

# Solicitation Audit Checklist

**Proposal:** RFP 24.5 - Lighting Audit Services & LED Solutions

**Awarded Vendor(s):** Premier Lighting, Inc; The Retrofit Companies

**Award Date:** \_\_\_\_\_ **Contract Number:** 24.5

- ☐ 1 Legal Affidavit(s)
- ☐ 2 Release of Solicitation
- ☐ 3 Copy of Solicitation Documents
- ☐ 4 Copy of Questions & Answers
- ☒ ~~5 Copy of Addenda~~
- ☐ 6 Closed Notification
- ☐ 7 Notification Report
- ☐ 8 Access Report
- ☐ 9 Opening Record
- ☐ 10 Copy of Qualified Vendor Responses
- ☐ 11 Evaluation Summary & Recommendation
- ☐ 12 Copy of Rejection Letter
- ☐ 13 Copy of Award Letter(s)
- ☐ 14 Copy of Signed Contract(s)

# Argus Leader

P.O. Box 677349, Dallas, TX 75267-7349

Account No.: SFA-0000000483

Ad No.: 0005793673

PO #:

Lines : 28

Ad Total: \$22.99

LAKES COUNTRY SERVICE COOPERAT  
1001 E MOUNT FAITH AVE  
FERGUS FALLS, MN 56537

**This is not an invoice**

# of Affidavits<sup>1</sup>

Account No.: SFA-0000000483

Ad No.: 0005793673

## Argus Leader AFFIDAVIT OF PUBLICATION

**State of Wisconsin**

**County of Brown**

I being duly sworn, says: That The Argus Leader is, and during all the times hereinafter mentioned was, a daily legal newspaper published at Sioux Falls, Minnehaha County, South Dakota; that affiant is and during all of said times, was an employee of the publisher of such newspaper and has personal knowledge of the facts stated in this affidavit; that the notice, order or advertisement, a printed copy of which is hereto attached, was published in said newspaper issue(s) :

Monday, August 14, 2023

Monday, August 21, 2023

Sworn to and subscribed before me this 21 day of August, 2023.

Legal Clerk

Notary Public, State of Wisconsin, County of Brown

8-21-26  
My Commission expires

NICOLE JACOBS  
Notary-Public  
State of Wisconsin



Sealed proposals will be received by the Cooperative Purchasing Connection (CPC) on behalf of its current and potential member agencies in Minnesota, North Dakota, and South Dakota for RFP #24.5 - Lighting Audit Services & LED Solutions.

Specifications and forms may be obtained by registering for free with CPC on Public Purchase ([www.publicpurchase.com](http://www.publicpurchase.com)).

Proposals must be uploaded to Public Purchase before 10 a.m. CT on Thursday, September 7, 2023. Late proposals will not be considered.

Published Aug 14, 21 2023, at the total approximate cost of \$22.99 and may be viewed free of charge at [www.sdpublicnotices.com](http://www.sdpublicnotices.com)

\*\*\* Proof of Publication \*\*\*

State of Indiana )  
 ) SS:  
County of Lake )

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8/14 & 21 - 61974

I, Kami Terrell, being  
duly sworn says that I am the Legal Clerk of Bismarck Tribune Co., a  
division of Lee Publications, Inc. A newspaper published in the  
County of Burleigh and State of North Dakota. Who declares that the  
attached Notice was published in said newspaper on the following  
dates:

8/14, 8/21

LAKES COUNTRY SERVICE COOP

Lori Mittelstadt

1001 E MOUNT FAITH

FERGUS FALLS MN 56537

ORDER NUMBER 61974

Kami Terrell  
SIGNATURE

Sworn and subscribed to before me this 21 day of

August 2023

Dawn Renee Heili  
Notary Public in and for the State of Indiana



Section: Legals

Category: 5380 Public Notices

PUBLISHED ON: 08/14/2023, 08/21/2023

TOTAL AD COST: 61.00

FILED ON: 8/21/2023

**AFFIDAVIT OF PUBLICATION**

**STATE OF NORTH DAKOTA**

**ss.**

**COUNTY OF CASS**

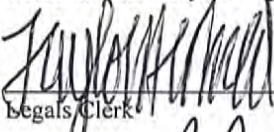
Taylor Herhold, The Forum of Fargo-Moorhead, being duly sworn, states as follows:

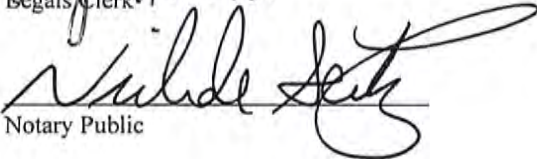
1. I am the designated agent of The Forum of Fargo-Moorhead, under the provisions and for the purposes of, Section 31-04-06, NDCC, for the newspaper listed on the attached exhibit.

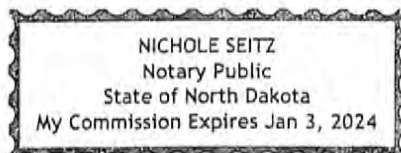
2. The newspaper listed on the exhibit published the advertisement of: *Legal Notice; (2) time: Wednesday, August 16, 2023, Wednesday, August 23, 2023*, as required by law or ordinance.

3. All of the listed newspapers are legal newspapers in the State of North Dakota and, under the provisions of Section 46-05-01, NDCC, are qualified to publish any public notice or any matter required by law or ordinance to be printed or published in a newspaper in North Dakota.

Dated this 23rd day of August, 2023

  
\_\_\_\_\_  
Legals Clerk

  
\_\_\_\_\_  
Notary Public



Sealed proposals will be received by the Cooperative Purchasing Connection (CPC) on behalf of its current and potential member agencies in Minnesota, North Dakota, and South Dakota for **RFP #24.5 - Lighting Audit Services & LED Solutions**. Specifications and forms may be obtained by registering for free with **CPC on Public Purchase** ([www.publicpurchase.com](http://www.publicpurchase.com)). Proposals must be uploaded to Public Purchase before **10 a.m. CT on Thursday, September 7, 2023**. Late proposals will not be considered.  
(Aug. 16 & 23, 2023) 249555

AFFIDAVIT OF PUBLICATION

STATE OF MINNESOTA )  
COUNTY OF HENNEPIN )



650 3rd Ave. S, Suite 1300 | Minneapolis, MN | 55488

Terri Swanson, being first duly sworn, on oath states as follows:

1. (S)He is and during all times herein stated has been an employee of the Star Tribune Media Company LLC, a Delaware limited liability company with offices at 650 Third Ave. S., Suite 1300, Minneapolis, Minnesota 55488, or the publisher's designated agent. I have personal knowledge of the facts stated in this Affidavit, which is made pursuant to Minnesota Statutes §331A.07.
2. The newspaper has complied with all of the requirements to constitute a qualified newspaper under Minnesota law, including those requirements found in Minnesota Statutes §331A.02.
3. The dates of the month and the year and day of the week upon which the public notice attached/copied below was published in the newspaper are as follows:

<u>Dates of Publication</u>	<u>Advertiser</u>	<u>Account #</u>	<u>Order #</u>
StarTribune 08/14/2023	COOPERATIVE PURCHASING CONNECTION	1000337556	465436
StarTribune 08/21/2023	COOPERATIVE PURCHASING CONNECTION	1000337556	465436

4. The publisher's lowest classified rate paid by commercial users for comparable space, as determined pursuant to § 331A.06, is as follows: **\$224.00**

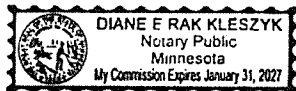
5. Mortgage Foreclosure Notices. Pursuant to Minnesota Statutes §580.033 relating to the publication of mortgage foreclosure notices: The newspaper's known office of issue is located in Hennepin County. The newspaper complies with the conditions described in §580.033, subd. 1, clause (1) or (2). If the newspaper's known office of issue is located in a county adjoining the county where the mortgaged premises or some part of the mortgaged premises described in the notice are located, a substantial portion of the newspaper's circulation is in the latter county.

FURTHER YOUR AFFIANT SAITH NOT.

*Terri Swanson*

Subscribed and sworn to before me on: 08/21/2023

*Diane E. Rak Kleszyk*



Notary Public



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St Bus Mon

**Place a classified ad today.**

MORTUAGOR(S): JANE M. Hess  
Trustee and JANE M. Hess, a single  
person.  
MORTGAGEE: Mortgage Electronic

**ASSIGNMENTS OF MORTGAGE**  
Assigned to: U.S. Bank National Association, as Trustee for the Structured Asset Investment Loan Trust

5th Street, Room 20, Minneapolis, MN to pay the debt then secured by said Mortgage, and taxes, if any, on said premises, and the costs and

IF March 19, 2024 falls on a Saturday, Sunday or legal holiday, THE TIME ALLOWED BY LAW FOR REDEMPTION BY THE MORTGAGEE



**From:** [Public Purchase](#)  
**To:** [Lisa Truax](#)  
**Cc:** [Lori Mittelstadt](#); [Melissa Mattson](#)  
**Subject:** [External]Release Successful on Bid RFP #24.5 - Lighting Audit Services & LED Solutions  
**Date:** Monday, August 14, 2023 10:34:33 AM

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Lisa M Truax:

Bid "RFP #24.5 - Lighting Audit Services & LED Solutions"  
Status: Release Successful on Aug 14, 2023 10:34:23 AM CDT

You can check the released bid by going to the following address:  
<http://www.publicpurchase.com/gems/bid/bidView?bidId=176590>

If you have any questions regarding this bid, please contact our Customer Support Staff at  
[agency support@publicpurchase.com](mailto:agency support@publicpurchase.com)

Thank you for using Public Purchase.

MK= uOzqeqODq7XY/f3fHQUC3g==

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

## Proposals Requested by the: **Cooperative Purchasing Connection**

# **RFP 24.5 – Lighting Audit Services & LED Solutions**

CPC is seeking to collaborate with an experienced Vendor(s), equipped with the necessary resources and capabilities to develop a program for participating agencies to have the ability to acquire lighting audit services and energy efficient light emitting diodes (LED) solutions at consortium level discounted pricing. Vendors able to provide a full turn-key solution shall only include LED lighting solutions that will provide an efficient, cost-effective way to illuminate their facilities.

**Due: 10:00 a.m. CT on Thursday, September 7, 2023**

**Vendors will submit questions and proposals online via Public  
Purchase ([www.publicpurchase.com](http://www.publicpurchase.com))**

**RFP Facilitator:**  
Lisa Truax  
Procurement Coordinator

**Published in:**  
Star Tribune  
Argus Leader  
Fargo Forum  
Bismarck Tribune



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## **I. Introduction to CPC**

The Cooperative Purchasing Connection (CPC) is a joint powers group of local governmental agencies and service cooperatives in Minnesota, organized pursuant to Minnesota Statute §123A.21. CPC obtains the legal authority to develop and offer, among other services, cooperative procurement services to members and participants. Eligible and existing participants include state, city, and county governments, as well as tribal nations, government agencies, both public and non-public educational agencies, colleges, universities, nonprofit organizations, and other entities contracted on behalf of an agency. Participation in the resulting contract(s) is open to government and nonprofit agencies across the United States

In addition, the North Dakota Educators Service Cooperative (NDESC) is a joint powers group organized under the provisions of Chapter 54-40.3 of the North Dakota Century Code. NDESC holds a joint powers agreement with Lakes Country Service Cooperative (LCSC) in Fergus Falls, Minnesota, to provide purchasing contracts to its participating agencies. South Dakota participating agencies may also utilize CPC's purchasing contracts pursuant to South Dakota State Statute §5-18A-37.

Cooperatives participating in this solicitation include AEA Purchasing, a 28E association of the Iowa Area Education Agencies (Iowa AEAs) and CESA Purchasing (Wisconsin). AEA Purchasing's primary function is to provide a voluntary purchasing program for K-12 schools by bringing all statewide school purchasing programs under one legal entity and one fiscal management group. CESA Purchasing was created by the 12 CESAs in 2006 so that all Wisconsin school districts could utilize discounts and contracts.

LCSC provides the administrative functions of CPC. Administrative functions include but are not limited to bid and contract research, contract development, negotiations; fiscal reporting agent; marketing; contract promotion and agency support services.

CPC is managing this solicitation and the resulting contract(s). All reporting and applicable administrative payments for sales under this contract(s) will be received and managed by CPC (LCSC).

## **II. Solicitation Description**

CPC is seeking to collaborate with an experienced Vendor(s), equipped with the necessary resources and capabilities to develop a program for participating agencies to have the ability to acquire lighting audit services and energy efficient light emitting diodes (LED) solutions at consortium level discounted pricing. Vendors able to provide a full turn-key solution shall only include LED lighting solutions that will provide an efficient, cost-effective way to illuminate their facilities. A qualified Vendor shall have established a percentage discount from a catalog list, published prices, or price list. Discounts may be submitted for an entire catalog or for specific product categories or manufacturer categories. Lighting audit services and LED lighting solutions may include, but is not limited to the following categories:

1. Lighting audit walk-through (per square foot)
2. Energy and savings reports
3. LED solutions
4. Installation services
5. Energy rebate assistance
6. Recycling services

Through the combination of purchasing power, CPC's objective is to achieve cost savings through a single competitive solicitation process. This process eliminates a Vendor from responding to multiple quotes and proposals allowing for the reduction in administrative and overhead costs through CPC's purchasing procedures. CPC will work closely with the Vendor to market the contract

not only to participating agencies but also to potential agencies where the contract would be an advantageous option for growing participation and purchases through the Vendor.

CPC intends to award this solicitation to one or more Vendors who can offer acceptable services and solutions that can be of benefit to all participating agencies in all five (states).

The contract(s) resulting from this solicitation will be Indefinite Delivery, Indefinite Quantity (IDIQ) contract(s). Historically, from November 2019 through March 2023, CPC participating agencies have purchased over \$3.9 million in lighting audit services and solutions in Minnesota, North Dakota, and South Dakota. The participation and expansion with Iowa and Wisconsin will bring continued growth to this category. All quantities or dollar values listed within this solicitation are estimates.

Numerous factors could cause the actual value of the contract(s) resulting from this solicitation to vary substantially from the historical value. Such factors include, but are not limited to, the following:

1. There is no guarantee of volume to be purchased, nor is there any guarantee that demand will continue in any manner consistent with previous purchases; and
2. The individual value of each contract is indeterminate and will depend upon actual participating agency demand, and actual quantities ordered during the contract period.

In CPC's experience, depending on the price of a particular item, the actual volume of purchases could be substantially in excess of, or substantially below, estimated volumes. Specifically, if actual contract pricing is lower than anticipated or historical pricing, actual quantities purchased could be substantially greater than the estimates; conversely, if actual contract pricing is higher than anticipated or historical pricing, actual quantities purchased could be substantially lower than the estimates. By submitting a response, the Vendor acknowledges the foregoing and agrees that actual good faith purchasing volumes during the term of the resulting contract(s) could vary substantially from the estimates/historical values provided in this solicitation.

### **III. Responding Minimum Qualifications**

All submittals must contain answers, responses and/or documentation to the information requested herein. Any submittal failing to provide the required information and/or documentation will be considered non-responsive. A submittal considered non-responsive may result in possible disqualification for consideration of a solicitation award.

Responding Vendors must demonstrate their ability, capacity, and available resources to provide lighting audit services and LED solutions to participating agencies. Vendors are required to communicate and demonstrate within their submittal that they have extensive knowledge, background, and at least five (5) years of experience with auditing, obtaining, producing, delivering, and supporting the product lines and services offered. Other factors may be used to determine if a Vendor's submittal and offer has proven to be of sound responsibility.

CPC reserves the right to accept or reject any Vendor's proposal failing to demonstrate their abilities or capacity solely based on information provided in the solicitation response and/or its own investigation of the company.

### **IV. Technical Specifications**

An attempt has been made to standardize the language used in this solicitation. The words "must", "shall", "mandatory" and the phrase "it is required" are used in connection with a mandatory specification. The words "should" and "may" are used in connection with a specification that is desirable.

## **A. General**

1. The Vendor must provide lighting audit services, LED solutions and equipment, or a combination of both when requested by participating agencies.
2. The Vendor must provide participating agencies who have questions, issues, and/or concerns with an efficient response; responding to agencies within 24 hours.

## **B. Lighting Audit and/or Installation Services**

1. Lighting audit services will be offered at a per square foot rate (see Pricing Schedule). The lighting audit shall result in the following, at a minimum:
  - a. Summary of the lighting audit and walk-through.
  - b. Energy and savings report(s); kilowatts and energy saved.
  - c. Estimated utility rebate(s), if applicable.
  - d. Fixture/lamp report, by location, including current product versus proposed product.
    - i. If able, Vendor should propose a good, better, best option for proposed (replacement) product.
  - e. Return on Investment (ROI) projections.
  - f. Proposed project timeline.
  - g. Proposed project costs including recycling services if available.
2. Pricing for design layout and/or installation will be at an hourly rate. The Vendor must outline all service charges for project design and installation. If the Vendor charges for installation by a method other than hourly or percentage, a complete explanation, and breakdown of how charges are calculated must be included with the Vendor's submission.
  - a. **Weekdays (M-F)/Normal Working Hours:** 7am CT to 5pm CT
  - b. **Evenings:** After 5pm CT and before 7am CT.
  - c. **Weekends/Holidays:** After 5pm CT on Friday and before 7am CT on Monday.
3. Prevailing Wage. If the resulting contract involves a project erection, construction, remodeling, or repairing of a public building or other public work financed in whole or part by State [Minnesota] funds, then pursuant to Minnesota Statutes 177.41 to 177.44 and corresponding Minnesota Rules 5200.1000 to 5200.1120, this contract is subject to the prevailing wages as established by the Minnesota Department of Labor and Industry. Specifically, all Vendors and all tiers of subcontractors must pay all laborers and mechanics the established prevailing wages for work performed under the resulting contract. Failure to comply with the aforementioned may result in civil or criminal penalties. Applicability: The prevailing wage applies to a contract or work under a contract, under which:
  - a. Only one (1) trade or occupation is required to complete it and the project is greater than \$2,500; or
  - b. The estimated total cost of completing the project is greater than \$25,000. For questions regarding prevailing wage laws, contact the Minnesota Department of Labor and Industry.

If required by law in Iowa, Wisconsin, or any state where work is conducted, prevailing wage requirements must be followed.
4. Prevailing Wage/Davis Bacon [State & Federal Funds]. The Vendor's hourly price shall include, but is not limited to, wage requirements, equipment and tools normally associated with the removal and installation of goods and services. Due to wage rate requirements for State and Federal funded projects, the costs associated with labor may increase from contracted pricing.
5. The Vendor subcontractors will maintain in current status, all federal, state, and local licenses, bonds, and permits required for the performance and delivery of any and all products and services in response to this solicitation. This also includes any contractor's licensure as required by state law. The Vendor must have the ability to furnish all required labor, materials, equipment, parts and supplies necessary for the services requested.
6. The Vendor will possess the ability to assess and determine existing site conditions and the participating agencies' expectations for the products being purchased.

7. Installation times will be coordinated with the purchasing agency. All areas will be kept clean and free of debris. Vendors must be able to provide the purchasing agency with a list of responsibilities for installation, a minimum of five (5) business days prior to the start of installation.
8. All personnel that are working in participating agencies must be bonded and insured and follow all participating agencies' requirements for contractors and subcontractors.
9. Subcontractors.
  - a. The Vendor will not assign any duties to perform services nor to provide goods to purchasing agencies under this contract to a subcontractor that is not listed in the Subcontractor Utilization Form.
  - b. If a subcontractor is removed from the contract agreement at any time, the Vendor will submit to CPC in writing the reason for removal and effective date.
  - c. To add a subcontractor to the contract agreement, the Vendor must submit to CPC an updated Subcontractor Utilization Form. The subcontractor may not begin providing service until approved by CPC.
  - d. The Vendor will be responsible for ensuring that all subcontractors who provide goods or services under the resulting contract agreement comply with the terms and conditions.
  - e. CPC reserves the right to require that a subcontractor be removed from the contract.
  - f. Any damage done to the participating agencies' property by contractors or subcontractors shall be repaired or replaced at no cost to the participating agency.
10. All services will be 100% guaranteed. Any service provided which does not meet the end-users' expectations will either be redone until the end-users' expectations are met, or the charges for the services are refunded to the participating agency.

**C. LED Solutions, Equipment, and Supplies**

1. All equipment, supplies, parts, and all related accessories that can be purchased must be new and actively marketed products by the manufacturer's authorized dealers.
2. If an electronic online catalog for order entry is made available, it must indicate product discounts and, if applicable, the differing discounts for catalog categories awarded.
3. The Vendor must have access to a full inventory of the proposed product line(s) while maintaining a minimum monthly average fill rate of 95% or above. Items that are reordered, back-ordered, or partially filled are not considered filled items when calculating this service level.
4. A Vendor must offer LED lighting solutions such as decorative lighting, exterior lighting, high/low bay lighting, bulbs, lamps, linear lighting, interior lighting, and retrofit kits.
5. LED lighting products must meet or exceed the following specifications:
  - a. A full, five (5) year replacement warranty.
  - b. Maintain at least seventy (70%) of their initial light output when they reach their rated life hours (L70).
  - c. A rated life  $\geq 25,000$  (bulbs) hours and  $\geq 50,000$  hours (all others).
  - d. An efficacy  $\geq 90$ .
  - e. Maintain a Color Rendering Index (CRI)  $\geq 80$ .
6. A Vendor must provide product specification sheets for all product purchased and/or installed.
7. Recalls.
  - a. The Vendor must notify CPC and their participating agencies of any product recalls.
  - b. The Vendor will issue a credit or comparable substitute for any delivered, recalled product at the agency's discretion.
  - c. All costs associated with voluntary and involuntary product recalls shall be borne by the Vendor.

8. Substitutions.

- a. Materials, products, or equipment described in these documents establish a standard of type, function, and quality to be met by any proposed substitution. Unless the specification prohibits substitution, vendors are encouraged to propose materials, products or equipment of comparable type, function, and quality. Proposals for substitute items shall be stated in the appropriate blank on the proposal form, or if the form does not contain blanks for substitution, on the Vendor's letterhead attached to the pricing form. Vendors shall attach to the form a statement of the manufacturer and brand name of each proposed substitution plus a complete description of the item, including descriptive literature, illustrations, performance, and test data and any other information necessary for evaluation. The burden of proof is upon the respondent for the merit of the proposed substitution.

**D. Pricing**

1. Contract discounts and percentages must be held firm during the initial contract period. Additional discounts may be made to accommodate one-time bulk replacements, special promotions, or a large individual project. The Vendor cannot offer additional discounts and percentages to a participating agency beyond a single large project until following the steps outlined below and receiving approval by CPC. CPC may conduct periodic audits and the Vendor will be responsible for full reimbursement for any overcharge to a participating agency.
2. The Vendor must provide a discount price schedule for all available, qualified products, labor, and services offered. Price lists are considered firm until the Vendor follows the steps outlined below.
3. When a manufacturers' price list is revised, to add or delete products and accessories that result in revised contract pricing, the Vendor shall notify CPC in writing via email as follows:
  - a. Request will be emailed to CPC;
  - b. It is filed with CPC, a minimum of seven (7) calendar days before the effective date of the proposed change;
  - c. It clearly identifies the items impacted by the change and the cause for the adjustment;
  - d. It is accompanied by documentation acceptable to the Procurement Solutions Coordinator to warrant the change (i.e. appropriate Bureau of Labor Statistics, Consumer Price Index (CPI-U, change in manufacturer's price, etc.);
  - e. CPC reserves the right to accept such change and will confirm disposition in writing. For contract administration purposes, CPC must be able to verify the manufacturer's current product price. Price increases that cannot be verified shall not be reflected on the contract nor charged to the participating agency.
4. New products and services, pertaining to the scope of this solicitation, can be added during the contract term with notice, as outlined above. These items shall meet or exceed all the specifications established in the solicitation and resulting contract. CPC may direct the Vendor to remove products that do not meet the intent or are otherwise in conflict with the contract requirements.
5. CPC expects Vendors to offer their very best prices. If a Vendor offers lower prices to any participating agency outside of this contract, it must lower its prices under this contract at the same time by written notice, via email to CPC.

**E. Maintenance Plans**

1. The Vendor may offer pricing for maintenance for all equipment listed under the solicitation and include it in pricing proposals to participating agencies if requested.
2. The Vendor providing maintenance and repair options must provide and clearly state, pricing and terms of the various plans in their submission.

## **F. Ordering Methods**

1. All orders will be executed by participating agencies directly with the Vendor. The Vendor may offer a variety of options for agencies to place orders. The Vendor will make all deliveries and installation of products and services. CPC will not warehouse items or provide services.
2. Participating agencies may use two (2) different methods of placing orders from the resulting contract: Purchase Orders (PO's) and procurement cards. The method of payment is at the discretion of the participating agency. Additional surcharges for the use of a procurement card must be clearly outlined (see Vendor Questionnaire).
3. A PO may be issued to the Vendor on behalf of the participating agency ordering the services covered under the resulting contract. An issued PO will become part of the resulting contract. The PO indicated that sufficient funds have been obligated toward the purchase.
4. Regardless of the method of ordering used, solely the contract and any modification determine performance time and dates.
5. Performance under this contract is not to begin until receipt of a PO, procurement card order, or other notification to proceed by the participating agencies to proceed.
  - a. See Performance Bond requirements.

## **G. Freight and Delivery**

1. All prices submitted are to be F.O.B. Destination, Freight Pre-Paid, and Allowed. Unless clearly stated otherwise by the respondent, prices submitted shall include all charges for transportation, packaging, etc., necessary to complete delivery on an F.O.B. Destination basis.
2. Invoice and ship all items directly to CPC's participating agencies unless pre-staging and warehousing is a standard practice prior to project installation. A vendor's shipping preference must be clearly defined in their response (see Questionnaire). A packing slip will be provided with all deliveries including the agencies' purchase order number. Orders not filled and partial shipments shall be indicated on the packing list. Participating agencies shall be notified of an anticipated availability date, within three (3) business days of receipt of order.
3. All equipment, supplies, and related accessories must be delivered during normal hours of operation on weekdays, unless at the convenience of the participating agency and through mutual agreement with the Vendor.
4. All products must be 100% guaranteed. Any product which is damaged, found to be defective, or does not perform to the end-user's expectations must be replaced at the vendor's expense including all shipping/delivery charges. If a participating agency receives the product(s) that appear to be damaged, they reserve the right to refuse delivery. Participating agencies will not be charged for items that are refused.

## **H. Payment**

1. Participating agencies using the resulting contract Agreement will make payments directly to the Vendor.
2. Payment terms will be defined by the Vendor in their response.
  - a. Vendors are encouraged to offer payment terms through procurement card (P Card) services, if applicable. Payments shall be made after satisfactory performance, following all provisions thereof, and upon receipt of a properly completed invoice.
  - b. Where a question of quality is involved, payment in whole or part against which to charge back any adjustment required shall be withheld at the direction of the participating agency. In the event a cash discount is stipulated, the withholding of payments, as herein described, will not deprive the participating agency of taking such a discount.
  - c. Payments for the used portion of inferior delivery will be made by the participating agency on an adjusted price basis.

3. The Vendor will submit invoices to the participating agencies clearly stating, "Per CPC Contract". The shipment tracking number or pertinent information for verification shall be made available upon request.

#### **I. Advertising and Marketing**

1. The Vendor will provide sales and marketing representation that is able to educate, introduce and demonstrate products and/or services.
2. The Vendor will be able to assist in developing marketing materials that support the contract.
3. The Vendor will provide a comprehensive training and support program on the operation and use of the contract agreement to all applicable personnel. The services offered must be appropriate and adequate to ensure a successful contract agreement.
4. All promotional marketing materials must have prior approval before distribution and must include appropriate logos and pertinent contract information.
5. Upon award and completion of the vendor orientation, CPC will promote the contract opportunity via its websites. CPC will also announce the new partnership through various marketing channels. Contracts will also be promoted at applicable trade shows, conferences, and meetings.
6. CPC will work collaboratively with AEA Purchasing and CESA Purchasing to streamline marketing efforts between all Parties.
7. CPC will coordinate marketing meetings with all Parties, including the awarded vendor(s).

### **V. Timeline**

<b>Date/Time</b>	<b>Event</b>
August 14, 2023	Publication of RFP 24.5 – Lighting Audit Services & LED Solutions
August 30, 2023, at 10 a.m. CT	<b>Deadline for Vendors to Submit Questions</b>
<b>September 7, 2023, at 10 a.m. CT</b>	<b>Deadline for Submission</b>
September 29, 2023	Contact Vendor/Award(s) Made
November 1, 2023	Initial Start of Contract Term

### **VI. Method of Award**

This solicitation will be evaluated based on the following combined factors. No single factor will determine the final award decision.

<b>Minimum Qualifications</b>	<b>Points Available</b>
<ul style="list-style-type: none"> <li>• Required documentation (submittal).</li> <li>• Extensive knowledge, background, and at least five (5) years of experience with auditing, obtaining, producing, delivering, and supporting the product lines and services offered.</li> <li>• Debarment and suspension verification.</li> </ul>	<b>Pass/Fail</b>
<b>Technical Proposal</b>	<b>121</b>
Qualifications & Experience	75
Warranty	10
Financials & Level of Support	10
Marketing & Partnership	16
Exceptions & Deviations	5
References	5
<b>Pricing Proposal</b>	<b>129</b>
1 – Lighting Audit Services <ul style="list-style-type: none"> <li>• Labor rates</li> <li>• 7 Project Deliverables</li> </ul>	60
2.1 – LED Category Discount	30
2.2 – LED Lighting	30
3 – Volume Discounts	9
<b>Total Points</b>	<b>250</b>



As a part of the process of determining responsible respondents, CPC may request reports that describe the financial soundness of your organization. Accepted financial reports may include balance sheets and Profit & Loss statements for the past three years, a Letter of Credit or Line of Credit from a bank or lending institution indicating the line of credit limit and the average outstanding balance, Dun & Bradstreet reports, a complete Annual Financial Report (for publicly traded companies).

**Best and Final Offer (BAFO):** CPC may request a BAFO if additional information or modified terms are necessary for the evaluation committee to complete its evaluation and ranking. CPC will set a date and time for the submission of BAFO proposals. The BAFO will be limited to specific sections of the RFP or proposal identified by CPC. A BAFO will not be used solely to reduce pricing. If a BAFO is requested, all short-listed Vendors or, if the short-list process is not used, all qualified Vendors will be provided an opportunity to submit a modified response. Only one BAFO request will be issued by CPC. The information received from the BAFO will be used by the evaluation committee to re-rank the Vendors. If a Vendor does not submit a BAFO proposal or a notice of withdrawal, the Vendor's previous proposal is considered the Vendor's BAFO. CPC reserves the right to proceed directly to negotiations with the highest ranked proposers immediately following the initial submission and evaluation of proposals.

**Contract Development:** Following the final evaluations and contract negotiations, CPC will develop a Master Contract Agreement with the most highly qualified Vendor(s). If a satisfactory contract cannot be developed with the most highly qualified Vendor(s) the second most qualified Vendor(s) may then be approached to develop a contract.

**Solicitation Debriefing:** An unsuccessful Vendor may request a debriefing to be scheduled with CPC after the solicitation process has been completed and a Master Contract Agreement with the awarded Vendor(s) has been executed. A debriefing is a learning opportunity for the unsuccessful Vendor to learn about the solicitation process and what measures of their response could be improved. Vendors will not be debriefed on how their response compared to other responding Vendors.

## VII. Solicitation and Submittal Procedures

**Public Purchase:** All solicitations can be found on Public Purchase ([www.publicpurchase.com](http://www.publicpurchase.com)). Public Purchase is an easy-to-use platform that provides Vendors with automatic notification of open solicitations, automatic notification of answered questions and issued addenda, and a way to electronically submit a response to the solicitation. All changes, updates, uploads, and downloads are time-stamped and logged as part of the solicitation process.

**Submission of Proposals:** It is the responsibility of the Vendor to be certain that the proposal being submitted has been uploaded to Public Purchase by the submission deadline, as described in the solicitation. All proposals must be submitted electronically via Public Purchase. If the proposal has not completed its upload to Public Purchase by the submission deadline, the Public Purchase system will not accept the proposal. If any issues occur during the upload of the proposal, Vendors should contact Public Purchase at [support@publicpurchase.com](mailto:support@publicpurchase.com) or utilize the chat function within Public Purchase for immediate technical support. The data included in the submission will not be password protected. Hardcopy proposals are invalid and will not receive consideration.

Document Title	How to Submit
1 RFP 2 General Terms and Conditions	<b><u>Do Not Submit with Response.</u></b> Retain for your records.
3 Questionnaire – Name of Company	<b>Provided as a Word document. Submit as one (1) PDF.</b>

	Include certifications, if applicable.
<b>4 Forms &amp; Signatures – Name of Company</b>	Provided as PDF. <b>Submit as one (1) PDF, <u>signatures required.</u></b>
<b>5 Pricing Schedule – Name of Company</b>	Provided as an Excel document. <b>Submit as an Excel document.</b>
<b>6 Certificate of Insurance (COI) – Name of Company</b>	<b>Submit as PDF.</b> Respondent to provide.
<b>7 Project Deliverables – Name of Company</b> <ul style="list-style-type: none"> <li>• Provide a narrative of a recent project that totaled at least \$150,000 in lighting audit and LED solutions. The narrative should describe the lighting audit and its results, a proposed project scope, pricing costs and calculations, any fees, your company's installation/project management rates, and a final report and rebate summary. <b>See Vendor Questionnaire, Qualifications &amp; Experience, #15 and #15a.</b></li> <li>• Provide the supporting documentation for the project described above. Supporting documentation and deliverables must include the following: <ul style="list-style-type: none"> <li>(i) Lighting audit and results</li> <li>(ii) Proposed project scope, pricing costs and calculations, any applicable fees</li> <li>(iii) Installation/Project Management plan</li> <li>(iv) Final report and rebate summary</li> </ul> </li> </ul>	<b>Submit as PDF.</b> Respondent to provide.

**Questions:** Requests for additional information or questions shall be asked via Public Purchase for all participating respondents to see. CPC will respond accordingly via Public Purchase to all questions asked by the question deadline.

**Addenda:** Addenda are written instruments issued by CPC which modify or interpret the solicitation documents by additions, deletions, clarification, or corrections. All addenda issued by CPC shall become a part of the specifications and will be made part of the contract. Addenda will be sent automatically through Public Purchase; being logged and tracked within the system. If such confirmation is not received, the Vendor may be deemed non-responsive. Interpretations, corrections, or changes made in any other manner will not be binding, and Vendors shall not rely upon such interpretations, corrections, and changes. No answers to questions or addenda will be issued later than five (5) business days prior to the submission deadline, except an addendum withdrawing the proposal or one which includes postponement of the submission deadline.

**Correction of RFP Documents:** Upon examination of the solicitation, Vendors shall promptly notify the RFP Facilitator of any ambiguity, inconsistency or error, which they may discover. Any notification of ambiguity, corrections and/or requests for interpretation must be submitted, no later than five (5) business days prior to the solicitation submission deadline. Interpretations, corrections, and changes to the documents will be made either by answers or an addendum.

**Late Submittals:** Submittals will not be allowed to be submitted or uploaded after the due date and time set by CPC. It is the respondent's responsibility to ensure that submittals are received by the due date and time listed.

**Modifications or Withdrawal of a Proposal:** A proposal may not be modified, withdrawn or canceled by the Vendor for a period of one hundred twenty (120) days following the submission deadline of the proposal, as each Vendor so agrees in submitting a proposal. Prior to the submission deadline, any proposal submitted may be modified or withdrawn within Public Purchase. Withdrawn proposals may be resubmitted within Public Purchase prior to the submission deadline provided that they are in full conformance with this solicitation.

**Rejection of Any or All Proposals:** CPC reserves the right to reject any, and all bids/proposals, to waive any informality, or to accept/reject any items listed in the pricing schedule in the best interest of CPC and its participating agencies.

**Opening of Proposals (Opening Record):** Proposals that have been submitted on time will be opened after the submission deadline. An opening record of the proposals received will be made available.

## **VIII. Solicitation Terms and Conditions**

**Performance Bond (*for construction and/or installation related projects*):** As defined by state statute, performance bonds will be required on all projects valued greater than:

1. One hundred seventy-five thousand dollars (\$175,000) or more in Minnesota;
2. Fifty thousand dollars (\$50,000) or more for educational agencies and two hundred thousand (\$200,000) or more for municipalities in North Dakota;
3. One hundred thousand dollars (\$100,000) or more for public improvement in South Dakota;
4. Twenty-five thousand dollars (\$25,000) in Iowa, as required by Chapter 573.2;
5. Sixteen thousand (\$16,000), following bonding requirements for public improvement projects as required by Wis. Stats. 779.14; or
6. Otherwise requested by the participating agency.

All performance bonds will be issued by a corporate surety authorized to do business in the state in which the work will be conducted and by a surety listed in the US Treasury Circular 570. Performance bonds will be posted by the Vendor and submitted to the specific participating agency for the assigned project. Should the contract be the result of a piggyback agreement, performance bonds will reflect each state's bonding requirements.

The Vendor will execute a performance bond in an amount equal to one hundred percent (100%) of the value specified in the contract between the participating agency and the Vendor unless the participating agency requires less to be posted. This bond will protect all persons supplying labor and material to the Vendor for the performance of the work provided in the contract. Subcontractors who may work on the contract may have to provide the Vendor with a performance bond. If the contract price increases after the bond is provided, the participating agency may consider obtaining additional bonds from the Vendor.

The Vendor will deliver the performance bond to the eligible participating agency at the time the contract is executed between the agency and the Vendor. Work will not commence between the Vendor and the eligible participating agency until the performance bond is received by the participating agency and a copy has been sent to CPC via email ([info@purchasingconnection.org](mailto:info@purchasingconnection.org)). The Vendor will be responsible for providing CPC with a copy of all contracts and bonds in accordance with CPC purchasing procedures. Should the Vendor fail to satisfactorily perform the contract, the bonding company that provided the performance bond will be required to pay the dollar amount of the bond to the participating agency.

It is the Vendor's responsibility to ensure that they can obtain the required bonding for all construction products based on an awarded contract arising from this solicitation. Payment will not be issued for any project for which the required bonds have not been received.

With said construction-based project, the participating agency may enter into a separate supplemental agreement to further define the level of service requirements over and above the minimum defined in this solicitation and resulting Master Contract Agreement (i.e. project timeline, completion dates, progress payments, delivery requirements, invoice requirements, etc.). Any supplemental agreement developed because of the Master Agreement is exclusively between the Vendor and the participating agency. CPC, its agents, members, and employees shall not be a party to any claim for breach of such agreement.

**Certificate of Insurance:** The Vendor must purchase, maintain and provide certification from the insurer for minimal coverage during the life of an awarded contract, to include, but not limited to, comprehensive public and/or commercial liability, errors and omissions, workman's compensation, unemployment, and other insurance coverage required by and applicable to each of CPC's individual state's statutes and federal laws which proposed products and services will be offered and provided. The Vendor must provide a Certificate of Insurance (COI) from the issuing company or their authorized agent, identifying the coverage required below and identifying CPC as a "Certificate Holder". Any required insurance that is canceled before the expiration date of the contract agreement, the issuing company will send immediate notice to CPC. COIs must be updated and sent electronically to CPC upon coverage renewal. The Vendor must meet the following, minimum coverage requirements:

1. Commercial General Liability: \$1,000,000 each occurrence, \$500,000 annual aggregate
2. Automobile Liability: \$1,000,000 each occurrence
3. Workers Compensation: \$100,000

CPC reserves the right to consider and accept alternate forms and plans of insurance or to require additional or more extensive coverage for any individual requirement. **The Vendor must provide the COI with their submission.**

**Binding Contract:** A response to this solicitation is an offer to contract with CPC based upon the terms, conditions, the scope of work, and specifications contained in the solicitation. The Vendor acknowledges that the Contract Offer and Award binds the party to all terms and conditions stated in the proposal.

**Notification of Intent to Award:** An award notification will be made as outlined in the Timeline. The actual award is subject to approval by the CPC Board of Directors and the successful negotiation of a mutually acceptable Master Contract Agreement.

**Contract Term:** The term of the contract resulting from this RFP will be from November 1, 2023, through October 31, 2025. The contract may be extended for one (1) additional 24-month period, based on successful performance. CPC may grant an extension under certain criteria and conditions. CPC evaluates and reviews all contract agreements. CPC has established a set of performance criteria that will be used in the Vendor evaluation. Performance criteria will include:

1. Contract start-up and communication
2. Partnership responsiveness with CPC
3. Participating agencies evaluation(s)
4. Volume, sales, and competitiveness
5. Marketing

**Administrative Fee:** The Vendor will be required to pay a two (2.0%) percent administrative fee on the total sales price of all purchases shipped and billed to participating agencies. This fee is used to cover CPC's program costs, including the cost of conducting the solicitation, continuing support of the contract, and marketing the contract to participating and potential agencies. Administrative fees shall be paid to CPC quarterly, within 20 business days after the end of each fiscal quarter.

Payments must be received either via check or authorized ACH. An ACH enrollment/authorization form must be provided to CPC for completion. ACH remittance notification must be sent to the individual indicated on the ACH enrollment/authorization form prior to ACH payment.

**Sales Reports Required of the Vendor:** The Vendor will provide CPC with a quarterly report listing the sales volume showing the total gross dollar volume of all purchases made by participating agencies, the administrative fee calculations, and the correlating savings incurred by participating agencies. CPC may also request reports on commonly purchased items or top-selling items to create or update a market basket or core list of commonly purchased items. All reports must be submitted in MS Excel within 20 business days after the end of each fiscal quarter, (see Appendix A) listing the following information:

1. Name of purchasing agency
2. Address of purchasing agency (city, state, zip code)
3. Date of purchase
4. Invoice number
5. Amount of purchase
6. Administrative fee generated by the sale
7. Savings generated by the sale

## IX. Appendix A: Sales Report Template

CPC operates on a fiscal year (July through June). The Vendor will receive a sales report template like that shown below. Fiscal quarters are outlined as:

July – September

October – December

January – March

April – June

[illegible]

## X. Appendix B: New Vendor Implementation Checklist – Sample

The following implementation checklist will commence once the Master Contract Agreement has been executed. Implementation and contract start-up is included as part of the evaluations that CPC conducts in regards to renewing a contract for an additional contract term.

Task Description	Completed By
<b>1. CPC Vendor Orientation</b> Discuss expectations Establish contacts, people, and roles Discuss the reporting process and requirements Discuss sales and ordering process Outline kick-off plan; marketing needs Establish Webinar training date, if applicable	CPC & Vendor
<b>2. Vendor/Supplier Login Established – Express (if applicable)</b> Complete supplier initiation form Complete supplier product template Create a user account and user ID – communicate to supplier	Vendor
<b>3. Sales Training and Roll Out</b> CP Personnel Briefing; possible webinar training Marketing information sent to CPC	CPC to Coordinate with Vendor
<b>4. Web Development/Express Store (if applicable)</b> Initiate IT contact Web store construction Web store final edit Product loaded into web store in Express Test Store Functionality Announce Store Availability	Vendor
<b>5. Marketing</b> General announcement Vendor profile page Email signature logo Email communication announcement <i>*All materials will be approved by Vendor prior to disbursement</i>	CPC
<b>6. Marketing – Vendor</b> General announcement Sales/Account team training; contract highlights including pricing schedule  <i>*All materials will be approved by CPC prior to disbursement</i>	Vendor
<b>7. Management Strategies</b> Review kickoff and roll-out plan Discuss and establish target communication strategy	CPC & Vendor
<b>8. Semi-Annual Evaluation and/or Annual Evaluation</b>	CPC

## General Terms & Conditions

The Cooperative Purchasing Connection (CPC) may make amendments to the General Terms and Conditions when CPC determines that such amendments are in the best interest of its participants. All amendments will be agreed upon between the Parties. Submittals by a Vendor certify that they have read the General Terms and Conditions and understand that they apply to all purchases under the resulting contract(s).

**Alcoholic Beverages, Substance Use, and Weapons:** A Vendor shall not permit its personnel or any subcontractor to possess upon school property any alcoholic beverages, illicit/non-prescribed drugs, tobacco products, or weapons. All personnel must follow all local substance rules and conduct (dress code, language, parking, etc.) policies while on school premises. Any actions involving, or possession of, any of the aforementioned items while on school property may cause a cancellation of any Agreement, at no cost to CPC and its participating SFAs. Criminal charges may apply.

**Assignment:** Any contract awarded under the conditions of this solicitation shall be for the use of organizations eligible for participation. Any eligible agency may participate (piggyback) with this contract at its discretion, with the consent of the Vendor. The Vendor must seek approval from CPC before utilizing the contract with another eligible agency. CPC has partnerships with consortiums across the United States. CPC will work with the Vendor to make such connections should the Vendor want to piggyback the contract as a vehicle for additional sales. All requirements of this solicitation will apply to all participating eligible agencies. Agencies participating in this contract shall be responsible for obtaining approval from their approving body of authority when necessary and shall hold CPC harmless from any disputes, disagreements, or actions which may arise as a result of using this contract.

**Audit:** Under applicable law, the Vendor will agree that members of CPC's purchasing team may audit their records to establish that total compliance of the agreement is met. CPC will ask participating agencies for invoices showing purchases from the Vendor. The Vendor will agree to provide verifiable documentation of all purchases made by said agencies and will make every reasonable effort to resolve discrepancies fairly and equitably to the satisfaction of both CPC and the Vendor. CPC will require a refund to the agencies involved if any difference in price is found and will also require payment of any administrative fees due resulting from sales that were not listed on the sales report(s). CPC will give at least five (5) calendar days' notice of an audit. The audit will be conducted at a reasonable place and time.

**Awarded Vendor:** The Respondent(s) chosen by CPC to provide goods and/or services to participating.

**Awards:** Awards will be made with reasonable promptness and by written notice to the successful Vendor; solicitation responses are considered to be irrevocable for a period of one hundred twenty (120) days following the solicitation opening unless expressly provided for to the contrary in the solicitation and may not be withdrawn during this period without the express permission of CPC.

1. Awards shall be made to the Vendor whose offer(s) constitutes the lowest responsive price offer (or lowest responsive price offer on an evaluated basis) for the item(s) in question or the solicitation as a whole, at the option of CPC. CPC reserves the right to determine those offers which are responsive to the solicitation, or which otherwise serve its members' best interests.
2. CPC reserves the right, before making an award, to initiate investigations as to whether or not the materials, equipment, supplies, qualifications or facilities offered by the Vendor meet the requirements outlined in the proposal and specification and are ample and sufficient to ensure the proper performance of the contract in the event of an award. If upon such examination it is found that the conditions of the proposal are not complied with or that articles or equipment proposed to be furnished do not meet the requirements called



for, or that the qualifications or facilities are not satisfactory, CPC may reject such offer. It is distinctly understood, however, that nothing in the foregoing shall mean or imply that it is obligatory upon CPC to make any examinations before awarding a contract; and it is further understood that if such examination is made, it in no way relieves the Vendor from fulfilling all requirements and conditions of the contract.

3. Qualified or conditional offers which impose limitations of the Vendor's liability or modify the requirements of the solicitation, offers for alternate specifications, or which are made subject to different terms and conditions than those specified by CPC may, at the option of the CPC, be:
  - a. Rejected as being non-responsive, or
  - b. Set aside in favor of the CPC's terms and conditions (with the consent of the respondent), or
  - c. Accepted, where CPC determines that such acceptance best serves the interests of participating agencies and CPC.

Acceptance or rejection of alternate or counteroffers by CPC shall not constitute a precedent that shall be binding on successive solicitations or procurements.

4. CPC reserves the right to determine the responsibility of any Vendor for a particular procurement.
5. CPC reserves the right to reject any responses in whole or in part, to waive technical defects, irregularities, and omissions, and to consider past performance of the offeror wherein its judgment the best interests of participating agencies will be served by so doing.
6. CPC reserves the right to make awards by items, group of items or on the total low response for all the items specified as indicated in the detailed specification unless the Vendor specifically indicates otherwise in their response.
7. Preference may be given to responses on products raised or manufactured in the state, other things being equal.

**Confidential Information:** CPC is a public entity; the information contained in the proposals shall be considered public information under the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13 et. seq. No part of a proposal shall be treated as confidential unless so designated, by the Vendor submitting the proposal, as trade secret information having met the criteria under Minnesota Statutes § 13.37 Subd. 1(b) and other applicable laws. Any data claimed by the vendor submitting the proposal to be trade secret data must be marked "proprietary and confidential." Should a challenge occur to said Vendor's designation of data as "proprietary and confidential," the vendor shall indemnify and hold CPC harmless for any attorney's fees, costs, penalties, or losses associated with such designation. CPC makes no representations to any vendor regarding their designation of data as "proprietary and confidential." CPC designates the sales reports and administrative fee data, references in this solicitation, as confidential. Therefore, under no circumstances, release this data to any entity other than CPC. CPC, however, is a government entity, is required to, upon request of any individual organization; make this information available to the person(s) requesting to contact the CPC department.

**Costs of Preparation:** All costs associated with the preparation, development, or submission of a response or other offers will be borne by the Vendor. CPC will not reimburse any Vendor for such costs.

**Default Contract:** The resulting contract shall be the default contract. All participating agencies' purchases will receive the pricing described in this contract and CPC will receive credit for those purchases made by participating agencies.

**Express Online Marketplace:** CPC provides participating agencies with an online purchasing platform called Express. Through Express, agencies can search for and purchase items. Essentially, Express is a one-stop-shop for many of CPC's commodity-based contracts. A Vendor does not have to have an e-commerce site to be included in Express. Express offers integration into two (2) of the main K-12 school financial systems in Minnesota. CPC expects growth in the number of agencies utilizing the marketplace and the volume of sales to grow significantly. CPC will work with the Vendor to determine if the contract agreement is suitable for the online platform. If deemed suitable, CPC will require integration into Express promptly as outlined in the solicitation.

**Entire Agreement:** The Master Contract Agreement, shall constitute the entire and exclusive agreement between CPC and any vendor receiving an award. In the event of any conflict between the bidder's standard terms of sale, these conditions or more specific provisions contained in the solicitation shall govern.

1. Each proposal will be received with the understanding that the acceptance, in writing, by contract or purchase order by the participating agency of the offer to do work or to furnish any or all the materials, equipment, supplies or services described therein shall constitute a contract between the Vendor and the participating agency. This shall bind the Vendor to furnish and deliver at the prices following the conditions of the said accepted proposal and detailed specifications and the participating agency to pay for at the agreed prices, all materials, equipment, supplies, or services specified and delivered. A contract shall be deemed executory only to the extent of funds available for payment of the amounts shown on purchase orders issued by the participating agency to the Vendor.
2. No alterations or variations of the terms of the contract shall be valid or binding unless submitted in writing and accepted by CPC. All orders and changes thereof must originate from the participating agencies: no oral agreement or arrangement made by a contractor with an agency or employee will be binding on CPC and may be disregarded.
3. Contracts will remain in force for the contract period specified or until all articles or services ordered before date of termination shall have been satisfactorily delivered or rendered and accepted and thereafter until all terms and conditions have been met, unless
  - a. Terminated prior to the expiration date by satisfactory delivery against orders of entire quantities, or
  - b. Extended upon written authorization of CPC and accepted by the Vendor, to permit ordering of the unordered balances or additional quantities at the contract price following the contract terms, or
  - c. Canceled by CPC following other provisions stated herein.
4. It is mutually understood and agreed that the vendor shall not assign, transfer, convey, sublet or otherwise dispose of this contract or his right, title or interest therein, or his power to execute such contract, to any other person, company or corporation, without the previous consent, in writing, of CPC.
5. If subsequent to the submission of an offer or issuance of a purchase order or execution of a contract, the Vendor shall merge with or be acquired by another entity, the contract may be terminated, except as a corporate resolution prepared by the Vendor and the new entity ratifying acceptance of the original bid or contract terms, condition, and pricing is submitted to CPC, and expressly accepted.

**Federal Uniform Guidance:** By entering a contract, the Vendor agrees to comply with all applicable provisions of Title 2, Subtitle A, Chapter II, Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards contained in Title 2 C.F.R. § 200 et. seq. (See Vendor Forms and Signatures).

**Fiscal Year:** a fiscal year is defined as July 1 through June 30 of the following calendar year. The fiscal quarters end on September 30, December 31, March 31, and June 30.

**Force Majeure:** Except for payments of sums due, neither party shall be liable to the other, nor deemed in default under this contract, if and to the extent that such party's performance of this contract is prevented by reason of force majeure. The term "force majeure" means an occurrence that is beyond the control of either party affected and occurs without fault or negligence, including, but not limited to, the following: acts of nature; acts of the public enemy; pandemics; war; riots; strikes; mobilization; labor disputes; civil disorders; fire; flood; earthquakes; famine; volcanic eruptions; meteor strikes; lockouts; injunctions-interventions-acts or failures; or refusals to act by government authority; and other similar occurrences beyond the control of the party declaring force majeure which such party is unable to prevent by exercising reasonable diligence. The force majeure shall be deemed to commence when the party declaring force majeure notifies the other party of the existence of the force majeure and shall be deemed to continue as long as the results or effects of the force majeure prevent the party from resuming performance in accordance with this agreement. Force majeure shall not include late deliveries of software or materials caused by congestion at a manufacturer's plant or elsewhere, an over-sold condition of the market, inefficiencies and poor

management practices, or similar occurrences. If either party is delayed at any time by force majeure, then the delayed party shall notify the other party in writing of such delay within 48 hours.

A Vendor requesting relief under this provision must adhere to the following conditions prior to the price of any product being adjusted:

1. A formal, written request for a price increase must be submitted by the Manufacturer to CPC prior to the price change taking effect. CPC must approve the request. The request will include the Force Majeure cause substantiating the reason the relief is being requested.
2. Adequate documentation to substantiate the request must be included.
3. Failure to comply with provisions of the Force Majeure shall be cause for a request to be denied.

**Governing Law:** This resulting contract award shall be interpreted and construed in accordance with and governed by the laws of the State of Minnesota.

**Governing Venue:** The resulting contract award shall be deemed to have been made and performed in Otter Tail County, Minnesota. All legal arbitration or causes for action arising out of the resulting agreement shall be brought to the courts of Otter Tail County, Minnesota.

**Hold Harmless:** All parties agree to hold the other harmless from any claims and demands of participating agencies which may result from the negligence of the other in connection with their duties and responsibilities under this agreement unless such action is a result of intentional wrongdoing of the other party.

**Leasing and Rental Agreements:** The Vendor may allow participating agencies to enter into a rental, lease, or lease-purchase agreements, providing such agreements comply with Minnesota Statutes and guidelines. CPC must receive a report annually, summarizing the executed lease purchases along with a summary of the participating agencies' purchases. CPC will not collect lease payments or be involved in the terms and conditions of the lease. All lease arrangements are between the Vendor and the participating agency. The Vendor agrees that leases will comply with the Uniform Commercial Code. The applicable administrative fee must be included in the lease cost based on the total value of the goods and applicable services purchased. This fee is referred to under the Technical Specifications. The Vendor should attempt to work with CPC's current leasing vendor. Note, the current leasing vendor may require a minimum purchase amount to begin the leasing process. Should the Vendor be required to utilize their own financial leasing company, this should be noted/requested as an exception.

**Minority and Women-Owned Business:** CPC intends to undertake every effort to increase the opportunity for utilization of minority and women-owned businesses in all aspects of procurement. In connection with the performance of this solicitation, the Vendor agrees to use their best effort to carry out this intent and ensure that minority and women-owned enterprises shall have the maximum practicable opportunity to compete for subcontract work under this solicitation consistent with the efficient performance of this solicitation. CPC desires to promote wherever possible equitable opportunities for minority and women-owned businesses to participate in the services associated with this solicitation.

**New Agency Notification:** CPC will email the current participating agency list to the Vendor each quarter. Those agencies not renewing their participation must not receive CPC agency pricing/discounts.

**Notices:** Notices permitted or required to be given hereunder shall be deemed sufficient if given by written email addressed to the following recipients of the parties, or at such other addresses as the respective parties may designate by like notice from time to time. Notices so given shall be effective upon (a) receipt by the party to which notice is given. Notices shall be sent to [info@purchasingconnection.org](mailto:info@purchasingconnection.org).

**Patent Indemnification:** The Vendor agrees to hold harmless CPC, its successors, assigns, customers and the users of its products from any liability of any nature or kind for use of any copyrighted or copyrighted composition, secret process, patented or unpatented invention, articles or appliances furnished or used in the performance of the contract agreement, for which the contractor is not the patentee, assignee or licensee.

**Participating Agency:** A participating agency shall be defined in accordance with the Minnesota Statutes M.S. §471.59, and M.S. §123A.21, Sub. 11, North Dakota Century Code Chapter 54-40.3, and South Dakota Statutes §5-18A-37. An eligible agency includes any school, higher education, city, county, other governmental agency, nonprofit organization, or other entity contracted to conduct business on behalf of a participating agency provided that the entity is required to follow state and local procurement regulations.

**Party:** The name given to either organization who enters into a contractual agreement.

**Protests:** All protests pertaining to the specifications of the solicitation must be delivered in writing and received by the RFP Facilitator no later than 4:00 p.m. CT on the third (3) business day before the opening of proposals. A protest shall be filed no later than three (3) business days after the opening of the proposals or if the protest is based on subsequent action of CPC, not later than three (3) business days after the aggrieved person knows or should have knowledge of the fact giving rise to the protests. Protests of an award will only be accepted by Vendors who have submitted a response to the solicitation. Respondents may protest only deviations from laws, rules, regulations, or procedures. Protests must specify the grounds for the protest including the specific citation of law, rule, regulation, or procedure upon which the protest is based. The judgment used in the scoring by individual evaluators may not be protested. Protests not filed within the time specified above, or which fail to cite the specific law, rule, regulation, or procedure upon which the protest is based shall be dismissed. Should such a protest reach arbitration and result in a loss, the Vendor will be borne to all costs, including CPC's legal fees. Protests shall include the following:

1. Name, address and telephone number of protester;
2. Original signature of the protester or its representative;
3. Identification of the solicitation by RFP number;
4. A detailed statement of legal and factual grounds including copies of relevant documents; and the form of relief requested; and
5. Any protest review and action shall be considered final with no further formalities being considered.

**Relationship of Parties:** No contract agreement resulting from this solicitation shall be considered a contract of employment. The relationship between CPC and the Vendor is one of the independent contractors each free to exercise judgment and discretion concerning the conduct of their respective businesses. The parties do not intend the proposed contract agreement to create or is to be construed as creating a partnership, joint venture, master-servant, principal-agent, or any other relationship. Except as provided elsewhere in this solicitation, neither party may be held liable for acts of omission or commission of the other party and neither party is authorized or has the power to obligate the other party by contract, agreement, warranty, representation or otherwise in any manner whatsoever except as may be expressly provided herein.

**Respondent:** A respondent has notified CPC of a desire to respond to the proposal and/or has submitted a proposal in response to this solicitation.

**Rights and Obligations Upon Termination:** Termination of the resulting contract award shall not release the party from the obligation to make payment of all amounts due and payable. Regardless of the cause, the Vendor must refrain from any activity which will create a negative relationship between participating agencies and CPC. Notification of termination to participating agencies shall not be made by the Vendor unless written approval has been received from CPC or its designee. Said approval shall include, but not be limited to, the content of the notice, its structure and timing. This will remain in effect for 60 days post-termination. When failure is deemed by the other party to be the result of willful and wanton negligence, it may result in a civil action against the first party. The

Vendor will continue to provide warranty and product support as specified in their proposed response to the solicitation or by the manufacturer, whichever is greater, on all services purchased by participating agencies during the contract term. Upon termination, any website references and/or email accounts, created by either the Vendor or CPC and designed to promote the contract agreement resulting from this solicitation shall be terminated within 48 hours of the termination.

**Risk of Loss:** Regardless of F.O.B., the Vendor agree(s) to bear all risks of loss, injury, or destruction of goods and materials ordered herein which occur before delivery, and such loss or destruction shall not release the Vendor from any obligation hereunder.

**Safety Data Sheet (SDS):** Documentation providing workers and emergency personnel with procedures for handling or working with a specific substance safely, and information such as physical data, toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, and spill-handling procedures. SDS documentation must accompany all deliveries when required by federal, state, and local laws.

**Sales Tax:** Sales and other taxes shall not be included in the prices quoted. The Vendor will charge state and local sales and other taxes on items for which a valid tax exemption certification has not been provided. Each participating agency is responsible for verifying the tax-exempt status to the Vendor. When ordering, participating agencies must indicate that they are tax-exempt entities. Except as set forth herein, no party shall be responsible for taxes imposed on another party as a result of or arising from the transactions contemplated by a Vendor resulting from this solicitation.

**Severability:** If any of the terms of this solicitation conflict with any rule of law or statutory provision or otherwise unenforceable under the laws or regulations of any government or subdivision thereof, such terms shall be deemed stricken from this agreement, but such invalidity or unenforceability shall not invalidate any of the other terms of this agreement, and this agreement shall continue in force, unless the invalidity or unenforceability of any such provisions hereof does substantial violence to, or where the invalid or unenforceable provisions compromise an integral part of or are otherwise inseparable from, the remainder of the resulting agreement.

**Substitutions:** The materials, products or equipment described in these documents establish a standard of type, function, and quality to be met by any proposed substitution. Unless the specification prohibits substitution, vendors are encouraged to propose materials, products or equipment of comparable type, function, and quality. Proposals for substitute items shall be stated in the appropriate blank on the proposal form, or if the form does not contain blanks for substitution, on the Vendor's letterhead attached to the pricing form. Vendors shall attach to the form a statement of the manufacturer and brand name of each proposed substitution plus a complete description of the item, including descriptive literature, illustrations, performance, and test data and any other information necessary for evaluation. The burden of proof is upon the respondent for the merit of the proposed substitution.

**Termination:** CPC reserves the right to terminate this contract, without penalty or recourse, in whole or in part, whereas termination is in the best interest of the participating agencies. The Parties may terminate the Agreement without cause by mutual written consent or by either Party with a minimum of 60 days written notice. The Vendor will not accept any new orders after the termination date specified in the notice. Participating agencies will only be required to pay the Vendor for goods and services delivered before termination and not otherwise returned following the Vendor's return policy. If the participating agency has paid the Vendor for goods and services not yet provided as of the date of termination, the Vendor shall immediately refund such payment(s). Any termination shall not affect projects that are in progress or in receipt of a purchase order (PO) at the time the termination is received. The Vendor shall be entitled to receive just and equitable compensation in accordance with applicable contract pricing for work in progress, work completed, and materials accepted before the effective date of the termination. The Vendor will not be reimbursed for any anticipated profit. CPC reserves the right to cancel, or suspend the use thereof, any contract resulting from this solicitation upon any one of the following events with the Vendor:



1. Voluntary or involuntary bankruptcy or insolvency;
2. Failure to remedy a material breach to the terms and conditions of this solicitation;
3. Receipt of written information from any authorized agency finding activities the Vendor engaged in according to this solicitation to violate the law.

**Termination for Default:** If either Party is in default under this contract, it shall have an opportunity to cure the default within the time indicated, 10 business days, after it is given written notice of default to the other party, specifying the nature of the default. Upon receipt of the notice of default, the defaulting party shall have 10 business days to provide a satisfactory response. Failure on the part of the defaulting party to adequately address all issues of concern may result in contract termination. If the default is not cured within the time specified in the notice of default, the non-defaulting party shall have the right, in addition to all other remedies at law or equity, to immediately terminate this contract. Failure to complain of any action, non-action or default under this Agreement shall not constitute a waiver of any of the parties' rights hereunder. CPC reserves the right to terminate this contract, or any part hereof, for cause in the event of any default by the Vendor, or if the Vendor fails to comply with any contract terms and conditions or fails to provide adequate assurances of future performance.

In the event of termination for cause, CPC and its participating agencies shall not be liable to the Vendor for any amount of supplies or services not accepted, and the Vendor shall be liable to CPC and its participating agencies for any and all rights and remedies provided by law. If it is determined that CPC improperly terminated this contract for default, such termination shall be deemed a termination for convenience. CPC will issue written notice to the Vendor for acting or failing to act in any of the following:

1. The Vendor provides material that does not meet the specifications of the contract;
2. The Vendor fails to adequately perform the services set forth in the specifications of the contract;
3. The Vendor fails to complete the work required or to furnish the materials required within a reasonable amount of time;
4. The Vendor fails to make progress in the performance of the contract and/or gives CPC reason to believe that the Vendor will not or cannot perform to the requirements of the contract;
5. The Vendor fails to observe any of the terms and conditions of the contract.

**Termination for Non-Appropriation:** Any individual participating agency's procurement/contract covered by this solicitation and executed in accordance with the resulting contract may be terminated if insufficient appropriations and/or authorizations do not exist due to changes in state or federal law, or because of a court order, or because of insufficient appropriations made available to the participating agency's governing board and/or its State Legislature. Such termination will be affected by sending fifteen (15) days written notice to the Vendor. The participating agency's decision as to whether sufficient appropriations and authorizations are available shall be accepted by the Vendor and shall be final.

**Tri-State Area:** Defined as the three states participating in CPC (Minnesota, North Dakota and South Dakota) and their participating agencies.

**Vendor Orientation (CPC 101):** The Vendor and their participating resellers/sub-contractors will be required to participate in an online training session that is designed to educate the Vendor and resellers/sub-contractors on the purpose and nature of CPC. The Vendor will not be marketed to participating agencies until they have completed the vendor orientation session.

**Waiver:** No failure by either party to take any action or assert any right hereunder shall be deemed to be a waiver of such right in the event of the continuation or repetition of the circumstances giving rise to such right.

## Vendor Questionnaire

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### **Instructions**

Contained herein is a questionnaire required by the Cooperative Purchasing Connection (CPC). Please note, while some information is merely informational, some will be used during the evaluation and vetting process.

To submit the required forms, follow these steps:

1. Read the document in its entirety.
2. Respondents must use the Vendor Questionnaire to its capacity. Attached exhibits and/or supplemental information should be included only when requested (i.e. Marketing Plan).
3. Complete all questions.
4. Save all pages in the correct order to a single PDF format titled “***Vendor Questionnaire – Name of Company***”.
5. Submit the Vendor Questionnaire, along with other required documents in Public Purchase.

**The following sections will need to be completed before submission and submitted as one (1) single PDF titled “Vendor Questionnaire – Name of Company”:**

[Company Information](#)  
[Qualifications & Experience](#)  
[Warranty](#)  
[Financials & Level of Support](#)  
[Marketing & Partnership](#)  
[Exceptions & Deviations](#)  
[References](#)

## Company Information

Name of Company: \_\_\_\_\_

Company Address: \_\_\_\_\_

City, State, Zip code: \_\_\_\_\_

Website: \_\_\_\_\_

Phone: \_\_\_\_\_

Provide the following company contacts that will be working with this anticipated contract. Include name, email, and phone number(s).

	Name	Email	Phone
General Manager			
Contract Manager			
Sales Manager			
Marketing Manager			
Customer Service Manager			
Account Manager(s)			

List who will be responsible for receiving updated participation lists.

Name	Email	Phone

List who will be responsible for submitting sales reports and administrative fee payments every quarter.

Name	Email	Phone

List who will be responsible for conducting audits as requested by CPC.

Name	Email	Phone

Identify any business types/classifications that your company holds. **\*Submit documentation in PDF format to verify business status (see submittal checklist).**

x	Business Type/Classification
	8(a) 8(a) Qualified Business
	DBE Disadvantaged Business Enterprise
	HUB Historically Underutilized Business Zone
	MBE Minority-Owned Business Enterprise
	MWBE Minority Women-Owned Business Enterprise
	SBE Small Business Enterprise
	Other; list name:

x	Business Type/Classification
	SDB Small Disadvantaged Business
	SDVOB Service-Disabled Veteran Owned Business
	SECTION 3 Section 3 Business Concern
	SSV Sole Source Vendor
	VBE Veteran-Owned Business Enterprise
	WBE Woman-Owned Business Enterprise

Provide a list of other contracts your organization has in place that could be accessed by our membership for your services (e.g. other consortiums, state agencies) in MN, ND, SD, IA, and WI?

Click or tap here to enter text.



## Qualifications & Experience

**1. Provide a brief background of your organization, including the year it was founded (1-2 paragraphs max.).**

Click or tap here to enter text.

**2. Provide evidence of what your company is doing to remain viable in the lighting industry.**

Click or tap here to enter text.

**3. Describe your company's logistics (locations, experience, production, distribution of products, warehouse inventories and delivery systems used) that should be considered in your ability to deliver on-time quality services, products, and solutions to participating agencies in MN, ND, SD, IA, and WI.**

Click or tap here to enter text.

**4. Describe the number of agencies your organization, on average, provides lighting audit services and LED solutions to. Include overall numbers and numbers specific to MN, ND, SD, IA, and WI.**

**Describe your customer retention as it pertains to lighting audit services and LED solutions (i.e. customers who are served that continue to be repeat customers).**

Click or tap here to enter text.

**5. Describe and specify your proposed service area (MN, ND, SD, IA, and WI) and how your company intends to meet the needs of customers in that area.**

Click or tap here to enter text.

**6. List the agencies, if any, you would exempt from this contract (i.e. current agencies that you are currently serving that will be exempt from pricing submitted with this proposal).**

Click or tap here to enter text.

**7. Describe your company's approach to lighting audits, the steps involved in an audit, and applicable LED solutions and what differentiates your company from your competitors. Describe any competitive differences regarding sales, service, installation, technology, and product line(s).**

Click or tap here to enter text.

**8. Describe how your company works with local utility companies to ensure energy rebates are maximized and how the funding/rebate, if approved, flows through, and applies to the project.**

Click or tap here to enter text.

**9. Describe your company's approach to proposing available LED solutions to an agency resulting from a lighting audit.**

Click or tap here to enter text.

**10. Describe any minimum project requirements and if any surcharges will be assessed for not meeting the minimum.**

Click or tap here to enter text.

**11. Describe how your company ensures that the LED solutions and products offered are current, energy efficient, best-value, and are customizable to agency needs.**

Click or tap here to enter text.

**12. Describe your company's hierarchy or chain of command from installers to sales to management that will work with this potential contract/program.**

Click or tap here to enter text.

**13. Describe the process from order placement, including methods, to receipt of order, installation, and final walk-through (punch-list).**

Click or tap here to enter text.

**14. Describe in detail your return or exchange program/policy(s) for purchases of LED lighting solutions and/or specific products (i.e lamps, fixtures) outside of an audit or applicable project.**

Click or tap here to enter text.

**15. Provide a narrative of a recent project that totaled at least \$150,000 in lighting audit and LED solutions. The narrative should describe the lighting audit and results, proposed project scope, pricing costs and calculations, any fees, your company's installation/project management, and a final report and rebate summary.**

Click or tap here to enter text.

**15a. Uploaded as a separate PDF document titled "7 - Project Deliverables" provide the supporting documentation for the project described above in #15. Supporting documentation and deliverables must include the following:**

- (i) Lighting audit and results**
- (ii) Proposed project scope, pricing costs and calculations, any applicable fees**
- (iii) Installation/Project Management plan**
- (iv) Final report and rebate summary**

**16. Describe any "added value" attributes being offered to participating agencies when purchasing services and products through your company. Describe any "value-adds" that are exclusive to the potential contract.**

Click or tap here to enter text.

## Warranty

**1. Describe your warranty program, including any conditions and requirements to qualify claims procedure and overall structure.**

Click or tap here to enter text.

**2. Do all warranties cover all products/equipment parts and labor?**

\_\_\_\_\_ *Yes*                      \_\_\_\_\_ *No*

**If NO, describe the exceptions to coverage.**

Click or tap here to enter text.

**3. Do warranties cover the expense of a technician's travel time and mileage to perform warranty repairs?**

\_\_\_\_\_ *Yes*                      \_\_\_\_\_ *No*

**If NO, describe why travel and mileage are not covered.**

Click or tap here to enter text.

**4. List any additional limitations or circumstances that would not be covered under your warranty?**

Click or tap here to enter text.

**5. List any geographic areas for which your organization cannot provide a certified technician to perform warranty repairs. How will participating agencies in these areas be provided service for warranty repair?**

Click or tap here to enter text.

## Financials & Level of Support

**1. Describe the percentage of your company's revenue, by category (city/county/government, K12 education, higher education) that is derived from lighting audit services and LED sales on an annual basis.**

Click or tap here to enter text.

**2. Describe how your company works with agencies to determine payment terms, progress payments, etc.**

Click or tap here to enter text.

**3. Describe your company's allowed methods for payment and if any fees are assessed for those methods.**

Click or tap here to enter text.

**4. Indicate the level of support your company will offer on this contract category.**

\_\_\_\_\_ Pricing is better than what is offered to individual educational agencies.  
\_\_\_\_\_ Pricing is better than what is offered to cooperative educational agencies.  
\_\_\_\_\_ Other, please describe

**If OTHER, describe how the pricing submitted differs from individual entities or other purchasing consortiums:**

Click or tap here to enter text.

**5. Describe any self-audit process/program you plan to employ to verify compliance with an anticipated contract award.**

Click or tap here to enter text.

## Marketing & Partnership

**1. Describe how your company will position and propose to support CPC and its participating agencies regarding program growth.**

Click or tap here to enter text.

**2. Describe and submit a marketing plan that would describe, at a minimum, the following: process on how the contract will be launched to current and potential agencies, the ability to produce and maintain full-color print advertisements in camera-ready electronic format, including company logos and contact information, anticipated contract announcements, planned advertisements, industry periodicals, other direct, or indirect marketing activities promoting the awarded contract, and how the contract award will be displayed/linked on your organization's website. You can submit any support materials as Exhibit A – Marketing Plan.**

Click or tap here to enter text.

**3. Describe how your company will position this contract to CPC's participating agencies if awarded.**

Click or tap here to enter text.

**4. Describe how you plan to inform and train company personnel on the contract terms and conditions, details, and promotion of the contract. Describe how your organization plans to utilize your marketing and sales staff with this anticipated contract.**

Click or tap here to enter text.

## Exceptions & Deviations

**1. List any additional stipulations and/or requirements your company requests that are not covered in the RFP.**

Click or tap here to enter text.

**2. List any exceptions your company is requesting to the terms outlined in the Technical Specifications.**

**Respondents must include the following when requesting exceptions:**

- **RFP section number and page number**
- **Describe the exception**
- **Explanation of why this is an issue**
- **A proposed alternative to meet the needs of participating agencies and the cooperative**

Click or tap here to enter text.

## References

**Provide three (3) references that have purchased Lighting Audit and LED Solutions from your company within the last two (2) years. References from the proposed service area are preferred. A contact name, phone number and email will be required. \*Note, ensure your references are prepared to communicate with a representative from CPC. Failure to confirm reference of past work may affect your evaluation.**

**Reference #1 – Company Name**

**Service/Product Purchased**

**Year of Purchase**

**Reference Contact**

**Phone**

**Email**

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

**Reference #2 – Company Name**

**Service/Product Purchased**

**Year of Purchase**

**Reference Contact**

**Phone**

**Email**

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

**Reference #3 – Company Name**

**Service/Purchase Purchased**

**Year of Purchase**

**Reference Contact**

**Phone**

**Email**

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

## Vendor Forms & Signatures

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### **Instructions**

Contained herein are forms and information required by the Cooperative Purchasing Connection (CPC). Please note, while some information is merely informational, some will be used during the evaluation and vetting process.

To submit the required forms, follow these steps:

1. Read the document in its entirety.
2. Complete all questions and forms.
3. Save all pages in the correct order to a single PDF format titled “***Vendor Forms & Signatures – Name of Company***”.
4. Submit the forms in the required format with all necessary signatures in Public Purchase.

**The following sections will need to be completed prior to submission and submitted as one single PDF titled “Vendor Forms & Signatures – Name of Company”:**

1. [Contract Offer & Award](#)
2. [Uniform Guidance “EDGAR” Certification Form](#)
3. [Subcontractor Utilization Form](#)

## Contract Offer & Award

**Instructions:** Part I of this form is to be completed by the Vendor and signed by its authorized representative. Part II will be completed by the Cooperative Purchasing Connection (CPC) upon the occasion of an award.

### Part I: Vendor

In compliance with the Request for Proposal (RFP), the undersigned warrants that I/we have examined all General Terms and Conditions, Forms and Specifications, and being familiar with all of the conditions surrounding the solicitation, hereby offer and agree to furnish all goods and services in compliance with all terms, conditions, specifications, and amendments in this solicitation and any written exceptions in the offer. Signature also certifies understanding and compliance with this proposal. The undersigned understands that his/her competence and responsibility and that of his/her proposed subcontractors, time of completion, as well as other factors of interest to CPC as stated in the evaluation section, will be a consideration in making the award. This contract offer and award binds said Vendor to all terms and conditions stated in the proposal.

<b>Business Name</b>	_____	<b>Date</b>	_____
<b>Address</b>	_____	<b>City, State, Zip</b>	_____
<b>Contact Person</b>	_____	<b>Title</b>	_____
<b>Authorized Signature</b>	_____	<b>Title</b>	_____
<b>Email</b>	_____	<b>Phone</b>	_____

### Part II: CPC

Your response to the identified proposal is hereby accepted. As a Vendor, you are now bound to offer and provide the products and services identified within this solicitation, your response, including all terms, conditions, specifications, exceptions, and amendments. The initial term of this contract shall be for up to twenty-four (24) months and will commence on the date indicated below. There will be an optional renewal for a period lasting no longer than one (1) additional 24-month period. CPC may grant an extension under certain criteria and conditions.

<b>Agency</b>	_____	<b>Authorized Signature</b>	_____
<b>Name</b>	_____	<b>Title</b>	_____
<b>Awarded this</b>	_____	<b>day of</b>	_____
		<b>Contract #</b>	_____
<b>Contract/Agreement to Commence</b>	_____		

# EDGAR Certification Form

2 CFR Part 200

## REQUIRED CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS – APPENDIX II TO 2 CFR 200

**The following provisions are required and apply when federal funds are expended by participating agencies for any contract resulting from this procurement process.**

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

### **(A) Vendor Violation or Breach of Contract Terms**

Contracts for more than the simplified acquisition threshold currently set at \$250,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate. Provisions regarding vendor default and legal remedies are included in Sections I.K.18 and I.K.19 above. Any contract award will be subject to such provisions. The remedies under the contract are in addition to any other remedies that may be available under law or in equity.

### **(B) Termination for Cause and for Convenience**

Pursuant to Federal Rule (B) above when federal funds are expended by participating agencies, the participating agency reserves all rights to immediately terminate any agreement in excess of \$10,000 resulting from this procurement process in the event of a breach or default of the agreement by the Vendor, in the event the vendor fails to” (1) meet schedules, deadlines, and/or delivery dates within the time specified in the procurement solicitation, contract, and/or a purchase order; (2) make any payments owed; or (3) otherwise perform in accordance with the contract and/or the procurement solicitation. The participating agency reserves the right to terminate the contract immediately, with written notice to vendor, for convenience, if the participation agency believes, in its sole discretion that it is in the best interest of the participating agency to do so. The vendor will be compensated for work performed and accepted and goods accepted by the participating agency as of the termination date if the contract is terminated for convenience of the participating agency. Any award made under this procurement process is not exclusive and the participating agency reserves the right to purchase goods and services from other vendors when it is in the best interest of the participating agency.

### **(C) Equal Employment Opportunity**

Except as otherwise provided under 41 CFR Part 60, all participating agency purchases or contract that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 shall be deemed to include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR Part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

### **(D) Davis Bacon Act**

When required by Federal program legislation, Vendor agrees that, for all participating agency contracts for the construction, alteration, or repair (including painting and decorating) of public buildings or public works, in excess of \$2,000, Vendor shall comply with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, the Vendor is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specific in a



wage determinate made by the Secretary of Labor. In addition, the Vendor shall pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

Vendor must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

#### **(E) Contract Work Hours and Safety Standards Act**

Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard workweek of 40 hours. Work in excess of the standard workweek is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the workweek. The requirements of the 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions that are unsanitary, hazardous or dangerous. These requirements do not apply to the purchase of supplies, materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

#### **(F) Right to Inventions Made Under a Contract or Agreement**

If the participating agency's Federal award meets the definition of "funding agreement" under 37 CFR 401.2(a) and the recipient or sub-recipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance or experiments, developmental or research work under the "funding agreement," the recipient or sub-recipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

#### **(G) Clean Air Act and Federal Water Pollution Control Act**

Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended, contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

#### **(H) Debarment and Suspension (Executive Order 12549 and 12689)**

A contract award (see 2 CFR 180.222) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1966 Comp. p. 189) and 12689 (3 CFR Part 1989 Comp. p. 235), "Debarment and Suspension." SAM exclusions contain the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.



#### **(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)**

Vendors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

Pursuant to Federal Rule (I) above, when federal funds are expended by participating agencies, the vendor certifies that during the term of an award for all contracts by participating agencies resulting from this procurement process, the vendor certifies that it is compliance with all applicable provisions of the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). The undersigned further certifies that:

- (1) No Federal appropriated funds have been paid or will be paid for on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be include in the award documents for all covered sub-awards exceeding \$100,000 in Federal funds at all appropriated tiers and that all subrecipients shall certify and disclose accordingly.

#### **(J) Procurement of Recovered Materials**

For participating agency purchases utilizing Federal funds, Vendor agrees to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act where applicable and provide such information and certifications as a participating agency may require to confirm estimates and otherwise comply. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery, and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

#### **(K) Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment**

A participating agency is prohibited from obligating or expending funds to:

- (1) Procure or obtain.
- (2) Extend or renew a contract to procure or obtain; or
- (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
  - (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou

Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

- (ii) Telecommunications or video surveillance services provided by such entities or using such equipment.
- (iii) Telecommunications or video surveillance equipment or services products or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

#### **(L) Domestic Preferences for Procurements**

As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

For the purpose of this section:

- (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

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#### **PROFIT AS A SEPARATE ELEMENT OF PRICE**

For purchases using federal funds in excess of \$250,000, a participating agency may be required to negotiate profit as a separate element of the price. See 2 CFR 200.323(b). When required by a participating agency, the vendor agrees to provide information and negotiate with the participating agency regarding profit as a separate element of the price for a particular purchase. However, vendor agrees that the total price, including profit, charged by the vendor to the participating agency shall not exceed the awarded pricing.

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#### **RECORD RETENTION REQUIREMENTS FOR CONTRACTS PAID FOR WITH FEDERAL FUNDS – 2 CFR § 200.333**

When federal funds are expended by participating agencies for any contract resulting from this procurement process, the vendor certifies that it will comply with the record retention requirements detailed in 2 CFR § 200.333. The vendor further certifies that vendor will retain all records as required by 2 CFR § 200.333 for a period of three years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

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#### **CERTIFICATION OF COMPLIANCE WITH THE ENERGY POLICY AND CONSERVATION ACT**

When federal funds are expended by participating agencies for any contract resulting from this procurement process, the vendor certifies that the vendor will be in compliance with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.; 49 C.F.R. Part 18; Pub. L. 94- 163, 89 Stat. 871).

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## CERTIFICATION OF NON-COLLUSION STATEMENT

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Vendor certifies under penalty of perjury that its responsible to this procurement solicitation is in all respects bona fide, fair, and made without collusion or fraud with any person, joint venture, partnership, corporation or other business or legal entity.

**Pursuant to Federal Ruling, when federal funds are expended by participating agencies, the vendor hereby certifies that during the term of an award for all contracts by participating agencies resulting from this procurement process, vendor certifies compliance will all provisions, laws, acts, regulations as specifically noted above. The vendor agrees to comply with all federal, state, and local laws, rules, regulations, and ordinances, as applicable.**

Business Name \_\_\_\_\_ **Authorized Signature** \_\_\_\_\_

Full Name \_\_\_\_\_ Title \_\_\_\_\_

## Subcontractor Utilization Form

**Instructions:** List all subcontractors to be used during the performance of this contract. Submit additional forms if needed.

Solicitation Name: \_\_\_\_\_  
Solicitation Number: \_\_\_\_\_  
Vendor Name: \_\_\_\_\_

If a subcontractor will not be used, check this box: ☐

Company Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Primary Contact: \_\_\_\_\_  
Email Address of Contact: \_\_\_\_\_  
Services to be provided: \_\_\_\_\_

Company Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Primary Contact: \_\_\_\_\_  
Email Address of Contact: \_\_\_\_\_  
Services to be provided: \_\_\_\_\_

Company Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Primary Contact: \_\_\_\_\_  
Email Address of Contact: \_\_\_\_\_  
Services to be provided: \_\_\_\_\_

# Pricing Schedule Intro

**\*Please note this workbook has multiple tabs.**

**Instructions.** This spreadsheet contains multiple workbooks/tabs relating to this RFP. Please follow the directions found/listed on each workbook and complete the workbooks as they pertain to your company's offerings. All pages have been formatted to print to one page width, however, you may add additional lines as needed. Please note, each individual workbook will note if it's a required or optional form. Per the RFP terms and conditions, all workbooks listed as optional are considered a value-added attribute.

## **This spreadsheet contains the following workbooks/tabs:**

- 1 - Lighting Audit Services
- 2.1 - LED Category Discount
- 2.2 - LED Lighting
- 3 - Volume Discounts

### **1 - Lighting Audit Services - *required***

*Submit pricing for all services your company is offering to CPC and its participating agencies.*

### **2.1 - LED Category Discount - *required, if proposing lighting solutions***

*Submit pricing for all categories of product offered (by catalog, category, and/or by manufacturer) which can include sub-categories (specific lines from manufacturers) and the discount associated with that category.*

### **2.2 - LED Lighting - *required, if proposing lighting solutions***

*Submit pricing for all products and accessories being proposed by your company.*

### **3 - Volume Discounts - *optional***

*Submit all volume discounts if available to CPC and its participating agencies.*

# 1- Lighting Audit Services

\*Please note this workbook has multiple tabs.

Instructions. Complete the tables below for the services your company is offering. Please note this is an REQUIRED form.

Responding Company's Name:

REQUIRED

## Lighting Assessment & Design

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Lighting Audit & Assessment (per square foot)			0.00%			
Design Services			0.00%			
Project Management			0.00%			
			0.00%			
			0.00%			

**Installation [Labor]** \*\*Prevailing wage projects/installs are subject to higher hourly rates/charges. Prevailing wage rates change by MN county. Participating agencies are required to notify the Vendor if prevailing wages are required (state/federal funding as part or all of the project).

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Hourly Rate - Regular Hours			0.00%			
Hourly Rate - Evening			0.00%			
Hourly Rate - Weekend/Holidays			0.00%			
			0.00%			
			0.00%			

## Other Services

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Rebate Fulfillment			0.00%			
Recycling Services			0.00%			
Training			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			

## 2.1 - LED Category Discount

**\*Please note this workbook has multiple tabs.**

**Instructions.** Complete the following schedule for all categories of product offered (by catalog, category, and/or by manufacturer) which can include sub-categories (specific lines from manufacturers) and the discount associated with that category. The form should be completed by the standards listed in the Technical Specifications. Additional rows may be added. This is a required form **if proposing lighting solutions.**

**Responding Company's Name:** \_\_\_\_\_

REQUIRED FORM

[illegible]

## 2.2 - LED Lighting - Pricing

**\*Please note this workbook has multiple tabs.**

**Instructions.** Complete the following schedule for all products and accessories being proposed by your company. The form should be completed by the standards listed in the Technical Specifications. Additional rows may be added. **This is a required form if proposing lighting solutions.**

**Responding Company's Name:**

[illegible]



### 3 - Volume Discounts

**\*Please note this workbook has multiple tabs.**

**Instructions.** Complete the form below if your company is offering additional discounts for a one time purchase, size of project, or a group of local agencies in a geographic area combining requirements (estimate annual spend). Please note this is an **optional form**.

100

## OPTIONAL FORM

[illegible]



Chat

Help

Logout

Home

New Bid

Closed Bids

My Stuff

Tools

**Questions for Bid RFP #24.5 - Lighting Audit Services & LED Solutions****Question #1**

We are currently licensed for installation in all states mentioned in the solicitation except for North Dakota. Please advise if this technicality excludes us from being able to submit our bid.

**Answers**

It does not exclude you from submitting a proposal. See 3 Questionnaire, Qualifications & Experience, question 5. A respondent will need to describe and specify their intended service area (i.e. states, regions, specific geographical locations).

If proposing to do work in said area and licensure/registration is required, the Vendor must be registered/licensed to do so.

Answer

Archive

Reject

Aug 15, 2023 3:55:28 PM CDT

By: Voss Electric Comapny - VossLighting1011

Aug 15, 2023 4:27:21 PM CDT

By: Itruax

**Question #2**

Subcontractor installers are often used for the LED solution installations. The subcontractors are usually determined based on the location of the project, the relationship with the agency (if applicable) and when it sells. For this initial submittal, is it okay to leave the Subcontractor utilization form empty, then just submit our subcontractors to the CPC on each project when it sells?

**Answers**

A Vendor may make an exception or deviation to the requirement. However, it must include a plan to meet the requirement when each subcontractor is hired by the Vendor.

Answer

Archive

Reject

Aug 25, 2023 11:26:11 AM CDT

By: The Retrofit Companies - Retrofit

Aug 28, 2023 12:59:15 PM CDT

By: Itruax

**Question #3**

We always provide Free LED lighting audits and build the required report sharing energy savings, maintenance savings, incentives, ROI return and much more for our clients. Can we enter \$0 for the costs for Lighting Audit & Assessment (per square foot), Design Services, and Project Management?

**Answers**

A responding Vendor may choose not to charge for their audit and assessment and other services when presented as a complete turnkey solution. A Vendor should consider the possibility of a participating agency only wanting a lighting audit conducted. A Vendor could waive the fee if the agency selects and moves forward with the final project.

Per the RFP: IV. Technical Specification, A. General, 1. The Vendor must provide lighting audit services, LED solutions, and equipment, or a combination of both when requested by participating agencies.

Answer

Archive

Reject

Aug 29, 2023 1:00:44 PM CDT

By: NCLED - dalebaeten

Aug 30, 2023 8:42:14 AM CDT

By: Itruax

Ask a Question

View Bid

**From:** [Public Purchase](#)  
**To:** [Lisa Truax](#)  
**Subject:** [External]Public Purchase - RFP #24.5 - Lighting Audit Services & LED Solutions Closed Notification  
**Date:** Thursday, September 7, 2023 10:00:10 AM

---

Lisa M Truax:

The bid RFP #24.5 - Lighting Audit Services & LED Solutions has closed on Sep 7, 2023 10:00:00 AM CDT

To see more details on this bid go to

<http://www.publicpurchase.com/gems/bid/bidView?bidId=176590>

Thank you for using Public Purchase.

MK= JnhxYGog5yOr9CEd6iPmWg==

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

## Notifications Report

Agency

Bid Number

Bid Title

Cooperative Purchasing Connection

176590

Lighting Audit Services & LED Solutions

Vendor Name	State	Invitation	Date	Email	Reason
9 TO 5 COMPUTER SUPPLY DIST., INC.	FL	Classification	2023-08-14 09:50:14	richardraab@9to5computer.com	Bid Notification
Accord Electric, Inc.	MN	Classification	2023-08-14 09:50:14	info@accordelectric.net	Bid Notification
Ask IT Consulting Inc.	NY	Self Invited	2023-08-15 15:27:21	stevewalse85@gmail.com	Bid Answer
Ask IT Consulting Inc.	NY	Self Invited	2023-08-28 11:59:16	stevewalse85@gmail.com	Bid Answer
Ask IT Consulting Inc.	NY	Self Invited	2023-08-30 07:42:14	stevewalse85@gmail.com	Bid Answer
Berners-Schober	WI	Classification	2023-08-14 09:50:14	jjuliot@bsagb.com	Bid Notification
Black & McDonald	MO	Classification	2023-08-14 09:50:14	gphilipps@blackandmcdonald.com	Bid Notification
Design Electric, Inc	MN	Classification	2023-08-14 09:50:14	rcostello@designelect.com	Bid Notification
E&I Global Energy Services, Inc	MN	Classification	2023-08-14 09:50:14	rhanson@ei-ges.com	Bid Notification
EAPC Architects Engineers	ND	Classification	2023-08-14 09:50:14	lori.bakken@eapc.net	Bid Notification
Efficiency Integrated Solutions, Inc.	GA	Classification	2023-09-07 07:35:48	eperez-young@energyintegrationsolutions.com	Bid Notification
eTech LED	WI	Classification	2023-08-14 09:50:14	reverhart@etechled.com	Bid Notification
Fastenal Company	MN	Classification	2023-08-14 09:50:14	govbids@fastenal.com	Bid Notification
Fastenal Company	MN	Classification	2023-08-14 09:50:14	govsales@fastenal.com	Bid Notification
GenPro Energy Solutions	SD	Classification	2023-08-14 09:50:14	jon.holsworth@genproenergy.com	Bid Notification
Global Equipment Company, Inc.	GA	Classification	2023-08-14 09:50:14	bgarrett@globalindustrial.com	Bid Notification
Graybar Electric	MO	Self Invited	2023-08-28 11:59:16	andrew.fleming@graybar.com	Bid Answer
Graybar Electric	MO	Self Invited	2023-08-30 07:42:14	andrew.fleming@graybar.com	Bid Answer
Graybar Electric Co.	MN	Classification	2023-08-14 09:50:14	david.stien@graybar.com	Bid Notification
Green Lightng Company	NE	Classification	2023-08-14 09:50:14	jongreen@gmail.com	Bid Notification
HD SUPPLY FACILITIES MAINTENANCE, LTD.	CA	Classification	2023-08-14 09:50:14	HDS-FMBIDS@HDSUPPLY.COM	Bid Notification
HiMEC, Inc.	MN	Classification	2023-08-14 09:50:14	himecestimating@hmcc.com	Bid Notification
INF Associates	NY	Classification	2023-09-06 18:50:07	steven@infassociates.com	Bid Notification
IronMan Engineering LLC	MN	Classification	2023-08-14 09:50:14	IMEngineeringLLC@gmail.com	Bid Notification
J H LARSON ELECTRICAL COMPANY	MN	Classification	2023-08-14 09:50:14	janemo@jhlaron.com	Bid Notification
L&L Supplies	TX	Self Invited	2023-08-15 15:27:21	swalker8585@gmail.com	Bid Answer
L&L Supplies	TX	Self Invited	2023-08-28 11:59:16	swalker8585@gmail.com	Bid Answer
L&L Supplies	TX	Self Invited	2023-08-30 07:42:14	swalker8585@gmail.com	Bid Answer
LED Supply CO	WI	Classification	2023-08-14 09:50:14	Tony@ledsupplyco.com	Bid Notification
LTL LED LLC	MN	Classification	2023-08-14 09:50:14	contact@wolfriverelectric.com	Bid Notification
Mad Dash, Inc.	IL	Classification	2023-08-14 09:50:14	sales@maddash.com	Bid Notification
Metropolitan Mechanical Contractors Inc	MN	Classification	2023-08-14 09:50:14	Bradley.Friedrich@metromech.us	Bid Notification
NCLED	WI	Classification	2023-08-30 07:42:14	dale@ncledlighting.com	Bid Answer
NCLED	WI	Classification	2023-09-05 13:08:50	dale@ncledlighting.com	Bid Notification
Neptun Light, Inc.	IL	Classification	2023-08-14 09:50:14	robert@neptunlight.com	Bid Notification
NetZero USA Holdings Inc	GA	Self Invited	2023-08-15 15:27:21	amanda@netzero-usa.com	Bid Answer
NetZero USA Holdings Inc	GA	Self Invited	2023-08-28 11:59:16	amanda@netzero-usa.com	Bid Answer
NetZero USA Holdings Inc	GA	Self Invited	2023-08-30 07:42:14	amanda@netzero-usa.com	Bid Answer
Nietz Electric	MN	Classification	2023-08-14 09:50:14	ajl@nietzco.com	Bid Notification
OmniPro LLC	CA	Self Invited	2023-08-30 07:42:14	ranjan@omniprollc.com	Bid Answer
Preferred Sales Agency	MN	Classification	2023-08-14 09:50:14	jnorton@preferred-sales.com	Bid Notification
Premier Lighting, Inc.	MN	Classification	2023-08-14 09:50:14	ANGIE@PREMIERLTG.COM	Bid Notification
Premier Lighting, Inc.	MN	Classification	2023-08-15 15:27:21	ANGIE@PREMIERLTG.COM	Bid Answer
Premier Lighting, Inc.	MN	Classification	2023-08-28 11:59:16	ANGIE@PREMIERLTG.COM	Bid Answer
Premier Lighting, Inc.	MN	Classification	2023-08-30 07:42:14	ANGIE@PREMIERLTG.COM	Bid Answer
RazrLites	VA	Classification	2023-08-14 09:50:14	info@whywastepower.com	Bid Notification
Renew Energy	SD	Classification	2023-08-14 09:50:14	neily@renewenergy.com	Bid Notification
Royal Media Network	MD	Classification	2023-08-14 09:50:14	hannah.u@royalimagingolutions.com,ermina@royalimagingolutions.com,charlene@royalimagingolutions.com,arish@royalimagingolutions.com	Bid Notification
Ryan Electric Inc	MN	Classification	2023-08-14 09:50:14	ryanelec@ryanelectricinc.com	Bid Notification
Schreder Lighting	IL	Classification	2023-08-14 09:50:14	d.doormann@schreder.com	Bid Notification
Sitler's LED Supplies	IA	Classification	2023-08-14 09:50:14	info@sitlersupplies.com	Bid Notification
Solus LED	MN	Classification	2023-08-14 09:50:14	jim@solusled-usa.com	Bid Notification
Solus LED	MN	Classification	2023-08-15 15:27:21	jim@solusled-usa.com	Bid Answer

Solus LED	MN	Classification	2023-08-28 11:59:16	jim@solusled-usa.com	Bid Answer
Solus LED	MN	Classification	2023-08-30 07:42:14	jim@solusled-usa.com	Bid Answer
Specialty Bulb Co Inc	NY	Classification	2023-08-14 09:50:14	luann@bulbspecialists.com	Bid Notification
The Clark Enersen Partners	MO	Classification	2023-08-14 09:50:14	marketing@clarkenersen.com	Bid Notification
The Retrofit Companies	MN	Self Invited	2023-08-15 15:27:21	jandrist@retrofitcompanies.com	Bid Answer
The Retrofit Companies	MN	Self Invited	2023-08-28 11:59:15	jandrist@retrofitcompanies.com	Bid Answer
The Retrofit Companies	MN	Self Invited	2023-08-30 07:42:14	jandrist@retrofitcompanies.com	Bid Answer
Thunderbird Electric Supply	MO	Classification	2023-08-14 09:50:14	robert@thunderbirdelectric.net	Bid Notification
Trans-Lux	NY	Self Invited	2023-08-28 11:59:16	jmclean@trans-lux.com	Bid Answer
Trans-Lux	NY	Self Invited	2023-08-30 07:42:14	jmclean@trans-lux.com	Bid Answer
Unleashing Effective Products.com LLC dba Mallory Energy Inc.	MO	Classification	2023-08-14 09:50:14	Paul@MalloryEnergy.com	Bid Notification
Voss Electric Comapny	NE	Classification	2023-08-14 09:50:14	10bids@vossighting.com	Bid Notification
Voss Electric Comapny	NE	Classification	2023-08-15 15:27:21	10bids@vossighting.com	Bid Answer
Voss Electric Comapny	NE	Classification	2023-08-28 11:59:16	10bids@vossighting.com	Bid Answer
Voss Electric Comapny	NE	Classification	2023-08-30 07:42:14	10bids@vossighting.com	Bid Answer
Voss Electric Company	NE	Classification	2023-08-14 09:50:14	richard.barber@vossighting.com	Bid Notification
Voss Electric Company	NE	Classification	2023-08-15 15:27:21	richard.barber@vossighting.com	Bid Answer
Voss Electric Company	NE	Classification	2023-08-28 11:59:16	richard.barber@vossighting.com	Bid Answer
Voss Electric Company	NE	Classification	2023-08-30 07:42:14	richard.barber@vossighting.com	Bid Answer
Warehouse-Lighting Com LLC	WI	Classification	2023-08-14 09:50:14	sphillips@warehouse-lighting.com	Bid Notification
WESCO Distribution Inc.	ND	Classification	2023-08-14 09:50:14	cmacynski@wesco.com	Bid Notification
WESCO Distribution Inc.	ND	Classification	2023-08-15 15:27:21	cmacynski@wesco.com	Bid Answer
WESCO Distribution Inc.	ND	Classification	2023-08-28 11:59:16	cmacynski@wesco.com	Bid Answer
WESCO Distribution Inc.	ND	Classification	2023-08-30 07:42:14	cmacynski@wesco.com	Bid Answer
West Plains Engineering, Inc.	SD	Classification	2023-08-14 09:50:14	mike.sigman@westplainsengineering.com	Bid Notification
Whole Energy and Hardware Inc	MN	Classification	2023-08-14 09:50:14	rick.parris@wholeenergyandhardware.com	Bid Notification
Widseth Smith Nolting & Associates, Inc.	MN	Classification	2023-08-14 09:50:14	rochester@widseth.com	Bid Notification

## Access Report

Agency

Bid Number

Bid Title

Cooperative Purchasing Connection

24.5

Lighting Audit Services &amp; LED Solutions

Vendor Name	Accessed First Time	Most Recent Access	Documents	Most Recent Response Date
School Wholesale Supplies LLC	2023-08-17 12:12 AM CDT	2023-08-17 05:45 AM CDT		
Trans-Lux	2023-08-17 11:25 AM CDT	2023-08-30 09:16 AM CDT	1 24.5 - Lighting Audit Services & LED Solutions.pdf	
Solus LED	2023-08-14 01:20 PM CDT	2023-08-14 01:20 PM CDT	1 24.5 - Lighting Audit Services & LED Solutions.pdf	
ELITE TEXTILE TRADING LLC	2023-08-15 05:37 AM CDT	2023-09-07 05:34 AM CDT		
L&L Supplies	2023-08-14 09:04 PM CDT	2023-08-14 09:05 PM CDT	5 24.5 - Pricing Schedule.xlsx 4 24.5 - Vendor Forms & Signatures.pdf 3 24.5 - Vendor Questionnaire.docx 2 24.5 - General Terms and Conditions.pdf 1 24.5 - Lighting Audit Services & LED Solutions.pdf	
The Bid Lab	2023-08-14 09:21 PM CDT	2023-09-07 02:02 AM CDT		
WESCO Distribution Inc.	2023-08-14 10:57 AM CDT	2023-08-14 10:58 AM CDT	1 24.5 - Lighting Audit Services & LED Solutions.pdf	
Voss Electric Company	2023-08-14 11:24 AM CDT	2023-08-17 02:01 PM CDT	5 24.5 - Pricing Schedule.xlsx 4 24.5 - Vendor Forms & Signatures.pdf 3 24.5 - Vendor Questionnaire.docx 2 24.5 - General Terms and Conditions.pdf 1 24.5 - Lighting Audit Services & LED Solutions.pdf	
The Retrofit Companies	2023-08-14 07:37 PM CDT	2023-09-07 01:08 PM CDT	5 24.5 - Pricing Schedule.xlsx 4 24.5 - Vendor Forms & Signatures.pdf 3 24.5 - Vendor Questionnaire.docx 2 24.5 - General Terms and Conditions.pdf 1 24.5 - Lighting Audit Services & LED Solutions.pdf	2023-09-06 02:47 PM CDT
Premier Lighting, Inc.	2023-08-14 10:50 AM CDT	2023-09-05 11:46 AM CDT	2 24.5 - General Terms and Conditions.pdf 4 24.5 - Vendor Forms & Signatures.pdf 3 24.5 - Vendor Questionnaire.docx 1 24.5 - Lighting Audit Services & LED Solutions.pdf 5 24.5 - Pricing Schedule.xlsx	2023-09-05 11:46 AM CDT
Efficiency Integrated Solutions, Inc.	2023-09-07 07:43 AM CDT	2023-09-07 11:29 AM CDT	1 24.5 - Lighting Audit Services & LED Solutions.pdf	2023-09-07 08:53 AM CDT
Ask IT Consulting Inc.	2023-08-14 11:31 PM CDT	2023-08-15 05:45 AM CDT	3 24.5 - Vendor Questionnaire.docx 5 24.5 - Pricing Schedule.xlsx 4 24.5 - Vendor Forms & Signatures.pdf 2 24.5 - General Terms and Conditions.pdf 1 24.5 - Lighting Audit Services & LED Solutions.pdf	
Onvia	2023-09-06 08:43 PM CDT	2023-09-06 08:43 PM CDT		
Metropolitan Mechanical Contractors Inc	2023-08-15 07:19 AM CDT	2023-08-15 07:19 AM CDT		
Dodge Data & Analytics	2023-08-14 10:55 PM CDT	2023-09-06 10:59 PM CDT		
Climate Survival Solutions	2023-08-18 01:15 AM CDT	2023-08-18 06:14 AM CDT		
OmniPro LLC	2023-08-29 01:49 PM CDT	2023-08-29 02:00 PM CDT	1 24.5 - Lighting Audit Services & LED Solutions.pdf 3 24.5 - Vendor Questionnaire.docx	
Graybar Electric	2023-08-17 02:14 PM CDT	2023-08-30 09:16 AM CDT	2 24.5 - General Terms and Conditions.pdf 5 24.5 - Pricing Schedule.xlsx 1 24.5 - Lighting Audit Services & LED Solutions.pdf	
EV Charging Pod LLC	2023-08-30 09:37 AM CDT	2023-09-06 10:26 PM CDT	4 24.5 - Vendor Forms & Signatures.pdf 2 24.5 - General Terms and Conditions.pdf 3 24.5 - Vendor Questionnaire.docx 5 24.5 - Pricing Schedule.xlsx	
INF Associates	2023-09-06 06:44 PM CDT	2023-09-07 09:31 AM CDT	5 24.5 - Pricing Schedule.xlsx 4 24.5 - Vendor Forms & Signatures.pdf 3 24.5 - Vendor Questionnaire.docx 2 24.5 - General Terms and Conditions.pdf	2023-09-07 09:30 AM CDT
Voss Electric Comapny	2023-08-15 03:49 PM CDT	2023-09-06 03:51 PM CDT	5 24.5 - Pricing Schedule.xlsx 3 24.5 - Vendor Questionnaire.docx 4 24.5 - Vendor Forms & Signatures.pdf 2 24.5 - General Terms and Conditions.pdf 1 24.5 - Lighting Audit Services & LED Solutions.pdf	2023-09-06 03:51 PM CDT
NetZero USA Holdings Inc	2023-08-14 12:33 PM CDT	2023-08-21 10:54 AM CDT	5 24.5 - Pricing Schedule.xlsx 4 24.5 - Vendor Forms & Signatures.pdf 3 24.5 - Vendor Questionnaire.docx 2 24.5 - General Terms and Conditions.pdf 1 24.5 - Lighting Audit Services & LED Solutions.pdf	
HTS Technologies LLC	2023-09-02 08:56 PM CDT	2023-09-02 08:56 PM CDT		

NCLED	2023-08-29 12:51 PM CDT	2023-09-07 10:27 AM CDT	5 24.5 - Pricing Schedule.xlsx 4 24.5 - Vendor Forms & Signatures.pdf 3 24.5 - Vendor Questionnaire.docx 2 24.5 - General Terms and Conditions.pdf 1 24.5 - Lighting Audit Services & LED Solutions.pdf	2023-09-07 08:55 AM CDT
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# Opening Record

## 24.5 – Lighting Audit Services & LED Solutions

Request for Proposal

DocuSigned by:  
  
 9AB8C86EB0B9422...

Lisa Truax, Procurement Coordinator

September 7, 2023

Date

DocuSigned by:  
  
 48D2E03F59EF456...

Lori Mittelstadt, CPC Program Assistant

10:00 a.m. CT

Time

Company Responding	Efficiency Integrated Solutions Inc.	INF Associates	NCLED LLC	Premier Lighting Inc.	The Retrofit Companies, Inc.	Voss Electric Company
<b>3 Questionnaire</b> <i>Yes/No</i>	Yes	Yes	Yes	Yes	Yes	Yes
<b>4 Forms &amp; Signatures</b> <i>Yes/No</i>	Yes	Yes	Yes	Yes	Yes	Yes
<b>5 Pricing Schedule</b> <i>Yes/No</i>	Yes	Yes	Yes	Yes	Yes	Yes
<b>6 Certificate of Insurance (COI)</b> <i>Yes/No</i>	Yes	Yes	Yes	Yes	Yes	Yes
<b>7 Project Deliverables</b> <i>Yes/No</i>	Yes	No	Yes	Yes	Yes	Yes
<b>Additional Information</b>						
<b>Business Type Certificate</b> <i>(if applicable)</i> <i>Yes/No</i>					Yes - WBENC	
<b>Catalogs</b> <i>(optional)</i> <i>Yes/No</i>	Yes					
<b>Other</b>	Mktg. Plan		Articles of Org.	Mktg. Plan	Mktg. Plan	
<b>Minimum Qualifications [Pass/Fail]</b>						
<ul style="list-style-type: none"> <li>Required documentation [submittal]</li> <li>Knowledge, background, and at least five (5) years' experience</li> <li>Debarment and suspension verification *State and Federal</li> </ul>	Pass	Fail	Pass	Pass	Pass	Pass
<b>Qualified (Responsive) Respondent</b> <i>Yes/No</i>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>

**Certificate Of Completion**

Envelope Id: D2BDF2A303194EB9B68876042E0EC642

Status: Completed

Subject: Complete with DocuSign: 9 24.5 - Opening Record.pdf

Source Envelope:

Document Pages: 1

Signatures: 2

Envelope Originator:

Certificate Pages: 2

Initials: 0

Lisa Truax

AutoNav: Enabled

1001 E. Mount Faith Avenue

Envelopeld Stamping: Enabled

nil

Time Zone: (UTC-08:00) Pacific Time (US &amp; Canada)

Fergus Falls, MN 56537

ltruax@lcsc.org

IP Address: 158.222.88.34

**Record Tracking**

Status: Original

Holder: Lisa Truax

Location: DocuSign

9/7/2023 11:43:45 AM

ltruax@lcsc.org

**Signer Events**

Lisa Truax

ltruax@lcsc.org

Cooperative Purchasing Connection

Security Level: Email, Account Authentication  
(None)**Signature**

DocuSigned by:



9AB8C86EB0B9422...

Signature Adoption: Pre-selected Style

Using IP Address: 158.222.88.34

**Timestamp**

Sent: 9/7/2023 11:44:28 AM

Viewed: 9/7/2023 11:48:18 AM

Signed: 9/7/2023 11:48:21 AM

**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

Lori Mittelstadt

lmittelstadt@lcsc.org

Cooperative Purchasing Program Assistant

Lakes Country Service Cooperative

Security Level: Email, Account Authentication  
(None)

DocuSigned by:



48D2E03F59EF456...

Signature Adoption: Pre-selected Style

Using IP Address: 158.222.88.34

Sent: 9/7/2023 11:44:28 AM

Viewed: 9/7/2023 11:46:41 AM

Signed: 9/7/2023 11:47:04 AM

**Electronic Record and Signature Disclosure:**

Not Offered via DocuSign

**In Person Signer Events****Signature****Timestamp****Editor Delivery Events****Status****Timestamp****Agent Delivery Events****Status****Timestamp****Intermediary Delivery Events****Status****Timestamp****Certified Delivery Events****Status****Timestamp****Carbon Copy Events****Status****Timestamp****Witness Events****Signature****Timestamp****Notary Events****Signature****Timestamp****Envelope Summary Events****Status****Timestamps**

Envelope Sent

Hashed/Encrypted

9/7/2023 11:44:28 AM

Certified Delivered

Security Checked

9/7/2023 11:46:41 AM

Envelope Summary Events	Status	Timestamps
Signing Complete	Security Checked	9/7/2023 11:47:04 AM
Completed	Security Checked	9/7/2023 11:48:21 AM
Payment Events	Status	Timestamps

**From:** [Lisa Truax](#)  
**To:** [steven@infassociates.com](mailto:steven@infassociates.com); [amikszewski@infassociates.com](mailto:amikszewski@infassociates.com)  
**Cc:** [Lisa Truax](#)  
**Subject:** RFP 24.5 - Notification - INF Associates  
**Date:** Friday, September 15, 2023 3:21:30 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)

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Thank you for your response to RFP #24.5 – Lighting Audit Services & LED Solutions. Responses were opened on September 7, 2023, and reviewed for required documents, forms, and signatures according to the solicitation checklist.

We are sorry to tell you that your response was deemed non-responsive and incomplete due to missing or incorrect, required documents.

**7 Project Deliverables**

- Not submitted

We appreciate your interest in responding to the solicitation and hope you will consider responding to this or similar opportunities in the future.

With Regard,

Lisa Truax



Lisa M. Truax  
Procurement Solutions Coordinator  
218.737.6535 (direct) | 888.739.3289  
[www.purchasingconnection.org](http://www.purchasingconnection.org)





# Suspended/Debarred Vendor Detailed Information

Minnesota Rules Part 1230.1150, Subpart 6 (<https://www.revisor.mn.gov/rules/1230.1150/>) requires the Office of State Procurement to maintain a master list of all suspensions and debarments. The master list must retain all information concerning suspensions and debarments as a public record for at least three years following the end of a suspension or debarment.

The vendors listed below may be currently suspended or debarred, or have a suspension or debarment end date within the past three years. Click the vendor name for complete details.

**NOTE:** Minnesota Rules Part 1230.1150, Subpart 2, Item B, Subitem (1) (<https://www.revisor.mn.gov/rules/1230.1150/>) also provides that: "Any vendor debarred by the federal government, the state of Minnesota, or any of its departments, commissions, agencies, or political subdivisions, is automatically debarred by the division under the same terms and limits of the original debarment."

See vendors debarred by federal government agencies (<https://sam.gov/content/exclusions>).

Results 1 - 8 of 8

[5Way Contractors Inc](#)

[Garson Group](#)

[Green Nature-Cycle, LLC.](#)

[Hunt's Carpet Service, Inc.](#)

[Krampitz Trucking](#)

[Snowmen Inc.](#)

[The Travel Group LLC](#)

[Treasure Enterprise, Inc.](#)

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Home / Doing Business with the State / Procurement / Suspended and Debarred Bidders

# Suspended and Debarred Bidders

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The OMB State Procurement Office maintains the State Bidders List of vendors who have applied to receive notice solicitations for commodities and services. Under state procurement rules, vendors may be subject to suspension or debarment from the Bidders List for cause. NDAC 4-12-05 contains the rules that pertain to suspension or debarment from the Bidders List. Contact the State Procurement Office at 701.328.2740 with questions.

**There are currently NO suspended or debarred vendors.**

## Federal Suspended and Debarred Vendors

Many state agencies and institutions cannot do business with vendors that have been suspended or debarred by the Federal government. Many solicitations also evaluate the experience and qualifications of vendors, including whether or not the vendor has been suspended or debarred. Search the federal list of suspended and debarred vendors.

**From:** [Hubbard, Lisa](#)  
**To:** [Lisa Truax](#)  
**Cc:** [Kassner, Dawn](#)  
**Subject:** [External]RE: SD Suspended/Debarred List  
**Date:** Thursday, September 7, 2023 12:50:47 PM  
**Attachments:** [image003.png](#)  
[image004.png](#)  
[image005.png](#)

---

Hello,

The Office of Procurement Management does not currently have any suspended or debarred companies, therefore, there is no list.

Best Regards,



**Lisa Hubbard | Assistant Director**  
Office of Procurement Management  
523 East Capitol Ave | Pierre, SD 57501  
[Lisa.Hubbard@state.sd.us](mailto:Lisa.Hubbard@state.sd.us) | 605.773.4580  
Website: <https://boa.sd.gov/>

---

**From:** Lisa Truax <[ltruax@lcsc.org](mailto:ltruax@lcsc.org)>  
**Sent:** Thursday, September 7, 2023 10:42 AM  
**To:** Kassner, Dawn <[Dawn.Kassner@state.sd.us](mailto:Dawn.Kassner@state.sd.us)>  
**Subject:** [EXT] SD Suspended/Debarred List

Hi Dawn,

Can you tell me if the State of South Dakota maintains a list of suspended or debarred companies?

Lisa Truax



Lisa M. Truax  
Procurement Solutions Coordinator  
218.737.6535 (direct) | 888.739.3289  
[www.purchasingconnection.org](http://www.purchasingconnection.org)



CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.



# CORRESPONDENCE/MEMORANDUM\_\_\_\_\_State of Wisconsin

Date: August 04, 2023  
To: Region Project Development Chiefs  
From: Rielly O'Donnell, P.E.  
Chief Proposal Management Engineer  
Subject: Debarred, Suspended and Ineligible Contractors

Enclosed is a listing of Debarred, Suspended and Ineligible Contractors.  
Revisions from list of July 10, 2023

**The following have been added to the list of Debarred Contractors:**

**The following have been added to the list of Suspended Contractors:**

**The following have been added to the list of Ineligible Contractors:**

**The following have been removed from the list of Debarred Contractors:**

**The following have been removed from the list of Suspended Contractors:**

**The following have been removed from the list of Ineligible Contractors:**

# List of Debarred, Suspended and Ineligible Contractors

## Prepared and Issued by Wisconsin Department of Transportation

### Ineligible Contractors

Name of Contractor	Address	Effective Date	Termination Date	Action	Restricted Area	Acting Agency	Cause Code
Adam M. Reichert	Norwalk, OH 44857	10/1/2021	Indefinite	Ineligible	Statewide	FHWA	
Gerald E. Reichert	Norwalk, OH 44857	10/1/2021	Indefinite	Ineligible	Statewide	FHWA	
HANGZHOU HIKVISION DIGITAL TECHNOLOGY CO., LTD.	NO.555, Qianmo Road, BINJIANG DISTRICT HANGZHOU, China	12/13/2019	Indefinite	Ineligible	Statewide	GSA	
HUAWEI DEVICE CO., LTD.	PRODUCTION PLANT -5, NANFANG FACTORY (PHASE I) PROJECT AREA B2, XINCHENG AVE., SONGSHANHU HIGH-TECH DONGGUAN, CHINA	2/21/2020	Indefinite	Ineligible	Statewide	AF	
HUAWEI DEVICE USA INC.	5700 TENNYSON PKWY STE 300 PLANO, TX 75024	2/21/2019	Indefinite	Ineligible	Statewide	AF	
HUAWEI INVESTMENT & HOLDING CO., LTD.	BLDG.1, AREA B, BANTIAN HUAWEI BASE, LONGGANG DIST. SHENZHEN, CHINA	12/13/2019	Indefinite	Ineligible	Statewide	GSA	
HUAWEI TECHNOLOGIES CO., LTD.	BANTIAN HUAWEI BASE, LONGGANG DISTRICT SHENZHEN, CHINA	2/21/2020	Indefinite	Ineligible	Statewide	AF	
HYTERA COMMUNICATIONS CORPORATION LIMITED	HAINENGDA BUILDING, NO.9108, BEIHUAN ROAD, BEI DISTRICT, HIGH-TECH ZONE, NANSHAN DISTRICT NANSHAN D SHENZHEN, CHINA	12/13/2019	Indefinite	Ineligible	Statewide	AF	
MENG WANZHOU	, CHINA	2/21/2019	Indefinite	Ineligible	Statewide	AF	

# List of Debarred, Suspended and Ineligible Contractors

## Prepared and Issued by Wisconsin Department of Transportation

### Ineligible Contractors

Name of Contractor	Address	Effective Date	Termination Date	Action	Restricted Area	Acting Agency	Cause Code
SKYCOM TECH. CO., LIMITED	TSIM SHA TSUI, SU HKG	2/21/2019	Indefinite	Ineligible	Statewide	AF	
ZHEJIANG DAHUA TECHNOLOGY CO., LTD.	NO.1199, BIN'AN ROAD, BINJIANG DISTRICT HANGZHOU, CHINA	12/13/2019	Indefinite	Ineligible	Statewide	AF	
ZTE Corporation	NO.55, HI-TECH SOUTH ROAD, NANSHAN DISTRICT SHENZHEN, CHN	12/13/2019	Indefinite	Ineligible	Statewide	GSA	

# List of Debarred, Suspended and Ineligible Contractors

## Prepared and Issued by Wisconsin Department of Transportation

### Suspended Contractors

Name of Contractor	Address	Effective Date	Termination Date	Action	Restricted Area	Acting Agency	Cause Code
FIGG Bridge Engineers, Inc.	424 N. Calhoun St Tallahassee, FL	7/14/2020	7/14/2029	Suspended	Statewide	FHWA	
Joseph Donnelly	N6938 Church Road Johnson Creek, WI 53038	1/11/2019	Indefinite	Suspended	Statewide	FHWA	
William Denney Pate	Tallahassee, FL	7/14/2020	7/14/2029	Suspended	Statewide		

## Guidelines for Contractors

Debarred or suspended persons or firms may not enter into contracts with the Wisconsin Department of Transportation (WisDOT). WisDOT Contractors may not enter into subcontracts with debarred or suspended persons or firms. These restrictions apply to all WisDOT projects paid for with state funds.

Contractors participating in federally funded WisDOT projects must comply with federal requirements\* in transactions with persons or firms who are debarred or suspended. Contractors must certify they will not knowingly enter into any transaction with persons who are debarred or suspended for a covered transaction. The federal requirements do differ from state requirements and would also prohibit contractors from purchasing more than \$24,999 worth of goods and services from debarred or suspended firms or persons.

The federal requirements and WisDOT specifications\*\* require prime contractors to obtain written consent to subcontract any portion of a contract. When seeking consent to subcontract, prime contractors must disclose to WisDOT that the subcontract is to a debarred or suspended person and other relevant facts. Again, WisDOT will not approve subcontracts with any debarred or suspended person or company. Contractors should also consider the following when requesting consent to subcontract on federally funded projects with a debarred or suspended person or firm:

- WisDOT will not enter into any contract with a debarred or suspended firm or person.
- The prime contractor seeking WisDOT consent to sublet with a debarred or suspended firm or person shall disclose that it is seeking consent to contract with a debarred or suspended subcontractor.
- WisDOT will not approve subcontracts, regardless of size, with debarred or suspended firms or persons.
- WisDOT is not responsible for any additional costs because the prime contractor enters into a transaction with a debarred or suspended subcontractor.
- WisDOT has the right to examine all books, records, documents and other data of the contractor and subcontractor relating to any subcontract.
- A debarred or suspended person or firm may sell goods or services for WisDOT projects unless the project is federally funded. If it is federally funded, the sale may not exceed \$24,999 for audit services.
- On federally funded projects, a contractor can receive DBE credit if a debarred or suspended DBE supplies goods or services not exceeding \$24,999.
- No exceptions will be granted.
- Failure to adhere to these restrictions may result in additional penalties.

\*49 CFR 29 and Federal Highway Administration 1273.

\*\*Subsection 108.1 of the standard specifications for Highway and Structure Construction.

### Note:

Contractors contemplating using an individual or company as a subcontractor on a federally funded project may check the following web sites for further information:

SAM website listed below for an updated list of all federal agency debarments:

<https://www.sam.gov/data-services/Exclusions/Public%20V2?privacy=Public>

**SAM.Gov – Debarment & Suspension Verification**  
**9/7/2023 | 11:38 am CT**

Supplier Name	Status	
Efficiency Integrated Solutions Inc.	Not Registered with SAM.	
INF Associates LLC	Validated as unique and existing, but is not registered in SAM.  Unique Entity ID XMV2CFJEG4M7	
NCLED, LLC	Not Registered with SAM.	
Premier Lighting Inc	Not Registered with SAM.	
The Retrofit Companies, Inc	Active Registration with SAM. No Exclusions.	<div> <div> <b>RETROFIT COMPANIES, INC., THE</b> ● Active Registration         </div> <div>           Unique Entity ID GSNGLCLA2YX6           CAGE Code TVXW6           Physical Address 2960 Yorkton Blvd Ste B, Little Canada, MN 55117 USA         </div> <div>           Expiration Date Dec 27, 2023           Purpose of Registration All Awards         </div> <div> <div> <b>Retrofit Companies, Inc., The</b> ● Active Registration         </div> <div>           Unique Entity ID NZTLH2T7W685           CAGE Code 811F9           Physical Address 1010 Hoffman Dr Ste A, Owatonna, MN 55060 USA         </div> <div>           Expiration Date Nov 2, 2023           Purpose of Registration All Awards         </div> </div> </div>
Voss Electric Company	Active Registration with SAM. No Exclusions.	<div> <div> <b>VOSS ELECTRIC CO</b> ● Active Registration         </div> <div>           Unique Entity ID DCB5M5J72J35           CAGE Code 6J267           Physical Address 1601 CUSHMAN DR, LINCOLN, NE 68512 USA         </div> <div>           Expiration Date Sep 4, 2024           Purpose of Registration All Awards         </div> </div>



**Cooperative Purchasing Connection**  
**Tabulation Report RFP #24.5 - Lighting Audit Services &**  
**LED Solutions**  
**Vendor: Efficiency Integrated Solutions, Inc.**

**General Comments:**

**General Attachments:** 3 24.5 - Vendor Questionnaire - Efficiency Integrated Solutions.pdf  
4 24.5 - Forms - Signatures - Efficiency Integrated Solutions.pdf  
5 24.5 - Pricing Schedule - Efficiency Integrated Solutions.xlsx  
5 - LED Catalog\_MetroTech - Efficiency Integrated Solutions.pdf  
6 24.5 - Certificate of Insurance (COI) - Efficiency Integrated Solutions.pdf  
7 24.5 - Project Deliverables Example - Efficiency Integrated Solutions.pdf  
EXHIBIT A - MARKETING PLAN - Efficiency Integrated Solutions.pdf

\*Full Price schedule on file with CPC.

## Vendor Questionnaire

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### **Instructions**

Contained herein is a questionnaire required by the Cooperative Purchasing Connection (CPC). Please note, while some information is merely informational, some will be used during the evaluation and vetting process.

To submit the required forms, follow these steps:

1. Read the document in its entirety.
2. Respondents must use the Vendor Questionnaire to its capacity. Attached exhibits and/or supplemental information should be included only when requested (i.e. Marketing Plan).
3. Complete all questions.
4. Save all pages in the correct order to a single PDF format titled “***Vendor Questionnaire – Name of Company***”.
5. Submit the Vendor Questionnaire, along with other required documents in Public Purchase.

**The following sections will need to be completed before submission and submitted as one (1) single PDF titled “Vendor Questionnaire – Name of Company”:**

[Company Information](#)  
[Qualifications & Experience](#)  
[Warranty](#)  
[Financials & Level of Support](#)  
[Marketing & Partnership](#)  
[Exceptions & Deviations](#)  
[References](#)



## Company Information

<b>Name of Company:</b>	EFFICIENCY INTEGRATED SOLUTIONS, INC. dba ENERGY INTEGRATED SOLUTIONS
<b>Company Address:</b>	829 PICKENS INDUSTRIAL DR. NE; SUITE 13
<b>City, State, Zip code:</b>	MARIETTA, GA 30062
<b>Website:</b>	www.energyintegratedsolutions.com
<b>Phone:</b>	404-937-6547

Provide the following company contacts that will be working with this anticipated contract. Include name, email, and phone number(s).

	Name	Email	Phone
<b>General Manager</b>	Alex Figueiras	afigueiras@energyintegratedsolutions.com	404-937-6547 x 701
<b>Contract Manager</b>	David Benavent	contactEIS@energyintegratedsolutions.com	404-937-6547
<b>Sales Manager</b>	Enrique Perez-Young	eperez-young@energyintegratedsolutions.com	404-433-9013
<b>Marketing Manager</b>	Enrique Perez-Young	eperez-young@energyintegratedsolutions.com	404-937-6547 x 721
<b>Customer Service Manager</b>	Michelle Beard	mbeard@energyintegratedsolutions.com	404-937-6547 x 702
<b>Account Manager(s)</b>	Dale Baeten	dbaeten@energyintegratedsolutions.com	920-418-0153

List who will be responsible for receiving updated participation lists.

Name	Email	Phone
Dale Baeten	dbaeten@energyintegratedsolutions.com	920-418-0153

List who will be responsible for submitting sales reports and administrative fee payments every quarter.

Name	Email	Phone
Enrique Perez-Young	eperez-young@energyintegratedsolutions.com	404-433-9013

List who will be responsible for conducting audits as requested by CPC.

Name	Email	Phone
Enrique Perez-Young	eperez-young@energyintegratedsolutions.com	404-433-9013

Identify any business types/classifications that your company holds. **\*Submit documentation in PDF format to verify business status (see submittal checklist).**

x	Business Type/Classification
	8(a) 8(a) Qualified Business
	DBE Disadvantaged Business Enterprise
	HUB Historically Underutilized Business Zone
	MBE Minority-Owned Business Enterprise
	MWBE Minority Women-Owned Business Enterprise
	SBE Small Business Enterprise
	Other; list name:

x	Business Type/Classification
	SDB Small Disadvantaged Business
	SDVOB Service-Disabled Veteran Owned Business
	SECTION 3 Section 3 Business Concern
	SSV Sole Source Vendor
	VBE Veteran-Owned Business Enterprise
	WBE Woman-Owned Business Enterprise

Provide a list of other contracts your organization has in place that could be accessed by our membership for your services (e.g. other consortiums, state agencies) in MN, ND, SD, IA, and WI?

1. In the process of applying for MBE Certification. Should have that completed around the end of 2023.
2. Have been a trade ally of multiple state utility programs and have won awards for highest energy savings for industrial and commercial customers multiple times and helped past affiliates do the same.

## Qualifications & Experience

### **1. Provide a brief background of your organization, including the year it was founded (1-2 paragraphs max.).**

Efficiency Integrated Solutions, Inc. ("EIS"), based in Atlanta, GA, has been providing energy and operations efficiency solutions to industrial and commercial customers for more than 40 years. In 1978, under the name of Energy Automation Systems, Inc., the company dedicated efforts to designing and installing custom energy conservation systems proven to: reduce electrical energy consumption; improve power quality, power factor and voltage; increase electrical system capacity; reduce unnecessary heat; improve cooling capacity of air conditioning and refrigeration and lengthen lives of motors, lights, air conditioning and refrigeration.

As a natural evolution and the increasing industry awareness of energy efficiencies, operational optimizations, limited resources for production, greenhouse gas emissions, scarcity of water and other globally impacting resource exhaustion, the company has grown to include a full range of best-in-class utility conservation and power quality improvement measures and products addressing all the major resource utilization groups in a typical facility (equipment motors, lighting, HVAC, refrigeration, air compressors, steam, wastewater treatment plants, etc.) with energy efficiency and sustainable solutions as a baseline. This progression is reflected in the change of name to a more comprehensive industry trend identification as *Energy Integrated Solutions, Inc.* in 2016, and to an all-encompassing *Efficiency Integrated Solutions, Inc.* in 2022.

### **2. Provide evidence of what your company is doing to remain viable in the lighting industry.**

EIS commits itself to sourcing the latest generation of proven LED with the appropriate certifications. The new **proven** technologies in the market are always adopted for our solutions and implemented in our projects. For example, in the case of the high bay fixtures we are at a higher efficacy of 190-200 lumens/watt compared to the average USA competitor in the 130 -150 lumens/watt. That equates to ~27%-46% more illumination for the same watts of energy. We are always participating in the Hong Kong light fairs before COVID and post COVID and visiting manufacturers at their plants. Our distribution and OEM agreements are best-in-class and exclusive with the volumes we generate.

### **3. Describe your company's logistics (locations, experience, production, distribution of products, warehouse inventories and delivery systems used) that should be considered in your ability to deliver on-time quality services, products, and solutions to participating agencies in MN, ND, SD, IA, and WI.**

EIS is based in Atlanta GA, but with an LED Lighting warehouse in Pensacola, GA. We have completed thousands of projects around the world, in more than 60 countries for Fortune 500 customers, and for many smaller customers. Currently we are able to perform rollouts for a multi-State industrial customer, a multi-State mining operator and a nationwide restaurant organization. Our clients achieve annual energy savings of 8% to 30% on their utility bills. EIS provides turnkey, fixed price project implementation, guaranteeing savings and investment payback. We also provide ongoing Measurement & Verification services to ensure our solutions deliver the potential energy savings we design and implement.

### **4. Describe the number of agencies your organization, on average, provides lighting audit services and LED solutions to. Include overall numbers and numbers specific to MN, ND, SD, IA, and WI.**

**Describe your customer retention as it pertains to lighting audit services and LED solutions (i.e. customers who are served that continue to be repeat customers).**

We provide lighting (and other) audit services to facility management software companies like Ecotrak; ESCO type companies like Buzzerfly; distributors like Wesco and of course end customers with one (Manpower Headquarters) to several locations (RR Donnelly & Sons) to thousands of locations like Inspire Brands. We always start with a very professional, comprehensive, and quality audit service that shows our expertise and builds our customers trust in our capabilities to do the surveys and turnkey projects.

### **5. Describe and specify your proposed service area (MN, ND, SD, IA, and WI) and how your company intends to meet the needs of customers in that area.**

We can support all the five states. We self-perform the audits. For the installations we may collaborate with an "uber-like" national network of electrical contractors that have been working with us for many years. We have standardized processes and project management forms that create consistency on the work while keeping the costs competitive and dealing with the market and workflow fluctuations.

### **6. List the agencies, if any, you would exempt from this contract (i.e. current agencies that you are currently serving that will be exempt from pricing submitted with this proposal).**

**7. Describe your company's approach to lighting audits, the steps involved in an audit, and applicable LED solutions and what differentiates your company from your competitors. Describe any competitive differences regarding sales, service, installation, technology, and product line(s).**

**Audit Steps**

- 1) Meet with customers to understand: goals, timeframe, how many locations, priorities (savings, safety, timeframe, paybacks, etc.), challenges and contacts.
- 2) Select one or two locations as pilots and schedule another call with the local leadership to determine: date of visit, site manufacturing requirements, personnel availability for the opening and closing meeting and walkthrough, Personal Protective Equipment (PPE) and other safety requirements and expected timeframe a proposal is needed.
- 3) Obtain facility electric bills (ask for 12 prior months) and floor plan.
- 4) Conduct light audit and ask questions throughout visit to validate information from calls and opening meeting. Visit spare / tool room to review spare lamps, ballasts, kits and fixtures to validate information captured during audit.
- 5) Use software (Ecoinsight or Snapcount on occasion) to capture light information by area and spaces within the facility. Intent is to ease the potential pre-installation light inspection utility incentive engineers conduct by breaking down the facility in modules that are easy to confirm.
- 6) Develop, as needed, light layouts of areas of the facility and compare with the footcandle / lux measurements taken during lighting audit. Include information in proposal.
- 7) Conduct meetings with potential solution providers to provide the biggest value LED treatments based on the customer requirements obtained above.
- 8) Develop, organize and present LED proposal with financials (IRR, NPV, ROI, savings, incentives, price); kWh (consumption), kW (demand) and Watts comparisons, terms, proposed light treatments, turnkey estimated schedules, warranties, product specs, financing and other implementation routes.
- 9) Present material to stakeholders. As needed, multiple options / solutions may be presented, but always one is recommended.

**Key Differentiators**

- 1) We always look for best-in-class products. As mentioned above, we not only go to Hong Kong (and US) light fairs, we also visit the manufacturers and establish a strong relationship. We look for products with high efficacy (lumens/watt) without sacrificing quality and durability
- 2) We have automated the process as much as possible to create consistency. In addition to the software tools that capture the audit and develop key proposal areas, we use checklists, training and documentation to create standardization.
- 3) We have over 40 years in energy savings throughout the globe.
- 4) We have won utility awards
- 5) We use seasoned project managers that have been in the field and support the installers and auditors.

**8. Describe how your company works with local utility companies to ensure energy rebates are maximized and how the funding/rebate, if approved, flows through, and applies to the project.**

As part of a service, EIS approaches our customers' utility organizations and explores the options and alternatives, designs the appropriate solutions, facilitates the relationship between all the organizations, and applies for the incentives and rebates, on behalf of our customers. In multiple cases EIS, when accepted by both parties, we have performed the job, discounted by the expected dollar-amount of rebates/incentives, and filed the proper documentation to receive the reimbursement directly from the utility, at our own risk.

We have become registered Trade Allies of some utility organizations to ensure we are pre-qualified for them to provide the customer with utility accepted technologies, processes, procedures, installation techniques, etc., maximizing the level of incentives they are offering.

As an example, we have been awarded by Entergy Arkansas as the trade ally company that saved the most energy in 2019 and 2020 for large Commercial and Industrial (C&I) customers. Work w/ partners with similar accomplishment for ComEd. These are the best incentive utility programs in the nation right now.

**9. Describe your company's approach to proposing available LED solutions to an agency resulting from a lighting audit.**

See question (7) above to see how we first start with gathering data from the customer. We generally are summoned by either an influencer on the light project or a decision maker. After capturing their challenges, goals and direction, when we are on site, we talk to the associates who generally are maintaining the lights and/or the facility.

**10. Describe any minimum project requirements and if any surcharges will be assessed for not meeting the minimum.**

We would prefer a Material Only minimum project Purchase Order (PO) of \$5,000 and a minimum PO for a turnkey project of \$40,000. However, we can adjust when the number of projects is expected to increase and/or after talking to agency and understanding their needs.

**11. Describe how your company ensures that the LED solutions and products offered are current, energy efficient, best-value, and are customizable to agency needs.**

EIS updates its catalog frequently with the newly proven developments of our manufacturers. Including, at least 5 USA domestic manufacturers and 3 or more Chinese LED designer/manufacturers companies, always focused on the highest efficiency possible, with the durability and reliability of the drivers. Twice a year EIS executives participate in International Lighting Conferences to ensure that our present manufacturers keep themselves current with the best-in-class technologies, verifying the new trends in the market and developing new manufacturing relationship.

We have been able to bring to the USA the highest level of LED efficiency with DLC certifications. Some customers' special specifications of limited quantities of fixtures, requirement of color temperature and CRI, IP or IK have been shared, discussed, re-designed to improve the results they need (e.g. agricultural industries, photo-reactive products industries and data-centers low temperature requirements)

**12. Describe your company's hierarchy or chain of command from installers to sales to management that will work with this potential contract/program.**

Once the project implementation is launched, installers are in continuous communication with the project manager assigned to the customer to ensure, material on site, correct and quantity of personnel is present to comply with schedules and to solve additional approved customer requests. The project manager keeps an open and consistent communication with the customer authorized representative via formal meetings (e.g., opening, closing) and electronic communications, e.g., weekly email completion reports.

Flow:

*Installers – On Site Supervisor – Project Manager – Operations (Supply chain) – Management (if escalation is needed)*

**13. Describe the process from order placement, including methods, to receipt of order, installation, and final walk-through (punch-list).**

1. Proposal Approved
2. PO issued
  - a. Email
  - b. Downpayment received (if apply)
3. List of material sorted by area to be installed, is submitted to customer to final approval
4. Pre-installation visit with Site Supervisor
  - a. Includes a re-assurance of voltage per area
  - b. Electric panels allocation
  - c. Approval of lifters and/or scaffolding
  - d. Additional safety issues to be considered
5. Material Ordered and Installation Personnel is scheduled and committed to the project
6. Material shipped
  - a. Conex or temporary storage is installed to receive material (as/if needed)
7. Kick-off meeting
8. Installation
  - a. Safety compliance to work on site
  - b. Weekly schedule to ensure all parties know areas to be cleared as needed and worked as expected.
  - c. Soft approval based on a partial walkthrough per area in order to move on to the next one.
  - d. Issue any Change Order as customer requires
  - e. Pre-assessment of finishing installation (one week prior to the final walkthrough)
9. Final Walkthrough
  - a. Punch List
  - b. Acceptance of project finished
10. Final report

**14. Describe in detail your return or exchange program/policy(s) for purchases of LED lighting solutions and/or specific products (i.e lamps, fixtures) outside of an audit or applicable project.**

- 1) Customer calls or emails about a specific product issue.

- 2) Technical personnel is assigned to review issues with customers.
- 3) If it appears that issue is with product, a Return Merchandise Authorization (RMA) with a specific code is provided to customer to send defective material
- 4) Generally, a substitute product is sent. On some occasions, the defective product is investigated prior to sending replacement to determine cause for issue or failure. Depending on circumstance, manufacturer will be brought to the conversation.
- 5) Results of analysis is discussed internally, then with customer.

**15. Provide a narrative of a recent project that totaled at least \$150,000 in lighting audit and LED solutions. The narrative should describe the lighting audit and results, proposed project scope, pricing costs and calculations, any fees, your company's installation/project management, and a final report and rebate summary.**

*Imerys Performance Minerals Americas at Lompoc, CA contracted EIS services to audit and analyze current lighting installation and to upgrade all lighting at the mining facility to an energy efficient lighting concept, complying with Imerys internal minimum lighting operating standards.*

*The scope of work performed updated the lighting at Imerys Lompoc, using LED latest technology to minimize electrical usage. Electrical Scope of Work, quantities, locations, and fixture types were assessed by EIS and a suitable lighting arrangement was proposed in order to meet the minimum lighting requirements (Imerys Standard IN-CX-ELE-001 rev.01) with the level of efficiency required by PG&E (the utility organization) in order to maximize the incentives and rebates established for this industrial type of customer. Additionally, Imerys internal lighting was enhanced to reach a CRI of 80 or higher, unless otherwise authorized by the Imerys project manager.*

*Additional issues found during the audit and discovery process and solved as part of the project implementation:*

- a. **I:** During the audit, it became evident that the excessive vibration in some steel structures, caused by adjacent conveyor belts and rock mills, was the source of continued failures in the lighting system since the beginning of the operation of the plant. The customer tried in the past to remedy the problem and explored different options, with no foreseeable solution.  
**R:** EIS, supported by the manufacturers, tested several alternatives, and found a solution with neoprene rings that cushioned the new bulbs into the fixtures and avoided failures. This solution was found sustainable, and it was successfully implemented. It is now part of the fixture/bulb specification in other Imerys plants.
- b. **I:** As part of the normal operation of the plant, it became a practice/habit running vehicles and roaming people on a narrow corridor between the Silicate WH and the property fence, in order to access the Celpure Plant. Mostly at night, due to null illumination and lack of proper signaling, this long area was the cause of quasi-accidents.  
**R:** EIS extended installed movement-sensor-controlled area lighting and wall packs in the problematic corridor as an add-on to the SOW of the project, without increasing the energy consumption of the Silicate WH.
- c. **I:** An important portion of the electric wiring was old and defective due to dry-cracked insulation.  
**R:** EIS offered its services to remove, dispose and reinstall new wiring, but this aspect was considered out of scope for the budgeted LED Upgrades investment and Imerys decided to do it on their own.
- d. **I:** Extending the audit to night shifts allows EIS to define improper or poor illumination in some areas. For Imerys Lompoc's case, this exercise made evident that some LED bulbs, previously installed by the customer, in external structures were inappropriately selected when sourced, since it caused a cloudy illumination with only clear vision at less than 1ft from every light source.  
**R:** Due to the quantity of fixtures to be corrected, this portion of the proposal was also removed from the SOW and performed as a correction of a prior internal project by themselves.

*EIS, at the request of Imerys, presented three alternative proposals for the customer to decide the level of retrofits that will keep their investment within their budget and corporate acceptable payback. The selected proposal achieved a total investment of \$447,162, which represented annual energy savings of 1,062,347 kWh (\$133,374) and maintenance-material savings of \$11,170 per year; resulting in an investment payback of 3.04 years.*

*All work was completed according to Imerys safety standards.*

*EIS guaranteed parts for 10 years and labor for 5 years.*

**See details in pdf file attached titled "7 24.5 – Project Deliverables Efficiency Integrated Solutions"**



**15a. Uploaded as a separate PDF document titled “7 - Project Deliverables – Efficiency Integrated Solutions” provide the supporting documentation for the project described above in #15. Supporting documentation and deliverables must include the following:**

- (i) Lighting audit and results**
- (ii) Proposed project scope, pricing costs and calculations, any applicable fees**
- (iii) Installation/Project Management plan**
- (iv) Final report and rebate summary**

**16. Describe any “added value” attributes being offered to participating agencies when purchasing services and products through your company. Describe any “value-adds” that are exclusive to the potential contract.**

The value adds are:

- 1) Pricing and volume discounts as expressed in pricing sheets
- 2) Assurance of consistency in audit, design and implementation of process thanks to seasoned employees, documentation and software tools

## Warranty

**1. Describe your warranty program, including any conditions and requirements to qualify claims procedure and overall structure.**

*(Please keep in mind that METROTECH is EIS LED Lighting Brand, so it is our Warranty)*

### METROTECH MEDIA & LIGHTING, INC. LIMITED WARRANTY FOR: SOLID STATE LIGHTING PRODUCTS

MetroTech Media & Lighting, Inc. (“MetroTech”) warrants to the original end-user (“Purchaser”) of “MetroTech”-brand Solid State Lighting Products (“Products”), that at the date of their purchase, “Products” will be free of significant defects in material and workmanship.

#### **10-Year Warranty for Materials and Workmanship**

For a period of ten (10) years after the date of purchase, “MetroTech”, at its sole option, will, itself, or through others, repair, replace “Product” that “MetroTech” verifies as being defective due to significant material or workmanship defects. The determination of whether the Product is defective shall be made by “MetroTech” in its sole discretion with consideration given to the overall performance of the Product. A Product shall not be considered defective if the number of inoperable components is less than 10% of the total number of LED components in the Product.

What the Warranty Does Not Cover: This warranty does not cover (1) Product advice or assistance that “MetroTech” furnishes as a courtesy, (2) removal or reinstallation of “Products”, or (3) defects or damage as a result of accident, modification, misuse (including but not limited to the operation at temperatures above 70°C or voltage levels outside the rated range), improper service or repair, improper facility grounding and system wiring, damage due to improper facility Transient Voltage Surge Suppression (TVSS), abuse or abnormal use including, without limitation, improper storage and incorrect installation. Use with 2 circuit - 3 wire shared neutral wiring installations is not covered. This warranty does not cover damage resulting from acts of nature beyond industry specifications of protection thereof. THIS LIMITED WARRANTY IS VOID IF THE PRODUCT IS NOT USED FOR THE PURPOSE FOR WHICH IT IS DESIGNED.

Conditions of Warranties: It is a condition of these warranties that: (1) the “Purchaser” submit all claims of defect; (2) return of “Product” is accompanied with a bill of sale or other evidence showing the date of purchase and identification of the original “Purchaser”; (3) the “Purchaser” prepay all freight, insurance and other transportation charges to send “Product” to “MetroTech” for warranty-coverage verification, repair or replacement, and; (4) “MetroTech” retains all repaired and replaced parts and “Products”.

Warranty Limitations: In no event shall this warranty run to OEM or component-part buyers. All replacement “Products” are warranted only for the remainder of the original warranty of the “Product” replaced.

Replacement “Products” will be equivalent in function, but not necessarily identical to, the replaced “Product”. Repair or replacement as set forth in these warranties is the sole and exclusive remedy under these warranties

or otherwise for "Product" defects. "METROTECH" DISCLAIMS ALL OTHER WARRANTIES, INCLUDING WITHOUT LIMITATION, AND IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Damage Limitations: "METROTECH" IS NOT LIABLE FOR, AND HEREBY DISCLAIMS, ALL DAMAGES CAUSED BY ANY PRODUCT OR THE FAILURE OF A "PRODUCT" TO PERFORM, INCLUDING, WITHOUT LIMITATION, DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OR LOSS OF PROFITS OR SAVINGS, UNDER ANY LEGAL THEORY, INCLUDING, WITHOUT LIMITATION, TORT (INCLUDING NEGLIGENCE AND STRICT "PRODUCT" LIABILITY) OR CONTRACT, SUSTAINED BY "PURCHASER" OR BY ANY OTHER PERSON. THIS LIMITATION CANNOT BE WAIVED OR AMENDED BY ANY PERSON AND WILL BE EFFECTIVE EVEN IF "METROTECH" OR ITS REPRESENTATIVE HAS BEEN ADVISED OF, OR MIGHT HAVE ANTICIPATED, THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY MAY NOT APPLY TO DAMAGES RELATING TO PERSONAL INJURY OR DEATH IN JURISDICTIONS WHERE SUCH DAMAGES MAY NOT BE DISCLAIMED AS A MATTER OF LAW.

## 2. Do all warranties cover all products/equipment parts and labor?

\_\_\_\_\_ Yes                        X   No

**If NO, describe the exceptions to coverage.**

Conditions of Warranties: It is a condition of these warranties that: (1) the "Purchaser" submit all claims of defect; (2) return of "Product" is accompanied with a bill of sale or other evidence showing the date of purchase and identification of the original "Purchaser"; (3) the "Purchaser" prepay all freight, insurance and other transportation charges to send "Product" to "MetroTech" for warranty-coverage verification, repair or replacement, and; (4) "MetroTech" retains all repaired and replaced parts and "Products".

Warranty Limitations: In no event shall this warranty run to OEM or component-part buyers. All replacement "Products" are warranted only for the remainder of the original warranty of the "Product" replaced.

Replacement "Products" will be equivalent in function, but not necessarily identical to, the replaced "Product". Repair or replacement as set forth in these warranties is the sole and exclusive remedy under these warranties or otherwise for "Product" defects. "METROTECH" DISCLAIMS ALL OTHER WARRANTIES, INCLUDING WITHOUT LIMITATION, AND IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Damage Limitations: "METROTECH" IS NOT LIABLE FOR, AND HEREBY DISCLAIMS, ALL DAMAGES CAUSED BY ANY PRODUCT OR THE FAILURE OF A "PRODUCT" TO PERFORM, INCLUDING, WITHOUT LIMITATION, DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OR LOSS OF PROFITS OR SAVINGS, UNDER ANY LEGAL THEORY, INCLUDING, WITHOUT LIMITATION, TORT (INCLUDING NEGLIGENCE AND STRICT "PRODUCT" LIABILITY) OR CONTRACT, SUSTAINED BY "PURCHASER" OR BY ANY OTHER PERSON. THIS LIMITATION CANNOT BE WAIVED OR AMENDED BY ANY PERSON AND WILL BE EFFECTIVE EVEN IF "METROTECH" OR ITS REPRESENTATIVE HAS BEEN ADVISED OF, OR MIGHT HAVE ANTICIPATED, THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY MAY NOT APPLY TO DAMAGES RELATING TO PERSONAL INJURY OR DEATH IN JURISDICTIONS WHERE SUCH DAMAGES MAY NOT BE DISCLAIMED AS A MATTER OF LAW

## 3. Do warranties cover the expense of a technician's travel time and mileage to perform warranty repairs?

\_\_\_\_\_ Yes                        X   No

**If NO, describe why travel and mileage are not covered.**

The labor warranty will cover the service call charges and labor costs for any repairs required to return the unit to service. Since a manufacturer's warranty only covers the parts, the labor warranty basically works to fill in the gaps, but the costs of time and transportation to any site at any place in the country, or in the world for that matter, cannot be incorporated in one single pricing schedule.

## 4. List any additional limitations or circumstances that would not be covered under your warranty?

Labor reimbursements include straight time labor charges only, and shall not include charges for travel time, mileage, rental of special equipment & tooling or other premium charges.

Labor warranty excludes remedy for damage or defect caused by abuse, modifications or alterations to the original Labor executed by EIS, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.

This Labor warranty does not include labor coverage for a component failure or other damage resulting from:

- Electrical power supply failure or water deterioration of the product, material, or equipment for any reason.
- Operating the product beyond the specifications set in the datasheet or manual.
- Failure to clean and maintain as set forth in the datasheet or manual.
- Owners modified installations, not in accordance with the product.

**5. List any geographic areas for which your organization cannot provide a certified technician to perform warranty repairs. How will participating agencies in these areas be provided service for warranty repair?**

NA

## Financials & Level of Support

**1. Describe the percentage of your company's revenue, by category (city/county/government, K12 education, higher education) that is derived from lighting audit services and LED sales on an annual basis.**

We can disclose our full financials when the award is granted as needed. Having said that, our LED revenue is about 30% of the overall parent company revenues. Of that amount, we break the revenues in three categories like the utilities do: small commercial, large commercial and industrial. Small commercial is about 40% of the LED revenue, and large commercial and industrial cover about 30% of the LED revenue each.

**2. Describe how your company works with agencies to determine payment terms, progress payments, etc.**

EIS is very flexible. If the Terms and Conditions are defined from the beginning, EIS will accommodate financial and payments to match the T&C.

EIS can even consider the possibility of financing their services in several modalities (from simple financing time/interest to Energy-as-a-Service)

With that said, if payment terms can be negotiated, as we do with Industrial Customers, we usually separate progress payments in three: (i) a downpayment; (ii) a payment issued against the Bill of Lading; and (iii) a final payment for the remaining contract value.

**3. Describe your company's allowed methods for payment and if any fees are assessed for those methods.**

1. Customers ACH process
2. Wire transfers
3. Checks by mail

**4. Indicate the level of support your company will offer on this contract category.**

☐ Pricing is better than what is offered to individual educational agencies.  
☐ Pricing is better than what is offered to cooperative educational agencies.  
☒ Other, please describe

**If OTHER, describe how the pricing submitted differs from individual entities or other purchasing consortiums:**

We will provide the same pricing to the individual educational agencies and to date CPC is receiving the best pricing of the cooperative educational agencies thanks to our brand new volume discounts we have obtained from our key supplier.

**5. Describe any self-audit process/program you plan to employ to verify compliance with an anticipated contract award.**

The general steps we follow is actually very structured. Once a contract is awarded and after the T&C are discussed with our lawyers. C-levels initiate an exercise and risks are identified, including risks of our customers: so:

- Identify risks:
  - Which compliance issues and risks are of greatest concern?
    - Existence—does a risk exist?
    - Significance—does it matter?



- Materiality—how much does it matter?
  - Where is the entity most vulnerable to these risks?
  - Prioritizing with Scores
- Audit periodically those risks:
  - Compliance programs contain the following six components:
    - Conducting internal monitoring and auditing;
    - Implementing compliance and practice standards;
    - Designating a compliance officer or contact;
    - Responding appropriately to detected offenses and developing corrective action;
    - Developing open lines of communication; and
    - Enforcing disciplinary standards
- Document the audit:
  - Use a standard form for claim audits, EOBs, and interviews
    - Guarantees consistency in the evaluation
    - Reduces subjectivity
  - Create a summary of the audit process using a “W-question” format to simplify the understanding and the actions to correct the findings.
    - Source (where the information came from);
    - Purpose (why you gathered it);
    - Procedures (what you did with it);
    - Results (what you learned); and
    - Conclusion (what it means).
- Review and act on the results.
  - Review and analyze audit documents, preferably with other compliance staff.
  - Determine if issues identified through the audit are significant, material, and systemic and in which part(s) of the control system those issues reside.
  - Feed audit results back into risk assessment and revise it accordingly.
  - Consider what you could easily and effectively do to control the key risks.
  - If needed, brainstorm with other relevant staff on how to control or minimize the key risks found.
  - Introduce controls based on what you have learned.
  - Release audit results, revised risks, and new controls to the organization.
  - If the change is major, document control changes in policy and procedure.

## Marketing & Partnership

### 1. Describe how your company will position and propose to support CPC and its participating agencies regarding program growth.

A multi-state program like this needs circulation, distribution, dissemination. EIS, with the proper authorization of CPC, would include the logo and the alliance status in our marketing documentation and website.

### 2. Describe and submit a marketing plan that would describe, at a minimum, the following: process on how the contract will be launched to current and potential agencies, the ability to produce and maintain full-color print advertisements in camera-ready electronic format, including company logos and contact information, anticipated contract announcements, planned advertisements, industry periodicals, other direct, or indirect marketing activities promoting the awarded contract, and how the contract award will be displayed/linked on your organization's website. You can submit any support materials as Exhibit A – Marketing Plan.

1. Press Release
2. Complete immersion in our current and future marketing and sales campaigns.
  - a. Cold calls
  - b. Multiple Email campaigns
  - c. Marketing materials

*See Sample Material in EXHIBIT A – MARKETING PLAN*

### 3. Describe how your company will position this contract to CPC's participating agencies if awarded.

1. Considering ourselves as a Trade Ally of CPC, we will position the contract as another successful effort of CPC's in providing pre-qualified professional and nationally recognized providers of sustainable and energy efficient products and services.

**2. Describe how you plan to inform and train company personnel on the contract terms and conditions, details, and promotion of the contract. Describe how your organization plans to utilize your marketing and sales staff with this anticipated contract.**

1. Complete immersion in our current and future marketing and sales campaigns.
  - a. Management calls
  - b. Sales meetings review
  - c. Assignment of account team: outside sales, inside sales support, project manager
  - d. Addition to cold calls and email campaigns
  - e. Add CPC to marketing materials

## Exceptions & Deviations

**1. List any additional stipulations and/or requirements your company requests that are not covered in the RFP.**

NA

**2. List any exceptions your company is requesting to the terms outlined in the Technical Specifications.**

**Respondents must include the following when requesting exceptions:**

- RFP section number and page number
- Describe the exception
- Explanation of why this is an issue
- A proposed alternative to meet the needs of participating agencies and the cooperative

NA

## References

**Provide three (3) references that have purchased Lighting Audit and LED Solutions from your company within the last two (2) years. References from the proposed service area are preferred. A contact name, phone number and email will be required. \*Note, ensure your references are prepared to communicate with a representative from CPC. Failure to confirm reference of past work may affect your evaluation.**

**Reference #1 – Company Name  
Service/Product Purchased  
Year of Purchase  
Reference Contact  
Phone  
Email**

RR Donnelly, Inc  
All types of LED for multiple facilities  
2022-2023  
Mark Guin  
630-329-3553  
Mark.guin@rrd.com

**Reference #2 – Company Name  
Service/Product Purchased  
Year of Purchase  
Reference Contact  
Phone  
Email**

Imerys  
LED Upgrades and Compressed Air  
2021-2023  
Patrick Zailaa  
805 737 1265  
patrick.zailaa@imerys.com

**Reference #3 – Company Name  
Service/Purchase Purchased  
Year of Purchase  
Reference Contact**

CleaResult – Engineering firm handling Entergy incentive program  
LED Upgrades, Compressed Air, ERV, Power Quality  
2015-present day  
Taylor Dumas, CEM, BEP

Phone  
Email

501-265-0249  
Taylor.dumas@clearesult.com

## Vendor Forms & Signatures

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### **Instructions**

Contained herein are forms and information required by the Cooperative Purchasing Connection (CPC). Please note, while some information is merely informational, some will be used during the evaluation and vetting process.

To submit the required forms, follow these steps:

1. Read the document in its entirety.
2. Complete all questions and forms.
3. Save all pages in the correct order to a single PDF format titled “***Vendor Forms & Signatures – Name of Company***”.
4. Submit the forms in the required format with all necessary signatures in Public Purchase.

The following sections will need to be completed prior to submission and submitted as one single PDF titled “Vendor Forms & Signatures – Name of Company”:


1. [Contract Offer & Award](#)
2. [Uniform Guidance “EDGAR” Certification Form](#)
3. [Subcontractor Utilization Form](#)

## Contract Offer & Award

**Instructions:** Part I of this form is to be completed by the Vendor and signed by its authorized representative. Part II will be completed by the Cooperative Purchasing Connection (CPC) upon the occasion of an award.

### Part I: Vendor

In compliance with the Request for Proposal (RFP), the undersigned warrants that I/we have examined all General Terms and Conditions, Forms and Specifications, and being familiar with all of the conditions surrounding the solicitation, hereby offer and agree to furnish all goods and services in compliance with all terms, conditions, specifications, and amendments in this solicitation and any written exceptions in the offer. Signature also certifies understanding and compliance with this proposal. The undersigned understands that his/her competence and responsibility and that of his/her proposed subcontractors, time of completion, as well as other factors of interest to CPC as stated in the evaluation section, will be a consideration in making the award. This contract offer and award binds said Vendor to all terms and conditions stated in the proposal.

<b>Business Name</b>	EFFICIENCY INTEGRATED SOLUTIONS, INC.	<b>Date</b>	SEP-07-2023
<b>Address</b>	829 PICKENS INDUSTRIAL DR. NE; SUITE 13	<b>City, State, Zip</b>	MARIETTA, GA 30062
<b>Contact Person</b>	ALEX FIGUEIRAS	<b>Title</b>	CEO
<b>Authorized Signature</b>		<b>Title</b>	CEO
<b>Email</b>	afigueiras@energyintegratedsolutions.com	<b>Phone</b>	678-315-7040

### Part II: CPC

Your response to the identified proposal is hereby accepted. As a Vendor, you are now bound to offer and provide the products and services identified within this solicitation, your response, including all terms, conditions, specifications, exceptions, and amendments. The initial term of this contract shall be for up to twenty-four (24) months and will commence on the date indicated below. There will be an optional renewal for a period lasting no longer than one (1) additional 24-month period. CPC may grant an extension under certain criteria and conditions.

<b>Agency</b>	_____	<b>Authorized Signature</b>	_____
<b>Name</b>	_____	<b>Title</b>	_____
<b>Awarded this</b>	_____	<b>day of</b>	_____
		<b>Contract #</b>	_____
<b>Contract/Agreement to Commence</b>	_____		

# EDGAR Certification Form

## 2 CFR Part 200

### REQUIRED CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS – APPENDIX II TO 2 CFR 200

**The following provisions are required and apply when federal funds are expended by participating agencies for any contract resulting from this procurement process.**

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

#### **(A) Vendor Violation or Breach of Contract Terms**

Contracts for more than the simplified acquisition threshold currently set at \$250,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate. Provisions regarding vendor default and legal remedies are included in Sections I.K.18 and I.K.19 above. Any contract award will be subject to such provisions. The remedies under the contract are in addition to any other remedies that may be available under law or in equity.

#### **(B) Termination for Cause and for Convenience**

Pursuant to Federal Rule (B) above when federal funds are expended by participating agencies, the participating agency reserves all rights to immediately terminate any agreement in excess of \$10,000 resulting from this procurement process in the event of a breach or default of the agreement by the Vendor, in the event the vendor fails to” (1) meet schedules, deadlines, and/or delivery dates within the time specified in the procurement solicitation, contract, and/or a purchase order; (2) make any payments owed; or (3) otherwise perform in accordance with the contract and/or the procurement solicitation. The participating agency reserves the right to terminate the contract immediately, with written notice to vendor, for convenience, if the participation agency believes, in its sole discretion that it is in the best interest of the participating agency to do so. The vendor will be compensated for work perform and accepted and goods accepted by the participating agency as of the termination date if the contract is terminated for convenience of the participating agency. Any award made under this procurement process is not exclusive and the participating agency reserves the right to purchase goods and services from other vendors when it is in the best interest of the participating agency.

#### **(C) Equal Employment Opportunity**

Except as otherwise provided under 41 CFR Part 60, all participating agency purchases or contract that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 shall be deemed to include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR Part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

#### **(D) Davis Bacon Act**

When required by Federal program legislation, Vendor agrees that, for all participating agency contracts for the construction, alteration, or repair (including painting and decorating) of public buildings or public works, in excess of \$2,000, Vendor shall comply with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, the Vendor is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specific in a

wage determinate made by the Secretary of Labor. In addition, the Vendor shall pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

Vendor must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

#### **(E) Contract Work Hours and Safety Standards Act**

Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard workweek of 40 hours. Work in excess of the standard workweek is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the workweek. The requirements of the 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions that are unsanitary, hazardous or dangerous. These requirements do not apply to the purchase of supplies, materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

#### **(F) Right to Inventions Made Under a Contract or Agreement**

If the participating agency’s Federal award meets the definition of “funding agreement” under 37 CFR 401.2(a) and the recipient or sub-recipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance or experiments, developmental or research work under the “funding agreement,” the recipient or sub-recipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

#### **(G) Clean Air Act and Federal Water Pollution Control Act**

Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended, contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

#### **(H) Debarment and Suspension (Executive Order 12549 and 12689)**

A contract award (see 2 CFR 180.222) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1966 Comp. p. 189) and 12689 (3 CFR Part 1989 Comp. p. 235), “Debarment and Suspension.” SAM exclusions contain the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.



#### **(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)**

Vendors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

Pursuant to Federal Rule (I) above, when federal funds are expended by participating agencies, the vendor certifies that during the term of an award for all contracts by participating agencies resulting from this procurement process, the vendor certifies that it is compliance with all applicable provisions of the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). The undersigned further certifies that:

- (1) No Federal appropriated funds have been paid or will be paid for on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be include in the award documents for all covered sub-awards exceeding \$100,000 in Federal funds at all appropriated tiers and that all subrecipients shall certify and disclose accordingly.

#### **(J) Procurement of Recovered Materials**

For participating agency purchases utilizing Federal funds, Vendor agrees to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act where applicable and provide such information and certifications as a participating agency may require to confirm estimates and otherwise comply. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery, and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

#### **(K) Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment**

A participating agency is prohibited from obligating or expending funds to:

- (1) Procure or obtain.
- (2) Extend or renew a contract to procure or obtain; or
- (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
  - (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou



Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

- (ii) Telecommunications or video surveillance services provided by such entities or using such equipment.
- (iii) Telecommunications or video surveillance equipment or services products or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

#### **(L) Domestic Preferences for Procurements**

As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

For the purpose of this section:

- (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

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#### **PROFIT AS A SEPARATE ELEMENT OF PRICE**

For purchases using federal funds in excess of \$250,000, a participating agency may be required to negotiate profit as a separate element of the price. See 2 CFR 200.323(b). When required by a participating agency, the vendor agrees to provide information and negotiate with the participating agency regarding profit as a separate element of the price for a particular purchase. However, vendor agrees that the total price, including profit, charged by the vendor to the participating agency shall not exceed the awarded pricing.

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#### **RECORD RETENTION REQUIREMENTS FOR CONTRACTS PAID FOR WITH FEDERAL FUNDS – 2 CFR § 200.333**

When federal funds are expended by participating agencies for any contract resulting from this procurement process, the vendor certifies that it will comply with the record retention requirements detailed in 2 CFR § 200.333. The vendor further certifies that vendor will retain all records as required by 2 CFR § 200.333 for a period of three years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

---

#### **CERTIFICATION OF COMPLIANCE WITH THE ENERGY POLICY AND CONSERVATION ACT**

When federal funds are expended by participating agencies for any contract resulting from this procurement process, the vendor certifies that the vendor will be in compliance with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.; 49 C.F.R. Part 18; Pub. L. 94- 163, 89 Stat. 871).

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## CERTIFICATION OF NON-COLLUSION STATEMENT

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Vendor certifies under penalty of perjury that its responsible to this procurement solicitation is in all respects bona fide, fair, and made without collusion or fraud with any person, joint venture, partnership, corporation or other business or legal entity.

**Pursuant to Federal Ruling, when federal funds are expended by participating agencies, the vendor hereby certifies that during the term of an award for all contracts by participating agencies resulting from this procurement process, vendor certifies compliance will all provisions, laws, acts, regulations as specifically noted above. The vendor agrees to comply with all federal, state, and local laws, rules, regulations, and ordinances, as applicable.**

Business Name	EFFICIENCY INTEGRATED SOLUTIONS, INC.	Authorized Signature	
Full Name	ALEX FIGUEIRAS	Title	CEO

## Subcontractor Utilization Form

**Instructions:** List all subcontractors to be used during the performance of this contract. Submit additional forms if needed.

Solicitation Name: LIGHTING AUDIT SERVICES & LED SOLUTIONS

Solicitation Number: RFP 24.5

Vendor Name: EFFICIENCY INTEGRATED SOLUTIONS, INC.

If a subcontractor will not be used, check this box: ☐

Company Name: CURTIS ELECTRIC, LLC

Street Address: 1406 N. JACKSON

City, State, Zip: MAGNOLIA, AR 71753

Telephone: (870) 818-2266

Primary Contact: JOHN P. CURTIS

Email Address of Contact: jpcurtis@hotmail.com

Services to be provided:

LED LIGHTING UPGRADES INSTALLATION, REMOVAL OF ELECTRIC FIXTURES, SUPERVISION OF LOCAL PERSONNEL

Company Name:

Street Address:

City, State, Zip:

Telephone:

Primary Contact:

Email Address of Contact:

Services to be provided:

Company Name:

Street Address:

City, State, Zip:

Telephone:

Primary Contact:

Email Address of Contact:

Services to be provided:

# 1- Lighting Audit Services

\*Please note this workbook has multiple tabs.

Instructions. Complete the tables below for the services your company is offering. Please note this is an **REQUIRED** form.

Responding Company's Name:

Efficiency Integrated Solutions, Inc. (EIS), dba Energy Integrated Solutions

**REQUIRED**

## Lighting Assessment & Design

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Lighting Audit & Assessment (per square foot)	\$ 0.03	\$ -	100%	\$ -	\$ -	\$0 for audit services only if project is awarded to EIS
Design Services: Facility under 20,000 sqft	\$ 1,000.00	\$ 500.00	50%			Per design for facilities under 20,000 sqft.
Design Services: Facility over 20,000 sqft	\$ 3,000.00	\$ 1,500.00	50%			
Project Management: Facility under 20,000 sqft	\$ 3,500.00	\$ 1,500.00	57%	\$ 100.00		
Project Management: Facility over 20,000 sqft	\$ 7,000.00	\$ 3,000.00	57%	\$ 100.00		
			#DIV/0!			

**Installation [Labor]** \*\*Prevailing wage projects/installations are subject to higher hourly rates/charges. Prevailing wage rates change by MN county. Participating agencies are required to notify the Vendor if prevailing wages are required (state/federal funding as part or all of the project).

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Hourly Rate - Regular Hours	\$ 95.00	\$ 80.00	15.79%	\$ 35.00	Per IRS standards	
Hourly Rate - Evening	\$ 142.50	\$ 120.00	15.79%	\$ 35.00	Per IRS standards	
Hourly Rate - Weekend/Holidays	\$ 142.50	\$ 120.00	15.79%	\$ 35.00	Per IRS standards	
			#DIV/0!			
			#DIV/0!			
			#DIV/0!			

## Other Services

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Rebate Fulfillment (per square foot)	\$ 0.05	\$ 0.02	60.00%			Discount price only if project is awarded to EIS
Recycling Services (per square foot)	\$ 0.25	\$ 0.145	42.00%			
Training: Per 6 hour training session	\$ 2,000.00	\$ 1,000.00	50.00%	\$ 100.00	Per IRS standards	
			#DIV/0!			
			#DIV/0!			
			#DIV/0!			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			

## 2.1 - LED Category Discount

**\*Please note this workbook has multiple tabs.**

**Instructions.** Complete the following schedule for all categories of product offered (by catalog, category, and/or by manufacturer) which can include sub-categories (specific lines from manufacturers) and the discount associated with that category. The form should be completed by the standards listed in the Technical Specifications. Additional rows may be added. This is a required form **if proposing lighting solutions.**

**Responding Company's Name:** Efficiency Integrated Solutions, Inc. (EIS), dba Energy Integrated Solutions

REQUIRED FORM

[illegible]

## 3 - Volume Discounts

**\*Please note this workbook has multiple tabs.**

**Instructions.** Complete the form below if your company is offering additional discounts for a one time purchase, size of project, or a group of local agencies in a geographic area combining requirements (estimate annual spend). Please note this is an **optional form**.

Downloaded from <http://ajphaphysocpharm.sagepub.com/> at 11:01 11 November 2014

## OPTIONAL FORM

[illegible]



ENERIN-S01

NMCGHEE

## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

9/6/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER <b>Houchens Insurance Group</b> 109 International Drive, Suite 101 Franklin, TN 37067	CONTACT NAME:		
	PHONE (A/C, No, Ext): (615) 261-1900	FAX (A/C, No): (615) 261-1901	
	E-MAIL ADDRESS: policy@higusa.com		
	INSURER(S) AFFORDING COVERAGE	NAIC #	
	INSURER A : Grange Insurance Company	14060	
INSURED  <b>Efficiency Integrated Solutions, Inc DBA</b> <b>Energy Integrated Solutions, Inc</b> 839 Pickens Industrial Dr. NE Suite 13 Marietta, GA 30062	INSURER B : Twin City Fire Insurance Company	29459	
	INSURER C :		
	INSURER D :		
	INSURER E :		
	INSURER F :		

## COVERAGES

## CERTIFICATE NUMBER:

## REVISION NUMBER:


THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			CPP2676460	3/31/2023	3/31/2024	EACH OCCURRENCE \$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000
							MED EXP (Any one person) \$ 10,000
							PERSONAL & ADV INJURY \$ 1,000,000
							GENERAL AGGREGATE \$ 2,000,000
							PRODUCTS - COMP/OP AGG \$ 2,000,000
							EMPLOYEE BENEFIT \$ 3,000,000
A	<input type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			CPP2676460	3/31/2023	3/31/2024	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
							BODILY INJURY (Per person) \$
							BODILY INJURY (Per accident) \$
							PROPERTY DAMAGE (Per accident) \$
							\$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$
							AGGREGATE \$
							\$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> Y / N If yes, describe under DESCRIPTION OF OPERATIONS below			33WECAO8081	4/20/2023	4/20/2024	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
							E.L. EACH ACCIDENT \$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

## CERTIFICATE HOLDER

## CANCELLATION

Cooperative Purchasing Connection 1001 E Mount Faith Fergus Falls, MN 56537	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 

# ENERGY EFFICIENCY PROJECT

Imerys Performance Minerals, Lompoc CA Facility

## LED Upgrade & Retrofit Example Energy Conservation Measures



**IMERYS**



### Requested by

Cooperative Purchasing Connection  
Ref: RFP 24.5  
Lighting Audit Services & LED Solutions  
1001 E Mount Faith  
Fergus Falls, MN 56537  
(888) 739-3289  
[info@purchasingconnection.org](mailto:info@purchasingconnection.org)

### Prepared by

Efficiency Integrated Solutions, Inc.  
829 Pickens Industrial Dr. NE, Suite 13  
Marietta, GA 30062  
Enrique Perez-Young  
CMO  
(404) 937-6547 ext 721  
[eperez-young@energyintegrationsolutions.com](mailto:eperez-young@energyintegrationsolutions.com)

September 7, 2023







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### DISCLAIMER AND CONFIDENTIALITY

This report is not intended to serve as an engineering design document but is intended to provide estimated energy efficiency savings associated with the proposed projects.

The information and recommendations presented in this report have been reviewed for their technical accuracy and are believed to be reasonable and correct.

All schematics, savings, and cost estimates are for informational purposes, and are not to be construed as a design document or as guarantees.

Final project specification and calculation of potential savings and costs should be developed using appropriate LED Lighting and Energy Savings professionals.

Cost and savings estimate, and “totals” included in tables may reflect rounding.

Efficiency Integrated Solutions, Inc. will not be held liable if plant staff fails to act on any safety or environmental recommendations noted in this report.

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This report is confidential, and the information is not to be used or disclosed in whole or in part for any purpose other than to evaluate this document.



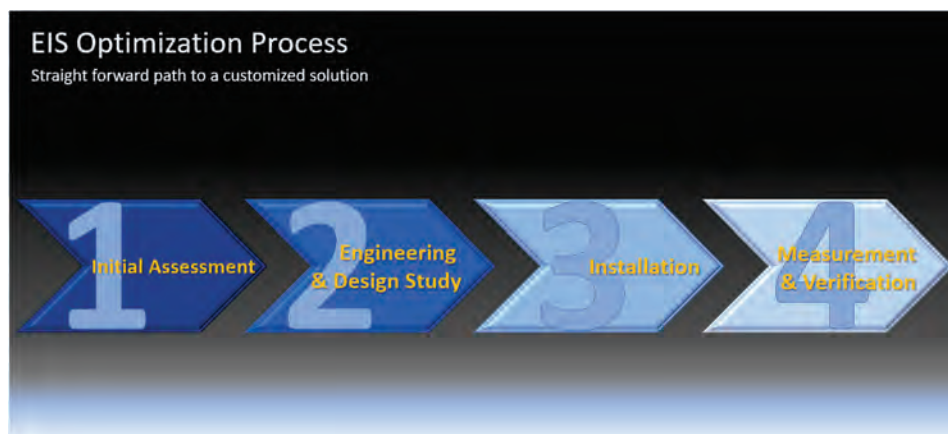
### A. Executive Summary

Imerys Performance Minerals Americas at Lompoc, CA contracted EIS services to audit and analyze current lighting installation and to upgrade all lighting at the mining facility to an energy efficient lighting concept, complying with Imerys internal minimum lighting operating standards.

The scope of work performed updated the lighting at Imerys Lompoc, using LED latest technology to minimize electrical usage.

Electrical Scope of Work, quantities, locations, and fixture types were assessed by EIS and a suitable lighting arrangement was proposed in order to meet the minimum lighting requirements (Imerys Standard IN-CX-ELE-001 rev.01) with the level of efficiency required by PG&E (the utility organization) in order to maximize the incentives and rebates established for this industrial type of customer. Additionally, Imerys internal lighting was enhanced to reach a CRI of 80 or higher, unless otherwise authorized by the Imerys project manager.

This project, as any other EIS project was approached following out 4 steps of optimization process:



Initial Assessment (Pre-Assessment; initial onsite walkthrough; and operational relevant data discovery process)

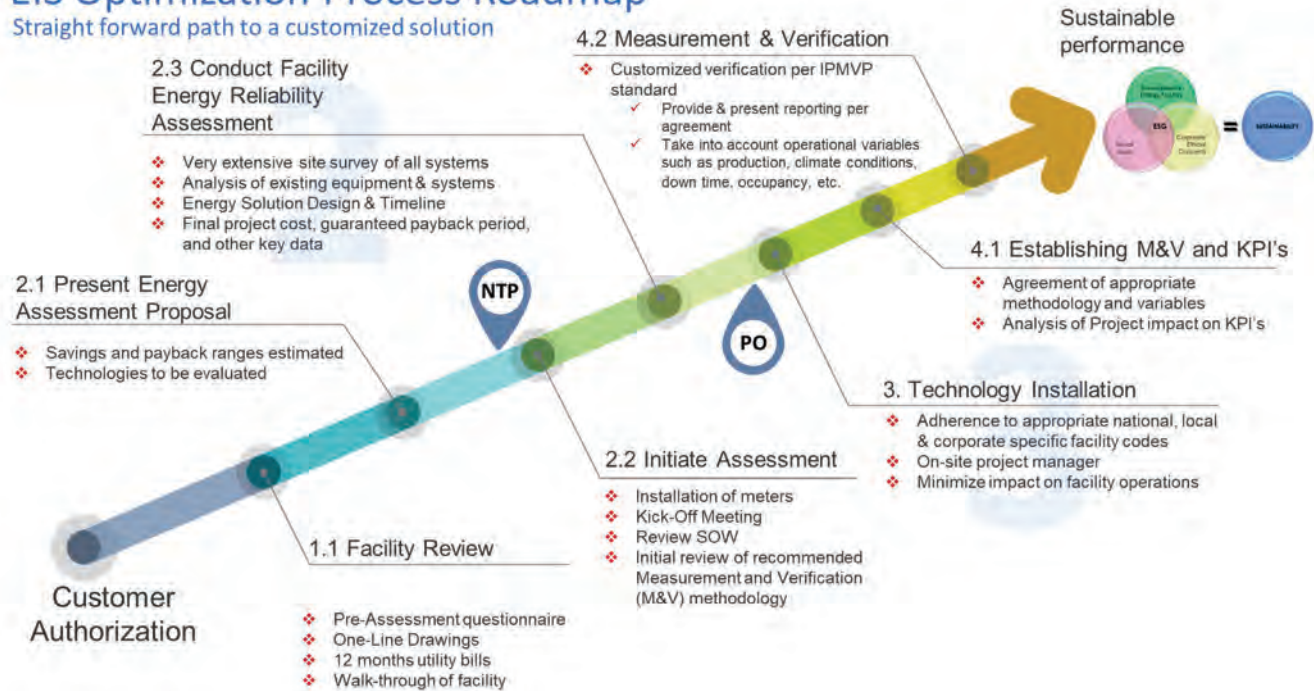
Engineering and Design (Analysis of the data collected; evaluation of potential areas of enhancement and applicable technologies; presentation and discussion of the discoveries with the customer; establishment of KPIs and M&V methodology. If more than one ECM is accepted to be thoroughly evaluated, then a more comprehensive site survey is scheduled, including meters and gauges installation)

Installation (Triggered by the PO; supply Chain of materials and labor; project manager is involved; and implementation of approved technologies)

Measurement and Verification (If the customer agrees to this point, instrumentation and control is set up to properly measure parameters of M&V adopted methodologies; apply customized M&V measurements while KPIs are calculated as agreed between the parties; perform verification of savings and KPI's following applicable IPMVP standard; and adjust results based on expected variations on production, down time, climate conditions, etc.)

## EIS Optimization Process Roadmap

Straight forward path to a customized solution



## B. Lighting Audit and Results

As specifically requested by the customer, this project was tailored to analyze exclusively the Lighting System of the facility and the mining operation, reason why the results were only tabulated and evaluated with the details of every single lighting source in the plant allocated to every specific area, hours of operation and environment condition during the operation. (See Appendix D for reviewing customized Kick Off Meeting discussion points and the photo-detail of every single fixture/lamp in the facility)

From this point on, the data was consistently included in every aspect of the design, energy consumption estimations, budgeting, discussion, and approval and finally installation and final walkthrough to facilitate the customer acceptance and future verification.

The proposal includes then solutions for every one of the audited items. It is a very detailed calculation of wattage consumption, temperature and color of the LED fixture and bulb designed to maintain the appropriate illumination or, more often than not, to improve such level of illumination to the OSHA/MSHA standards. Even the calculation of labor required for the implementation of the project is carefully considered for the minutes required to remove, dispose, and replace each one of the lighting sources in the plant. (See Appendix A to review the standard EIS proposal, which shows scope of work; calculation of current and future energy usage; pricing and investments; details of each replacement, retrofit or addition to the lighting system; expected savings inherent to the ECM; incentives and rebates offered by utility program and/or federal funds; financial projections; installation schedule per area per week; etc.)



Additional issues found during the audit and discovery process and solved as part of the project implementation:

- a. **I:** During the audit, it became evident that the excessive vibration in some steel structures, caused by adjacent conveyor belts and rock mills, was the source of continued failures in the lighting system since the beginning of the operation of the plant. The customer tried in the past to remedy the problem and explored different options, with no foreseeable solution.  
  
**R:** EIS, supported by the manufacturers, tested several alternatives, and found a solution with neoprene rings that cushioned the new bulbs into the fixtures and avoided failures. This solution was found sustainable, and it was successfully implemented. It is now part of the fixture/bulb specification in other Imerys plants.
- b. **I:** As part of the normal operation of the plant, it became a practice/habit running vehicles and roaming people on a narrow corridor between the Silicate WH and the property fence, in order to access the Celpure Plant. Mostly at night, due to null illumination and lack of proper signaling, this long area was the cause of quasi-accidents.  
  
**R:** EIS extended installed movement-sensor-controlled area lighting and wall packs in the problematic corridor as an add-on to the SOW of the project, without increasing the energy consumption of the Silicate WH.
- c. **I:** An important portion of the electric wiring was old and defective due to dry-cracked insulation.  
  
**R:** EIS offered its services to remove, dispose and reinstall new wiring, but this aspect was considered out of scope for the budgeted LED Upgrades investment and Imerys decided to do it on their own.
- d. **I:** Extending the audit to night shifts allows EIS to define improper or poor illumination in some areas. For Imerys Lompoc's case, this exercise made evident that some LED bulbs, previously installed by the customer, in external structures were inappropriately selected when sourced, since it caused a cloudy illumination with only clear vision at less than 1ft from every light source.  
  
**R:** Due to the quantity of fixtures to be corrected, this portion of the proposal was also removed from the SOW and performed as a correction of a prior internal project by themselves.

EIS, at the request of Imerys, presented three alternative proposals for the customer to decide the level of retrofits that will keep their investment within their budget and corporate acceptable payback. The selected proposal achieved a total investment of \$447,162, which represented annual energy savings of 1,062,347 kWh (\$133,374) and maintenance-material savings of \$11,170 per year; resulting in an investment payback of 3.04 years.

All work was completed according to Imerys safety standards. EIS guaranteed LED fixtures for 10 years and labor for 5 years.







### C. Installation/Project Management plan

Once the proposal was selected, the capital project was approved, and the PO was issued along with the mutually agreed downpayment and payment structure, the project general schedule and installation intervals included in the proposal is broken-down by the Project Managers in workable timelines and weekly schedules per area per fixture.

This extremely detailed project management plan, in Gantt graph and/or tabulated form was shared with the installation crew and weekly discussed and adjusted with Imerys Authorized Representative to ensure all the parties were aware of the working areas, type of equipment, lifters, personnel, quantity of material to be present in the operating areas in a specific date/time of the week. This reduced, to the very minimum, disruption of the production timeline.

At the end of every week the timeline was adjusted, and the new schedule for the next week was shared with the appropriate operations and production area personnel. (See Appendix B with the Installation Report with Labor, which the Project Manager uses as a base to generate workable timelines in Gantt charts)

Soft acceptances by the customer representative, supported by partial walkthroughs were scheduled every week to ensure the finished areas were within the parameters specified by the contract and agreements; to be sure that every area was cleared or still had pending issues (punch list). So, if additional work was needed, the schedule was not interrupted or unnecessarily extended; if changes of the SOW were discovered, appropriate change orders were issued, and delays were avoided or kept to the minimum.

### D. Final Walkthrough, Final Report and Rebate Summary

One or two weeks prior to the installation closing, a formal final walkthrough was scheduled by the Project Manager with the EIS On-site Supervisor and the Imerys Authorized Representative. During the exercise, a documented process was in effect, and a Final Report was generated on the spot, containing area by area clearance or a complete punch list of unsolved items (which was not the case). Also, a review of all the change orders completion is achieved.

The document includes relevant pictures or areas, description of closed and open items to be solved, if any, and the signature of both authorized parties. (See Appendix C with the EIS Project Status Report – COMPLETION WALKTHROUGH version; the installation report with the calculated energy savings per type of fixture, required to submit the rebate/incentive filing with PG&E; and a copy of the catalogued rebates that EIS was able to obtain on Imerys behalf)





## APPENDIX A: Sample of a standard EIS proposal



# LED LIGHTING PROPOSAL SUMMARY:

## Option 3 – Keep 19W LED Bulbs

Prepared for

Imerys Filtration: Lompoc, CA



### Site Information

Name: Imerys Lompoc CA

Address: 2500 San Miguelito Rd  
Lompoc CA 93436

Proposal Date

09/07/2021

Proposal Expires

10/06/2021







September 7, 2021

Imerys – Lompoc, CA

Dear Project Owner,

Thank you for the opportunity to provide this proposal for the LED lighting upgrade. As you are aware, as the cost per kWh of energy from municipal power grids continues to rise each year, many businesses are seeking long-term alternatives to reduce their energy bills. LED lighting retrofits provide an easy way to reduce operating costs through energy efficiency. Furthermore, incentives continue to shrink in the lighting category as utilities are exploring creative ways to continue to reduce electrical consumption through alternatives other than lighting upgrades.

Key highlights of your project:

- Reduction in energy: 1,062,347 kWh
- Reduction in demand: 193 kW
- Annual energy cost savings: \$133,374
- Annual maintenance savings: \$11,170
- Estimated Utility incentives available: \$7,866
- Project ROI / simple payback period: 3.04 years

EIS is committed to **deliver a value-added difference** - providing you with quality products and workmanship on your project; offering you excellent customer service, support, and satisfaction; and expanding and improving services, quality processes and programs. Why us?

1. Your success and profitability are paramount to our success because we are dependent on your ongoing business.
2. EIS has been in business since 1978, meaning we have the financial fortitude to back this project if something were to go wrong (our doors are not closing).
3. We specify solutions that are sustainable and specific for your site and environment.
4. You have the commitment of your sales representative.
5. We are a turn-key solution provider, project manager and financier.
6. Awarded by Entergy Arkansas as the trade ally company that saved the most energy in 2019 and 2020 for large Commercial and Industrial (C&I) customers. Work w/ partners with similar accomplishment for ComEd. These are the best incentive utility programs in the nation right now.

In this proposal, details have been included regarding the expected impact that a system will have on your energy use and overall energy costs. A cash system has been modeled, but a finance solution can also be provided upon request.

Key Contacts:

Enrique Perez-Young  
Energy Integrated Solutions  
404-433-9013  
[eperez-young@energyintegratedsolutions.com](mailto:eperez-young@energyintegratedsolutions.com)

Michelle Beard  
Energy Integrated Solutions  
615-319-3024  
[mbeard@energyintegratedsolutions.com](mailto:mbeard@energyintegratedsolutions.com)



## Executive Summary

Our analysis of existing lighting is based on data, facts and findings from our detailed survey. All financial data is derived from the existing fixtures and true consumption based on operating hours compared to proposed consumption from lighting solutions and controls, validated by DLC-Design Lighting Consortium certification.

### Project Costs

Total Project Cost	\$447,162
Material Sales Tax <sup>1</sup>	\$0
Incentives/Rebates <sup>2</sup>	\$7,866
Turnkey Project Cost	\$439,296

### Financial Metrics

Payback Period (yrs)	3.04 year(s)
Avg. Annual Return	33%
10 Yr Operating Savings	\$1,445,440
Net Present Value	\$648,719

### Cost of Waiting

Postpone for one month	\$12,045
Postpone for six months	\$72,272
Postpone for one year	\$144,544

### Assumptions

Energy Rate (\$/kWh) <sup>3</sup>	0.1200
Annual Utility Rate Increase	1.00%
Discount Rate	6.00%

***This proposal is for Option 3: Keeps 19W LED bulbs currently in use by Imerys Lompoc.***

***<sup>1</sup> Assumes corporation satisfies all requirements to be exempt from sales taxes and can provide documentation as needed.***

***<sup>2</sup> Calculated using guidelines from utility company.***

***<sup>3</sup> From electric bills provided by customer.***



## Additional Comments

*As requested by customer, 196 sensors were added in the designated areas.*

*We are always sourcing the latest generation of proven LED with the appropriate certifications. For example, the E26 LED bulbs currently used at Lompoc have only a ~88 lumens/watt efficacy vs. our corn bulb over 160 lumens/watt or basically an 82% improvement in illumination. In the case of the high bay fixtures we are at an even higher efficacy of ~190 lumens/watt compared to the average competitor in the 130 -150 lumens/watt.*

*\*\*Financing options are available. Please note that additional profits from tax savings can be potentially achieved as stated at end of proposal due to tax savings from Section 179 of the 2017 Tax Reform Act. These additional savings are not included in calculations above. Consult your finance team for validation.*

*Warranty will follow Imerys Corporate Master Service Agreement (MSA) signed with EIS.*

*Used voltage & some wattage information as provided by customer. When in doubt assumed conservative numbers. Imerys electricians noted during audit that some cables and sockets are in bad condition, e.g., Silicate Plant Processing area. This is outside the scope of the project. Any discrepancies or repairs may/will require a change order.*



## Annual Savings Summary

### Energy Reduction



**1,062,347 kWh**  
REDUCED

Usage (kWh)

### Energy Savings



**\$133,374**  
SAVED

Demand (kW)

### Maintenance Savings



**\$11,170**  
SAVED

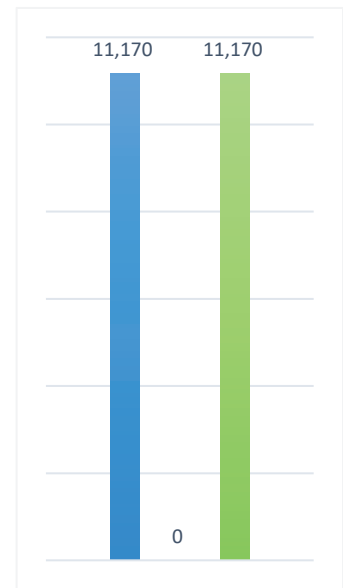
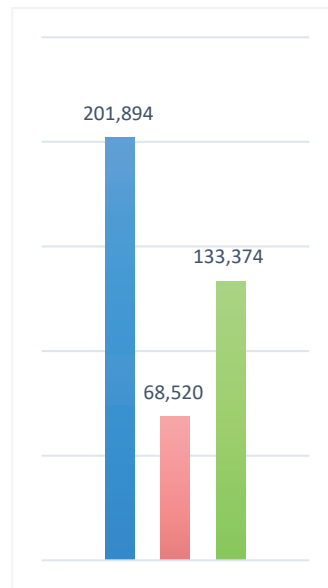
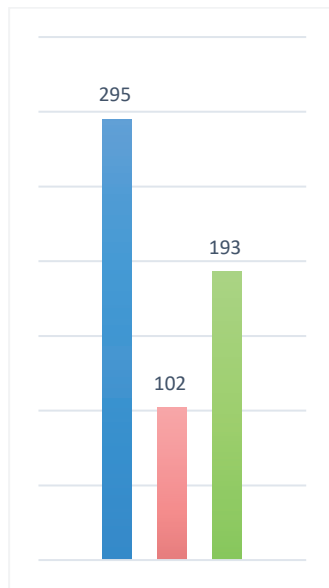
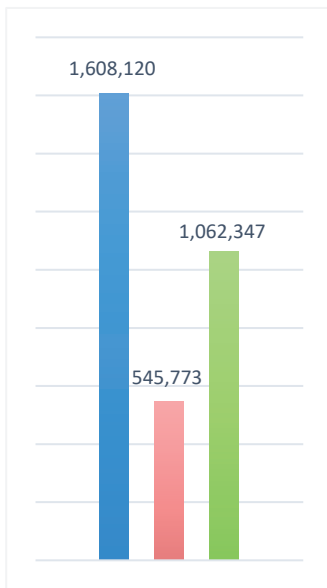
Energy Cost (\$)

### Carbon Savings



**749,818 kgCO<sub>2</sub>e**  
GASES REDUCED

Maintenance Cost (\$)



■ Current ■ Proposed ■ Savings

## Impact of New Lighting

Energy Reduction	66%
Avg. Annual Maintenance Savings	100%
Avg. Annual Operating Savings	68%

## Aggregate Average Operating Savings

Saving Area	Year 1	Year 5	Year 10
Energy	\$133,374	\$666,870	\$1,333,740
Maintenance	\$11,170	\$55,850	\$111,700
Total	\$1444,544	\$722,720	\$1,445,440

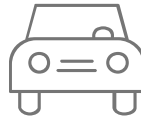


## Environmental Summary



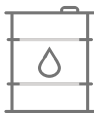
Gallons of Gasoline Saved

**77,868**



Fewer Cars on the Road

**146**



Barrels of Oil not Consumed

**1,609**



Acres of Trees Saved

**567**



# of Household's Annual  
Electricity Usage

**121**



Tons of Coal not Burned

**378**



## Electrical Scope of Work

- Fixture Voltages and Electrical Exceptions

Voltages are as noted in the proposal below and were provided by personnel assigned by the customer during our audit/walk thru and subsequent visits. Any changes as a result of incorrect voltages may result in a need for any one of the following:

- Removal from scope of work.
- Change of fixture type or fixture voltage (may affect the cost of the fixture)
- Change order
- Electrical repairs or upgrades

- Quantities

Quantities, location and fixture type are noted in the proposal and constitute the Scope of Work to be completed for the project. EIS strives to be as accurate as possible during the audit process with the counting of fixtures throughout the entire facility, however, from time to time, there may be fixtures or areas that were not counted or overlooked. EIS will attempt to make any changes (additional material/labor) within the existing project, however there may be a need to add on as a separate project as needed. Any changes of this nature will be discussed with the customer and submitted to the customer for final approval.

- Repairs/Electrical Upgrades

The customer may request that EIS perform repairs or electrical upgrades as necessary to complete the lighting installation but the customer retains the right to contract directly with their contractor to complete any necessary repairs and/or upgrades.

- Change Orders

Change Orders: Upon notification of a change order that falls outside of the projects financial limitations (assignment of incentives), EIS will provide a written estimate and request that the customer issue a PO for the additional scope of work.

## Initial Estimated Installation Plan

This estimated installation plan is based on what was surveyed and we are assuming the implementation will take approximately six to eight weeks. The following plan was created to provide a glimpse at what the installation may look like given the layout and challenges of the site. The project includes a cleanup of the installation area prior to exit daily. We will finalize staging and storage needs with you after a notice to proceed has been delivered.



- **Week #1-5 Installation**
- **Week #6-10 Installation**
- **Week #11-14 Installation, Clean-up, Closing Meeting**



## Disclaimer

The information provided in this proposal is based on an audit of your facility performed by our personnel or affiliated companies.

Although we attempt to perform the most accurate audit possible, we are subject to several factors that are often times out of our control, i.e. access to areas, incorrect voltage information, unforeseen defects, faulty wiring, damaged lenses, etc. This and other circumstances occasionally lead to minor variances from this proposal. This proposal only includes what is noted in the BOM - Bill of Materials. Any costs related to variances in the fixture count, repairs, substitutions, upgrades not noted, additional fixtures, lenses or ancillary items not noted in the BOM will be considered a change order subject to customer approval. Customer will be notified of these variances for approval of any change in scope and the associated costs.

Estimates of the hours of operation used to calculate savings must be provided to our personnel by representatives of customer facility. Our personnel assume that all current fixtures installed meet local jurisdiction electrical and pertinent safety codes. Fixtures with a "Retrofit" treatment are assumed to be in proper and safe working condition.

Our calculations for energy and maintenance savings as well as our prescribed treatment are based on current (at the time of the survey) operations as indicated by customer representative(s). Changes in processes, operations, equipment, operating hours and/or production schedules, etc. may adversely affect the savings and incentive estimates, required lighting levels and/or the proper assignment of prescribed treatment. Shortfalls in incentives due to incorrect customer information are the responsibility of the customer.





## Warranties, Terms and Conditions

1. WARRANTY. STANDARD WARRANTY SHALL APPLY TO ALL GOODS EXCEPT WHERE A SEPARATE WARRANTY IS PRESENTED IN WRITING AND THOSE WARRANTY TERMS REPLACE THOSE FOUND IN THE STANDARD WARRANTY. STANDARD LIMITED WARRANTY, SELLER WARRANTS TO BUYER THAT GOODS AND SERVICES SOLD FOR USE (EXCEPT WHEN USED FOR PERSONAL PURPOSES) HEREUNDER WILL BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP WHICH APPEAR WITHIN ONE (1) YEAR OF THE DATE OF SHIPMENT TO THE ORIGINAL BUYER. PROVIDED THAT BUYER NOTIFIES SELLER IN WRITING OF THE DEFECTS COVERED BY THIS WARRANTY WITHIN THIRTY (30) DAYS OF THEIR FIRST APPEARANCE. SELLER'S MAXIMUM OBLIGATION IS TO REPAIR OR REPLACE GOODS WHICH ARE PROVED TO BE DEFECTIVE. ALL WARRANTY WORK IS PERFORMED AT FACTORY. THIS LIMITED WARRANTY IS MADE ONLY AS TO THOSE PRODUCTS MANUFACTURED SOLELY BY THE SELLER. PRODUCTS OF OR ACCESSORIES FOR EQUIPMENT FURNISHED BY SELLER BUT MANUFACTURED BY OTHER MANUFACTURERS SHALL CARRY WHATEVER WARRANTY, IF ANY, SUCH MANUFACTURERS HAVE CONVEYED TO SELLER AND WHICH CAN BE PASSED ON TO BUYER. THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND THERE ARE NOT OTHER WARRANTIES, ORAL OR WRITTEN, EXPRESSED OR IMPLIED WITH RESPECT TO ANY GOODS OR SERVICES SOLD HEREUNDER, WHETHER AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSES OR ANY OTHER MATTER UNLESS SUCH WARRANTIES ARE MADE IN WRITING. AFTER EXPIRATION OF THE WARRANTY PERIOD ALL LIABILITY TO BUYER CEASES.

2. DELAY/NON-PERFORMANCE: Seller will not be liable for failure to perform due to any cause beyond Seller's control. Seller will attempt to notify Buyer of any material delay and will specify a revised performance date as soon as practicable, but Seller shall have no Liability for failure to do so.

3. LIMITATIONS OF LIABILITY: a. SELLER WILL NOT UNDER ANY CIRCUMSTANCES, WHETHER AS A RESULT OF BREACH OF CONTRACT, BREACH OF WARRANTY, TORT OR OTHERWISE BE LIABLE FOR CONSEQUENTIAL, SPECIAL, OR EXEMPLARY DAMAGES, INCLUDING BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUE, LOSS OF USE OR DAMAGE TO ANY ASSOCIATED EQUIPMENT, COST OF SUBSTITUTE PRODUCTS OR SERVICES, DOWNTIME COSTS, OR CLAIMS OF BUYER'S CUSTOMERS. b. SELLER'S LIABILITY ON ANY CLAIM OF ANY KIND FOR ANY LOSS, DAMAGE, OR OTHERWISE, ARISING OUT OF, RESULTING FROM, OR CONCERNING ANY RESPECT OF THIS AGREEMENT OR THE GOODS OR SERVICES FURNISHED HEREUNDER SHALL NOT EXCEED THE PRICE OF THE SPECIFIC PRODUCT WHICH GIVES RISE TO THE CLAIM. c. Seller will not be subjected to any liability, whether in contract, warranty, tort or otherwise, on any claim for loss or damage concerning products, parts, advice, assistance or service which Seller furnished to buyer as a business courtesy, but not required hereunder. d. Seller shall have no responsibility or liability for goods which have been misused, inadequately maintained or stored, or incorrectly or negligently installed or serviced.

4. RETURN FOR CREDIT: Generally, debit memos and other return-for-credit vouchers will not be honored. Returned merchandise will be regarded as returned for repair. Exceptions may, at Seller's option, be possible when merchandise is returned within thirty (30) days of original delivery date, the merchandise is non-custom and not made to order, and similar merchandise of nearly equal value is substituted. Extra shipping charges, restocking charges, or special charges may be applicable. Advance negotiation by telephone or letter is recommended.

5. REPAIRS: a. Warranty Repair-The defective products must be returned to Seller within the warranty period, accompanied by a statement of the reason for return and the Buyer's option as to warranty applicability.



## **METROTECH MEDIA & LIGHTING, INC. LIMITED WARRANTY FOR: SOLID STATE LIGHTING PRODUCTS**

MetroTech Media & Lighting, Inc. ("MetroTech") warrants to the original end-user ("Purchaser") of "MetroTech"-brand Solid State Lighting Products ("Products"), that at the date of their purchase, "Products" will be free of significant defects in material and workmanship.

### **10-Year Warranty for Materials and Workmanship**

For a period of ten (10) years after the date of purchase, "MetroTech", at its sole option, will, itself, or through others, repair, replace "Product" that "MetroTech" verifies as being defective due to significant material or workmanship defects. The determination of whether the Product is defective shall be made by "MetroTech" in its sole discretion with consideration given to the overall performance of the Product. A Product shall not be considered defective if the number of inoperable components is less than 10% of the total number of LED components in the Product.

**What the Warranty Does Not Cover:** This warranty does not cover (1) Product advice or assistance that "MetroTech" furnishes as a courtesy, (2) removal or reinstallation of "Products", or (3) defects or damage as a result of accident, modification, misuse (including but not limited to the operation at temperatures above 70oC or voltage levels outside the rated range), improper service or repair, improper facility grounding and system wiring, damage due to improper facility Transient Voltage Surge Suppression (TVSS), abuse or abnormal use including, without limitation, improper storage and incorrect installation. Use with 2 circuit - 3 wire shared neutral wiring installations is not covered. This warranty does not cover damage resulting from acts of nature beyond industry specifications of protection thereof. THIS LIMITED WARRANTY IS VOID IF THE PRODUCT IS NOT USED FOR THE PURPOSE FOR WHICH IT IS DESIGNED.

**Conditions of Warranties:** It is a condition of these warranties that: (1) the "Purchaser" submit all claims of defect; (2) return of "Product" is accompanied with a bill of sale or other evidence showing the date of purchase and identification of the original "Purchaser"; (3) the "Purchaser" prepay all freight, insurance and other transportation charges to send "Product" to "MetroTech" for warranty-coverage verification, repair or replacement, and; (4) "MetroTech" retains all repaired and replaced parts and "Products".

**Warranty Limitations:** In no event shall this warranty run to OEM or component-part buyers. All replacement "Products" are warranted only for the remainder of the original warranty of the "Product" replaced. Replacement "Products" will be equivalent in function, but not necessarily identical to, the replaced "Product". Repair or replacement as set forth in these warranties is the sole and exclusive remedy under these warranties or otherwise for "Product" defects. "METROTECH" DISCLAIMS ALL OTHER WARRANTIES, INCLUDING WITHOUT LIMITATION, AND IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

**Damage Limitations:** "METROTECH" IS NOT LIABLE FOR, AND HEREBY DISCLAIMS, ALL DAMAGES CAUSED BY ANY PRODUCT OR THE FAILURE OF A "PRODUCT" TO PERFORM, INCLUDING, WITHOUT LIMITATION, DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OR LOSS OF PROFITS OR SAVINGS, UNDER ANY LEGAL THEORY, INCLUDING, WITHOUT LIMITATION, TORT (INCLUDING NEGLIGENCE AND STRICT "PRODUCT" LIABILITY) OR CONTRACT, SUSTAINED BY "PURCHASER" OR BY ANY OTHER PERSON. THIS LIMITATION CANNOT BE WAIVED OR AMENDED BY ANY PERSON AND WILL BE EFFECTIVE EVEN IF "METROTECH" OR ITS REPRESENTATIVE HAS BEEN ADVISED OF, OR MIGHT HAVE ANTICIPATED, THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY MAY NOT APPLY TO DAMAGES RELATING TO PERSONAL INJURY OR DEATH IN JURISDICTIONS WHERE SUCH DAMAGES MAY NOT BE DISCLAIMED AS A MATTER OF LAW.

**How to Obtain Warranty Service:** To obtain warranty service, "Purchaser" must obtain a "Return Material Authorization" (RMA) number from the MetroTech Media & Lighting Customer Service Group, 38 S. Blue Angel Parkway, Suite 108; Pensacola, FL 32506, USA, [kk@metrotechlighting.com](mailto:kk@metrotechlighting.com).

Solid State Lighting 10-Year Limited Warranty    September 21, 2016



We have financing available as an option to implement the project. Please let us know if that is an alternative you would like to explore and we will provide the application paperwork.

We are both in agreement that after the walkthrough that the counts, voltages, utility company, etc. will cover the installation of the LED project agreed upon.

IN WITNESS WHEREOF, the undersigned have caused this Agreement to be executed as of the day and year first above written.

**Acceptance:**

Imerys

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

**Acceptance:**

Energy Integrated Solutions, Inc.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

PRODUCT:	
CATALOG #:	
TYPE:	
DLC:	

**190 Lm/W**



### DESCRIPTION:

MT's LmMax High Bay is built for versatility and performance. With industry leading 190Lm/W, the MT LmMax High Bay gives more light output than competitors with less wattage, meaning higher savings! Available in White (Special Order)

### APPLICATION:

- Warehouse • Manufacturing
- Commercial



### FEATURES & SPECIFICATIONS:

Rated Power(W)	70W	90W	110W	150W	200W	240W
Lumens Per Watt	175-190	175-190	175-190	175-190	175-190	170-180
Total Lumens	12250 - 13300	15750 - 17100	18250 - 20900	26250 - 28500	35000 - 38000	40800 - 43200
L70	>50,000 Hrs					
Input Voltage	AC100-277V 50/60Hz					
CCT	4000K-5000K					
RA (CRI)	>70					
Power Factor	>0.95					
IP Rating	IP65					
Beam Angle	60°, 90°, 120°					
Working Temperature	-40~54.1°C					
Measurements	Φ 289 x 138 mm			Φ 325 x 149 mm		

### EXAMPLES: MTHBLM-90W01-5005-45

Meanwell 4KV Surge Protection Built In

MetroTech	Series	Watt	Voltage	CCT	Optic/Lens	Internal	DLC
MT	HBLM	70W	01 (100-277V)	50 (5000K)	01 (60°)	45	Y
		90W			03 (90°)		Y
		110W			05 (120°)		Y
		150W					Y
		200W					Y
		240W					Y

PRODUCT:	
CATALOG #:	
TYPE:	
DLC:	



YM Mount also used for Flood Mounting Applications.

## DESCRIPTION:

MT's Ares Parking Lot Light benefits from the latest in LED technology in a high performance, high efficacy, long-life luminaire. The out standing photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. The MT Area Parking Lot Light is an alternative for traditional street and an excellent area lighting with quick payback and improved performance.

## APPLICATION:

Street - Roads  
Parking Lot  
General Area Spaces

Industrial Area  
Walkways

## NOTES:

Standard housing color  
Black

US Assembly Available

Optional housing colors  
Bronze  
White  
Grey



## FEATURES & SPECIFICATIONS:

Rated Power(W)	25W	50W	75W	100W	150W	200W	300W
Luminous Flux	3200	6000	9200	12000	18600	23800	35000
Lumen Efficiency	135-145lm/W	135-145lm/W	125-135lm/W	120-130lm/W	130-145lm/W	120-140lm/W	120-135lm/W
Input Voltage	100-277V / 480V (Step down transformer needed)						
L70	≥100,000						
CCT	Standard 5000K / 4000K Optional						
RA (CRI)	>70						
Power Factor	≥ .99						
IP Rating	IP65						
Beam Angle	Type 3						
Working Temperature	-40C° ~ +50C°						

**EXAMPLES: MTAPL-150W01-50T3YM-29** **Note: Photocell and Surge Protector comes standard.**

MetroTech	Series	Watt	Voltage	Color Temp	Lens	Mount	Internal	DLC
MT	APL	25W	01 = 100-277V	40 = 4000K	T2= Type 2	AM = Adjustable	29	Y
		50W	02 = 480V	50 = 5000K	T3 = Type 3 (DLC)	YM = Yoke (Flood Use)		Y
		75W			T5 = Type 5	RPM = Round Pole		Y
		100W				SPM = Square Pole		Y
		150W				US = Assembled in the USA		Y
		200W						Y
		300W						Y



# MTALSB Shoebox LED

PRODUCT:

CATALOG #:

TYPE:

DLC:



## DESCRIPTION:

MT's Area Light / Shoebox LED with it's sleek design has multiple uses. Various mounting options makes this light is versatile in many applications. High efficiency LED Driver, Lumileds LEDs and cast aluminum design delivers quality. Standard housing color is Black, also available in Dark Bronze and Silver. Custom colors may be available upon request.

## DIMENSIONS:

### 60W – 150W

L x W x H Inches

AM 20.7 x 12.6 x 2.9

DM 20.3 x 12.6 x 2.9

YM 19 x 12.6 x 2.9

### 185W – 300W

L x W x H Inches

AM 30.7 x 13.4 x 3.4

DM 29.4 x 13.4 x 3.9

YM 27.2 x 13.4 x 3.4

## APPLICATION:

Residential Roads

Parking Lot

Industrial Area

Sidewalks

## FEATURES & SPECIFICATIONS:



Rated Power(W)	60W	90W	120W	150W	185W	240W	300W
Luminous Flux	8100-8700	12150-13000	15000-16200	18000-19500	24050-26825	30000-33600	36000-41000
Lumen Efficiency	135-145Lm/W	135-145Lm/W	125-135Lm/W	120-130Lm/W	130-145Lm/W	120-140Lm/W	120-135Lm/W
Input Voltage	100-277V				200-480V		
L70	≥50,000						
CCT	5000K						
RA (CRI)	>70						
Power Factor	≥ .90						
IP Rating	IP65						
Beam Angle	Type 3						
Working Temperature	-20C° ~ +45C°						

## EXAMPLES: MTALSB-1201-50T3YM-09

Note: Photocell and Surge Protector comes standard.

MetroTech	Series	Watt	Voltage	Color Temp	Mount	Lens	Internal	DLC
MT	ALSB	06 = 60W	01 = 100-277V	50 = 5000K	AM = Adjustable	T3 = Type 3	09	Y
		09 = 90W	09 = 200-480V		DM = Direct			Y
		12 = 120W			YM = Yoke			Y
		15 = 150W						Y
		18 = 185W						Y
		24 = 240W						Y
		30 = 300W						Y





# Stubby Version 100-277VAC LED Corn Lamp

## PRODUCT DATASHEET

Updated 02/23/2020

### PRODUCT DESCRIPTION

- » LED replacement for high wattage HID fixtures from 100W to 550W.
- » Consumes up to 80% less energy than conventional HID systems.
- » State-of-the-art LED light sources deliver over 155 lumens per watt.
- » Lasts 3x longer than metal halide or HPS HID lamps.
- » Shatter resistant for reduced risk of injury & breakage.
- » Integral driver, eliminates the need for external driver or ballast.
- » Environmentally friendly: contains no glass, mercury, or lead.
- » On-board fan.

Stubby Corn Lamps are great for Short Fixtures and Specialty Applications!

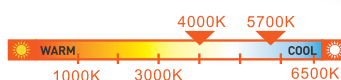


\*for approved fixture categories

### SPECIFICATIONS/FEATURES

- » Voltage 100-277V ac -not compatible with ballasts
- » Warranted 70% light output for 50,000 hours
- » Non-dimmable
- » Up to 155lm/W
- » CRI: >80Ra
- » Power Factor  $\geq 0.9$
- » Flame retardant material
- » Operating temperature: -4°F to 104°F (-20°C to 40°C)
- » Base Types: E40/E39/Ex39/E27/E26 Base
- » Beam angle: 360 degrees
- » 5 year limited warranty

#### CCT



5700K neutral white color temperature as standard.  
Other color temperatures available to order, subject to minimum requirement.  
2700K -6500K

### RETROFIT EXISTING FIXTURES



### TECHNICAL SPECIFICATIONS

Model No.	Wattage (W)	AC Input	Lumens +/- 5%	CCT.	PF	THD	Dimensions Approx W*L	Suggested HID Equivalent	Certificate
YL-C015S	15	100~277V ac	2,325	2700-6500K	$\geq 0.9$	<20%	E26 75*133mm / 2.95"x5.24"	50-100W *Fits mini HID Fixtures*	ETL/CE
YL-C020S-20W-M-XXK	20	100~277V ac	3,200	2700-6500K	$\geq 0.9$	<20%	E26 75*150mm / 2.95"x5.91"	70-110W *Fits mini HID Fixtures*	ETL/CE
YL-C020	20	100~277V ac	3,200	2700-6500K	$\geq 0.9$	<20%	E26 75*180mm / 2.95"x7.09"	70-110W *Fits mini HID Fixtures*	ETL
YL-C023S-23W-M-XXK	23	100~277V ac	3,680	2700-6500K	$\geq 0.9$	<20%	E26 75*150mm / 2.95"x5.91"	80-130W *Fits mini HID Fixtures*	ETL
YL-C030SG4	30	100~277V ac	4,650	2700-6500K	$\geq 0.9$	<20%	E26 106*160mm / 4.17"x6.30" E39/Ex39 106*170mm / 4.17"x6.69"	100-150W	ETL/CE
YL-C030SL	30	100~277V ac	4,650	2700-6500K	$\geq 0.9$	<20%	E26 93*140mm / 3.66"x5.51" E39/Ex39 93*150mm / 3.66"x5.91"	100-150W Slimline stubby	ETL/CE
YL-C040SG4	40	100~277V ac	6,200	2700-6500K	$\geq 0.9$	<20%	E26 106*160mm / 4.17"x6.30" E39/Ex39 106*170mm / 4.17"x6.69"	150-175W	ETL/DLC/CE
YL-C040SL	40	100~277V ac	6,200	2700-6500K	$\geq 0.9$	<20%	E26 93*140mm / 3.66"x5.51" E39/Ex39 93*150mm / 3.66"x5.91"	150-175W Slimline stubby	ETL/CE
YL-C050SG4	50	100~277V ac	7,750	2700-6500K	$\geq 0.9$	<20%	E26 106*160mm / 4.17"x6.30" E39/Ex39 106*170mm / 4.17"x6.69"	175-200W	ETL/DLC
YL-C065SG4	65	100~277V ac	10,075	2700-6500K	$\geq 0.9$	<20%	E26 106*165mm / 4.17"x6.50" E39/Ex39 106*175mm / 4.17"x6.89"	200-250W	ETL/DLC
YL-C085SG4	85	100~277V ac	13,175	2700-6500K	$\geq 0.9$	<20%	E26 106*165mm / 4.17"x6.50" E39/Ex39 106*175mm / 4.17"x6.89"	300-400W	ETL/DLC
YL-C105SG4	105	100~277V ac	16,275	2700-6500K	$\geq 0.9$	<20%	E39/Ex39 106*245mm / 4.17"x9.65"	400-450W	ETL/DLC
YL-C135SG4	135	100~277V ac	20,925	2700-6500K	$\geq 0.9$	<20%	E39/Ex39 132*240mm / 5.20"x9.45"	400-550W	N/A

\* Dimension lengths listed are calculated for E39 / Ex39 / E26 base. The E27 / E40 base is slightly long.

\* Kelvin Temperatures may vary +/- 250k.

\* DLC not available for E26 Medium Base. DLC not available for all CCT. Please inquire.

## LED Magnetic Strip Retrofit (Choice)

### CERTIFICATIONS



### PRODUCT FEATURES



#### Construction

LED Strips, LED Drivers, Connector

#### Applications

- Retail
- Schools
- Offices
- Healthcare
- Various commercial applications

#### Mounting

- Magnetic clips
- Screw in

#### Warranty

7-Year Limited Product Warranty  
(Optional 10-Year Warranty available)

### BENEFITS

- Can be used to update existing 2x2 and 2x4 fluorescent luminaires to LED.
- Easy installation, can be completed in as little as 5 minutes.
- Kits include LED strips, an external driver, wire connector, and attached magnets for a quick install.



### SPECIFICATIONS

Available Wattage	20W - 80W
Available CCT	3500K, 4000K, 5000K
Efficacy Average	122 LM/W - 134 LM/W
Lumen Output	2,207 LM - 10,560 LM
Input Voltage	AC100-277V
Input Frequency	50/60HZ
CRI	>80
Power Factor	0.9
THD	>12%
Working Temp	-5F to 115F (-20C to 45C)
Lens	No Lens, Frosted
IP Rating	IP20
Dimming	Yes
Life Span (Hours)	>70,000



## LED Standard Wall Pack

### CERTIFICATIONS



### PRODUCT FEATURES



#### Construction

Die-Cast aluminum housing with powder coat finish and prismatic lens.

#### Applications

- Factory
- Pedestrian lighting
- Security
- Storage
- Walkways
- Warehouse

#### Mounting

- Surface mount

#### Warranty

7-Year Limited Product Warranty  
(Optional 10-Year Warranty available)

### BENEFITS

- Suitable for replacing Metal Halide fixtures.
- Traditional shape helps maintain building aesthetics when replacing only a portion of existing wall packs, eliminating unwanted markings from the removal of older fixtures.
- Photocell sensor ready versions at 35W, 55W, 80W and 120W



Photocell Sensor Ready

### SPECIFICATIONS

Available Wattage	35W - 120W
Available CCT	5000K
Efficacy Average	125 LM/W
Lumen Output	4,745 LM - 15,517 LM
Input Voltage	AC100-277V
Input Frequency	50/60HZ
CRI	>80
Power Factor	0.9
THD	>15%
Working Temp	-4F TO 113F (-20C TO 45C)
Lens	Striped
IP Rating	IP65
Dimming	Yes
Life Span (Hours)	>70,000

# LED Small Flood Light

## CERTIFICATIONS



## PRODUCT FEATURES



### Construction

Die-cast aluminum housing with powder coat finish.  
UV stabilized polycarbonate lens.

### Applications

- Car dealerships
- Factory
- Parking lot
- Playground
- Retail
- Warehouse
- Walkway

### Mounting

- Knuckle Mount
- Trunnion Mount

### Warranty

7-Year Limited Product Warranty  
(Optional 10-Year Warranty available)

## BENEFITS

- The LED Small Flood is a high performance LED lighting solution designed with CCT Tunable functionality, optical versatility and a slim, low profile design.
- Rugged cast aluminum housing minimizes wind load requirements and features an integral, watertight LED driver compartment and high performance aluminum heat sinks.



## SPECIFICATIONS

Available Wattage	15W - 50W
Available CCT	3000K, 4000K, 5000K
Efficacy Average	119 LM/W - 123 LM/W
Lumen Output	3,484 LM - 6,089 LM
Input Voltage	AC100-277V
Input Frequency	50/60HZ
CRI	>80
Power Factor	0.9
THD	>10%
Working Temp	-30F to 113F (-30C to 45C)
Lens	Striped
IP Rating	IP65
Dimming	No
Life Span (Hours)	>70,000



## **APPENDIX B: Installation Report with Labor.**



EXISTING LIGHTING SYSTEM										ESTIMATED LABOR									
Sl. No.	Area Name	Space Name	Fixture	Wattage	Quantity	Voltage	Type	Proposed Description	Brand	Part Number	Quantity	Install Minutes per Fixture	Total Install Minutes	Total Install Hours	Labor Rate per Unit	Total Install Rate			
1	General Office	OTH-INC-75W-1	OTH-INC-75W-1	75	1		Lamp	A19/LED-314000K/100-27V	35-Bulbs.com	A19-355400K	1	5	5	0.08	6.25	6.25			
2	General Office	OTH-INC-120W-2	OTH-INC-120W-2	120	42		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST120	42	15	630	18.75	18.75	18.75			
3	General Office	WRP-TB-18-32W-2	WRP-TB-18-32W-2	60	11		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST120	11	15	165	2.75	2.75	2.75			
4	General Office	STR-TB-4-32W-1	STR-TB-4-32W-1	32	10		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/24W/120-27V	Maverick	MES-R1ST124	10	15	150	2.75	2.75	2.75			
4(a)	General Office						Control	Mav RetroFit Occ Sensor	Maverick	MES-08243	9	5	50	0.83	6.25	6.25			
5	General Office	TR-TB-4-32W-2	TR-TB-4-32W-2	60	9		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST120	9	15	135	2.25	18.75	18.75			
6	General Office	WRP-T12-2-32W-2	WRP-T12-2-32W-2	99	1		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	1	15	15	0.25	18.75	18.75			
7	General Office	STR-TB-4-32W-1	STR-TB-4-32W-1	32	66		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/24W/120-27V	Maverick	MES-R1ST124	66	15	990	16.50	18.75	18.75			
8(a)	General Office						Control	Mav RetroFit Occ Sensor	Maverick	MES-08243	5	5	330	5.50	6.25	6.25			
9	General Office	WRP-T12-2-32W-2	WRP-T12-2-32W-2	99	1		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	1	15	15	0.25	18.75	18.75			
10	General Office	WRP-TB-4-32W-2	WRP-TB-4-32W-2	60	103		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	103	15	1545	25.75	18.75	18.75			
11	General Office	WRP-TB-4-32W-2	WRP-TB-4-32W-2	60	17		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	17	15	255	4.25	18.75	18.75			
12	General Office	WRP-TB-4-32W-2	WRP-TB-4-32W-2	60	17		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	17	15	255	4.25	18.75	18.75			
13	General Office	STR-TB-4-32W-2	STR-TB-4-32W-2	60	8		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	8	15	120	2.00	18.75	18.75			
14	General Office	STR-TB-4-32W-2	STR-TB-4-32W-2	60	8		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	8	15	120	2.00	18.75	18.75			
15	General Office	WRP-TB-4-32W-2	WRP-TB-4-32W-2	60	98		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	98	15	1470	24.50	18.75	18.75			
16	General Office	WRP-TB-4-32W-2	WRP-TB-4-32W-2	60	4		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	4	15	60	1.00	18.75	18.75			
17	General Office	TR-TB-4-32W-2	TR-TB-4-32W-2	60	2		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	2	15	30	0.50	18.75	18.75			
18	General Office	TR-TB-4-32W-2	TR-TB-4-32W-2	60	2		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	2	15	30	0.50	18.75	18.75			
19	Warehouse	Warehouse B&G	HB-TB-4-32W-2	234	30		Fixture	Highbay/Round/LED/5000K/100-27V	Strong	SL-UF-0A00-70C-R120-C(W)	30	90	2700	45.00	112.50	112.50			
19(a)	Warehouse						Control	Motion Sensor	Strong	Strong-MotionSensor	1	90	90	NA	NA	NA			
20(a)	Warehouse						Control	Highbay/Round/LED/5000K/100-27V	Strong	SL-UF-0A00-70C-R120-C(W)	20	90	1800	30.00	112.50	112.50			
21(a)	Warehouse						Control	Highbay/Round/LED/5000K/100-27V	Strong	SL-UF-0A00-70C-R120-C(W)	22	90	1980	33.00	112.50	112.50			
21(a)	Warehouse						Control	Highbay/Round/LED/5000K/100-27V	Strong	SL-UF-0A00-70C-R120-C(W)	22	90	1980	33.00	112.50	112.50			
22	Warehouse	Warehouse D&E	OTH-INC-75W-1	75	1		Lamp	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
23	Warehouse	Warehouse D&E	OTH-INC-75W-1	75	7		Lamp	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	7	30	210	3.50	37.50	37.50			
24	Warehouse	Warehouse D&E	OTH-INC-75W-1	75	7		Lamp	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	7	30	210	3.50	37.50	37.50			
25	Warehouse	Warehouse A&A	AL-MH-100W-1	1078	62		Fixture	Highbay/Round/LED/5000K/100-27V	Strong	SL-UF-0A00-70C-R120-C(W)	62	90	5580	93.00	112.50	112.50			
25(a)	Warehouse						Control	Motion Sensor	Strong	Strong-MotionSensor	1	90	90	NA	NA	NA			
26	Warehouse Exterior	Outside Building	AL-MH-100W-1	1078	4	27V	Fixture	300W/Area Light/Sheebox/LED/5000K/100-27V	Maverick	MES-05680	4	60	240	4.00	75.00	75.00			
27	Warehouse Exterior	Outside Building	AL-MH-100W-1	1078	1	27V	Fixture	300W/Area Light/Sheebox/LED/5000K/100-27V	Maverick	MES-05680	1	60	60	1.00	75.00	75.00			
28	Warehouse Exterior	Outside Building	FL-LED-40W-1	453	2	27V	Fixture	150W/Area Light/Sheebox/LED/5000K/100-27V	Maverick	MES-05684	2	60	120	2.00	75.00	75.00			
29	Warehouse Exterior	Outside Building	FL-LED-40W-1	453	2	27V	Fixture	150W/Area Light/Sheebox/LED/5000K/100-27V	Maverick	MES-05684	2	60	120	2.00	75.00	75.00			
30	Warehouse Exterior	Outside Building	OTH-MH-175W-1	208	4		Lamp	Com Cobl/LED/40W/5700K/120-27V	YouLumi	YL-C040SLG4-40W-57K	4	30	120	2.00	37.50	37.50			
31	Warehouse Exterior	Scrubble	VT-TS-4-32W-2	117	6		Refrofit Kit	Linear/4 f/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	6	15	90	1.50	18.75	18.75			
32	Warehouse Exterior	Loading Dock	AL-LED-19W-1	19	3		Lamp	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	3	30	90	1.50	37.50	37.50			
33	Warehouse Exterior	Loading Dock	AL-LED-45W-1	45	1		Keep	NA	NA	NA									
34	Warehouse Exterior	Loading Dock	FL-LED-40W-1	40	1		Keep	NA	NA	NA									
35	Warehouse Exterior	Loading Dock	WP-MH-175W-1	208	7		Fixture	Wall Mount/Security/LED/55W/120-27V	YouLumi	MES-SWP2-55B&2-A44	7	45	315	5.25	56.25	56.25			
36	Warehouse Exterior	MC room	VT-TS-4-32W-2	117	4		Refrofit Kit	Com Cobl/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	4	15	60	1.00	37.50	37.50			
37	Warehouse Exterior	MC room	VT-TS-4-32W-2	117	4		Refrofit Kit	Com Cobl/LED/Refrofit Kit/30W/120-27V	Maverick	MES-R1ST1230	4	15	60	1.00	37.50	37.50			
38	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
39	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
40	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
41	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
42	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
43	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
44	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
45	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
46	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
47	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
48	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
49	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
50	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
51	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
52	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
53	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
54	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
55	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
56	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
57	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
58	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
59	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
60	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
61	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
62	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
63	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
64	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
65	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
66	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
67	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50	37.50			
68	Warehouse Exterior	MC room	AL-LED-75W-1	75	1		Refrofit Kit	Com Cobl/LED/Incand/Driver/5700K/120-27V	MTYL	YL-C036SLG4-30W-57K	1	30	30	0.50	37.50</				

EXISTING LIGHTING SYSTEM										ESTIMATED LABOR					
Sl. No.	Area Name	Space Name	Fixture	Wattage	Quantity	Voltage	Type	Proposed Solution Description	Brand	Part Number	Quantity	Install Minutes	Total Install Hours	Labor Rate per Unit	Total Install Rate
86	Exterior	Parking & Roads	HBK-MH-100W-1	453	2	480V	Fixture	150W/Area Light/Street/LED/5000K/120-277V	Maverick	MES-09106	2	60	120	2.00	75.00
87	Exterior	Warehouse	WRP-TB-4 R-32W-2	234	1	277V	Fixture	Highway/Round/LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(w)	1	90	180	1.30	112.50
88	Exterior	Warehouse	HB-TS-4 R-54W-4	234	8		Fixture	Highway/Round/LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(w)	8	60	720	12.00	900.00
89(a)	Exterior	Warehouse	STR-TB-4 R-32W-1	66	6		Control	Motion Sensor	Maverick	MES-RST1220	6	NA	NA	NA	NA
90	Exterior	Warehouse	STR-TB-4 R-32W-1	32	54		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST124	54	15	810	13.50	112.50
90(a)	Exterior	Warehouse	STR-TB-4 R-32W-1	32	54		Control	Mav RetroFitl Occ Sensor	Maverick	MES-08243	54	15	810	13.50	112.50
91	Exterior	Warehouse	STR-TB-4 R-32W-2	60	1		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	1	15	15	0.25	18.75
92	Exterior	Warehouse	TR-TB-4 R-32W-2	60	16		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	16	15	240	4.00	37.50
93	Exterior	Warehouse	AL-INC-75W-1	75	3		Lamp	Com Cab/LED/Internal Driver/5700K/120-277V	MTYL	YL-CO30S-LG4-30W-57K	3	30	90	1.50	112.50
94	Exterior	Warehouse	AL-MH-1000W-1	1,078	1	277V	Fixture	300W/Area Light/Street/LED/5000K/100-277V	Maverick	MES-05680	1	60	60	1.00	75.00
95	Exterior	Warehouse	AL-MH-1000W-1	1,078	2		Fixture	300W/Area Light/Street/LED/5000K/100-277V	Maverick	MES-05680	2	60	120	2.00	150.00
96	Exterior	Warehouse	OTH-INC-75W-1	75	2		Lamp	Com Cab/LED/Internal Driver/5700K/120-277V	MTYL	YL-CO30S-LG4-30W-57K	2	30	60	1.00	75.00
97	Exterior	Warehouse	OTH-MH-175W-1	208	2		Lamp	Com Cab/LED/40W/5700K/120-277V	YouLumi	YL-CO40S-LG4-40W-57K	2	60	60	1.00	37.50
98	Exterior	Warehouse	WRP-MH-175W-1	208	1		Fixture	Wall Mount/Security/LED/55W/120-277V	Strong	MES-SWP2-55BA2-A-44	1	45	45	0.75	56.25
99	Exterior	Specialties WH	HB-TS-4 R-54W-4	234	19		Control	Highway/Round/LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(w)	19	1,710	28.50	112.50	2,137.50
99(a)	Exterior	Specialties WH	OTH-MH-175W-1	208	2		Control	Motion Sensor	Strong	Strong-MotionSensor	2	NA	NA	NA	NA
100	Exterior	Specialties WH	STR-TB-4 R-32W-1	32	10		Retrofit Kit	Com Cab/LED/40W/5700K/120-277V	YouLumi	YL-CO40S-LG4-40W-57K	10	15	150	2.50	187.50
101	Exterior	Specialties WH	STR-TB-4 R-32W-1	32	10		Control	Linear/4 f/LED/Retrofit/ KJ24W/120-277V	Maverick	MES-RST1124	10	15	50	0.83	62.50
101(a)	Exterior	Specialties WH	STR-TB-4 R-32W-1	32	10		Control	Mav RetroFitl Occ Sensor	Maverick	MES-08243	10	5	50	0.83	62.50
102	Exterior	Specialties WH	WRP-MH-175W-1	208	2		Fixture	Wall Mount/Security/LED/55W/120-277V	Maverick	MES-SWP2-55BA2-A-44	2	45	45	1.50	56.25
103	Exterior	Specialties WH	WRP-MH-175W-1	208	2		Fixture	NA	NA	NA	2	NA	NA	NA	NA
104	Exterior	Specialties WH	STR-TB-4 R-32W-2	60	3		Lamp	Com Cab/LED/40W/5700K/120-277V	MTYL	YL-CO30S-LG4-30W-57K	3	30	90	1.50	112.50
105	Exterior	Specialties WH	STR-TB-4 R-32W-2	60	3		Lamp	Com Cab/LED/40W/5700K/120-277V	MTYL	YL-CO30S-LG4-30W-57K	3	30	90	1.50	112.50
106	Exterior	Specialties WH	WRP-TB-4 R-32W-2	60	4		Control	Com Cab/LED/Retrofit/ KJ30W/120-277V	MTYL	MES-RST1220	4	15	60	1.00	75.00
107	Exterior	Silicate Maintenance Shop	STR-TB-4 R-32W-1	32	26		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ24W/120-277V	Maverick	MES-RST1124	26	15	390	6.50	187.50
107(a)	Exterior	Silicate Maintenance Shop	STR-TB-4 R-32W-1	32	26		Control	Mav RetroFitl Occ Sensor	Maverick	MES-08243	26	5	130	2.17	162.50
108	Exterior	Silicate Maintenance Shop	STR-TB-4 R-32W-2	60	3		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	3	15	45	0.75	56.25
109	Exterior	Silicate Maintenance Shop	WRP-TB-8 R-59W-2	110	4		Fixture	Linear/8 f/LED/Retrofit/ KJ60W/120-277V	Maverick	MES-RST1460	4	15	60	1.00	75.00
110	Exterior	Processing Area	AL-MH-1000W-1	1,078	3	277V	Fixture	300W/Area Light/Street/LED/5000K/100-277V	Maverick	MES-05680	3	60	180	3.00	225.00
111	Exterior	Processing Area	HB-MH-175W-1	208	1		Fixture	Highway/Round/LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(w)	1	90	90	1.50	112.50
112	Exterior	Processing Area	HB-TS-4 R-54W-4	234	1		Fixture	Highway/Round/LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(w)	1	90	90	1.50	112.50
112(a)	Exterior	Processing Area	Processing Area				Control	Motion Sensor	Strong	Strong-MotionSensor	1	NA	NA	NA	NA
113	Exterior	Processing Area	OTH-INC-75W-1	75	3		Lamp	Com Cab/LED/40W/5700K/120-277V	MTYL	YL-CO30S-LG4-30W-57K	3	30	90	1.50	112.50
114	Exterior	Processing Area	OTH-MH-175W-1	208	2		Lamp	Com Cab/LED/40W/5700K/120-277V	YouLumi	YL-CO40S-LG4-40W-57K	2	30	60	1.00	75.00
115	Exterior	Processing Area	OTH-MH-175W-1	208	2		Lamp	Com Cab/LED/40W/5700K/120-277V	YouLumi	YL-CO40S-LG4-40W-57K	2	30	60	1.00	75.00
116	Exterior	Processing Area	STR-TB-4 R-32W-1	32	36		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ24W/120-277V	Maverick	MES-RST1124	36	15	540	9.00	675.00
116(a)	Exterior	Processing Area	Processing Area				Control	Mav RetroFitl Occ Sensor	Maverick	MES-08243	36	5	180	3.00	225.00
117	Exterior	Processing Area	VT-TS-4 R-54W-2	117	22		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	22	15	330	5.50	412.50
118	Exterior	Processing Area	WRP-MH-250W-1	288	7		Fixture	Wall Mount/Security/LED/80W/120-277V	Maverick	MES-05694	7	45	315	5.25	393.75
119	Exterior	Silicate Building Exterior	STR-TB-4 R-32W-2	60	2	NA	Fixture	60W/Area Light/Street/LED/5000K/100-277V	Maverick	MES-05691	2	60	120	3.00	225.00
120	Exterior	Silicate Building Exterior	STR-TB-4 R-32W-2	60	2		Fixture	Highway/Round/LED/5000K/100-277V	Maverick	MES-SWP2-55BA2-A-44	2	45	45	1.50	56.25
121	Exterior	Silicate Warehouse	HB-TS-4 R-54W-4	234	20		Control	Highway/Round/LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(w)	20	60	1,800	30.00	2,250.00
121(a)	Exterior	Silicate Warehouse	STR-TB-4 R-54W-4	234	20		Control	Motion Sensor	Strong	Strong-MotionSensor	20	NA	NA	NA	NA
122	Exterior	Silicate Warehouse	STR-TB-4 R-54W-2	117	26		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	26	15	420	7.00	525.00
123	Exterior	Silicate Warehouse	STR-TB-4 R-32W-1	66	4		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ24W/120-277V	Maverick	MES-RST1124	4	15	60	1.00	75.00
124	Exterior	Silicate Tanks Offices	STR-TB-4 R-32W-1	32	36		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ24W/120-277V	Maverick	MES-RST1124	36	15	540	9.00	675.00
124(a)	Exterior	Silicate Tanks Offices	STR-TB-4 R-32W-1	32	36		Control	Mav RetroFitl Occ Sensor	Maverick	MES-08243	36	5	180	3.00	225.00
125	Exterior	Silicate Tanks Offices	TR-TB-4 R-32W-2	60	12		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	12	15	180	3.00	225.00
126	Exterior	Silicate Tanks Offices	WRP-MH-175W-1	208	1		Fixture	Wall Mount/Security/LED/55W/120-277V	Maverick	MES-SWP2-55BA2-A-44	1	45	45	0.75	56.25
127	Exterior	Silicate Tanks Offices	WRP-TB-4 R-32W-2	60	8		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	8	15	120	2.00	150.00
128	Exterior	Ceupure Plant	HB-TS-4 R-54W-4	234	36		Fixture	Highway/Round/LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(w)	36	90	3,240	54.00	4,050.00
128(a)	Exterior	Ceupure Plant	Ceupure Plant				Control	Motion Sensor	Strong	Strong-MotionSensor	36	NA	NA	NA	NA
129	Exterior	Ceupure Plant	OTH-MH-175W-1	208	8		Retrofit Kit	Com Cab/LED/40W/5700K/120-277V	YouLumi	YL-CO40S-LG4-40W-57K	8	30	240	4.00	300.00
130	Exterior	Ceupure Plant	STR-TB-4 R-32W-2	60	16		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	16	15	240	4.00	300.00
130(a)	Exterior	Ceupure Plant	VT-TS-4 R-54W-2	117	49		Control	Mav RetroFitl Occ Sensor	Maverick	MES-08243	49	5	80	1.33	62.50
131	Exterior	Ceupure Plant	CEPURE PLANT				Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	49	15	735	12.25	187.50
132	Exterior	Ceupure Plant	CEPURE PLANT				Control	Mav RetroFitl Occ Sensor	Maverick	MES-08243	49	5	80	1.33	62.50
133	Exterior	Ceupure Plant	CEPURE PLANT				Control	Mav RetroFitl Occ Sensor	Maverick	MES-08243	49	5	80	1.33	62.50
134	Exterior	Ceupure Plant	CEPURE PLANT				Control	Mav RetroFitl Occ Sensor	Maverick	MES-08243	49	5	80	1.33	62.50
135	Exterior	Breakroom Building	STR-TB-4 R-32W-2	60	2	277V	Fixture	Wall Mount/Security/LED/80W/120-277V	Maverick	MES-SWP2-80BA2-A-44	2	45	45	1.50	56.25
136	Exterior	Breakroom Building	STR-TB-4 R-32W-2	60	10		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	10	15	150	2.50	187.50
137	Exterior	Breakroom Building	STR-TB-4 R-32W-2	60	15		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	15	15	225	3.75	281.25
138	Exterior	Q&M Warehouse	STR-TB-4 R-32W-2	60	60		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	60	15	900	15.00	875.00
139	Exterior	Q&M Warehouse	STR-TB-4 R-32W-1	32	15		Retrofit Kit	Linear/4 f/LED/Retrofit/ KJ24W/120-277V	Maverick	MES-RST1124	15	15	225	3.75	281.25
139(a)	Exterior	Q&M Warehouse	STR-TB-4 R-54W-4	234	6		Fixture	Highway/Round/LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(w)	6	90	540	9.00	675.00
139(a)	Exterior	Q&M Warehouse	STR-TB-4 R-54W-4	234	6		Control	Motion Sensor	Strong	Strong-MotionSensor	6	NA	NA	NA	NA
140	Exterior	Q&M Warehouse	HB-TS-4 R-54W-4	234	9		Fixture	Highway/Round/LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(w)	9	90	810	13.50	1,012.50
140(a)	Exterior	Q&M Warehouse	STR-TB-4 R-54W-4	234	9		Control	Motion Sensor	Strong	Strong-MotionSensor	9	NA	NA	NA	NA
141	Exterior	Maintenance Shops	Heavy Duty Garage	1,078	9	277V	Fixture	300W/Area Light/Street/LED/5000K/100-277V	Maverick	MES-05680	9	60	540	9.00	675.00
142	Exterior	Maintenance Shops	Heavy Duty Garage	HB-TS-4 R-54W-4	234	14	Fixture	Highway/Round/LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(w)	14	90	1,260	21.00	1,575.00
142(a)	Exterior	Maintenance Shops	Heavy Duty Garage	STR-TB-4 R-32W-1	32		Control	Motion Sensor	Strong	Strong-MotionSensor	32	NA	NA	NA	NA
143	Exterior	Maintenance Shops	Heavy Duty Garage	STR-TB-4 R-32W-1	32	27	Control	Linear/4 f/LED/Retrofit/ KJ30W/120-277V	Maverick	MES-RST1220	27	15	405	6.75	506.25
143(a)	Exterior	Maintenance Shops	Heavy Duty Garage	STR-TB-4 R-32W-1	32	27	Control	Mav RetroFitl Occ Sensor	Maverick	MES-08243	27	5	135	2.25	168.75
144	Exterior	Maintenance Shops	Light Duty Garage	HB-TS-4 R-54W-4	234	4	Fixture	Highway/Round/LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(w)	4	90	360	6.00	450.00
144(a)	Exterior	Maintenance Shops	Light Duty Garage	STR-TB-4 R-32W-1	32		Control	Motion Sensor	Strong	Strong-MotionSensor	32	NA	NA	NA	NA
145	Exterior	Maintenance Shops	Light Duty Garage	STR-TB-4 R-32W-1	32	16	Control	Linear/4 f/LED/Retrofit/ KJ24W/120-277V	Maverick	MES-RST1124	16	15	240	4.00	300.00
145(a)	Exterior	Maintenance Shops	Light Duty Garage	STR-TB-4 R-32W-1	32	16	Control	Mav RetroFitl Occ Sensor	Maverick	MES-08243	16	5	80	1.33	62.50
146	Exterior	Maintenance Shops	Electric Shop	HB-TS-4 R-54W-4	234	9	Fixture	Highway/Round/LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(w)	9	90	810	13.50	1,012.50
146(a)	Exterior	Maintenance Shops	Electric Shop	STR-TB-4 R-54W-4	234	9	Control	Motion Sensor	Strong	Strong-MotionSensor	9	NA	NA	NA	NA
147	Exterior	Maintenance Shops													

Imerys Lompoc CA		EXISTING LIGHTING SYSTEM										ESTIMATED LABOR				
SL No.	Area Name	Space Name	Fixture	Wattage	Quantity	Voltage	Type	Proposed Solution Description	Brand	Part Number	Quantity	Install Minutes per Fixture	Total Install Hours	Labor Rate per Unit	Total Install Rate	
158	Maintenance Shops	Hazardous Waste Storage	NA			NA	Lamp	Com Cool LED 40W/5700K/120-277V	YoutLumi	YL-COOL57-40W-57K	1	30	30	37.50	37.50	
159	Maintenance Shops	Breakroom	STR-T8-4 ft-32W-1	32	12		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/24W/120-277V	Maverick	MES-RTST124	12	15	180	3.00	18.75	
159(a)	Maintenance Shops	Breakroom	STR-T8-4 ft-32W-1	32	12		Control	Mav Retrofit/Occ Sensor	Maverick	MES-08243	12	5	60	1.00	6.25	
160	Maintenance Shops	Breakroom	WRP-T5-4 ft-54W-2	117	16		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/30W/120-277V	Maverick	MES-RTST230	16	15	240	4.00	18.75	
161	Erection & Repair	E&R Office	DEC-LED-19W-3	57	2		Lamp	A19 LED/E26 40000K/100-277V	35-Bulbs.com	A19-9.5W-40K	2	5	30	0.50	6.25	
162	Erection & Repair	E&R Office	STR-T8-4 ft-32W-1	32	14		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/24W/120-277V	Maverick	MES-RTST124	14	15	210	3.50	18.75	
162(a)	Erection & Repair	E&R Office	STR-T8-4 ft-32W-1	32	14		Control	Mav Retrofit/Occ Sensor	Maverick	MES-08243	14	5	70	1.17	6.25	
163	Erection & Repair	E&R Office	TR-T8-4 ft-32W-2	60	14		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/30W/120-277V	Maverick	MES-RTST230	14	15	210	3.50	18.75	
164	Erection & Repair	E&R Office	VT-T5-4 ft-54W-2	117	1		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/30W/120-277V	Maverick	MES-RTST230	1	15	15	0.25	18.75	
165	Erection & Repair	E&R Office	WRP-T8-4 ft-32W-2	60	20		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/30W/120-277V	Maverick	MES-RTST230	20	15	300	5.00	18.75	
166	Erection & Repair	Welding Shop	HB-T5-4 ft-54W-4	234	34		Fixture	Highbay/Round LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(x) [80]	34	90	3,060	11.25	3,825.00	
166(a)	Erection & Repair	Welding Shop	HB-T5-4 ft-54W-4	234	34		Control	Motion Sensor	Strong	Strong-MotionSensor	NA	NA	NA	NA	NA	
167	Erection & Repair	Welding Shop	STR-T8-4 ft-32W-1	32	6		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/24W/120-277V	Maverick	MES-RTST124	6	15	90	1.50	18.75	
167(a)	Erection & Repair	Welding Shop	STR-T8-4 ft-32W-1	32	6		Control	Mav Retrofit/Occ Sensor	Maverick	MES-08243	6	5	30	0.50	6.25	
168	Erection & Repair	Welding Shop	VT-T5-4 ft-54W-2	117	3		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/30W/120-277V	Maverick	MES-RTST230	3	15	45	0.75	18.75	
169	Erection & Repair	DXP	HB-T5-4 ft-54W-4	234	25		Fixture	Highbay/Round LED/5000K/100-277V	Strong	SL-UF-0A00-70C-R120-C(x) [80]	25	90	2,250	11.250	2,812.50	
169(a)	Erection & Repair	DXP	HB-T5-4 ft-54W-4	234	25		Control	Motion Sensor	Strong	Strong-MotionSensor	NA	NA	NA	NA	NA	
170	Erection & Repair	DXP	STR-T12-4 ft-34W-2	66	2		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/30W/120-277V	Maverick	MES-RTST230	2	15	30	0.50	18.75	
171	Erection & Repair	DXP	STR-T8-4 ft-32W-1	32	40		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/24W/120-277V	Maverick	MES-RTST124	40	15	600	10.00	18.75	
171(a)	Erection & Repair	DXP	STR-T8-4 ft-32W-1	32	40		Control	Mav Retrofit/Occ Sensor	Maverick	MES-08243	40	5	200	6.00	18.75	
172	Erection & Repair	DXP	STR-T8-4 ft-32W-1	32	52		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/24W/120-277V	Maverick	MES-RTST124	52	15	780	13.00	18.75	
172(a)	Erection & Repair	DXP	STR-T8-4 ft-32W-1	32	52		Control	Mav Retrofit/Occ Sensor	Maverick	MES-08243	52	5	260	7.67	6.25	
173	Erection & Repair	DXP	TR-T8-4 ft-32W-2	60	8		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/30W/120-277V	Maverick	MES-RTST230	8	15	120	2.00	18.75	
174	Erection & Repair	DXP	WP-MH-250W-1	288	6		Fixture	75W/Arctic Light/Strokeball LED/5000K/100-277V	Maverick	MES-06931	6	60	360	6.00	75.00	
175	R&D building	Offices	TR-T8-4 ft-32W-2	60	104		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/30W/120-277V	Maverick	MES-RTST230	104	15	1,560	26.00	18.75	
176	R&D building	Offices	WRP-T12-2 ft-35W-2	99	7		Retrofit Kit	Linear/2 ft LED/Retrofit Kit/30W/120-277V	Maverick	MES-RTST230	7	15	105	1.75	18.75	
177	R&D building	Offices	WRP-T8-4 ft-32W-2	60	19		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/30W/120-277V	Maverick	MES-RTST230	19	15	285	4.75	356.25	
178	R&D building	Offices	WRP-T8-4 ft-32W-2	60	6		Retrofit Kit	Linear/4 ft LED/Retrofit Kit/30W/120-277V	Maverick	MES-RTST230	6	15	90	1.50	18.75	
179	R&D building	R&D Exterior	WP-INC-75W-1	75	3		Fixture	20W/Wallpack/Decorative LED/5000K/100-277V	Maverick	MES-05032	3	45	135	2.25	56.25	
180	R&D building	R&D Exterior	WP-MH-175W-1	208	7		Fixture	Wall Mount/Security LED/65W/120-277V	Maverick	MES-SWP02-55BA2-A-44	7	45	315	5.25	393.75	
Total Treatments:											2,343	Total Est. Labor Hours:			1,263.67	Project Labor:
																+



**APPENDIX C: EIS Project Status Report – COMPLETION WALKTHROUGH  
version and the Installation Report with the calculated energy  
savings per fixture per area with PG&E applicable rebate.**





# EIS Project Status Report

Overall Status: **Complete**

Project Name: Imerys Performance Minerals America – Lompoc CA – LED Upgrades  
PO 8302034720 (AP8302)

March 07<sup>th</sup>, 2022

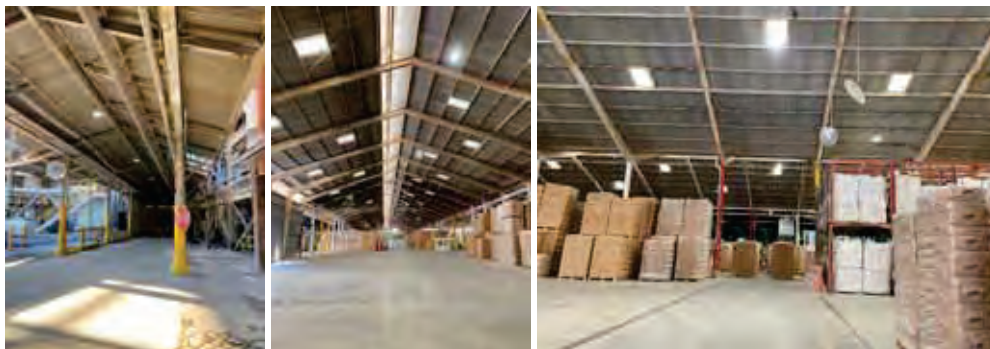
## Status Code Legend

- On Track: Project is on schedule
- High Risk: At risk, with a high risk of going off track
- Completed
- At Risk: Milestones missed but date intact
- Off Track: Date will be missed if action not taken

The project is **completed** **FRIDAY 03/04/22**, total of 59 calendar days after mobilization, and final inspection generated this summary:

- All LED fixtures and bulbs included on the SOW are installed and working by 03/04/2022
- Complying with the CSA, mutually signed between Imerys and EIS, final inspection is performed by project completion.
- Final Inspection Walkthrough, performed by EIS and Imerys authorized representative is concluded, and project is accepted by customer.
- PO SOW finished & LED upgrades and controls are operating as expected

Warehouse 55

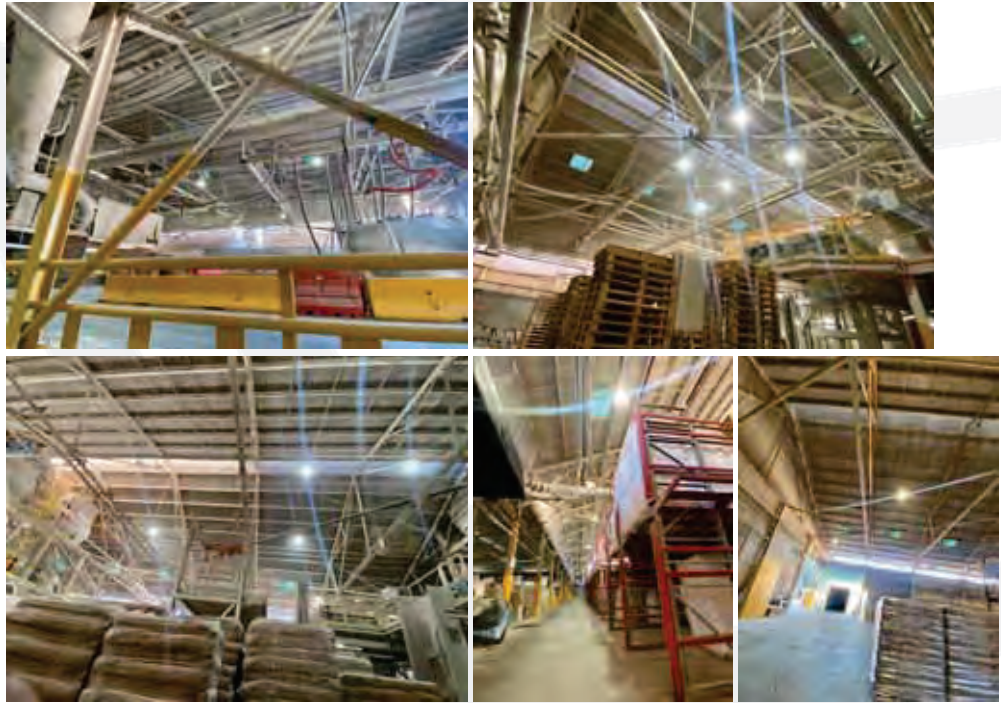


Warehouse 62





Dock 48



Celpure Plant



Issues:



Milestones accomplished  
the week ending  
03/04/2022:

- Completion of 2 change orders approved by Imerys
- Final Inspection – Imerys & EIS project completion approval walkthrough.
  - General Office
    - Engineering Office
    - EHS
    - Management Office
    - Quality Control Lab
    - Shipping



	<ul style="list-style-type: none"> <li>● Gatehouse &amp; Scales</li> <li>● 55 Warehouse (Including Exterior)</li> <li>● 62 Warehouse (Including Exterior)</li> <li>● Central Waste</li> <li>● 7 Kiln (MCC, Operation areas, 7 Wet &amp; 7 Dry)</li> <li>● 6 Kiln (Exterior, Offices, Control Room &amp; Maintenance)</li> <li>● 46 Warehouse</li> <li>● Exterior (Parking &amp; Roads)</li> <li>● Specialties <ul style="list-style-type: none"> <li>● 2266 Warehouse</li> <li>● 2266 WH Exterior</li> <li>● Specialties WH</li> <li>● Specialties WH Exterior</li> <li>● Contractor Trailer</li> </ul> </li> <li>● Silicate plant <ul style="list-style-type: none"> <li>● Silicate Maintenance Shop</li> <li>● Processing Area</li> <li>● Silicate Building Exterior</li> <li>● Silicate Warehouse</li> <li>● Silicate Tanks Offices</li> </ul> </li> <li>● Celpure Plant (Including Exterior)</li> <li>● Breakroom building and lockers</li> <li>● Q&amp;M (Office, maintenance &amp; Greenhouse)</li> <li>● Maintenance Shops <ul style="list-style-type: none"> <li>● Heavy Duty Garage</li> <li>● Light Duty Garage</li> <li>● Electric Shop</li> <li>● Carpenter Shop</li> <li>● Carpenter Shop</li> <li>● Utility Shop</li> <li>● Paint Storage</li> <li>● Hazardous Waste Staging</li> <li>● Breakroom</li> </ul> </li> <li>● Erection &amp; Repair <ul style="list-style-type: none"> <li>● Office</li> <li>● Welding Shop</li> <li>● DXP</li> <li>● E&amp;R Exterior</li> </ul> </li> <li>● R&amp;D building</li> </ul>
Milestones planned this week, but not achieved with variance:	<ul style="list-style-type: none"> <li>● Removal of the storage Connex is in effect 03/07/2022</li> <li>● Final disposal of striped-off/replaced fixtures (removing them from the site) is in effect before EOW 03/11/2022</li> </ul>
Milestones planned for next week:	N/A



Areas/questions for discussion:	<ul style="list-style-type: none"> <li>●</li> <li>●</li> <li>●</li> </ul>
Last week's issues forwarded to this week:	N/A



Imerys Lompoc CA - Option 3									
EXISTING LIGHTING SYSTEM									
SL No.	Area Name	Space Name	Existing Fixture	Fixture Wattage	Qty	Type	Proposed Solution Description	Part Number	Qty
1	General Office	Engineering Office	OTH-INC-75W-1	75	1	Lamp	A19/LED/E31/4000K/100-277V	A19-14.5W-40K	1
2	General Office	Engineering Office	TR-T8-4 ft-32W-2	60	42	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	42
3	General Office	Engineering Office	WRP-T8-4 ft-32W-2	60	11	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	11
4	General Office	EHS	STR-T8-4 ft-32W-1	32	10	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	10
4(a)	General Office	EHS				Control	Mav RetroFit Occ Sensor	MES-06243	10
5	General Office	EHS	TR-T8-4 ft-32W-2	60	9	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	9
6	General Office	EHS	WRP-T12-2 ft-35W-2	99	1	Retrofit Kit	Linear/2 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST2230	1
7	General Office	EHS	WRP-T8-4 ft-32W-2	60	48	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	48
8	General Office	Management Office	STR-T8-4 ft-32W-1	32	66	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	66
8(a)	General Office	Management Office				Control	Mav RetroFit Occ Sensor	MES-06243	66
9	General Office	Management Office	TR-T8-4 ft-32W-2	60	68	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	68
10	General Office	Management Office	WRP-T12-2 ft-35W-2	99	1	Retrofit Kit	Linear/2 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST2230	1
11	General Office	Management Office	WRP-T8-4 ft-32W-2	60	103	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	103
12	General Office	Management Office	WRP-T8-4 ft-32W-2	60	17	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	17
13	General Office	Management Office	WRP-T8-8 ft-59W-2	110	8	Retrofit Kit	Linear/8 ft/LED/Retrofit Kit/60W/120-277V	MES-RTST460	8
14	General Office	Quality Control Lab	STR-T8-4 ft-32W-2	60	4	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	4
15	General Office	Quality Control Lab	TR-T8-4 ft-32W-2	60	98	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	98
16	General Office	Quality Control Lab	WRP-T8-4 ft-32W-2	60	4	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	4
17	General Office	Shipping	TR-T8-4 ft-32W-2	60	32	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	32
18	General Office	Gatehouse & Scales	TR-T8-4 ft-32W-2	60	2	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	2
19	55 Warehouse	Warehouse B&G	HB-T5-4 ft-54W-4	234	30	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	30
19(a)	55 Warehouse	Warehouse B&G				Control	Motion Sensor,	Strong-MotionSensc	
20	55 Warehouse	Warehouse C&H	HB-T5-4 ft-54W-4	234	20	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	20
20(a)	55 Warehouse	Warehouse C&H				Control	Motion Sensor,	Strong-MotionSensc	
21	55 Warehouse	Warehouse D&E	HB-T5-4 ft-54W-4	234	22	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	22
21(a)	55 Warehouse	Warehouse D&E				Control	Motion Sensor,	Strong-MotionSensc	
22	55 Warehouse	Warehouse D&E	OTH-INC-75W-1	75	1	Lamp	Corn Cob/LED/Internal Driver/5700K/120-277V	YL-C030SLG4-30W	1
23	55 Warehouse	Loading Dock Wall	OTH-INC-75W-1	75	7	Lamp	Corn Cob/LED/Internal Driver/5700K/120-277V	YL-C030SLG4-30W	7
24	55 Warehouse	Outside	HB-MH-250W-1	288	1	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	1
25	62 Warehouse	Warehouse Aisle	HB-T5-4 ft-54W-4	234	62	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	62
25(a)	62 Warehouse	Warehouse Aisle				Control	Motion Sensor,	Strong-MotionSensc	
26	55 Warehouse Exterior	Outside Building	AL-MH-1000W-1	1,078	4	Fixture	300W/Area Light/Shoebox/LED/5000K/100-277V	MES-05680	4
27	55 Warehouse Exterior	Outside Building	AL-MH-1000W-1	1,078	1	Fixture	300W/Area Light/Shoebox/LED/5000K/100-277V	MES-05680	1
28	55 Warehouse Exterior	Outside Building	AL-MH-400W-1	453	2	Fixture	150W/Area Light/Shoebox/LED/5000K/100-277V	MES-05694	2
29	55 Warehouse Exterior	Outside Building	FL-LED-40W-1	40	2	Keep	NA	NA	
30	55 Warehouse Exterior	Outside Building	OTH-MH-175W-1	208	4	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	4
31	55 Warehouse Exterior	Scribble	VT-T5-4 ft-54W-2	117	6	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	6
32	62 Warehouse Exterior	Loading Dock	AL-LED-19W-1	19	3	Lamp	Corn Cob/LED/Internal Driver/5700K/120-277V	YL-C030SLG4-30W	3
33	62 Warehouse Exterior	Loading Dock	AL-LED-45W-1	45	1	Keep	NA	NA	
34	62 Warehouse Exterior	Loading Dock	FL-LED-40W-1	40	1	Keep	NA	NA	
35	62 Warehouse Exterior	Loading Dock	WP-MH-175W-1	208	1	Fixture	Wall Mount/Security/LED/55W/120-277V	MES-SWP02-55BA	1
36	Central Waste	MCC room	OTH-MH-175W-1	208	7	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	7
37	Central Waste	MCC room	VT-T5-4 ft-54W-2	117	4	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	4
38	Central Waste	CW	AL-INC-75W-1	75	1	Lamp	Corn Cob/LED/Internal Driver/5700K/120-277V	YL-C030SLG4-30W	1
39	Central Waste	CW	FL-MH-175W-1	208	2	Fixture	60W/Area Light/Shoebox/LED/5000K/100-277V	MES-05691	2
40	Central Waste	CW	HB-MH-175W-1	208	1	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	1
41	Central Waste	CW	OTH-MH-175W-1	208	1	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	1
42	Central Waste	CW	VT-T5-4 ft-54W-2	117	4	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	4
43	7 Kiln	Manufacturer Floor	OTH-MH-175W-1	208	18	Fixture	60W/Area Light/Shoebox/LED/5000K/100-277V	MES-05691	18
44	7 Kiln	Manufacturer Floor	OTH-T12-8 ft-60W-2	115	4	Retrofit Kit	Linear/8 ft/LED/Retrofit Kit/60W/120-277V	MES-RTST460	4
45	7 Kiln	Manufacturer Floor	VT-T5-4 ft-54W-2	117	6	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	6
46	7 Kiln	7 Kiln MCC	VT-T5-4 ft-54W-2	117	19	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	19
47	7 Kiln	7 Wet	AL-MH-1000W-1	1,078	1	Fixture	300W/Area Light/Shoebox/LED/5000K/100-277V	MES-05680	1
48	7 Kiln	7 Wet	HB-MH-250W-1	288	2	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	2
49	7 Kiln	7 Wet	HB-T5-4 ft-54W-4	234	5	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	5
49(a)	7 Kiln	7 Wet				Control	Motion Sensor,	Strong-MotionSensc	
50	7 Kiln	7 Wet	OTH-MH-175W-1	208	28	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	28
51	7 Kiln	7 Wet	VT-T5-4 ft-54W-2	117	72	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	72
52	7 Kiln	7 Dry	FL-MH-175W-1	208	1	Fixture	60W/Area Light/Shoebox/LED/5000K/100-277V	MES-05691	1
53	7 Kiln	7 Dry	HB-MH-175W-1	208	1	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	1
54	7 Kiln	7 Dry	OTH-MH-175W-1	208	1	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	1
55	7 Kiln	7 Dry	VT-T5-4 ft-54W-2	117	64	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	64
56	7 Kiln	7 Dry	WP-MH-175W-1	208	1	Fixture	Wall Mount/Security/LED/55W/120-277V	MES-SWP02-55BA	1
57	6 Kiln	6 Dry A&B Office	STR-LED-35W-1	35	1	Keep	NA	NA	
58	6 Kiln	6 Dry A&B Office	TR-T8-4 ft-32W-2	60	4	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	4
59	6 Kiln	6 Dry Exterior	NA			Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	1
60	6 Kiln	Exterior Walls	DL-LED-19W-1	19	3	Keep	NA	NA	
61	6 Kiln	Exterior Walls	OTH-INC-100W-1	100	6	Lamp	Corn Cob/LED/Internal Driver/5700K/120-277V	YL-C030SLG4-30W	6
62	6 Kiln	Exterior Walls	OTH-MH-175W-1	208	9	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	9
63	6 Kiln	6 Dry Maintenance	STR-T8-8 ft-86W-2	160	16	Retrofit Kit	Linear/8 ft/LED/Retrofit Kit/60W/120-277V	MES-RTST460	16
64	6 Kiln	6 Dry Maintenance	VT-T5-4 ft-54W-2	117	1	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	1
65	6 Kiln	6 Dry Control Room	HB-MH-250W-1	288	2	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	2
66	6 Kiln	6 Dry Control Room	OTH-MH-175W-1	208	4	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	4
67	6 Kiln	6 Dry Control Room	STR-T12-4 ft-34W-2	66	2	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	2
68	6 Kiln	6 Dry Control Room	STR-T8-4 ft-32W-2	60	2	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	2
69	6 Kiln	6 Dry Control Room	STR-T8-8 ft-86W-2	160	11	Retrofit Kit	Linear/8 ft/LED/Retrofit Kit/60W/120-277V	MES-RTST460	11
70	6 Kiln	6 Dry Control Room	WRP-T8-4 ft-32W-2	60	2	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	2
71	46 Warehouse	Warehouse Aisle	DL-LED-19W-1	19	3	Keep	NA	NA	
72	46 Warehouse	Warehouse Aisle	HB-MH-250W-1	288	10	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	10
73	46 Warehouse	Warehouse Aisle	HB-T5-4 ft-54W-4	234	57	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	57
73(a)	46 Warehouse	Warehouse Aisle				Control	Motion Sensor,	Strong-MotionSensc	
74	46 Warehouse	Warehouse Aisle	OTH-INC-100W-1	100	9	Lamp	Corn Cob/LED/Internal Driver/5700K/120-277V	YL-C030SLG4-30W	9
75	46 Warehouse	Warehouse Aisle	OTH-INC-75W-1	75	9	Lamp	A19/LED/E31/4000K/100-277V	A19-14.5W-40K	9
76	46 Warehouse	Warehouse Aisle	OTH-MH-175W-1	208	11	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	11
77	46 Warehouse	Warehouse Aisle	STR-T8-4 ft-32W-1	32	18	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	18
77(a)	46 Warehouse	Warehouse Aisle				Control	Mav RetroFit Occ Sensor	MES-06243	18



# Imerys Lompoc CA - Option 3

EXISTING LIGHTING SYSTEM									
SL No.	Area Name	Space Name	Existing Fixture	Fixture Wattage	Qty	Type	Proposed Solution Description	Part Number	Qty
78	46 Warehouse	Warehouse Aisle	STR-T8-4 ft-32W-2	60	2	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	2
79	46 Warehouse	Warehouse Aisle	STR-T8-8 ft-86W-2	160	8	Retrofit Kit	Linear/8 ft/LED/Retrofit Kit/60W/120-277V	MES-RTST460	8
80	46 Warehouse	Warehouse Aisle	VT-T5-4 ft-54W-1	64	82	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	82
81	46 Warehouse	Warehouse Aisle	VT-T5-4 ft-54W-2	117	17	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	17
82	Exterior	Parking & Roads	AL-MH-1000W-1	1,078	20	Fixture	300W/Area Light/Shoebox/LED/5000K/200-480V	MES-09109	20
83	Exterior	Parking & Roads	AL-MH-400W-1	453	3	Fixture	150W/Area Light/Shoebox/LED/5000K/200-480V	MES-09106	3
84	Exterior	Parking & Roads	AL-MH-400W-1	453	1	Fixture	150W/Area Light/Shoebox/LED/5000K/200-480V	MES-09106	1
85	Exterior	Parking & Roads	OTH-MH-175W-1	208	1	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	1
86	Exterior	Parking & Roads	PGR-MH-400W-1	453	2	Fixture	150W/Area Light/Shoebox/LED/5000K/200-480V	MES-09106	2
87	Specialties	2266 Warehouse	HB-MH-250W-1	288	1	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	1
88	Specialties	2266 Warehouse	HB-T5-4 ft-54W-4	234	8	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	8
88(a)	Specialties	2266 Warehouse				Control	Motion Sensor,	Strong-MotionSensc	
89	Specialties	2266 Warehouse	STR-T12-4 ft-34W-2	66	6	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	6
90	Specialties	2266 Warehouse	STR-T8-4 ft-32W-1	32	54	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	54
90(a)	Specialties	2266 Warehouse				Control	Mav RetroFit Occ Sensor	MES-06243	54
91	Specialties	2266 Warehouse	STR-T8-4 ft-32W-2	60	1	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	1
92	Specialties	2266 Warehouse	TR-T8-4 ft-32W-2	60	16	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	16
93	Specialties	2266 WH Exterior	AL-INC-75W-1	75	3	Lamp	Corn Cob/LED/Internal Driver/5700K/120-277V	YL-C030SLG4-30W	3
94	Specialties	2266 WH Exterior	AL-MH-1000W-1	1,078	1	Fixture	300W/Area Light/Shoebox/LED/5000K/100-277V	MES-05680	1
95	Specialties	2266 WH Exterior	AL-MH-1000W-1	1,078	2	Fixture	300W/Area Light/Shoebox/LED/5000K/100-277V	MES-05680	2
96	Specialties	2266 WH Exterior	OTH-INC-75W-1	75	2	Lamp	Corn Cob/LED/Internal Driver/5700K/120-277V	YL-C030SLG4-30W	2
97	Specialties	2266 WH Exterior	OTH-MH-175W-1	208	2	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	2
98	Specialties	2266 WH Exterior	WP-MH-175W-1	208	1	Fixture	Wall Mount/Security/LED/55W/120-277V	MES-SWP02-55BA	1
99	Specialties	Specialties WH	HB-T5-4 ft-54W-4	234	19	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	19
99(a)	Specialties	Specialties WH				Control	Motion Sensor,	Strong-MotionSensc	
100	Specialties	Specialties WH	OTH-MH-175W-1	208	2	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	2
101	Specialties	Specialties WH	STR-T8-4 ft-32W-1	32	10	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	10
101(a)	Specialties	Specialties WH				Control	Mav RetroFit Occ Sensor	MES-06243	10
102	Specialties	Specialties WH	WP-MH-175W-1	208	2	Fixture	Wall Mount/Security/LED/55W/120-277V	MES-SWP02-55BA	2
103	Specialties	Specialties WH Exterior	AL-LED-18W-1	18	4	Keep	NA	NA	
104	Specialties	Specialties WH Exterior	FL-INC-65W-1	65	3	Lamp	Corn Cob/LED/Internal Driver/5700K/120-277V	YL-C030SLG4-30W	3
105	Specialties	Specialties WH Exterior	OTH-INC-100W-1	100	16	Lamp	Corn Cob/LED/Internal Driver/5700K/120-277V	YL-C030SLG4-30W	16
106	Specialties	Contractor Trailer	WRP-T8-4 ft-32W-2	60	4	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	4
107	Silicate plant	Silicate Maintenance Sh	STR-T8-4 ft-32W-1	32	26	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	26
107(a)	Silicate plant	Silicate Maintenance Sh				Control	Mav RetroFit Occ Sensor	MES-06243	26
108	Silicate plant	Silicate Maintenance Sh	STR-T8-4 ft-32W-2	60	3	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	3
109	Silicate plant	Silicate Maintenance Sh	WRP-T8-8 ft-59W-2	110	4	Retrofit Kit	Linear/8 ft/LED/Retrofit Kit/60W/120-277V	MES-RTST460	4
110	Silicate plant	Processing Area	AL-MH-1000W-1	1,078	3	Fixture	300W/Area Light/Shoebox/LED/5000K/100-277V	MES-05680	3
111	Silicate plant	Processing Area	HB-MH-175W-1	208	1	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	1
112	Silicate plant	Processing Area	HB-T5-4 ft-54W-4	234	1	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	1
112(a)	Silicate plant	Processing Area				Control	Motion Sensor,	Strong-MotionSensc	
113	Silicate plant	Processing Area	OTH-INC-75W-1	75	3	Lamp	Corn Cob/LED/Internal Driver/5700K/120-277V	YL-C030SLG4-30W	3
114	Silicate plant	Processing Area	OTH-MH-175W-1	208	2	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	2
115	Silicate plant	Processing Area	OTH-MH-175W-1	208	2	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	2
116	Silicate plant	Processing Area	STR-T8-4 ft-32W-1	32	36	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	36
116(a)	Silicate plant	Processing Area				Control	Mav RetroFit Occ Sensor	MES-06243	36
117	Silicate plant	Processing Area	VT-T5-4 ft-54W-2	117	22	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	22
118	Silicate plant	Processing Area	WP-MH-250W-1	288	7	Fixture	Wall Mount/Security/LED/80W/120-277V	MES-SWP02-80BA	7
119	Silicate plant	Silicate Building Exterior	NA			Fixture	60W/Area Light/Shoebox/LED/5000K/100-277V	MES-05691	3
120	Silicate plant	Silicate Building Exterior	WP-MH-175W-1	208	2	Fixture	Wall Mount/Security/LED/55W/120-277V	MES-SWP02-55BA	2
121	Silicate plant	Silicate Warehouse	HB-T5-4 ft-54W-4	234	20	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	20
121(a)	Silicate plant	Silicate Warehouse				Control	Motion Sensor,	Strong-MotionSensc	
122	Silicate plant	Silicate Warehouse	VT-T5-4 ft-54W-2	117	28	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	28
123	Silicate plant	Silicate Tanks Offices	STR-T12-4 ft-34W-2	66	4	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	4
124	Silicate plant	Silicate Tanks Offices	STR-T8-4 ft-32W-1	32	36	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	36
124(a)	Silicate plant	Silicate Tanks Offices				Control	Mav RetroFit Occ Sensor	MES-06243	36
125	Silicate plant	Silicate Tanks Offices	TR-T8-4 ft-32W-2	60	12	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	12
126	Silicate plant	Silicate Tanks Offices	WP-MH-175W-1	208	1	Fixture	Wall Mount/Security/LED/55W/120-277V	MES-SWP02-55BA	1
127	Silicate plant	Silicate Tanks Offices	WRP-T8-4 ft-32W-2	60	8	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	8
128	Celpure Plant	Celpure	HB-T5-4 ft-54W-4	234	36	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	36
128(a)	Celpure Plant	Celpure				Control	Motion Sensor,	Strong-MotionSensc	
129	Celpure Plant	Celpure	OTH-MH-175W-1	208	8	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	8
130	Celpure Plant	Celpure	STR-T8-4 ft-32W-2	60	16	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	16
130(a)	Celpure Plant	Celpure				Control	Mav RetroFit Occ Sensor	MES-06243	16
131	Celpure Plant	Celpure	VT-T5-4 ft-54W-2	117	49	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	49
132	Celpure Plant	Celpure	WP-MH-250W-1	288	2	Fixture	Wall Mount/Security/LED/80W/120-277V	MES-SWP02-80BA	2
133	Celpure Plant	Celpure Exterior	AL-MH-400W-1	453	2	Fixture	150W/Area Light/Shoebox/LED/5000K/100-277V	MES-05694	2
134	Lockers	Breakroom Building	STR-T8-4 ft-32W-2	60	10	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	10
135	Lockers	Breakroom Building	TR-T8-4 ft-32W-2	60	15	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	15
136	Lockers	Breakroom Building	WRP-T8-4 ft-32W-2	60	5	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	5
137	Q&M	Q&M Office	TR-T8-4 ft-32W-2	60	50	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	50
138	Q&M	Q&M Maintenance	STR-T8-4 ft-32W-1	32	15	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	15
139	Q&M	Greenhouse	HB-T5-4 ft-54W-4	234	6	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	6
139(a)	Q&M	Greenhouse				Control	Motion Sensor,	Strong-MotionSensc	
140	Q&M	Q&M-Maintenance	HB-T5-4 ft-54W-4	234	9	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	9
140(a)	Q&M	Q&M-Maintenance				Control	Motion Sensor,	Strong-MotionSensc	
141	Maintenance Shops	Heavy Duty Garage	AL-MH-1000W-1	1,078	9	Fixture	300W/Area Light/Shoebox/LED/5000K/100-277V	MES-05680	9
142	Maintenance Shops	Heavy Duty Garage	HB-T5-4 ft-54W-4	234	14	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	14
142(a)	Maintenance Shops	Heavy Duty Garage				Control	Motion Sensor,	Strong-MotionSensc	
143	Maintenance Shops	Heavy Duty Garage	STR-T8-4 ft-32W-1	32	27	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	27
143(a)	Maintenance Shops	Heavy Duty Garage				Control	Mav RetroFit Occ Sensor	MES-06243	27
144	Maintenance Shops	Light Duty Garage	HB-T5-4 ft-54W-4	234	4	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	4
144(a)	Maintenance Shops	Light Duty Garage				Control	Motion Sensor,	Strong-MotionSensc	
145	Maintenance Shops	Light Duty Garage	STR-T8-4 ft-32W-1	32	16	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	16
145(a)	Maintenance Shops	Light Duty Garage				Control	Mav RetroFit Occ Sensor	MES-06243	16
146	Maintenance Shops	Electric Shop	HB-T5-4 ft-54W-4	234	9	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	9

Imerys Lompoc CA - Option 3									
EXISTING LIGHTING SYSTEM									
SL No.	Area Name	Space Name	Existing Fixture	Fixture Wattage	Qty	Type	Proposed Solution Description	Part Number	Qty
146(a)	Maintenance Shops	Electric Shop				Control	Motion Sensor,	Strong-MotionSensc	
147	Maintenance Shops	Electric Shop	STR-T8-4 ft-32W-1	32	24	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	24
147(a)	Maintenance Shops	Electric Shop				Control	Mav RetroFit Occ Sensor	MES-06243	24
148	Maintenance Shops	Electric Shop	VT-T5-4 ft-54W-2	117	1	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	1
149	Maintenance Shops	Electric Shop	WP-MH-250W-1	288	1	Fixture	75W/Area Light/Shoebox/LED/5000K/100-277V	MES-05691	1
150	Maintenance Shops	Electric Shop	WRP-T5-4 ft-54W-2	117	4	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	4
151	Maintenance Shops	Carpenter Shop	HB-T5-4 ft-54W-4	234	9	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	9
151(a)	Maintenance Shops	Carpenter Shop				Control	Motion Sensor,	Strong-MotionSensc	
152	Maintenance Shops	Carpenter Shop	STR-T8-4 ft-32W-1	32	4	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	4
152(a)	Maintenance Shops	Carpenter Shop				Control	Mav RetroFit Occ Sensor	MES-06243	4
153	Maintenance Shops	Carpenter Shop	VT-T5-4 ft-54W-2	117	2	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	2
154	Maintenance Shops	Carpenter Shop	WRP-T8-4 ft-32W-2	60	4	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	4
155	Maintenance Shops	Utility Shop	HB-T5-4 ft-54W-4	234	5	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	5
155(a)	Maintenance Shops	Utility Shop				Control	Motion Sensor,	Strong-MotionSensc	
156	Maintenance Shops	Utility Shop	OTH-MH-175W-1	208	4	Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	4
157	Maintenance Shops	Paint Storage	OTH-INC-75W-1	75	3	Lamp	Corn Cob/LED/Internal Driver/5700K/120-277V	YL-C030SLG4-30W	3
158	Maintenance Shops	Hazardous Waste Storage	NA			Lamp	Corn Cob/LED/40W/5700K/120-277V	YL-C040SLG4-40W	1
159	Maintenance Shops	Breakroom	STR-T8-4 ft-32W-1	32	12	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	12
159(a)	Maintenance Shops	Breakroom				Control	Mav RetroFit Occ Sensor	MES-06243	12
160	Maintenance Shops	Breakroom	WRP-T5-4 ft-54W-2	117	16	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	16
161	Erection & Repair	E&R Office	DEC-LED-19W-3	57	2	Lamp	A19/LED/E30/4000K/100-277V	A19-9.5W-40K	2
162	Erection & Repair	E&R Office	STR-T8-4 ft-32W-1	32	14	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	14
162(a)	Erection & Repair	E&R Office				Control	Mav RetroFit Occ Sensor	MES-06243	14
163	Erection & Repair	E&R Office	TR-T8-4 ft-32W-2	60	14	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	14
164	Erection & Repair	E&R Office	VT-T5-4 ft-54W-2	117	1	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	1
165	Erection & Repair	E&R Office	WRP-T8-4 ft-32W-2	60	20	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	20
166	Erection & Repair	Welding Shop	HB-T5-4 ft-54W-4	234	34	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	34
166(a)	Erection & Repair	Welding Shop				Control	Motion Sensor,	Strong-MotionSensc	
167	Erection & Repair	Welding Shop	STR-T8-4 ft-32W-1	32	6	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	6
167(a)	Erection & Repair	Welding Shop				Control	Mav RetroFit Occ Sensor	MES-06243	6
168	Erection & Repair	Welding Shop	VT-T5-4 ft-54W-2	117	3	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	3
169	Erection & Repair	DXP	HB-T5-4 ft-54W-4	234	25	Fixture	Highbay/Round/LED/5000K/100-277V	SL-UFOA00-70C-R	25
169(a)	Erection & Repair	DXP				Control	Motion Sensor,	Strong-MotionSensc	
170	Erection & Repair	DXP	STR-T12-4 ft-34W-2	66	2	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	2
171	Erection & Repair	DXP	STR-T8-4 ft-32W-1	32	40	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	40
171(a)	Erection & Repair	DXP				Control	Mav RetroFit Occ Sensor	MES-06243	92
172	Erection & Repair	DXP	STR-T8-4 ft-32W-1	32	52	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	MES-RTST124	52
172(a)	Erection & Repair	DXP				Control	Mav RetroFit Occ Sensor	MES-06243	92
173	Erection & Repair	DXP	TR-T8-4 ft-32W-2	60	8	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	8
174	Erection & Repair	E&R Exterior	WP-MH-250W-1	288	6	Fixture	75W/Area Light/Shoebox/LED/5000K/100-277V	MES-05691	6
175	R&D building	Offices	TR-T8-4 ft-32W-2	60	104	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	104
176	R&D building	Offices	WRP-T12-2 ft-35W-2	99	7	Retrofit Kit	Linear/2 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST2230	7
177	R&D building	Offices	WRP-T8-4 ft-32W-2	60	19	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	19
178	R&D building	Offices	WRP-T8-4 ft-32W-2	60	6	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	MES-RTST230	6
179	R&D building	R&D Exterior	WP-INC-75W-1	75	3	Fixture	20W/Wallpack/Decorative/LED/5000K/100-277V	MES-05052	3
180	R&D building	R&D Exterior	WP-MH-175W-1	208	7	Fixture	Wall Mount/Security/LED/55W/120-277V	MES-SWP02-55BA	7

## Approval Signatures

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Accepted and agreed this 7<sup>th</sup> day of March of 2022.

### EIS Representative

By:  \_\_\_\_\_

Enrique Perez-Young / CMO

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### Imerys Project Manager

By:  \_\_\_\_\_

Patrick Zailaa / Industrial Performance Manager

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## Project Abstract

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Imerys Performance Minerals Americas @ Lompoc CA contracted services to upgrade all lighting at the Sylacauga facility to energy efficient lighting, complying with Imerys internal minimum lighting standards. The purpose of the work to be performed is to upgrade the lighting at Sylacauga, using LED latest technology to minimize electrical usage.

Electrical Scope of Work, quantities, locations and fixture types were assessed by EIS and a suitable lighting arrangement was proposed in order to meet the minimum lighting requirements (Imerys Standard IN-CX-ELE-001 rev.01). Imerys internal lighting will meet a CRI of 80 or higher unless otherwise authorized by the Imerys project manager. All proposed light fixtures were approved by the Project Manager. All work was completed according to Imerys safety standards.

EIS guaranteed parts for 10 years and for 5 years.



EXISTING LIGHTING SYSTEM										PROPOSED LIGHTING SYSTEM									
Area Name	Space Name	Space Usage	Fixture	Fixture Wattage	Quantity	Current Watts	Burn Hours	Current kWh	Refit Decision	Type	Proposed Solution Description	Quantity	Watts	Total Watts	Burn Hours	kWh			
General Office	Engineering Office	Office	OTH-INC-75W-1	75.00	1	75	3,129	207	Replace Lamp	Lamp	A19/LED/E31/4000K/100-277V	1	15	15	3,129	44			
	General Office	Office	TR-T8-4 ft-32W-2	60.00	42	2,520	3,129	6,969	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	42	30	1,260	3,129	3,788			
	General Office	Office	WRP-T8-4 ft-32W-2	60.00	11	660	3,129	1,825	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	11	30	330	3,129	992			
	General Office	Office	OTH-LED-19W-1	19.00	2	38	3,129	105	Replace Lamp	Lamp	A19/LED/E31/4000K/100-277V	2	15	29	3,129	87			
	General Office	Office	STR-T8-4 ft-32W-1	32.00	10	320	3,129	885	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	10	24	240	3,129	722			
	General Office	Office	TR-T8-4 ft-32W-2	60.00	9	540	3,129	1,493	Replace Retrofit Kit	Control	Max Refit Occ Sensor	10							
	General Office	Office	WRP-T12-2 ft-35W-2	99.00	1	99	3,129	1,973	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	9	30	270	3,129	812			
	General Office	Office	WRP-T8-4 ft-32W-2	60.00	48	2,880	3,129	7,965	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	1	30	30	3,129	90			
	General Office	Management Office	Office	OTH-LED-19W-1	19.00	2	38	2,346	79	Replace Lamp	Lamp	A19/LED/E31/4000K/100-277V	48	30	1,440	3,129	4,329		
	General Office	Management Office	Office	STR-T8-4 ft-32W-1	32.00	66	2,112	2,346	4,379	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	2	15	29	2,346	65		
General Office	Management Office	Office	TR-T8-4 ft-32W-2	60.00	68	4,080	2,346	8,460	Replace Retrofit Kit	Control	Max Refit Occ Sensor	66	24	1,584	2,346	3,571			
	General Office	Office	WRP-T12-2 ft-35W-2	99.00	1	99	2,346	205	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	68	30	2,040	2,346	4,599			
	General Office	Management Office	WRP-T8-4 ft-32W-2	60.00	103	6,180	2,346	12,814	Replace Retrofit Kit	Retrofit Kit	Linear/2 ft/LED/Retrofit Kit/30W/120-277V	1	30	30	2,346	68			
	General Office	Management Office	WRP-T8-4 ft-32W-2	60.00	17	1,020	2,346	2,115	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	103	30	3,090	2,346	6,965			
	General Office	Management Office	WRP-T8-8 ft-59W-2	110.00	8	880	2,346	1,825	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/60W/120-277V	17	30	510	2,346	1,150			
	General Office	Quality Control Lab	STR-T8-4 ft-32W-2	60.00	4	240	8,760	1,858	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	8	60	480	2,346	1,082			
	General Office	Quality Control Lab	TR-T8-4 ft-32W-2	60.00	98	5,880	8,760	45,526	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	4	30	120	8,760	1,010			
	General Office	Quality Control Lab	WRP-T8-4 ft-32W-2	60.00	4	240	8,760	1,858	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	98	30	2,940	8,760	24,747			
	General Office	Shipping	TR-T8-4 ft-32W-2	60.00	32	1,920	8,760	14,866	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	4	30	120	8,760	1,010			
	General Office	Gatehouse & Scales	TR-T8-4 ft-32W-2	60.00	2	120	8,760	929	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	32	30	960	8,760	8,081			
Lighting Treatment QTY												529	15,577				63,716		
Controls Treatment QTY												76							
Current kWh												114,640							
Proposed kWh												63,716							
55 Warehouse	Warehouse B&G	Warehouse Aisle	HB-T5-4 ft-54W-4	234.00	30	7,020	8,760	54,353	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	30	72	2,160	8,760	18,181			
	Warehouse C&H	Warehouse Aisle	HB-T5-4 ft-54W-4	234.00	20	4,680	8,760	36,235	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	30	72	1,440	8,760	12,121			
	Warehouse D&E	Warehouse Aisle	HB-T5-4 ft-54W-4	234.00	22	5,148	8,760	39,859	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	20	72	1,584	8,760	13,333			
	Warehouse D&E	Warehouse Aisle	OTH-INC-75W-1	75.00	1	75	8,760	581	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	22	72	1,584	8,760	13,333			
	Warehouse D&E	Warehouse Aisle	OTH-LED-19W-1	19.00	1	19	8,760	147	Replace Fixture	Fixture	Flood Light/LED/30W/5000K/120-277V	1	30	30	8,760	253			
	Warehouse Loading Dock Wall	Loading Dock	OTH-INC-75W-1	75.00	7	525	8,760	4,065	Replace Lamp	Fixture	Com Cob/LED/40W/5700K/120-277V	1	15	15	8,760	122			
	Warehouse Outside	Outside	HB-MH-250W-1	288.00	1	288	8,760	2,230	Replace Fixture	Lamp	Highbay/Round/LED/5000K/100-277V	7	30	210	8,760	1,768			
	Lighting Treatment QTY												82	5,511				46,383	
	Controls Treatment QTY												72						
	Current kWh												137,470						
Proposed kWh												46,383							
55 Warehouse Exterior	Outside Building	Outside Building	AL-MH-1000W-1	1,078.00	4	4,312	4,380	16,693	Replace Fixture	Fixture	Area Light/Shoobox/LED/5000K/100-277V	4	300	1,200	4,380	5,050			
	Warehouse Exterior	Outside Building	AL-MH-1000W-1	1,078.00	1	1,078	4,380	4,173	Replace Fixture	Fixture	Area Light/Shoobox/LED/5000K/100-277V	1	300	300	4,380	1,263			
	Warehouse Exterior	Outside Building	FL-LED-40W-1	40.00	2	906	4,380	3,507	Replace Fixture	Fixture	Area Light/Shoobox/LED/5000K/100-277V	2	150	300	4,380	1,263			
	Warehouse Exterior	Outside Building	OTH-MH-175W-1	208.00	4	832	4,380	3,221	Replace Lamp	Lamp	NA	4	40	160	4,380	673			
	Warehouse Exterior	Scribble	VT-T5-4 ft-54W-2	117.00	6	702	4,380	2,718	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	6	30	180	4,380	758			
	Lighting Treatment QTY												17	2,140				9,006	
	Controls Treatment QTY												17						
	Current kWh												30,312						
	Proposed kWh												9,006						
	62 Warehouse	Warehouse Aisle	Warehouse Aisle	HB-T5-4 ft-54W-4	234.00	62	14,508	8,760	112,330	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	62	72	4,464	8,760	37,574		
Motion Sensor												62							
Lighting Treatment QTY												62	4,464				37,574		
Controls Treatment QTY												62							
Current kWh												112,330							
Proposed kWh												37,574							
62 Warehouse Exterior		Loading Dock	Loading Dock	AL-LED-19W-1	19.00	3	57	4,380	221	Replace Fixture	Fixture	Flood Light/LED/30W/5000K/120-277V	3	30	90	4,380	379		
		Warehouse Exterior	Loading Dock	AL-LED-45W-1	45.00	1	45	4,380	174	Keep	NA	NA	1	300	300	4,380	1,263		
		Warehouse Exterior	Loading Dock	FL-LED-40W-1	40.00	1	40	4,380	155	Keep	NA	NA	1	300	300	4,380	1,263		
		Warehouse Exterior	Loading Dock	WP-MH-175W-1	208.00	1	208	4,380	805	Replace Fixture	Fixture	Wall Mount/Security/LED/55W/120-277V	1	55	55	4,380	231		
	Lighting Treatment QTY												4	145				610	
	Controls Treatment QTY												4						
	Current kWh												1,026						
	Proposed kWh												1026						
	Central Waste	MCC room	MCC room	OTH-MH-175W-1	208.00	7	1,456	8,760	11,273	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	7	40	280	8,760	2,357		



EXISTING LIGHTING SYSTEM										PROPOSED LIGHTING SYSTEM									
Area Name	Space Name	Space Usage	Fixture	Fixture Wattage	Quantity	Current Watts	Burn Hours	Current kWh	Type	Proposed Solution	Description	Quantity	Watts	Total Watts	Burn Hours	kWh			
Central Waste	MCC room		VT-T5-4 ft-54W-2	117.00	4	468	8,760	3,624	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	4	30	120	8,760	1,010			
	CW		AL-INC-75W-1	75.00	1	75	4,380	290	Replace Fixture	Fixture	Flood Light/LED/30W/5000K/120-277V	1	30	30	4,380	126			
	CW		FL-MH-175W-1	208.00	2	416	4,380	1,610	Replace Fixture	Fixture	Area Light/Shoebox/LED/5000K/100-277V	2	50	100	4,380	421			
	CW		HB-MH-175W-1	208.00	1	208	4,380	805	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	1	72	72	4,380	303			
	CW		OTH-MH-175W-1	208.00	1	208	4,380	805	Replace Lamp	Lamp	Com CobLED/40W/5700K/120-277V	1	40	40	4,380	168			
	CW		VT-T5-4 ft-54W-2	117.00	4	468	4,380	1,812	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	4	30	120	4,380	505			
					20	3,299		20,220		Lighting Treatment QTY			20		762	4,890			
									Controls Treatment QTY			20,220							
									Current kWh			4,890							
									Proposed kWh										
7 Kiln	Manufacturer Floor	OTH-MH-175W-1	208.00		18	3,744	4,380	14,494	Replace Fixture	Fixture	Area Light/Shoebox/LED/5000K/100-277V	18	50	900	4,380	3,788			
	Manufacturer Floor	OTH-T12-8 ft-60W-2	115.20		4	461	4,380	1,784	Replace Retrofit Kit	Retrofit Kit	Linear/8 ftLED/Retrofit Kit/60W/120-277V	4	60	240	4,380	1,010			
	Manufacturer Floor	VT-T5-4 ft-54W-2	117.00		6	702	4,380	2,718	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	6	30	180	4,380	758			
	7 Kiln MCC	VT-T5-4 ft-54W-2	117.00		19	2,223	4,380	8,606	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	19	30	570	4,380	2,999			
	7 Wet	AL-MH-1000W-1	1,078.00		1	1,078	4,380	4,173	Replace Fixture	Fixture	Area Light/Shoebox/LED/5000K/100-277V	1	300	300	4,380	1,263			
	7 Wet	HB-MH-250W-1	288.00		2	576	4,380	2,230	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	2	72	144	4,380	606			
	7 Wet	HB-T5-4 ft-54W-4	234.00		5	1,170	4,380	4,529	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	5	72	360	4,380	1,515			
	7 Wet	OTH-MH-175W-1	208.00		28	5,824	4,380	22,546	Replace Lamp	Lamp	Motion Sensor,	5							
	7 Wet	VT-T5-4 ft-54W-2	117.00		72	8,424	4,380	32,612	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	28	40	1,120	4,380	4,714			
	7 Dry	FL-MH-175W-1	208.00		1	208	4,380	805	Replace Fixture	Fixture	Area Light/Shoebox/LED/5000K/100-277V	72	30	2,160	4,380	9,091			
	7 Dry	HB-MH-175W-1	208.00		1	208	4,380	805	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	1	50	50	4,380	210			
	7 Dry	OTH-MH-175W-1	208.00		1	208	4,380	805	Replace Fixture	Lamp	Com CobLED/40W/5700K/120-277V	1	72	72	4,380	303			
	7 Dry	VT-T5-4 ft-54W-2	117.00		64	7,488	4,380	28,988	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	1	40	40	4,380	168			
	7 Dry	WP-MH-175W-1	208.00		1	208	4,380	805	Replace Fixture	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	64	30	1,920	4,380	8,081			
					223	32,522		125,902		Lighting Treatment QTY			223		8,111	34,136			
										Controls Treatment QTY			5						
										Current kWh			125,902						
									Proposed kWh			34,136							
6 Kiln	6 Dry A&B Office	STR-LED-35W-1	35.00		1	35	8,760	271	Keep		NA	NA	4	30	120	8,760	1,010		
	6 Dry A&B Office	TR-T8-4 ft-32W-2	60.00		4	240	8,760	1,858	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	4							
	Exterior Walls	DL-LED-19W-1	19.00		3	-	4,380	-	Keep		NA	NA							
	Exterior Walls	NEW LIGHTING	0.00		-	-	4,380	-	Add Lamp	Lamp	Com CobLED/40W/5700K/120-277V	1	40	40	4,380	168			
	Exterior Walls	OTH-INC-100W-1	100.00		6	600	4,380	2,323	Replace Lamp	Lamp	Com CobLED/40W/5700K/120-277V	6	30	180	4,380	758			
	Exterior Walls	OTH-MH-175W-1	208.00		9	1,872	4,380	7,247	Replace Lamp	Lamp	Com CobLED/40W/5700K/120-277V	9	40	360	4,380	1,515			
	6 Dry Maintenance	STR-T8-8 ft-86W-2	160.00		16	2,560	8,760	19,821	Replace Retrofit Kit	Retrofit Kit	Linear/8 ftLED/Retrofit Kit/86W/120-277V	16	60	960	8,760	8,081			
	6 Dry Maintenance	VT-T5-4 ft-54W-2	117.00		1	117	8,760	906	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	1	30	30	8,760	253			
	6 Dry Control Room	HB-MH-250W-1	288.00		2	576	8,760	4,460	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	2	72	144	8,760	1,212			
	6 Dry Control Room	OTH-MH-175W-1	208.00		4	832	8,760	6,442	Replace Lamp	Lamp	Com CobLED/40W/5700K/120-277V	4	40	160	8,760	1,347			
	6 Dry Control Room	STR-T12-4 ft-34W-2	65.80		2	132	8,760	1,019	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	2	30	60	8,760	505			
	6 Dry Control Room	STR-T8-4 ft-32W-2	60.00		2	120	8,760	929	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	2	30	60	8,760	505			
	6 Dry Control Room	STR-T8-8 ft-86W-2	160.00		11	1,760	8,760	13,627	Replace Retrofit Kit	Retrofit Kit	Linear/8 ftLED/Retrofit Kit/86W/120-277V	11	60	660	8,760	5,555			
	6 Dry Control Room	WRP-T8-4 ft-32W-2	60.00		2	120	8,760	929	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	2	30	60	8,760	505			
					59	8,929		59,561		Treatment QTY			60		2,834	21,413			
										Controls QTY									
										Current kWh			59,561						
									Proposed kWh			21,413							
46 Warehouse	Warehouse Aisle	DL-LED-19W-1	19.00		3	-	8,760	-	Keep		NA	NA							
	Warehouse Aisle	HB-MH-250W-1	288.00		10	2,880	8,760	22,299	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	10	72	720	8,760	6,060			
	Warehouse Aisle	HB-T5-4 ft-54W-4	234.00		57	13,338	8,760	103,271	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	57	72	4,104	8,760	34,544			
	Warehouse Aisle	OTH-INC-100W-1	100.00		9	900	8,760	6,968	Replace Lamp	Lamp	Motion Sensor,	57	30	270	8,760	2,273			
	Warehouse Aisle	OTH-INC-75W-1	75.00		9	675	8,760	5,226	Replace Lamp	Lamp	A19/LED/E31/4000K/100-277V	9	15	131	8,760	1,098			
	Warehouse Aisle	OTH-MH-175W-1	208.00		11	2,288	8,760	17,715	Replace Lamp	Lamp	Com CobLED/40W/5700K/120-277V	11	40	440	8,760	3,704			
	Warehouse Aisle	STR-T8-4 ft-32W-1	32.00		18	576	8,760	4,460	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/24W/120-277V	18	24	432	8,760	3,636			
46 Warehouse	Warehouse Aisle	STR-T8-4 ft-32W-2	60.00		2	120	8,760	929	Replace Retrofit Kit	Control	Max RetroFit Occ Sensor	18	30	60	8,760	505			
	Warehouse Aisle	STR-T8-8 ft-86W-2	160.00		8	1,280	8,760	9,911	Replace Retrofit Kit	Retrofit Kit	Linear/8 ftLED/Retrofit Kit/86W/120-277V	2	60	480	8,760	4,040			
	Warehouse Aisle	VT-T5-4 ft-54W-1	64.00		82	5,248	8,760	40,633	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/24W/120-277V	82	24	1,968	8,760	16,565			
	Warehouse Aisle	VT-T5-4 ft-54W-2	117.00		17	1,989	8,760	15,400	Replace Retrofit Kit	Retrofit Kit	Linear/4 ftLED/Retrofit Kit/30W/120-277V	17	30	510	8,760	4,293			
					223	29,294		226,812		Lighting Treatment QTY			223		9,115	76,719			
										Controls Treatment QTY			75						
										Current kWh			226,812						
									Proposed kWh			76,719							
Exterior	Parking & Roads	AL-MH-1000W-1	1,078.00		20	21,560	4,380	83,465	Replace Fixture	Fixture	Area Light/Shoebox/LED/5000K/200-480V	20	300	6,000	4,380	25,252			
	Parking & Roads	AL-MH-400W-1	453.00		3	1,359	4,380	5,261	Replace Fixture	Fixture	Area Light/Shoebox/LED/5000K/200-480V	3	150	450	4,380	1,894			
	Parking & Roads	AL-MH-400W-1	453.00		1	453	4,380	1,754	Replace Fixture	Fixture	Area Light/Shoebox/LED/5000K/200-480V	1	150	150	4,380	631			
	Parking & Roads	OTH-MH-175W-1	208.00		1	208	4,380	805	Replace Lamp	Lamp	Com CobLED/40W/5700K/120-277V	1	40	40	4,380	168			

EXISTING LIGHTING SYSTEM				PROPOSED LIGHTING SYSTEM														
Area Name	Space Name	Space Usage	Fixture	Fixture Wattage	Quantity	Current Watts	Burn Hours	Current kWh	Type	Proposed Solution Description	Quantity	Watts	Total Watts	Burn Hours	kWh			
Exterior	Parking & Roads		PGR-MH-400W-1	453.00	2	906	4,380	3,507	Replace Fixture	Fixture	Area Light/Shoebox/LED/5000K/200-480V	2	150	300	4,380	1,263		
				27	24,486	94,793			Lighting Treatment QTY	27		6,940	29,208					
									Controls Treatment QTY									
									Current kWh	94,793								
Specialties	2266 Warehouse	Warehouse Aisle	HB-MH-250W-1	288.00	1	288	6,257	1,593	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	1	72	72	6,257	433		
			HB-T5-4 ft-54W-4	234.00	8	1,872	6,257	10,353	Replace Fixture	Control	Motion Sensor	8	72	576	6,257	3,463		
		Warehouse Aisle	OTH-LED-19W-1	19.00	10	190	6,257	1,051	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	10	30	300	6,257	1,804		
			STR-T12-4 ft-34W-2	65.80	6	395	6,257	2,183	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	6	30	180	6,257	1,082		
	Warehouse Aisle	STR-T8-4 ft-32W-1	32.00	54	1,728	6,257	9,556	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	54	24	1,296	6,257	7,792			
										Control	Max RetroFit Occ Sensor	54						
	2266 Warehouse	Warehouse Aisle	STR-T8-4 ft-32W-2	60.00	1	60	6,257	332	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	1	30	30	6,257	180		
			TR-T8-4 ft-32W-2	60.00	16	960	6,257	5,309	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	16	30	480	6,257	2,886		
		Warehouse Aisle	AL-INC-75W-1	75.00	3	225	6,257	1,244	Replace Fixture	Fixture	Flood Light/LED/30W/5000K/120-277V	3	30	90	6,257	541		
			AL-MH-1000W-1	1,078.00	1	1,078	4,380	4,173	Replace Fixture	Fixture	Area Light/Shoebox/LED/5000K/100-277V	1	300	300	4,380	1,263		
	Specialties	2266 WH Exterior	Specialties WH Exterior	AL-MH-1000W-1	1,078.00	2	2,156	4,380	8,347	Replace Fixture	Fixture	Area Light/Shoebox/LED/5000K/100-277V	2	300	600	4,380	2,525	
				OTH-INC-75W-1	75.00	2	150	6,257	830	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	2	30	60	6,257	361	
		2266 WH Exterior	Specialties WH Exterior	OTH-LED-19W-1	19.00	10	190	6,257	1,051	Replace Fixture	Fixture	Flood Light/LED/30W/5000K/120-277V	10	30	300	6,257	1,804	
				OTH-MH-175W-1	208.00	2	416	6,257	2,301	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	2	40	80	6,257	481	
	Specialties	2266 WH Exterior	Specialties WH Exterior	WP-MH-175W-1	208.00	1	208	6,257	1,150	Replace Fixture	Fixture	Wall Mount/Security/LED/55W/120-277V	1	55	55	6,257	331	
				HB-T5-4 ft-54W-4	234.00	19	4,446	6,257	24,588	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	19	72	1,368	6,257	8,225	
Specialties WH		Specialties WH	OTH-LED-19W-1	19.00	71	1,349	6,257	7,460	Replace Fixture	Control	Motion Sensor	19						
			OTH-MH-175W-1	208.00	2	416	6,257	2,301	Replace Lamp	Fixture	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	71	30	2,130	6,257	12,806		
Specialties	Specialties WH	Specialties WH	STR-T8-4 ft-32W-1	32.00	10	320	6,257	1,770	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	10	24	240	6,257	1,443		
										Control	Max RetroFit Occ Sensor	10						
	Specialties WH	Specialties WH	WP-MH-175W-1	208.00	2	416	6,257	2,301	Replace Fixture	Fixture	Wall Mount/Security/LED/55W/120-277V	2	40	80	6,257	481		
											NA	2						
Specialties	Specialties WH Exterior	Specialties WH Exterior	AL-LED-18W-1	18.00	4	-	4,380	-	Keep	Lamp	Com Cob/LED/40W/5700K/120-277V	3	30	90	4,380	379		
			FL-INC-65W-1	65.00	3	195	4,380	755	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	3	30	480	4,380	2,020		
		Specialties WH Exterior	Specialties WH Exterior	OTH-INC-100W-1	100.00	16	1,600	4,380	6,194	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	16	30	480	4,380	2,020	
				OTH-LED-19W-1	19.00	4	76	4,380	294	Replace Fixture	Fixture	Flood Light/LED/30W/5000K/120-277V	4	30	120	4,380	505	
	Contractor Trailer	Contractor Trailer	WRP-T8-4 ft-32W-2	60.00	4	240	6,257	1,327	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	4	30	120	6,257	721		
	Specialties	Specialties WH	Specialties WH		248	18,974	96,462			Lighting Treatment QTY	248		9,457	52,186				
		Specialties WH	Specialties WH	Controls Treatment QTY														
				Current kWh	96,462													
	Specialties	Silicate plant	Silicate Maintenance Shop	OTH-LED-19W-1	19.00	6	114	8,760	883	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	6	30	180	8,760	1,515	
				STR-T8-4 ft-32W-1	32.00	26	832	8,760	6,442	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	26	24	624	8,760	5,252	
			Silicate Maintenance Shop	Silicate Maintenance Shop	STR-T8-4 ft-32W-2	60.00	3	180	8,760	1,394	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	3	30	90	8,760	758
					WRP-T8-8 ft-59W-2	110.00	4	440	8,760	3,407	Replace Retrofit Kit	Retrofit Kit	Linear/8 ft/LED/Retrofit Kit/60W/120-277V	4	60	240	8,760	2,020
		Processing Area	Processing Area	AL-MH-1000W-1	1,078.00	3	3,234	4,380	12,520	Replace Fixture	Fixture	Area Light/Shoebox/LED/5000K/100-277V	3	300	900	4,380	3,788	
				HB-MH-175W-1	208.00	1	208	8,760	1,610	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	1	72	72	8,760	606	
Processing Area		Processing Area	HB-T5-4 ft-54W-4	234.00	1	234	8,760	1,812	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	1	72	72	8,760	606		
Specialties		Processing Area	Processing Area	OTH-INC-75W-1	75.00	3	225	8,760	1,742	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	3	30	90	8,760	758	
				OTH-LED-19W-1	19.00	154	2,926	8,760	22,655	Replace Fixture	Fixture	Flood Light/LED/30W/5000K/120-277V	154	30	4,620	8,760	38,888	
		Processing Area	Processing Area	OTH-LED-19W-1	19.00	65	1,235	8,760	9,562	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	65	30	1,950	8,760	16,414	
				OTH-MH-175W-1	208.00	2	416	8,760	3,221	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	2	40	80	8,760	673	
Specialties		Processing Area	Processing Area	OTH-MH-175W-1	208.00	2	416	8,760	3,221	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	2	40	80	8,760	673	
				STR-T8-4 ft-32W-1	32.00	36	1,152	8,760	8,919	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	36	24	864	8,760	7,272	
		Processing Area	Processing Area	VT-T5-4 ft-54W-2	117.00	22	2,574	8,760	19,929	Replace Retrofit Kit	Control	Max RetroFit Occ Sensor	36					
				WP-MH-250W-1	288.00	7	2,016	8,760	15,609	Replace Fixture	Fixture	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	22	30	660	8,760	5,555	
Specialties	Silicate plant	Silicate Building Exterior	NEW LIGHTING			4,380			New fixture	Fixture	Area Light/Shoebox/LED/5000K/100-277V	3	50	150	4,380	631		
			OTH-LED-19W-1	19.00	1	19	4,380	74	Replace Fixture	Fixture	Flood Light/LED/30W/5000K/120-277V	1	30	30	4,380	126		
		Silicate Building Exterior	Silicate Building Exterior	WP-MH-175W-1	208.00	2	416	4,380	1,610	Replace Fixture	Fixture	Wall Mount/Security/LED/55W/120-277V	2	55	110	4,380	463	
				HB-T5-4 ft-54W-4	234.00	20	4,680	4,380	18,118	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	20	72	1,440	4,380	6,060	
	Silicate Warehouse	Silicate Tanks Offices	VT-T5-4 ft-54W-2	117.00	28	3,276	8,760	25,365	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	28	30	840	8,760	7,070		
			STR-T12-4 ft-34W-2	65.80	4	263	8,760	2,038	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	4	30	120	8,760	1,010		
	Silicate Tanks Offices	Silicate Tanks Offices	STR-T8-4 ft-32W-1	32.00	36	1,152	8,760	8,919	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	36	24	864	8,760	7,272		
											Control	Max RetroFit Occ Sensor	36					
	Specialties	Silicate Tanks Offices	Silicate Tanks Offices	TR-T8-4 ft-32W-2	60.00	12	720	8,760	5,575	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	12	30	360	8,760	3,030	
				WP-MH-175W-1	208.00	1	208	8,760	1,610	Replace Fixture	Fixture	Wall Mount/Security/LED/55W/120-277V	1	55	55	8,760	463	
		Silicate Tanks Offices	Silicate Tanks Offices	WRP-T8-4 ft-32W-2	60.00	8	480	8,760	3,716	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	8	30	240	8,760	2,020	
						447	27,416	179,951			Lighting Treatment QTY	450		15,291	117,639			
											Controls Treatment QTY							
											Current kWh	179,951						
											Proposed kWh	117,639						

EXISTING LIGHTING SYSTEM				PROPOSED LIGHTING SYSTEM											
Area Name	Space Name	Space Usage	Fixture	Fixture Wattage	Quantity	Current Watts	Burn Hours	Current kWh	Type	Proposed Solution Description	Quantity	Watts	Total Watts	Burn Hours	
Ceppure Plant	Ceppure		HB-T5-4 ft-54W-4	234.00	36	8,424	8,760	65,224	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	36	72	2,592	8,760
Ceppure Plant	Ceppure		OTH-MH-175W-1	208.00	8	1,664	8,760	12,884	Replace Lamp	Control	Motion Sensor,	36		320	8,760
Ceppure Plant	Ceppure		OTR-T8-4 ft-32W-2	60.00	16	960	8,760	7,433	Replace Retrofit Kit	Lamp	Com Cob/LED/40W/5700K/120-277V	8	40	480	8,760
Ceppure Plant	Ceppure		VT-T5-4 ft-54W-2	117.00	49	5,733	8,760	44,388	Replace Retrofit Kit	Control	Max RetroFit Occ Sensor	16	30	1,470	8,760
Ceppure Plant	Ceppure		WP-MH-250W-1	288.00	2	576	4,380	2,230	Replace Fixture	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	49	30	160	4,380
Ceppure Plant	Ceppure Exterior		AL-MH-400W-1	453.00	2	906	4,380	3,507	Replace Fixture	Fixture	Wall Mount/Security/LED/80W/120-277V	2	80	300	4,380
					113	18,263		135,666		Area Light/Shoebox/LED/5000K/100-277V	2	150	300	1,263	
										Lighting Treatment QTY	113		5,322	42,860	
										Controls Treatment QTY	52				
										Current kWh	135,666				
										Proposed kWh	42,860				
Lockers	Breakroom Building	Restroom	OTH-LED-19W-1	19.00	5	95	4,380	368	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	5	30	150	4,380
Lockers	Breakroom Building	Restroom	STR-T8-4 ft-32W-2	60.00	10	600	8,760	4,646	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	10	30	300	8,760
Lockers	Breakroom Building	Restroom	TR-T8-4 ft-32W-2	60.00	15	900	8,760	6,968	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	15	30	450	8,760
Lockers	Breakroom Building	Restroom	WRP-T8-4 ft-32W-2	60.00	5	300	8,760	2,323	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	5	30	150	8,760
					35	1,895		14,304		Lighting Treatment QTY	35		1,050	8,207	
										Controls Treatment QTY					
										Current kWh	14,304				
										Proposed kWh	8,207				
Q&M	Q&M Office	Office	TR-T8-4 ft-32W-2	60.00	50	3,000	8,760	23,228	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	50	30	1,500	8,760
Q&M	Q&M Maintenance	Mechanical	STR-T8-4 ft-32W-1	32.00	15	480	8,760	3,716	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	15	24	360	8,760
Q&M	Greenhouse		HB-T5-4 ft-54W-4	234.00	6	1,404	8,760	10,871	Replace Fixture	Fixture	Highbay/Round/LED/5000K/100-277V	6	72	432	8,760
					9	2,106	8,760	16,306	Replace Fixture	Control	Motion Sensor,	6	72	648	8,760
										Control	Motion Sensor,	9			5,454
					80	6,990		54,121		Lighting Treatment QTY	80		2,940	24,747	
										Controls Treatment QTY	15				
										Current kWh	54,121				
										Proposed kWh	24,747				
Maintenance Shops	Heavy Duty Garage	Mechanical	AL-MH-1000W-1	1,078.00	9	9,702	4,380	37,559	Replace Fixture	Fixture	Area Light/Shoebox/LED/5000K/100-277V	9	300	2,700	4,380
Maintenance Shops	Heavy Duty Garage	Mechanical	HB-T5-4 ft-54W-4	234.00	14	3,276	8,760	25,365	Replace Fixture	Control	Motion Sensor,	14	72	1,008	8,760
Maintenance Shops	Heavy Duty Garage	Mechanical	OTH-LED-19W-1	19.00	5	95	8,760	736	Replace Fixture	Fixture	Flood Light/LED/30W/5000K/120-277V	5	30	150	8,760
Maintenance Shops	Heavy Duty Garage	Mechanical	STR-T8-4 ft-32W-1	32.00	27	864	8,760	6,690	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	27	30	810	8,760
Maintenance Shops	Light Duty Garage	Mechanical	HB-T5-4 ft-54W-4	234.00	4	936	8,760	7,247	Replace Fixture	Control	Max RetroFit Occ Sensor	27		288	8,760
					4	936	8,760	7,247	Replace Fixture	Control	Motion Sensor,	4	72	288	8,760
Maintenance Shops	Light Duty Garage	Mechanical	OTH-LED-19W-1	19.00	5	95	8,760	736	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	5	30	150	8,760
Maintenance Shops	Light Duty Garage	Mechanical	STR-T8-4 ft-32W-1	32.00	16	512	8,760	3,964	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	16	24	384	8,760
Maintenance Shops	Electric Shop	Mechanical	HB-T5-4 ft-54W-4	234.00	9	2,106	8,760	16,306	Replace Fixture	Control	Max RetroFit Occ Sensor	16		648	8,760
					9	2,106	8,760	16,306	Replace Fixture	Control	Motion Sensor,	9	72	648	8,760
Maintenance Shops	Electric Shop	Mechanical	OTH-LED-19W-1	19.00	3	57	8,760	441	Replace Fixture	Control	Motion Sensor,	9		30	8,760
Maintenance Shops	Electric Shop	Mechanical	STR-T8-4 ft-32W-1	32.00	24	768	8,760	5,946	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	24	24	576	8,760
Maintenance Shops	Electric Shop	Mechanical	VT-T5-4 ft-54W-2	117.00	1	117	8,760	906	Replace Retrofit Kit	Control	Max RetroFit Occ Sensor	24		30	8,760
Maintenance Shops	Electric Shop	Mechanical	WP-MH-250W-1	288.00	1	288	4,380	1,115	Replace Fixture	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	1	30	75	4,380
Maintenance Shops	Electric Shop	Mechanical	WRP-T5-4 ft-54W-2	117.00	4	468	8,760	3,624	Replace Retrofit Kit	Fixture	Area Light/Shoebox/LED/5000K/100-277V	1	75	480	316
Maintenance Shops	Carpenter Shop	Mechanical	HB-T5-4 ft-54W-4	234.00	9	2,106	8,760	16,306	Replace Fixture	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	4	30	120	8,760
					9	2,106	8,760	16,306	Replace Fixture	Control	Motion Sensor,	9	72	648	8,760
Maintenance Shops	Carpenter Shop	Mechanical	OTH-LED-19W-1	19.00	1	19	4,380	74	Replace Fixture	Control	Motion Sensor,	9		30	126
Maintenance Shops	Carpenter Shop	Mechanical	STR-T8-4 ft-32W-1	32.00	4	128	8,760	991	Replace Retrofit Kit	Fixture	Flood Light/LED/30W/5000K/120-277V	1	30	480	808
Maintenance Shops	Carpenter Shop	Mechanical	VT-T5-4 ft-54W-2	117.00	2	234	8,760	1,812	Replace Retrofit Kit	Control	Max RetroFit Occ Sensor	4	24	96	8,760
Maintenance Shops	Carpenter Shop	Mechanical	WRP-T8-4 ft-32W-2	60.00	4	240	8,760	1,858	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	2	30	60	8,760
Maintenance Shops	Utility Shop	Mechanical	HB-T5-4 ft-54W-4	234.00	5	1,170	8,760	9,059	Replace Fixture	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	4	30	120	8,760
					5	1,170	8,760	9,059	Replace Fixture	Control	Motion Sensor,	5	72	360	3,030
Maintenance Shops	Utility Shop	Mechanical	OTH-MH-175W-1	208.00	4	832	4,380	3,221	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	4	40	160	4,380
Maintenance Shops	Paint Storage	Storage	OTH-INC-75W-1	75.00	3	225	8,760	1,742	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	3	30	90	8,760
Maintenance Shops	Hazardous Waste Staging	NEW LIGHTING	NEW LIGHTING						Add Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	1	40	40	758
Maintenance Shops	Breakroom	Maintenance Shops	OTH-LED-19W-1	19.00	12	228	8,760	1,765	Replace Lamp	Lamp	Com Cob/LED/40W/5700K/120-277V	12	30	360	8,760
Maintenance Shops	Breakroom	Maintenance Shops	STR-T8-4 ft-32W-1	32.00	12	384	8,760	2,973	Replace Retrofit Kit	Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/24W/120-277V	12	24	288	8,760
					16	1,872	8,760	14,494	Replace Retrofit Kit	Control	Max RetroFit Occ Sensor	12		288	2,424
Maintenance Shops	Breakroom		WRP-T5-4 ft-54W-2	117.00	194	26,722		164,929		Retrofit Kit	Linear/4 ft/LED/Retrofit Kit/30W/120-277V	16	30	480	8,760
										Lighting Treatment QTY	195		9,761	69,682	
										Controls Treatment QTY	124				
										Current kWh	164,929				
										Proposed kWh	69,682				



# Lighting Rebates



## The advantages of light-emitting diode (LED) technologies

Light-emitting diode technologies use less energy and operate at lower temperatures, which helps reduce cooling costs. They also last much longer and require less maintenance. Best of all, these advanced technologies offer you all these benefits while providing equal- or better-quality light.

### Additional benefits and technological advantages of LEDs:

- LEDs convert energy to light more efficiently than other sources, and when combined with improvements in fixture design, can lead to improved fixture efficiency as well.
- LEDs turn on at full brightness almost instantly with no strike delay, even when cold, making LEDs the superior option for cold locations, such as walk-in refrigerators, cold storage facilities and outdoor areas like parking lots.
- LEDs are resistant to breakage and heavy vibrations because they do not have filaments or glass bulbs.
- LEDs are mercury-free and have fewer environmental toxins than some other lighting technologies.
- Quality LEDs can be dimmed and when you add compatible lighting controls, it's possible to eliminate overlighting and greatly enhance savings.

## Rebates to help you save energy with LED lighting

**PG&E offers many rebates to help you leverage the advantages of LED lighting. In addition to reviewing the specific requirements for each lighting rebate, and to ensure rebate eligibility, please note the following requirements before you begin:**

- All components must be installed and operational before a rebate application is submitted.
- All new lighting fixtures, retrofit kits and components must carry the appropriate designated safety certification label—including, but not limited to, Underwriters Laboratories (UL), Electrical Testing Laboratory (ETL) or TUV Rheinland (TUV).
- Installations must be installed in accordance with all applicable local, state and national codes and ordinances.
- Installation of new fixtures must result in a net decrease of installed wattage per space.
- Only DesignLights Consortium [DLC]-premium fixtures listed in the product category that meet catalog requirements qualify for this rebate. All other PG&E business rebate application conditions apply. Visit [designlights.org/search](https://designlights.org/search).
- If building type eligibility is not listed, all building types are eligible. Additional requirements may apply.
- To qualify for energy-savings rebates, you must have a non-residential electric account with PG&E at the installation address.





# Lighting

## Interior LED High-Bay and Low-Bay Lighting

### Requirements:

- Only DesignLights Consortium [DLC]-premium fixtures listed—visit [designlights.org/search](https://designlights.org/search) in the LED high-bay or low-bay product category that meet catalog requirements qualify for this rebate:
  - High-Bay Luminaires (fixtures and retrofit kits)
  - Low-Bay Luminaires (fixtures and retrofit kits)
  - High-Bay Aisle Luminaires (fixtures)
- Customer selects the measure code based on the wattage and efficacy of the new fixture.

### Exclusions:

- Self-ballasted, screw-based or pin-based lamps and LED tube-style lamps do not qualify.
- Products not listed in the high-bay or low-bay categories above, including LED troffers, troffer retrofit kits, linear LED retrofit kits, lamp style retrofit kits, linear ambient luminaires or any lighting products classified in the outdoor/exterior categories, do not qualify for this rebate.
- Horticultural installations do not qualify for this rebate.
- Exterior installations do not qualify for this rebate.
- New construction is not eligible

### Additional details:

- Measure codes and rebates are defined by and set according to lumen range and minimum efficacy requirements as follows:
  - Tier 1 measures: Products must meet or exceed DLC Premium classification
  - Tier 2 measures: Products must meet or exceed DLC Premium classification

continued

*Added by Enrique Perez-Young from EIS 06/25/2021*  
High Bay Fixtures proposed complies with Tier LT531:  
Rebate is \$19/fixture (See next page table)  
- DLC Premium classification  
- >150 LPW  
- 70W generates ~13,000 lumens

EIS Proposal Option 1: 414 HB @ \$19/fixture = \$7,866

EIS Proposal Option 2: 488 HB @ \$19/fixture = \$9,272

EIS Proposal Option 3: 414 HB @ \$19/fixture = \$7,866



Tier 1: Meets or exceeds DLC Premium Classification

Rebate Code	Lumen Range	Minimum Efficacy Requirements	Rebate/Unit Measure
LT514	4500 to < 5400	$\geq 130 \text{ LPW} < 150 \text{ LPW}$	\$13/fixture
LT515	5400 to < 6500	$\geq 130 \text{ LPW} < 150 \text{ LPW}$	\$13/fixture
LT516	6500 to < 7800	$\geq 130 \text{ LPW} < 150 \text{ LPW}$	\$13/fixture
LT517	7800 to < 9400	$\geq 130 \text{ LPW} < 150 \text{ LPW}$	\$13/fixture
LT518	9400 to < 11800	$\geq 130 \text{ LPW} < 150 \text{ LPW}$	\$13/fixture
LT519	11800 to < 14800	$\geq 130 \text{ LPW} < 150 \text{ LPW}$	\$13/fixture
LT520	14800 to < 18500	$\geq 135 \text{ LPW} < 150 \text{ LPW}$	\$13/fixture
LT521	18500 to < 23100	$\geq 135 \text{ LPW} < 150 \text{ LPW}$	\$25/fixture
LT522	23100 to < 30000	$\geq 135 \text{ LPW} < 150 \text{ LPW}$	\$25/fixture
LT523	30000 to < 39000	$\geq 135 \text{ LPW} < 150 \text{ LPW}$	\$25/fixture
LT524	39000 to < 50700	$\geq 140 \text{ LPW} < 150 \text{ LPW}$	\$25/fixture
LT525	50700 to < 65900	$\geq 140 \text{ LPW} < 150 \text{ LPW}$	\$25/fixture

Tier 2: Meets or exceeds DLC Premium Classification

Rebate Code	Lumen Range	Minimum Efficacy Requirements	Rebate/Unit Measure
LT526	4500 to < 5400	$\geq 150 \text{ LPW}$	\$19/fixture
LT527	5400 to < 6500	$\geq 150 \text{ LPW}$	\$19/fixture
LT528	6500 to < 7800	$\geq 150 \text{ LPW}$	\$19/fixture
LT529	7800 to < 9400	$\geq 150 \text{ LPW}$	\$19/fixture
LT530	9400 to < 11800	$\geq 150 \text{ LPW}$	\$19/fixture
LT531	11800 to < 14800	$\geq 150 \text{ LPW}$	\$19/fixture
LT532	14800 to < 18500	$\geq 150 \text{ LPW}$	\$19/fixture
LT533	18500 to < 23100	$\geq 150 \text{ LPW}$	\$40/fixture
LT534	23100 to < 30000	$\geq 150 \text{ LPW}$	\$40/fixture
LT535	30000 to < 39000	$\geq 150 \text{ LPW}$	\$40/fixture
LT536	39000 to < 50700	$\geq 150 \text{ LPW}$	\$40/fixture
LT537	50700 to < 65900	$\geq 150 \text{ LPW}$	\$40/fixture





## APPENDIX D: Customized Kick Off Meeting Discussion Points and the Photo-Detail of Every Single Fixture/Lamp in the Facility



## Imerys Lompoc – Kick Off Meeting Discussion

- 1) Send monthly electric invoices to Enrique for analysis - Andrew M, Will be sent next week
- 2) Coordinate best time for on-site visit with electrician to escort - Patrick, should have a good timeframe communicated by mid next week.
- 3) Imerys will canvass management and appropriate team members (EH&S) for input re specific areas that need more lights and/or delamping.
- 4) EIS will check PG&E incentives requirements.
- 5) Please send EIS, electronically, or share in printed format when we arrive, plant layout or facility drawing and its areas
  - a) Open discussion of categorization and identification of every area in Imerys own nomenclature, so EIS final lighting design and pricing is associated to Imerys customary terms
    - i) This will help to discuss special treatments, special needs or specific requirements per area.
    - ii) Or if the scope of the project is limited, also to establish the particular area(s) EIS is going to provide the solution.
    - iii) Identify Voltage of the current fixtures (277, 480, etc.) for each facility area, or at least interior/exterior.
- 6) Additional key personnel that should be invited to the kick-off meeting as early as convenient at the plant Tuesday APR-30
  - a) Usually includes time with the Maintenance Manager and the electrician he will assign to us for the audit, but please include all the personnel he deems necessary.
  - b) Since EIS gets into every illuminated area of the plant, usually we can also make a pre-assessment audit for other power demanding opportunities, if there is any interest (e.g. compressed air, boilers, steam, HVAC, etc.)
  - c) Has Imerys had planned any additional lighting, facility expansions or change of in the floor plan in the near future?
    - i) EIS will always consider which fixtures will be a one to one upgrade and/or how many new fixtures and solutions are needed to add to the proposal
- 7) EIS will need to cover these and other questions:
  - a) How many hours per year do they operate (per area)?
    - i) How many shifts (per area)?
  - b) How old is the lighting in the facility (per area or building)?
    - i) What type of lighting technology is currently in use?
  - c) Are occupancy sensors or dimmers in use within the facility?
    - i) Where?
    - ii) Do you need any/additional included for this proposal?
  - d) What is your expected/required payback or ROI for these types of projects
  - e) Confirm if this is a turnkey proposal (material, installation, PM, disposal) or Material Only proposal
  - f) Interested in third party funding (financing) option?
    - i) EIS is able to provide a solution that brings them cash flow positive savings from electricity while providing ECM or EEM

### Itinerary:

- Monday APR-29 arrival to Lompoc City in the evening.
- Tuesday APR-30 ETA to your office @ 9:00am or before if your team is available.
  - o Establish the daily departure from the facility depending on Imerys policies for visitors
  - o If/when possible for 24-hour facilities, EIS prefers to have a short run through the areas at night-time to ensure level of illumination (OSHA/MSHA requirements, visibility, comfortability)
- Wednesday APR-31 ETA to the facility and dedicate all the time to complete the audit.
  - o Ideally, at the end of the audit, I'll have a meeting with the person in charge of the project and the maintenance manager to clarifications in scope and any Imerys additional expectations. This meeting will also formalize the closing and departure.

## Proposal LED Upgrade

Imerys Lompoc CA

2500 San Miguelito Rd, Lompoc,  
CA, 93436

**Space Information**

Area: General Office

Space Name: Engineering Office

Space Type: Office Access: Select one

Ceiling Ht: Deck Ht:

Ceiling Type: Suspended - Other

**Existing Fixture**

Fixture: OTH-INC-75W-1

Description:



Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Lamp

Brand: 35-Bulbs.com

Part no.: A19-14.5W-40K

Description: A19 / LED / E31 / 4000K / 100-277V

Quantity: 1

Controls: None

**Actual Quantity Installed****Notes****Signature**



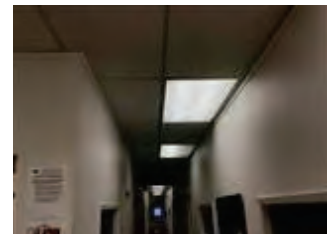
### Space Information

Area: General Office  
Space Name: Engineering Office  
Space Type: Office Access: Select one  
Ceiling Ht: Deck Ht:  
Ceiling Type: Suspended - Other

---

### Existing Fixture

Fixture: TR-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 42  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 42  
Controls: None

---

**Actual Quantity Installed**

**Notes**

---

**Signature**

**Space Information**

Area: General Office  
Space Name: Engineering Office  
Space Type: Office Access: Select one  
Ceiling Ht: Deck Ht:  
Ceiling Type: Suspended - Other

---

**Existing Fixture**

Fixture: WRP-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 11  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 11  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**



### Space Information

Area: General Office  
 Space Name: EHS  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description: 2700K



Quantity: 2  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: 35-Bulbs.com  
 Part no.: A19-14.5W-40K  
 Description: A19 / LED / E31 / 4000K / 100-277V

Quantity: 2  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: General Office

Space Name: EHS

Space Type: Office

Access: None

Ceiling Ht:

Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-1

Description: Electronic / 1 Ballast / Occupancy



Quantity: 10

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST124

Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 10

Controls: Maverick/MES-06243

**Actual Quantity Installed****Notes****Signature**

**Space Information**

Area: General Office

Space Name: EHS

Space Type: Office

Access: None

Ceiling Ht:

Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: TR-T8-4 ft-32W-2

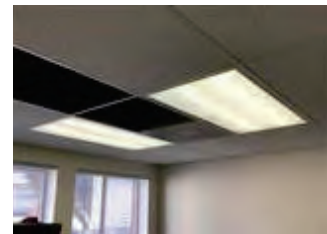
Description: Electronic / 1 Ballast

Quantity: 9

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 9

Controls: None

**Actual Quantity Installed****Notes**

---

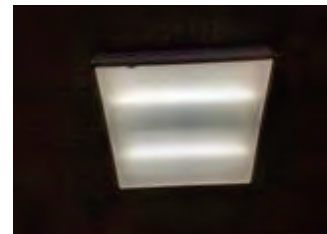
**Signature**

### Space Information

Area: General Office  
 Space Name: EHS  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: WRP-T12-2 ft-35W-2  
 Description: Magnetic / 1 Ballast



Quantity: 1  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST2230  
 Description: Linear / 2 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 1  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: General Office

Space Name: EHS

Space Type: Office

Access: None

Ceiling Ht:

Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: WRP-T8-4 ft-32W-2

Description: Electronic / 1 Ballast

Quantity: 48

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 48

Controls: None

**Actual Quantity Installed****Notes****Signature**

### Space Information

Area: General Office  
 Space Name: Management Office  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:



### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description: 2700K



Quantity: 2  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: 35-Bulbs.com  
 Part no.: A19-14.5W-40K  
 Description: A19 / LED / E31 / 4000K / 100-277V

Quantity: 2  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

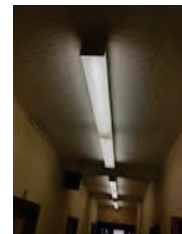
### Space Information

Area: General Office  
 Space Name: Management Office  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:



### Existing Fixture

Fixture: STR-T8-4 ft-32W-1  
 Description: Electronic / 1 Ballast / Occupancy



Quantity: 66  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST124  
 Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 66  
 Controls: Maverick/MES-06243

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: General Office  
 Space Name: Management Office  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:



### Existing Fixture

Fixture: TR-T8-4 ft-32W-2  
 Description: Electronic / 1 Ballast

Quantity: 68  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None



### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST230  
 Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 68  
 Controls: None

### Actual Quantity Installed

### Notes

Signature



### Space Information

Area: General Office  
 Space Name: Management Office  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:



### Existing Fixture

Fixture: WRP-T12-2 ft-35W-2  
 Description: Magnetic / 1 Ballast

Quantity: 1  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST2230  
 Description: Linear / 2 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 1  
 Controls: None

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: General Office  
 Space Name: Management Office  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:



### Existing Fixture

Fixture: WRP-T8-4 ft-32W-2  
 Description: Electronic / 1 Ballast



Quantity: 103  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST230  
 Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 103  
 Controls: None

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: General Office  
 Space Name: Management Office  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:



### Existing Fixture

Fixture: WRP-T8-4 ft-32W-2  
 Description: Electronic / 1 Ballast



Quantity: 17  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST230  
 Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 17  
 Controls: None

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: General Office  
 Space Name: Management Office  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:



### Existing Fixture

Fixture: WRP-T8-8 ft-59W-2  
 Description: Electronic / 1 Ballast



Quantity: 8  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST460  
 Description: Linear / 8 ft / LED / Retrofit Kit / 60W / 120-277V

Quantity: 8  
 Controls: None

### Actual Quantity Installed

### Notes

Signature

**Space Information**

Area: General Office  
Space Name: Quality Control Lab  
Space Type: Office Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 4  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 4  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

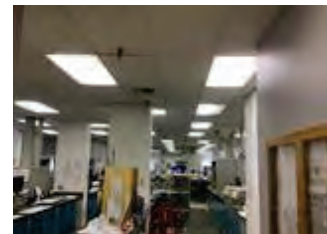
**Space Information**

Area: General Office  
Space Name: Quality Control Lab  
Space Type: Office Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: TR-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 98  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 98  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**



### Space Information

Area: General Office  
Space Name: Quality Control Lab  
Space Type: Office Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

### Existing Fixture

Fixture: WRP-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 4  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 4  
Controls: None

---

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: General Office

Space Name: Shipping

Space Type: Office Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: TR-T8-4 ft-32W-2

Description: Electronic / 1 Ballast

Quantity: 32

Voltage:

Fixture ht:

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 32

Controls: None

**Actual Quantity Installed****Notes****Signature**



**Space Information**

Area: General Office

Space Name: Gatehouse &amp; Scales

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: TR-T8-4 ft-32W-2

Description: Electronic / 1 Ballast

Quantity: 2

Voltage:

Fixture ht:

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 2

Controls: None

**Actual Quantity Installed****Notes****Signature**

### Space Information

Area: 55 Warehouse

Space Name: Warehouse B&G

Space Type: Warehouse Aisle      Access: None

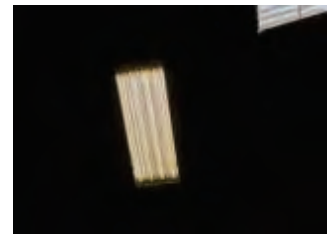
Ceiling Ht: 30.000 ft      Deck Ht:

Ceiling Type: Metal

### Existing Fixture

Fixture: HB-T5-4 ft-54W-4

Description: Electronic / 1 Ballast / Occupancy / Wireguard



Quantity: 30

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 30

Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed**

**Notes**

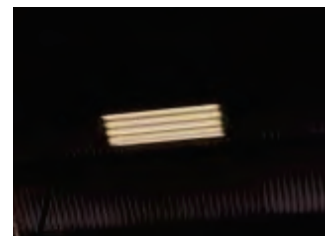
**Signature**

### Space Information

Area: 55 Warehouse  
 Space Name: Warehouse C&H  
 Space Type: Access: None  
 Ceiling Ht: 30.000 ft Deck Ht:  
 Ceiling Type: Metal

### Existing Fixture

Fixture: HB-T5-4 ft-54W-4  
 Description: Electronic / 1 Ballast / Occupancy / Wireguard



Quantity: 20  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Fixture  
 Brand: 45-Metrotech  
 Part no.: MTHBLM-70W01-5005-45  
 Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 20  
 Controls: 45-MetroTech/MTHBLM-MotionSensor

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: 55 Warehouse

Space Name: Warehouse D&E

Space Type: Warehouse Aisle      Access: None

Ceiling Ht: 30.000 ft      Deck Ht:

Ceiling Type: Metal

### Existing Fixture

Fixture: HB-T5-4 ft-54W-4

Description: Electronic / 1 Ballast / Occupancy / Wireguard



Quantity: 22

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 22

Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: 55 Warehouse

Space Name: Warehouse D&E

Space Type: Warehouse Aisle      Access: None

Ceiling Ht: 30.000 ft      Deck Ht:

Ceiling Type: Metal

### Existing Fixture

Fixture: OTH-INC-75W-1

Description:



Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Lamp

Brand: MTYL

Part no.: YL-C030SLG4-30W-57K

Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 1

Controls: None

**Actual Quantity Installed**

**Notes**

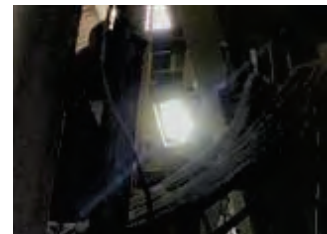
**Signature**

### Space Information

Area: 55 Warehouse  
 Space Name: Warehouse D&E  
 Space Type: Warehouse Aisle Access: None  
 Ceiling Ht: 30.000 ft Deck Ht:  
 Ceiling Type: Metal

### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description: 2700K



Quantity: 1  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: 35-Bulbs.com  
 Part no.: A19-14.5W-40K  
 Description: A19 / LED / E31 / 4000K / 100-277V

Quantity: 1  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: 55 Warehouse

Space Name: Loading Dock Wall

Space Type: Loading Dock Access: None

Ceiling Ht: 30.000 ft Deck Ht:

Ceiling Type: Metal

### Existing Fixture

Fixture: OTH-INC-75W-1

Description:



Quantity: 7

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Lamp

Brand: MTYL

Part no.: YL-C030SLG4-30W-57K

Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 7

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: 55 Warehouse

Space Name: Outside

Space Type: Access: None

Ceiling Ht: 30.000 ft Deck Ht:

Ceiling Type: Metal

### Existing Fixture

Fixture: HB-MH-250W-1

Description: Magnetic / 1 Ballast



Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 1

Controls: None

### Actual Quantity Installed

### Notes

Signature



**Space Information**

Area: 62 Warehouse  
Space Name: Warehouse Aisle  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: HB-T5-4 ft-54W-4  
Description: Electronic / 1 Ballast / Occupancy / Wireguard

Quantity: 62  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Fixture  
Brand: 45-Metrotech  
Part no.: MTHBLM-70W01-5005-45  
Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 62  
Controls: 45-MetroTech/MTHBLM-MotionSensor

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: 55 Warehouse Exterior  
Space Name: Outside Building  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: AL-MH-1000W-1  
Description: Magnetic / 1 Ballast / 277V



Quantity: 4  
Voltage: 277V  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Fixture  
Brand: 29-MetroTech  
Part no.: MTAPL-300W01-50T3-YM-29  
Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 4  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

### Space Information

Area: 55 Warehouse Exterior

Space Name: Outside Building

Space Type: Access: None

Ceiling Ht: Deck Ht:

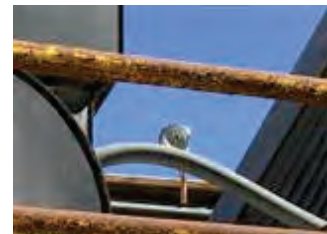
Ceiling Type:

---

### Existing Fixture

Fixture: AL-MH-1000W-1

Description: Magnetic / 1 Ballast / 277V



Quantity: 1

Voltage: 277V

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 29-MetroTech

Part no.: MTAPL-300W01-50T3-YM-29

Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 1

Controls: None

---

**Actual Quantity Installed**

**Notes**

**Signature**

---

### Space Information

Area: 55 Warehouse Exterior

Space Name: Outside Building

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: AL-MH-400W-1

Description: Magnetic / 1 Ballast / 277V



Quantity: 2

Voltage: 277V

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 29-MetroTech

Part no.: MTAPL-150W01-50T3-YM-29

Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 2

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: 55 Warehouse Exterior

Space Name: Outside Building

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: FL-LED-40W-1

Description:



Quantity: 2

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Keep

Brand: NA

Part no.: NA

Description: NA

Quantity: NA

Controls: None

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: 55 Warehouse Exterior

Space Name: Outside Building

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: OTH-MH-175W-1

Description: Magnetic / 1 Ballast



Quantity: 4

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Lamp

Brand: YouLumi

Part no.: YL-C040SLG4-40W-57K

Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 4

Controls: None

### Actual Quantity Installed

### Notes

Signature

**Space Information**

Area: 55 Warehouse Exterior  
Space Name: Scribble  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-2  
Description: Electronic / 1 Ballast



Quantity: 6  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 6  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

### Space Information

Area: 62 Warehouse Exterior

Space Name: Loading Dock

Space Type: Loading Dock Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: AL-LED-19W-1

Description:



Quantity: 3

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Lamp

Brand: MTYL

Part no.: YL-C030SLG4-30W-57K

Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 3

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**



**Space Information**

Area: 62 Warehouse Exterior  
Space Name: Loading Dock  
Space Type: Loading Dock Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: AL-LED-45W-1  
Description:



Quantity: 1  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Keep  
Brand: NA  
Part no.: NA  
Description: NA

Quantity: NA  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**



### Space Information

Area: 62 Warehouse Exterior  
Space Name: Loading Dock  
Space Type: Loading Dock Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

### Existing Fixture

Fixture: FL-LED-40W-1  
Description:



Quantity: 1  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

### Proposed Fixture

Decision: Keep  
Brand: NA  
Part no.: NA  
Description: NA

Quantity: NA  
Controls: None

---

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: 62 Warehouse Exterior  
 Space Name: Loading Dock  
 Space Type: Loading Dock Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: WP-MH-175W-1  
 Description: Magnetic / 1 Ballast



Quantity: 1  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Fixture  
 Brand:  
 Part no.: MES-SWP02-55BA2-A-44  
 Description: Wall Mount / Security / LED / 55W / 120-277V

Quantity: 1  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Central Waste

Space Name: MCC room

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: OTH-MH-175W-1

Description: Magnetic / 1 Ballast

Quantity: 7

Voltage:

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Lamp

Brand: YouLumi

Part no.: YL-C040SLG4-40W-57K

Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 7

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: Central Waste

Space Name: MCC room

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-2

Description: Electronic / 1 Ballast



Quantity: 4

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 4

Controls: None

**Actual Quantity Installed****Notes****Signature**

**Space Information**

Area: Central Waste

Space Name: CW

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: AL-INC-75W-1

Description:



Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Lamp

Brand: MTYL

Part no.: YL-C030SLG4-30W-57K

Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 1

Controls: None

**Actual Quantity Installed****Notes****Signature**

### Space Information

Area: Central Waste

Space Name: CW

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: FL-MH-175W-1

Description: Magnetic / 1 Ballast

Quantity: 2

Voltage:

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Fixture

Brand: 29-MetroTech

Part no.: MTAPL-50W01-50T3-AM-29

Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 2

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Central Waste

Space Name: CW

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: HB-MH-175W-1

Description: Magnetic / 1 Ballast

Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 1

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**



**Space Information**

Area: Central Waste

Space Name: CW

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: OTH-MH-175W-1

Description: Magnetic / 1 Ballast

Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Lamp

Brand: YouLumi

Part no.: YL-C040SLG4-40W-57K

Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 1

Controls: None

**Actual Quantity Installed****Notes****Signature**

**Space Information**

Area: Central Waste

Space Name: CW

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-2

Description: Electronic / 1 Ballast



Quantity: 4

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 4

Controls: None

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: 7 Kiln  
Space Name: Manufacturer Floor  
Space Type: Manufacturer Floor Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: OTH-MH-175W-1  
Description: Magnetic / 1 Ballast



Quantity: 18  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Fixture  
Brand: 29-MetroTech  
Part no.: MTAPL-50W01-50T3-YM-29  
Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 18  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: 7 Kiln  
Space Name: Manufacturer Floor  
Space Type: Manufacturer Floor Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: OTH-T12-8 ft-60W-2  
Description: Magnetic / 1 Ballast



Quantity: 4  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST460  
Description: Linear / 8 ft / LED / Retrofit Kit / 60W / 120-277V

Quantity: 4  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

### Space Information

Area: 7 Kiln

Space Name: Manufacturer Floor

Space Type: Manufacturer Floor Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: VT-T5-4 ft-54W-2

Description: Electronic / 1 Ballast



Quantity: 6

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 6

Controls: None

### Actual Quantity Installed

### Notes

Signature

**Space Information**

Area: 7 Kiln  
Space Name: 7 Kiln MCC  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-2  
Description: Electronic / 1 Ballast

Quantity: 19  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 19  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

### Space Information

Area: 7 Kiln

Space Name: 7 Wet

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: AL-MH-1000W-1

Description: Magnetic / 1 Ballast / 277V

Quantity: 1

Voltage: 277V

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Fixture

Brand: 29-MetroTech

Part no.: MTAPL-300W01-50T3-YM-29

Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 1

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: 7 Kiln

Space Name: 7 Wet

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

---

**Existing Fixture**

Fixture: HB-MH-250W-1

Description: Magnetic / 1 Ballast

Quantity: 2

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 2

Controls: None

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**Actual Quantity Installed****Notes**

---

**Signature**



**Space Information**

Area: 7 Kiln

Space Name: 7 Wet

Space Type: Access: None

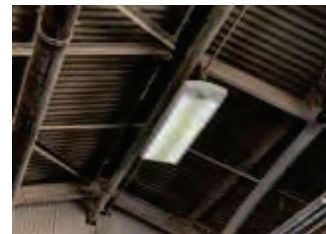
Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: HB-T5-4 ft-54W-4

Description: Electronic / 1 Ballast / Occupancy / Wireguard



Quantity: 5

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 5

Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed****Notes****Signature**

### Space Information

Area: 7 Kiln

Space Name: 7 Wet

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: OTH-MH-175W-1

Description: Magnetic / 1 Ballast

Quantity: 28

Voltage:

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Lamp

Brand: YouLumi

Part no.: YL-C040SLG4-40W-57K

Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 28

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**



### Space Information

Area: 7 Kiln

Space Name: 7 Wet

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: VT-T5-4 ft-54W-2

Description: Electronic / 1 Ballast



Quantity: 72

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 72

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: 7 Kiln

Space Name: 7 Dry

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: FL-MH-175W-1

Description: Magnetic / 1 Ballast

Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Fixture

Brand: 29-MetroTech

Part no.: MTAPL-50W01-50T3-YM-29

Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 1

Controls: None

**Actual Quantity Installed****Notes****Signature**

**Space Information**

Area: 7 Kiln

Space Name: 7 Dry

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: HB-MH-175W-1

Description: Magnetic / 1 Ballast

Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 1

Controls: None

**Actual Quantity Installed****Notes****Signature**

**Space Information**

Area: 7 Kiln

Space Name: 7 Dry

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

---

**Existing Fixture**

Fixture: OTH-MH-175W-1

Description: Magnetic / 1 Ballast

Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Lamp

Brand: YouLumi

Part no.: YL-C040SLG4-40W-57K

Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 1

Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: 7 Kiln

Space Name: 7 Dry

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-2

Description: Electronic / 1 Ballast

Quantity: 64

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 64

Controls: None

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: 7 Kiln

Space Name: 7 Dry

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: WP-MH-175W-1

Description: Magnetic / 1 Ballast

Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Fixture

Brand:

Part no.: MES-SWP02-55BA2-A-44

Description: Wall Mount / Security / LED / 55W / 120-277V

Quantity: 1

Controls: None

**Actual Quantity Installed****Notes****Signature**



**Space Information**

Area: 6 Kiln

Space Name: 6 Dry A&amp;B Office

Space Type: Office

Access: None

Ceiling Ht:

Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: STR-LED-35W-1

Description:



Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Keep

Brand: NA

Part no.: NA

Description: NA

Quantity: NA

Controls: None

**Actual Quantity Installed****Notes**

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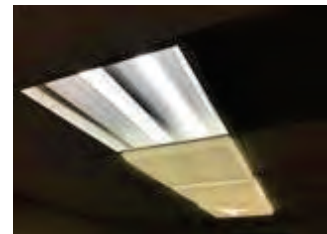
**Signature**

### Space Information

Area: 6 Kiln  
 Space Name: 6 Dry A&B Office  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: TR-T8-4 ft-32W-2  
 Description: Electronic / 1 Ballast



Quantity: 4  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST230  
 Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 4  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: 6 Kiln

Space Name: 6 Dry Exterior

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

---

**Existing Fixture**

Fixture: NA

Description: NA

Quantity: NA

Voltage: NA

Fixture ht: NA

Controls: NA

**Proposed Fixture**

Decision: Replace Lamp

Brand: YouLumi

Part no.: YL-C040SLG4-40W-57K

Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 1

Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**



### Space Information

Area: 6 Kiln

Space Name: Exterior Walls

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: DL-LED-19W-1

Description:



Quantity: 3

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Keep

Brand: NA

Part no.: NA

Description: NA

Quantity: NA

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: 6 Kiln  
 Space Name: Exterior Walls  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-INC-100W-1  
 Description:



Quantity: 6  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 6  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: 6 Kiln

Space Name: Exterior Walls

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: OTH-MH-175W-1

Description: Magnetic / 1 Ballast



Quantity: 9

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Lamp

Brand: YouLumi

Part no.: YL-C040SLG4-40W-57K

Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 9

Controls: None

### Actual Quantity Installed

### Notes

Signature

**Space Information**

Area: 6 Kiln  
Space Name: 6 Dry Maintenance  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-8 ft-86W-2  
Description: Electronic / 1 Ballast



Quantity: 16  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST460  
Description: Linear / 8 ft / LED / Retrofit Kit / 60W / 120-277V

Quantity: 16  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: 6 Kiln  
Space Name: 6 Dry Maintenance  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-2  
Description: Electronic / 1 Ballast



Quantity: 1  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 1  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**



### Space Information

Area: 6 Kiln  
 Space Name: 6 Dry Control Room  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: HB-MH-250W-1  
 Description: Magnetic / 1 Ballast



Quantity: 2  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Fixture  
 Brand: 45-Metrotech  
 Part no.: MTHBLM-70W01-5005-45  
 Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 2  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: 6 Kiln

Space Name: 6 Dry Control Room

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: OTH-MH-175W-1

Description: Magnetic / 1 Ballast



Quantity: 4

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Lamp

Brand: YouLumi

Part no.: YL-C040SLG4-40W-57K

Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 4

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: 6 Kiln

Space Name: 6 Dry Control Room

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: STR-T12-4 ft-34W-2

Description: Magnetic / 1 Ballast



Quantity: 2

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 2

Controls: None

**Actual Quantity Installed****Notes**

---

Signature

**Space Information**

Area: 6 Kiln  
Space Name: 6 Dry Control Room  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 2  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 2  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: 6 Kiln

Space Name: 6 Dry Control Room

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: STR-T8-8 ft-86W-2

Description: Electronic / 1 Ballast

Quantity: 11

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST460

Description: Linear / 8 ft / LED / Retrofit Kit / 60W / 120-277V

Quantity: 11

Controls: None

**Actual Quantity Installed****Notes**

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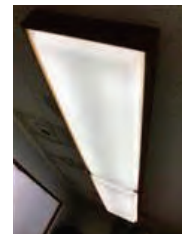
**Signature**

### Space Information

Area: 6 Kiln  
 Space Name: 6 Dry Control Room  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: WRP-T8-4 ft-32W-2  
 Description: Electronic / 1 Ballast



Quantity: 2  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST230  
 Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 2  
 Controls: None

### Actual Quantity Installed

### Notes

Signature



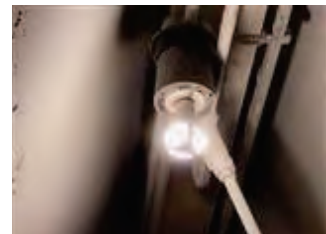
### Space Information

Area: 46 Warehouse  
Space Name: Warehouse Aisle  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

### Existing Fixture

Fixture: DL-LED-19W-1  
Description:



Quantity: 3  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

### Proposed Fixture

Decision: Keep  
Brand: NA  
Part no.: NA  
Description: NA

Quantity: NA  
Controls: None

---

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: 46 Warehouse  
 Space Name: Warehouse Aisle  
 Space Type: Warehouse Aisle Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: HB-MH-250W-1  
 Description: Magnetic / 1 Ballast



Quantity: 10  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Fixture  
 Brand: 45-Metrotech  
 Part no.: MTHBLM-70W01-5005-45  
 Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 10  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**



### Space Information

Area: 46 Warehouse

Space Name: Warehouse Aisle

Space Type: Warehouse Aisle Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: HB-T5-4 ft-54W-4

Description: Electronic / 1 Ballast / Occupancy / Wireguard

Quantity: 57

Voltage:

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 57

Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: 46 Warehouse  
Space Name: Warehouse Aisle  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: OTH-INC-100W-1  
Description:



Quantity: 9  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Lamp  
Brand: MTYL  
Part no.: YL-C030SLG4-30W-57K  
Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 9  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: 46 Warehouse  
Space Name: Warehouse Aisle  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: OTH-INC-75W-1  
Description:



Quantity: 9  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Lamp  
Brand: 35-Bulbs.com  
Part no.: A19-14.5W-40K  
Description: A19 / LED / E31 / 4000K / 100-277V

Quantity: 9  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

### Space Information

Area: 46 Warehouse  
 Space Name: Warehouse Aisle  
 Space Type: Warehouse Aisle Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-MH-175W-1  
 Description: Magnetic / 1 Ballast



Quantity: 11  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: YouLumi  
 Part no.: YL-C040SLG4-40W-57K  
 Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 11  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: 46 Warehouse  
 Space Name: Warehouse Aisle  
 Space Type: Warehouse Aisle Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: STR-T8-4 ft-32W-1  
 Description: Electronic / 1 Ballast / Occupancy



Quantity: 18  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST124  
 Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 18  
 Controls: Maverick/MES-06243

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: 46 Warehouse

Space Name: Warehouse Aisle

Space Type: Warehouse Aisle Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: STR-T8-4 ft-32W-2

Description: Electronic / 1 Ballast



Quantity: 2

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 2

Controls: None

### Actual Quantity Installed

### Notes

Signature

**Space Information**

Area: 46 Warehouse  
Space Name: Warehouse Aisle  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-8 ft-86W-2  
Description: Electronic / 1 Ballast



Quantity: 8  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST460  
Description: Linear / 8 ft / LED / Retrofit Kit / 60W / 120-277V

Quantity: 8  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: 46 Warehouse  
Space Name: Warehouse Aisle  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-1  
Description: Electronic / 1 Ballast



Quantity: 82  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST124  
Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 82  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**



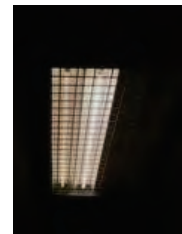
**Space Information**

Area: 46 Warehouse  
Space Name: Warehouse Aisle  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-2  
Description: Electronic / 1 Ballast



Quantity: 17  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 17  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Exterior  
Space Name: Parking & Roads  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: AL-MH-1000W-1  
Description: Magnetic / 1 Ballast / 480V



Quantity: 20  
Voltage: 480V  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Fixture  
Brand: 09-MetroTech  
Part no.: MTALSB-3009-50T3YM-09  
Description: Area Light / Shoebox / LED / 5000K / 200-480V

Quantity: 20  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

### Space Information

Area: Exterior

Space Name: Parking & Roads

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: AL-MH-400W-1

Description: Magnetic / 1 Ballast / 480V



Quantity: 3

Voltage: 480V

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 09-MetroTech

Part no.: MTALSB-1509-50T3AM-09

Description: Area Light / Shoebox / LED / 5000K / 200-480V

Quantity: 3

Controls: None

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: Exterior

Space Name: Parking & Roads

Space Type: Access: None

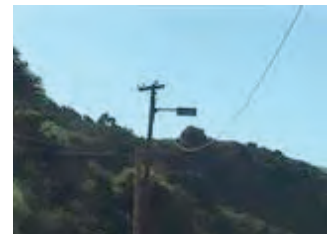
Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: AL-MH-400W-1

Description: Magnetic / 1 Ballast / 480V



Quantity: 1

Voltage: 480V

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 09-MetroTech

Part no.: MTALSB-1509-50T3DM-09

Description: Area Light / Shoebox / LED / 5000K / 200-480V

Quantity: 1

Controls: None

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: Exterior

Space Name: Parking & Roads

Space Type: Access: None

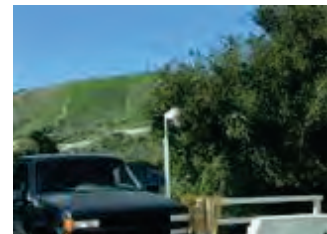
Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: OTH-MH-175W-1

Description: Magnetic / 1 Ballast



Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Lamp

Brand: YouLumi

Part no.: YL-C040SLG4-40W-57K

Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 1

Controls: None

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: Exterior

Space Name: Parking & Roads

Space Type: Access: None

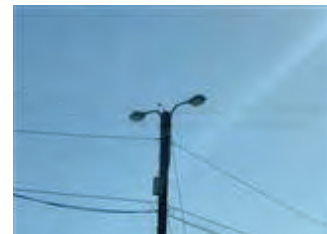
Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: PGR-MH-400W-1

Description: Magnetic / 1 Ballast / 480V



Quantity: 2

Voltage: 480V

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 09-MetroTech

Part no.: MTALSB-1509-50T3AM-09

Description: Area Light / Shoebox / LED / 5000K / 200-480V

Quantity: 2

Controls: None

### Actual Quantity Installed

### Notes

Signature

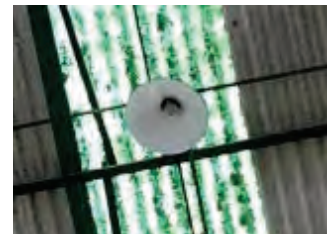
**Space Information**

Area: Specialties  
Space Name: 2266 Warehouse  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: HB-MH-250W-1  
Description: Magnetic / 1 Ballast



Quantity: 1  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Fixture  
Brand: 45-Metrotech  
Part no.: MTHBLM-70W01-5005-45  
Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 1  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Specialties  
Space Name: 2266 Warehouse  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: HB-T5-4 ft-54W-4  
Description: Electronic / 1 Ballast / Occupancy / Wireguard



Quantity: 8  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Fixture  
Brand: 45-Metrotech  
Part no.: MTHBLM-70W01-5005-45  
Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 8  
Controls: 45-MetroTech/MTHBLM-MotionSensor

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**Actual Quantity Installed****Notes**

---

**Signature**



### Space Information

Area: Specialties  
 Space Name: 2266 Warehouse  
 Space Type: Warehouse Aisle Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description: 2700K



Quantity: 10  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 10  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

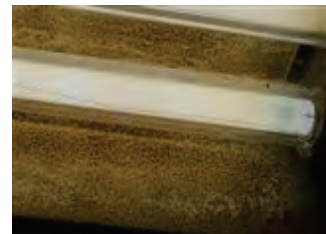
**Space Information**

Area: Specialties  
Space Name: 2266 Warehouse  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T12-4 ft-34W-2  
Description: Magnetic / 1 Ballast



Quantity: 6  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 6  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Specialties  
Space Name: 2266 Warehouse  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-1  
Description: Electronic / 1 Ballast / Occupancy



Quantity: 54  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST124  
Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 54  
Controls: Maverick/MES-06243

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**Actual Quantity Installed****Notes**

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**Signature**

**Space Information**

Area: Specialties  
Space Name: 2266 Warehouse  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 1  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 1  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Specialties  
Space Name: 2266 Warehouse  
Space Type: Warehouse Aisle Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: TR-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 16  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 16  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**



### Space Information

Area: Specialties  
Space Name: 2266 WH Exterior  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

### Existing Fixture

Fixture: AL-INC-75W-1  
Description:



Quantity: 3  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

### Proposed Fixture

Decision: Replace Lamp  
Brand: MTYL  
Part no.: YL-C030SLG4-30W-57K  
Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 3  
Controls: None

---

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Specialties  
 Space Name: 2266 WH Exterior  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: AL-MH-1000W-1  
 Description: Magnetic / 1 Ballast / 277V



Quantity: 1  
 Voltage: 277V  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Fixture  
 Brand: 29-MetroTech  
 Part no.: MTAPL-300W01-50T3-YM-29  
 Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 1  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

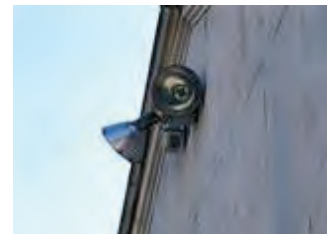
**Space Information**

Area: Specialties  
Space Name: 2266 WH Exterior  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: AL-MH-1000W-1  
Description: Magnetic / 1 Ballast / 277V



Quantity: 2  
Voltage: 277V  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Fixture  
Brand: 29-MetroTech  
Part no.: MTAPL-300W01-50T3-YM-29  
Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 2  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**



**Space Information**

Area: Specialties  
Space Name: 2266 WH Exterior  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: OTH-INC-75W-1  
Description:



Quantity: 2  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Lamp  
Brand: MTYL  
Part no.: YL-C030SLG4-30W-57K  
Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 2  
Controls: None

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**Actual Quantity Installed****Notes**

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**Signature**

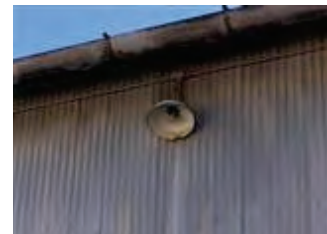
### Space Information

Area: Specialties  
 Space Name: 2266 WH Exterior  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

---

### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description: 2700K



Quantity: 10  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 10  
 Controls: None

---

**Actual Quantity Installed**

**Notes**

---

**Signature**

### Space Information

Area: Specialties  
 Space Name: 2266 WH Exterior  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-MH-175W-1  
 Description: Magnetic / 1 Ballast



Quantity: 2  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: YouLumi  
 Part no.: YL-C040SLG4-40W-57K  
 Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 2  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Specialties  
 Space Name: 2266 WH Exterior  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: WP-MH-175W-1  
 Description: Magnetic / 1 Ballast



Quantity: 1  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Fixture  
 Brand:  
 Part no.: MES-SWP02-55BA2-A-44  
 Description: Wall Mount / Security / LED / 55W / 120-277V

Quantity: 1  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Specialties  
 Space Name: Specialties WH  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: HB-T5-4 ft-54W-4  
 Description: Electronic / 1 Ballast / Occupancy / Wireguard  
 Quantity: 19  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None



### Proposed Fixture

Decision: Replace Fixture  
 Brand: 45-Metrotech  
 Part no.: MTHBLM-70W01-5005-45  
 Description: Highbay / Round / LED / 5000K / 100-277V  
 Quantity: 19  
 Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Specialties  
 Space Name: Specialties WH  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description: 2700K



Quantity: 71  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 71  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: Specialties  
Space Name: Specialties WH  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: OTH-MH-175W-1  
Description: Magnetic / 1 Ballast



Quantity: 2  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Lamp  
Brand: YouLumi  
Part no.: YL-C040SLG4-40W-57K  
Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 2  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Specialties  
Space Name: Specialties WH  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-1  
Description: Electronic / 1 Ballast / Occupancy



Quantity: 10  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST124  
Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 10  
Controls: Maverick/MES-06243

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**Actual Quantity Installed****Notes**

---

**Signature**



### Space Information

Area: Specialties  
 Space Name: Specialties WH  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: WP-MH-175W-1  
 Description: Magnetic / 1 Ballast



Quantity: 2  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Fixture  
 Brand:  
 Part no.: MES-SWP02-55BA2-A-44  
 Description: Wall Mount / Security / LED / 55W / 120-277V

Quantity: 2  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Specialties  
 Space Name: Specialties WH Exterior  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: AL-LED-18W-1  
 Description:



Quantity: 4  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Keep  
 Brand: NA  
 Part no.: NA  
 Description: NA

Quantity: NA  
 Controls: None

### Actual Quantity Installed

### Notes

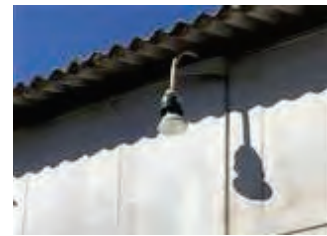
Signature

### Space Information

Area: Specialties  
 Space Name: Specialties WH Exterior  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: FL-INC-65W-1  
 Description:



Quantity: 3  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 3  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Specialties  
 Space Name: Specialties WH Exterior  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-INC-100W-1  
 Description:



Quantity: 16  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 16  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Specialties  
 Space Name: Specialties WH Exterior  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description: 2700K



Quantity: 4  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 4  
 Controls: None

**Actual Quantity Installed**

**Notes**

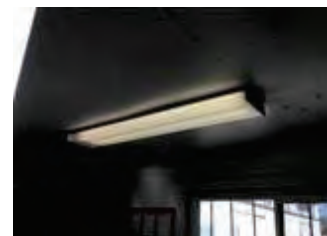
**Signature**

### Space Information

Area: Specialties  
 Space Name: Contractor Trailer  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: WRP-T8-4 ft-32W-2  
 Description: Electronic / 1 Ballast



Quantity: 4  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST230  
 Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 4  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Silicate plant

Space Name: Silicate Maintenance Shop

Space Type: Access: None

Ceiling Ht: Deck Ht:

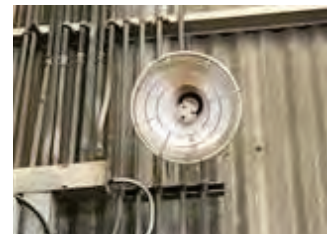
Ceiling Type:

---

### Existing Fixture

Fixture: OTH-LED-19W-1

Description: 2700K



Quantity: 6

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Lamp

Brand: MTYL

Part no.: YL-C030SLG4-30W-57K

Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 6

Controls: None

---

**Actual Quantity Installed**

**Notes**

**Signature**

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### Space Information

Area: Silicate plant

Space Name: Silicate Maintenance Shop

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: STR-T8-4 ft-32W-1

Description: Electronic / 1 Ballast / Occupancy



Quantity: 26

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST124

Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 26

Controls: Maverick/MES-06243

### Actual Quantity Installed

### Notes

Signature



### Space Information

Area: Silicate plant

Space Name: Silicate Maintenance Shop

Space Type: Access: None

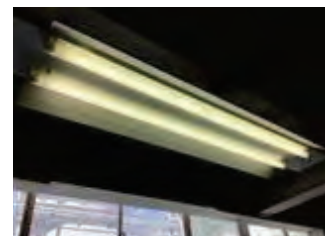
Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: STR-T8-4 ft-32W-2

Description: Electronic / 1 Ballast



Quantity: 3

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 3

Controls: None

### Actual Quantity Installed

### Notes

Signature

**Space Information**

Area: Silicate plant  
Space Name: Silicate Maintenance Shop  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: WRP-T8-8 ft-59W-2  
Description: Electronic / 1 Ballast



Quantity: 4  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST460  
Description: Linear / 8 ft / LED / Retrofit Kit / 60W / 120-277V

Quantity: 4  
Controls: None

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**Actual Quantity Installed****Notes**

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**Signature**

### Space Information

Area: Silicate plant

Space Name: Processing Area

Space Type: Access: None

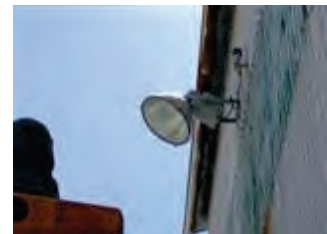
Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: AL-MH-1000W-1

Description: Magnetic / 1 Ballast / 277V



Quantity: 3

Voltage: 277V

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 29-MetroTech

Part no.: MTAPL-300W01-50T3-YM-29

Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 3

Controls: None

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: Silicate plant

Space Name: Processing Area

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: HB-MH-175W-1

Description: Magnetic / 1 Ballast



Quantity: 1

Voltage:

Fixture ht:

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 1

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Silicate plant

Space Name: Processing Area

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: HB-T5-4 ft-54W-4

Description: Electronic / 1 Ballast / Occupancy / Wireguard



Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 1

Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: Silicate plant

Space Name: Processing Area

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: OTH-INC-75W-1

Description:



Quantity: 3

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Lamp

Brand: MTYL

Part no.: YL-C030SLG4-30W-57K

Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 3

Controls: None

**Actual Quantity Installed****Notes****Signature**

### Space Information

Area: Silicate plant  
 Space Name: Processing Area  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description:



Quantity: 154  
 Voltage:  
 Fixture ht:  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 154  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Silicate plant

Space Name: Processing Area

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: OTH-LED-19W-1

Description:



Quantity: 65

Voltage:

Fixture ht:

Controls: None

### Proposed Fixture

Decision: Replace Lamp

Brand: MTYL

Part no.: YL-C030SLG4-30W-57K

Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 65

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**



### Space Information

Area: Silicate plant

Space Name: Processing Area

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

---

### Existing Fixture

Fixture: OTH-MH-175W-1

Description: Magnetic / 1 Ballast



Quantity: 2

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Lamp

Brand: YouLumi

Part no.: YL-C040SLG4-40W-57K

Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 2

Controls: None

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**Actual Quantity Installed**

**Notes**

**Signature**

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### Space Information

Area: Silicate plant

Space Name: Processing Area

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: OTH-MH-175W-1

Description: Magnetic / 1 Ballast



Quantity: 2

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Lamp

Brand: YouLumi

Part no.: YL-C040SLG4-40W-57K

Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 2

Controls: None

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: Silicate plant

Space Name: Processing Area

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: STR-T8-4 ft-32W-1

Description: Electronic / 1 Ballast / Occupancy



Quantity: 36

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST124

Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 36

Controls: Maverick/MES-06243

### Actual Quantity Installed

### Notes

Signature

**Space Information**

Area: Silicate plant

Space Name: Processing Area

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-2

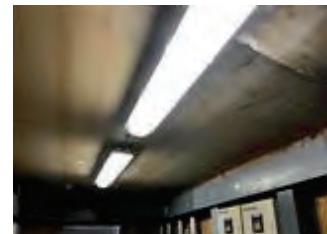
Description: Electronic / 1 Ballast

Quantity: 22

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 22

Controls: None

**Actual Quantity Installed****Notes**

---

Signature

### Space Information

Area: Silicate plant

Space Name: Processing Area

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: WP-MH-250W-1

Description: Magnetic / 1 Ballast



Quantity: 7

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand:

Part no.: MES-SWP02-80BA2-A-44

Description: Wall Mount / Security / LED / 80W / 120-277V

Quantity: 7

Controls: None

### Actual Quantity Installed

### Notes

Signature



### Space Information

Area: Silicate plant  
Space Name: Silicate Building Exterior  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

### Existing Fixture

Fixture: NA  
Description: NA

Quantity: NA  
Voltage: NA  
Fixture ht: NA  
Controls: NA

### Proposed Fixture

Decision: Replace Fixture  
Brand: 29-MetroTech  
Part no.: MTAPL-50W01-50T3-YM-29  
Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 3  
Controls: None

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**Actual Quantity Installed**

**Notes**

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**Signature**

### Space Information

Area: Silicate plant  
 Space Name: Silicate Building Exterior  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description: 2700K



Quantity: 1  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 1  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Silicate plant

Space Name: Silicate Building Exterior

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

---

### Existing Fixture

Fixture: WP-MH-175W-1

Description: Magnetic / 1 Ballast



Quantity: 2

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand:

Part no.: MES-SWP02-55BA2-A-44

Description: Wall Mount / Security / LED / 55W / 120-277V

Quantity: 2

Controls: None

---

**Actual Quantity Installed**

**Notes**

**Signature**

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### Space Information

Area: Silicate plant

Space Name: Silicate Warehouse

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:



### Existing Fixture

Fixture: HB-T5-4 ft-54W-4

Description: Electronic / 1 Ballast / Occupancy / Wireguard

Quantity: 20

Voltage:

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 20

Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Silicate plant

Space Name: Silicate Warehouse

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:



### Existing Fixture

Fixture: VT-T5-4 ft-54W-2

Description: Electronic / 1 Ballast

Quantity: 28

Voltage:

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 28

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**



### Space Information

Area: Silicate plant  
Space Name: Silicate Tanks Offices  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

### Existing Fixture

Fixture: STR-T12-4 ft-34W-2  
Description: Magnetic / 1 Ballast

Quantity: 4  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 4  
Controls: None

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**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Silicate plant

Space Name: Silicate Tanks Offices

Space Type: Access: None

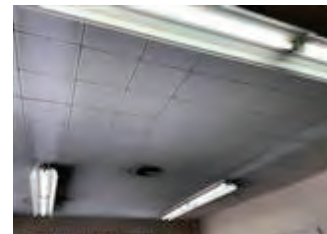
Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: STR-T8-4 ft-32W-1

Description: Electronic / 1 Ballast / Occupancy



Quantity: 36

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST124

Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 36

Controls: Maverick/MES-06243

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: Silicate plant

Space Name: Silicate Tanks Offices

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: TR-T8-4 ft-32W-2

Description: Electronic / 1 Ballast



Quantity: 12

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 12

Controls: None

### Actual Quantity Installed

### Notes

Signature

### Space Information

Area: Silicate plant

Space Name: Silicate Tanks Offices

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

---

### Existing Fixture

Fixture: WP-MH-175W-1

Description: Magnetic / 1 Ballast



Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand:

Part no.: MES-SWP02-55BA2-A-44

Description: Wall Mount / Security / LED / 55W / 120-277V

Quantity: 1

Controls: None

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**Actual Quantity Installed**

**Notes**

**Signature**

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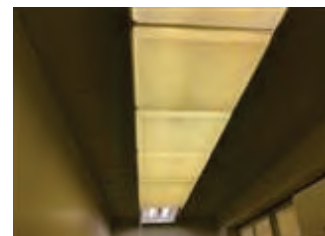
**Space Information**

Area: Silicate plant  
Space Name: Silicate Tanks Offices  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: WRP-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 8  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 8  
Controls: None

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**Actual Quantity Installed****Notes**

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**Signature**

### Space Information

Area: Celpure Plant

Space Name: Celpure

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:



### Existing Fixture

Fixture: HB-T5-4 ft-54W-4

Description: Electronic / 1 Ballast / Occupancy / Wireguard

Quantity: 36

Voltage:

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 36

Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed**

**Notes**

**Signature**



### Space Information

Area: Celpure Plant

Space Name: Celpure

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:



### Existing Fixture

Fixture: OTH-MH-175W-1

Description: Magnetic / 1 Ballast

Quantity: 8

Voltage:

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Lamp

Brand: YouLumi

Part no.: YL-C040SLG4-40W-57K

Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 8

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Celpure Plant

Space Name: Celpure

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:



### Existing Fixture

Fixture: STR-T8-4 ft-32W-2

Description: Electronic / 1 Ballast / Occupancy

Quantity: 16

Voltage:

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 16

Controls: Maverick/MES-06243

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: Celpure Plant

Space Name: Celpure

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-2

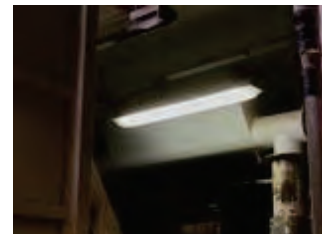
Description: Electronic / 1 Ballast

Quantity: 49

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 49

Controls: None

**Actual Quantity Installed****Notes****Signature**

**Space Information**

Area: Celpure Plant

Space Name: Celpure

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: WP-MH-250W-1

Description: Magnetic / 1 Ballast

Quantity: 2

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Fixture

Brand:

Part no.: MES-SWP02-80BA2-A-44

Description: Wall Mount / Security / LED / 80W / 120-277V

Quantity: 2

Controls: None

**Actual Quantity Installed****Notes**

---

**Signature**

### Space Information

Area: Celpure Plant  
 Space Name: Celpure Exterior  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:



### Existing Fixture

Fixture: AL-MH-400W-1  
 Description: Magnetic / 1 Ballast / 277V



Quantity: 2  
 Voltage: 277V  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Fixture  
 Brand: 29-MetroTech  
 Part no.: MTAPL-150W01-50T3-AM-29  
 Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 2  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

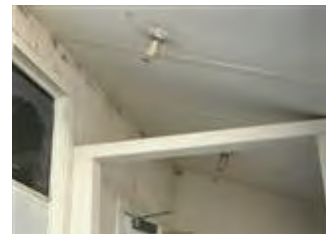
**Space Information**

Area: Lockers  
Space Name: Breakroom Building  
Space Type: Restroom Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: OTH-LED-19W-1  
Description: 2700K



Quantity: 5  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Lamp  
Brand: MTYL  
Part no.: YL-C030SLG4-30W-57K  
Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 5  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Lockers  
Space Name: Breakroom Building  
Space Type: Restroom Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 10  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 10  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

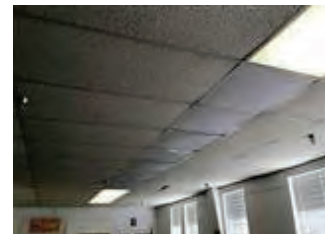
**Space Information**

Area: Lockers  
Space Name: Breakroom Building  
Space Type: Restroom Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: TR-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 15  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 15  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**



**Space Information**

Area: Lockers  
Space Name: Breakroom Building  
Space Type: Restroom Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: WRP-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 5  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 5  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Q&M  
Space Name: Q&M Office  
Space Type: Office Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: TR-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast

Quantity: 50  
Voltage:  
Fixture ht:  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 50  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Q&M  
Space Name: Q&M Maintenance  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-1  
Description: Electronic / 1 Ballast

Quantity: 15  
Voltage:  
Fixture ht:  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST124  
Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 15  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Q&M  
Space Name: Greenhouse  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: HB-T5-4 ft-54W-4  
Description: Electronic / 1 Ballast / Occupancy

Quantity: 6  
Voltage:  
Fixture ht:  
Controls: None

**Proposed Fixture**

Decision: Replace Fixture  
Brand: 45-Metrotech  
Part no.: MTHBLM-70W01-5005-45  
Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 6  
Controls: 45-MetroTech/MTHBLM-MotionSensor

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Q&M  
Space Name: Q&M-Maintenance  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: HB-T5-4 ft-54W-4  
Description: Electronic / 1 Ballast / Occupancy

Quantity: 9  
Voltage:  
Fixture ht:  
Controls: None

**Proposed Fixture**

Decision: Replace Fixture  
Brand: 45-Metrotech  
Part no.: MTHBLM-70W01-5005-45  
Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 9  
Controls: 45-MetroTech/MTHBLM-MotionSensor

---

**Actual Quantity Installed****Notes**

---

**Signature**

### Space Information

Area: Maintenance Shops  
 Space Name: Heavy Duty Garage  
 Space Type: Mechanical Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

---

### Existing Fixture

Fixture: AL-MH-1000W-1  
 Description: Magnetic / 1 Ballast / 277V



Quantity: 9  
 Voltage: 277V  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Fixture  
 Brand: 29-MetroTech  
 Part no.: MTAPL-300W01-50T3-YM-29  
 Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 9  
 Controls: None

---

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Maintenance Shops

Space Name: Heavy Duty Garage

Space Type: Mechanical      Access: None

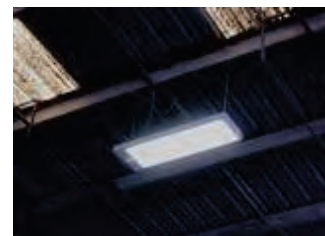
Ceiling Ht:      Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: HB-T5-4 ft-54W-4

Description: Electronic / 1 Ballast / Occupancy / Wireguard



Quantity: 14

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 14

Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed**

**Notes**

**Signature**

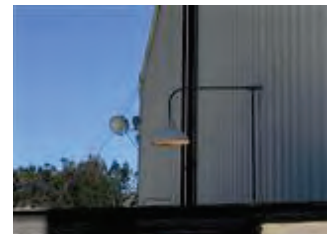
**Space Information**

Area: Maintenance Shops  
Space Name: Heavy Duty Garage  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: OTH-LED-19W-1  
Description: 2700K



Quantity: 5  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Lamp  
Brand: MTYL  
Part no.: YL-C030SLG4-30W-57K  
Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 5  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**



**Space Information**

Area: Maintenance Shops  
Space Name: Heavy Duty Garage  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-1  
Description: Electronic / 1 Ballast / Occupancy



Quantity: 27  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 27  
Controls: Maverick/MES-06243

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**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Maintenance Shops  
Space Name: Light Duty Garage  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: HB-T5-4 ft-54W-4  
Description: Electronic / 1 Ballast / Occupancy / Wireguard



Quantity: 4  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Fixture  
Brand: 45-Metrotech  
Part no.: MTHBLM-70W01-5005-45  
Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 4  
Controls: 45-MetroTech/MTHBLM-MotionSensor

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**Actual Quantity Installed****Notes**

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**Signature**

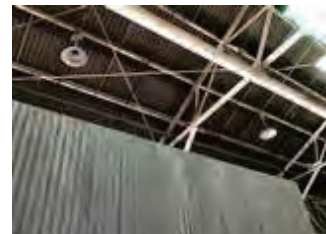
**Space Information**

Area: Maintenance Shops  
Space Name: Light Duty Garage  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: OTH-LED-19W-1  
Description: 2700K



Quantity: 5  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Lamp  
Brand: MTYL  
Part no.: YL-C030SLG4-30W-57K  
Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 5  
Controls: None

---

**Actual Quantity Installed****Notes**

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**Signature**

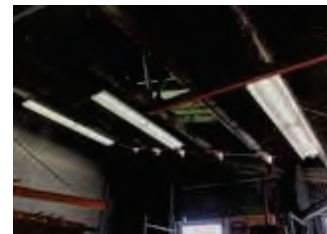
**Space Information**

Area: Maintenance Shops  
Space Name: Light Duty Garage  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-1  
Description: Electronic / 1 Ballast / Occupancy



Quantity: 16  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST124  
Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 16  
Controls: Maverick/MES-06243

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**Actual Quantity Installed****Notes**

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**Signature**

### Space Information

Area: Maintenance Shops

Space Name: Electric Shop

Space Type: Mechanical Access: None

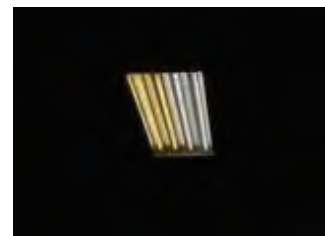
Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: HB-T5-4 ft-54W-4

Description: Electronic / 1 Ballast / Occupancy / Wireguard



Quantity: 9

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 9

Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Maintenance Shops  
 Space Name: Electric Shop  
 Space Type: Mechanical Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description: 2700K



Quantity: 3  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 3  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Maintenance Shops

Space Name: Electric Shop

Space Type: Mechanical Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

---

### Existing Fixture

Fixture: STR-T8-4 ft-32W-1

Description: Electronic / 1 Ballast / Occupancy



Quantity: 24

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST124

Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 24

Controls: Maverick/MES-06243

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**Actual Quantity Installed**

**Notes**

**Signature**

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**Space Information**

Area: Maintenance Shops  
Space Name: Electric Shop  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-2  
Description: Electronic / 1 Ballast



Quantity: 1  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 1  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**



### Space Information

Area: Maintenance Shops

Space Name: Electric Shop

Space Type: Mechanical Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

---

### Existing Fixture

Fixture: WP-MH-250W-1

Description: Magnetic / 1 Ballast



Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 29-MetroTech

Part no.: MTAPL-75W01-50T3-AM-29

Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 1

Controls: None

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**Actual Quantity Installed**

**Notes**

**Signature**

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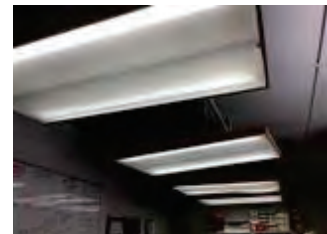
**Space Information**

Area: Maintenance Shops  
Space Name: Electric Shop  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: WRP-T5-4 ft-54W-2  
Description: Electronic / 1 Ballast



Quantity: 4  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 4  
Controls: None

---

**Actual Quantity Installed****Notes**

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**Signature**

### Space Information

Area: Maintenance Shops

Space Name: Carpenter Shop

Space Type: Mechanical Access: None

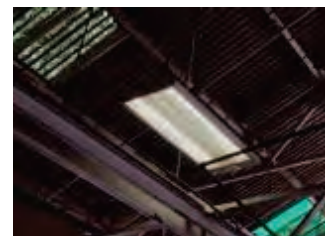
Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: HB-T5-4 ft-54W-4

Description: Electronic / 1 Ballast / Occupancy / Wireguard



Quantity: 9

Voltage:

Fixture ht: 0.000 ft

Controls: None

### Proposed Fixture

Decision: Replace Fixture

Brand: 45-Metrotech

Part no.: MTHBLM-70W01-5005-45

Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 9

Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed**

**Notes**

**Signature**

### Space Information

Area: Maintenance Shops  
 Space Name: Carpenter Shop  
 Space Type: Mechanical Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description: 2700K

Quantity: 1  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None



### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 1  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: Maintenance Shops  
Space Name: Carpenter Shop  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-1  
Description: Electronic / 1 Ballast / Occupancy



Quantity: 4  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST124  
Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 4  
Controls: Maverick/MES-06243

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**Actual Quantity Installed****Notes**

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**Signature**



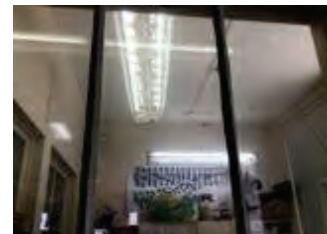
### Space Information

Area: Maintenance Shops  
Space Name: Carpenter Shop  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

### Existing Fixture

Fixture: VT-T5-4 ft-54W-2  
Description: Electronic / 1 Ballast



Quantity: 2  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 2  
Controls: None

---

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: Maintenance Shops  
Space Name: Carpenter Shop  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: WRP-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 4  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 4  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Maintenance Shops  
Space Name: Utility Shop  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: HB-T5-4 ft-54W-4  
Description: Electronic / 1 Ballast / Occupancy / Wireguard



Quantity: 5  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Fixture  
Brand: 45-Metrotech  
Part no.: MTHBLM-70W01-5005-45  
Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 5  
Controls: 45-MetroTech/MTHBLM-MotionSensor

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**Actual Quantity Installed****Notes**

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**Signature**



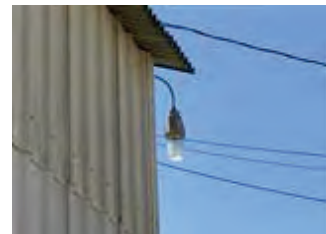
**Space Information**

Area: Maintenance Shops  
Space Name: Utility Shop  
Space Type: Mechanical Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: OTH-MH-175W-1  
Description: Magnetic / 1 Ballast



Quantity: 4  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Lamp  
Brand: YouLumi  
Part no.: YL-C040SLG4-40W-57K  
Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 4  
Controls: None

---

**Actual Quantity Installed****Notes**

---

**Signature**

### Space Information

Area: Maintenance Shops  
 Space Name: Paint Storage  
 Space Type: Storage Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

---

### Existing Fixture

Fixture: OTH-INC-75W-1  
 Description:



Quantity: 3  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 3  
 Controls: None

---

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: Maintenance Shops  
Space Name: Hazardous Waste Staging Area  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: NA  
Description: NA

Quantity: NA  
Voltage: NA  
Fixture ht: NA  
Controls: NA

**Proposed Fixture**

Decision: Replace Lamp  
Brand: YouLumi  
Part no.: YL-C040SLG4-40W-57K  
Description: Corn Cob / LED / 40W / 5700K / 120-277V

Quantity: 1  
Controls: None

---

**Actual Quantity Installed****Notes**

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**Signature**

### Space Information

Area: Maintenance Shops  
 Space Name: Breakroom  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description: 2700K



Quantity: 12  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 12  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: Maintenance Shops  
Space Name: Breakroom  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-1  
Description: Electronic / 1 Ballast / Occupancy



Quantity: 12  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST124  
Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 12  
Controls: Maverick/MES-06243

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**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Maintenance Shops  
Space Name: Breakroom  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: WRP-T5-4 ft-54W-2  
Description: Electronic / 1 Ballast

Quantity: 16  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 16  
Controls: None

---

**Actual Quantity Installed****Notes**

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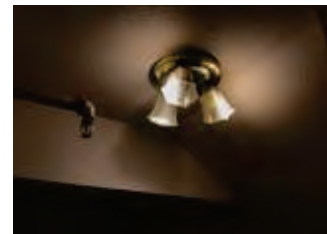
**Signature**

### Space Information

Area: Erection & Repair  
 Space Name: E&R Office  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: DEC-LED-19W-3  
 Description:



Quantity: 2  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: 35-Bulbs.com  
 Part no.: A19-9.5W-40K  
 Description: A19 / LED / E30 / 4000K / 100-277V

Quantity: 6  
 Controls: None

**Actual Quantity Installed**

**Notes**

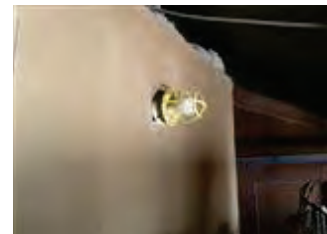
**Signature**

### Space Information

Area: Erection & Repair  
 Space Name: E&R Office  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: OTH-LED-19W-1  
 Description: 2700K



Quantity: 2  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Lamp  
 Brand: MTYL  
 Part no.: YL-C030SLG4-30W-57K  
 Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 2  
 Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**



**Space Information**

Area: Erection & Repair  
Space Name: E&R Office  
Space Type: Office Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-1  
Description: Electronic / 1 Ballast / Occupancy



Quantity: 14  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST124  
Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 14  
Controls: Maverick/MES-06243

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**Actual Quantity Installed****Notes**

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**Signature**

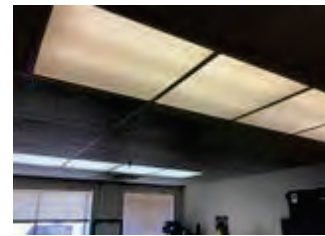
**Space Information**

Area: Erection & Repair  
Space Name: E&R Office  
Space Type: Office Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: TR-T8-4 ft-32W-2  
Description: Electronic / 1 Ballast



Quantity: 14  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST230  
Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 14  
Controls: None

---

**Actual Quantity Installed****Notes**

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**Signature**

**Space Information**

Area: Erection &amp; Repair

Space Name: E&amp;R Office

Space Type: Office Access: None

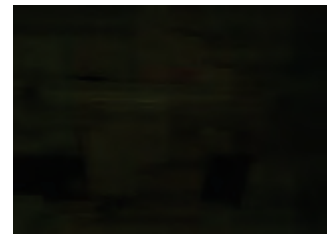
Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-2

Description: Electronic / 1 Ballast



Quantity: 1

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 1

Controls: None

**Actual Quantity Installed****Notes**

---

Signature

**Space Information**

Area: Erection &amp; Repair

Space Name: E&amp;R Office

Space Type: Office Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: WRP-T8-4 ft-32W-2

Description: Electronic / 1 Ballast

Quantity: 20

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 20

Controls: None

**Actual Quantity Installed****Notes**

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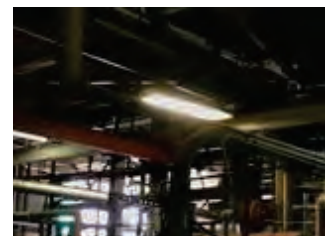
Signature

### Space Information

Area: Erection & Repair  
 Space Name: Welding Shop  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: HB-T5-4 ft-54W-4  
 Description: Electronic / 1 Ballast / Occupancy / Wireguard  
 Quantity: 34  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None



### Proposed Fixture

Decision: Replace Fixture  
 Brand: 45-Metrotech  
 Part no.: MTHBLM-70W01-5005-45  
 Description: Highbay / Round / LED / 5000K / 100-277V  
 Quantity: 34  
 Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: Erection & Repair  
Space Name: Welding Shop  
Space Type: Access: None  
Ceiling Ht: Deck Ht:  
Ceiling Type:

---

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-1  
Description: Electronic / 1 Ballast / Occupancy



Quantity: 6  
Voltage:  
Fixture ht: 0.000 ft  
Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit  
Brand: Maverick  
Part no.: MES-RTST124  
Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 6  
Controls: Maverick/MES-06243

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**Actual Quantity Installed****Notes**

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**Signature**

**Space Information**

Area: Erection &amp; Repair

Space Name: Welding Shop

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: VT-T5-4 ft-54W-2

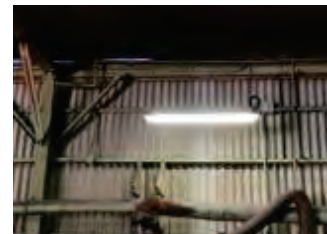
Description: Electronic / 1 Ballast

Quantity: 3

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 3

Controls: None

**Actual Quantity Installed****Notes**

---

**Signature**

### Space Information

Area: Erection & Repair  
 Space Name: DXP  
 Space Type: Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: HB-T5-4 ft-54W-4  
 Description: Electronic / 1 Ballast / Occupancy / Wireguard



Quantity: 25  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Fixture  
 Brand: 45-Metrotech  
 Part no.: MTHBLM-70W01-5005-45  
 Description: Highbay / Round / LED / 5000K / 100-277V

Quantity: 25  
 Controls: 45-MetroTech/MTHBLM-MotionSensor

**Actual Quantity Installed**

**Notes**

**Signature**



**Space Information**

Area: Erection &amp; Repair

Space Name: DXP

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: OTH-LED-19W-1

Description: 2700K

Quantity: 29

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Lamp

Brand: MTYL

Part no.: YL-C030SLG4-30W-57K

Description: Corn Cob / LED / Internal Driver / 5700K / 120-277V

Quantity: 29

Controls: None

**Actual Quantity Installed****Notes****Signature**

**Space Information**

Area: Erection &amp; Repair

Space Name: DXP

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: STR-T12-4 ft-34W-2

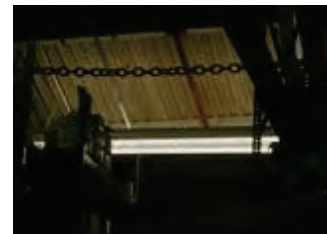
Description: Magnetic / 1 Ballast

Quantity: 2

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 2

Controls: None

**Actual Quantity Installed****Notes**

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**Signature**

**Space Information**

Area: Erection &amp; Repair

Space Name: DXP

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-1

Description: Electronic / 1 Ballast / Occupancy



Quantity: 40

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST124

Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 40

Controls: Maverick/MES-06243

**Actual Quantity Installed****Notes**

---

**Signature**

**Space Information**

Area: Erection &amp; Repair

Space Name: DXP

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: STR-T8-4 ft-32W-1

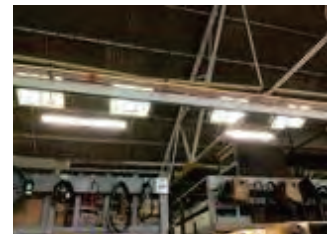
Description: Electronic / 1 Ballast / Occupancy

Quantity: 52

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST124

Description: Linear / 4 ft / LED / Retrofit Kit / 24W / 120-277V

Quantity: 52

Controls: Maverick/MES-06243

**Actual Quantity Installed****Notes**

---

**Signature**

### Space Information

Area: Erection & Repair

Space Name: DXP

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: TR-T8-4 ft-32W-2

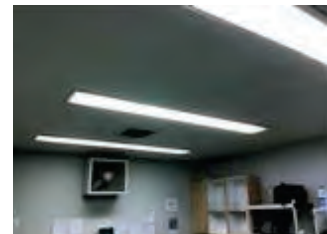
Description: Electronic / 1 Ballast

Quantity: 8

Voltage:

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 8

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

**Space Information**

Area: Erection &amp; Repair

Space Name: E&amp;R Exterior

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: WP-MH-250W-1

Description: Magnetic / 1 Ballast

Quantity: 6

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Fixture

Brand: 29-MetroTech

Part no.: MTAPL-75W01-50T3-YM-29

Description: Area Light / Shoebox / LED / 5000K / 100-277V

Quantity: 6

Controls: None

**Actual Quantity Installed****Notes****Signature**

**Space Information**

Area: R&amp;D building

Space Name: Offices

Space Type: Office Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: TR-T8-4 ft-32W-2

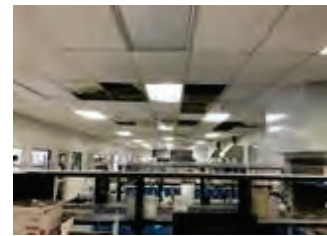
Description: Electronic / 1 Ballast

Quantity: 104

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 104

Controls: None

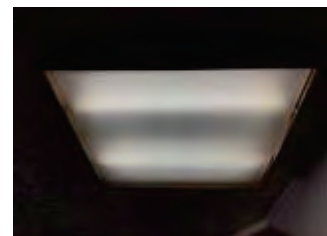
**Actual Quantity Installed****Notes****Signature**

### Space Information

Area: R&D building  
 Space Name: Offices  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: WRP-T12-2 ft-35W-2  
 Description: Magnetic / 1 Ballast



Quantity: 7  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST2230  
 Description: Linear / 2 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 7  
 Controls: None

### Actual Quantity Installed

### Notes

Signature



### Space Information

Area: R&D building  
 Space Name: Offices  
 Space Type: Office Access: None  
 Ceiling Ht: Deck Ht:  
 Ceiling Type:

### Existing Fixture

Fixture: WRP-T8-4 ft-32W-2  
 Description: Electronic / 1 Ballast



Quantity: 19  
 Voltage:  
 Fixture ht: 0.000 ft  
 Controls: None

### Proposed Fixture

Decision: Replace Retrofit Kit  
 Brand: Maverick  
 Part no.: MES-RTST230  
 Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 19  
 Controls: None

### Actual Quantity Installed

### Notes

Signature

**Space Information**

Area: R&amp;D building

Space Name: Offices

Space Type: Office Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: WRP-T8-4 ft-32W-2

Description: Electronic / 1 Ballast

Quantity: 6

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Retrofit Kit

Brand: Maverick

Part no.: MES-RTST230

Description: Linear / 4 ft / LED / Retrofit Kit / 30W / 120-277V

Quantity: 6

Controls: None

**Actual Quantity Installed****Notes****Signature**

**Space Information**

Area: R&amp;D building

Space Name: R&amp;D Exterior

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

**Existing Fixture**

Fixture: WP-INC-75W-1

Description:



Quantity: 3

Voltage:

Fixture ht: 0.000 ft

Controls: None

**Proposed Fixture**

Decision: Replace Fixture

Brand: 29-MetroTech

Part no.: MTWP402-26W01-50P-29

Description: Wallpack / Decorative / LED / 5000K / 100-277V

Quantity: 3

Controls: None

**Actual Quantity Installed****Notes**

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**Signature**



### Space Information

Area: R&D building

Space Name: R&D Exterior

Space Type: Access: None

Ceiling Ht: Deck Ht:

Ceiling Type:

### Existing Fixture

Fixture: WP-MH-175W-1

Description: Magnetic / 1 Ballast

Quantity: 7

Voltage:

Fixture ht: 0.000 ft

Controls: None



### Proposed Fixture

Decision: Replace Fixture

Brand:

Part no.: MES-SWP02-55BA2-A-44

Description: Wall Mount / Security / LED / 55W / 120-277V

Quantity: 7

Controls: None

**Actual Quantity Installed**

**Notes**

**Signature**

# Energy Integrated Solutions, Inc.

## Company Capability Statement

829 Pickens Industrial Dr. NE., Suite 13  
Marietta, GA 30062  
contactEIS@energyintegratedsolutions.com  
404-937-6547  
www.energyintegratedsolutions.com



### About EIS

Energy Integrated Solutions, Inc. ("EIS"), based in Atlanta, GA, has been providing optimization solutions to industrial and commercial customers for more than 40 years:

- Turnkey projects implementations with an ongoing Measurement & Verification (M&V) service to ensure our solutions deliver the potential savings we design with a performance guarantee agility.
- Efficiency solutions and conservations measures addressing all major load groups: equipment motors, LED lighting, HVAC, refrigeration, compressed air, steam, water, alternative generation systems, predictive maintenance and operations improvements, etc.
- Attractive ROI – typically 8% - 30% annual savings with reasonable paybacks within 1 to 3 years
- Solutions are passive and non-intrusive – no change in operational behavior required from occupants during implementation.
- Flexibility to address customer needs, reducing risk and capitalizing on financial and operational savings.
- Full energy and efficiency consulting service through a holistic vision.

### Past Performance

Highest Energy Savings Award for large industrial and commercial companies, as Entergy and CLEAResult trade ally for the years 2019 and 2020



CLIENT	SAVINGS	PAYBACK PERIOD
C.R.BARD	26.2%	26.7 months
MONDELEZ INT.	12.0%	27.0 months
FIRMENICH	13.0%	30.7 months
GENERAL ELECTRIC	21.0%	11.0 months
FREEMAN WEBB	22.3%	31.0 months
CHRYSLER	23.0%	39.6 months
PEPSI	15.1%	13.0 months

### Type of Industries

- Commercial Buildings
- Food & Beverage
- Hospitality
- Mining Industries
- Packaging
- Sawmills
- Health Care Facilities
- Manufacturing facilities
- Automotive
- Chemicals & Plastics
- Data Centers
- Medical Devices
- Mills (Steel, Paper, etc.)
- Pharmaceuticals
- Fiber and textiles
- Hospitals

### Core Competencies

reduce • reuse • renew • rebuild

EIS approach is founded in performing on-site-data-based engineering analysis of the facility, to design and implement solutions for operational efficiency and savings escalating sustainable principles:



- Ensuring PRODUCTION RESOURCES SAVINGS through implementation of efficiencies and conservation measures (ECMs) to **reduce** facility's consumption pattern.



- Implementing ENHANCED OPTIMIZATION METHODS, combined with recycling processes to **reuse** typically wasted resources increasing significantly their lifecycles.



- Establishing viable ONSITE GENERATION of all type of energy (i.e. electric, thermal, mechanical, etc.), modifying facility systems to recover exhausted energy and/or incorporating **renewable** energy into the facility.

- Energy & Efficiency Consulting
- ASHRAE Level 1 & Level 2 Audits
- Operations & Management (O&M) for Projects
- Efficiency as a Service (EaaS)
- Lighting as a Service (Laas)
- Forensic Billing Analysis
- Energy Financing

### EIS Services

### EIS Technologies

- Compressed Air Systems
- HVAC & Hydronics
- Heat Recovery
- LED Lighting
- Motor Controls (VFD, BMS, etc.)
- Power Quality Conditioning
- Steam Systems
- Photovoltaic (PV) Solar
- Post Process/Wastewater Recycling



**EIS**  
Energy Integrated Solutions



# EIS Arkansas Projects

reduce • reuse • renew • rebuild

Energy Integrated Solutions, Inc. is a trade ally in the Entergy Solutions energy efficiency programs  
2019 and 2020 Highest Energy Savings Award for large industrial and commercial companies



## Clean Harbors - El Dorado, AR



Clean Harbors El Dorado incineration facility, supported by its \$120million incinerator, specializes in the treatment of hazardous wastes (RCRA regulated) and non-hazardous waste by high temperature incineration. Understanding the need to reduce their energy costs, while increasing their electrical efficiency, drove them to undertake an LED & Advanced Controls Project, which represented an investment of \$648,000 to obtain savings of \$323,500 per year (from the annual energy conservation of 3.4million kWh). These results, added to \$609,000 in incentives triggered by the Entergy AR. Entergy Solutions Program trimmed down the payback period to only 2 months.

Founded in 1969, Drew Foam is a full service Expanded Polystyrene (EPS) block molding company, which today counts with three plants manufacturing over 16,000 specialty items: roof and wall insulation, packaging solutions, Geofoam, rigid foam, architectural shapes, or other construction products. Drew Foam is also taking seriously its environmental role, recycling 100% of all waste produced during manufacturing, grinding up the left-over scrap and mixing it with raw material to produce a lower grade foam that can be used in a multitude of other applications. Their facility in Monticello, AR needed to upgrade their Lighting and EIS implemented an LED & Advance Control project which saved them 318KW in power and 2.7million kWh per year. Opting into the Entergy AR. Entergy Solutions Program represented an investment of \$405,300, completely funded by the incentives. Sustainable results are achieved in the magnitude of \$251,305 per year in savings with zero disbursement from Drew Foam.

## Drew Foam - Monticello, AR



## West Fraser Saw Mill - Russellville, AR



A leading diversified wood products company, West Fraser operates more than 45 manufacturing facilities in North America, which means that is one of North America's largest lumber manufacturers, as well as an established leader in sustainable forestry, high-efficiency wood product production and innovation in manufacturing. West Fraser produces SPF and SYP dimensional lumbars, panels (plywood, MDF), engineered wood products (LVL), pulp & paper, wood chips, other residuals and energy. Efficiency is an integral part of West Fraser model, so EIS has been furnishing energy conservation and power quality systems for West Fraser over the years. At the Russellville's facility, a \$541,000 investment in LED and Advance Lighting Control was implemented successfully generating immediately savings of 245KW and 2.4million kWh per year (~\$184,000 a year benefit) since the investment was 100% funded by incentives coming from the Entergy AR Entergy Solutions Program.

Founded in 1903, PotlatchDeltic is a Real Estate Investment Trust (REIT) that owns nearly 1.9 million acres of timberland in AL, AR, ID, LA, MN and MS. The company also operates six sawmills, an industrial-grade plywood mill, a residential and commercial Real Estate development business and a rural timberland sales program. PotlatchDeltic is dedicated to long-term stewardship and sustainable management of its timber resources and forest practices. EIS helped their Waldo wood mill to take advantage of the Entergy AR. Entergy Solutions Program, upgrading their lighting system to LED, reaching annual savings in the order of 188kW in power and 1.4million kWh in electric energy. These savings represent 17 months payback of \$327,700 in LED lighting fixtures, when incentives from Entergy AR Entergy Solutions Program covers 63% of such investment, with the advantage that, once installed, LED represents a sustainable saving for years to come.

## PotlatchDeltic - Waldo, AR



## Contact Us

For inquiries contact us at **404-937-6547**, or email us at [contactEIS@energyintegratedsolutions.com](mailto:contactEIS@energyintegratedsolutions.com)  
HQ: 829 Pickens Industrial Dr. NE, Suite 13, Marietta, GA 30062 • Distr.Ctr: 110 Lurton St., Pensacola, FL 32505  
Visit our website [www.energyintegratedsolutions.com](http://www.energyintegratedsolutions.com)



# EIS Arkansas Projects

reduce • reuse • renew

Energy Integrated Solutions, Inc. is a trade ally in the Entergy Solutions energy efficiency programs 2019 and 2020 Highest Energy Savings Award for large industrial and commercial companies



## Conifex Timber - El Dorado, AR



Manufacturer of structural grade SPF (spruce, pine and fir) dimension lumber and Southern Pine decking and dimensional lumber, while producing clean, renewable energy from the sawmill residuals. Conifex's strong fiber basket supports lumber production increase and its bioeconomy footprint. With energy efficiency in mind, Conifex Timber implemented with EIS energy conservation measures using the incentives available in the state. EIS installed an LED Lighting solution driven by Advance Controls, bringing Conifex a sustainable 880,600 kWh per year with an upside of \$363,000 investment covered 100% by the Entergy AR. Entergy Solutions Program incentives, allowing them to perceive an immediate payback, while benefited from savings as soon as day one.



A one of the world's largest lumber providers, Interfor is operating 18 world-class facilities in North America, with annual capacity of 3.1 billion board feet. Nine of these facilities are located in the south of USA. Interfor truly considers that wood is the ultimate natural, renewable and strong building material, but also believes wood products only have value if it is produced in ways that generate economic growth, create social benefits and minimize the impact on the environment. This fine balance that characterize their achievements is embedded in clear commitments of collaboration and continuous improvement, as reflected in their interest in steadily increase conservation measures within each plant. EIS initiated this initiative in Monticello's facility with a pilot LED project of \$133,600, reflecting energy savings in the order of 45KW in power and 489,500 kWh/yr. The incentives obtained through the Entergy AR. Entergy Solutions Program took care of 60% of the investment, reducing its payback period.

## Interfor - Monticello, AR



## Gränges - Newport, AR



Gränges AB, founded in 1896 HDQ in Stockholm, Sweden, develops, produces, and distributes rolled aluminum materials for brazed heat exchanger and niche applications in Europe, Asia, and USA. It serves automotive, heating, ventilation, and air-conditioning industries; and other markets, such as transformers and food packaging industries. Its newly improved and expanded plant at Newport-AR, founded in 1951, supplies 20 ktonnes/yr of a growing demand of light gauge foil market in the US. As the inherent progress of its efficiency-oriented culture, the facility decided to opt-in for Entergy AR Solutions Program, implementing a LED lighting project, which resulted in energy savings of 1,067,017 kWh/yr (69% reduction of its original electricity consumption), translated in \$81,845 of cost reductions. With an investment of \$199,252, (76% funded by Entergy), Granges obtained a payback in 8 months of the first year.



## Dallas County Medical Center - Fordyce, AR



A comprehensive healthcare system that services Dallas County in Fordyce, Arkansas, providing general medical and surgical care for inpatient, outpatient, and emergency room patients. EIS implemented an LED Lighting savings project which triggered direct incentives of 53,000 USD from the Entergy AR. Entergy Solutions Program while generating a sustainable annual power savings of 51KW and 378,480kWh of electric energy savings per year.



## Contact Us

For inquiries contact us at **404-937-6547**, or email us at [contactEIS@energyintegratedsolutions.com](mailto:contactEIS@energyintegratedsolutions.com)  
HQ: 829 Pickens Industrial Dr. NE, Suite 13, Marietta, GA 30062 • Distr.Ctr.: 110 Lurton St., Pensacola, FL 32505  
Visit our website [www.energyintegratedsolutions.com](http://www.energyintegratedsolutions.com)







# Energy Integrated Solutions, Inc.

reduce • reuse • renew

## MetroTech: Commercial & Industrial LED lighting

With more than 40 years of experience and expertise in the LED industry, MetroTech LED lights are built specifically to withstand the rigors of commercial and industrial use. Innovation and newest technologies are the core of MetroTech line of products, which are backed by UL and DLC certifications. Our lights provide years of reliable and maintenance free performance, allowing us to offer an industry leading 10-year warranty.

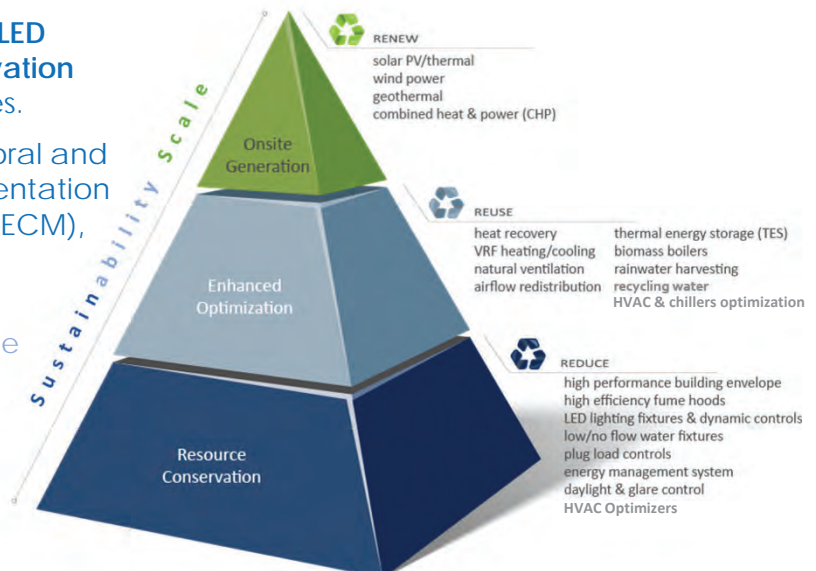
## EIS efficiency pyramid

Illumination projects implemented with **MetroTech LED Lighting Solutions** are part of the **Resource Conservation** tier of solutions of EIS pyramidal structured principles.

**RESOURCE CONSERVATION TIER:** efficiency behavioral and operational practices, combined with the implementation of Efficiency and Energy Conservation Measures (EECM), to **reduce** the consumption pattern.

**ENHANCED OPTIMIZATION TIER:** Energy Procurement and Demand Management shifting the energy usage to periods of less demand distribution as possible, combined with recycling measures to **reuse** post-process wasted resources with significant lifecycles.

**ONSITE GENERATION TIER:** Renewable energy, when the facility systems are modified to use energy efficiently, less generation is required, reducing the investment in **renewable** energy production.





## Industrial Lighting

MetroTech's line of industrial fixtures are designed for the high demand of industrial facilities. With available IP65+, IK10, and Hazloc Class I Division 2 ratings, our fixtures are ideally suited for a wide range of harsh industrial applications. With the highest lumens per watt output in the market, they can light up any facility and are the ideal choice for factories, warehouses, and more.

## Commercial Interior Lighting

MetroTech's line of interior commercial lighting is versatile, high performance lighting suited to a wide variety of interior applications. We have your needs covered from quick install retrofit kits and drop in troffers to IP65+ rated fixtures for wet or dusty environments.

## Commercial Exterior Lighting

All MetroTech outdoor rated fixtures are designed and tested to work for years of reliable outdoor use. Heavy duty cast aluminum housing combined with IP65 ratings give you the confidence that our fixtures will withstand the sun and rain. Surge protection, photocell, motion, and dimmer controls are available.

## Roadway Lighting

MetroTech's line of roadway lighting includes LED traffic, roadway signs, and streetlights. Our patented iDriver™ technology significantly extends the LED life. Optional smart street lighting controls can notify you when a light is not working. When combined with our turnkey maintenance plans, our roadway lighting will improve safety, save money, and eliminate all of your maintenance concerns.



**built to outshine and outlast**

### Benefits at a Glance

- 40+ Years Industry Experience
- UL & DLC Certified Lighting
- UL Certified Assembly
- Audits, Design, & Turn-Key Projects
- Maintenance Agreements
- Financing Available



### Guaranteed Optimization

- 40+ year track record with worldwide installations.
- Experienced Engineering designing value-added EECM for the whole facility.
- Non-disruptive solutions customized to the facility operational requirements.



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# Energy Integrated Solutions, Inc.

reduce • reuse • renew

## Solar Solutions: from photovoltaic power to thermal

Clean, unlimited, independent and free source of energy made available for any industrial and commercial facility. Through silicon photocell panels, the sun's light is converted into thermal and/or electric energy by exciting their electrons: (i) inverters convert the direct current (DC) to alternate current (AC) which is used to power the facility (self-generation) or sold to the local power utility (power-house); and (ii) energy introduced into HVAC systems by the sun enables the production of higher total heat rejection with less energy expended by the compressors.

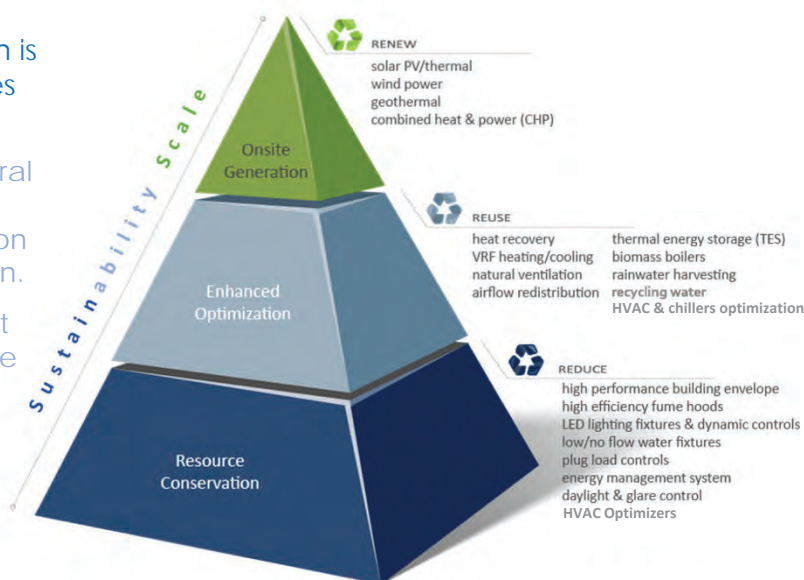
## EIS efficiency pyramid

**Solar Photovoltaic and Thermal Solutions** approach is part of the **ONSITE GENERATION** tier of technologies of EIS pyramidal structured principles.

**RESOURCE CONSERVATION TIER:** efficiency behavioral and operational practices, combined with the implementation of Efficiency and Energy Conservation Measures (EECM), to **reduce** the consumption pattern.

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**ONSITE GENERATION TIER:** Renewable energy, when the facility systems are modified to use energy efficiently, less generation is required, reducing the investment in **renewable** energy production.





## Photovoltaic (PV) Power Generation

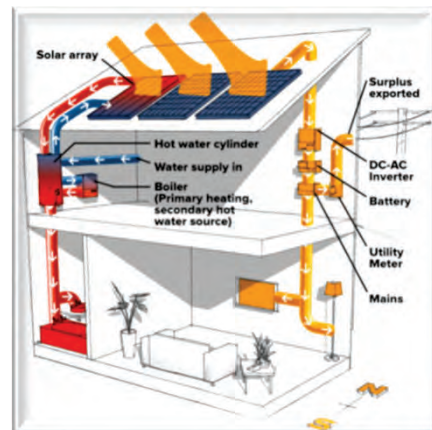
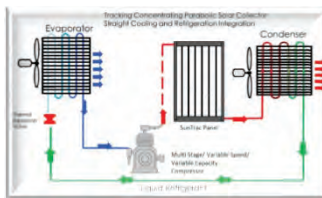
PV Solar Power efficiency is actually reflected in the capability of obtaining an alternate free-fuel-source of energy for the facility production. Depending on the demand or the production pattern, end-users are able to use PV technology from simple back-up power to a 100% of their energy requirement; with the advantage of reducing environmental impacts associated with transportation and dependence on fossil fuel.

Since a PV system can be constructed and updated to any size depending on energy requirements, it can be easily scaled modularly or even moved as the energy needs change. Even more, small-scale solar plants can take advantage of unused real estate space on land or rooftops of existing buildings.

## Modulated Solar Thermal Energy

Renewable energy method of adding pressure and heat to the refrigeration cycle of HVAC systems, which results in a decreased/displaced compressor workload, translated to electric energy savings.

This solar thermal system displaces a portion of the mechanical energy used by various compressor types, including single speed compressors w/VFD's, variable capacity, multistage, and variable speed compressors; and allowing them to operate at low stage, low range or low capacity, while delivering full and partial load cooling requirements.



**don't waste your energy... invest it**

## Benefits at a Glance

- Solid investment and reasonable payback.
- Reduce monthly electric bills and improve seasonal or peak consumption.
- Possibilities of tax credits and accelerated depreciation.
- Improve corporate image: solar powerhouse, business sustainability and environmental responsibility.
- PV cells operate reliably for long periods of time with virtually no maintenance.
- Decreases HVAC system electric consumption by 25 to 40%.
- Increases efficiencies on new HVAC systems, as well as mid-lifecycle existing systems.
- HVAC solution with ROI of less than 36 months, and positive cash flow.



## Guaranteed Optimization

- 40+ track record with worldwide installations.
- Experienced Engineering designing value-added EECM for the whole facility.
- Non-disruptive solutions customized to the facility operational requirements.



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# Energy Integrated Solutions, Inc.

reduce • reuse • renew

## Sustainability Services: from energy audits to ESG reporting

Utilities Billing Forensic Analysis, Energy Audits, Building Envelope Solutions and ESG Scoring & Reporting can provide insight into the long-term prospects of companies, to current stakeholders and those trending future investors, who are actively looking for new market sustainable opportunities. A well structured combination of these services represents a reliable and versatile risk management system based on Environmental and Energy Factors, Social Direction, and Corporate Ethical Concerns at the core of the business.

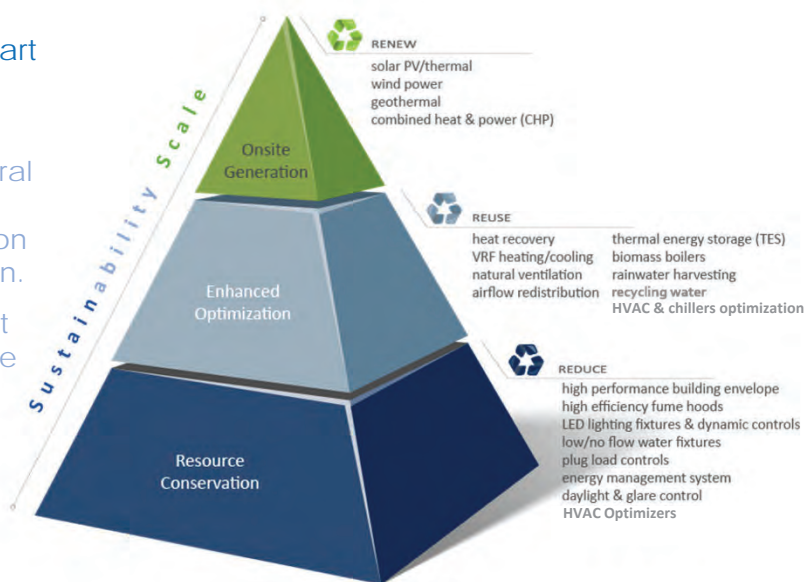
## EIS efficiency pyramid

**Sustainability Analysis and Solutions** approach is part of the **RENEW** tier of technologies of EIS pyramidal structured principles.

**RESOURCE CONSERVATION TIER:** efficiency behavioral and operational practices, combined with the implementation of Efficiency and Energy Conservation Measures (EECM), to **reduce** the consumption pattern.

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## Utilities Billing Forensic Analysis

Complete effort of reducing energy costs by performing a comprehensive utility invoice audit, verifying level of errors, discrepancies, and overcharges. 80% of the time, EIS finds invoicing inaccuracies, oversights and discrepancies within client's different utilities accounts. Utilities recognize the miscalculations and smoothly issue the necessary adjustments and/or applicable reimbursements.

When applicable, EIS reduces Rate/Cost Per Unit on electricity, natural gas, and/or other monthly recurring utilities' billing by negotiating lowest rates with the providers on behalf of the client.

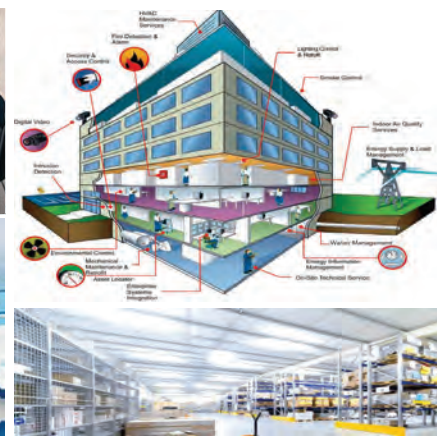
## Building Envelope Energy Audits

Customized assessment, analysis, action plan and execution that updates current conditions in buildings, while guides clients to optimize energy and increase comfort with cost-effective improvements. Building Envelope takes into account client's expectations and concerns; results from our analysis; current & expected energy use; building science, health and safety issues and expertise to make more cost-efficient, comfortable, safe, and resilient facilities. From energy bills analysis, diagnostic tools, thermal imaging, and data monitoring equipment; to identify locations where energy is wrongly used, insulation levels and installation techniques; and verify if building management systems and/or controls operate as designed. Our recommendations range from low-cost/no-cost advice to sophisticated upgrades to the building envelope, energy and ventilation systems, and renewable energy systems.

## ESG Consulting Services

EIS commits its experience and expertise in efficiency and optimization to help clients to put in motion its own unique sustainability and social responsibility journey. among other ECMs:

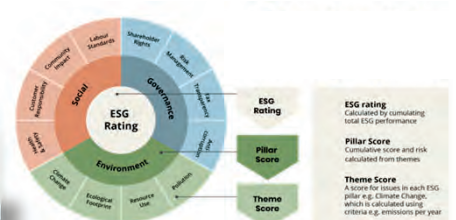
EIS advocates for these environmental, social and governance (ESG) efforts to be strategically driven, more than just making companies appear socially conscious. And because they impact profitability, offer effective methodologies to communicate its effective progress to investors and stakeholders to ensure business success in the current and future marketplace.



**don't waste your energy... invest it**

## Benefits at a Glance

- Decrease, consistently energy consumption, increasing operational efficiencies and savings (e.g. retrofitting lights, upgrading HVAC-R systems, installing energy-efficient equipment/technologies, stabilizing the voltage of electrical network, recycling post-process water, etc.)
- Evaluate, analyze, monitor and control of cost effectiveness of the utilities, while removing redundant, outdated, hidden, or unnecessary charges.
- Prioritize occupancy comfort issues: increasing morale, attendance, productivity.
- Troubleshoot indoor air quality problems, improving air recirculation, while solving contamination by outdoor air, occupants' health and safety issues, smells, etc.
- Investigate feasibility of using renewable and recyclable energy systems and other efficient technologies (e.g. heat pumps, controls, or lighting.)
- Provide relevant information and transparency to investors and stakeholders, regarding company's commitments to identify, manage, and report ESG risks.



## Guaranteed Optimization

- 40+ year track record with worldwide installations.
- Experienced Engineering designing value-added EECM for the whole facility.
- Non-disruptive solutions customized to the facility operational requirements.



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**Cooperative Purchasing Connection**  
**Tabulation Report RFP #24.5 - Lighting Audit Services &**  
**LED Solutions**  
**Vendor: NCLED**

**General Comments:** Thank you for allowing us this great opportunity to Bid on the Lighting Audit Services and LED Solutions RFP.

In total we show 9 attachments being submitted. If you did not receive 7 PDF's, 1 Word Document, and 1 XLS document please let us know. (920-418-0153).

Thanks,

Dale Baeten  
NCLED, LLC

**General Attachments:** 1 - Articles of Organization.pdf  
Certificate of Insurance (COI) NCLED, LLC.pdf  
Forms - Signatures- NCLED, LLC. PDF.pdf  
NCLED 2020\_Antigo High School\_Fixture Option 1-2-22 (2) (6).pdf  
Pricing Schedule - NCLED LLC.xls  
Project Deliverables (Lighting Audit Results-Final Report - and Rebate Summary)- NCLED, LLC.pdf  
Project Deliverables (Sample LED Lighting Contract).pdf  
Project Deliverables (Scope of Work) NCLED, LLC.pdf  
Questionnaire- NCLED, LLC.docx

## Vendor Questionnaire

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### **Instructions**

Contained herein is a questionnaire required by the Cooperative Purchasing Connection (CPC). Please note, while some information is merely informational, some will be used during the evaluation and vetting process.

To submit the required forms, follow these steps:

1. Read the document in its entirety.
2. Respondents must use the Vendor Questionnaire to its capacity. Attached exhibits and/or supplemental information should be included only when requested (i.e. Marketing Plan).
3. Complete all questions.
4. Save all pages in the correct order to a single PDF format titled “***Vendor Questionnaire – Name of Company***”.
5. Submit the Vendor Questionnaire, along with other required documents in Public Purchase.

**The following sections will need to be completed before submission and submitted as one (1) single PDF titled “Vendor Questionnaire – Name of Company”:**

[Company Information](#)  
[Qualifications & Experience](#)  
[Warranty](#)  
[Financials & Level of Support](#)  
[Marketing & Partnership](#)  
[Exceptions & Deviations](#)  
[References](#)

## Company Information

**Name of Company:** NCLED, LLC

**Company Address:** 516 N. Eighth Street

**City, State, Zip code:** De Pere, WI 54110

**Website:** [www.ncledlighting.com](http://www.ncledlighting.com)

**Phone:** 920-655-2468

Provide the following company contacts that will be working with this anticipated contract. Include name, email, and phone number(s).

	Name	Email	Phone
General Manager	Jay Polena	<a href="mailto:jay@ncledlighting.com">jay@ncledlighting.com</a>	1-920-328-8948
Contract Manager	Shelly Bekkers	<a href="mailto:Shelly@ncledlighting.com">Shelly@ncledlighting.com</a>	1-920-366-8495
Sales Manager	Mark Wright	<a href="mailto:mwright@ncledlighting.com">mwright@ncledlighting.com</a>	1-920-740-2297
Marketing Manager	Dale Baeten	<a href="mailto:dale@ncledlighting.com">dale@ncledlighting.com</a>	1-920-418-0153
Customer Service Manager	Nick Goffard	<a href="mailto:nick@ncledlighting.com">nick@ncledlighting.com</a>	1-920-655-2468 x103
Account Manager(s)	Dale Baeten	<a href="mailto:dale@ncledlighting.com">dale@ncledlighting.com</a>	1-920-418-0153

List who will be responsible for receiving updated participation lists.

Name	Email	Phone
Dale Baeten	<a href="mailto:dale@ncledlighting.com">dale@ncledlighting.com</a>	920-418-0153

List who will be responsible for submitting sales reports and administrative fee payments every quarter.

Name	Email	Phone
Shelly Bekkers	<a href="mailto:Shelly@ncledlighting.com">Shelly@ncledlighting.com</a>	920-366-8495

List who will be responsible for conducting audits as requested by CPC.

Name	Email	Phone
Jay Polena	<a href="mailto:jay@ncledlighting.com">jay@ncledlighting.com</a>	920-328-8948

Identify any business types/classifications that your company holds. **\*Submit documentation in PDF format to verify business status (see submittal checklist).**

X	Business Type/Classification
	8(a) 8(a) Qualified Business
	DBE Disadvantaged Business Enterprise
	HUB Historically Underutilized Business Zone
	MBE Minority-Owned Business Enterprise
	MWBE Minority Women-Owned Business Enterprise
	SBE Small Business Enterprise
X	Other; list name: NCLED LLC Verification

X	Business Type/Classification
	SDB Small Disadvantaged Business
	SDVOB Service-Disabled Veteran Owned Business
	SECTION 3 Section 3 Business Concern
	SSV Sole Source Vendor
	VBE Veteran-Owned Business Enterprise
	WBE Woman-Owned Business Enterprise

Provide a list of other contracts your organization has in place that could be accessed by our membership for your services (e.g. other consortiums, state agencies) in MN, ND, SD, IA, and WI?

None



## Qualifications & Experience

### **1. Provide a brief background of your organization, including the year it was founded (1-2 paragraphs max.).**

NCLED is previously New Covenant Contracting. In 2014 Doug Schoenwalder brought Jay Polena in to start a division of installing LED lighting. In 2017 New Covenant Contracting was dissolved and NCLED has remained since. Our Turnkey solutions service: Schools Municipalities, Property Managers, Warehouses, Manufacturers, Schools, Street Lighting, Stadium Lighting, Office spaces, Post offices, and Retail stores. Recently we were awarded the Focus on energy Trade Ally Contractor Energy Efficiency award. Before focusing on LED Lighting exclusively we were a Electrical Contractor since 1999.

### **2. Provide evidence of what your company is doing to remain viable in the lighting industry.**

NCLED attends all of the Lightfare seminars. We also work very closely with our vendors to be well educated on the latest technologies. NCLED takes advantage of any seminars held in regard to LED lighting.

### **3. Describe your company's logistics (locations, experience, production, distribution of products, warehouse inventories and delivery systems used) that should be considered in your ability to deliver on-time quality services, products, and solutions to participating agencies in MN, ND, SD, IA, and WI.**

Our warehouse is in De Pere, Wisconsin. We can also ship out of California. The trucking companies we use are Daylight, T-Force, and Old Dominion.

### **4. Describe the number of agencies your organization, on average, provides lighting audit services and LED solutions to. Include overall numbers and numbers specific to MN, ND, SD, IA, and WI.**

**Describe your customer retention as it pertains to lighting audit services and LED solutions (i.e. customers who are served that continue to be repeat customers).**

We provide lighting audit services for over 250 projects a year. In Minnesota we provide over 10 audits a year, North Dakota 0 audits a year, South Dakota 0 audits a year, Iowa 0 audits a year and over 240 a year in Wisconsin. We have many School Districts in Wisconsin who continue to come back to us for additional lighting needs as well as municipalities. We have a very high retention % and we often received many referrals to other School districts and City, Village, and Townships

### **5. Describe and specify your proposed service area (MN, ND, SD, IA, and WI) and how your company intends to meet the needs of customers in that area.**

We would like to provide our proposed services for all 5 States, as we feel that we can handle all locations. We travel as a turnkey company. Our install team would stay onsite to complete any projects. We are licensed in Wisconsin, however, are willing to acquire anything needed in other States.

### **6. List the agencies, if any, you would exempt from this contract (i.e. current agencies that you are currently serving that will be exempt from pricing submitted with this proposal).**

None

### **7. Describe your company's approach to lighting audits, the steps involved in an audit, and applicable LED solutions and what differentiates your company from your competitors. Describe any competitive differences regarding sales, service, installation, technology, and product line(s).**

NCLED travels to the location. We use an iPad with a lighting program called Eco Insight. Our auditors are electricians, so they know what to look for. We record each area with the existing lighting all while having in depth conversations on the best solution for that area. We do not believe in cookie cutter solutions. NCLED is competitive in both pricing & by using a mix of solutions where it makes sense to give the best energy savings for the lowest dollar amount. It does not need to be all fixtures or all lamps for a solution, it can be a combination of both in certain solutions.

### **8. Describe how your company works with local utility companies to ensure energy rebates are maximized and how the funding/rebate, if approved, flows through, and applies to the project.**

NCLED works very closely with all utility companies and energy advisors to make sure we do not miss any potential incentives, rebates, or grants. When a project is awarded to NCLED we take the rebate amount off the total project and wait for the rebates to come to us so you don't have to wait for the check to be cut.

### **9. Describe your company's approach to proposing available LED solutions to an agency resulting from a lighting audit.**

After in depth conversations, NCLED provides a few options to our clients for the best possible scenario. There are several ways we can present solutions: in person, zoom, and phone conference. We can also provide samples if needed.

**10. Describe any minimum project requirements and if any surcharges will be assessed for not meeting the minimum.**

We have no minimums.

**11. Describe how your company ensures that the LED solutions and products offered are current, energy efficient, best-value, and are customizable to agency needs.**

NCLED ensures all lights are DLC listed. When it comes to value it is our experience that we always excel at that. NCLED does not believe in all fixtures or an all-lamp solution. Everything is based on gaining the highest energy savings at the lowest cost. We are proposing long & short-term gains when we build a project.

**12. Describe your company's hierarchy or chain of command from installers to sales to management that will work with this potential contract/program.**

NCLED has a team of 7 installers, 1 Office Administrator, 1 Lead generator, 3 Auditors, and 1 project Manager. Our Office Administrator handles all paperwork, Our Lead Generator creates new opportunities, Our Audit team consists of our Company VP, Master Electrician, and President, and Our Project Manager orders all materials, schedules all projects and coordinates all, warranty servicing.

**13. Describe the process from order placement, including methods, to receipt of order, installation, and final walk-through (punch-list).**

When we are awarded a project NCLED sends a companywide email out that includes our client. This ensures we are all on the same page. Our office admin will start paperwork (W9, contracts, etc). The project manager secures all materials and stages them for the install team. He then schedules the install with the client. The auditor has a meeting with the lead installer to ensure all questions are covered. During the install the lead reports to the office daily to address any issues. A final walkthrough is done by the lead before the crews leave. An additional post inspection is done by the auditor to ensure nothing is incorrect.

**14. Describe in detail your return or exchange program/policy(s) for purchases of LED lighting solutions and/or specific products (i.e lamps, fixtures) outside of an audit or applicable project.**

In most cases a picture will suffice. If our vendor wants the product for any reason NCLED will cover the cost. You simply email or call NCLED to let us know of your needs.

**15. Provide a narrative of a recent project that totaled at least \$150,000 in lighting audit and LED solutions. The narrative should describe the lighting audit and results, proposed project scope, pricing costs and calculations, any fees, your company's installation/project management, and a final report and rebate summary.**

We are providing the Antigo School district Interior & Exterior Lighting turnkey project for your review. As you will see with our attached documents for 15a, you will receive net costs after incentives, ROI, Energy Savings calculations, Maintenance Savings calculations, Cash Flow Analysis, Costs of waiting, current kWh rate, and much more.

**15a. Uploaded as a separate PDF document titled "7 - Project Deliverables" provide the supporting documentation for the project described above in #15. Supporting documentation and deliverables must include the following:**

- (i) Lighting audit and results
- (ii) Proposed project scope, pricing costs and calculations, any applicable fees
- (iii) Installation/Project Management plan
- (iv) Final report and rebate summary

**16. Describe any "added value" attributes being offered to participating agencies when purchasing services and products through your company. Describe any "value-adds" that are exclusive to the potential contract.**

We will provide photometrics and light level readings as an "added value" for projects that can benefit from these value-adds. We can also provide sample lighting for clients who would like to see how the LED solution will look in their facilities.

## Warranty

**1. Describe your warranty program, including any conditions and requirements to qualify claims procedure and overall structure.**

Our products come with a minimum 5-year warranty. If a product fails NCLED will replace the product. Simply sending us a description of the product will allow us to review our work order for the location. If a picture is needed for further product clarification, we will request one.

**2. Do all warranties cover all products/equipment parts and labor?**

XXXXX Yes        No

**If NO, describe the exceptions to coverage.**

Click or tap here to enter text.

**3. Do warranties cover the expense of a technician's travel time and mileage to perform warranty repairs?**

XXXXX Yes        No

**If NO, describe why travel and mileage are not covered.**

Click or tap here to enter text.

**4. List any additional limitations or circumstances that would not be covered under your warranty?**

Damage caused by your electrical system failure due to water or damage caused by negligence.

**5. List any geographic areas for which your organization cannot provide a certified technician to perform warranty repairs. How will participating agencies in these areas be provided service for warranty repair?**

None, we will provide a certified technician for repairs for all of the areas we service in the 5 listed States (ND, SD, IA, MN, & Wisconsin.

## Financials & Level of Support

**1. Describe the percentage of your company's revenue, by category (city/county/government, K12 education, higher education) that is derived from lighting audit services and LED sales on an annual basis.**

80% of our company's revenue is derived from City/County/Government, K12 Education and Higher education. K12 equates to about 50%, Higher Education 15% and City/County/Government 15%.

**2. Describe how your company works with agencies to determine payment terms, progress payments, etc.**

In most cases a 50% down payment balance net 30 after project completion. We also offer a Municipal & Technology lease option that can go as far out as 10 years.

**3. Describe your company's allowed methods for payment and if any fees are assessed for those methods.**

Check or ACH payments are both allowed.

**4. Indicate the level of support your company will offer on this contract category.**

XXXXX Pricing is better than what is offered to individual educational agencies.

XXXXX Pricing is better than what is offered to cooperative educational agencies.

       Other, please describe

**If OTHER, describe how the pricing submitted differs from individual entities or other purchasing consortiums:**

Click or tap here to enter text.

**5. Describe any self-audit process/program you plan to employ to verify compliance with an anticipated contract award.**

Post Project Team review of a project always occurs to verify all contracts were handled properly. This is completed by our Vice President.

## Marketing & Partnership

1. **Describe how your company will position and propose to support CPC and its participating agencies regarding program growth.**

We can provide the energy saved for your agencies so that others in your program can see the benefits.

2. **Describe and submit a marketing plan that would describe, at a minimum, the following: process on how the contract will be launched to current and potential agencies, the ability to produce and maintain full-color print advertisements in camera-ready electronic format, including company logos and contact information, anticipated contract announcements, planned advertisements, industry periodicals, other direct, or indirect marketing activities promoting the awarded contract, and how the contract award will be displayed/linked on your organization's website. You can submit any support materials as Exhibit A – Marketing Plan.**

We will provide our Turnkey LED Lighting capabilities flyer, 2023 Trade Ally Contractor award video from Focus on Energy, along with our company logo and contact information. We will add an additional tab on our website to reflect all projects to date that we have provided services for CPC. Included will be the name, location, kWh hours saved, energy savings, etc.

3. **Describe how your company will position this contract to CPC's participating agencies if awarded.**

We will provide a PDF for both email and a printed copy to share with CPC's participating agencies.

4. **Describe how you plan to inform and train company personnel on the contract terms and conditions, details, and promotion of the contract. Describe how your organization plans to utilize your marketing and sales staff with this anticipated contract.**

We will have a staff meeting to explain the conditions and details of the contract and use the full force of our staff to implement the marketing pieces and strategy with CPC.

## Exceptions & Deviations

1. **List any additional stipulations and/or requirements your company requests that are not covered in the RFP.**

None

2. **List any exceptions your company is requesting to the terms outlined in the Technical Specifications.**

Respondents must include the following when requesting exceptions:

- RFP section number and page number
- Describe the exception
- Explanation of why this is an issue
- A proposed alternative to meet the needs of participating agencies and the cooperative

None

## References

Provide three (3) references that have purchased Lighting Audit and LED Solutions from your company within the last two (2) years. References from the proposed service area are preferred. A contact name, phone number and email will be required. \*Note, ensure your references are prepared to communicate with a representative from CPC. Failure to confirm reference of past work may affect your evaluation.

Reference #1 – Company Name  
Service/Product Purchased

Oconto Falls School District  
Turnkey LED lighting Installation

<b>Year of Purchase</b>	2021-Current Day
<b>Reference Contact</b>	Mike Bouche
<b>Phone</b>	920-848-4475
<b>Email</b>	Michael.bouche@of-ps.org

<b>Reference #2 – Company Name</b>	Suring School District
<b>Service/Product Purchased</b>	Turnkey LED Lighting Installation
<b>Year of Purchase</b>	2019
<b>Reference Contact</b>	Greg Jaeger
<b>Phone</b>	920-842-2178
<b>Email</b>	jaeggr@suringk12.org

<b>Reference #3 – Company Name</b>	Columbus School District
<b>Service/Purchase Purchased</b>	Turnkey LED Lighting Installation
<b>Year of Purchase</b>	2023
<b>Reference Contact</b>	Troy Marshall
<b>Phone</b>	920-623-5950 x3158
<b>Email</b>	tmarshall@columbus.k12.wi.us

## Vendor Forms & Signatures

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### Instructions

Contained herein are forms and information required by the Cooperative Purchasing Connection (CPC). Please note, while some information is merely informational, some will be used during the evaluation and vetting process.

To submit the required forms, follow these steps:

1. Read the document in its entirety.
2. Complete all questions and forms.
3. Save all pages in the correct order to a single PDF format titled "*Vendor Forms & Signatures – Name of Company*".
4. Submit the forms in the required format with all necessary signatures in Public Purchase.

The following sections will need to be completed prior to submission and submitted as one single PDF titled "Vendor Forms & Signatures – Name of Company":

1. Contract Offer & Award
2. Uniform Guidance "EDGAR" Certification Form
3. Subcontractor Utilization Form

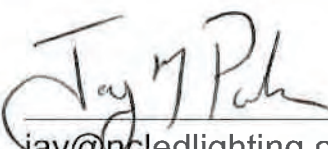


## Contract Offer & Award

**Instructions:** Part I of this form is to be completed by the Vendor and signed by its authorized representative. Part II will be completed by the Cooperative Purchasing Connection (CPC) upon the occasion of an award.

### Part I: Vendor

In compliance with the Request for Proposal (RFP), the undersigned warrants that I/we have examined all General Terms and Conditions, Forms and Specifications, and being familiar with all of the conditions surrounding the solicitation, hereby offer and agree to furnish all goods and services in compliance with all terms, conditions, specifications, and amendments in this solicitation and any written exceptions in the offer. Signature also certifies understanding and compliance with this proposal. The undersigned understands that his/her competence and responsibility and that of his/her proposed subcontractors, time of completion, as well as other factors of interest to CPC as stated in the evaluation section, will be a consideration in making the award. This contract offer and award binds said Vendor to all terms and conditions stated in the proposal.

Business Name	NCLED, LLC	Date	09/07/2023
Address	516 N. Eighth Street Unit D	City, State, Zip	De Pere, WI 54115
Contact Person	Jay Polena	Title	Vice President
Authorized Signature		Title	Vice President
Email	jay@ncledlighting.com	Phone	920-328-8948

### Part II: CPC

Your response to the identified proposal is hereby accepted. As a Vendor, you are now bound to offer and provide the products and services identified within this solicitation, your response, including all terms, conditions, specifications, exceptions, and amendments. The initial term of this contract shall be for up to twenty-four (24) months and will commence on the date indicated below. There will be an optional renewal for a period lasting no longer than one (1) additional 24-month period. CPC may grant an extension under certain criteria and conditions.

Agency	_____	Authorized Signature	_____
Name	_____	Title	_____
Awarded this	_____ day of	Contract #	_____
Contract/Agreement to Commence _____			

## **EDGAR Certification Form**

### **2 CRF Part 200**

#### **REQUIRED CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS – APPENDIX II TO 2 CFR 200**

**The following provisions are required and apply when federal funds are expended by participating agencies for any contract resulting from this procurement process.**

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

##### **(A) Vendor Violation or Breach of Contract Terms**

Contracts for more than the simplified acquisition threshold currently set at \$250,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate. Provisions regarding vendor default and legal remedies are included in Sections I.K.18 and I.K.19 above. Any contract award will be subject to such provisions. The remedies under the contract are in addition to any other remedies that may be available under law or in equity.

##### **(B) Termination for Cause and for Convenience**

Pursuant to Federal Rule (B) above when federal funds are expended by participating agencies, the participating agency reserves all rights to immediately terminate any agreement in excess of \$10,000 resulting from this procurement process in the event of a breach or default of the agreement by the Vendor, in the event the vendor fails to " (1) meet schedules, deadlines, and/or delivery dates within the time specified in the procurement solicitation, contract, and/or a purchase order; (2) make any payments owed; or (3) otherwise perform in accordance with the contract and/or the procurement solicitation. The participating agency reserves the right to terminate the contract immediately, with written notice to vendor, for convenience, if the participation agency believes, in its sole discretion that it is in the best interest of the participating agency to do so. The vendor will be compensated for work perform and accepted and goods accepted by the participating agency as of the termination date if the contract is terminated for convenience of the participating agency. Any award made under this procurement process is not exclusive and the participating agency reserves the right to purchase goods and services from other vendors when it is in the best interest of the participating agency.

##### **(C) Equal Employment Opportunity**

Except as otherwise provided under 41 CFR Part 60, all participating agency purchases or contract that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 shall be deemed to include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR Part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

##### **(D) Davis Bacon Act**

When required by Federal program legislation, Vendor agrees that, for all participating agency contracts for the construction, alteration, or repair (including painting and decorating) of public buildings or public works, in excess of \$2,000, Vendor shall comply with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, the Vendor is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specific in a



wage determinate made by the Secretary of Labor. In addition, the Vendor shall pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

Vendor must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

#### **(E) Contract Work Hours and Safety Standards Act**

Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard workweek of 40 hours. Work in excess of the standard workweek is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the workweek. The requirements of the 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions that are unsanitary, hazardous or dangerous. These requirements do not apply to the purchase of supplies, materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

#### **(F) Right to Inventions Made Under a Contract or Agreement**

If the participating agency's Federal award meets the definition of "funding agreement" under 37 CFR 401.2(a) and the recipient or sub-recipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance or experiments, developmental or research work under the "funding agreement," the recipient or sub-recipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

#### **(G) Clean Air Act and Federal Water Pollution Control Act**

Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended, contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

#### **(H) Debarment and Suspension (Executive Order 12549 and 12689)**

A contract award (see 2 CFR 180.222) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1966 Comp. p. 189) and 12689 (3 CFR Part 1989 Comp. p. 235), "Debarment and Suspension." SAM exclusions contain the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

#### **(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)**

Vendors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

Pursuant to Federal Rule (I) above, when federal funds are expended by participating agencies, the vendor certifies that during the term of an award for all contracts by participating agencies resulting from this procurement process, the vendor certifies that it is compliance with all applicable provisions of the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). The undersigned further certifies that:

- (1) No Federal appropriated funds have been paid or will be paid for on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be include in the award documents for all covered sub-awards exceeding \$100,000 in Federal funds at all appropriated tiers and that all subrecipients shall certify and disclose accordingly.

#### **(J) Procurement of Recovered Materials**

For participating agency purchases utilizing Federal funds, Vendor agrees to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act where applicable and provide such information and certifications as a participating agency may require to confirm estimates and otherwise comply. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery, and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

#### **(K) Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment**

A participating agency is prohibited from obligating or expending funds to:

- (1) Procure or obtain.
- (2) Extend or renew a contract to procure or obtain; or
- (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
  - (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou

Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

- (ii) Telecommunications or video surveillance services provided by such entities or using such equipment.
- (iii) Telecommunications or video surveillance equipment or services products or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

#### **(L) Domestic Preferences for Procurements**

As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

For the purpose of this section:

- (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

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#### **PROFIT AS A SEPARATE ELEMENT OF PRICE**

For purchases using federal funds in excess of \$250,000, a participating agency may be required to negotiate profit as a separate element of the price. See 2 CFRR 200.323(b). When required by a participating agency, the vendor agrees to provide information and negotiate with the participating agency regarding profit as a separate element of the price for a particular purchase. However, vendor agrees that the total price, including profit, charged by the vendor to the participating agency shall not exceed the awarded pricing.

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#### **RECORD RETENTION REQUIREMENTS FOR CONTRACTS PAID FOR WITH FEDERAL FUNDS - 2 CFR § 200.333**

When federal funds are expended by participating agencies for any contract resulting from this procurement process, the vendor certifies that it will comply with the record retention requirements detailed in 2 CFR § 200.333. The vendor further certifies that vendor will retain all records as required by 2 CFR § 200.333 for a period of three years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

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#### **CERTIFICATION OF COMPLIANCE WITH THE ENERGY POLICY AND CONSERVATION ACT**

When federal funds are expended by participating agencies for any contract resulting from this procurement process, the vendor certifies that the vendor will be in compliance with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.; 49 C.F.R. Part 18; Pub. L. 94- 163, 89 Stat. 871).

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### CERTIFICATION OF NON-COLLUSION STATEMENT

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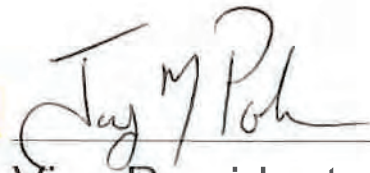
Vendor certifies under penalty of perjury that its responsible to this procurement solicitation is in all respects bona fide, fair, and made without collusion or fraud with any person, joint venture, partnership, corporation or other business or legal entity.

Pursuant to Federal Ruling, when federal funds are expended by participating agencies, the vendor hereby certifies that during the term of an award for all contracts by participating agencies resulting from this procurement process, vendor certifies compliance will all provisions, laws, acts, regulations as specifically noted above. The vendor agrees to comply with all federal, state, and local laws, rules, regulations, and ordinances, as applicable.

Business Name NCLED, LLC

Full Name Jay Polena

Authorized  
Signature



Title Vice President



## Subcontractor Utilization Form

**Instructions:** List all subcontractors to be used during the performance of this contract. Submit additional forms if needed.

Solicitation Name: \_\_\_\_\_  
Solicitation Number: \_\_\_\_\_  
Vendor Name: \_\_\_\_\_

If a subcontractor will not be used, check this box: ☒

Company Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Primary Contact: \_\_\_\_\_  
Email Address of Contact: \_\_\_\_\_  
Services to be provided: \_\_\_\_\_

Company Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Primary Contact: \_\_\_\_\_  
Email Address of Contact: \_\_\_\_\_  
Services to be provided: \_\_\_\_\_

Company Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Primary Contact: \_\_\_\_\_  
Email Address of Contact: \_\_\_\_\_  
Services to be provided: \_\_\_\_\_

# 1- Lighting Audit Services

\*Please note this workbook has multiple tabs.

**Instructions.** Complete the tables below for the services your company is offering. Please note this is an **REQUIRED** form.

**Responding Company's Name:**

NCLED, LLC

**REQUIRED**

## Lighting Assessment & Design

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Lighting Audit & Assessment (per square foot)	Free	Free	#VALUE!	None	None	Our Audits are free
Design Services	Free	Free	#VALUE!	None	None	Our Designs are completed in house and are free
Project Management	Free	Free	#VALUE!	None	None	Our Project Management is done in house and is free
			0.00%			
			0.00%			
			0.00%			

**Installation [Labor]** \*\*Prevailing wage projects/installs are subject to higher hourly rates/charges. Prevailing wage rates change by MN county. Participating agencies are required to notify the Vendor if prevailing wages are required (state/federal funding as part or all of the project).

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Hourly Rate - Regular Hours	\$ 88.00	\$ 80.00	9.09%	None	None	
Hourly Rate - Evening	\$ 88.00	\$ 80.00	9.09%	None	None	
Hourly Rate - Weekend/Holidays	\$ 132.00	\$ 120.00	9.09%	None	None	
			0.00%			
			0.00%			
			0.00%			

## Other Services

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Rebate Fulfillment	Free	Free	#VALUE!	None	None	Completed in house and is Free
Recycling Services	\$ 0.25	\$ 0.15	40.00%	None	None	Completed in house and is Free
Training	Free	Free	#VALUE!	None	None	
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			

## 2.1 - LED Category Discount

**\*Please note this workbook has multiple tabs.**

**Instructions.** Complete the following schedule for all categories of product offered (by catalog, category, and/or by manufacturer) which can include sub-categories (specific lines from manufacturers) and the discount associated with that category. The form should be completed by the standards listed in the Technical Specifications. Additional rows may be added. This is a required form **if proposing lighting solutions.**

**Responding Company's Name:**

NCLED, LLC

**REQUIRED FORM**

Category	Catalog	Manufacturer	Discount Offered	Comments
T8 Tubes	4ft T8 LED Tube CCT & Wattage Selectable	Etherium	10%	
T8 Tubes	2ft LED U-Tube 6" Leg Spacing	Falcor	10%	
T8 Tubes	2ft LED U-Tube 1.625" Leg Spacing	Falcor	10%	
T8 Tubes	2ft T8 LED Tube	Falcor	10%	
T8 Tubes	3ft T8 LED Tube	Falcor	10%	
T5 Tubes	4ft T5 LED Tube	Falcor	10%	
Bollard	LED Bollard	Portor	10%	
Area Light Fixtures	Area Light	Portor	10%	
Area Light Fixtures	Area Light	Portor	10%	
Area Light Fixtures	Area Light	Portor	10%	
Area Light Fixtures	Area Light	Portor	10%	
Area Light Fixtures	Area Light	Portor	10%	
Area Light Fixtures	Area Light	Portor	10%	
Area Light Fixtures	Area Light	Portor	10%	
Area Light Fixtures	Area Light	Portor	10%	
Area Light Fixtures	Area Light	Portor	10%	
Area Light Fixtures	Area Light	Portor	10%	
Area Light Fixtures	Area Light	Portor	10%	
Area Light Fixtures	Wattage Tuneable Area Light	Portor	10%	
Area Light Fixtures	Wattage Tuneable Area Light	Portor	10%	
Area Light Fixtures	Wattage Tuneable Area Light	Portor	10%	
Area Light Fixtures	Wattage Tuneable Area Light	Portor	10%	
Area Light Accessories	Photocell	Portor	10%	
Area Light Accessories	480V Photocell	Portor	10%	
Area Light Accessories	Shield for AL2	Portor	10%	
Area Light Accessories	Shield for AL2	Portor	10%	
Area Light Accessories	T5 Lens	Portor	10%	
Area Light Accessories	T5 Lens	Portor	10%	
Area Light Mounting	Slip-Fitter	Portor	10%	
Area Light Mounting	Square Pole	Portor	10%	
Area Light Mounting	Trunnion	Portor	10%	
Area Light Mounting	Straight Arm	Portor	10%	
Area Light Mounting	U-Bracket	Portor	10%	
Area Light Mounting	U-Bracket	Portor	10%	
Area Light Mounting	W Slip-Fitter	Portor	10%	
Area Light Mounting	W Square Pole	Portor	10%	
Area Light Mounting	W Trunnion	Portor	10%	
Area Light Mounting	Straight Arm	Portor	10%	
Area Light Mounting	W U-Bracket	Portor	10%	
Area Light Mounting	W U-Bracket	Portor	10%	
Barn Light Fixture	Barn Light	Portor	10%	
Barn Light Fixture	Barn Light	Portor	10%	
Canopy Fixture	Canopy	Portor	10%	
Canopy Fixture	Canopy	Portor	10%	
Canopy Fixture	Canopy	Portor	10%	
Canopy Accessories	Dimmable Motion Sensor	Portor	10%	
Canopy Accessories	Dimmable Motion Sensor	Portor	10%	
Corn Bulb	Corn Cob Bulb	Portor	10%	
Corn Bulb	Corn Cob Bulb	Portor	10%	
Corn Bulb	Corn Cob Bulb	Portor	10%	
Corn Bulb	Corn Cob Bulb	Portor	10%	
Retrofit Downlight	Socket Base Downlight	Portor	10%	
Retrofit Downlight	Socket Base Downlight	Portor	10%	
Retrofit Downlight	Socket Base Downlight	Portor	10%	
Retrofit Downlight	Socket Base Downlight	Portor	10%	
Retrofit Downlight Accessories	4" Round Trim	Portor	10%	
Retrofit Downlight Accessories	4" Round Trim	Portor	10%	
Retrofit Downlight Accessories	4" Round Trim	Portor	10%	
Retrofit Downlight Accessories	6" Round Trim	Portor	10%	
Retrofit Downlight Accessories	6" Round Trim	Portor	10%	
Retrofit Downlight Accessories	6" Round Trim	Portor	10%	

5CCT Slim Downlight	Downlight Slim Round	Portor	10%	
5CCT Slim Downlight	Downlight Slim Round	Portor	10%	
5CCT Slim Downlight	Downlight Slim Round	Portor	10%	
5CCT Slim Downlight	Downlight Slim Round	Portor	10%	
Slim Baffled Round Downlight	Slim Baffled Downlight	Portor	10%	
Slim Baffled Round Downlight	Slim Baffled Downlight	Portor	10%	
Slim Downlight Accessories	Mounting Plate	Portor	10%	
Slim Downlight Accessories	Mounting Plate	Portor	10%	
Slim Downlight Accessories	Universal Mounting Plate	Portor	10%	
Disk Light	Disk Light	Portor	10%	
Disk Light	Disk Light	Portor	10%	
Disk Light	Disk Light	Portor	10%	
Disk Light With Motion Sensor	Disk Light w/ Motion Sensor	Portor	10%	
Disk Light With Motion Sensor	Disk Light w/ Motion Sensor	Portor	10%	
Surface Mount Downlight (Round)	Surface Mount Downlight	Portor	10%	
Surface Mount Downlight (Round)	Surface Mount Downlight	Portor	10%	
Surface Mount Downlight (Round)	Surface Mount Downlight	Portor	10%	
Surface Mount Downlight (Round)	Surface Mount Downlight	Portor	10%	
DLSM-R-7-EM	EM Battery	Portor	10%	
Surface Mount Downlight (SQ) Accessories	5" Round Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	5" Round Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	5" Round Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	7" Round Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	7" Round Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	7" Round Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	9" Round Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	9" Round Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	9" Round Trim	Portor	10%	
Surface Mount Downlight (SQ)	Surface Mount Downlight	Portor	10%	
Surface Mount Downlight (SQ)	Surface Mount Downlight	Portor	10%	
Surface Mount Downlight (SQ)	Surface Mount Downlight	Portor	10%	
Surface Mount Downlight (SQ)	Surface Mount Downlight	Portor	10%	
Surface Mount Downlight (SQ) Accessories	5" Square Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	5" Square Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	5" Square Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	7" Square Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	7" Square Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	7" Square Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	9" Square Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	9" Square Trim	Portor	10%	
Surface Mount Downlight (SQ) Accessories	9" Square Trim	Portor	10%	
Commercial Downlight 5C3P	Commercial Downlight	Portor	10%	
Commercial Downlight 5C3P	Commercial Downlight	Portor	10%	
Commercial Downlight 5C3P	Commercial Downlight	Portor	10%	
CDL Trim	Trim for Commercial Downlight	Portor	10%	
CDL Trim	Trim for Commercial Downlight	Portor	10%	
CDL Trim	Trim for Commercial Downlight	Portor	10%	
CDL Trim	Trim for Commercial Downlight	Portor	10%	
CDL Trim	Trim for Commercial Downlight	Portor	10%	
CDL Trim	Trim for Commercial Downlight	Portor	10%	
CDL Trim	Trim for Commercial Downlight	Portor	10%	
CDL Trim	Trim for Commercial Downlight	Portor	10%	
Glimbal Downlight	Round Gimbal	Portor	10%	
Glimbal Downlight	Round Gimbal	Portor	10%	
Glimbal Downlight	Floating Gimbal	Portor	10%	
Flood Light	Flood Light	Portor	10%	
Flood Light	Flood Light	Portor	10%	
Flood Light	Flood Light	Portor	10%	
Flood Light	Flood Light	Portor	10%	
Flood Light	Flood Light	Portor	10%	
Flood Light	Flood Light	Portor	10%	
Flood Light	Flood Light	Portor	10%	



Flood Light	Flood Light	Portor	10%	
Flood Light	Flood Light	Portor	10%	
Flood Light	Flood Light	Portor	10%	
Linear High Bay (LHB)	Linear Highbay	Portor	10%	
Linear High Bay (LHB)	Linear Highbay	Portor	10%	
Linear High Bay (LHB)	Linear Highbay	Portor	10%	
Linear High Bay (LHB)	Linear Highbay	Portor	10%	
Linear High Bay (LHB)	Linear Highbay	Portor	10%	
Linear High Bay (LHB)	Linear Highbay	Portor	10%	
Linear High Bay Accessories	Pendant Mount	Portor	10%	
Linear High Bay Accessories	Surface Mount	Portor	10%	
Linear High Bay Accessories	Wire Guard	Portor	10%	
Linear High Bay Accessories	Wire Guard	Portor	10%	
Linear High Bay Accessories	Remote Control	Portor	10%	
High Bay Round	Round Highbay	Portor	10%	
High Bay Round	Round Highbay	Portor	10%	
High Bay Round	Round Highbay	Portor	10%	
High Bay Round	Round Highbay	Portor	10%	
High Bay Round	Round Highbay	Portor	10%	
High Bay Round	Round Highbay	Portor	10%	
High Bay Round	Round Highbay	Portor	10%	
High Bay Round Mounting Options	Small U-bracket	Portor	10%	
High Bay Round Mounting Options	Large U-bracket	Portor	10%	
High Bay Round Reflector Options	Motion sensor	Portor	10%	
High Bay Round Reflector Options	Motion sensor	Portor	10%	
High Bay Round Reflector Options	Remote Control	Portor	10%	
High Bay Round Reflector Options	PC Reflector	Portor	10%	
High Bay Round Reflector Options	PC Reflector	Portor	10%	
High Bay Round Reflector Options	Reflector	Portor	10%	
High Bay Round Reflector Options	Reflector	Portor	10%	
High Bay Round Reflector Options	PC Reflector	Portor	10%	
High Bay Round Reflector Options	PC Reflector	Portor	10%	
High Bay Round Reflector Options	Wire Guard	Portor	10%	
High Bay Round Reflector Options	Wire Guard	Portor	10%	
Panel- Backlit Fixture	Back-Lit Panel	Portor	10%	
Panel- Backlit Fixture	Back-Lit Panel	Portor	10%	
Panel- Backlit Fixture	Back-Lit Panel	Portor	10%	
Backlit Panel Accessories	Surface Mount Kit	Portor	10%	
Backlit Panel Accessories	Surface Mount Kit	Portor	10%	
Backlit Panel Accessories	Surface Mount Kit	Portor	10%	
Backlit Panel Accessories	Flange Kit	Portor	10%	
Backlit Panel Accessories	Flange Kit	Portor	10%	
Backlit Panel Accessories	Flange Kit	Portor	10%	
Area Light Brackets/Poles	Wall Mount	Portor	10%	
Area Light Brackets/Poles	Wall Mount	Portor	10%	
Area Light Brackets/Poles	Wall Mount	Portor	10%	
Area Light Brackets/Poles	Wall Mount	Portor	10%	
Area Light Brackets/Poles	1 Prong Tenon	Portor	10%	
Area Light Brackets/Poles	2 Prong Tenon	Portor	10%	
Area Light Brackets/Poles	4 Prong Tenon	Portor	10%	
Area Light Brackets/Poles	1 Prong Tenon	Portor	10%	
Area Light Brackets/Poles	2 Prong Tenon	Portor	10%	
Area Light Brackets/Poles	3 Prong Tenon	Portor	10%	
Area Light Brackets/Poles	4 Prong Tenon	Portor	10%	
Area Light Brackets/Poles	1 Prong Tenon	Portor	10%	
Area Light Brackets/Poles	2 Prong Tenon	Portor	10%	
Area Light Brackets/Poles	3 Prong Tenon	Portor	10%	
Area Light Brackets/Poles	4 Prong Tenon	Portor	10%	
LS1 Strip Light	Strip Light	Portor	10%	
LS1 Strip Light	Strip Light	Portor	10%	
LS1 Strip Light	Strip Light w/ EM	Portor	10%	
LS1 Strip Light	Strip Light w/ EM	Portor	10%	
Wire Guard	Wire Guard	Portor	10%	
Stairwell Light	Stairwell Light	Portor	10%	
Stairwell Light	Stairwell Light	Portor	10%	
Troffer	Troffer 2x2	Portor	10%	
Troffer	Troffer 2x4	Portor	10%	
Troffer Accessories	Surface Mount Kit	Portor	10%	
Troffer Accessories	Surface Mount Kit	Portor	10%	
Troffer Accessories	2x2 Flange Kit	Portor	10%	
Troffer Accessories	2x4 Flange Kit	Portor	10%	
Vapor Tight	Vapor Tight	Portor	10%	
Vapor Tight	Vapor Tight	Portor	10%	
Vapor Tight	Vapor Tight	Portor	10%	
Vapor Tight	Vapor Tight	Portor	10%	
VT2	Vapor Tight	Portor	10%	
VT2	Vapor Tight	Portor	10%	
Wall Pack	Wall Pack	Portor	10%	
Wall Pack	Wall Pack	Portor	10%	
Wall Pack W/EM Installed	Wall Pack W/ EM	Portor	10%	
Wall Pack W/EM Installed	Wall Pack W/ EM	Portor	10%	
Full Cutoff Wall Pack	Full Cutoff Wall Pack	Portor	10%	
Full Cutoff Wall Pack	Full Cutoff Wall Pack	Portor	10%	
Wall Pack Mini	Mini Wall Pack	Portor	10%	

Wall Pack Mini	Mini Wall Pack	Portor	10%	
Wall Pack Mini	Mini Wall Pack	Portor	10%	
Motion Sensor	Motion Sensor	Portor	10%	
Motion Sensor	Motion Sensor	Portor	10%	
Motion Sensor	Motion Sensor	Portor	10%	
Wrap Around	Wrap Around	Portor	10%	
Wrap Around	Wrap Around	Portor	10%	
Emergency Light	Exit light / Double	Portor	10%	
Emergency Light	Exit Light w/ EM Lights	Portor	10%	
Emergency Light	Emergency Light	Portor	10%	
Cable	Aircraft Cable	Portor	10%	
Emergency Batteries	EM Battery	Portor	10%	
	EM Battery	Portor	10%	
Emergency Batteries	EM Battery	Portor	10%	
Emergency Batteries	EM Battery	Portor	10%	
Emergency Batteries	EM Battery	Portor	10%	
Emergency Batteries	EM Battery	Portor	10%	
Emergency Batteries	EM Battery	Portor	10%	
Emergency Batteries	EM Battery	Portor	10%	
Emergency Batteries	EM Battery	Portor	10%	
Photocell	Photocell	Portor	10%	
Photocell	Photocell	Portor	10%	
Photocell	Motion Sensor	Portor	10%	
Photocell	Remote Control	Portor	10%	
Wire Connectors and Junction Boxes	Junction Box	Portor	10%	
Wire Connectors and Junction Boxes	3-prong Connector	Portor	10%	
Wire Connectors and Junction Boxes	5-prong Wire Connector	Portor	10%	
Whip	Metal Whip 5 Wire	Portor	10%	
Whip	Metal Whip 6 Wire	Portor	10%	
Whip	90° Whip Connector	Portor	10%	
CLVS-MO	Vapor Tight	Colossus	10%	
CLVS-MO	Vapor Tight	Colossus	10%	
CLVS-WD	Vapor Tight	Colossus	10%	
Tri Proof Light	Tri-proof	Colossus	10%	
Tri Proof Light	Tri-proof	Colossus	10%	
Tri Proof Light	Tri-proof	Colossus	10%	
Tri Proof Light	Tri-proof	Colossus	10%	
Tri Proof Light	Tri-proof	Colossus	10%	
High Bay Round	HALO Highbay	Colossus	10%	
High Bay Round	HALO Highbay	Colossus	10%	
High Bay Round	HALO Highbay	Colossus	10%	
High Bay Round	HALO Highbay	Colossus	10%	
High Bay Round	HALO Highbay	Colossus	10%	
Flood Light Fixture	Flood Light	Colossus	10%	
Flood Light Fixture	Flood Light	Colossus	10%	
Flood Light Fixture	Flood Light	Colossus	10%	
CLFL1 Accessories	30 degree lens	Colossus	10%	
CLFL1 Accessories	60 degree lens	Colossus	10%	

### 3 - Volume Discounts

**\*Please note this workbook has multiple tabs.**

**Instructions.** Complete the form below if your company is offering additional discounts for a one time purchase, size of project, or a group of local agencies in a geographic area combining requirements (estimate annual spend). Please note this is an **optional form**.

**NCLED, LLC**

## OPTIONAL FORM

[illegible]



## SCOPE OF WORK

The following is included in the LED upgrade for Antigo High School.

- Complete walkthrough of all areas with I-PAD using Eco Insight
- Determine what solutions are best for each area
- Discover energy & maintenance savings (72% energy, 100% Maintenance)
- Provide point of contacts for billing, installation, questions
- Provide turnkey project costs (\$350,649.00 rebates \$32,740)
- Pre start discussion on staging materials & plan of progression
- Install all products in the outlined proposal up to code.
- This project will be completed during the summer with a projected completion time of 5 weeks.
- Process final invoice & Focus on Energy after final walkthrough

The quote includes all material, labor, lifts, travel, recycling, and paperwork for the Focus on Energy rebates.

NCLED  
516 N 8th St, Unit D  
DePere, WI 54115

# LIGHTING RETROFIT PROPOSAL

Prepared for

**Jake Leiterman**

**Supervisor of Buildings & Grounds**

## Site Information

Name: Antigo High School

Address: 1900 10th Ave Antigo WI 54409

Proposal Date

December 30, 2021

Proposal Expires

January 31, 2022



Jay Polena  
Vice President  
920.655.2468  
[jay@ncledlighting.com](mailto:jay@ncledlighting.com)



## Executive Summary

### Project Costs

Total Project Cost	\$350,649
Sales Tax	\$0
Incentives/Rebates	\$32,740
Turnkey Project Cost	\$317,909

### Financial Metrics

Payback Period (yrs)	6.17
Avg. Annual Return	16%
10 Yr Operating Savings	\$495,586
Net Present Value	\$57,984

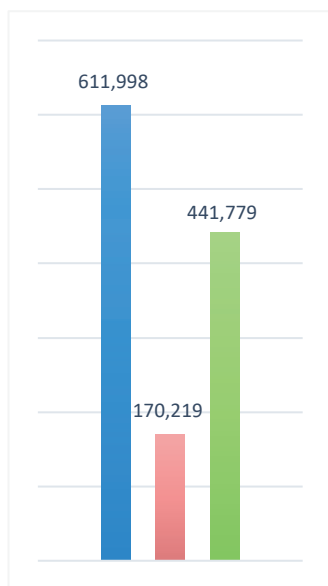
### Cost of Waiting

Postpone for one month	\$4,130
Postpone for six months	\$24,779
Postpone for one year	\$49,559

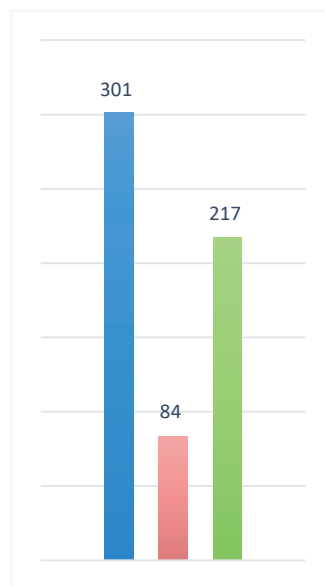
### Assumptions

Energy Rate (\$/kWh)	0.1006
Annual Utility Rate Increase	0.00%
Discount Rate	6.00%

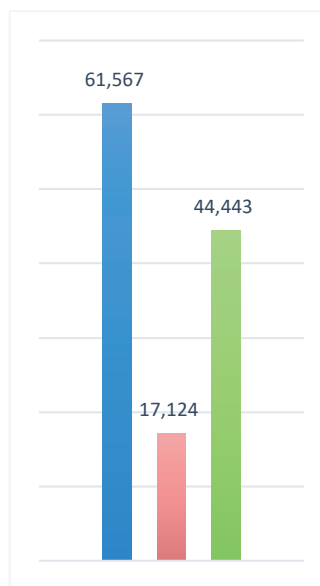
### Usage (kWh)



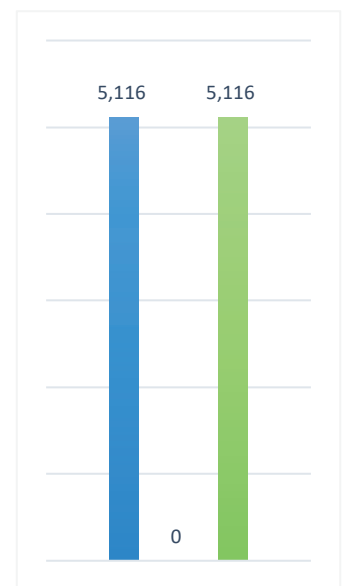
### Demand (kW)



### Energy Cost (\$)



### Maintenance Cost



■ Current ■ Proposed ■ Savings



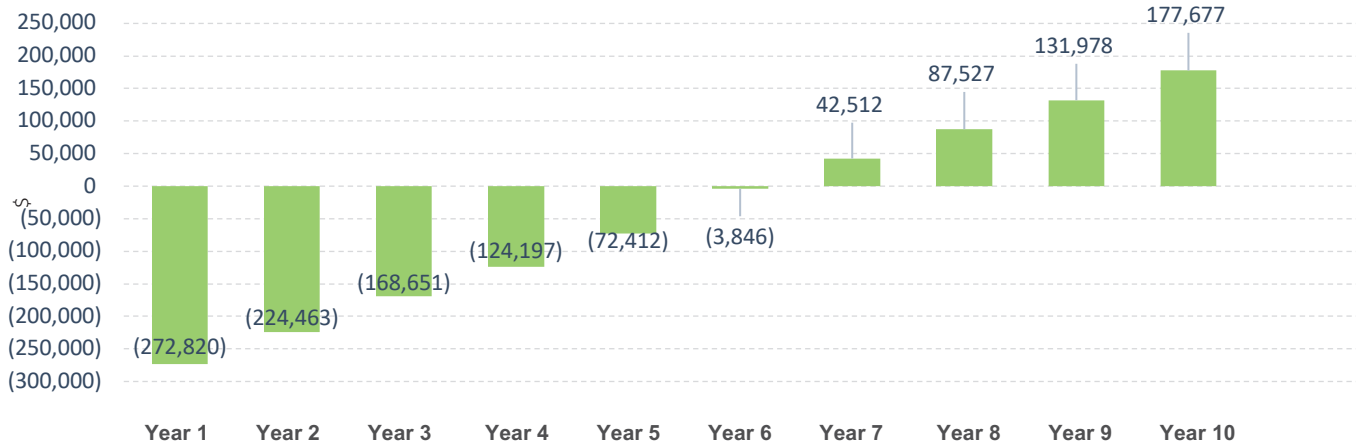
### Impact of New Lighting

Energy Reduction	72%
Avg. Annual Maintenance Savings	100%
Avg. Annual Operating Savings	74%

### Aggregate Operating Savings

Saving Area	Year 1	Year 5	Year 10
Energy	\$44,443	\$222,215	\$444,429
Maintenance	\$646	\$23,282	\$51,157
<b>Total</b>	<b>\$45,089</b>	<b>\$245,497</b>	<b>\$495,586</b>

### Aggregate Cash Flow Over Ten Years



### Itemized Cash Flow

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Project Cost	\$(350,649)	-	-	-	-	-	-	-	-	-
Rebates	\$32,740	-	-	-	-	-	-	-	-	-
Energy Savings	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443
Maintenance Savings	\$646	\$3,914	\$11,369	\$11	\$7,342	\$24,123	\$1,915	\$572	\$8	\$1,256
<b>Net Cash Flow</b>	<b>\$(272,820)</b>	<b>\$48,357</b>	<b>\$55,812</b>	<b>\$44,454</b>	<b>\$51,785</b>	<b>\$68,566</b>	<b>\$46,358</b>	<b>\$45,015</b>	<b>\$44,451</b>	<b>\$45,699</b>

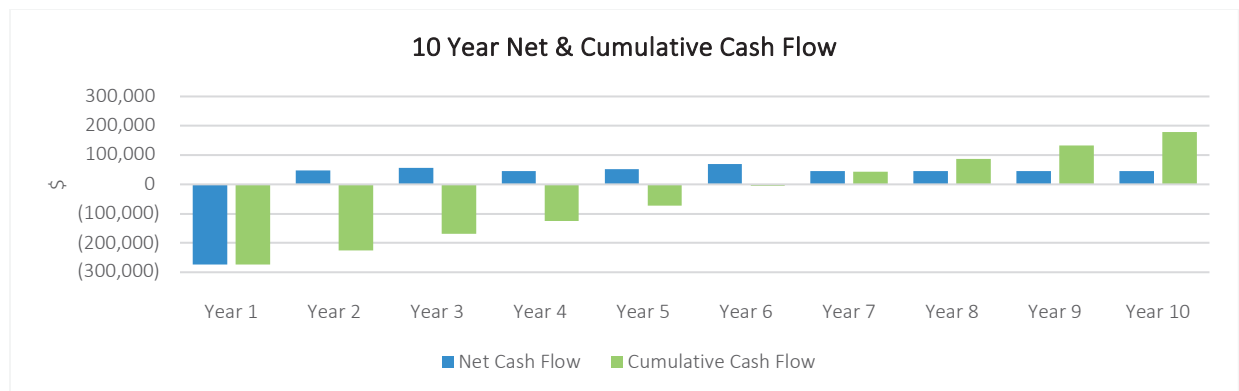
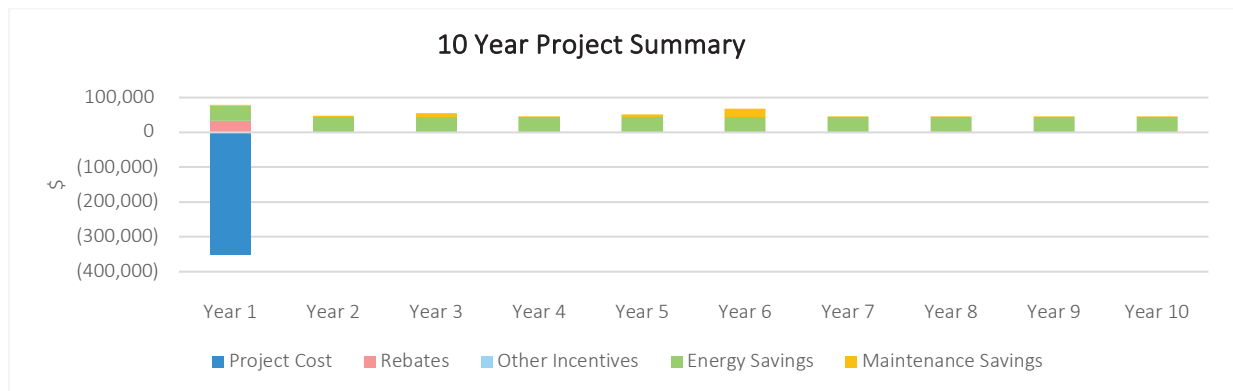


## Cash Flow

We understand that finalizing a project like this often takes time. However, each day you delay your upgrade, you are missing out on the opportunity to reduce your operating expenses. As shown below, the lost opportunity continues to compound over time.

### 10 Year Cash Flow Analysis

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Project Cost	\$(350,649)	-	-	-	-	-	-	-	-	-	\$(350,649)
Rebates	\$32,740	-	-	-	-	-	-	-	-	-	\$32,740
Energy Savings	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$444,429
Maintenance Savings	\$646	\$3,914	\$11,369	\$11	\$7,342	\$24,123	\$1,915	\$572	\$8	\$1,256	\$51,157
Net Cash Flow	\$(272,820)	\$48,357	\$55,812	\$44,454	\$51,785	\$68,566	\$46,358	\$45,015	\$44,451	\$45,699	\$177,677
Cum Cash Flow	\$(272,820)	\$(224,463)	\$(168,651)	\$(124,197)	\$(72,412)	\$(3,846)	\$42,512	\$87,527	\$131,978	\$177,677	\$177,677



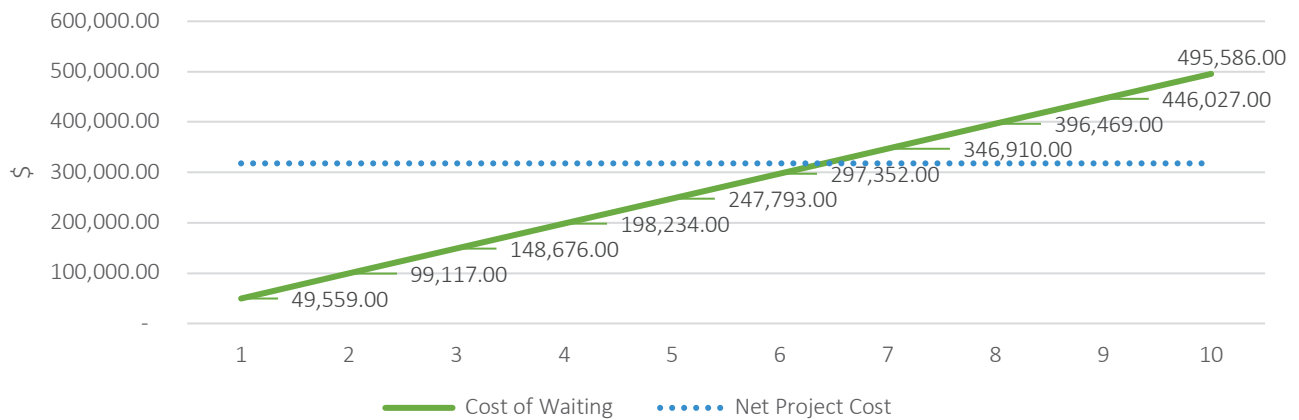




## Cost of Waiting

The cost of waiting shows the amount of cash your company will be losing if you delay the proposed lighting upgrade.

Monthly	Yearly	10 Years
\$4,130	\$49,559	\$495,586



*Cost of waiting includes energy savings and maintenance savings applied as an average annual amount over a 10 year analysis period*



## Energy Usage

The following set of information evaluates your current energy usages and costs and compares that to the projected energy usage and costs your facility will see after the proposed lighting upgrade.

### Annual Energy Usage

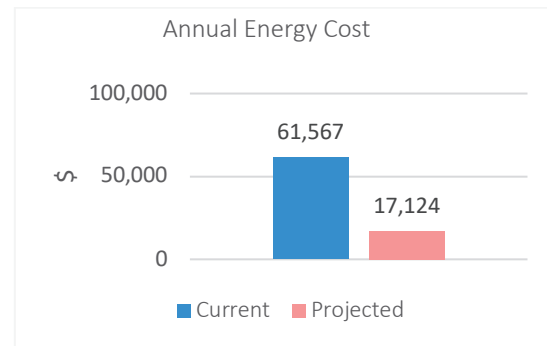
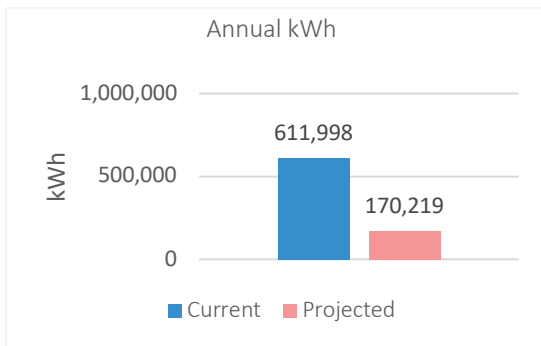
Current Usage (kWh)	Projected Usage (kWh)	Reduction	Current Cost	Projected Cost	Financial Savings	Percent Saved
611,998	170,219	72%	\$61,567	\$17,124	\$44,443	72%

1. Energy cost = \$0.1006/kWh; Annual energy cost escalation = 0.00%
2. Energy costs are averaged over 10 year analysis period
3. Projected Usage (kWh) includes savings from controls if applicable

### Annual Energy Usage Reduction

Current Usage (kWh)	Projected Usage (kWh)	Reduction (kWh)	Reduction
611,998	170,219	441,779	72%

### Energy Comparison



1. Energy Cost = \$0.1006/kWh; Annual energy cost escalation = 0.00%
2. Energy costs are averaged over 10 year analysis period



## Watts Summary

Existing Watts	Proposed Watts	Reduced Watts	Reduction
301,079	83,525	217,554	72%

*The calculations in this table take into account the existing fixtures that are being replaced, upgraded, and/or have new lighting controls being proposed for them*

## Lighting Wattage Comparison

### Exterior

Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
Recessed Cans	Area Light/Mercury Vapor/400.0W/1 Lamp	18	454.0	8,172	Part No: SB 150 Area & Site	18	150.0	2,700	4,380
Recessed Cans	Downlight/Metal Halide/175.0W/1 Lamp	13	210.0	2,730	Part No: CC30 Garage & Canopy/Retrofit Kit	13	30.0	390	4,380
Wallpacks	Wallpack/High Pressure Sodium/150.0W/1 Lamp	19	188.0	3,572	Part No: STD WP 50 Wall Mount	19	50.0	950	4,380
<b>Total</b>			<b>852.0</b>	<b>14,474</b>			<b>230.0</b>	<b>4,040</b>	

### Interior

Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
A Hallway	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	27	74.9	2,022	Part No: Backlit FP24 Troffers & Panels	27	30.0	810	2,100
A101/A102	Downlight/Incandescent/150.0W/1 Lamp	2	150.0	300	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	521
A103	Strip/T12 Fluorescent/4 ft/40.0W/2 Lamp	20	75.0	1,500	Part No: PT-LSFA-4F Linear	20	25.0	500	1,900
A104	Strip/T12 Fluorescent/4 ft/40.0W/2 Lamp	20	75.0	1,500	Part No: PT-LSFA-4F Linear	20	25.0	500	1,900
A105	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A106	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A108	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	521
A109	Strip/T12 Fluorescent/4 ft/40.0W/2 Lamp	31	75.0	2,325	Part No: PT-LSFA-4F Linear	31	25.0	775	1,900
A110	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	11	149.8	1,648	Part No: Backlit FP24 Troffers & Panels	11	30.0	330	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
A111	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-LSFA-4F Linear	2	25.0	50	1,900
A112 Hallway	Wrap/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: PT-WAFA-4F91-3CCT Wrap	4	30.0	120	2,100
A113	Strip/T12 Fluorescent/4 ft/40.0W/2 Lamp	32	75.0	2,400	Part No: PT-LSFA-4F Linear	32	25.0	800	1,900
A114	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: PT-LSFA-4F Linear	4	25.0	100	1,900
A115	Downlight/Incandescent/150.0W/1 Lamp	2	150.0	300	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	1,900
A116	Wrap/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-WAFA-4F91-3CCT Wrap	2	30.0	60	1,900
A117	Wrap/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: PT-WAFA-4F91-3CCT Wrap	4	30.0	120	1,900
A118	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	24	149.8	3,595	Part No: Backlit FP24 Trovers & Panels	24	30.0	720	1,900
A119	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Trovers & Panels	12	30.0	360	1,900
A120	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	18	149.8	2,696	Part No: Backlit FP24 Trovers & Panels	18	30.0	540	1,900
A121	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: Backlit FP 14 Trovers & Panels	1	20.0	20	1,900
A122	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: Backlit FP 14 Trovers & Panels	1	20.0	20	1,900
A123	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Trovers & Panels	2	30.0	60	1,900
A126	Downlight/Incandescent/150.0W/1 Lamp	2	150.0	300	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	1,900
A126	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	16	149.8	2,397	Part No: Backlit FP24 Trovers & Panels	16	30.0	480	1,900
A127	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Trovers & Panels	12	30.0	360	1,900
A128	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Trovers & Panels	2	30.0	60	1,900
A129	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Trovers & Panels	2	30.0	60	1,900
A130	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Trovers & Panels	12	30.0	360	1,900
A131	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Trovers & Panels	8	30.0	240	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
A132	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	20	149.8	2,996	Part No: Backlit FP24 Troffers & Panels	20	30.0	600	1,900
A133	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: PT-LSFA-4F Linear	3	25.0	75	1,900
A135	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
A137	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: PT-VT1-4F-45W Vapor Tight	4	45.0	180	1,900
A138	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: Backlit FP 14 Troffers & Panels	2	20.0	40	1,900
A139	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	18	56.3	1,013	Part No: PT-VT1-4F-45W Vapor Tight	18	45.0	810	1,900
A140	Downlight/CFL Pin Base/26.0W/2 Lamp	1	45.8	46	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	1	24.0	24	1,900
A141	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: Backlit FP 14 Troffers & Panels	3	20.0	60	1,900
A143	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A144	Troffer/CFL TT5/40.0W/2 Lamp	2	70.4	141	Part No: Backlit FP22 Troffers & Panels	2	25.0	50	1,900
A145	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A147	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	6	56.3	338	Part No: PT-VT1-4F-45W Vapor Tight	6	45.0	270	1,900
A148	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: Backlit FP 14 Troffers & Panels	1	20.0	20	1,900
A149	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A150	Troffer/CFL TT5/40.0W/2 Lamp	2	70.4	141	Part No: Backlit FP22 Troffers & Panels	2	25.0	50	1,900
A153	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: Backlit FP 14 Troffers & Panels	3	20.0	60	1,900
A154	Downlight/CFL Pin Base/26.0W/2 Lamp	1	45.8	46	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	1	24.0	24	1,900
A155	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-LSFA-4F Linear	12	25.0	300	1,900
A156	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	4	149.8	599	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
A157	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A158	Troffer/CFL TT5/40.0W/2 Lamp	3	70.4	211	Part No: Backlit FP22 Troffers & Panels	3	25.0	75	1,900
A159	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: PT-LSFA-4F Linear	1	25.0	25	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
A160	Troffer/CFL TT5/40.0W/2 Lamp	3	70.4	211	Part No: Backlit FP22 Troffers & Panels	3	25.0	75	1,900
A161	Downlight/CFL Pin Base/26.0W/2 Lamp	2	45.8	92	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	1,900
A201 Stairs	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: PT-LSFA-4F Linear	1	25.0	25	1,900
A202	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	5	112.3	562	Part No: Backlit FP24 Troffers & Panels	5	30.0	150	1,900
A203	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A204	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A205	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-LSFA-4F Linear	12	25.0	300	1,900
A210/A212	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-LSFA-4F Linear	12	25.0	300	1,900
A211	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	8	56.3	450	Part No: PT-LSFA-4F Linear	8	25.0	200	1,900
A213	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	15	56.3	845	Part No: PT-LSFA-4F Linear	15	25.0	375	1,900
B Elevator 2nd Floor Area	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	74.9	300	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
B Hallway	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	14	74.9	1,049	Part No: Backlit FP24 Troffers & Panels	14	30.0	420	1,900
B Hallway	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: Backlit FP 14 Troffers & Panels	3	20.0	60	1,900
B105	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	8	56.3	450	Part No: PT-LSFA-4F Linear	8	25.0	200	1,900
B106	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	6	149.8	899	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
B107	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: PT-VT1-4F-45W Vapor Tight	1	45.0	45	1,900
B108	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
B109	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: PT-LSFA-4F Linear	3	25.0	75	1,900
B110	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-VT1-4F-45W Vapor Tight	12	45.0	540	1,900
B112	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	6	56.3	338	Part No: PT-LSFA-4F Linear	6	25.0	150	1,900
B113	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	6	149.8	899	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
B114	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: PT-VT1-4F-45W Vapor Tight	4	45.0	180	1,900
B119/B120	Troffer/CFL TT5/40.0W/2 Lamp	2	70.4	141	Part No: Backlit FP22 Troffers & Panels	2	25.0	50	1,900
B121/B122	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
B123	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-VT1-4F-45W Vapor Tight	2	45.0	90	1,900
B124/B125	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
B124/B125	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: PT-VT1-4F-45W Vapor Tight	1	45.0	45	1,900
B126	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-VT1-4F-45W Vapor Tight	12	45.0	540	1,900
B129	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	7	56.3	394	Part No: PT-LSFA-4F Linear	7	25.0	175	1,900
B132	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
B132	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	21	149.8	3,146	Part No: Backlit FP24 Troffers & Panels	21	30.0	630	1,900
B134	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	3	112.3	337	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
B135	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	3	149.8	449	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
B136	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-LSFA-4F Linear	2	25.0	50	521
B137	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	6	149.8	899	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
B138	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
B201 Stairs/hall	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: PT-LSFA-8F Linear	4	55.0	220	1,900
B201 Stairs/hall	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
B202	Wrap/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-WAFA-4F91-3CCT Wrap	2	30.0	60	1,900
B203	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	15	56.3	845	Part No: PT-LSFA-8F Linear	15	55.0	825	1,900
B204	Highbay/Metal Halide/250.0W/1 Lamp	18	295.0	5,310	Part No: UFO 100 Highbays & Lowbays	18	100.0	1,800	1,900
B204	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	5	56.3	282	Part No: PT-LSFA-8F Linear	5	55.0	275	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
B205	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	10	56.3	563	Part No: PT-LSFA-4F Linear	10	25.0	250	1,900
B206	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: PT-LSFA-4F Linear	3	25.0	75	1,900
B207	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	6	56.3	338	Part No: PT-LSFA-4F Linear	6	25.0	150	1,900
B208	Wrap/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-WAFA-4F91-3CCT Wrap	2	30.0	60	1,900
C Hallways	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	53	74.9	3,970	Part No: Backlit FP24 Troffers & Panels	53	30.0	1,590	1,900
C103/C104 /C105/C10 6	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: Backlit FP 14 Troffers & Panels	4	20.0	80	1,900
C107	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-LSFA-4F Linear	12	25.0	300	1,900
C109-C115	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
C109-C115	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	10	112.3	1,123	Part No: Backlit FP24 Troffers & Panels	10	30.0	300	1,900
C109-C115	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C116	Strip/T12 Fluorescent/4 ft/40.0W/2 Lamp	74	75.0	5,550	Part No: PT-LSFA-4F Linear	74	25.0	1,850	1,900
C118	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C119	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
C120	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C121-C124	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	6	112.3	674	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
C125	Strip/T12 Fluorescent/4 ft/40.0W/2 Lamp	36	75.0	2,700	Part No: PT-LSFA-4F Linear	36	25.0	900	1,900
C126	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C127	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	1	149.8	150	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
C128	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C130	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900





Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
C133	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	3	112.3	337	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
C134/C135	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C136	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C144	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C145	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	1	112.3	112	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
C146	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: Backlit FP 14 Troffers & Panels	1	20.0	20	1,900
C147	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	74.9	225	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
C148	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C201	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	6	56.3	338	Part No: PT-LSFA-4F Linear	6	25.0	150	1,900
C203	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	13	74.9	974	Part No: Backlit FP24 Troffers & Panels	13	30.0	390	1,900
D101	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: Backlit FP 14 Troffers & Panels	2	20.0	40	1,900
D102	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	4	149.8	599	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
D103/D104	Troffer/CFL T5/40.0W/2 Lamp	12	70.4	845	Part No: Backlit FP22 Troffers & Panels	12	25.0	300	1,900
D105	Downlight/CFL Pin Base/26.0W/2 Lamp	2	45.8	92	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	1,900
D106/D107	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	11	74.9	824	Part No: Backlit FP24 Troffers & Panels	11	30.0	330	2,100
D108/D109	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	5	149.8	749	Part No: Backlit FP24 Troffers & Panels	5	30.0	150	1,900
D110	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	9	56.3	507	Part No: PT-LSFA-4F Linear	9	25.0	225	2,100
D110	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	16	74.9	1,198	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	2,100
D111	Downlight/CFL Pin Base/26.0W/2 Lamp	16	45.8	733	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	16	24.0	384	2,100
D111	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-LSFA-4F Linear	12	25.0	300	2,100
D111	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	69	112.3	7,749	Part No: Backlit FP24 Troffers & Panels	69	30.0	2,070	2,100



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
D111	Troffer/T8 Fluorescent/4 ft/32.0W/6 Lamp	26	169.0	4,394	Part No: Backlit FP24 Troffers & Panels	52	30.0	1,560	2,100
D112	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	6	149.8	899	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
D113	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	74.9	225	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	2,100
D114	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	8	74.9	599	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	2,100
D115	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	16	74.9	1,198	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	2,100
E 2nd Floor Hallways	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	60	74.9	4,494	Part No: Backlit FP24 Troffers & Panels	60	30.0	1,800	1,900
E Hallways	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	58	74.9	4,344	Part No: Backlit FP24 Troffers & Panels	58	30.0	1,740	2,100
E101	Downlight/CFL Pin Base/26.0W/2 Lamp	2	45.8	92	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	2,100
E102/E103	Troffer/CFL TT5/40.0W/2 Lamp	10	70.4	704	Part No: Backlit FP22 Troffers & Panels	10	25.0	250	1,900
E105	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: Backlit FP 14 Troffers & Panels	1	20.0	20	1,900
E106	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-LSFA-4F Linear	2	25.0	50	521
E107	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E109	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E110	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E112	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E113	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E114	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E116	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E117	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	20	149.8	2,996	Part No: Backlit FP24 Troffers & Panels	20	30.0	600	1,900
E119	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E121	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	20	149.8	2,996	Part No: Backlit FP24 Troffers & Panels	20	30.0	600	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
E122	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	20	149.8	2,996	Part No: Backlit FP24 Troffers & Panels	20	30.0	600	1,900
E123	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E124	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	8	112.3	898	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E125	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
E125	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E127	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	11	149.8	1,648	Part No: Backlit FP24 Troffers & Panels	11	30.0	330	1,900
E130	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
E130	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	16	149.8	2,397	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	1,900
E131	Troffer/CFL T5/40.0W/2 Lamp	2	70.4	141	Part No: Backlit FP22 Troffers & Panels	2	25.0	50	1,900
E132	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E133	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E134	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E135	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E136	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E137/E142	Downlight/CFL Pin Base/26.0W/2 Lamp	6	45.8	275	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	6	24.0	144	1,900
E138/E139	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-LSFA-4F Linear	2	25.0	50	1,900
E140	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E141	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E144	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E145	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	6	112.3	674	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
E146	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
E147	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E148	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E149	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	3	112.3	337	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
E150/E154	Downlight/CFL Pin Base/26.0W/2 Lamp	6	45.8	275	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	6	24.0	144	1,900
E152/E153	Troffer/CFL TT5/40.0W/2 Lamp	4	70.4	282	Part No: Backlit FP22 Troffers & Panels	4	25.0	100	1,900
E156	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E157	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E158	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E159	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	16	149.8	2,397	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	1,900
E161	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	16	149.8	2,397	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	1,900
E162	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
E162	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E163	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	20	149.8	2,996	Part No: Backlit FP24 Troffers & Panels	20	30.0	600	1,900
E164	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	24	149.8	3,595	Part No: Backlit FP24 Troffers & Panels	24	30.0	720	1,900
E165	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E166	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E167	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	6	112.3	674	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
E168	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	6	112.3	674	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
E169/E171	Troffer/CFL TT5/40.0W/2 Lamp	6	70.4	422	Part No: Backlit FP22 Troffers & Panels	6	25.0	150	1,900
E170	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: Backlit FP 14 Troffers & Panels	1	20.0	20	521
E172	Downlight/CFL Pin Base/26.0W/2 Lamp	2	45.8	92	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	1,900
E173	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	24	149.8	3,595	Part No: Backlit FP24 Troffers & Panels	24	30.0	720	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
E174	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	20	149.8	2,996	Part No: Backlit FP24 Troffers & Panels	20	30.0	600	1,900
E175	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	16	149.8	2,397	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	1,900
E176	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	16	149.8	2,397	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	1,900
E201	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	13	56.3	732	Part No: PT-LSFA-4F Linear	13	25.0	325	1,900
E202	Troffer/CFL TT5/40.0W/2 Lamp	5	70.4	352	Part No: Backlit FP22 Troffers & Panels	5	25.0	125	1,900
E203	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: PT-LSFA-4F Linear	3	25.0	75	1,900
E204	Troffer/CFL TT5/40.0W/2 Lamp	7	70.4	493	Part No: Backlit FP22 Troffers & Panels	7	25.0	175	1,900
E205	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	7	149.8	1,049	Part No: Backlit FP24 Troffers & Panels	7	30.0	210	1,900
E206/E207/ E208	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	6	112.3	674	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
E209	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E210	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E212	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	10	112.3	1,123	Part No: Backlit FP24 Troffers & Panels	10	30.0	300	1,900
E212	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: PT-VT1-4F-45W Vapor Tight	1	45.0	45	1,900
E213/E214/ E215/E216	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	8	112.3	898	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E219	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E220	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	12	112.3	1,348	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E221	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	8	112.3	898	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E222	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E223	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E224	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E226	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
E227	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E228	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E229	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E230	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E231	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E233	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E234	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E235	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E236	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E237	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E238	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E240	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E241	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E242	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E244	Downlight/CFL Pin Base/26.0W/1 Lamp	8	22.9	183	Part No: CAN TRIM 6 WIRED Downlight/Retrofit Kit	8	13.0	104	1,900
E244	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	28	149.8	4,194	Part No: Backlit FP24 Troffers & Panels	28	30.0	840	1,900
E246	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	6	149.8	899	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
E247	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	4	149.8	599	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E248	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	13	149.8	1,947	Part No: Backlit FP24 Troffers & Panels	13	30.0	390	1,900
E249	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E250	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	102	149.8	15,280	Part No: Backlit FP24 Troffers & Panels	102	30.0	3,060	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
E251	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	3	112.3	337	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
E252	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E253	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E253	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E254	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E255/E256	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-LSFA-4F Linear	2	25.0	50	1,900
E257	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	5	112.3	562	Part No: Backlit FP24 Troffers & Panels	5	30.0	150	1,900
E260	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	3	149.8	449	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
E261	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: PT-LSFA-4F Linear	1	25.0	25	1,900
Gym	Highbay/Metal Halide/400.0W/1 Lamp	73	460.0	33,580	Part No: UFO 150 Highbays & Lowbays	73	150.0	10,950	1,900
Gym	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	14	56.3	788	Part No: PT-LSFA-8F Linear	14	55.0	770	1,900
Gym	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
<b>Total</b>			<b>26,459 .3</b>	<b>286,60 5</b>			<b>7,561. 0</b>	<b>79,485</b>	



516 N. 8th St., Unit D De Pere WI 54115  
[www.ncledlighting.com](http://www.ncledlighting.com)

## Upgrade Analysis



# LIGHTING RETROFIT PROPOSAL

Prepared for

**Jake Leiterman**

**Supervisor of Buildings & Grounds**

## Site Information

Name: Antigo High School

Address: 1900 10th Ave Antigo WI 54409

Proposal Date

December 30, 2021

Proposal Expires

January 31, 2022



Jay Polena  
Vice President  
920.655.2468  
[jay@ncledlighting.com](mailto:jay@ncledlighting.com)



## Executive Summary

### Project Costs

Total Project Cost	\$350,649
Sales Tax	\$0
Incentives/Rebates	\$32,740
Turnkey Project Cost	\$317,909

### Financial Metrics

Payback Period (yrs)	6.17
Avg. Annual Return	16%
10 Yr Operating Savings	\$495,586
Net Present Value	\$57,984

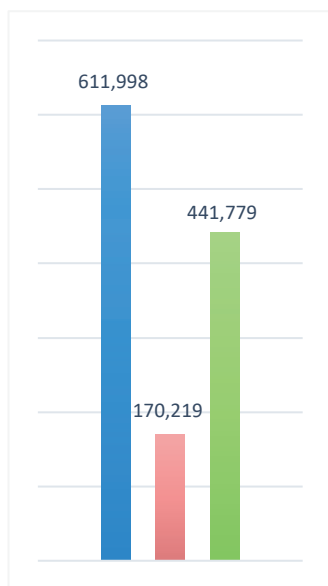
### Cost of Waiting

Postpone for one month	\$4,130
Postpone for six months	\$24,779
Postpone for one year	\$49,559

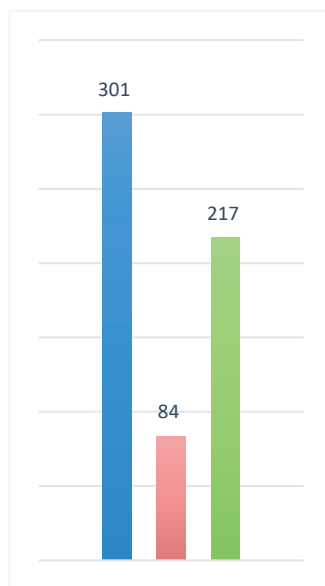
### Assumptions

Energy Rate (\$/kWh)	0.1006
Annual Utility Rate Increase	0.00%
Discount Rate	6.00%

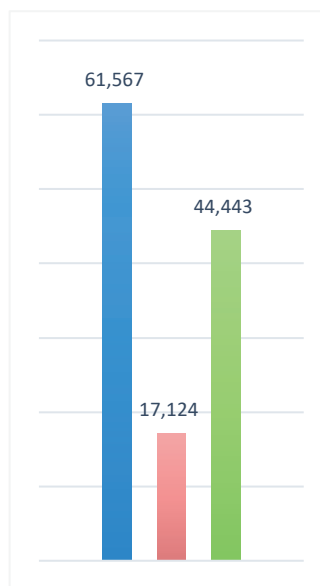
### Usage (kWh)



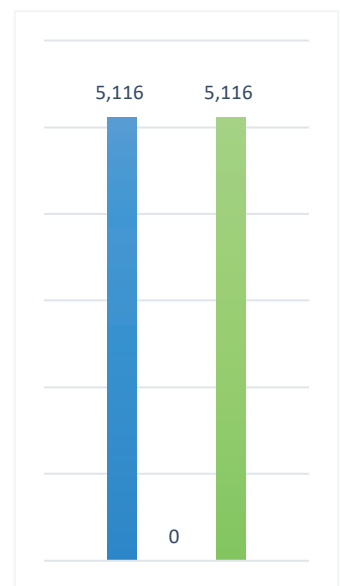
### Demand (kW)



### Energy Cost (\$)



### Maintenance Cost



■ Current ■ Proposed ■ Savings



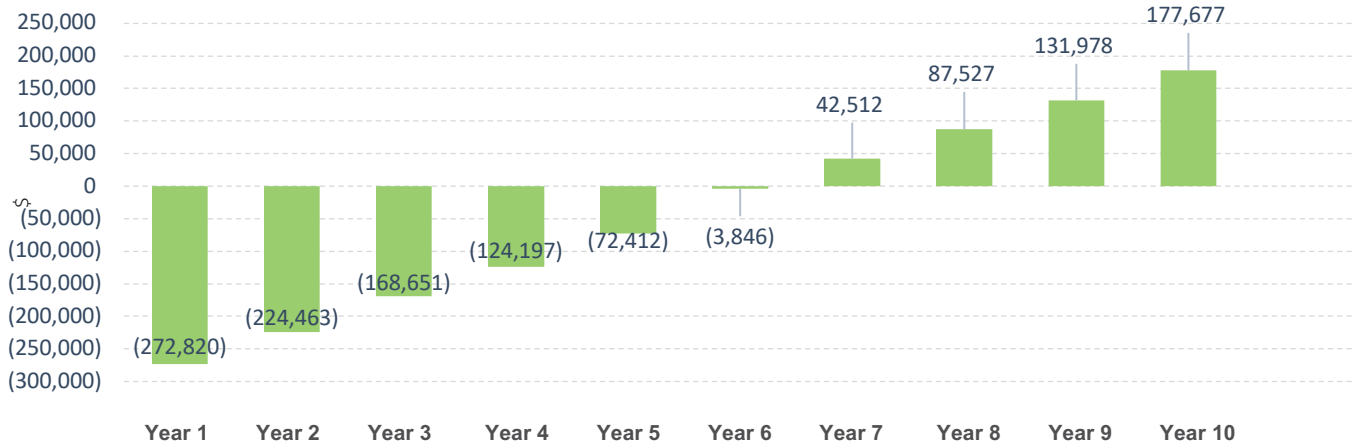
### Impact of New Lighting

Energy Reduction	72%
Avg. Annual Maintenance Savings	100%
Avg. Annual Operating Savings	74%

### Aggregate Operating Savings

Saving Area	Year 1	Year 5	Year 10
Energy	\$44,443	\$222,215	\$444,429
Maintenance	\$646	\$23,282	\$51,157
<b>Total</b>	<b>\$45,089</b>	<b>\$245,497</b>	<b>\$495,586</b>

### Aggregate Cash Flow Over Ten Years



### Itemized Cash Flow

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Project Cost	\$(350,649)	-	-	-	-	-	-	-	-	-
Rebates	\$32,740	-	-	-	-	-	-	-	-	-
Energy Savings	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443
Maintenance Savings	\$646	\$3,914	\$11,369	\$11	\$7,342	\$24,123	\$1,915	\$572	\$8	\$1,256
<b>Net Cash Flow</b>	<b>\$(272,820)</b>	<b>\$48,357</b>	<b>\$55,812</b>	<b>\$44,454</b>	<b>\$51,785</b>	<b>\$68,566</b>	<b>\$46,358</b>	<b>\$45,015</b>	<b>\$44,451</b>	<b>\$45,699</b>

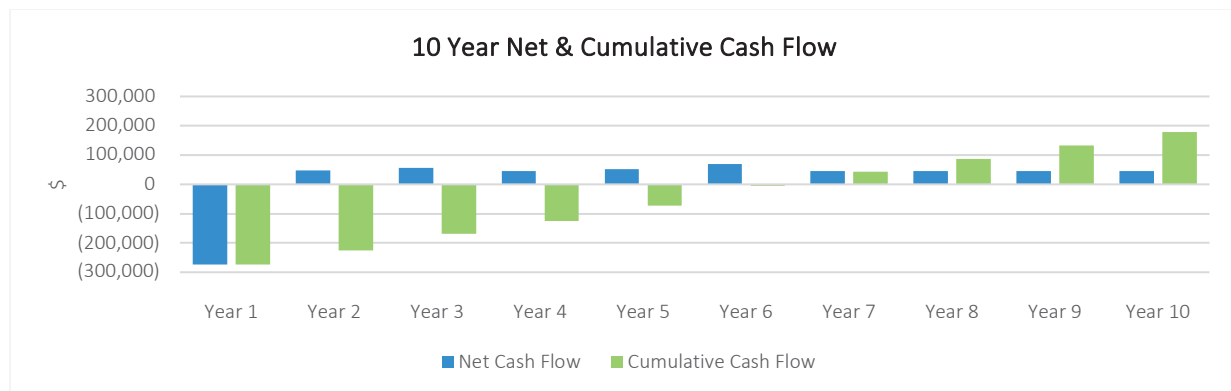
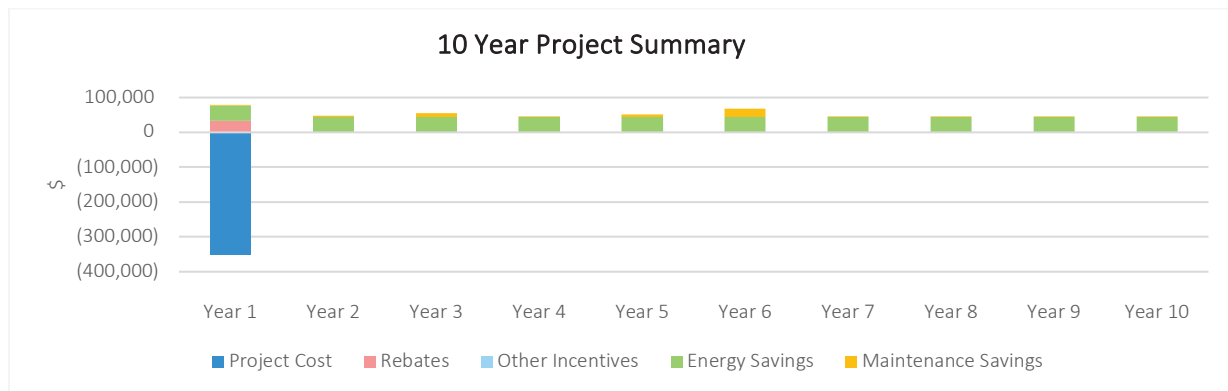


## Cash Flow

We understand that finalizing a project like this often takes time. However, each day you delay your upgrade, you are missing out on the opportunity to reduce your operating expenses. As shown below, the lost opportunity continues to compound over time.

### 10 Year Cash Flow Analysis

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Project Cost	\$(350,649)	-	-	-	-	-	-	-	-	-	\$(350,649)
Rebates	\$32,740	-	-	-	-	-	-	-	-	-	\$32,740
Energy Savings	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$44,443	\$444,429
Maintenance Savings	\$646	\$3,914	\$11,369	\$11	\$7,342	\$24,123	\$1,915	\$572	\$8	\$1,256	\$51,157
Net Cash Flow	\$(272,820)	\$48,357	\$55,812	\$44,454	\$51,785	\$68,566	\$46,358	\$45,015	\$44,451	\$45,699	\$177,677
Cum Cash Flow	\$(272,820)	\$(224,463)	\$(168,651)	\$(124,197)	\$(72,412)	\$(3,846)	\$42,512	\$87,527	\$131,978	\$177,677	\$177,677

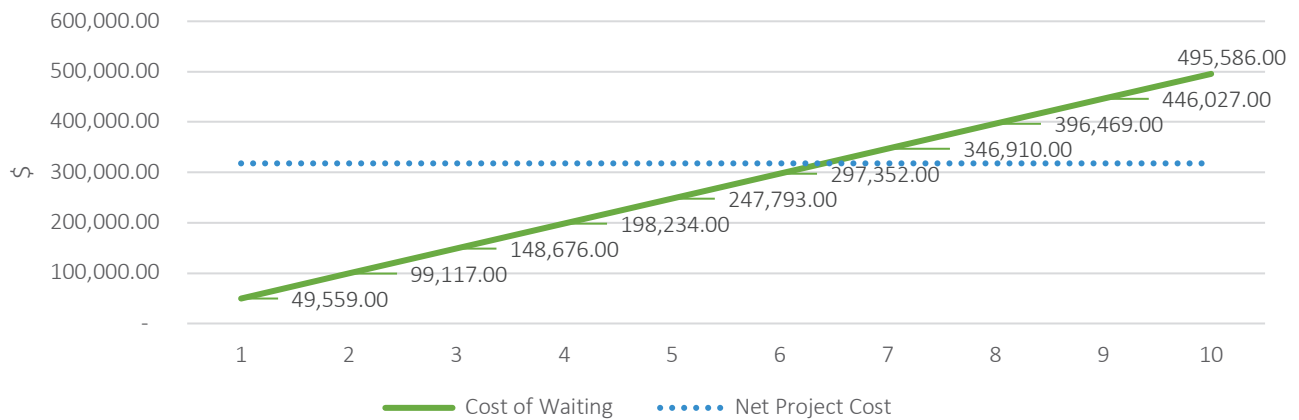




## Cost of Waiting

The cost of waiting shows the amount of cash your company will be losing if you delay the proposed lighting upgrade.

Monthly	Yearly	10 Years
\$4,130	\$49,559	\$495,586



*Cost of waiting includes energy savings and maintenance savings applied as an average annual amount over a 10 year analysis period*



## Energy Usage

The following set of information evaluates your current energy usages and costs and compares that to the projected energy usage and costs your facility will see after the proposed lighting upgrade.

### Annual Energy Usage

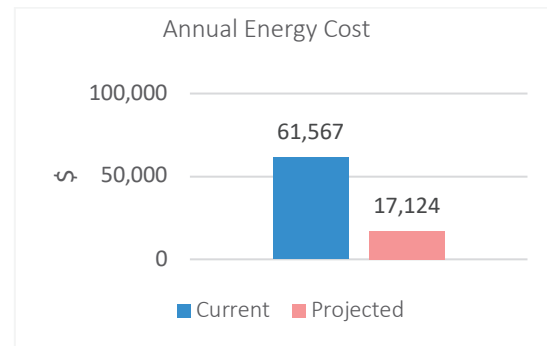
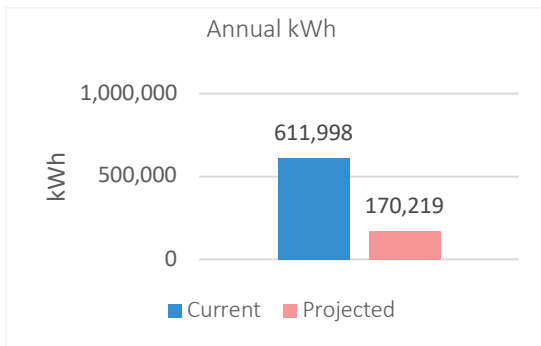
Current Usage (kWh)	Projected Usage (kWh)	Reduction	Current Cost	Projected Cost	Financial Savings	Percent Saved
611,998	170,219	72%	\$61,567	\$17,124	\$44,443	72%

1. Energy cost = \$0.1006/kWh; Annual energy cost escalation = 0.00%
2. Energy costs are averaged over 10 year analysis period
3. Projected Usage (kWh) includes savings from controls if applicable

### Annual Energy Usage Reduction

Current Usage (kWh)	Projected Usage (kWh)	Reduction (kWh)	Reduction
611,998	170,219	441,779	72%

### Energy Comparison



1. Energy Cost = \$0.1006/kWh; Annual energy cost escalation = 0.00%
2. Energy costs are averaged over 10 year analysis period



## Watts Summary

Existing Watts	Proposed Watts	Reduced Watts	Reduction
301,079	83,525	217,554	72%

*The calculations in this table take into account the existing fixtures that are being replaced, upgraded, and/or have new lighting controls being proposed for them*

## Lighting Wattage Comparison

### Exterior

Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
Recessed Cans	Area Light/Mercury Vapor/400.0W/1 Lamp	18	454.0	8,172	Part No: SB 150 Area & Site	18	150.0	2,700	4,380
Recessed Cans	Downlight/Metal Halide/175.0W/1 Lamp	13	210.0	2,730	Part No: CC30 Garage & Canopy/Retrofit Kit	13	30.0	390	4,380
Wallpacks	Wallpack/High Pressure Sodium/150.0W/1 Lamp	19	188.0	3,572	Part No: STD WP 50 Wall Mount	19	50.0	950	4,380
<b>Total</b>			<b>852.0</b>	<b>14,474</b>			<b>230.0</b>	<b>4,040</b>	

### Interior

Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
A Hallway	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	27	74.9	2,022	Part No: Backlit FP24 Troffers & Panels	27	30.0	810	2,100
A101/A102	Downlight/Incandescent/150.0W/1 Lamp	2	150.0	300	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	521
A103	Strip/T12 Fluorescent/4 ft/40.0W/2 Lamp	20	75.0	1,500	Part No: PT-LSFA-4F Linear	20	25.0	500	1,900
A104	Strip/T12 Fluorescent/4 ft/40.0W/2 Lamp	20	75.0	1,500	Part No: PT-LSFA-4F Linear	20	25.0	500	1,900
A105	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A106	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A108	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	521
A109	Strip/T12 Fluorescent/4 ft/40.0W/2 Lamp	31	75.0	2,325	Part No: PT-LSFA-4F Linear	31	25.0	775	1,900
A110	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	11	149.8	1,648	Part No: Backlit FP24 Troffers & Panels	11	30.0	330	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
A111	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-LSFA-4F Linear	2	25.0	50	1,900
A112 Hallway	Wrap/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: PT-WAFA-4F91-3CCT Wrap	4	30.0	120	2,100
A113	Strip/T12 Fluorescent/4 ft/40.0W/2 Lamp	32	75.0	2,400	Part No: PT-LSFA-4F Linear	32	25.0	800	1,900
A114	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: PT-LSFA-4F Linear	4	25.0	100	1,900
A115	Downlight/Incandescent/150.0W/1 Lamp	2	150.0	300	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	1,900
A116	Wrap/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-WAFA-4F91-3CCT Wrap	2	30.0	60	1,900
A117	Wrap/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: PT-WAFA-4F91-3CCT Wrap	4	30.0	120	1,900
A118	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	24	149.8	3,595	Part No: Backlit FP24 Troffers & Panels	24	30.0	720	1,900
A119	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
A120	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	18	149.8	2,696	Part No: Backlit FP24 Troffers & Panels	18	30.0	540	1,900
A121	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: Backlit FP 14 Troffers & Panels	1	20.0	20	1,900
A122	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: Backlit FP 14 Troffers & Panels	1	20.0	20	1,900
A123	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A126	Downlight/Incandescent/150.0W/1 Lamp	2	150.0	300	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	1,900
A126	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	16	149.8	2,397	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	1,900
A127	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
A128	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A129	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A130	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
A131	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900





Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
A132	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	20	149.8	2,996	Part No: Backlit FP24 Troffers & Panels	20	30.0	600	1,900
A133	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: PT-LSFA-4F Linear	3	25.0	75	1,900
A135	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
A137	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: PT-VT1-4F-45W Vapor Tight	4	45.0	180	1,900
A138	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: Backlit FP 14 Troffers & Panels	2	20.0	40	1,900
A139	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	18	56.3	1,013	Part No: PT-VT1-4F-45W Vapor Tight	18	45.0	810	1,900
A140	Downlight/CFL Pin Base/26.0W/2 Lamp	1	45.8	46	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	1	24.0	24	1,900
A141	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: Backlit FP 14 Troffers & Panels	3	20.0	60	1,900
A143	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A144	Troffer/CFL TT5/40.0W/2 Lamp	2	70.4	141	Part No: Backlit FP22 Troffers & Panels	2	25.0	50	1,900
A145	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A147	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	6	56.3	338	Part No: PT-VT1-4F-45W Vapor Tight	6	45.0	270	1,900
A148	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: Backlit FP 14 Troffers & Panels	1	20.0	20	1,900
A149	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A150	Troffer/CFL TT5/40.0W/2 Lamp	2	70.4	141	Part No: Backlit FP22 Troffers & Panels	2	25.0	50	1,900
A153	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: Backlit FP 14 Troffers & Panels	3	20.0	60	1,900
A154	Downlight/CFL Pin Base/26.0W/2 Lamp	1	45.8	46	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	1	24.0	24	1,900
A155	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-LSFA-4F Linear	12	25.0	300	1,900
A156	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	4	149.8	599	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
A157	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A158	Troffer/CFL TT5/40.0W/2 Lamp	3	70.4	211	Part No: Backlit FP22 Troffers & Panels	3	25.0	75	1,900
A159	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: PT-LSFA-4F Linear	1	25.0	25	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
A160	Troffer/CFL TT5/40.0W/2 Lamp	3	70.4	211	Part No: Backlit FP22 Troffers & Panels	3	25.0	75	1,900
A161	Downlight/CFL Pin Base/26.0W/2 Lamp	2	45.8	92	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	1,900
A201 Stairs	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: PT-LSFA-4F Linear	1	25.0	25	1,900
A202	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	5	112.3	562	Part No: Backlit FP24 Troffers & Panels	5	30.0	150	1,900
A203	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A204	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
A205	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-LSFA-4F Linear	12	25.0	300	1,900
A210/A212	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-LSFA-4F Linear	12	25.0	300	1,900
A211	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	8	56.3	450	Part No: PT-LSFA-4F Linear	8	25.0	200	1,900
A213	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	15	56.3	845	Part No: PT-LSFA-4F Linear	15	25.0	375	1,900
B Elevator 2nd Floor Area	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	74.9	300	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
B Hallway	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	14	74.9	1,049	Part No: Backlit FP24 Troffers & Panels	14	30.0	420	1,900
B Hallway	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: Backlit FP 14 Troffers & Panels	3	20.0	60	1,900
B105	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	8	56.3	450	Part No: PT-LSFA-4F Linear	8	25.0	200	1,900
B106	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	6	149.8	899	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
B107	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: PT-VT1-4F-45W Vapor Tight	1	45.0	45	1,900
B108	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
B109	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: PT-LSFA-4F Linear	3	25.0	75	1,900
B110	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-VT1-4F-45W Vapor Tight	12	45.0	540	1,900
B112	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	6	56.3	338	Part No: PT-LSFA-4F Linear	6	25.0	150	1,900
B113	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	6	149.8	899	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
B114	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: PT-VT1-4F-45W Vapor Tight	4	45.0	180	1,900
B119/B120	Troffer/CFL TT5/40.0W/2 Lamp	2	70.4	141	Part No: Backlit FP22 Troffers & Panels	2	25.0	50	1,900
B121/B122	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
B123	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-VT1-4F-45W Vapor Tight	2	45.0	90	1,900
B124/B125	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
B124/B125	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: PT-VT1-4F-45W Vapor Tight	1	45.0	45	1,900
B126	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-VT1-4F-45W Vapor Tight	12	45.0	540	1,900
B129	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	7	56.3	394	Part No: PT-LSFA-4F Linear	7	25.0	175	1,900
B132	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
B132	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	21	149.8	3,146	Part No: Backlit FP24 Troffers & Panels	21	30.0	630	1,900
B134	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	3	112.3	337	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
B135	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	3	149.8	449	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
B136	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-LSFA-4F Linear	2	25.0	50	521
B137	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	6	149.8	899	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
B138	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
B201 Stairs/hall	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: PT-LSFA-8F Linear	4	55.0	220	1,900
B201 Stairs/hall	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
B202	Wrap/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-WAFA-4F91-3CCT Wrap	2	30.0	60	1,900
B203	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	15	56.3	845	Part No: PT-LSFA-8F Linear	15	55.0	825	1,900
B204	Highbay/Metal Halide/250.0W/1 Lamp	18	295.0	5,310	Part No: UFO 100 Highbays & Lowbays	18	100.0	1,800	1,900
B204	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	5	56.3	282	Part No: PT-LSFA-8F Linear	5	55.0	275	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
B205	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	10	56.3	563	Part No: PT-LSFA-4F Linear	10	25.0	250	1,900
B206	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: PT-LSFA-4F Linear	3	25.0	75	1,900
B207	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	6	56.3	338	Part No: PT-LSFA-4F Linear	6	25.0	150	1,900
B208	Wrap/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-WAFA-4F91-3CCT Wrap	2	30.0	60	1,900
C Hallways	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	53	74.9	3,970	Part No: Backlit FP24 Troffers & Panels	53	30.0	1,590	1,900
C103/C104 /C105/C10 6	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	4	56.3	225	Part No: Backlit FP 14 Troffers & Panels	4	20.0	80	1,900
C107	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-LSFA-4F Linear	12	25.0	300	1,900
C109-C115	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
C109-C115	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	10	112.3	1,123	Part No: Backlit FP24 Troffers & Panels	10	30.0	300	1,900
C109-C115	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C116	Strip/T12 Fluorescent/4 ft/40.0W/2 Lamp	74	75.0	5,550	Part No: PT-LSFA-4F Linear	74	25.0	1,850	1,900
C118	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C119	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
C120	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C121-C124	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	6	112.3	674	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
C125	Strip/T12 Fluorescent/4 ft/40.0W/2 Lamp	36	75.0	2,700	Part No: PT-LSFA-4F Linear	36	25.0	900	1,900
C126	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C127	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	1	149.8	150	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
C128	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C130	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
C133	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	3	112.3	337	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
C134/C135	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C136	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C144	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C145	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	1	112.3	112	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
C146	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: Backlit FP 14 Troffers & Panels	1	20.0	20	1,900
C147	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	74.9	225	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
C148	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
C201	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	6	56.3	338	Part No: PT-LSFA-4F Linear	6	25.0	150	1,900
C203	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	13	74.9	974	Part No: Backlit FP24 Troffers & Panels	13	30.0	390	1,900
D101	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: Backlit FP 14 Troffers & Panels	2	20.0	40	1,900
D102	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	4	149.8	599	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
D103/D104	Troffer/CFL T5/40.0W/2 Lamp	12	70.4	845	Part No: Backlit FP22 Troffers & Panels	12	25.0	300	1,900
D105	Downlight/CFL Pin Base/26.0W/2 Lamp	2	45.8	92	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	1,900
D106/D107	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	11	74.9	824	Part No: Backlit FP24 Troffers & Panels	11	30.0	330	2,100
D108/D109	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	5	149.8	749	Part No: Backlit FP24 Troffers & Panels	5	30.0	150	1,900
D110	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	9	56.3	507	Part No: PT-LSFA-4F Linear	9	25.0	225	2,100
D110	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	16	74.9	1,198	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	2,100
D111	Downlight/CFL Pin Base/26.0W/2 Lamp	16	45.8	733	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	16	24.0	384	2,100
D111	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	12	56.3	676	Part No: PT-LSFA-4F Linear	12	25.0	300	2,100
D111	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	69	112.3	7,749	Part No: Backlit FP24 Troffers & Panels	69	30.0	2,070	2,100



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
D111	Troffer/T8 Fluorescent/4 ft/32.0W/6 Lamp	26	169.0	4,394	Part No: Backlit FP24 Troffers & Panels	52	30.0	1,560	2,100
D112	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	6	149.8	899	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
D113	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	74.9	225	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	2,100
D114	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	8	74.9	599	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	2,100
D115	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	16	74.9	1,198	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	2,100
E 2nd Floor Hallways	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	60	74.9	4,494	Part No: Backlit FP24 Troffers & Panels	60	30.0	1,800	1,900
E Hallways	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	58	74.9	4,344	Part No: Backlit FP24 Troffers & Panels	58	30.0	1,740	2,100
E101	Downlight/CFL Pin Base/26.0W/2 Lamp	2	45.8	92	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	2,100
E102/E103	Troffer/CFL TT5/40.0W/2 Lamp	10	70.4	704	Part No: Backlit FP22 Troffers & Panels	10	25.0	250	1,900
E105	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: Backlit FP 14 Troffers & Panels	1	20.0	20	1,900
E106	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-LSFA-4F Linear	2	25.0	50	521
E107	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E109	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E110	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E112	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E113	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E114	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E116	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E117	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	20	149.8	2,996	Part No: Backlit FP24 Troffers & Panels	20	30.0	600	1,900
E119	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E121	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	20	149.8	2,996	Part No: Backlit FP24 Troffers & Panels	20	30.0	600	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
E122	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	20	149.8	2,996	Part No: Backlit FP24 Troffers & Panels	20	30.0	600	1,900
E123	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E124	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	8	112.3	898	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E125	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
E125	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E127	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	11	149.8	1,648	Part No: Backlit FP24 Troffers & Panels	11	30.0	330	1,900
E130	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
E130	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	16	149.8	2,397	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	1,900
E131	Troffer/CFL T5/40.0W/2 Lamp	2	70.4	141	Part No: Backlit FP22 Troffers & Panels	2	25.0	50	1,900
E132	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	2	149.8	300	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E133	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E134	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E135	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E136	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E137/E142	Downlight/CFL Pin Base/26.0W/2 Lamp	6	45.8	275	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	6	24.0	144	1,900
E138/E139	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-LSFA-4F Linear	2	25.0	50	1,900
E140	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E141	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E144	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E145	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	6	112.3	674	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
E146	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
E147	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E148	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E149	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	3	112.3	337	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
E150/E154	Downlight/CFL Pin Base/26.0W/2 Lamp	6	45.8	275	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	6	24.0	144	1,900
E152/E153	Troffer/CFL TT5/40.0W/2 Lamp	4	70.4	282	Part No: Backlit FP22 Troffers & Panels	4	25.0	100	1,900
E156	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E157	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E158	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E159	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	16	149.8	2,397	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	1,900
E161	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	16	149.8	2,397	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	1,900
E162	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	74.9	75	Part No: Backlit FP24 Troffers & Panels	1	30.0	30	1,900
E162	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E163	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	20	149.8	2,996	Part No: Backlit FP24 Troffers & Panels	20	30.0	600	1,900
E164	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	24	149.8	3,595	Part No: Backlit FP24 Troffers & Panels	24	30.0	720	1,900
E165	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E166	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E167	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	6	112.3	674	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
E168	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	6	112.3	674	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
E169/E171	Troffer/CFL TT5/40.0W/2 Lamp	6	70.4	422	Part No: Backlit FP22 Troffers & Panels	6	25.0	150	1,900
E170	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: Backlit FP 14 Troffers & Panels	1	20.0	20	521
E172	Downlight/CFL Pin Base/26.0W/2 Lamp	2	45.8	92	Part No: CAN TRIM 8 WIRED Downlight/Retrofit Kit	2	24.0	48	1,900
E173	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	24	149.8	3,595	Part No: Backlit FP24 Troffers & Panels	24	30.0	720	1,900





Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
E174	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	20	149.8	2,996	Part No: Backlit FP24 Troffers & Panels	20	30.0	600	1,900
E175	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	16	149.8	2,397	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	1,900
E176	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	16	149.8	2,397	Part No: Backlit FP24 Troffers & Panels	16	30.0	480	1,900
E201	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	13	56.3	732	Part No: PT-LSFA-4F Linear	13	25.0	325	1,900
E202	Troffer/CFL TT5/40.0W/2 Lamp	5	70.4	352	Part No: Backlit FP22 Troffers & Panels	5	25.0	125	1,900
E203	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	3	56.3	169	Part No: PT-LSFA-4F Linear	3	25.0	75	1,900
E204	Troffer/CFL TT5/40.0W/2 Lamp	7	70.4	493	Part No: Backlit FP22 Troffers & Panels	7	25.0	175	1,900
E205	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	7	149.8	1,049	Part No: Backlit FP24 Troffers & Panels	7	30.0	210	1,900
E206/E207/ E208	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	6	112.3	674	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
E209	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E210	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E212	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	10	112.3	1,123	Part No: Backlit FP24 Troffers & Panels	10	30.0	300	1,900
E212	Vapor Tight/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: PT-VT1-4F-45W Vapor Tight	1	45.0	45	1,900
E213/E214/ E215/E216	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	8	112.3	898	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E219	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E220	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	12	112.3	1,348	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E221	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	8	112.3	898	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E222	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E223	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E224	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E226	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
E227	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E228	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E229	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E230	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E231	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E233	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E234	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E235	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E236	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E237	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E238	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	12	149.8	1,798	Part No: Backlit FP24 Troffers & Panels	12	30.0	360	1,900
E240	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E241	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E242	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E244	Downlight/CFL Pin Base/26.0W/1 Lamp	8	22.9	183	Part No: CAN TRIM 6 WIRED Downlight/Retrofit Kit	8	13.0	104	1,900
E244	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	28	149.8	4,194	Part No: Backlit FP24 Troffers & Panels	28	30.0	840	1,900
E246	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	6	149.8	899	Part No: Backlit FP24 Troffers & Panels	6	30.0	180	1,900
E247	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	4	149.8	599	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E248	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	13	149.8	1,947	Part No: Backlit FP24 Troffers & Panels	13	30.0	390	1,900
E249	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	4	112.3	449	Part No: Backlit FP24 Troffers & Panels	4	30.0	120	1,900
E250	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	102	149.8	15,280	Part No: Backlit FP24 Troffers & Panels	102	30.0	3,060	1,900



Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	Burn Hours
E251	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	3	112.3	337	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
E252	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E253	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E253	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	8	149.8	1,198	Part No: Backlit FP24 Troffers & Panels	8	30.0	240	1,900
E254	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	2	112.3	225	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
E255/E256	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	56.3	113	Part No: PT-LSFA-4F Linear	2	25.0	50	1,900
E257	Troffer/T8 Fluorescent/4 ft/32.0W/3 Lamp	5	112.3	562	Part No: Backlit FP24 Troffers & Panels	5	30.0	150	1,900
E260	Troffer/T8 Fluorescent/4 ft/32.0W/4 Lamp	3	149.8	449	Part No: Backlit FP24 Troffers & Panels	3	30.0	90	1,900
E261	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	1	56.3	56	Part No: PT-LSFA-4F Linear	1	25.0	25	1,900
Gym	Highbay/Metal Halide/400.0W/1 Lamp	73	460.0	33,580	Part No: UFO 150 Highbays & Lowbays	73	150.0	10,950	1,900
Gym	Strip/T8 Fluorescent/4 ft/32.0W/2 Lamp	14	56.3	788	Part No: PT-LSFA-8F Linear	14	55.0	770	1,900
Gym	Troffer/T8 Fluorescent/4 ft/32.0W/2 Lamp	2	74.9	150	Part No: Backlit FP24 Troffers & Panels	2	30.0	60	1,900
<b>Total</b>			<b>26,459 .3</b>	<b>286,60 5</b>			<b>7,561. 0</b>	<b>79,485</b>	



516 N. 8th St., Unit D De Pere WI 54115  
[www.ncledlighting.com](http://www.ncledlighting.com)

## Upgrade Analysis

## LED Lighting Contract

This lighting contract is made on \_\_\_\_\_, by and between NCLED and \_\_\_\_\_. NCLED desires to provide LED lighting services to \_\_\_\_\_, and \_\_\_\_\_ desires to obtain such services from NCLED.

**1. Description of Services.** LED Lighting and electrical services to begin on such a future date, that is agreed upon by both parties. NCLED will provide \_\_\_\_\_ the following services: Full Turn Key LED lighting and installation as stated in the Lighting Retrofit Proposal dated \_\_\_\_\_, as given to and presented by Jay Polena of NCLED to \_\_\_\_\_.

**2. Scope of Work.** NCLED will provide Lighting Materials, Labor and Installation, Recycling, necessary tools/equipment, and complete all paperwork for eligible rebates as stated in the **Lighting Retrofit Proposal dated \_\_\_\_\_, to \_\_\_\_\_ for the property located at \_\_\_\_\_.**

**Lighting Retrofit Proposal dated \_\_\_\_\_:**

Proposal Amount: \_\_\_\_\_

Minus Focus on Energy Rebate Incentives: \_\_\_\_\_.

**\* Net Proposal, after rebate: \$ \_\_\_\_\_**

**\* To be paid as 50% down payment of \$ \_\_\_\_\_ due upon receipt of invoice), and remaining balance due upon completion of installation.**

**3. Warranty: Five (5) year manufacturer warranty and one (1) year of Labor.**

**4. Projected Energy Costs:** The projected energy costs and savings contained in the Lighting Retrofit Proposal dated \_\_\_\_\_ are estimates based upon data obtained during the audit of your facility and information obtained from \_\_\_\_\_ or its employees. Thus, NCLED will not be held responsible for differences that were caused as a result of inaccurate data supplied. However, if it's not due to inaccurate information supplied, NCLED will work diligently to correct the issue.

**5. Compliance with Laws.** NCLED shall provide services in a workmanlike manner, and comply with all applicable federal, state, and local laws and regulations.

**Lighting Retrofit Proposal dated \_\_\_\_\_, net proposal amount due after rebates is \$ \_\_\_\_\_, is made on \_\_\_\_\_, by and between NCLED and \_\_\_\_\_.**

Sign X: \_\_\_\_\_ Sign X: \_\_\_\_\_  
(NCLED, Shelly Bekkers) **Client**

Date: \_\_\_\_\_ Date: \_\_\_\_\_



NCLEDLL-01

MBERNIER

## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

9/7/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Appleton - Vizance, Inc. 2501 E. Enterprise Ave. Suite 301 Appleton, WI 54913	CONTACT NAME: Kathleen L Salo	
	PHONE (A/C, No, Ext): (920) 441-0066	FAX (A/C, No):
	E-MAIL ADDRESS: ksalo@vizance.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Benchmark Insurance Company	41394
INSURED  NC LED LLC 516 N 8th Street De Pere, WI 54115	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

## COVERAGES

## CERTIFICATE NUMBER:

## REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC OTHER:			CP5009044	6/1/2023	6/1/2024	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			CA5004030	6/1/2023	6/1/2024	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 0			UM5002518	6/1/2023	6/1/2024	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
A	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input checked="" type="checkbox"/> Y / N If yes, describe under DESCRIPTION OF OPERATIONS below		N / A	WC5005091	6/1/2023	6/1/2024	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	Leased/Rented			CP5009044	6/1/2023	6/1/2024	Limit 60,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

## CERTIFICATE HOLDER

## CANCELLATION

Cooperative Purchasing Connection  
1001 E Mount Faith  
Fergus Falls, MN 56537

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

3/20/2017

Printer-Friendly Form View

Sec. 183.0202  
Wis. Stats.



State of Wisconsin  
Department of Financial Institutions

**ARTICLES OF ORGANIZATION - LIMITED LIABILITY COMPANY**

Executed by the undersigned for the purpose of forming a Wisconsin Limited Liability Company under Chapter 183 of the Wisconsin Statutes:

Article 1. **Name of the limited liability company:**

NCLED LLC

Article 2. **The limited liability company is organized under Ch. 183 of the Wisconsin Statutes.**

Article 3. **Name of the initial registered agent:**

Doug Schoenwalder

Article 4. **Street address of the initial registered office:**

516 N. 8TH STREET  
unit D  
De Pere, WI 54115  
United States of America

Article 5. **Management of the limited liability company shall be vested in:**

A member or members

Article 6. **Name and complete address of each organizer:**

DOUGLAS J. SCHOENWALDER  
396 Riverdale Dr  
Oneida, WI 54155  
United States of America

Other Information. **This document was drafted by:**

Doug Schoenwalder

**Organizer Signature:**

DOUGLAS J. SCHOENWALDER

**Date & Time of Receipt:**

3/16/2017 8:10:57 AM





**Cooperative Purchasing Connection**  
**Tabulation Report RFP #24.5 - Lighting Audit Services &**  
**LED Solutions**  
**Vendor: Premier Lighting, Inc.**

**General Comments:** Thank you for the opportunity. We will work hard to grow the contract.

**General Attachments:** 24.5 - Pricing Schedule.xlsx  
7-Project Deliverables.pdf  
COI Premier Lighting Inc.pdf  
Exhibit A LinkedInexample.docx  
Exhibit A - marketing plan case study.pdf  
Exhibit A - marketingplan sample.pdf  
Exhibit A - marketingPremierLighting.pdf  
Vendor Forms - Signatures -Premier Lighting.pdf  
Vendor Questionnaire- Premier Lighting.pdf



## Vendor Questionnaire

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### **Instructions**

Contained herein is a questionnaire required by the Cooperative Purchasing Connection (CPC). Please note, while some information is merely informational, some will be used during the evaluation and vetting process.

To submit the required forms, follow these steps:

1. Read the document in its entirety.
2. Respondents must use the Vendor Questionnaire to its capacity. Attached exhibits and/or supplemental information should be included only when requested (i.e. Marketing Plan).
3. Complete all questions.
4. Save all pages in the correct order to a single PDF format titled “***Vendor Questionnaire – Name of Company***”.
5. Submit the Vendor Questionnaire, along with other required documents in Public Purchase.

**The following sections will need to be completed before submission and submitted as one (1) single PDF titled “Vendor Questionnaire – Name of Company”:**

[Company Information](#)  
[Qualifications & Experience](#)  
[Warranty](#)  
[Financials & Level of Support](#)  
[Marketing & Partnership](#)  
[Exceptions & Deviations](#)  
[References](#)

## Company Information

**Name of Company:** Premier Lighting, Inc

**Company Address:** 2885 Country Drive Suite 135

**City, State, Zip code:** St. Paul, MN 55117

**Website:** www.premierltg.com

**Phone:** 651-490-0886

Provide the following company contacts that will be working with this anticipated contract. Include name, email, and phone number(s).

	Name	Email	Phone
General Manager	Angie Koch	angie@premierltg.com	651-200-3311
Contract Manager	Greg Ehrich	greg@premierltg.com	651-200-3330
Sales Manager	Greg Ehrich	greg@premierltg.com	651-200-3330
Marketing Manager	Erin Sturm	erin@premierltg.com	651-2003333
Customer Service Manager	Angie Koch	angie@premierltg.com	651-200-3311
Account Manager(s)	Greg/Angie	above	above

List who will be responsible for receiving updated participation lists.

Name	Email	Phone
Greg Ehrich	greg@premierltg.com	651-200-3330

List who will be responsible for submitting sales reports and administrative fee payments every quarter.

Name	Email	Phone
Angie Koch	<a href="mailto:angie@premierltg.com">angie@premierltg.com</a>	651-200-3311

List who will be responsible for conducting audits as requested by CPC.

Name	Email	Phone
Greg Ehrich	greg@premierltg.com	651-200-3330

Identify any business types/classifications that your company holds. \*Submit documentation in PDF format to verify business status (see submittal checklist).

x	Business Type/Classification
	8(a) 8(a) Qualified Business
	DBE Disadvantaged Business Enterprise
	HUB Historically Underutilized Business Zone
	MBE Minority-Owned Business Enterprise
	MWBE Minority Women-Owned Business Enterprise
x	SBE Small Business Enterprise
	Other; list name:

x	Business Type/Classification
	SDB Small Disadvantaged Business
	SDVOB Service-Disabled Veteran Owned Business
	SECTION 3 Section 3 Business Concern
	SSV Sole Source Vendor
	VBE Veteran-Owned Business Enterprise
x	WBE Woman-Owned Business Enterprise

Provide a list of other contracts your organization has in place that could be accessed by our membership for your services (e.g. other consortiums, state agencies) in MN, ND, SD, IA, and WI?

Click or tap here to enter text.

None

## Qualifications & Experience

### **1. Provide a brief background of your organization, including the year it was founded (1-2 paragraphs max.).**

Premier Lighting was founded in 1991 and for 32 years has been a leading lighting supplier and turn-key retrofit company. We serve all types of commercial/industrial businesses and government accounts. Premier Lighting employs 13 people and our mission is to provide our customers with the most optimal and practical lighting systems available on the market. We serve locations nationwide with turn-key lighting retrofit projects that lower energy costs with environmentally friendly solutions. Our 30 years of success stems from staying on top of the latest and greatest in lighting technology, while giving our customers the level of care and timeliness they deserve.

### **2. Provide evidence of what your company is doing to remain viable in the lighting industry.**

Premier Lighting is an active member of NALD (national association of innovative lighting distributors) which consists of lighting distributors, vendors and rebate providers. Our employees participate in an online lighting course and we have our vendors monthly to update us on the latest energy saving products.

### **3. Describe your company's logistics (locations, experience, production, distribution of products, warehouse inventories and delivery systems used) that should be considered in your ability to deliver on-time quality services, products, and solutions to participating agencies in MN, ND, SD, IA, and WI.**

Our warehouse is located in St. Paul where we stock a variety of LED items. Our distribution manager has been with Premier for 18 years! We use Speedee, UPS and FedEx for our local 5 state delivery. In addition to local stock, our manufacture relationship with Keystone Technologies allows us access to their warehouses in Atlanta, Boston, Charlotte, Chicago, Cincinnati, Dallas, Denver, Detroit, Fort Lauderdale, Houston, Indianapolis, Kansas City, Los Angeles, Louisville, Memphis, Minneapolis, Nashville, New Orleans, Philadelphia, Portland, San Francisco, and Syracuse.

### **4. Describe the number of agencies your organization, on average, provides lighting audit services and LED solutions to. Include overall numbers and numbers specific to MN, ND, SD, IA, and WI.**

**Describe your customer retention as it pertains to lighting audit services and LED solutions (i.e. customers who are served that continue to be repeat customers).**

Premier provides audits and solutions to, on average, 550 customers a year. The majority of our customers are in MN (400), followed by 50 per year in WI, and 25 in the bordering states.

### **5. Describe and specify your proposed service area (MN, ND, SD, IA, and WI) and how your company intends to meet the needs of customers in that area.**

Premier Lighting will travel to any location in the 5 state area to provide audit services and install of projects. All audits will be performed by Greg and installers may vary from state to state.

### **6. List the agencies, if any, you would exempt from this contract (i.e. current agencies that you are currently serving that will be exempt from pricing submitted with this proposal).**

City of Minneapolis, Hennepin County, Met Council, Chisago Lakes School, Centennial School District, Spring Lake Park School District

### **7. Describe your company's approach to lighting audits, the steps involved in an audit, and applicable LED solutions and what differentiates your company from your competitors. Describe any competitive differences regarding sales, service, installation, technology, and product line(s).**

The auditing process is a thorough investigation and analysis of the existing lighting system and how it is controlled. Once all of the necessary details are gathered the appropriate solutions are determined and suggested. All we do is lighting and we are experts at it. There are many lighting companies who have only been around since LED technology took off in the last 10 years. We have been in business for over 30 years and have a deep understanding of legacy lighting technology as well as the most state-of-the-art technology. We are constantly searching for the best solutions available to ensure our customers get the optimal lighting system for their facility.

**8. Describe how your company works with local utility companies to ensure energy rebates are maximized and how the funding/rebate, if approved, flows through, and applies to the project.**

Premier Lighting works with all local utility companies to maximize rebate dollars for all projects. Premier can accept the rebate and have the end user pay the net amount, or the customer can pay in full and wait for the rebate. Customer preference.

**9. Describe your company's approach to proposing available LED solutions to an agency resulting from a lighting audit.**

We take the time to consider all solutions available and suggest and propose what we feel will be the best solution for the long run. We ensure our customers will be able to maintain and service what they have in the future when needed.

**10. Describe any minimum project requirements and if any surcharges will be assessed for not meeting the minimum.**

Premier Lighting does not have any surcharges. The only thing that requires minimum charges would be shipments if freight allowances of \$1000 were not met.

**11. Describe how your company ensures that the LED solutions and products offered are current, energy efficient, best-value, and are customizable to agency needs.**

*Premier Lighting only buys from USA based companies that offers the most up to date efficient items. There are many lighting distributors that buy discontinued items at a lower price. Premier Lighting does not purchase liquidation items. If the need is for best value, we can offer pricing packages for value and premium quality items.*

**12. Describe your company's hierarchy or chain of command from installers to sales to management that will work with this potential contract/program.**

*The audit and order will start with Greg, the program manager. Once the project/audit is complete and project accepted he will work with Ben, project manager for procurement and time schedule of installation. Ben will work with the end user to communicate deliveries, installers and project communication.*

**13. Describe the process from order placement, including methods, to receipt of order, installation, and final walk-through (punch-list).**

Once the project is accepted the end user will provide Premier Lighting with a purchase order. Premier then procures products, schedules delivery and installation. Premier project manager will close out project, schedule any punchlist items. When job is complete, Premier will process the necessary rebate paperwork and provide proper invoice.

**14. Describe in detail your return or exchange program/policy(s) for purchases of LED lighting solutions and/or specific products (i.e lamps, fixtures) outside of an audit or applicable project.**

*Outside of an audit, we offer a complete return of items that are still in the original packaging. We will also accept returns with a restock if the packaging is missing and the product has not been used.*

**15. Provide a narrative of a recent project that totaled at least \$150,000 in lighting audit and LED solutions. The narrative should describe the lighting audit and results, proposed project scope, pricing costs and calculations, any fees, your company's installation/project management, and a final report and rebate summary.**

All of our proposals are completed after a thorough audit is completed. Taking a specific recent example we analyzed the current lighting and after a discussion with the customer on potential solutions narrowed it down to what was best for them. In this case they had existing fluorescent lay-in troffer fixtures in great shape that were evenly spaced out and provided enough light for the task at hand, but they were wasting energy. In addition, they had highbay fixtures in the gym and wrap fixtures in the cafeteria that were in the right location, but in rough shape with missing components/broken lenses. Upon discussion with the customer we decided to go with energy-saving LED tubes that bypass the fixtures in the lay-in fixtures that were in good shape and new LED fixtures in the gym and cafeteria to improve the aesthetics and save energy. Please see the PDF for specifics on how we were able to help them with a 1.6 year payback.

**15a. Uploaded as a separate PDF document titled "7 - Project Deliverables" provide the supporting documentation for the project described above in #15. Supporting documentation and deliverables must include the following:**

- (i) Lighting audit and results
- (ii) Proposed project scope, pricing costs and calculations, any applicable fees
- (iii) Installation/Project Management plan
- (iv) Final report and rebate summary

**16. Describe any “added value” attributes being offered to participating agencies when purchasing services and products through your company. Describe any “value-adds” that are exclusive to the potential contract.**

Premier Lighting will offer, at our location, or through an online, meeting training/education on the most recent updates on LED lighting to facilities staff on the purchased products or on general lighting, sensors, stage lighting and specialized lighting for any special need situations.

## Warranty

**1. Describe your warranty program, including any conditions and requirements to qualify claims procedure and overall structure.**

Premier Lighting will follow the manufacture warranty that typically follows hours used, or years for the product (typically 5years)

**2. Do all warranties cover all products/equipment parts and labor?**

  x   Yes                        x   No

If NO, describe the exceptions to coverage.

Products are covered per manufacture warranty and labor is situational

**3. Do warranties cover the expense of a technician’s travel time and mileage to perform warranty repairs?**

       Yes                        x   No

If NO, describe why travel and mileage are not covered.

Not part of manufacture warranty

**4. List any additional limitations or circumstances that would not be covered under your warranty?**

This would follow the manufacture warranty

**5. List any geographic areas for which your organization cannot provide a certified technician to perform warranty repairs. How will participating agencies in these areas be provided service for warranty repair?**

None

## Financials & Level of Support

**1. Describe the percentage of your company’s revenue, by category (city/county/government, K12 education, higher education) that is derived from lighting audit services and LED sales on an annual basis.**

City – 1%

County 1%

Government – 3%

K12 – 5%

**2. Describe how your company works with agencies to determine payment terms, progress payments, etc.**

Our accounting department would work with agencies by providing progress payment requests on large projects and we allow Net30 on LED sales/

**3. Describe your company’s allowed methods for payment and if any fees are assessed for those methods.**

ACH preferred without fee. Checks are acceptable and if CC is used we charge 3.5%

#### 4. Indicate the level of support your company will offer on this contract category.

- x   Pricing is better than what is offered to individual educational agencies.  
       Pricing is better than what is offered to cooperative educational agencies.  
       Other, please describe

**If OTHER, describe how the pricing submitted differs from individual entities or other purchasing consortiums:**  
Click or tap here to enter text.

#### 5. Describe any self-audit process/program you plan to employ to verify compliance with an anticipated contract award.

We will review monthly for invoices generated to the agencies using the Coop contract.Ric

## Marketing & Partnership

#### 1. Describe how your company will position and propose to support CPC and its participating agencies regarding program growth.

We will do a proactive marking campaign directed at CPC customers that will include outbound calling, emails, social media blasts, LinkedIn messaging and in person events. We will notify our rebate utility partners to make them aware of the program. To grow WI and Iowa we will target the rebate programs such as Access Energy and Focus on Energy.

#### 2. Describe and submit a marketing plan that would describe, at a minimum, the following: process on how the contract will be launched to current and potential agencies, the ability to produce and maintain full-color print advertisements in camera-ready electronic format, including company logos and contact information, anticipated contract announcements, planned advertisements, industry periodicals, other direct, or indirect marketing activities promoting the awarded contract, and how the contract award will be displayed/linked on your organization's website. You can submit any support materials as Exhibit A – Marketing Plan.

We would start with an email blast to our e-newsletter database that contains over 10,000 facilities in the 5 state area as well as a targeted LinkedIn campaign. We would also do ads in any publications that would make sense to hit the correct audience and start an outbound calling campaign to spread the awareness. We attached our existing marketing materials and if awarded will add the CPC contract to all pieces.

#### 3. Describe how your company will position this contract to CPC's participating agencies if awarded.

This will be a priority in our business and how we go to market. We will make sure anyone that can take advantage of CPC will know the benefits and ease of working with us.

#### 4. Describe how you plan to inform and train company personnel on the contract terms and conditions, details, and promotion of the contract. Describe how your organization plans to utilize your marketing and sales staff with this anticipated contract.

We will do a kickoff meeting with everyone in the company to gain a full understanding of all it entails as well as weekly meetings to make sure we are all actively promoting it and sharing in each other's success.

## Exceptions & Deviations

#### 1. List any additional stipulations and/or requirements your company requests that are not covered in the RFP.

Click or tap here to enter text.

#### 2. List any exceptions your company is requesting to the terms outlined in the Technical Specifications. Respondents must include the following when requesting exceptions:

- RFP section number and page number
- Describe the exception
- Explanation of why this is an issue
- A proposed alternative to meet the needs of participating agencies and the cooperative

## References

**Provide three (3) references that have purchased Lighting Audit and LED Solutions from your company within the last two (2) years. References from the proposed service area are preferred. A contact name, phone number and email will be required. \*Note, ensure your references are prepared to communicate with a representative from CPC. Failure to confirm reference of past work may affect your evaluation.**

Reference #1 – Company Name	Richfield ISD #280
Service/Product Purchased	LED Area Lights and LED products
Year of Purchase	2022/2023
Reference Contact	Dan Kretsinger
Phone	612-798-6081
Email	dan.kretsinger@rpsmn.org
Reference #2 – Company Name	Centennial School Dist #12
Service/Product Purchased	LED light fixtures, audits, turnkey retrofit
Year of Purchase	2020-2023
Reference Contact	Tim Burton
Phone	763-792-6016
Email	tburton@isd12.org
Reference #3 – Company Name	Hennepin County
Service/Purchase Purchased	LED Lighting Supplies
Year of Purchase	2020-2023
Reference Contact	Leah Hiniker
Phone	612-543-1219
Email	leah.hiniker@hennepin.us

## Vendor Forms & Signatures

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### **Instructions**

Contained herein are forms and information required by the Cooperative Purchasing Connection (CPC). Please note, while some information is merely informational, some will be used during the evaluation and vetting process.

To submit the required forms, follow these steps:

1. Read the document in its entirety.
2. Complete all questions and forms.
3. Save all pages in the correct order to a single PDF format titled “***Vendor Forms & Signatures – Name of Company***”.
4. Submit the forms in the required format with all necessary signatures in Public Purchase.

The following sections will need to be completed prior to submission and submitted as one single PDF titled “Vendor Forms & Signatures – Name of Company”:

1. [Contract Offer & Award](#)
2. [Uniform Guidance “EDGAR” Certification Form](#)
3. [Subcontractor Utilization Form](#)



## Contract Offer & Award

**Instructions:** Part I of this form is to be completed by the Vendor and signed by its authorized representative. Part II will be completed by the Cooperative Purchasing Connection (CPC) upon the occasion of an award.

## Part I: Vendor

In compliance with the Request for Proposal (RFP), the undersigned warrants that I/we have examined all General Terms and Conditions, Forms and Specifications, and being familiar with all of the conditions surrounding the solicitation, hereby offer and agree to furnish all goods and services in compliance with all terms, conditions, specifications, and amendments in this solicitation and any written exceptions in the offer. Signature also certifies understanding and compliance with this proposal. The undersigned understands that his/her competence and responsibility and that of his/her proposed subcontractors, time of completion, as well as other factors of interest to CPC as stated in the evaluation section, will be a consideration in making the award. This contract offer and award binds said Vendor to all terms and conditions stated in the proposal.

Business Name	Premier Lighting Inc	Date	8.31.23
Address	2885 Country Dr Ste135	City, State, Zip	St. Paul, MN 55117
Contact Person	Greg Ehrich	Title	VP

Authorized Signature	<u>Greg Ehrlich</u>	Title	<u>VP</u>
Email	<u>greg@premierltg.com</u>	Phone	<u>651-200-3330</u>

## Part II: CPC

Your response to the identified proposal is hereby accepted. As a Vendor, you are now bound to offer and provide the products and services identified within this solicitation, your response, including all terms, conditions, specifications, exceptions, and amendments. The initial term of this contract shall be for up to twenty-four (24) months and will commence on the date indicated below. There will be an optional renewal for a period lasting no longer than one (1) additional 24-month period. CPC may grant an extension under certain criteria and conditions.

Agency \_\_\_\_\_ Authorized Signature \_\_\_\_\_

Name	Title
------	-------

**Awarded this**                      **day of**                      **Contract #**

**Contract/Agreement to Commence**

# EDGAR Certification Form

## 2 CFR Part 200

### REQUIRED CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS – APPENDIX II TO 2 CFR 200

**The following provisions are required and apply when federal funds are expended by participating agencies for any contract resulting from this procurement process.**

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

#### **(A) Vendor Violation or Breach of Contract Terms**

Contracts for more than the simplified acquisition threshold currently set at \$250,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate. Provisions regarding vendor default and legal remedies are included in Sections I.K.18 and I.K.19 above. Any contract award will be subject to such provisions. The remedies under the contract are in addition to any other remedies that may be available under law or in equity.

#### **(B) Termination for Cause and for Convenience**

Pursuant to Federal Rule (B) above when federal funds are expended by participating agencies, the participating agency reserves all rights to immediately terminate any agreement in excess of \$10,000 resulting from this procurement process in the event of a breach or default of the agreement by the Vendor, in the event the vendor fails to” (1) meet schedules, deadlines, and/or delivery dates within the time specified in the procurement solicitation, contract, and/or a purchase order; (2) make any payments owed; or (3) otherwise perform in accordance with the contract and/or the procurement solicitation. The participating agency reserves the right to terminate the contract immediately, with written notice to vendor, for convenience, if the participation agency believes, in its sole discretion that it is in the best interest of the participating agency to do so. The vendor will be compensated for work performed and accepted and goods accepted by the participating agency as of the termination date if the contract is terminated for convenience of the participating agency. Any award made under this procurement process is not exclusive and the participating agency reserves the right to purchase goods and services from other vendors when it is in the best interest of the participating agency.

#### **(C) Equal Employment Opportunity**

Except as otherwise provided under 41 CFR Part 60, all participating agency purchases or contract that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 shall be deemed to include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR Part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

#### **(D) Davis Bacon Act**

When required by Federal program legislation, Vendor agrees that, for all participating agency contracts for the construction, alteration, or repair (including painting and decorating) of public buildings or public works, in excess of \$2,000, Vendor shall comply with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, the Vendor is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specific in a

wage determinate made by the Secretary of Labor. In addition, the Vendor shall pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

Vendor must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

#### **(E) Contract Work Hours and Safety Standards Act**

Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard workweek of 40 hours. Work in excess of the standard workweek is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the workweek. The requirements of the 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions that are unsanitary, hazardous or dangerous. These requirements do not apply to the purchase of supplies, materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

#### **(F) Right to Inventions Made Under a Contract or Agreement**

If the participating agency’s Federal award meets the definition of “funding agreement” under 37 CFR 401.2(a) and the recipient or sub-recipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance or experiments, developmental or research work under the “funding agreement,” the recipient or sub-recipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

#### **(G) Clean Air Act and Federal Water Pollution Control Act**

Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended, contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

#### **(H) Debarment and Suspension (Executive Order 12549 and 12689)**

A contract award (see 2 CFR 180.222) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1966 Comp. p. 189) and 12689 (3 CFR Part 1989 Comp. p. 235), “Debarment and Suspension.” SAM exclusions contain the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

#### **(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)**

Vendors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

Pursuant to Federal Rule (I) above, when federal funds are expended by participating agencies, the vendor certifies that during the term of an award for all contracts by participating agencies resulting from this procurement process, the vendor certifies that it is compliance with all applicable provisions of the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). The undersigned further certifies that:

- (1) No Federal appropriated funds have been paid or will be paid for on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be include in the award documents for all covered sub-awards exceeding \$100,000 in Federal funds at all appropriated tiers and that all subrecipients shall certify and disclose accordingly.

#### **(J) Procurement of Recovered Materials**

For participating agency purchases utilizing Federal funds, Vendor agrees to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act where applicable and provide such information and certifications as a participating agency may require to confirm estimates and otherwise comply. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery, and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

#### **(K) Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment**

A participating agency is prohibited from obligating or expending funds to:

- (1) Procure or obtain.
- (2) Extend or renew a contract to procure or obtain; or
- (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
  - (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou

Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

- (ii) Telecommunications or video surveillance services provided by such entities or using such equipment.
- (iii) Telecommunications or video surveillance equipment or services products or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

#### **(L) Domestic Preferences for Procurements**

As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

For the purpose of this section:

- (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

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#### **PROFIT AS A SEPARATE ELEMENT OF PRICE**

For purchases using federal funds in excess of \$250,000, a participating agency may be required to negotiate profit as a separate element of the price. See 2 CFR 200.323(b). When required by a participating agency, the vendor agrees to provide information and negotiate with the participating agency regarding profit as a separate element of the price for a particular purchase. However, vendor agrees that the total price, including profit, charged by the vendor to the participating agency shall not exceed the awarded pricing.

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#### **RECORD RETENTION REQUIREMENTS FOR CONTRACTS PAID FOR WITH FEDERAL FUNDS – 2 CFR § 200.333**

When federal funds are expended by participating agencies for any contract resulting from this procurement process, the vendor certifies that it will comply with the record retention requirements detailed in 2 CFR § 200.333. The vendor further certifies that vendor will retain all records as required by 2 CFR § 200.333 for a period of three years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

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#### **CERTIFICATION OF COMPLIANCE WITH THE ENERGY POLICY AND CONSERVATION ACT**

When federal funds are expended by participating agencies for any contract resulting from this procurement process, the vendor certifies that the vendor will be in compliance with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.; 49 C.F.R. Part 18; Pub. L. 94- 163, 89 Stat. 871).

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## CERTIFICATION OF NON-COLLUSION STATEMENT

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Vendor certifies under penalty of perjury that its responsible to this procurement solicitation is in all respects bona fide, fair, and made without collusion or fraud with any person, joint venture, partnership, corporation or other business or legal entity.

Pursuant to Federal Ruling, when federal funds are expended by participating agencies, the vendor hereby certifies that during the term of an award for all contracts by participating agencies resulting from this procurement process, vendor certifies compliance will all provisions, laws, acts, regulations as specifically noted above. The vendor agrees to comply with all federal, state, and local laws, rules, regulations, and ordinances, as applicable.

Business Name	<u>Premier Lighting, Inc</u>	Authorized Signature	<u><i>Greg Ehrich</i></u>
Full Name	<u>Greg Ehrich</u>	Title	<u>VP</u>



## Subcontractor Utilization Form

**Instructions:** List all subcontractors to be used during the performance of this contract. Submit additional forms if needed.

Solicitation Name: Lighting Audit Services & LED Solutions

Solicitation Number: #RFP #24.5

Vendor Name: PREMIER LIGHTING INC

If a subcontractor will not be used, check this box: ☐

Company Name: Multitech

Street Address: 2515 White Bear Ave Suite 8A-187

City, State, Zip: White Bear Lake, MN 55109

Telephone: 651-277-1181

Primary Contact: Jon Dahlstrom

Email Address of Contact: multitechelectric@live.com

Services to be provided:

Electrical install services

Company Name: Realm Electric

Street Address: 518 ROSEDALE RD NE

City, State, Zip: SPRING LAKE PARK, MN 55432

Telephone: 651-460-0122

Primary Contact: RYAN HOLIHAN

Email Address of Contact: ryan@realmelectricllc.com;kelsey@realmelectricllc.com

Services to be provided:

Electrical install services

Company Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_

Primary Contact: \_\_\_\_\_

Email Address of Contact: \_\_\_\_\_

Services to be provided: \_\_\_\_\_

# 1- Lighting Audit Services

\*Please note this workbook has multiple tabs.

Instructions. Complete the tables below for the services your company is offering. Please note this is an REQUIRED form.

Responding Company's Name:

Premier Lighting

REQUIRED

## Lighting Assessment & Design

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Lighting Audit & Assessment (per square foot)	\$0.05	\$0.03	40.00%	\$ 150.00	\$ 0.50	Fee is waived if project goes through us. Anything outside of 100 mile radius of Minneapolis. Per diem if overnight required
Design Services	\$ 80.00	\$ 60.00	25.00%	\$ 150.00	\$ 0.50	Fee is waived if project goes through us. Anything outside of 100 mile radius of Minneapolis. Per diem if overnight required
Project Management	\$ 80.00	\$ 60.00	25.00%	\$ 150.00	\$ 0.50	Fee is waived if project goes through us. Anything outside of 100 mile radius of Minneapolis. Per diem if overnight required
			0.00%			
			0.00%			
			0.00%			

Installation [Labor] \*\*Prevailing wage projects/installs are subject to higher hourly rates/charges. Prevailing wage rates change by MN county. Participating agencies are required to notify the Vendor if prevailing wages are required (state/federal funding as part or all of the project).

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Hourly Rate - Regular Hours	\$ 130.00	\$ 105.00	19.23%	\$ 150.00	\$ 0.65	Anything outside of 100 mile radius of Minneapolis. Per diem if overnight required
Hourly Rate - Evening	\$ 195.00	\$ 150.00	21.43%	\$ 150.00	\$ 0.65	Anything outside of 100 mile radius of Minneapolis. Per diem if overnight required
Hourly Rate - Weekend/Holidays	\$ 220.00	\$ 175.00	21.43%	\$ 150.00	\$ 0.65	Anything outside of 100 mile radius of Minneapolis. Per diem if overnight required
			0.00%			
			0.00%			
			0.00%			

## Other Services

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Rebate Fulfillment	\$ 100.00	\$ -	100.00%			We will do this service at no cost for members.
Recycling Services	\$ 0.65	\$ 0.25	61.54%			Pricing varies by item- this is for a 4' fluorescent
Training			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			



## 2.1 - LED Category Discount

**\*Please note this workbook has multiple tabs.**

**Instructions.** Complete the following schedule for all categories of product offered (by catalog, category, and/or by manufacturer) which can include sub-categories (specific lines from manufacturers) and the discount associated with that category. The form should be completed by the standards listed in the Technical Specifications. Additional rows may be added. This is a required form **if proposing lighting solutions.**

**Responding Company's Name:**

Premier Lighting, Inc

## REQUIRED FORM

[illegible]

# 3 - Volume Discounts

\*Please note this workbook has multiple tabs.

**Instructions.** Complete the form below if your company is offering additional discounts for a one time purchase, size of project, or a group of local agencies in a geographic area combining requirements (estimate annual spend). Please note this is an **optional form**.

Responding Company's Name:

Premier Lighting

OPTIONAL FORM

Dollar Amount From	Dollar Amount To	Catalog/Product/Manufacturer	Additional Discount Offered
\$100,000.00	unlimited	All	5%
\$10,000.00	\$50,000.00	Satco	5%
\$50,000.00	unlimited	Satco	6%
\$15,000.00	\$99,999.00	Keystone	2%
\$50,000.00			2%



# LIGHTING AUDIT ENERGY & COST SAVINGS

<b>Property Address:</b>	Centennial Schools 4757 North Road Circle Pines, MN 55014
<b>Presented To:</b>	Tim Burton
<b>Project:</b>	Centennial High School
<b>Report Date:</b>	April 9, 2020
<b>Energy Company:</b>	Xcel
<b>Presented by Auditor:</b>	Greg Ehrich, LC Premier Lighting, Inc. 2885 Country Drive Suite 135 St. Paul, MN 55117 Direct: 651-200-3330 Office: 651-490-0886 Fax: 651-490-0963 <a href="mailto:greg@premierltg.com">greg@premierltg.com</a>

# Lighting Audit Details

**Client** Centennial Schools  
**Contact Person** Tim Burton  
**Email** [tburton@isd12.org](mailto:tburton@isd12.org)  
**Phone #** 763-792-6016  
**Address** 4757 North Road  
**City, State Zip** Circle Pines, MN 55014  
**Project** Centennial High School  
**ENERGY**  
**COMPANY** Xcel

**Electrical Cost**  
**/ Kilowatt Hr** \$ 0.12  
  
**Premise #**  
**Voltage**  
**EM Type**  
  
**Ladder/Lift**  
**Applicable**  
**Sales Tax** 0.000%

Current Lighting					Proposed Upgrade					
Location	Current Lighting	Current Watts	# Current Fixtures	Hours / Year	Recommended Replacement	New Watts	# New	New Hours/Year	Kelvin	Installation Notes
2x2 Fixtures West	2' 2-Lamp T8 Ubend	62	36	2600	Ubend 6" Type B LED T8 (2 Lamps-direct line)	36	36	2600	4100	
2 Lamp Fixtures West	4' 2-Lamp T8 32 Watt	62	345	2600	4' Type B 9.2w 2 Lamp LED T8 Lamp (2 Lamp-direct line)	18.4	345	2600	4100	
West Cafeteria	4' 2-Lamp T8 32 Watt	62	70	2600	4' Curved Wrap Fixture 5k Lumen LED Key	40	70	2600	4100	
3 Lamp Fixtures West	4' 3-Lamp T8 32 Watt	86	1322	2600	4' Type B 9.2w 3 Lamp LED T8 Lamp (3 Lamp-direct line)	27.6	1322	2600	4100	Bilevel
4 Lamp Fixtures West	4' 4-Lamp T8 32 Watt	112	25	2600	4' Type B 9.2w 4 Lamp LED T8 Lamp (4 Lamp-direct line)	36.8	25	2600	4100	
West Gym	4' 6-Lamp T8 32 Watt	226	35	2080	High Bay PEL2-50MH (24K Lumen)	159	35	2080	5000	
2x2 Fixtures East	2' 2-Lamp T8 Ubend	62	117	2600	Ubend 6" Type B LED T8 (2 Lamps-direct line)	36	117	2600	4100	
2 Lamp Fixtures East	4' 2-Lamp T8 32 Watt	62	705	2600	4' Type B 9.2w 2 Lamp LED T8 Lamp (2 Lamp-direct line)	18.4	705	2600	4100	
3 Lamp Fixtures East	4' 3-Lamp T8 32 Watt	86	797	2600	4' Type B 9.2w 3 Lamp LED T8 Lamp (3 Lamp-direct line)	27.6	797	2600	4100	Bilevel
4 Lamp Fixtures East	4' 4-Lamp T8 32 Watt	112	117	2600	4' Type B 9.2w 4 Lamp LED T8 Lamp (4 Lamp-direct line)	36.8	117	2600	4100	
East Gyms	4' 6-Lamp T8 32 Watt	226	50	2080	High Bay PEL2-50MM (18K Lumen)	123	50	2080	5000	
East Gymnastics	4' 6-Lamp T8 32 Watt	226	12	2080	High Bay PEL2-50MM (18K Lumen)	123	12	2080	5000	
East Kitchen	4' 2-Lamp T12 HO (60 watt)	142	2	2600	Vaportight Fixture LED	44	2	2600	5000	

## WHY PREMIER LIGHTING

We recommend what we feel is the optimal and practical lighting system for your application. Please discuss with us if you are considering something other than what we proposed as we want to give you all the opportunities to have the best lighting solution for your facility's future.



### **Service**

*We communicate with our customers in a timely manner and make it convenient and easy for them to work with us for all of their lighting needs. We are there for you before, during and after the sale. Our goal is to be your lighting supplier for life.*

### **Options/Lighting Knowledge**

*We have been in business for over 25 years and stay on top of the latest in greatest in lighting technology. Lighting is confusing so we sort through all of the practical options and provide you with the optimal recommendation for your facility.*

### **Quality**

*Everything we provide is commercial grade and backed by warranty from reputable manufacturers.*

### **Price**

*We competitively price everything we provide to save our customers time and provide peace of mind that they are getting the best lighting product at the best price.*

### **Recommendation Rationale**



## Energy Savings Summary

### SAVINGS

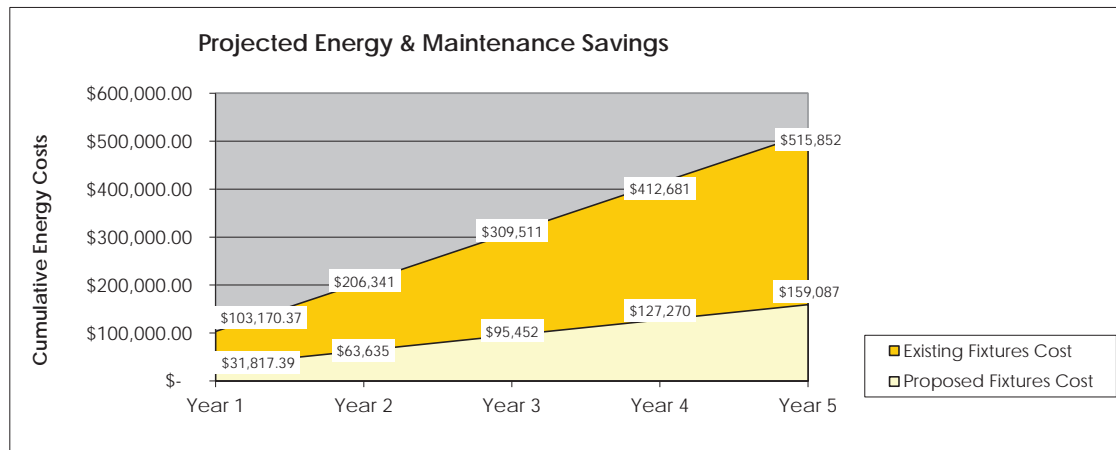
KW Savings	Annual KWH Savings	Annual Energy Savings
<b>194.7</b>	<b>501,557.7</b>	<b>\$60,186.92</b>

Reduce Energy By: **65%**

### MAINTENANCE SAVINGS SUMMARY:

#### Savings Appreciated:

Lamp Replacement	Labor Lamp Replacement	Ballast Replacement	Labor Ballast Replacement	Total Replacement Cost
\$2,823.24	\$2,584.56	\$3,838.85	\$1,919.42	<b>\$11,166.06</b>
ANNUAL SAVINGS:				<b>\$11,166.06</b>



Total Savings      **\$71,353**      **\$142,706**      **\$214,059**      **\$285,412**      **\$356,765**

### CUMULATIVE ENERGY COST & MAINTENANCE SAVINGS

	Year 1	Year 2	Year 3	Year 4	Year 5
Existing Fixtures Cost	#####	\$206,341	\$309,511	\$412,681	\$515,852
Proposed Fixtures Cost	\$31,817.39	\$63,635	\$95,452	\$127,270	\$159,087
Total Annual Savings	\$71,353	\$142,706	\$214,059	\$285,412	\$356,765

# Contract of Lighting Upgrades For Centennial Schools

Presented to: Tim Burton

Project: Centennial High School

Date: April 09, 2020

*This proposal is valid for 60 days*



Lighting Upgrades	
<b><i>Estimated Costs</i></b>	
Material Costs	\$118,677.50
Installation <i>(with permit and lift if necessary)</i>	\$84,151.83
Recycling	\$6,042.85
Freight	\$0.00
Tax	\$0.00
Estimated Investment	\$208,872.18
Estimated Rebates	-\$94,862.39
<b>Estimated Final Investment</b>	<b>\$114,009.79</b>
Annual Maintenance Savings	\$11,166.06
Annual Energy Savings	\$60,186.92
<b>Estimated Annual Savings</b>	<b>\$71,352.99</b>
<b><i>Estimated Payback in Years</i></b>	<b><i>1.60</i></b>
<b><i>Estimated Return on Investment</i></b>	<b><i>63%</i></b>
<b><i>Estimated Energy Reduction</i></b>	<b><i>65%</i></b>

The amount of Premier Lighting's quote does not include the furnishing of any materials or labor required to repair or correct any pre-existing power, electrical wiring, dimming and control issues. In addition this contract is only for the items on the Lighting Audit Details Page. We cannot guarantee the counts in this proposal are 100% accurate so any additional or less material/labor will be added to or deducted from the project cost. Typical lead time to completion is 6-8 weeks from approval.

All products are backed by the manufacturer warranty which does not include labor-only material. If Premier Lighting performs the initial install we will cover labor on warranties for 60 days after job completion. If you choose, you may purchase an extended labor warranty priced per project.

Premier Lighting's terms are 50% down, balance due upon completion. With credit approval, due upon completion.

This Agreement shall not be binding upon either party if not accepted within sixty (60) days from the date of this Agreement.

☐ Customer is taking the rebate.

☐ Premier Lighting is taking the rebate.

**By signing this contract I agree I have read and agree to the terms above.**

PROPOSAL ACCEPTED AND INSTALLATION AUTHORIZED BY:

I agree to this project and the terms laid out in this proposal.

\_\_\_\_\_  
*Customer Signature*

\_\_\_\_\_  
Date

Tim Burton

\_\_\_\_\_  
*Customer Name*

\_\_\_\_\_  
Title

\_\_\_\_\_  
SALES PERSON SIGNATURE

Greg Ehrich, LC  
\_\_\_\_\_  
SALES PERSON NAME

4/9/2020  
\_\_\_\_\_  
PROPOSAL DATE

Before

After



# PREMIER LIGHTING

## Problem

Braemar Arena is an indoor ice rink facility located in Edina, Minnesota. The facility has three, regulation sized ice sheets and is home to local skating clubs and hockey teams. Built in 1965, the facility had undergone many renovations; but, it had been a while since they upgraded their fluorescent lighting. The fluorescent bulbs provided adequate light, but they degraded over the years and replacements were getting costly. Braemar Arena wanted a more efficient lighting solution that they could have more control over.

## Solution

With the advancement in LED lighting technology, we saw the perfect opportunity to upgrade the fluorescent fixtures in the facility to LED. We sorted through and analyzed several fixtures and layout options before ultimately deciding on an integrated LED high bay fixture with a state of the art lighting control system. This system reimagines wireless lighting control and can be controlled from a computer or a phone while providing more adequate light and significant energy savings.

## Result

The new LED fixtures reduced energy consumption in the facility by 35% and increased lighting levels by over 30%. The LED fixture has a rated life of over 100,000 hours compared to 20,000 hours for the fluorescent system. Each fixture can now be individually controlled to dim to any level from a phone or computer system from anywhere. Braemar Arena already has a reputation as a premier ice arena in the area; with state-of-the-art LED lighting, they are now in a class of their own.

## Case Study: Braemar Hockey Rink LED Retrofit

### About Us

Premier Lighting provides high-quality, commercial-grade lighting products, installation, and retrofits. Our mission is to provide our customers with the most optimal and practical lighting solution for their facility. From quality products to turnkey solutions, we have your lighting needs covered.

### Services Offered

- **Lighting Products:**  
fixtures, bulbs, ballasts,  
lenses, sockets, and parts
- **Turnkey Lighting Retrofits**
- **Service Work**
- **Energy Audits**
- **Layouts**
- **Photometrics**

**Connecting Light To You**

(651) 490-0886 | [www.premierltg.com](http://www.premierltg.com) | 2885 Country Drive 135, Little Canada, MN 55117



## True End-To-End LED Service

### Who We Are

The LED market is completely saturated. What does this mean for you? Well, you do have a variety of choices: from big box providers to electrical contractors. But how do you know you will be getting a top-quality LED solution?

Premier Lighting offers a truly comprehensive service, from competitive pricing on the right equipment for your needs to turn-key installation and maintenance. In other words, we're not just a supplier; we're a long-term partner.

### Our Services

- Lighting Energy Audits
- Lighting Design
- Recycling
- Commercial-Grade Lighting Product Supply
- Lighting Installation and Maintenance
- Lighting Consultation

### Client Testimonial

"We go out for multiple bids and time and again, Premier has come through with the best bid. They're not just a low-cost provider; the service has always been there: they give us a quote and they finish the project on budget and on time."

– Jim Schlundt, First Industrial, Marketing/Leasing Director

**Connecting Light To You**

(651) 490-0886 | [www.premierltg.com](http://www.premierltg.com) | 2885 Country Drive 135, Little Canada, MN 55117

# PREMIER LIGHTING

## Why Choose Premier Lighting?



### Who We Are

Our mission is to provide our customers with the most optimal and practical lighting systems available on the market. We serve locations nationwide with turn-key lighting retrofit projects that lower energy costs with environmentally friendly solutions.

Our 25 years of success stems from staying on top of the latest and greatest in lighting technology, while giving our customers the level of care and timeliness they deserve.

# #1

Lighting rebate processor  
for the state of Minnesota.

**OVER \$1 MILLION**  
PER YEAR IN REBATES PROCESSED.

### Here's what our clients have to say:

"The service has always been there: they give us a quote and they finish the project on budget and on time."

"Premier is quick to respond to our needs, and they consistently provide our facilities with brighter lighting and more energy-efficient equipment."

"Since we did the lighting upgrades with Premier, people have really noticed a difference. We're saving money and increasing safety"

"Premier has been great to work with: their pricing has held up, and they provide high-quality products and the best service possible"



## Our Services

- > LED Upgrades
- > Turn-Key Lighting Retrofits
- > Lighting Products
  - Fixtures, bulbs, ballasts, lenses, sockets, and parts
- > Service Work
- > Energy Audits
- > Layouts
- > Photometrics
- > In-house Rebate Processing
- > 5 to 10-year Warranties

**Our goal is to be your lighting supplier for life. With Premier Lighting you receive:**

**Service** - We communicate with our customers in a timely manner and turn around most quotes within 24 hours. We are there for you before, during, and after the sale.

**Options/Lighting Knowledge** - Lighting is confusing, so we sort through all the practical options and provide you with the optimal recommendation for your facility.

**Quality** - Everything we provide is commercial grade and backed by warranties from reputable manufacturers.

**Price** - We competitively price everything we offer to save our customers time and to ensure peace of mind that they are getting the best lighting product at the best price.





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## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

9/5/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Stein Agency Inc. 12800 Lake Blvd Lindstrom, MN 55045	CONTACT NAME:		
	PHONE (A/C, No, Ext):	(651) 257-1042	FAX (A/C, No): (651) 257-3937
INSURED  Premier Lighting Inc 2885 Country Drive #135 Little Canada, MN 55117	E-MAIL ADDRESS:		
	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A : The Hanover Insurance Company		
	INSURER B :		
	INSURER C :		
	INSURER D :		
INSURER E :			
INSURER F :			

## COVERAGES

## CERTIFICATE NUMBER:

## REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PER <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:			OBXH14625102	1/1/2023	1/1/2024	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			AWXH14469702	1/1/2023	1/1/2024	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 0			OBXH14625102	1/1/2023	1/1/2024	EACH OCCURRENCE \$ 2,000,000 AGGREGATE \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	W2X H146244 02	1/1/2023	1/1/2024	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

## CERTIFICATE HOLDER

## CANCELLATION

Cooperative Purchasing Connection  
1001 E Mount Faith  
Fergus Falls, MN 56537

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



**Cooperative Purchasing Connection**  
**Tabulation Report RFP #24.5 - Lighting Audit Services &**  
**LED Solutions**  
**Vendor: The Retrofit Companies**

**General Comments:** Thank you in advance for your review of these submittals!

**General Attachments:** Certificate of Insurance (COI) - The Retrofit Companies, Inc..pdf  
Exhibit A Marketing Plan - The Retrofit Companies, Inc..pdf  
Forms - Signatures - The Retrofit Companies, Inc..pdf  
Pricing Schedule - The Retrofit Companies, Inc..xlsx  
Project Deliverables - The Retrofit Companies, Inc..pdf  
Questionnaire - The Retrofit Companies, Inc.pdf

## Vendor Questionnaire

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### **Instructions**

Contained herein is a questionnaire required by the Cooperative Purchasing Connection (CPC). Please note, while some information is merely informational, some will be used during the evaluation and vetting process.

To submit the required forms, follow these steps:

1. Read the document in its entirety.
2. Respondents must use the Vendor Questionnaire to its capacity. Attached exhibits and/or supplemental information should be included only when requested (i.e. Marketing Plan).
3. Complete all questions.
4. Save all pages in the correct order to a single PDF format titled “***Vendor Questionnaire – Name of Company***”.
5. Submit the Vendor Questionnaire, along with other required documents in Public Purchase.

**The following sections will need to be completed before submission and submitted as one (1) single PDF titled “Vendor Questionnaire – Name of Company”:**

[Company Information](#)  
[Qualifications & Experience](#)  
[Warranty](#)  
[Financials & Level of Support](#)  
[Marketing & Partnership](#)  
[Exceptions & Deviations](#)  
[References](#)

## Company Information

**Name of Company:** The Retrofit Companies, Inc. (dba Retrofit Lighting & Design)

**Company Address:** 1010 Hoffman Drive Suite A

**City, State, Zip code:** Owatonna, MN 55060

**Website:** www.retrofitcompanies.com

**Phone:** (800) 795-1230

Provide the following company contacts that will be working with this anticipated contract. Include name, email, and phone number(s).

	Name	Email	Phone
General Manager	Jake Andrist	jandrist@retrofitcompanies.com	(507) 363-0656
Contract Manager	Jake Andrist	jandrist@retrofitcompanies.com	(507) 363-0656
Sales Manager	Jake Andrist	jandrist@retrofitcompanies.com	(507) 363-0656
Marketing Manager	Madison Keller	manonick@retrofitcompanies.com	(320) 241-8931
Customer Service Manager	Jake Andrist	jandrist@retrofitcompanies.com	(507) 363-0656
Account Manager(s)	Adam Wacholz	awacholz@retrofitcompanies.com	(651) 279-0325

List who will be responsible for receiving updated participation lists.

Name	Email	Phone
Jake Andrist	jandrist@retrofitcompanies.com	(507) 363-0656

List who will be responsible for submitting sales reports and administrative fee payments every quarter.

Name	Email	Phone
Jake Andrist	jandrist@retrofitcompanies.com	(507) 363-0656

List who will be responsible for conducting audits as requested by CPC.

Name	Email	Phone
Jake Andrist	jandrist@retrofitcompanies.com	(507) 363-0656

Identify any business types/classifications that your company holds. **\*Submit documentation in PDF format to verify business status (see submittal checklist).**

x	Business Type/Classification
	8(a) 8(a) Qualified Business
X	DBE Disadvantaged Business Enterprise
	HUB Historically Underutilized Business Zone
	MBE Minority-Owned Business Enterprise
	MWBE Minority Women-Owned Business Enterprise
X	SBE Small Business Enterprise
X	Other; list name: WOSB, CERT, TG

x	Business Type/Classification
	SDB Small Disadvantaged Business
	SDVOB Service-Disabled Veteran Owned Business
	SECTION 3 Section 3 Business Concern
	SSV Sole Source Vendor
	VBE Veteran-Owned Business Enterprise
X	WBE Woman-Owned Business Enterprise

**Provide a list of other contracts your organization has in place that could be accessed by our membership for your services (e.g. other consortiums, state agencies) in MN, ND, SD, IA, and WI?**

*\*For our Recycling division*

Cooperative Purchasing Connection (CPC) #20.10 Recycling Services Contract

State of Iowa Contract 19041D – Lamps, Ballasts, Computer Components, and other Recyclables.





## Qualifications & Experience

### **1. Provide a brief background of your organization, including the year it was founded (1-2 paragraphs max.).**

The Retrofit Companies, Inc. was founded in 1992, in Owatonna, MN. We are a woman-owned, small, family business with locations in Owatonna, MN and Little Canada, MN.

Starting out as “Lighting Retrofit” we specialized in energy-efficient lighting upgrades. We quickly added “Retrofit Electric” to the offering, as projects demanded electrical work. In the mid-90’s, regulations were put on the proper disposal and recycling of fluorescent lamps and PCB ballasts, (common lighting technology back then), so we acquired a recycling business, and created “Retrofit Environmental”. Later, we added “Retrofit Supply” to the mix to offer affordable access to lamps, ballasts, and light fixtures. Now, we are The Retrofit Companies, Inc., still offering our lighting expertise, in addition to electrical and environmental services.

### **2. Provide evidence of what your company is doing to remain viable in the lighting industry.**

Our lighting division focuses on the proper lighting design of projects. We have a team of lighting auditors and project developers that specify LED solutions to meet our customers’ goals for energy savings and lighting performance.

We are vendor-neutral and have great relationships with most lighting manufacturers and distributors. This allows us to take advantage of various ongoing training and available resources. Our team engages in ongoing training on lighting technology, lighting requirements, and lighting controls. We hold certifications for LC, CLCP, and CLEP, which keep us informed and in front of lighting trends and changes in the industry.

We are also part of multiple national lighting industry organizations like [NALMCO](#), [IES](#), [LCA](#), and the Department of Energy’s [Integrated Lighting Campaign](#).

### **3. Describe your company’s logistics (locations, experience, production, distribution of products, warehouse inventories and delivery systems used) that should be considered in your ability to deliver on-time quality services, products, and solutions to participating agencies in MN, ND, SD, IA, and WI.**

Our primary lighting warehouse is in Owatonna, MN, however we do not stock very much project material there. If we do, it would be based on where the product is being installed and who is installing. In our experience, with the continuing evolution of LED technology it is not a good idea to stock material. Many versions become obsolete or less efficient quickly. By stocking material, you also eliminate your ability to agnostically specify the right solution for the job. We want to specify the products that will perform to meet the goals of the project, rather than set the goal of the project to what we have in our warehouse.

We order lighting project material through multiple channels, including directly from many manufacturers and distribution. Our primary distributor is Rexel Energy Solutions, who covers all 50 states, including the service areas mentioned above. We leverage their network of multiple warehouses to source products faster, whenever possible, and to stage products as needed. We also use 3<sup>rd</sup> party logistics companies to accept and verify material delivery and combine the materials for shipment to the job site once all the product is received.

After we source material, we have many installation partners, and are always looking to work with local electrical contractors in partnership for our project installations. These contractors are usually already working in the district and/or the municipality and within the community. We often ask them to receive the project material and verify that all products are received before starting the project. Some have the space to do so, some do not. Our customers also often receive and store materials at the project site.

Our various sources allow us to have options to speed up ship dates, however, there is typically a 4–8-week lead time on full project material lists. (Some products are readily available, and some dates are further out.) We always prefer to receive all products before mobilizing the installation to ensure an organized installation and an efficient timeline for project completion.

### **4. Describe the number of agencies your organization, on average, provides lighting audit services and LED solutions to. Include overall numbers and numbers specific to MN, ND, SD, IA, and WI.**

**Describe your customer retention as it pertains to lighting audit services and LED solutions (i.e., customers who are served that continue to be repeat customers).**

Much of our business is focused on education and municipalities. Year to date, in 2023, we have audited and developed over 70 projects at educational institutions (K12, College, Public and Private), and over 60 projects at City/County municipalities, (buildings like Ice Arenas, Rec Centers, Park & Rec, Public Works, etc.), in Minnesota. We have also looked at a few Non-profit organization facilities like Boys & Girls Clubs and Habitat for Humanity.

Wisconsin, Iowa, and North and South Dakota have not been our primary focus, so we have only looked at a couple of projects in WI. Our company growth goals do include more sales focus in WI, IA, ND, and SD.

Our customer retention has been good, however, that depends on how many buildings they manage. If they only have one building, and we upgrade the lighting, there is no more lighting to be done for a long time. Through the 31 years though, we have upgraded many buildings multiple times through various lighting technologies - from HID/HPS lighting technology, to Fluorescent, then to LED.

If they have multiple buildings, we usually recommend that they have us audit all the buildings to help them prioritize, plan and budget for upgrades. Then, we find that when their budget allows, we are asked to complete the upgrade. This can happen over the course of years in many cases.

Some customers have asked us to upgrade entire districts, or a list of prioritized buildings throughout a city and we have successfully audited, developed, and implemented projects at multiple buildings as one single project.

**5. Describe and specify your proposed service area (MN, ND, SD, IA, and WI) and how your company intends to meet the needs of customers in that area.**

As a company we are currently auditing, developing, and installing projects across the country. We are based in Minnesota and have our own team of project auditors/developers, project managers, and installers that would primarily service the needs in the Upper Midwest, (MN, IA, WI, ND and SD).

We are a small Minnesota business, so while we own our projects from concept to completion no matter where they are, we do rely on our vetted partners to help support us. This support can come from our manufacturing and distribution channels, in the form of project audit and development support or from our labor partners accepting project materials and installing the project. All projects that we sell are always The Retrofit Companies' project, always giving our customers one point of contact at our company.

**6. List the agencies, if any, you would exempt from this contract (i.e., current agencies that you are currently serving that will be exempt from pricing submitted with this proposal).**

N/A

**7. Describe your company's approach to lighting audits, the steps involved in an audit, and applicable LED solutions and what differentiates your company from your competitors. Describe any competitive differences regarding sales, service, installation, technology, and product line(s).**

1. **Consultation** - Our sales rep meets with the prospective customer to discuss the project, including what LED they have done, what their experience has been with LED, and what their priorities are, focusing on lighting performance, functionality (like controls), and energy savings.

At this point we will determine if the customer has any quotes on the project and, if so, the level of detail they have. If they have a quote, we will discuss what project details they have and if it is enough for them to feel confident in that scope of work. If they are just looking for a secondary quote, we will discuss whether or not we will bid on the project based on the scope of work they have. This situation is not ideal, but if they are just looking for a number, we want to try to support them, however, it's difficult to show our value in just a number.

The best scenario is when we propose our paid Lighting Energy Study. With the paid study, we do the audit and development, we guarantee that project scope to be accurate, and we guarantee no change orders on the project.

The deliverables of this paid study include the full project scope of work, the material list and specification sheets, and energy analysis. With these deliverables, the customer can use that scope of work to get apples-to-apples bids to compare quotes on the exact same project. Without the scope of work from the paid study, they are stuck guessing on which project is a better deal.

Ideally, they understand that the CPC contract allows them to simplify their purchasing process and requirement for multiple bids, but that is not always the case.

Once project goals and path are established, and if they want to move forward with the Lighting Energy Study, we collect building layouts to use in our audit software (Snapcount), hours of operation/lighting “burn hours”, to determine how much the lights are currently one, as well as at least (3) utility bills to use in our energy analysis.

*\*Capturing this level of detail from the customer is key to understanding where they are, where they’ve been and where they want to go, regarding the project. It also ensures that we are accurately calculating energy savings. Limiting the number of assumptions and guaranteeing our projects to have no change orders is a big differentiator for us.*

2. **Site Audit/Project Development** - Our development team will meet with our customer, discussing in more detail to narrow down the proper solutions. At this stage, we try to dig into how the current lighting operates, how they want the lighting system to operate, and the budget, to know what level of project solutions they need/want.

This is a very educational process for the customer. We want them to make an informed decision, so we discuss the differences between the options like solution longevity, aesthetics, controllability, etc. These discussions are typically a “Good” (LED lamp), “Better” (LED fixture/retrofit kit), “Best” (LED fixtures/retrofit kit with controls) dialogue and the costs/savings, pros/cons associated with each.

*\*Educating our customers is a big differentiator for us. We can specify whatever they want since we are not stuck with only warehouse stock, so we need to dial in what they want for performance and what their budget will afford. We typically don’t get those answers unless we provide them context for reference. This also helps build trust and rapport through the process.*

3. **Proposal** – Once the physical site audit is complete, the project developer will put the project together with the solutions that best meet the goals of the customer.

*\*We are vendor-neutral, which many contractors are not, so we specify the right solution to meet the goal, not set the goal to meet the capabilities of our solution, another key differentiator.*

This project proposal will include an energy analysis of current vs. existing energy usage, and energy savings based on the details collected earlier in the process. It will also include the project solutions, price, estimated utility rebates, payback, ROI, etc. The sales rep will coordinate a meeting with all necessary contacts to review the project proposal and determine the next steps and timelines.

*\*The amount of detail that goes into the project development, our confidence in our work, and relationship with the customer is our biggest differentiator.*

#### **4. Describe how your company works with local utility companies to ensure energy rebates are maximized and how the funding/rebate, if approved, flows through, and applies to the project.**

Every rebate program is different; some offer prescriptive rebates, some are custom, some projects qualify for both. Lately, there have been bonus level rebates, but the programs change annually, so we never know for sure if there will be rebates next year. Lighting controls often add another layer of incentive. Also, certain products that meet certain standards like DLC/DLC Premium get more rebate than not meeting that standard.

We have Sale Support staff that reviews rebate programs on every job to ensure we are maximizing the rebate amount on all projects. This includes our project developers that specify products to not only meet the project goals, but also get the most rebate.

We typically will estimate the rebate on our initial proposals, then, based on timing of the decision to move forward and rebate programs at that time, we will refresh and get pre-approval.

When allowed, we try to take the rebate on behalf of the customer, so they do not need to cashflow the difference until the job is completed. Not all utility companies allow this.

We fill out all rebate paperwork, collect signatures from our customers, and submit everything on the customer's behalf. All they need to do is review the paperwork and sign it.

**5. Describe your company's approach to proposing available LED solutions to an agency resulting from a lighting audit.**

We will specify LED solutions to meet the project goals first, taking a vendor-neutral approach, specifying the solution that meets the customer's requirements and to maximize performance, energy savings, and rebates.

**6. Describe any minimum project requirements and if any surcharges will be assessed for not meeting the minimum.**

If the agency is not willing to pay for the Lighting Energy Study and have our team audit and develop the project, we will do our best to support them, however, if a site visit is needed, mileage and per diem fees apply.

**7. Describe how your company ensures that the LED solutions and products offered are current, energy efficient, best-value, and are customizable to agency needs.**

We do not stock any material for projects, so all LED solutions specified are the newest, most efficient versions.

Many manufacturers now offer "selectable" LED solutions that are most readily available and offer versatility on projects. Most every brand has them, so it is reducing the number of products out there. For example, you can often get most fixture types with some switches on the fixture that you can select Lumen Output (the amount of light coming out of the fixture) and Color Temperature of the light. These are great when replacing fixtures. But not an option on all fixture types currently.

Retrofit kits allow you to upgrade a light fixture, with LED components that are the same as a new fixture, without touching the existing housing. This helps when the ceiling tile is possibly asbestos, and areas where paint may be needed after a fixture is replaced. Retrofit kits are also installed in about half the time that a new fixture does, reducing the cost of labor.

Other details are often required to light a facility properly. When light levels are an issue, before and after photometric layouts may be needed to ensure we are meeting requirements. When controls are desired on a project we can not only specify, but also commission the lighting control system and educate the customer on how to use the controls.

**8. Describe your company's hierarchy or chain of command from installers to sales to management that will work with this potential contract/program.**

Installers – either Retrofit Electric staff or subcontractor partner; responsible for installation, permits, and lifts/equipment.

Project Manager – manage all things for the project including material receiving and management, coordinating pre-project walk throughs and planning, project kick-off, installation and crew, project change orders/adders, and punch-list items.

Sales Rep – responsible for overseeing the project from afar, ensuring the project progresses through the process and all customer expectations are being met.

Procurement – order all material and track all shipments, updating the sales rep and project manager.

Sales Support – estimates and applies for all utility rebates. Ensure all pre-approvals are submitted on time and that the applications get filled out, executed, and submitted. Also, follows up on project rebates after project completion and puts together project As-Built deliverables. Assists in project warranty support.

Project Developer – audit the facility and develop the project scope of work. Collaborate with Sales rep on front end and Project manager on any changes in scope, spec, requests, etc.

Director – Oversee that the project progresses as expected and that all people are executing their part to ensure a seamless installation and that all expectations are met/exceeded.

Finance – sends initial and final invoices, verifies changes and adders are accounted for and billed (or not billed) as planned.

**9. Describe the process from order placement, including methods, to receipt of order, installation, and final walk-through (punch-list).**

- Project is sold/terms agreed to – customer signs the quote and initial invoice is sent.
- The customer pays the initial invoice and project material is ordered.
- Project Manager secures material delivery site and labor installation and connects with customer to discuss project kick-off.
- Project manager walks the site and prepares plan with the customer for installation and timelines.
- Marketing attends the walk- through to capture pre-project pictures and video. (If applicable)
- All project material arrives, and project installation begins.
- Project manager meets with installation foreman weekly for updates.
- Project is installed, final walk-through scheduled.
- Project manager meets with customers, ensures all project deliverables are met in accordance with the plan and expectations.
- Customer agrees that all expectations are met. If they are not, punch-list is generated and material/labor direction determined, and work completed.
- Final rebate application signed/submitted.
- Final invoice is sent to the customer.
- Project As-Built are provided to customers with warranty information.
- The sales rep checks-in with the customer to ensure that the customer is 100% satisfied, and if so, asks if they would be interested in a project case study/testimonial video, would like to complete customer survey, etc.
- (If applicable) Sales and Marketing meet with the customer to discuss the project goals and execution on video to share with other people in similar roles.

**10. Describe in detail your return or exchange program/policy(s) for purchases of LED lighting solutions and/or specific products (i.e lamps, fixtures) outside of an audit or applicable project.**

Some products can be returned, and some cannot. Typically, it depends on the product. Custom items cannot be returned, for example, a LED fixtures that has a control sensor/node added vs. stock (commodity) products, like LED bulbs typically can. All product returns are subject to restocking fees.

**11. Provide a narrative of a recent project that totaled at least \$150,000 in lighting audit and LED solutions. The narrative should describe the lighting audit and results, proposed project scope, pricing costs and calculations, any fees, your company's installation/project management, and a final report and rebate summary.**

In early 2021, I met with Kevin Johnson, the Facilities Director at Red Wing School district. He was interested in removing all fluorescent lamps and ballasts from his school district. He was starting to see consistent failure and knew he had to address the maintenance issue that was upcoming, as well as reduce some operating costs and his energy bill.

We discussed options for LED and the pros and cons around LED bulbs and LED fixtures and discussed what he had at his schools currently for switching, dimming and other functionality. We quickly determined that LED bulbs would not work for them, from not only a functional aspect, but also a funding aspect. The district's SPED (Special Education) Director was also involved and wanted to add Color-tuning functionality in all SPED rooms across the district.

We had some direction, so the next step was to capture the information with our site audits, or what we call our Lighting Energy Study. We collected utility bills, building layouts, and worked with the customer to capture accurate "burn hours", or the hours the lights are on annually.

Through the CPC contract we quoted the discounted \$0.04/sq. ft. for a total of 757,428 square feet. (\$30,297.12) This was for all (8) buildings in the school district. Red Wing High School, Middle School, Covill, Burnside, and Sunnyside Elementary schools, Prairie Island Ice Arena, the district maintenance shop, and River Bluff Education Center.

In May of 2021, we mobilized a team of project developers to capture existing fixtures counts, types, wattage, ceiling type, ceiling height, and light levels. They also all had a clear direction to specify consistent LED fixture solutions across all buildings.

For each building we provided a full scope of work, product material list and specification sheets, and a savings analysis. This analysis included the current annual lighting costs, current kW usage, current kWh usage, as well as the proposed usage for each. This calculated the expected energy savings dollars, kW, and kWh. We also provided the estimated utility



rebates for each, based on the current utility programs available. Total investment pricing, net investment, payback period and ROI were also provided for each building.

With the scope of work details, the financial investment numbers, and savings estimates in-hand, Kevin had what he needed to approach the Business Manager and School board with this project.

We determined at that time that the project needed to be implemented over the summer months, so the project was put on hold over the school year. In March of 2022 we refreshed the proposal with current rebate incentives and Kevin started his approval process. I attended multiple school board meetings with Kevin Johnson and his team to discuss the project and in May of 2022, the school board approved the project. They separated one school out as its own project since it was technically its own district (River Bluff Education Center) which was also approved by its board. That amount was \$73,500.00. The total sell price of the other (7) buildings was \$2,089,933.13. We reimbursed the Lighting Energy Study Fee, and we captured \$254,617.43 in Xcel Energy utility rebates. The total net investment for the district was \$1,805,018.58.

With approval, we immediately ordered the project material and had staff onsite the first week of June, when school got out. We hired three different subcontractors to perform the installation of the project to ensure all were completed by Labor Day, and the start of school. One of the three subcontractors was the district's local contractor. Once Labor Day came, we were about 95% completed with a small punch list of items to address. We all mutually felt the project installation went very well.

At the end of the project, we walked every building to make sure that all was completed and met the expectations of Kevin and his team. We coordinated a training for the SPED staff to learn how to program and use the color-tuning lights and provide video training resources for them to reference. We also did a customer testimonial with them to highlight the project results and the district's investment in energy-efficient technology and special color-tuning lighting for SPED students.

Here is a link to the case study for the entire district - <https://retrofitcompanies.com/maintenance-savings-red-wing-schools/>

Prairie Island Ice Arena was part of the project, so we also highlighted that portion of the project in a video: <https://retrofitcompanies.com/prairie-island-ice-arena-lighting-upgrade-video/>

**15a. Uploaded as a separate PDF document titled "7 - Project Deliverables" provide the supporting documentation for the project described above in #15. Supporting documentation and deliverables must include the following:**

- (i) Lighting audit and results**
- (ii) Proposed project scope, pricing costs and calculations, any applicable fees**
- (iii) Installation/Project Management plan**
- (iv) Final report and rebate summary**

*\*Because this project included (8) different buildings, I have provided the audit and results, and project details for Burnside Elementary as an example.*

*\*I have also included the Lighting Energy Study quote, for all sites, and the Combined Project Proposal mentioned above, combining all the buildings.*

**12. Describe any "added value" attributes being offered to participating agencies when purchasing services and products through your company. Describe any "value-adds" that are exclusive to the potential contract.**

Our value-added attributes are our experience, reputation, and lighting project knowledge through 31 years in the lighting industry. We have been doing turnkey projects for a long time, through all the technological changes and ever-changing market conditions. Through it all, we have retained a talented team that continues to deliver projects that meet our customers' goals, always putting them first. We also have a great marketing team that promotes us, our projects, and collaborates with the organizations we are a part of.

I don't know whether I can claim any of the above as exclusive to this potential contract. I will add though, that we have held multiple CPC contracts through the years, going back to 10+ years on our recycling contract. I think this knowledge of the CPC contracts and how they work are exclusive value-adds that we bring to members, to help them understand and utilize the contract(s).

## Warranty

### 1. Describe your warranty program, including any conditions and requirements to qualify claims procedure and overall structure.

We honor and facilitate all manufacturers' warranties on products. Most are a term of 5 years; however, we support whatever term they offer. If a customer has any issue with material failing, they call us, then we facilitate replacement material.

Our labor warranty is 30 days after install; all is covered, no questions asked. At the end of our projects, we walk the facility with our customer to ensure all is completed and functioning correctly. In our experience, if an LED is going to fail, it is typically going to happen right away, so we cover everything for that 30-day period. If failure happens after that 30 day, we help diagnose the issue through our support team and manage the material claim. If labor is needed, we can provide the services, for a fee or we can send them the material.

### 2. Do all warranties cover all products/equipment parts and labor?

       Yes                        X   No

If NO, describe the exceptions to coverage.

As stated above, we support and facilitate the manufacturers' material warranty and labor for a period of 30-days past installation completion. We continue to be a resource for them as issues arise. For larger warranty issues, we have pushed our vendors to cover all labor costs and materials, successfully.

### 3. Do warranties cover the expense of a technician's travel time and mileage to perform warranty repairs?

  X   Yes                             No

If NO, describe why travel and mileage are not covered.

If within the 30-day window of project completion, all travel and mileage is covered in the warranty. If after the 30-day window technician's time and travel is billable.

### 4. List any additional limitations or circumstances that would not be covered under your warranty?

The manufacturer's warranty coverage is determined by the manufacturer. We support and facilitate the claim for our customers.

### 5. List any geographic areas for which your organization cannot provide a certified technician to perform warranty repairs. How will participating agencies in these areas be provided service for warranty repair?

N/A

## Financials & Level of Support

### 1. Describe the percentage of your company's revenue, by category (city/county/government, K12 education, higher education) that is derived from lighting audit services and LED sales on an annual basis.

In a normal year, education and city/county government project sales make up over 50% of our annual lighting revenue.

### 2. Describe how your company works with agencies to determine payment terms, progress payments, etc.

We ask for 50% of the gross amount down, then the remaining amount upon completion. Usually there is a rebate involved and, in most cases, we can take that for the customer, so they do not need to come out of pocket on that amount. We also



understand that the fiscal years, for education anyway, start in July, so we can work with each customer, as needed on payment terms.

**3. Describe your company's allowed methods for payment and if any fees are assessed for those methods.**

Check and ACH. Credit Cards accepted with a 3% fee added.

**4. Indicate the level of support your company will offer on this contract category.**

- ☒ Pricing is better than what is offered to individual educational agencies.  
☐ Pricing is better than what is offered to cooperative educational agencies.  
☐ Other, please describe

**If OTHER, describe how the pricing submitted differs from individual entities or other purchasing consortiums:**

Click or tap here to enter text.

**5. Describe any self-audit process/program you plan to employ to verify compliance with an anticipated contract award.**

We have a process in place to double check all projects being developed for accuracy and notify our project development team that the project being developed is CPC-eligible. This includes pricing discounts and when bonding is needed on a project. We review projects being developed and projects/studies being proposed weekly through our CRM and a shared Smartsheet, and in weekly meetings, to ensure that all are accurate and moving through the process.

## Marketing & Partnership

**1. Describe how your company will position and propose to support CPC and its participating agencies regarding program growth.**

In my experience, educating the customer on the value of the CPC contract is the most difficult and important part.

The people that I have engaged with that have used CPC contracts in the past have jumped at the opportunity to do a lighting project this way. Many though have not used a CPC contract before and are hesitant to approach a project without multiple bids.

Our marketing team will develop an online resource for the contract that can be shared by our team through direct outreach and campaigns.

I think we could be better at utilizing the CPC's Marketing team, bringing them into our conversations early on so that the agency can better understand what they are getting by utilizing the CPC and this contract.

**2. Describe and submit a marketing plan that would describe, at a minimum, the following: process on how the contract will be launched to current and potential agencies, the ability to produce and maintain full-color print advertisements in camera-ready electronic format, including company logos and contact information, anticipated contract announcements, planned advertisements, industry periodicals, other direct, or indirect marketing activities promoting the awarded contract, and how the contract award will be displayed/linked on your organization's website. You can submit any support materials as Exhibit A – Marketing Plan.**

SEE Exhibit A – Marketing Plan

**3. Describe how your company will position this contract to CPC's participating agencies if awarded.**

Discounts and simplicity - better pricing, vetted partner, simple purchasing process.

**4. Describe how you plan to inform and train company personnel on the contract terms and conditions, details, and promotion of the contract. Describe how your organization plans to utilize your marketing and sales staff with this anticipated contract.**

If awarded, we train all staff on the contract details and coordinate a kick-off call with CPC's Marketing team, as well as contacts in the newly added areas (AEA and CESA).

## Exceptions & Deviations

1. List any additional stipulations and/or requirements your company requests that are not covered in the RFP.

N/A

2. List any exceptions your company is requesting to the terms outlined in the Technical Specifications.

Respondents must include the following when requesting exceptions:

- RFP section number and page number
- Describe the exception
- Explanation of why this is an issue
- A proposed alternative to meet the needs of participating agencies and the cooperative

N/A

## References

Provide three (3) references that have purchased Lighting Audit and LED Solutions from your company within the last two (2) years. References from the proposed service area are preferred. A contact name, phone number and email will be required. \*Note, ensure your references are prepared to communicate with a representative from CPC. Failure to confirm reference of past work may affect your evaluation.

Reference #1 – Company Name

Service/Product Purchased

Year of Purchase

Reference Contact

Phone

Email

ISD #256 Red Wing School District  
District-wide turnkey lighting upgrade  
2022  
Kevin Johnson  
(651) 764-2685  
jmailbag@gmail.com

Reference #2 – Company Name

Service/Product Purchased

Year of Purchase

Reference Contact

Phone

Email

ISD #656 Faribault School District  
Elementary School Media Center turnkey lighting upgrade  
2022  
Kain Smith  
(507) 333-6027  
ksmith@faribault.k12.mn.us

Reference #3 – Company Name

Service/Purchase Purchased

Year of Purchase

Reference Contact

Phone

Email

Boys & Girls Clubs of the Twin Cities  
Eastside Club Gymnasium turnkey lighting upgrade  
2023  
Doug Shellum  
(612) 282-1857  
dshellum@bgc-tc.org



hereby grants

# National Women's Business Enterprise Certification

The Retrofit Companies, Inc. DBA Retrofit Lighting & Design, Retrofit Electric, & Retrofit Environmental

to

who has successfully met WBENC's standards as a Women's Business Enterprise (WBE).

This certification affirms the business is woman-owned, operated and controlled and is valid through the date herein.

Certification Granted: January 22, 2019  
Expiration Date: January 31, 2024  
WBENC National Certification Number: WBE1900158

WBENC National WBE Certification was processed and validated by Women's Business Development Center - Midwest, a WBENC Regional Partner Organization.

Authorized by Emilia DiMenco, President &  
CEO Women's Business Development Center -  
Midwest



NAICS: 238990, 238210, 423610, 541330, 541420, 541690, 541990, 561790, 562112, 562119, 562211, 562219  
UNSPSC: 24102400, 39000000, 39101600, 39101628, 39101700, 39101701, 39101901, 39101907, 39110000, 39111500, 39111501, 39111503, 39111505, 39111508, 39111515, 39111516, 39111521, 39111522, 39111530, 39111531, 39111532, 39111533, 39111534, 39111535, 39111536, 39111537, 39111538, 39111539, 39111544, 39111612, 39111616, 39111619, 39111700, 39111821, 39111827, 39111828, 39112102, 39112307, 39112403, 39121107, 42191601, 42191602, 42295110, 45111808, 72121103, 72121400, 72151500, 72151501, 72151509, 72151511, 72154055, 76121902, 76121904, 76121905, 76122002, 76122003, 76122004, 76122100, 76122101, 76122102, 76122103, 76122201, 76122202, 76122203, 76122300, 76122301, 76122302, 76122303, 76122304, 76122305, 76122314, 76122315, 76131600, 76131602, 76131700





**HEREBY GRANTS  
WOMAN OWNED SMALL BUSINESS (WOSB) CERTIFICATION TO**

**The Retrofit Companies, Inc. DBA Retrofit Lighting & Design, Retrofit Electric, & Retrofit Environmental**

The identified small business is an eligible WOSB for the WOSB Program, as set forth in 13 C.F.R. part 127 and has been certified as such by an SBA approved Third Party Certifier pursuant to the Third Party Agreement, dated June 30, 2011, and available at [www.sba.gov/wosb](http://www.sba.gov/wosb).

The WOSB Certification expires on the date herein unless there is a change to the SBA's regulation that makes the WOSB ineligible or there is a change in the WOSB that makes the WOSB ineligible. If either occurs, this WOSB Certification is immediately invalid. The WOSB must not misrepresent its certification status to any other party, including any local or State government or contracting official or the Federal government or any of its contracting officials.

Majority Female Owner: Wendy Fry	 	Emilia DiMenco, Women's Business Development Center - Midwest President & CEO
NAICS: 238990, 238210, 423610, 541330, 541420, 541690, 541990, 561790, 562112, 562119, 562211, 562219 UNSPSC: 24102400, 39000000, 39101600, 39101628, 39101700, 39101701, 39101901, 39101907, 39110000, 39111500, 39111501, 39111503, 39111505, 39111508, 39111515, 39111516, 39111521, 39111522, 39111530, 39111531, 39111532, 39111533, 39111534, 39111535, 39111536, 39111537, 39111538, 39111539, 39111544, 39111612, 39111616, 39111619, 39111700, 39111821, 39111827, 39111828, 39112102, 39112307, 39112403, 39121107, 42191601, 42191602, 42295110, 45111808, 72121103, 72121400, 72151500, 72151501, 72151509, 72151511, 72154055, 76121900, 76121902, 76121904, 76121905, 76122002, 76122003, 76122004, 76122100, 76122101, 76122102, 76122103, 76122200, 76122201, 76122202, 76122203, 76122301, 76122302, 76122303, 76122304, 76122305, 76122314, 76122315, 76131600, 76131602, 76131700, 76131701, 81101518		Pamela Prince-Easton, WBENC President & CEO
Certification Number: WOSB190162		LaKesha White, Vice President, Certification
Renewal Date: January 31, 2024		
WOSB Regulation Expiration Date: 1/31/2026		

January 29, 2019

Ms. Wendy Fry  
Retrofit Environmental - AND - Retrofit Lighting & Design  
1010 Hoffman Drive Ste A AND 2960 Yorkton Blvd Little Canada MN 55117  
Owatonna, MN 55060

Dear Ms. Fry:

Your application for participation in the Minnesota Small Business Procurement Program has been approved. Your business is now listed in the directory of certified businesses as shown below. Your company was certified on January 29, 2019.

Retrofit Environmental - AND -  
Retrofit Lighting & Design  
1010 Hoffman Drive Ste A AND 2960  
Yorkton Blvd Little Canada MN 55117  
Owatonna, MN 55060  
State Vendor Number: 0000221066  
[www.retrofitcompanies.com](http://www.retrofitcompanies.com)

Woman Owned Business (W)  
Wendy Fry  
Phone: (612) 756-0774  
Fax: (507) 455-2192

Customize environmental solutions - lab packing, pre-demolition clean-up, removal and proper disposal of regulated waste. Customized energy-efficient lighting retrofit design and implementation services.

Primary NAICS Code: 238210  
Secondary NAICS Codes:

Preferences and subcontract opportunities are only valid for products or services as approved by and on file with this office, and are generally applied in accordance with the attached chart. The individual(s) in the Office of State Procurement who most often purchase the products or services you provide are listed on our website at <http://www.mmd.admin.state.mn.us/mn06003a.asp>

You are required to notify this office in writing of any and all changes in your business which could affect your eligibility for this program within thirty days of such change. Please also notify this office of any changes in address, telephone number, product line or services, etc. Your certification is valid until rescinded by this office. You may be asked to verify and update information on file at any time.

You are also certified to participate in similar state-funded programs at the Minnesota Department of Transportation (highway construction-related) and several metropolitan agencies. The state certification does not apply to federal-funded programs administered by those agencies.

Your company is listed on the state's vendor list. If you have any questions about the state's purchasing process, please feel free to call our HelpLine at 651.296.2600. Be sure to keep your vendor information current through the Supplier Portal Online Vendor Registration (link can be found on our home page at [www.mmd.admin.state.mn.us](http://www.mmd.admin.state.mn.us)). There you will also find a link to Solicitation Announcements, where the state's purchasing opportunities are published.

If you have any questions or need any assistance regarding the Minnesota Small Business Procurement Program, please feel free to contact the Office of Equity in Procurement at 651.201.2402.

Sincerely,

Aaron Anderson  
Vendor Specialist  
Office of Equity in Procurement  
Minnesota Small Business Procurement Program

Enclosures



The Office of Equity in Procurement now offers certified Targeted Group, Economically Disadvantaged, and Veteran-Owned small businesses a logo for use on their websites, emails, etc. To find this certification logo, please go to this website: <https://mn.gov/admin/business/vendor-info/oep/sbcp/cert-logo/>





5/16/2023

Wendy Fry

The Retrofit Companies Inc dba Retrofit Environmental and Retrofit Lighting & Design  
1010 Hoffman Drive Suite A  
Owatonna, MN 55060

Dear Wendy Fry:

This letter confirms receipt of your 2022 annual Disadvantaged Business Enterprise No Change Affidavit and supporting documentation in accordance with 49 Code of Federal Regulations Part 26 (49 C.F.R. §26 et seq.).

I am pleased to inform you that the information has been reviewed and approved by the Minnesota Unified Certification Committee. Your firm's Disadvantaged Business Enterprise (DBE) certification will remain valid for another year.

The DBE directory, located at <https://mnucp.org/>, will continue to list your contact information and will include the following NAICS codes and description of services performed:

**\*Please note: NAICS Codes are periodically updated by the US Census Bureau North American Industry Classification Systems. NAICS CODES 335122 which you were previously certified in has been updated to 335132 and 444190 has been updated to 444180 in accordance with these updates. The DBE directory has been updated to reflect this change\***

**NAICS**

238210 Electrical Contractors and Other Wiring Installation Contractors  
335132 Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing  
444180 Other Building Material Dealers  
541330 Engineering Services  
562112 Hazardous Waste Collection

**Business Description:** 3 DIVISIONS TO PROVIDE EXCEPTIONAL SERVICE: RETROFIT ELECTRIC - CONSTRUCTION, RENOVATION, DESIGN BUILD, SERVICE & EV CHARGING. RETROFIT LIGHTING & DESIGN - LIGHTING RETROFITS, CONTROLS AND ENERGY-EFFICIENT LIGHTING DESIGN. RETROFIT ENVIRONMENTAL - ENVIRONMENTAL SERVICES, DELIVERING A STRESS FREE EXPERIENCE TO PROPERLY DISPOSE OF REGULATED HAZARDOUS AND NON-HAZARDOUS WASTE.

Should any changes occur within your firm, or if you have any questions, please feel free to contact me at 651-564-5259

Sincerely,

Leigh Collier  
DBE Specialist  
MnDOT - Office of Civil Rights

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Minnesota Department of Transportation  
Office of Civil Rights  
Civil Rights  
395 John Ireland Blvd Mail Stop 170  
#239  
St. Paul MN 55155-1899  
55415  
Phone: 651-366-3073  
3076

Metropolitan Airports Commission  
Office of Diversity  
6040 28<sup>th</sup> Avenue South  
Minneapolis, MN 55450  
Phone: 612-726-8193

Metropolitan Council  
Office of Diversity  
560 6<sup>th</sup> Avenue North  
Minneapolis, MN 55411  
Phone: 612-349-7463

City of Minneapolis  
Department of  
350 S 5<sup>th</sup> Street  
Minneapolis, MN  
Phone: 612-673-



# Central CERT Certification Program

This is to confirm that

The Retrofit Companies, Inc. DBA Retrofit Lighting &  
Design, Retrofit Electric & Retrofit Environmental

VENDOR # 20084576

is certified as a  
Small and Women Business Enterprise  
(S/WBE)

Your certification with the CERT Program is valid for three years from  
April 26, 2023 to April 26, 2026



# CERT

15 West Kellogg Blvd. # 280  
Saint Paul, MN 55102  
651.266.8900

*Serena Boyce*  
Certification Specialist

*April 26, 2023*  
Date

## Vendor Forms & Signatures

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### **Instructions**

Contained herein are forms and information required by the Cooperative Purchasing Connection (CPC). Please note, while some information is merely informational, some will be used during the evaluation and vetting process.

To submit the required forms, follow these steps:

1. Read the document in its entirety.
2. Complete all questions and forms.
3. Save all pages in the correct order to a single PDF format titled “***Vendor Forms & Signatures – Name of Company***”.
4. Submit the forms in the required format with all necessary signatures in Public Purchase.

The following sections will need to be completed prior to submission and submitted as one single PDF titled “Vendor Forms & Signatures – Name of Company”:


1. [Contract Offer & Award](#)
2. [Uniform Guidance “EDGAR” Certification Form](#)
3. [Subcontractor Utilization Form](#)

## Contract Offer & Award

**Instructions:** Part I of this form is to be completed by the Vendor and signed by its authorized representative. Part II will be completed by the Cooperative Purchasing Connection (CPC) upon the occasion of an award.

### Part I: Vendor

In compliance with the Request for Proposal (RFP), the undersigned warrants that I/we have examined all General Terms and Conditions, Forms and Specifications, and being familiar with all of the conditions surrounding the solicitation, hereby offer and agree to furnish all goods and services in compliance with all terms, conditions, specifications, and amendments in this solicitation and any written exceptions in the offer. Signature also certifies understanding and compliance with this proposal. The undersigned understands that his/her competence and responsibility and that of his/her proposed subcontractors, time of completion, as well as other factors of interest to CPC as stated in the evaluation section, will be a consideration in making the award. This contract offer and award binds said Vendor to all terms and conditions stated in the proposal.

<b>Business Name</b>	<u>The Retrofit Companies, Inc. (dba Retrofit Lighting &amp; Design)</u>	<b>Date</b>	<u>8/31/2023</u>
<b>Address</b>	<u>1010 Hoffman Drive Suite A</u>	<b>City, State, Zip</b>	<u>Owatonna, MN 55060</u>
<b>Contact Person</b>	<u>Jake Andrist</u>	<b>Title</b>	<u>Director</u>
<b>Authorized Signature</b>	<u></u>	<b>Title</b>	<u>Director</u>
<b>Email</b>	<u>jandrist@retrofitcompanies.com</u>	<b>Phone</b>	<u>(507) 363-0656</u>

### Part II: CPC

Your response to the identified proposal is hereby accepted. As a Vendor, you are now bound to offer and provide the products and services identified within this solicitation, your response, including all terms, conditions, specifications, exceptions, and amendments. The initial term of this contract shall be for up to twenty-four (24) months and will commence on the date indicated below. There will be an optional renewal for a period lasting no longer than one (1) additional 24-month period. CPC may grant an extension under certain criteria and conditions.

<b>Agency</b>	<u></u>	<b>Authorized Signature</b>	<u></u>
<b>Name</b>	<u></u>	<b>Title</b>	<u></u>
<b>Awarded this</b>	<u></u> <b>day of</b>	<b>Contract #</b>	<u></u>
<b>Contract/Agreement to Commence</b> <u></u>			

# EDGAR Certification Form

## 2 CFR Part 200

### REQUIRED CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS – APPENDIX II TO 2 CFR 200

**The following provisions are required and apply when federal funds are expended by participating agencies for any contract resulting from this procurement process.**

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

#### **(A) Vendor Violation or Breach of Contract Terms**

Contracts for more than the simplified acquisition threshold currently set at \$250,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate. Provisions regarding vendor default and legal remedies are included in Sections I.K.18 and I.K.19 above. Any contract award will be subject to such provisions. The remedies under the contract are in addition to any other remedies that may be available under law or in equity.

#### **(B) Termination for Cause and for Convenience**

Pursuant to Federal Rule (B) above when federal funds are expended by participating agencies, the participating agency reserves all rights to immediately terminate any agreement in excess of \$10,000 resulting from this procurement process in the event of a breach or default of the agreement by the Vendor, in the event the vendor fails to” (1) meet schedules, deadlines, and/or delivery dates within the time specified in the procurement solicitation, contract, and/or a purchase order; (2) make any payments owed; or (3) otherwise perform in accordance with the contract and/or the procurement solicitation. The participating agency reserves the right to terminate the contract immediately, with written notice to vendor, for convenience, if the participation agency believes, in its sole discretion that it is in the best interest of the participating agency to do so. The vendor will be compensated for work perform and accepted and goods accepted by the participating agency as of the termination date if the contract is terminated for convenience of the participating agency. Any award made under this procurement process is not exclusive and the participating agency reserves the right to purchase goods and services from other vendors when it is in the best interest of the participating agency.

#### **(C) Equal Employment Opportunity**

Except as otherwise provided under 41 CFR Part 60, all participating agency purchases or contract that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 shall be deemed to include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR Part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

#### **(D) Davis Bacon Act**

When required by Federal program legislation, Vendor agrees that, for all participating agency contracts for the construction, alteration, or repair (including painting and decorating) of public buildings or public works, in excess of \$2,000, Vendor shall comply with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, the Vendor is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specific in a

wage determinate made by the Secretary of Labor. In addition, the Vendor shall pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

Vendor must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

#### **(E) Contract Work Hours and Safety Standards Act**

Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard workweek of 40 hours. Work in excess of the standard workweek is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the workweek. The requirements of the 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions that are unsanitary, hazardous or dangerous. These requirements do not apply to the purchase of supplies, materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

#### **(F) Right to Inventions Made Under a Contract or Agreement**

If the participating agency’s Federal award meets the definition of “funding agreement” under 37 CFR 401.2(a) and the recipient or sub-recipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance or experiments, developmental or research work under the “funding agreement,” the recipient or sub-recipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

#### **(G) Clean Air Act and Federal Water Pollution Control Act**

Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended, contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

#### **(H) Debarment and Suspension (Executive Order 12549 and 12689)**

A contract award (see 2 CFR 180.222) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1966 Comp. p. 189) and 12689 (3 CFR Part 1989 Comp. p. 235), “Debarment and Suspension.” SAM exclusions contain the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

#### **(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)**

Vendors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

Pursuant to Federal Rule (I) above, when federal funds are expended by participating agencies, the vendor certifies that during the term of an award for all contracts by participating agencies resulting from this procurement process, the vendor certifies that it is compliance with all applicable provisions of the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). The undersigned further certifies that:

- (1) No Federal appropriated funds have been paid or will be paid for on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be include in the award documents for all covered sub-awards exceeding \$100,000 in Federal funds at all appropriated tiers and that all subrecipients shall certify and disclose accordingly.

#### **(J) Procurement of Recovered Materials**

For participating agency purchases utilizing Federal funds, Vendor agrees to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act where applicable and provide such information and certifications as a participating agency may require to confirm estimates and otherwise comply. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery, and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

#### **(K) Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment**

A participating agency is prohibited from obligating or expending funds to:

- (1) Procure or obtain.
- (2) Extend or renew a contract to procure or obtain; or
- (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
  - (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou



Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

- (ii) Telecommunications or video surveillance services provided by such entities or using such equipment.
- (iii) Telecommunications or video surveillance equipment or services products or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

#### **(L) Domestic Preferences for Procurements**

As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

For the purpose of this section:

- (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

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#### **PROFIT AS A SEPARATE ELEMENT OF PRICE**

For purchases using federal funds in excess of \$250,000, a participating agency may be required to negotiate profit as a separate element of the price. See 2 CFR 200.323(b). When required by a participating agency, the vendor agrees to provide information and negotiate with the participating agency regarding profit as a separate element of the price for a particular purchase. However, vendor agrees that the total price, including profit, charged by the vendor to the participating agency shall not exceed the awarded pricing.

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#### **RECORD RETENTION REQUIREMENTS FOR CONTRACTS PAID FOR WITH FEDERAL FUNDS – 2 CFR § 200.333**

When federal funds are expended by participating agencies for any contract resulting from this procurement process, the vendor certifies that it will comply with the record retention requirements detailed in 2 CFR § 200.333. The vendor further certifies that vendor will retain all records as required by 2 CFR § 200.333 for a period of three years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

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#### **CERTIFICATION OF COMPLIANCE WITH THE ENERGY POLICY AND CONSERVATION ACT**

When federal funds are expended by participating agencies for any contract resulting from this procurement process, the vendor certifies that the vendor will be in compliance with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.; 49 C.F.R. Part 18; Pub. L. 94- 163, 89 Stat. 871).

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## CERTIFICATION OF NON-COLLUSION STATEMENT

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Vendor certifies under penalty of perjury that its responsible to this procurement solicitation is in all respects bona fide, fair, and made without collusion or fraud with any person, joint venture, partnership, corporation or other business or legal entity.

**Pursuant to Federal Ruling, when federal funds are expended by participating agencies, the vendor hereby certifies that during the term of an award for all contracts by participating agencies resulting from this procurement process, vendor certifies compliance will all provisions, laws, acts, regulations as specifically noted above. The vendor agrees to comply with all federal, state, and local laws, rules, regulations, and ordinances, as applicable.**

Business Name	<u>The Retrofit Companies, Inc. (dba Retrofit Lighting &amp; Design)</u>	Authorized Signature	<u></u>
Full Name	<u>Jake Andrist</u>	Title	<u>Director</u>



## Subcontractor Utilization Form

**Instructions:** List all subcontractors to be used during the performance of this contract. Submit additional forms if needed.

Solicitation Name: Lighting Audit Services & LED Solutions  
Solicitation Number: RFP #24.5  
Vendor Name: The Retrofit Companies, Inc. (dba Retrofit Lighting & Design)

If a subcontractor will not be used, check this box: ☐

Company Name: \*Please see "Subcontractor Utilization Process Plan – The Retrofit Companies, Inc."  
Street Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Primary Contact: \_\_\_\_\_  
Email Address of Contact: \_\_\_\_\_  
Services to be provided: \_\_\_\_\_

Company Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Primary Contact: \_\_\_\_\_  
Email Address of Contact: \_\_\_\_\_  
Services to be provided: \_\_\_\_\_

Company Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Primary Contact: \_\_\_\_\_  
Email Address of Contact: \_\_\_\_\_  
Services to be provided: \_\_\_\_\_

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TWIN CITIES, MINNESOTA

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EST. 1992

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## RETROFIT LIGHTING & DESIGN

### **Subcontractor Utilization Process Plan – The Retrofit Companies, Inc.**

1. During the project development process, The Retrofit Companies, Inc. will note any existing contractor relationships or interest from the customer to source local labor on the projects.
2. At the time of sale, The Retrofit Companies, Inc. will assess their backlog of work for their own electricians, the geographic location of the project, any existing relationships or interest from the customer to source any particular labor option and determine if sub-contracted labor is needed.
3. If sub-contracted labor is needed, The Retrofit Companies, Inc. will reach out to at least (2) electrical contractors in the area to see if they are interested in the project installation.
4. All potential sub-contractors will be given a non-disclosure agreement (NDA) to review, sign and return.
5. After The Retrofit Companies, Inc. receives the executed NDAs, the scope of work is shared, along with a bid document to fill out and submit for review.
6. Upon receiving all the subcontractor bids, The Retrofit Companies, Inc. will select the appropriate subcontractor for that job.
7. The Retrofit Companies, Inc. will then submit the sub-contractor information via the Sub-Contractor Utilization Form, to the Cooperative Purchasing Connection (CPC) for review.
8. If approved, a contract will be drafted and sent to the sub-contractor to execute the project.
9. If not approved by the CPC we will submit alternate options for installation utilizing the same process.

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800-795-1230

[info@retrofitcompanies.com](mailto:info@retrofitcompanies.com)  
[www.retrofitcompanies.com](http://www.retrofitcompanies.com)

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# 1- Lighting Audit Services

\*Please note this workbook has multiple tabs.

Instructions. Complete the tables below for the services your company is offering. Please note this is an REQUIRED form.

Responding Company's Name:

The Retrofit Companies, Inc. (dba Retrofit Lighting & Design)

REQUIRED

## Lighting Assessment & Design

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Lighting Audit & Assessment (per square foot)	\$0.07	\$0.04	42.86%	\$ 125.00	Current IRS Tax Rate	Mileage and Per Diem is applicable case by case
Design Services	N/A	N/A	N/A			Design services included in deliverable of the Lighting Audit & Assessment.
Project Management	\$ 200.00	\$ 125.00	37.50%	\$ 125.00	Current IRS Tax Rate	Project Management, from concept to completion is included in all turnkey projects.

Installation [Labor] \*\*Prevailing wage projects/installs are subject to higher hourly rates/charges. Prevailing wage rates change by MN county. Participating agencies are required to notify the Vendor if prevailing wages are required (state/federal funding as part or all of the project).

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Hourly Rate - Regular Hours	\$ 150.00	\$ 135.00	10.00%	\$ 125.00	Current IRS Tax Rate	
Hourly Rate - Evening	\$ 175.00	\$ 160.00	8.57%	\$ 125.00	Current IRS Tax Rate	
Hourly Rate - Weekend/Holidays	\$ 200.00	\$ 185.00	7.50%	\$ 125.00	Current IRS Tax Rate	

## Other Services

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Rebate Fulfillment	\$ 200.00	\$ 125.00	37.50%	\$ 125.00	Current IRS Tax Rate	Rebate fulfillment included in turnkey project
Recycling Services	N/A	N/A	N/A			Recycling rates dependant on waste types and packaging needed on the Job; CPC Recycling Services Contract is recommended. All recycling services included in turnkey project
Training (Lighting Controls Commissioning and Training)	\$ 200.00	\$ 125.00	37.50%	\$ 125.00	Current IRS Tax Rate	Lighting Controls training and commissioning included in turnkey project

## 2.1 - LED Category Discount

**\*Please note this workbook has multiple tabs.**

**Instructions.** Complete the following schedule for all categories of product offered (by catalog, category, and/or by manufacturer) which can include sub-categories (specific lines from manufacturers) and the discount associated with that category. The form should be completed by the standards listed in the Technical Specifications. Additional rows may be added. This is a required form **if proposing lighting solutions.**

**Responding Company's Name:**

**The Retrofit Companies, Inc. (dba Retrofit Lighting & Design)**

## REQUIRED FORM

[illegible]

## 3 - Volume Discounts

**\*Please note this workbook has multiple tabs.**

**Instructions.** Complete the form below if your company is offering additional discounts for a one time purchase, size of project, or a group of local agencies in a geographic area combining requirements (estimate annual spend). Please note this is an **optional form**.

100

## OPTIONAL FORM

[illegible]



# THE RETROFIT COMPANIES, INC.

DBA Retrofit Lighting and Design

1010 HOFFMAN DRIVE, SUITE A | OWATONNA, MN 55060

tel 800-795-1230 | fax 507-455-2192

PROPOSED BY:

Jake Andrist

## LIGHTING ENERGY STUDY PROPOSAL

ISD #256 Red Wing Public Schools District-wide Lighting Energy Study

INCLUDE	TRC WILL PROVIDE THE FOLLOWING	DESIGN FEE
X	<b>DETAILED SCOPE OF WORK:</b> includes location, existing system details, and full proposed details, including part #s and installation instructions	
X	<b>SAVINGS ANALYSIS:</b> includes existing and proposed kW, kWh, estimated utility rebates, and energy costs, condensed by technology.	
X	<b>PROJECT SUMMARY:</b> snapshot of existing, proposed, and savings figures, simple payback, total investment, and return on investment	
	<b>TOTAL LIGHTING DESIGN FEE</b>	<b>\$30,297.12</b>

**AREA(S) INCLUDED IN DESIGN** Audit and develop turnkey projects for the interior and exterior spaces of the following sites. Fee per square foot, at the CPC discounted rate of \$0.04/sq. ft. to include the following areas:

Red Wing High School 269,824 SF  
Twin Bluff Middle School 179,224 SF  
Burnside Elementary 88,353 SF  
Sunnyside Elementary 74,416 SF  
Colvill 23,535 SF  
Prairie Island Arena 50,066 SF  
River Bluff Education Center 66,710 SF  
Maintenance Shop 5,300 SF  
**TOTALLING 757,428 SF**

**TERMS INVOICE UPON COMPLETION**  
**DETAILS**

All project areas developed, as stated above, will be allowed (1) rework to ensure that the project technology specifications, pricing, and utility rebate are current at time of implementation.

This Lighting Energy Study is utilizing the Cooperative Purchasing Connection contract:  
#20.6 - RLD Lighting Audit and Solutions

COOPERATIVE  
*Purchasing*  
CONNECTION

SIGNATURE

DATE

[www.retrofitcompanies.com](http://www.retrofitcompanies.com)

# ISD #256 Red Wing Public Schools

Burnside Elementary - Fixture/Kit Option

September 07, 2021



## Prepared By:

Jake Andrist

Sales and Marketing Manager

(507) 363-0656

[jandrist@retrofitcompanies.com](mailto:jandrist@retrofitcompanies.com)



## Executive Summary

Since 1992, The Retrofit Companies, Inc. has offered thousands of clients a premium solution to help them meet their energy-saving goals. Through our collaborative approach, sophisticated design capabilities, and thorough project management, we implement high-performance solutions that deliver quality results.

We are pleased to offer you a customized turn-key solution that includes: project material, labor, equipment, and utility rebates. We've included estimates for your current and proposed energy usage, as well as savings for the areas this project addresses. Additionally, you will find payback and R.O.I. information. Please keep in mind that the electrical rate and hours of operation will affect the accuracy of these figures.

After reviewing this proposal, please sign and send back to get your lighting upgrade started. We look forward to working with you!

Jake Andrist  
Sales and Marketing Manager  
(507) 363-0656  
jandrist@retrofitcompanies.com

## **Improved LED lighting can provide increased funding to your school.**

**Some states are seeing funding cut by 10% every year.**

Improving lighting and other systems to become more energy-efficient directly affects student performance, student absenteeism, and teacher retention while offering additional opportunities for funding to be allocated towards other projects for student materials and resources.

### **Improved lighting design leads to increased attendance, improved learning conditions, and improved health of students and staff:**

- A typical energy budget equates to roughly \$205.00 per student, per year. \$1.40 per square foot spent on energy costs in the education sector; 17% typically goes towards lighting.
- A 2004 study found that facility condition and quality was an important predictor of the decisions of teachers to leave their positions and that as the perceived quality of school facility improves, the probability of retention increases.
- With the increased attention put on the quality and care of meals being served in schools, the implementation of better equipment and LED lighting has allowed kitchen staff to notice an improvement in food color and flavor, as well as reductions in the amount of time it takes to prepare meals.

### **Lighting quality plays a significant role in student achievement.**

- LED lighting technologies have the potential to significantly reduce energy consumption while increasing student performance.
- Tunable LED lighting offers the ability to tune lighting levels and color temperature, optimizing performance on tasks.
- A recent study found that students achieved a significantly higher percentage increase in oral reading fluency performance when working in a room equipped with LED lights set to a “focus” setting of 1000 lux and 6500K, compared to fluorescent T8 lamps with 500 lux and 3500K.

With a potential decrease every year in federal, state and local funding for public schools it is vital that districts pay close attention to student attendance and performance. Improved learning environments have proven to increase math and reading test scores and have shown an improvement in student health, reducing student absenteeism, resulting in better grades in general.

Teacher's also benefit from a more productive classroom and improved health due to their environment. This improves teacher retention, in turn reducing the substitute teacher budget and attracts new talented, qualified teachers.

# Cash Flow Analysis

Assumptions	
Discount Rate	10.00%
Utility Rates +/-	10.00%
Analysis Years	10

Cash Outflows	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Investment	\$235,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Down Payment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Financed Investment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>SUBTOTAL OUTFLOWS</b>	<b>\$235,500</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Cash Inflows											
Energy	\$0	\$12,074	\$13,281	\$14,610	\$16,071	\$17,678	\$19,445	\$21,390	\$23,529	\$25,882	\$28,470
HVAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rebates	\$20,233	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>SUBTOTAL INFLOWS</b>	<b>\$20,233</b>	<b>\$12,074</b>	<b>\$13,281</b>	<b>\$14,610</b>	<b>\$16,071</b>	<b>\$17,678</b>	<b>\$19,445</b>	<b>\$21,390</b>	<b>\$23,529</b>	<b>\$25,882</b>	<b>\$28,470</b>
<b>TOTAL CASH FLOWS</b>	<b>-\$215,267</b>	<b>\$12,074</b>	<b>\$13,281</b>	<b>\$14,610</b>	<b>\$16,071</b>	<b>\$17,678</b>	<b>\$19,445</b>	<b>\$21,390</b>	<b>\$23,529</b>	<b>\$25,882</b>	<b>\$28,470</b>
<b>Present Value (PV)</b>	<b>-\$215,267</b>	<b>\$10,976</b>	<b>\$10,976</b>	<b>\$10,977</b>	<b>\$10,977</b>	<b>\$10,977</b>	<b>\$10,976</b>	<b>\$10,976</b>	<b>\$10,976</b>	<b>\$10,976</b>	<b>\$10,976</b>

Net Present Value (NPV)	-\$105,502.92
Return on Investment (ROI)	13.23%
Internal Return Rate (IRR)	-1.75%
Savings to Investment Ratio (SIR)	0.51

## ISD #256 Red Wing Public Schools

### Burnside Elementary - Fixture/Kit Option

#### Customized Energy-Efficient Lighting Solution Summary

TRC will supply materials and the installation for conversion of your existing lighting systems. All equipment meets necessary requirements to qualify for the lighting rebates. Disposal costs are included in proposal price.

### ENERGY SAVINGS

<b>Current Annual lighting cost</b>	<b>\$22,916.00</b>
<b>Current KW</b>	<b>75.412</b>
<b>Current KWH</b>	<b>199,614</b>
<b>Proposed Annual lighting cost</b>	<b>\$10,842.00</b>
<b>Proposed KW</b>	<b>36.551</b>
<b>Proposed KWH</b>	<b>94,440</b>
<b>KW Saved</b>	<b>38.861</b>
<b>KWH Saved</b>	<b>105,175</b>
<b>Annual Energy Cost Savings</b>	<b>\$12,074.05</b>
• <b>MONTHLY</b>	<b>\$1,006.17</b>
• <b>DAILY</b> (cost per business day of not doing retrofit)	<b>\$50.31</b>

<b>Total Project Investment</b>	<b>\$235,500.00</b>
<b>Estimated Utility Rebate</b>	<b>\$20,232.61</b>
<b>Total Net Project Investment</b>	<b>\$215,267.39</b>
<b>Project Simple Payback</b> (based on energy-excluding Maintenance savings) <b>in years</b>	<b>17.83</b>
<b>Return on Investment Excluding Maintenance Savings</b>	<b>5.61%</b>

### ENVIRONMENTAL IMPACT\* (ANNUALLY)

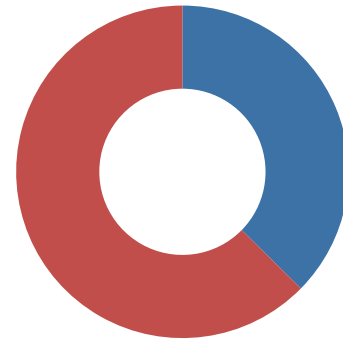
<b>Total greenhouse gas reduction (Metric Tons of CO2)</b>	<b>78.2</b>
<b>Passenger cars not driven for one year</b>	<b>16.5</b>
<b>Gallons of gasoline</b>	<b>8,805.0</b>
<b>Acres of forest preserved from deforestation</b>	<b>73.82</b>
<b>Tons of waste recycled instead of landfilled</b>	<b>100.32</b>

\*SOURCE: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

## Project Cost & Savings Summary

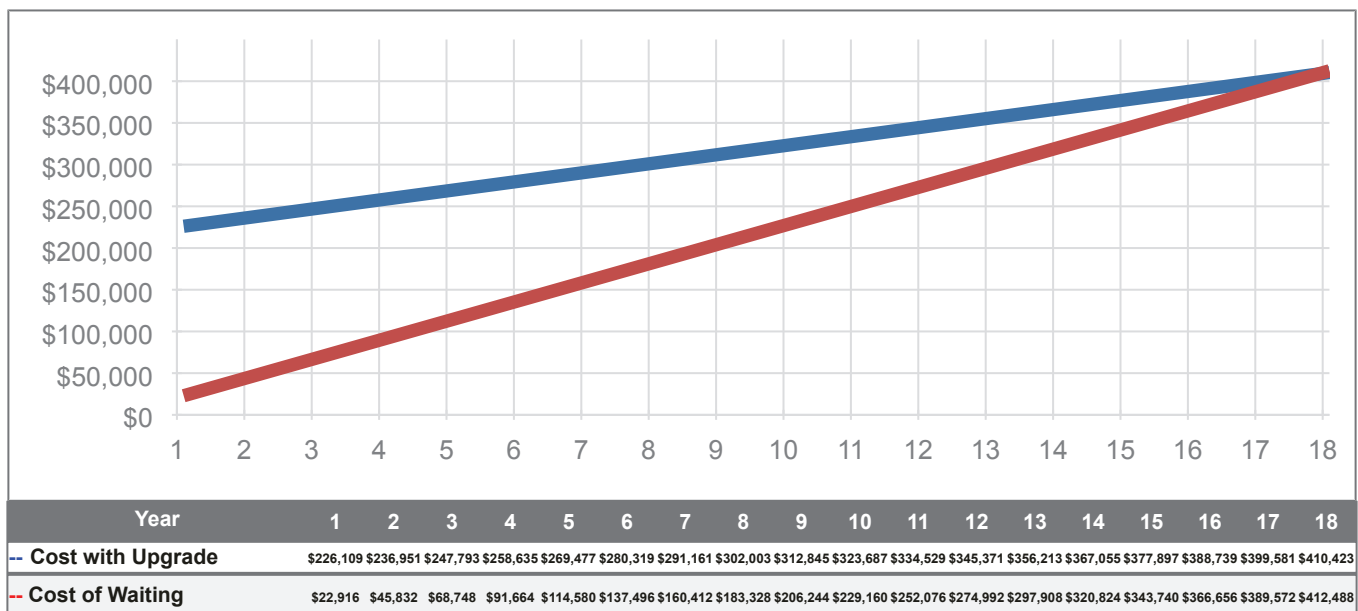
The following graphs and tables show the annual project costs and savings expected with the proposed design, based on annual usage hours and a utility rate of \$0.1148 per kWh.

Financial Costs and Savings		
	Costs	Savings
Cost of Project	\$235,500	
Rebates		\$20,233
Annual Energy Savings		\$12,074
Annual HVAC Savings		\$0
Annual Maintenance Savings		\$0



## The Cost of Waiting

■ Energy (\$12,074) ■ Rebates (\$20,233)



Cumulative Costs Over 18 Year Lifecycle (\$)  
(Graph based on Single Investment project data)

**\$120,740.46**  
Estimated Lifecycle Savings

# Maintenance Savings Detail

## Existing Maintenance

Part Type	SKU	Qty	Material Cost	Labor Cost	Rated Life	Warranty Years	Avg Burn	Fail Factor	Annual Cost
LAMP	13W CFL SPRING LAMP 13W CFL SPRING LAMP	2	\$9.72	\$5.00	0	2	2,400	0.50	\$0.00
LAMP	CFN DBL TUBE 4PIN N-I 26 (Trimmed1)	12	\$0.00	\$5.00	0	0	508	0.50	\$0.00
LAMP	CFN SGL TUBE 2PIN N-I 7	16	\$0.00	\$5.00	0	0	3,675	0.50	\$0.00
LAMP	CFS-M Triple Tube 23	2	\$0.00	\$5.00	0	0	250	0.50	\$0.00
LAMP	HPS MED BASE HID 100 HPS MED BASE HID 100	22	\$25.88	\$0.00	24,000	0	4,368	0.50	\$61.83
LAMP	HPS MED BASE HID 70 HPS MED BASE HID 70	7	\$25.88	\$0.00	24,000	0	4,368	0.50	\$19.67
LAMP	HPS MOG BASE HID 400 HPS MOG BASE HID 400	16	\$25.88	\$0.00	24,000	0	2,735	0.50	\$28.15
LAMP	INCS-M A19 60 60W A19 Incandescent Lamp	6	\$0.88	\$5.00	1,000	0	1,683	0.50	\$29.71
LAMP	INCS-M PAR38	6	\$0.00	\$5.00	0	0	2,160	0.50	\$0.00
LAMP	LED Linear Board 40	1	\$0.00	\$5.00	0	0	3,900	0.50	\$0.00
LAMP	LEDS-M A19 12	41	\$0.00	\$0.00	0	0	4,368	0.50	\$0.00
LAMP	LEDS-M COB 22	21	\$0.00	\$0.00	0	0	4,368	0.50	\$0.00
LAMP	LF2 T8 17 LF2 T8 17	2	\$3.05	\$5.00	36,000	0	2,160	0.50	\$0.48
LAMP	LF3 T8 25 LF3 T8 25	34	\$3.05	\$5.00	36,000	0	2,636	0.50	\$10.03
LAMP	LF4 T8 25 LF4 T8 25	2577	\$3.82	\$5.00	36,000	0	2,613	0.50	\$825.25
LAMP	LF4 T8 32 LF4 T8 32	74	\$2.64	\$5.00	36,000	0	250	0.50	\$1.96
LAMP	LL4A T8 15	4	\$0.00	\$5.00	0	0	4,160	0.50	\$0.00
BALLAST	ELE CFN	6	\$0.00	\$10.00	0	0	508	0.50	\$0.00
BALLAST	ELE T8 DIM NP LF4 2L ELE T8 DIM NP LF4 2L	29	\$18.82	\$10.00	60,000	0	3,900	0.50	\$27.17
BALLAST	ELE T8 IS NP LF2 2L ELE T8 IS NP LF2 2L	1	\$18.82	\$10.00	60,000	0	2,160	0.50	\$0.52



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BALLAST	ELE T8 IS NP LF3 2L ELE T8 IS NP LF3 2L	17	\$18.82	\$10.00	60,000	0	2,636	0.50	\$10.77
BALLAST	ELE T8 IS NP LF4 10L ELE T8 IS NP LF4 10L	6	\$21.17	\$10.00	60,000	0	2,160	0.50	\$3.37
BALLAST	ELE T8 IS NP LF4 2L ELE T8 IS NP LF4 2L	328	\$18.82	\$10.00	60,000	0	2,838	0.50	\$223.58
BALLAST	ELE T8 IS NP LF4 3L ELE T8 IS NP LF4 3L	1096	\$21.17	\$10.00	60,000	0	2,379	0.50	\$677.42
BALLAST	ELE T8 IS NP LF4 4L ELE T8 IS NP LF4 4L	1	\$21.17	\$10.00	60,000	0	250	0.50	\$0.06
BALLAST	ELE T8 IS NP LF4 6L ELE T8 IS NP LF4 6L	48	\$21.17	\$10.00	60,000	0	3,120	0.50	\$38.91
BALLAST	HID HPS 100 HID HPS 100	22	\$122.35	\$0.00	60,000	0	4,368	0.50	\$105.99
BALLAST	HID HPS 400 HID HPS 400	16	\$129.41	\$0.00	60,000	0	2,735	0.50	\$50.83
BALLAST	HID HPS 70 HID HPS 70	7	\$88.23	\$0.00	60,000	0	4,368	0.50	\$25.03
BALLAST	LED DRIVER	1	\$0.00	\$10.00	0	0	3,900	0.50	\$0.00
BALLAST	MAG ES	8	\$0.00	\$10.00	0	0	3,675	0.50	\$0.00
Total Existing Maintenance									\$2,140.73

Proposed Maintenance

Part Type	SKU	Qty	Material Cost	Labor Cost	Rated Life	Warranty Years	Avg Burn	Fail Factor	Annual Cost	Y1 Cost	Y2 Cost	Y3 Cost	Y4 Cost	Y5 Cost	Y6 Cost	Y7 Cost	Y8 Cost	Y9 Cost	Y10 Cost
LAMP	15.5PAR38DIM/940FL40 15.5W LED PAR38 E26 4000K Dimmable 90CRI - 120W Halogen Equivalent	6	\$22.87	\$5.00	50,000	5	2,160	0.10	\$0.72	\$0	\$0	\$0	\$0	\$0	\$1	\$1	\$1	\$1	\$1
LAMP	5.5PLS/840/HYB/GX23 5.5W LED Hybrid PLS GX23 4000K - 13W CFL Equivalent	16	\$12.99	\$5.00	50,000	5	3,675	0.10	\$2.12	\$0	\$0	\$0	\$0	\$0	\$2	\$2	\$2	\$2	\$2
LAMP	9A19/840/277V 9W LED A19 E26 4000K 120-277V - 60W Incandescent Equivalent	6	\$4.31	\$5.00	25,000	3	2,400	0.10	\$0.54	\$0	\$0	\$0	\$1	\$1	\$1	\$1	\$1	\$1	\$1
LAMP	9A19/840/277 9W LED A19 E26 4000K 120-277V 92CRI - 60W Incandescent Equivalent	2	\$4.31	\$5.00	25,000	5	250	0.10	\$0.02	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
LAMP	9PLO/840/HYBM 9W LED Hybrid PLO G24q & GX24q (4-pin) Based 40K - 26W CFL Equivalent	10	\$19.37	\$5.00	50,000	5	250	0.10	\$0.12	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
LAMP	KT-LED9.5A19-O-850 9.5W LED A19 E26 5000K Dimmable - 60W Halogen Equivalent	41	\$1.95	\$0.00	15,000	2	4,368	0.10	\$2.33	\$0	\$0	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2
LAMP	T8LACD2F9/840B25EC	2	\$5.75	\$5.00	50,000	5	2,160	0.10	\$0.09	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

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9W 2' LED Type B T8 Lamp 4000K												
LAMP	T8LACD3F12/840B25EC 12W 3' LED Type B T8 Lamp 4000K	14	\$5.75	\$5.00	50,000	5	3,317	0.10	\$1.00	\$0	\$0	\$1
LAMP	T8LACD4F12/840B25EC 12W 4' LED Type B T8 Lamp 4000K	364	\$5.75	\$5.00	50,000	5	2,596	0.10	\$20.32	\$0	\$0	\$1
KIT	EvoKit 2x2 31L 22W 840 UNV 0-10 G5 22W 2x2 LED Troffer Retrofit Kit, 4,000K, 3,100 Nominal Lumens, and 0-10V Dimming Driver	1	\$82.64	\$10.00	70,000	5	3,900	0.10	\$0.52	\$0	\$0	\$1
KIT	EvoKit 2x4 36L 25W 840 UNV 0-10 G5 25W 2x4 LED Troffer Retrofit Kit, 3600 Lumens, 4000K	113	\$105.80	\$10.00	70,000	5	3,738	0.10	\$69.88	\$0	\$0	\$1
KIT	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 28W 2x4 LED Troffer Retrofit Kit, 4200 Lumens, 4000K	168	\$105.80	\$10.00	70,000	5	2,348	0.10	\$65.24	\$0	\$0	\$1
KIT	EvoKit HE 2x4 30L 19W 840 UNV 0-10 G5 19W 2x4 HE Troffer Retrofit Kit, 4000K	9	\$123.45	\$10.00	70,000	5	2,400	0.10	\$4.12	\$0	\$0	\$1
KIT	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 28W 2x4 LED Troffer Retrofit Kit, 4200 Lumens, 4000K with Step Dimming Driver	375	\$149.89	\$10.00	70,000	5	2,405	0.10	\$206.03	\$0	\$0	\$1
KIT	K-24LT-F4N0-2S-40-FR-D 30W LED 2x4 lensed troffer retrofit kit, 4425 initial lumens, 4000K color temp, with frosted lens, Dimming	4	\$95.17	\$10.00	0	5	2,160	0.10	\$0.00	\$0	\$0	\$0
KIT	K-24LT-F4N6-2S-40-FR-SD 36W LED 2x4 lensed troffer retrofit kit, 5298 initial lumens, 4000K color temp, with frosted lens and 30/50/100 Step Dimming Driver	15	\$101.90	\$10.00	100,000	5	2,160	0.10	\$3.63	\$0	\$0	\$0
KIT	LBK 3FT 1 2000LMHE 80CRI 40K MIN10 ZT MVOLT 13.5W 3ft Light Bar Retrofit Kit - 4000K, 1 Bar	10	\$44.60	\$10.00	60,000	5	2,160	0.10	\$1.97	\$0	\$0	\$0
KIT	LBK 4FT 1 3000LMHE 80CRI 40K MIN10 ZT MVOLT 19.5W 4ft Light Bar Retrofit Kit - 4000K, 1 Bar	27	\$41.72	\$10.00	60,000	5	2,160	0.10	\$5.03	\$0	\$0	\$0
KIT	LBR6 10LM 50K AR LSS MWD MVOLT UGZ AT WL 13W LBR6 6" Recessed Can, 1454 nominal lumens 5000K Air Tight, Wet Rated.	7	\$64.66	\$0.00	60,000	5	4,368	0.10	\$3.30	\$0	\$0	\$0
KIT	LBR8 07LM 40K AR LSS MWD MVOLT UGZ 9W LBR8 8" Recessed Can, 832 Nominal Lumens in 40K, Medium Distribution	1	\$52.24	\$10.00	60,000	5	1,800	0.10	\$0.19	\$0	\$0	\$0
FIXTURE	F-24LX-L4H-RGBW-FR-CAS 38W 2x4 LX Series Fixture, 38W, 4635 Lumens, Seoul LED, RGBW, Frosted Lens, Casambi Wireless Control	58	\$316.44	\$10.00	150,000	5	1,469	0.10	\$18.54	\$0	\$0	\$0





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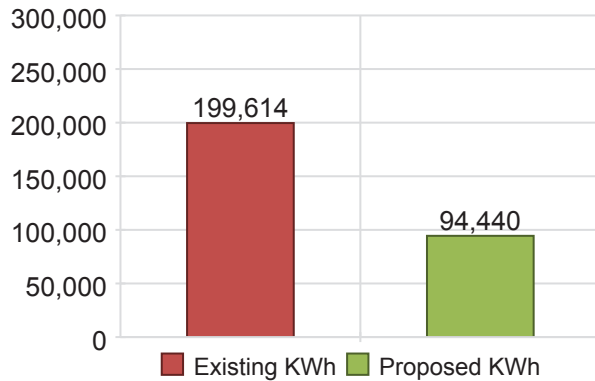
FEM L48 4000LM LPPFL WD MVOLT																		
GZ10 40K 80CRI STSL																		
FIXTURE	24W LED 4" Vaportight - 4000K, wide distribution, polycarbonate low profile frosted lens, 0-10V Dimming	2	\$323.28	\$10.00	100,000	5	4,160	0.10	\$2.77	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$3	\$3
IBG 18000LM SEF AFL GND MVOLT																		
DWH																		
FIXTURE	105W IBG LED High Bay Fixture, 5000K, 18000 Nominal Lumens, Standard Efficiency, Acrylic Frosted Lens, General Distribution, and White Finish - Includes Wire Guard and nLight AIR (wireless) Gen 2 Control Device	24	\$323.28	\$10.00	60,000	5	2,184	0.10	\$29.12	\$0	\$0	\$0	\$0	\$0	\$0	\$29	\$29	\$29
RSX2 LED P3 50K R2 MVOLT SPA																		
DDBXD																		
FIXTURE	147W RSX2 LED Area Light, Type 2 Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	2	\$539.08	\$0.00	100,000	5	2,190	0.10	\$2.36	\$0	\$0	\$0	\$0	\$0	\$0	\$2	\$2	\$2
RSX2 LED P4 50K R4 MVOLT SPA																		
DDBXD																		
FIXTURE	187W RSX2 LED Area Light, Type 4 Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	6	\$544.83	\$0.00	100,000	5	2,190	0.10	\$7.16	\$0	\$0	\$0	\$0	\$0	\$0	\$7	\$7	\$7
RSX2 LED P5 50K R5 MVOLT SPA																		
DDBXD																		
FIXTURE	210W RSX2 LED Area Light, Type 5 Wide Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	4	\$567.82	\$0.00	100,000	5	2,190	0.10	\$4.97	\$0	\$0	\$0	\$0	\$0	\$0	\$5	\$5	\$5
STL4-30L-EZ1-LP840																		
FIXTURE	27W LED Surface Mount Volumetric Fixture 4000K	9	\$229.66	\$10.00	60,000	5	2,589	0.10	\$9.31	\$0	\$0	\$0	\$0	\$0	\$0	\$9	\$9	\$9
XSPW-B-WM-4ME-4L-50K-JL-BZ																		
FIXTURE	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	43	\$255.23	\$0.00	100,000	10	4,368	0.10	\$47.94	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Proposed Maintenance										\$509.30								

**\$ .00**  
Estimated Average Yearly Savings

## Energy Savings Summary

The following graphs and tables show the annual energy savings expected with the proposed design, based on annual usage hours and a utility rate of \$0.1148 per kWh.

**KWh Savings: 105,175**



**Energy Cost Savings: \$12,074**



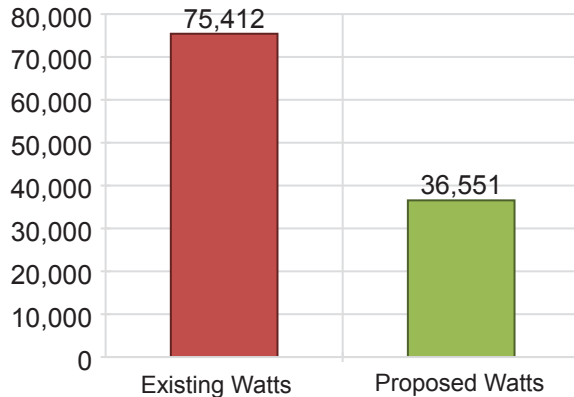
## Area Detail

### Burnside Elementary

Area	Energy Reduction %	Avg. Burn Hour Reduction %	Annual Energy Savings	Annual HVAC Savings
Exterior	60%	5%	\$2,795	\$0
Interior	51%	1%	\$9,240	\$0
Interior - Mezzanine	60%	0%	\$39	\$0
Total Number of Fixtures: 1,240				

# Fixture Summary

## Fixture Watts Saved: 38,861



## Proposed Actions

Retrofit	1,004
Do Nothing	119
Replace	59
Relamp	58

# Fixture Breakdown

Existing			Proposed			Savings	
Fixture Name	Qty	Watts	Solution Name	Qty	Watts	Action	Watts
10L 25W LF4 T8 [3x ELE T8 IS NP]	2	426	Lithonia-LBK 4FT 1 3000 40K (5)	2	195	Retrofit	231
1L 100W HPS MED BASE HID [1x MAG]	22	2,772	CREE-XSPW-40W-50K-T4-DB	22	880	Replace	1,892
1L 100W LED COB [1x LED DRIVER]	2	200		2	200	Do Nothing	0
1L 12W LEDS-M A19 [0x NULL]	41	492	KEYSTONE-9.5W-A19-50K-1L	41	390	Relamp	103
1L 150W INCS-M PAR38 [0x NULL]	6	900	GC-17W-PAR38-40K-1L-277V	6	102	Relamp	798
1L 16W LED COB [1x LED DRIVER]	1	16		1	16	Do Nothing	0
1L 20W LED Array [1x LED DRIVER]	97	1,940		97	1,940	Do Nothing	0
1L 20W LED COB [1x LED DRIVER]	5	100		5	100	Do Nothing	0
1L 22W LEDS-M COB [0x edit	21	462	CREE-XSPW-40W-50K-T4-DB	21	840	Replace	-378
1L 23W CFS-M Triple tube [0x Null	2	46	GC-16.5W-A21-40K-1L	2	33	Relamp	13
1L 30W LED Linear Board [1x LED DRIVER]	2	60		2	60	Do Nothing	0
1L 400W HPS MOG BASE HID [1x MAG]	2	914	LITHONIA-RSX2-147W-50K-R2-MVOLT-SPA-DBXD	2	294	Replace	620

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1L 400W HPS MOG BASE HID [1x MAG]	6	2,742	LITHONIA-RSX2-187W-50K-R4-MVOLT- SPA-DDBXD	6	1,122	Replace	1,620
1L 400W HPS MOG BASE HID [1x MAG]	4	1,828	LITHONIA-RSX2-210W-50K-R5-MVOLT- SPA-DDBXD	4	840	Replace	988
1L 400W HPS MOG BASE HID [1x MAG]	4	1,828	Remove	4	0	Replace	1,828
1L 40W LED Linear Board [1x LED DRIVER]	1	40		1	40	Do Nothing	0
1L 40W LED Linear Board [1x LED DRIVER]	1	40	PHILIPS-EVOKIT2X2-22W-40K-D	1	40	Do Nothing	0
1L 44W LED COB [1x LED DRIVER]	2	88		2	88	Do Nothing	0
1L 60W INCS-M A19 [0x NULL]	2	120	GC-9W-A19-40K-1L	2	18	Relamp	102
1L 63W LED Array [1x LED DRIVER]	1	63		1	63	Do Nothing	0
1L 70W HPS MED BASE HID [1x MAG]	7	602	LITHONIA-LBR6-13W-50K-MWD-MVOLT- UGZ-AT-WL	7	91	Retrofit	511
2L 13W CFS-M SPIRAL [0x NULL]	1	26	GC-9W-A19-40K-2L	1	18	Relamp	8
2L 15W LL4A T8 [1x ELE T8 IS NP]	2	68	LITHONIA-FEM-24W-40K-LPPFL-STSL	2	68	Do Nothing	0
2L 17W LF2 T8 [1x ELE T8 IS NP]	1	31		1	31	Do Nothing	0
2L 17W LF2 T8 [1x ELE T8 IS NP]	1	31	ULT-224-9W-40K-DE	1	18	Retrofit	13
2L 25W LF3 T8 [1x ELE T8 IS NP]	10	430	Lithonia-LBK 3FT 1 2000 40K	10	135	Retrofit	295
2L 25W LF3 T8 [1x ELE T8 IS NP]	7	301	ULT-236-12W-40-DE	7	168	Retrofit	133
2L 25W LF4 T8 [1x ELE T8 DIM NP]	8	344	PHILLIPS-EVOKIT2X4-25W-40K	8	200	Retrofit	144
2L 25W LF4 T8 [1x ELE T8 DIM NP]	21	903	ULT-248-12W-40K-DE	21	504	Retrofit	399
2L 25W LF4 T8 [1x ELE T8 IS NP]	17	731	Lithonia-LBK 4FT 1 3000 40K	17	332	Retrofit	400
2L 25W LF4 T8 [1x ELE T8 IS NP]	42	1,806	PHILIPS-EVOKIT2X4-28W-40K-D	42	1,176	Retrofit	630
2L 25W LF4 T8 [1x ELE T8 IS NP]	105	4,515	PHILLIPS-EVOKIT2X4-25W-40K	105	2,625	Retrofit	1,890
2L 25W LF4 T8 [1x ELE T8 IS NP]	28	1,204	ULT-248-12W-40K-DE	28	672	Retrofit	532
2L 25W LF4 T8 [1x ELE T8 IS NP]	88	3,784	ULT-248-12W-40K-DE	88	2,112	Retrofit	1,672

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2L 25W LF4 T8 [1x ELE T8 IS NP]	9	387	LITHONIA-STL4-27W-40K	9	243	Retrofit	144
2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES]	4	208	GC-9W-PLO-40K-2L	4	72	Retrofit	136
2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES]	1	52	LITHONIA-LBR8-9W-40K-MWD-MVOLT-UGZ	1	9	Retrofit	43
2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES]	1	52	GC-9W-PLO-40K-2L	1	18	Retrofit	34
2L 32W LF4 T8 [1x ELE T8 IS NP]	37	2,146	ULT-248-12W-40K-DE	37	888	Retrofit	1,258
2L 60W INCS-M A19 [0x NULL]	2	240	GC-9W-A19-40K-2L	2	36	Relamp	204
2L 7W CFN SGL TUBE 2PIN N-I [1x MAG ES]	4	56	GC-5.5W-PLS-40K-2L	4	56	Do Nothing	0
2L 7W CFN SGL TUBE 2PIN N-I [1x MAG ES]	4	56	GC-5.5W-PLS-40K-2L	4	44	Relamp	12
3L 25W LF4 T8 [1x ELE T8 IS NP]	2	126	ESI-F-24LX-38W-RGBW-MC	2	76	Retrofit	50
3L 25W LF4 T8 [1x ELE T8 IS NP]	61	3,843	PHILIPS-EVOKIT2X4-28W-40K-D	61	1,708	Retrofit	2,135
3L 25W LF4 T8 [1x ELE T8 IS NP]	4	252	ULT-348-12W-40K-DE	4	144	Retrofit	108
3L 25W LF4 T8 [1x ELE T8 IS NP]	4	252	ESI-K-24LT-F4N0-2S-40-FR-D	4	120	Retrofit	132
3L 25W LF4 T8 [1x ELE T8 IS NP]	15	945	ESI-K-24LT-F4N6-2S-40-FR-SD	15	540	Retrofit	405
3L 25W LF4 T8 [2x ELE T8 IS NP]	52	3,484	ESI-F-24LX-38W-RGBW-MC	52	1,976	Retrofit	1,508
3L 25W LF4 T8 [2x ELE T8 IS NP]	48	3,216	PHILIPS-EVOKIT2X4-28W-40K-D	48	1,344	Retrofit	1,872
3L 25W LF4 T8 [2x ELE T8 IS NP]	375	25,125	PHILLIPS-EVOKIT2X4-28W-40K-SD	375	10,500	Retrofit	14,625
3L 25W LF4 T8 [2x ELE T8 IS NP]	4	268	ESI-F-24LX-38W-RGBW-MC	4	152	Retrofit	116
3L 25W LF4 T8 [2x ELE T8 IS NP]	9	603	PHILIPS-EVOKIT2x4-19W-40K-HE	9	171	Retrofit	432
3L 25W LF4 T8 [2x ELE T8 IS NP]	17	1,139	PHILIPS-EVOKIT2X4-28W-40K-D	17	476	Retrofit	663
4L 25W LF4 T8 [1x ELE T8 IS NP]	1	85	ULT-448-12W-40K-DE	1	48	Retrofit	37
6L 25W LF4 T8 [2x ELE T8 IS NP]	24	3,024	LITHONIA-IBG-105W-50K-AFL-GND-RIO-WGX-DWH	24	2,520	Retrofit	504

## Fixture Detail

Totals		1240		199,614		1240		94,440		\$20,233		\$12,074		\$0		\$0	
Area		Existing				Proposed Solution				Savings							
Room		Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
<b>Burnside Elementary / Exterior</b>																	
1L 20W LED																	
Door 1	COB [1x LED DRIVER]/ Recessed Can 6" Can Recessed	20.0	2	4,368	175	Do Nothing		20.0	2	0	4,368	175	0	\$0	\$0	\$0	\$0
Door 1	1L 12W LEDS-M A19 [0x NULL]/ Wall Mount * Wall	12.0	14	4,368	734	KEYSTONE-9.5W- A19-50K-1L		9.5	14	0	4,368	581	0	\$0	\$18	\$0	\$0
Door 2	1L 12W LEDS-M A19 [0x NULL]/ Wall Mount * Wall	12.0	2	4,368	105	KEYSTONE-9.5W- A19-50K-1L		9.5	2	0	4,368	83	0	\$0	\$3	\$0	\$0
Door 3	1L 12W LEDS-M A19 [0x NULL]/ Wall Mount * Wall	12.0	2	4,368	105	KEYSTONE-9.5W- A19-50K-1L		9.5	2	0	4,368	83	0	\$0	\$3	\$0	\$0
WP 1	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB		40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
WP 2	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB		40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 3	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB		40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
WP 4	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB		40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 5	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB		40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
WP 6	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB		40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
Door 5	1L 70W HPS MED BASE HID [1x MAG]/	86.0	1	4,368	376	LITHONIA-LBR6- 13W-50K-MWD- MVOLT-UGZ-AT-WL		13.0	1	0	4,368	57	0	\$0	\$37	\$0	\$0

ISD #256 Red Wing Public Schools  
Burnside Elementary - Fixture/Kit Option

Area		Existing				Proposed Solution						Savings				
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Recessed Can 6" Can Recessed																
Door 5	1L 12W LEDS-M A19 [0x NULL]/ Wall Mount * Wall	12.0	3	4,368	157	KEYSTONE-9.5W- A19-50K-1L	9.5	3	0	4,368	124	0	\$0	\$4	\$0	\$0
WP 7	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 8	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 9	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
WP 10	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
WP 11	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
WP 12	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
WP 13	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
WP 14	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 15	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
Door 13	1L 70W HPS MED BASE HID [1x MAG]/ Recessed Can 6" Can Recessed	86.0	1	4,368	376	LITHONIA-LBR6- 13W-50K-MWD- MVOLT-UGZ-AT-WL	13.0	1	0	4,368	57	0	\$0	\$37	\$0	\$0
WP 16	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0

ISD #256 Red Wing Public Schools  
Burnside Elementary - Fixture/Kit Option

Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
WP 17	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
		22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 18	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$0	\$0	\$0
		1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0
WP 19	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$0	\$0	\$0
		22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 20	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$0	\$0	\$0
		1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0
Door 15	1L 70W HPS MED BASE HID [1x MAG]/ Recessed Can 6" Can Recessed	86.0	1	4,368	376	LITHONIA-LBR6- 13W-50K-MWD- MVOLT-UGZ-AT-WL	13.0	1	0	4,368	57	0	\$0	\$37	\$0	\$0
		1L 12W LEDS-M A19 [0x NULL]/ Wall Mount * Wall	12.0	3	4,368	157	KEYSTONE-9.5W- A19-50K-1L	9.5	3	0	4,368	124	0	\$0	\$4	\$0
WP 22	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
		1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0
WP 23	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$0	\$0	\$0
		1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0
WP 24	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$0	\$0	\$0
		1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0
WP 25	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$0	\$0	\$0
		1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0
WP 26	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$0	\$0	\$0
		1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0
Door 17	1L 70W HPS MED BASE HID [1x MAG]/ Recessed Can 6" Can Recessed	86.0	1	4,368	376	LITHONIA-LBR6- 13W-50K-MWD- MVOLT-UGZ-AT-WL	13.0	1	0	4,368	57	0	\$0	\$37	\$0	\$0
		1L 12W LEDS-M A19 [0x NULL]/ Wall Mount * Wall	12.0	3	4,368	157	KEYSTONE-9.5W- A19-50K-1L	9.5	3	0	4,368	124	0	\$0	\$4	\$0



ISD #256 Red Wing Public Schools  
Burnside Elementary - Fixture/Kit Option

Area		Existing				Proposed Solution						Savings				
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
WP 27	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
WP 28	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
WP 29	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
WP 29	1L 12W LEDS-M A19 [0x NULL]/ Wall Mount * Wall	12.0	2	4,368	105	KEYSTONE-9.5W- A19-50K-1L	9.5	2	0	4,368	83	0	\$0	\$3	\$0	\$0
WP 30	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 31	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
WP 31	1L 12W LEDS-M A19 [0x NULL]/ Wall Mount * Wall	12.0	2	4,368	105	KEYSTONE-9.5W- A19-50K-1L	9.5	2	0	4,368	83	0	\$0	\$3	\$0	\$0
WP 32	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 33	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 34	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 35	1L 22W LEDS-M COB [0x edit]/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 36	1L 100W HPS MED BASE HID [1x MAG]/ Wallpack Wall	126.0	1	4,368	550	CREE-XSPW-40W- 50K-T4-DB	40.0	1	0	4,368	175	0	\$0	\$43	\$0	\$0
Door 20	1L 70W HPS MED BASE HID [1x MAG]/ Recessed Can 6" Can Recessed	86.0	1	4,368	376	LITHONIA-LBR6- 13W-50K-MWWD- MVOLT-UGZ-AT-WL	13.0	1	0	4,368	57	0	\$0	\$37	\$0	\$0
FL 1	1L 63W LED Array [1x LED DRIVER]/	63.0	1	4,368	275	Do Nothing	63.0	1	0	4,368	275	0	\$0	\$0	\$0	\$0

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Burnside Elementary - Fixture/Kit Option

Area		Existing					Proposed Solution					Savings				
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Flood Wall																
WP 37	1L 22W LEDS-M COB [0x edit/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W-50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 38	1L 22W LEDS-M COB [0x edit/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W-50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
WP 39	1L 22W LEDS-M COB [0x edit/ Wallpack * Wall	22.0	1	4,368	96	CREE-XSPW-40W-50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
1L 70W HPS MED BASE HID [1x MAG]/ Recessed Can 6" Can Recessed																
Door 21		86.0	1	4,368	376	LITHONIA-LBR6-13W-50K-MWD-MVOLT-UGZ-AT-WL	13.0	1	0	4,368	57	0	\$0	\$37	\$0	\$0
1L 12W LEDS-M A19 [0x NULL]/ Wall Mount * Wall																
Door 21		12.0	3	4,368	157	KEYSTONE-9.5W-A19-50K-1L	9.5	3	0	4,368	124	0	\$0	\$4	\$0	\$0
1L 22W LEDS-M COB [0x edit/ Wallpack * Wall																
WP 40		22.0	1	4,368	96	CREE-XSPW-40W-50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
1L 22W LEDS-M COB [0x edit/ Wallpack * Wall																
WP 41		22.0	1	4,368	96	CREE-XSPW-40W-50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
1L 22W LEDS-M COB [0x edit/ Wallpack * Wall																
WP 42		22.0	1	4,368	96	CREE-XSPW-40W-50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
1L 22W LEDS-M COB [0x edit/ Wallpack * Wall																
WP 43		22.0	1	4,368	96	CREE-XSPW-40W-50K-T4-DB	40.0	1	0	4,368	175	0	\$0	-\$9	\$0	\$0
1L 70W HPS MED BASE HID [1x MAG]/ Recessed Can 6" Can Recessed																
Door 22		86.0	1	4,368	376	LITHONIA-LBR6-13W-50K-MWD-MVOLT-UGZ-AT-WL	13.0	1	0	4,368	57	0	\$0	\$37	\$0	\$0
1L 12W LEDS-M A19 [0x NULL]/ Wall Mount * Wall																
Door 22		12.0	10	4,368	524	KEYSTONE-9.5W-A19-50K-1L	9.5	10	0	4,368	415	0	\$0	\$13	\$0	\$0
1L 16W LED COB [1x LED DRIVER]/ Flood Wall																
Flag Pole 1		16.0	1	4,368	70	Do Nothing	16.0	1	0	4,368	70	0	\$0	\$0	\$0	\$0
1L 400W HPS MOG BASE HID [1x MAG]/ Pole Light Pole																
Pole 1		457.0	1	2,190	1,001	LITHONIA-RSX2-187W-50K-R4-MVOLT-SPA-DBBXD	187.0	1	0	2,190	410	0	\$0	\$68	\$0	\$0

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Burnside Elementary - Fixture/Kit Option

Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Pole 2	1L 400W HPS	457.0	1	2,190	1,001	LITHONIA-RSX2-	187.0	1	0	2,190	410	0	\$0	\$68	\$0	\$0
	MOG BASE HID [1x MAG] Pole Light Pole					187W-50K-R4- MVOLT-SPA-DDBXD										
Pole 3	1L 400W HPS	457.0	1	2,190	1,001	LITHONIA-RSX2-	187.0	1	0	2,190	410	0	\$0	\$68	\$0	\$0
	MOG BASE HID [1x MAG] Pole Light Pole					187W-50K-R4- MVOLT-SPA-DDBXD										
Pole 4	1L 400W HPS	457.0	1	2,190	1,001	LITHONIA-RSX2-	187.0	1	0	2,190	410	0	\$0	\$68	\$0	\$0
	MOG BASE HID [1x MAG] Pole Light Pole					187W-50K-R4- MVOLT-SPA-DDBXD										
Pole 5	1L 400W HPS	457.0	1	2,190	1,001	LITHONIA-RSX2-	210.0	1	0	2,190	460	0	\$0	\$62	\$0	\$0
	MOG BASE HID [1x MAG] Pole Light Pole					210W-50K-R5- MVOLT-SPA-DDBXD										
Pole 5	1L 400W HPS	457.0	1	4,368	1,996	Remove	.0	1	100	0	0	0	\$0	\$229	\$0	\$0
	MOG BASE HID [1x MAG] Pole Light Pole															
Pole 6	1L 400W HPS	457.0	1	2,190	1,001	LITHONIA-RSX2-	147.0	1	0	2,190	322	0	\$0	\$78	\$0	\$0
	MOG BASE HID [1x MAG] Pole Light Pole					147W-50K-R2- MVOLT-SPA-DDBXD										
Pole 7	1L 400W HPS	457.0	1	2,190	1,001	LITHONIA-RSX2-	147.0	1	0	2,190	322	0	\$0	\$78	\$0	\$0
	MOG BASE HID [1x MAG] Pole Light Pole					147W-50K-R2- MVOLT-SPA-DDBXD										
Pole 8	1L 400W HPS	457.0	1	2,190	1,001	LITHONIA-RSX2-	210.0	1	0	2,190	460	0	\$0	\$62	\$0	\$0
	MOG BASE HID [1x MAG] Pole Light Pole					210W-50K-R5- MVOLT-SPA-DDBXD										
Pole 8	1L 400W HPS	457.0	1	4,368	1,996	Remove	.0	1	100	0	0	0	\$0	\$229	\$0	\$0
	MOG BASE HID [1x MAG] Pole Light Pole															
Pole 9	1L 400W HPS	457.0	1	2,190	1,001	LITHONIA-RSX2-	210.0	1	0	2,190	460	0	\$0	\$62	\$0	\$0
	MOG BASE HID [1x MAG] Pole Light Pole					210W-50K-R5- MVOLT-SPA-DDBXD										
Pole 9	1L 400W HPS	457.0	1	4,368	1,996	Remove	.0	1	100	0	0	0	\$0	\$229	\$0	\$0
	MOG BASE HID [1x MAG] Pole Light Pole															
Pole 10	1L 400W HPS	457.0	1	2,190	1,001	LITHONIA-RSX2-	210.0	1	0	2,190	460	0	\$0	\$62	\$0	\$0
	MOG BASE HID [1x MAG] Pole Light Pole					210W-50K-R5- MVOLT-SPA-DDBXD										

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Area		Existing				Proposed Solution						Savings				
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Pole 10	1L 400W HPS	457.0	1	4,368	1,996	Remove	.0	1	100	0	0	0	\$0	\$229	\$0	\$0
	MOG BASE HID [1x MAG]/ Pole Light Pole															
Pole 11	1L 400W HPS	457.0	1	2,190	1,001	LITHONIA-RSX2-187W-50K-R4-MVOLT-SPA-DBBXD	187.0	1	0	2,190	410	0	\$0	\$68	\$0	\$0
	MOG BASE HID [1x MAG]/ Pole Light Pole															
Pole 11	1L 100W LED COB [1x LED DRIVER]/ Flood Yolk	100.0	1	3,000	300	Do Nothing	100.0	1	0	3,000	300	0	\$0	\$0	\$0	\$0
Pole 12	1L 400W HPS	457.0	1	2,190	1,001	LITHONIA-RSX2-187W-50K-R4-MVOLT-SPA-DBBXD	187.0	1	0	2,190	410	0	\$0	\$68	\$0	\$0
	MOG BASE HID [1x MAG]/ Pole Light Pole															
Pole 12	1L 100W LED COB [1x LED DRIVER]/ Flood Yolk	100.0	1	3,000	300	Do Nothing	100.0	1	0	3,000	300	0	\$0	\$0	\$0	\$0
FL 1	1L 44W LED COB [1x LED DRIVER]/ Flood Knuckle	44.0	1	4,368	192	Do Nothing	44.0	1	0	4,368	192	0	\$0	\$0	\$0	\$0
FL 2	1L 44W LED COB [1x LED DRIVER]/ Flood Knuckle	44.0	1	4,368	192	Do Nothing	44.0	1	0	4,368	192	0	\$0	\$0	\$0	\$0
Burnside Elementary / Interior																
Door 1 vestibule	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	3	3,900	234	Do Nothing	20.0	3	0	3,900	234	0	\$0	\$0	\$0	\$0
Lobby	2L 25W LF4 T8 [1x ELE T8 DIM NP]/ Lensed Troffer 2x4 Recessed	43.0	3	3,900	503	PHILLIPS-EVOKIT2X4-25W-40K	25.0	3	0	3,900	293	0	\$0	\$24	\$0	\$0
Lobby	2L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	43.0	7	3,900	1,174	PHILLIPS-EVOKIT2X4-25W-40K	25.0	7	0	3,900	683	0	\$0	\$56	\$0	\$0
Lobby	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	5	3,900	390	Do Nothing	20.0	5	0	3,900	390	0	\$0	\$0	\$0	\$0

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Burnside Elementary - Fixture/Kit Option

Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Lobby	2L 25W LF4 T8 [1x ELE T8 DIM NPI]/ Standard Strip 4' Surface	43.0	17	3,900	2,851	ULT-248-12W-40K- DE	24.0	17	0	3,900	1,591	0	\$0	\$145	\$0	\$0
Lobby	1L 20W LED COB [1x LED DRIVER]/ Recessed Can 6" Can Recessed	20.0	3	3,900	234	Do Nothing	20.0	3	0	3,900	234	0	\$0	\$0	\$0	\$0
Trophy Case	2L 25W LF4 T8 [1x ELE T8 DIM NPI]/ Standard Strip 4' Surface	43.0	4	3,900	671	ULT-248-12W-40K- DE	24.0	4	0	3,900	374	0	\$0	\$34	\$0	\$0
Room 100 - Main Office	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Parabolic Troffer 2x4 Recessed	67.0	6	2,400	965	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	6	0	2,400	403	0	\$0	\$64	\$0	\$0
Room 100 - Main Office	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	2	2,400	96	Do Nothing	20.0	2	0	2,400	96	0	\$0	\$0	\$0	\$0
Room 101 - Principals Office	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Parabolic Troffer 2x4 Recessed	67.0	4	2,400	643	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	4	0	2,400	269	0	\$0	\$43	\$0	\$0
Room 102 - Health Services	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Parabolic Troffer 2x4 Recessed	67.0	1	2,400	161	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	1	0	2,400	67	0	\$0	\$11	\$0	\$0
Room 102 - Health Services	2L 60W INCS-M A19 [0x NULL]/ Vanity Wall	120.0	2	2,400	576	GC-9W-A19-40K-2L	18.0	2	0	2,400	86	0	\$0	\$56	\$0	\$0
Room 102 - Health Services	2L 13W CFS-M SPIRAL [0x NULL]/ Vanity Wall	26.0	1	2,400	62	GC-9W-A19-40K-2L	18.0	1	0	2,400	43	0	\$0	\$2	\$0	\$0
Room 102 - Health Services	1L 40W LED Linear Board [1x LED DRIVER]/ Lensed Troffer 2x2 Recessed	40.0	1	2,400	96	Do Nothing	40.0	1	0	2,400	96	0	\$0	\$0	\$0	\$0
Room 102A - health services office	3L 25W LF4 T8 [2x ELE T8 IS NPI]/	67.0	2	2,400	322	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	2	0	2,400	134	0	\$0	\$21	\$0	\$0

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Burnside Elementary - Fixture/Kit Option

Area		Existing				Proposed Solution						Savings				
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Health Services Restroom	Parabolic Troffer 2x4 Recessed															
	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Wrap 4' Surface	43.0	1	3,900	168	LITHONIA-STL4-27W-40K	27.0	1	0	3,900	105	0	\$0	\$7	\$0	\$0
	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Parabolic Troffer 2x4 Recessed	67.0	4	2,400	643	PHILIPS-EVOKIT2x4-28W-40K-D	28.0	4	0	2,400	269	0	\$0	\$43	\$0	\$0
Room 103																
Restroom 1	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Wrap 4' Surface	43.0	1	2,400	103	LITHONIA-STL4-27W-40K	27.0	1	0	2,400	65	0	\$0	\$4	\$0	\$0
	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Wrap 4' Surface	43.0	1	2,400	103	LITHONIA-STL4-27W-40K	27.0	1	0	2,400	65	0	\$0	\$4	\$0	\$0
	Room 104 - breakroom															
Room 104 - breakroom	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	43.0	4	3,900	671	PHILIPS-EVOKIT2x4-28W-40K-D	28.0	4	0	3,900	437	0	\$0	\$27	\$0	\$0
	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	15	3,900	1,170	Do Nothing	20.0	15	0	3,900	1,170	0	\$0	\$0	\$0	\$0
	Room 104A - copy room															
Room 104B - Server Room	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Parabolic Troffer 2x4 Recessed	67.0	9	2,400	1,447	PHILIPS-EVOKIT2x4-19W-40K-HE	19.0	9	0	2,400	410	0	\$0	\$119	\$0	\$0
	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	2	250	34	PHILIPS-EVOKIT2x4-28W-40K-D	28.0	2	0	250	14	0	\$0	\$2	\$0	\$0
	Room 105 - Wellness Room															
Door 22 vestibule	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Parabolic Troffer 2x4 Recessed	67.0	4	2,160	579	ESL-F-24LX-38W-RGBW-MC	38.0	4	30	1,512	230	1	\$0	\$40	\$0	\$0
	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	1	3,600	72	Do Nothing	20.0	1	0	3,600	72	0	\$0	\$0	\$0	\$0

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Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	43.0	35	3,600	5,418	PHILLIPS- EVOKIT2X4-25W- 40K	25.0	35	0	3,600	3,150	0	\$0	\$260	\$0	\$0
	2L 7W CFN SGL TUBE 2PIN N-I [1x MAG ES]/ Decorative 9" Wall	14.0	4	3,600	202	Do Nothing	14.0	4	0	3,600	202	0	\$0	\$0	\$0	\$0
A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]/ Standard Strip 4" Surface	43.0	3	3,600	464	ULT-248-12W-40K- DE	24.0	3	0	3,600	259	0	\$0	\$24	\$0	\$0
	2L 25W LF4 T8 [1x ELE T8 IS NP]/ Standard Strip 4" Surface	43.0	3	3,600	464	ULT-248-12W-40K- DE	24.0	3	0	3,600	259	0	\$0	\$24	\$0	\$0
A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]/ Standard Strip 4" Surface	43.0	6	3,600	929	ULT-248-12W-40K- DE	24.0	6	0	3,600	518	0	\$0	\$47	\$0	\$0
	3L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	63.0	2	2,400	302	PHILLIPS- EVOKIT2X4-28W- 40K-D	28.0	2	0	2,400	134	0	\$0	\$19	\$0	\$0
Room 107 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS- EVOKIT2X4-28W- 40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
	3L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	63.0	2	1,800	227	ULT-348-12W-40K- DE	36.0	2	0	1,800	130	0	\$0	\$11	\$0	\$0
Room 109 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	63.0	2	1,800	227	ULT-348-12W-40K- DE	36.0	2	0	1,800	130	0	\$0	\$11	\$0	\$0
	3L 25W LF4 T8 [2x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS- EVOKIT2X4-28W- 40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0

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Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Room 111 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
Room 111 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	3	2,160	434	PHILLIPS-EVOKIT2X4-28W-40K-D	28.0	3	0	2,160	181	0	\$0	\$29	\$0	\$0
Room 111 - classroom	1L 150W INCS-M PAR38 [0x NULL]/ Track 6" Can Surface	150.0	6	2,160	1,944	GC-17W-PAR38-40K-1L-27TV	17.0	6	0	2,160	220	0	\$0	\$198	\$0	\$0
Room 111A	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	2	1,800	241	PHILLIPS-EVOKIT2X4-28W-40K-D	28.0	2	0	1,800	101	0	\$0	\$16	\$0	\$0
Room 112 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
Room 113 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
Room 114 - Supplies	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	3	2,160	434	PHILLIPS-EVOKIT2X4-28W-40K-D	28.0	3	0	2,160	181	0	\$0	\$29	\$0	\$0
Room 115 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
Door 21 vestibule	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	2	3,900	156	Do Nothing	20.0	2	0	3,900	156	0	\$0	\$0	\$0	\$0
Room 116 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0



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Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Room 117 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS- EVOKIT2X4-28W- 40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS- EVOKIT2X4-28W- 40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
Door 20 vestibule	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	1	3,900	78	Do Nothing	20.0	1	0	3,900	78	0	\$0	\$0	\$0	\$0
Room 119 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS- EVOKIT2X4-28W- 40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4' Surface	43.0	4	1,800	310	ULT-248-12W-40K- DE	24.0	4	0	1,800	173	0	\$0	\$16	\$0	\$0
Boys Restroom	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	4	1,800	144	Do Nothing	20.0	4	0	1,800	144	0	\$0	\$0	\$0	\$0
Girls Restroom	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4' Surface	43.0	4	1,800	310	ULT-248-12W-40K- DE	24.0	4	0	1,800	173	0	\$0	\$16	\$0	\$0
	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	4	1,800	144	Do Nothing	20.0	4	0	1,800	144	0	\$0	\$0	\$0	\$0
Room 120 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS- EVOKIT2X4-28W- 40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
Room 124	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4' Surface	43.0	1	250	11	ULT-248-12W-40K- DE	24.0	1	0	250	6	0	\$0	\$1	\$0	\$0

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Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Room 121 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS- EVOKIT2X4-28W- 40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
	3L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	63.0	2	1,800	227	ESI-F-24LX-38W- RGBW-MC	38.0	2	30	1,260	96	1	\$0	\$15	\$0	\$0
Room 123 - student services	3L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	63.0	2	1,800	227	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	2	0	1,800	101	0	\$0	\$14	\$0	\$0
	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES] / Recessed Square 137x13x Recessed	52.0	1	250	13	GC-9W-PLO-40K-2L	18.0	1	0	250	5	0	\$0	\$1	\$0	\$0
Room 125 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS- EVOKIT2X4-28W- 40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	2	2,160	289	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	2	0	2,160	121	0	\$0	\$19	\$0	\$0
Room 127 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	14	2,160	2,026	ESI-F-24LX-38W- RGBW-MC	38.0	14	30	1,512	804	1	\$0	\$140	\$0	\$0
	3L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	63.0	2	2,160	272	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0
Room 128	3L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	63.0	2	2,160	272	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0
	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	14	2,160	2,026	ESI-F-24LX-38W- RGBW-MC	38.0	14	30	1,512	804	1	\$0	\$140	\$0	\$0

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Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Women's Restroom	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4' Surface	43.0	2	1,800	155	ULT-248-12W-40K-DE	24.0	2	0	1,800	86	0	\$0	\$8	\$0	\$0
	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	3	1,800	108	Do Nothing	20.0	3	0	1,800	108	0	\$0	\$0	\$0	\$0
Women's Restroom	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	1	1,800	36	Do Nothing	20.0	1	0	1,800	36	0	\$0	\$0	\$0	\$0
Supply Room	1L 30W LED Linear Board [1x LED DRIVER]/ Standard Strip 4' Wall	30.0	1	250	8	Do Nothing	30.0	1	0	250	8	0	\$0	\$0	\$0	\$0
Mens Restroom	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4' Surface	43.0	2	1,800	155	ULT-248-12W-40K-DE	24.0	2	0	1,800	86	0	\$0	\$8	\$0	\$0
	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	4	1,800	144	Do Nothing	20.0	4	0	1,800	144	0	\$0	\$0	\$0	\$0
Room 130 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	16	2,160	2,316	ESI-F-24LX-38W-RGBW-MC	38.0	16	30	1,512	919	1	\$0	\$160	\$0	\$0
Room 130 - classroom	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES] / Recessed Can 8" Recessed	52.0	1	1,800	94	LITHONIA-LBR8-9W-40K-MWD-MVOLT-UGZ	9.0	1	0	1,800	16	0	\$0	\$9	\$0	\$0
A Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	43.0	7	3,900	1,174	PHILLIPS-EVOKIT2x4-25W-40K	25.0	7	0	3,900	683	0	\$0	\$56	\$0	\$0
A Wing Hallway A	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	2	3,900	156	Do Nothing	20.0	2	0	3,900	156	0	\$0	\$0	\$0	\$0

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Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
A Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]/ Standard Strip 4' Surface	43.0	14	3,900	2,348	ULT-248-12W-40K- DE	24.0	14	0	3,900	1,310	0	\$0	\$119	\$0	\$0
	2L 25W LF3 T8 [1x ELE T8 IS NP]/ Standard Strip 3' Surface	43.0	2	3,900	335	ULT-236-12W-40-DE	24.0	2	0	3,900	187	0	\$0	\$17	\$0	\$0
Media Center	2L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	43.0	31	2,160	2,879	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	31	0	2,160	1,875	0	\$0	\$115	\$0	\$0
Media Center	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	27	2,160	1,166	Do Nothing	20.0	27	0	2,160	1,166	0	\$0	\$0	\$0	\$0
Media Center	2L 25W LF4 T8 [1x ELE T8 IS NP]/ Standard Strip 4' Surface	43.0	4	2,160	372	ULT-248-12W-40K- DE	24.0	4	0	2,160	207	0	\$0	\$19	\$0	\$0
Media Center	2L 25W LF3 T8 [1x ELE T8 IS NP]/ Standard Strip 3' Surface	43.0	2	2,160	186	ULT-236-12W-40-DE	24.0	2	0	2,160	104	0	\$0	\$9	\$0	\$0
Media Center	2L 17W LF2 T8 [1x ELE T8 IS NP]/ Standard Strip 2' Surface	31.0	1	2,160	67	ULT-224-9W-40K-DE	18.0	1	0	2,160	39	0	\$0	\$3	\$0	\$0
Room 131A - Media Center Office	3L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	63.0	2	2,160	272	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0
Room 131B - Copy Room	3L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	63.0	2	2,160	272	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0
Room 132	3L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	63.0	6	2,160	816	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	6	0	2,160	363	0	\$0	\$52	\$0	\$0

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Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Room 132A	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	43.0	4	2,160	372	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	4	0	2,160	242	0	\$0	\$15	\$0	\$0
	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	3	2,160	130	Do Nothing	20.0	3	0	2,160	130	0	\$0	\$0	\$0	\$0
Room 133	10L 25W LF4 T8 [3x ELE T8 IS NPI]/ Indirect 20" Suspended	213.0	1	2,160	460	Lithonia-LBK 4FT 1 3000 40K (5)	97.5	1	0	2,160	211	0	\$0	\$29	\$0	\$0
	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Indirect 4' Wall	43.0	2	2,160	186	Lithonia-LBK 4FT 1 3000 40K	19.5	2	0	2,160	84	0	\$0	\$12	\$0	\$0
Room 133	2L 25W LF3 T8 [1x ELE T8 IS NPI]/ Indirect 3' Wall	43.0	5	2,160	464	Lithonia-LBK 3FT 1 2000 40K	13.5	5	0	2,160	146	0	\$0	\$37	\$0	\$0
	10L 25W LF4 T8 [3x ELE T8 IS NPI]/ Indirect 20" Suspended	213.0	1	2,160	460	Lithonia-LBK 4FT 1 3000 40K (5)	97.5	1	0	2,160	211	0	\$0	\$29	\$0	\$0
Room 136	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Indirect 4' Wall	43.0	15	2,160	1,393	Lithonia-LBK 4FT 1 3000 40K	19.5	15	0	2,160	632	0	\$0	\$87	\$0	\$0
	2L 25W LF3 T8 [1x ELE T8 IS NPI]/ Indirect 3' Wall	43.0	5	2,160	464	Lithonia-LBK 3FT 1 2000 40K	13.5	5	0	2,160	146	0	\$0	\$37	\$0	\$0
Room 135	3L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	63.0	5	2,160	680	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	5	0	2,160	302	0	\$0	\$43	\$0	\$0
	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	43.0	7	3,900	1,174	PHILLIPS- EVOKIT2X4-25W- 40K	25.0	7	0	3,900	683	0	\$0	\$56	\$0	\$0
B Wing Hallway A	2L 17W LF2 T8 [1x ELE T8 IS NPI]/	31.0	1	3,900	121	Do Nothing	31.0	1	0	3,900	121	0	\$0	\$0	\$0	\$0

ISD #256 Red Wing Public Schools  
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Area		Existing				Proposed Solution						Savings				
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Standard Strip 2' Surface																
B Wing Hallway A	2L 25W LF4 T8															
	[1x ELE T8 IS NPI/ Standard Strip 4' Surface	43.0	16	3,900	2,683	ULT-248-12W-40K-DE	24.0	16	0	3,900	1,498	0	\$0	\$136	\$0	\$0
2L 25W LF3 T8																
B Wing Hallway A	[1x ELE T8 IS NPI/ Standard Strip 3' Surface	43.0	1	3,900	168	ULT-236-12W-40-DE	24.0	1	0	3,900	94	0	\$0	\$9	\$0	\$0
Room 134 - Classroom	3L 25W LF4 T8															
	[1x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	63.0	6	2,160	816	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	6	0	2,160	363	0	\$0	\$52	\$0	\$0
3L 25W LF4 T8																
Room 137 - classroom	[2x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	67.0	15	2,160	2,171	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	15	0	2,160	907	0	\$0	\$145	\$0	\$0
Room 137A	3L 25W LF4 T8															
	[1x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	63.0	2	2,160	272	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0
3L 25W LF4 T8																
Room 137B	[1x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	63.0	2	2,160	272	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0
Room 137C	3L 25W LF4 T8															
	[1x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	63.0	2	2,160	272	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0
3L 25W LF4 T8																
Room 138/139 - Student Services	[1x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	63.0	5	1,800	567	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	5	0	1,800	252	0	\$0	\$36	\$0	\$0
Door 17 vestibule	1L 20W LED Array [1x LED DRIVER/ Canopy 10' x 10" Surface	20.0	1	3,900	78	Do Nothing	20.0	1	0	3,900	78	0	\$0	\$0	\$0	\$0
B Wing Hallway B	2L 25W LF4 T8															
	[1x ELE T8 IS NPI/	43.0	26	3,600	4,025	PHILLIPS-EVOKIT2X4-25W-40K	25.0	26	0	3,600	2,340	0	\$0	\$193	\$0	\$0

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Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Lensed Troffer 2x4 Recessed																
B Wing Hallway B	2L 7W CFN SGL TUBE 2PIN N-I [1x MAG ES]/ Decorative 9" Wall	14.0	2	3,600	101	GC-5.5W-PLS-40K-2L	11.0	2	0	3,600	79	0	\$0	\$2	\$0	\$0
2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4" Surface																
B Wing Hallway B		43.0	5	3,600	774	ULT-248-12W-40K-DE	24.0	5	0	3,600	432	0	\$0	\$39	\$0	\$0
2L 25W LF3 T8 [1x ELE T8 IS NPI]/ Standard Strip 3" Surface																
B Wing Hallway B		43.0	2	3,600	310	ULT-236-12W-40-DE	24.0	2	0	3,600	173	0	\$0	\$16	\$0	\$0
3L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed																
Room 140		63.0	3	1,800	340	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	3	0	1,800	151	0	\$0	\$22	\$0	\$0
3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed																
Room 141 - classroom		67.0	8	1,800	965	ESI-F-24LX-38W-RGBW-MC	38.0	8	30	1,260	383	1	\$0	\$67	\$0	\$0
3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed																
Room 141 - classroom		67.0	3	1,800	362	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	3	0	1,800	151	0	\$0	\$24	\$0	\$0
3L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed																
Room 141A		63.0	2	2,160	272	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0
3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed																
Room 142 - classroom		67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
4L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 8" Surface																
Server Room		85.0	1	250	21	ULT-448-12W-40K-DE	48.0	1	0	250	12	0	\$0	\$1	\$0	\$0
3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Standard Strip 8" Surface																
Room 143 - classroom		67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0

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Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Room 144	Lensed Troffer 2x4 Recessed															
	3L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	63.0	2	2,160	272	PHILLIPS-EVOKIT2X4-28W-40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0
Room 145 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
Door 15 vestibule	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	2	3,900	156	Do Nothing	20.0	2	0	3,900	156	0	\$0	\$0	\$0	\$0
Room 146 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
Boys Restroom	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4' Surface	43.0	3	1,800	232	ULT-248-12W-40K-DE	24.0	3	0	1,800	130	0	\$0	\$12	\$0	\$0
Boys Restroom	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	3	1,800	108	Do Nothing	20.0	3	0	1,800	108	0	\$0	\$0	\$0	\$0
Girls Restroom	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4' Surface	43.0	3	1,800	232	ULT-248-12W-40K-DE	24.0	3	0	1,800	130	0	\$0	\$12	\$0	\$0
Girls Restroom	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	3	1,800	108	Do Nothing	20.0	3	0	1,800	108	0	\$0	\$0	\$0	\$0
Room 147 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
Room 148 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/	67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0



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Area		Existing				Proposed Solution						Savings				
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Door 14 vestibule	Lensed Troffer 2x4 Recessed															
	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	2	3,900	156	Do Nothing	20.0	2	0	3,900	156	0	\$0	\$0	\$0	\$0
Room 149 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	12	2,160	1,737	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	12	0	2,160	726	0	\$0	\$116	\$0	\$0
Room 150 - classroom	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	43.0	15	3,900	2,516	PHILLIPS-EVOKIT2X4-25W-40K	25.0	15	0	3,900	1,463	0	\$0	\$121	\$0	\$0
	2L 7W CFN SGL TUBE 2PIN N-I [1x MAG ES]/ Decorative 9" Wall	14.0	2	3,900	109	GC-5.5W-PLS-40K-2L	11.0	2	0	3,900	86	0	\$0	\$3	\$0	\$0
C Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4" Surface	43.0	3	3,900	503	ULT-248-12W-40K-DE	24.0	3	0	3,900	281	0	\$0	\$26	\$0	\$0
	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	2	3,900	156	Do Nothing	20.0	2	0	3,900	156	0	\$0	\$0	\$0	\$0
Room 156 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	15	2,160	2,171	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	15	0	2,160	907	0	\$0	\$145	\$0	\$0
	3L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	63.0	1	2,160	136	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	1	0	2,160	60	0	\$0	\$9	\$0	\$0
Room 156B	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Wrap 4" Surface	43.0	1	2,160	93	LITHONIA-STL4-27W-40K	27.0	1	0	2,160	58	0	\$0	\$4	\$0	\$0

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Area		Existing				Proposed Solution						Savings				
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Room 156C	3L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	63.0	1	2,160	136	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	1	0	2,160	60	0	\$0	\$9	\$0	\$0
	1L 30W LED Linear Board [1x LED DRIVER]/ Standard Strip 4' Wall	30.0	1	250	8	Do Nothing	30.0	1	0	250	8	0	\$0	\$0	\$0	\$0
Boys Restroom	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4' Surface	43.0	4	1,800	310	ULT-248-12W-40K- DE	24.0	4	0	1,800	173	0	\$0	\$16	\$0	\$0
	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	3	1,800	108	Do Nothing	20.0	3	0	1,800	108	0	\$0	\$0	\$0	\$0
Boys showers	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES] / Recessed Can 13? Recessed	52.0	2	250	26	GC-9W-PLO-40K-2L	18.0	2	0	250	9	0	\$0	\$2	\$0	\$0
	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4' Surface	43.0	3	1,800	232	ULT-248-12W-40K- DE	24.0	3	0	1,800	130	0	\$0	\$12	\$0	\$0
Girls Restroom	1L 20W LED Array [1x LED DRIVER]/ Canopy 10" x 10" Surface	20.0	3	1,800	108	Do Nothing	20.0	3	0	1,800	108	0	\$0	\$0	\$0	\$0
	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES] / Recessed Can 13? Recessed	52.0	2	250	26	GC-9W-PLO-40K-2L	18.0	2	0	250	9	0	\$0	\$2	\$0	\$0
Room 157 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	15	2,160	2,171	PHILLIPS- EVOKIT2X4-28W- 40K-SD	28.0	15	0	2,160	907	0	\$0	\$145	\$0	\$0
	3L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	63.0	2	2,160	272	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0

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Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Room 157 -Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]/ Wrap 4' Surface	43.0	1	2,160	93	LITHONIA-STL4-27W-40K	27.0	1	0	2,160	58	0	\$0	\$4	\$0	\$0
Room 158 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	67.0	15	2,160	2,171	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	15	0	2,160	907	0	\$0	\$145	\$0	\$0
Room 158A	3L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	63.0	2	2,160	272	PHILLIPS-EVOKIT2X4-28W-40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0
Room 158 -Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]/ Wrap 4' Surface	43.0	1	2,160	93	LITHONIA-STL4-27W-40K	27.0	1	0	2,160	58	0	\$0	\$4	\$0	\$0
Room 160 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	67.0	17	2,160	2,460	PHILLIPS-EVOKIT2X4-28W-40K-SD	28.0	17	0	2,160	1,028	0	\$0	\$164	\$0	\$0
Room 160A	3L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	63.0	1	2,160	136	PHILLIPS-EVOKIT2X4-28W-40K-D	28.0	1	0	2,160	60	0	\$0	\$9	\$0	\$0
Room 160B	3L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	63.0	2	2,160	272	PHILLIPS-EVOKIT2X4-28W-40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0
Room 160 -Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]/ Wrap 4' Surface	43.0	1	2,160	93	LITHONIA-STL4-27W-40K	27.0	1	0	2,160	58	0	\$0	\$4	\$0	\$0
Room 160D	3L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	63.0	2	2,160	272	PHILLIPS-EVOKIT2X4-28W-40K-D	28.0	2	0	2,160	121	0	\$0	\$17	\$0	\$0
Room 160E	3L 25W LF4 T8 [1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed	63.0	1	2,160	136	PHILLIPS-EVOKIT2X4-28W-40K-D	28.0	1	0	2,160	60	0	\$0	\$9	\$0	\$0
Room 163A - Receiving	2L 25W LF4 T8 [1x ELE T8 IS NP]/	43.0	16	4,160	2,862	ULT-248-12W-40K-DE	24.0	16	0	4,160	1,597	0	\$0	\$145	\$0	\$0

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Area		Existing				Proposed Solution						Savings				
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Room 161B - Maintenance	Standard Strip 4' Chain/Cable															
	3L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	63.0	2	4,160	524	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	2	0	4,160	233	0	\$0	\$33	\$0	\$0
Room 163B - Boiler	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4' Chain/Cable	43.0	12	4,160	2,147	ULT-248-12W-40K-DE	24.0	12	0	4,160	1,198	0	\$0	\$109	\$0	\$0
	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Standard Strip 4' Surface	43.0	2	4,160	358	ULT-248-12W-40K-DE	24.0	2	0	4,160	200	0	\$0	\$18	\$0	\$0
Restroom	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Wrap 4' Surface	43.0	1	4,160	179	LITHONIA-STL4-27W-40K	27.0	1	0	4,160	112	0	\$0	\$8	\$0	\$0
	2L 15W LL4A T8 [1x ELE T8 IS NPI]/ Vaporlight 4' Surface	34.0	1	4,160	141	Do Nothing	34.0	1	0	4,160	141	0	\$0	\$0	\$0	\$0
Refrigerator	2L 15W LL4A T8 [1x ELE T8 IS NPI]/ Vaporlight 4' Surface	34.0	1	4,160	141	Do Nothing	34.0	1	0	4,160	141	0	\$0	\$0	\$0	\$0
	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	17	4,160	4,738	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	17	0	4,160	1,980	0	\$0	\$317	\$0	\$0
Room 162A	3L 25W LF4 T8 [2x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	67.0	3	4,160	836	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	3	0	4,160	349	0	\$0	\$56	\$0	\$0
	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Wrap 4' Surface	43.0	1	1,800	77	LITHONIA-STL4-27W-40K	27.0	1	0	1,800	49	0	\$0	\$3	\$0	\$0
Room 162E - Storage	2L 25W LF4 T8 [1x ELE T8 IS NPI]/ Lensed Troffer 2x4 Recessed	43.0	3	250	32	PHILIPS-EVOKIT2X4-28W-40K-D	28.0	3	0	250	21	0	\$0	\$1	\$0	\$0

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Area		Existing				Proposed Solution					Savings					
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Room 154 - cafeteria	3L 25W LF4 T8 [2x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	67.0	36	4,160	10,034	PHILLIPS- EVOKIT2X4-28W- 40K-SD	28.0	36	0	4,160	4,193	0	\$0	\$671	\$0	\$0
	3L 25W LF4 T8 [2x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	67.0	10	4,160	2,787	PHILLIPS- EVOKIT2X4-28W- 40K-SD	28.0	10	0	4,160	1,165	0	\$0	\$186	\$0	\$0
Room 159C - storage	3L 25W LF4 T8 [2x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	67.0	1	250	17	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	1	0	250	7	0	\$0	\$1	\$0	\$0
	3L 25W LF4 T8 [2x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	67.0	1	250	17	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	1	0	250	7	0	\$0	\$1	\$0	\$0
Room 159A - storage	3L 25W LF4 T8 [2x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	67.0	1	250	17	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	1	0	250	7	0	\$0	\$1	\$0	\$0
	3L 25W LF4 T8 [2x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	67.0	3	250	50	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	3	0	250	21	0	\$0	\$3	\$0	\$0
Music Room Hallway	3L 25W LF4 T8 [2x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	67.0	2	3,900	523	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	2	0	3,900	218	0	\$0	\$35	\$0	\$0
	3L 25W LF4 T8 [1x ELE T8 IS NPI/ Lensed Troffer 2x4 Surface	63.0	4	2,160	544	ESIK-24LT-F4N0-2S- 40-FR-D	30.0	4	0	2,160	259	0	\$0	\$33	\$0	\$0
Room 153B	3L 25W LF4 T8 [2x ELE T8 IS NPI/ Lensed Troffer 2x4 Recessed	67.0	2	2,160	289	PHILIPS- EVOKIT2X4-28W- 40K-D	28.0	2	0	2,160	121	0	\$0	\$19	\$0	\$0
	3L 25W LF4 T8 [1x ELE T8 IS NPI/ Lensed Troffer 2x4 Surface	63.0	15	2,160	2,041	ESIK-24LT-F4N6-2S- 40-FR-SD	36.0	15	0	2,160	1,166	0	\$0	\$100	\$0	\$0

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Area		Existing				Proposed Solution						Savings				
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Room 151B - Gym	6L 25W LF4 T8	126.0	12	3,120	4,717	LITHONIA-IBG-105W-50K-AFL-GND-RIO-WGX-DWH	105.0	12	30	2,184	2,752	1	\$0	\$226	\$0	\$0
	[2x ELE T8 IS NP]/ Highbay 1x8 Surface															
Room 151A - Gym	6L 25W LF4 T8	126.0	12	3,120	4,717	LITHONIA-IBG-105W-50K-AFL-GND-RIO-WGX-DWH	105.0	12	30	2,184	2,752	1	\$0	\$226	\$0	\$0
	[2x ELE T8 IS NP]/ Highbay 1x8 Surface															
Room 152 - gym office	3L 25W LF4 T8	67.0	3	1,800	362	PHILLIPS-EVOKIT2X4-28W-40K-D	28.0	3	0	1,800	151	0	\$0	\$24	\$0	\$0
	[2x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed															
Room 155A - gym storage	2L 25W LF4 T8	43.0	3	250	32	ULT-248-12W-40K-DE	24.0	3	0	250	18	0	\$0	\$2	\$0	\$0
	[1x ELE T8 IS NP]/ Standard Strip 4' Surface															
Room 155B - gym storage	2L 25W LF4 T8	43.0	3	250	32	ULT-248-12W-40K-DE	24.0	3	0	250	18	0	\$0	\$2	\$0	\$0
	[1x ELE T8 IS NP]/ Standard Strip 4' Surface															
Cafeteria hallway	2L 25W LF4 T8	43.0	5	3,900	839	PHILLIPS-EVOKIT2X4-25W-40K	25.0	5	0	3,900	488	0	\$0	\$40	\$0	\$0
	[1x ELE T8 DIM NP]/ Lensed Troffer 2x4 Recessed															
Cafeteria hallway	2L 25W LF4 T8	43.0	8	3,900	1,342	PHILLIPS-EVOKIT2X4-25W-40K	25.0	8	0	3,900	780	0	\$0	\$64	\$0	\$0
	[1x ELE T8 IS NP]/ Lensed Troffer 2x4 Recessed															
Cafeteria hallway	1L 40W LED	40.0	1	3,900	156	Do Nothing	40.0	1	0	3,900	156	0	\$0	\$0	\$0	\$0
	Linear Board [1x LED DRIVER]/ Lensed Troffer 2x2 Recessed															
Door 5 vestibule	1L 20W LED	20.0	1	3,900	78	Do Nothing	20.0	1	0	3,900	78	0	\$0	\$0	\$0	\$0
	Array [1x LED DRIVER]/ Canopy 10" x 10" Surface															
Oil storage	1L 23W CFS-M	23.0	2	250	12	GC-16.5W-A21-40K-1L	16.5	2	0	250	8	0	\$0	\$0	\$0	\$0
	Triple tube [0x Null]/ Jelly Jar Surface															
Burnside Elementary / Interior - Mezzanine																

ISD #256 Red Wing Public Schools  
Burnside Elementary - Fixture/Kit Option

Area		Existing				Proposed Solution							Savings			
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance
Room 200	2L 32W LF4 T8															
	[1x ELE T8 IS NP]/ Standard Strip 4' Surface	58.0	5	250	73	ULT-248-12W-40K- DE	24.0	5	0	250	30	0	\$0	\$5	\$0	\$0
Room 200A - crawl space	1L 60W INCS-M															
	A19 [0x NULL]/ Porcelain Socket Wall	60.0	1	250	15	GC-9W-A19-40K-1L	9.0	1	0	250	2	0	\$0	\$1	\$0	\$0
Room 201	2L 32W LF4 T8															
	[1x ELE T8 IS NP]/ Standard Strip 4' Surface	58.0	10	250	145	ULT-248-12W-40K- DE	24.0	10	0	250	60	0	\$0	\$10	\$0	\$0
Room 201A	2L 32W LF4 T8															
	[1x ELE T8 IS NP]/ Standard Strip 4' Surface	58.0	10	250	145	ULT-248-12W-40K- DE	24.0	10	0	250	60	0	\$0	\$10	\$0	\$0
Room 202	2L 32W LF4 T8															
	[1x ELE T8 IS NP]/ Standard Strip 4' Surface	58.0	5	250	73	ULT-248-12W-40K- DE	24.0	5	0	250	30	0	\$0	\$5	\$0	\$0
Room 200B - crawl space	1L 60W INCS-M															
	A19 [0x NULL]/ Porcelain Socket Wall	60.0	1	250	15	GC-9W-A19-40K-1L	9.0	1	0	250	2	0	\$0	\$1	\$0	\$0
Room 203	2L 32W LF4 T8															
	[1x ELE T8 IS NP]/ Standard Strip 4' Surface	58.0	7	250	102	ULT-248-12W-40K- DE	24.0	7	0	250	42	0	\$0	\$7	\$0	\$0
Totals			1240		199,614		1240				94,440		\$20,233	\$12,074	\$0	\$0

## Lighting Control Benefits



**Over 4% increase in energy savings!**



Lighting Only Savings		Lighting + Control Savings
\$232,548	<b>Project Cost</b>	\$235,500
\$11,644	<b>Energy Savings</b>	\$12,074
\$0	<b>Maintenance Savings</b>	\$0
\$0	<b>HVAC Savings</b>	\$0
\$20,233	<b>Rebates</b>	\$20,233
<b>18.2 yrs</b>	<b>Payback</b>	<b>17.8 yrs</b>

## 10 Year Savings Comparison

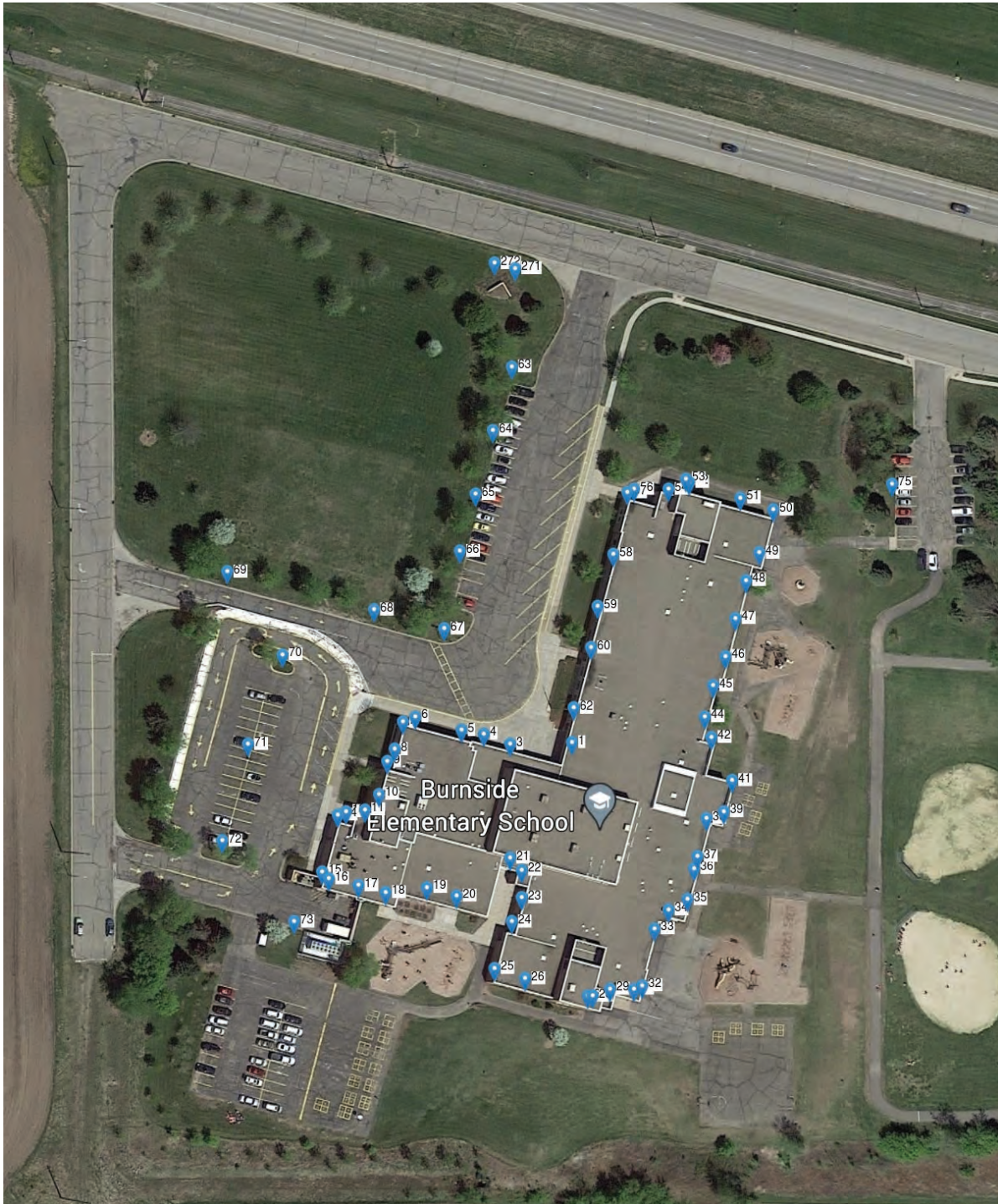


**\$6,855.00**  
Estimated 10 Year Opportunity Lost



## Area Floor Plan

### Burnside Elementary / Exterior



ID#	Room	Existing	Action	Existing Qty	Proposed	Proposed Qty	Control
2	Door 1	1L 12W LEDS-M A19 [0x NULL]	Relamp	14	KEYSTONE-9.5W-A19-50K-1L	14	
3	Door 2	1L 12W LEDS-M A19 [0x NULL]	Relamp	2	KEYSTONE-9.5W-A19-50K-1L	2	
4	Door 3	1L 12W LEDS-M A19 [0x NULL]	Relamp	2	KEYSTONE-9.5W-A19-50K-1L	2	
5	WP 1	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
6	WP 2	1L 22W LEDS-M COB [0x edit	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
7	WP 3	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
8	WP 4	1L 22W LEDS-M COB [0x edit	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
9	WP 5	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
10	WP 6	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
11	Door 5	1L 70W HPS MED BASE HID [1x MAG]	Retrofit	1	LITHONIA-LBR6-13W-50K-MWD-MVOLT-UGZ-AT-WL	1	
12	Door 5	1L 12W LEDS-M A19 [0x NULL]	Relamp	3	KEYSTONE-9.5W-A19-50K-1L	3	
13	WP 7	1L 22W LEDS-M COB [0x edit	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
14	WP 8	1L 22W LEDS-M COB [0x edit	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
15	WP 9	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
16	WP 10	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
17	WP 11	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
18	WP 12	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
19	WP 13	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
20	WP 14	1L 22W LEDS-M COB [0x edit	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
21	WP 15	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
22	Door 13	1L 70W HPS MED BASE HID [1x MAG]	Retrofit	1	LITHONIA-LBR6-13W-50K-MWD-MVOLT-UGZ-AT-WL	1	
23	WP 16	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
24	WP 17	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
25	WP 18	1L 22W LEDS-M COB [0x edit	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
26	WP 19	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
27	WP 20	1L 22W LEDS-M COB [0x edit	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
28	WP 21	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1	
29	Door 15	1L 70W HPS MED BASE HID [1x MAG]	Retrofit	1	LITHONIA-LBR6-13W-50K-MWD-MVOLT-UGZ-AT-WL	1	
30	Door 15	1L 12W LEDS-M A19 [0x NULL]	Relamp	3	KEYSTONE-9.5W-A19-50K-1L	3	

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31	WP 22	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
32	WP 23	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
33	WP 24	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
34	WP 25	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
35	WP 26	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
36	Door 17	1L 70W HPS MED BASE HID [1x MAG]	Retrofit	1	LITHONIA-LBR6-13W-50K-MWD-MVOLT- UGZ-AT-WL	1
37	WP 27	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
38	WP 28	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
39	WP 29	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
40	WP 29	1L 12W LEDS-M A19 [0x NULL]	Relamp	2	KEYSTONE-9.5W-A19-50K-1L	2
41	WP 30	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
42	WP 31	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
43	WP 31	1L 12W LEDS-M A19 [0x NULL]	Relamp	2	KEYSTONE-9.5W-A19-50K-1L	2
44	WP 32	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
45	WP 33	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
46	WP 34	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
47	WP 35	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
48	WP 36	1L 100W HPS MED BASE HID [1x MAG]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
49	Door 20	1L 70W HPS MED BASE HID [1x MAG]	Retrofit	1	LITHONIA-LBR6-13W-50K-MWD-MVOLT- UGZ-AT-WL	1
51	WP 37	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
52	WP 38	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
53	WP 39	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
54	Door 21	1L 70W HPS MED BASE HID [1x MAG]	Retrofit	1	LITHONIA-LBR6-13W-50K-MWD-MVOLT- UGZ-AT-WL	1
55	Door 21	1L 12W LEDS-M A19 [0x NULL]	Relamp	3	KEYSTONE-9.5W-A19-50K-1L	3
56	WP 40	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
57	WP 41	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
58	WP 42	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
59	WP 43	1L 22W LEDS-M COB [0x edit]	Replace	1	CREE-XSPW-40W-50K-T4-DB	1
60	Door 22	1L 70W HPS MED BASE HID [1x MAG]	Retrofit	1	LITHONIA-LBR6-13W-50K-MWD-MVOLT- UGZ-AT-WL	1
61	Door 22	1L 12W LEDS-M A19 [0x NULL]	Relamp	10	KEYSTONE-9.5W-A19-50K-1L	10
63	Pole 1	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1	LITHONIA-RSX2-187W-50K-R4-MVOLT- SPA-DDBXD	1
64	Pole 2	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1	LITHONIA-RSX2-187W-50K-R4-MVOLT- SPA-DDBXD	1

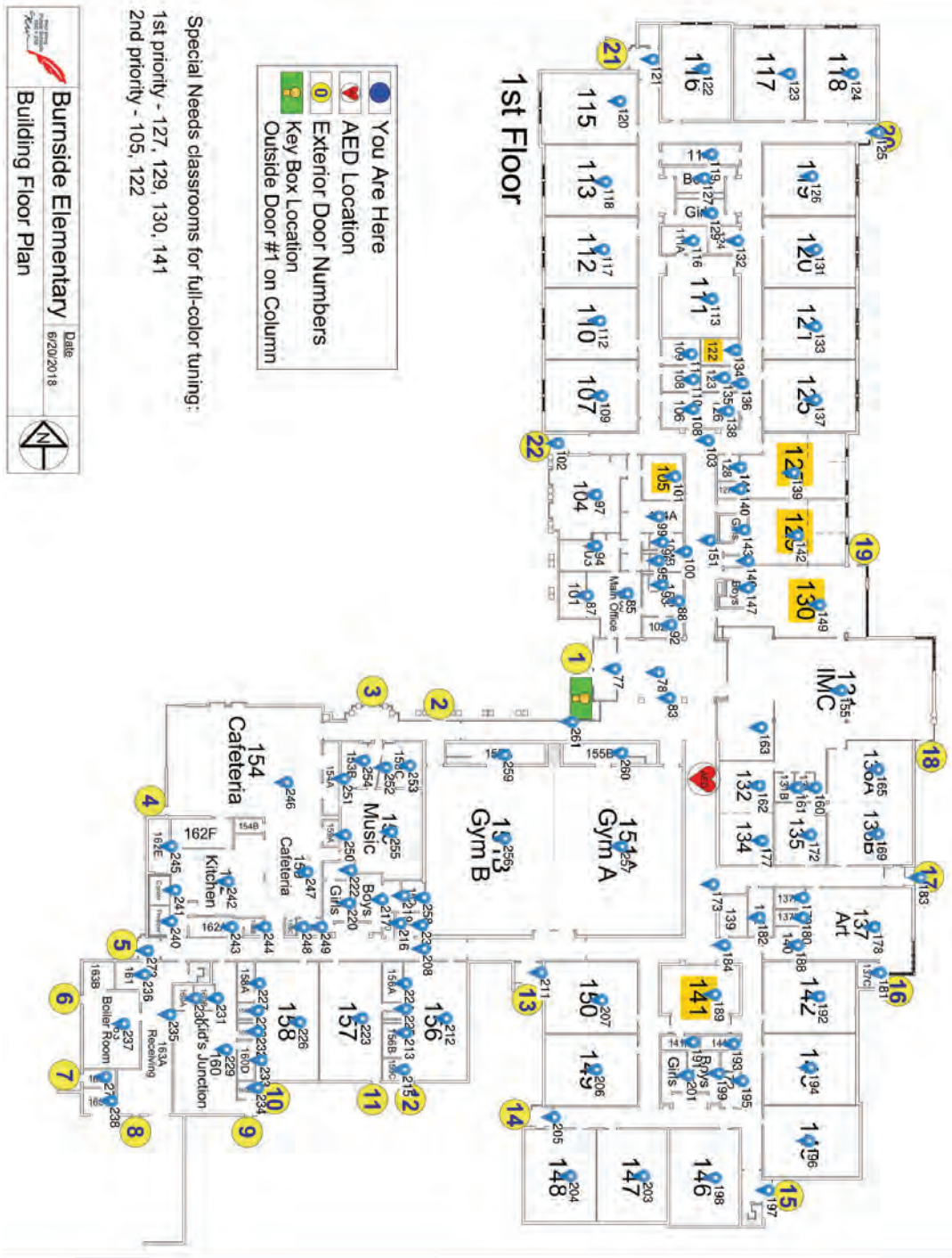
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65	Pole 3	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1	LITHONIA-RSX2-187W-50K-R4-MVOLT- SPA-DDBXD	1
66	Pole 4	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1	LITHONIA-RSX2-187W-50K-R4-MVOLT- SPA-DDBXD	1
67	Pole 5	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1	LITHONIA-RSX2-210W-50K-R5-MVOLT- SPA-DDBXD	1
67	Pole 5	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1		1
68	Pole 6	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1	LITHONIA-RSX2-147W-50K-R2-MVOLT- SPA-DDBXD	1
69	Pole 7	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1	LITHONIA-RSX2-147W-50K-R2-MVOLT- SPA-DDBXD	1
70	Pole 8	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1	LITHONIA-RSX2-210W-50K-R5-MVOLT- SPA-DDBXD	1
70	Pole 8	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1		1
71	Pole 9	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1	LITHONIA-RSX2-210W-50K-R5-MVOLT- SPA-DDBXD	1
71	Pole 9	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1		1
72	Pole 10	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1	LITHONIA-RSX2-210W-50K-R5-MVOLT- SPA-DDBXD	1
72	Pole 10	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1		1
73	Pole 11	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1	LITHONIA-RSX2-187W-50K-R4-MVOLT- SPA-DDBXD	1
75	Pole 12	1L 400W HPS MOG BASE HID [1x MAG]	Replace	1	LITHONIA-RSX2-187W-50K-R4-MVOLT- SPA-DDBXD	1



## Burnside Elementary / Interior



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ID#	Room	Existing	Action	Existing Qty	Proposed	Proposed Qty	Control
78	Lobby	2L 25W LF4 T8 [1x ELE T8 DIM NP]	Retrofit	3	PHILLIPS-EVOKIT2X4-25W-40K	3	
79	Lobby	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	7	PHILLIPS-EVOKIT2X4-25W-40K	7	
81	Lobby	2L 25W LF4 T8 [1x ELE T8 DIM NP]	Retrofit	17	ULT-248-12W-40K-DE	17	
83	Trophy Case	2L 25W LF4 T8 [1x ELE T8 DIM NP]	Retrofit	4	ULT-248-12W-40K-DE	4	
85	Room 100 - Main Office	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	6	PHILIPS-EVOKIT2X4-28W-40K-D	6	
87	Room 101 - Principals Office	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	4	PHILIPS-EVOKIT2X4-28W-40K-D	4	
88	Room 102 - Health Services	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	1	PHILIPS-EVOKIT2X4-28W-40K-D	1	
89	Room 102 - Health Services	2L 60W INCS-M A19 [0x NULL]	Relamp	2	GC-9W-A19-40K-2L	2	
90	Room 102 - Health Services	2L 13W CFS-M SPIRAL [0x NULL]	Relamp	1	GC-9W-A19-40K-2L	1	
92	Room 102A - health services office	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
93	Health Services Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	LITHONIA-STL4-27W-40K	1	
94	Room 103	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	4	PHILIPS-EVOKIT2X4-28W-40K-D	4	
95	Restroom 1	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	LITHONIA-STL4-27W-40K	1	
96	Restroom 2	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	LITHONIA-STL4-27W-40K	1	
97	Room 104 - breakroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	4	PHILIPS-EVOKIT2X4-28W-40K-D	4	
99	Room 104A - copy room	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	9	PHILIPS-EVOKIT2x4-19W-40K-HE	9	
100	Room 104B - Server Room	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
101	Room 105 - Wellness Room	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	4	ESI-F-24LX-38W-RGBW-MC	4	ENOCEAN-ESRPB-W
103	A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	35	PHILLIPS-EVOKIT2X4-25W-40K	35	
104	A Wing Hallway B	2L 7W CFN SGL TUBE 2PIN N-1 [1x MAG ES]	Do Nothing	4	GC-5.5W-PLS-40K-2L	4	
105	A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	3	ULT-248-12W-40K-DE	3	
106	A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	3	ULT-248-12W-40K-DE	3	
107	A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	6	ULT-248-12W-40K-DE	6	
108	Room 106 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
109	Room 107 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
110	Room 108 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	ULT-348-12W-40K-DE	2	
111	Room 109 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	ULT-348-12W-40K-DE	2	
112	Room 110 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
113	Room 111 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
114	Room 111 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	3	PHILIPS-EVOKIT2X4-28W-40K-D	3	
115	Room 111 - classroom	1L 150W INCS-M PAR38 [0x NULL]	Relamp	6	GC-17W-PAR38-40K-1L-277V	6	
116	Room 111A	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
117	Room 112 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
118	Room 113 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
119	Room 114 - Supplies	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	3	PHILIPS-EVOKIT2X4-28W-40K-D	3	

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120	Room 115 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
122	Room 116 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
123	Room 117 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
124	Room 118 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
126	Room 119 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
127	Boys Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	4	ULT-248-12W-40K-DE	4	
129	Girls Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	4	ULT-248-12W-40K-DE	4	
131	Room 120 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
132	Room 124	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	ULT-248-12W-40K-DE	1	
133	Room 121 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
134	Room 122 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	ESI-F-24LX-38W-RGBW-MC	2	ENOCEAN-ESRPB-W
135	Room 123 - student services	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
136	Room 124	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES]	Retrofit	1	GC-9W-PLO-40K-2L	1	
137	Room 125 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
138	Room 126 - Conference Room	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
139	Room 127 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	14	ESI-F-24LX-38W-RGBW-MC	14	ENOCEAN-ESRPB-W
140	Room 127A	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
141	Room 128	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
142	Room 129 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	14	ESI-F-24LX-38W-RGBW-MC	14	ENOCEAN-ESRPB-W
143	Women?s Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	ULT-248-12W-40K-DE	2	
147	Mens Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	ULT-248-12W-40K-DE	2	
149	Room 130 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	16	ESI-F-24LX-38W-RGBW-MC	16	ENOCEAN-ESRPB-W
150	Room 130 - classroom	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES]	Retrofit	1	LITHONIA-LBR8-9W-40K-MWD-MVOLT-UGZ	1	
151	A Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	7	PHILLIPS-EVOKIT2X4-25W-40K	7	
153	A Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	14	ULT-248-12W-40K-DE	14	
154	A Wing Hallway A	2L 25W LF3 T8 [1x ELE T8 IS NP]	Retrofit	2	ULT-236-12W-40-DE	2	
155	Media Center	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	31	PHILIPS-EVOKIT2X4-28W-40K-D	31	
157	Media Center	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	4	ULT-248-12W-40K-DE	4	
158	Media Center	2L 25W LF3 T8 [1x ELE T8 IS NP]	Retrofit	2	ULT-236-12W-40-DE	2	
159	Media Center	2L 17W LF2 T8 [1x ELE T8 IS NP]	Retrofit	1	ULT-224-9W-40K-DE	1	
160	Room 131A - Media Center Office	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
161	Room 131B - Copy Room	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
162	Room 132	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	6	PHILIPS-EVOKIT2X4-28W-40K-D	6	
163	Room 132A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	4	PHILIPS-EVOKIT2X4-28W-40K-D	4	
165	Room 133	10L 25W LF4 T8 [3x ELE T8 IS NP]	Retrofit	1	Lithonia-LBK 4FT 1 3000 40K (5)	1	
167	Room 133	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	Lithonia-LBK 4FT 1 3000 40K	2	
168	Room 133	2L 25W LF3 T8 [1x ELE T8 IS NP]	Retrofit	5	Lithonia-LBK 3FT 1 2000 40K	5	

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169	Room 136	10L 25W LF4 T8 [3x ELE T8 IS NP]	Retrofit	1	Lithonia-LBK 4FT 1 3000 40K (5)	1	
170	Room 136	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	15	Lithonia-LBK 4FT 1 3000 40K	15	
171	Room 136	2L 25W LF3 T8 [1x ELE T8 IS NP]	Retrofit	5	Lithonia-LBK 3FT 1 2000 40K	5	
172	Room 135	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	5	PHILIPS-EVOKIT2X4-28W-40K-D	5	
173	B Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	7	PHILLIPS-EVOKIT2X4-25W-40K	7	
175	B Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	16	ULT-248-12W-40K-DE	16	
176	B Wing Hallway A	2L 25W LF3 T8 [1x ELE T8 IS NP]	Retrofit	1	ULT-236-12W-40-DE	1	
177	Room 134 - Classroom	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	6	PHILIPS-EVOKIT2X4-28W-40K-D	6	
178	Room 137 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	15	PHILLIPS-EVOKIT2X4-28W-40K-SD	15	
179	Room 137A	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
180	Room 137B	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
181	Room 137C	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
182	Room 138/139 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	5	PHILIPS-EVOKIT2X4-28W-40K-D	5	
184	B Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	26	PHILLIPS-EVOKIT2X4-25W-40K	26	
185	B Wing Hallway B	2L 7W CFN SGL TUBE 2PIN N-I [1x MAG ES]	Relamp	2	GC-5.5W-PLS-40K-2L	2	
186	B Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	5	ULT-248-12W-40K-DE	5	
187	B Wing Hallway B	2L 25W LF3 T8 [1x ELE T8 IS NP]	Retrofit	2	ULT-236-12W-40-DE	2	
188	Room 140	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	3	PHILIPS-EVOKIT2X4-28W-40K-D	3	
189	Room 141 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	8	ESI-F-24LX-38W-RGBW-MC	8	ENOCEAN-ESRPB-W
190	Room 141 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	3	PHILIPS-EVOKIT2X4-28W-40K-D	3	
191	Room 141A	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
192	Room 142 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
193	Server Room	4L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	ULT-448-12W-40K-DE	1	
194	Room 143 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
195	Room 144	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
196	Room 145 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
198	Room 146 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
199	Boys Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	3	ULT-248-12W-40K-DE	3	
201	Girls Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	3	ULT-248-12W-40K-DE	3	
203	Room 147 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
204	Room 148 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
206	Room 149 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
207	Room 150 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	PHILLIPS-EVOKIT2X4-28W-40K-SD	12	
208	C Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	15	PHILLIPS-EVOKIT2X4-25W-40K	15	
209	C Wing Hallway A	2L 7W CFN SGL TUBE 2PIN N-I [1x MAG ES]	Relamp	2	GC-5.5W-PLS-40K-2L	2	
210	C Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	3	ULT-248-12W-40K-DE	3	
212	Room 156 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	15	PHILLIPS-EVOKIT2X4-28W-40K-SD	15	



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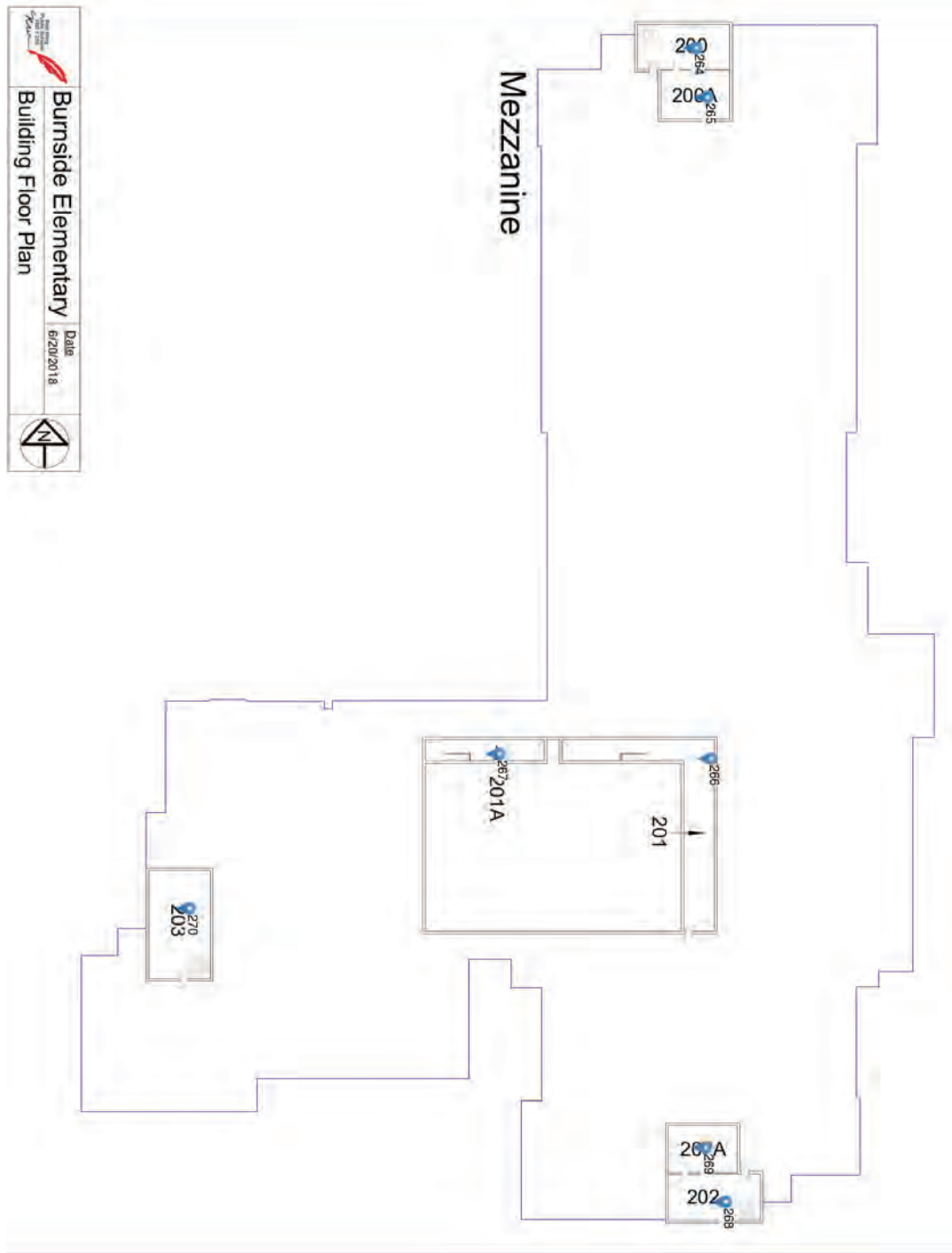
213	Room 156B	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	PHILIPS-EVOKIT2X4-28W-40K-D	1
214	Room 156B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	LITHONIA-STL4-27W-40K	1
215	Room 156C	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	PHILIPS-EVOKIT2X4-28W-40K-D	1
217	Boys Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	4	ULT-248-12W-40K-DE	4
219	Boys showers	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES]	Retrofit	2	GC-9W-PLO-40K-2L	2
220	Girls Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	3	ULT-248-12W-40K-DE	3
222	Girls Showers	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES]	Retrofit	2	GC-9W-PLO-40K-2L	2
223	Room 157 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	15	PHILLIPS-EVOKIT2X4-28W-40K-SD	15
224	Room 157A	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2
225	Room 157 -Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	LITHONIA-STL4-27W-40K	1
226	Room 158 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	15	PHILLIPS-EVOKIT2X4-28W-40K-SD	15
227	Room 158A	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2
228	Room 158 -Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	LITHONIA-STL4-27W-40K	1
229	Room 160 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	17	PHILLIPS-EVOKIT2X4-28W-40K-SD	17
230	Room 160A	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	PHILIPS-EVOKIT2X4-28W-40K-D	1
231	Room 160B	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2
232	Room 160 -Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	LITHONIA-STL4-27W-40K	1
233	Room 160D	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2
234	Room 160E	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	PHILIPS-EVOKIT2X4-28W-40K-D	1
235	Room 163A - Receiving	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	16	ULT-248-12W-40K-DE	16
236	Room 161B - Maintenance	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2
237	Room 163B - Boiler	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	12	ULT-248-12W-40K-DE	12
238	Room 163C - Garage	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	2	ULT-248-12W-40K-DE	2
239	Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	LITHONIA-STL4-27W-40K	1
240	Freezer	2L 15W LL4A T8 [1x ELE T8 IS NP]	Do Nothing	1	LITHONIA-FEM-24W-40K-LPPFL-STSL	1
241	Refrigerator	2L 15W LL4A T8 [1x ELE T8 IS NP]	Do Nothing	1	LITHONIA-FEM-24W-40K-LPPFL-STSL	1
242	Room 162 - Kitchen	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	17	PHILIPS-EVOKIT2X4-28W-40K-D	17
243	Room 162A	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	3	PHILIPS-EVOKIT2X4-28W-40K-D	3
244	Room 162B - Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	1	LITHONIA-STL4-27W-40K	1
245	Room 162E - Storage	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	3	PHILIPS-EVOKIT2X4-28W-40K-D	3
246	Room 154 - cafeteria	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	36	PHILLIPS-EVOKIT2X4-28W-40K-SD	36
247	Room 159 - cafeteria	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	10	PHILLIPS-EVOKIT2X4-28W-40K-SD	10
248	Room 159C - storage	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	1	PHILIPS-EVOKIT2X4-28W-40K-D	1
249	Room 159B - storage	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	1	PHILIPS-EVOKIT2X4-28W-40K-D	1
250	Room 159A - storage	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	1	PHILIPS-EVOKIT2X4-28W-40K-D	1
251	Room 154A - storage	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	3	PHILIPS-EVOKIT2X4-28W-40K-D	3
252	Music Room Hallway	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2

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253	Room 153C - Music Room Storage	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	4	ESI-K-24LT-F4N0-2S-40-FR-D	4	
254	Room 153B	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	2	PHILIPS-EVOKIT2X4-28W-40K-D	2	
255	Room 153 - Music Room	3L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	15	ESI-K-24LT-F4N6-2S-40-FR-SD	15	
256	Room 151B - Gym	6L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	LITHONIA-IBG-105W-50K-AFL-GND-RIO-WGX-DWH	12	NLIGHT- (1) RPODB-2S-DX-WH-G2 (1) 3G WP WH (2) SB
257	Room 151A - Gym	6L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	12	LITHONIA-IBG-105W-50K-AFL-GND-RIO-WGX-DWH	12	NLIGHT- (1) RPODB-2S-DX-WH-G2 (1) 3G WP WH (2) SB
258	Room 152 - gym office	3L 25W LF4 T8 [2x ELE T8 IS NP]	Retrofit	3	PHILIPS-EVOKIT2X4-28W-40K-D	3	
259	Room 155A - gym storage	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	3	ULT-248-12W-40K-DE	3	
260	Room 155B - gym storage	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	3	ULT-248-12W-40K-DE	3	
261	Cafeteria hallway	2L 25W LF4 T8 [1x ELE T8 DIM NP]	Retrofit	5	PHILLIPS-EVOKIT2X4-25W-40K	5	
262	Cafeteria hallway	2L 25W LF4 T8 [1x ELE T8 IS NP]	Retrofit	8	PHILLIPS-EVOKIT2X4-25W-40K	8	
263	Cafeteria hallway	1L 40W LED Linear Board [1x LED DRIVER]	Do Nothing	1	PHILIPS-EVOKIT2X2-22W-40K-D	1	
274	Oil storage	1L 23W CFS-M Triple tube [0x Null	Relamp	2	GC-16.5W-A21-40K-1L	2	


## Burnside Elementary / Interior - Mezzanine



ID#	Room	Existing	Action	Existing Qty	Proposed	Proposed Qty	Control
264	Room 200	2L 32W LF4 T8 [1x ELE T8 IS NP]	Retrofit	5	ULT-248-12W-40K-DE	5	
265	Room 200A - crawl space	1L 60W INCS-M A19 [0x NULL]	Relamp	1	GC-9W-A19-40K-1L	1	
266	Room 201	2L 32W LF4 T8 [1x ELE T8 IS NP]	Retrofit	10	ULT-248-12W-40K-DE	10	
267	Room 201A	2L 32W LF4 T8 [1x ELE T8 IS NP]	Retrofit	10	ULT-248-12W-40K-DE	10	
268	Room 202	2L 32W LF4 T8 [1x ELE T8 IS NP]	Retrofit	5	ULT-248-12W-40K-DE	5	
269	Room 200B - crawl space	1L 60W INCS-M A19 [0x NULL]	Relamp	1	GC-9W-A19-40K-1L	1	
270	Room 203	2L 32W LF4 T8 [1x ELE T8 IS NP]	Retrofit	7	ULT-248-12W-40K-DE	7	

PREPARED FOR:		QUOTED BY:	
ACCOUNT	ISD #256 Red Wing Public Schools	TRC REP	Jake Andrist
ADDRESS	2451 Eagle Ridge Dr. Red Wing, MN 55066	EMAIL	<a href="mailto:jandrist@retrofitcompanies.com">jandrist@retrofitcompanies.com</a>
ATTN	Alan Gaynor	PHONE	(507) 363-0656
	avgaylor@rwps.org	<b>The Retrofit Companies, Inc.</b> <i>dba Retrofit Lighting and Design</i> 1010 Hoffman Drive Suite A Owatonna, MN 55060 RETROFITCOMPANIES.COM	
DATE	09/07/2021		

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QTY	DESCRIPTION	UNIT PRICE	TOTAL
1121	Implement Customized Energy-Efficient Lighting Solutions utilizing the Cooperative Purchasing Connection (CPC) Contract: <b>#20.6 - RLD - Lighting Audit and Solutions</b>  Rebate payable to: <span style="color: red;">Estimated Xcel Energy (CEE-One Stop) Rebate*</span> The Retrofit Companies, Inc. <span style="color: red;">\$20,232.61</span>		\$235,500.00
* For all instances of PCB containing ballasts, generator must obtain EPA ID number and complete profile/manifest paperwork to ensure proper off-site disposal upon completion of the project. <b>** Visa &amp; MasterCard are accepted and will be charged 3% for processing</b>			

This proposal is valid for 30 days\*

\*Pricing is subject to change

Signature \_\_\_\_\_  
 Title \_\_\_\_\_  
 Date \_\_\_\_\_

Subtotal	<b>\$215,267.39</b>
Shipping & Handling	<b>Included</b>
Taxes	n/a
<b>TOTAL</b>	<b>\$215,267.39</b>

1.5% FINANCE CHARGE APPLIED TO ALL PAST  
DUE ACCOUNTS

Proposal Acknowledgement:

Your signature above, or PO for this proposal, indicates you have read and agree to the Terms and Conditions and Warranty information provided in the proposal.

Any changes in the above specifications shall be made in writing, and as evidence of agreement, shall be signed by both parties. TRC shall not be held responsible or liable for any loss, damage or delay due to causes beyond his control. If the purchaser disposes of the property by sale or otherwise before this contract has been

# Terms and Conditions

**Payment Terms:** A down payment of 50% of the gross project value is due prior to project materials being ordered. The remaining balance is due upon project completion.

**Incentives:** The rebate figure provided is merely an estimate. Utilities reserve the right to adjust their rebate programs at any time, thus The Retrofit Companies, Inc. (TRC) will not be liable for unforeseen adjustments to rebate programs and amounts.

**Schedule Contingencies:** Conditions or events beyond the control of TRC may jeopardize the proposed performance schedules. TRC shall not be responsible for delays in delivery beyond TRC's control. Examples of conditions or events beyond TRC's control include inability to access client's facility, extreme weather conditions, or force majeure.

**Cancellation:** Customer may choose to cancel prior to material shipment without additional restocking charge(s). Material orders that have been manufactured and/or shipped cannot be canceled and returned. All order cancellations must be in writing. All costs for warehousing and freight on orders canceled after shipment and/or refused at destination will be charged to the customer.

**Maintenance of Material:** Customer acknowledges and agrees that customer shall operate and maintain the material in accordance with the manufacturer's recommendations.

**Publicity of Customer Participation:** The customer grants TRC the right to use and reference, for promotional purposes, the customer's partnership with TRC.

**Indemnification and Limitation of Company's Liability:** Customer shall indemnify, defend and hold harmless TRC, its affiliates and their respective contractors, officers, directors, employees, agents, representatives from and against any and all claims, damages, losses and expenses, including reasonable attorneys' fees and costs incurred to enforce this indemnity, arising out of, resulting from, or related to the project or the performance of any services or other work in connection with the project's ("Damages"), caused or alleged to be caused in whole or in part by any actual or alleged act or omission of the customer, any subcontractor, agent, or third party, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. To the fullest extent allowed by law, TRC's aggregate liability, regardless of the number of claims, shall be limited to paying approved incentives in accordance with these Terms and Conditions. TRC and its affiliates and their respective contractors, officers, directors, employees, agents, representatives shall not be liable to the customer or any other party for any other obligation. To the fullest extent allowed by law and as part of the consideration for participation in the project, the customer waives and releases TRC and its affiliates from all obligation, and for any liability or claim associated with the material, the performance of the material, or these Terms and Conditions.

**Contractor Selection:** Customer acknowledges that TRC reserves the right to select a vendor or contractor to install the materials and equipment at the customer's facility.

**Removal of Equipment:** The customer agrees to allow TRC to properly remove and dispose of, or recycle, the equipment, lamps and components in accordance with all applicable laws, and regulations and codes. The customer agrees not to re-install any of removed equipment. Customer may be responsible for securing an EPA ID #, if they don't currently have one, in the instance of PCB ballast being found on-site.

**Energy Benefits:** Other than the energy cost savings projected to the customer, TRC is not held liable for unforeseen factors that could alter the projected savings outlined in this proposal.

**ASHRAE or IECC Energy Codes:** Unless explicitly stated otherwise on the quote page, all lighting projects developed by TRC do not comply with the ASHRAE or IECC energy codes. Adjustments to project pricing resulting from adhering to these codes, should the project be flagged during the electrical permitting process, are the sole responsibility of the customer.

## PLEASE TAKE NOTICE:

(A) ANY PERSON OR COMPANY SUPPLYING LABOR OR MATERIALS FOR THIS IMPROVEMENT TO YOUR PROPERTY MAY FILE A LIEN AGAINST YOUR PROPERTY IF THAT PERSON OR COMPANY IS NOT PAID FOR THE CONTRIBUTIONS

(B) UNDER MINNESOTA LAW YOU HAVE THE RIGHT TO PAY PERSONS WHO SUPPLIED LABOR OR MATERIALS FOR THIS AMOUNT FROM OUR CONTRACT PRICE, OR WITHHOLD THE AMOUNTS DUE THEM FROM US UNTIL 120 DAYS AFTER COMPLETION OF THE IMPROVEMENT UNLESS WE GIVE YOU A LIEN WAIVER SIGNED BY PERSONS WHO SUPPLIED ANY LABOR OR MATERIAL FOR THE IMPROVEMENT AND WHO GAVE YOU TIMELY NOTICE.

(C) IF AT ANY TIME DURING INSTALLATION OR INSPECTION IT IS FOUND THAT THE FACILITY'S EXISTING ELECTRICAL DOES NOT MEET CURRENT CODE, THE RETROFIT COMPANIES, INC. IS NOT RESPONSIBLE FOR THE WORK REQUIRED TO BRING

# Warranty

The Retrofit Companies, Inc. (TRC) warrants that its labor for all Turn-Key Retrofit projects is consistent with applicable industry standards. If you believe that TRC's labor did not comply with this warranty, then for a period of 30 days, TRC will have its laborers work with you to cure any alleged deficiencies in the labor performed pursuant to the parties' agreement. This limited warranty period starts upon substantial completion.

TRC's limited warranty is strictly limited, and only applies, to TRC's labor provided on the project. You understand that TRC's warranty does not cover, and TRC does not have any responsibility for, the design, manufacture, operation, maintenance, or performance of the products and equipment used in your project. The applicable manufacturers' warranties are owned by you, and you may pursue any warranty-related claims for the products with the manufacturers. Your TRC representative can, and will, help coordinate your warranty claims with the manufacturer as needed.

## WHAT IS NOT INCLUDED IN THE WARRANTY

### Labor and Equipment

TRC will leave your facility with lights and equipment in full working order. If products should fail, TRC will assist you in making a warranty claim to the manufacturer, free of charge. At your option, TRC will offer repair at our hourly rate, or offer to ship product to you for your own installation. If lifts or other specialty equipment is required to access the defective product, those fees will also be charged at the time of service.

### Shipping and Delivery

TRC will invoice for shipping fees associated with return & delivery of replacement products.

## LIMITATION OF DAMAGES

Regardless of the type of claim or damages, you agree that TRC's aggregate liability for all claims will not exceed the fee paid for our labor services or \$25,000, whichever is greater. If you are unwilling to accept this allocation of risk, we will increase our aggregate liability to \$50,000 provided that, within 10 days of the date of our Agreement, you provide payment in an amount that will increase our fees by 10%, but not less than \$500, to compensate us for the greater risk undertaken. This increased fee is not the purchase of insurance.

## WARRANTY LIMITATIONS

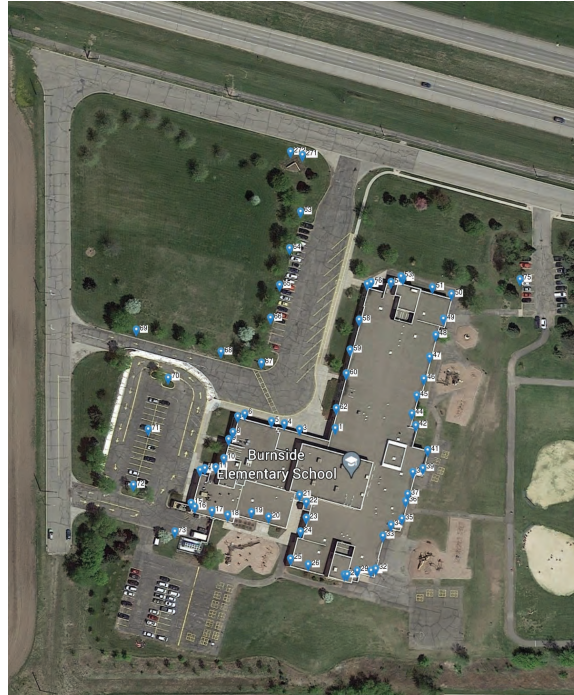
THIS LIMITED WARRANTY CONSTITUTES THE SOLE WARRANTY MADE BY TRC, AND REPLACES ALL OTHER ORAL OR WRITTEN WARRANTIES, LIABILITIES OR OBLIGATIONS OF TRC. THE OBLIGATIONS CONTAINED IN THIS LIMITED WARRANTY CONSTITUTE THE EXCLUSIVE REMEDY AND ARE EXPRESSLY PROVIDED IN LIEU OF, AND REPLACE, ANY AND ALL OTHER OBLIGATIONS, GUARANTEES, AND WARRANTIES. THIS LIMITED WARRANTY IS NON-TRANSFERABLE AND THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED WHICH EXTEND BEYOND THE FACE HEREOF, HEREIN, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED. TRC'S OBLIGATIONS, RESPONSIBILITIES AND/OR LIABILITY SHALL BE LIMITED AS STATED ABOVE.

IN NO EVENT SHALL TRC BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING ECONOMIC LOSS AND DAMAGE TO ANY PERSONS OR PROPERTY.



# Area Scope of Work

## Exterior



Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
1	Door 1	1L 20W LED COB [1x LED DRIVER] / Recessed Can 6" Can Recessed		Do Nothing			9			2	-
2	Door 1	1L 12W LEDS-M A19 [0x NULL] / Wall Mount * Wall		Relamp	KEYSTONE-9.5W-A19-50K-1L		7	Relamp Fixture Using (1) 9.5W LED A19 E26 5000K Dimmable - 60W Halogen Equivalent	KT-LED9.5A19-O-850 (MFG: KEY) (Qty:1)	14	
3	Door 2	1L 12W LEDS-M A19 [0x NULL] / Wall Mount * Wall		Relamp	KEYSTONE-9.5W-A19-50K-1L		7	Relamp Fixture Using (1) 9.5W LED A19 E26 5000K Dimmable - 60W Halogen Equivalent	KT-LED9.5A19-O-850 (MFG: KEY) (Qty:1)	2	
4	Door 3	1L 12W LEDS-M A19 [0x NULL] / Wall Mount * Wall		Relamp	KEYSTONE-9.5W-A19-50K-1L		7	Relamp Fixture Using (1) 9.5W LED A19 E26 5000K Dimmable - 60W Halogen Equivalent	KT-LED9.5A19-O-850 (MFG: KEY) (Qty:1)	2	
5	WP 1	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
6	WP 2	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
7	WP 3	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
8	WP 4	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
9	WP 5	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
10	WP 6	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
11	Door 5	1L 70W HPS MED BASE HID [1x MAG] / Recessed Can 6" Can Recessed		Retrofit	LITHONIA-LBR6-13W-50K-MWD-MVOLT-UGZ-AT-WL		9	13W LBR6 6" Recessed Can, 1454 nominal lumens 5000K Air Tight, Wet Rated.	LBR6 10LM 50K AR LSS MWD MVOLT UGZ AT WL (MFG: LITH) (Qty:1)	1	
12	Door 5	1L 12W LEDS-M A19 [0x NULL] / Wall Mount * Wall		Relamp	KEYSTONE-9.5W-A19-50K-1L		7	Relamp Fixture Using (1) 9.5W LED A19 E26 5000K Dimmable - 60W Halogen Equivalent	KT-LED9.5A19-O-850 (MFG: KEY) (Qty:1)	3	





Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
13	WP 7	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
14	WP 8	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
15	WP 9	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
16	WP 10	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
17	WP 11	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
18	WP 12	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
19	WP 13	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
20	WP 14	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
21	WP 15	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
22	Door 13	1L 70W HPS MED BASE HID [1x MAG] / Recessed Can 6" Can Recessed		Retrofit	LITHONIA-LBR6-13W-50K-MWD-MVOLT-UGZ-AT-WL		9	13W LBR6 6" Recessed Can, 1454 nominal lumens 5000K Air Tight, Wet Rated.	LBR6 10LM 50K AR LSS MWD MVOLT UGZ AT WL (MFG: LITH) (Qty:1)	1	
23	WP 16	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
24	WP 17	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
25	WP 18	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
26	WP 19	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
27	WP 20	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
28	WP 21	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
29	Door 15	1L 70W HPS MED BASE HID [1x MAG] / Recessed Can 6" Can Recessed		Retrofit	LITHONIA-LBR6-13W-50K-MWD-MVOLT-UGZ-AT-WL		9	13W LBR6 6" Recessed Can, 1454 nominal lumens 5000K Air Tight, Wet Rated.	LBR6 10LM 50K AR LSS MWD MVOLT UGZ AT WL (MFG: LITH) (Qty:1)	1	
30	Door 15	1L 12W LEDS-M A19 [0x NULL] / Wall Mount * Wall		Relamp	KEYSTONE-9.5W-A19-50K-1L		7	Relamp Fixture Using (1) 9.5W LED A19 E26 5000K Dimmable - 60W Halogen Equivalent	KT-LED9.5A19-O-850 (MFG: KEY) (Qty:1)	3	
31	WP 22	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
32	WP 23	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
33	WP 24	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
34	WP 25	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
35	WP 26	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
36	Door 17	1L 70W HPS MED BASE HID [1x MAG] / Recessed Can 6" Can Recessed		Retrofit	LITHONIA-LBR6-13W-50K-MWD-MVOLT-UGZ-AT-WL		9	13W LBR6 6" Recessed Can, 1454 nominal lumens 5000K Air Tight, Wet Rated.	LBR6 10LM 50K AR LSS MWD MVOLT UGZ AT WL (MFG: LITH) (Qty:1)	1	
37	WP 27	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
38	WP 28	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
39	WP 29	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
40	WP 29	1L 12W LEDS-M A19 [0x		Relamp	KEYSTONE-9.5W-A19-50K-1L		7	Relamp Fixture Using (1) 9.5W LED A19 E26 5000K	KT-LED9.5A19-O-850 (MFG: KEY) (Qty:1)	2	



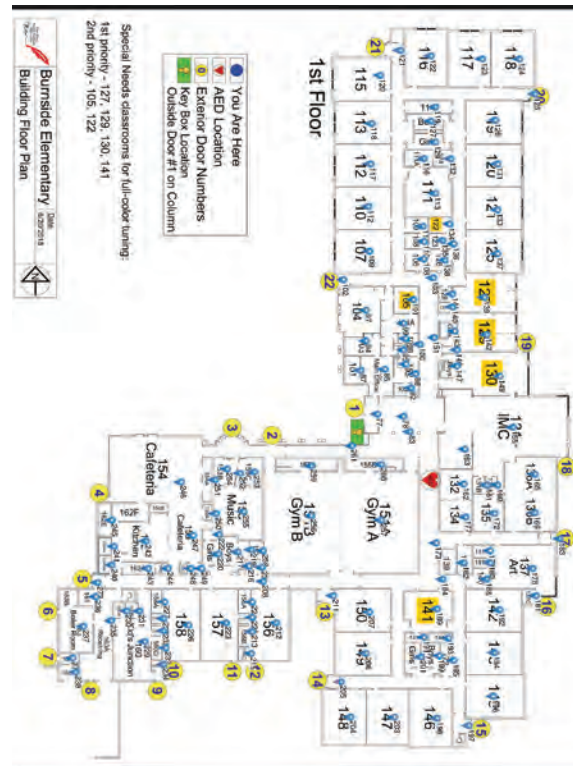
Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
		NULL / Wall Mount * Wall						Dimmable - 60W Halogen Equivalent			
41	WP 30	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
42	WP 31	1L 100W HPS MED BASE HID [1x MAG] / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
43	WP 31	1L 12W LEDS-M A19 [0x NULL] / Wall Mount * Wall		Relamp	KEYSTONE-9.5W-A19-50K-1L		7	Relamp Fixture Using (1) 9.5W LED A19 E26 5000K Dimmable - 60W Halogen Equivalent	KT-LED9.5A19-O-850 (MFG: KEY) (Qty:1)	2	
44	WP 32	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
45	WP 33	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
46	WP 34	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
47	WP 35	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
48	WP 36	1L 100W HPS MED BASE HID [1x MAG] / Wallpack Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
49	Door 20	1L 70W HPS MED BASE HID [1x MAG] / Recessed Can 6" Can Recessed		Retrofit	LITHONIA-LBR6-13W-50K-MWD-MVOLT-UGZ-AT-WL		9	13W LBR6 6" Recessed Can, 1454 nominal lumens 5000K Air Tight, Wet Rated.	LBR6 10LM 50K AR LSS MWD MVOLT UGZ AT WL (MFG: LITH) (Qty:1)	1	
50	FL 1	1L 63W LED Array [1x LED DRIVER] / Flood Wall		Do Nothing			14			1	-
51	WP 37	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
52	WP 38	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
53	WP 39	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
54	Door 21	1L 70W HPS MED BASE HID [1x MAG] / Recessed Can 6" Can Recessed		Retrofit	LITHONIA-LBR6-13W-50K-MWD-MVOLT-UGZ-AT-WL		9	13W LBR6 6" Recessed Can, 1454 nominal lumens 5000K Air Tight, Wet Rated.	LBR6 10LM 50K AR LSS MWD MVOLT UGZ AT WL (MFG: LITH) (Qty:1)	1	
55	Door 21	1L 12W LEDS-M A19 [0x NULL] / Wall Mount * Wall		Relamp	KEYSTONE-9.5W-A19-50K-1L		7	Relamp Fixture Using (1) 9.5W LED A19 E26 5000K Dimmable - 60W Halogen Equivalent	KT-LED9.5A19-O-850 (MFG: KEY) (Qty:1)	3	
56	WP 40	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
57	WP 41	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
58	WP 42	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
59	WP 43	1L 22W LEDS-M COB [0x edit / Wallpack * Wall		Replace	CREE-XSPW-40W-50K-T4-DB		14	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) (Qty:1)	1	
60	Door 22	1L 70W HPS MED BASE HID [1x MAG] / Recessed Can 6" Can Recessed		Retrofit	LITHONIA-LBR6-13W-50K-MWD-MVOLT-UGZ-AT-WL		9	13W LBR6 6" Recessed Can, 1454 nominal lumens 5000K Air Tight, Wet Rated.	LBR6 10LM 50K AR LSS MWD MVOLT UGZ AT WL (MFG: LITH) (Qty:1)	1	
61	Door 22	1L 12W LEDS-M A19 [0x NULL] / Wall Mount * Wall		Relamp	KEYSTONE-9.5W-A19-50K-1L		7	Relamp Fixture Using (1) 9.5W LED A19 E26 5000K Dimmable - 60W Halogen Equivalent	KT-LED9.5A19-O-850 (MFG: KEY) (Qty:1)	10	
62	Flag Pole 1	1L 16W LED COB [1x LED DRIVER] / Flood Wall		Do Nothing			11			1	-
63	Pole 1	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace	LITHONIA-RSX2-187W-50K-R4-MVOLT-SPA-DDBXD		25	187W RSX2 LED Area Light, Type 4 Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	RSX2 LED P4 50K R4 MVOLT SPA DDBXD (MFG: LITH) (Qty:1)	1	
64	Pole 2	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace	LITHONIA-RSX2-187W-50K-R4-MVOLT-SPA-DDBXD		25	187W RSX2 LED Area Light, Type 4 Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	RSX2 LED P4 50K R4 MVOLT SPA DDBXD (MFG: LITH) (Qty:1)	1	
65	Pole 3	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace	LITHONIA-RSX2-187W-50K-R4-MVOLT-SPA-DDBXD		25	187W RSX2 LED Area Light, Type 4 Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	RSX2 LED P4 50K R4 MVOLT SPA DDBXD (MFG: LITH) (Qty:1)	1	
66	Pole 4	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace	LITHONIA-RSX2-187W-50K-R4-MVOLT-SPA-DDBXD		25	187W RSX2 LED Area Light, Type 4 Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	RSX2 LED P4 50K R4 MVOLT SPA DDBXD (MFG: LITH) (Qty:1)	1	
67	Pole 5	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace	LITHONIA-RSX2-210W-50K-R5-MVOLT-SPA-DDBXD		25	210W RSX2 LED Area Light, Type 5 Wide Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	RSX2 LED P5 50K R5 MVOLT SPA DDBXD (MFG: LITH) (Qty:1)	1	



Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
67	Pole 5	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace			25	Remove Fixtures		1	
68	Pole 6	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace	LITHONIA-RSX2- 147W-50K-R2- MVOLT-SPA-DDBXD		25	147W RSX2 LED Area Light, Type 2 Optics, 5000K, Dark Bronze Finish, 120- 277V - Includes Square Pole Mounting	RSX2 LED P3 50K R2 MVOLT SPA DDBXD (MFG: LITH) (Qty:1)	1	
69	Pole 7	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace	LITHONIA-RSX2- 147W-50K-R2- MVOLT-SPA-DDBXD		25	147W RSX2 LED Area Light, Type 2 Optics, 5000K, Dark Bronze Finish, 120- 277V - Includes Square Pole Mounting	RSX2 LED P3 50K R2 MVOLT SPA DDBXD (MFG: LITH) (Qty:1)	1	
70	Pole 8	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace	LITHONIA-RSX2- 210W-50K-R5- MVOLT-SPA-DDBXD		25	210W RSX2 LED Area Light, Type 5 Wide Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	RSX2 LED P5 50K R5 MVOLT SPA DDBXD (MFG: LITH) (Qty:1)	1	
70	Pole 8	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace			25	Remove Fixtures		1	
71	Pole 9	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace	LITHONIA-RSX2- 210W-50K-R5- MVOLT-SPA-DDBXD		25	210W RSX2 LED Area Light, Type 5 Wide Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	RSX2 LED P5 50K R5 MVOLT SPA DDBXD (MFG: LITH) (Qty:1)	1	
71	Pole 9	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace			25	Remove Fixtures		1	
72	Pole 10	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace	LITHONIA-RSX2- 210W-50K-R5- MVOLT-SPA-DDBXD		25	210W RSX2 LED Area Light, Type 5 Wide Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	RSX2 LED P5 50K R5 MVOLT SPA DDBXD (MFG: LITH) (Qty:1)	1	
72	Pole 10	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace			25	Remove Fixtures		1	
73	Pole 11	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace	LITHONIA-RSX2- 187W-50K-R4- MVOLT-SPA-DDBXD		25	187W RSX2 LED Area Light, Type 4 Optics, 5000K, Dark Bronze Finish, 120- 277V - Includes Square Pole Mounting	RSX2 LED P4 50K R4 MVOLT SPA DDBXD (MFG: LITH) (Qty:1)	1	
74	Pole 11	1L 100W LED COB [1x LED DRIVER] / Flood Yolk		Do Nothing			25			1	-
75	Pole 12	1L 400W HPS MOG BASE HID [1x MAG] / Pole Light Pole		Replace	LITHONIA-RSX2- 187W-50K-R4- MVOLT-SPA-DDBXD		26	187W RSX2 LED Area Light, Type 4 Optics, 5000K, Dark Bronze Finish, 120- 277V - Includes Square Pole Mounting	RSX2 LED P4 50K R4 MVOLT SPA DDBXD (MFG: LITH) (Qty:1)	1	
76	Pole 12	1L 100W LED COB [1x LED DRIVER] / Flood Yolk		Do Nothing			25			1	-
271	FL 1	1L 44W LED COB [1x LED DRIVER] / Flood Knuckle		Do Nothing						1	-
272	FL 2	1L 44W LED COB [1x LED DRIVER] / Flood Knuckle		Do Nothing						1	-



## Interior



Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
77	Door 1 vestibule	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			3	-
78	Lobby	2L 25W LF4 T8 [1x ELE T8 DIM NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-25W-40K		9	25W 2x4 LED Troffer Retrofit Kit, 3600 Lumens, 4000K	EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	3	
79	Lobby	2L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-25W-40K		9	25W 2x4 LED Troffer Retrofit Kit, 3600 Lumens, 4000K	EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	7	
80	Lobby	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			5	-
81	Lobby	2L 25W LF4 T8 [1x ELE T8 DIM NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE			Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	17	
82	Lobby	1L 20W LED COB [1x LED DRIVER] / Recessed Can 6" Can Recessed		Do Nothing			9			3	-
83	Trophy Case	2L 25W LF4 T8 [1x ELE T8 DIM NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		10	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	4	
85	Room 100 - Main Office	3L 25W LF4 T8 [2x ELE T8 IS NP] / Parabolic Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	6	
86	Room 100 - Main Office	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			2	-
87	Room 101 - Principals Office	3L 25W LF4 T8 [2x ELE T8 IS NP] / Parabolic Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	4	



Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
88	Room 102 - Health Services	3L 25W LF4 T8 [2x ELE T8 IS NP] / Parabolic Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	1	
89	Room 102 - Health Services	2L 60W INCS-M A19 [0x NULL] / Vanity Wall		Relamp	GC-VS-9W-A19-40K-2L		8	Relamp Fixture w/ (2) x 9W LED Value Select A19 E26 4000K Dimmable - 60W Incandescent Equivalent	9A19DIM/840/R (MFG: GC) (Qty:2)	2	
90	Room 102 - Health Services	2L 13W CFS-M SPIRAL [0x NULL] / Vanity Wall		Relamp	GC-VS-9W-A19-40K-2L		8	Relamp Fixture w/ (2) x 9W LED Value Select A19 E26 4000K Dimmable - 60W Incandescent Equivalent	9A19DIM/840/R (MFG: GC) (Qty:2)	1	
91	Room 102 - Health Services	1L 40W LED Linear Board [1x LED DRIVER] / Lensed Troffer 2x2 Recessed		Do Nothing			9			1	-
92	Room 102A - health services office	3L 25W LF4 T8 [2x ELE T8 IS NP] / Parabolic Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
93	Health Services Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Wrap 4' Surface		Retrofit	LITHONIA-STL4-27W-40K		9	27W LED Surface Mount Volumetric Fixture 4000K	STL4-30L-EZ1-LP840 (MFG: LITH) (Qty:1)	1	
94	Room 103	3L 25W LF4 T8 [2x ELE T8 IS NP] / Parabolic Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	4	
95	Restroom 1	2L 25W LF4 T8 [1x ELE T8 IS NP] / Wrap 4' Surface		Retrofit	LITHONIA-STL4-27W-40K		9	27W LED Surface Mount Volumetric Fixture 4000K	STL4-30L-EZ1-LP840 (MFG: LITH) (Qty:1)	1	
96	Restroom 2	2L 25W LF4 T8 [1x ELE T8 IS NP] / Wrap 4' Surface		Retrofit	LITHONIA-STL4-27W-40K		9	27W LED Surface Mount Volumetric Fixture 4000K	STL4-30L-EZ1-LP840 (MFG: LITH) (Qty:1)	1	
97	Room 104 - breakroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	4	
98	Room 104 - breakroom	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			15	-
99	Room 104A - copy room	3L 25W LF4 T8 [2x ELE T8 IS NP] / Parabolic Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2x4-19W-40K-HE		9	19W 2x4 HE Retrofit Kit, 4000K	Evokit HE 2x4 30L 19W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	9	
100	Room 104B - Server Room	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
101	Room 105 - Wellness Room	3L 25W LF4 T8 [2x ELE T8 IS NP] / Parabolic Troffer 2x4 Recessed		Retrofit	ESI-F24LX-38W-RGBW	ENOCEAN-ESRPB-W	9	38W 2x4 LX Series Fixture, 38W, 4635 Lumens, Seoul LED, RGBW, Frosted Lens, Casambi Wireless Control	F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) (Qty:1)	4	
102	Door 22 vestibule	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			1	-
103	A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-25W-40K		9	25W 2x4 LED Troffer Retrofit Kit, 3600 Lumens, 4000K	EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	35	
104	A Wing Hallway B	2L 7W CFN SGL TUBE 2PIN N-I [1x MAG ES] / Decorative 9" Wall		Do Nothing			9	5.5W LED Hybrid PLS GX23 4000K - 13W CFL Equivalent		4	-
105	A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		10	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	3	
106	A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE			Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	3	
107	A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	6	
108	Room 106 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
109	Room 107 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
110	Room 108 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	ULT-348-12W-40K-DE		9	Retrofit Fixture w/ (3) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:3)	2	
111	Room 109 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed		Retrofit	ULT-348-12W-40K-DE		9	Retrofit Fixture w/ (3) x 12W 4' LED Type 'B' Double-	T8LACD4F12/840B25EC (MFG: ULT) (Qty:3)	2	





Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
		Troffer 2x4 Recessed						Ended T8 Lamps 4000K - 1,800 Nominal Lumens			
112	Room 110 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
113	Room 111 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		12	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
114	Room 111 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		12	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	3	
115	Room 111 - classroom	1L 150W INCS-M PAR38 [0x NULL] / Track 6" Can Surface		Relamp	GC-17W-PAR38-40K-1L-277V		12	Relamp Fixture w/ (1) x 17W LED PAR38 4000K (277V) - 75W Halogen Equivalent	15.5PAR38DIM/940FL40 (MFG: GC) (Qty:1)	6	
116	Room 111A	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
117	Room 112 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
118	Room 113 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
119	Room 114 - Supplies	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	3	
120	Room 115 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
121	Door 21 vestibule	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			2	-
122	Room 116 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
123	Room 117 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
124	Room 118 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
125	Door 20 vestibule	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			1	-
126	Room 119 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
127	Boys Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	4	
128	Boys Restroom	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			4	-
129	Girls Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	4	
130	Girls Restroom	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			4	-
131	Room 120 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
132	Room 124	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	1	
133	Room 121 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
134	Room 122 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed		Retrofit	ESI-F24LX-38W-RGBW	ENOCAN-ESRPB-W	9	38W 2x4 LX Series Fixture, 38W, 4635 Lumens, Seoul	F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) (Qty:1)	2	



Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
		Troffer 2x4 Recessed						LED, RGBW, Frosted Lens, Casambi Wireless Control			
135	Room 123 - student services	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
136	Room 124	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES] / Recessed Square 137x13x Recessed		Retrofit	GC-9W-PLO-40K-2L		9	Retrofit Fixture w/ (2) 9W LED Hybrid PLO G24q & GX24q (4-pin) Based Type B 40K - 26W CFL Equivalent	9PLO/840/HYBM (MFG: GC) (Qty:2)	1	
137	Room 125 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
138	Room 126 - Conference Room	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
139	Room 127 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	ESI-F24LX-38W-RGBW	ENOCEAN-ESRPB-W	9	38W 2x4 LX Series Fixture, 38W, 4635 Lumens, Seoul LED, RGBW, Frosted Lens, Casambi Wireless Control	F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) (Qty:1)	14	
140	Room 127A	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
141	Room 128	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
142	Room 129 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	ESI-F24LX-38W-RGBW	ENOCEAN-ESRPB-W	9	38W 2x4 LX Series Fixture, 38W, 4635 Lumens, Seoul LED, RGBW, Frosted Lens, Casambi Wireless Control	F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) (Qty:1)	14	
143	Women's Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	2	
144	Women's Restroom	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			3	-
145	Women's Restroom	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing						1	-
146	Supply Room	1L 30W LED Linear Board [1x LED DRIVER] / Standard Strip 4' Wall		Do Nothing			9			1	-
147	Mens Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	2	
148	Mens Restroom	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			4	-
149	Room 130 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	ESI-F24LX-38W-RGBW	ENOCEAN-ESRPB-W	9	38W 2x4 LX Series Fixture, 38W, 4635 Lumens, Seoul LED, RGBW, Frosted Lens, Casambi Wireless Control	F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) (Qty:1)	16	
150	Room 130 - classroom	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES] / Recessed Can 8" Recessed		Retrofit	LITHONIA-LBR8-9W-40K-MWD-MVOLT-UGZ		9	9W LBR8 8" Recessed Can, 832 Nominal Lumens in 40K, Medium Distribution	LBR8 07LM 40K AR LSS MWD MVOLT UGZ (MFG: LITH) (Qty:1)	1	
151	A Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-25W-40K		9	25W 2x4 LED Troffer Retrofit Kit, 3600 Lumens, 4000K	EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	7	
152	A Wing Hallway A	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			8			2	-
153	A Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	14	
154	A Wing Hallway A	2L 25W LF3 T8 [1x ELE T8 IS NP] / Standard Strip 3' Surface		Retrofit	ULT-236-12W-40-DE		9	Retrofit Fixture w/ (2) 12W 3' LED Type 'B' Double-Ended T8 Lamps 4000K	T8LACD3F12/840B25EC (MFG: ULT) (Qty:2)	2	
155	Media Center	2L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	31	
156	Media Center	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			8			27	-
157	Media Center	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	4	



Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
		NP) / Standard Strip 4' Surface						Ended T8 Lamps 4000K - 1,800 Nominal Lumens			
158	Media Center	2L 25W LF3 T8 [1x ELE T8 IS NP) / Standard Strip 3' Surface		Retrofit	ULT-236-12W-40-DE		9	Retrofit Fixture w/ (2) 12W 3' LED Type 'B' Double-Ended T8 Lamps 4000K	T8LACD3F12/840B25EC (MFG: ULT) (Qty:2)	2	
159	Media Center	2L 17W LF2 T8 [1x ELE T8 IS NP) / Standard Strip 2' Surface		Retrofit	ULT-224-9W-40K-DE		10	Retrofit Fixture w/ (2) x 9W 2' LED Type 'B' Double-Ended T8 Lamps 4000K	T8LACD2F9/840B25EC (MFG: ULT) (Qty:2)	1	
160	Room 131A - Media Center Office	3L 25W LF4 T8 [1x ELE T8 IS NP) / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
161	Room 131B - Copy Room	3L 25W LF4 T8 [1x ELE T8 IS NP) / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
162	Room 132	3L 25W LF4 T8 [1x ELE T8 IS NP) / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	6	
163	Room 132A	2L 25W LF4 T8 [1x ELE T8 IS NP) / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	4	
164	Room 132A	1L 20W LED Array [1x LED DRIVER) / Canopy 10" x 10" Surface		Do Nothing			9			3	-
165	Room 133	10L 25W LF4 T8 [3x ELE T8 IS NP) / Indirect 20' Suspended		Retrofit	Lithonia-LBK 4FT 1 3000 40K (5)		10	(5) 19.5W 4ft Light Bar Retrofit Kit - 4000K, 1 Bar	LBK 4FT 1 3000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) (Qty:5)	1	
167	Room 133	2L 25W LF4 T8 [1x ELE T8 IS NP) / Indirect 4' Wall		Retrofit	Lithonia-LBK 4FT 1 3000 40K		9	19.5W 4ft Light Bar Retrofit Kit - 4000K, 1 Bar	LBK 4FT 1 3000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) (Qty:1)	2	
168	Room 133	2L 25W LF3 T8 [1x ELE T8 IS NP) / Indirect 3' Wall		Retrofit	Lithonia-LBK 3FT 1 2000 40K		9	13.5W 3ft Light Bar Retrofit Kit - 4000K, 1 Bar	LBK 3FT 1 2000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) (Qty:1)	5	
169	Room 136	10L 25W LF4 T8 [3x ELE T8 IS NP) / Indirect 20' Suspended		Retrofit	Lithonia-LBK 4FT 1 3000 40K (5)		10	(5) 19.5W 4ft Light Bar Retrofit Kit - 4000K, 1 Bar	LBK 4FT 1 3000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) (Qty:5)	1	
170	Room 136	2L 25W LF4 T8 [1x ELE T8 IS NP) / Indirect 4' Wall		Retrofit	Lithonia-LBK 4FT 1 3000 40K		9	19.5W 4ft Light Bar Retrofit Kit - 4000K, 1 Bar	LBK 4FT 1 3000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) (Qty:1)	15	
171	Room 136	2L 25W LF3 T8 [1x ELE T8 IS NP) / Indirect 3' Wall		Retrofit	Lithonia-LBK 3FT 1 2000 40K		9	13.5W 3ft Light Bar Retrofit Kit - 4000K, 1 Bar	LBK 3FT 1 2000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) (Qty:1)	5	
172	Room 135	3L 25W LF4 T8 [1x ELE T8 IS NP) / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	5	
173	B Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP) / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-25W-40K		9	25W 2x4 LED Troffer Retrofit Kit, 3600 Lumens, 4000K	EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	7	
174	B Wing Hallway A	2L 17W LF2 T8 [1x ELE T8 IS NP) / Standard Strip 2' Surface		Do Nothing			8			1	-
175	B Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP) / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	16	
176	B Wing Hallway A	2L 25W LF3 T8 [1x ELE T8 IS NP) / Standard Strip 3' Surface		Retrofit	ULT-236-12W-40-DE		9	Retrofit Fixture w/ (2) 12W 3' LED Type 'B' Double-Ended T8 Lamps 4000K	T8LACD3F12/840B25EC (MFG: ULT) (Qty:2)	1	
177	Room 134 - Classroom	3L 25W LF4 T8 [1x ELE T8 IS NP) / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	6	
178	Room 137 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP) / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	15	
179	Room 137A	3L 25W LF4 T8 [1x ELE T8 IS NP) / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
180	Room 137B	3L 25W LF4 T8 [1x ELE T8 IS NP) / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
181	Room 137C	3L 25W LF4 T8 [1x ELE T8 IS NP) / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
182	Room 138/139 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP) / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	5	





Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
183	Door 17 vestibule	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			1	-
184	B Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-25W-40K		9	25W 2x4 LED Troffer Retrofit Kit, 3600 Lumens, 4000K	EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	26	
185	B Wing Hallway B	2L 7W CFN SGL TUBE 2PIN N-I [1x MAG ES] / Decorative 9" Wall		Relamp	GC-5.5W-PLS-40K-2L		8	5.5W LED Hybrid PLS GX23 4000K - 13W CFL Equivalent	5.5PLS/840/HYB/GX23 (MFG: GC) (Qty:2)	2	
186	B Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	5	
187	B Wing Hallway B	2L 25W LF3 T8 [1x ELE T8 IS NP] / Standard Strip 3' Surface		Retrofit	ULT-236-12W-40-DE		10	Retrofit Fixture w/ (2) 12W 3' LED Type 'B' Double-Ended T8 Lamps 4000K	T8LACD3F12/840B25EC (MFG: ULT) (Qty:2)	2	
188	Room 140	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	3	
189	Room 141 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	ESI-F24LX-38W-RGBW	ENOCLEAN-ESRPB-W	12	38W 2x4 LX Series Fixture, 38W, 4635 Lumens, Seoul LED, RGBW, Frosted Lens, Casambi Wireless Control	F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) (Qty:1)	8	
190	Room 141 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-28W-40K-D		12	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	3	
191	Room 141A	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
192	Room 142 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
193	Server Room	4L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 8' Surface		Retrofit	ULT-448-12W-40K-DE		9	Retrofit Fixture w/ (4) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:4)	1	
194	Room 143 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
195	Room 144	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
196	Room 145 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
197	Door 15 vestibule	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			2	-
198	Room 146 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
199	Boys Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	3	
200	Boys Restroom	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			3	-
201	Girls Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	3	
202	Girls Restroom	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			3	-
203	Room 147 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
204	Room 148 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
205	Door 14 vestibule	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			2	-



Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
206	Room 149 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
207	Room 150 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	12	
208	C Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-25W-40K		9	25W 2x4 LED Troffer Retrofit Kit, 3600 Lumens, 4000K	EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	15	
209	C Wing Hallway A	2L 7W CFN SCL TUBE 2PIN N-I [1x MAG ES] / Decorative 9" Wall		Relamp	GC-5.5W-PLS-40K-2L		8	5.5W LED Hybrid PLS GX23 4000K - 13W CFL Equivalent	5.5PLS/840/HYB/GX23 (MFG: GC) (Qty:2)	2	
210	C Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	3	
211	Door 13 vestibule	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			2	-
212	Room 156 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	15	
213	Room 156B	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	1	
214	Room 156B	2L 25W LF4 T8 [1x ELE T8 IS NP] / Wrap 4' Surface		Retrofit	LITHONIA-STL4-27W-40K		9	27W LED Surface Mount Volumetric Fixture 4000K	STL4-30L-EZ1-LP840 (MFG: LITH) (Qty:1)	1	
215	Room 156C	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	1	
216	Room 170 - Supply Room	1L 30W LED Linear Board [1x LED DRIVER] / Standard Strip 4' Wall		Do Nothing			9			1	-
217	Boys Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	4	
218	Boys Restroom	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			3	-
219	Boys showers	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES] / Recessed Can 13" Recessed		Retrofit	GC-9W-PLO-40K-2L		9	Retrofit Fixture w/ (2) 9W LED Hybrid PLO G24q & GX24q (4-pin) Based Type B 40K - 26W CFL Equivalent	9PLO/840/HYBM (MFG: GC) (Qty:2)	2	
220	Girls Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	3	
221	Girls Restroom	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			3	-
222	Girls Showers	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES] / Recessed Can 13" Recessed		Retrofit	GC-9W-PLO-40K-2L		9	Retrofit Fixture w/ (2) 9W LED Hybrid PLO G24q & GX24q (4-pin) Based Type B 40K - 26W CFL Equivalent	9PLO/840/HYBM (MFG: GC) (Qty:2)	2	
223	Room 157 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	15	
224	Room 157A	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
225	Room 157 -Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Wrap 4' Surface		Retrofit	LITHONIA-STL4-27W-40K		9	27W LED Surface Mount Volumetric Fixture 4000K	STL4-30L-EZ1-LP840 (MFG: LITH) (Qty:1)	1	
226	Room 158 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	15	
227	Room 158A	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
228	Room 158 -Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Wrap 4' Surface		Retrofit	LITHONIA-STL4-27W-40K		9	27W LED Surface Mount Volumetric Fixture 4000K	STL4-30L-EZ1-LP840 (MFG: LITH) (Qty:1)	1	

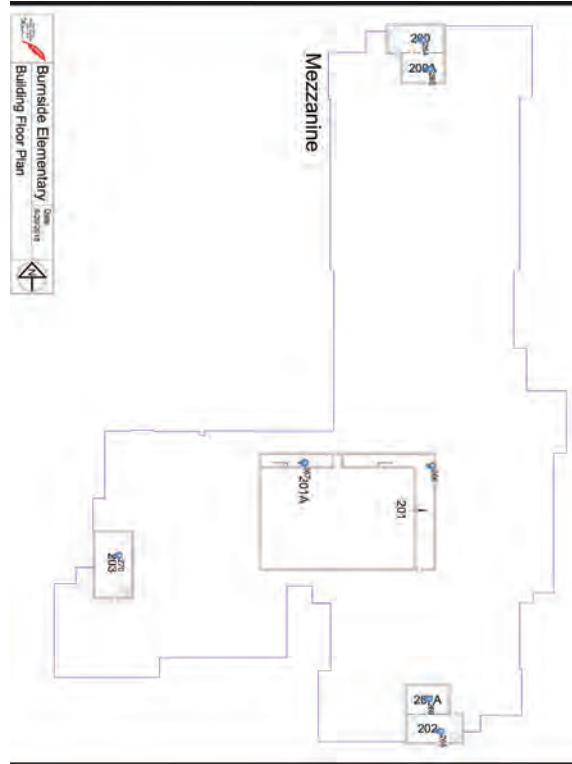


Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
229	Room 160 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	17	
230	Room 160A	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	1	
231	Room 160B	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
232	Room 160 - Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Wrap 4' Surface		Retrofit	LITHONIA-STL4-27W-40K		9	27W LED Surface Mount Volumetric Fixture 4000K	STL4-30L-EZ1-LP840 (MFG: LITH) (Qty:1)	1	
233	Room 160D	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
234	Room 160E	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	1	
235	Room 163A - Receiving	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Chain/Cable		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	16	
236	Room 161B - Maintenance	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
237	Room 163B - Boiler	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Chain/Cable		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	12	
238	Room 163C - Garage	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	2	
239	Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Wrap 4' Surface		Retrofit	LITHONIA-STL4-27W-40K		9	27W LED Surface Mount Volumetric Fixture 4000K	STL4-30L-EZ1-LP840 (MFG: LITH) (Qty:1)	1	
240	Freezer	2L 15W LL4A T8 [1x ELE T8 IS NP] / Vaportight 4' Surface		Do Nothing			8	24W LED 4' Vaportight - 4000K, wide distribution, polycarbonate low profile frosted lens, 0-10V Dimming		1	-
241	Refrigerator	2L 15W LL4A T8 [1x ELE T8 IS NP] / Vaportight 4' Surface		Do Nothing			8	24W LED 4' Vaportight - 4000K, wide distribution, polycarbonate low profile frosted lens, 0-10V Dimming		1	-
242	Room 162 - Kitchen	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	17	
243	Room 162A	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	3	
244	Room 162B - Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP] / Wrap 4' Surface		Retrofit	LITHONIA-STL4-27W-40K		9	27W LED Surface Mount Volumetric Fixture 4000K	STL4-30L-EZ1-LP840 (MFG: LITH) (Qty:1)	1	
245	Room 162E - Storage	2L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	3	
246	Room 154 - cafeteria	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		12	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	36	
247	Room 159 - cafeteria	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-SD		12	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and Step-Dimming Driver	EvoKit HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) (Qty:1)	10	
248	Room 159C - storage	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	1	
249	Room 159B - storage	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	1	
250	Room 159A - storage	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	1	
251	Room 154A - storage	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	3	



Room Details											
ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
252	Music Room Hallway	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
253	Room 153C - Music Room Storage	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Surface		Retrofit	ESI-K-24LT-F4N0-2S-40-FR-D		9	30 W LED 2x4 lensed troffer retrofit kit, 4425 initial lumens, 4000K color temp, with frosted lens, Dimming	K-24LT-F4N0-2S-40-FR-D (MFG: ESI) (Qty:1)	4	
254	Room 153B	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	2	
255	Room 153 - Music Room	3L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Surface		Retrofit	ESI-K-24LT-F4N6-2S-40-FR-SD		9	36W LED 2x4 lensed troffer retrofit kit, 5298 initial lumens, 4000K color temp, with frosted lens, Step Dimming	K-24LT-F4N6-2S-40-FR-SD (MFG: ESI) (Qty:1)	15	
256	Room 151B - Gym	6L 25W LF4 T8 [2x ELE T8 IS NP] / Highbay 1x8 Surface		Retrofit	LITHONIA-IBG-105W-50K-AFL-GND-RIO-WGX-DWH	NLIGHT- (1) RPODB-2S-DX-WH-G2 (1) 3G WP WH (2) SB	26	105W IBG LED High Bay Fixture, 5000K, 18000 Nominal Lumens, Standard Efficiency, Acrylic Frosted Lens, General Distribution, and White Finish - Includes Wire Guard and nLight AIR (wireless) Gen 2 Control Device	IBAC120-M100 (MFG: LITH) (Qty:1); IBG 18000LM SEF AFL GND MVOLT GZ10 50K 80CRI NLTAIR2 RIO WGX DWH (MFG: LITH) (Qty:1)	12	
257	Room 151A - Gym	6L 25W LF4 T8 [2x ELE T8 IS NP] / Highbay 1x8 Surface		Retrofit	LITHONIA-IBG-105W-50K-AFL-GND-RIO-WGX-DWH	NLIGHT- (1) RPODB-2S-DX-WH-G2 (1) 3G WP WH (2) SB	26	105W IBG LED High Bay Fixture, 5000K, 18000 Nominal Lumens, Standard Efficiency, Acrylic Frosted Lens, General Distribution, and White Finish - Includes Wire Guard and nLight AIR (wireless) Gen 2 Control Device	IBAC120-M100 (MFG: LITH) (Qty:1); IBG 18000LM SEF AFL GND MVOLT GZ10 50K 80CRI NLTAIR2 RIO WGX DWH (MFG: LITH) (Qty:1)	12	
258	Room 152 - gym office	3L 25W LF4 T8 [2x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILIPS-EVOKIT2X4-28W-40K-D		9	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	3	
259	Room 155A - gym storage	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		10	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	3	
260	Room 155B - gym storage	2L 25W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		10	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	3	
261	Cafeteria hallway	2L 25W LF4 T8 [1x ELE T8 DIM NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-25W-40K		9	25W 2x4 LED Troffer Retrofit Kit, 3600 Lumens, 4000K	EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	5	
262	Cafeteria hallway	2L 25W LF4 T8 [1x ELE T8 IS NP] / Lensed Troffer 2x4 Recessed		Retrofit	PHILLIPS-EVOKIT2X4-25W-40K		9	25W 2x4 LED Troffer Retrofit Kit, 3600 Lumens, 4000K	EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) (Qty:1)	8	
263	Cafeteria hallway	1L 40W LED Linear Board [1x LED DRIVER] / Lensed Troffer 2x2 Recessed		Do Nothing			9	22W 2x2 LED Troffer Retrofit Kit, 3100 Lumens, 4000K		1	-
273	Door 5 vestibule	1L 20W LED Array [1x LED DRIVER] / Canopy 10" x 10" Surface		Do Nothing			9			1	-
274	Oil storage	1L 23W CFS-M Triple tube [0x Null / Jelly Jar Surface		Relamp	GC-17W-A21-40K-1L		7	Relamp Fixture w/ (1) x 17W LED A21 Lamp 4000K - 125W Incandescent Equivalent	17A21/840/277V/DIM (MFG: GC) (Qty:1)	2	

## Interior - Mezzanine



### Room Details

ID	Room	Existing	Notes	Action	Proposed	Control	Fixture Height	Scope of Work	Material Item Code	Qty	Completed
264	Room 200	2L 32W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	5	
265	Room 200A - crawl space	1L 60W INCS-M A19 [0x NULL] / Porcelain Socket Wall		Relamp	GC-VS-9W-A19-40K-1L		5	Relamp Fixture w/ (1) x 9W LED Value Select A19 E26 4000K Dimmable - 60W Incandescent Equivalent	9A19DIM/840/R (MFG: GC) (Qty:1)	1	
266	Room 201	2L 32W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	10	
267	Room 201A	2L 32W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	10	
268	Room 202	2L 32W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	5	
269	Room 200B - crawl space	1L 60W INCS-M A19 [0x NULL] / Porcelain Socket Wall		Relamp	GC-VS-9W-A19-40K-1L		5	Relamp Fixture w/ (1) x 9W LED Value Select A19 E26 4000K Dimmable - 60W Incandescent Equivalent	9A19DIM/840/R (MFG: GC) (Qty:1)	1	
270	Room 203	2L 32W LF4 T8 [1x ELE T8 IS NP] / Standard Strip 4' Surface		Retrofit	ULT-248-12W-40K-DE		9	Retrofit Fixture w/ (2) x 12W 4' LED Type 'B' Double-Ended T8 Lamps 4000K - 1,800 Nominal Lumens	T8LACD4F12/840B25EC (MFG: ULT) (Qty:2)	7	



# Material Checklist

Job #621

## Items

Item #	Description	Qty Required	Qty Received	Notes
<b>GENERIC-TRC</b>				
326-W WLPLT BLNK INSRT DECO 1G WHT SCR	Decora switch blank, white	4		
<b>GREEN CREATIVE</b>				
5.5PLS/840/HYB/GX23	5.5W LED Hybrid PLS GX23 4000K - 13W CFL Equivalent	16		
9PLO/840/HYBM	9W LED Hybrid PLO G24q & GX24q (4-pin) Based 40K - 26W CFL Equivalent	10		
15.5PAR38DIM/940FL40	15.5W LED PAR38 E26 4000K Dimmable 90CRI - 120W Halogen Equivalent	6		
9A19DIM/840/R	9W LED A19 E26 4000K Dimmable - 60W Incandescent Equivalent	8		
17A21/840/277V/DIM	17W LED A21 E26 4000K Dimmable - 125W Incandescent Equivalent	2		
<b>Lithonia Lighting</b>				
STL4-30L-EZ1-LP840	27W LED Surface Mount Volumetric Fixture 4000K	9		
IBAC120-M100	Aircraft Cable 10' With Hook (one pair)	24		
RPODB 2S DX WH G2	nLight Air Battery Powered Preset Scene Wall Switch White Finish - Two Preset Scene Control + Single Zone On/Off/Raise/Lower Control	2		
IBG 18000LM SEF AFL GND MVOLT GZ10 50K 80CRI NLTAIR2 RIO WGX DWH	105W IBG LED High Bay Fixture, 5000K, 18000 Nominal Lumens, Standard Efficiency, Acrylic Frosted Lens, General Distribution, and White Finish - Includes Wire Guard and nLight AIR (wireless) Gen 2 Control Device	24		
FEMSMB	Surface Mount Bracket (Pair)	2		
LBR8 07LM 40K AR LSS MWD MVOLT UGZ	9W LBR8 8" Recessed Can, 832 Nominal Lumens in 40K, Medium Distribution	1		
FEM L48 4000LM LPPFL WD MVOLT GZ10 40K 80CRI STSL	24W LED 4' Vaportight - 4000K, wide distribution, polycarbonate low profile frosted lens, 0-10V Dimming	2		
LBR6 10LM 50K AR LSS MWD MVOLT UGZ AT WL	13W LBR6 6" Recessed Can, 1454 nominal lumens 5000K Air Tight, Wet Rated.	7		

LBK 4FT 1 3000LMHE 80CRI 40K MIN10 ZT MVOLT	19.5W 4ft Light Bar Retrofit Kit - 4000K, 1 Bar	27
LBK 3FT 1 2000LMHE 80CRI 40K MIN10 ZT MVOLT	13.5W 3ft Light Bar Retrofit Kit - 4000K, 1 Bar	10
RSX2 LED P4 50K R4 MVOLT SPA DDBXD	187W RSX2 LED Area Light, Type 4 Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	6
RSX2 LED P5 50K R5 MVOLT SPA DDBXD	210W RSX2 LED Area Light, Type 5 Wide Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	4
RSX2 LED P3 50K R2 MVOLT SPA DDBXD	147W RSX2 LED Area Light, Type 2 Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	2
<b>ESI</b>		
K-24LT-F4N0-2S-40-FR-D	30W LED 2x4 lensed troffer retrofit kit, 4425 initial lumens, 4000K color temp, with frosted lens, Dimming	4
K-24LT-F4N6-2S-40-FR-SD	36W LED 2x4 lensed troffer retrofit kit, 5298 initial lumens, 4000K color temp, with frosted lens and 30/50/100 Step Dimming Driver	15
F-24LX-L4H-RGBW-FR-CAS	38W 2x4 LX Series Fixture, 38W, 4635 Lumens, Seoul LED, RGBW, Frosted Lens, Casambi Wireless Control	58
<b>Universal Lighting Technologies</b>		
T8LACD3F12/840B25EC	12W 3' LED Type B T8 Lamp 4000K	14
T8LACD4F12/840B25EC	12W 4' LED Type B T8 Lamp 4000K	364
T8LACD2F9/840B25EC	9W 2' LED Type B T8 Lamp 4000K	2
<b>Keystone Technologies</b>		
KT-LED9.5A19-O-850	9.5W LED A19 E26 5000K Dimmable - 60W Halogen Equivalent	41
<b>EnOcean</b>		
ESRPB-W	Wireless Single Rocker Switch - BLE	6
<b>Cree Lighting</b>		
XSPW-B-WM-4ME-4L-50K-UL-BZ	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	43
<b>P &amp; S</b>		
SSJ263	3 Gang Decorator Steel Wall Plate	2
<b>Philips</b>		
EvoKit 2x4 42L 28W 840 UNV 0-10 G5	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	168
EvoKit HE 2x4 42L 28W 840 UNV STEP G5	28W 2x4 LED Troffer Retrofit Kit, 4200 Lumens, 4000K with Step Dimming Driver	375



EvoKit 2x4 36L 25W 840 UNV 0-10 G5	25W 2x4 LED Troffer Retrofit Kit, 3600 Lumens, 4000K	113
EvoKit 2x2 31L 22W 840 UNV 0-10 G5	22W 2x2 LED Troffer Retrofit Kit, 4,000K, 3,100 Nominal Lumens, and 0-10V Dimming Driver	1
Evokit HE 2x4 30L 19W 840 UNV 0-10 G5	19W 2x4 HE Troffer Retrofit Kit, 4000K	9

### Additional Materials

Item #	Description	Qty Required	Qty Received	Notes
GREEN CREATIVE				
5.5PLS/840/HYB/GX23	5.5W LED Hybrid PLS GX23 4000K - 13W CFL Equivalent	2		
9PLO/840/HYBM	9W LED Hybrid PLO G24q & GX24q (4-pin) Based 40K - 26W CFL Equivalent	2		
15.5PAR38DIM/940FL40	15.5W LED PAR38 E26 4000K Dimmable 90CRI - 120W Halogen Equivalent	1		
9A19DIM/840/R	9W LED A19 E26 4000K Dimmable - 60W Incandescent Equivalent	4		
17A21/840/277V/DIM	17W LED A21 E26 4000K Dimmable - 125W Incandescent Equivalent	4		
Universal Lighting Technologies				
T8LACD3F12/840B25EC	12W 3' LED Type B T8 Lamp 4000K	11		
T8LACD4F12/840B25EC	12W 4' LED Type B T8 Lamp 4000K	11		
Keystone Technologies				
KT-LED9.5A19-O-850	9.5W LED A19 E26 5000K Dimmable - 60W Halogen Equivalent	1		
GENERIC (Proposed)				
RGBW CONTROL STATION	Armodilo Keyo Wallstation and iPad - Use with Casambi RGBW Lighting Package	6		



# LIGHTING PROJECT AS-BUILTS



RETROFIT  
LIGHTING & DESIGN

**Project:**

Burnside Elementary

**Prepared For:**

ISD #256 Burnside Elementary School

**Location:**

5001 Learning Ln.  
Red Wing, MN 55066

# WARRANTY



Thank you for choosing Retrofit Lighting & Design, a division of The Retrofit Companies, Inc. as your lighting partner. We're proud to have been chosen to implement your project and we want to continue to support your lighting system if you should have any premature failures. Please [keep this information](#) in your files, as this will be required when submitting warranty claims. Retrofit Lighting & Design works with the manufacturer to fulfill warranty materials on your behalf.

**Customer Information:**

ISD #256 Red Wing Public Schools

**Job Number:**

1425004

**Project Description:**

Burnside Elementary

**Customer Number:**

ISD0256

**Installation Completion Date:** 12/12/2022

When requesting warranty products, you will have the option of hiring our team to troubleshoot and install the products OR self-submitting part #s and photos of the failed product. There may be additional information requested to validate the claim. The warranty submittal form can be found [here](#) or on our website under the warranty header.

Please see your scope of work for room-by-room details of areas that were included in the completed project



# As-Built Material List

Type	Classification	Manufacturer	Part Number	Description	Installed Qty
XX	ACCESSORIES	Sylvania LEDVANCE	CANOPY3AMTGPLATE12/BZ	12.5" Mounting Plate for Sylvania Canopy Fixture, Bronze	7
XX	ACCESSORIES	Lithonia Lighting	IBAC120-M100	Aircraft Cable 10' With Hook (one pair)	24
C1	CONTROL	EnOcean	ESRPB-W	Wireless Single Rocker Switch - BLE	6
C2	CONTROL	Lithonia Lighting	RPODB 2S DX WH G2	nLight Air Battery Powered Preset Scene Wall Switch White Finish - Two Preset Scene Control + Single Zone On/Off/Raise/Lower Control	2
F1	FIXTURE	Sylvania LEDVANCE	CANOPYS4A040UNVD8SC2C5BZ	40W LED Ceiling Canopy Fixture, 5000CT in Bronze	7
F2	FIXTURE	ESI	F-24LX-L4H-RGBW-FR-CAS	38W 2x4 LX Series Fixture, 38W, 4635 Lumens, Seoul LED, RGBW, Frosted Lens, Casambi Wireless Control	61
F3	FIXTURE	Lithonia Lighting	IBG 18000LM SEF AFL GND MVOLT GZ10 50K 80CRI NLTAIR2 RIO WGX DWH	105W IBG LED High Bay Fixture, 5000K, 18000 Nominal Lumens, Standard Efficiency, Acrylic Frosted Lens, General Distribution, and White Finish - Includes Wire Guard and nLight AIR (wireless) Gen 2 Control Device	24
F4	FIXTURE	Lithonia Lighting	RSX2 LED P3 50K R2 MVOLT SPA DDBXD	147W RSX2 LED Area Light, Type 2 Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	2
F5	FIXTURE	Lithonia Lighting	RSX2 LED P4 50K R4 MVOLT SPA DDBXD	187W RSX2 LED Area Light, Type 4 Optics, 5000K, Dark Bronze Finish Finish, 120-277V - Includes Square Pole Mounting	6
F6	FIXTURE	Lithonia Lighting	RSX2 LED P5 50K R5 MVOLT SPA DDBXD	210W RSX2 LED Area Light, Type 5 Wide Optics, 5000K, Dark Bronze Finish, 120-277V - Includes Square Pole Mounting	4
F7	FIXTURE	Lithonia Lighting	STL4-30L-EZ1-LP840	27W LED Surface Mount Volumetric Fixture 4000K	9
F8	FIXTURE	Cree Lighting	XSPW-B-WM-4ME-4L-50K-UL-BZ	40W XSPW LED Wallpack Type 4 Optics 5000K 90CRI Bronze Finish	43
K1	KIT	Philips	EvoKit 2x4 36L 25W 840 UNV 0-10 G5	25W 2x4 LED Troffer Retrofit Kit, 3600 Lumens, 4000K	113
K2	KIT	Philips	EvoKit 2x4 42L 28W 840 UNV 0-10 G5	28W 2x4 LED Troffer Retrofit Kit, 4,000K, 4200 Nominal Lumens, and 0-10V Dimming Driver	172
K3	KIT	Philips	EvoKit HE 2x4 30L 19W 840 UNV 0-10 G5	19W 2x4 HE Troffer Retrofit Kit, 4000K	9
K4	KIT	Philips	EvoKit HE 2x4 42L 28W 840 UNV STEP G5	28W 2x4 LED Troffer Retrofit Kit, 4200 Lumens, 4000K with Step Dimming Driver	375
K5	KIT	ESI	K-24LT-F4N0-2S-40-FR-D	30W LED 2x4 lensed troffer retrofit kit, 4425 initial lumens, 4000K color temp, with frosted lens, Dimming	4
K6	KIT	ESI	K-24LT-F4N6-2S-40-FR-SD	36W LED 2x4 lensed troffer retrofit kit, 4425 initial lumens, 4000K color temp, with frosted lens and 30/50/100 Step Dimming Driver	15



ISD #256 Red Wing Schools

Job #621

Type	Classification	Manufacturer	Part Number	Description	Installed Qty
K7	KIT	Lithonia Lighting	LBK 3FT 1 2000LMHE 80CRI 40K MIN10 ZT MVOLT	13.5W 3ft Light Bar Retrofit Kit - 4000K, 1 Bar	10
K8	KIT	Lithonia Lighting	LBK 4FT 1 3000LMHE 80CRI 40K MIN10 ZT MVOLT	19.5W 4ft Light Bar Retrofit Kit - 4000K, 1 Bar	32
K9	KIT	Lithonia Lighting	LBR8 07LM 40K AR LSS MWD MVOLT UGZ	9W LBR8 8" Recessed Can, 832 Nominal Lumens in 40K, Medium Distribution	4
L1	LAMP	GREEN CREATIVE	15.5PAR38DIM/940FL40	15.5W LED PAR38 E26 4000K Dimmable 90CRI - 120W Halogen Equivalent	6
L2	LAMP	GREEN CREATIVE	17A21/840/277V/DIM	17W LED A21 E26 4000K Dimmable - 125W Incandescent Equivalent	2
L3	LAMP	GREEN CREATIVE	3.5PLS/840/HYB/G23/R	3.5W LED Hybrid PLS G23 4000K - 7.9W CFL Equivalent	16
L4	LAMP	GREEN CREATIVE	9A19DIM/840/R	9W LED A19 E26 4000K Dimmable - 60W Incandescent Equivalent	8
L5	LAMP	GREEN CREATIVE	9PLO/840/HYBM	9W LED Hybrid PLO G24q & GX24q (4-pin) Based 40K - 26W CFL Equivalent	10
L6	LAMP	Keystone Technologies	KT-LED9.5A19-O-850	9.5W LED A19 E26 5000K Dimmable - 60W Halogen Equivalent	41
L7	LAMP	Universal Lighting Technologies	T8LACD2F9/840B25EC	9W 2' LED Type B T8 Lamp 4000K	2
L8	LAMP	Universal Lighting Technologies	T8LACD3F12/840B25EC	12W 3' LED Type B T8 Lamp 4000K	14
L9	LAMP	Universal Lighting Technologies	T8LACD4F12/840B25EC	12W 4' LED Type B T8 Lamp 4000K	364



# Scope of Work

ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
1.0	Exterior	Door 1	1L 20W LED COB [1x LED DRIVER]	Recessed Can 6" Can Recessed	Do Nothing	0	
2.0	Exterior	Door 1	1L 12W LEDS-M A19 [0x NULL]	Wall Mount * Wall	KEYSTONE-9.5W-A19- 50K-1L	14	- KT-LED9.5A19-O-850 (MFG: KEY) Qty: 1
3.0	Exterior	Door 2	1L 12W LEDS-M A19 [0x NULL]	Wall Mount * Wall	KEYSTONE-9.5W-A19- 50K-1L	2	- KT-LED9.5A19-O-850 (MFG: KEY) Qty: 1
4.0	Exterior	Door 3	1L 12W LEDS-M A19 [0x NULL]	Wall Mount * Wall	KEYSTONE-9.5W-A19- 50K-1L	2	- KT-LED9.5A19-O-850 (MFG: KEY) Qty: 1
5.0	Exterior	WP 1	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
6.0	Exterior	WP 2	1L 22W LEDS-M COB [0x edit	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
7.0	Exterior	WP 3	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
8.0	Exterior	WP 4	1L 22W LEDS-M COB [0x edit	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
9.0	Exterior	WP 5	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
10.0	Exterior	WP 6	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
11.0	Exterior	Door 5	1L 70W HPS MED BASE HID [1x MAG]	Recessed Can 6" Can Recessed	SYLVANIA-40W- CANOPY34A-50K-BRZ	1	- CANOPY34A-50K-UL-BZ (MFG: SYL) Qty: 1 - CANOPY34A-50K-UL-BZ (MFG: SYL) Qty: 1
12.0	Exterior	Door 5	1L 12W LEDS-M A19 [0x NULL]	Wall Mount * Wall	KEYSTONE-9.5W-A19- 50K-1L	3	- KT-LED9.5A19-O-850 (MFG: KEY) Qty: 1
13.0	Exterior	WP 7	1L 22W LEDS-M COB [0x edit	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
14.0	Exterior	WP 8	1L 22W LEDS-M COB [0x edit	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1



## ISD #256 Red Wing Schools

Job #621

ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
15.0	Exterior	WP 9	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
16.0	Exterior	WP 10	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
17.0	Exterior	WP 11	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
18.0	Exterior	WP 12	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
19.0	Exterior	WP 13	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
20.0	Exterior	WP 14	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
21.0	Exterior	WP 15	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
22.0	Exterior	Door 13	1L 70W HPS MED BASE HID [1x MAG]	Recessed Can 6" Can Recessed	SYLVANIA-40W- CANOPY S4A-50K-BRZ	1	- CANOPY S4A040UNVD8SC2C5BZ (MFG: SYL) Qty: 1 - CANOPY 3AMTGPLATE/12/BZ (MFG: SYL) Qty: 1
23.0	Exterior	WP 16	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
24.0	Exterior	WP 17	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
25.0	Exterior	WP 18	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
26.0	Exterior	WP 19	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
27.0	Exterior	WP 20	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
28.0	Exterior	WP 21	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1



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ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
29.0	Exterior	Door 15	1L 70W HPS MED BASE HID [1x MAG]	Recessed Can 6" Can Recessed	SYLVANIA-40W- CANOPYS4A-50K-BRZ	1	- CANOPYS4A040UNVD8SC2C5BZ (MFG: SYL) Qty: 1 - CANOPY3AMTGPLATE/12/BZ (MFG: SYL) Qty: 1
30.0	Exterior	Door 15	1L 12W LEDS-M A19 [0x NULL]	Wall Mount * Wall	KEYSTONE-9.5W-A19- 50K-1L	3	- KT-LED9.5A19-O-850 (MFG: KEY) Qty: 1
31.0	Exterior	WP 22	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
32.0	Exterior	WP 23	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
33.0	Exterior	WP 24	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
34.0	Exterior	WP 25	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
35.0	Exterior	WP 26	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
36.0	Exterior	Door 17	1L 70W HPS MED BASE HID [1x MAG]	Recessed Can 6" Can Recessed	SYLVANIA-40W- CANOPYS4A-50K-BRZ	1	- CANOPYS4A040UNVD8SC2C5BZ (MFG: SYL) Qty: 1 - CANOPY3AMTGPLATE/12/BZ (MFG: SYL) Qty: 1
37.0	Exterior	WP 27	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
38.0	Exterior	WP 28	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
39.0	Exterior	WP 29	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
40.0	Exterior	WP 29	1L 12W LEDS-M A19 [0x NULL]	Wall Mount * Wall	KEYSTONE-9.5W-A19- 50K-1L	2	- KT-LED9.5A19-O-850 (MFG: KEY) Qty: 1
41.0	Exterior	WP 30	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
42.0	Exterior	WP 31	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1



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ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
43.0	Exterior	WP 31	1L 12W LEDS-M A19 [0x NULL]	Wall Mount * Wall	KEYSTONE-9.5W-A19- 50K-1L	2	- KT-LED9.5A19-O-850 (MFG: KEY) Qty: 1
44.0	Exterior	WP 32	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
45.0	Exterior	WP 33	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
46.0	Exterior	WP 34	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
47.0	Exterior	WP 35	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
48.0	Exterior	WP 36	1L 100W HPS MED BASE HID [1x MAG]	Wallpack Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
49.0	Exterior	Door 20	1L 70W HPS MED BASE HID [1x MAG]	Recessed Can 6" Can Recessed	SYLVANIA-40W- CANOPY S4A-50K-BRZ	1	- CANOPYS4A040UNVD8SC2C5BZ (MFG: SYL) Qty: 1 - CANOPY3AMTGPLATE/12/BZ (MFG: SYL) Qty: 1
50.0	Exterior	FL 1	1L 63W LED Array [1x LED DRIVER]	Flood Wall	Do Nothing	0	
51.0	Exterior	WP 37	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
52.0	Exterior	WP 38	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
53.0	Exterior	WP 39	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
54.0	Exterior	Door 21	1L 70W HPS MED BASE HID [1x MAG]	Recessed Can 6" Can Recessed	SYLVANIA-40W- CANOPY S4A-50K-BRZ	1	- CANOPYS4A040UNVD8SC2C5BZ (MFG: SYL) Qty: 1 - CANOPY3AMTGPLATE/12/BZ (MFG: SYL) Qty: 1
55.0	Exterior	Door 21	1L 12W LEDS-M A19 [0x NULL]	Wall Mount * Wall	KEYSTONE-9.5W-A19- 50K-1L	3	- KT-LED9.5A19-O-850 (MFG: KEY) Qty: 1
56.0	Exterior	WP 40	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K- T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1





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ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
57.0	Exterior	WP 41	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K-T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
58.0	Exterior	WP 42	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K-T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
59.0	Exterior	WP 43	1L 22W LEDS-M COB [0x edit]	Wallpack * Wall	CREE-XSPW-40W-50K-T4-DB	1	- XSPW-B-WM-4ME-4L-50K-UL-BZ (MFG: CREE) Qty: 1
60.0	Exterior	Door 22	1L 70W HPS MED BASE HID [1x MAG]	Recessed Can 6" Can Recessed	SYLVANIA-40W-CANOPYS4A-50K-BRZ	1	- CANOPYS4A040UNVDS2C5BZ (MFG: SYL) Qty: 1 - CANOPY3A/MTGPLATE/12/BZ (MFG: SYL) Qty: 1
61.0	Exterior	Door 22	1L 12W LEDS-M A19 [0x NULL]	Wall Mount * Wall	KEYSTONE-9.5W-A19-50K-1L	10	- KT-LED9.5A19-O-850 (MFG: KEY) Qty: 1
62.0	Exterior	Flag Pole 1	1L 16W LED COB [1x LED DRIVER]	Flood Wall	Do Nothing	0	
63.0	Exterior	Pole 1	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	LITHONIA-RSX2-187W-50K-R4-MVOLT-SPA-DDBXD	1	- RSX2 LED P4 50K R4 MVOLT SPA DDBXD (MFG: LITH) Qty: 1
64.0	Exterior	Pole 2	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	LITHONIA-RSX2-187W-50K-R4-MVOLT-SPA-DDBXD	1	- RSX2 LED P4 50K R4 MVOLT SPA DDBXD (MFG: LITH) Qty: 1
65.0	Exterior	Pole 3	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	LITHONIA-RSX2-187W-50K-R4-MVOLT-SPA-DDBXD	1	- RSX2 LED P4 50K R4 MVOLT SPA DDBXD (MFG: LITH) Qty: 1
66.0	Exterior	Pole 4	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	LITHONIA-RSX2-187W-50K-R4-MVOLT-SPA-DDBXD	1	- RSX2 LED P4 50K R4 MVOLT SPA DDBXD (MFG: LITH) Qty: 1
67.0	Exterior	Pole 5	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	LITHONIA-RSX2-210W-50K-R5-MVOLT-SPA-DDBXD	1	- RSX2 LED P5 50K R5 MVOLT SPA DDBXD (MFG: LITH) Qty: 1
67.1	Exterior	Pole 5	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	Remove	1	
68.0	Exterior	Pole 6	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	LITHONIA-RSX2-147W-50K-R2-MVOLT-SPA-DDBXD	1	- RSX2 LED P3 50K R2 MVOLT SPA DDBXD (MFG: LITH) Qty: 1
69.0	Exterior	Pole 7	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	LITHONIA-RSX2-147W-50K-R2-MVOLT-SPA-DDBXD	1	- RSX2 LED P3 50K R2 MVOLT SPA DDBXD (MFG: LITH) Qty: 1



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ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
70.0	Exterior	Pole 8	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	LITHONIA-RSX2-210W- 50K-R5-MVOLT-SPA- DDBXD	1	- RSX2 LED P5 50K R5 MVOLT SPA DDBXD (MFG: LITH) Qty: 1
70.1	Exterior	Pole 8	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	Remove	1	
71.0	Exterior	Pole 9	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	LITHONIA-RSX2-210W- 50K-R5-MVOLT-SPA- DDBXD	1	- RSX2 LED P5 50K R5 MVOLT SPA DDBXD (MFG: LITH) Qty: 1
71.1	Exterior	Pole 9	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	Remove	1	
72.0	Exterior	Pole 10	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	LITHONIA-RSX2-210W- 50K-R5-MVOLT-SPA- DDBXD	1	- RSX2 LED P5 50K R5 MVOLT SPA DDBXD (MFG: LITH) Qty: 1
72.1	Exterior	Pole 10	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	Remove	1	
73.0	Exterior	Pole 11	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	LITHONIA-RSX2-187W- 50K-R4-MVOLT-SPA- DDBXD	1	- RSX2 LED P4 50K R4 MVOLT SPA DDBXD (MFG: LITH) Qty: 1
74.0	Exterior	Pole 11	1L 100W LED COB [1x LED DRIVER]	Flood Yolk	Do Nothing	0	
75.0	Exterior	Pole 12	1L 400W HPS MOG BASE HID [1x MAG]	Pole Light Pole	LITHONIA-RSX2-187W- 50K-R4-MVOLT-SPA- DDBXD	1	- RSX2 LED P4 50K R4 MVOLT SPA DDBXD (MFG: LITH) Qty: 1
76.0	Exterior	Pole 12	1L 100W LED COB [1x LED DRIVER]	Flood Yolk	Do Nothing	0	
271.0	Exterior	FL 1	1L 44W LED COB [1x LED DRIVER]	Flood Knuckle	Do Nothing	0	
272.0	Exterior	FL 2	1L 44W LED COB [1x LED DRIVER]	Flood Knuckle	Do Nothing	0	
77.0	Interior	Door 1 vestibule	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
78.0	Interior	Lobby	2L 25W LF4 T8 [1x ELE T8 DIM NP]	Lensed Troffer 2x4 Recessed	PHILLIPS-EVOKIT2X4- 25W-40K	3	- EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
79.0	Interior	Lobby	2L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILLIPS-EVOKIT2X4- 25W-40K	7	- EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
80.0	Interior	Lobby	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	



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ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
81.0	Interior	Lobby	2L 25W LF4 T8 [1x ELE T8 DIM NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	17	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
82.0	Interior	Lobby	1L 20W LED COB [1x LED DRIVER]	Recessed Can 6" Can Recessed	Do Nothing	0	
83.0	Interior	Trophy Case	2L 25W LF4 T8 [1x ELE T8 DIM NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	4	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
85.0	Interior	Room 100 - Main Office	3L 25W LF4 T8 [2x ELE T8 IS NP]	Parabolic Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	6	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
86.0	Interior	Room 100 - Main Office	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
87.0	Interior	Room 101 - Principals Office	3L 25W LF4 T8 [2x ELE T8 IS NP]	Parabolic Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	4	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
88.0	Interior	Room 102 - Health Services	3L 25W LF4 T8 [2x ELE T8 IS NP]	Parabolic Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	1	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
89.0	Interior	Room 102 - Health Services	2L 60W INCS-M A19 [0x NULL]	Vanity Wall	GC-VS-9W-A19-40K-2L	2	- 9A19DIM/840/R (MFG: GC) Qty: 2
90.0	Interior	Room 102 - Health Services	2L 13W CFS-M SPIRAL [0x NULL]	Vanity Wall	GC-VS-9W-A19-40K-2L	1	- 9A19DIM/840/R (MFG: GC) Qty: 2
91.0	Interior	Room 102 - Health Services	1L 40W LED Linear Board [1x LED DRIVER]	Lensed Troffer 2x2 Recessed	Do Nothing	0	
92.0	Interior	Room 102A - health services office	3L 25W LF4 T8 [2x ELE T8 IS NP]	Parabolic Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
93.0	Interior	Health Services Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Wrap 4' Surface	LITHONIA-STL4-27W- 40K	1	- STL4-30L-EZ1-LP840 (MFG: LITH) Qty: 1
94.0	Interior	Room 103	3L 25W LF4 T8 [2x ELE T8 IS NP]	Parabolic Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	4	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
95.0	Interior	Restroom 1	2L 25W LF4 T8 [1x ELE T8 IS NP]	Wrap 4' Surface	LITHONIA-STL4-27W- 40K	1	- STL4-30L-EZ1-LP840 (MFG: LITH) Qty: 1
96.0	Interior	Restroom 2	2L 25W LF4 T8 [1x ELE T8 IS NP]	Wrap 4' Surface	LITHONIA-STL4-27W- 40K	1	- STL4-30L-EZ1-LP840 (MFG: LITH) Qty: 1
97.0	Interior	Room 104 - breakroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	4	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
98.0	Interior	Room 104 - breakroom	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	



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99.0	Interior	Room 104A - copy room	3L 25W LF4 T8 [2x ELE T8 IS NP]	Parabolic Troffer 2x4 Recessed	PHILIPS-EVOKIT2x4-19W-40K-HE	9	- EvoKit HE 2x4 30L 19W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
100.0	Interior	Room 104B - Server Room	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2x4-28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
101.0	Interior	Room 105 - Wellness Room	3L 25W LF4 T8 [2x ELE T8 IS NP]	Parabolic Troffer 2x4 Recessed	ESI-F24LX-38W-RGBW	4	- F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) Qty: 1
102.0	Interior	Door 22 vestibule	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
103.0	Interior	A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2x4-25W-40K	35	- EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
104.0	Interior	A Wing Hallway B	2L 7W CFN SGL TUBE 2PIN N-I [1x MAG ES]	Decorative 9" Wall	GC-3.5W-PL-40K-2L	4	- 3.5PLS/840/HYB/G23/R (MFG: GC) Qty: 2
105.0	Interior	A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	3	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
106.0	Interior	A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	3	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
107.0	Interior	A Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	6	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
108.0	Interior	Room 106 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2x4-28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
109.0	Interior	Room 107 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2x4-28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
110.0	Interior	Room 108 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	ULT-348-12W-40K-DE	2	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 3
111.0	Interior	Room 109 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	ULT-348-12W-40K-DE	2	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 3
112.0	Interior	Room 110 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2x4-28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
113.0	Interior	Room 111 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2x4-28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
114.0	Interior	Room 111 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2x4-28W-40K-D	3	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1



## ISD #256 Red Wing Schools

Job #621

ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
115.0	Interior	Room 111 - classroom	1L 150W INCS-M PAR38 [0x NULL]	Track 6" Can Surface	GC-17W-PAR38-40K- 1L-277V	6	- 15.5PAR38DIM/940FL40 (MFG: GC) Qty: 1
116.0	Interior	Room 111A	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
117.0	Interior	Room 112 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
118.0	Interior	Room 113 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
119.0	Interior	Room 114 - Supplies	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	3	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
120.0	Interior	Room 115 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
121.0	Interior	Door 21 vestibule	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
122.0	Interior	Room 116 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
123.0	Interior	Room 117 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
124.0	Interior	Room 118 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
125.0	Interior	Door 20 vestibule	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
126.0	Interior	Room 119 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
127.0	Interior	Boys Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	4	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
128.0	Interior	Boys Restroom	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
129.0	Interior	Girls Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	4	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
130.0	Interior	Girls Restroom	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	



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Job #621

ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
131.0	Interior	Room 120 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
132.0	Interior	Room 124	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	1	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
133.0	Interior	Room 121 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
134.0	Interior	Room 122 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	ESI-F24LX-38W-RGBW	2	- F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) Qty: 1
135.0	Interior	Room 123 - student services	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
136.0	Interior	Room 124	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES]	Recessed Square 13"x13x Recessed	GC-9W-PLO-40K-2L	1	- 9PLO/840/HYBM (MFG: GC) Qty: 2
137.0	Interior	Room 125 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
138.0	Interior	Room 126 - Conference Room	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
139.0	Interior	Room 127 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	ESI-F24LX-38W-RGBW	14	- F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) Qty: 1
140.0	Interior	Room 127A	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
141.0	Interior	Room 128	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
142.0	Interior	Room 129 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	ESI-F24LX-38W-RGBW	14	- F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) Qty: 1
143.0	Interior	Women?s Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	2	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
144.0	Interior	Women?s Restroom	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
145.0	Interior	Women?s Restroom	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	



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Job #621

ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
146.0	Interior	Supply Room	1L 30W LED Linear Board [1x LED DRIVER]	Standard Strip 4' Wall	Do Nothing	0	
147.0	Interior	Mens Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	2	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
148.0	Interior	Mens Restroom	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
149.0	Interior	Room 130 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	ESI-F24LX-38W-RGBW	16	- F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) Qty: 1
150.0	Interior	Room 130 - classroom	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES]	Recessed Can 8" Recessed	LITHONIA-LBR8-9W-40K-MWD-MVOLT-UGZ	1	- LBR8 07LM 40K AR LSS MWD MVOLT UGZ (MFG: LITH) Qty: 1
277.0	Interior	Room 130 - classroom	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES]	Recessed Can 8" Recessed	LITHONIA-LBR8-9W-40K-MWD-MVOLT-UGZ	2	- LBR8 07LM 40K AR LSS MWD MVOLT UGZ (MFG: LITH) Qty: 1
151.0	Interior	A Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILLIPS-EVOKIT2X4-25W-40K	7	- EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
152.0	Interior	A Wing Hallway A	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
153.0	Interior	A Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	14	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
154.0	Interior	A Wing Hallway A	2L 25W LF3 T8 [1x ELE T8 IS NP]	Standard Strip 3' Surface	ULT-236-12W-40-DE	2	- T8LACD3F12/840B25EC (MFG: ULT) Qty: 2
155.0	Interior	Media Center	2L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	31	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
156.0	Interior	Media Center	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
157.0	Interior	Media Center	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	4	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
158.0	Interior	Media Center	2L 25W LF3 T8 [1x ELE T8 IS NP]	Standard Strip 3' Surface	ULT-236-12W-40-DE	2	- T8LACD3F12/840B25EC (MFG: ULT) Qty: 2
159.0	Interior	Media Center	2L 17W LF2 T8 [1x ELE T8 IS NP]	Standard Strip 2' Surface	ULT-224-9W-40K-DE	1	- T8LACD2F9/840B25EC (MFG: ULT) Qty: 2
160.0	Interior	Room 131A - Media Center Office	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1



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Job #621

ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
161.0	Interior	Room 131B - Copy Room	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
162.0	Interior	Room 132	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	6	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
163.0	Interior	Room 132A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	4	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
164.0	Interior	Room 132A	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
165.0	Interior	Room 133	10L 25W LF4 T8 [3x ELE T8 IS NP]	Indirect 20' Suspended	Lithonia-LBK 4FT 1 3000 40K (5)	1	- LBK 4FT 1 3000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) Qty: 5
167.0	Interior	Room 133	2L 25W LF4 T8 [1x ELE T8 IS NP]	Indirect 4' Wall	Lithonia-LBK 4FT 1 3000 40K	2	- LBK 4FT 1 3000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) Qty: 1
168.0	Interior	Room 133	2L 25W LF3 T8 [1x ELE T8 IS NP]	Indirect 3' Wall	Lithonia-LBK 3FT 1 2000 40K	5	- LBK 3FT 1 2000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) Qty: 1
169.0	Interior	Room 136	10L 25W LF4 T8 [3x ELE T8 IS NP]	Indirect 20' Suspended	Lithonia-LBK 4FT 1 3000 40K (5)	1	- LBK 4FT 1 3000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) Qty: 5
170.0	Interior	Room 136	2L 25W LF4 T8 [1x ELE T8 IS NP]	Indirect 4' Wall	Lithonia-LBK 4FT 1 3000 40K	15	- LBK 4FT 1 3000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) Qty: 1
171.0	Interior	Room 136	2L 25W LF3 T8 [1x ELE T8 IS NP]	Indirect 3' Wall	Lithonia-LBK 3FT 1 2000 40K	5	- LBK 3FT 1 2000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) Qty: 1
278.0	Interior	Room 136	2L 25W LF4 T8 [1x ELE T8 IS NP]	Indirect 4' Wall	Lithonia-LBK 4FT 1 3000 40K	5	- LBK 4FT 1 3000LMHE 80CRI 40K MIN10 ZT MVOLT (MFG: LITH) Qty: 1
172.0	Interior	Room 135	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	5	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
173.0	Interior	B Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 25W-40K	7	- EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
174.0	Interior	B Wing Hallway A	2L 17W LF2 T8 [1x ELE T8 IS NP]	Standard Strip 2' Surface	Do Nothing	0	
175.0	Interior	B Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	16	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
176.0	Interior	B Wing Hallway A	2L 25W LF3 T8 [1x ELE T8 IS NP]	Standard Strip 3' Surface	ULT-236-12W-40-DE	1	- T8LACD3F12/840B25EC (MFG: ULT) Qty: 2





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ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
276.0	Interior	B Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	7	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
177.0	Interior	Room 134 - Classroom	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	6	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
178.0	Interior	Room 137 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	15	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
179.0	Interior	Room 137A	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
180.0	Interior	Room 137B	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
181.0	Interior	Room 137C	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
182.0	Interior	Room 138/139 - Student Services	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	5	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
183.0	Interior	Door 17 vestibule	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
184.0	Interior	B Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 25W-40K	26	- EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
185.0	Interior	B Wing Hallway B	2L 7W CFN SGL TUBE 2PIN N-I [1x MAG ES]	Decorative 9" Wall	GC-3.5W-PL-40K-2L	2	- 3.5PLS/840/HYB/G23/R (MFG: GC) Qty: 2
186.0	Interior	B Wing Hallway B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	5	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
187.0	Interior	B Wing Hallway B	2L 25W LF3 T8 [1x ELE T8 IS NP]	Standard Strip 3' Surface	ULT-236-12W-40-DE	2	- T8LACD3F12/840B25EC (MFG: ULT) Qty: 2
188.0	Interior	Room 140	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	3	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
189.0	Interior	Room 141 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	ESI-F24LX-38W-RGBW	8	- F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) Qty: 1
190.0	Interior	Room 141 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	ESI-F24LX-38W-RGBW	3	- F-24LX-L4H-RGBW-FR-CAS (MFG: ESI) Qty: 1



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Job #621

ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
191.0	Interior	Room 141A	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
192.0	Interior	Room 142 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
193.0	Interior	Server Room	4L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 8' Surface	ULT-448-12W-40K-DE	1	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 4
194.0	Interior	Room 143 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
195.0	Interior	Room 144	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
196.0	Interior	Room 145 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
197.0	Interior	Door 15 vestibule	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
198.0	Interior	Room 146 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
199.0	Interior	Boys Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	3	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
200.0	Interior	Boys Restroom	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
201.0	Interior	Girls Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	3	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
202.0	Interior	Girls Restroom	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
203.0	Interior	Room 147 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
204.0	Interior	Room 148 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
205.0	Interior	Door 14 vestibule	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
206.0	Interior	Room 149 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1



## ISD #256 Red Wing Schools

Job #621

ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
207.0	Interior	Room 150 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	12	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
208.0	Interior	C Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 25W-40K	15	- EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
209.0	Interior	C Wing Hallway A	2L 7W CFN SGL TUBE 2PIN N-I [1x MAG ES]	Decorative 9" Wall	GC-3.5W-PL-40K-2L	2	- 3.5PLS/840/HYB/G23/R (MFG: GC) Qty: 2
210.0	Interior	C Wing Hallway A	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	3	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
211.0	Interior	Door 13 vestibule	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
212.0	Interior	Room 156 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-SD	15	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
213.0	Interior	Room 156B	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	1	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
214.0	Interior	Room 156B	2L 25W LF4 T8 [1x ELE T8 IS NP]	Wrap 4' Surface	LITHONIA-STL4-27W- 40K	1	- STL4-30L-EZ1-LP840 (MFG: LITH) Qty: 1
215.0	Interior	Room 156C	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	1	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
216.0	Interior	Room 170 - Supply Room	1L 30W LED Linear Board [1x LED DRIVER]	Standard Strip 4' Wall	Do Nothing	0	
217.0	Interior	Boys Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	4	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
218.0	Interior	Boys Restroom	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
219.0	Interior	Boys showers	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES]	Recessed Can 13? Recessed	GC-9W-PLO-40K-2L	2	- 9PLO/840/HYBM (MFG: GC) Qty: 2
220.0	Interior	Girls Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	3	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
221.0	Interior	Girls Restroom	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	



## ISD #256 Red Wing Schools

Job #621

ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
222.0	Interior	Girls Showers	2L 26W CFN DBL TUBE 4PIN N-I [1x MAG ES]	Recessed Can 13? Recessed	GC-9W-PLO-40K-2L	2	- 9PLO/840/HYBM (MFG: GC) Qty: 2
223.0	Interior	Room 157 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-SD	15	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
224.0	Interior	Room 157A	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
225.0	Interior	Room 157 -Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Wrap 4' Surface	LITHONIA-STL4-27W-40K	1	- STL4-30L-EZ1-LP840 (MFG: LITH) Qty: 1
226.0	Interior	Room 158 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-SD	15	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
227.0	Interior	Room 158A	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
228.0	Interior	Room 158 -Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Wrap 4' Surface	LITHONIA-STL4-27W-40K	1	- STL4-30L-EZ1-LP840 (MFG: LITH) Qty: 1
229.0	Interior	Room 160 - classroom	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-SD	17	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
230.0	Interior	Room 160A	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	1	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
231.0	Interior	Room 160B	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
232.0	Interior	Room 160 -Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Wrap 4' Surface	LITHONIA-STL4-27W-40K	1	- STL4-30L-EZ1-LP840 (MFG: LITH) Qty: 1
233.0	Interior	Room 160D	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
234.0	Interior	Room 160E	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	1	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
235.0	Interior	Room 163A - Receiving	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Chain/Cable	ULT-248-12W-40K-DE	16	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
236.0	Interior	Room 161B - Maintenance	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
237.0	Interior	Room 163B - Boiler	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Chain/Cable	ULT-248-12W-40K-DE	12	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2



## ISD #256 Red Wing Schools

Job #621

ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
238.0	Interior	Room 163C - Garage	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	2	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
239.0	Interior	Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Wrap 4' Surface	LITHONIA-STL4-27W-40K	1	- STL4-30L-EZ1-LP840 (MFG: LITH) Qty: 1
240.0	Interior	Freezer	2L 15W LL4A T8 [1x ELE T8 IS NP]	Vaportight 4' Surface	LITHONIA-FEM-24W-40K-LPPFL-STSL	0	- FEM L48 4000LM LPPFL WD MVOLT GZ10 40K 80CRI STSL (MFG: LITH) Qty: 1 - FEMSMB (MFG: LITH) Qty: 1
241.0	Interior	Refrigerator	2L 15W LL4A T8 [1x ELE T8 IS NP]	Vaportight 4' Surface	LITHONIA-FEM-24W-40K-LPPFL-STSL	0	- FEM L48 4000LM LPPFL WD MVOLT GZ10 40K 80CRI STSL (MFG: LITH) Qty: 1 - FEMSMB (MFG: LITH) Qty: 1
242.0	Interior	Room 162 - Kitchen	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	17	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
243.0	Interior	Room 162A	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	3	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
244.0	Interior	Room 162B - Restroom	2L 25W LF4 T8 [1x ELE T8 IS NP]	Wrap 4' Surface	LITHONIA-STL4-27W-40K	1	- STL4-30L-EZ1-LP840 (MFG: LITH) Qty: 1
245.0	Interior	Room 162E - Storage	2L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	3	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
246.0	Interior	Room 154 - cafeteria	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-SD	36	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
247.0	Interior	Room 159 - cafeteria	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-SD	10	- EVOKIT HE 2x4 42L 28W 840 UNV STEP G5 (MFG: PHI) Qty: 1
248.0	Interior	Room 159C - storage	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	1	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
249.0	Interior	Room 159B - storage	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	1	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
250.0	Interior	Room 159A - storage	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	1	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
251.0	Interior	Room 154A - storage	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	3	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
252.0	Interior	Music Room Hallway	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4-28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1



## ISD #256 Red Wing Schools

Job #621

ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
253.0	Interior	Room 153C - Music Room Storage	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Surface	ESI-K-24LT-F4N0-2S- 40-FR-D	4	- K-24LT-F4N0-2S-40-FR-D (MFG: ESI) Qty: 1
254.0	Interior	Room 153B	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	2	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
255.0	Interior	Room 153 - Music Room	3L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Surface	ESI-K-24LT-F4N6-2S- 40-FR-SD	15	- K-24LT-F4N6-2S-40-FR-SD (MFG: ESI) Qty: 1
256.0	Interior	Room 151B - Gym	6L 25W LF4 T8 [2x ELE T8 IS NP]	Highbay 1x8 Surface	LITHONIA-IBG-105W- 50K-AFL-GND-RIO- WGX-DWH	12	- IBG 18000LM SEF AFL GND MVOLT GZ10 50K 80CRI NLTAIR2 RIO WGX DWH (MFG: LITH) Qty: 1 - IBAC120-M100 (MFG: LITH) Qty: 1
257.0	Interior	Room 151A - Gym	6L 25W LF4 T8 [2x ELE T8 IS NP]	Highbay 1x8 Surface	LITHONIA-IBG-105W- 50K-AFL-GND-RIO- WGX-DWH	12	- IBG 18000LM SEF AFL GND MVOLT GZ10 50K 80CRI NLTAIR2 RIO WGX DWH (MFG: LITH) Qty: 1 - IBAC120-M100 (MFG: LITH) Qty: 1
258.0	Interior	Room 152 - gym office	3L 25W LF4 T8 [2x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILIPS-EVOKIT2X4- 28W-40K-D	3	- EvoKit 2x4 42L 28W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
259.0	Interior	Room 155A - gym storage	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	3	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
260.0	Interior	Room 155B - gym storage	2L 25W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	3	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
261.0	Interior	Cafeteria hallway	2L 25W LF4 T8 [1x ELE T8 DIM NP]	Lensed Troffer 2x4 Recessed	PHILLIPS-EVOKIT2X4- 25W-40K	5	- EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
262.0	Interior	Cafeteria hallway	2L 25W LF4 T8 [1x ELE T8 IS NP]	Lensed Troffer 2x4 Recessed	PHILLIPS-EVOKIT2X4- 25W-40K	8	- EvoKit 2x4 36L 25W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
263.0	Interior	Cafeteria hallway	1L 40W LED Linear Board [1x LED DRIVER]	Lensed Troffer 2x2 Recessed	PHILIPS-EVOKIT2X2- 22W-40K-D	0	- EvoKit 2x2 31L 22W 840 UNV 0-10 G5 (MFG: PHI) Qty: 1
273.0	Interior	Door 5 vestibule	1L 20W LED Array [1x LED DRIVER]	Canopy 10" x 10" Surface	Do Nothing	0	
274.0	Interior	Oil storage	1L 23W CFS-M Triple tube [0x Null]	Jelly Jar Surface	GC-17W-A21-40K-1L	2	- 17A21/840/277V/DIM (MFG: GC) Qty: 1
264.0	Interior - Mezzanine	Room 200	2L 32W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	5	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2



ISD #256 Red Wing Schools

Job #621

ID	Area	Room	Existing	Existing Fixture Attributes	Proposed Solution	Installed Qty	Parts List
265.0	Interior - Mezzanine	Room 200A - crawl space	1L 60W INCS-M A19 [0x NULL]	Porcelain Socket Wall	GC-VS-9W-A19-40K-1L	1	- 9A19DIM/840/R (MFG: GC) Qty: 1
266.0	Interior - Mezzanine	Room 201	2L 32W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	10	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
267.0	Interior - Mezzanine	Room 201A	2L 32W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	10	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
268.0	Interior - Mezzanine	Room 202	2L 32W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	5	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2
269.0	Interior - Mezzanine	Room 200B - crawl space	1L 60W INCS-M A19 [0x NULL]	Porcelain Socket Wall	GC-VS-9W-A19-40K-1L	1	- 9A19DIM/840/R (MFG: GC) Qty: 1
270.0	Interior - Mezzanine	Room 203	2L 32W LF4 T8 [1x ELE T8 IS NP]	Standard Strip 4' Surface	ULT-248-12W-40K-DE	7	- T8LACD4F12/840B25EC (MFG: ULT) Qty: 2

## DATA SHEET

**EASYFIT**  
 by EnOcean

### Easyfit Bluetooth® Single / Double Rocker Pad

#### ESRPB / EDRPB

**Easyfit Single / Double Rocker Pad for BLE (ESRPB / EDRPB) are universal energy harvesting wireless switches implementing the 2.4 GHz Bluetooth Low Energy (BLE) radio standard.**

ESRPB and EDRPB are based on the maintenance free, self-powered Bluetooth Low Energy (BLE) pushbutton transmitter module PTM 215B and delivered as single rocker (ESRPB) and double rocker (EDRPB) variants using the US rocker pad form factor.

The PTM 215B module within ESRPB and EDRPB contains an electro-dynamic energy transducer which is actuated by the rocker movement.

Whenever a rocker is pushed down or released, electrical energy is created and a set of BLE advertising frames is transmitted identifying the rocker status (pushed or released).



„Long“ or „Short“ rocker press (the time between pushing and releasing the rocker) can be calculated by the receiver. This enables switching, dimming control or jalousie control including slat action.

#### Ordering Information

##### TYPE

**Single Rocker Pad ESRPB**  
**Double Rocker Pad EDRPB**

##### ORDERING CODE

**ESRPB-W-EO**  
**EDRPB-W-EO**

#### Feature Overview

<b>Radio Transmitter</b>	PTM 215B pushbutton module with integrated antenna
<b>Energy Source</b>	Electro-dynamic energy generator, maintenance free
<b>Frequency / Protocol</b>	2.4 GHz / Bluetooth Low Energy (BLE)
<b>Range</b>	Within one room (up to 10 m line of sight)
<b>Channels</b>	2 or 4 (single or double rocker with medial position, pressed/released)
<b>Size of Single Rocker Pad</b>	4.95" H x 3.21" W x 0.74" D (126mm x 82mm x 19mm)
<b>Size of Double Rocker Pad</b>	4.95" H x 4.52" W x 0.72" D (126mm x 115mm x 18mm)
<b>Weight of Single Rocker Pad</b>	3.9 oz (112g)
<b>Weight of Double Rocker Pad</b>	5.3 oz (150g)
<b>Mounting</b>	Screwing onto flat surface (screws included)
<b>Operating conditions</b>	Temperature: -25 ... +65°C Humidity: 0 ... 95% r.h., non-condensing (dry environment only)
<b>Lifetime</b>	> 50.000 actuations (switching cycles) according to EN 60669
<b>Approvals</b>	FCC, IC, ACMA



Catalog Number:

Date:

Project:

## OVERVIEW

The nLight® AIR rPODB xS Series WallPods™ are wireless, battery-powered wall switches that provide two and four preset scene control, with optional single zone on/off/dimming control. A true wire-free switch, these single gang decorator style devices have soft-click push-buttons and a green LED indicator for each button that light up to confirm when pressed. The rPODB wall switches communicate with other nLight AIR devices via radio frequency (RF) after assigning to a group with the Clairity Pro smartphone app. A battery-powered wall switch can work with any nLight AIR enabled fixture or power pack group to provide preset scene control and optionally on/off/dimming control of a single zone.

## FEATURES

- Powered with three off-the-shelf AAA Lithium size batteries and rated for 10 years of normal use, minimizing battery replacement (Battery replacement with alkaline batteries does not guarantee a 10-year run time.)
- Batteries included and preinstalled... Just unbox and mount
- Communicates with nLight® AIR devices via radio frequency (RF) in the 900MHz spectrum
- Soft-click push-button control with LED feedback upon press
- Custom button engraving at no charge (WH, IV, AL GY units only)
- 2 or 4 preset scene control
- Maximum of 4 total preset scenes per nLight Air group
- All devices within nLight Air group are controlled by the preset scene
- Default preset scenes after assigning preset scene selectors to a nLight Air group using Clairity Pro:
  - 100% ("2S" & "4S" Options)
  - 66% ("2S" & "4S" Options)
  - 33% ("4S" Option Only)
  - Off ("4S" Option Only)
- Presets can be overridden through 5-10 second push-and-hold of appropriate preset scene button, storing the current individual fixture/power pack light level as the new preset scene
- Optional single zone on/off and raise/lower control ("DX" option)
- Wireless multi location preset scene recall and on/off/dimming control – if multiple preset scene switches are part of the same nLight Air group, the switches will recall the same preset scenes (i.e. multi-way control)

## Warranty

Five-year limited warranty. Complete warranty terms located at:  
[www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

**Note:** Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.



## nLight® AIR rPODB xS Battery powered preset scene Wall Switch



nLight® AIR Platform

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**Note:** nLight® AIR devices are only compatible with other nLight AIR enabled devices; and is not cross compatible with other nLight product lines at this time.

## ORDERING INFORMATION

Example: RPODB 4S DX WH G2				
Series	# of Scenes	Dimming Control	Color	Generation
RPODB	2S Two Preset Scene Control 4S Four Preset Scene Control	[blank] Preset Scenes Only DX Preset Scenes + Single Zone On/Off/Raise/Lower Control	WH White IV Ivory AL Light Almond GY Gray	G2 Generation 2 Compatibility

## SPECIFICATIONS

<b>Electrical</b>	<b>Battery Type</b>	3 AAA Lithium Batteries (included)
	<b>Battery Life</b>	10 years (with Lithium batteries)
<b>Mechanical</b>	<b>Dimensions</b>	2.74"H x 1.68"W x 1.63"D (70mm x 43mm x 41mm)
	<b>Weight</b>	4.25 oz
	<b>Mounting</b>	Single-Gang Switch Box or Low Voltage Ring
	<b>Standards/ Ratings</b>	RoHS
<b>Environmental</b>	<b>Warrantied Operating Temperature</b>	-40°F to 140°F (-40°C to 60°C)
	<b>Relative Humidity</b>	20 to 75%, Non-Condensing
<b>Wireless</b>	<b>Radio Frequency</b>	Dual Radio: 900MHz & 2.4GHz
	<b>RF Transmit Power</b>	900MHz: +20dBm; 2.4GHz: Variable
	<b>Wireless Standard</b>	900MHz: IEEE 802.15.4-based
		2.4GHz: Version 4.0+ of the Bluetooth Specification
	<b>Security</b>	Application Data Encryption: AES-128 bit
		Mutual Entity Authentication
		Message Confidentiality
		Message Authentication and Replay Prevention
		Limited Anonymity
		Complies with California Civil Code Title 1.81.26, Security of Connected Devices, approved under Senate Bill No. 327 (2018)
	<b>Standards/ Ratings:</b>	FCC, IC

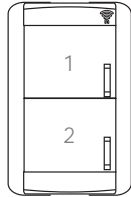
## PROGRAMMING

- Add preset scene selector to the appropriate nLight Air group using the Clarity Pro app. If the unit includes the "DX" option, assign the switch to a zone for on/off/raise/lower control. After assigning, preset scenes buttons will automatically operate under the following default settings:
  - rPODB 2S (DX)
    - Preset Scene button 1 is set to 100%
    - Preset Scene button 2 is set to 66%
  - rPODB 4S (DX)
    - Preset Scene button 1 is set to 100%
    - Preset Scene button 2 is set to 66%
    - Preset Scene button 3 is set to 33%
    - Preset Scene button 4 is set to OFF
- The preset scene levels can be changed by first adjusting the light level of the nLight Air devices in the group with either the unit's raise/lower buttons (i.e. rPODB 2S DX, rPODB 4S DX), via additional on/off/raise/lower rPODB in the group, or through SensorView if the nLight Air group is networked to an nLight ECLYPSE™. All devices in the nLight Air group (i.e. nLight Air enabled fixtures, power packs) can be set to the same or different levels, and ALL devices in the group must be included in the preset scene (i.e. devices must be set to off, or a level between 1 – 100%, and cannot be excluded from the preset scene).
- Once lights are at a desired level, hold the appropriate preset scene button for 5 seconds. Once the button begins flashing rapidly, release to save the new preset scene. All lights will dim down and back up to identify that the preset scene level has saved successfully.

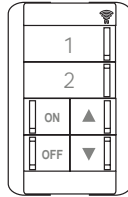
## CUSTOM ENGRAVING

- Default button labeling is shown below.
- Custom lettering for WH, IV, AL, and GY units can be specified and ordered at no charge at:  
<https://www.acuitybrands.com/brands/lighting-controls/-/media/abl/acuitybrands/files/nlight/ngrave-110-pdf.pdf>.
- To ensure color uniformity, ordering templates facilitate specifying all buttons on a unit as custom lettered. Replacing single buttons not recommended.
- Buttons may ship separately and require field installation

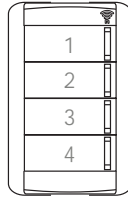
### DEFAULT LABELING



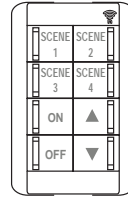
**rPODB 2S**  
**2-Preset Scene Control**  
Default Scenes:  
1 - 100%  
2 - 66%



**rPODB 2S DX**  
**2-Preset Scene Control**  
**with On/Off/Raise/Lower**  
Default Scenes:  
1 - 100%  
2 - 66%



**rPODB 4S**  
**4-Preset Scene Control**  
Default Scenes:  
1 - 100%  
2 - 66%  
3 - 33%  
4 - Off



**rPODB 4S DX**  
**4-Preset Scene Control**  
**with On/Off/Raise/Lower**  
Default Scenes:  
1 - 100%  
2 - 66%  
3 - 33%  
4 - Off

## INSTALLATION OVERVIEW

Installation of the rPODB wall switch is simple, straight forward, and quick! A truly "wire-free" installation with preinstalled batteries and embedded nLight AIR radio. Follow the simple steps below to perform the mechanical installation of the rPODB Wall Switch.

### Installation

1. Install the rPODB into a single gang box just like your typical wall switch
2. No wiring needed, and can be installed retainer first, or switch and retainer together
3. Check to make sure the rPODB is secure in retainer clip once installed
4. Screw down wall plate - DONE!



[www.ledvanceUS.com/luminaires](http://www.ledvanceUS.com/luminaires)

## SYLVANIA Luminaires

### UltraLED™ CCT Selectable Canopy

#### Application

The Canopy luminaires are environmentally preferable LED alternatives to traditional HID luminaires, offering up to 79% in energy savings. Ideal in place of traditional luminaires, or as new installations, the Canopy series is offered in four wattages/lumen packages for illuminating parking garages, covered exterior corridors or walkways and stairwells.

#### Benefits and Features

- Slim, lightweight design
- High efficacy meets DLC requirements and increases rebate opportunities
- CCT selectability increases luminaire versatility
- Up to 135 LPW
- 3000K, 4000K or 5000K CCT Selectable
- CRI >80
- Offered in 20, 40, 60, and 75 watts
- Two color options: bronze or white
- Garage and Canopy optics
- Energy savings up to 79%

#### Electrical

- 120-277V<sub>AC</sub>
- Power factor >90%
- THD <20%
- 0-10V dimmable

#### Rated Life

- 100,000 hours (L<sub>70</sub>)

#### Warranty

- 5-year
- NLB Trusted Warranty Program

#### Ambient Operating Range

- -30°F to +122°F (-22°C to +50°C)

Item #
Type
Project
Notes
Date



#### Wattage Comparison

Traditional Source	Traditional System Wattage	LED System Wattage	Energy Savings
35W HPS	42	20	52%
50W HPS	62	20	68%
70W HPS	91	20	78%
70W HPS	91	40	56%
100W HPS	120	40	67%
100W MH	130	40	69%
150W HPS	170	40	76%
150W MH	188	40	79%
150W HPS	170	60	65%
150W MH	188	60	68%
175W MH	210	60	71%
250W MH	290	60	79%
150W HPS	170	75	56%
150W MH	188	75	60%
175W MH	210	75	64%
250W MH	290	75	74%

#### Certifications and Listings

- cULus rated for wet locations
- RoHS
- IP65
- FCC
- DLC Premium

#### Installation

- Luminaire mounts to recessed outlet box or can be pendant mounted (accessories not included).



LEDLUM097R4 6-22



## Ordering Guide

CANOPYS	4X	/ XX	UNV	D	8	SC2	/ X5	/ BZ	/ X
Product Name	Generation	Wattage	Voltage	Dimming	CRI	Color Temp	Distribution	Color/Finish	Options
CANOPYS = UltraLED™	4A = 20 or 40W	20 = 20 watts	UNV =	D = 0-10V	8 = >80	SC2 = selectable 3000, 4000 or 5000K CCT	G5 = Garage Optics C5 = Canopy Optics	BZ = Bronze WH = White	Blank = no option D = Motion/Daylight Sensor M = Motion Sensor P = Photocontrol
CCT Selectable Canopy	versions	40 = 40 watts	120-277V						
Luminaire	4B = 60 or 75W versions	60 = 60 watts 75 = 75 watts							

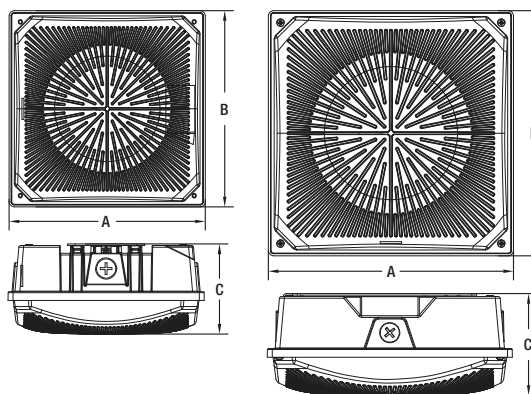
## Ordering Information

Item Number	Ordering Abbreviation	Power (W)	Input Voltage (V)	Dimming	CRI	Color Temp	Distribution	Total Fixture Lumens	LPW*	DLC	Options	Finish
62223	CANOPYS4A/020UNVD8SC2/C5/BZ	20	120-277	0-10V	80	3000, 4000 or 5000K	Canopy	2500	125	Premium	–	Bronze
61312	CANOPYS4A/020UNVD8SC2/C5/WH	20	120-277	0-10V	80	3000, 4000 or 5000K	Canopy	2500	125	Premium	-	White
62224	CANOPYS4A/020UNVD8SC2/G5/BZ	20	120-277	0-10V	80	3000, 4000 or 5000K	Garage	2500	125	Premium	–	Bronze
62225	CANOPYS4A/020UNVD8SC2/G5/BZ/D	20	120-277	0-10V	80	3000, 4000 or 5000K	Garage	2500	125	Premium	Motion/Daylight Sensor	Bronze
62226	CANOPYS4A/040UNVD8SC2/C5/BZ	40	120-277	0-10V	80	3000, 4000 or 5000K	Canopy	5000	125	Premium	–	Bronze
61313	CANOPYS4A/040UNVD8SC2/C5/WH	40	120-277	0-10V	80	3000, 4000 or 5000K	Canopy	5000	125	Premium	-	White
62227	CANOPYS4A/040UNVD8SC2/G5/BZ	40	120-277	0-10V	80	3000, 4000 or 5000K	Garage	5000	125	Premium	–	Bronze
62228	CANOPYS4A/040UNVD8SC2/G5/BZ/D	40	120-277	0-10V	80	3000, 4000 or 5000K	Garage	5000	125	Premium	Motion/Daylight Sensor	Bronze
62229	CANOPYS4B/060UNVD8SC2/C5/BZ	60	120-277	0-10V	80	3000, 4000 or 5000K	Canopy	7500	125	Premium	–	Bronze
61314	CANOPYS4B/060UNVD8SC2/C5/WH	60	120-277	0-10V	80	3000, 4000 or 5000K	Canopy	7500	125	Premium	-	White
62230	CANOPYS4B/060UNVD8SC2/G5/BZ	60	120-277	0-10V	80	3000, 4000 or 5000K	Garage	7500	125	Premium	–	Bronze
62231	CANOPYS4B/060UNVD8SC2/G5/BZ/D	60	120-277	0-10V	80	3000, 4000 or 5000K	Garage	7500	125	Premium	Motion/Daylight Sensor	Bronze
61309	CANOPYS4B/075UNVD8SC2/C5/BZ	75	120-277	0-10V	80	3000, 4000 or 5000K	Canopy	9375	125	Premium	–	Bronze
61315	CANOPYS4B/075UNVD8SC2/C5/WH	75	120-277	0-10V	80	3000, 4000 or 5000K	Canopy	9375	125	Premium	-	White
61310	CANOPYS4B/075UNVD8SC2/G5/BZ	75	120-277	0-10V	80	3000, 4000 or 5000K	Garage	9375	125	Premium	–	Bronze
61311	CANOPYS4B/075UNVD8SC2/G5/BZ/D	75	120-277	0-10V	80	3000, 4000 or 5000K	Garage	9375	125	Premium	Motion/Daylight Sensor	Bronze

\*LPW is calculated at 3000K

## Physical Information

Lamp Description	(A) Length in	(B) Width in	(C) Height in
UltraLED Canopy 20 and 40W versions	7.992	7.992	3.661
UltraLED Canopy 60 and 75W versions	10	10	4.173



## Accessories

Item Number	Ordering Abbreviation	Description
60683	CANOPY3A/MTGPLATE/12/BZ	12.5" Mounting Plate, Bronze
60684	CANOPY3A/MTGPLATE/16/BZ	16" Mounting Plate, Bronze
60105	HIBAY2A/REMOTE	Sensor Remote
60685	CANOPY3A/MTGPLATE/12/WH	12.5" mounting plate, white
60686	CANOPY3A/MTGPLATE/16/WH	16" mounting plate, white

### Sensor Options Information

Motion	100% Lumen output
≥5 min no motion	30% Lumen output
≥60 min no motion	Off Lumen output

**Stand-by power:** <1W

**Detection area options:** 25%/50%/75%/100%\*

**Hold time options:** 5s/30s/1min/3min/5min/10min/20min/30min

**Daylight threshold options:** 2Lux/10Lux/30Lux/50Lux  
 80Lux/120Lux/Disable

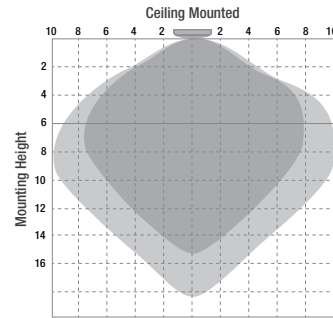
**Stand-by period options:** 0s/10s/30s/1min/5min/10min/30min/+∞

**Mounting height:** Max – 49ft (15m)

**Dimming Level:** 10%, 20%, 30%, 50%

\*25% and 50% can only be accessed via the remote (NAED 60105).

### Detection Range\*



\*Dark grey denotes maximum sensitivity  
 Light grey denotes decreased sensitivity  
 Graph is shown at 100% detection range;  
 units are shown in meters.

LEDVANCE LLC  
 200 Ballardvale Street  
 Wilmington, MA 01887 USA  
 Phone 1-800-LIGHTBULB (1-800-544-4828)  
 www.ledvanceUS.com

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 All other trademarks are those of their respective owners.  
 Licensee of product trademark SYLVANIA in general lighting.  
 Specifications subject to change without notice.

 /sylvania  /sylvania

© 2022 LEDVANCE LLC

Name: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: \_\_\_\_\_





**LX**  
**GOLD**

**LED TROFFER KIT / FIXTURE**  
**COLOR TUNING**

TYPE	PROJECT NAME	DATE

## FEATURES

- Energy efficient replacement from fluorescent technology
- 150,000 hr + L70
- Seoul Semiconductor LEDs
- Philips Xitanium / Sylvania Optotronic LED Drivers
- Dimming options available upon request
- Wide range of lumen and wattage packages available
- 135 lumen per watt delivered / 82+ CRI
- Color tune with simple controls systems

## TECHNICAL INFORMATION

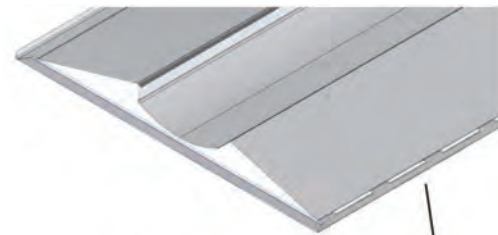
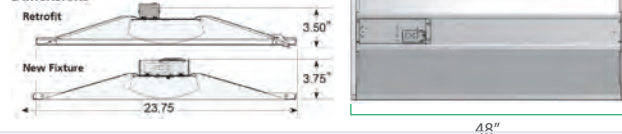
- **Housing:** All aluminum construction minimizes weight and maximizes thermal performance of the LED light engine.
- **Finish:** All parts are painted with a matte white paint to provide soft, even illumination.
- **Fixture Mounting:** Fixture is designed for lay-in, recessed applications only.
- **LEDs:** Best efficacy of mid-level power LEDs, 80+ CRI, utilizes aluminum substrate to provide superior thermal management.

## INSTALLATION POINTS

### RETROFIT INSTRUCTIONS

- The existing door frame must be removed along with all of the existing fluorescent components in the fixture. A hinge rail is inserted between the ceiling grid and fixture housing at each end. The hinge tabs on the retrofit insert are engaged with the slots in the hinge rails. With the insert hanging open, the electrical connection can be made and ground strap installed. The final step is to close the new LED door and secure the latches.

### Dimensions

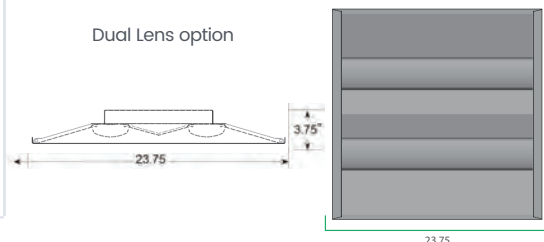


Air Handling on Fixture.

For proper Air Handling on an LX Kit Side Rails are omitted.



Dual Lens option



**MADE IN THE USA**

**LX 17001**



Energy Solutions  
INTERNATIONAL, INC.

LX  
GOLD

ORDERING INFORMATION

Part Number = Style + Size + Light Engine + Color Temperature + Options  
(Example: F-24LX-L4N-2765-CT = 2'x4' LX Retrofit Kit with a 32 Watt Light Engine with 2700K - 6500K Color Tuning LED Boards)

			RGBW		CAS
STYLE	SIZE	LIGHT ENGINE	COLOR TEMP.	OPTIONS	COLOR TUNING
K - RETROFIT KIT	14LX - 1' X 4'	L4L - (1X4) - 14W - 1587 - LUMENS		FR - FROSTED LENS	
F - FIXTURE	22LX - 2' X 2'	L4N - (1X4) - 21W - 2316 - LUMENS		PA - PRE ASSEMBLED	
	24LX - 2' X 4'	L4M - (1X4) - 25W 2725 - LUMENS		DF - DOOR FRAME KIT	
		L4H - (1X4) - 32W 3414 - LUMENS		D - 0-10V DIMMING	
		L4V - (1X4) - 38W 3978 - LUMENS		AH - AIR HANDLING	
		L2L - (2X2) - 17W 1880 - LUMENS		EM - EMERGENCY DRIVER	
		L2N - (2X2) - 20W 2160 - LUMENS		DL - DUAL LENS	
		L2H - (2X2) - 22W 2365 - LUMENS			
		L2VN - (2X2) - 30W 3210 - LUMENS			
		L2VH - (2X2) - 38W 4050 - LUMENS			
		L2VV - (2X2) - 44W 4620 - LUMENS			
		L4L - (2X4) - 24W 3115 - LUMENS			
		L4LN - (2X4) - 26W 3304 - LUMENS			
		L4LM - (2X4) - 28W 3532 - LUMENS			
		L4LH - (2X4) - 30W 3732 - LUMENS			
		L4N - (2X4) - 32W 4030 - LUMENS			
		L4NH - (2X4) - 35W 4364 - LUMENS			
		L4H - (2X4) - 38W 4635 - LUMENS			
		L4V - (2X4) - 44W 5180 - LUMENS			

CONTACT FACTORY FOR CONTROLS  
OPTIONS AND COMPATIBILITY

CONTROLS CAPABILITIES

"All products are IoT-Ready!"



OCCUPANCY / VACANCY



DAYLIGHT HARVESTING



GROUPING



SCHEDULING



DIMMING



NETWORKED LIGHTING CONTROLS



MADE IN THE USA

LX 17001





## FEATURES & SPECIFICATIONS

**INTENDED USE** — Ideal one-for-one replacement of conventional HID and fluorescent high bay systems. Applications include warehousing, manufacturing, gymnasiums, and other large indoor spaces with mounting heights up to 60'. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate.** [Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.](#)

**Certain airborne contaminants may adversely affect the functioning of LEDs and other electronic components, depending on various factors such as concentrations of the contaminants, ventilation, and temperature at the end-user location.** [Click here for a list of substances that may not be suitable for interaction with LEDs and other electronic components.](#)

**CONSTRUCTION** — Structural elements such as the channel and end caps are fabricated from steel for maximum rigidity, IK ratings page 8. Wireguard attachment points provided. Lightweight aluminum heat sink designed to perform in ambient temperatures up to 55 °C for maximum naturally convective cooling. Optional rotatable outer light modules available when ROTO option is specified, see page 4 for additional details.

**OPTICS** — General, narrow, wide and aisle distributions available to meet both horizontal and vertical light level requirements. Diffuse lens standard to provide glare control and LED protection. Optics are IP5X rated.

Patent-pending Acuity-exclusive Fresnel pattern molded into lens for crisp distributions and interchangeability in the field.

**ELECTRICAL** — L92 at 60,000 hours. Utilizes a 90°C case temperature driver for maximum life at high temperatures. 0.90 power factor. Luminaire Surge Protection Level: Designed to withstand up to 6kV/3kA per ANSI C82.77-5-2015. Luminaire Surge Protection Level: Designed to withstand up to 10kV/5kA per ANSI C82.77-5-2015, optional. Available as 120-277V or 347-480V input.

0-10V dimming standard for a dimming range of 100% to 10%.

**WIRELESS NETWORKING** — nLight® AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and nLight AIR is available with or without an integral sensor. Integrated smart sensors or dimming and switching modules must be part of each luminaire in the nLight AIR network, which can be grouped to control multiple luminaires. The granularity of control with the digital PIR occupancy detection and daylight sensing makes this a great solution for any application.

**INSTALLATION** — Suitable for suspension by chain, cable, surface mounting when using compatible surface mount bracket (THUN accessory ordered separately), and hook monopoint or single (pendant) mount. To maintain ambient listing, fixture should be mounted at a minimum plenum height of 18".

**LISTINGS** — CSA certified to US and Canadian safety standards. Damp location listed. Suitable for ambient temperatures from -40°F (-40°C) to 131°F (55°C) when suspended 18" from ceiling. The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Acuity Brands is under license. Other trademarks and trade names are those of their respective owners.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

**BUY AMERICAN** — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

**WARRANTY** — 5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Catalog Number
Notes
Type



LED High Bay

IBG



## Embed nLight controls today. Prepare for tomorrow.

Now	Tomorrow
User-friendly install	Scalability
Enhanced energy savings	Space configuration
Code compliance	Future-ready

## Stock configurations are offered for shorter lead times:

Standard Part Number	Stock Part Number	DLC QPL Product ID	DLC Premium?
IBG 12000LM SEF AFL GND MVOLT GZ10 40K 80CRI DWH	IBG 12L MVOLT	PAMMN2VX	✓
IBG 15000LM SEF AFL GND MVOLT GZ10 40K 80CRI DWH	IBG 15L MVOLT	P3G6HADN	✓
IBG 18000LM SEF AFL GND MVOLT GZ10 40K 80CRI DWH	IBG 18L MVOLT	P851GVEP	✓
IBG 24000LM SEF AFL GND MVOLT GZ10 40K 80CRI DWH	IBG 24L MVOLT	P2BJQY5S	✓
IBG 12000LM SEF AFL GND MVOLT GZ10 50K 80CRI DWH	IBG 12L MVOLT 5K	P7TZAZV	✓
IBG 15000LM SEF AFL GND MVOLT GZ10 50K 80CRI DWH	IBG 15L MVOLT 5K	PXMBGZJS	✓
IBG 18000LM SEF AFL GND MVOLT GZ10 50K 80CRI DWH	IBG 18L MVOLT 5K	P85EZK7	✓
IBG 24000LM SEF AFL GND MVOLT GZ10 50K 80CRI DWH	IBG 24L MVOLT 5K	PQ5CSK48	✓

## Capable Luminaire

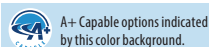
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® or XPoint™ Wireless control networks marked by a [shaded background\\*](#)

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

\*See ordering tree for details

## IBG LED High Bay



### ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

**Example:** IBG 24000LM SEF AFL GND MVOLT GZ10 40K 80CRI DWH

Series	Lumen package	Performance package	Lens	Distribution	Voltage	Driver	Color temperature	Coloring rendering index
IBG	8000LM 8,000 lumens ‡	SEF Standard efficiency HEF Premium efficiency	AFL Acrylic, frosted	GND General	MVOLT 120-277V	GZ10 0-10V dimming	35K 3500 K	70CRI 70 CRI
	12000LM 12,000 lumens		ACL Clear acrylic		HVOLT 347-480V ‡		40K 4000 K	80CRI 80 CRI
	15000LM 15,000 lumens		PCL Clear polycarbonate		120 120V		50K 5000 K	90CRI 90 CRI ‡
	18000LM 18,000 lumens		PFL Semi-diffuse polycarbonate		208 208V			
	24000LM 24,000 lumens		L/LENS Less lens ‡		240 240V			
	30000LM 30,000 lumens				277 277V			
	36000LM 36,000 lumens ‡		ATL Acrylic textured lens	ND Narrow WD Wide ADL Rack	347 347V ‡			
	48000LM 48,000 lumens ‡		PTL Polycarbonate textured lens		480 480V ‡			
	60000LM 60,000 lumens ‡							
	72000LM 72,000 lumens ‡							

Options			Finish
BAA	Buy America(n) Act Compliant	Individual Controls (LSXR): ‡	DNA Natural aluminum
Emergency batteries ‡		LSXR6 360° integral high mount motion sensor with standard on/off operation (formerly LAOZU) <a href="#">LINK</a>	DWH Gloss white
E10WCP	10W emergency battery pack, Certified in CA Title 20 MAEDBS ‡	LSXR6 HL 360° integral high mount motion sensor with high/low/(Off) occupancy operation (formerly LAHOSZU) (For High/Low only, bypass relay)	MB Matte black
IE20WCPHE	10W 20W emergency battery pack, Certified in CA Title 20 MAEDBS ‡	LSXR6 P 360° integral high mount motion sensor with On/Off switching photocell (formerly LAPZU)	
IE30WCPHE	10W 30W emergency battery pack, Certified in CA Title 20 MAEDBS ‡	LSXR6 ADC 360° integral high mount motion sensor with dimming & switching photocell (formerly LAMOSZU)	
		LSXR6 ANL 360° integral high mount motion sensor with High/Low (Off) occupancy dimming & auto-dimming photocell;	
SPD	Surge protection device ‡	*For 360° integral Low Mount sensors, replace "6" in nomenclature with "10". For High Mount Aisleway sensors, replace "6" in nomenclature with "50". Ex: LSXR10 ADC	
ETS	Generator transfer device ‡	Individual Controls with Bluetooth Programming (Haleon) ‡	
SF	Single fuse ‡	HLN45 OCC 360° integral high mount motion sensor; Bluetooth enabled <a href="#">LINK</a> (formerly HLN360)	
DF	Double fuse ‡	HLN45 HL 360° integral high mount motion sensor with High/Low (Off) occupancy detection; Bluetooth enabled (formerly HLN360HL)	
OUTCTR	Wiring leads pulled through back center of fixture ‡	HLN45 ADC 360° integral high mount motion sensor. On/Off occupancy detection with auto-dimming photocell; Bluetooth enabled (formerly HLN360ADC)	
OCS	RELOC® OnePass® selectable cable 6' installed ‡	HLN45 ANL 360° integral high mount motion sensor with High/Low (Off) occupancy dimming & auto-dimming photocell; Bluetooth enabled (formerly HLN360ANL)	
OCS4C	RELOC® One Pass® selectable cable 6' installed. ‡	*For integral Aisle Mount sensors, replace "45" in nomenclature with "45A". Ex: HLN45A ADC	
OCU	RELOC® OnePass® unselectable cable 6' installed (must specify tap position) ‡	C6DOSUEM 360° high mount motion sensor, dimming only (photocell disabled), pre-wired; UL924 listed (not available with battery pack or ETS) ‡	
IMP	Integrated modular plug ‡	*For Low Mount sensor, replace "6" in nomenclature with "10"	
RRL	RELOC® Ready luminaire. (Not available with Haleon sensor options) See page 11 for ordering information ‡	nLight Wired Network Controls	
WGX	Standard wire guard, installed (not available with Haleon sensor)	NCMB6 nLight High Mount Occupancy Sensor with Dimming, pre-wired <a href="#">LINK</a> (Includes dimming Power Pack) ‡	
ROTO	Rotatable optics ‡	NPP16 D nLight dimming & switching module <a href="#">LINK</a> ‡	
JP	Job Pack Packaging (Consult table on page 10 for details)	*For 360° integral Low Mount sensors, replace "6" in nomenclature with "10". For high Aisle Mount sensors, replace "6" with "50". Ex: NCMB50	
Cord sets ‡		nLight AIR Wireless Controls ‡	
CPSBW	6' white damp location cord with straight blade plug (voltage will match fixture)	NLTAIR2 RMSOD45 nLight AIR (wireless) gen 2 control device with high mount occupancy and daylight sensor <a href="#">LINK</a>	
CPTLW	6' white damp location cord with twist-lock plug (voltage will match fixture)	NLTAIR2 RIO nLight AIR (wireless) gen 2 control device (dimming & switching) <a href="#">LINK</a>	
CNPW	6' white cord, no plug	*For 360° integral Low Mount sensors, replace "45" in nomenclature with "7". For high Aisle Mount sensors, replace "45" with "45A". Ex: NLTAIR2 RMSOD45A	
CNP4CW	6' white cord with 4 conductors, no plug (for use when unswitched hot is required for battery pack)		
CNP5CW	6' white cord, 5 conductor, no plug, damp location		
CNP5CDW	6' white cord, 5 conductors (for bringing dimming leads out of fixture)	**For guidance on which sensors to use with emergency generator power, consult table on page 9.	

NOTE: ‡ indicates option chosen has ordering restrictions. Please reference ordering restrictions chart, page 4. Options are sorted alphanumerically.

See Accessories and option value restrictions on next page

## IBG LED High Bay

Accessories: Order as separate catalog number.			
<b>Mounting:</b>		<b>Cord sets and sensors for IMP option:</b>	
<b>IBAC120 M100</b>	<b>Aircraft cable 10' with hook (one pair)</b>	CS1WIMP	Straight plug, 120V
IBAC240 M75	Aircraft cable 20' with hook (one pair)	CS3WIMP	Twist-lock, 120V
IBHMP	Hook monopoint	CS7WIMP	Straight plug, 277V
HBBS36	Chain hanger with chain, 36" (one pair)	CS11WIMP	Twist-lock, 277V
IBGACVH	Aircraft 10' V hanger (one pair)	CS25WIMP	Twist-lock 347V
IBGPMPHB	Pendant monopoint splice box, includes side covers (3/4" hub) for use with OUTCTR option, not available with BPK option ‡	CS93WIMP	600V 50 white cord, no plug (no voltage required)
THUN	Tong hanger bracket (order 2 per fixture) ‡	CS97WIMP	Twist-lock 480V
		MSIIMPBG	Aisle sensor for use with IMP option
		MSI360IMPBG	360° sensor for use with IMP option
		*Base fixture must be ordered with IMP option when ordering this accessory.	
		<b>Wire guards (gloss white*) - not available with Haleon sensor</b>	
		<b>SEF Lumen Packages</b>	<b>HEF Lumen Packages</b>
WGIBG22	8000LM, 12000LM, 15000LM	8000LM	
WGIBG24	18000LM, 24000LM, 30000LM	12000LM, 15000LM	
WGIBG26	36000M	18000LM, 24000LM, 30000LM, 36000LM	
WGIBG44	48000LM, 60000LM	-	
WGIBG46	72000LM	48000LM, 60000LM, 72000LM	
		*For DNA wire guards, add DNA to end of nomenclature. Ex: WGIBG26DNA	
		*For MB wire guards, add MB to end of nomenclature. Ex: WGIBG26MB	

### CORD SET ORDERING INFORMATION

Cord sets cannot be ordered as accessories

Plug Option	Plug type	Amperage**	Gauge	# of conductors	Color	Location	Length
CNP Cord Only	(blank) No Plug Option (for Cord Only option)	(blank) 15 amps	(blank) 18 gauge standard	(blank) 3 conductors (blk/wht/grn)	(blank) Black	(blank) Damp Location	(blank) 6 feet
CP Cord with Plug	TL Locking Type	20A 20 amps	12 12 gauge	4C 4 conductors; Use with Battery option when unswitched hot is needed	W White		3FT 3 feet
	SB Straight blade*		14 14 gauge				10FT 10 feet
			16 16 gauge				12FT 12 feet
				5C 5 conductors; Use when fixture has 2 drivers and separate operation is required			15FT 15 feet
				5CD *** 5 conductors; Use with dimming driver when dimming leads are desired (Not for use with dimming sensors)			20FT 20 feet

\* Not available wet location.

\*\* Amperage is only configurable for cords with plugs

\*\*\* Not available with plugs.

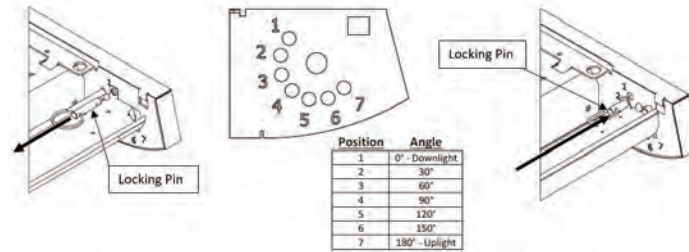
## IBG LED High Bay

† Option Value Ordering Restrictions	
Option value	Restriction
347	Not available with ETS or, emergency batteries and EM or ER sensor solutions.
36000LM	When ordering 347V or 480V with NLTAIR2 or Haleon, <b>fixture utilizes backpack adding 3.09" depth to fixture (see page 8 for line art).</b>
480	Not available with ETS, nPP16 D, EM or ER sensor solutions and emergency batteries.
48000LM	When using IBGMPMPHB, mono-point bracket mounts off-center, requiring aircraft cables for additional fixture support and fixture leveling. Must use additional method such as flexible conduit (supplied by others) to bring wiring to pendant mono-point when using for wiring box.
60000LM	When using IBGMPMPHB, mono-point bracket mounts off-center, requiring aircraft cables for additional fixture support and fixture leveling. Must use additional method such as flexible conduit (supplied by others) to bring wiring to pendant mono-point when using for wiring box.
72000LM	When using IBGMPMPHB, mono-point bracket mounts off-center, requiring aircraft cables for additional fixture support and fixture leveling. Must use additional method such as flexible conduit (supplied by others) to bring wiring to pendant mono-point when using for wiring box.
8000LM	When ordering 347V or 480V with NLTAIR2 or Haleon option, <b>fixture utilizes backpack adding 3.09" depth to fixture (see page 8 for line art).</b>
90CRI	Only available with SEF. 90CRI configurations have longer lead times.
C60DSUEM	Daylight harvesting functionality not enabled by default. See page 12 for default sequence of operation. Utilizes <a href="#">XPA CMRB6</a> . Not available with 36000LM. Not available with other controls.
Cord sets	Must specify voltage on cord sets with plugs. Cords come standard out center back of fixture. Refer to cord set ordering table, page 3 for more configurations. Non-standard configurations have extended lead times.
DF	Available on 208, 240, 480V. Not available with MVOLT or HVOLT.
E10WCP	Only available with 8000LM. MVOLT only. Not available with IMP option. <b>Fixture utilizes backpack, adding 3.08" to fixture depth (see page 8 for line art).</b>
Emergency batteries	Not available with IMP option. Emergency batteries alter fixture construction, (see pg. 6 for batteries that use a backpack and line art) Not available with cords with plugs. Use CNP4CW or OCS4C when unswitched hot is required for batter pack options. Consult standard wiring detail on page 8.
ETS	MVOLT only. Not available with cord sets or batteries. When sensor is required, please use the ER sensor option (reference page 9). When ordered with 72000LM, fixture cannot be surface mounted (THUN brackets). Consult table on page 7 for max operating temperature. Utilizes <a href="#">ETS20 DR</a> for 72000LM and <a href="#">ETS 924 DR</a> for all others.
HVOLT	Not available with ETS, nPP16 D, EM or ER sensor solutions and emergency batteries.
IBGMPMPHB	48000LM, When using IBGMPMPHB, mono-point bracket mounts off-center, requiring aircraft cables for additional fixture support and fixture leveling. Must use additional method such as flexible conduit (supplied by others) to bring wiring to pendant mono-point when using for wiring box.
IE20WCPHE	MVOLT only. Not available with 8000LM or IMP option. <b>Battery adds 2.8" depth to fixture (see page 8 for line art).</b>
IE30WCPHE	MVOLT only. Not available with 8000LM or IMP option. <b>Battery adds 2.8" depth to fixture (see page 8 for line art).</b>
IMP	Must specify voltage. Not available with nLight wired sensors, batteries, or OUTCTR option. Fixture requires IMP power cord accessory.
Individual controls (Haleon)	Refer to page 12 for Haleon sensor default settings matrix. When ordered with ER sensor, ETS is used. Not available with other controls. Low temperature (LT) option standard, do not call out.
Individual controls (LSXR)	Comes standard with SPD. This sensor configuration is suitable for minimum ambient temperature of 14°F (-10°C). When ordered with ER sensor, ETS is used. Not available with other controls. Refer to page 9 for additional LSXR ordering options.
nLight wireless	Not available with Haleon or nLight wired options. When ordered with ER sensor, ETS is used. Not available with other controls.
L/LENS	Lens is always recommended.
NCMB6	Sensor wired via CAT5 to nPP16 D dimming power pack. CAT5e connector cable also included. Ships standard with SPD. Only available with 120, 277 or 347V. Not available with other controls.
nPP16 D	Not for use with THUN accessory. Ships standard with SPD. Only available with 120, 277, or 347V. Not available with IMP or nLight wireless options.
OCS	Must specify voltage. Fixture will bear dry location label. Order OCS10 for 10' cord. Consult standard wiring detail on page 8.
OCS4C	Fixture will bear a dry location label. Use when unswitched hot is required for battery pack options, consult standard wiring detail on page 8.
OCU	Must specify voltage. When 0-10V dimming leads are required, use C125 option. C125 option is not available with dimming sensors. Fixture will bear dry location label.
OUTCTR	Not available with emergency batteries. Requires IBGMPMPHB accessory to mount fixture. Not available with cord set, ETS and IMP options.
ROTO	Available with IBG 8000LM, 12000LM, 15000LM, 18000LM, 24000LM, 30000LM or 36000LM only.
RRL	When dimming leads are required use C125 option. Not for use with dimming sensors.
SF	Available on 120, 277, 347V. Not available with MVOLT or HVOLT.
SPD	Standard with HVOLT, 347, 480, ETS, PS10250, E10WCP, LSXR, and NPP16 D, NPP16 D ER, RPP20 D EM options. Standard with 8000LM and 36000LM when order with Haleon and NLTAIR2. Only specify for MVOLT, 120, 208, 240, or 277V when additional surge protection is needed.
THUN	Maximum ambient temperature of standard fixture mounted with THUN is 113°F (45°C). Not available with MSIMPIBG, MSI360IMPIBG, NPP16 D options, or any configurations that utilize fixture backpack (see pg. 8 for batteries that use a backpack). Not available with 72000LM with ETS.

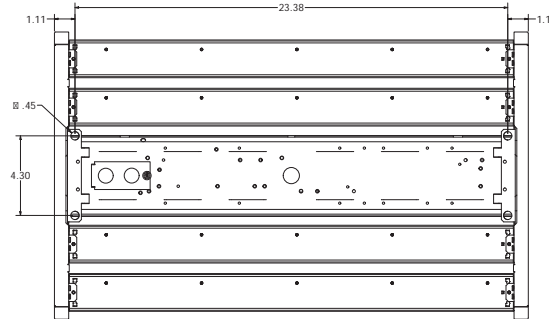
## IBG LED High Bay

### ROTATABLE OPTICS

- Rotate in 30° increments, 0° - 180°
- Create Custom Distributions
- 30° - light up rack
- 90° - wall wash
- 180° - Uplight



### HANGER HOLE DIMENSIONS

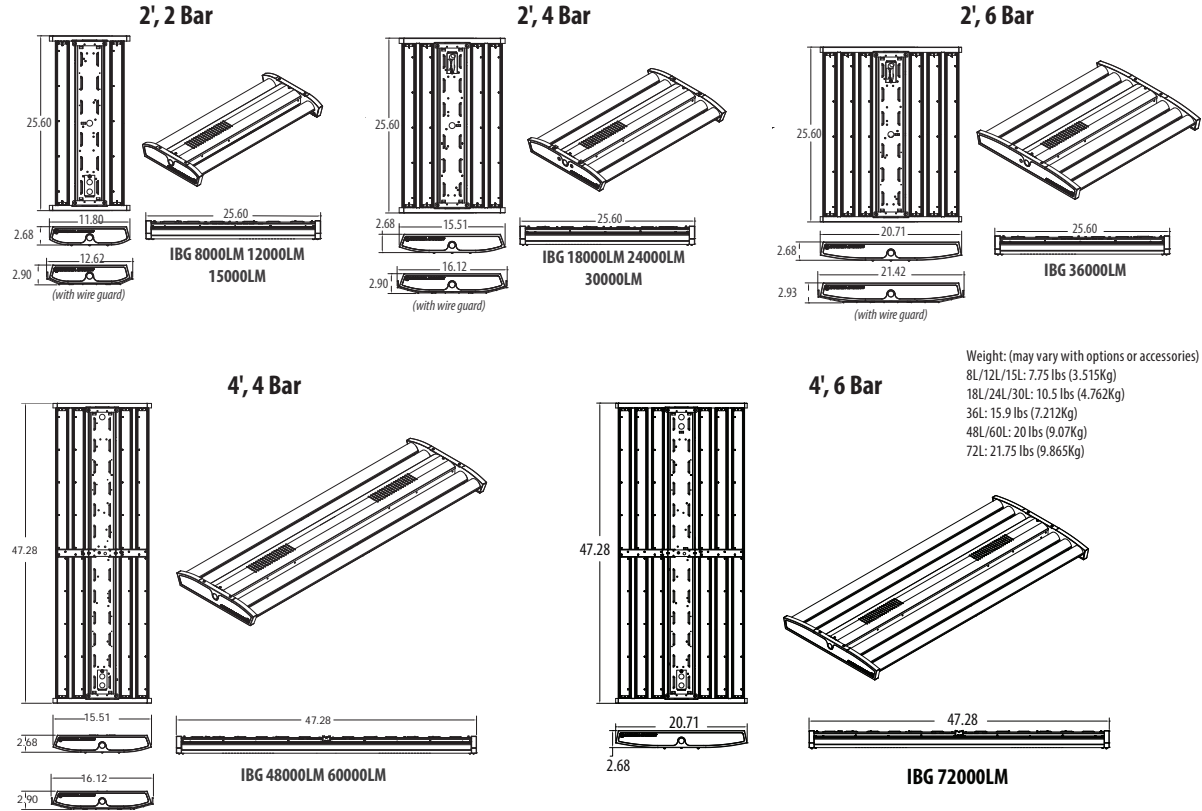


## IBG LED High Bay

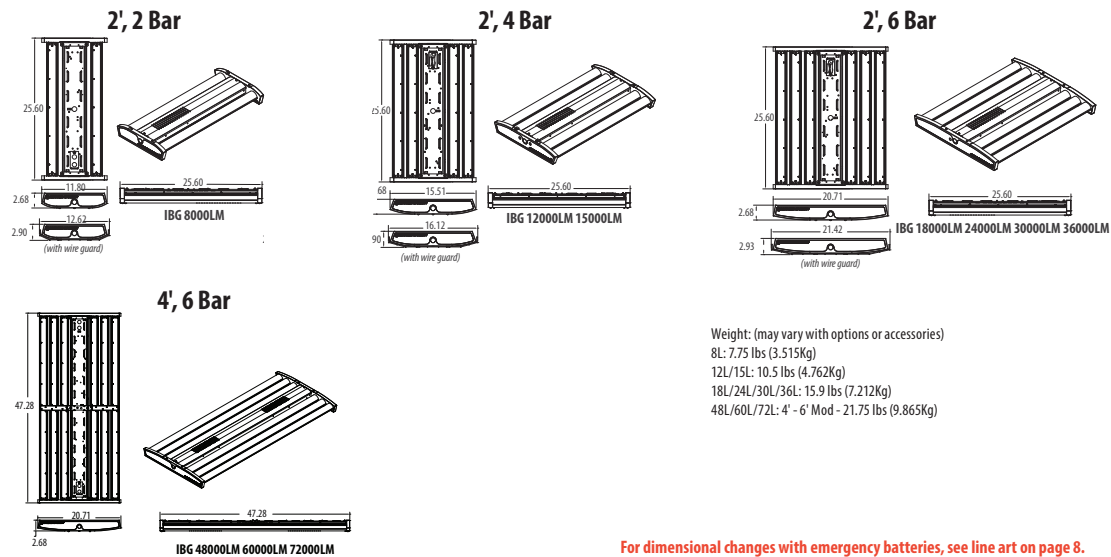
### LINE ART AND DIMENSIONS

All dimensions are in inches (centimeters) unless otherwise indicated.  
 Dimensions may vary with options or accessories.

#### IBG SEF DIMENSIONS



#### IBG HEF DIMENSIONS



For dimensional changes with emergency batteries, see line art on page 8.

## IBG LED High Bay

### IBG OPERATIONAL DATA

IBG SEF	AFL GND			
	Acrylic Frosted, General			
	Lumen Package	Wattage (277V)	Lumen Output	LPW
Delivered Lumens 4000K, 80CRI SEF	8000LM	48	7845	163
	12000LM	76	11856	156
	15000LM	93	14774	159
	18000LM	105	18531	176
	24000LM	144	24490	170
	30000LM	178	29586	166
	36000LM	218	35451	163
	48000LM	284	47261	166
	60000LM	357	59715	167
	72000LM	426	71168	167
Delivered Lumens 5000K, 80CRI SEF	8000LM	48	7970	165
	12000LM	76	12045	158
	15000LM	93	15010	161
	18000LM	105	18297	174
	24000LM	144	25046	174
	30000LM	178	30059	169
	36000LM	218	36018	165
	48000LM	284	48017	169
	60000LM	357	60670	170
	72000LM	426	72306	170

IBG HEF	AFL GND			
	Acrylic Frosted, General			
	Lumen Package	Wattage (277V)	Lumen Output	LPW
Delivered Lumens 4000K, 80CRI HEF	8000LM	47	7913	167
	12000LM	68	11944	176
	15000LM	85	14941	176
	18000LM	100	17902	179
	24000LM	134	23845	178
	30000LM	170	29819	175
	36000LM	214	35900	168
	48000LM	280	47662	170
	60000LM	343	57621	168
	72000LM	425	71124	167
Delivered Lumens 5000K, 80CRI HEF	8000LM	47	8092	171
	12000LM	68	12215	180
	15000LM	85	15280	180
	18000LM	100	18308	183
	24000LM	134	24386	182
	30000LM	170	30495	179
	36000LM	214	36715	172
	48000LM	280	48744	174
	60000LM	343	58929	172
	72000LM	425	72738	171

### SCALING FACTOR TABLES

CCT	Multiplier
3000K	0.93
3500K	0.96
4000K	0.98
5000K	1.00

CRI	Multiplier
70CRI	1.05
80CRI	1.00
90CRI	0.87

General Distributions	Multiplier
AFL GND	1.00
ACL GND	1.01
PFL GND	0.83
L/Lens	1.04

Other Distributions	Multiplier
AFL GND	1.00
ATL ND	1.00
ATL WD	1.00
ATL AD	1.01

## PHOTOMETRICS

See [www.lithonia.com](http://www.lithonia.com).



IBG

IBG LED High Bay

IBG CHARACTERISTICS

Lumen package	Wattage								Length	Width	Depth	Comparable Light Source
	Standard efficiency				High efficiency							
	120V	277V	347V	480V	120V	277V	347V	480V	Dimensions are shown in inches (centimeters) unless otherwise noted. Dimensions are for SEF fixtures.			
8000LM	48	48	48	48	47	47	47	47	25.6	11.8	2.75	100W MH, 4-lamp T8 NBF
12000LM	77	76	75	75	69	68	67	68	25.6	11.8	2.75	175W MH, 4-lamp T8 HBF, 2-lamp T5HO
15000LM	95	93	93	93	86	85	85	85	25.6	11.8	2.75	200W MH, 6-lamp T8 NBF
18000LM	106	105	106	105	100	100	99	99	25.6	15.51	2.75	250W MH, 6-lamp T8 HBF, 4-lamp T5HO
24000LM	147	144	145	145	135	134	134	135	25.6	15.51	2.75	400W MH, 6-lamp T5HO
30000LM	182	178	179	179	172	170	171	171	25.6	15.51	2.75	575W MH, 10-lamp T8 HBF
36000LM	223	218	217	217	214	214	214	213	25.6	20.65	2.75	750W MH, 8-lamp T5HO
48000LM	290	284	287	285	280	280	279	278	47.29	15.51	2.75	875W MH, 10-lamp T5HO
60000LM	365	357	361	359	346	343	344	345	47.29	15.51	2.75	1000W MH
72000LM	435	426	431	428	428	425	426	427	47.29	20.65	2.75	1000W MH

PROJECTED LUMEN MAINTENANCE

IBG 2ft & 4ft						
Operating hours	0	15,000	30,000	45,000	60,000	100,000
Lumen maintenance factor	1	0.98	0.96	0.94	0.92	0.86

IK RATING

IK Rating	
Poly-carbonate Lens	IK10
Acrylic Lens	IK06

AMBIENT TEMPERATURE RATINGS

LUMENS	SUSPENDED	SUSPENDED SENSORS/ CONTROL	SURFACE	SURFACE SENSORS/ CONTROL	BATTERY	ETS
8000LM	55	55	45	45	45	40
12000LM	55	55	45	45	40	40
15000LM	55	55	45	45	40	40
18000LM	55	55	45	45	40	40
24000LM	55	55	45	45	40	40
30000LM	55	55	45	45	40	40
36000LM	55	55	45	45	40	40
48000LM	55	55	45	45	40	40
60000LM	55	55	45	45	40	40
72000LM	55	55	45	45	40	40

LUMENS VS. AMBIENT TEMPERATURE

Ambient °C	Ambient °F	Lumen Multiplier
0	32	1.03
5	41	1.03
10	50	1.02
15	59	1.01
20	68	1.01
25	77	1
30	86	0.99
35	95	0.99
40	104	0.98
45	113	0.97
50	122	0.96
55	131	0.95

**Note:** Various add-on components such as sensors and batteries impact operating temperature range of IBG fixture. Consult component specification sheets or consult factory to determine if components have a different operating temperature range than IBG.



## IBG LED High Bay

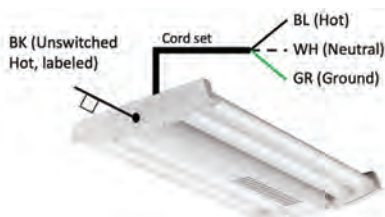
### EMERGENCY BATTERY PACK OPTIONS

Factory-Installed Nomenclature	Battery Part Number	Utilizes BPK?*	Suitable for Field Installation
E10WCP	PS1055CP	Yes	No
IE20WCPHE	ILBLP-CP20-HE-SD-HV	No	Yes
IE30WCPHE	ILBLP-CP30-HE-SD-HV	No	Yes
-	ILBHI-CP20-HE-SD-HV	-	Yes
-	ILBHI-CP30-HE-SD-HV	-	Yes

Note: ILBHI is standard HVOLT battery pack

### CORD SETS WITH EMERGENCY WIRING DETAILS

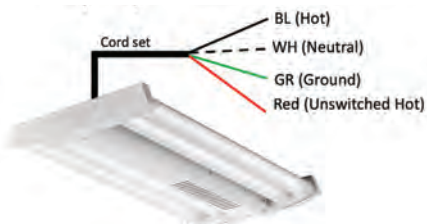
When battery is ordered with a 3-conductor cord set or Reloc® cord (OCS):



The 3 conductor cord set will include the hot (BL), neutral (WH), and ground (GR) conductors but not the unswitched hot for the battery.

- The unswitched hot for powering the battery (BK) will exit the fixture out of the KO of the backpack (for E10WCP batteries) or out of the KO on the end plate (all other battery options).
- If KO-mounted sensor is included, the unswitched hot will come out of opposite end plate KO.

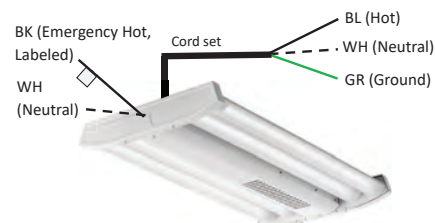
When battery is ordered with a 4-conductor cord set or Reloc® cord (OCS4C):



The 4 conductor cord set will include include the hot (BL), neutral (WH), and ground (GR) conductors AND the unswitched hot will be a separate conductor (RED).

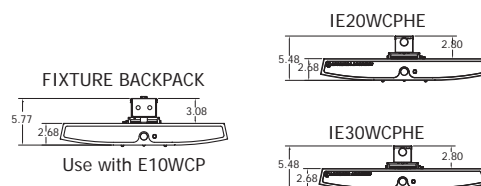
**Note:** To get IBG wired from the factory for 24/7 operation, with on/off controlled by sensor rather than switch, contact your factory representative to request the normal hot and unswitched hot wired together in the fixture. Consult local codes to determine if this is allowable.

When ETS is used (individually or on ER sensor) with a 3-conductor cord set or Reloc® cord (OCS):



The 3 conductor cord set will include the hot (BL), neutral (WH), and ground (GR) conductors but not the dedicated hot and neutral for emergency function

- The emergency hot (BK) and neutral (WH) will exit the fixture out of the KO of the end plate.
- If KO-mounted sensor is included, the emergency hot and neutral will come out of opposite end plate KO.



### EMERGENCY LUMENS AFL GND (5000K 80CRI)

		E10WCP	IE20WCPHE	IE30WCPHE
SEF	8000	2000	-	-
	12000	-	3900	5800
	15000	-	3900	5800
	18000	-	3900	5800
	24000	-	4000	6000
	30000	-	4000	6000
	36000	-	4000	6000
	48000	-	4000	6000
	60000	-	4000	6000
	72000	-	4000	6000

		E10WCP	IE20WCPHE	IE30WCPHE
HEF	8000	2100	-	-
	12000	-	4200	6200
	15000	-	4200	6200
	18000	-	4300	6300
	24000	-	4300	6300
	30000	-	4300	6300
	36000	-	4300	6300
	48000	-	4300	6300
	60000	-	4300	6300
	72000	-	4100	6100

**Note:** Based on AFL GND, 50K, 80CRI. For emergency lumen output of specific model, please consult factory.

### EMERGENCY LUMENS CROSS AFL GND (5000K, 80CRI)

		OLD BATTERY	NEW BATTERY	OLD BATTERY	NEW BATTERY
		PS10250	IE20WCPHE	PS30250	IE30WCPHE
SEF	12000	1400	3900	4300	5800
	15000	1400	3900	4300	5800
	18000	1400	3900	4300	5800
	24000	2900	4000	3600	6000
	30000	2900	4000	3600	6000
	36000	2900	4000	3600	6000
	48000	2900	4000	3600	6000
	60000	2900	4000	3600	6000

## IBG LED High Bay

### EMERGENCY OPERATION SCENARIOS

	Standard Sensor or Control Device (commonly used with Battery Pack Option)	EM Solution (Used when switching single incoming hot to generator power)	ER Solution (Used when switching to generator power via a 2nd hot lead)
<b>Emergency Lighting Strategy</b>	*Luminaire-integral battery pack and emergency driver *Generator transfer device	*Diesel genset emergency backup supply *Slow transfer inverter (>30ms) emergency backup supply	*Fast Transfer (FT) inverter emergency backup supply *Uninterruptible Power System (UPS) emergency
<b>Recommended Control Device Option</b>	*Not specifically listed for emergency use. *Wired such that a separately listed emergency device provides emergency lighting power and/or control during loss of normal power scenarios.	*UL924 listed *Utilizes Power Interruption Detection to initiate lighting control override during loss of normal power scenarios. *Requires power interruption > 30 ms to luminaire during transfer to emergency backup supply.	*UL924 listed *Utilizes dedicated Normal Power sensing leads to initiate lighting control override during loss of normal power scenarios. *Requires connections to both emergency and normal power circuits.

Function	Sequence of Operations	Standard Sensor or Control Device	EM Solution (Generator 1 Hot)	ER Solution* (Generator 2 Hots)	IBG Standard Sensor Settings				
					Vacancy Time Out	Dim to Off Time Delay	High Trim	Low Trim (Vacancy Dim Level)	Photocell Set Point
<b>Standalone Sensors</b> (Individual control per fixture)	On/Off	Lights turn on when motion detected; Upon vacancy, Lights turn off after timeout.	LSXR6	SBOR6 OEX EM	LSXR6 ER	10 min	-	-	-
	High/Low (Off)	"Lights turn on to high trim when presence is detected; Upon vacancy, the lights dim to low trim after timeout and turn off after "Dim To Off" Time Delay. For High/Low (Never Off) function, bypass the relay by bringing power directly into driver rather than wiring hot through LSXR device."	LSXR6 HL	-	LSXR6 HL ER	10 min	2.5 min	100%	"10% (Driver Low)"
	Photocell	Lights turn on unless ambient light level is above set point; If ambient light levels in the space exceed the photocell set point, lights will turn off even during occupancy.	LSXR6 P	-	LSXR6 P ER	-	-	-	4 fc
	Dimming + Photocell	Lights turn on when presence is detected unless ambient light level is above set point; Upon vacancy, the lights dim to low trim, then turn off after timeout; During occupancy, automatically raise and lower electric light level to maintain set point and turn off, depending on ambient light.	LSXR6 ADC	SBOR6 ODP EM	LSXR6 ADC ER	10 min	2.5	-	4 fc
	Dimming + Photocell + High/Low	Lights turn on when presence is detected unless ambient light level is above set point; Upon vacancy, lights dim to low trim after timeout and remain at low trim until presence is detected; Automatically raise and lower electric light level to maintain set point during occupancy and during vacancy keeps lights at low trim if ambient light is not sufficient.	LSXR6 ANL	-	LSXR6 ANL ER	10 min	-	100%	10%
Note: For 360° integral Low Mount sensors, replace "6" in nomenclature with "10". Ex. LSXR10 P. For High Aisle Mount sensors, replace "6" with "50".									

<b>Bluetooth Sensors</b> (Configurable via mobile Bluetooth app)	On/Off	Lights turn on when motion detected; Upon vacancy, Lights turn off after timeout.	HLN45 OCC	-	HLN45 OCC ER	10 min	-	-	-
	High/Low (Off)	Lights turn on to high trim when presence is detected; Upon vacancy, the lights dim to low trim after timeout and turn off after "Dim To Off" Time Delay.	HLN45 HL	-	HLN45 HL ER	10 min	2.5 min	100%	10%
	Dimming + Photocell	Lights turn on when presence is detected unless ambient light level is above set point; Upon vacancy, the lights dim to low trim during timeout; During occupancy, automatically raise and lower electric light level to maintain set point and turn off, depending on ambient light.	HLN45 ADC	-	HLN45 ADC ER	10 min	-	-	50 fc
	Dimming + Photocell + High/Low (Never Off)	Lights turn on when presence is detected unless ambient light level is above set point; Upon vacancy, lights dim to low trim after timeout and remain at low trim until presence is detected; Automatically raise and lower electric light level to maintain set point during occupancy and during vacancy keeps lights at low trim if ambient light is not sufficient.	HLN45 ANL	-	HLN45 ANL ER	10 min	-	100%	10%
Note: For High Aisle Mount sensors, replace "45" in nomenclature with "45A". Ex. HLN45A HL									

<b>nLight wired</b> Networked Controls	Dimming + Photocell + Occupancy	Programmable network sensor - On/Off Occupancy detection with Dimming (includes dimming powerpack externally mounted to fixture access plate)	NCMB6	-	NCMB6 ER	10 min	7.5 min	100%	10%
	Dimming	Programmable On/Off control only with dimming - no sensor (device externally mounted to fixture access plate)	NPP16 D	-	NPP16 D ER	-	-	100%	1%
Note: For 360° integral Low Mount sensors, replace "6" in nomenclature with "10". For High Aisle Mount sensors, replace "6" with "50". Ex: NCMB50									

<b>nLight AIR</b> Wireless Sensors	Dimming + Photocell + Occupancy	Wirelessly programmable network sensor - On/Off control with dimming, occupancy detection, and daylight harvesting (Sensor embedded in fixture)	NLTAIR2 RMS0D45	NLTAIR2 RLSXR6 EM	NLTAIR2 RMS0D45 ER	7.5 min	-	100%	30%
	Dimming	Wirelessly programmable On/Off control with dimming - no sensor (Device embedded in fixture)	NLTAIR2 RIO	NLTAIR2 RPP20 D EM	NLTAIR2 RIO ER	-	-	100%	"10% (driver low)"
Note: For 360° integral Low Mount sensors, replace "45" in nomenclature with "7". For High Aisle Mount sensors, replace "45" with "45A". Ex: NLTAIR2 RMS0D45A EM sensors/controls are KO-mounted; all others integral. RPP20 D EM de-rates fixture to Damp Location.									

**\*All ER solutions except nLight wired, include standard sensor or control device with a factory-installed --Iota ETS#-DR (UL924 bypass device). This device is integral to the fixture and will include a hot and neutral lead for the dedicated emergency circuit.**

## IBG LED High Bay

### JOB PACK QUANTITIES

Series	Performance	Lumens	Job Pack Quantities			
			Standard / Base configuration	With Sensor, Cord Set, or RELOC	With Wire guards	With Battery
IBG	SEF	8000LM	90	60	60	48
		12000LM				
		15000LM				
		18000LM	64	40	40	32
		24000LM				
		30000LM				
		36000LM	52	32	32	28
		48000LM	30	24	20	14
		60000LM	26	18	18	14
		72000LM				
	HEF	8000LM	90	60	60	48
		12000LM	64	40	40	32
		15000LM				
		18000LM				
		24000LM	52	32	32	28
		30000LM				
		36000LM				
		48000LM	26	18	18	14
		60000LM				
		72000LM				

#### Breakout Example:

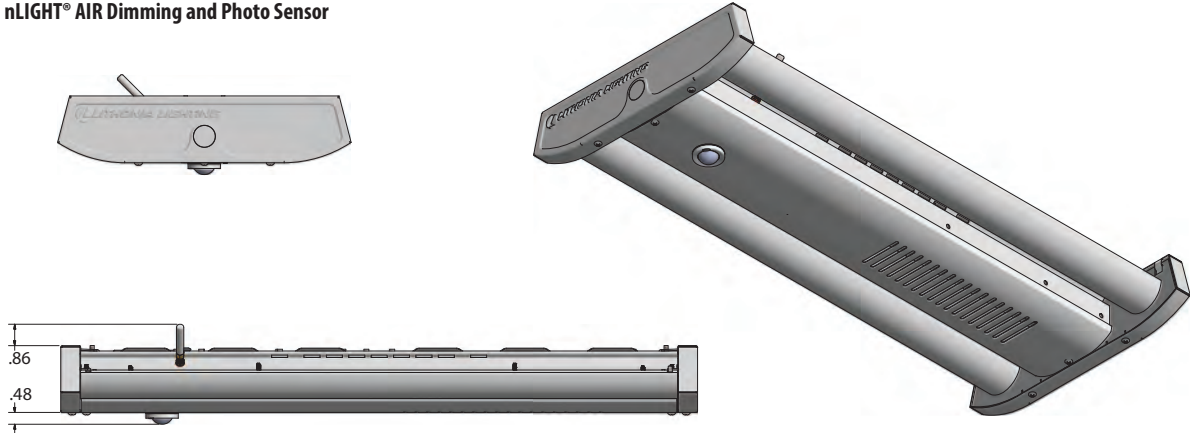
<b>Ordered Line:</b>	Qty: 90	IBG 24000LM SEF AFL GND MVOLT GZ10 50K 80CRI LXR6 DWH JP
		*Above configuration shows 40 units for Job Pack
Breakout Line 1:	Qty: 80	IBG 24000LM SEF AFL GND MVOLT GZ10 50K 80CRI LXR6 DWH JP40
		*Will have 2 pallets of 40 units each
Breakout Line 2:	Qty: 10	IBG 24000LM SEF AFL GND MVOLT GZ10 50K 80CRI LXR6 DWH
		*Balance will ship in unit cartons

Note: If quantity ordered is less than Job Pack quantity for that configuration, the breakout line will default to unit packs.

## IBG LED High Bay

### nLIGHT AIR SENSOR - RMSOD

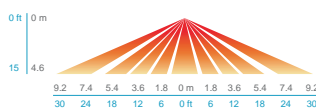
#### nLIGHT® AIR Dimming and Photo Sensor



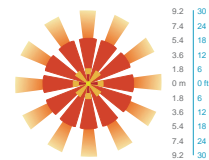
### 7 - MINI-LOW BAY 360° LENS

- Recommended for walking motion detection from mounting heights between 8 ft (2.44m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m)
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74)
- Initial detection will occur earlier when walking across sensor's field of view than walking directly at sensor

SIDE VIEW



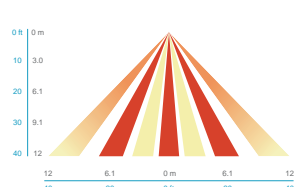
TOP VIEW



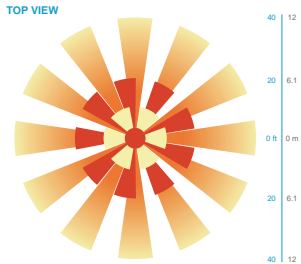
### 45- HIGH MOUNT 360°

- Optimized full coverage pattern for 10 – 40 ft. (3.1 – 12 m)
- Reliable detection of large motion (e.g. pedestrian walking traffic) up to 30 ft. (9.1 m) mounting height
- Reliable detection of extra-large motion (e.g. forklift traffic) up to 40 ft. (12 m) mounting height

SIDE VIEW



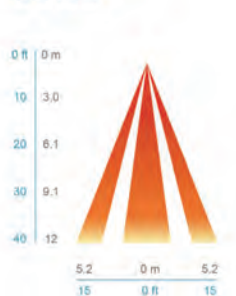
TOP VIEW



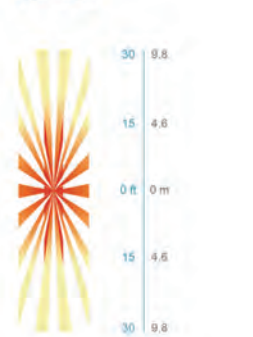
### 45A HIGH MOUNT AISLEWAY

- Optimized bi directional coverage pattern for aiseways with 10 – 40 ft. (3.1 – 12 m) mounting heights
- 1.5X's mounting height equals approximate detection range
- Reliable detection of large motion (e.g. pedestrian walking traffic) up to 30 ft. (9.1 m) mounting height
- Reliable detection of extra-large motion (e.g. forklift traffic) up to 40 ft. (12 m) mounting height

SIDE VIEW



TOP VIEW



## IBG LED High Bay

### HALEON - Integrated Occupancy Sensor with Bluetooth® Programmability

- Programmable sensor settings over Bluetooth® with Acuity VLP smartphone app.
- Default programming options to service various application spaces - occupancy detection, 0-10V dimming and daylight harvesting.
- 360° High Mount and High Mount Aisleway lens detection options for mounting heights up to 40 ft.
- Integrated retractable lens mask included to block unwanted detection.
- Sensor ambient temperature rating of -40°F (-40°C) to 158°F (70°C).



### Haleon Default Programming

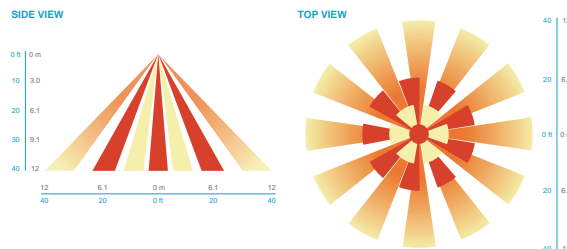
Model	Default Operation	LSXR Equivalent	Occupancy Time Delay	Photocell Mode	Photocell Set-point	Low Trim	High Trim	Dim to Off Time Delay
HLNxxx	On/Off Occupancy Only	LSXR6 LT or LA00STU	10 minutes	Disabled	n/a	n/a	100%	Disabled
HLNxxx HL	Occupancy w/ 0-10V Dimming (High/Low/Off)	LSXR6 HL LT or LAH0STU	10 minutes	Disabled	n/a	10%	100%	2.5 minutes
HLNxxx ADC	Occupancy w/ Dim & Switch Photocell	LSXR6 ADC LT or LAM0STU	10 minutes	On/Off & Auto Dim	50 fc	10%	100%	0 seconds
HLNxxx ANL	Dim & Switch Photocell with High/Low Occupancy Operation	LSXR6 ANL LT or LAG0STU	10 minutes	On/Off & Auto Dim	50 fc	10%	100%	Stay Dim/ Never Off

Note: Lens detection noted in place of 'xxx'

### HALEON COVERAGE PATTERNS

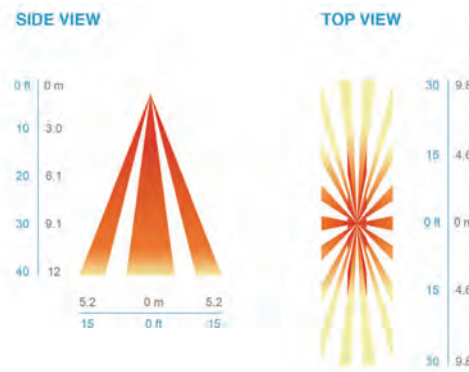
#### 45- HIGH MOUNT 360°

- Optimized full coverage pattern for 10 – 40 ft. (3.1 – 12 m)
- Reliable detection of large motion (e.g. pedestrian walking traffic) up to 30 ft. (9.1 m) mounting height
- Reliable detection of extra-large motion (e.g. forklift traffic) up to 40 ft. (12 m) mounting height
- Stow-able rotating lens shield can be utilized to mask areas in which detection is not desired



#### 45A HIGH MOUNT AISLEWAY

- Optimized bi directional coverage pattern for aiseways with 10 – 40 ft. (3.1 – 12 m) mounting heights
- 1.2X's mounting height equals approximate detection range
- Reliable detection of large motion (e.g. pedestrian walking traffic) up to 30 ft. (9.1 m) mounting height
- Reliable detection of extra-large motion (e.g. forklift traffic) up to 40 ft. (12 m) mounting height
- Stow-able rotating lens shield can be utilized to mask areas in which detection is not desired



## IBG LED High Bay

### LSXR – Fixture Mount Occupancy Sensor (see [www.AcuityControls.com](http://www.AcuityControls.com) for additional information)

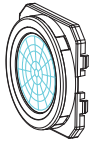
- Three interchangeable lens options to satisfy multiple mounting heights and coverage pattern requirements.
- Integrated mounting bracket drops lens down 3" from chase nipple.
- Single or dual relay versions — designed with robust protection from the harsh switching requirements of T5 and LED loads.
- Photocell and 0-10VDC dimming options.
- No PIR field calibration or sensitivity adjustments required.
- Sensor ambient temperature rating of 14°F (-10°C) to 131°F (55°C).

LSXR configuration	Comparable CMRB sensor	Old style sensor nomenclature
<b>For shortest lead times use one of the following LSXR configurations</b>		
<b>LSXR50 / LC0ZU</b>	CMRB 50	MSI
<b>LSXR50 HL / LCH0SZU</b>	CMRB 50 D	MSID
<b>LSXR50 P / LCPZU</b>	CMRB 50 P	MSIPED
<b>LSXR6 / LA0ZU</b>	CMRB 6	MSI360
<b>LSXR6 HL / LAH0SZU</b>	CMRB 6 D	MSI360D
<b>LSXR6 P / LAPZU</b>	CMRB 6 P	MSI360PED



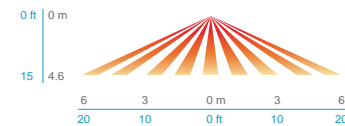
### LSXR COVERAGE PATTERNS

#### HIGH MOUNT 360° LENS (#6)

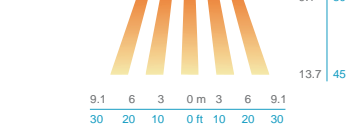


- Best choice for 15 to 45 ft (4.57 to 13.72 m) mounting heights
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Excellent detection of large motion (e.g. walking) up to a 35 ft (10.76 m) mounting height
- Excellent detection of extra large motion (e.g. forklifts) up to a 45 ft (13.72 m) mounting height

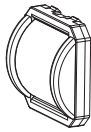
LOW VIEW



HIGH VIEW

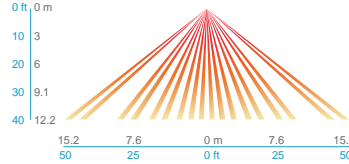


#### HIGH MOUNT AISLEWAY LENS (#50)

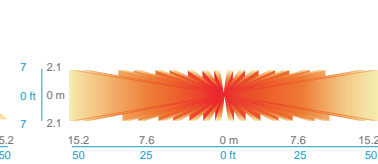


- Provides a bi-directional coverage pattern ideal for warehouse racking
- 1.2x mounting height equals approximate detection range in either direction
- Typical 40 ft (12.19 m) mounting detects 50 ft (15.24 m) in either direction
- Superior aisleway coverage compared to a masked 360° lens

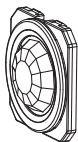
SIDE VIEW



TOP VIEW

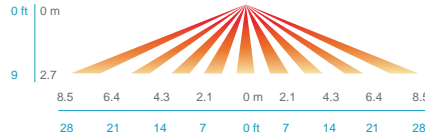


#### LOW MOUNT 360° LENS (#10)



- Best choice for large motion detection (e.g. walking)
- 360° conical shaped pattern
- Provides ~24 ft (7.32 m) radial coverage (~2000 ft²) when mounted at 9 ft (2.74 m)
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage
- Detection range improves when walking across beams compared to into beams

SIDE VIEW



TOP VIEW



## IBG LED High Bay

### C6D0SUEM & C10D0SUEM - UL924 Listed Sensors

#### SENSOR DEFAULT SEQUENCE OF OPERATION

- The occupied light level is full output.
- The unoccupied light level is approximately 30%.
- The time delay following sensor vacancy is 5 minutes, with an additional 5 minute slow ramp from the occupied light level to the unoccupied light level.
- **The onboard daylight sensor is not enabled by default - sensor will not respond to changing daylight conditions.**

Daylight sensor settings can be enabled and programmed by a trained technician after installation.

#### EGRESS MODE SEQUENCE OF OPERATION

The UL924 C6D0SUEM & C10D0SUEM controls are designed to provide fully tuned light output for 90 minutes following power loss or interruption, ignoring automatic dimming/occupancy/daylight control signals during this time.

- Typical sequence upon power loss: Backup power source activates, transfer switch moves the emergency circuit powering the sensor onto the backup source, and sensor regains power. This sensor is programmed to detect any power interruption or transfer > 30 ms
- The sensor then ignores occupancy & daylight status and controls the luminaire to full light output for 90 minutes.
- The device resumes normal dimming & occupancy controls after 90 minutes.
- This sensor should not be used with online power backup systems or any transfer devices with < 30 ms transfer time.



## IBG LED High Bay

### IMP - Integrated Modular Plug

- The integrated modular plug (IMP) option allows the installer to plug and play a multitude of accessories.
- Cord sets connect quickly to any fixture with IMP option.
- IMP accessories include occupancy sensors, photocells, X-point relays.

IMP compatible cord sets <sup>1</sup>	
<b>CS1WIMP</b>	Straight plug, 120V
<b>CS3WIMP</b>	Twist-lock, 120V
<b>CS7WIMP</b>	Straight plug, 277V
<b>CS11WIMP</b>	Twist-lock, 277V
<b>CS25WIMP</b>	Twist-lock, 347V
<b>CS93WIMP</b>	600V SE00W white cord, no plug
<b>CS97WIMP</b>	Twist-lock, 480V

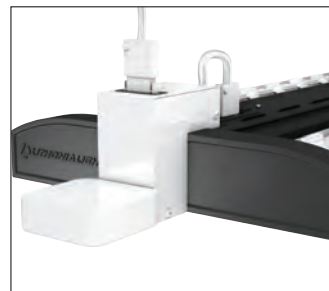
IMP compatible sensors	
<b>MSIIMP</b>	Aisle sensor
<b>MSI360IMP</b>	360° sensor

#### Ordering Example

Order As: Qty 1 - IBG 12000LM SEF AFL GND 120 GZ10 40K 80CRI IMP CP5BW DWH

Ships As: Qty 1 - IBG 12000LM SEF AFL GND MVOLT GZ10 40K 80CRI DWH

Qty 1 - CS1WIMP



#### Notes

- 1 Cord set required for fixture operation. All cord sets are 18/3, 6' white.

### RRL - RELOC®-Ready Luminaire

- RRL connectors to be used with the OnePass system.
- Load side of connector factory installed to luminaire.
- 4-pole mating connector with push-in terminations allows for simple installation.
- Touch-safe design on both halves meets UL/CSA requirement.
- Wiping contact design allows safe disconnect under load.



#### ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

**Example: RRLA**

Series	Wiring instructions
RRL RELOC®-ready luminaire	<p>A Hot conductor wired to position #1 (phase A); non-dimming</p> <p>B Hot conductor wired to position #2 (phase B); non-dimming</p> <p>AE Hot conductor wired to position #1 (phase A), hot conductor #2 wired to position #2 (phase B); non-dimming<sup>1</sup></p> <p>C12S Hot conductor in position #1 (phase A), low voltage conductor #1 in position #2, low voltage conductor #2 in position #3; dimming<sup>2</sup></p>

### Compatible RELOC® Cables for Industrial Luminaires (ordered and shipped separately)

(click to view RELOC product page for more information)



#### Notes

- 1 AE commercial fixtures should disconnect the TSPL before unplugging the RRL so it does not go into discharge mode. Requires fixture to have battery option.
- 2 C12S option is used with the OnePass for 0-10V/DALI applications. Not for use with dimming sensors.





## RSX2 LED Area Luminaire

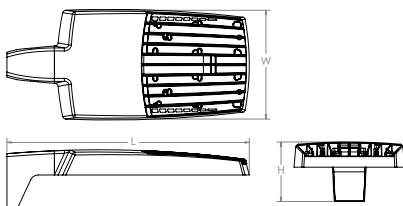


Catalog Number	
Notes	
Type	

Hit the Tab key or mouse over the page to see all interactive elements.

### Specifications

EPA (ft <sup>2</sup> @0°):	0.69 ft <sup>2</sup> (0.06 m <sup>2</sup> )
Length:	29.3" (74.4 cm) (SPA mount)
Width:	13.4" (34.0 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.3 cm) Arm
Weight: (SPA mount)	30.0 lbs (13.6 kg)



### Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX2 delivers 11,000 to 31,000 lumens allowing it to replace 250W to 1000W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

### Ordering Information

**EXAMPLE: RSX2 LED P6 40K R3 MVOLT SPA DDBXD**

RSX2 LED					
Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX2 LED	P1 P2 <b>P3</b> P4 P5 P6	30K 3000K 40K 4000K <b>50K 5000K</b>	<b>R2</b> Type 2 Wide R3 Type 3 Wide R3S Type 3 Short R4 Type 4 Wide R4S Type 4 Short R5 Type 5 Wide <sup>1</sup> R5S Type 5 Short <sup>1</sup> AFR Automotive Front Row AFRR90 Automotive Front Row Right Rotated AFRL90 Automotive Front Row Left Rotated	<b>MVOLT</b> (120V-277V) <sup>2</sup> <b>HVOLT</b> (347V-480V) <sup>3</sup> <b>XVOLT</b> (277V-480V) <sup>4</sup> (use specific voltage for options as noted) 120 <sup>3</sup> 277 <sup>5</sup> 208 <sup>3</sup> 347 <sup>5</sup> 240 <sup>3</sup> 480 <sup>5</sup>	<b>SPA</b> Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°) <b>RPA</b> Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°) <b>MA</b> Mast arm adaptor (fits 2-3/8" OD horizontal tenon) <b>IS</b> Adjustable slipfitter (fits 2-3/8" OD tenon) <sup>6</sup> <b>WBA</b> Wall bracket <sup>1</sup> <b>WBASC</b> Wall bracket with surface conduit box <b>AASP</b> Adjustable tilt arm square pole mounting <sup>6</sup> <b>AARP</b> Adjustable tilt arm round pole mounting <sup>6</sup> <b>AAWB</b> Adjustable tilt arm with wall bracket <sup>6</sup> <b>AAWSC</b> Adjustable tilt arm wall bracket and surface conduit box <sup>6</sup>

Options	Finish
<b>Shipped Installed</b> HS House-side shield <sup>7</sup> PE Photocontrol, button style <sup>8,9</sup> PEX Photocontrol external threaded, adjustable <sup>9,10</sup> PER7 Seven-wire twist-lock receptacle only (no controls) <sup>9,11,12,13</sup> CE34 Conduit entry 3/4" NPT (Qty 2) SF Single fuse (120, 277, 347) <sup>5</sup> DF Double fuse (208, 240, 480) <sup>5</sup> SPD20KV 20KV Surge pack (10KV standard) FAO Field adjustable output <sup>9,13</sup> DMG 0-10V dimming extend out back of housing for external control (control ordered separate) <sup>9,13</sup> DS Dual switching <sup>9,14</sup>	<b>Shipped Installed</b> <b>*Standalone and Networked Sensors/Controls (factory default settings, see table page 9)</b> NLTAIR2 nLight AIR generation 2 <sup>13,15,16</sup> PIRHN Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) <sup>13,16,17</sup> BAA Buy America(n) Act Compliant  <b>*Note: PIRHN with nLight Air can be used as a standalone dimming sensor with out-of-box settings or as a wireless networked solution. See factory default settings table. Sensor coverage pattern is affected when luminaire is tilted.</b>  <b>Shipped Separately (requires some field assembly)</b> EGS External glare shield <sup>6</sup> EGFV External glare full visor (360° around light aperture) <sup>7</sup> BS Bird spikes <sup>18</sup>
	<b>DDBXD</b> <b>Dark Bronze</b> DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured Dark Bronze DBLBXD Textured Black DNATXD Textured Natural Aluminum DWHGXD Textured White

## Ordering Information

### Accessories

Ordered and shipped separately.

RSX2HS	RSX2 House side shield (includes 2 shields)
RSX2EGS (FINISH) U	External glare shield (specify finish)
RSX2HSAFR (FINISH) U	RSX2 House side shields for AFR rotated optics (includes 2 shields)
RSX2EGFV (FINISH) U	External glare full visor (specify finish)
RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify finish)
RSXWBA (FINISH) U	RSX WBA wall bracket (specify finish) <sup>1</sup>
RSXSCB (FINISH) U	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) <sup>19</sup>
DL1347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) <sup>19</sup>
DL1480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) <sup>19</sup>
DSH08T SBK U	Shorting cap <sup>19</sup>

### NOTES

- Any Type 5 distribution, is not available with WBA.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- XVOLT driver not available with P1. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing (SF or DF) and not available with PE or PEX.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Maximum tilt is 90° above horizontal.
- It may be ordered as an accessory.
- Requires MVOLT or 347V.
- Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, FAO, DMG, DS, PIRHN).
- Requires 120V, 208V, 240V, or 277V.
- Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
- For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
- Two or more of the following options cannot be combined including DMG, DS, PER7, FAO and PIRHN.
- DS only available on performance package P5 and P6.
- Must be ordered with PIRHN.
- Requires MVOLT or HVOLT.
- Must be ordered with NLTAIR2. For additional information on PIRHN visit [here](#).
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

## External Shields



House Side Shield



External Glare Shield

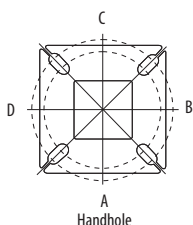


External 360 Full Visor

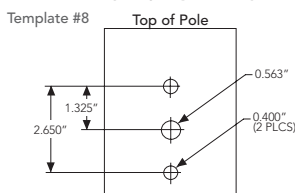
## Pole/Mounting Information

Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

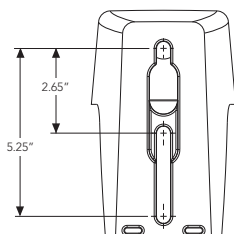
### HANDHOLE ORIENTATION



### RSX POLE DRILLING



### RSX STANDARD ARM & ADJUSTABLE ARM



### Round Tenon Mount - Pole Top Slipfitters

Tenon O.D.	RSX Mounting	Single	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
2 - 3/8"	RPA, AARP	AS3-5190	AS3-5280	AS3-5290	AS3-5320	AS3-5390	AS3-5490
2 - 7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

### Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
#8	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
	Drill Nomenclature	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

### RSX2 - Luminaire EPA

\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
RPA - Round Pole Adaptor		0.74	1.27	1.37	1.9	1.71	2.49	1.42	2.16	2.84
MA - Mast Arm Adaptor		0.61	1.14	1.11	1.64	1.45	2.23	1.29	1.9	2.58
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
	10°	0.53	1.06	1.05	1.58	1.37	2.08	1.06	1.59	2.12
	20°	0.52	1.02	1.03	1.52	1.33	2.02	1.03	1.55	2.07
	30°	0.64	1.11	1.18	1.63	1.45	2.21	1.27	1.91	2.54
	40°	0.81	1.21	1.35	1.74	1.65	2.39	1.62	2.43	3.23
	45°	0.91	1.25	1.5	1.81	1.75	2.48	1.82	2.73	3.64
	50°	1.34	1.83	2.17	2.61	2.56	3.62	2.68	4.02	5.36
	60°	2.2	2.97	3.57	4.24	4.17	5.89	4.41	6.61	8.82
	70°	2.86	4.13	4.7	5.89	5.71	8.21	5.71	8.57	11.42
	80°	3.4	5.13	5.67	7.34	7.09	10.21	6.79	10.19	13.59
	90°	3.85	5.96	6.55	8.58	8.31	11.88	7.70	11.56	15.41

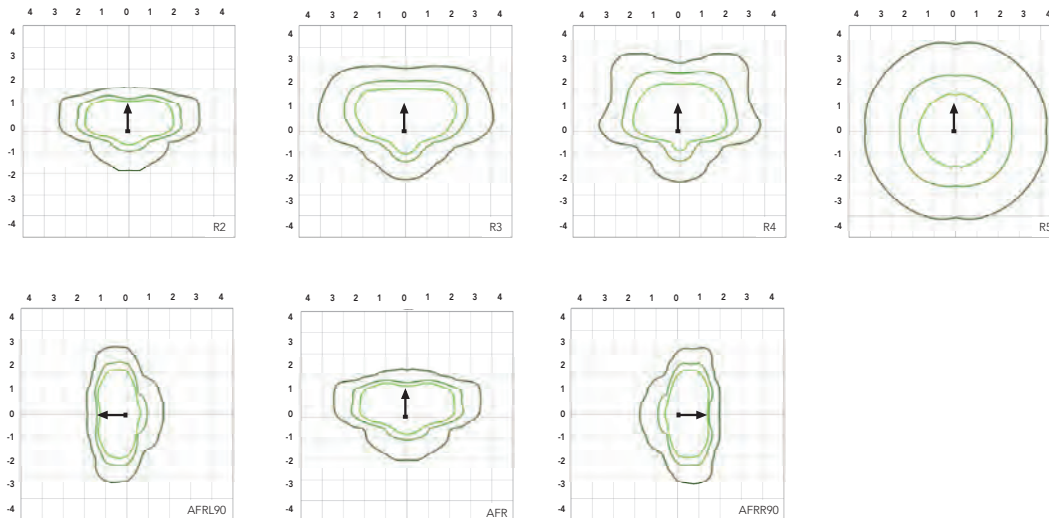
## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

Isofootcandle plots for the RSX2 LED P6 40K. Distances are in units of mounting height (30').

### LEGEND

- 0.1 fc
- 0.5 fc
- 1.0 fc



## Performance Data

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

### Electrical Load

Performance Package	System Watts (W)	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	71W	0.59	0.34	0.30	0.26	0.20	0.15
P2	111W	0.93	0.53	0.46	0.40	0.32	0.23
P3	147W	1.23	0.70	0.61	0.53	0.42	0.31
P4	187W	1.55	0.90	0.78	0.68	0.53	0.38
P5	210W	1.75	1.01	0.87	0.76	0.60	0.44
P6	244W	2.03	1.17	1.01	0.88	0.70	0.51

### Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

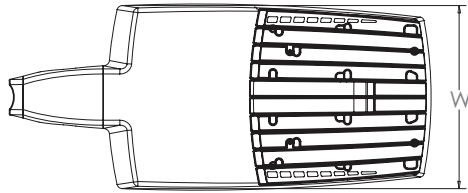
Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	71W	R2	10,040	2	0	1	139	11,031	2	0	1	153	11,031	2	0	1	153
		R3	10,005	2	0	2	141	10,992	2	0	2	155	10,992	2	0	2	155
		R3S	10,271	2	0	2	143	11,285	2	0	2	157	11,285	2	0	2	157
		R4	10,136	2	0	2	143	11,136	2	0	2	157	11,136	2	0	2	157
		R4S	9,779	2	0	2	138	10,744	2	0	2	151	10,744	2	0	2	151
		R5	10,271	4	0	2	145	11,285	4	0	2	159	11,285	4	0	2	159
		R5S	10,544	3	0	1	149	11,585	3	0	2	163	11,585	3	0	2	163
		AFR	10,026	2	0	1	141	11,016	2	0	1	155	11,016	2	0	1	155
		AFRR90	10,122	3	0	2	140	11,121	3	0	2	154	11,121	3	0	2	154
		AFRL90	10,164	3	0	2	141	11,167	3	0	2	155	11,167	3	0	2	155
P2	111W	R2	15,712	2	0	2	138	17,263	2	0	2	151	17,263	2	0	2	151
		R3	15,657	2	0	3	141	17,202	3	0	3	155	17,202	3	0	3	155
		R3S	16,075	2	0	2	141	17,661	2	0	2	155	17,661	2	0	2	155
		R4	15,862	2	0	3	143	17,427	2	0	3	157	17,427	2	0	3	157
		R4S	15,304	2	0	2	138	16,815	2	0	2	151	16,815	2	0	2	151
		R5	16,075	4	0	2	145	17,661	5	0	3	159	17,661	5	0	3	159
		R5S	16,502	4	0	2	149	18,130	4	0	2	163	18,130	4	0	2	163
		AFR	15,691	2	0	2	141	17,240	2	0	2	155	17,240	2	0	2	155
		AFRR90	15,841	3	0	3	139	17,404	4	0	3	153	17,404	4	0	3	153
		AFRL90	15,907	3	0	3	139	17,477	4	0	3	153	17,477	4	0	3	153
P3	147W	R2	19,855	3	0	2	132	21,814	3	0	2	145	21,814	3	0	2	145
		R3	19,785	3	0	3	135	21,737	3	0	4	148	21,737	3	0	4	148
		R3S	20,312	3	0	3	135	22,317	3	0	3	149	22,317	3	0	3	149
		R4	20,044	3	0	3	136	22,022	3	0	4	150	22,022	3	0	4	150
		R4S	19,339	3	0	3	132	21,247	3	0	3	145	21,247	3	0	3	145
		R5	20,313	5	0	3	138	22,317	5	0	3	152	22,317	5	0	3	152
		R5S	20,852	4	0	2	142	22,910	4	0	2	156	22,910	4	0	2	156
		AFR	19,828	3	0	2	135	21,785	3	0	2	148	21,785	3	0	2	148
		AFRR90	20,017	4	0	3	133	21,992	4	0	3	147	21,992	4	0	3	147
		AFRL90	20,101	4	0	3	134	22,084	4	0	3	147	22,084	4	0	3	147
P4	187W	R2	22,836	3	0	2	120	25,090	3	0	2	132	25,090	3	0	2	132
		R3	22,756	3	0	4	122	25,002	3	0	4	134	25,002	3	0	4	134
		R3S	23,363	3	0	3	123	25,668	3	0	3	135	25,668	3	0	3	135
		R4	23,054	3	0	4	123	25,329	3	0	4	135	25,329	3	0	4	135
		R4S	22,243	3	0	3	119	25,059	3	0	3	134	25,059	3	0	3	134
		R5	23,363	5	0	3	125	25,669	5	0	4	137	25,669	5	0	4	137
		R5S	23,983	4	0	2	128	26,350	4	0	2	141	26,350	4	0	2	141
		AFR	22,806	3	0	2	122	25,056	3	0	2	134	25,056	3	0	2	134
		AFRR90	23,023	4	0	3	121	25,295	4	0	3	133	25,295	4	0	3	133
		AFRL90	23,120	4	0	3	122	25,401	4	0	3	134	25,401	4	0	3	134
P5	210W	R2	26,141	3	0	2	122	28,721	3	0	2	135	28,721	3	0	2	135
		R3	26,049	3	0	4	124	28,620	3	0	4	136	28,620	3	0	4	136
		R3S	26,744	3	0	3	125	29,383	3	0	4	138	29,383	3	0	4	138
		R4	26,390	3	0	4	126	28,994	3	0	4	138	28,994	3	0	4	138
		R4S	25,462	3	0	3	121	27,974	3	0	3	133	27,974	3	0	3	133
		R5	26,744	5	0	4	127	29,383	5	0	4	140	29,383	5	0	4	140
		R5S	27,454	4	0	2	131	30,163	4	0	2	144	30,163	4	0	2	144
		AFR	26,106	3	0	2	124	28,682	3	0	2	137	28,682	3	0	2	137
		AFRR90	26,354	4	0	3	123	28,955	5	0	3	136	28,955	5	0	3	136
		AFRL90	26,465	4	0	3	124	29,077	5	0	3	136	29,077	5	0	3	136
P6	244W	R2	27,646	3	0	2	112	30,374	3	0	2	123	30,374	3	0	2	123
		R3	27,549	3	0	4	113	30,267	3	0	4	124	30,267	3	0	4	124
		R3S	28,283	3	0	3	115	31,075	3	0	4	126	31,075	3	0	4	126
		R4	27,909	3	0	4	114	30,663	3	0	4	126	30,663	3	0	4	126
		R4S	26,928	3	0	3	110	29,585	3	0	3	121	29,585	3	0	3	121
		R5	28,284	5	0	4	116	31,075	5	0	4	127	31,075	5	0	4	127
		R5S	29,035	4	0	2	119	31,900	5	0	3	131	31,900	5	0	3	131
		AFR	27,608	3	0	2	112	30,332	3	0	2	123	30,332	3	0	2	123
		AFRR90	27,872	4	0	3	113	30,622	5	0	3	124	30,622	5	0	3	124
		AFRL90	27,989	4	0	3	113	30,751	5	0	3	125	30,751	5	0	3	125

## Dimensions & Weights

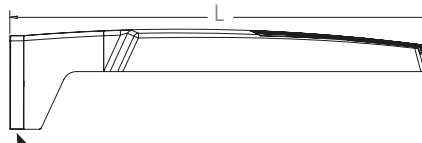
### Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	30 lbs
RPA	32 lbs
MA	30 lbs
WBA	33 lbs
WBASC	36 lbs
IS	33 lbs
AASP	33 lbs
AARP	35 lbs
AAWB	36 lbs
AAWSC	39 lbs

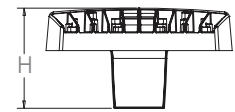
#### RSX2 with Round Pole Adapter (RPA)



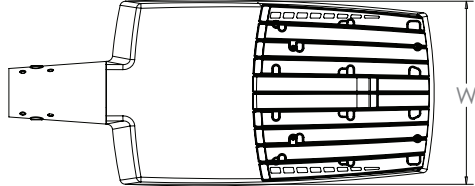
Length: 30.3" (77.0 cm)  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 7.2" (18.3 cm) Arm



Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.



#### RSX2 with Mast Arm Adapter (MA)



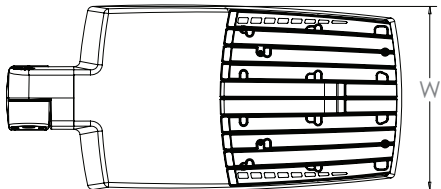
Length: 30.6" (77.7 cm)  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 3.5" (8.9 cm) Arm



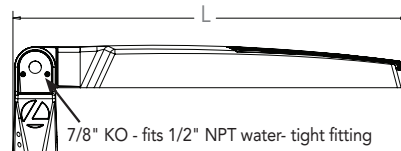
7/16" locking thru bolt/nut provided



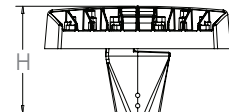
#### RSX2 with Adjustable Slipfitter (IS)



Length: 28.3" (71.9 cm)  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 7.6" (19.3 cm) Arm

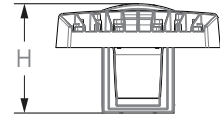
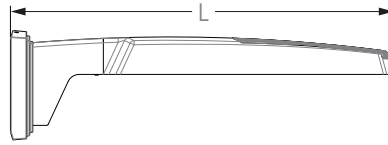
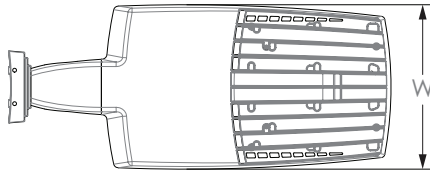


7/8" KO - fits 1/2" NPT water- tight fitting



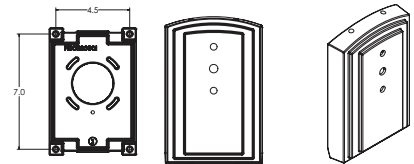
## Dimensions

### RSX2 with Wall Bracket (WBA)

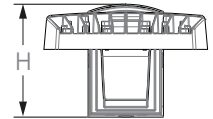
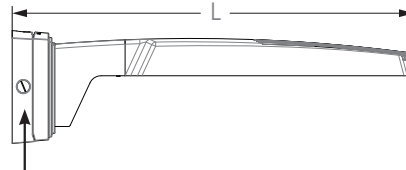
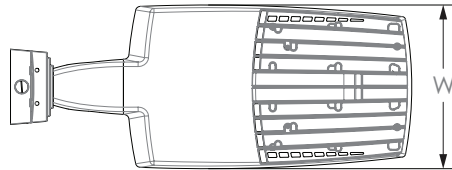


Length: 31.2" (79.2 cm)  
 Width: 13.4" (41.7 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 8.9" (22.6 cm) Arm

### Wall Bracket (WBA) Mounting Detail



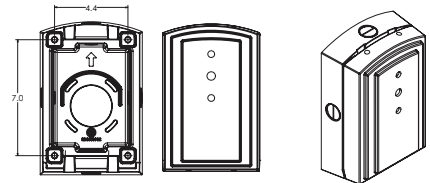
### RSX2 with Wall Bracket with Surface Conduit Box (WBASC)



3/4" NPT taps with plugs - Qty (4) provided

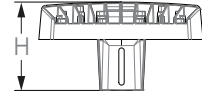
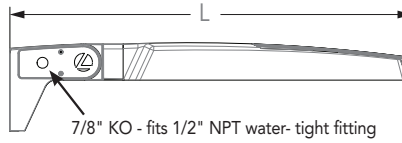
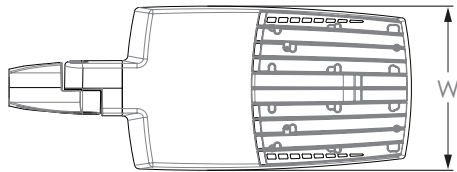
Length: 32.8" (83.3 cm)  
 Width: 13.4" (41.7 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 9.2" (23.4 cm) Arm

### Surface Conduit Box (SCB) Mounting Detail

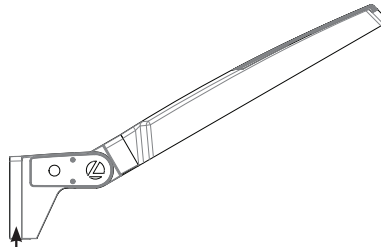


## Dimensions

### RSX2 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)



Length: 32.8" (83.3 cm) **AASP**  
 33.8" (85.9 cm) **AARP**  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 7.2" (18.2 cm) Arm



**NOTE:**  
 RPA - Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

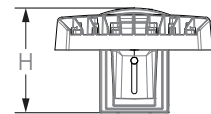
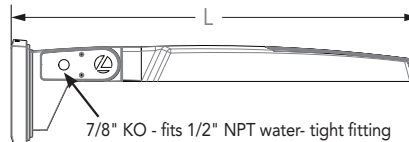
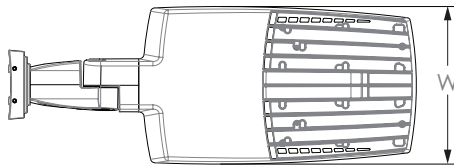


#### Notes

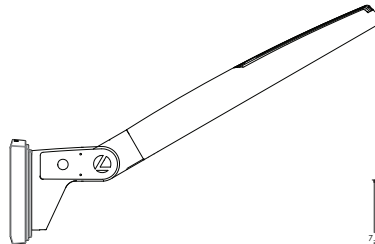
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.

AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

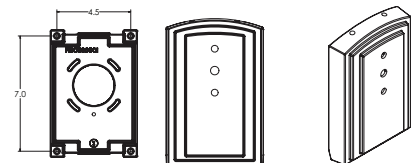
### RSX2 with Adjustable Tilt Arm with Wall Bracket (AAWB)



Length: 34.7" (88.0 cm)  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 8.9" (22.6 cm) Arm

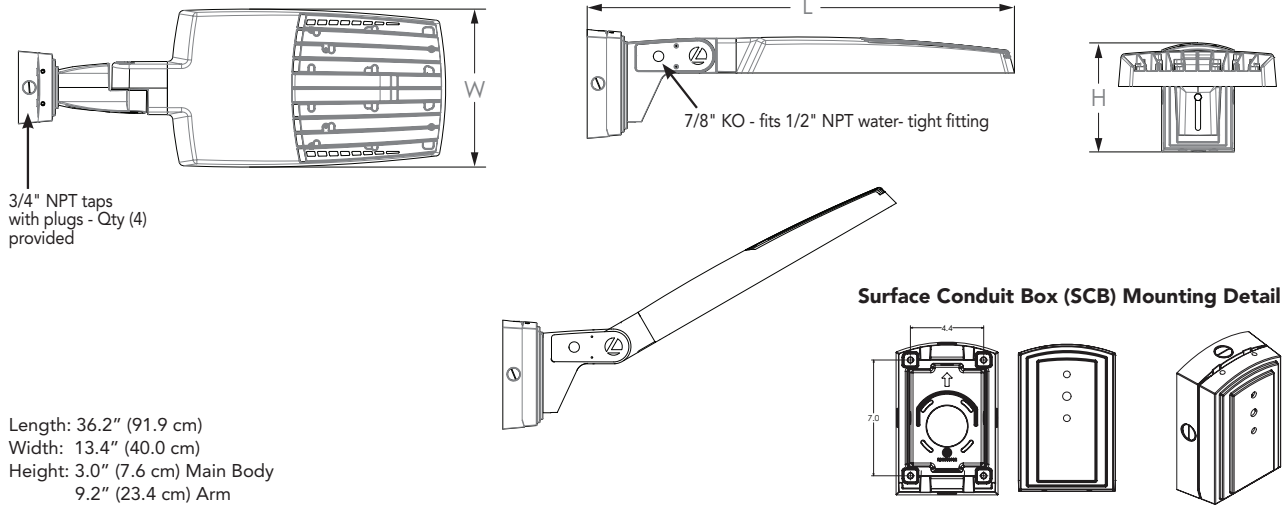


#### Wall Bracket (WBA) Mounting Detail

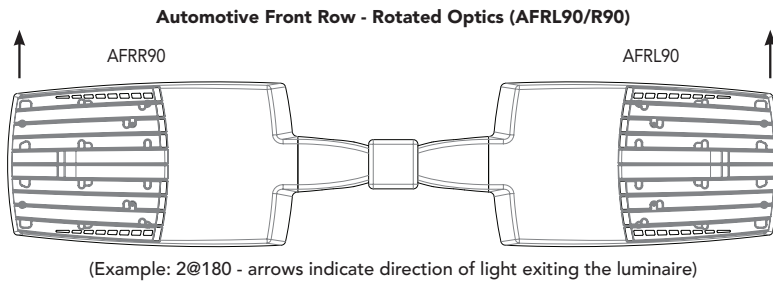
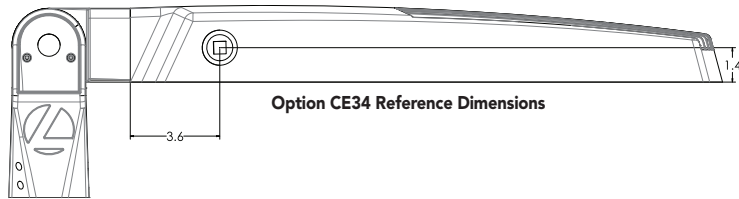


## Dimensions

### RSX2 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)



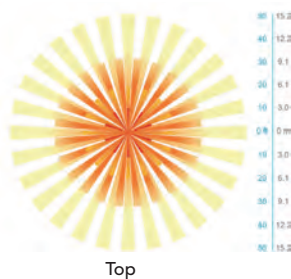
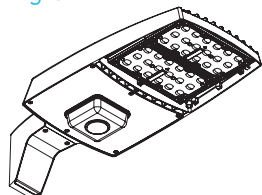
### Additional Reference Drawings



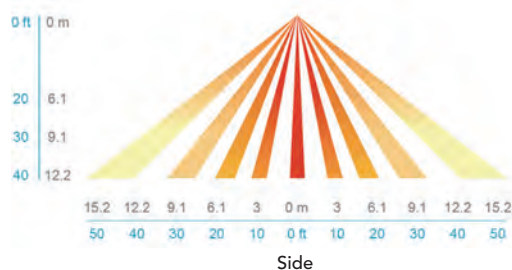


## nLight Control - Sensor Coverage and Settings

### NLTAIR2 PIRHN nLight Sensor Coverage Pattern nLight PIRHN



Top



Side

Motion Sensor Default Settings - Option PIRHN						
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)
NLTAIR2 PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds	5 minutes

\*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clarity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is tilted.

## FEATURES & SPECIFICATIONS

### INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX2 delivers 11,000 to 31,000 lumens and is ideal for replacing 250W to 1000W HID pole-mounted luminaires in parking lots and other area lighting applications.

### CONSTRUCTION AND DESIGN

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. Vibration rated per ANSI C136.31: 3G Mountings: Include SPA, RPA, MA, IS, AASP, AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warranted not to crack or peel.

### OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row) and AFR rotated AFR90 and ARFL90.

### ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

### nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

### INSTALLATION

Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

### LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

### BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

### WARRANTY

5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/support/customer-support/terms-and-conditions](http://www.acuitybrands.com/support/customer-support/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



## RSX2 LED Area Luminaire



Catalog Number	
Notes	
Type	

Hit the Tab key or mouse over the page to see all interactive elements.

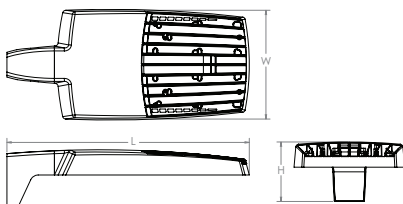
### Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX2 delivers 11,000 to 31,000 lumens allowing it to replace 250W to 1000W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This “no-drill” solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

### Specifications

EPA (ft <sup>2</sup> @0°):	0.69 ft <sup>2</sup> (0.06 m <sup>2</sup> )
Length:	29.3" (74.4 cm) (SPA mount)
Width:	13.4" (34.0 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.3 cm) Arm
Weight: (SPA mount)	30.0 lbs (13.6 kg)



### Ordering Information

**EXAMPLE: RSX2 LED P6 40K R3 MVOLT SPA DDBXD**

Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
<b>RSX2 LED</b>					
P1	30K 3000K	R2	Type 2 Wide	<b>MVOLT</b> (120V-277V) <sup>2</sup>	<b>SPA</b> Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°)
P2	40K 4000K	R3	Type 3 Wide	<b>HVOLT</b> (347V-480V) <sup>3</sup>	<b>RPA</b> Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°)
P3	<b>50K 5000K</b>	R3S	Type 3 Short	<b>XVOLT</b> (277V-480V) <sup>4</sup>	<b>MA</b> Mast arm adaptor (fits 2-3/8" OD horizontal tenon)
<b>P4</b>		<b>R4</b>	<b>Type 4 Wide</b>	(use specific voltage for options as noted)	<b>IS</b> Adjustable slipfitter (fits 2-3/8" OD tenon) <sup>6</sup>
P5		R4S	Type 4 Short	120 <sup>3</sup> 277 <sup>5</sup>	<b>WBA</b> Wall bracket <sup>1</sup>
P6		R5	Type 5 Wide <sup>1</sup>	208 <sup>3</sup> 347 <sup>5</sup>	<b>WBASC</b> Wall bracket with surface conduit box
		R5S	Type 5 Short <sup>1</sup>	240 <sup>3</sup> 480 <sup>5</sup>	<b>AASP</b> Adjustable tilt arm square pole mounting <sup>6</sup>
		AFR	Automotive Front Row		<b>AARP</b> Adjustable tilt arm round pole mounting <sup>6</sup>
		AFRR90	Automotive Front Row Right Rotated		<b>AAWB</b> Adjustable tilt arm with wall bracket <sup>6</sup>
		AFRL90	Automotive Front Row Left Rotated		<b>AAWSC</b> Adjustable tilt arm wall bracket and surface conduit box <sup>6</sup>

Options	Finish
<b>Shipped Installed</b> HS House-side shield <sup>7</sup> PE Photocontrol, button style <sup>8,9</sup> PEX Photocontrol external threaded, adjustable <sup>9,10</sup> PER7 Seven-wire twist-lock receptacle only (no controls) <sup>9,11,12,13</sup> CE34 Conduit entry 3/4" NPT (Qty 2) SF Single fuse (120, 277, 347) <sup>5</sup> DF Double fuse (208, 240, 480) <sup>5</sup> SPD20KV 20KV Surge pack (10KV standard) FAO Field adjustable output <sup>9,13</sup> DMG 0-10V dimming extend out back of housing for external control (control ordered separate) <sup>9,13</sup> DS Dual switching <sup>9,14</sup>	<b>Shipped Installed</b> <b>*Standalone and Networked Sensors/Controls (factory default settings, see table page 9)</b> NLTAIR2 nLight AIR generation 2 <sup>13,15,16</sup> PIRHN Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) <sup>13,16,17</sup> BAA Buy America(n) Act Compliant  <b>*Note: PIRHN with nLight Air can be used as a standalone dimming sensor with out-of-box settings or as a wireless networked solution. See factory default settings table. Sensor coverage pattern is affected when luminaire is tilted.</b>  <b>Shipped Separately (requires some field assembly)</b> EGS External glare shield <sup>6</sup> EGFV External glare full visor (360° around light aperture) <sup>7</sup> BS Bird spikes <sup>18</sup>
	<b>DDBXD</b> <b>Dark Bronze</b> DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured Dark Bronze DBLBXD Textured Black DNATXD Textured Natural Aluminum DWHGXD Textured White

## Ordering Information

### Accessories

Ordered and shipped separately.

RSX2HS	RSX2 House side shield (includes 2 shields)
RSX2EGS (FINISH) U	External glare shield (specify finish)
RSX2HSAFR (FINISH) U	RSX2 House side shields for AFR rotated optics (includes 2 shields)
RSX2EGFV (FINISH) U	External glare full visor (specify finish)
RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify finish)
RSXWBA (FINISH) U	RSX WBA wall bracket (specify finish) <sup>1</sup>
RSXSCB (FINISH) U	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) <sup>19</sup>
DL1347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) <sup>19</sup>
DL1480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) <sup>19</sup>
DSHORT SBK U	Shorting cap <sup>19</sup>

### NOTES

- Any Type 5 distribution, is not available with WBA.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- XVOLT driver not available with P1. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing (SF or DF) and not available with PE or PEX.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Maximum tilt is 90° above horizontal.
- It may be ordered as an accessory.
- Requires MVOLT or 347V.
- Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, FAO, DMG, DS, PIRHN).
- Requires 120V, 208V, 240V, or 277V.
- Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
- For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
- Two or more of the following options cannot be combined including DMG, DS, PER7, FAO and PIRHN.
- DS only available on performance package P5 and P6.
- Must be ordered with PIRHN.
- Requires MVOLT or HVOLT.
- Must be ordered with NLTAIR2. For additional information on PIRHN visit [here](#).
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

## External Shields



House Side Shield



External Glare Shield

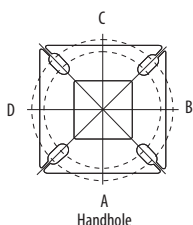


External 360 Full Visor

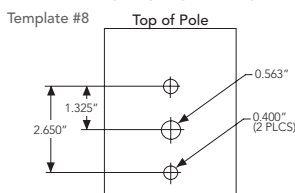
## Pole/Mounting Information

Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

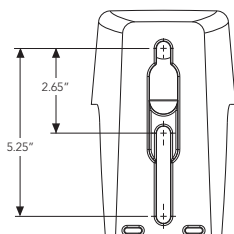
### HANDHOLE ORIENTATION



### RSX POLE DRILLING



### RSX STANDARD ARM & ADJUSTABLE ARM



### Round Tenon Mount - Pole Top Slipfitters










Tenon O.D.	RSX Mounting	Single	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
2 - 3/8"	RPA, AARP	AS3-5190	AS3-5280	AS3-5290	AS3-5320	AS3-5390	AS3-5490
2 - 7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

### Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
#8	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
	Drill Nomenclature	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

### RSX2 - Luminaire EPA

\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
RPA - Round Pole Adaptor		0.74	1.27	1.37	1.9	1.71	2.49	1.42	2.16	2.84
MA - Mast Arm Adaptor		0.61	1.14	1.11	1.64	1.45	2.23	1.29	1.9	2.58
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
	10°	0.53	1.06	1.05	1.58	1.37	2.08	1.06	1.59	2.12
	20°	0.52	1.02	1.03	1.52	1.33	2.02	1.03	1.55	2.07
	30°	0.64	1.11	1.18	1.63	1.45	2.21	1.27	1.91	2.54
	40°	0.81	1.21	1.35	1.74	1.65	2.39	1.62	2.43	3.23
	45°	0.91	1.25	1.5	1.81	1.75	2.48	1.82	2.73	3.64
	50°	1.34	1.83	2.17	2.61	2.56	3.62	2.68	4.02	5.36
	60°	2.2	2.97	3.57	4.24	4.17	5.89	4.41	6.61	8.82
	70°	2.86	4.13	4.7	5.89	5.71	8.21	5.71	8.57	11.42
	80°	3.4	5.13	5.67	7.34	7.09	10.21	6.79	10.19	13.59
	90°	3.85	5.96	6.55	8.58	8.31	11.88	7.70	11.56	15.41

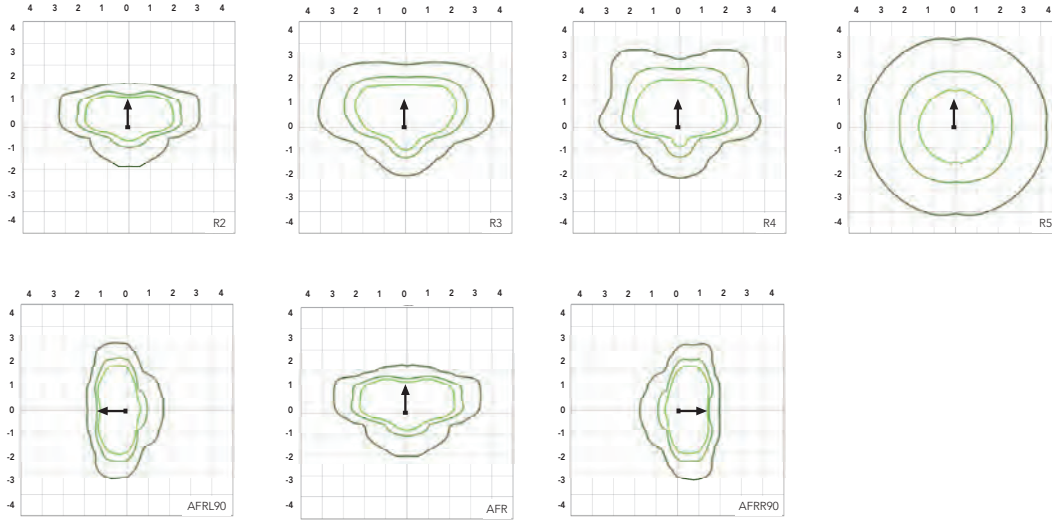
## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

Isofootcandle plots for the RSX2 LED P6 40K. Distances are in units of mounting height (30').

### LEGEND

- 0.1 fc
- 0.5 fc
- 1.0 fc



## Performance Data

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

### Electrical Load

Performance Package	System Watts (W)	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	71W	0.59	0.34	0.30	0.26	0.20	0.15
P2	111W	0.93	0.53	0.46	0.40	0.32	0.23
P3	147W	1.23	0.70	0.61	0.53	0.42	0.31
P4	187W	1.55	0.90	0.78	0.68	0.53	0.38
P5	210W	1.75	1.01	0.87	0.76	0.60	0.44
P6	244W	2.03	1.17	1.01	0.88	0.70	0.51

### Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

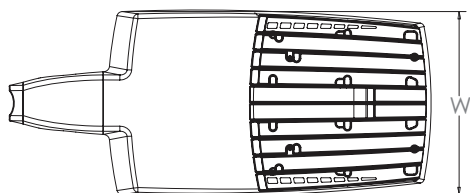
Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	71W	R2	10,040	2	0	1	139	11,031	2	0	1	153	11,031	2	0	1	153
		R3	10,005	2	0	2	141	10,992	2	0	2	155	10,992	2	0	2	155
		R3S	10,271	2	0	2	143	11,285	2	0	2	157	11,285	2	0	2	157
		R4	10,136	2	0	2	143	11,136	2	0	2	157	11,136	2	0	2	157
		R4S	9,779	2	0	2	138	10,744	2	0	2	151	10,744	2	0	2	151
		R5	10,271	4	0	2	145	11,285	4	0	2	159	11,285	4	0	2	159
		R5S	10,544	3	0	1	149	11,585	3	0	2	163	11,585	3	0	2	163
		AFR	10,026	2	0	1	141	11,016	2	0	1	155	11,016	2	0	1	155
		AFRR90	10,122	3	0	2	140	11,121	3	0	2	154	11,121	3	0	2	154
		AFRL90	10,164	3	0	2	141	11,167	3	0	2	155	11,167	3	0	2	155
P2	111W	R2	15,712	2	0	2	138	17,263	2	0	2	151	17,263	2	0	2	151
		R3	15,657	2	0	3	141	17,202	3	0	3	155	17,202	3	0	3	155
		R3S	16,075	2	0	2	141	17,661	2	0	2	155	17,661	2	0	2	155
		R4	15,862	2	0	3	143	17,427	2	0	3	157	17,427	2	0	3	157
		R4S	15,304	2	0	2	138	16,815	2	0	2	151	16,815	2	0	2	151
		R5	16,075	4	0	2	145	17,661	5	0	3	159	17,661	5	0	3	159
		R5S	16,502	4	0	2	149	18,130	4	0	2	163	18,130	4	0	2	163
		AFR	15,691	2	0	2	141	17,240	2	0	2	155	17,240	2	0	2	155
		AFRR90	15,841	3	0	3	139	17,404	4	0	3	153	17,404	4	0	3	153
		AFRL90	15,907	3	0	3	139	17,477	4	0	3	153	17,477	4	0	3	153
P3	147W	R2	19,855	3	0	2	132	21,814	3	0	2	145	21,814	3	0	2	145
		R3	19,785	3	0	3	135	21,737	3	0	4	148	21,737	3	0	4	148
		R3S	20,312	3	0	3	135	22,317	3	0	3	149	22,317	3	0	3	149
		R4	20,044	3	0	3	136	22,022	3	0	4	150	22,022	3	0	4	150
		R4S	19,339	3	0	3	132	21,247	3	0	3	145	21,247	3	0	3	145
		R5	20,313	5	0	3	138	22,317	5	0	3	152	22,317	5	0	3	152
		R5S	20,852	4	0	2	142	22,910	4	0	2	156	22,910	4	0	2	156
		AFR	19,828	3	0	2	135	21,785	3	0	2	148	21,785	3	0	2	148
		AFRR90	20,017	4	0	3	133	21,992	4	0	3	147	21,992	4	0	3	147
		AFRL90	20,101	4	0	3	134	22,084	4	0	3	147	22,084	4	0	3	147
P4	187W	R2	22,836	3	0	2	120	25,090	3	0	2	132	25,090	3	0	2	132
		R3	22,756	3	0	4	122	25,002	3	0	4	134	25,002	3	0	4	134
		R3S	23,363	3	0	3	123	25,668	3	0	3	135	25,668	3	0	3	135
		R4	23,054	3	0	4	123	25,329	3	0	4	135	25,329	3	0	4	135
		R4S	22,243	3	0	3	119	25,059	3	0	3	134	25,059	3	0	3	134
		R5	23,363	5	0	3	125	25,669	5	0	4	137	25,669	5	0	4	137
		R5S	23,983	4	0	2	128	26,350	4	0	2	141	26,350	4	0	2	141
		AFR	22,806	3	0	2	122	25,056	3	0	2	134	25,056	3	0	2	134
		AFRR90	23,023	4	0	3	121	25,295	4	0	3	133	25,295	4	0	3	133
		AFRL90	23,120	4	0	3	122	25,401	4	0	3	134	25,401	4	0	3	134
P5	210W	R2	26,141	3	0	2	122	28,721	3	0	2	135	28,721	3	0	2	135
		R3	26,049	3	0	4	124	28,620	3	0	4	136	28,620	3	0	4	136
		R3S	26,744	3	0	3	125	29,383	3	0	4	138	29,383	3	0	4	138
		R4	26,390	3	0	4	126	28,994	3	0	4	138	28,994	3	0	4	138
		R4S	25,462	3	0	3	121	27,974	3	0	3	133	27,974	3	0	3	133
		R5	26,744	5	0	4	127	29,383	5	0	4	140	29,383	5	0	4	140
		R5S	27,454	4	0	2	131	30,163	4	0	2	144	30,163	4	0	2	144
		AFR	26,106	3	0	2	124	28,682	3	0	2	137	28,682	3	0	2	137
		AFRR90	26,354	4	0	3	123	28,955	5	0	3	136	28,955	5	0	3	136
		AFRL90	26,465	4	0	3	124	29,077	5	0	3	136	29,077	5	0	3	136
P6	244W	R2	27,646	3	0	2	112	30,374	3	0	2	123	30,374	3	0	2	123
		R3	27,549	3	0	4	113	30,267	3	0	4	124	30,267	3	0	4	124
		R3S	28,283	3	0	3	115	31,075	3	0	4	126	31,075	3	0	4	126
		R4	27,909	3	0	4	114	30,663	3	0	4	126	30,663	3	0	4	126
		R4S	26,928	3	0	3	110	29,585	3	0	3	121	29,585	3	0	3	121
		R5	28,284	5	0	4	116	31,075	5	0	4	127	31,075	5	0	4	127
		R5S	29,035	4	0	2	119	31,900	5	0	3	131	31,900	5	0	3	131
		AFR	27,608	3	0	2	112	30,332	3	0	2	123	30,332	3	0	2	123
		AFRR90	27,872	4	0	3	113	30,622	5	0	3	124	30,622	5	0	3	124
		AFRL90	27,989	4	0	3	113	30,751	5	0	3	125	30,751	5	0	3	125

## Dimensions & Weights

### Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	30 lbs
RPA	32 lbs
MA	30 lbs
WBA	33 lbs
WBASC	36 lbs
IS	33 lbs
AASP	33 lbs
AARP	35 lbs
AAWB	36 lbs
AAWSC	39 lbs

### RSX2 with Round Pole Adapter (RPA)



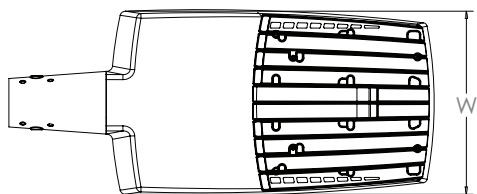
Length: 30.3" (77.0 cm)  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 7.2" (18.3 cm) Arm



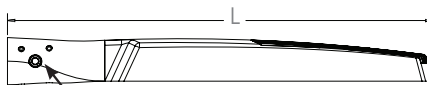
Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.



### RSX2 with Mast Arm Adapter (MA)



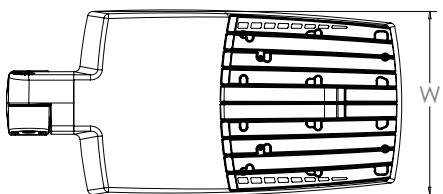
Length: 30.6" (77.7 cm)  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 3.5" (8.9 cm) Arm



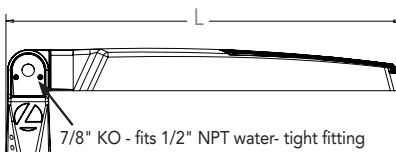
7/16" locking thru bolt/nut provided



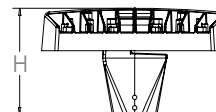
### RSX2 with Adjustable Slipfitter (IS)



Length: 28.3" (71.9 cm)  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 7.6" (19.3 cm) Arm

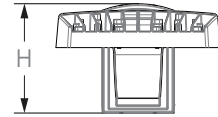
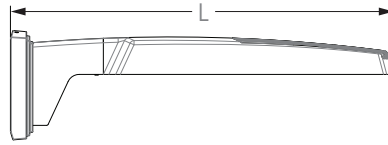
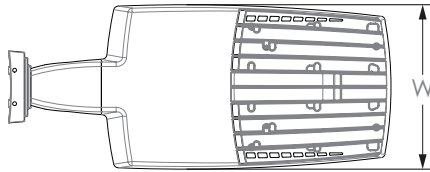


7/8" KO - fits 1/2" NPT water-tight fitting



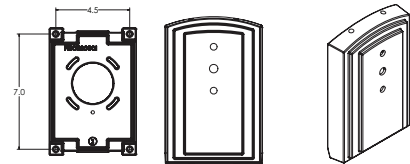
## Dimensions

### RSX2 with Wall Bracket (WBA)

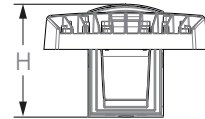
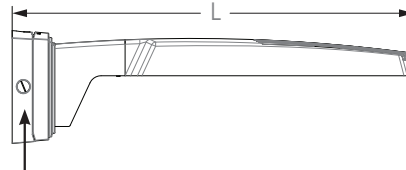
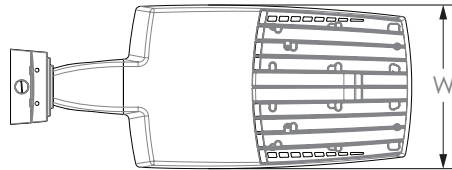


Length: 31.2" (79.2 cm)  
 Width: 13.4" (41.7 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 8.9" (22.6 cm) Arm

### Wall Bracket (WBA) Mounting Detail



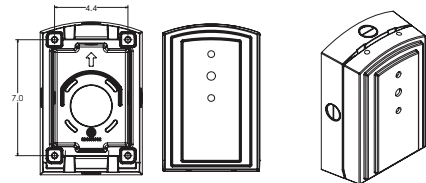
### RSX2 with Wall Bracket with Surface Conduit Box (WBASC)



3/4" NPT taps with plugs - Qty (4) provided

Length: 32.8" (83.3 cm)  
 Width: 13.4" (41.7 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 9.2" (23.4 cm) Arm

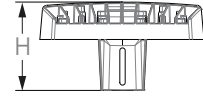
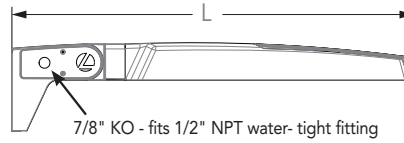
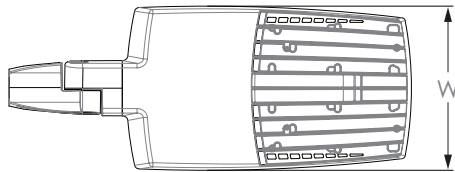
### Surface Conduit Box (SCB) Mounting Detail



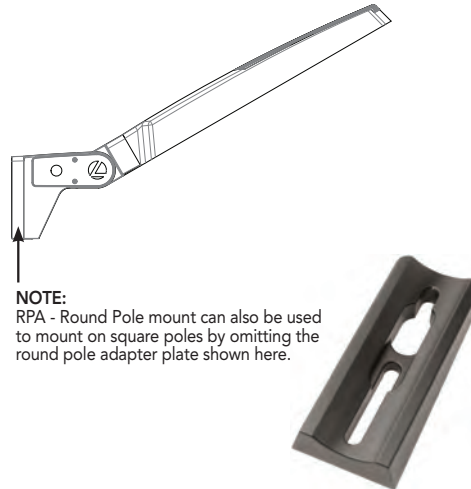


## Dimensions

### RSX2 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)



Length: 32.8" (83.3 cm) **AASP**  
 33.8" (85.9 cm) **AARP**  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 7.2" (18.2 cm) Arm



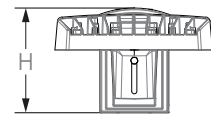
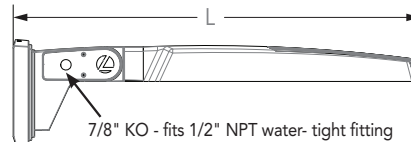
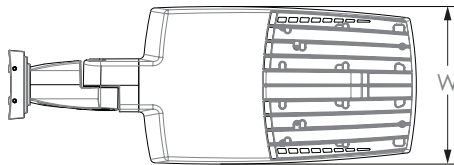
**NOTE:**  
 RPA - Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

#### Notes

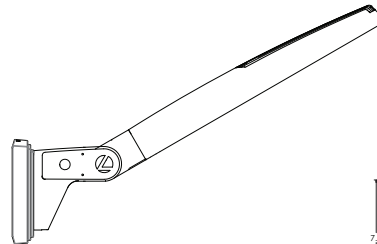
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.

AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

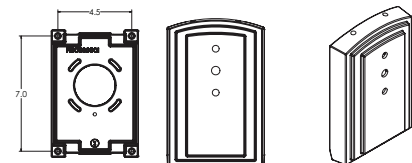
### RSX2 with Adjustable Tilt Arm with Wall Bracket (AAWB)



Length: 34.7" (88.0 cm)  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 8.9" (22.6 cm) Arm



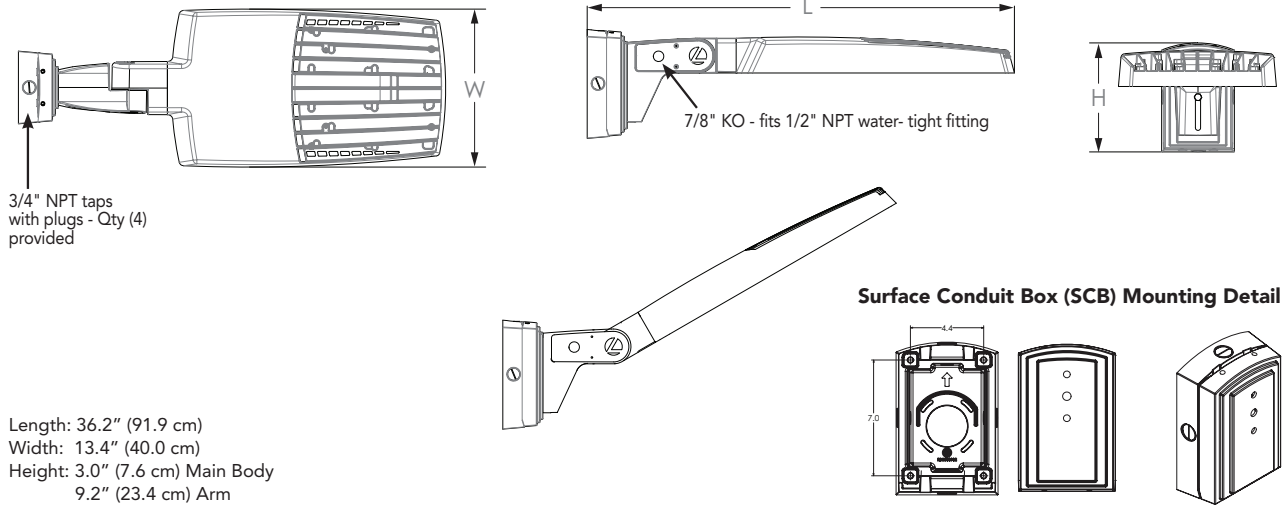
#### Wall Bracket (WBA) Mounting Detail



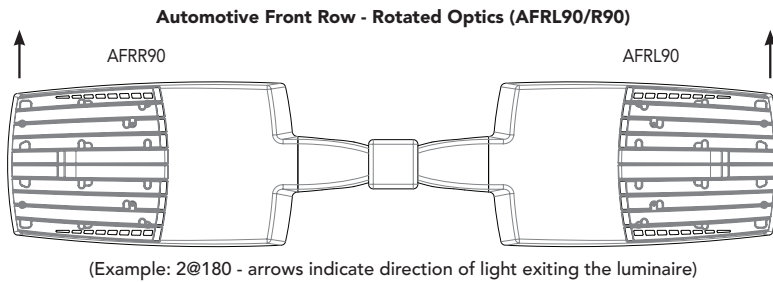
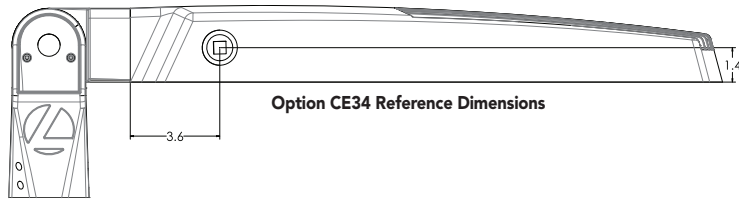


## Dimensions

### RSX2 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)

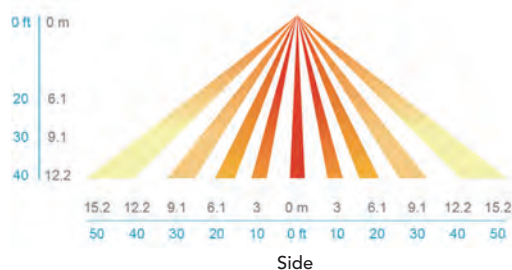
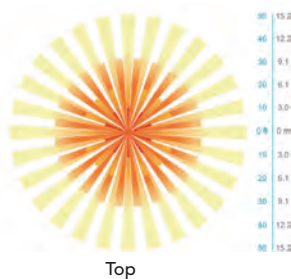
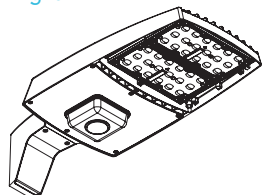


### Additional Reference Drawings



## nLight Control - Sensor Coverage and Settings

### NLTAIR2 PIRHN nLight Sensor Coverage Pattern nLight PIRHN



Motion Sensor Default Settings - Option PIRHN						
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)
NLTAIR2 PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds	5 minutes

\*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clarity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is tilted.

## FEATURES & SPECIFICATIONS

### INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX2 delivers 11,000 to 31,000 lumens and is ideal for replacing 250W to 1000W HID pole-mounted luminaires in parking lots and other area lighting applications.

### CONSTRUCTION AND DESIGN

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. Vibration rated per ANSI C136.31: 3G Mountings: Include SPA, RPA, MA, IS, AASP, AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warranted not to crack or peel.

### OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row) and AFR rotated AFR90 and ARFL90.

### ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

### nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

### INSTALLATION

Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

### LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

### BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

### WARRANTY

5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/support/customer-support/terms-and-conditions](http://www.acuitybrands.com/support/customer-support/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



## RSX2 LED Area Luminaire

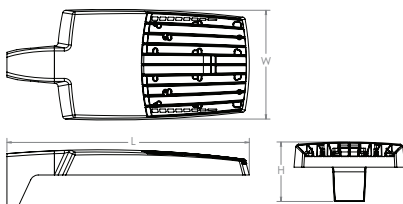


Catalog Number	
Notes	
Type	

Hit the Tab key or mouse over the page to see all interactive elements.

### Specifications

EPA (ft <sup>2</sup> @0°):	0.69 ft <sup>2</sup> (0.06 m <sup>2</sup> )
Length:	29.3" (74.4 cm) (SPA mount)
Width:	13.4" (34.0 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.3 cm) Arm
Weight: (SPA mount)	30.0 lbs (13.6 kg)



### Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX2 delivers 11,000 to 31,000 lumens allowing it to replace 250W to 1000W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

### Ordering Information

**EXAMPLE: RSX2 LED P6 40K R3 MVOLT SPA DDBXD**

Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
<b>RSX2 LED</b>					
P1	30K 3000K	R2	Type 2 Wide	<b>MVOLT</b> (120V-277V) <sup>2</sup>	<b>SPA</b> Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°)
P2	40K 4000K	R3	Type 3 Wide	<b>HVOLT</b> (347V-480V) <sup>3</sup>	<b>RPA</b> Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°)
P3	<b>50K 5000K</b>	R3S	Type 3 Short	<b>XVOLT</b> (277V-480V) <sup>4</sup>	<b>MA</b> Mast arm adaptor (fits 2-3/8" OD horizontal tenon)
P4		R4	Type 4 Wide	(use specific voltage for options as noted)	<b>IS</b> Adjustable slipfitter (fits 2-3/8" OD tenon) <sup>6</sup>
<b>P5</b>		R4S	Type 4 Short	120 <sup>3</sup> 277 <sup>5</sup>	<b>WBA</b> Wall bracket <sup>1</sup>
P6		<b>R5</b>	Type 5 Wide <sup>1</sup>	208 <sup>3</sup> 347 <sup>5</sup>	<b>WBASC</b> Wall bracket with surface conduit box
		R5S	Type 5 Short <sup>1</sup>	240 <sup>3</sup> 480 <sup>5</sup>	<b>AASP</b> Adjustable tilt arm square pole mounting <sup>6</sup>
		AFR	Automotive Front Row		<b>AARP</b> Adjustable tilt arm round pole mounting <sup>6</sup>
		AFRR90	Automotive Front Row Right Rotated		<b>AAWB</b> Adjustable tilt arm with wall bracket <sup>6</sup>
		AFRL90	Automotive Front Row Left Rotated		<b>AAWSC</b> Adjustable tilt arm wall bracket and surface conduit box <sup>6</sup>

Options	Finish
<b>Shipped Installed</b> HS House-side shield <sup>7</sup> PE Photocontrol, button style <sup>8,9</sup> PEX Photocontrol external threaded, adjustable <sup>9,10</sup> PER7 Seven-wire twist-lock receptacle only (no controls) <sup>9,11,12,13</sup> CE34 Conduit entry 3/4" NPT (Qty 2) SF Single fuse (120, 277, 347) <sup>5</sup> DF Double fuse (208, 240, 480) <sup>5</sup> SPD20KV 20KV Surge pack (10KV standard) FAO Field adjustable output <sup>9,13</sup> DMG 0-10V dimming extend out back of housing for external control (control ordered separate) <sup>9,13</sup> DS Dual switching <sup>9,14</sup>	<b>Shipped Installed</b> <b>*Standalone and Networked Sensors/Controls (factory default settings, see table page 9)</b> NLTAIR2 nLight AIR generation 2 <sup>13,15,16</sup> PIRHN Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) <sup>13,16,17</sup> BAA Buy America(n) Act Compliant  <b>*Note: PIRHN with nLight Air can be used as a standalone dimming sensor with out-of-box settings or as a wireless networked solution. See factory default settings table. Sensor coverage pattern is affected when luminaire is tilted.</b>  <b>Shipped Separately (requires some field assembly)</b> EGS External glare shield <sup>6</sup> EGFV External glare full visor (360° around light aperture) <sup>7</sup> BS Bird spikes <sup>18</sup>
	<b>DDBXD</b> <b>Dark Bronze</b> DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured Dark Bronze DBLBXD Textured Black DNATXD Textured Natural Aluminum DWHGXD Textured White

## Ordering Information

### Accessories

Ordered and shipped separately.

RSX2HS	RSX2 House side shield (includes 2 shields)
RSX2EGS (FINISH) U	External glare shield (specify finish)
RSX2HSAFR (FINISH) U	RSX2 House side shields for AFR rotated optics (includes 2 shields)
RSX2EGFV (FINISH) U	External glare full visor (specify finish)
RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify finish)
RSXWBA (FINISH) U	RSX WBA wall bracket (specify finish) <sup>1</sup>
RSXSCB (FINISH) U	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) <sup>19</sup>
DL1347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) <sup>19</sup>
DL1480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) <sup>19</sup>
DSH08T SBK U	Shorting cap <sup>19</sup>

### NOTES

- Any Type 5 distribution, is not available with WBA.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- XVOLT driver not available with P1. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing (SF or DF) and not available with PE or PEX.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Maximum tilt is 90° above horizontal.
- It may be ordered as an accessory.
- Requires MVOLT or 347V.
- Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, FAO, DMG, DS, PIRHN).
- Requires 120V, 208V, 240V, or 277V.
- Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
- For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
- Two or more of the following options cannot be combined including DMG, DS, PER7, FAO and PIRHN.
- DS only available on performance package P5 and P6.
- Must be ordered with PIRHN.
- Requires MVOLT or HVOLT.
- Must be ordered with NLTAIR2. For additional information on PIRHN visit [here](#).
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

## External Shields



House Side Shield



External Glare Shield

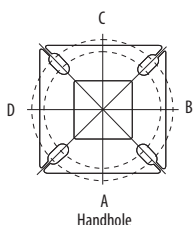


External 360 Full Visor

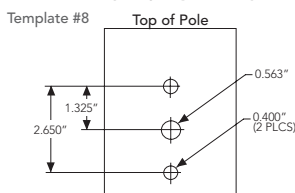
## Pole/Mounting Information

Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

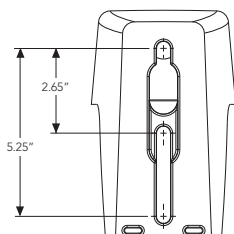
### HANDHOLE ORIENTATION



### RSX POLE DRILLING



### RSX STANDARD ARM & ADJUSTABLE ARM



### Round Tenon Mount - Pole Top Slipfitters

Tenon O.D.	RSX Mounting	Single	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
2 - 3/8"	RPA, AARP	AS3-5190	AS3-5280	AS3-5290	AS3-5320	AS3-5390	AS3-5490
2 - 7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

### Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
#8	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
	Drill Nomenclature	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

### RSX2 - Luminaire EPA

\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
RPA - Round Pole Adaptor		0.74	1.27	1.37	1.9	1.71	2.49	1.42	2.16	2.84
MA - Mast Arm Adaptor		0.61	1.14	1.11	1.64	1.45	2.23	1.29	1.9	2.58
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
	10°	0.53	1.06	1.05	1.58	1.37	2.08	1.06	1.59	2.12
	20°	0.52	1.02	1.03	1.52	1.33	2.02	1.03	1.55	2.07
	30°	0.64	1.11	1.18	1.63	1.45	2.21	1.27	1.91	2.54
	40°	0.81	1.21	1.35	1.74	1.65	2.39	1.62	2.43	3.23
	45°	0.91	1.25	1.5	1.81	1.75	2.48	1.82	2.73	3.64
	50°	1.34	1.83	2.17	2.61	2.56	3.62	2.68	4.02	5.36
	60°	2.2	2.97	3.57	4.24	4.17	5.89	4.41	6.61	8.82
	70°	2.86	4.13	4.7	5.89	5.71	8.21	5.71	8.57	11.42
	80°	3.4	5.13	5.67	7.34	7.09	10.21	6.79	10.19	13.59
	90°	3.85	5.96	6.55	8.58	8.31	11.88	7.70	11.56	15.41

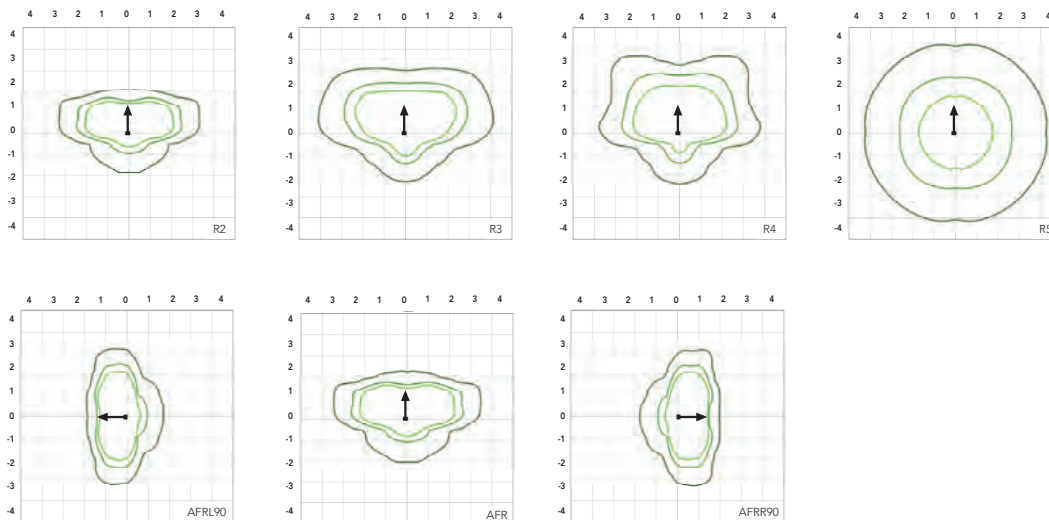
## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

Isofootcandle plots for the RSX2 LED P6 40K. Distances are in units of mounting height (30').

### LEGEND

- 0.1 fc
- 0.5 fc
- 1.0 fc



## Performance Data

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

### Electrical Load

Performance Package	System Watts (W)	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	71W	0.59	0.34	0.30	0.26	0.20	0.15
P2	111W	0.93	0.53	0.46	0.40	0.32	0.23
P3	147W	1.23	0.70	0.61	0.53	0.42	0.31
P4	187W	1.55	0.90	0.78	0.68	0.53	0.38
P5	210W	1.75	1.01	0.87	0.76	0.60	0.44
P6	244W	2.03	1.17	1.01	0.88	0.70	0.51

### Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

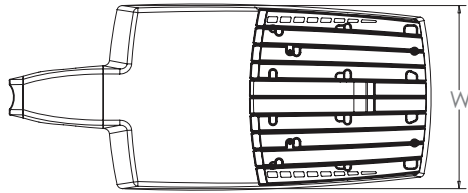
Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	71W	R2	10,040	2	0	1	139	11,031	2	0	1	153	11,031	2	0	1	153
		R3	10,005	2	0	2	141	10,992	2	0	2	155	10,992	2	0	2	155
		R3S	10,271	2	0	2	143	11,285	2	0	2	157	11,285	2	0	2	157
		R4	10,136	2	0	2	143	11,136	2	0	2	157	11,136	2	0	2	157
		R4S	9,779	2	0	2	138	10,744	2	0	2	151	10,744	2	0	2	151
		R5	10,271	4	0	2	145	11,285	4	0	2	159	11,285	4	0	2	159
		R5S	10,544	3	0	1	149	11,585	3	0	2	163	11,585	3	0	2	163
		AFR	10,026	2	0	1	141	11,016	2	0	1	155	11,016	2	0	1	155
		AFRR90	10,122	3	0	2	140	11,121	3	0	2	154	11,121	3	0	2	154
		AFRL90	10,164	3	0	2	141	11,167	3	0	2	155	11,167	3	0	2	155
P2	111W	R2	15,712	2	0	2	138	17,263	2	0	2	151	17,263	2	0	2	151
		R3	15,657	2	0	3	141	17,202	3	0	3	155	17,202	3	0	3	155
		R3S	16,075	2	0	2	141	17,661	2	0	2	155	17,661	2	0	2	155
		R4	15,862	2	0	3	143	17,427	2	0	3	157	17,427	2	0	3	157
		R4S	15,304	2	0	2	138	16,815	2	0	2	151	16,815	2	0	2	151
		R5	16,075	4	0	2	145	17,661	5	0	3	159	17,661	5	0	3	159
		R5S	16,502	4	0	2	149	18,130	4	0	2	163	18,130	4	0	2	163
		AFR	15,691	2	0	2	141	17,240	2	0	2	155	17,240	2	0	2	155
		AFRR90	15,841	3	0	3	139	17,404	4	0	3	153	17,404	4	0	3	153
		AFRL90	15,907	3	0	3	139	17,477	4	0	3	153	17,477	4	0	3	153
P3	147W	R2	19,855	3	0	2	132	21,814	3	0	2	145	21,814	3	0	2	145
		R3	19,785	3	0	3	135	21,737	3	0	4	148	21,737	3	0	4	148
		R3S	20,312	3	0	3	135	22,317	3	0	3	149	22,317	3	0	3	149
		R4	20,044	3	0	3	136	22,022	3	0	4	150	22,022	3	0	4	150
		R4S	19,339	3	0	3	132	21,247	3	0	3	145	21,247	3	0	3	145
		R5	20,313	5	0	3	138	22,317	5	0	3	152	22,317	5	0	3	152
		R5S	20,852	4	0	2	142	22,910	4	0	2	156	22,910	4	0	2	156
		AFR	19,828	3	0	2	135	21,785	3	0	2	148	21,785	3	0	2	148
		AFRR90	20,017	4	0	3	133	21,992	4	0	3	147	21,992	4	0	3	147
		AFRL90	20,101	4	0	3	134	22,084	4	0	3	147	22,084	4	0	3	147
P4	187W	R2	22,836	3	0	2	120	25,090	3	0	2	132	25,090	3	0	2	132
		R3	22,756	3	0	4	122	25,002	3	0	4	134	25,002	3	0	4	134
		R3S	23,363	3	0	3	123	25,668	3	0	3	135	25,668	3	0	3	135
		R4	23,054	3	0	4	123	25,329	3	0	4	135	25,329	3	0	4	135
		R4S	22,243	3	0	3	119	25,059	3	0	3	134	25,059	3	0	3	134
		R5	23,363	5	0	3	125	25,669	5	0	4	137	25,669	5	0	4	137
		R5S	23,983	4	0	2	128	26,350	4	0	2	141	26,350	4	0	2	141
		AFR	22,806	3	0	2	122	25,056	3	0	2	134	25,056	3	0	2	134
		AFRR90	23,023	4	0	3	121	25,295	4	0	3	133	25,295	4	0	3	133
		AFRL90	23,120	4	0	3	122	25,401	4	0	3	134	25,401	4	0	3	134
P5	210W	R2	26,141	3	0	2	122	28,721	3	0	2	135	28,721	3	0	2	135
		R3	26,049	3	0	4	124	28,620	3	0	4	136	28,620	3	0	4	136
		R3S	26,744	3	0	3	125	29,383	3	0	4	138	29,383	3	0	4	138
		R4	26,390	3	0	4	126	28,994	3	0	4	138	28,994	3	0	4	138
		R4S	25,462	3	0	3	121	27,974	3	0	3	133	27,974	3	0	3	133
		R5	26,744	5	0	4	127	29,383	5	0	4	140	29,383	5	0	4	140
		R5S	27,454	4	0	2	131	30,163	4	0	2	144	30,163	4	0	2	144
		AFR	26,106	3	0	2	124	28,682	3	0	2	137	28,682	3	0	2	137
		AFRR90	26,354	4	0	3	123	28,955	5	0	3	136	28,955	5	0	3	136
		AFRL90	26,465	4	0	3	124	29,077	5	0	3	136	29,077	5	0	3	136
P6	244W	R2	27,646	3	0	2	112	30,374	3	0	2	123	30,374	3	0	2	123
		R3	27,549	3	0	4	113	30,267	3	0	4	124	30,267	3	0	4	124
		R3S	28,283	3	0	3	115	31,075	3	0	4	126	31,075	3	0	4	126
		R4	27,909	3	0	4	114	30,663	3	0	4	126	30,663	3	0	4	126
		R4S	26,928	3	0	3	110	29,585	3	0	3	121	29,585	3	0	3	121
		R5	28,284	5	0	4	116	31,075	5	0	4	127	31,075	5	0	4	127
		R5S	29,035	4	0	2	119	31,900	5	0	3	131	31,900	5	0	3	131
		AFR	27,608	3	0	2	112	30,332	3	0	2	123	30,332	3	0	2	123
		AFRR90	27,872	4	0	3	113	30,622	5	0	3	124	30,622	5	0	3	124
		AFRL90	27,989	4	0	3	113	30,751	5	0	3	125	30,751	5	0	3	125

## Dimensions & Weights

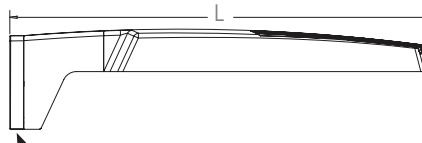
### Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	30 lbs
RPA	32 lbs
MA	30 lbs
WBA	33 lbs
WBASC	36 lbs
IS	33 lbs
AASP	33 lbs
AARP	35 lbs
AAWB	36 lbs
AAWSC	39 lbs

#### RSX2 with Round Pole Adapter (RPA)



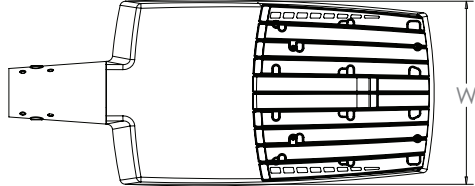
Length: 30.3" (77.0 cm)  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 7.2" (18.3 cm) Arm



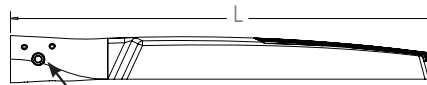
Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.



#### RSX2 with Mast Arm Adapter (MA)



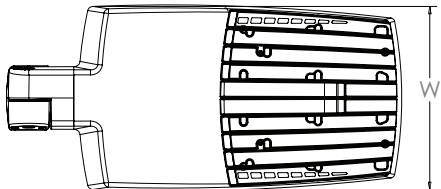
Length: 30.6" (77.7 cm)  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 3.5" (8.9 cm) Arm



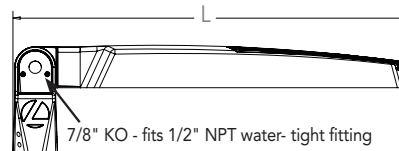
7/16" locking thru bolt/nut provided



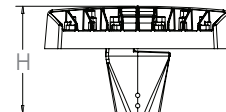
#### RSX2 with Adjustable Slipfitter (IS)



Length: 28.3" (71.9 cm)  
 Width: 13.4" (34.0 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 7.6" (19.3 cm) Arm



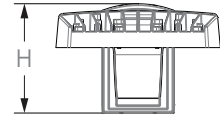
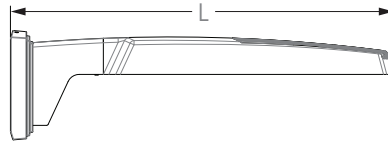
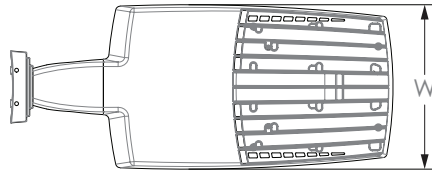
7/8" KO - fits 1/2" NPT water- tight fitting





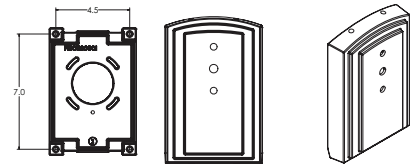
## Dimensions

### RSX2 with Wall Bracket (WBA)

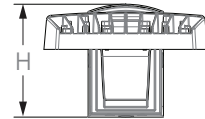
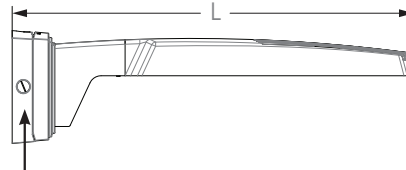
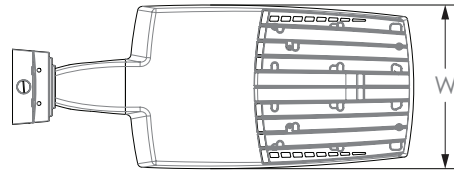


Length: 31.2" (79.2 cm)  
 Width: 13.4" (41.7 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 8.9" (22.6 cm) Arm

### Wall Bracket (WBA) Mounting Detail



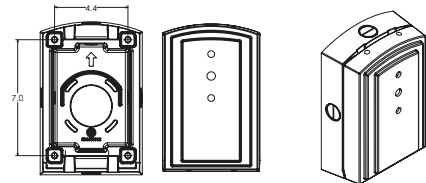
### RSX2 with Wall Bracket with Surface Conduit Box (WBASC)



3/4" NPT taps with plugs - Qty (4) provided

Length: 32.8" (83.3 cm)  
 Width: 13.4" (41.7 cm)  
 Height: 3.0" (7.6 cm) Main Body  
 9.2" (23.4 cm) Arm

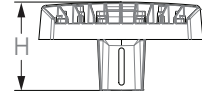
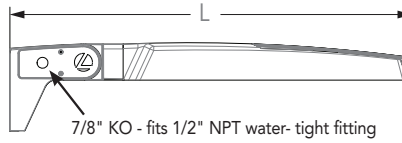
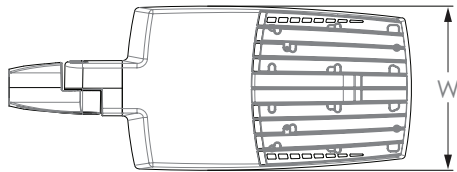
### Surface Conduit Box (SCB) Mounting Detail



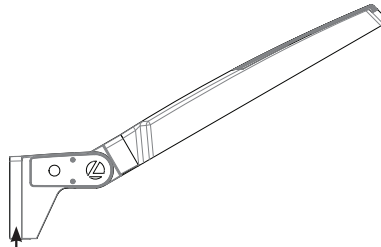


## Dimensions

### RSX2 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)



Length: 32.8" (83.3 cm) **AASP**  
33.8" (85.9 cm) **AARP**  
Width: 13.4" (34.0 cm)  
Height: 3.0" (7.6 cm) Main Body  
7.2" (18.2 cm) Arm



**NOTE:**  
RPA - Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

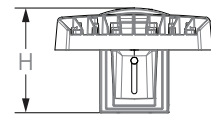
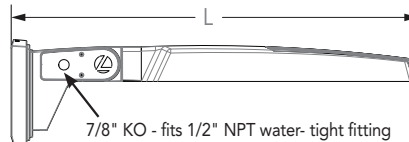
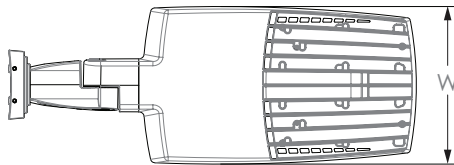


#### Notes

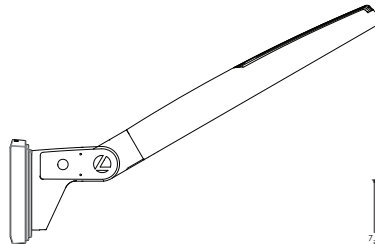
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.

AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

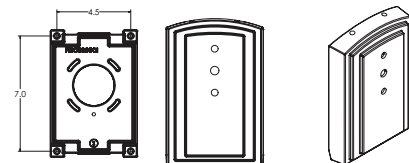
### RSX2 with Adjustable Tilt Arm with Wall Bracket (AAWB)



Length: 34.7" (88.0 cm)  
Width: 13.4" (34.0 cm)  
Height: 3.0" (7.6 cm) Main Body  
8.9" (22.6 cm) Arm

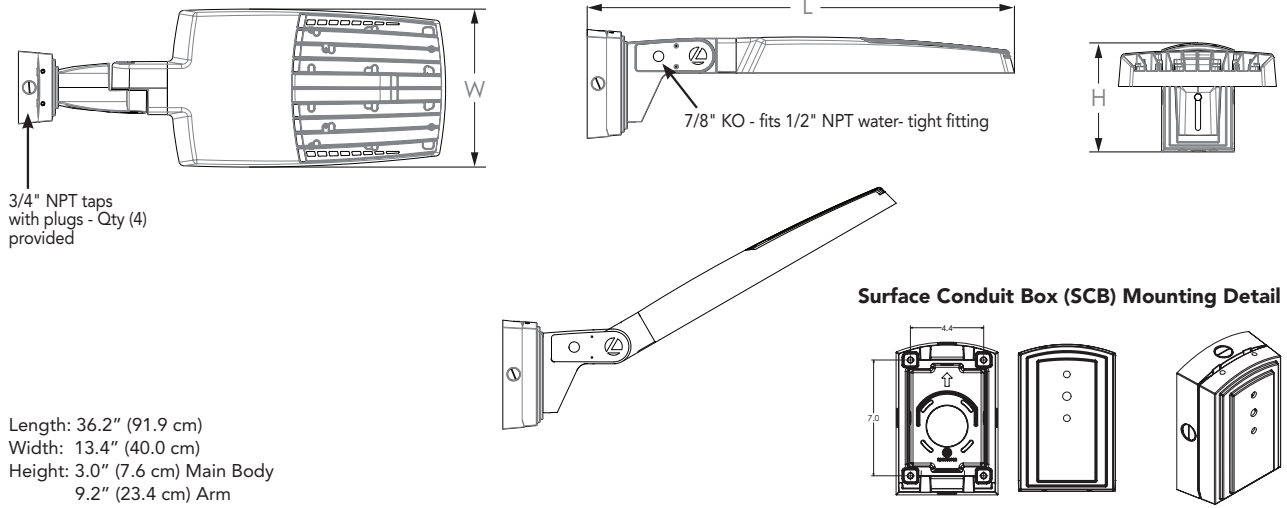


#### Wall Bracket (WBA) Mounting Detail

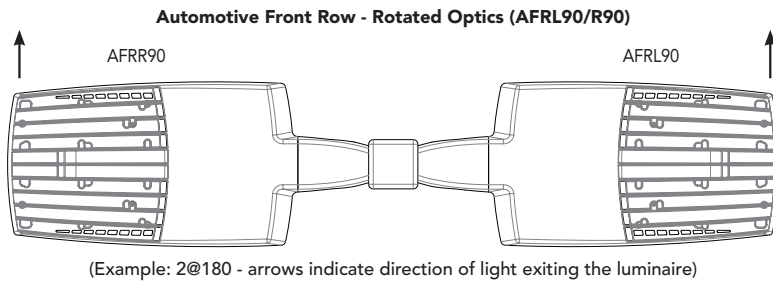
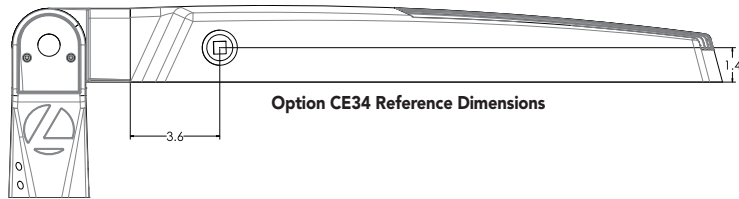


## Dimensions

### RSX2 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)

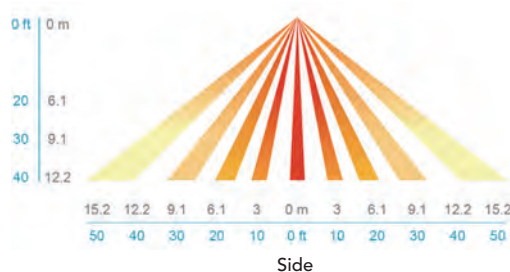
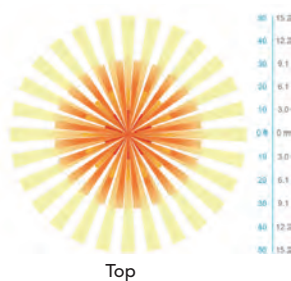
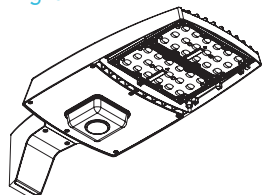


### Additional Reference Drawings



## nLight Control - Sensor Coverage and Settings

### NLTAIR2 PIRHN nLight Sensor Coverage Pattern nLight PIRHN



Motion Sensor Default Settings - Option PIRHN						
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)
NLTAIR2 PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds	5 minutes

\*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clarity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is tilted.

## FEATURES & SPECIFICATIONS

### INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX2 delivers 11,000 to 31,000 lumens and is ideal for replacing 250W to 1000W HID pole-mounted luminaires in parking lots and other area lighting applications.

### CONSTRUCTION AND DESIGN

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. Vibration rated per ANSI C136.31: 3G Mountings: Include SPA, RPA, MA, IS, AASP, AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warranted not to crack or peel.

### OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row) and AFR rotated AFR90 and ARFL90.

### ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

### nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

### INSTALLATION

Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

### LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

### BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

### WARRANTY

5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/support/customer-support/terms-and-conditions](http://www.acuitybrands.com/support/customer-support/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



## FEATURES & SPECIFICATIONS

**INTENDED USE** — The STL combines digital LED lighting and controls technologies with high-performance optical design to offer the most advanced surface-mount luminaire for general ambient lighting applications. High-efficacy light engine delivers long life and excellent color, ensuring a superior quality lighting installation that is highly efficient and sustainable.

**CONSTRUCTION** — Housing is roll formed from code-gauge steel.

Impact modified linear-faceted refractor with light diffusing film. Refractor attaches to die cast ends by simple hook and pin design with controlled tension provided by sonically welded end plate, providing secure installation and easy maintenance.

Decorative die-cast end caps provide added durability.

Finish: All metal parts are post-painted in white polyester powder coat for smooth, finished edges and uniform light distribution. Natural aluminum finish available on end caps (see Options).

Injection-molded plastic light traps prevent light leaks between shielding and end plates and centers diffuser on channel.

**OPTICS** — Volumetric illumination is achieved by creating an optimal mix of light to vertical and horizontal work surfaces, rendering interior space, objects and occupants in a more balanced luminous environment. Light distribution is carefully controlled at high angles, providing just enough luminous flux to create the volumetric effect.

Angled mounting surface combined with crescent-shape linear faceted refractor system obscures and integrates individual LED images and uniformly washes fixture surface with light.

**ELECTRICAL** — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. STL is rated to deliver L90 performance at 60,000 hours. The LEDs have a CRI of 82.

elDoLED driver options deliver choice of dimming range and choices for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Optional nLight® embedded controls continuously monitor system performance, allow for constant lumen management / compensation function, facilitate simple “plug-and-play” network and controls upgrading via Cat-5 cable. Ballast disconnect provided where required to comply with US and Canadian codes.

**LISTINGS** — CSA certified to meet U.S. and Canadian standards.

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

Patents pending. Damp listed.

**WARRANTY** — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

[www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

Catalog Number
Notes
Type

**ST SERIES**  
 Surface Volumetric

**STL4**

4'  
 LED



### A+ Capable Luminaire

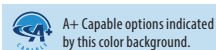
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a **shaded background**\*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a **shaded background**\*

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

\*See ordering tree for details

## STL4 LED Surface Volumetric



### ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

**Example:** STL4 20L EZ1 LP840

STL4							
Series	Lumens <sup>1</sup>	Voltage	Driver	Color temperature	Control	Options	Finish <sup>5</sup>
STL4 4' surface volumetric LED	20L	(blank) MVOLT (120-277)	EZ1 eldoLED dims to 1%, 0-10V	LP830 3000K	(blank) No controls	EL7L 700 nominal lumen battery pack (Noncompliant with CA T20)	(blank) White
	30L			LP835 3500K	N80 nLight with 80% (L80) lumen management		DNA Natural aluminum
	40L	347 347V <sup>2</sup>	EZB eldoLED dims to dark, 0-10V	LP840 4000K	N80EMG nLight with 80% (L80) lumen management for use with generator supply EM power		MB Matte Black
	48L			LP850 5000K		EL14L 1400 nominal lumen battery pack (Noncompliant with CA T20)	
	60L		SLD Step-level dimming <sup>3</sup>		N100 nLight without lumen management	E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS	
			GZ10 Dims to 10% (0-10V dimming) <sup>6</sup>		N100EMG nLight without lumen management for use with generator supply EM power		
					LSXRHL Sensor Switch® fixture mount sensor with High/Low occupancy operation <sup>4</sup>	SC1 Surface conduit end cap provisions for one endcap	
					LSXR10 Sensor Switch® fixture mount sensor with On/Off occupancy operation	SC2 Surface conduit end cap provisions for both end caps	
						BDP Factory Installed Ballast Disconnect Plug	

Accessories: Order as separate catalog number.						
CI Code	Model	Kit Type	Voltage	Dimming	Length	Ceiling Type*
*211LSF	STLCR	Continuous Row Connector	NA	NA	NA	NA
*208XVT	STACG36 F1	Adjustable aircraft cable gripper suspension kit	NA	NA	36 inch	F1
*208XVY	STACG36 F2					F2
*208XW2	STACG72 F1				72 inch	F1
*208XVW	STACG72 F2					F2
*208XW7	STACG36 F1	Adjustable aircraft cable gripper w/power feed	120-277V	Non-Dimming	36 inch	F1
*208XVW	STACG36 F2					F2
*208XW3	STACG72 F1				72 inch	F1
*208XW0	STACG72 F2					F2
*2594WC	STACGFD36 F1		347V	0-10V Dimming	36 inch	F1
*2594WK	STACGFD36 F2					F2
*2594WP	STACGFD72 F1				72 inch	F1
*2594WV	STACGFD72 F2					F2
*2594X0	STACG347FD36 F1		120-277V	Non-Dimming	36 inch	F1
*2594YJ	STACG347FD36 F2					F2
*2594YK	STACG347FD72 F1				72 inch	F1
*2594YN	STACG347FD72 F2					F2
*210AC1	STACGE36 F1	Adjustable aircraft cable gripper w/emergency power feed	120-277V	Non-Dimming	36 inch	F1
*210CN1	STACGE36 F2					F2
*210AAV	STACGE72 F1				72 inch	F1
*210CMP	STACGE72 F2					F2

\*Reference mounting data for ceiling type

### Notes

- 1 Approximate lumen output.
- 2 Not available with EL battery packs or SLD driver.
- 3 Not available with controls options
- 4 Requires SC1 option. Dims to approximately 10% light output when unoccupied. See sensor details on next page.
- 5 For additional paint finishes refer to: [Architectural Colors](#)
- 6 GZ10 drivers not available with any Controls or sensor options.

## STL4 LED Surface Volumetric

Performance Data			
Lumen Package	Input Watts¹	Lumens	LPW
30L LP830	26.7	2904	108.8
30L LP835	26.7	3049	114.2
30L LP840	26.7	3195	119.7
30L LP850	26.7	3282	122.9
40L LP830	34.9	3688	105.7
40L LP835	34.9	3834	109.9
40L LP840	34.9	3979	114.0
40L LP850	34.9	4124	118.2
48L LP830	45.2	4615	102.1
48L LP835	45.2	4850	107.3
48L LP840	45.2	5088	112.6
48L LP850	45.2	5184	114.7
60L LP830	53.2	5294	99.5
60L LP835	53.2	5559	104.5
60L LP840	53.2	5811	109.2
60L LP850	53.2	5954	111.9

### How to Calculate Delivered Lumens in Emergency Mode

Use the formula below to determine the delivered lumens in emergency mode

**Delivered Lumens = 1.25 x P x LPW**

P = Output power of emergency driver. P = 10W for E10WLCF option.

LPW = Lumen per watt rating of the luminaire. LPW information available in Performance Data section.



### Sensor Switch LSXR Sensor

**Lens type:** 10 - Low Mount 360°  
**Dimming:** HL - High/Low Occupancy operation  
**Min Dim Level:** 3V - approximately 10% light output when unoccupied  
**Time Delay:** 5M - 5 minutes

## MOUNTING DATA

Suspension Kit Ceiling Types: F1 for use with most T-bar and screw slot grid ceiling applications. Designed for on-grid and off-grid installations.

F2 for use with recessed or surface-mount horizontal J-box applications.

For unit or row installation; surface or suspend mounting.

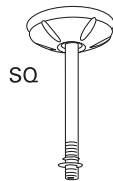
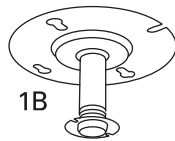
Individual installation — Two single-stem hangers required.

For aircraft cable, one STACG\_, STACGF\_, or STACGE\_ required for each suspension point.

Row installation — Order one (1) STLCR accessory per fixture for continuous row applications. Not required for last fixture in row. One hanger per fixture plus one per row required.

Note: 2' configurations with emergency option cannot be stem mounted.

See ACCESSORIES below for hanging devices.

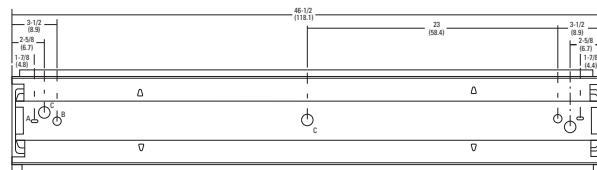


## DIMENSIONS

All dimensions are inches (centimeters) unless otherwise noted.

### Specifications

Length: 46-3/8 (117.8)      A = 1/4 x 1/2 (.635 x 1.27) Oval Hole  
 Width: 10-1/8 (25.7)      B = 11/16 (1.75) Dia. K.O.  
 Depth: 3-7/8 (9.8)      C = 7/8 (2.22) Dia. K.O.  
 Weight: 13LB



## XSP Series

XSPW™ LED Wall Mount Luminaire featuring Cree TrueWhite® Technology

Rev. Date: VersionB V4 02/25/2020

### Product Description

The XSPW™ LED wall mount luminaire has a slim, low profile design intended for outdoor wall mounted applications. The rugged lightweight aluminum housing and mounting box are designed for installation over standard single gang J-Boxes and mud ring single gang J-Boxes. The luminaire allows for through-wired or conduit entry from the top, bottom, sides and rear. The housing design is intended specifically for LED technology including a weathertight LED driver compartment and thermal management. Optic design features industry-leading NanoOptic® Precision Delivery Grid™ system in multiple distributions.

**Applications:** General area and security lighting

### Performance Summary

NanoOptic® Precision Delivery Grid™ optic

Assembled in the U.S.A. of U.S. and imported parts

**CRI:** Minimum 70 CRI (3000K, 4000K & 5700K); 90 CRI (5000K)

**CCT:** 3000K, 4000K, 5000K, 5700K

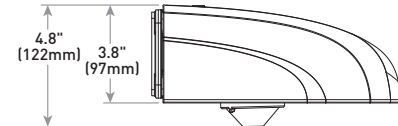
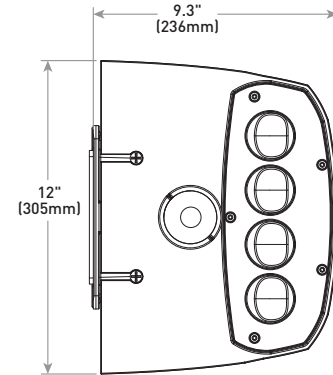
**Limited Warranty\*:** 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

\* See <http://creelighting.com/warranty> for warranty terms

### Accessories

Field-Installed	
<b>Beauty Plate</b> WM-PLT12** - 12" [305mm] Square WM-PLT14** - 14" [356mm] Square - Covers holes left by incumbent wall packs	<b>Hand-Held Remote</b> XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required

\*\* Must specify color



Multi-Level Sensor location  
(ordered as an option)

Lumen Package	Weight
2L, 4L, 6L	11.0 lbs. [5.0kg]
8L	11.8 lbs. [5.4kg]

### Ordering Information

Example: XSPW-B-WM-2ME-2L-30K-UL-BK

XSPW	B	WM						
Product	Version	Mounting	Optic	Lumen Package*	CCT	Voltage	Color Options	Options
<b>XSPW</b>	<b>B</b>	<b>WM</b> Wall	<b>2ME</b> Type II Medium <b>3ME</b> Type III Medium <b>4ME</b> Type IV Medium	<b>2L</b> 2,490 lumens <b>4L</b> 4,270 lumens <b>6L</b> 6,100 lumens <b>8L</b> 8,475 lumens	<b>30K</b> 3000K - 70 CRI <b>40K</b> 4000K - 70 CRI <b>50K</b> 5000K - 90 CRI <b>57K</b> 5700K - 70 CRI	<b>UL</b> Universal 120-277V <b>UH</b> Universal 347-480V <b>34</b> 347V - For use with P option only	<b>BK</b> Black <b>BZ</b> Bronze <b>SV</b> Silver <b>WH</b> White	<b>ML Multi-Level</b> - Refer to ML spec sheet for details - Available with UL voltage only <b>P Button Photocell</b> - Not available with ML or PML options - Available with UL and 34 voltages only <b>PML Programmable Multi-Level</b> - Refer to PML spec sheet for details - Available with UL voltage only

\* Lumen Package selection codes identify approximate light output only. Actual lumen output levels may vary depending on CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values



**CREE LIGHTING**

US: [creelighting.com](http://creelighting.com) (800) 236-6800  
 Canada: [creelighting-canada.com](http://creelighting-canada.com) (800) 473-1234

## XSPW™ LED Wall Mount Luminaire

### Product Specifications

#### CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

#### CONSTRUCTION & MATERIALS

- Slim, low profile design
- Luminaire housing specifically designed for LED applications with advanced LED thermal management and driver
- Luminaire mounting box designed for installation over standard single gang J-Boxes and mud ring single gang J-Boxes
- Luminaire can also be direct mounted to a wall and surface wired
- Secures to wall with four 3/16" (5mm) screws (by others)
- Conduit entry from top, bottom, sides, and rear
- Exclusive Colorfast DeltaGuard® finish features an E-coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Silver, black, white and bronze are available
- **Weight:** 2L, 4L, 6L - 11.0 lbs. (5.0kg); 8L - 11.8 lbs. (5.4kg)

#### ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Designed with 0-10V dimming capabilities. Controls by others
- **10V Source Current:** 0.15 mA
- Refer to [Dimming spec sheet](#) for details
- **Operating Temperature Range:** -40°C - +50°C (-40°F - +122°F)

#### REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Designed for downlight applications only
- Enclosure rated IP66 per IEC 60598
- ANSI C136.2 10kV surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- Dark Sky Friendly, IDA Approved when ordered with 30K CCT. Please refer to <https://www.darksky.org/our-work/lighting/lighting-for-industry/fsa/fsa-products/> for most current information
- DLC and DLC Premium qualified versions available. Please refer to <https://www.designlights.org/search/> for most current information
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

Electrical Data*									
Lumen Package	CCT/CRI	System Watts	Efficacy	Total Current [A]					
		120-480V		120V	208V	240V	277V	347V	480V
2L	30K/70 CRI	20	125	0.17	0.10	0.08	0.07	0.06	0.05
	40K/70 CRI	19	131	0.16	0.09	0.08	0.07	0.06	0.04
	50K/90 CRI	24	104	0.20	0.11	0.10	0.08	0.07	0.05
	57K/70 CRI	19	131	0.16	0.09	0.08	0.07	0.06	0.04
4L	30K/70 CRI	33	129	0.28	0.16	0.14	0.13	0.10	0.07
	40K/70 CRI	31	138	0.27	0.15	0.13	0.12	0.09	0.07
	50K/90 CRI	40	107	0.34	0.20	0.17	0.16	0.12	0.09
	57K/70 CRI	31	138	0.26	0.15	0.13	0.12	0.09	0.07
6L	30K/70 CRI	51	120	0.43	0.25	0.22	0.19	0.14	0.11
	40K/70 CRI	47	130	0.40	0.23	0.20	0.18	0.14	0.10
	50K/90 CRI	60	102	0.51	0.29	0.25	0.23	0.17	0.13
	57K/70 CRI	47	130	0.40	0.23	0.20	0.17	0.14	0.10
8L	30K/70 CRI	77	110	0.65	0.38	0.32	0.28	0.22	0.16
	40K/70 CRI	72	118	0.61	0.35	0.31	0.27	0.21	0.15
	50K/90 CRI	78	89	0.66	0.37	0.33	0.29	0.22	0.16
	57K/70 CRI	71	119	0.60	0.35	0.30	0.26	0.20	0.15

\* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10%

XSPW Series Ambient Adjusted Lumen Maintenance Factors <sup>1</sup>					
Ambient	Initial LMF	25K hr Reported <sup>2</sup> LMF	50K hr Reported <sup>2</sup> LMF	75K hr Estimated <sup>3</sup> LMF	100K hr Estimated <sup>3</sup> LMF
5°C (41°F)	1.03	0.98	0.96	0.94	0.92
10°C (50°F)	1.03	0.98	0.96	0.94	0.92
15°C (59°F)	1.02	0.97	0.95	0.93	0.92
20°C (68°F)	1.01	0.96	0.95	0.93	0.91
25°C (77°F)	1.00	0.96	0.94	0.92	0.90
30°C (86°F)	0.99	0.95	0.93	0.91	0.89
35°C (95°F)	0.98	0.94	0.92	0.90	0.88
40°C (104°F)	0.97	0.93	0.91	0.89	0.87

<sup>1</sup> Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.

<sup>2</sup> In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

<sup>3</sup> Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

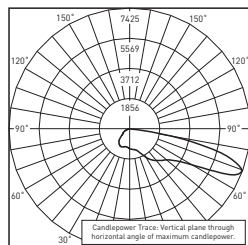


## XSPW™ LED Wall Mount Luminaire

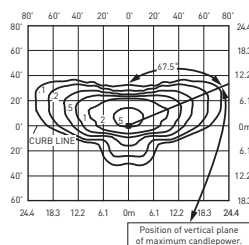
### Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult:  
<http://creelighting.com/products/outdoor/wall-mount/xsp-series-wall>

#### 2ME



CESTL Test Report #: PL12798-001A  
 XSPW-B-\*\*-2ME-8L-40K-UL  
 Initial Delivered Lumens: 8,622



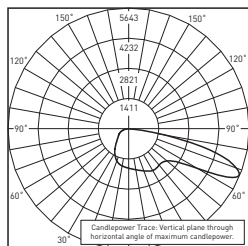
XSPW-B-\*\*-2ME-8L-40K-UL  
 Mounting Height: 15' (4.6) A.F.G.  
 Initial Delivered Lumens: 8,475  
 Initial FC at grade

Type II Medium Distribution								
Lumen Package	3000K		4000K		5000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
2L	2,490	B1 U0 G1	2,490	B1 U0 G1	2,490	B1 U0 G1	2,490	B1 U0 G1
4L	4,270	B1 U0 G1	4,270	B1 U0 G1	4,270	B1 U0 G1	4,270	B1 U0 G1
6L	6,100	B1 U0 G2	6,100	B1 U0 G2	6,100	B1 U0 G2	6,100	B1 U0 G2
8L	8,475	B2 U0 G2	8,475	B2 U0 G2	6,925	B1 U0 G2	8,475	B2 U0 G2

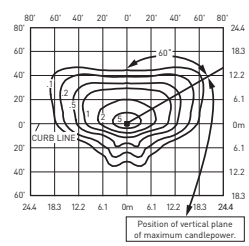
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

#### 3ME



CESTL Test Report #: PL12366-007A  
 XSPW-B-\*\*-3ME-8L-40K-UL  
 Initial Delivered Lumens: 8,543



XSPW-B-\*\*-3ME-8L-40K-UL  
 Mounting Height: 15' (4.6m) A.F.G.  
 Initial Delivered Lumens: 8,475  
 Initial FC at grade

Type III Medium Distribution								
Lumen Package	3000K		4000K		5000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
2L	2,490	B1 U0 G1	2,490	B1 U0 G1	2,490	B1 U0 G1	2,490	B1 U0 G1
4L	4,270	B1 U0 G1	4,270	B1 U0 G1	4,270	B1 U0 G1	4,270	B1 U0 G1
6L	6,100	B1 U0 G2	6,100	B1 U0 G2	6,100	B1 U0 G2	6,100	B1 U0 G2
8L	8,475	B2 U0 G2	8,475	B2 U0 G2	6,925	B1 U0 G2	8,475	B2 U0 G2

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

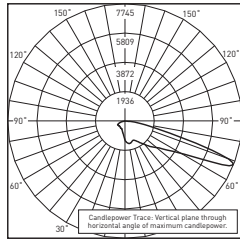
\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

## XSPW™ LED Wall Mount Luminaire

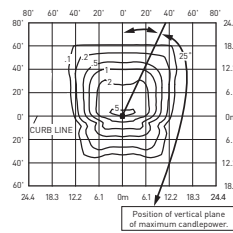
### Photometry

All published luminaire photometric testing performed to IES LM-79-08 standards. To obtain an IES file specific to your project consult:  
<http://creelighting.com/products/outdoor/wall-mount/xsp-series-wall>

#### 4ME



RESTL Test Report #: PL14415-001A  
 XSPW-B-\*\*-4ME-8L-40K-UL  
 Initial Delivered Lumens: 8,763



XSPW-B-\*\*-4ME-8L-40K-UL  
 Mounting Height: 15' (4.6m) A.F.G.  
 Initial Delivered Lumens: 8,475  
 Initial FC at grade

#### Type IV Medium Distribution

Lumen Package	3000K		4000K		5000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
2L	2,490	B1 U0 G1	2,490	B1 U0 G1	2,490	B1 U0 G1	2,490	B1 U0 G1
4L	4,270	B1 U0 G1	4,270	B1 U0 G1	4,270	B1 U0 G1	4,270	B1 U0 G1
6L	6,100	B1 U0 G2	6,100	B1 U0 G2	6,100	B1 U0 G2	6,100	B1 U0 G2
8L	8,475	B1 U0 G2	8,475	B1 U0 G2	6,925	B1 U0 G2	8,475	B1 U0 G2

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

# PHILIPS

## Recessed

### EvoKit LED Retrofit Kit Gen 5



Philips EvoKit LED Retrofit kit gen 5 is an energy efficient LED alternative to traditional linear fluorescent troffers that also helps reduce maintenance costs due to its long lifetime. Simple construction helps decrease installation times offering an installed LED solution within minutes.

Products can be found on the DLC QPL by searching the 6 digit product number.  
Additional information can be found at [www.philips.com/evokit](http://www.philips.com/evokit).

Project: \_\_\_\_\_  
Location: \_\_\_\_\_  
Cat.No: \_\_\_\_\_  
Type: \_\_\_\_\_  
Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
Notes: \_\_\_\_\_

#### EvoKit with 0-10V Dimming ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>0-10V Dimming</b>								
527978	929002714213	EvoKit 2x2 21L 15W 835 UNV 0-10 G5	15W	120-277	70,000	2100	3500	140
527986	929002714313	EvoKit 2x2 21L 14W 840 UNV 0-10 G5	14W	120-277	70,000	2100	4000	150
527994	929002714413	EvoKit 2x2 21L 14W 850 UNV 0-10 G5	14W	120-277	70,000	2100	5000	150
528000	929002714513	EvoKit 2x2 31L 22W 835 UNV 0-10 G5	22W	120-277	70,000	3100	3500	135
528018	929002714613	EvoKit 2x2 31L 22W 840 UNV 0-10 G5	22W	120-277	70,000	3100	4000	141
528026	929002714713	EvoKit 2x2 31L 22W 850 UNV 0-10 G5	22W	120-277	70,000	3100	5000	141
528455	929002719013	EvoKit 2x2 31L 23W 935 UNV 0-10 G5	23W	120-277	70,000	3100	3500	135
528034	929002714813	EvoKit 2x4 36L 25W 835 UNV 0-10 G5	25W	120-277	70,000	3600	3500	144
528042	929002714913	EvoKit 2x4 36L 25W 840 UNV 0-10 G5	25W	120-277	70,000	3600	4000	144
528059	929002715013	EvoKit 2x4 36L 25W 850 UNV 0-10 G5	25W	120-277	70,000	3600	5000	144
528067	929002715113	EvoKit 2x4 42L 28W 835 UNV 0-10 G5	28W	120-277	70,000	4200	3500	145
528075	929002715213	EvoKit 2x4 42L 28W 840 UNV 0-10 G5	28W	120-277	70,000	4200	4000	150
528083	929002715313	EvoKit 2x4 42L 28W 850 UNV 0-10 G5	28W	120-277	70,000	4200	5000	150
528463	929002719113	EvoKit 2x4 42L 32W 935 UNV 0-10 G5	32W	120-277	70,000	4200	3500	131
<b>High Efficiency 0-10 V Dimming</b>								
528091	929002715413	EvoKit HE 2x2 21L 14W 835 UNV 0-10 G5	14W	120-277	70,000	2100	3500	153
528109	929002715513	EvoKit HE 2x2 21L 13W 840 UNV 0-10 G5	13W	120-277	70,000	2100	4000	162
528125	929002715713	EvoKit HE 2x2 31L 21W 835 UNV 0-10 G5	21W	120-277	70,000	3100	3500	148
528133	929002715813	EvoKit HE 2x2 31L 20W 840 UNV 0-10 G5	20W	120-277	70,000	3100	4000	155
528141	929002715913	EvoKit HE 2x2 31L 20W 850 UNV 0-10 G5	20W	120-277	70,000	3100	5000	155
528158	929002716013	EvoKit HE 2x4 30L 19W 835 UNV 0-10 G5	19W	120-277	70,000	3000	3500	158
528166	929002716113	EvoKit HE 2x4 30L 19W 840 UNV 0-10 G5	19W	120-277	70,000	3000	4000	158
528174	929002716213	EvoKit HE 2x4 36L 23W 835 UNV 0-10 G5	23W	120-277	70,000	3600	3500	157
528182	929002716313	EvoKit HE 2x4 36L 22W 840 UNV 0-10 G5	22W	120-277	70,000	3600	4000	164
528208	929002716513	EvoKit HE 2x4 42L 26W 835 UNV 0-10 G5	26W	120-277	70,000	4200	3500	158
528216	929002716613	EvoKit HE 2x4 42L 26W 840 UNV 0-10 G5	26W	120-277	70,000	4200	4000	162
528224	929002716713	EvoKit HE 2x4 42L 26W 850 UNV 0-10 G5	26W	120-277	70,000	4200	5000	162
528232	929002716813	EvoKit HE 2x4 47L 31W 835 UNV 0-10 G5	31W	120-277	70,000	4700	3500	152
528240	929002716913	EvoKit HE 2x4 47L 30W 840 UNV 0-10 G5	30W	120-277	70,000	4700	4000	157
<b>0-10V Step Dimming</b>								
528299	929002717413	EvoKit HE 2x2 31L 22W 835 UNV STEP G5	22W	120-277	70,000	3100	3500	142
528307	929002717513	EvoKit HE 2x2 31L 21W 840 UNV STEP G5	21W	120-277	70,000	3100	4000	148
528315	929002717613	EvoKit HE 2x4 42L 28W 835 UNV STEP G5	28W	120-277	70,000	4200	3500	150
528323	929002717713	EvoKit HE 2x4 42L 28W 840 UNV STEP G5	28W	120-277	70,000	4200	4000	150

See footnotes on the last page.

EvoKit Gen 5 Spec 04/21 page 1 of 6



## EvoKit LED retrofit kit gen 5

### EvoKit with Spacewise SWZDT ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>Spacewise SWZDT</b>								
528471	929002719213	EvoKit 2x2 31L 23W 935 UNV SWZDT G5	23W	120-277	70,000	3100	3500	135
528489	929002719313	EvoKit 2x4 42L 32W 935 UNV SWZDT G5	32W	120-277	70,000	4200	3500	131
<b>High Efficiency Spacewise SWZDT</b>								
◆ 528331	929002717813	EvoKit HE 2x2 31L 20W 835 UNV SWZDT G5	20W	120-277	70,000	3100	3500	152
◆ 528349	929002717913	EvoKit HE 2x2 31L 20W 840 UNV SWZDT G5	20W	120-277	70,000	3100	4000	155
528356	929002718013	EvoKit HE 2x2 31L 20W 850 UNV SWZDT G5	20W	120-277	70,000	3100	5000	155
◆ 528380	929002718313	EvoKit HE 2x4 42L 26W 835 UNV SWZDT G5	26W	120-277	70,000	4200	3500	159
◆ 528398	929002718413	EvoKit HE 2x4 42L 26W 840 UNV SWZDT G5	26W	120-277	70,000	4200	4000	162
528406	929002718513	EvoKit HE 2x4 42L 26W 850 UNV SWZDT G5	26W	120-277	70,000	4200	5000	162
528414	929002718613	EvoKit HE 2x4 47L 31W 835 UNV SWZDT G5	31W	120-277	70,000	4700	3500	152
528422	929002718713	EvoKit HE 2x4 47L 30W 840 UNV SWZDT G5	30W	120-277	70,000	4700	4000	157

See footnotes on the last page.

#### Features

- Occupancy sensing, daylight harvesting and task tuning in one device
- Granular dimming (occupancy sharing)
- Dwell time
- Scene setting
- Configuration of sensor parameters – if desired – using NFC or IR via intuitive Android-based Philips field apps
- Quick task tuning in the field to optimize light and power levels
- Enables auto-off/manual-on and auto-off/partial-on application
- DLC qualified: Listed on the QPL for Networked Lighting Controls

#### Benefits

- Installation savings – integral wireless controls factory installed. No need to order separate components.
- Minimal startup and configuration expertise – savings on labor time & effort
- Deep energy savings & code compliance strategies
- Faster ROI with attractive payback periods (varies depending on luminaire choices)

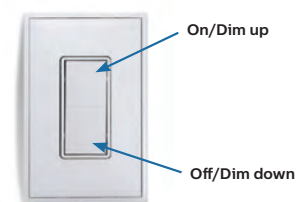
#### Applications

Conference rooms, individual offices, open offices, classrooms, storage and break areas, restrooms, lobbies.

#### SpaceWise wireless switch

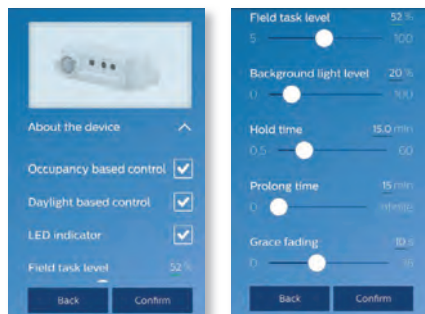
To complete the SpaceWise System a wireless switch may be added.

Ordering code: UID8451/10



#### New configuration tool

An Android phone is needed for commissioning the system. Please refer to [www.usa.lighting.philips.com/systems/lighting/systems/spacewise](http://www.usa.lighting.philips.com/systems/lighting/systems/spacewise) for full list of compatible phones.



#### Refer to the website for registration details:

[www.usa.lighting.philips.com/support/support/tools/](http://www.usa.lighting.philips.com/support/support/tools/)

Sensor parameters can be configured via Philips field apps. Two versions are available:

1. **NFC** – This app allows configuring sensor parameters only when you can physically access the sensor with a smartphone.
2. **IR** – This app allows configuring sensor parameters plus enables grouping to a wireless switch, which can be done with the IR feature of applicable phones from floor level.

You must first register for the app to receive a username and password, then download Philips field apps from the Google Play Store.



## EvoKit LED retrofit kit gen 5

### EvoKit with air return ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>High Efficiency 0-10 V Dimming – Air Return</b>								
528257	929002717013	Evokit HE 2x2 A 31L 21W 835 UNV 0-10 G5	21W	120-277	70,000	3100	3500	148
528265	929002717113	Evokit HE 2x2 A 31L 20W 840 UNV 0-10 G5	20W	120-277	70,000	3100	4000	155
528273	929002717213	Evokit HE 2x4 A 47L 31W 835 UNV 0-10 G5	31W	120-277	70,000	4700	3500	152
528281	929002717313	Evokit HE 2x4 A 47L 30W 840 UNV 0-10 G5	30W	120-277	70,000	4700	4000	157
<b>High Efficiency Spacewise – Air Return</b>								
528364	929002718113	Evokit HE 2x2 A 31L 20W 835 UNV SWZDT G5	20W	120-277	70,000	3100	3500	152
528372	929002718213	Evokit HE 2x2 A 31L 20W 840 UNV SWZDT G5	20W	120-277	70,000	3100	4000	155
528430	929002718813	Evokit HE 2x4 A 47L 31W 835 UNV SWZDT G5	31W	120-277	70,000	4700	3500	152
528448	929002718913	Evokit HE 2x4 A 47L 30W 840 UNV SWZDT G5	30W	120-277	70,000	4700	4000	157

See footnotes on the last page.

### Air Return data

The air return versions of EvoKit are suitable for retrofitting listed air return troffers.

#### 2x2 air return data

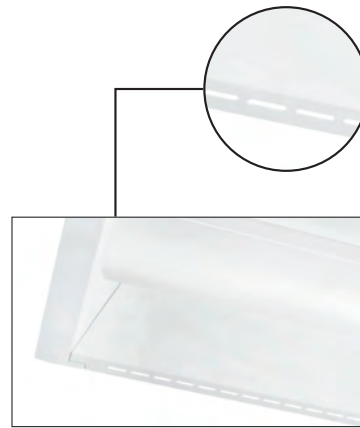
Return Air Volume, SCFM.	61	69	80	97	112	131
Negative Static Pressure, in. H <sub>2</sub> O	0.11	0.15	0.20	0.30	0.40	0.55
Noise Criteria (NC)*	17	21	25	31	34	38

Note: 24 total air slots, each 30mm x 6mm.

#### 2x4 air return data

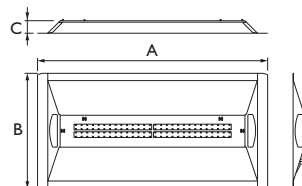
Return Air Volume, SCFM.	105	119	128	162	259	272
Negative Static Pressure, in. H <sub>2</sub> O	0.05	0.08	0.10	0.20	0.45	0.55
Noise Criteria (NC)*	<15	32	32	36	38	40

Note: 50 total air slots, each 30mm x 6mm.



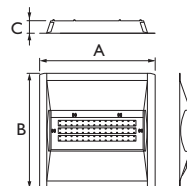
### Dimensions 2x4

A Face Plate Length	B Face Plate Width	C Face Plate Height
47.83"	23.9"	2.95"



### Dimensions 2x2

A Face Plate Length	B Face Plate Width	C Face Plate Height
23.9"	23.9"	2.95"



## EvoKit LED retrofit kit gen 5

### Application

- A highly efficient, visually comfortable, architecturally styled LED retrofit kit designed to replace recessed linear fluorescent troffers.
- Unique modular design offers refreshing new look in the ceiling when compared to traditional fluorescent luminaires.
- Single light bar combined with slanted troffer helps reflect light to reduce glare and provide uniform light distribution making it ideal for applications such as offices, schools, healthcare and retail.
- Excellent color rendering with a CRI above 80.
- Extremely high efficacies up to 164 lumens per watt.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source.
- Designed for use with standard grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-Grids.
- High efficiency source and luminaire design help significantly reduce energy consumption and more easily comply with known energy codes.
- Helps meet regulation requirements such as ASHRAE 90.1 and Title 24 when matched with suitable controls.

### Construction/Finish

- Simple design allows for quick installation in existing luminaire without the need to break the ceiling plenum.
- Constructed using galvanized steel which helps fight rust and makes for more durable product.
- Integrated securement tabs for securement to existing troffer housing.
- Minimum depth of only 3" necessary to allow proper clearance and installation of the EvoKit.
- Retrofit kit is powder coated after fabrication with high quality, durable finish to ensure no unfinished edges and avoid future potential of corrosion.
- Components fit together easily without the need for tools during installation.

### Electrical

- Multiple driver options available
  - Philips Advance Xitanium SR driver enables SpaceWise DT control system.
  - Philips Advance drivers with 0-10V dimming allow for maximum fixture efficiency and provide 10% dimming.
- 7-year limited warranty in the HE (High Efficiency) units or 5-year limited warranty the other units includes all components of the retrofit kit, including driver, LED board and nonelectrical components.\* Visit [signify.com/warranties](http://signify.com/warranties) for complete Warranty information.
- Listed with UL and Design Lights Consortium\*\* to ensure quality performance and safety standards are met.
- High efficiency LEDs have a minimum 70,000 hour rated life (L70).

### Enclosure

- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

### Accessories

- Suitable for use with Philips 503441 emergency backup.
- Earthquake cables available for additional securement to the existing troffer for areas where required.

Prod. No.	Description
502435	Earthquake cable 317mm
517987	EvoKit 2x4 replacement lens ribbed
517748	EvoKit 2x4 replacement lens smooth
517979	EvoKit 2x2 replacement lens ribbed
517755	EvoKit 2x2 replacement lens smooth
503441	EvoKit field installed emergency battery backup (requires the use of bracket)
517730	EvoKit emergency battery backup bracket (comes in pack of 4). Two emergency brackets needed per battery pack.

\* Please visit [www.philips.com/warranties](http://www.philips.com/warranties) for full details.  
 \*\* Evokit luminaires are Design Lights Consortium qualified. Please see the DLC QPL list for exact catalog numbers (<http://www.designlights.org/QPL>).

### EvoKit with new SimpleSet technology for wireless lumen level programming

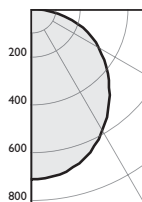
EvoKit with new SimpleSet technology allows the maximum lumen level to be set prior to installation using a smartphone-based app without requiring power to the luminaire. Available in HE versions only. The app can be downloaded at Google Play. Please contact your Philips representative for the current list of approved Android smartphones. Distributors can set lumen levels prior to shipping, and contractors can set lumen levels prior to installation. Lumen level is quickly and easily set in two steps:



- Step 1: Place the smartphone next to the NFC antenna on the driver.
- Step 2: Follow the on-screen instructions.

## EvoKit LED retrofit kit gen 5

### EvoKit gen 5 LED, 2'x2', 21L, 14W, 80 CRI, 3500K CCT, UNV 0-10, 2100 delivered lumens



**Cat. No.**  
527978  
**Test No.**  
104271456CHI-001  
**S/MH**  
1.2  
**Lumens/Watt**  
136  
**Input Watts**  
15

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology.  
 Photometric values based on tests performed in compliance with LM-79.

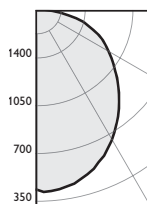
Candlepower					
	0	22.5	45	67.5	90
0	708	708	708	708	708
5	704	705	704	705	706
10	699	697	699	699	699
15	684	680	681	683	684
20	659	654	656	658	659
25	626	619	623	626	628
30	588	580	585	590	588
35	544	537	544	549	592
40	495	488	497	505	508
45	442	437	448	458	462
50	389	385	399	413	418
55	335	333	351	367	373
60	282	282	303	328	328
70	175	183	208	322	231
75	123	135	158	172	176
80	73	88	105	114	116
85	32	41	52	57	58
90	0	0	0	0	0

Zonal lumens & percentages		
Zone	Lumens	%Fixture
0-20	259	13%
0-30	545	27%
0-40	884	44%
0-60	1541	77%
0-80	1949	94%
0-90	2000	100%

Average Luminance			
Angle	0°	45°	90°
45	841	851	879
55	786	822	875
65	724	816	894
75	637	821	913
85	486	797	898

Coefficients of utilization											
Ceiling		80%			70%			50%			
Wall		70	50	30	70	50	30	50	30		
RCR		Zonal cavity method - Effective floor reflectance = 20%									
Room Cavity Ratio	0	119	119	119	116	116	116	111	111	111	
	1	108	104	99	106	101	97	97	94	94	
	2	98	90	83	96	88	82	84	79	79	
	3	90	79	71	87	77	70	74	68	68	
	4	82	70	61	80	68	60	66	59	59	
	5	75	62	53	73	61	53	59	51	51	
	6	70	56	47	68	55	47	53	46	46	
	7	64	51	42	63	50	42	48	41	41	
	8	60	46	38	58	46	37	44	37	37	
	9	56	43	34	55	42	34	41	33	33	
	10	53	39	31	51	39	31	38	31	31	

### EvoKit gen 5 LED, 2'x4', 37L, 26W, 80 CRI, 3500K CCT, UNV 0-10, 3600 delivered lumens



**Cat. No.**  
528034  
**Test No.**  
104271456CHI-003  
**S/MH**  
1.2  
**Lumens/Watt**  
142  
**Input Watts**  
26

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology.  
 Photometric values based on tests performed in compliance with LM-79.

Candlepower					
	0	22.5	45	67.5	90
0	1300	1300	1300	1300	1300
5	1281	1283	1293	1306	1317
10	1267	1268	1280	1293	1302
15	1241	1237	1248	1262	1271
20	1198	1190	1202	1216	1225
25	1142	1131	1143	1157	1165
30	1073	1060	1074	1088	1096
35	992	980	995	1010	1017
40	902	890	908	925	934
45	804	794	816	838	848
50	705	697	724	754	767
55	602	600	635	674	689
60	502	504	551	596	614
65	403	414	471	520	537
70	305	330	392	439	454
75	212	248	308	346	359
80	127	170	215	237	241
85	52	87	110	119	120
90	0	0	0	0	0

Zonal lumens & percentages		
Zone	Lumens	%Fixture
0-20	475	13%
0-30	1002	27%
0-40	1623	44%
0-60	2820	76%
0-80	3588	97%
0-90	3695	100%

Average Luminance			
Angle	0°	45°	90°
45	1528	1551	1612
55	1412	1487	1615
65	1280	1499	1709
75	1103	1602	1865
85	802	1701	1845

Coefficients of utilization											
Ceiling		80%			70%			50%			
Wall		70	50	30	70	50	30	50	30		
RCR		Zonal cavity method - Effective floor reflectance = 20%									
Room Cavity Ratio	0	119	119	119	116	116	116	111	111	111	
	1	108	104	99	106	101	97	97	94	94	
	2	98	90	83	96	88	82	85	79	79	
	3	90	79	71	87	77	70	74	68	68	
	4	82	70	61	80	69	60	66	59	59	
	5	75	62	53	73	61	53	59	51	51	
	6	70	56	47	68	55	47	53	46	46	
	7	65	51	42	63	50	42	48	41	41	
	8	60	46	38	58	46	37	44	37	37	
	9	56	43	34	55	42	34	41	34	34	
	10	53	39	31	51	39	31	38	31	31	

## EvoKit LED retrofit kit gen 5

### Energy saving solution – EvoKit 2'x4'

#### Estimated lighting costs using a standard 3 lamp T8 troffer

Present wattage	85	W
× Annual operating hours	4,380	hrs
=	372,300	Watt-Hours
÷ 1,000 =	372.3	kWh per year (rates will vary)
× kWh rate of \$0.10 =	\$37.23	per year
× 125 fixtures	\$4,653.75	annual energy cost per space

#### Estimated lighting costs using a Philips 42L 2x4 Evokit G4

Present wattage	26	W
× Annual operating hours	4,380	hrs
=	113,880	Watt-Hours
÷ 1,000 =	113.88	kWh per year (rates will vary)
× kWh rate of \$0.10 =	\$11.39	per year
× 125 fixtures	\$1,423.50	annual energy cost per space

**Total estimated annual savings<sup>‡</sup> \$3,230.25**

<sup>‡</sup> Based on 125 fixtures per space operating 4,380 hours a year.  
 125 fixtures is roughly equivalent to a 10,000 square foot space.

#### Footnotes:

1. L70 72,000 hours @ 35°C based on TM21 and LM80.
  2. Based on photometric testing consistent with IES LM-79. Actual wattage may differ by +/- 10%. Actual initial lumen output may vary between -10 and +10% of the rated lumens.
  3. 0-10V Dimming products that are not HE (High Efficiency) do not support lumen level tuning with SimpleSet technology using the MultiOne Mobile smartphone app.
- ◆ Made to stock product (Contact your Philips sales representative for stock availability and lead time).
- Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electrical products. For products used in North America, compliance with RoHS is voluntary and self-certified.



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# PHILIPS

## Recessed

### EvoKit LED Retrofit Kit Gen 5



Philips EvoKit LED Retrofit kit gen 5 is an energy efficient LED alternative to traditional linear fluorescent troffers that also helps reduce maintenance costs due to its long lifetime. Simple construction helps decrease installation times offering an installed LED solution within minutes.

Products can be found on the DLC QPL by searching the 6 digit product number.  
Additional information can be found at [www.philips.com/evokit](http://www.philips.com/evokit).

Project: \_\_\_\_\_  
Location: \_\_\_\_\_  
Cat.No: \_\_\_\_\_  
Type: \_\_\_\_\_  
Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
Notes: \_\_\_\_\_

#### EvoKit with 0-10V Dimming ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>0-10V Dimming</b>								
527978	929002714213	EvoKit 2x2 21L 15W 835 UNV 0-10 G5	15W	120-277	70,000	2100	3500	140
527986	929002714313	EvoKit 2x2 21L 14W 840 UNV 0-10 G5	14W	120-277	70,000	2100	4000	150
527994	929002714413	EvoKit 2x2 21L 14W 850 UNV 0-10 G5	14W	120-277	70,000	2100	5000	150
528000	929002714513	EvoKit 2x2 31L 22W 835 UNV 0-10 G5	22W	120-277	70,000	3100	3500	135
528018	929002714613	EvoKit 2x2 31L 22W 840 UNV 0-10 G5	22W	120-277	70,000	3100	4000	141
528026	929002714713	EvoKit 2x2 31L 22W 850 UNV 0-10 G5	22W	120-277	70,000	3100	5000	141
528455	929002719013	EvoKit 2x2 31L 23W 935 UNV 0-10 G5	23W	120-277	70,000	3100	3500	135
528034	929002714813	EvoKit 2x4 36L 25W 835 UNV 0-10 G5	25W	120-277	70,000	3600	3500	144
528042	929002714913	EvoKit 2x4 36L 25W 840 UNV 0-10 G5	25W	120-277	70,000	3600	4000	144
528059	929002715013	EvoKit 2x4 36L 25W 850 UNV 0-10 G5	25W	120-277	70,000	3600	5000	144
528067	929002715113	EvoKit 2x4 42L 28W 835 UNV 0-10 G5	28W	120-277	70,000	4200	3500	145
528075	929002715213	EvoKit 2x4 42L 28W 840 UNV 0-10 G5	28W	120-277	70,000	4200	4000	150
528083	929002715313	EvoKit 2x4 42L 28W 850 UNV 0-10 G5	28W	120-277	70,000	4200	5000	150
528463	929002719113	EvoKit 2x4 42L 32W 935 UNV 0-10 G5	32W	120-277	70,000	4200	3500	131
<b>High Efficiency 0-10 V Dimming</b>								
528091	929002715413	EvoKit HE 2x2 21L 14W 835 UNV 0-10 G5	14W	120-277	70,000	2100	3500	153
528109	929002715513	EvoKit HE 2x2 21L 13W 840 UNV 0-10 G5	13W	120-277	70,000	2100	4000	162
528125	929002715713	EvoKit HE 2x2 31L 21W 835 UNV 0-10 G5	21W	120-277	70,000	3100	3500	148
528133	929002715813	EvoKit HE 2x2 31L 20W 840 UNV 0-10 G5	20W	120-277	70,000	3100	4000	155
528141	929002715913	EvoKit HE 2x2 31L 20W 850 UNV 0-10 G5	20W	120-277	70,000	3100	5000	155
528158	929002716013	EvoKit HE 2x4 30L 19W 835 UNV 0-10 G5	19W	120-277	70,000	3000	3500	158
528166	929002716113	EvoKit HE 2x4 30L 19W 840 UNV 0-10 G5	19W	120-277	70,000	3000	4000	158
528174	929002716213	EvoKit HE 2x4 36L 23W 835 UNV 0-10 G5	23W	120-277	70,000	3600	3500	157
528182	929002716313	EvoKit HE 2x4 36L 22W 840 UNV 0-10 G5	22W	120-277	70,000	3600	4000	164
528208	929002716513	EvoKit HE 2x4 42L 26W 835 UNV 0-10 G5	26W	120-277	70,000	4200	3500	158
528216	929002716613	EvoKit HE 2x4 42L 26W 840 UNV 0-10 G5	26W	120-277	70,000	4200	4000	162
528224	929002716713	EvoKit HE 2x4 42L 26W 850 UNV 0-10 G5	26W	120-277	70,000	4200	5000	162
528232	929002716813	EvoKit HE 2x4 47L 31W 835 UNV 0-10 G5	31W	120-277	70,000	4700	3500	152
528240	929002716913	EvoKit HE 2x4 47L 30W 840 UNV 0-10 G5	30W	120-277	70,000	4700	4000	157
<b>0-10V Step Dimming</b>								
528299	929002717413	EvoKit HE 2x2 31L 22W 835 UNV STEP G5	22W	120-277	70,000	3100	3500	142
528307	929002717513	EvoKit HE 2x2 31L 21W 840 UNV STEP G5	21W	120-277	70,000	3100	4000	148
528315	929002717613	EvoKit HE 2x4 42L 28W 835 UNV STEP G5	28W	120-277	70,000	4200	3500	150
528323	929002717713	EvoKit HE 2x4 42L 28W 840 UNV STEP G5	28W	120-277	70,000	4200	4000	150

See footnotes on the last page.

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## EvoKit LED retrofit kit gen 5

### EvoKit with Spacewise SWZDT ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>Spacewise SWZDT</b>								
528471	929002719213	EvoKit 2x2 31L 23W 935 UNV SWZDT G5	23W	120-277	70,000	3100	3500	135
528489	929002719313	EvoKit 2x4 42L 32W 935 UNV SWZDT G5	32W	120-277	70,000	4200	3500	131
<b>High Efficiency Spacewise SWZDT</b>								
◆ 528331	929002717813	EvoKit HE 2x2 31L 20W 835 UNV SWZDT G5	20W	120-277	70,000	3100	3500	152
◆ 528349	929002717913	EvoKit HE 2x2 31L 20W 840 UNV SWZDT G5	20W	120-277	70,000	3100	4000	155
528356	929002718013	EvoKit HE 2x2 31L 20W 850 UNV SWZDT G5	20W	120-277	70,000	3100	5000	155
◆ 528380	929002718313	EvoKit HE 2x4 42L 26W 835 UNV SWZDT G5	26W	120-277	70,000	4200	3500	159
◆ 528398	929002718413	EvoKit HE 2x4 42L 26W 840 UNV SWZDT G5	26W	120-277	70,000	4200	4000	162
528406	929002718513	EvoKit HE 2x4 42L 26W 850 UNV SWZDT G5	26W	120-277	70,000	4200	5000	162
528414	929002718613	EvoKit HE 2x4 47L 31W 835 UNV SWZDT G5	31W	120-277	70,000	4700	3500	152
528422	929002718713	EvoKit HE 2x4 47L 30W 840 UNV SWZDT G5	30W	120-277	70,000	4700	4000	157

See footnotes on the last page.

### Features

- Occupancy sensing, daylight harvesting and task tuning in one device
- Granular dimming (occupancy sharing)
- Dwell time
- Scene setting
- Configuration of sensor parameters – if desired – using NFC or IR via intuitive Android-based Philips field apps
- Quick task tuning in the field to optimize light and power levels
- Enables auto-off/manual-on and auto-off/partial-on application
- DLC qualified: Listed on the QPL for Networked Lighting Controls

### Benefits

- Installation savings – integral wireless controls factory installed. No need to order separate components.
- Minimal startup and configuration expertise – savings on labor time & effort
- Deep energy savings & code compliance strategies
- Faster ROI with attractive payback periods (varies depending on luminaire choices)

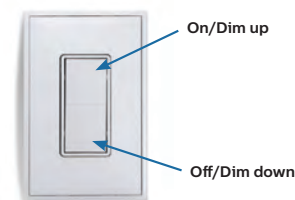
### Applications

Conference rooms, individual offices, open offices, classrooms, storage and break areas, restrooms, lobbies.

### SpaceWise wireless switch

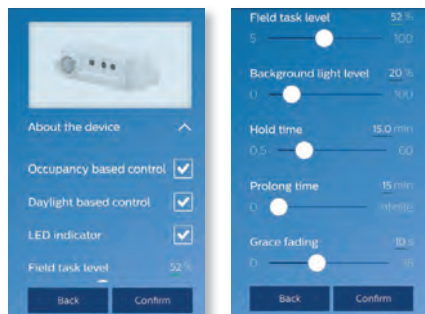
To complete the SpaceWise System a wireless switch may be added.

Ordering code: UID8451/10



### New configuration tool

An Android phone is needed for commissioning the system. Please refer to [www.usa.lighting.philips.com/systems/lighting/systems/spacewise](http://www.usa.lighting.philips.com/systems/lighting/systems/spacewise) for full list of compatible phones.



### Refer to the website for registration details:

[www.usa.lighting.philips.com/support/support/tools/](http://www.usa.lighting.philips.com/support/support/tools/)

Sensor parameters can be configured via Philips field apps. Two versions are available:

1. **NFC** – This app allows configuring sensor parameters only when you can physically access the sensor with a smartphone.
2. **IR** – This app allows configuring sensor parameters plus enables grouping to a wireless switch, which can be done with the IR feature of applicable phones from floor level.

You must first register for the app to receive a username and password, then download Philips field apps from the Google Play Store.



## EvoKit LED retrofit kit gen 5

### EvoKit with air return ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>High Efficiency 0-10 V Dimming – Air Return</b>								
528257	929002717013	Evokit HE 2x2 A 31L 21W 835 UNV 0-10 G5	21W	120-277	70,000	3100	3500	148
528265	929002717113	Evokit HE 2x2 A 31L 20W 840 UNV 0-10 G5	20W	120-277	70,000	3100	4000	155
528273	929002717213	Evokit HE 2x4 A 47L 31W 835 UNV 0-10 G5	31W	120-277	70,000	4700	3500	152
528281	929002717313	Evokit HE 2x4 A 47L 30W 840 UNV 0-10 G5	30W	120-277	70,000	4700	4000	157
<b>High Efficiency Spacewise – Air Return</b>								
528364	929002718113	Evokit HE 2x2 A 31L 20W 835 UNV SWZDT G5	20W	120-277	70,000	3100	3500	152
528372	929002718213	Evokit HE 2x2 A 31L 20W 840 UNV SWZDT G5	20W	120-277	70,000	3100	4000	155
528430	929002718813	Evokit HE 2x4 A 47L 31W 835 UNV SWZDT G5	31W	120-277	70,000	4700	3500	152
528448	929002718913	Evokit HE 2x4 A 47L 30W 840 UNV SWZDT G5	30W	120-277	70,000	4700	4000	157

See footnotes on the last page.

### Air Return data

The air return versions of EvoKit are suitable for retrofitting listed air return troffers.

#### 2x2 air return data

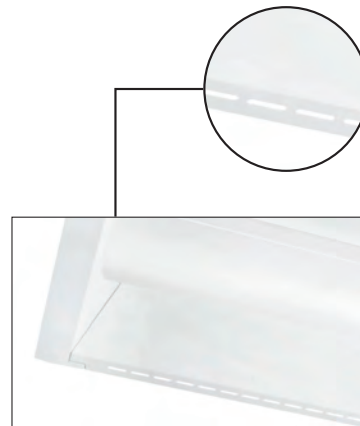
Return Air Volume, SCFM.	61	69	80	97	112	131
Negative Static Pressure, in. H <sub>2</sub> O	0.11	0.15	0.20	0.30	0.40	0.55
Noise Criteria (NC)*	17	21	25	31	34	38

Note: 24 total air slots, each 30mm x 6mm.

#### 2x4 air return data

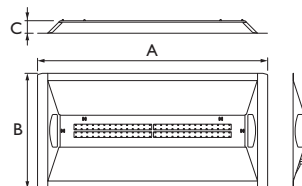
Return Air Volume, SCFM.	105	119	128	162	259	272
Negative Static Pressure, in. H <sub>2</sub> O	0.05	0.08	0.10	0.20	0.45	0.55
Noise Criteria (NC)*	<15	32	32	36	38	40

Note: 50 total air slots, each 30mm x 6mm.



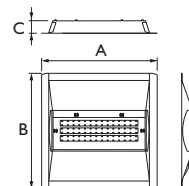
### Dimensions 2x4

A Face Plate Length	B Face Plate Width	C Face Plate Height
47.83"	23.9"	2.95"



### Dimensions 2x2

A Face Plate Length	B Face Plate Width	C Face Plate Height
23.9"	23.9"	2.95"



## EvoKit LED retrofit kit gen 5

### Application

- A highly efficient, visually comfortable, architecturally styled LED retrofit kit designed to replace recessed linear fluorescent troffers.
- Unique modular design offers refreshing new look in the ceiling when compared to traditional fluorescent luminaires.
- Single light bar combined with slanted troffer helps reflect light to reduce glare and provide uniform light distribution making it ideal for applications such as offices, schools, healthcare and retail.
- Excellent color rendering with a CRI above 80.
- Extremely high efficacies up to 164 lumens per watt.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source.
- Designed for use with standard grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-Grids.
- High efficiency source and luminaire design help significantly reduce energy consumption and more easily comply with known energy codes.
- Helps meet regulation requirements such as ASHRAE 90.1 and Title 24 when matched with suitable controls.

### Construction/Finish

- Simple design allows for quick installation in existing luminaire without the need to break the ceiling plenum.
- Constructed using galvanized steel which helps fight rust and makes for more durable product.
- Integrated securement tabs for securement to existing troffer housing.
- Minimum depth of only 3" necessary to allow proper clearance and installation of the EvoKit.
- Retrofit kit is powder coated after fabrication with high quality, durable finish to ensure no unfinished edges and avoid future potential of corrosion.
- Components fit together easily without the need for tools during installation.

### Electrical

- Multiple driver options available
  - Philips Advance Xitanium SR driver enables SpaceWise DT control system.
  - Philips Advance drivers with 0-10V dimming allow for maximum fixture efficiency and provide 10% dimming.
- 7-year limited warranty in the HE (High Efficiency) units or 5-year limited warranty the other units includes all components of the retrofit kit, including driver, LED board and nonelectrical components.\* Visit [signify.com/warranties](http://signify.com/warranties) for complete Warranty information.
- Listed with UL and Design Lights Consortium\*\* to ensure quality performance and safety standards are met.
- High efficiency LEDs have a minimum 70,000 hour rated life (L70).

### Enclosure

- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

### Accessories

- Suitable for use with Philips 503441 emergency backup.
- Earthquake cables available for additional securement to the existing troffer for areas where required.

Prod. No.	Description
502435	Earthquake cable 317mm
517987	EvoKit 2x4 replacement lens ribbed
517748	EvoKit 2x4 replacement lens smooth
517979	EvoKit 2x2 replacement lens ribbed
517755	EvoKit 2x2 replacement lens smooth
503441	EvoKit field installed emergency battery backup (requires the use of bracket)
517730	EvoKit emergency battery backup bracket (comes in pack of 4). Two emergency brackets needed per battery pack.

\* Please visit [www.philips.com/warranties](http://www.philips.com/warranties) for full details.  
 \*\* Evokit luminaires are Design Lights Consortium qualified. Please see the DLC QPL list for exact catalog numbers (<http://www.designlights.org/QPL>).

### EvoKit with new SimpleSet technology for wireless lumen level programming

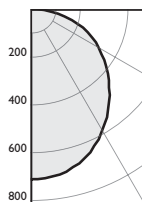
EvoKit with new SimpleSet technology allows the maximum lumen level to be set prior to installation using a smartphone-based app without requiring power to the luminaire. Available in HE versions only. The app can be downloaded at Google Play. Please contact your Philips representative for the current list of approved Android smartphones. Distributors can set lumen levels prior to shipping, and contractors can set lumen levels prior to installation. Lumen level is quickly and easily set in two steps:



- Step 1: Place the smartphone next to the NFC antenna on the driver.
- Step 2: Follow the on-screen instructions.

## EvoKit LED retrofit kit gen 5

### EvoKit gen 5 LED, 2'x2', 21L, 14W, 80 CRI, 3500K CCT, UNV 0-10, 2100 delivered lumens



**Cat. No.**  
527978  
**Test No.**  
104271456CHI-001  
**S/MH**  
1.2  
**Lumens/Watt**  
136  
**Input Watts**  
15

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on tests performed in compliance with LM-79.

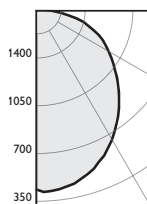
Candlepower					
	0	22.5	45	67.5	90
0	708	708	708	708	708
5	704	705	704	705	706
10	699	697	699	699	699
15	684	680	681	683	684
20	659	654	656	658	659
25	626	619	623	626	628
30	588	580	585	590	588
35	544	537	544	549	592
40	495	488	497	505	508
45	442	437	448	458	462
50	389	385	399	413	418
55	335	333	351	367	373
60	282	282	303	322	328
70	175	183	208	222	231
75	123	135	158	172	176
80	73	88	105	114	116
85	32	41	52	57	58
90	0	0	0	0	0

Zonal lumens & percentages		
Zone	Lumens	%Fixture
0-20	259	13%
0-30	545	27%
0-40	884	44%
0-60	1541	77%
0-80	1949	94%
0-90	2000	100%

Average Luminance			
Angle	0°	45°	90°
45	841	851	879
55	786	822	875
65	724	816	894
75	637	821	913
85	486	797	898

Coefficients of utilization									
Ceiling		80%			70%			50%	
Wall	70	50	30	70	50	30	50	30	
RCR	Zonal cavity method - Effective floor reflectance = 20%								
Room Cavity Ratio	0	119	119	119	116	116	116	111	111
	1	108	104	99	106	101	97	97	94
	2	98	90	83	96	88	82	84	79
	3	90	79	71	87	77	70	74	68
	4	82	70	61	80	68	60	66	59
	5	75	62	53	73	61	53	59	51
	6	70	56	47	68	55	47	53	46
	7	64	51	42	63	50	42	48	41
	8	60	46	38	58	46	37	44	37
	9	56	43	34	55	42	34	41	33
	10	53	39	31	51	39	31	38	31

### EvoKit gen 5 LED, 2'x4', 37L, 26W, 80 CRI, 3500K CCT, UNV 0-10, 3600 delivered lumens



**Cat. No.**  
528034  
**Test No.**  
104271456CHI-003  
**S/MH**  
1.2  
**Lumens/Watt**  
142  
**Input Watts**  
26

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on tests performed in compliance with LM-79.

Candlepower					
	0	22.5	45	67.5	90
0	1300	1300	1300	1300	1300
5	1281	1283	1293	1306	1317
10	1267	1268	1280	1293	1302
15	1241	1237	1248	1262	1271
20	1198	1190	1202	1216	1225
25	1142	1131	1143	1157	1165
30	1073	1060	1074	1088	1096
35	992	980	995	1010	1017
40	902	890	908	925	934
45	804	794	816	838	848
50	705	697	724	754	767
55	602	600	635	674	689
60	502	504	551	596	614
65	403	414	471	520	537
70	305	330	392	439	454
75	212	248	308	346	359
80	127	170	215	237	241
85	52	87	110	119	120
90	0	0	0	0	0

Zonal lumens & percentages		
Zone	Lumens	%Fixture
0-20	475	13%
0-30	1002	27%
0-40	1623	44%
0-60	2820	76%
0-80	3588	97%
0-90	3695	100%

Average Luminance			
Angle	0°	45°	90°
45	1528	1551	1612
55	1412	1487	1615
65	1280	1499	1709
75	1103	1602	1865
85	802	1701	1845

Coefficients of utilization									
Ceiling		80%			70%			50%	
Wall		70	50	30	70	50	30	50	30
RCR		Zonal cavity method - Effective floor reflectance = 20%							
Room Cavity Ratio	0	119	119	119	116	116	116	111	111
	1	108	104	99	106	101	97	97	94
	2	98	90	83	96	88	82	85	79
	3	90	79	71	87	77	70	74	68
	4	82	70	61	80	69	60	66	59
	5	75	62	53	73	61	53	59	52
	6	70	56	47	68	55	47	53	46
	7	65	51	42	63	50	42	48	41
	8	60	46	38	58	46	37	44	37
	9	56	43	34	55	42	34	41	34
	10	53	39	31	51	39	31	38	31

## EvoKit LED retrofit kit gen 5

### Energy saving solution – EvoKit 2'x4'

#### Estimated lighting costs using a standard 3 lamp T8 troffer

Present wattage	85	W
× Annual operating hours	4,380	hrs
=	372,300	Watt-Hours
÷ 1,000 =	372.3	kWh per year (rates will vary)
× kWh rate of \$0.10 =	\$37.23	per year
× 125 fixtures	\$4,653.75	annual energy cost per space

#### Estimated lighting costs using a Philips 42L 2x4 Evokit G4

Present wattage	26	W
× Annual operating hours	4,380	hrs
=	113,880	Watt-Hours
÷ 1,000 =	113.88	kWh per year (rates will vary)
× kWh rate of \$0.10 =	\$11.39	per year
× 125 fixtures	\$1,423.50	annual energy cost per space

**Total estimated annual savings<sup>‡</sup> \$3,230.25**

<sup>‡</sup> Based on 125 fixtures per space operating 4,380 hours a year.  
 125 fixtures is roughly equivalent to a 10,000 square foot space.

#### Footnotes:

1. L70 72,000 hours @ 35°C based on TM21 and LM80.
  2. Based on photometric testing consistent with IES LM-79. Actual wattage may differ by +/- 10%. Actual initial lumen output may vary between -10 and +10% of the rated lumens.
  3. 0-10V Dimming products that are not HE (High Efficiency) do not support lumen level tuning with SimpleSet technology using the MultiOne Mobile smartphone app.
- ◆ Made to stock product (Contact your Philips sales representative for stock availability and lead time).
- Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electrical products. For products used in North America, compliance with RoHS is voluntary and self-certified.



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# PHILIPS

## Recessed

### EvoKit LED Retrofit Kit Gen 5



Philips EvoKit LED Retrofit kit gen 5 is an energy efficient LED alternative to traditional linear fluorescent troffers that also helps reduce maintenance costs due to its long lifetime. Simple construction helps decrease installation times offering an installed LED solution within minutes.

Products can be found on the DLC QPL by searching the 6 digit product number.  
Additional information can be found at [www.philips.com/evokit](http://www.philips.com/evokit).

Project: \_\_\_\_\_  
Location: \_\_\_\_\_  
Cat.No: \_\_\_\_\_  
Type: \_\_\_\_\_  
Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
Notes: \_\_\_\_\_

#### EvoKit with 0-10V Dimming ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>0-10V Dimming</b>								
527978	929002714213	EvoKit 2x2 21L 15W 835 UNV 0-10 G5	15W	120-277	70,000	2100	3500	140
527986	929002714313	EvoKit 2x2 21L 14W 840 UNV 0-10 G5	14W	120-277	70,000	2100	4000	150
527994	929002714413	EvoKit 2x2 21L 14W 850 UNV 0-10 G5	14W	120-277	70,000	2100	5000	150
528000	929002714513	EvoKit 2x2 31L 22W 835 UNV 0-10 G5	22W	120-277	70,000	3100	3500	135
528018	929002714613	EvoKit 2x2 31L 22W 840 UNV 0-10 G5	22W	120-277	70,000	3100	4000	141
528026	929002714713	EvoKit 2x2 31L 22W 850 UNV 0-10 G5	22W	120-277	70,000	3100	5000	141
528455	929002719013	EvoKit 2x2 31L 23W 935 UNV 0-10 G5	23W	120-277	70,000	3100	3500	135
528034	929002714813	EvoKit 2x4 36L 25W 835 UNV 0-10 G5	25W	120-277	70,000	3600	3500	144
528042	929002714913	EvoKit 2x4 36L 25W 840 UNV 0-10 G5	25W	120-277	70,000	3600	4000	144
528059	929002715013	EvoKit 2x4 36L 25W 850 UNV 0-10 G5	25W	120-277	70,000	3600	5000	144
528067	929002715113	EvoKit 2x4 42L 28W 835 UNV 0-10 G5	28W	120-277	70,000	4200	3500	145
528075	929002715213	EvoKit 2x4 42L 28W 840 UNV 0-10 G5	28W	120-277	70,000	4200	4000	150
528083	929002715313	EvoKit 2x4 42L 28W 850 UNV 0-10 G5	28W	120-277	70,000	4200	5000	150
528463	929002719113	EvoKit 2x4 42L 32W 935 UNV 0-10 G5	32W	120-277	70,000	4200	3500	131
<b>High Efficiency 0-10 V Dimming</b>								
528091	929002715413	EvoKit HE 2x2 21L 14W 835 UNV 0-10 G5	14W	120-277	70,000	2100	3500	153
528109	929002715513	EvoKit HE 2x2 21L 13W 840 UNV 0-10 G5	13W	120-277	70,000	2100	4000	162
528125	929002715713	EvoKit HE 2x2 31L 21W 835 UNV 0-10 G5	21W	120-277	70,000	3100	3500	148
528133	929002715813	EvoKit HE 2x2 31L 20W 840 UNV 0-10 G5	20W	120-277	70,000	3100	4000	155
528141	929002715913	EvoKit HE 2x2 31L 20W 850 UNV 0-10 G5	20W	120-277	70,000	3100	5000	155
528158	929002716013	EvoKit HE 2x4 30L 19W 835 UNV 0-10 G5	19W	120-277	70,000	3000	3500	158
528166	929002716113	EvoKit HE 2x4 30L 19W 840 UNV 0-10 G5	19W	120-277	70,000	3000	4000	158
528174	929002716213	EvoKit HE 2x4 36L 23W 835 UNV 0-10 G5	23W	120-277	70,000	3600	3500	157
528182	929002716313	EvoKit HE 2x4 36L 22W 840 UNV 0-10 G5	22W	120-277	70,000	3600	4000	164
528208	929002716513	EvoKit HE 2x4 42L 26W 835 UNV 0-10 G5	26W	120-277	70,000	4200	3500	158
528216	929002716613	EvoKit HE 2x4 42L 26W 840 UNV 0-10 G5	26W	120-277	70,000	4200	4000	162
528224	929002716713	EvoKit HE 2x4 42L 26W 850 UNV 0-10 G5	26W	120-277	70,000	4200	5000	162
528232	929002716813	EvoKit HE 2x4 47L 31W 835 UNV 0-10 G5	31W	120-277	70,000	4700	3500	152
528240	929002716913	EvoKit HE 2x4 47L 30W 840 UNV 0-10 G5	30W	120-277	70,000	4700	4000	157
<b>0-10V Step Dimming</b>								
528299	929002717413	EvoKit HE 2x2 31L 22W 835 UNV STEP G5	22W	120-277	70,000	3100	3500	142
528307	929002717513	EvoKit HE 2x2 31L 21W 840 UNV STEP G5	21W	120-277	70,000	3100	4000	148
528315	929002717613	EvoKit HE 2x4 42L 28W 835 UNV STEP G5	28W	120-277	70,000	4200	3500	150
528323	929002717713	EvoKit HE 2x4 42L 28W 840 UNV STEP G5	28W	120-277	70,000	4200	4000	150

See footnotes on the last page.

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## EvoKit LED retrofit kit gen 5

### EvoKit with Spacewise SWZDT ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>Spacewise SWZDT</b>								
528471	929002719213	EvoKit 2x2 31L 23W 935 UNV SWZDT G5	23W	120-277	70,000	3100	3500	135
528489	929002719313	EvoKit 2x4 42L 32W 935 UNV SWZDT G5	32W	120-277	70,000	4200	3500	131
<b>High Efficiency Spacewise SWZDT</b>								
◆ 528331	929002717813	EvoKit HE 2x2 31L 20W 835 UNV SWZDT G5	20W	120-277	70,000	3100	3500	152
◆ 528349	929002717913	EvoKit HE 2x2 31L 20W 840 UNV SWZDT G5	20W	120-277	70,000	3100	4000	155
528356	929002718013	EvoKit HE 2x2 31L 20W 850 UNV SWZDT G5	20W	120-277	70,000	3100	5000	155
◆ 528380	929002718313	EvoKit HE 2x4 42L 26W 835 UNV SWZDT G5	26W	120-277	70,000	4200	3500	159
◆ 528398	929002718413	EvoKit HE 2x4 42L 26W 840 UNV SWZDT G5	26W	120-277	70,000	4200	4000	162
528406	929002718513	EvoKit HE 2x4 42L 26W 850 UNV SWZDT G5	26W	120-277	70,000	4200	5000	162
528414	929002718613	EvoKit HE 2x4 47L 31W 835 UNV SWZDT G5	31W	120-277	70,000	4700	3500	152
528422	929002718713	EvoKit HE 2x4 47L 30W 840 UNV SWZDT G5	30W	120-277	70,000	4700	4000	157

See footnotes on the last page.

### Features

- Occupancy sensing, daylight harvesting and task tuning in one device
- Granular dimming (occupancy sharing)
- Dwell time
- Scene setting
- Configuration of sensor parameters – if desired – using NFC or IR via intuitive Android-based Philips field apps
- Quick task tuning in the field to optimize light and power levels
- Enables auto-off/manual-on and auto-off/partial-on application
- DLC qualified: Listed on the QPL for Networked Lighting Controls

### Benefits

- Installation savings – integral wireless controls factory installed. No need to order separate components.
- Minimal startup and configuration expertise – savings on labor time & effort
- Deep energy savings & code compliance strategies
- Faster ROI with attractive payback periods (varies depending on luminaire choices)

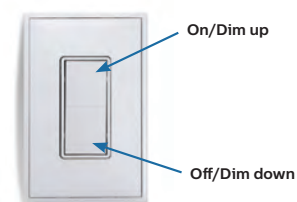
### Applications

Conference rooms, individual offices, open offices, classrooms, storage and break areas, restrooms, lobbies.

### SpaceWise wireless switch

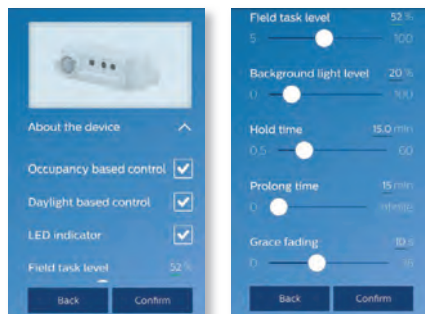
To complete the SpaceWise System a wireless switch may be added.

Ordering code: UID8451/10



### New configuration tool

An Android phone is needed for commissioning the system. Please refer to [www.usa.lighting.philips.com/systems/lighting/systems/spacewise](http://www.usa.lighting.philips.com/systems/lighting/systems/spacewise) for full list of compatible phones.



### Refer to the website for registration details:

[www.usa.lighting.philips.com/support/support/tools/](http://www.usa.lighting.philips.com/support/support/tools/)

Sensor parameters can be configured via Philips field apps. Two versions are available:

1. **NFC** – This app allows configuring sensor parameters only when you can physically access the sensor with a smartphone.
2. **IR** – This app allows configuring sensor parameters plus enables grouping to a wireless switch, which can be done with the IR feature of applicable phones from floor level.

You must first register for the app to receive a username and password, then download Philips field apps from the Google Play Store.





## EvoKit LED retrofit kit gen 5

### EvoKit with air return ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>High Efficiency 0-10 V Dimming – Air Return</b>								
528257	929002717013	Evokit HE 2x2 A 31L 21W 835 UNV 0-10 G5	21W	120-277	70,000	3100	3500	148
528265	929002717113	Evokit HE 2x2 A 31L 20W 840 UNV 0-10 G5	20W	120-277	70,000	3100	4000	155
528273	929002717213	Evokit HE 2x4 A 47L 31W 835 UNV 0-10 G5	31W	120-277	70,000	4700	3500	152
528281	929002717313	Evokit HE 2x4 A 47L 30W 840 UNV 0-10 G5	30W	120-277	70,000	4700	4000	157
<b>High Efficiency Spacewise – Air Return</b>								
528364	929002718113	Evokit HE 2x2 A 31L 20W 835 UNV SWZDT G5	20W	120-277	70,000	3100	3500	152
528372	929002718213	Evokit HE 2x2 A 31L 20W 840 UNV SWZDT G5	20W	120-277	70,000	3100	4000	155
528430	929002718813	Evokit HE 2x4 A 47L 31W 835 UNV SWZDT G5	31W	120-277	70,000	4700	3500	152
528448	929002718913	Evokit HE 2x4 A 47L 30W 840 UNV SWZDT G5	30W	120-277	70,000	4700	4000	157

See footnotes on the last page.

### Air Return data

The air return versions of EvoKit are suitable for retrofitting listed air return troffers.

#### 2x2 air return data

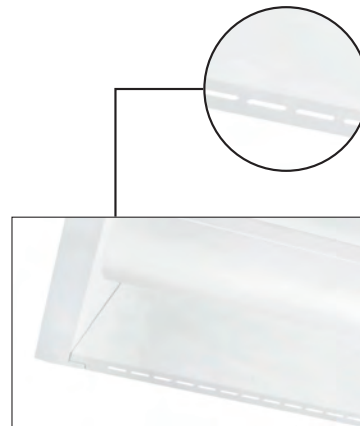
Return Air Volume, SCFM.	61	69	80	97	112	131
Negative Static Pressure, in. H <sub>2</sub> O	0.11	0.15	0.20	0.30	0.40	0.55
Noise Criteria (NC)*	17	21	25	31	34	38

Note: 24 total air slots, each 30mm x 6mm.

#### 2x4 air return data

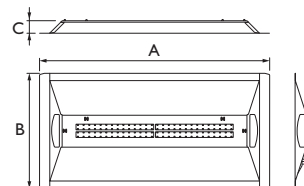
Return Air Volume, SCFM.	105	119	128	162	259	272
Negative Static Pressure, in. H <sub>2</sub> O	0.05	0.08	0.10	0.20	0.45	0.55
Noise Criteria (NC)*	<15	32	32	36	38	40

Note: 50 total air slots, each 30mm x 6mm.



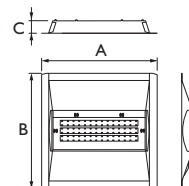
### Dimensions 2x4

A Face Plate Length	B Face Plate Width	C Face Plate Height
47.83"	23.9"	2.95"



### Dimensions 2x2

A Face Plate Length	B Face Plate Width	C Face Plate Height
23.9"	23.9"	2.95"



## EvoKit LED retrofit kit gen 5

### Application

- A highly efficient, visually comfortable, architecturally styled LED retrofit kit designed to replace recessed linear fluorescent troffers.
- Unique modular design offers refreshing new look in the ceiling when compared to traditional fluorescent luminaires.
- Single light bar combined with slanted troffer helps reflect light to reduce glare and provide uniform light distribution making it ideal for applications such as offices, schools, healthcare and retail.
- Excellent color rendering with a CRI above 80.
- Extremely high efficacies up to 164 lumens per watt.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source.
- Designed for use with standard grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-Grids.
- High efficiency source and luminaire design help significantly reduce energy consumption and more easily comply with known energy codes.
- Helps meet regulation requirements such as ASHRAE 90.1 and Title 24 when matched with suitable controls.

### Construction/Finish

- Simple design allows for quick installation in existing luminaire without the need to break the ceiling plenum.
- Constructed using galvanized steel which helps fight rust and makes for more durable product.
- Integrated securement tabs for securement to existing troffer housing.
- Minimum depth of only 3" necessary to allow proper clearance and installation of the EvoKit.
- Retrofit kit is powder coated after fabrication with high quality, durable finish to ensure no unfinished edges and avoid future potential of corrosion.
- Components fit together easily without the need for tools during installation.

### Electrical

- Multiple driver options available
  - Philips Advance Xitanium SR driver enables SpaceWise DT control system.
  - Philips Advance drivers with 0-10V dimming allow for maximum fixture efficiency and provide 10% dimming.
- 7-year limited warranty in the HE (High Efficiency) units or 5-year limited warranty the other units includes all components of the retrofit kit, including driver, LED board and nonelectrical components.\* Visit [signify.com/warranties](http://signify.com/warranties) for complete Warranty information.
- Listed with UL and Design Lights Consortium\*\* to ensure quality performance and safety standards are met.
- High efficiency LEDs have a minimum 70,000 hour rated life (L70).

### Enclosure

- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

### Accessories

- Suitable for use with Philips 503441 emergency backup.
- Earthquake cables available for additional securement to the existing troffer for areas where required.

Prod. No.	Description
502435	Earthquake cable 317mm
517987	EvoKit 2x4 replacement lens ribbed
517748	EvoKit 2x4 replacement lens smooth
517979	EvoKit 2x2 replacement lens ribbed
517755	EvoKit 2x2 replacement lens smooth
503441	EvoKit field installed emergency battery backup (requires the use of bracket)
517730	EvoKit emergency battery backup bracket (comes in pack of 4). Two emergency brackets needed per battery pack.

\* Please visit [www.philips.com/warranties](http://www.philips.com/warranties) for full details.  
 \*\* Evokit luminaires are Design Lights Consortium qualified. Please see the DLC QPL list for exact catalog numbers (<http://www.designlights.org/QPL>).

### EvoKit with new SimpleSet technology for wireless lumen level programming

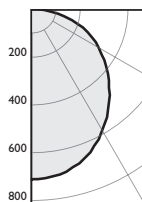
EvoKit with new SimpleSet technology allows the maximum lumen level to be set prior to installation using a smartphone-based app without requiring power to the luminaire. Available in HE versions only. The app can be downloaded at Google Play. Please contact your Philips representative for the current list of approved Android smartphones. Distributors can set lumen levels prior to shipping, and contractors can set lumen levels prior to installation. Lumen level is quickly and easily set in two steps:



- Step 1: Place the smartphone next to the NFC antenna on the driver.
- Step 2: Follow the on-screen instructions.

## EvoKit LED retrofit kit gen 5

### EvoKit gen 5 LED, 2'x2', 21L, 14W, 80 CRI, 3500K CCT, UNV 0-10, 2100 delivered lumens



Cat. No.  
527978  
Test No.  
104271456CHI-001  
S/MH  
1.2  
Lumens/Watt  
136  
Input Watts  
15

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on tests performed in compliance with LM-79.

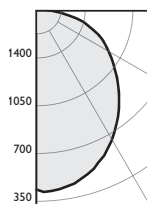
Candlepower					
	0	22.5	45	67.5	90
0	708	708	708	708	708
5	704	705	704	705	706
10	699	697	699	699	699
15	684	680	681	683	684
20	659	654	656	658	659
25	626	619	623	626	628
30	588	580	585	590	588
35	544	537	544	549	592
40	495	488	497	505	508
45	442	437	448	458	462
50	389	385	399	413	418
55	335	333	351	367	373
60	282	282	303	322	328
70	175	183	208	222	231
75	123	135	158	172	176
80	73	88	105	114	116
85	32	41	52	57	58
90	0	0	0	0	0

Zonal lumens & percentages		
Zone	Lumens	%Fixture
0-20	259	13%
0-30	545	27%
0-40	884	44%
0-60	1541	77%
0-80	1949	94%
0-90	2000	100%

Average Luminance			
Angle	0°	45°	90°
45	841	851	879
55	786	822	875
65	724	816	894
75	637	821	913
85	486	797	898

Coefficients of utilization											
Ceiling		80%			70%			50%			
Wall		70	50	30	70	50	30	50	30		
RCR		Zonal cavity method - Effective floor reflectance = 20%									
Room Cavity Ratio	0	119	119	119	116	116	116	111	111		
	1	108	104	99	106	101	97	97	94		
	2	98	90	83	96	88	82	84	79		
	3	90	79	71	87	77	70	74	68		
	4	82	70	61	80	68	60	66	59		
	5	75	62	53	73	61	53	59	51		
	6	70	56	47	68	55	47	53	46		
	7	64	51	42	63	50	42	48	41		
	8	60	46	38	58	46	37	44	37		
	9	56	43	34	55	42	34	41	33		
	10	53	39	31	51	39	31	38	31		

### EvoKit gen 5 LED, 2'x4', 37L, 26W, 80 CRI, 3500K CCT, UNV 0-10, 3600 delivered lumens



Cat. No.  
528034  
Test No.  
104271456CHI-003  
S/MH  
1.2  
Lumens/Watt  
142  
Input Watts  
26

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on tests performed in compliance with LM-79.

Candlepower					
	0	22.5	45	67.5	90
0	1300	1300	1300	1300	1300
5	1281	1283	1293	1306	1317
10	1267	1268	1280	1293	1302
15	1241	1237	1248	1262	1271
20	1198	1190	1202	1216	1225
25	1142	1131	1143	1157	1165
30	1073	1060	1074	1088	1096
35	992	980	995	1010	1017
40	902	890	908	925	934
45	804	794	816	838	848
50	705	697	724	754	767
55	602	600	635	674	689
60	502	504	551	596	614
65	403	414	471	520	537
70	305	330	392	439	454
75	212	248	308	346	359
80	127	170	215	237	241
85	52	87	110	119	120
90	0	0	0	0	0

Zonal lumens & percentages		
Zone	Lumens	%Fixture
0-20	475	13%
0-30	1002	27%
0-40	1623	44%
0-60	2820	76%
0-80	3588	97%
0-90	3695	100%

Average Luminance			
Angle	0°	45°	90°
45	1528	1551	1612
55	1412	1487	1615
65	1280	1499	1709
75	1103	1602	1865
85	802	1701	1845

Coefficients of utilization											
Ceiling		80%			70%			50%			
Wall		70	50	30	70	50	30	50	30		
RCR		Zonal cavity method - Effective floor reflectance = 20%									
Room Cavity Ratio	0	119	119	119	116	116	116	111	111		
	1	108	104	99	106	101	97	97	94		
	2	98	90	83	96	88	82	85	79		
	3	90	79	71	87	77	70	74	68		
	4	82	70	61	80	69	60	66	59		
	5	75	62	53	73	61	53	59	52		
	6	70	56	47	68	55	47	53	46		
	7	65	51	42	63	50	42	48	41		
	8	60	46	38	58	46	37	44	37		
	9	56	43	34	55	42	34	41	34		
	10	53	39	31	51	39	31	38	31		

## EvoKit LED retrofit kit gen 5

### Energy saving solution – EvoKit 2'x4'

#### Estimated lighting costs using a standard 3 lamp T8 troffer

Present wattage	85	W
× Annual operating hours	4,380	hrs
=	372,300	Watt-Hours
÷ 1,000 =	372.3	kWh per year (rates will vary)
× kWh rate of \$0.10 =	\$37.23	per year
× 125 fixtures	\$4,653.75	annual energy cost per space

#### Estimated lighting costs using a Philips 42L 2x4 Evokit G4

Present wattage	26	W
× Annual operating hours	4,380	hrs
=	113,880	Watt-Hours
÷ 1,000 =	113.88	kWh per year (rates will vary)
× kWh rate of \$0.10 =	\$11.39	per year
× 125 fixtures	\$1,423.50	annual energy cost per space

**Total estimated annual savings<sup>‡</sup> \$3,230.25**

<sup>‡</sup> Based on 125 fixtures per space operating 4,380 hours a year.  
 125 fixtures is roughly equivalent to a 10,000 square foot space.

#### Footnotes:

1. L70 72,000 hours @ 35°C based on TM21 and LM80.
  2. Based on photometric testing consistent with IES LM-79. Actual wattage may differ by +/- 10%. Actual initial lumen output may vary between -10 and +10% of the rated lumens.
  3. 0-10V Dimming products that are not HE (High Efficiency) do not support lumen level tuning with SimpleSet technology using the MultiOne Mobile smartphone app.
- ◆ Made to stock product (Contact your Philips sales representative for stock availability and lead time).
- Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electrical products. For products used in North America, compliance with RoHS is voluntary and self-certified.



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# PHILIPS

## Recessed

### EvoKit LED Retrofit Kit Gen 5



Philips EvoKit LED Retrofit kit gen 5 is an energy efficient LED alternative to traditional linear fluorescent troffers that also helps reduce maintenance costs due to its long lifetime. Simple construction helps decrease installation times offering an installed LED solution within minutes.

Products can be found on the DLC QPL by searching the 6 digit product number. Additional information can be found at [www.philips.com/evokit](http://www.philips.com/evokit).

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

#### EvoKit with 0-10V Dimming ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>0-10V Dimming</b>								
527978	929002714213	EvoKit 2x2 21L 15W 835 UNV 0-10 G5	15W	120-277	70,000	2100	3500	140
527986	929002714313	EvoKit 2x2 21L 14W 840 UNV 0-10 G5	14W	120-277	70,000	2100	4000	150
527994	929002714413	EvoKit 2x2 21L 14W 850 UNV 0-10 G5	14W	120-277	70,000	2100	5000	150
528000	929002714513	EvoKit 2x2 31L 22W 835 UNV 0-10 G5	22W	120-277	70,000	3100	3500	135
528018	929002714613	EvoKit 2x2 31L 22W 840 UNV 0-10 G5	22W	120-277	70,000	3100	4000	141
528026	929002714713	EvoKit 2x2 31L 22W 850 UNV 0-10 G5	22W	120-277	70,000	3100	5000	141
528455	929002719013	EvoKit 2x2 31L 23W 935 UNV 0-10 G5	23W	120-277	70,000	3100	3500	135
528034	929002714813	EvoKit 2x4 36L 25W 835 UNV 0-10 G5	25W	120-277	70,000	3600	3500	144
528042	929002714913	EvoKit 2x4 36L 25W 840 UNV 0-10 G5	25W	120-277	70,000	3600	4000	144
528059	929002715013	EvoKit 2x4 36L 25W 850 UNV 0-10 G5	25W	120-277	70,000	3600	5000	144
528067	929002715113	EvoKit 2x4 42L 28W 835 UNV 0-10 G5	28W	120-277	70,000	4200	3500	145
528075	929002715213	EvoKit 2x4 42L 28W 840 UNV 0-10 G5	28W	120-277	70,000	4200	4000	150
528083	929002715313	EvoKit 2x4 42L 28W 850 UNV 0-10 G5	28W	120-277	70,000	4200	5000	150
528463	929002719113	EvoKit 2x4 42L 32W 935 UNV 0-10 G5	32W	120-277	70,000	4200	3500	131
<b>High Efficiency 0-10 V Dimming</b>								
528091	929002715413	EvoKit HE 2x2 21L 14W 835 UNV 0-10 G5	14W	120-277	70,000	2100	3500	153
528109	929002715513	EvoKit HE 2x2 21L 13W 840 UNV 0-10 G5	13W	120-277	70,000	2100	4000	162
528125	929002715713	EvoKit HE 2x2 31L 21W 835 UNV 0-10 G5	21W	120-277	70,000	3100	3500	148
528133	929002715813	EvoKit HE 2x2 31L 20W 840 UNV 0-10 G5	20W	120-277	70,000	3100	4000	155
528141	929002715913	EvoKit HE 2x2 31L 20W 850 UNV 0-10 G5	20W	120-277	70,000	3100	5000	155
528158	929002716013	EvoKit HE 2x4 30L 19W 835 UNV 0-10 G5	19W	120-277	70,000	3000	3500	158
528166	929002716113	EvoKit HE 2x4 30L 19W 840 UNV 0-10 G5	19W	120-277	70,000	3000	4000	158
528174	929002716213	EvoKit HE 2x4 36L 23W 835 UNV 0-10 G5	23W	120-277	70,000	3600	3500	157
528182	929002716313	EvoKit HE 2x4 36L 22W 840 UNV 0-10 G5	22W	120-277	70,000	3600	4000	164
528208	929002716513	EvoKit HE 2x4 42L 26W 835 UNV 0-10 G5	26W	120-277	70,000	4200	3500	158
528216	929002716613	EvoKit HE 2x4 42L 26W 840 UNV 0-10 G5	26W	120-277	70,000	4200	4000	162
528224	929002716713	EvoKit HE 2x4 42L 26W 850 UNV 0-10 G5	26W	120-277	70,000	4200	5000	162
528232	929002716813	EvoKit HE 2x4 47L 31W 835 UNV 0-10 G5	31W	120-277	70,000	4700	3500	152
528240	929002716913	EvoKit HE 2x4 47L 30W 840 UNV 0-10 G5	30W	120-277	70,000	4700	4000	157
<b>0-10V Step Dimming</b>								
528299	929002717413	EvoKit HE 2x2 31L 22W 835 UNV STEP G5	22W	120-277	70,000	3100	3500	142
528307	929002717513	EvoKit HE 2x2 31L 21W 840 UNV STEP G5	21W	120-277	70,000	3100	4000	148
528315	929002717613	EvoKit HE 2x4 42L 28W 835 UNV STEP G5	28W	120-277	70,000	4200	3500	150
528323	929002717713	EvoKit HE 2x4 42L 28W 840 UNV STEP G5	28W	120-277	70,000	4200	4000	150

See footnotes on the last page.

EvoKit Gen 5 Spec 04/21 page 1 of 6



## EvoKit LED retrofit kit gen 5

### EvoKit with Spacewise SWZDT ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>Spacewise SWZDT</b>								
528471	929002719213	EvoKit 2x2 31L 23W 935 UNV SWZDT G5	23W	120-277	70,000	3100	3500	135
528489	929002719313	EvoKit 2x4 42L 32W 935 UNV SWZDT G5	32W	120-277	70,000	4200	3500	131
<b>High Efficiency Spacewise SWZDT</b>								
◆ 528331	929002717813	EvoKit HE 2x2 31L 20W 835 UNV SWZDT G5	20W	120-277	70,000	3100	3500	152
◆ 528349	929002717913	EvoKit HE 2x2 31L 20W 840 UNV SWZDT G5	20W	120-277	70,000	3100	4000	155
528356	929002718013	EvoKit HE 2x2 31L 20W 850 UNV SWZDT G5	20W	120-277	70,000	3100	5000	155
◆ 528380	929002718313	EvoKit HE 2x4 42L 26W 835 UNV SWZDT G5	26W	120-277	70,000	4200	3500	159
◆ 528398	929002718413	EvoKit HE 2x4 42L 26W 840 UNV SWZDT G5	26W	120-277	70,000	4200	4000	162
528406	929002718513	EvoKit HE 2x4 42L 26W 850 UNV SWZDT G5	26W	120-277	70,000	4200	5000	162
528414	929002718613	EvoKit HE 2x4 47L 31W 835 UNV SWZDT G5	31W	120-277	70,000	4700	3500	152
528422	929002718713	EvoKit HE 2x4 47L 30W 840 UNV SWZDT G5	30W	120-277	70,000	4700	4000	157

See footnotes on the last page.

### Features

- Occupancy sensing, daylight harvesting and task tuning in one device
- Granular dimming (occupancy sharing)
- Dwell time
- Scene setting
- Configuration of sensor parameters – if desired – using NFC or IR via intuitive Android-based Philips field apps
- Quick task tuning in the field to optimize light and power levels
- Enables auto-off/manual-on and auto-off/partial-on application
- DLC qualified: Listed on the QPL for Networked Lighting Controls

### Benefits

- Installation savings – integral wireless controls factory installed. No need to order separate components.
- Minimal startup and configuration expertise – savings on labor time & effort
- Deep energy savings & code compliance strategies
- Faster ROI with attractive payback periods (varies depending on luminaire choices)

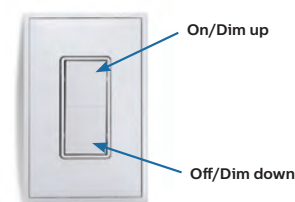
### Applications

Conference rooms, individual offices, open offices, classrooms, storage and break areas, restrooms, lobbies.

### SpaceWise wireless switch

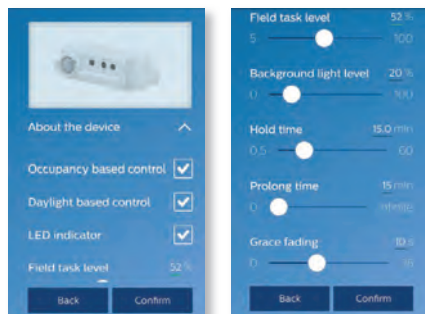
To complete the SpaceWise System a wireless switch may be added.

Ordering code: UID8451/10



### New configuration tool

An Android phone is needed for commissioning the system. Please refer to [www.usa.lighting.philips.com/systems/lighting/systems/spacewise](http://www.usa.lighting.philips.com/systems/lighting/systems/spacewise) for full list of compatible phones.



### Refer to the website for registration details:

[www.usa.lighting.philips.com/support/support/tools/](http://www.usa.lighting.philips.com/support/support/tools/)

Sensor parameters can be configured via Philips field apps. Two versions are available:

1. **NFC** – This app allows configuring sensor parameters only when you can physically access the sensor with a smartphone.
2. **IR** – This app allows configuring sensor parameters plus enables grouping to a wireless switch, which can be done with the IR feature of applicable phones from floor level.

You must first register for the app to receive a username and password, then download Philips field apps from the Google Play Store.



## EvoKit LED retrofit kit gen 5

### EvoKit with air return ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>High Efficiency 0-10 V Dimming – Air Return</b>								
528257	929002717013	Evokit HE 2x2 A 31L 21W 835 UNV 0-10 G5	21W	120-277	70,000	3100	3500	148
528265	929002717113	Evokit HE 2x2 A 31L 20W 840 UNV 0-10 G5	20W	120-277	70,000	3100	4000	155
528273	929002717213	Evokit HE 2x4 A 47L 31W 835 UNV 0-10 G5	31W	120-277	70,000	4700	3500	152
528281	929002717313	Evokit HE 2x4 A 47L 30W 840 UNV 0-10 G5	30W	120-277	70,000	4700	4000	157
<b>High Efficiency Spacewise – Air Return</b>								
528364	929002718113	Evokit HE 2x2 A 31L 20W 835 UNV SWZDT G5	20W	120-277	70,000	3100	3500	152
528372	929002718213	Evokit HE 2x2 A 31L 20W 840 UNV SWZDT G5	20W	120-277	70,000	3100	4000	155
528430	929002718813	Evokit HE 2x4 A 47L 31W 835 UNV SWZDT G5	31W	120-277	70,000	4700	3500	152
528448	929002718913	Evokit HE 2x4 A 47L 30W 840 UNV SWZDT G5	30W	120-277	70,000	4700	4000	157

See footnotes on the last page.

### Air Return data

The air return versions of EvoKit are suitable for retrofitting listed air return troffers.

#### 2x2 air return data

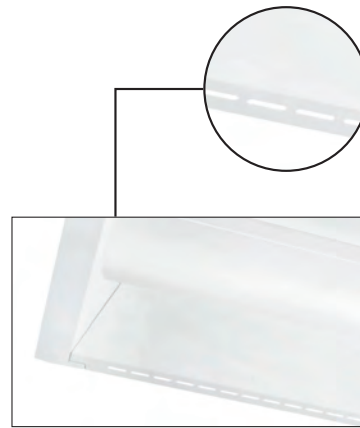
Return Air Volume, SCFM.	61	69	80	97	112	131
Negative Static Pressure, in. H <sub>2</sub> O	0.11	0.15	0.20	0.30	0.40	0.55
Noise Criteria (NC)*	17	21	25	31	34	38

Note: 24 total air slots, each 30mm x 6mm.

#### 2x4 air return data

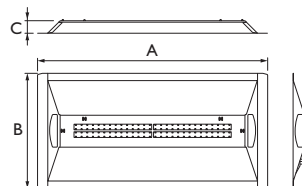
Return Air Volume, SCFM.	105	119	128	162	259	272
Negative Static Pressure, in. H <sub>2</sub> O	0.05	0.08	0.10	0.20	0.45	0.55
Noise Criteria (NC)*	<15	32	32	36	38	40

Note: 50 total air slots, each 30mm x 6mm.



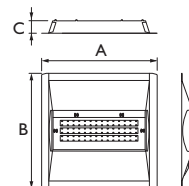
### Dimensions 2x4

A Face Plate Length	B Face Plate Width	C Face Plate Height
47.83"	23.9"	2.95"



### Dimensions 2x2

A Face Plate Length	B Face Plate Width	C Face Plate Height
23.9"	23.9"	2.95"





## EvoKit LED retrofit kit gen 5

### Application

- A highly efficient, visually comfortable, architecturally styled LED retrofit kit designed to replace recessed linear fluorescent troffers.
- Unique modular design offers refreshing new look in the ceiling when compared to traditional fluorescent luminaires.
- Single light bar combined with slanted troffer helps reflect light to reduce glare and provide uniform light distribution making it ideal for applications such as offices, schools, healthcare and retail.
- Excellent color rendering with a CRI above 80.
- Extremely high efficacies up to 164 lumens per watt.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source.
- Designed for use with standard grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-Grids.
- High efficiency source and luminaire design help significantly reduce energy consumption and more easily comply with known energy codes.
- Helps meet regulation requirements such as ASHRAE 90.1 and Title 24 when matched with suitable controls.

### Construction/Finish

- Simple design allows for quick installation in existing luminaire without the need to break the ceiling plenum.
- Constructed using galvanized steel which helps fight rust and makes for more durable product.
- Integrated securement tabs for securement to existing troffer housing.
- Minimum depth of only 3" necessary to allow proper clearance and installation of the EvoKit.
- Retrofit kit is powder coated after fabrication with high quality, durable finish to ensure no unfinished edges and avoid future potential of corrosion.
- Components fit together easily without the need for tools during installation.

### Electrical

- Multiple driver options available
  - Philips Advance Xitanium SR driver enables SpaceWise DT control system.
  - Philips Advance drivers with 0-10V dimming allow for maximum fixture efficiency and provide 10% dimming.
- 7-year limited warranty in the HE (High Efficiency) units or 5-year limited warranty the other units includes all components of the retrofit kit, including driver, LED board and nonelectrical components.\* Visit [signify.com/warranties](http://signify.com/warranties) for complete Warranty information.
- Listed with UL and Design Lights Consortium\*\* to ensure quality performance and safety standards are met.
- High efficiency LEDs have a minimum 70,000 hour rated life (L70).

### Enclosure

- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

### Accessories

- Suitable for use with Philips 503441 emergency backup.
- Earthquake cables available for additional securement to the existing troffer for areas where required.

Prod. No.	Description
502435	Earthquake cable 317mm
517987	EvoKit 2x4 replacement lens ribbed
517748	EvoKit 2x4 replacement lens smooth
517979	EvoKit 2x2 replacement lens ribbed
517755	EvoKit 2x2 replacement lens smooth
503441	EvoKit field installed emergency battery backup (requires the use of bracket)
517730	EvoKit emergency battery backup bracket (comes in pack of 4). Two emergency brackets needed per battery pack.

\* Please visit [www.philips.com/warranties](http://www.philips.com/warranties) for full details.  
 \*\* Evokit luminaires are Design Lights Consortium qualified. Please see the DLC QPL list for exact catalog numbers (<http://www.designlights.org/QPL>).

### EvoKit with new SimpleSet technology for wireless lumen level programming

EvoKit with new SimpleSet technology allows the maximum lumen level to be set prior to installation using a smartphone-based app without requiring power to the luminaire. Available in HE versions only. The app can be downloaded at Google Play. Please contact your Philips representative for the current list of approved Android smartphones. Distributors can set lumen levels prior to shipping, and contractors can set lumen levels prior to installation. Lumen level is quickly and easily set in two steps:

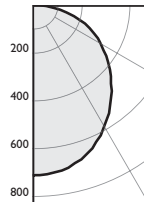


- Step 1: Place the smartphone next to the NFC antenna on the driver.
- Step 2: Follow the on-screen instructions.



## EvoKit LED retrofit kit gen 5

### EvoKit gen 5 LED, 2'x2', 21L, 14W, 80 CRI, 3500K CCT, UNV 0-10, 2100 delivered lumens



The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on tests performed in compliance with LM-79.

Cat. No.  
527978  
Test No.  
104271456CHI-001  
S/MH  
1.2  
Lumens/Watt  
136  
Input Watts  
15

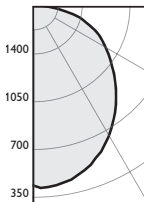
Candlepower					
	0	22.5	45	67.5	90
0	708	708	708	708	708
5	704	705	704	705	706
10	699	697	699	699	699
15	684	680	681	683	684
20	659	654	656	658	659
25	626	619	623	626	628
30	588	580	585	590	588
35	544	537	544	549	592
40	495	488	497	505	508
45	442	437	448	458	462
50	389	385	399	413	418
55	335	333	351	367	373
60	282	282	303	322	328
70	175	183	208	222	231
75	123	135	158	172	176
80	73	88	105	114	116
85	32	41	52	57	58
90	0	0	0	0	0

Zonal lumens & percentages		
Zone	Lumens	%Fixture
0-20	259	13%
0-30	545	27%
0-40	884	44%
0-60	1541	77%
0-80	1949	94%
0-90	2000	100%

Average Luminance			
Angle	0°	45°	90°
45	841	851	879
55	786	822	875
65	724	816	894
75	637	821	913
85	486	797	898

Coefficients of utilization											
Ceiling		80%			70%			50%			
Wall		70	50	30	70	50	30	50	30		
RCR		Zonal cavity method - Effective floor reflectance = 20%									
Room Cavity Ratio	0	119	119	119	116	116	116	111	111		
	1	108	104	99	106	101	97	97	94		
	2	98	90	83	96	88	82	84	79		
	3	90	79	71	87	77	70	74	68		
	4	82	70	61	80	68	60	66	59		
	5	75	62	53	73	61	53	59	51		
	6	70	56	47	68	55	47	53	46		
	7	64	51	42	63	50	42	48	41		
	8	60	46	38	58	46	37	44	37		
	9	56	43	34	55	42	34	41	33		
	10	53	39	31	51	39	31	38	31		

### EvoKit gen 5 LED, 2'x4', 37L, 26W, 80 CRI, 3500K CCT, UNV 0-10, 3600 delivered lumens



The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on tests performed in compliance with LM-79.

Cat. No.  
528034  
Test No.  
104271456CHI-003  
S/MH  
1.2  
Lumens/Watt  
142  
Input Watts  
26

Candlepower					
	0	22.5	45	67.5	90
0	1300	1300	1300	1300	1300
5	1281	1283	1293	1306	1317
10	1267	1268	1280	1293	1302
15	1241	1237	1248	1262	1271
20	1198	1190	1202	1216	1225
25	1142	1131	1143	1157	1165
30	1073	1060	1074	1088	1096
35	992	980	995	1010	1017
40	902	890	908	925	934
45	804	794	816	838	848
50	705	697	724	754	767
55	602	600	635	674	689
60	502	504	551	596	614
65	403	414	471	520	537
70	305	330	392	439	454
75	212	248	308	346	359
80	127	170	215	237	241
85	52	87	110	119	120
90	0	0	0	0	0

Zonal lumens & percentages		
Zone	Lumens	%Fixture
0-20	475	13%
0-30	1002	27%
0-40	1623	44%
0-60	2820	76%
0-80	3588	97%
0-90	3695	100%

Average Luminance			
Angle	0°	45°	90°
45	1528	1551	1612
55	1412	1487	1615
65	1280	1499	1709
75	1103	1602	1865
85	802	1701	1845

Coefficients of utilization											
Ceiling		80%			70%			50%			
Wall		70	50	30	70	50	30	50	30		
RCR		Zonal cavity method - Effective floor reflectance = 20%									
Room Cavity Ratio	0	119	119	119	116	116	116	111	111		
	1	108	104	99	106	101	97	97	94		
	2	98	90	83	96	88	82	85	79		
	3	90	79	71	87	77	70	74	68		
	4	82	70	61	80	69	60	66	59		
	5	75	62	53	73	61	53	59	52		
	6	70	56	47	68	55	47	53	46		
	7	65	51	42	63	50	42	48	41		
	8	60	46	38	58	46	37	44	37		
	9	56	43	34	55	42	34	41	34		
	10	53	39	31	51	39	31	38	31		

## EvoKit LED retrofit kit gen 5

### Energy saving solution – EvoKit 2'x4'

#### Estimated lighting costs using a standard 3 lamp T8 troffer

Present wattage	85	W
× Annual operating hours	4,380	hrs
=	372,300	Watt-Hours
÷ 1,000 =	372.3	kWh per year (rates will vary)
× kWh rate of \$0.10 =	\$37.23	per year
× 125 fixtures	\$4,653.75	annual energy cost per space

#### Estimated lighting costs using a Philips 42L 2x4 Evokit G4

Present wattage	26	W
× Annual operating hours	4,380	hrs
=	113,880	Watt-Hours
÷ 1,000 =	113.88	kWh per year (rates will vary)
× kWh rate of \$0.10 =	\$11.39	per year
× 125 fixtures	\$1,423.50	annual energy cost per space

**Total estimated annual savings<sup>‡</sup> \$3,230.25**

<sup>‡</sup> Based on 125 fixtures per space operating 4,380 hours a year.  
 125 fixtures is roughly equivalent to a 10,000 square foot space.

#### Footnotes:

1. L70 72,000 hours @ 35°C based on TM21 and LM80.
  2. Based on photometric testing consistent with IES LM-79. Actual wattage may differ by +/- 10%. Actual initial lumen output may vary between -10 and +10% of the rated lumens.
  3. 0-10V Dimming products that are not HE (High Efficiency) do not support lumen level tuning with SimpleSet technology using the MultiOne Mobile smartphone app.
- ◆ Made to stock product (Contact your Philips sales representative for stock availability and lead time).
- Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electrical products. For products used in North America, compliance with RoHS is voluntary and self-certified.



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EvoKit LED retrofit kit gen 5 04/21 philips.com/lighting page 6 of 6



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**LT  
GOLD**

## LED TROFFER RETROFIT KIT

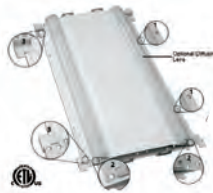
TYPE	PROJECT NAME	DATE

### FEATURES

- All Aluminum construction for superior heat transfer & component life
- Increases light output while decreasing wattage by more than 50%
- Utilizing Phillips Titanium drivers and Phillips Fortimo LED Boards
- Compatible with most troffer housings
- Provides even wide spread illumination

### TECHNICAL INFORMATION

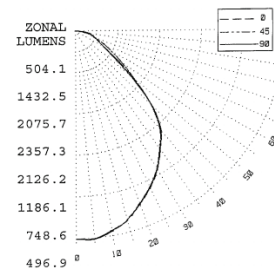
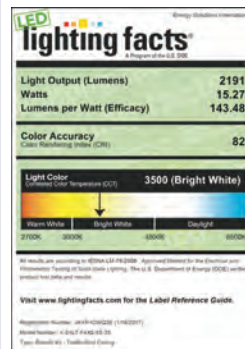
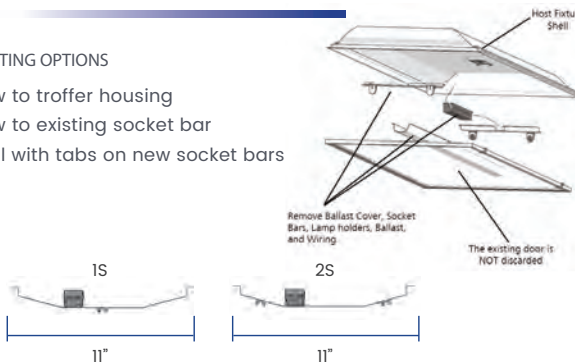
- Mounting: Fits in most troffer housings.
- Housing: All aluminum construction minimizes weight.
- Construction: The solid body provides added rigidity.
- LEDs: Best efficacy of mid-level power LEDs, 80+ CRI, utilizes aluminum substrate to provide an advanced thermal management system.



### DIMENSIONAL INFORMATION

#### MOUNTING OPTIONS

- Screw to troffer housing
- Screw to existing socket bar
- Install with tabs on new socket bars



LUMEN SUMMARY				
ZONE	LUMENS	% FIXTURE	ZONE	LUMENS
0 - 30	4012	36.1	90 - 120	0
0 - 40	6370	57.3	90 - 130	0
0 - 60	9682	87.1	90 - 150	0
0 - 90	11114	100	90 - 180	0
TOTAL LUMINAIRE =			0 - 180	11114

IES SPACING CRITERIA : END = 1.2    DIAGONAL = 1.2    CROSS = 1.2



**MADE IN THE USA**

**LT 17002**



**Energy Solutions**  
 INTERNATIONAL, INC.

**LT**  
**GOLD**

## ORDERING INFORMATION

Part Number = Style + Size + Light Engine + Color Temperature + Options  
 (Example: K-24LT-F4L0-1S-35 = 2'x4' LT retrofit kit with a 20 watt light engine & 3500K LED Boards)

STYLE	SIZE	LIGHT ENGINE 2x2 1 Strip	LIGHT ENGINE 2x2 Multiple	COLOR TEMPERATURE	OPTIONS
K - RETROFIT KIT	22LT - 2' X 2'	F2X5-1S - 16W - 2000 LUMENS	F2X5-2S - 15W - 1994 LUMENS	35 - 3500K LED COLOR TEMP	FR - FROSTED LENS
		F2L0-1S - 20W - 2532 LUMENS	F2L0-2S - 20W - 2507 LUMENS	40 - 4000K LED COLOR TEMP	D - DIMMING
		F2L4-1S - 24W - 3041 LUMENS	F2L4-2S - 24W - 3055 LUMENS	50 - 5000K LED COLOR TEMP	
			F2N0-2S - 30W - 3855 LUMENS		
			F2N6-2S - 36W - 4660 LUMENS		
			F2N8-2S - 38W - 4912 LUMENS		
			F2M2-2S - 42W - 5367 LUMENS		
			F2H2-3S - 52W - 6688 LUMENS		
			F2H8-3S - 59W - 7575 LUMENS		

STYLE	SIZE	LIGHT ENGINE 2x4 1 Strip	LIGHT ENGINE 2x4 Multiple	COLOR TEMPERATURE	OPTIONS
K - RETROFIT KIT	24LT - 2' X 4'	F4L0-1S - 20W - 2958 LUMENS	F4L0-2S - 20W - 2974 LUMENS	35 - 3500K LED COLOR TEMP	FR - FROSTED LENS
		F4L4-1S - 24W - 3451 LUMENS	F4L5-2S - 25W - 3652 LUMENS	40 - 4000K LED COLOR TEMP	D - DIMMING
		F4L8-1S - 28W - 3974 LUMENS	F4N0-2S - 30W - 4425 LUMENS	50 - 5000K LED COLOR TEMP	
		F4N2-1S - 32W - 4488 LUMENS	F4N6-2S - 36W - 5298 LUMENS		
		F4N6-1S - 36W - 5092 LUMENS	F4M0-2S - 40W - 5837 LUMENS		
		F4M0-1S - 40W - 5536 LUMENS	F4M4-2S - 44W - 6372 LUMENS		
			F4H2-2S - 52W - 7427 LUMENS		
			F4V0-2S - 60W - 8464 LUMENS		
			F4V9-2S - 69W - 9683 LUMENS		
			F4Z0-2S - 81W - 11114 LUMENS		

## CONTROLS CAPABILITIES

***"All products are IoT-Ready!"***



OCCUPANCY / VACANCY



DAYLIGHT HARVESTING



GROUPING



SCHEDULING



DIMMING



NETWORKED LIGHTING CONTROLS



**MADE IN THE USA**

LT 17002



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GOLD**

## LED TROFFER RETROFIT KIT

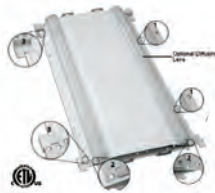
TYPE	PROJECT NAME	DATE

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### TECHNICAL INFORMATION

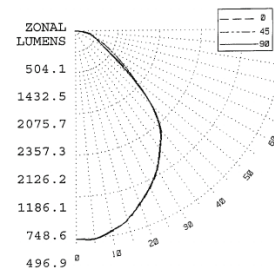
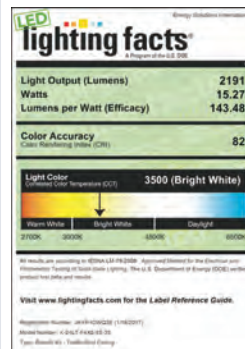
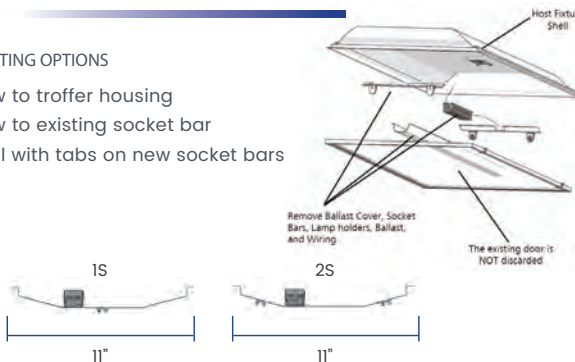
- Mounting: Fits in most troffer housings.
- Housing: All aluminum construction minimizes weight.
- Construction: The solid body provides added rigidity.
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### DIMENSIONAL INFORMATION

#### MOUNTING OPTIONS

- Screw to troffer housing
- Screw to existing socket bar
- Install with tabs on new socket bars



LUMEN SUMMARY				
ZONE	LUMENS	% FIXTURE	ZONE	LUMENS
0 - 30	4012	36.1	90 - 120	0
0 - 40	6370	57.3	90 - 130	0
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 (Example: K-24LT-F4L0-1S-35 = 2'x4' LT retrofit kit with a 20 watt light engine & 3500K LED Boards)

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			F2N0-2S - 30W - 3855 LUMENS		
			F2N6-2S - 36W - 4660 LUMENS		
			F2N8-2S - 38W - 4912 LUMENS		
			F2M2-2S - 42W - 5367 LUMENS		
			F2H2-3S - 52W - 6688 LUMENS		
			F2H8-3S - 59W - 7575 LUMENS		

STYLE	SIZE	LIGHT ENGINE 2x4 1 Strip	LIGHT ENGINE 2x4 Multiple	COLOR TEMPERATURE	OPTIONS
K - RETROFIT KIT	24LT - 2' X 4'	F4L0-1S - 20W - 2958 LUMENS	F4L0-2S - 20W - 2974 LUMENS	35 - 3500K LED COLOR TEMP	FR - FROSTED LENS
		F4L4-1S - 24W - 3451 LUMENS	F4L5-2S - 25W - 3652 LUMENS	40 - 4000K LED COLOR TEMP	D - DIMMING
		F4L8-1S - 28W - 3974 LUMENS	F4N0-2S - 30W - 4425 LUMENS	50 - 5000K LED COLOR TEMP	SD - STEP DIMMING
		F4N2-1S - 32W - 4488 LUMENS	F4N6-2S - 36W - 5298 LUMENS		
		F4N6-1S - 36W - 5092 LUMENS	F4M0-2S - 40W - 5837 LUMENS		
		F4M0-1S - 40W - 5536 LUMENS	F4M4-2S - 44W - 6372 LUMENS		
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			F4V0-2S - 60W - 8464 LUMENS		
			F4V9-2S - 69W - 9683 LUMENS		
			F4Z0-2S - 81W - 11114 LUMENS		

## CONTROLS CAPABILITIES

***"All products are IoT-Ready!"***



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DAYLIGHT HARVESTING



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DIMMING



NETWORKED LIGHTING CONTROLS



**MADE IN THE USA**

LT 17002



FEATURES & SPECIFICATIONS

**INTENDED USE** — The LBK kit provides a simple, cost-effective integrated LED solution for retrofit in nearly any fluorescent fixture with T8, T12, or T5 lamps. Lightbar kits provide the reliability, thermal performance, and longevity of integrated LED systems with the simplicity of installing wherever fluorescent lamps are used. Existing fluorescent lampholders and ballasts are not used for operation, greatly increasing reliability of system.

**CONSTRUCTION & OPTICS** — Rigid, formed steel channel with high-performance LED boards mounted directly for optimal thermal performance. Diffuse acrylic lens increases uniformity and controls brightness. LBK is available in standard 4', 2', and 3' configurations for increased flexibility in linear applications.

**ELECTRICAL** — Long-life LEDs coupled with high-efficiency drivers provide extended service life. LBK is rated to deliver greater than L80 performance at 60,000 hours (Calculated L70 > 140,000 hrs). LEDs are high efficiency for lightbar kit performance levels exceeding 150 LPW.

**INSTALLATION** — Magnets secure lightbar for easy positioning and alignment. Self-tapping Tek screws are included to secure bar for final installation. Drivers are mounted in existing ballast channel. Lightbars and drivers plug together with modular wiring harness in a configuration specified when ordering for installation simplicity.

**LISTINGS** — UL/cUL Classified for damp location. Tested to LM80 standards. Made in North America for standard TAA compliance. BAA compliant product is available (consult factory)

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**BUY AMERICAN** — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

**WARRANTY** — Five-year warranty coverage of luminaires includes fixture construction, LED light engine, and driver. Terms and conditions apply. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Extended warranties may be available for certain applications.

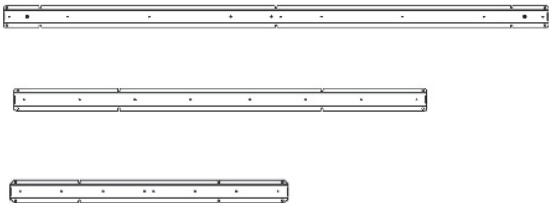
**NOTE:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Catalog Number
Notes
Type



LBK LightBar Kit LED Retrofit System

LBK



Specifications

Length: 46.25", 34.40", 22.63"  
Width: 1.61"  
Height: 0.9"



LBK Performance		1600LMHE	2000LMHE	3000LMHE	4000LMHE	6000LMHE	8000LMHE	12000LMHE
		10W	13W	20W	26W	39W	51W	77W
2 FT	2FT - 1 bar - 40K	1475 LM 9.9 W 149 LPW	1995 LM 13.3 W 150 LPW					
	2FT - 2 bars - 40K	1485 LM 9.9 W 150 LPW	2,005 LM 13.3 W 151 LPW	3,045 LM 20.0 W 152 LPW	3,908 LM 25.1 W 155 LPW			
	2FT - 3 bars - 40K		1,985 LM 13.2 W 151 LPW	3,009 LM 19.7 W 153 LPW	3,891 LM 24.7 W 158 LPW	5,703 LM 37.4 W 152 LPW		
	2FT - 4 bars - 40K					5663 LM 37.5 W 151 LPW	7,708 LM 50.5 W 153 LPW	
3 FT	3FT - 1 bar - 40K	1,463 LM 9.9 W 147 LPW	1990 LM 13.3 W 150 LPW	3000 LM 20.0 W 150 LPW	3970 LM 25.1 W 158 LPW			
	3FT - 2 bars - 40K		2000 LM 13.2 W 152 LPW	3,087 LM 19.7 W 157 LPW	4000 LM 25.1 W 159 LPW	5650 LM 37.4 W 151 LPW		
4 FT	4FT - 1 bar - 40K	1,564 LM 9.9 W 158 LPW	2,022 LM 13.2 W 153 LPW	3,057 LM 19.9 W 154 LPW	3,938 LM 24.9 W 158 LPW	5775 LM 37.5 W 154 LPW		
	4FT - 2 bars - 40K		2,061 LM 13.1 W 158 LPW	3,149 LM 19.6 W 161 LPW	4,097 LM 24.5 W 167 LPW	6,007 LM 37.2 W 162 LPW	7,903 LM 50.3 W 157 LPW	
	4FT - 3 bars - 40K			3,151 LM 19.5 W 162 LPW	4,044 LM 24.3 W 166 LPW	6,025 LM 36.7 W 164 LPW	7925 LM 50.5 W 157 LPW	
	4FT - 4 bars - 40K				4050 LM 25.0 W 162 LPW	6050 LM 36.7 W 165 LPW	8,140 LM 49.4 W 165 LPW	11,979 LM 74.9 W 160 LPW



## LBK LED Lightbar Kit

### ORDERING INFORMATION

Example: LBK 4FT 2 3000LMHE 80CRI 40K MIN10 ZT MVOLT J12

Series	Fixture Dimension	# Bars	Lumens Output	CRI	Color Temperature	
LBK LED Lightbar Kit	2FT 2'	1 1 bar	1600LMHE Nominal 1600 lumens high efficiency <sup>1,2</sup>	80CRI 80 CRI	35K 3500K	
		2 2 bars	2000LMHE Nominal 2000 lumens high efficiency <sup>1,2,3</sup>		40K 4000K	
		3 3 bars	3000LMHE Nominal 3000 lumens high efficiency <sup>2,3</sup>		50K 5000K	
		4 4 bars	4000LMHE Nominal 4000 lumens high efficiency <sup>2,3</sup>			
			6000LMHE Nominal 6000 lumens high efficiency <sup>3,4</sup>			
			8000LMHE Nominal 8000 lumens high efficiency <sup>4</sup>			
	3FT 3'	1 1 bar	1600LMHE Nominal 1600 lumens high efficiency <sup>1</sup>			
		2 2 bars	2000LMHE Nominal 2000 lumens high efficiency <sup>1,2</sup>			
			3000LMHE Nominal 3000 lumens high efficiency			
			4000LMHE Nominal 4000 lumens high efficiency <sup>1,2</sup>			
			6000LMHE Nominal 6000 lumens high efficiency <sup>2</sup>			
	4FT 4'	1 1 bar	1600LMHE Nominal 1600 lumens high efficiency <sup>1</sup>			
		2 2 bars	2000LMHE Nominal 2000 lumens high efficiency <sup>1,2</sup>			
		3 3 bars	3000LMHE Nominal 3000 lumens high efficiency <sup>1,2,3</sup>			
		4 4 bars	4000LMHE Nominal 4000 lumens high efficiency <sup>1,2,3,4</sup>			
			6000LMHE Nominal 6000 lumens high efficiency <sup>1,2,3,4</sup>			
			8000LMHE Nominal 8000 lumens high efficiency <sup>2,3,4</sup>			
			12000LMHE Nominal 12000 lumens high efficiency <sup>4</sup>			
Minimum Dimming Level		Control Input	Voltage	Options		
MIN10	Constant current, dimming to 10%	ZT Generic 0-10V Dimming <sup>5</sup>	MVOLT MVOLT, 120-277V	NAxx	Customer-specific options <sup>7</sup>	
MIN1	Constant current, dimming to 1%	EZT eldoLED 0-10V Dimming <sup>6</sup>		UFC	DOD Unified Facility Criteria compliant driver <sup>7,8</sup>	
				FAO	Field adjustable output device	
				J2	Job pack of 2 kits (1-bar & 2-bar kits only) <sup>9</sup>	
				J6	Job pack of 6 kits (4-bar kits only) <sup>9</sup>	
				J12	Job pack of 12 kits (2-bar kits only) <sup>9</sup>	
				BAA	Buy America(n) Act Compliant	

Accessories: Order as separate catalog number.	
ILB CP10 HE B M20	IOTA 10 Watt Constant Power, High Efficiency LED Emergency Driver for CA Title 20 <sup>10</sup>
LBKXFMR	347V Autotransformer <sup>10</sup>

### NOTES

1. Available with # Bars qty 1.
2. Available with # Bars qty 2.
3. Available with # Bars qty 3.
4. Available with # Bars qty 4.
5. Only available with MIN10.
6. Only available with MIN1.
7. Consult factory for details on availability.
8. Must be ordered with MIN10 ZT.
9. Job packs include multiple bars, drivers, and hardware in single carton.
10. Field-installed by contractor.

### Emergency Battery Pack Options – Field Installable

Battery Model Number	Wattage	Runtime (Minutes)	Lumen Output* @ 120 Lumens/Watt	Other
ILB CP07 2H A	7W	120	840	FEMA Specification
ILB CP10 A	10W	90	1200	
ILBLP CP10 HE SD A	10W	90	1200	Title 20, Self Diagnostic
ILBLP CP15 HE SD A	15W	90	1800	Title 20, Self Diagnostic
ILB CP20 HE A	20W	90	2400	Title 20
ILB CP20 HE SD A	20W	90	2400	Title 20, Self Diagnostic

All the above are UL Listed products that are certified for field install external/remote to the fixture.

\*Minimum delivered lumen output to assist in product selection for increased fixture mounting height.

The CP10 delivered emergency illumination outperforms legacy 1400 lumen fluorescent emergency ballast.

Please contact us at [productsupportemergency@acuitybrands.com](mailto:productsupportemergency@acuitybrands.com) for any Emergency Battery related questions.





FEATURES & SPECIFICATIONS

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**LISTINGS** — UL/cUL Classified for damp location. Tested to LM80 standards. Made in North America for standard TAA compliance. BAA compliant product is available (consult factory)

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

**BUY AMERICAN** — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

**WARRANTY** — Five-year warranty coverage of luminaires includes fixture construction, LED light engine, and driver. Terms and conditions apply. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Extended warranties may be available for certain applications.

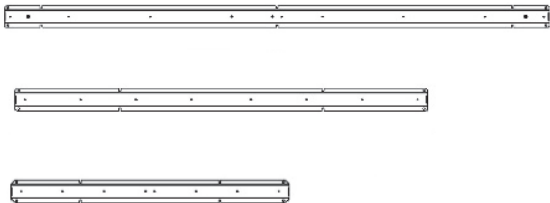
**NOTE:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Catalog Number
Notes
Type

LBK LightBar Kit LED Retrofit System



LBK



Specifications

Length: 46.25", 34.40", 22.63"

Width: 1.61"

Height: 0.9"



LBK Performance		1600LMHE	2000LMHE	3000LMHE	4000LMHE	6000LMHE	8000LMHE	12000LMHE
		10W	13W	20W	26W	39W	51W	77W
2 FT	2FT - 1 bar - 40K	1475 LM 9.9 W 149 LPW	1995 LM 13.3 W 150 LPW					
	2FT - 2 bars - 40K	1485 LM 9.9 W 150 LPW	2,005 LM 13.3 W 151 LPW	3,045 LM 20.0 W 152 LPW	3,908 LM 25.1 W 155 LPW			
	2FT - 3 bars - 40K		1,985 LM 13.2 W 151 LPW	3,009 LM 19.7 W 153 LPW	3,891 LM 24.7 W 158 LPW	5,703 LM 37.4 W 152 LPW		
	2FT - 4 bars - 40K					5663 LM 37.5 W 151 LPW	7,708 LM 50.5 W 153 LPW	
3 FT	3FT - 1 bar - 40K	1,463 LM 9.9 W 147 LPW	1990 LM 13.3 W 150 LPW	3000 LM 20.0 W 150 LPW	3970 LM 25.1 W 158 LPW			
	3FT - 2 bars - 40K		2000 LM 13.2 W 152 LPW	3,087 LM 19.7 W 157 LPW	4000 LM 25.1 W 159 LPW	5650 LM 37.4 W 151 LPW		
4 FT	4FT - 1 bar - 40K	1,564 LM 9.9 W 158 LPW	2,022 LM 13.2 W 153 LPW	3,057 LM 19.9W 154 LPW	3,938 LM 24.9 W 158 LPW	5775 LM 37.5 W 154 LPW		
	4FT - 2 bars - 40K		2,061 LM 13.1 W 158 LPW	3,149 LM 19.6 W 161 LPW	4,097 LM 24.5 W 167 LPW	6,007 LM 37.2 W 162 LPW	7,903 LM 50.3 W 157 LPW	
	4FT - 3 bars - 40K			3,151 LM 19.5 W 162 LPW	4,044 LM 24.3 W 166 LPW	6,025 LM 36.7 W 164 LPW	7925 LM 50.5 W 157 LPW	
	4FT - 4 bars - 40K				4050 LM 25.0 W 162 LPW	6050 LM 36.7 W 165 LPW	8,140 LM 49.4 W 165 LPW	11,979 LM 74.9 W 160 LPW

## LBK LED Lightbar Kit

### ORDERING INFORMATION

Example: LBK 4FT 2 3000LMHE 80CRI 40K MIN10 ZT MVOLT J12

Series	Fixture Dimension	# Bars	Lumens Output	CRI	Color Temperature
LBK LED Lightbar Kit	2FT 2'	1 1 bar	1600LMHE Nominal 1600 lumens high efficiency <sup>1,2</sup>	80CRI 80 CRI	35K 3500K 40K 4000K 50K 5000K
		2 2 bars	2000LMHE Nominal 2000 lumens high efficiency <sup>1,2,3</sup>		
		3 3 bars	3000LMHE Nominal 3000 lumens high efficiency <sup>2,3</sup>		
		4 4 bars	4000LMHE Nominal 4000 lumens high efficiency <sup>2,3</sup>		
	3FT 3'	1 1 bar	1600LMHE Nominal 1600 lumens high efficiency <sup>1</sup>		
		2 2 bars	2000LMHE Nominal 2000 lumens high efficiency <sup>1,2</sup>		
			3000LMHE Nominal 3000 lumens high efficiency		
			4000LMHE Nominal 4000 lumens high efficiency <sup>1,2</sup>		
	4FT 4'	1 1 bar	1600LMHE Nominal 1600 lumens high efficiency <sup>1</sup>		
		2 2 bars	2000LMHE Nominal 2000 lumens high efficiency <sup>1,2</sup>		
		3 3 bars	3000LMHE Nominal 3000 lumens high efficiency <sup>1,2,3</sup>		
		4 4 bars	4000LMHE Nominal 4000 lumens high efficiency <sup>1,2,3,4</sup>		
			6000LMHE Nominal 6000 lumens high efficiency <sup>1,2,3,4</sup>		
			8000LMHE Nominal 8000 lumens high efficiency <sup>2,3,4</sup>		
			12000LMHE Nominal 12000 lumens high efficiency <sup>4</sup>		

Minimum Dimming Level	Control Input	Voltage	Options
MIN10 Constant current, dimming to 10%	ZT Generic 0-10V Dimming <sup>5</sup>	MVOLT MVOLT, 120-277V	NAxx Customer-specific options <sup>7</sup>
MIN1 Constant current, dimming to 1%	EZT eldoLED 0-10V Dimming <sup>6</sup>		UFC DOD Unified Facility Criteria compliant driver <sup>7,8</sup>
			FAO Field adjustable output device
			J2 Job pack of 2 kits (1-bar & 2-bar kits only) <sup>9</sup>
			J6 Job pack of 6 kits (4-bar kits only) <sup>9</sup>
			J12 Job pack of 12 kits (2-bar kits only) <sup>9</sup>
			BAA Buy America(n) Act Compliant

<b>Accessories:</b> Order as separate catalog number.	
ILB CP10 HE B M20	IOTA 10 Watt Constant Power, High Efficiency LED Emergency Driver for CA Title 20 <sup>10</sup>
LBKXFMR	347V Autotransformer <sup>10</sup>

#### NOTES

- Available with # Bars qty 1.
- Available with # Bars qty 2.
- Available with # Bars qty 3.
- Available with # Bars qty 4.
- Only available with MIN10.
- Only available with MIN1.
- Consult factory for details on availability.
- Must be ordered with MIN10 ZT.
- Job packs include multiple bars, drivers, and hardware in single carton.
- Field-installed by contractor.

### Emergency Battery Pack Options – Field Installable

Battery Model Number	Wattage	Runtime (Minutes)	Lumen Output* @ 120 Lumens/Watt	Other
ILB CP07 2H A	7W	120	840	FEMA Specification
ILB CP10 A	10W	90	1200	
ILBLP CP10 HE SD A	10W	90	1200	Title 20, Self Diagnostic
ILBLP CP15 HE SD A	15W	90	1800	Title 20, Self Diagnostic
ILB CP20 HE A	20W	90	2400	Title 20
ILB CP20 HE SD A	20W	90	2400	Title 20, Self Diagnostic

All the above are UL Listed products that are certified for field install external/remote to the fixture.

\*Minimum delivered lumen output to assist in product selection for increased fixture mounting height.

The CP10 delivered emergency illumination outperforms legacy 1400 lumen fluorescent emergency ballast.

Please contact us at [productsupportemergency@acuitybrands.com](mailto:productsupportemergency@acuitybrands.com) for any Emergency Battery related questions.



LBK Configurable



### FEATURES & SPECIFICATIONS

**INTENDED USE** — Typical applications include corridors, lobbies, conference rooms and private offices.

**CONSTRUCTION** — Retrofit, remodel, and new construction mounting types. See table for compatible ceiling openings and thickness range.

Optional goof rings available for additional overlap trim coverage.

1/2"-1-1/2" ceiling thickness

25° ambient temperature

IC rated up to 1000lm

**OPTICS** — 55° cutoff

New construction frame accessories approved for 8 (4 in/4 out) No. 12 AWG conductors rated for 90°C through wiring.

1.0 S/MH standard (wallwash reflector available)

80CRI standard (90CRI optional)

**ELECTRICAL** — Adjustable lumen output with three module options. Fixed lumen options also available.

MVOLT 120/277V 50/60Hz driver (0-10V & 120V Phase Dimming to 10% min dimming level)

100LPW typical

FCC CFR Title 47 Part 15 Class A for 277V. FCC CFR Title 47 Part 15 Class B for 120V.

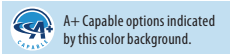
L80 at 60,000 hours

3 SDCM

**LISTINGS** — Certified to US and Canadian safety standards. Title 24 compliant (90CRI, up to 1000lm) Damp location standard (Wet location, covered ceiling optional). Some configurations are ENERGY STAR® certified, please visit [www.energystar.gov](http://www.energystar.gov) for specific products. TAA compliant. UFC (3-530-01) specification compliant for power factor and THD. GSA P100 6.2.4 compliant for power quality at full output; compliant up to 2000lm at fully dimmed output.

**WARRANTY** — 5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



Catalog Number
Notes
Type

# LBR8

8" OPEN



Retrofit | Remodel



New Construction



### Module ordering

**ORDERING INFORMATION**      Lead times will vary depending on options selected. Consult with your sales representative.      **Example:** LBR8 AL02 SWW1 AR LSS MWD MVOLT UGZ 90CRI

Series	Lumens <sup>‡</sup>	Color temperature <sup>‡</sup>	Reflector Color	Reflector Flange	Reflector Finish
LBR8      8" Retrofit	Adjustable Lumen Output	Switchable CCT	AR      Clear	(blank)      Self-flanged	LSS      Semi-specular
LBR8WW      8" Retrofit Wallwash	AL01    500/750/1000lm AL02    1000/1500/2000lm AL03    2000/2500/3000lm	SWW1    3000K-3500K-4000K-5000K	WR <sup>‡</sup> White painted BR <sup>‡</sup> Black painted	TRW <sup>‡</sup> White painted flange TRBL <sup>‡</sup> Black painted flange	
	Fixed Lumen Output	Fixed CCT			
	0SLM    500lm	30K    3000K			
	07LM    750lm	35K    3500K			
	10LM    1000lm	40K    4000K			
	15LM    1500lm	50K    5000K			
	20LM    2000lm				
	25LM    2500lm				
	30LM    3000lm				

Distribution	Voltage	Driver	Options
MWD      Medium wide (1.0 s/mh) WW <sup>‡</sup> Wallwash	MVOLT    120V - 277V 347V	UGZ      Universal dimming to 10% 0-10V; line voltage dimming (120V) DALI <sup>‡</sup> DALI dimming to 1% D10      Minimum dimming 10% driver for use with JOT D1      Minimum dimming 1% driver for use with JOT	90CRI    High CRI (90+) AT <sup>‡</sup> Airtight E10WCPR <sup>‡</sup> Batterypack (10W constant power) T20 Compliant remote test switch ELR <sup>‡</sup> Batterypack (10W constant power) Non-T20 Compliant remote test switch EC1 <sup>‡</sup> Extended Conduit (18") EC6 <sup>‡</sup> Extended Conduit (6ft) WL <sup>‡</sup> Wet Location (IP55) QDS <sup>‡</sup> Quick disconnect plugs CP <sup>‡</sup> Chicago Plenum JOT <sup>‡</sup> Wireless room control with "Just One Touch" pairing

nLight Options <sup>‡</sup>	
NPP16D	nLight® network power/relay pack with 0-10V dimming
NPP16DER	nLight® network power/relay pack with 0-10V dimming; ER controls fixtures on emergency circuit.
NLTAIR2	nLight® Air enabled
NLTAIRER2	nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit
NLTAIREM2	nLight® AIR Dimming Pack Wireless Controls. UL924 Emergency Operation, via power interrupt detection.

New Construction Frames: Order as separate catalog number. Shipped separately.	
LBR8PFW	8" New construction frame with JBOX, 18" conduit
LBR8PFWQDS	8" New construction frame with JBOX, 18" conduit, quick disconnects
LBR8PFWCP	8" Chicago Plenum New construction frame with JBOX, 18" conduit

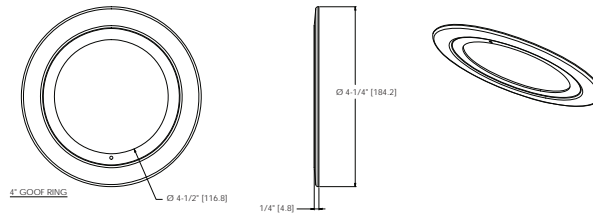
**NOTE:** ‡ indicates option value has ordering restrictions. Please reference the Option Value Ordering Restrictions chart on the next page.

## LBR8

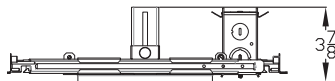
± Option Value Ordering Restrictions	
<b>Options</b>	<b>Restriction</b>
Lumens	Fixed CCT and lumens must be specified together (for example: 10LM 30K).
WR, BR	Not available with reflector finish.
TRW	For use with Clear (AR) reflector finish only. Not applicable with WR (white reflector).
TRBL	For use with Clear (AR) reflector finish only. Not applicable with BR (black reflector).
WW	Only available with WW Series (for example LBR4WW).
DALI	Not available with Fixed CCT and lumens.
D10, D1	Only available with JOT
AT	Standard for CP and IP55, not available with WW.
ELR, E10WCPR	Not available QDS, CP, 347V, NPP16D ER, NLTAIRER2, or NLTAIREM2.
EC1, EC6	Not Available with CP, QDS, ELR, or E10WCPR.
WL	IP55 rated; Not available with WW. All CP is wet locations, excluding WW (Damp listed)
QDS	Not available CP, ELR, E10WCPR, or 347V.
JOT	Not available with CP, NPP16D, NPP16D ER, NLTAIR2, NLTAIRER2, NLTAIREM2, UGZ, or DALI drivers. 4-1/2" minimum plenum depth required. Not recommended for use in metal ceilings.
NPP16D	Not available with CP, QDS, DALI, D1, OR D10 drivers. 120V OR 277V only. Not available with 347V. 5-1/2" minimum plenum depth required.
NPP16DER	Not available with CP, QDS, ELR, E10WCPR, DALI, D1, OR D10 drivers. 120V OR 277V only. Not available with 347V. Will require an emergency hot feed and normal hot feed. 5-1/2" minimum plenum depth required.
NLTAIR2	Not available with CP, QDS, DALI, D1, OR D10 drivers. Not recommended for metal ceiling installations. 5-1/2" minimum plenum depth required.
NLTAIRER2	Not available with CP, QDS, ELR, E10WCPR, DALI, D1, OR D10 drivers. Not recommended for metal ceiling installations. 5-1/2" minimum plenum depth required.
NLTAIREM2	Not available with CP, QDS, ELR, E10WCPR, DALI, D1, OR D10 drivers. Not recommended for metal ceiling installations. 5-1/2" minimum plenum depth required.
CP	Not available with, QDS, EC1, EC6, ELR, E10WCPR, 347V, JOT, NPP16D, NPP16D ER, NLTAIR2, NLTAIRER2, NLTAIREM2, D1, OR D10 drivers. Not available with square trim.
T24	IC rated, 90CRI, 500-1000 lumens, & round trim only.
Goof Rings	Not Available with CP.

Accessories: Order as separate catalog number. Shipped separately.	
LBRGR56	Goof ring 5-3/4" to 6-3/4" for LBR4
LBR468 FPAN U	Mounting plate 4"-8" unit pack
LBR468 FPAN J10	Mounting plate 4"-8" 10-pack

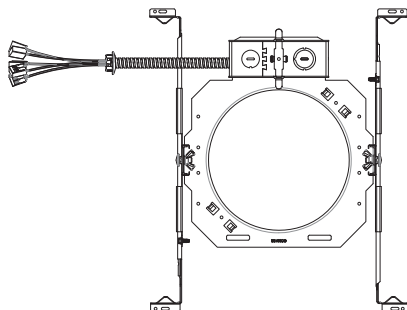
Goof rings must specify finish  
 Examples: LBRGR56 WR, LBRGR78 BR, LBRGR910 AR  
 WR = white, BR = black, AR = Clear



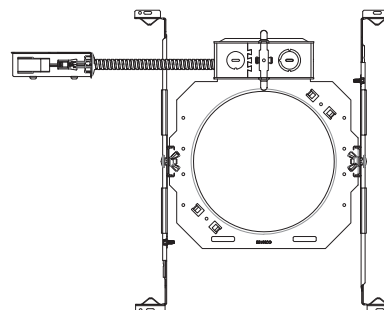
\* All dimensions are inches (millimeters) unless otherwise noted.



Aperture Size	Ceiling Cutout
8 In	8-3/4"



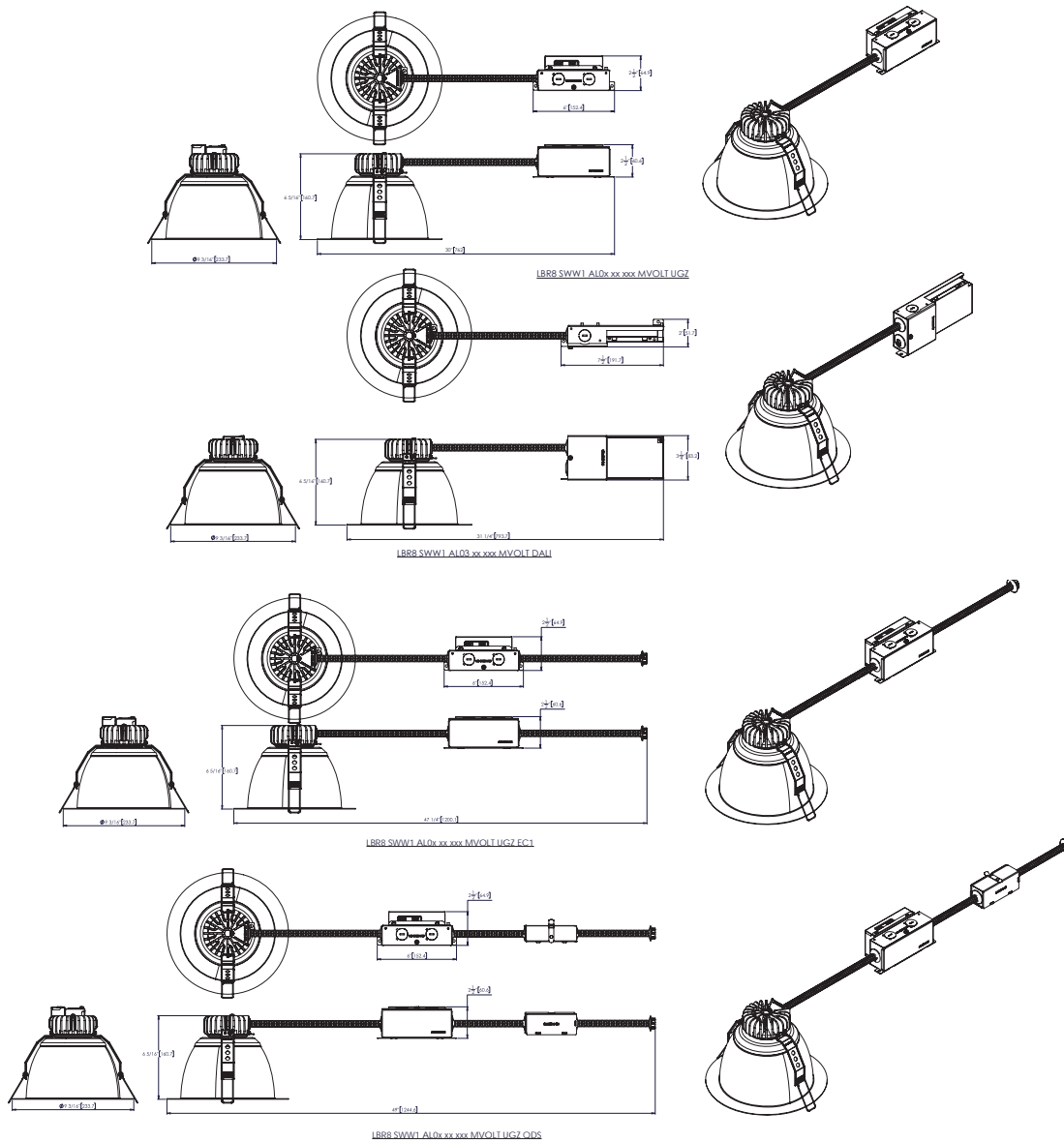
8" New Construction Frame, 18" Conduit



8" New Construction Frame, QDS

## LBR8

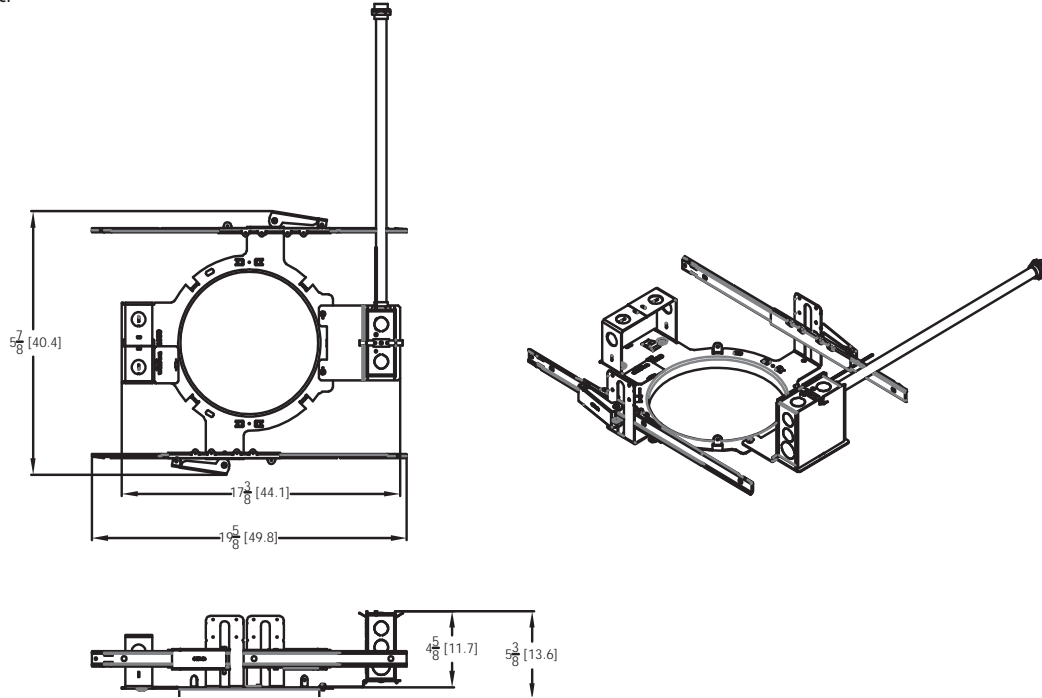
\* All dimensions are inches (millimeters) unless otherwise noted.



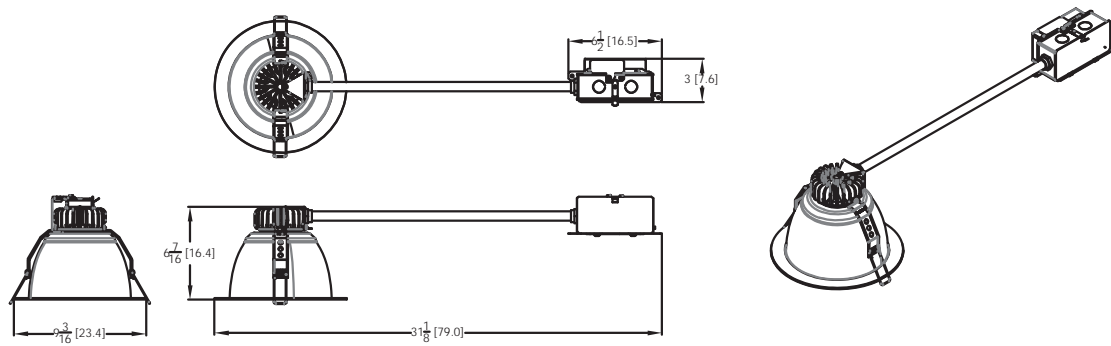
## LBR8

\* All dimensions are inches (millimeters) unless otherwise noted.

### LBR8PFWCP



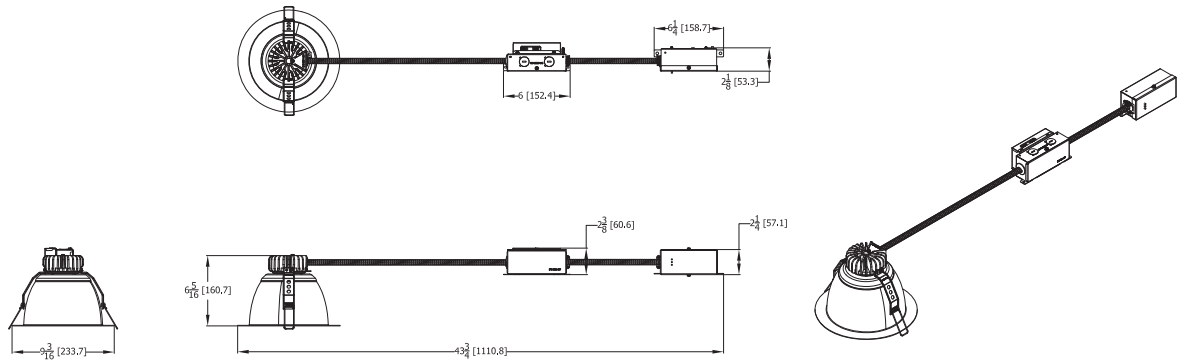
### LBR8 SWW1 ALOx MVOLT UGZ CP



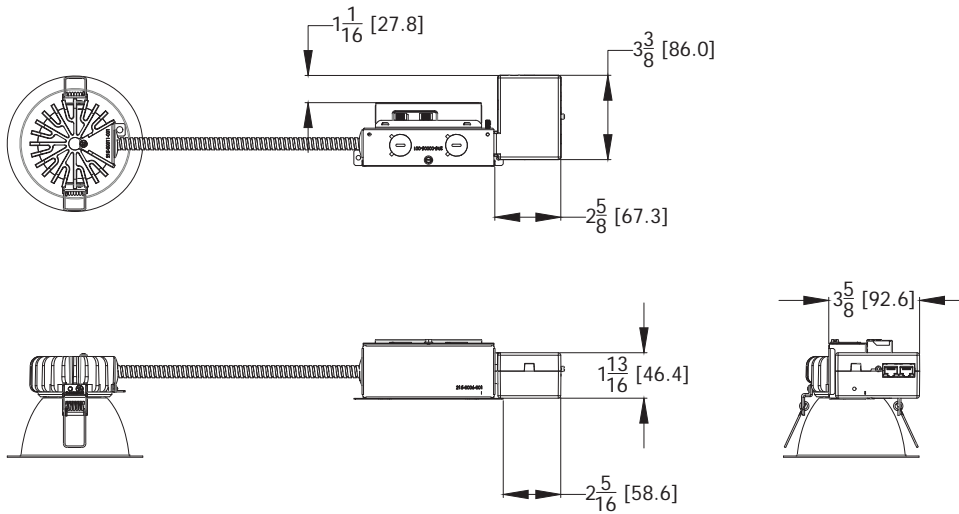
## LBR8

\* All dimensions are inches (millimeters) unless otherwise noted.

LBR8 AL0x SWW1 xx xxx 347 UGZ



LBRx nLIGHT

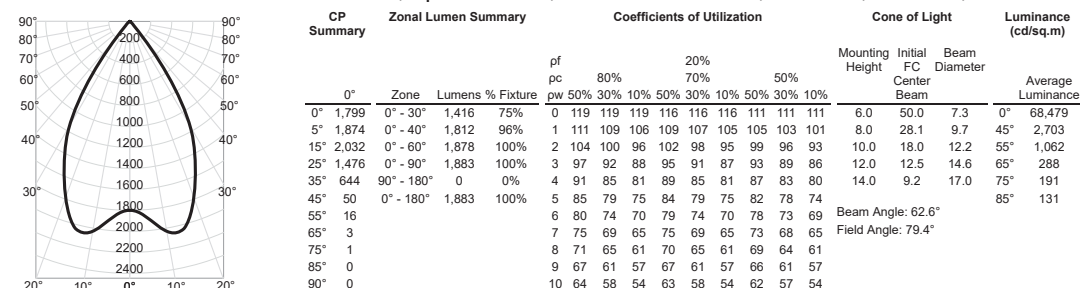


## LBR8

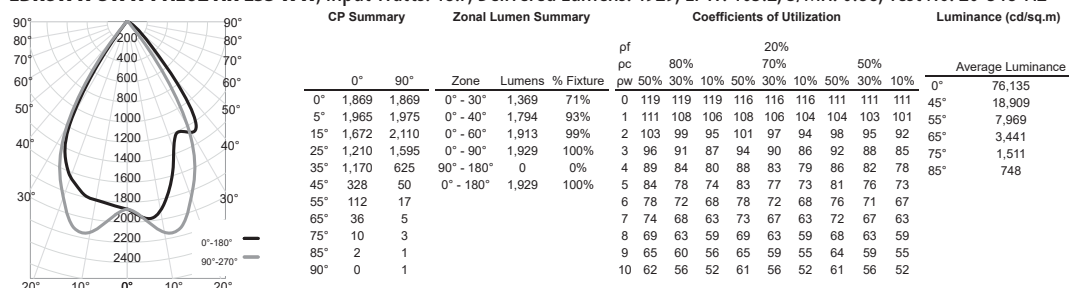
### PHOTOMETRY

Distribution Curve	Distribution Data	Output Data	Coefficient of Utilization	Illuminance Data at 30" Above Floor for a Single Luminaire
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**LBR8 SWW1 ALO2 AR LSS MWD MVOLT UGZ**, Input Watts: 18.1, Delivered Lumens: 1883, LPW: 104.0, S/MH: 1.05, Test No: 20-518-04



**LBR8WW SSW1 ALO2 AR LSS WW**, Input Watts: 18.7, Delivered Lumens: 1929, LPW: 103.2, S/MH: 0.88, Test No: 20-518-A2



### LBR ROUND LUMEN TABLES

LBR8		80CRI							
Lumen Output	Wattage	30K/80CRI		35K/80CRI		40K/80CRI		50K/80CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
ALO1 (500LM)	6	551	96	564	97	577	99	595	101
ALO1 (750LM)	9	872	98	893	100	914	102	942	104
ALO1 (1000LM)	13	1225	95	1253	96	1283	98	1323	101
ALO2 (1000LM)	13	1298	105	1328	106	1360	108	1402	111
ALO2 (1500LM)	19	1895	101	1939	103	1985	105	2047	107
ALO2 (2000LM)	25	2387	96	2442	98	2500	99	2578	102
ALO3 (2000LM)	25	2456	99	2513	101	2572	103	2652	105
ALO3 (2500LM)	32	2965	94	3034	96	3106	98	3202	100
ALO3 (3000LM)	38	3367	90	3445	91	3527	93	3636	95

LBR8WW		80CRI							
Lumen Output	Wattage	30K/80CRI		35K/80CRI		40K/80CRI		50K/80CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
ALO1 (500LM)	6	552	96	565	97	578	99	596	101
ALO1 (750LM)	9	874	98	894	100	915	102	943	104
ALO1 (1000LM)	13	1227	95	1255	97	1285	98	1325	101
ALO2 (1000LM)	13	1300	105	1330	106	1362	108	1404	111
ALO2 (1500LM)	19	1898	101	1942	103	1988	105	2050	107
ALO2 (2000LM)	25	2391	96	2446	98	2504	100	2582	102
ALO3 (2000LM)	25	2460	99	2517	101	2576	103	2656	105
ALO3 (2500LM)	32	2969	95	3038	96	3110	98	3207	100
ALO3 (3000LM)	38	3372	90	3451	91	3532	93	3642	95

LBR8		90CRI							
Lumen Output	Wattage	30K/90CRI		35K/90CRI		40K/90CRI		50K/90CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
ALO1 (500LM)	6	482	84	495	85	508	87	521	89
ALO1 (750LM)	9	762	86	783	87	804	89	824	91
ALO1 (1000LM)	13	1070	83	1099	85	1128	86	1157	88
ALO2 (1000LM)	13	1135	91	1165	93	1196	95	1227	97
ALO2 (1500LM)	19	1656	88	1701	90	1746	92	1791	94
ALO2 (2000LM)	25	2086	84	2143	86	2199	87	2256	89
ALO3 (2000LM)	25	2146	87	2205	89	2263	90	2321	92
ALO3 (2500LM)	32	2591	83	2661	84	2732	86	2802	87
ALO3 (3000LM)	38	2943	78	3023	80	3102	82	3182	83

LBR8WW		90CRI							
Lumen Output	Wattage	30K/90CRI		35K/90CRI		40K/90CRI		50K/90CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
ALO1 (500LM)	6	482	84	495	85	508	87	522	89
ALO1 (750LM)	9	764	86	784	88	805	89	826	91
ALO1 (1000LM)	13	1072	83	1101	85	1130	87	1159	88
ALO2 (1000LM)	13	1136	92	1167	93	1198	95	1229	97
ALO2 (1500LM)	19	1659	89	1704	90	1749	92	1794	94
ALO2 (2000LM)	25	2089	84	2146	86	2203	88	2259	89
ALO3 (2000LM)	25	2150	87	2208	89	2266	91	2325	92
ALO3 (2500LM)	32	2595	83	2666	84	2736	86	2806	88
ALO3 (3000LM)	38	2947	79	3027	80	3107	82	3187	83



## LBR8

LUMEN OUTPUT MULTIPLIERS - CCT				
3000K	3500K	4000K	5000K	
0.98	1.0	1.01	1.03	

LUMEN OUTPUT MULTIPLIERS - FINISH	
Specular (LS)	1.00
White (WR)	1.03
Black (BR)	0.60

### HOW TO ESTIMATE DELIVERED LUMENS IN EMERGENCY MODE

Use the formula below to estimate the delivered lumens in emergency mode

$$\text{Delivered Lumens} = 1.25 \times P \times \text{LPW}$$

P = Output power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

The LPW rating is also available at [Designlight Consortium](#).

PLENUM DEPTH TABLE				
Aperture Size/Output	Fixture Height*	IC	NON-IC	NON-IC MARKED SPACINGS
LBR8 500-1000 LM	5.81	X		
LBR8 1000-2000 LM	5.81		X	
LBR8 2000-3000 LM	5.81			24 x 24 x 9

\*Above unfinished 1/2" ceiling plane

CEILING COVERAGE TABLE								
Series		Aperture	Trim Flange OD	Min ceiling opening	Ceiling Thickness	Max ceiling opening	Max Ceiling Opening with Goof Ring	Overall Goof Ring OD
LBR8	ROUND	7-1/6"	9-3/16"	7-3/4"	1/2"	8-7/8"	9-1/4"	11-1/4"
LBR8					1-1/2"		9-5/8"	

## LBR8

### DIMMER COMPATIBILITY

Not compatible with DALI or DMX dimmers. For specific compatible dimmers see below.

LINE VOLTAGE DIMMING:					
Type	Forward Phase	S (500-1000lm)	M (1000-2000lm)	L (2000-3000lm)	Comment
MLV	Lutron Glyder GLV-600	YES	YES	YES	
INC	Leviton SureSlide 6633	YES	YES	YES	
MLV	Lutron Diva DVLV-600P	YES	YES	YES	
MLV	Lutron Skylark SLV-600P	YES	YES	YES	
INC	Lutron RadioRA 2 10ND	YES	YES	YES	
MLV	Leviton SureSlide 6613-PLW	YES	YES	YES	
INC	Lutron Diva DVCL-153P	YES	YES	YES	
MLV	Leviton IPM06	YES, 2x *	YES	YES	* min 2 fixtures
INC	Leviton IPI06	YES, 2x *	YES	YES	* min 2 fixtures
MLV	Synergy ISD 600LV	YES, 2x *	YES	YES	* min 2 fixtures
INC	Synergy ISD 600 I	YES, 2x *	YES	YES	* min 2 fixtures
INC	Control4 C4-FPD 120	YES	YES	YES	
Type	Reverse Phase Dimmer Bank	S (500-1000lm)	M (1000-2000lm)	L (2000-3000lm)	
ELV	Lutron Nova T NTELV-600	YES	YES	YES	
ELV	Lutron Diva DVELV 600P	YES	YES	YES	
ELV	Lutron Maestro MAELV 600	YES	YES	YES	
ELV	Leviton Vizia VPE06-1LX	YES	YES	YES	
ELV	Leviton Illumatech IPE04	YES	YES	YES	
ELV	Control4 C4-APD 120 REVERSE PHASE	YES	YES	YES	
Type	Miscellaneous Dimmers	S (500-1000lm)	M (1000-2000lm)	L (2000-3000lm)	
PHA	Lutron RadioRA2 RRD-6NA	YES	YES	YES	
PHA	Lutron Maestro PRO LED+ RRD-PRO	YES	YES	YES	
Type	Control Systems	S (500-1000lm)	M (1000-2000lm)	L (2000-3000lm)	
MLV	Lutron LP-RPM-4U	YES	YES	YES	
PHA	Lutron LP-RPM-4A	YES	YES	YES	
MLV	Lutron GRAPHIC EYE QSGRJ-3P	YES	YES	YES	
PHA	Lutron PA Power Module PHPM-PA-120	YES	YES	YES	
ELV	Lutron nLight nSP5PCD ELV	YES	YES	YES	

### DIMMER COMPATIBILITY

Not compatible with DALI or DMX dimmers. For specific compatible dimmers see below.

0-10V DIMMING:						
Manufacturer	System Type	Description	P/N	S (500-1000lm)	M (1000-2000lm)	L (2000-3000lm)
Lutron	Other	0-10V (sink or source) PowPak wireless dimming module	RMJ-ST-DV-B	YES	YES	YES
Wattstopper	Control System	Digital single relay room controller (0-10V)	LMRC-211	YES	YES	YES
Crestron	Control System	DIN Rail 0-10V fluorescent dimmer, 4 feeds, 4 channels (Green Light System)	DIN-4DIMFLV4	YES	YES	YES
Lutron	Other	Grafik Eye 0-10V adapter	GRX-TVI	YES	YES	YES
Leviton	Wall Box	Illumatech 0-10V	IP710-DLX	YES	YES	YES
Lutron	Control System	Mounted in the Homeworks QS panel - 0-10V dimmer (sink or source)	GRX-TVM2	YES	YES	YES
Lutron	Wall Box	Nova 0-10V wallbox dimmer (use with PP-120-H line voltage relay)	NTFTV	YES	YES	YES
Lutron	Wall Box	Nova 0-10V wallbox dimmer (use with PP-120-H line voltage relay)	NTSTV-DV	YES	YES	YES
Lutron	Wall Box	Nova T	NFTV	YES	YES	YES
Leviton	Wall Box	Renior II 0-10V	AWSMG-7DW	YES	YES	YES
ACUITY	Wall Box	sensorswitch, wall switch sensor, occupancy controlled dimming	WSX D WH	YES	YES	YES
ACUITY	Control System	nLight	nPP16D	YES	YES	YES
ACUITY	Control System	nLight	nPS 80 EZ	YES	YES	YES
ACUITY	Control System	nLight Air	rPP20 D	YES	YES	YES

Project Name:	Type:
Part Number:	Date:



## REFINE PAR FAMILY

### FEATURES

- Suitable to replace 50W, 75W, 120W halogen lamps
- Powered by TRUE CHROMA: delivers best in class color accuracy and consistency
- Proprietary designed optic maximizes output, efficacy, color fidelity, and visual comfort
- High CRI and R values (R9 85, R13 95) deliver richer reds and healthier skin tones
- Smooth dimming with existing dimmers\*
- Compact size 1:1 halogen form factor
- Spot, Narrow, Flood beam angles
- Suitable for damp locations and totally enclosed fixtures
- Fixture operating temperature: -4°F to 95°F (-20°C to 35°C)
- Lamp ambient temperature: -4°F to 113°F (-20°C to 45°C)
- Rated Lifetime (L70): 50,000hrs
- 5 year limited warranty\*\*














011921

### SPECIFICATIONS

Product	Model	Equiv.	Wattage (W)	CCT	Lumens	Efficacy (LPW)	Input Voltage	Beam Angle	CBP (cd)	CRI	Dim.*	Power Factor	Base	Fixture Rating	TRUE CHROMA	ES / JA8 / T20
34890	6.5PAR20DIM/927SP15	50W	6.5	2700K	520	80	120V	15°	5,000	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34891	6.5PAR20DIM/927NF25	50W	6.5	2700K	560	86	120V	25°	1,800	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34892	6.5PAR20DIM/927FL40	50W	6.5	2700K	560	86	120V	40°	1,100	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34893	6.5PAR20DIM/930SP15	50W	6.5	3000K	550	85	120V	15°	5,300	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34894	6.5PAR20DIM/930NF25	50W	6.5	3000K	580	89	120V	25°	1,900	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34895	6.5PAR20DIM/930FL40	50W	6.5	3000K	580	89	120V	40°	1,200	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34896	6.5PAR20DIM/940FL40	50W	6.5	4000K	600	92	120V	40°	1,300	95	Yes	0.9	E26	Enclosed	NO	✓/✓/✓
34897	6.5PAR20DIM/930FL40/B	50W	6.5	3000K	580	89	120V	40°	1,200	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34898	11PAR30DIM/927SP15	75W	11	2700K	950	86	120V	15°	10,000	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34899	11PAR30DIM/927NF25	75W	11	2700K	950	86	120V	25°	4,500	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34900	11PAR30DIM/927FL40	75W	11	2700K	950	86	120V	40°	1,700	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34901	11PAR30DIM/930SP15	75W	11	3000K	990	90	120V	15°	10,600	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34902	11PAR30DIM/930NF25	75W	11	3000K	990	90	120V	25°	4,700	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34903	11PAR30DIM/930FL40	75W	11	3000K	990	90	120V	40°	1,750	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34904	11PAR30DIM/940FL40	75W	11	4000K	1,030	94	120V	40°	1,850	95	Yes	0.9	E26	Enclosed	NO	✓/✓/✓
34905	11PAR30DIM/930FL40/B	75W	11	3000K	990	90	120V	40°	1,750	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34906	11PAR30SNDIM/927SP15	75W	11	2700K	950	86	120V	15°	10,000	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34907	11PAR30SNDIM/927NF25	75W	11	2700K	950	86	120V	25°	4,500	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34908	11PAR30SNDIM/927FL40	75W	11	2700K	950	86	120V	40°	1,700	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34909	11PAR30SNDIM/930SP15	75W	11	3000K	990	90	120V	15°	10,600	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34910	11PAR30SNDIM/930NF25	75W	11	3000K	990	90	120V	25°	4,700	95	Yes	0.9	E26	Enclosed		✓/✓/✓
35939	11PAR30SNDIM/930NF25/B	75W	11	3000K	990	90	120V	25°	4,700	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34911	11PAR30SNDIM/930FL40	75W	11	3000K	990	90	120V	40°	1,750	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34912	11PAR30SNDIM/940FL40	75W	11	4000K	1,030	94	120V	40°	1,850	95	Yes	0.9	E26	Enclosed	NO	✓/✓/✓
34913	11PAR30SNDIM/930FL40/B	75W	11	3000K	990	90	120V	40°	1,750	95	Yes	0.9	E26	Enclosed		✓/✓/✓



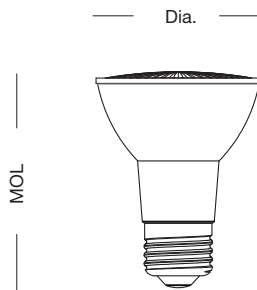
## REFINE PAR FAMILY

SPECIFICATIONS																
Product	Model	Equiv.	Wattage (W)	CCT	Lumens	Efficacy (LPW)	Input Voltage	Beam Angle	CBCP (cd)	CRI	Dim.*	Power Factor	Base	Fixture Rating	TRUE CHROMA	ES / JA8 / T20
34916	15.5PAR38DIM/927SP15	120W	15.5	2700K	1,320	85	120V	15°	14,000	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34917	15.5PAR38DIM/927NF25	120W	15.5	2700K	1,320	85	120V	25°	6,750	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34918	15.5PAR38DIM/927FL40	120W	15.5	2700K	1,320	85	120V	40°	2,800	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34919	15.5PAR38DIM/930SP15	120W	15.5	3000K	1,370	88	120V	15°	14,700	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34920	15.5PAR38DIM/930NF25	120W	15.5	3000K	1,370	88	120V	25°	7,000	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34921	15.5PAR38DIM/930FL40	120W	15.5	3000K	1,370	88	120V	40°	2,900	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34922	15.5PAR38DIM/940FL40	120W	15.5	4000K	1,420	92	120V	40°	3,000	95	Yes	0.9	E26	Enclosed	NO	✓/✓/✓
34923	15.5PAR38DIM/930NF25/B	120W	15.5	3000K	1,370	88	120V	25°	7,000	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34924	15.5PAR38DIM/930FL40/B	120W	15.5	3000K	1,370	88	120V	40°	2,900	95	Yes	0.9	E26	Enclosed		✓/✓/✓
34925	15.5PAR38DIM/930FL40/GU24	120W	15.5	3000K	1,370	88	120V	40°	2,900	95	Yes	0.9	GU24	Enclosed		✓/✓/✓
34914	11PAR30/930FL40/277V	75W	11	3000K	990	90	120-277V	40°	1,750	95	No	0.9	E26	Enclosed		✓/NA./✓
34915	11PAR30/940FL40/277V	75W	11	4000K	1,030	94	120-277V	40°	1,850	95	No	0.9	E26	Enclosed	NO	✓/NA./✓
34926	15.5PAR38/930FL40/277V	120W	15.5	3000K	1,370	88	120-277V	40°	2,900	95	No	0.9	E26	Enclosed		✓/NA./✓
34927	15.5PAR38/940FL40/277V	120W	15.5	4000K	1,420	92	120-277V	40°	3,000	95	No	0.9	E26	Enclosed	NO	✓/NA./✓

\*This lamp might not be compatible with all dimmers. Please visit [www.greencreative.com](http://www.greencreative.com) for compatibility information.

\*\*Please visit [www.greencreative.com](http://www.greencreative.com) for Limited Warranty terms.

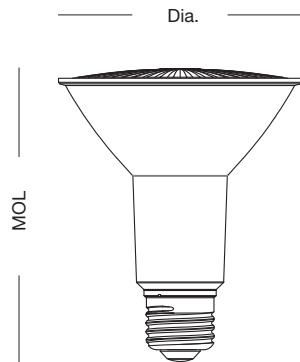
## DIMENSIONS & WEIGHT



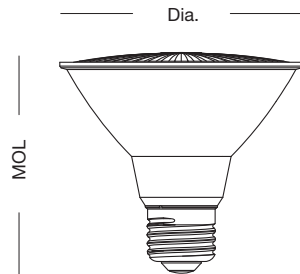
Model	Base	MOL	Dia.	Weight
6.5PAR20DIM/927SP15	E26	3-1/4"	2-1/2"	0.18lb
6.5PAR20DIM/927NF25	E26	3-1/4"	2-1/2"	0.18lb
6.5PAR20DIM/927FL40	E26	3-1/4"	2-1/2"	0.18lb
6.5PAR20DIM/930SP15	E26	3-1/4"	2-1/2"	0.18lb
6.5PAR20DIM/930NF25	E26	3-1/4"	2-1/2"	0.18lb
6.5PAR20DIM/930FL40	E26	3-1/4"	2-1/2"	0.18lb
6.5PAR20DIM/940FL40	E26	3-1/4"	2-1/2"	0.18lb
6.5PAR20DIM/930FL40/B	E26	3-1/4"	2-1/2"	0.18lb

# REFINE PAR FAMILY

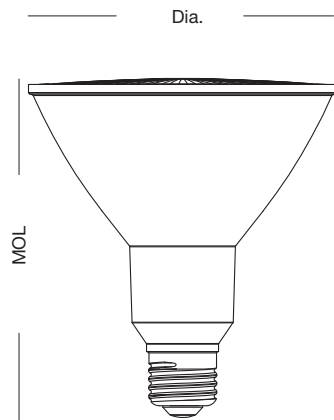
## DIMENSIONS & WEIGHT



Model	Base	MOL	Dia.	Weight
11PAR30DIM/927SP15	E26	4-7/16"	3-11/16"	0.31lb
11PAR30DIM/927NF25	E26	4-7/16"	3-11/16"	0.31lb
11PAR30DIM/927FL40	E26	4-7/16"	3-11/16"	0.31lb
11PAR30DIM/930SP15	E26	4-7/16"	3-11/16"	0.31lb
11PAR30DIM/930NF25	E26	4-7/16"	3-11/16"	0.31lb
11PAR30DIM/930FL40	E26	4-7/16"	3-11/16"	0.31lb
11PAR30DIM/940FL40	E26	4-7/16"	3-11/16"	0.31lb
11PAR30DIM/930FL40/B	E26	4-7/16"	3-11/16"	0.31lb
11PAR30/930FL40/277V	E26	4-7/16"	3-11/16"	0.33lb
11PAR30/940FL40/277V	E26	4-7/16"	3-11/16"	0.33lb



Model	Base	MOL	Dia.	Weight
11PAR30SNDIM/927SP15	E26	3-1/4"	3-11/16"	0.3lb
11PAR30SNDIM/927NF25	E26	3-1/4"	3-11/16"	0.3lb
11PAR30SNDIM/927FL40	E26	3-1/4"	3-11/16"	0.3lb
11PAR30SNDIM/930SP15	E26	3-1/4"	3-11/16"	0.3lb
11PAR30SNDIM/930NF25	E26	3-1/4"	3-11/16"	0.3lb
11PAR30SNDIM/930NF25/B	E26	3-1/4"	3-11/16"	0.3lb
11PAR30SNDIM/930FL40	E26	3-1/4"	3-11/16"	0.3lb
11PAR30SNDIM/940FL40	E26	3-1/4"	3-11/16"	0.3lb
11PAR30SNDIM/930FL40/B	E26	3-1/4"	3-11/16"	0.3lb



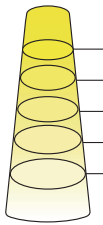
Model	Base	MOL	Dia.	Weight
15.5PAR38DIM/927SP15	E26	5-1/8"	4-5/8"	0.52lb
15.5PAR38DIM/927NF25	E26	5-1/8"	4-5/8"	0.52lb
15.5PAR38DIM/927FL40	E26	5-1/8"	4-5/8"	0.52lb
15.5PAR38DIM/930SP15	E26	5-1/8"	4-5/8"	0.52lb
15.5PAR38DIM/930NF25	E26	5-1/8"	4-5/8"	0.52lb
15.5PAR38DIM/930FL40	E26	5-1/8"	4-5/8"	0.52lb
15.5PAR38DIM/940FL40	E26	5-1/8"	4-5/8"	0.52lb
15.5PAR38DIM/930NF25/B	E26	5-1/8"	4-5/8"	0.52lb
15.5PAR38DIM/930FL40/B	E26	5-1/8"	4-5/8"	0.52lb
15.5PAR38DIM/930FL40/GU24	GU24	5-1/8"	4-5/8"	0.54lb
15.5PAR38/930FL40/277V	E26	5-1/8"	4-5/8"	0.52lb
15.5PAR38/940FL40/277V	E26	5-1/8"	4-5/8"	0.52lb



## REFINE PAR FAMILY

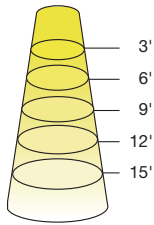
### ILLUMINANCE & CANDELA DISTRIBUTION

6.5PAR20DIM/930SP15



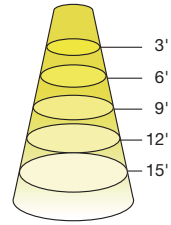
Diameter	Footcandles
0.8	589
1.6	147
2.4	65
3.2	37
3.9	24

6.5PAR20DIM/930NF25

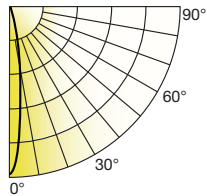


Diameter	Footcandles
1.3	211
2.7	53
4.0	23
5.3	13
6.7	8

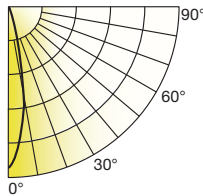
6.5PAR20DIM/930FL40



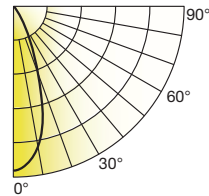
Diameter	Footcandles
2.2	133
4.4	33
6.6	15
8.7	8
10.9	5



Degree	Candela
0	5300
5	3488
15	564
25	170
35	74
45	40

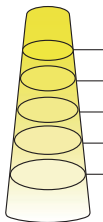


Degree	Candela
0	1900
5	1589
15	638
25	219
35	94
45	51



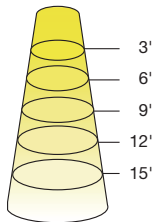
Degree	Candela
0	1200
5	1100
15	725
25	365
35	174
45	76

11PAR30DIM/930SP15



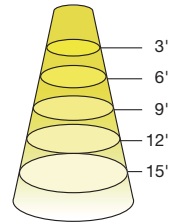
Diameter	Footcandles
0.8	1,178
1.6	294
2.4	131
3.2	74
3.9	47

11PAR30DIM/930NF25

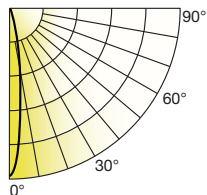


Diameter	Footcandles
1.3	522
2.7	131
4.0	58
5.3	33
6.7	21

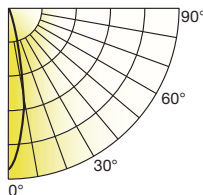
11PAR30DIM/930FL40



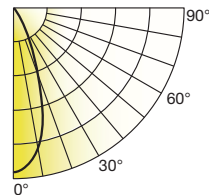
Diameter	Footcandles
2.2	194
4.4	49
6.6	22
8.7	12
10.9	8



Degree	Candela
0	10,600
5	7,008
15	958
25	174
35	102
45	68



Degree	Candela
0	4,700
5	3,841
15	1,157
25	213
35	81
45	56



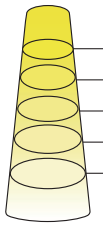
Degree	Candela
0	1,750
5	1,636
15	991
25	592
35	217
45	64



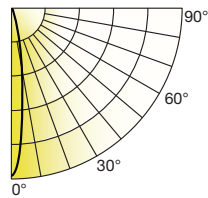
# REFINE PAR FAMILY

## ILLUMINANCE & CANDELA DISTRIBUTION

11PAR30SNDIM/930SP15

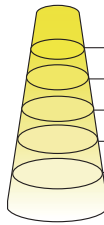


Diameter	Footcandles
0.8	1,178
1.6	294
2.4	131
3.2	74
3.9	47

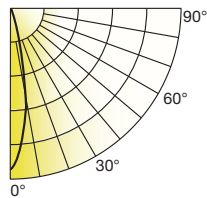


Degree	Candela
0	10,600
5	7,008
15	958
25	174
35	102
45	68

11PAR30SNDIM/930NF25



Diameter	Footcandles
1.3	522
2.7	131
4.0	58
5.3	33
6.7	21

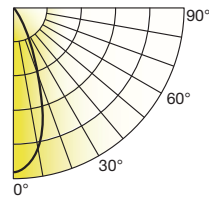


Degree	Candela
0	4,700
5	3,841
15	1,157
25	213
35	81
45	56

11PAR30SNDIM/930FL40

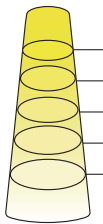


Diameter	Footcandles
2.2	194
4.4	49
6.6	22
8.7	12
10.9	8

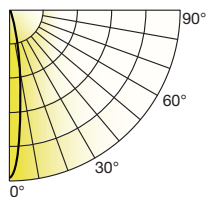


Degree	Candela
0	1,750
5	1,636
15	991
25	592
35	217
45	64

15.5PAR38DIM/930SP15

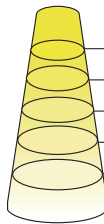


Diameter	Footcandles
0.8	1,633
1.6	408
2.4	181
3.2	102
3.9	65

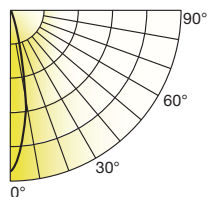


Degree	Candela
0	14,700
5	9,095
15	1,435
25	256
35	93
45	58

15.5PAR38DIM/930NF25



Diameter	Footcandles
1.3	778
2.7	194
4.0	86
5.3	49
6.7	31

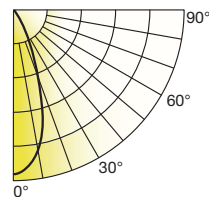


Degree	Candela
0	7,000
5	6,095
15	1,658
25	408
35	137
45	64

15.5PAR38DIM/930FL40



Diameter	Footcandles
2.2	322
4.4	81
6.6	36
8.7	20
10.9	13

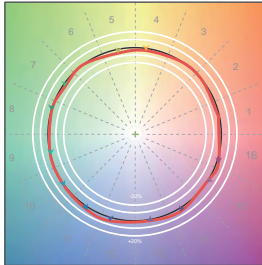
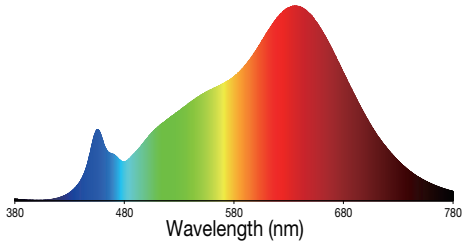
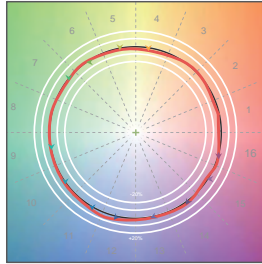
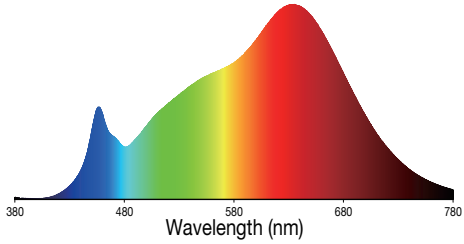
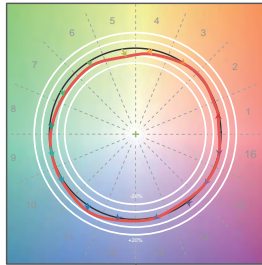
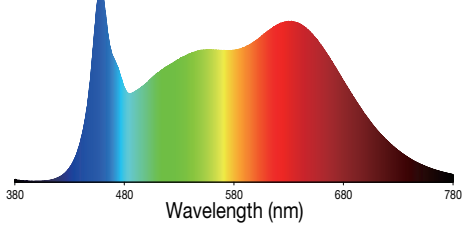


Degree	Candela
0	2,900
5	2,845
15	1,813
25	929
35	300
45	78

For other CCT use the following multiplier: 2700K .98, 4000K 1.02

## REFINE PAR FAMILY

### COLOR ACCURACY & SPECTRAL POWER DISTRIBUTION

CCT	COLOR ACCURACY	SPECTRAL POWER DISTRIBUTION
2700K	 <p>Rr: 95, Rg: 100</p>	 <p>Wavelength (nm)</p>
3000K	 <p>Rr: 94, Rg: 99</p>	 <p>Wavelength (nm)</p>
4000K	 <p>Rr: 90, Rg: 97</p>	 <p>Wavelength (nm)</p>

Rr: TM-30 metric measuring color fidelity (whether colors are similar to those under natural light). Rr is a more accurate version of the CRI Ra. Rr is 100 for natural light.  
 Rg: TM-30 metric measuring color gamut (whether colors are more saturated than under natural light). Rg is 100 for natural light.



Project Name:	Type:
Part Number:	Date:



## COMPACT HID REPLACEMENT BULB

### FEATURES

- Integral driver suitable for 120-277V
- Integral thermal sensor reduces power to the lamp in the event ambient temperature exceeds specified limitations
- E26 versions are smooth dimming with existing installations\*
- EX39 versions are step-dimming using SelectDrive technology
- A21 replaces up to 125W Inc.
- A23 replaces up to 200W Inc.
- PS30 replaces up to 100-175W HID, E26 version replaces up to 300W Inc.
- Suitable for damp locations and totally enclosed fixtures\*\*
- Lamp ambient temperature: -4°F to 140°F (-20°C to 60°C)
- Fixture operating temperature: -4°F to 113°F (-20°C to 45°C)
- Rated lifetime (L70): 50,000hrs
- 5 year limited warranty\*\*\*
- Supplied with safety cable to provide secondary support for A23 and PS30
- 4kV integral surge protector
- For installation in Post Top, Area light, or other fixtures exposed to high surge conditions, the use of our 10KV surge protector 97718-10SURGE/277V is recommended.

ETL CLASSIFIED



128110

### FOCUS FEATURE

EX39 version has integrated side switch for step-dimming



H  
M  
L

#### 3 Level power output

Power select switch allows power to be tailored to application requirements and can be adjusted from high to low.



	CCT	Wattage	Lumen	LPW
34HID/8xx/277V/EX39/SD	3000K	40%-13.6W	1,800	132
		60%-20.4W	2,700	132
		100%-34W	4,500	132
	4000K	40%-13.6W	2,000	147
		60%-20.4W	3,000	147
		100%-34W	5,000	147
	5000K	40%-13.6W	2,000	147
		60%-20.4W	3,000	147
		100%-34W	5,000	147

	CCT	Wattage	Lumen	LPW
24HID/8xx/277V/EX39/SD	3000K	40%-9W	1,250	139
		60%-14W	1,850	132
		100%-24W	3,100	129
	3500K	40%-9W	1,250	139
		60%-14W	1,850	132
		100%-24W	3,100	129
	4000K	40%-9W	1,300	144
		60%-14W	1,900	136
		100%-24W	3,200	133
	5000K	40%-9W	1,300	144
		60%-14W	1,900	136
		100%-24W	3,200	133

Where xxx means 824-965 which indicates CRI and color temperature

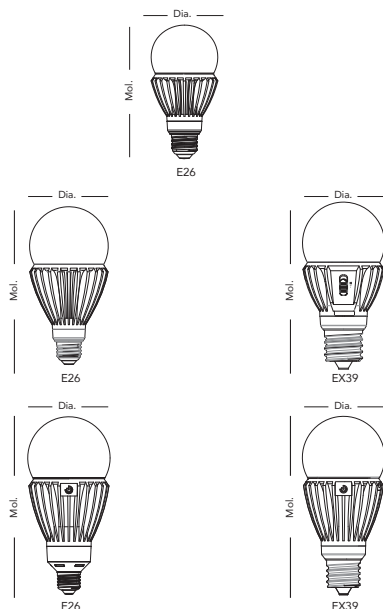
# COMPACT HID REPLACEMENT BULB

SPECIFICATIONS														
Product	Model	Equiv.	Input Voltage	Wattage	Lumens	CCT	CRI	Efficacy (LPW)	Beam Angle	Dim.*	Power Factor	THD	Fixture Rating	DLC / ES
36165	17A21/830/277V/DIM	125W Inc.	120-277V	17	2,000	3000K	82	118	230°	Yes	0.9	<20%	Enclosed	N.A. / √
36166	17A21/835/277V/DIM	125W Inc.	120-277V	17	2,000	3500K	82	118	230°	Yes	0.9	<20%	Enclosed	N.A. / √
36167	17A21/840/277V/DIM	125W Inc.	120-277V	17	2,100	4000K	82	124	230°	Yes	0.9	<20%	Enclosed	N.A. / √
36168	17A21/850/277V/DIM	125W Inc.	120-277V	17	2,100	5000K	82	124	230°	Yes	0.9	<20%	Enclosed	N.A. / √
36169	24HID/830/277V/E26/DIM	200W Inc.	120-277V	24	3,100	3000K	82	129	230°	Yes	0.9	<20%	Enclosed	N.A. / √
36214	24HID/835/277V/E26/DIM	200W Inc.	120-277V	24	3,100	3500K	82	129	230°	Yes	0.9	<20%	Enclosed	N.A. / √
36170	24HID/840/277V/E26/DIM	200W Inc.	120-277V	24	3,200	4000K	82	133	230°	Yes	0.9	<20%	Enclosed	N.A. / √
36171	24HID/850/277V/E26/DIM	200W Inc.	120-277V	24	3,200	5000K	82	133	230°	Yes	0.9	<20%	Enclosed	N.A. / √
36158	24HID/830/277V/EX39/SD	70-100W HID	120-277V	24	3,100	3000K	82	139	230°	No	0.9	<20%	Enclosed	√ / N.A.
36159	24HID/835/277V/EX39/SD	70-100W HID	120-277V	24	3,100	3500K	82	139	230°	No	0.9	<20%	Enclosed	√ / N.A.
36160	24HID/840/277V/EX39/SD	70-100W HID	120-277V	24	3,200	4000K	82	144	230°	No	0.9	<20%	Enclosed	√ / N.A.
36161	24HID/850/277V/EX39/SD	70-100W HID	120-277V	24	3,200	5000K	82	144	230°	No	0.9	<20%	Enclosed	√ / N.A.
36173	34HID/840/277V/E26/DIM	300W Inc.	120-277V	34	5,000	4000K	82	147	230°	Yes	0.9	<20%	Enclosed	N.A. / √
36174	34HID/850/277V/E26/DIM	300W Inc.	120-277V	34	5,000	5000K	82	147	230°	Yes	0.9	<20%	Enclosed	N.A. / √
36163	34HID/840/277V/EX39/SD	100-175W HID	120-277V	34	5,000	4000K	82	147	230°	No	0.9	<20%	Enclosed	√ / N.A.
36164	34HID/850/277V/EX39/SD	100-175W HID	120-277V	34	5,000	5000K	82	147	230°	No	0.9	<20%	Enclosed	√ / N.A.

\*This lamp is available for dimming with 120V line voltage only and might not be compatible with all dimmers. Please visit [www.greencreative.com](http://www.greencreative.com) for compatibility information.

\*\*\*Please visit [www.greencreative.com](http://www.greencreative.com) for Limited Warranty terms.

## DIMENSION & WEIGHT



Model	Base	Mol.	Dia.	Weight
17A21/xxx/277V/DIM	E26	5-1/4"	2-5/8"	2-5/8"

Model	Base	Mol.	Dia.	Weight
24HID/xxx/277V/E26/DIM	E26	6-5/8"	3-5/16"	0.82 lb
24HID/xxx/277V/EX39/SD	EX39	6-11/16"	3-5/16"	0.87 lb

Model	Base	Mol.	Dia.	Weight
34HID/xxx/277V/E26/DIM	E26	8-1/8"	3-3/4"	1.42 lb
34HID/xxx/277V/EX39/SD	EX39	8-1/8"	3-3/4"	1.49 lb


Where xxx means 824-965 which indicates CRI and color temperature


# COMPACT HID REPLACEMENT BULB



ORDERING INFORMATION						
Model Number	Master Carton			Shipping Carton		
	Case Qty	Case Dimensions (LxWxH)	Case Weight	Case Qty	Case Dimensions (LxWxH)	Case Weight
17A21/xxx/277V/DIM	6PCS	8-15/16"x 6-1/4" x 6-1/2"	3.5 lb	24PCS	12-7/8" x 9-5/16" x 13-3/4"	15 lb
24HID/xxx/277V/E26/DIM	6PCS	11-1/4" x 7-9/16" x 7-13/16"	6.4 lb	24PCS	15-1/2" x 11-9/16" x 8-7/16"	13.4 lb
24HID/xxx/277V/EX39/SD	6PCS	11-1/8" x 7-1/2" x 7-7/8"	7.5lb	24PCS	15-1/2" x 11-3/4" x 8-7/16"	15.2lb
34HID/xxx/277V/E26/DIM	N.A.	N.A.	N.A.	12PCS	16-9/16"x 12-3/8"x 9-9/16"	21.2 lb
34HID/xxx/277V/EX39/SD	N.A.	N.A.	N.A.	12PCS	16-9/16" x 12-3/8"x 9-9/16"	22.1 lb

Where xxx means 824-965 which indicates CRI and color temperature

## \*\*MINIMUM COMPARTMENT DIMENSIONS ( FOR ENCLOSED FIXTURES )


	Model Number		24HID/xxx/277V/EX39/SD	34HID/xxx/277V/EX39/SD
	Lamp Compartment Dimensions	Diameter Height	6"	8"
			8-1/2"	11"
	Maximum Lamps in Luminaire		1	1

<div>Post top installation</div> 	Model Number		24HID/xxx/277V/EX39/SD	34HID/xxx/277V/EX39/SD
	Lamp Compartment Dimensions	Diameter Height	3-9/16"	8"
			7-7/8"	11"
	Maximum Lamps in Luminaire		1	1

		Model Number	17A21/xxx/277V/DIM	24HID/xxx/277V/E26/DIM	34HID/xxx/277V/E26/DIM
Low bay installation		Lamp Compartment Dimensions	Diameter	6"	8"
	Height		8-1/2"	11"	
Post top installation			Diameter	3-9/16"	8"
			Height	7-7/8"	11"
Maximum Lamps in Luminaire			1	1	1


\*\*Installing lamp in a fixture that does not have the minimum compartment dimensions will void the warranty and could cause product failures.

## SUPPLIED ACCESSORY

Description	Picture	Dimensions
Safety Cable		22-13/16"



## COMPACT HID REPLACEMENT BULB

OPTIONAL ACCESSORY ORDERING INFORMATION				
Product	Model	Description	Picture	Dimensions
97718	10SURGE/277V	10 kV Surge Protector (For use in outdoor and other applications subject to high surge conditions)		
16325	E26 EXTENDER	E26 Lamp Extender Adds 1-5/16" to Lamp Height		
35050	E39 EXTENDER	EX39 Lamp Extender Adds 1-11/16" to Lamp Height		

CERTIFICATION INFORMATION				
Product	Model	DLC ID#	ES ID#	
36158	24HID/830/277V/EX39/SD	PLEQ5F7K	N.A.	
36159	24HID/835/277V/EX39/SD	PW8V6BP	N.A.	
36160	24HID/840/277V/EX39/SD	PRDUFT1V	N.A.	
36161	24HID/850/277V/EX39/SD	PLEQ5F7K	N.A.	
36162	34HID/830/277V/EX39/SD	PSE1QG12	N.A.	
36163	34HID/840/277V/EX39/SD	P7TYZ0PO	N.A.	
36164	34HID/850/277V/EX39/SD	PYW8K0EW	N.A.	
36165	17A21/830/277V/DIM	N.A.	2390212	
36166	17A21/835/277V/DIM	N.A.	2390213	
36167	17A21/840/277V/DIM	N.A.	2390214	
36168	17A21/850/277V/DIM	N.A.	2390215	
36169	24HID/830/277V/E26/DIM	N.A.	2390216	
36214	24HID/835/277V/E26/DIM	N.A.	2390217	
36170	24HID/840/277V/E26/DIM	N.A.	2390218	
36171	24HID/850/277V/E26/DIM	N.A.	2390219	
36173	34HID/840/277V/E26/DIM	N.A.	2390221	
36174	34HID/850/277V/E26/DIM	N.A.	2390222	

Note: All rights reserved. All sizes and specifications are subject to change at any time without notice.

Project Name:	Type:
Part Number:	Date:



## BYPASS AND HYBRID BYPASS PLS

### FEATURES

- Built-in universal driver – Bypass installation operates directly on 120 – 277V line voltage
- Hybrid Bypass versions can also operate directly on most magnetic ballasts\*
- Bypass versions replace 7W-13W CFL lamps with 2G7 & 2GX7 bases
- Hybrid Bypass versions replace 7W-13W CFL lamps with G23 & GX23 (2-pin) bases
- Exceptional efficacy up to 113 LPW
- Suitable for damp locations
- Lamp ambient temperature: -4°F to 113°F (-20°C to 45°C)
- Fixture operating temperature: -4°F to 95°F (-20°C to 35°C)
- Rated lifetime (L70): 50,000hrs
- 5 year limited warranty\*\*/ 10 year available  
(see EXTENDED WARRANTIES table for information)



031622

### SPECIFICATIONS

Product	Model	Equiv.	Input Voltage	Wattage	Lumens	CCT	CRI	Efficacy (LPW)	Power Factor	THD	Beam Angle	Base Rotatable Angle	Fixture Rating
36631	3.5PLS/835/BYP/2G7/R	7-9W	120-277V	3.5	350	3500K	82	100	0.9	<20%	120°	180°	Enclosed
36637	5.5PLS/835/BYP/2GX7/R	13W	120-277V	3.5	600	3500K	82	109	0.9	<20%	110°	180°	Enclosed
36627	3.5PLS/827/HYB/G23/R	7-9W	120-277V	3.5	325	2700K	82	93	0.9	<20%	120°	170°	Enclosed
36628	3.5PLS/830/HYB/G23/R	7-9W	120-277V	3.5	340	3000K	82	97	0.9	<20%	120°	170°	Enclosed
36629	3.5PLS/835/HYB/G23/R	7-9W	120-277V	3.5	350	3500K	82	100	0.9	<20%	120°	170°	Enclosed
36630	3.5PLS/840/HYB/G23/R	7-9W	120-277V	3.5	370	4000K	82	106	0.9	<20%	120°	170°	Enclosed
36632	5.5PLS/827/HYB/GX23/R	13W	120-277V	5.5	520	2700K	82	95	0.9	<20%	110°	170°	Enclosed
36633	5.5PLS/830/HYB/GX23/R	13W	120-277V	5.5	550	3000K	82	100	0.9	<20%	110°	170°	Enclosed
36634	5.5PLS/835/HYB/GX23/R	13W	120-277V	5.5	600	3500K	82	109	0.9	<20%	110°	170°	Enclosed
36635	5.5PLS/840/HYB/GX23/R	13W	120-277V	5.5	620	4000K	82	113	0.9	<20%	110°	170°	Enclosed
36644	5.5PLSH/827/HYB/GX23/R	13W	120-277V	5.5	570	2700K	82	104	0.9	<20%	110°	310°	Non-Enclosed
36645	5.5PLSH/830/HYB/GX23/R	13W	120-277V	5.5	580	3000K	82	105	0.9	<20%	110°	310°	Non-Enclosed
36646	5.5PLSH/835/HYB/GX23/R	13W	120-277V	5.5	600	3500K	82	109	0.9	<20%	110°	310°	Non-Enclosed
36647	5.5PLSH/840/HYB/GX23/R	13W	120-277V	5.5	620	4000K	82	113	0.9	<20%	110°	310°	Non-Enclosed
98403	5.5PLSV/827/HYB/GX23	13W	120-277V	5.5	570	2700K	82	104	0.9	<20%	120°	310°	Non-Enclosed
98404	5.5PLSV/830/HYB/GX23	13W	120-277V	5.5	600	3000K	82	109	0.9	<20%	120°	310°	Non-Enclosed
98405	5.5PLSV/835/HYB/GX23	13W	120-277V	5.5	600	3500K	82	109	0.9	<20%	120°	310°	Non-Enclosed
98406	5.5PLSV/840/HYB/GX23	13W	120-277V	5.5	620	4000K	82	113	0.9	<20%	120°	310°	Non-Enclosed

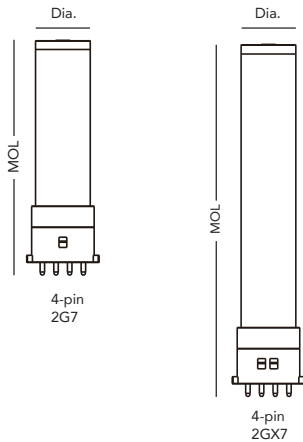
\* Ballast Dependent. Please refer to [www.greencreative.com](http://www.greencreative.com) for full ballast compatibility list.

\*\* Please visit [www.greencreative.com](http://www.greencreative.com) for Limited Warranty terms.



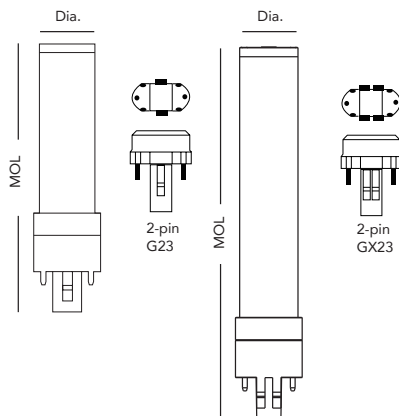
## BYPASS AND HYBRID BYPASS PLS

### DIMENSION & WEIGHT



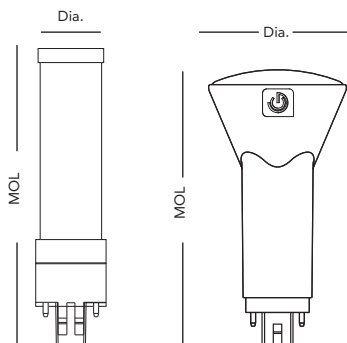
Model	3.5PLS/xxx/BYP/2G7/R	5.5PLS/xxx/BYP/2GX7/R
Compatible base	2G7 (4-pin)	2GX7 (4-pin)
MOL	4-3/4"	6-9/16"
Dia	1-7/16"	1-7/16"
Weight	0.06 lb	0.06lb

Where xxx means 824-965 which indicates CRI and color temperature



Model	3.5PLS/xxx/HYB/G23/R	5.5PLS/xxx/HYB/GX23/R
Compatible base	G23 (2-pin)	GX23 (2-pin)
MOL	5-5/16"	7"
Dia	1-1/4"	1-1/4"
Weight	0.08 lb	0.08 lb

Where xxx means 824-965 which indicates CRI and color temperature



Model	5.5PLSH/xxx/HYB/GX23/R	5.5PLSV/xxx/HYB/GX23
Compatible base	GX23 (2-pin)	GX23 (2-pin)
MOL	5-1/2"	5-1/4"
Dia	1-3/8"	2-9/16"
Weight	0.15 lb	0.16lb

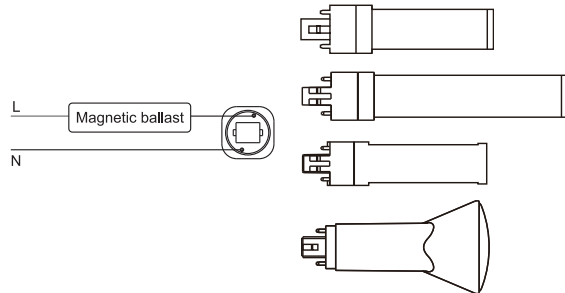
Where xxx means 824-965 which indicates CRI and color temperature



## BYPASS AND HYBRID BYPASS PLS

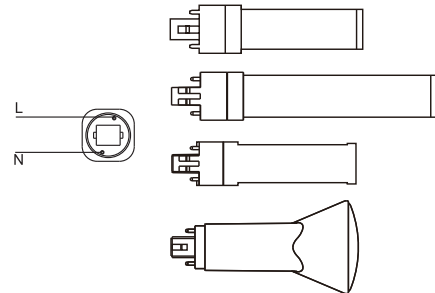
### HYBRID Installation - DIRECT (Magnetic Ballasts) or BYPASS

When used with a magnetic ballast, the lamp can function as a plug & play lamp and operate with the existing ballast.

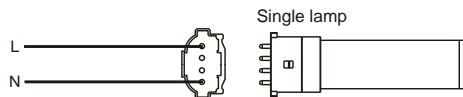


OR

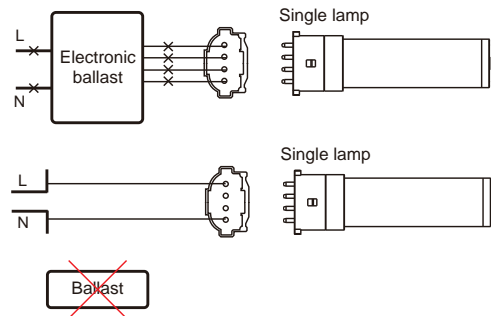
If the ballast is not compatible, it can be bypassed and the lamp can run directly off line voltage.




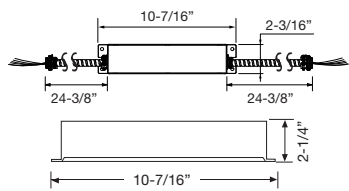
### BYPASS Installation



OR



### ACCESSORY ORDERING INFORMATION

Product	Model	Description	Pictures	Dimensions
98003	23EMDRIVER	California Title 20 Compliant 23W Emergency LED Driver (Field Installation)		 <p>10-7/16"</p> <p>2-3/16"</p> <p>24-3/8"</p> <p>24-3/8"</p> <p>2-1/4"</p> <p>10-7/16"</p>

Note: 23EMDRIVER is working for 3.5PLS HYB and 5.5PLSV HYB only.




### EXTENDED WARRANTIES\*\*\*

Model	Description****
3.5PLS/BYP/10YEARWARRANTY	10 Year warranty for 3.5PLS/8xx/BYP/2G7/yy
5.5PLS/BYP/10YEARWARRANTY	10 Year warranty for 5.5PLS/8xx/BYP/2GX7/yy
3.5PLS/HYB/10YEARWARRANTY	10 Year warranty for 3.5PLS/8xx/HYB/G23/yy
5.5PLS/HYB/10YEARWARRANTY	10 Year warranty for 5.5PLS/8xx/HYB/GX23/yy
5.5PLSH/HYB/10YEARWARRANTY	10 Year warranty for 5.5PLSH/8xx/HYB/GX23/yy
5.5PLSV/HYB/10YEARWARRANTY	10 Year warranty for 5.5PLSV/8xx/HYB/GX23/yy

\*\*\* Warranty based on a maximum of 4,368 annual operating hours (per year for ten years) and exposure to a maximum fixture operating temperature of 80°F / 27°C

\*\*\*\* xx – Refers to the CCT yy – Refers to model generations within the same nominal performance. Typically blank, 'R', or 'RC'

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An ILLUMUS Brand

Project Name:	Type:
Part Number:	Date:



## Value Select A Lamp Family

### FEATURES

- Suitable to replace 40W, 60W, 75W, 100W Incandescent
- Comfortable diffused light
- Smooth dimming with most forward and reverse phase dimmers\*
- Available in 2700K, 3000K, 3500K, 4000K and 5000K color temperatures
- Suitable for use in totally enclosed fixtures\*\*
- Suitable for use in damp locations
- Fixture operating temperature: -4°F to 95°F (-20°C to 35°C)
- Lamp ambient temperature: -4°F to 113°F (-20°C to 45°C)
- Rated Lifetime (L70): 25,000hrs for 9W and 15W series, 15,000hrs for 5W, 9.5W, 13W and 15W 3WAY series
- 3WAY lamp emits Warm White light in 3 defined lumen outputs
- 3 year limited warranty\*\*\*



111422

### SPECIFICATIONS

Product	Model	Equiv.	Wattage (W)	CCT	Lumens	Efficacy (LPW)	Input Voltage	Beam Angle	CRI	Dim.*	Power Factor	Base	Fixture Rating	ES
37082	5A19DIM/827/4PK	40W	5	2700K	450	90	120V	230°	82	Yes	0.7	E26	Enclosed	✓
37083	5A19DIM/830/4PK	40W	5	3000K	450	90	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36548	9A19DIM/827/R	60W	9	2700K	800	89	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36549	9A19DIM/830/R	60W	9	3000K	820	91	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36559	9A19DIM/835/R	60W	9	3500K	840	93	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36550	9A19DIM/840/R	60W	9	4000K	860	96	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36551	9A19DIM/850/R	60W	9	5000K	860	96	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36544	9.5A19DIM/827	60W	9.5	2700K	800	84	120V	230°	82	Yes	0.7	E26	OPEN	✓
36545	9.5A19DIM/830	60W	9.5	3000K	820	86	120V	230°	82	Yes	0.7	E26	OPEN	✓
36546	9.5A19DIM/840	60W	9.5	4000K	860	91	120V	230°	82	Yes	0.7	E26	OPEN	✓
36547	9.5A19DIM/850	60W	9.5	5000K	860	91	120V	230°	82	Yes	0.7	E26	OPEN	✓
36861	9.5A19DIM/827/R	60W	9.5	2700K	800	84	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36862	9.5A19DIM/830/R	60W	9.5	3000K	820	86	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36863	9.5A19DIM/840/R	60W	9.5	4000K	860	91	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36615	13A19DIM/827	75W	13	2700K	1,100	85	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36616	13A19DIM/830	75W	13	3000K	1,150	88	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36617	13A19DIM/840	75W	13	4000K	1,200	92	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36618	13A19DIM/850	75W	13	5000K	1,200	92	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36671	15A19DIM/827	100W	15	2700K	1,600	107	120V	230°	82	Yes	0.7	E26	Enclosed	✓
36674	15A19DIM/850	100W	15	5000K	1,700	113	120V	230°	82	Yes	0.7	E26	Enclosed	✓
98150	15A21DIM/827/GU24	100W	15	2700K	1,600	107	120V	240°	82	Yes	0.9	GU24	Enclosed	✓
36746	15A21/827/3WAY	40W	6		450	75								
		60W	9	2700K	800	89	120V	230°	82	No	0.7	E26d	Non-Enclosed	✓
		100W	15		1,600	107								

\* This lamp might not be compatible with all dimmers. Please visit [www.greencreative.com](http://www.greencreative.com) for compatibility information.

\*\* 9.5W not for use in totally enclosed luminaires or recessed luminaires, 15W 3WAY not for use in totally enclosed fixtures, all other lamps are suitable for use in totally enclosed non-IC fixtures. Besides, all Value Select A lamps are not suitable for use in IC enclosed fixtures.

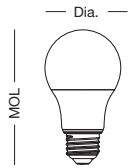
\*\*\* Please visit [www.greencreative.com](http://www.greencreative.com) for Limited Warranty terms.



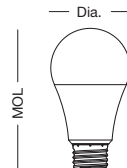


## Value Select A Lamp Family

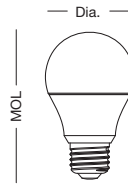
### DIMENSIONS & WEIGHT



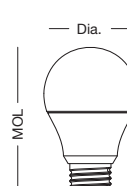
Model	Base	MOL	Dia.	Weight
5A19DIM/xxx/4PK	E26	4-3/16"	2-3/8"	0.061lb



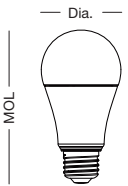
Model	Base	MOL	Dia.	Weight
9A19DIM/xxx/R	E26	4-3/8"	2-3/8"	0.067lb



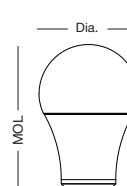
Model	Base	MOL	Dia.	Weight
9.5A19DIM/827	E26	3-15/16"	2-3/8"	0.071lb



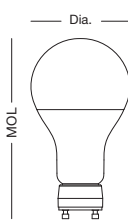
Model	Base	MOL	Dia.	Weight
9.5A19DIM/xxx/R	E26	4-3/16"	2-3/8"	0.061lb



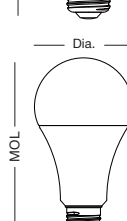
Model	Base	MOL	Dia.	Weight
13A19DIM/xxx	E26	4-9/16"	2-3/8"	0.104lb



Model	Base	MOL	Dia.	Weight
15A19DIM/xxx	E26	4-7/16"	2-3/8"	0.15lb



Model	Base	MOL	Dia.	Weight
15A21/xxx/GU24	GU24	5-1/2"	3"	0.26lb



Model	Base	MOL	Dia.	Weight
15A21/xxx/3WAY	E26d	5-7/16"	2-15/16"	0.2lb

### MINIMUM COMPARTMENT DIMENSIONS (FOR ENCLOSED FIXTURES)\*\*\*\*

Model	Diameter	Height
5A19DIM/xxx/4PK	5-1/8"	7-1/2"
9A19DIM/xxx/R		
9.5A19DIM/xxx/R		
13A19DIM/xxx		
15A19DIM/xxx		
15A21DIM/xxx/GU24		

\*\*\*\* Installing lamp in a fixture that does not have the minimum compartment dimensions will void the warranty and could cause product failures.  
 Where xxx means 824-965 which indicates CRI and color temperature



## Value Select A Lamp Family

ORDERING INFORMATION						
Model	Master Carton			Shipping Carton		
	Case Qty	Case Dimensions (L x W x H)	Case Weight	Case Qty	Case Dimensions (L x W x H)	Case Weight
5A19DIM/xxx/4PK	N.A.	N.A.	N.A.	24UNIT	22-1/4" x 10-7/16" x 10-7/16"	8.82 lb
9A19DIM/xxx/R	N.A.	N.A.	N.A.	72PCS	15-9/16" x 15-9/16" x 10-5/8"	11.38 lb
9.5A19DIM/xxx	N.A.	N.A.	N.A.	50PCS	12-3/16" x 12-3/16" x 8-7/8"	5.91 lb
9.5A19DIM/xxx/R	N.A.	N.A.	N.A.	50PCS	12-3/16" x 12-3/16" x 9-1/4"	5.16 lb
13A19DIM/xxx	N.A.	N.A.	N.A.	50PCS	12-3/16" x 12-3/16" x 9-7/8"	7.78 lb
15A19DIM/xxx	6PCS	7-11/16"x5-1/8"x5-1/8"	1.32 lb	24PCS	16"x11"x6-1/8"	5.95 lb
15A21DIM/xxx/GU24	6PCS	9-5/8"x 6-5/8" x 6-3/8"	2.36 lb	24PCS	19-7/16" x 13-3/8" x 7-3/16"	10.58 lb
15A21/xxx/3WAY	6PCS	9-3/4" x 6-5/8" x 6-3/8"	1.76 lb	24PCS	19-5/8" x 13-3/8" x 7-1/4"	8.38 lb

Where xxx means 824-965 which indicates CRI and color temperature

CERTIFICATION INFORMATION		
Product	Model	ES ID#
36544	9A19DIM/827/R	2384714
36545	9A19DIM/830/R	2384715
36546	9A19DIM/840/R	2384717
36547	9A19DIM/850/R	2384718
36544	9.5A19DIM/827	2388097
36545	9.5A19DIM/830	2388091
36546	9.5A19DIM/840	2388096
36547	9.5A19DIM/850	2388098
36861	9.5A19DIM/827/R	2394933
36862	9.5A19DIM/830/R	2394940
36863	9.5A19DIM/840/R	2394936
36615	13A19DIM/827	2388092
36616	13A19DIM/830	2388095
36617	13A19DIM/840	2388093
36618	13A19DIM/850	2388094
36746	15A21/827/3WAY	2390564
36671	15A19DIM/827	2393096
36674	15A19DIM/850	2393099
37082	5A19DIM/827/4PK	2404362
37083	5A19DIM/830/4PK	2404363

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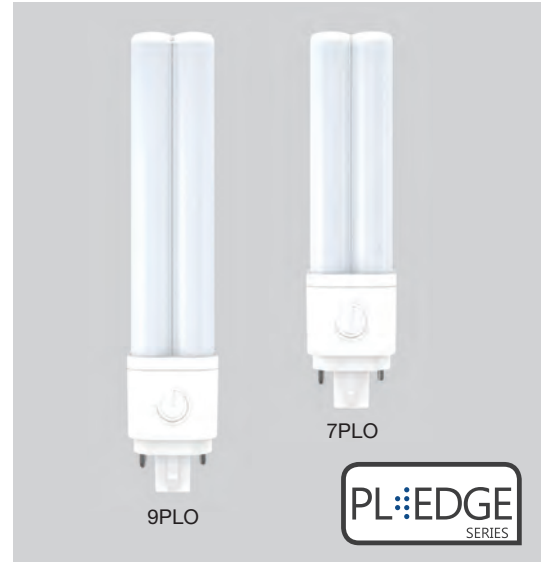
Project Name:	Type:
Part Number:	Date:



## HYBM PL OMNI

### FEATURES

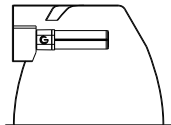
- Omni directional light distribution equivalent to fluorescent lamps
- May be installed horizontally and vertically
- HYBRID installation - DIRect or BYPass
- Replaces G24d, GX24d (2-pin), G24q & GX24q (4-pin) 13W-26W CFL lamps
- Compatible with magnetic ballasts\* - DIRect installation
- Built-in universal voltage driver - Bypass installation
- Exceptional high efficacy up to 126 LPW
- UL Listed & UL Classified for damp locations
- Lamp ambient temperature: -4°F to 113°F (-20°C to 45°C)
- Fixture operating temperature: -4°F to 95°F (-20°C to 35°C)
- Rated lifetime (L70): 50,000hrs
- 5 year limited warranty
- Lamp CCT falls within 4 SDCM for consistent CCT



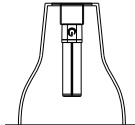
042121

### SPECIFICATIONS

Horizontal Installation



Vertical Installation

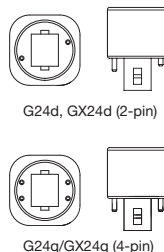
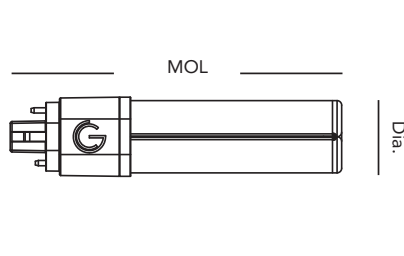


Product	Model	Equiv.	Input Voltage	Wattage	Lumens	CCT	CRI	Efficacy (LPW)	Power Factor	THD	Beam Angle	Dim.*	Fixture Rating**	Cert.
34996	7PLO/827/HYBM	13W-18W	120-277V	7	770	2700K	82	110	0.9	<20%	360°	No	Enclosed	N.A.
34997	7PLO/830/HYBM	13W-18W	120-277V	7	790	3000K	82	112	0.9	<20%	360°	No	Enclosed	N.A.
34998	7PLO/835/HYBM	13W-18W	120-277V	7	820	3500K	82	117	0.9	<20%	360°	No	Enclosed	N.A.
34999	7PLO/840/HYBM	13W-18W	120-277V	7	850	4000K	82	121	0.9	<20%	360°	No	Enclosed	N.A.
35000	9PLO/827/HYBM	26W	120-277V	9	1,100	2700K	82	122	0.9	<20%	360°	No	Enclosed	N.A.
35001	9PLO/830/HYBM	26W	120-277V	9	1,150	3000K	82	125	0.9	<20%	360°	No	Enclosed	N.A.
35002	9PLO/835/HYBM	26W	120-277V	9	1,200	3500K	82	130	0.9	<20%	360°	No	Enclosed	N.A.
35003	9PLO/840/HYBM	26W	120-277V	9	1,250	4000K	82	133	0.9	<20%	360°	No	Enclosed	N.A.

\* Ballast Dependent. Please refer to [www.greencreative.com](http://www.greencreative.com) for full ballast compatibility list.

\*\* Suitable for use in totally enclosed fixtures. Please make sure the minimum dimensions of the lamp compartment in the fixture meet the guidelines in the installation guide.

### DIMENSION & WEIGHT



Model	7PLO/xxx/HYBM	9PLO/xxx/HYBM
Compatible base	G24d, GX24d, G24q & GX24q (2/4-pin CFL)	
MOL	5-11/16"	6-7/8"
Dia.	1-3/8"	1-3/8"
Weight	0.18 lb	0.22 lb

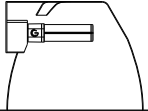
Where xxx means 824-965 which indicates CRI and color temperature

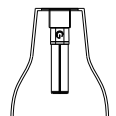


## HYBM PL OMNI

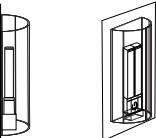
### MINIMUM COMPARTMENT DIMENSIONS

Note – the base of this lamp is 1-3/8" by 1-3/8" and the opening in the reflector should be a minimum of 1-3/8" by 1-3/8" to insure a proper fit. For non-enclosed rated applications the minimum compartment must be follow below guidelines.

Non-enclosed Fixture Horizontal Installation 	Model Number		7PLO/xxx/HYBM	9PLO/xxx/HYBM
	Lamp Compartment Dimensions	Diameter	6-1/8"	6-1/8"
		Height	4-3/4"	4-3/4"
	Maximum Lamps in Luminaire		2	2
	Lampholder-to-Lampholder Spacing		3/8"	3/8"

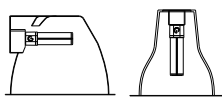

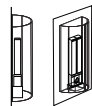
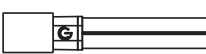
Non-enclosed Fixture Vertical Installation 	Model Number		7PLO/xxx/HYBM	9PLO/xxx/HYBM
	Lamp Compartment Dimensions	Diameter	4-1/2"	6-5/16"
		Height	8-1/16"	9-1/16"
	Maximum Lamps in Luminaire		1	1

For enclosed rated applications the minimum compartment must be follow below guidelines.

Wall Mounted Enclosed Fixture Installation 	Model Number		7PLO/xxx/HYBM	9PLO/xxx/HYBM
	Lamp Compartment Dimensions	Length	11-13/16"	11-13/16"
		Width	6-5/16"	6-5/16"
		Height	2-3/4"	2-3/4"
	Maximum Lamps in Luminaire		2	2
	Lampholder-to-Lampholder Spacing		1-7/8"	1-7/8"

Where xxx means 824-965 which indicates CRI and color temperature.  
Product warranty is defined based on the condition of above minimum compartment size, maximum lamps in glass/metal luminaire.

### TEMPERATURE

Fixture operating temperature		Lamp ambient temperature	
Non-enclosed Fixture 	-4°F to 95°F (-20°C to 35°C)	7PLO/xxx/HYBM 	-4°F to 113°F (-20°C to 45°C)
Wall Mounted Enclosed Fixture 		9PLO/xxx/HYBM 	

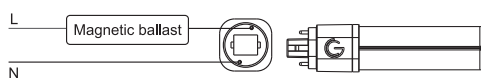
Where xxx means 824-965 which indicates CRI and color temperature.



## HYBM PL OMNI

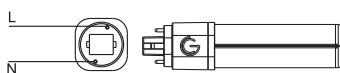
### HYBRid Installation - DIRect or BYPass - Magnetic Ballasts

When used with a magnetic ballast, the PLO lamp can function as a plug & play lamp and operate with the existing ballast.

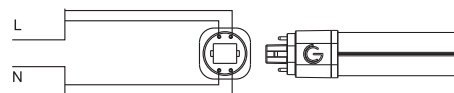


OR

If the ballast is not compatible, it can be bypassed and the lamp can run directly off line voltage.


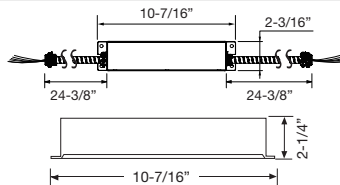


G24d, GX24d (2-pin)



G24q/GX24q (4-pin)

### ACCESSORY ORDERING INFORMATION

Product	Model	Description	Pictures	Dimensions
98003	23EMDRIVER	California Title 20 Compliant 23W Emergency LED Driver (Field Installation)		 <p>10-7/16"</p> <p>2-3/16"</p> <p>24-3/8"</p> <p>24-3/8"</p> <p>2-1/4"</p> <p>10-7/16"</p>

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## ESSENTIAL SERIES

GENERAL PURPOSE LED BULBS

### KT-LED9.5A19-O-8XX

REPLACEMENT LAMP

#### DESCRIPTION

9.5W A19 Lamp | 2700–5000K | >80 CRI | Omni-Directional



<b>LAMP TYPE:</b> A19
<b>BASE TYPE:</b> E26 (Medium)
<b>WATTAGE:</b> 9.5W
<b>COLOR TEMPERATURE:</b> 2700–5000K
<b>COLOR RENDERING INDEX (CRI):</b> >80
<b>WARRANTY:</b> 2 Years
<b>RATED LIFE:</b> L70 (15,000 Hours)



#### TYPICAL APPLICATIONS

- Table, Desk, and Floor Lamps
- Wall Sconces
- Surface Mount Ceiling Fixtures
- General Lighting
- Pendant Lights

#### PRODUCT FEATURES

- Energy Efficient, 80%+ Energy Savings over Legacy Equivalents
- Lower Heat Generation than Legacy Equivalents
- PF >0.70
- Complies with Part 15 of FCC
- Durable Plastic housing lowers the risk for breakage
- ANSI complaint construction ensures fitment for intended applications
- Operating temperature range –4°F/–20°C to 95°F/35°C
- Long Life minimizes replacement and maintenance costs
- Meets Energy Star requirements
- UL Listed
- Smooth diffused lens for comfortable glare free performance
- UL enclosed rated, suitable for use in totally enclosed luminaires
- Smooth, uniform dimming

#### ELECTRICAL AND PERFORMANCE SPECIFICATIONS

Keystone Catalog Number	Description	Color Temp	Input Voltage	Rated Lamp Wattage	Legacy Equivalent Wattage	Base Type	Lumens	CRI	Light Distribution	Dimmable	Efficacy
KT-LED9.5A19-O-827	A19 bulb. Omni-Directional, dimmable	2700K	120V	9.5W	60W halogen	E26	800	>80	230°	Yes	84 lm/W
KT-LED9.5A19-O-830	A19 bulb. Omni-Directional, dimmable	3000K	120V	9.5W	60W halogen	E26	800	>80	230°	Yes	84 lm/W
KT-LED9.5A19-O-835	A19 bulb. Omni-Directional, dimmable	3500K	120V	9.5W	60W halogen	E26	800	>80	230°	Yes	84 lm/W
KT-LED9.5A19-O-840	A19 bulb. Omni-Directional, dimmable	4000K	120V	9.5W	60W halogen	E26	800	>80	230°	Yes	84 lm/W
<b>KT-LED9.5A19-O-850</b>	<b>A19 bulb. Omni-Directional, dimmable</b>	<b>5000K</b>	<b>120V</b>	<b>9.5W</b>	<b>60W halogen</b>	<b>E26</b>	<b>800</b>	<b>&gt;80</b>	<b>230°</b>	<b>Yes</b>	<b>84 lm/W</b>



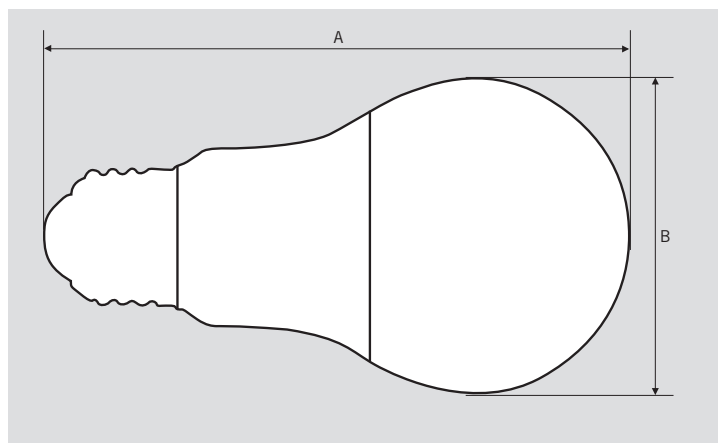
## ESSENTIAL SERIES

GENERAL PURPOSE LED BULBS

### KT-LED9.5A19-O-8XX

REPLACEMENT LAMP

#### PHYSICAL CHARACTERISTICS



#### PACKAGING

Carton Quantity	60 pcs
Carton Dimensions	15.55" x 13.07" x 10"
Carton Weight	9.9 lbs

#### LAMP DIMENSIONS

A (Length)	4.33"
B (Diameter)	2.36"

BASE TYPE: E26 (Medium)

#### ORDERING INFORMATION

ORDER CODE	CARTON QUANTITY	ITEM STATUS
KT-LED9.5A19-O-8XX	60 pcs	Active

#### CATALOG NUMBER BREAKDOWN

## KT-LED9.5A19-O-8XX

1 2 3 4 5 6 7

- 1 Keystone Technologies
- 2 LED Lamp
- 3 Wattage
- 4 Lamp Shape
- 5 Omni-Directional
- 6 800 Series
- 7 Color Temperature



Type:	Project:	Date:	Prepared by:
Catalog #:			

### AC Direct T8 LED Integral Driver



#### FEATURES

- Integral Driver, Bypasses ballast
- Universal input voltage 120-277VAC
- Double ended input
  - Reduces installation costs
  - Shunted or Non-shunted
- 4' 1800 & 2200 lumen options
- High Efficiency operation, up to 150 lm/W
  - Standard and Premium options
- Long Life: 50,000 hours L80
- Glass construction for optimum optical efficiency
- Full light output down to -4°F
- RoHS Compliant - Mercury Free
- No UV Emissions
- 5 Year limited lamp warranty
- UL Classified 1598C for US and Canada
- NSF Listed
- DesignLights Consortium® qualified on select models.  
 Consult [www.designlights.org/QPL](http://www.designlights.org/QPL) for details

### ORDERING GUIDE

Standard									
Model Number	Ordering Code	Length	Lumens	Power (W)	Efficacy (lm/W)	CCT	Pkg Qty	DLC®	UPC Code
T8LACD2F9/835B	T8LACD2F9/835B25EC	24"	1050	9	117	3500	25	Y	768386645115
<b>T8LACD2F9/840B</b>	<b>T8LACD2F9/840B25EC</b>	<b>24"</b>				<b>4000</b>		<b>Y</b>	<b>768386645122</b>
T8LACD2F9/850B	T8LACD2F9/850B25EC	24"				5000		Y	768386645139
T8LACD3F12/835B	T8LACD3F12/835B25EC	36"	1450	12	120	3500	25	Y	768386693031
T8LACD3F12/840B	T8LACD3F12/840B25EC	36"				4000		Y	768386693048
T8LACD3F12/850B	T8LACD3F12/850B25EC	36"				5000		Y	768386693055
T8LACD4F14/835B	T8LACD4F14/835B25EC	48"	1800	14	129	3500	25	Y	768386623137
T8LACD4F14/840B	T8LACD4F14/840B25EC	48"				4000		Y	768386623144
T8LACD4F14/850B	T8LACD4F14/850B25EC	48"				5000		Y	768386623151
T8LACD6U15/835B	T8LACD6U15/835B12C	U-22"	2000	15.1	132	3500	12	Y	768386703648
T8LACD6U15/840B	T8LACD6U15/840B12C	U-22"	2100		139	4000		Y	768386703655
T8LACD4F17/835B	T8LACD4F17/835B25EC	48"	2200	17	129	3500	25	Y	768386623168
T8LACD4F17/840B	T8LACD4F17/840B25EC	48"				4000		Y	768386623175
T8LACD4F17/850B	T8LACD4F17/850B25EC	48"				5000		Y	768386623182
T8LACD4F25/840B	T8LACD4F25/840B25EC	48"	3000	25	120	4000	25	Y	768386710004
T8LACD4F25/850B	T8LACD4F25/850B25EC	48"				5000	25	Y	768386710011

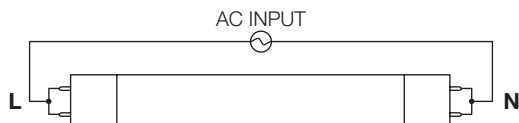
Premium									
Model Number	Ordering Code	Length	Lumens	Power (W)	Efficacy (lm/W)	CCT	Pkg Qty	DLC®	UPC Code
T8LACD4F10/835B	T8LACD4F10/835B25EC	48"	1650	10.5	157	3500	25	Y	768386690863
T8LACD4F10/840B	T8LACD4F10/840B25EC	48"				4000		Y	768386690870
T8LACD4F10/850B	T8LACD4F10/850B25EC	48"				5000		Y	768386690887
T8LACD4F12/835B	T8LACD4F12/835B25EC	48"	1800	12	150	3500	25	Y	768386645054
T8LACD4F12/840B	T8LACD4F12/840B25EC	48"				4000		Y	768386645061
T8LACD4F12/850B	T8LACD4F12/850B25EC	48"				5000		Y	768386645078
T8LACD4F15/830B	T8LACD4F15/830B25EC	48"	2200	15	147	3000	25	Y	768386695059
T8LACD4F15/835B	T8LACD4F15/835B25EC	48"				3500		Y	768386645085
T8LACD4F15/840B	T8LACD4F15/840B25EC	48"				4000		Y	768386645092
T8LACD4F15/850B	T8LACD4F15/850B25EC	48"				5000		Y	768386645108

### ADDITIONAL SPECIFICATIONS

Lamp Type:	Linear T8
Base:	Medium Bi-Pin (G13)
Color Rendering Index (CRI):	82
Lumen Maintenance:	L80 > 60,000 Hours

Ambient Temperature:	-4°F to 113°F
Beam Angle:	210°
EMI/RFI:	FCC Part 18 - Non-Consumer
Warranty:	5 years

### WIRING DIAGRAM



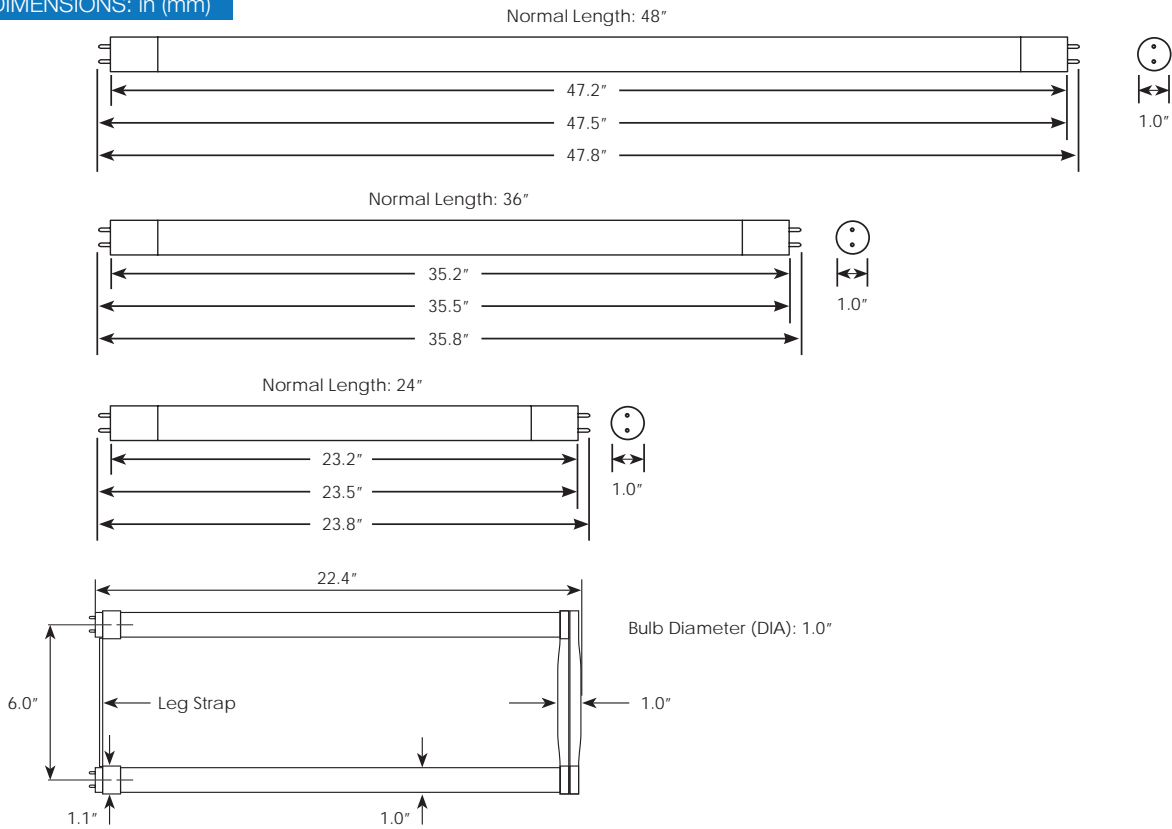
#### OPERATING NOTES:

- \* Input voltage is wired so that one lamp holder is connected to Neutral and the other to Line.
- \* Shunted or Non-Shunted lamp holders may be used.

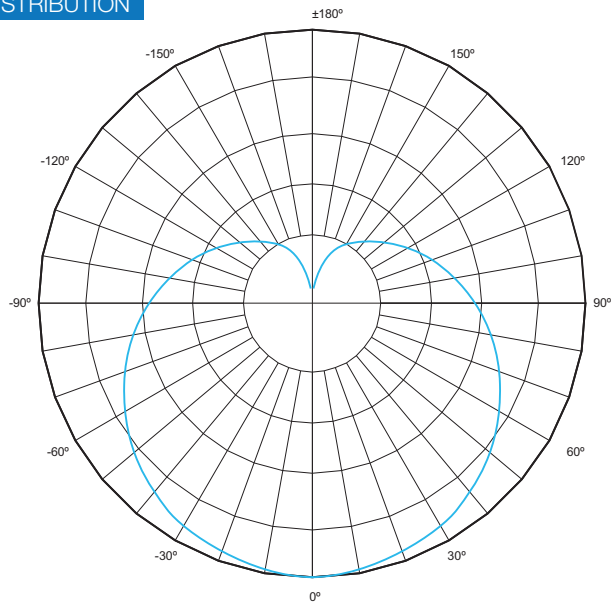




**DIMENSIONS: in (mm)**



**POLAR DISTRIBUTION**



**OPERATING NOTES:**

- Suitable for use in dry and damp environments
- Must follow installation guidelines provide with the lamp shipment.
- NSF Listed for Food Zone (Non-contact), Splash Zone, and Non-food Zone.



Type:	Project:	Date:	Prepared by:
Catalog #:			

## AC Direct T8 LED Integral Driver



### FEATURES

- Integral Driver, Bypasses ballast
- Universal input voltage 120-277VAC
- Double ended input
  - Reduces installation costs
  - Shunted or Non-shunted
- 4' 1800 & 2200 lumen options
- High Efficiency operation, up to 150 lm/W
  - Standard and Premium options
- Long Life: 50,000 hours L80
- Glass construction for optimum optical efficiency
- Full light output down to -4°F
- RoHS Compliant - Mercury Free
- No UV Emissions
- 5 Year limited lamp warranty
- UL Classified 1598C for US and Canada
- NSF Listed
- DesignLights Consortium® qualified on select models.  
Consult [www.designlights.org/QPL](http://www.designlights.org/QPL) for details

## ORDERING GUIDE

Standard									
Model Number	Ordering Code	Length	Lumens	Power (W)	Efficacy (lm/W)	CCT	Pkg Qty	DLC®	UPC Code
T8LACD2F9/835B	T8LACD2F9/835B25EC	24"	1050	9	117	3500	25	Y	768386645115
T8LACD2F9/840B	T8LACD2F9/840B25EC	24"				4000		Y	768386645122
T8LACD2F9/850B	T8LACD2F9/850B25EC	24"				5000		Y	768386645139
T8LACD3F12/835B	T8LACD3F12/835B25EC	36"	1450	12	120	3500	25	Y	768386693031
<b>T8LACD3F12/840B</b>	<b>T8LACD3F12/840B25EC</b>	<b>36"</b>				<b>4000</b>		<b>Y</b>	<b>768386693048</b>
T8LACD3F12/850B	T8LACD3F12/850B25EC	36"				5000		Y	768386693055
T8LACD4F14/835B	T8LACD4F14/835B25EC	48"	1800	14	129	3500	25	Y	768386623137
T8LACD4F14/840B	T8LACD4F14/840B25EC	48"				4000		Y	768386623144
T8LACD4F14/850B	T8LACD4F14/850B25EC	48"				5000		Y	768386623151
T8LACD6U15/835B	T8LACD6U15/835B12C	U-22"	2000	15.1	132	3500	12	Y	768386703648
T8LACD6U15/840B	T8LACD6U15/840B12C	U-22"	2100		139	4000		Y	768386703655
T8LACD4F17/835B	T8LACD4F17/835B25EC	48"	2200	17	129	3500	25	Y	768386623168
T8LACD4F17/840B	T8LACD4F17/840B25EC	48"				4000		Y	768386623175
T8LACD4F17/850B	T8LACD4F17/850B25EC	48"				5000		Y	768386623182
T8LACD4F25/840B	T8LACD4F25/840B25EC	48"	3000	25	120	4000	25	Y	768386710004
T8LACD4F25/850B	T8LACD4F25/850B25EC	48"				5000	25	Y	768386710011

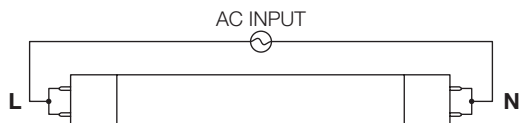
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T8LACD4F12/840B	T8LACD4F12/840B25EC	48"				4000		Y	768386645061
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T8LACD4F15/830B	T8LACD4F15/830B25EC	48"	2200	15	147	3000	25	Y	768386695059
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T8LACD4F15/840B	T8LACD4F15/840B25EC	48"				4000		Y	768386645092
T8LACD4F15/850B	T8LACD4F15/850B25EC	48"				5000		Y	768386645108

## ADDITIONAL SPECIFICATIONS

Lamp Type:	Linear T8
Base:	Medium Bi-Pin (G13)
Color Rendering Index (CRI):	82
Lumen Maintenance:	L80 > 60,000 Hours

Ambient Temperature:	-4°F to 113°F
Beam Angle:	210°
EMI/RFI:	FCC Part 18 - Non-Consumer
Warranty:	5 years

## WIRING DIAGRAM

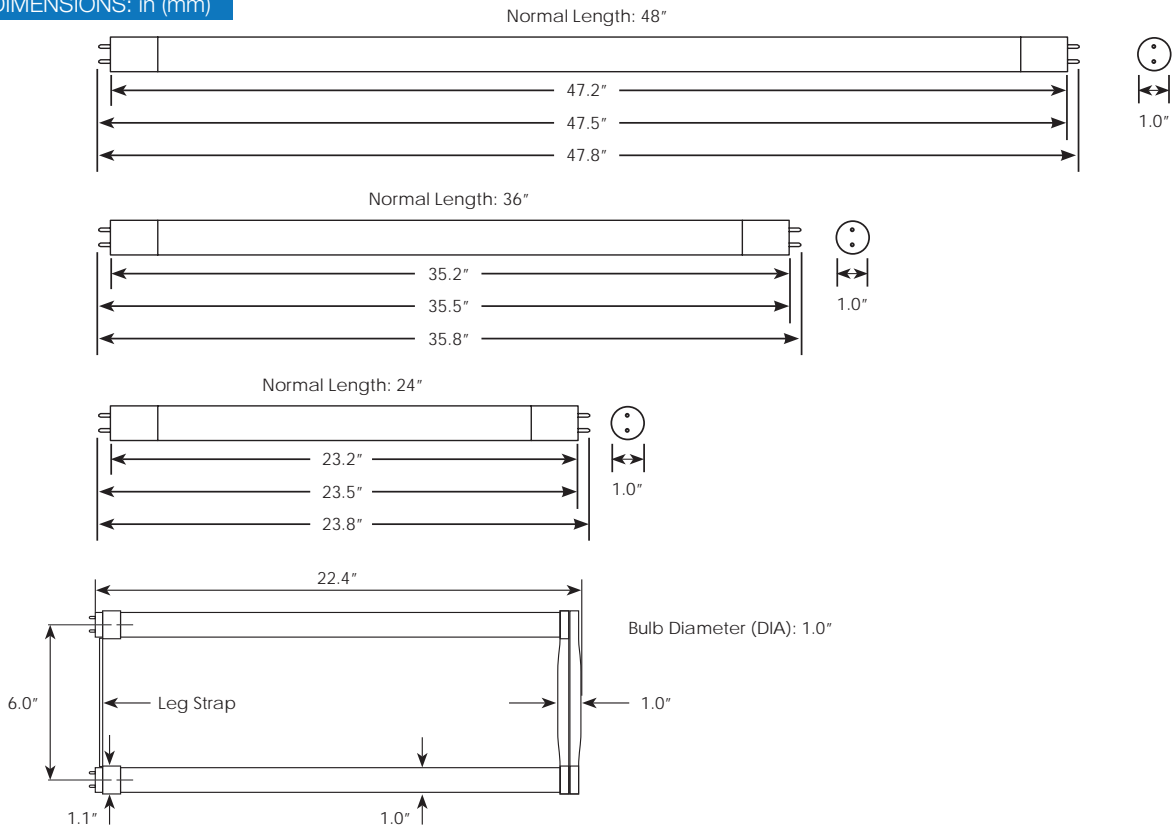


### OPERATING NOTES:

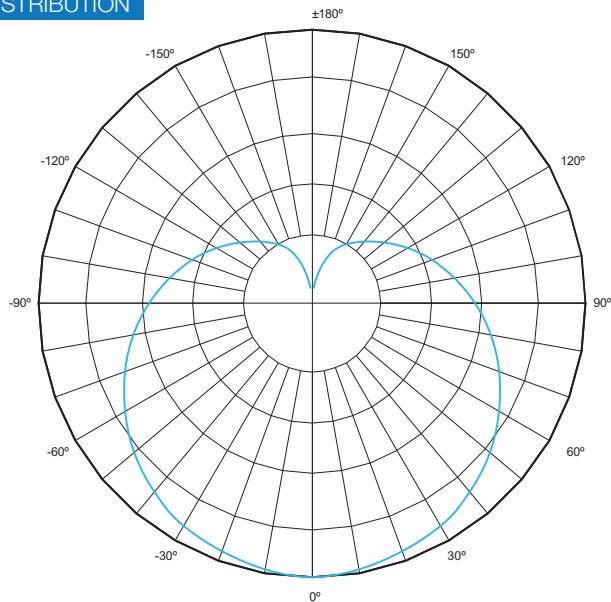
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- \* Shunted or Non-Shunted lamp holders may be used.



**DIMENSIONS: in (mm)**



**POLAR DISTRIBUTION**



**OPERATING NOTES:**

- Suitable for use in dry and damp environments
- Must follow installation guidelines provide with the lamp shipment.
- NSF Listed for Food Zone (Non-contact), Splash Zone, and Non-food Zone.



Type:	Project:	Date:	Prepared by:
Catalog #:			

### AC Direct T8 LED Integral Driver



#### FEATURES

- Integral Driver, Bypasses ballast
- Universal input voltage 120-277VAC
- Double ended input
  - Reduces installation costs
  - Shunted or Non-shunted
- 4' 1800 & 2200 lumen options
- High Efficiency operation, up to 150 lm/W
  - Standard and Premium options
- Long Life: 50,000 hours L80
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- Full light output down to -4°F
- RoHS Compliant - Mercury Free
- No UV Emissions
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- UL Classified 1598C for US and Canada
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T8LACD4F14/835B	T8LACD4F14/835B25EC	48"	1800	14	129	3500	25	Y	768386623137
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T8LACD6U15/840B	T8LACD6U15/840B12C	U-22"	2100		139	4000		Y	768386703655
T8LACD4F17/835B	T8LACD4F17/835B25EC	48"	2200	17	129	3500	25	Y	768386623168
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T8LACD4F17/850B	T8LACD4F17/850B25EC	48"				5000		Y	768386623182
T8LACD4F25/840B	T8LACD4F25/840B25EC	48"	3000	25	120	4000	25	Y	768386710004
T8LACD4F25/850B	T8LACD4F25/850B25EC	48"				5000	25	Y	768386710011

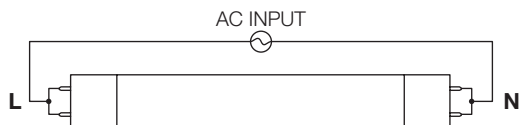
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T8LACD4F15/850B	T8LACD4F15/850B25EC	48"				5000		Y	768386645108

### ADDITIONAL SPECIFICATIONS

Lamp Type:	Linear T8
Base:	Medium Bi-Pin (G13)
Color Rendering Index (CRI):	82
Lumen Maintenance:	L80 > 60,000 Hours

Ambient Temperature:	-4°F to 113°F
Beam Angle:	210°
EMI/RFI:	FCC Part 18 - Non-Consumer
Warranty:	5 years

### WIRING DIAGRAM

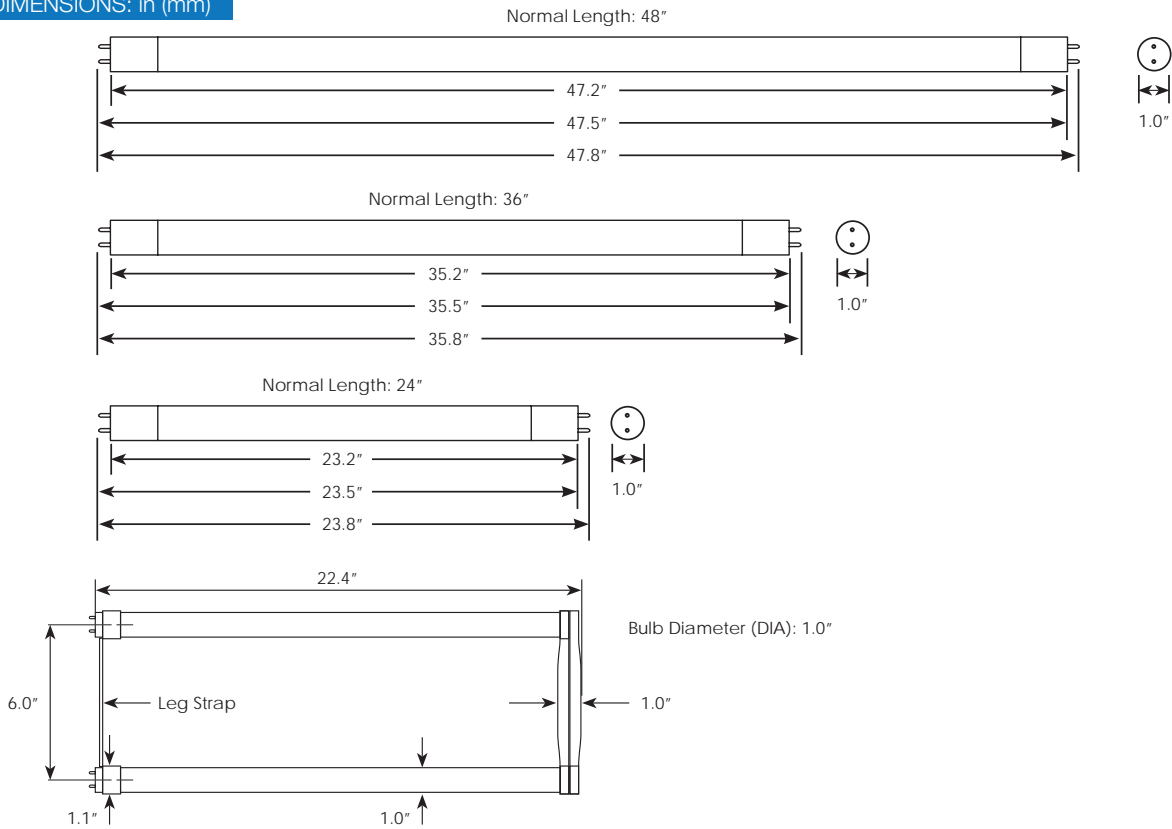


#### OPERATING NOTES:

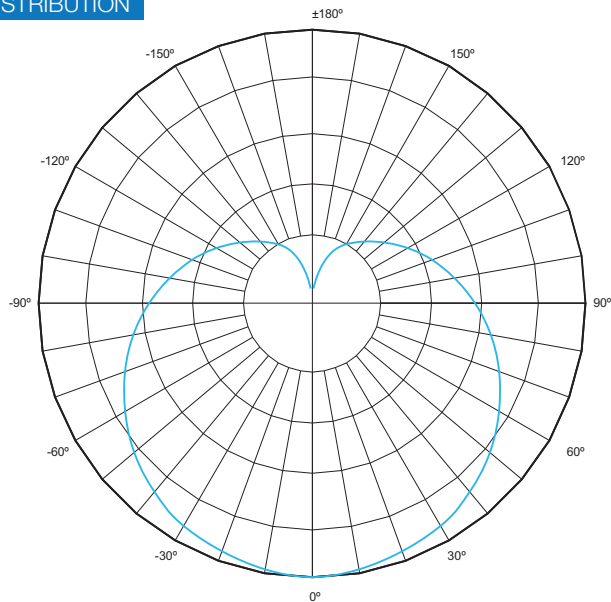
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**DIMENSIONS: in (mm)**



**POLAR DISTRIBUTION**



**OPERATING NOTES:**

- Suitable for use in dry and damp environments
- Must follow installation guidelines provide with the lamp shipment.
- NSF Listed for Food Zone (Non-contact), Splash Zone, and Non-food Zone.





**One-Stop Efficiency Shop®**  
**LIGHTING EFFICIENCY REBATE APPLICATION**

**Business Information**

Business Name ISD 256/Burnside Elem-Phase 4-final

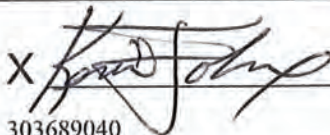
Installation Address 5001 Learning Ln City Red Wing State MN ZIP 55066

Contact Person Alan Gaylor Phone 651.385.4508 Fax \_\_\_\_\_

The undersigned does hereby certify that: 1) the undersigned, and not Xcel Energy, is solely responsible for the accuracy of the information contained in this application; 2) all installation is complete prior to submitting rebate; and 3) all rules of this One-Stop Efficiency Shop® Lighting Efficiency Program (see attached Program Rules) have been followed. Further, the undersigned acknowledges that nothing contained in this application shall impose any liability on Xcel Energy for the work performed and information presented for this Xcel Energy program by the party. **The undersigned authorizes the party listed below to receive the rebate check for this project.**

<b>Rebate Check</b>	<b>Payable To:</b>	Center for Energy and Environment	<b>CEE ACH:</b>
	<b>Mailing Address:</b>	Center for Energy and Environment, c/o Admin 212 3rd Avenue North, Suite 560 Minneapolis, MN 55401	

**Customer Signature**

X 

Date 11/23/22

Xcel Account Number 303689040 CEE Financed ☐ Yes ☒ No

**Rebate Information**

Estimated electric demand savings	33.214 kW
Estimated electric energy savings	110,408 kWh/yr
Installed cost of new lighting systems	\$224,909.00
<b>One Stop Efficiency Shop® Rebate</b> <small>(See attached page for more details)</small>	<b>\$24,170.33</b>
Net cost of new lighting systems	\$200,738.67

**Vendor Information**

Vendor Name The Retrofit Companies Wk Ph (507) 414-5156

Email zkramer@retrofitcompanies.com Contact Zane Kramer Mobile \_\_\_\_\_

**Xcel Energy**

**IMPORTANT:** A copy of this completed application form and the DETAILED invoice are required before Xcel Energy issues incentives. Xcel Energy retains the right to make adjustments to correct incentive calculations if necessary.

KW Save (EISA) 32.812	KWh Save (EISA) 109,594	Interactive KW 43.640	Interactive KWh 118,030 (int) 85,127 (ext) 32,903	Peak Coincident 30.985 KW	Incremental Capital 103,868.52	Interactive Heating -328.40
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Business Office Only:

## Lighting System Descriptions

Property: ISD 256/Burnside Elem-Phase 4-final

### Area / Schedule / Active

Lighting System ID Selected System Name / Description	# Fix / Fix	# Lamps / Lamp	Ballast Code = Description or INCAN Watt/Lamp & Lamp Type	Tandem Wiring	Energy Analysis		
					W/Fix	Watt	kWh/yr

A: Exterior Wallpacks				Schedule=Exterior (4380hrs/yr)			
OLD: <input checked="" type="checkbox"/>	HPS 100W STD1 1L	22	1 W12100 = HPS 100W (MOG), STD-1 (130W)	<input type="checkbox"/>	130	2,860	12,527
NEW: <input checked="" type="checkbox"/>	LED Wall Pack Fixture 40W DLC	22	1 LED= 40W, Type=Fixture	<input type="checkbox"/>	40	880	3,854

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	1,980.00 W (Exterior Night-Only, PC=0.00 W)	8,672.4 kWh/yr	\$6,950.05	\$520.34	<input checked="" type="checkbox"/> \$0/kW	<input type="checkbox"/> 60% Cap \$0.06/kWh

B: Exterior Doors				Schedule=Exterior (4380hrs/yr)			
OLD: <input checked="" type="checkbox"/>	HPS 70W STD1 1L	7	1 W12060 = HPS 70W (MED), STD-1 (86W)	<input type="checkbox"/>	86	602	2,637
NEW: <input checked="" type="checkbox"/>	LED Can Hardwired Retrofit Kit 6" 13W	7	1 LED= 13W, Type=Recessed Can	<input type="checkbox"/>	13	91	399

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	511.00 W (Exterior Night-Only, PC=0.00 W)	2,238.2 kWh/yr	\$887.66	\$111.91	<input checked="" type="checkbox"/> \$0/kW	<input type="checkbox"/> 60% Cap \$0.05/kWh

C: Exterior Poles				Schedule=Exterior (4380hrs/yr)			
OLD: <input checked="" type="checkbox"/>	HPS 400W STD1 1L	16	1 W12220 = HPS 400W (MOG), STD-1 (457W)	<input type="checkbox"/>	457	7,312	32,027
NEW: <input checked="" type="checkbox"/>	LED Area Light 189.5W DLC Premium	6	1 LED= 189.5W, Type=Fixture	<input type="checkbox"/>	189.5	1,137	4,980
NEW: <input checked="" type="checkbox"/>	LED Area Light 213.5W DLC Premium	4	1 LED= 213.5W, Type=Fixture	<input type="checkbox"/>	213.5	854	3,741
NEW: <input checked="" type="checkbox"/>	LED Area Light 150W DLC Premium	2	1 LED= 150W, Type=Fixture	<input type="checkbox"/>	150	300	1,314

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	5,021.00 W (Exterior Night-Only, PC=0.00 W)	21,992.0 kWh/yr	\$8,509.99	\$1,319.52	<input checked="" type="checkbox"/> \$0/kW	<input type="checkbox"/> 60% Cap \$0.06/kWh

D: Lobby				Schedule=3900 hrs/week (3900hrs/yr)			
OLD: <input checked="" type="checkbox"/>	T8 4' 25W E2 2L *	17	2 W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	731	2,851
NEW: <input checked="" type="checkbox"/>	LED Linear T8 4' 12W 2L-Bypass	17	2 LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	24	408	1,591

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	323.00 W	1,259.7 kWh/yr	\$1,314.34	\$190.57	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap \$0.10/kWh

D: Lobby				Schedule=3900 hrs/week (3900hrs/yr)			
OLD:	<i>T8 4' 25W E2 2L *</i>	<b>10</b>	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	430 1,677
<input checked="" type="checkbox"/>							
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	<b>10</b>	1	LED= 25W, Type=Retrofit	<input type="checkbox"/>	25	250 975
<input checked="" type="checkbox"/>	<i>25W DLC Premium</i>						

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	180.00 W	702.0 kWh/yr	\$2,455.32	<b>\$199.13</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap \$0.19/kWh

E: Trophy Case				Schedule=3900 hrs/week (3900hrs/yr)			
OLD:	<i>T8 4' 25W E2 2L *</i>	<b>4</b>	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	172 671
<input checked="" type="checkbox"/>							
NEW:	<i>LED LinearT8 4' 12W 2L-Bypass</i>	<b>4</b>	2	LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	24	96 374
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	76.00 W	296.4 kWh/yr	\$309.26	<b>\$44.84</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap \$0.10/kWh

F: Rooms 100-120				Schedule=5x01 (261hrs/yr)			
OLD:	<i>T8 4' 25W E2E1 3L *</i>	<b>3</b>	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	207 54
<input checked="" type="checkbox"/>							
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>		
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	<b>3</b>	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	84 22
<input checked="" type="checkbox"/>	<i>28W DLC Premium</i>						

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	123.00 W	32.1 kWh/yr	\$745.24	<b>\$52.14</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap \$0.19/kWh

F: Rooms 100-120				Schedule=3900 hrs/week (3900hrs/yr)			
OLD:	<i>T8 4' 25W E2E1 3L *</i>	<b>19</b>	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	1,311 5,113
<input checked="" type="checkbox"/>							
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>		
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	<b>19</b>	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	532 2,075
<input checked="" type="checkbox"/>	<i>28W DLC Premium</i>						

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	779.00 W	3,038.1 kWh/yr	\$4,719.84	<b>\$861.77</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap \$0.19/kWh

F: Rooms 100-120				Schedule=3900 hrs/week (3900hrs/yr)			
OLD:	<i>INC A 60W 2L (EISA= INC A 43W 2L)</i>	<b>2</b>	2	INCAN= 60W, Type=A-Lamp	<input type="checkbox"/>	120	240 936
<input checked="" type="checkbox"/>						EISA=86	172 671
NEW:	<i>LED 9W 2L A-Lamp</i>	<b>2</b>	2	LED= 9W, Type=A-Lamp	<input type="checkbox"/>	18	36 140
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	136.00 W	530.4 kWh/yr	\$67.98	<b>\$33.99</b>	<input type="checkbox"/> \$160/kW	<input checked="" type="checkbox"/> 50% Cap \$0.08/kWh



F: Rooms 100-120				Schedule=3900 hrs/week (3900hrs/yr)			
OLD:	<i>CFL 13W-2L Spiral</i>	<b>1</b>	2 CFL-S= 13W, Type=Spiral	<input type="checkbox"/>	26	26	101
<input checked="" type="checkbox"/>							
NEW:	<i>LED 9W 2L A-Lamp</i>	<b>1</b>	2 LED= 9W, Type=A-Lamp	<input type="checkbox"/>	18	18	70
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	8.00 W	31.2 kWh/yr	\$35.35	<b>\$3.78</b>	<input checked="" type="checkbox"/> \$160/kW	<input type="checkbox"/> 50% Cap	\$0.08/kWh

F: Rooms 100-120				Schedule=1800 hrs/week (1800hrs/yr)			
OLD:	<i>INC PAR 150W 1L (EISA= INC PAR 100W 1L)</i>	<b>6</b>	1 INCAN= 150W, Type=PAR	<input type="checkbox"/>	150	900	1,620
<input checked="" type="checkbox"/>					EISA=100	600	1,080
NEW:	<i>LED 15.5W 1L Par</i>	<b>6</b>	1 LED= 15.5W, Type=PAR-Lamp	<input type="checkbox"/>	15.5	93	167
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	507.00 W	912.6 kWh/yr	\$177.58	<b>\$88.79</b>	<input type="checkbox"/> \$160/kW	<input checked="" type="checkbox"/> 50% Cap	\$0.08/kWh

F: Rooms 100-120				Schedule=1800 hrs/week (1800hrs/yr)			
OLD:	<i>T8 4' 25W E2E1 3L *</i>	<b>5</b>	2 W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	345	621
<input checked="" type="checkbox"/>							
Ballast #2			1 W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 Retrofit Kit 28W DLC Premium</i>	<b>5</b>	1 LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	140	252
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	205.00 W	369.0 kWh/yr	\$1,242.06	<b>\$146.06</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

F: Rooms 100-120				Schedule=5x16 (4171hrs/yr)			
OLD:	<i>T8 4' 25W E2E1 3L *</i>	<b>4</b>	2 W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	276	1,151
<input checked="" type="checkbox"/>							
Ballast #2			1 W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 Fixture 38W Non-DLC</i>	<b>4</b>	1 LED= 38W, Type=Fixture	<input type="checkbox"/>	38	152	634
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	124.00 W	517.2 kWh/yr	\$927.40	<b>\$76.52</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

F: Rooms 100-120				Schedule=5x16 (4171hrs/yr)			
OLD:	<i>T8 4' 25W E3 3L *</i>	<b>4</b>	3 W06616 = F25T8 4' 25W, ELC-3 (63W)	<input type="checkbox"/>	63	252	1,051
<input checked="" type="checkbox"/>							
NEW:	<i>LED LinearT8 4' 12W 3L-Bypass</i>	<b>4</b>	3 LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	36	144	601
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	108.00 W	450.5 kWh/yr	\$397.87	<b>\$66.65</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

F: Rooms 100-120				Schedule=1800 hrs/week (1800hrs/yr)				
OLD:	<i>T8 4' 25W E2E1 3L *</i>	120	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	8,280	14,904
<input checked="" type="checkbox"/>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 28W w/ Step-Dimming Driver DLC</i>	120	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	3,360	6,048
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	4,920.00 W	8,856.0 kWh/yr	\$22,896.43	<b>\$2,804.40</b>	<input checked="" type="checkbox"/> \$300/kW	<input type="checkbox"/> 75% Cap \$0.15/kWh

F: Rooms 100-120				Schedule=5x16 (4171hrs/yr)				
OLD:	<i>T8 4' 25W E3 3L *</i>	2	3	W06616 = F25T8 4' 25W, ELC-3 (63W)	<input type="checkbox"/>	63	126	526
<input checked="" type="checkbox"/>								
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	2	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	56	234
<input checked="" type="checkbox"/>	<i>28W DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	70.00 W	292.0 kWh/yr	\$492.16	<b>\$80.99</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap \$0.19/kWh

F: Rooms 100-120				Schedule=1800 hrs/week (1800hrs/yr)				
OLD:	<i>T8 4' 25W E2E1 3L *</i>	5	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	345	621
<input checked="" type="checkbox"/>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	5	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	140	252
<input checked="" type="checkbox"/>	<i>28W DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	205.00 W	369.0 kWh/yr	\$1,242.06	<b>\$146.06</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap \$0.19/kWh

F: Rooms 100-120				Schedule=3900 hrs/week (3900hrs/yr)				
OLD:	<i>T8 4' 25W E2E1 3L *</i>	9	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	621	2,422
<input checked="" type="checkbox"/>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	9	1	LED= 19W, Type=Retrofit	<input type="checkbox"/>	19	171	667
<input checked="" type="checkbox"/>	<i>19W DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	450.00 W	1,755.0 kWh/yr	\$2,235.71	<b>\$497.81</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap \$0.19/kWh

F: Rooms 100-120				Schedule=5x16 (4171hrs/yr)				
OLD:	<i>T8 4' 25W E2E1 3L *</i>	12	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	828	3,454
<input checked="" type="checkbox"/>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 28W w/ Step-Dimming Driver DLC</i>	12	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	336	1,401
<input checked="" type="checkbox"/>								

	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
Xcel Rebate Calculation	492.00 W	2,052.1 kWh/yr	\$2,289.65	<b>\$455.42</b>	<input checked="" type="checkbox"/> \$300/kW	<input type="checkbox"/> 75% Cap	\$0.15/kWh

F: Rooms 100-120				Schedule=3900 hrs/week (3900hrs/yr)				
OLD: <input checked="" type="checkbox"/>	T8 4' 25W E2 2L *	4	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	172	671
NEW: <input checked="" type="checkbox"/>	LED Troffer 2x4 Retrofit Kit 28W DLC Premium	4	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	112	437

	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
Xcel Rebate Calculation	60.00 W	234.0 kWh/yr	\$982.13	<b>\$66.38</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

G: Restrooms (All)				Schedule=3900 hrs/week (3900hrs/yr)				
OLD:	<i>T8 4' 25W E2 2L *</i>	1	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	43	168
<input checked="" type="checkbox"/>								
NEW:	<i>LED Wrap 4' Fixture 26.8W</i>	1	1	LED= 26.8W, Type=Fixture	<input type="checkbox"/>	26.8	26.8	105
<input checked="" type="checkbox"/>	<i>DLC</i>							

	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
Xcel Rebate Calculation	16.20 W	63.2 kWh/yr	\$233.87	<b>\$14.34</b>	<input checked="" type="checkbox"/> \$300/kW	<input type="checkbox"/> 75% Cap	\$0.15/kWh

G: Restrooms (All)				Schedule=1800 hrs/week (1800hrs/yr)				
OLD: <input checked="" type="checkbox"/>	T8 4' 25W E2 2L *	25	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	1,075	1,935
NEW: <input checked="" type="checkbox"/>	LED LinearT8 4' 12W 2L-Bypass	25	2	LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	24	600	1,080

	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
Xcel Rebate Calculation	475.00 W	855.0 kWh/yr	\$1,932.84	<b>\$180.50</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

G: Restrooms (All)				Schedule=5x16 (4171hrs/yr)				
OLD: <input checked="" type="checkbox"/>	T8 4' 25W E2 2L *	1	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	43	179
NEW: <input checked="" type="checkbox"/>	LED Wrap 4' Fixture 26.8W DLC	1	1	LED= 26.8W, Type=Fixture	<input type="checkbox"/>	26.8	26.8	112

	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
Xcel Rebate Calculation	16.20 W	67.6 kWh/yr	\$233.87	<b>\$15.00</b>	<input checked="" type="checkbox"/> \$300/kW	<input type="checkbox"/> 75% Cap	\$0.15/kWh

G: Restrooms (All)				Schedule=1800 hrs/week (1800hrs/yr)			
OLD:	<i>T8 4' 25W E2 2L *</i>	<b>6</b>	2 W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	258	464
<input checked="" type="checkbox"/>							
NEW:	<i>LED Wrap 4' Fixture 26.8W DLC</i>	<b>6</b>	1 LED= 26.8W, Type=Fixture	<input type="checkbox"/>	26.8	160.8	289
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	97.20 W	175.0 kWh/yr	\$1,403.20	<b>\$55.40</b>	<input checked="" type="checkbox"/> \$300/kW	<input type="checkbox"/> 75% Cap	\$0.15/kWh

H: A Wing Hallway A & B				Schedule=3900 hrs/week (3900hrs/yr)			
OLD:	<i>T8 3' 25W E2 2L *</i>	<b>2</b>	2 W06480 = F25T8 3' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	86	335
<input checked="" type="checkbox"/>							
NEW:	<i>LED LinearT8 3' 12W 2L-Bypass</i>	<b>2</b>	2 LED= 12W, Type=Linear-T8-Bypass-3'	<input type="checkbox"/>	24	48	187
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	38.00 W	148.2 kWh/yr	\$154.62	<b>\$22.42</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

H: A Wing Hallway A & B				Schedule=3900 hrs/week (3900hrs/yr)			
OLD:	<i>CFLp 7W M2 2L</i>	<b>4</b>	2 W02000 = CFT 7W (G23), EEM-2 (16.3W)	<input type="checkbox"/>	16.3	65.2	254
<input checked="" type="checkbox"/>							
NEW:	<i>LED PL-GX23 5.5W 2L-Bypass</i>	<b>4</b>	2 LED= 5.5W, Type=PL	<input type="checkbox"/>	11	44	172
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	21.20 W	82.7 kWh/yr	\$276.21	<b>\$12.51</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

H: A Wing Hallway A & B				Schedule=3900 hrs/week (3900hrs/yr)			
OLD:	<i>T8 4' 25W E2 2L *</i>	<b>26</b>	2 W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	1,118	4,360
<input checked="" type="checkbox"/>							
NEW:	<i>LED LinearT8 4' 12W 2L-Bypass</i>	<b>26</b>	2 LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	24	624	2,434
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	494.00 W	1,926.6 kWh/yr	\$2,010.16	<b>\$291.46</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

H: A Wing Hallway A & B				Schedule=3900 hrs/week (3900hrs/yr)			
OLD:	<i>T8 4' 25W E2 2L *</i>	<b>42</b>	2 W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	1,806	7,043
<input checked="" type="checkbox"/>							
NEW:	<i>LED Troffer 2x4 Retrofit Kit 25W DLC Premium</i>	<b>42</b>	1 LED= 25W, Type=Retrofit	<input type="checkbox"/>	25	1,050	4,095
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	756.00 W	2,948.4 kWh/yr	\$10,312.38	<b>\$836.33</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

I: B Wing Hallway A				Schedule=3900 hrs/week (3900hrs/yr)				
OLD: <input checked="" type="checkbox"/>	T8 3' 25W E2 2L *	1	2	W06480 = F25T8 3' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	43	168
NEW: <input checked="" type="checkbox"/>	LED LinearT8 3' 12W 2L-Bypass	1	2	LED= 12W, Type=Linear-T8-Bypass-3'	<input type="checkbox"/>	24	24	94

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	19.00 W	74.1 kWh/yr	\$77.32	<b>\$11.21</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

I: B Wing Hallway A				Schedule=3900 hrs/week (3900hrs/yr)				
OLD:	<i>T8 4' 25W E2 2L *</i>	16	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	688	2,683
<input checked="" type="checkbox"/>								
NEW:	<i>LED LinearT8 4' 12W 2L-Bypass</i>	16	2	LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	24	384	1,498
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	304.00 W	1,185.6 kWh/yr	\$1,237.02	<b>\$179.36</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

I: B Wing Hallway A				Schedule=3900 hrs/week (3900hrs/yr)				
OLD:	<i>T8 4' 25W E2 2L *</i>	7	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	301	1,174
<input checked="" type="checkbox"/>								
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	7	1	LED= 25W, Type=Retrofit	<input type="checkbox"/>	25	175	683
<input checked="" type="checkbox"/>	<i>25W DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	126.00 W	491.4 kWh/yr	\$1,718.73	<b>\$139.39</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

J: B Wing Hallway B				Schedule=3900 hrs/week (3900hrs/yr)				
OLD:	<i>T8 4' 25W E2 2L *</i>	5	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	215	839
<input checked="" type="checkbox"/>								
NEW:	<i>LED LinearT8 4' 12W 2L-Bypass</i>	5	2	LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	24	120	468
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	95.00 W	370.5 kWh/yr	\$386.56	<b>\$56.05</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

J: B Wing Hallway B				Schedule=3900 hrs/week (3900hrs/yr)				
OLD:	<i>T8 4' 25W E3 3L *</i>	2	3	W06616 = F25T8 4' 25W, ELC-3 (63W)	<input type="checkbox"/>	63	126	491
<input checked="" type="checkbox"/>								
NEW:	<i>LED LinearT8 4' 12W 3L-Bypass</i>	2	3	LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	36	72	281
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	54.00 W	210.6 kWh/yr	\$198.93	<b>\$31.86</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

J: B Wing Hallway B				Schedule=3900 hrs/week (3900hrs/yr)
OLD:	<i>CFLp 7W M2 2L</i>	<b>2</b>	2 W02000 = CFT 7W (G23), EEM-2 (16.3W)	<input type="checkbox"/> 16.3 32.6 127
NEW:	<i>LED PL-GX23 5.5W 2L-Bypass</i>	<b>2</b>	2 LED= 5.5W, Type=PL	<input type="checkbox"/> 11 22 86

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type
	10.60 W	41.3 kWh/yr	\$138.10	<b>\$6.25</b>	<input checked="" type="checkbox"/> \$200/kW <input type="checkbox"/> 60% Cap \$0.10/kWh

J: B Wing Hallway B				Schedule=3900 hrs/week (3900hrs/yr)
OLD:	<i>T8 4' 25W E2 2L *</i>	<b>26</b>	2 W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/> 43 1,118 4,360
NEW:	<i>LED Troffer 2x4 Retrofit Kit 25W DLC Premium</i>	<b>26</b>	1 LED= 25W, Type=Retrofit	<input type="checkbox"/> 25 650 2,535

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type
	468.00 W	1,825.2 kWh/yr	\$6,383.85	<b>\$517.73</b>	<input checked="" type="checkbox"/> \$375/kW <input type="checkbox"/> 75% Cap \$0.19/kWh

K: Media Center				Schedule=1800 hrs/week (1800hrs/yr)
OLD:	<i>T8 3' 25W E2 2L *</i>	<b>2</b>	2 W06480 = F25T8 3' 25W, ELC-2 (43W)	<input type="checkbox"/> 43 86 155
NEW:	<i>LED LinearT8 3' 12W 2L-Bypass</i>	<b>2</b>	2 LED= 12W, Type=Linear-T8-Bypass-3'	<input type="checkbox"/> 24 48 86

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type
	38.00 W	68.4 kWh/yr	\$154.62	<b>\$14.44</b>	<input checked="" type="checkbox"/> \$200/kW <input type="checkbox"/> 60% Cap \$0.10/kWh

K: Media Center				Schedule=1800 hrs/week (1800hrs/yr)
OLD:	<i>T8 4' 25W E2 2L *</i>	<b>4</b>	2 W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/> 43 172 310
NEW:	<i>LED LinearT8 4' 12W 2L-Bypass</i>	<b>4</b>	2 LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/> 24 96 173

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type
	76.00 W	136.8 kWh/yr	\$309.26	<b>\$28.88</b>	<input checked="" type="checkbox"/> \$200/kW <input type="checkbox"/> 60% Cap \$0.10/kWh

K: Media Center				Schedule=1800 hrs/week (1800hrs/yr)
OLD:	<i>T8 2' 17 E2 2L-Exist*</i>	<b>1</b>	2 W06160 = F17T8 2' 17W, ELC-2 (31W)	<input type="checkbox"/> 31 31 56
NEW:	<i>LED LinearT8 2' 9W 2L-Bypass</i>	<b>1</b>	2 LED= 9W, Type=Linear-T8-Bypass-2'	<input type="checkbox"/> 18 18 32

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type
	13.00 W	23.4 kWh/yr	\$70.12	<b>\$4.94</b>	<input checked="" type="checkbox"/> \$200/kW <input type="checkbox"/> 60% Cap \$0.10/kWh

K: Media Center				Schedule=1800 hrs/week (1800hrs/yr)				
OLD:	<i>T8 4' 25W E2 2L *</i>	31	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	1,333	2,399
<input checked="" type="checkbox"/>								
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	31	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	868	1,562
<input checked="" type="checkbox"/>	<i>28W DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	465.00 W	837.0 kWh/yr	\$7,611.52	<b>\$331.31</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

L: Rooms 120-140				Schedule=5x01 (261hrs/yr)				
OLD: <input checked="" type="checkbox"/>	CFLp 26W E2 2L	1	2	W02640 = CFQ 26W (G24D), ELC-2 (51W)	<input type="checkbox"/>	51	51	13
NEW: <input checked="" type="checkbox"/>	LED 9W 2L PL Ballast Bypass	1	2	LED= 9W, Type=PL	<input type="checkbox"/>	18	18	5

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	33.00 W	8.6 kWh/yr	\$80.58	<b>\$7.46</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

L: Rooms 120-140				Schedule=5x01 (261hrs/yr)				
OLD:	<i>T8 4' 25W E2 2L *</i>	1	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	43	11
<input checked="" type="checkbox"/>								
NEW:	<i>LED LinearT8 4' 12W 2L-Bypass</i>	1	2	LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	24	24	6
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	19.00 W	5.0 kWh/yr	\$77.32	<b>\$4.30</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

L: Rooms 120-140				Schedule=1800 hrs/week (1800hrs/yr)				
OLD: <input checked="" type="checkbox"/>	T8 4' 25W E2E1 3L *	44	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	3,036	5,465
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
OLD: <input checked="" type="checkbox"/>	T8 4' 25W E3 3L *	2	3	W06616 = F25T8 4' 25W, ELC-3 (63W)	<input type="checkbox"/>	63	126	227
NEW: <input checked="" type="checkbox"/>	LED Troffer 2x4 Fixture 38W Non-DLC	46	1	LED= 38W, Type=Fixture	<input type="checkbox"/>	38	1,748	3,146

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	1,414.00 W	2,545.2 kWh/yr	\$10,660.45	<b>\$1,007.48</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

L: Rooms 120-140				Schedule=1800 hrs/week (1800hrs/yr)				
OLD:	<i>T8 3' 25W E2 2L *</i>	10	2	W06480 = F25T8 3' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	430	774
<input checked="" type="checkbox"/>								
NEW:	<i>LED Lightbar 3' Fixture 14W</i>	10	1	LED= 14W, Type=Fixture	<input type="checkbox"/>	14	140	252
<input checked="" type="checkbox"/>	<i>Non-DLC</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	290.00 W	522.0 kWh/yr	\$3,113.52	<b>\$110.20</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

L: Rooms 120-140				Schedule=1800 hrs/week (1800hrs/yr)				
OLD:	<i>T8 4' 25W E3 10L *</i>	<b>2</b>	8	W06620 = F25T8 4' 25W, ELC-4 (85W)	<input type="checkbox"/>	213	426	767
<input checked="" type="checkbox"/>								
Ballast #2			2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>			
NEW:	<i>LED Lightbar 4' Fixture 19.9W</i>	<b>10</b>	1	LED= 19.9W, Type=Fixture	<input type="checkbox"/>	19.9	199	358
<input checked="" type="checkbox"/>	<i>DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	227.00 W	408.6 kWh/yr	\$3,824.31	<b>\$161.74</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

L: Rooms 120-140				Schedule=1800 hrs/week (1800hrs/yr)				
OLD:	<i>CFLp 26W E2 2L</i>	1	2	W02640 = CFQ 26W (G24D), ELC-2 (51W)	<input type="checkbox"/>	51	51	92
<input checked="" type="checkbox"/>								
NEW:	<i>LED Can Hardwired Retrofit Kit 8" 9W</i>	1	1	LED= 9W, Type=Recessed Can	<input type="checkbox"/>	9	9	16
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	42.00 W	75.6 kWh/yr	\$170.59	<b>\$15.96</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

L: Rooms 120-140				Schedule=1800 hrs/week (1800hrs/yr)				
OLD:	<i>T8 4' 25W E2 2L *</i>	21	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	903	1,625
<input checked="" type="checkbox"/>								
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	4	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	112	202
<input checked="" type="checkbox"/>	<i>28W DLC Premium</i>							
NEW:	<i>LED Lightbar 4' Fixture 19.9W</i>	17	1	LED= 19.9W, Type=Fixture	<input type="checkbox"/>	19.9	338.3	609
<input checked="" type="checkbox"/>	<i>DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	452.70 W	814.9 kWh/yr	\$7,499.30	<b>\$322.55</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh



L: Rooms 120-140				Schedule=1800 hrs/week (1800hrs/yr)			
OLD:	<i>T8 4' 25W E2E1 3L *</i>	<b>39</b>	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	2,691 4,844
	<b>Ballast #2</b>		1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>		
NEW:	<i>LED Troffer 2x4 28W w/ Step-Dimming Driver DLC</i>	<b>39</b>	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	1,092 1,966

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	1,599.00 W	2,878.2 kWh/yr	\$7,441.34	<b>\$911.43</b>	<input checked="" type="checkbox"/> \$300/kW <input type="checkbox"/> 75% Cap	\$0.15/kWh

L: Rooms 120-140				Schedule=1800 hrs/week (1800hrs/yr)			
OLD:	<i>T8 4' 25W E2E1 3L *</i>	<b>2</b>	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	138 248
	<b>Ballast #2</b>		1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>		
OLD:	<i>T8 4' 25W E3 3L *</i>	<b>41</b>	3	W06616 = F25T8 4' 25W, ELC-3 (63W)	<input type="checkbox"/>	63	2,583 4,649
NEW:	<i>LED Troffer 2x4 Retrofit Kit 28W DLC Premium</i>	<b>43</b>	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	1,204 2,167

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	1,517.00 W	2,730.6 kWh/yr	\$10,586.22	<b>\$1,080.86</b>	<input checked="" type="checkbox"/> \$375/kW <input type="checkbox"/> 75% Cap	\$0.19/kWh

M: Server Room				Schedule=5x01 (261hrs/yr)			
OLD:	<i>T8 4' 25 E4-4L-Exist*</i>	<b>1</b>	4	W06620 = F25T8 4' 25W, ELC-4 (85W)	<input type="checkbox"/>	85	85 22
NEW:	<i>LED LinearT8 4' 12W 4L-Bypass</i>	<b>1</b>	4	LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	48	48 13

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	37.00 W	9.7 kWh/yr	\$134.15	<b>\$8.37</b>	<input checked="" type="checkbox"/> \$200/kW <input type="checkbox"/> 60% Cap	\$0.10/kWh

N: Rooms 141-150				Schedule=5x01 (261hrs/yr)			
OLD:	<i>T8 4' 25W E3 3L *</i>	<b>4</b>	3	W06616 = F25T8 4' 25W, ELC-3 (63W)	<input type="checkbox"/>	63	252 66
NEW:	<i>LED Troffer 2x4 Retrofit Kit 28W DLC Premium</i>	<b>4</b>	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	112 29

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	140.00 W	36.5 kWh/yr	\$984.33	<b>\$59.35</b>	<input checked="" type="checkbox"/> \$375/kW <input type="checkbox"/> 75% Cap	\$0.19/kWh

N: Rooms 141-150				Schedule=1800 hrs/week (1800hrs/yr)				
OLD:	<i>T8 4' 25W E2E1 3L *</i>	8	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	552	994
<input checked="" type="checkbox"/>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 Fixture 38W</i>	8	1	LED= 38W, Type=Fixture	<input type="checkbox"/>	38	304	547
<input checked="" type="checkbox"/>	<i>Non-DLC</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	248.00 W	446.4 kWh/yr	\$1,854.80	<b>\$94.24</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

N: Rooms 141-150				Schedule=1800 hrs/week (1800hrs/yr)				
OLD:	<i>T8 4' 25W E2E1 3L *</i>	96	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	6,624	11,923
<input checked="" type="checkbox"/>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 28W w/ Step-Dimming Driver DLC</i>	96	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	2,688	4,838
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	3,936.00 W	7,084.8 kWh/yr	\$18,317.15	<b>\$2,243.52</b>	<input checked="" type="checkbox"/> \$300/kW	<input type="checkbox"/> 75% Cap	\$0.15/kWh

N: Rooms 141-150				Schedule=1800 hrs/week (1800hrs/yr)				
OLD:	<i>T8 4' 25W E2E1 3L *</i>	3	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	207	373
<input checked="" type="checkbox"/>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	3	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	84	151
<input checked="" type="checkbox"/>	<i>28W DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	123.00 W	221.4 kWh/yr	\$745.24	<b>\$87.64</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

O: C Wing Hallway A				Schedule=3900 hrs/week (3900hrs/yr)				
OLD: <input checked="" type="checkbox"/>	<i>T8 4' 25W E2 2L *</i>	<b>3</b>	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	129	503
NEW: <input checked="" type="checkbox"/>	<i>LED LinearT8 4' 12W 2L-Bypass</i>	<b>3</b>	2	LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	24	72	281

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	57.00 W	222.3 kWh/yr	\$231.94	<b>\$33.63</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

O: C Wing Hallway A				Schedule=3900 hrs/week (3900hrs/yr)			
OLD:	<i>CFLp 7W M2 2L</i>	<b>2</b>	2 W02000 = CFT 7W (G23), EEM-2	<input type="checkbox"/>	16.3	32.6	127
<input checked="" type="checkbox"/>			(16.3W)				
NEW:	<i>LED PL-GX23 5.5W 2L-Bypass</i>	<b>2</b>	2 LED= 5.5W, Type=PL	<input type="checkbox"/>	11	22	86
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	10.60 W	41.3 kWh/yr	\$138.10	<b>\$6.25</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

O: C Wing Hallway A				Schedule=3900 hrs/week (3900hrs/yr)			
OLD:	<i>T8 4' 25W E2 2L *</i>	<b>15</b>	2 W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	645	2,516
<input checked="" type="checkbox"/>							
NEW:	<i>LED Troffer 2x4 Retrofit Kit 25W DLC Premium</i>	<b>15</b>	1 LED= 25W, Type=Retrofit	<input type="checkbox"/>	25	375	1,463
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	270.00 W	1,053.0 kWh/yr	\$3,683.00	<b>\$298.69</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

P: Showers				Schedule=5x01 (261hrs/yr)			
OLD:	<i>CFLp 26W E2 2L</i>	<b>4</b>	2 W02640 = CFQ 26W (G24D), ELC-2	<input type="checkbox"/>	51	204	53
<input checked="" type="checkbox"/>			(51W)				
NEW:	<i>LED 9W 2L PL Ballast Bypass</i>	<b>4</b>	2 LED= 9W, Type=PL	<input type="checkbox"/>	18	72	19
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	132.00 W	34.5 kWh/yr	\$322.29	<b>\$29.85</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

Q: Rooms 156, 157, 158, 160				Schedule=5x01 (261hrs/yr)			
OLD:	<i>T8 4' 25W E3 3L *</i>	<b>4</b>	3 W06616 = F25T8 4' 25W, ELC-3 (63W)	<input type="checkbox"/>	63	252	66
<input checked="" type="checkbox"/>							
NEW:	<i>LED Troffer 2x4 Retrofit Kit 28W DLC Premium</i>	<b>4</b>	1 LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	112	29
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	140.00 W	36.5 kWh/yr	\$984.33	<b>\$59.35</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

Q: Rooms 156, 157, 158, 160				Schedule=5x01 (261hrs/yr)			
OLD:	<i>T8 4' 25W E2 2L *</i>	<b>1</b>	2 W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	43	11
<input checked="" type="checkbox"/>							
NEW:	<i>LED Wrap 4' Fixture 26.8W DLC</i>	<b>1</b>	1 LED= 26.8W, Type=Fixture	<input type="checkbox"/>	26.8	26.8	7
<input checked="" type="checkbox"/>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	16.20 W	4.2 kWh/yr	\$233.87	<b>\$5.49</b>	<input checked="" type="checkbox"/> \$300/kW	<input type="checkbox"/> 75% Cap	\$0.15/kWh

Q: Rooms 156, 157, 158, 160				Schedule=1800 hrs/week (1800hrs/yr)				
OLD: <input checked="" type="checkbox"/>	T8 4' 25W E3 3L *	7	3	W06616 = F25T8 4' 25W, ELC-3 (63W)	<input type="checkbox"/>	63	441	794
NEW: <input checked="" type="checkbox"/>	LED Troffer 2x4 Retrofit Kit 28W DLC Premium	7	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	196	353

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	245.00 W	441.0 kWh/yr	\$1,722.58	<b>\$174.56</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

Q: Rooms 156, 157, 158, 160				Schedule=5x16 (4171hrs/yr)				
OLD: <input checked="" type="checkbox"/>	T8 4' 25W E3 3L *	1	3	W06616 = F25T8 4' 25W, ELC-3 (63W)	<input type="checkbox"/>	63	63	263
NEW: <input checked="" type="checkbox"/>	LED Troffer 2x4 Retrofit Kit 28W DLC Premium	1	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	28	117

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	35.00 W	146.0 kWh/yr	\$246.08	<b>\$40.50</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

Q: Rooms 156, 157, 158, 160				Schedule=1800 hrs/week (1800hrs/yr)				
OLD:	<i>T8 4' 25W E2E1 3L *</i>	62	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	4,278	7,700
<input checked="" type="checkbox"/>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 28W w/ Step-Dimming Driver DLC</i>	62	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	1,736	3,125
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	2,542.00 W	4,575.6 kWh/yr	\$11,829.82	<b>\$1,448.94</b>	<input checked="" type="checkbox"/> \$300/kW	<input type="checkbox"/> 75% Cap	\$0.15/kWh

R: Rooms 161 & 163				Schedule=5x16 (4171hrs/yr)				
OLD:	<i>T8 4' 25W E2 2L *</i>	30	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	1,290	5,381
<input checked="" type="checkbox"/>								
NEW:	<i>LED LinearT8 4' 12W 2L-Bypass</i>	30	2	LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	24	720	3,003
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	570.00 W	2,377.5 kWh/yr	\$2,319.42	<b>\$351.75</b>	<input checked="" type="checkbox"/> \$200/kW	<input type="checkbox"/> 60% Cap	\$0.10/kWh

R: Rooms 161 & 163				Schedule=5x16 (4171hrs/yr)				
OLD:	<i>T8 4' 25W E3 3L *</i>	2	3	W06616 = F25T8 4' 25W, ELC-3 (63W)	<input type="checkbox"/>	63	126	526
<input checked="" type="checkbox"/>								
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	2	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	56	234
<input checked="" type="checkbox"/>	<i>28W DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	70.00 W	292.0 kWh/yr	\$492.16	<b>\$80.99</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

S: Rooms 154, 159, & 162				Schedule=5x01 (261hrs/yr)				
OLD:	<i>T8 4' 25W E2 2L *</i>	<b>3</b>	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	129	34
<input checked="" type="checkbox"/>								
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	<b>3</b>	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	84	22
<input checked="" type="checkbox"/>	<i>28W DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	45.00 W	11.7 kWh/yr	\$736.60	<b>\$19.08</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

S: Rooms 154, 159, & 162				Schedule=5x01 (261hrs/yr)				
OLD:	<i>T8 4' 25W E2E1 3L *</i>	<div>6</div>	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<div><input type="checkbox"/></div>	69	414	108
<div><input checked="" type="checkbox"/></div>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<div><input type="checkbox"/></div>			
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	<div>6</div>	1	LED= 28W, Type=Retrofit	<div><input type="checkbox"/></div>	28	168	44
<div><input checked="" type="checkbox"/></div>	<i>28W DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	246.00 W	64.2 kWh/yr	\$1,490.47	<b>\$104.29</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

S: Rooms 154, 159, & 162				Schedule=3900 hrs/week (3900hrs/yr)				
OLD:	<i>T8 4' 25W E2 2L *</i>	13	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	559	2,180
<input checked="" type="checkbox"/>								
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	13	1	LED= 25W, Type=Retrofit	<input type="checkbox"/>	25	325	1,268
<input checked="" type="checkbox"/>	<i>25W DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	234.00 W	912.6 kWh/yr	\$3,191.93	<b>\$258.86</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

S: Rooms 154, 159, & 162				Schedule=5x16 (4171hrs/yr)				
OLD:	<i>T8 4' 25W E2E1 3L *</i>	20	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	1,380	5,756
<input checked="" type="checkbox"/>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	20	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	560	2,336
<input checked="" type="checkbox"/>	<i>28W DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type		
	820.00 W	3,420.2 kWh/yr	\$4,968.26	<b>\$948.79</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap	\$0.19/kWh

S: Rooms 154, 159, & 162				Schedule=5x16 (4171hrs/yr)				
OLD:	<i>T8 4' 25W E2E1 3L *</i>	46	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	3,174	13,239
<input checked="" type="checkbox"/>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 28W w/ Step-Dimming Driver DLC</i>	46	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	1,288	5,372
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	1,886.00 W	7,866.5 kWh/yr	\$8,776.96	<b>\$1,745.78</b>	<input checked="" type="checkbox"/> \$300/kW	<input type="checkbox"/> 75% Cap \$0.15/kWh

T: Room 153-Music Room				Schedule=3900 hrs/week (3900hrs/yr)				
OLD:	<i>T8 4' 25W E2E1 3L *</i>	<b>2</b>	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	138	538
<input checked="" type="checkbox"/>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	<i>LED Troffer 2x4 Retrofit Kit</i>	<b>2</b>	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	56	218
<input checked="" type="checkbox"/>	<i>28W DLC Premium</i>							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	82.00 W	319.8 kWh/yr	\$496.82	<b>\$90.71</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap \$0.19/kWh

T: Room 153-Music Room				Schedule=1800 hrs/week (1800hrs/yr)				
OLD: <input checked="" type="checkbox"/>	<i>T8 4' 25W E2E1 3L *</i>	<b>2</b>	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	138	248
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
OLD: <input checked="" type="checkbox"/>	<i>T8 4' 25W E3 3L *</i>	<b>19</b>	3	W06616 = F25T8 4' 25W, ELC-3 (63W)	<input type="checkbox"/>	63	1,197	2,155
NEW: <input checked="" type="checkbox"/>	<i>LED Troffer 2x4 Retrofit Kit 36.49W DLC Premium</i>	<b>15</b>	1	LED= 36.49W, Type=Retrofit	<input type="checkbox"/>	36.49	547.35	985
NEW: <input checked="" type="checkbox"/>	<i>LED Troffer 2x4 Retrofit Kit 30.28W DLC Premium</i>	<b>4</b>	1	LED= 30.28W, Type=Retrofit	<input type="checkbox"/>	30.28	121.12	218
NEW: <input checked="" type="checkbox"/>	<i>LED Troffer 2x4 Retrofit Kit 28W DLC Premium</i>	<b>2</b>	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	56	101

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	610.53 W	1,099.0 kWh/yr	\$5,172.40	<b>\$435.00</b>	<input checked="" type="checkbox"/> \$375/kW	<input type="checkbox"/> 75% Cap \$0.19/kWh

U: Room 151-Gym, Storage, Office				Schedule=5x12 (3128hrs/yr)				
OLD: <input checked="" type="checkbox"/>	<i>T8 4' 25W E2 NBF 6L *</i>	24	6	W09104 = F25ST8 4' 25W, ELC-2 NBF (HiPer) (43.5W)	<input type="checkbox"/>	130.5	3,132	9,797
NEW: <input checked="" type="checkbox"/>	<i>LED High Bay Fixture 106.42W DLC Premium</i>	24	1	LED= 106.42W, Type=Fixture	<input type="checkbox"/>	106.42	2,554.08	7,989

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type	
	577.92 W	1,807.7 kWh/yr	\$14,418.83	<b>\$889.07</b>	<input checked="" type="checkbox"/> \$600/kW	<input type="checkbox"/> 75% Cap \$0.30/kWh

U: Room 151-Gym, Storage, Office				Schedule=5x01 (261hrs/yr)				
OLD: <input checked="" type="checkbox"/>	T8 4' 25W E2 2L *	6	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	43	258	67
NEW: <input checked="" type="checkbox"/>	LED LinearT8 4' 12W 2L-Bypass	6	2	LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	24	144	38

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type			
	114.00 W	29.8 kWh/yr	\$463.88	<b>\$25.78</b>	<input checked="" type="checkbox"/>	\$200/kW	<input type="checkbox"/>	60% Cap \$0.10/kWh

U: Room 151-Gym, Storage, Office				Schedule=5x16 (4171hrs/yr)				
OLD:	T8 4' 25W E2E1 3L *	3	2	W06612 = F25T8 4' 25W, ELC-2 (43W)	<input type="checkbox"/>	69	207	863
<input checked="" type="checkbox"/>								
Ballast #2			1	W06608 = F25T8 4' 25W, ELC-1 (26W)	<input type="checkbox"/>			
NEW:	LED Troffer 2x4 Retrofit Kit	3	1	LED= 28W, Type=Retrofit	<input type="checkbox"/>	28	84	350
<input checked="" type="checkbox"/>	28W DLC Premium							

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type			
	123.00 W	513.0 kWh/yr	\$745.24	<b>\$142.32</b>	<input checked="" type="checkbox"/>	\$375/kW	<input type="checkbox"/>	75% Cap \$0.19/kWh

V: Oil Room				Schedule=5x01 (261hrs/yr)				
OLD:	<i>CFL 23W-1L Spiral</i>	2	1	CFL-S= 23W, Type=Spiral	<input type="checkbox"/>	23	46	12
<input checked="" type="checkbox"/>								
NEW:	<i>LED 17W 1L A-Lamp</i>	2	1	LED= 17W, Type=A-Lamp	<input type="checkbox"/>	17	34	9
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type			
	12.00 W	3.1 kWh/yr	\$52.64	<b>\$2.17</b>	<input checked="" type="checkbox"/>	\$160/kW	<input type="checkbox"/>	50% Cap \$0.08/kWh

W: Mezzanine				Schedule=5x01 (261hrs/yr)				
OLD:	<i>T8 4' 32 E2-2L-Exist*</i>	37	2	W07320 = F32T8 4' 32W, ELC-1 (32W)	<input type="checkbox"/>	64	2,368	618
<input checked="" type="checkbox"/>								
NEW:	<i>LED LinearT8 4' 12W 2L-Bypass</i>	37	2	LED= 12W, Type=Linear-T8-Bypass-4'	<input type="checkbox"/>	24	888	232
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type			
	1,480.00 W	386.3 kWh/yr	\$2,946.83	<b>\$334.63</b>	<input checked="" type="checkbox"/>	\$200/kW	<input type="checkbox"/>	60% Cap \$0.10/kWh

W: Mezzanine				Schedule=5x01 (261hrs/yr)				
OLD:	<i>INC A 060W 1L (EISA= INC A 043W 1L)</i>	2	1	INCAN= 60W, Type=A-Lamp	<input type="checkbox"/>	60	120	31
<input checked="" type="checkbox"/>						EISA=43	86	22
NEW:	<i>LED 9W-1L A-Lamp</i>	2	1	LED= 9W, Type=A-Lamp	<input type="checkbox"/>	9	18	5
<input checked="" type="checkbox"/>								

Xcel Rebate Calculation	Watt Savings	kWh Savings	Installed Cost	Rebate	Rebate Calc Type			
	68.00 W	17.7 kWh/yr	\$33.99	<b>\$12.30</b>	<input checked="" type="checkbox"/>	\$160/kW	<input type="checkbox"/>	50% Cap \$0.08/kWh

## Operating Schedules

Schedule Name	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>1800 hrs/week</b>	Start 4.9 hrs	4.9 hrs	4.9 hrs	4.9 hrs	4.9 hrs	4.9 hrs	4.9 hrs
1800 hrs/yr	End						
<b>3900 hrs/week</b>	Start 10.7 hrs	10.7 hrs	10.7 hrs	10.7 hrs	10.7 hrs	10.7 hrs	10.7 hrs
3900 hrs/yr	End						
<b>5x01</b>	Start 1.0 hrs	1.0 hrs	1.0 hrs	1.0 hrs	1.0 hrs		
261 hrs/yr	End						
<b>5x12</b>	Start 12.0 hrs	12.0 hrs	12.0 hrs	12.0 hrs	12.0 hrs		
3128 hrs/yr	End						
<b>5x16</b>	Start 16.0 hrs	16.0 hrs	16.0 hrs	16.0 hrs	16.0 hrs		
4171 hrs/yr	End						
<b>Exterior</b>	Start 12.0 hrs	12.0 hrs	12.0 hrs	12.0 hrs	12.0 hrs	12.0 hrs	12.0 hrs
4380 hrs/yr	End						

## Rebate Calculation Method

Rebate Code			Rebate	kW Savings	kWh Savings
<b>Exterior DLC Luminaire/Kit</b>	\$0/kW	\$0.06/kWh	\$1839.86	0.0000	30,664
		[60% cap]	\$0.00	0.0000	0
<b>Exterior Non-DLC Luminaire/Kit</b>	\$0/kW	\$0.05/kWh	\$111.91	0.0000	2,238
		[60% cap]	\$0.00	0.0000	0
<b>2022 LED Tube Bonus</b>	\$200/kW	\$0.10/kWh	\$1881.64	4.3900	10,036
		[60% cap]	\$0.00	0.0000	0
<b>2022 DLC Premium Bonus</b>	\$375/kW	\$0.19/kWh	\$9247.86	10.6812	27,959
		[75% cap]	\$0.00	0.0000	0
<b>Screw-In/LED Tube</b>	\$160/kW	\$0.08/kWh	\$18.25	0.0880	52
		[50% cap]	\$122.78	0.6430	1,443
<b>2022 DLC Bonus</b>	\$300/kW	\$0.15/kWh	\$9699.72	15.5208	33,623
		[75% cap]	\$0.00	0.0000	0
<b>2021 Non DLC Kit/Fixture</b>	\$200/kW	\$0.10/kWh	\$359.24	0.9114	1,770
		[60% cap]	\$0.00	0.0000	0
<b>2022 DLC Premium High Bay Bonus</b>	\$600/kW	\$0.30/kWh	\$889.07	0.5779	1,808
		[75% cap]	\$0.00	0.0000	0



# ONE-STOP EFFICIENCY SHOP® PROGRAM RULES AND REQUIREMENTS

The One-Stop Efficiency Shop® lighting efficiency program (One-Stop Efficiency Shop®), administered by Center for Energy and Environment ("CEE") and funded through Xcel Energy, offers cash rebates to eligible small business customers ("Participant") who purchase and install qualifying energy-efficient lighting products in existing buildings.

The intent of the One-Stop Efficiency Shop® operating as a Minnesota Conservation Improvement Program (CIP), is to incentivize Xcel Energy's customers to install energy efficient equipment earlier than they would have otherwise by defraying a portion of the cost of the retrofit. To ensure that the program operates as intended, the Participant must have a financial stake in the transaction and the Participant's Project Cost must be greater than zero to receive a One-Stop Efficiency Shop® rebate.

## Participant Qualifications

One-Stop Efficiency Shop® rebates apply only to qualified Xcel Energy customers with a valid commercial electric account in Xcel Energy's Minnesota service territory that meet One-Stop Efficiency Shop® eligibility requirements. The Vendor or Participant must verify with a CEE consultant that an Xcel Energy account is eligible for One-Stop Efficiency Shop® rebates before committing to, purchasing equipment for or implementing a project. To determine if a business qualifies for the One-Stop Efficiency Shop® please contact CEE at (612) 244-2427.

## Eligibility Requirements

1. Rebate items must be installed at the Xcel Energy electric account listed on the application.
2. All equipment must be new. Used or rebuilt equipment is not eligible for a rebate.
3. All removed lighting equipment (lamps, ballasts and fixtures) must be properly recycled, and cannot be sold or reused at another location. Documentation may be required to ensure compliance with proper disposal of equipment.
4. Energy-efficient equipment must result in an electric load reduction.
5. Xcel Energy and CEE recommend Illuminating Engineering Society (IES) light levels. Participant is responsible for approval of final light levels.
6. Rebates are offered for interior lighting, exterior canopy lighting, soffit fixtures, wall pack fixtures, parking garage and parking lot lighting. Rebates will not be issued for street lighting. Most screw-in compact fluorescent lamps (CFLs) are not eligible for rebates.
7. Lamps or other equipment that have already been rebated through any other Xcel Energy rebate programs are ineligible for a rebate under the One-Stop Efficiency Shop®. This includes upstream programs that provide incentives to manufacturers, distributors and retailers to sell products at a discounted price.
8. CEE reserves the right to disallow a rebate if it determines, in its sole judgment, that the lighting technology is inappropriately applied or light levels are inadequate. Contact your CEE consultant to determine qualification of custom or specialty lighting projects.
9. Equipment must be purchased, properly installed and fully operating prior to submitting an application for a rebate.

## Vendor Responsibilities

10. The "Vendor" is any person or company that is consulting on the project, selling the project to the participant, completing the work and/or supplying the materials. Vendor is an independent contractor and not an agent or representative of Xcel Energy or CEE, has no authority to bind Xcel Energy or CEE, and is solely responsible for sub-contractors the Vendor hires to do some or all of the work and/or supply materials.
11. The Vendor must clearly communicate to the Participant the purpose and requirements of the One-Stop Efficiency Shop®, including eligibility requirements for lighting rebates. The Vendor must involve the CEE consultant in communications with the Participant, and must keep the CEE consultant fully informed regarding all details of the transaction.

12. Vendors are responsible for reviewing, signing and returning the Contractor Report to CEE before materials are ordered. By signing the Contractor Report, the Vendor represents and warrants that the transaction complies with these Rules and Requirements and that the project specifications in the Contractor Report are accurate, acceptable and will be installed as specified.
13. Any inaccuracies concerning project specifications must be reported immediately to a CEE consultant so they can be addressed, the rebate recalculated if necessary and a revised report issued to the Vendor and the Participant.
14. Vendor must contact a CEE consultant whenever there are changes to the project so that equipment eligibility can be confirmed and the rebate value can be re-calculated if necessary.
15. CEE will not be responsible for changes in the rebate value if the Vendor does not sign and return the Contractor Report, and report: inaccuracies in the Contractor Report; changes in the equipment to be installed; or changes in the project during construction.

## Rebate Calculations

16. Rebate values are based on CEE's calculation of electric demand (KW) and energy (kWh) savings. Hours used for calculation of the kWh savings must be an accurate representation of the Participant's operating schedule.
17. Electric demand and energy savings are calculated using lighting efficiency baselines established by the Energy Independence and Security Act (EISA). EISA standards apply to most T12 and incandescent lighting technologies today, and will apply to other technologies as efficiency requirements continue to be phased in.
18. If an Xcel Energy lighting rebate was previously assigned to this account and the rebated lighting was subsequently converted to a less efficient lighting system, a One-Stop consultant must review the situation to determine the correct baseline energy use for calculating the rebate.
19. Rebates are based on the energy use of the equipment actually installed at the site and the Participant's Project Cost. Rebates will be recalculated if the final equipment and Participant's Project Cost is different than originally approved by CEE.
20. Rebates cannot exceed 60 percent of the Participant's Project Cost, unless otherwise specified by the One-Stop Efficiency Shop®. The minimum rebate paid is \$5.00.
21. "Participant's Project Cost" means the Participant's financial obligation for the lighting retrofit based on the total project cost less any and all Deductions, regardless of when these Deductions are received.

## ONE-STOP EFFICIENCY SHOP® PROGRAM RULES AND REQUIREMENTS

22. "Deductions" means anything of value received by the Participant that reduces the Participant's actual out-of-pocket cost for the lighting retrofit including, but not limited to: labor or material donations; monetary donations; labor or material cost deductions; grants; awards, rebates; or any other assistance of monetary value provided, directly or indirectly, by the Vendor, its agents or representatives to reduce the Participant's actual financial obligation for the lighting project.

23. The following types of financial transactions are not allowed as methods of payment by the Participant for the lighting project: barter, in-kind donations and performance contracting.

24. All Deductions must be separately itemized on the final invoice submitted to CEE. The Participant's Project Cost must be greater than zero to receive a One-Stop Efficiency Shop® rebate.

### Invoice

25. The Vendor must submit an accurate, complete and transparent final invoice for the completed lighting retrofit. All parties involved in the project, including the Participant and CEE, must have a clear understanding of the scope of work and associated project costs, including any Deductions that have been applied.

26. Invoice(s) submitted must include: (1) itemized quantity, manufacturer's make and model numbers for each material item, (2) a lump sum amount for both material and labor, and (3) grand total project cost. In some cases, original equipment manufacturer (OEM) specification sheets may be requested for verification or clarification.

27. The Vendor must provide the Participant an invoice that reflects the same financial information that is submitted to CEE, including any Deductions that have been applied.

### Verification

28. CEE reserves the right to inspect Participant's facility(ies) for installation of materials listed on this rebate application and will need access to survey the installed project. Participant must keep a sample of any and all types of equipment removed for a period of three (3) months after receiving a rebate from Xcel Energy. If the inspection determines that Participant did not comply with these Rules and Requirements, any rebate received by Participant must be promptly returned to Xcel Energy.

29. Vendor agrees to promptly provide CEE with such additional documentation and information as may be necessary to verify compliance with these Rules and Requirements, such as copies of cancelled checks or other relevant receipts/records as proof that the Participant paid the amount reflected on the invoice. Rebates for that project will not be paid until all requested documentation and information is provided and verified.

### Rebate Application and Payment

30. One-Stop Efficiency Shop® rules and rebate eligibility requirements are subject to change. It is the Participant's and Vendor's responsibility to verify with CEE that estimated rebates are still valid before committing to, purchasing equipment for or implementing a project. CEE will not pay a rebate for projects where the invoice is submitted more than 12 months after the start of the project.

31. Xcel Energy and CEE are not responsible for any lost, late, stolen, ineligible, illegible, misdirected or postage-due mail. All completed rebate applications and other submissions in connection with the One-Stop Efficiency Shop® become the property of Xcel Energy and CEE and will not be returned.

32. In cases of deferred payment, CEE reserves the right to process the rebate only when full payment is received by the Vendor from the Participant. All financed and alternate payment plans must be documented with detailed, legally obligating and signed contracts. CEE reserves the right to disallow any payment plan that its staff determines is not in compliance with the program design intent and rules.

33. Rebates will not be disbursed until the project is fully installed and verified.

34. The rebate check will be sent to the Participant (i.e., Xcel Energy account holder) listed on the rebate application, unless otherwise authorized by CEE. Xcel Energy will issue rebates in the form of checks, not utility bill credits.

35. Once completed paperwork is submitted and approved, rebate payments are usually made in 6 to 8 weeks.

### Special Notices

36. Xcel Energy and CEE reserve the right to refuse payment or participation in the One-Stop Efficiency Shop® if the Participant or Vendor violates program design intent, rules and procedures. Xcel Energy and CEE are not liable for rebates promised to Participants as a result of a Vendor misrepresenting the program.

37. The One-Stop Efficiency Shop® is subject to 60 days notice of cancellation.

The Participant and Vendor are responsible for checking with a CEE consultant to determine whether the program is still in effect and to verify program requirements.

### 38. CEE RESERVES THE RIGHT TO DISQUALIFY NON-COMPLIANT VENDORS FROM PARTICIPATION IN THE ONE-STOP EFFICIENCY SHOP®.

### Disclaimers

Xcel Energy and CEE:

39. Do not endorse any particular vendor, manufacturer, product or system design by offering these rebates;

40. Will not be responsible for any tax liability imposed on the Participant as a result of the payment of rebates;

41. EXPRESSLY DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE WITH RESPECT TO ANY PRODUCTS, EQUIPMENT, MATERIAL OR WORKMANSHIP PROVIDED, SUPPLIED OR INSTALLED IN CONNECTION WITH THE ONE-STOP EFFICIENCY SHOP®. Warranties, if any, are between Participant and equipment manufacturer(s) and/or Vendors.

42. Are not responsible for the disposal of removed lighting equipment (lamps, ballasts and/or fixtures) replaced as a result of this program, when required for optimum lighting performance;

43. In no event shall be liable for any indirect, special, incidental, consequential or punitive damages arising out of or relating to administering the One-Stop Efficiency Shop®

44. Do not guarantee that a specific level of energy or cost savings will result from the implementation of energy conservation measures or the use of products funded under this program.

For more information, contact CEE at  
Phone: (612) 244-2427 Fax: (612) 335-5888.  
Mail To: Center for Energy and Environment  
212 3rd Avenue North, Suite 560  
Minneapolis, MN 55401



CEE FACET, Programs Rules #  
130326

**ISD #256 Red Wing Schools District-wide LED Lighting Upgrade with 2022 Bonus Rebates**

School Name	Current Total Price	2022 BONUS REBATE / CREDIT	Annual Energy Savings	NET PRICE	PAYBACK
Lighting Energy Study	\$30,297.12	\$30,297.12			
Prairie Island Arena	\$126,885.00	\$17,948.23	\$6,870.44	\$108,936.77	15.86
District Maintenance Shop	\$8,700.00	\$225.00	\$16.07	\$8,475.00	527.38
Twin Bluffs Middle School	\$453,000.00	\$62,250.00	\$12,669.84	\$390,750.00	30.84
Sunnyside Elementary School	\$159,901.00	\$20,106.25	\$8,390.04	\$139,794.75	16.66
Burnside Elementary	\$235,500.00	\$23,794.83	\$12,074.05	\$211,705.17	17.53
Colvill Family Center	\$83,750.00	\$8,043.75	\$2,258.82	\$75,706.25	33.52
Red Wing High School and District Office	\$991,900.01	\$122,249.37	\$42,811.40	\$869,650.64	20.31
	<b>\$2,089,933.13</b>	<b>\$284,914.55</b>	<b>\$85,090.66</b>	<b>\$1,805,018.58</b>	<b>21.21</b>

ISD #256 Red Wing Public Schools District Combined -  
LED Fixtures Lighting Upgrade

COOPERATIVE  
*Purchasing*  
CONNECTION



PREPARED FOR:	QUOTED BY:
ACCOUNT ISD #256 Red Wing Public Schools	TRC REP Jake Andrist
ADDRESS 2451 Eagle Ridge Dr. Red Wing, MN 55066	EMAIL <a href="mailto:jandrist@retrofitcompanies.com">jandrist@retrofitcompanies.com</a>
ATTN Kevin Johnson (651) 385-4507 kjohnson@rwps.org	PHONE (507) 363-0656
DATE 4/13/2022	The Retrofit Companies, Inc. dba Retrofit Lighting and Design 1010 Hoffman Drive Suite A Owatonna, MN 55060 RETROFITCOMPANIES.COM

District Combined - LED Fixtures Lighting Upgrade

DESCRIPTION	UNIT PRICE	TOTAL
Implement Customized Energy-Efficient Lighting Solutions utilizing the Cooperative Purchasing Connection (CPC) Contract: <b>#20.6 - RLD - Lighting Audit and Solutions</b>		\$2,089,933.13
COOPERATIVE <i>Purchasing</i> CONNECTION CPC Lighting Energy Study Reimbursement		\$30,297.12
Estimated Xcel Energy and CEE One-Stop 2022 Bonus Rebates <i>Rebates payable to: The Retrofit Companies, Inc.</i>		\$254,617.43
<p>* For all instances of PCB containing ballasts, generator must obtain EPA ID number and complete profile/manifest paperwork to ensure proper off-site disposal upon completion of the project.  ** Visa &amp; MasterCard are accepted and will be charged 3% for processing</p>		

Subtotal	<b>\$1,805,018.58</b>
Shipping & Handling	<b>INCLUDED</b>
Taxes	<b>N/A</b>
<b>TOTAL</b>	<b>\$1,805,018.58</b>

1.5% FINANCE CHARGE APPLIED TO ALL PAST  
DUE ACCOUNTS

Proposal Acknowledgement:

Your signature above, or PO for this proposal, indicates you have read and agree to the Terms and Conditions and Warranty Information provided in the proposal.

Any changes in the above specifications shall be made in writing, and as evidence of agreement, shall be signed by both parties. TRC shall not be held responsible or liable for any loss, damage or delay due to causes beyond his control. If the purchaser disposes of the property by sale or otherwise before this contract has been fulfilled, the full unpaid amount of the contract shall become due and payable at once.





# Terms and Conditions

**Payment Terms:** A down payment of 50% of the gross project value is due prior to project materials being ordered. The remaining balance is due upon project completion.

**Incentives:** The rebate figure provided is merely an estimate. Utilities reserve the right to adjust their rebate programs at any time, thus The Retrofit Companies, Inc. (TRC) will not be liable for unforeseen adjustments to rebate programs and amounts.

**Schedule Contingencies:** Conditions or events beyond the control of TRC may jeopardize the proposed performance schedules. TRC shall not be responsible for delays in delivery beyond TRC's control. Examples of conditions or events beyond TRC's control include inability to access client's facility, extreme weather conditions, or force majeure.

**Cancellation:** Customer may choose to cancel prior to material shipment without additional restocking charge(s). Material orders that have been manufactured and/or shipped cannot be canceled and returned. All order cancellations must be in writing. All costs for warehousing and freight on orders canceled after shipment and/or refused at destination will be charged to the customer.

**Maintenance of Material:** Customer acknowledges and agrees that customer shall operate and maintain the material in accordance with the manufacturer's recommendations.

**Publicity of Customer Participation:** The customer grants TRC the right to use and reference, for promotional purposes, the customer's partnership with TRC.

**Indemnification and Limitation of Company's Liability:** Customer shall indemnify, defend and hold harmless TRC, its affiliates and their respective contractors, officers, directors, employees, agents, representatives from and against any and all claims, damages, losses and expenses, including reasonable attorneys' fees and costs incurred to enforce this indemnity, arising out of, resulting from, or related to the project or the performance of any services or other work in connection with the project's ("Damages"), caused or alleged to be caused in whole or in part by any actual or alleged act or omission of the customer, any subcontractor, agent, or third party, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. To the fullest extent allowed by law, TRC's aggregate liability, regardless of the number of claims, shall be limited to paying approved incentives in accordance with these Terms and Conditions. TRC and its affiliates and their respective contractors, officers, directors, employees, agents, representatives shall not be liable to the customer or any other party for any other obligation. To the fullest extent allowed by law and as part of the consideration for participation in the project, the customer waives and releases TRC and its affiliates from all obligation, and for any liability or claim associated with the material, the performance of the material, or these Terms and Conditions.

**Contractor Selection:** Customer acknowledges that TRC reserves the right to select a vendor or contractor to install the materials and equipment at the customer's facility.

**Removal of Equipment:** The customer agrees to allow TRC to properly remove and dispose of, or recycle, the equipment, lamps and components in accordance with all applicable laws, and regulations and codes. The customer agrees not to re-install any of removed equipment. Customer may be responsible for securing an EPA ID #, if they don't currently have one, in the instance of PCB ballast being found on-site.

**Energy Benefits:** Other than the energy cost savings projected to the customer, TRC is not held liable for unforeseen factors that could alter the projected savings outlined in this proposal.

**ASHRAE or IECC Energy Codes:** Unless explicitly stated otherwise on the quote page, all lighting projects developed by TRC do not comply with the ASHRAE or IECC energy codes. Adjustments to project pricing resulting from adhering to these codes, should the project be flagged during the electrical permitting process, are the sole responsibility of the customer.

## PLEASE TAKE NOTICE:

(A) ANY PERSON OR COMPANY SUPPLYING LABOR OR MATERIALS FOR THIS IMPROVEMENT TO YOUR PROPERTY MAY FILE A LIEN AGAINST YOUR PROPERTY IF THAT PERSON OR COMPANY IS NOT PAID FOR THE CONTRIBUTIONS

(B) UNDER MINNESOTA LAW YOU HAVE THE RIGHT TO PAY PERSONS WHO SUPPLIED LABOR OR MATERIALS FOR THIS AMOUNT FROM OUR CONTRACT PRICE, OR WITHHOLD THE AMOUNTS DUE THEM FROM US UNTIL 120 DAYS AFTER COMPLETION OF THE IMPROVEMENT UNLESS WE GIVE YOU A LIEN WAIVER SIGNED BY PERSONS WHO SUPPLIED ANY LABOR OR MATERIAL FOR THE IMPROVEMENT AND WHO GAVE YOU TIMELY NOTICE.

(C) IF AT ANY TIME DURING INSTALLATION OR INSPECTION IT IS FOUND THAT THE FACILITY'S EXISTING ELECTRICAL DOES NOT MEET CURRENT CODE, THE RETROFIT COMPANIES, INC. IS NOT RESPONSIBLE FOR THE WORK REQUIRED TO BRING





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# Warranty

The Retrofit Companies, Inc. (TRC) warrants that its labor for all Turn-Key Retrofit projects is consistent with applicable industry standards. If you believe that TRC's labor did not comply with this warranty, then for a period of 30 days, TRC will have its laborers work with you to cure any alleged deficiencies in the labor performed pursuant to the parties' agreement. This limited warranty period starts upon substantial completion.

TRC's limited warranty is strictly limited, and only applies, to TRC's labor provided on the project. You understand that TRC's warranty does not cover, and TRC does not have any responsibility for, the design, manufacture, operation, maintenance, or performance of the products and equipment used in your project. The applicable manufacturers' warranties are owned by you, and you may pursue any warranty-related claims for the products with the manufacturers. Your TRC representative can, and will, help coordinate your warranty claims with the manufacturer as needed.

## WHAT IS NOT INCLUDED IN THE WARRANTY

### Labor and Equipment

TRC will leave your facility with lights and equipment in full working order. If products should fail, TRC will assist you in making a warranty claim to the manufacturer, free of charge. At your option, TRC will offer repair at our hourly rate, or offer to ship product to you for your own installation. If lifts or other specialty equipment is required to access the defective product, those fees will also be charged at the time of service.

### Shipping and Delivery

TRC will invoice for shipping fees associated with return & delivery of replacement products.

## LIMITATION OF DAMAGES

Regardless of the type of claim or damages, you agree that TRC's aggregate liability for all claims will not exceed the fee paid for our labor services or \$25,000, whichever is greater. If you are unwilling to accept this allocation of risk, we will increase our aggregate liability to \$50,000 provided that, within 10 days of the date of our Agreement, you provide payment in an amount that will increase our fees by 10%, but not less than \$500, to compensate us for the greater risk undertaken. This increased fee is not the purchase of insurance.

## WARRANTY LIMITATIONS

THIS LIMITED WARRANTY CONSTITUTES THE SOLE WARRANTY MADE BY TRC, AND REPLACES ALL OTHER ORAL OR WRITTEN WARRANTIES, LIABILITIES OR OBLIGATIONS OF TRC. THE OBLIGATIONS CONTAINED IN THIS LIMITED WARRANTY CONSTITUTE THE EXCLUSIVE REMEDY AND ARE EXPRESSLY PROVIDED IN LIEU OF, AND REPLACE, ANY AND ALL OTHER OBLIGATIONS, GUARANTEES, AND WARRANTIES. THIS LIMITED WARRANTY IS NON-TRANSFERABLE AND THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED WHICH EXTEND BEYOND THE FACE HEREOF, HEREIN, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED. TRC'S OBLIGATIONS, RESPONSIBILITIES AND/OR LIABILITY SHALL BE LIMITED AS STATED ABOVE.

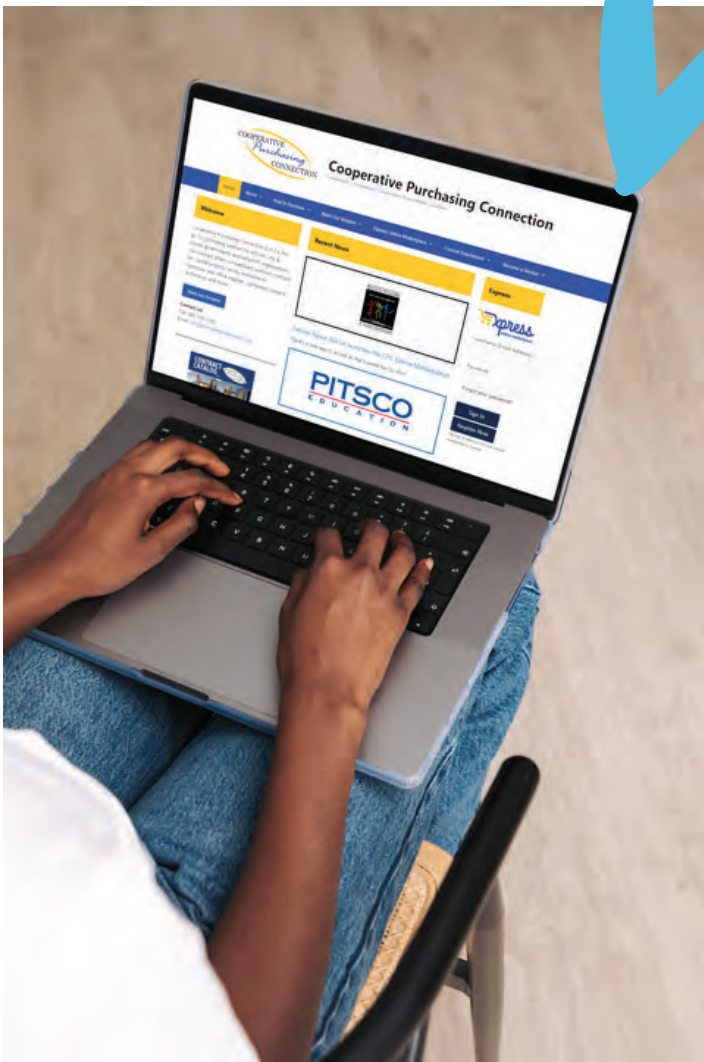
IN NO EVENT SHALL TRC BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING ECONOMIC LOSS AND DAMAGE TO ANY PERSONS OR PROPERTY.

# Marketing

## PROPOSAL

### Cooperative Purchasing Connection

Retrofit Lighting & Design, a division of The Retrofit Companies, Inc. (TRC), is excited to, once again, have the opportunity to partner with the Cooperative Purchasing Connection as well as the participating agencies in the program. The CPC has always provided exceptional service to their customers and we greatly value the collaborative marketing approach that TRC and the CPC have developed over the years. We have had wonderful success in marketing alongside the CPC for many years and hope to continue this partnership.



CONVENIENT | COMPETATIVE



RETROFIT  
**LIGHTING & DESIGN**

800-795-1230

[www.retrofitcompanies.com](http://www.retrofitcompanies.com)



# MARKETING STRATEGY



*As a leading lighting contractor in the Midwest territory, we are committed to delivering efficient, professional, and experienced lighting services to our customers. Our goal is to empower educational institutions with sustainable and cost-effective lighting solutions that enhance learning environments while reducing energy consumption.*

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## Tailored Lighting & Marketing Solutions

Our experienced team of lighting experts has designed a range of tailored lighting solutions that meet the specific needs of schools, cities, counties, municipalities, and non-profits in MN, ND, SD, WI, and IA. From classrooms to auditoriums, libraries to gymnasiums, our lighting solutions not only improve visibility but also promote energy efficiency, creating a better environment for students and staff.



- 
- 32+ years of experience working with schools, cities, counties, municipalities, and non-profits
  - Customers love partnering with our marketing team to showcase their finished project
  - We directly support customers in gaining more visibility within their community and key decision makers
  - CPC gains visibility through every project completed - digital marketing, multi-platform social, direct outreach and continued promotion through outbound sales effort with new and existing community & business partnerships





# CONTRACT LAUNCH

*To launch the CPC lighting partner contract, our team will employ a multi-faceted approach that combines digital marketing, direct outreach, and strategic partnerships.*



## RESEARCH & ANALYSIS

Before launching the contract, we conduct extensive research and analysis to understand the lighting needs and challenges faced by schools, cities, counties, municipalities, and non-profits in MN, ND, SD, WI & IA. This allows us to develop a comprehensive understanding of the local market, enabling us to provide tailored solutions that address the unique requirements of educational facilities as well as funding challenges & solutions.

## DIGITAL MARKETING

Our online presence will play a pivotal role in promoting the lighting partner contract. We will leverage social media platforms, email marketing, and targeted online associations to raise awareness among schools, cities, counties, municipalities, and non-profits in the region. By utilizing our efficient, experienced, and professional brand voice, we will communicate the unique benefits and advantages of our sustainable lighting solutions, emphasizing energy savings and enhanced lighting quality.

## DIRECT OUTREACH

Personalized direct outreach will be a key component of our launch strategy. Our experienced sales team will engage directly with school administrators, facility managers, and decision-makers through phone calls, emails, and in-person meetings. By showcasing our decades of experience, unique expertise, professionalism, and dedication to custom problem-solving, we will demonstrate the value of partnering with Retrofit Lighting & Design.

## STRATEGIC PARTNERSHIPS

An additional aspect of our launch strategy involves establishing strategic partnerships with educational associations and organizations in each of the targeted states. By collaborating with these influential entities, we can extend our reach and credibility. This will involve participating in education-focused events, conferences, and seminars, where we can demonstrate our lighting solutions and connect with schools, cities, counties, municipalities, and non-profits representatives.

# VALUE-ADDS

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*Our unique partnership with the CPC and their in-house Marketing Team over the years has fostered a beautiful collaborate approach to promoting our lighting contract and the values and benefits of utilizing the program.*

- The Retrofit Companies, Inc. has a seasoned marketing department with years of experience in supporting this membership. This provides a huge value in partnering with us compared to our competitors.
- Our in-house ability to create custom video (shoot, edit, produce, publish), coupled with our graphic design capabilities to provide print and digital ads and marketing materials is also a unique benefit of our company.
- We would, additionally, provide a custom landing page uniquely for CPC members, providing supporting materials explaining the various perks and benefits of the program in great detail, with examples and FAQ's.
- Our team understands that maintaining consistency and professionalism in communication material is paramount. Thus, our marketing team will ensure that full color, print-ready electronic advertisements are always readily available. This will ensure our messages remain clear and concise, and our clients always have access to the latest marketing materials.
- Finally, our team attends dozens of tradeshow across the country annually and CPC lighting projects are often featured in our streaming digital content at our booth. These videos play in front of thousands of attendees throughout the year at a variety of industry events, showcasing how our services have supported their vision.

## CONCLUSION

We look forward to announcing the continued partnership with the CPC. This contract allows both the CPC and TRC to empower educational institutions across the Midwest with sustainable and cost-effective lighting solutions while streamlining the process and utilizing funds efficiently.



800-795-1230  
[www.retrofitcompanies.com](http://www.retrofitcompanies.com)

**ACORD**<sup>TM</sup>**CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY)

8/25/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> <b>USI Insurance Services, LLC</b> <b>8000 Norman Center Drive</b> <b>Suite 400</b> <b>Bloomington, MN 55437</b>		<b>CONTACT NAME:</b> <b>USI Insurance Services</b> <b>PHONE (A/C, No, Ext):</b> <b>800 735-3008</b> <b>FAX (A/C, No):</b> <b>610-537-1954</b> <b>E-MAIL ADDRESS:</b> <b>bloomingtoncertrequest@usi.com</b>	
		<b>INSURER(S) AFFORDING COVERAGE</b>	
		<b>INSURER A : Union Insurance Company</b>	
		<b>INSURER B : Employers Mutual Casualty Insurance Co</b>	
		<b>INSURER C : SFM Mutual Insurance Company</b>	
		<b>INSURER D : Evanston Insurance Company</b>	
		<b>INSURER E :</b>	
		<b>INSURER F :</b>	

**COVERAGES** **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
<b>A</b>	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> <b>PD Ded: \$250</b> GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			<b>5D73254</b>	<b>08/10/2023</b>	<b>08/10/2024</b>	EACH OCCURRENCE <b>\$1,000,000</b> DAMAGE TO RENTED PREMISES (Ea occurrence) <b>\$1,000,000</b> MED EXP (Any one person) <b>\$10,000</b> PERSONAL & ADV INJURY <b>\$1,000,000</b> GENERAL AGGREGATE <b>\$2,000,000</b> PRODUCTS - COMP/OP AGG <b>\$2,000,000</b> \$
<b>B</b>	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			<b>6E58451</b>	<b>08/10/2023</b>	<b>08/10/2024</b>	COMBINED SINGLE LIMIT (Ea accident) <b>\$1,000,000</b> BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
<b>B</b>	<input checked="" type="checkbox"/> <b>UMBRELLA LIAB</b> <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION <b>\$10,000</b>			<b>6J58451</b>	<b>08/10/2023</b>	<b>08/10/2024</b>	EACH OCCURRENCE <b>\$5,000,000</b> AGGREGATE <b>\$5,000,000</b> \$
<b>C</b>	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE/OFFICER/MEMBER EXCLUDED? <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		<b>N/A</b>	<b>129003204</b>	<b>08/10/2023</b>	<b>08/10/2024</b>	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT <b>\$500,000</b> E.L. DISEASE - EA EMPLOYEE <b>\$500,000</b> E.L. DISEASE - POLICY LIMIT <b>\$500,000</b>
<b>D</b>	<b>Contractors Pollution Liab</b>			<b>MKLV3ENV104053</b>	<b>08/10/2023</b>	<b>08/10/2025</b>	<b>\$1M/\$2M - \$10k SIR</b>
<b>B</b>	<b>L/R Equipment</b>			<b>6C58451</b>	<b>08/10/2023</b>	<b>08/10/2024</b>	<b>\$80,000/\$1,000 Ded</b>

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

**Contractors Errors or Omissions - Electrical Work**

**Union Insurance Company 5D73254**

**\$1,000,000 Each Claim/\$1,000,000 Aggregate/\$1,000 Deductible Each Claim**

**CERTIFICATE HOLDER****CANCELLATION**

**Cooperative Purchasing  
Connection (CPC)  
1001 E Mount Faith  
Fergus Falls, MN 56537**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



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**Cooperative Purchasing Connection**  
**Tabulation Report RFP #24.5 - Lighting Audit Services &**  
**LED Solutions**  
**Vendor: Voss Electric Comapny**

**General Comments:** Thank you for the opportunity!

**General Attachments:** 7 - Project Deliverables - Voss Lighting - CPC Bid - 20230906.pdf  
COI for CPC Bid - Voss Electric dba Voss Lighting.pdf  
Pricing Schedule - Voss Lighting -CPC Bid - 20230609.pdf  
Vendor Forms - Signatures - Voss Electric dba Voss Lighting.pdf  
Vendor Questionnaire – Voss Electric dba Voss Lighting.pdf

## Vendor Questionnaire

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### **Instructions**

Contained herein is a questionnaire required by the Cooperative Purchasing Connection (CPC). Please note, while some information is merely informational, some will be used during the evaluation and vetting process.

To submit the required forms, follow these steps:

1. Read the document in its entirety.
2. Respondents must use the Vendor Questionnaire to its capacity. Attached exhibits and/or supplemental information should be included only when requested (i.e. Marketing Plan).
3. Complete all questions.
4. Save all pages in the correct order to a single PDF format titled “***Vendor Questionnaire – Name of Company***”.
5. Submit the Vendor Questionnaire, along with other required documents in Public Purchase.

**The following sections will need to be completed before submission and submitted as one (1) single PDF titled “Vendor Questionnaire – Name of Company”:**

[Company Information](#)

[Qualifications & Experience](#)

[Warranty](#)

[Financials & Level of Support](#)

[Marketing & Partnership](#)

[Exceptions & Deviations](#)

[References](#)

## Company Information

**Name of Company:** Voss Electric dba Voss Lighting

**Company Address:** 1601 Cushman Dr.  
Lincoln, NE 68512

**City, State, Zip code:** www.vosslighting.com

**Website:** (402) 328-2283

**Phone:**

Provide the following company contacts that will be working with this anticipated contract. Include name, email, and phone number(s).

	Name	Email	Phone
General Manager	Steve Sanderson	steve.sanderson@vosslighting.com	(402) 328-2281
Contract Manager	Richard Barber	richard.barber@vosslighting.com	(402) 328-2281
Sales Manager	Mario Mammina; Josh Koch	<a href="mailto:mario.mammina@vosslighting.com">mario.mammina@vosslighting.com</a> ; <a href="mailto:joshua.koch@vosslighting.com">joshua.koch@vosslighting.com</a>	(402) 547-5295; (612) 968-3274
Marketing Manager	Jay O'Neal	jay.oneal@vosslighting.com	(402) 328-2281
Customer Service Manager	Mario Mammina; Josh Koch	<a href="mailto:mario.mammina@vosslighting.com">mario.mammina@vosslighting.com</a> ; <a href="mailto:joshua.koch@vosslighting.com">joshua.koch@vosslighting.com</a>	(469) 559-4336; (612) 968-3274
Account Manager(s)	Grant Teckmeyer, Dave Christenson	<a href="mailto:grant.teckmeyer@vosslighting.com">grant.teckmeyer@vosslighting.com</a> ; <a href="mailto:dave.christenson@vosslighting.com">dave.christenson@vosslighting.com</a>	(402) 850-9779; (612) 270-3664

List who will be responsible for receiving updated participation lists.

Name	Email	Phone
Richard Barber	richard.barber@vosslighting.com	(402) 328-2281

List who will be responsible for submitting sales reports and administrative fee payments every quarter.

Name	Email	Phone
Vince Granshorn	vince.granshorn@vosslighting.com	(402) 328-2281

List who will be responsible for conducting audits as requested by CPC.

Name	Email	Phone
Mario Mammina; Josh Koch; Brian Casebolt; Brad Selley	<a href="mailto:mario.mammina@vosslighting.com">mario.mammina@vosslighting.com</a> ; <a href="mailto:joshua.koch@vosslighting.com">joshua.koch@vosslighting.com</a> ; <a href="mailto:brian.casebolt@vosslighting.com">brian.casebolt@vosslighting.com</a> ; <a href="mailto:brad.selley@vosslighting.com">brad.selley@vosslighting.com</a>	(469) 559-4336; (612) 968-3274; (402) 906-5560; (612) 251-2420

Identify any business types/classifications that your company holds. **\*Submit documentation in PDF format to verify business status (see submittal checklist).**

x	Business Type/Classification
8(a)	8(a) Qualified Business

x	Business Type/Classification
SDB	Small Disadvantaged Business

	DBE	Disadvantaged Business Enterprise
	HUB	Historically Underutilized Business Zone
	MBE	Minority-Owned Business Enterprise
	MWBE	Minority Women-Owned Business Enterprise
	SBE	Small Business Enterprise
	Other; list name:	

	SDVOB	Service-Disabled Veteran Owned Business
	SECTION 3	Section 3 Business Concern
	SSV	Sole Source Vendor
	VBE	Veteran-Owned Business Enterprise
	WBE	Woman-Owned Business Enterprise

**Provide a list of other contracts your organization has in place that could be accessed by our membership for your services (e.g. other consortiums, state agencies) in MN, ND, SD, IA, and WI?**

Click or tap here to enter text.

NCPA, Minnesota State Contract(LAMP CONTRACT #L290 BALLAST CONTRACT # 65590) , Nebraska State Contract, Omnia Partners



## Qualifications & Experience

### **1. Provide a brief background of your organization, including the year it was founded (1-2 paragraphs max.).**

Voss Lighting was founded in 1939, in Lincoln, Nebraska and has grown to thirteen brick and mortar branches nationwide located in the following states: Nebraska, Minnesota, Missouri, Kansas, Oklahoma, Colorado, North Carolina, Georgia, Texas, and Arizona.

Voss is a trusted lighting solutions and services provider in North America. We work with building owners, property managers, government, and corporations to deliver tailored lighting and energy solutions. Our customers look to Voss when they are frustrated with wasting money and resources due to out of control building expenses, rising energy costs, and outdated lighting systems. In our continually changing environment, we specify quality lighting solutions through a joined collaboration between our customers and Voss' highly-trained lighting specialists.

### **2. Provide evidence of what your company is doing to remain viable in the lighting industry.**

From 1939 to 2013, our business functioned primarily as an MRO distributor offering replacement lamps and ballasts to our customers nationwide. Nearly ten years ago, we adopted our business model to meet the market demand for full turn-key installations, which includes supplying industry leading lighting and controls, helping customers filter and discern the constant barrage of poor, pre-packaged LED solutions, navigating our customers through the deep waters of compliance, regulations and standards that come with lighting upgrades, maximizing energy savings, and facilitating energy rebates and financing options.

### **3. Describe your company's logistics (locations, experience, production, distribution of products, warehouse inventories and delivery systems used) that should be considered in your ability to deliver on-time quality services, products, and solutions to participating agencies in MN, ND, SD, IA, and WI.**

Our primary locations serving this five-state region include Lincoln and Omaha, NE, Kansas City, and Minneapolis. All four brick-and-mortar branches have warehouses for stocking distribution and staging materials for project installations. Each branch is also equipped with a delivery van. In cases where drop-shipping from the manufacturer is permissible, the shipment would be coordinated with the agency and manufacturer by a Voss representative. We understand how important staging the materials is for the agency and electricians on site, and emphasis on this portion of the project is of high importance.

### **4. Describe the number of agencies your organization, on average, provides lighting audit services and LED solutions to. Include overall numbers and numbers specific to MN, ND, SD, IA, and WI.**

**Describe your customer retention as it pertains to lighting audit services and LED solutions (i.e. customers who are served that continue to be repeat customers).**

Since its inception in 1939, Voss Lighting has specialized in value-added sales and has been consistently offering product-specific energy audits to our customers. On a daily basis, we conduct numerous such audits, including those for single buildings or single zones, which collectively amount to thousands per year. However, for the purposes of this bid submission, we will focus exclusively on "institutional" audits, encompassing multi-building assessments and evaluations of office or government campuses. As a company, we typically carry out an average of 150-200 institutional audits each year. In the 2022-2023 fiscal year, 56 of these audits were performed by the locations responsible for managing the contract in the regions of Minnesota (MN), North Dakota (ND), South Dakota (SD), Iowa (IA), and Wisconsin (WI).

### **5. Describe and specify your proposed service area (MN, ND, SD, IA, and WI) and how your company intends to meet the needs of customers in that area.**

Voss Lighting has 13 brick-and-mortar locations in the Midwest, Southwest, and Southeast regions. Our history spans over 80 years, originating in Lincoln, NE, and expanding to Minneapolis, MN. We have a strong track record serving public sector customers in MN, ND, SD, IA, and WI from these two branches. Our on-site lighting specialists respond within 5 business days to customer requests, providing expertise and site evaluations. They are backed by a team of fixture designers, project managers, and logistical support staff, ensuring efficient customer service.

**6. List the agencies, if any, you would exempt from this contract (i.e. current agencies that you are currently serving that will be exempt from pricing submitted with this proposal).**

MN customers that are currently purchasing from the state contracts. ( LAMP CONTRACT #L290 BALLAST CONTRACT # 65590)

**7. Describe your company's approach to lighting audits, the steps involved in an audit, and applicable LED solutions and what differentiates your company from your competitors. Describe any competitive differences regarding sales, service, installation, technology, and product line(s).**

An agency would start the process by reaching out to our lighting account managers listed on this bid submission. Those account managers would take the time to interview the prospective client as we looked holistically and thought financially in order to understand the agency's primary needs. At that time, our account managers would engage our project teams to set a date to audit the site. From the audit, we can determine what other resources are needed to complete a final proposal (additional site visits, communication with local AHJs, site visits by subcontractors). Upon sufficient information gathering, we then build the formal proposal. Our goal would be to have that formal proposal ready to be presented in person within 14 business days, at which time a presentation meeting would be set with the agency.

If the agency chooses to proceed with the project, we will collaborate closely with all personnel at the facility to develop a comprehensive and dependable installation plan. This plan will encompass precise product lead times, site safety prerequisites, site storage arrangements, recycling and disposal procedures, and an installation timeline. Upon project initiation, a dedicated Voss Lighting project manager will be assigned to oversee all aspects of the ongoing project. This project manager will maintain regular communication with the agency's facility team to ensure seamless coordination and progress updates.

When you compare Voss Lighting to our competitors, you'll notice several aspects that we take immense pride in:

- (1) Customer-First Culture: Voss Lighting's core is built on a customer-centric culture, firmly rooted in integrity.
- (2) One-Stop Lighting and Energy Solution: We are your trusted, comprehensive solution for all your lighting and energy requirements.
- (3) Long-Term Partnership: We are dedicated to fostering long-term partnerships that extend from project conception to exceptional after-sales support.
- (4) Our expertise in light fixtures allows you to rely on us for selecting the right fixture based on availability now and in the future, durability and life expectancy, controls compatibility and much more.
- (5) Our financial focus means you can be assured we will go beyond products and services to also include funding options so you can do more with less.

**8. Describe how your company works with local utility companies to ensure energy rebates are maximized and how the funding/rebate, if approved, flows through, and applies to the project.**

We are experts in working with and maximizing any energy rebates that can be associated with your lighting retrofits. Upon completing a site audit, we promptly assess available rebate options from local utilities. These estimated rebates will be integrated into our final project proposal presentation. Regarding rebate acquisition, if permissible by the rebate provider, we will deduct the rebate amount from the project's total cost. In cases where this isn't feasible, we will manage all necessary paperwork and ensure rebate funds are directly disbursed to the client.

**9. Describe your company's approach to proposing available LED solutions to an agency resulting from a lighting audit.**

Our expertise in light fixtures allows you to rely on us for selecting the right fixture based on availability now and in the future, durability and life expectancy, controls compatibility, and much more. Because there are several ways to approach a lighting retrofit, we oftentimes will propose a good, better, best solution to the agency, taking into account energy savings, aesthetics, functionality, and controllability. We also offer mock-up demonstrations if needed so that the agency can make the best decision for themselves. In short, we provide the offerings and help guide the agency to make the best decision to fit their practical needs and budget.

**10. Describe any minimum project requirements and if any surcharges will be assessed for not meeting the minimum.**

Minimum Area = 7000 Sq Ft . If the project is smaller than 7000 Sq Ft. all rates associated with the lighting audit will be increased by a 2x multiplier.

**11. Describe how your company ensures that the LED solutions and products offered are current, energy efficient, best-value, and are customizable to agency needs.**

Since our inception in 1939, we have only offered the best in lighting quality at a fair price to our customers. This business model has ensured us time-tested partnerships with our customers and preferred lighting manufacturers. The plethora of available LED solutions to agencies has made the need for specialists ever more important. Every day, we help customers filter and discern the constant barrage of poor, pre-packaged LED solutions. Even though we facilitate the manufacturer's warranty between the agent and the manufacturer, we rarely need to warranty because of the quality products we chose to specify and provide.

**12. Describe your company's hierarchy or chain of command from installers to sales to management that will work with this potential contract/program.**

An agency would start the process by reaching out to our lighting account managers listed on this bid submission. Those account managers would take the time to interview the prospective client as we looked holistically and thought financially in order to understand the agency's primary needs. At that time, our account managers would engage our project teams to set a date to audit the site. From the audit, we can determine what other resources are needed to complete a final proposal (additional site visits, communication with local AHJs, site visits by subcontractors). Upon sufficient information gathering, we then build the formal proposal. Our goal would be to have that formal proposal ready to be presented in person within 14 business days, at which time a presentation meeting would be set with the agency.

**13. Describe the process from order placement, including methods, to receipt of order, installation, and final walk-through (punch-list).**

Once order is placed, the following will take place, which could include one staging process or a combination of both. A) We will bring the materials into our warehouse for staging and palletize the materials according to the predetermined installation schedule. B) If the project warrants a direct drop ship (distance and/or the agencies capability to receive shipment), we will schedule the delivery with the agency directly from the manufacturer. One of our representatives will also follow up on site after the delivery to check over the materials and palletize on site according to the predetermined installation schedule.

We will administer a pre-installation walkthrough with the agency and our electrician. During the installation, our project manager will be on site at least weekly in order to make sure installation is progressing according to the predetermined installation schedule and serves as the direct point of contact for the agency. After installation, our project manager will facilitate the final walk-through punch-list with the agency, and correct any items left undone in a prompt manner in order to finalize the project.

**14. Describe in detail your return or exchange program/policy(s) for purchases of LED lighting solutions and/or specific products (i.e lamps, fixtures) outside of an audit or applicable project.**

Labor/Installation Warranty - Voss Lighting will provide a 1-year warranty on all labor (from the time of the final invoice) and the materials warranty starting upon receiving the purchase order from the agency. (Exception : This warranty does not cover lift or equipment charges in excess of \$500 per project)

Material Warranty - We will provide warranty based on the manufacturer's listed warranty at the time the project was completed. We make the warranty process easy for the agency by facilitating the warranty on their behalf with the manufacturer. This manufacturer's warranty can range from 5 years to 10 years based on the equipment selected for the project. Note: an agency *may* incur shipping costs on a warranty replacement

**15. Provide a narrative of a recent project that totaled at least \$150,000 in lighting audit and LED solutions. The narrative should describe the lighting audit and results, proposed project scope, pricing costs and calculations, any fees, your company's installation/project management, and a final report and rebate summary.**

Elmwood-Murdock Public Schools

The school district had a desire to upgrade all the lighting in two school buildings located in adjacent communities. It was the goal of the District's Superintendent and Board of Education to upgrade to more energy efficient LED technology to reduce operating costs and improve the learning environment.

The Districts' leadership had concerns with the initial investment and the manpower to manage the development and delivery of a successful project. Voss Lighting shared its process and provided funding information, as well as recommended a solution to meet the State and District's procurement requirements...all of which removed any concerns by District Leadership and their decision to proceed with a lighting upgrade project through a partnership with Voss Lighting. Voss Lighting addressed the District's concerns as follows:

1. Initial investment - We shared what the net investment would be after rebates and first year O&M savings. We then shared how many years it would take to pay for the project and what funding sources they could potentially pull money from to fund (e.g. Depreciation Account, Building Fund Levy balance or future allocations and reallocated costs such as energy, maintenance, etc.) 2. Manpower to develop and manage the project - We shared with the Superintendent how we could do a preliminary audit to then share with the Board of Education. And we shared how we would manage the process from concept to a successful completed project. The process shared by Voss was as follows:

1. Discovery Meeting: We used this meeting to identify opportunities for lighting upgrades and gain an understanding of the District's financial position for the sake of determining how best to fund a project from within their operating budget. We determined that there were two school buildings that would benefit from building wide upgrades to improve light levels in classrooms, gyms, offices, commons and many other areas. And in this initial meeting with the Superintendent we were able to show him how we could lead the District from concept to implementation and completion of a successful project, all while meeting procurement requirements and assuring the Board of Education of a competitively priced solution. As a preferred lighting vendor in the Nebraska State Education Service Unit's COOP Purchasing Program we were able to share that our pricing has already been competitively solicited and publicly awarded.

2. Facility Survey and Energy Audit: We conducted a survey of both buildings to determine where light levels needed to be improved, where light fixtures should be replaced and where lamp only replacements were more appropriate and where safety and security concerns could be addressed with enhanced lighting. We also collected electricity usage information so that we could provide an Energy Audit, showing projected energy usage and cost savings; as well as projected project investment with ROI and simple payback information. This Report gave the District Leadership pertinent information in which to justify proceeding with a project. The Audit/Cost Benefit Analysis is included.

3. Project Development and Proposed Scope: We put together the scope of work agreed to by the Board of Education based on our recommendations, projected investment, energy and maintenance cost savings, utility company rebates and resulting ROI and simple payback. The final scope of work was to upgrade fixtures to 4000K LED flat panels in classrooms, halls and offices. 4000K LED lamps were installed in all decorative fixtures in various areas, such as the Library and specific halls in the elementary school. Both gyms received new LED high bay fixtures which improved light levels by a minimum of 50%. Parking lot and building exterior lighting was upgraded to LED technology, improving light level and coverage to enhance safety and security desires. Voss Lighting was responsible for project management which included but was not limited to: product ordering and delivery, ongoing communication with the District representative, work scheduling and assurance agreed to timeline was met, managing installation, project closeout, and any applicable warranty (there have been no warranty claims from this project other than one or two immediate product failures at the time of installation, which were handled promptly) .

4. Final pricing was presented to the Board of Education. The District's final investment was \$93,080 for the Elementary School and \$113,595 for the Middle/High School. And as part of our partnership, we handled the application process for the District to receive utility company rebate funds totalling \$14,718. This money was sent directly to the District from the utility company.

5. After Rebates, the simple payback for the Elementary School was less than 5 years (\$17,324 annual savings) and the Middle/High School was less than 5.6 years. (\$18,900 annual savings.) The Superintendent stated that this summer's energy bills (which represent one year since the lighting upgrade took place) have shown a greater savings than projected.

**15a. Uploaded as a separate PDF document titled “7 - Project Deliverables” provide the supporting documentation for the project described above in #15. Supporting documentation and deliverables must include the following:**

- (i) Lighting audit and results**
- (ii) Proposed project scope, pricing costs and calculations, any applicable fees**
- (iii) Installation/Project Management plan**
- (iv) Final report and rebate summary**

**16. Describe any “added value” attributes being offered to participating agencies when purchasing services and products through your company. Describe any “value-adds” that are exclusive to the potential contract.**

We provide all of our listed “value-add” services to each of our current and prospective customers. Voss Lighting has been focused on providing the maximum value for all of our customers since 1939.

## Warranty

**1. Describe your warranty program, including any conditions and requirements to qualify claims procedure and overall structure.**

Labor/Installation Warranty - Voss Lighting will provide a 1-year warranty on labor associated with the original scope of work (from the time of the final invoice) and the materials warranty starting upon receiving the purchase order from the agency. (Exception : This warranty does not cover lift or equipment charges in excess of \$500 per project)

Material Warranty - We will provide warranty based on the manufacturer's listed warranty at the time the project was completed. We make the warranty process easy for the agency by facilitating the warranty on their behalf with the manufacturer. Note: an agency *may* incur shipping costs on a warranty replacement.

Initiating Warranty Claims - To initiate a warranty claim, reach out to the project manager who was assigned to your project within 30 days of the failure or potential failure of the product covered by the warranty. The project manager will then guide you through the process, facilitating the ordering and delivery of the replacement materials. If your project is still within the one-year parts and labor warranty window, they will also oversee the installation of these materials.

**2. Do all warranties cover all products/equipment parts and labor?**

\_\_\_\_\_ **Yes**                        x   **No**

**If NO, describe the exceptions to coverage.**

Labor/Installation Warranty - This warranty does not cover lift or equipment charges in excess of \$500 per project.

Material Warranty - Voss Lighting will facilitate the warranty between the manufacturing of the LED products and the agency who received the material. In the event that the manufacturer no longer is supporting their listed warranty , Voss Lighting can no longer continue facilitating the stated warranty.

**3. Do warranties cover the expense of a technician’s travel time and mileage to perform warranty repairs?**

  x   **Yes**                        x   **No**

**If NO, describe why travel and mileage are not covered.**

Labor/Installation Warranty - Voss Lighting will provide a 1-year warranty on labor associated with the original scope of work (from the time of the final invoice) and the materials warranty starting upon receiving the purchase order from the agency. (Exception : This warranty does not cover lift or equipment charges in excess of \$500 per project)

Travel Costs subject to verification on cause for warranty. 24-hour period travel costs are covered with the 1-year period of the labor/installation warranty. Travel costs outside of 24-hour period are subject to the nature of the warranty. Outside of the 1-year labor and installation warranty, only material costs are covered by any warranty facilitated by Voss Lighting.

**4. List any additional limitations or circumstances that would not be covered under your warranty?**

No, other than the agency and/or third party operating the LED lighting in negligence, disruptions to the power grid (i.e. voltage spikes that could destroy an LED driver), or random acts of God.

**5. List any geographic areas for which your organization cannot provide a certified technician to perform warranty repairs. How will participating agencies in these areas be provided service for warranty repair?**

No

## Financials & Level of Support

**1. Describe the percentage of your company's revenue, by category (city/county/government, K12 education, higher education) that is derived from lighting audit services and LED sales on an annual basis.**

28% - 12.7M ( House / Government Sales) - 2022/2023 Fiscal Year

**2. Describe how your company works with agencies to determine payment terms, progress payments, etc.**

Our normal payment terms are NET30 with 40% down payment and progress billing depending on the size and duration of the project.

**3. Describe your company's allowed methods for payment and if any fees are assessed for those methods.**

Check , ACH , P-Card (4% fee for all P-Card use)

**4. Indicate the level of support your company will offer on this contract category.**

\_\_\_\_\_ Pricing is better than what is offered to individual educational agencies.  
\_\_\_\_\_ Pricing is better than what is offered to cooperative educational agencies.  
  x   Other, please describe

**If OTHER, describe how the pricing submitted differs from individual entities or other purchasing consortiums:**

In most cases this pricing will be better than what is available to individual educational agencies. The main exception is for agencies that have access to some of the products via a state level pricing contract that has already been awarded. Example : Minnesota State Contract(LAMP CONTRACT #L290 BALLAST CONTRACT # 65590) , Nebraska State Contract . Note these contracts do not include labor rates , just material pricing.

**5. Describe any self-audit process/program you plan to employ to verify compliance with an anticipated contract award.**

All projects/sales within Voss Lighting are subject to review by our national project manager. All projects over \$100K are subject to a pre-project review at the beginning of the project , in some cases prior to the audit of the facilities to make sure any factors unique to the project in question are discussed. All projects are reviewed by our national projects team and the PM assigned to the project. At that time they will confirm all pricing is within the contract terms and itemize costs as necessary on the final invoice to demonstrate this to the agency where the work was completed.



## Marketing & Partnership

### **1. Describe how your company will position and propose to support CPC and its participating agencies regarding program growth.**

We will request CPC provide Voss Lighting with a contact list of members so we can do email blasts and phone calls to them, promoting our recently approved vendor and our services and the value they will provide. Regarding projects, it is important we share that Voss Lighting looks holistically and thinks financially when surveying our customers' buildings. By doing so we can show our customers how they can fund much of their project with reallocated costs, rebates and federal incentives. And in many instances we can show them how to fund a project with 0 - 10% investment upfront. We will also provide promotional information and resources to be added under our company name on the Promotion and Resources page of the CPC website. Some of the information we will include is:

- Benefits of LED Lighting
- Upcoming Ban on Fluorescent Lighting
- Not all LED is made the same
- How to do a LED Lighting Upgrade without Adding Costs
- 5 Minute Exercise to Determine Investment to do LED Lighting Upgrades
- How Controls can Save You Money, Instill Game Time excitement and Enhance Your Learning Environment
- Why a Lighting Expert Needs to be Included in New Construction Design Stage
- It's now Easy and Inexpensive to Add Color to Your Building or Points of Interest

### **2. Describe and submit a marketing plan that would describe, at a minimum, the following: process on how the contract will be launched to current and potential agencies, the ability to produce and maintain full-color print advertisements in camera-ready electronic format, including company logos and contact information, anticipated contract announcements, planned advertisements, industry periodicals, other direct, or indirect marketing activities promoting the awarded contract, and how the contract award will be displayed/linked on your organization's website. You can submit any support materials as Exhibit A – Marketing Plan.**

- A participant in online webinars
- A presenter at conference breakout sessions
- An exhibitor at conferences
- An advertiser in publications
- An association sponsor or specific to various events
- A contributor to newsletter and/or other forms of communication

Voss Lighting has a Marketing Department that is responsible for producing and maintaining full color print ads in camera ready electric format. We currently work closely with the Nebraska State ESU COOP Purchasing Program Coordinator, providing him with needed marketing material throughout the year. Samples of some marketing flyers we anticipate sending out are included in Exhibit A - Marketing Plan

### **3. Describe how your company will position this contract to CPC's participating agencies if awarded.**

Voss Lighting will provide Ads for such opportunities as on the CPC website, in collaboration at conferences and new member solicitations.

**4. Describe how you plan to inform and train company personnel on the contract terms and conditions, details, and promotion of the contract. Describe how your organization plans to utilize your marketing and sales staff with this anticipated contract.**

Voss Lighting will roll this out to all contacts associated with the contract if the bid is awarded . Voss Lighting will work with our internal pricing and AR staff to manage the pricing during the duration of the contract. We will also have quarterly updates with the account managers that are responsible for the areas covered under this contract to make sure they are make any existing or potential clients aware of the benefits of this contract.

## Exceptions & Deviations

**1. List any additional stipulations and/or requirements your company requests that are not covered in the RFP.**

None.

**2. List any exceptions your company is requesting to the terms outlined in the Technical Specifications.**

**Respondents must include the following when requesting exceptions:**

- **RFP section number and page number**
  - **Describe the exception**
  - **Explanation of why this is an issue**
  - **A proposed alternative to meet the needs of participating agencies and the cooperative**
- Voss Lighting is not licensed to perform electrical installation in the state of ND. We can still provide lighting audit services, product specification and product supply in ND.

## References

**Provide three (3) references that have purchased Lighting Audit and LED Solutions from your company within the last two (2) years. References from the proposed service area are preferred. A contact name, phone number and email will be required. \*Note, ensure your references are prepared to communicate with a representative from CPC. Failure to confirm reference of past work may affect your evaluation.**

<b>Reference #1 – Company Name</b>	Elmwood-Murdock Public Schools
<b>Service/Product Purchased</b>	LED Lighting.
<b>Year of Purchase</b>	2022
<b>Reference Contact</b>	Ryan Knippelmeyer
<b>Phone</b>	(402) 867-2341.
<b>Email</b>	rknippelmeyer@emknights.org

<b>Reference #2 – Company Name</b>	Apex Solutions for the City of Maple Grove, MN
<b>Service/Product Purchased</b>	Site Audit & Spec , Interior & Exterior LED Lamps , LED Fixtures , Installation
<b>Year of Purchase</b>	2020-2021
<b>Reference Contact</b>	Gene Molitor, City of Maple Grove
<b>Phone</b>	763-494-6386.
<b>Email</b>	Gmolitor@maplegrovmn.gov

<b>Reference #3 – Company Name</b>	Wilber Clatonia Public Schools
<b>Service/Purchase Purchased</b>	Lighting & Installation Services .
<b>Year of Purchase</b>	2023
<b>Reference Contact</b>	Ray Collins
<b>Phone</b>	(402) 821-2508
<b>Email</b>	ray.collins@wilberclatonia.org.



## Vendor Forms & Signatures

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### **Instructions**

Contained herein are forms and information required by the Cooperative Purchasing Connection (CPC). Please note, while some information is merely informational, some will be used during the evaluation and vetting process.

To submit the required forms, follow these steps:

1. Read the document in its entirety.
2. Complete all questions and forms.
3. Save all pages in the correct order to a single PDF format titled “***Vendor Forms & Signatures – Name of Company***”.
4. Submit the forms in the required format with all necessary signatures in Public Purchase.

The following sections will need to be completed prior to submission and submitted as one single PDF titled “Vendor Forms & Signatures – Name of Company”:


1. [Contract Offer & Award](#)
2. [Uniform Guidance “EDGAR” Certification Form](#)
3. [Subcontractor Utilization Form](#)

## Contract Offer & Award

**Instructions:** Part I of this form is to be completed by the Vendor and signed by its authorized representative. Part II will be completed by the Cooperative Purchasing Connection (CPC) upon the occasion of an award.

### Part I: Vendor

In compliance with the Request for Proposal (RFP), the undersigned warrants that I/we have examined all General Terms and Conditions, Forms and Specifications, and being familiar with all of the conditions surrounding the solicitation, hereby offer and agree to furnish all goods and services in compliance with all terms, conditions, specifications, and amendments in this solicitation and any written exceptions in the offer. Signature also certifies understanding and compliance with this proposal. The undersigned understands that his/her competence and responsibility and that of his/her proposed subcontractors, time of completion, as well as other factors of interest to CPC as stated in the evaluation section, will be a consideration in making the award. This contract offer and award binds said Vendor to all terms and conditions stated in the proposal.

Business Name	<u>Voss Electric dba Voss Lighting</u>	Date	<u>09/06/2023</u>
Address	<u>5200 S 16th St.</u>	City, State, Zip	<u>Lincoln , NE , 68512</u>
Contact Person	<u>Mario Mammina</u>	Title	<u>Branch Manager</u>
Authorized Signature	<u></u>	Title	<u>Branch Manager</u>
Email	<u>mario.mammina@vosslighting.com</u>	Phone	<u>469.559.4336</u>

### Part II: CPC

Your response to the identified proposal is hereby accepted. As a Vendor, you are now bound to offer and provide the products and services identified within this solicitation, your response, including all terms, conditions, specifications, exceptions, and amendments. The initial term of this contract shall be for up to twenty-four (24) months and will commence on the date indicated below. There will be an optional renewal for a period lasting no longer than one (1) additional 24-month period. CPC may grant an extension under certain criteria and conditions.

Agency	_____	Authorized Signature	_____
Name	_____	Title	_____
Awarded this	_____ day of _____	Contract #	_____
Contract/Agreement to Commence	_____		

# EDGAR Certification Form

## 2 CFR Part 200

### REQUIRED CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS – APPENDIX II TO 2 CFR 200

**The following provisions are required and apply when federal funds are expended by participating agencies for any contract resulting from this procurement process.**

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

#### **(A) Vendor Violation or Breach of Contract Terms**

Contracts for more than the simplified acquisition threshold currently set at \$250,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate. Provisions regarding vendor default and legal remedies are included in Sections I.K.18 and I.K.19 above. Any contract award will be subject to such provisions. The remedies under the contract are in addition to any other remedies that may be available under law or in equity.

#### **(B) Termination for Cause and for Convenience**

Pursuant to Federal Rule (B) above when federal funds are expended by participating agencies, the participating agency reserves all rights to immediately terminate any agreement in excess of \$10,000 resulting from this procurement process in the event of a breach or default of the agreement by the Vendor, in the event the vendor fails to” (1) meet schedules, deadlines, and/or delivery dates within the time specified in the procurement solicitation, contract, and/or a purchase order; (2) make any payments owed; or (3) otherwise perform in accordance with the contract and/or the procurement solicitation. The participating agency reserves the right to terminate the contract immediately, with written notice to vendor, for convenience, if the participation agency believes, in its sole discretion that it is in the best interest of the participating agency to do so. The vendor will be compensated for work perform and accepted and goods accepted by the participating agency as of the termination date if the contract is terminated for convenience of the participating agency. Any award made under this procurement process is not exclusive and the participating agency reserves the right to purchase goods and services from other vendors when it is in the best interest of the participating agency.

#### **(C) Equal Employment Opportunity**

Except as otherwise provided under 41 CFR Part 60, all participating agency purchases or contract that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 shall be deemed to include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR Part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

#### **(D) Davis Bacon Act**

When required by Federal program legislation, Vendor agrees that, for all participating agency contracts for the construction, alteration, or repair (including painting and decorating) of public buildings or public works, in excess of \$2,000, Vendor shall comply with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, the Vendor is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specific in a

wage determinate made by the Secretary of Labor. In addition, the Vendor shall pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

Vendor must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

#### **(E) Contract Work Hours and Safety Standards Act**

Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard workweek of 40 hours. Work in excess of the standard workweek is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the workweek. The requirements of the 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions that are unsanitary, hazardous or dangerous. These requirements do not apply to the purchase of supplies, materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

#### **(F) Right to Inventions Made Under a Contract or Agreement**

If the participating agency’s Federal award meets the definition of “funding agreement” under 37 CFR 401.2(a) and the recipient or sub-recipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance or experiments, developmental or research work under the “funding agreement,” the recipient or sub-recipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

#### **(G) Clean Air Act and Federal Water Pollution Control Act**

Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended, contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

#### **(H) Debarment and Suspension (Executive Order 12549 and 12689)**

A contract award (see 2 CFR 180.222) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1966 Comp. p. 189) and 12689 (3 CFR Part 1989 Comp. p. 235), “Debarment and Suspension.” SAM exclusions contain the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

#### **(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)**

Vendors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

Pursuant to Federal Rule (I) above, when federal funds are expended by participating agencies, the vendor certifies that during the term of an award for all contracts by participating agencies resulting from this procurement process, the vendor certifies that it is compliance with all applicable provisions of the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). The undersigned further certifies that:

- (1) No Federal appropriated funds have been paid or will be paid for on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be include in the award documents for all covered sub-awards exceeding \$100,000 in Federal funds at all appropriated tiers and that all subrecipients shall certify and disclose accordingly.

#### **(J) Procurement of Recovered Materials**

For participating agency purchases utilizing Federal funds, Vendor agrees to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act where applicable and provide such information and certifications as a participating agency may require to confirm estimates and otherwise comply. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery, and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

#### **(K) Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment**

A participating agency is prohibited from obligating or expending funds to:

- (1) Procure or obtain.
- (2) Extend or renew a contract to procure or obtain; or
- (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
  - (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou



Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

- (ii) Telecommunications or video surveillance services provided by such entities or using such equipment.
- (iii) Telecommunications or video surveillance equipment or services products or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

#### **(L) Domestic Preferences for Procurements**

As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

For the purpose of this section:

- (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

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#### **PROFIT AS A SEPARATE ELEMENT OF PRICE**

For purchases using federal funds in excess of \$250,000, a participating agency may be required to negotiate profit as a separate element of the price. See 2 CFR 200.323(b). When required by a participating agency, the vendor agrees to provide information and negotiate with the participating agency regarding profit as a separate element of the price for a particular purchase. However, vendor agrees that the total price, including profit, charged by the vendor to the participating agency shall not exceed the awarded pricing.

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#### **RECORD RETENTION REQUIREMENTS FOR CONTRACTS PAID FOR WITH FEDERAL FUNDS – 2 CFR § 200.333**

When federal funds are expended by participating agencies for any contract resulting from this procurement process, the vendor certifies that it will comply with the record retention requirements detailed in 2 CFR § 200.333. The vendor further certifies that vendor will retain all records as required by 2 CFR § 200.333 for a period of three years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

---

#### **CERTIFICATION OF COMPLIANCE WITH THE ENERGY POLICY AND CONSERVATION ACT**

When federal funds are expended by participating agencies for any contract resulting from this procurement process, the vendor certifies that the vendor will be in compliance with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.; 49 C.F.R. Part 18; Pub. L. 94- 163, 89 Stat. 871).

---

## CERTIFICATION OF NON-COLLUSION STATEMENT

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Vendor certifies under penalty of perjury that its responsible to this procurement solicitation is in all respects bona fide, fair, and made without collusion or fraud with any person, joint venture, partnership, corporation or other business or legal entity.

**Pursuant to Federal Ruling, when federal funds are expended by participating agencies, the vendor hereby certifies that during the term of an award for all contracts by participating agencies resulting from this procurement process, vendor certifies compliance will all provisions, laws, acts, regulations as specifically noted above. The vendor agrees to comply with all federal, state, and local laws, rules, regulations, and ordinances, as applicable.**

Business Name Voss Electric dba Voss Lighting

Full Name Mario Mammina

Authorized  
Signature



Title Branch Manager

## Subcontractor Utilization Form

**Instructions:** List all subcontractors to be used during the performance of this contract. Submit additional forms if needed.

Solicitation Name: Lighting Audit Services & LED Solutions  
Solicitation Number: RFP #24.5  
Vendor Name: Voss Electric dba Voss Lighting

If a subcontractor will not be used, check this box: ☐

Company Name: Hunt Electric  
Street Address: 7900 CHICAGO AVENUE S  
City, State, Zip: BLOOMINGTON, MN , 55420  
Telephone: 651-646-2911  
Primary Contact: Seth Holm  
Email Address of Contact: sholm@huntelec.com  
Services to be provided:

### Labor & Installation Services

Company Name: Commonwealth Electric Company  
Street Address: 1530 2nd Ave  
City, State, Zip: Des Moines, IA, 50314  
Telephone: (515) 288-5783  
Primary Contact: Tom Washington  
Email Address of Contact: twashington@commonwealthelectric.com  
Services to be provided:

### Labor & Installation Services

Company Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Primary Contact: \_\_\_\_\_  
Email Address of Contact: \_\_\_\_\_  
Services to be provided: \_\_\_\_\_



# 1- Lighting Audit Services

\*Please note this workbook has multiple tabs.

**Instructions.** Complete the tables below for the services your company is offering. Please note this is an **REQUIRED** form.

**Responding Company's Name:**

Voss Electric dba Voss Lighting

**REQUIRED**

## Lighting Assessment & Design

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Lighting Audit & Assessment (per square foot)	\$ 0.04	\$ 0.02	0.01%	\$ 179.00	\$ 0.75	Mileage calculations will start from the base location for the
Design Services / hr	\$ 195.00	\$ 150.00	21.43%	\$ 179.00	\$ 0.75	Mileage calculations will start from the base location for the
Project Management	\$ 195.00	\$ 150.00	21.43%	\$ 179.00	\$ 0.75	Mileage calculations will start from the base location for the
			0.00%			
			0.00%			
			0.00%			

**Installation [Labor]** \*\*Prevailing wage projects/installs are subject to higher hourly rates/charges. Prevailing wage rates change by MN county. Participating agencies are required to notify the Vendor if prevailing wages are required (state/federal funding as part or all of the project).

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Project Manager - Hourly Rate - Regular Hours	\$ 225.00	\$ 195.00	14.29%	\$ 179.00	\$ -	Maximum Hourly Rates. Travel will be charged on an hourly
Project Manager - Hourly Rate - Evening/Weekend/Holidays	\$ 398.00	\$ 368.00	14.29%	\$ 179.00	\$ -	Maximum Hourly Rates. Travel will be charged on an hourly
Journeyman - Hourly Rate - Regular Hours	\$ 207.00	\$ 177.00	14.29%	\$ 179.00	\$ -	Maximum Hourly Rates. Travel will be charged on an hourly
Journeyman - Hourly Rate - Evening/Weekend/Holidays	\$ 367.00	\$ 337.00	14.29%	\$ 179.00	\$ -	Maximum Hourly Rates. Travel will be charged on an hourly
Apprentice 1 - Hourly Rate - Regular Hours	\$ 160.00	\$ 130.00	14.29%	\$ 179.00	\$ -	Maximum Hourly Rates. Travel will be charged on an hourly
Apprentice 1 - Hourly Rate - Evening/Weekend/Holidays	\$ 270.00	\$ 240.00	14.29%	\$ 179.00	\$ -	Maximum Hourly Rates. Travel will be charged on an hourly
Apprentice 2 - Hourly Rate - Regular Hours	\$ 145.00	\$ 115.00	14.29%	\$ 179.00	\$ -	Maximum Hourly Rates. Travel will be charged on an hourly
Apprentice 2 - Hourly Rate - Evening/Weekend/Holidays	\$ 243.00	\$ 213.00	14.29%	\$ 179.00	\$ -	Maximum Hourly Rates. Travel will be charged on an hourly

## Other Services

Description	Standard Price & Rate	Discounted Price & Rate	Member Savings	Per Diem Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
Rebate Fulfillment			0.00%			TBD / Project Scope
Recycling Services			0.00%			TBD / Project Scope
Training	\$ 195.00	\$ 150.00	21.43%	\$ 179.00	\$ 0.75	Mileage calculations will start from the base location for the
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			
			0.00%			

**\*Please note this workbook has multiple tabs.**

**Responding Company's Name:** Voss Electric dba Voss Lighting

Voss Electric dba Voss Lighting

[illegible]

### 3 - Volume Discounts

**\*Please note this workbook has multiple tabs.**

**Instructions.** Complete the form below if your company is offering additional discounts for a one time purchase, size of project, or a group of local agencies in a geographic area combining requirements (estimate annual spend). Please note this is an **optional form**.

**Responding Company's Name:**  
Voss Electric dba Voss Lighting

**Responding Company's Name:**  
Voss Electric dba Voss Lighting

**Responding Company's Name:**  
Voss Electric dba Voss Lighting

[illegible]



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## Case Study

# St. Vincent de Paul School

14330 Eagle Run Drive,  
Omaha, NE 68164

Facility Contact:  
Tom Peal  
402-496-7988

Project Cost: \$73,300

Utility Company Rebate \$8,823

Annual Maintenance and Energy Savings \$15,801

Simple Payback 4 years



## Challenge

The school had invested in modern, architectural style troffers so replacing with new LED fixtures was not practical; but energy and lighting replacement costs were increasing. It was the desire of school leadership to decrease lighting costs as soon as possible.

## Solution

Voss provided a solution that allowed the school to keep aesthetically attractive troffers. Ballasts and fluorescent lamps were removed, allowing for direct wiring to new LED lamps. To meet the school's desire to cut costs as quickly as possible, we began in early December upgrading the lighting in areas where students and staff would not be, such as storage and office areas. And then at Christmas Break, we focused on the classrooms, halls and all other areas normally occupied by students and teachers.

*"Voss provided a solution for us to upgrade our lighting to LED without having to replace all our fixtures. They worked with us to get the project done as soon as possible versus waiting six months for summer vacation. And they did everything without interrupting the learning environment."*

— Tom Peal, Facility Coordinator

Contact:

Randy Herrick  
Voss Lighting Customer Representative  
402-850-9789  
[randy.herrick@vosslighting.com](mailto:randy.herrick@vosslighting.com)



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**PHILIPS**



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## Case Study

# Oakland Heights Nursing Home

### Facility Contact:

Roger Huber 402-685-5683  
Oakland Heights  
207 S. Engdahl Avenue  
Oakland, NE 68045

### Project Cost:

\$50,639

### Funding Solution:

Five year lease  
(\$10,369.56 annually)

### 1st Year Savings:

\$12,405  
(Projected to be cash flow positive entire lease term.)



## Challenge

Oakland Heights Nursing Home and Assisted Living Facility, a maturing facility, had older lighting technology and lacked adequate lighting in some areas. Without necessary funds to upgrade the lighting infrastructure, the facility continued to replace lamps and ballasts in ceiling fixtures as they failed and delayed the addition of new lighting fixtures. This reactive approach and delaying facility improvements is common in facilities with tight operating budgets.

## Solution

Voss and Oakland Heights Administrator and maintenance staff identified the right lighting fixtures to improve indoor lighting, reduce energy and maintenance costs, improve maintenance staff efficiency and employee morale. Voss then put together a lease purchase plan, allowing Oakland Heights to fund the improvements with the generated savings. With no down payment requirement, the project was able to be completed and paid for from within the existing operating budget.



### Contact:

Randy Herrick  
Voss Lighting Customer Service Representative  
402-850-9789  
[randy.herrick@vossilighting.com](mailto:randy.herrick@vossilighting.com)

*"Partnering with Voss Lighting allowed us to upgrade our facility's lighting without the need for capital funds or added expense in our operating budget. Voss Lighting was able to show us how to fund our project with the energy and maintenance savings generated from the upgrade."*

*David Deemer, Oakland Heights Administrator*



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**PHILIPS**





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## Case Study

# Concordia Lutheran Junior & Senior High School

Address  
City, State zip

Contact:  
Rob Cooksey  
###.###.####

Project Cost: \$18,970

Projected Annual Savings: \$4,800

The school is realizing more savings than projected by running lights at 70% brightness during regular hours.



## Challenge

The School uses the gym for athletic activities, fine arts performances and graduation. Each one has unique lighting needs. With only one full size gym, it is used continuously, up to 16 hours per day. The energy cost to keep lights on for that long was a concern.

## Goal

Reduce energy consumption, lower operating costs, provide a user-friendly way to dim and control overall lighting, and provide a “wow-factor” for events.

## Solution

Reduced the number of high bay fixtures by almost 30%, from 53 to 38. Reduced the wattage per fixture by 45%, from 324W to 177W. The new system can be control either by a wall mounted pad or wirelessly via a phone or tablet app. Customized lighting options can be pre-programmed to do such things as light up specific areas of the gym while other areas remain dark or at a lower light level.

*“This was a total solutions opportunity for Concordia as opposed to just hiring an electrician. Beginning with an energy audit and concluding with installation and product training, Voss was focused on our needs as the customer and end user. They improved lighting, control of lighting, and efficiency so that the project will quickly pay for itself in savings.”* — Head of School, Rob Cooksey

Contact:

Randy Herrick  
Voss Lighting Customer Service Representative  
402-850-9789  
[randy.herrick@vosslighting.com](mailto:randy.herrick@vosslighting.com)



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**PHILIPS**



LED Upgrade Audit:  
Elmwood Elementary

Prepared by:  
Randy Herrick  
Voss Lighting  
09/05/2023

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## A large, abstract, pixelated graphic resembling a stylized letter 'A' or a similar shape, composed of many small, dark gray dots on a white background. The shape is formed by a dense arrangement of dots, with some gaps and irregularities, giving it a hand-drawn or digital-art feel. The overall impression is that of a large, stylized character or symbol created from individual pixels.

## Elmwood Elementary

General Scope of Proposed Work	Existing	After Retrofit
Number of Fixtures	631	631
Lighting System Energy Consumption (kW)	54.033	26.064
Current Utility Rate - \$/kWh	\$0.0940	

Energy & Demand Reduction	
Kilowatt-Hours (kWh) Reduced	122,504

Savings Summary	
First Year Total Savings	\$17,324

Financial Summary	
Project Cost	\$93,080.00
Less Rebates	\$0.00
Net Project Cost	\$93,080.00

Simple Payback	5.4 yrs
Overall Simple Return on Investment (ROI)	18.44%
Net Present Value (NPV)	\$33,546.88
Internal Rate of Return (IRR)	13.09%

Monthly Cost of Delay	\$1,443.68
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Cash Flow Analysis

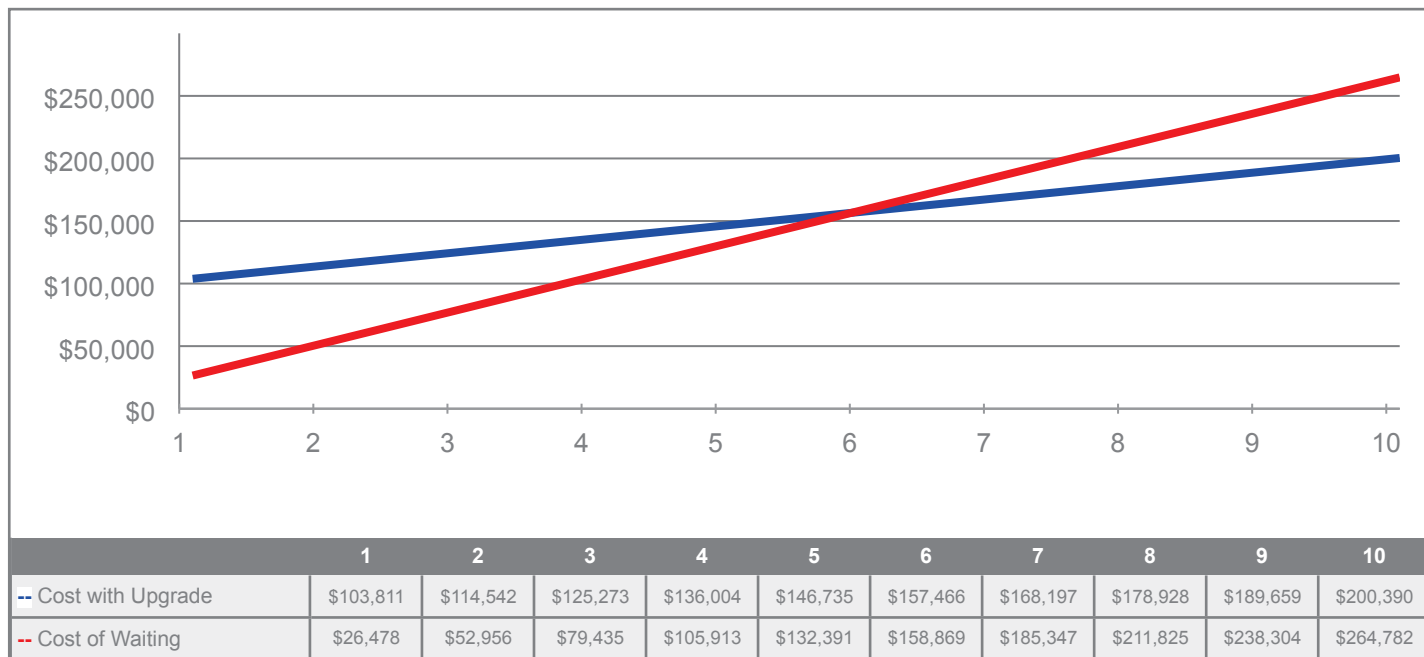
Cash Outflows	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Investment	\$93,080	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Down Payment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Financed Investment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>SUBTOTAL OUTFLOWS</b>	<b>\$93,080</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Cash Inflows											
Energy	\$0	\$11,515	\$11,515	\$11,515	\$11,515	\$11,515	\$11,515	\$11,515	\$11,515	\$11,515	\$11,515
HVAC	\$0	\$1,577	\$1,577	\$1,577	\$1,577	\$1,577	\$1,577	\$1,577	\$1,577	\$1,577	\$1,577
Maintenance	\$0	\$4,232	\$4,232	\$4,073	\$4,073	\$4,073	\$4,073	\$4,073	\$4,073	\$4,073	\$4,073
Rebates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>SUBTOTAL INFLOWS</b>	<b>\$0</b>	<b>\$17,324</b>	<b>\$17,324</b>	<b>\$17,165</b>	<b>\$17,165</b>	<b>\$17,165</b>	<b>\$17,165</b>	<b>\$17,165</b>	<b>\$17,165</b>	<b>\$17,165</b>	<b>\$17,165</b>
<b>TOTAL CASH FLOWS</b>	<b>-\$93,080</b>	<b>\$17,324</b>	<b>\$17,324</b>	<b>\$17,165</b>	<b>\$17,165</b>	<b>\$17,165</b>	<b>\$17,165</b>	<b>\$17,165</b>	<b>\$17,165</b>	<b>\$17,165</b>	<b>\$17,165</b>
Present Value (PV)	-\$93,080	\$16,343	\$15,418	\$14,412	\$13,596	\$12,827	\$12,101	\$11,416	\$10,769	\$10,160	\$9,585

## Savings Summary

The following tables show the annual energy and cost savings expected with the proposed design, based on annual usage hours and a utility rate of \$0.094000 per kWh.

Energy Savings		Financial Savings	
Current kWh	236,665	Cost of Project	\$93,080.00
Current Demand (kW)	54.033	Rebates	\$ .00
Current Annual Energy Cost	\$22,246.00	Net Cost	\$93,080.00
Projected kWh	114,160	Annual Energy & HVAC Cost	\$13,091.93
Projected Demand (kW)	26.064	Annual Maintenance Cost	\$4,232.17
Projected Ann. Energy Cost	\$10,731.00	Total Annual Cost Savings	\$17,324.10
Annual kWh Savings	122,504	Simple Payback (Years)	5.4
Annual kW Savings	27.969	Return on Investment	18.44%
<b>Annual Energy Cost Savings</b>	<b>\$11,515</b>	<b>Estimated Lifecycle Savings</b>	<b>\$173,241.04</b>

## The Cost of Waiting



Cumulative Costs Over 10 Year Lifecycle (\$)

(Graph based on Single Investment project data)

## Annual Environmental Impact

Sustainability objectives for companies are not only required by some government agencies, but it is also just good business. The fact is that greenhouse gas emissions are an enormous contributor to pollution. Outlined below is the projected environmental impact your new lighting system will have that includes the reduction in the amount of CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub> that you can avoid with the installation of your new lighting solution. Reducing 122,504 kWh per year on this project is equivalent to:



**189,863 lbs. CO<sub>2</sub> Saved**  
Leading Cause of Global Warming

- OR -



**18.2 Cars Removed from Road**  
(4.73 metric tons of CO<sub>2</sub> / Passenger Vehicle)

- OR -



**9,691 Gallons of Gas Consumed**  
(0.008887 metric ton of CO<sub>2</sub> per gallon of gasoline)

- OR -



**2,208 Tree Seedlings Grown**  
(0.039 metric ton CO<sub>2</sub> per urban tree planted for 10 years)

- OR -



**81.2 Acres of Forest in 1 Year**  
(1.06 metric tons CO<sub>2</sub> sequestered annually by 1 acre U.S. forest)

Cited using <http://www.epa.gov/cleanenergy/energy-resources/calculator>

Fixture Detail



Totals		631				236,665				631				114,160				\$0				\$11,515				\$1,577		\$4,232		5.4	
Area		Existing								Proposed Solution								Savings													
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance	Payback														
Elmwood / Lobby		28	28		10,214		28	28			4,906		\$0	\$499	\$68	\$188	7.7														
Entrance	F-F32T8-2	59.0	4	4,380	1,034	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	4	0	4,380	701	0	\$0	\$31	\$4	\$24															
Front Desk	F-F32T8-3	93.0	12	4,380	4,888	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	12	0	4,380	2,102	0	\$0	\$262	\$36	\$84															
Nurse	F-F32T8-3	93.0	4	4,380	1,629	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	4	0	4,380	701	0	\$0	\$87	\$12	\$28															
Nurse Back Room	F-F32T8-2	59.0	2	4,380	517	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	2	0	4,380	350	0	\$0	\$16	\$2	\$12															
Office	F-F32T8-3	93.0	4	4,380	1,629	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	4	0	4,380	701	0	\$0	\$87	\$12	\$28															
Meeting	F-F32T8-2	59.0	2	4,380	517	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	2	0	4,380	350	0	\$0	\$16	\$2	\$12															
Elmwood / Hallway & Classrooms		552	552		181,625		552	552			85,795		\$0	\$9,008	\$1,233	\$3,544	5.8														
Bathrooms 2	F-F32T8-2	59.0	2	4,380	517	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	2	0	4,380	350	0	\$0	\$16	\$2	\$12															
Psychologist	F-F32T8-3	93.0	2	4,380	815	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	2	0	4,380	350	0	\$0	\$44	\$6	\$14															
Guidance	F-F32T8-3	93.0	4	4,380	1,629	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	4	0	4,380	701	0	\$0	\$87	\$12	\$28															
103/108	F-F32T8-3	93.0	22	4,380	8,961	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	22	0	4,380	3,854	0	\$0	\$480	\$66	\$154															
Childrens	F-F32T8-3	93.0	15	4,380	6,110	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	15	0	4,380	2,628	0	\$0	\$327	\$45	\$105															
Children&#x2019;s Bathrooms (2)	F-F32T8-2	59.0	4	4,380	1,034	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	4	0	4,380	701	0	\$0	\$31	\$4	\$24															

# Elmwood Elementary LED Upgrade



Children&#x2019;s 2	F-F32T8-3	93.0	27	4,380	10,998	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	27	0	4,380	4,730	0	\$0	\$589	\$81	\$189
Children&#x2019;s 102	F-F32T8-3	93.0	14	4,380	5,703	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	14	0	4,380	2,453	0	\$0	\$305	\$42	\$98
107/104	F-F32T8-3	93.0	24	4,380	9,776	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	24	0	4,380	4,205	0	\$0	\$524	\$72	\$168
105/106	F-F32T8-3	93.0	24	4,380	9,776	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	24	0	4,380	4,205	0	\$0	\$524	\$72	\$168
Paraeducator	F-F32T8-3	93.0	8	4,380	3,259	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	8	0	4,380	1,402	0	\$0	\$175	\$24	\$56
Title One	F-F32T8-3	93.0	6	4,380	2,444	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	6	0	4,380	1,051	0	\$0	\$131	\$18	\$42
Caf Bathrooms	F-F32T8-3	93.0	2	4,380	815	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	2	0	4,380	350	0	\$0	\$44	\$6	\$14
Caf Bathrooms 2	F-F32T8-2	59.0	2	4,380	517	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	2	0	4,380	350	0	\$0	\$16	\$2	\$12
Caf Bathrooms 3	CFL-CF13W-1	13.0	8	4,380	456	1L GREEN CREATIVE GRNLEDPL1840K5 5WBP	5.5	8	0	4,380	193	0	\$0	\$25	\$3	\$19
Cafeteria	F-F32T8-2	59.0	46	4,380	11,887	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	46	0	4,380	8,059	0	\$0	\$360	\$49	\$275
IT Closet	F-F32T8-2	59.0	2	4,380	517	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	2	0	4,380	350	0	\$0	\$16	\$2	\$12
Tech Coordinator	F-F32T8-3	93.0	2	4,380	815	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	2	0	4,380	350	0	\$0	\$44	\$6	\$14
Mech Room	F-F32T8-2	59.0	3	4,380	775	2L PHILIPS PHILLED84884010 WB	21.0	3	0	4,380	276	0	\$0	\$47	\$6	\$18
Music Room	F-F32T8-3	93.0	16	4,380	6,517	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	16	0	4,380	2,803	0	\$0	\$349	\$48	\$112
Music Studios	F-F32T8-3	93.0	4	4,380	1,629	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	4	0	4,380	701	0	\$0	\$87	\$12	\$28
Storage	F-F32T8-2	59.0	3	4,380	775	2L PHILIPS PHILLED84884010 WB	21.0	3	0	4,380	276	0	\$0	\$47	\$6	\$18

# Elmwood Elementary LED Upgrade



Caf Kitchen	F-F32T8-3	93.0	14	4,380	5,703	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	14	0	4,380	2,453	0	\$0	\$305	\$42	\$98
Caf Bathrooms 2	F-F32T8-3	93.0	6	4,380	2,444	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	6	0	4,380	1,051	0	\$0	\$131	\$18	\$42
Old Locker	F-F32T8-2	59.0	14	4,380	3,618	2L PHILIPS PHLLEDT84884010 WBB	21.0	14	0	4,380	1,288	0	\$0	\$219	\$30	\$84
206/205	F-F32T8-3	93.0	24	4,380	9,776	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	24	0	4,380	4,205	0	\$0	\$524	\$72	\$168
204/207	F-F32T8-3	93.0	24	4,380	9,776	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	24	0	4,380	4,205	0	\$0	\$524	\$72	\$168
203/208	F-F32T8-3	93.0	24	4,380	9,776	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	24	0	4,380	4,205	0	\$0	\$524	\$72	\$168
202	F-F32T8-3	93.0	6	4,380	2,444	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	6	0	4,380	1,051	0	\$0	\$131	\$18	\$42
Classroom Storage	F-F32T8-3	93.0	3	4,380	1,222	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	3	0	4,380	526	0	\$0	\$65	\$9	\$21
209	F-F32T8-3	93.0	12	4,380	4,888	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	12	0	4,380	2,102	0	\$0	\$262	\$36	\$84
201	F-F32T8-3	93.0	9	4,380	3,666	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	9	0	4,380	1,577	0	\$0	\$196	\$27	\$63
Teacher Work Area	F-F32T8-2	59.0	10	4,380	2,584	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	10	0	4,380	1,752	0	\$0	\$78	\$11	\$60
Guided Reading	F-F32T8-3	93.0	4	4,380	1,629	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	4	0	4,380	701	0	\$0	\$87	\$12	\$28
Library	UFL-FU31T8/3- 3	82.0	19	4,380	6,824	DAYBRITE DCO2FP238B8402- DS-UNV-DIM	33.0	19	0	4,380	2,746	0	\$0	\$383	\$52	\$213
Library 2	CFL-CF13W-1	13.0	18	4,380	1,025	1L GREEN CREATIVE GRNLEDPL1840K5 5WBP	5.5	18	0	4,380	434	0	\$0	\$56	\$8	\$43
Library 3	CFL-CF40W-2	80.0	4	4,380	1,402	2L GREEN CREATIVE GRNLEDPL12440K 17WBP	34.0	4	0	4,380	596	0	\$0	\$76	\$10	\$14
Hallways	F-F32T8-2	59.0	56	4,380	14,472	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	56	0	4,380	9,811	0	\$0	\$438	\$60	\$335



# Elmwood Elementary LED Upgrade



Perimeter Hallways	F-F32T8-2	59.0	26	4,380	6,719	2L PHILIPS PHLLEDT84884010 WBB	21.0	26	0	4,380	2,391	0	\$0	\$407	\$56	\$156
Hallways 2	F-F32T8-2	59.0	15	4,380	3,876	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	15	0	4,380	2,628	0	\$0	\$117	\$16	\$90
Conference Room	F-F32T8-3	93.0	4	4,380	1,629	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	4	0	4,380	701	0	\$0	\$87	\$12	\$28
Speech	F-F32T8-3	93.0	2	4,380	815	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	2	0	4,380	350	0	\$0	\$44	\$6	\$14
Hall Cans	CFL-CF13W-1	13.0	16	4,380	911	1L GREEN CREATIVE GRNLEDPL1840K5 5WBP	5.5	16	0	4,380	385	0	\$0	\$49	\$7	\$38
Hall Fixtures	CFL-CF40W-2	80.0	2	4,380	701	2L GREEN CREATIVE GRNLEDPL2440K 17WBP	34.0	2	0	4,380	298	0	\$0	\$38	\$5	\$7
Elmwood / Gym																
			51		44,825		51				23,459		\$0	\$2,008	\$275	\$500
Gym	F-F54T5HO-6	360.0	20	4,380	31,536	DAYBRITE DCOFBY30L840UN V	208.0	20	0	4,380	18,221	0	\$0	\$1,252	\$171	\$280
Stage	F-F32T8-2	59.0	8	4,380	2,067	2L PHILIPS PHLLEDT84884010 WBB	21.0	8	0	4,380	736	0	\$0	\$125	\$17	\$48
Boys Locker	F-F32T8-4	112.0	5	4,380	2,453	4L PHILIPS PHLLEDT84884010 WBB	42.0	5	0	4,380	920	0	\$0	\$144	\$20	\$40
Boys Storage	F-F96T12-2	135.0	2	4,380	1,183	2L PHILIPS PHLLEDT89685034 WBB	68.0	2	0	4,380	596	0	\$0	\$55	\$8	\$12
Boys Shower	F-F32T8-4	112.0	1	4,380	491	4L PHILIPS PHLLEDT84884010 WBB	42.0	1	0	4,380	184	0	\$0	\$29	\$4	\$8
Boys Shower 2	F-F32T8-2	59.0	2	4,380	517	2L PHILIPS PHLLEDT84884010 WBB	21.0	2	0	4,380	184	0	\$0	\$31	\$4	\$12
Girls Locker	F-F32T8-4	112.0	5	4,380	2,453	4L PHILIPS PHLLEDT84884010 WBB	42.0	5	0	4,380	920	0	\$0	\$144	\$20	\$40
Girls Storage	F-F96T12-2	135.0	2	4,380	1,183	2L PHILIPS PHLLEDT89685034 WBB	68.0	2	0	4,380	596	0	\$0	\$55	\$8	\$12
Girls Shower	F-F32T8-4	112.0	1	4,380	491	4L PHILIPS PHLLEDT84884010 WBB	42.0	1	0	4,380	184	0	\$0	\$29	\$4	\$8

Elmwood Elementary  
LED Upgrade



Girls Shower 2 F-F32T8-4		112.0	5	4,380	2,453	4L PHILLIPS PHLLEDT84884010 WBB	42.0	5	0	4,380	920	0	\$0	\$144	\$20	\$40
Totals			631		236,665		631				114,160		\$0	\$11,515	\$1,577	\$4,232
																5.4



## LED Upgrade Audit: Murdock School

Prepared by:  
Randy Herrick  
Voss Lighting  
09/05/2023

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## Executive Summary

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We understand that organizations like yours are always looking for ways to reduce costs, increase efficiency and minimize your environmental footprint. Voss Lighting has performed a comprehensive lighting audit to identify ways to meet those objectives.

We have created a proposal that details solutions to meet those goals including estimated material and labor costs, energy and maintenance savings and potential return on investment. This proposal summarizes the value to your company when you move forward with this project.

This proposal is guaranteed for 30 days from proposal date. After 30 days, our pricing will be reviewed for any necessary adjustments related to material and expense costs, and other related costs that may be affected by an extended approval period. Due to recent and future trade tariffs on Chinese goods and general price increases, all quotes are subject to change at the time of order being place.

Randy Herrick  
[randy.herrick@vosslighting.com](mailto:randy.herrick@vosslighting.com)

## Murdock School

General Scope of Proposed Work	Existing	After Retrofit
Number of Fixtures	717	717
Lighting System Energy Consumption (kW)	63.578	33.476
Current Utility Rate - \$/kWh	\$0.0940	

Energy & Demand Reduction	
Kilowatt-Hours (kWh) Reduced	131,849

Savings Summary	
First Year Total Savings	\$18,900

Financial Summary	
Project Cost	\$113,595.00
Less Rebates	\$0.00
Net Project Cost	\$113,595.00

Simple Payback	6.0 yrs
Overall Simple Return on Investment (ROI)	16.47%
Net Present Value (NPV)	\$24,424.42
Internal Rate of Return (IRR)	10.34%

Monthly Cost of Delay	\$1,574.98
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## Cash Flow Analysis

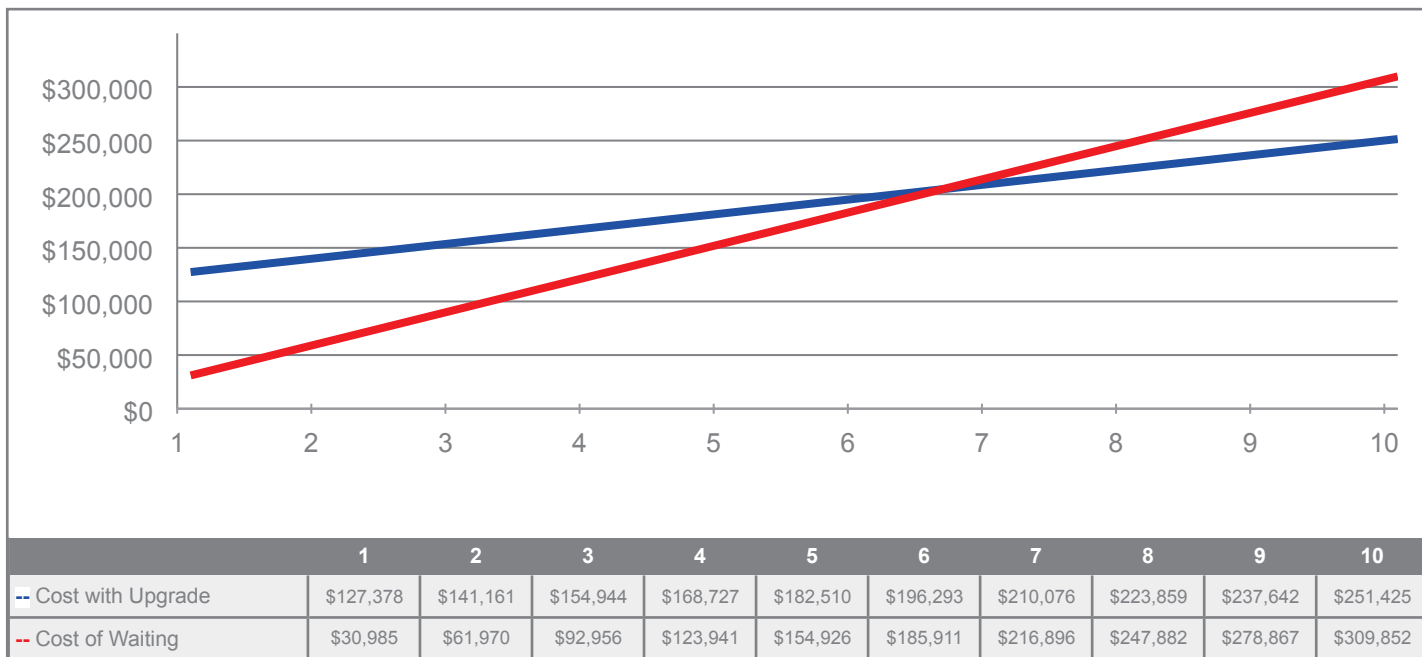
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<b>Cash Outflows</b>											
Investment	\$113,595	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Down Payment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Financed Investment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>SUBTOTAL OUTFLOWS</b>	<b>\$113,595</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Cash Inflows</b>											
Energy	\$0	\$12,394	\$12,394	\$12,394	\$12,394	\$12,394	\$12,394	\$12,394	\$12,394	\$12,394	\$12,394
HVAC	\$0	\$1,697	\$1,697	\$1,697	\$1,697	\$1,697	\$1,697	\$1,697	\$1,697	\$1,697	\$1,697
Maintenance	\$0	\$4,809	\$4,809	\$4,613	\$4,613	\$4,613	\$4,613	\$4,613	\$4,613	\$4,613	\$4,613
Rebates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>SUBTOTAL INFLOWS</b>	<b>\$0</b>	<b>\$18,900</b>	<b>\$18,900</b>	<b>\$18,704</b>	<b>\$18,704</b>	<b>\$18,704</b>	<b>\$18,704</b>	<b>\$18,704</b>	<b>\$18,704</b>	<b>\$18,704</b>	<b>\$18,704</b>
<b>TOTAL CASH FLOWS</b>	<b>-\$113,595</b>	<b>\$18,900</b>	<b>\$18,900</b>	<b>\$18,704</b>	<b>\$18,704</b>	<b>\$18,704</b>	<b>\$18,704</b>	<b>\$18,704</b>	<b>\$18,704</b>	<b>\$18,704</b>	<b>\$18,704</b>
Present Value (PV)	-\$113,595	\$17,830	\$16,821	\$15,704	\$14,815	\$13,976	\$13,185	\$12,439	\$11,735	\$11,071	\$10,444

## Savings Summary

The following tables show the annual energy and cost savings expected with the proposed design, based on annual usage hours and a utility rate of \$0.094000 per kWh.

Energy Savings		Financial Savings	
Current kWh	278,472	Cost of Project	\$113,595.00
Current Demand (kW)	63.578	Rebates	\$ .00
Current Annual Energy Cost	\$26,176.00	Net Cost	\$113,595.00
Projected kWh	146,623	Annual Energy & HVAC Cost	\$14,090.59
Projected Demand (kW)	33.476	Annual Maintenance Cost	\$4,809.19
Projected Ann. Energy Cost	\$13,783.00	Total Annual Cost Savings	\$18,899.79
Annual kWh Savings	131,849	Simple Payback (Years)	6.0
Annual kW Savings	30.103	Return on Investment	16.47%
<b>Annual Energy Cost Savings</b>	<b>\$12,394</b>	<b>Estimated Lifecycle Savings</b>	<b>\$188,997.86</b>

## The Cost of Waiting



Cumulative Costs Over 10 Year Lifecycle (\$)

(Graph based on Single Investment project data)



## Annual Environmental Impact

Sustainability objectives for companies are not only required by some government agencies, but it is also just good business. The fact is that greenhouse gas emissions are an enormous contributor to pollution. Outlined below is the projected environmental impact your new lighting system will have that includes the reduction in the amount of CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub> that you can avoid with the installation of your new lighting solution. Reducing 131,849 kWh per year on this project is equivalent to:



**204,346 lbs. CO<sub>2</sub> Saved**  
Leading Cause of Global Warming

- OR -



**19.6 Cars Removed from Road**  
(4.73 metric tons of CO<sub>2</sub> / Passenger Vehicle)

- OR -



**10,430 Gallons of Gas Consumed**  
(0.008887 metric ton of CO<sub>2</sub> per gallon of gasoline)

- OR -



**2,377 Tree Seedlings Grown**  
(0.039 metric ton CO<sub>2</sub> per urban tree planted for 10 years)

- OR -



**87.4 Acres of Forest in 1 Year**  
(1.06 metric tons CO<sub>2</sub> sequestered annually by 1 acre U.S. forest)

Cited using <http://www.epa.gov/cleanenergy/energy-resources/calculator>

Fixture Detail



Totals		717			278,472			717			146,623			\$0			\$12,394			\$1,697			\$4,809			6.0		
Area	Existing			Proposed Solution						Savings																		
Room	Existing	Watts	Qty	Burn	kWh	Proposed	Watts	Qty	% Red.	Burn	kWh	Ctrl Qty	Rebates	Energy	HVAC	Maintenance	Payback											
School / Entryway			43		8,515		43				3,900		\$0	\$434	\$59	\$211	5.5											
Lobby	F-F32T8-2	59.0	10	4,380	2,584	DAYBRITE DCO2FPZ42B8404 DSUNVDIM	40.0	10	0	4,380	1,752	0	\$0	\$78	\$11	\$60												
	CFL-CFQ18W-1	26.0	11	4,380	1,253	1L GREEN CREATIVE GRNLEDPL1840K5 5WBP	5.5	11	0	4,380	265	0	\$0	\$93	\$13	\$26												
Common Perimeter	CFL-CF18W-1	18.0	12	4,380	946	1L GREEN CREATIVE GRNLEDPL1840K5 5WBP	5.5	12	0	4,380	289	0	\$0	\$62	\$8	\$76												
	CFL-CF40W-2	80.0	6	4,380	2,102	2L GREEN CREATIVE GRNLEDPL2440K 17WBP	34.0	6	0	4,380	894	0	\$0	\$114	\$16	\$21												
Common Kitchen	F-F32T8-3	93.0	4	4,380	1,629	DAYBRITE DCO2FPZ42B8404 DSUNVDIM	40.0	4	0	4,380	701	0	\$0	\$87	\$12	\$28												
School / Hallway		223	80,242			223	38,728			\$0			\$3,902			\$534			\$1,484			6.9						
Hallway by Gym	F-F32T8-2	59.0	8	4,380	2,067	DAYBRITE DCO2FPZ42B8404 DSUNVDIM	40.0	8	0	4,380	1,402	0	\$0	\$63	\$9	\$48												
	F-F32T8-2	59.0	26	4,380	6,719	DAYBRITE DCO2FPZ42B8404 DSUNVDIM	40.0	26	0	4,380	4,555	0	\$0	\$203	\$28	\$156												
Boiler Room	F-F32T8-2	59.0	3	4,380	775	2L PHILIPS PHLLEDT84884010 WBB	21.0	3	0	4,380	276	0	\$0	\$47	\$6	\$18												
Small Hallway	F-F32T8-2	59.0	6	4,380	1,551	DAYBRITE DCO2FPZ42B8404 DSUNVDIM	40.0	6	0	4,380	1,051	0	\$0	\$47	\$6	\$36												
	UFL-FU31T8/6-2	80.0	3	4,380	1,051	DAYBRITE DCO2FPZ38B8402- DS-UNV-DIM	33.0	3	0	4,380	434	0	\$0	\$58	\$8	\$15												
Storage	F-F32T8-2	59.0	2	4,380	517	DAYBRITE DCO2FPZ42B8404 DSUNVDIM	40.0	2	0	4,380	350	0	\$0	\$16	\$2	\$12												

Murdock School  
LED Upgrade



IT Room	F-F32T8-3	93.0	6	4,380	2,444	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	6	0	4,380	1,051	0	\$0	\$131	\$18	\$42
Library	F-F32T8-3	93.0	19	4,380	7,739	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	19	0	4,380	3,329	0	\$0	\$415	\$57	\$133
Library Offices	F-F32T8-2	59.0	8	4,380	2,067	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	8	0	4,380	1,402	0	\$0	\$63	\$9	\$48
Library Back Hallway	F-F32T8-2	59.0	3	4,380	775	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	3	0	4,380	526	0	\$0	\$23	\$3	\$18
Library Classrooms (2)	F-F32T8-3	93.0	16	4,380	6,517	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	16	0	4,380	2,803	0	\$0	\$349	\$48	\$112
Library Side Hallway (2)	F-F32T8-2	59.0	14	4,380	3,618	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	14	0	4,380	2,453	0	\$0	\$110	\$15	\$84
Library Classrooms (3)	F-F32T8-3	93.0	38	4,380	15,479	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	38	0	4,380	6,658	0	\$0	\$829	\$114	\$266
201	F-F32T8-3	93.0	12	4,380	4,888	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	12	0	4,380	2,102	0	\$0	\$262	\$36	\$84
202+203	F-F32T8-3	93.0	18	4,380	7,332	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	18	0	4,380	3,154	0	\$0	\$393	\$54	\$126
204	F-F32T8-3	93.0	9	4,380	3,666	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	9	0	4,380	1,577	0	\$0	\$196	\$27	\$63
302	F-F32T8-3	93.0	23	4,380	9,369	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	23	0	4,380	4,030	0	\$0	\$502	\$69	\$161
301	F-F32T8-3	93.0	9	4,380	3,666	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	9	0	4,380	1,577	0	\$0	\$196	\$27	\$63
School / Shop			77		19,898		77				13,490		\$0	\$602	\$82	\$461
																10.4
Classroom	F-F32T8-2	59.0	39	4,380	10,078	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	39	0	4,380	6,833	0	\$0	\$305	\$42	\$233
Shop	F-F32T8-2	59.0	38	4,380	9,820	DAYBRITE DCO2FP242B8404 DSUNVDIM	40.0	38	0	4,380	6,658	0	\$0	\$297	\$41	\$227
School / Main Gym			40		39,026		40				21,480		\$0	\$1,649	\$226	\$420
																4.8
Gym	F-F54T5HO-6	360.0	20	4,380	31,536	DAYBRITE DCOFBY30L840JUN V	208.0	20	0	4,380	18,221	0	\$0	\$1,252	\$171	\$280
Stage	F-F32T8-4	112.0	10	4,380	4,906	4L PHILIPS PHILLED84884010 WB	42.0	10	0	4,380	1,840	0	\$0	\$288	\$39	\$80

# Murdock School LED Upgrade



Stage	F-F32T8-2	59.0	2	4,380	517	2L PHILIPS PHLLEDT84884010 WBB	21.0	2	0	4,380	184	0	\$0	\$31	\$4	\$12
Gym Exit Hallways	F-F32T8-2	59.0	6	4,380	1,551	DAYBRITE DCO2FPZ42B8404 DSUNVDIM	40.0	6	0	4,380	1,051	0	\$0	\$47	\$6	\$36
Gym	F-F32T8-2	59.0	2	4,380	517	2L PHILIPS PHLLEDT84884010 WBB	21.0	2	0	4,380	184	0	\$0	\$31	\$4	\$12
School / 2nd Gym		41	41	26,661			41				21,545		\$0	\$481	\$66	\$319 25.2
Gym	F-F54T5HO-4	200.0	20	4,380	17,520	DAYBRITE DCOFBY30L840UN V	208.0	20	0	4,380	18,221	0	\$0	-66	-9	\$161
Storage	F-F32T8-4	112.0	7	4,380	3,434	4L PHILIPS PHLLEDT84884010 WBB	42.0	7	0	4,380	1,288	0	\$0	\$202	\$28	\$56
Kitchen	F-F32T8-4	112.0	9	4,380	4,415	DAYBRITE DCO2FPZ42B8404 DSUNVDIM	40.0	9	0	4,380	1,577	0	\$0	\$267	\$37	\$72
Office	F-F32T8-2	59.0	3	4,380	775	2L PHILIPS PHLLEDT84884010 WBB	21.0	3	0	4,380	276	0	\$0	\$47	\$6	\$18
Office	F-F32T8-2	59.0	2	4,380	517	2L PHILIPS PHLLEDT84884010 WBB	21.0	2	0	4,380	184	0	\$0	\$31	\$4	\$12
School / Randy Count		293	293	104,130			293				47,479		\$0	\$5,325	\$729	\$1,914 3.0
One	F-F32T8-3	93.0	167	4,380	68,026	DAYBRITE DCO2FPZ42B8404 DSUNVDIM	40.0	167	0	4,380	29,258	0	\$0	\$3,644	\$499	\$1,170
Two	F-F32T8-2	59.0	56	4,380	14,472	DAYBRITE DCO2FPZ42B8404 DSUNVDIM	40.0	56	0	4,380	9,811	0	\$0	\$438	\$60	\$335
Three	F-F32T8-4	112.0	6	4,380	2,943	DAYBRITE DCO2FPZ42B8404 DSUNVDIM	40.0	6	0	4,380	1,051	0	\$0	\$178	\$24	\$48
Four	F-F32T8-2	59.0	10	4,380	2,584	2L PHILIPS PHLLEDT84884010 WBB	21.0	10	0	4,380	920	0	\$0	\$156	\$21	\$60
Five	F-F32T8-4	112.0	26	4,380	12,755	4L PHILIPS PHLLEDT84884010 WBB	42.0	26	0	4,380	4,783	0	\$0	\$749	\$103	\$209
Six	F-F32T8-4	112.0	4	4,380	1,962	4L PHILIPS PHLLEDT84884010 WBB	42.0	4	0	4,380	736	0	\$0	\$115	\$16	\$32
Shower Round Fixture	CFL-CF13W-1	13.0	1	4,380	57	PHILIPS PHLLEDA19827K85 WND	8.5	1	0	4,380	37	0	\$0	\$2	\$0	\$2
Shower Square Fixtures	CFL-CF13W-1	13.0	20	4,380	1,139	PHILIPS PHLLEDA19827K85 WND	8.5	20	0	4,380	745	0	\$0	\$37	\$5	\$47

Murdock School  
LED Upgrade



Seven	CFL-CF13W-1	13.0	2	4,380	114	PHILIPS PHLLEDA19827K85 WND	8.5	2	0	4,380	74	0	\$0	\$4	\$1	\$5
Eight	CFL-CF18W-1	18.0	1	4,380	79	PHILIPS PHLLEDA19827K14 WND	14.5	1	0	4,380	64	0	\$0	\$1	\$0	\$6
Totals			717		278,472		717				146,623		\$0	\$12,394	\$1,697	\$4,809
																6.0



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

9/6/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS **WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> InterWest Insurance Serv., LLC License #0B01094 222 Court Street Woodland CA 95695	<b>CONTACT</b> NAME: Sara Foster, CISR PHONE (A/C, No, Ext): 916-797-4425 E-MAIL ADDRESS: sfoster@iwins.com	<b>FAX</b> (A/C, No): 916-797-4425
<b>INSURER(S) AFFORDING COVERAGE</b>		<b>NAIC #</b>
INSURER A : Natl Union Fire Ins Co of Pitt		19445
INSURER B : Federal Insurance Company		20281
INSURER C :		
INSURER D :		
INSURER E :		
INSURER F :		

**COVERAGES**

CERTIFICATE NUMBER: 875598480

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	Y	Y	GL5180260	3/1/2023	3/1/2024	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 25,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> <b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	Y	Y	CA2961690	3/1/2023	3/1/2024	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	<input checked="" type="checkbox"/> <b>UMBRELLA LIAB</b> <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$	Y	Y	78186758	3/1/2023	3/1/2024	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	Y	WC012016025	3/1/2023	3/1/2024	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)**

Additional Insured status applies to requested entities, if required by written contract, per the attached policy forms/endorsements. Waiver of subrogation applies to requested entities, if required by written contract, per the attached policy forms/endorsements. 30 day notice of cancellation applies to requested entities, if required by written contract, per the attached policy forms/endorsements.

**CERTIFICATE HOLDER****CANCELLATION**

Cooperative Purchasing Connection  
\*\*\*\*\*  
1001 E Mount Faith Fergus  
Fergus Falls MN 56537

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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## ENDORSEMENT

This endorsement, effective 12:01 A.M. 03/01/2023 forms a part of

Policy No. CA 296-16-90 issued to VOSS ELECTRIC COMPANY

by NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

### **ADDITIONAL INSURED - WHERE REQUIRED UNDER CONTRACT OR AGREEMENT**

*This endorsement modifies insurance provided under the following:*

BUSINESS AUTO COVERAGE FORM

#### **SCHEDULE**

#### **ADDITIONAL INSURED:**

Any person or organization for whom you are contractually bound to provide Additional Insured status but only to the extent of such person's or organization's liability arising out of the use of a covered "auto".

**I. SECTION II - COVERED AUTOS LIABILITY COVERAGE, A. Coverage, 1. - Who Is Insured, is amended to add:**

- d. Any person or organization, shown in the schedule above, to whom you become obligated to include as an additional insured under this policy, as a result of any contract or agreement you enter into which requires you to furnish insurance to that person or organization of the type provided by this policy, but only with respect to liability arising out of use of a covered "auto". However, the insurance provided will not exceed the lesser of:

- (1) The coverage and/or limits of this policy, or
- (2) The coverage and/or limits required by said contract or agreement.



AUTHORIZED REPRESENTATIVE

**ENDORSEMENT #**

This endorsement, effective 12:01 A.M. 03/01/2023 forms a part of

Policy No. GL 518-02-60 issued to VOSS ELECTRIC COMPANY

By NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**LIMITED ADVICE OF CANCELLATION PROVIDED VIA E-MAIL  
TO ENTITIES OTHER THAN THE FIRST NAMED INSURED**

This policy is amended as follows:

In the event that the **Insurer** cancels this policy for any reason other than non-payment of premium, and

1. the cancellation effective date is prior to this policy's expiration date;
2. the **First Named Insured** is under an existing contractual obligation to notify a certificate holder when this policy is canceled (hereinafter, the "Certificate Holder(s)") and has provided to the **Insurer**, either directly or through its broker of record, the email address of a contact at each such entity; and
3. the **Insurer** received this information after the **First Named Insured** receives notice of cancellation of this policy and prior to this policy's cancellation effective date, via an electronic spreadsheet that is acceptable to the **Insurer**,

the **Insurer** will provide advice of cancellation (the "Advice") via e-mail to each such Certificate Holders within 30 days after the **First Named Insured** provides such information to the **Insurer**; provided, however, that if a specific number of days is not stated above, then the Advice will be provided to such Certificate Holder(s) as soon as reasonably practicable after the **First Named Insured** provides such information to the **Insurer**.

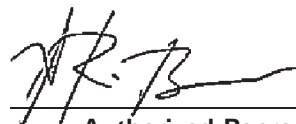
Proof of the **Insurer** emailing the Advice, using the information provided by the **First Named Insured**, will serve as proof that the **Insurer** has fully satisfied its obligations under this endorsement.

This endorsement does not affect, in any way, coverage provided under this policy or the cancellation of this policy or the effective date thereof, nor shall this endorsement invest any rights in any entity not insured under this policy.

The following Definitions apply to this endorsement:

1. **First Named Insured** means the Named Insured shown on the Declarations Page of this policy.
2. **Insurer** means the insurance company shown in the header on the Declarations page of this policy.

All other terms, conditions and exclusions shall remain the same.



Authorized Representative



**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

This endorsement changes the policy to which it is attached effective on the inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy).

This endorsement, effective 12:01 AM 03/01/2023 forms a part of Policy No. WC 012-01-6025

Issued to VOSS ELECTRIC COMPANY

By NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA.

**LIMITED ADVICE OF CANCELLATION PROVIDED VIA E-MAIL  
TO ENTITIES OTHER THAN THE NAMED INSURED  
(WORKERS' COMPENSATION ONLY)**

This policy is amended as follows:

In the event that the **Insurer** cancels this policy for any reason other than non-payment of premium, and

1. the cancellation effective date is prior to this policy's expiration date;
2. the **Named Insured** or, if applicable, any other employers named in Item 1 of the Information Page is under an existing contractual obligation to notify a certificate holder when this policy is canceled (hereinafter, the "Certificate Holder(s)") and the **Named Insured** has provided to the **Insurer**, either directly or through its broker of record, the email address of a contact at each such entity; and
3. the **Insurer** received this information after the **Named Insured** receives notice of cancellation of this policy and prior to this policy's cancellation effective date, via an electronic spreadsheet that is acceptable to the **Insurer**,

the **Insurer** will provide advice of cancellation (the "Advice") via e-mail to each such Certificate Holders within 30 days after the **Named Insured** provides such information to the **Insurer**; provided, however, that if a specific number of days is not stated above, then the Advice will be provided to such Certificate Holder(s) as soon as reasonably practicable after the **Named Insured** provides such information to the **Insurer**.

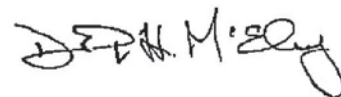
Proof of the **Insurer** emailing the Advice, using the information provided by the **First Named Insured**, will serve as proof that the **Insurer** has fully satisfied its obligations under this endorsement.

This endorsement does not affect, in any way, coverage provided under this policy or the cancellation of this policy or the effective date thereof, nor shall this endorsement invest any rights in any entity not insured under this policy.

The following definitions apply to this endorsement:

1. **Named Insured** means the insured first named employer in Item 1 of the Information Page of this policy.
2. **Insurer** means the insurance company shown in the header on the Information Page of this policy.

All other terms, conditions and exclusions shall remain the same.



**AUTHORIZED REPRESENTATIVE**

**ENDORSEMENT #**

This endorsement, effective 12:01 A.M. 03/01/2023 forms a part of

Policy No. CA 296-16-90 issued to VOSS ELECTRIC COMPANY

By NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**LIMITED ADVICE OF CANCELLATION PROVIDED VIA E-MAIL  
TO ENTITIES OTHER THAN THE FIRST NAMED INSURED**

This policy is amended as follows:

In the event that the **Insurer** cancels this policy for any reason other than non-payment of premium, and

1. the cancellation effective date is prior to this policy's expiration date;
2. the **First Named Insured** is under an existing contractual obligation to notify a certificate holder when this policy is canceled (hereinafter, the "Certificate Holder(s)") and has provided to the **Insurer**, either directly or through its broker of record, the email address of a contact at each such entity; and
3. the **Insurer** received this information after the **First Named Insured** receives notice of cancellation of this policy and prior to this policy's cancellation effective date, via an electronic spreadsheet that is acceptable to the **Insurer**,

the **Insurer** will provide advice of cancellation (the "Advice") via e-mail to each such Certificate Holders within 30 days after the **First Named Insured** provides such information to the **Insurer**; provided, however, that if a specific number of days is not stated above, then the Advice will be provided to such Certificate Holder(s) as soon as reasonably practicable after the **First Named Insured** provides such information to the **Insurer**.

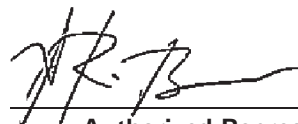
Proof of the **Insurer** emailing the Advice, using the information provided by the **First Named Insured**, will serve as proof that the **Insurer** has fully satisfied its obligations under this endorsement.

This endorsement does not affect, in any way, coverage provided under this policy or the cancellation of this policy or the effective date thereof, nor shall this endorsement invest any rights in any entity not insured under this policy.

The following Definitions apply to this endorsement:

1. **First Named Insured** means the Named Insured shown on the Declarations Page of this policy.
2. **Insurer** means the insurance company shown in the header on the Declarations page of this policy.

All other terms, conditions and exclusions shall remain the same.



Authorized Representative

## ENDORSEMENT

This endorsement, effective 12:01 A.M. 3/1/2023 forms a part of

policy No. CA 296-16-90 issued to VOSS ELECTRIC COMPANY

by NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

### **WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US**

*This endorsement modifies insurance provided under the following:*

#### **BUSINESS AUTO COVERAGE FORM**

**Section IV - Business Auto Conditions, A. - Loss Conditions, 5. - Transfer of Rights of Recovery Against Others to Us**, is amended to add:

However, we will waive any right of recover we have against any person or organization with whom you have entered into a contract or agreement because of payments we make under this Coverage Form arising out of an "accident" or "loss" if:

- (1) The "accident" or "loss" is due to operations undertaken in accordance with the contract existing between you and such person or organization; and
- (2) The contract or agreement was entered into prior to any "accident" or "loss".

No waiver of the right of recovery will directly or indirectly apply to your employees or employees of the person or organization, and we reserve our rights or lien to be reimbursed from any recovery funds obtained by any injured employee.



AUTHORIZED REPRESENTATIVE

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED - OWNERS, LESSEES OR  
CONTRACTORS - SCHEDULED PERSON OR  
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**SCHEDULE**

<b>Name Of Additional Insured Person(s) Or Organization(s)</b>	<b>Location(s) Of Covered Operations</b>
ANY PERSON OR ORGANIZATION WHOM YOU BECOME OBLIGATED TO INCLUDE AS AN ADDITIONAL INSURED AS A RESULT OF ANY CONTRACT OR AGREEMENT YOU HAVE ENTERED INTO.	PER THE CONTRACT OR AGREEMENT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

**A. Section II 6 Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

**B.** With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

- C. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable limits of insurance;  
whichever is less.

This endorsement shall not increase the applicable limits of insurance.

## WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
ELECTRONIC DATA LIABILITY COVERAGE PART  
LIQUOR LIABILITY COVERAGE PART  
POLLUTION LIABILITY COVERAGE PART DESIGNATED SITES  
POLLUTION LIABILITY LIMITED COVERAGE PART DESIGNATED SITES  
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART  
RAILROAD PROTECTIVE LIABILITY COVERAGE PART  
UNDERGROUND STORAGE TANK POLICY DESIGNATED TANKS

### SCHEDULE

**Name Of Person(s) Or Organization(s):**

**PURSUANT TO APPLICABLE WRITTEN CONTRACT OR AGREEMENT YOU ENTER INTO.**

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph **8. Transfer Of Rights Of Recovery Against Others To Us** of **Section IV – Conditions**:

We waive any right of recovery against the person(s) or organization(s) shown in the Schedule above because of payments we make under this Coverage Part. Such waiver by us applies only to the extent that the insured has waived its right of recovery against such person(s) or organization(s) prior to loss. This endorsement applies only to the person(s) or organization(s) shown in the Schedule above.

## WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

This endorsement changes the policy to which it is attached effective on inception date of the policy unless a different date is indicated below.

This endorsement, effective 12:01 AM 03/01/2023 forms a part of Policy No. WC 012-01-6025

Issued to VOSS ELECTRIC COMPANY

By NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA.

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.

This agreement shall not operate directly or indirectly to benefit any one not named in the Schedule.

### Schedule

ANY PERSON OR ORGANIZATION TO WHOM YOU BECOME  
OBLIGATED TO WAIVE YOUR RIGHTS OF RECOVERY  
AGAINST, UNDER ANY WRITTEN CONTRACT OR AGREEMENT  
YOU ENTER INTO PRIOR TO THE OCCURRENCE OF LOSS.

Any person or organization for which the employer has agreed by written contract, executed prior to loss, may execute a waiver of subrogation. However, for purposes of work performed by the employer in Missouri, this waiver of subrogation does not apply to any construction group of classifications as designated by the waiver of right to recover from others (subrogation) rule in our manual.

This form is not applicable in California, Kentucky, New Hampshire, New Jersey, Texas, or Utah.

WC 00 03 13  
(Ed. 04/84)

Countersigned by \_\_\_\_\_



Authorized Representative

Person Completing This Survey, include: Name Title Agency/Company Email Address Phone Number	Mark Guin Director, Prepress and Color Reproduction RR Donnelly Inc. mark.guin@rrd.com 630-329-3553	Taylor Dumas Senior Account Manager CLEAResult taylor.dumas@clearresult.com 870-814-2411	Taylor Dumas, CEM, PEP - CleaResult, taylor.dumas@clearresult.com, 501-265-0249
Has your agency received or purchased lighting audit services and/or LED solutions from the Supplier?	Yes	Yes	No
Briefly describe your service/project recieved from the Supplier.	Has completed four projects through out different states. Three more projects to go. Very flexible. Great to work with. Clean up was great.	We are the implementer of Entergy Arkansas Energy Solutions Program which is the incentive program for the electric utility Entergy Arkansas. Every energy efficiency project that Efficiency Integrated Solutions has completed for incentives in Arkansas our company has been heavily involved in and I personally have handled I would guess the majority of the lighting new construction and retrofit, compressed air, pumps and controls energy efficiency projects. I believe I have done around 20 projects throughout the years with the EIS group.	
Did the Supplier and their staff meet your agency/company's requested needs?	Yes	Yes	Yes
Describe how the Supplier did not meet your agency's needs.			
Has the Supplier's performance been consistently thorough, acceptable, and professional?	Yes	Yes	Yes
Describe how the Supplier's performance was not consistent, acceptable, or professional.			
Did the Supplier respond to your agency/company's needs in a timely manner?	Yes	Yes	Yes
Describe how the Supplier did not address your agency's needs in a timely manner.			
Have or were there any problems with this Supplier's work or conduct?	No	Yes	No
Describe the problems encountered with this Supplier's work or conduct.		I have never had a problem with any of their work as the projects that have completed have vastly ranged in complexity with lighting projects tending to be the least complex in comparison to other ones. Our company requires a very thorough list of items for all projects and EIS has always provided those in a timely and professional manor. There were projects that had hiccups per say, but they were never anything was addressed and corrected with the customer and CLEAResult. Example a lighting project was completed and the customer saw that one area had to much or to little light then different fixtures were added or removed to that location to rectify the "hiccup" CLEAResult pays incentives based on kWh reduction so this type of example changes our calculations as we just communicate what we need for the said change to properly calculate the addition/subtraction of light. I have never had one problem that with EIS that wasn't considered small in my opinion and each one was resolved properly.	
Was the attitude of the Supplier and their staff friendly and helpful?	Yes	Yes	Yes
Please describe the attitude of the Supplier and their staff.			
Were there any disputes regarding their work?	No	No	No
Please describe the(se) disputes with the Supplier and their work.			
Would you have for any reason to not contract with this Supplier in the future should you have the opportunity?	No	No	No
Please rate the Vendor's overall job performance.	5	5	5
Other Comments (Supplier or Project/Service)...	Great work. Great agency.	CLEAResult handles about a few hundred million kWh reduction through several energy efficiency projects annually, and I directly oversee approximately 60% each year. With that said I work on thousands projects and I get to really see how projects start and finish from countless contractors. EIS has always provided a quality project above requirements we set forth to gain incentives through the Entergy Arkansas Energy Solutions Program, but the other side to this is they provide a personal level of customer service that I appreciate. I don't prefer when contractors take a transactional approach to the work and EIS provides a quality product with a wonderful customer service aspect during and long after the projects completion. As an employee of CLEAResult I must operate without any preference to one contractor over the other, but I can say EIS provides a level of service that separates themselves from contractors I typically see. EIS is always a group I know will provide an exceptional level of service on their energy efficiency projects.	CleaResult is a third party energy consultant for EIS. Every project through Arkansas has to go through them. They have done at least 15 - 20 projects with EIS. Have worked with them for several years.



Person Completing This Survey, include: Name Title Agency/Company Email Address Phone Number	Troy Marshall, Director of Buildings and Grounds Columbus School District, tmarshall@columbus.k12.wi.us 920-623-5950 ext.3158	Glen Napier Building and grounds supervisor Suring School District napigl@suringk12.org	Mike Bouche, Oconto Falls Public School, Building/Grounds & Maintenance Supervisor, 920-848-4475.
Has your agency received or purchased lighting audit services and/or LED solutions from the Supplier?	Yes	Yes	Yes
Briefly describe your service/project recieved from the Supplier.	We did an LED lighting project in 3 gyms, HS corridors, and HS/ES classrooms	Led lights installed throughout the building	Exterior & Interior Lighting projects.
Did the Supplier and their staff meet your agency/company's requested needs?	Yes	Yes	Yes
Has the Supplier's performance been consistently thorough, acceptable, and professional?	Yes	Yes	Yes
Did the Supplier respond to your agency/company's needs in a timely manner?	Yes	Yes	Yes
Have or were there any problems with this Supplier's work or conduct?	No	No	No
Was the attitude of the Supplier and their staff friendly and helpful?	Yes	Yes	Yes
Were there any disputes regarding their work?	No	No	No
Would you have for any reason to not contract with this Supplier in the future should you have the opportunity?	No	No	No
Please rate the Vendor's overall job performance.	5	5	5
Other Comments (Supplier or Project/Service)...	NCLED really came through in a short amount of time for us. They did roughly \$85k worth of work in about 5 days. From the time I contacted them to the time they were finished, it only took 2 weeks to be finished. I have recommended them to 3 other schools already.		Good job with billing process. Good to work with.

Person Completing This Survey, include: Name Title Agency/Company Email Address Phone Number	Leah Hiniker Sustainability Manager Hennepin County leah.hiniker@hennepin.us 612.543.1219	Tim Burton Director of Buildings & Grounds Operations Centennial School District 12 tburton@isd12.org 763-792-6016	Dan Kretsinger Director of Facilities & Transportation Richfield Public Schools ISD280 dan.kretsinger@rpsmn.org 612-798-6081
Has your agency received or purchased lighting audit services and/or LED solutions from the Supplier?	Yes	Yes	Yes
Briefly describe your service/project recieved from the Supplier.	Mostly LED lamps	Full district audit. We used the report to plan a large LED conversion. They have also completed a new parking lot lighting, auditorium lighting conversion, and several miscellaneous projects. They are my first call for all lighting needs.	We purchase all of our light bulbs from Premier Lighting. They also provide all of our large project lighting. I really appreciate their detail by providing us with rebate information and energy savings information for all projects.
Did the Supplier and their staff meet your agency/company's requested needs?	Yes	Yes	Yes
Has the Supplier's performance been consistently thorough, acceptable, and professional?	Yes	Yes	Yes
Did the Supplier respond to your agency/company's needs in a timely manner?	Yes	Yes	Yes
Have or were there any problems with this Supplier's work or conduct?	No	No	No
Was the attitude of the Supplier and their staff friendly and helpful?	Yes	Yes	Yes
Were there any disputes regarding their work?	No	No	No
Would you have for any reason to not contract with this Supplier in the future should you have the opportunity?	No	No	No
Please rate the Vendor's overall job performance.	5	5	5
Other Comments (Supplier or Project/Service)...		They have delivered on all projects and are a great troubleshooting resource.	The are an excellent provider for lighting. They are always responsive, have quick turn around, and they meet and exceed the needs for our school district. I would highly recommend them!

Person Completing This Survey, include: Name Title Agency/Company Email Address Phone Number	Kain Smith Director of Buildings & Grounds/Health & Safety Faribault Public Schools ksmith@faribault.k12.mn.us 507-333-6027	Doug Shellum, Boys & Girls Club of the Twin Cities, dshellum@bgc-tc.org 612-282-1857, Director of Facilities	Kevin Johnson, Retired - Red Wing Public Schools
Has your agency received or purchased lighting audit services and/or LED solutions from the Supplier?	Yes	Yes	Yes
Briefly describe your service/project recieved from the Supplier.	New LED retrofit lights in our Middle and High Schools along with new color tuning lights in all Special Ed classrooms at both sites.	3 different projects. Complete gut and reinstall LED, Retrofit put LED into the existing fixtures.	Full District LED Replacement
Did the Supplier and their staff meet your agency/company's requested needs?	Yes	Yes	Yes
Has the Supplier's performance been consistently thorough, acceptable, and professional?	Yes	Yes	Yes
Did the Supplier respond to your agency/company's needs in a timely manner?	Yes	Yes	Yes
Have or were there any problems with this Supplier's work or conduct?	No	No	No
Was the attitude of the Supplier and their staff friendly and helpful?	Yes	Yes	Yes
Were there any disputes regarding their work?	No	No	No
Would you have for any reason to not contract with this Supplier in the future should you have the opportunity?	No	No	No
Please rate the Vendor's overall job performance.	5	5	5
Other Comments (Supplier or Project/Service)...	Great company to work with. Truly care about the customer and their satisfaction not just sales when designing your project.	That they went above and beyond. They do awesome work. Has three projects that are waiting for approval from the board that is going to Retrofit. They helped the Boys and Girls club win an award by filling out the paperwork etc.	Nice, Honest Job.
Award Info		Award Info	

Person Completing This Survey, include: Name Title Agency/Company Email Address Phone Number	Ryan Knippelmeyer, Superintendent, Elmwood-Murdock Public Schools, rknippelmeyer@emknights.org, 402-867-2341	Gene Molitor, Facility Supervisor, City of Maple Grove gmolitor@maplegrovern.gov 763-494-6386
Has your agency received or purchased lighting audit services and/or LED solutions from the Supplier?	Yes	Yes
Briefly describe your service/project recieved from the Supplier.	We completed a district wide lighting audit - 2 buildings, and then completed a full LED light upgrade through Voss lighting in all interior spaces in both buildings in 2022.	LED lighting through out the building. Electrical Upgrades too.
Did the Supplier and their staff meet your agency/company's requested needs?	Yes	Yes
Has the Supplier's performance been consistently thorough, acceptable, and professional?	Yes	Yes
Did the Supplier respond to your agency/company's needs in a timely manner?	Yes	Yes
Have or were there any problems with this Supplier's work or conduct?	No	No
Was the attitude of the Supplier and their staff friendly and helpful?	Yes	Yes
Were there any disputes regarding their work?	No	No
Would you have for any reason to not contract with this Supplier in the future should you have the opportunity?	No	No
Please rate the Vendor's overall job performance.	5	5
Other Comments (Supplier or Project/Service)...	Voss Lighting was great to work with and would recommend their consideration if you are considering a lighting project.	Good working relationship.

## 11c Reference Check – Survey Links by Supplier

**Efficiency Integrated Solutions, Inc.**

<https://forms.office.com/r/tv1Mp142te>

**NCLED**

<https://forms.office.com/r/B4gPL4kJrC>

**Premier Lighting, Inc.**

<https://forms.office.com/r/QmAPpax86B>

**The Retrofit Companies**

<https://forms.office.com/r/mNskTk8zP9>

**Voss Electric Company**

<https://forms.office.com/r/Nt4E5UYxJ2>

[See Reference Check Intro Email](#)



## Evaluation Committee Report

### RFP #24.5 – Lighting Audit Services & LED Solutions

#### Description of Solicitation

The Cooperative Purchasing Connection (CPC) issued a Request for Proposal (RFP) for Lighting Audit Services & LED Solutions on August 14, 2023. The intent of the solicitation is to secure an experienced Supplier(s), equipped with the necessary resources and capabilities to develop a program for participating agencies to have the ability to acquire lighting audit services and energy efficient light emitting diodes (LED) solutions at consortium level discounted pricing. Suppliers able to provide a full turn-key solution shall only include LED lighting solutions that will provide an efficient, cost-effective way to illuminate their facilities. Lighting audit services and LED lighting solutions may include but is not limited to the following categories: 1) Lighting audit walk-through (per square foot), 2) Energy and savings reports, 3) LED solutions, 4) Installation services, 5) Energy rebate assistance, and 6) Recycling services.

The solicitation was due on September 7, 2023. Thereafter, CPC conducted and followed its opening procedures and confirmed if the responding Suppliers were deemed responsive or non-responsive.

#### Summary of Evaluation Committee Activity

The members of the Evaluation Committee included Melissa Mattson, Director of Administrative Services with CPC; Joni Puffett, Marketing & Vendor Relations Facilitator with AEA; and Jerome Evans, Program Representative with CPC.

Six (6) proposals were received by the submission deadline. Proposals were reviewed for compliance with the mandatory requirements set forth in the Request for Proposal (RFP). Five (5) proposals were found to be compliant and deemed responsive.

The Evaluation Committee conducted their evaluation the week of September 18, 2023. The Committee met virtually to review and discuss the responses collectively on September 26, 2023. A summation of their evaluation is included below.

#### Evaluation Committee Discussion & Overview

Upon review of the Supplier's responses, the evaluation committee agreed on the following:

##### Efficiency Integrated Solutions

1. The Supplier is headquartered in Atlanta, Georgia, and had no prior presence or previous states in the five-state territory. Significant concern about how they plan to operate in this niche and location of the market. Concern about costs associated with travel to conduct their self-performing audits.
2. The Supplier has conducted minimal work in the public sector. Most, if not all work has been completed in the commercial sector. Project deliverable, references, and all job descriptions were from the commercial sector.
3. The Supplier's response lacked clear direction on how they were going to deploy the contract to any of the participating states and avoiding answering other questions in the questionnaire.

4. The Supplier would manage the receipt of rebates/incentives received by filing paperwork and providing the discount to the participating agency upfront, while they wait for actual reimbursement from the utility provider.
5. The Supplier is requesting a minimum job requirement of \$5,000 for material only or \$40,000 minimum for a full turn-key project. Per the price schedule, 20,000 sq. feet approximately.
6. The Supplier offered the longest warranty for materials and workmanship (10 years). Costs for mobilization, labor, and/or shipping may outweigh warranty duration.
7. The Supplier's design services are itemized at the highest rate amongst respondents.
8. Committee expressed concern that a no-charge audit only if the project is awarded to the Supplier; this requires a mandatory commitment to a project resulting from an audit.
9. Additional concern from the committee due to the low discount offer (5%).
10. The Supplier is offering an additional 5% volume discount on design and project management services on projects valued at \$250,000 to \$1 million.

#### **NCLED**

1. The Supplier has been serving Wisconsin for most of their tenure which includes public, private, and commercial clients. The Supplier has completed a few projects in Minnesota. The retention rate is high and often receives continuous referrals from public agencies.
2. The Committee had some concerns about the ability to service other states as they are currently only licensed in Wisconsin. The Supplier has expressed interest in obtaining licensure for other states.
3. The Supplier is a recent recipient of the Trade Ally Contractor Energy Efficiency award. Before focusing on LED, the Supplier was solely an electrical contractor.
4. The Supplier would manage the receipt of rebates/incentives received by filing paperwork and providing the discount to the participating agency upfront, while they wait for actual reimbursement from the utility provider.
5. The Supplier operates its business with a smaller team, and they travel as a company. Some concerns were noted again regarding the ability to keep up with potential work when moving as a unit. Audit availability vs. project availability; team capacity may be limited.
6. The Supplier operates on a progress-payment basis. 50% down and balance net 30 after project completion. They also offer a lease option that can go out as far as 10 years.
7. The Supplier is proposing the lowest costs on auditing services as compared to other respondents. The Committee is concerned over "Free" and no per diem and mileage charges when looking at the vast mileage of the five participating states. Concerning that their intent is to stay in Wisconsin.
8. The Supplier is offering four (4) lines of LED manufacturers with a 10% discount off list.

#### **Premier Lighting**

1. The Supplier is a Small/Women-Owned Business Enterprise (SBE/WBE) lighting supplier and turn-key retrofit company since 1991 (32 years).
2. The Supplier operates with a small team. They conduct the audits internally and utilize a trusted installer network to complete projects.
3. The Supplier and its warehouse are in St. Paul, MN. They maintain local stock as well as a partnership with the manufacturer, Keystone Technologies which allows them to access various warehouses across the United States.
4. The Supplier conducts about 10% of their work in the public sector, approximately 50-60 public customers across the states. Currently don't take up a large market share in public work based off numbers provided.
5. The Supplier indicated that they only purchase product and materials from U.S. based companies.
6. The Supplier has exempted multiple agencies from contract pricing.
7. The Supplier can accept the rebate and deduct it from the end-user's bill, or they customer can pay in full and wait for the rebate directly, relying on customer preference.
8. The Supplier noted a potential surcharge if a shipment doesn't meet \$1,000 in freight allowances; surcharge was not defined.
9. The Supplier is willing to work with participating agencies to determine progress payments for large projects and allow net 30 on LED sales.

10. The Supplier's audit services (per square foot) are competitive and their per diem is higher priced, but lower on mileage rates. Mileage will apply to all agencies outside of a 100-mile radius of Minneapolis, MN. The audit fee, design services, and project management are waived if the project runs through the Supplier.
11. The Supplier's labor rates are competitive when using internal and external installer networks to complete the project. Mileage and per diem are the same for audit services, however, the mileage fee for labor is the current IRS tax rate.
12. The Supplier is offering four (4) lines of LED manufacturers with a 10-65% discount off list varying by manufacturer. In addition, the Supplier is offering volume discounts on:
  - a. All manufacturers 5%, \$100,000+
  - b. Satco 5%, \$10,000 - \$50,000
  - c. Satco 6%, \$50,000+
  - d. Keystone 2%, \$15,000 – 99,999

### **The Retrofit Companies**

1. The Supplier is a Small/Women-Owned Business Enterprise (SBE/WBE) company since 1992 (31 years).
2. The Supplier has a team of lighting auditors and project developers that work specifically with the LED solutions. The Supplier also indicated that they are manufacturer neutral and have great working relationships with the manufacturers thus allowing the Supplier the ability to design and pitch the best solutions to the client.
3. The Supplier does not stock a lot of products due to the continuing evolution of LED technology; this prevents needing to sell stocked product to customer that is obsolete. Flexibility and partnership allow the customer to decide what will be best for them and their needs.
4. In 2023, the Supplier audited and developed over 130 public agency projects in Minnesota. They have indicated limited projects in Wisconsin, but note plans for growth and sales potential in Wisconsin, Iowa, North Dakota, and South Dakota. The Supplier is continuing to grow and has invested in a partner vetting process to assist with project completion (installation) like an installer network. The Supplier has been conducting most of its installs through in-house installers and electricians.
5. The Supplier presents findings and lighting solutions in a "good, better, best" method explaining the cost savings, pros/cons of each solution. The Supplier quotes a Retrofit kit which allows a work-around option when operating with different age buildings and materials.
6. The Supplier will make attempts to take and accept the rebate initiative on behalf of the customer, this prevents the customer from allocating/paying for the entire project until the rebate finalizes. However, some utility companies do not allow this method.
7. The Supplier's lighting audit services are competitive along with their per diem rates and mileage rates. The audit includes design services. Project management services are also competitive. Both the audit and project management services are waived if the full project runs through the Supplier.
8. The Supplier is offering 16 lines of LED manufacturers all with a 15% discount off list.

### **Voss Electric**

1. The Supplier has been in business since 1939 and has grown to include 13 branches nationwide. Initial work was primarily around distribution of replacement lamps and ballasts up until 10 years ago when they started offering full turn-key installations.
2. The Supplier has multiple contracts accessible to participating agencies, they include NCPA, OMNIA, the State of Minnesota (lamps and ballasts – materials only) and a Nebraska State Contract. Agencies purchasing from the State of Minnesota contract are exempt from proposed contract pricing.
3. In 2022-2023, the Supplier conducted 56 institutional audits in the five (5) states.
4. The Supplier will deduct the projected rebate from the final cost so the client doesn't have to wait for the rebate to process. The Supplier can provide rebate pass through if required by the utility.
5. The Supplier requires a minimum area of 7,000 sq. feet. For projects below the minimum, all rates associated with the lighting audit will be increased by a 2x multiplier (double).
6. The Supplier is currently not licensed to perform electrical installation in North Dakota. The Supplier can still provide audit services, product specifications, and product supply in North Dakota.
7. The Supplier's audit, design, project management, per diem, and mileage are the highest of all proposers. Mileage calculations start from the base location of the auditor that is readily available.



8. The Supplier's labor rates are the highest amongst proposers. The per diem rate is high, but mileage is not charged. Per diem rates increase significantly for projects in North Dakota, Minnesota, and Wisconsin if they are more than 75 miles from Duluth, Bloomington, or Rochester, Minnesota.
9. The Supplier is offering 10 lines of LED manufacturers all with an 87% discount off list.

## Recommendation

After analysis of the Supplier/s proposals, the Evaluation Committee recommends that contracts be awarded to Premier Lighting, Inc. and The Retrofit Companies.

The recommendation and awards are subject to final review by CPC Administration and approval by the Board of Directors.

DocuSigned by:  
*Melissa Mattson*  
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*Melissa Mattson, Director of Administrative Services  
Cooperative Purchasing Connection*

DocuSigned by:  
*Joni Puffett*  
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*Joni Puffett, Marketing & Vendor Relations Facilitator  
AEA Purchasing*

DocuSigned by:  
*Jerome Evans*  
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*Jerome Evans, Program Representative  
Cooperative Purchasing Connection*

DocuSigned by:  
*Lisa Truax*  
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*Lisa Truax, Procurement Coordinator  
Cooperative Purchasing Connection*

### Attachment:

Evaluation Scoring Summary

cc: Procurement File

RFP 24.5 - Lighting Audit Services & LED Solutions  
Evaluation Scoring Summary

	<i>Efficiency Integrated Solutions, Inc.</i>	<i>NCLED</i>	<i>Premier Lighting, Inc.</i>	<i>The Retrofit Companies</i>	<i>Voss Electric</i>
Evaluator #1	128	170	200	210	173
Evaluator #2	113	169	218	222	199
Evaluator #3	137	184	199	190	195
Average Total Score	126	174	206	207	189

Evaluation Criteria	Points Available	<i>Efficiency Integrated Solutions, Inc.</i>	<i>NCLED</i>	<i>Premier Lighting, Inc.</i>	<i>The Retrofit Companies</i>	<i>Voss Electric</i>
<i>Technical Proposal</i>						
Qualifications & Experience	75	42	55	70	70	66
Warranty	10	6	9	6	8	6
Financials & Level of Support	10	6	7	5	7	5
Marketing & Partnership	16	8	8	13	14	11
Exceptions & Deviations	5	5	5	5	5	4
References	5	4	5	5	5	5
<i>Pricing Proposal</i>						
1 – Lighting Audit Services *7 - Project Deliverables	60	27	50	47	49	40
2.1 – LED Category Discount	30	12	18	24	25	28
2.2 – LED Lighting	30	13	18	24	24	24
3 – Volume Discounts	9	4	0	6	0	0
Average Total Score	250	126	174	206	207	189

## **Evaluation Committee Report**

### **RFP #24.5 – Lighting Audit Services & LED Solutions**

#### **Description of Solicitation**

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The solicitation was due on September 7, 2023. Thereafter, CPC conducted and followed its opening procedures and confirmed if the responding Suppliers were deemed responsive or non-responsive.

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The Evaluation Committee conducted their evaluation the week of September 18, 2023. The Committee met virtually to review and discuss the responses collectively on September 26, 2023. A summation of their evaluation is included below.

#### **Evaluation Committee Discussion & Overview**

Upon review of the Supplier's responses, the evaluation committee agreed on the following:

##### **Efficiency Integrated Solutions**

1. The Supplier is headquartered in Atlanta, Georgia, and had no prior presence or previous states in the five-state territory. Significant concern about how they plan to operate in this niche and location of the market. Concern about costs associated with travel to conduct their self-performing audits.
2. The Supplier has conducted minimal work in the public sector. Most, if not all work has been completed in the commercial sector. Project deliverable, references, and all job descriptions were from the commercial sector.
3. The Supplier's response lacked clear direction on how they were going to deploy the contract to any of the participating states and avoiding answering other questions in the questionnaire.

4. The Supplier would manage the receipt of rebates/incentives received by filing paperwork and providing the discount to the participating agency upfront, while they wait for actual reimbursement from the utility provider.
5. The Supplier is requesting a minimum job requirement of \$5,000 for material only or \$40,000 minimum for a full turn-key project. Per the price schedule, 20,000 sq. feet approximately.
6. The Supplier offered the longest warranty for materials and workmanship (10 years). Costs for mobilization, labor, and/or shipping may outweigh warranty duration.
7. The Supplier's design services are itemized at the highest rate amongst respondents.
8. Committee expressed concern that a no-charge audit only if the project is awarded to the Supplier; this requires a mandatory commitment to a project resulting from an audit.
9. Additional concern from the committee due to the low discount offer (5%).
10. The Supplier is offering an additional 5% volume discount on design and project management services on projects valued at \$250,000 to \$1 million.

#### **NCLED**

1. The Supplier has been serving Wisconsin for most of their tenure which includes public, private, and commercial clients. The Supplier has completed a few projects in Minnesota. The retention rate is high and often receives continuous referrals from public agencies.
2. The Committee had some concerns about the ability to service other states as they are currently only licensed in Wisconsin. The Supplier has expressed interest in obtaining licensure for other states.
3. The Supplier is a recent recipient of the Trade Ally Contractor Energy Efficiency award. Before focusing on LED, the Supplier was solely an electrical contractor.
4. The Supplier would manage the receipt of rebates/incentives received by filing paperwork and providing the discount to the participating agency upfront, while they wait for actual reimbursement from the utility provider.
5. The Supplier operates its business with a smaller team, and they travel as a company. Some concerns were noted again regarding the ability to keep up with potential work when moving as a unit. Audit availability vs. project availability; team capacity may be limited.
6. The Supplier operates on a progress-payment basis. 50% down and balance net 30 after project completion. They also offer a lease option that can go out as far as 10 years.
7. The Supplier is proposing the lowest costs on auditing services as compared to other respondents. The Committee is concerned over "Free" and no per diem and mileage charges when looking at the vast mileage of the five participating states. Concerning that their intent is to stay in Wisconsin.
8. The Supplier is offering four (4) lines of LED manufacturers with a 10% discount off list.

#### **Premier Lighting**

1. The Supplier is a Small/Women-Owned Business Enterprise (SBE/WBE) lighting supplier and turn-key retrofit company since 1991 (32 years).
2. The Supplier operates with a small team. They conduct the audits internally and utilize a trusted installer network to complete projects.
3. The Supplier and its warehouse are in St. Paul, MN. They maintain local stock as well as a partnership with the manufacturer, Keystone Technologies which allows them to access various warehouses across the United States.
4. The Supplier conducts about 10% of their work in the public sector, approximately 50-60 public customers across the states. Currently don't take up a large market share in public work based off numbers provided.
5. The Supplier indicated that they only purchase product and materials from U.S. based companies.
6. The Supplier has exempted multiple agencies from contract pricing.
7. The Supplier can accept the rebate and deduct it from the end-user's bill, or they customer can pay in full and wait for the rebate directly, relying on customer preference.
8. The Supplier noted a potential surcharge if a shipment doesn't meet \$1,000 in freight allowances; surcharge was not defined.
9. The Supplier is willing to work with participating agencies to determine progress payments for large projects and allow net 30 on LED sales.

10. The Supplier's audit services (per square foot) are competitive and their per diem is higher priced, but lower on mileage rates. Mileage will apply to all agencies outside of a 100-mile radius of Minneapolis, MN. The audit fee, design services, and project management are waived if the project runs through the Supplier.
11. The Supplier's labor rates are competitive when using internal and external installer networks to complete the project. Mileage and per diem are the same for audit services, however, the mileage fee for labor is the current IRS tax rate.
12. The Supplier is offering four (4) lines of LED manufacturers with a 10-65% discount off list varying by manufacturer. In addition, the Supplier is offering volume discounts on:
  - a. All manufacturers 5%, \$100,000+
  - b. Satco 5%, \$10,000 - \$50,000
  - c. Satco 6%, \$50,000+
  - d. Keystone 2%, \$15,000 - 99,999

### **The Retrofit Companies**

1. The Supplier is a Small/Women-Owned Business Enterprise (SBE/WBE) company since 1992 (31 years).
2. The Supplier has a team of lighting auditors and project developers that work specifically with the LED solutions. The Supplier also indicated that they are manufacturer neutral and have great working relationships with the manufacturers thus allowing the Supplier the ability to design and pitch the best solutions to the client.
3. The Supplier does not stock a lot of products due to the continuing evolution of LED technology; this prevents needing to sell stocked product to customer that is obsolete. Flexibility and partnership allow the customer to decide what will be best for them and their needs.
4. In 2023, the Supplier audited and developed over 130 public agency projects in Minnesota. They have indicated limited projects in Wisconsin, but note plans for growth and sales potential in Wisconsin, Iowa, North Dakota, and South Dakota. The Supplier is continuing to grow and has invested in a partner vetting process to assist with project completion (installation) like an installer network. The Supplier has been conducting most of its installs through in-house installers and electricians.
5. The Supplier presents findings and lighting solutions in a "good, better, best" method explaining the cost savings, pros/cons of each solution. The Supplier quotes a Retrofit kit which allows a work-around option when operating with different age buildings and materials.
6. The Supplier will make attempts to take and accept the rebate initiative on behalf of the customer, this prevents the customer from allocating/paying for the entire project until the rebate finalizes. However, some utility companies do not allow this method.
7. The Supplier's lighting audit services are competitive along with their per diem rates and mileage rates. The audit includes design services. Project management services are also competitive. Both the audit and project management services are waived if the full project runs through the Supplier.
8. The Supplier is offering 16 lines of LED manufacturers all with a 15% discount off list.

### **Voss Electric**

1. The Supplier has been in business since 1939 and has grown to include 13 branches nationwide. Initial work was primarily around distribution of replacement lamps and ballasts up until 10 years ago when they started offering full turn-key installations.
2. The Supplier has multiple contracts accessible to participating agencies, they include NCPA, OMNIA, the State of Minnesota (lamps and ballasts – materials only) and a Nebraska State Contract. Agencies purchasing from the State of Minnesota contract are exempt from proposed contract pricing.
3. In 2022-2023, the Supplier conducted 56 institutional audits in the five (5) states.
4. The Supplier will deduct the projected rebate from the final cost so the client doesn't have to wait for the rebate to process. The Supplier can provide rebate pass through if required by the utility.
5. The Supplier requires a minimum area of 7,000 sq. feet. For projects below the minimum, all rates associated with the lighting audit will be increased by a 2x multiplier (double).
6. The Supplier is currently not licensed to perform electrical installation in North Dakota. The Supplier can still provide audit services, product specifications, and product supply in North Dakota.
7. The Supplier's audit, design, project management, per diem, and mileage are the highest of all proposers. Mileage calculations start from the base location of the auditor that is readily available.

8. The Supplier's labor rates are the highest amongst proposers. The per diem rate is high, but mileage is not charged. Per diem rates increase significantly for projects in North Dakota, Minnesota, and Wisconsin if they are more than 75 miles from Duluth, Bloomington, or Rochester, Minnesota.
9. The Supplier is offering 10 lines of LED manufacturers all with an 87% discount off list.

## Recommendation

After analysis of the Supplier/s proposals, the Evaluation Committee recommends that contracts be awarded to Premier Lighting, Inc. and The Retrofit Companies.

The recommendation and awards are subject to final review by CPC Administration and approval by the Board of Directors.

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*Melissa Mattson, Director of Administrative Services  
Cooperative Purchasing Connection*

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*Joni Puffett, Marketing & Vendor Relations Facilitator  
AEA Purchasing*

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*Jerome Evans, Program Representative  
Cooperative Purchasing Connection*

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*Lisa Truax, Procurement Coordinator  
Cooperative Purchasing Connection*

**Attachment:**  
Evaluation Scoring Summary

cc: Procurement File

RFP 24.5 - Lighting Audit Services & LED Solutions  
Evaluation Scoring Summary

	<i>Efficiency Integrated Solutions, Inc.</i>	<i>NCLED</i>	<i>Premier Lighting, Inc.</i>	<i>The Retrofit Companies</i>	<i>Voss Electric</i>
Evaluator #1	128	170	200	210	173
Evaluator #2	113	169	218	222	199
Evaluator #3	137	184	199	190	195
Average Total Score	126	174	206	207	189

Evaluation Criteria	Points Available	<i>Efficiency Integrated Solutions, Inc.</i>	<i>NCLED</i>	<i>Premier Lighting, Inc.</i>	<i>The Retrofit Companies</i>	<i>Voss Electric</i>
<i>Technical Proposal</i>						
Qualifications & Experience	75	42	55	70	70	66
Warranty	10	6	9	6	8	6
Financials & Level of Support	10	6	7	5	7	5
Marketing & Partnership	16	8	8	13	14	11
Exceptions & Deviations	5	5	5	5	5	4
References	5	4	5	5	5	5
<i>Pricing Proposal</i>						
1 – Lighting Audit Services *7 - Project Deliverables	60	27	50	47	49	40
2.1 – LED Category Discount	30	12	18	24	25	28
2.2 – LED Lighting	30	13	18	24	24	24
3 – Volume Discounts	9	4	0	6	0	0
Average Total Score	250	126	174	206	207	189

1- Lighting Audit Services

\*Please note this workbook has multiple tabs.

Lighting Assessment & Design							
	Lighting Audit & Assessment (per square foot)	Standard Price & Rate	Discounted Price & Rate	Number Savings	Per Hour Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
BA	Lighting Audit & Assessment (per square foot)	\$ - 0.03	\$ - -	100.00%	\$ - -	\$ - -	SB for audit services only if project is awarded to E2
NCUB	Lighting Audit & Assessment (per square foot)	\$ - -	\$ - -	49.00%	\$ - -	\$ - -	Our Audit are free
	Lighting Audit & Assessment (per square foot)	\$ - -	\$ - -	49.00%	\$ - -	\$ - -	
P	Lighting Audit & Assessment (per square foot)	\$ 0.05	\$ 0.03	40.00%	\$ 100.00	\$ 0.50	For a waived E2 project gone through an. Anything outside of 100 mile radius of Minneapolis. Per hour if overnight required
	Lighting Audit & Assessment (per square foot)	\$ 0.05	\$ 0.03	40.00%	\$ 100.00	\$ 0.50	Correct E2 fee for mileage. Per hour if overnight required
V	Lighting Audit & Assessment (per square foot)	\$ 0.07	\$ 0.04	42.86%	\$ 125.00	\$ 0.65	Correct E2 fee for mileage. Per hour if overnight required
	Lighting Audit & Assessment (per square foot)	\$ 0.07	\$ 0.04	42.86%	\$ 125.00	\$ 0.65	Correct E2 fee for mileage. Per hour if overnight required
V	Lighting Audit & Assessment (per square foot)	\$ 0.08	\$ 0.05	37.50%	\$ 175.00	\$ 0.75	Mileage calculations will start from the base location for the auditor unless for each specific project. These locations may vary based on availability
	Lighting Audit & Assessment (per square foot)	\$ 0.08	\$ 0.05	37.50%	\$ 175.00	\$ 0.75	Mileage calculations will start from the base location for the auditor unless for each specific project. These locations may vary based on availability
Design Services							
	Design Services (Facility only 20,000 sq ft)	Standard Price & Rate	Discounted Price & Rate	Number Savings	Per Hour Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
BA	Design Services (Facility only 20,000 sq ft)	\$ 1,000.00	\$ 1,000.00	0.00%	\$ - -	\$ - -	For design for facilities under 20,000 sq ft
NCUB	Design Services (Facility only 20,000 sq ft)	\$ - -	\$ - -	49.00%	\$ - -	\$ - -	
P	Design Services (Facility only 20,000 sq ft)	\$ 80.00	\$ 48.00	35.00%	\$ 150.00	\$ 0.50	For design of project gone through an. Anything outside of 100 mile radius of Minneapolis. Per hour if overnight required
	Design Services (Facility only 20,000 sq ft)	\$ 80.00	\$ 48.00	35.00%	\$ 150.00	\$ 0.50	For design of project gone through an. Anything outside of 100 mile radius of Minneapolis. Per hour if overnight required
V	Design Services / hr	\$ 195.00	\$ 120.00	22.43%	\$ 175.00	\$ 0.75	Design calculations will start from the base location for the auditor unless for each specific project. These locations may vary based on availability
	Design Services / hr	\$ 195.00	\$ 120.00	22.43%	\$ 175.00	\$ 0.75	Design calculations will start from the base location for the auditor unless for each specific project. These locations may vary based on availability
Design Services							
	Design Services (Facility only 20,000 sq ft)	Standard Price & Rate	Discounted Price & Rate	Number Savings	Per Hour Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
BA	Design Services (Facility only 20,000 sq ft)	\$ 1,000.00	\$ 1,000.00	0.00%	\$ - -	\$ - -	Our Project Management is done in house and is free
NCUB	Design Services (Facility only 20,000 sq ft)	\$ - -	\$ - -	49.00%	\$ - -	\$ - -	
P	Design Services (Facility only 20,000 sq ft)	\$ 80.00	\$ 48.00	35.00%	\$ 150.00	\$ 0.50	For a waived E2 project gone through an. Anything outside of 100 mile radius of Minneapolis. Per hour if overnight required
	Design Services (Facility only 20,000 sq ft)	\$ 80.00	\$ 48.00	35.00%	\$ 150.00	\$ 0.50	For a waived E2 project gone through an. Anything outside of 100 mile radius of Minneapolis. Per hour if overnight required
V	Design Services / hr	\$ 200.00	\$ 125.00	37.50%	\$ 125.00	\$ 0.65	Correct E2 fee for mileage. Project Management, from concept to completion is included in all tertiary projects
	Design Services / hr	\$ 200.00	\$ 125.00	37.50%	\$ 125.00	\$ 0.65	Correct E2 fee for mileage. Project Management, from concept to completion is included in all tertiary projects
V	Design Services / hr	\$ 195.00	\$ 120.00	22.43%	\$ 175.00	\$ 0.75	Mileage calculations will start from the base location for the auditor unless for each specific project. These locations may vary based on availability
	Design Services / hr	\$ 195.00	\$ 120.00	22.43%	\$ 175.00	\$ 0.75	Mileage calculations will start from the base location for the auditor unless for each specific project. These locations may vary based on availability
Installation (Labor) **Preexisting wage projects (details are subject to labor hourly rates change by MN counties) *Outstanding agencies are required to notify the Vendor if prevailing wages are required (state/federal funding as part or all of the project)							
	Regular Hours	Standard Price & Rate	Discounted Price & Rate	Number Savings	Per Hour Charges (daily rate, if any)	Mileage Charges (per mile, if any)	Notes/Comments
BA	Hourly Rate - Regular Hours	\$ 95.00	\$ 80.00	15.79%	\$ 25.00	\$ 0.65	For E2 standards
NCUB	Hourly Rate - Regular Hours	\$ 88.00	\$ 80.00	9.09%	None	None	
P	Hourly Rate - Regular Hours	\$ 130.00	\$ 105.00	19.23%	\$ 100.00	\$ 0.65	Anything outside of 100 mile radius of Minneapolis. Per hour if overnight required
	Hourly Rate - Regular Hours	\$ 130.00	\$ 105.00	19.23%	\$ 100.00	\$ 0.65	Anything outside of 100 mile radius of Minneapolis. Per hour if overnight required
V	Hourly Rate - Regular Hours	\$ 150.00	\$ 120.00	20.00%	\$ 125.00	\$ 0.65	Correct E2 fee for mileage
	Hourly Rate - Regular Hours	\$ 150.00	\$ 120.00	20.00%	\$ 125.00	\$ 0.65	Correct E2 fee for mileage
V	Project Manager - Hourly Rate - Regular Hours	\$ 225.00	\$ 195.00	14.29%	\$ 175.00	\$ -	Maximum Hourly Rate. Travel will be charged on an hourly basis for the destination base location
	Project Manager - Hourly Rate - Regular Hours	\$ 225.00	\$ 195.00	14.29%	\$ 175.00	\$ -	Maximum Hourly Rate. Travel will be charged on an hourly basis for the destination base location
V	Apprentice 1 - Hourly Rate - Regular Hours	\$ 140.00	\$ 110.00	21.43%	\$ 175.00	\$ -	Per diem rates will increase to \$392/day in project's date of MN, MN



**From:** [Lori Mittelstadt](#)  
**To:** [afigueiras@energynintegratedsolutions.com](mailto:afigueiras@energynintegratedsolutions.com)  
**Cc:** [Lori Mittelstadt](#); [Melissa Mattson](#)  
**Subject:** RFP 24.5 Lighting Audit Services & LED Solutions  
**Date:** Monday, October 16, 2023 9:15:33 AM  
**Attachments:** [image001.png](#)

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Dear Alex Figueiras:

The Cooperative Purchasing Connection (CPC) would like to thank you for your time, effort, and interest in supplying a response for Request for Proposal (RFP) #24.5 – Lighting Audit Services & LED Solutions.

The evaluation committee, using the criteria outlined in the RFP documents, have completed their review of the proposals received. The evaluation committee did not recommend your proposal for award.

CPC would like to thank you for your proposal and interest in this RFP. CPC will look forward to your participation in future RFPs for similar engagements.

Should you have any questions about this matter, please feel free to contact me.

Regards,

Melissa Mattson | Director of Administrative Services  
Cooperative Purchasing Connection

**From:** [Lori Mittelstadt](#)  
**To:** [jay@ncdledlighting.com](mailto:jay@ncdledlighting.com); [dale@ncdledlighting.com](mailto:dale@ncdledlighting.com)  
**Cc:** [Lori Mittelstadt](#); [Melissa Mattson](#)  
**Subject:** RFP 24.5 Lighting Audit Services & LED Solutions  
**Date:** Monday, October 16, 2023 9:17:54 AM  
**Attachments:** [image001.png](#)

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Dear Jay Polena:

The Cooperative Purchasing Connection (CPC) would like to thank you for your time, effort, and interest in supplying a response for Request for Proposal (RFP) #24.5 – Lighting Audit Services & LED Solutions.

The evaluation committee, using the criteria outlined in the RFP documents, have completed their review of the proposals received. The evaluation committee did not recommend your proposal for award.

CPC would like to thank you for your proposal and interest in this RFP. CPC will look forward to your participation in future RFPs for similar engagements.

Should you have any questions about this matter, please feel free to contact me.

Regards,

Melissa Mattson | Director of Administrative Services  
Cooperative Purchasing Connection

**From:** [Lori Mittelstadt](#)  
**To:** [mario.mammina@vossighting.com](mailto:mario.mammina@vossighting.com)  
**Cc:** [Lori Mittelstadt](#); [Melissa Mattson](#)  
**Subject:** RFP 24.5 Lighting Audit Services & LED Solutions  
**Date:** Monday, October 16, 2023 9:19:30 AM  
**Attachments:** [image001.png](#)

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Dear Mario Mammina:

The Cooperative Purchasing Connection (CPC) would like to thank you for your time, effort, and interest in supplying a response for Request for Proposal (RFP) #24.5 – Lighting Audit Services & LED Solutions.

The evaluation committee, using the criteria outlined in the RFP documents, have completed their review of the proposals received. The evaluation committee did not recommend your proposal for award.

CPC would like to thank you for your proposal and interest in this RFP. CPC will look forward to your participation in future RFPs for similar engagements.

Should you have any questions about this matter, please feel free to contact me.

Regards,

Melissa Mattson | Director of Administrative Services  
Cooperative Purchasing Connection

September 29, 2023

Premier Lighting Inc.  
Attn: Greg Ehrich, Vice President  
2885 County Drive, Suite 135  
St. Paul, MN 55117

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**Award Decision, RFP #24.5 – Lighting Audit Services & LED Solutions**

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Dear Greg Ehrich,

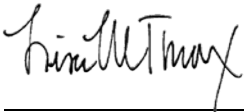
The Cooperative Purchasing Connection (CPC) would like to thank you for your time, effort, and interest in supplying a response for Request for Proposal (RFP) #24.5 - Lighting Audit Services & LED Solutions.

The evaluation committee, using the criteria outlined in the RFP documents, has completed its review of the proposals received.

CPC is pleased to announce that your proposal received the recommendation for award. This decision is subject to the approval of the Boards of Directors and the successful negotiation of a mutually acceptable contract.

I will be contacting you soon to finalize a contract for the awarded goods and/or services. Thank you for submitting your proposal; CPC looks forward to working with you.

Regards,

A handwritten signature in black ink, appearing to read "Lisa Truax", is positioned above the signature line.

---

Lisa Truax | Procurement Coordinator  
Cooperative Purchasing Connection

September 29, 2023

The Retrofit Companies  
Attn: Jake Andrist, Director  
1010 Hoffman Drive, Suite A  
Owatonna, MN 55060

---

**Award Decision, RFP #24.5 – Lighting Audit Services & LED Solutions**

---

Dear Jake Andrist,

The Cooperative Purchasing Connection (CPC) would like to thank you for your time, effort, and interest in supplying a response for Request for Proposal (RFP) #24.5 – Lighting Audit Services & LED Solutions.

The evaluation committee, using the criteria outlined in the RFP documents, has completed its review of the proposals received.

CPC is pleased to announce that your proposal received the recommendation for award. This decision is subject to the approval of the Boards of Directors and the successful negotiation of a mutually acceptable contract.

I will be contacting you soon to finalize a contract for the awarded goods and/or services. Thank you for submitting your proposal; CPC looks forward to working with you.

Regards,

A handwritten signature in black ink, appearing to read "Lisa Truax", is positioned above the printed name.

---

Lisa Truax | Procurement Coordinator  
Cooperative Purchasing Connection




## Contract Offer & Award

**Instructions:** Part I of this form is to be completed by the Vendor and signed by its authorized representative. Part II will be completed by the Cooperative Purchasing Connection (CPC) upon the occasion of an award.

### Part I: Vendor

In compliance with the Request for Proposal (RFP), the undersigned warrants that I/we have examined all General Terms and Conditions, Forms and Specifications, and being familiar with all of the conditions surrounding the solicitation, hereby offer and agree to furnish all goods and services in compliance with all terms, conditions, specifications, and amendments in this solicitation and any written exceptions in the offer. Signature also certifies understanding and compliance with this proposal. The undersigned understands that his/her competence and responsibility and that of his/her proposed subcontractors, time of completion, as well as other factors of interest to CPC as stated in the evaluation section, will be a consideration in making the award. This contract offer and award binds said Vendor to all terms and conditions stated in the proposal.

Business Name	<u>Premier Lighting Inc</u>	Date	<u>8.31.23</u>
Address	<u>2885 Country Dr Ste135</u>	City, State, Zip	<u>St. Paul, MN 55117</u>
Contact Person	<u>Greg Ehrich</u>	Title	<u>VP</u>
Authorized Signature	<u></u>	Title	<u>VP</u>
Email	<u>greg@premierltg.com</u>	Phone	<u>651-200-3330</u>

### Part II: CPC

Your response to the identified proposal is hereby accepted. As a Vendor, you are now bound to offer and provide the products and services identified within this solicitation, your response, including all terms, conditions, specifications, exceptions, and amendments. The initial term of this contract shall be for up to twenty-four (24) months and will commence on the date indicated below. There will be an optional renewal for a period lasting no longer than one (1) additional 24-month period. CPC may grant an extension under certain criteria and conditions.

Agency	<u>Cooperative Purchasing Connection</u>	Authorized Signature	<u> 6D9BB132BB3040A...</u>
Name	<u>Jane Eastes</u>	Title	<u>Deputy Executive Director</u>
Awarded this	<u>29th</u> day of <u>September 2023</u>	Contract #	<u>24.5 - PLI</u>
Contract/Agreement to Commence	<u>November 1, 2023</u>		



## Contract Offer & Award

**Instructions:** Part I of this form is to be completed by the Vendor and signed by its authorized representative. Part II will be completed by the Cooperative Purchasing Connection (CPC) upon the occasion of an award.

### Part I: Vendor

In compliance with the Request for Proposal (RFP), the undersigned warrants that I/we have examined all General Terms and Conditions, Forms and Specifications, and being familiar with all of the conditions surrounding the solicitation, hereby offer and agree to furnish all goods and services in compliance with all terms, conditions, specifications, and amendments in this solicitation and any written exceptions in the offer. Signature also certifies understanding and compliance with this proposal. The undersigned understands that his/her competence and responsibility and that of his/her proposed subcontractors, time of completion, as well as other factors of interest to CPC as stated in the evaluation section, will be a consideration in making the award. This contract offer and award binds said Vendor to all terms and conditions stated in the proposal.

<b>Business Name</b>	The Retrofit Companies, Inc. (dba Retrofit Lighting & Design)	<b>Date</b>	8/31/2023
<b>Address</b>	1010 Hoffman Drive Suite A	<b>City, State, Zip</b>	Owatonna, MN 55060
<b>Contact Person</b>	Jake Andrist	<b>Title</b>	Director
<b>Authorized Signature</b>		<b>Title</b>	Director
<b>Email</b>	jandrist@retrofitcompanies.com	<b>Phone</b>	(507) 363-0656

### Part II: CPC

Your response to the identified proposal is hereby accepted. As a Vendor, you are now bound to offer and provide the products and services identified within this solicitation, your response, including all terms, conditions, specifications, exceptions, and amendments. The initial term of this contract shall be for up to twenty-four (24) months and will commence on the date indicated below. There will be an optional renewal for a period lasting no longer than one (1) additional 24-month period. CPC may grant an extension under certain criteria and conditions.

<b>Agency</b>	Cooperative Purchasing Connection	<b>Authorized Signature</b>	 6D9BB132BB3040A...
<b>Name</b>	Jane Eastes	<b>Title</b>	Deputy Executive Director
<b>Awarded this</b>	29th day of September 2023	<b>Contract #</b>	24.5 - RLD
<b>Contract/Agreement to Commence</b>	November 1, 2023		