

EPL-BS-70-50

50W Explosion Proof LED Light - Class 1 & II Div 1 & 2 - Non-Spark Aluminum Base Stand - 50' 16/3 SOOW Cord

Product ID: 150874

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



Image: EPL-BS-70-50

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-BS-70-50 - Explosion Proof LED Light

Listing: United States - Canada

Lamp Technology: LED

Dimensions: 15.25"-H x 10.5"-W x 9.25"-D

Weight: 25 lb

Voltage: 100-277 Volts AC, 50/60Hz

Total Watts: 50W

Total Lumens: 7,000 lms

Luminous Efficacy: 140 Lm/w

Lamp Life: 60,000+ Hours

Color Temp: 5600K, 4500K, or 3000K

Color Rendering Index: >75 CRI

Lamp Type: -

Lamp Base: -

Replacement Lamp: -

Beam Angle: 60°, 125°, or 140°

Lighting Configuration: Flood Pattern

Power Efficiency: >95%

Power Factor: 0.99

Amps: 0.42 A @ 120 V, 0.21 A @ 240 V, 0.18 A @ 277 V

Ratings/Approvals

Class I, Divisions 1 & 2, Groups C and D

Class II, Divisions 1 & 2, Groups E, F and G

Class III, Divisions 1 & 2

NRTL Certified to UL 844 Ed. 13

NRTL Certified to UL 1598

NRTL Certified to C22.2 No. 137 Rev 2009

NRTL Certified to C22.2 No. 250.0

NRTL Certified to C22.2 No. 30-M-1986 Rev 2012

T5 Temperature Rating

Paint Spray Booth Approved

IEC 60529 Tested

IP67 Rated Waterproof

LEL Approved

Single LED Driver

80% Lumen Retention after 60,000 Hours

Factory Sealed Light Fixture

Surge Protection

Replacement for 250W Metal Halide Lamps

Ambient Operating Temp Range: -50°C to +65°C

Operating Temp Rating: T5

Temperature Rise: 11°C (10°F) Over Ambient

Housing Material: Copper Free Cast Aluminum

Housing Finish: Epoxy Powder Coated - Grey

Lens Material: Hardened Borosilicate Glass

Gasket Material: Silicone

Mounting: Non-Sparking Aluminum Base Stand w/ Carrying Handle

Wiring: 50' SOOW Cord w/ Explosion Proof Cord Cap

Cord Cap Options: 5-15P, 5-20P, or 6-20P

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-270-1187

Fax: 1-903-765-7664

E-mail: sales@larsonelectronics.com

Made in the USA

The EPL-BS-70-50 Explosion Proof LED Light provides operators with a powerful alternative to traditional hazardous location luminaries. The spun aluminum mount and LED lamp used with this unit provide operators with excellent power and efficiency coupled with high versatility and ease of use.

The EPL-BS-70-50 is a Class I, Division 1 & 2 and Class II, Division 1 & 2 explosion proof light fixture that is designed for energy efficient and superior illumination in combustible environments. This 50-watt LED fixture offers 7,000 lumens of high quality light with a color temperature of 5600K. We also offer a 3000K warm white and 4500K natural white color temperature options (longer lead times may apply for non-standard temperatures). Serving as a suitable replacement for 250-watt metal halide lamps, a color rendering index of 75 ensures colors and details are produced more accurately than high pressure sodium or mercury vapor luminaries.

This portable LED lighting solution for explosive sites is IP67 rated, dust-proof and protected against high pressure jets and temporary submersion. The copper-free aluminum alloy housing is specially designed to dissipate heat which increases the efficiency and lifespan of the LEDs and electronic components. An epoxy powder coated finish facilitates durability and an attractive aesthetic appearance. Special heat dissipating design in conjunction with LED technology helps this fixture to achieve an excellent 60,000-hour rated lifespan with 80% lumen retention. The explosion proof LED light also offers operators convenience in the form of field serviceability.



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LED Benefits: Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation and/or transportation. Instead of heating a small filament or using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current is applied, providing instant illumination with no warm up or cool down time before re-striking. Because there is no warm up period, this light can be cycled on and off with no reduction in lamp life.

LED lights run at significantly cooler temperatures than traditional metal halide and high pressure sodium lights and contain no harmful gases, vapors, or mercury, making them both safer and more energy efficient. No extra energy is wasted in cooling enclosed work areas due to external heat emissions from bulb type lights, and the operator risks associated with traditional lighting methods, such as accidental burns and exposure to hazardous substances contained in the glass bulbs, are eliminated. In addition, LEDs are also safer for the environment as they are 100% recyclable, which eliminates the need for costly special disposal services required with traditional gas burning and arc type lamps.

LED Drivers: Even in LED fixtures, heat is the single largest factor in premature light failure and color shifting. As a result, many manufacturers reduce the output of their LEDs in order to reduce the amount of heat produced. Rather than lower light output or quality, Larson Electronics addresses this problem with the addition of an electronic LED driver. This internal driver provides the ability to automatically monitor and adjust input current to maintain the correct LED voltage levels regardless of input levels across a specific range. This not only reduces the energy dissipation, effectively lowering the operating temperature of the fixture, but also prevents AC over-voltage and short circuit loading making this fixture virtually maintenance free. Because the electronic driver allows the EPL-LB-50LED-RT to run at a cooler internal temperature and regulates the electrical current, energy efficiency and LED service hours are maximized while at the same time reducing operating costs and downtime incurred from the frequent servicing intervals required with other hotter running lights.

Energy Consumption Comparison

	<u>Metal Halide</u>	<u>LED</u>
Wattage	175 watts	50 watts
Amp Draw @ 120V AC	1.69 amps	0.42 amps
Amp Draw @ 220V AC	0.92 amps	0.23 amps
Amp Draw @ 240V AC	0.85 amps	0.21 amps
Amp Draw @ 277V AC	0.73 amps	0.18 amps
Amp Draw @ 12V DC	16.77 amps	4.17 amps
Amp Draw @ 24V DC	8.39 amps	2.08 amps
Lamp Life Expectancy	20,000 hours	60,000+ hours
Operation cost per year (12hs/day @ 12c/kWh)	\$241.78	\$26.30

Each LED light fixture has the potential to save \$150.00+ per year in electricity alone, not including maintenance costs, operational downtime, reduced productivity, HVAC loads, or carbon footprint. When retrofitting an entire facility with 100s of light fixtures, the return on investment of LED over metal halide becomes evident.

Voltage: The light is universal voltage capable and can be operated with 100-277 V AC, 50/60 Hz. We also offer a low voltage version of this LED fixture that operates on AC/DC voltages from 11-25 Volts.

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5-15 Straight Blade Plug



5-20 Straight Blade Plug



6-20 Straight Blade Plug

Wiring & Plug: This explosion proof LED light is equipped with 50 feet of 16/3 chemical and abrasion resistant SOOW cord that is fitted with an explosion proof cord cap for easy connection to explosion proof outlets. Plug options include a 5-15 15 amp straight blade plug for use with 120 V explosion proof outlets, a 5-20 20 amp straight blade plug for use with 120 V explosion proof outlets, or a 6-20 20 amp straight blade plug for use with 220-240 V explosion proof outlets.

****PLEASE NOTE**** voltage ratings on plugs and outlets are MAXIMUM voltage. For low voltage applications, proper voltage must be applied to the outlet or damage to the light fixture will occur.

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60° Beam Angle



125° Beam Angle



140° Beam Angle

Beam Angles: When used as a portable lighting solution, the varying beam angles are each individually ideal for several environments. The 60° beam provides the most intense beam of the three options. It is perfect for narrow, confined spaces and is ideally suited for tank cleaning purposes. It offers focused light to provide ample illumination to tight work spaces and other environments. The 125° beam offers a more diffused source of light that is also less intense in brightness. It is a great general area work light and performs well when used for outdoor illumination. The 140° beam offers a very wide lighting pattern and is ideal for situations where lighting distance is not a concern, but illumination of a wider area and even light distribution is. The 140° beam is great for situations that call for working in close proximity to lights such as in a paint booth.

Suggested Applications: Paint spray booths, aircraft maintenance, oil drilling rigs, refineries, solvent and cleaning areas, chemical manufacturing, waste treatment plants, gas processing plants, and more.

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.



Frequently Asked Questions (FAQ)

There are no Faqs



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Product ID: 150874

Export Control Classification Number (ECCN): EAR99

Options:

EPL-BS-70-50-Cord Cap-Beam Config-Color Temperature

Example: EPL-BS-70-50-1523-60B-56K

Cord Cap	
5-15	-1523
5-20	-2023.125V
6-20	-2023.250V

Beam Config	
60°	-60B
125°	-125B
140°	-140B

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

Links (Click on the below items to view):

- **Dimensional Drawing 2D** (<https://www.larsonelectronics.com/images/product/DimensionalDrawing/150874.PDF>)
- **HigResPic1** (<https://www.larsonelectronics.com/images/product/HigResPic1/150874.JPG>)
- **HigResPic2** (<https://www.larsonelectronics.com/images/product/HigResPic2/150874.JPG>)
- **HigResPic3** (<https://www.larsonelectronics.com/images/product/HigResPic3/150874.JPG>)
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- **HigResPic5** (<https://www.larsonelectronics.com/images/product/HigResPic5/150874.JPG>)
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- **HigResPic10** (<https://www.larsonelectronics.com/images/product/HigResPic10/150874.JPG>)
- **Video1** (<https://www.youtube.com/watch?v=oPx-iV0F3nA>)
- **ISO 9001 Certification** (<http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF>)
- **Business Certificate** (<https://www.larsonelectronics.com/images/pdfdocs/w9.PDF>)
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