

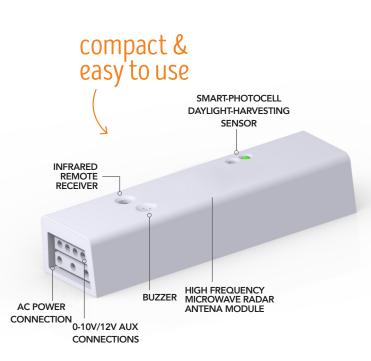








motion sensor with daylight harvesting



- Designed to plug directly into the LBI
- Occupancy & daylight sensor works behind plastic & glass lenses.
- Plug & Play, requires no wiring
- Adjusts light based on occupancy and/or daylight
- Powered by 12V DC from LBI Bars
- High-frequency microwave radar occupancy sensor
- Works right out of the box, requires no pre-commisioning (See default settings on pg.3)
- Infared remote control available (sold seperately)
- Mounting height up to 40ft
- Detection diameter up to 60ft
- Uses less than 0.1W in standby mode

PART #	UPC	DESCRIPTION
RP-LBI-OC2	844006024208	OC2 SENSOR KIT - EXTENDED RANGE





## - Sensor Kit Includes

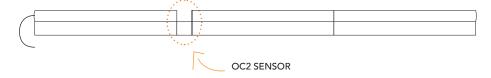


- **1.** (1) Sensor
- 2. (2) Seamless connectors (DIM Version) (RP-LBI-SSC-DIM)
- 3. (1) Surface mount magnetic clip (RP-LBI-SMM)
- 4. (1) 12 inch linking cable (DIM Version) (RP-LBI-LC-12IN-DIM)
- 5. (2) self drilling sheet metal screws

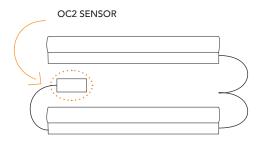
## - Install Instructions

The OC2 Sensor is an easy plug + play installation onto any LBI Pro system.

Use the seamless connector when using the sensor in-line with the light bars is desired.



Use the linking cable when it is not useful to have the sensor in-line with the light bar.





## Remote Control Settings

If satisfied with OC2 default settings, remote control is not needed. If settings need to be changed, optional remote control (RP-OC2-REMOTE-IR11), is required.



#### PERMANENT ON FUNCTION

Press 'ON' button, fixture goes to permanent on mode, sensor is disabled. With memory function against power failure.

\* Press 'Auto' or 'Reset' to guit this mode.



## PERMANENT OFF FUNCTION

Press 'OFF' button, fixture goes to permanent off mode, sensor is disabled.

\* Press 'Auto'or 'Reset' learn' to quit this mode.



#### **SENSOR MODE**

Press 'Auto' button, the sensor starts to work and all settings remain the same as the latest status before the light was switched on/off.



#### **RESET FUNCTION**

Press 'Reset' button, all settings go back to factory default settings.

### FACTORY DEFAULT SETTINGS - REMOTE REQUIRED TO CHANGE SETTINGS

Sensitivity=50%

Daylight sensor=disable

Hold time=5min

Twilight time=+∞

Twilight level=30%

NOTE daylight harvest function is disabled in factory defaut mode. Choose the appropriate lux threshold first to activate the daylight harvest function.



### **DISABLE DAYLIGHT SENSOR**

Press 'Disable' button, the daylight sensor will be disabled, the motion sensor will work always, even in daytime.



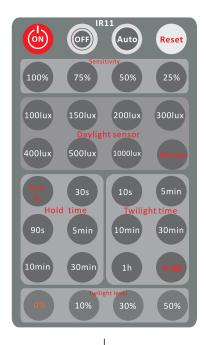
### **TEST MODE**

'Test mode' is used for testing purpose only, for users to check the the desired detection range.

Quit test mode by pressing any other button of 'Hold time'. The sensor settings are changed accordingly.

### **TEST MODE SETTINGS**

Daylight sensor=disable Hold time=3s Twilight time=N/A Twilight level=N/A





#### **IR11**

- The buzzer short beeps (~0.5s) ONCE when sensor successfully receives RC signal after pressing any button.
- When"twilight level"set at 0%, it becomes ON/OFF control.
- The sensor controls the LBI fixtures w/ 0-10V inputs. Even if on/off only function is desired, the OC2 sensor is only compatible w/ PRO series LBI products. (Not compatible w/ LBI Base series)



# Easy operation for daylight harvesting dimming function

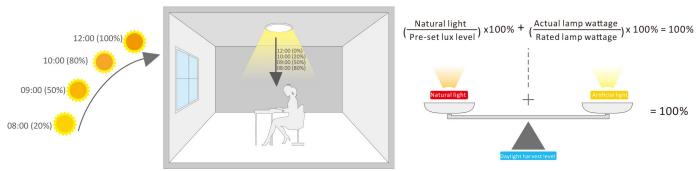
Utilizing the smart photocell technology, this sensor can tell the difference between natural light and LED light from behind the fixture lens, switching on automatically (even without movements) when the ambient light is below target value, and then switch off automatically whenever the artificial light is not required (ambient light is bright enough) This special daylight sensor responds only to changes of natural light, any artificial light has no influence on its readings.

### STEP 1

Choose the desired daylight sensor threshold, the daylight sensor will automatically switch on when surrounding brightness is below the chosen threshold. If surrounding brightness is above the threshold, daylight sensor will turn fixture off.

### STEP 2

During operation, the daylight sensor regulates the light output automatically according to the level of surrounding brightness.



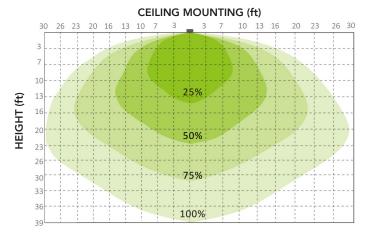
### STEP 3

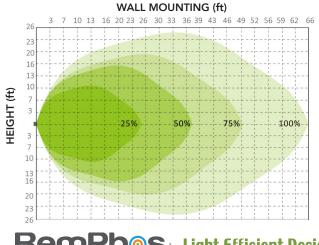
The daylight sensor will automatically switch the fixture off when the natural light is confirmed sufficient (lux-off sampling time is 30s).

### NOTE

- Suggested setting for the daylight harvest level is 300 lux, this value should suit most of general applications.
- Lux-Off sampling time-30s; Lux-On sampling time-10s.
- Lux-On function takes effect without motion only when standby dimming period set at +∞.

# Sensor spacing and setting selection





**Phos** by Light Efficient Design lighting on target

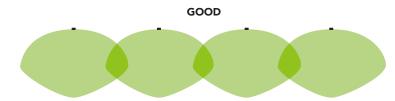
# Important Application Notes

These sensors operate in the 5.8 GHz C-Band (5.8GHz +/- 75 MHz) When using many sensors in one location, proper spacing and setting selection is required to assure the sensors operate properly. Improper setup may result in interference with other microwave sensors or 5.8 GHz WiFi devices. Like any wireless device, many can operate in the same space with an acceptable level of interference. If excessive numbers of any wireless devices are used close together; performance of the devices may be affected.

## Sensor Spacing and Setting Selection

Sensors should be physically spaced and use the sesitivite detection range setting that results in limited detection ranges overlap.

Sensitivity	Recommended space between sensors
25%	8 ft
50%	12 ft
75%	16 ft
100%	20 ft



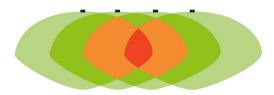
Minimum sensor requirement; use this spacing pattern when it is desired to have the minimum number of sensors used. Each sensor has very limited overlap with the neighboring sensors detection areas.

#### MIN RECOMMENDED SPACING



Minimum recommended sensor spacing distance; proper sensor spacing should result in limited area with 3 sensors having overlapping detection areas.

### **NOT RECCOMENDED**



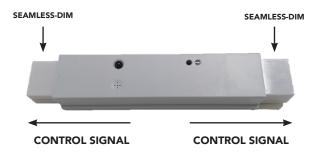
Not recommended; 4 or more sensors have overlapping detection area. Although not ideal, having a small area with dense overlapping detection area should not greatly reduce performance. Most important is not to implement this dense overlapping detection pattern systematically throughout a location. Sensor spacing and sensitivity level should be carefully considered in locations with a high number of sensors to reduce this level of detection range overlap.



### Sensor Connection

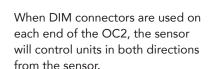
- The OC2 is designed for full control (High-Low-Off) up to 15 LBI units. (independant of unit length)
- The OC2 is designed for limited control (High-Low) up to 40 LBI units. (independant of unit length)
- Like all 0-10v sensors and controllers; only one OC2 sensor can be connected to a 0-10v fixture group.

To seperate a continous run powered by one incoming power cable, use any of the LBI-NODIM linking cables or NODIM seamless connectors. The NODIM connectors will connect the AC power and seperate the 0-10v to make independant control groups. One OC2 sensor should be attached to each 0-10v group.











When NODIM connector (sold seperate) is used on one of the OC2, the sensor will NOT control units beyoned the NODIM connector.

NODIM connectors/ cables can be connected directly to OC2 sensors or in between any LBI junction