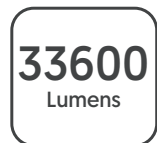


Glow UFO High Bay

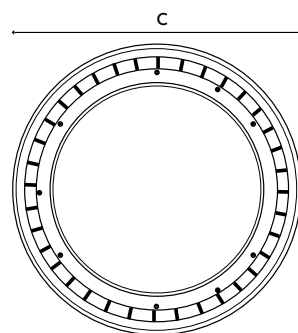
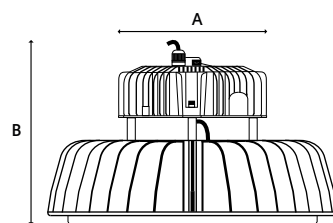
Industrial Range

CODE: GLOWUFO-240NW/MS

QVIS[®]
LED LIGHTING



TECHNICAL DRAWINGS

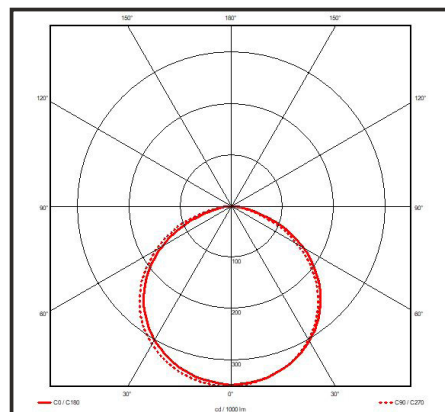


A = 150mm C = 320mm
B = 180mm

| Specification | Glow UFO |
|------------------------|--|
| System Power | 240W |
| Sensor Driver | Merrytek |
| LED Chipset | Samsung |
| Colour Rendering Index | >85 |
| Lumen Output | 33600Lm |
| LED Efficacy | 140 Lm/cW |
| Power Factor | >0.9 |
| Sensor Type | Microwave |
| IP Rating | IP65 |
| IK Rating | IK08 |
| Colour Temperature | 4000K |
| Beam Spread | 120° |
| Housing Material | Aluminium |
| Diffuser Material | Tempered Glass |
| Operating Temperature | -20 to +50°C |
| Input Voltage | AC200-240V, 47-63Hz |
| Dimensions | 320mm x 180mm |
| Weight | 5.3kg |
| MacAdam Step | <3 |
| Lifetime | 50,000 hours, L70-B10 [Ta 25 °C] |
| CE Standards | EN60598-1, EN 60598 2-5, EN62493, EN55015, EN61547, EN61000-3-2, EN61000-3-3, EN62722-1, EN62722-2-1 and EN50581 |
| CE Directives | LVD, EMC, ERP & RoHS |

* Warranty terms and conditions apply

LUMINOUS INTENSITY DISTRIBUTION



Information is subject to change and can be withdrawn without notice

For further information on our products or terms and conditions visit our website www.qvis.co.uk/lighting or email: sales@qvislighting.com

Microwave Sensor



1. Features



- Operating voltage 120~277V AC,
- Patented microwave antenna, mounting height is 15m Max
- Supports high-sensitivity and low-sensitivity modes (for metal ceilings, metal reflector mounting environments)
- Work with 1-10V dimmable LED driver, easy to achieve 2-step or 3-step dimming function.
- New patented remote control to adjust the transmitting angle to avoid misuse
- Dim+/Dim- to set occupancy light level

2.Parameter

| | | |
|-------------------|-------------------------|--|
| Input | Operating Voltage Range | 108-305V AC, 50Hz/60Hz |
| | DC Input Voltage | N/A |
| | Rated Voltage | 120-277Vac,60Hz |
| | No-load Power | N/A |
| | Stand-by Power | <1W |
| | Surge Test | L--N: 1kV |
| Output | Working Mode | ON/OFF function, 1-10V step dimming |
| | Type of Load | Inductive or resistive Load |
| | Load Capacity | 120VAC: 4A; 220-277VAC: 3A |
| | Current of Load | N/A |
| | Max. Surge Capacity | 50A (50% Ipeak, twidth =500uS, 230Vac full load, cold start); 80A (50% Ipeak, twidth =200uS, 230Vac, full load, cold start) |
| Dim Interface | 1-10V Dimming | < 50mA (Non-constant source) 10%(1.4-1.6V), 20%(1.9-2.1V), 30%(2.9-3.1V), 50% (4.9-5.1V) |
| | Synchronous Control | N/A |
| | High Low-level | N/A |
| | PWM Control | N/A |
| Sensor Parameters | Operating Frequency | 5.8 GHz \pm 75 MHz, ISM Band. |
| | Transmitting power | 0.5mW Max. |
| | Hold time | 5s/30s/1min/3min/5min/10min/20min/30min |
| | Stand-by DIM Level | 10%/20%/30%/50% |
| | Stand-by Period | 0s/10s/1min/3min/5min/10min/30min/+ ∞ |
| | Detection Area | 25%/50%/75%/100% |

Microwave Sensor



| | | |
|------------------------------|---------------------------|---|
| Sensor Parameters | Daylight Sensor | 5lux/15lux/30lux/50lux/100lux/150lux/Disable (Ambient light diffusion) |
| | Detecting Radius | See detection pattern |
| | Mounting Height | 15m Max |
| | Detecting Angle | 150°(wall mounting), 360°(ceiling mounting) |
| Wireless Module | Operating Frequency | N/A |
| | Transmitting power | N/A |
| | Transmitting distance | N/A |
| | Modulation mode | N/A |
| | Number of coding | N/A |
| Operating Environment | Operating Temperature | -35℃...+55℃ |
| | Storage Temperature | Temperature:-40℃...+80℃;Humidity:10%-95% (non-condensing) |
| Certificate Standards | Safety standards | IEC60669-2-1, IEC60669-1 AS/NZS 60669.1, AS/NZS 60669.2.1 UL60730-1 |
| | EMC standards | EN55015, EN61000-3-2, EN61000-3-3, EN61547 AS/NZS CISPR 15, AS/NZS 4268 FCC Part 15C, Part 15B EN 60950-1, EN301489-1, EN 201489-3, EN300440 |
| | Environmental Requirement | Compliant to RoHS |
| | Certificate | cULus, CE, SAA, FCC, RED |
| Others | Wiring | SJTW,5*18AWG (USA); H05RR-F,5*18AWG (Europe,Australia); exposed line length: 810-830mm |
| | Wiring color | Sheath: Black Core: Red,White,Black,Gray,Purple (US); blue, brown, red, purple,Gray (Europe, Australia) |
| | IP Rating | IP65 |
| | Protection Class | Class II |
| | Installation | Independent |
| | Dimension | (ΦxH)72*59mm |
| | Package | Instruction+ White box+ White box tags+ Clapboard+ Carton(K=A) |
| | Net Weight | MC054V RC A: 225g, MC054V RC B:246g, MC054V RC C:225g , MC054V RC D:165g |
| | Lifetime | 5 years warranty @Ta 230V full load |

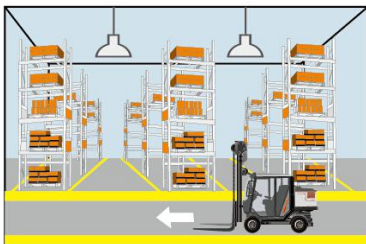
Note

1. "N/A"means not available.
2. Detection area is effected on volume of motion object and motion speed. The detection area is tested by a 165cm height person and walking speed is 0.5m/s.

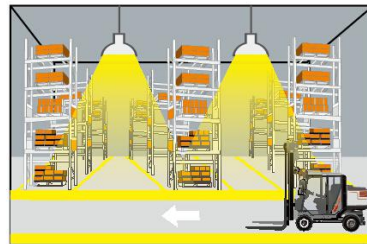
Microwave Sensor

3. Function

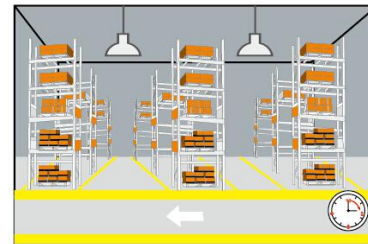
1) On/OFF Function (stand-by period be set to "0"s)



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

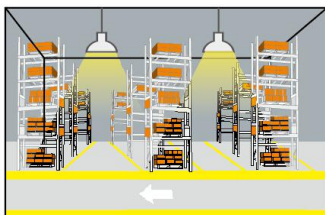


- 2 With insufficient ambient light, the sensor switches on the light when motion is detected.

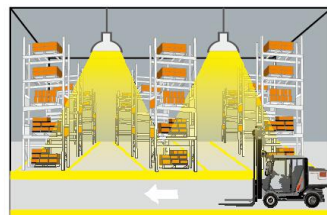


- 3 After elapse of hold time, the sensor switches off the light when no motion is detected.

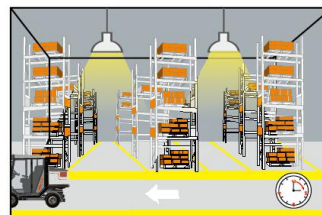
2) 2-step dimming function (stand-by period be set to "+∞")



- 1 If there is no motion detected, the light will be remained at a low light level all the time.

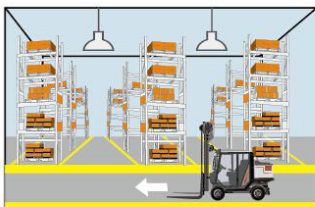


- 2 When motion is detected, the sensor will switch on the light to 100% brightness

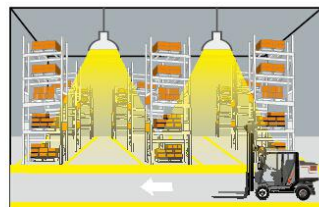


- 3 After elapse of hold time, the sensor dims the light at the present low light level if no motion is detected.

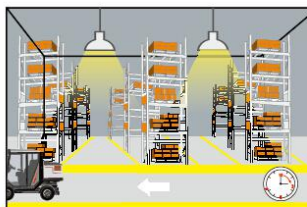
3) 3-step dimming function (stand-by period be set to "10s/1min/3min/5min/10min/30min")



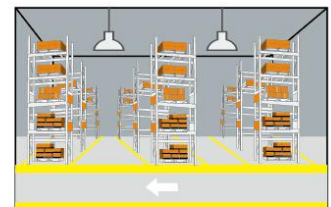
- 1 With sufficient ambient light, the light will not be switched on even if with motion signal.



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



- 3 After elapse of hold time, the sensor dims the light at a low light level if no new motion is detected.

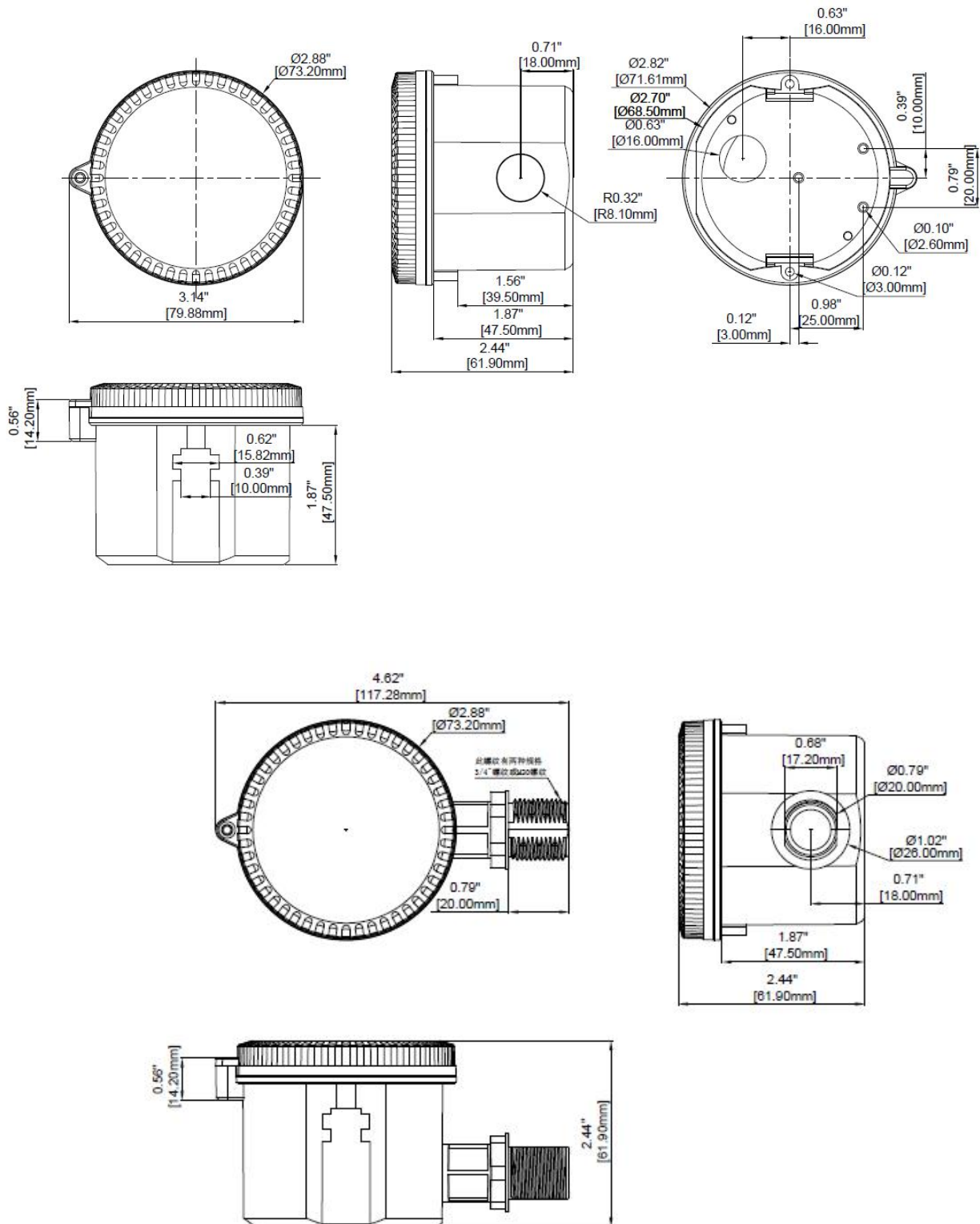


- 4 After elapse of standby period, the sensor switches off the light if no motion is detected in the detection zone.

Microwave Sensor



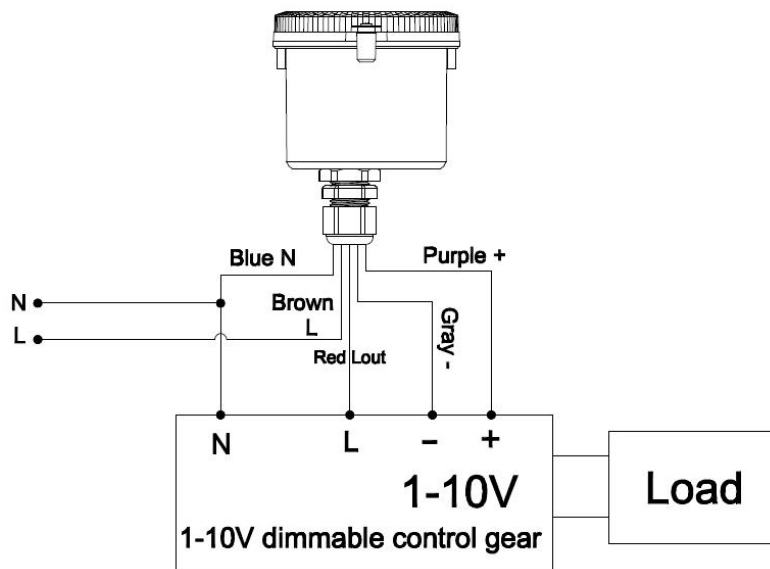
4.Dimension (mm)



Microwave Sensor

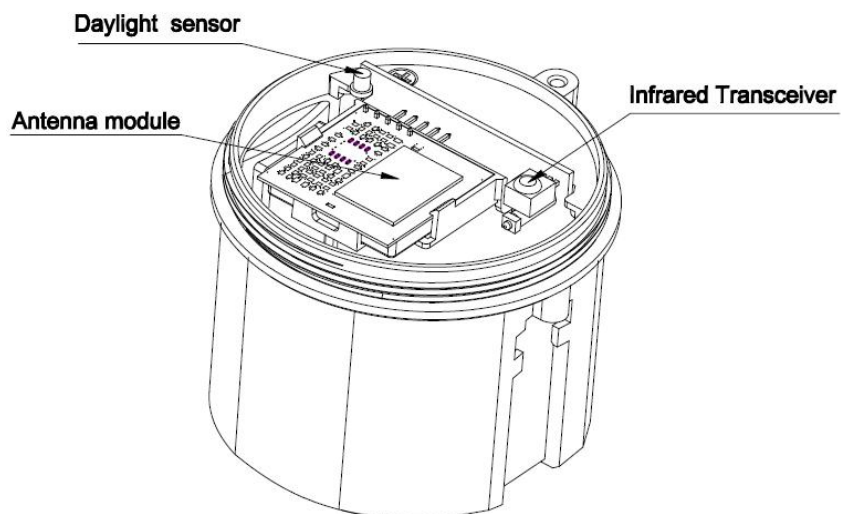


5. Wiring



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

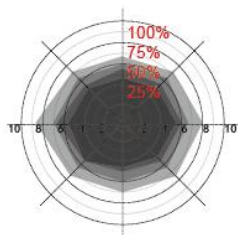
6. Function Diagram



7. Radiation Pattern

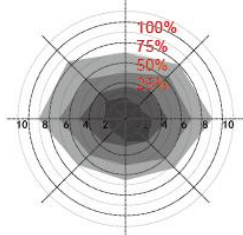
Ceiling mounting

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



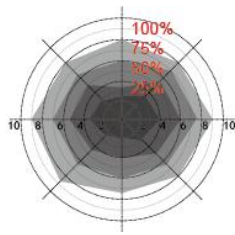
Normal moving
(Speed:1m/s)

Ceiling mounted
height: 6m
Sensitivity:
100%/75%/50%/25%



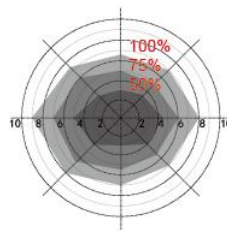
Normal moving
(Speed:1m/s)

Ceiling mounted
height: 9m
Sensitivity:
100%/75%/50%/25%



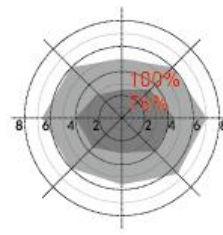
Normal moving
(Speed:1m/s)

Ceiling mounted
height: 12m
Sensitivity:
100%/75%/50%

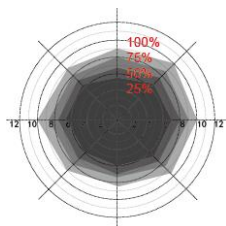


Normal moving
(Speed:1m/s)

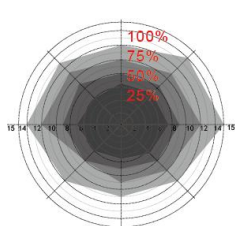
Ceiling mounted
height: 15m
Sensitivity:
100%/75%



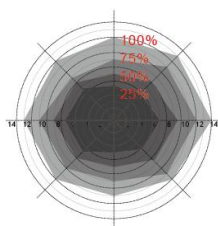
Normal moving
(Speed:1m/s)



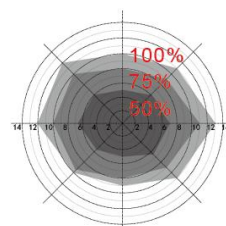
Slow moving
(Speed 0.3m/s)



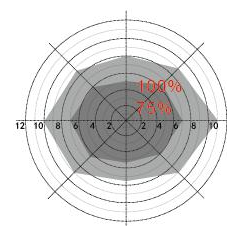
Slow moving
(Speed: 0.3m/s)



Slow moving
(Speed: 0.3m/s)



Slow moving
(Speed: 0.3m/s)

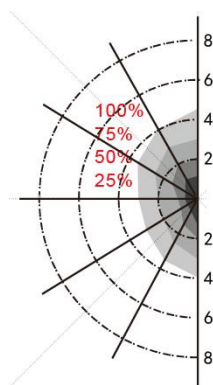


Slow moving
(Speed: 0.3m/s)

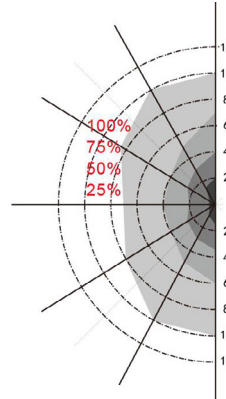
*Only 100%/75%/50% detection sensitivity is workable when installed at 10m & 15m mounting height. 25% sensitivity is not able to detect motion signal.

Wall mounting

Horizon mounted height: 2m
Sensitivity: 100%/75%/50%/25%



Normal moving (Speed: 1m/s)



Slow moving (Speed 0.3m/s)

8. Remote Control

| Remote Control Setting | Button | Remarks | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---------------|-----------------|--------------------|-----------------|--------------------|-----------------|-------------------|-----|------|------|-------|-----|-------|----|-----|------|-------|-------|-----|---------|----|-----|------|-------|-------|-----|---------|----|
| | ON/OFF | Press the "ON/OFF" button, the light goes to constant on/off mode, sensor is disabled. Press "Reset" "Sensor motion" button to quit from this mode and the sensor starts to work. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Reset | Press "Reset" button, all parameters are same as setting of factory settings. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sensor motion | Press "Sensor motion" button, the light quits from the constant on/ off mode, and the sensor starts to work (The latest setting stays in validity) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DIM Test | Press "DIM Test" button, the 1-10 V dimming works to test whether the 1-10Vdc dimming ports are connected properly. After 2s, it returns to the latest setting automatically. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Override DH, Disable, DIM+, DIM-, DH Mode | "Override DH", and "DH Mode" that the two functions are not applicable for MC054V RC2. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Q1, Q2, Q3 | <table border="1"> <thead> <tr> <th>Scene Options</th> <th>Detection Area</th> <th>Hold Time</th> <th>Stand-by period</th> <th>Stand-by dim level</th> <th>Daylight Sensor</th> <th>Sensitivity model</th> </tr> </thead> <tbody> <tr> <td>Q51</td> <td>100%</td> <td>5min</td> <td>10min</td> <td>10%</td> <td>30Lux</td> <td>Hs</td> </tr> <tr> <td>Q52</td> <td>100%</td> <td>10min</td> <td>30min</td> <td>10%</td> <td>Disable</td> <td>Hs</td> </tr> <tr> <td>Q53</td> <td>100%</td> <td>20min</td> <td>30min</td> <td>10%</td> <td>Disable</td> <td>Hs</td> </tr> </tbody> </table> <p>Note: Detection area / Hold time /Stand-by period /Stand-by dim level / Daylight sensor can be adjusted by pressing the corresponding button. The latest setting will stay valid.</p> | Scene Options | Detection Area | Hold Time | Stand-by period | Stand-by dim level | Daylight Sensor | Sensitivity model | Q51 | 100% | 5min | 10min | 10% | 30Lux | Hs | Q52 | 100% | 10min | 30min | 10% | Disable | Hs | Q53 | 100% | 20min | 30min | 10% | Disable | Hs |
| | Scene Options | Detection Area | Hold Time | Stand-by period | Stand-by dim level | Daylight Sensor | Sensitivity model | | | | | | | | | | | | | | | | | | | | | | | |
| | Q51 | 100% | 5min | 10min | 10% | 30Lux | Hs | | | | | | | | | | | | | | | | | | | | | | | |
| | Q52 | 100% | 10min | 30min | 10% | Disable | Hs | | | | | | | | | | | | | | | | | | | | | | | |
| | Q53 | 100% | 20min | 30min | 10% | Disable | Hs | | | | | | | | | | | | | | | | | | | | | | | |
| | TEST 2S | Press the "TEST 2S" button can enter the test mode any time. At the mode, the sensor parameters as below: Detection Area is 100%, Hold Time is 5s, Stand-by Dim Level is 10%, Stand-by Period is 0s, daylight sensor disable. This function only for testing. Quit the mode by pressing "RESET" or any other function buttons. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | HS, LS | Press "HS" button to set the detection area to be high sensitive. Press "LS" button to set the detection area to be low sensitive. The adjustment bases on the "Detection Area" parameter you set. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Daylight Sensor | Set up daylight threshold: 5Lux/15Lux/30Lux/50Lux/100Lux/150Lux/ Disable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Stand-by period | Set up stand-by time: 0S/10S/1min/3min/5min/10min/30min/+∞ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Hold time | Set up hold time: 5S/30S/1min/3min/5min/10min/20min/30min | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stand-by dim level | Set up stand-by dim level: 10%/20%/30%/50% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Detection Area | Set up detection area: 25%/50%/75%/100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Remote Distance | Toggle button can set the remote distance of remote control and sensor. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

9. Initialization

1/ On/Off function /3-step dimming function:

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.

2/ 2-step dimming function:

After power on, the sensor automatically turns on light at 100% brightness. After 10sec, it dims the light to a low light level (set by stand-by dim level). During the initialization, the sensor is not able to detect movement.

10. Factory Setting

Detection area: 100%, Hold Time: 5S, Stand-by Period: 0s, Stand-by dim level: 10%, Daylight Sensor: Disable

11. Override Function

Switch on and off power 3 times to cancel sensor function, switch on and off one time to recover sensor function

12. Application Notice

- 1) The sensor should be installed by a professional electrician. Please turn off the power before installing, wiring, changing the setting of the DIP switch.
- 2) The sensor which installed in the plastic and glass lampshade will reduce the sensitivity. For every 3mm increase in thickness, the sensitivity will be reduced by 20%.
- 3) The dimming performance could be different from different 1-10v drivers.
- 4) The light sensitivity threshold is in a sunny environment, no shadow and ambient light diffuse reflection. Ambient lux level could be different in different environment, weather, climate, time-of-day and season.
- 5) The parameters of the sensor may need to be reconfigured in different installation environments. Please refer to the following instructions or contact the manufacturer.
- 6) This sensor is for indoor use only. It will affect the waterproof effect for outdoor use. Wind, rain, and moving objects around will cause false triggering.
- 7) The distance between any inductive sensors should be greater than 3m.
- 8) Do not place the sensor close to high-density objects such as metal, glass, concrete walls, etc, false triggering could happen. When the sensor is installed in a metal lamp, metal reflective surface, or a narrow enclosed environment, the microwave will be reflected repeatedly and cause false triggering. Please reduce the sensitivity or contact the manufacturer for technical support.
- 9) Please ensure that there are no moving signals around the sensor, such as fan, DC motor, sewer pipe, air outlet, etc., the sensor may generate false trigger.
- 10) You are advised to test 5 samples before mass application of sensor in a new lighting project.
- 11) Due to continuous improvement, the contents of this instruction could be changed without prior notice.