BPO LIGHTING
Hazardous Area Lighting

HLL S
TUNABLE


S2


S4

Class 1 Division 1

Key Features

FEATURES: **Tunable Wattage**
Adjustable CCT

Compact Rugged Low-Bay/High-Bay Area Light
High Lumen efficiency up to 145 lm/W
Impact Resistant & Flame Proof
Cost Effective

OPTIONS: Convex or Flat Glass
2 Body Sizes
4 Mounting Styles
High Heat
T2, T3, T5, 40°, 60°, 90° or 120°
Compatible for Jib and Crane use
Lens: Flat or Convex / Clear or Frosted - Glass
High Voltage
Emergency Back-Up

Compliance

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

IP66
IK08 (Glass Cover)
IK10 (With Wire Guard)
1000 Hours Salt Spray
ABS
3G

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	20 W	30 W	40 W	50 W	60 W	80 W	100 W	150 W	20 W	30 W	40 W	50 W	60 W	80 W	100 W	120 W	180 W	200 W	240 W
Body	S1								S2										

OPTICAL																			
Lumen Output	2900 lm	4350 lm	5800 lm	7250 lm	8700 lm	11600 lm	14500 lm	21750 lm	2900 lm	4350 lm	5800 lm	7250 lm	8700 lm	11600 lm	14500 lm	17400 lm	26100 lm	29000 lm	34800 lm

Lumens Per Watt	145 lm/W
Color Temperature: CCT	**SELECTABLE: Standard** 5000K **Options:** 3000K/4000K/5000K/5700K/6500K
CRI (Color Rendering Index)	>70
Beam Angle	**Standard:** 120° **Options:** 40°/60°/90°/120°/T2/T3/T5
Dimming	0-10V dimming

ENVIRONMENTAL		
Ambient Operating Temperature	T5:-40°C to +55°C (-40'F to +131'F)	T5: –40°C to +50°C (-40'F to +122'F)[120-277V] T4A:—40°C to +55°C (-40'F to +131'F) [277-480V/120-347V]
Temperature Code	T5 +55°C	T5 +50°C, T4A +55°C
Power Model (120-277VAC/ 347VAC)	SS-150VA-56BHL	SS-240VA-56BHL
Power Model (277-480 VAC)	VA-150VAC-056B	VA-240VAC-056B
Power Model (120-347 VAC)	FD-150T-054D	FD-240T-054D

MECHANICAL	
Housing Material	Die-cast Aluminum
Lens Diffuser	**Standard:** Clear Flat Glass **Options:** Clear Flat Glass, Clear Convex Glass, Frosted Flat Glass, Frosted Convex Glass
Mounting	Ceiling, Wall, Pole, Pendant
Cable Entry	3/4" NPT
LED Chip	2835
Warranty	5 Year Standard Warranty

ELECTRICAL	
Lifespan	L70> 150,000 Operational Hours @ 55°C
Input Voltage	120-277VAC, 120-347VAC, 200-480VAC
Input Frequency	50/60Hz
Power Factor	> 0.95
LED Driver	Sosen/Fahold (120-277VAC/120-347): Meanwell (200-480VAC)
EMERGENCY	
Emergency Time	1.5 Hour, 3 Hour

Ordering Logic

ORDER EXAMPLE: HLL S EX 100W S1 D 50 D120 T

90° Pole Mount Bracket (Not Shown)

(1) Product	(2) Product Category	(3) Rated Input Watta	(4) Shape Series	(5) Dimming
HLL S	EX - Explosion Proof	100W: 100W/80W/60W [S1]	S1	Blank - Non-Dimmable
		200W: 200W/150W/120W [S2]	S2	D - Dimmable (S)
		Inquire About Additional Wattage Combinations:		
		S1: 20W, 30W, 40W, 50W, 60W, 80W, 100W, 150W		
		S1: 20W, 30W, 40W, 50W, 60W, 80W, 100W, 120W, 180W, 200W, 240W		

(6) Kelvin	(7) Beam Angle	(8) Lens	(9) Dual Tunable	(10) Backup Power Source
30 - 3000 K	D40 - 40°	CFG or Blank - Clear Flat Glass (S)	T - With Tunable	Blank - Without Emergency Battery
40 - 4000 K	D60 - 60°	CCG - Clear Convex Glass		EM - Emergency Battery
50 - 5000 K (S)	D90 - 90°	FFG - Frosted Flat Glass		
57 - 5700 K	D120 - 120° (S)	FCG - Frosted Convex Glass		
65 - 6500 K	T2 - 60°			
	T3 - 90°			
	T5 - 120°			

(S) Standard

Accessories

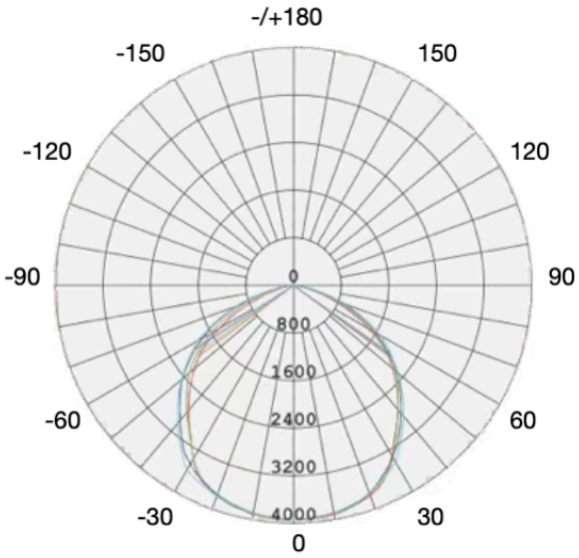
Bracket

Threaded Pipe

EX Junction Box

25° Pole Mount Bracket

Photometric



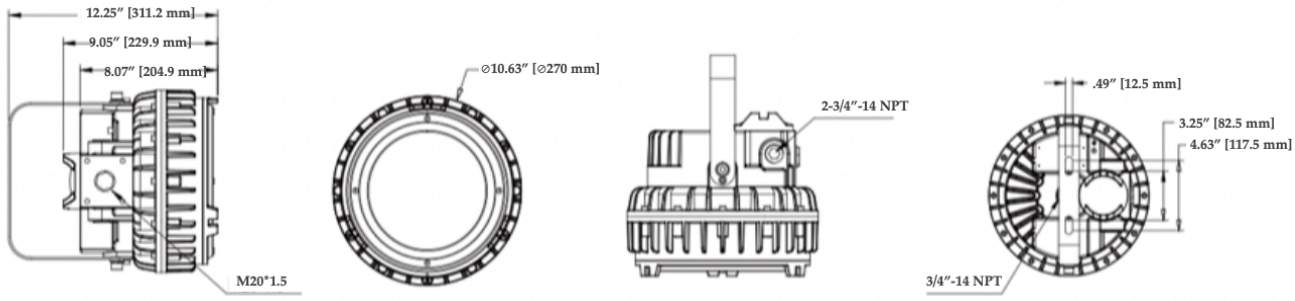
120 Degree

Average Beam Angle (50%): 110.1 Degree

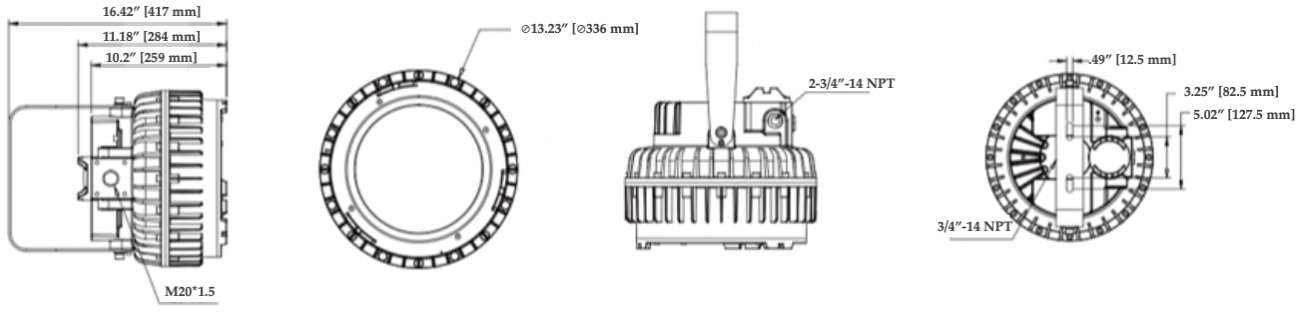
UNIT: cd
C0/180,106.7°
C30/210,108.9°
C60/240,111.4°
C90/270,113.4°

Product Dimensions

S1



S2

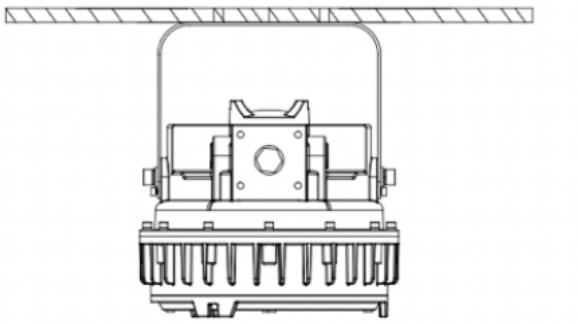


Packaging Information

	S1	S2
Pieces	1	1
Fixture Dimensions	See Product Dimensions Drawing	See Product Dimensions Drawing
Package Dimensions	16.54 x 18.50 x 12.60 in (420 x 470 x 320 mm)	19.69 x 18.5 x 15.75 in (500 x 470 x 400 mm)
Net Fixture Weight	27.34 lb (12.4 kg)	44.31 lb (20.1 kg)
Gross Weight	29.32 lb (13.3kg)	47.62 lb (21.6 kg)

Mounting Methods

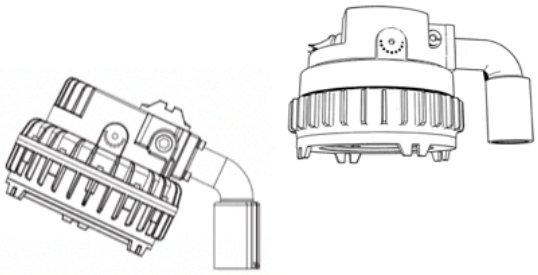
Option 1: Ceiling Mount



Accessory

Bracket

Option 2: Pole Mount

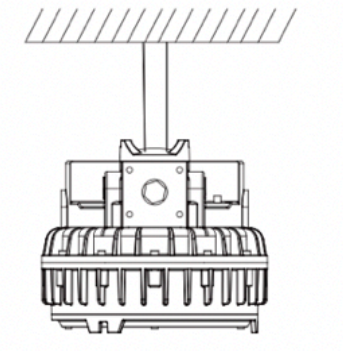


Accessory

25° Pole Mount Bracket

90° Pole Mount Bracket
(Not Shown)

Option 3: Pendant Mount



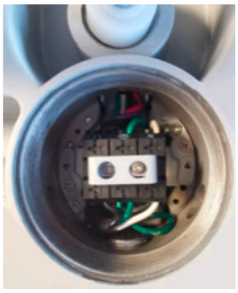
Accessory

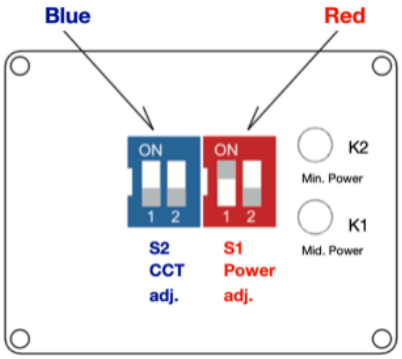
Threaded Pipe

Option 4: Pendant Mounting with Junction Box

Accessory

EX Junction Box





OPERATING INSTRUCTIONS

S1 DIP SWITCH - RED (S1 Power adj.)

The power adjustment dial switch can be set to three power levels,
and the factory default setting can be defined according to order requirements.

1. 

First gear (Max. power), 100% full power.
Operation instructions: Dial 1 and 2 are both in the OFF position;

Example: 100W

2. 

Second gear (Mid. power), 70%-80% power, can be set according to the required power.
Operation instructions: Dial 1 is in the ON position, Dial 2 is in the OFF position;

Example: 80W

3. 

Third gear (Min. power), 50%-60% power, can be set according to the required power.
Operation instructions: Dial 1 is in the OFF position, Dial 2 is in the ON position;

Example: 60W

S2 DIP SWITCH - BLUE (S2 CCT adj.)

The color temperature dial switch can be set to three levels of color temperature,
and the factory default setting can be defined according to order requirements.

1. 

First gear, the cold white temperature gear, for example, 6000K.
Operation instructions: Dial 1 and 2 are both in the OFF position;

6500K

2. 

Second gear, the neutral temperature gear, for example, 5000K.
Operation instructions: Dial 1 is in the ON position, and Dial 2 is in the OFF position;

5000K

3. 

Third gear, the warm white temperature gear, for example, 4000K.
Operation instructions: Dial 1 and 2 are both in the ON position;

4000K

(1) Power Adjuster:
Connect to the 0/1-10V dimming port of the LED driver.

(2) CCT Adjuster:
Connect the output voltage of the LED driver:
DC20 - 60V LED driver maximum no - load output voltage: 68V max

(3) The three - gear power setting principle is as follows:
The first gear is 100%, the second gear is 70 - 80%, and the third gear is 50 - 60%.
The minimum setting cannot be lower than 50%.