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

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.765.7664

EPL-HB-100LED-RT-CM

Ceiling Mount Explosion Proof 100 Watt High Bay LED Light Fixture - Paint Spray Booth Approved

Product ID: 105696

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



Image: EPL-HB-100LED-RT-CM

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-HB-100LED-RT-CM - C1D1 High Bay LED Light

Listing: United States - Canada
Lamp Type: Cree LED
Dimensions: 14"H x 16"W x 11"D
Weight: 35 lbs.
Voltage: 100-277 Volts AC, 50/60Hz or 11-25 Volts AC/DC
Total Watts: 100W
Total Lumens: 14,000
Luminous Efficiency: 140 Lm/W
Lamp Life: 60,000+ Hours
Color Temp: 5000K, 4000K, 3000K
Color Rendering Index: >75 CRI
Beam Angle: 60° or 125°
Lighting Configuration: Flood Pattern
NEMA Type (Lighting): 6H x 6V (60° Optics); 6H x 6V (125° Optics); 6H x 7V (140° Optics)
IES Classification: Type I (60° Optics); Type VS (125° Optics); Type VS (140° Optics)
Longitudinal Classification: Very Short (60° Optics); Very Short (125° Optics); Short (140° Optics)
Cutoff Classification: Cutoff
CIE Type: Direct
BUG Rating: B4-U1-G0 (60° Optics); B4-U1-G1 (125° Optics); B3-U1-G2 (140° Optics)

Ratings/Approvals

Listed for United States and Canada
Class I, Divisions 1 & 2, Groups C and D
Class II, Divisions 1 & 2, Groups E,F,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
T5 Temperature Rating
Paint Spray Booth Approved
IEC 60529 Tested
IP67 Rated Waterproof
LEL Approved
Multiple Driver Banks
80% Lumen Retention after 60,000 Hours
Factory Sealed Light Fixture
Recommended 15` to 40` Mounting Height

Power Efficiency: >95%
Power Factor: 0.992
Amperage: 0.83A @ 120V, 0.42 @ 240V, 0.36 @ 277V
Ambient Operating Temp Range:-50° C to +65°C
Operating Temp Rating: T5
Housing Material: Copper Free Cast Aluminum
Lens Material: Hardened Borosilicate Glass
Gasket Material: Silicone
Mounting: Ceiling Mount Junction Box
Wiring: (4) 3/4" NPT Hubs on Ceiling Mount
Wiring Hub: 3/4" NPT

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

The Larson Electronics EPL-HB-100LED-RT-CM Ceiling Mount Explosion Proof High Bay light fixture provides operators with a powerful and energy efficient alternative to traditional hazardous location luminaries. Cree LED technology and compact design makes this lamp an excellent replacement upgrade option for bulky and high maintenance cost older incandescent, metal halide and high pressure sodium lights.

This Class I Division 1 & 2, Class II Division 1 & 2 explosion proof light fixture provides 14,000 of high quality light while drawing only 100 watts. The copper free aluminum alloy body is powder coated for added 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. Light weight and a low profile make this unit an attractive alternative to larger and heavier older fixtures and requires less hardware to install.



Click Photo to Enlarge



Click Photo to Enlarge



Click Photo to Enlarge

The explosion proof LED light fixture features multiple LED drivers which helps to increase the operational life of the fixture. With traditional LED lights, in the event an LED array or driver fails, the entire fixture no longer illuminates. This new series of LED lamps contains eight individual LED boards configured in a series of banks. Each bank contains two LED boards with an individual driver. In the event of a driver failure, only one bank of LEDs will be effected while the other banks will continue to operate. In the event that of an LED failure, the mating LED will continue to operate.

Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation. 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 and emit light. 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 traditional 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 lighting.

This light is universal voltage capable and can be operated with 100-277 VAC, 50/60Hz. We also offer a low voltage version of this LED fixture that operates on AC/DC voltages from 11-25 Volts. This explosion proof LED light fixture is IP67 rated, dust-proof, and protected against high pressure jets and temporary submersion. The cast aluminum body and LED lamp give this light excellent durability and resistance to vibration and impacts. The housing is specially designed to dissipate heat which increases the efficiency and lifespan of the LEDs and electronics.

Energy Consumption Comparison

	Metal Halide	LED
Wattage	250 watts	100 watts
Amp Draw @ 120V AC	2.38 amps	.83 amps
Amp Draw @ 220V AC	1.30 amps	0.45 amps
Amp Draw @ 240V AC	1.19 amps	0.42 amps
Amp Draw @ 277V AC	1.03 amps	0.36 amps
Amp Draw @ 12V DC	23.75 amps	8.3 amps
Amp Draw @ 24V DC	11.88 amps	4.17 amps
Lamp Life Expectancy	20,000 hours	50,000+ hours
Operation cost per year (12hs/day @ 12c/kWh)	$149.80	$52.56

Each LED light fixture has the potential to save ~$100.00+ 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.

This LED light produces 14,000 lumens with a color temperature of 5000K and a color rendering index of 75 which produces colors and details much more accurately than high pressure sodium or mercury vapor luminaries. We also offer a 3000K warm white and 4000K natural white color temperature options (longer lead times may apply for non-standard temperatures). The standard version of this explosion proof LED fixture includes a flat surface ceiling mount with four 3/4" NPT entries.

High Quality Features

1. Low power consumption.
2. Instant on/off operation.
3. Fixture constructed of extruded corrosion resistant copper free aluminum alloy.
4. Superior color rendering compared to HPS, LPS, MH.
5. Retains 80% lumen output after 60,000 operating hours.
6. Powder coated aluminum fixture body.
7. Ceiling mount included w/ 3/4" knock outs
8. Low profile - Light weight
9. 14,000 Lumen output from 100 watts

Superior LED Benefits

1. 60,000 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 LED 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: 903.765.7664

Frequently Asked Questions (FAQ)

There are no Faqs

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

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.765.7664



Image: EPL-HB-100LED-RT-CM



Image: EPL-HB-100LED-RT-CM



Image: EPL-HB-100LED-RT-CM



Image: EPL-HB-100LED-RT-CM

EPL-HB-100LED-RT-CM

Product ID: 105696

Warranty: 60 Months.

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

Options:

EPL-HB-100LED-RT-CM-Voltage-Beam Angle
Example: EPL-HB-100LED-RT-CM-1227-60B

Voltage	
120-277V AC	-1227
11-25V AC/DC	-1224

Beam Angle	
60°	-60B
125°	-125B

Links (Click on the below items to view):

- **Canadian CEC Certificate (Commonly referred to as CSA Certificate)**(https://www.larsonelectronics.com/images/product/CECCert/105696.PDF)
- **IES (Photometric File)**(https://www.larsonelectronics.com/images/product/ies/105696.ZIP)
- **LM79**(https://www.larsonelectronics.com/images/product/LM79/105696.PDF)
- **LM80**(https://www.larsonelectronics.com/images/product/LM80/105696.PDF)
- **Operations Manual**(https://www.larsonelectronics.com/images/product/Manual/105696.PDF)
- **Photometric Flood Report**(https://www.larsonelectronics.com/images/product/FloodReport/105696.PDF)
- **Photometric Indoor Report**(https://www.larsonelectronics.com/images/product/IndoorReport/105696.PDF)
- **Photometric Polar Graph**(https://www.larsonelectronics.com/images/product/PolarGraph/105696.PDF)
- **SpecSheetSpanish**(https://www.larsonelectronics.com/images/product/SpecSheetSpanish/105696.PDF)
- **USA NEC Certificate (Commonly referred to as UL Certificate)**(https://www.larsonelectronics.com/images/product/NECCert/105696.PDF)
- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/105696.JPG)
- **HigResPic2**(https://www.larsonelectronics.com/images/product/HigResPic2/105696.JPG)
- **HigResPic3**(https://www.larsonelectronics.com/images/product/HigResPic3/105696.JPG)
- **HigResPic4**(https://www.larsonelectronics.com/images/product/HigResPic4/105696.JPG)
- **HigResPic5**(https://www.larsonelectronics.com/images/product/HigResPic5/105696.JPG)
- **HigResPic6**(https://www.larsonelectronics.com/images/product/HigResPic6/105696.JPG)
- **HigResPic7**(https://www.larsonelectronics.com/images/product/HigResPic7/105696.JPG)
- **HigResPic8**(https://www.larsonelectronics.com/images/product/HigResPic8/105696.JPG)
- **Video1**(https://www.youtube.com/watch?v=IU_55HyiXV8)
- **Video2**(https://www.youtube.com/watch?v=rvPRFZk-Fpc)
- **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)