

# SWISH2X2- 19N/D10/MVS



LED efficiency and performance in an economical 2'x2' center basket troffer.

Color: White

Weight: 13.7 lbs

<b>Project:</b>	<b>Type:</b>
<b>Prepared By:</b>	<b>Date:</b>

Driver Info		LED Info	
Type:	Constant Current	Watts:	19W
120V:	0.16A	Color Temp:	4000K
208V:	0.10A	Color Accuracy:	85 CRI
240V:	0.09A	L70 Lifespan:	100000
277V:	0.08A	Lumens:	2,461
Input Watts:	19W	Efficacy:	126 LPW
Efficiency:	97%		

## Technical Specifications

### Listings

#### UL Listing:

Suitable for damp locations

#### 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.

DLC Product Code: PAMSUTEM

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

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

### Electrical

#### Driver:

Class 2, Constant Current, 100-277V, 50/60Hz, 120V: 0.16A, 208V: 0.10A, 240V: 0.09A, 277V: 0.08A, THD <15%, Power Factor >90%, 4kV surge protection

#### Dimming Driver:

Driver includes dimming control for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims as low as 10%.

#### THD:

13.1% at 120V, 12.6% at 277V

#### Power Factor:

98.7% at 120V, 90.1% at 277V

#### Smart Sensing:

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

### Construction

#### Ambient Temperature:

Suitable for 40°C (104°F) ambient temperatures

#### IC Rating:

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 distribution

#### Lens:

Snap-in, frosted polycarbonate lens

#### Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

#### Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

### LED Characteristics

#### LEDs:

Long-life, high-efficiency surface mount LEDs

#### Lifespan:

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

#### Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

#### Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

### Other

#### Replacement:

19 Watt 2x2 replaces (2) F17 T8 or (2) F24 T5

#### 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.

#### Patents:

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

#### Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

#### Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

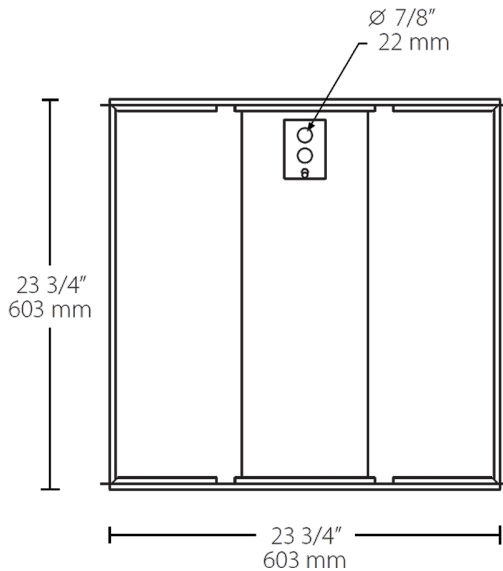
#### Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

**Technical Specifications (continued)**

<p><b>Other</b></p> <hr/> <p><b>Trade Agreements Act Compliant:</b> This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.</p> <p><b>GSA Schedule:</b> Suitable in accordance with FAR Subpart 25.4.</p> <p><b>Sensor Specifications</b></p> <hr/> <p><b>Capacitance Load:</b> 400W at 120V, 800W at 230V, 1000W at 277V</p> <p><b>Operating Temperature:</b> -20°C to +60°C (-4°F to +140°F)</p> <p><b>Relay:</b> Zero-cross relay</p> <p><b>Maximum Mounting Height:</b> 5m</p>	<p><b>Customizable Detection Area:</b> 10, 50, 75 or 100%</p> <p><b>Time Delay:</b> 5s, 30s, 1min, 5min, 10min, 20min, 30min</p> <p><b>Cut Off Period:</b> 0s, 10s, 1min, 5min, 10min, 30min, 1hr, Bi-Level</p> <p><b>Cut Off Dimming level:</b> 10, 20, 30, 50%</p> <p><b>Cut Off Power:</b> Less than 1W</p> <p><b>Daylight Threshold:</b> About .2-5 fc for disabled</p>	<p><b>Sensor Principle:</b> High Frequency</p> <p><b>Microwave Frequency:</b> 5.8GHz +/- 75MHz</p> <p><b>Microwave Power:</b> &lt;0.2mW</p> <p><b>Detection Range Max:</b> 16m across, 10m high</p> <p><b>Detection Angle:</b> About 30 to 150 degrees</p> <p><b>Remote Control:</b> Adjust settings using remote control (catalog# MVSREM). Only available with 0-10V dimming driver options.</p>
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**Dimensions**



**Features**

- Ultra-efficient performance with DLC Premium listing
- Optional surface mount and drywall frame kits available
- Optional programmable occupancy sensor for multi-level lighting control
- 0-10V dimming standard on all models
- 100,000-hour LED lifespan 5-year warranty

**Ordering Matrix**

Family	Size	Watts	Color Temp	Dimming	Sensor
SWISH	2X2	19	N	/D10	/MVS
	2X2 = 2' x 2'	19 = 19W 29 = 29W	Y = 3000K (Warm) YN = 3500K (Warm Neutral) N = 4000K (Neutral)	/D10 = Dimmable	Blank = No Occupancy Sensor /MVS = Occupancy Sensor