

SWISH® Air-Return Troffer



SWISH2X2



SWISHAIR2X2



SWISH1X4



SWISHAIR1X4



SWISH2X4



SWISHAIR2X4

PROJECT:

DATE:

TYPE:

PREPARED BY:



Field-adjustable, air return troffers



- SWISH and SWISHAIR available in 3 sizes with selectable wattages:
SWISH2X2 / SWISHAIR2X2: 35/26/18W - Factory default: 35W
SWISH1X4 / SWISHAIR1X4: 35/26/18W - Factory default: 35W
SWISH2X4 / SWISHAIR2X4: 44/35/26W - Factory default: 44W
- Field-adjustable CCT: 3500/4000/5000K - Factory default: 4000K
- Voltage rating: 120-277V
- Suitable for **damp** locations
- Available with standard or Lightcloud Blue-enabled PIR/MVS sensors
- Battery backup available
- 5-Year, limited warranty

PERFORMANCE

SWISH2X2	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
Watts	35W			26W			18W		
Input Watt	34.4W	33.6W	34.7W	25.3W	24.8W	25.5W	17.2W	16.9W	17.3W
Lumens	4,424	4,703	4,604	3,425	3,620	3,538	2,386	2,476	2,483
Efficacy	128.5	139.9	132.8	135.3	145.9	138.9	138.9	146.4	144.0
CRI	83	84	82	83	84	83	83	84	83
Voltage Rating	120-277V								

SWISH1X4	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
Watts	35W			26W			18W		
Input Watt	34.4W	33.5W	34.5W	25.2W	24.7W	25.3W	16.9W	16.7W	17.1W
Lumens	4,715	4,923	4,887	3,589	3,716	3,719	2,455	2,559	2,584
Efficacy	137.3	146.9	141.6	142.5	150.7	147.0	145.0	153.0	151.1
CRI	83	84	82	83	84	82	83	84	82
Voltage Rating	120-277V								

PERFORMANCE

SWISH2X4	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
Watts	44W			35W			26W		
Input Watt	42.5W	41.2W	42.4W	33.9W	32.9W	33.7W	25.5W	24.9W	25.5W
Lumens	5,859	6,048	5,883	4,783	4,903	4,832	3,681	3,758	3,720
Efficacy	137.8	147.0	138.7	141.1	148.9	143.2	144.5	150.8	145.9
CRI	82	83	82	82	83	83	82	83	82
Voltage Rating	120-277V								
SWISHAIR2X2	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
Watts	35W			26W			18W		
Input Watt	34.4W	33.6W	34.7W	25.3W	24.8W	25.5W	17.2W	16.9W	17.3W
Lumens	4424	4703	4604	3425	3620	3538	2386	2476	2483
Efficacy	128.5	139.9	132.8	135.3	145.9	138.9	138.9	146.4	144.0
CRI	82.6	83.6	82.1	82.7	83.6	82.5	82.7	83.6	82.5
Voltage Rating	120-277V								
SWISHAIR1X4	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
Watts	35W			26W			18W		
Input Watt	34.4W	33.5W	34.5W	25.2W	24.7W	25.3W	16.9W	16.7W	17.1W
Lumens	4715	4923	4887	3589	3716	3719	2455	2559	2584
Efficacy	137.3	146.9	141.6	142.5	150.7	147.0	145.0	153.0	151.1
CRI	83.1	83.6	81.8	83.1	83.6	81.9	83.1	83.6	81.9
Voltage Rating	120-277V								
SWISHAIR2X4	3500K	4000K	5000K	3500K	4000K	5000K	3500K	4000K	5000K
Watts	44W			35W			26W		
Input Watt	42.5W	41.2W	42.4W	33.9W	32.9W	33.7W	25.5W	24.9W	25.5W
Lumens	5859	6048	5883	4783	4903	4832	3681	3758	3720
Efficacy	137.8	147.0	138.7	141.1	148.9	143.2	144.5	150.8	145.9
CRI	82.0	83.4	82.4	82.0	83.4	82.5	82.1	83.4	82.4
Voltage Rating	120-277V								

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:

SWISH2X2 : S-DG7IW2

SWISH1X4 : S-AIFQ80

SWISH2X4 : S-WUIQNR

COMPLIANCE

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.

PRODUCT ID:

SWISHAIR2X2: S-M443P3

SWISHAIR1X4: S-RV80FX

SWISHAIR2X4: S-1Y204R

TECHNICAL SPECIFICATIONS

CONSTRUCTION

Cold Weather Starting

Minimum starting temperature is -4°F (-20°C)

Cold Weather Starting w/Battery Backup

Minimum starting temperature is 41°F (5°C)

Maximum Ambient Temperature

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

Maximum Ambient Temperature w/Battery Backup

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

Mounting

Recessed into T-grid ceiling

Lens

Diffused Polystyrene

Housing

Cold Rolled Carbon Steel Sheets and Strip (SPCC)

Green Technology

Mercury and UV free. RoHs-compliant components.

Finish

Formulated for high durability and long lasting color

ELECTRICAL

Drivers

Class 2, Constant Current, 120-277V, 50/60Hz

SWISH2X2 / SWISH1X4 / SWISHAIR2X2 / SWISHAIR1X4:

35W: 120V: 0.28A, 208V: 0.16A, 240V: 0.14A, 277V: 0.13A
26W: 120V: 0.21A, 208V: 0.12A, 240V: 0.10A, 277V: 0.10A
18W: 120V: 0.14A, 208V: 0.08A, 240V: 0.07A, 277V: 0.07A

SWISH2X4 / SWISHAIR2X4

44W: 120V: 0.34A, 208V: 0.20A, 240V: 0.17A, 277V: 0.15A
35W: 120V: 0.28A, 208V: 0.16A, 240V: 0.14A, 277V: 0.12A
26W: 120V: 0.21A, 208V: 0.12A, 240V: 0.10A, 277V: 0.10A

Dimming Driver

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

Note: Lightcloud Blue models do not require 0-10V dimming circuit.

Surge Protection

2 kV L-L 2kV L/N-G

THD

SWISH1X4 / SWISHAIR1X4: 6.6% at 120V, 12.5% at 277V

SWISH2X2 / SWISHAIR2X2: 7.03% at 120V, 12.7% at 277V

SWISH2X4 / SWISHAIR2X4: 7.6% at 120V, 13.1% at 277V

Power Factor

SWISH1X4 / SWISHAIR1X4: 99.6% at 120V, 95.1% at 277V

SWISH2X2 / SWISHAIR2X2: 99.6% at 120V, 95.0% at 277V

SWISH2X4 / SWISHAIR2X4: 99.9% at 120V, 96.3% at 277V

Battery Backup

Battery backup will operate the LED Lamp for 90 minutes if power falls.

Wired for 120-277V.

39W: 0.196

26W: 0.301

Battery Backup Light Loss Factor

SWISH1X4 / SWISHAIR1X4: 0.23

SWISH2X2 / SWISHAIR2X2: 0.18

SWISH2X4 / SWISHAIR2X4: 0.23

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: 35/26/18W - Factory default: 35W

SWISH2X2: 35/26/18W - Factory default: 35W

SWISH2X4: 44/35/26W - Factory default: 44W

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

Note: Lightcloud Blue models offer wireless dimming features.

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

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.

Lifespan

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

WIRELESS NETWORK LIGHTING CONTROLS

Lightcloud products offer integrated network lighting control for a truly wireless solution that allows you to manage 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 communicate with other devices in the mesh network. With two Lightcloud systems to choose from, it's easy to implement controls anywhere.

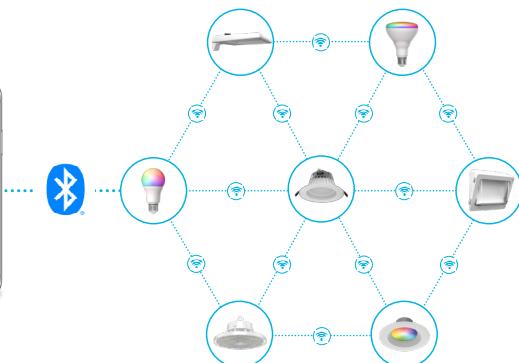


Learn more about Lightcloud wireless networked lighting controls.

Design Lights Consortium Network Lighting Controls:

- Interior Applications: N1XMLOEATB
- Exterior Applications: NHCZ2BIA17L

Lightcloud®



- 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
- Add the XDIM/BRIDGE/LCB and LCGATEWAY to adopt premium Lightcloud Enterprise features

SIMPLE SETUP

- 1 Download the app.

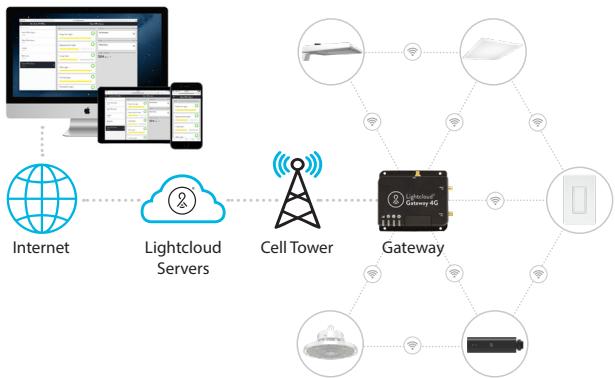

- 2 Connect product to power.

- 3 Pair product to app.

- 4 Enjoy!


Learn more about [Lightcloud Blue](#). Visit the [Lightcloud Blue Resources](#) page for more information on how to use the system.

Lightcloud®



- 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

SIMPLE SETUP

- 1 Download the app.


- 2 Complete the startup document.

- 3 Connect product to power.

- 4 Contact RAB for Remote Commissioning.

- 5 Enjoy!


Learn more about [Lightcloud Enterprise](#). Visit the [Lightcloud Enterprise Resources](#) page for more information on how to use the system.

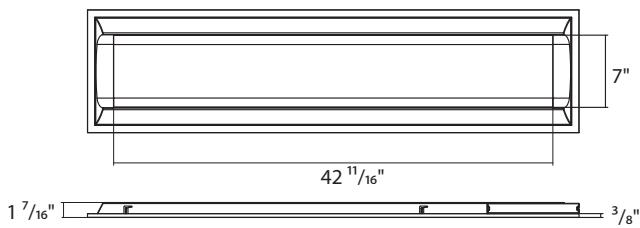
SWISH® Air-Return Troffer

RAB

DIMENSIONS

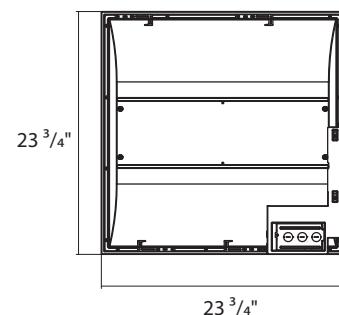
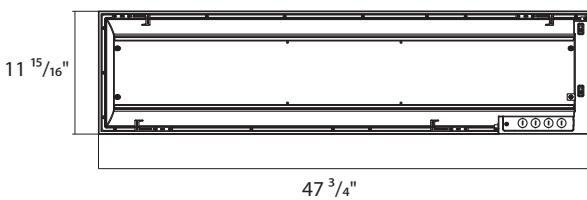
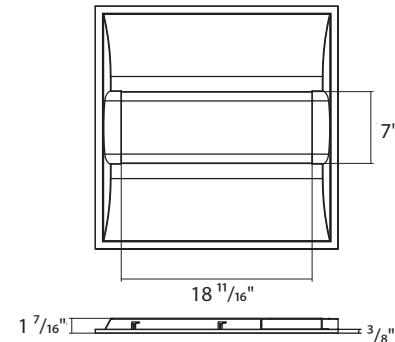
SWISH1X4 & SWISHAIR1X4

Weight: 10 Lbs



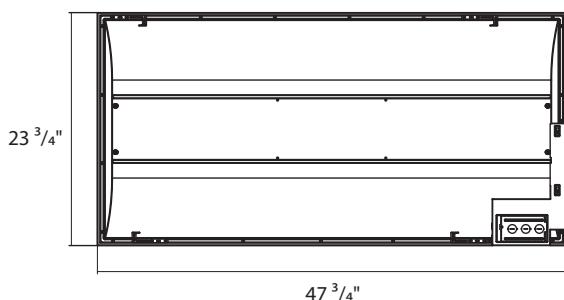
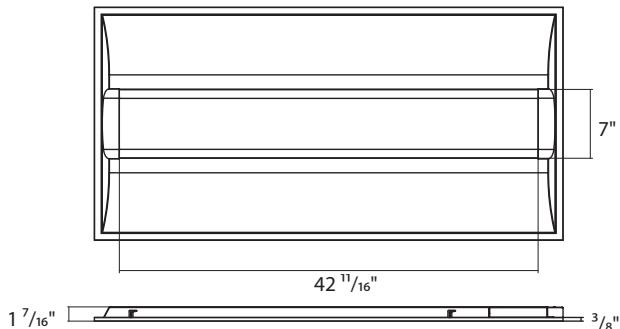
SWISH2X2 & SWISHAIR2X2

Weight: 8.8 Lbs



SWISH2X4 /SWISHAIR2X4

Weight: 10 Lbs



SWISH[®] Air-Return Troffer



ORDERING MATRIX

SWISH-SWISHAIR

Family	Length/Wattage	Color Temperature	Finish	Driver	Controls	Battery Backup
SWISHAIR	With Vents	1X4	Blank 3500/4000/5000K	Blank	Blank	None
SWISH	Without Vents	2X2	1'X4'(35/26/18W)	White	120-277V, 0-10V Dimming	PIR Sensor
		2X4	2'X2'(35/26/18W)		/PIR /MVS /LCBS	Microwave Sensor
			2'X4'(44/35/26W)		/LCB/MVS	Lightcloud Blue
						PIR Sensor
						Lightcloud Blue
						MVS Sensor
						None
						Blank /E
						Battery Backup