

# 50W Hazardous Location Low Bay LED Fixture - Paint Spray Booth Approved -7,000 lms -

Ceiling Mount - T5 EPLC2-LB-50LED-RT-CM



#### EPLC2-LB-50LED-RT-CM - Hazardous Location Low Bay LED Light

Listing: United States - Canada Lamp Technology: LED Dimensions: 7.04" L x 15.04" H x 5.72"D Weight: 9 lbs Voltage: 100-277 Volts AC, 50/60Hz or 11-25 Volts AC/DC 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° or 125° Lighting Configuration: Flood Pattern Power Efficiency: >95% Power Factor: 0.99 Amps: 0.42A @ 120V, 0.21A @ 240V, 0.18A @ 277V 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: Ceiling/Surface Mount

Wiring: Internal Wiring Junction Box Hub: (4) 3/4" NPT Threaded Hubs

#### Ratings/Approvals

Class I, Division 2, Groups C and D Class II, Divisions 1 & 2, Groups E, F and G Class III, Divisions 1 & 2 Certified to UL 844 Ed. 13 Certified to UL 1598 Certified to C22.2 No. 137 Rev 2009 Certified to C22.2 No. 250.0 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 Recommended 15' to 40' Mounting Height Surge Protection Replacement for 250W Metal Halide Lamps

Special Orders- Requirements Contact us for special requirements Toll Free: 1-800-369-6671 Intl: 1-214-616-6180

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The Larson Electronics EPLC2-LB-50LED-RT-CM Hazardous Location Low Bay LED Light Fixture provides operators with a powerful alternative to traditional hazardous location luminaries. Capable of replacing 250-watt metal halide lamps, this 50-watt low bay LED unit emits 7,000 lumens, carries an IP67 waterproof rating and features an extended lifespan of 60,000+ hours. The factory sealed, hazardous location fixture is protected by a copper-free aluminum housing with an epoxy powder coated finish.

The EPLC2-LB-50LED-RT-CM is a Class I, Division 2 and Class II, Divisions 1 & 2 hazardous



location light fixture that is designed for energy efficient and superior illumination in combustible environments. This 50-watt low bay 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 low bay lighting solution 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 hazardous location low bay LED light also offers operators convenience in the form of field serviceability.

**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 EPLC2-LB-50LED-RT-CM 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**

|   | Metal Halide | LED           |
|---|--------------|---------------|
| 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<br>(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:** This light is universal voltage capable and can be operated with 100-277V AC, 50/60Hz. We also offer a low voltage version of this LED fixture that operates on AC/DC voltages from 11-25 Volts.

**Wiring:** The hazardous location low bay LED light fixture is equipped with an internal wiring junction box built into the mount of the fixture. A total of four, 3/4" NPT threaded ports are available for running conduit (located at every corner of the unit). Additionally, wiring can be passed through the junction box, reducing the need for additional junction boxes. Operators run wiring directly to the fixture and terminate in the junction box mount. This fixture is factory sealed and does not require a seal off.

**Mount:** This hazardous location low bay LED light fixture comes standard with a flat surface ceiling mounting system, equipped with four bolts. The sturdy, square mounting plate can be secured on horizontal or vertical surfaces. Spacing between the mounting component and LED fixture's fins, which are located at the back of the unit, streamline cool operation. Several mounting options including pendant mounting and cable mounting can be ordered separately. Compared to high bay lights, low bay fixtures are recommended for lower mounting heights ranging between 15' to 40'.

**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 <u>sales@larsonelectronics.com</u> for more information about our custom options tailored to meet your specific industry needs.



# **Options:**

# EPLC2-LB-50LED-RT-CM-Voltage-Beam Spread-Color Temperature Example: EPLC2-LB-50LED-RT-CM-1227-1227-56K

| Vo           | Itage |      | Beam Spread |       | Color Temperature |  |
|--------------|-------|------|-------------|-------|-------------------|--|
| 120-277V AC  | -1227 | 60°  | -1227       | 5600K | -56K              |  |
| 11-25V AC/DC | -1224 | 125° | -1224       | 4500K | -45K              |  |
|              |       |      |             | 3000K | -30K              |  |



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