EV LED Series Explosionproof LED Luminaires

Factory-sealed
Improve safety, reliability and energy efficiency

Cl. I, Div. 1, Groups C, D
Cl. I, Zone 1 & 2, Group IIB
Cl. II, Groups E, F, G
Cl. III, Simultaneous Presence

UL Listed
cUL Listed (certified by UL to CSA standards)
T6 temperature rating at 55°C
Marine and wet locations
Type 4X, IP66

The EV LED 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.

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.

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

Certifications & Compliances:
NEC & CEC
- Class I, Division 1, Groups C, D
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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

EV LED Benefits:
Enhance safety and productivity
- Instant illumination and re-strike
- Better visibility with crisp, white light
- Cold temperature operation / no warm-up 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
- Provides 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 (celing mount 13$\frac{1}{4}$")

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

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:
- 120VAC to 277VAC
- 50/60 Hz
- 36 watts
- 0.5 amps at 120VAC
- 0.2 amps at 277VAC
- Power factor > 0.92
- THD(I) < 15%

LED System:
- 24 Light Emitting Diodes (LED)
- Lumileds™ Luxeon® Rebel
- CRI > 75
- CCT 4100 typical
- Ambient suitability -30°C to 55°C
- 70% lumen maintenance at 60k hours

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Ordering Information:
EV LED Series Luminaires – Complete Unit

Complete Units	Mounting Style	Hub Size	Catalog Number
	Pendant Mount	³/₄"	EVLEDA2201
		1"	EVLEDA3201
	Ceiling Mount	³/₄"	EVLEDCX2201
		1"	EVLEDCX3201
	Wall Mount	³/₄"	EVLEDBX2201
		1"	EVLEDBX3201
	Bulkhead Mount	³/₄"	EVLEDBH2201
	Stanchion Mount	1¹/₄"	EVLEDJ4201

Ordering Information:
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"	EVMP2
	1"	EVMP3
Ceiling & Wall Mount	³/₄"	EV22
	1"	EV33
Wall Bracket Arm	³/₄"	EV22&EV87
	1"	EV33&EV87
Stanchion Mount	1¹/₄"	EVMJ4
Bulkhead Mount	³/₄"	EVIJ2

Family Tree:

Stanchion	Ceiling	Pendant	Wall	Bulkhead
EVMJ4 1-1/4" HUB4	EV22 3/4" HUB4	EVMP2 3/4" HUB4	EV22 & EV87 3/4" HUB4	EVIJ2 3/4"
	EV33 1" HUB4	EVMP3 1" HUB4	EV33 & EV87 1" HUB4	

EVLED201 Housing and Globe Assembly with Guard

COOPER Crouse-Hinds

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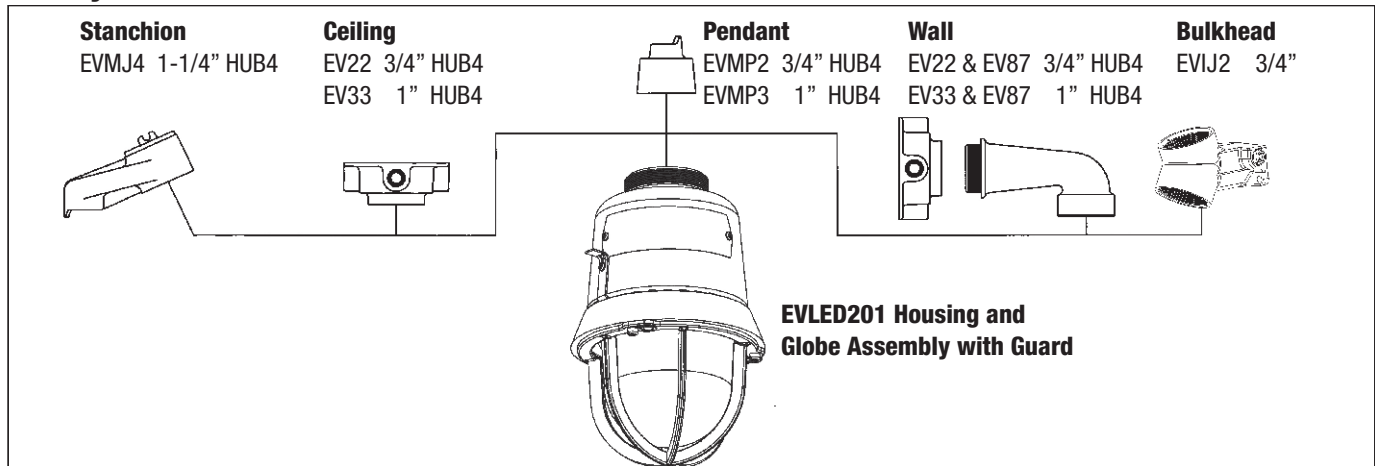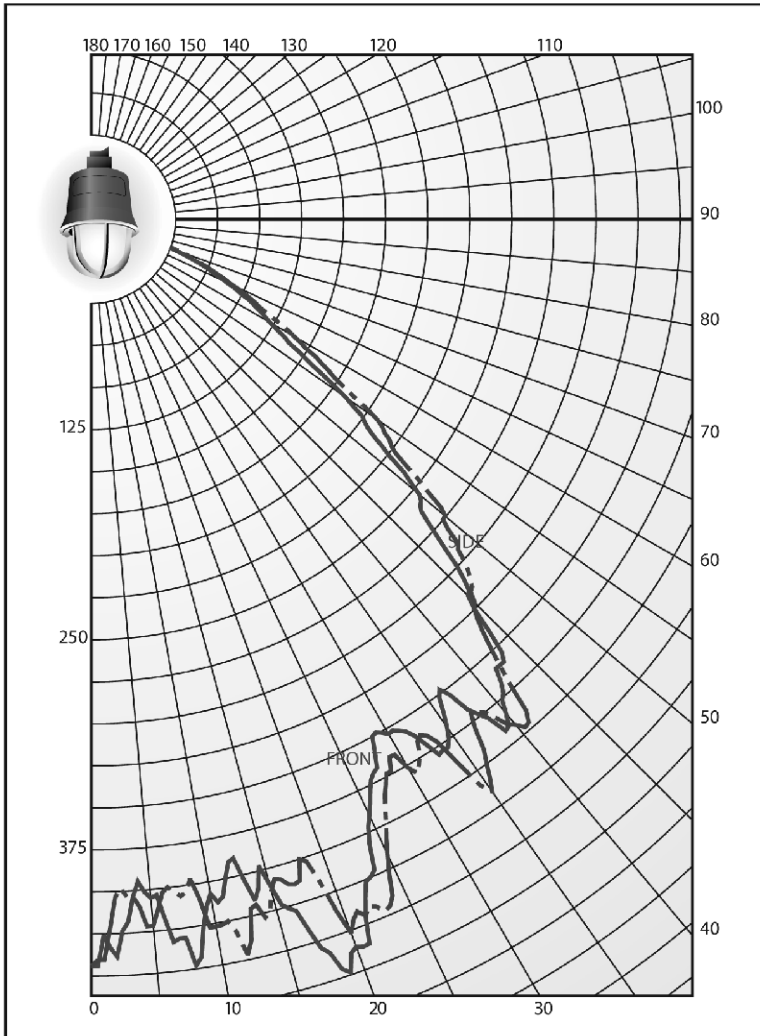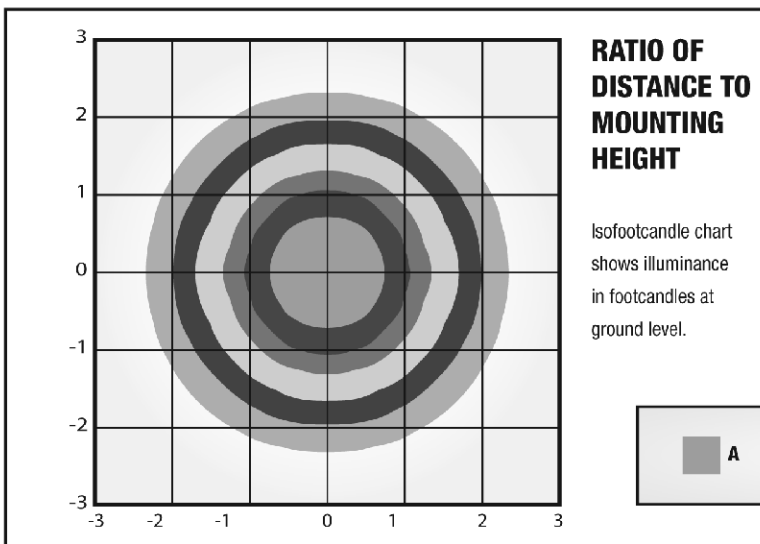Marine and wet locations
Type 4X, IP66

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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		
175	0	0	Total	1158
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

A   B   C   D   E   F

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Dimensions (inches):

Pendant Mount

12
12-3/4
7-1/4

Ceiling Mount

6-3/4
4
4
5/16
1
13
13-3/4
7-1/4

Stanchion Mount

13-1/4
1-1/4
12-3/4
13-1/2
1-1/4 conduit
25°

Wall Mount

12-9/16
9-7/16
6-3/4
4
4
6-13/16
16-1/16
5/16

Bulkhead

1-5/16
9-1/4
4
13/32
13/16
16-1/8
15-3/8
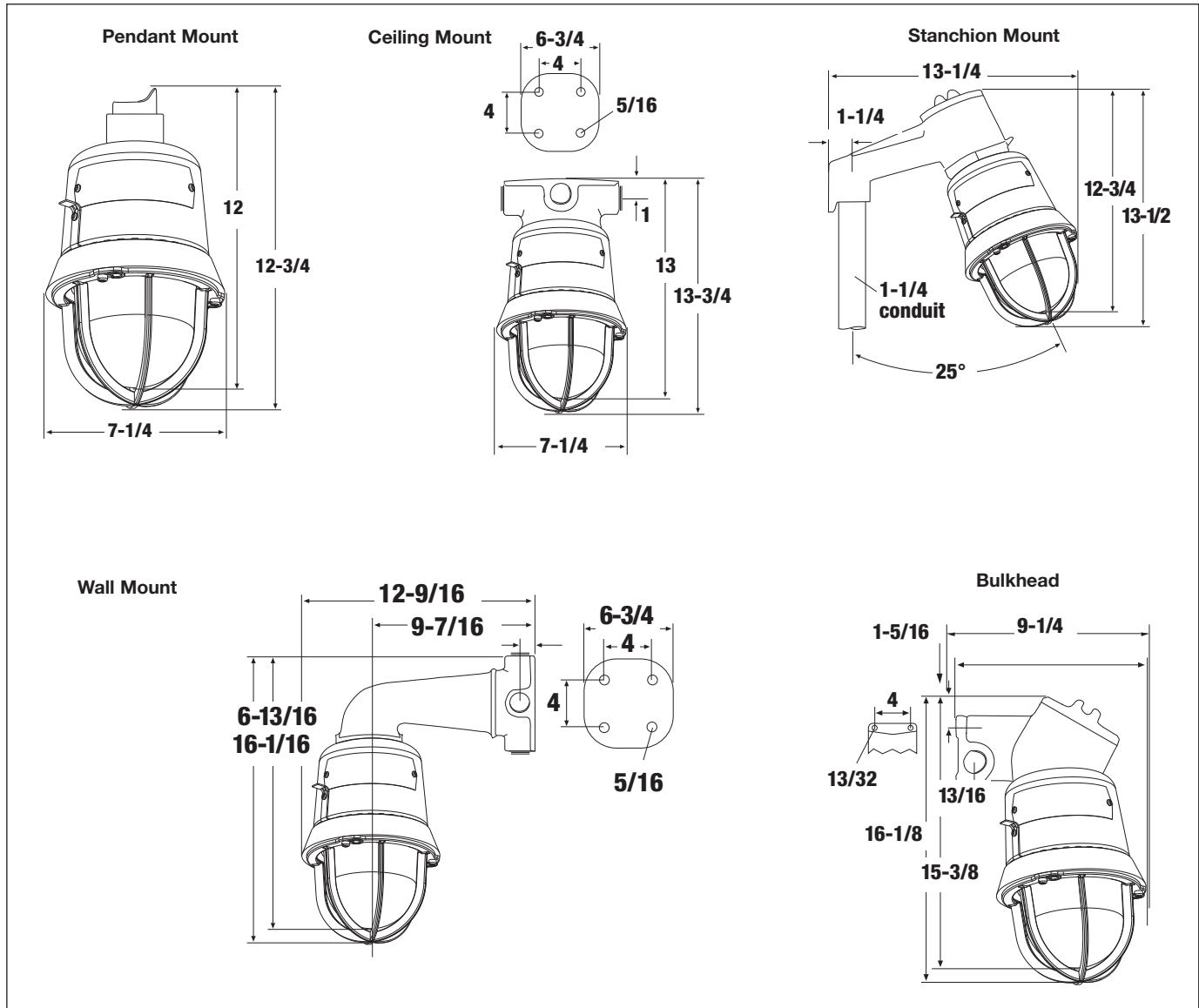
Net Weight (lbs.):

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.

Distribuidor Autorizado: www.tucanobrasil.com.br

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