

Durable Lighting Made for Industrial Safety



Hazardous Location LED Luminaire I Series (for North America)

Specsheet-2023-07 EN



12



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Product Description

The I Series LED luminaire is the ideal choice for marine and hazardous applications where a linear design is required. They can be used in locations where moisture, dirt, dust, corrosion and vibration may be present, or areas where wind, water, snow or high ambient can be expected.

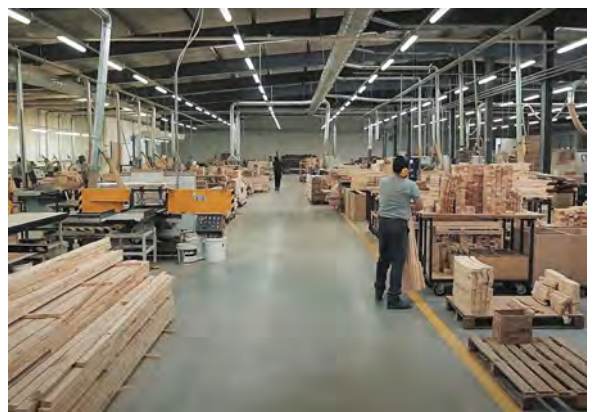
Features

- 0-10V dimming
- Emergency function optional
- Compact and robust structure, excellent reliability
- Various installation ways for different applications
- Great impact resistance with IK08/IK10 certified
- Copper-free aluminum housing, great corrosion resistance and cooling performance

Compliance

UL 844 Hazardous Locations
Class I Division 1, Group C, D
Class I Division 2, Group A, B, C, D
Class II Division 1, Group E, F, G
Class II Division 2, Group F, G
Class III
Class I, Zone 1, Group IIB
Class II, Zone 21, Group IIIC
UL 1598 Wet Locations
UL 1598A Marine Outside Type
UL 924 Emergency Lighting
CSA C22.2#137:2018 Ed.2
CSA C22.2#250.0:2021 Ed.5
ETL (ATM for Report 105342415DAL-001/003)
ABS
DLC*
IP66/IP67
IK08 (glass cover)
IK10 (with wire guard)
5G vibration

** Not all product variations listed on this spec sheet are DLC qualified.
Visit www.designlights.org/search to confirm qualification.*



Application

- Power Plants
- Heavy Industrials Storage Facility
- Paper mills
- Wastewater Treatment Plants
- Loading Docks Platforms
- Offshore Environments
- Chemical Processing Facility
- Petrochemical Processing Facility
- Metallurgical Industry
- Coal Mine
- Food and Alcohol industry



Warranty

5-Year Standard Warranty
LED lumen Maintenance: L70> 150,000 Operation Hours@55°C

Technical Parameter

• Electrical

| Specification | EX-20W I2YZD | EX-40W I2YZD | EX-60W I2YZD |
|-----------------|-----------------------|--------------|--------------|
| Rated Power | 20W | 40W | 60W |
| Input Voltage | 100-277VAC/200-480VAC | | |
| Input Frequency | 50/60Hz | | |
| Power Factor | > 0.95 | | |
| Emergency Time* | 1.5 hours | | |

*Emergency function optional.

• Optical

| Specification | EX-20W I2YZD | EX-40W I2YZD | EX-60W I2YZD |
|-----------------|---------------|--------------|--------------|
| Lumen Output | 2800lm | 5600lm | 8400lm |
| Lumens Per Watt | 140lm/W | | |
| CCT | 2700K-7000K | | |
| CRI | > 70 | | |
| Beam Angle | 120° | | |
| Dimming | 0-10V dimming | | |

• Environmental

| Specification | EX-20W I2YZD | EX-40W I2YZD | EX-60W I2YZD |
|---------------------|----------------------------------|--------------|--------------|
| Ambient Temperature | -40°C to +60°C (-40°F to +140°F) | | |
| Temperature Code | T4 | | |

• Mechanical

| Specification | EX-20W I2YZD | EX-40W I2YZD | EX-60W I2YZD |
|------------------|--|--------------|--------------|
| Housing Material | Copper-free aluminum | | |
| Diffuser | Tempered glass | | |
| Hardware | Stainless steel | | |
| Protection | IP66/IP67/IK08 (glass cover)/IK10 (with wire guard)/5G vibration | | |
| Mounting | Ceiling, Pole, Wall, Chain, Pendant | | |
| Cable Entries | Top: 3/4 NPT(standard), 1/2 NPT Two sides: 3/4 NPT(standard), 1/2 NPT | | |

Technical Parameter

• Electrical

| Specification | EX-40W I4YZD | EX-60W I4YZD | EX-80W I4YZD | EX-100W I4YZD | EX-120W I4YZD |
|-----------------|-----------------------|--------------|--------------|---------------|---------------|
| Rated Power | 40W | 60W | 80W | 100W | 120W |
| Input Voltage | 100-277VAC/200-480VAC | | | | |
| Input Frequency | 50/60Hz | | | | |
| Power Factor | > 0.95 | | | | |
| Emergency Time* | 1.5 hours | | | | |

*Emergency function optional.

• Optical

| Specification | EX-40W I4YZD | EX-60W I4YZD | EX-80W I4YZD | EX-100W I4YZD | EX-120W I4YZD |
|-----------------|---------------|--------------|--------------|---------------|---------------|
| Lumen Output | 5600lm | 8400lm | 11200lm | 14000lm | 16800lm |
| Lumens Per Watt | 140lm/W | | | | |
| CCT | 2700K-7000K | | | | |
| CRI | > 70 | | | | |
| Beam Angle | 120° | | | | |
| Dimming | 0-10V dimming | | | | |

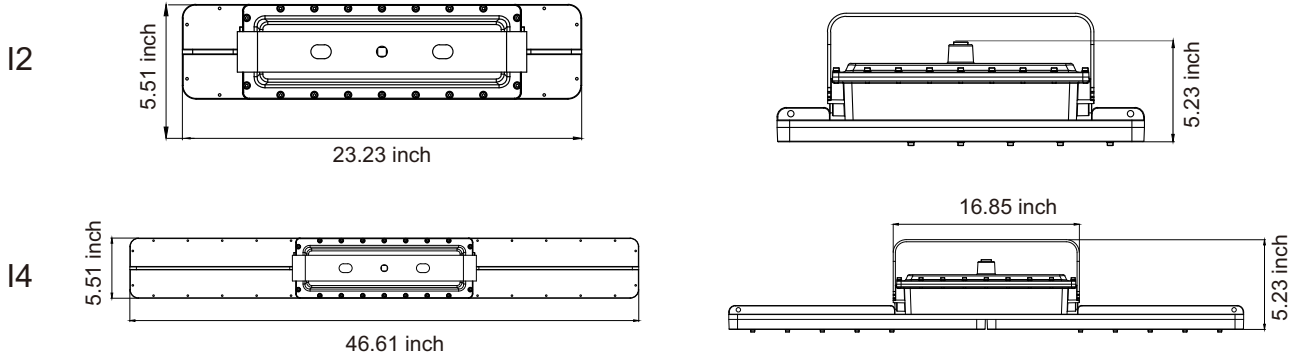
• Environmental

| Specification | EX-40W I4YZD | EX-60W I4YZD | EX-80W I4YZD | EX-100W I4YZD | EX-120W I4YZD |
|-------------------------------|----------------------------------|--------------|--------------|----------------------------------|---------------|
| Ambient Operating Temperature | -40°C to +60°C (-40°F to +140°F) | | | -40°C to +40°C (-40°F to +104°F) | |
| Temperature Code | T4 | | | T4 | |

• Mechanical

| Specification | EX-40W I4YZD | EX-60W I4YZD | EX-80W I4YZD | EX-100W I4YZD | EX-120W I4YZD |
|------------------|--|--------------|--------------|---------------|---------------|
| Housing Material | Copper-free aluminum | | | | |
| Diffuser | Tempered glass | | | | |
| Hardware | Stainless steel | | | | |
| Protection | IP66/IP67/IK08 (glass cover)/IK10 (with wire guard)/5G vibration | | | | |
| Mounting | Ceiling, Pole, Wall, Chain, Pendant | | | | |
| Cable Entries | Top: 3/4 NPT(standard), 1/2 NPT Two sides: 3/4 NPT(standard), 1/2 NPT | | | | |

Product Dimensions

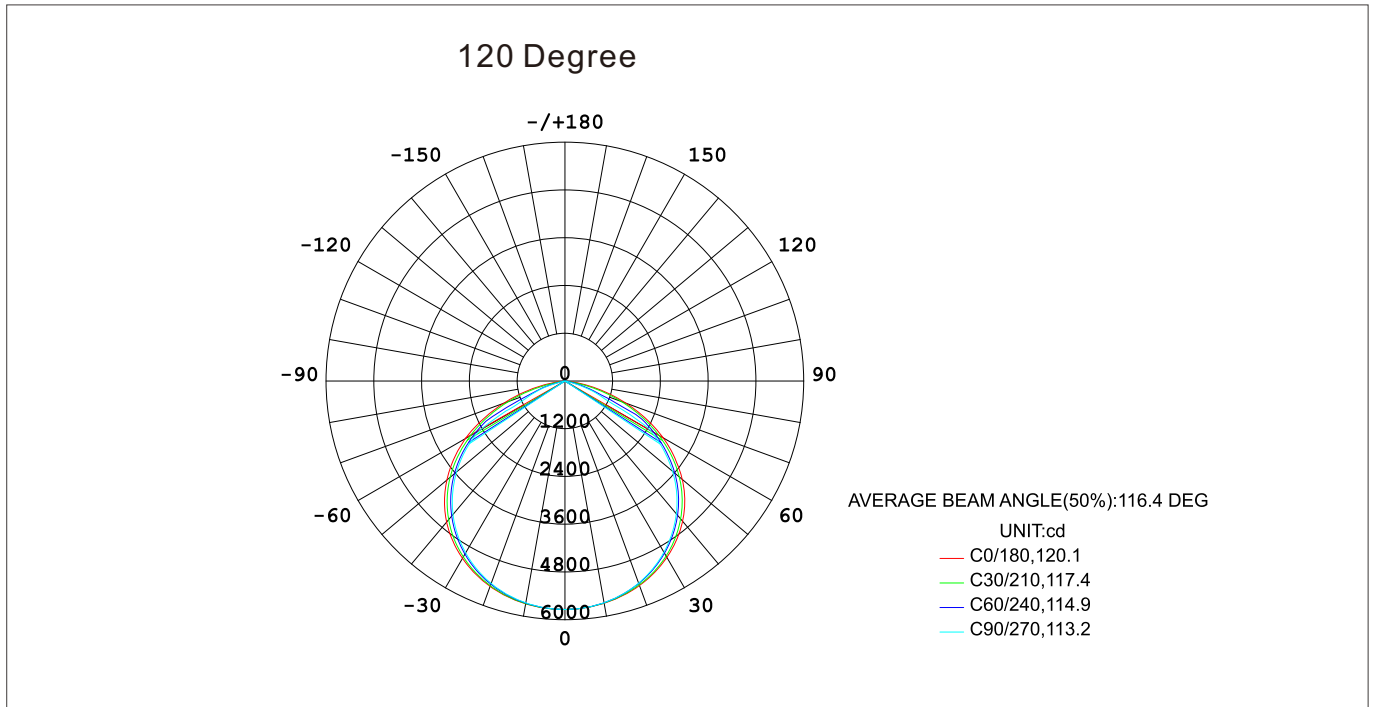


• Packing Information

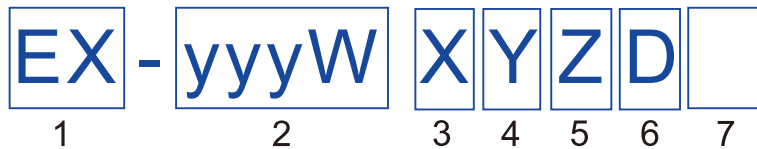
| Model | Net Weight | Gross Weight* | Quantity/Carton | Package Dimensions (LxWxH) |
|-------------------------------|------------|---------------|-----------------|----------------------------|
| I2 (Regular) | 26.46 lb | 28.66 lb | 1 pc | 30.31x13.39x10.43 inch |
| I4 (Regular) | 40.79 lb | 45.19 lb | 1 pc | 53.54x13.39x10.43 inch |
| I2 (Side Opening Cover Model) | 33.07 lb | 35.27 lb | 1 pc | 30.31x13.39x10.43 inch |
| I4 (Side Opening Cover Model) | 49.38 lb | 53.79 lb | 1 pc | 53.54x13.39x10.43 inch |

* These values are estimated weights.

Photometric



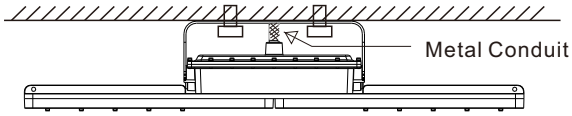
Ordering Guide



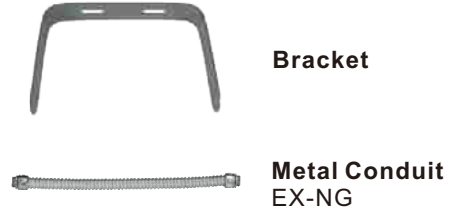
| 1. Product Categories | 2. Wattage | 3. Shell Shape Series | 4. Dimming or Not |
|---|--|---|---|
| Explosion Proof Light | I2: 20/40/60W I4: 40/60/80/100/120W | “X” Can be: I2 (2=2FT) I4 (4=4FT) | “Y” Can be: D: dimmable N: non-dimmable |
| 5. Color Temperature | 6. Beam Angle | 7. | |
| “Z” can be 27 to 70 denotes 2700K to 7000K, and each 100K gradually increase, max 7000K | “D” can be: D120: 120° | blank: made in China | |

Mounting Methods and Accessories

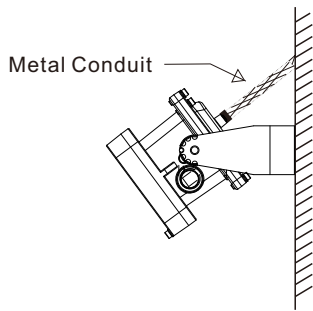
• Option 1: Ceiling Mounting



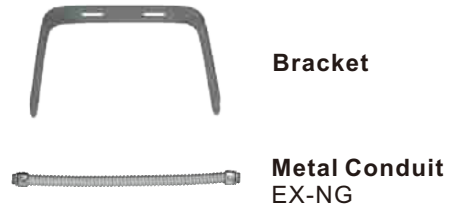
• Accessories



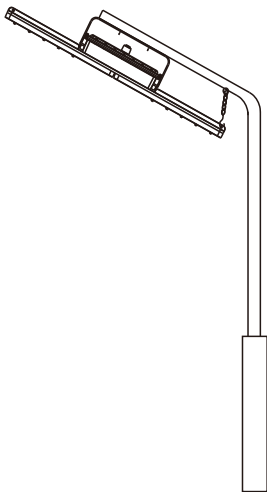
• Option 2: Wall Mounting



• Accessories



• Option 3: Pole Mounting

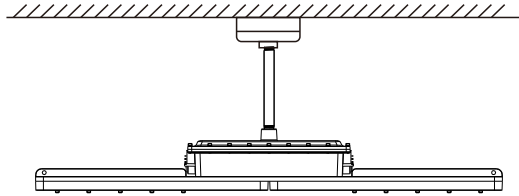


• Accessory



Mounting Methods and Accessories

• Option 4: Pendant Mounting



• Accessories

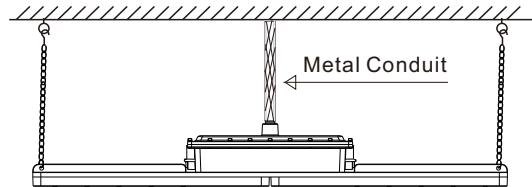


Junction Box
EX-HD51-KB1



Pole
Ex-Straight Pipe

• Option 5: Chain Mounting



• Accessories



Pendant Chain
Ex-Straight Chain



Metal Conduit
EX-NG