Larson Electronics LLC
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HAL-48-2L-LED-D-V2

0-10V Dimmable Class 1 Div 2 LED Light Fixture - 4 Foot 2 Lamp - Marine Grade Aluminum - 7000 Lumens

Product ID: 144081

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



Image: HAL-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.

HAL-48-2L-LED-D-V2 Hazardous Area Dimmable LED Rig Light

NRTL Listed for 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:-25° C to +45° C
Operating Temp Rating: T4 Rated
Minimum Operating Temp: -25°C
Maximum Case Temp: +45°C

Ratings/Approvals

Class I 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 Dimmable LED Lamps
ABS Approved
Made in the USA
Silicone Free
0-10V Dimmable

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
Warranty: 5 Years*

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-V2 Hazardous Area 0-10V 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 dimmable 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 0-10V 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-V2 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 which each produce 3,500 lumens of lighting power. 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.

This LED light fixture features 0-10V dimming capabilities. This gives operators the ability to manually adjust the brightness of the LED lamp quickly and easily. The 0-10V dimming allows for adjustments to fit the brightness needs of any lighting situation. A 0-10V dimmable light works through the use of a DC control signal that ranges between zero and ten volts. The basic idea is that at 10 volts of input the light is at its brightest level with 0 volts being the lowest possible dimness setting. The smooth, continuous and flicker-free dimming of a 0-10V dimmable LED light is ideal for a wide range of different lighting applications.

We now offer our second generation dimmable 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.

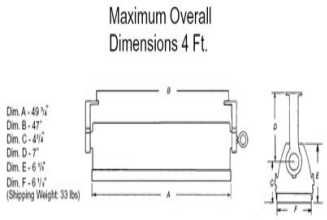
This fixture carries a T4A temperature rating and is NRTL Certified to U.L. 595 and UL 1598A Marine Type approved for use marine environments. The HAL-48-2L-LED-D-V2 is weatherproof and provides operators in hazardous locations with a highly efficient, reliable and affordable lighting solution for open 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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Click Photo to Enlarge



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Surface Mount



Pendant Mount

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 dimmable 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 dimmable LED lamps produce 30% more illumination than standard T8 bulbs while offering lower amp draw and increased reliability. Each lamp produces 3500 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 dimmable LED version of the same light, with a total of 56 watts, draws only 0.46 amps at 120 volts AC at full intensity. This results in a lower amp draw while still providing increased reliability and light output.

The HAL-48-2L-LED-D-V2 is universal voltage, not multi-tap, and operates on any voltage from 100-277V 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 100-277V range, no modifications required. Seperate grey/violet dimming control wires provide dimming capabilities for this fixture. Standarad 0-10V dimming switches (mounted outside the hazardous location) are compatible with these hazardous location fixtures. Larson Electronics offers an explosoin proof dimmer switch for mounting within the hazardous location.

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
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 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, chemical manufacturing, waste treatment plants, gas processing plants.

At Larson Electronics, we do more than meet your lighting needs. We also provide

replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

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.

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

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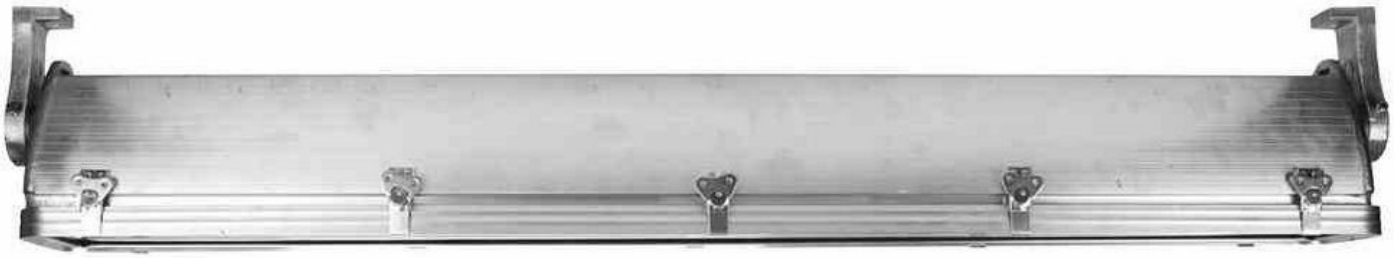


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HAL-48-2L-LED-D-V2

Product ID: 144081

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

Options:

HAL-48-2L-LED-D-V2-Mount-Color Temp-Hub Config
Example: HAL-48-2L-LED-D-V2-SFC-56K-0.5IN

Mount	
SURFACE	-SFC
PENDANT	-PND

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

Hub Config	
1/2IN	-0.5IN
3/4IN	-0.75IN

Links (Click on the below items to view):

- **Dimensional Drawing 2D**(https://www.larsonelectronics.com/images/product/DimensionalDrawing/144081.PDF)
- **Operations Manual**(https://www.larsonelectronics.com/images/product/Manual/144081.PDF)
- **STEP File (3D CAD Model)**(https://www.larsonelectronics.com/images/product/Step/144081.ZIP)
- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/144081.JPG)
- **HigResPic2**(https://www.larsonelectronics.com/images/product/HigResPic2/144081.JPG)
- **HigResPic3**(https://www.larsonelectronics.com/images/product/HigResPic3/144081.JPG)
- **HigResPic4**(https://www.larsonelectronics.com/images/product/HigResPic4/144081.JPG)
- **HigResPic5**(https://www.larsonelectronics.com/images/product/HigResPic5/144081.JPG)
- **HigResPic6**(https://www.larsonelectronics.com/images/product/HigResPic6/144081.JPG)
- **HigResPic7**(https://www.larsonelectronics.com/images/product/HigResPic7/144081.JPG)
- **HigResPic8**(https://www.larsonelectronics.com/images/product/HigResPic8/144081.JPG)
- **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)