

Explosion Proof LED Light - 4 Foot, 2 Lamp - Class 1 & 2 Division 1 - Pendant and Surface Mount

EPL-48-2L-LED-PNSF



Specifications / Additional Information

EPL-48-2L-LED-PNSF Explosion Proof LED Fixture

NRTL Listed for United States & Canada

Dimensions: W-11.25" x L-52" x H-8.5"

Weight: 45 Lbs.

Voltage: Universal 120-277VAC 50/60 Hz or 11-25V AC/DC

Total Watts: 56 watts (28 Watts Per Lamp)

Total Lumens: 7,000 (3,500 Per 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

Ambient Operating Temp Range: -30° C to +85°C

Operating Temp Rating: T6 Rated

Minimum Operating Temp: -30°C

Maximum Case Temp: +90°C

Housing Material: Cast Aluminum End Caps, 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

Ratings/Approvals

Class 1 Division 1 & 2, Groups C and D

Class 2, Division 1 & 2, Groups E,F,G

NRTL Certified to UL 595 Marine Type (Saltwater)

NRTL Certified to UL 844

NRTL Certified to UL 1598 Marine Type

Certified Canadian Standards

Listed for Paint Spray Booths

California Title 24 Compliant

IP67 Rated - Waterproof

T6 Temperature Rating

NEMA 4X

LEL Listed LED Lamps

Approved for Confined Spaces

Silicone Free

Factory Sealed Fixture

Made in the USA

Special Orders- Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-270-1187

E-mail: sales@larsonelectronics.com

Made in the USA

The Larson Electronics EPL-48-2L-LED-PNSF Explosion Proof 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 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 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-48-2L-LED-PNSF is equipped with Larson Electronics' specially designed LED T-series bulbs which

produce 7,000 lumens, resulting in 30% 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 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.](#)

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 28 watt LED lamps produce 30% 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-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 56 watts, draws only 0.47 amps at 120 volts AC. The EPL-48-2L-LED-PNSF 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

	<u>T5HO</u>	<u>T8</u>	<u>LED</u>
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
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Our EPL-48-2L-LED-PNSF 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.

Standard Bracket Mounts: 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 of 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.

This fixture ships with both pendant and surface mount. It comes equipped with surface mount but is shipped with a pendant mount leg. The installer swaps out the surface mount leg for the pendant mount leg to pendant mount the fixture.



Surface Mount (Standard)



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[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](#)

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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 dialectically 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 re-lamping 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.

Options:

EPL-48-2L-LED-PNSF-Voltage

Example: EPL-48-2L-LED-PNSF-110277

Voltage	
110-277VAC	-110277
9-32VDC	-932

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