EVI Series Explosionproof Incandescent Luminaires

Factory Sealed
100–500W Medium and Mogul Base

Applications:
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.
• Indoors and outdoors in locations which are hazardous due to the presence of flammable vapors or gases, ignitable dusts, or ignitable fibers and 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 and 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 133/4” long.
• Shock absorbing receptacle.
• Easy to assemble and relamp.
• Silicone gaskets seal out dirt and moisture.
• Epoxy powder coat for corrosion resistance.
• Same mounting modules as used with the EVM and EVLP series.

Certifications and Compliances:
• NEC & CEC:
  Class I, Division 1, Groups C, D
  Class I, Zone 1, Group IIB
  Class II, Groups E, F, G (Max 150W–Medium base)
  Cl. III & Simultaneous Presence
  (Max 150W–Medium base)
  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 Luminaires
  1598A Luminaires for Installation on Marine Vessels
• CSA Standards:
  C22.2 No. 137

Standard Materials:
• Body, mounting modules and guard – copper-free aluminum
• Globe – heat and 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
• 3/4” or 1” NPT pendant, ceiling, wall mount
• 3/4” NPT bulkhead mount

Options:
Description
250V luminaire for export applications (medium base only)

Suffix
/250

Accessories:
• Reflectors – For Ordering by Components see page 883.
**EVI Series Explosionproof Incandescent Luminaires**

Factory Sealed

**100–500W Medium and Mogul Base**

<table>
<thead>
<tr>
<th>Mounting Style</th>
<th>Hub Size</th>
<th>EVI301 Series Medium Base with EV505 Guard (Max. 300W PS25)</th>
<th>EVI501 Series Mogul Base with EV503 Guard (Max. 500W PS40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pendant Mount</td>
<td>½&quot;</td>
<td>EVIA2301</td>
<td>EVIA2501</td>
</tr>
<tr>
<td></td>
<td>1&quot;</td>
<td>EVIA3301</td>
<td>EVIA3501</td>
</tr>
<tr>
<td>Ceiling Mount</td>
<td>½&quot;</td>
<td>EVICX2301</td>
<td>EVICX2501</td>
</tr>
<tr>
<td></td>
<td>1&quot;</td>
<td>EVICX3301</td>
<td>EVICX3501</td>
</tr>
<tr>
<td>Wall Mount</td>
<td>½&quot;</td>
<td>EVIBX2301</td>
<td>EVIBX2501</td>
</tr>
<tr>
<td></td>
<td>1&quot;</td>
<td>EVIBX3301</td>
<td>EVIBX3501</td>
</tr>
<tr>
<td>Bulkhead Mount</td>
<td>½&quot;</td>
<td>EVIBH2301</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>1&quot;</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Stanchion Mount</td>
<td>1½&quot;</td>
<td>EVIJ4301</td>
<td>EVIJ4501</td>
</tr>
</tbody>
</table>

**Luminaire with Guard Less Mounting Module**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>EVI301</th>
<th>EVI501</th>
</tr>
</thead>
</table>

**Note:**

Medium base luminaires (EVI301 Series) – For A19 lamps up to 100W, use Leviton socket extension Leviton catalog number 200 5.
Mogul base luminaires (EVI501 Series) – For PS30 medium base lamps, use Eaton’s Wiring Devices socket adapter catalog number 332.
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:

<table>
<thead>
<tr>
<th>Type</th>
<th>Conduit</th>
<th>Cat. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pendant</td>
<td>3/4”</td>
<td>EVMP2</td>
</tr>
<tr>
<td></td>
<td>1”</td>
<td>EVMP3</td>
</tr>
<tr>
<td>Ceiling and Wall Box</td>
<td>3/4”</td>
<td>EV22</td>
</tr>
<tr>
<td></td>
<td>1”</td>
<td>EV33</td>
</tr>
<tr>
<td>Wall Bracket Arm</td>
<td>3/4”</td>
<td>EV22 &amp; EV87</td>
</tr>
<tr>
<td></td>
<td>1”</td>
<td>EV33 &amp; EV87</td>
</tr>
<tr>
<td>Stanchion</td>
<td>1 1/4”</td>
<td>EVMJ4</td>
</tr>
<tr>
<td>Bulk Head</td>
<td>3/4”</td>
<td>EVIJ2</td>
</tr>
</tbody>
</table>

### II. Luminaire Body and Globe Assembly with Guard:

<table>
<thead>
<tr>
<th>Type</th>
<th>Cat. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium Base</td>
<td>EVI301</td>
</tr>
<tr>
<td>Mogul Base</td>
<td>EVI501</td>
</tr>
</tbody>
</table>

### III. Guards and Reflectors:

<table>
<thead>
<tr>
<th>Type</th>
<th>Cat. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guard – Fits EVI301 Series (medium base)</td>
<td>EV505</td>
</tr>
<tr>
<td>Guard – Fits EVI501 Series (mogul base)</td>
<td>EV503</td>
</tr>
<tr>
<td>Dome Reflector – Fits EVI301 Series (medium base)</td>
<td>RD636</td>
</tr>
<tr>
<td>Angle Reflector – Fits EVI301 Series (medium base)</td>
<td>RA636</td>
</tr>
<tr>
<td>Dome Reflector – Fits EVI501 Series (mogul base)</td>
<td>RD739</td>
</tr>
<tr>
<td>Angle Reflector – Fits EVI501 Series (mogul base)</td>
<td>RA739</td>
</tr>
</tbody>
</table>
### EVI Series Explosionproof Incandescent Luminaires

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

#### Temperature Performance Data:

<table>
<thead>
<tr>
<th>Type</th>
<th>Watts/Lamp</th>
<th>Class I, Div. 1 (Class I, Zone 1)</th>
<th>Class II Simultaneous Presence</th>
<th>Supply Wire Temp (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Ambient</td>
<td>40°C</td>
<td>55°C</td>
</tr>
<tr>
<td>EVI301</td>
<td>100W/A21 or A19</td>
<td>T4</td>
<td>T3C</td>
<td>T3C</td>
</tr>
<tr>
<td>Medium</td>
<td>150W/A21</td>
<td>T4</td>
<td>T3C</td>
<td>T3C</td>
</tr>
<tr>
<td>Base</td>
<td>200W/A23 or A25</td>
<td>T3</td>
<td>T2D</td>
<td>T2C</td>
</tr>
<tr>
<td></td>
<td>300W/PS25</td>
<td>T3</td>
<td>T2D</td>
<td>T2C</td>
</tr>
<tr>
<td>EVI501</td>
<td>200W/PS30</td>
<td>T4A</td>
<td>T4</td>
<td>T4</td>
</tr>
<tr>
<td>Mogul</td>
<td>300W/PS35</td>
<td>T4</td>
<td>T3C</td>
<td>T3C</td>
</tr>
<tr>
<td>Base</td>
<td>500W/PS40</td>
<td>T3A</td>
<td>T3</td>
<td>T3</td>
</tr>
</tbody>
</table>
Medium Base EVI Luminaire
Dimensions In Inches:

**Pendant Mount**
- 12 in.
- 12 3/4 in.

**Ceiling Mount**
- 1 in.
- 13 in.
- 13 3/4 in.

**Stanchion Mount**
- 1 1/4 in.
- 12 in.
- 12 3/4 in.
- 13 3/4 in.
- 25°

**Wall Mount**
- 12 3/4 in.
- 9 1/4 in.
- 16 1/8 in.

**Bulkhead Mount**
- 16 1/8 in.

**Medium Base Net Luminaire Weights (lbs.):**

<table>
<thead>
<tr>
<th>Add mounting modules:</th>
<th>Add for reflectors:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pendant</td>
<td>RD636 (Dome Reflector, Small)</td>
</tr>
<tr>
<td>Ceiling</td>
<td>RA636 (Angle Reflector, Small)</td>
</tr>
<tr>
<td>Wall</td>
<td>RD739 (Dome Reflector, Small)</td>
</tr>
<tr>
<td>Bulkhead</td>
<td>RA739 (Angle Reflector, Small)</td>
</tr>
<tr>
<td>Stanchion</td>
<td></td>
</tr>
</tbody>
</table>
EVI Series Explosionproof Incandescent Luminaires

Factory Sealed
100–500W Medium and Mogul Base

Mogul Base EVI Luminaire
Dimensions In Inches:

<table>
<thead>
<tr>
<th>Mounting Style</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pendant Mount</td>
<td>15 1/8 in.</td>
</tr>
<tr>
<td>Ceiling Mount</td>
<td>6 1/8 in.</td>
</tr>
<tr>
<td>Stanchion Mount</td>
<td>15 in.</td>
</tr>
<tr>
<td>Wall Mount</td>
<td>13 3/4 in.</td>
</tr>
</tbody>
</table>

Mogul Base Net Luminaire Weights (lbs.):

<table>
<thead>
<tr>
<th>Mounting Style</th>
<th>Add for Reflector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pendant</td>
<td>1.0 lbs.</td>
</tr>
<tr>
<td>Ceiling</td>
<td>2.0 lbs.</td>
</tr>
<tr>
<td>Wall</td>
<td>4.5 lbs.</td>
</tr>
<tr>
<td>Bulkhead</td>
<td>2.2 lbs.</td>
</tr>
<tr>
<td>Stanchion</td>
<td>2.5 lbs.</td>
</tr>
</tbody>
</table>

Add for Reflector:
- 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

Factory Sealed
100–500W Medium and Mogul Base

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

- CANDELABS
  - Degrees: Front / Side / Back
  - 0 / 86 / 883
  - 5 / 199 / 601
  - 10 / 326 / 654
  - 15 / 417 / 716
  - 20 / 475 / 800
  - 25 / 524 / 875
  - 30 / 555 / 987
  - 35 / 576 / 1100
  - 40 / 595 / 1130
  - 45 / 605 / 1130
  - 50 / 615 / 1150
  - 55 / 625 / 1150
  - 60 / 635 / 1200
- ZONAL LUMENS
  - Zone 0: 29
  - Zone 1: 108
  - Zone 2: 339
  - Zone 3: 695

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

- CANDELABS
  - Degrees: Front / Side / Back
  - 0 / 265 / 289
  - 5 / 326 / 344
  - 10 / 398 / 416
  - 15 / 453 / 475
  - 20 / 475 / 800
  - 25 / 524 / 875
  - 30 / 555 / 987
  - 35 / 576 / 1100
  - 40 / 595 / 1130
  - 45 / 615 / 1150
  - 50 / 635 / 1200
- ZONAL LUMENS
  - Zone 0: 29
  - Zone 1: 108
  - Zone 2: 339
  - Zone 3: 695

Photometric Data

Note: Photometric data was developed using a 300W incandescent lamp (3,000 lumen). For other lamp wattages, use the following conversion factors: multiplying with Candelas and Zonal luminens charts.

CONVERSION FACTOR
- LAMP WATTS
  - 100W
  - 200W

Note: Photometric data was developed using a 500W incandescent lamp (5,000 lumen). For other lamp wattages, use the following conversion factors: multiplying with Candelas and Zonal luminens charts.

CONVERSION FACTOR
- LAMP WATTS
  - 100W
  - 200W

Note: Photometric data was developed using a 300W incandescent lamp (3,000 lumen). For other lamp wattages, use the following conversion factors: multiplying with Candelas and Zonal luminens charts.

CONVERSION FACTOR
- LAMP WATTS
  - 100W
  - 200W

Note: Photometric data was developed using a 500W incandescent lamp (5,000 lumen). For other lamp wattages, use the following conversion factors: multiplying with Candelas and Zonal luminens charts.

CONVERSION FACTOR
- LAMP WATTS
  - 100W
  - 200W

Note: Photometric data was developed using a 300W incandescent lamp (3,000 lumen). For other lamp wattages, use the following conversion factors: multiplying with Candelas and Zonal luminens charts.

CONVERSION FACTOR
- LAMP WATTS
  - 100W
  - 200W

Note: Photometric data was developed using a 500W incandescent lamp (5,000 lumen). For other lamp wattages, use the following conversion factors: multiplying with Candelas and Zonal luminens charts.

CONVERSION FACTOR
- LAMP WATTS
  - 100W
  - 200W

Note: Photometric data was developed using a 300W incandescent lamp (3,000 lumen). For other lamp wattages, use the following conversion factors: multiplying with Candelas and Zonal luminens charts.

CONVERSION FACTOR
- LAMP WATTS
  - 100W
  - 200W
Mogul Base
Luminaire with Globe and Dome Reflector (Less Guard)
EVIAS2500 Lamp: 500W/PS40 Incandescent

Note: Photometric data was developed using a 1000W incandescent lamp (1000 lumens). For other lamp wattages, use the following conversion factors multiplied with both-cavity distribution and isofootcandle charts. Multipliers are not used with Coefficients of Utilization tables.

COEFFICIENTS OF UTILIZATION
Effective Floor Cavity Reflectance 20%

Note: Photometric data was developed using a 500W incandescent lamp (500 lumens). For other lamp wattages, use the following conversion factors multiplied with both-cavity distribution and isofootcandle charts. Multipliers are not used with Coefficients of Utilization tables.

ISOFOOTCANDLE CHART: Footcandle Values for Isofootcandle Lines

Note: Photometric data was developed using a 500W incandescent lamp (500 lumens). For other lamp wattages, use the following conversion factors multiplied with both-cavity distribution and isofootcandle charts. Multipliers are not used with Coefficients of Utilization tables.