

Project		Catalog #		Type	
Prepared by		Notes		Date	



# HALO

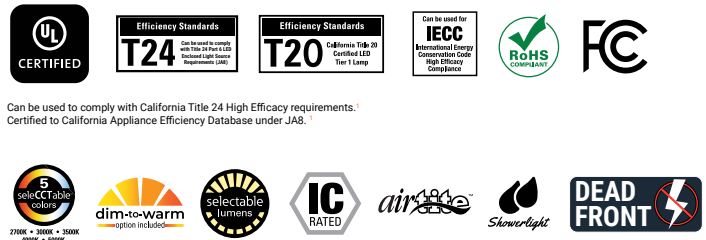
## SMX18 Edgeless Surface Mount LED Downlights

The SMX series redefines the surface downlighting experience. With a fully luminous lens face, this series provides exceptional light quality with a sleek, edgeless design that blends effortlessly into any ceiling. The SMX fixtures are engineered to offer a versatile downlighting solution with selectable lumens and color temperatures including dim-to-warm in flicker-free phase cut or 0-10V dimming options. The innovative mounting method ensures a hassle-free installation that seats the fixture securely against the ceiling in either junction boxes or recessed housings. Upgrade your lighting experience with the SMX series and enjoy a seamless blend of style and functionality.

**Typical Applications**  
Residential • Multifamily • Hospitality • Healthcare • Retail

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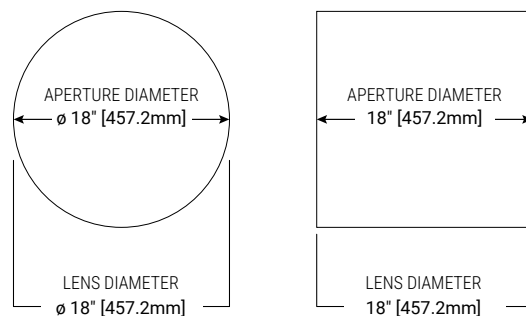
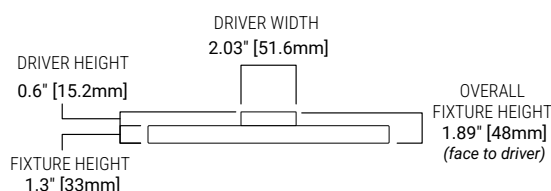


Can be used to comply with California Title 24 High Efficacy requirements.<sup>1</sup>  
Certified to California Appliance Efficiency Database under JAB.<sup>1</sup>

### Top Product Features

- 18" Surface Mount Edgeless Design in Round or Square
- Fully luminous edge-to-edge lens with no front face flange
- **Field-SeleCCTable (90+ CRI):**
  - **Phase Cut Versions:** 6-Position Switch with 5 CCT (27/30/35/40/5000K) + Dim-to-Warm (3000K dims to 1800K)
  - **0-10V Versions:** 5 CCT (27/30/35/40/5000K)
- **Brightness:** Lumen Select 1500/2000/2500 lm (nominal)
- **Dimming:** Dims to less than 5% with compatible dimmers in either phase cut LE/TE (120V) or 0–10V (120–277V)
- Mounting hardware, orange LED Quick Connect and E26 adapter included
- Edgeless Decorative Overlays (sold separately)
- AIR-TITE, wet location-listed, IC-rated
- 50,000 hrs of maintenance-free operation
- 5-year warranty

### Dimensional and Mounting Details



## Order Information

Catalog Number	Description	Lumens (nominal)	CCT	Finish	Driver Compatibility	Packaging
SMX18RLSFS2W	18" Round Surface Mount LED Downlight	Lumen Selectable: 1500/2000/2500 lm	90+ CRI, Field Selectable CCT: Dim-to-Warm/2700/3000/3500/4000/5000K	Matte White	Phase Cut LE/TE 5%; 120V	Plastic-free recyclable
SMX18RLSFS010	18" Round Surface Mount LED Downlight	Lumen Selectable: 1500/2000/2500 lm	90+ CRI, Field Selectable CCT: 2700/3000/3500/4000/5000K	Matte White	0-10V 5%; 120-277V	Plastic-free recyclable
SMX18SLSFS2W	18" Square Surface Mount LED Downlight	Lumen Selectable: 1500/2000/2500 lm	90+ CRI, Field Selectable CCT: Dim-to-Warm/2700/3000/3500/4000/5000K	Matte White	Phase Cut LE/TE 5%; 120V	Plastic-free recyclable
SMX18SLSFS010	18" Square Surface Mount LED Downlight	Lumen Selectable: 1500/2000/2500 lm	90+ CRI, Field Selectable CCT: 2700/3000/3500/4000/5000K	Matte White	0-10V 5%; 120-277V	Plastic-free recyclable

### Accessories – Decorative Trim Overlays (order separately)

Add a touch of style and personality to spaces with HALO Decorative Overlays by matching existing hardware or painted finishes.

Accessories		
Catalog Number	Description	Finish
SMX18RTRMMW	18" Round Decorative Overlay	Paintable Matte White
SMX18RTRMB	18" Round Decorative Overlay	Matte Black
SMX18RTRMSN	18" Round Decorative Overlay	Satin Nickel
SMX18RTRMTBZ	18" Round Decorative Overlay	Tuscan Bronze
SMX18STRMMW	18" Square Decorative Overlay	Paintable Matte White
SMX18STRMB	18" Square Decorative Overlay	Matte Black
SMX18STRMSN	18" Square Decorative Overlay	Satin Nickel
SMX18STRMTBZ	18" Square Decorative Overlay	Tuscan Bronze



SMX18RTRMMW  
Paintable Matte White



SMX18RTRMB  
Matte Black



SMX18RTRMSN  
Satin Nickel



SMX18RTRMTBZ  
Tuscan Bronze



SMX18STRMMW  
Paintable Matte White



SMX18STRMB  
Matte Black



SMX18STRMSN  
Satin Nickel



SMX18STRMTBZ  
Tuscan Bronze

### Accessories – 3D Printed Decorative Trim Shades (order separately)

Snap-on 3D printed shades designed to fit HALO SMX Surface Mount downlights, adding depth, texture, and a more architectural look. Easily upgrade the fixture's appearance with distinctive forms that bring a custom, design-forward feel to any space.

Accessories				
Catalog Number	Description	Finish	Diameter	Height
SMX1810	18" SMX 3DP Trim Mini Drop	Clear	18"	1.86"
SMX1820	18" SMX 3DP Trim Drop	Clear	18"	2.84"
SMX1830	18" SMX 3DP Trim Tulip	Clear	18"	3.49"
SMX1840	18" SMX 3DP Trim Bowl	Clear	18"	2.92"



SMX1810  
Mini Drop



SMX1820  
Drop



SMX1830  
Tulip



SMX1840  
Bowl

### Accessories – Emergency Power (order separately)

Emergency power to connected fixtures during outages. Automatically switches on and dims fixtures for extended runtime.

Emergency Power Accessories	
Catalog Number	Description
INVM-10W-AD	Single Phase 0-10V Auto Dimming (can power up to 1 SMX 18" fixtures)
INVM-25W-ADSD	Single Phase 0-10V Auto Dimming (can power up to 8 SMX 18" fixtures)

## Compatible Junction Boxes<sup>2</sup>



**Octagon  
Steel Light Fixture w/Fan Box**  
4" x 4" x 2-1/8"



**Round  
New Work Fixture Box (Plastic)**  
4" Diameter x 2-3-16"



**Round  
New Work Ceiling Box (Plastic)**  
3-1/2" Diameter x 2-3-4"



**Round  
Old Work Box (Plastic)**  
4-1/4" Diameter flange (3-1/2" I.D.) x 2-3-4"



**Round  
New Work Fixture Box (Plastic) w/Bar Hanger**  
4" x 2-3/16"



**TP316  
For non-metallic cable**  
4" x 4" x 2-1/8"



**TP317  
For metal clad cable**  
4" x 4" x 2-1/8"



**JB4FR2  
4" NC JBox for Fire Rated Ceilings**  
4" diameter x 5-1/2"  
(102mm x 140mm)

2. This is a representative list of compatible junction boxes only. Information contained in this literature about other manufacturers' products is from published information made available by the manufacturer and is deemed to be reliable, but has not been verified. Cooper Lighting Solutions makes no specific recommendation on product selection and there are no warranties of performance or compatibility implied. Installer must determine that site conditions are suitable to allow proper installation of the mounting bracket in the box.

## Product Specifications

### Module

- The LED surface mount downlight consists of an LED array, optical assembly, driver, and edgeless trim
- Achieves L70 at 50,000 hrs in IC (insulation contact) and non-IC applications

### Selectable System

- Use the CCT select switch to choose between Dim-to-Warm (D2W), 2700K, 3000K, 3500K, 4000K, and 5000K CCT
  - **Note:** D2W only available for phase cut fixtures
- Dim-to-Warm option starts at 3000K and warms to 1800K as the fixture dims
- Factory default is set to 3000K
- Use the 3-position Lumen Select switch to choose the brightness level (Low, Medium, High)
- Lumen Select factory default is to the highest lumen option

### LED Array

- Mid-power LED array provides a uniform light source with high efficiency and no pixilation
- 90+ CRI minimum, R9 greater than 50
- Color accuracy at 3SCDM at the end points provides color consistency and uniformity

### Driver

- Integral 120V 60Hz constant current driver provides noise-free, high-efficiency operation
- Phase Cut Dimming: Continuous, flicker-free dimming from 100% to 5% with compatible leading or trailing edge (LE/TE) 120V phase cut dimmers; (See Dimming Guide for compatible dimmers.)
- 0-10V Dimming: Continuous, flicker-free dimming from 100% to 5% with compatible 0-10V 120-277V dimmer; (See Dimming Guide for compatible dimmers.)
  - **Tip:** For optimal dimming performance, consider dimmers with low-end trim adjustment; Note that some dimmers require a neutral wire in the box.
- **Wiring:** Includes optional inline electrical orange LED Quick Connect

### Electrical Junction Box Mounting

- Twist and lock steel mounting bracket to fit snugly to the ceiling
- Installs from below the ceiling in most 30 (3-1/2") and 40 (4") standard round/octagonal junction boxes along with compact (pancake) junction boxes
- May be used in compatible electrical junction boxes in direct contact with insulation, including spray foam insulation
- Installer must ensure compatibility of fit, wiring, and proper mounting in the electrical junction box. This includes all applicable national and local electrical along with building coded NEMA LSD 57-2013.
- Reference installation instructions for complete mounting steps

### Gasket

- Closed-cell gasket achieves restrictive airflow requirements without additional caulking.

### Decorative Overlays (sold separately)

- Overlays cover the edge of the fixture while maintaining the edgeless design and are sold as an accessory for a designer finish
  - Paintable Matte White
  - Satin Nickel
  - Matte Black

### Emergency Mini Inverter

- Provides 90 minutes of 10VA emergency power to lighting fixtures
- 0-10V Auto dimming allows up to 50VA max dimmable load
- 10VA max non-dimmable load
- Automatic 120VAC or 277VAC output power to driver or ballast means easy field install
- UL924 and CSA 22.2 No.141 listed for field or factory installation
- Remote mounting up to 250feet
- Maintenance free lithium-ion battery
- See Mini Inverter Spec Sheet for more information

### Compliance

- cULus certified for US and Canada
- Wet Location listed for showers and covered outdoor ceilings
- Airtight per ASTM-E283 (no gasket necessary)
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- EMI/RFI emissions per FCC 47CFR Part 15 consumer limits
- Contains no mercury or lead and RoHS compliant<sup>1</sup>
- Photometric testing in accordance with IES LM-79-08
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11
- Can be used for State of California Title 24 high efficacy LED compliance under JA8<sup>1</sup>, reference Modernized Appliance Efficiency Database System (MAEDBS) for 2022 JA8 High Efficacy Lighting

### Warranty

- Five year limited warranty, consult website for details. [www.cooperlighting.com/warranty](http://www.cooperlighting.com/warranty)

## Energy Data

	120V (Triac)		120V-277V (0-10V)			
	Round	Square	Round		Square	
	SMX18RLSFS010	SMX18SLSFS010	SMX18RLSFS010		SMX18SLSFS010	
Lumens	1500	1500	1500	1500	1500	1500
Input Voltage (V)	120V	120V	120V	277V	120V	277V
Input Current (A)	0.14233A	0.14133A	0.14233A	0.068A	0.1472A	0.069A
Input Power (W)	16.54W	16.4W	16.54W	18.33W	17.58W	18.17W
Efficiency	84.99%	84.95%	84.70%	84%	84.90%	84.60%
Inrush (A)	1.51A@130usec	1.51A@130usec	3.3A@57usec	4.8A@68usec	3.1A@56usec	4.6A@63usec
THDi (%)	11.95%	12.01%	7.50%	16.40%	7.30%	16.30%
PF	0.969	0.967	0.969	0.936	0.996	0.935
T Ambient	-30 to +40 °C	-30 to +40 °C	-30 to +40 °C	-30 to +40 °C	-30 to +40 °C	-30 to +40 °C
Sound Rating	<22dBA	<22dBA	<22dBA	<22dBA	<22dBA	<22dBA
Efficacy(LPW)	98.15	95.66	98.15	98.15	103.3	103.3
Lumens	2000	2000	2000	2000	2000	2000
Input Voltage (V)	120V	120V	120V	277V	120V	277V
Input Current (A)	0.19987A	0.19783A	0.19987A	0.089A	0.19873A	0.087A
Input Power (W)	23.53W	23.26W	23.53W	24.45W	23.73W	24.28W
Efficiency	84.30%	84.48%	85.10%	85.50%	84.80%	85.30%
Inrush (A)	1.51A@130usec	1.51A@130usec	3.3A@57usec	4.8A@68usec	3.1A@56usec	4.6A@63usec
THDi (%)	11.12%	11.31%	9.20%	11.60%	9.40%	11.40%
PF	0.981	0.98	0.981	0.961	0.996	0.963
T Ambient	-30 to +40 °C	-30 to +40 °C	-30 to +40 °C	-30 to +40 °C	-30 to +40 °C	-30 to +40 °C
Sound Rating	<22dBA	<22dBA	<22dBA	<22dBA	<22dBA	<22dBA
Efficacy(LPW)	95.25	93.04	95.25	95.25	100.45	100.45
Lumens	2500	2500	2500	2500	2500	2500
Input Voltage (V)	120V	120V	120V	277V	120V	277V
Input Current (A)	0.25187A	0.25063A	0.25187A	0.109A	0.24837A	0.111A
Input Power (W)	29.79W	29.63W	29.79W	30.57W	29.63W	30.49W
Efficiency	83.68%	83.63%	85.30%	86.10%	85.30%	86.10%
Inrush (A)	1.51A@130usec	1.51A@130usec	3.3A@57usec	4.8A@68usec	3.1A@56usec	4.6A@63usec
THDi (%)	11.08%	11.24%	10.20%	9.30%	9.60%	9.20%
PF	0.986	0.985	0.986	0.978	0.995	0.977
T Ambient	-30 to +40 °C	-30 to +40 °C	-30 to +40 °C	-30 to +40 °C	-30 to +40 °C	-30 to +40 °C
Sound Rating	<22dBA	<22dBA	<22dBA	<22dBA	<22dBA	<22dBA
Efficacy(LPW)	91.89	89.73	91.89	91.89	97.32	97.32

SMX18RLSFS02W (Equivalent to 125W Incandescent)				
CCT	Watts	Lumens	LPW	CRI
2700K	30.3	2565	84.7	93
3000K	30.4	2640	86.8	94
3500K	30.4	2695	88.7	95
4000K	30.5	2750	90.2	95
5000K	30.2	2815	93.2	92

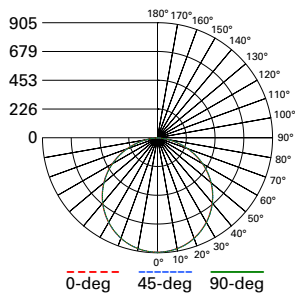
SMX18SLSFS02W (Equivalent to 125W Incandescent)				
CCT	Watts	Lumens	LPW	CRI
2700K	29.7	2475	83.3	93
3000K	30.0	2530	84.3	94
3500K	30.0	2585	86.2	95
4000K	30.0	2630	87.7	94
5000K	29.7	2700	90.9	93

SMX18RLSFS010 (Equivalent to 125W Incandescent)				
CCT	Watts	Lumens	LPW	CRI
2700K	29.4	2755	93.7	93
3000K	29.4	2805	95.4	94
3500K	29.4	2870	97.6	95
4000K	29.4	2930	99.7	94
5000K	29.3	3000	102.4	93

SMX18SLSFS010 (Equivalent to 125W Incandescent)				
CCT	Watts	Lumens	LPW	CRI
2700K	30.0	2735	91.2	92
3000K	30.0	2800	93.3	94
3500K	30.0	2870	95.7	94
4000K	30.0	2930	97.7	94
5000K	30.0	3005	100.2	92

## Photometric Data

[View IES files](#)



### SMX18RLSFS2W-2500LM-3000K

Spacing criterion:  
(0-180) 1.27 | (90-270) 1.27 |  
(Diagonal) 1.39  
Beam Angle: 115°  
Field Angle: 162°  
Lumens: 2640  
Input Watts: 30.4 W  
Efficacy: 86.8 LPW  
UGR: 19  
Test Report: P869722

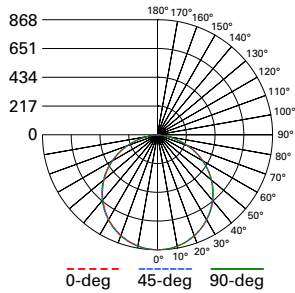
Zonal Lumen	Lumens	% Lumens
0-30	706	26.7
0-40	1161	44
0-60	2072	78.5
0-90	2640	100

CCT: Range of 2700K - 5000K  
  
 Dim-to-Warm: Range of 1800K - 3000K

TM-30-15	Rf = 92
	Rg = 99
CRI/CIE	Ra = 95.5
	R9 = 72.6



115°



### SMX18SLSFS2W-2500LM-3000K

Spacing criterion:  
(0-180) 1.27 | (90-270) 1.27 |  
(Diagonal) 1.39  
Beam Angle: 115°  
Field Angle: 162°  
Lumens: 2530  
Input Watts: 30 W  
Efficacy: 84.3 LPW  
UGR: 18  
Test Report: P869752

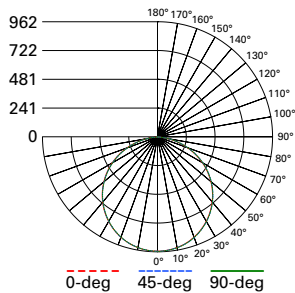
Zonal Lumen	Lumens	% Lumens
0-30	676	26.7
0-40	1112	43.9
0-60	1985	78.5
0-90	2530	100

CCT: Range of 2700K - 5000K  
  
 Dim-to-Warm: Range of 1800K - 3000K

TM-30-15	Rf = 92
	Rg = 99
CRI/CIE	Ra = 95.2
	R9 = 71



115°



### SMX18RLSFS010-2500LM-3000K

Spacing criterion:  
(0-180) 1.27 | (90-270) 1.27 |  
(Diagonal) 1.39  
Beam Angle: 115°  
Field Angle: 162°  
Lumens: 2805  
Input Watts: 29.4 W  
Efficacy: 95.4 LPW  
UGR: 19  
Test Report: P869707

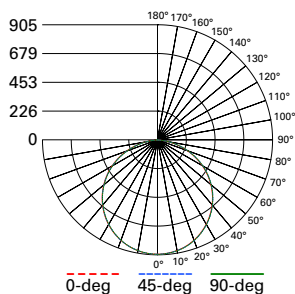
Zonal Lumen	Lumens	% Lumens
0-30	750	26.7
0-40	1233	44
0-60	2201	78.5
0-90	2805	100

CCT: Range of 2700K - 5000K

TM-30-15	Rf = 92
	Rg = 99
CRI/CIE	Ra = 95.5
	R9 = 72.6



115°



### SMX18SLSFS010-2500LM-3000K

Spacing criterion:  
(0-180) 1.27 | (90-270) 1.27 |  
(Diagonal) 1.39  
Beam Angle: 115°  
Field Angle: 162°  
Lumens: 2800  
Input Watts: 30 W  
Efficacy: 93.3 LPW  
UGR: 18  
Test Report: P869737

Zonal Lumen	Lumens	% Lumens
0-30	748	26.7
0-40	1230	43.9
0-60	2197	78.5
0-90	2800	100

CCT: Range of 2700K - 5000K

TM-30-15	Rf = 92
	Rg = 99
CRI/CIE	Ra = 95.2
	R9 = 71



115°

## Mini Inverter Schematic

