

Description	Page No.
Application/Selection	Page 710
Class I Hazardous Area Luminaires	
EVI Series Groups C, D	711-719
EV Series Groups A, B, C, D	720

2L Incandescent Luminaires

Hazardous Application and Selection

Application:

- For use in areas made hazardous by presence of flammable vapors, gases, or dusts
- For indoor or outdoor use. For general area or spot lighting

Considerations for Selection:

Environmental:

- What is the hazardous area classification (NEC)/(CEC) of the location in which the luminaires will be installed?

Lighting levels required:

- What wattage fixture(s) will provide the desired light level? (See Lighting Selector Guide, pages 665 through 689, to determine number and location of luminaires required.)

Physical arrangement:

- Type of luminaire mounting needed

Product Selection:

Two product families are included in Section 2L as follows:

- EVI models suitable for use in Class I, Groups C, D, and Class II, Groups E, F and G locations. These luminaires may be ordered with a wide variety of reflector styles and mounting arrangements to provide the required light distribution, depending on application, mounting height and lamp size. Check individual catalog pages for specific hazardous location suitabilities of each luminaire. Models are available for lamp sizes 100 watt, A-19 to 500 watt, PS-40.
- EV Models suitable for use in Class 1, Groups A, B, C, D locations. These luminaires may be ordered with a wide variety of reflector styles and arrangements to provide the required light distribution, depending on application, mounting height and lamp size. Check individual catalog pages for specific hazardous location suitabilities of each luminaire. Models are available for lamp size 300 watt PS35 mogul base.

Table 500-3(d) Identification Numbers.

Maximum Temperature		Identification Number
Deg. C	Deg. F	
450	842	T1
300	572	T2
280	536	T2A
260	500	T2B
230	446	T2C
215	419	T2D
200	392	T3
180	356	T3A
165	329	T3B
160	320	T3C
135	275	T4
120	248	T4A
100	212	T5
85	185	T6

EVI Series Explosionproof Incandescent Luminaires

Factory Sealed

100-500W Medium and Mogul Base

Cl. I, Div. 1, Groups C,D
Cl. I, Zone 1 & 2, Group IIB
Cl. II, Groups E,F,G (Max 150W-Med. base)
Cl. III & Simultaneous Presence (Max 150W-Med. base)
Marine and Wet Locations • Type 4X; IP66

2L



Application:

EVI series incandescent luminaires are used:

- for **Type 4X, marine**, wet location and hose down environments.

- where a consistent light level relatively unaffected by extremes in ambient temperature (-40°C to +65°C) is required.
- in areas that require lamps to reach full illumination immediately.
- in areas that require lamps to be frequently turned on and off.
- indoor & outdoor in locations which are hazardous due to the presence of flammable vapors or gases, ignitable dusts or ignitable fibers & flyings.
- where a luminaire is required for tough environmental conditions involving corrosives, water, dust and extreme temperatures.
- manufacturing plants, heavy industrial facilities, industrial process facilities such as refineries, chemical, petrochemical, pharmaceutical and platforms.
- for lighting of loading docks, tunnels, stairways, storage closets & task lighting.

Features:

- **Ambient suitability to 65°C.**
- **Standard 90°C rated building wire for 150W max 40°C ambient application - represents more than 75% of all applications.**
- **Type 4X, marine outdoor locations.**
- **Factory sealed - no external seals required.**
- Quick connect - fixture threads onto the mounting module for easy installation.
- One size luminaire for all medium base incandescent lamps through 300W.
- One size luminaire for all mogul base incandescent lamps through 500W.
- Small compact size - ceiling mount is 13¾" long.
- Shock absorbing receptacle.
- Easy to assemble & relamp.
- Silicone gaskets seal out dirt and moisture.
- Epoxy powder coat for corrosion resistance.
- Same mounting modules as used with the EVM & EVLP series.

Standard Materials:

- Body, mounting modules and guard - copperfree aluminum
- Globe - heat & impact resistant glass
- Gaskets - silicone
- External hardware - stainless steel
- Reflectors - Krydon® fiberglass-reinforced polyester

Standard Finishes:

- Copper free aluminum - Corro-free™ epoxy powder coat
- Stainless steel - Natural
- Krydon® Reflectors - High reflectance white

Electrical Ratings:

Sources/Wattages

- Medium Base - Maximum 300W (PS25)
- Mogul Base - Maximum 500W (PS40)

Voltages

- Medium Base 120V (250V with suffix /250)
- Mogul Base 277V

Hub Size

- ¾" or 1" NPT pendant, ceiling, wall mount
- ¾" NPT bulkhead mount

Certifications and Compliances:

NEC & CEC:

- Class I, Division 1, Groups C & D
- Class I, Zone 1, Group IIB
- Class II, Groups E, F & G
- Marine Locations, Wet Locations, Enclosure 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 Luminaires
- 1598A Luminaires for Installation on Marine Vessels

CSA Standards:

- C22.2 No. 137

Options:

Description

- 250V luminaire for export applications (medium base only)

Suffix to be added to Cat. No.
/250

Accessories:

- Reflectors - See Ordering by Components on page 713.



2L Incandescent Fixtures

2L

EVI Series Explosionproof Incandescent Luminaires

**Factory Sealed
100-500W Medium and Mogul Base**

Cl. I, Div. 1, Groups C,D
Cl. I, Zone 1 & 2, Group IIB
Cl. II, Groups E,F,G (Max 150W-Med. base)
Cl. III & Simultaneous Presence (Max 150W-Med. base)
Marine and Wet Locations • Type 4X; IP66

	Mounting Style	Hub Size	EVI301 SERIES	EVI501 SERIES
			Medium Base with EV505 Guard (Max. 300W PS25)	Mogul Base with EV503 Guard (Max. 500W PS40)
	Pendant Mount	3/4"	EVI A2301	EVI A2501
		1"	EVI A3301	EVI A3501
	Ceiling Mount	3/4"	EVICX2301	EVICX2501
		1"	EVICX3301	EVICX3501
	Wall Mount	3/4"	EVIBX2301	EVIBX2501
		1"	EVIBX3301	EVIBX3501
	Bulkhead Mount	3/4"	EVIBH2301	—
		1"	—	—
	Stanchion Mount	1 1/4"	EVIJ4301	EVIJ4501
	Luminaire with Guard Less Mounting Module		EVI301✓	EVI501✓

Note:

Medium base luminaires (EVI301 Series) - For A19 lamps up to 100W, use Leviton socket extension catalog number 2005.
Mogul base luminaires (EVI501 Series) - For PS30 medium base lamps, use Cooper Wiring Devices socket adapter catalog number 332.

✓ - Available with Lightning Service™ Delivery. See Section G for complete details.

Incandescent Fixtures
2L

EVI Series Explosionproof Incandescent Luminaires

Ordering By Components

2L



Factory Sealed 100-500W Medium and Mogul Base

EVI Luminaires are available in components.

A complete luminaire consists of:

- I. Mounting Module
- II. EVI Luminaire Body and Globe Assembly
- III. Guard, Reflector

I. Mounting Module:

Type	Conduit	Cat. No.
Pendant	3/4"	EVMP2✓
	1"	EVMP3✓
Ceiling and Wall Box	3/4"	EV22✓
	1"	EV33✓
Wall Bracket Arm	3/4"	EV22✓ & EV87✓
	1"	EV33✓ & EV87✓
Stanchion	1 1/4"	EVMJ4✓
Bulk Head	3/4"	EVIJ2✓

II. Luminaire Body and Globe Assembly with Guard

Type	Cat. No.
Medium Base	EVI301✓
Mogul Base	EVI501✓

III. Guards and Reflectors

Type	Cat. No.
Guard - Fits EVI301 Series (medium base)	EV505
Guard - Fits EVI501 Series (mogul base)	EV503
Dome Reflector - Fits EVI301 Series (medium base)	RD636
Angle Reflector - Fits EVI301 Series (medium base)	RA636
Dome Reflector - Fits EVI501 Series (mogul base)	RD739
Angle Reflector - Fits EVI501 Series (mogul base)	RA739

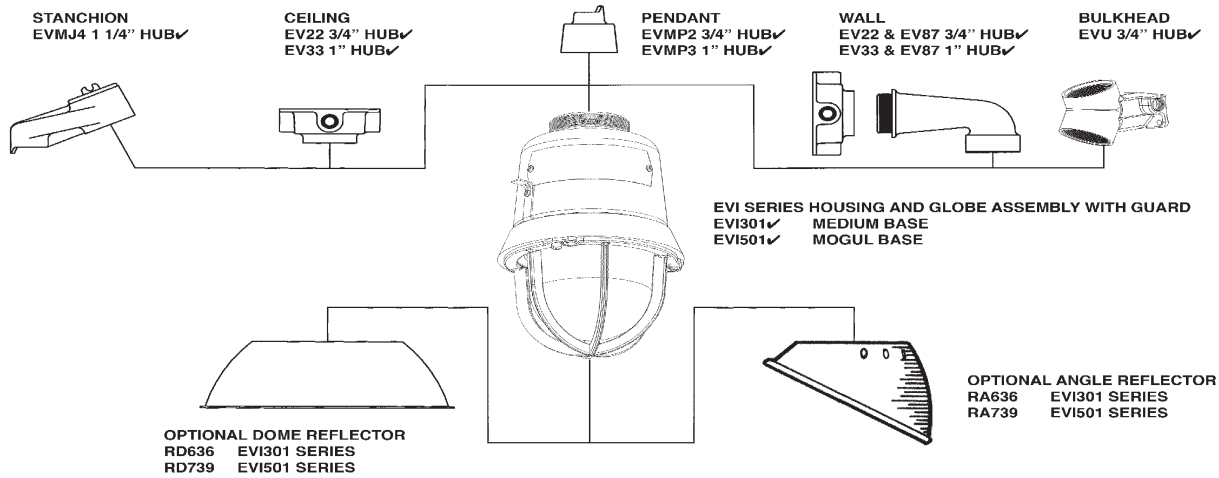
✓ - Available with Lightning Service™ Delivery. See Section G for complete details.



EVl Series Explosionproof Incandescent Luminaires

Factory Sealed
100-500W Medium and Mogul Base

Family Tree
Temperature Performance Data



Temperature Performance Data:

Type	Watts/Lamp	Class I, Div 1 (Class I, Zone 1)			Class II	Simultaneous Presence	Supply Wire Temp (°C)		
		Ambient					Ambient	Ambient	Ambient
		40°C	55°C	65°C	40°C	40°C	40°C	55°C	65°C
EV1301 Medium Base	100W/A21 or A19*	T4	T3C	T3C	T3C	T3C	90°C	105°C	125°C
	150W/A21	T4	T3C	T3C	T3C	T3C	90°C	105°C	125°C
	200W/A23 or A25	T3	T2D	T2C	—	—	105°C	125°C	125°C
	300W/PS25	T3	T2D	T2C	—	—	105°C	125°C	125°C
EV1501 Mogul Base	200W/PS30*	T4A	T4	T4	T3A	T3A	90°C	90°C	105°C
	300W/PS35	T4	T3C	T3C	—	—	90°C	90°C	105°C
	500W/PS40	T3A	T3	T3	—	—	105°C	125°C	125°C

* Note:

Medium base luminaires (EV1301 Series) - For A19 lamps up to 100W, use Leviton socket extension catalog number 2005.

Mogul base luminaires (EV1501 Series) - For PS30 medium base lamps, use Cooper Wiring Devices socket adapter catalog number 332.

✓ - Available with Lightning Service™ Delivery. See Section G for complete details.

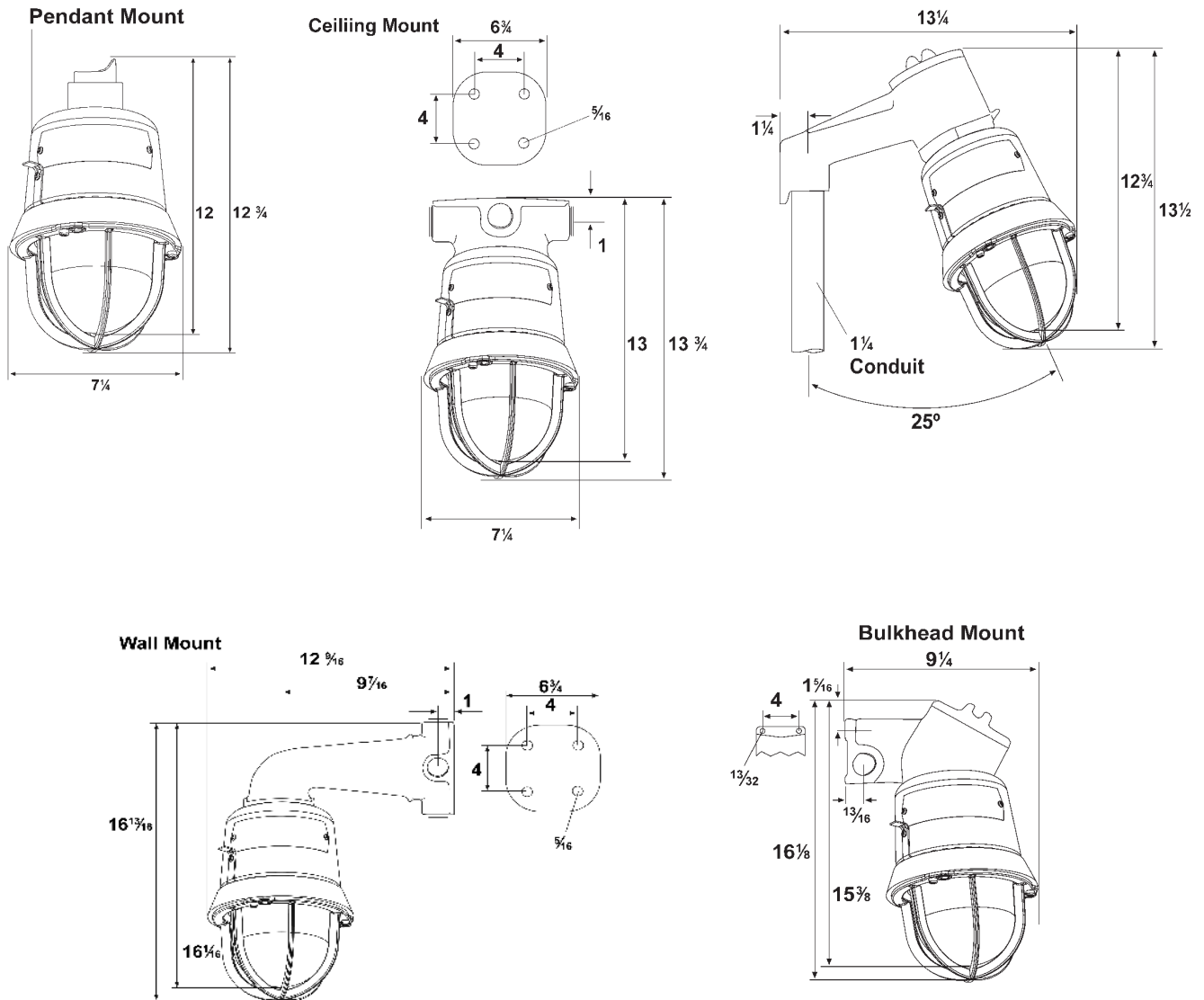
EVI Series Explosionproof Incandescent Luminaires

Medium Base Dimensions and Weights

2L

Factory Sealed
100-500W Medium and Mogul Base

Medium Base EVI Luminaire Dimensions (Inches):



Medium Base Net Luminaire Weights (lbs.):

EVI301 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

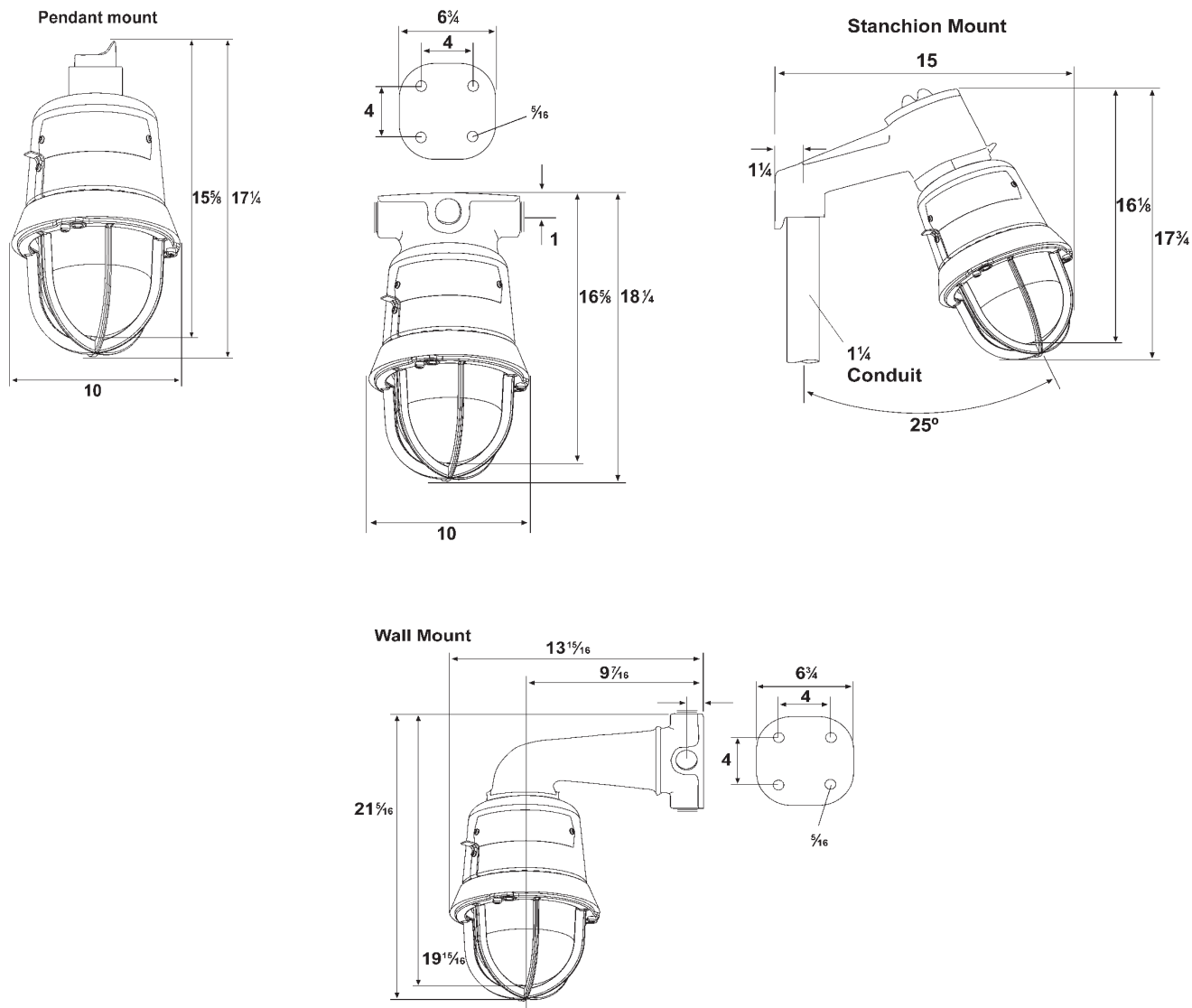
Add for Reflectors

RD636 (Dome Reflector, Small)	1.5 lbs
RA636 (Angle Reflector, Small)	1.0 lbs
RD739 (Dome Reflector, Small)	2.0 lbs
RA739 (Angle Reflector, Small)	1.4 lbs

2L Incandescent Fixtures

Factory Sealed
100-500W Medium and Mogul Base

Medium Base EVI Luminaire Dimensions (Inches):



Mogul Base Net Luminaire Weights (lbs.):

EVI501 with guard

24 lbs.

Add mounting modules:

Pendant

1.0 lbs

Ceiling

2.0 lbs

Wall

4.5 lbs

Bulkhead

2.2 lbs

Stanchion

2.5 lbs

Add for Reflectors

RD636 (Dome Reflector, Small)

1.5 lbs

RA636 (Angle Reflector, Small)

1.0 lbs

RD739 (Dome Reflector, Small)

2.0 lbs

RA739 (Angle Reflector, Small)

1.4 lbs

EVI Series Explosionproof Incandescent Luminaires

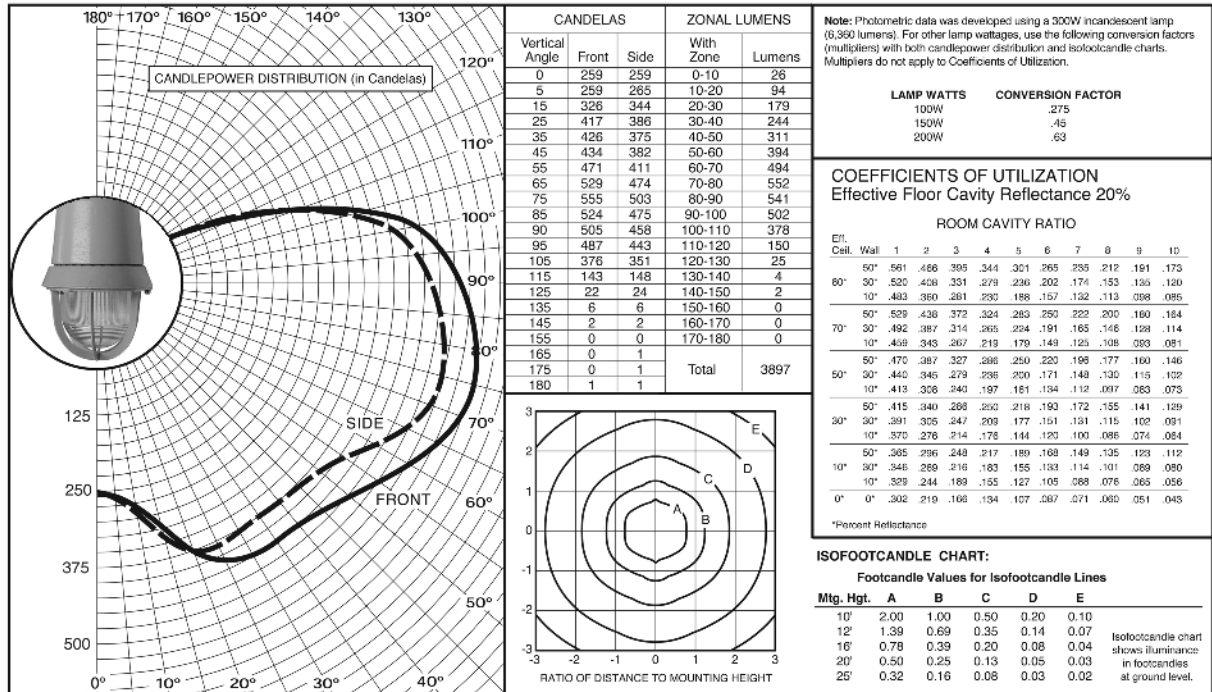
Photometric Data

2L

Factory Sealed
100-500W Medium and Mogul Base

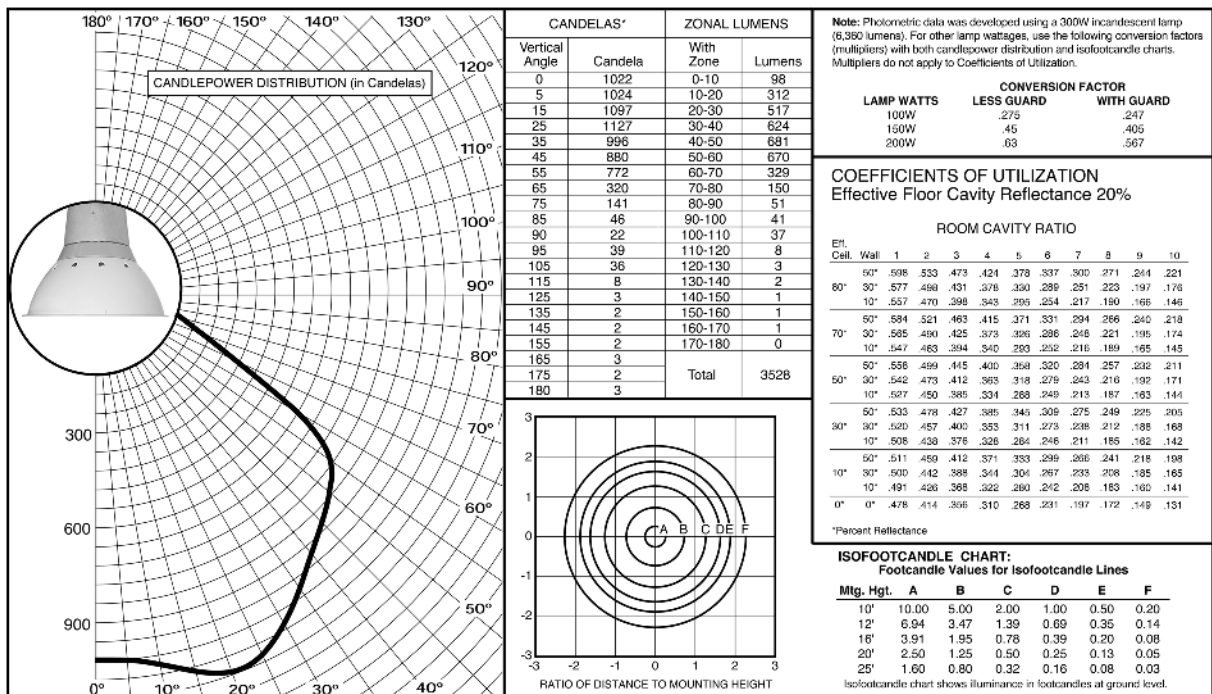
Medium Base

Luminaire with Globe and Guard
EVICX2301 Lamp: 300W/PS25 Incandescent



Medium Base

Luminaire with Globe and Dome Reflector (Less Guard)
EVICX2300 Lamp: 300W/PS25 Incandescent

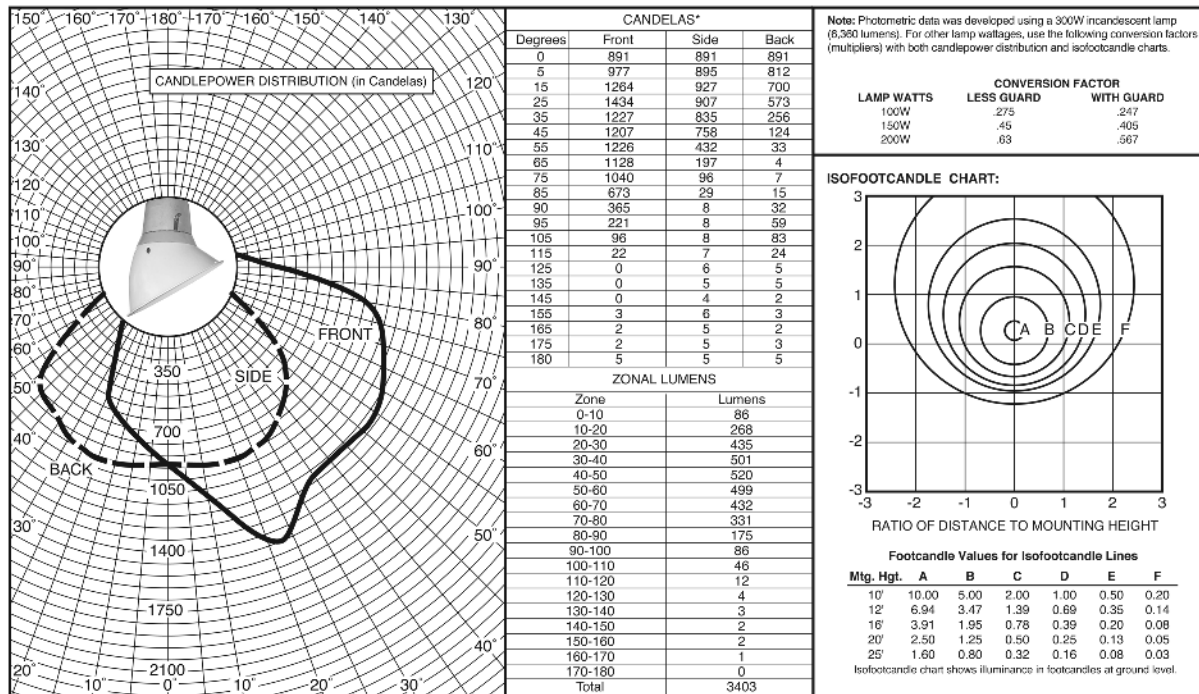


EVl Series Explosionproof Incandescent Luminaires

Factory Sealed 100-500W Medium and Mogul Base

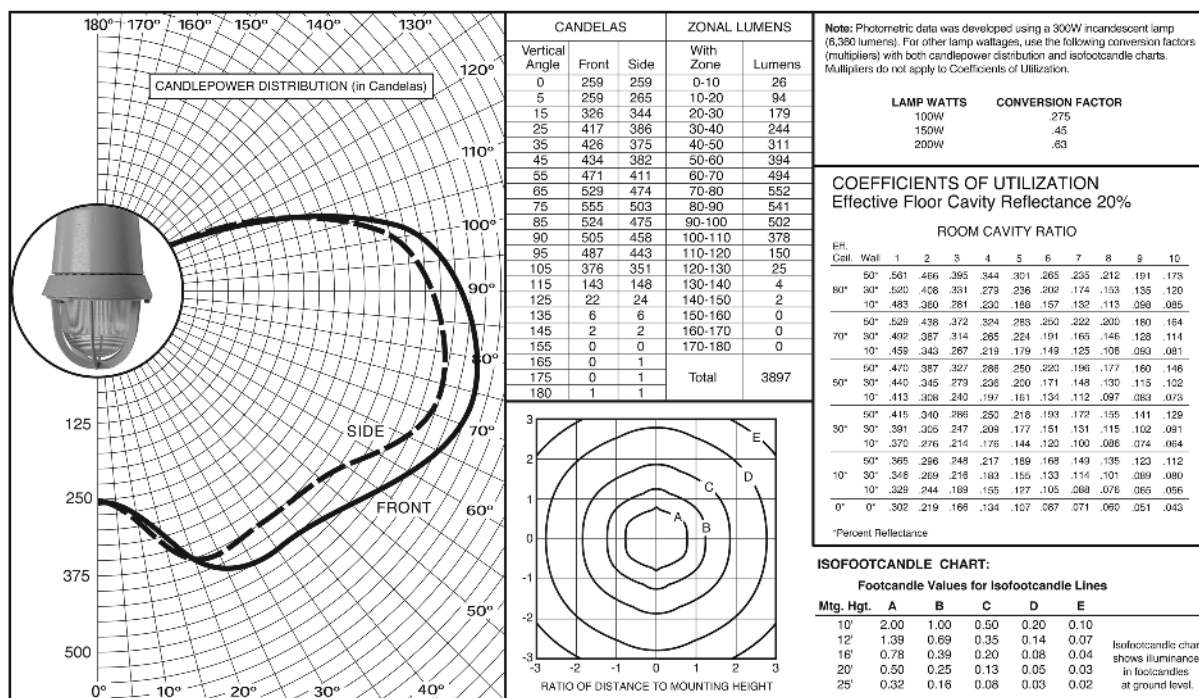
Medium Base

Luminaire with Globe and 30° Angle Reflector (Less Guard)
EVICX2300 Lamp: 300W/PS25 Incandescent



Mogul Base

Luminaire with Globe and Guard
EVIA2501 Lamp: 500W/PS40 Incandescent



EVI Series Explosionproof Incandescent Luminaires

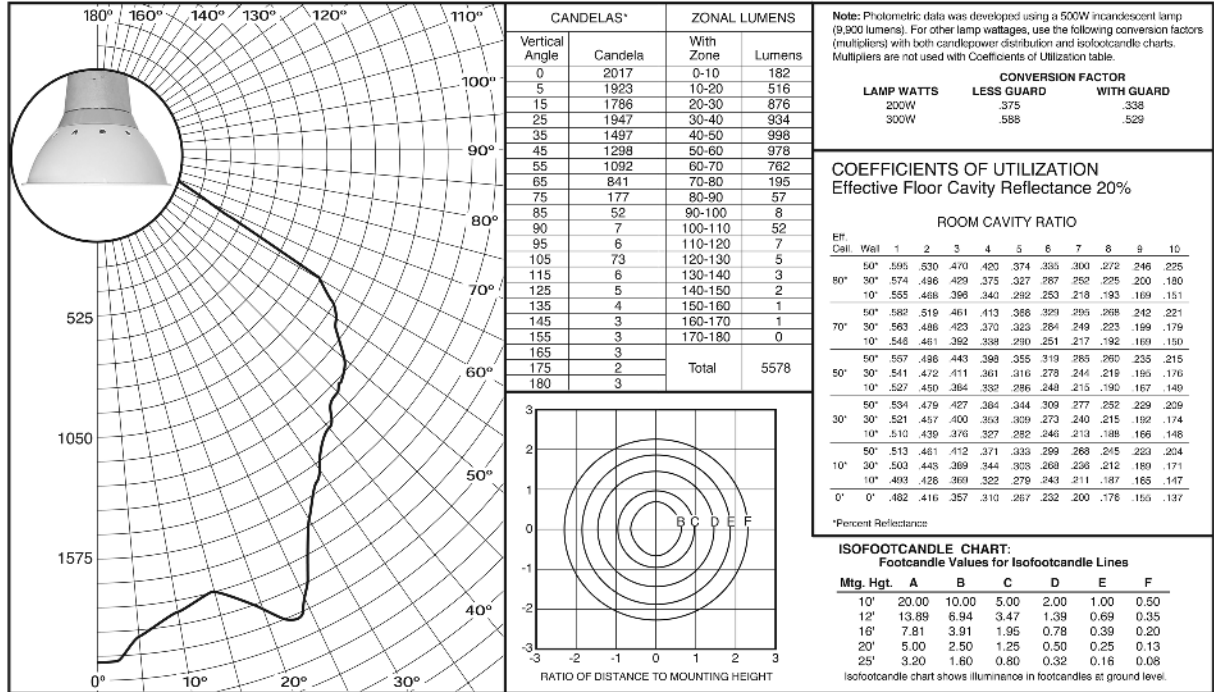
Photometric Data

2L

Factory Sealed
100-500W Medium and Mogul Base

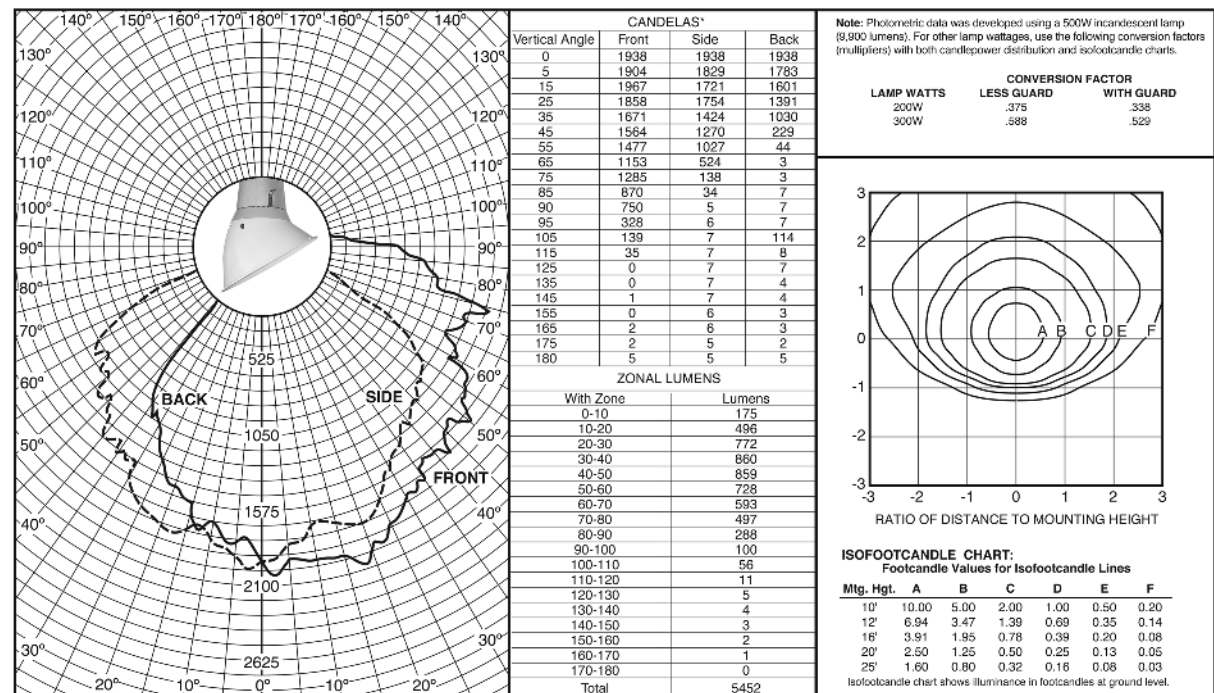
Mogul Base

Luminaire with Globe and Dome Reflector (Less Guard)
EVI2500 Lamp: 500W/PS40 Incandescent



Mogul Base

Luminaire with Globe and Angle Reflector (Less Guard)
EVI2500 Lamp: 500W/PS40 Incandescent



Application:

EV292 Series luminares are used:

- to provide incandescent lighting in locations made hazardous due to the presence of hydrogen, gases or vapors of an equivalent hazard, such as manufactured gas.
- hydrogen areas of process industries, missile bases where hydrogen fuel is used and gas manufacturing plants.
- in areas of lesser hazard than indicated above.
- EVA292 pendant mount luminaire is also suitable for use in locations made hazardous due to the presence of acetylene.

Features:

- Flametight threaded joints – no external seal needed
- Easy to assemble and relamp
- Shock absorbing receptacle
- Gasket seals out dirt and liquids
- Positive locking of globe holder
- Heat and impact resistant globe
- Inner reflector eliminates upward spill light
- Lightweight
- Corrosion Resistant
- Dome and 30° angle reflectors available

Standard Materials:

- Globes – heat and impact resistant glass
- Luminaire and bracket arm – copper-free aluminum
- Reflectors – *Krydon*® fiberglass-reinforced polyester
- Back box – *Feraloy*® iron alloy

Standard Finishes:

- Aluminum – epoxy powder coat
- *Krydon* – high reflectance white
- *Feraloy* – electrogalvanized and aluminum acrylic paint

Size Ranges:

- 3/4" conduit hub

Capacity Ranges:

- 300 watt, PS-30 medium base lamps

Certifications and

Compliances:

- NEC/CEC: Class I, Divisions 1 and 2, Groups A,B,C,D – pendant mount
- Class I, Divisions 1 and 2, Groups B,C,D – ceiling and bracket mount
- UL Standard: 844
- CSA Standard: C22.2 No. 137

Temperature Performance

Data:

Style	Class I UL	Ambient Temp. °C	Supply Wire °C
Pendant	T3A	25/40	150°C
Ceiling	T3A	25/40	150°C
Bracket	T3A	25/40	150°C

NOTE: Photometric curves and data are the same as shown for EV Groups C, D series.



Pendant style with RD725 dome reflector

Style	Max. Lamp Size
Pendant	300 watt, PS-30 (medium base)

Pendant style with RA725 30° angle reflector

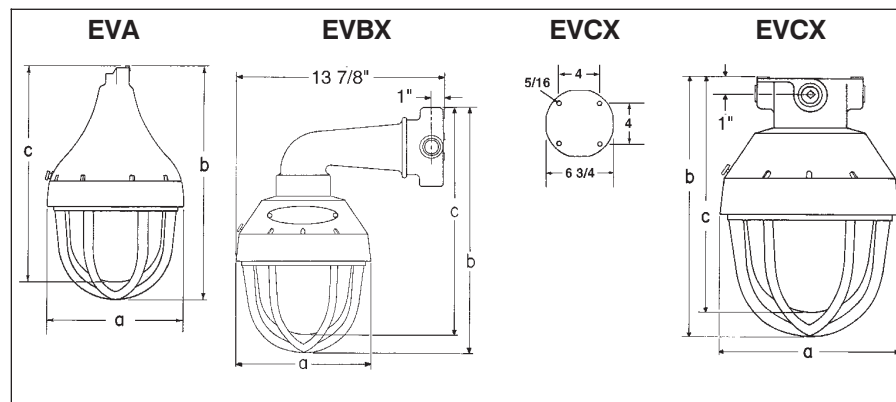
Style	Hub Size	Without Reflector Cat. #
Pendant	3/4"	EVA292

Pendant style without reflector

Style	Dome Reflector Cat. #	30° Angle Reflector Cat. #
Pendant	RD725	RA725

Ceiling	300 watt, PS-30 (medium base)	With Guard	3/4"	EVCX292	RD725	RA725
Bracket	300 watt, PS-30 (medium base)	With Guard	3/4"	EVBX292	Not Applicable	

Dimensions



	EVA	EVBX	EVCX	Reflector Diameter Type
a	8 7/8"	8 7/8"	8 7/8"	Dome 16"
b	16 3/8"	18 1/8"	14 3/8"	30° Angle 16"
c	14 7/8"	16 5/8"	12 7/8"	