Catalog Number: | Date: | Project:

OVERVIEW

The rCMSB family of wireless nLight occupancy and daylight sensors provides flexible sensing solutions for a wide range of ceiling-mounted applications. Designed for both ceiling and surface mounting, the rCMSB uses analog Passive Infrared (PIR) detection and offers multiple lens options to accommodate different mounting heights and coverage requirements.

Each sensor includes an integrated photosensor that supports automatic daylight harvesting and dimming through system programming. Battery power simplifies installation, making the rCMSB ideal for locations where line voltage is not readily available. The sensor communicates wirelessly within an nLight system to control one or more luminaires or power packs, enabling fixtures to be managed individually or in groups.

FEATURES

- Wireless occupancy and daylight sensor designed for ceiling- and surface-mounted applications
- Analog Passive Infrared (PIR) motion detection, with optional dual-technology sensing using microphonics for enhanced performance*
- Integrated photosensor supporting automatic daylight harvesting and dimming control
- Battery-powered operation using three standard lithium AA batteries, rated for up to 10 years of use. Batteries ship included
- Multiple lens options to accommodate a wide range of mounting heights and coverage patterns
- Flexible mounting options, including surface, recessed, and J-box mounting
- Wireless communication within an nLight system to control luminaires or power packs individually or in groups
- Settings are configured via Bluetooth using the CLAIRITY™+ mobile app, including time delays and daylight setpoints
- Long-distance wireless communication designed to support typical indoor lighting control applications, including open spaces and partitioned environments

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.

design select

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.
*See ordering tree for details

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nLight® AIR rCMSB

Ceiling Mounted Battery Powered Smart Sensor



LISTED

Design Select options indicated by this color background.

ORDERING INFORMATION

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

Accessories	
MASKKIT RCMSBACC J5	Masking Labels*

*Must order in quantities of 5

Notes:

1. PDT is only available with the 7 lens.
2. BK option is subject to extended lead times and is available in surface mount only.

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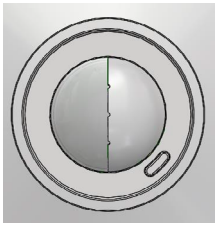
SPECIFICATIONS

Product Weight	4.3 oz
Color	Matte White or Black
Enclosure Material	Polycarbonate/ABS
Max Humidity	95% non-condensing
Mounting	Surface mountable to concrete, drywall, ceiling tile or metal. Recessed mountable in drywall or ceiling tile applications.
Operating Temperature	-4°F to 140°F (-20°C to 60°C), indoor use only
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: RCPNLNL20-2057
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.

Out of Box Settings

Daylighting setpoint:	5 fc
LED behavior:	Enabled, responds to occupancy transitions
Occupancy Time Delay:	10 min* default

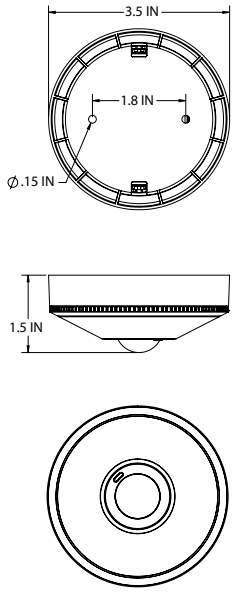
*Note: shorter delay may affect battery life



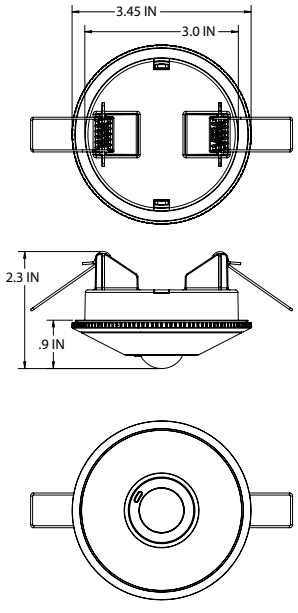
Masking Label

DIMENSIONS

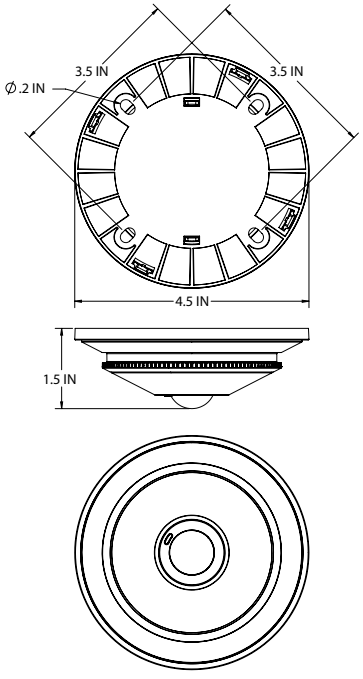
Surface Mount



Recessed Mount



J-Box Mount



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COVERAGE PATTERNS*

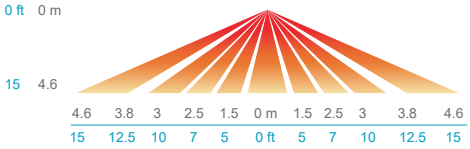
Recommended mounting 4' or more away from HVAC vents.

7 – LOW MOUNT 360°

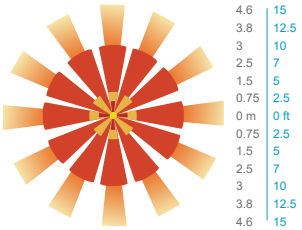


- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection radius of walking motion equivalent to the mounting height (up to 15'). For mounting heights between 15' and 20', multiply the mounting height by .875 to determine the initial 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

SIDE VIEW



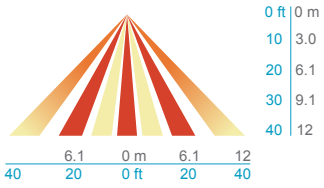
TOP VIEW

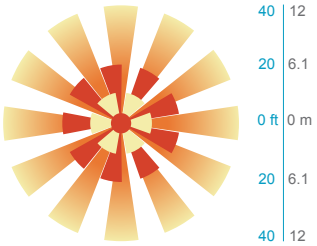


45 – HIGH MOUNT 360°



- 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

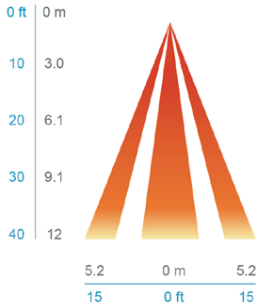


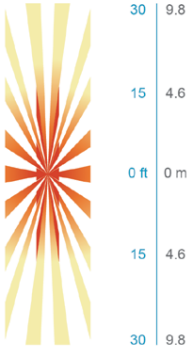


45A – HIGH MOUNT AISLEWAY



- Optimized bi directional coverage pattern for aisleways 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

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