POCATELLO/CHUBBUCK SCHOOL DISTRICT NO. 25 Bannock County

Administration Offices 3115 Pole Line Road Pocatello, Idaho

SPECIFICATIONS

FOR

REPLACEMENT OF HALLWAY LIGHTING Pocatello High School Unit #1 325 North Arthur Pocatello, ID 83201

BIDS WITH CONDITIONS WILL NOT BE ACCEPTED

BID OPENING March 14, 2018 10:30 AM

POCATELLO/CHUBBUCK SCHOOL DISTRICT NO. 25 Bannock County

INVITATION TO BID

REPLACEMENT OF HALLWAY LIGHTING at Pocatello High School, Unit #1

Sealed bids for Replacement of Hallway Lighting at Pocatello High School, Unit #1 project will be received and opened by a Representative of the Board of Trustees of School District No. 25, Bannock County, Idaho at 3115 Pole Line Road, Pocatello, Idaho, 83201 until 10:30 AM on March 14, 2018.

A mandatory pre-bid conference will be held at 1:00 p.m. on March 1, 2018, at Pocatello High School, 325 North Arthur, Pocatello, Idaho 83201

Specifications or additional details, (including bid forms), may be secured at 3115 Pole Line Road, Pocatello, Idaho, 83201. All bids must be on the forms furnished, all blank spaces filled in, and signed with the name and address of the Bidder. No unqualified bids will be read.

Each bid shall be accompanied by a certified check, cashier's check, or a bidder's bond, (executed by a qualified surety company with the power to do business in the State of Idaho) in the sum of not less than five percent, (5%) of the total bid, made payable to School District No. 25, Bannock County, Pocatello, Idaho. This surety shall be forfeited by the bidder in the event of failure to enter into a contract. <u>Personal or company checks will not be accepted</u>. Compliance with Idaho Public Works Law is required.

The Board of Trustees reserves the right to reject any/or all bids or to waive any informalities, or to accept the bid or bids deemed best for School District No. 25, Bannock County, Pocatello, Idaho.

Jacob Gertsch, Clerk School District No. 25

To be published on the dates of:

February 21, 2018 February 28, 2018

IDAHO STATE JOURNAL

INSTRUCTIONS TO BIDDERS

BIDS:

Sealed "BIDS" will be received on or before the time and date set forth under "INVITATION TO BID".

The owner reserves the right to accept or reject any part or all bids.

Bidders submitting a "Bid" on this work will be required to figure and furnish everything as called for by these specifications and the requirements of the Bid sheet.

All bids shall be in a sealed envelope addressed to the Board of Trustees of School District No. 25, 3115 Pole Line Road, Pocatello, Idaho. The following shall be written on the exterior of the envelope:

"BIDS FOR **REPLACEMENT OF HALLWAY LIGHTING AT PHS** TO BE OPENED ON MARCH 14, 2018 AT 10:30 AM."

Bids not delivered by contractors at time of bid opening <u>must</u> be received in mail or no later than 4:00 PM on March 13, 2018, the day before the bid opening.

EXAMINATION OF THE SITE AND DOCUMENTS *Pre-Bid Walk Through*:

Refer all questions to Mr. Alan Spidell, School Plant Coordinator at (208) 233-2604. Contact with other district staff, Board of Trustees, or Administration, will be by written permission only.

A mandatory pre-bid walk through and conference will be held at 1:00 p.m. on Tuesday, March 6, 2018 at Pocatello High School, 325 North Arthur, Pocatello, Idaho, 83201.

Before submitting a proposal the bidder shall:

- 1. Carefully examine the specifications.
- 2. Visit the worksite.
- 3. Be fully informed of existing conditions and limitations.
- 4. Include in the bid, sums sufficient to cover all items required by the contract, and shall rely entirely upon his own examinations in making his proposal.

INTERPRETATIONS:

Should a bidder find discrepancies in or omissions from the specifications, or be in doubt as to their meaning, he should at once notify the Owner, who will send written instructions or addenda to all bidders. The owner will not be responsible for oral interpretations. Questions received less than 48 hours before time for bid opening cannot be answered. All addenda issued during the time of bidding will be incorporated in the contract.

BID GUARANTEE:

As a guarantee that, if awarded the contract, the bidder will execute same and furnish bond. Each bid will be accompanied by a <u>Certified check</u>, <u>Cashier's Check</u>, or <u>Bid Bond</u> for not less than five percent (5%) of the base bid payable to the Owner. <u>NO PERSONAL OR COMPANY CHECKS WILL BE ACCEPTED</u>.

OBJECTIONS:

Written objections to specifications or bid procedures must be received by the clerk, secretary, or other authorized official of the District at least one (1) business day before the date and time upon which bids are scheduled to be received, per Idaho Code Section 68-2806(c).

CONTRACTOR'S LICENSE:

In compliance with Idaho Laws, the contractor must be registered with the State of Idaho, and hold the required <u>*Public Works Contractor's License*</u> before obtaining the contract documents and before submitting a bid for this work.

EVIDENCE OF QUALIFICATIONS:

Upon request of the owner, a bidder whose bid is under consideration for award of the contract shall submit, promptly, satisfactory evidence of his financial resources, his experiences, and the organization and equipment he has available for performance of the contract.

PERFORMANCE BOND:

The successful bidder will be required to furnish a 100% performance bond when entering into the contract work, per Idaho Code Section 54-1926, "....conditioned upon the faithful performance of the contract in accordance with the plans, specifications and conditions thereof."

PAYMENT BOND:

The successful bidder will be required to furnish a 100% payment bond when entering into the contract work, per Idaho Code Section 54-1926, "solely for the protection of persons supplying labor or materials, or renting, leasing, or otherwise supplying equipment to the contractor or his subcontractors in the prosecution of the work provided for in such contract."

5% RETAINAGE:

The Owner will retain 5% of the Contractor's earned sum to ensure faithful performance. This 5% will be released to the Contractor upon receipt of approval from State of Idaho.

FORM WH5:

Per Idaho Code Section 54-1904A, within thirty (30) days of award of bid, the contractor shall file with the State Tax Commission a form WH-5, Public Works Contract Report. **EMPLOYMENT OF RESIDENTS OF IDAHO:**

In compliance with Idaho Laws, Section 44-1001 and 44-1002 Idaho Code, the contractor must employ <u>ninety-five</u> <u>percent</u> 95% bona fide Idaho residents as employees on any such contracts <u>except where under such contracts</u> fifty (50) or less persons are employed the contractor may employ <u>ten percent</u> (10%) nonresidents, provided however, in all cases such employers must give preference to the employment of bona fide Idaho residents in the performance of such work.

INSURANCE:

All contractors who provide goods or services to the District are required to provide the District with certificates of insurance for General Liability, Auto Liability, Workers Compensation, and Professional Liability if applicable.

The General Liability and/or Professional Liability certificate must name the District as an additional insured under the contractor's policy. Certificates are to be provided to the District prior to any work commencing on District property. This would include the placement of any equipment or materials at the work site

Minimum Insurance Limits

General Liability	\$1,000,000 per occurrence \$1,000,000 products and completed operations \$1,000,000 annual aggregate
Auto Liability	\$1,000,000 per occurrence
Worker' Compensation	Statutory
Professional Liability	\$1,000,000 per occurrence \$1,000,000 annual aggregate

OWNER/CONTRACTOR AGREEMENT:

The Agreement for the work will be written on a District provided Form of Agreement between Owner and Contractor where the basis of payment is a stipulated sum.

LAWS AND ORDINANCES:

The contractor hereby binds himself to protect and save harmless the owner from all damages arising from the violation of any and all Federal, State, County, City, and all other laws, rules, regulations, in the performance of the terms of the contract.

HOLD HARMLESS AGREEMENTS:

The District expects your work to conform to professional standards. The contractor is expected to hold the District harmless for all damages or claims arising out of the work performed by the contractor. The District will not agree to hold the contractor harmless for damages or claims.

EQUIPMENT:

The contractor shall provide all labor, materials, tools, and equipment, etc. necessary for the complete and substantial execution of everything described in the specifications.

STORAGE OF MATERIALS:

The contractor shall make arrangement and coordinate with the Maintenance Department for storage of materials. Any damages of life or property caused by storage of materials on the above indicated place shall be paid for by the contractor, who shall hold the owner harmless for any damages concerning the same.

SUPERVISION:

The supervision of this work will be done by the School District No. 25 Maintenance Department.

INSPECTION OF WORK:

The representative of the Owner shall at all times have access to the work wherever it is in preparation or progress and the contractor shall provide facilities for such access and for inspection.

WARRANTY:

Manufacturer shall warrant products under normal use and service to be free from defects in materials and workmanship for a period of one year from date of delivery.

Warranty shall cover repair or replacement of such parts determined defective upon inspection. Warranty does not cover any product or part of a product subject to accident, negligence, alteration, abuse or misuse. Warranty does not cover any accessories or parts not supplied by the manufacturer.

Warranty shall not cover any labor expended or materials used to repair any equipment without manufacturer's prior written authorization.

CHANGES IN THE WORK:

The owner, without invalidating the contract, may order extra work or make changes by altering, adding to, or deducting from the work; the contract sum being adjusted accordingly. All such work shall be executed under the conditions of the original contract, except that any claim for extension of the time caused thereby shall be adjusted at the time of ordering such change.

The total allowance for combined overhead and profit for changes shall be included in the total cost to the owner and shall be based on the following schedule:

(A.) For the Contractor, 10% over cost;

(B.) For the Sub-Contractor, 15% over cost to be divided 10% for Sub-Contractor and 5% for Contractor; and

(C.) For any Sub-Subcontractor, 15% over cost to be divided 5% for Contractor, 5% for Sub-Contractor, and 5% for Sub-Subcontractor.

LIQUIDATED DAMAGES:

Contractor shall be required to pay Owner as liquidated damages the sum of \$200 for each day, after the scheduled completion date, that the project is unfinished.

CLEAN UP:

The contractor shall at all times keep the premises free from accumulations of waste material or rubbish caused by his employees or work, and at the completion of the work he shall remove all his rubbish from and about the building and all tools and surplus materials and shall leave his work clean. In case of dispute, the owner shall remove the rubbish and surplus materials and charge the cost to the contractor.

IDAHO EMPLOYER ALCOHOL AND DRUG-FREE WORKPLACE ACT: Include with your bid sheet a contractor's affidavit pursuant to Idaho Code Section 72-1717.

<u>BIDDER CERTIFICATION FORM</u>: All bidders must complete and submit the Bidder Certification Form included with this bid request.

PAYMENT:

Prices must remain firm as quoted by supplier until quantity awarded is received. Application for payment dated on or before the 25th of the month, shall be paid by the 15th of the following month. Application for payment dated after the 25th of the month, shall be paid within 30 days. Delivery may be accepted any time, however, payment for the 2018-2019 fiscal year cannot be made until after July 5, 2018 when those funds have been released.

BID:

The following universal specifications are being used as a guideline. Alternate bids for equal equipment will be considered. Substitutions or major alternations must be indicated upon the proposal sheet at the time of the bid submission. Bids must be based upon conditions at the site and these specifications. Bids shall be submitted in accordance with the requirements shown on the bid form.

BID EVALUATION CRITERIA:

Contractor selection on this project will be evaluated based on the following:

- 1) Price
- 2) Contractor reputation for quality of work with current customers or past performance with District 25. (please list all jobs/contracts greater than \$10,000 performed in the past two years if contractor has not performed one for the District in past 5 years)
- 3) Vendor ability to best match the listed criteria as specified.

DELIVERY AND START OF WORK:

The time-frame for the replacement of hallway lighting at Pocatello High School to be completed is between May 29, 2018 and July 31, 2018.

REQUIREMENT FOR REPLACEMENT OF HALLWAY LIGHTING:

POCATELLO HIGH SCHOOL UNIT #1 - This work is to replace and update all hallway lighting, and will require on-site modifications to existing wiring and controls. School District No. 25 will provide new fixtures and new control components to be installed. Bids should include the following:

- A. Removal and disposal of all existing lighting fixtures in unit #1 corridors.
- B. Removal of unnecessary wire and wiring equipment.
- C. Installation of (242) Metalux LED surface mount light fixtures.
- D. Installation of (45) Litetronics LED flat panels with suspension kits.
- E. Installation of new lighting control system as per manufactures design.
- F. Installation or modification of necessary wiring as required to accommodate new lighting layout.
- G. Cost for all permits and inspections.
- H. Location of light fixtures to be determined by the owner.

New installation shall meet all Federal, State and Local Code Requirements. The contractor will be responsible for obtaining any required permits and/or jurisdictional approvals. The contractor is responsible for providing any and all drawings and specifications that are required by governmental agencies. The contractor will be required to provide proof of final inspection / approval from all governmental agencies having jurisdiction over this work once the installation is complete.

Contractor is responsible for verifying existing electrical loads and notifying the District if electrical service modifications might be required. The contractor is responsible for making all electrical connections necessary unless directed differently in individual item descriptions.

The contractor is responsible for providing any changes or modifications required to the building (drywall, painting, roofing, insulation, etc.) so as to provide a complete, finished product.

Contractor will provide industry standard warrantee for this application.

Contractor will provide operation and maintenance training of Maintenance personnel once the installation is complete. Complete as-build drawings, equipment drawings and operation and maintenance manuals are to be turned into the District Maintenance Department.

BID SHEET 2018 LIGHT REPLACEMENT

Board of Trustees School District No. 25 3115 Pole Line Road Pocatello, ID 8320`

We, ______ propose to furnish all labor, materials, tools, and equipment and complete all work called for by these specifications in connection with Replacement of Hallway Lighting at Pocatello High School Unit #1 under the supervision of the School Plant Coordinator and the Business Service Coordinator, for the sum of:

<u>PROJECT</u>

Replacement of Hallway Lighting at PHS Unit #1

Work can begin as soon as possible after May 29, 2018 and completed by July 31, 2018

The Board of Trustees reserves the right to reject any or all bids or to waive any informalities, or to accept the bid or bids deemed best for School District No. 25, Bannock County, Pocatello, Idaho.

Respectfully submitted,

- Attached, if applicable, is a listing of subcontractors names and addresses for this project.

- Attached is our Affidavit of Alcohol and Drug-Free Worksite, as pursuant to Idaho Code 72-1717.

- Attached is Bidder Certification Form.

Company Name	Authorized Signature / Date
Address	Title
City, State, Zip	Public Works License Number
Phone / Fax Number	Worker's Comp & Liability Insurance Exp. Date

Date:

TOTAL BID

AMOUNT

\$_____

\$

CONTRACTOR'S AFFIDAVIT CONCERNING ALCOHOL AND DRUG-FREE WORKPLACE

STATE OF _____

COUNTY OF _____

Pursuant to the Idaho Code, Section 72-1717, I, the undersigned, being duly sworn, depose and certify that named contractor is in compliance with the provisions of Idaho Code section 72-1717; that named contractor provides a drug-free workplace program that complies with the provisions of Idaho Code, title 72, chapter 17 and will maintain such program throughout the life of a state construction contract and that named contractor shall subcontract work only to subcontractors meeting the requirements of Idaho Code, section 72-1717(1)(a).

Name of Contractor		
Address		
City and State		
By: (Signature)		
Subscribed and sworn to before me this	day of	, 2018.
Commission expires:		
	NOTARY PUBLIC	C, residing at

BIDDER CERTIFICATION FORM



1. **Debarment and Suspension** – In submitting this bid proposal, we hereby certify that we have not been suspended or in any way excluded from Federal procurement actions by any Federal Agency. We fully understand that if information contrary to this certification subsequently becomes available, such evidence may be grounds for non-award or nullification of a bid contract.

- 2. Anti-Collusion In submitting this bid proposal, we hereby certify this proposal was developed and prepared without any collusion with any competing bidder or District employee. The content of this proposal has not been disclosed to any competing or potentially competing bidder prior to the proposal due date and time. Furthermore, no action to persuade any person, partnership or corporation to submit or withhold a bid has been made.
- 3. **Anti-Lobbying** In submitting this bid proposal, we hereby certify that to the best of our knowledge and belief, no appropriated Federal funds have been paid or will be paid by or on behalf of person associated with this proposal to any person for influencing or attempting to influence and officer or employee of any agency, a member of Congress, an office or employee of Congress or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement.
- 4. **National Sexual Offender Registry** In submitting this bid proposal, you certify to the District that your company will prohibit any persons in your employ who are registered or required to register under the Idaho Sex Offender Registration Act from participation in company business with the District if such participation would require them to be present on school property. You certify further that you have cross checked such employees against the National Sex Offender Registry found at the following web link: <u>http://www.nsopr.gov/</u>

Signed:	Date:
Name & Title:	
Company:	
Address:	
City & State:	

DESCRIPTION

SRL is a narrow LED surface, wall or suspension mount luminaire which can be used in a broad range of commercial and industrial applications. This series is designed with the latest LED, electronic drivers and integrated controls for optimal performance. Offered with three different lenses and distributions, this series provides uniformity and is a versatile choice for general and special purpose lighting. Integrated controls are installed, tested and suitable for use with wired and wireless systems. The SRL improves installation and commissioning time making it an ideal choice for code compliance and to maximize energy efficiency.

SPECIFICATION FEATURES

Construction

Channel is die formed cold rolled steel with numerous KOs for ease of installation and is available in standard and continuous row options. Channel/wireway cover securely holds to the housing with sheet metal screws. Exterior end plate is used as a continuous row aligner. Decorative white injection molded end and mid-caps are provided to house the integrated controls. Wireway channel includes a groove for use the standard hanging accessories from the SN strips family.

Controls

The SRL is Powered by Fifth Light, with a standard 10% "CD" or optional 1% "HCD" 0-10V continuous dimming driver that works with many types of controls, like dimmers, occupancy sensors, daylighting controls or lighting relay panels to maximize energy savings. For individual control and out-of-the-box energy savings, the SRL is equipped with factory-installed and preprogrammed integrated sensor system "SVPD2 or SPVD3" for occupancy, daylight dimming and manual control from within the footprint of the fixture. Expand into fully-addressable systems by specifying the Digital Addressable Lighting Interface (DALI) 10% "5LTD". Or, go wireless with the Wavelinx "SWPD1" (lowbay) option for code-compliance and easy installation, or the LumaWatt Pro powered by Enlighted options "LWIPD1" (lowbay) for a fully integrated sensor system with Internet of Things (IoT) connectivity and configurable software. See ordering information and specification supplements for details on all these control options.

Electrical

Long-Life LED system coupled with sensor enabled electronic drivers deliver optimal lighting performance. LED's available in 3000K, 3500K, 4000K, or 5000K with a CRI \geq 80. Projected life at 70% lumen maintenance is up to 170,000 hours with TM21 ratings of L82 > 60,000 hours. UNV, 347V and 480V drivers are available.

Emergency Battery Pack Option

Optional 120V-277V integral emergency battery pack is available in 7-watts or 14-watts to meet critical life-safety lighting requirements. The 90-minute batteries provide constant power to the LED system, ensuring codecompliance. A test switch/indicator button can be tested safely from the ground using a laser pointer, while the patented EZKey prevents accidental discharge of the battery during construction. See ordering information for details.

Finish

Highly reflective post painted finish (PAF) provides optimal performance and handling. Housing is treated with a multistage iron phosphate pretreatment, ensuring maximum bonding and rust inhibition. Opaque end and mid-caps are molded in color to match the paint and have a smooth pleasing appearance

Channel/Wireway Cover

Die formed heavy gauge steel with end plates that can be removed for continuous rows or to enable through wiring through KO. Formed tabs retain the lenses without the need for separate lens clips. Sensor coverage patterns and application versatility is enabled by factory wiring using quick connects allowing up to three drivers to be connected to each sensor. See notes for additional details.

Metalux

Catalog #	Туре
Project	
Comments	Date
Prepared by	

Shielding

Lenses are specially designed for LED with lens blends and linear optics to enable three different distributions: - LC (clear for optimal efficacy), LN (semi-frost with narrow distribution) and LW (full frost with wide distribution). These lenses provide different lighting distributions allowing customers to meet their unique needs with smooth even illumination. Lens is securely held in place by removable injection-molded white end caps and onto the channel with built in lens retainers. End and mid-caps are easily removed without tools for installation and maintenance.

Installation

Fixtures may be individually or continuous row mounted on surfaces and with suspension systems or stems. The total fixture height is less than 4 inches and will comply with ADA requirements. See accessories for ordering information.

Compliance

Luminaires are cULus listed for -20° C to 40° C ambient environments, damp location listed, and comply with IESNA LM-79 and LM-80 standards. LM80 and Life values are typical values measured in laboratory at 25° C. DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www. designlights.org for details. Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements.

Warranty

Five-year warranty.



SRL Led

Lensed, Sensor-enabled LED Striplight



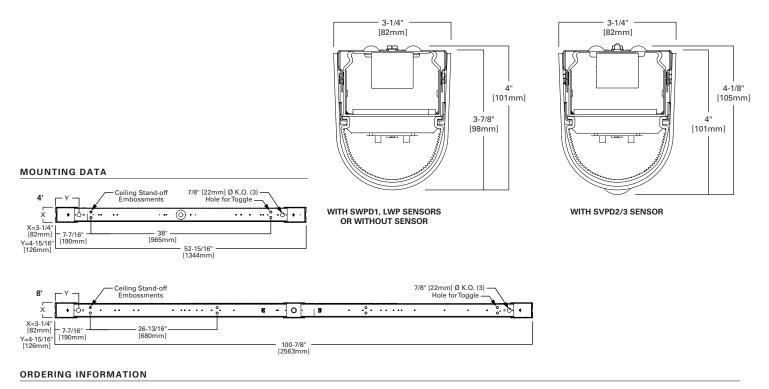




Safe and convenient means of disconnecting power







SAMPLE NUMBER: 4SRL-LD5-41SL-LW-UNV-L835-CD1-SPVD2-U

Length 4=4 ft. Length 8=8 ft. Length Series ⁽¹⁶⁾ SRL=Sensor enabled LED strip LED Type LD5=LED 5.0 LED Lumen Packages LW LN 27SL ⁽²⁾ 29SL ⁽²⁾ 34SL ⁽²⁾ 33SL ⁽²⁾ 34SL ⁽²⁾ 33SL ⁽²⁾ 34SL ⁽²⁾ 33SL ⁽²⁾ 34SL ⁽²⁾ 41SL ⁽²⁾ 44SL ⁽²⁾ 49SL ⁽²⁾ 50SL ⁽²⁾ 52SL ⁽²⁾ 50SL ⁽²⁾ 52SL ⁽²⁾ 50SL ⁽²⁾ 52SL ⁽²⁾ 54SL 60SL	s (1) <u>LC</u> 30SL (2) 34SL (2) 34SL (2) 34SL (2) 53SL (2) 50SL (2) 50S	Lens LW=Full Frost Lens - Wide LC=Clear Lens LN=Semi-Frost Lens - Narrow Row Type [Blank]=Stand alone with two endcaps CR=Continuous row with one mid cap and coupling bracket ^(a)	Voltage 347V=347 Volt ⁽⁹⁾ 480V=480 Volt ⁽¹²⁾ UNV=Universal Voltage 120-277 ⁽⁶⁾ ELTW=7-watt, 120V-277V emergency battery pack installed ⁽¹⁰⁾ EL14W=14-watt 120V battery pack installed GTD2=Bodine Gener, ETS2=IOTA Emergen CCT L830=3000K L840=4000K L840=5000K	ator Transfer Device ⁽⁶⁾	v	Options PI/CPI=Plug in and cross over plug in options ⁽¹⁴⁾ PC6/515P=(NEMA 5-15P) 6' Cord with NEMA Straight Plug ^{(8), (14)} PC6/L715=(NEMA L7-15P) 6' Cord with NEMA Twist Plug ^{(6), (14)} PCs/L715=(NEMA L7-15P) 6' Cord with NEMA Twist Plug ^{(6), (14)} Sensors [Blank]=End or midcap included with SVPD3=Integrated occupancy and daylight dimming sensor, 900 sq. ft. coverage ⁽¹⁶⁾ SVPD3=Integrated occupancy and daylight dimming sensor, 1200 sq. ft. coverage ⁽¹⁵⁾ LWIPD1=Integrated LumaWatt Pro Wireless Sensor System ⁽¹¹⁾ SWPD1=Integrated WaveLinx Connected Lighting System ⁽¹⁵⁾	Packaging U=Unit Pack
61SL ⁽⁷⁾ 67SL ⁽⁷⁾ 67SL ⁽⁷⁾ 74SL ⁽⁷⁾ 74SL ⁽⁷⁾ , ⁽⁹⁾ 82SL ⁽⁷⁾ , ⁽⁹⁾	68SL ⁽⁷⁾ 75SL ⁽⁷⁾ 83SL ^{(7), (9)}					CESSORIES	_
82SL ^{(7), (9)} 92SL ^{(7), (9)} 88SL ^{(7), (9)} 96SL ^{(7), (9)} 95SL ^{(7), (9)} 104SL ^{(7), (9)}	98SL ^{(7), (9)} 9) 106SL ^{(7), (9)}) for actual lumens. ⁽²⁾ Available i	n 4 foot only ⁽³⁾ Compatible)	with Fifth Light or other DALL	AYC-Chain/Set (Use 1 set per	-bar grid hanger t=36" Chain Hanger	

SCS=Swivel Stem Set (Specify Length) EYE CHAIN SET/3FT=Eye Bolt Chain

A1B/Spacer-U=Spacer 1-1/2" to 2-1/2" from ceiling (Use 2 Per Fixture) TOGGLE=SingleToggle No. 2 (Specify Length) Y-TOGGLE=Y Toggle No. 2 (Specify Length)

CLC-SRL-EXT-B=Continuous row external bracket SRL-BEC=Blank End Cap, No hole for Sensor SRL-WCLEC=WaveLinx end cap

SRL SPECIFIC SPARE PARTS/ACCESSORIES

SRL-LWPEC=LumaWatt Pro End Cap SRL-SPVD23LEC=Integrated SPVD2 or SPVD3 Sensor endcap

SRL-SPVD23LMC=Integrated SPVD2 or SPVD3 Mid Cap

ISHH-01=Programming Remote for SPVD Integrated Sensor ISHH-02=Personal Remote for SPVD Integrated Sensor

(Use 1 set per fixture)

(Order Separately)

ATG SNF-4-U=Tong hanger

SRL-BMC=Blank Mid Cap SRL-WCLMC=Wavelinx Mid Cap

SRL-LWPMC=LumaWatt Pro Mid Cap

SRL-LENS-LW=Replacement Wide Lens

SRL-LENS-LN=Replacement Narrow Lens SRL-LENS-LC=Replacement Clear Lens

NOTES: ⁽¹⁾ Nominal lumen output. See table for actual lumens. ⁽²⁾Available in 4 foot only. ⁽³⁾ Compatible with Fifth Light or other DALI systems only. Integrated sensor options not available. For a complete listing of Fifth Light products, visit www.eaton.com/lightingsystems ⁽⁴⁾ DesignLights Consortium® Qualified and classified for DLC Standard (all lumen packages), refer to www.edsignlights consortium® Qualified and classified for DLC Standard (all lumen packages), refer to www.edsignlights consortium® Qualified and classified for DLC standard (all "end" locations will be on the end with sensor installed. ⁽⁶⁾ Used to transfer fixture to secondary power source for life-safety operation. When used with a dimming feature, two devices are required to ensure control is disabled while operating under emergency power. ⁽⁷⁾Available in 8 foot only. ⁽⁸⁾ For continuous row application, select one standard fixture and the rest as continuous row (-CR). See instruction booklet for additional information. ⁽⁶⁾ Al 347V, two drivers required for lumen packages identified. ⁽¹⁰⁾ With integral test switch/indicator/laser test. For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 m/W x - 2-700 lumens). ⁽¹¹⁾ Must specify SR driver for this option. See LumaWatt Pro spec sheet for additional details. ⁽¹²⁾ Aguot numerus options for this feature. ⁽¹³⁾ Requires two drivers. ⁽¹⁶⁾DesignLights Consortium® Cualified and classified for both DLC Standard and DLC Premium, refer to www.edsignlights.consortium.

Specifications & dimensions subject to change without notice. Consult your Eaton Representative for availability and ordering information.

SHIPPING DATA

vering Business World

Length.	
4 ft., 8 in.	
8 ft., 8 in.	

	Eaton
	1121 Highway 74 South
	Peachtree City, GA 30269
	P: 770-486-4800
lwide	www.eaton.com/lighting

Wt.

8.2 lbs.

15.1 lbs

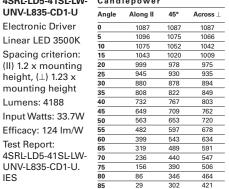
Specifications and dimensions subject to change without notice. WATTAGE

Lens Type	Length	Catalog Logic*	Lumens	Wattage	lm/W	
Full Frost (LW)	4 ft.	4SRL-LD5-27SL-LW-UNV-L835-CD1-U	2686	20.2	133	
Full Frost (LW)	4 ft.	4SRL-LD5-30SL-LW-UNV-L835-CD1-U	3037	23.2	131	
Full Frost (LW)	4 ft.	4SRL-LD5-34SL-LW-UNV-L835-CD1-U	3459	26.9	129	
Full Frost (LW)	4 ft.	4SRL-LD5-37SL-LW-UNV-L835-CD1-U	3765	29.6	127	
Full Frost (LW)	4 ft.	4SRL-LD5-41SL-LW-UNV-L835-CD1-U	4SRL-LD5-41SL-LW-UNV-L835-CD1-U 4188			
Full Frost (LW)	4 ft.	4SRL-LD5-44SL-LW-UNV-L835-CD1-U	4487	36.7	122	
Full Frost (LW)	4 ft.	4SRL-LD5-47SL-LW-UNV-L835-CD1-U	4778	39.9	120	
Full Frost (LW)	4 ft.	4SRL-LD5-50SL-LW-UNV-L835-CD1-U	5065	43.1	118	
Full Frost (LW)	4 ft.	4SRL-LD5-54SL-LW-UNV-L835-CD1-U	5478	47.0	116	
Full Frost (LW)	8 ft.	8SRL-LD5-54SL-LW-UNV-L835-CD1-U	5372	40.3	133	
Full Frost (LW)	8 ft.	8SRL-LD5-61SL-LW-UNV-L835-CD1-U	6125	46.2	133	
Full Frost (LW)	8 ft.	8SRL-LD5-67SL-LW-UNV-L835-CD1-U	6744	53.7	126	
Full Frost (LW)	8 ft.	8SRL-LD5-74SL-LW-UNV-L835-CD1-U	7466	57.3	130	
Full Frost (LW)	8 ft.	8SRL-LD5-82SL-LW-UNV-L835-CD1-U	8376	67.4	124	
Full Frost (LW)	8 ft.	8SRL-LD5-88SL-LW-UNV-L835-CD1-U	8808	73.4	120	
Full Frost (LW)	8 ft.	8SRL-LD5-95SL-LW-UNV-L835-CD1-U	9530	79.7	120	
Full Flost (LVV)	0 IL.	03HELD3-353ELW-0HV-L035-CD1-0	9030	/9./	120	
Semi Frost (LN)	4 ft.	4SRL-LD5-29SL-LN-UNV-L835-CD1-U	2947	20.2	146	
Semi Frost (LN)	4 ft.	4SRL-LD5-33SL-LN-UNV-L835-CD1-U	3332	23.2	144	
Semi Frost (LN)	4 ft.	4SRL-LD5-38SL-LN-UNV-L835-CD1-U	3795	26.9	141	
Semi Frost (LN)	4 ft.	4SRL-LD5-41SL-LN-UNV-L835-CD1-U	4131	29.6	140	
Semi Frost (LN)	4 ft.	4SRL-LD5-46SL-LN-UNV-L835-CD1-U	4595	33.7	136	
Semi Frost (LN)	4 ft.	4SRL-LD5-49SL-LN-UNV-L835-CD1-U	4923	36.7	134	
Semi Frost (LN)	4 ft.	4SRL-LD5-52SL-LN-UNV-L835-CD1-U	5242	39.9	132	
Semi Frost (LN)	4 ft.	4SRL-LD5-55SL-LN-UNV-L835-CD1-U	5557	43.1	129	
Semi Frost (LN)	4 ft.	4SRL-LD5-60SL-LN-UNV-L835-CD1-U	6010	47.0	128	
Semi Frost (LN)	8 ft.	8SRL-LD5-60SL-LN-UNV-L835-CD1-U	5894	40.3	146	
Semi Frost (LN)	8 ft.	8SRL-LD5-67SL-LN-UNV-L835-CD1-U	6720	46.2	145	
Semi Frost (LN)	8 ft.	8SRL-LD5-74SL-LN-UNV-L835-CD1-U	7399	53.7	138	
Semi Frost (LN)	8 ft.	8SRL-LD5-82SL-LN-UNV-L835-CD1-U	8192	57.3	143	
Semi Frost (LN)	8 ft.	8SRL-LD5-92SL-LN-UNV-L835-CD1-U	9190	67.4	136	
Semi Frost (LN)	8 ft.	8SRL-LD5-96SL-LN-UNV-L835-CD1-U	9664	73.4	132	
Semi Frost (LN)	8 ft.	8SRL-LD5-104SL-LN-UNV-L835-CD1-U	10456	79.7	131	
	010		10100	70.7	101	
Clear (LC)	4 ft.	4SRL-LD5-30SL-LC-UNV-L835-CD1-U	3007	20.2	149	
Clear (LC)	4 ft.	4SRL-LD5-34SL-LC-UNV-L835-CD1-U	3400	23.2	147	
Clear (LC)	4 ft.	4SRL-LD5-38SL-LC-UNV-L835-CD1-U	3872	26.9	144	
Clear (LC)	4 ft.	4SRL-LD5-42SL-LC-UNV-L835-CD1-U	4214	29.6	142	
Clear (LC)	4 ft.	4SRL-LD5-47SL-LC-UNV-L835-CD1-U	4688	33.7	139	
Clear (LC)	4 ft.	4SRL-LD5-50SL-LC-UNV-L835-CD1-U	5023	36.7	137	
Clear (LC)	4 ft.	4SRL-LD5-53SL-LC-UNV-L835-CD1-U	5348	39.9	134	
Clear (LC)	4 ft.	4SRL-LD5-56SL-LC-UNV-L835-CD1-U	5670	43.1	132	
Clear (LC)	4 ft.	4SRL-LD5-61SL-LC-UNV-L835-CD1-U	6132	47.0	130	
Clear (LC)	8 ft.	8SRL-LD5-61SL-LC-UNV-L835-CD1-U	6013	40.3	149	
Clear (LC)	8 ft.	8SRL-LD5-68SL-LC-UNV-L835-CD1-U	6856	46.2	148	
Clear (LC)	8 ft.	8SRL-LD5-75SL-LC-UNV-L835-CD1-U	7549	53.7	141	
	8 ft.	8SRL-LD5-83SL-LC-UNV-L835-CD1-U	8358	57.3	146	
Clear (LC)			1	1	1	
Clear (LC) Clear (LC)	8 ft.	8SRL-LD5-94SL-LC-UNV-L835-CD1-U	9376	67.4	139	
		8SRL-LD5-94SL-LC-UNV-L835-CD1-U 8SRL-LD5-98SL-LC-UNV-L835-CD1-U	9376 9860	67.4 73.4	139 134	

Note: These values are for 3500K at an input voltage at 120V. *Sensor options not shown and do not affect lumen output.



4SRL-LD5-41SL-LW- Candlepower UNV-L835-CD1-U



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Coefficients of Utilization

		Effective floor cavity reflectance						nce	20)%									
_	rc		8	0%			7	'0%			50%	6		30% 10%		6	0%		
	rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
R	CR																		
	0	116	116	116	116	111	111	111	111	103	103	103	95	95	95	88	88	88	85
	1	103	97	92	87	98	93	88	84	86	82	79	80	76	74	74	71	69	66
	2	92	83	75	69	88	80	73	67	74	68	63	68	64	59	63	59	56	53
	3	84	72	63	56	80	70	61	55	64	58	52	60	54	49	55	51	47	44
	4	76	64	54	47	73	61	53	46	57	50	44	53	47	42	49	44	40	37
_	5	70	57	47	40	67	55	46	39	51	43	38	47	41	36	44	38	34	31
	6	65	51	42	35	62	49	40	34	46	38	33	43	36	31	40	34	30	27
	7	60	46	37	31	57	44	36	30	42	34	29	39	32	28	36	31	26	24
	8	56	42	33	27	53	41	32	27	38	31	26	36	29	25	33	28	24	21
	9	52	38	30	24	50	37	29	24	35	28	23	33	27	22	31	25	21	19
_	10	49	35	27	22	47	34	27	22	32	25	21	30	24	20	29	23	19	17

Electronic Driver

Linear LED 3500K

Spacing criterion:

(II) 1.2 x mounting

height, (\perp) 1.23 x

mounting height

Lumens: 4188

Test Report:

IES

UNV-L835-CD1-U.

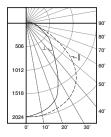
Zonal Lumen Summary

Lum	inance	Data
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90

0

verage 90-Deg cd/sm	erage 5-Deg :d/sm	Average 0-Deg cd/sm	Angle — in Deg	% Fixture	Lumens	Zone
7592	7831	10309	45	19.6	823	0-30
7110	7109	9266	55	32.0	1340	0-40
6758	6533	8076	65	57.7	2416	0-60
6582	6145	6051	75	85.2	3568	0-90
6580	6023	2571	85	100.0	4188	0-180



4SRL-LD5-46SL-LN-UNV-L835-CD1-U Electronic Driver Linear LED 3500K Spacing criterion: (II) 1.35 x mounting height, (\perp) 1.04 x mounting height Lumens: 4596 Input Watts: 33.7W Efficacy: 136.4 Im/

UNV-L835-CD1-U	Angle	Along II	45°	Across \perp
Electronic Driver	0	2010	2010	2010
Linear LED 3500K	5	2021	1987	1980
LINEAL LLD 3500K	10	2008	1947	1924
Spacing criterion:	15	1980	1890	1859
(II) 1.35 x mounting	20	1943	1817	1757
height, (⊥) 1.04 x	25	1896	1702	1568
0	30	1832	1524	1311
mounting height	35	1750	1284	1071
Lumens: 4596	40	1633	1030	888
Input Watts: 33.7W	45	1471	823	770
input watts. 55.7 W	50	1261	661	673
Efficacy: 136.4 Im/W	55	1004	541	561
Test Report:	60	722	426	451
	65	477	335	352
4SRL-LD5-46SL-LN-	70	289	266	275
UNV-L835-CD1-U.	75	159	215	218
IES	80	77	179	179
	85	27	150	151

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Specifications and

dimensions subject to

change without notice.

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Candlepower

Coefficients of Utilization

	Effe	ectiv	e floc	or cav	ity ref	lecta	nce	20%	6									
rc		8	0%			7	0%			50%	6		30%	, 0		10%	6	0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	118	118	118	118	114	114	114	114	108	108	108	103	103	103	97	97	97	95
1	108	104	100	96	105	101	97	94	96	93	90	91	89	86	87	85	83	80
2	99	92	85	80	96	89	83	79	85	80	76	81	77	74	77	74	71	69
3	91	82	74	68	88	80	73	67	76	70	65	73	68	63	69	65	62	59
4	84	73	65	59	82	71	64	58	68	62	57	65	60	55	63	58	54	52
5	78	66	58	51	76	65	57	51	62	55	50	59	54	49	57	52	48	46
6	72	60	51	45	70	59	51	45	56	49	44	5448	3	44	52	47	43	41
7	67	55	46	41	65	54	46	40	52	45	40	50	44	39	48	43	38	37
8	63	50	42	37	61	49	42	36	48	41	36	46	40	35	44	39	35	33
9	59	46	38	33	57	45	38	33	44	37	33	43	37	32	41	36	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	38	33	29	27

Zonal Lumen Summarv

Luminance Data

			Angle	Average 0-Deg	Average 45-Deg	Average 90-Deg
Zone	Lumens	% Fixture	in Deg	cd/sm	cd/sm	cd/sm
0-30	1513	32.9	<u>45</u>	23366	9090	7672
0-40	2352	51.2	55	19301	6442	5883
0-60	3654	79.5	65	12076	4475	4025
0-90	4359	94.9	75	6167	3388	2836
0-180	4596	100.0	85	2394	2992	2360



Eaton

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		90°
	MARCON L	80°
536	TAX XIT	70°
1071	HH	60°
		50°
1607	+14-7	
	still)	40°
2142)' 10' 20' 30'	-

UNV-L835-CD1-U **Electronic Driver** Linear LED 3500H Spacing criterion (II) 1.54 x mounti height, (⊥) 1.13 x mounting height Lumens: 4688 Input Watts: 33.7 Efficacy: 139.1 Im Test Report: 4SRL-LD5-47SL-L0 UNV-L835-CD1-U

4SRL-LD5-47SL-LC-	Candlepower								
UNV-L835-CD1-U	Angle	Along II	45°	Across ⊥					
Electronic Driver	0	1944	1944	1944					
Linear LED 3500K	5	1958	1994	2005					
	10	1952	1934	1951					
Spacing criterion:	15	1940	1959	2038					
(II) 1.54 x mounting	20	1928	2019	2116					
height, (⊥) 1.13 x	25	1920	2083	1876					
mounting height	30	1916	2028	1678					
mounting neight	35	1930	1431	848					
Lumens: 4688	40	1983	862	746					
Input Watts: 33.7W	45	2087	632	751					
input watts. 55.7 w	50	2142	594	669					
Efficacy: 139.1 lm/W	55	1922	494	537					
Test Report:	60	1378	331	350					
	65	788	215	242					
4SRL-LD5-47SL-LC-	70	377	185	206					
UNV-L835-CD1-U.	75	163	166	163					
IES	80	65	143	128					
	85	18	124	114					
	90	0	103	88					
ation									

Coefficients of Utilization

	Effe	ectiv	e floo	or cav	ity ref	ecta	nce	20%	5									
rc		8	0%			7	0%			50%	6		30%	6		10%	6	0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	96
1	109	105	101	97	106	102	99	95	97	94	92	93	90	88	89	87	85	83
2	100	93	87	82	98	91	85	81	87	82	78	83	79	76	80	77	74	72
3	93	83	76	70	90	81	75	69	78	72	67	75	70	66	72	68	64	62
0 1 2 3 4 5 6 7	86	75	67	61	83	73	66	60	70	64	59	68	62	58	65	60	57	54
5	79	67	59	53	77	66	59	53	64	57	52	61	56	51	59	54	50	48
6	74	61	53	47	72	60	52	47	58	51	46	56	50	46	54	49	45	43
7	69	56	48	42	67	55	47	42	53	46	41	52	45	41	50	45	40	38
8	64	51	43	38	62	51	43	38	49	42	37	48	41	37	46	41	37	35
9	60	47	40	35	58	47	39	34	45	39	34	44	38	34	43	37	33	32
10	56	44	36	32	55	43	36	31	42	36	31	41	35	31	40	34	31	29

Zonal Lumen Summary

Luminance Data

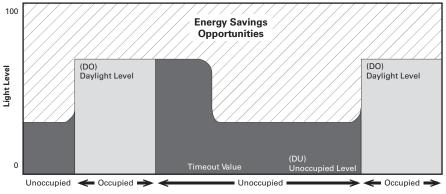
Zone	Lumens	% Fixture	Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
0-30	1649	35.2	45	33151	6980	7483
0-40	2563	54.7	55	36949	5883	5632
0-60	3930	83.8	65	19950	2872	2767
0-90	4516	96.3	75	6323	2616	2120
0-180	4688	100.0	85	1596	2473	1782

INTEGRATED SENSOR

The SRL with Integrated Sensor technology provides automatic energy savings without sacrificing performance. Traditionally, these types of energy savings required coordination between the luminaire and a lighting control system. The SRL delivers superior lighting with integrated occupancy and daylighting controls. Capture the benefits of traditional lighting controls, without complicated coverage planning or special wiring. Ideal for new construction or retrofit, the SRL delivers automatic ON to an energy saving light level, while ensuring lighting is turned OFF when the space is unoccupied. The integral daylight sensor reduces the need for special daylight zone planning. Each luminaire will automatically adjust the light level based on reflected light beneath the sensor in a closed loop method. Occupied daylight light levels and unoccupied light levels can be adjusted using the integrated sensor programming remote (Catalog Number: ISHH-01). The integrated sensor programming remote (Catalog Number: ISHH-02) provides code compliant manual raise, lower, ON, OFF control. The SRL with Integrated Sensor is easy to install with no special wiring and ensures energy savings out-of-the-box with default control settings.

How it works:

- As the user enters the space controlled by the integral sensor, the lighting turns ON to the default daylight level.
- Lighting will remain at that the daylight level until the space is unoccupied. This will start the occupancy timeout period (default 20 minutes).
- If the space remains unoccupied for half of the timeout period, the lighting will automatically reduce to the Energy Saver light level. This adjustable light level is typically half of the occupied daylight level.
- At the end of the timeout period the lighting will go to the unoccupied light level. This adjustable light level reduces to 50% by default.



Target light level default: 500 lux at 8 ft.

Coverage Patterns next page

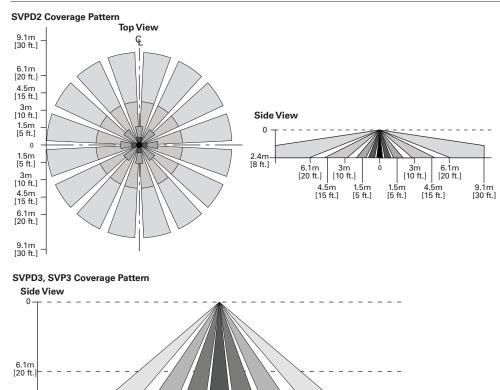


SENSOR DETAILS - SRL

9.1m [30 ft.]

12.2m [40 ft.] 9.1m [30 ft.] 6.1m [20 ft.] 3m [10 ft.] ò

3m [10 ft.] 6.1m [20 ft.] 9.1m [30 ft.] 12.2m [40 ft.]

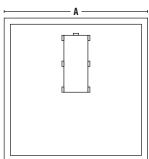






Specifications and dimensions subject to change without notice.

E **LED** Flat Panel **F** 1'x4', 2'x2' & 2'x4' **Technical Product Information** Ď B Average Rated Life: 100,000H **CRI:** 80 **Power Factor:** ≥0.95 **Weight:** 1x4 = 8 lbs. | 2x2 = 8 lbs. | 2x4 = 16 lbs. Sizing Beam Angle: 110° Operating Temp.: -4°F to 113°F PART A В C D Dimming: 0-10V 1' x 4' 11.85" 47.5" 9.88" 45.53"



E

.44"

.44"

.44"

F

1.38"

1.38"

1.38"

Part Number Matrix

XX (product family)	XX (wattage)	X (voltage)	XX (shape)	XX (color temperature)	XX (dimming)	Х
FP = LED Flat Panel	030 = 30 watts 040 = 40 watts 050 = 50 watts	U = 120-277V	F1 = 1'x4' F2 = 2'x2' F4 = 2'x4'	35 = 3500K 40 = 4000K 50 = 5000K	DL = 0-10V Dimming	Blank=Standard P=Premium

2' x 2'

2' x 4'

23.75"

23.75"

23.75"

47.5"

21.78"

21.78"

21.78"

45.53"

DLC Premium Product Specifications

ТҮРЕ	WATTS	DESCRIPTION	ORDERING CODE	CCT (K)	LUMINAIRE LUMENS
		30W WHT LED FLAT PANEL 1X4 PRE 120-277V 3500K 0-10V DIM	FP030UF135DLP	3500	3750
1' X 4'	30	30W WHT LED FLAT PANEL 1X4 PRE 120-277V 4000K 0-10V DIM	FP030UF140DLP	4000	3750
		30W WHT LED FLAT PANEL 1X4 PRE 120-277V 5000K 0-10V DIM	FP030UF150DLP	5000	3750
		30W WHT LED FLAT PANEL 2X2 PRE 120-277V 3500K 0-10V DIM	FP030UF235DLP	3500	3750
2' X 2'	30	30W WHT LED FLAT PANEL 2X2 PRE 120-277V 4000K 0-10V DIM	FP030UF240DLP	4000	3750
		30W WHT LED FLAT PANEL 2X2 PRE 120-277V 5000K 0-10V DIM	FP030UF250DLP	5000	3750
		40W WHT LED FLAT PANEL 2X4 PRE 120-277V 3500K 0-10V DIM	FP040UF435DLP	3500	5000
2' X 4'	40	40W WHT LED FLAT PANEL 2X4 PRE 120-277V 4000K 0-10V DIM	FP040UF440DLP	4000	5000
		40W WHT LED FLAT PANEL 2X4 PRE 120-277V 5000K 0-10V DIM	FP040UF450DLP	5000	5000

DLC Standard Product Specifications

RóHS

Compliant

ТҮРЕ	WATTS	DESCRIPTION	ORDERING CODE	CCT (K)	LUMINAIRE LUMENS
	1' X 4' 30	30W WHT LED FLAT PANEL 1X4 120-277V 3500K 0-10V DIM	FP030UF135DL	3500	3000
1' X 4'		30W WHT LED FLAT PANEL 1X4 120-277V 4000K 0-10V DIM	FP030UF140DL	4000	3000
		30W WHT LED FLAT PANEL 1X4 120-277V 5000K 0-10V DIM	FP030UF150DL	5000	3000
		30W WHT LED FLAT PANEL 2X2 120-277V 3500K 0-10V DIM	FP030UF235DL	3500	3000
	30	30W WHT LED FLAT PANEL 2X2 120-277V 4000K 0-10V DIM	FP030UF240DL	4000	3000
2' X 2'		30W WHT LED FLAT PANEL 2X2 120-277V 5000K 0-10V DIM	FP030UF250DL	5000	3000
2 X 2		40W WHT LED FLAT PANEL 2X2 120-277V 3500K 0-10V DIM	FP040UF235DL	3500	4000
	40	40W WHT LED FLAT PANEL 2X2 120-277V 4000K 0-10V DIM	FP040UF240DL	4000	4000
		40W WHT LED FLAT PANEL 2X2 120-277V 5000K 0-10V DIM	FP040UF250DL	5000	4000
		50W WHT LED FLAT PANEL 2X4 120-277V 3500K 0-10V DIM	FP050UF435DL	3500	5000
2' X 4'	50	50W WHT LED FLAT PANEL 2X4 120-277V 4000K 0-10V DIM	FP050UF440DL	4000	5000
		50W WHT LED FLAT PANEL 2X4 120-277V 5000K 0-10V DIM	FP050UF450DL	5000	5000



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