Hazardous Location Lighting

The
FHZR™
Series

Class I Div 2 LED Luminaires

PacLights

The **FHZR**™ series

- Maintenance free LED luminaries
- Available in 60W LED (replaces 150W MH), 100W LED (replaces 250W MH) or 150W LED (replaces 400W MH)
- Class I, Division 2, Groups A, B, C, D
- IP66, UL 1598, UL 8750 and UL 844 ratings
- Resistant to shock and vibration
- Three mounting options: pendant, ceiling or wall
- Rugged construction ensures long-life and safe operation
- 100,000-Hour LED lifespan
- 5-Year warranty

PacLights

Hazardous
Location
Classified

Class I, Division 2
Groups A, B, C and D

Class I: A hazardous location in which flammable gases or vapors may be present in the air in sufficient quantities to be explosive or ignitable, such as petroleum refineries, aircraft hangars, dry cleaning plants, utility gas plants or storage areas for liquified petroleum or natural gas, and spray finishing areas.

Division 2: Abnormal condition, where ignitable concentrations of flammable gases, vapors or liquids are not likely to exist under normal operating conditions, for example: Closed storage drums containing flammable liquids in an inside storage room would not normally allow the hazardous vapors to escape into the atmosphere. But if one of the containers is leaking, you've got an abnormal condition.

Groups A - D: The gases and vapors of Class I locations are broken into four groups by the Code: A, B, C, and D. These materials are grouped according to the ignition temperature of the substance, its explosion pressure, and other flammable characteristics.

- Group A - The only substance in Group A is acetylene because it is a gas with extremely high explosion pressures.
- Group B - This group includes hydrogen and other materials with similar characteristics.
- Group C & D - The most usual Class I groups. They comprise the greatest percentage of all Class I hazardous locations. Found in Group C is ethylene. Found in Group D are many of the most common flammable substances such as butane, gasoline, natural gas and propane.

UL cUL
Listed

C (UL) US
LISTED

Complies with the following standards:
- Standard for Luminaires for Use in Hazardous (Classified) Locations, UL 844
- Standard for Luminaires, UL 1598
- Light Emitting Diode (LED) Light Sources for Use in Lighting Products, UL 8750

Complies with the following standards:
- CSA C22.2 No. 137 - Electric Luminaires for Use in Hazardous Locations
- CSA C22.2 No. 250.0-13 - CSA Standard for Safety for Luminaires

IP66
Rated

No ingress of dust; complete protection against contact (dust tight) No ingress of water projected in powerful jets from any direction

T
Ratings

Runs much cooler than equivalent incandescent and metal halide fixtures, can be used in hazardous area that has a lower ignition temperature threshold. 60w & 150w models are T4A rated, 100w models are T5 rated.

LEDs
Multi-chip, high-output, long-life LEDs
Drivers
60W - Constant Current, Class P, 100-277V, 50/60 Hz, 650mA, THD <20%, PF 95%
100W - Constant Current, Class P, 100-277V, 50/60 Hz, 1100mA, THD <20%, PF 95%
150W - Constant Current, Class P, 100-277V, 50/60 Hz, 1650mA, THD <20%, PF 95%
150W - Constant Current, Class P, 277-480V, 50/60 Hz, 600mA, THD <20%, PF 95%
Lifespan
100,000-Hour LED Lifespan based on IES LM-80 results and TM-21 calculations
Maximum Ambient Temperature
55°C (131°F)
Thermal Management
Superior heat sinking with external Air-Flow fins
Housing, Hardware & Gasket
Die-cast aluminum housing, lens frame and mounting arm; stainless steel external hardware; silicone gasket
Lens/Globes
Clear glass lens, Frosted glass globes
Mounting
Three mounting styles: 3/4" NPT threaded pendant; or ceiling/wall mounting with included trunnion arm
Finish
Our environmentally friendly polyester powder coatings are formulated for highdurability and long-lasting color, and contain no VOC or toxic heavy metals.
Color Stability
LED color temperature warrantied not to shift more than 200K in CCT in 5 years
Color Uniformity
PacLights's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.
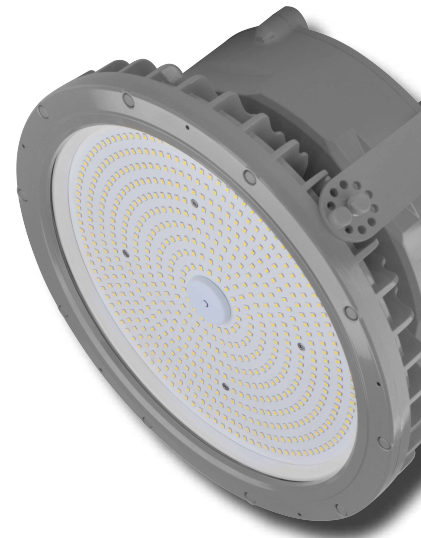**Green Technology**
Mercury and UV free, and RoHS compliant. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.
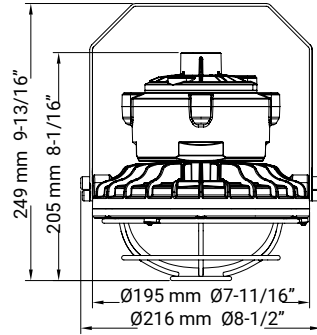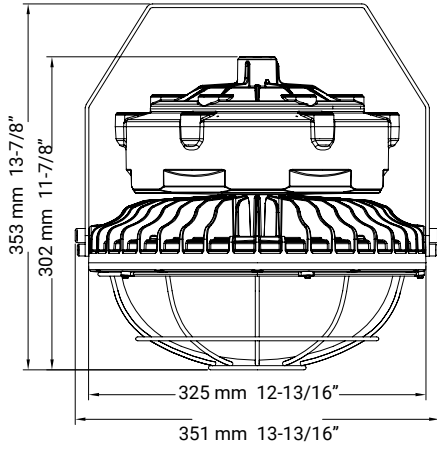**IESNA LM-79 & LM-80 Testing**
PacLights LED luminaires have been tested by laboratory in accordance with IESNA LM-79 and LM-80.
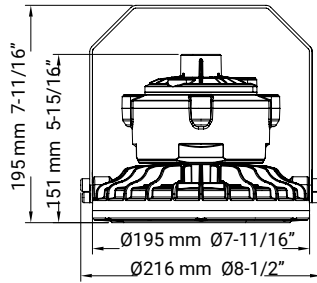
Product
Specifications

Dimensions
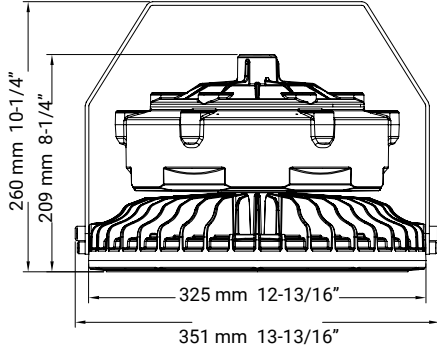## Diagram

Globe w/ wireguard

353 mm 13-7/8"
302 mm 11-7/8"
325 mm 12-13/16"
351 mm 13-13/16"

249 mm 9-13/16"
205 mm 8-1/16"
Ø195 mm Ø7-11/16"
Ø216 mm Ø8-1/2"

Flat Lens

260 mm 10-1/4"
209 mm 8-1/4"
325 mm 12-13/16"
351 mm 13-13/16"

195 mm 7-11/16"
151 mm 5-15/16"
Ø195 mm Ø7-11/16"
Ø216 mm Ø8-1/2"

FHZR 100/150   FHZR 060

Models	with flat lens	with flat lens & wire guard	with globe	with globe & wireguard
FHZR 060	8.5 lb	8.9 lb	9.2 lb	9.5
FHZR 100	24 lb	24.7 lb	25.7 lb	26.5 lb
FHZR 150	24.5 lb	25.3 lb	26.4 lb	27.2 lb

Performance
Chart

Models	with flat lens	with flat lens & wire guard	with globe	with globe & wireguard
FHZR 060	8,400 lm	8,100 lm	7,800 lm	7,200 lm
FHZR 100	15,000 lm	14,500 lm	14,500 lm	13,500 lm
FHZR 150	23,250 lm	22,500 lm	21,750 lm	21,000 lm

Ordering Matrix

Family	Model	Color Temperature	Input Voltage	Lens Type	Housing Color	Optional Addon
FHZR		–	–	–	–	–

Model
- **060** 60w
- **100** 100w
- **150** 150w

Color Temperature
- **30*** 3000K
- **40*** 4000K
- **50** 5000K
- **57*** 5700K
- **65*** 6500K

Input Voltage
- **UV** 100-277v
- **HV#** 277-480v

Lens Type
- **CF** Clear Flat
- **SG** Frost Globe

Housing Color
- **GR** Gray
- **XX*** Other

Optional Addon
- **WG** Wire Guard

HV models only available in 150w;
* Options available as special order.

PL_SPEC_FHZR-v1

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