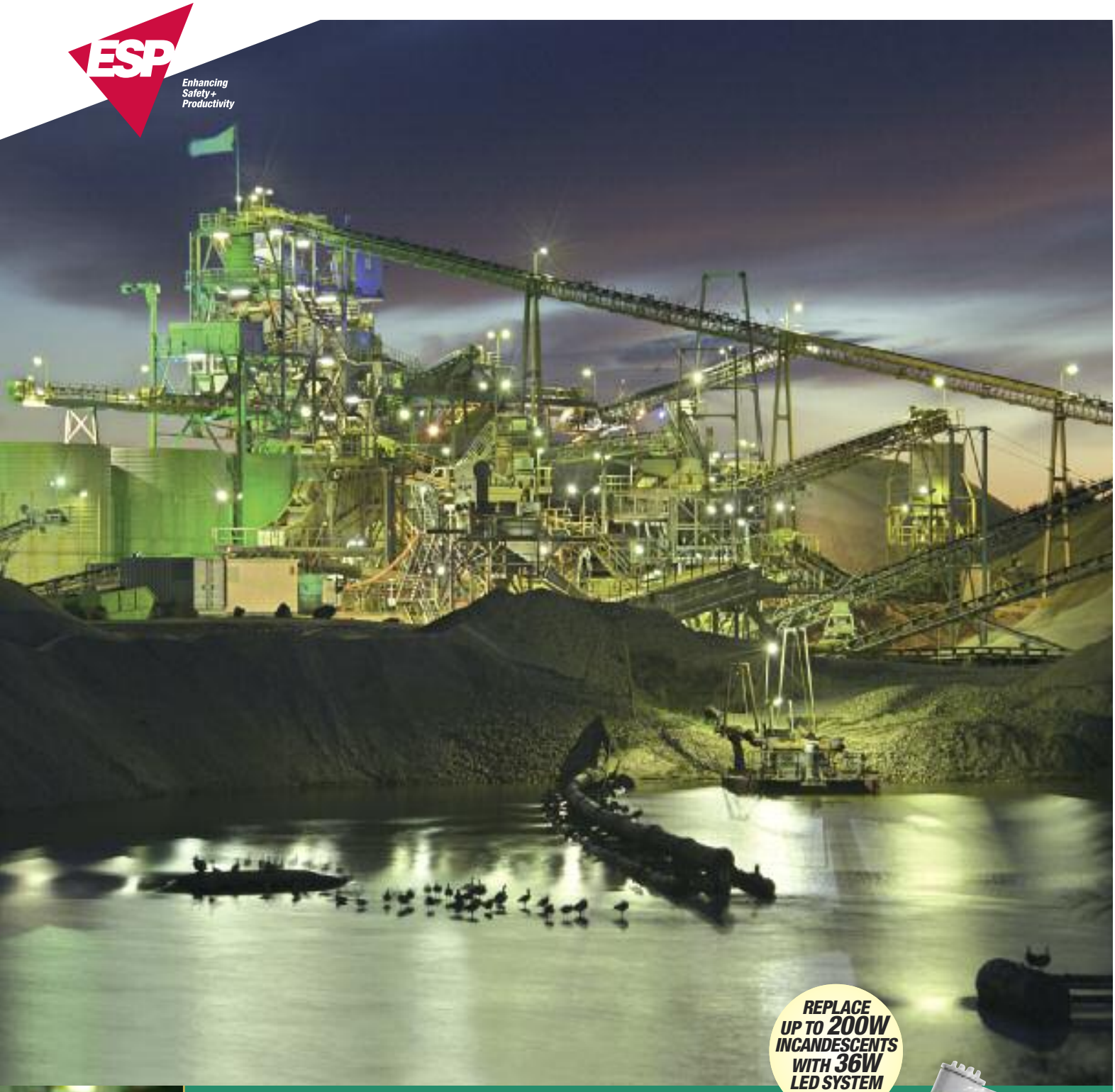
ESP

Enhancing Safety+ Productivity



REPLACE UP TO 200W INCANDESCENTS WITH 36W LED SYSTEM

EV LED Series

The industry's first Class I, Division 1 factory-sealed LED luminaire for general illumination

Improve safety, reliability and energy efficiency

COOPER Crouse-Hinds

High-performance, high-brightness EV LED luminaire – brilliantly combining safety, reliability and energy efficiency.

The world's most demanding environments need smart new lighting ideas and innovative approaches to enhancing safety. You need lighting that cuts the overall cost of ownership. Lighting that improves energy efficiency and lives up to ever-escalating environmental standards.

You need all of this innovation from a single source. It could only be: Cooper Crouse-Hinds®.

Introducing ESP solutions.

For more than 100 years, Cooper Crouse-Hinds has exceeded customer expectations when it comes to new ideas and technological advancements. Today, as the electrical industry's global leader for hazardous environments, we continue to reach beyond the expected – especially with our commitment to **ESP (Enhancing Safety & Productivity)**.

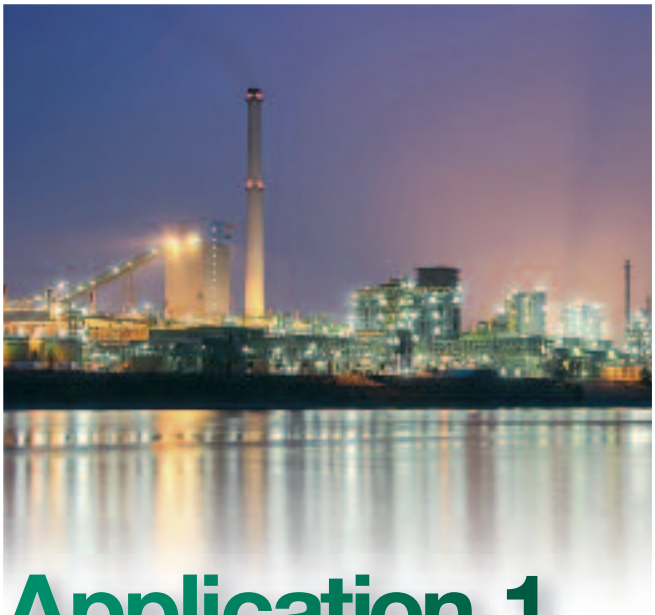
The problem that never happens. That's the goal behind ESP – smarter, more powerful solutions enhancing safety and productivity in your world. You see, making danger obsolete is what drives the innovative minds at Cooper Crouse-Hinds. ESP is all about anticipating customer needs while staying in tune with what's important to you. By providing innovative solutions for enhancing safety and productivity, we're helping you do more with less.

Time to look at LEDs in a whole new light.

Dramatic advances in LED (Light Emitting Diode) technology have broadened the applicability of this type of illumination, creating an exciting new option for hazardous, industrial and other highly demanding locations. Compared to traditional incandescent or compact fluorescent technologies, LED light sources can deliver longer life, enhanced energy efficiency, greater eco-friendliness, lowered maintenance demands and equal or better quality of light.

Today, bright-white LEDs have more than tripled their light output as compared with just a few years ago. That and other ongoing performance improvements are helping LEDs gain wider acceptance in hazardous, industrial, commercial and municipal applications.

Cooper Crouse-Hinds' development of products like the EV LED Series explosionproof luminaire provides LED technology for applications in the world's most challenging environments.



Application 1

You operate a sprawling petrochemical plant, where 24/7, bright lighting is required in a number of highly flammable areas.

Old Way:

Conventional 200-watt incandescent lighting is used, requiring frequent change-out of burned-out lamps, resulting in high maintenance costs, high replacement costs and ongoing safety concerns.

New Way:

Install the Cooper Crouse-Hinds 36-watt EV LED System and benefit from as much as 60,000 hours of reliable bright white light, without the heat of incandescent lamps.

Benefit:

Cost and time savings through greatly reduced frequency of luminaire replacement; enhanced safety through cooler operation; greater energy efficiency without sacrificing brightness.

EV LED offers new solutions for old challenges.

The EV LED Series is a perfect example of Cooper Crouse-Hinds innovation.

It is the first bright white LED Class I, Division 1 luminaire for general illumination. It is built to perform effectively and economically in areas that may be difficult to service, expensive to shut down, or any location requiring an increased degree of safety.

Engineered for high reliability and performance. An integral aluminum extrusion provides safe and effective heat transfer from both the LED and the driver to the outside environment. High-performance LEDs, a solid-state electronic driver and internal optic provide light where you need it at a fraction of the operating cost of incandescent technologies.

The results include improved system performance, superior lumens per watt and significant lifetime cost savings. Compared with conventional lighting, the EV LED luminaire consumes up to 80% less energy and typically lasts as long as 60,000 hours or more.

EV LED Benefits

Enhance safety and productivity

- Instant illumination and restrike
- Better visibility with crisp white light
- Cold temperature operation / no warmup required
- “No lights-out” feature – if a single LED fails, circuit provides enough useable light to remaining LEDs

Reduce operation and labor costs

- Easy installation - fixture threads onto mounting module
- T6 temperature rating – safely operate in the most hazardous environments
- Energy efficient <40 watts
- Up to 60,000 hours rated life – eliminates need for frequent lamp replacement

Reliable performance in any environment

- Maintains 70% lumen output through luminaire life
- Durable, vibration-resistant
- Ambient suitability for -30° to 55°C
- Factory sealed, no external seals required
- Type 4X, marine outdoor locations, IP66 rated
- Compact size (ceiling mount 13-1/4”)

Bright and white and "green" all over

- Low energy consumption (less than 40W)
- Contains no mercury or other hazardous substances
- Replace up to 200W incandescents with 36W LED system

Certifications & Compliances

NEC & CEC

- Class I, Div. 1, Groups C, D
- T6 temperature rating at 55°C
- Class I, Zone 1 & 2, Groups IIB
- Class II, Groups E, F, G
- Marine and wet locations, Type 4X, IP66
- UL Listed
- cUL Listed (certified by UL to CSA standards)

NEC

- Class III, simultaneous presence

UL Standards

- 844 electric fixture hangers for hazardous locations
- 1598 luminaire
- 1598A luminaire for installation on marine vessels

CSA Standards

- C22.2 No. 137

Applications

- Type 4X, marine, wet locations and hose-down environments
- Locations requiring consistent light levels in extreme ambient temperatures
- Areas requiring frequent on-and-off of lights
- Where flammable vapors, gases, ignitable dusts, fibers or flyings are present; indoors or outdoors
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- Manufacturing plants; heavy industrial, chemical, petrochemical or pharmaceutical facilities; platforms; loading docks; tunnels

Standard Materials

- Body, mounting modules and guard – copper-free aluminum with Corro-free™ epoxy powder coat
- Globe – heat and impact-resistant glass
- Gaskets – silicone
- External hardware – stainless steel

Electrical Ratings

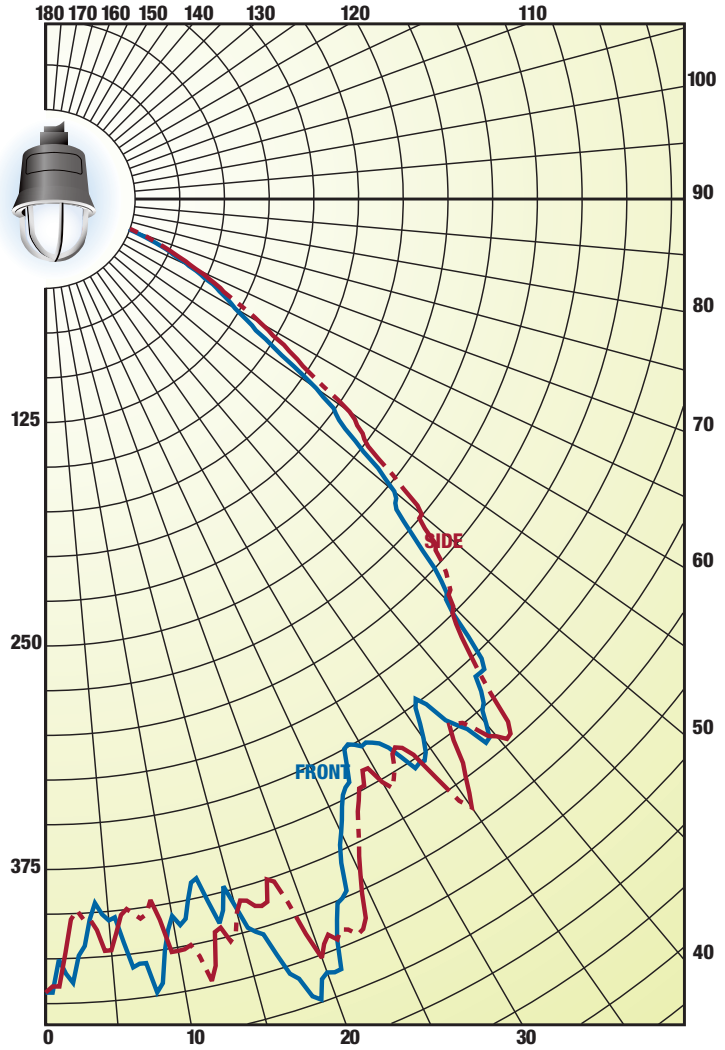
- 120V to 277VAC
- 50/60 Hz
- 36 watts
- 0.5 amps at 120V
- 0.2 amps at 277VAC
- Power factor > 0.92

LED System

- 24 Light Emitting Diodes (LED)
- Lumileds™ Luxeon® Rebel
- CRI > 75
- CCT 4100
- Ambient suitability -30°C to 55°C
- 70% Lumen maintenance at 60K hours
- 115°C junction temperature at 55°C ambient

EV LED Series – Photometrics

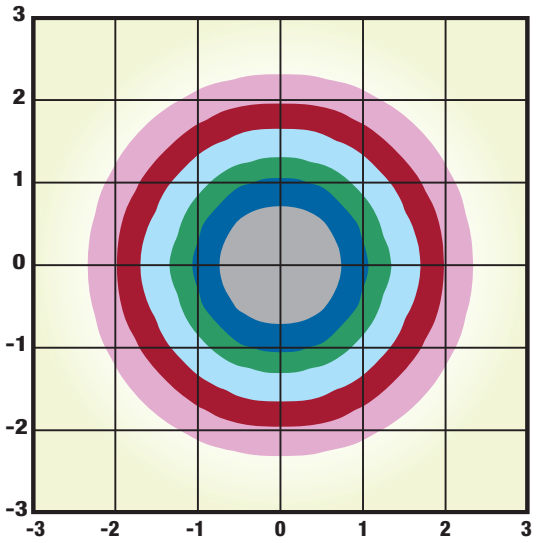
EV LED with Internal Optic, Refracting Globe, Protective Grate – Lamp: 24 white LED



CANDELAS			ZONAL LUMENS	
Vert. Angle	Front	Side	Zone	Lumens
0	444	444	0-10	40
5	405	422	10-20	120
15	409	413	20-30	186
25	391	416	30-40	232
35	368	415	40-50	252
45	317	322	50-60	167
55	185	207	60-70	92
65	88	93	70-80	25
75	20	20	80-90	11
85	10	10	90-100	10
90	9	8	100-110	8
95	9	8	110-120	7
105	9	8	120-130	5
115	8	8	130-140	2
125	6	6	140-150	0
135	2	2	150-160	0
145	0	0	160-170	0
155	0	0	170-180	0
165	0	0	Total	1158
175	0	0		
180	0	0		

TESTING CONDITIONS – PENDANT MOUNT

EVLED201
Electrical Values: **120.0VAC, 0.309A, 35.99W**
Luminaire Efficacy: **32.3 Lumens/Watt**
Note: This test was performed using the calibrated photodetector method of absolute photometry. Vertical test data was acquired in 1/2 degree increments.



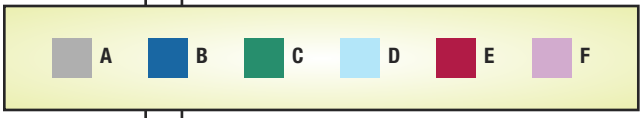
RATIO OF DISTANCE TO MOUNTING HEIGHT

Isofootcandle chart shows illuminance in footcandles at ground level.

ISOFOOTCANDLE CHART

Footcandle Values for Isofootcandle Lines

Mtg.Hgt.	A	B	C	D	E	F
10’	2.00	1.00	0.50	0.20	0.10	0.05
12’	1.39	0.69	0.35	0.14	0.07	0.03
16’	0.78	0.39	0.20	0.08	0.04	0.02
20’	0.50	0.25	0.13	0.05	0.03	0.01
25’	0.32	0.16	0.08	0.03	0.02	0.01



Ordering Guide

COOPER Crouse-Hinds

ESP Enhancing Safety + Productivity

EV LED Series Luminaires – Complete Unit

Complete Units	Mounting Style	Hub Size	Catalog Number
	Pendant Mount	3/4" 1"	EVLEDA2201 EVLEDA3201
	Ceiling Mount	3/4" 1"	EVLEDCX2201 EVLEDCX3201
	Wall Mount	3/4" 1"	EVLEDBX2201 EVLEDBX3201
	Bulkhead Mount	3/4"	EVLEDBH2201
	Stanchion Mount	1-1/4"	EVLEDJ4201

EV LED Series Luminaires – Components

A complete luminaire consists of: 1. LED luminaire body and globe assembly
2. Mounting module

1. LED luminaire body and globe assembly:

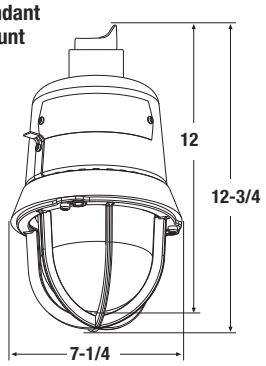
Component 1	Type	Catalog Number
	Luminaire with Guard Less Mounting Module	EVLED201

2. Mounting Module:

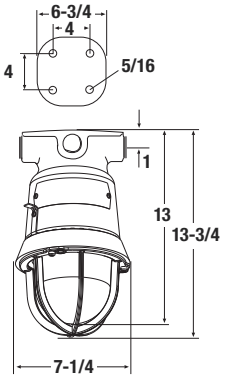
Component 2	Conduit	Catalog Number
Pendant Mount	3/4" 1"	EVMP2 EVMP3
Ceiling & Wall Mount	3/4" 1"	EV22 EV33
Wall Bracket Arm	3/4" 1"	EV22 & EV87 EV33 & EV87
Stanchion Mount	1-1/4"	EVMJ4
Bulkhead Mount	3/4"	EVIJ2

Dimensions (inches)

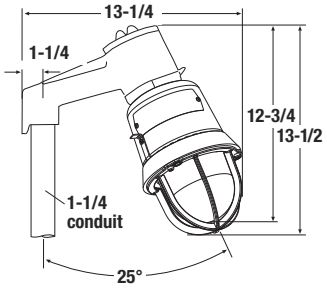
Pendant Mount



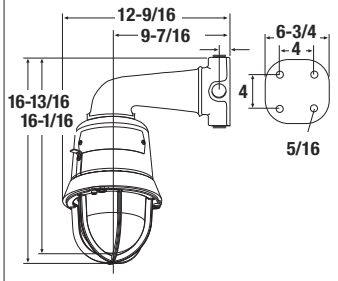
Ceiling Mount



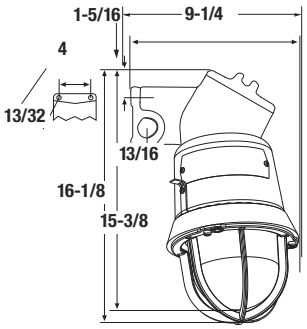
Stanchion Mount



Wall Mount



Bulkhead



Net Weight (lbs.)	
EV LED with Guard	11 lbs.
Add Mounting Modules:	
Pendant	1.0 lbs.
Ceiling	2.0 lbs.
Wall	4.5 lbs.
Bulkhead	2.2 lbs.
Stanchion	2.5 lbs.

Family Tree:

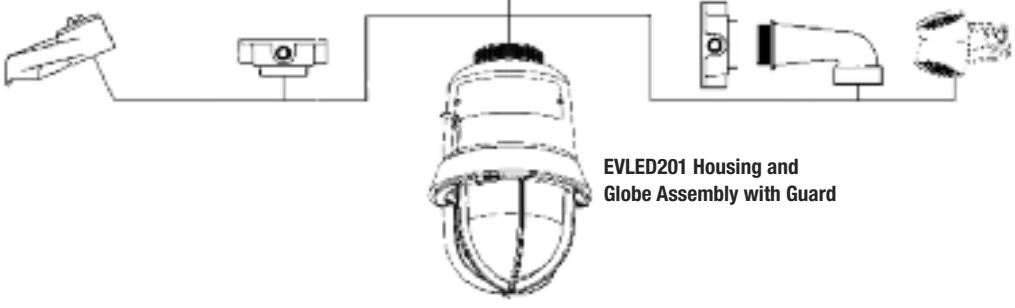
Stanchion
EVMJ4 1-1/4" HUB4

Ceiling
EV22 3/4" HUB4
EV33 1" HUB4

Pendant
EVMP2 3/4" HUB4
EVMP3 1" HUB4

Wall
EV22 & EV87 3/4" HUB4
EV33 & EV87 1" HUB4

Bulkhead
EVU 3/4" HUB4



EVLED201 Housing and Globe Assembly with Guard

For more information:

Your Authorized Cooper Crouse-Hinds Distributor is:

www.tucanobrasil.com.br

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Printed in USA

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