Catalog Number: Date: Project

OVERVIEW

The nLight AIR rSBOR outdoor pole and fixture mount motion and photo sensor provides reliable networked control in a variety of outdoor and indoor lighting control applications. Designed to mount directly through a 1/2" knockout (7/8" hole) in a light fixture or pole, the rSBOR utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The rSBOR has a dual radio that allows it to communicate wirelessly to other nLight AIR devices to enable control strategies like group response to motion, on/off control in response to daylight, and on/off by switch.

SENSOR FEATURES

- 100% digital PIR detection
- Combined daylight and occupancy sensor
- Fully dimmable with 0-10V dimming, providing the right amount of light for the application and to
 optimize energy savings
- Power Monitoring with Current Measurement +/- 3% accuracy
- Programmable return to last state capability

INSTALLATION FEATURES

- IP66 rated for outdoor or other demanding environments
- Wireless communication enables simple retrofits no communication wires to pull between devices
- Designed to mount directly to ½" knockout (7/8" hole) in a luminaire, on a pole, or to a junction box for a sensor only configuration
- Simple app-based configuration of space behaviors

ADVANCED WIRELESS FEATURES

- Devices intercommunicate to provide grouped-response to motion and on/off and dimming response to daylight conditions
- Flexible sensor time delays and light levels in responding to motion and daylight conditions
- Fully compatible with other nLight AIR devices on the site
- Easy to integrate with the nLight ECLYPSE™, which provides site-wide lighting control through nLight's SensorView software and and provides optional BMS integration
- Comprehensive wireless security

Warranty

Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

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nLight

nLight AIR rSBOR

Outdoor Pole/ Fixture Mount Sensor



Note: Sensor may appear different from above photo depending on selected body and bracket type.



ORDERING INFORMATION

rSBOR Example: rSBOR 6 IM WH									
Series		Mounting Height	Voltage		Emergency				
rSBOR	nLight AIR Outdoor Pole/ Fixture Mount Sensor	6 High Mount (15-30 ft) 10 Low Mount (8-15 ft) 40 High Mount Site/ Area (40 ft)	[blank] HVOLT	120-277 VAC (MVOLT) ¹ 347-480 VAC ¹	[blank ²] EM ³	None UL 924 Emergency Operation, via separate normal power sensing device			

Body/ Bracket			Power Monitoring		Color		Generation		Pack Qty		
EB1 Sho	ort extension, low back ort extension, high back ng extension, low back	EB3 EB4 EB5	Long extension, high back Medium extension, low back Medium extension, high back	IM	Current Monitoring	WH BK BZ NA	White Black Dark Bronze Natural Aluminum	G2	Generation 2 compatibility	[blank] J40	Single 40 Pack

Note:

- Safety Note: only one line phase is being switched on all phase to phase applications, including 208VAC and 480VAC.
- 2. Can provide normal power sensing information to nLight AIR devices with EM option. See the UL 924 Response section for more information.
- 3. EM option requires an nLight AIR device connected to normal power for wireless normal power detection. See the UL 924 Response section for more information.

Idle Tim Until Dim 7.5 Minutes

Photocontrol Enabled

Occupancy Control Enabled

Occupied Dim Level 100%

Dimming Fade Rate Time 5 Minutes

Unoccupied Dim Level 30%

Photocontrol Set Point 5 fc

Photocontrol Transition On Time 45 Seconds

Photocontrol Transition Off Time 5 Minutes

Size: Bracket Dependent

Weight: 9.6 oz

Mounting: 1/2" knockout (7/8" hole)
Mounting Height: rSBOR 10: 8 -15 ft (2.44-4.57 m)

rSBOR 6: 15-30 ft (4.57-9.14 m) rSBOR 40: 40 ft (12.19m)

Maximum Load: 450W for 120-277VAC, 800VA for 347-480VAC

Motor Load: 1/4 HP

Dimming Load: Sinks < 10 mA (0-10 VDC LED Drivers / Ballasts)

Ingress Protection: IP66

Operating Voltages: 120-277VAC or 347VAC/480VAC

Frequency: 50/60Hz

Temperature Rating: -40°C to 65°C ambient

RF: Transmit Power 900Mhz: +20dBm; 2.4GHz: +10.4 dBm

Wireless: Standard 900MHz: IEEE 802.15.4-based

2.4GHz: Version 4.0+ of the Bluetooth specification

Wireless Range: 900MHz: Up to 1,000 ft. (~304m) in free space/ line of sight

Minimum of 150 ft through typical construction 2.4GHz: Up to 60 ft. (~18m) in free space/ line of sight

Security: Complies with California Civil Code Title 1.81.26, Security of Connected Devices,

approved under Senate Bill No. 327 (2018)

Regulatory Compliance: FCC ID: 2ADCB-RMODIT3

IC: 6715C-RMODIT3
IFETEL: RCPNLNL20-2057

cULus RoHS

Current Monitoring: MVOLT versions include automatic voltage detection for power calculation. HVOLT versions

require user input of voltage via SensorView to calculate power Minimum Current of 225mA required to ensure +/- 3% Accuracy

Programming Tool: $CLAIRITY^{TM} + Mobile App$

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COVERAGE PATTERN

Parking Garage / Low Mount Applications

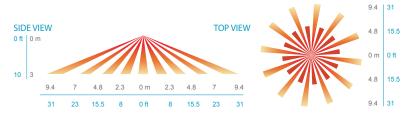
In general, the rSBOR 10 is recommended for 8-15 ft (2.44-4.57 m) mounting and provides a coverage area radius for walking motion of greater than 2x the mounting height. When mounted 10 ft high, for example, on a luminaire in a parking garage, the sensor's coverage for walking motion extends out 30 ft in a 360° pattern. This closely matches the lighting distribution of a typical parking garage luminaire. When mounted to a light pole, for example, in a parking lot or along a path, the sensor provides 270° of coverage (90° is blocked by the pole). Note, walking askew to sensor typically results in earlier detection than walking directly at sensor.

Site & Area Lighting / High Mount Applications

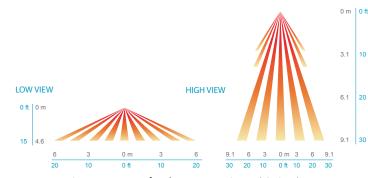
The rSBOR 6 is intended for higher pole mount applications, between 15-30 ft (4.57-9.14 m), and provides a coverage area radius for walking motion of 15-20 ft (4.57-6.10 m). When mounted to a pole the sensor provides 270° of coverage (90° is blocked by the pole). Higher mounting (e.g. 40 ft or 12.20 m) may result in shorter detection range.

Site & Area Lighting / High Mount Applications

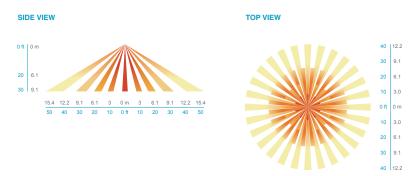
The rSBOR 40 is intended for the highest of mounting heights - up to 40ft. It provides a coverage area radius for walking motion of 50ft. When mounted to a pole, the sensor provides 270 degrees of coverage.



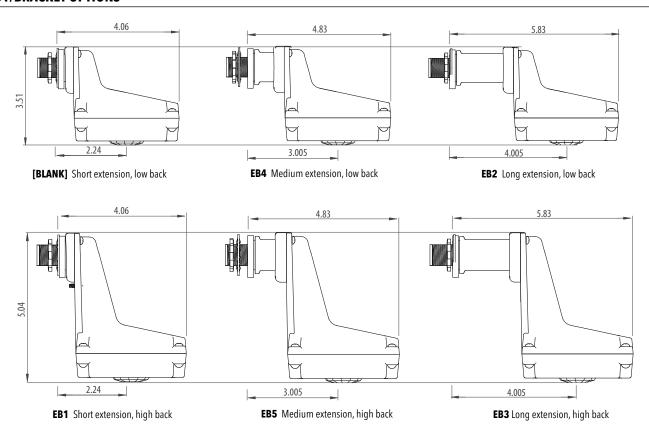
Coverage Pattern of Low Mount Lens Option (rSBOR 10)



Coverage Pattern of High Mount Lens Option (rSBOR 6)



Coverage Pattern of High Mount Site/ Area Lens Option (rSBOR 40)

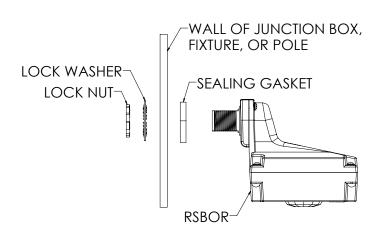


INSTALLATION INSTRUCTIONS

 Sensor has a 1/2" chase nipple that enables mounting through a knockout/hole in a junction box, fixture, or pole.

MOUNTING SPECIFICATIONS

- Mounts through 7/8" diameter hole
- Requires access on opposite or adjacent side to secure mounting nut
- Required mounting distance from light source may vary by sensor functionality and luminaire design
- See specification drawing for details





WIRING** (DO NOT WIRE HOT)

WIRING TO SINGLE PHASE POWER (120/277/347 VAC)

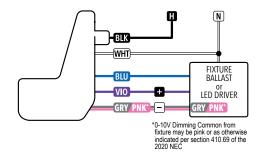
BLACK* - 120/240/347 VAC Input

BLUE* - Switched Line Voltage Output to Luminaire

WHITE - Neutral

VIOLET - Low Voltage Dim Output (0-10 VDC)

PINK - Low Voltage Common



WIRING TO 2-PHASE POWER* (208/240/480 VAC)

BLACK* - 208/240/480 VAC Phase A Input

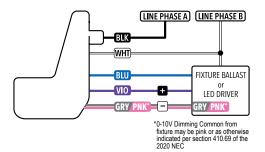
BLUE* - Switched Line Voltage Output to Luminaire

WHITE - Phase B of 208/240/480 VAC Input

VIOLET (w/ D option) - Low Voltage Dim Output (0-10 VDC)

PINK (w/ D option) - Low Voltage Common

*Safety Note: only one line phase is being switched



WIRING TO EMERGENCY (-EM) UNITS

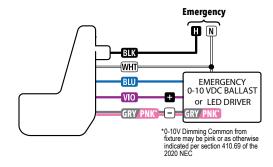
BLACK - Input Emergency Hot

BLUE - Switched Line Voltage Output to Luminaire

WHITE - Emergency Neutral

VIOLET - Low Voltage Dim Output (0-10 VDC)

PINK - Low Voltage Common



UL 924 Response - nLight AIR Devices with EM Option

The below information applies to all nLight AIR devices with an EM option.

- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CLAIRITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices.
 See specification sheets for control devices and luminaires for more information on options that support normal power sensing.

^{*}Safety Note: only one line phase is being switched

^{**}Device must be permanently energized