Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

HAL-48-2L-LED-D

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

Product ID: 105937

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



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.

HAL-48-2L-LED-D Hazardous Area LED Dimmable Rig Light

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 90-132V AC, 220-240V AC, or 11-25V AC/DC
Total Watts: 46 watts (23 Watts Per Lamp)
Total Lumens: 5,750 (2,875 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: 1/2" or 3/4" NPT

Ratings/Approvals

Class 1, Division 2, Groups A, B, C, D
NRTL Certified to UL 844
NRTL Certified to 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
Dimmable
NRTL Listed for United States and Canada

Special Orders - Special 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

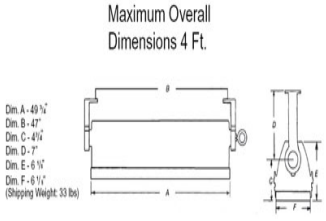
The Larson Electronics HAL-48-2L-LED-D Hazardous Area Dimmable LED Light Fixture is NRTL Listed for United States and Canada for Class 1 Division 2 Groups A, B, C and D, NRTL Certified to UL 1598A listed, and ideal for hazardous locations where flammable chemical/petrochemical vapors may be occasionally 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 dimmable 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-D 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 T4 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 T4 temperature rating and is NRTL Certified to U.L. 595 and UL 1598A Marine Type approved for use in marine environments. The HAL-48-2L-LED-D 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.



Click Photo to Enlarge



Click Photo to Enlarge



Surface Mount



Pendant Mount

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 dimmable LEDT8-48-D 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.
These are the first generation of our dimmable 23 watt LED tubes. Lumen output is 125 lumens per watt for a total of 2,875 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 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. When using electronic dimmer switches, fixtures equipped with the LEDT8-48-D LED bulb will dim from 0% up to 100% via the user provided dimming switch. Please note: the dimmer switch must be installed outside the hazardous environment or use an explosion proof dimmer switch. This fixture is offered in three voltage ranges: 90-132V AC 50/60Hz, 220-240V AC 50/60Hz, and 11-25V AC/DC. Operating the LED lamps outside of the designed voltage range may result in internal damage when higher voltage is applied to the lamps, and the lamp may not function on lower voltages.
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 is applied and emit 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, providing 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 23 watt LED lamps produce 30% more illumination than standard T8 bulbs while offering lower amp draw and increased reliability. Each lamp produces 2,875 lumens at 125 lumens per watt, for a combined 5,750 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 46 watts, draws only 0.38 amps at 120 volts AC. This results in a lower amp draw while still providing increased reliability and light output.

Energy Consumption Comparison

	T5HO	T8	LED
Wattage	108 watts	64 watts	46 watts
Amp Draw @ 120V AC	0.90 amps	0.54 amps	0.38 amps
Amp Draw @ 220V AC	0.49 amps	0.29 amps	0.21 amps
Amp Draw @ 240V AC	0.45 amps	0.27 amps	0.19 amps
Amp Draw @ 277V AC	0.39 amps	0.24 amps	0.17 amps
Amp Draw @ 12V DC	9 amps	5.34 amps	3.83 amps
Amp Draw @ 24V DC	4.5 amps	2.67 amps	1.92 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	$24.18

Please note: operation costs are calculated with the light fixture at 100% illumination. When dimming the light fixture below 100%, electrical consumption will be lower

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 pre-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 either two 1/2" or 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 hear 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. 1/2" or 3/4", 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.
9. Dimmable LED lamps

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.

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

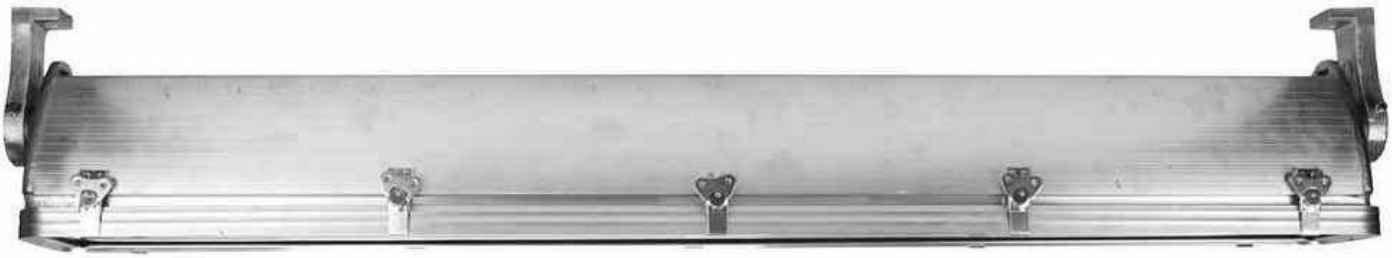
www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

Frequently Asked Questions (FAQ)









Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

HAL-48-2L-LED-D

Product ID: 105937

Warranty: 60 Months

Harmonized System (HS) Code: 9405.41.84.10

Export Control Classification Number (ECCN): EAR99

Options:

HAL-48-2L-LED-D-Mount-Voltage-Color Temp

Example: HAL-48-2L-LED-D-SFC-120V-56K

Mount	
SURFACE MOUNT	-SFC
PENDANT MOUNT	-PND

Voltage	
90-132V AC	-120V
220-240V AC	-240V
12-24V AC/DC	-1224

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

Links (Click on the below items to view):

- HigResPic1
- HigResPic2
- HigResPic3
- HigResPic4
- HigResPic5
- HigResPic6
- HigResPic7
- HigResPic8
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map