# SWISH<sup>®</sup>MAX Field-Adjustable Troffer





# 0-10V













# DAMP RATED

# **TECHNICAL SPECIFICATIONS**

#### COMPLIANCE

#### **UL** Listed

Suitable for dry and 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. PRODUCT ID: SWISH1X4 : S-AIFQ80 SWISH2X2: S-DG7IW2

SWISH2X4 : S-WUIQNR

#### LED CHARACTERISTICS

#### LEDs

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

#### **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.

#### FIELD ADJUSTABILITY

Field Adjustable:

SWISH1X4: 29/25/19W - Factory default: 25W SWISH2X2: 39/29/19W - Factory default: 29W SWISH2X4: 49/39/26W - Factory default: 39W

Color temperature: 3500/4000/5000K (factory default 4000K)

#### **PROJECT:**

DATE:

TYPE:

#### **PREPARED BY:**







- Available in 3 sizes with selectable wattages SWISH1X4: 29/25/19W - Factory default: 25W SWISH2X2: 39/29/19W - Factory default: 29W SWISH2X4: 49/39/26W - Factory default: 39W
- Field-Adjustable CCT: 3500/4000/5000K Factory default: 4000K
- Voltage rating: 120-277V
- Suitable for damp locations
- Suitable for direct contact with insulation
- Available with standard or Lightcloud Blue-enabled PIR/MVS sensors. Battery backup available
- 5-Year, no-compromise warranty

### CONSTRUCTION

**Cold Weather Starting** Minimum starting temperature is -20°C (-4°F)

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

Mounting Recessed into T-grid ceiling. Lens **Frosted Polystyrene** 

Housing / Finish Die-Formed 26 Guage Cold-Rolled Steel

**Green Technology** Mercury and UV free. RoHs-compliant components

Reflector: Aluminum with high reflectance white finish

IC Rated Suitable for direct contact with insulation

Finish Formulated for high durability and long lasting color



### **TECHNICAL SPECIFICATIONS**

#### ELECTRICAL

#### Drivers:

Class 2, Constant Current, 120-277V, 50/60Hz 19W: 120V: 0.16A, 208V: 0.10A, 240V: 0.08A, 277V: 0.07A 29W: 120V: 0.25A, 208V: 0.14A, 240V: 0.12A, 277V: 0.11A 39W: 120V: 0.33A, 208V: 0.19A, 240V: 0.17A, 277V: 0.14A 49W: 120V: 0.41A, 208V: 0.24A, 240V: 0.21A, 277V: 0.18A

#### **Dimming Driver:**

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

#### Surge Protection:

DM 1kV, CM 2kV

#### THD:

SWISH1X4: 11.9% at 120V, 10.4% at 277V SWISH2X2: 10.2% at 120V, 12.8% at 277V SWISH2X4: 7.5% at 120V, 10.4% at 277V

#### Power Factor:

SWISH1X4: 98.7% at 120V, 94.9% at 277V SWISH2X2: 98.8% at 120V, 93.2% at 277V SWISH2X4: 99.3% at 120V, 96% at 277V

#### **Battery Backup:**

Battery backup will operate the LED Lamp for 90 minutes if power falls. Wired for 120-277V.

#### Battery Backup Light Loss Factor:

SWISH1X4: 29W: 0.263 25W: 0.313 19W: 0.426

#### SWISH2X2:

39W: 0.203 29W: 0.266 19W: 0.436

#### SWISH2X4:

49W: 0.157 39W: 0.196 26W: 0.301

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

#### WIRELESS NETWORK LIGHTING CONTROLS

Lightcloud-enabled products offer integrated network lighting control for a truly wireless solution that allows you to control RAB's various compatible devices. With RAB's patented Rapid Provisioning technology, devices can be quickly and easily commissioned for residential and commercial applications. Each device can then communicate with other devices in the mesh network. With two Lightcloud systems to choose from, it's easy to implement controls within any application. DLC system - N1XMLOEATBA (Interior); NHCZ2BIA17L (Exterior) Learn more at www.lightcloud.com

#### Lightcloud Blue (/LCB)

- Utilizes Bluetooth Mesh, eliminating the need for a Gateway or Hub.
- Ideal for applications that need basic wireless control such as ON/OFF, dimming, color tuning, Schedules, and SmartShift.
- Download the Lightcloud Blue mobile app for iOS or Android devices.

#### LIGHTCLOUD (CONTINUED)

#### Lightcloud Enterprise (/LC)

- Utilizes a secure cellular and Zigbee mesh network that requires a Gateway or Hub (sold separately).
- Offers premium features like remote commissioning, demand response, BACnet integration, and more.
- Download the Lightcloud Enterprise mobile app for iOS or Android devices.

#### **OCCUPANCY SENSORS**

Sensor Type: Passive Infrared (PIR) or Microwave (MVS)

Input Voltage: 12VDC

Operating Frequency: 50/60Hz

Operating Temperature: -22°F to 104°F (-30°C to 40°C)

Max Mounting Height: 9 ft. to 12 ft.

Detection Range: 20 ft. diameter at 9 ft. mounting height

**Daylight Sensing**: The sensor will determine to trigger the light(s) on or not based on the daylight threshold level set. Closed loop daylight harvesting with continuous dimming available with Lightcloud Blue. Specify settings using the Lightcloud Blue mobile app.

#### Default Settings:

Motion Sensitivity: High Brightness when triggered : 100% Hold time: 20 minutes Standby to dim: 20% Standby time: 1 minute When vacant: Off Daylight: Disabled

Adjustable Settings: Settings for Lightcloud Blue-enabled sensors can be adjusted using the mobile app. All other sensors will require MSR1 Remote (sold separately) to adjust the following sensor settings: Standby to dim: 10%/20%/30%/50% Standby time: 0s/10s/30s/1min/5min/10min/30min/60min/+∞ Daylight Threshold: 2Lux/10Lux/30Lux/50Lux/80Lux/120Lux/Disable

#### PERFORMANCE

#### Lifespan

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

#### 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.

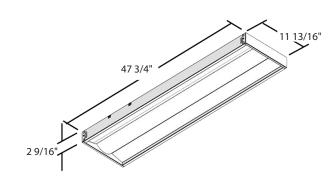
# SWISH®MAX Field-Adjustable Troffer



# DIMENSIONS

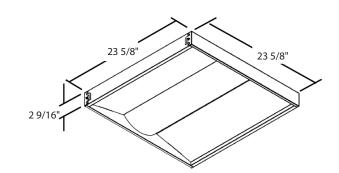
# SWISH1X4

# Weight: 10 Lbs



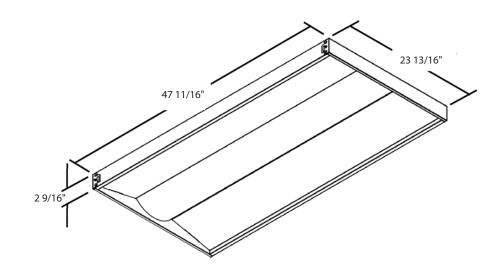
## SWISH2X2

Weight: 8.8 Lbs



## SWISH2X4

# Weight: 17.6 Lbs



# SWISH®MAX Field-Adjustable Troffer

# PERFORMANCE

SWISH1X4	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K	
WATTAGE	29W				25W		19W			
INPUT WATTS	30.4W	29.1W	30.3W	25.6W	24.6W	25.5W	18.8W	18.2W	18.8W	
LUMENS	3,767	4,012	3,907	3,222	3,416	3,354	2,465	2,586	2,572	
LM/W	123.8	137.8	129	126	138.9	131.6	131.3	142.2	136.9	
CRI	85	86	85	85	86	85	85	86	85	
VOLTAGE		120-277V			120-277V	1	120-277V			

SWISH2X2	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K	
WATTAGE	39W				29W		19W			
INPUT WATTS	39.5W	37.6W	5W 39.3W 30.1W		28.9W	29.9W	18.4W	17.8W	18.3W	
LUMENS	4,609	4,983	4,751	3,669	3,913	3,801	2,388	2,498	2,470	
LM/W	116.6	132.5	120.9	122.1	135.7	127	130.1	140.2	135	
CRI	85	86	84	85	86	84	85	86	85	
VOLTAGE	120-277V			120-277V			120-277V			

SWISH2X4	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K	
WATTAGE	49W				39W		26W			
INPUT WATTS	50.9W	48.4W	50.6W	40.9W	39.1W	40.7W	26.6W	25.7W	26.5W	
LUMENS	6,026	6,496	6,239	5,076	5,420	5,266	3,532	3,711	3,635	
LM/W	118.5	134.2	123.3	124.3	138.6	129.5	133	144.6	138.2	
CRI	85	86	85	85	86	85	85	86	85	
VOLTAGE	<b>DLTAGE</b> 120-277V				120-277V	1	120-277V			

## ACCESSORIES (to be ordered separately)

Image	SKU#	UPC	Description
	MVSREM	019813490991	REMOTE FOR MICROWAVE SENSOR FOR TROFFER
And the second sec	RMKPANEL1X4	019813104997	LPANEL 1X4 RECESSED MOUNTING KIT WHITE
$\langle \rangle$	RMKPANEL2X2	019813104966	LPANEL 2X2 RECESSED MOUNTING KIT WHITE
	RMKPANEL2X4	019813104980	LPANEL 2X4 RECESSED MOUNTING KIT WHITE

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# ORDERING MATRIX

### SWISH MAX

Family	Length/Wattages		attages Color Temperature		Finish			Voltage	Options	
SWISH										
	1X4	1'X4' (29/25/19W)	Blank	3500/4000/5000K	Blank	White	Blank	120-277V, 0-10V	Blank	No Option
	2X2	2'X2' (39/29/19W)						Dimming	/E	Battery Backup
	2X4	2'X4' (49/39/26W)							/LC	Lightcloud <sup>®</sup> Controller
									/LCB	Lightcloud <sup>®</sup> Blue enabled
									/LCBS	Lightcloud <sup>®</sup> Blue enabled w/PIR Sensor
									/MVS	Microwave Occupancy Sensor
									/LC/E	Lightcloud <sup>®</sup> Controller w/ Battery Backup
									/LCB/E	Lightcloud® Blue w/ Battery Backup
									/LCBS/E	Lightcloud <sup>®</sup> Blue PIR Sensor w/ Battery Backup
									/MVS/E	Microwave Occupancy Sensor w/ Battery Backup
									/LCBS/MVS	Lightcloud Blue enabled w/Occupancy Sensor
									/LCBS/MVS/	E Lightcloud Blue enabled Microwave
										Occupancy Sensor w/ Battery Backup