

Durable Lighting Made for Industrial Safety



Hazardous Location LED Luminaire D Series

Specsheet-2023-07 EN



D2



D



Product Description

The D Series LED luminaire is the ideal choice for marine and hazardous applications. 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
- High luminous efficacy - Up to 140 lumens per watt
- Battery backup function available
- 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)
CB (Ref. Certif. No.: DE 2-028898)
ABS
DLC*
IP66/IP67
IK08 (glass cover)
IK10 (with wire guard)
1000 hours salt spray
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 D2YZDA	EX-40W D2YZDA	EX-60W D2YZDA	EX-80W D2YZDA
Rated Power	20W	40W	60W	80W
Input Voltage	100-277/200-480VAC or 12-48VDC			
Input Frequency	50/60Hz			
Power Factor	> 0.95			
Emergency Time*	3 hours			

*Emergency function optional.

• Optical

Specification	EX-20W D2YZDA	EX-40W D2YZDA	EX-60W D2YZDA	EX-80W D2YZDA
Lumen Output	2720lm	5,600lm	8,400lm	11200lm
Lumens Per Watt	136lm/W	140lm/W	140lm/W	140lm/W
CCT	2700K-7000K			
CRI	> 70			
Beam Angle	40°/60°/90°/120°			
Dimming	0-10V dimming			

• Environmental

Specification	EX-20W D2YZDA	EX-40W D2YZDA	EX-60W D2YZDA	EX-80W D2YZDA
Ambient Operating Temperature	T4: -40°C to 55°C (-40°F to 131°F)			

• Mechanical

Specification	EX-20W D2YZDA	EX-40W D2YZDA	EX-60W D2YZDA	EX-80W D2YZDA
Housing Material	Copper-free aluminum			
Diffuser	Tempered glass			
Hardware	Stainless steel			
Protection	IP66/IP67/IK08 (glass cover)/IK10 (with wire guard)			
Mounting	Ceiling, Wall, Pole			
Cable Entry	Top: 3/4 NPT; Side: 3/4 NPT			

Technical Parameter

• Electrical

Specification	EX-100W DYZDA	EX-150W DYZDA	EX-200W DYZDA	EX-220W DYZDA
Rated Power	100W	150W	200W	220W
Input Voltage	100-277/200-480VAC or 12-48VDC			
Input Frequency	50/60Hz			
Power Factor	> 0.95			
Emergency Time*	3 hours			

*Emergency function optional.

• Optical

Specification	EX-100W DYZDA	EX-150W DYZDA	EX-200W DYZDA	EX-220W DYZDA
Lumen Output	14000lm	21000lm	28000lm	28600lm
Lumens Per Watt	140lm/W	140lm/W	140lm/W	130lm/W
CCT	2700K-7000K			
CRI	> 70			
Beam Angle	40°/60°/90°/120°			
Dimming	0-10V dimming			

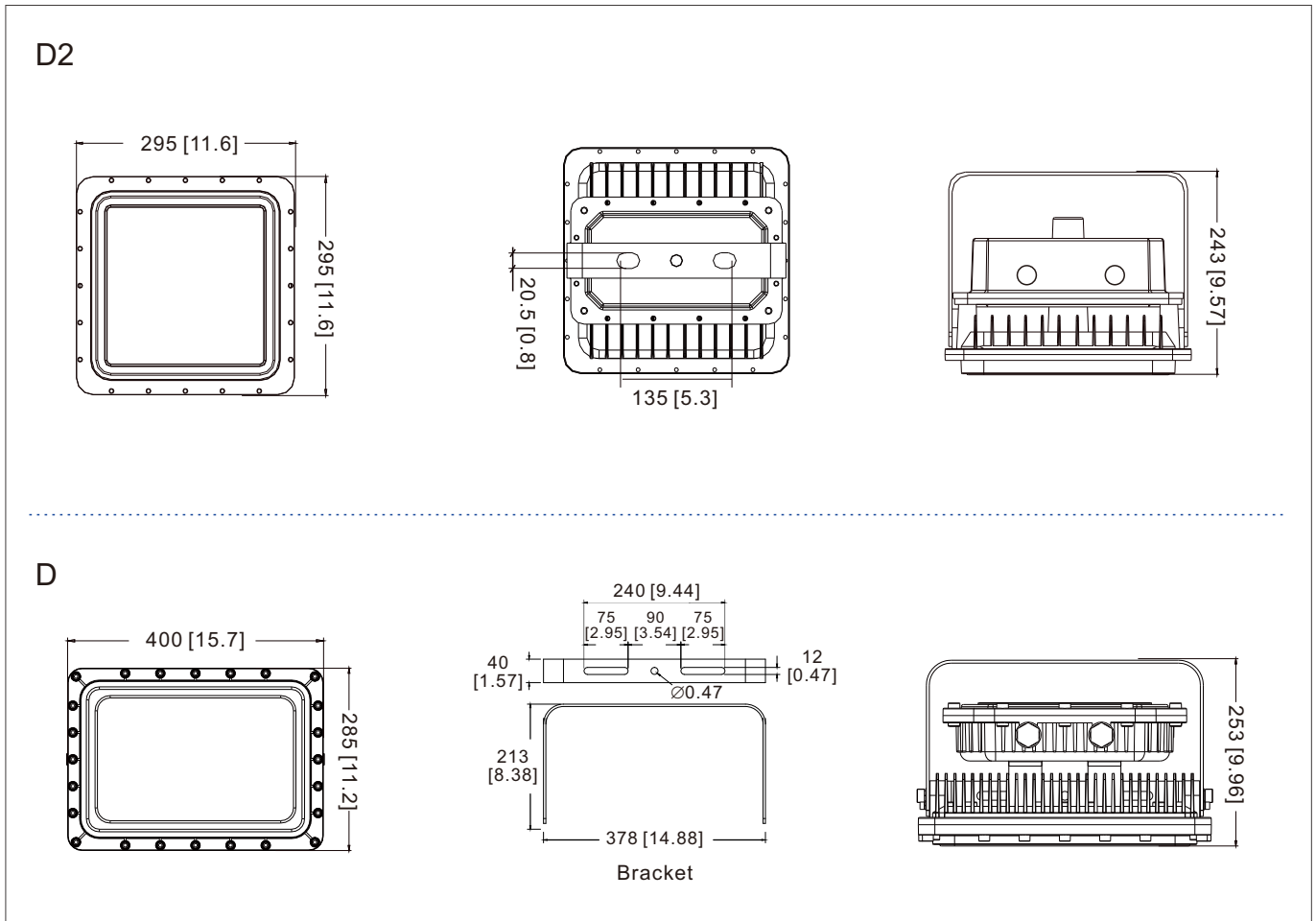
• Environmental

Specification	EX-100W DYZDA	EX-150W DYZDA	EX-200W DYZDA	EX-220W DYZDA
Ambient Operating Temperature	T4: -40°C to 55°C (-40°F to 131°F)	T4: -40°C to 55°C (-40°F to 131°F)	T4: -40°C to 45°C (-40°F to 113°F)	T4: -40°C to 45°C (-40°F to 113°F)

• Mechanical

Specification	EX-100W DYZDA	EX-150W DYZDA	EX-200W DYZDA	EX-220W DYZDA
Housing Material	Copper-free aluminum			
Diffuser	Tempered glass			
Hardware	Stainless steel			
Protection	IP66/IP67/IK08 (glass cover)/IK10 (with wire guard)			
Mounting	Ceiling			
Cable Entry	Side: 3/4 NPT			

Product Dimensions Unit: mm [inch]

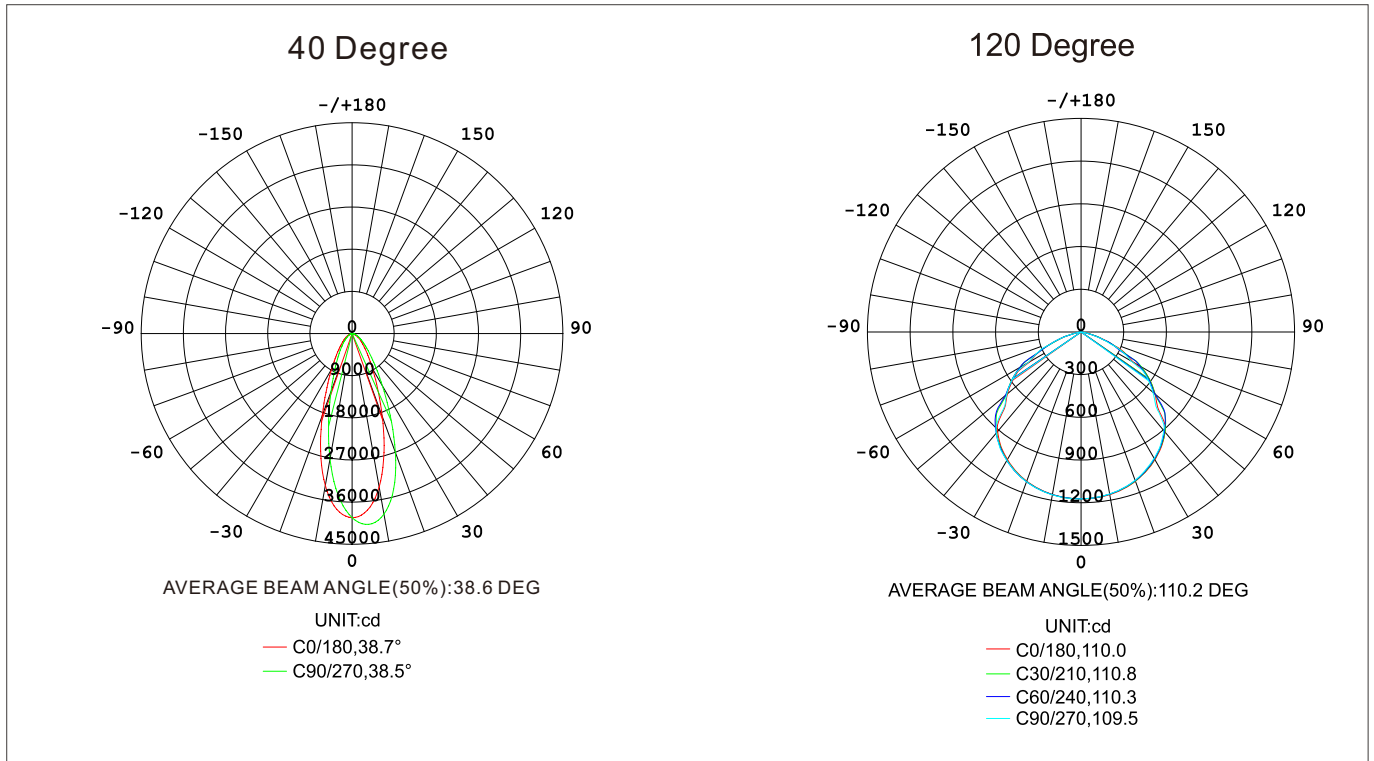


- Packing Information

Model	Net Weight*	Gross Weight*	Quantity/Carton	Package Dimensions (LxWxH)
D2	7 kg/ 15.43 lb	9.5 kg/ 20.94 lb	1 pc	400x385x335mm/15.75x15.16x13.19inch
D	17.9 kg/ 39.46 lb	19.5 kg/ 42.99 lb	1 pc	502x376x350mm/19.76x14.80x13.78inch

*Please note that net weight and gross weight may be subject to change because of actual configuration.

Photometric



Ordering Guide

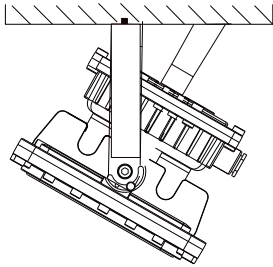
EX - yyyW XYZDA

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2
3
4
5
6
7
8

1. Product Categories	2. Wattage	3. Shell Shape Series	4. Dimming or Not
Explosion Proof Light	D2: 20/40/60/80W D: 100/150/200/220W	“X” Can be: D D2	“Y” Can be: D: Dimmable N: Non-dimmable
5. Color Temperature	6. Beam Angle	7. Spherical glass cover optional	8.
“Z” can be 27 to 70 denotes 2700K to 7000K, and each 100K gradually increase, max 7000K	D40=40° D60=60° D90=90° D120=120°	“A” = C: spherical glass cover	blank: made in China

Mounting Methods and Accessories

- Option 1: Ceiling Mounting (for D2)

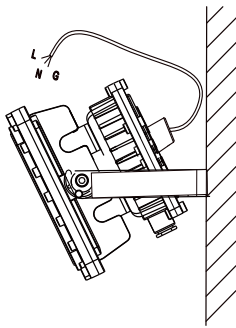


- Accessory



Bracket

- Option 2: Wall Mounting (for D2)

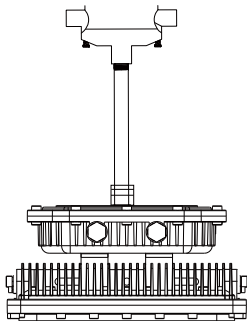


- Accessory



Bracket

- Option 3: Pole Mounting (Vertical) (for D2)



- Accessories



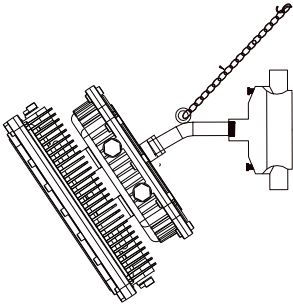
Junction Box
EX-HD51-KB1



Pole
Ex-Straight Pipe

Mounting Methods and Accessories

- Option 4: Pole Mounting (Non-vertical) (for D2)



- Accessories



Junction Box
EX-HD51-KB1

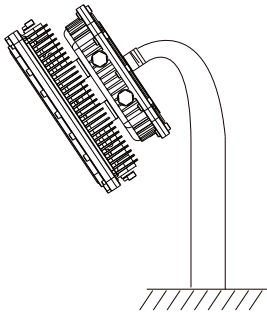


Pole
Ex-Bended Pipe

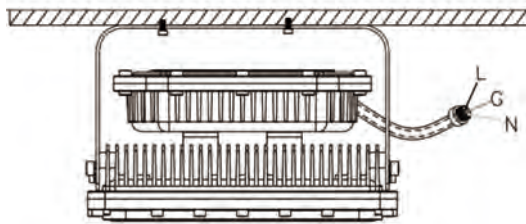


Pendant Chain
Ex-Straight Chain

- Option 5: Pole Mounting (for D2)



- Ceiling Mounting (for D)



- Accessory



Bracket