

Class 1 Div 2 LED Light Fixture - 4 Foot 2 Lamp - Marine Grade Aluminum Light - LED Rig Light

Part #: HAL-48-2L-LED

**Made in the USA**

The Larson Electronics HAL-48-2L-LED Hazardous Area LED Light Fixture is U.S./Canada approved for Class 1 Division 2 Groups A, B, C and D, UL 1598A listed, and ideal for hazardous locations where flammable chemical/petrochemical vapors may be occasionally encountered. This hazardous location LED light has a T4 temperature rating and carries a United States Coast Guard approval, making it ideal for applications such as oil rigs, ships, offshore applications, petrochemical, manufacturing, chemical storage, and water treatment centers.

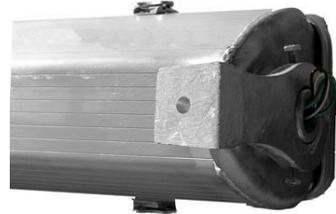
This four foot long, two lamp LED fixture is ideal for operators seeking a top quality hazardous location light that will reduce operating costs, improve lighting quality and reduce downtime incurred from frequent servicing intervals. The HAL-48-2L-LED fixture is listed Class 1 Division 2 Groups A, B, C and D hazardous area LED light that takes the reliability and efficiency of a fluorescent fixture and adds even longer lamp life and efficiency with high output LEDs. This fixture is T4A temperature rated and comes standard with our high power 28 watt LED lamps. The lamps are protected by an aluminum framed shatter and heat resistant clear acrylic lens secured with ten draw latches and the fixture is constructed of copper free aluminum alloy. The lamp reflector is corrosion resistant heavy gauge aluminum and coated with a high gloss reflective finish. We now offer our second generation LED tube lamps with this fixture which have increased this hazardous location light's performance. This two lamp HAZLOC LED linear fixture is lighter in weight and produces more light than hazardous location 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 T4A temperature rating and is U.L. 595 and UL 1598A Marine Type approved for use marine environments. The HAL-48-2L-LED is weatherproof and provides operators in hazardous locations with a highly efficient, reliable and affordable lighting solution for open areas where flammable chemicals and vapors may occasionally be present. Click here to read the NEC description for explosion proof and hazardous locations.



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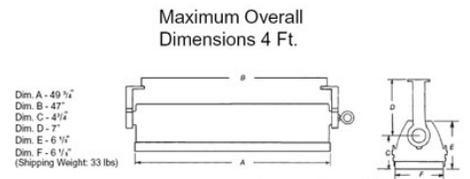
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We have eliminated the ballast normally associated with fluorescent fixtures which reduces overall weight and overall complexity of installation. There is no ballast in this unit and the included LEDT8-28W-V1 LED lamps have a 50,000+ hour service life, both of which result in extreme efficiency and greatly reduced maintenance costs. 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 HAL-48-2L-T8 hazardous location 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. This results in a lower amp draw while still providing increased reliability and light output.

The HAL-48-2L-LED is universal voltage, not multi-tap, and operates on any voltage from 120V to 277V AC 50/60hz without any modifications. The internal LED driver is a "smart" driver, sensing the incoming voltage and adjusting accordingly to provide the current required by the lamp. This allows operators to simply wire the fixture to voltage within the 120-277V range, no modifications required. This includes commonly found voltages such as 120V 60Hz, 220V 50Hz, 240V 60Hz, and 277V 60Hz. We also offer a 12/24V AC/DC version for low voltage applications for AC or DC power. Low voltage fixtures require no modifications between 12V and 24V power sources, nor between alternating and direct current supply.

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

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. A sliding bracket mount is available so operators can retrofit this LED light fixture to use the per-existing mounting holes from other fluorescent fixtures. Below, in the related items area you can order the sliding mount bracket option.

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.

Suspension Mounting: Pendant mount fixtures hang from the ceiling and are suspended by rigid pipe. Each fixture is equipped with two 3/4" NPT hubs, one on each end of the fixture. Operators bring rigid pipe down to the threaded mounting hubs. Wiring is fed down through the rigid pipe to one of the NPT hubs and tied in to the fixture's lead wires, completing the electrical connection. The remaining pendant hub provides support for the opposite end of the fixture.

Suggested Applications: Aircraft maintenance, oil drilling rigs, refineries, marine and salt water environments, ships, tankers, offshore, 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, where other models may only offer one or three choices. Pendant mount fixtures allow for suspension mounting via rigid conduit.
3. Fixture constructed streamlined ribbed corrosion-resistant, copper free extruded aluminum body for better heat dissipation, increasing LED efficiency and lamp life.
4. Aluminum extruded lens frame for greater strength
5. Re-lamping done via ten draw latches, which enable the operator to unlatch the lens and access the lamps.
6. Heavy gauge aluminum reflectors with high gloss reflective finish. Resists dents and corrosion.
7. 3/4 inch, threaded access hole for wiring conduit on both ends of the fixture. Pendant mount fixtures have access holes on ends and back side of fixture.
8. Both surface or pendant mount units can be wired end to end in series.

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.

Specifications / Additional Information**HAL-48-2L-LED Hazardous Area LED Rig Light****Listing:** United States - Canada**Surface Mount Dimensions:** 53.74"-L x 7.03"-W x 9.11"-H**Pendant Mount Dimensions:** 53.74"-L x 7.03"-W x 7.62"-H**Weight:** 22.7 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)**Luminous Efficacy:** 125 Lm/W**LED Lamp Life Expectancy:** 50,000 Hours**Color Temp:** 5600K, 4500K, or 3000K**Color Rendering Index:** >80**Beam Angle:** 150°**Lighting Configuration:** Flood Pattern**Power Efficiency:** 90%**Power Factor:** >0.95**Ambient Operating Temp Range:**-40° C to +65°C**Operating Temp Rating:** T4 Rated**Minimum Operating Temp:** -30°C**Maximum Case Temp:** +90°C**Housing Material:** Copper Free Aluminum Extrusion Housing**Lens Material:** Shatter/Impact Resistant Acrylic Lens**Gasket Material:** Neoprene**Mounting:** Surface Standard - Pendant Optional**Wiring Hub:** 3/4" NPT**Warranty:** 5 Years***U.L Approval:** [U.S Certificate](#) [Canada Certificate](#)

*5 year warranty replacement on this LED light (or LED bulbs for light fixtures with removable LED bulbs). After 30 days, the customer ships the failed LED light and/or LED bulb to Larson Electronics at their expense. If the failure is a manufacturer defect, we will ship a new replacement to the customer. If failure occurs within 30 days of receipt, Larson Electronics will provide a return label via email to the customer. When the failed light is returned, Larson Electronics will ship a new replacement. Please click here to see our 5 Year Warranty pamphlet.

Ratings/Approvals

Listed for United States and Canada

Class 1, Division 2, Groups A, B, C, D

UL 844

UL 1598A Marine Type (Salt water)

Certified to Canadian Standards

Meets USCG Specifications

California Title 24 Compliant

T4 Temperature Rating

LEL Listed LED Lamps

Made in the USA

Silicone Free

Special Orders- Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671**Intl:** 1-903-498-3363**E-mail:** sales@larsonelectronics.com[Scroll Down to Purchase-](#)

Part #: HAL-48-2L-LED (45328)





Links (Click on the below items to view):

- [SpecSheet Spanish](#)
- [Dimensional Drawing](#)
- [Manual](#)
- [SpectrumChart](#)
- [STEP](#)

- EASM
- Hi-Res Image 1 - Front Image of Fixture with Surface Brackets
- Front of Fixture with Lens Open
- Front Image of Fixture
- Side Image of Fixture with Clasps that hold the Lens and Fixture Together
- Side Image of Fixture with Surface Mount Brackets
- Close up Image of the Surface Mount Bracket
- Close up Image of the Pendant Mount Wiring Hub
- Back Image of Fixture for Pendant Mounting