150W Explosion Proof LED Flood Light - Surface Mount - 17500 Lumens - C1D1 - 120-277V AC - 140°

Part #: EPL-LED-150W-RT-140DB

The EPL-LED-150W-RT-140DB from Larson Electronics is an Explosion Proof High Bay LED Light Fixture that 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 Divisions 1 & 2 and Class II Divisions 1 & 2 explosion proof light fixture provides 17,500 lumens of high quality light while drawing only 150 watts. The copper free aluminum alloy body is powder coated for added durability and an attractive aesthetic appearance. A 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 lightweight design and low profile make this unit an attractive alternative to larger and heavier older fixtures and requires less hardware to install.

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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.
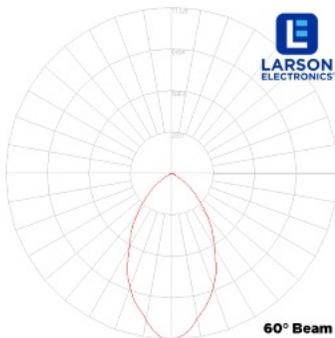
This explosion proof LED light fixture features multiple LED drivers which helps to increase the operational life of the fixture. With traditional LED lights, in the event an LED array or driver fails, the entire fixture no longer illuminates. This new series of LED lamps contains twelve individual LED 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.

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 electronic LED drivers. These internal drivers provide 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 drivers allow the EPL-LED-150W-RT-140DB 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.
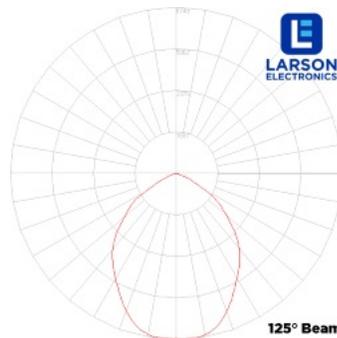
The explosion proof LED light fixture features multiple LED drivers which helps to increase the operational life of the fixture. With traditional LED lights, in the event an LED array or driver fails, the entire fixture no longer illuminates. With the EPL-LED-150W-RT-140DB series of explosion proof lamps from Larson Electronics, each LED fixture contains six individual LED boards configured in a series of banks. Each bank contains

two LED on a single board 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.
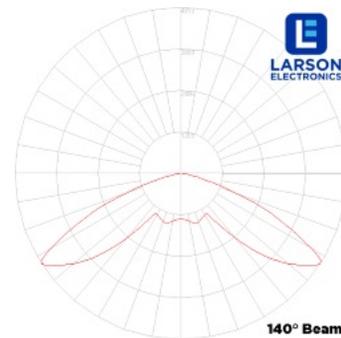
Click Photos to Enlarge

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. This unit produces 17,500 lumens with a color temperature of 5000K standard 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 both 3000K warm white and 4500K natural white color temperature options (longer lead times may apply for non-standard temperatures). This lamp uses Cree LED units that have been chosen for their high lumen per watt ratio and extreme longevity. These Cree LEDs generate a robust 86.67 lumens per watt effective lumen output and have a 80% lumen retention at 60,000 hours, giving them better efficiency and operational life than traditional light sources.

Field Serviceability: This explosion proof LED light fixture is field serviceable. All major internal components can be purchased from Larson Electronics and installed by a licensed electrician with basic tools. With most explosion proof fixtures, the fixture must be returned to the manufacturer for repair work, which presents downtime and long turn around times for repair work. Larson Electronics addresses this issue with the EPL-HB-150LED-RT series with field serviceability, allowing operators to perform service work without having to return the fixture to the manufacturer in the event of damage or failure.

Energy Consumption Comparison

	Metal Halide	**LED**
Wattage	400 watts	150 watts
Amp Draw @ 120V AC	3.83 amps	1.25 amps
Amp Draw @ 220V AC	2.09 amps	0.68 amps
Amp Draw @ 240V AC	1.92 amps	0.63 amps
Amp Draw @ 277V AC	1.66 amps	0.54 amps
Amp Draw @ 12V DC	38.33 amps	12.5 amps
Amp Draw @ 24V DC	19.12 amps	6.25 amps
Lamp Life Expectancy	20,000 hours	50,000+ hours
Operation cost per year (12hs/day @ 12c/kWh)	$241.78	$78.84

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 explosion proof LED light is universal voltage capable and can be operated with 100-277V AC, 50/60 Hz without modifications to the fixture. A low voltage version of this LED fixture that operates on AC/DC voltages from 11-25 volts is also available. 18-48V AC/DC voltage models are available for network systems and marine vessels. We also offer an additional 347-480V high voltage, 125-250V DC, and 0-10V dimmable versions of this explosion proof LED light fixture.

Mounting: The EPL-LED-150W-RT-140DB comes standard with an adjustable surface mount bracket. The EPL-LED-150W-RT-140DB offers an adjustable mounting system that this fixture to be mounted to any flat surface including walls and ceilings.

This explosion proof LED light fixture is paint spray booth listed, 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.

Suggested Applications: The EPL-HB-150LED-RT is approved for use within environments where flammable or combustible gases, vapors, dusts, fibers, and flying exist or stand the potential to exist, and is ideal for a wide variety of applications.

Applications include but not limited to aircraft maintenance, alcohol processing, aerospace, chemical manufacturing, coke processing, cold storage, compressed natural gas (CNG) facilities, cranes, cryogenics, distilleries, food processing (with food grade gasketed polycarbonate lens: EPL-HB-150LED-RT-188), fuel storage, gas processing plants, grain processing, laboratories, liquefied natural gas (LNG) facilities, liquid propane gas (LPG), manufacturing, marine vessels, methane production, mining, offshore, oil drilling rigs, oil refineries, paint spray booths, paper processing, petrochemical, pharmaceuticals, power plants, production refineries, sand blast cabinets, sewage and septic tanks, shipyards, solvent and cleaning areas, storage facilities, tank farms, tankers, textile, washdown areas, waste treatment plants, and woodworking. Click here to read the NEC description for explosion proof and hazardous locations.

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.

High Quality Features   **Superior LED Benefits**

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. Adjustable surface mount bracket included
8. Low profile - Light weight
9. 17,500 Lumen output from 150 watts

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   **www.LarsonElectronics.com**

9419 E US HWY 175, Kemp, TX 75143   **Phone: 1-800-369-6671**   **Fax: 903-498-3364**   **Email: sales@LarsonElectronics.com**

Specifications / Additional Information

EPL-LED-150W-RT-140DB Explosion Proof LED Flood Light

Ratings/Approvals

Listing: United States - Canada

Lamp Type: Cree LED

Dimensions: 14"H x 16"W x 5"D

Weight: 32 lbs

Voltage: 100-277 Volts AC, 50/60Hz or 11-25 Volts AC/DC

Total Watts: 150W

Total Lumens: 17,500

Luminous Efficacy: 116.67 Lm/W

Lamp Life: 60,000+ Hours

Color Temp: 5000K, 4500K or 3000K

Color Rendering Index: >75 CRI

Beam Angle: 140°

Lighting Configuration: Flood Pattern

Power Efficiency: >95%

Power Factor: 0.992

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

Operating Temp Rating: T5

Housing Material: Copper Free Cast Aluminum

Housing Finish: Epoxy Powder Coated - Grey

Lens Material: Hardened Borosilicate Glass

Gasket Material: Silicone

Mounting: Adjustable Flat Surface Mount U-Bracket

Wiring: 10' 16/3 SOOW w/ Flying Leads

Wiring Hub: 3/4" NPT

LED Driver Specs

Input Voltage: 100-277 Volts AC

Input Current: 1.8A Max

Output Voltage: 54V Max

Output Current: 2.1A

Warranty: Yes - 5 Years* - 10 Year / 100,000 Lumen Available**

Scroll Down to Purchase-

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

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

Multiple Driver Banks

80% Lumen Retention after 60,000 Hours

Factory Sealed Light Fixture

3.5kV Surge Protection (NTC Circuit)

Special Orders- Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-498-3363

E-mail: sales@larsonelectronics.com

Part #: EPL-LED-150W-RT-140DB (148115)

Options:

EPL-LED-150W-RT-140DB- **VOLTAGE** - **COLOR TEMP**

Example: **EPL-LED-150W-RT-140DB**-**1227**-**50K**

VOLTAGE		COLOR TEMP	
120-277V AC/DC	-1227	5000K	-50K
11-25V AC/DC	-1224	4500K	-45K
		3000K	-30K

Links (Click on the below items to view):

- Hi-Res Image 1 - 150 Watt Explosion Proof LED Flood Light

- Hi-Res Image 2 - 150 Watt Explosion Proof LED Flood Light

- Hi-Res Image 3 - 150 Watt Explosion Proof LED Flood Light

- Hi-Res Image 4 - 150 Watt Explosion Proof LED Flood Light