

Project:	Туре:
Prepared By:	Date:

Driver Info		LED Info	
Type	Constant Current, Class	Watts	9W
120V	2 .08A	Color Temp	Tunable White 2700K - 6500K
208V	N/A	Color Accuracy	95 CRI
240V	N/A	L70 Lifespan	50,000 Hours
277V	N/A	Lumens	550 lm
Input Watts	9W	Efficacy	61

# **Technical Specifications**

### Performance

# **Product Type:**

Edge-Lit Wafer

### Description:

This canless wafer has an ultra low profile design making them a flexible solution for both new construction and retrofit applications. With museum quality CRI and Lightcloud Blue-enabled features this is the ideal solution for museums, galleries, residential, and retail applications.

### Wattage Equivalency:

60W Incandescent

# Input Wattage:

9W

# Lumens (Nominal):

550lm

# Efficacy:

61lm/W

### L70 Lifespan:

50,000-Hour LED lifespan based on IES LM-70 results

# 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.

Learn more at www.lightcloud.com

# **Gateway Required:**

No

# **Communication Protocol:**

Bluetooth Mesh

# SmartShift:

SmartShift is the most advanced - yet easiest to use - circadian lighting system, which syncs white color tuning with the local sunrise and sunset.

### Range

Up to 60 feet between standard building materials. Building materials such as brick, concrete, and steel construction may require additional Lightcloud Blue devices to extend around an obstruction.

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 downlight is online and select 'Delete'.

Method 2: Manual

Power the downlight off and on 5x consecutively. Do not allow less than 4s to elapse from switching off to on. Do not allow more than 2s to elapse from switching on to off. The downlight will flash 3x, then reset to 100% brightness at default CCT.

Method 3: Rapid Reset Tool

The Rapid Reset process must be done by a professional electrician qualified by RAB. Reach out to your RAB sales manager to request a Rapid Reset Tool. The tool simply needs to be placed directly on the small Lightcloud Blue logo on the device for 2s or until the lamp/luminaire flashes 3x, then resets to 100% brightness at the default CCT.

# Electrical

### Driver:

Constant Current, Class 2, 60 Hz, 120V, 120V: 0.08A

### THD:

≤20%



# **Technical Specifications (continued)**

### **Power Factor:**

≥0.9

### Dimmable:

Yes, via the Lightcloud Blue mobile app and devices. This lamp will not operate properly when connected to a standard (incandescent) dimmer or dimming control.

# Input Voltage:

120V

### **Operating Frequency:**

60 Hz

# Input Current @ 120V (mA):

82mA

# **Operating Temperature:**

-4°F to 104°F (-20°C to 40°C)

### Flicker:

≤5%

### **LED Characteristics**

# LEDs:

Edge-lit

### **Color Temperature:**

Tunable White 2200K - 6500K

# Color Accuracy (CRI):

>95 CRI

# **Natural Spectrum:**

Low blue LEDs deliver a spectrum of light similar to that of natural Sunlight. They beautifully render colors with greater than 95+ CRI and an R9 value greater than 90. In addition, these LEDs don't suppress melatonin creation which aids in promoting better sleep/wake cycles.

# R9 Value:

High color performance with R9 greater than or equal to 50

# **Color Consistency:**

4-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

# **Color Stability:**

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

# **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.

# Installation

# Mounting:

Recessed

### Construction

#### Size:

**4**"

# Shape:

Round

### Finish:

White

### **Housing Material:**

Metal and Plastic

### Trim Style:

Baffle

#### Gaskets:

Gasket included can achieve restrictive airflow and wet location without any additional gasket or caulk

### Lens:

Acrylic light guide distributes light evenly and smoothly for general lighting applications

# Beam Angle:

110°

# Remote Driver:

Stamping formed galvanized steel driver / junction box with captive hinged junction box cover.

Recessed CCT Selectable dip-switch.

Listed for (6) #12 AWG 90°C splice conductors.

2-in, 2-out plus 2-ground.(4) 1/2" conduit pry-outs.

(3) Push in connectors for quick and reliable line voltage connections. Integral mounting facilitates direct mounting to building structure or mounting frame.

# IC Rated:

Suitable for direct contact with insulation

# Compliance

# Listings:

**UL** Listed

#### **Environment:**

Suitable for use in dry, damp, and wet environments.

# Air Tight:

Not compliant

# **Energy Star Approved:**

This product is ENERGY STAR® Version 2.2 Certified

# **Energy Star ID:**

2404279

# T20 Compliant:

Not Compliant

### California Title 24 JA8 Compliant:

Can be used to conform with the requirements of California Title 24 Part 6

# California Energy Commission (CEC) Status:

Lawful for Sales in California

# **NEC Compliant:**

Suitable for use in closets. Compliant with NEC Sec. 410.16 (A)(1) and 410.16 (C3).

### IESNA LM-79 &lm-80 Testing:

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

# RoHS:

Mercury and UV free. RoHS-compliant components.

### FCC:

Complies with Part 15B of the FCC Rules

# Trade Agreements Act Compliant:

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

# WFRL4R99TW120WB-SS-NS/LCB



# **Technical Specifications (continued)**

### Other

### Accessories:

HAD4/D10

277V 0-10V driver

DLPLATE/WFR3456

Mounting plate

DLPLATE/WFR3468/NB

Mounting plate with nailer bar

WFRL-GOOF-4R-6R-W

4"-6" Goof Ring

WFRL-TRIM-4R-BS

4" round smooth black trim

WFRL-TRIM-4R-BRS

4" round smooth bronze trim

WFRL-TRIM-4R-BN

4" round smooth brushed nickel trim

EXTCBL-CCT-6

6' Extension cable

EXTCBL-CCT-12

12' Extension cable

EXTCBL-CCT-20

20' Extension cable

# 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.

# Note:

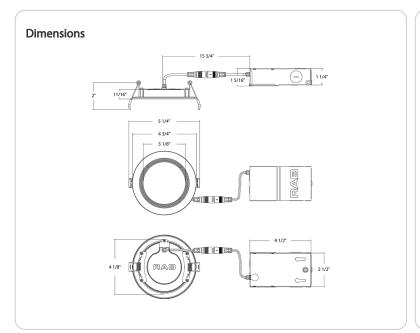
All values are typical (tolerance +/- 10%)

# **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.

# WFRL4R99TW120WB-SS-NS/LCB





# **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, Color Temperature, Schedules, Scenes, SmartShift and more

Tunable White 2700 - 6500K with smooth transition between color temperatures

SmartShift technology syncs with local sunrise/sunset for healthier circadian lighting

Natural Spectrum technology mimics natural light that renders color accurately

Ordering Matrix										
Family	Size	Shape	Wattage	CRI/Color Temp	Voltage	Finish	Trim	SmartShift	Natural Spectrum	Options
WFRL	4	R	9	9TW	120	W	В	SS	NS	/LCB
	<b>4</b> = 4" <b>6</b> = 6"	R = Round	<b>9</b> = 9W <b>13</b> = 13W	<b>9TW =</b> 90 CRI, Tunable White 2700K-6500K	<b>120</b> = 120V	<b>W</b> = White	<b>B</b> = Baffle	SS = SmartShift	<b>NS =</b> Natural Spectrum	<b>/LCB =</b> Lightcloud® Blue Enabled
4" only available in 9W 6" only available in 13W										