

# IP66 LED Waterproof Luminaire

## with Power adjustable

## Emergency

## Sensor

## TW

RW08 SERIES



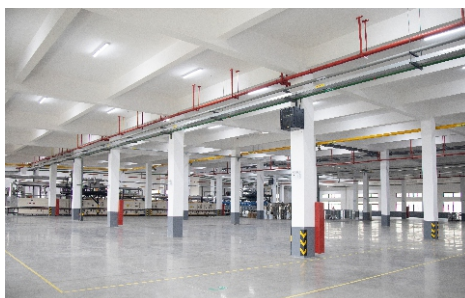
Powered by **PHILIPS**    Powered by **OSRAM**    Powered by **TRIDONIC**

## Advantages

- ⊙ RW08 is the second generation of RW08, which is our hot-selling LED tri-proof light.
- ⊙ As the upgraded series of RW08, the structure of the metal plate has been redesigned in order to decrease the processes of
- ⊙ production. This generation could provide with 2 solutions of luminous efficacy- 120lm/W or 130lm/W.
- ⊙ It is convenient for installation and maintenance due to the design of external clips.
- ⊙ Triangular screws are available for option, which could prevent from opening and theft.



Warehouse



Factory

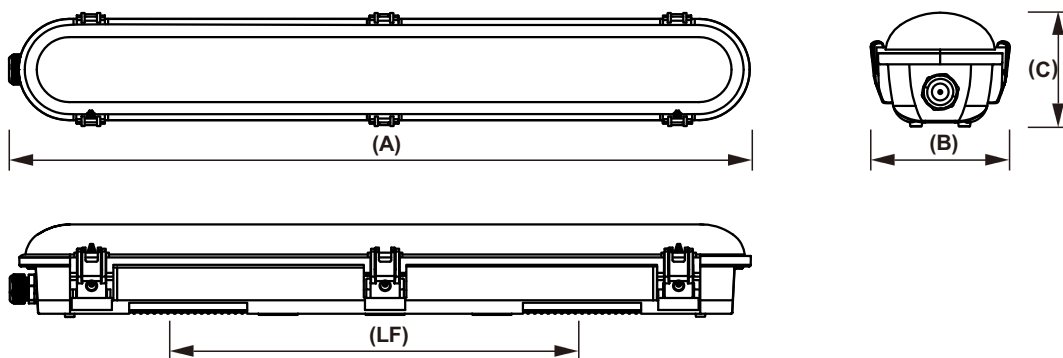


Cold Storage

# Specifications

| Size (mm)                   | 650                        | 1220                              | 1560                              |
|-----------------------------|----------------------------|-----------------------------------|-----------------------------------|
| Model                       | RW08-20W-650               | RW08-20W-1220<br>RW08-40W-1220    | RW08-36W-1560<br>RW08-60W-1560    |
| Power                       | 20W                        | 20W / 36W / 40W / 45W             | 36W / 54W / 60W / 65W             |
| Input voltage               | AC 220-240V                | AC 220-240V                       | AC 220-240V                       |
| Frequency                   | 50/60Hz                    | 50/60Hz                           | 50/60Hz                           |
| 120lm/W version             | 2400lm                     | 2400lm / 4320lm / 4800lm / 5400lm | 4320lm / 6480lm / 7200lm / 7800lm |
| Optical cover/lens type     | Polycarbonate              | Polycarbonate                     | Polycarbonate                     |
| Body color                  | RAL7035                    | RAL7035                           | RAL7035                           |
| Driver brand                | OSRAM / TRIDONIC / PHILIPS | OSRAM / TRIDONIC / PHILIPS        | OSRAM / TRIDONIC / PHILIPS        |
| LED type                    | SMD2835                    | SMD2835                           | SMD2835                           |
| Mech.impact protection code | IK10                       | IK10                              | IK10                              |
| Ingress protection code     | IP66                       | IP66                              | IP66                              |
| Beam Angel of light source  | 120°                       | 120°                              | 120°                              |
| CE mark                     | CE mark                    | CE mark                           | CE mark                           |
| Protection class IEC        | Safety class I             | Safety class I                    | Safety class I                    |
| Glow-wire test              | 850                        | 850                               | 850                               |
| Light source replaceable    | Yes                        | Yes                               | Yes                               |
| Init.Corr.Color Temperature | 2700K- 6500K               | 2700K- 6500K                      | 2700K- 6500K                      |
| Init.Color Rendering Index  | 80                         | 80                                | 80                                |
| Luminous flux tolerance     | + / -10%                   | + / -10%                          | + / -10%                          |
| Power factor                | >0.9                       | >0.9                              | >0.9                              |
| Product Size                | 650*100*83mm               | 1220*100*83mm                     | 1560*100*83mm                     |
| Innerbox Size               | 670*104*87mm               | 1240*104*87mm                     | 1580*104*87mm                     |
| Carton Size                 | 685*280*339mm              | 1255*280*230mm                    | 1595*280*230mm                    |
| Qty / CTN                   | 9pcs                       | 6pcs                              | 6pcs                              |

## Dimension



| Product Size | A      | B     | C    | LF     |
|--------------|--------|-------|------|--------|
| RW08-650     | 650mm  | 100mm | 83mm | 350mm  |
| RW08-1220    | 1220mm | 100mm | 83mm | 860mm  |
| RW08-1560    | 1560mm | 100mm | 83mm | 1200mm |

## Product Photo

2FT 650\*100\*83mm



4FT 1220\*100\*83mm

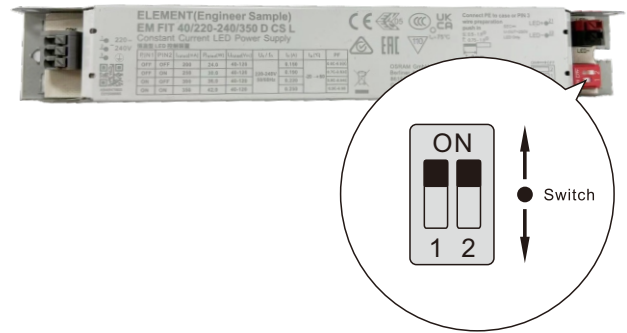


5FT 1560\*100\*83mm



# Features

## Power Adjustable



| Model                         | Switch | Current | Power | Lumen  |
|-------------------------------|--------|---------|-------|--------|
| RW08-20W-650<br>RW08-20W-1220 |        | 0.20A   | 11W   | 1370lm |
|                               |        | 0.25A   | 14W   | 1710lm |
|                               |        | 0.30A   | 17W   | 2060lm |
|                               |        | 0.35A   | 20W   | 2400lm |

| Model                          | Switch | Current | Power | Lumen  |
|--------------------------------|--------|---------|-------|--------|
| RW08-36W-1220<br>RW08-36W-1560 |        | 0.20A   | 20W   | 2470lm |
|                                |        | 0.25A   | 25W   | 3085lm |
|                                |        | 0.30A   | 30W   | 3700m  |
|                                |        | 0.35A   | 36W   | 4320lm |

| Model         | Switch | Current | Power | Lumen  |
|---------------|--------|---------|-------|--------|
| RW08-40W-1220 |        | 0.20A   | 23W   | 2740lm |
|               |        | 0.25A   | 28W   | 3430lm |
|               |        | 0.30A   | 34W   | 4110m  |
|               |        | 0.35A   | 40W   | 4800lm |

| Model         | Switch | Current | Power | Lumen  |
|---------------|--------|---------|-------|--------|
| RW08-45W-1220 |        | 0.20A   | 25W   | 3085lm |
|               |        | 0.25A   | 32W   | 3857lm |
|               |        | 0.30A   | 40W   | 4628lm |
|               |        | 0.35A   | 45W   | 5400lm |

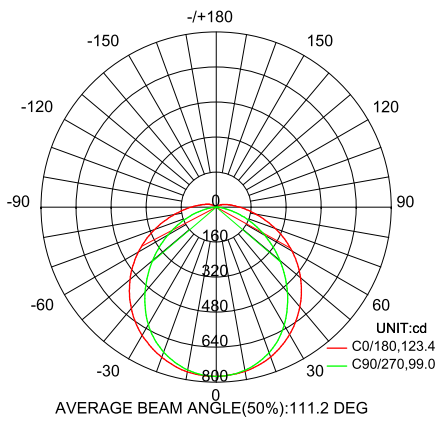
| Model         | Switch | Current | Power | Lumen  |
|---------------|--------|---------|-------|--------|
| RW08-54W-1560 |        | 0.20A   | 30W   | 3702lm |
|               |        | 0.25A   | 38W   | 4628lm |
|               |        | 0.30A   | 46W   | 5554lm |
|               |        | 0.35A   | 54W   | 6480lm |

| Model         | Switch | Current | Power | Lumen  |
|---------------|--------|---------|-------|--------|
| RW08-60W-1560 |        | 0.20A   | 34W   | 4115lm |
|               |        | 0.25A   | 42W   | 5142lm |
|               |        | 0.30A   | 50W   | 6171lm |
|               |        | 0.35A   | 60W   | 7200lm |

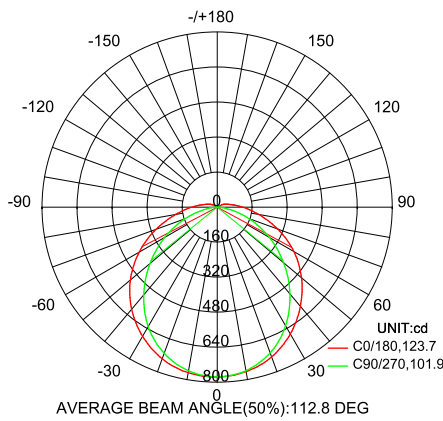
| Model         | Switch | Current | Power | Lumen  |
|---------------|--------|---------|-------|--------|
| RW08-65W-1560 |        | 0.20A   | 37W   | 4457lm |
|               |        | 0.25A   | 46W   | 5571lm |
|               |        | 0.30A   | 56W   | 6685lm |
|               |        | 0.35A   | 65W   | 7800lm |

# Luminous intensity distribution diagram

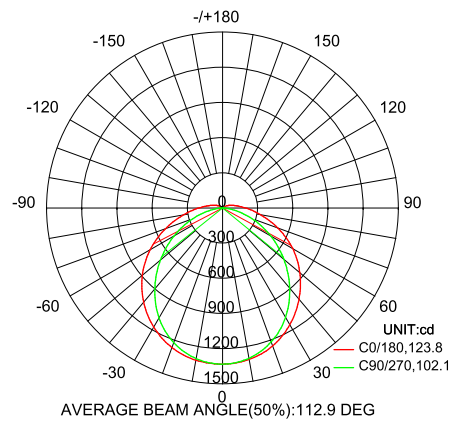
RW08-20W-650



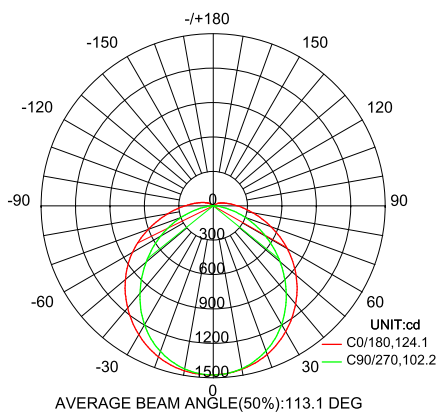
RW08-20W-1220



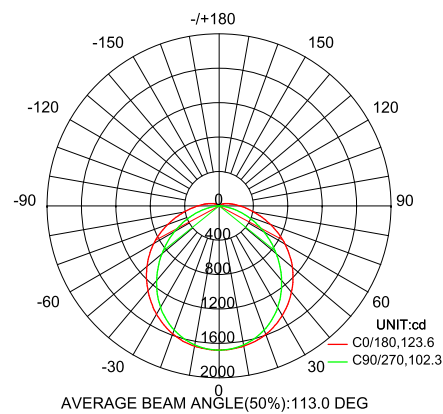
RW08-36W-1220



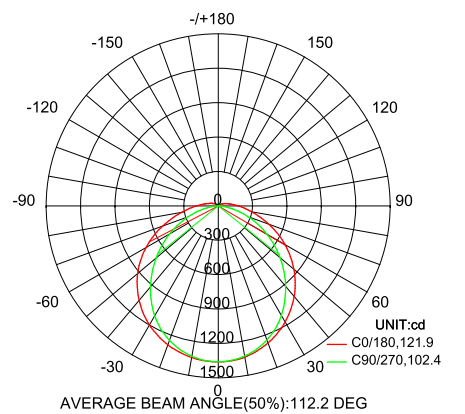
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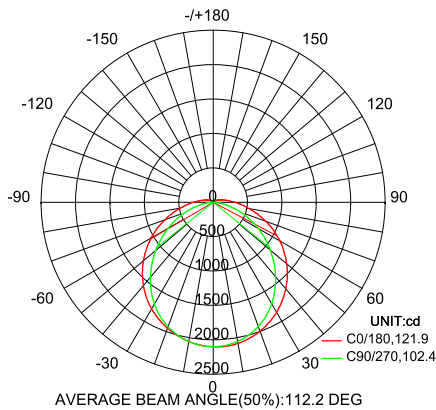
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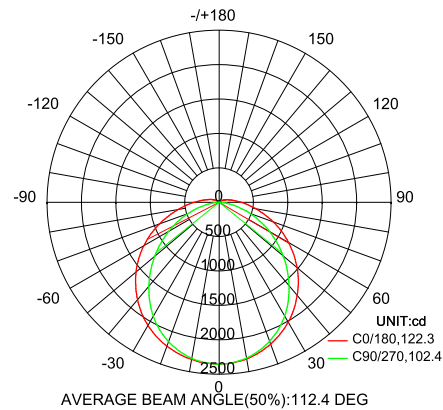
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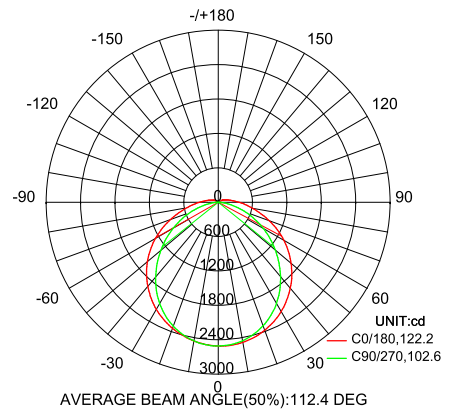
RW08-54W-1560



RW08-60W-1560

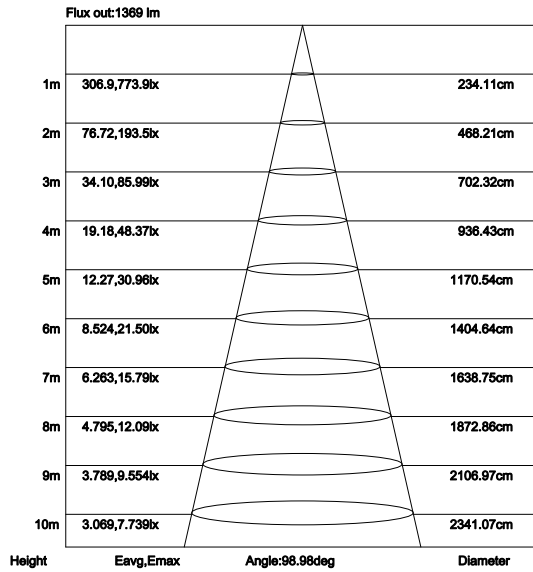


RW08-65W-1560

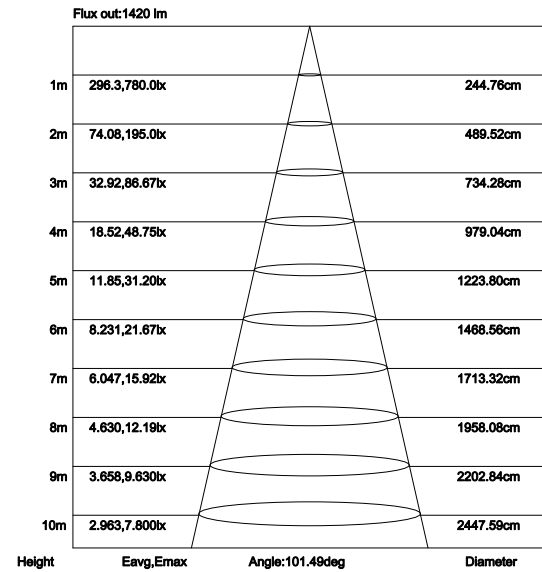


# AAI Figure

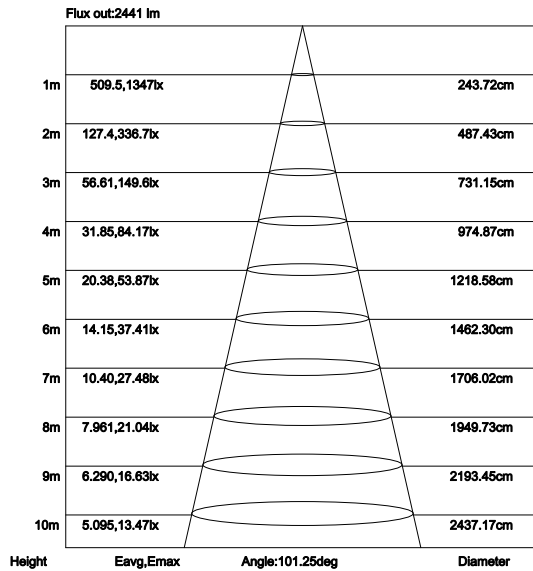
RW08-20W-650



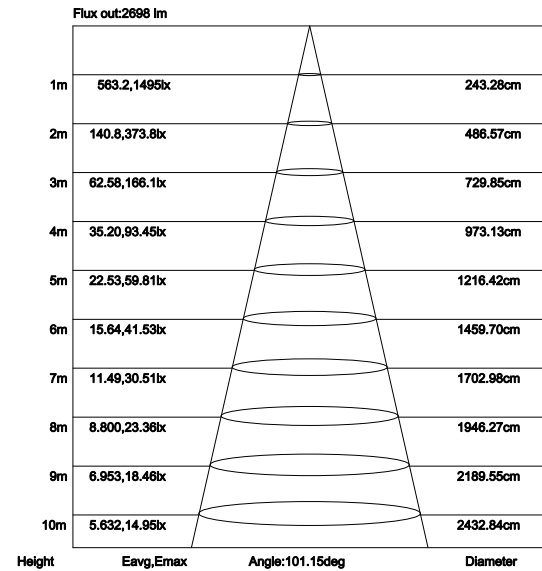
RW08-20W-1220



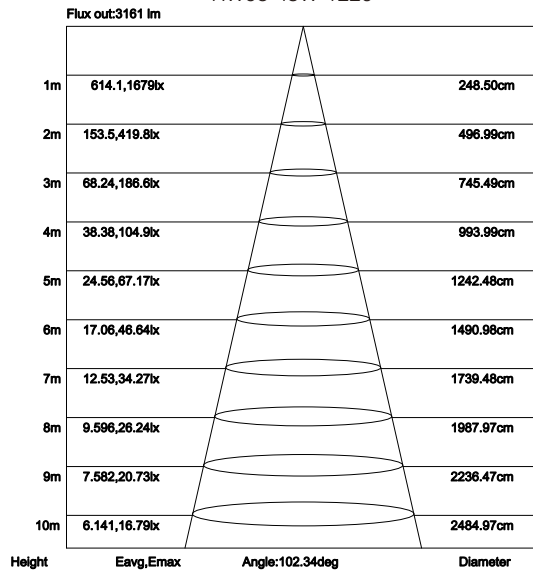
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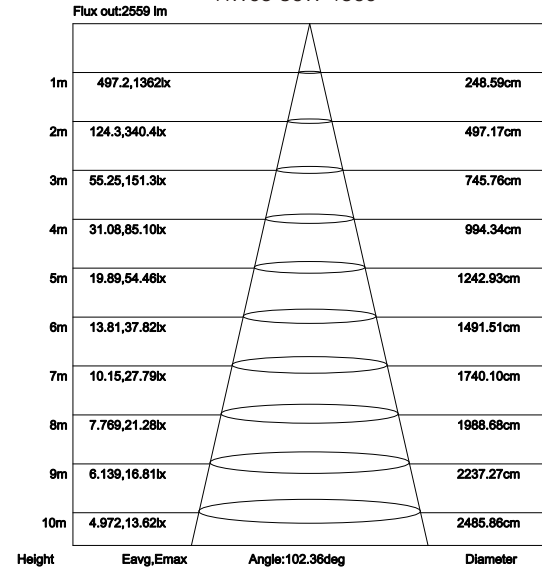
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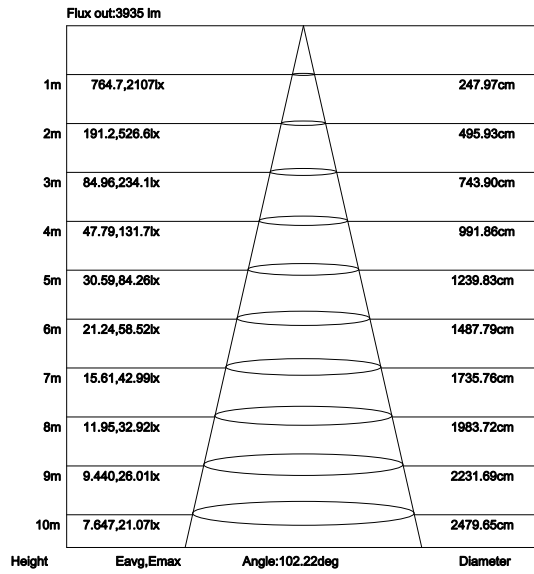
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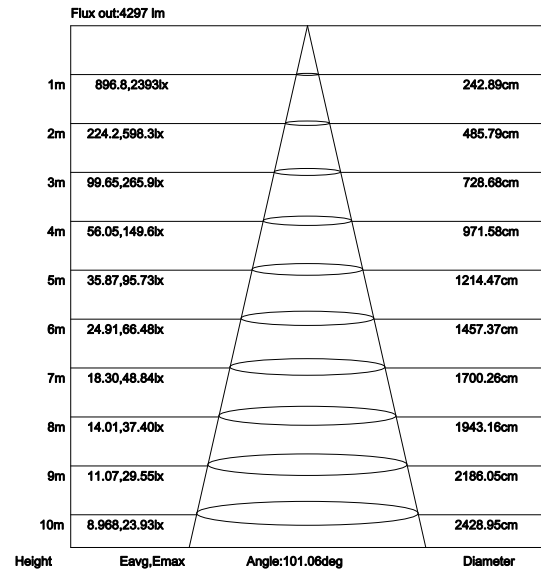
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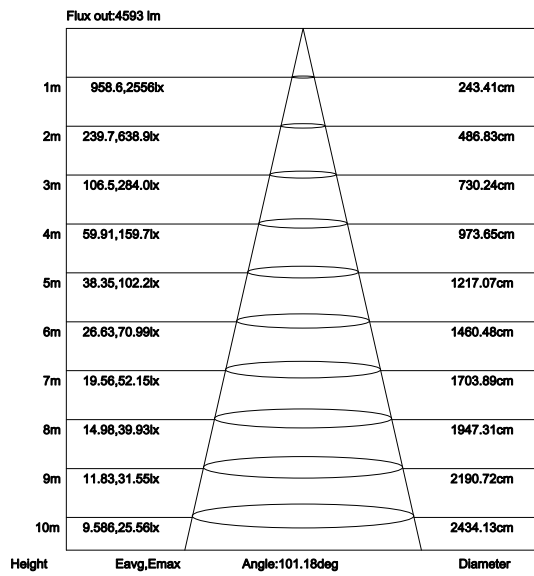
RW08-54W-1560



RW08-60W-1560



RW08-65W-1560

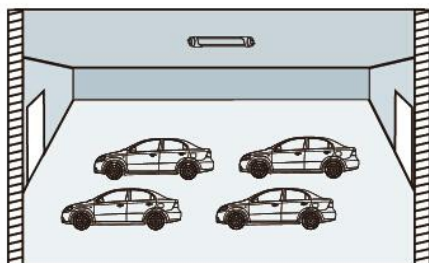


# Sensor module

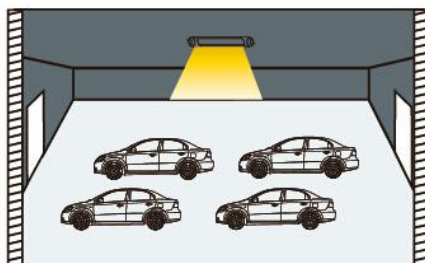
## Induction parameters

|                       |                           |  |
|-----------------------|---------------------------|--|
| Input                 | Operating Voltage Range   | 198-264V AC, 50Hz/60Hz   |
|                       | Rated Voltage             | 220-240V AC, 50Hz/60Hz   |
|                       | Stand-by Power            | ≤ 0.5W   |
|                       | Surge Test                | L--N: 1kV  |
| Output                | Working Mode              | ON/OFF function  |
|                       | Type of Load              | Inductive or Resistive   |
|                       | Load Capacity             | 400W (Inductive) ; 800W (Resistive)  |
|                       | Max. Surge Capacity       | 30A (50% I <sub>peak</sub> , t <sub>width</sub> =500uS, 230Vac full load, cold start);<br>60A (50% I <sub>peak</sub> , t <sub>width</sub> =200uS, 230Vac, full load, cold start) |
| Sensor Parameters     | Operating Frequency       | 5.8 GHz ±75 MHz , ISM Band.  |
|                       | Transmitting power        | 0.5mW Max.   |
|                       | Hold time                 | 5s//30s/90s/5min/20min/30min   |
|                       | Detection Sensitivity     | 100%/75%/50%/25%   |
|                       | Daylight Sensor           | 2Lux/10Lux/30Lux/50Lux/Disable   |
|                       | Detecting Radius          | 3-10m (mounting height 3-4m)<br>2-8m(mounting height 6m)   |
|                       | Mounting Height           | 6m Max.  |
|                       | Detecting Angle           | 150° (Wall mounted), 360° (Ceiling mounted)  |
| Operating Environment | Operating Temperature     | -25℃---+60℃  |
|                       | Storage Temperature       | -40℃---+80℃ (Humidity: 10%-95% Non-condensing)   |
| Certificate Standards | Safety standards          | EN61058-1  |
|                       | EMC standards             | EN300440; EN301489-1; EN55015; EN61547; EN61000-3-2;<br>EN61000-3-3; EN62479   |
|                       | Environmental Requirement | Compliant to RoHS  |
|                       | Certificate               | CE, RED  |

## Switching function



- ① With sufficient ambient light, the light will not be switched on even if with motion signal.



- ② With insufficient ambient light, the sensor switches on the light when motion is detected.

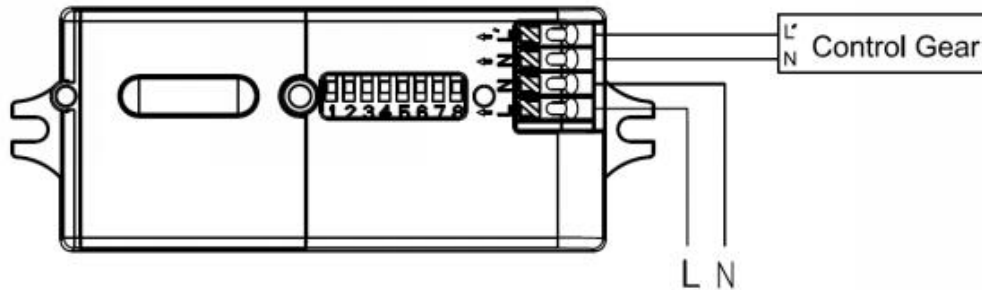


- ③ After elapse of hold time, the sensor switches off the light when no motion is detected.



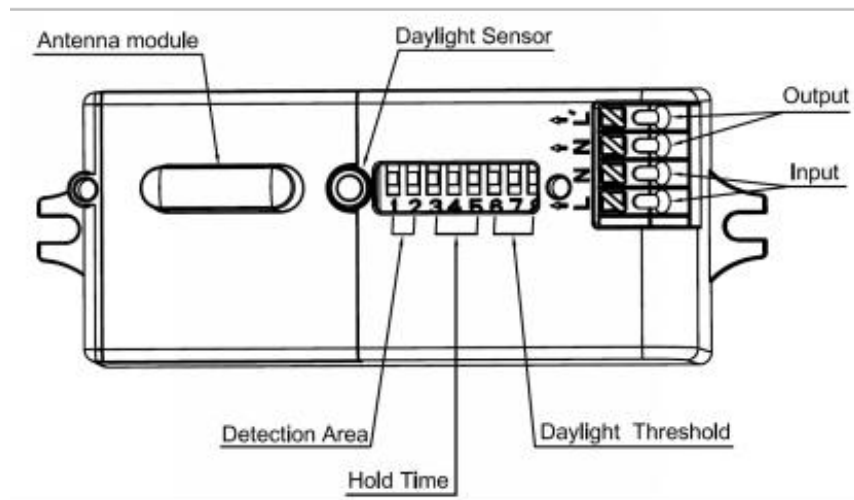
# Sensor module

## Wiring



\*The sensor is designed for connect one load only. Connect more than one loads may damage the sensor.

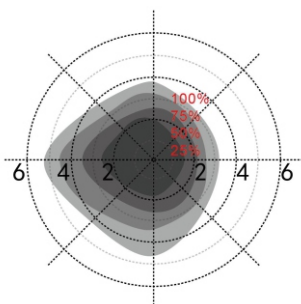
## Structure



## Radiation Pattern

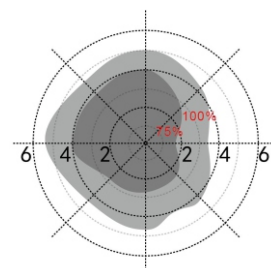
### 1) Ceiling mounting

Ceiling mounted height: 3m  
Sensitivity: 100%/75%/50%/25%



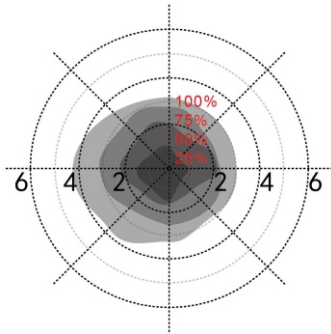
Normal moving (Speed:1m/s)

Ceiling mounted height: 6m(\*)  
Sensitivity:100%/75%

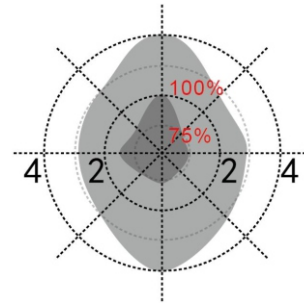


Normal moving (Speed:1m/s)

## Sensor module



Slow moving (Speed 0.3m/s)

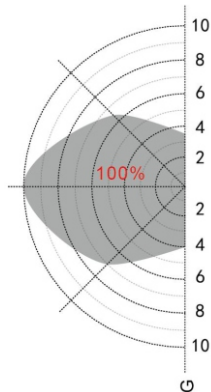


Slow moving (Speed: 0.3m/s)

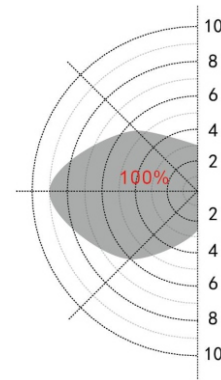
\*Only 100%/75% detection sensitivity is workable when installed at 6m mounting height. 25%/50% sensitivity is not able to detect motion signal.

### 2) Wall mounting

Horizon mounted height: 2m  
Sensitivity: 100%



Normal moving (Speed 1m/s)



Slow moving (Speed 0.3m/s)

## DIP Switch Setting

Detection Area (Sensitivity)

|      | 1  | 2  |
|------|----|----|
| 100% | ON | ON |
| 75%  | –  | ON |
| 50%  | ON | –  |
| 25%  | –  | –  |

# Sensor module

## Hold Time

|     | 3  | 4  | 5  |       |
|-----|----|----|----|-------|
| I   | ON | ON | ON | 5S    |
| II  | –  | ON | ON | 30S   |
| III | ON | –  | ON | 90S   |
| IV  | –  | –  | ON | 5min  |
| V   | ON | ON | –  | 20min |
| VI  | –  | –  | –  | 30min |

## Daylight Threshold

|     | 6  | 7  | 8  |          |
|-----|----|----|----|----------|
| I   | ON | ON | ON | 2Lux     |
| II  | ON | ON | –  | 10Lux    |
| III | –  | ON | –  | 30Lux    |
| IV  | ON | –  | –  | 50Lux    |
| V   | –  | –  | –  | Disable* |

\*Disable”means the daylight sensor not work. it will turn on light once motion is detected regardless of ambient light .

## Override Function

Quick switch ON/OFF 3 times within 2sec to override sensor function. Lights will switch on all the time. Power off and on again to recover sensor function.

## Initialization

After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it turns off the light. During the initialization, the sensor is not able to detect movement.

## Factory Setting

Detection area: 100%, Hold Time: 5S, Daylight Sensor: Disable

# Emergency module



220-240V

## LED Emergency converter

### Product description

- LED emergency converter that can transfer standard LED fitting into emergency LED fitting.
- Used with Lithium iron phosphate battery.
- Suits for LED fitting with external led driver.
- Accessory: test switch and charge indicator.

### Relevant standard

IEC 61347-1  
IEC 61347-2-7  
EN 55015  
IEC 60598-2-22



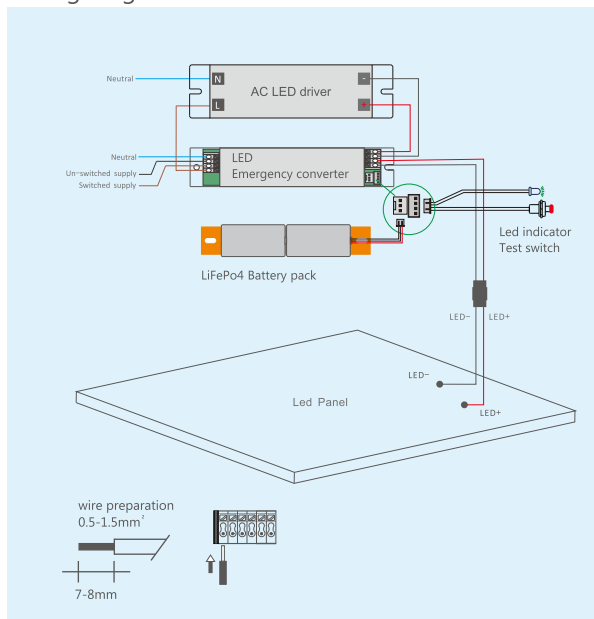
## Applications

- Use in damp and dry environment.
- For use on a wide range of LED fittings to convert them from standard to emergency fitting.
- LED fitting would be maintained emergency LED fitting if standard (main powered) driver, emergency lighting kit and battery are all retained in the circuit.
- LED fitting would be non-maintained emergency LED fitting if only emergency lighting kit and battery are retained in the circuit.
- Additional Relay that can control standard LED driver.
- Deep discharge protection.
- Connector between emergency kit and battery has the function of polarity reversal protection.
- Ambient range to 0...50°C
- IP20 protection, relies on end-product enclosure for protection against accidental contact live parts.
- Not intended for use in luminaires for high-risk task area lighting.
- Full warranty 3 years.

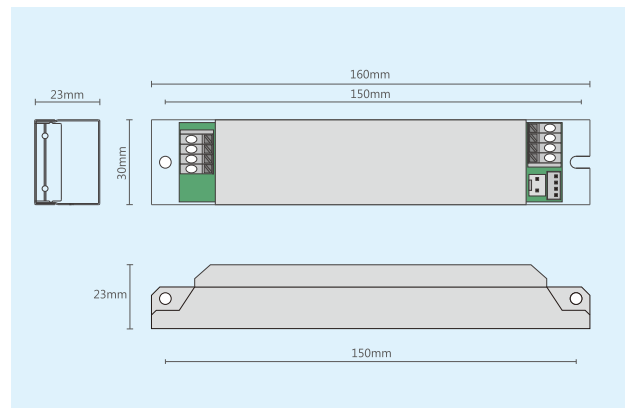
## Technical data

- Input rated voltage: 220-240V AC 50-60Hz
- AC input current 10-60mA
- AC Input power rated 4 W max
- Power factor: >0.6
- Charge time ≥16 hours
- Charge mode: trickle re-charging on battery.
- Output emergency power 2-4 wattage constant power output.
- Output voltage DC10...50V, DC50-200V
- Battery capacity (LiFePo4):  
1500mAh, 3000mAh
- Battery Charging Current 0-400mA
- 1, 1.5, 2 or 3 hours rated duration
- Charging indicator light  
Green light on--Battery is charging  
Green light on--Battery is fully charged  
Indicator off--The device is something wrong and is malfunction.
- Max. casing temperature to 70°C
- Lumen Factor: 140lm/Wattage
- Reinforced insulation between the supply and the battery circuit.
- This unit can recharge the battery normally after reconnecting of battery.

## Wiring diagram



## Dimensions



# Emergrncy module

## Product Description

- High-temperature Lithium iron phosphate batteries
- 2 , 4 Cells Lithium iron phosphate Battery pack

## Technical Data

- Rated 500 charge/discharge cycle
- 18650 battery core
- Battery voltage 3.2V/Cell
- Max. short term temperature 70°C
- Ambient temperature 0°to +50°C°

Battery



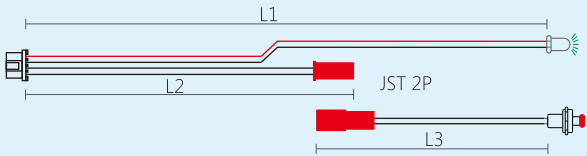
## Battery wire

- Two wires: 1 red and 2 black
- Length: 200mm
- Wire type: 0.75mm²

## Test switch and LED indicator



## ORDERING DATA



| type  | L1     | L2    | L3    |
|-------|--------|-------|-------|
| 05F02 | 300mm  | 150mm | 150mm |
| 05F03 | 600mm  | 150mm | 450mm |
| 05F04 | 1000mm | 150mm | 850mm |

## Product description

- For connection to the emergency lighting unit
- The test switch for checking the device function
- The LED indicates that charging current is flowing into the battery
- Plug connection

## LED indicator

- Mounting hole 6.5mm dia
- Wire insulation rating: 85°C

## Test switch

- Mounting hole 7mm dia
- Wire insulation rating: 85°C