

## OVERVIEW

The rCMSB family of nLight AIR-enabled wireless ceiling/surface mount occupancy and daylight sensors provide a range of sensor solutions for a wide variety of ceiling applications. The rCMSB sensor utilizes analog Passive Infrared (PIR) detection and are available with several lens options, providing flexibility for multiple mounting height and coverage pattern requirements. It also has an integrated photosensor, with automatic daylight harvesting/dimming control available during programming.

The rCMSB is battery powered for ease of installation where line power is not easily accessible and communicates with one or more nLight AIR-enabled fixtures or Power Packs to enable control of fixtures individually or in groups.

## FEATURES

- Powered with three off-the-shelf lithium AA batteries and rated for 10 years of use, minimizing battery replacement.
- Analog PIR Detection and optional Passive Dual Technology (PDT) occupancy that adds Microphonics to look and listen for occupants in the space.
- A recessed mount option that takes the tools out of your hands, installing in a standard 3" hole and delivering the lowest profile of any independent occupancy sensor
- Integrated, dimming photosensor included – Photocell views down through sensor lens
- LED status indicator to indicate motion during operation and provide feedback during startup
- Adjustable settings (e.g. occupancy time delays, photocell set-points) via CLAIRITY™+ mobile app
- Batteries are included and preinstalled, allowing for a simple unbox and mount installation
- Communicates with nLight AIR devices via radio frequency (RF) in the 900MHz spectrum

## 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](http://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.



Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit [www.acuitybrands.com/designselect](http://www.acuitybrands.com/designselect).  
\*See ordering tree for details

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nLight® AIR  
rCMSB  
Ceiling Mounted  
Battery Powered  
Smart Sensor



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## ORDERING INFORMATION

rCMSB		Example: RCMSB 7 G2				
Series / Detection	Detection	Lens		Mounting Type		Generation
RCMSB nLight AIR occupancy and daylight sensor	[blank] PIR Detection PDT Dual Tech PIR/Microphonics <sup>1</sup>	7 Low Mount 360 <sup>1</sup>	45 High Mount 360°	45A High Mount Aisleway	[blank] Surface Mount RECM Recessed Mount JBM J-Box Mount	G2 Generation 2 compatibility

### Accessories

MASKKIT RCMSBACC J5 Masking Labels\*

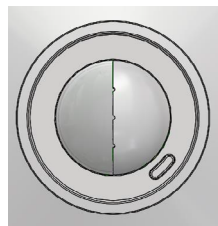
### Notes:

1. PDT is only available with the 7 lens.

\*Must order in quantities of 5

## SPECIFICATIONS

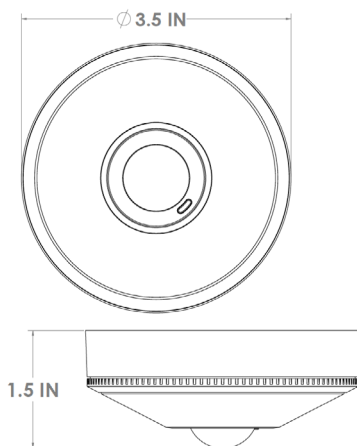
Product Weight	4.3 oz	Out of Box Settings	
Color	Matte White	Daylighting setpoint:	5 fc
Enclosure Material	Polycarbonate/ABS	LED behavior:	Enabled, responds to occupancy transitions
Max Humidity	95% non-condensing	Occupancy Time Delay:	10 min* default
Mounting	Surface mountable to concrete, drywall, ceiling tile or metal. Recessed mountable in drywall or ceiling tile applications.	*Note:	shorter delay may affect battery life
Operating Temperature	-40°F to 140°F (-40°C to 60°C)		
Radio Frequency	Dual Radio: 900MHz & 2.4GHz		
RF Transmit Power	900Mhz: up to 20 dBm 2.4GHz: up to 10.4 dBm		
Wireless Standard	900MHz: IEEE 802.15.4-based 2.4GHz: Version 4.0+ of the Bluetooth specification		
Security Application Data Encryption:	AES-128 bit Mutual Entity Authentication Message Confidentiality Message Authentication and Replay Prevention Limited Anonymity		
Regulatory Compliance:	FCC ID: 2ADCB-RMODIT3, RoHS Compliant, cULus IC: 6715C-RMODIT3 IFETEL: RCPNLL20-2057		
Masking Labels	Masking Labels are available as a 5 pack to mask off a portion of the lens coverage pattern for end-of-aisle applications.		



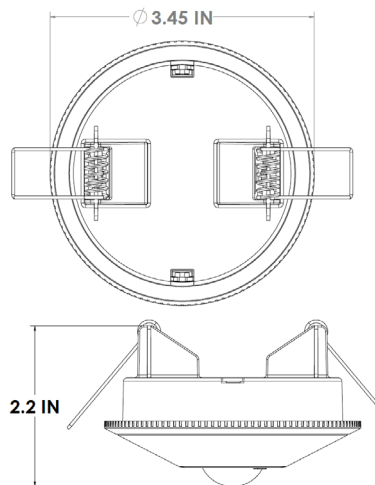
**Masking Label**

## DIMENSIONS

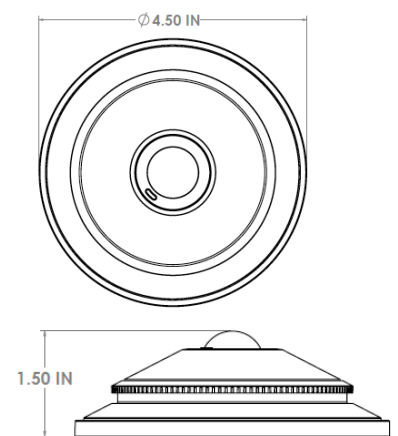
**Surface Mount**



**Recessed Mount**



**J-Box Mount**



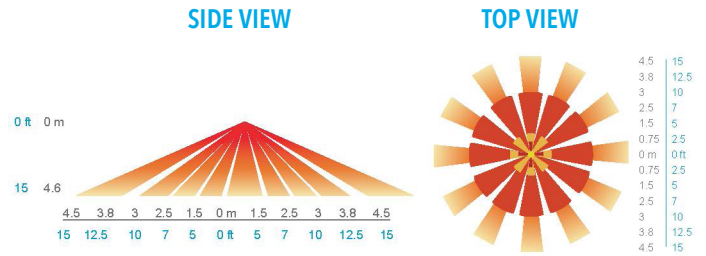
## COVERAGE PATTERNS\*

Recommended mounting 4' or more away from HVAC vents.

### 7 – LOW MOUNT 360°



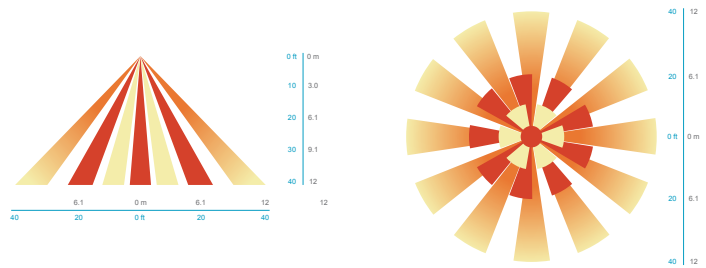
- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection radius of walking motion equivalent to the mounting height (up to 15'). For mounting heights between 15' and 20', multiply the mounting height by .875 to determine the initial detection radius for walking motion (ex. 20' x .875 = 17.5' radius).
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Tested to NEMA WD 7-2011



### 45 – HIGH MOUNT 360°



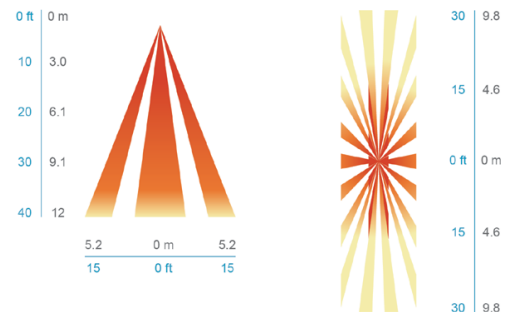
- Optimized full coverage pattern for 10 – 40 ft. (3.1 – 12 m)
- Reliable detection of large motion (e.g. pedestrian walking traffic) up to 30 ft. (9.1 m) mounting height
- Reliable detection of extra-large motion (e.g. forklift traffic) up to 40 ft. (12 m) mounting height
- Tested to NEMA WD 7-2011



### 45A – HIGH MOUNT AISLEWAY



- Optimized bi directional coverage pattern for aiseways with 10 – 40 ft. (3.1 – 12 m) mounting heights
- 1.5x's mounting height equals approximate detection range
- Reliable detection of large motion (e.g. pedestrian walking traffic) up to 30 ft. (9.1 m) mounting height
- Reliable detection of extra-large motion (e.g. forklift traffic) up to 40 ft. (12 m) mounting height
- Tested to NEMA WD 7-2011



\* Coverage pattern shown is derived from NEMA WD7 testing