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

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

EPL-HB-100LED-RT-UVA

100W Explosion Proof Ultraviolet LED Light Fixture - Class I, II, III - Paint Spray Booth Approved - 180° Beam Angle

Product ID: 104729

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



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-UVA - C1D1 Ultraviolet LED Light
Lamp Type: LED
Dimensions: 14"-H x 16"-W 5"-D
Total Watts: 100W
Total Intensity: 46,550 mW
Efficiency: 350 mW/w
Voltage: 100-277 Volts AC, 50/60 Hz or 11-25 Volts AC/DC
Mounting: 3/4" Pendant and Swivel Mount (Both Included)
Weight: 28 lb
Lighting Configuration: Flood Pattern
Temp Rating: T5 -50C to +65C
Color: Ultraviolet- 365NM
Wavelength Curve: 350-400NM - Peak @ 365NM
Lamp Life: 50,000+ Hours
Beam Angle: 180°

Ratings/Approvals
Class I, Division 1, Groups C,D
Class I, Division 2, Groups A,B,C,D
Class II, Divisions 1 & 2, Groups E,F,G
Class III
T5 Temperature Rating
NRTL Certified to UL844 and C22.2 Standards
Paint Spray Booth Approved
LEL Approved
IP67 Rated Waterproof
Multiple Driver Banks
80% Intensity Retention after 50,000 Hours

Special Orders - Special Requirements
Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-270-1187

Fax: 1-903-498-3364

E-mail: sales@larsonelectronics.com

The EPL-HB-100LED-RT-UVA from Larson Electronics is an Explosion Proof Ultraviolet Light Fixture that provides operators with a powerful and energy efficient alternative to traditional hazardous location luminaries

with UV cutoff filters. 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 fixture uses advanced LED light technology to produce ultraviolet light and is T6 rated for hazardous locations where UV lamps are used in paint and adhesive curing, food inspection, or for non-destructive testing. The EPL-HB-100LED-RT-UVA features a 180° beam angle.

This Class I Divisions 1 & 2, Class II Divisions 1 & 2 explosion proof UV light fixture provides 46,550 mW of high quality ultraviolet light while drawing only 100 watts. This high output UV LED fixture provides a 6,384 µW/cm2 center beam maximum intensity at 12" while providing a minimum 2,660 µW/cm2 intensity over a 14" by 14" area. The EPL-HB-100LED-RT-UVA is typically used for curing coatings or adhesives and for non-destructive testing applications. This fixture has been thoroughly tested with the DuPont line of ultraviolet curable paint and primers, accelerating the cure times over metal halide fixtures with surface temperatures as low at 55°F.

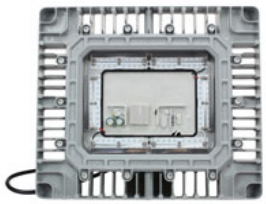
The copper free aluminum alloy body is powder coated for added durability and an attractive aesthetic appearance. Special heat dissipating design in conjunction with LED technology helps this fixture to achieve an excellent 50,000 hour rated lifespan with 80% intensity retention. Light weight and a low profile make this unit an attractive alternative to larger and heavier older fixtures and requires less hardware to install. This fixture can operate on voltages ranging from 120V-277 V AC, 50/60 Hz and is ETL approved for use in hazardous environments, paint spray booths, wet environments, and areas where UV lamps are used in paint and adhesive curing, food inspection, and for non-destructive testing.



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 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.

The EPL-HB-100LED-RT-UVA uses ultraviolet LED light technology, a technology that is far better in energy saving than traditional fluorescent bulbs used for the same purposes. Traditional ultraviolet lights require a coating to block out visible light or a special composition of gases and chemicals used to create a higher concentration of ultraviolet light. This process, however, also produces many other wavelengths of light which go unused and end up as wasted energy. LED lights are unique in that they have a narrower wavelength band than traditional ultraviolet sources and therefore do not require these special coatings. As a result, LED lights

do not produce unused, wasted light and therefore consume less energy than traditional UV lights on the market. LED lights have the added benefit of being capable of producing very specific wavelengths with tighter curves and are more durable and light weight as well. This eliminates harmful UV-B and UV-C wavelengths from being emitted from the light source, adding in productivity and safety during operation.

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.

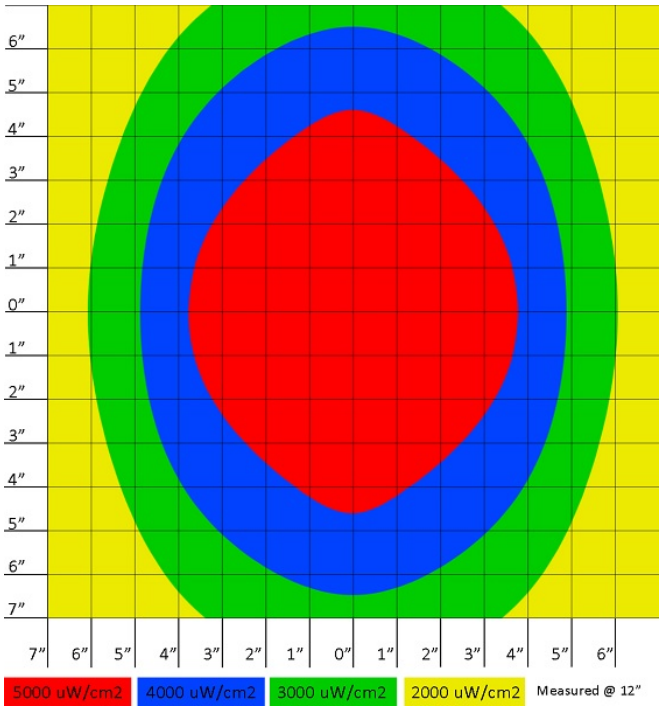
	400W MH	**100W LED**
Wattage	400 watts	100 watts
Amp Draw @ 120V AC	3.34 amps	0.84 amps
Amp Draw @ 24V DC	16.67 amps	4.17 amps
Lamp Life Expectancy	15,000	50,000+ Hours
Wavelength	320-400NM	350-380NM
Operation Cost per Year (8hs/day @ 11c/kWh)	$138.12	$32.12

The Class I & II, Divisions 1 & 2 LED ultraviolet light fixture can be used for non-destructive testing in aviation and manufacturing, food processing and inspection, and in paint, coating, and adhesive curing. The EPL-HB-100LED-RT-UVA provides operators in hazardous locations with a reliable and durable UV lighting solution that combines effective production of UV light with explosion proof protection and is applicable for leak detection, paint spray booths, ink, coatings, and adhesive curing, non-destructive testing, inspection, and food processing.

This 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. 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.

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

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364



Click Photo to Enlarge

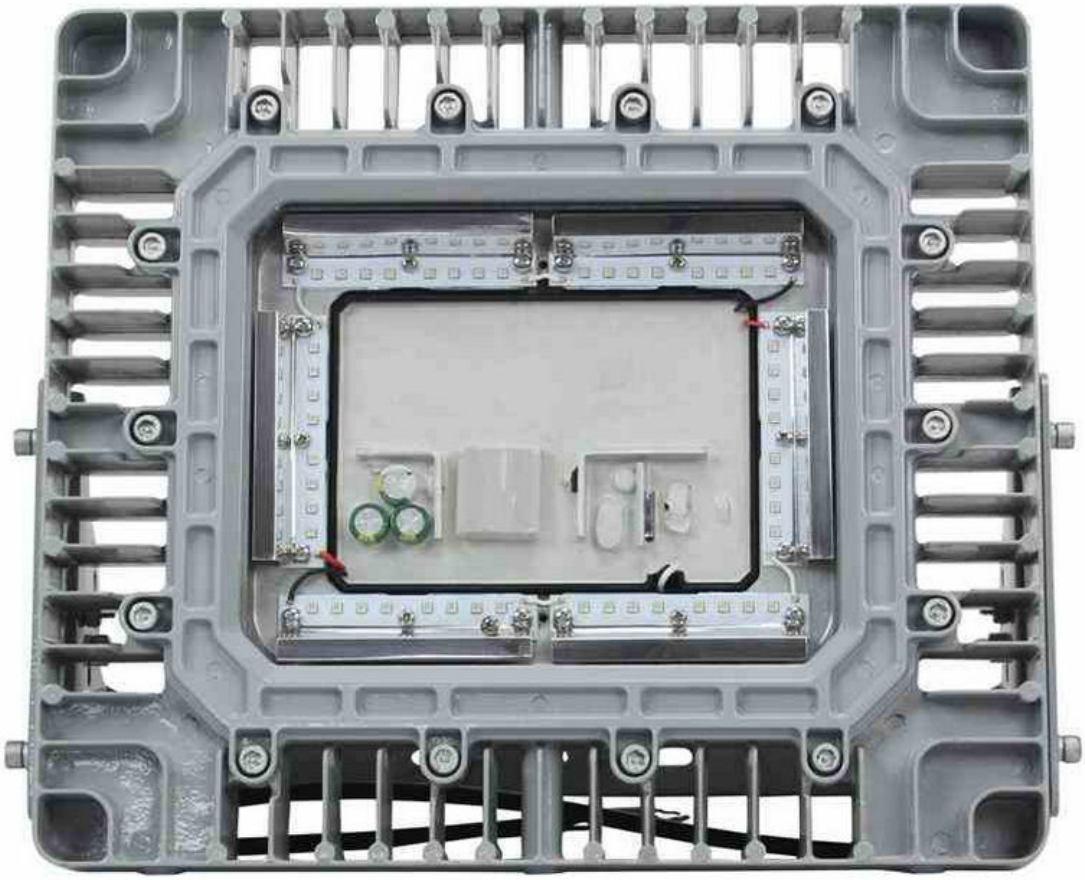
This LED light produces 46,550 mW with a wavelength curve of 350-380NM. The EPL-HB-100LED-RT-UVA offers several mounting options including ceiling mounting, pendant mounting, wall mounting and cable mounting. The standard version of this explosion proof LED fixture includes a pendant mount and a surface mount option.

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.

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

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

Frequently Asked Questions (FAQ)









EPL-HB-100LED-RT-UVA
Product ID: 104729

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

Options:
EPL-HB-100LED-RT-UVA-Voltage
Example: EPL-HB-100LED-RT-UVA-1227

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

Links (Click on the below items to view):

- Canadian CEC Certificate (Commonly referred to as CSA Certificate)
- Dimensional Drawing 2D
- Operations Manual
- SpecSheetSpanish
- Spectrum Curve (Wavelength Graph)
- STEP File (3D CAD Model)
- USA NEC Certificate (Commonly referred to as UL Certificate)
- HigResPic1
- HigResPic2
- HigResPic3
- HigResPic4
- HigResPic5
- HigResPic6
- HigResPic7
- HigResPic8
- HigResPic9
- HigResPic10
- Video1
- Video2
- Video3
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map