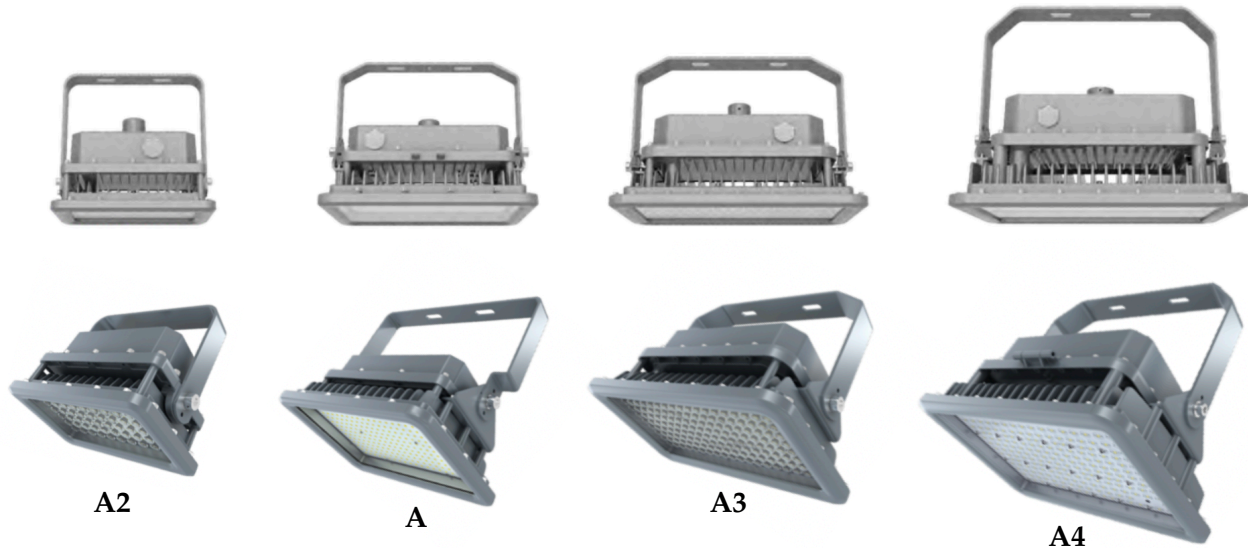




BPO LIGHTING
Hazardous Area Lighting

HLL A



Class 1 Division 2

Key Features

- FEATURES:** Low-Bay/High-Bay Area Light (Rugged)
11 Mounting Styles
High Im/W
- OPTIONS:** 4 Body Sizes
High Voltage
40°, 60°, 90° or 120°
Emergency Back-Up

Compliance

UL 844 Hazardous Locations
Class I Division 2 Groups A, B, C, D
Class I, Zone 2, Group IIC
Class II Division 1 Groups E, F, G
Class II Division 2 Groups F, G
Class II, Zone 21, Group IIIC
Zone 2, 21,22
Class III
UL 1598 Suitable Locations
UL 1598A Marine Saltwater

IP66
IK08 (Without Wire Guard)
IK10 (With Wire Guard)
1000 Hours Salt Spray
ETL (ATM for Report 105342415DAL-001)
ABS
CB (Ref. Certif. No.: DE 2-038462-M1)
EX II 3G Ex ec IIC T6...T3 Gc
EX II 2D Ex tb IIIC T85°C...T103°C Db IP66
Ex ec IIC T6...T3 Gc
Ex tb IIIC T85°C...T100°C Dbn IP66
DLC qualification varies for product versions.

Applications

Oil and Gas

Petroleum production and refining
Petroleum loading, storage, transportation and retail
Confined spaces with vapor accumulation
LNG and LPG handling
Oil tankers and shipping vessels
Fuel system testing facilities

Power Plants

Coal-fired power plants, including coal handling and storage areas
Gas-fired power plants with fuel storage
Nuclear power facilities in hazardous auxiliary areas
Biomass or waste-to-energy plants with combustible dust risks

Industrial

Industrial storage facilities
Paper mills, sawmills and lumber yards
Loading dock platforms
Manufacturing plants for heavy industrial goods
Warehouses handling flammable materials

Waste Treatment

Wastewater treatment plants
Pumping stations
Solid waste processing and incineration facilities
Sewage treatment with methane gas risks
Hazardous waste recycling centers

Mining

Operations and service areas
Underground mining tunnels with gas accumulation

Chemical Industry

Chemical production, processing and storage facilities
Solvent handling and mixing areas
Chemical research labs with flammable substances

Ocean, Marine and Aerospace

Offshore platform operation facilities and structures
Marine and saltwater environments
Aerospace clean rooms and production areas
Ocean vessel operations
Shipyards and dry docks
Aircraft hangars with fuel vapors

Metal Treatment

Paint facilities
Steel and aluminum factories
Metal smelting, foundry and fabrication
Welding and cutting areas with gas risks

Military and Defense

Ammunition storage and handling
Fuel depots and refueling stations
Explosives manufacturing
Vehicle maintenance bays in hazardous zones

Food, Alcohol and Agriculture Industry

Flour and fine particle production and storage
Food and distilling production
Grain storage elevators and silos
Breweries and fermentation tanks
Feed mills with dust risks
Fertilizer production and storage

Pharmaceutical Industry

Drug manufacturing and solvent handling
Clean rooms with volatile compounds
Pill coating and drying areas
Research and development labs

Other high humidity, high dust, high temperature and vapor locations

Specifications

Wattage	20W	40W	60W	80W	100W	150W	180W	200W	250W	300W	400W
Body	A2			A		A3			A4		

OPTICAL

Lumen Output	2800 lm	5600 lm	8400 lm	11200 lm	14000 lm	21000 lm	25200 lm	28000 lm	35000 lm	42000 lm	56000 lm
Lumens Per Watt	140 lm/W										
Color Temperature: CCT	5000K (standard), 3000-6500K optional										
CRI (Color Rendering Index)	> 70										
Beam Angle	120° Standard 40°, 60°, 90°option										
Dimming	0-10V dimming										

ENVIRONMENTAL

Ambient Operating Temperature	-40°C to +40°C (-40°F to +104°F): Models A2, 20-40W	-40°C to +40°C (-40°F to +104°F): Models A, 40-120W -40°C to +50°C (-40°F to +122°F): Models A, 40-100W, Class I Division 2 Group A, B, C, D;	-40°C to +40°C (-40°F to +104°F): Models A3, 20-200W	-40°C to +55°C (-40°F to +131°F): Models A4, 20-300W -40°C to +40°C (-40°F to +104°F): Models A4, 20-400W
Temperature Code	T3: (+55°C)			

MECHANICAL

Housing Material	Die-cast aluminum	
Lens Diffuser	Tempered glass & PC	
Hardware	Stainless Steel	
Fixture Color	Grey RAL7040 (Standard)	
Mounting	Ceiling, Wall, Hook, Trunnion, Pole, Stanchion	Ceiling, Wall, Hook, Pole, Stanchion
Cable Entry	Top: 3/4" NPT (standard); Side: 3/4" NPT (standard); M20, M25, 1/2" NPT Option	
Warranty	5-Year Standard Warranty	

ELECTRICAL

Lifespan	L70> 78,000 Operational Hours @ 55°C
Input Voltage	120-277VAC, 277-480VAC
Input Frequency	50/60Hz
Power Factor	> 0.95

EMERGENCY

Emergency Time	A2: No emergency function	A/A3/A4: Optional
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Ordering Logic

ORDER EXAMPLE: HLL A EX 150W A3 D 5K 120

(1) Product	(2) Product Category	(3) Wattage	(4) Shape Series	(5) Dimming	(6) Kelvin
HLL A	EX - Explosion Proof	20W (2,800 lm)	A - 80/100W	D - Dimmable	3K - 3000 K
		40W (5,600 lm)	A2 - 20/40/60W	N - Non-Dimmable	4K - 4000 K
		60W (8,400 lm)	A3 - 150/180/200W		5K - 5000 K(S)
		80W (11,200 lm)	A4 - 250/300/400W		
		100W (14,000 lm)			
		150W (21,000 lm)			
		180W (25,200 lm)			
		200W (28,000 lm)			
		250W (35,000 lm)			
		300W (42,000 lm)			
400W (56,000 lm)					
(7) Beam Angle	(8) Cover Option	(9) Voltage	(10) Optional		
40 - 40°	Blank - Non Long Glass Clover	Blank - U 100-277	Blank - Without Emergency Function		
60 - 60°	C - Long Glass Cover	HV - 480	EM - Emergency Back Up*		
90 - 90°					
120 - 120° (S)					

(S) Standard * EM Available on 80W and above

Accessories



Junction Box



Installation Hook



Metal Conduit



Winding Swing Pipe



Straight Pipe



Pendant Direction Adapter



Surface Mounting Arm



25° Pole Support



90° Pole Support



90° Arm to Junction Box



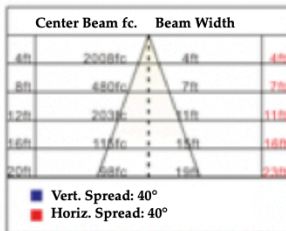
25° Arm to Junction Box



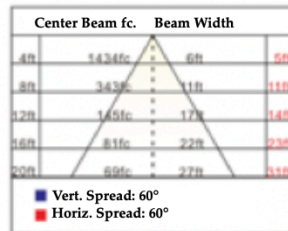
25° Direct Mounting Arm

Light Distribution

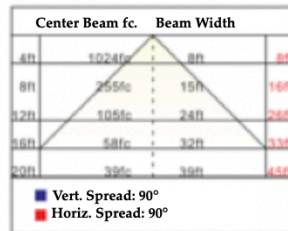
40D



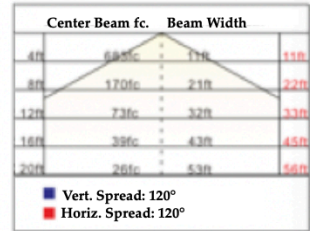
60D



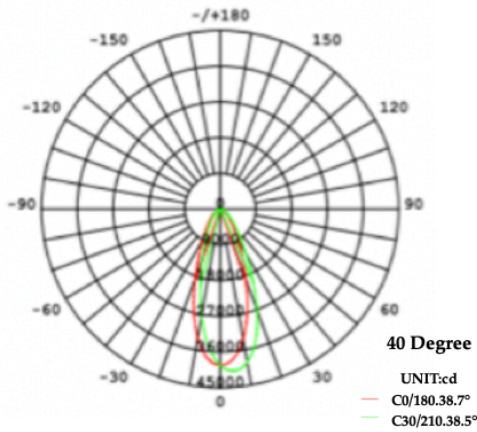
90D



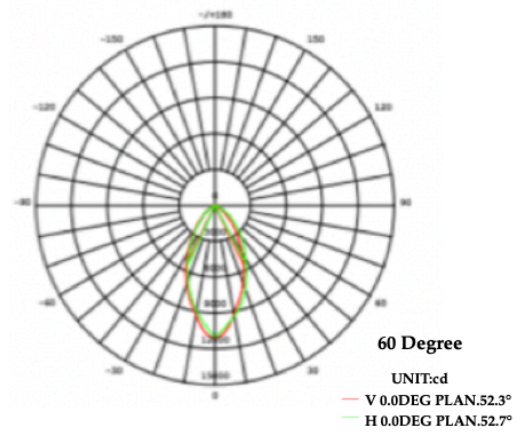
120D



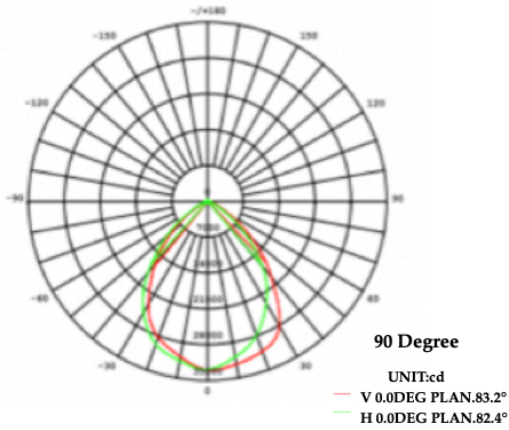
Photometric



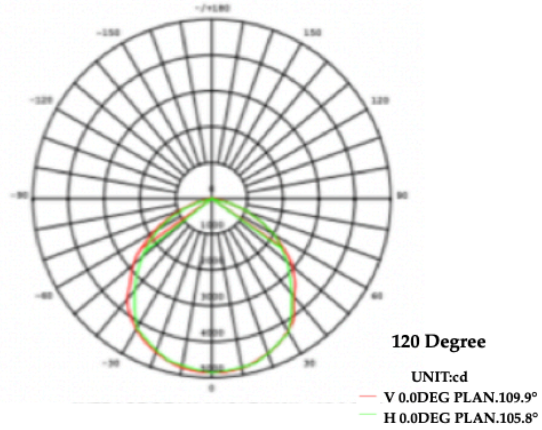
Average Beam Angle (50%):38.6 DEG



Average Beam Angle (50%):52.5 DEG



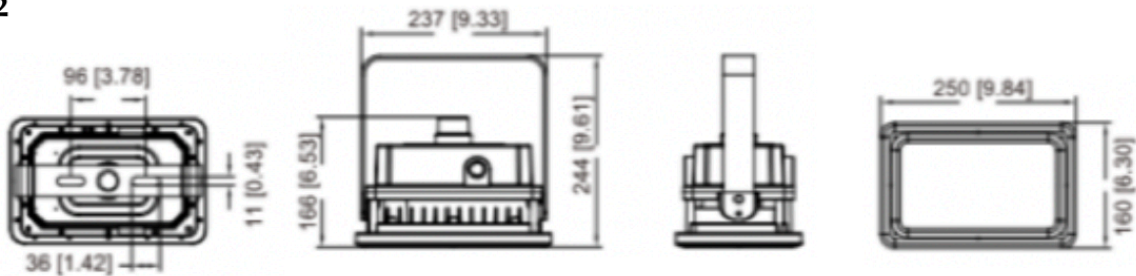
Average Beam Angle (50%):82.8 DEG



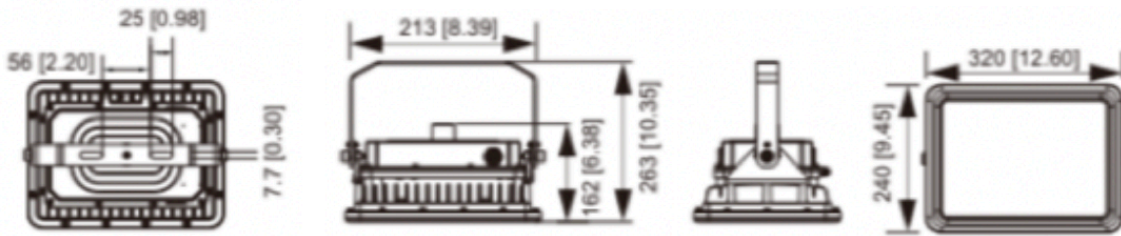
Average Beam Angle (50%):107.8 DEG

Product Dimensions

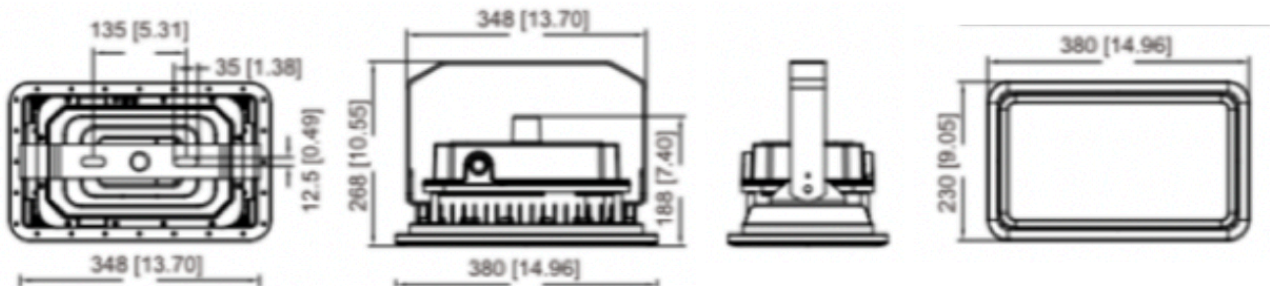
A2



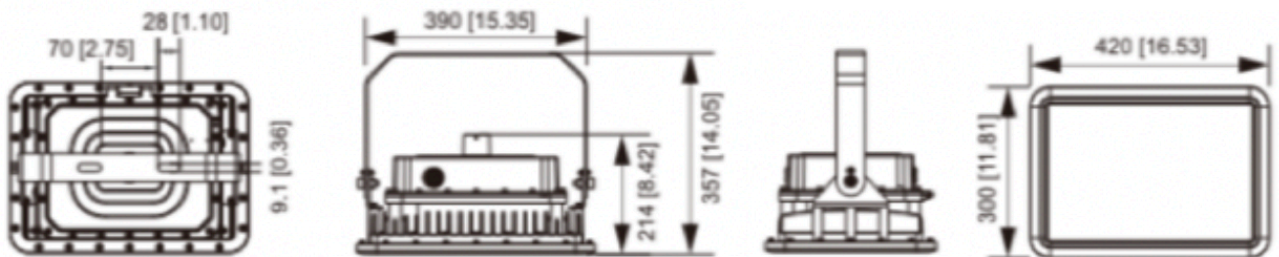
A



A3



A4

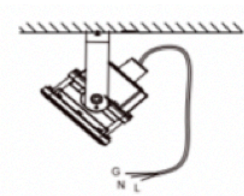


Packaging Information

	A2	A	A3	A4
Pieces	1	1	1	1
Fixture Dimensions	See Product Dimensions Drawing	See Product Dimensions Drawing	See Product Dimensions Drawing	See Product Dimensions Drawing
Package Dimensions	14.37 x 10.63 x 12.01 IN (365 x 270 x 305 MM)	14.76 x 13.39 x 8.46 IN (375 x 340 x 215 MM)	19.09 x 13.39 x 14.37 IN (485 x 340 x 365 MM)	20.08 x 18.90 x 13.78 IN (510 x 480 x 350 MM)
Net Fixture Weight	4.15 kg/9.15 lb	6.95 kg/15.32 lb	8.30 kg/18.30 lb	15.1 kg/33.29 lb
Gross Weight	5.30 kg/11.68 lb	7.90 kg/17.42 lb	10.30 kg/22.71 lb	15.80 kg/34.83 lb

Mounting Methods

Option 1: Ceiling Mounting

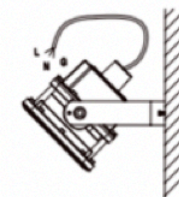


Accessory



Bracket

Option 2: Wall Mounting

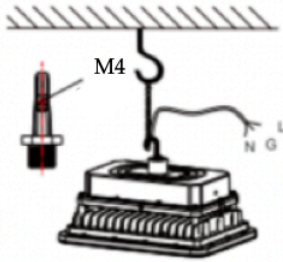


Accessory

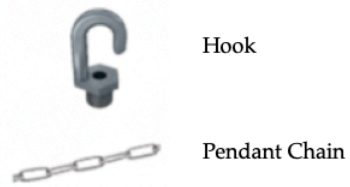


Bracket

Option 3: Hook Mounting



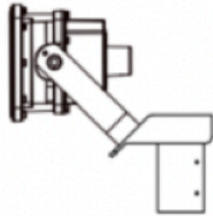
Accessory



Hook

Pendant Chain

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

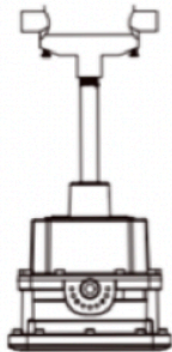


Accessory

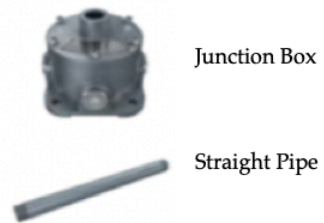


Slip Fitter
Mounting Kit

Option 5: Pole Mounting (Vertical)



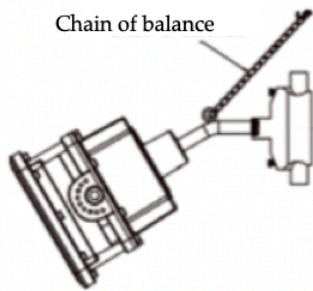
Accessory



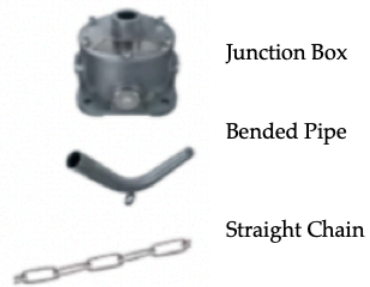
Junction Box

Straight Pipe

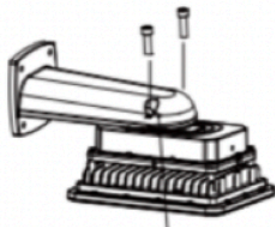
Option 6: Pole Mounting (Non-Vertical)



Accessory



Option 7: Stanchion Mounting on the Wall



45mm



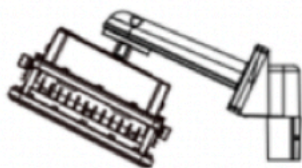
Make sure the screw is fixed well for safety

6# Allen Key

Accessory



Option 9: Stanchion Mounting on the Poll (25 Degree)

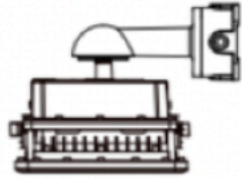


Accessory



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

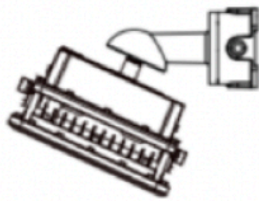
Accessory



90° Stanchion Arm

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

Accessory



90° Stanchion Arm