Hazardous Location LED Luminaire

FME Moon Series

Standard Trunnion
&
Pendant Mounting

Product Description

The MOON Series LED Luminaire can be used in locations made hazardous by the presence of flammable vapors, gases, or combustible dusts as defined by the NEC, Atex, CNEX, and CSA. The Moon Series is IP66 and IK10 rated. **An adjustable U-Bracket and pendant mounting are standard.**

Features

- Heavy-duty and high impact resistance
- Three connection cable entry points
- Dimmable and non-dimmable options available.
- Emergency battery backup available with integrated junction box for driver.
- Tempered glass lens standard with opal globe and guard option available for wider distribution and protection.
- Various mounting options include: pendant mount, wall mount, stanchion, or surface mount.
- Standard 120-277V, Available options include
  - 277-480V
  - 12-36VDC
- Operating Temperature:
  - 20 - 80W : -40°C - 50°C (-40°F - 122°F)
  - 100 - 400W : -40°C - 40°C (-40°F - 104°F)

- **Housing:** A383 Die Cast Aluminum
- **Gasketing:** Fluorosilicone Rubber
- **Hardware:** Stainless Steel 304
- **Finish:** Polyester Powdercoat
- **Lens:** Tempered Glass
- **LED Chips:** Philips
- **Driver:** Meanwell
- **Surge Protection:** 10KV
- **Expected Life:** Over 85,000 hrs.
- **Rating:** IP66 & IK10
- **Color Rendering Index (CRI):** 70

Compliance

UL 844 Hazardous Locations North America

- Class I, Division 2, Groups A, B, C, D
- Class II, Division 1, Groups E, F, G
- Class II, Division 2, Groups F, G
- Class III

Marking Atex

- II2 G Ex mb eb IIC T4 Gb
- II2 D Ex tb IIIC T135°C Db IP66
- II3 G Ex ec IIC T3C Gc
- II2 D Ex tb IIIC T135°C Db IP66

Marking ICEX

- Ex mb eb IIC T4 Gb
- Ex tb IIIC T135C Db IP66
- Ex ec IIC T3C Gc
- Ex tb IIIC T135C Db Ip66

Marking Marine

- UL1598, UL1598A
- ABS

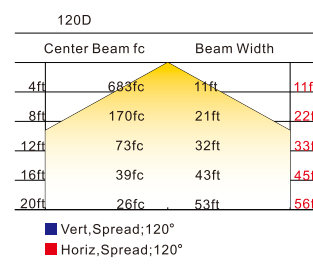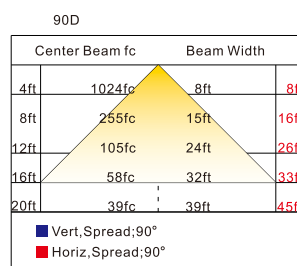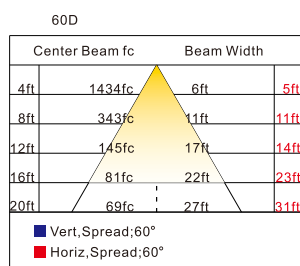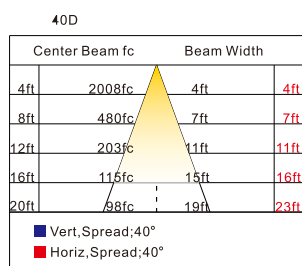### Other Markings / Standards

- IP66

Applications

- Power Plants / Heavy Industrials Storage Facility
- Paper Mills / Wastewater Treatment Plants
- Loading Docks / Platforms / Shipyards
- Chemical Processing Facility
- Petrochemical Processing Facility
- Mining
- Ocean Marine
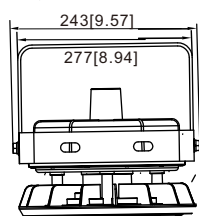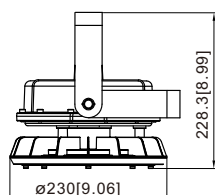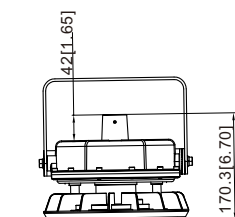- LNG facilities
- Metal Industry

40D

	Center Beam fc	Beam Width	
4ft	2008fc	4ft	4ft
8ft	480fc	7ft	7ft
12ft	203fc	11ft	11ft
16ft	115fc	15ft	16ft
20ft	98fc	19ft	23ft

■ Vert,Spread;40°
■ Horiz,Spread;40°

60D

	Center Beam fc	Beam Width	
4ft	1434fc	6ft	5ft
8ft	343fc	11ft	11ft
12ft	145fc	17ft	14ft
16ft	81fc	22ft	23ft
20ft	69fc	27ft	31ft

■ Vert,Spread;60°
■ Horiz,Spread;60°

90D

	Center Beam fc	Beam Width	
4ft	1024fc	8ft	8ft
8ft	255fc	15ft	16ft
12ft	105fc	24ft	26ft
16ft	58fc	32ft	33ft
20ft	39fc	39ft	45ft

■ Vert,Spread;90°
■ Horiz,Spread;90°

120D

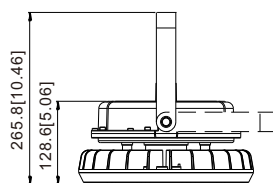|	Center Beam fc	Beam Width	
4ft	683fc	11ft	11ft
8ft	170fc	21ft	22ft
12ft	73fc	32ft	33ft
16ft	39fc	43ft	45ft
20ft	26fc	53ft	56ft

■ Vert,Spread;120°
■ Horiz,Spread;120°

Product Dimensions

20W - 40W - 60W
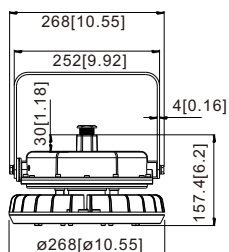
42[1.65]
170.3[6.70]
228.3[8.99]
ø230[9.06]
243[9.57]
277[8.94]

80W - 100W

265.8[10.46]
128.6[5.06]
268[10.55]
252[9.92]
4[0.16]
30[1.18]
157.4[6.2]
ø268[ø10.55]

150W - 200W

40[1.57]
370[14.57]
371.4[14.62]
346[13.62]
40[1.57]
197[7.76]

250W - 400W

241.5
393.59 [15.50]
210.5
[9.50] [8.28]
ø480 [ø18.90]

Lumen Chart
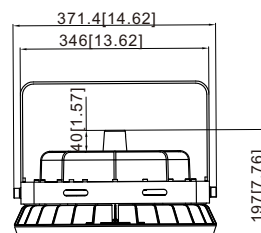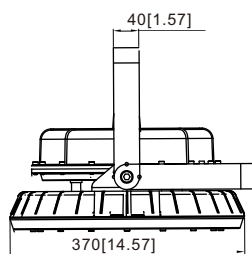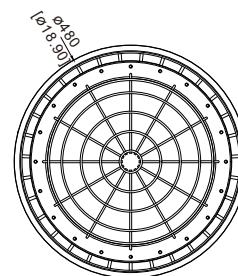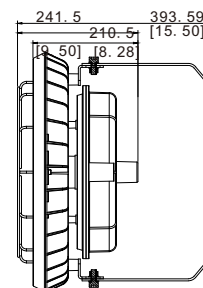
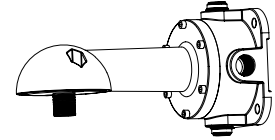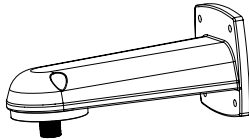|	5000K		5000K
20W	2,700 lm	250W	35,000 lm
40W	5,400 lm	300W	42,000 lm
60W	8,100 lm	350W	49,000 lm
80W	10,800 lm	400W	56,000 lm
100W	13,500 lm		
150W	20,250 lm		
200W	27,000 lm		

Mounting Accessories
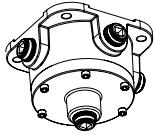
OPEB: Junction Box
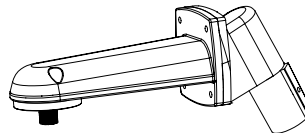
OPWA25: 25° Wall Mount & Junction Box
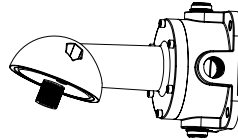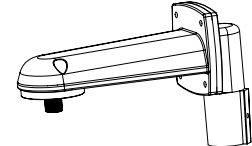
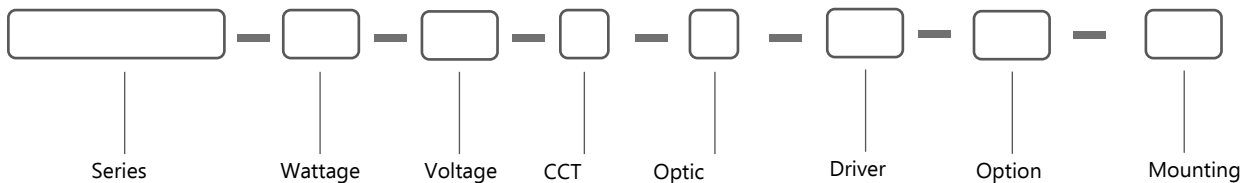**OPWA90: 90° Wall Mount & Junction Box**

OPWA: 90° Wall Mount

OPPS25: 25° Pole Mount

OPPS90: 90° Pole Mount

Ordering Information

| Series | | Wattage | Voltage | CCT | Optic | Driver | Option | Mounting |

SERIES	WATTAGE	VOLTAGE	COLOR TEMP	OPTIC	DRIVER	OPTION
FME-MOO	2 = 20W	A = AC100-277V	S = 3000K	M = 40°	D = 0-10V Dimming	EM = Emergency Battery Backup
	4 = 40W	B = AC200-480V	I = 4000K	N = 60°	ND = No Dimming	CG = Clear Globe
	6 = 60W	C = 12-48VDC	C = 5000K	O = 90°		FG = Frosted Globe
	8 = 80W		K = 6000K	P = 120°		WG = Wire Guard
	10 = 100W					CGG = Clear Globe w/ Wire Guard
	12 = 120W					FGG = Frosted Globe w/ Wire Guard
	15 = 150W					DREF = Dome Reflector
	20 = 200W					AREF = Angle Reflector
	25 = 250W					
	30 = 300W					
	35 = 350W					
	40 = 400W					

MOUNTING / ACCESSORIES

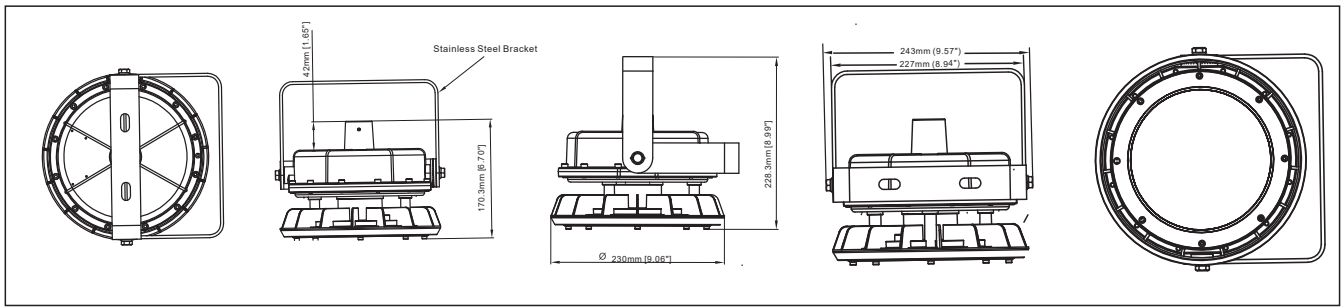|		
OPEB	=	Junction Box
OPCM	=	Ceiling / Surface Mounting & Junction Box: 3/4" NPT
OPWA	=	90° Wall Mount
OPWA25	=	25° Wall Mount & Junction Box: 3/4" NPT
OPWA90	=	90° Wall Mount & Junction Box: 3/4" NPT
OPPS25	=	25° Pole Mount: 1-1/2" NPT
OPPS90	=	90° Pole Mount: 1-1/2" NPT

FME Lighting | ILLUMINATING INDUSTRIAL APPLICATIONS

Mechanical Structure

Unit: mm or inch

20 Watt & 40 Watt Version

Standard Bracket and Flat Glass Lens

Stainless Steel Bracket

42mm [1.65"]
170.3mm [6.7.0"]
228.3mm [8.99"]
243mm (9.57")
227mm (8.94")
Ø 230mm [9.06"]

Standard Bracket and Wireguard

1.Bracket, Glass Lens, Wireguard and flat LED module.
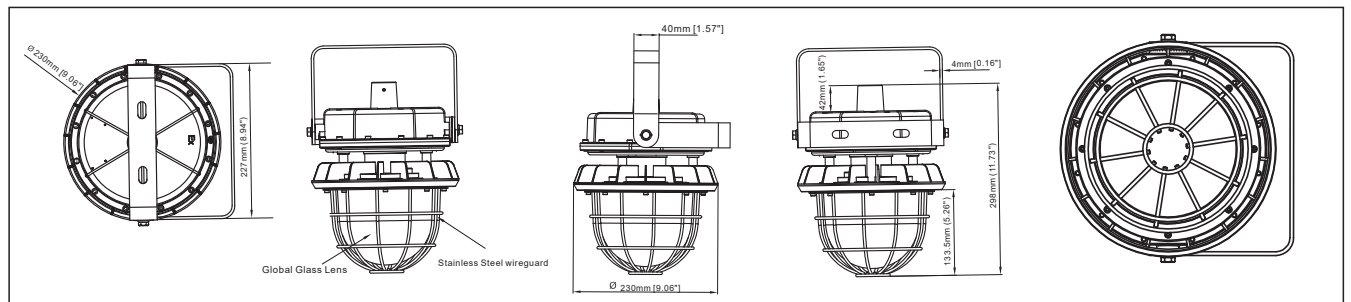
Ø 230mm [9.06"]
227mm [8.94"]
40mm [1.57"]
42mm [1.65"]
4mm [0.16"]
298mm [11.73"]
133.5mm [5.26"]
Global Glass Lens
Stainless Steel wireguard
Ø 230mm [9.06"]

This structure type with bracket, global glass lens and wireguard to generate 180° light distribution.

30° Angle Dome Reflector

1, Bracket, Global Glass Lens, flat LED module and 30° cut off angle reflector.

222.5mm [8.76"]
161.2mm [6.35"]
Ø230mm [9.06"]
315.9mm [12.44"]
243mm [9.57"]
227mm [8.94"]
164.5mm [6.48"]
384.9mm [15.15"]
Ø315.8mm [12.43"]

This structure can make the lighting distribution more concentrated for special beam angle.

Dome Reflector

1, Bracket, Global Glass Lens, flat LED module and dome reflector

243mm [9.57"]
227mm [8.94"]
228.3mm [8.99"]
162.1mm [6.38"]
Ø230mm [9.06"]
Ø 269.7mm [10.62"]
327.9mm [12.91"]
385.9mm [15.19"]
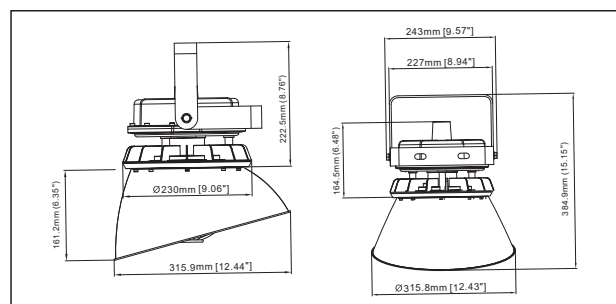
This structure can make the lighting distribution more concentrated.
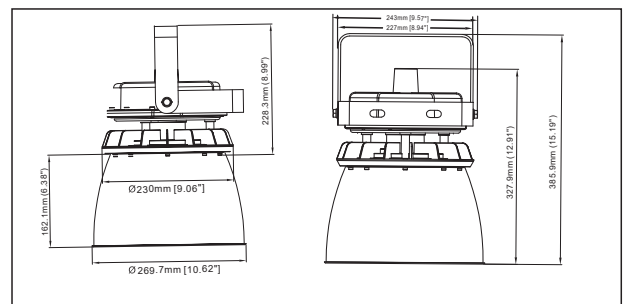
FME Lighting
ILLUMINATING INDUSTRIAL APPLICATIONS

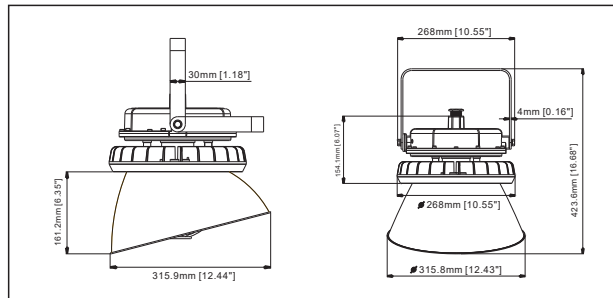# 60 Watt & 80W Version

Standard Bracket and Flat Glass Lens
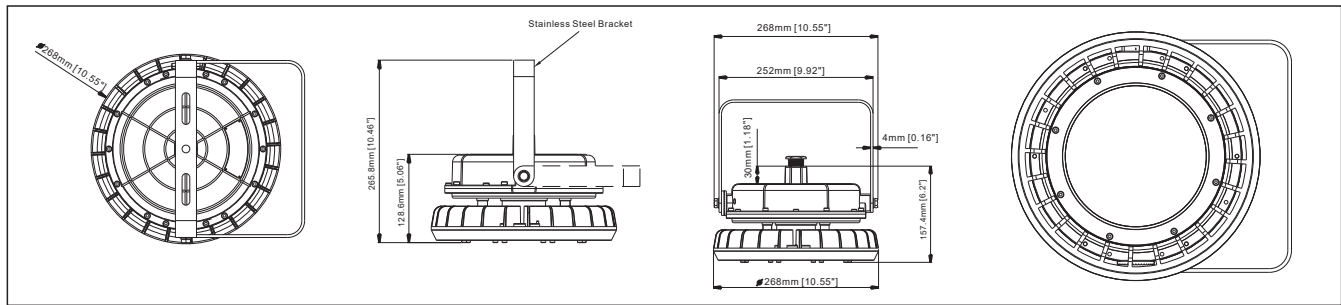
This structure type with bracket,flat glass and optics lens to generate 40°,60°,90° and 120° light distribution.

Standard Bracket and Wireguard

1, Bracket, Global Glass Lens, Wireguard and flat LED module.
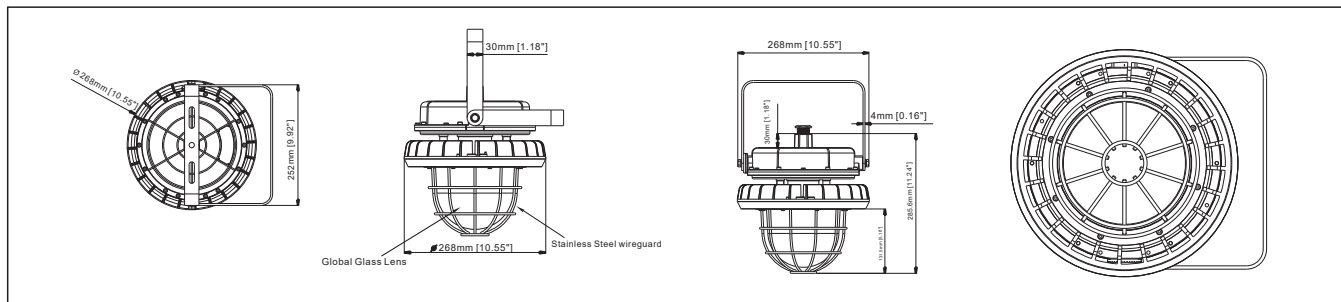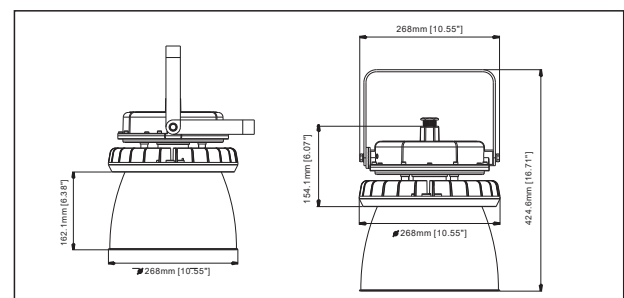

30° Angle Dome Reflector

This structure can make the lighting distribution more concentrated for special beam angle.
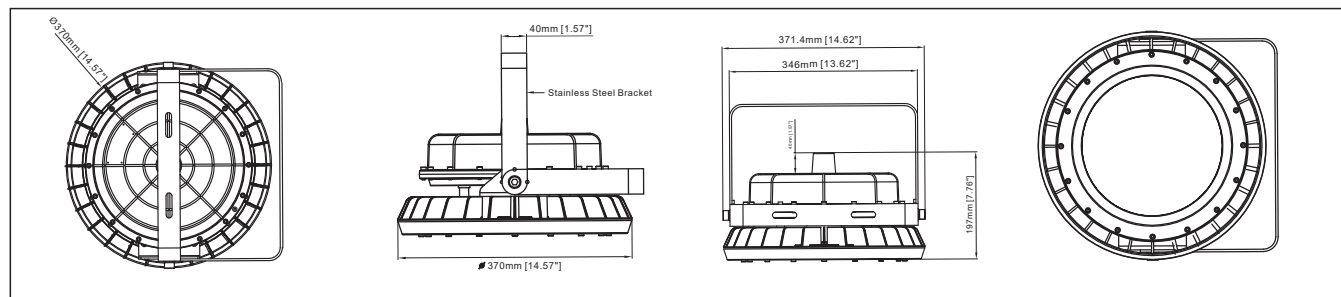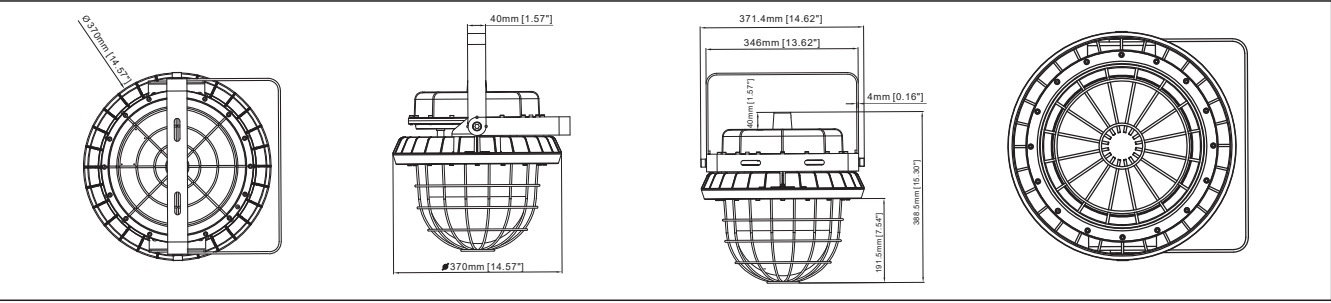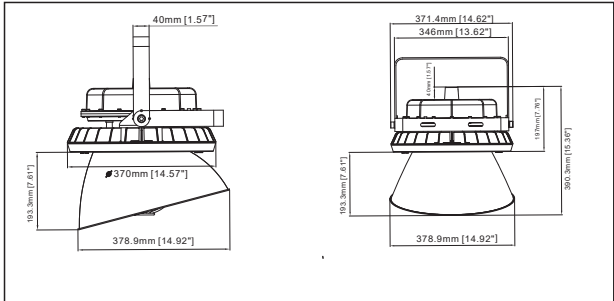
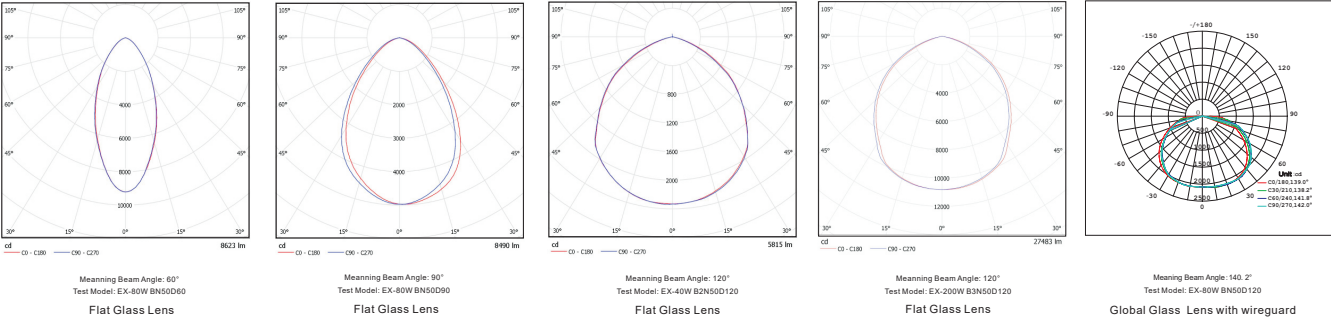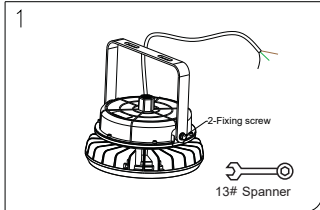## Dome Reflector

This structure can make the lighting distribution more concentrated.

100 Watt - 200 Watt Versions

Standard Bracket and Flat Glass Lens

This structure type with bracket,flat glass and optics lens to generate 40°,60°,90° and 120° light distribution.

Standard Bracket and Wireguard

1, Bracket, Global Glass Lens, Wireguard and flat LED module.

This structure type with bracket, global glass lens and wireguard to generate 180° light distribution. We also can put corn bulb In the global glass lens to make this beam angle up to 360°.

30° Angle Dome Reflector

1, Bracket, Global Glass Lens, flat LED module and 30° cut off angle reflector.

This structure can make the lighting distribution more concentrated for special beam angle.

Dome Reflector

1, Bracket, Global Glass Lens, flat LED module and dome reflector
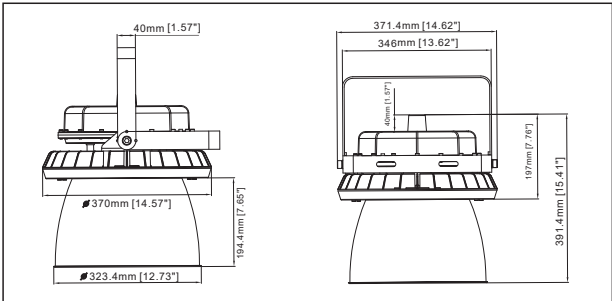
This structure can make the lighting distribution more concentrated.

Lighting Distribution

Meanning Beam Angle: 60°
Test Model: EX-80W BN50D60

Flat Glass Lens

Meanning Beam Angle: 90°
Test Model: EX-80W BN50D90

Flat Glass Lens

Meanning Beam Angle: 120°
Test Model: EX-40W B2N50D120

Flat Glass Lens

Meanning Beam Angle: 120°
Test Model: EX-200W B3N50D120

Flat Glass Lens

Meanning Beam Angle: 140. 2°
Test Model: EX-80W BN50D120

Global Glass Lens with wireguard

Ceiling Mounting

1

1. Take the fixture and accessory out from cartoon box, tighten 2x angle holder screw as Fig.1.

2-Fixing screw

13# Spanner

2

2. Flexible metal conduit install and tighten with the fixture.

Flexible metal conduit
3/4 NPT
3/4 NTP(At least 6x Teeth need to tighten)

3
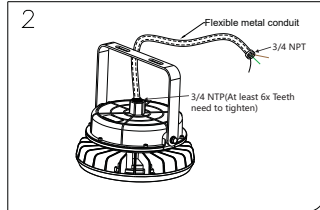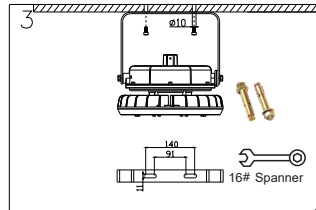
3. Drill 2x hole as Fig.2, the distance can be 91~140mm, fixing ⌀10 expanded crews and bracket on ceiling.
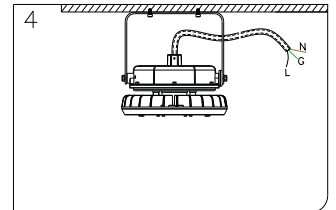
⌀10
140
91
16# Spanner

4

4. Connect the AC cable, Black cable conect to L, white cable connect to N, green cable connect to grounding.

N
G
L

5

Ceiling mounting

Mounting Direction Adjustable Screw
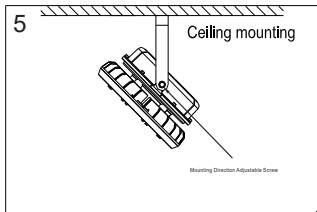
5. Adjust the beam angle from 0-180°.

Wall Mounting
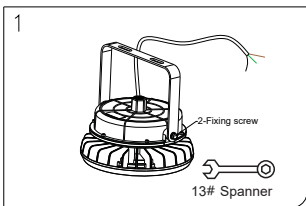
1

1. Take the fixture and accessory out from cartoon box, tighten 2x angle holder screw as Fig.1.

2-Fixing screw

13# Spanner

2

2. Flexible metal conduit install and tighten with the fixture.

Flexible metal conduit
3/4 NPT
3/4 NTP(At least 6x Teeth need to tighten)

3
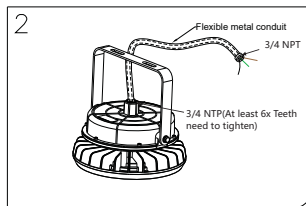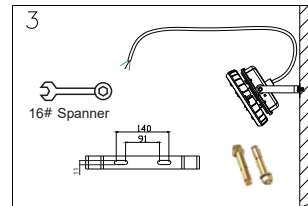
3. Drill 2x hole as Fig.2, the distance can be 91~140mm, fixing ⌀10 expansion screws and bracket on ceiling.
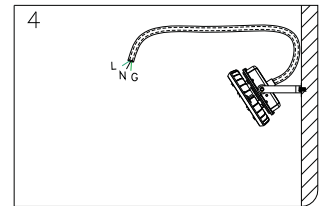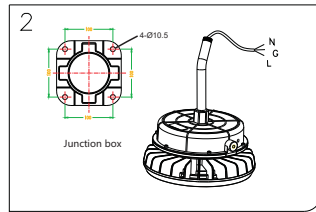
16# Spanner
140
91
11

4

4. Connect the AC cable, Black cable conect to L, white cable connect to N, green cable connect to grounding.
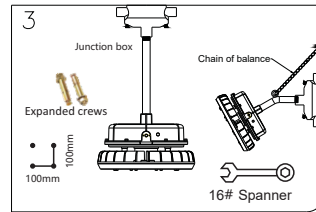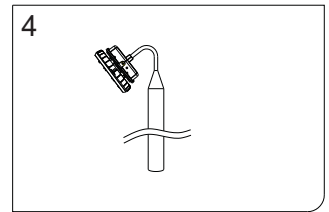
L
N
G

Pole Pendant
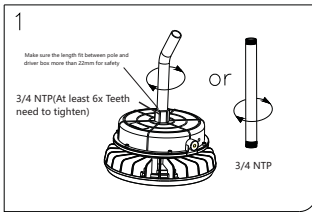
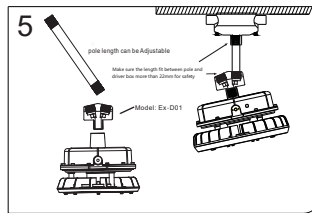1. Take the fixture and pole accessory out from cartoon box, tighten pole as Fig.1.

2. Connect the AC cable to junction box, black cable connect to L, white cable connect to N, green cable connect to grounding.
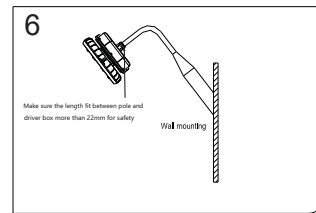

3. Drill 4x Ø10mm holes, as 100mm distance, install the junction box to the wall or ceiling as Fig.3, tighten the pole to the box, and adjust the chain of balance.

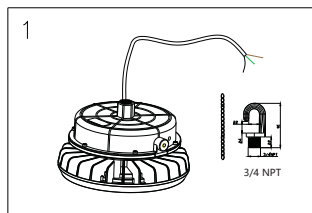Optional: Install the fixture to the long pole after cable connecting.

1. Adjustable pole installation. With this adjustable kit, you can Make any light distribution direct as you want.

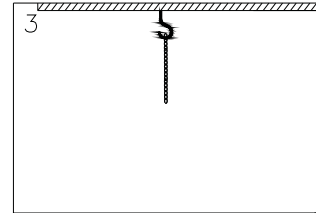Optional: Install the fixture to the long pole and mount to the wall.
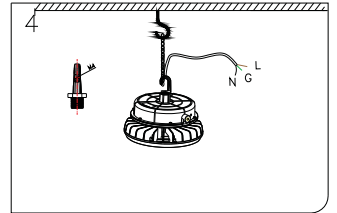
Hook Pendant

1. Take the fixture and accessory out from cartoon box, tighten 2x angle holder screw as Fig.1.
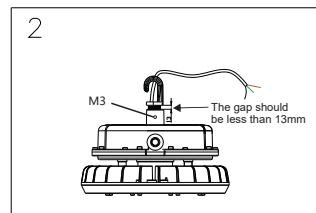
2. Tighten the hook with the fixture, at least 6x teeth need to tighten, fix the M3 screw to avoid the hook loosing.
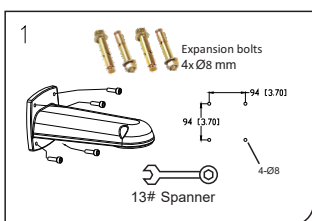

3. Drill 1 expansion screw hole and install it, and hang the chain as Fig.3.
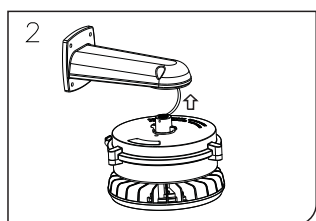

4. Hang the fixture to the hook as above, connect the AC cable, Black cable connect to L, white cable connect to N, green cable connect to grounding.
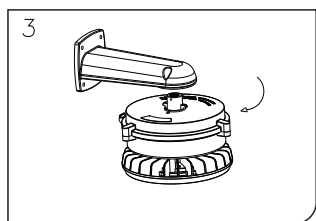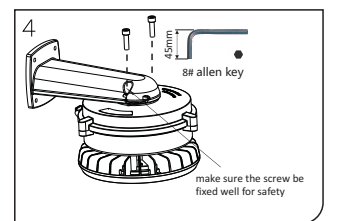
Quick Arm Mounting without open driver box

1. Drill 4x holes as above distance, and fix the arm on the wall, tighten 4x screwes as Fig.1.

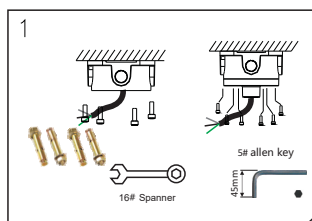2. Contact the power AC wire with lamp, put the terminal into the arm.

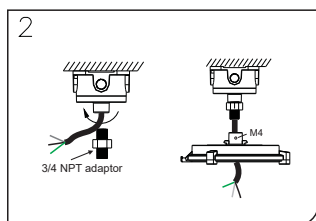3. Match the circle part with arm, and rotate it to right.

4. Tighten 2x screws to avoid the lamp loosed.

Arm or Ceiling Mounting by openning driver box

1. Install the junction box to ceiling the via 4x expansion bolts, tighten the junction box cover screws by 5# allen key.

2. Through the cable to the hole of adaptor, install the 3/4" NPT adaptor and tighten it. Tighten the driver enclosure cover to adaptor. Finally, tighten M4 screw to avoid loosing.
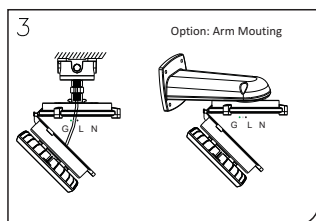
3. Hang the lamp housing to the driver enclosure cover, contact the AC wire as black one to live wire, white one to null wire, green one to grounding.
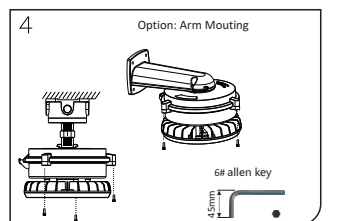
4. Tighten 3x M8 screws for driver enclosure as above.