

LED High Bay Light

YWHBFM-230H-XXXXX with Microwave Motion Sensor

Product Specification



AL080



PC080



AL120



PC120

◆ Introduction

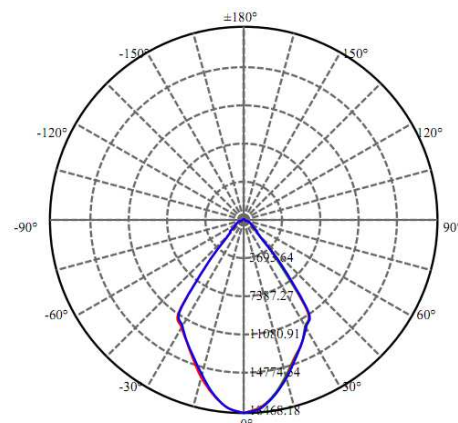


High power LED high bay light, using high brightness LED chip, high transmission radiator, lamp shade adjusting beam angle. It can be widely used in energy-intensive, large amount electricity, long time using electricity environment. This product is equipped with a Microwave Motion Sensor. When somebody/something is close to the detection zone, the light turns on automatically. Dimming can be adjusted to a specified brightness and totally turn off at a stated time. Furthermore, with insufficient ambient light, the sensor will switch ON. It can solve industrial electricity waste effectively.

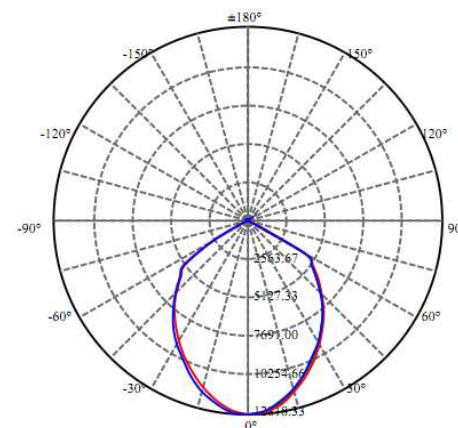
LED High Bay Light Technical Data

Model	YWHBFM-230H-AL080	YWHBFM-230H-AL120
Max. Power	230W	230W
Luminous flux	28750LM	29900LM
Luminous efficiency	125lm/w	130lm/w
Beam Angle	80°	120°
Lamp Shade	1070AL / PC	1070AL / PC
CCT	3000-3500K / 4000-4500K / 6000-6500K	
LED chip	Bridgelux	
Driver	Mean Well	
Input Voltage	100-240VAC	
Driver efficiency	>0.9	
Power factor	>0.95	
CRI	Ra≥80	
Heat Sink material	6063 AL	
Insulation grade	Class I	
Working Tem.	-30~+45℃	
IP Code	IP20	
Light body color	Black / Silvery	
N.W.	6.3KG	
Life Span	>100,000 Hours	
Warranty	7 years	

◆ Luminance distribution

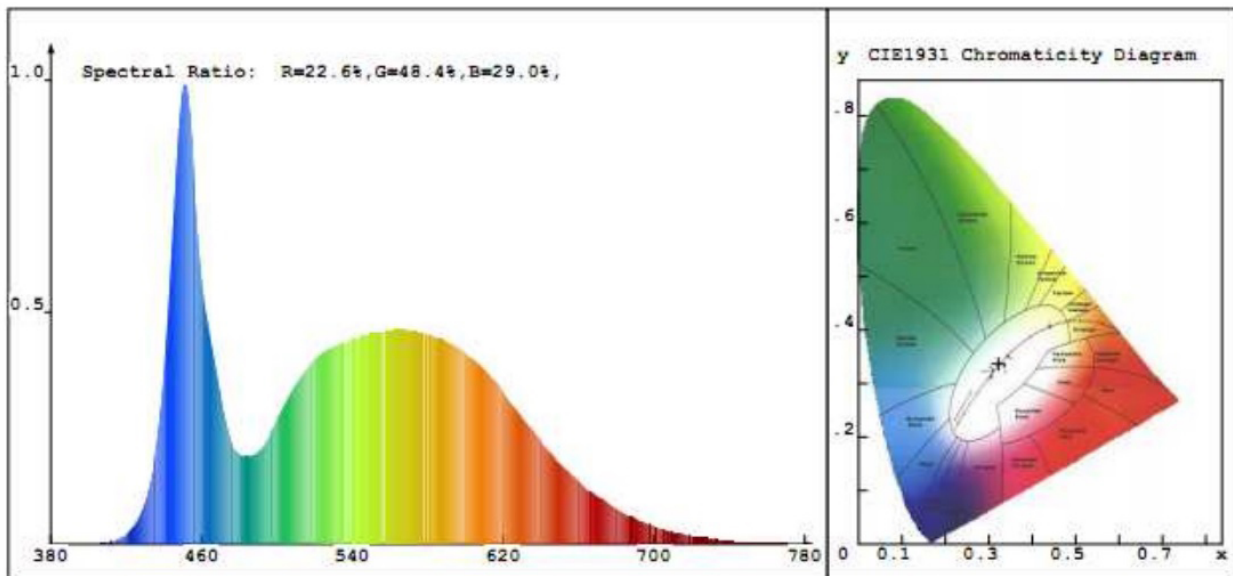


YWHBFM-230H-AL080



YWHBFM-230H-AL120

Integrating sphere test report



Chroma Parameters

Chro.Coord.: x=0.3221 y=0.3370 u=0.2013 v=0.3159 duv=0.0027
 CCT: 5982K Dominant Wave.: 496.0nm Purity: 3.6%
 Flux RGB Ratio: R=13.9%, G=82.5%, B=3.6% Peak Wave: 451.6nm Half Width: 20.1nm

Rendering Index: Ra= 81.0

R1 =80 R2 =87 R3 =90 R4 =80 R5 =79 R6 =79 R7 =87 R8 =67
 R9 =0 R10=66 R11=79 R12=53 R13=82 R14=95 R15=75

Photo Parameters

Flux: 30133.81lm Effi.: 130.9lm/W Radiant: 99829.2mW Iv: 0.0mcd

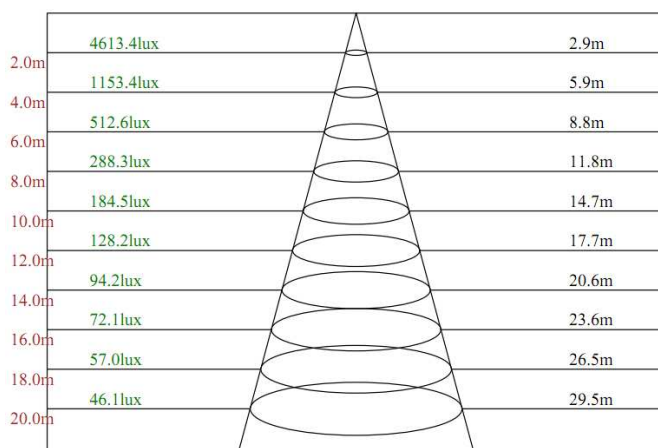
Ele. Parameters

Voltage: U=240.400V Current: I=0.9840A
 Power: P=230.20W Power Factor: PF=0.972

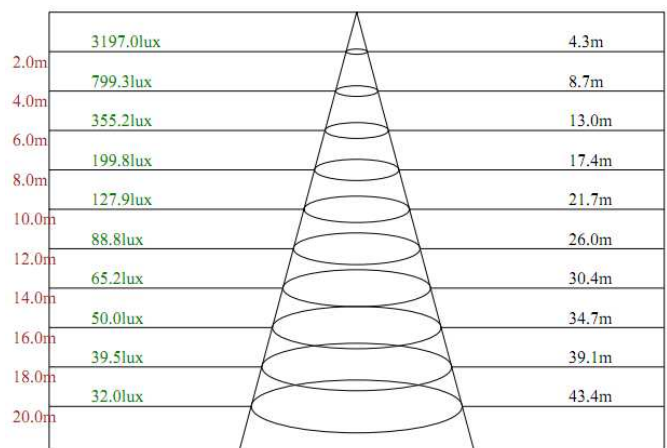
Instrument state

Instrument: Hopoo HP8000S Integral Time: 0.787ms VPeak: 13289
 VDark: 1198 Scan Range: 380-780nm Product ID: 201301252

Illuminance diagram



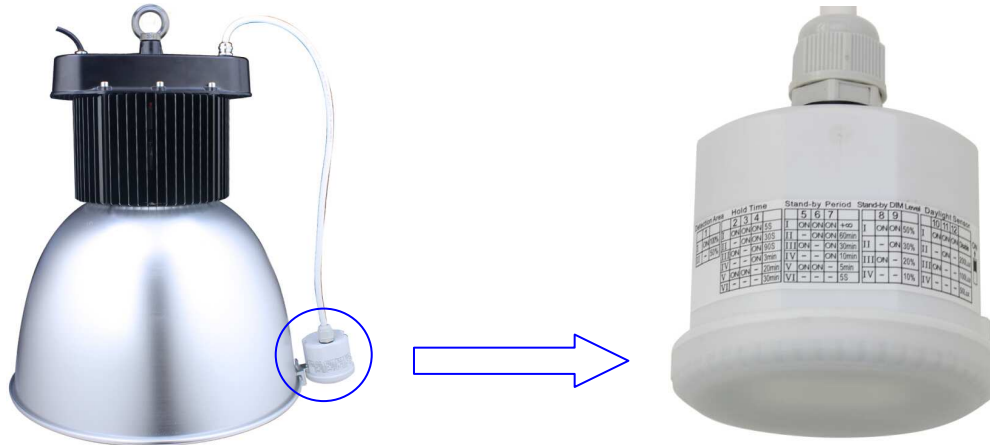
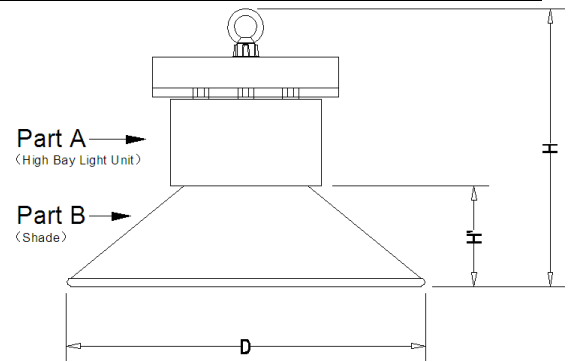
YWHBFM-230H-AL080



YWHBFM-230H-AL120

◆ Outer Size Diagram

Model	Lamp Shade	H(mm)	H'(mm)	D(mm)
YWHBFM-230H-AL080	80°	530	260	∅ 420
YWHBFM-230H-AL120	120°	415	145	∅ 500



Microwave Motion Sensor

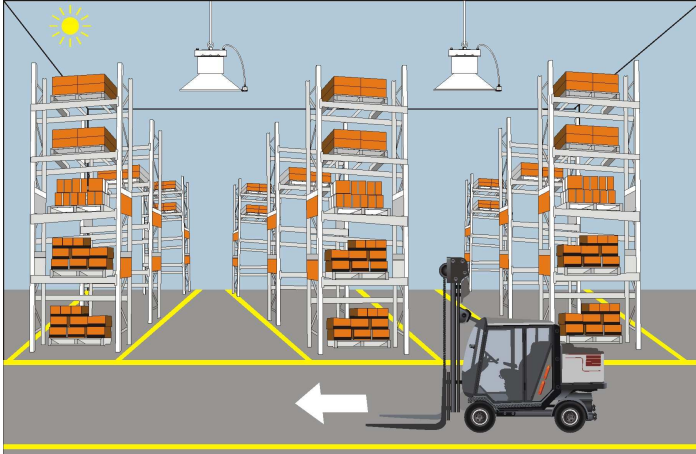
◆ Microwave Motion Sensor Introduction

- Wide detection area, range up to 16m in diameter and mounting height Max 15M. Suitable for warehouse use.
- Special clip for installation easy to be fixed with high bay.
- The Microwave motion sensor is innovative and active motion detectors with HF system 5.8GHz. Motion can be detected through plastic, glass and thin non-metal materials. Except the higher mounting height Max. 15m.

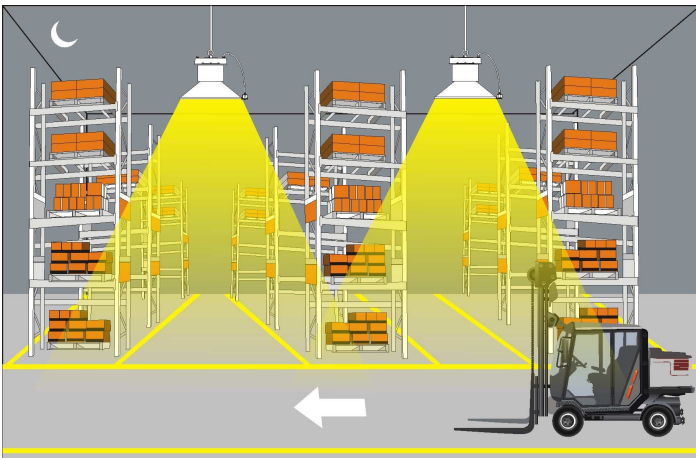
Microwave Motion Sensor Technical Data

Operating voltage	120~277Vac, 50Hz/60Hz	
Rated load	400W@120Vac, 800W@220-277Vac	
HF system	5.8GHz±75MHz, ISM wave band	
Transmitting power	<0.5mW	
Power consumption	≤0.8W(standby), <1.5W(operation)	
Detection zone	Max.(D x H): 16m x 15m	
Detection sensitivity	100% / 50%	Apply to ON and OFF
Hold time	5s / 30s / 90s / 3min / 20min / 30min	Apply to ON and OFF
Daylight sensor	50lux / 100lux / 200lux / Disable	Apply to DIM function
Stand-by period	5s / 5min / 10min / 30min / 1h / Disable	Apply to DIM function
Stand-by dimming level	10% / 20% / 30% / 50%	Apply to DIM function
Mounting height	15m Max	
Motion detection	0.5~3m/s	
Detection angle	360°(ceiling installation)	
Operating temperature	-35℃~70℃	

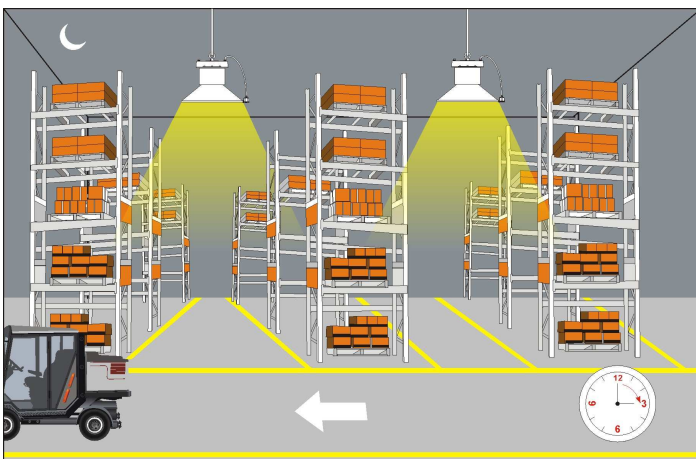
Dimming Function



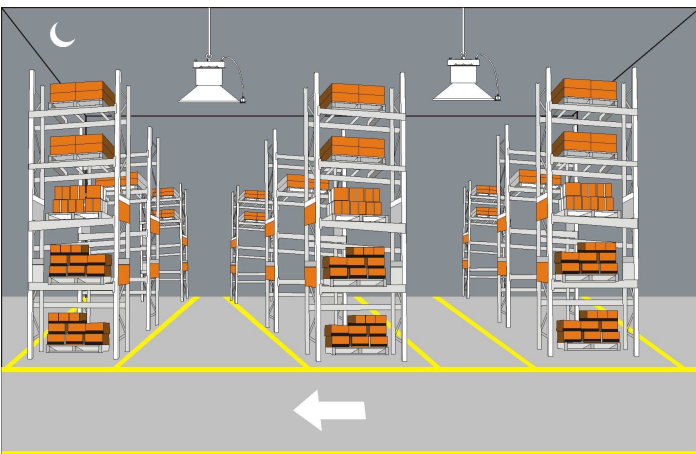
With sufficient ambient light, the sensor does not switch on the High Bay Light.



With insufficient ambient light, the sensor switches on the High Bay Light when motion is detected.

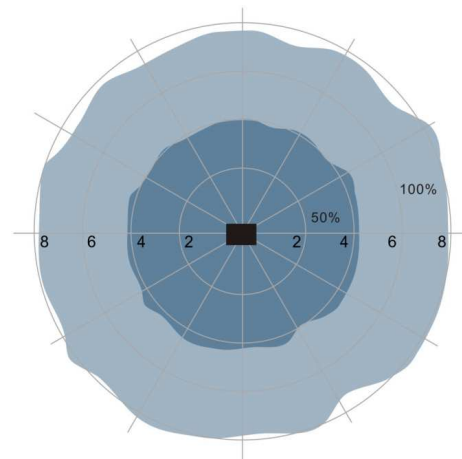
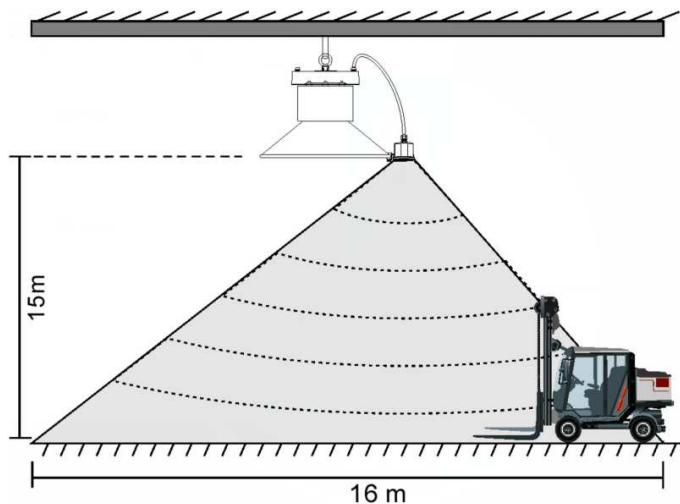


After hold time, the sensor dims the High Bay Light at a low light level if no new motion trigger.



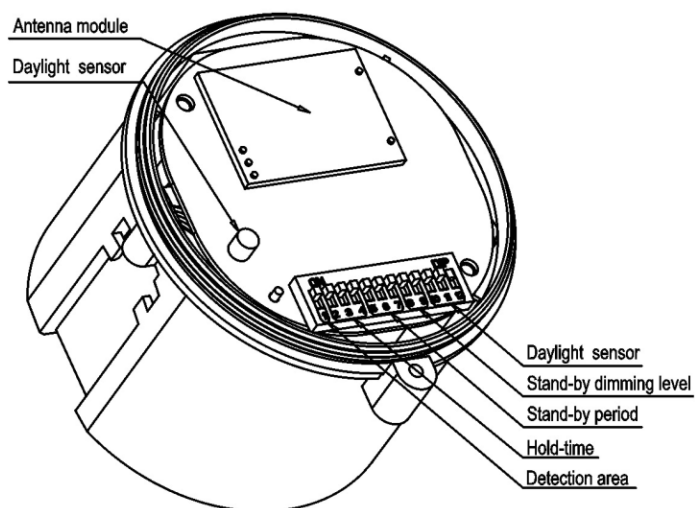
After stand-by period, the sensor switches off the High Bay Light if no motion is detected in its detection zone.

Detection Pattern



Ceiling mounting pattern (Unit: m)

Setting



ON		1	
↑	I	ON	100%
□	II	—	50%

By selecting the combination on the DIP switch, sensor data can be precisely set for each specific application.

If use Sensor ON/OFF Function, only need to adjust 1-4 switch.

If use Sensor ON/OFF Function, also with Dimming Function, adjusting 5-12 switch.


Detection area

Detection area can be reduced by selecting the combination on the DIP switches to fit precisely each application.

		2	3	4	
ON ↑ □	I	ON	ON	ON	5S
	II	—	ON	ON	30s
	III	ON	—	ON	90s
	IV	—	—	ON	3min
	V	ON	ON	—	20min
	VI	—	—	—	30min


Hold time

Refers to the time period the lamp remains at 100% illumination after no motion detected.

		5	6	7	
ON ↑ 	I	ON	ON	ON	$+\infty$
	II	—	ON	ON	60min
	III	ON	—	ON	30min
	IV	—	—	ON	10min
	V	ON	ON	—	5min
	VI	—	—	—	5s


Stand-by period

Refers to the time period the lamp remains at a low light level before it completely switches off in the long absence of people. When set to Disable mode, the low light is maintained until motion is detected.

		8	9	
ON ↑ 	I	ON	ON	50%
	II	—	ON	30%
	III	ON	—	20%
	IV	—	—	10%

Stand-by Dimming level

The low light level you would like to have after the hold time in the long absence of people.

		10	11	12	
ON ↑ 	I	ON	ON	ON	Disable
	II	—	ON	—	200lux
	III	ON	—	—	100lux
	IV	—	—	—	50lux

Daylight sensor

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold.

When set to Disable mode, the daylight sensor will switch on the lamp when motion is detected regardless of ambient light level. 200lux: twilight operation, 50lux, 30lux: darkness operation only.

Note that daylight sensor is active only when lamp totally switches off.

Product Attribute

- Adopts single LED module source design, high thermal conductivity, low lumens depreciation and uniform light color
- High PFC, Long lifespan >100000 hours, low carbon ad lead free
- Resistance to fluctuation
- Protection with short circuit, over current, over voltage and over temperature
- 100% full capacity aging testing
- Instant start-up
- Excellent appearance design, easy installation, easy disassembly, and wide application
- With Microwave Motion Sensor switch function, it reduces cost, and save electricity

Application

Only for indoor use, such as workshop, warehouse, toll station, supermarket, exhibition hall, gymnasium and other indoor illumination places.

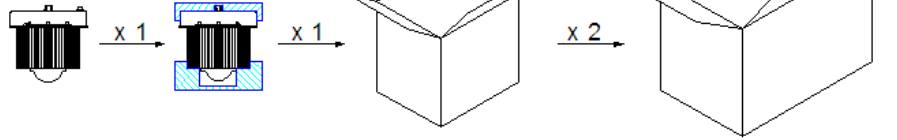
Not suitable places: Outdoor, High dust, high oil, inflammable or low noise required places.



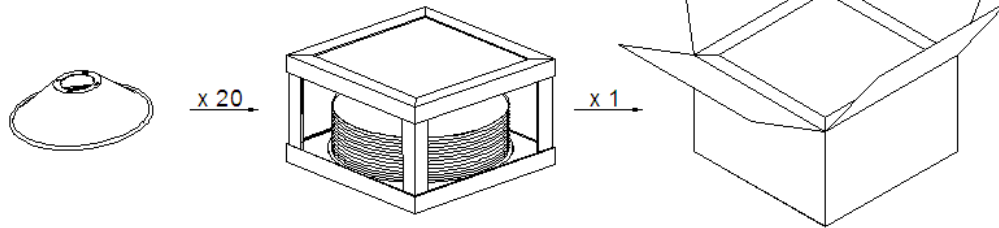
Packaging

Separately package between LED high bay light body (PART.A) and lamp shade (PART.B).

PART A : 30.0x24.5x35.5cm (1pcs/Box)
50.0x31.5x37.5cm (2Box/ctn)

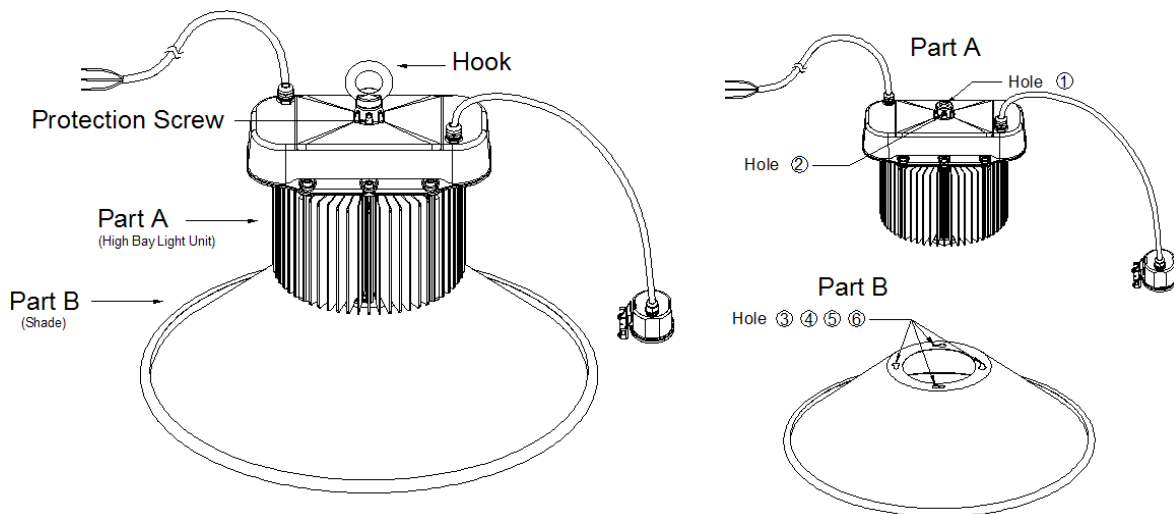


PART B : 80° 44.5x44.5x42.0cm (20pcs/ctn)
120° 52.5x52.5x29.0cm (20pcs/ctn)

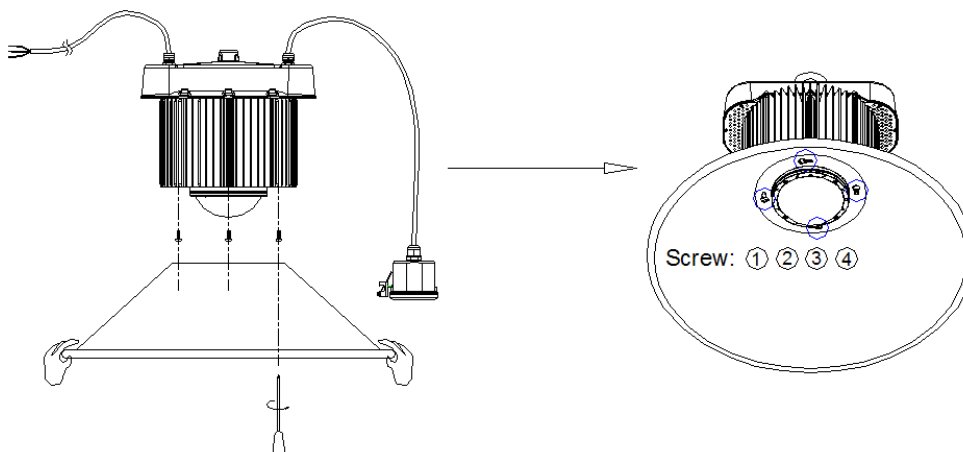


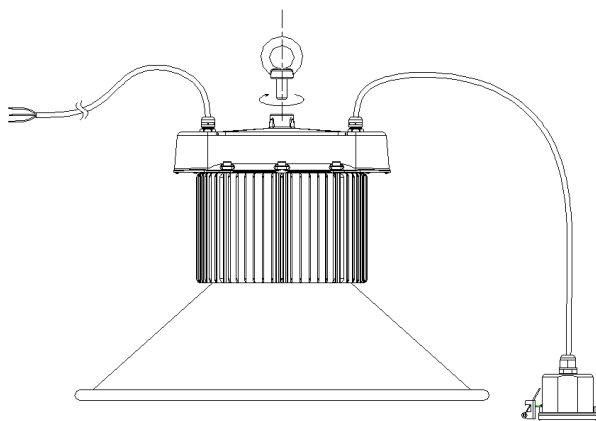
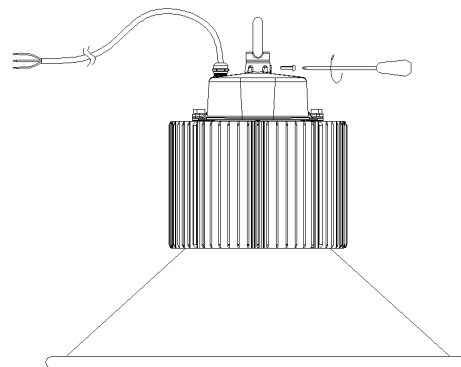
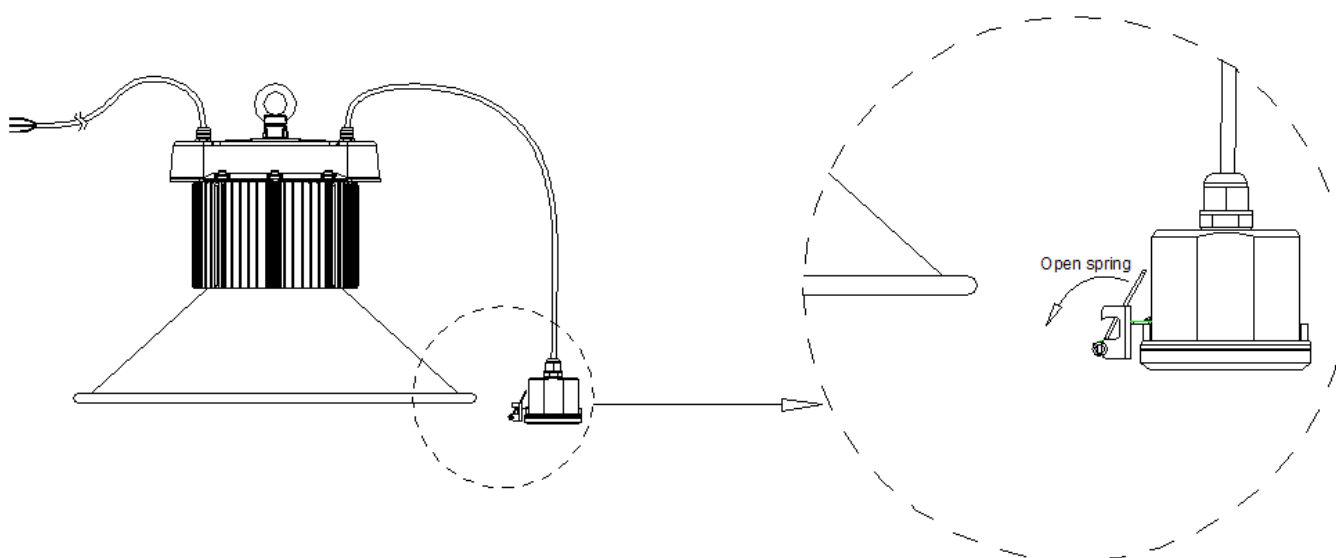
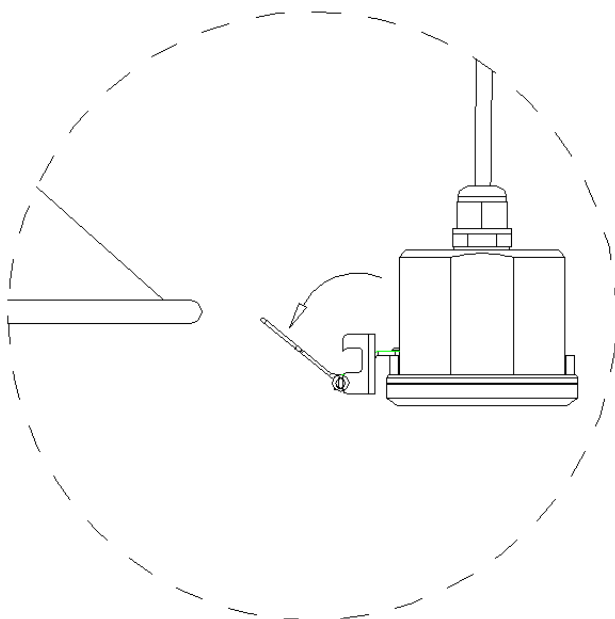
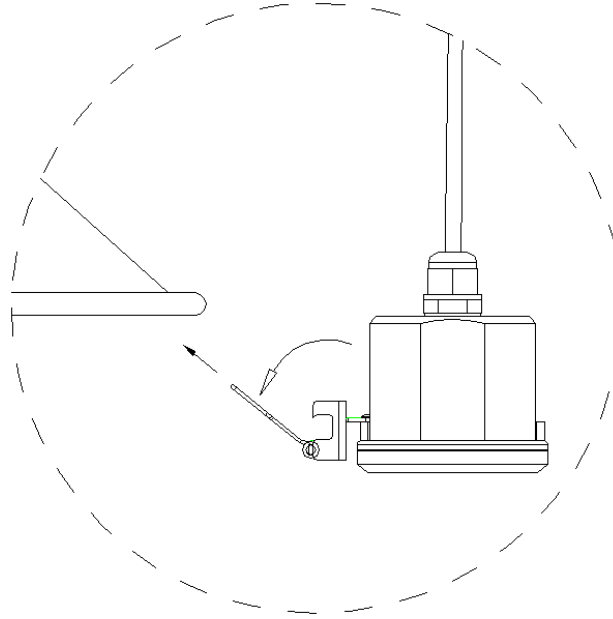
Installation Method

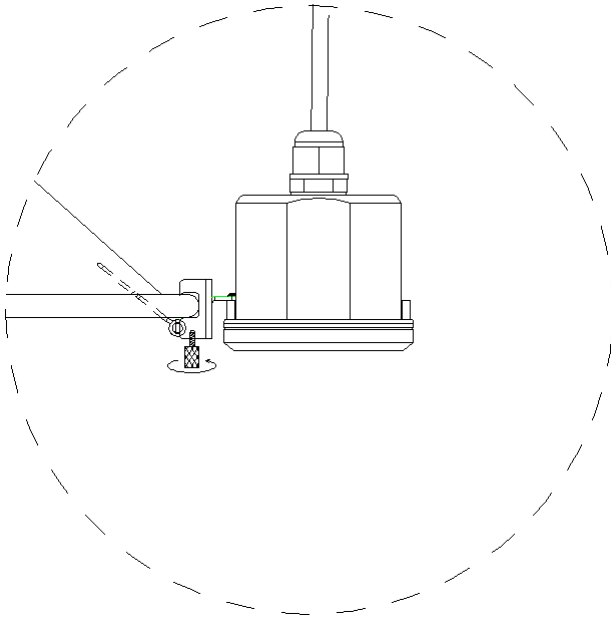
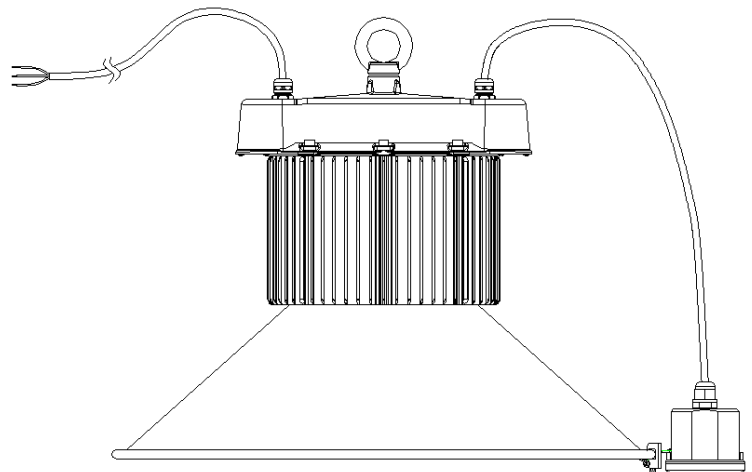
Function indicator diagram:



Pic.1 Installation Shade



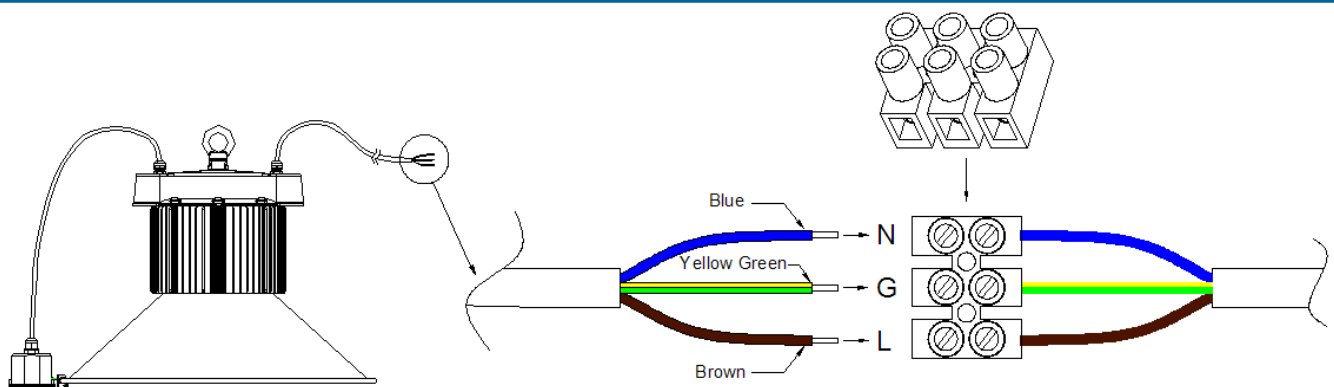
Pic.2 Installation Hook**Pic.3 Installation Screw****Pic.4 Installation Microwave Motion Sensor****Pic.5 Open Spring****Pic.6 Installation Spring**

Pic.7 Fixing Screw**Pic.8 Finish****Note:**

1. Installation lamp shade: Firstly loose the screws ①②③④, set the lamp shade hole ③④⑤⑥ correspondingly to the four screws, then spin the lamp shade anticlockwise to assure it, tighten the bolts finally; (as Pic. 1)
2. Installation hook: Screw the hook into hole clockwise ①. (as Pic. 2)
3. Installation the protection screw: Screw M4*16 into hole ②, assure tighten it well. (as Pic. 3)
4. As Pic. 1 – Pic. 7, installing Microware Motion Sensor
5. As Pic.8, the installation finished

Installation Caution

1. Installation should be done by professional electricians.
2. Please make sure all power is turned off before installation completed.
3. Please ensure the power supply wire grounding is normal.
4. Please ensure the hook tighten well.
5. When connecting wires, don't make any frictions or drop off the product, otherwise will cause damage.
6. Be sure to install the lights correctly, the power cord bare wire must be connected with insulation protection.
7. When connecting wires, should clearly know Neutral wire , Earth wire and Live wire to assure safety. After examination, switch on.
8. Don't cover anything on or touch the emitting section and the heat sink during lighting.
9. The luminaries should be positioned so that prolonged staring into the luminaries at a distance closer than 3 m is not expected".
10. Luminaries has two degrees of protection provided: IP65 for LED module part, IP20 for another parts.

Power Supply Connection

Power Supply Connect Caution

1. If the Power cord of this luminaries is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.
2. Non –user replacement light source : "The light source contained in this luminaries shall only be replaced by the manufacturer or his service agent or a similar qualified person."



Caution, risk of electric shock

3. A wiring device shall be provided for connection to a branch circuit. The wiring device shall be rated for the temperatures, locations, voltage, and current encountered during normal operation.

For Example

- 3 PIN Screw less terminals
- Rated voltage 250V
- Rated connecting capacity 1.5-2.5mm²
- Conductors be tinned
- If necessary please provide the wiring compartment placed the terminal block

Trouble removal & Maintenance

● Trouble removal (Non professionals should not disassemble the lamp.)

Fault finding and solutions: When examination, observe any change in colour circumstances at LED source appearance or damage, any obvious breakage of connections, loose power supply connections, any short circuit, any obvious damage condition please replace with new LED source or driver.

Defect	Possible factors	Solutions
LED source not bright	Wrong connecting wires	Loose the screws, re-connecting the wires
	LED source damage	Replace LED source
	Power failure	Replace LED driver
LED source flicker	Virtual power supply connecting	Loose the screws, re-connecting the wires
	Input voltage fluctuation	Confirm input voltage
	Power failure	Replace LED driver

● Maintenance

1. Please make sure all power turned off before maintenance.
2. Clean the shade surface periodically, to keep good reflectivity.
3. Clean the lamp heat sink periodically, to keep good heat dissipation.
4. Clean with dry cloth, don't use water or corrosive liquid.
5. When replace driver, connect the wires as follows: AC Power supply three core wires, connect power input : brown line connect with the "L", blue line connect with the "N" , yellow-green or yellow line connected into the lamp body of insulation. Light source lead to connect power output: the red connection with the light source is the positive (red line), the black thread and the light source cathode (black line), positive and negative must not be connected wrong.

Guarantee clause

- **Product guarantee**

SHENZHEN YOUWIN OPTRONICS CO., LTD guarantee within 7 years from delivering to customers, we will be responsible for repair and replacement, if any conditions such as not bright or flicker of LED source under right preservation, installation, usage and maintenance.

- **Disclaimer and limitation**

1. Under any circumstances, any quality problems compensation should be within the guarantee period.
2. The product guarantee does not include: Product damage caused by.
 - 2.1 The negligence of storage, transportation or improper handling.
 - 2.2 Incorrect operation or not proper usage of product.
 - 2.3 Any damage caused by repair or modifications from unauthorized person.
 - 2.4 Caused by the forces of nature, irresistible factors of product damage, such as Earthquakes, typhoons, tornadoes, volcanic eruptions, floods, lightning, heavy snow, war, etc
3. If the product serial number has been changed, altered or blur, it will no longer enjoy the corresponding guarantee.
4. This guarantee is not responsible for repair or replacement of the transport, customs clearance fee.

Remark:



Correct Disposal of this product. This marking indicates that this product should not be disposed with other

household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

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