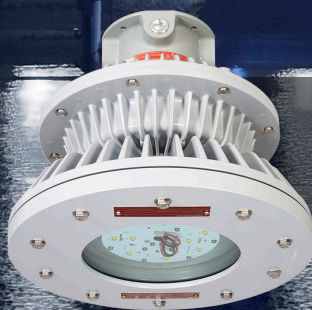


Hazardous Area LED Lighting

CROUSE-HINDS  
SERIES

# Hazard·Gard EVLLA

**Explosionproof LED lighting for hazardous areas**



**Safe. Reliable. Efficient.**  
**4 models from 5,000 to 13,000 lumens**

**EATON**

*Powering Business Worldwide*



Hazard•Gard EVLLA LED

# Safe. Reliable. Efficient.

Featuring a broad range of LED luminaires for harsh, hazardous and industrial environments, Eaton's Crouse-Hinds delivers lighting solutions that perform reliably even in the worst operating conditions. This reduces energy, maintenance and manpower costs.

## Why LED?

### **Useful life**

Rated life of 60,000 hours of maintenance-free and safe operation

### **Energy efficiency**

LED average energy consumption is 50% less than HID and 85% less than incandescent

### **Start/restart time**

Instant illumination compared to 10 minute restrike time for HID

### **Light quality**

Higher color rendering and color temperature compared to fluorescent

### **Environmental benefits**

Mercury-free LED eliminates disposal costs and lower energy consumption for a smaller carbon footprint

## Why Crouse-Hinds?

### **Industry-best reliability**

Built to withstand extreme temperatures, vibration, water and dust

### **Thermal management**

Effective heat sinking ensures longer life

### **Quality of light**

Custom optics designed to maximize light distribution and intensity

### **Retrofit compatibility**

LED fixtures are compatible with Crouse-Hinds' HID installed base



# Why Hazard•Gard EVLLA LED?

**Designed for hazardous areas.** Hazard•Gard EVLLA LED luminaires are engineered to stand up to the demanding conditions faced in Class I, Division 1 environments. The rugged design and efficient heat dissipation stands up to challenging conditions while delivering long life and high lumen performance.

## Factory sealed

- No external sealing fittings required in Groups B, C and D.



## Optional color temperatures

- Warm, neutral or cool white color temperatures available.

## Rugged design

- The LED housing is constructed of durable die cast aluminum, providing an efficient thermal path to the heat sink assembly.
- Impact-resistant lens is sealed from the outside environment and provides ingress protection against water and dust.
- Multi-die LEDs are used to provide energy-efficient, long life white light.



## Robust heat sink

- Heat sink designed to perform in high ambient temperatures up to +65°C\* and as low as -25°C.
- Thick walled castings make for a tough, rugged housing that keeps the internal driver and LED temperature down.

\* EVLLA5-EVLLA9 models

## Easy installation and replacement

- Contractor-friendly design is ideal for both retrofit and new construction applications.
- Installed using the same mounting modules as existing Hazard•Gard Series luminaires.
- Quick-connect design facilitates installation – install and wire the mounting module, then screw in your luminaire. Two start Acme threads ease and reduce installation time.



## Case study: HID to LED retrofit

### Location:

Petrochemical facility

### Challenge:

Find a rugged, low maintenance solution to replace existing 400W pulse start metal halide HID luminaires

### Solution:

Install EVLLA-13, 129W LEDs

### Results:

Energy consumption was reduced by 62%. Quick-connect design mounting modules made installation easy, and lamp maintenance was virtually eliminated.



# Features & benefits

## Hazard•Gard EVLLA LED luminaires

The hazardous rated Hazard•Gard EVLLA LED luminaire is used for general lighting in areas where flammable or explosive vapors or gases are present.

Model number	Nominal lumens	Wattage*	Equivalent HID luminaire	Typical energy savings/lifetime
EVLLA5L	6,200	59	100W-150W	<b>62% energy savings and over 60,000 hours of continuous operation!</b>
EVLLA7L	7,600	69	150W-175W	
EVLLA9L	8,700	81	175W-250W	
EVLLA11L	12,000	115	250W-320W	
EVLLA13L	13,000	130	320W-400W	

\* UNV1 at 120 VAC.

## Applications:

- For areas with mounting heights of up to 30 feet
- Oil and gas refineries, drilling rigs, petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels, outdoor wall and stanchion mounted general area lighting, and where flammable vapors, gases, ignitable dusts, fibers or flyings are present
- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- NEMA 4X, marine, wet locations and hose-down environments
- Classified and hazardous locations



**Safe. Reliable. Efficient.**  
4 models from 5,000 to 13,000 lumens



## Features and benefits:

### Industry best ease of installation

- Quick-connect design – install and wire the mounting module, then simply screw in the luminaire
- Factory sealed – no external sealing fittings required in Groups B, C and D
- Adapter available for connection to existing Hazard•Gard EVI, EVLP and EVM modules

### Reduce operation and maintenance costs

- Energy-efficient – up to 62% reduction in energy used versus equivalent HID fixtures
- 60,000 hours rated life – eliminates need for frequent lamp replacement
- 6kV surge protection

### Reliable performance in any environment

- Shock- and vibration-resistant solid-state luminaires have no filaments or glass components that could break – greatly reduces the risk of premature failure
- T6 temperature rating
- 5 year fixture warranty†

†Refer the authorized distributor price book for Crouse-Hinds standard Terms and Conditions.

### Operating ambient temperature:

- -25°C to 65°C (5L to 9L)
- -25°C to 55°C (11L and 13L)

### Certifications and compliances:

#### NEC and CEC

- Class I, Division 1, Groups B, C, D
- Class II, Groups E, F, G
- Class III, Simultaneous Presence
- Wet Locations, NEMA 4X, IP66

#### UL Standards

- UL844; UL1598; UL1598A

#### CSA Standard

- CSA C22.2 No. 137



# Specifications

## Electrical ratings:

### All models

<b>Voltage range, VAC</b>	120-277	<b>THD</b>	<15%
<b>Frequency</b>	50/60 Hz	<b>Power factor</b>	>.90

### UNV1

	5L	7L	9L	11L	13L
<b>Input power (watts)</b>	59	69	81	115	130
<b>Input amps at 120-277 VAC</b>	0.49 -0.22	0.58-0.26	0.68-0.30	0.96-0.43	1.08-0.48
<b>Maintained lumens</b>	6,200	7,600	8,700	12,000	13,000

### UNV34

	5L	7L	9L	11L	13L
<b>Input power (watts)</b>	49	68	80	104	128
<b>Input amps at 347-480 VAC</b>	0.15-0.11	0.20-0.15	0.23-0.17	0.30-0.23	0.37-0.28
<b>Maintained lumens</b>	5,500	7,600	9,000	11,000	13,300

## Standard materials:

- Body and mounting modules – copper-free aluminum with Corro-free™ epoxy powder coat
- Lens – shatter-resistant, explosionproof glass
- Gaskets – silicone
- Guard – stainless steel
- External hardware – stainless steel
- Factory sealed\*

\* Refer to Installation and Maintenance Sheet for external seal requirements.

## LED system:

- Cool white (5000K), CRI 70
- Neutral white (4000K), CRI 70
- Warm white (3000K), CRI 80
- Array complies with requirements of LM79 and LM80

## Temperature codes:

Model number	Max. ambient temp. °C	Class I, Div. 1	Class II, Div. 1 & 2	Class I, II simultaneous
EVLLA5L	40°	T6	T6	T6
	55°	T6	T6	T6
	65°	T6	T6	T6
EVLLA7L	40°	T6	T6	T6
	55°	T6	T6	T6
	65°	T6	T6	T6
EVLLA9L	40°	T6	T6	T6
	55°	T6	T6	T6
	65°	T6	T6	T6
EVLLA11L	40°	T6	T6	T6
	55°	T6	T6	T6
EVLLA13L	40°	T6	T6	T6
	55°	T6	T6	T6



## Weights:

Model number	Lbs.	Kg.
EVLLA5L	51.76	23.48
EVLLA7L	51.81	23.50
EVLLA9L	52.38	23.76
EVLLA11L	53.00	24.04
EVLLA13L	53.00	24.04

*Add additional weights for mounting module*

<b>Pendant mount</b>	2.00	0.90
<b>Ceiling mount</b>	3.50	1.59
<b>Wall mount</b>	3.00	1.36
<b>Stanchion mount</b>	5.50	2.49
<b>Adapter</b>	2.00	0.90

# Ordering information

## Part number example

**EVLLA5LCA21-UNV1**

Hazard • Gard EVLLA, NEC and CEC certified 6,200 lumen, cool white, pendant mount, ¾" NPT hubs, UNV1 driver

# EVLLA 5L C A 2 1 - UNV1 -

### Lamp/function

<b>5L</b>	6,200 lumen LED
<b>7L</b>	7,600 lumen LED
<b>9L</b>	8,700 lumen LED
<b>11L</b>	12,000 lumen LED
<b>13L</b>	13,000 lumen LED

### Color temperature

<b>C</b>	Cool (5000K)
<b>N</b>	Neutral (4000K)
<b>W</b>	Warm (3000K)

### Mounting style

<b>BLANK</b>	Mounting module adapter or no mounting module
<b>A</b>	Pendant EVSP
<b>BX</b>	Wall bracket EVSW
<b>CX</b>	Ceiling mount EVSC
<b>J</b>	Stanchion EVSJ
<b>M*</b>	Mounting module adapter EVSA

\* EVSA adapter for use with existing Crouse-Hinds EVI, EVLP and EVM mounting modules.

### Suffixes

<b>S812</b>	Trunnion mount kit
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### Voltage

<b>UNV1</b>	120-277 VAC, 50/60 Hz;
<b>UNV34</b>	347-480 VAC, 50/60 Hz

### Guard

<b>0</b>	No guard
<b>1</b>	Stainless steel

### Hub size

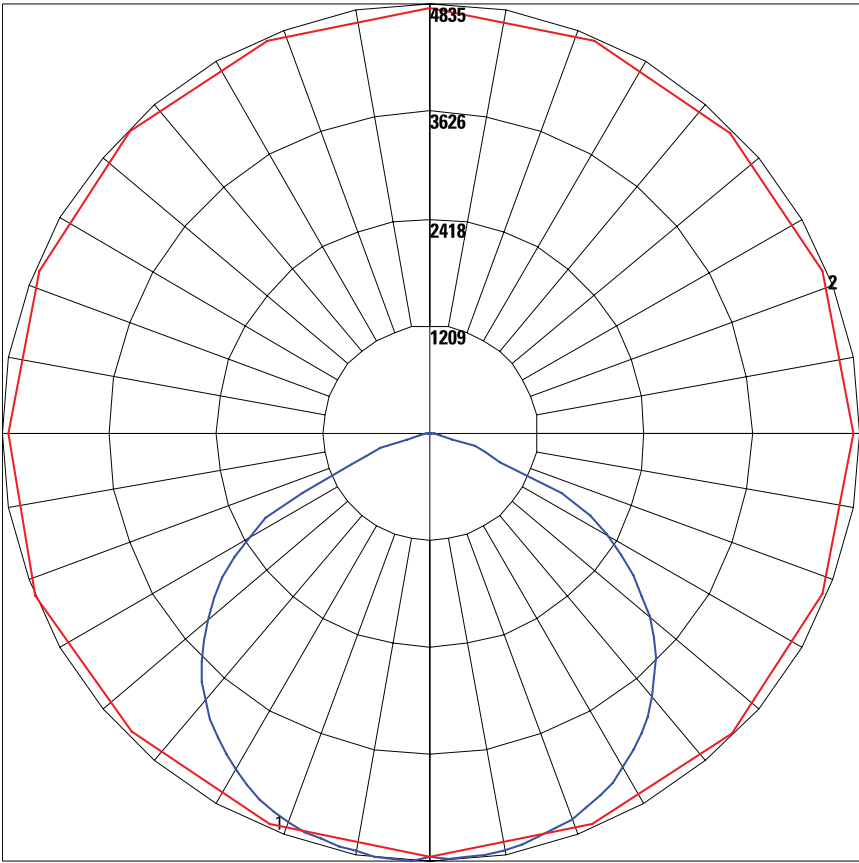
<b>BLANK</b>	Mounting module adapter or no mounting module
<b>2</b>	¾" NPT (pendant, ceiling and wall only)
<b>3</b>	1" NPT (pendant, ceiling and wall only)
<b>5</b>	1-½" NPT (stanchion only)
<b>25</b>	25 mm (pendant, ceiling and wall only)
<b>32</b>	32 mm (pendant, ceiling and wall only)

### Replacement driver kits (ordered separately)

<b>EVLLA-5L-UNV1-DRIVER-KIT</b>	UNV1 replacement driver kit for EVLLA5L
<b>EVLLA-5L-UNV34-DRIVER-KIT</b>	UNV34 replacement driver kit for EVLLA5L
<b>EVLLA-7L-UNV1-DRIVER-KIT</b>	UNV1 replacement driver kit for EVLLA7L
<b>EVLLA-7L-UNV34-DRIVER-KIT</b>	UNV34 replacement driver kit for EVLLA7L
<b>EVLLA-9L-UNV1-DRIVER-KIT</b>	UNV1 replacement driver kit for EVLLA9L
<b>EVLLA-9L-UNV34-DRIVER-KIT</b>	UNV34 replacement driver kit for EVLLA9L
<b>EVLLA-11L-UNV1-DRIVER-KIT</b>	UNV1 replacement driver kit for EVLLA11L
<b>EVLLA-11L-UNV34-DRIVER-KIT</b>	UNV34 replacement driver kit for EVLLA11L
<b>EVLLA-13L-UNV1-DRIVER-KIT</b>	UNV1 replacement driver kit for EVLLA13L
<b>EVLLA-13L-UNV34-DRIVER-KIT</b>	UNV34 replacement driver kit for EVLLA13L

# Photometric data

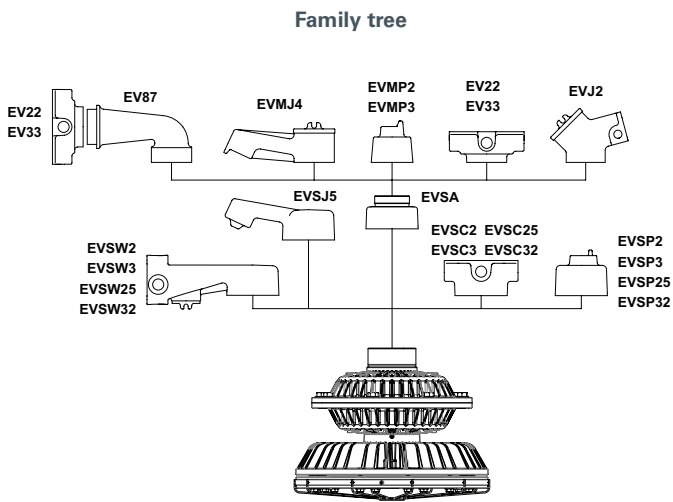
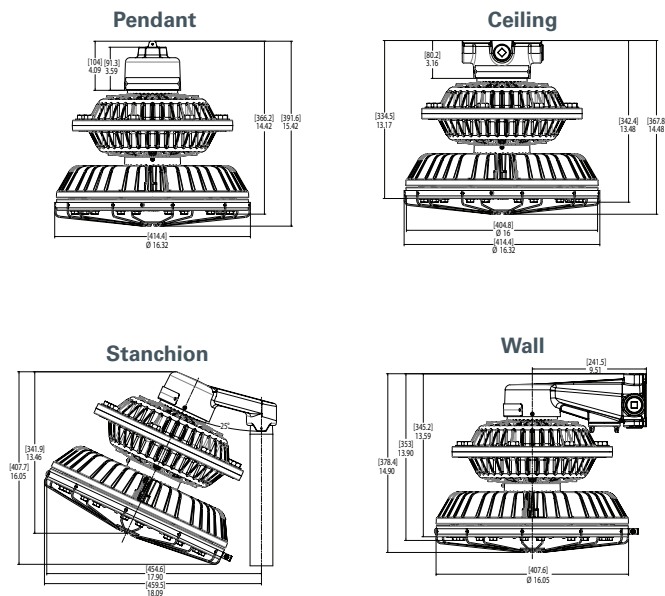
## Polar plot candela



## EVLLA13L LED (129 Watt)

Zone	% of luminaire
0-30	28.5%
0-40	47.7%
0-60	86.4%
0-90	100.0%
90-180	0.00%
0-180	100.0%

## Mounting options and dimensions:



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