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EPL-EMG-48-2L-LED-D-V2

0-10V Dimmable Explosion Proof Emergency LED light - 4 foot 2 lamp - Backup Ballast - C1D1/C2D1

Product ID: 147795

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



Image: EPL-EMG-48-2L-LED-D-V2

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-EMG-48-2L-LED-D-V2 Explosion Proof

NRTL Listed for United States & Canada
Dimensions: W-11.25" x L-52" x H-8.5 "
Weight: 60 Lbs
Voltage: 120-277V AC or 11-25V AC/DC
Total Watts: 56 watts (28 Watts Per Lamp)
Total Lumens: 7,000 (3,500 Per Lamp)
Lumens on Battery Power: 3,500 (1 Lamp)
LED Lamp Life Expectancy: 50,000+ Hours
Luminous Efficacy: 125 Lumens per Watt
Color Temp: 5600K, 4500K, 3000K
Color Rendering Index: >80
Beam Angle: 150°
Power Efficiency: 90%
Power Factor: >0.95
Battery AC Input Voltage: 120/277V AC 60Hz
Battery AC Input Current: 90 mA
Battery AC Input Power Rating: 9.5W
Battery Output Current: 120V @ 165mA - 277V @ 72mA
Illumination Time: 90+ Minutes
Battery Type: High Temp, Maintenance Free, Nickel Cadmium

Ratings/Approvals

Class 1 Division 1, Groups C and D T6
Class 1 Division 2, Group A,B,C,D
Class 2, Division 1 & 2, Groups E,F,G
NRTL Certified to UL 595 Marine Type (Saltwater)
NRTL Certified to UL 844, UL 924
NRTL Certified to UL 1598 Marine Type
Certified Canadian Standards
Listed for Paint Spray Booths
California Title 20 & Title 24 Compliant
IP67 Rated - Waterproof
T6 Temperature Rating
NEMA 4X
LEL Listed LED Lamps
Approved for Confined Spares
Silicone Free
Factory Sealed Fixture
Failsafe Lighting
Emergency Battery Backup
90+ Minute Runtime
Made in the USA

Battery Lifespan: 7 to 10 Years
Battery Charge Current: 250 mA
Battery Recharge Time: 24 Hours
Ambient Operating Temp Range:0° C to +50°C
Operating Temp Rating: T6 Rated
Minimum Operating Temp: 0°C
Maximum Case Temp: +50°C
Housing Material: Cast Aluminum End Caps & Battery Enclosure, Aluminum Reflectors - Copper Free
Lens Material: Hardened Borosilicate Glass Tubes
Gasket Material: Buna Rubber O-Rings
Mounting: Surface Standard - Pendant Optional
Wiring Hub: 1/2" NPT

Switch Leg for Powering Light On/Off

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671
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Made in the USA

The Larson Electronics EPL-EMG-48-2L-LED-D-V2 Dimmable Explosion Proof Emergency LED Light Fixture is NRTL Listed for United States and Canada approved Class 1 Division 1 & 2 and Class 2 Division 1 and 2 for areas where flammable chemical/petrochemical vapors exist or have the potential to exist. This failsafe explosion proof LED light has a T6 temperature rating and carries a paint spray booth light certification, making it ideal for applications such as paint booths, oil rigs, offshore applications, petrochemical, manufacturing, chemical storage, water treatment centers, and food processing plants.

This four foot, two lamp dimmable emergency LED fixture is ideal for operators seeking a top quality explosion proof light that will reduce operating costs, improve lighting quality and reduce downtime incurred from frequent servicing intervals. The EPL-EMG-48-2L-LED-D-V2 is equipped with Larson Electronics' specially designed LED T-series bulbs which produce 7,000 lumens, resulting in 25% more foot candles of illumination at 8 feet as compared to standard T8 lamps when measured with an Extech light meter. Our LED-T series bulbs are visibly brighter than standard T8`s and have consistently surprised many of our customers with their unexpectedly high light output levels.

We now offer our second generation LED tube lamps with this fixture which have increased this hazardous location light's performance. This two lamp explosion proof LED linear fixture is lighter in weight, has a slimmer profile, and produces more light than traditional explosion proof fluorescent fixtures. The four foot long LED tube design bulbs included with this unit are rated at 50,000 hours of service life, which is over twice as long as standard T8 bulbs.

This emergency backup only fluorescent light works, mounts and is wired like our EPL-48-2L-LED explosion proof integrated LED light fixtures. The main difference is that we add a battery backup unit that adds emergency light functionality to the fixture. With an integrated emergency ballast, this explosion proof LED light will continue to operate one LED lamp for 90 minutes at 3,500 lumens after the main electrical power to the light is severed. Once standard electrical power is restored, the emergency battery pack will be recharged. The battery backup unit includes a switched leg for turning the light fixture on/off without kicking the unit into emergency mode.

This fixture carries a T6 temperature rating and is approved for Class I Division 1, Groups C and D, Class I, Division 2, Group A, B, C and D, and Class II, Division 1 and 2, Groups E, F and G environments where flammable or combustible gases, vapors, dusts, fibers, and flying exist or stand the potential to exist. This LED linear fixture is approved for use in confined spaces. Click here to read the NEC description for explosion proof and hazardous locations.

The included dimmable LED lamps have a 50,000+ hour service life, both of which result in extreme efficiency and greatly reduced maintenance costs. These fluorescent style 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.

These dimmable 28 watt LED tubes work with standard 0-10 dimming controllers. Lumen output is 125 lumens per watt for a total of 3,500 lumens per bulb. While fluorescent lamps are omni-directional and illuminate 360°, the LED style replacement lamps are directional and offer a 160° beam spread. This allows for directed illumination where it is needed and not wasting light via reflectors or or over illuminating areas. This dimming LED tube uses electronic silicon control dimming. We have tested these lamps on all Lutron and Leviton electronic dimmers, such as the Leviton 6633-PLW. Please note: the dimmer switch must be installed outside the hazardous environment or use an explosion proof dimmer switch. Larson Electronics offers an explosion proof dimmer switch that can be installed within the hazardous location.

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 28 watt LED lamps produce 25% more illumination than standard T8 bulbs while offering lower amp draw and increased reliability. Each lamp produces 3,500 lumens at 125 lumens per watt, for a combined 7,000 total lumen light output. An EPL-EMG-48-2L-T8 explosion proof fluorescent light, with a combined total of 64 watts, draws 0.54 amps at 120 volts AC. This LED version of the same light, with a total of 46 watts, draws only 0.38 amps at 120 volts AC. The EPL-EMG-48-2L-LED-D-V2 is universal voltage, not multi-tap, and operates on any voltage from 120V to 277V AC 50/60hz without any modifications. We also make a 12/24V AC/DC version for low voltage applications for AC or DC power.

Energy Consumption Comparison

	T5HO	T8	LED
Wattage	108 watts	64 watts	56 watts
Amp Draw @ 120V AC	0.90 amps	0.54 amps	0.47 amps
Amp Draw @ 220V AC	0.49 amps	0.29 amps	0.25 amps
Amp Draw @ 240V AC	0.45 amps	0.27 amps	0.23 amps
Amp Draw @ 277V AC	0.39 amps	0.24 amps	0.20 amps
Amp Draw @ 12V DC	9 amps	5.34 amps	4.67 amps
Amp Draw @ 24V DC	4.5 amps	2.67 amps	2.34 amps

Lamp Life Expectancy	20,000 hours	24,000 hours	50,000 hours
Operation cost per year (12hs/day @ 12c/kWh)	$56.77	$33.64	$29.43

Our EPL-48-2L-LED-D-V2 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.

Field Serviceability: This explosion proof LED light fixture is field serviceable. All major internal components can be purchased from Larson Electronics and installed by a licensed electrician with basic tools. With most explosion proof fixtures, the fixture must be returned to the manufacturer for repair work, which presents downtime and long turn around times for repair work. Field serviceability allows operators to perform service work without having to return the fixture to the manufacturer in the event of damage or failure. This fixture has two individual led bulbs. Each LED lamp has its own internal driver specific to that bulb and every bulb is serviceable. Should a lamp failure occur, the other lamp will continue to operate until replaced. The lamps are isolated from each other, so one lamp failure does not impact the second lamp. The other added benefit of the LED bulbs vs integrated LEDs is the bulb can be upgraded as technology advances, providing less wattage for the same light or more light output for the same wattage.

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)





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 dielectrically 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. Qualifies 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



Image: EPL-EMG-48-2L-LED-D-V2 EPL-EMG-48-2L-LED Explosion Proof Emergency LED light

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Image: EPL-EMG-48-2L-LED-D-V2 Class 1 Division 1 & 2 and Class 2 Division 1 and 2 LED Light

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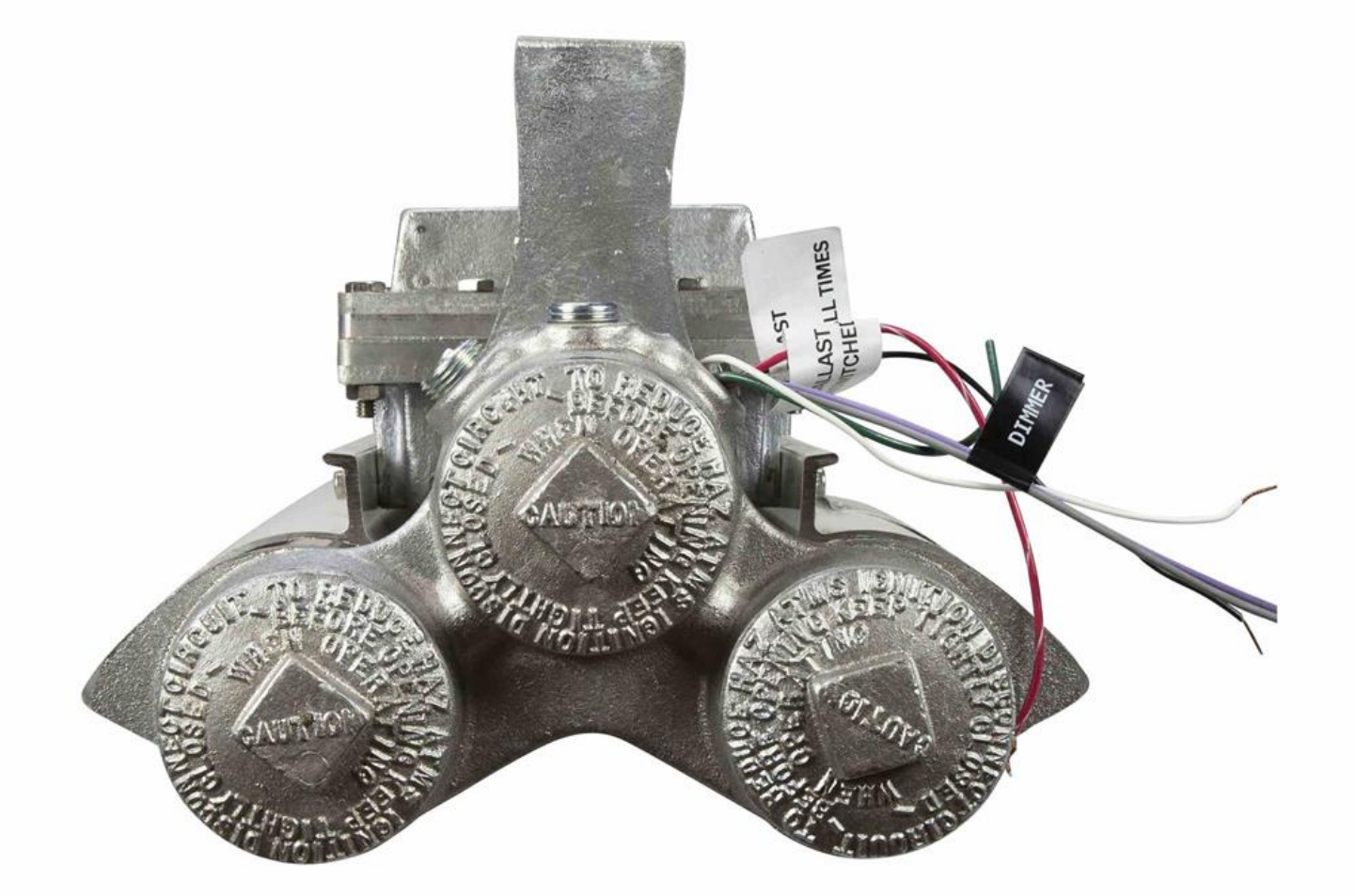

Image: EPL-EMG-48-2L-LED-D-V2 EPL-EMG-48-2L-LED paint spray booth LED light with backup ballast



Image: EPL-EMG-48-2L-LED-D-V2 This photos displays the side view of EPL-EMG-48-2L-LED

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EPL-EMG-48-2L-LED-D-V2

Product ID: 147795

Warranty: 36 Months.

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

Options:

EPL-EMG-48-2L-LED-D-V2-Voltage-Mount-Color Temp
Example: EPL-EMG-48-2L-LED-D-V2-1227-SFC-56K

Voltage	
120-277V AC	-1227
11-25V AC/DC	-1224

Mount	
SURFACE	-SFC
PENDANT	-PND

Color Temp	
5600K	-56K
4500K	-45K
3000K	-30K

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Links (Click on the below items to view):

- **Dimensional Drawing 2D**(https://www.larsonelectronics.com/images/product/DimensionalDrawing/147795.PDF)
- **IES (Photometric File)**(https://www.larsonelectronics.com/images/product/ies/147795.ZIP)
- **MSDS (Material Safety Data Sheet**(https://www.larsonelectronics.com/images/product/Msds/147795.PDF)
- **Operations Manual**(https://www.larsonelectronics.com/images/product/Manual/147795.PDF)
- **SpecSheetSpanish**(https://www.larsonelectronics.com/images/product/SpecSheetSpanish/147795.PDF)
- **STEP File (3D CAD Model)**(https://www.larsonelectronics.com/images/product/Step/147795.ZIP)
- **Wiring Diagram**(https://www.larsonelectronics.com/images/product/WiringDiagram/147795.PDF)
- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/147795.JPG)
- **HigResPic2**(https://www.larsonelectronics.com/images/product/HigResPic2/147795.JPG)
- **HigResPic3**(https://www.larsonelectronics.com/images/product/HigResPic3/147795.JPG)
- **HigResPic4**(https://www.larsonelectronics.com/images/product/HigResPic4/147795.JPG)
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- **HigResPic6**(https://www.larsonelectronics.com/images/product/HigResPic6/147795.JPG)
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- **HigResPic9**(https://www.larsonelectronics.com/images/product/HigResPic9/147795.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)