HMOO Series
Hazardous Location LED Luminaire

Product Description:
The HMOO 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 HMOO Series is IP66 and IK10 rated. An adjustable U-Bracket and pendant mounting are standard.

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
• Food and distilling
• Alcohol Industry
• Steel and aluminum factories

Pendant Mounting standard

Globe & Guard option

Features:

• Heavy-duty and high impact resistance
• Replaceable LED board and driver
• Standard U bracket and 1 meter cord
• 3 Hour Emergency battery backup available: 400W sizes
• 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
  o 277-480V
  o 12-48VDC
• Operating Temperature:
  o 20 - 80W : -40°C - 50°C (-40°F - 122°F)
  o 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 (Marine Rated)
• **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

Standard U-Bracket

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

Other Markings / Standards

• IP66
• IK10 (Impact)

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

5 Year and 10 Year Warranties Available

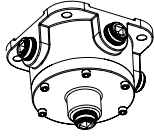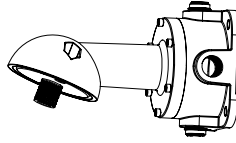BAA and TAA available. Contact factory for more information and pricing.

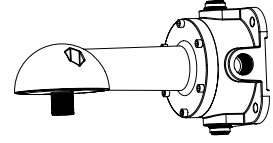2024.02

Mounting Accessories
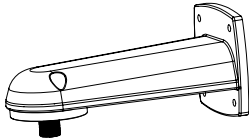
OPEB: Junction Box

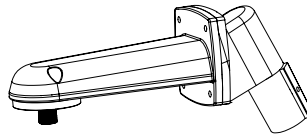**OPWA25: 25° Wall Mount & Junction Box**
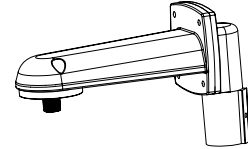
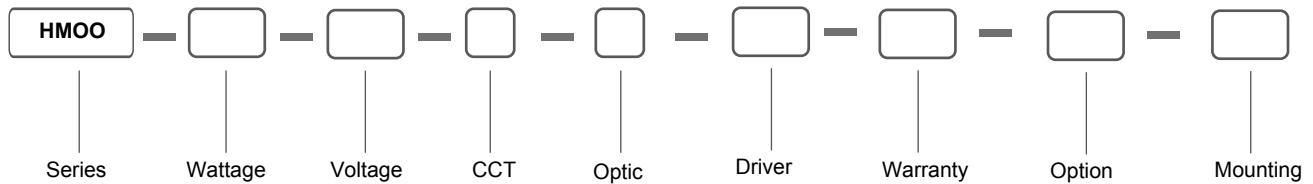**OPWA90: 90° Wall Mount & Junction Box**

OPWA: 90° Wall Mount

OPPS25: 25° Pole Mount
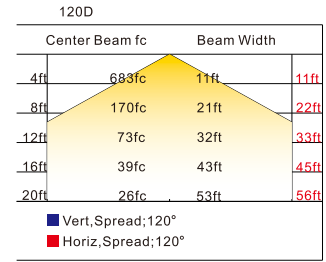
OPPS90: 90° Pole Mount

Ordering Information

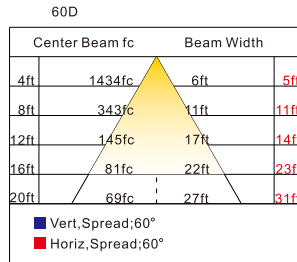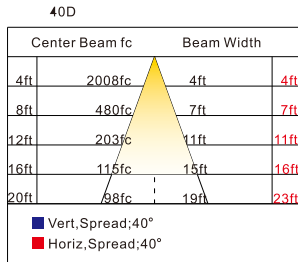| HMOO | – | ☐ | – | ☐ | – | ☐ | – | ☐ | – | ☐ | – | ☐ | – | ☐ | – | ☐ |

Series — Wattage — Voltage — CCT — Optic — Driver — Warranty — Option — Mounting

SERIES	WATTAGE	VOLTAGE	COLOR TEMP	OPTIC	DRIVER	WARRANTY
HMOO	2 = 20W	A = AC100-277V	S = 3000K	M = 40°	D = 0-10V Dimming	5Y = Five Year Warranty
	4 = 40W	B = AC200-480V	I = 4000K	N = 60°	ND = No Dimming	10Y** = Ten Year Warranty**
	6* = 60W*	C = 12-48VDC	C = 5000K	O = 90°		
	6L* = 60W*		K = 6000K	P = 120°		**Please contact factory for 10yr warranty option
	8 = 80W					
	10 = 100W					
	12 = 120W					
	15 = 150W					
	20 = 200W					
	25 = 250W					
	30 = 300W					
	35 = 350W					
	40 = 400W					

*6 (60W) dimensions = 9.06x9.06x8.99

*6L (60W) dimensions = 10.6x10.6x10.5in

OPTION

EM	=	Emergency Battery Backup (100-400W)
CG	=	Clear Globe
FG	=	Frosted Globe
WG	=	Wire Guard
CGG	=	Clear Globe w/ Wire Guard Frosted
FGG	=	Globe w/ Wire Guard
DREF	=	Dome Reflector
AREF	=	Angle Reflector
BAA***	=	Buy American Act Compliant**
TAA***	=	Trade Agreements Act Compliant**

**Please contact factory for BAA and TAA options.

MOUNTING / ACCESSORIES

OPEB	=	Junction Box
OPCM	=	Ceiling / Surface Mounting & Junction Box: 3/4"
OPWA	=	NPT 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

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Photometric

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
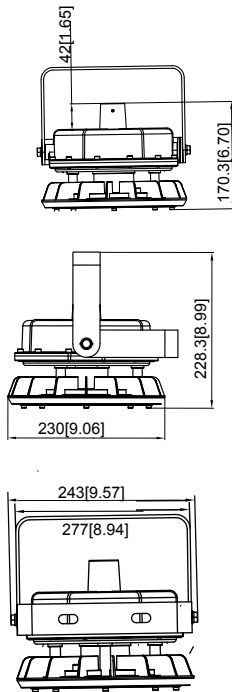
60W - 100W
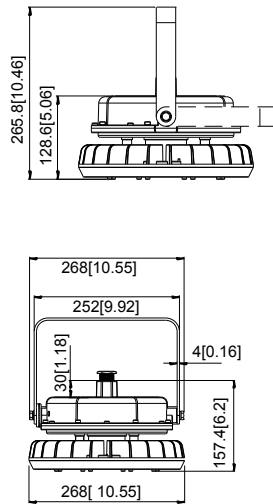
100W - 200W
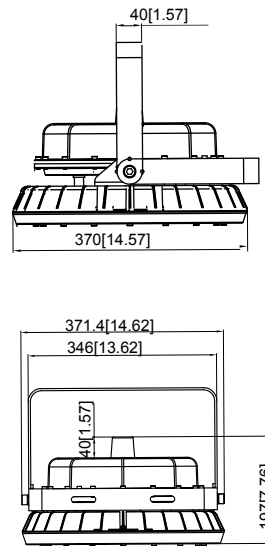
250W - 400W
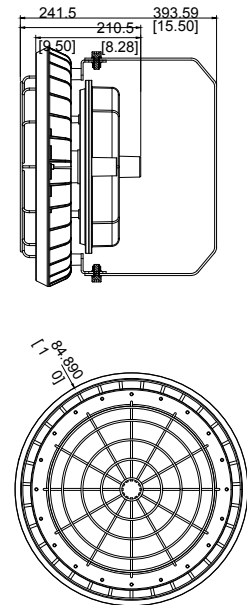
Lumen Chart

	5000K
20W	2,700 lm
40W	5,400 lm
60W	8,100 lm
80W	10,800 lm
100W	13,500 lm
150W	20,250 lm
200W	27,000 lm

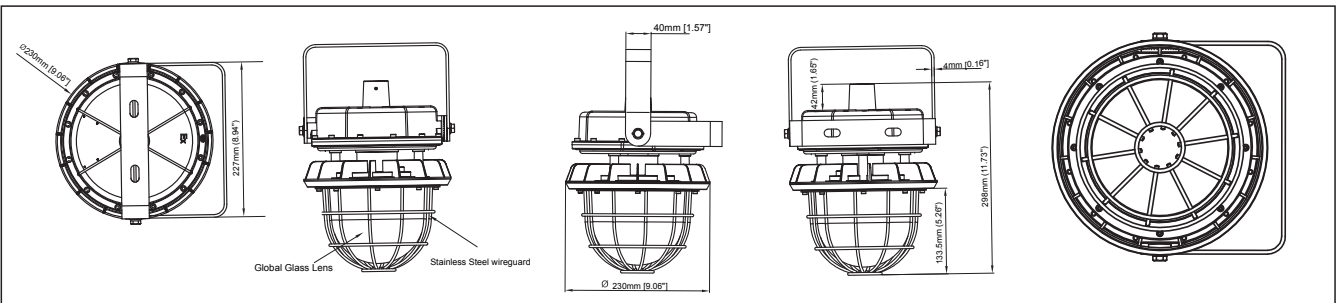|	5000K
250W	35,000 lm
300W	42,000 lm
350W	49,000 lm
400W	56,000 lm

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Mechanical Structure: Unit: mm or inch

20 Watt & 40 Watt Version

Standard Bracket and Flat Glass Lens
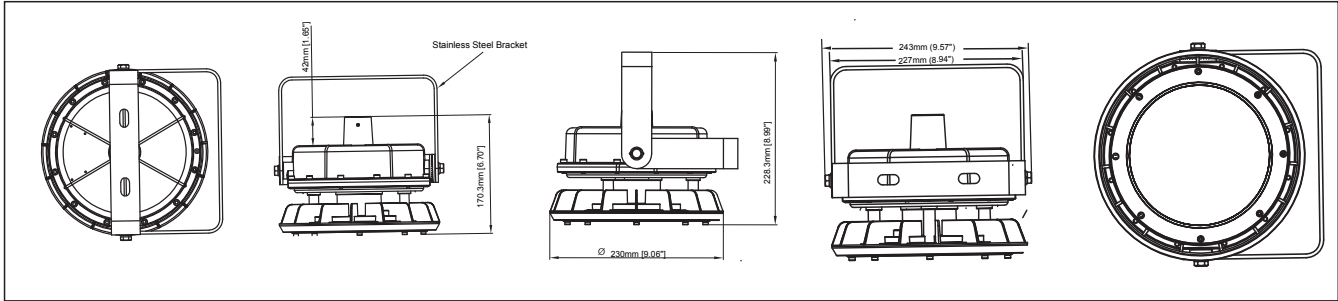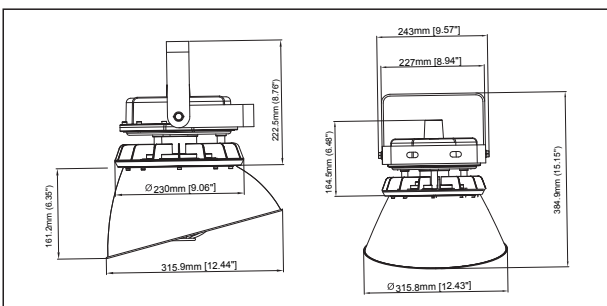

Standard Bracket and Wireguard
1.Bracket, Glass Lens, Wireguard and flat LED module.

This structure type with bracket, global glass lens and wireguard to generate 180° light distribution.
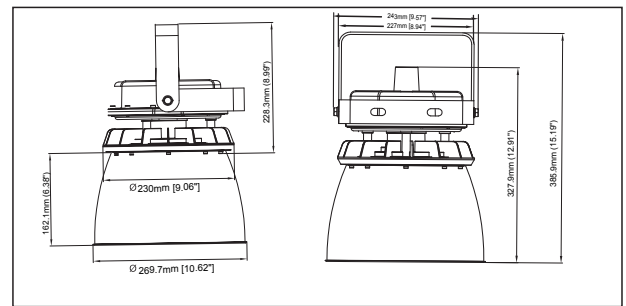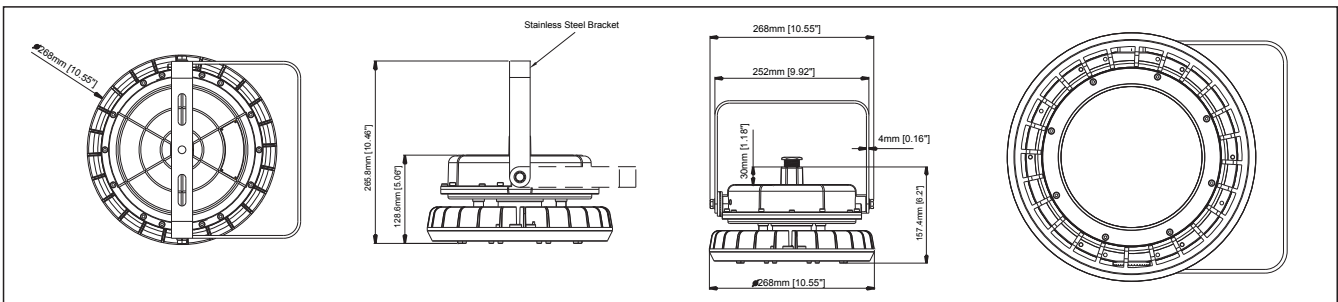
30° Angle Dome Reflector
1, Bracket, Global Glass Lens, flat LED module and 30° cut off angle reflector.

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.

60 Watt & 80W Version

Standard Bracket and Flat Glass Lens

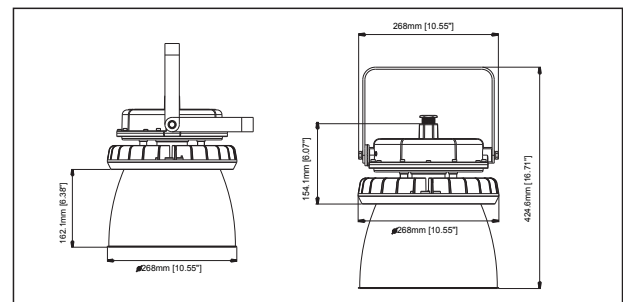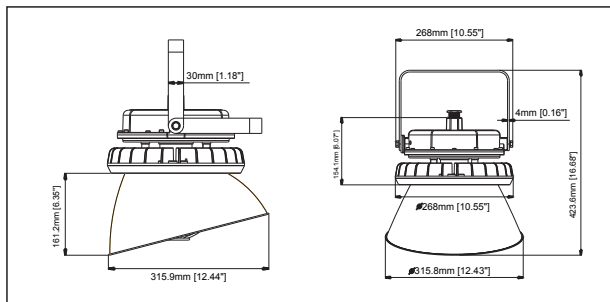This structure type with bracket,flat glass and optics lens to generate 40°,60°,90° and 120° light distribution.

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60 Watt & 80W Version CO

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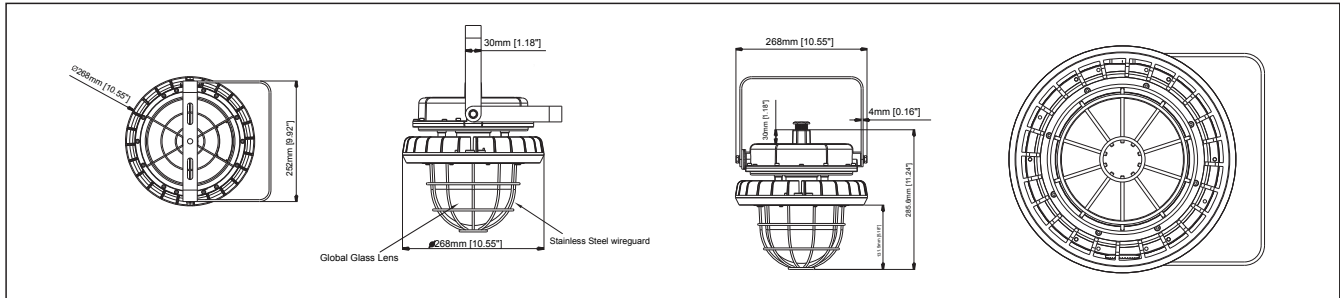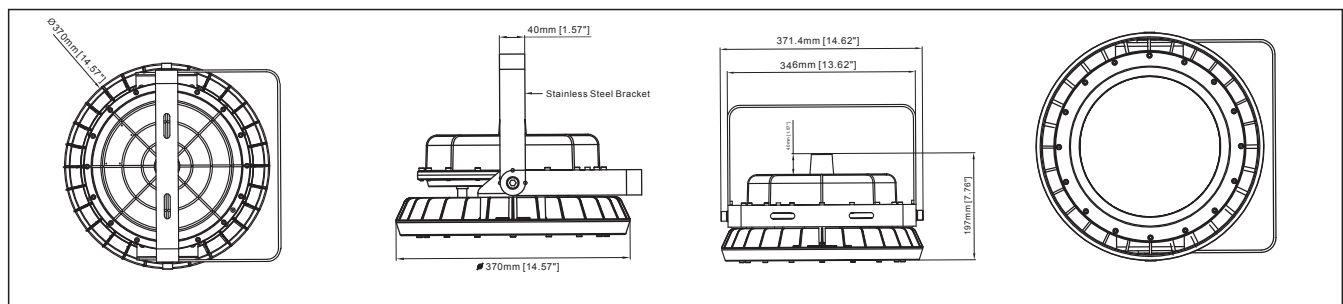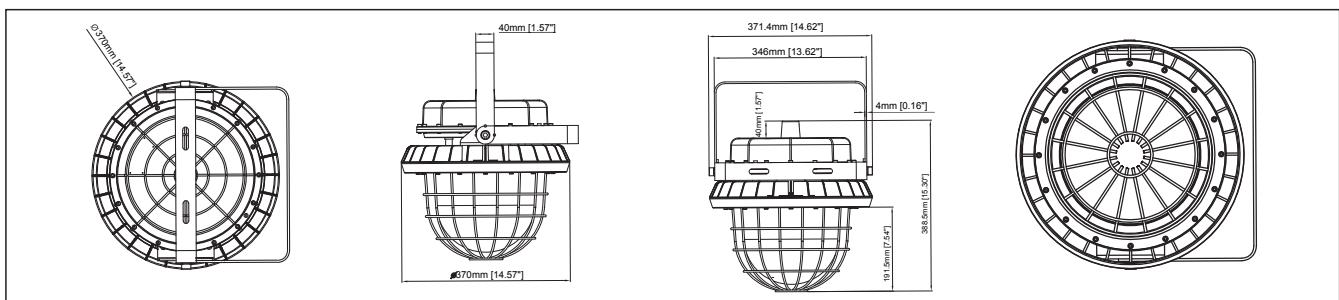

30° Angle Dome Reflector

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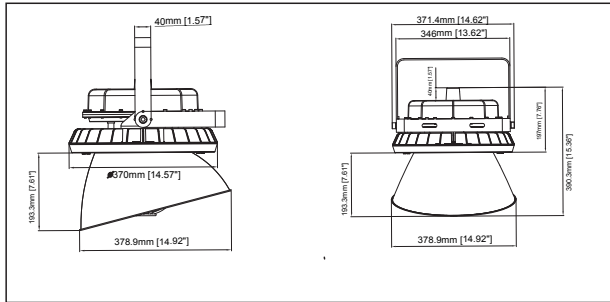1, Bracket, Global Glass Lens, Wireguard and flat LED module.

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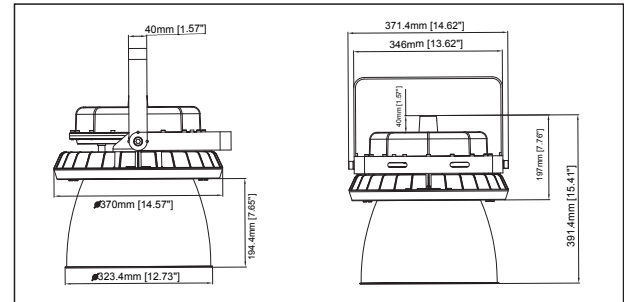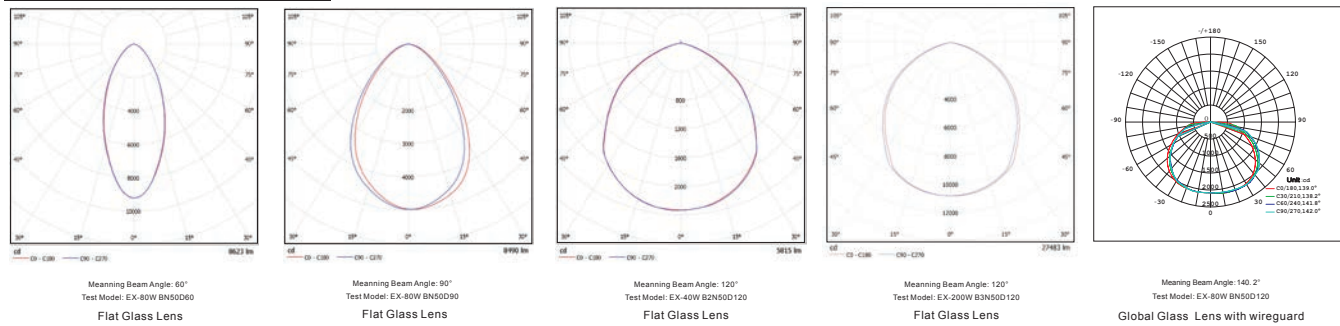
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30° Angle Dome Reflector
1, Bracket, Global Glass Lens, flat LED module and 30° cut off angle reflector.

40mm [1.57"]
371.4mm [14.62"]
346mm [13.62"]
40mm [1.57"]
197mm [7.76"]
193.3mm [7.61"]
Ø370mm [14.57"]
390.3mm [15.9"]
378.9mm [14.92"]
193.3mm [7.61"]
378.9mm [14.92"]

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

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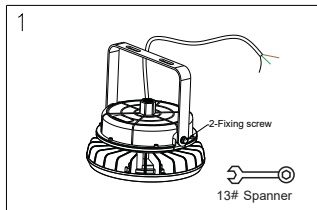1, Bracket, Global Glass Lens, flat LED module and dome reflector

40mm [1.57"]
371.4mm [14.62"]
346mm [13.62"]
40mm [1.5"]
197mm [7.76"]
194.4mm [7.65"]
Ø370mm [14.57"]
391.4mm [15.4"]
Ø323.4mm [12.73"]

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

Meaning Beam Angle: 140. 2°
Test Model: EX-80W BN50D120
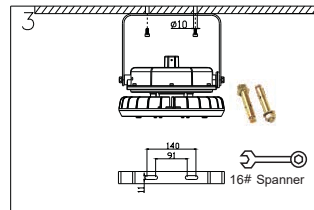**Global Glass Lens with wireguard**
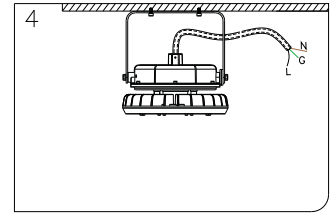
Ceiling Mounting

1 2-Fixing screw / 13# Spanner

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

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

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

3 Ø10 / 140 / 91 / 16# Spanner
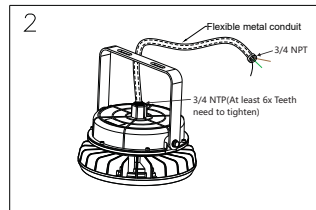
3. Drill 2x hole as Fig.2, the distance can be 91~140mm, fixing Ø10 expanded crews and bracket on ceiling.

4 N G L
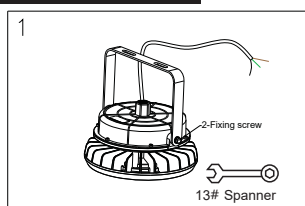
4. Connect the AC cable, Black cable conect to L, white cable connect to N, green cable connect to grounding.
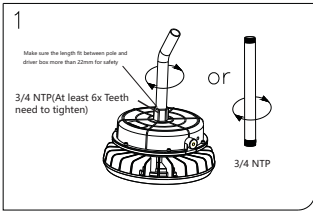
5 Ceiling mounting / Mounting Direction Adjustable Screw
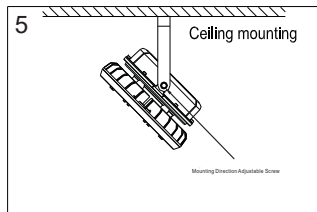
5. Adjust the beam angle from 0-180°.

Wall Mounting

1 2-Fixing screw / 13# Spanner

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

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

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

3 16# Spanner / 140 / 91
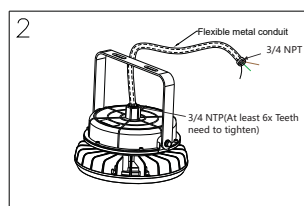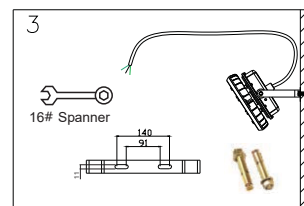
3. Drill 2x hole as Fig.2, the distance can be 91~140mm, fixing Ø10 expansion screws and bracket on ceiling.
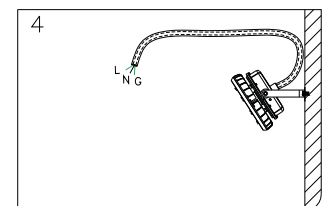
4 L N G

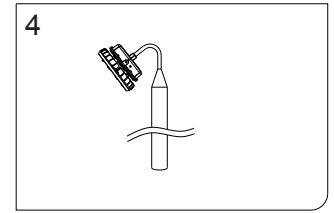4. Connect the AC cable, Black cable conect to L, white cable connect to N, green cable connect to grounding.

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Job Name: _____

Type: _____

Part #: _____

Notes: _____

Pole Pendant

1

Make sure the length fit between pole and driver box more than 22mm for safety

3/4 NTP(At least 6x Teeth need to tighten)

or

3/4 NTP

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

2

4-Ø10.5

N
G
L
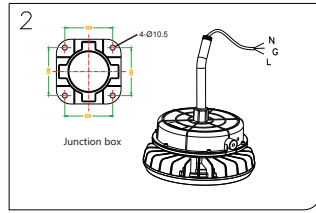
Junction box

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

3

Junction box

Chain of balance
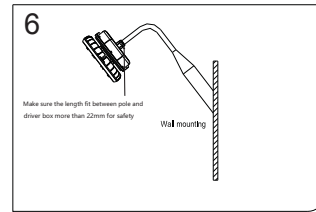
Expanded crews

100mm

100mm

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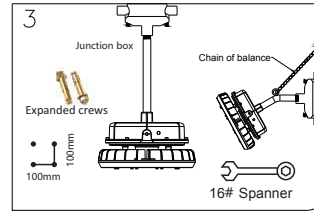
3. Drill 4x Ø10mm holes, as 100mm distance, install the junction box to the wall or ceiling as Fig.3, tighten the pole to the box, and adjust the chain of balance.

4

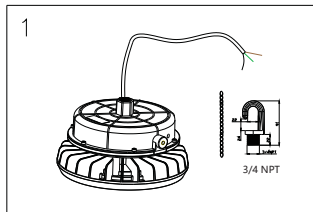Optional: Install the fixture to the long pole after cable connecting.

5

pole length can be Adjustable

Make sure the length fit between pole and driver box more than 22mm for safety

Model: Ex-D01
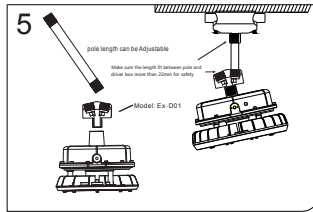
1. Adjustable pole installation. With this adjustable kit, you can Make any light distribution direct as you want.

6

Make sure the length fit between pole and driver box more than 22mm for safety
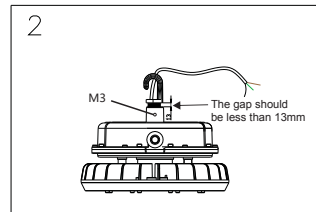
Wall mounting

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

Hook Pendant

1

3/4 NPT

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

2

M3

The gap should be less than 13mm

2. Tighten the hook with the fixture, at least 6x teeth need to tighten, fix the M3 screw to avoid the hook loosing .
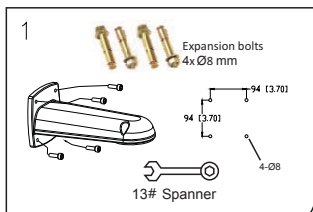
3
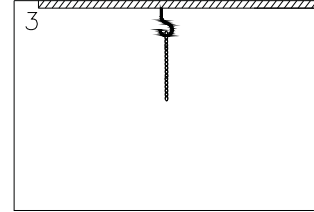
3. Drill 1 expansion screw hole and install it, and hang the chain as Fig.3.

4

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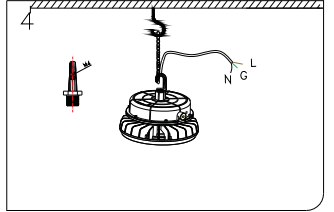
4. Hang the fixture to the hook as above, connect the AC cable, Black cable connect to L, white cable connect to N, green cable connect to grounding.
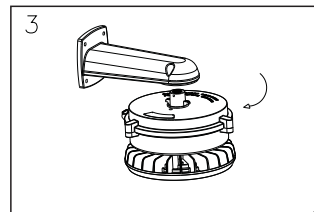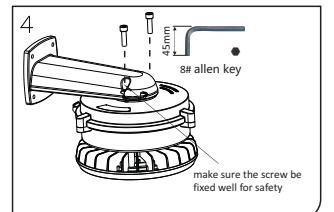
Quick arm Mounting without open driver box

1

Expansion bolts 4x Ø8 mm

94 〔3.70〕

94 〔3.70〕

4-Ø8

13# Spanner

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

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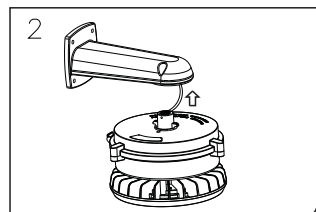
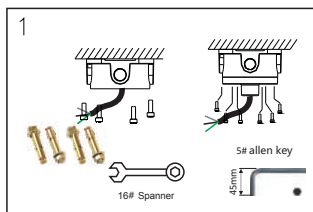2. Contact the power AC wire with lamp, put the terminal into the arm.

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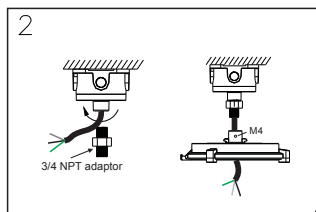
3. Match the circle part with arm, and rotate it to right.

4

45mm

8# allen key

make sure the screw be fixed well for safety

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

Arm or Ceiling Mount by Opening Driver Box

1

5# allen key

16# Spanner

45mm

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

2

M4

3/4 NPT adaptor

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

Option: Arm Mouting

G L N

G L N
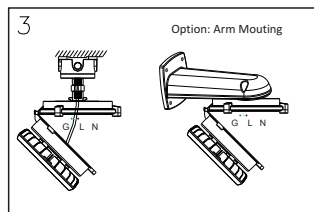
3. Hang the lamp housing to the driver enclosure cover, contact the AC wire as black one to live wire, white one to null wire, green one to grounding.

4

Option: Arm Mouting

6# allen key

45mm
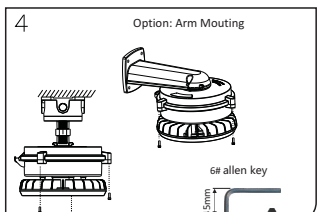
4. Tighten 3x M8 screws for driver enclosure as above.

2024.02