

Project:

Type:

Prepared By:

Date:

**Driver Info**

|             |                  |
|-------------|------------------|
| Type        | Constant Current |
| 120V        | 0.17A            |
| 208V        | 0.10A            |
| 240V        | 0.09A            |
| 277V        | 0.08A            |
| Input Watts | 10.5-20.4W       |

**LED Info**

|                |                   |
|----------------|-------------------|
| Watts          | 20W               |
| Color Temp     | 3000K/3500K/4000K |
| Color Accuracy | 93-95 CRI         |
| L70 Lifespan   | 50,000 Hours      |
| Lumens         | 1,379-2,796 lm    |
| Efficacy       | 127.7-142.1 lm/W  |

**Technical Specifications****Field Adjustability****Field Adjustable:**

Field Adjustable Light Output:  
20W/10W (factory default 20W)  
5 Power Preset:  
100%/0% (Downlight Only)  
70%/30%  
60%/40%  
50%/50%  
0%/100% (Uplight Only)  
Color Temperature Selectable:  
3000K, 3500K and 4000K (factory default 4000K)

**Compliance****UL Listed:**

Suitable for damp locations

**DLC Listed:**

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.  
DLC Product Code: S-7A850F

**Electrical****Driver:**

Constant Current, Class 2, 120-277V, 50/60 Hz:  
20W: 120V: 0.17A, 208V: 0.10A, 240V: 0.09A, 277V: 0.08A  
10W: 120V: 0.09A, 208V: 0.06A, 240V: 0.05A, 277V: 0.05A

**Dimming Driver:**

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

**THD:**

4.46% at 120V, 8.1% at 277V

**Power Factor:**

99.5% at 120V, 93% at 277V

**Surge Protection:**

2kV

**Status Indicator:**

The status indicator light is located around the circumference of the top of the Controller.

Solid Green - Nano is paired to the Lightcloud Blue app  
Flashing Red - Nano has been restored to default factory settings

**Device Identification Button:**

Located at the top of the controller under the Lightcloud logo.  
Once the Controller has been provisioned to the Lightcloud Blue mobile app this button offers the following functionality:  
Press once to rapid identify this device in the Lightcloud Blue mobile app  
Press twice to toggle circuit on and off  
Press twice and hold to set dim level  
Press and hold for 10s to reset the device to factory settings and into pairing mode

**Sensor Connection Type:**

RJ09

**LED Characteristics****LEDs:**

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

**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:**

50,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

## Technical Specifications (continued)

### Performance Data:

[Click here for the BOA2 performance data](#)

### Wattage Equivalency:

20W 100% / 0%: Replaces up to (1) F32T8 or (3) F17T8

20W 70% / 30%: Replaces up to (1) F32T8 or (3) F17T8

20W 60% / 40%: Replaces up to (1) F32T8 or (3) F17T8

20W 50% / 50%: Replaces up to (1) F32T8 or (3) F17T8

20W 0% / 100%: Replaces up to (1) F32T8 or (12) F17T8

### Construction

#### Cold Weather Starting:

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

#### Maximum Ambient Temperature:

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

#### Housing:

Aluminum

#### Mounting:

For direct ceiling and wall mounting

#### Lens:

Polycarbonate frosted flat lens

#### Reflector:

Polyethylene Terephthalate (PET)

#### Finish:

Formulated for high durability and long-lasting color

#### Green Technology:

Mercury and UV free. RoHS-compliant components.

### Lightcloud

#### Lightcloud Blue:

Lightcloud Blue is a Bluetooth mesh wireless lighting control system that allows you to control RAB's various compatible devices. With RAB's patent-pending Rapid Provisioning technology, devices can be quickly and easily commissioned for residential and large commercial applications using the Lightcloud Blue mobile app. Each device in a system can communicate with any other device, eliminating the need for a Gateway or Hub and maximizing the control system's reach.

DLC system - N1XMLOEATBA

[Learn more at \[www.lightcloud.com\]\(http://www.lightcloud.com\)](#)

#### Gateway Required:

No

#### Communication Protocol:

Bluetooth Mesh

#### Range:

Up to 60 feet between standard building materials.

Up to 200 feet clear line of sight.

#### Spacing Criteria:

Lightcloud Blue devices should be placed within the specified range to communicate within the Bluetooth Mesh network.

#### Factory Reset:

Method 1: Delete from App

Open the app and access the device settings for the paired device. Be sure that the device is online and select 'Delete'. The device will flash on/off 5 times and return to full brightness.

Method 2: Manual

Locate the device identification button at the top of the Controller under the Lightcloud logo. Press and hold this button for 10s or until the indicator light begins flashing red. If the Controller is attached to a fixture, the fixture will also flash on/off 5x.

### Sensor Settings

#### Default Setting:

Uncommissioned State:

Sensor Status: Enabled

Motion Sensitivity: High

Brightness when triggered : 100%

Hold time: 1 minute

Standby to dim: 20%

Standby time: 1 minute

When vacant: Off

Commissioned State:

Sensor Status: Disabled, once enabled the following default are set.

Motion Sensitivity: High

Brightness when triggered: Last on status

Hold time: 20 minutes

When vacant: Off

#### Sensor Type:

Passive Infrared (PIR)

#### Sensing Type:

Occupancy or Vacancy

#### Sensor Sensitivity:

Low/Medium/High

#### Occupied Actions:

On or On at a Dim Level

#### Vacant Options:

Off or On at a Dim Level

#### Occupancy Timeout:

1 minute to 240 minutes

#### Daylight Sensing:

The sensor will determine to trigger the light(s) on or not based on the daylight threshold level set in the Lightcloud Blue mobile app.

#### Daylight Threshold:

150 lux to 1500 lux

### Other

#### Note:

All values are typical (tolerance +/- 10%)

#### 5 Yr Limited Warranty:

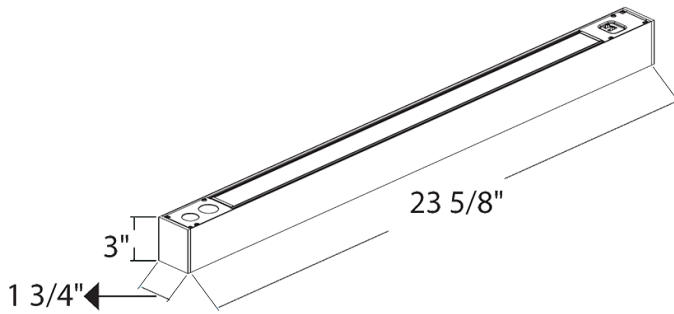
The RAB 5-year, limited warranty covers light output, driver performance and paint finish. RAB's warranty is subject to all terms and conditions found at [rablighting.com/warranty](http://rablighting.com/warranty).

## Technical Specifications (continued)

### 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.

## Dimensions



## Features

- 50,000-Hour LED lifespan
- 0-10V dimming
- 5-Year, limited warranty

Ordering Matrix

| Family | Size (Wattages)                                    | Mount       | Lens                        | Light Output          | Color Temp                               | Voltage                         | Finish                               | Options  |
|--------|--|-------------|-----------------------------|-----------------------|--|---------------------------------|--------------------------------------|--|
| BOA    | 2  | P           |                             | U                     |  |                                 | W                                    | /LCBS  |
|        | 2 = 2 ft (20W)<br>4 = 4 ft (40W)<br>8 = 8 ft (80W) | P = Pendant | Blank = Flat<br>L = Louvers | U = Uplight/Downlight | Blank = 3000K/3500K/4000K CCT Adjustable | Blank = 120-277V, 0-10V Dimming | W = White<br>S = Silver<br>B = Black | Blank = No Option<br>/MVS = Microwave Occupancy Sensor<br>/PIR = Passive Infrared Occupancy Sensor<br>/LCBS = Lightcloud® Blue Enabled w/ PIR Sensor<br>/LCBS/MVS = Lightcloud® Blue Enabled w/ MVS Sensor<br>/E = Battery Backup <sup>2</sup><br>/MVS/E = Microwave Occupancy Sensor w/ Battery Backup <sup>2</sup><br>/PIR/E = Passive Infrared Occupancy Sensor w/ Battery Back Up <sup>2</sup><br>/LCBS/E = Lightcloud® Blue Enabled w/ PIR Sensor and Battery Backup <sup>2</sup><br>/LCBS/MVS/E = Lightcloud® Blue Enabled w/ MVS Sensor and Battery Backup <sup>2</sup> |

<sup>1</sup> 5 Presets Down/Up: 100% / 0% (downlight only), 70% / 30%, 60% / 40%, 50% / 50%, 0% / 100% (uplight only)

<sup>2</sup> Only available on 4 ft and 8 ft models only