Larson Electronics LLC
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EPL-48-2L-LED-LV

12 / 24 Volt Explosion Proof LED light - Class 1 Div 1 & Class 2 Div 1 - Paint Spray Booth Cert.

Product ID: 46838

Please see last page for supporting documentation for this product (certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Image: EPL-48-2L-LED-LV

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

EPL-48-2L-LED-LV Explosion Proof

Dimensions: W-11.25" L-52" H-8.5 "
Weight: 45 Lbs
Total Watts: 56 watts
Voltage: 12/24 volts AC or DC
LED Lamp Life Expectancy: 50,000+ Hours
Total Lumens: 4320
Efficiency: 90 Lumens per Watt
Ambient Operating Temp Range:-30 C to 85 C
Operating Temp Rating: T6 Rated
Minimum Operating Temp: -30 C
Maximum Case Temp: 90 C
Beam Angle: 150 degrees
Color Temp: 5300K- CRI-75
Mounting: Bracket Standard - Pendant Optional
Wiring Hub: 1/2 inch threaded

Ratings

Class 1 Division 1, Groups C and D
Class 1 Division 2, Group A,B,C,D
NRTL Certified to UL 595 Marine Type (Saltwater)
NRTL Certified to UL 844, 924
NRTL Certified to UL 1598 Marine Type
NRTL Listed for United States & Canada
Class II, Division 1 - 2, Groups E,F,G
Certified to Canadian Standards
Listed for Paint Spray Booths
California Title 24 Compliant

Special Orders - Special Requirements

Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-765-7664
E-mail: sales@larsonelectronics.com

Made in the USA

The Larson Electronics EPL-48-2L-LED-LV 12 / 24 Volt Explosion Proof LED Light Fixture is NRTL Listed for United States and Canada Class 1 Division 1, Class II Division I, and is NRTL Certified to UL 844 for use within oil rigs, paint spray booths and other hazardous location areas. This unit has a T6 temperature rating and carries a paint spray booth certification.

The EPL-48-2L-LED-LV is designed to use Larson Electronics specially constructed 12/24 volt LED T-series bulbs which produce 15% more foot candles of illumination at 8 feet as compared to standard T8 lamps and is NRTL Certified to UL 844 Class 1 Division 1 and Class II Division 1. This low voltage fixture can operate on 12 or 24 volts AC or DC. This makes it useful in remote applications where battery banks are used or where OSHA or internal safety standards mandate low voltage lighting. Our LED-T series bulbs are visibly brighter than standard T8s and consistently surprise many of our customers with their unexpectedly high light output levels.

We have replaced two 8 foot dual lamp T8 fixtures in our own facility with our LED T series lamps and produced more illumination in the work area with only one 2 lamp 4 foot long LED fixture. We now offer our second generation LED tube lamps with this fixture which have increased this unit's performance.

We have eliminated the ballast box normally associated with explosion proof fluorescent fixtures which reduces overall weight and overall complexity of installation. There is no ballast in this unit and the included LEDT8-28W-V1 LED lamps have a 50,000+ hour service life, both of which result in extreme efficiency and greatly reduced maintenance costs. These fluorescent LED lamps have internal drivers, eliminating external power components. The solid state design of the LED lamps give this fixture superior resistance to damage from vibration, extremes in temperature and a lamp service life over twice that of standard fluorescent bulbs. This second generation lamp is offered in 5600K cool white, 4500K natural white, and 3000K warm white. Our standard unit ships with 5600K unless different color temperature is specified.

Unlike the glass tube design of traditional fluorescent lamps, these LED T-Style lamps have no filaments or fragile housings to break during operation. Instead of using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current applied and emitting light. The LED assembly is mounted to the "tube" constructed from extruded aluminum, with a polycarbonate lens protecting the LEDs. With LED lights, there is no warm up time or cool down time before re-striking and provide instant illumination when powered on, adding to the reliability of LED technology. By nature, LED light sources run significantly cooler than fluorescent lamps, reducing the chance of accidental burns and increased temperatures due to heat emissions. This solid state design of light emitting diodes provides a more reliable, stable, durable, and energy efficient light source over traditional fluorescent lighting.

The 24 watt LED lamps produce more illumination than standard T8 bulbs, but draw only 3/4 of current. An EPL-48-2L-T8 explosion proof fluorescent light, with a combined total of 64 watts, draws 0.54 amps @120 volts. This LED version of the same light, with a total of 56 watts, draws only .4 amps. The EPL-48-2L-LED-LV is multi-voltage and works with any voltage between 9-32V DC, making it ideal for 12 and 24 volt DC applications. We also offer this lamp in a 120-277 standard voltage model.

Energy Consumption Comparison

	T5HO	T8	LED

Wattage	108 watts	64 watts	56 watts
Amp Draw @ 120V AC	0.9 amps	0.54 amps	0.4 amps
Amp Draw @ 277V AC	0.39 amps	0.24 amps	0.18 amps
Amp Draw @ 12V DC	9 amps	5.34 amps	4 amps
Amp Draw @ 24V DC	4.5 amps	2.67 amps	2 amps
Lamp Life Expectancy	20,000 hours	24,000 hours	50,000 hours
Color Temperature	5000K / 4100K	4100K	5300K
Operation cost per year (8hs/day @ 11c/kWh)	$34.69	$20.56	$15.42

Our EPL-48-2L-LED-LV LED light fixture is NRTL Listed for United States and Canada approved for use in paint spray booths. Please note, according to the NEC, using threaded rigid pipe does not require additional seal offs with this fixture. An EYM and seal off is necessary for flex conduit or other non-rigid pipe implementations.

Mounting Options: Unless otherwise specified, our standard, most popular configuration is the bracket end mounting shown enlarged below. We also offer a pendant mount for those needing to suspend the fixture away from the ceiling surface (i.e. suspend from pipe or conduit). Additional mounting configurations can be customized to meet the requirements on the application. Please contact us for special mounting configurations.

Surface Mount (Standard)



Click Photo to Enlarge



Click Photo to Enlarge



Click Photo to Enlarge

Adjustable Surface Mount Brackets: Each bracket is cinched to the bracket mounting peg on each side of the light. The angle of the bracket is set by tightening two cap screws on either side of the bracket. The cap screws act as a set screw. The bracket itself is mounted via a single bolt hole at the top the bracket. There are two brackets, one on each end of the light. Once the brackets are mounted to a surface (ceiling, floor or wall), the light fixture can be removed from the brackets by loosening the cap screws that hold the bracket to the mounting peg.



Pendant Mount (Optional)

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Click Photo to Enlarge



3 Conduit Positions

Click Photo to Enlarge

Suspension Mounting: Pendant mount fixtures hang from the ceiling and are suspended by rigid pipe. Each fixture features a 1/2” NPT junction box on one end, and a 1/2” NPT adjustable L-bracket on the other end of the fixture. Operators bring rigid pipe down to the threaded mounting hubs. Wiring is fed down through the rigid pipe to the junction box and tied in to the fixture’s lead wires, completing the electrical connection. The adjustable L-shape mounting bracket provides support for the opposite end of the fixture.

Suggested Applications: Paint spray booths, aircraft maintenance, oil drilling rigs, refineries, solvent and cleaning areas, gas processing plants, chemical manufacturing, waste treatment plants, gas processing plants.

Made in USA Quality

1. Each unit dialectrically tested.
2. Fixture arrives assembled and lamped to reduce installation time and cost. Adjustable mounting brackets enable the operator to choose any mounting angle for the fixture.
3. Fixture constructed of extruded corrosion resistant copper free aluminum alloy
4. No ballast box. No ballast to replace. We simply run the black wire to one end of the bulb and white wire to the other.
5. Heavy gauge extruded aluminum reflectors with high gloss reflective finish. Resists dents and corrosion.
6. A wrench is used to unscrew the end caps for relamping the fixture, while some competitive models require the “tap and knock off” method to loosen the end cap.
7. Explosion proof, impact and heat resistant Pyrex tubes provide lamp protection.

Superior LED Benefits

1. 50,000 hour lifespan.
2. Can SAVE 50% or more on energy.
3. May qualify retrofit projects for financial incentives, including utility rebates, tax credits and energy loan programs.
4. Reduces energy use and prolongs life-spans of peripheral cooling units (A/C, refrigeration)
5. 100% recyclable.
6. No toxins-lead, mercury.
7. No UV light, infrared radiation or CO2 emissions.
8. Qualifies buildings for LEED and other sustainable business certifications.
9. Bright, even light maintains consistent color over time.
10. Instant on/off – No flickering, delays or buzzing.
11. Very good color rendering.
12. Vibration/impact resistant.
13. Significantly cooler operation.
14. Less frequent outages, higher output improves workplace safety.

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Frequently Asked Questions (FAQ)

There are no Faqs

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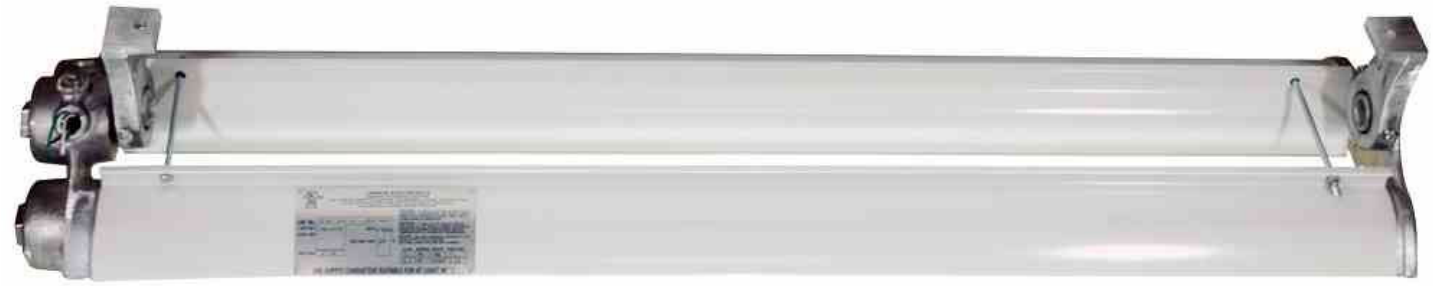


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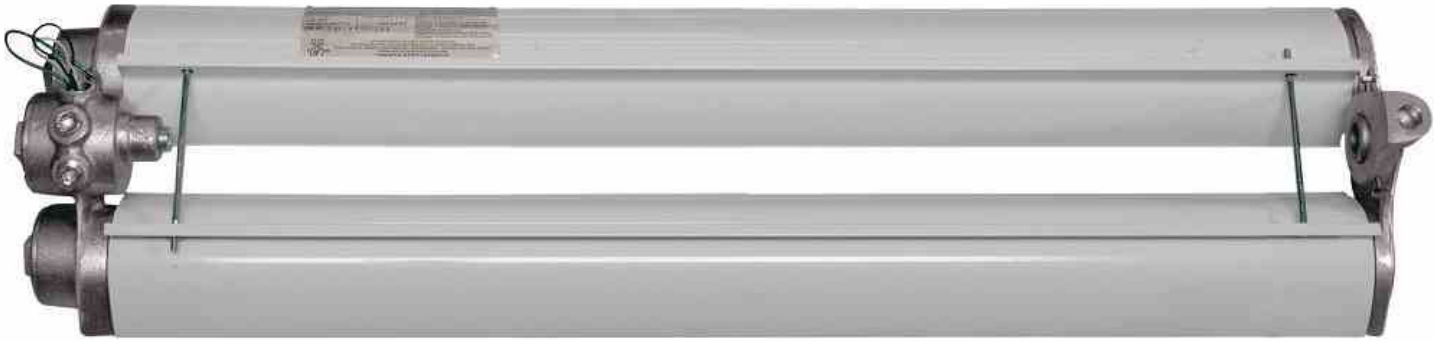


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EPL-48-2L-LED-LV

Product ID: 46838

Harmonized System (HS) Code: 9405.41.84.10
Export Control Classification Number (ECCN): EAR99

Options:

EPL-48-2L-LED-LV-Mount-Color Temp-Current
Example: EPL-48-2L-LED-LV-SFC-5600K-VDC

Mount	
SURFACE	-SFC
PENDANT	-PND

Color Temp	
5600K	-5600K
4100K	-4100K

Current	
DC	-VDC
AC	-VAC

Links (Click on the below items to view):

- **Canadian CEC Certificate (Commonly referred to as CSA Certificate)**(https://www.larsonelectronics.com/images/product/CECCert/46838.PDF)
- **Dimensional Drawing 2D**(https://www.larsonelectronics.com/images/product/DimensionalDrawing/46838.PDF)
- **IES (Photometric File)**(https://www.larsonelectronics.com/images/product/ies/46838.ZIP)
- **MSDS (Material Safety Data Sheet**(https://www.larsonelectronics.com/images/product/Msds/46838.PDF)
- **Operations Manual**(https://www.larsonelectronics.com/images/product/Manual/46838.PDF)
- **Solidworks EASM File**(https://www.larsonelectronics.com/images/product/Easm/46838.ZIP)
- **SpecSheetArabic**(https://www.larsonelectronics.com/images/product/SpecSheetArabic/46838.PDF)
- **SpecSheetFrench**(https://www.larsonelectronics.com/images/product/SpecSheetFrench/46838.PDF)
- **Spectrum Curve (Wavelength Graph)**(https://www.larsonelectronics.com/images/product/SpectrumChart/46838.PDF)
- **STEP File (3D CAD Model)**(https://www.larsonelectronics.com/images/product/Step/46838.ZIP)
- **USA NEC Certificate (Commonly referred to as UL Certificate)**(https://www.larsonelectronics.com/images/product/NECCert/46838.PDF)
- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/46838.JPG)
- **HigResPic2**(https://www.larsonelectronics.com/images/product/HigResPic2/46838.JPG)
- **HigResPic3**(https://www.larsonelectronics.com/images/product/HigResPic3/46838.JPG)
- **HigResPic4**(https://www.larsonelectronics.com/images/product/HigResPic4/46838.JPG)
- **HigResPic5**(https://www.larsonelectronics.com/images/product/HigResPic5/46838.JPG)
- **HigResPic6**(https://www.larsonelectronics.com/images/product/HigResPic6/46838.JPG)
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- **HigResPic10**(https://www.larsonelectronics.com/images/product/HigResPic10/46838.JPG)
- **Video1**(https://www.youtube.com/watch?v=ZseBiwS7iMI)
- **ISO 9001 Certification**(http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF)
- **Business Certificate**(https://www.larsonelectronics.com/images/pdfdocs/w9.PDF)
- **Shipping Time Map**(https://www.larsonelectronics.com/images/product/ShippingTimeMap/ShippingTimeMap.pdf)