

Cincinnati Public Schools Mercantile Self  
Direct CUSTOM Applications – Part 3 of 4

**Roselawn School**  
**Supporting Documentation**

# Ohio Mercantile Self Direct Program

## Application Guide & Cover Sheet

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email this form along with completed Mercantile Self Direct Prescriptive or Custom applications, proof of payment, energy savings calculations and spec sheets to [SelfDirect@Duke-Energy.com](mailto:SelfDirect@Duke-Energy.com). You may also fax to 1-513-419-5572.

Mercantile customers, defined as using at least 700,000 kWh annually are eligible for the Mercantile Self Direct program. Please indicate mercantile qualification:

- a single Duke Energy Ohio account
- multiple accounts in Ohio (energy usage with other utilities may be counted toward the total)

Please list Duke Energy account numbers below (attach listing of multiple accounts an/or billing history for other utilities as required):

Account Number	Annual Usage	Account Number	Annual Usage
7870-0683-01			

Self Direct rebates are available for completed Custom projects that have not previously received a Duke Energy Smart \$aver® Custom Incentive. Self Direct incentives are applicable to Prescriptive measures that were installed more than 90 days prior to submission to Duke Energy and have not previously received a Duke Energy Prescriptive rebate.

Self Direct Program requirements dictate that certain projects that may be Prescriptive in nature under the Smart \$aver program must be evaluated using the Custom process. Use the table on page two as a guide to determine which Self Direct program fits your project(s). Apply for Self Direct projects using the appropriate application forms in conjunction with this cover sheet. Where Mercantile Self Direct Prescriptive applications are listed, please refer to the measure list on that application. If your measure is not listed, you may be eligible for a Self Direct Custom rebate. Self Direct Custom applications, like Smart \$aver Custom applications, should include detailed analysis of pre-project and post-project energy usage and project costs. Please indicate which type of rebate applications are included in the table provided on page two.

Please check each box to indicate completion of the following program requirements:

<input type="checkbox"/> All sections of appropriate application(s) are completed	<input type="checkbox"/> Proof of payment.*	<input type="checkbox"/> Manufacturer's Spec sheets	<input type="checkbox"/> Energy model/calculations and detailed inputs for Custom applications
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\* If a single payment record is intended to demonstrate the costs of both Prescriptive & Custom projects, please include an additional document with an estimated breakout of costs for each Prescriptive and Custom energy conservation measure.

Application Type	Replaced equipment at end of lifetime or because equipment failed**	Replaced fully operational equipment to improve efficiency***	New Construction
Lighting	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input checked="" type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>
Heating & Cooling	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>
			MSD Custom Part 1 <input checked="" type="checkbox"/> MSD Custom General Worksheet <input checked="" type="checkbox"/>
Window Films, Programmable Thermostats, & Guest Room Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>
Chillers & Thermal Storage	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Chillers & Thermal Storage <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Motors & Pumps	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
VFDs	Not Applicable	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>	
Food Service	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Food Service <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Process	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Process <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	
Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>
Behavioral*** & No/Low Cost	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>		

\*\* Under the Self Direct program, failed equipment and equipment at the end of its useful life are evaluated differently than early replacement of fully functioning equipment. **All equipment replacements due to failure or old age will be evaluated via the Custom program.**

\*\*\* Please ensure that you include the age of the replaced equipment for measures classified as "Early Replacement" in your application as well as the estimated date that you would have otherwise replaced the existing equipment if you had not chosen a more energy efficient option.

\*\*\*\* Behavioral energy efficiency and demand reduction projects must be both measurable and verifiable. Provide justification with your application.

# Mercantile Self Direct Nonresidential Custom Rebate Application PART 1



Proposed energy efficiency measures may be eligible for Self-Direct Custom rebates if they clearly reduce electrical consumption and/or demand as compared to the appropriate baseline.

Before you complete this application, please note the following important criteria:

- Submitting this application does not guarantee a rebate will be approved.
- Rebates are based on electricity conservation only.
- Electric demand and/or energy reductions must be well documented with auditable calculations.
- Incomplete applications cannot be reviewed; all fields are required.

Refer to the complete list of Instructions and Disclaimers, beginning on page 6.

## Notes on the Application Process

If you have any questions concerning how to complete any portion of the application or what supplementary information is required, please contact your Duke Energy Ohio, Inc account manager or the Duke Energy Smart \$aver® team at 1-866-380-9580.

Every application must include calculations of the baseline electrical usage and the electrical usage of the proposed high-efficiency equipment/system. Monthly calculations are best. You, the Duke Energy Ohio customer, or your equipment vendor / engineer should perform these calculations and submit them to Duke Energy for review. *We strongly encourage the use of modeling software (such as eQuest or comparable) for complex projects.*

Upon receipt of your application, an acknowledgement email will be sent to you with an estimated response time based on an initial assessment of your application. The application review may include some communication to resolve any questions about the project or to request additional information. Applications that are received complete without missing information have a faster review time.

There are two ways to submit your completed application.

Email your scanned form to: [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com)

Or, fax your form to 513-419-5572

**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



**1. Contact Information (Required)**

Duke Energy Customer Contact Information					
Company Name	Cincinnati Public Schools				
Address	2651 Burnett Ave				
Project Contact	Don Elbe				
City	Cincinnati	State	OH	Zip Code	45219
Title	Utility Management Coordinator				
Office Phone	614-580-3352	Mobile Phone		Fax	
E-mail Address	elbedon@cpsboe.k12.oh.us				

Equipment Vendor / Contractor / Architect / Engineer Contact Information					
Company Name	Plug Smart				
Address	1275 Kinnear Road Suite 229				
City	Columbus	State	OH	Zip Code	43212
Project Contact	Lucas Dixon				
Title	Operations Manager				
Office Phone	614-580-3352	Mobile Phone		Fax	1-800-518-5576
E-mail Address	lucas.dixon@plugsmart.com				
Describe Role	Ensures rebate is correctly applied for				

Payment Information					
Payee Legal Company Name (as shown on Federal income tax return):	Cincinnati Public Schools				
Mailing Address	2651 Burnett Ave				
City	Cincinnati	State	OH	Zip Code	45219
Type of organization (check one) <input type="checkbox"/> Individual/Sole Proprietor <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input checked="" type="checkbox"/> Unit of Government <input type="checkbox"/> Non-Profit (non-corporation)					
Payee Federal Tax ID # of Legal Company Name Above:	31-6000758				
Who should receive incentive payment? (select one) <input checked="" type="checkbox"/> Customer <input type="checkbox"/> Vendor (Customer must sign below)					
If the vendor is to receive payment, please sign below: I hereby authorize payment of incentive directly to vendor:					
Customer Signature _____ Date ____/____/____ (mm/dd/yyyy)					

**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



**2. Project Information (Required)**

- A. Please indicate project type:
- New Construction
  - Expansion at an existing facility
  - Replacing equipment due to equipment failure
  - Replacing equipment that is estimated to have remaining useful life of 2 years or less
  - Replacing equipment that is estimated to have remaining useful life of more than 2 years
  - Behavioral, operational and/or procedural programs/projects
- B. Please describe your project, or attach a detailed project description that describes the project.  
Public K-8 school in the CPS District
- C. When did you start and complete implementation?  
Start date / (mm/yyyy) End date 08/2008 (mm/yyyy)
- D. Are you also applying for Self-Direct Prescriptive incentives and, if so, which one(s)<sup>1</sup>?
- E. Please indicate which worksheet(s) you are submitting for this application (check all that apply):
- Lighting
  - Variable Frequency Drive (VFD)
  - Compressed Air
  - Energy Management System (EMS)
  - General (for projects not easily submitted using one of the above worksheets)
- F. Please tell us if there is anything about your electrical energy projections (either for the baseline or the proposed project) that you are either unsure about or for which you have made significant assumptions. Attach additional sheets as needed.

Required: Attach a supplier or contractor invoice or other equivalent information documenting the Implementation Cost for each project listed in your application. (Note: self-install costs cannot be included in the Implementation Cost)

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<sup>1</sup> If your project involves some equipment that is eligible for prescriptive incentives and some equipment that is likely eligible for custom incentives, and if it is feasible to separate the equipment for the energy analysis, then the equipment will be evaluated separately. If it is not feasible to separate the equipment for analysis, then the equipment will be evaluated together in the custom application.

**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



**3. Signature** (Required – must be signed by Duke Energy customer)

**Customer Consent to Release of Personal Information**

I, (insert name) Don Elbe, do hereby consent to Duke Energy disclosing my Duke Energy Ohio, Inc Account Number and Federal Tax ID Number to its subcontractors solely for the purpose of administering Duke Energy Ohio's Mercantile Self-Direct Program. I understand that such subcontractors are contractually bound to otherwise maintain my Duke Energy Ohio, Inc Account Number and Federal Tax ID Number in the strictest of confidence.

I realize that under the rules and regulations of the public utilities commission, I may refuse to allow Duke Energy Ohio, Inc to release the information set forth above. By my signature, I freely give Duke Energy Ohio, Inc permission to release the information designated above.

**Application Signature**

I certify that I meet the eligibility requirements of the Duke Energy Ohio, Inc Mercantile Self Direct Custom Incentives Program and that all information provided within this application is correct to the best of my knowledge. I agree to the terms and conditions set forth for this program. I certify that the numbers, energy savings, and responses shown on this form are correct. Further, I certify that the taxpayer identification number is current and correct. I am not subject to backup withholding because: (a) I am exempt from backup withholding; or (b) I have not been notified by the IRS that I am subject to backup withholding as a result of a failure to report all interest or dividends; or (c) the IRS has notified me that I am no longer subject to backup withholding. I am a U.S. citizen (includes a U.S. resident alien).

\_\_\_\_\_  
Duke Energy Ohio, Inc Customer Signature

Print Name Don Elbe

Date 12/30/2011



**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



**Checklist for completing the Application**

INCOMPLETE APPLICATIONS WILL RESULT IN DELAYS IN DUKE ENERGY PROCESSING YOUR APPLICATION AND NOTIFYING YOU CONCERNING ANY REBATES. Before submitting the application and the required supplementary information, use the following checklist to ensure that your application is complete and the information in the application is accurate. (Note: this checklist is for your use only – do not submit this checklist with your application)

Section No. & Title	Have You:
1. Contact Information	<input type="checkbox"/> Completed the contact information for the Duke Energy customer? <input type="checkbox"/> Completed the contact information for the equipment vendor / project engineer that can answer questions about the technical aspects of the project, if that is a different person than above?
2. Project Information	<input type="checkbox"/> Answered the questions A-E, including providing a description of your project. <input type="checkbox"/> Completed and attached the lighting, compressed air, VFD, EMS and/or General worksheet(s)?
3. Signature	<input type="checkbox"/> Signed your name? <input type="checkbox"/> Printed your name? <input type="checkbox"/> Entered the date?
Supplementary information (Required)	<input type="checkbox"/> Attached a supplier or contractor's invoice or other equivalent information documenting the Implementation Cost for projects listed in your application? (Note: self-install costs cannot be included in the Implementation Cost) <input type="checkbox"/> (If submitting the General Worksheet) attached calculations documenting the energy usage and energy savings for <b>each</b> project listed in your application?

If you have any questions concerning how to complete any portion of the application or what supplementary information is required, please contact:

- your Duke Energy account manager
- or,
- the Duke Energy Smart \$aver® team at 1-866-380-9580.

# Mercantile Self Direct Nonresidential Custom Rebate Application PART 1



## Instructions/Terms/Conditions

Note: Please keep for your records- do not submit with the application

1. Energy service companies or contractors may assist in preparing the application, but an authorized representative of the customer must sign this application to be eligible to participate in the Mercantile Self Direct Program. Completion of this application does not guarantee the approval of a Self Direct Custom Rebate.
2. Once all documentation requested in this application is received by *Duke Energy Ohio, Inc*, and any follow-up information requested by *Duke Energy* is received, the rebate amount for each Energy Conservation Measure (ECM) will be communicated to the customer. The rebate amount will be based on ECM energy savings and ECM incremental installation cost.
3. All rebates require approval by the Public Utilities Commission of Ohio. *Duke Energy Ohio, Inc* will submit an application for rebate on the customer's behalf upon customer attestation to program terms, conditions and requirements as outlined in the rebate offer letter and upon customer completion of attestation documents required by the Public Utilities Commission of Ohio.
4. *Duke Energy Ohio, Inc* will issue a Self Direct Custom Rebate check, based on the approved rebate amount for each ECM, upon receiving approval from the Public Utilities Commission of Ohio. *Duke Energy Ohio, Inc* does not guarantee PUCO approval.
5. With the application, the customer must provide a list of all sites where the ECMs were installed. *Duke Energy Ohio, Inc* requests that sites of similar size, hours of operation and energy consuming characteristics be grouped together in one application for the determination of the rebate amount. The application should identify the site where each unique ECM was installed.
6. Based on the information submitted with the application and the information gathered both before and after the initial installation of the ECM, *Duke Energy Ohio, Inc* will calculate the rebate amount for each ECM.
7. *Duke Energy Ohio, Inc* may conduct random site inspections of a sample of the locations where the ECMs are installed to verify installation and operability of the ECMs and to obtain information needed to calculate the Approved Incentive Amount.
8. Customers are encouraged to retain copies of all forms, invoices and supporting documentation for their records.
9. Approved rebates are valid for 6 months from the date communicated to the customer by *Duke Energy Ohio, Inc*, subject to the expiration of measure eligibility based on project completion dates and application submission deadlines as defined by PUCO. Customers are encouraged to execute their rebate offer contracts and PUCO-required affidavits promptly to ensure eligibility is not forfeited.
10. *Duke Energy Ohio, Inc* reserves the right to recover all unrecoverable costs associated with the project approval if the customer decides not to execute the rebate contract, after the project is approved by *Duke Energy Ohio, Inc*.
11. Projects financially supported by other funding sources will be evaluated on a case-by-case basis for potential partial funding from *Duke Energy Ohio, Inc*.
12. Participants must be *Duke Energy Ohio, Inc* nonresidential, mercantile customers with the project sites in the *Duke Energy Ohio, Inc* service territory.

**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



13. Customers or trade allies may not use any *Duke Energy* logo without prior written permission.
14. Only trade allies registered with *Duke Energy* are eligible to participate.
15. All equipment must be new. Used or rebuilt equipment is not eligible for incentives. All old existing equipment must be removed on retrofit projects.
16. Disclaimers: *Duke Energy Ohio, Inc*
  - a. does not endorse any particular manufacturer, product or system design within the program;
  - b. will not be responsible for any tax liability imposed on the customer as a result of the payment of incentives;
  - c. does not expressly or implicitly warrant the performance of installed equipment. (Contact your contractor for details regarding equipment warranties.);
  - d. is not responsible for the proper disposal/recycling of any waste generated or obsolete or old equipment as a result of this project;
  - e. is not liable for any damage caused by the installation of the equipment nor for any damage caused by the malfunction of the installed equipment; and
  - f. reserves the right to change or discontinue this program at any time. The acceptance of program applications is determined solely by *Duke Energy Ohio, Inc*.



The Lighting Worksheet is part 2 of the application. Do not submit this file without submitting a completed Part1 Custom Application document file, which can be found at [www.duke-energy.com](http://www.duke-energy.com).

Before you complete this application, please note the following important criteria:

- Incentive approval is required PRIOR to equipment purchase, or any other activity which would indicate that the Duke Energy customer has already decided to proceed.
- Submitting this application does not guarantee an incentive will be approved.
- Incentives are based on electricity conservation only.
- Electric demand and/or energy reductions must be well documented with auditable calculations.
- Simple payback without incentive must be greater than 1 year.
- Incomplete applications will not be reviewed; all fields are required.

Refer to the complete list of Instructions and Disclaimers, found in the Custom Application Part 1 document.

Please enter your information and data into the cells that are shaded.  
Cells in white are locked and cannot be written over.

**Duke Energy Customer Contact Information (Match the information in Application Part 1):**

Name	Don Elbe
Company	Cincinnati Public Schools

**Equipment Vendor / Project Engineer Contact Information**

Name	Lucas Dixon
Company	Plug Smart

Before proceeding with the custom application, please verify that your project is not on the prescriptive incentive application.

The prescriptive incentive applications can be found at:

KY <http://www.duke-energy.com/kentucky-business/energy-management/energy-efficiency-incentives.asp>

Kentucky only: custom incentives only available to K-12 school facilities; prescriptive incentives available for those not on rate TT.

OH <http://www.duke-energy.com/ohio-business/energy-management/energy-efficiency-incentives.asp>

NC <http://www.duke-energy.com/north-carolina-business/energy-management/energy-efficiency-incentives.asp>

SC <http://www.duke-energy.com/south-carolina-business/energy-management/energy-efficiency-incentives.asp>

Prescriptive incentives are already pre-approved and the application is submitted after project implementation.

Take note of the equipment eligibility on the prescriptive application before planning to utilize the prescriptive application.



Please enter your information and data into the cells that are shaded.  
 Cells in white are locked and cannot be written over.

**List of Sites (Required)**

Project/ Site (see note 1)	Site Name	Electric Account Number(s) (see note 2)	Site Address	Area (sq ft)	Location within Facility	Location Type	Indoor or Outdoor?
<i>Example</i>	<i>Distribution Center</i>	<i>12345678 01</i>	<i>Example: 123 Main Street, Anywhere USA 12345</i>	<i>1000</i>	<i>Warehouse</i>	<i>Industrial</i>	<i>Indoor</i>
1	Roselawn Condon Schod	7870-0683-01	1594 Summit Road, Cincinnati, OH 45237	#####	Classroom	K-12	Indoor
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

If your application involves more than 20 lighting projects, please check here and use multiple worksheets.

**1 Project/Site**

You can write over the default project/site number with a store #, building identifier, or other reference that distinguishes one project/location from another.

**2 Electric Account Number(s)**

If there are multiple meters at a site, only include the Duke Energy account numbers that pertain to the project.

Currently active account number(s) are required for an existing facility. For new construction, write in "new construction."



Project/ Site	Hours of Use (see note 3)								Controls (see note 5)				
	24 x 7	Weekday		Saturday		Sunday		Weeks of Use in Year (see note 4)	Total Annual Hours of Use	Existing		Proposed Type of Control	Description
		Start Hour	End Hour	Start Hour	End Hour	Start Hour	End Hour			Type of Control	Hours Reduction		
<i>Example</i>	<i>No</i>	<i>8:00 AM</i>	<i>7:00 PM</i>	<i>10:00 AM</i>	<i>6:00 PM</i>	<i>1:00 PM</i>	<i>6:00 PM</i>	<i>52</i>	<i>3,536</i>	<i>None</i>	<i>0%</i>	<i>Occupancy</i>	<i>Applying for Prescriptive Incentive</i>
1	No	7:00:00 AM	5:30:00 PM					45	1,913			Occupancy	Applying for Prescriptive Incentive
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
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17													
18													
19													
20													

**3 Hours of Use**

For unoccupied times, leave applicable cells blank.

**4 Weeks of Use in Year**

If the lighting fixtures are not in use 52 weeks during the year (for example, during holiday or summer break), provide an explanation of when they are not expected to be in use and why:

The School is shut down for a combined 7 weeks a year due to holidays and the summer break.

**5 Controls**

Please attach more description of existing and/or proposed controls if more space is needed. If sufficient description is not provided, then controls portion of project will not be evaluated. Attach assumptions and calculations to support estimated reduction in hours that result from the controls.

New occupancy sensors should be applied for through the prescriptive application unless ineligible for prescriptive.

New or upgraded EMS/building controls require a separate application part 2. Without the separate application, EMS portion of the project will not be evaluated for an incentive.



Project/ Site	Existing Fixture(s)								
	Existing Fixture Installation Year (see note 6)	Fixture Type	Fixture Manufacturer (see note 6)	Fixture Model Number (see note 6)	Lamps per Fixture	Fixture Size	Fixture Input Power (watts) (see note 7)	Quantity of Fixtures	Total Demand (kW)
<i>Example</i>	1995	High Pressure Sodium	Manufacturer	Model #	1		190	175	33
1	2008	Other (enter by typing)	Com Check	Com Check	1		136,235	1	136
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

**Application Total** **1** **136**

**6 Information on Existing Fixture(s)**

Optional - please provide as much information as you can.

For new construction projects, provide information on the light fixture(s) that would meet the building code in your location.

**7 Fixture Input Power (watts)**

Provide actual input power (in watts), not nominal power rating. For example, a 400 watt (nominal) metal halide fixture has a typical input power of approximately 459 watts.



Project/ Site	Proposed Fixture(s)										Projected Savings			Incremental Project Cost \$ (see note 11)
	Fixture Type	Fixture Manufacturer (see note 8)	Fixture Model Number (see note 8)	Warranty of Proposed Fixtures (years)	Lamps per Fixture	Fixture Input Power (watts) (see note 9)	Quantity of Fixtures	Total Demand (kW)	Lumen Output per Fixture	Lumen/ Sq Ft	Demand (kW)	Annual Energy (kWh)	Other Annual Savings \$ (see note 10)	
Example	T8 Fluorescent	Manufacturer	Model #	5.0	1.0	78	225	18		0		55,515	\$1,265	\$29,215
1	Other (enter by typing	Com Check	Com Check		1.0	99,321	1	99		0	37	70,598		
2														
3														
4														
5														
6														
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17														
18														
19														
20														

Application Total 1 99 37 70,598 \$0 \$0  
 Average Electric Rate \$/kWh \$0.10 Project Simple Electric Payback (see note 12)   years

**8 Fixture Manufacturer and Model Number**

Attach a scanned copy of a spec sheet for each fixture that includes the input power (watts), lumen output and other relevant information. For eligible LED fixtures, refer to the FAQs for Custom Incentives found at [www.duke-energy.com](http://www.duke-energy.com) and attach required documents if necessary.

**9 Fixture Input Power (watts)**

Provide actual input power (in watts), not nominal power rating. For example, a 400 watt (nominal) metal halide fixture has a typical input power of approximately 459 watts.

**10 Other Annual Savings \$**

Optional. Estimate other annual savings in addition to electric (for example operations/maintenance savings).

**11 Incremental Project Cost \$**

Attach a copy of a formal proposal with the projected project costs. For new construction projects, a formal proposal is also required with the projected costs for the light fixture(s) that would meet the building code in your location.

**12 Project Simple Electric Payback**

If the simple payback on the project is less than 1 year, then the project is not eligible for a custom incentive. Please check that the electric rate is accurate based on history.



March 2, 2012



To whom it may concern:

This letter is to confirm that for the renovation to Cincinnati Public school Roselawn (1594 Summit Rd), for the custom rebate application, the lighting project was installed with a minimum unit cost listed below.

DESCRIPTION	QUANTITY	PRICE/FIXTURE	AMOUNT
L28 - Columbia CS8-232-4E88RLH277	30	\$79.00	\$2,370.00
G21 - Alera CV-2T5-S-PM	188	\$431.00	\$81,028.00
A2 - Columbia ST824-232G	32	\$130.00	\$4,160.00
A32 - Columbia ST824-332G	132	\$135.00	\$17,820.00
A31 - Columbia ST824-332G	52	\$135.00	\$7,020.00
B28 - Alera CV-2T5-PERF	126	\$431.00	\$54,306.00
C31 - Columbia P4D24-332G	7	\$115.00	\$805.00
S2 - Prescolite CFT632EB	48	\$50.00	\$2,400.00
C32 - Columbia P4D24-332G-	7	\$115.00	\$805.00
V2 - Con Tech LA210-P	16	\$27.00	\$432.00
S1 - Prescolite CFT632EB-STF602	47	\$50.00	\$2,350.00
D4 - Columbia SM24-432-FSA12	16	\$152.00	\$2,432.00
D6 - Day-Brite AVW232-PMW	5	\$182.00	\$910.00
D6F - Day-Brite AVW232-PMW	7	\$182.00	\$1,274.00
L24 - Columbia CS4-232-EB88RLH277	5	\$58.00	\$290.00
G1 - Alera CV-2T5-S-PM	25	\$431.00	\$10,775.00
C3 - Columbia P4D24-332G	2	\$115.00	\$230.00
J3 - Columbia STR24-332-MPO	2	\$231.00	\$462.00
D2 - Luminaire VPF84-232-PRS	14	\$290.00	\$4,060.00
A1 - Columbia ST814-232G	9	\$130.00	\$1,170.00
D1 - Columbia CS4-228-EB5277	14	\$182.00	\$2,548.00
S5 - Con Tech RL20 CTR2002	6	\$32.00	\$192.00
G4 - Columbia WT24-432G	1	\$242.00	\$242.00
L14 - Columbia CS4-132-EB88RLH277	5	\$58.00	\$290.00

V1 - Con Tech CTL838P	12	\$43.00	\$516.00
X8P - Hubbell SWF842-A-SW	28	\$825.00	\$23,100.00

<b>TOTAL</b>	<b>\$221,987.00</b>
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This is also to confirm that for the renovation to Roselawn (1594 Summit Rd), for the prescriptive rebate application, occupancy sensors and motors were installed with a minimum unit cost listed below.

DESCRIPTION	Model Number	QUANTITY	Nominal Size (Tons)	PRICE/FIXTURE	AMOUNT
Self Direct Occupancy Sensor	DT-2000, DT-1000, DT-500	161	-	\$117.89	\$18,980.29
SelfDirect Motor	Baldor EM2518T	1	-	\$830.00	\$830.00
SelfDirect Motor	Baldor EM3313T	3	-	\$1,477.00	\$4,431.00
SelfDirect Motor	Baldor EM2535T	2	-	\$3,052.00	\$6,104.00
SelfDirect Motor	Baldor EM3311T	3	-	\$1,220.00	\$3,660.00

<b>TOTAL</b>	<b>\$34,005.29</b>
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Thank you for your attention to this matter,

*Don Elbe*

Don Elbe  
Utility Management Coordinator

**Turner  TYS**  
Rebuilding Cincinnati Public Schools

December 4, 2009

Angie Tolle  
Cincinnati Public Schools  
2315 Iowa Avenue  
Cincinnati, OH 45206

Dear Angie:

Attached is **Pay Application** for the **Roselawn-Condon School**, please process payment for the **January 1, 2009 check distribution**.

Contractor	Application #	Monthly Billing	Total Billing To Date	Contract Amount to Date
BP#7 Beacon Electric	#17	\$ 2,500.00	\$ 2,336,541.00	\$ 2,336,541.00

Please call if you have any questions.

Sincerely,  
TURNER/DAG/TYS



James T. DeLage  
Project Executive

/bcs

Attachments

cc: John Kennedy - ATA/Beilharz  
Greg Rohr - Turner/DAG/TYS  
File 0025 - 10960PB

T:\PROJECTS\Roselawn-Condon\00250 Pay Application\2009-12-04 beacon pay app.doc

2315 Iowa Avenue, Cincinnati, OH 45206, Phone 513-363-0875, Fax 513-363-0880

**Cincinnati Public Schools**

2315 Iowa Avenue  
Cincinnati, Ohio 45206

Contractor's Name: Beacon Electrical Contractors  
Address: 7815 Redsky Drive, Cincinnati, OH 45249

**Contractor Pay Application Summary**

**Project Name: CPS Roselawn-Condon School**  
**Bid Package No.: #7 Electrical/Technology**

1	Original Contract Amount	\$	2,145,000.00
2	Net Changes to Date	\$	191,541.00
3	Current Contract Amount	\$	2,336,541.00
4	Labor Completed to Date	\$	841,041.00
5	Material Completed to Date	\$	1,495,500.00
6	Total Work Completed to Date	\$	2,336,541.00
7	Store Material to Date	\$	0.00
8	Less Retained to Date	\$	0.00
9	Total Amount Due	\$	2,336,541.00
10	Less Previous Payments	\$	2,334,041.00
11	Less Amount Retained to Cover Lien	\$	0.00
12	Less Amount Retained for Liquidated Damages	\$	0.00
13	Less Other Amounts Withheld	\$	0.00
14	Current Due	\$	2,500.00
15	Balance to Complete	\$	0.00

**OSFC approval required for the following contract adjustments:**

1. Assessment of liquidated damages
2. Other amounts withheld

Ohio School Facilities Commission

Date

Comments:

**APPLICATION AND CERTIFICATE FOR PAYMENT**

TO OWNER: Cincinnati Public Schools

PROJECT: Roselawn-Condron School

APPLICATION No:

17

PERIOD TO:

11/31/09

PROJECT NOS:

Bid Package #7

CONTRACT DATE:

*Maureen L. Merkel*  
 MAUREEN L. MERKEL  
 Notary Public, State of Ohio  
 My Commission Expires  
 July 8, 2013

FROM CONTRACTOR: Beacon Electrical Contractors

VIA ARCHITECT ATA - Bellharz

CONTRACT FOR: Electrical / Technology

**CONTRACTOR'S APPLICATION FOR PAYMENT**

Application is made for payment as shown below, in connection with the Contract.  
 Continuation sheet is attached.

1. ORIGINAL CONTRACT SUM	.....	\$	2,145,000.00
2. Net Change by Change Orders	.....	\$	191,541.00
3. CONTRACT SUM TO DATE	.....	\$	2,336,541.00
4. TOTAL COMPLETED & STORED TO DATE	.....	\$	2,336,541.00
5. RETAINAGE			
a. 8-50% of Completed Labor	.....	\$	0.00
b. 8% of Stored Material	.....	\$	0.00
Total Retainage	.....	\$	0.00
6. TOTAL EARNED LESS RETAINAGE	.....	\$	2,336,541.00
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT	.....	\$	2,334,041.00
8. CURRENT PAYMENT DUE	.....	\$	2,500.00
9. BALANCE TO FINISH, INCLUDING RETAINAGE	.....	\$	0.00

Change Order/Contract	ADDITIONS	DEDUCTIONS
Total Changes approved in Previous months by Owner		
Total approved this month		
<b>TOTALS</b>		
NET CHANGES by Change Order		

The Contractor certified that the work covered by this pay request has been completed in accordance with the Contract Documents and that all progress payments previously paid by the State have been applied by the Contractor to discharge in full all of Contractor's obligations incurred in connection with the work covered by all prior pay requests.

Contractor *[Signature]* Date 11-9-09

Based upon on-site observations, the firm affirms that the work has progressed to the percentage of completeness indicated on the pay request.

Asphalt *[Signature]* Date 11-20-09

Construction Manager *[Signature]* Date 11-24-09

Approved:

School District Treasurer \_\_\_\_\_ Date \_\_\_\_\_

ITEM NUMBER	DESCRIPTION OF WORK	MATERIAL	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED	TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
				PREVIOUS APPS.	THIS PERIOD					
1	General									
2	Bond, Insurance, etc.	LABOR	21,500.00	21,500.00	0.00	0.00	21,500.00	100.00%	0.00	0.00
3		MATERIAL	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4	Permits, Fees, etc.	LABOR	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
5		MATERIAL	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
6	Allowances	LABOR	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
7		MATERIAL	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
8	Demolition	LABOR	50,000.00	50,000.00	0.00	0.00	50,000.00	100.00%	0.00	0.00
9		MATERIAL	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
10	Temporary Power	LABOR	2,500.00	2,500.00	0.00	0.00	2,500.00	100.00%	0.00	0.00
11		MATERIAL	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
12	Mobilization	LABOR	12,500.00	12,500.00	0.00	0.00	12,500.00	100.00%	0.00	0.00
13		MATERIAL	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
14	Building Rough In/Wiring (Phase 1)									
15	Branch/Feeder Conduit	LABOR	74,550.00	74,550.00	0.00	0.00	74,550.00	100.00%	0.00	0.00
16		MATERIAL	71,750.00	71,750.00	0.00	0.00	71,750.00	100.00%	0.00	0.00
17	Branch/Feeder Wiring	LABOR	52,500.00	52,500.00	0.00	0.00	52,500.00	100.00%	0.00	0.00
18		MATERIAL	61,250.00	61,250.00	0.00	0.00	61,250.00	100.00%	0.00	0.00
19	Surface Raceway/Wiring	LABOR	3,500.00	3,500.00	0.00	0.00	3,500.00	100.00%	0.00	0.00
20		MATERIAL	4,200.00	4,200.00	0.00	0.00	4,200.00	100.00%	0.00	0.00
21	AV & Security Wiring	LABOR	8,750.00	8,750.00	0.00	0.00	8,750.00	100.00%	0.00	0.00
22		MATERIAL	5,250.00	5,250.00	0.00	0.00	5,250.00	100.00%	0.00	0.00
23	Telephone/Data Wiring	LABOR	7,000.00	7,000.00	0.00	0.00	7,000.00	100.00%	0.00	0.00
24		MATERIAL	5,250.00	5,250.00	0.00	0.00	5,250.00	100.00%	0.00	0.00
25	Network Equipment Wiring	LABOR	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
26		MATERIAL	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
27	Building Equipment/Finishes (Phase 1)									
28	Switchgear/Disc/Starters Equipment	LABOR	4,200.00	4,200.00	0.00	0.00	4,200.00	100.00%	0.00	0.00
29		MATERIAL	17,675.00	17,675.00	0.00	0.00	17,675.00	100.00%	0.00	0.00
30	Light Fixtures/Controls	LABOR	8,750.00	8,750.00	0.00	0.00	8,750.00	100.00%	0.00	0.00
31		MATERIAL	73,500.00	73,500.00	0.00	0.00	73,500.00	100.00%	0.00	0.00
32	Devices/Equipment	LABOR	1,750.00	1,750.00	0.00	0.00	1,750.00	100.00%	0.00	0.00
33		MATERIAL	2,625.00	2,625.00	0.00	0.00	2,625.00	100.00%	0.00	0.00
34	Fire Alarm System Equipment	LABOR	3,500.00	3,500.00	0.00	0.00	3,500.00	100.00%	0.00	0.00
35		MATERIAL	8,750.00	8,750.00	0.00	0.00	8,750.00	100.00%	0.00	0.00
36	Generator Equipment	LABOR	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
37		MATERIAL	35,000.00	35,000.00	0.00	0.00	35,000.00	100.00%	0.00	0.00
38	AV & Security Equipment	LABOR	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
39		MATERIAL	435,000.00	435,000.00	0.00	0.00	435,000.00	100.00%	0.00	0.00
40	Telephone/Data Equipment	LABOR	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
41		MATERIAL	185,000.00	185,000.00	0.00	0.00	185,000.00	100.00%	0.00	0.00
42	Network Equipment	LABOR	1,500.00	1,500.00	0.00	0.00	1,500.00	100.00%	0.00	0.00
43		MATERIAL	85,000.00	85,000.00	0.00	0.00	85,000.00	100.00%	0.00	0.00
44	Dimming System Equipment	LABOR	3,500.00	3,500.00	0.00	0.00	3,500.00	100.00%	0.00	0.00
45		MATERIAL	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
46	Building Rough In/Wiring (Phase 2)									
47	Branch/Feeder Conduit	LABOR	106,500.00	106,500.00	0.00	0.00	106,500.00	100.00%	0.00	0.00
48		MATERIAL	102,500.00	102,500.00	0.00	0.00	102,500.00	100.00%	0.00	0.00
49	Branch/Feeder Wiring	LABOR	75,000.00	75,000.00	0.00	0.00	75,000.00	100.00%	0.00	0.00
50		MATERIAL	87,500.00	87,500.00	0.00	0.00	87,500.00	100.00%	0.00	0.00
51	Surface Raceway/Wiring	LABOR	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
52		MATERIAL	6,000.00	6,000.00	0.00	0.00	6,000.00	100.00%	0.00	0.00
53	AV & Security Wiring	LABOR	12,500.00	12,500.00	0.00	0.00	12,500.00	100.00%	0.00	0.00
54		MATERIAL	7,500.00	7,500.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
	<b>SUB TOTAL</b>		<b>1,730,250.00</b>	<b>1,730,250.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1,730,250.00</b>	<b>100.00%</b>	<b>0.00</b>	<b>0.00</b>

ITEM NUMBER	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED	TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
			PREVIOUS APPS.	THIS PERIOD					
1	Building Rough In/Wiring (Phase 2 Cont.)	10,000.00	10,000.00	0.00	0.00	10,000.00	100.00%	0.00	0.00
2	Telephone/Data Wiring	7,500.00	7,500.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
3	Network Equipment Wiring	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
4	Network Equipment	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
5	Building Equipment/Finishes (Phase 2)	6,000.00	6,000.00	0.00	0.00	6,000.00	100.00%	0.00	0.00
6	Switchgear/Disc/Starters Equipment	32,825.00	32,825.00	0.00	0.00	32,825.00	100.00%	0.00	0.00
7	Light Fixtures/Controls	12,500.00	12,500.00	0.00	0.00	12,500.00	100.00%	0.00	0.00
8	Devices/Equipment	136,500.00	136,500.00	0.00	0.00	136,500.00	100.00%	0.00	0.00
9	Devices/Equipment	2,500.00	2,500.00	0.00	0.00	2,500.00	100.00%	0.00	0.00
10	Fire Alarm System Equipment	3,750.00	3,750.00	0.00	0.00	3,750.00	100.00%	0.00	0.00
11	AV & Security Equipment	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
12	Telephone/Data Equipment	16,250.00	16,250.00	0.00	0.00	16,250.00	100.00%	0.00	0.00
13	AV & Security Equipment	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
14	Telephone/Data Equipment	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
15	Network Equipment	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
16	Network Equipment	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
17	Building Rough In/Wiring (Phase 3)	29,950.00	29,950.00	0.00	0.00	29,950.00	100.00%	0.00	0.00
18	Branch/Feeder Conduit	30,750.00	30,750.00	0.00	0.00	30,750.00	100.00%	0.00	0.00
19	Branch/Feeder Wiring	22,500.00	22,500.00	0.00	0.00	22,500.00	100.00%	0.00	0.00
20	Surface Raceway/Wiring	26,250.00	26,250.00	0.00	0.00	26,250.00	100.00%	0.00	0.00
21	AV & Security Wiring	1,800.00	1,800.00	0.00	0.00	1,800.00	100.00%	0.00	0.00
22	Telephone/Data Wiring	3,750.00	3,750.00	0.00	0.00	3,750.00	100.00%	0.00	0.00
23	Network Equipment Wiring	2,250.00	2,250.00	0.00	0.00	2,250.00	100.00%	0.00	0.00
24	Building Equipment/Finishes (Phase 3)	3,000.00	3,000.00	0.00	0.00	3,000.00	100.00%	0.00	0.00
25	Switchgear/Disc/Starters Equipment	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
26	Light Fixtures/Controls	1,800.00	1,800.00	0.00	0.00	1,800.00	100.00%	0.00	0.00
27	Devices/Equipment	3,750.00	3,750.00	0.00	0.00	3,750.00	100.00%	0.00	0.00
28	Fire Alarm System Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
29	AV & Security Equipment	3,750.00	3,750.00	0.00	0.00	3,750.00	100.00%	0.00	0.00
30	Telephone/Data Equipment	1,125.00	1,125.00	0.00	0.00	1,125.00	100.00%	0.00	0.00
31	AV & Security Equipment	1,500.00	1,500.00	0.00	0.00	1,500.00	100.00%	0.00	0.00
32	Telephone/Data Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
33	Network Equipment	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
34	Network Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
35	Site Trench/Concrete	7,500.00	7,500.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
36	Branch/Feeder Conduit & Wire	2,500.00	2,500.00	0.00	0.00	2,500.00	100.00%	0.00	0.00
37	Branch/Feeder Conduit & Wire	7,500.00	7,500.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
38	Branch/Feeder Conduit & Wire	8,500.00	8,500.00	0.00	0.00	8,500.00	100.00%	0.00	0.00
39	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
40	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
41	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
42	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
43	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
44	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
45	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
46	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
47	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
48	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
49	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
50	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
51	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
52	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
53	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
54	Branch/Feeder Conduit & Wire	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	<b>SUB TOTAL</b>	<b>414,750.00</b>	<b>414,750.00</b>	<b>0.00</b>	<b>0.00</b>	<b>414,750.00</b>	<b>100.00%</b>	<b>0.00</b>	<b>0.00</b>

ITEM NUMBER	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED	TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
			PREVIOUS APPS.	THIS PERIOD					
1	Change Order #1	(3,760.00)	(3,760.00)	0.00	0.00	(3,760.00)	100.00%	0.00	0.00
2	Change Order #1	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
3	Change Order #2	7,342.00	7,342.00	0.00	0.00	7,342.00	100.00%	0.00	0.00
4	Change Order #2	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5	Change Order #3	15,397.00	15,397.00	0.00	0.00	15,397.00	100.00%	0.00	0.00
6	Change Order #3	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
7	Change Order #4	19,702.00	19,702.00	0.00	0.00	19,702.00	100.00%	0.00	0.00
8	Change Order #4	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
9	Change Order #5	21,666.00	21,666.00	0.00	0.00	21,666.00	100.00%	0.00	0.00
10	Change Order #5	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
11	Change Order #6	7,694.00	7,694.00	0.00	0.00	7,694.00	100.00%	0.00	0.00
12	Change Order #6	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
13	Change Order #7	6,960.00	6,960.00	0.00	0.00	6,960.00	100.00%	0.00	0.00
14	Change Order #7	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
15	Change Order #8	18,150.00	18,150.00	0.00	0.00	18,150.00	100.00%	0.00	0.00
16	Change Order #8	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
17	Change Order #9	11,241.00	11,241.00	0.00	0.00	11,241.00	100.00%	0.00	0.00
18	Change Order #9	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
19	Change Order #10	8,737.00	8,737.00	0.00	0.00	8,737.00	100.00%	0.00	0.00
20	Change Order #10	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
21	Change Order #11	9,550.00	9,550.00	0.00	0.00	9,550.00	100.00%	0.00	0.00
22	Change Order #11	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
23	Change Order #12	2,598.00	2,598.00	0.00	0.00	2,598.00	100.00%	0.00	0.00
24	Change Order #12	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
25	Change Order #13	4,667.00	4,667.00	0.00	0.00	4,667.00	100.00%	0.00	0.00
26	Change Order #13	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
27	Change Order #14	2,500.00	2,500.00	0.00	0.00	2,500.00	100.00%	0.00	0.00
28	Change Order #14	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
29	Change Order #15	14,123.00	14,123.00	0.00	0.00	14,123.00	100.00%	0.00	0.00
30	Change Order #15	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
31	Change Order #16	7,758.00	7,758.00	0.00	0.00	7,758.00	100.00%	0.00	0.00
32	Change Order #16	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
33	Change Order #17	3,679.00	3,679.00	0.00	0.00	3,679.00	100.00%	0.00	0.00
34	Change Order #17	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
35	Change Order #18	1,114.00	1,114.00	0.00	0.00	1,114.00	100.00%	0.00	0.00
36	Change Order #18	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
37	Change Order #19	3,460.00	3,460.00	0.00	0.00	3,460.00	100.00%	0.00	0.00
38	Change Order #19	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
39	Change Order #20	9,659.00	9,659.00	0.00	0.00	9,659.00	100.00%	0.00	0.00
40	Change Order #20	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
41	Change Order #21	1,214.00	1,214.00	0.00	0.00	1,214.00	100.00%	0.00	0.00
42	Change Order #21	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
43	Change Order #22	5,570.00	5,570.00	0.00	0.00	5,570.00	100.00%	0.00	0.00
44	Change Order #22	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
45	Change Order #23	1,814.00	1,814.00	0.00	0.00	1,814.00	100.00%	0.00	0.00
46	Change Order #23	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
47	Change Order #24	306.00	306.00	0.00	0.00	306.00	100.00%	0.00	0.00
48	Change Order #24	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
49	Change Order #25	1,695.00	1,695.00	0.00	0.00	1,695.00	100.00%	0.00	0.00
50	Change Order #25	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
51	Change Order #26	5,526.00	5,526.00	0.00	0.00	5,526.00	100.00%	0.00	0.00
52	Change Order #26	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
53	Change Order #26	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
54	Change Order #26	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	<b>SUB TOTAL</b>	<b>188,362.00</b>	<b>188,362.00</b>	<b>0.00</b>	<b>0.00</b>	<b>188,362.00</b>	<b>100.00%</b>	<b>0.00</b>	<b>0.00</b>



ITEM NUMBER	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED	TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
			PREVIOUS APPS.	THIS PERIOD					
1	Change Order #27	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
2	Change Order #28	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
3	Change Order #28	(3,364.00)	(3,364.00)	0.00	0.00	(3,364.00)	100.00%	0.00	0.00
4	Change Order #29	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5	Change Order #29	4,043.00	4,043.00	0.00	0.00	4,043.00	100.00%	0.00	0.00
6	Change Order #30	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
7	Change Order #30	2,500.00	2,500.00	0.00	0.00	2,500.00	100.00%	0.00	0.00
8	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
9	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
10	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
11	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
12	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
13	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
14	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
15	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
16	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
17	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
18	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
19	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
20	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
21	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
22	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
23	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
24	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
25	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
26	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
27	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
28	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
29	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
30	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
31	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
32	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
33	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
34	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
35	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
36	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
37	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
38	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
39	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
40	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
41	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
42	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
43	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
44	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
45	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
46	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
47	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
48	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
49	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
50	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
51	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
52	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
53	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
54	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
SUB TOTAL		3,179.00	679.00	2,500.00	0.00	3,179.00	100.00%	0.00	0.00
TOTAL		2,336,541.00	2,334,041.00	2,500.00	0.00	2,336,541.00	100.00%	0.00	0.00

**LABOR**

Said affiant further says that the following shows the names and addresses of every unpaid laborer in the employ of BEACON ELECTRIC COMPANY

is due, or to become due, for labor done to date hereof.

furnishing labor under said contract, giving the amount, if any, which

NOTE--If the fact is that every laborer has been paid in full, then recite: "Every laborer has been paid in full." If not, then give each unpaid laborer's name and address and the amount due or to become due.

NAME	ADDRESS	HOURS	Amount Due or to Become Due for Labor Furnished to Date Hereof
EVERY LABORER HAS BEEN PAID IN FULL			

Affiant further states that there is due or to become due to BEACON ELECTRIC COMPANY for work performed or machinery, material or fuel furnished to CPS Roselawn-Condon School to date hereof under said contracts, the sum of \$ 2,500.00 (Owner or Contractor)

That the amounts due or to become due to said sub-contractors, material men and laborers, for work done or machinery, material or fuel furnished to the data hereof, to BEACON ELECTRIC COMPANY are fully and correctly set forth opposite their names, respectively, in the aforesaid statements, and further evidenced by certificates of every person furnishing machinery, material or fuel, hereto attached, and made a part hereof.

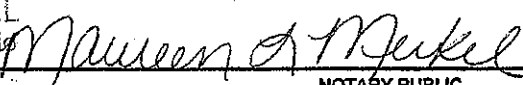
Affiant further says that BEACON ELECTRIC COMPANY has not employed or purchased or procured machinery, material or fuel from, or sub-contracted with any person, firm or corporation, other than those above mentioned, and owes for no labor performed, or machinery, material or fuel furnished, under said contracts, other than above set forth.

  
 JOE N. MELLENCAMP, President

SWORN TO BEFORE ME AND SUBSCRIBED IN MY PRESENCE, at CINCINNATI Ohio

this 9th day of November, 2009



MAUREEN L. MERKEL  
 Notary Public, State of Ohio  
 My Commission Expires July 3, 2013  
  
 NOTARY PUBLIC

1. Secy., Treas., one of firm, or agent, as case may be.
2. Name and address.
3. "Owner," "part-owner," "lessee," or "authorized agent of the owner, part-owner or lessee," or "original" or "principal contractor under a contract with \_\_\_\_\_ the owner, part-owner or lessee," as the case may be.
4. "Constructing, altering or repairing a boat, vessel or other watercraft," or "erecting, altering, repairing or removing a house, mill, manufactory, or any furnace or furnace material therein, or other building appurtenance, fixture, bridge or other structure," or "digging, drilling, boring, operating, completing and repairing of any gas well, oil well or other well," or "altering, repairing or constructing any oil derrick, oil tank, oil or gas pipe line," or "furnishing tile for the drainage of any lot or land."
5. Accurate description of property.
6. Contractor or sub-contractor executing affidavit.



Cincinnati Public Schools  
2315 Iowa Avenue  
Cincinnati, Ohio 45206

Contractor's Name:  
Address:

Century Construction, Inc.  
34 Kenton Lands Rd. - PO Box 18870  
Erlanger, KY 41018

### Contractor Pay Application Summary

Project Name  
Bid Package No.

Roselawn-Condon School  
3-9

1	Original Contract Amount		
2	Net Changes to Date	\$	2,157,626.00
3	Current Contract Amount	\$	72,665.00
<hr/>			
3	Current Contract Amount	\$	2,230,291.00
4	Labor Completed to Date	\$	811,898.00
5	Material Completed to Date	\$	1,418,393.00
6	Total Work Completed to Date	\$	2,230,291.00
7	Store Material to Date	\$	-
8	Less Retained to Date	\$	-
9	Total Amount Due	\$	2,230,291.00
10	Less Previous Payments	\$	2,228,760.00
11	Less Amount Retained to Cover Lien	\$	-
12	Less Amount Retained for Liquidated Damages	\$	-
13	Less Other Amounts Withheld	\$	-
14	Current Due	\$	1,531.00
15	Balance to Complete	\$	-

**OSFC approval required for the following contract adjustments:**

1. Assessment of liquidated damages
2. Other amounts withheld

Ohio School Facilities Commission \_\_\_\_\_

Date \_\_\_\_\_

Comments:


**APPLICATION AND CERTIFICATE FOR PAYMENT**

**TO OWNER:** Cincinnati Public Schools  
CPS Facilities  
Cincinnati, OH 45206

**PROJECT:**

Roselawn-Condor School

**APPLICATION NO:** 16  
**PERIOD TO:** 3/25/2009  
**PROJECT NOS:** D-137 R  
**CONTRACT DATE:** 08/15/07

**FROM CONTRACTOR:** Century Construction, Inc.  
34 Kenton Lands Rd  
Erlanger, KY 41018

**VIA ARCHITECT:** Cincinnati Public Schools  
CPS Facilities  
Cincinnati, OH 45206

**CONTRACT FOR:** HVAC

**CONTRACTOR'S APPLICATION FOR PAYMENT**

Application is made for payment as shown below. In connection with the Contract Continuation sheet is attached.

1. ORIGINAL CONTRACT SUM.....\$ 2,157,626.00
2. Net Change by Change Orders.....\$ 72,665.00
3. CONTRACT SUM TO DATE.....\$ 2,230,291.00
4. TOTAL COMPLETED & STORED TO DATE.....\$ 2,230,291.00
5. RETAINAGE
  - a. 8-50% of Completed Labor.....\$
  - b. 8% of Stored Material.....\$
 Total Retainage.....\$
6. TOTAL EARNED LESS RETAINAGE.....\$ 2,230,291.00
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT.....\$ 2,228,760.00
8. CURRENT PAYMENT DUE.....\$ 1,531.00
9. BALANCE TO FINISH, INCLUDING RETAINAGE.....\$

Change Order/Contract	ADDITIONS	DEDUCTIONS
Total Changes approved in Previous months by Owner	71134.00	
Total approved this month	1631.00	
<b>TOTALS</b>	<b>72665.00</b>	
<b>NET CHANGES by Change Order</b>	<b>72665.00</b>	

The Contractor certified that the work covered by this pay request has been completed in accordance with the Contract Documents and that all progress payments previously paid by the State have been applied by the Contractor to discharge in full all of Contractor's obligations incurred in connection with the work covered by all prior pay requests.

*Scott B. Blunt* V.P.  
Contractor Date 3/21/08

*Alvina S. Rosty, Notary* My Commission Expires 8/28/12  
Based upon on-site observations, the firm affirms that the work has progressed to the percentage of completeness indicated on the pay request.

*Jim Caldwell*  
Architect Date 10.1.07

*Sam Re*  
Construction Manager Date 6.1.07

Approved:

School District Treasurer Date

**CONTINUATION SHEET**

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification, is attached. In tabulations below, amounts are stated to the nearest dollar. Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO.: 0016  
 APPLICATION DATE: 3/25/2009  
 PERIOD TO: 07/5521  
 ARCHITECTS PROJECT NO.: 075521

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		E THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)	H BALANCE TO FINISH (C-G)	I RETAINAGE (IF VARIABLE) RATE
			FROM PREVIOUS APPLICATION (D+E)						
010	Bond & Insurance	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
015	Material	\$27,164.00	\$27,164.00		\$0.00	\$0.00	\$27,164.00	\$0.00	\$0.00
020	Labor	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
025	Mobilization	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030	Material	\$700.00	\$700.00		\$0.00	\$0.00	\$700.00	\$0.00	\$0.00
035	Labor	\$700.00	\$700.00		\$0.00	\$0.00	\$700.00	\$0.00	\$0.00
040	Phase I Piping	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
045	Material	\$61,827.00	\$61,827.00		\$0.00	\$0.00	\$61,827.00	\$0.00	\$0.00
050	Labor	\$89,066.00	\$89,066.00		\$0.00	\$0.00	\$89,066.00	\$0.00	\$0.00
051	Control's Engineering	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
052	Material	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
053	Labor	\$39,420.00	\$39,420.00		\$0.00	\$0.00	\$39,420.00	\$0.00	\$0.00
055	Phase I Demo - Pipe & Equipment	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
060	Material	\$8,944.00	\$8,944.00		\$0.00	\$0.00	\$8,944.00	\$0.00	\$0.00
065	Labor	\$18,030.00	\$18,030.00		\$0.00	\$0.00	\$18,030.00	\$0.00	\$0.00
070	Phase I Penthouse Piping	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
075	Material	\$18,048.00	\$18,048.00		\$0.00	\$0.00	\$18,048.00	\$0.00	\$0.00
080	Labor	\$19,841.00	\$19,841.00		\$0.00	\$0.00	\$19,841.00	\$0.00	\$0.00
085	Phase I Duct Rough-In	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
090	Material	\$89,600.00	\$89,600.00		\$0.00	\$0.00	\$89,600.00	\$0.00	\$0.00
095	Labor	\$84,000.00	\$84,000.00		\$0.00	\$0.00	\$84,000.00	\$0.00	\$0.00
100	Phase I Penthouse Duct Rough-In & Demo	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
105	Material	\$33,600.00	\$33,600.00		\$0.00	\$0.00	\$33,600.00	\$0.00	\$0.00
110	Labor	\$22,400.00	\$22,400.00		\$0.00	\$0.00	\$22,400.00	\$0.00	\$0.00
115	Phase I Insulation	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
120	Material	\$17,903.00	\$17,903.00		\$0.00	\$0.00	\$17,903.00	\$0.00	\$0.00
125	Labor	\$26,854.00	\$26,854.00		\$0.00	\$0.00	\$26,854.00	\$0.00	\$0.00
130	Phase I Penthouse Insulation	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
135	Material	\$10,744.00	\$10,744.00		\$0.00	\$0.00	\$10,744.00	\$0.00	\$0.00
140	Labor	\$16,115.00	\$16,115.00		\$0.00	\$0.00	\$16,115.00	\$0.00	\$0.00
145	Phase I Controls	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
150	Material	\$47,065.00	\$47,065.00		\$0.00	\$0.00	\$47,065.00	\$0.00	\$0.00
155	Labor	\$31,376.00	\$31,376.00		\$0.00	\$0.00	\$31,376.00	\$0.00	\$0.00
160	Phase I Penthouse Controls	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



AIA DOCUMENT G703 • APPLICATION AND CERTIFICATE FOR PAYMENT • 1992 EDITION • AIA® • ©1992 • THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVENUE, N.Y., WASHINGTON, D.C. 20006-5292

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G703-1992

# CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification, is attached. In tabulations below, amounts are stated to the nearest dollar. Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO.: 0016  
 APPLICATION DATE: 3/25/2009  
 PERIOD TO: 075521  
 ARCHITECT'S PROJECT NO.: 075521

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		E THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)	H BALANCE TO FINISH (C-G)	I RETAINAGE (IF VARIABLE) RATE
			FROM PREVIOUS APPLICATION (D+E)						
165	Material	\$31,377.00	\$31,377.00	\$0.00	\$0.00	\$0.00	\$31,377.00	\$0.00	\$0.00
170	Labor	\$20,918.00	\$20,918.00	\$0.00	\$0.00	\$0.00	\$20,918.00	\$0.00	\$0.00
175	Phase I Balancing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
180	Material	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
185	Labor	\$6,533.00	\$6,533.00	\$0.00	\$0.00	\$0.00	\$6,533.00	\$0.00	\$0.00
190	Phase II Piping	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
195	Material	\$27,562.00	\$27,562.00	\$0.00	\$0.00	\$0.00	\$27,562.00	\$0.00	\$0.00
200	Labor	\$36,754.00	\$36,754.00	\$0.00	\$0.00	\$0.00	\$36,754.00	\$0.00	\$0.00
205	Phase II Penthouse Piping	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
210	Material	\$5,598.00	\$5,598.00	\$0.00	\$0.00	\$0.00	\$5,598.00	\$0.00	\$0.00
215	Labor	\$7,692.00	\$7,692.00	\$0.00	\$0.00	\$0.00	\$7,692.00	\$0.00	\$0.00
220	Phase II Duct Rough-in	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
225	Material	\$69,440.00	\$69,440.00	\$0.00	\$0.00	\$0.00	\$69,440.00	\$0.00	\$0.00
230	Labor	\$58,240.00	\$58,240.00	\$0.00	\$0.00	\$0.00	\$58,240.00	\$0.00	\$0.00
235	Phase II Penthouse Duct Rough-in & Demo	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
240	Material	\$53,760.00	\$53,760.00	\$0.00	\$0.00	\$0.00	\$53,760.00	\$0.00	\$0.00
245	Labor	\$41,440.00	\$41,440.00	\$0.00	\$0.00	\$0.00	\$41,440.00	\$0.00	\$0.00
250	Phase II Insulation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
255	Material	\$14,323.00	\$14,323.00	\$0.00	\$0.00	\$0.00	\$14,323.00	\$0.00	\$0.00
260	Labor	\$21,484.00	\$21,484.00	\$0.00	\$0.00	\$0.00	\$21,484.00	\$0.00	\$0.00
265	Phase II Penthouse Insulation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
270	Material	\$14,323.00	\$14,323.00	\$0.00	\$0.00	\$0.00	\$14,323.00	\$0.00	\$0.00
275	Labor	\$21,484.00	\$21,484.00	\$0.00	\$0.00	\$0.00	\$21,484.00	\$0.00	\$0.00
280	Phase II Controls	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
285	Material	\$20,273.00	\$20,273.00	\$0.00	\$0.00	\$0.00	\$20,273.00	\$0.00	\$0.00
290	Labor	\$13,517.00	\$13,517.00	\$0.00	\$0.00	\$0.00	\$13,517.00	\$0.00	\$0.00
295	Phase II Penthouse Controls	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
300	Material	\$13,516.00	\$13,516.00	\$0.00	\$0.00	\$0.00	\$13,516.00	\$0.00	\$0.00
305	Labor	\$9,011.00	\$9,011.00	\$0.00	\$0.00	\$0.00	\$9,011.00	\$0.00	\$0.00
310	Phase II Balancing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
315	Material	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
320	Labor	\$6,533.00	\$6,533.00	\$0.00	\$0.00	\$0.00	\$6,533.00	\$0.00	\$0.00
325	Phase III Piping	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
330	Material	\$6,714.00	\$6,714.00	\$0.00	\$0.00	\$0.00	\$6,714.00	\$0.00	\$0.00

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**CONTINUATION SHEET**

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APPLICATION NO.: 0016  
 APPLICATION DATE: PERIOD TO: 3/25/2009  
 ARCHITECT'S PROJECT NO.: 075521

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		E THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN DORE)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)	H BALANCE TO FINISH (C-G)	I RETAINAGE (IF VARIABLE) RATE
			FROM PREVIOUS APPLICATION (D+E)						
335	Labor	\$9,515.00	\$9,515.00	\$0.00	\$0.00	\$0.00	\$9,515.00	\$0.00	\$0.00
340	Phase III Duct Rough-in	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
345	Material	\$22,400.00	\$22,400.00	\$0.00	\$0.00	\$0.00	\$22,400.00	\$0.00	\$0.00
350	Labor	\$15,680.00	\$15,680.00	\$0.00	\$0.00	\$0.00	\$15,680.00	\$0.00	\$0.00
355	Phase III Insulation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
360	Material	\$14,323.00	\$14,323.00	\$0.00	\$0.00	\$0.00	\$14,323.00	\$0.00	\$0.00
365	Labor	\$21,484.00	\$21,484.00	\$0.00	\$0.00	\$0.00	\$21,484.00	\$0.00	\$0.00
370	Phase III Controls	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
375	Material	\$8,449.00	\$8,449.00	\$0.00	\$0.00	\$0.00	\$8,449.00	\$0.00	\$0.00
380	Labor	\$5,632.00	\$5,632.00	\$0.00	\$0.00	\$0.00	\$5,632.00	\$0.00	\$0.00
385	Phase III Balancing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
390	Material	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
395	Labor	\$6,534.00	\$6,534.00	\$0.00	\$0.00	\$0.00	\$6,534.00	\$0.00	\$0.00
400	Coordination Drawings	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
405	Material	\$33,600.00	\$33,600.00	\$0.00	\$0.00	\$0.00	\$33,600.00	\$0.00	\$0.00
410	Labor	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
415	VAV's	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
420	Material	\$19,040.00	\$19,040.00	\$0.00	\$0.00	\$0.00	\$19,040.00	\$0.00	\$0.00
425	Labor	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
430	Pumps & Accessories	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
435	Material	\$27,000.00	\$27,000.00	\$0.00	\$0.00	\$0.00	\$27,000.00	\$0.00	\$0.00
440	Labor	\$3,000.00	\$3,000.00	\$0.00	\$0.00	\$0.00	\$3,000.00	\$0.00	\$0.00
445	AHU's & HR's	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
450	Material	\$265,440.00	\$265,440.00	\$0.00	\$0.00	\$0.00	\$265,440.00	\$0.00	\$0.00
455	Labor	\$50,000.00	\$50,000.00	\$0.00	\$0.00	\$0.00	\$50,000.00	\$0.00	\$0.00
460	Chillers	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
465	Material	\$251,000.00	\$251,000.00	\$0.00	\$0.00	\$0.00	\$251,000.00	\$0.00	\$0.00
470	Labor	\$3,880.00	\$3,880.00	\$0.00	\$0.00	\$0.00	\$3,880.00	\$0.00	\$0.00
475	MAU	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
480	Material	\$5,600.00	\$5,600.00	\$0.00	\$0.00	\$0.00	\$5,600.00	\$0.00	\$0.00
485	Labor	\$1,080.00	\$1,080.00	\$0.00	\$0.00	\$0.00	\$1,080.00	\$0.00	\$0.00
490	Cabinet & Unit Heaters	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
495	Material	\$13,440.00	\$13,440.00	\$0.00	\$0.00	\$0.00	\$13,440.00	\$0.00	\$0.00
500	Labor	\$2,000.00	\$2,000.00	\$0.00	\$0.00	\$0.00	\$2,000.00	\$0.00	\$0.00

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# CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification, is attached. In tabulations below, amounts are stated to the nearest dollar. Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO.: 0016  
 APPLICATION DATE: 3/25/2009  
 PERIOD TO: 07/5521

ARCHITECT'S PROJECT NO.: 075521

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		E THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN DOR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E+H)	H % (G÷C)	I BALANCE TO FINISH (C-G)	J RETAINAGE (IF VARIABLE) RATE
			FROM PREVIOUS APPLICATION (D + E)							
505	AC Units	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0.00	\$0.00
510	Material	\$7,000.00	\$7,000.00	\$0.00	\$0.00	\$0.00	\$7,000.00	100.000	\$0.00	\$0.00
515	Labor	\$1,000.00	\$1,000.00	\$0.00	\$0.00	\$0.00	\$1,000.00	100.000	\$0.00	\$0.00
520	VFD's	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0.00	\$0.00
525	Material	\$26,880.00	\$26,880.00	\$0.00	\$0.00	\$0.00	\$26,880.00	100.000	\$0.00	\$0.00
530	Labor	\$2,000.00	\$2,000.00	\$0.00	\$0.00	\$0.00	\$2,000.00	100.000	\$0.00	\$0.00
535	Exhaust & Return Fans	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0.00	\$0.00
540	Material	\$28,000.00	\$28,000.00	\$0.00	\$0.00	\$0.00	\$28,000.00	100.000	\$0.00	\$0.00
545	Labor	\$17,920.00	\$17,920.00	\$0.00	\$0.00	\$0.00	\$17,920.00	100.000	\$0.00	\$0.00
550	Louvers & Dampers	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0.00	\$0.00
555	Material	\$35,840.00	\$35,840.00	\$0.00	\$0.00	\$0.00	\$35,840.00	100.000	\$0.00	\$0.00
560	Labor	\$33,600.00	\$33,600.00	\$0.00	\$0.00	\$0.00	\$33,600.00	100.000	\$0.00	\$0.00
565	Air Devices	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0.00	\$0.00
570	Material	\$16,800.00	\$16,800.00	\$0.00	\$0.00	\$0.00	\$16,800.00	100.000	\$0.00	\$0.00
575	Labor	\$33,600.00	\$33,600.00	\$0.00	\$0.00	\$0.00	\$33,600.00	100.000	\$0.00	\$0.00
580	Punch List/Commissioning & Start-Up	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0.00	\$0.00
585	Material	\$1,000.00	\$1,000.00	\$0.00	\$0.00	\$0.00	\$1,000.00	100.000	\$0.00	\$0.00
590	Labor	\$1,000.00	\$1,000.00	\$0.00	\$0.00	\$0.00	\$1,000.00	100.000	\$0.00	\$0.00
595	Allowance	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0.00	\$0.00
600	Remaining	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	\$0.00	\$0.00
601	Allowance AA 1	\$4,595.00	\$4,595.00	\$0.00	\$0.00	\$0.00	\$4,595.00	100.000	\$0.00	\$0.00
602	Allowance AA 2	\$509.00	\$509.00	\$0.00	\$0.00	\$0.00	\$509.00	100.000	\$0.00	\$0.00
603	Allowance AA 3	\$484.00	\$484.00	\$0.00	\$0.00	\$0.00	\$484.00	100.000	\$0.00	\$0.00
604	Allowance AA 4	\$910.00	\$910.00	\$0.00	\$0.00	\$0.00	\$910.00	100.000	\$0.00	\$0.00
605	Allowance AA 5	\$870.00	\$870.00	\$0.00	\$0.00	\$0.00	\$870.00	100.000	\$0.00	\$0.00
606	Allowance AA 6	\$2,632.00	\$2,632.00	\$0.00	\$0.00	\$0.00	\$2,632.00	100.000	\$0.00	\$0.00
620	CO #1	\$18,455.00	\$18,455.00	\$0.00	\$0.00	\$0.00	\$18,455.00	100.000	\$0.00	\$0.00
625	CO #2	\$1,123.00	\$1,123.00	\$0.00	\$0.00	\$0.00	\$1,123.00	100.000	\$0.00	\$0.00
630	CO #3	\$4,968.00	\$4,968.00	\$0.00	\$0.00	\$0.00	\$4,968.00	100.000	\$0.00	\$0.00
640	CO #4	\$4,282.00	\$4,282.00	\$0.00	\$0.00	\$0.00	\$4,282.00	100.000	\$0.00	\$0.00
645	CO #5	\$2,864.00	\$2,864.00	\$0.00	\$0.00	\$0.00	\$2,864.00	100.000	\$0.00	\$0.00
650	CO #6	\$7,933.00	\$7,933.00	\$0.00	\$0.00	\$0.00	\$7,933.00	100.000	\$0.00	\$0.00
655	CO #7	\$386.00	\$386.00	\$0.00	\$0.00	\$0.00	\$386.00	100.000	\$0.00	\$0.00
660	CO #8	\$1,854.00	\$1,854.00	\$0.00	\$0.00	\$0.00	\$1,854.00	100.000	\$0.00	\$0.00

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APPLICATION NO.: 0016  
 APPLICATION DATE: 3/25/2009  
 ARCHITECT'S PROJECT NO.: 075521

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		E THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)	H BALANCE TO FINISH (C-G)	I RETAINAGE (IF VARIABLE) RATE
			FROM PREVIOUS APPLICATION (D+E)	THIS PERIOD					
665	CO #9	\$4,568.00	\$4,568.00	\$0.00	\$0.00	\$0.00	\$4,568.00	\$0.00	\$0.00
670	CO #10	\$1,527.00	\$1,527.00	\$0.00	\$0.00	\$0.00	\$1,527.00	\$0.00	\$0.00
680	CO #11	\$2,187.00	\$2,187.00	\$0.00	\$0.00	\$0.00	\$2,187.00	\$0.00	\$0.00
690	CO #12	\$565.00	\$565.00	\$0.00	\$0.00	\$0.00	\$565.00	\$0.00	\$0.00
700	CO #13	\$409.00	\$409.00	\$0.00	\$0.00	\$0.00	\$409.00	\$0.00	\$0.00
710	CO #14	\$10,060.00	\$10,060.00	\$0.00	\$0.00	\$0.00	\$10,060.00	\$0.00	\$0.00
720	CO #15	\$8,384.00	\$8,384.00	\$0.00	\$0.00	\$0.00	\$8,384.00	\$0.00	\$0.00
730	CO #16	\$1,569.00	\$1,569.00	\$0.00	\$0.00	\$0.00	\$1,569.00	\$0.00	\$0.00
740	CO #17	(\$3,364.00)	\$0.00	(\$3,364.00)	\$0.00	\$0.00	(\$3,364.00)	\$0.00	\$0.00
750	CO #18	\$4,895.00	\$0.00	\$4,895.00	\$0.00	\$0.00	\$4,895.00	\$0.00	\$0.00
		\$2,230,291.00	\$2,228,760.00	\$1,531.00	\$0.00	\$2,230,291.00	100.00%	\$0.00	\$0.00



Committed to Quality, Service and Customer Satisfaction.

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Roselawn Condon School  
7735 Greenland Place  
Cincinnati, Oh.

( Tab Section # 02)

Fixtures  
by  
Beacon Electric Company

(

(

(

ARCHITECTS'S APPROVAL STAMP:

ENGINEER'S APPROVAL STAMP:

**SUBMITTAL REVIEW**

ENGINEER'S REVIEW IS FOR GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS. COMMENTS DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR REMAINS RESPONSIBLE FOR ACCURACY OF QUANTITIES, DIMENSIONS, DETAILS AND CORRELATION WITH OTHER TRADES.

<input checked="" type="checkbox"/> NO EXCEPTIONS	<input type="checkbox"/> EXCEPTIONS NOTED SUBMIT RECORD COPY
<input type="checkbox"/> EXCEPTIONS NOTED	<input type="checkbox"/> REVISE AND RESUBMIT

BY: Andre Miller Date: 10-30-07

**KOHR'S LONNEMANN HEIL ENGINEERS, PSC**

CONSTRUCTION MANAGER APPROVAL STAMP:

ELECTRICAL CONTRACTOR'S STAMP:

**BEACON ELECTRIC CO.**

Contractor hereby represents that he has reviewed this submittal and verified that this equipment is "APPROVED AS NOTED" with the specifications with regard to manufacturer, catalog numbers, and similar data relative to this submittal.

Project Name: ROSELAWN CONHDON SCHOOL  
Project No. 2071784  
Spec. Section 27-05-13, 26-09-23  
LUMINAIRES AND LIGHTING CONTROL  
Submittal No. 2  
Date: OCTOBER 24, 2007

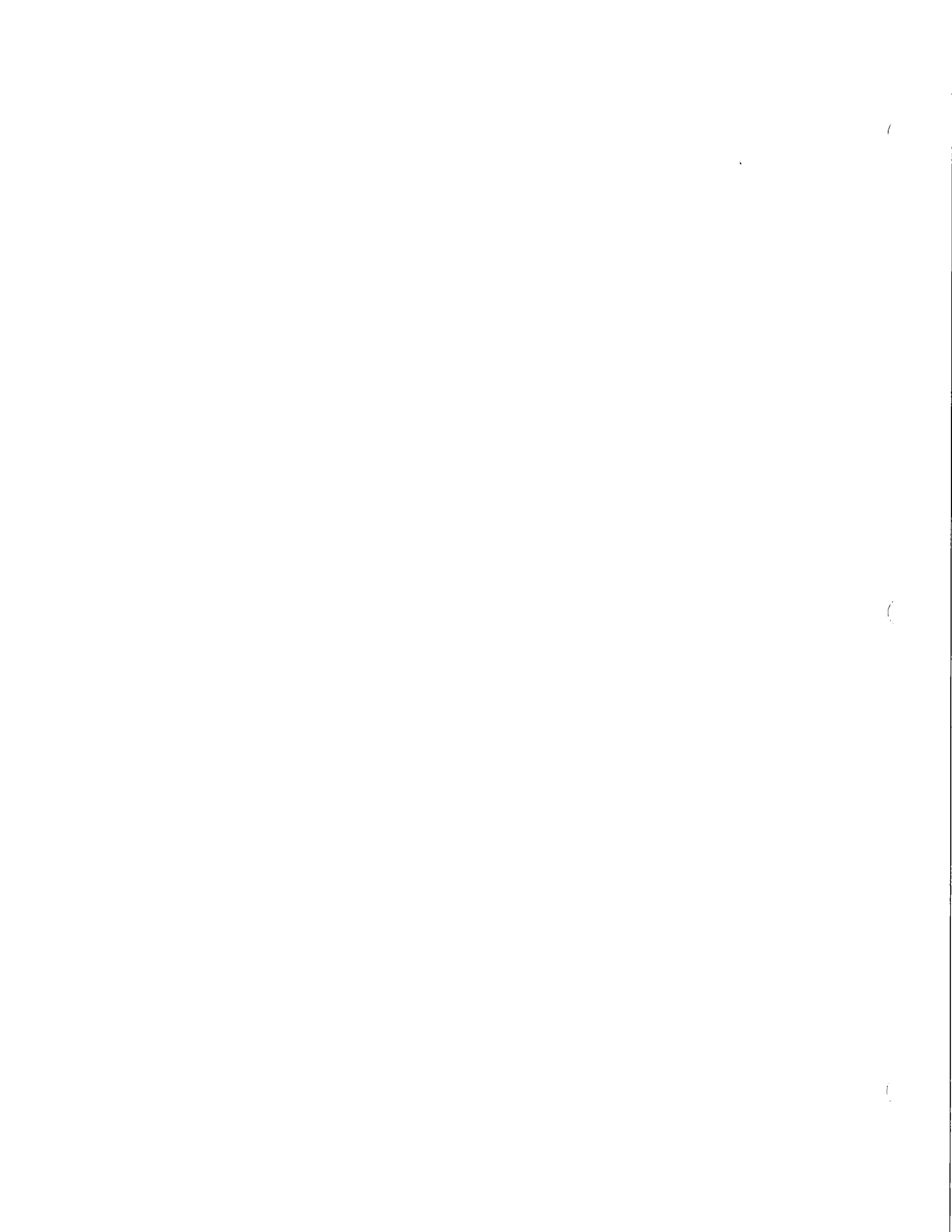
By: Jim Newcomb

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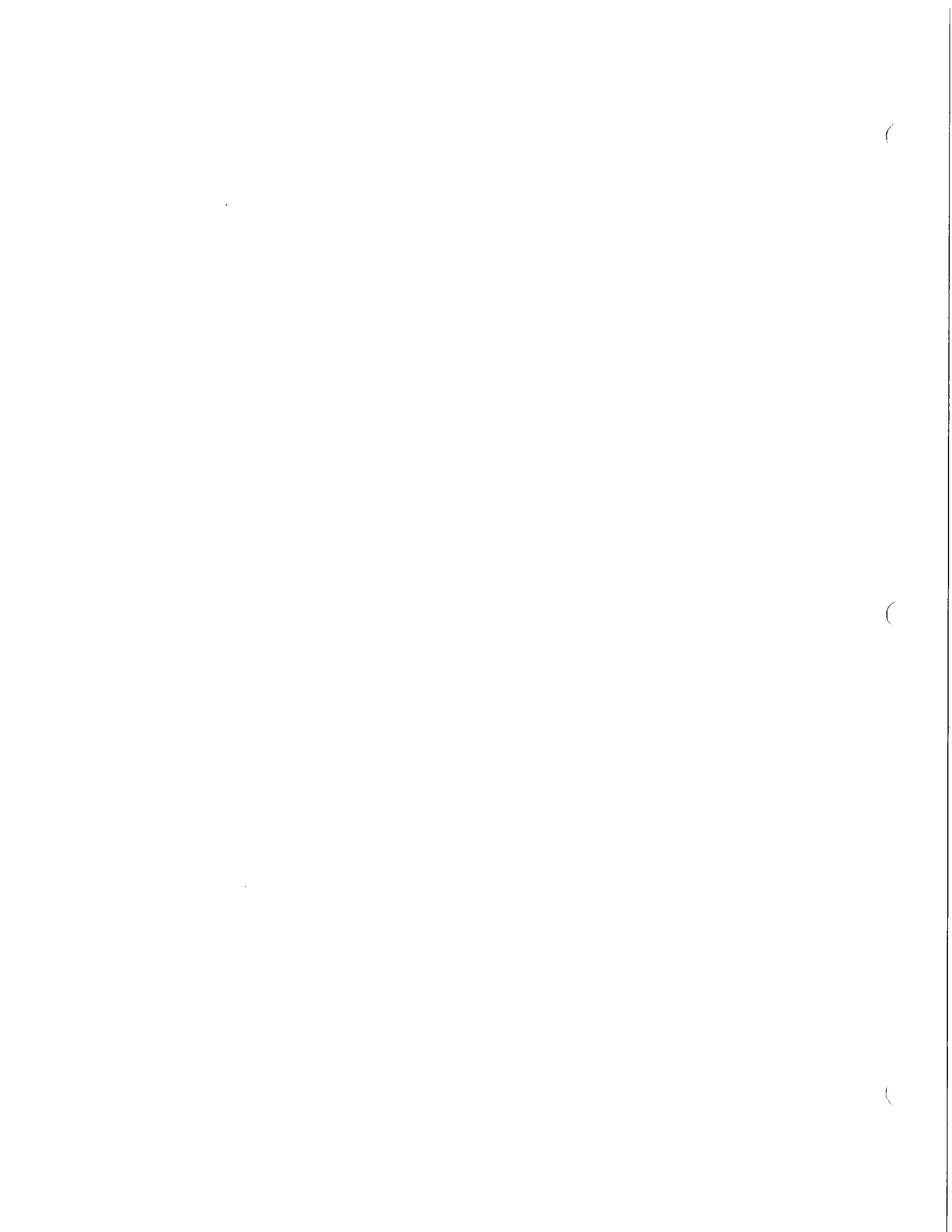




# Transmittal

Leesman Sales  
 1663 Blue Rock Street  
 Cincinnati OH 45223  
 Phone: (513) 681-2081  
**From: Dennis Leesman**

Type	MFG	Part
D4	Columbia	SM24-432-FSA12.125-4EB8RLH277-F0835
D6	Day-Brite Lighting	AVW232-PMW-UNV-1/2EB10R-DEK
D6F	Day-Brite Lighting	AVW232-PMW-UNV-1/2EB10R-AVWIJ-DEK
EX	Dual Lite	SESRWN
EXDF	Dual Lite	SEDRWN
EX1	Dual Lite	LN4XRW
G1	Alera	CV-2T5-S-PM 24" FEED/CM 18: NON FEED-EB5277-MW-4
G21	Alera	CV-2T5-S-PM 24" FEED / CM 24" NON FEED-EB5277-MW-8-L/R
G21GTD	Alera	CV-2T5-S-PM 24" FEED / CM 24" NON FEED-EB5277-MW-8-L/R-GTD SUPPLIED BY LEESMAN FACTORY INSTALLED
G21S	Alera	CV-2T5-S-WM-EB5277-MW-8
G4	Columbia	WT24-432G-FAA12.156INV-4EB8RLH277-F0835
J3	Columbia	STR24-332G-MPO-3EB8RLH277-F0835
L14	Columbia	CS4-132-EB8RLH277-CSWG4
L24	Columbia	CS4-232-EB8RLH277-CSWG4
L28	Columbia	CS8-232-4EB8RLH277-(2)CSWG4
LSA2	Kim	1A/AR2/400MH277/PS-P/SQUARE POLE ARM
LSA3	Kim	1A/AR3/400MH277/PS-P/SQUARE POLE ARM
LSA3	Kim	1A/AR3/400MH277/PS-P/SQUARE POLE ARM-HS
LSA4	Kim	1A/AR4/400MH277/PS-P/SQUARE POLE ARM
PS1	Spaulding	HT2-CM-P15--HL-DA-Q-WH-F4
PS1E	Spaulding	HT2-CM-P15-HL-DA-Q-WH-F4-QZ
PS2E	Luminaire	YOVH-13-1PLC26-277-OPAL-WHT-LAMP INCLUDED
PS4	Architectural Area Lighting	INDA-XX-150MHT6-277-MAL-LAMP 150
PS4	KW Industries	RSP12-4.0-11-BAL-BC
S1	Prescolite	CFT632EB-STF602-SS-B24
S2	Prescolite	CFT632EB-STF602-WW-SS-B24
S3	Prescolite	CFT632HEB-STF602H-SS-B24
S4	Prescolite	CFT632EB-STF602-DL-B24
S5	Con Tech	RL20 / CTR2002-CLR-P
V1	Con Tech	CTL838P
V1	Con Tech	LT24-P
V1	Con Tech	LA210-P

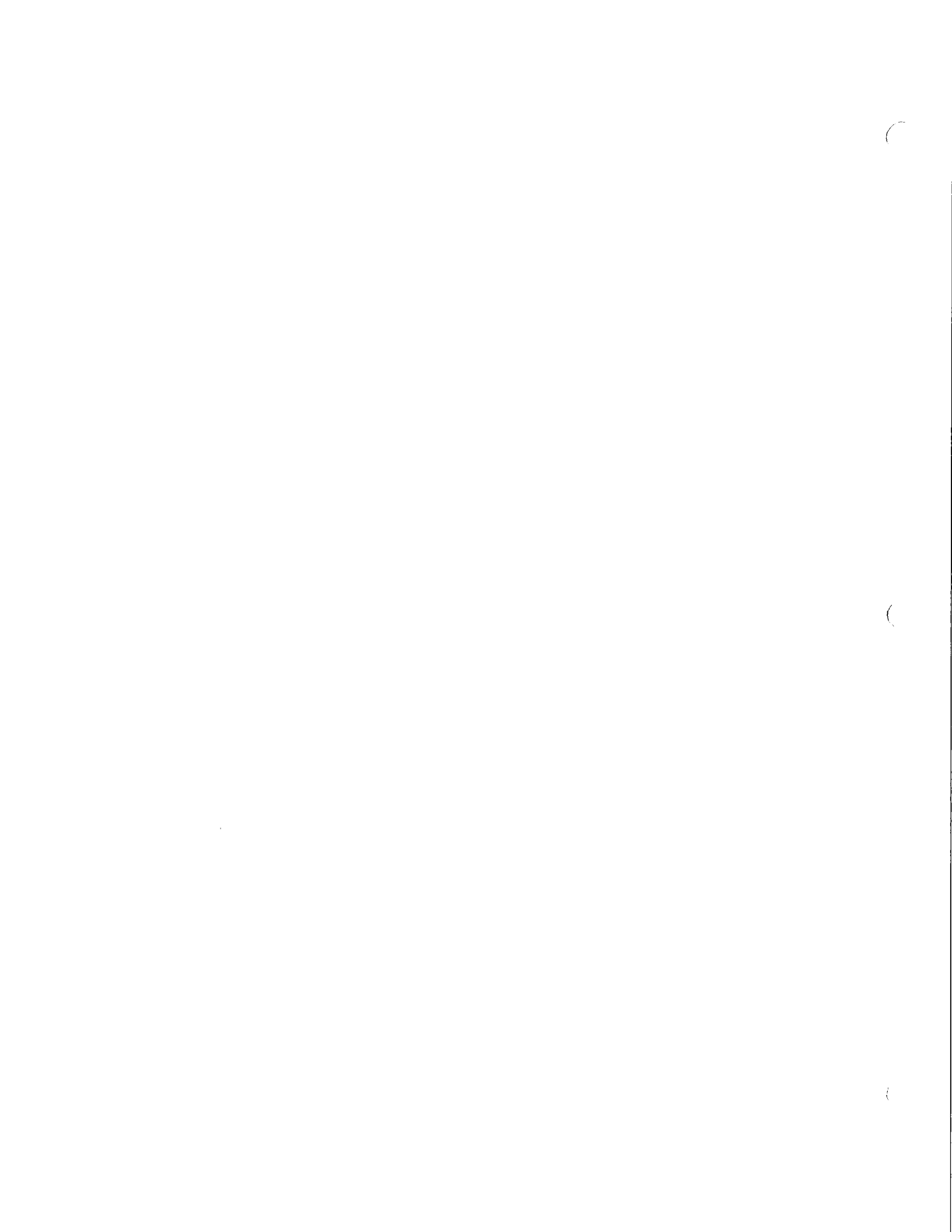




# Transmittal

Leesman Sales  
1663 Blue Rock Street  
Cincinnati OH 45223  
Phone: (513) 681-2081  
From: Dennis Leesman

Type	MFG	Part
V2	Con Tech	CTL838-P
V2	Con Tech	LT28-P
V2	Con Tech	LA210-P
X8P	Hubbell	SWF842-A-SW-WG LAMPS
PSS1	KW Industries	SSP15-4.0-11-DM10-KIM AR-KIM PS-P
PSS2	KW Industries	SSP20-4.0-11-DM2180-KIM AR-KIM PS-P
PSS3	KW Industries	SSP20-4.0-11-DM10-KIM AR KIM PS-P-CPL
GTD	Side-Lite	PSM FACTORY INSTALLED IN FIXTURES ABOVE
2000 SQ FT	Hubbell Building Automation	OMNI-DT2000-RP
1000 SQ FT	Hubbell Building Automation	OMNI-DT1000-RP
500 SQ ST	Hubbell Building Automation	OMNI-DT500-RP
POWER PACK	Hubbell Building Automation	MP277A



Submitted by Leesman Sales



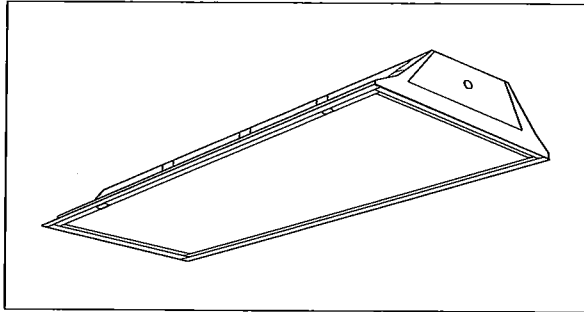
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST814-232G-FSA12.125-EB8RLH-  
277-FO835  
Notes:

**Type:**

**A1**

LEE07-6119



# ST814-232

## SPECIFICATION GRADE T8 TROFFER

### 1' x 4', 2 T8 LAMPS

Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

#### Features

- Optical performance designed for T8 lamp technology.
- Mechanical light seal.
- Attractive post-painted door frame with positive action latches.
- Spring loaded latches optional.
- Rolled fixture edges reduce risk of injury during fixture handling and installation.
- Integral T-bar clips quickly secure fixture to grid system without the need for time consuming loose parts.
- Snap-in ballast covers can be removed when lamps are installed.
- Corner hinging for easy insertion and removal of door frame from either side.
- Optional flush or regressed aluminum shielding frames available with positive action or spring loaded latches.
- Housing ends secured by unique corner interlock and screws.

#### Flanged Features

- Four adjustable Uni-Lugs for quick easy installation.
- Optional plaster frames available for individual or row mounting.
- Fixture end flanges are removable for row mounting. Joiner channels are included.

#### Housing

Heavy gauge steel. Die formed for extra rigidity. Designed for installation in standard inverted tee grid ceilings.

#### Ballasts

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified.

#### Finish

All metal parts are processed with a five phase phosphate bonding treatment. Grid units are pre-painted with high gloss baked white enamel, 86% reflective. Flanged units are painted after fabrication with a polyester powder coat, reflectance of 90%.

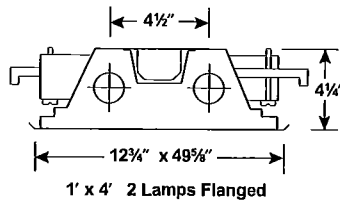
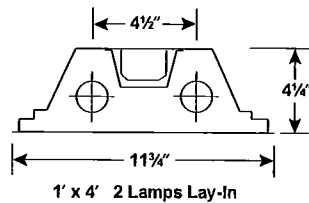
#### Shielding

100% acrylic prismatic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

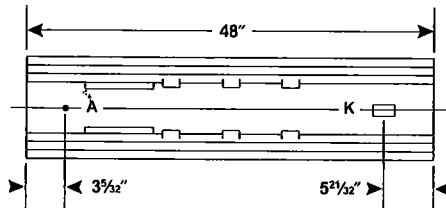
#### Labels

All fixtures carry the UL label. (CSA approval available. Use Suffix "CSA".)

#### Cross Section



**Flanged cut out dimensions  
for single unit only:  
12" x 48 7/8"**



A - 3/8" Diameter Knockout

K - 2" x 3" through hole for access plate.

**NOTE:** All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

Complete ordering information on back. Dimensions and specifications subject to change without notice.



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T9.2

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST814-232G-FSA12.125-EB8RLH-  
277-FO835  
Notes:

**Type:**

**A1**

LEE07-6119

**ST814-232 - 1' x 4', 2 T8 Lamps**

**SPECIFICATION GRADE TROFFER**

**CONTACT FACTORY**

**Ordering Information**

Example: ST814-232G-FSA12-EB8120-FO735-C488

ST8 14 - 2 32 G - FS A12.125 - EB8RLH 277 - FO835 - T8 82CRI, 3500K Lamps

<b>Series</b>	<b>Fixture Size</b>	<b>No. of Lamps</b>	<b>Lamp Type</b>	<b>Ceiling Type</b>	<b>Door Style</b>	<b>Voltage</b>	<b>Ballast</b>	<b>Options</b>
ST8	14 - 1' x 4'	2 - Two	32 - 4', T8, 32 Watt	G - Inverted T-Bar F - Overlap Fringe	FS - Flush Steel RA - Regressed Aluminum, White BRA - Black Regressed Aluminum SRA - Silver Regressed Aluminum FA - Flush Aluminum, White BFA - Black Flush Aluminum SFA - Silver Flush Aluminum	120 - 120V 277 - 277V 347 - 347V UNV - 120V/277V (T8 w/LH only)	EB8 - Electronic T8 EB8LH - Electronic T8 <10% THD For a specific ballast vendor, show as option. EB8RLH - Electronic T8 <10% THD Rapid Start Low Harmonic	SLL - Spring Loaded Latch GMF - Slow Blow Fuse GLR - Fast Blow Fuse C388 - 3/8" Flex with 3 No. 18 Wires C488 - 1/2" Flex with 4 No. 18 Wires FO730 - T8, 70CRI, 3000K Lamps, Furn/Inst. FO735 - T8, 70CRI, 3500K Lamps, Furn/Inst. FO741 - T8, 70CRI, 4100K Lamps, Furn/Inst. CSA - Approved for Canadian Standards Association EL - Emergency Battery Pack PAF - Painted After Fabrication MS9 - Master/Satellite Pair with 9' Harness For a complete set of options, see options and accessories section.
<b>Shielding</b>								
A12 - Pattern 12 Acrylic .100" Nominal (Standard)								
A12.125 - Pattern 12 Acrylic .125" Nominal								
A12.125M - Pattern 12 Acrylic .125" Minimum								
A19 - Pattern 19 Acrylic .156" Male Prism								
IMA - .150 Injection Molded Acrylic .156" Male Prism								
DOP - White Dished Acrylic								
PC1 - Silver Parabolic Louver 1/2" x 1/2" x 1/2"								
PCG1 - Gold Parabolic Louver 1/2" x 1/2" x 1/2"								
PC2 - Silver Parabolic Louver 1 1/2" x 1 1/2" x 1"								
PCG2 - Gold Parabolic Louver 1 1/2" x 1 1/2" x 1"								
For more shielding see options and accessories section.								

T9.2

CO 5/04



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Hubbell Lighting, Inc.

Submitted by Leesman Sales



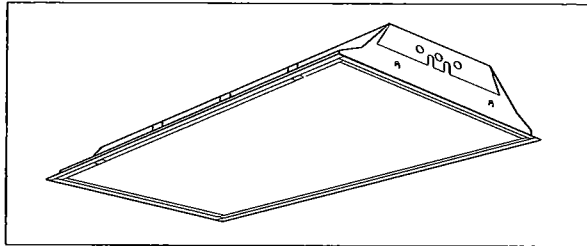
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST824-232G-FSA12.125-EB8RLH-  
277-FO835  
Notes:

Type:

**A2**

LEE07-8119

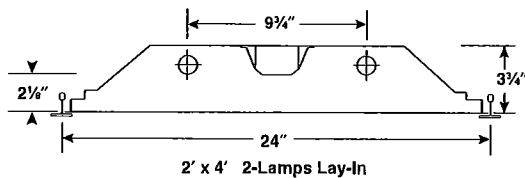


**ST824-232**  
**SPECIFICATION GRADE**  
**T8 TROFFER**  
**2' x 4', 2 T8 Lamps**

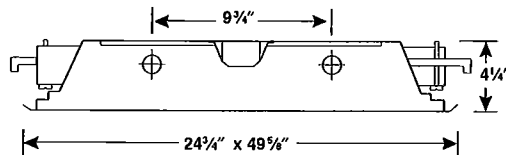
Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

**Cross Section**

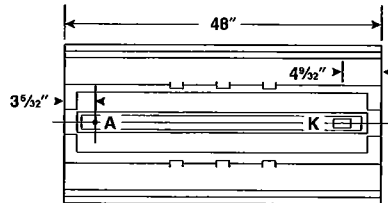


2' x 4' 2-Lamps Lay-In



2' x 4' 2-Lamps Flanged

**Flanged cut out dimensions  
for single unit only: 24" x 48 7/8"**



A - 7/8" Diameter Knockout

K - 2" x 3" through hole for access plate.

NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

**Features**

- Optical performance designed for T8 lamp technology.
- 2 1/8" minimum spacing from bottom of lamp to bottom of lens.
- Mechanical light seal.
- Attractive, post-painted door frame with positive action latches.
- Spring loaded latches optional.
- Rolled fixture edges reduce risk of injury during fixture handling and installation.
- Integral T-bar clips quickly secure fixture to grid system without the need for time-consuming loose parts.
- Snap-in ballast covers can be removed when lamps are installed.
- Corner hinging for easy insertion and removal of door frame from either side.
- Optional flush or regressed aluminum shielding frames available with positive action or spring loaded latches.
- Housing ends secured by unique corner interlock and screws.

**Housing**

Heavy gauge steel. Die formed for extra rigidity. Grid housings are designed for installation in standard 1 5/8" T-bar ceilings. Integral T-bar clips are located in the end of the housing. Flanged housings for hard ceilings feature overlap flange trim and wing hangers.

**Ballasts**

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, magnetic or electronic ballasts.

**Finish**

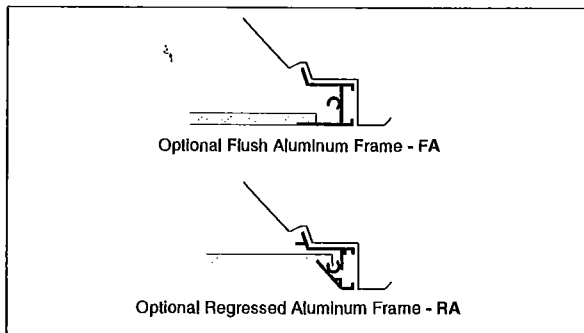
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

**Shielding**

100% clear prismatic acrylic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

**Labels**

All fixtures carry the UL label. (CSA approval available. Use Suffix "CSA").



Optional Flush Aluminum Frame - FA

Optional Regressed Aluminum Frame - RA

Complete ordering information on back. Dimensions and specifications subject to change without notice.



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**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST824-232G-FSA12.125-EB8RLH-  
277-FO835  
Notes:

**Type:**

**A2**

LEE07-6119

**ST824-232**

2' x 4', 2 T8 Lamps

**SPECIFICATION GRADE TROFFER**

**Columbia**  
LIGHTING

Environmental Laboratories

REPORT # 1/15/83  
DATE: 1/27/83

2' x 4' T8 LAMP WITH 82C LED  
DALI REL-2P32-SC; LAMP: F3278; BAL. FNC. 1.03; MFTS: 58  
LUMENS RATED AT 2500 LUMENS EACH  
LUMENS: 465 x 21.0

EFFICIENCY: 176 LM/W

PLANT OF APPROXIMATE SHIELDING PAR. 50 NORM '90

TEST RUN IN ACCORDANCE TO CURRENT I.E.S. PUBLISHED PRACTICES

TESTED BY: *[Signature]* APPROVED BY: *[Signature]*

**ST824-232G-FSA12-EB8-PAF**

Report No: 12583 Efficiency: 85.6 S/MH: Parl 1.23 Norm 1.36

Zonal Cavity Method Coefficients of Utilization Floor Reflectance - .20

RC RW	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	0
1	94	91	88	85	92	89	86	83	85	83	81	75
2	87	81	76	72	85	79	75	71	76	73	69	65
3	80	73	66	61	78	71	66	61	69	64	60	57
4	74	65	58	53	72	64	58	53	62	56	52	49
5	68	58	51	46	66	57	50	46	55	50	45	43
6	63	52	45	40	61	52	45	40	50	44	40	37
7	58	47	40	35	57	47	40	35	45	39	35	33
8	54	42	35	31	52	42	35	30	41	35	30	28
9	49	38	31	26	48	38	31	26	37	31	26	24
10	46	35	28	23	45	34	28	23	33	27	23	22

**Zonal Summary**

Zone	Lumens	Lamp	Fixt.
0-30	1562.	26.9	31.5
0-40	2558.	44.1	51.5
0-60	4226.	72.9	85.1
0-90	4965.	85.6	100.0
90-180	0.	0.0	0.0
0-180	4965.	85.6	100.0

**Energy Data**

LER: FL-76 Energy Cost: \$3.16\*  
Input Watts: 58 BF: .88

The above energy calculations were conducted using a specific lamp/ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.

\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

**Ordering Information**

Example: ST824-232G-FSA12-EB8120-F0735-C388

ST8 24-2 32G-FSA12.125-EB8RLH 277-FO835

**Series**  
ST8

**Fixture Size**  
24 - 2' x 4'

**No. of Lamps**  
2 - Two

**Lamp Type**  
32 - 4', T8, 32 Watt

**Ceiling Type**  
G - Inverted T-Bar  
F - Overlap Plange

**Door Style**  
FS - Flush Steel  
RA - Regressed Aluminum, White  
BRA - Black Regressed Aluminum  
SRA - Silver Regressed Aluminum  
FA - Flush Aluminum, White  
BFA - Black Flush Aluminum  
SFA - Silver Flush Aluminum

**Voltage**  
120 - 120V  
277 - 277V  
347 - 347V  
UNV - 120V/277V (T8 w/LH only)

**Options**  
SLL - Spring Loaded Latch  
GMF - Slow Blow Fuse  
GLR - Fast Blow Fuse  
C388 - 3/8" Flex with 3 No. 18 Wires  
C384 - 3/8" Flex with 3 No. 14 Wires  
C488 - 3/8" Flex with 4 No. 18 Wires  
C424 - 1/2" Flex with 4 No. 14 Wires  
FO730 - T8, 70CRI, 3000K Lamps, Furnished/Installed  
FO735 - T8, 70CRI, 3500K Lamps, Furnished/Installed  
FO741 - T8, 70CRI, 4100K Lamps, Furnished/Installed  
CSA - Approved for Canadian Standards Association  
EL - Emergency Battery Pack  
PAF - Painted After Fabrication  
For complete list of options, see options and accessories section.

**Ballast**  
EB8 - Electronic T8  
EB8LH - Electronic T8 <10% THD  
For a specific ballast vendor, show as option.  
EB8RLH - Electronic T8 <10% THD Rapid Start Low Harmonic

**Shielding**  
A12 - Pattern 12 Acrylic, 100" Nominal (Standard)  
A12.125 - Pattern 12 Acrylic, .125" Nominal  
A12.125M - Pattern 12 Acrylic, .125" Minimum  
A19 - Pattern 19 Acrylic, .156" Male Prism  
IMA - .150 Injection Molded Acrylic, .156" Male Prism  
DOP - White Dished Acrylic  
PC1 - Silver Parabolic Louver 1/2" x 1/2" x 1/2"  
PCG1 - Gold Parabolic Louver 1/2" x 1/2" x 1/2"  
PC2 - Silver Parabolic Louver 1 1/2" x 1 1/2" x 1"  
PCG2 - Gold Parabolic Louver 1 1/2" x 1 1/2" x 1"  
For complete list of lenses and louvers, see options and accessories section.

FO835 - T8 82CRI, 3500K Lamps



Submitted by Leesman Sales



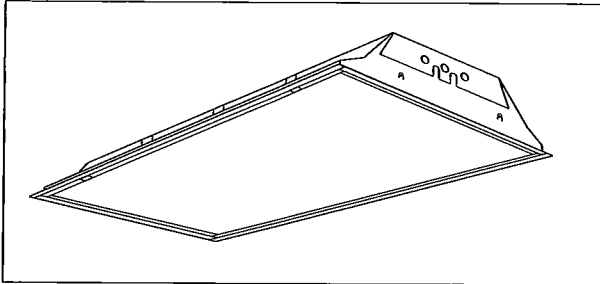
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST824-332G-FSA12.125-EB8RLH-  
277-FO835  
Notes:

**Type:**

**A3**

LEE07-6119

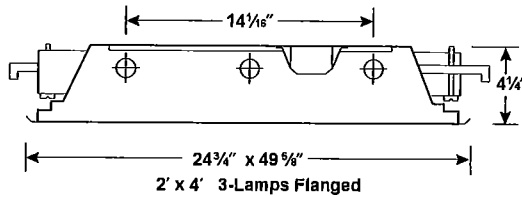
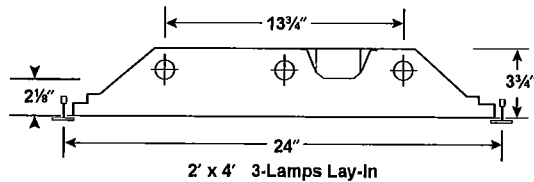


## ST824-332 SPECIFICATION GRADE T8 TROFFER 2' x 4', 3 T8 Lamps

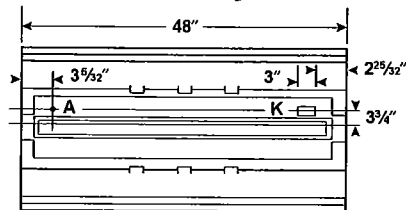
Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

### Cross Section



### Flanged cut out dimensions for single unit only: 24" x 48 7/8"



A - 7/8" Diameter Knockout

K - 2" x 3" through hole for access plate.

NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

### Features

- Optical performance designed for T8 lamp technology.
- 2 1/8" minimum spacing from bottom of lamp to bottom of lens.
- Mechanical light seal.
- Attractive, post-painted door frame with positive action latches.
- Spring loaded latches optional.
- Rolled fixture edges reduce risk of injury during fixture handling and installation.
- Integral T-bar clips quickly secure fixture to grid system without the need for time-consuming loose parts.
- Snap-in ballast covers can be removed when lamps are installed.
- Corner hinging for easy insertion and removal of door frame from either side.
- Optional flush or regressed aluminum shielding frames available with positive action or spring loaded latches.
- Housing ends secured by unique corner interlock and screws.

### Housing

Heavy gauge steel. Die formed for extra rigidity. Grid housings are designed for installation in standard 1 5/8" T-bar ceilings. Integral T-bar clips are located in the end of the housing. Flanged housings for hard ceilings feature overlap flange trim and wing hangers.

### Ballasts

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, magnetic or electronic ballasts.

### Finish

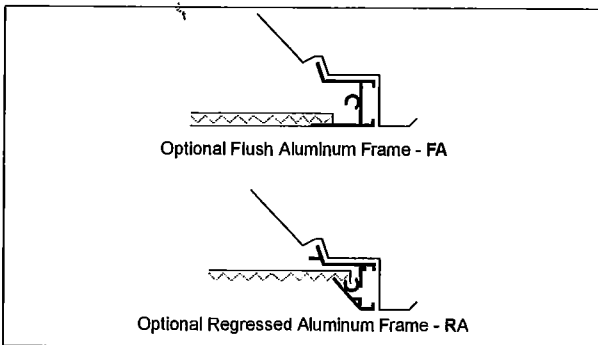
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

### Shielding

100% clear prismatic acrylic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

### Labels

All fixtures carry the UL label. (CSA approval available. Use Suffix "CSA").



Complete ordering information on back. Dimensions and specifications subject to change without notice.

T26



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST824-332G-FSA12.125-EB8RLH-  
277-FO835  
**Notes:**

**Type:**  
**A3**

LEE07-6119

**ST824-332**

2' x 4', 3 T8 Lamps

**SPECIFICATION GRADE TROFFER**

**Columbia LIGHTING**  
Environmental Laboratories

REPORT # 12381  
DATE: 7/26/00

LUMINAIRE: ST824-332G-FSA12-3EB8-PAF  
2 x 4' T8 LAMP WITH AIR FILLS  
BALL: E332120004 LAMPS: E33212 BAL. FAC.: .05; WATTS: 84  
LUMPS RATED AT 2700 LUMENS EACH  
LUMINOUS AREA: 45.9 x 21.0

PERFORMANCE: PCH .45

PERFORMANCE RECEIVED

PLOT OF NORMAL PLANE  
CHIEF LIGHT: PARL 90 NORM 90

S/MH: PARL 1.26 NORM 1.36

LAMP LUMENS PER HOUR

0	2773	2773	2773	2773	2773
5	2751	2751	2751	2751	2751
10	2716	2731	2750	2760	2758
15	2659	2679	2715	2733	2733
20	2576	2606	2656	2692	2692
25	2470	2511	2500	2620	2637
30	2355	2399	2376	2531	2544
35	2167	2233	2233	2391	2412
40	1967	2037	2149	2218	2244
45	1725	1793	1901	1970	2008
50	1440	1513	1607	1648	1700
55	1127	1219	1291	1327	1381
60	873	927	105	997	1002
65	640	659	691	702	703
70	431	444	432	449	474
75	308	299	278	322	330
80	205	170	178	214	219
85	111	103	112	110	114
90	0	0	0	0	0

**ZONAL SUMMARY**

ZONE	LUMENS	LAMP	FIXT.
0-30	2211	25.4	30.0
0-40	3654	42.0	49.6
0-60	6235	71.7	84.6
0-90	7371	84.7	100.0
90-180	0	0.0	0.0
0-180	7371	84.7	100.0

TEST RUN IN ACCORDANCE TO CURRENT I.E.S. PUBLISHED PROCEDURES

**ST824-332G-FSA12-3EB8-PAF**

Report No: 12681 Efficiency: 84.7 S/MH: Parl 1.26 Norm 1.36

Zonal Cavity Method Coefficients of Utilization Floor Reflectance - .20

RC	80				70				50				0			
	RW	70	50	30	10	70	50	30	10	50	30	10	0	30	10	0
1	93	90	87	84	91	88	85	83	84	82	80	75				
2	86	80	75	71	84	78	74	70	75	72	68	64				
3	79	71	65	60	77	70	64	60	68	63	59	56				
4	73	64	57	52	71	63	57	52	61	55	51	48				
5	67	57	50	45	65	56	49	44	54	48	44	41				
6	62	51	44	39	60	50	44	39	49	43	38	36				
7	57	46	39	34	56	45	39	34	44	38	33	31				
8	52	41	34	29	51	41	34	29	40	33	29	27				
9	48	37	30	25	47	36	30	25	35	29	25	23				
10	45	34	27	22	44	33	27	22	32	26	22	21				

**Zonal Summary**

Zone	Lumens	Lamp	Fixt.
0-30	2211	25.4	30.0
0-40	3654	42.0	49.6
0-60	6235	71.7	84.6
0-90	7371	84.7	100.0
90-180	0	0.0	0.0
0-180	7371	84.7	100.0

**Energy Data**

LER: FL-77 Energy Cost: \$3.12\*  
Input Watts: 84 BF: .88

The above energy calculations were conducted using a specific lamp/ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.

\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

**Ordering Information**

Example: ST824-332G-FSA12-EB8120-F0735-C488

ST8 24-3 32G-FSA12.125-EB8RLH 277-FO835

**Series**

**Fixture Size**  
24 - 2' x 4'

**No. of Lamps**  
3 - Three

**Lamp Type**  
32 - 4', T8, 32 Watt

**Ceiling Type**  
G - Inverted T-Bar  
F - Overlap Flange

**Door Style**  
FS - Flush Steel  
RA - Regressed Aluminum, White  
BRA - Black Regressed Aluminum  
SRA - Silver Regressed Aluminum  
FA - Flush Aluminum, White  
BFA - Black Flush Aluminum  
SFA - Silver Flush Aluminum

**Voltage**  
120 - 120V  
277 - 277V  
347 - 347V

**Options**  
SLL - Spring Loaded Latch  
GMF - Slow Blow Fuse  
GLR - Fast Blow Fuse  
C388 - 3/8" Flex with 3 No. 18 Wires  
C488 - 3/8" Flex with 4 No. 18 Wires  
FO730 - T8, 70CRI, 3000K Lamps, Furnished/Installed  
FO736 - T8, 70CRI, 3500K Lamps, Furnished/Installed  
FO741 - T8, 70CRI, 4100K Lamps, Furnished/Installed  
CSA - Approved for Canadian Standards Association  
EL - Emergency Battery Pack  
PAF - Painted After Fabrication  
MS9 - Master/Slave Pair with 9' harness  
For complete list of options, see options and accessories section.

**Ballast**  
3EB8 - 3 Lamp Electronic T8  
3EB8LH - 3 Lamp Electronic T8 <10%THD  
EB8 - Electronic T8  
EB8LH - Electronic T8 <10% THD  
OCT - Magnetic T8 (Oclron)  
For a specific ballast vendor, show as option.

**Shielding**  
EB8RLH - Electronic T8 <10% THD Rapid Start Low Harmonic

**Options**  
FO835 - T8 82CRI, 3500K Lamps

**Shielding**  
A12 - Pattern 12 Acrylic .100" Nominal (Standard)  
A12.125 - Pattern 12 Acrylic .125" Nominal  
A12.125M - Pattern 12 Acrylic .125" Minimum  
A19 - Pattern 19 Acrylic .156" Male Prism  
IMA - .150 Injection Molded Acrylic .156" Male Prism  
DOP - White Dished Acrylic  
PC1 - Silver Parabolic Louver 1/2" x 1/2" x 1/2"  
PCG1 - Gold Parabolic Louver 1/2" x 1/2" x 1/2"  
PC2 - Silver Parabolic Louver 1 1/2" x 1 1/2" x 1"  
PCG2 - Gold Parabolic Louver 1 1/2" x 1 1/2" x 1"  
For complete list of lenses and louvers, see options and accessories section.

T26



Submitted by Leesman Sales

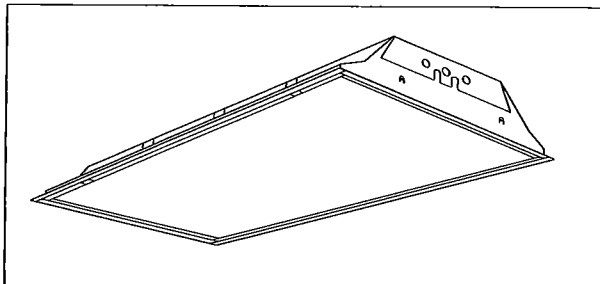


**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST824-332G-FSA12.125-  
3EB8RLH-277-FO835  
Notes:

**Type:**  
**A31**

LEE07-6119

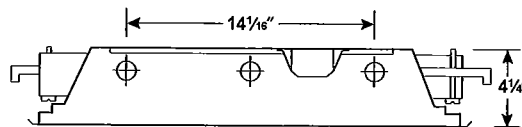
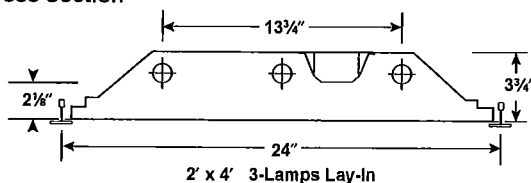


## ST824-332 SPECIFICATION GRADE T8 TROFFER 2' x 4', 3 T8 Lamps

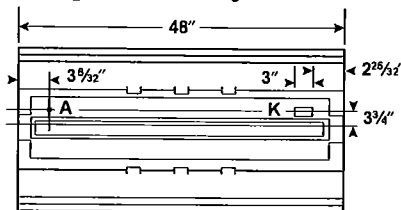
Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

### Cross Section



### Flanged cut out dimensions for single unit only: 24" x 48 7/8"



A - 7/8" Diameter Knockout

K - 2" x 3" through hole for access plate.

NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

### Features

- Optical performance designed for T8 lamp technology.
- 2 1/8" minimum spacing from bottom of lamp to bottom of lens.
- Mechanical light seal.
- Attractive, post-painted door frame with positive action latches.
- Spring loaded latches optional.
- Rolled fixture edges reduce risk of injury during fixture handling and installation.
- Integral T-bar clips quickly secure fixture to grid system without the need for time-consuming loose parts.
- Snap-in ballast covers can be removed when lamps are installed.
- Corner hinging for easy insertion and removal of door frame from either side.
- Optional flush or regressed aluminum shielding frames available with positive action or spring loaded latches.
- Housing ends secured by unique corner interlock and screws.

### Housing

Heavy gauge steel. Die formed for extra rigidity. Grid housings are designed for installation in standard 1 5/16" T-bar ceilings. Integral T-bar clips are located in the end of the housing. Flanged housings for hard ceilings feature overlap flange trim and wing hangers.

### Ballasts

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, magnetic or electronic ballasts.

### Finish

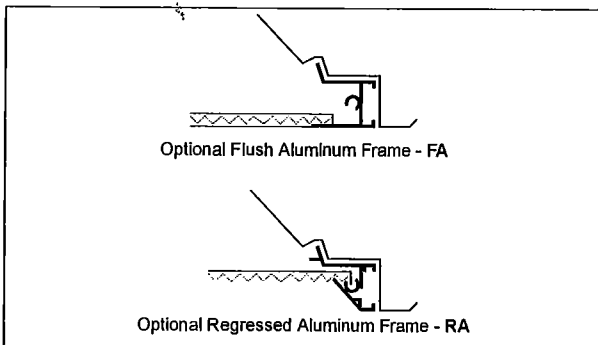
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

### Shielding

100% clear prismatic acrylic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

### Labels

All fixtures carry the UL label. (CSA approval available. Use Suffix "CSA").



Complete ordering information on back. Dimensions and specifications subject to change without notice.

T26



Submitted by Leesman Sales



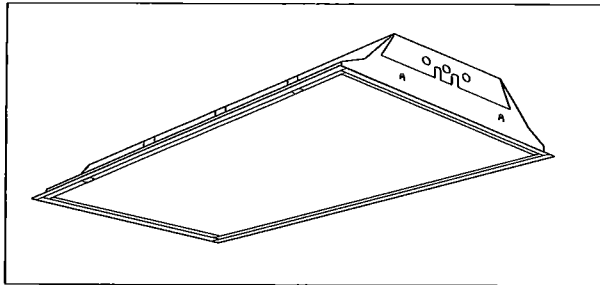
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST824-332G-FSA12.125-3EB8RLH-277-FO835-  
GTD BY LEESMAN FACTORY INSTALLED

Notes:

**Type:**  
**A31GTD**

LEE07-6119



# ST824-332

## SPECIFICATION GRADE

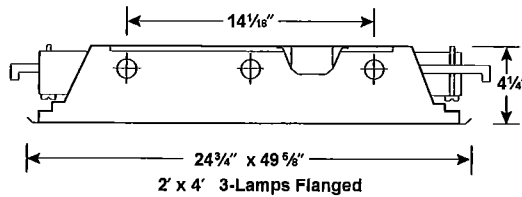
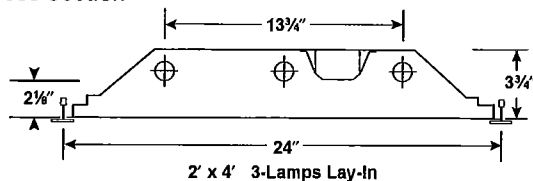
### T8 TROFFER

#### 2' x 4', 3 T8 Lamps

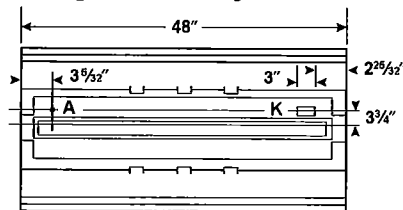
Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

### Cross Section



### Flanged cut out dimensions for single unit only: 24" x 48 7/8"



A - 7/8" Diameter Knockout

K - 2" x 3" through hole for access plate.

NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

### Features

- Optical performance designed for T8 lamp technology.
- 2 1/8" minimum spacing from bottom of lamp to bottom of lens.
- Mechanical light seal.
- Attractive, post-painted door frame with positive action latches.
- Spring loaded latches optional.
- Rolled fixture edges reduce risk of injury during fixture handling and installation.
- Integral T-bar clips quickly secure fixture to grid system without the need for time-consuming loose parts.
- Snap-in ballast covers can be removed when lamps are installed.
- Corner hinging for easy insertion and removal of door frame from either side.
- Optional flush or regressed aluminum shielding frames available with positive action or spring loaded latches.
- Housing ends secured by unique corner interlock and screws.

### Housing

Heavy gauge steel. Die formed for extra rigidity. Grid housings are designed for installation in standard 1 5/8" T-bar ceilings. Integral T-bar clips are located in the end of the housing. Flanged housings for hard ceilings feature overlap flange trim and wing hangers.

### Ballasts

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, magnetic or electronic ballasts.

### Finish

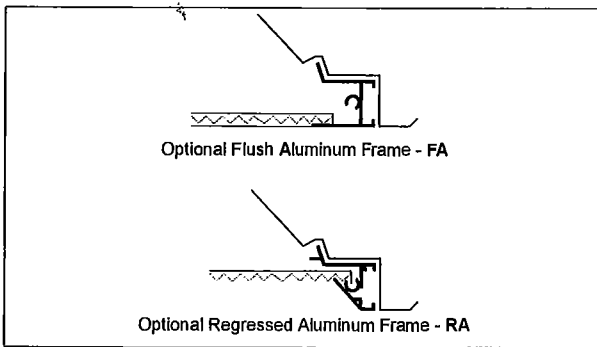
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

### Shielding

100% clear prismatic acrylic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

### Labels

All fixtures carry the UL label. (CSA approval available. Use Suffix "CSA").



Complete ordering information on back. Dimensions and specifications subject to change without notice.

T26

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST824-332G-FSA12-125-3EB8RLH-277-F0835-  
GTD BY LEESMAN FACTORY INSTALLED

**Type:**  
**A31GTD**

Notes:

LEE07-6119

**ST824-332**

2' x 4', 3 T8 Lamps

**SPECIFICATION GRADE TROFFER**

**Columbia LIGHTING**  
Environmental Laboratories  
REPORT 4 12591  
DATE: 7/25/06

ST824-332G-FSA12-3EB8-PAF

2' x 4' x 1.25" WITH AIR LINES  
BALLAST: 83321200M LAMPS: F327B; BAL. FAC.: .88; WATTS: 84  
LAMP RATED AT 2900 LUMENS EACH  
LUMINOUS Efficacy: 45.9 2.21.0

REPORT RECEIVED  
PLAT OF NOMINAL PLANE  
SHIELDING: PARL 90 NORM 90

PLANE PARL 1.25 NORM 1.25

Dist	0	2.5	5	7.5	10	12.5	15	17.5	20	22.5	25	27.5	30
0	2775	2775	2775	2775	2775	2775	2775	2775	2775	2775	2775	2775	2775
2.5	2751	2703	2729	2774	2764	2754	2744	2734	2724	2714	2704	2694	2684
5	2714	2731	2750	2760	2754	2744	2734	2724	2714	2704	2694	2684	2674
7.5	2650	2678	2713	2733	2735	2725	2715	2705	2695	2685	2675	2665	2655
10	2574	2604	2656	2692	2697	2687	2677	2667	2657	2647	2637	2627	2617
12.5	2479	2511	2580	2626	2631	2621	2611	2601	2591	2581	2571	2561	2551
15	2355	2396	2476	2531	2536	2526	2516	2506	2496	2486	2476	2466	2456
17.5	2167	2213	2303	2358	2363	2353	2343	2333	2323	2313	2303	2293	2283
20	1967	2013	2103	2158	2163	2153	2143	2133	2123	2113	2103	2093	2083
22.5	1725	1771	1861	1916	1921	1911	1901	1891	1881	1871	1861	1851	1841
25	1449	1511	1607	1662	1667	1657	1647	1637	1627	1617	1607	1597	1587
27.5	1157	1219	1315	1370	1375	1365	1355	1345	1335	1325	1315	1305	1295
30	873	927	1023	1078	1083	1073	1063	1053	1043	1033	1023	1013	1003
32.5	600	639	735	790	795	785	775	765	755	745	735	725	715
35	431	444	539	604	609	600	590	580	570	560	550	540	530
37.5	309	299	278	272	272	271	270	269	268	267	266	265	264
40	209	190	170	164	164	163	162	161	160	159	158	157	156
42.5	111	103	112	110	110	109	108	107	106	105	104	103	102
45	0	0	0	0	0	0	0	0	0	0	0	0	0

ZONAL SUMMARY

Zone	Lumens	Lamp	Fixt.
0-30	2211	25.4	30.0
0-40	3654	42.0	49.6
0-60	6235	71.7	84.6
0-90	7371	84.7	100.0
90-180	0	0.0	0.0
0-180	7371	84.7	100.0

Energy Data  
LER: FL-77 Energy Cost: \$3.12\*  
Input Watts: 84 BF: 88  
The above energy calculations were conducted using a specific lamp/ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

**ST824-332G-FSA12-3EB8-PAF**  
Report No: 12581 Efficiency: 84.7 S/MH: Parl 1.26 Norm 1.36

Zonal Cavity Method Coefficients of Utilization Floor Reflectance - .20

RC	RW	80				70				50				0			
		70	50	30	10	70	50	30	10	50	30	10	0	30	10	0	
1	93	90	87	84	91	88	85	83	84	82	80	75	75	72	68	64	
2	86	80	75	71	84	78	74	70	75	72	68	64	64	63	59	56	
3	79	71	65	60	77	70	64	60	68	63	59	56	56	55	51	48	
4	73	64	57	52	71	63	57	52	61	55	51	48	48	48	44	41	
5	67	57	50	45	65	56	49	44	54	48	44	41	41	43	38	36	
6	62	51	44	39	60	50	44	39	49	43	38	36	36	38	33	31	
7	57	46	39	34	56	45	39	34	44	38	33	31	31	33	29	27	
8	52	41	34	29	51	41	34	29	40	33	29	27	27	29	25	23	
9	48	37	30	25	47	36	30	25	35	29	25	23	23	25	21	20	
10	45	34	27	22	44	33	27	22	32	26	22	21	21	23	19	18	

Zonal Summary

Zone	Lumens	Lamp	Fixt.
0-30	2211	25.4	30.0
0-40	3654	42.0	49.6
0-60	6235	71.7	84.6
0-90	7371	84.7	100.0
90-180	0	0.0	0.0
0-180	7371	84.7	100.0

Energy Data

LER: FL-77 Energy Cost: \$3.12\*  
Input Watts: 84 BF: 88  
The above energy calculations were conducted using a specific lamp/ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

**Ordering Information**

Example: ST824-332G-FSA12-EB8120-F0735-C488

ST8 24-3-32G-FSA12.125-3EB8RLH 277-F0835

Series: 24-2' x 4'

Fixture Size: 24 - 2' x 4'

No. of Lamps: 3 - Three

Lamp Type: 32 - 4', T8, 32 Watt

Ceiling Type: G - Inverted T-Bar  
F - Overlap Flange

Door Style: FS - Flush Steel  
RA - Regressed Aluminum, White  
BRA - Black Regressed Aluminum  
SRA - Silver Regressed Aluminum  
FA - Flush Aluminum, White  
BFA - Black Flush Aluminum  
SFA - Silver Flush Aluminum

Voltage: 120 - 120V  
277 - 277V  
347 - 347V

Options:  
SLL - Spring Loaded Latch  
GMF - Slow Blow Fuse  
GLR - Fast Blow Fuse  
C388 - 3/8" Flex with 3 No. 18 Wires  
C488 - 3/8" Flex with 4 No. 18 Wires  
F0730 - T8, 70CRI, 3000K Lamps, Furnished/Installed  
F0735 - T8, 70CRI, 3500K Lamps, Furnished/Installed  
F0741 - T8, 70CRI, 4100K Lamps, Furnished/Installed  
CSA - Approved for Canadian Standards Association  
EL - Emergency Battery Pack  
PAF - Painted After Fabrication  
MS9 - Master/Slave Pair with 9' harness  
For complete list of options, see options and accessories section.

Ballast:  
3EB8 - 3 Lamp Electronic T8  
3EB8LH - 3 Lamp Electronic T8 <10%THD  
EB8 - Electronic T8  
EB8LH - Electronic T8 <10% THD  
OCT - Magnetic T8 (Octron)  
For a specific ballast vendor, show as option.  
3EB8RLH - 3 Lamp Electronic T8 <10% THD Rapid Start Low Harmonic

Shielding:  
A12 - Pattern 12 Acrylic .100" Nominal (Standard)  
A12.125 - Pattern 12 Acrylic .125" Nominal  
A12.125M - Pattern 12 Acrylic .125" Minimum  
A19 - Pattern 19 Acrylic .156" Male Prism  
IMA - .150 Injection Molded Acrylic .156" Male Prism  
DOP - White Dished Acrylic  
PC1 - Silver Parabolic Louver 1/2" x 1/2" x 1/2"  
PCG1 - Gold Parabolic Louver 1/2" x 1/2" x 1/2"  
PC2 - Silver Parabolic Louver 1 1/2" x 1 1/2" x 1"  
PCG2 - Gold Parabolic Louver 1 1/2" x 1 1/2" x 1"  
For complete list of lenses and louvers, see options and accessories section.

F0835 - T8 82CRI, 3500K Lamps

T26

GTD BY LEESMAN FACTORY INSTALLED



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CO 12/01

Submitted by Leesman Sales

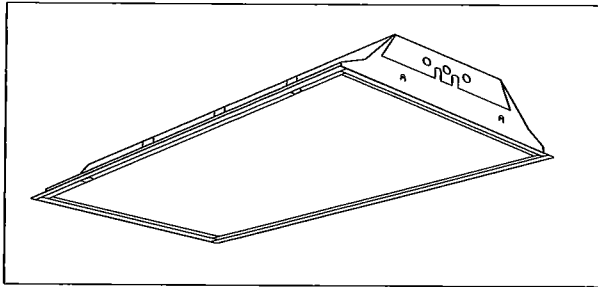


**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST824-332G-FSA12.125-  
24EB8RLH-277-FO835-MS9  
Notes:

**Type:**  
**A32**

LEE07-6119



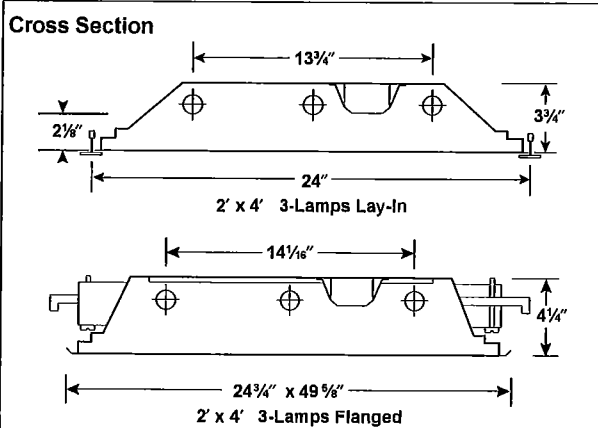
# ST824-332

## SPECIFICATION GRADE T8 TROFFER

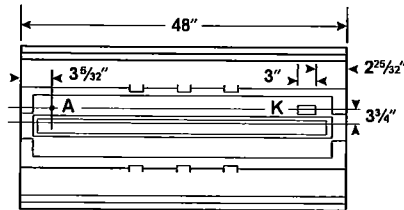
### 2' x 4', 3 T8 Lamps

Type: \_\_\_\_\_

Job Description: \_\_\_\_\_



### Flanged cut out dimensions for single unit only: 24" x 48 7/8"



A - 3/8" Diameter Knockout

K - 2" x 3" through hole for access plate.

NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

### Features

- Optical performance designed for T8 lamp technology.
- 2 1/8" minimum spacing from bottom of lamp to bottom of lens.
- Mechanical light seal.
- Attractive, post-painted door frame with positive action latches.
- Spring loaded latches optional.
- Rolled fixture edges reduce risk of injury during fixture handling and installation.
- Integral T-bar clips quickly secure fixture to grid system without the need for time-consuming loose parts.
- Snap-in ballast covers can be removed when lamps are installed.
- Corner hinging for easy insertion and removal of door frame from either side.
- Optional flush or regressed aluminum shielding frames available with positive action or spring loaded latches.
- Housing ends secured by unique corner interlock and screws.

### Housing

Heavy gauge steel. Die formed for extra rigidity. Grid housings are designed for installation in standard 1 1/2" T-bar ceilings. Integral T-bar clips are located in the end of the housing. Flanged housings for hard ceilings feature overlap flange trim and wing hangers.

### Ballasts

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, magnetic or electronic ballasts.

### Finish

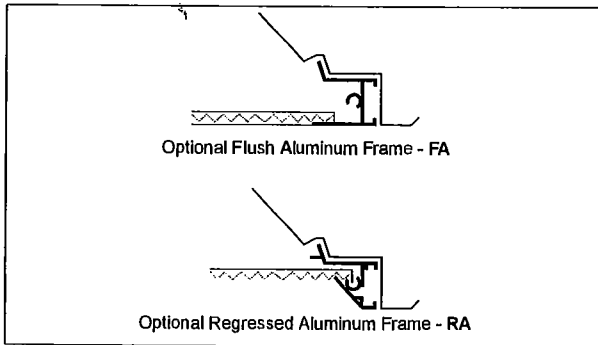
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

### Shielding

100% clear prismatic acrylic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

### Labels

All fixtures carry the UL label. (CSA approval available. Use Suffix "CSA").



Complete ordering information on back. Dimensions and specifications subject to change without notice.

T26



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST824-332G-FSA12.125-  
24EB8RLH-277-FO835-MS9  
Notes:

**Type:**  
**A32**

LEE07-6119

**ST824-332**

2' x 4', 3 T8 Lamps

**SPECIFICATION GRADE TROFFER**

**Columbia LIGHTING**  
Environmental Laboratories

REPORT # 12581  
DATE: 7/27/00

LUMINAIRE: ST824-332G-FSA12-3EB8-PAF  
2' x 4' x 1" LAMP WITH AID 1925  
BALLAST: E8321 (2000H) LUMENS: F3212; BNL FAC. 1.00; WATTS: 84  
LAMPS RATED AT 2300 LUMENS EACH  
LUMINOUS Efficacy: 45.9 1 21.0

REPORTER: PCM .03  
REMARKS: RECESSED  
PLANT: PARL 1.26 NORM 1.36  
PLOT OF NORMAL PLANE SHIELDING: PARL 90 120 150 180 210 240 270 300

**L A M P U L L P O W E R**

0	70	80	90
0	2273	2273	2273
10	2316	2316	2316
20	2359	2359	2359
30	2402	2402	2402
40	2445	2445	2445
50	2488	2488	2488
60	2531	2531	2531
70	2574	2574	2574
80	2617	2617	2617
90	2660	2660	2660
100	2703	2703	2703
110	2746	2746	2746
120	2789	2789	2789
130	2832	2832	2832
140	2875	2875	2875
150	2918	2918	2918
160	2961	2961	2961
170	3004	3004	3004
180	3047	3047	3047
190	3090	3090	3090
200	3133	3133	3133
210	3176	3176	3176
220	3219	3219	3219
230	3262	3262	3262
240	3305	3305	3305
250	3348	3348	3348
260	3391	3391	3391
270	3434	3434	3434
280	3477	3477	3477
290	3520	3520	3520
300	3563	3563	3563
310	3606	3606	3606
320	3649	3649	3649
330	3692	3692	3692
340	3735	3735	3735
350	3778	3778	3778
360	3821	3821	3821
370	3864	3864	3864
380	3907	3907	3907
390	3950	3950	3950
400	3993	3993	3993
410	4036	4036	4036
420	4079	4079	4079
430	4122	4122	4122
440	4165	4165	4165
450	4208	4208	4208
460	4251	4251	4251
470	4294	4294	4294
480	4337	4337	4337
490	4380	4380	4380
500	4423	4423	4423
510	4466	4466	4466
520	4509	4509	4509
530	4552	4552	4552
540	4595	4595	4595
550	4638	4638	4638
560	4681	4681	4681
570	4724	4724	4724
580	4767	4767	4767
590	4810	4810	4810
600	4853	4853	4853
610	4896	4896	4896
620	4939	4939	4939
630	4982	4982	4982
640	5025	5025	5025
650	5068	5068	5068
660	5111	5111	5111
670	5154	5154	5154
680	5197	5197	5197
690	5240	5240	5240
700	5283	5283	5283
710	5326	5326	5326
720	5369	5369	5369
730	5412	5412	5412
740	5455	5455	5455
750	5498	5498	5498
760	5541	5541	5541
770	5584	5584	5584
780	5627	5627	5627
790	5670	5670	5670
800	5713	5713	5713
810	5756	5756	5756
820	5799	5799	5799
830	5842	5842	5842
840	5885	5885	5885
850	5928	5928	5928
860	5971	5971	5971
870	6014	6014	6014
880	6057	6057	6057
890	6100	6100	6100
900	6143	6143	6143
910	6186	6186	6186
920	6229	6229	6229
930	6272	6272	6272
940	6315	6315	6315
950	6358	6358	6358
960	6401	6401	6401
970	6444	6444	6444
980	6487	6487	6487
990	6530	6530	6530
1000	6573	6573	6573

**ZONAL SUMMARY**

Zone	Lumens	Lamp	Flxt.
0-30	2211	25.4	30.0
0-40	3654	42.0	49.6
0-60	6235	71.7	84.6
0-90	7371	84.7	100.0
90-180	0	0.0	0.0
0-180	7371	84.7	100.0

This photometric test was performed using a specific ballast / lamp combination. Extrapolation of these data for other ballast / lamp combinations may produce erroneous results. The ballast factor must be applied to the lumen output rating assigned to the lamp(s) or to the conditioner's values shown. Luminaire efficacy rating (LER) by IEEE LED-1993.

LER = 45.9 TESTED BY: [Signature] APPROVED BY: [Signature]

TEST RUN IN ACCORDANCE TO CURRENT I.E.S. PUBLISHED PROCEDURES

**ST824-332G-FSA12-3EB8-PAF**  
Report No: 12581 Efficiency: 84.7 S/IMH: Parl 1.26 Norm 1.36

**Coefficients of Utilization**

Zonal Cavity Method				Floor Reflectance - .20								
RC	80			70			50			0		
RW	70	50	30	10	70	50	30	10	50	30	10	0
1	93	90	87	84	91	88	85	83	84	82	80	75
2	86	80	75	71	84	78	74	70	75	72	68	64
3	79	71	65	60	77	70	64	60	68	63	59	56
4	73	64	57	52	71	63	57	52	61	55	51	48
5	67	57	50	45	65	56	49	44	54	48	44	41
6	62	51	44	39	60	50	44	39	49	43	38	36
7	57	46	39	34	56	45	39	34	44	38	33	31
8	52	41	34	29	51	41	34	29	40	33	29	27
9	48	37	30	25	47	36	30	25	35	29	25	23
10	45	34	27	22	44	33	27	22	32	26	22	21

**Zonal Summary**

Zone	Lumens	Lamp	Flxt.
0-30	2211	25.4	30.0
0-40	3654	42.0	49.6
0-60	6235	71.7	84.6
0-90	7371	84.7	100.0
90-180	0	0.0	0.0
0-180	7371	84.7	100.0

**Energy Data**

LER: FL-77 Energy Cost: \$3.12  
Input Watts: 84 BF: .88

The above energy calculations were conducted using a specific lamp/ ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.

\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per kWh.

**Ordering Information**

Example: ST824-332G-FSA12-EB8120-F0735-C488

ST8 24 - 3 32 G - FS A12.125 - 24EB8RLH 277 - MS9 - FO835

<b>Series</b>	<b>Voltage</b> 120 - 120V 277 - 277V 347 - 347V	<b>Options</b> SLL - Spring Loaded Latch GMF - Slow Blow Fuse GLR - Fast Blow Fuse C388 - 3/8" Flex with 3 No. 18 Wires C488 - 3/8" Flex with 4 No. 18 Wires FO730 - T8, 70CRI, 3000K Lamps, Furnished/Installed FO736 - T8, 70CRI, 3500K Lamps, Furnished/Installed FO741 - T8, 70CRI, 4100K Lamps, Furnished/Installed CSA - Approved for Canadian Standards Association EL - Emergency Battery Pack PAF - Painted After Fabrication MS9 - Master/Slave Pair with 9' harness
<b>Fixture Size</b> 24 - 2' x 4'	<b>Ballast</b> 3EB8 - 3 Lamp Electronic T8 3EB8LH - 3 Lamp Electronic T8 <10% THD E88 - Electronic T8 EB8LH - Electronic T8 <10% THD OCT - Magnetic T8 (Octron) For a specific ballast vendor, show as option.	For complete list of options, see options and accessories section.
<b>No. of Lamps</b> 3 - Three	24EB8RLH - (1) 2-Lamp & (1) 4-Lamp Electronic T8 <10% THD Rapid Start Low Harmonic	FO835 - T8 82CRI, 3500K Lamps
<b>Lamp Type</b> 32 - 4', T8, 32 Watt	<b>Shielding</b> A12 - Pattern 12 Acrylic .100" Nominal (Standard) A12.125 - Pattern 12 Acrylic .125" Nominal A12.125M - Pattern 12 Acrylic .125" Minimum A19 - Pattern 19 Acrylic .156" Male Prism IMA - .150 Injection Molded Acrylic .156" Male Prism DOP - White Dishd Acrylic PC1 - Silver Parabolic Louver 1/2" x 1/2" x 1/2" PCG1 - Gold Parabolic Louver 1/2" x 1/2" x 1/2" PC2 - Silver Parabolic Louver 1 1/2" x 1 1/2" x 1" PCG2 - Gold Parabolic Louver 1 1/2" x 1 1/2" x 1"	For complete list of lenses and louvers, see options and accessories section.
<b>Ceiling Type</b> G - Inverted T-Bar F - Overlap Flange		
<b>Door Style</b> FS - Flush Steel RA - Regressed Aluminum, White BRA - Black Regressed Aluminum SRA - Silver Regressed Aluminum FA - Flush Aluminum, White BFA - Black Flush Aluminum SFA - Silver Flush Aluminum		





Submitted by Leesman Sales



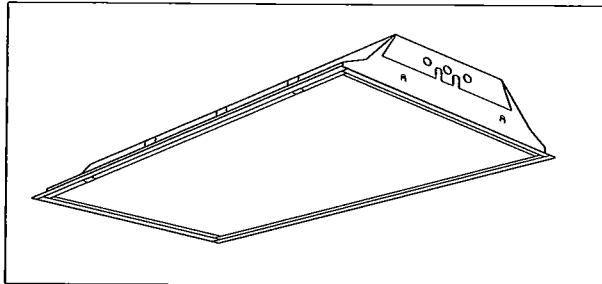
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST824-332G-FSA12.125-24EB8RLH-277-FO835-  
MS9-GTD BY LEESMAN FACTORY INSTALLED

**Type:**  
**A32GTD**

Notes:

LEE07-6119



# ST824-332

## SPECIFICATION GRADE

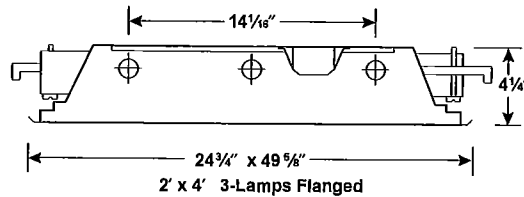
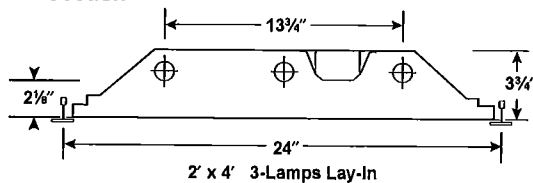
### T8 TROFFER

#### 2' x 4', 3 T8 Lamps

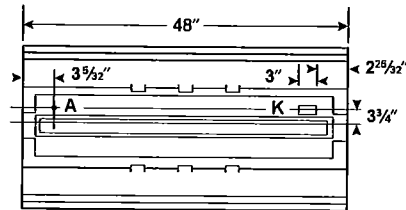
Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

#### Cross Section



#### Flanged cut out dimensions for single unit only: 24" x 48 7/8"



A - 7/8" Diameter Knockout  
K - 2" x 3" through hole for access plate.

**NOTE:** All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

#### Features

- Optical performance designed for T8 lamp technology.
- 2 1/8" minimum spacing from bottom of lamp to bottom of lens.
- Mechanical light seal.
- Attractive, post-painted door frame with positive action latches.
- Spring loaded latches optional.
- Rolled fixture edges reduce risk of injury during fixture handling and installation.
- Integral T-bar clips quickly secure fixture to grid system without the need for time-consuming loose parts.
- Snap-in ballast covers can be removed when lamps are installed.
- Corner hinging for easy insertion and removal of door frame from either side.
- Optional flush or regressed aluminum shielding frames available with positive action or spring loaded latches.
- Housing ends secured by unique corner interlock and screws.

#### Housing

Heavy gauge steel. Die formed for extra rigidity. Grid housings are designed for installation in standard 1 5/8" T-bar ceilings. Integral T-bar clips are located in the end of the housing. Flanged housings for hard ceilings feature overlap flange trim and wing hangers.

#### Ballasts

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, magnetic or electronic ballasts.

#### Finish

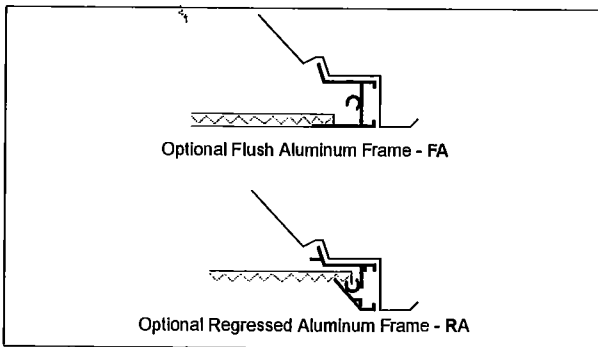
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

#### Shielding

100% clear prismatic acrylic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

#### Labels

All fixtures carry the UL label. (CSA approval available. Use Suffix "CSA").



Complete ordering information on back. Dimensions and specifications subject to change without notice.

T26

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
ST824-332G-FSA12.125-24EB8RLH-277-F0835-  
MS9-GTD BY LEESMAN FACTORY INSTALLED

**Type:**  
**A32GTD**

Notes:

LEE07-6119

**ST824-332**

2' x 4', 3 T8 Lamps

**SPECIFICATION GRADE TROFFER**

**Columbia LIGHTING**  
Environmental Laboratories

REPORT # 12581  
DATE: 7/25/00

LUMINAIRE: ST824-332G-FSA12-3EB8-PAF  
LAMP: 32-4' T8, 32 WATT  
LUMENS RATED AT 2500 LUMENS EACH  
LUMINOUS Efficacy: 84.7 lm/w

PHOTO METER: PCH-103  
MOUNTING: RECESSED

SPFH: PARL 1-26 NORM 1-36  
PLOT OF MERIDIAN PLANE  
SHIELDING: PARL 90 FORM 40

**L A M P L U M E N S P O W E R**

Dist	0	22.5	45	67.5	90
C	2773	2773	2773	2773	2773
S	2751	2763	2772	2776	2784
10	2726	2731	2750	2760	2758
15	2650	2679	2713	2733	2735
20	2574	2606	2654	2692	2697
25	2490	2511	2560	2607	2617
30	2395	2429	2476	2531	2544
35	2167	2233	2333	2391	2412
40	1967	2037	2140	2210	2244
45	1725	1793	1901	1970	2006
50	1440	1513	1607	1660	1700
55	1162	1245	1321	1372	1435
60	873	927	986	1027	1082
65	600	639	691	702	703
70	431	444	459	469	474
75	308	309	320	322	326
80	206	190	170	218	217
85	111	103	112	110	116
90	0	0	0	0	0

**ZONAL SUMMARY**

ZONE	LUMENS	LAMP	FIXT.
0-30	2211	25.4	30.0
0-40	3654	42.0	49.6
0-60	6235	71.7	84.6
0-90	7371	84.7	100.0
90-180	0	0.0	0.0
0-180	7371	84.7	100.0

TEST RUN IN ACCORDANCE TO CURRENT I.E.S. PUBLISHED PROCEDURES

**ST824-332G-FSA12-3EB8-PAF**

Report No: 12581 Efficiency: 84.7 S/MH: Parl 1.26 Norm 1.36

**Coefficients of Utilization**

RC	80				70				50				0			
	RW	70	50	30	10	70	50	30	10	50	30	10	0	30	10	0
1	93	90	87	84	91	88	85	83	84	82	80	75	75	72	68	64
2	86	80	75	71	84	78	74	70	75	72	68	64	64	63	59	56
3	79	71	65	60	77	70	64	60	68	63	59	56	56	55	51	48
4	73	64	57	52	71	63	57	52	61	55	51	48	48	48	44	41
5	67	57	50	45	65	56	49	44	54	48	44	41	41	43	38	36
6	62	51	44	39	60	50	44	39	49	43	38	36	36	38	33	31
7	57	46	39	34	56	45	39	34	44	38	33	31	31	33	29	27
8	52	41	34	29	51	41	34	29	40	33	29	27	27	25	23	23
9	48	37	30	25	47	36	30	25	35	29	25	23	23	25	23	23
10	45	34	27	22	44	33	27	22	32	26	22	21	21	22	21	21

**Zonal Summary**

Zone	Lumens	Lamp	Fixt.
0-30	2211	25.4	30.0
0-40	3654	42.0	49.6
0-60	6235	71.7	84.6
0-90	7371	84.7	100.0
90-180	0	0.0	0.0
0-180	7371	84.7	100.0

**Energy Data**

LER: FL-77 Energy Cost: \$3.12  
Input Watts: 84 BF: .88

The above energy calculations were conducted using a specific lamp/ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.

\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

**Ordering Information**

Example: ST824-332G-FSA12-EB8120-F0735-C488

**STB** 24-3 32 G - FS A12.125 - 24EB8RLH 277 - MS9 F0835

<b>Series</b>	<b>Voltage</b> 120 - 120V 277 - 277V 347 - 347V	<b>Options</b> SLL - Spring Loaded Latch GMF - Slow Blow Fuse GLR - Fast Blow Fuse C388 - 3/8" Flex with 3 No. 18 Wires C488 - 3/8" Flex with 4 No. 18 Wires FO730 - T8, 70CRI, 3000K Lamps, Furnished/Installed FO735 - T8, 70CRI, 3500K Lamps, Furnished/Installed FO741 - T8, 70CRI, 4100K Lamps, Furnished/Installed CSA - Approved for Canadian Standards Association EL - Emergency Battery Pack PAF - Painted After Fabrication MS9 - Master/Slave Pair with 9' harness
<b>Fixture Size</b> 24 - 2' x 4'	<b>Ballast</b> 3EB8 - 3 Lamp Electronic T8 3EB8LH - 3 Lamp Electronic T8 <10% THD EB8 - Electronic T8 EB8LH - Electronic T8 <10% THD OCT - Magnetic T8 (Octron) For a specific ballast vendor, show as option.	For complete list of options, see options and accessories section.
<b>No. of Lamps</b> 3 - Three	24EB8RLH - (1) 2-Lamp & (1) 4-Lamp Electronic T8 <10% THD Rapid Start Low Harmonic	
<b>Lamp Type</b> 32 - 4', T8, 32 Watt	<b>Shielding</b> A12 - Pattern 12 Acrylic, 100" Nominal (Standard) A12.125 - Pattern 12 Acrylic, 125" Nominal A12.125M - Pattern 12 Acrylic, 125" Minimum A19 - Pattern 19 Acrylic, 156" Male Prism IMA - 150 Injection Molded Acrylic, 156" Male Prism DOP - White Dished Acrylic PC1 - Silver Parabolic Louver 1/2" x 1/2" x 1/2" PCG1 - Gold Parabolic Louver 1/2" x 1/2" x 1/2" PC2 - Silver Parabolic Louver 1 1/2" x 1 1/2" x 1" PCG2 - Gold Parabolic Louver 1 1/2" x 1 1/2" x 1"	F0835 - T8 82CRI, 3500K Lamps
<b>Ceiling Type</b> G - Inverted T-Bar F - Overlap Flange		
<b>Door Style</b> FS - Flush Steel RA - Regressed Aluminum, White BRA - Black Regressed Aluminum SRA - Silver Regressed Aluminum FA - Flush Aluminum, White BFA - Black Flush Aluminum SFA - Silver Flush Aluminum		

For complete list of lenses and louvers, see options and accessories section.

T26



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GTD BY LEESMAN FACTORY INSTALLED

CO 12/01

Submitted by Leesman Sales



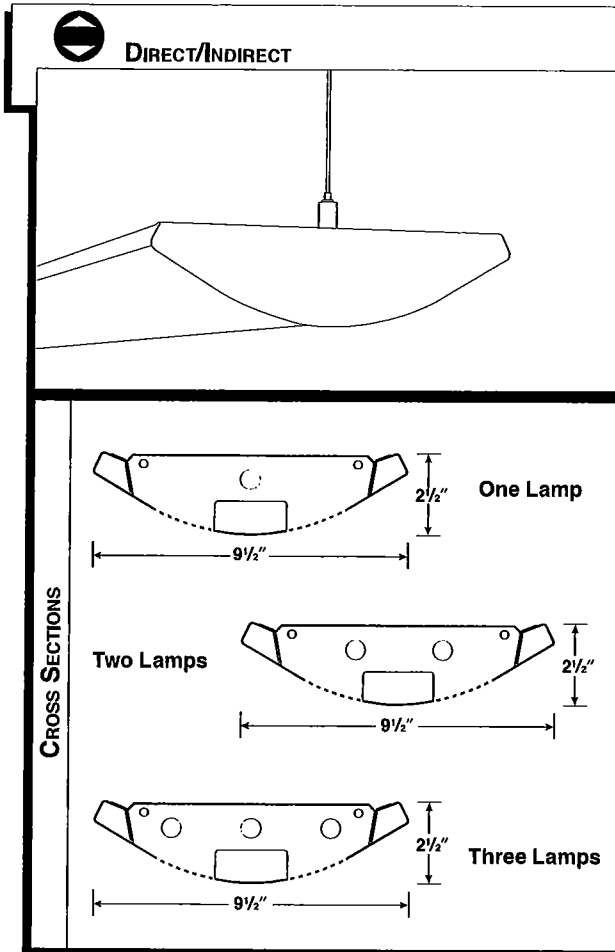
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CV-2T5-PERF-PM 18" FEED/CM 18"  
NON FEED-EB5277-MW-8-L/R

Notes:

**Type:**  
**B28**

LEE07-6119



# Cûrv

PERFORATED HOUSING, T5 OR T5HO

TYPE

Project: \_\_\_\_\_

Location: \_\_\_\_\_

### CONSTRUCTION

The Cûrv series is constructed of heavy 20-gauge perforated steel with a 9 1/2" x 2 1/2" profile. The perforations measure .0625" in diameter and provide a 23% opening per square inch (refer to the TID sheet for an illustration) and have a white acrylic diffuser overlay. Fixtures are available with up to three T5 or T5HO lamps. The exact shape of the housing is maintained by the use of an inner die cast plate at each fixture end. The housing is designed to wrap around the plate and secures on top with concealed screws to ensure housing tolerances are consistent. These die cast aluminum end caps and aligners provide zero tolerance alignment between fixtures, resulting in consistently straight rows with no snaking. The luminaire comes standard with a painted white steel reflector with specular inserts on the sides. A high efficiency reflector (HRF) option is constructed of high reflectance specular material and allows for wide distribution with maximum efficiency. An economical painted white reflector (WR) is available.

### FINISH

The housing and all painted parts are treated with a multi-stage phosphate bonding process before being finished. Parts are then finished with a white RAL powder coat finish for maximum consistent coverage and longevity.

### MOUNTING

The Cûrv is designed for ceiling suspension and is provided with an aircraft cable suspension mechanism. The fixed cable has a total vertical adjustment of 1 1/4". End of cable barrel screws into a standard 1/4" bolt brought down from the ceiling. Cover plates are provided to shield the ceiling cutout. A straight or optional coil cord is available for feed locations. A feed canopy is provided for each feed location. All fixtures are suspended in modular increments and must be supported at each fixture-housing end. Refer to the Cûrv TID sheet for actual hanging points for specific row information.

### LABELS AND ELECTRICAL

All fixtures bear appropriate UL or CSA labels. Fixtures are prewired with small case electronic T5 or T5HO ballasts and are available in 120, 277, or 347 volt. All fixtures are wired for single circuit operation, but additional circuits can be supplied as an option by designating IBOB or LR switching.

Dimensions and specifications subject to change without notice.

CV-2T5-PERF-PM-CM 18-EB5 277-MW-8'-L/R

<b>ORDERING INFORMATION</b>	<b>Model</b> CV - Cûrv	<b>Suspension Length</b> 18 - 18" 24 - 24" 36 - 36" 48 - 48" Other lengths available on request.	<b>Voltage</b> 120 - 120V 277 - 277V 347 - 347V U - 120V-277V	<b>Fixture Length</b> Single or Row Individual Lengths. Note: Fixtures in rows are modular & will be identified as components within the row by their individual lengths. Lengths for this product are: 4 - 4' 8 - 8' 12 - 12'
	<b>Row Length</b> Specify entire row		<b>Finish</b> MW - Matte White (Std.) See MTX-1 for other color selections.	
	<b>Lamp Type &amp; Profile</b> 1T5 - One T5 Lamp 2T5 - Two T5 Lamps 3T5 - Three T5 Lamps 1T5HO - One T5HO Lamp 2T5HO - Two T5HO Lamps 3T5HO - Three T5HO Lamps		<b>Ballast Type</b> EP - Electronic, Programmed Start (Standard for T5 & T5HO, optional for T8) EB5 - Electronic T5 Unless specified, Alera will use fewest ballasts possible.	<b>Options</b> WR - White Reflector HRF - High Efficiency Reflector TBAR - T-Bar Mounting Clip DL - Damp Label IB/OB - Inboard/Outboard Switching L/R - Left/Right Switching EL - Emergency Battery Pack CSA - UL listed or CSA certified for Canada SCE - Shallow Cûrv End Cap BN - Bull Nose End Cap
	<b>Housing Type</b> PERF - Perforated HSLT - Horizontal Slot VSLT - Vertical Slot	<b>Mounting Method</b> FCM - Fixed Aircraft Cable Mount (Non-adjustable Std.) CM - Adjustable Aircraft Cable Mount		

18" NON FEED



Subject to change without notice.

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18-2  
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**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CV-2T5-PERF-PM 18" FEED/CM 18"  
NON FEED-EB5277-MW-8-L/R

**Type:**  
**B28**

Notes:

LEF07-6119

**PHOTOMETRICS**

**CV, CÛRV**

**ONE LAMP STANDRAD REFLECTOR**

Cat. No.: CV-1T5HO-PERF-E  
Lamps: One FP54/835/HO  
Ballasts: QT1X54/120PHO  
Test No.: ITL51565  
Efficiency: 98.9%

Candela Curve (90° Plane)

Deg.	Parl.	45°	Norm.
0	3	3	3
5	4	3	2
15	3	6	6
25	2	6	5
35	2	4	3
45	1	2	2
55	0	2	2
65	0	0	0
75	0	0	0
85	0	0	0
90	0	0	0
95	36	170	76
105	186	1074	1126
115	367	1036	1688
125	541	815	1274
135	700	867	1023
145	827	927	1021
155	929	976	1027
165	997	1010	1027
175	1031	1026	1027
180	1027	1027	1027

RC RW	80				70				50				0			
	70	50	30	10	70	50	30	10	50	30	10	0	0	0	0	
1	86	82	78	75	73	70	67	65	48	46	45	0	0	0	0	
2	78	71	66	61	66	61	57	53	42	39	37	0	0	0	0	
3	71	63	56	51	60	54	48	44	37	34	31	0	0	0	0	
4	65	55	48	43	55	47	41	37	33	29	26	0	0	0	0	
5	59	49	41	36	50	42	36	31	29	25	22	0	0	0	0	
6	54	43	36	31	46	37	31	27	26	22	19	0	0	0	0	
7	50	39	32	27	42	33	27	23	23	19	16	0	0	0	0	
8	46	35	28	23	39	30	24	20	21	17	14	0	0	0	0	
9	43	32	25	20	36	27	22	18	19	15	13	0	0	0	0	
10	40	29	22	18	34	25	19	16	17	14	11	0	0	0	0	

Zone	Lumens	Lamp	Fixture
0-30	4	0.1	0.1
0-40	6	0.1	0.1
0-50	9	0.2	0.2
0-90	10	0.2	0.2
90-120	2070	41.4	41.8
90-130	2853	57.1	57.7
90-150	4102	82.0	82.9
90-180	4936	98.7	99.8
0-180	4946	98.9	100.0

**ENERGY DATA**  
Energy Cost: \$2.86\* LER: 84  
Input Watts: 59.2 BF: 1.0  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

**ONE LAMP HIGH EFFICIENCY REFLECTOR**

Cat. No.: CV-1T5HO-PERF-EP-HRF  
Lamps: One F54T5  
Ballasts: QT1X54/120PHO  
Test No.: 12987  
Efficiency: 99.2%

Candela Curve (90° Plane)

Deg.	Parl.	45°	Norm.
0	3	3	3
5	3	3	3
15	3	3	3
25	3	3	3
35	3	3	3
45	2	3	3
55	2	2	2
65	1	2	2
75	1	1	2
85	1	1	1
90	3	2	1
95	24	163	105
105	89	1006	952
115	173	1110	1634
125	262	843	1504
135	345	813	1079
145	417	755	983
155	472	684	816
165	510	611	671
175	530	544	552
180	531	531	531

RC RW	80				70				50				0			
	70	50	30	10	70	50	30	10	50	30	10	0	0	0	0	
1	86	82	78	75	73	70	67	65	48	46	45	0	0	0	0	
2	78	72	66	61	67	61	57	53	42	39	37	0	0	0	0	
3	71	63	56	51	61	54	48	44	37	34	31	0	0	0	0	
4	65	55	48	43	55	47	42	37	33	29	26	0	0	0	0	
5	59	49	42	36	50	42	36	31	29	25	22	0	0	0	0	
6	54	43	36	31	46	37	31	27	26	22	19	0	0	0	0	
7	50	39	32	27	43	33	27	23	23	19	16	0	0	0	0	
8	46	35	28	23	39	30	24	20	21	17	14	0	0	0	0	
9	43	32	25	20	36	27	21	18	19	15	12	0	0	0	0	
10	40	29	22	18	34	25	19	15	17	13	11	0	0	0	0	

Zone	Lumens	Lamp	Fixture
0-30	3	0.1	0.1
0-40	4	0.1	0.1
0-60	8	0.2	0.2
0-90	13	0.3	0.3
90-120	1963	44.6	45.0
90-130	2760	62.7	63.2
90-150	3818	86.8	87.5
90-180	4353	98.9	99.7
0-180	4366	99.2	100.0

**ENERGY DATA**  
Energy Cost: \$3.38\* LER: 71  
Input Watts: 61 BF: 1.00  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

**TWO LAMP HIGH EFFICIENCY REFLECTOR**

Cat. No.: CV-2T5HO-PERF-EP-HRF  
Lamps: Two F54T5  
Ballasts: QT2X54/120PHO  
Test No.: 12933  
Efficiency: 97.9%

Candela Curve (90° Plane)

Deg.	Parl.	45°	Norm.
0	7	7	7
5	7	7	6
15	7	7	6
25	7	6	7
35	6	6	5
45	5	5	6
55	4	5	5
65	2	4	5
75	2	2	3
85	1	2	2
90	2	2	2
95	60	265	219
105	207	1300	1387
115	391	2207	2390
125	579	2106	3027
135	756	1837	2635
145	905	1694	2147
155	1022	1529	1816
165	1105	1355	1496
175	1148	1190	1216
180	1155	1155	1155

RC RW	80				70				50				0			
	70	50	30	10	70	50	30	10	50	30	10	0	0	0	0	
1	85	81	77	74	72	69	66	64	47	46	44	0	0	0	0	
2	77	71	65	61	68	60	56	52	42	39	37	0	0	0	0	
3	70	62	55	50	60	53	48	44	36	33	31	0	0	0	0	
4	64	54	47	42	54	47	41	37	32	29	26	0	0	0	0	
5	59	48	41	36	50	41	35	31	29	25	22	0	0	0	0	
6	54	43	36	30	46	37	31	27	25	22	19	0	0	0	0	
7	49	38	31	26	42	33	27	23	23	19	16	0	0	0	0	
8	45	34	27	23	39	30	24	20	21	17	14	0	0	0	0	
9	42	31	24	20	36	27	21	17	19	15	12	0	0	0	0	
10	39	28	22	17	33	24	19	15	17	13	11	0	0	0	0	

Zone	Lumens	Lamp	Fixture
0-30	6	0.1	0.1
0-40	9	0.1	0.1
0-60	17	0.2	0.2
0-90	25	0.3	0.3
90-120	3236	36.8	37.6
90-130	4989	56.7	57.9
90-150	7405	84.2	86.0
90-180	8587	97.6	99.7
0-180	8612	97.9	100.0

**ENERGY DATA**  
Energy Cost: \$3.38\* LER: 71  
Input Watts: 121 BF: 1.00  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

Submitted by Leesman Sales



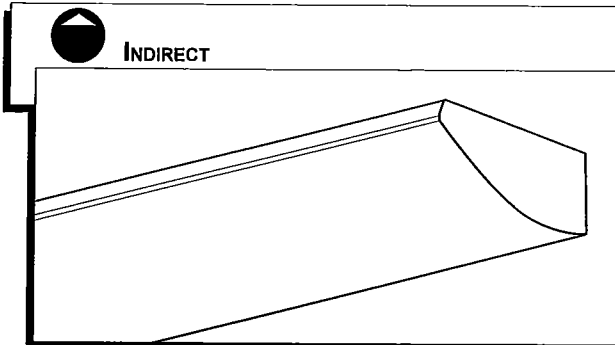
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CV-2T5-PERF-WM-EB5277-MW-8

**Type:**  
**B28W**

Notes:

LEE07-6119



INDIRECT

**Cûrv**

WALL MOUNT

TYPE

Project: \_\_\_\_\_

Location: \_\_\_\_\_

**CONSTRUCTION**

The Cûrv is constructed of heavy 20-gauge perforated or solid steel with a 6/4" x 2 1/2" profile. Perforated sections include a hole pattern that measures .0625" in diameter, provides 23% opening per square inch (refer to the TID sheet for an illustration), and has a white acrylic diffuser overlay.

Fixtures are available with one or two T5, T5 HO, or T8 lamps. The housing is designed to wrap around the inner die cast plate and secure on top with concealed screws to ensure housing tolerances are consistent. Die cast aluminum endcaps and inner end plates have a tongue and groove connection eliminating the possibility of light leak and ensuring straight rows.

**FINISH**

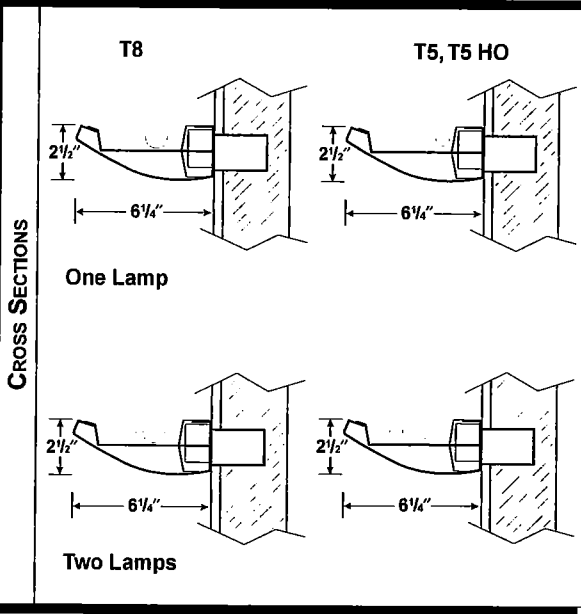
The housing and all painted parts are treated with a multi-stage phosphate bonding process before being finished. Parts are then finished with a white RAL powder coat finish for maximum consistent coverage and longevity.

**MOUNTING**

The Cûrv mounts directly to and is flush with the wall. A 1 3/4" x 3" cutout is provided in the unit to mount to a junction box. A cover plate is used to cover the exposed junction box. Keyhole slots on the back of the unit provide additional support. Consult the Installation Sheet for exact dimensions and location of holes and slots.

**LABELS AND ELECTRICAL**

All fixtures bear appropriate UL or CSA labels. Fixtures are prewired with electronic T5, T5 HO, or T8 ballasts and are available in 120, 277, or 347 volt. All fixtures are wired for single circuit operation, but left/right circuits can be added as an option.



Dimensions and specifications subject to change without notice.

**CV - 2T5 - PERF - WM - EB5 277 - MW - 8 -**

<b>ORDERING INFORMATION</b>	<b>Model</b> CV - Cûrv	<b>Mounting Method</b> WM - Wall Mount	<b>Voltage</b> 120 - 120V 277 - 277V 347 - 347V	<b>Fixture Length</b> 4 - 4' 8 - 8'
	<b>Lamp Type &amp; Profile</b> 1T5 - One T5 Lamp 2T5 - Two T5 Lamps 1T5HO - One T5 HO Lamp 2T5HO - Two T5 HO Lamps 1T8 - One T8 Lamp 2T8 - Two T8 Lamps	<b>Ballast Type</b> EB5 - Electronic T5 EB8 - Electronic T8 EB8LH - Electronic T8, <10% THD Unless specified, Alera will use fewest ballasts possible.	<b>Finish</b> MW - Matte White (Std.) See MIX-1 for other color selections.	<b>Options</b> WR - White Reflector HRF - High Efficiency Reflector SCE - Shallow Cûrv End Cap BN - Bull Nose End Cap DL - Damp Label L/R - Left/Right Switching EL - Emergency Battery Pack CSA - Approved, Canadian Standards Association
	<b>Housing Type</b> PERF - Perforated S - Solid			

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CV-2T5-PERF-WM-EB5277-MW-8

**Type:**  
**B28W**

Notes:

LEE07-6119

**PHOTOMETRICS**

**CV, CURV, WALL MOUNT**

**ONE LAMP - T8**

Cat. No.: CV-1T8-P-WM-EB8-HRF  
Lamps: One F32T8  
Ballasts: REL1P32SC  
Test No.: 13103  
Efficiency: 86.1

Candela Curve (90° Plane)

CANDLEPOWER			
Deg.	Parl.	45°	Norm.
0	10	10	10
5	10	10	10
15	9	11	12
25	8	11	13
35	7	11	17
45	5	14	19
55	3	14	17
65	2	12	13
75	1	7	9
85	1	4	5
90	1	2	3
95	43	67	71
105	197	290	252
115	319	419	553
125	401	473	720
135	448	515	789
145	486	535	783
155	502	535	711
165	503	518	622
175	489	491	511
180	488	488	488

**ENERGY DATA**  
Energy Cost: \$3.64\* LER: 66  
Input Watts: 38 BF: 1.00  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

COEFFICIENTS OF UTILIZATION														
		Effective Floor Cavity Reflectance = 0.20												
RC	RW	80				70				60				0
		70	50	30	10	70	50	30	10	50	30	10		
1	75	71	68	65	64	61	59	57	42	41	39	1		
2	68	62	57	53	58	53	50	46	37	35	33	1		
3	62	55	49	44	53	47	42	38	32	30	27	1		
4	57	48	42	37	48	41	36	32	29	25	23	1		
5	52	42	36	31	44	37	31	27	25	22	19	0		
6	47	38	31	27	40	33	27	23	23	19	17	0		
7	43	34	27	23	37	29	24	20	20	17	14	0		
8	40	30	24	20	34	26	21	17	18	15	12	0		
9	37	27	21	17	32	24	19	15	17	13	11	0		
10	34	25	19	15	29	21	17	13	15	12	10	0		

ZONAL SUMMARY				LUMINANCE SUMMARY			
Zone	Lumens	Lamp	Fixture	Degree	Parl.	45°	Norm.
0-30	7	0.3	0.3	55	34	148	178
0-40	13	0.4	0.5	60	28	162	183
0-60	27	0.9	1.1	65	25	167	184
0-90	42	1.5	1.7	70	31	165	186
90-120	788	27.2	31.5	75	20	164	205
90-130	1235	42.6	49.5	80	20	203	224
90-150	2002	69.0	80.2	85	40	283	324
90-180	2455	84.7	98.3				
0-180	2497	86.1	100.0				

**TWO LAMP - T8**

Cat. No.: CV-2T8-P-WM-EB8-HRF  
Lamps: Two F32T8  
Ballasts: REL2P32SC  
Test No.: 13104  
Efficiency: 81.9

Candela Curve (90° Plane)

CANDLEPOWER			
Deg.	Parl.	45°	Norm.
0	38	38	38
5	38	40	40
15	35	44	46
25	31	44	50
35	26	42	54
45	19	42	56
55	12	40	50
65	8	32	39
75	4	20	27
85	2	8	10
90	2	8	10
95	56	97	99
105	252	395	344
115	462	794	753
125	660	1104	1134
135	639	1272	1390
145	589	1326	1485
155	1104	1351	1443
165	1185	1305	1358
175	1227	1245	1236
180	1228	1228	1228

**ENERGY DATA**  
Energy Cost: \$2.96\* LER: 81  
Input Watts: 69 BF: 1.00  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

COEFFICIENTS OF UTILIZATION														
		Effective Floor Cavity Reflectance = 0.20												
RC	RW	80				70				60				0
		70	50	30	10	70	50	30	10	50	30	10		
1	71	68	65	62	61	59	56	54	41	39	38	2		
2	65	59	55	51	56	51	47	44	36	33	31	1		
3	59	52	47	42	51	45	40	37	31	28	26	1		
4	54	46	40	35	46	40	35	31	28	25	22	1		
5	49	41	34	30	42	35	30	26	24	21	19	1		
6	45	36	30	26	39	31	26	22	22	19	16	1		
7	41	32	26	22	35	28	23	19	20	16	14	1		
8	38	29	23	19	33	25	20	17	18	14	12	1		
9	35	26	20	17	30	23	18	15	16	13	10	0		
10	33	24	18	15	28	21	16	13	14	11	9	0		

ZONAL SUMMARY				LUMINANCE SUMMARY			
Zone	Lumens	Lamp	Fixture	Degree	Parl.	45°	Norm.
0-30	29	0.5	0.6	55	119	410	517
0-40	48	0.8	1.0	60	108	433	527
0-60	90	1.6	1.9	65	106	445	545
0-90	132	2.3	2.8	70	89	440	564
90-120	1106	19.1	23.3	75	91	454	618
90-130	1930	33.3	40.6	80	68	515	704
90-150	3557	61.3	74.9	85	135	756	1026
90-180	4619	79.6	97.2				
0-180	4751	81.9	100.0				

**ONE LAMP - T5 HO**

Cat. No.: CV-1T5HO-P-WM-EB5-WR  
Lamps: One F54T5  
Ballasts: ICN2S54SC  
Test No.: 13174  
Efficiency: 72.9

Candela Curve (90° Plane)

CANDLEPOWER			
Deg.	Parl.	45°	Norm.
0	9	9	9
5	9	9	9
15	8	10	11
25	7	10	11
35	6	10	11
45	4	8	11
55	2	7	9
65	1	5	16
75	0	19	28
85	0	16	13
90	1	13	62
95	34	357	290
105	142	866	988
115	254	997	1267
125	360	1019	1302
135	454	1020	1252
145	532	985	1174
155	592	915	1052
165	633	821	894
175	655	717	731
180	658	658	658

**ENERGY DATA**  
Energy Cost: \$4.44\* LER: 64  
Input Watts: 80 BF: 1.00  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

COEFFICIENTS OF UTILIZATION														
		Effective Floor Cavity Reflectance = 0.20												
RC	RW	80				70				60				0
		70	50	30	10	70	50	30	10	50	30	10		
1	63	60	58	55	54	52	50	48	36	34	33	1		
2	57	53	48	45	49	45	42	39	31	29	27	0		
3	52	46	41	37	45	40	36	32	27	25	23	0		
4	48	41	35	31	41	35	31	27	24	21	19	0		
5	44	36	30	26	37	31	26	23	21	19	16	0		
6	40	32	26	23	34	27	23	20	19	16	14	0		
7	37	29	23	19	31	25	20	17	17	14	12	0		
8	34	26	20	17	29	22	18	15	15	13	10	0		
9	31	23	18	15	27	20	16	13	14	11	9	0		
10	29	21	16	13	25	18	14	11	13	10	8	0		

ZONAL SUMMARY				LUMINANCE SUMMARY			
Zone	Lumens	Lamp	Fixture	Degree	Parl.	45°	Norm.
0-30	7	0.2	0.2	55	25	73	94
0-40	11	0.3	0.3	60	25	67	91
0-60	19	0.4	0.6	65	20	69	216
0-90	45	1.0	1.4	70	12	109	413
90-120	1188	27.0	37.0	75	8	434	627
90-130	1721	39.1	53.7	80	0	886	742
90-150	2609	59.3	81.4	85	24	1097	859
90-180	3162	71.9	98.6				
0-180	3207	72.9	100.0				



**ALERA**  
LIGHTING

3808 N Sullivan Rd, Bldg 29  
Spokane WA 99216 • (509) 921-8300  
www.aleralighting.com



Hubbell Lighting, Inc.

AL 06/02



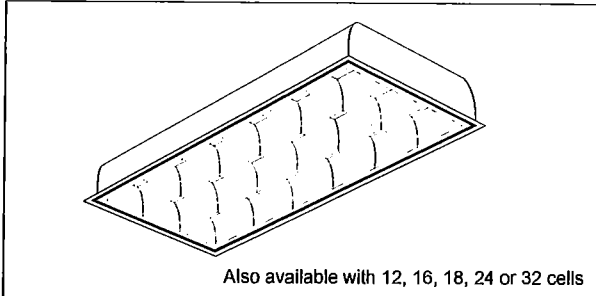
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
P4D24-332G-MA36-S-  
EB8RLH277-FO835  
**Notes:**

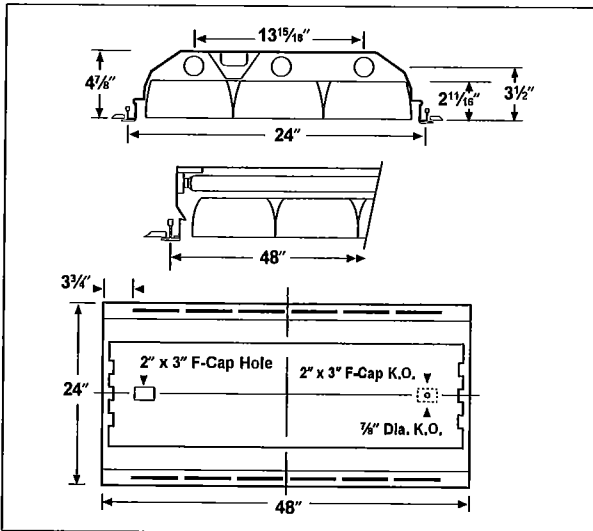
**Type:**  
**C3**

LEE07-6119

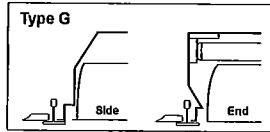
## P4D Parabolic



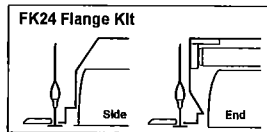
Also available with 12, 16, 18, 24 or 32 cells



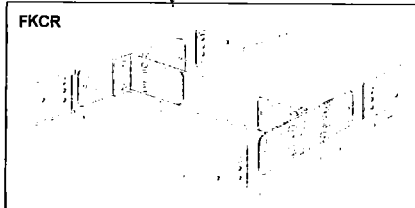
### Ceiling Compatibility



For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 2" allowed.



For hard ceiling applications order FK24 flange kit. Flange kit wires directly into concealed ceiling opening for a clean, finished appearance.



Row cut out dimensions using FK24s & FKCR adapters:  
Width 24 3/4", Length  $[48" \times (\# \text{ in row})] + 3/4"$ . Example:  $(48" \times 2) + 3/4" = 96 3/4"$

**Flange kit cut out dimension for single unit only: 24 3/4" x 48 3/8"**

Complete ordering information on back. Dimensions and specifications subject to change without notice.

## P4D24-3

**2' x 4' Parabolic  
3 Lamp, 18 Cells**

Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

### Features

- Nominal 3" deep parabolic louver provides excellent glare control and maintenance-free operation.
- Duralouver™** anodized aluminum louver resists dents and scratches, holds shape, and maintains precision performance over the life of the louver.
- Matte anodized low iridescent semi-specular aluminum (MA) louver finish (standard) virtually eliminates visibility of fingerprints and construction dust.
- Proper lamp position provides maximum efficiency with controlled widespread distribution.
- Shallow 4 7/8" housing height allows installation in restricted ceiling areas.
- Lightweight and contractor friendly, for ease of installation.
- Full black reveal provides floating louver appearance and full air handling capability.

### Construction

Luminaire housing and end caps are die formed code gauge cold rolled steel. Louver is formed from Duralouver™ anodized aluminum and secured in open or closed position by die formed steel hinges. Louver hinges from either side. Mechanical light trap prevents light leaks. Latches are finger-tip actuated, positive feed type, fabricated of spring steel, and completely concealed in the black reveal.

### Finish

Parts are treated with a five stage phosphate bonding process and finished with a high temperature baked white enamel. For post painted housing, suffix catalog number with PAF. Regressed slots are flat black. Anodized aluminum Duralouver standard finish is matte anodized low iridescent (MA). Also available in low-iridescent semi-specular natural anodized aluminum (LD) or low-iridescent specular aluminum (LS).

### Air Handling

All supply/return and air extract functions are shown on the reverse side of this sheet and are available as a specified option. Directional control vanes and/or extract dampers must be specified. Air extract slots are located out of sight in end caps. Air removal data is on reverse side of sheet.

### Installation

For fast wiring connections without the necessity of opening fixture or wireway, an adapter plate is furnished with each luminaire. A plastic dust cover which eliminates construction dust and protects the lamps is provided as standard.

### Labels & Electrical

All luminaires are listed with UL and bear UL recessed fixture labels. Damp label is available. Completely wired with class "P" thermally protected, resetting, HPF, CBM, energy efficient ballast. Sound rated "A". All ballast leads extend a minimum of 6" through the access plate. Standard wiring is inboard/outboard.

### Ceiling Compatibility

Luminaire is available to fit most standard ceiling types as shown at left. For information on compatibility with specific ceilings, contact your Columbia representative. Four integral T-bar clips are provided for static (-S), air supply/return (-A) and air supply/return with control vanes (-AV). Two non-integral T-bar clips are provided for use with all other air functions. Four non-integral T-bar clips are available as an option.

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
P4D24-332G-MA36-S-  
EB8RLH277-FO835  
Notes:

**Type:**  
**C3**

LEE07-6119

Photometric Report No. 12446

**Columbia**  
LIGHTING

**Environmental Laboratories**

TEL 509 324 7000  
PO Box 2181 (27222) 2908 North Duane Road Spokane, WA 99216

REPL# 1 12446  
DATE: 7/25/00

LUMINAIRE: P4D24-332G-LD36-EBB12C-PAP

2 x 4 3 LAMP W/ 3X6 CELL SEMI-SPEC LAMPER AND PAP HOUSING  
EFL. 1 DISCONTINUOUS LAMPES F3278; BUL. FAC. 1; B3; HATES; B4  
LAMP RATED AT 2700; LUMENS CALD  
LUMINOUS AREA: 40 X 20.9

REFLECTANCE: .97 FCN HOUSING: RECESSED

PLUT OF HORIZONTAL PLANE  
SHIELDING: PART 21 PART 22

CANDLE POWER

0	22.5	45	67.5	90	
0	2446	2446	2446	2446	
5	2424	2425	2446	2422	2447
10	2379	2400	2426	2465	2476
15	2315	2387	2420	2491	2513
20	2236	2287	2403	2509	2547
25	2142	2216	2375	2496	2545
30	2025	2125	2323	2492	2530
35	1907	2041	2258	2311	2362
40	1762	1930	2285	2274	2375
45	1605	1799	2293	2229	2333
50	1410	1675	1940	1745	1844
55	1211	1440	1200	809	859
60	971	1120	651	622	598
65	692	659	379	265	222
70	227	205	134	62	50
75	41	44	34	7	7
80	18	17	14	11	9
85	5	5	4	3	2
90	0	0	0	0	0

**ZONAL SUMMARY**

ZONE	LUMENS	LAMP	FIXT
0-30	2600	23.1	30.8
3-40	2480	40.0	55.2
40-60	6019	49.2	92.2
60-70	5227	75.0	100.0
70-80	0	0	0
80-100	0	0	0

This photometric test was performed using a specific ballast / lamp combination. Extrapolation of these data for other ballast / lamp combinations may produce erroneous results. The ballast factor must be adjusted to the lamp output rating assigned to the lamp(s) or to the manufacturer values shown. Luminaire efficacy rating (LER) per IESNA IES-1993.

LER = FP-68 TESTED BY: S.L. APPROVED BY: R

TEST IN ACCORDANCE TO CURRENT I.E.S. PUBLISHED PROCEDURES

Coefficients of Utilization

**Coefficients of Utilization**

Zonal Cavity Method

RC	Floor Reflectance - .20												
	80		70		50		0						
RW	70	50	30	10	70	50	30	10	50	30	10	0	0
1	84	81	78	76	82	79	77	75	76	74	73	68	68
2	78	73	69	66	76	72	68	65	69	66	63	60	60
3	72	66	61	57	70	65	60	56	62	59	55	52	52
4	67	59	53	49	65	58	53	49	56	52	48	46	46
5	61	53	47	42	60	52	46	42	50	45	42	40	40
6	56	47	41	37	55	47	41	37	45	40	36	35	35
7	52	42	36	32	51	42	36	32	41	36	32	30	30
8	48	38	32	28	46	37	32	28	36	31	27	26	26
9	44	34	28	24	43	33	28	24	33	27	24	22	22
10	40	31	25	21	39	30	25	21	29	24	21	19	19

Visual Comfort Probability

Reflectance - 80, 50, 20  
Work Plane Illumination - 100 FC@ 2.5 ft.

**VCP**

Room Dimensions	Luminaire Lengthwise	Luminaire Crosswise	VCP					
			8.5	10.0	13.0	16.0		
W L	Ht.	Ht.	8.5	10.0	13.0	16.0		
20 20	70	66	67	77	82	78	75	77
20 40	77	72	65	62	86	83	79	75
30 30	78	74	65	64	87	82	76	71
30 60	82	79	71	65	87	84	82	77
40 40	82	79	71	64	88	86	81	74
40 60	83	81	74	67	88	86	83	77
60 30	79	76	71	69	88	85	80	73
60 40	82	80	74	67	88	87	83	75
60 60	83	82	76	70	88	87	85	78

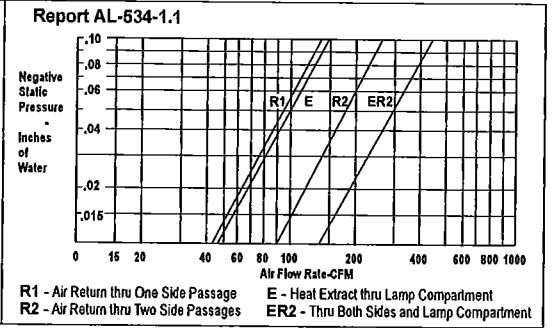
Energy Data

**LER: FP-68** **Energy Cost: \$3.53\***  
**Input Watts: 84** **BF: .88**

The above energy calculations were conducted using a specific lamp/ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.

\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

Return & Extract Air Data



Ordering Information

**P4D 24-332G-MA36-S-EB8RLH 277-FO835**

<b>Model</b> P4D - P4D, Duralouper Parabolic	<b>No. Cells Lengthwise</b> 6 - Six 8 - Eight	<b>Voltage</b> 120 - 120V 277 - 277V 347 - 347V UNV - 120V/277V (T8 w/LH only)	<b>Options</b> FK24 - 2"x4" Single Flange Kit FKCR - Flange Kit Row Adapter Brackets** 2BC - 2 Ballast Covers GMF - Slow Blow Fuse GLR - Fast Blow Fuse EL - Emergency Battery Pack MS9 - Master/Satellite Pair with 9' Harness FO730 - T8 Lamp Installed 70 CRI, 3000 K FO735 - T8 Lamp Installed 70 CRI, 3500 K FO741 - T8 Lamp Installed 70 CRI, 4100 K TB - Two Bulk T-Bar Clips 4TB - Four Bulk T-Bar Clips **See page T44 for details.
<b>Fixture Size</b> 24 - 2' x 4'	<b>No. Cells Crosswise</b> 2 - Two 3 - Three 4 - Four	<b>Ballast</b> LE - Energy Saving Magnetic T12 EBB - Electronic T8 EB8LH - Electronic T8 <10% THD 3EBB - 3-Lamp Electronic T8 3EB8LH - 3-Lamp Electronic T8 <10% THD 24EBB - (1) 2-Lamp & (1) 4-Lamp Electronic T8 (for MS9) 24EB8LH - (1) 2-Lamp & (1) 4-Lamp Electronic T8 (for MS9) <10% THD	<b>Air Handling Function</b> S - Static A - Air handling AV - Air handling w/supply vanes C - Combination supply/extract CV - Combination supply vanes/extract CD - Combination supply/extract dampers CVD - Combination supply vanes extract dampers H - Heat extract HD - Heat extract w/dampers
<b>Lamp Type</b> 32 - 4', 32 Watt, T8 40 - 4', 40 Watt, T12	<b>Louver Finish</b> MA - Matte Anodized Low Intensity Semi-Specular (Std.) LD - Low Intensity Semi-Specular LS - Low Intensity Specular Aluminum	<b>For a specific ballast vendor, show as option.</b>	

(For hard ceilings use flange kit; see options)

P36.2



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EB8RLH - Electronic T8 <10% THD Rapid Start Low Harmonic

FO835 - T8 82CRI, 3500K Lamps

CO 06/02



Submitted by Leesman Sales



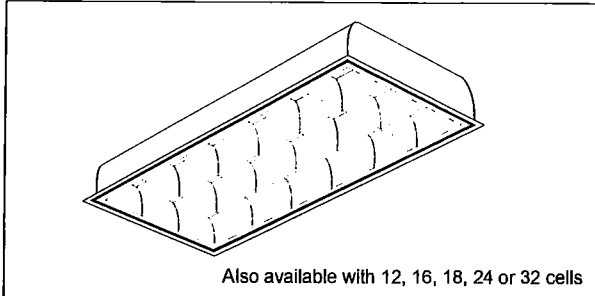
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
P4D24-332G-MA36-S-  
3EB8RLH277-FO835  
Notes:

**Type:**  
**C31**

LEE07-6119

## P4D Parabolic



Also available with 12, 16, 18, 24 or 32 cells

## P4D24-3 2' x 4' Parabolic 3 Lamp, 18 Cells

Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

### Features

- Nominal 3" deep parabolic louver provides excellent glare control and maintenance-free operation.
- **Duralouver™** anodized aluminum louver resists dents and scratches, holds shape, and maintains precision performance over the life of the louver.
- Matte anodized low iridescent semi-specular aluminum (MA) louver finish (standard) virtually eliminates visibility of fingerprints and construction dust.
- Proper lamp position provides maximum efficiency with controlled widespread distribution.
- Shallow 4 7/8" housing height allows installation in restricted ceiling areas.
- Lightweight and contractor friendly, for ease of installation.
- Full black reveal provides floating louver appearance and full air handling capability.

### Construction

Luminaire housing and end caps are die formed code gauge cold rolled steel. Louver is formed from DuraLouver™ anodized aluminum and secured in open or closed position by die formed steel hinges. Louver hinges from either side. Mechanical light trap prevents light leaks. Latches are finger-tip actuated, positive feed type, fabricated of spring steel, and completely concealed in the black reveal.

### Finish

Parts are treated with a five stage phosphate bonding process and finished with a high temperature baked white enamel. For post painted housing, suffix catalog number with PAF. Regressed slots are flat black. Anodized aluminum DuraLouver standard finish is matte anodized low iridescent (MA). Also available in low-iridescent semi-specular natural anodized aluminum (LD) or low-iridescent specular aluminum (LS).

### Air Handling

All supply/return and air extract functions are shown on the reverse side of this sheet and are available as a specified option. Directional control vanes and/or extract dampers must be specified. Air extract slots are located out of sight in end caps. Air removal data is on reverse side of sheet.

### Installation

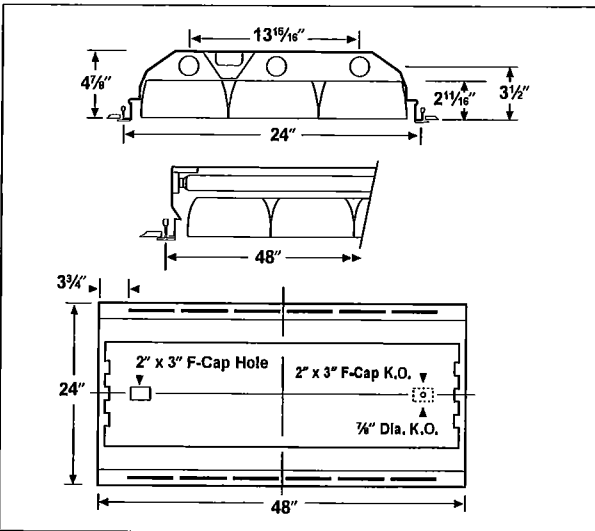
For fast wiring connections without the necessity of opening fixture or wireway, an adapter plate is furnished with each luminaire. A plastic dust cover which eliminates construction dust and protects the lamps is provided as standard.

### Labels & Electrical

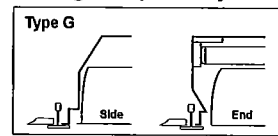
All luminaires are listed with UL and bear UL recessed fixture labels. Damp label is available. Completely wired with class "P" thermally protected, resetting, HPF, CBM, energy efficient ballast. Sound rated "A". All ballast leads extend a minimum of 6" through the access plate. Standard wiring is inboard/outboard.

### Ceiling Compatibility

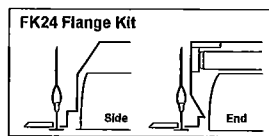
Luminaire is available to fit most standard ceiling types as shown at left. For information on compatibility with specific ceilings, contact your Columbia representative. Four integral T-bar clips are provided for static (-S), air supply/return (-A) and air supply/return with control vanes (-AV). Two non-integral T-bar clips are provided for use with all other air functions. Four non-integral T-bar clips are available as an option.



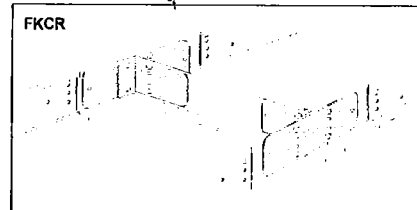
### Ceiling Compatibility



For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 2" allowed.



For hard ceiling applications order FK24 flange kit. Flange kit wires directly into concealed ceiling opening for a clean, finished appearance.



For flanged fixtures in row configurations, the FKCR adapter bracket kit is required in addition to the FK24 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK24 & (1) FKCR)

Row cut out dimensions using FK24s & FKCR adapters:  
Width 24 3/8", Length [48"x(# in row)+3/8"]. Example: (48"x2)+3/8"=96 3/8"

**Flange kit cut out dimension for single unit only: 24 3/8" x 48 3/8"**

Complete ordering information on back. Dimensions and specifications subject to change without notice.



Submitted by Leesman Sales



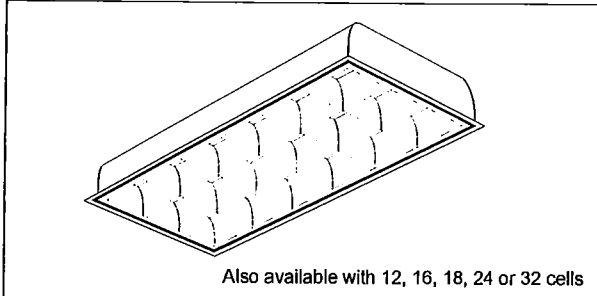
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
P4D24-332G-MA36-S-  
24EB8RLH277-FO835-MS9  
Notes:

**Type:**  
**C32**

LEE07-6119

## P4D Parabolic



Also available with 12, 16, 18, 24 or 32 cells

## P4D24-3 2' x 4' Parabolic 3 Lamp, 18 Cells

Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

### Features

- Nominal 3" deep parabolic louver provides excellent glare control and maintenance-free operation.
- **Duralouver™** anodized aluminum louver resists dents and scratches, holds shape, and maintains precision performance over the life of the louver.
- Matte anodized low iridescent semi-specular aluminum (MA) louver finish (standard) virtually eliminates visibility of fingerprints and construction dust.
- Proper lamp position provides maximum efficiency with controlled widespread distribution.
- Shallow 4 7/8" housing height allows installation in restricted ceiling areas.
- Lightweight and contractor friendly, for ease of installation.
- Full black reveal provides floating louver appearance and full air handling capability.

### Construction

Luminaire housing and end caps are die formed code gauge cold rolled steel. Louver is formed from Duralouver™ anodized aluminum and secured in open or closed position by die formed steel hinges. Louver hinges from either side. Mechanical light trap prevents light leaks. Latches are finger-tip actuated, positive feed type, fabricated of spring steel, and completely concealed in the black reveal.

### Finish

Parts are treated with a five stage phosphate bonding process and finished with a high temperature baked white enamel. For post painted housing, suffix catalog number with PAF. Regressed slots are flat black. Anodized aluminum Duralouver standard finish is matte anodized low iridescent (MA). Also available in low-iridescent semi-specular natural anodized aluminum (LD) or low-iridescent specular aluminum (LS).

### Air Handling

All supply/return and air extract functions are shown on the reverse side of this sheet and are available as a specified option. Directional control vanes and/or extract dampers must be specified. Air extract slots are located out of sight in end caps. Air removal data is on reverse side of sheet.

### Installation

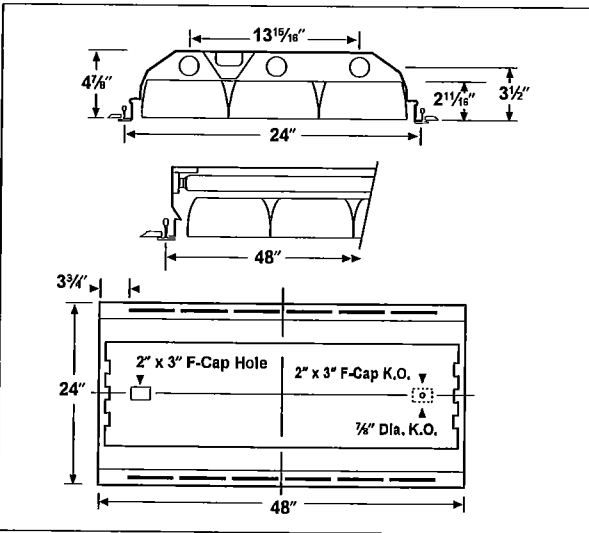
For fast wiring connections without the necessity of opening fixture or wireway, an adapter plate is furnished with each luminaire. A plastic dust cover which eliminates construction dust and protects the lamps is provided as standard.

### Labels & Electrical

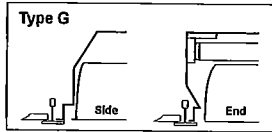
All luminaires are listed with UL and bear UL recessed fixture labels. Damp label is available. Completely wired with class "P" thermally protected, resetting, HPF, CBM, energy efficient ballast. Sound rated "A". All ballast leads extend a minimum of 6" through the access plate. Standard wiring is inboard/outboard.

### Ceiling Compatibility

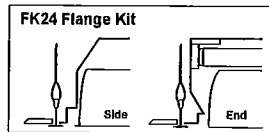
Luminaire is available to fit most standard ceiling types as shown at left. For information on compatibility with specific ceilings, contact your Columbia representative. Four integral T-bar clips are provided for static (-S), air supply/return (-A) and air supply/return with control vanes (-AV). Two non-integral T-bar clips are provided for use with all other air functions. Four non-integral T-bar clips are available as an option.



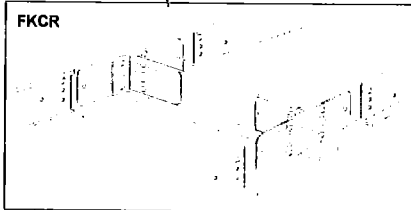
### Ceiling Compatibility



For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 2" allowed.



For hard ceiling applications order FK24 flange kit. Flange kit wires directly into concealed ceiling opening for a clean, finished appearance.



For flanged fixtures in row configurations, the FKCR adapter bracket kit is required in addition to the FK24 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK24 & (1) FKCR)

Row cut out dimensions using FK24s & FKCR adapters:  
Width 24 3/8", Length [48"x(# in row)]+3/8". Example: (48"x2)+3/8"=96 3/8"

Flange kit cut out dimension for single unit only: 24 3/8" x 48 3/8"

Complete ordering information on back. Dimensions and specifications subject to change without notice.



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P36.2



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

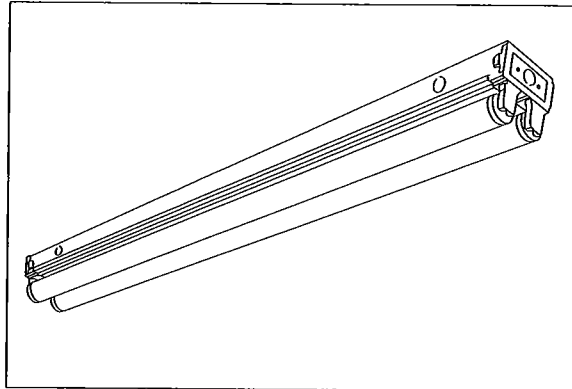
**Catalog Number:**  
CS4-228-EB5277

**Type:**

**D1**

Notes:

LEE07-6119



**CS2-2, CS3-2  
CS4-2, CS8-2  
STRAIGHTLINER  
CHANNEL TWO LAMP TS & RS**

Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

**FEATURES:**

- Available 2', 3', 4' or 8'.
- Heavy die formed steel channel.
- Rotary lock lampholders for positive lamp contact.
- Channel ends double as joiners.
- Individual or row mounting. Surface or suspended.
- Ballast covers on 4' and 8' units are secured with 1/4-turn fasteners.

**SPECIFICATIONS:**

**Ballasts**

Energy efficient ballasts are thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified. 20 watt ballasts are trigger start, low power factor, Class P. All are U.L. listed.

**Housing**

Die formed steel with heat sink embossments for cooler running ballasts. Socket saddles are factory installed.

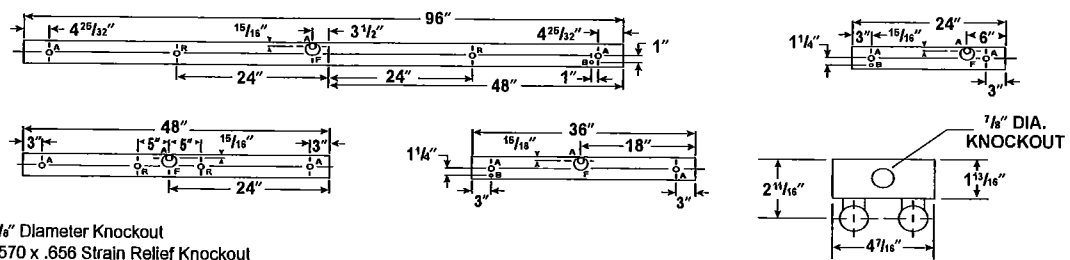
**Finish**

All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

**Labels**

All fixtures carry the U.L. label. 2', 3' and 4' units are listed for use on combustible low density, cellulose fiberboard ceilings. (CSA approval available. Use Suffix "CSA").

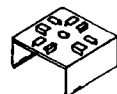
**Cross Section**



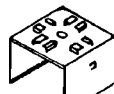
- A - 7/8" Diameter Knockout
- B - .570 x .656 Strain Relief Knockout
- F - 2" Diameter Knockout
- R - 1/16" Diameter Knockout

Note 1: All Non-Shielded (strip) fixtures - Deduct 1/16" from overall dimension for continuous row mounting. Dimensions shown include end panel.

**Mounting Data**



CSZTF  
Flush Mount

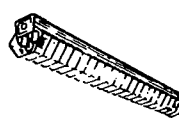


CSZT  
1 1/2" Space

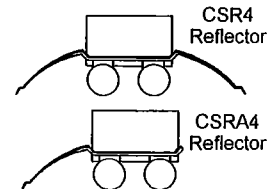


CSTH  
Slide Clamp  
Tong Hanger

**Accessories**



CSWG4 Wire Guards  
CSWG3 Wire Guards



CSR4  
Reflector

CSRA4  
Reflector

C2



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
VPF84-232-PRS-277-OPAL-WHT

Notes:

**Type:**  
**D2**

LEE07-6119

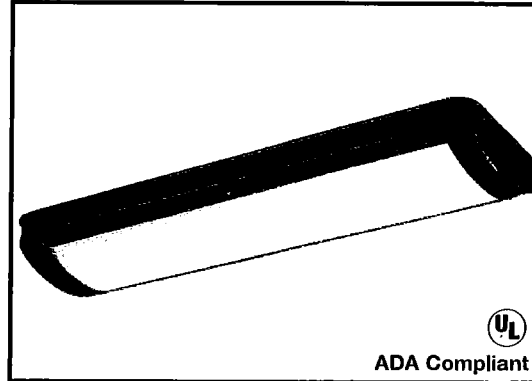


FIXTURE TYPE: \_\_\_\_\_  
WALL/CEILING/PENDANT MOUNT  
1, 2 or 3 F32T8

**VANDAL RESISTANT  
FLUORESCENT  
VPF 84**

**SPECIFICATIONS**

- Housing** Marine grade heat treated extruded aluminum. Chemically primed and finished with robotically applied polyester powder coat.
- Lens** Extruded UV stabilized polycarbonate with integral prisms. Maximum wall thickness .160". Secured to housing with die cast aluminum clamps and 6 stainless steel TORX® head screws.
- End Caps** Die cast marine grade aluminum. Provisions for surface conduit entry.
- Ballast** Electronic high frequency.
- Sockets** Precision spring loaded snap type for maximum impact damping.
- UL Listing** C.UL., wet optional.



**OPTIONS**

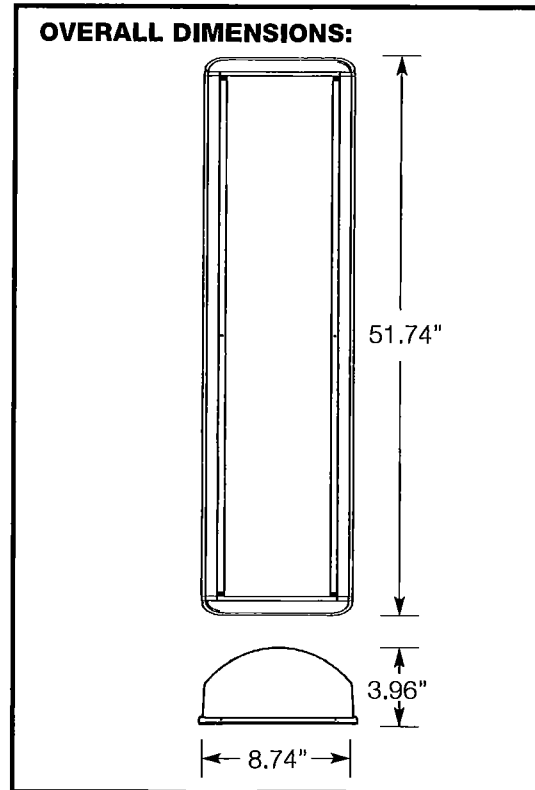
- OPAL** Opal polycarbonate lens instead of clear prismatic.
- JB** Die cast joiner band for continuous row mount. Consult factory for row information.
- WET** Silicone and neoprene gasketing for wet location.
- 277** 277 volt ballast.
- PC** Photoelectric switch.
- GLR** Fuse and fuse holder.
- EMB** 90 minute self contained emergency battery pack.
- EMB 50** Specification grade 90 minute self contained emergency battery pack.
- PRS** Program rapid start electronic ballast.
- LH** Low harmonics (10% THD)
- ST/SC** Slotted screws instead of TORX® head.

**ACCESSORIES**

- COR** Corner mounted backbox. Constructed from 16 gauge cold rolled zinc coated steel. Finished with white powder coat.
- TX/SD** TORX® head bit.

Patent Pending

**OVERALL DIMENSIONS:**



[www.luminairelighting.com](http://www.luminairelighting.com)

7 Olsen Avenue ■ P.O. Box 2104 ■ Edison, New Jersey 08818 ■ Telephone (732) 549-0056 ■ FAX (732) 549-9737

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
VPF84-232-PRS-277-OPAL-WHT

**Type:**

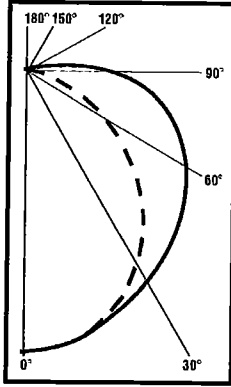
**D2**

Notes:

LEE07-6119

**PHOTOMETRIC DATA**

**CANDLEPOWER DISTRIBUTION CURVE**



--- 0° Plane  
— 90° Plane

**MODEL VPF 84 - 232**

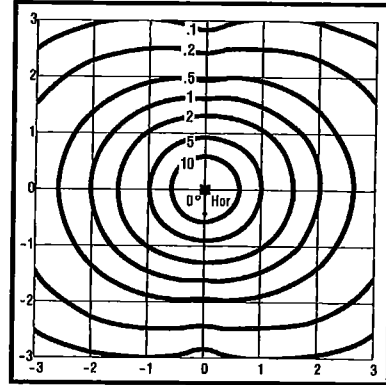
LTL #07080  
Extruded aluminum housing, formed white enamel steel reflector, clear linear prismatic polycarbonate lens.

**Ballast:** One Advance REL-2P32-SC

**Lamps:** Two Phillips F32T8-TL741 rated at 2850 lumens each.

**Mounting:** Surface

**ISOFOOTCANDLE CHART**



**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Lamp	% Fixt
0-30	940	16.5	22.9
0-40	1535	26.9	37.4
0-60	2764	48.5	67.3
0-90	3953	69.3	96.2
90-120	155	2.7	3.8
90-130	155	2.7	3.8
90-150	155	2.7	3.8
90-180	155	2.7	3.8
0-180	4107	72.1	100.0

**Total efficiency:** 72.1%  
**CIE type:** Direct

**ORDERING INFORMATION**

EXAMPLE: VPF 84 - 132 - ELECT - 120 - OP - BLK - EMB - COR

<b>VPF 84</b>	-	<b>232</b>	-	<b>PRS</b>	-	<b>277</b>	-	<b>OP</b>	-	<b>WHT</b>	-		-	
<b>Series</b>		<b>Lamps</b> (Not included) 132-(1) F32T8 232-(2) F32T8 332-(3) F32T8		<b>Ballast</b> ELECT-Electronic ballast LH-Electronic ballast with less than 10% total harmonic distortion PRS-Program rapid start electronic ballast		<b>Volts</b> 120 277		<b>Lens</b> Clear Prismatic Standard. OP-Opal		<b>Colors</b> BK-Black WHT-White BRZ-Bronze GRY-Grey CUST-Custom color, consult factory.		<b>Options</b> JB-Die cast joiner band WET-Silicone and neoprene gasketing for wet location PC-Photoelectric switch GLR-Fuse and fuse holder EMB-Emergency battery pack EMB 50-Specification grade emergency battery pack ST/SC-Slotted screws		<b>Accessories</b> TX/SD-TORX® head bit COR-Corner backbox

Catalog No.:	
Fixture Type:	Voltage:
Job Name:	
Approved By:	

**LIFETIME WARRANTY**  
Luminaire Vandal Resistant fixtures feature a lifetime warranty. Luminaire Lighting Corporation will repair or replace any fixture damaged due to vandalism for the lifetime of the installation.

**NOTES:**  
For complete photometric test reports and custom colors or finishes, please contact your local representative. Availability and specifications subject to change without notice. All LUMINAIRE fixtures are provided with TORX® head screws. Please remember to order TORX® head bits.



www.luminairelighting.com

FL VPF 84 1/07

7 Olsen Avenue ■ P.O. Box 2104 ■ Edison, New Jersey 08818 ■ Telephone (732) 549-0056 ■ FAX (732) 549-9737



Submitted by Leesman Sales



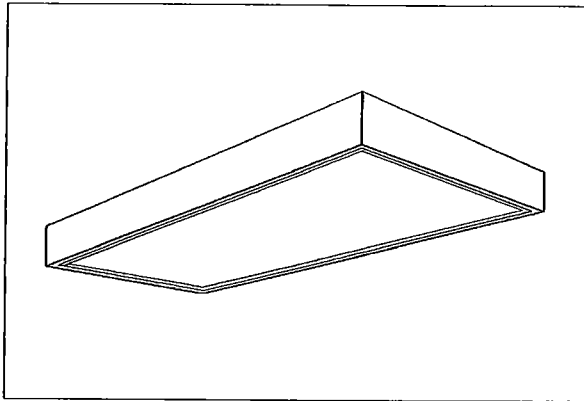
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SM24-432-FSA12.125-  
4EB8RLH277-FO835  
Notes:

**Type:**

**D4**

LEE07-6119



# SM24-4 SKYLARK SURFACE MODULAR

2' x 4', 4 LAMPS  
RAPID START

Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

**FEATURES:**

- Only 3 1/2" deep. Modular dimensions.
- Clean mitered corners, no overlap.
- Heavy gauge flush steel shielding frame screw assembled for easy diffuser replacement.
- Optional flush or regressed aluminum shielding frames available with positive action corner slide latches.
- Aluminum frames are standard with spring loaded slide latches.
- Rotary lock lampholders for positive lamp contact.
- Heat sink embossments behind ballasts for cooler operation, longer life.
- Door frame and corners are sealed with an open cell foam gasket.

**SPECIFICATIONS:**

**Housing**

Heavy gauge steel. Die formed for extra rigidity. Designed for surface mounting.

**Ballasts**

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified.

**Shielding**

100% acrylic prismatic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

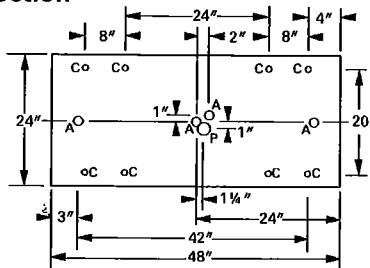
**Finish**

All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

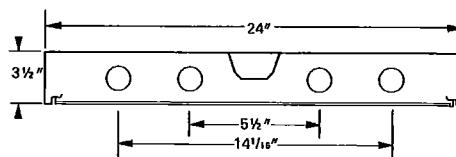
**Labels**

All fixtures carry the U.L. label. (CSA approval available. Use Suffix "CSA").

**Cross Section**

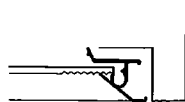


**2' x 4' 4-Lamps**



- A - 7/8" Diameter Knockout
- C - 5/8" Diameter Knockout
- P - 1 1/2" Diameter Knockout

Note: All dimensions are in inches; dimensions are subject to change without notice. Please consult factory or check sample for verification.



Optional Regressed Aluminum Frame - RA



Optional Flush Aluminum Frame - FA

S31

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SM24-432-FSA12.125-  
4EB8RLH277-F0835  
Notes:

**Type:**  
**D4**

LEE07-6119

Photometric Report No. 10311



**Environmental Laboratories**

PO Box 2187 1992201 2808 North Sullivan Road Spokane WA 99216 TEL 509 624 7000

REPORT # 10311  
DATE: 12/18/92

LUMINAIRE: SM24-432-FSA12-4EB8

2 X 4 LAMP WITH A-12 PATTERN ACRYLIC PRISMED LENS  
BAL. # 0432120; LAMP# F032; BAL. FAC. # .88; MATH# 105  
LAMPS RATED AT 2900 LUMENS EACH X 21.0

REFLECTANCE: BNE .80

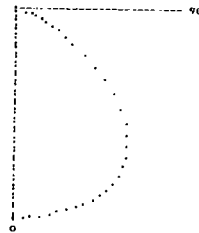
MOUNTING: SURFACE

S/PH: PARL 1.26, HORN 1.41

PLANE OF HORIZONTAL PLANE  
SHIELDING: PARL 90, HORN 90

**CANDLEPOWER**

0	22.5	45	67.5	90
0	2946	2946	2946	2946
5	2926	2939	2948	2938
10	2889	2908	2932	2938
15	2826	2897	2902	2932
20	2741	2784	2856	2917
25	2631	2689	2792	2880
30	2488	2569	2706	2826
35	2306	2412	2579	2699
40	2078	2202	2376	2482
45	1805	1906	2074	2197
50	1472	1559	1707	1791
55	1141	1221	1326	1357
60	862	899	952	959
65	630	639	658	670
70	436	431	410	408
75	329	325	296	369
80	246	235	242	261
85	151	130	151	147
90	0	0	0	0



**ZONAL SUMMARY**

ZONE	LUMENS	LAMP	FIXT
0-30	2379	20.5	30.3
0-40	3763	34.2	50.4
0-50	6689	57.7	85.1
0-60	7056	67.7	100.0
0-180	0	0.0	0.0
0-180	7856	67.7	100.0

This photometric test was performed using a specific ballast / lamp combination. Extrapolation of these data for other ballast / lamp combinations may produce erroneous results. The ballast factor must be applied to the lumen output rating assigned to the lamps or to the candlepower values shown. Luminaire efficacy rating (LER) per IESNA LES-1993.

LER = FL-66

TESTED BY: *R.K.* APPROVED BY: *[Signature]*

TEST RUN IN ACCORDANCE TO CURRENT I.C.S. PUBLISHED PROCEDURES

**Coefficients of Utilization**

RC RW	Zonal Cavity Method								Floor Reflectance - .20			
	80				70				50		0	
	70	50	30	10	70	50	30	10	50	30	10	0
1	75	72	69	67	73	70	68	66	67	66	64	60
2	69	64	60	57	67	63	59	56	60	57	55	51
3	64	57	52	48	62	56	52	48	54	50	47	45
4	59	51	46	42	57	50	45	42	49	44	41	39
5	54	46	40	36	52	45	40	36	44	39	35	33
6	50	41	35	31	48	41	35	31	39	35	31	29
7	46	37	31	27	45	36	31	27	35	31	27	25
8	42	33	28	24	41	33	27	24	32	27	24	22
9	39	30	24	20	38	29	24	20	29	24	20	19
10	36	27	22	18	35	27	22	18	26	21	18	17

**LER: FL-66**      **Energy Cost: \$3.64\***  
**Input Watts: 105**      **BF: .88**

The above energy calculations were conducted using a specific lamp/ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.

\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

**Ordering Information**

Example: SM24-432-FSA12-EB8120

*SM 24 - 4 32 - FS A12.125 - 4EB8RLH 277 - F0835*

<b>Series</b> SM Series	<b>Fixture Size</b> 24 - 2' x 4'	<b>No. of Lamps</b> 4 - Four Lamps	<b>Lamp Type</b> 40 - 4' T12, 40 Watt 32 - 4' T8, 32 Watt	<b>Door</b> FS - Flush Steel FA - Flush Aluminum RA - Regressed Aluminum	<b>Voltage</b> 120 - 120V 277 - 277V 347 - 347V	<b>Skylark Options</b> GLR - Fast Blow Fuse GMF - Slow Blow Fuse EL - Emergency Light CSA - Approved for Canadian Standards Association PAF - Painted After Fabrication TP - Two Tamper Resistant Spanner Head Captive Screws (FS door only) TP4 - Four Tamper Resistant Spanner Head Captive Screws (FS door only)
				<b>Ballast</b> LE - Energy Saving Magnetic T12 EB12 - Electronic T12 EB12LH - Electronic T12 <10% THD OCT - Magnetic T8 (Octron) EB8 - Electronic T8 EB8LH - Electronic T8 <10% THD 4EB8 - 4 Lamp Electronic T8 4EB8LH - 4 Lamp Electronic T8 <10% THD	<b>Diffuser Options</b> A12 - Acrylic, Pattern 12 A12.125 - Acrylic, Pattern 12.125 Nominal A12.125M - Acrylic, Pattern 12.125 Minimum A19 - Acrylic, Pattern 19.156 Male Prism PC1 - Polystyrene Silver Parabolic Louver 1/2" x 1/2" x 1/2" PC2 - Polystyrene Silver Parabolic Louver 1 1/2" x 1 1/2" x 1" IMA - .150" Injection Molded Acrylic DOP - White Dished Acrylic	

F0835 - T8 82CRI, 3500K Lamps

4EB8RLH - 4-Lamp Electronic T8<10% THD Rapid Start Low Harmonic

S31



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CO 10/98

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

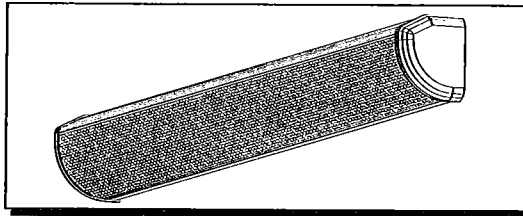
**Catalog Number:**  
AVW232-PMW-UNV-1/2EB10R-  
DEK  
Notes:

**Type:**  
**D6**

LEE07-6119

**Day-Brite® Lighting**

**Arioso® WALL**



2', 3', or 4'  
1 or 2 Lamp  
T8, T5, T5HO, or CFTT5

**APPLICATION**

- Surface wall-mounted direct/indirect luminaire.
- Suitable for individual or continuous row mounting.
- Continuous rows can be installed on the wall at the ceiling to provide an integral cove appearance.
- Also suitable for use lower on the wall as a sconce or in continuous rows.
- ADA approved for applications requiring lower mounting heights.

**CONSTRUCTION/FINISH**

- No visible hardware.
- Swing down lamp cover for easy relamping.
- Multi-stage phosphate treated for maximum corrosion resistance and finish coat is baked matte white enamel.
- Easy ballast access through removable reflector.
- Die-cast decorative aluminum end caps are held on by magnets to provide secure retention and easy, toolless installation or removal.

**ELECTRICAL**

- UL listed for damp locations.
- Class P, HPF ballasts comply with ©Federal Ballast Law (public law 100-357, 1988.)

- Self-contained low-profile emergency power pack can be incorporated. UL listed for dry locations.
- Modular wiring may be incorporated for continuous row applications.
- Electronic ballast standard for maximum efficiency.

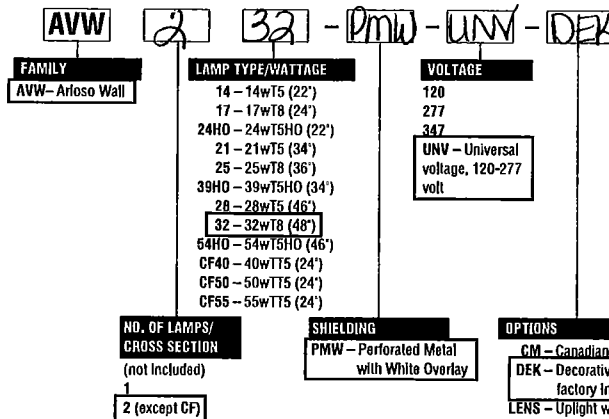
**ENCLOSURES**

- Micro-perforated lamp shield provides soft awareness to lamp source.
- White overlay on inside of lamp cover conceals lamp image.
- Solid top cover (no uplight) is standard.
- Uplight option w/lens available for lower mounting heights, not recommended for mounting near ceiling.
- End caps are **required**. They can be factory-installed (-DEK option) for individual mounting or shipped separately for row applications (cat. # AVW-DEK).\*
- For continuous row applications, order one joiner (cat. # AVW-IJ) for each junction of two luminaires.

**ACCESSORIES**

- AVW-DEK - end caps (pair)
- AVW-IJ - in-line joiner

**CATALOG NUMBER**



\*Standard luminaire does not include end caps. Either -DEK option or AVW-DEK accessory is required.

**NOTES:**

- With generic Electronic Ballasts (Brand selected by Day-Brite)
- Suffix Catalog # with -Ballast Quantity - / -EB Lamps Per Ballast.

Example: -1/2-EB = One 2 Lamp Electronic Ballast,

1/2EB10R - 1 Ballast for 2 Lamps Rapid Start

**JOB INFORMATION**

**0485-AR**

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
AVW232-PMW-UNV-1/2EB10R-  
DEK  
Notes:

**Type:**  
**D6**

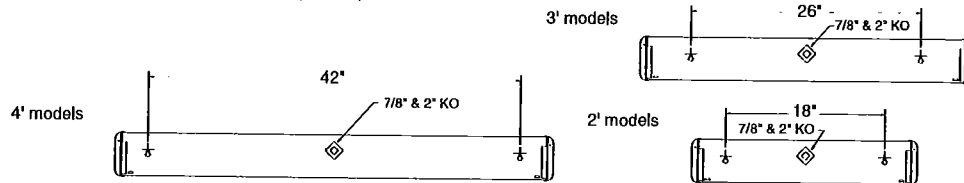
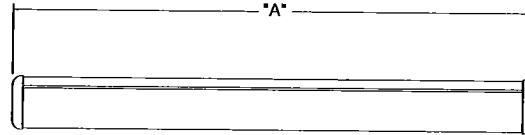
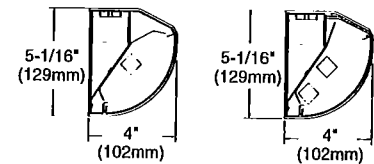
LEE07-6119

**Arioso WALL**

**Day-Brite® Lighting**

**DIMENSIONS**

1 Lamp Standard      2 Lamp w/Lens Option



	DIM "A" w/DEK end caps	without end caps
2' model	25-1/2" (648mm)	24" (610mm)
3' model	37-1/2" (953mm)	36" (914mm)
4' model	49-1/2" (1257mm)	48" (1219mm)

**PHOTOMETRIC DATA**

CATALOG # AVW232-PMW-1/2-EB  
TEST #24706 S/MH = 2.0

LAMPS = F32T8      INPUT WATTS = 56  
BALLAST = ELECTRONIC      BALLAST FACTOR = .88

LER = 31

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$7.74 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY = 34.7%

CANDLEPOWER				
Angle	End	45	Cross	
0	493	493	493	
5	483	517	544	
15	466	553	616	
25	429	577	682	
35	370	580	717	
45	293	555	720	
55	96	508	696	
65	98	439	641	
75	24	346	563	
85	2	255	472	
95	0	181	382	
105	0	121	294	
115	0	69	206	
125	0	36	134	
135	1	17	75	
145	1	6	33	
155	2	0	6	
165	2	2	2	
175	2	2	2	

**MAINTAINED ILLUMINATION TABLE- Square Feet/Fixture\***

- 80-50-20 Reflectances (Ceiling-Wall-Floor)
- LLF = 0.75 2850 Lumens/Lamp very clean
- Room width divided by room height = 5 or more, 2 or 1

Fixture Size & # of Lamps	Room Width Room Height =	Approx. Area (sq. ft.) per Fixture			
		10 ft-c	30 ft-c	50 ft-c	100 ft-c
4'	5	145	48	-	-
2 Lamp	2	95	32	-	-
T8	1	69	-	-	-

\*Observe Fixture SAMH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2850 LUMEN LAMPS				
ANGLE	END	45°	CROSS	
45	3858	1340	2973	
55	3837	926	2452	
65	3745	560	1664	
75	3616	305	665	
85	3482	659	165	

LLF = .75 LLF = LIGHT LOSS FACTOR LLF = LDD X LLD X BFB LDD = VERY CLEAN 0.94 CLEAN 0.90 LLD = 0.91 @ 40% RATED LAMP LIFE BFB = .88 ELECTRONIC BALLAST & T8 LAMP (RELAMP AT 70% LAMP LIFE)

**COEFFICIENT OF UTILIZATION**

plc pcc pw RCR	20			70			50		
	80	70	50	30	50	30	50	30	
0	40	40	39	39	39	35	35	35	
1	35	34	32	34	33	30	29	28	
2	32	28	26	30	28	26	26	23	
3	28	25	22	28	23	22	23	20	
4	27	22	19	25	20	17	20	17	
5	23	20	16	23	19	16	17	14	
6	23	17	14	22	17	14	16	13	
7	20	16	13	20	16	13	14	11	
8	19	14	11	19	14	11	13	11	
9	17	13	10	17	13	10	11	10	
10	17	11	8	16	11	8	11	8	

**LIGHT DISTRIBUTION**

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	390	6.8	19.7
0-40	647	11.3	32.7
0-60	1185	20.8	59.9
0-90	1719	30.2	87.0
90-180	258	4.6	13.0
0-180	1976	34.7	100.0

**PHOTOMETRIC DATA**

CATALOG # AVW232-PMW-1/2-EB-LENS  
TEST #24704 S/MH = 2.0

LAMPS = F32T8      INPUT WATTS = 59  
BALLAST = ELECTRONIC      BALLAST FACTOR = .88

LER = 44

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$5.45 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY = 51.4%

CANDLEPOWER				
Angle	End	45	Cross	
0	387	387	387	
5	380	404	424	
15	363	431	475	
25	333	448	523	
35	285	453	555	
45	222	446	560	
55	149	412	558	
65	68	365	539	
76	15	318	523	
85	1	291	487	
95	2	303	476	
105	27	374	511	
115	73	442	602	
125	152	489	709	
135	239	506	725	
145	308	514	695	
155	356	498	626	
165	387	459	542	
175	401	413	459	

**MAINTAINED ILLUMINATION TABLE- Square Feet/Fixture\***

- 80-50-20 Reflectances (Ceiling-Wall-Floor)
- LLF = 0.75 2850 Lumens/Lamp very clean
- Room width divided by room height = 5 or more, 2 or 1

Fixture Size & # of Lamps	Room Width Room Height =	Approx. Area (sq. ft.) per Fixture			
		10 ft-c	30 ft-c	50 ft-c	100 ft-c
4'	5	66	40	-	-
2 Lamp	2	132	44	-	-
T8 w/uplight	1	94	31	-	-

\*Observe Fixture SAMH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2850 LUMEN LAMPS				
ANGLE	END	45°	CROSS	
45	3009	1096	2253	
55	3076	788	1864	
65	3149	509	1155	
75	3359	305	416	
85	3593	412	82	

LLF = .75 LLF = LIGHT LOSS FACTOR LLF = LDD X LLD X BFB LDD = VERY CLEAN 0.94 CLEAN 0.90 LLD = 0.91 @ 40% RATED LAMP LIFE BFB = .88 ELECTRONIC BALLAST & T8 LAMP (RELAMP AT 70% LAMP LIFE)

**COEFFICIENT OF UTILIZATION**

plc pcc pw RCR	20			70			50		
	80	70	50	30	50	30	50	30	
0	55	55	51	51	51	42	42	42	
1	49	46	44	45	42	40	39	34	
2	41	40	35	40	36	31	30	28	
3	40	34	30	36	32	28	27	23	
4	36	30	26	33	28	23	23	20	
5	34	27	23	30	25	20	20	17	
6	30	23	20	28	22	17	19	16	
7	28	22	17	26	20	16	17	14	
8	26	20	16	23	17	14	16	13	
9	25	17	14	22	17	13	14	11	
10	23	17	13	20	14	11	13	10	

**LIGHT DISTRIBUTION**

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	308	5.4	10.5
0-40	510	8.9	17.4
0-60	940	16.5	32.1
0-90	1438	25.2	49.1
90-180	1492	25.2	50.9
0-180	2930	51.4	100.0

**0485-AR**

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CANADIAN DIVISION  
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**Day-Brite® Lighting**  
a Genlyte company

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

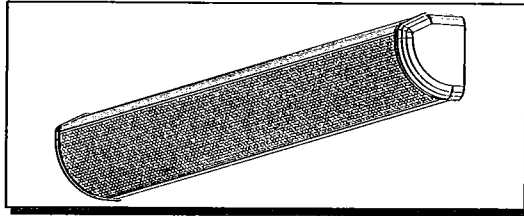
**Catalog Number:**  
AVW232-PMW-UNV-1/2EB10R-  
AVWIJ-DEK  
Notes:

**Type:**  
**D6F**

LEE07-6119

**C Day-Brite® Lighting**

*Arioso®* WALL



2', 3', or 4'  
1 or 2 Lamp  
T8, T5, T5HO, or CFTT5

**APPLICATION**

- Surface wall-mounted direct/indirect luminaire.
- Suitable for individual or continuous row mounting.
- Continuous rows can be installed on the wall at the ceiling to provide an integral cove appearance.
- Also suitable for use lower on the wall as a sconce or in continuous rows.
- ADA approved for applications requiring lower mounting heights.

**CONSTRUCTION/FINISH**

- No visible hardware.
- Swing down lamp cover for easy relamping.
- Multi-stage phosphate treated for maximum corrosion resistance and finish coat is baked matte white enamel.
- Easy ballast access through removable reflector.
- Die-cast decorative aluminum end caps are held on by magnets to provide secure retention and easy, toolless installation or removal.

**ELECTRICAL**

- UL listed for damp locations.
- Class P, HPF ballasts comply with ©Federal Ballast Law (public law 100-357, 1988.)

- Self-contained low-profile emergency power pack can be incorporated. UL listed for dry locations.
- Modular wiring may be incorporated for continuous row applications.
- Electronic ballast standard for maximum efficiency.

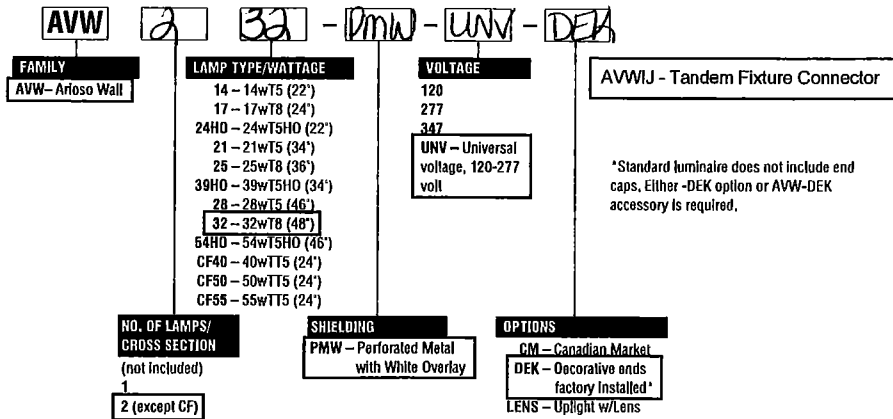
**ENCLOSURES**

- Micro-perforated lamp shield provides soft awareness to lamp source.
- White overlay on inside of lamp cover conceals lamp image.
- Solid top cover (no upright) is standard.
- Uplight option w/lens available for lower mounting heights, not recommended for mounting near ceiling.
- End caps are required. They can be factory-installed (-DEK option) for individual mounting or shipped separately for row applications (cat. # AVW-DEK).\*
- For continuous row applications, order one joiner (cat. # AVW-IJ) for each junction of two luminaires.

**ACCESSORIES**

- AVW-DEK - end caps (pair)
- AVW-IJ - in-line joiner

**CATALOG NUMBER**



\*Standard luminaire does not include end caps. Either -DEK option or AVW-DEK accessory is required.

**NOTES:**

- With generic Electronic Ballasts (Brand selected by Day-Brite)  
Suffix Catalog # with - Ballast Quantity - / -EB Lamps Per Ballast.

Example: -1/2-EB = One 2 Lamp Electronic Ballast.

1/2EB10R - 1 Ballast for 2 Lamps Rapid Start

**JOB INFORMATION**

0485-AR

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
AVW232-PMW-UNV-1/2EB10R-  
AVWIJ-DEK  
Notes:

**Type:**  
**D6F**

LEE07-6119

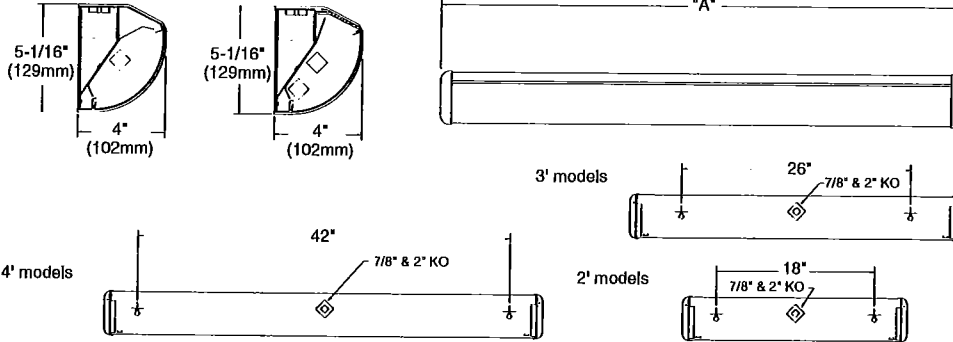
**Avioso® WALL**

**Day-Brite® Lighting**

**DIMENSIONS**

	DIM "A" w/DEK end caps	without end caps
2' model	25-1/2" (648mm)	24" (610mm)
3' model	37-1/2" (953mm)	36" (914mm)
4' model	49-1/2" (1257mm)	48" (1219mm)

1 Lamp Standard      2 Lamp w/Lens Option



**PHOTOMETRIC DATA**

CATALOG # AVW232-PMW-1/2-EB  
TEST #24706 S/MH = 2.0

LAMPS = F32T8  
BALLAST = ELECTRONIC

INPUT WATTS = 56  
BALLAST FACTOR = .88

LER = 31

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$7.74 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY = 34.7%

CANDLEPOWER				
Angle	End	45	Cross	
0	493	493	493	
5	483	517	544	
15	466	553	616	
25	429	577	682	
35	370	680	717	
45	293	555	720	
55	96	508	696	
65	98	439	641	
75	24	348	563	
85	2	255	472	
95	0	191	382	
105	0	121	234	
115	0	69	208	
125	0	35	134	
135	1	17	75	
145	1	6	33	
155	2	0	8	
165	2	2	2	
175	2	2	2	

**MAINTAINED ILLUMINATION TABLE - Square Feet/Fixture\***

- 80-50-20 Reflectances (Ceiling-Wall-Floor)
- LLF = 0.75 2850 Lumens/Lamp very clean
- Room width divided by room height = 5 or more, 2 or 1

Fixture Size & # of Lamps	Room Width / Room Height =	Approx. Area (sq. ft.) per Fixture				
		10 ft-c	30 ft-c	50 ft-c	70 ft-c	100 ft-c
4'	5	145	48	-	-	-
2 Lamp T8	1	95	32	-	-	-
		69	-	-	-	-

\*Observe Fixture SAMH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2850 LUMEN LAMPS			
ANGLE	END	45°	CROSS
45	3858	1340	2973
55	3837	926	2452
65	3745	560	1664
75	3616	305	665
85	3482	659	165

TYPICAL V.C.P.'s Room Mounting Height				
Room Size	Lengthwise	Crosswise	8.5	10
30x30	64	58	52	59
40x40	61	64	50	54
60x30	65	68	58	63
60x60	59	61	46	49
100x100	57	58	44	46

**COEFFICIENT OF UTILIZATION**

pfc	RCR	20						70						50					
		70	50	30	70	50	30	50	30	70	50	30	50	30					
0	0	40	40	40	39	39	39	35	35	35	35	35	35	35					
1	1	35	34	32	34	33	33	30	29	28	28	28	28	28					
2	2	32	28	26	30	28	26	26	23	23	23	23	23	23					
3	3	28	25	22	28	23	22	22	20	20	20	20	20	20					
4	4	27	22	19	25	20	17	17	17	17	17	17	17	17					
5	5	23	20	16	23	19	16	17	14	14	14	14	14	14					
6	6	23	17	14	22	17	14	16	13	13	13	13	13	13					
7	7	20	16	13	20	16	13	14	11	11	11	11	11	11					
8	8	19	14	11	19	14	11	13	11	11	11	11	11	11					
9	9	17	13	10	17	13	10	11	10	10	10	10	10	10					
10	10	17	11	8	16	11	8	11	8	8	8	8	8	8					

**LIGHT DISTRIBUTION**

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	390	6.8	19.7
0-40	647	11.3	32.7
0-60	1185	20.8	59.9
0-90	1719	30.2	87.0
90-180	258	4.5	13.0
0-180	1976	34.7	100.0

LLF = .75 LLF = LIGHT LOSS FACTOR LUF = LDD X LLD X BF LDD = VERY CLEAN .94 CLEAN .89  
LLD = .91 @ 40% RATED LAMP LIFE BF = .88 ELECTRONIC BALLAST A T8 LAMP (RELAMP AT 70% LAMP LIFE)

**PHOTOMETRIC DATA**

CATALOG # AVW232-PMW-1/2-EB-LENS  
TEST #24704 S/MH = 2.0

LAMPS = F32T8  
BALLAST = ELECTRONIC

INPUT WATTS = 59  
BALLAST FACTOR = .88

LER = 44

COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$5.45 BASED ON 3000 HRS. AND \$.08 PER KWH.

FIXTURE EFFICIENCY = 51.4%

CANDLEPOWER				
Angle	End	45	Cross	
0	387	387	387	
5	380	404	424	
15	363	431	475	
25	333	448	523	
35	285	453	555	
45	222	446	580	
55	149	412	558	
65	98	365	539	
75	15	318	523	
85	1	291	487	
95	2	303	476	
105	27	374	511	
115	73	442	602	
125	152	489	709	
135	239	606	725	
145	308	514	695	
155	356	498	626	
165	367	459	542	
175	401	412	459	

**MAINTAINED ILLUMINATION TABLE - Square Feet/Fixture\***

- 80-50-20 Reflectances (Ceiling-Wall-Floor)
- LLF = 0.75 2850 Lumens/Lamp very clean
- Room width divided by room height = 5 or more, 2 or 1

Fixture Size & # of Lamps	Room Width / Room Height =	Approx. Area (sq. ft.) per Fixture				
		10 ft-c	30 ft-c	50 ft-c	70 ft-c	100 ft-c
4'	5	-	66	40	-	-
2 Lamp T8 w/Uplight	2	132	44	-	-	-
	1	94	31	-	-	-

\*Observe Fixture SAMH Requirements for Specific Applications

AVERAGE LUMINANCE CD/SQ.M WITH 2850 LUMEN LAMPS			
ANGLE	END	45°	CROSS
45	3009	1096	2253
55	3076	788	1864
65	3149	509	1155
75	3359	305	416
85	3593	412	82

TYPICAL V.C.P.'s Room Mounting Height				
Room Size	Lengthwise	Crosswise	8.5	10
30x30	74	79	62	69
40x40	69	73	56	62
60x30	72	76	65	71
60x60	64	67	51	55
100x100	58	61	47	49

**COEFFICIENT OF UTILIZATION**

pfc	RCR	20						70						50					
		70	50	30	70	50	30	50	30	70	50	30	50	30					
0	0	55	55	55	51	51	51	42	42	42	42	42	42	42					
1	1	48	46	44	45	42	40	35	34	34	34	34	34	34					
2	2	41	40	35	40	36	31	30	28	28	28	28	28	28					
3	3	38	34	30	36	32	28	27	23	23	23	23	23	23					
4	4	36	30	26	33	28	23	23	20	20	20	20	20	20					
5	5	31	27	23	30	25	20	20	17	17	17	17	17	17					
6	6	30	26	20	28	22	17	19	16	16	16	16	16	16					
7	7	28	22	17	26	20	16	16	14	14	14	14	14	14					
8	8	25	20	16	23	17	14	16	13	13	13	13	13	13					
9	9	25	17	14	22	17	13	14	11	11	11	11	11	11					
10	10	23	17	13	20	14	11	13	10	10	10	10	10	10					

**LIGHT DISTRIBUTION**

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	308	5.4	10.5
0-40	510	8.9	17.4
0-60	940	16.5	32.1
0-90	1438	25.2	49.1
90-180	1492	26.2	50.9
0-180	2930	51.4	100.0

LLF = .75 LLF = LIGHT LOSS FACTOR LUF = LDD X LLD X BF LDD = VERY CLEAN .94 CLEAN .89  
LLD = .91 @ 40% RATED LAMP LIFE BF = .88 ELECTRONIC BALLAST A T8 LAMP (RELAMP AT 70% LAMP LIFE)

**0485-AR**

DAY-BRITE LIGHTING • www.daybriteighting.com  
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CANADIAN DIVISION  
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**Day-Brite® Lighting**  
a Genlyte company

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SESRWN

Notes:

**Type:**

**EX**

LEE07-6119

**DUAL LITE**

**SEMPRA<sup>TM</sup> Series**

*Compact, low-profile exit signs featuring  
cast aluminum construction, easy  
installation and energy-saving,  
long-life LED lamps*

**EXIT** >



All signs available with natural brushed face finishes



Patent Pending

## LIFETIME WARRANTY ON ALL SPECTRON MODELS

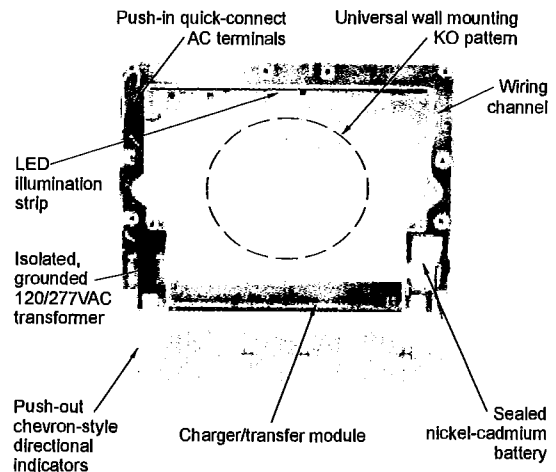
### Features

#### All Models

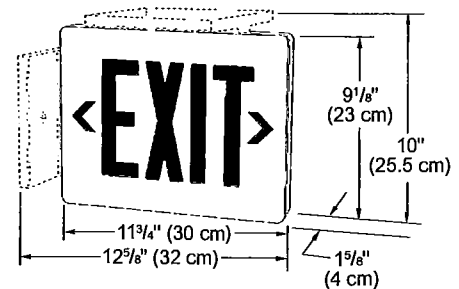
- High-strength cast aluminum construction
- Compact, low-profile style
- Easy to install
- Bright, even illumination
- Red and green letters
- Long-life LED lamps provide over 20 years of service
- Energy-saving operation
- Single and double face models
- White, white with brushed aluminum face, black and black with brushed aluminum face finishes offered
- Push-in wiring connectors provided
- End, ceiling or wall mounting
- Break-out chevron directional arrows
- 120/277VAC, 60 Hz operation
- Temperature range: 20°C to 30°C (68°F to 86°F)

#### Emergency Models

- Fully automatic, solid-state charger
- All emergency components mount inside exit housing
- Maintenance-free, nickel-cadmium battery
- Operates for a minimum of 2 hours
- Automatic battery protection
- Test switch
- AC-On indicator
- Models available with Spectron self-testing/self-diagnostic electronics
- UL 924 Listed



### Dimensions



Hubbell Lighting, Inc.

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SESRWN

Notes:

Type:

**EX**

LEE07-6119

**Specifications**

**Sempra™ Series**  
Cast Aluminum LED Exit Signs

**Construction**

Sign: Housing, exit face(s) and matching canopy constructed of high-strength cast aluminum  
Sign Finish: Textured white, white with brushed aluminum face, black or black with brushed aluminum face  
Diffuser Finish: Frequency-matched silkscreened coating provides optimized LEO light output

**Exit Face Design**

Letters: 6" letters, 3/4" stroke  
Directional Arrows: Break-out chevron type

**Illumination**

All Models: 4 red or 4 green high-output LEDs  
Rated lamp life: In excess of 20 years  
Brightness Index: Exceeds UL requirements  
Illumination Uniformity: Exceeds UL requirements

**Installation**

Mounting: Sign mounts to 3 1/2", 4" octagon, or 4" square outlet boxes and standard plaster rings.  
Wall Installations: Exit housing provides a knockout pattern for mounting to outlet box.  
Ceiling or End Installations: Mounting canopy provided with all models. Canopy mounts to outlet boxes by means of universal mounting plate supplied. Exit housing mounts to canopy bracket  
Wiring: Pre-stripped AC input pigtail leads provided. Push-in wire connectors supplied for making AC connections. All wiring dresses into formed wireways in exit housing.

**Electronics**

Input: 120/277VAC, 60 Hz (all models)  
Built-In Protection: Surge, transient and low-battery voltage  
Emergency Operation Module (Internally Mounted)  
Charger: Solid-state, constant current type  
Transfer: Solid-state design  
Battery Recharge Cycle: Per UL time standards  
Test Means: Integral test switch  
Indicators: AC-On LED indicator  
Operating Temperature range: 20°C to 30°C (68°F to 86°F)

**Compliances**

UL 924 (exceeds brightness and uniformity requirements and meets 2001 directional indicator specifications)  
NFPA-101  
EPA/DOE EnergyStar® compliant

**Warranty**

Spectron Self-Testing/Self Diagnostic Sempra Models Electronics and Battery: Lifetime
All Other Sempra Models LED Illumination Strip: Lifetime Unit and Electronics: 5 years full Battery: 1 year full, 9 years pro-rata (10 years total)

This warranty only applies when the product is used as intended. Any abuse or misuse contrary to normal installation or operation shall void this warranty.

**Suggested Specification**

Exit sign construction will be high-strength cast aluminum in textured (white)(white with brushed face)(black)(black with brushed face) finish. Exit face will provide 6" high letters with 3/4" stroke and break-out chevron type directional arrows. Exit sign design will allow universal 120/277VAC, 60 Hz operation. Normal illumination will be provided by 4 red or green high-output LEDs consuming less than 1 watt. Normal LED lamp life will be in excess of 20 years. Exit letters will exceed the lumen output and illumination uniformity required by UL specifications. Exits will be (single face) (double face) and provided with all necessary components for wall, ceiling or end mounting applications. Mounting canopies will be provided with all models and will be of identical construction and color to match the exit frame. Exits will be designed to mount to 3 1/2" or 4" octagon and 4" square electrical boxes or standard plaster rings. Emergency exit models will be achieved through a (factory)(field) installed fully automatic emergency operation module. All emergency module components will mount inside the exit housing and will include a solid-state, constant current type battery charger; a maintenance-free, nickel-cadmium battery; an AC-On Indicator light; and a test switch. The unit charger will be capable of recharging the battery within acceptable UL time standards. The emergency operation module must be capable of providing a minimum of 2 hours of emergency operation. Exit signs must comply with all UL 924 and NFPA 101 Life Safety Code requirements. Optional equipment will include:  
Dimensions to be 9 1/8" (23 cm) high x 11 1/4" (30 cm) wide by 1 1/8" (4 cm) deep.

**Product Selector (Single Face Models)**

AC Model Numbers	Emergency Model Numbers	Spectron* Model Numbers	Colors		
			Exit Letters	Housing	Stencil Face(s)
SESRW	SESRWE	SESRWEI	Red	White	White
SESGW	SESGWE	SESGWEI	Green	White	White
SESRWN	SESRWNE	SESRWNEI	Red	White	Brushed
SESGWN	SESGWNE	SESGWNEI	Green	White	Brushed
SESRB	SESRBE	SESRBEI	Red	Black	Black
SESGB	SESGBE	SESGBEI	Green	Black	Black
SESRBN	SESRBNE	SESRBNEI	Red	Black	Brushed
SESGBN	SESGBNE	SESGBNEI	Green	Black	Brushed

**Product Selector (Double Face Models)**

AC Model Numbers	Emergency Model Numbers	Spectron* Model Numbers	Colors		
			Exit Letters	Housing	Stencil Face(s)
SEDRW	SEDRWE	SEDRWEI	Red	White	White
SEDGW	SEDGWE	SEDGWEI	Green	White	White
SEDRWN	SEDRWNE	SEDRWNEI	Red	White	Brushed
SEDGWN	SEDGWNE	SEDGWNEI	Green	White	Brushed
SEDRB	SEDRBE	SEDRBEI	Red	Black	Black
SEDEB	SEDEBE	SEDEBEI	Green	Black	Black
SEDRBN	SEDRBNE	SEDRBNEI	Red	Black	Brushed
SEDEBN	SEDEBNE	SEDEBNEI	Green	Black	Brushed

\* For complete information on the Spectron self-testing/self-diagnostic electronics system, refer to data sheet 0601471.

**Battery Type:** Maintenance-free nickel-cadmium

**Power Consumption\***

	120VAC	277VAC
Red AC Only Models:	2.6 watts	2.6 watts
Green AC Only Models:	2.1 watts	2.1 watts
Red Emergency Models:	3.8 watts	3.8 watts
Green Emergency Models:	3.5 watts	3.5 watts

\* Wattage figures include LED lamps, transformer and electronics power requirements

LED lamp assemblies (red or green) consume less than 1 watt.

Power factor, average: .8 (lagging)

**Options and Accessory Items**

Descriptions	Factory Equipped Add Suffix To Model	Field Conversion Kit Order Part Number
Emergency operation module (red models)	— <sup>(1)</sup>	SER-E
Emergency operation module (green models)	— <sup>(1)</sup>	SEG-E
Remote DC operation <sup>(2,3,4)</sup>	-DC	—
2-circuit operation <sup>(2,3)</sup>	-2C	—
Fire alarm panel interface <sup>(1,4)</sup>	-FAP	—
2-circuit fire alarm panel interface <sup>(2,3,4)</sup>	-2CFAP	—
Flasher module <sup>(2,3)</sup>	-FM	—
Audible/Flasher module <sup>(2,3)</sup>	-AF	—
220/240 VAC, 60 Hz. operation	-24K	—
Special wording option <sup>(1)</sup>	-SW	—
Pendant mounting kit (white)	—	PMCW
Pendant mounting kit (black)	—	PMCB
Wire guard (Wall mount)	—	WGLX
Wire guard (Ceiling mount)	—	WGLXC
Wire guard (End mount)	—	WGLXE

**Special Wording Open Face Diffusers**

Option No.	Description	Option No.	Description
1	TO EXIT	12	AREA OF RESCUE ASSISTANCE
2	NOT AN EXIT	13	AREA OF RESCUE ASSISTANCE (w/wheelchair symbol)
3	IN USE		
4	XRAY IN USE	14	ELEVATOR
5	DARKROOM IN USE	15	RESTROOMS
6	CAUTION	16	MEN
7	DO NOT ENTER	17	MEN (w/symbol)
8	TEST IN PROGRESS	18	WOMEN
9	ON AIR	19	WOMEN (w/symbol)
10	AREA OF REFUGE		
11	AREA OF REFUGE (w/wheelchair symbol)		Consult factory for additional special wording diffuser options

(1) For factory-equipped emergency models, see Product Selector above

(2) For use with AC models only.

(3) For use with emergency models only.

(4) Operates with 24-volt AC or DC fire alarm panels.

(5) For emergency illumination of sign from remote 6-24 VDC power sources.

(6) -DC, -2C, -FAP, -2CFAP, -FM, -AF options may not be specified together.

(7) For special wording diffusers, see table above and add Option Number to Option Suffix in model number. Ex: SEDRWE-SW10



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SEDRWN

Notes:

**Type:**

**EXDF**

LEE07-6119

**DUAL LITE**

**SEMPRA Series**

*Compact, low-profile exit signs featuring  
cast aluminum construction, easy  
installation and energy-saving,  
long-life LED lamps*

**EXIT** >



All signs available with natural brushed face finishes



Patent Pending

**LIFETIME WARRANTY ON  
ALL SPECTRON MODELS**

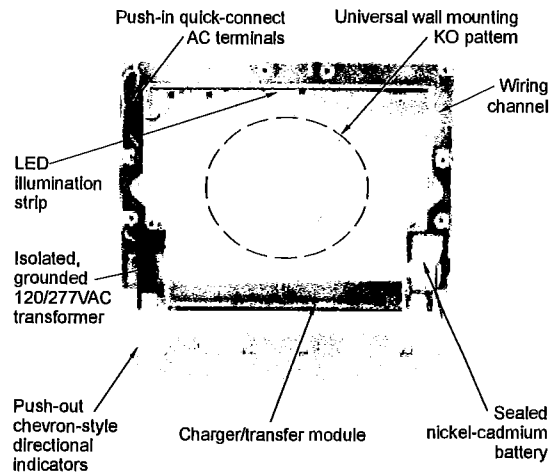
**Features**

**All Models**

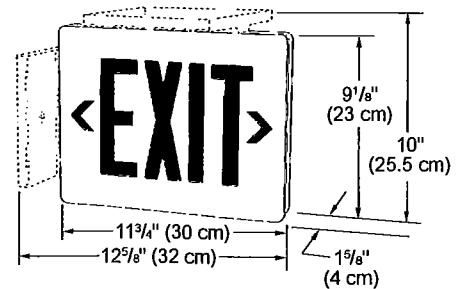
- High-strength cast aluminum construction
- Compact, low-profile style
- Easy to install
- Bright, even illumination
- Red and green letters
- Long-life LED lamps provide over 20 years of service
- Energy-saving operation
- Single and double face models
- White, white with brushed aluminum face, black and black with brushed aluminum face finishes offered
- Push-in wiring connectors provided
- End, ceiling or wall mounting
- Break-out chevron directional arrows
- 120/277VAC, 60 Hz operation
- Temperature range: 20°C to 30°C (68°F to 86°F)

**Emergency Models**

- Fully automatic, solid-state charger
- All emergency components mount inside exit housing
- Maintenance-free, nickel-cadmium battery
- Operates for a minimum of 2 hours
- Automatic battery protection
- Test switch
- AC-On indicator
- Models available with Spectron self-testing/  
self-diagnostic electronics
- UL 924 Listed



**Dimensions**



Hubbell Lighting Inc

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SEDRWN

**Type:**  
**EXDF**

Notes:

LEE07-6119

**Specifications**

**Sempra™ Series**  
**Cast Aluminum LED Exit Signs**

**Construction**

Sign: Housing, exit face(s) and matching canopy constructed of high-strength cast aluminum  
Sign Finish: Textured white, white with brushed aluminum face, black or black with brushed aluminum face  
Diffuser Finish: Frequency-matched silkscreened coating provides optimized LED light output

**Exit Face Design**

Letters: 6" letters, 3/4" stroke  
Directional Arrows: Break-out chevron type

**Illumination**

All Models: 4 red or 4 green high-output LEDs  
Rated lamp life: In excess of 20 years  
Brightness Index: Exceeds UL requirements  
Illumination Uniformity: Exceeds UL requirements

**Installation**

Mounting: Sign mounts to 3/2", 4" octagon, or 4" square outlet boxes and standard plaster rings.  
Wall Installations: Exit housing provides a knockout pattern for mounting to outlet box.  
Ceiling or End Installations: Mounting canopy provided with all models. Canopy mounts to outlet boxes by means of universal mounting plate supplied. Exit housing mounts to canopy bracket  
Wiring: Pre-stripped AC input pigtail leads provided. Push-in wire connectors supplied for making AC connections. All wiring dresses into formed wireways in exit housing.

**Electronics**

Input: 120/277VAC, 60 Hz (all models)  
Built-in Protection: Surge, transient and low-battery voltage  
Emergency Operation Module (Internally Mounted)  
Charger: Solid-state, constant current type  
Transfer: Solid-state design  
Battery Recharge Cycle: Per UL time standards  
Test Means: Integral test switch  
Indicators: AC-On LED indicator  
Operating Temperature range: 20°C to 30°C (68°F to 86°F)

**Compliances**

UL 924 (exceeds brightness and uniformity requirements and meets 2001 directional indicator specifications)  
NFPA-101  
EPA/DOE EnergyStar® compliant

**Warranty**

Spectron Self-Testing/Self Diagnostic Sempra Models Electronics and Battery: Lifetime
All Other Sempra Models LED Illumination Strip: Lifetime Unit and Electronics: 5 years full Battery: 1 year full, 9 years pro-rata (10 years total)

*This warranty only applies when the product is used as intended. Any abuse or misuse contrary to normal installation or operation shall void this warranty.*

**Suggested Specification**

Exit sign construction will be high-strength cast aluminum in textured (white)(white with brushed face)(black)(black with brushed face) finish. Exit face will provide 6" high letters with 3/4" stroke and break-out chevron type directional arrows. Exit sign design will allow universal 120/277VAC, 60 Hz operation. Normal illumination will be provided by 4 red or green high-output LEDs consuming less than 1 watt. Normal LED lamp life will be in excess of 20 years. Exit letters will exceed the lumen output and illumination uniformity required by UL specifications. Exits will be (single face) (double face) and provided with all necessary components for wall, ceiling or end mounting applications. Mounting canopies will be provided with all models and will be of identical construction and color to match the exit frame. Exits will be designed to mount to 3/2" or 4" octagon and 4" square electrical boxes or standard plaster rings. Emergency exit models will be achieved through a (factory)(field) installed fully automatic emergency operation module. All emergency module components will mount inside the exit housing and will include a solid-state, constant current type battery charger; a maintenance-free, nickel-cadmium battery; an AC-On indicator light; and a test switch. The unit charger will be capable of recharging the battery within acceptable UL time standards. The emergency operation module must be capable of providing a minimum of 2 hours of emergency operation. Exit signs must comply with all UL 924 and NFPA 101 Life Safety Code requirements. Optional equipment will include:  
Dimensions to be 9 1/2" (23 cm) high x 11 1/2" (30 cm) wide by 1 1/2" (4 cm) deep.

**Product Selector (Single Face Models)**

AC Model Numbers	Emergency Model Numbers	Spectron* Model Numbers	Colors		
			Exit Letters	Housing	Stenoll Face(s)
SESRW	SESRWE	SESRWEI	Red	White	White
SESGW	SESGWE	SESGWEI	Green	White	White
SESRWN	SESRWNE	SESRWNEI	Red	White	Brushed
SESGWN	SESGWNE	SESGWNEI	Green	White	Brushed
SESRB	SESRBE	SESRBEI	Red	Black	Black
SESGB	SESGBE	SESGBEI	Green	Black	Black
SESRBN	SESRBNE	SESRBNEI	Red	Black	Brushed
SESGBN	SESGBNE	SESGBNEI	Green	Black	Brushed

**Product Selector (Double Face Models)**

AC Model Numbers	Emergency Model Numbers	Spectron* Model Numbers	Colors		
			Exit Letters	Housing	Stenoll Face(s)
SEDRW	SEDRWE	SEDRWEI	Red	White	White
SEDGW	SEDGWE	SEDGWEI	Green	White	White
SEDRWN	SEDRWNE	SEDRWNEI	Red	White	Brushed
SEDGWN	SEDGWNE	SEDGWNEI	Green	White	Brushed
SEDRB	SEDRBE	SEDRBEI	Red	Black	Black
SEDEB	SEDEBE	SEDEBEI	Green	Black	Black
SEDRBN	SEDRBNE	SEDRBNEI	Red	Black	Brushed
SEDEBN	SEDEBNE	SEDEBNEI	Green	Black	Brushed

\* For complete information on the Spectron self-testing/self-diagnostic electronics system, refer to data sheet 0601471.

**Battery Type:** Maintenance-free nickel-cadmium

**Power Consumption\***

	120VAC	277VAC
Red AC Only Models:	2.6 watts	2.6 watts
Green AC Only Models:	2.1 watts	2.1 watts
Red Emergency Models:	3.8 watts	3.8 watts
Green Emergency Models:	3.5 watts	3.5 watts

\* Wattage figures include LED lamps, transformer and electronics power requirements

LED lamp assemblies (red or green) consume less than 1 watt

Power factor, average: .8 (lagging)

**Options and Accessory Items**

Descriptions	Factory Equipped Add Suffix To Model	Field Conversion Kit Order Part Number
Emergency operation module (red models)	— <sup>(1)</sup>	SER-E
Emergency operation module (green models)	— <sup>(1)</sup>	SEG-E
Remote DC operation <sup>(2)(3)(4)</sup>	-DC	—
2-circuit operation <sup>(2)(4)</sup>	-2C	—
Fire alarm panel interface <sup>(5)(6)</sup>	-FAP	—
2-circuit fire alarm panel interface <sup>(2)(7)(4)</sup>	-2CFAP	—
Flasher module <sup>(8)(9)</sup>	-FM	—
Audible/Flasher module <sup>(10)</sup>	-AF	—
220/240 VAC, 60 Hz. operation	-24K	—
Special wording option <sup>(11)</sup>	-SW	—
Pendant mounting kit (white)	—	PMCW
Pendant mounting kit (black)	—	PMCB
Wire guard (Wall mount)	—	WGLX
Wire guard (Ceiling mount)	—	WGLXC
Wire guard (End mount)	—	WGLXE

**Special Wording Open Face Diffusers**

Option No.	Description	Option No.	Description
1	TO EXIT	12	AREA OF RESCUE ASSISTANCE
2	NOT AN EXIT	13	AREA OF RESCUE ASSISTANCE (w/wheelchair symbol)
3	IN USE		
4	XRAY IN USE	14	ELEVATOR
5	DARKROOM IN USE	15	RESTROOMS
6	CAUTION	16	MEN
7	DO NOT ENTER	17	MEN (w/symbol)
8	TEST IN PROGRESS	18	WOMEN
9	ON AIR	19	WOMEN (w/symbol)
10	AREA OF REFUGE		
11	AREA OF REFUGE (w/wheelchair symbol)		Consult factory for additional special wording diffuser options

(1) For factory-equipped emergency models, see Product Selector above.

(2) For use with AC models only.

(3) For use with emergency models only.

(4) Operates with 24-volt AC or DC fire alarm panels.

(5) For emergency illumination of sign from remote 6-24 VDC power sources.

(6) -DC, -2C, -FAP, -2CFAP, -FM, -AF options may not be specified together.

(7) For special wording diffusers, see table above and add Option Number to Option Suffix in model number. Ex: SEDRWE-SW(10)

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
LN4XRW

Notes:

**Type:**

**EX1**

LEE07-6119

**DUAL LITE**

## LN4X Series

Wet location UL 50 type 4X exit signs for indoor/outdoor use, featuring energy-saving, long-life LED lamp assemblies.



**Liteforms**  
Collection



### Application

Indoor/outdoor applications with wet or dusty environments requiring corrosion-resistant, UL 50 type 4X exit signs with energy-saving, long-life LED lamp assemblies.

### Features

#### All Models

- UL 50 type 4X units for indoor/outdoor use
- Suitable for use in wet locations
- Oil-resistant gasket for watertight/dust-tight seal
- High-impact, corrosion-resistant polycarbonate housing
- LN4X Series utilizes NEMA 4X enclosures
- Easy installation
- Bright, even illumination
- Exceeds NFPA 101 illumination requirements
- Red and green letters
- Long-life LED lamps provide over 20 years of service
- Energy-saving operation
- EPA/DOE ENERGYSTAR® compliant
- Snap-in chevron type directional arrows
- Optional 2-circuit models available
- Listed to UL Standard 924
- Universal 120/277VAC operation
- Operating temperature range:  
AC models: 0°C to 40°C (32°F to 104°F)  
Emergency models: 10°C to 40°C (50°F to 104°F)  
Emergency models with -XTR option: -20°C to 50°C (-4°F to 122°F)

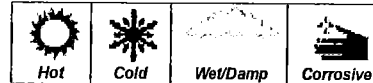
#### Emergency Sign Features

- Completely self-contained
- Fully automatic, solid-state charger
- Maintenance-free, nickel-cadmium battery
- Operates for a minimum of 90 minutes
- Automatic battery protection
- Test switch
- AC On indicator
- UL 924 Listed
- UL Wet/Damp location listed

An

**ULTRÉX**

Severe Conditions Product



### Product Selector

#### Standard Models

Fixture Type	Model Number	AC Voltage	Colors	
			Letters	Diffuser
	LN4XRW	120/277	Red	White
	LN4XGW	120/277	Green	White

#### Emergency Models

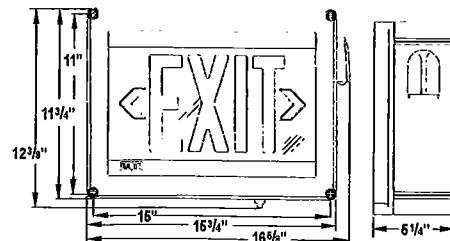
Fixture Type	Model Number	AC Voltage	Colors	
			Letters	Diffuser
	LN4XRWE	120/277	Red	White
	LN4XGWE	120/277	Green	White

#### Options

Description	Factory Equipped Add Suffix To Model
Spectron self-testing/self-diagnostic electronics <sup>(1)(2)</sup>	I
Extreme temperature operation <sup>(2)(8)(9)</sup>	-XTR
2-circuit operation <sup>(9)(7)</sup>	-2C
Fire alarm panel interface <sup>(4)(6)(7)</sup>	-FAP
Extreme temperature operation Fire alarm panel interface <sup>(2)(4)(6)(7)(8)(9)</sup>	-XTRFAP
Flasher module <sup>(2)(6)</sup>	-FM
Remote DC operation <sup>(3)(5)(6)</sup>	-DC
Tamper-proof screws (tool included)	-TR

- (1) Add "I" option suffix immediately after model number. Example: LN4XWEI
- (2) For use with emergency models only.
- (3) For use with AC models only.
- (4) Operates with 24 volt AC or DC fire alarm panels.
- (5) For emergency illumination of sign from remote 6-24VDC power sources.
- (6) -FAP, -XTRFAP, -FM or -DC options may not be specified together.
- (7) -2C and -FAP or -XTRFAP options may be specified together.
- (8) Not available with self-testing/self-diagnostic Spectron models.
- (9) Provides an operating temperature range of -20°C to 50°C (-4°F to 122°F)

### Dimensions



Hubbell Lighting, Inc.

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
LN4XRW

Notes:

Type:

**EX1**

LEE07-6119

## Specifications

# LN4X Series

## Wet Location LED Exit Signs

### Description

LN4X Series LED exit signs meet UL 50 type 4X standards; units are watertight, raintight, corrosion-resistant, suitable for use in damp or dusty locations. LN4X Series LED exit signs utilize NEMA 4X enclosures constructed of neutral gray, high-impact-resistant, glass-filled polycarbonate with a clear polycarbonate cover. The cover is secured to the housing by means of four slotted polyamide screws. An oil-resistant gasket supplied with the cover provides a watertight and dust-tight seal. 1/4" mounting holes for securing the housing to wall surfaces are located under the four cover screws. Exit letters meet UL 924 requirements. A white trim plate installs under the housing cover. Letters are offered standard in a choice of red or green. Directional arrows are snap-in chevron type. Illumination is provided by long-life, energy-saving LED lamps. Standard operation is from 120 or 277VAC.

### Emergency Models

LN4X LED Series emergency models are completely self-contained. A waterproof housing vent is provided on all emergency models. The unit incorporates a solid-state, constant current type charger module. Operation is fully automatic. During normal operation, the charger module maintains the battery at full charge. A transfer circuit automatically switches to emergency battery operation upon loss of normal power. The battery will operate the unit's LED lamps for a minimum of 90 minutes during emergency operation. An automatic low-voltage disconnect circuit protects the battery from deep discharge damage during prolonged power failures. On restoration of utility power, the charger will begin a recharge cycle and bring the battery to full capacity within acceptable UL time standards. A test switch is provided for checking emergency operation. An "AC On" LED indicator is supplied for checking the presence of utility power. Standard operation is from 120 or 277VAC.

### Battery

Type: Maintenance-free nickel-cadmium

### Illumination

LN4X LED Series exit signs are supplied with energy-saving LED lamp assemblies that allow operation from 120 or 277VAC. All models meet UL 924 requirements for exit face illumination and color contrast ratio and exceed NFPA 101 illumination requirements. LED lamp assemblies are arranged to provide a very evenly illuminated exit legend. Average useful life exceeds 20 years under normal operating conditions. LED lamp assemblies in emergency models provide illumination in AC and battery power modes.

### Temperature Ranges

AC models: 0°C to 40°C (32°F to 104°F)  
Emergency models: 10°C to 40°C (50°F to 104°F)  
Emergency models with -XTR option: -20°C to 50°C (-4°F to 122°F)

### Power Consumption

	120VAC	277VAC
Red AC Only Models	2.64 watts	2.70 watts
Green AC Only Models	2.24 watts	2.24 watts
Red Emergency Models	3.81 watts	3.80 watts
Green Emergency Models	3.50 watts	3.50 watts

Power Factor, Average: .8 (lagging)

### Installation

LN4X LED Series exit signs are designed to mount to walls through four 1/4" integral mounting holes in the unit housing. Mounting hardware supplied by others. Units must be surface wired for utility power input. Housings are easily drilled or punched to accept sealed conduit hubs (supplied by others).

### Options

Options include self-diagnostic operation (I), extreme temperature operation (-XTR), 2-circuit operation (-2C), fire alarm panel interface (-FAP), extreme temperature operation fire alarm panel interface (-XTRFAP), tamper-proof cover screws (-TR) remote DC operation (-DC) and flasher module (-FM).

### Warranty

Unit and Electronics: 5 years full

### Battery:

Standard Models: 1 year full, 9 years pro-rata (10 years total)  
Spectron Models: 2 years full, 8 years pro-rata (10 years total)

### Suggested Specifications

Exit signs shall be wet location listed UL 50 type 4X-rated for indoor/outdoor use. LN4X enclosures shall be corrosion-resistant polycarbonate and feature watertight and dust-tight construction. Molded in mounting holes shall be provided under the unit cover screws for securing the housing to walls. A choice of red or green letters will be supplied. Directional arrows shall be snap-in chevron type. Normal AC and emergency illumination will be provided by long-life, energy-saving LED lamp assemblies. Emergency models shall be supplied with all emergency operation components installed internally. Emergency components shall include a solid-state, constant current charger, a nickel-cadmium battery, an "AC On" LED indicator and a test switch for checking emergency operation. The unit charger shall include an automatic low-voltage disconnect circuit and will be capable of recharging the battery within acceptable UL time standards. Must be capable of providing 90 minutes minimum of emergency operation.

Exit signs will be Dual-Lite LN4X LED Series,  
model(s) \_\_\_\_\_

Submitted by Leesman Sales

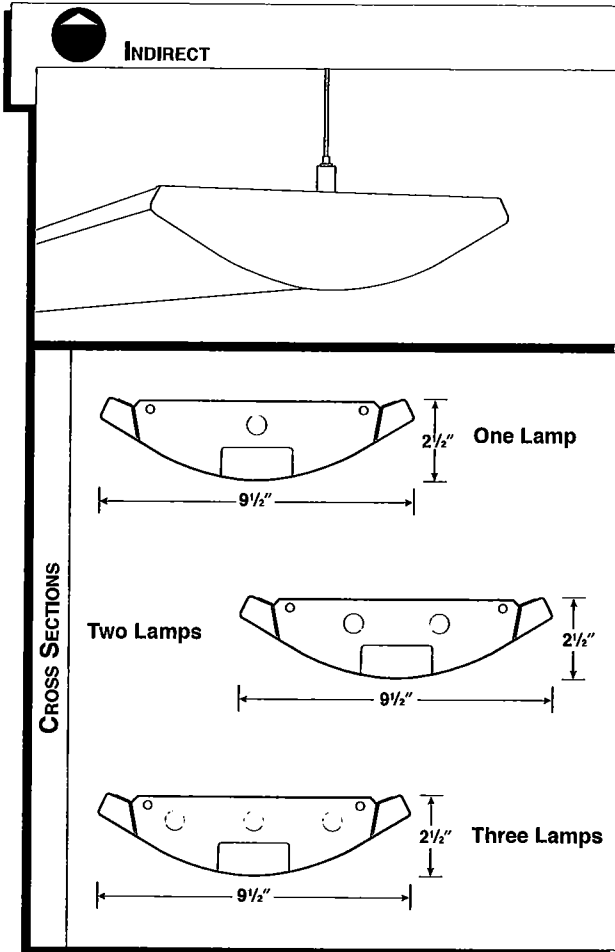


**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CV-2T5-S-PM 24" FEED/CM 18:  
NON FEED-EB5277-MW-4  
Notes:

**Type:**  
**G1**

LEE07-6119



**Cûrv**

**SOLID HOUSING, T5 OR T5HO**

TYPE

Project: \_\_\_\_\_

Location: \_\_\_\_\_

**CONSTRUCTION**

The Cûrv series is constructed of heavy 20-gauge steel with a 9 1/2" x 2 1/2" profile. Fixtures are available with up to three T5 or T5HO lamps. The exact shape of the housing is maintained by the use of an inner die cast plate at each fixture end. The housing is designed to wrap around the plate and secures on top with concealed screws to ensure housing tolerances are consistent. These die cast aluminum end caps and aligners provide zero tolerance alignment between fixtures, resulting in consistently straight rows with no snaking. The luminaire comes standard with a painted white steel reflector with specular inserts on the sides. A high efficiency reflector (HRF) option is constructed of high reflectance specular material and allows for wide distribution with maximum efficiency. An economical painted white reflector (WR) is available.

**FINISH**

The housing and all painted parts are treated with a multi-stage phosphate bonding process before being finished. Parts are then finished with a white RAL powder coat finish for maximum consistent coverage and longevity.

**MOUNTING**

The Cûrv is designed for ceiling suspension and is provided with an aircraft cable suspension mechanism. The fixed cable has a total vertical adjustment of 1 1/4". End of cable barrel screws into a standard 1/4 20 bolt brought down from the ceiling. Cover plates are provided to shield the ceiling cutout. A straight or optional coil cord is available for feed locations. A feed canopy is provided for each feed location. All fixtures are suspended in modular increments and must be supported at each fixture-housing end. Refer to the Cûrv TID sheet for actual hanging points for specific row information.

**LABELS AND ELECTRICAL**

All fixtures bear appropriate UL or CSA labels. Fixtures are prewired with small case electronic T5 or T5HO ballasts and are available in 120, 277, or 347 volt. All fixtures are wired for single circuit operation, but additional circuits can be supplied as an option by designating IBOB or L/R switching.

Dimensions and specifications subject to change without notice.

CV - 2T5-S-PM-CM 18 - EB5 277-MW-4-4B

<b>ORDERING INFORMATION</b>	<b>Model</b> CV - Cûrv	<b>Suspension Length</b> 18 - 18" 24 - 24" 36 - 36" 48 - 48" Other lengths available on request.	<b>Voltage</b> 120 - 120V 277 - 277V 347 - 347V U - 120V-277V	<b>Fixture Length</b> Single or Row Individual Lengths. Note: Fixtures in rows are modular & will be identified as components within the row by their individual lengths. Lengths for this product are: 4 = 4' 8 = 8' 12 = 12'
	<b>Row Length</b> Specify entire row			
	<b>Lamp Type &amp; Profile</b> 1T5 - One T5 Lamp 2T5 - Two T5 Lamps 3T5 - Three T5 Lamps 1T5HO - One T5HO Lamp 2T5HO - Two T5HO Lamps 3T5HO - Three T5HO Lamps			
	<b>Housing Type</b> S - Solid			
	<b>Ballast Type</b> EP - Electronic, Programmed Start (Standard for T5 & T5HO, optional for T8) EB5 - Electronic T5	<b>Finish</b> MW - Matte White (Std.) See MTX-1 for other color selections.	<b>Options</b> WR - White Reflector HRF - High Efficiency Reflector TBAR - T-Bar Mounting Clip DL - Damp Label IB/OB - Inboard/Outboard Switching L/R - Left/Right Switching EL - Emergency Battery Pack CSA - UL listed or CSA certified for Canada SCE - Shallow Cûrv End Cap BN - Bull Nose End Cap	
	<b>Mounting Method</b> FCM - Fixed Aircraft Cable Mount (Non-adjustable, Std.) CM - Adjustable Aircraft Cable Mount	Unless specified, Alera will use fewest ballasts possible.		



18 NON FEED

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18-4 C

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**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CV-2T5-S-PM 24" FEED/CM 18:  
NON FEED-EB5277-MW-4  
**Notes:**

**Type:**  
**G1**

LEE07-6119

**PHOTOMETRICS**

**CV, CURV**

**ONE LAMP STANDRAD REFLECTOR**

Cat. No.: CV-1T5HO-PERF-EB8  
Lamps: One FP54/835/HO  
Ballasts: QT1X54/120PHO  
Test No.: ITL51565  
Efficiency: 98.9%

Candela Curve (90° Plane)

Deg.	Parl.	45°	Norm.
0	3	3	3
5	4	3	2
15	3	6	6
25	2	6	5
35	2	4	3
45	1	2	2
55	0	2	2
65	0	0	0
75	0	0	0
85	0	0	0
90	0	0	0
95	36	170	76
105	186	1074	1126
115	367	1036	1898
125	541	815	1274
135	700	867	1023
145	827	927	1021
155	929	976	1027
165	997	1010	1027
175	1031	1026	1027
180	1027	1027	1027

**ENERGY DATA**  
Energy Cost: \$2.86\* LER: 84  
Input Watts: 69.2 BF: 1.0  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

RC RW	80				70				50				0
	70	50	30	10	70	50	30	10	50	30	10	0	
1	86	82	78	75	73	70	67	65	48	46	45	0	
2	78	71	66	61	66	61	57	53	42	39	37	0	
3	71	63	56	51	60	54	48	44	37	34	31	0	
4	65	55	48	43	55	47	41	37	33	29	26	0	
5	59	49	41	36	50	42	36	31	29	25	22	0	
6	54	43	36	31	46	37	31	27	26	22	19	0	
7	50	39	32	27	42	33	27	23	23	19	16	0	
8	46	35	28	23	39	30	24	20	21	17	14	0	
9	43	32	25	20	36	27	22	18	19	15	13	0	
10	40	29	22	18	34	25	19	16	17	14	11	0	

Zone	Lumens	Lamp	Fixture
0-30	4	0.1	0.1
0-40	6	0.1	0.1
0-60	8	0.2	0.2
0-90	10	0.2	0.2
90-120	2070	41.4	41.8
90-130	2853	57.1	57.7
90-150	4102	82.0	82.9
90-180	4936	98.7	99.8
0-180	4946	98.9	100.0

**ONE LAMP HIGH EFFICIENCY REFLECTOR**

Cat. No.: CV-1T5HO-PERF-EB5-HRF  
Lamps: One F54T5  
Ballasts: QT1X64/120PHO  
Test No.: 12987  
Efficiency: 99.2%

Candela Curve (90° Plane)

Deg.	Parl.	45°	Norm.
0	3	3	3
5	3	3	3
15	3	3	3
25	3	3	3
35	3	3	3
45	2	3	3
55	2	2	2
65	1	2	2
75	1	1	2
85	1	1	1
90	3	2	1
95	24	163	105
105	89	1006	952
115	173	1110	1834
125	262	843	1504
135	345	813	1079
145	417	755	933
155	472	684	816
165	510	611	671
175	530	544	552
180	531	531	531

**ENERGY DATA**  
Energy Cost: \$3.39\* LER: 71  
Input Watts: 61 BF: 1.00  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

RC RW	80				70				50				0
	70	50	30	10	70	50	30	10	50	30	10	0	
1	86	82	78	75	73	70	67	65	48	46	45	0	
2	78	72	66	61	67	61	57	53	42	39	37	0	
3	71	63	56	51	61	54	48	44	37	34	31	0	
4	65	55	48	43	55	47	42	37	33	29	26	0	
5	59	49	42	36	50	42	36	31	29	25	22	0	
6	54	43	36	31	46	37	31	27	26	22	19	0	
7	50	39	32	27	43	33	27	23	23	19	16	0	
8	46	35	28	23	39	30	24	20	21	17	14	0	
9	43	32	25	20	36	27	21	18	19	15	12	0	
10	40	29	22	18	34	25	19	15	17	13	11	0	

Zone	Lumens	Lamp	Fixture
0-30	3	0.1	0.1
0-40	4	0.1	0.1
0-60	8	0.2	0.2
0-90	13	0.3	0.3
90-120	1963	44.6	45.0
90-130	2760	62.7	63.2
90-150	3818	85.8	87.5
90-180	4353	98.9	99.7
0-180	4366	99.2	100.0

**TWO LAMP HIGH EFFICIENCY REFLECTOR**

Cat. No.: CV-2T5HO-PERF-EB5-HRF  
Lamps: Two F54T5  
Ballasts: QT2X54/120PHO  
Test No.: 12933  
Efficiency: 97.9%

Candela Curve (90° Plane)

Deg.	Parl.	45°	Norm.
0	7	7	7
5	7	7	6
15	7	7	6
25	7	6	7
35	6	6	5
45	5	5	6
55	4	5	6
65	2	4	5
75	2	2	3
85	1	2	2
90	2	2	2
95	60	295	219
105	207	1300	1387
115	391	2207	2390
125	579	2106	3027
135	756	1837	2635
145	905	1694	2147
155	1022	1529	1816
165	1105	1355	1496
175	1148	1190	1216
180	1155	1165	1165

**ENERGY DATA**  
Energy Cost: \$3.38\* LER: 71  
Input Watts: 121 BF: 1.00  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

RC RW	80				70				50				0
	70	50	30	10	70	50	30	10	50	30	10	0	
1	85	81	77	74	72	69	66	64	47	46	44	0	
2	77	71	65	61	66	60	56	52	42	39	37	0	
3	70	62	55	50	60	53	48	44	36	33	31	0	
4	64	54	47	42	54	47	41	37	32	29	26	0	
5	59	48	41	36	50	41	35	31	29	25	22	0	
6	54	43	36	30	46	37	31	27	25	22	19	0	
7	49	38	31	26	42	33	27	23	23	19	16	0	
8	45	34	27	23	39	30	24	20	21	17	14	0	
9	42	31	24	20	36	27	21	17	19	15	12	0	
10	39	28	22	17	33	24	19	15	17	13	11	0	

Zone	Lumens	Lamp	Fixture
0-30	6	0.1	0.1
0-40	9	0.1	0.1
0-60	17	0.2	0.2
0-90	25	0.3	0.3
90-120	3236	36.8	37.6
90-130	4989	56.7	57.9
90-150	7405	84.2	86.0
90-180	8587	97.6	99.7
0-180	8612	97.9	100.0



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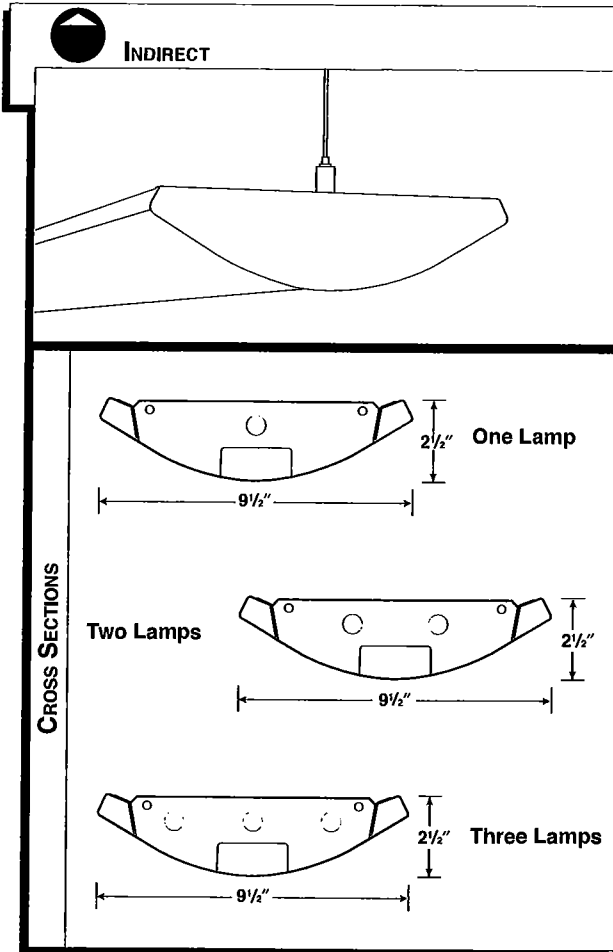


**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CV-2T5-S-PM 24" FEED / CM 24"  
NON FEED-EB5277-MW-8-L/R  
Notes:

**Type:**  
**G21**

LEE07-6119



**Cûrv**

**SOLID HOUSING, T5 OR T5HO**

TYPE

Project: \_\_\_\_\_

Location: \_\_\_\_\_

**CONSTRUCTION**

The Cûrv series is constructed of heavy 20-gauge steel with a 9 1/2" x 2 1/2" profile. Fixtures are available with up to three T5 or T5HO lamps. The exact shape of the housing is maintained by the use of an inner die cast plate at each fixture end. The housing is designed to wrap around the plate and secures on top with concealed screws to ensure housing tolerances are consistent. These die cast aluminum end caps and alligners provide zero tolerance alignment between fixtures, resulting in consistently straight rows with no snaking. The luminaire comes standard with a painted white steel reflector with specular inserts on the sides. A high efficiency reflector (HRF) option is constructed of high reflectance specular material and allows for wide distribution with maximum efficiency. An economical painted white reflector (WR) is available.

**FINISH**

The housing and all painted parts are treated with a multi-stage phosphate bonding process before being finished. Parts are then finished with a white RAL powder coat finish for maximum consistent coverage and longevity.

**MOUNTING**

The Cûrv is designed for ceiling suspension and is provided with an aircraft cable suspension mechanism. The fixed cable has a total vertical adjustment of 1 1/4". End of cable barrel screws into a standard 1/4 20 bolt brought down from the ceiling. Cover plates are provided to shield the ceiling cutout. A straight or optional coil cord is available for feed locations. A feed canopy is provided for each feed location. All fixtures are suspended in modular increments and must be supported at each fixture-housing end. Refer to the Cûrv TID sheet for actual hanging points for specific row information.

**LABELS AND ELECTRICAL**

All fixtures bear appropriate UL or CSA labels. Fixtures are prewired with small case electronic T5 or T5HO ballasts and are available in 120, 277, or 347 volt. All fixtures are wired for single circuit operation, but additional circuits can be supplied as an option by designating IBOB or LR switching.

Dimensions and specifications subject to change without notice.

**CV - 2T5 - S - CM 24 - EB5 277 - MW - 8' - LR**

<b>ORDERING INFORMATION</b>	<b>Model</b> CV - Cûrv	<b>Suspension Length</b> 18 - 18" 24 - 24" 36 - 36" 48 - 48" Other lengths available on request.	<b>Voltage</b> 120 - 120V 277 - 277V 347 - 347V U - 120V-277V	<b>Fixture Length</b> Single or Row Individual Lengths. Note: Fixtures in rows are modular & will be identified as components within the row by their individual lengths. Lengths for this product are: 4 = 4' 8 = 8' 12 = 12'
	<b>Row Length</b> Specify entire row	<b>Ballast Type</b> EP - Electronic, Programmed Start (Standard for T5 & T5HO, optional for T8)	<b>Finish</b> MW - Matte White (Std.) See MTX-1 for other color selections.	<b>Options</b> WR - White Reflector HRF - High Efficiency Reflector TBAR - T-Bar Mounting Clip DL - Damp Label IB/OB - Inboard/Outboard Switching L/R - Left/Right Switching
	<b>Lamp Type &amp; Profile</b> 1T5 - One T5 Lamp 2T5 - Two T5 Lamps 3T5 - Three T5 Lamps 1T5HO - One T5HO Lamp 2T5HO - Two T5HO Lamps 3T5HO - Three T5HO Lamps	<b>Mounting Method</b> FCM - Fixed Aircraft Cable Mount (Non-adjustable, Std.) CM - Adjustable Aircraft Cable Mount	<b>Unless specified, Alera will use fewest ballasts possible.</b>	<b>EL - Emergency Battery Pack</b> <b>CSA - UL Listed or CSA certified for Canada</b> <b>SCE - Shallow Cûrv End Cap</b> <b>BN - Bull Nose End Cap</b>
	<b>Housing Type</b> S - Solid	<b>PM - Pendant Mount 24" Feed</b>		

24" NON FEED



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**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CV-2T5-S-PM 24" FEED / CM 24"  
NON FEED-EB5277-MW-8-L/R  
Notes:

**Type:**  
**G21**

LEE07-6119

**PHOTOMETRICS**

**CV, CURV**

**ONE LAMP STANDRAD REFLECTOR**

Cat. No.: CV-1T5HO-S-EP  
Lamps: One F54T5  
Ballasts: QT1X54/120PHO  
Test No.: 13004  
Efficiency: 99.1%

Candela Curve (90° Plane)

CANDLEPOWER			
Deg.	Parl.	45°	Norm.
90	0	0	0
95	40	187	138
100	98	476	479
105	169	847	781
110	246	1025	1157
115	324	1002	1363
120	400	860	1373
125	474	770	1192
130	544	753	1012
135	608	777	915
140	668	801	892
145	721	825	893
150	768	845	895
155	808	863	897
160	842	870	897
165	867	891	897
170	886	899	897
175	897	903	896
180	900	900	900

COEFFICIENTS OF UTILIZATION														
		80				70				50				0
RC	RW	70	50	30	10	70	50	30	10	50	30	10	0	
1		86	82	78	75	73	70	67	65	48	46	45	0	
2		78	71	66	61	66	61	57	53	42	39	37	0	
3		71	63	58	51	60	54	48	44	37	34	31	0	
4		65	55	48	43	55	47	41	37	33	29	26	0	
5		59	49	41	36	50	42	36	31	29	25	22	0	
6		54	43	36	31	46	37	31	27	28	22	19	0	
7		50	39	32	26	42	33	27	23	23	19	16	0	
8		46	35	28	23	39	30	24	20	21	17	14	0	
9		43	31	25	20	36	27	21	17	19	15	12	0	
10		40	29	22	18	34	25	19	15	17	13	11	0	

ZONAL SUMMARY			
Zone	Lumens	Lamp	Fixture
0-30	0	0	0
0-40	0	0	0
0-60	0	0	0
0-90	0	0	0
90-120	1777	40.4	40.8
90-130	2513	57.1	57.6
90-150	3626	82.4	83.2
90-180	4359	99.1	100.0
0-180	4359	99.1	100.0

**ONE LAMP HIGH EFFICIENCY REFLECTOR**

Cat. No.: CV-1T5HO-S-EP-HRF  
Lamps: One F54T5  
Ballasts: QT1X54/120PHO  
Test No.: 13011  
Efficiency: 99.7

Candela Curve (90° Plane)

CANDLEPOWER			
Deg.	Parl.	45°	Norm.
90	0	0	0
95	20	178	116
100	49	431	450
105	86	912	685
110	127	1134	1234
115	171	1222	1571
120	215	1152	1602
125	259	985	1676
130	301	846	1526
135	342	821	1239
140	379	794	1036
145	412	760	986
150	441	723	893
155	466	684	817
160	486	645	741
165	503	607	668
170	515	570	604
175	522	537	546
180	523	523	523

COEFFICIENTS OF UTILIZATION														
		80				70				50				0
RC	RW	70	50	30	10	70	50	30	10	50	30	10	0	
1		86	82	79	76	74	70	68	65	48	47	45	0	
2		79	72	66	62	67	62	57	53	42	39	37	0	
3		72	63	56	51	61	54	49	44	37	34	31	0	
4		65	55	48	43	55	48	42	37	33	29	26	0	
5		60	49	42	36	51	42	36	32	29	25	22	0	
6		55	44	36	31	46	38	31	27	26	22	19	0	
7		50	39	32	27	43	34	28	23	23	19	16	0	
8		46	35	28	23	39	30	24	20	21	17	14	0	
9		43	32	25	20	36	27	22	18	19	15	12	0	
10		40	29	22	18	34	25	19	15	17	14	11	0	

ZONAL SUMMARY			
Zone	Lumens	Lamp	Fixture
0-30	0	0	0
0-40	0	0	0
0-60	0	0	0
0-90	0	0	0
90-120	1874	42.6	42.7
90-130	2762	62.8	63.0
90-150	3856	87.6	87.9
90-180	4387	99.7	100.0
0-180	4387	99.7	100.0

**TWO LAMP HIGH EFFICIENCY REFLECTOR**

Cat. No.: CV-2T5HO-S-EP-HRF  
Lamps: Two F54T5  
Ballasts: QT2X54/120PHO  
Test No.: 13007  
Efficiency: 98.2

Candela Curve (90° Plane)

CANDLEPOWER			
Deg.	Parl.	45°	Norm.
90	0	0	0
95	43	248	184
100	110	779	639
105	193	1288	1279
110	285	1913	1752
115	382	2322	2391
120	478	2341	3062
125	574	2191	3252
130	667	1999	3126
135	755	1812	2847
140	836	1698	2498
145	907	1634	2159
150	970	1562	1945
155	1025	1489	1784
160	1072	1412	1627
165	1108	1334	1475
170	1134	1256	1336
175	1149	1188	1211
180	1158	1158	1158

COEFFICIENTS OF UTILIZATION														
		80				70				50				0
RC	RW	70	50	30	10	70	50	30	10	50	30	10	0	
1		85	81	78	74	73	69	67	64	47	46	44	0	
2		77	71	65	61	66	61	56	53	42	39	37	0	
3		70	62	56	50	60	53	48	44	37	33	31	0	
4		64	55	48	42	55	47	41	37	32	29	26	0	
5		59	48	41	36	50	42	36	31	29	25	22	0	
6		54	43	36	31	46	37	31	27	25	22	19	0	
7		49	38	31	26	42	33	27	23	23	19	16	0	
8		46	35	28	23	39	30	24	20	21	17	14	0	
9		42	31	24	20	36	27	21	17	19	15	12	0	
10		39	28	22	17	33	24	19	15	17	13	11	0	

ZONAL SUMMARY			
Zone	Lumens	Lamp	Fixture
0-30	21	0.2	0.3
0-40	34	0.4	0.5
0-60	61	0.7	0.8
0-90	91	1.0	1.3
90-120	3237	36.8	37.4
90-130	5057	57.5	58.5
90-150	7483	85.0	86.5
90-180	8645	98.2	100.0
0-180	8645	98.2	100.0



Submitted by Leesman Sales

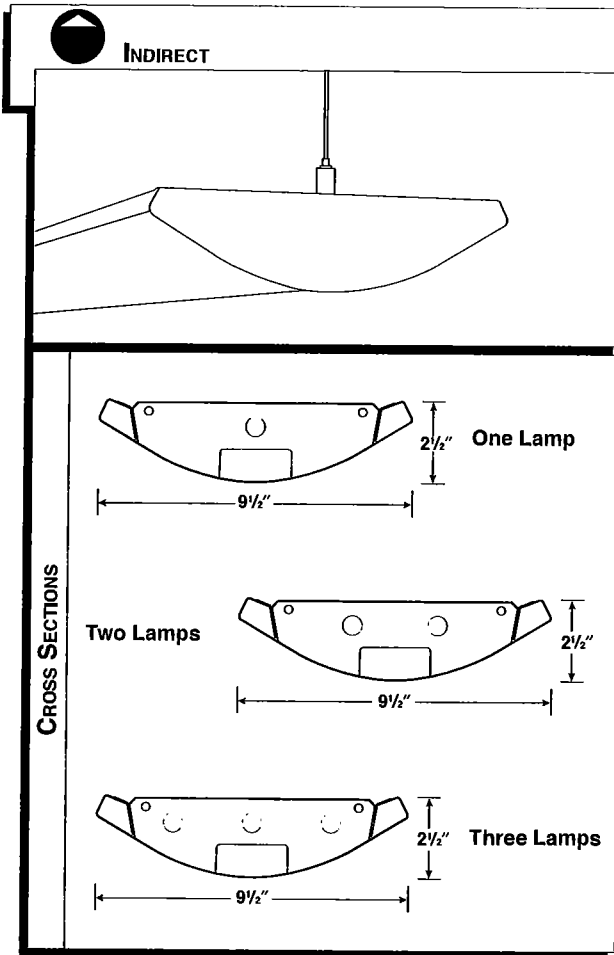


**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CV-2T5-S-PM 24" FEED / CM 24" NON FEED-  
EB5277-MW-8-L/R-GTD SUPPLIED BY  
LEESMAN FACTORY INSTALLED

**Type:**  
**G21GTD**

LEE07-6119



**Cûrv**

**SOLID HOUSING, T5 OR T5HO**

TYPE

Project: \_\_\_\_\_

Location: \_\_\_\_\_

**CONSTRUCTION**

The Cûrv series is constructed of heavy 20-gauge steel with a 9 1/2" x 2 1/2" profile. Fixtures are available with up to three T5 or T5HO lamps. The exact shape of the housing is maintained by the use of an inner die cast plate at each fixture end. The housing is designed to wrap around the plate and secures on top with concealed screws to ensure housing tolerances are consistent. These die cast aluminum end caps and aligners provide zero tolerance alignment between fixtures, resulting in consistently straight rows with no snaking. The luminaire comes standard with a painted white steel reflector with specular inserts on the sides. A high efficiency reflector (HRF) option is constructed of high reflectance specular material and allows for wide distribution with maximum efficiency. An economical painted white reflector (WR) is available.

**FINISH**

The housing and all painted parts are treated with a multi-stage phosphate bonding process before being finished. Parts are then finished with a white RAL powder coat finish for maximum consistent coverage and longevity.

**MOUNTING**

The Cûrv is designed for ceiling suspension and is provided with an aircraft cable suspension mechanism. The fixed cable has a total vertical adjustment of 1 1/4". End of cable barrel screws into a standard 1/4" 20 bolt brought down from the ceiling. Cover plates are provided to shield the ceiling cutout. A straight or optional coil cord is available for feed locations. A feed canopy is provided for each feed location. All fixtures are suspended in modular increments and must be supported at each fixture-housing end. Refer to the Cûrv TID sheet for actual hanging points for specific row information.

**LABELS AND ELECTRICAL**

All fixtures bear appropriate UL or CSA labels. Fixtures are prewired with small case electronic T5 or T5HO ballasts and are available in 120, 277, or 347 volt. All fixtures are wired for single circuit operation, but additional circuits can be supplied as an option by designating IBOB or LR switching.

Dimensions and specifications subject to change without notice.

**CV - 2T5 - SPM - CM 24 - EB5 277 - MW - 8 - LR**

<b>ORDERING INFORMATION</b>	<b>Model</b> CV - Cûrv	<b>Suspension Length</b> 18 - 18" 24 - 24" 36 - 36" 48 - 48" Other lengths available on request.	<b>Voltage</b> 120 - 120V 277 - 277V 347 - 347V U - 120V-277V	<b>Fixture Length</b> Single or Row Individual Lengths. Note: Fixtures in rows are modular & will be identified as components within the row by their individual lengths. Lengths for this product are: 4 = 4' 8 = 8' 12 = 12'
	<b>Row Length</b> Specify entire row			
	<b>Lamp Type &amp; Profile</b> 1T5 - One T5 Lamp 2T5 - Two T5 Lamps 3T5 - Three T5 Lamps 1T5HO - One T5HO Lamp 2T5HO - Two T5HO Lamps 3T5HO - Three T5HO Lamps			
	<b>Housing Type</b> S - Solid			
	<b>Ballast Type</b> EP - Electronic, Programmed Start (Standard for T5 & T5HO, optional for T8) EB5 - Electronic T5	<b>Finish</b> MW - Matte White (Std.) See MTX-1 for other color selections.	<b>Options</b> WR - White Reflector HRF - High Efficiency Reflector TBAR - T-Bar Mounting Clip DL - Damp Label IB/OB - Inboard/Outboard Switching L/R - Left/Right Switching EL - Emergency Battery Pack CSA - UL listed or CSA certified for Canada SCE - Shallow Cûrv End Cap BN - Bull Nose End Cap	
	<b>Mounting Method</b> PM - Pendant Mount 24" Feed FCM - Fixed Aircraft Cable Mount (Non-adjustable Std.) CM - Adjustable Aircraft Cable Mount	Unless specified, Alera will use fewest ballasts possible.		



24" NON FEED

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GTD SUPPLIED BY LEESMAN FACTORY INSTALLED

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CV-2T5-S-PM 24" FEED / CM 24" NON FEED-  
EB5277-MW-8-LR-GTD SUPPLIED BY  
LEESMAN FACTORY INSTALLED  
**Notes:**

**Type:**  
**G21GTD**

LEE07-6119

**PHOTOMETRICS**

**CV, CURV**

**ONE LAMP STANDRAD REFLECTOR**

Cat. No.: CV-1T5HO-S-EP  
Lamps: One F54T5  
Ballasts: QT1X54/120PHO  
Test No.: 13004  
Efficiency: 99.1%

Candela Curve (90° Plane)

CANDLEPOWER			
Deg.	Parl.	45°	Norm.
90	0	0	0
95	40	167	138
100	98	476	479
105	169	847	781
110	246	1025	1157
115	324	1002	1363
120	400	860	1373
125	474	770	1192
130	544	753	1012
135	608	777	915
140	668	801	892
145	721	825	893
150	768	845	895
155	808	863	897
160	842	879	897
165	867	891	897
170	886	899	897
175	897	903	896
180	900	900	900

COEFFICIENTS OF UTILIZATION														
RC	RW	80				70				50				0
		70	50	30	10	70	50	30	10	60	50	30	10	
1		86	82	78	75	73	70	67	65	48	46	45	0	
2		78	71	66	61	66	61	57	53	42	39	37	0	
3		71	63	56	51	60	54	48	44	37	34	31	0	
4		65	55	48	43	55	47	41	37	33	29	26	0	
5		59	49	41	36	50	42	36	31	29	25	22	0	
6		54	43	36	31	46	37	31	27	26	22	19	0	
7		50	39	32	26	42	33	27	23	23	19	16	0	
8		46	35	28	23	39	30	24	20	21	17	14	0	
9		43	31	25	20	36	27	21	17	19	15	12	0	
10		40	29	22	18	34	25	19	15	17	13	11	0	

ZONAL SUMMARY			
Zone	Lumens	Lamp	Fixture
0-30	0	0	0
0-40	0	0	0
0-50	0	0	0
0-90	0	0	0
90-120	1777	40.4	40.8
90-130	2513	57.1	57.6
90-150	3626	82.4	83.2
90-180	4359	99.1	100.0
0-180	4359	99.1	100.0

**ONE LAMP HIGH EFFICIENCY REFLECTOR**

Cat. No.: CV-1T5HO-S-EP-HRF  
Lamps: One F54T5  
Ballasts: QT1X54/120PHO  
Test No.: 13011  
Efficiency: 99.7

Candela Curve (90° Plane)

CANDLEPOWER			
Deg.	Parl.	45°	Norm.
90	0	0	0
95	20	178	116
100	49	431	450
105	86	912	685
110	127	1134	1234
115	171	1222	1571
120	215	1152	1662
125	259	985	1676
130	301	846	1526
135	342	821	1239
140	379	794	1036
145	412	760	966
150	441	723	893
155	466	684	817
160	486	645	741
165	503	607	668
170	515	570	604
175	522	537	546
180	523	523	523

COEFFICIENTS OF UTILIZATION														
RC	RW	80				70				50				0
		70	50	30	10	70	50	30	10	50	30	10		
1		86	82	79	76	74	70	68	65	48	47	45	0	
2		79	72	66	62	67	62	57	53	42	39	37	0	
3		72	63	56	51	61	54	49	44	37	34	31	0	
4		65	55	48	43	55	48	42	37	33	29	26	0	
5		60	49	42	36	51	42	36	32	29	25	22	0	
6		55	44	36	31	46	38	31	27	26	22	19	0	
7		50	39	32	27	43	34	28	23	23	19	16	0	
8		46	35	28	23	39	30	24	20	21	17	14	0	
9		43	32	25	20	36	27	22	18	19	15	12	0	
10		40	29	22	18	34	25	19	15	17	14	11	0	

ZONAL SUMMARY			
Zone	Lumens	Lamp	Fixture
0-30	0	0	0
0-40	0	0	0
0-60	0	0	0
0-90	0	0	0
90-120	1874	42.6	42.7
90-130	2762	62.3	63.0
90-150	3856	87.6	87.9
90-180	4387	99.7	100.0
0-180	4387	99.7	100.0

**TWO LAMP HIGH EFFICIENCY REFLECTOR**

Cat. No.: CV-2T5HO-S-EP-HRF  
Lamps: Two F54T5  
Ballasts: QT2X54/120PHO  
Test No.: 13007  
Efficiency: 98.2

Candela Curve (90° Plane)

CANDLEPOWER			
Deg.	Parl.	45°	Norm.
90	0	0	0
95	43	248	184
100	110	779	839
105	193	1288	1279
110	285	1913	1752
115	382	2322	2391
120	478	2341	3062
125	574	2191	3252
130	667	1999	3126
135	755	1812	2847
140	836	1698	2498
145	907	1634	2159
150	970	1562	1945
155	1025	1489	1784
160	1072	1412	1627
165	1108	1334	1475
170	1134	1256	1336
175	1149	1188	1211
180	1158	1158	1158

COEFFICIENTS OF UTILIZATION														
RC	RW	80				70				50				0
		70	50	30	10	70	50	30	10	50	30	10		
1		85	81	78	74	73	69	67	64	47	46	44	0	
2		77	71	65	61	66	61	56	53	42	39	37	0	
3		70	62	55	50	60	53	48	44	37	33	31	0	
4		64	55	48	42	55	47	41	37	32	28	26	0	
5		59	48	41	36	50	42	36	31	29	25	22	0	
6		54	43	36	31	46	37	31	27	25	22	19	0	
7		49	38	31	26	42	33	27	23	23	19	16	0	
8		46	35	28	23	39	30	24	20	21	17	14	0	
9		42	31	24	20	36	27	21	17	19	15	12	0	
10		39	28	22	17	33	24	19	15	17	13	11	0	

ZONAL SUMMARY			
Zone	Lumens	Lamp	Fixture
0-30	21	0.2	0.3
0-40	34	0.4	0.5
0-60	61	0.7	0.8
0-90	91	1.0	1.3
90-120	3237	36.8	37.4
90-130	5057	57.5	58.5
90-150	7483	85.0	86.5
90-180	8645	98.2	100.0
0-180	8645	98.2	100.0



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AL 06/02



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

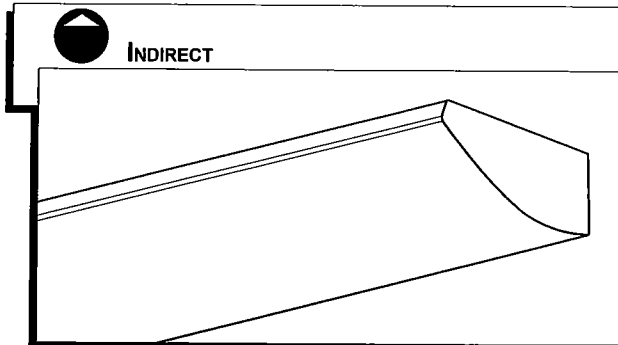
**Catalog Number:**  
CV-2T5-S-WM-EB5277-MW-8

Notes:

**Type:**

**G21S**

LEE07-6119



INDIRECT

**Cûrv**  
WALL MOUNT

TYPE

Project: \_\_\_\_\_

Location: \_\_\_\_\_

**CONSTRUCTION**

The Cûrv is constructed of heavy 20-gauge perforated or solid steel with a 6¼" x 2½" profile. Perforated sections include a hole pattern that measures .0625" in diameter, provides 23% opening per square inch (refer to the TID sheet for an illustration), and has a white acrylic diffuser overlay.

Fixtures are available with one or two T5, T5 HO, or T8 lamps. The housing is designed to wrap around the inner die cast plate and secure on top with concealed screws to ensure housing tolerances are consistent. Die cast aluminum endcaps and inner end plates have a tongue and groove connection eliminating the possibility of light leak and ensuring straight rows.

**FINISH**

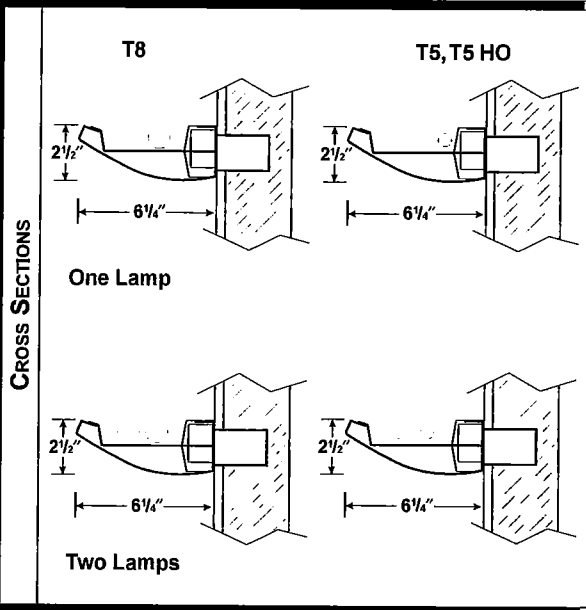
The housing and all painted parts are treated with a multi-stage phosphate bonding process before being finished. Parts are then finished with a white RAL powder coat finish for maximum consistent coverage and longevity.

**MOUNTING**

The Cûrv mounts directly to and is flush with the wall. A 1¼" x 3" cutout is provided in the unit to mount to a junction box. A cover plate is used to cover the exposed junction box. Keyhole slots on the back of the unit provide additional support. Consult the Installation Sheet for exact dimensions and location of holes and slots.

**LABELS AND ELECTRICAL**

All fixtures bear appropriate UL or CSA labels. Fixtures are prewired with electronic T5, T5 HO, or T8 ballasts and are available in 120, 277, or 347 volt. All fixtures are wired for single circuit operation, but left/right circuits can be added as an option.



CROSS SECTIONS

T8

T5, T5 HO

2½"

2½"

6¼"

6¼"

2½"

2½"

6¼"

6¼"

Two Lamps

One Lamp

Dimensions and specifications subject to change without notice.

CV - 2T5 - S - WM - EB5 277 - MW - 8 -

<b>ORDERING INFORMATION</b>	<b>Model</b> CV - Cûrv	<b>Mounting Method</b> WM - Wall Mount	<b>Voltage</b> 120 - 120V 277 - 277V 347 - 347V	<b>Fixture Length</b> 4 - 4' 8 - 8'
	<b>Lamp Type &amp; Profile</b> 1T5 - One T5 Lamp 2T5 - Two T5 Lamps 1T5HO - One T5 HO Lamp 2T5HO - Two T5 HO Lamps 1T8 - One T8 Lamp 2T8 - Two T8 Lamps	<b>Ballast Type</b> EB5 - Electronic T5 EB8 - Electronic T8 EB8LH - Electronic T8, <10% THD Unless specified, Alera will use fewest ballasts possible.	<b>Finish</b> MW - Matte White (Std.) See MTX-1 for other color selections.	<b>Options</b> WR - White Reflector HRF - High Efficiency Reflector SCE - Shallow Cûrv End Cap BN - Bull Nose End Cap DL - Damp Label L/R - Left/Right Switching EL - Emergency Battery Pack CSA - Approved, Canadian Standards Association
	<b>Housing Type</b> PERF - Perforated S - Solid			



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CV-2T5-S-WM-EB5277-MW-8

**Type:**  
**G21S**

Notes:

LEE07-6119

**PHOTOMETRICS**

**CV, CURV, WALL MOUNT**

**ONE LAMP - T8**

Cat. No.: CV-1T8-P-WM-EB8-HRF  
Lamps: One F32T8  
Ballasts: REL1P32SC  
Test No.: 13103  
Efficiency: 86.1

Candela Curve (90° Plane)

CANDLEPOWER			
Deg.	Parl.	45°	Norm.
0	10	10	10
5	10	10	10
15	9	11	12
25	8	11	13
35	7	11	17
45	5	14	19
55	3	14	17
65	2	12	13
75	1	7	9
85	1	4	5
90	1	2	3
95	43	67	71
105	197	290	262
115	319	419	553
125	401	473	720
135	448	515	789
145	486	535	783
155	502	535	711
165	503	518	622
175	489	491	511
180	488	488	488

**ENERGY DATA**  
Energy Cost: \$3.64\* LER: 66  
Input Watts: 38 BF: 1.00  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

COEFFICIENTS OF UTILIZATION														
RC	RW	80				70				60				0
		70	50	30	10	70	50	30	10	50	30	10		
1	75	71	68	65	64	61	59	57	42	41	39	1		
2	68	62	57	53	58	53	50	46	37	35	33	1		
3	62	55	49	44	53	47	42	38	32	30	27	1		
4	57	48	42	37	48	41	36	32	29	25	23	1		
5	52	42	36	31	44	37	31	27	25	22	19	0		
6	47	38	31	27	40	33	27	23	23	19	17	0		
7	43	34	27	23	37	29	24	20	20	17	14	0		
8	40	30	24	20	34	26	21	17	18	15	12	0		
9	37	27	21	17	32	24	19	15	17	13	11	0		
10	34	25	19	15	29	21	17	13	15	12	10	0		

ZONAL SUMMARY			
Zone	Lumens	Lamp	Fixture
0-30	7	0.3	0.3
0-40	13	0.4	0.5
0-60	27	0.9	1.1
0-90	42	1.5	1.7
90-120	788	27.2	31.5
90-130	1235	42.6	49.5
90-150	2002	69.0	80.2
90-180	2455	84.7	98.3
0-180	2497	86.1	100.0

LUMINANCE SUMMARY			
Degree	Parl.	45°	Norm.
55	34	148	178
60	28	162	183
65	25	167	184
70	31	165	196
75	20	164	205
80	20	203	224
85	40	283	324

**TWO LAMP - T8**

Cat. No.: CV-2T8-P-WM-EB8-HRF  
Lamps: Two F32T8  
Ballasts: REL2P32SC  
Test No.: 13104  
Efficiency: 81.9

Candela Curve (90° Plane)

CANDLEPOWER			
Deg.	Parl.	45°	Norm.
0	38	38	38
5	38	40	40
15	35	44	46
25	31	44	50
35	26	42	54
45	19	42	56
55	12	40	50
65	8	32	39
75	4	20	27
85	2	11	15
90	2	8	10
95	56	97	99
105	252	395	344
115	462	794	753
125	660	1104	1134
135	838	1272	1390
145	988	1326	1485
155	1104	1351	1443
165	1185	1305	1358
175	1227	1245	1236
180	1228	1228	1228

**ENERGY DATA**  
Energy Cost: \$2.98\* LER: 81  
Input Watts: 69 BF: 1.00  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

COEFFICIENTS OF UTILIZATION														
RC	RW	80				70				60				0
		70	50	30	10	70	50	30	10	50	30	10		
1	71	68	65	62	61	59	56	54	41	39	38	2		
2	65	59	55	51	56	51	47	44	36	33	31	1		
3	59	52	47	42	51	45	40	37	31	28	26	1		
4	54	46	40	35	46	40	35	31	28	25	22	1		
5	49	41	34	30	42	35	30	26	24	21	19	1		
6	45	36	30	26	39	31	26	22	22	19	16	1		
7	41	32	26	22	35	28	23	19	20	16	14	1		
8	38	29	23	19	33	25	20	17	18	14	12	1		
9	35	26	20	17	30	23	18	15	16	13	10	0		
10	33	24	18	15	28	21	16	13	14	11	9	0		

ZONAL SUMMARY			
Zone	Lumens	Lamp	Fixture
0-30	29	0.5	0.6
0-40	48	0.8	1.0
0-60	90	1.6	1.9
0-90	132	2.3	2.8
90-120	1106	19.1	23.3
90-130	1930	33.3	40.6
90-150	3557	61.3	74.9
90-180	4619	79.6	97.2
0-180	4751	81.9	100.0

LUMINANCE SUMMARY			
Degree	Parl.	45°	Norm.
55	119	410	517
60	108	433	527
65	106	445	545
70	89	440	564
75	91	454	618
80	68	515	704
85	135	756	1026

**ONE LAMP - T5 HO**

Cat. No.: CV-1T5HO-P-WM-EB5-WR  
Lamps: One F54T5  
Ballasts: ICN2S54SC  
Test No.: 13174  
Efficiency: 72.9

Candela Curve (90° Plane)

CANDLEPOWER			
Deg.	Parl.	45°	Norm.
0	9	9	9
5	9	9	9
15	8	10	11
25	7	10	11
35	6	10	11
45	4	8	11
55	2	7	9
65	1	5	16
75	0	19	28
85	0	16	13
90	1	13	62
95	34	357	299
105	142	866	998
115	254	997	1267
125	360	1019	1302
135	454	1020	1252
145	532	985	1174
155	592	915	1052
165	633	821	894
175	655	717	731
180	658	658	658

**ENERGY DATA**  
Energy Cost: \$4.44\* LER: 64  
Input Watts: 60 BF: 1.00  
\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

COEFFICIENTS OF UTILIZATION														
RC	RW	80				70				60				0
		70	50	30	10	70	50	30	10	50	30	10		
1	63	60	58	55	54	52	50	48	36	34	33	1		
2	57	53	48	45	49	45	42	39	31	29	27	0		
3	52	46	41	37	45	40	36	32	27	25	23	0		
4	48	41	35	31	41	35	31	27	24	21	19	0		
5	44	36	30	26	37	31	26	23	21	19	16	0		
6	40	32	26	23	34	27	23	20	19	16	14	0		
7	37	29	23	19	31	25	20	17	17	14	12	0		
8	34	26	20	17	29	22	18	15	15	13	10	0		
9	31	23	18	15	27	20	16	13	14	11	9	0		
10	29	21	16	13	25	18	14	11	13	10	8	0		

ZONAL SUMMARY			
Zone	Lumens	Lamp	Fixture
0-30	7	0.2	0.2
0-40	11	0.3	0.3
0-60	19	0.4	0.6
0-90	45	1.0	1.4
90-120	1188	27.0	37.0
90-130	1721	39.1	53.7
90-150	2609	59.3	81.4
90-180	3162	71.9	98.6
0-180	3207	72.9	100.0

LUMINANCE SUMMARY			
Degree	Parl.	45°	Norm.
55	25	73	94
60	25	67	91
65	20	69	216
70	12	109	413
75	8	434	627
80	0	886	742
85	24	1097	859

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
WT24-432G-FAA12.156INV-  
4EB8RLH277-F0835  
Notes:

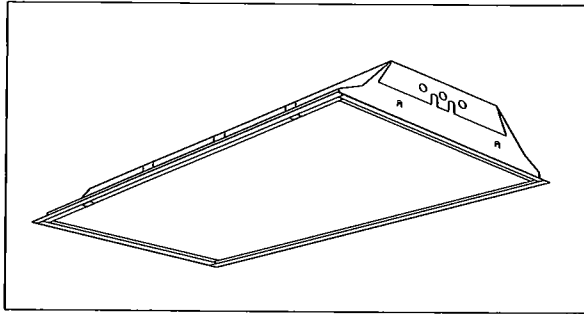
**Type:**  
**G4**

LEE07-6119

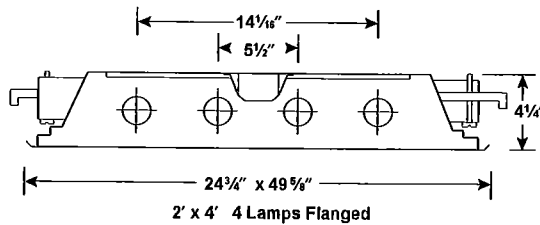
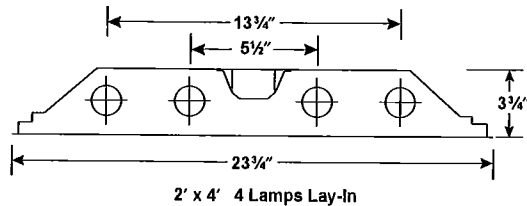
# WT24-4

## WET LOCATION "SHALLOW" TROFFER

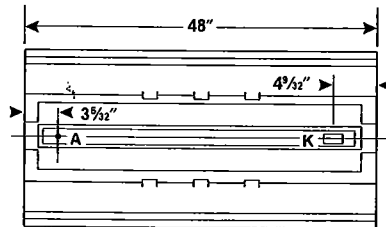
### 2' x 4', 4 Lamps



#### Cross Section



#### Flanged cut out dimensions for single unit only: 24" x 48 7/8"



A - 1/8" Diameter Knockout

K - 2" x 3" through hole for access plate.

**NOTE:** All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

Complete ordering information on back. Dimensions and specifications subject to change without notice.

Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

#### Features

- Wet label shallow housing troffer.
- Gasketed to provide additional seal between door, lens, and housing.
- Mitered corners standard on door frame.
- Rolled or hemmed housing edges.
- Mechanical light trap.
- All metal parts are white powder coat, painted after fabrication.
- UL listed 1598 for wet location covered ceiling applications.
- Integral T-bar clips quickly secure fixture to the grid system without the need for time-consuming loose parts.
- Snap-in ballast covers can be removed when lamps are installed.
- Corner hinging for easy insertion and removal of shielding frame.
- Flush steel shielding frame, screw assembled for easy diffuser replacement.
- Housing ends are secured by unique corner interlock and screws.
- Heat sink embossments behind ballasts for cooler operation and longer life.
- Metal to metal light leak protection on all four sides of shielding frame.

#### Flanged Features

- Four adjustable Uni-Lugs for quick easy installation.
- Optional plaster frames available for individual or row mounting.
- Fixture end flanges are removable for row mounting. Joiner channels are included.

#### Housing

Heavy gauge steel. Die formed for extra rigidity. Designed for installation in standard inverted tee grid ceilings.

#### Ballasts

Energy efficient, thermally protected, automatic resetting. Class P, high power factor, CBM, sound rated A, unless otherwise specified.

#### Finish

All metal parts are processed with a 5 phase phosphate bonding treatment. Grid units are pre-painted with high gloss baked white enamel, 86% reflective. Flanged units are painted after fabrication with a polyester powder coat, reflectance of 90%.

#### Shielding

100% acrylic prismatic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

#### Labels

All fixtures carry the UL 1598 label. (CSA approval available. Use Suffix "CSA").

#### Flanged Unit Installation

Fixtures are installed from below the ceiling and have overlapping trim flanges. Adjustable Uni-Lugs secure the fixture to the ceiling structure. Plaster frames are available if required.

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
WT24-432G-FAA12.156INV-  
4EB8RLH277-F0835  
Notes:

**Type:**  
**G4**

LEE07-6119

**WT24-4 - 2' x 4', 4 lamps**

**WET LOCATION "SHALLOW" TROFFER**

**Photometric Report**

**CONTACT FACTORY**

**Ordering Information** Example: WT24-440G-FSA12-LE120-CWES-C488-GLR  
**WT 24-4 32 G-FA 4EB8RLH A12.125<sup>INV</sup> 277-F0835**

**Series**

**Fixture Size**

24 - 2' x 4'

**No. of Lamps**

4 - Four

**Lamp Type**

40 - 40 Watt, T12  
32 - 32 Watt, T8  
28 - 28 Watt, T5  
54 - 54 Watt, T5 HO

**Ceiling Type**

G - Inverted T-Bar  
F - Overlap Flange

**Door Style**

FS - White Flush Steel (Standard)  
PS - Premium Steel  
TRFS - Tamper Resistant Flush Steel  
FA - White Flush Aluminum  
RA - White Regressed Aluminum  
BFA - Black Painted Flush Aluminum  
BRA - Black Painted Regressed Aluminum  
SFA - Silver Painted Flush Aluminum  
SRA - Silver Painted Regressed Aluminum

**Voltage**

120 - 120V  
277 - 277V  
347 - 347V  
UNV - 120V/277V  
(T8 w/LH only)

**Ballast**

LE - Energy Saving Magnetic T12  
EB8 - Electronic T8  
EB8LH - Electronic T8 <10% THD  
4EB8 - 4-Lamp Electronic T8  
4EB8LH - 4-Lamp Electronic T8  
<10% THD  
EB5 - Electronic T5  
EB5LH - Electronic T5 <10% THD  
For a specific ballast vendor, show as  
option  
4EB8RLH - 4-Lamp Electronic T8<10%  
THD Rapid Start Low Harmonic

**Shielding**

A12 - Pattern 12 Acrylic .100" Nominal (Standard)  
A12.125 - Pattern 12 Acrylic .125" Nominal  
A12.125M - Pattern 12 Acrylic .125" Minimum  
A19 - Pattern 19 Acrylic .156" Male Prism  
IMA - .150 Injection Molded Acrylic .156" Male Prism  
DOP - White Dished Acrylic  
PC1 - Silver Parabolic Louver 1/2" x 1/2" x 1/2"  
PC2 - Silver Parabolic Louver 1 1/2" x 1 1/2" x 1"

For more shielding see options and accessories section.

**Options**

SLL - Spring Loaded Latches  
GMF - Slow Blow Fuse  
GLR - Fast Blow Fuse  
C388 - 3/8" Flex with 3 No. 18 Wires  
C384 - 3/8" Flex with 3 No. 14 Wires  
C488 - 3/8" Flex with 4 No. 18 Wires  
C424 - 1/2" Flex with 4 No. 14 Wires  
FCWES - T12 Cool White Energy  
Saving Lamps Furn/Inst.  
FWWES - T12 Warm/White Energy  
Saving Lamps Furn/Inst.  
FO730 - T8, 70CRI, 3000K  
Lamps, Furn/Inst.  
FO736 - T8, 70CRI, 3500K  
Lamps, Furn/Inst.  
FO741 - T8, 70CRI, 4100K  
Lamps, Furn/Inst.  
CSA - Approved for Canadian  
Standards Association  
EL - Emergency Battery Pack  
For a complete set of options, see  
options and accessories section.  
H - Undamped Heat Extract

F0835 - T8 82CRI,  
3500K Lamps

T25



3808 N Sullivan Rd, Bldg 29 • Spokane, WA 99216 • (509) 924-7000 • www.columbialighting.com

A12.158INV - Pattern 12  
Acrylic .156" Thick Inverted

CO 1204



Hubbell Lighting, Inc.

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
STR24-332G-MPO-3EB8RLH277-  
FO835  
Notes:

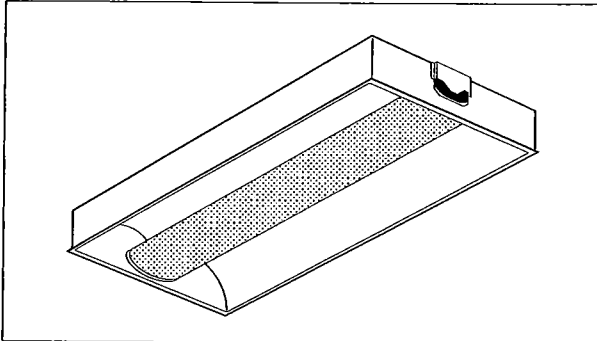
**Type:**  
**J3**

LEE07-6119

## Stratus

## STR24-3

### 2' x 4', 3 Lamp, Linear Indirect Recessed Luminaire



Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

#### Features

- Precision optical system produces an efficient luminaire without sacrificing high visual comfort.
- Completely recessed, provides a clean ceiling while providing soft, uniform indirect illumination in rooms with ceilings as low as 8 feet.
- Available for use with T8, T5 or HO T5 linear fluorescent lamps.
- White powder coat finish, painted after fabrication.
- Ease of installation and maintenance.
- UL listed 1570 and CUL approved.

#### Construction

Luminaire housing and endcaps are die formed code gauge cold rolled steel. The two piece aluminum reflector is profiled to a precision curve and finished with a matte white paint that provides soft, uniform, indirect illumination. Matte white perforated light basket snaps securely into place for ease of lamp replacement. Thermoplastic light traps snap into the housing at both ends of the light basket to prevent light leaks.

#### Finish

Custom formulated soft non-glare white powder coat finish on the housing, light basket, and reflector is applied after fabrication.

#### Shielding

A perforated metal light basket (46% opening) with an opal acrylic overlay is standard.

#### Installation

For fast wiring connections without the necessity of opening fixture or wireway, a flex connector adaptor plate is furnished with each luminaire.

#### Labels & Electrical

All luminaires are listed with U.L. and CUL and bear appropriate recessed fixture labels. Completely wired with class "P," thermally protected, resetting, HPF, CBM ballast. Sound rated A. All ballast leads extend a minimum of 6" through the access opening.

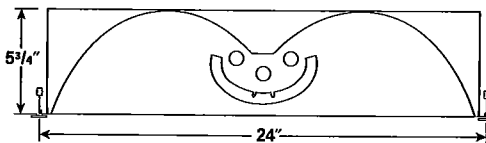
#### Recessed Ceiling Compatibility

The Stratus is available to fit NEMA type G (lay-in) and type F (overlapping flange) recessed ceiling systems. The type G unit fits into a standard grid ceiling. For type F applications, a type G fixture must be ordered along with a flange kit for the fixture to sit in. The flange kit is assembled in the field and is wired directly to the ceiling structure. The flange kit should be installed before the fixture is installed. For row mounting applications, contact factory.

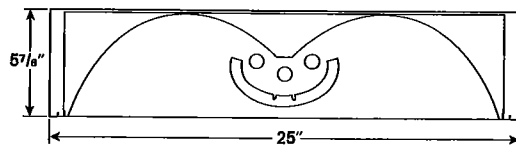
#### Surface or Pendant Mount

Attractive surface mount units available to match performance and aesthetics of recessed models. See reverse side for ordering information.

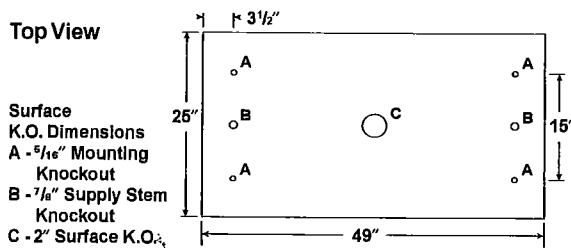
#### Cross Section - 2'x4', 3-lamp, lay-in Recessed



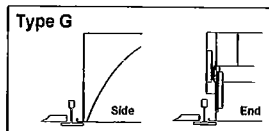
#### Surface



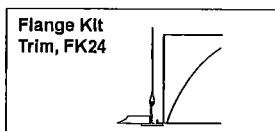
#### Top View



#### Ceiling Compatibility



For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 1 1/2" allowed.



For hard ceiling applications, fixtures must be ordered with a flange kit that wires directly into the concealed ceiling opening for a clean finished appearance. T8 not available in rows. For T5 row configurations contact your local Columbia Representative.

Flange kit cut out dimension for single FK24 only: 24 3/8" x 48 3/8"

O40.1

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
STR24-332G-MPO-3EB8RLH277-  
FO835  
Notes:

**Type:**  
**J3**

LEE07-6119

Photometric Report No. 12059

**Columbia**  
LIGHTING

FD No. 2107 (10/2008) 2008 North Sullivan Rd., Spokane, WA 99216 TEL (509) 924-7000

**Environmental Laboratories**

REPORT # 12059  
DATE: 3/19/98

LUMINAIRE: STR24-332G-MPO-3EB8

2 x 4 3-LAMP WITH PERFORATED METAL BASKET AND OVERLAY  
BALL: 8322120CRI, 10WPC, F3215; BALL FAC.: .891; WATTS: 87  
LAMP RATED AT 2900 LUMENS EACH  
LUMINOUS AREA: 47 X 22.5

REFLECTANCE: FC@ .92

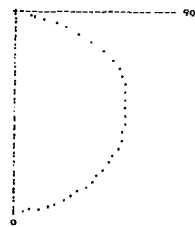
MOUNTING: RECESSED

S/M: PAR: 1.24 NORM: 1.35

PLI OF MANUAL FLAKE  
SHIELDING: PAR: 90 NORM: 90

CANDLEPOWER

DEG	0	22.5	45	67.5	90
0	1579	1579	1579	1579	1579
5	1567	1573	1577	1577	1571
10	1548	1551	1560	1563	1559
15	1500	1513	1530	1540	1539
20	1432	1463	1490	1509	1511
25	1385	1403	1441	1471	1476
30	1308	1331	1363	1425	1437
35	1216	1258	1315	1365	1378
40	1116	1156	1234	1296	1312
45	1005	1050	1146	1216	1235
50	887	947	1047	1131	1160
55	763	821	939	1045	1090
60	634	700	835	953	999
65	507	580	731	858	922
70	389	452	606	745	834
75	269	342	496	633	722
80	162	217	320	455	555
85	64	72	76	74	75
90	0	0	0	0	0



**ZONAL SUMMARY**

ZONE LUMENS	LAMP FIXT
0-30	1243, 14.3, 25.0
0-40	2040, 23.7, 41.5
0-60	3772, 45.4, 75.0
0-90	4968, 57.1, 100.0
90-100	0, 0.0, 0.0
0-100	4968, 57.1, 100.0

This photometric test was performed using a specific ballast / lamp combination. Extrapolation of these data for other ballast / lamp combinations may produce erroneous results. The ballast factor must be applied to the lumen output rating assigned to the lamp(s) or to the candlepower values shown. Luminaire efficacy rating (LER) per NECA 105-1003.

LER = 53

TESTED BY: [Signature]

APPROVED BY: [Signature]

TEST RUN IN ACCORDANCE TO ILLUMIN. I.E.S. PUBLISHED PROCEDURES

Energy Data

LER: 53  
Input Watts: 82

Energy Cost: \$4.53\*  
BF: .88

The above energy calculations were conducted using a specific lamp/ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.

\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

Coefficients of Utilization

**Coefficients of Utilization**

Zonal Cavity Method Floor Reflectance - .20

RC RW	70				50				0			
	70	50	30	10	70	50	30	10	70	50	30	10
1	62	60	57	55	61	58	56	54	56	54	52	49
2	57	52	48	45	55	51	47	44	49	46	43	41
3	52	46	41	38	50	45	41	37	43	40	37	34
4	47	41	36	32	46	40	35	32	38	34	31	29
5	43	36	30	27	42	35	30	26	34	29	26	24
6	40	32	27	23	38	31	26	23	30	26	23	21
7	36	28	23	20	35	28	23	20	27	23	20	18
8	33	25	20	17	33	25	20	17	24	20	17	16
9	31	23	18	15	30	22	18	15	22	18	15	13
10	29	21	16	13	28	20	16	13	20	16	13	12

Visual Comfort Probability

Reflectance - 80, 50, 20  
Work Plane Illumination - 100 FC@ 2.5 ft.

**VCP**

Room Room	W L	Ht.	Luminaires Lengthwise				Luminaires Crosswise			
			8.5	10.0	13.0	16.0	Ht.	8.5	10.0	13.0
20 20			60	68	80	90	53	60	74	87
20 40			53	57	63	70	47	49	52	59
30 30			54	58	65	75	50	52	57	68
30 60			52	53	55	60	47	48	47	51
40 40			53	55	58	64	50	50	51	56
40 60			52	53	53	58	49	49	47	50
60 30			57	60	63	71	54	56	59	68
60 40			55	56	57	62	52	52	52	56
60 60			53	53	52	56	51	50	48	50
60 80			53	53	51	53	50	50	46	48

Example: STR24-332G-MPO-EB8120

STR 24 - 3 32 G - MPO - 3EB8RLH 277 - FO835

Ordering Information

Series

STR

Fixture Size

24 - 2' x 4'

No. of Lamps in Cross Section

3 - 3 Lamps

Lamp Type

32 - 4', T8, 32 Watt  
28 - 4', T5 Linear, 28 Watt  
54 - 4', T5 Linear High Output, 54 Watt

Ceiling Type

G - Grid Lay-in  
SM - Surface Mount

Ballast

120 - 120V  
277 - 277V  
OCT - Magnetic T8 Octron  
EB8 - Electronic T8  
EB8D - Dimming Electronic T8  
EB6 - Electronic T5\*  
\*Contact factory for availability.

Shielding

MPO - Metal Perf. overlay

Options

GLR - Fast Blow Fuse  
GMF - Slow Blow Fuse  
EL - Emergency Battery Pack  
FK24 - Flange Kit (Shipped separately)  
DL - Damp Label

O40.1

3EB8RLH - 3 Lamp Electronic T8 <10%  
THD Rapid Start Low Harmonic

FO835 - T8 82CRI,  
3500K Lamps

**Columbia**  
LIGHTING

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CO 12/98



Submitted by Leesman Sales



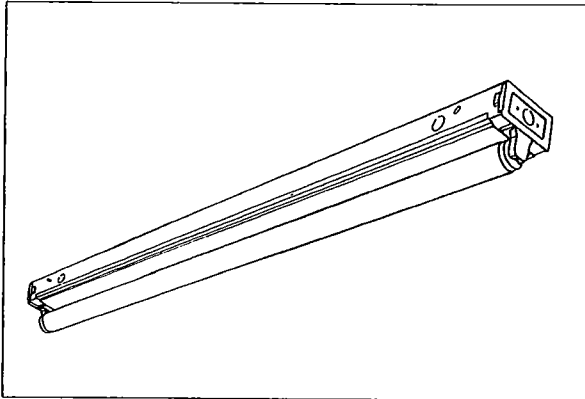
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CS4-132-EB8RLH277-CSWG4

**Type:**  
**L14**

Notes:

LEE07-6119



## CS2-1, CS3-1 CS4-1, CS8-1 STRAIGHTLINER CHANNEL ONE LAMP TS & RS

Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

### FEATURES:

- Available 2', 3', 4' or 8'.
- Heavy die formed steel channel.
- Rotary lock lampholders for positive lamp contact.
- Channel ends double as joiners.
- Individual or row mounting. Surface or suspended.
- Ballast covers on 4' and 8' units are secured with 1/4-turn fasteners.

### SPECIFICATIONS:

#### Ballasts

Energy efficient ballasts are thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified. 20 watt ballasts are trigger start, low power factor, Class P. All are U.L. listed.

#### Housing

Die formed steel with heat sink embossments for cooler running ballasts. Socket saddles are factory installed.

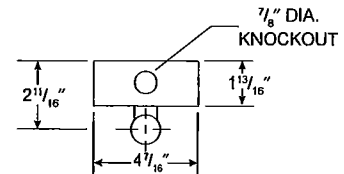
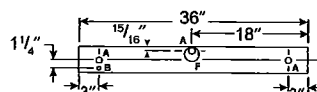
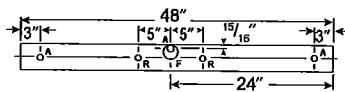
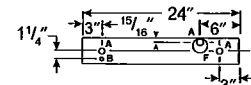
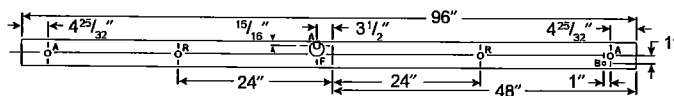
#### Finish

All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

#### Labels

All fixtures carry the U.L. label. 2', 3' and 4' units are listed for use on combustible low density, cellulose fiberboard ceilings. (CSA approval available. Use Suffix "CSA"). (HPF only).

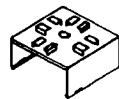
### Cross Section



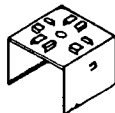
- A - 7/8" Diameter Knockout
- B - .570 x .656 Strain Relief Knockout
- F - 2" Diameter Knockout
- R - 11/16" Diameter Knockout

Note 1: All Non-Shielded (strip) fixtures - Deduct 1/16" from overall dimension for continuous row mounting. Dimensions shown include end panel.

### Mounting Data



CSZTF  
Flush Mount

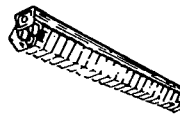


CSZT  
1-1/2" Space

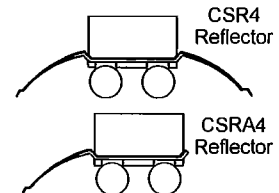


CSTH  
Slide Clamp  
Tong Hanger

### Accessories



CSWG4 Wire Guards  
CSWG3 Wire Guards



C1

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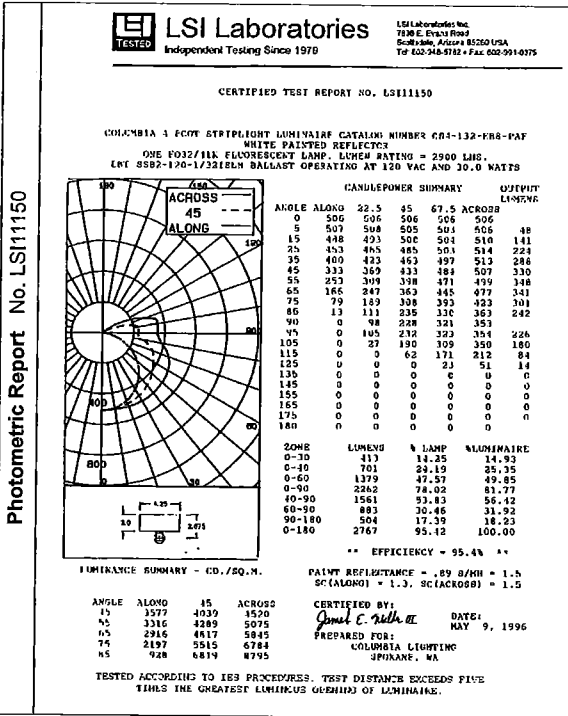
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CS4-132-EB8RLH277-CSWG4

**Type:**  
**L14**

Notes:

LEE07-6119



**Coefficients of Utilization**

Zonal Cavity Method

RC RW	80				70				50				0
	70	50	30	10	70	50	30	10	50	30	10	0	
1	97	91	86	81	92	87	83	78	80	76	73	59	
2	87	78	70	64	83	74	67	61	68	62	57	47	
3	78	67	59	52	75	64	57	50	59	53	47	38	
4	71	59	50	43	68	57	48	42	52	45	39	32	
5	65	52	42	36	61	49	41	35	45	38	33	26	
6	59	46	37	30	56	44	35	29	40	33	28	22	
7	55	41	32	26	52	39	31	25	36	29	24	19	
8	50	37	28	22	48	35	27	22	32	25	20	16	
9	46	33	25	19	44	32	24	19	29	22	18	14	
10	43	30	22	17	41	29	21	16	27	20	15	12	

**Energy Data**

**LER: FS-85** **Energy Cost: \$2.82\***  
**Input Watts: 30** **BF: .92**

The above energy calculations were conducted using a specific lamp/ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.

\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

**Ordering Information**

Example: CS8-132-EB8120-EL

**CS 4 - 1 32 - EB8RLH 277 - CSWG4**

**Series**  
CS

**Size**  
2-2'  
3-3'  
4-4'  
8-8'

**No. of Lamps In Cross Section**  
1 - One

**Lamp Type**  
40 - 4', T12, 40 Watt  
32 - 4', T8, 32 Watt  
30 - 3', T12, 30 Watt  
25 - 3', T8, 25 Watt  
20 - 2', T12, 20 Watt  
17 - 2', T8, 17 Watt

For complete list of options and accessories, see options and accessories section.

**Ballast**  
Blank - HPF, Non Energy-Saving  
PH - Pre-heat (2' only)  
L - Low Power Factor  
LE - Energy Saving Magnetic T12  
Z - Zero Degree Magnetic T12\*

EB12 - Electronic T12  
EB12LH - Electronic T12 <10% THD  
EB8 - Electronic T8  
EB8LH - Electronic T8 <10% THD  
For a specific ballast vendor, show as option.  
\* Not for use with energy saving lamps.

EB8RLH - Electronic T8 <10% THD Rapid Start Low Harmonic

**Voltage**  
120 - 120V  
277 - 277V

**Strip & Channel Options**  
GLR - Fast Blow Fuse  
GMF - Slow Blow Fuse  
EL - Emergency Battery Pack  
BC - Branch Circuit Plug-on Wiring System. See options section for details.  
CSA - Approved, Canadian Standards Association  
PAF - Paint After Fabrication

**Strip & Channel Accessories**  
Order Separately  
ITB4 - Hanger for close mounting on a Tee Bar Ceiling  
CSZTF - Zip Tee Hanger - flush mount on Tee Bar Ceiling  
CSZT - Zip Tee Hanger - 1-1/2" spacer on Tee Bar Ceiling  
CSTH - Slide Tong Hanger with 7/8" hole  
CSWG4 - 4' Wire Guard, 2 required for 8' fixture  
CSWG3 - 3' Wire Guard  
CSRA4 - 4' Asymmetric Reflector  
CSR4 - 4' Symmetric Reflector

C1



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CO 4/98

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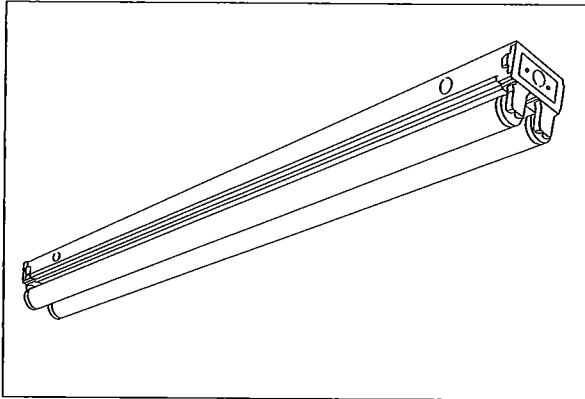
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CS4-232-EB8RLH277-CSWG4

Notes:

**Type:**  
**L24**

LEE07-6119



**CS2-2, CS3-2  
CS4-2, CS8-2  
STRAIGHTLINER  
CHANNEL TWO LAMP TS & RS**

Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

**FEATURES:**

- Available 2', 3', 4' or 8'.
- Heavy die formed steel channel.
- Rotary lock lampholders for positive lamp contact.
- Channel ends double as joiners.
- Individual or row mounting. Surface or suspended.
- Ballast covers on 4' and 8' units are secured with 1/4-turn fasteners.

**SPECIFICATIONS:**

**Ballasts**

Energy efficient ballasts are thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified. 20 watt ballasts are trigger start, low power factor, Class P. All are U.L. listed.

**Housing**

Die formed steel with heat sink embossments for cooler running ballasts. Socket saddles are factory installed.

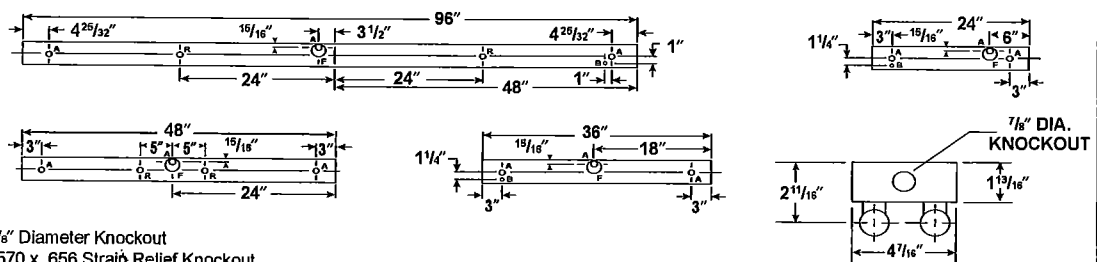
**Finish**

All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

**Labels**

All fixtures carry the U.L. label. 2', 3' and 4' units are listed for use on combustible low density, cellulose fiberboard ceilings. (CSA approval available. Use Suffix "CSA").

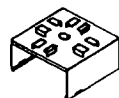
**Cross Section**



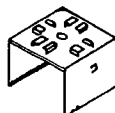
- A - 7/8" Diameter Knockout
- B - .570 x .656 Straiñ Relief Knockout
- F - 2" Diameter Knockout
- R - 1/16" Diameter Knockout

Note 1: All Non-Shielded (strip) fixtures - Deduct 1/16" from overall dimension for continuous row mounting. Dimensions shown include end panel.

**Mounting Data**



CSZTF  
Flush Mount

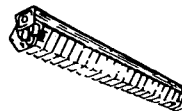


CSZT  
1/2" Space

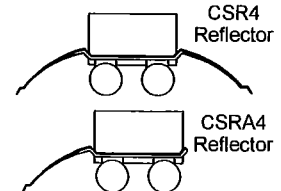


CSTH  
Slide Clamp  
Tong Hanger

**Accessories**



CSWG4 Wire Guards  
CSWG3 Wire Guards



CSR4  
Reflector  
  
CSRA4  
Reflector

C2

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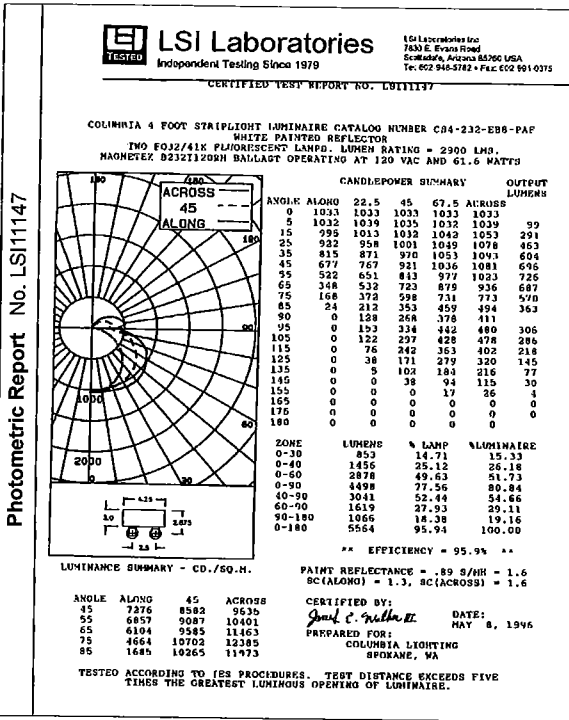
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CS4-232-EB8RLH277-CSWG4

**Type:**  
**L24**

Notes:

LEE07-6119



**Coefficients of Utilization**

Zonal Cavity Method

RC	80				70				60				0
	70	50	30	10	70	50	30	10	50	30	10	0	
1	98	93	88	84	94	89	84	80	81	78	75	60	
2	88	79	72	66	84	76	69	64	69	64	59	48	
3	80	69	60	54	76	66	58	52	60	54	49	40	
4	73	60	52	45	69	58	50	43	53	46	41	33	
5	66	53	44	37	62	51	42	36	46	39	34	27	
6	60	47	38	32	57	45	37	30	41	34	29	23	
7	55	42	33	27	53	40	32	26	37	30	25	20	
8	51	37	29	23	48	36	28	22	33	26	21	17	
9	47	34	25	20	45	32	25	19	30	23	18	14	
10	44	31	22	17	42	29	22	17	27	20	16	12	

**LER: FS-79**      **Energy Cost: \$3.04\***  
**Input Watts: 62**      **BF: .88**

The above energy calculations were conducted using a specific lamp/ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.

\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

**Ordering Information**

Example: CS4-240-LE120-GLR

**CS 4 - 2 32 - EB8RLH 277 - CSWG4**

**Series**  
CS

**Size**  
2 - 2'  
3 - 3'  
4 - 4'  
8 - 8'

**No. of Lamps In Cross Section**  
2 - Two

**Lamp Type**  
40 - 4' T12, 40 Watt  
32 - 4', T8, 32 Watt  
30 - 3', T12, 30 Watt  
25 - 3', T8, 25 Watt  
20 - 2', T12, 20 Watt  
17 - 2', T8, 17 Watt

**Ballast**  
Blank - HPF, Non Energy-Saving  
PH - Pre-heat (2' only)  
L - Low Power Factor  
LE - Energy Saving Magnetic T12  
Z - Zero Degree Magnetic T12  
EB12 - Electronic T12  
EB12LH - Electronic T12 <10% THD  
OCT - Magnetic Octron T8  
EB8 - Electronic T8  
EB8LH - Electronic T8 <10% THD  
4EB8 - 4 Lamp Electronic T8  
4EB8LH - Electronic T8 <10% THD  
For a specific ballast vendor, show as option.  
\* Not for use with energy saving lamps.

**Voltage**  
120 - 120V  
277 - 277V

**Strip & Channel Options**  
GLR - Fast Blow Fuse  
GMF - Slow Blow Fuse  
EL - Emergency Battery Pack  
BC - Branch Circuit Plug-on Wiring System.  
See options section for details.  
CSA - Approved, Canadian Standards Association  
PAF - Paint After Fabrication

**Strip & Channel Accessories**  
Order Separately  
ITB4 - Hanger for Close Mounting on a Tee Bar Ceiling  
CSZTF - Zip Tee Hanger - Flush Mount on Tee Bar Ceiling  
CSZT - Zip Tee Hanger - 1 1/2" Spacer on Tee Bar Ceiling  
CSTH - Slide Tono Hanger with 7/8" Hole  
CSWG4 - 4' Wire Guard, 2 Required for 8' Fixture  
CSWG3 - 3' Wire Guard  
CSRA4 - 4' Asymmetric Reflector  
CSR4 - 4' Symmetric Reflector

**For complete list of options and accessories, see options and accessories section.**

C2



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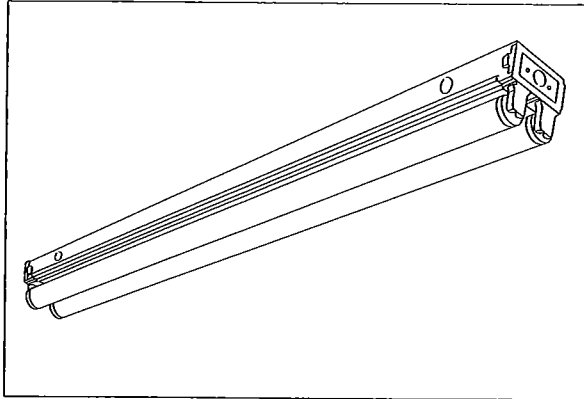
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CS8-232-4EB8RLH277-(2)CSWG4

**Type:**  
**L28**

Notes:

LEE07-6119



**CS2-2, CS3-2  
CS4-2, CS8-2  
STRAIGHTLINER  
CHANNEL TWO LAMP TS & RS**

Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

**FEATURES:**

- Available 2', 3', 4' or 8'.
- Heavy die formed steel channel.
- Rotary lock lampholders for positive lamp contact.
- Channel ends double as joiners.
- Individual or row mounting. Surface or suspended.
- Ballast covers on 4' and 8' units are secured with 1/4-turn fasteners.

**SPECIFICATIONS:**

**Ballasts**

Energy efficient ballasts are thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified. 20 watt ballasts are trigger start, low power factor, Class P. All are U.L. listed.

**Housing**

Die formed steel with heat sink embossments for cooler running ballasts. Socket saddles are factory installed.

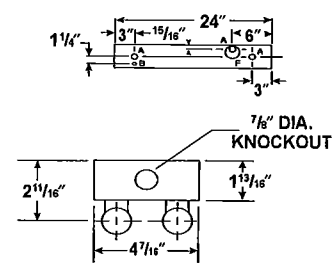
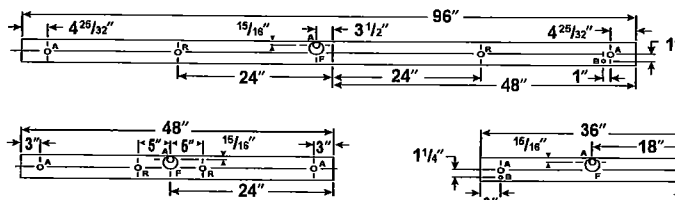
**Finish**

All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

**Labels**

All fixtures carry the U.L. label. 2', 3' and 4' units are listed for use on combustible low density, cellulose fiberboard ceilings. (CSA approval available. Use Suffix "CSA").

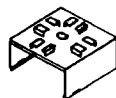
**Cross Section**



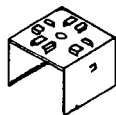
- A - 7/8" Diameter Knockout
- B - .570 x .656 Strain Relief Knockout
- F - 2" Diameter Knockout
- R - 1 1/16" Diameter Knockout

Note 1: All Non-Shielded (strip) fixtures - Deduct 1/16" from overall dimension for continuous row mounting. Dimensions shown include end panel.

**Mounting Data**



CSZTF  
Flush Mount

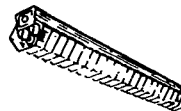


CSZT  
1 1/2" Space

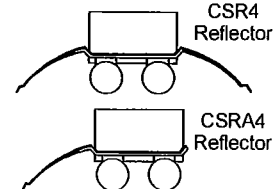


CSTH  
Slide Clamp  
Tong Hanger

**Accessories**



CSWG4 Wire Guards  
CSWG3 Wire Guards



CSR4  
Reflector

CSRA4  
Reflector

C2

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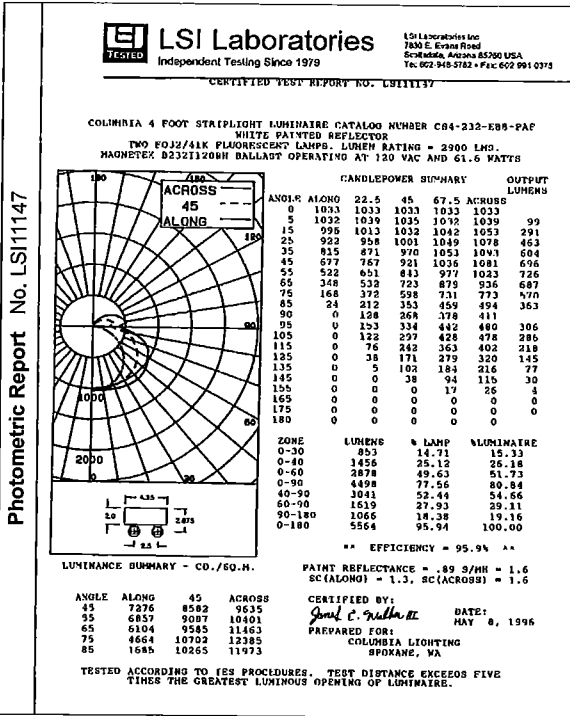
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CS8-232-4EB8RLH277-(2)CSWG4

**Type:**  
**L28**

Notes:

LEE07-6119



**Coefficients of Utilization**

Zonal Cavity Method

RC	Floor Reflectance - .20							
	70		50		30		10	
1	98	93	88	84	94	89	84	80
2	88	79	72	66	84	76	69	64
3	80	69	60	54	76	66	58	52
4	73	60	52	45	69	58	50	43
5	66	53	44	37	62	51	42	36
6	60	47	38	32	57	45	37	30
7	55	42	33	27	53	40	32	26
8	51	37	29	23	48	36	28	22
9	47	34	25	20	45	32	25	19
10	44	31	22	17	42	29	22	17

**Energy Data**

LER: FS-79  
Input Watts: 62

Energy Cost: \$3.04\*  
BF: .88

The above energy calculations were conducted using a specific lamp/ballast combination. Actual results may vary depending upon the lamp and ballast used. Lamp and ballast specifications are subject to change without notice.

\*Comparative annual lighting energy cost per 1000 lumens based on 3000 hours and \$0.08 per KWH.

**Ordering Information**

Example: CS4-240-LE120-GLR

CS 8 - 2 32 - 4EB8RLH 277 - (2) CSWG4 -

**Series**  
CS

**Size**  
2 - 2'  
3 - 3'  
4 - 4'  
8 - 8'

**No. of Lamps In Cross Section**  
2 - Two

**Lamp Type**  
40 - 4' T12, 40 Watt  
32 - 4' T8, 32 Watt  
30 - 3' T12, 30 Watt  
25 - 3' T8, 25 Watt  
20 - 2' T12, 20 Watt  
17 - 2' T8, 17 Watt

For complete list of options and accessories, see options and accessories section.

**Ballast**

- Blank - HPF, Non Energy-Saving
- PH - Pre-heat (2' only)
- L - Low Power Factor
- LE - Energy Saving Magnetic T12
- Z - Zero Degree Magnetic T12
- EB12 - Electronic T12
- EB12LH - Electronic T12 <10% THD
- OCT - Magnetic Octron T8
- EB8 - Electronic T8
- EB8LH - Electronic T8 <10% THD
- 4EB8 - 4 Lamp Electronic T8
- 4EB8LH - Electronic T8 <10% THD

For a specific ballast vendor, show as option.  
\* Not for use with energy saving lamps.

4EB8RLH - 4-Lamp Electronic T8<10% THD Rapid Start Low Harmonic

**Voltage**  
120 - 120V  
277 - 277V

**Strip & Channel Options**

- GLR - Fast Blow Fuse
- GMF - Slow Blow Fuse
- EL - Emergency Battery Pack
- BC - Branch Circuit Plug-on Wiring System. See options section for details.
- CSA - Approved, Canadian Standards Association
- PAF - Paint After Fabrication

**Strip & Channel Accessories**

Order Separately

- ITB4 - Hanger for Close Mounting on a Tee Bar Ceiling
- CSZTF - Zip Tee Hanger - Flush Mount on Tee Bar Ceiling
- CSZT - Zip Tee Hanger - 1 1/2" Spacer on Tee Bar Ceiling
- CSTH - Slide Tong Hanger with 7/8" Hole
- CSWG4 - 4' Wire Guard, 2 Required for 8' Fixture
- CSWG3 - 3' Wire Guard
- CSRA4 - 4' Asymmetric Reflector
- CSR4 - 4' Symmetric Reflector

C2



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**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR2/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**  
**LSA2**

LEE07-6119



**AR**

The Archetype®  
revision 3/17/03 • ar.pdf

**Type:**  
**Job:**  
**Catalog number:**

**Approvals:**

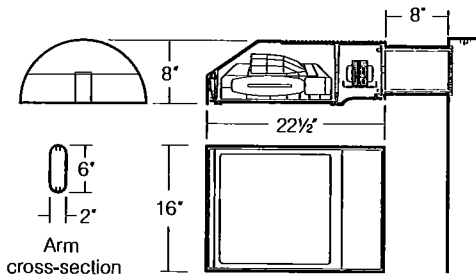
Mfg.	Fixture	Electrical Module	Finish	Options	Optional Vertical Slipfitter Mount See page 5
See page 2				See pages 3-4	

**Date:**  
**Page: 1 of 5**

Select pole from Kim Pole Catalog. If pole is provided by others indicate O.D. for arm fitting.

## Specifications

150 to 400 watt  
Mogul Base Lamps  
Maximum Fixture weight (400HPS) = 45 lb



**Housing:** One piece low copper (less than .6%) die-cast aluminum alloy with integral cooling ribs over the optical chamber and electrical compartment. Solid barrier wall separates optical and electrical compartments. Double-thick wall with gussets on the support-arm mounting end. Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail. All hardware is stainless steel or electro-zinc plated steel.

**Lens Frame:** One piece low copper (less than .6%) die-cast aluminum alloy lens frame with 1" minimum depth around the gasket flange. Integral hinges with stainless steel pins provide no-tool mounting and removal from housing. Single die-cast aluminum cam-latch provides positive locking and sealing of the optical chamber by a one piece extruded and vulcanized silicone gasket. Clear 3/8" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimeter.

**Reflector Module:** Specular Alzak<sup>®</sup> optical segments are rigidly mounted within a die-cast aluminum enclosure that attaches to the housing as a one-piece module. Reflector module is field rotatable in 90° increments. HPS and PMH sockets are porcelain 4KV pulse rated mogul base, MH sockets are porcelain mogul base, pin-oriented, with molded silicone lamp stabilizer. All reflector modules are factory prewired with quick-disconnect plug and include silicone seal at the penetration of the internal barrier wall in the luminaire housing.

**Electrical Module:** All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only. All ballasts are high power factor rated -20°F. starting.

**Support Arm:** One piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut for specified round pole.

**Optional Wall Mounting:** Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket is provided to accept draw bolts, and a trim plate covers the wall-embedded Junction Box. All wall mount components are finished to match the fixture.

**NOTE:** Junction Box in wall must provide adequate fixture support. See NEC sections 370-13, 17 and 410-14, 16.

**Finish:** Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a chromate conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Platinum Silver, or White. Custom colors are available and subject to additional charges, minimum quantities and longer lead times. Consult representative.

**Certification:** UL Listed to U.S. and Canadian safety standards for wet locations. Fixture manufacturer shall employ a quality program that is certified to meet the ISO 9001:2000 standard.

**CAUTION:** Fixtures must be grounded in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR2/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**  
**LSA2**

LEE07-6119

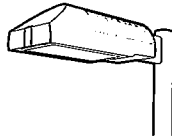


**AR**  
The Archetype®  
revision 3/17/03 • ar.pdf

Type:

Job:

Page: 2 of 5



### Standard Features

<p><b>Mounting</b> 3Y configuration is available for round poles only.</p>	<p>Plan View:</p> <p>Wall Mount</p> <p>EPA: 1.2 2.4 2.0 3.2 3.2 3.9 n/a</p> <p>Cat. No.: <input checked="" type="checkbox"/> 1A <input type="checkbox"/> 12B <input type="checkbox"/> 12L <input type="checkbox"/> 13T <input type="checkbox"/> 13Y <input type="checkbox"/> 14C <input type="checkbox"/> 11W</p>																																																																														
<p><b>Fixture</b> Cat. No. designates fixture and light distribution. See the Kim Site/Roadway Optical Systems Catalog for detailed information on reflector design and application.</p>	<p>Flat Lens</p> <p>Light Distribution: Type II Type III Type IV Forward Throw Full Cutoff Type V Square Full Cutoff</p> <p>Cat. No.: <input checked="" type="checkbox"/> AR2 <input type="checkbox"/> AR3 <input type="checkbox"/> AR4 <input type="checkbox"/> AR5</p>																																																																														
<p><b>Electrical Module</b> HPS = High Pressure Sodium MH = Metal Halide PMH = Pulse Start Metal Halide</p> <p>Lamp Lamp Line Watts Type Volts 400 HPS 277</p>	<p>Cat. Nos. for Electrical Modules available:</p> <table border="1"> <tr> <td><input type="checkbox"/> 150HPS120</td> <td><input type="checkbox"/> 250HPS120</td> <td><input type="checkbox"/> 400HPS120</td> <td><input type="checkbox"/> 175MH120</td> </tr> <tr> <td><input type="checkbox"/> 150HPS208</td> <td><input type="checkbox"/> 250HPS208</td> <td><input type="checkbox"/> 400HPS208</td> <td><input type="checkbox"/> 175MH208</td> </tr> <tr> <td><input type="checkbox"/> 150HPS240</td> <td><input type="checkbox"/> 250HPS240</td> <td><input type="checkbox"/> 400HPS240</td> <td><input type="checkbox"/> 175MH240</td> </tr> <tr> <td><input type="checkbox"/> 150HPS277</td> <td><input type="checkbox"/> 250HPS277</td> <td><input type="checkbox"/> 400HPS277</td> <td><input type="checkbox"/> 175MH277</td> </tr> <tr> <td><input type="checkbox"/> 150HPS347</td> <td><input type="checkbox"/> 250HPS347</td> <td><input type="checkbox"/> 400HPS347</td> <td><input type="checkbox"/> 175MH347</td> </tr> <tr> <td><input type="checkbox"/> 150HPS480</td> <td><input type="checkbox"/> 250HPS480</td> <td><input type="checkbox"/> 400HPS480</td> <td><input type="checkbox"/> 175MH480</td> </tr> </table> <table border="1"> <tr> <td>Lamp</td> <td>E-23 1/2, Clear</td> <td>E-18, Clear</td> <td>E-18, Clear</td> <td>BT-28 or ED-28, Clear</td> </tr> <tr> <td>Socket</td> <td>Mogul Base</td> <td>Mogul Base</td> <td>Mogul Base</td> <td>Mogul Base Pin-Oriented</td> </tr> <tr> <td>ANSI Ballast Type</td> <td>S-55</td> <td>S-50</td> <td>S-51</td> <td>M-57</td> </tr> </table> <table border="1"> <tr> <td><input type="checkbox"/> 250MH120</td> <td><input type="checkbox"/> 400MH120</td> <td><input type="checkbox"/> 250PMH120</td> <td><input type="checkbox"/> 400PMH120</td> </tr> <tr> <td><input type="checkbox"/> 250MH208</td> <td><input type="checkbox"/> 400MH208</td> <td><input type="checkbox"/> 250PMH208</td> <td><input type="checkbox"/> 400PMH208</td> </tr> <tr> <td><input type="checkbox"/> 250MH240</td> 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Ballast Type</td> <td>M-58</td> <td>M-59</td> <td>M-138</td> <td>M-135</td> </tr> </table>	<input type="checkbox"/> 150HPS120	<input type="checkbox"/> 250HPS120	<input type="checkbox"/> 400HPS120	<input type="checkbox"/> 175MH120	<input type="checkbox"/> 150HPS208	<input type="checkbox"/> 250HPS208	<input type="checkbox"/> 400HPS208	<input type="checkbox"/> 175MH208	<input type="checkbox"/> 150HPS240	<input type="checkbox"/> 250HPS240	<input type="checkbox"/> 400HPS240	<input type="checkbox"/> 175MH240	<input type="checkbox"/> 150HPS277	<input type="checkbox"/> 250HPS277	<input type="checkbox"/> 400HPS277	<input type="checkbox"/> 175MH277	<input type="checkbox"/> 150HPS347	<input type="checkbox"/> 250HPS347	<input type="checkbox"/> 400HPS347	<input type="checkbox"/> 175MH347	<input type="checkbox"/> 150HPS480	<input type="checkbox"/> 250HPS480	<input type="checkbox"/> 400HPS480	<input type="checkbox"/> 175MH480	Lamp	E-23 1/2, Clear	E-18, Clear	E-18, Clear	BT-28 or ED-28, Clear	Socket	Mogul Base	Mogul Base	Mogul Base	Mogul Base Pin-Oriented	ANSI Ballast Type	S-55	S-50	S-51	M-57	<input type="checkbox"/> 250MH120	<input type="checkbox"/> 400MH120	<input type="checkbox"/> 250PMH120	<input type="checkbox"/> 400PMH120	<input type="checkbox"/> 250MH208	<input type="checkbox"/> 400MH208	<input type="checkbox"/> 250PMH208	<input type="checkbox"/> 400PMH208	<input type="checkbox"/> 250MH240	<input type="checkbox"/> 400MH240	<input type="checkbox"/> 250PMH240	<input type="checkbox"/> 400PMH240	<input type="checkbox"/> 250MH277	<input checked="" type="checkbox"/> 400MH277	<input type="checkbox"/> 250PMH277	<input type="checkbox"/> 400PMH277	<input type="checkbox"/> 250MH347	<input type="checkbox"/> 400MH347	<input type="checkbox"/> 250PMH347	<input type="checkbox"/> 400PMH347	<input type="checkbox"/> 250MH480	<input type="checkbox"/> 400MH480	<input type="checkbox"/> 250PMH480	<input type="checkbox"/> 400PMH480	Lamp	BT-28 or ED-28, Clear	ED-28, Clear	ED-28, Clear	ED-28, Clear	Socket	Mogul Base Pin-Oriented	Mogul Base Pin-Oriented	Mogul Base	Mogul Base	ANSI Ballast Type	M-58	M-59	M-138	M-135
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ANSI Ballast Type	M-58	M-59	M-138	M-135																																																																											
<p><b>Finish</b> Super TGIC powder coat paint over a chromate conversion coating.</p>	<p>Color: Black Dark Bronze Light Gray Platinum Silver White Custom Color<sup>1</sup></p> <p>Cat. No.: <input type="checkbox"/> BL-P <input type="checkbox"/> DB-P <input type="checkbox"/> LG-P <input checked="" type="checkbox"/> PS-P <input type="checkbox"/> WH-P <input type="checkbox"/> CC-P</p> <p><sup>1</sup>Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____</p>																																																																														





**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR2/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**  
**LSA2**

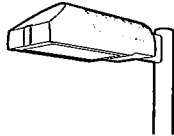
LEE07-6119



**AR**  
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revision 3/17/03 • ar.pdf

Type:  
Job:

Page: 3 of 5

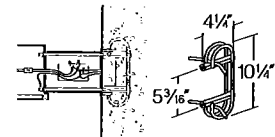


### Optional Features

**Wall Mounting**

Cat. No. **1W**  
Select from Mounting on page 2.

Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket (**WEB**) is provided to accept draw bolts, and a trim plate covers the wall-embedded Junction Box. All wall mount components are finished to match the fixture.

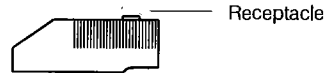


Wall mount using wall embedment bracket - J-box in wall (by others)

**Photocell Receptacle**

Cat. No.  **A-25**  
 **No Option**

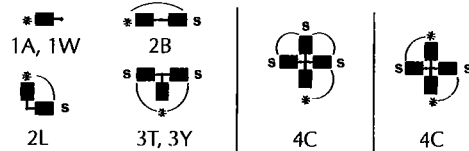
Fixture supplied with a fully gasketed receptacle above the electrical compartment for NEMA base photocell (by others). For all multiple-fixture pole mountings with two or three fixtures, one fixture has a receptacle to operate the others. Four fixtures (250 watt or less) also require one fixture with a receptacle. Four fixtures (400 watt) require two fixtures with receptacles.



Receptacle

Mounting (see page 2)

\* - Fixture with Photocell Receptacle  
S - slave unit(s)



Allowable wattage per fixture:

150-400W

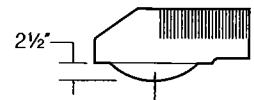
150-250W

400W

**Convex Glass Lens**

Cat. No.  **CGL**  
 **No Option**

The 3/16" thick clear convex tempered glass lens replaces the standard flat glass lens. Provides increased lens presence and provides a subtle improvement in uniformity where pole spacing is extreme. Increases effectiveness of houseside shielding.

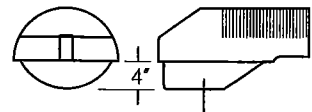


Convex Glass Lens

**Polycarbonate Lens**

Cat. No.  **LS**  
 **No Option**

Fixture supplied with a one piece vacuum formed, clear, UV stabilized convex polycarbonate, fully gasketed, replacing the standard tempered glass lens. 250 watt maximum. May be used with 400HPS in outdoor locations where ambient air temperature during fixture operation will not exceed 85°F.



Polycarbonate Lens

**CAUTION:** Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight and metal halide lamps.



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR2/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

Type:

**LSA2**

LEE07-6119

**KIM LIGHTING**

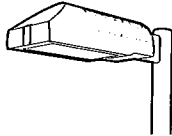
**AR**

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Type:

Job:

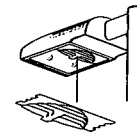
Page: 4 of 5



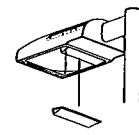
## Optional Features

**Houseside Shield**  
Cat. No. (See right)  
 No Option

(Types II, III, and IV only). Fixtures with the standard flat glass lens are available with stamped aluminum louvers that pass streetside light and block houseside light, and a blackened panel added to the reflector to reduce houseside reflections. Fixtures with the optional convex glass lens are available with a formed aluminum shield that passes streetside light and blocks houseside light, and a black anodized panel added to the reflector to reduce houseside reflections. Use with clear lamps only, as coated lamps reduce effectiveness.



**HS**  
for flat lens



**HSC**  
for convex lens or polycarbonate lens

Cat. No.

 **HS**

Recommended for use with clear lamps only. Effectiveness is reduced for coated lamps. Not for use with Type V light distributions.

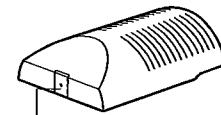
 **HSC**

For use with all fixtures with convex glass lens. Not for use with Type V light distributions.

**Tamper-Resistant Latch**  
Cat. No.  TL  
 No Option

Standard die-cast latch is provided with a captive 10-32 stainless steel flat socket-head screw to prevent unauthorized opening.

**NOTE:** Required only for vandal protection in locations where fixtures can be reached by unauthorized persons.

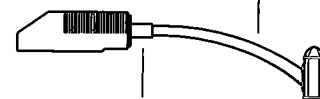


Tamper-Resistant Latch

**Horizontal Slipfitter Mount**  
Cat. No.  HSF  
 No Option

Replaces standard mounting arm with a slipfitter which allows fixture to be mounted to a horizontal pole davit-arm with 2" pipe-size mounting end (2 3/8" O.D.). Cast aluminum clamp-type slipfitter with set screw anti-rotation lock. Bolts to housing from inside the electrical compartment using mounting holes for the standard support arm. Davit-arm must be field drilled at a set screw location to insure against fixture rotation. Finished to match fixture.

Davit-arm with 2" pipe-size  
fixture mount (by others)



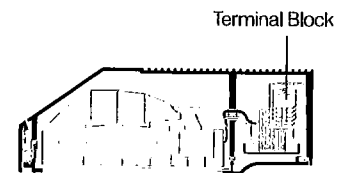
Horizontal Slipfitter  
Mount by Kim

**Special Options for Street Lighting**  
Cat. No. (See right)

**Terminal Block:** (For field wire connections.) 85AMP, 600V box clamp terminal block mounted to the housing inside the electrical compartment. Accepts #14-4 wire. Factory prewired to electrical module quick-disconnect plug.

 **TB** **No Option**

**Air Filter:** Allows for ventilation through the optical chamber, filtering all air particles above 500 microns. Multi-layer disc assembly mounted on solid wall between optical compartment and latch cavity.

 **AF** **No Option**

Air Filter

Terminal Block



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR2/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**  
**LSA2**

LEE07-6119



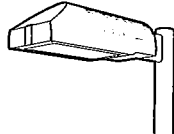
**AR**

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Type:

Job:

Page: 5 of 5

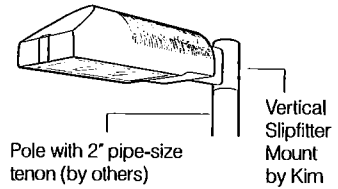


### Optional Features

**Vertical Slipfitter Mounts**  
Cat. No. includes Mounting  
Cat. No. (See right)  
 No Option

Allows fixture with standard support arm to be mounted to poles having a 2" pipe-size tenon (2 3/8" O.D. x 4 1/2" min. length). All mounting configurations can be used (1A, 2B, 2L, 3T, 3Y, 4C). 4" square or round die-cast aluminum with flush cap, secured by four 3/8" stainless steel set point allen screws, finished to match fixture and arm.

**NOTE:** 3Y only available on round slipfitter.



- Cat. No.  
 VSF-1A  
 VSF-2B  
 VSF-2L  
 VSF-3T  
 VSF-3Y  
 VSF-4C



Round

Stainless steel set screws



Square

- Cat. No.  
 SVSF-1A  
 SVSF-2B  
 SVSF-2L  
 SVSF-3T  
 SVSF-4C

- Mounting Configuration**  
**1A** - single arm mount  
**2B** - 2 at 180°  
**2L** - 2 at 90°  
**3T** - 3 at 90°  
**3Y** - 3 at 120°  
**4C** - 4 at 90°

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR3/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**  
**LSA3**

LEE07-6119



**AR**

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**Type:**  
**Job:**  
**Catalog number:**

**Approvals:**

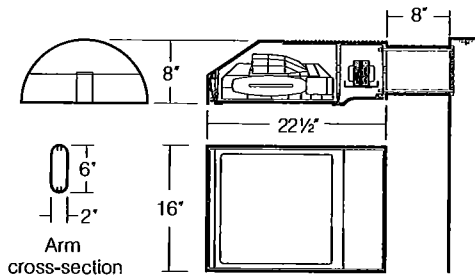
Altg.	Fixture	Electrical Module	Finish	Options	Optional
See page 2				See pages 3-4	Optional Vertical Sphilter Mount See page 5

**Date:**  
**Page: 1 of 5**

Select pole from Kim Pole Catalog. If pole is provided by others indicate O.D. for arm fitting.

## Specifications

150 to 400 watt  
Mogul Base Lamps  
Maximum Fixture weight (400HPS) = 45 lb



**Housing:** One piece low copper (less than .6%) die-cast aluminum alloy with integral cooling ribs over the optical chamber and electrical compartment. Solid barrier wall separates optical and electrical compartments. Double-thick wall with gussets on the support-arm mounting end. Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail. All hardware is stainless steel or electro-zinc plated steel.

**Lens Frame:** One piece low copper (less than .6%) die-cast aluminum alloy lens frame with 1" minimum depth around the gasket flange. Integral hinges with stainless steel pins provide no-tool mounting and removal from housing. Single die-cast aluminum cam-latch provides positive locking and sealing of the optical chamber by a one piece extruded and vulcanized silicone gasket. Clear 3/8" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimeter.

**Reflector Module:** Specular Alzak<sup>2</sup> optical segments are rigidly mounted within a die-cast aluminum enclosure that attaches to the housing as a one-piece module. Reflector module is field rotatable in 90° increments. HPS and PMH sockets are porcelain 4KV pulse rated mogul base, MH sockets are porcelain mogul base, pin-oriented, with molded silicone lamp stabilizer. All reflector modules are factory prewired with quick-disconnect plug and include silicone seal at the penetration of the internal barrier wall in the luminaire housing.

**Electrical Module:** All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only. All ballasts are high power factor rated -20°F. starting.

**Support Arm:** One piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut for specified round pole.

**Optional Wall Mounting:** Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket is provided to accept draw bolts, and a trim plate covers the wall-embedded Junction Box. All wall mount components are finished to match the fixture.

**NOTE:** Junction Box in wall must provide adequate fixture support. See NEC sections 370-13, 17 and 410-14, 16.

**Finish:** Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a chromate conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Platinum Silver, or White. Custom colors are available and subject to additional charges, minimum quantities and longer lead times. Consult representative.

**Certification:** UL Listed to U.S. and Canadian safety standards for wet locations. Fixture manufacturer shall employ a quality program that is certified to meet the ISO 9001:2000 standard.

**CAUTION:** Fixtures must be grounded in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.





**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR3/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**  
**LSA3**

LEE07-6119



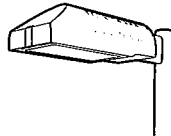
**AR**

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Type:

Job:

Page: 2 of 5



### Standard Features

<p><b>Mounting</b> 3Y configuration is available for round poles only.</p>	<p>Plan View:</p> <p>Wall Mount</p> <p>EPA: 1.2 2.4 2.0 3.2 3.2 3.9 n/a</p> <p>Cat. No.: <input checked="" type="checkbox"/> 1A <input type="checkbox"/> 12B <input type="checkbox"/> 12L <input type="checkbox"/> 13T <input type="checkbox"/> 13Y <input type="checkbox"/> 14C <input type="checkbox"/> 11W</p>																																																						
<p><b>Fixture</b> Cat. No. designates fixture and light distribution. See the Kim Site/Roadway Optical Systems Catalog for detailed information on reflector design and application.</p>	<p>Flat Lens</p> <p>Light Distribution: Type II Type III Type IV Forward Throw Full Cutoff Type V Square Full Cutoff</p> <p>Cat. No.: <input type="checkbox"/> AR2 <input checked="" type="checkbox"/> AR3 <input type="checkbox"/> AR4 <input type="checkbox"/> AR5</p>																																																						
<p><b>Electrical Module</b> HPS = High Pressure Sodium MH = Metal Halide PMH = Pulse Start Metal Halide</p> <p>Lamp Lamp Line Watts Type Volts 400 HPS 277</p>	<p>Cat. Nos. for Electrical Modules available:</p> <table border="0"> <tr> <td><input type="checkbox"/> 150HPS120</td> <td><input type="checkbox"/> 250HPS120</td> <td><input type="checkbox"/> 400HPS120</td> <td><input type="checkbox"/> 175MH120</td> </tr> <tr> <td><input type="checkbox"/> 150HPS208</td> <td><input type="checkbox"/> 250HPS208</td> <td><input type="checkbox"/> 400HPS208</td> <td><input type="checkbox"/> 175MH208</td> </tr> <tr> <td><input type="checkbox"/> 150HPS240</td> <td><input type="checkbox"/> 250HPS240</td> <td><input type="checkbox"/> 400HPS240</td> <td><input type="checkbox"/> 175MH240</td> </tr> <tr> <td><input type="checkbox"/> 150HPS277</td> <td><input type="checkbox"/> 250HPS277</td> <td><input type="checkbox"/> 400HPS277</td> <td><input type="checkbox"/> 175MH277</td> </tr> <tr> <td><input type="checkbox"/> 150HPS347</td> <td><input type="checkbox"/> 250HPS347</td> <td><input type="checkbox"/> 400HPS347</td> <td><input type="checkbox"/> 175MH347</td> </tr> <tr> <td><input type="checkbox"/> 150HPS480</td> <td><input type="checkbox"/> 250HPS480</td> <td><input type="checkbox"/> 400HPS480</td> <td><input type="checkbox"/> 175MH480</td> </tr> </table> <p>Lamp E-23 1/2, Clear E-18, Clear E-18, Clear BT-28 or ED-28, Clear</p> <p>Socket Mogul Base Mogul Base Mogul Base Mogul Base Pin-Oriented</p> <p>ANSI Ballast Type S-55 S-50 S-51 M-57</p> <table border="0"> <tr> <td><input type="checkbox"/> 250MH120</td> <td><input type="checkbox"/> 400MH120</td> <td><input type="checkbox"/> 250PMH120</td> <td><input type="checkbox"/> 400PMH120</td> </tr> <tr> <td><input type="checkbox"/> 250MH208</td> <td><input type="checkbox"/> 400MH208</td> <td><input type="checkbox"/> 250PMH208</td> <td><input type="checkbox"/> 400PMH208</td> </tr> <tr> <td><input type="checkbox"/> 250MH240</td> <td><input checked="" type="checkbox"/> 400MH240</td> <td><input type="checkbox"/> 250PMH240</td> <td><input type="checkbox"/> 400PMH240</td> </tr> <tr> <td><input type="checkbox"/> 250MH277</td> <td><input checked="" type="checkbox"/> 400MH277</td> <td><input type="checkbox"/> 250PMH277</td> <td><input type="checkbox"/> 400PMH277</td> </tr> <tr> <td><input type="checkbox"/> 250MH347</td> <td><input type="checkbox"/> 400MH347</td> <td><input type="checkbox"/> 250PMH347</td> <td><input type="checkbox"/> 400PMH347</td> </tr> <tr> <td><input type="checkbox"/> 250MH480</td> <td><input type="checkbox"/> 400MH480</td> <td><input type="checkbox"/> 250PMH480</td> <td><input type="checkbox"/> 400PMH480</td> </tr> </table> <p>Lamp BT-28 or ED-28, Clear ED-28, Clear ED-28, Clear ED-28, Clear</p> <p>Socket Mogul Base Pin-Oriented Mogul Base Pin-Oriented Mogul Base Mogul Base</p> <p>ANSI Ballast Type M-58 M-59 M-138 M-135</p>							<input type="checkbox"/> 150HPS120	<input type="checkbox"/> 250HPS120	<input type="checkbox"/> 400HPS120	<input type="checkbox"/> 175MH120	<input type="checkbox"/> 150HPS208	<input type="checkbox"/> 250HPS208	<input type="checkbox"/> 400HPS208	<input type="checkbox"/> 175MH208	<input type="checkbox"/> 150HPS240	<input type="checkbox"/> 250HPS240	<input type="checkbox"/> 400HPS240	<input type="checkbox"/> 175MH240	<input type="checkbox"/> 150HPS277	<input type="checkbox"/> 250HPS277	<input type="checkbox"/> 400HPS277	<input type="checkbox"/> 175MH277	<input type="checkbox"/> 150HPS347	<input type="checkbox"/> 250HPS347	<input type="checkbox"/> 400HPS347	<input type="checkbox"/> 175MH347	<input type="checkbox"/> 150HPS480	<input type="checkbox"/> 250HPS480	<input type="checkbox"/> 400HPS480	<input type="checkbox"/> 175MH480	<input type="checkbox"/> 250MH120	<input type="checkbox"/> 400MH120	<input type="checkbox"/> 250PMH120	<input type="checkbox"/> 400PMH120	<input type="checkbox"/> 250MH208	<input type="checkbox"/> 400MH208	<input type="checkbox"/> 250PMH208	<input type="checkbox"/> 400PMH208	<input type="checkbox"/> 250MH240	<input checked="" type="checkbox"/> 400MH240	<input type="checkbox"/> 250PMH240	<input type="checkbox"/> 400PMH240	<input type="checkbox"/> 250MH277	<input checked="" type="checkbox"/> 400MH277	<input type="checkbox"/> 250PMH277	<input type="checkbox"/> 400PMH277	<input type="checkbox"/> 250MH347	<input type="checkbox"/> 400MH347	<input type="checkbox"/> 250PMH347	<input type="checkbox"/> 400PMH347	<input type="checkbox"/> 250MH480	<input type="checkbox"/> 400MH480	<input type="checkbox"/> 250PMH480	<input type="checkbox"/> 400PMH480
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<p><b>Finish</b> Super TGIC powder coat paint over a chromate conversion coating.</p>	<p>Color: Black Dark Bronze Light Gray <input checked="" type="checkbox"/> Platinum Silver White Custom Color<sup>1</sup></p> <p>Cat. No.: <input type="checkbox"/> BL-P <input type="checkbox"/> DB-P <input type="checkbox"/> LG-P <input checked="" type="checkbox"/> PS-P <input type="checkbox"/> WH-P <input type="checkbox"/> CC-P</p> <p><sup>1</sup>Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____</p>																																																						



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR3/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**  
**LSA3**

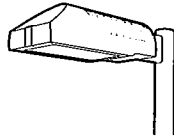
LEE07-6119



**AR**  
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Type:  
Job:

Page: 3 of 5

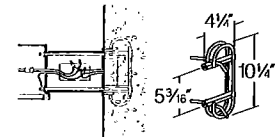


### Optional Features

**Wall Mounting**

Cat. No. **1W**  
Select from Mounting on page 2.

Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket (**WEB**) is provided to accept draw bolts, and a trim plate covers the wall-embedded Junction Box. All wall mount components are finished to match the fixture.



Wall mount using wall embedment bracket - J-box in wall (by others)

**Photocell Receptacle**

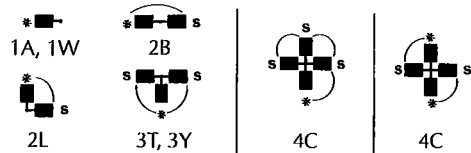
Cat. No.  **A-25**  
 **No Option**

Fixture supplied with a fully gasketed receptacle above the electrical compartment for NEMA base photocell (by others). For all multiple-fixture pole mountings with two or three fixtures, one fixture has a receptacle to operate the others. Four fixtures (250 watt or less) also require one fixture with a receptacle. Four fixtures (400 watt) require two fixtures with receptacles.



Mounting (see page 2)

\* - Fixture with Photocell Receptacle  
S - slave unit(s)

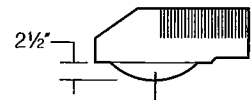


Allowable wattage per fixture:	150-400W	150-250W	400W
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**Convex Glass Lens**

Cat. No.  **CGL**  
 **No Option**

The 3/16" thick clear convex tempered glass lens replaces the standard flat glass lens. Provides increased lens presence and provides a subtle improvement in uniformity where pole spacing is extreme. Increases effectiveness of houseside shielding.

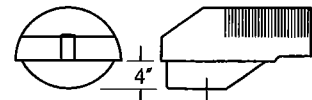


Convex Glass Lens

**Polycarbonate Lens**

Cat. No.  **LS**  
 **No Option**

Fixture supplied with a one piece vacuum formed, clear, UV stabilized convex polycarbonate, fully gasketed, replacing the standard tempered glass lens. 250 watt maximum. May be used with 400HPS in outdoor locations where ambient air temperature during fixture operation will not exceed 85°F.



Polycarbonate Lens

**CAUTION:** Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight and metal halide lamps.



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR3/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**

**LSA3**

LEE07-6119



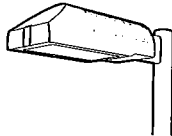
**AR**

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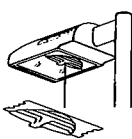
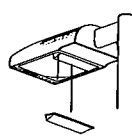
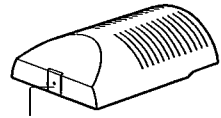
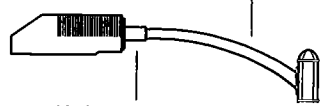
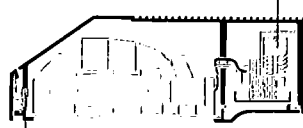
Type:

Job:

Page: 4 of 5



### Optional Features

<p><b>Houseside Shield</b> Cat. No. (See right) <input type="checkbox"/> No Option</p>	<p><b>(Types II, III, and IV only).</b> Fixtures with the standard flat glass lens are available with stamped aluminum louvers that pass streetside light and block houseside light, and a blackened panel added to the reflector to reduce houseside reflections. Fixtures with the optional convex glass lens are available with a formed aluminum shield that passes streetside light and blocks houseside light, and a black anodized panel added to the reflector to reduce houseside reflections. Use with clear lamps only, as coated lamps reduce effectiveness.</p> <p>Cat. No. <input type="checkbox"/> <b>HS</b> Recommended for use with clear lamps only. Effectiveness is reduced for coated lamps. Not for use with Type V light distributions. <input type="checkbox"/> <b>HSC</b> For use with all fixtures with convex glass lens. Not for use with Type V light distributions.</p>	 <p><b>HS</b> for flat lens</p>  <p><b>HSC</b> for convex lens or polycarbonate lens</p>
<p><b>Tamper-Resistant Latch</b> Cat. No. <input type="checkbox"/> TL <input type="checkbox"/> No Option</p>	<p>Standard die-cast latch is provided with a captive 10-32 stainless steel flat socket-head screw to prevent unauthorized opening.</p> <p><b>NOTE:</b> Required only for vandal protection in locations where fixtures can be reached by unauthorized persons.</p>	 <p>Tamper-Resistant Latch</p>
<p><b>Horizontal Slipfitter Mount</b> Cat. No. <input type="checkbox"/> HSF <input type="checkbox"/> No Option</p>	<p>Replaces standard mounting arm with a slipfitter which allows fixture to be mounted to a horizontal pole davit-arm with 2" pipe-size mounting end (2 3/8" O.D.). Cast aluminum clamp-type slipfitter with set screw anti-rotation lock. Bolts to housing from inside the electrical compartment using mounting holes for the standard support arm. Davit-arm must be field drilled at a set screw location to insure against fixture rotation. Finished to match fixture.</p>	<p>Davit-arm with 2" pipe-size fixture mount (by others)</p>  <p>Horizontal Slipfitter Mount by Kim</p>
<p><b>Special Options for Street Lighting</b> Cat. No. (See right)</p>	<p><b>Terminal Block:</b> (For field wire connections.) 85AMP, 600V box clamp terminal block mounted to the housing inside the electrical compartment. Accepts #14-4 wire. Factory prewired to electrical module quick-disconnect plug.</p> <p><input type="checkbox"/> <b>TB</b> <input type="checkbox"/> No Option</p> <p><b>Air Filter:</b> Allows for ventilation through the optical chamber, filtering all air particles above 500 microns. Multi-layer disc assembly mounted on solid wall between optical compartment and latch cavity.</p> <p><input type="checkbox"/> <b>AF</b> <input type="checkbox"/> No Option</p>	<p>Terminal Block</p>  <p>Air Filter</p>





**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR3/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**  
**LSA3**

LEE07-6119

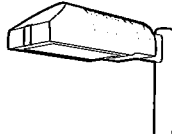


**AR**  
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revision 3/17/03 • ar.pdf

Type:

Job:

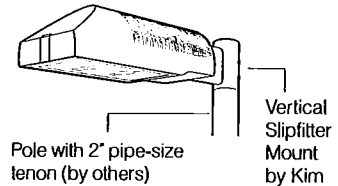
Page: 5 of 5



### Optional Features

**Vertical Slipfitter Mounts**  
Cat. No. includes Mounting  
Cat. No. **(See right)**  
 No Option

Allows fixture with standard support arm to be mounted to poles having a 2" pipe-size tenon (2 3/8" O.D. x 4 1/2" min. length). All mounting configurations can be used (1A, 2B, 2L, 3T, 3Y, 4C). 4" square or round die-cast aluminum with flush cap, secured by four 3/8" stainless steel set point allen screws, finished to match fixture and arm.



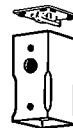
**NOTE:** 3Y only available on round slipfitter.

- Cat. No.  
 VSF-1A  
 VSF-2B  
 VSF-2L  
 VSF-3T  
 VSF-3Y  
 VSF-4C



Round

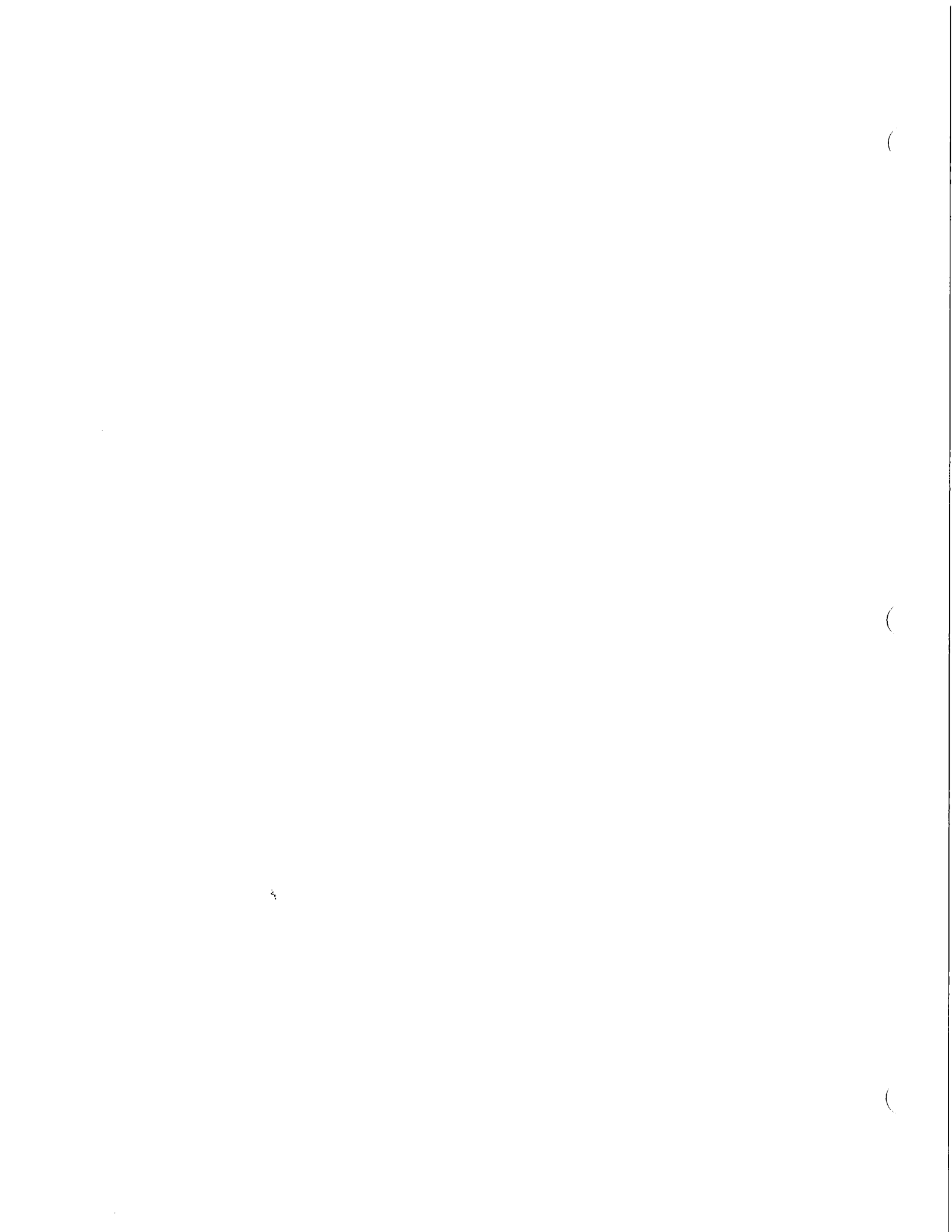
Stainless steel set screws



Square

- Cat. No.  
 SVSF-1A  
 SVSF-2B  
 SVSF-2L  
 SVSF-3T  
 SVSF-4C

- Mounting Configuration**  
1A - single arm mount  
2B - 2 at 180°  
2L - 2 at 90°  
3T - 3 at 90°  
3Y - 3 at 120°  
4C - 4 at 90°



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR3/400MH277/PS-P/  
SQUARE POLE ARM-HS  
Notes:

**Type:**  
**LSA3**

LEE07-6119



**AR**

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revision 3/17/03 • ar.pdf

**Type:**  
**Job:**  
**Catalog number:**

**Approvals:**

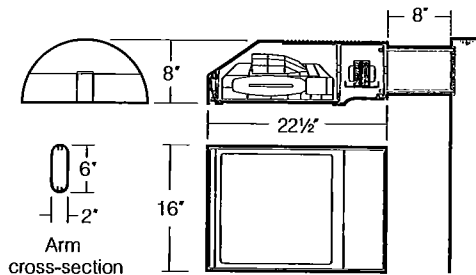
Mtg.	Fixture	Electrical Module	Finish	Options	Optional Vertical Splitter Mount
/	/	/	/	/	/
See page 2				See pages 3-4	See page 5

**Date:**  
**Page: 1 of 5**

Select pole from Kim Pole Catalog. If pole is provided by others indicate O.D. for arm fitting.

## Specifications

150 to 400 watt  
Mogul Base Lamps  
Maximum Fixture weight (400HPS) = 45 lb



**Housing:** One piece low copper (less than .6%) die-cast aluminum alloy with integral cooling ribs over the optical chamber and electrical compartment. Solid barrier wall separates optical and electrical compartments. Double-thick wall with gussets on the support-arm mounting end. Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail. All hardware is stainless steel or electro-zinc plated steel.

**Lens Frame:** One piece low copper (less than .6%) die-cast aluminum alloy lens frame with 1" minimum depth around the gasket flange. Integral hinges with stainless steel pins provide no-tool mounting and removal from housing. Single die-cast aluminum cam-latch provides positive locking and sealing of the optical chamber by a one piece extruded and vulcanized silicone gasket. Clear 3/8" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimeter.

**Reflector Module:** Specular Alzak<sup>2</sup> optical segments are rigidly mounted within a die-cast aluminum enclosure that attaches to the housing as a one-piece module. Reflector module is field rotatable in 90° increments. HPS and PMH sockets are porcelain 4KV pulse rated mogul base, MH sockets are porcelain mogul base, pin-oriented, with molded silicone lamp stabilizer. All reflector modules are factory prewired with quick-disconnect plug and include silicone seal at the penetration of the internal barrier wall in the luminaire housing.

**Electrical Module:** All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only. All ballasts are high power factor rated -20°F. starting.

**Support Arm:** One piece extruded aluminum with internal bolt guides and fully radiussed top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut for specified round pole.

**Optional Wall Mounting:** Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket is provided to accept draw bolts, and a trim plate covers the wall-embedded Junction Box. All wall mount components are finished to match the fixture.

**NOTE:** Junction Box in wall must provide adequate fixture support. See NEC sections 370-13, 17 and 410-14, 16.

**Finish:** Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a chromate conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Platinum Silver, or White. Custom colors are available and subject to additional charges, minimum quantities and longer lead times. Consult representative.

**Certification:** UL Listed to U.S. and Canadian safety standards for wet locations. Fixture manufacturer shall employ a quality program that is certified to meet the ISO 9001:2000 standard.

**CAUTION:** Fixtures must be grounded in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.





**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR3/400MH277/PS-P/  
SQUARE POLE ARM-HS  
Notes:

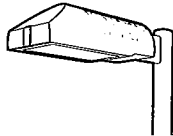
**Type:**  
**LSA3**

LEE07-6119



**AR**  
The Archetype®  
revision 3/17/03 • ar.pdf

**Type:**  
**Job:**



### Standard Features

<p><b>Mounting</b> 3Y configuration is available for round poles only.</p>	<p>Plan View:</p> <p>EPA: 1.2 2.4 2.0 3.2 3.2 3.9 n/a Cat. No.: <input checked="" type="checkbox"/> 1A <input type="checkbox"/> 2B <input type="checkbox"/> 2L <input type="checkbox"/> 3T <input type="checkbox"/> 3Y <input type="checkbox"/> 4C <input type="checkbox"/> 1W</p>																																																																														
<p><b>Fixture</b> Cat. No. designates fixture and light distribution. See the Kim Site/Roadway Optical Systems Catalog for detailed information on reflector design and application.</p>	<p>Flat Lens</p> <p>Light Distribution: Type II Type III Type IV Type V Full Cutoff Full Cutoff Forward Throw Square Cat. No.: <input type="checkbox"/> AR2 <input checked="" type="checkbox"/> AR3 <input type="checkbox"/> AR4 <input type="checkbox"/> AR5</p>																																																																														
<p><b>Electrical Module</b> HPS = High Pressure Sodium MH = Metal Halide PMH = Pulse Start Metal Halide</p> <p>Lamp Lamp Line Watts Type Volts 400 HPS 277</p>	<p>Cat. Nos. for Electrical Modules available:</p> <table border="1"> <tr> <td><input type="checkbox"/> 150HPS120</td> <td><input type="checkbox"/> 250HPS120</td> <td><input type="checkbox"/> 400HPS120</td> <td><input type="checkbox"/> 175MH120</td> </tr> <tr> <td><input type="checkbox"/> 150HPS208</td> <td><input type="checkbox"/> 250HPS208</td> <td><input type="checkbox"/> 400HPS208</td> <td><input type="checkbox"/> 175MH208</td> </tr> <tr> <td><input type="checkbox"/> 150HPS240</td> <td><input type="checkbox"/> 250HPS240</td> <td><input type="checkbox"/> 400HPS240</td> <td><input type="checkbox"/> 175MH240</td> </tr> <tr> <td><input type="checkbox"/> 150HPS277</td> <td><input type="checkbox"/> 250HPS277</td> <td><input type="checkbox"/> 400HPS277</td> <td><input type="checkbox"/> 175MH277</td> </tr> <tr> <td><input type="checkbox"/> 150HPS347</td> <td><input type="checkbox"/> 250HPS347</td> <td><input type="checkbox"/> 400HPS347</td> <td><input type="checkbox"/> 175MH347</td> </tr> <tr> <td><input type="checkbox"/> 150HPS480</td> <td><input type="checkbox"/> 250HPS480</td> <td><input type="checkbox"/> 400HPS480</td> <td><input type="checkbox"/> 175MH480</td> </tr> </table> <table border="1"> <tr> <td>Lamp</td> <td>E-23 1/2, Clear</td> <td>E-18, Clear</td> <td>E-18, Clear</td> <td>BT-28 or ED-28, Clear</td> </tr> <tr> <td>Socket</td> <td>Mogul Base</td> <td>Mogul Base</td> <td>Mogul Base</td> <td>Mogul Base Pin-Oriented</td> </tr> <tr> <td>ANSI Ballast Type</td> <td>S-55</td> <td>S-50</td> <td>S-51</td> <td>M-57</td> </tr> </table> <table border="1"> <tr> <td><input type="checkbox"/> 250MH120</td> <td><input type="checkbox"/> 400MH120</td> <td><input type="checkbox"/> 250PMH120</td> <td><input type="checkbox"/> 400PMH120</td> </tr> <tr> <td><input type="checkbox"/> 250MH208</td> <td><input type="checkbox"/> 400MH208</td> <td><input type="checkbox"/> 250PMH208</td> <td><input type="checkbox"/> 400PMH208</td> </tr> <tr> <td><input type="checkbox"/> 250MH240</td> 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Ballast Type</td> <td>M-58</td> <td>M-59</td> <td>M-138</td> <td>M-135</td> </tr> </table>	<input type="checkbox"/> 150HPS120	<input type="checkbox"/> 250HPS120	<input type="checkbox"/> 400HPS120	<input type="checkbox"/> 175MH120	<input type="checkbox"/> 150HPS208	<input type="checkbox"/> 250HPS208	<input type="checkbox"/> 400HPS208	<input type="checkbox"/> 175MH208	<input type="checkbox"/> 150HPS240	<input type="checkbox"/> 250HPS240	<input type="checkbox"/> 400HPS240	<input type="checkbox"/> 175MH240	<input type="checkbox"/> 150HPS277	<input type="checkbox"/> 250HPS277	<input type="checkbox"/> 400HPS277	<input type="checkbox"/> 175MH277	<input type="checkbox"/> 150HPS347	<input type="checkbox"/> 250HPS347	<input type="checkbox"/> 400HPS347	<input type="checkbox"/> 175MH347	<input type="checkbox"/> 150HPS480	<input type="checkbox"/> 250HPS480	<input type="checkbox"/> 400HPS480	<input type="checkbox"/> 175MH480	Lamp	E-23 1/2, Clear	E-18, Clear	E-18, Clear	BT-28 or ED-28, Clear	Socket	Mogul Base	Mogul Base	Mogul Base	Mogul Base Pin-Oriented	ANSI Ballast Type	S-55	S-50	S-51	M-57	<input type="checkbox"/> 250MH120	<input type="checkbox"/> 400MH120	<input type="checkbox"/> 250PMH120	<input type="checkbox"/> 400PMH120	<input type="checkbox"/> 250MH208	<input type="checkbox"/> 400MH208	<input type="checkbox"/> 250PMH208	<input type="checkbox"/> 400PMH208	<input type="checkbox"/> 250MH240	<input type="checkbox"/> 400MH240	<input type="checkbox"/> 250PMH240	<input type="checkbox"/> 400PMH240	<input type="checkbox"/> 250MH277	<input checked="" type="checkbox"/> 400MH277	<input type="checkbox"/> 250PMH277	<input type="checkbox"/> 400PMH277	<input type="checkbox"/> 250MH347	<input type="checkbox"/> 400MH347	<input type="checkbox"/> 250PMH347	<input type="checkbox"/> 400PMH347	<input type="checkbox"/> 250MH480	<input type="checkbox"/> 400MH480	<input type="checkbox"/> 250PMH480	<input type="checkbox"/> 400PMH480	Lamp	BT-28 or ED-28, Clear	ED-28, Clear	ED-28, Clear	ED-28, Clear	Socket	Mogul Base Pin-Oriented	Mogul Base Pin-Oriented	Mogul Base	Mogul Base	ANSI Ballast Type	M-58	M-59	M-138	M-135
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ANSI Ballast Type	M-58	M-59	M-138	M-135																																																																											
<p><b>Finish</b> Super TGIC powder coat paint over a chromate conversion coating.</p>	<p>Color: Black Dark Bronze Light Gray Platinum Silver White Custom Color<sup>1</sup> Cat. No.: <input type="checkbox"/> BL-P <input type="checkbox"/> DB-P <input type="checkbox"/> LG-P <input checked="" type="checkbox"/> PS-P <input type="checkbox"/> WH-P <input type="checkbox"/> CC-P <sup>1</sup>Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____</p>																																																																														



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR3/400MH277/PS-P/  
SQUARE POLE ARM-HS  
Notes:

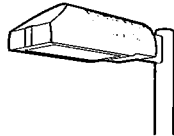
**Type:**  
**LSA3**  
LEE07-6119



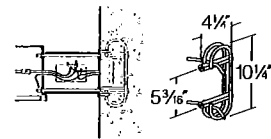

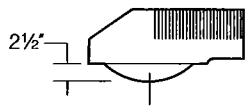
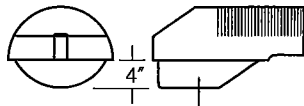
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Type:  
Job:

Page: 3 of 5



### Optional Features

<p><b>Wall Mounting</b> Cat. No. <b>1W</b> Select from Mounting on page 2.</p>	<p>Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket (<b>WEB</b>) is provided to accept draw bolts, and a trim plate covers the wall-embedded Junction Box. All wall mount components are finished to match the fixture.</p>	 <p>Wall mount using wall embedment bracket - J-box in wall (by others)</p>																			
<p><b>Photocell Receptacle</b> Cat. No. <input type="checkbox"/> <b>A-25</b> <input type="checkbox"/> <b>No Option</b></p>	<p>Fixture supplied with a fully gasketed receptacle above the electrical compartment for NEMA base photocell (by others). For all multiple-fixture pole mountings with two or three fixtures, one fixture has a receptacle to operate the others. Four fixtures (250 watt or less) also require one fixture with a receptacle. Four fixtures (400 watt) require two fixtures with receptacles.</p> <p>Mounting (see page 2)</p> <p>* - Fixture with Photocell Receptacle S - slave unit(s)</p> <table border="1" data-bbox="941 1155 1437 1312"> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1A, 1W</td> <td>2B</td> <td>4C</td> <td>4C</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2L</td> <td>3T, 3Y</td> <td></td> <td></td> </tr> </table> <p>Allowable wattage per fixture:</p> <table border="1" data-bbox="941 1312 1437 1354"> <tr> <td>150-400W</td> <td>150-250W</td> <td>400W</td> </tr> </table>					1A, 1W	2B	4C	4C					2L	3T, 3Y			150-400W	150-250W	400W	 <p>Receptacle</p>
1A, 1W	2B	4C	4C																		
2L	3T, 3Y																				
150-400W	150-250W	400W																			
<p><b>Convex Glass Lens</b> Cat. No. <input type="checkbox"/> <b>CGL</b> <input type="checkbox"/> <b>No Option</b></p>	<p>The 3/16" thick clear convex tempered glass lens replaces the standard flat glass lens. Provides increased lens presence and provides a subtle improvement in uniformity where pole spacing is extreme. Increases effectiveness of houseside shielding.</p>	 <p>Convex Glass Lens</p>																			
<p><b>Polycarbonate Lens</b> Cat. No. <input type="checkbox"/> <b>LS</b> <input type="checkbox"/> <b>No Option</b></p>	<p>Fixture supplied with a one piece vacuum formed, clear, UV stabilized convex polycarbonate, fully gasketed, replacing the standard tempered glass lens. 250 watt maximum. May be used with 400HPS in outdoor locations where ambient air temperature during fixture operation will not exceed 85°F.</p> <p><b>CAUTION:</b> Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight and metal halide lamps.</p>	 <p>Polycarbonate Lens</p>																			



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR3/400MH277/PS-P/  
SQUARE POLE ARM-HS  
Notes:

Type:

**LSA3**

LEE07-6119

**KIM LIGHTING**

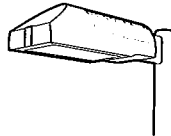
**AR**

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Type:

Job:

Page: 4 of 5

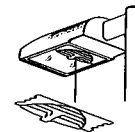


## Optional Features

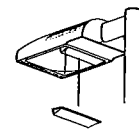
### Houseside Shield

Cat. No. (See right)  
 No Option

(Types II, III, and IV only). Fixtures with the standard flat glass lens are available with stamped aluminum louvers that pass streetside light and block houseside light, and a blackened panel added to the reflector to reduce houseside reflections. Fixtures with the optional convex glass lens are available with a formed aluminum shield that passes streetside light and blocks houseside light, and a black anodized panel added to the reflector to reduce houseside reflections. Use with clear lamps only, as coated lamps reduce effectiveness.



**HS**  
for flat lens



**HSC**  
for convex lens or  
polycarbonate lens

Cat. No.

 **HS**

Recommended for use with clear lamps only. Effectiveness is reduced for coated lamps. Not for use with Type V light distributions.

 **HSC**

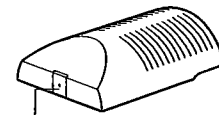
For use with all fixtures with convex glass lens. Not for use with Type V light distributions.

### Tamper-Resistant Latch

Cat. No.  TL  
 No Option

Standard die-cast latch is provided with a captive 10-32 stainless steel flat socket-head screw to prevent unauthorized opening.

**NOTE:** Required only for vandal protection in locations where fixtures can be reached by unauthorized persons.



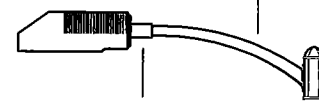
Tamper-Resistant Latch

### Horizontal Slipfitter Mount

Cat. No.  HSF  
 No Option

Replaces standard mounting arm with a slipfitter which allows fixture to be mounted to a horizontal pole davit-arm with 2" pipe-size mounting end (2 3/8" O.D.). Cast aluminum clamp-type slipfitter with set screw anti-rotation lock. Bolts to housing from inside the electrical compartment using mounting holes for the standard support arm. Davit-arm must be field drilled at a set screw location to insure against fixture rotation. Finished to match fixture.

Davit-arm with 2" pipe-size  
fixture mount (by others)



Horizontal Slipfitter  
Mount by Kim

### Special Options for Street Lighting

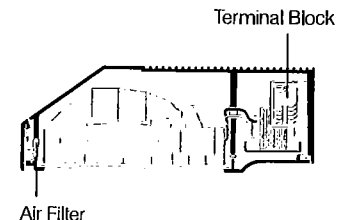
Cat. No. (See right)

#### Terminal Block: (For field wire connections.)

85AMP, 600V box clamp terminal block mounted to the housing inside the electrical compartment. Accepts #14-4 wire. Factory prewired to electrical module quick-disconnect plug.

 **TB** **No Option**

**Air Filter:** Allows for ventilation through the optical chamber, filtering all air particles above 500 microns. Multi-layer disc assembly mounted on solid wall between optical compartment and latch cavity.

 **AF** **No Option**

Air Filter

Terminal Block



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR3/400MH277/PS-P/  
SQUARE POLE ARM-HS  
Notes:

**Type:**  
**LSA3**

LEE07-6119

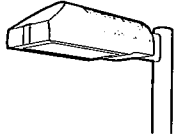


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Type:

Job:

Page: 5 of 5

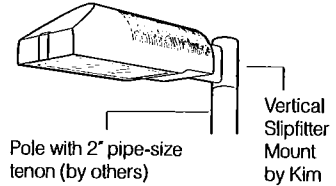


### Optional Features

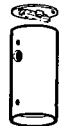
**Vertical Slipfitter Mounts**  
Cat. No. includes Mounting  
Cat. No. (See right)  
 No Option

Allows fixture with standard support arm to be mounted to poles having a 2" pipe-size tenon (2 3/8" O.D. x 4 1/2" min. length). All mounting configurations can be used (1A, 2B, 2L, 3T, 3Y, 4C). 4" square or round die-cast aluminum with flush cap, secured by four 3/8" stainless steel set point allen screws, finished to match fixture and arm.

**NOTE:** 3Y only available on round slipfitter.



- Cat. No.  
 VSF-1A  
 VSF-2B  
 VSF-2L  
 VSF-3T  
 VSF-3Y  
 VSF-4C



Round

Stainless steel set screws



Square

- Cat. No.  
 SVSF-1A  
 SVSF-2B  
 SVSF-2L  
 SVSF-3T  
 SVSF-4C

- Mounting Configuration  
1A - single arm mount  
2B - 2 at 180°  
2L - 2 at 90°  
3T - 3 at 90°  
3Y - 3 at 120°  
4C - 4 at 90°

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR4/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**  
**LSA4**

LEE07-6119



**AR**

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**Type:**  
**Job:**  
**Catalog number:**

**Approvals:**

_____ / _____ / _____ / _____ / _____
Mtg. Fixture Electrical Module Finish Options
_____ See page 2 _____ See pages 1-4

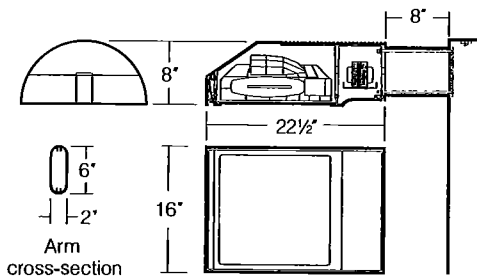
Optional  
Vertical  
Shelf Mount  
See page 5

**Date:**  
**Page: 1 of 5**

Select pole from Kim Pole Catalog. If pole is provided by others indicate O.D. for arm fitting.

### Specifications

150 to 400 watt  
Mogul Base Lamps  
Maximum Fixture weight (400HPS) = 45 lb



**Housing:** One piece low copper (less than .6%) die-cast aluminum alloy with integral cooling ribs over the optical chamber and electrical compartment. Solid barrier wall separates optical and electrical compartments. Double-thick wall with gussets on the support-arm mounting end. Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail. All hardware is stainless steel or electro-zinc plated steel.

**Lens Frame:** One piece low copper (less than .6%) die-cast aluminum alloy lens frame with 1" minimum depth around the gasket flange. Integral hinges with stainless steel pins provide no-tool mounting and removal from housing. Single die-cast aluminum cam-latch provides positive locking and sealing of the optical chamber by a one piece extruded and vulcanized silicone gasket. Clear 3/8" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimeter.

**Reflector Module:** Specular Alzak<sup>2</sup> optical segments are rigidly mounted within a die-cast aluminum enclosure that attaches to the housing as a one-piece module. Reflector module is field rotatable in 90° increments. HPS and PMH sockets are porcelain 4KV pulse rated mogul base, MH sockets are porcelain mogul base, pin-oriented, with molded silicone lamp stabilizer. All reflector modules are factory prewired with quick-disconnect plug and include silicone seal at the penetration of the internal barrier wall in the luminaire housing.

**Electrical Module:** All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only. All ballasts are high power factor rated -20°F. starting.

**Support Arm:** One piece extruded aluminum with internal bolt guides and fully radiused top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut for specified round pole.

**Optional Wall Mounting:** Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket is provided to accept draw bolts, and a trim plate covers the wall-embedded Junction Box. All wall mount components are finished to match the fixture.

**NOTE:** Junction Box in wall must provide adequate fixture support. See NEC sections 370-13, 17 and 410-14, 16.

**Finish:** Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a chromate conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Platinum Silver, or White. Custom colors are available and subject to additional charges, minimum quantities and longer lead times. Consult representative.

**Certification:** UL Listed to U.S. and Canadian safety standards for wet locations. Fixture manufacturer shall employ a quality program that is certified to meet the ISO 9001:2000 standard.

**CAUTION:** Fixtures must be grounded in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.





**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR4/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**

**LSA4**

LEE07-6119



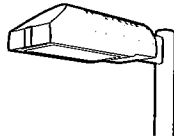
**AR**

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**Type:**

**Job:**

Page: 2 of 5



**Standard Features**

<p><b>Mounting</b> 3Y configuration is available for round poles only.</p>	<p>Plan View:</p> <p>Wall Mount</p> <p>EPA: 1.2 2.4 2.0 3.2 3.2 3.9 n/a</p> <p>Cat. No.: <input checked="" type="checkbox"/> 1A <input type="checkbox"/> 12B <input type="checkbox"/> 12L <input type="checkbox"/> 13T <input type="checkbox"/> 13Y <input type="checkbox"/> 14C <input type="checkbox"/> 11W</p>																																																
<p><b>Fixture</b> Cat. No. designates fixture and light distribution. See the Kim Site/Roadway Optical Systems Catalog for detailed information on reflector design and application.</p>	<p>Flat Lens</p> <p>Light Distribution: Type II Type III Type IV Type V</p> <p>Full Cutoff Full Cutoff Full Throw Full Cutoff</p> <p>Cat. No.: <input type="checkbox"/> AR2 <input type="checkbox"/> AR3 <input checked="" type="checkbox"/> AR4 <input type="checkbox"/> AR5</p>																																																
<p><b>Electrical Module</b> HPS = High Pressure Sodium MH = Metal Halide PMH = Pulse Start Metal Halide</p> <p>Lamp Watts Type Volts 400 HPS 277</p>	<p>Cat. Nos. for Electrical Modules available:</p> <table border="1"> <tr> <td><input type="checkbox"/> 150HPS120</td> <td><input type="checkbox"/> 250HPS120</td> <td><input type="checkbox"/> 400HPS120</td> <td><input type="checkbox"/> 175MH120</td> </tr> <tr> <td><input type="checkbox"/> 150HPS208</td> <td><input type="checkbox"/> 250HPS208</td> <td><input type="checkbox"/> 400HPS208</td> <td><input type="checkbox"/> 175MH208</td> </tr> <tr> <td><input type="checkbox"/> 150HPS240</td> <td><input type="checkbox"/> 250HPS240</td> <td><input type="checkbox"/> 400HPS240</td> <td><input type="checkbox"/> 175MH240</td> </tr> <tr> <td><input type="checkbox"/> 150HPS277</td> <td><input type="checkbox"/> 250HPS277</td> <td><input type="checkbox"/> 400HPS277</td> <td><input type="checkbox"/> 175MH277</td> </tr> <tr> <td><input type="checkbox"/> 150HPS347</td> <td><input type="checkbox"/> 250HPS347</td> <td><input type="checkbox"/> 400HPS347</td> <td><input type="checkbox"/> 175MH347</td> </tr> <tr> <td><input type="checkbox"/> 150HPS480</td> <td><input type="checkbox"/> 250HPS480</td> <td><input type="checkbox"/> 400HPS480</td> <td><input type="checkbox"/> 175MH480</td> </tr> </table> <p>Lamp E-23½, Clear E-18, Clear E-18, Clear BT-28 or ED-28, Clear</p> <p>Socket Mogul Base Mogul Base Mogul Base Mogul Base Pin-Oriented</p> <p>ANSI Ballast Type S-55 S-50 S-51 M-57</p> <table border="1"> <tr> <td><input type="checkbox"/> 250MH120</td> <td><input type="checkbox"/> 400MH120</td> <td><input type="checkbox"/> 250PMH120</td> <td><input type="checkbox"/> 400PMH120</td> </tr> <tr> <td><input type="checkbox"/> 250MH208</td> <td><input type="checkbox"/> 400MH208</td> <td><input type="checkbox"/> 250PMH208</td> <td><input type="checkbox"/> 400PMH208</td> </tr> <tr> <td><input type="checkbox"/> 250MH240</td> <td><input type="checkbox"/> 400MH240</td> <td><input type="checkbox"/> 250PMH240</td> <td><input type="checkbox"/> 400PMH240</td> </tr> <tr> <td><input type="checkbox"/> 250MH277</td> <td><input checked="" type="checkbox"/> 400MH277</td> <td><input type="checkbox"/> 250PMH277</td> <td><input type="checkbox"/> 400PMH277</td> </tr> <tr> <td><input type="checkbox"/> 250MH347</td> <td><input type="checkbox"/> 400MH347</td> <td><input type="checkbox"/> 250PMH347</td> <td><input type="checkbox"/> 400PMH347</td> </tr> <tr> <td><input type="checkbox"/> 250MH480</td> <td><input type="checkbox"/> 400MH480</td> <td><input type="checkbox"/> 250PMH480</td> <td><input type="checkbox"/> 400PMH480</td> </tr> </table> <p>Lamp BT-28 or ED-28, Clear ED-28, Clear ED-28, Clear ED-28, Clear</p> <p>Socket Mogul Base Pin-Oriented Mogul Base Pin-Oriented Mogul Base Mogul Base</p> <p>ANSI Ballast Type M-58 M-59 M-138 M-135</p>	<input type="checkbox"/> 150HPS120	<input type="checkbox"/> 250HPS120	<input type="checkbox"/> 400HPS120	<input type="checkbox"/> 175MH120	<input type="checkbox"/> 150HPS208	<input type="checkbox"/> 250HPS208	<input type="checkbox"/> 400HPS208	<input type="checkbox"/> 175MH208	<input type="checkbox"/> 150HPS240	<input type="checkbox"/> 250HPS240	<input type="checkbox"/> 400HPS240	<input type="checkbox"/> 175MH240	<input type="checkbox"/> 150HPS277	<input type="checkbox"/> 250HPS277	<input type="checkbox"/> 400HPS277	<input type="checkbox"/> 175MH277	<input type="checkbox"/> 150HPS347	<input type="checkbox"/> 250HPS347	<input type="checkbox"/> 400HPS347	<input type="checkbox"/> 175MH347	<input type="checkbox"/> 150HPS480	<input type="checkbox"/> 250HPS480	<input type="checkbox"/> 400HPS480	<input type="checkbox"/> 175MH480	<input type="checkbox"/> 250MH120	<input type="checkbox"/> 400MH120	<input type="checkbox"/> 250PMH120	<input type="checkbox"/> 400PMH120	<input type="checkbox"/> 250MH208	<input type="checkbox"/> 400MH208	<input type="checkbox"/> 250PMH208	<input type="checkbox"/> 400PMH208	<input type="checkbox"/> 250MH240	<input type="checkbox"/> 400MH240	<input type="checkbox"/> 250PMH240	<input type="checkbox"/> 400PMH240	<input type="checkbox"/> 250MH277	<input checked="" type="checkbox"/> 400MH277	<input type="checkbox"/> 250PMH277	<input type="checkbox"/> 400PMH277	<input type="checkbox"/> 250MH347	<input type="checkbox"/> 400MH347	<input type="checkbox"/> 250PMH347	<input type="checkbox"/> 400PMH347	<input type="checkbox"/> 250MH480	<input type="checkbox"/> 400MH480	<input type="checkbox"/> 250PMH480	<input type="checkbox"/> 400PMH480
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<input type="checkbox"/> 250MH480	<input type="checkbox"/> 400MH480	<input type="checkbox"/> 250PMH480	<input type="checkbox"/> 400PMH480																																														
<p><b>Finish</b> Super TGIC powder coat paint over a chromate conversion coating.</p>	<p>Color: Black Dark Bronze Light Gray Platinum Silver White Custom Color<sup>1</sup></p> <p>Cat. No.: <input type="checkbox"/> BL-P <input type="checkbox"/> DB-P <input type="checkbox"/> LG-P <input checked="" type="checkbox"/> PS-P <input type="checkbox"/> WH-P <input type="checkbox"/> CC-P</p> <p><sup>1</sup>Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____</p>																																																



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR4/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**  
**LSA4**

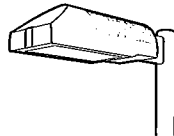
LEE07-8119



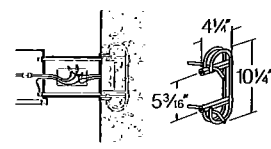

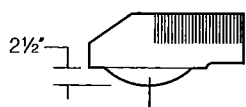
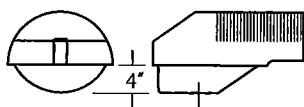
**AR**  
The Archetype®  
revision 3/17/03 • ar.pdf

Type:  
Job:

Page: 3 of 5



### Optional Features

<p><b>Wall Mounting</b> Cat. No. <b>1W</b> Select from Mounting on page 2.</p>	<p>Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket (<b>WEB</b>) is provided to accept draw bolts, and a trim plate covers the wall-embedded Junction Box. All wall mount components are finished to match the fixture.</p>	 <p>Wall mount using wall embedment bracket - J-box in wall (by others)</p>																			
<p><b>Photocell Receptacle</b> Cat. No. <input type="checkbox"/> A-25 <input type="checkbox"/> No Option</p>	<p>Fixture supplied with a fully gasketed receptacle above the electrical compartment for NEMA base photocell (by others). For all multiple-fixture pole mountings with two or three fixtures, one fixture has a receptacle to operate the others. Four fixtures (250 watt or less) also require one fixture with a receptacle. Four fixtures (400 watt) require two fixtures with receptacles.</p> <p>Mounting (see page 2)</p> <p>* - Fixture with Photocell Receptacle S - slave unit(s)</p> <table border="1" data-bbox="941 1155 1429 1323"> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1A, 1W</td> <td>2B</td> <td>4C</td> <td>4C</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2L</td> <td>3T, 3Y</td> <td></td> <td></td> </tr> </table> <p>Allowable wattage per fixture:</p> <table border="1" data-bbox="941 1323 1429 1365"> <tr> <td>150-400W</td> <td>150-250W</td> <td>400W</td> </tr> </table>					1A, 1W	2B	4C	4C					2L	3T, 3Y			150-400W	150-250W	400W	 <p>Receptacle</p>
1A, 1W	2B	4C	4C																		
2L	3T, 3Y																				
150-400W	150-250W	400W																			
<p><b>Convex Glass Lens</b> Cat. No. <input type="checkbox"/> CGL <input type="checkbox"/> No Option</p>	<p>The 3/16" thick clear convex tempered glass lens replaces the standard flat glass lens. Provides increased lens presence and provides a subtle improvement in uniformity where pole spacing is extreme. Increases effectiveness of houseside shielding.</p>	 <p>Convex Glass Lens</p>																			
<p><b>Polycarbonate Lens</b> Cat. No. <input type="checkbox"/> LS <input type="checkbox"/> No Option</p>	<p>Fixture supplied with a one piece vacuum formed, clear, UV stabilized convex polycarbonate, fully gasketed, replacing the standard tempered glass lens. 250 watt maximum. May be used with 400HPS in outdoor locations where ambient air temperature during fixture operation will not exceed 85°F.</p> <p><b>CAUTION:</b> Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight and metal halide lamps.</p>	 <p>Polycarbonate Lens</p>																			



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR4/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

**Type:**

**LSA4**

LEE07-6119

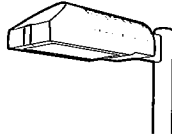


**AR**  
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Type:

Job:

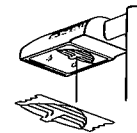
Page: 4 of 5



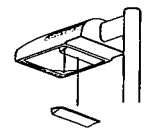
### Optional Features

**Houseside Shield**  
Cat. No. (See right)  
 No Option

(Types II, III, and IV only). Fixtures with the standard flat glass lens are available with stamped aluminum louvers that pass streetside light and block houseside light, and a blackened panel added to the reflector to reduce houseside reflections. Fixtures with the optional convex glass lens are available with a formed aluminum shield that passes streetside light and blocks houseside light, and a black anodized panel added to the reflector to reduce houseside reflections. Use with clear lamps only, as coated lamps reduce effectiveness.



**HS**  
for flat lens



**HSC**  
for convex lens or polycarbonate lens

Cat. No.

**HS**

Recommended for use with clear lamps only. Effectiveness is reduced for coated lamps. Not for use with Type V light distributions.

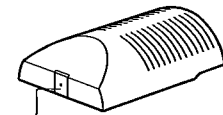
**HSC**

For use with all fixtures with convex glass lens. Not for use with Type V light distributions.

**Tamper-Resistant Latch**  
Cat. No.  TL  
 No Option

Standard die-cast latch is provided with a captive 10-32 stainless steel flat socket-head screw to prevent unauthorized opening.

**NOTE:** Required only for vandal protection in locations where fixtures can be reached by unauthorized persons.

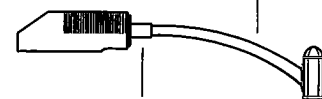


Tamper-Resistant Latch

**Horizontal Slipfitter Mount**  
Cat. No.  HSF  
 No Option

Replaces standard mounting arm with a slipfitter which allows fixture to be mounted to a horizontal pole davit-arm with 2" pipe-size mounting end (2 3/8" O.D.). Cast aluminum clamp-type slipfitter with set screw anti-rotation lock. Bolts to housing from inside the electrical compartment using mounting holes for the standard support arm. Davit-arm must be field drilled at a set screw location to insure against fixture rotation. Finished to match fixture.

Davit-arm with 2" pipe-size fixture mount (by others)



Horizontal Slipfitter Mount by Kim

**Special Options for Street Lighting**  
Cat. No. (See right)

**Terminal Block:** (For field wire connections.) 85AMP, 600V box clamp terminal block mounted to the housing inside the electrical compartment. Accepts #14-4 wire. Factory prewired to electrical module quick-disconnect plug.

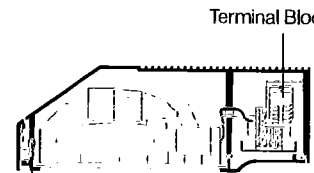
**TB**

**No Option**

**Air Filter:** Allows for ventilation through the optical chamber, filtering all air particles above 500 microns. Multi-layer disc assembly mounted on solid wall between optical compartment and latch cavity.

**AF**

**No Option**



Terminal Block

Air Filter



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR4/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

Type:

**LSA4**

LEE07-6119

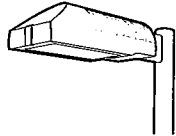
**AR**

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Type:

Job:

Page: 5 of 5



## Optional Features

### Vertical Slipfitter Mounts

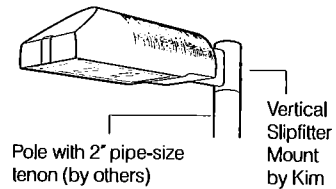
Cat. No. includes Mounting

Cat. No. (See right)

 No Option

Allows fixture with standard support arm to be mounted to poles having a 2" pipe-size tenon (2 3/8" O.D. x 4 1/2" min. length). All mounting configurations can be used (1A, 2B, 2L, 3T, 3Y, 4C). 4" square or round die-cast aluminum with flush cap, secured by four 3/8" stainless steel set point allen screws, finished to match fixture and arm.

**NOTE:** 3Y only available on round slipfitter.

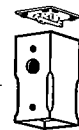


Cat. No.

 VSF-1A VSF-2B VSF-2L VSF-3T VSF-3Y VSF-4C

Round

Stainless steel set screws



Square

Cat. No.

 SVSF-1A SVSF-2B SVSF-2L SVSF-3T SVSF-4C

Mounting Configuration

**1A** - single arm mount**2B** - 2 at 180°**2L** - 2 at 90°**3T** - 3 at 90°**3Y** - 3 at 120°**4C** - 4 at 90°

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
HT2-CM-P15--HL-DA-Q-WH-F4

Notes:

Type:

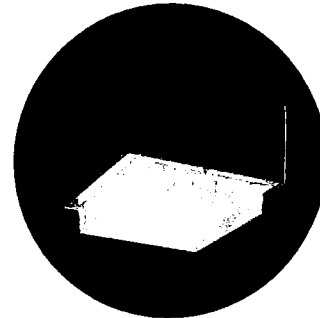
**PS1**

LEE07-6119

# HUNTINGTON

## Features

- Square, formed and welded aluminum housing.
- Extruded aluminum door fully gasketed to housing. Concealed hinge door secured with captive screw. Drop prismatic acrylic, drop prismatic polycarbonate, or flat CT73 patterned glass lens provide symmetric light pattern.
- Semi-specular, anodized aluminum reflector for horizontal lamp. HP, high performance optics, consists of specular, anodized aluminum reflector panels.
- Ceiling mount provided with bolt and wiring holes in housing top.
- Mogul porcelain socket, pulse rated, with spring loaded, nickel plated center contact and reinforced lamp grip screw shell. Medium base for ED-17 lamp.
- CWA type ballast, HPF, starting rated at -20°F (-40°F for HPS).
- UL and CSA listed for wet locations.



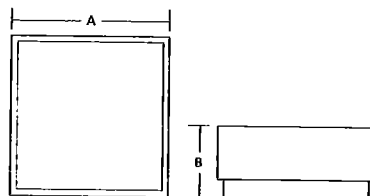
## Ordering Information

Example: HT2 - CM - H25 - HP - DA - Q - DB - F1

Series	Mount	Lamp/Watts	Optics	Lens	Volts	Color	Options
Series							
HT1	70-175W						
HT2	200-400W						
Mounting							
CM	Ceiling Mount						
Lamp Type/Wattage							
Metal Halide							
H17	175W (ED-28)						
H25	250W (ED-28)						
H40	400W (ED-37)						
Super Metal Halide							
MS17	175W (ED-28)						
MS25	250W (ED-28)						
MS40	400W (ED-37)						
Pulse Start Metal Halide							
P70	70W (ED-17)						
P10	100W (ED-17)						
P12	125W (ED-17)						
P15	150W (ED-28)						
P20	200W (ED-28)						
P25	250W (ED-28)						
P32	320W (ED-37)						
P35	350W (ED-37)						
P40	400W (ED-37)						
High Pressure Sodium							
S70	70W (ED-23 1/2)						
S10	100W (ED-23 1/2)						
S15	150W (ED-23 1/2)						
S25	250W (ED-18)						
S40	400W (ED-18)						
Optics							
HL	Standard						
HP	High Performance Optics (HT2 only)						
Lens							
DA	Drop Acrylic						
DP	Drop Polycarbonate						
FGP	Flat CT73 Glass Lens (Prismatic)						
Voltage							
Q	Quad Tap <sup>1</sup>						
	(120, 208, 240, 277V) <sup>1</sup>						
5	480V <sup>2</sup>						
T	120/277/347V CSA <sup>1</sup>						
Color							
DB	Dark Bronze						
BL	Black						
WH	White						
GR	Gray						
PS	Platinum Silver						
RD	Red (Premium Color)						
FG	Forest Green (Premium Color)						
CC	Custom Color (Consult Factory)						
Options							
F1	Fusing - 120V						
F2	Fusing - 208V						
F3	Fusing - 240V						
F4	Fusing - 277V						
F5	Fusing - 480V						
F6	Fusing - 347V						
QZ	Quartz RS with lamp						
L	Lamp						

- 1 Factory wired for highest voltage unless specified.
- 2 Not available with 70 or 100W Pulse Start Metal Halide lamps.

## Dimensions



	A	B	Weight
HT1	14" sq. 356 mm	8" 203 mm	20 lbs. 9.1 kg
HT2	21 1/8" sq. 537 mm	10" 254 mm	40 lbs. 18.1 kg

SURFACE AND RECESSED LUMINAIRES

**SPAULDING**  
LIGHTING

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
HT2-CM-P15-HL-DA-Q-WH-F4-QZ

Notes:

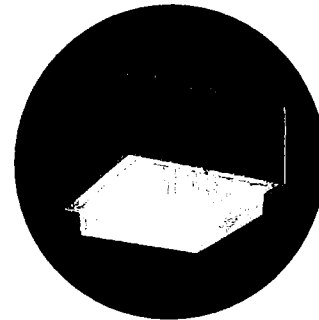
**Type:**  
**PS1E**

LEE07-6119

# HUNTINGTON

## Features

- Square, formed and welded aluminum housing.
- Extruded aluminum door fully gasketed to housing. Concealed hinge door secured with captive screw. Drop prismatic acrylic, drop prismatic polycarbonate, or flat CT73 patterned glass lens provide symmetric light pattern.
- Semi-specular, anodized aluminum reflector for horizontal lamp. HP, high performance optics, consists of specular, anodized aluminum reflector panels.
- Ceiling mount provided with bolt and wiring holes in housing top.
- Mogul porcelain socket, pulse rated, with spring loaded, nickel plated center contact and reinforced lamp grip screw shell. Medium base for ED-17 lamp.
- CWA type ballast, HPF, starting rated at -20°F (-40°F for HPS).
- UL and CSA listed for wet locations.

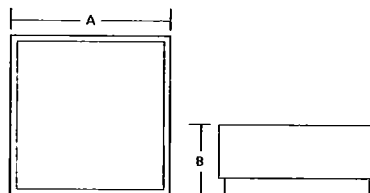


## Ordering Information Example: HT2 - CM - H25 - HP - DA - Q - DB - F1

Series	Mount	Lamp/Watts	Optics	Lens	Volts	Color	Options
Series HT1 70-175W HT2 200-400W	Mounting CM Ceiling Mount	Lamp Type/Wattage Metal Halide H17 175W (ED-28) H25 250W (ED-28) H40 400W (ED-37) Super Metal Halide MS17 175W (ED-28) MS25 250W (ED-28) MS40 400W (ED-37) Pulse Start Metal Halide P70 70W (ED-17) P10 100W (ED-17) P12 125W (ED-17) P15 150W (ED-28) P20 200W (ED-28) P25 250W (ED-28) P32 320W (ED-37) P35 350W (ED-37) P40 400W (ED-37) High Pressure Sodium S70 70W (ED-23 1/2) S10 100W (ED-23 1/2) S15 150W (ED-23 1/2) S25 250W (ED-18) S40 400W (ED-18)	Optics HL Standard HP High Performance Optics (HT2 only)	Lens DA Drop Acrylic DP Drop Polycarbonate FGP Flat CT73 Glass Lens (Prismatic)	Voltage Q Quad Tap® (120, 208, 240, 277V) <sup>1</sup> 5 480V <sup>2</sup> T 120/277/347V CSA <sup>1</sup>	Color DB Dark Bronze RL Black WH White GR Gray PS Platinum Silver RD Red (Premium Color) FG Forest Green (Premium Color) CC Custom Color (Consult Factory)	Options F1 Fusing - 120V F2 Fusing - 208V F3 Fusing - 240V F4 Fusing - 277V F5 Fusing - 480V F6 Fusing - 347V QZ Quartz RS with lamp L Lamp

- 1 Factory wired for highest voltage unless specified.
- 2 Not available with 70 or 100W Pulse Start Metal Halide lamps.

## Dimensions



	A	B	Weight
HT1	14" sq. 356 mm	8" 203 mm	20 lbs. 9.1 kg
HT2	21 1/8" sq. 537 mm	10" 254 mm	40 lbs. 18.1 kg

SURFACE AND RECESSED LUMINAIRES

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(

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
YOVH-13-1PLC26-277-OPAL-  
WHT-LAMP INCLUDED  
Notes:

**Type:**  
**PS2E**

LEE07-6119

**Luminaire**  
Lighting Corporation

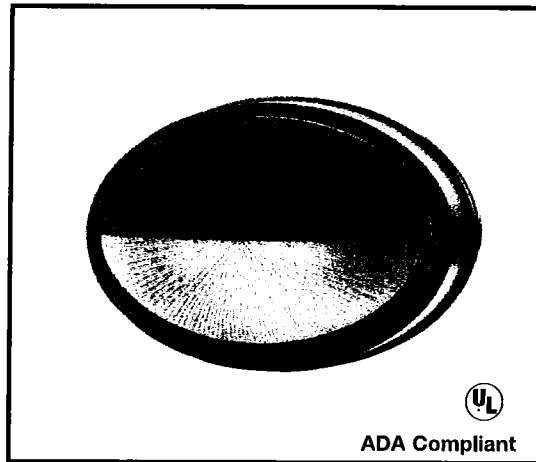
FIXTURE TYPE: \_\_\_\_\_

WALL MOUNT  
1 or 2 PLC 13/18/26  
1 PLT 32/42

**VANDAL RESISTANT  
FLUORESCENT  
YOVH 13**

**SPECIFICATIONS**

- Housing** One piece injection molded UV stabilized polycarbonate secured to baseplate with (2) stainless steel TORX® head screws and sealed against moisture and contaminants with two high temperature silicone O-rings. Color is molded through entire part for scratch resistant finish.
- Lens** One piece injection molded UV stabilized prismatic polycarbonate with minimum .130" wall thickness. Available in clear or opal and secured to baseplate by housing and silicone O-rings.
- Reflector** Die formed heavy gauge specular aluminum, shaped for maximum efficiency.
- Baseplate** Pressure die cast marine grade aluminum. Chemically primed and finished with electrostatically applied polyester powder coat.
- Socket** High temperature thermo plastic, precision snap locked to specular reflector bracket for easy interchangeability.
- Ballast** Electronic microprocessor controlled high-frequency class P high power factor ballast. Ballast shall have less than 10% total harmonic distortion.
- Gasket** Closed cell die cut neoprene gasket provided between fixture baseplate and mounting surface. High temperature silicone O-ring between lens and baseplate.
- UL Listing** Wet location, 595, C.UL.

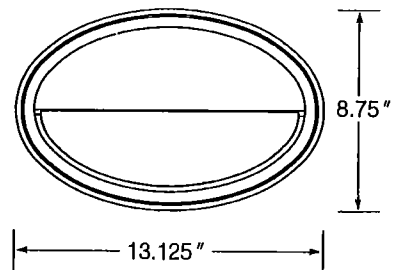


**OPTIONS**

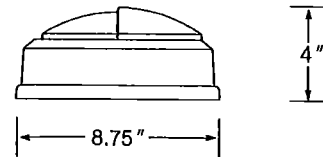
- EMB** Emergency battery pack. Will operate one or two lamps for a minimum of 90 minutes. Self contained within fixture. CAB is required and included.
- CAB** Cast aluminum backbox. Provided with (5) 1/2" i.p.t. holes for conduit entry and 4 threaded plugs. Chemically primed and finished with electrostatically applied polyester powder coat.
- WMC** Cast aluminum 700 series wiremold adapter.
- PC** Button type photoelectric switch. Requires CAB option.
- GLR** Fuse and fuse holder.

**OVERALL DIMENSIONS:**

Front View



Side View



Patent Pending



[www.luminairelighting.com](http://www.luminairelighting.com)

7 Olsen Avenue ■ P.O. Box 2104 ■ Edison, New Jersey 08818 ■ Telephone (732) 549-0056 ■ FAX (732) 549-9737

Submitted by Leesman Sales



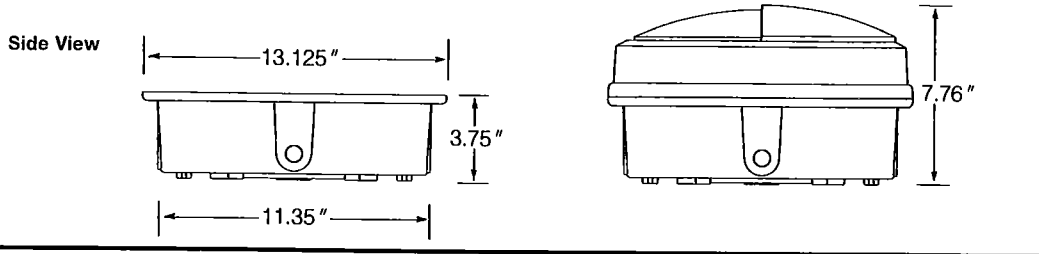
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
YOVH-13-1PLC26-277-OPAL-  
WHT-LAMP INCLUDED  
Notes:

**Type:**  
**PS2E**

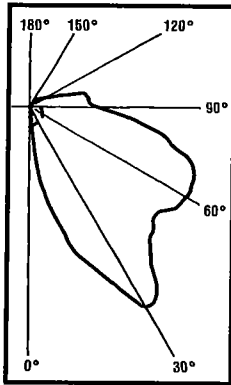
LEE07-6119

**CAB - BACKBOX OVERALL DIMENSIONS:**



**PHOTOMETRIC DATA**

**CANDLEPOWER DISTRIBUTION CURVE**



--- 0° Plane  
--- 90° Plane

**MODEL YOYH13 - 1PLC26**  
LTL #04418

Cast aluminum housing, formed specular aluminum reflector, clear polycarbonate prismatic lens.

**Lamp:** One Sylvania CF26DD/E/835 rated at 1800 lumens.

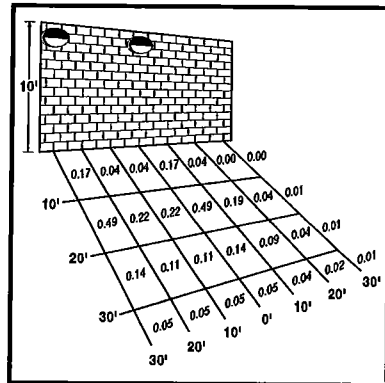
**Mounting:** Wall

**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Lamp	% Fixt
0-30	38	2.1	13.4
0-40	77	4.3	27.0
0-60	160	8.9	56.1
0-90	261	14.5	91.3
90-120	24	1.3	8.3
90-130	25	1.4	8.7
90-150	25	1.4	8.7
90-180	25	1.4	8.7
0-180	285	15.9	100.0

**Total efficiency:** 15.9%  
**CIE type:** Direct

**FOOTCANDLE DISTRIBUTION PATTERN**



Mounting Height	Multiplying Factor
5'	4.00
6'	2.78
7'	2.04
8'	1.56
9'	1.23
10'	1.00

**ORDERING INFORMATION**

EXAMPLE: YOYH 13 - 1PLC13 - 120V - CP - BLK - GLR

**YOYH 13** - **1 PLC26** - **277** - **OP** - **WHT** - **Lamp incl.**

**Series**

**Lamps (Included)**

- 1 PLC13
- 2 PLC13
- 1 PLC18
- 2 PLC18
- 1 PLC26
- 2 PLC26
- 1 PLT32
- 1 PLT42

**Volts**

- 120
- 277

**Lens**

- CP-Clear
- Prismatic
- OP-Opal

**Colors**

- WHT-White
- BLK-Black
- BRZ- Bronze
- GRY- Grey

**Options**

- EMB-Emergency battery pack (CAB included)
- CAB-Cast aluminum backbox
- WMC-Cast aluminum 700 series wiremold adapter
- PC-Photoelectric switch (requires CAB)
- GLR-Fuse and fuse holder

**LAMP INCLUDED**

Catalog No.:	
Fixture Type:	Voltage:
Job Name:	
Approved By:	

**NOTES:**  
For complete photometric test reports and custom colors or finishes, please contact your local representative. Availability and specifications subject to change without notice.



www.luminairelighting.com

FL YOYH13 12/04

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
INDA-XX-150MHT6-277-MAL-  
LAMP 150  
Notes:

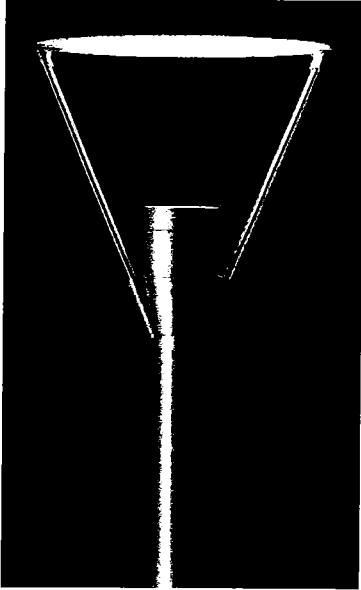
**Type:**  
**PS4**

LEE07-6119

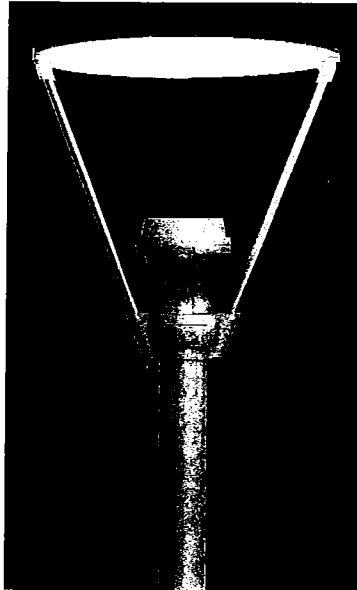
## Indirect

page 1 of 4      DATE      TYPE

INDF



INDA



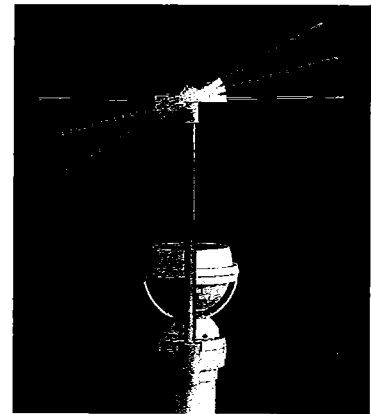
### Construction

- Integral ballast assembly in fixture for easy installation.
- Lightweight aluminum composite upper reflector minimizes pole stress.
- Stainless steel vertical struts.
- Round or square upper reflectors available for both models.
- Reflector tilts and locks at 0, 15 or 30 degrees.
- Both models use the AAL Indirect Reflector System. The optics reduce uplight to less than one percent, improving efficiency while complying with dark sky ordinances.

### Reflector Adjustment

The Indirect upper reflector can be tilted 15 or 30 degrees for an asymmetrical light distribution. The locking clamp design insures a consistent tilt angle on all fixtures.

The Indirect model INDA has an adjustable lamp head to focus the light beam onto the center of the shade, when the shade is tilted. This improves efficiency and minimizes any stray light beyond the reflector.



### Architectural Area Lighting

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714.994.2700 / fax 714.994.0522 / www.aal.net  
Ref: Indirect.pdf    copyright 2005, design patented



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
INDA-XX-150MHT6-277-MAL-  
LAMP 150  
Notes:

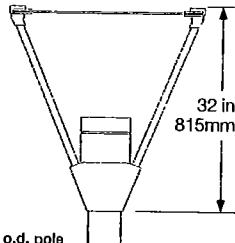
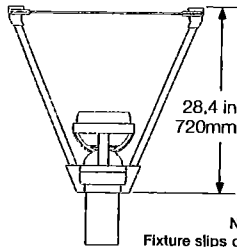
**Type:**  
**PS4**

LEE07-6119

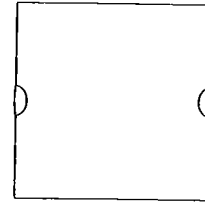
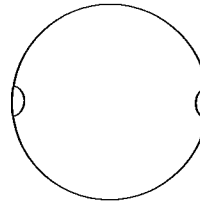
**Indirect**

page 2 of 4      DATE      TYPE

1	2	3	4	5	6	7
FIXTURE	REFLECTOR	BALLAST	OPTIONS	COLOR	ARM	BASE-POLE
1	2	3	4	5	6	7
1 FIXTURE	2 REFLECTOR - UPPER					
<input checked="" type="checkbox"/> INDA Adjustable head	<input type="checkbox"/> INDF Straight, fixed head			<input type="checkbox"/> RD 30" Round		<input type="checkbox"/> SQ 30" Square



NOTE:  
Fixture slips over a 5" o.d. pole



→ **SELECT REFLECTOR**

**5 BALLAST**

- INC** For use with mini cand base, incandescent lamps up to 250 watts, 120 volts.
- CF** Compact Fluorescent, electronic ballast 120 thru 277 volt, 18° C starting temperature. Use 4-pin 26, 32 or 42 watt lamp. for INDA - 26 watts only.
- 70MH** 70 watt metal halide 120/208/240/277 volt ball ast. Use a medium base, clear ED-17 lamps. For INDF models only.
- 70MHEB** 70 watt electronic metal halide ballast 120 thru 277 volt. Use a medium base, clear ED-17 lamp. For INDF models only.
- 70MHT6** 70 watt metal halide magnetic, multitap ballast 120/277 volt. Use a G12 base, clear T-6 ceramic MH lamp.
- 70MHT6EB** 70 watt electronic metal halide ballast 120 thru 277 volt. G12 base, use a clear T-6 ceramic metal halide lamp.
- 100MH** 100 watt metal halide 120/208/240/277 volt ball ast. Use a medium base, clear ED-17 lamps. For INDF models only.
- 150MH** 150 watt metal halide 120/208/240/277 volt ball ast. Use a medium base, clear ED-17 lamps. For INDF models only.
- 150MHEB** 150 watt electronic metal halide ballast 120 thru 277 volt. Use a medium base, clear ED-17 lamp. For INDF models only.
- 150MHT6** 150 watt metal halide magnetic multitap ballast 120/208/240/277 volt. G12 base, use a clear T-6 ceramic metal halide lamp.
- IL-55** 55 watt, Phillips Induction Lamp system with transformer. Specify 120, 208, 240 or 277 volt. For INDF models only.
- IL-85** 85 watt, Phillips Induction Lamp system with transformer. Specify 120, 208, 240 or 277 volt.

**5 COLORS**

- WHT** White
- LGY** Light Grey
- MAL** Matte Aluminum
- MDG** Medium Grey
- ATG** Antique Green
- VGR** Verde Green
- WRZ** Weathered Bronze
- DGN** Dark Green
- CRT** Corten
- BRM** Metallic Bronze
- DBZ** Dark Bronze
- BLK** Black
- MTB** Matte Black
- RAL #** Provide a RAL 4 digit color number
- CUSTOM** Please provide a color chip for matching

All ballasts are factory wired for 277 volts. Lamps not included.

SOLD TO \_\_\_\_\_ PO # \_\_\_\_\_ JOB NAME \_\_\_\_\_

Approvals

**Architectural Area Lighting**  
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714.994.2700 / fax 714.994.0522 / www.aal.net  
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277V



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
INDA-XX-150MHT6-277-MAL-  
LAMP 150  
Notes:

**Type:**  
**PS4**

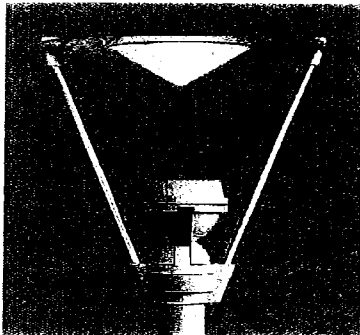
LEE07-6119

**Indirect**

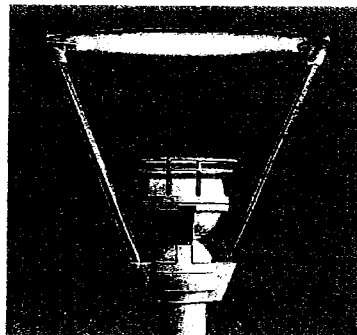
page 3 of 4      DATE      TYPE

**4 OPTIONS**

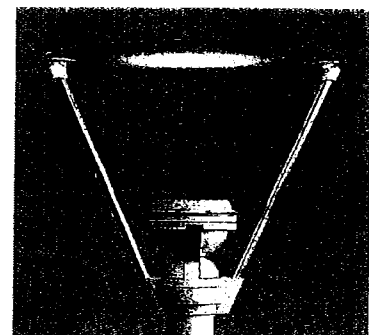
**CDC** Center deflector cone for round reflector (RD). Provides a wider light distribution.



**SR** Two aluminum rings attached to the fixture, for INDA (adjustable mode) only. Factory installed.



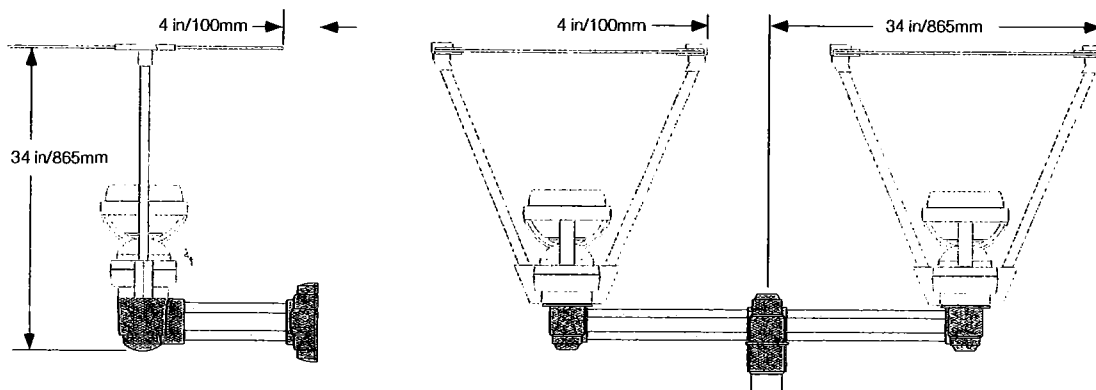
**CFH** Color filter holder attached to the fixture, for INDA (adjustable model) only. Factory installed.



- LAMP70** Philips® 70 watt clear T-6 ceramic metal halide lamp, CDM70/T6/830
- LAMP150** Philips® 150 watt clear T-6 ceramic metal halide lamp, CDM70/T6/830
- 347** 120/277/347 magnetic ballast for the 150 watt metal halide lamp.
- AD5** Cast aluminum adapter for the PMAT arm to slip over a 5"/127mm pole

**6 ARMS FOR WALL OR POLE MOUNTING**

- WMA** Wall mounted arm, 10 lbs.
- PMAT** Twin pole mount arm, slips over a 4"/100mm pole or tenon. 14 lbs, EPA: .83





**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
INDA-XX-150MHT6-277-MAL-  
LAMP 150  
Notes:

Type:

**PS4**

LEE07-6119

## Indirect

page 4 of 4      DATE      TYPE

### Specifications

#### UPPER REFLECTOR

The upper reflector shall be a light weight aluminum composite. The reflector shall be finished in a white, fluoropolymer finish. The reflector shall be attached to the cast aluminum pivot joints and secured with four stainless steel bolts. Two cast aluminum, adjustable knuckles shall connect the reflector assembly to the vertical, stainless steel struts. The struts are #316 stainless steel with a minimum .250" wall thickness. The struts shall have threaded connections for attachment to the upper reflector and the lamp module.

#### LAMP MODULE

The reflector shall be enclosed in die cast aluminum housing. The front cover is secured with four cap screws for relamping and internal access. The front glass element is clear, tempered glass. The front cover and electrical module are sealed with a memory retentive, molded silicone gaskets.

The parabolic reflector shall be prefocused to illuminate the upper reflector with no stray light beyond the reflector. The fixture shall be IES rated as a cutoff luminaire with less than 1% uplight with the upper reflector in the horizontal position. The INDA model lamp module swivels, to center the beam on a tilted reflector, by loosening two stainless steel cap screws. All internal and external hardware is stainless steel.

#### HOUSING

The INDA and INDF post top models shall slip over a 5" o.d. pole.

#### ELECTRICAL MODULE

The ballast is mounted on a prewired plate with a quick disconnect plug. Magnetic metal halide ballasts are high power factor, rated for -30°F starting. Electronic metal halide ballasts are rated for -30°F starting, sound rating A, 120 thru 277 volt. Sockets are pulse rated porcelain, bi-pin, G12 for T-6 lamps. A porcelain screw base for the mini-cand T-4 halogen lamp. The compact fluorescent shall have an electronic transformer, 120 thru 277 volt.

#### FINISH

Fixture finish consists of a five stage pretreatment regimen with a polymer primer sealer, oven dry off and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.

The reflector shall be painted white. The vertical struts are #4 brushed stainless steel. All other fixture parts shall be finished in the same specified color.

#### CERTIFICATION

The fixture shall be listed with ETL and U.L. for outdoor, wet location use, UL1598 and Canadian CSA Std. C22.2 NO.250. IP=66

#### EPA: INDA or INDF

with round upper reflector: 3.65

with square upper reflector: 4.40

#### WARRANTY

Fixture shall be warranted for three years. Ballast components carry the ballast manufacturer's limited warranty.

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**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
RSP12-4.0-11-BAL-BC

Notes:

Type:

**PS4**

LEE07-6119

KW Industries

Page 1 of 3

## RSP Round Non-Tapered Steel Poles

### Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196") or 7 gauge (0.1793"). The pole shaft material shall conform to ASTM A-500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly cylindrical in cross-section with round sides and excellent torsional properties.

### Base Plate

The anchor base is fabricated from structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base telescopes the pole shaft and is circumferentially welded top and bottom. All welds are performed in accordance with the American Welding Society specification AWS D1.1, latest edition.

### Anchor Bolts

Anchor bolts are fabricated from commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 55,000 psi. Four properly sized anchor bolts, each with two regular hex nuts and washers, are furnished and shipped with all poles unless otherwise specified. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches in accordance with ASTM A-153. Fully galvanized anchor bolts are available upon request.

### Handhole

An oval reinforced gasketed handhole, having a nominal 2" x 4" or 3" x 5" inside opening, located 1'-6" above base, is standard on all poles. A grounding provision is located inside the handhole ring.

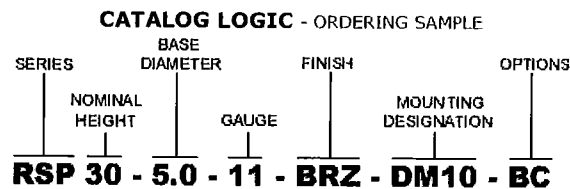
### Finishes

The **Standard Finish** is a polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils for all color finishes. **Hot dip Galvanized** finish to a ASTM A-123 specification or primed finish is also available. For optional finishes, see **K-KLAD** and **K-KLAD Over Galvanizing**.

### HOW TO ORDER

When ordering KW lighting standards, mounting adaptors and accessories, be sure to specify the complete catalog number. Our catalog numbers reflect the precise specifications of the item ordered to ensure our customers will receive the product which meets their exact requirements.

The following explanation of the catalog numbers will be helpful in placing orders:



Catalog Number	Nominal Height	Pole Shaft	Gauge	Handhole Size	Anchor Bolt	Bolt Circle	80 MPH	90 MPH	100 MPH	Ship WT.
RSP10-4.0-11	10	4.00 x 10.0	11	2 x 4	0.75 x 17 x 3	8	31	24	19.5	78
RSP10-4.5-11	10	4.50 x 10.0	11	3 x 5	0.75 x 17 x 3	8	40	31.5	25	84
RSP10-5.0-11	10	5.0 x 10.0	11	3 x 5	1.00 x 36 x 4	11	51	40.5	32.5	139
RSP12-4.0-11	12	4.00 x 12.0	11	2 x 4	0.75 x 17 x 3	8	28.9	23.4	19.2	73
RSP12-4.5-11	12	4.50 x 12.0	11	3 x 5	0.75 x 17 x 3	8	34	27	21.5	96

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
RSP12-4.0-11-BAL-BC

**Notes:**

**Type:**

**PS4**

LEE07-8118

KW Industries

Page 2 of 3

RSP12-5.0-11	12	5.0 x 12.0	11	3 x 5	1.00 x 36 x 4	11	43	33.5	27	153
RSP14-4.0-11	14	4.00 x 14.0	11	2 x 4	0.75 x 17 x 3	8	23.6	19.1	15.6	99
RSP14-4.5-11	14	4.50 x 14.0	11	3 x 5	0.75 x 17 x 3	8	28	22	17	108
RSP14-5.0-11	14	5.0 x 14.0	11	3 x 5	1.00 x 36 x 4	11	36	28	22.5	166
RSP15-4.0-11	15	4.00 x 15.0	11	2 x 4	0.75 x 17 x 3	8	18.1	14.5	11.8	98
RSP15-4.5-11	15	4.50 x 15.0	11	3 x 5	0.75 x 17 x 3	8	26.5	20.5	16.3	98
RSP15-5.0-11	15	5.0 x 15.0	11	3 x 5	1.00 x 36 x 4	11	33	26	20.5	173
RSP15-5.0-7	15	5.0 x 15.0	7	3 x 5	1.00 x 36 x 4	11	50	39	31.5	222
RSP16-4.0-11	16	4.00 x 16.0	11	2 x 4	0.75 x 17 x 3	8	16.5	13.2	10.6	93
RSP16-4.5-11	16	4.50 x 16.0	11	3 x 5	0.75 x 17 x 3	8	24.4	18.8	14.8	120
RSP16-5.0-11	16	5.0 x 16.0	11	3 x 5	1.00 x 36 x 4	11	31	24.2	19.4	179
RSP16-5.0-7	16	5.0 x 16.0	7	3 x 5	1.00 x 36 x 4	11	47	37	29	232
RSP18-4.0-11	18	4.00 x 18.0	11	2 x 4	0.75 x 17 x 3	8	13.7	10.8	8.6	103
RSP18-4.5-11	18	4.50 x 18.0	11	3 x 5	0.75 x 17 x 3	8	21	16	12.5	132
RSP18-5.0-11	18	5.0 x 18.0	11	3 x 5	1.00 x 36 x 4	11	27	21	16.5	192
RSP18-5.0-7	18	5.0 x 18.0	7	3 x 5	1.00 x 36 x 4	11	40	31	25.2	252
RSP20-4.0-11	20	4.00 x 20.0	11	2 x 4	0.75 x 17 x 3	8	11.4	8.9	6.9	123
RSP20-4.5-11	20	4.50 x 20.0	11	3 x 5	0.75 x 30 x 3	8	15.5	12.2	9.6	135
RSP20-5.0-11	20	5.00 x 20.0	11	3 x 5	1.00 x 36 x 4	11	20.3	16	12.7	189
RSP20-5.0-7	20	5.00 x 20.0	7	3 x 5	1.00 x 36 x 4	11	28.2	22.4	18	253
RSP22-4.0-11	22	4.00 x 22.0	11	2 x 4	0.75 x 17 x 3	8	7	5.1	3.7	148
RSP22-4.5-11	22	4.50 x 22.0	11	3 x 5	0.75 x 30 x 3	8	13	10.1	7.8	147
RSP22-5.0-11	22	5.00 x 22.0	11	3 x 5	1.00 x 36 x 4	11	17.3	13.5	10.5	202
RSP22-5.0-7	22	5.00 x 22.0	7	3 x 5	1.00 x 36 x 4	11	24.2	19.2	15.3	272
RSP24-4.0-11	24	4.00 x 24.0	11	2 x 4	0.75 x 17 x 3	8	7	5.1	3.7	148
RSP24-4.5-11	24	4.50 x 24.0	11	3 x 5	0.75 x 30 x 3	8	10.9	8.3	6.3	158
RSP24-5.0-11	24	5.00 x 24.0	11	3 x 5	1.00 x 36 x 4	11	14.6	11.3	8.6	215
RSP24-5.0-7	24	5.00 x 24.0	7	3 x 5	1.00 x 36 x 4	11	20.9	16.4	12.9	292
RSP25-4.0-11	25	4.00 x 25.0	11	2 x 4	0.75 x 17 x 3	8	7	5.1	3.7	148
RSP25-4.5-11	25	4.50 x 25.0	11	3 x 5	0.75 x 30 x 3	8	10	7.5	5.5	164
RSP25-5.0-11	25	5.00 x 25.0	11	3 x 5	1.00 x 36 x 4	11	13.5	10.3	7.8	221
RSP25-5.0-7	25	5.00 x 25.0	7	3 x 5	1.00 x 36 x 4	11	19.4	15.1	11.8	301
RSP26-4.5-11	26	4.50 x 26.0	11	3 x 5	0.75 x 30 x 3	8	9.1	6.7	4.9	170
RSP26-5.0-11	26	5.00 x 26.0	11	3 x 5	1.00 x 36 x 4	11	12.4	9.3	7	228
RSP26-5.0-7	26	5.00 x 26.0	7	3 x 5	1.00 x 36 x 4	11	18	13.9	10.8	311
RSP28-4.5-11	28	4.50 x 28.0	11	3 x 5	0.75 x 30 x 3	8	7.4	5.3	3.6	182
RSP28-5.0-11	28	5.00 x 28.0	11	3 x 5	1.00 x 36 x 4	11	10.4	7.6	5.5	240
RSP28-5.0-7	28	5.00 x 28.0	7	3 x 5	1.00 x 36 x 4	11	15.4	11.7	8.9	330
RSP30-4.5-11	30	4.50 x 30.0	11	3 x 5	0.75 x 30 x 3	8	5.3	3.5	2.2	193
RSP30-5.0-11	30	5.00 x 30.0	11	3 x 5	1.00 x 36 x 4	11	7.6	5.3	3.6	253
RSP30-5.0-7	30	5.00 x 30.0	7	3 x 5	1.00 x 36 x 4	11	11.5	8.5	6.2	349
RSP35-5.0-7	35	5.00 x 35.0	7	3 x 5	1.00 x 36 x 4	11	7	4.6	2.8	397

**FINISHES**

<b>Standard</b>		<b>Galvanized</b>		<b>K-KLAD</b>		<b>K-KLAD Over Galvanizing</b>	
<b>BRZ</b> Bronze		<b>G</b> Galvanized		<b>K813</b> Bronze		<b>KZ13</b> Bronze	
<b>BLK</b> Black				<b>K821</b> Black		<b>KZ21</b> Black	
<b>GRY</b> Gray				<b>K841</b> Gray		<b>KZ41</b> Gray	
<b>GRN</b> Green				<b>K891</b> Green		<b>KZ91</b> Green	
<b>WHT</b> White				<b>K881</b> White		<b>KZ81</b> White	
<b>P</b> Primed				<b>K845</b> Natural Aluminum		<b>KZ45</b> Natural Aluminum	
<b>NA</b> Natural Aluminum							

1 YEAR WARRANTY

5 YEAR WARRANTY

10 YEAR WARRANTY

**MOUNTING DESIGNATIONS**

BAL - AAL MAL COLOR

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
RSP12-4.0-11-BAL-BC

**Type:**  
**PS4**

Notes:

LEE07-6119

KW Industries

Page 3 of 3

**Tenon Mount**

- 2 2 3/8 " x 4 " TENON
- 3 2 7/8 " x 4 " TENON
- 3.5 3 1/2 " x 6 " TENON
- 4 4 " x 6 " TENON

**Drill Mount**

- DM10** Drilled for 1 Luminaire
- DM2090** Drilled for 2 Luminaires @ 90°
- DM2180** Drilled for 2 Luminaires @ 180°
- DM3090** Drilled for 3 Luminaires @ 90°
- DM3120** Drilled for 3 Luminaires @ 120°
- DM4090** Drilled for 4 Luminaires @ 90°

**Gain Mount**

- GMT4** attachment for CXA
- GMT9** attachment for CXASQ

**Open Mount**

- OT** Open Top
- OTC** Open Top includes Pole Cap

**OPTIONS**

There are numerous options that can be ordered. Please indicate these selections under the options column in the catalog number, Example: CPL-WPR2-BC.

**Accessories**

- **BC** Base Cover
- CPL** Threaded Coupling<sup>†</sup>
- NPL** Threaded Nipple<sup>†</sup>
- WPR2** Weatherproof Duplex Receptacle<sup>† †</sup>
- WPRP** Festoon Opening<sup>† †</sup>

**Extra Handholes**

- XHH** Extra Handhole<sup>†</sup>

**Embedment Pole Options**

- E** Embedded Pole
- GS** Ground Sleeve
- CTE** Coal Tar Epoxy

**For Embedment Poles:**

Recommended Mounting Height	Recommended Embedment Depth
Less than 20'	4'
20' - 33'	6'
Greater than 33'	7'

**Additional Simplex**

- 1S** 1 @ 0°<sup>†</sup>
- 2S** 2 @ 180°<sup>†</sup>
- 3S** 3 @ 90°<sup>†</sup>
- 4S** 4 @ 90°<sup>†</sup>

Greater embedment depths are available upon request.

<sup>†</sup> Please advise size, location, and orientation. (Handholes are restricted by size of pole shaft diameter)

<sup>††</sup> Located 24" above baseplate and same side as handhole. (No electrical included)

**PACKAGING**

Immediately after coating, the lighting standard including the baseplate shall be wrapped in heavy corrugation specially designed and sized to achieve maximum protection in transit.

KW Industries, Inc. coating process system and stringent quality control procedures provide our customer the finest quality lighting standards in the industry.

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2

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4

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Submitted by Leesman Sales



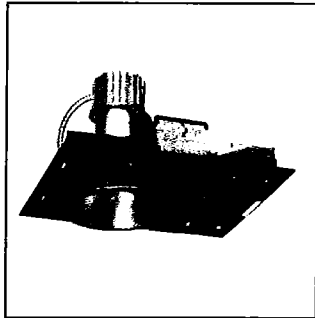
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632EB-STF602-SS-B24

Notes:

**Type:**  
**S1**

LEE07-6119



Featuring VirtualSource Reflectors

## 6" Vertical Triple Open & Wall Wash Downlight **CFT632EB**

One 26W, 32W, or 42W Triple Tube 4-Pin Lamp  
Non-IC Rated  
120V, 208V, 240V, 277V, or 347V

DATE \_\_\_\_\_ TYPE \_\_\_\_\_  
FRM NAME \_\_\_\_\_  
PROJECT \_\_\_\_\_



Ceiling Cutout: 6 1/4"  
Maximum Ceiling Thickness: 1 1/4"  
For conversion to millimeters,  
multiply inches by 25.4  
Not to Scale

### APPLICATIONS:

The CFT632EB offers a vertical lamped compact fluorescent downlight and wall wash fixture that provides superior brightness and glare control. The multi-watt, multi-volt ballast provides the ability to change wattages by simply replacing the lamp. This luminaire is ideal for a wide variety of low to medium height ceiling applications including commercial, retail, and hospitality. The CFT632EB is compatible with the Signos6 family of architectural elements.

### HOUSING:

One-piece painted 18-gauge cold rolled steel platform. Prewired J-box with snap-on cover for easy access. Vented at lamp tip and socket for maximum light output. Same housing accommodates downlight and wall wash downlight reflectors. Diecast aluminum heat sink.

### REFLECTOR:

High purity aluminum Alzak® Virtual Source® iridescence suppressed reflector. Self-trim (ST) standard. Painted white self-trim (WT) available. Baffled units standard with painted white self trim. Optical system provides excellent glare and brightness control for visual comfort.

### BALLAST:

One (1) compact fluorescent Class 'P' electronic multivolt (120V through 277V) ballast suitable for operating all 26W, 32W, and 42W triple tube lamps. HPF and EOL protection standard. Accessible from below ceiling. 347V available (specify wattage when ordering).

### LAMP:

Use one (1) 26W (GX24q-3 base), 32W (GX24q-3 base), or 42W (GX24q-4 base) 4-pin triple tube compact fluorescent lamp. Lamp furnished by others.

### SOCKET:

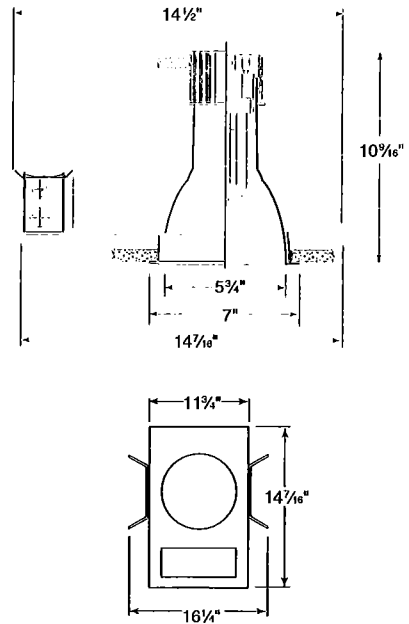
One (1) injection molded socket suitable for 26W, 32W, and 42W triple tube lamps (vented). Adjusts to three positions, accommodating various lamp sizes and ensuring proper lamp position.

### INSTALLATION:

Universal adjustable mounting brackets accommodate 1 1/2" or 3/4" lathing channel (by others) or Prescolite 24" bar hangers (B24 or B6).

### LABELS:

UL, CSA listed for damp locations  
Approved for through wiring  
Non-type I.C.



CATALOG NUMBER:

EXAMPLE: CFT632EBCP-STF602-B6

HOUSING	HOUSING OPTIONS	HOUSING OPTIONS	REFLECTORS	REFLECTOR OPTIONS	ACCESSORIES
<input checked="" type="checkbox"/> <b>CFT632EB</b> 6", (1) 26W/32W/42W Triple Tube, multi-volt electronic ballast	<input type="checkbox"/> <b>347V</b> (Specify wattage)  <input type="checkbox"/> <b>CP</b> Chicago Plenum. Fixture construction and/or specifications may vary. Refer to Chicago Plenum specification sheets on <a href="http://www.prescolite.com">www.prescolite.com</a> for details. (Prefix housing catalog number)  <input type="checkbox"/> <b>3DM</b> 3D AddressPro™ digital dimming ballast for programmable dimming capability. Refer to dimming specification packet #PR3117	<input type="checkbox"/> <b>DM</b> Electronic analog dimming ballast  <input type="checkbox"/> <b>EM</b> Emergency battery pack with remote test switch and indicator light  <input type="checkbox"/> <b>FSDFA</b> Fuse kit installed at factory  <input type="checkbox"/> <b>RIFI</b> Radio interference filter (single circuit)	<input checked="" type="checkbox"/> <b>STF602</b> ☼ 6" Specular clear Alzak  <input type="checkbox"/> <b>STF603</b> ☼ 6" Champagne gold Alzak  <input type="checkbox"/> <b>STF604</b> ☼ 6" Pewter Alzak  <input type="checkbox"/> <b>STF602MFC</b> ☼ 6" American Motte™ clear  <input type="checkbox"/> <b>STF602DSC</b> ☼ 6" EuroSpec™  <input type="checkbox"/> <b>WTF607</b> 6" Black cone  <input type="checkbox"/> <b>WTF605</b> 6" Black baffle  <input type="checkbox"/> <b>WTF606</b> 6" White baffle	<input type="checkbox"/> <b>L</b> Regressed clear lens  <input type="checkbox"/> <b>SL</b> Regressed prismatic spread lens  <input checked="" type="checkbox"/> <b>SS</b> Semi-specular finish  <input type="checkbox"/> <b>TRG</b> Trim ring gasket (factory installed)  <input type="checkbox"/> <b>WT</b> Painted white self-flange (substitute WT for ST)  <input type="checkbox"/> <b>WW</b> Wall wash reflector (not available with baffle or lensed trims)	<input checked="" type="checkbox"/> <b>B24</b> Set of two (2) 24" bar hangers for T-bar ceilings  <input type="checkbox"/> <b>B6</b> Set of two (2) bar hangers for ceiling joists up to 24" centers  <input type="checkbox"/> <b>FSDFI</b> Fuse kit for field installation  <input type="checkbox"/> <b>SCA6D</b> Sloped ceiling adapter (see note on back page)  <input type="checkbox"/> <b>Signos8</b> Architectural glass elements Refer to specification sheets ARCH-SIG-005 through -008



In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.  
Web: [www.prescolite.com](http://www.prescolite.com) • Tech Support: (888) 777-4832

ARCH-CFL-007

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632EB-STF602-SS-B24

**Type:**  
**S1**

Notes:

LEE07-6119

# PHOTOMETRIC DATA

## Architektür - 6" Vertical Triple Open & Wall Wash Downlight - CFT632EB

BALLAST DATA	26W Triple			32W Triple			42W Triple		
	120V	277V	347V	120V	277V	347V	120V	277V	347V
Total System Watts	28W	28W	38W	35W	35W	42W	44W	47W	48W
Input Current (Amps)	0.23	0.1	0.11	0.29	0.13	0.13	0.36	0.17	0.14
Input Frequency in Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power Factor	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%
Ballast Factor	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%
Total Harmonic Distortion	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%
Total Harmonic Distortion	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)

### LAMP DATA

	26W Triple	32W Triple	42W Triple
Rated Watts	1800	2400	3200
Rated Lumens	69	75	76
Efficacy (LPW)	10,000 hours	10,000 hours	10,000 hours
Rated Life	82	82	82
CRI	0° F	0° F	0° F
Minimum Starting Temp.			

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
0°	2980
45°	29
55°	0
65°	0
75°	0
85°	0

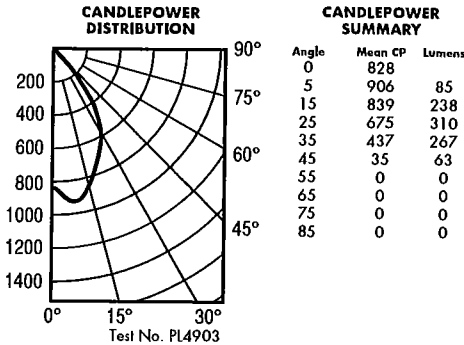
### CFT632EB-STF602 with Clear Alzak® Reflector

Lamp: One 32W Triple  
Spacing Criteria: 1.0  
Efficiency: 40.1%

### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array)  
Ceiling 80% Wall 50% Floor 20%

SPACING	RCR1	RCR3	RCR7
7.0	17	15	11
8.0	13	12	9
9.0	10	9	7
10.0	8	7	5
11.0	7	6	5



### COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Floor Cavity Reflectance																									
	80%				70%				50%				30%				10%									
	20% Effective Floor Cavity Reflectance																									
													% Wall Reflectance													
													70	50	30	10	70	50	30	10	50	30	10	50	30	10
1	48	47	46	45	47	46	45	44	44	43	43	42	42	42	41	41	41	41	40	40	39	38	38			
2	46	44	42	41	45	43	41	40	41	40	39	40	39	38	38	37	37	36	35	35	34	33	33			
3	41	41	39	37	42	40	38	37	39	37	36	38	37	35	35	34	34	33	33	33	32	31	31			
4	41	38	36	34	40	38	35	34	37	35	33	36	34	33	33	32	32	30	30	30	29	28	28			
5	39	35	33	31	38	35	33	31	34	32	31	33	32	30	30	29	29	28	28	28	27	26	26			
6	37	33	30	29	36	33	30	29	32	30	28	31	30	28	28	27	27	26	26	26	25	24	24			
7	35	31	28	26	34	30	28	26	30	28	26	29	27	26	26	25	25	24	24	24	23	22	22			
8	33	28	26	24	32	28	26	24	28	25	24	27	25	24	24	23	23	22	22	22	21	20	20			
9	31	27	26	22	30	26	24	22	26	23	22	25	23	22	22	21	21	20	20	20	19	18	18			
10	29	25	22	20	28	24	22	20	24	22	20	24	22	20	20	19	19	18	18	18	17	16	16			

CFT632EB-STF602

Test No PL4903

### NOTES

Ⓢ Denotes a Virtual Source reflector.

Refer to [www.prescolite.com](http://www.prescolite.com) for additional photometric tests (IES Files).

When ordering a sloped ceiling adapter, specify the degree of slope in 5° increments, max. of 35°. For a more precise degree or wet ceiling applications, please contact factory. Sloped ceiling adapter and housing must be installed at the same time.



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Hubbell Lighting, Inc.

Submitted by Leesman Sales



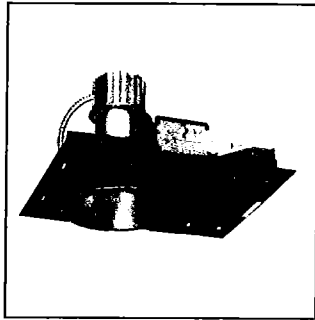
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632EB-STF602-VW-SS-B24

**Type:**  
**S2**

Notes:

LEE07-6119



Featuring VirtualSource® Reflectors

## 6" Vertical Triple Open & Wall Wash Downlight **CFT632EB**

One 26W, 32W, or 42W Triple Tube 4-Pin Lamp  
Non-IC Rated  
120V, 208V, 240V, 277V, or 347V

DATE \_\_\_\_\_ TYPE \_\_\_\_\_  
HRM NAME \_\_\_\_\_  
PROJECT \_\_\_\_\_

**Architektür**

Ceiling Cutout: 6 1/4"  
Maximum Ceiling Thickness: 1 1/4"  
For conversion to millimeters,  
multiply inches by 25.4  
Not to Scale

### APPLICATIONS:

The CFT632EB offers a vertical lamped compact fluorescent downlight and wall wash fixture that provides superior brightness and glare control. The multi-volt, multi-volt ballast provides the ability to change wattages by simply replacing the lamp. This luminaire is ideal for a wide variety of low to medium height ceiling applications including commercial, retail, and hospitality. The CFT632EB is compatible with the Signosó family of architectural elements.

### HOUSING:

One-piece painted 18-gauge cold rolled steel platform. Prewired J-box with snap-on cover for easy access. Vented at lamp tip and socket for maximum light output. Same housing accommodates downlight and wall wash downlight reflectors. Diecast aluminum heat sink.

### REFLECTOR:

High purity aluminum Alzak® Virtual Source® iridescence suppressed reflector. Self-trim (ST) standard. Painted white self-trim (WT) available. Baffled units standard with painted white self-trim. Optical system provides excellent glare and brightness control for visual comfort.

### BALLAST:

One (1) compact fluorescent Class 'P' electronic multivolt (120V through 277V) ballast suitable for operating all 26W, 32W, and 42W triple tube lamps. HPF and EOL protection standard. Accessible from below ceiling. 347V available (specify wattage when ordering).

### LAMP:

Use one (1) 26W (GX24q-3 base), 32W (GX24q-3 base), or 42W (GX24q-4 base) 4-pin triple tube compact fluorescent lamp. Lamp furnished by others.

### SOCKET:

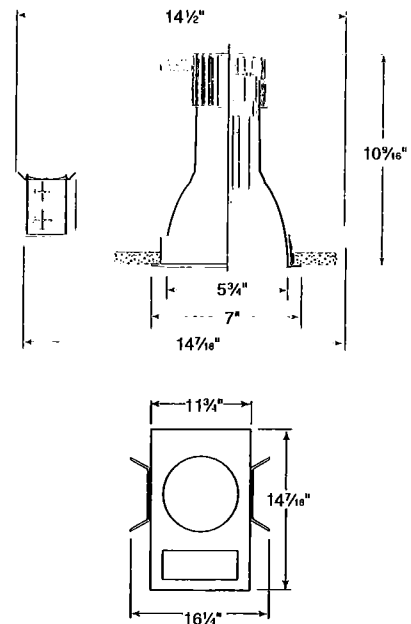
One (1) injection molded socket suitable for 26W, 32W, and 42W triple tube lamps (vented). Adjusts to three positions, accommodating various lamp sizes and ensuring proper lamp position.

### INSTALLATION:

Universal adjustable mounting brackets accommodate 1 1/2" or 3/4" lathing channel (by others) or Prescolite 24" bar hangers (B24 or B6).

### LABELS:

UL, CSA listed for damp locations  
Approved for through wiring  
Non-type I.C.



CATALOG NUMBER:

EXAMPLE: CFT632EBCP-STF602-B6

HOUSING	HOUSING OPTIONS	HOUSING OPTIONS	REFLECTORS	REFLECTOR OPTIONS	ACCESSORIES
<input checked="" type="checkbox"/> <b>CFT632EB</b> 6", (1) 26W/32W/42W Triple tube, multi-volt electronic ballast	<input type="checkbox"/> <b>347V</b> (Specify wattage) <input type="checkbox"/> <b>CP</b> Chicago Plenum. Fixture construction and/or specifications may vary. Refer to Chicago Plenum specification sheets on <a href="http://www.prescolite.com">www.prescolite.com</a> for details. (Prefix housing catalog number) <input type="checkbox"/> <b>3DM</b> 3D AddressPro™ digital dimming ballast for programmable dimming capability. Refer to dimming specification packet #PR3117	<input type="checkbox"/> <b>DM</b> Electronic analog dimming ballast <input type="checkbox"/> <b>EM</b> Emergency battery pack with remote test switch and indicator light <input type="checkbox"/> <b>FSDFA</b> Fuse kit installed at factory <input type="checkbox"/> <b>RIFI</b> Radio interference filter (single circuit)	<input checked="" type="checkbox"/> <b>STF602</b> ☺ 6" Specular clear Alzak <input type="checkbox"/> <b>STF603</b> ☺ 6" Champagne gold Alzak <input type="checkbox"/> <b>STF604</b> ☺ 6" Pewter Alzak <input type="checkbox"/> <b>STF602MFC</b> ☺ 6" American Motte™ clear <input type="checkbox"/> <b>STF602DSC</b> ☺ 6" EuroSpec™ <input type="checkbox"/> <b>WTF607</b> 6" Black cone <input type="checkbox"/> <b>WTF605</b> 6" Black baffle <input type="checkbox"/> <b>WTF606</b> 6" White baffle	<input type="checkbox"/> <b>L</b> Regressed clear lens <input type="checkbox"/> <b>SL</b> Regressed prismatic spread lens <input checked="" type="checkbox"/> <b>SS</b> Semi-specular finish <input type="checkbox"/> <b>TRG</b> Trim ring gasket (factory installed) <input type="checkbox"/> <b>WT</b> Painted white self-flange substitute WT (for ST) <input checked="" type="checkbox"/> <b>VW</b> Wall wash reflector (not available with baffle or lensed trims)	<input checked="" type="checkbox"/> <b>B24</b> Set of two (2) 24" bar hangers for T-bar ceilings <input type="checkbox"/> <b>B6</b> Set of two (2) bar hangers for ceiling joists up to 24" centers <input type="checkbox"/> <b>FSDFI</b> Fuse kit for field installation <input type="checkbox"/> <b>SCA6D</b> Sloped ceiling adapter (see note on back page) <input type="checkbox"/> <b>Signos8</b> Architectural glass elements Refer to specification sheets ARCH-SIG-005 through -008

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**ARCH-CFL-007**

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632EB-STF602-VVV-SS-B24

**Type:**  
**S2**

Notes:

LEE07-6119

# PHOTOMETRIC DATA

## Architektür - 6" Vertical Triple Open & Wall Wash Downlight - CFT632EB

BALLAST DATA	26W Triple			32W Triple			42W Triple		
	120V	277V	347V	120V	277V	347V	120V	277V	347V
Total System Watts	28W	28W	38W	35W	35W	42W	44W	47W	48W
Input Current (Amps)	0.23	0.1	0.11	0.29	0.13	0.12	0.36	0.17	0.14
Input Frequency in Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power Factor	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%
Ballast Factor	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%
Total Harmonic Distortion	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%
Total Harmonic Distortion	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)

### LAMP DATA

	26W Triple	32W Triple	42W Triple
Rated Watts	26W Triple	32W Triple	42W Triple
Rated Lumens	1800	2400	3200
Efficacy (LPW)	69	75	76
Rated Life	10,000 hours	10,000 hours	10,000 hours
CRI	82	82	82
Minimum Starting Temp.	0° F	0° F	0° F

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
0°	
45°	2980
55°	29
65°	0
75°	0
85°	0

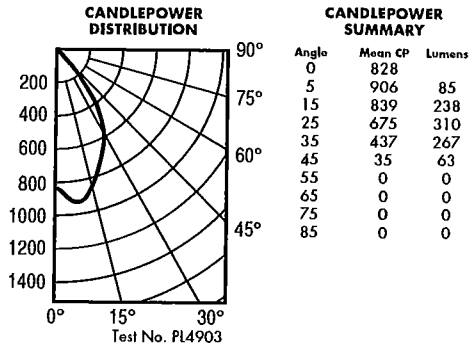
### CFT632EB-STF602 with Clear Alzak® Reflector

Lamp: One 32W Triple  
Spacing Criteria: 1.0  
Efficiency: 40.1%

### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array)  
Ceiling 80% Wall 50% Floor 20%

SPACING	RCR1	RCR3	RCR7
7.0	17	15	11
8.0	13	12	9
9.0	10	9	7
10.0	8	7	5
11.0	7	6	5



### COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Floor Cavity Reflectance										
	80%		70%		50%		30%		10%		
	20% Effective Floor Cavity Reflectance										
	% Wall Reflectance										
	70	50	30	10	70	50	30	10	50	30	10
1	48	47	46	45	47	46	45	44	44	43	43
2	46	44	42	41	45	43	41	40	41	40	39
3	41	41	39	37	42	40	38	37	39	37	36
4	41	38	36	34	40	38	35	34	37	35	33
5	39	35	33	31	38	35	33	31	34	32	31
6	37	33	30	29	36	33	30	29	32	30	28
7	35	31	28	26	34	30	28	26	29	27	26
8	33	28	26	24	32	28	26	24	27	25	24
9	31	27	26	22	30	26	24	22	26	23	22
10	29	25	22	20	28	24	22	20	24	22	20

CFT632EB-STF602

Test No. PL4903

### NOTES

☉ Denotes a Virtual Source reflector.

Refer to [www.prescolite.com](http://www.prescolite.com) for additional photometric tests (IES Files).

When ordering a sloped ceiling adapter, specify the degree of slope in 5° increments, max. of 35°. For a more precise degree or wet ceiling applications, please contact factory. Sloped ceiling adapter and housing must be installed at the same time.



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Submitted by Leesman Sales



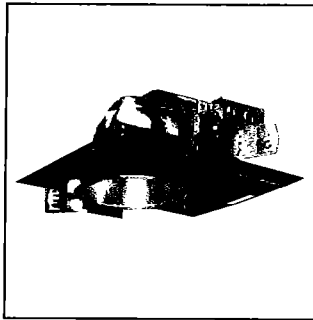
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632HEB-STF602H-SS-B24

**Type:**  
**S3**

Notes:

LEE07-6119



Featuring VirtualSource® Reflectors

## 6" Horizontal Triple Open & Wall Wash Downlight **CFT632HEB**

One 26W, 32W, or 42W Triple Tube 4-Pin Lamp  
Non-IC Rated  
120V, 208V, 240V, 277V, or 347V

DATE \_\_\_\_\_ TYPE \_\_\_\_\_

HRM NAME \_\_\_\_\_

PROJECT \_\_\_\_\_

**Architektür**

Ceiling Cutout: 6 1/4"  
Maximum Ceiling Thickness: 1 1/4"  
For conversion to millimeters,  
multiply inches by 25.4  
Not to Scale

### APPLICATIONS:

The CFT632HEB offers a horizontally lamped compact fluorescent downlight and wall wash fixture that provides superior brightness and glare control. The multi-watt multi-volt ballast provides the ability to change wattages by simply replacing the lamp. This luminaire is ideal for a wide variety of low to medium height ceiling applications including commercial, retail, and hospitality. The CFT632HEB is compatible with the Signosó family of architectural elements.

### HOUSING:

One-piece painted 18-gauge cold rolled steel platform. Prewired J-box with snap-on cover for easy access. Vented at lamp tip and socket for maximum light output. Same housing accommodates downlight and wall wash downlight reflectors.

### REFLECTOR:

High purity aluminum Alzak® Virtual Source® iridescence suppressed reflector. Self-trim (ST) standard. Painted white self-trim (WT) available. Baffled units standard with painted white self trim.

### BALLAST:

One (1) compact fluorescent Class 'P' electronic multi-volt (120V through 277V) ballast suitable for operating 26W, 32W, and 42W triple tube lamps. HPF and EOL protection standard. Accessible from below ceiling. 347V available (specify wattage when ordering).

### LAMP:

One (1) 26W (GX24q-3 base), 32W (GX24q-3 base), or 42W (GX24q-4 base) 4-pin triple tube compact fluorescent lamp. Lamps furnished by others.

### SOCKET:

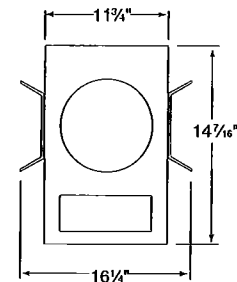
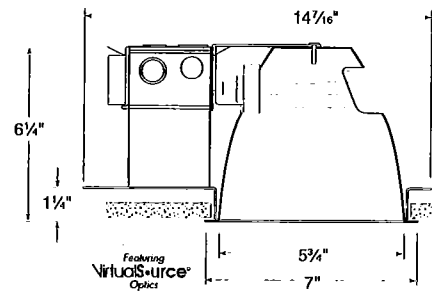
One (1) injection molded socket suitable for 26W, 32W, and 42W triple tube lamps (vented).

### INSTALLATION:

Universal adjustable mounting brackets accommodate 1 1/2" or 3/4" lathing channel (by others) or Prescolite 24" bar hangers (B24 or B6).

### LABELS:

UL, CSA listed for damp locations  
Approved for through wiring  
Non-type I.C.



CATALOG NUMBER:

EXAMPLE: CFT632HEBDMEM-STF603H-B24

HOUSING	HOUSING OPTIONS	HOUSING OPTIONS	REFLECTORS	REFLECTOR OPTIONS	ACCESSORIES
<input checked="" type="checkbox"/> <b>CFT632HEB</b> 6", (1) 26W/32W/ 42W triple tube, multi-volt electronic ballast	<input type="checkbox"/> <b>347V</b> (Specify wattage)  <input type="checkbox"/> <b>CP</b> Chicago Plenum. Fixture construction and/or specifications may vary. Refer to Chicago Plenum specification sheets on www.prescolite.com for details. (Prefix housing catalog number)  <input type="checkbox"/> <b>3DM</b> 3D AddressPro™ digital dimming ballast for programmable dimming capability. Refer to dimming specification packet #PR3117	<input type="checkbox"/> <b>DM</b> Electronic analog dimming ballast (Contact factory for wall control system compatibility)  <input type="checkbox"/> <b>EM</b> Emergency battery pack with remote test switch and indicator light  <input type="checkbox"/> <b>FSDFA</b> Fuse kit installed at factory  <input type="checkbox"/> <b>RIF1</b> Radio interference filter (single circuit)	<input checked="" type="checkbox"/> <b>STF602H</b> ® 6" Specular clear Alzak  <input type="checkbox"/> <b>STF603H</b> ® 6" Champagne gold Alzak  <input type="checkbox"/> <b>STF604H</b> ® 6" Powder Alzak  <input type="checkbox"/> <b>STF602HMFC</b> ® 6" American Matte™ clear  <input type="checkbox"/> <b>STF602HDSC</b> ® 6" EuroSpec™  <input type="checkbox"/> <b>WTF607H</b> 6" Black cone  <input type="checkbox"/> <b>WTF605H</b> 6" Black baffle  <input type="checkbox"/> <b>WTF606H</b> 6" White baffle	<input type="checkbox"/> <b>L</b> Regressed clear lens  <input type="checkbox"/> <b>SL</b> Regressed prismatic spread lens  <input checked="" type="checkbox"/> <b>SS</b> Semi-specular finish  <input type="checkbox"/> <b>TRG</b> Trim ring gasket (factory installed)  <input type="checkbox"/> <b>WT</b> Painted white self- flange (substitute WT for ST)  <input type="checkbox"/> <b>WW</b> Wall wash reflector (not available with baffle or lensed trims)	<input checked="" type="checkbox"/> <b>B24</b> Set of two (2) 24" bar hangers for T-bar ceilings  <input type="checkbox"/> <b>B6</b> Set of two (2) bar hangers for ceiling joists up to 24" centers  <input type="checkbox"/> <b>FSDFI</b> Fuse kit for field installation  <input type="checkbox"/> <b>SCA6D</b> Sloped ceiling adapter (see note on back page)  <input type="checkbox"/> <b>Signosó</b> Architectural glass elements Refer to specification sheets ARCH-SIG- 001 through -004

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**ARCH-CFL-001**

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632HEB-STF602H-SS-B24

**Type:**

**S3**

Notes:

LEE07-6119

# PHOTOMETRIC DATA

## Architektür - 6" Horizontal Triple Open & Wall Wash Downlights - CFT632HEB

BALLAST DATA	26W Triple			32W Triple			42W Triple		
	120V	277V	347V	120V	277V	347V	120V	277V	347V
Total System Watts	28W	28W	38W	35W	35W	42W	44W	47W	48W
Input Current (Amps)	0.23	0.1	0.11	0.29	0.13	0.12	0.36	0.17	0.14
Input Frequency in Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power Factor	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%
Ballast Factor	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%
Total Harmonic Distortion	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%
Total Harmonic Distortion	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)

### LAMP DATA (One per fixture)

	26W Triple	32W Triple	42W Triple
Rated Watts	26W	32W	42W
Rated Lumens	1800	2400	3200
Efficacy (LPW)	69	75	76
Rated Life	10,000 hours	10,000 hours	10,000 hours
CRI	82	82	82
Min. Starting Temp.	0° F	0° F	0° F

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average 0°	Average 45°	Average 90°
45°	21019	21096	14312
55°	0	0	0
65°	0	0	0
75°	0	0	0
85°	0	0	0

### CFT632HEB-STF602H with Specular Clear Alzak Reflector

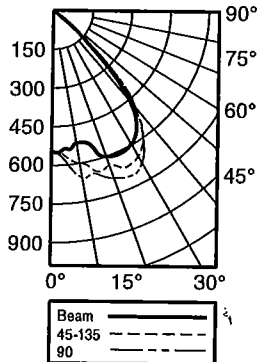
Lamp: One 32W Triple  
Spacing Criteria:  
0° = 1.5  
90° = 1.6  
Efficiency: 45.1%

### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array)  
Ceiling 80% Wall 50% Floor 20%

SPACING	RCR1	RCR3	RCR7
7.0	20	17	12
8.0	15	13	9
9.0	12	10	7
10.0	10	8	6
11.0	8	7	5

### CANDLEPOWER DISTRIBUTION



### CANDLEPOWER SUMMARY

Angle	0	45	90
0	540	540	540
5	598	572	535
15	649	638	528
25	700	663	601
35	605	601	557
45	249	249	227
55	0	0	0
65	0	0	0
75	0	0	0
85	0	0	0

Test No. PL5221

### COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Floor Cavity Reflectance																												
	80%				70%				50%				30%				10%												
	20% Effective Floor Cavity Reflectance																												
													% Wall Reflectance																
													70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
1	51	50	49	48	50	49	48	47	47	46	46	45	45	44	44	43	43	43	42	41	42	41	41	41	40	40	39	38	37
2	49	47	45	43	48	46	44	43	44	43	42	43	42	41	42	41	41	41	40	40	40	39	38	39	38	37	37	36	35
3	46	43	41	39	45	42	40	39	41	40	38	40	39	38	38	37	37	37	36	35	36	35	35	35	34	33	34	33	32
4	44	40	38	36	43	40	37	36	39	37	35	38	36	35	36	35	35	35	34	33	34	33	33	33	32	31	32	31	30
5	41	37	35	33	40	37	34	32	36	34	32	35	33	32	33	32	32	32	31	30	31	30	30	30	29	28	29	28	27
6	39	35	32	30	38	34	32	30	34	31	30	33	31	29	32	30	29	29	28	27	28	27	27	27	26	25	26	25	24
7	36	32	29	27	36	32	29	27	31	29	27	30	28	27	28	26	26	27	26	25	26	25	25	25	24	23	24	23	22
8	34	29	27	25	34	29	26	24	29	26	24	28	26	24	26	24	24	25	24	23	24	23	23	23	22	21	22	21	20
9	32	27	24	22	31	27	24	22	26	24	22	26	23	22	24	22	22	23	22	21	22	21	21	21	20	19	20	19	18
10	30	25	22	20	29	25	22	20	24	22	20	24	21	20	22	20	20	21	20	19	20	19	19	19	18	17	18	17	16

CFT632HEB-STF602H

Test No. PL5221

### NOTES

Ⓢ Denotes a Virtual Source reflector.

Refer to [www.prescolite.com](http://www.prescolite.com) for additional photometric tests (IES Files).

When ordering a sloped ceiling adapter, specify the degree of slope in 5° increments, max. of 35°. For a more precise degree or wet ceiling applications, please contact factory. Sloped ceiling adapter and housing must be installed at the same time.



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Submitted by Leesman Sales



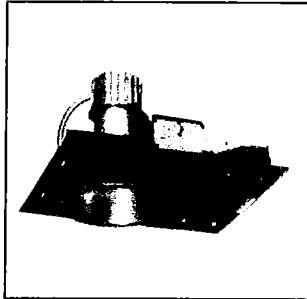
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632EB-STF602-DL-B24

**Type:**  
**S4**

Notes:

LEE07-6119



**6" Vertical Regressed  
High Impact Lens Downlight**

**CFT632EB**

One 26W, 32W, or 42W Triple Tube  
4-Pin Lamp  
Non-IC Rated  
120V, 208V, 240V, 277V, or 347V

Featuring **VirtualSource** Reflectors

**APPLICATIONS:**  
The CFT632EB offers a vertical lamped compact fluorescent downlight that provides superior brightness and glare control. The multi-volt, multi-volt ballast provides the ability to change wattages by simply replacing the lamp. This luminaire is ideal for a wide variety of low to medium height ceiling applications including commercial, retail, and hospitality. The CFT632EB is compatible with the Signos6 family of architectural elements.

**HOUSING:**  
One-piece 18-gauge galvanized steel platform. Prewired J-box with snap-on cover for easy access. Vented of lamp tip and socket for maximum light output. Some housing accommodates downlight and wall wash downlight reflectors. Diecast aluminum heat sink.

**REFLECTOR:**  
High purity aluminum Alzak® Virtual Source® iridescence suppressed reflector. Self-Frim (ST) standard. Painted white self-Frim (WT) available.

**LENSES:**  
High impact CA-81 equivalent acrylic lens. Lenses are FDA approved for use in food service areas and UL94 approved with a flammability rating of 94HB.

**BALLAST:**  
One (1) compact fluorescent Class 'P' electronic multivolt (120V through 277V) ballast suitable for operating all 26W, 32W, and 42W triple tube lamps. HPF and EOL protection standard. Accessible from below ceiling. 347V available (specify wattage when ordering).

**LAMP:**  
Use one (1) 26W (GX24q-3 base), 32W (GX24q-3 base), or 42W (GX24q-4 base) 4-pin triple tube compact fluorescent lamp. Lamp furnished by others.

**SOCKET:**  
One (1) injection molded socket suitable for 26W, 32W, and 42W triple tube lamps (vented). Adjusts to three positions, accommodating various lamp sizes and ensuring proper lamp position.

**INSTALLATION:**  
Universal adjustable mounting brackets accommodate 1 1/2" or 7/4" latching channel or 1/2" EMT (by others), or Prescolite 24" bar hangers (B24 or B6).

**LABELS:**  
UL, CSA listed for wet locations  
Approved for through wiring  
Non-type I.C.

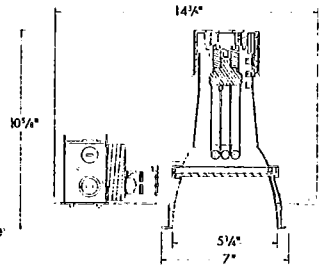
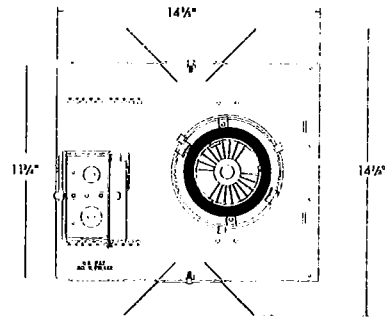
DATE \_\_\_\_\_ TYPE \_\_\_\_\_

FIRM NAME \_\_\_\_\_

PROJECT \_\_\_\_\_

**Architektür**

Ceiling Cutout: 6 1/4"  
Maximum Ceiling Thickness: 1 1/4"  
For conversion to millimeters,  
multiply inches by 25.4  
Not to Scale



CATALOG NUMBER:

EXAMPLE: CFT632EBCP-STF602CL-B6

HOUSING	HOUSING OPTIONS	HOUSING OPTIONS	REFLECTOR FINISH	REFLECTOR COLOR	REFLECTOR OPTIONS	ACCESSORIES
<input checked="" type="checkbox"/> <b>CFT632EB</b> 6" (1) 26W/32W/ 42W Triple tube, multi- volt electronic ballast  <input type="checkbox"/> <b>347V</b> (Specify wattage)	<input type="checkbox"/> <b>CP</b> Chicago Plenum. Fixture construction and/or specifications may vary. Refer to Chicago Plenum specification sheets on www.prescolite.com for details. (Prefix housing catalog number)  <input type="checkbox"/> <b>DM</b> Electronic Analog Dimming Ballast to 3%, 4-wire (120V through 277V)  <input type="checkbox"/> <b>SDM</b> Lutron Compact SE Dimming Ballast to 5%, 3-wire (specify voltage)  <input type="checkbox"/> <b>HDM</b> Lutron Hi-Lume Dimming Ballast to 1%, 3-wire (specify voltage)  <input type="checkbox"/> <b>2DM</b> Lutron Tu-Wire Dimming Ballast to 5%, 2-wire (120 volt only)	<input type="checkbox"/> <b>7DM</b> Advance Mark 7 Dimming Ballast to 3%, 4-wire (120V through 277V)  <input type="checkbox"/> <b>XDM</b> Advance Mark 10 Dimming Ballast to 5%, 2-wire (specify voltage)  <input type="checkbox"/> <b>EM</b> Emergency battery pack with remote test switch and indicator light  <input type="checkbox"/> <b>FSDFA</b> Fuse kit installed at factory  <input type="checkbox"/> <b>RIF1</b> Radio interference filter (single circuit)  <input type="checkbox"/> <b>MW26</b> Max Wattage label, 26W  <input type="checkbox"/> <b>MW32</b> Max Wattage label, 32W	<input checked="" type="checkbox"/> <b>STF602</b> Specular Alzak or Painted Option  <input type="checkbox"/> <b>STF602MFC</b> American Matte™  <input type="checkbox"/> <b>STF602SS</b> Semi-Specular  <input type="checkbox"/> <b>STF602HZ</b> Haze (Diffused & Buffed)	<input type="checkbox"/> <b>CG</b> 6" Chompagne Gold Alzak  <input type="checkbox"/> <b>PW</b> 6" Pewter Alzak  <input type="checkbox"/> <b>BL</b> 6" Black Alzak  <input type="checkbox"/> <b>WE</b> 6" Wheat Alzak  <input type="checkbox"/> <b>LW</b> 6" Light Wheat Alzak  <b>Painted Options*</b> <input type="checkbox"/> <b>WC</b> White Cone  <input type="checkbox"/> <b>BC</b> Black Cone	<input type="checkbox"/> <b>DL</b> Diffused Lens  <input type="checkbox"/> <b>CLC</b> Clear Lens  <input type="checkbox"/> <b>PL</b> Prismatic Lens  <input type="checkbox"/> <b>TRG</b> Trim Ring Gasket (Factory Installed)  <input type="checkbox"/> <b>WT</b> Painted White Self Flange (Substitute WT for ST)	<input type="checkbox"/> <b>B24</b> Set of two (2) 24" bar hangers for T-bar ceilings  <input type="checkbox"/> <b>B6</b> Set of two (2) bar hangers for ceiling joints up to 24" centers  <input type="checkbox"/> <b>FSDFI</b> Fuse kit for field installation  <input type="checkbox"/> <b>SCA6D</b> Sloped ceiling adapter (see note on back page)  <input type="checkbox"/> <b>Signos6</b> Architectural elements Refer to specification sheets ARCHSIG-001 through -004

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**ARCH-CFL-058**

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632EB-STF602-DL-B24

**Type:**  
**S4**

Notes:

LEE07-6119

# PHOTOMETRIC DATA

## Architektür - 6" Vertical Triple Tube Regressed High Impact Lens Downlight - CFT632EB

BALLAST DATA	26W Triple			32W Triple			42W Triple		
	120V	277V	347V	120V	277V	347V	120V	277V	347V
Total System Watts	28W	28W	38W	35W	35W	42W	44W	47W	48W
Input Current (Amps)	0.23	0.1	0.11	0.29	0.13	0.12	0.36	0.17	0.14
Input Frequency in Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power Factor	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%
Ballast Factor	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%
Total Harmonic Distortion	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%
Total Harmonic Distortion	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)

### LAMP DATA

	26W Triple	32W Triple	42W Triple
Rated Watts	26W Triple	32W Triple	42W Triple
Rated Lumens	1800	2400	3200
Efficacy (LPW)	69	75	76
Rated Life	10,000 hours	10,000 hours	10,000 hours
CRI	82	82	82
Minimum Starting Temp.	0° F	0° F	0° F

### AVERAGE INITIAL FOOTCANDLES

- Assumptions:
- Multiple units (square array)
  - Ceiling 80%; Wall 50%; Floor 20%
  - Four fixtures evenly spaced in the center of the room
  - The room is square and has a width and length equal to twice the lamp spacing
  - The lumen depreciation factor is 0.8
  - The dirt depreciation factor is 0.98

#### 42W Triple

SPACING	RCR1	RCR3	RCR7
7.0	12	11	8
8.0	9	8	6
9.0	7	6	5
10.0	6	5	4
11.0	5	4	3
12.0	4	4	3
13.0	4	3	2
14.0	3	3	2
15.0	3	2	2

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
0°	0°
45°	4402
55°	4863
65°	376
75°	169
85°	126

### CFT632EB-STF602CL Clear Alzak® Reflector w/clear lens

Lamp: One 42W Triple  
Rated lumens: 3200  
Spacing Criteria: 1.0  
Efficiency: 22.0%

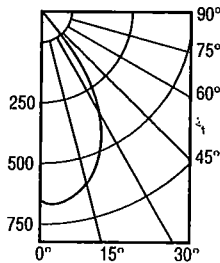
### COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Floor Cavity Reflectance																	
	80%				70%				50%				30%				10%	0%
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	26	26	26	26	26	26	26	24	24	24	23	23	23	22	22	22	22	22
1	25	24	24	23	24	24	23	23	22	22	22	22	21	21	21	21	21	20
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4	21	19	18	17	21	19	18	17	18	17	17	18	17	16	17	16	16	16
5	20	18	16	15	19	18	16	15	17	16	15	17	16	15	16	15	15	15
6	19	17	15	14	18	16	15	14	16	15	14	16	15	14	15	14	14	14
7	18	16	14	13	17	15	14	13	15	14	13	15	14	13	14	13	13	13
8	17	15	13	12	17	14	13	12	14	13	12	14	13	12	13	12	12	12
9	16	14	12	11	16	14	12	11	13	12	11	13	12	11	12	11	11	11
10	15	13	12	11	15	13	11	11	13	11	11	12	11	11	12	11	10	10

CFT632EB-STF602CL

Test No. 2003102

### CANDLEPOWER DISTRIBUTION



Test No. 2003102

### CANDLEPOWER SUMMARY

Angle	Mean CP
0	663
5	678
10	644
15	588
20	526
25	466
30	393
35	277
40	136
45	57
50	35
55	51
60	22
65	3
70	1
75	1
80	0
85	0
90	0

### NOTES

Ⓢ Denotes a Virtual Source reflector.

Refer to [www.prescolite.com](http://www.prescolite.com) for additional photometric tests (IES Files).

When ordering a sloped ceiling adapter, specify the degree of slope in 5° increments, max. of 35°. For a more precise degree or wet ceiling applications, please contact factory. Sloped ceiling adapter and housing must be installed at the same time.



Web: [www.prescolite.com](http://www.prescolite.com) • Tech Support: (888) 777-4832  
101 Corporate Drive • Spartanburg, SC 29303 U.S.A. • Phone (864) 599-6000  
Copyright ©2006 Prescolite, Inc., a division of Hubbell Lighting, Inc. All Rights Reserved  
Specifications subject to change without notice • Printed in U.S.A. • ARCHFL05B • 12/01/06



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
RL20 / CTR2002-CLR-P

**Type:**  
**S5**

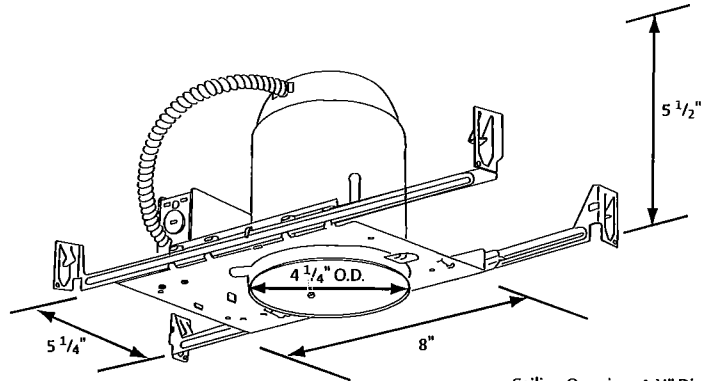
Notes:

LEE07-6119

## RL20

4" Line Voltage  
Mini-Recessed Housing

Catalog # \_\_\_\_\_ Type \_\_\_\_\_ Project \_\_\_\_\_



Ceiling Opening: 4-3/4" Diameter

### Specifications/Features

#### Fixture

Compact 4" incandescent downlight housing for new construction applications.  
Many different trims available to complement any design style.  
May be used with drywall, plaster or suspended ceilings from 1/2" to 1-1/2" thick.  
The housing may be used in insulated ceilings if a minimum 3" distance is maintained all around fixture from insulation material.

#### Electrical

See trim sheet details for maximum lamp size and wattage.  
Prewired junction box with spring-latch access plates.  
Approved for through-circuit wiring (max (8) #12 AWG 4 in/4 out). Push-in wire connectors included.

Adjustable lamp socket (vertical position).

Thermally protected.

Junction box has (4) 1/2" pryouts, (1) 3/4" concentric pryout and (4) Romex pryouts.

#### Mounting

Includes dual extension hanger bars that are adjustable from 14-1/2" to 24-1/2".

Just-A-Nail mounting system included on hanger bars.  
Hanger bars may be extended to rest on T-bar ceilings.

#### Labels/Usage

cULus listed for damp locations.

New York City approved, calendar number 38645.

### Ordering Information

Example Order:  -

Housing	Trims	Options
<input type="text" value="RL20"/>	<input type="text" value="CTR2002-CLR-P"/>	<input type="text"/>
<input type="text" value="RL20"/>		HB-30 - Optional T-Hanger Bar

**Max Lamp: 50W R20, 50W PAR20 and 45W PAR16**

- CTR2001-(P, PB) - Black Baffled Downlight:  
-P (White Trim), -PB (Polished Brass Trim)
- CTR2001W-P - White Baffled Downlight, White Trim
- CTR2003-P - Mini-Recessed Scoop Wall Wash, White Trim
- CTR2005-P - Mini-Recessed Pin Spot, White Trim
- CTR2007-(B, NK, P, PB, S) - 4" Surface Adjustable: -B (Black Trim), -NK (Nickel Trim),  
-P (White Trim), -PB (Polished Brass Trim), -S (Silver Trim)

**Max Lamp: 40W A15, 50W R20, 50W PAR20 and 45W PAR16**

- CTR2002-BLK-(B, P) - Black Specular Aluminum Reflector:  
-B (Black Trim), -P (White Trim)
- Clear Specular Aluminum Reflector, White Trim (40W A15 lamp)
- CTR2002-GLD-P - Gold Specular Aluminum Reflector, White Trim
- CTR2002-WHT-P - White Specular Aluminum Reflector, White Trim

**Max Lamp: 35W PAR20, 40W A19**

- CTR2006-P - Drop Opal Glass, Gasketed, Shower Light, White Trim
- CTR2012-P - Flat Albalite Glass Lens, Shower Light, White Trim

**Non-IC: 50W R20, 50W PAR20 and 45W PAR16**

**IC: 50W R20, 45W PAR16 and 50W PAR20**

- CTR2008-(P, PB, U) - Mini-Recessed Eyeball, 30° Vertical Adjustment:  
-P (White Trim), -PB (Polished Brass Trim), -U (UNlook Trim)



1-800-728-0312

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CTL838P

Notes:

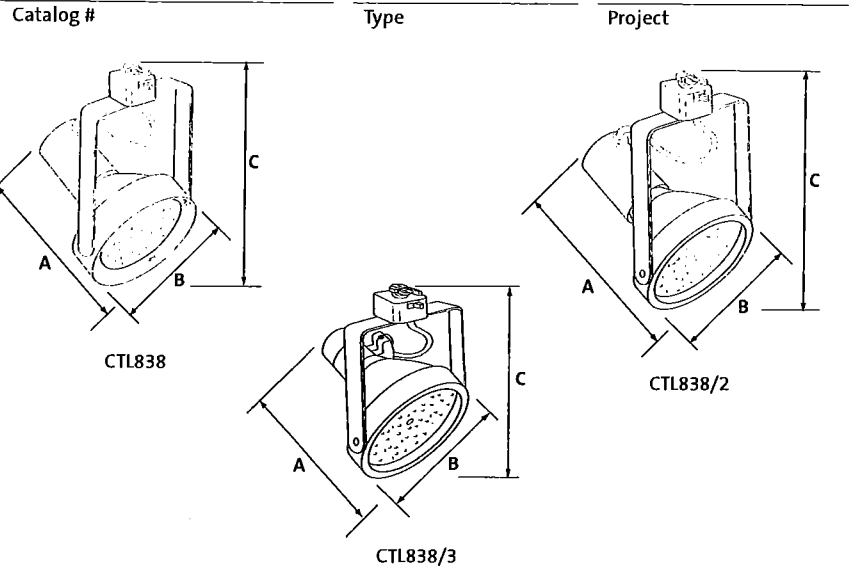
**Type:**

**V1**

LEE07-6119

**CTL838**  
**CTL838/2**  
**CTL838/3**

Gimbal  
120V Series  
Track Fixtures



DIMENSIONS			
Model	A	B	C
CTL838	6 1/2"	5 1/2"	11"
CTL838/2	5 3/4"	5"	10 1/8"
CTL838/3	4 3/4"	5 1/2"	9 3/4"

**Specifications/Features**

**Fixture**  
The free, unconfined look of these gimbal lamp holders make them popular for commercial, retail and residential applications. The 2-plane gimbal design permits maximum horizontal and vertical swivel for excellent aiming, and our "Sure-Set" yoke holds the fixture firmly in place. Models are offered for all the popular halogen PAR lamps. The CTL838 (only) is supplied with spring clips for the use with accessories.

**Lamp/Electrical**  
CTL838 Lamp: 250W PAR38 (max)

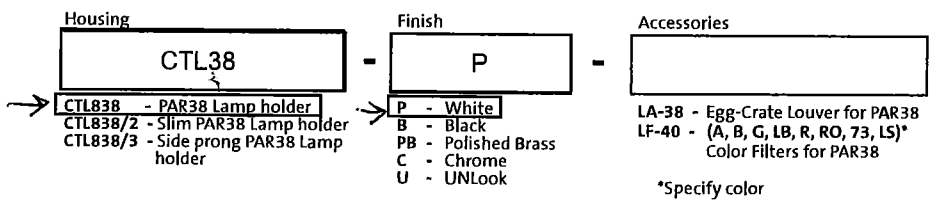
CTL838/2 Lamp: 250W PAR38 (max)  
CTL838/3 Lamp: 150W PAR38 (max)  
All styles are equipped with a convenient on/off switch and polarity indicator.

**Warranty**  
This fixture is covered by Con-Tech's full replacement guarantee which is effective for one year.

**Listing**  
cUL<sub>US</sub> listed. Suitable for dry locations.

**Ordering Information**

Example Order: **CTL838** - **P** - **LA-38**



1-800-728-0312

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All specifications subject to change without notice.  
AD04TRSS44

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

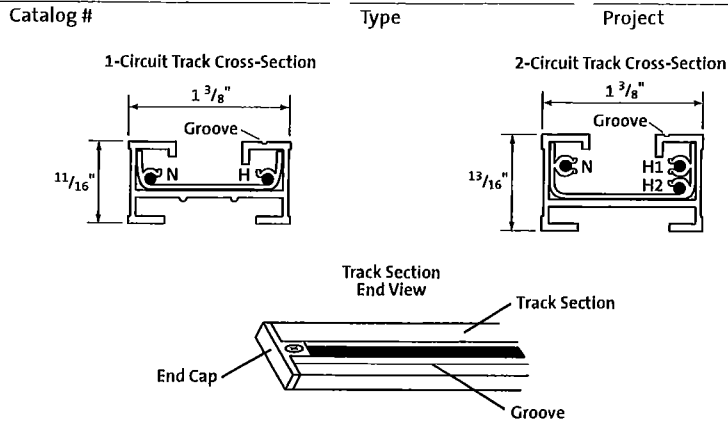
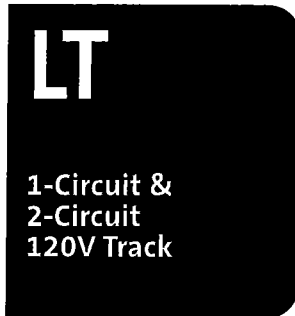
**Catalog Number:**  
LT24-P

Notes:

**Type:**

**V1**

LEE07-6119



**Specifications/Features**

**Track Systems**

Commercial grade track systems offer true versatility with a wide variety of power feed and connection accessories.

Mounting accessories available for T-Bar clips, stems, threaded rods, and aircraft cable.

All conductors are solid copper with thermoplastic insulators for electrical isolation.

All track sections are supplied with two insulated end caps.

Channels are constructed of heavy 14 ga. extruded aluminum.

Mechanical polarity with visual indicator (groove) simplifies installation of fixtures and assures proper electrical connections.

Nominal length track sections can be cut in the field for exact fit.

Toggle bolts are supplied for simple surface installation.

Track sections may be mounted within Con-Tech's Recessed Track Housing System to minimize appearance.

**1-Circuit And 2-Circuit Application**

Single and 2-circuit track options available for 120V applications.

All Con-Tech track fixtures have two position contacts to access 1-circuit or 2-circuit track conductors.

All 2-circuit track sections are supplied with a set of shims (1 per foot of track) to lock the fixture contacts into 2nd circuit position.

**1-Circuit Track**

The economic solution for most applications.

Single hot and neutral conductors are rated for 20 Amps.

Low profile track cross-section.

**2-Circuit Track**

Enhanced versatility with two hot conductors and a common neutral.

Allows higher wattage output by splitting loads over one run of track for maximum capacity of 40 Amps (20A per circuit on single phase, 3-wire power feed).

Create lighting effects by simply applying fixtures to the desired circuits and utilizing separate switching.

**Labels/Usage**

cULus listed. For dry locations.

**Ordering Information**

Example Order: **LT - 8 - P**

1-Circuit Sections	Track Finish/End Cap
LT - <input type="text"/>	- <input type="text"/>
2 - 2' Length	B - Black/Black
4 - 4' Length	P - White/White
6 - 6' Length	PB - Polished Brass/Black*
8 - 8' Length	U - Unfinished Aluminum/Grey*
12 - 12' Length	
	*Not Available on 12' sections.

2-Circuit Sections	Track Finish/End Cap
LT - <input type="text"/>	- <input type="text"/>
LT24	P
24 - 4' Length	B - Black/Black
26 - 6' Length	P - White/White
28 - 8' Length	U - Unfinished Aluminum/Grey*
212 - 12' Length	
	*Not Available on 12' sections.

Actual track extrusion lengths are 3/8" shorter than nominal lengths indicated above.  
LA11 or LA211 end caps are supplied with all track sections and may be ordered separately as needed.  
See other sheets for Recessed Track Systems and 120V Track Accessories.  
2', 4', and 6' sections supplied with (2) toggle bolts, 8' and 12' sections supplied with (3) toggle bolts.



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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
LA210-P

Notes:

**Type:**

**V1**

LEE07-6119

# 2-Circuit Track

## Power Feeds

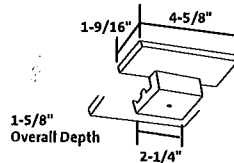
Catalog # \_\_\_\_\_ Type \_\_\_\_\_ Project \_\_\_\_\_

### General Track Information

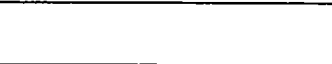
Power feeds are constructed of sturdy polycarbonate with galvanized steel back plates. Every electrical component is polarized and has a grounding capability to ensure safe usage. Visual polarity indicators simplify proper electrical installation. Twelve gauge insulated wire is used for internal connections. Solid copper track contacts provide good electrical conductivity for years of trouble free operation.

All track components are cULus listed. Installations are suitable for dry locations only. Maximum power rating is 2400 Watts per circuit (4800W total); 20A per circuit (40A total capacity) at 120V, 60Hz. NEC allows 80% of full capacity or 1920 Watts per circuit (3840W total).

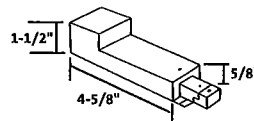
### 1-Circuit Track Power Feeds



**Floating Feed Point**



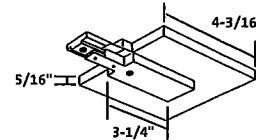
**LA-207-(B, P, U)**  
 • Can be installed anywhere along track. Kit includes square J-Box Canopy Cover, J-Box Mounting Bracket, Track Adaptor, and one LA-211 Series End Cap.



**Surface Conduit End Feed**



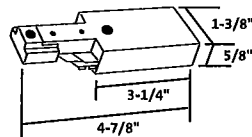
**LA-208-(B, P, U)**  
 • End Feed. (1) 1/2" top K.O. and (1) 1/2" end K.O. for surface conduit.  
**LA-208A-(B, P, U)**  
 • Reverse Polarity End Feed. (1) 1/2" top K.O. and (1) 1/2" end K.O. for surface conduit.



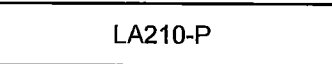
**Outlet Box Feed Kit**



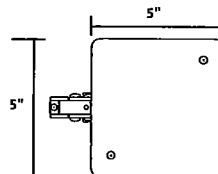
**LA-209-(B, P, U)**  
 • Square Cover Plate With End Feed. (1) 1/2" K.O. Kit includes J-Box Mounting Bracket, Threaded Nipple And Nut.



**Top Access End Feed**



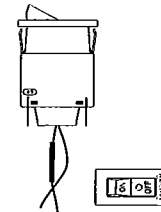
**LA-210-(B, P, U)**  
 • Power Feed. (1) 1/2" top K.O. for standard electrical conduit.  
**LA-210A-(B, P, U)**  
 • Reverse Polarity Power Feed. (1) 1/2" top K.O. for standard electrical conduit.



**Regulator Current Limiting Device End Feed**



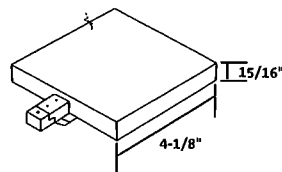
**LA-223-R -(B, P, U)**  
 Title 24 compliant (CA). (2) Illuminated circuit breakers required. 1-1/4" H.



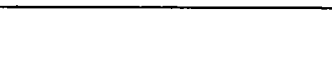
**Illuminated Circuit Breaker**



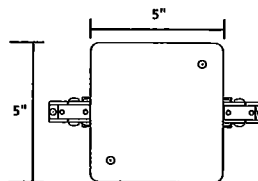
**REG1 - 120W, 1A**  
**REG3 - 300W, 2.5A**  
**REG6 - 600W, 5A**  
**REG9 - 900W, 7.5A**  
**REG10 - 1200W, 10A**  
**REG12 - 1440W, 12A**  
**REG14 - 1680W, 14A**  
 Finish: -B, P, U



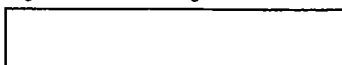
**T-Bar End Feed**



**LA-220-(B, P)**  
 • Ceiling End Feed has 4 1/8" square canopy cover. (3) 1/2" top K.O.'s can be used with T-grid installations.



**Regulator Current Limiting Device In-line Feed**



**LA-233-R-(B, P, U)**  
 Title 24 compliant (CA). (2) Illuminated circuit breakers required. 1-1/4" H.

**Polarity-Configuration Legend**

Forward Polarity Configuration

Reverse Polarity Configuration



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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CTL838-P

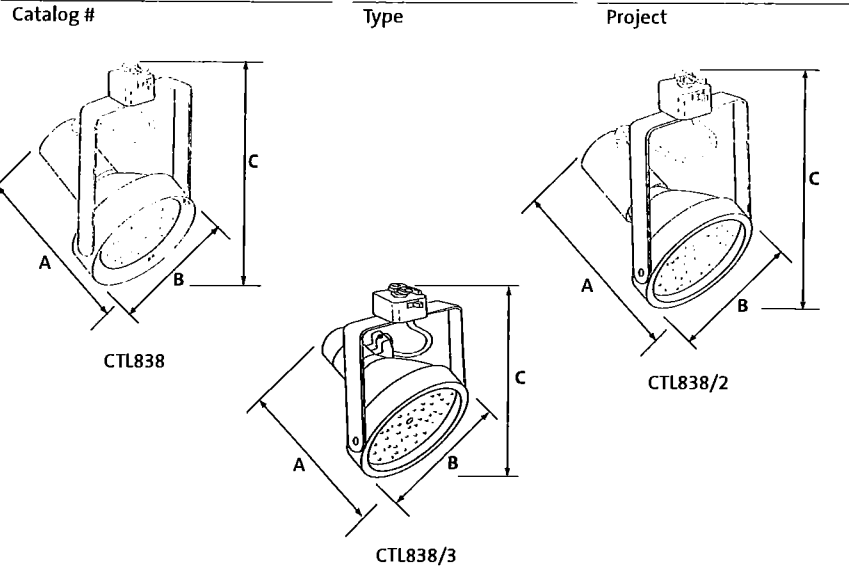
Notes:

**Type:**  
**V2**

LEE07-8119

**CTL838**  
**CTL838/2**  
**CTL838/3**

Gimbal  
120V Series  
Track Fixtures



DIMENSIONS			
Model	A	B	C
CTL838	6 1/2"	5 1/2"	11"
CTL838/2	5 3/4"	5"	10 1/8"
CTL838/3	4 3/4"	5 1/2"	9 3/4"

**Specifications/Features**

**Fixture**  
The free, unconfined look of these gimbal lamp holders make them popular for commercial, retail and residential applications. The 2-plane gimbal design permits maximum horizontal and vertical swivel for excellent aiming, and our "Sure-Set" yoke holds the fixture firmly in place. Models are offered for all the popular halogen PAR lamps. The CTL838 (only) is supplied with spring clips for the use with accessories.

**Lamp/Electrical**  
CTL838 Lamp: 250W PAR38 (max)

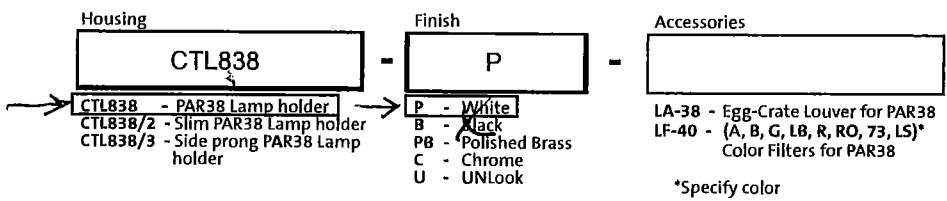
CTL838/2 Lamp: 250W PAR38 (max)  
CTL838/3 Lamp: 150W PAR38 (max)  
All styles are equipped with a convenient on/off switch and polarity indicator.

**Warranty**  
This fixture is covered by Con-Tech's full replacement guarantee which is effective for one year.

**Listing**  
cUL<sub>US</sub> listed. Suitable for dry locations.

**Ordering Information**

Example Order: **CTL838** - **P** - **LA-38**



*Handwritten note:* BLACK



1-800-728-0312

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AD04TR5544

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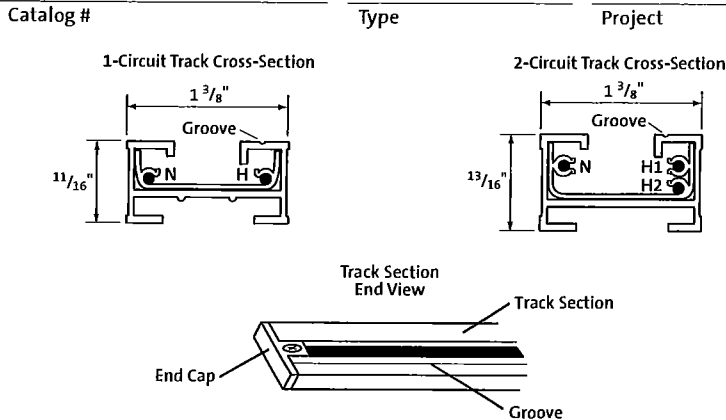
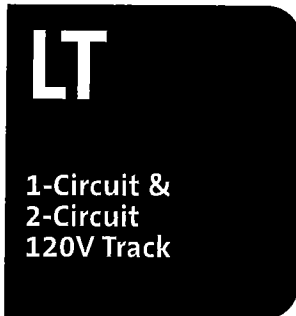
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
LT28-P

Notes:

**Type:**  
**V2**

LEE07-8119



**Specifications/Features**

**Track Systems**

Commercial grade track systems offer true versatility with a wide variety of power feed and connection accessories.

Mounting accessories available for T-Bar clips, stems, threaded rods, and aircraft cable.

All conductors are solid copper with thermoplastic insulators for electrical isolation.

All track sections are supplied with two insulated end caps.

Channels are constructed of heavy 14 ga. extruded aluminum.

Mechanical polarity with visual indicator (groove) simplifies installation of fixtures and assures proper electrical connections.

Nominal length track sections can be cut in the field for exact fit.

Toggle bolts are supplied for simple surface installation.

Track sections may be mounted within Con-Tech's Recessed Track Housing System to minimize appearance.

**1-Circuit And 2-Circuit Application**

Single and 2-circuit track options available for 120V applications.

All Con-Tech track fixtures have two position contacts to access 1-circuit or 2-circuit track conductors.

All 2-circuit track sections are supplied with a set of shims (1 per foot of track) to lock the fixture contacts into 2nd circuit position.

**1-Circuit Track**

The economic solution for most applications.

Single hot and neutral conductors are rated for 20 Amps.

Low profile track cross-section.

**2-Circuit Track**

Enhanced versatility with two hot conductors and a common neutral.

Allows higher wattage output by splitting loads over one run of track for maximum capacity of 40 Amps (20A per circuit on single phase, 3-wire power feed).

Create lighting effects by simply applying fixtures to the desired circuits and utilizing separate switching.

**Labels/Usage**

cULus listed. For dry locations.

**Ordering Information**

Example Order: **LT - 8 - P**

1-Circuit Sections	Track Finish/End Cap
LT - <input type="text"/>	<input type="text"/>
2 - 2' Length	B - Black/Black
4 - 4' Length	P - White/White
6 - 6' Length	PB - Polished Brass/Black*
8 - 8' Length	U - Unfinished Aluminum/Grey*
12 - 12' Length	
	*Not Available on 12' sections.

2-Circuit Sections	Track Finish/End Cap
LT - <input type="text"/>	<input type="text"/>
24 - 4' Length	B - Black/Black
26 - 6' Length	P - White/White
28 - 8' Length	U - Unfinished Aluminum/Grey*
212 - 12' Length	
	*Not Available on 12' sections.

Actual track extrusion lengths are 3 7/8" shorter than nominal lengths indicated above. LA11 or LA211 end caps are supplied with all track sections and may be ordered separately as needed. See other sheets for Recessed Track Systems and 120V Track Accessories. 2', 4', and 6' sections supplied with (2) toggle bolts, 8' and 12' sections supplied with (3) toggle bolts.

*Black*



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AD04TRSS07





Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
LA210-P

Notes:

**Type:**

**V2**

LEE07-8119

# 2-Circuit Track

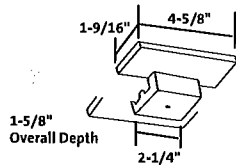
## Power Feeds

Catalog #	Type	Project
<b>General Track Information</b>		

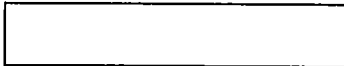
Power feeds are constructed of sturdy polycarbonate with galvanized steel back plates. Every electrical component is polarized and has a grounding capability to ensure safe usage. Visual polarity indicators simplify proper electrical installation. Twelve gauge insulated wire is used for internal connections. Solid copper track contacts provide good electrical conductivity for years of trouble free operation.

All track components are cULus listed. Installations are suitable for dry locations only. Maximum power rating is 2400 Watts per circuit (4800W total); 20A per circuit (40A total capacity) at 120V, 60Hz. NEC allows 80% of full capacity or 1920 Watts per circuit (3840W total).

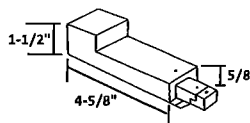
### 1-Circuit Track Power Feeds



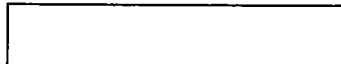
**Floating Feed Point**



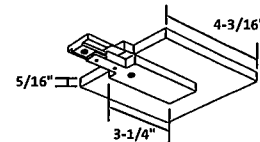
**LA-207-(B, P, U)**  
 • Can be installed anywhere along track. Kit includes square J-Box Canopy Cover, J-Box Mounting Bracket, Track Adaptor, and one LA-211 Series End Cap.



**Surface Conduit End Feed**



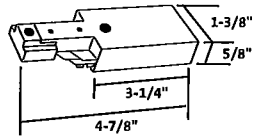
**LA-208-(B, P, U)**  
 • End Feed. (1) 1/2" top K.O. and (1) 1/2" end K.O. for surface conduit.  
**LA-208A-(B, P, U)**  
 • Reverse Polarity End Feed. (1) 1/2" top K.O. and (1) 1/2" end K.O. for surface conduit.



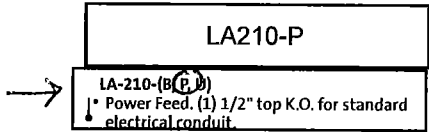
**Outlet Box Feed Kit**



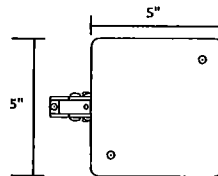
**LA-209-(B, P, U)**  
 • Square Cover Plate With End Feed. (1) 1/2" K.O. Kit includes J-Box Mounting Bracket, Threaded Nipple And Nut.



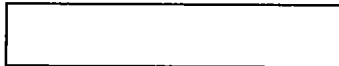
**Top Access End Feed**



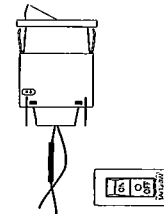
**LA-210-(B, P, U)**  
 • Power Feed. (1) 1/2" top K.O. for standard electrical conduit.  
**LA-210A-(B, P, U)**  
 • Reverse Polarity Power Feed. (1) 1/2" top K.O. for standard electrical conduit.



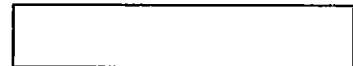
**Regulator Current Limiting Device End Feed**



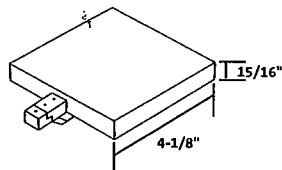
**LA-223-R-(B, P, U)**  
 Title 24 compliant (CA). (2) Illuminated circuit breakers required. 1-1/4" H.



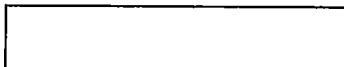
**Illuminated Circuit Breaker**



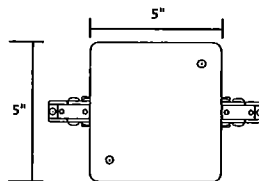
**REG1 - 120W, 1A**  
**REG3 - 300W, 2.5A**  
**REG6 - 600W, 5A**  
**REG9 - 900W, 7.5A**  
**REG10 - 1200W, 10A**  
**REG12 - 1440W, 12A**  
**REG14 - 1680W, 14A**  
 Finish: -B, P, U



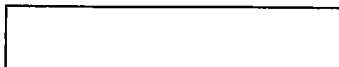
**T-Bar End Feed**



**LA-220-(B, P)**  
 • Ceiling End Feed has 4 1/8" square canopy cover. (3) 1/2" top K.O.'s can be used with T-grid installations.

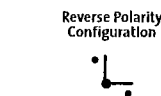
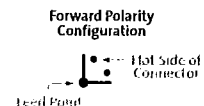


**Regulator Current Limiting Device In-line Feed**



**LA-233-R-(B, P, U)**  
 Title 24 compliant (CA). (2) Illuminated circuit breakers required. 1-1/4" H.

### Polarity-Configuration Legend



1-800-728-0312

www.con-techlighting.com

All specifications subject to change without notice

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**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SWF842-A-SW-WG LAMPS

**Type:**  
**X8P**

Notes:

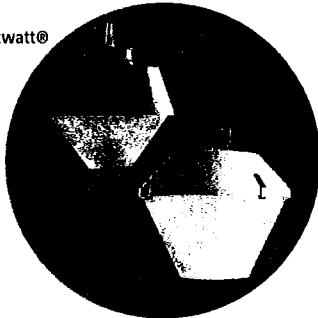
LEE07-6119

# SW/LW CFL

## COMPACT FLUORESCENT

### Features

Lightwatt®



Superwatt®

- Instant on – The compact fluorescent lamps are on as soon as they are energized.
- Instant re-strike – As above, the compact fluorescent lamps are on as soon as energized.
- Good Color – Compact Fluorescent lamps have a CRI of about 82 on a scale of 100.
- Better Lumen Maintenance – Compact Fluorescent lamps have a flatter lumen maintenance curve.
- Switch-able Dimming – Since each ballast powers two lamps, an eight lamp unit can be switched to provide 25%, 50%, 75% and 100% light output.
- Fail safe light output – Since these are multiple lamp source units, they provide a measure of "fail safe" lighting that single source fixtures can not.
- Shielding of Lamp Image – The Superwatt refractor does a good job of breaking up the lamp image.
- Superwatt Appearance – In comparison to all of the other CF highbays the Superwatt just plain looks better. In many applications this could tip the scales in your favor.

### Ordering Information Example:

SWF - 842 - A

LW - P - 084 - 4 - A - WH

SPECIFICATION GRADE

Series	Lamp/Watts	Refractor
Series SWF	Superwatt® Series Compact Fluorescent	
Lamp type/Wattage		
426	(4) 26W PLT	
432	(4) 32W PLT	
442	(4) 42W PLT	
626	(6) 26W PLT	
632	(6) 32W PLT	
642	(6) 42W PLT	
826	(8) 26W PLT	
832	(8) 32W PLT	
842	(8) 42W PLT	
Refractor		
A	Acrylic	
P	Polycarbonate	
Options		
-INC	Incandescent Socket	
-LL	Less lamp	
-EM	One Emergency Ballast	

Note All fixtures are wet location listed.  
Note All fixtures are pendant mount.  
Note Voltage is Universal 120/277V 50/60Hz.  
Note Options must be added as suffix to catalog number. Accessories must be ordered separately.

Series	Mount	Watts	Volts	Refractor	color
Series LW	Lightwatt				
Mounting					
J	J-Box (damp location)				
P	Balanced Pendant (wet location); (damp location) with cord option <sup>1</sup>				
C	Ceiling thru-wire (wet location)				
B	Pipe wall bracket (wet location)				
S	Stanchion Davit (wet location)				
Wattage					
042	1 x 42W				
064	2 x 32W				
084	2 x 42W				
Voltage					
1	120V				
4	277V				
Refractor					
A	Acrylic				
P	Polycarbonate				
Color					
WH	White Lektrocote® (standard)				
GR	Gray Lektrocote®				

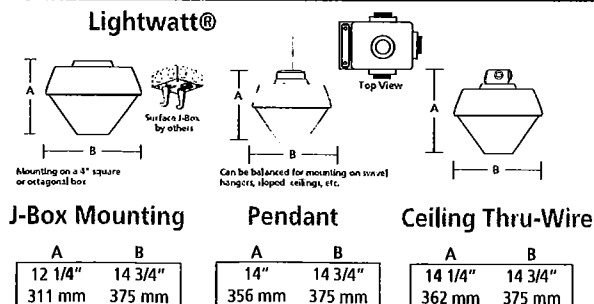
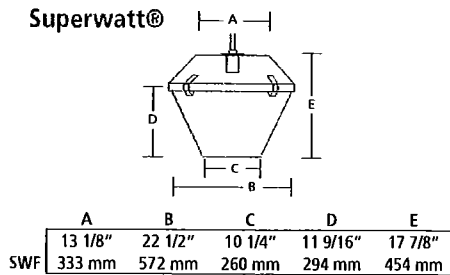
1 Fast-Lock J-Box mounting-recessed J-Box requires installation of the included 1 1/2" extension ring.

Note Lamp included.  
Note Options must be added as suffix to catalog number. Accessories must be ordered separately.

### Accessories - Order Separately

Catalog Number	Description
SW-WG	Wire guard
A-Lens	Acrylic Bottom "Lift & Shift" Lens
P-Lens	Polycarbonate Bottom "Lift & Shift" Lens

### Dimensions





Submitted by Leesman Sales

**Job Name:**Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase**Catalog Number:**SSP15-4.0-11-DM10-KIM AR-KIM  
PS-P  
Notes:**Type:****PSS1**

LEE07-6119

KW Industries

Page 1 of 4

## SSP Square Non-Tapered Steel Poles

### Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196"), 7 gauge (0.1793"), or 3 gauge (0.2391"). The pole shaft material shall conform to ASTM A-500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly square in cross-section with flat sides, small corner radii and excellent torsional properties.

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### Handhole

An oval reinforced gasketed handhole, having a nominal 3" x 5" or 4" x 6-1/2" inside opening, located 1'-6" above base, is standard on all poles. Optional 5" x 8" and 4" x 10" handholes are available (see options). A grounding provision is located inside the handhole ring.

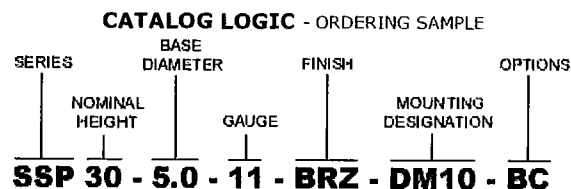
### Finishes

The **Standard Finish** is a polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils for all color finishes. **Hot dip Galvanized** finish to a ASTM A-123 specification or primed finish is also available. For optional finishes, see **K-KLAD** and **K-KLAD Over Galvanizing**.

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The following explanation of the catalog numbers will be helpful in placing orders:



Catalog Number	Nominal Height	Pole Shaft	Gauge	Handhole Size	Anchor Bolt	Bolt Circle	80 MPH	90 MPH	100 MPH	Ship WT.
SSP10-4.0-11	10	4.0 x 10.0	11	3 x 5	0.75 x 17 x 3	8	42.1	33.5	27.1	87
SSP10-4.0-7	10	4.0 x 10.0	7	3 x 5	0.75 x 30 x 3	8	55	44	35.5	130
SSP10-5.0-11	10	5.0 x 10.0	11	3 x 5	1.00 x 36 x 4	11	58	44	34	151
SSP12-4.0-11	12	4.0 x 12.0	11	3 x 5	0.75 x 17 x 3	8	33.7	26.7	21.4	100
SSP12-4.0-7	12	4.0 x 12.0	7	3 x 5	0.75 x 30 x 3	8	47.5	37.3	29.8	150



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP15-4.0-11-DM10-KIM AR-KIM  
PS-P  
Notes:

**Type:**  
**PSS1**

LEE07-6119

SSP12-5.0-11	12	5.0 x 12.0	11	3 x 5	1.00 x 36 x 4	11	49	38	29	158
SSP14-4.0-11	14	4.0 x 14.0	11	3 x 5	0.75 x 17 x 3	8	27.4	21.5	17.1	113
SSP14-4.0-7	14	4.0 x 14.0	7	3 x 5	0.75 x 30 x 3	8	40	31	24.5	170
SSP14-5.0-11	14	5.0 x 14.0	11	3 x 5	1.00 x 36 x 4	11	40	30	23	184
SSP14-5.0-7	14	5.0 x 14.0	7	3 x 5	1.00 x 36 x 4	11	65	52	41.5	242
SSP15-4.0-11	15	4.0 x 15.0	11	3 x 5	0.75 x 17 x 3	8	20.7	16.1	12.6	119
SSP15-4.0-7	15	4.0 x 15.0	7	3 x 5	0.75 x 30 x 3	8	30.9	24.4	19.6	172
SSP15-5.0-11	15	5.0 x 15.0	11	3 x 5	1.00 x 36 x 4	11	36	27.5	21	192
SSP15-5.0-7	15	5.0 x 15.0	7	3 x 5	1.00 x 36 x 4	11	59	46.5	37	253
SSP16-4.0-11	16	4.0 x 16.0	11	3 x 5	0.75 x 17 x 3	8	18.7	14.4	11.2	125
SSP16-4.0-7	16	4.0 x 16.0	7	3 x 5	0.75 x 30 x 3	8	27.2	20.7	16	210
SSP16-5.0-11	16	5.0 x 16.0	11	3 x 5	1.00 x 36 x 4	11	33.5	25	18	201
SSP16-5.0-7	16	5.0 x 16.0	7	3 x 5	1.00 x 36 x 4	11	54	43	34	266
SSP18-4.0-11	18	4.0 x 18.0	11	3 x 5	0.75 x 17 x 3	8	15.2	11.5	8.7	138
SSP18-4.0-7	18	4.0 x 18.0	7	3 x 5	0.75 x 30 x 3	8	27.2	20.7	16	210
SSP18-5.0-11	18	5.0 x 18.0	11	3 x 5	1.00 x 36 x 4	11	27	19.5	15	218
SSP18-5.0-7	18	5.0 x 18.0	7	3 x 5	1.00 x 36 x 4	11	46	36	28	291
SSP20-4.0-11	20	4.0 x 20.0	11	3 x 5	0.75 x 17 x 3	8	12.3	9	6.5	151
SSP20-4.0-7	20	4.0 x 20.0	7	3 x 5	0.75 x 30 x 3	8	19.6	15	11.5	219
SSP20-5.0-11	20	5.0 x 20.0	11	3 x 5	1.00 x 36 x 4	11	22.2	16.8	12.6	235
SSP20-5.0-7	20	5.0 x 20.0	7	3 x 5	1.00 x 36 x 4	11	35.4	27.5	21.5	313
SSP20-6.0-7	20	6.0 x 20.0	7	3 x 5	1.00 x 36 x 4	11.5	56	42.5	33.5	368
SSP22-4.0-7	22	4.0 x 22.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP22-4.0-11	22	4.0 x 22.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182
SSP22-5.0-11	22	5.0 x 22.0	11	3 x 5	1.00 x 36 x 4	11	18.5	13.6	9.8	252
SSP22-5.0-7	22	5.0 x 22.0	7	3 x 5	1.00 x 36 x 4	11	30.2	23.2	17.8	337
SSP22-6.0-7	22	6.0 x 22.0	7	3 x 5	1.00 x 36 x 4	11.5	49	37.5	28	398
SSP24-4.0-7	24	4.0 x 24.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP24-5.0-11	24	5.0 x 24.0	11	3 x 5	1.00 x 36 x 4	11	15.2	10.8	7.4	268
SSP24-5.0-7	24	5.0 x 24.0	7	3 x 5	1.00 x 36 x 4	11	25.8	19.4	14.6	361
SSP24-6.0-7	24	6.0 x 24.0	7	3 x 5	1.00 x 36 x 4	11.5	42	31.5	23	428
SSP25-4.0-11	25	4.0 x 25.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182
SSP25-4.0-7	25	4.0 x 25.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP25-5.0-11	25	5.0 x 25.0	11	3 x 5	1.00 x 36 x 4	11	13.8	9.5	6.3	276
SSP25-5.0-7	25	5.0 x 25.0	7	3 x 5	1.00 x 36 x 4	11	23.8	17.7	13.1	373
SSP25-6.0-7	25	6.0 x 25.0	7	3 x 5	1.00 x 36 x 4	11.5	39	28.5	21	443
SSP26-4.0-7	26	4.0 x 26.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP26-5.0-11	26	5.0 x 26.0	11	3 x 5	1.00 x 36 x 4	11	12.4	8.3	5.2	284
SSP26-5.0-7	26	5.0 x 26.0	7	3 x 5	1.00 x 36 x 4	11	21.9	16.1	11.8	384
SSP26-6.0-7	26	6.0 x 26.0	7	3 x 5	1.00 x 36 x 4	11.5	35.5	25.5	18.5	457
SSP28-4.0-7	28	4.0 x 28.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP28-5.0-11	28	5.0 x 28.0	11	3 x 5	1.00 x 36 x 4	11	9.8	6.1	3.2	300
SSP28-5.0-7	28	5.0 x 28.0	7	3 x 5	1.00 x 36 x 4	11	18.4	13.2	9.2	408
SSP28-6.0-7	28	6.0 x 28.0	7	3 x 5	1.00 x 36 x 4	11.5	30	21.5	15	467
SSP30-4.0-7	30	4.0 x 30.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP30-5.0-11	30	5.0 x 30.0	11	3 x 5	1.00 x 36 x 4	11	6.5	3.5	1.2	315
SSP30-5.0-7	30	5.0 x 30.0	7	3 x 5	1.00 x 36 x 4	11	13.4	9.1	5.9	432
SSP30-6.0-7	30	6.0 x 30.0	7	3 x 5	1.00 x 36 x 4	11.5	27.5	19.9	14.1	512
SSP30-6.0-3	30	6.0 x 30.0	3	3 x 5	1.00 x 36 x 4	12	34.3	25.3	18.5	645
SSP35-5.0-7	35	5.0 x 35.0	7	3 x 5	1.00 x 36 x 4	11	7.2	3.7	1	491
SSP35-6.0-7	35	6.0 x 35.0	7	3 x 5	1.00 x 36 x 4	11.5	15	9.5	5.3	584
SSP35-6.0-3	35	6.0 x 35.0	3	3 x 5	1.00 x 36 x 4	12	19.7	13.2	8.2	739
SSP39-6.0-7	39	6.0 x 39.0	7	3 x 5	1.00 x 36 x 4	11.5	9.2	4.3	0.6	642
SSP39-6.0-3	39	6.0 x 39.0	3	3 x 5	1.00 x 36 x 4	12	13	7.4	3.1	814

**FINISHES**

**Standard**

**BRZ** Bronze  
**BLK** Black

**Galvanized**

**G** Galvanized

**K-KLAD**

**K813** Bronze  
**K821** Black

**K-KLAD Over Galvanizing**

**KZ13** Bronze  
**KZ21** Black

**Job Name:**Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase**Catalog Number:**SSP15-4.0-11-DM10-KIM AR-KIM  
PS-P

Notes:

**Type:****PSS1**

LEE07-6119

KW Industries

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GRY	Gray	<b>KIM LIGHTING PS-P (Platinum Silver)</b>	K841	Gray	KZ41	Gray
GRN	Green		K891	Green	KZ91	Green
WHT	White		K881	White	KZ81	White
P	Primed		K845	Natural Aluminum	KZ45	Natural Aluminum
NA	Natural Aluminum					

1 YEAR WARRANTY

5 YEAR WARRANTY

10 YEAR WARRANTY

**MOUNTING DESIGNATIONS****Tenon Mount**

2	2 3/8" x 4" TENON
3	2 7/8" x 4" TENON
3.5	3 1/2" x 6" TENON
4	4" x 6" TENON

**Drill Mount**

<b>DM10</b>	Drilled for 1 Luminaire
<b>DM2090</b>	Drilled for 2 Luminaires @ 90°
<b>DM2180</b>	Drilled for 2 Luminaires @ 180°
<b>DM3090</b>	Drilled for 3 Luminaires @ 90°
<b>DM4090</b>	Drilled for 4 Luminaires @ 90°

**Gain Mount**

<b>GMT4</b>	attachment for CXA
<b>GMT9</b>	attachment for CXASQ

**Open Mount**

<b>OT</b>	Open Top
<b>OTC</b>	Open Top includes Pole Cap

**OPTIONS**

There are numerous options that can be ordered. Please indicate these selections under the options column in the catalog number. Example: CPL-WPR2-BC.

**Accessories**

<b>BC</b>	Base Cover
<b>CPL</b>	Threaded Coupling*
<b>NPL</b>	Threaded Nipple*
<b>WPR2</b>	Weatherproof Duplex Receptacle* <sup>1</sup>
<b>WPRP</b>	Festoon Opening <sup>1</sup>

**Optional Handholes**

<b>58HH</b>	5" x 8" Handhole*
<b>410HH</b>	4" x 10" Handhole*

**Extra Handholes**

<b>XHH</b>	Extra Handhole*
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**Embedment Pole Options**

<b>E</b>	Embedded Pole
<b>GS</b>	Ground Sleeve
<b>CTE</b>	Coal Tar Epoxy

**For Embedment Poles:**

Recommended Mounting Height	Recommended Embedment Depth
Less than 20'	4'
20' - 33'	6'
Greater than 33'	7'

**Additional Simplex**

<b>1S</b>	1 @ 0° *
<b>2S</b>	2 @ 180° *
<b>3S</b>	3 @ 90° *
<b>4S</b>	4 @ 90° *

Greater embedment depths are available upon request.  
Embedment poles greater than 35' are not available.

\* Please advise size, location, and orientation. (Handholes are restricted by size of pole shaft diameter)

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**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP20-4.0-11-DM2180-KIM AR-  
KIM PS-P  
Notes:

Type:

**PSS2**

LEE07-6119

KW Industries

Page 1 of 4

## SSP Square Non-Tapered Steel Poles

### Pole Shaft

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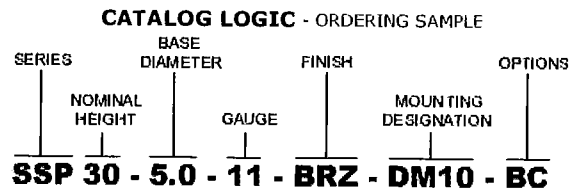
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When ordering KW lighting standards, mounting adaptors and accessories, be sure to specify the complete catalog number. Our catalog numbers reflect the precise specifications of the item ordered to ensure our customers will receive the product which meets their exact requirements.

The following explanation of the catalog numbers will be helpful in placing orders:



Catalog Number	Nominal Height	Pole Shaft	Gauge	Handhole Size	Anchor Bolt	Bolt Circle	80 MPH	90 MPH	100 MPH	Ship WT.
SSP10-4.0-11	10	4.0 x 10.0	11	3 x 5	0.75 x 17 x 3	8	42.1	33.5	27.1	87
SSP10-4.0-7	10	4.0 x 10.0	7	3 x 5	0.75 x 30 x 3	8	55	44	35.5	130
SSP10-5.0-11	10	5.0 x 10.0	11	3 x 5	1.00 x 36 x 4	11	56	44	34	151
SSP12-4.0-11	12	4.0 x 12.0	11	3 x 5	0.75 x 17 x 3	8	33.7	26.7	21.4	100
SSP12-4.0-7	12	4.0 x 12.0	7	3 x 5	0.75 x 30 x 3	8	47.5	37.3	29.8	150



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP20-4.0-11-DM2180-KIM AR-  
KIM PS-P  
Notes:

Type:

**PSS2**

LEE07-6119

KW Industries

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SSP12-5.0-11	12	5.0 x 12.0	11	3 x 5	1.00 x 36 x 4	11	49	36	29	156
SSP14-4.0-11	14	4.0 x 14.0	11	3 x 5	0.75 x 17 x 3	8	27.4	21.5	17.1	113
SSP14-4.0-7	14	4.0 x 14.0	7	3 x 5	0.75 x 30 x 3	8	40	31	24.5	170
SSP14-5.0-11	14	5.0 x 14.0	11	3 x 5	1.00 x 36 x 4	11	40	30	23	184
SSP14-5.0-7	14	5.0 x 14.0	7	3 x 5	1.00 x 36 x 4	11	65	52	41.5	242
SSP15-4.0-11	15	4.0 x 15.0	11	3 x 5	0.75 x 17 x 3	8	20.7	16.1	12.6	119
SSP15-4.0-7	15	4.0 x 15.0	7	3 x 5	0.75 x 30 x 3	8	30.9	24.4	19.5	172
SSP15-5.0-11	15	5.0 x 15.0	11	3 x 5	1.00 x 36 x 4	11	36	27.5	21	192
SSP15-5.0-7	15	5.0 x 15.0	7	3 x 5	1.00 x 36 x 4	11	59	46.5	37	254
SSP16-4.0-11	16	4.0 x 16.0	11	3 x 5	0.75 x 17 x 3	8	18.7	14.4	11.2	125
SSP16-4.0-7	16	4.0 x 16.0	7	3 x 5	0.75 x 30 x 3	8	27.2	20.7	16	210
SSP16-5.0-11	16	5.0 x 16.0	11	3 x 5	1.00 x 36 x 4	11	33.5	25	18	201
SSP16-5.0-7	16	5.0 x 16.0	7	3 x 5	1.00 x 36 x 4	11	54	43	34	266
SSP18-4.0-11	18	4.0 x 18.0	11	3 x 5	0.75 x 17 x 3	8	15.2	11.5	8.7	138
SSP18-4.0-7	18	4.0 x 18.0	7	3 x 5	0.75 x 30 x 3	8	27.2	20.7	16	210
SSP18-5.0-11	18	5.0 x 18.0	11	3 x 5	1.00 x 36 x 4	11	27	19.5	15	218
SSP18-5.0-7	18	5.0 x 18.0	7	3 x 5	1.00 x 36 x 4	11	46	36	28	291
SSP20-4.0-11	20	4.0 x 20.0	11	3 x 5	0.75 x 17 x 3	8	12.3	9	6.5	151
SSP20-4.0-7	20	4.0 x 20.0	7	3 x 5	0.75 x 30 x 3	8	19.6	15	11.5	219
SSP20-5.0-11	20	5.0 x 20.0	11	3 x 5	1.00 x 36 x 4	11	22.2	16.8	12.6	235
SSP20-5.0-7	20	5.0 x 20.0	7	3 x 5	1.00 x 36 x 4	11	35.4	27.5	21.5	313
SSP20-6.0-7	20	6.0 x 20.0	7	3 x 5	1.00 x 36 x 4	11.5	56	42.5	33.5	368
SSP22-4.0-7	22	4.0 x 22.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP22-4.0-11	22	4.0 x 22.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182
SSP22-5.0-11	22	5.0 x 22.0	11	3 x 5	1.00 x 36 x 4	11	18.5	13.6	9.8	252
SSP22-5.0-7	22	5.0 x 22.0	7	3 x 5	1.00 x 36 x 4	11	30.2	23.2	17.8	337
SSP22-6.0-7	22	6.0 x 22.0	7	3 x 5	1.00 x 36 x 4	11.5	49	37.5	28	398
SSP24-4.0-7	24	4.0 x 24.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP24-5.0-11	24	5.0 x 24.0	11	3 x 5	1.00 x 36 x 4	11	15.2	10.8	7.4	268
SSP24-5.0-7	24	5.0 x 24.0	7	3 x 5	1.00 x 36 x 4	11	25.8	19.4	14.6	361
SSP24-6.0-7	24	6.0 x 24.0	7	3 x 5	1.00 x 36 x 4	11.5	42	31.5	23	428
SSP25-4.0-11	25	4.0 x 25.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182
SSP25-4.0-7	25	4.0 x 25.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP25-5.0-11	25	5.0 x 25.0	11	3 x 5	1.00 x 36 x 4	11	13.8	9.5	6.3	276
SSP25-5.0-7	25	5.0 x 25.0	7	3 x 5	1.00 x 36 x 4	11	23.8	17.7	13.1	373
SSP25-6.0-7	25	6.0 x 25.0	7	3 x 5	1.00 x 36 x 4	11.5	39	28.5	21	443
SSP26-4.0-7	26	4.0 x 26.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP26-5.0-11	26	5.0 x 26.0	11	3 x 5	1.00 x 36 x 4	11	12.4	8.3	5.2	284
SSP26-5.0-7	26	5.0 x 26.0	7	3 x 5	1.00 x 36 x 4	11	21.9	16.1	11.8	384
SSP26-6.0-7	26	6.0 x 26.0	7	3 x 5	1.00 x 36 x 4	11.5	35.5	25.5	18.5	457
SSP28-4.0-7	28	4.0 x 28.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP28-5.0-11	28	5.0 x 28.0	11	3 x 5	1.00 x 36 x 4	11	9.8	6.1	3.2	300
SSP28-5.0-7	28	5.0 x 28.0	7	3 x 5	1.00 x 36 x 4	11	18.4	13.2	9.2	408
SSP28-6.0-7	28	6.0 x 28.0	7	3 x 5	1.00 x 36 x 4	11.5	30	21.5	15	487
SSP30-4.0-7	30	4.0 x 30.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP30-5.0-11	30	5.0 x 30.0	11	3 x 5	1.00 x 36 x 4	11	6.5	3.5	1.2	315
SSP30-5.0-7	30	5.0 x 30.0	7	3 x 5	1.00 x 36 x 4	11	13.4	9.1	5.9	432
SSP30-6.0-7	30	6.0 x 30.0	7	3 x 5	1.00 x 36 x 4	11.5	27.5	19.9	14.1	512
SSP30-6.0-3	30	6.0 x 30.0	3	3 x 5	1.00 x 36 x 4	12	34.3	25.3	18.5	645
SSP35-5.0-7	35	5.0 x 35.0	7	3 x 5	1.00 x 36 x 4	11	7.2	3.7	1	491
SSP35-6.0-7	35	6.0 x 35.0	7	3 x 5	1.00 x 36 x 4	11.5	15	9.5	5.3	584
SSP35-6.0-3	35	6.0 x 35.0	3	3 x 5	1.00 x 36 x 4	12	19.7	13.2	8.2	739
SSP39-6.0-7	39	6.0 x 39.0	7	3 x 5	1.00 x 36 x 4	11.5	9.2	4.3	0.6	642
SSP39-6.0-3	39	6.0 x 39.0	3	3 x 5	1.00 x 36 x 4	12	13	7.4	3.1	814

**FINISHES****Standard**

BRZ Bronze

BLK Black

**Galvanized**

G Galvanized

**K-KLAD**

K813 Bronze

K821 Black

**K-KLAD Over Galvanizing**

KZ13 Bronze

KZ21 Black



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP20-4.0-11-DM2180-KIM AR-  
KIM PS-P  
Notes:

**Type:**  
**PSS2**

LEE07-6119

KW Industries

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<b>GRY</b> Gray	<b>KIM LIGHTING PS-P (Platinum Silver)</b>	<b>K841</b> Gray	<b>KZ41</b> Gray
<b>GRN</b> Green		<b>K891</b> Green	<b>KZ91</b> Green
<b>WHT</b> White		<b>K881</b> White	<b>KZ81</b> White
<b>P</b> Prinned		<b>K845</b> Natural Aluminum	<b>KZ45</b> Natural Aluminum
<b>NA</b> Natural Aluminum			

1 YEAR WARRANTY

5 YEAR WARRANTY

10 YEAR WARRANTY

**MOUNTING DESIGNATIONS**

<b>Tenon Mount</b>		<b>Drill Mount</b>	
<b>2</b>	2 3/8" x 4" TENON	<b>DM10</b>	Drilled for 1 Luminaire
<b>3</b>	2 7/8" x 4" TENON	<b>DM2090</b>	Drilled for 2 Luminaires @ 90°
<b>3.5</b>	3 1/2" x 6" TENON	<b>DM2180</b>	Drilled for 2 Luminaires @ 180°
<b>4</b>	4" x 6" TENON	<b>DM3090</b>	Drilled for 3 Luminaires @ 90°
		<b>DM4090</b>	Drilled for 4 Luminaires @ 90°
<b>Gain Mount</b>		<b>Open Mount</b>	
<b>GMT4</b>	attachment for CXA	<b>OT</b>	Open Top
<b>GMT9</b>	attachment for CXASQ	<b>OTC</b>	Open Top includes Pole Cap

**OPTIONS**

There are numerous options that can be ordered. Please indicate these selections under the options column in the catalog number. Example: CPL-WPR2-BC.

**Accessories**

<b>BC</b>	Base Cover
<b>CPL</b>	Threaded Coupling*
<b>NPL</b>	Threaded Nipple*
<b>WPR2</b>	Weatherproof Duplex Receptacle**
<b>WPRP</b>	Festoon Opening**

**Optional Handholes**

<b>58HH</b>	5" x 8" Handhole*
<b>410HH</b>	4" x 10" Handhole*

**Extra Handholes**

<b>XHH</b>	Extra Handhole*
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**Embedment Pole Options**

<b>E</b>	Embedded Pole
<b>GS</b>	Ground Sleeve
<b>CTE</b>	Coal Tar Epoxy

**For Embedment Poles:**

Recommended Mounting Height	Recommended Embedment Depth
Less than 20'	4'
20' - 33'	6'
Greater than 33'	7'

**Additional Simplex**

<b>1S</b>	1 @ 0° *
<b>2S</b>	2 @ 180° *
<b>3S</b>	3 @ 90° *
<b>4S</b>	4 @ 90° *

Greater embedment depths are available upon request.  
Embedment poles greater than 35' are not available.

\* Please advise size, location, and orientation. (Handholes are restricted by size of pole shaft diameter)

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP20-4.0-11-DM10-KIM AR KIM  
PS-P-CPL  
Notes:

**Type:**  
**PSS3**

LEE07-6119

KW Industries

Page 1 of 4

## SSP Square Non-Tapered Steel Poles

### Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196"), 7 gauge (0.1793"), or 3 gauge (0.2391"). The pole shaft material shall conform to ASTM A-500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly square in cross-section with flat sides, small corner radii and excellent torsional properties.

### Base Plate

The anchor base is fabricated from structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base telescopes the pole shaft and is circumferentially welded top and bottom. All welds are performed in accordance with the American Welding Society specification AWS D1.1, latest edition.

### Anchor Bolts

Anchor bolts are fabricated from commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 55,000 psi. Four properly sized anchor bolts, each with two regular hex nuts and washers, are furnished and shipped with all poles unless otherwise specified. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches in accordance with ASTM A-153. Fully galvanized anchor bolts are available upon request.

### Handhole

An oval reinforced gasketed handhole, having a nominal 3" x 5" or 4" x 6-1/2" inside opening, located 1'-6" above base, is standard on all poles. Optional 5" x 8" and 4" x 10" handholes are available (see options). A grounding provision is located inside the handhole ring.

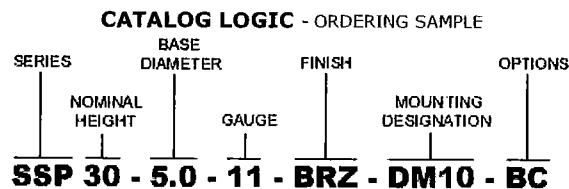
### Finishes

The **Standard Finish** is a polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils for all color finishes. **Hot dip Galvanized** finish to a ASTM A-123 specification or primed finish is also available. For optional finishes, see **K-KLAD** and **K-KLAD Over Galvanizing**.

### HOW TO ORDER

When ordering KW lighting standards, mounting adaptors and accessories, be sure to specify the complete catalog number. Our catalog numbers reflect the precise specifications of the item ordered to ensure our customers will receive the product which meets their exact requirements.

The following explanation of the catalog numbers will be helpful in placing orders:



Catalog Number	Nominal Height	Pole Shaft	Gauge	Handhole Size	Anchor Bolt	Bolt Circle	80 MPH	90 MPH	100 MPH	Ship WT.
SSP10-4.0-11	10	4.0 x 10.0	11	3 x 5	0.75 x 17 x 3	8	42.1	33.5	27.1	87
SSP10-4.0-7	10	4.0 x 10.0	7	3 x 5	0.75 x 30 x 3	8	55	44	35.5	130
SSP10-5.0-11	10	5.0 x 10.0	11	3 x 5	1.00 x 36 x 4	11	58	44	34	151
SSP12-4.0-11	12	4.0 x 12.0	11	3 x 5	0.75 x 17 x 3	8	33.7	26.7	21.4	100
SSP12-4.0-7	12	4.0 x 12.0	7	3 x 5	0.75 x 30 x 3	8	47.5	37.3	29.8	150



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP20-4.0-11-DM10-KIM AR KIM  
PS-P-CPL  
**Notes:**

Type:

**PSS3**

LEE07-6119

KW Industries

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SSP12-5.0-11	12	5.0 x 12.0	11	3 x 5	1.00 x 36 x 4	11	49	38	29	158
SSP14-4.0-11	14	4.0 x 14.0	11	3 x 5	0.75 x 17 x 3	8	27.4	21.5	17.1	113
SSP14-4.0-7	14	4.0 x 14.0	7	3 x 5	0.75 x 30 x 3	8	40	31	24.5	170
SSP14-5.0-11	14	5.0 x 14.0	11	3 x 5	1.00 x 36 x 4	11	40	30	23	164
SSP14-5.0-7	14	5.0 x 14.0	7	3 x 5	1.00 x 36 x 4	11	65	52	41.5	242
SSP15-4.0-11	15	4.0 x 15.0	11	3 x 5	0.75 x 17 x 3	8	20.7	16.1	12.6	119
SSP15-4.0-7	15	4.0 x 15.0	7	3 x 5	0.75 x 30 x 3	8	30.9	24.4	19.6	172
SSP15-5.0-11	15	5.0 x 15.0	11	3 x 5	1.00 x 36 x 4	11	36	27.5	21	192
SSP15-5.0-7	15	5.0 x 15.0	7	3 x 5	1.00 x 36 x 4	11	59	46.5	37	254
SSP16-4.0-11	16	4.0 x 16.0	11	3 x 5	0.75 x 17 x 3	8	18.7	14.4	11.2	125
SSP16-4.0-7	16	4.0 x 16.0	7	3 x 5	0.75 x 30 x 3	8	27.2	20.7	16	210
SSP16-5.0-11	16	5.0 x 16.0	11	3 x 5	1.00 x 36 x 4	11	33.5	25	18	201
SSP16-5.0-7	16	5.0 x 16.0	7	3 x 5	1.00 x 36 x 4	11	54	43	34	266
SSP18-4.0-11	18	4.0 x 18.0	11	3 x 5	0.75 x 17 x 3	8	15.2	11.5	8.7	138
SSP18-4.0-7	18	4.0 x 18.0	7	3 x 5	0.75 x 30 x 3	8	27.2	20.7	16	210
SSP18-5.0-11	18	5.0 x 18.0	11	3 x 5	1.00 x 36 x 4	11	27	19.5	15	218
SSP18-5.0-7	18	5.0 x 18.0	7	3 x 5	1.00 x 36 x 4	11	46	36	28	291
SSP20-4.0-11	20	4.0 x 20.0	11	3 x 5	0.75 x 17 x 3	8	12.3	9	6.5	151
SSP20-4.0-7	20	4.0 x 20.0	7	3 x 5	0.75 x 30 x 3	8	19.6	15	11.5	219
SSP20-5.0-11	20	5.0 x 20.0	11	3 x 5	1.00 x 36 x 4	11	22.2	16.8	12.6	235
SSP20-5.0-7	20	5.0 x 20.0	7	3 x 5	1.00 x 36 x 4	11	35.4	27.5	21.5	313
SSP20-6.0-7	20	6.0 x 20.0	7	3 x 5	1.00 x 36 x 4	11.5	56	42.5	33.5	368
SSP22-4.0-7	22	4.0 x 22.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP22-4.0-11	22	4.0 x 22.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182
SSP22-5.0-11	22	5.0 x 22.0	11	3 x 5	1.00 x 36 x 4	11	18.5	13.6	9.8	252
SSP22-5.0-7	22	5.0 x 22.0	7	3 x 5	1.00 x 36 x 4	11	30.2	23.2	17.8	337
SSP22-6.0-7	22	6.0 x 22.0	7	3 x 5	1.00 x 36 x 4	11.5	49	37.5	28	398
SSP24-4.0-7	24	4.0 x 24.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP24-5.0-11	24	5.0 x 24.0	11	3 x 5	1.00 x 36 x 4	11	15.2	10.8	7.4	268
SSP24-5.0-7	24	5.0 x 24.0	7	3 x 5	1.00 x 36 x 4	11	25.8	19.4	14.6	361
SSP24-6.0-7	24	6.0 x 24.0	7	3 x 5	1.00 x 36 x 4	11.5	42	31.5	23	428
SSP25-4.0-11	25	4.0 x 25.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182
SSP25-4.0-7	25	4.0 x 25.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP25-5.0-11	25	5.0 x 25.0	11	3 x 5	1.00 x 36 x 4	11	13.8	9.5	6.3	276
SSP25-5.0-7	25	5.0 x 25.0	7	3 x 5	1.00 x 36 x 4	11	23.8	17.7	13.1	373
SSP25-6.0-7	25	6.0 x 25.0	7	3 x 5	1.00 x 36 x 4	11.5	39	28.5	21	443
SSP26-4.0-7	26	4.0 x 26.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP26-5.0-11	26	5.0 x 26.0	11	3 x 5	1.00 x 36 x 4	11	12.4	8.3	5.2	284
SSP26-5.0-7	26	5.0 x 26.0	7	3 x 5	1.00 x 36 x 4	11	21.9	16.1	11.8	384
SSP26-6.0-7	26	6.0 x 26.0	7	3 x 5	1.00 x 36 x 4	11.5	35.5	25.5	18.5	457
SSP28-4.0-7	28	4.0 x 28.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP28-5.0-11	28	5.0 x 28.0	11	3 x 5	1.00 x 36 x 4	11	9.8	6.1	3.2	300
SSP28-5.0-7	28	5.0 x 28.0	7	3 x 5	1.00 x 36 x 4	11	18.4	13.2	9.2	408
SSP28-6.0-7	28	6.0 x 28.0	7	3 x 5	1.00 x 36 x 4	11.5	30	21.5	15	487
SSP30-4.0-7	30	4.0 x 30.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP30-5.0-11	30	5.0 x 30.0	11	3 x 5	1.00 x 36 x 4	11	6.5	3.5	1.2	315
SSP30-5.0-7	30	5.0 x 30.0	7	3 x 5	1.00 x 36 x 4	11	13.4	9.1	5.9	432
SSP30-6.0-7	30	6.0 x 30.0	7	3 x 5	1.00 x 36 x 4	11.5	27.5	19.9	14.1	512
SSP30-6.0-3	30	6.0 x 30.0	3	3 x 5	1.00 x 36 x 4	12	34.3	25.3	10.5	645
SSP35-5.0-7	35	5.0 x 35.0	7	3 x 5	1.00 x 36 x 4	11	7.2	3.7	1	491
SSP35-6.0-7	35	6.0 x 35.0	7	3 x 5	1.00 x 36 x 4	11.5	15	9.5	5.3	584
SSP35-6.0-3	35	6.0 x 35.0	3	3 x 5	1.00 x 36 x 4	12	19.7	13.2	8.2	739
SSP39-6.0-7	39	6.0 x 39.0	7	3 x 5	1.00 x 36 x 4	11.5	9.2	4.3	0.6	642
SSP39-6.0-3	39	6.0 x 39.0	3	3 x 5	1.00 x 36 x 4	12	13	7.4	3.1	814

**FINISHES****Standard**

BRZ Bronze

BLK Black

**Galvanized**

G Galvanized

**K-KLAD**

K813 Bronze

K821 Black

**K-KLAD Over Galvanizing**

K213 Bronze

K221 Black

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP20-4.0-11-DM10-KIM AR KIM  
PS-P-CPL  
Notes:

**Type:**  
**PSS3**

LEE07-8119

KW Industries

Page 3 of 4

<b>GRY</b> Gray	<b>KIM LIGHTING PS-P (Platinum Silver)</b>	<b>K841</b> Gray	<b>KZ41</b> Gray
<b>GRN</b> Green		<b>K891</b> Green	<b>KZ91</b> Green
<b>WHT</b> White		<b>K881</b> White	<b>KZ81</b> White
<b>P</b> Primed		<b>K845</b> Natural Aluminum	<b>KZ45</b> Natural Aluminum
<b>NA</b> Natural Aluminum			

1 YEAR WARRANTY

5 YEAR WARRANTY

10 YEAR WARRANTY

**MOUNTING DESIGNATIONS**

**Tenon Mount**

- 2** 2 3/8 " x 4 " TENON
- 3** 2 7/8 " x 4 " TENON
- 3.5** 3 1/2 " x 6 " TENON
- 4** 4 " x 6 " TENON

**Drill Mount**

- DM10** Drilled for 1 Luminaire
- DM2090** Drilled for 2 Luminaires @ 90°
- DM2180** Drilled for 2 Luminaires @ 180°
- DM3090** Drilled for 3 Luminaires @ 90°
- DM4090** Drilled for 4 Luminaires @ 90°

**Gain Mount**

- GMT4** attachment for CXA
- GMT9** attachment for CXASQ

**Open Mount**

- OT** Open Top
- OTC** Open Top includes Pole Cap

**OPTIONS**

There are numerous options that can be ordered. Please indicate these selections under the options column in the catalog number. Example: CPL-WPR2-BC.

**Accessories**

- BC** Base Cover
- CPL** Threaded Coupling\*
- NPL** Threaded Nipple\*
- WPR2** Weatherproof Duplex Receptacle\* †
- WPRP** Festoon Opening\* †

**Optional Handholes**

- 5BHH** 5 " x 8 " Handhole\*
- 410HH** 4 " x 10 " Handhole\*

**Extra Handholes**

- XHH** Extra Handhole\*

**Embedment Pole Options**

- E** Embedded Pole
- GS** Ground Sleeve
- CTE** Coal Tar Epoxy

**For Embedment Poles:**

Recommended Mounting Height	Recommended Embedment Depth
Less than 20'	4'
20' - 33'	6'
Greater than 33'	7'

**Additional Simplex**

- 1S** 1 @ 0° \*
- 2S** 2 @ 180° \*
- 3S** 3 @ 90° \*
- 4S** 4 @ 90° \*

Greater embedment depths are available upon request. Embedment poles greater than 35' are not available.

\* Please advise size, location, and orientation. (Handholes are restricted by size of pole shaft diameter)

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
PSM FACTORY INSTALLED IN  
FIXTURES ABOVE  
Notes:

**Type:**  
**GTD**  
LEE07-6118



**Side-Lite™**

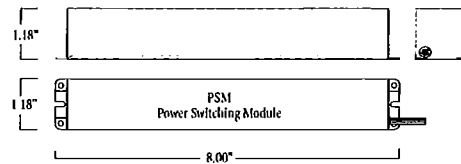
P.O. Box 1769 • New Port Richey, FL 34656-1769  
TOLL-FREE 888-900-7544 • FAX 727-848-0678  
Order Entry / Customer Service • TOLL-FREE  
800-480-4848 • FAX 662-349-0769  
www.sidelite.com

# PSM

**POWER SWITCHING MODULE**  
FOR GENERATOR-SUPPLIED OR CENTRAL  
INVERTER-SUPPLIED SYSTEMS

### Application

The Side-Lite Power Switching Module (PSM) works with a generator or central inverter system and a fluorescent fixture to provide emergency lighting regardless of fixture wall switch position (on/off). The PSM is used to bypass the fixture wall switch, permitting the generator or central inverter system to activate designated switchable fixtures. One PSM is installed per fixture. The device may be used with a multi-ballast arrangement if the ballast current requirements do not exceed the maximum PSM load rating of 3 amps. The PSM consists of relay switching circuitry and fusing in one compact galvanized steel case and is designed for use in indoor and damp locations.

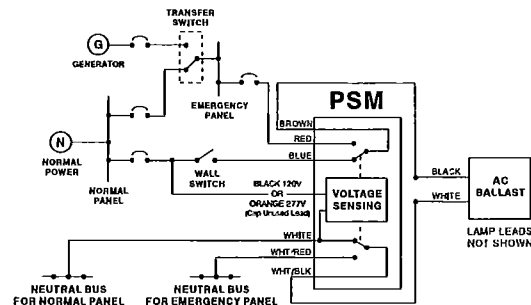


### Operation

When normal power fails, the PSM immediately and automatically switches the AC input power connection to an unswitched generator-supplied or central inverter system-supplied lighting circuit, bringing on designated switchable lighting fixtures. Routine maintenance is not required, however, *all* life safety unit equipment should be checked periodically. Please note that a test switch is not provided with the PSM. The PSM is considered auxiliary lighting equipment under UL 924, and neither UL nor the NEC requires the use of a test switch with this type of equipment.

### Installation

As with other Side-Lite unit equipment, the PSM does not affect normal fixture operation. It comes fully assembled and ready to install inside the fixture ballast channel. The PSM may be installed on top of the fixture by using the wire bundle covers, S-TWBC (sold separately). The PSM may be remotely located up to 50 feet, but this type of installation requires an enclosure and/or other hardware not included with the PSM. Contact your Side-Lite representative or the factory for details. In addition, to available wiring, the PSM requires an unswitched, direct connection to a generator-supplied or central inverter system-supplied emergency panel and an unswitched source on the same branch circuit as the switched supply. Please see the diagram for more information.



### UL Listed

The PSM has been approved by Underwriters Laboratories (UL 924) and is UL Listed for factory or field installation.



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
PSM FACTORY INSTALLED IN  
FIXTURES ABOVE  
Notes:

**Type:**  
**GTD**

LEE07-6119

# PSM



## Side-Lite™

### POWER SWITCHING MODULE

FOR GENERATOR-SUPPLIED OR CENTRAL  
INVERTER-SUPPLIED SYSTEMS

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Order Entry / Customer Service • TOLL-FREE  
800-480-4848 • FAX 662-349-0769  
[www.sidelite.com](http://www.sidelite.com)

#### Specification

The Side-Lite Power Switching Module (PSM) used in conjunction with a standard fluorescent fixture and an auxiliary generator or central inverter system shall provide emergency lighting. Should normal power fail, the module shall switch the AC input power connection to an unswitched generator-supplied or central inverter system-supplied lighting circuit, thereby allowing the generator or central inverter system to bring on designated switchable fixtures regardless of fixture wall switch position (on/off). The PSM shall consist of fusing and relay switching circuitry contained in one 8" x 1.18" x 1.18" galvanized steel case. The module shall have all inputs fused to 3 amps maximum; shall operate at 120 or 277 VAC; and shall draw 280 mA and 1.6 Watts during normal operation. The PSM shall be UL Listed for installation inside, on top of or remote from the fixture and shall comply with the current NEC. The module shall be warranted for five (5) full years from the date of purchase and shall be assembled in the USA.

#### Warranty

The PSM is warranted for five (5) full years from the date of purchase. The Side-Lite warranty covers only properly installed Power Switching Modules used under normal conditions from the date of purchase. For the full warranty period, Side-Lite will, at its option, repair or replace without charge a defective unit, provided it is returned to the factory transportation prepaid and our inspection determines it to be defective under terms of the warranty. Repair or replacement, as stated above, shall constitute the purchaser's exclusive warranty, which does not extend to transportation, installation, labor or any other charges; nor does it apply to any equipment of another manufacturer used in conjunction with the Side-Lite unit.

#### Product Summary

<b>UL LISTED</b> Factory or Field Installation	<b>Recommended Applications</b> Auditoriums Classrooms Other locations with generator-supplied (or central inverter system-supplied) lighting	<b>AC Input Power Rating</b> 1.6 Watts	<b>Dimensions</b> 8" x 1.18" x 1.18" (204 mm x 30 mm x 30 mm) Mounting Center 7.60" (193 mm)
<b>Full Warranty</b> 5 Years (NOT pro-rata)		<b>Fusing</b> All inputs fused to 3 A Maximum	<b>Weight</b> 0.50 lbs. (0.23 kg)
<b>Dual Input Voltage</b> 120/277 VAC, 60 Hz	<b>AC Input Current</b> 280 mA	<b>Temperature Rating (Ambient)</b> 0°C to +50°C 32°F to 122°F	

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
OMNI-DT2000-RP

Notes:

**Type:**  
**2000 SQ FT**

LEE07-6119



**Building Automation, Inc.**

## OMNI-DT/OMNI-DT-RP (Option RP) *Dual Technology Ceiling Mount Sensor*

### KEY FEATURES

- INTELLIGENT – Continuously Adapting sensor.
- Ultrasonic & Infrared Sensing
- Simple, Fast Installation
- Snap-Lock Sensor, Ceiling Mounting
- Excellent false tripping immunity
- Non-Volatile Memory: settings saved in protected memory are not lost during power outages.
- Optional Photocell Control and Relay
- 500 to 2000 sq. ft. mounted at 8'
- Multiple Sensor and Power Pack Connections
- 24VDC, Class 2 low voltage wiring
- Designed & Manufactured in USA



### GENERAL OPERATION

Occupancy sensors have two tasks; keeping the lights on while the room is occupied and keeping the lights off when unoccupied. Hubbell Building Automation's intelligent, continuously adapting sensor technology eliminates manual sensitivity and timer adjustments during installation and over the life of the product. The self-adapting microprocessor constantly assures maintenance free "Install and Forget" operation.

The OMNI-DT is a ceiling mount occupancy sensor that combines both ultrasonic (US) and passive infrared (PIR) sensing. Hubbell Building Automation's self-adapting OMNI-DT addresses areas with complex environments that are difficult to control with single technology sensors. The internal microprocessor analyzes the information from both the US and PIR technologies and determines the optimum setting to use in order to properly cover the space. The automatic timer and automatic sensitivity features of the Omni-DT work independently to prevent "false-offs" and

"false-ons." When the sensor detects motion immediately after it turns the lights out, a "false-off" is detected, timer and sensitivity are increased. If the sensor turns the lights on, but detects no immediate follow-up motion, "false-on" is detected, timer and sensitivity are decreased. The "Intelligent software" algorithm determines, for example, if the lights are staying on due to adjacent hallway traffic and responds by adapting its program to compensate for the false trigger and turns out the lights. The OMNI-DT is the sensor replacement combining both the superior minor motion detection of ultrasonic with the excellent long-range major motion detection of passive infrared.

In addition, the OMNI-DT has an optional photocell, which increases energy savings when engaged by preventing the lights from turning on when there is sufficient natural light. This feature is factory disabled and may be activated by the installer.

Designed specifically to meet the challenges found in rooms where tasks entail minor motion for long periods of time. Ultrasonic (doppler shift) motion detection gives maximum sensitivity yet can be vulnerable to false triggering from air conditioning currents, corridor activity and movement of inanimate objects. Infrared motion detection gives immunity to these false triggers, but lacks sensitivity at greater distances. Hubbell Building Automation's intelligent software reads the environment and adapts to meet these specific challenges. Should the room suddenly be reallocated into a copy room with high traffic patterns, the intelligent software will adapt as needed to provide the correct time out for the

*The OMNI-DT is the sensor replacement combining both the superior minor motion detection of ultrasonic with the excellent long-range major motion detection of passive infrared.*



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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
OMNI-DT2000-RP

Notes:

**Type:**  
**2000 SQ FT**

LEE07-6119

lights. Using PIR sensing (high error immunity) with US (high sensitivity) provides good performance. Conventional ceiling mounted dual tech sensors use a simple formula for operation: BOTH for ON, EITHER for KEEP ON. This method requires that both sensors receive fixed-strength signals for ON or a single fixed-level signal for KEEP ON. The OMNI-DT uses a more sophisticated method called a composite signal where the signal strengths are added together to form a composite sum. The advantage of this method is that a weak PIR signal plus a strong US signal will turn the lights on because the sum is enough. The installer need not worry that the signal level be balanced for reliable lights on. This technology eliminates time consuming adjustments and callbacks found in non-intelligent sensors.

The sensor requires a 24V DC, MP Series power pack. The mounting base, provided with the sensor, allows quick and easy mounting.

**ADAPTIVE FUNCTIONS**

The OMNI constantly analyzes and adapts to changing conditions:

Period	Time	Action
Installation	60 minutes	Timer automatically resets from Test (8 seconds) to 8 minutes.
Learning	Four weeks	1. Response to Error Conditions: (false-ons, false offs) 2. Air current adaptation 3. Timer optimization

**Adjustments Made:**

- Ultrasonic sensitivity
- Infrared sensitivity
- Timer
- Air current threshold

Post learning	After	1. 24 hour occupancy periods learned (circadian)
Occupancy	Four weeks	2. Weekly occupancy periods learned
Periods (Circadian)		

**Adjustments Made:**

- a. Generally occupied periods: Threshold+High Sensivity mode
- b. Generally unoccupied periods: Threshold=Miser mode

**SPECIFICATIONS**

**LED Lamp:** Red Infrared motion, Green Ultrasonic motion

**Construction:** Two ultrasonic transmitters and two narrow bandwidth receivers each 16mm in diameter. Frequency — Crystal controlled to ±.005%. Transducers — Oriented north and south (DT2000 only, others use single pairs), angled 30° down from horizontal. Housing — Rugged, high-impact, injection molded plastic KJB ABS Cyolac (UL-945VA)

flame class rating, UV inhibitors. Color-coded leads are 6"

**Size & Weight:** 4.5" dia., 1.5" height; 5 oz. (114 mm dia., 38 mm height; 142 g.)

**Color:** White.

**Power**

**Requirements:** 24 VDC, 33 mA

(use MP-series power pack.)

**Timer Setting:** Automatic - 8 min. to 32 min.;

test mode - 8 seconds

**Output:**

24 VDC active high logic control signal with short circuit protection and optional dry contact (see -RP option).

**Operating**

**Environment:** 32°F to 104°F (0°C to 40°C); 0% to 95% non-condensing, relative humidity, For indoor use only.

**RP Option:**

Relay and Photocell Included (both). Relay: NO + NC contacts, 500ma rated @ 24vdc, three wire, isolated relay. Photocell, 0-1000 Lux adjustable.

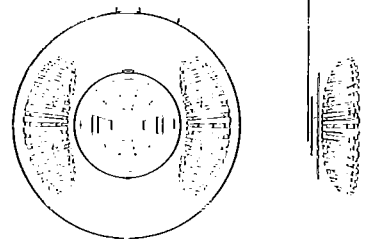
**Warranty:**

5 years limited.

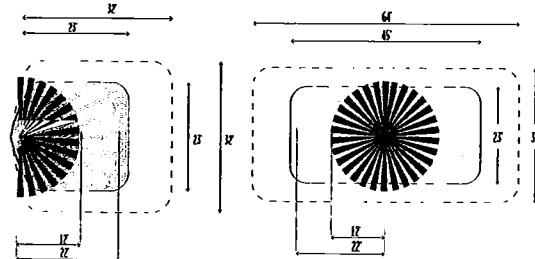
**MODELS**

Cat. No.	Color	Coverage	Application
OMNI-DT500	Off White	500 sq. ft.	Private Office
OMNI-DT500-RP	Off White	500 sq. ft.	Private Office
OMNI-DT1000	Off White	1000 sq. ft.	Open Office
OMNI-DT1000-RP	Off White	1000 sq. ft.	Open Office
OMNI-DT2000	Off White	2000 sq. ft.	Open Office
OMNI-DT2000-RP	Off White	2000 sq. ft.	Open Office

**RANGE DIAGRAM**



**ORTHOGRAPHIC PROJECTION**




DT-1000 Range Diagram

DT-500 Range Pattern is not provided

DT-2000 Range Diagram



Submitted by Leesman Sales	<b>Job Name:</b> Cincinnati Public Schools - Roselawn Condon FDL Beacon Purchase	<b>Catalog Number:</b> OMNI-DT1000-RP	<b>Type:</b> <b>1000 SQ FT</b>
		<b>Notes:</b>	LEE07-6119



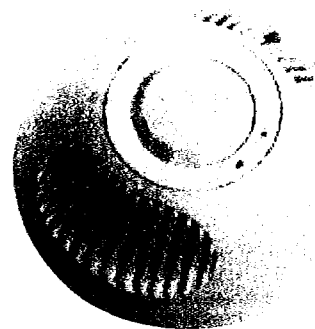
Building Automation, Inc.



## OMNI-DT/OMNI-DT-RP (Option RP) *Dual Technology Ceiling Mount Sensor*

### KEY FEATURES

- INTELLIGENT – Continuously Adapting sensor.
- Ultrasonic & Infrared Sensing
- Simple, Fast Installation
- Snap-Lock Sensor, Ceiling Mounting
- Excellent false tripping immunity
- Non-Volatile Memory: settings saved in protected memory are not lost during power outages.
- Optional Photocell Control and Relay
- 500 to 2000 sq. ft. mounted at 8'
- Multiple Sensor and Power Pack Connections
- 24VDC, Class 2 low voltage wiring
- Designed & Manufactured in USA



### GENERAL OPERATION

Occupancy sensors have two tasks; keeping the lights on while the room is occupied and keeping the lights off when unoccupied. Hubbell Building Automation's intelligent, continuously adapting sensor technology eliminates manual sensitivity and timer adjustments during installation and over the life of the product. The self-adapting microprocessor constantly assures maintenance free "Install and Forget" operation.

The OMNI-DT is a ceiling mount occupancy sensor that combines both ultrasonic (US) and passive infrared (PIR) sensing. Hubbell Building Automation's self-adapting OMNI-DT addresses areas with complex environments that are difficult to control with single technology sensors. The internal microprocessor analyzes the information from both the US and PIR technologies and determines the optimum setting to use in order to properly cover the space. The automatic timer and automatic sensitivity features of the Omni-DT work independently to prevent "false-offs" and

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In addition, the OMNI-DT has an optional photocell, which increases energy savings when engaged by preventing the lights from turning on when there is sufficient natural light. This feature is factory disabled and may be activated by the installer.

Designed specifically to meet the challenges found in rooms where tasks entail minor motion for long periods of time. Ultrasonic (doppler shift) motion detection gives maximum sensitivity yet can be vulnerable to false triggering from air conditioning currents, corridor activity and movement of inanimate objects. Infrared motion detection gives immunity to these false triggers, but lacks sensitivity at greater distances. Hubbell Building Automation's intelligent software reads the environment and adapts to meet these specific challenges. Should the room suddenly be reallocated into a copy room with high traffic patterns, the intelligent software will adapt as needed to provide the correct time out for the

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
OMNI-DT1000-RP

Notes:

**Type:**  
**1000 SQ FT**

LEE07-8119

lights. Using PIR sensing (high error immunity) with US (high sensitivity) provides good performance. Conventional ceiling mounted dual tech sensors use a simple formula for operation: BOTH for ON, EITHER for KEEP ON. This method requires that both sensors receive fixed-strength signals for ON or a single fixed-level signal for KEEP ON. The OMNI-DT uses a more sophisticated method called a composite signal where the signal strengths are added together to form a composite sum. The advantage of this method is that a weak PIR signal plus a strong US signal will turn the lights on because the sum is enough. The installer need not worry that the signal level be balanced for reliable lights on. This technology eliminates time consuming adjustments and callbacks found in non-intelligent sensors.

The sensor requires a 24V DC, MP Series power pack. The mounting base, provided with the sensor, allows quick and easy mounting.

**ADAPTIVE FUNCTIONS**

The OMNI constantly analyzes and adapts to changing conditions:

Period	Time	Action
Installation	60 minutes	Timer automatically resets from Test (8 seconds) to 8 minutes.
Learning	Four weeks	1. Response to Error Conditions: (false-ons, false offs) 2. Air current adaption 3. Timer optimization

Adjustments Made:  
Ultrasonic sensitivity  
Infrared sensitivity  
Timer  
Air current threshold

Post learning	After	1. 24 hour occupancy periods learned (circadian)
Occupancy	Four weeks	2. Weekly occupancy periods learned
Periods (Circadian)		

Adjustments Made:  
a. Generally occupied periods:  
Threshold+High Sensivity mode  
b. Generally unoccupied periods:  
Threshold=Miser mode

**SPECIFICATIONS**

**LED Lamp:** Red Infrared motion, Green Ultrasonic motion  
**Construction:** Two ultrasonic transmitters and two narrow bandwidth receivers each 16mm in diameter. Frequency — Crystal controlled to ±.005%. Transducers — Oriented north and south (DT2000 only, others use single pairs), angled 30° down from horizontal. Housing — Rugged, high-impact, injection molded plastic KJB ABS Cyolac (UL-945VA)

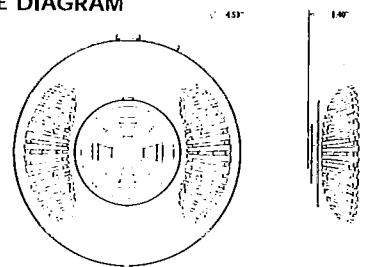
flame class rating, UV inhibitors. Color-coded leads are 6".

**Size & Weight:** 4.5" dia., 1.5" height; 5 oz. (114 mm dia., 38 mm height; 142 g.)  
**Color:** White.  
**Power Requirements:** 24 VDC, 33 mA (use MP-series power pack.)  
**Timer Setting:** Automatic - 8 min. to 32 min.; test mode - 8 seconds  
**Output:** 24 VDC active high logic control signal with short circuit protection and optional dry contact (see -RP option).  
**Operating Environment:** 32°F to 104°F (0°C to 40°C); 0% to 95% non-condensing, relative humidity. For indoor use only.  
**RP Option:** Relay and Photocell Included (both). Relay: NO + NC contacts, 500ma rated @ 24vdc, three wire, isolated relay. Photocell, 0-1000 Lux adjustable.  
**Warranty:** 5 years limited.

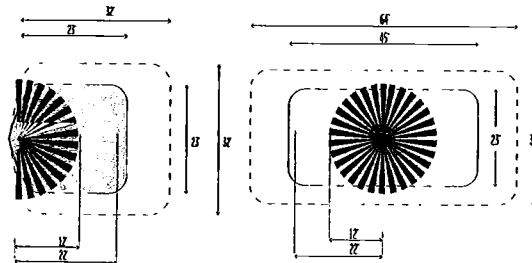
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<b>OMNI-DT1000-RP</b>	Off White	1000 sq. ft.	Open Office
OMNI-DT2000	Off White	2000 sq. ft.	Open Office
OMNI-DT2000-RP	Off White	2000 sq. ft.	Open Office

**RANGE DIAGRAM**



**ORTHOGRAPHIC PROJECTION**



DT-1000 Range Diagram  
DT-500 Range Pattern is not provided

DT-2000 Range Diagram



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
OMNI-DT500-RP

Notes:

**Type:**  
**500 SQ ST**

LEE07-6119



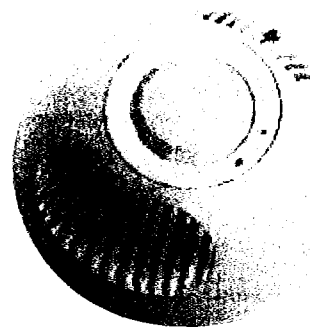
Building Automation, Inc.



## OMNI-DT/OMNI-DT-RP (Option RP) *Dual Technology Ceiling Mount Sensor*

### KEY FEATURES

- INTELLIGENT – Continuously Adapting sensor.
- Ultrasonic & Infrared Sensing
- Simple, Fast Installation
- Snap-Lock Sensor, Ceiling Mounting
- Excellent false tripping immunity
- Non-Volatile Memory; settings saved in protected memory are not lost during power outages.
- Optional Photocell Control and Relay
- 500 to 2000 sq. ft. mounted at 8'
- Multiple Sensor and Power Pack Connections
- 24VDC, Class 2 low voltage wiring
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### GENERAL OPERATION

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The OMNI-DT is a ceiling mount occupancy sensor that combines both ultrasonic (US) and passive infrared (PIR) sensing. Hubbell Building Automation's self-adapting OMNI-DT addresses areas with complex environments that are difficult to control with single technology sensors. The internal microprocessor analyzes the information from both the US and PIR technologies and determines the optimum setting to use in order to properly cover the space. The automatic timer and automatic sensitivity features of the Omni-DT work independently to prevent "false-offs" and

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
OMNI-DT500-RP

Notes:

**Type:**  
**500 SQ ST**

LEE07-6119

lights. Using PIR sensing (high error immunity) with US (high sensitivity) provides good performance. Conventional ceiling mounted dual tech sensors use a simple formula for operation: BOTH for ON, EITHER for KEEP ON. This method requires that both sensors receive fixed-strength signals for ON or a single fixed-level signal for KEEP ON. The OMNI-DT uses a more sophisticated method called a composite signal where the signal strengths are added together to form a composite sum. The advantage of this method is that a weak PIR signal plus a strong US signal will turn the lights on because the sum is enough. The installer need not worry that the signal level be balanced for reliable lights on. This technology eliminates time consuming adjustments and callbacks found in non-intelligent sensors.

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Adjustments Made:  
Ultrasonic sensitivity  
Infrared sensitivity  
Timer  
Air current threshold

Post learning Occupancy Periods (Circadian)	After Four weeks	1. 24 hour occupancy periods learned (circadian) 2. Weekly occupancy periods learned
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Adjustments Made:  
a. Generally occupied periods: Threshold+High Sensivity mode  
b. Generally unoccupied periods: Threshold=Miser mode

**SPECIFICATIONS**

**LED Lamp:** Red Infrared motion, Green Ultrasonic motion  
**Construction:** Two ultrasonic transmitters and two narrow bandwidth receivers each 16mm in diameter. Frequency — Crystal controlled to ±.005%. Transducers — Oriented north and south (DT2000 only, others use single pairs), angled 30° down from horizontal. Housing — Rugged, high-impact, injection molded plastic KJB ABS Cyolac (UL-945VA)

flame class rating, UV inhibitors. Color-coded leads are 6".  
**Size & Weight:** 4.5" dia., 1.5" height; 5 oz. (114 mm dia., 38 mm height; 142 g.)  
**Color:** White.

**Power Requirements:** 24 VDC, 33 mA (use MP-series power pack.)  
**Timer Setting:** Automatic - 8 min. to 32 min.; test mode - 8 seconds  
**Output:** 24 VDC active high logic control signal with short circuit protection and optional dry contact (see -RP option).

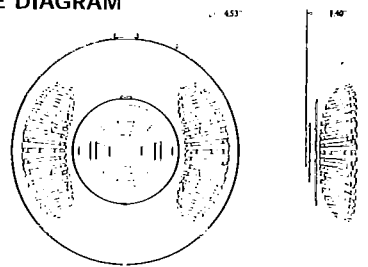
**Operating Environment:** 32°F to 104°F (0°C to 40°C); 0% to 95% non-condensing, relative humidity. For indoor use only.

**RP Option:** Relay and Photocell Included (both). Relay: NO + NC contacts, 500ma rated @ 24vdc, three wire, isolated relay. Photocell, 0-1000 Lux adjustable.  
**Warranty:** 5 years limited.

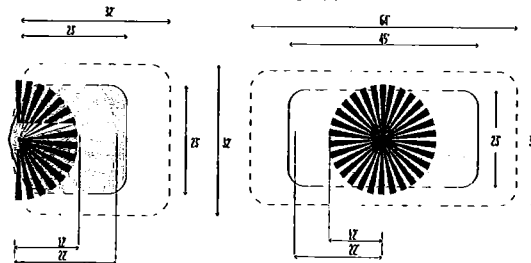
**MODELS**

Cat. No.	Color	Coverage	Application
OMNI-DT500	Off White	500 sq. ft.	Private Office
<b>OMNI-DT500-RP</b>	Off White	500 sq. ft.	Private Office
OMNI-DT1000	Off White	1000 sq. ft.	Open Office
OMNI-DT1000-RP	Off White	1000 sq. ft.	Open Office
OMNI-DT2000	Off White	2000 sq. ft.	Open Office
OMNI-DT2000-RP	Off White	2000 sq. ft.	Open Office

**RANGE DIAGRAM**



**ORTHOGRAPHIC PROJECTION**



DT-1000 Range Diagram  
DT-500 Range Pattern is not provided

DT-2000 Range Diagram





Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
MP277A

Notes:

**Type:**  
**POWER PACK**

LEE07-6119



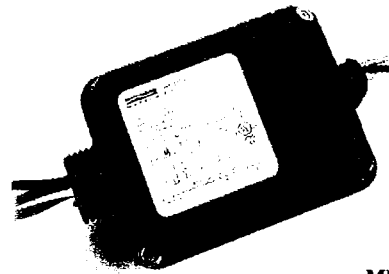
**Building Automation, Inc.**

Networked Lighting Control System

### Power Packs and Relays MP Power Pack "A" Series

#### KEY FEATURES

- Plenum rated
- Self-contained transformer & relay
- 120, 230, 277 and 347 VAC models available
- Regulated 24 VDC current, 100 mA output
- Easily mounts inside or outside junction box
- Optional Quick To Install (QTI) connector
- Companion auxiliary relay device available
- UL and cUL listed
- Five-year warranty



MP277-A



MP Slave  
MPSA

#### OVERVIEW

Hubbell Building Automation power switch packs provide both the 24 VDC power supply to operate sensors as well as the 20 Amp line voltage relay to control the load in one compact housing. The MP power packs mount in the knockout hole of a junction box. The unit can be placed outside or inside the junction box with a simple twist-on nut. The MP power packs can also be used to supply power to up to three sensors. They can also be used to supply power to the MPSA auxiliary relay for multiple circuits.

#### FEATURES and BENEFITS

##### Features

Plenum rated

Self-contained transformer & relay

Optional Quick To Install (QTI) connector

wire

##### Benefits

- Complies with requirements for use in a compartment handling conditioned air (plenum)

- No need for separate transformers and relay devices

- Dramatically reduces installation costs by removing the time consuming process of manually wiring sensor to power pack
- Easy to install, fast and efficient – no cutting, stripping, or

nuts required to install

#### APPLICATIONS

- Offices
- Small conference rooms
- Break rooms

Hubbell Building Automation, Inc. 960 Dessau Road Building One Suite 100 Austin, Texas 78754 (512) 450-1100 (512) 450-1215 fax  
www.hubbell-automation.com

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
MP277A

Notes:

**Type:**  
**POWER PACK**

LEE07-6119

**SPECIFICATIONS**

Construction	• High impact, UL rated 94-5V plastic.
Relay	• Class B (130°C) insulating material. • Silver alloy contacts.
Transformer	• Class II 120, 230, 277, or 347 VAC primary (must specify)
Output	• 24 VDC, 100 mA nominal, full-wave rectified and filtered. (Each HBA sensor contains an internal voltage regulator.)
Relay Contact Rating	• 20 A — 120/230/277 V Ballast • 15 A — 347 V Ballast • 13 A — 120 V Incandescent
Wire	• 7" leads 18 AWG input, 7" leads 16 AWG contacts
Plenum Rated:	• "Complies with requirements for use in a compartment handling conditioned air (plenum)"
Power Requirements	• 120, 230, 277 or 347 VAC (depending upon model number) @ 60Hz.
Total Wire Length	22 AWG 750' 375' 250' 375' 250' 250' 22 AWG 750' 375' 250' 375' 250' 250' 20 AWG 1200' 600' 400' 600' 400' 400' 18 AWG 2400' 1200' 800' 1200' 800' 800'
Operating environment	• Indoor use only • Operating temperature: 32°- 104°F (0° to 40°C) 0% to 95% relative humidity, non-condensing
Size & Weight	• 3.69" l x 2.33" w x 1.36" h, 15 oz. (93 mm x 59 mm x 35 mm, 400g.) • Weight: 5.0 oz (142g)
Color	• Black
Certifications	• UL and cUL Listed
Warranty	• 5 years

**HOW TO ORDER**

Model #	Power Input	Control Input	Output
MP120A	120 VAC, 60Hz	24 VDC, 5 mA	24 VDC, 100 mA
MP230A	230 VAC, 50 & 60Hz	24 VDC, 5 mA	24 VDC, 100 mA
MP277A	277 VAC, 60Hz	24 VDC, 5 mA	24 VDC, 100 mA
MP347A	347 VAC, 60Hz	24 VDC, 5 mA	24 VDC, 100 mA
MPSA (Auxiliary Slave Device)	N/A / 24 VDC, 5 mA	N/A	



**Building Automation, Inc.**

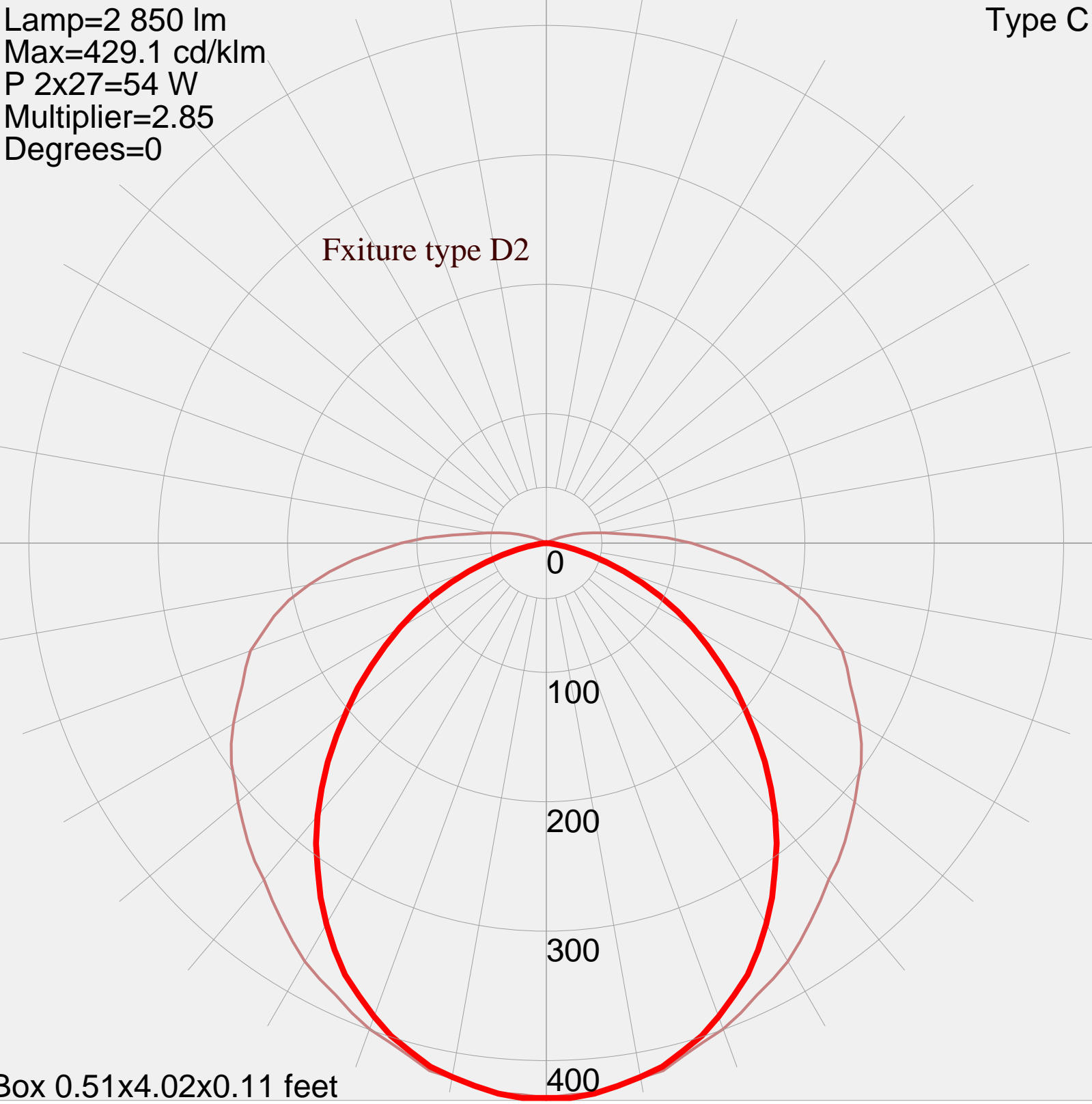
Hubbell Building Automation, Inc.  
9601 Dessau Road Building One Suite 100  
Austin, Texas 78754  
{512} 450-1100 {512} 450-1215 fax  
www.hubbell-automation.com

hba-ceil-mpa-7.05-3a

Type C

Lamp=2 850 lm  
Max=429.1 cd/klm  
P 2x27=54 W  
Multiplier=2.85  
Degrees=0

Fixture type D2



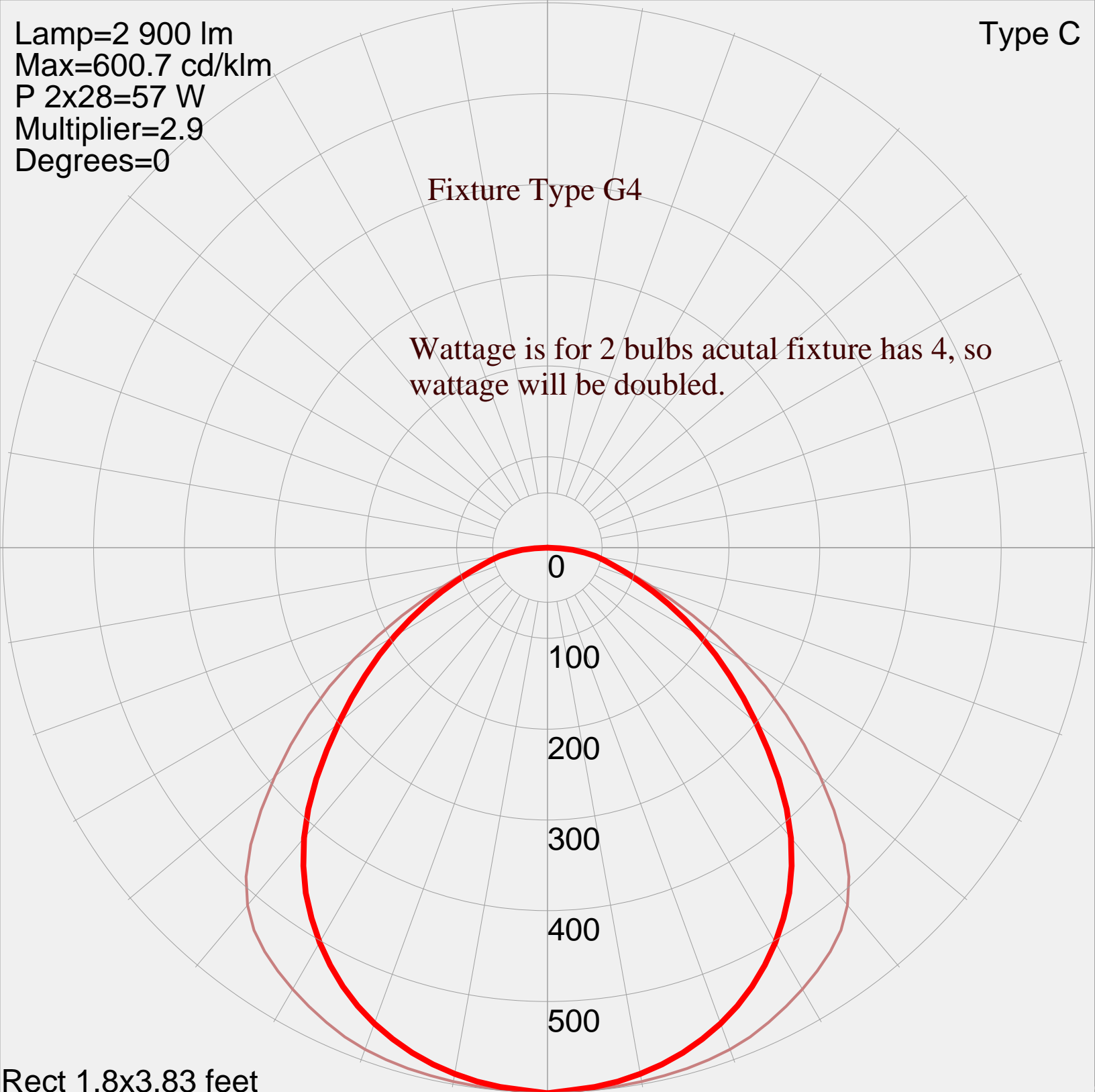
Box 0.51x4.02x0.11 feet

Manufacturer: LUMINAIRE LIGHTING CORP.  
Luminaire catalog: VPF84-232  
Luminaire: EXTRUDED ALUMINUM HOUSING, FORMED WHITE ENAMEL  
Lamp: TWO PHILIPS F32T8/TL741/ALTO RATED AT 2850 LUMENS EACH.

Lamp=2 900 lm  
Max=600.7 cd/klm  
P 2x28=57 W  
Multiplier=2.9  
Degrees=0

Fixture Type G4

Wattage is for 2 bulbs acutal fixture has 4, so  
wattage will be doubled.



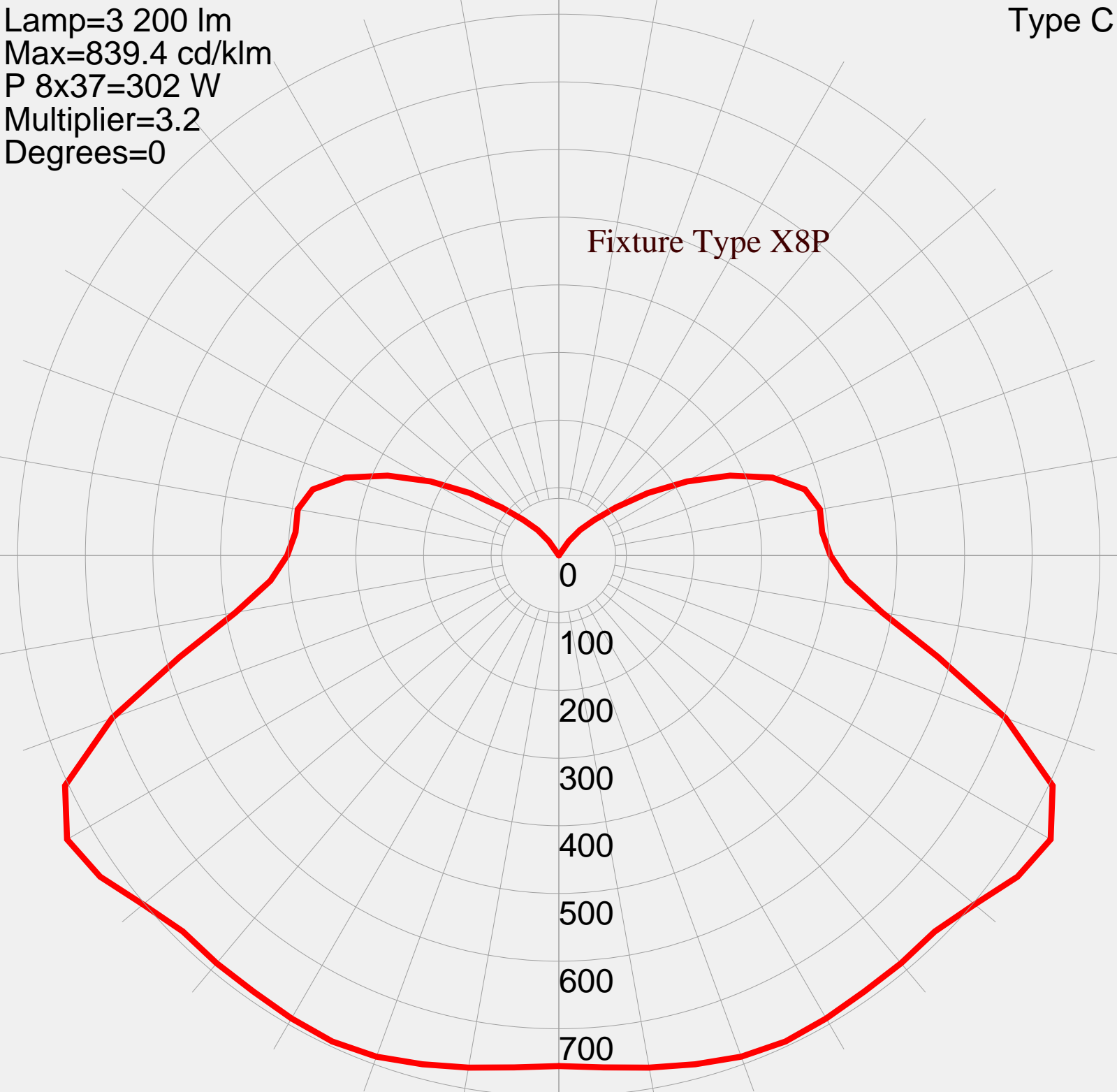
Rect 1.8x3.83 feet

Manufacturer: COLUMBIA LIGHTING  
Luminaire catalog: WT24-232G-FSA12-EB8-PAF  
Luminaire: WT Lensed Troffer  
Lamp catalog: F32T8

Type C

Lamp=3 200 lm  
Max=839.4 cd/klm  
P 8x37=302 W  
Multiplier=3.2  
Degrees=0

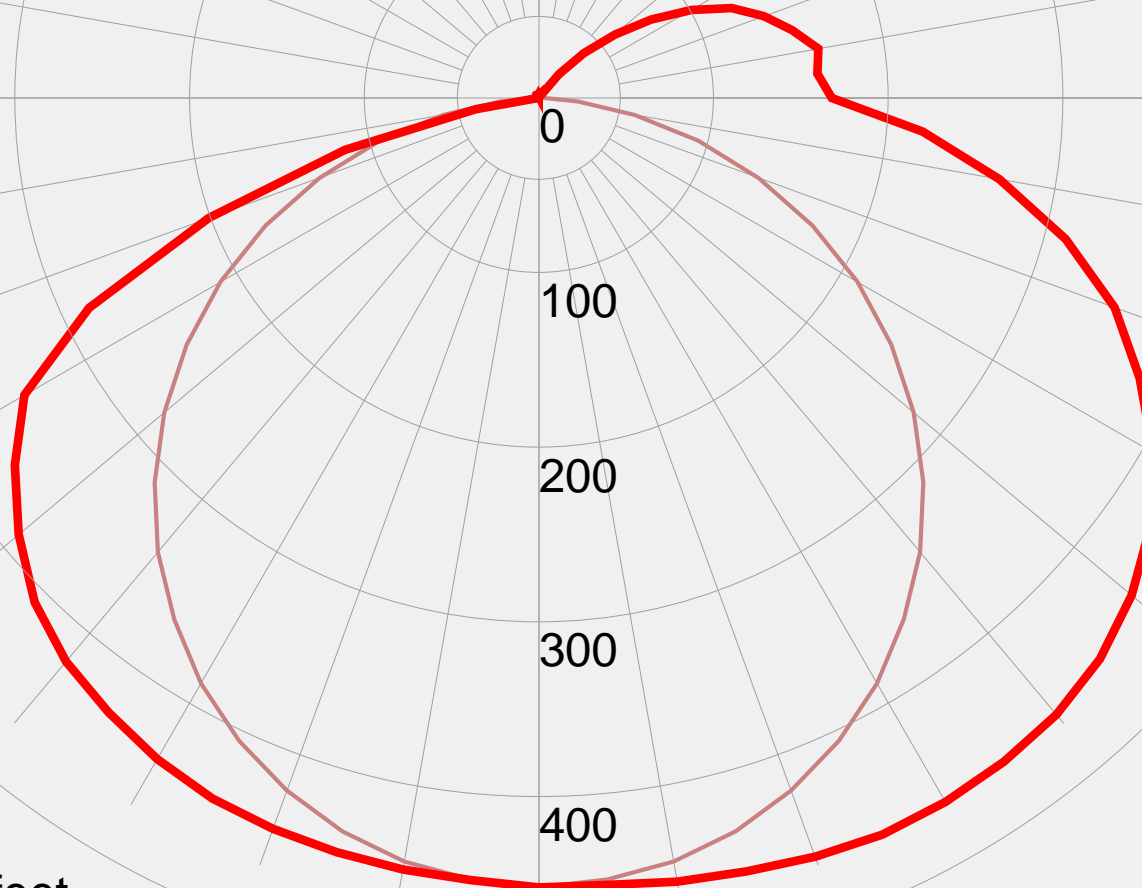
Fixture Type X8P



Vertical cilinder D=1.828 H=0.972 feet 800  
Manufacturer: Hubbell Lighting, Inc., Christiansburg, VA 24073-2500  
Luminaire catalog: SWF842A-x  
Luminaire: SUPERWATT FLUORESCENT  
Lamp catalog: PL-T42W/41/4P-ALTO  
Lamp: 42 WATT TRIPLE TUBE COMPACT FLUORESCENT

Lamp=2 900 lm  
Max=465.2 cd/klm  
P 2x28=56 W  
Multiplier=2.9  
Degrees=90

Exiture type L28  
Only covers 1 fixture, actual is two end to end so wattage is doubled.



Rect 0.33x4 feet  
Manufacturer: COLUMBIA LIGHTING  
Luminaire catalog: CS4-232-E-CSRA4-PAF  
Luminaire: CS Striplight  
Lamp catalog: F32T8