

Durable Lighting Made for Industrial Safety



Hazardous Location LED Luminaire A Series (Zone 2 & Class I Divison 2)



A2



A



A3



A4



Visor Available



Product Description

The A 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 optional
- High luminous efficacy -Up to 140 lumens per watt
- Battery backup function: emergency only available for A3 and A4
- Compact and robust structure, excellent reliability
- Various installation ways for different applications
- Great impact resistance with IK08/IK10 certified
- Die-cast aluminum housing, great corrosion resistance and cooling performance

Compliance

ATEX Standard:

Ex II 3G Ex ec IIC T6...T3 Gc

Ex II 2D Ex tb IIIC T85°C...T103°C Db IP66

IECEx Standard (Certificate No.: IECEx PCET 22.0008X):

Ex ec IIC T6...T3 Gc

Ex tb IIIC T85°C...T100°C Db

Ex tc IIIC T85°C...T100°C Dc

Zone 2, Zone 21&22

CB (Ref. Certif. No.: DE 2-038462-M1)

UL 844 Hazardous Locations

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 2, Group IIC

Class II, Zone 21, Group IIIC

UL 1598 Wet Locations

UL 1598A Marine Outside Type

ETL (ATM for Report 105342415DAL-001)

ABS

DLC*

IP66

IK08 (without wire guard)

IK10 (with wire guard)

1000 hours salt spray

**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> 78,000 Operation Hours@55°C

Technical Parameter - Class I Division 2

• Electrical

Rated Power	20W	40W	100-277/200-	60W	60W	80W	100W
Input Voltage	480VAC 50/60Hz						
Input Frequency							
Power Factor	> 0.95						
Emergency Function	No emergency function				No emergency function		

• Optical

Lumen Output	2800lm	5600lm	8400lm	8400lm	11200lm	14000lm
Lumens Per Watt	140lm/W					
CCT	3000K-6500K					
CRI	> 70					
Beam Angle	40°/60°/90°/120°					
Dimming	0-10V dimming optional					

• Mechanical

Housing Material	Die-cast aluminum					
Lens	Tempered glass & PC					
Hardware	Stainless steel					
Visor	Available					
Fixture Color	Gray RAL7040 (Standard)					
Protection	IP66/IP67/IK08 (glass cover)/IK10 (with wire guard)					
Mounting	Ceiling, Wall, Hook, Trunnion, Pole, Stanchion					
Cable Entries	Side: 3/4" NPT (standard); M20, M25, 1/2" NPT (optional) Top: 3/4" NPT (standard)					

Technical Parameter - Class I Divison 2

• Electrical

Rated Power	120W	150W	180W	200W	250W	300W	400W
Input Voltage	120-277/277-480VAC						
Input Frequency	50/60Hz						
Power Factor	> 0.95						
Emergency Function	Optional (1.5 hours)	No emergency function			No emergency function		

• Optical

Lumen Output	16800lm	21000lm	25200lm	28000lm	35000lm	42000lm	56000lm
Lumens Per Watt	140lm/W						
CCT	3000K-6500K						
CRI	> 70						
Beam Angle	40°/60°/90°/120°						
Dimming	0-10V dimming optional						

• Mechanical

Housing Material	Die-cast aluminum						
Lens	Tempered glass & PC						
Hardware	Stainless steel						
Fixture Color	Gray RAL7040 (Standard)						
Protection	IP66/IP67/IK08 (glass cover)/IK10 (with wire guard)						
Mounting	Ceiling, Wall, Hook, Pole, Stanchion						
Cable Entries	Side: 3/4" NPT (standard); M20, M25, 1/2" NPT (optional) Top: 3/4" NPT (standard)						

• Ambient Temperature

-40°C to +40°C (-40°F to +104°F)	Models A, 20-120W
-40°C to +40°C (-40°F to +104°F)	Models A, 20-100W, Class I Division 2 Group A, B, C, D
-40°C to +40°C (-40°F to +104°F)	Models A2, 20-60W
-40°C to +55°C (-40°F to +131°F)	Models A3, 20-200W
-40°C to +50°C (-40°F to +122°F)	Models A4, 20-300W
-40°C to +40°C (-40°F to +104°F)	Models A4, 20-400W

Technical Parameter - for Zone 2/21/22

• Electrical

Rated Power	20W	40W	60W	60W	80W	100W
Input Voltage	100-277VAC					
Input Frequency	50/60Hz					
Power Factor	> 0.95					
Emergency Function	No emergency function			No emergency function		

• Optical

Lumen Output	2800lm	5600lm	8400lm	8400lm	11200lm	14000lm
Lumens Per Watt	140lm/W					
CCT	3000K-6500K					
CRI	> 70					
Beam Angle	40°/60°/90°/120°					
Dimming	0-10V dimming optional					

• Environmental

Ambient Temperature	T3: -40°C to +55°C (-40°F to +131°F)					

• Mechanical

Housing Material	Die-cast aluminum					
Fixture Color	Gray RAL7040 (Standard)					
Lens	Tempered glass & PC					
Hardware	Stainless steel					
Protection	IP66/IP67/IK08 (glass cover)/IK10 (with wire guard)					
Mounting	Ceiling, Wall, Hook, Pole, Stanchion Side: M20 (standard); M25, 1/2" NPT, 3/4" NPT (optional) Top: 3/4" NPT (standard)					
Cable Entries						

Technical Parameter - for Zone 2/21/22

• Electrical

Rated Power	120W	150W	180W	200W	250W	300W
Input Voltage	100-277VAC					
Input Frequency	50/60Hz					
Power Factor	> 0.95					
Emergency Function	Optional (3 hours)				No emergency function	

• Optical

Lumen Output	16800lm	21000lm	25200lm	28000lm	35000lm	42000lm
Lumens Per Watt	140lm/W					
CCT	3000K-6500K					
CRI	> 70					
Beam Angle	40°/60°/90°/120°					
Dimming	0-10V dimming optional					

• Environmental

Ambient Temperature	T3: -40°C to +55°C (-40°F to +131°F)					

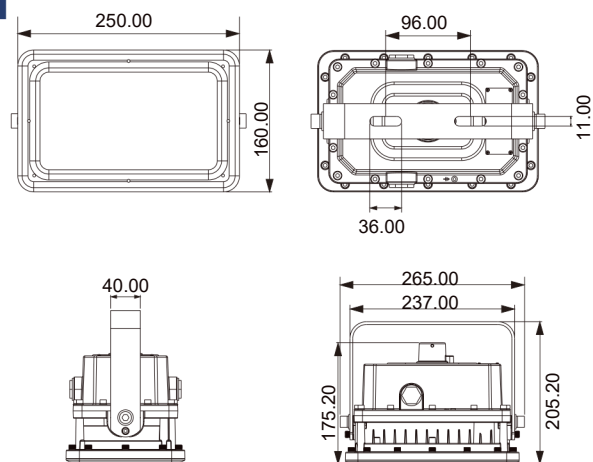
• Mechanical

Housing Material	Die-cast aluminum					
Fixture Color	Gray RAL7040 (Standard)					
Lens	Tempered glass & PC					
Hardware	Stainless steel					
Protection	IP66/IP67/IK08 (glass cover)/IK10 (with wire guard)					
Mounting	Ceiling, Wall, Hook, Pole, Stanchion					
Cable Entries	Side: M20 (standard); M25, 1/2" NPT, 3/4" NPT (optional) Top: 3/4" NPT (standard)					

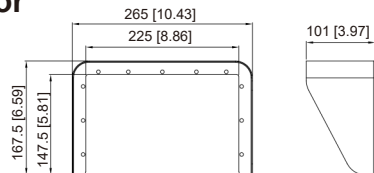
Product Dimensions

Unit: mm [inch]

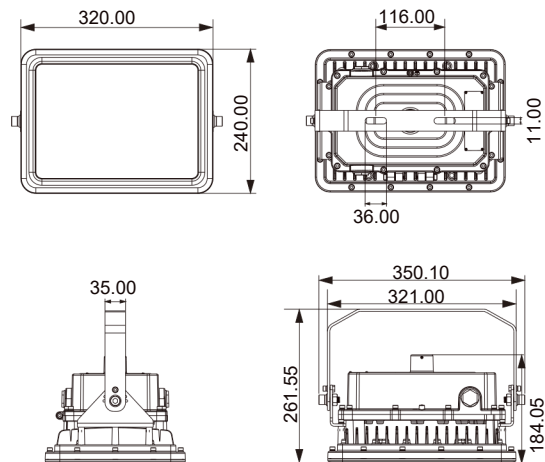
A2



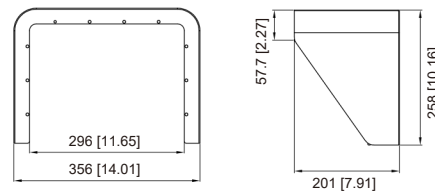
visor



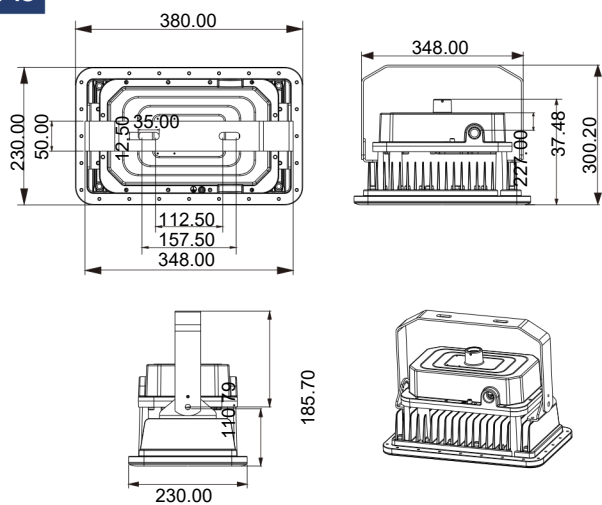
A



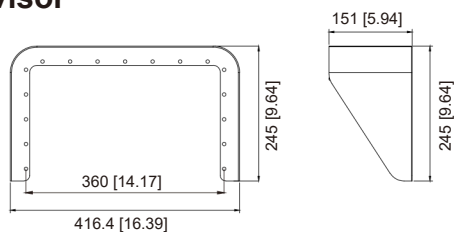
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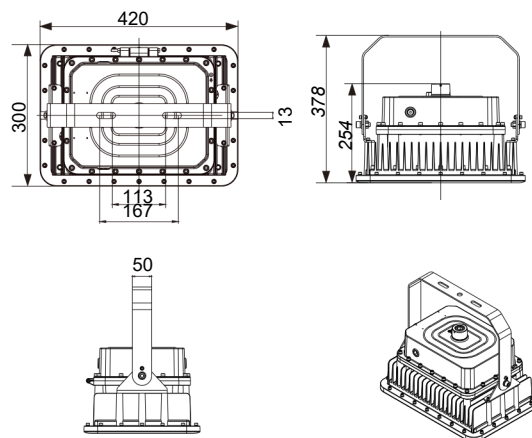
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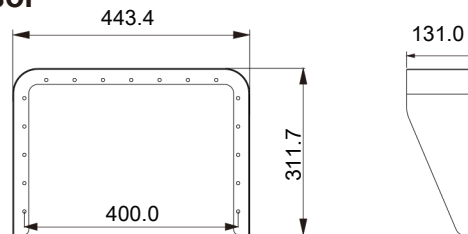
visor



A4



visor



•Packing Information

Model	Net Weight*	Gross Weight*	Quantity/ Carton	Package Dimensions (LxWxH)
A2	4.15 kg/9.15 lb	5.30 kg/11.68 lb	1 pc	365x270x305 mm/14.37x10.63x12.01inch
A	6.95 kg/15.32 lb	9.50 kg/20.94 lb	1 pc	450x340x370mm/17.72x13.39x14.57inch
A3	8.30 kg/18.30 lb	11.35 kg/25.02 lb	1 pc	470x370x300mm/18.50x14.57x11.81inch
A4	15.1 kg/33.29 lb	18.55 kg/40.90 lb	1 pc	520x490x380mm/20.47x19.29x14.96inch

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

Ordering Guide - Class I Division 2

EX - yyyW X Y Z D A -1

1 2 3 4 5 6 7 8

1.Product Categories	2.Wattage	3.Shell Shape Series	4.Dimming or Not
Explosion Proof Light	A: 60/80/100W A2: 20W/40W/60W A3: 120/150/180/200W A4: 250/300/400W	"X" Can be: A, A2, A3, A4	"Y" Can be: D: Dimmable N: Non-dimmable
5.Color Temp.	6.Beam Angle	7.Long Glass Cover Option	8.Optional
"Z" can be 27 to 70, denotes 2700K to 7000K	D40=40° D60=60° D90=90° D120=120°	"A" = C: long glass cover blank: non long glass cover	blank: made in China

Ordering Guide - for Zone 2/21/22

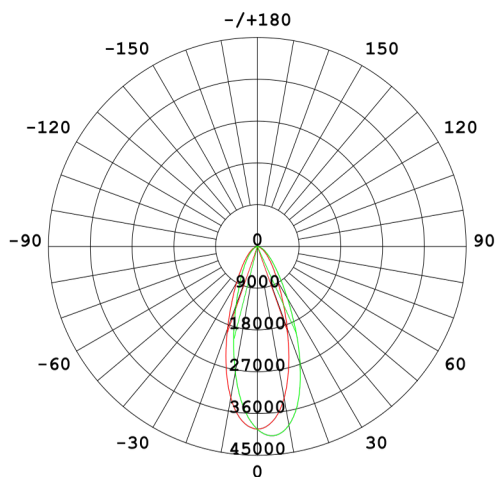
Ex - * * W * * N * * D * *

1 2 3 4

1.Wattage (W)	2.Product Code	3.Color Temperature	4.Beam Angle (Degree)
A: 80/100W A2: 20W/40/60W A3: 120/150/180/200W A4: 250/300W	Can be: A, A2, A3, A4	Can be 30 to 65, means 3000K to 6500K	Can be: 40, 60, 90, 120

Photometric

40 Degree



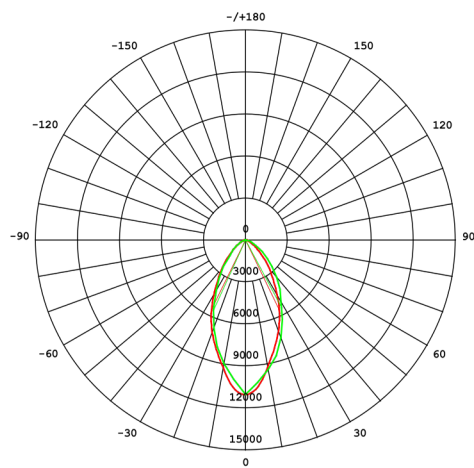
AVERAGE BEAM ANGLE(50%):38.6 DEG

UNIT:cd

— C0/180,38.7°

— C90/270,38.5°

60 Degree



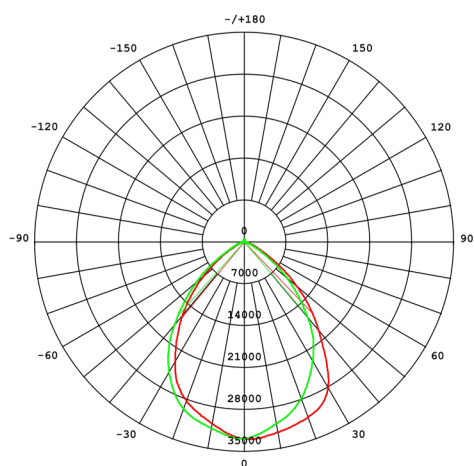
AVERAGE BEAM ANGLE(50%):52.5 DEG

UNIT:cd

— V 0.0DEG PLAN,52.3

— H 0.0DEG PLAN,52.7

90 Degree



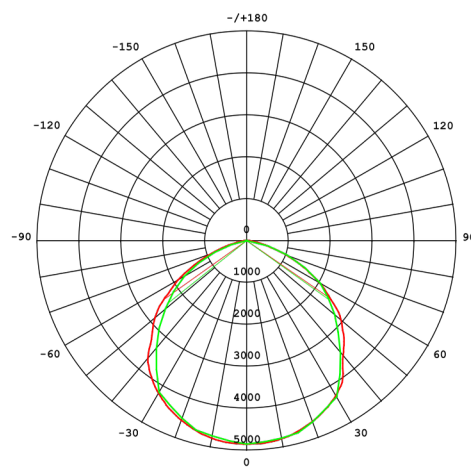
AVERAGE BEAM ANGLE(50%):82.8 DEG

UNIT:cd

— V 0.0DEG PLAN,83.2

— H 0.0DEG PLAN,82.4

120 Degree



AVERAGE BEAM ANGLE(50%):107.8 DEG

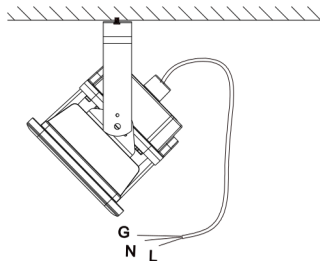
UNIT:cd

— V 0.0DEG PLAN,109.9

— H 0.0DEG PLAN,105.8

Mounting Methods and Accessories

• Option 1: Ceiling Mounting

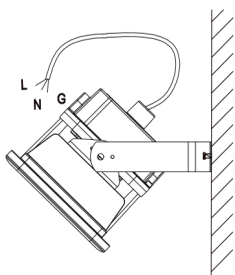


• Accessory



Bracket

• Option 2: Wall Mounting

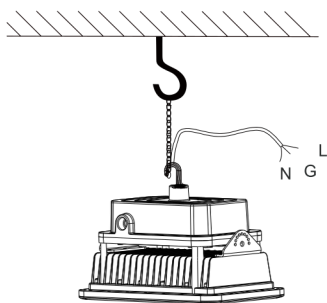


• Accessory



Bracket

• Option 3: Hook Mounting



• Accessories



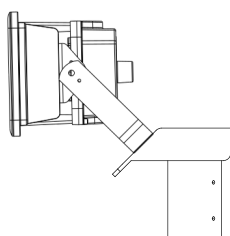
**Hook
Ex-Hook**



**Pendant Chain
Ex-Straight Chain**

• Option 4: Trunnion Mounting (Only for A and A2)

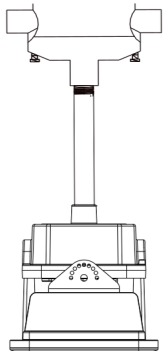
• Accessory



**EX-Slip
Fitter Mounting Kit**

Mounting Methods and Accessories

• Option 5: Pole Mounting (Vertical)



• Accessories

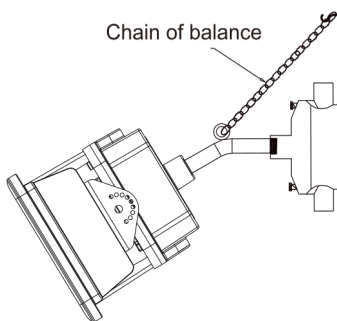


Junction Box
EX-HD51-KB1



Pole
Ex-Straight Pipe

• Option 6: Pole Mounting (Non-vertical)



• Accessories



Junction Box
EX-HD51-KB1



Pole
Ex-Bended Pipe



Pendant Chain
Ex-Straight Chain

• Option 7: Stanchion Mounting on the Wall



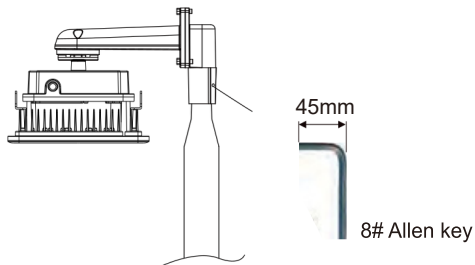
• Accessory



Stanchion Arm
Ex-MArm

Mounting Methods and Accessories

• Option 8: Stanchion Mounting on the Pole (90 Degree)

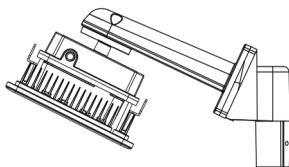


• Accessories



EX-90PSupport

• Option 9: Stanchion Mounting on the Pole (25 Degree)

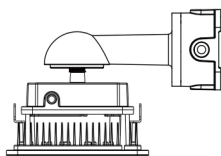


• Accessories



EX-25PSupport

• Option 10: Wall Mounting with Junction Box (90 Degree)

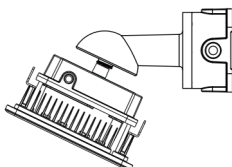


• Accessory



**Stanchion Arm
EX-HD51-KYD 90**

• Option 11: Wall Mounting with Junction Box (25 Degree)



• Accessory



**Stanchion Arm
EX-HD51-KYD25**