

**COOPER CROUSE-HINDS®**



**EVI SERIES**  
**EXPLOSIONPROOF**  
**FACTORY SEALED**  
**INCANDESCENT LUMINAIRES**

100-500 WATT

MEDIUM AND MOGUL BASE

CL. I, DIV. 1, GROUPS C & D • CL I, ZONE 1, GROUP IIB • ENCLOSURE TYPE 4X • MARINE & WET LOCATIONS

## 2 EVI Series Factory Sealed Incandescent Luminaires

**EVI301 Series - Medium Base**

**EVI501 Series - Mogul Base**

### **Need it fast? ASK FOR LIGHTNING SERVICE™ DELIVERY.**

We're ready to ship the EVI luminaires you need in 24 to 48 hours when you ask for Lightning Service™ delivery.

Two ordering options are available - components or complete luminaire unit pack (complete luminaire with mounting module in a single carton). Complete luminaires must be made up of the components listed below:

#### **Same-day to 24-hour shipping: Components**

We'll ship these components the same day when the distributor's order requesting same-day Lightning Service is placed with us before 12:00 p.m. Eastern time. If placed after 12:00 p.m. EST, components will ship the next day.

##### Luminaire Body & Globe Assembly with Guard:

Medium Base EVI301

Mogul base EVI501

##### Mounting modules:

EVMP2, EVMP3, EV22, EV33, EV87, EVMJ4, EVIJ2

#### **Shipped within 48 hours: Complete Luminaire Unit Pack**

Complete luminaire with mounting module shipped in a single carton.

Maximum line item quantity for Lightning Service delivery - 12.  
For larger quantities, typically 2-4 weeks.

Lightning Service delivery is available for many of our most popular products, and we're adding more all the time. Visit the Quick Ship area of our web site [www.crouse-hinds.com](http://www.crouse-hinds.com) to see the most up-to-date listing of Lightning Service products. Lightning Service products are also designated in the Cooper Crouse-Hinds Catalog 6000 and price list.



#### **Also available from Cooper Crouse-Hinds:**

- *VaporGard™ Incandescent Luminaires - Class I, Division 2 Groups A, B, C & D*
- *Nonmetallic NDA Corro-gard™ Incandescent Luminaires - Class I, Division 2 Groups A, B, C & D*

Cooper Crouse-Hinds offers a complete line of industrial luminaires including incandescent, HID, fluorescent and induction light sources to fulfill every application need. See Section L of Cooper Crouse-Hinds Catalog 6000 for the complete offering.

# EVI Series Factory Sealed Incandescent Luminaires

**EVI301 Series - Medium Base**

**EVI501 Series - Mogul Base**

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

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## 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 - copper-free 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 5.



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## EVI Series Factory Sealed Incandescent Luminaires

**EVI301 Series - Medium Base**

**EVI501 Series - Mogul Base**

- Cl. I, Div 1, Groups C & D
- Cl. I, Zone 1 & 2, Group IIB
- Cl. II, Groups E, F & G
- Cl. III & Simultaneous Presence
- Marine & Wet Locations
- 4X; IP66



	Mounting Style	Hub Size	EVI301 SERIES Medium Base with EV505 Guard (Max. 300W PS25)	EVI501 SERIES Mogul Base with EV503 Guard (Max. 500W PS40)
	Pendant Mount	3/4" 1"	EVIA2301 EVIA3301	EVIA2501 EVIA3501
	Ceiling Mount	3/4" 1"	EVICX2301 EVICX3301	EVICX2501 EVICX3501
	Wall Mount	3/4" 1"	EVIBX2301 EVIBX3301	EVIBX2501 EVIBX3501
	Bulkhead Mount	3/4" 1"	EVIBH2301 -----	----- -----
	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 Page 2 for details.

# EVI Series Factory Sealed Incandescent Luminaires

• Ordering by Components

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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 Page 2 for details.

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## EVI Series Factory Sealed Incandescent Luminaires

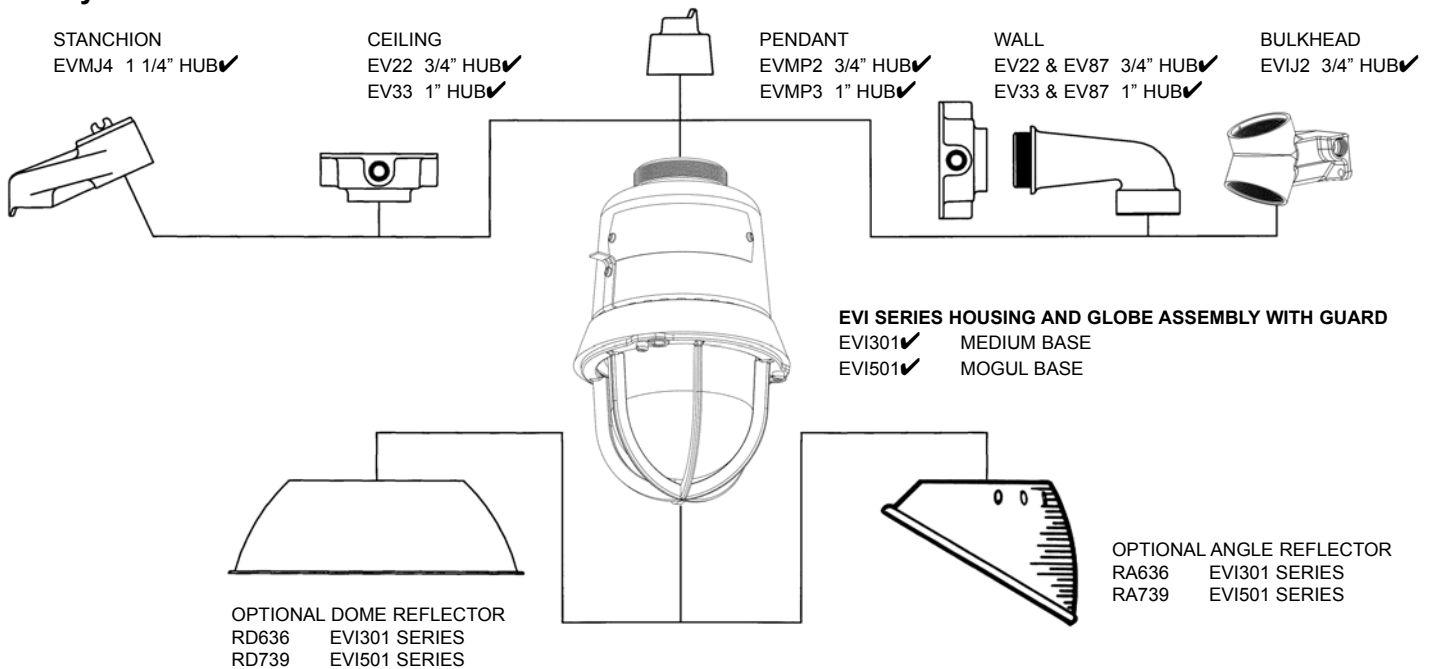
**EVI301 Series - Medium Base**

**EVI501 Series - Mogul Base**

- Family Tree
- Temperature Performance Data



### Family Tree:



### 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
<b>EVI301 Medium Base</b>	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
<b>EVI501 Mogul Base</b>	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 (EVI301 Series) - For A19 lamps up to 100W, use Leviton socket extension catalog number 2005.

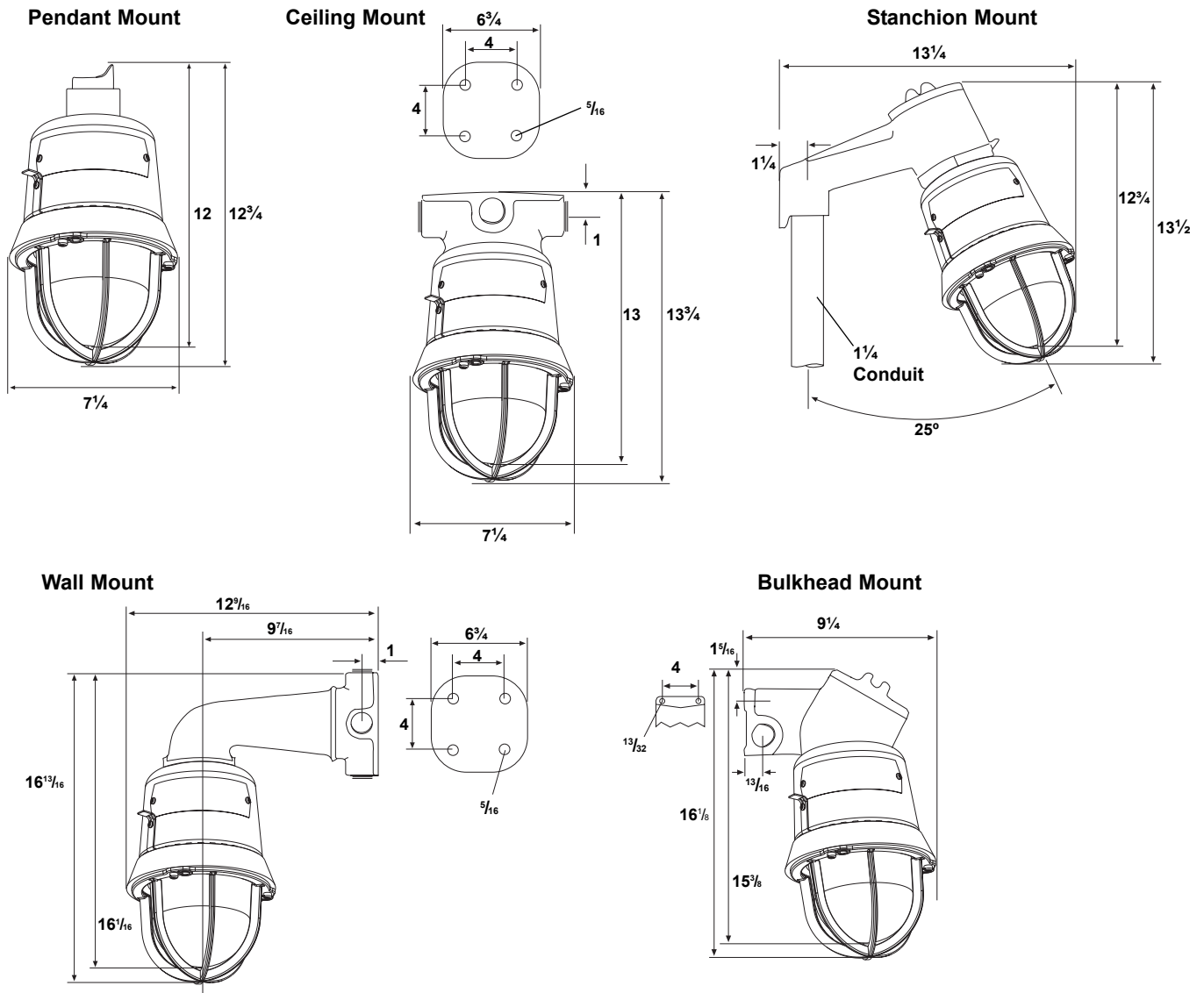
Mogul base luminaires (EVI501 Series) - For PS30 medium base lamps, use Cooper Wiring Devices socket adapter catalog number 332.

✓ - Available with Lightning Service™ Delivery. See Page 2 for details.

**EVI Series Factory Sealed Incandescent Luminaires**  
**EVI301 Series - Medium Base**

• Medium Base Dimensions and Weights

**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

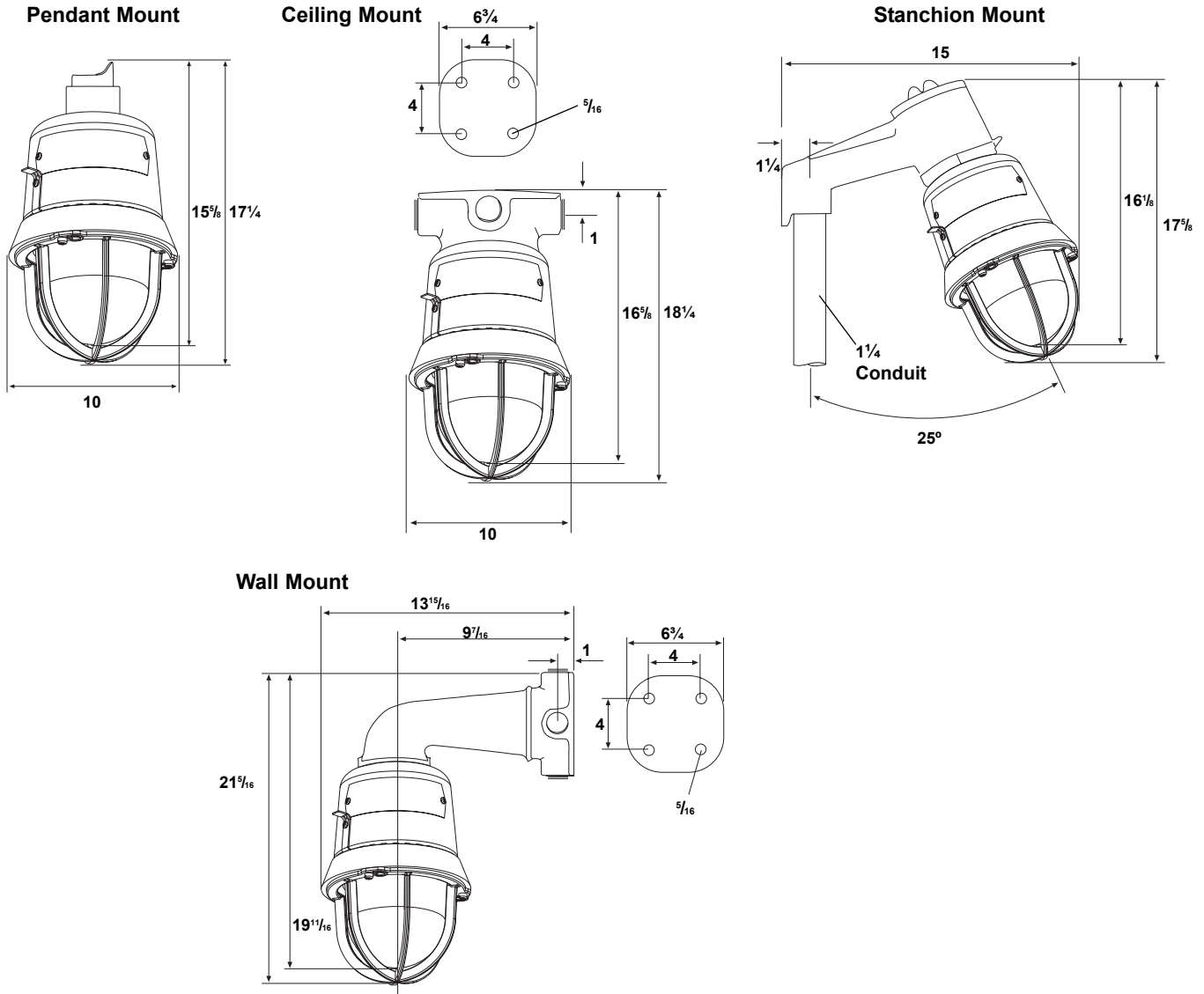
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## EVI Series Factory Sealed Incandescent Luminaires

EVI501 Series - Mogul Base

• Mogul Base Dimensions and Weights

### Mogul 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



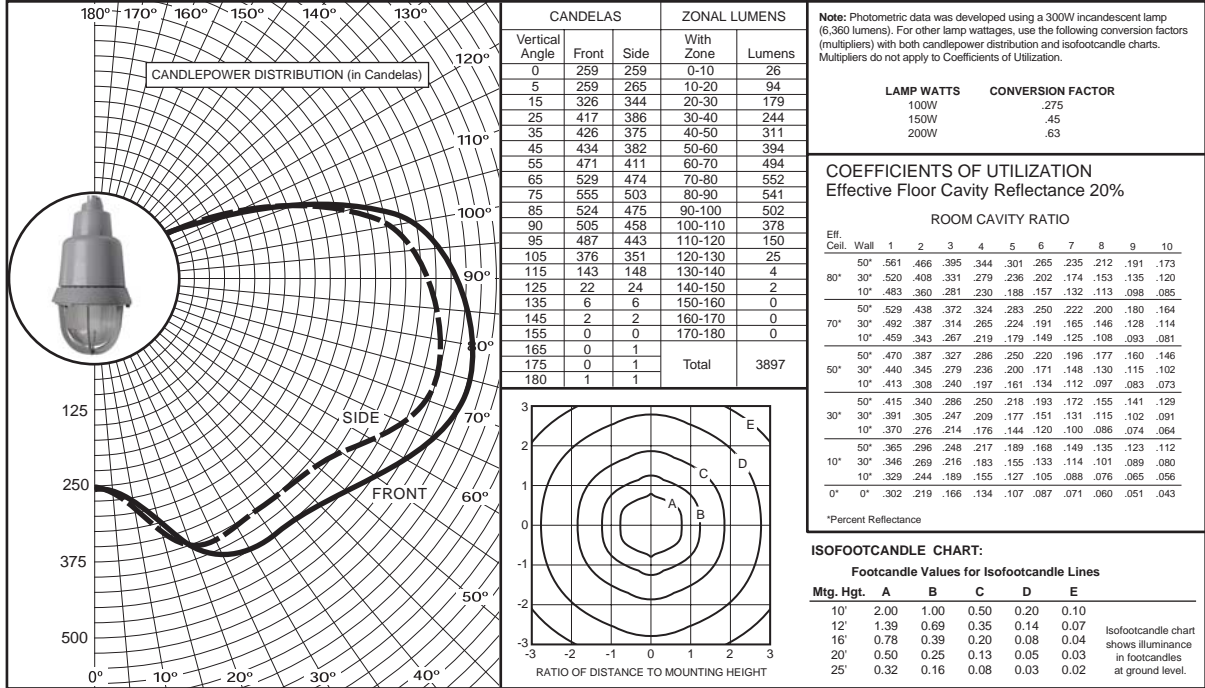
# EVI Series Factory Sealed Incandescent Luminaires

• Photometric Data

## EVI301 Series - Medium Base EVI501 Series - Mogul Base

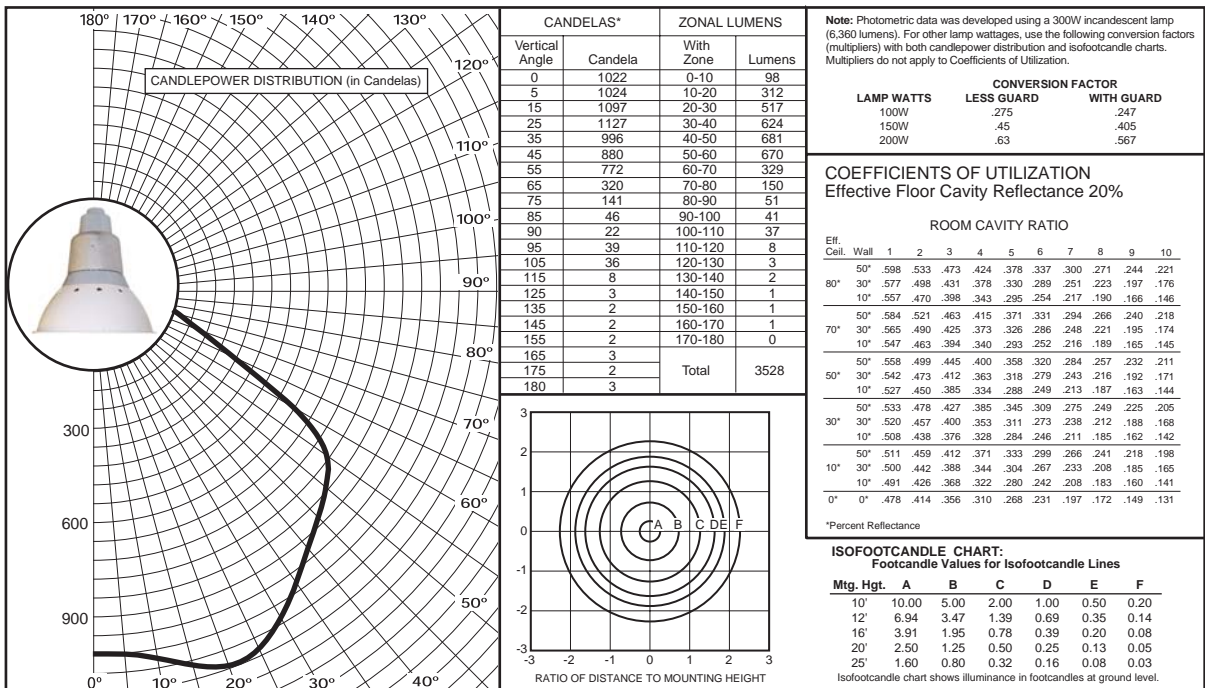
### Medium Base

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



### Medium Base

Luminaire with Globe and Dome Reflector (Less Guard)  
EVICX2301 Lamp: 300W/PS25 Incandescent



\*For luminaires with guard, use .9 multiplier.

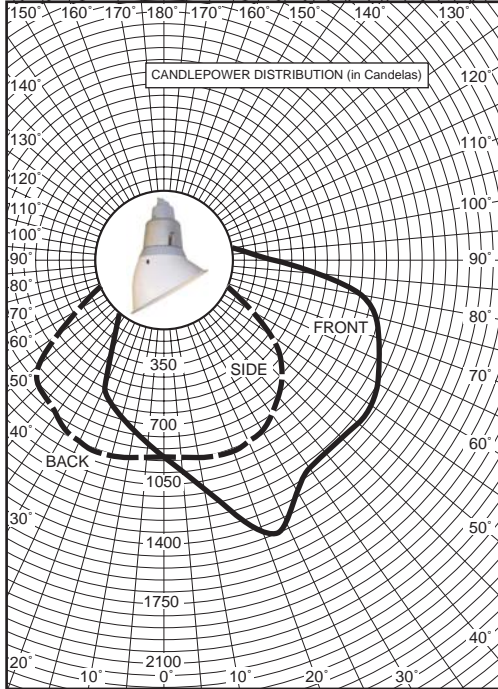
# 10 EVI Series Factory Sealed Incandescent Luminaires

• Photometric Data

## EVIC301 Series - Medium Base EVI501 Series - Mogul Base

### Medium Base

Luminaire with Globe and 30° Angle Reflector (Less Guard)  
EVICX2301 Lamp: 300W/PS25 Incandescent



CANDELAS*			
Degrees	Front	Side	Back
0	891	891	891
5	977	895	812
15	1264	927	700
25	1434	907	573
35	1227	835	256
45	1207	758	124
55	1226	432	33
65	1128	197	4
75	1040	96	7
85	673	29	15
90	365	8	32
95	221	8	59
105	96	8	83
115	22	7	24
125	0	6	5
135	0	5	5
145	0	4	2
155	3	5	3
165	2	5	2
175	2	5	3
180	5	5	5

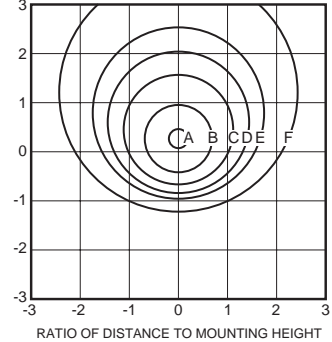
  

ZONAL LUMENS	
Zone	Lumens
0-10	86
10-20	268
20-30	435
30-40	501
40-50	520
50-60	499
60-70	432
70-80	331
80-90	175
90-100	86
100-110	46
110-120	12
120-130	4
130-140	3
140-150	2
150-160	2
160-170	1
170-180	0
Total	3403

Note: Photometric data was developed using a 300W incandescent lamp (6,360 lumens). For other lamp wattages, use the following conversion factors (multipliers) with both candlepower distribution and isofotocandle charts.

LAMP WATTS	CONVERSION FACTOR	
	LESS GUARD	WITH GUARD
100W	.275	.247
150W	.45	.405
200W	.63	.567

### ISOFOOTCANDLE CHART:

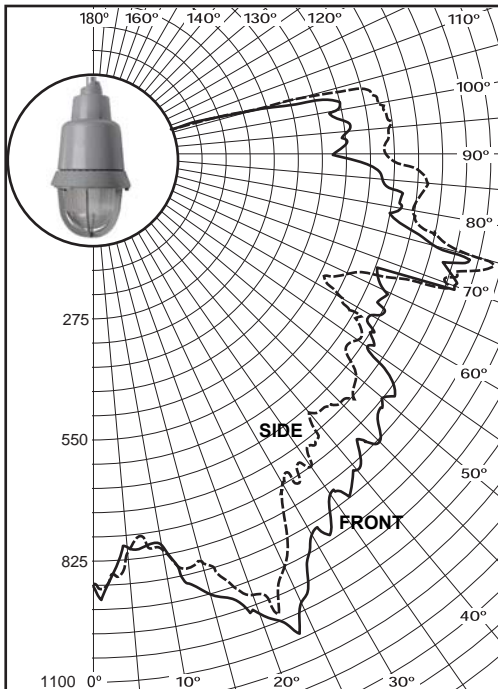


Footcandle Values for Isofootcandle Lines						
Mtg. Hgt.	A	B	C	D	E	F
10'	10.00	5.00	2.00	1.00	0.50	0.20
12'	6.94	3.47	1.39	0.69	0.35	0.14
16'	3.91	1.95	0.78	0.39	0.20	0.08
20'	2.50	1.25	0.50	0.25	0.13	0.05
25'	1.60	0.80	0.32	0.16	0.08	0.03

\*For luminaires with guard, use .9 multiplier.

### Mogul Base

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



CANDELAS				ZONAL LUMENS	
Vertical Angle	Front	Side	With Zone	Lumens	
0	887	887	0-10	80	
5	788	797	10-20	257	
15	923	848	20-30	453	
25	1044	937	30-40	516	
35	850	777	40-50	598	
45	832	684	50-60	624	
55	670	650	60-70	670	
65	627	613	70-80	797	
75	757	834	80-90	685	
85	578	681	90-100	661	
90	472	589	100-110	629	
95	556	640	110-120	82	
105	553	630	120-130	18	
115	58	52	130-140	8	
125	23	19	140-150	3	
135	11	10	150-160	1	
145	3	3	160-170	0	
155	3	0	170-180	0	
165	1	0			
175	1	0			
180	1	1			
Total				6082	

Note: Photometric data was developed using a 500W incandescent lamp (9,900 lumens). For other lamp wattages, use the following conversion factors (multipliers) with both candlepower distribution and isofotocandle charts. Multipliers are not used with Coefficients of Utilization table.

LAMP WATTS	CONVERSION FACTOR	
	LESS GUARD	WITH GUARD
200W	.375	
300W	.588	

### COEFFICIENTS OF UTILIZATION Effective Floor Cavity Reflectance 20%

ROOM CAVITY RATIO											
Eff. Cell.	Wall	1	2	3	4	5	6	7	8	9	10
50°	50°	.568	.480	.413	.364	.321	.286	.255	.231	.209	.190
80°	30°	.531	.428	.354	.304	.261	.227	.198	.176	.156	.140
10°	49°	.499	.384	.308	.258	.217	.185	.158	.138	.120	.106
50°	50°	.539	.455	.392	.346	.306	.272	.243	.220	.199	.182
70°	30°	.507	.408	.339	.291	.250	.218	.190	.169	.150	.134
10°	47°	.477	.369	.296	.248	.209	.178	.152	.133	.116	.103
50°	48°	.486	.410	.353	.312	.276	.246	.220	.200	.182	.166
50°	30°	.460	.371	.308	.266	.229	.200	.175	.156	.138	.124
10°	43°	.436	.338	.272	.229	.193	.165	.141	.124	.108	.096
50°	43°	.438	.367	.316	.280	.249	.222	.199	.181	.165	.151
30°	41°	.336	.280	.242	.209	.183	.160	.143	.127	.114	.104
10°	39°	.309	.250	.211	.178	.153	.131	.115	.100	.089	.080
50°	39°	.393	.328	.282	.251	.223	.200	.179	.164	.149	.137
10°	30°	.376	.304	.253	.220	.190	.166	.146	.130	.116	.105
10°	36°	.282	.228	.193	.164	.140	.120	.106	.092	.082	.074
0°	0°	.337	.259	.207	.174	.146	.124	.105	.092	.079	.069

ISOFOOTCANDLE CHART: Footcandle Values for Isofootcandle Lines					
Mtg. Hgt.	A	B	C	D	E
10'	5.00	2.00	1.00	0.50	0.20
12'	3.47	1.39	0.69	0.35	0.14
16'	1.95	0.78	0.39	0.20	0.08
20'	1.25	0.50	0.25	0.13	0.05
25'	0.80	0.32	0.16	0.08	0.03

Isofootcandle chart shows illuminance in footcandles at ground level.

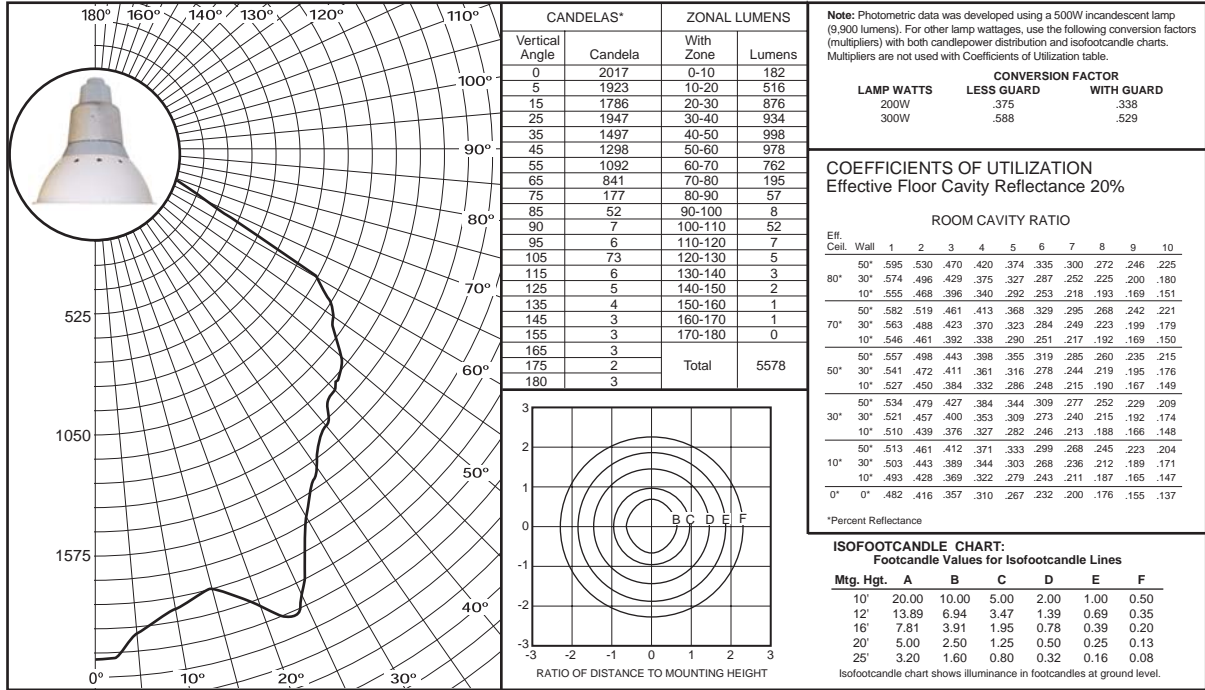
# EVI Series Factory Sealed Incandescent Luminaires

• Photometric Data

## EVI301 Series - Medium Base EVI501 Series - Mogul Base

### Mogul Base

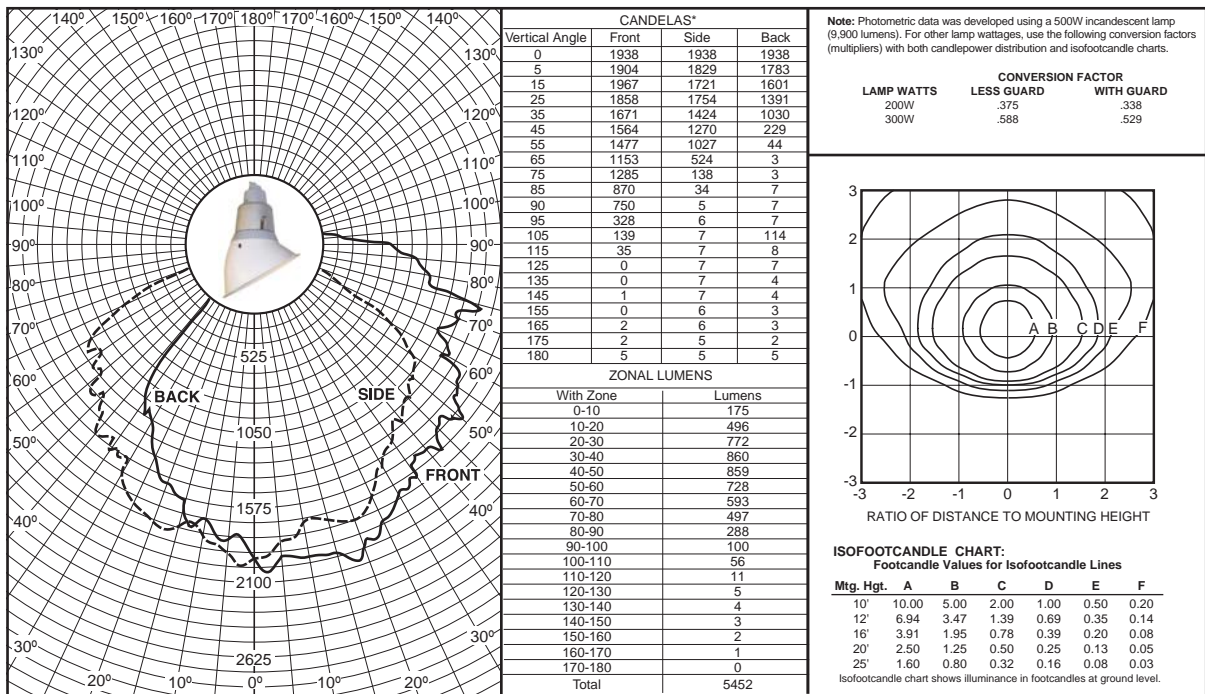
Luminaire with Globe and Dome Reflector (Less Guard)  
EVI2500 Lamp: 500W/PS40 Incandescent



\*For luminaires with guard, use .9 multiplier.

### Mogul Base

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



\*For luminaires with guard, use .9 multiplier.

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**EVI SERIES**

**EXPLOSIONPROOF**

**FACTORY SEALED**

**INCANDESCENT LUMINAIRES**

**100-500 WATT**

**MEDIUM AND MOGUL BASE**

***Distributed by:***

***For more information:***

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