



Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type	Constant Current	Watts	19W
120V	0.15A	Color Temp	5000K (Cool)
208V	0.10A	Color Accuracy	85 CRI
240V	0.08A	L70 Lifespan	100,000 Hours
277V	0.07A	Lumens	2,878 lm
Input Watts	18.2W	Efficacy	158.1 lm/W

Technical Specifications

Compliance

UL Listed:

Suitable for damp locations

IESNA LM-79 & lm-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA lm-79 and lm-80

Trade Agreements Act Compliant:

This product is a product of Cambodia and a "designated country" end product that complies with the Trade Agreements Act

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.

DLC Product Code: PWHR1N1A

Electrical

Driver:

Class 2, Constant Current, 120-277V, 50/60Hz, 120V: 0.15A, 208V: 0.10A, 240V: 0.08A, 277V: 0.07A

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

7.12% at 120V, 9.17% at 277V

Power Factor:

99.4% at 120V, 99.5% at 277V

Battery Backup:

Battery backup will operate the fixture for 90 minutes if power fails. Wired for 120-277V.

Smart Sensing:

Programmable occupancy sensor for multi-level lighting control. Includes manual override from a light switch.

Surge Protection:

2.5kV

Battery Backup Light Loss Factor:

0.67

Construction

Cold Weather Starting:

The minimum starting temperature is -20°C (-4°F)

Ambient Temperature:

Suitable for use in up to 40°C (104°F)

IC Rated:

Suitable for direct contact with insulation

Housing:

Die-formed, 20-gauge, cold-rolled steel

Mounting:

Integral T-grid clips make installation easy and secure

Reflector:

High-reflectance, powder-coated finish, optimized for uniform light distribution

Lens:

Snap-in, frosted polycarbonate lens

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Technical Specifications (continued)

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Lightcloud

Lightcloud Blue Sensor Installed:

Occupancy, vacancy, and closed loop daylight harvesting in one versatile sensor. In addition control any fixture in your Lightcloud Blue integrated/embedded networked lighting luminaire-level control system. LLLC - capable of switching, 0-10V dimming, power/energy monitoring. Can also be used to extend the range of the Lightcloud Blue utilizing a "BLE Mesh" network communication protocols. The Lightcloud Blue sensor can be attached to the fixture provided an unobstructed view of the coverage area is available. DLC system - N1XMLOEATBA
[Learn more about Lightcloud.](#)

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Patents:

This design is protected by patents pending in US, Canada, China, Taiwan and Mexico

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Sensor Specifications

Capacitance Load:

400VA at 120VAC, 800VA at 230VAC, 1000VA at 277VAC

Operating Temperature:

-20°C to +60°C (-4°F to +140°F)

Relay:

Zero-cross relay

Maximum Mounting Height:

16.4 feet

Customizable Detection Area:

10, 50, 75 or 100%

Time Delay:

5s, 30s, 1min, 5min, 10min, 20min, 30min

Cut Off Period:

0s, 10s, 1min, 5min, 10min, 30min, 1hr, Bi-Level

Cut-Off Dimming level:

10, 20, 30, 50%

Cut-Off Power:

Less than 1W

Daylight Threshold:

About .2-5 fc for disabled

Sensor Principle:

High Frequency

Microwave Frequency:

5.8GHz +/- 75MHz

Microwave Power:

<0.2mW

Max Detection Range:

26 ft diameter at 16 ft mounting height

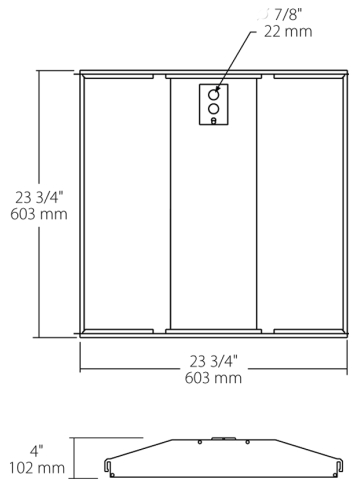
Detection Angle:

About 30 to 150 degrees

Remote Control Accessory:

Adjust settings using remote control (catalog# MVSREM). Only available with 0-10V dimming driver options. [Remote control available here.](#)

Dimensions



Features

- Direct Connect to the Lightcloud Blue mobile app via Bluetooth, no Gateway or Hub required
- Use mobile device to configure features for On/Off Control, Dim Level, Schedules, Scenes, and more.
- Meets Luminaire Level Lighting Control (LLLC) requirements
- Integrated passive infrared or microwave sensor for added savings
- Use mobile device to configure sensor settings for sensitivity, timeout and actions.
- Includes emergency battery backup

Ordering Matrix

Family	Size	Wattage	Color Temp	Driver	Options	Chicago Penum
SWISH	2X2	19		/D10	/LCBS/MVS/E2	
	2X4 = 2' x 4' 2X2 = 2' x 2'	19 = 19W (2x2) 29 = 29W (2x2) 39 = 39W (2x4) 49 = 49W (2x4)	Blank = 5000K Cool N = 4000K Neutral YN = 3500K Warm Neutral Y = 3000K Warm	/D10 = 0-10V Dimming	Blank = No Option /E2 = Battery Backup /LC = Lightcloud® Controller /LCB = Lightcloud® Blue Enabled /LCBS = Lightcloud® Blue Enabled w/ PIR Sensor /MVS = Microwave Occupancy Sensor /LC/E2 = Lightcloud® Controller w/ Battery Backup /LCB/E2 = Lightcloud® Blue Enabled and Battery Backup /LCBS/E2 = Lightcloud® Blue Enabled w/ PIR Sensor and Battery Backup /LCBS/MVS = Lightcloud® Blue Enabled w/ MVS Sensor /LCBS/MVS/E2 = Lightcloud® Blue Enabled w/ MVS Sensor and Battery Backup /MVS/E2 = Microwave Occupancy Sensor w/ Battery Backup	Blank = Standard /CP = Chicago Plenum