

## DESCRIPTION

The Halo Surface Mount LED Downlight (SMD) is an low profile surface mounting luminaire with a modern look and high performance. Universal voltage SMD6 (6") is designed for installation in many 3-1/2" and 4" square, octagon, or round junction boxes. Supply wire adapter with LED quick wiring connector included. The SMD6 may also retrofit in 5" and 6" aperture IC and Non-IC recessed housings. Compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5).

Catalog #		Type
Project		
Comments		Date
Prepared by		

## SPECIFICATION FEATURES

### HOUSING

- Non-electrically conductive polycarbonate frame.
- High impact diffuse polystyrene lens provides shielding to the light guide with no pixilation
- Stamped aluminum housing provides thermal cooling achieving L70 at 50,000 hours in IC and non-IC applications

### GASKETS

- Closed cell gasket achieves restrictive airflow and wet location requirements without additional caulking

### OPTICS

- Precision acrylic light guide organizes source flux into wide distribution with 1.2 – 1.4 spacing criteria useful for general area illumination

### LED

- Mid power led array provide a uniform source with high efficiency and long life.
- Available in 90 CRI minimum, R9 greater than 50 and color accuracy within 3 SDCM provide color accuracy and uniformity

### DRIVER

- Integral 120V 50/60Hz constant current driver provides noise free operation.
- Dimmable to 10% in typical operation with compatible 0-10V DC low voltage dimmers.
- Dimming to 5% is best assured using dimmers with low end trim adjustment. Consult dimmer manufacturer for compatibility and conditions of use. (Note some dimmers require a neutral in the wallbox.)
- Inline electrical quick connect and E26 adapter (provided) provides mains connections.

### MOUNTING/RETENTION

- Adjustable spider plate allows for quick installation into both junction boxes and recessed housings.
- Torsion springs or friction blades included

### ELECTRICAL JUNCTION BOX MOUNTING

- The SMD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation.
- Suitable for installation in many 3-1/2" and 4" square, octagon, and round electrical junction boxes.
- Surface mounting in a fire-rated ceiling using an appropriate fire rated electrical box .

**Note:** Fire-rating is per the rating of the ceiling and applicable junction box, not the SMD.

- Installer must ensure compatibility of fit, wiring and proper mounting in the electrical junction box. This includes all applicable national and local electrical and building coded

### RECESSED HOUSING MOUNTING

- May be installed in IC recessed housings in direct contact with insulation
- Note:** Not for use in recessed housing in direct contact with spray foam insulation. Refer to NEMA LSD 57-2013.

### Torsion Spring 5" & 6"

- Precision formed torsion spring bracket kit included
- The torsion springs adjust on the mounting plate to fit 5" or 6" compatible housings

### Friction Blade 5" & 6"

- Precision formed friction blades included
- For retrofit in 5" and 6" housings without torsion springs mounting tabs.
- Friction blade design allows the SMD to be installed in any position within the housing aperture (360 degrees)

### DESIGNER SKINS (SOLD SEPARATELY)

- SMD skins are accessory rings in both round and square. These skins attach to the SMD for a permanent finish. Refer to the SMD accessories specification sheet for details.

- Matte White (Paintable)
- Satin Nickel
- Tuscan Bronze

### WARRANTY

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

### COMPLIANCE

- cULus listed / certified for use with Halo housings, classified for use with other's housings, see instruction sheet for conditions of acceptability.
- Wet and Damp Location listed, airtight per ASTM-E283
- Suitable for use in closets, compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5)
- EMI/RFI emissions per FCC 47CFR Part 15B
- Contains no mercury or lead and RoHS compliant.
- 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 luminaire compliance, reference the California Energy Commission Title 20 Appliance Efficiency Database for current listings.
- Can be used for International Energy Conservation Coe (IECC) and Washington State Energy Code high efficiency luminaire compliance



## SMD6 UNV Series

6 inch Round and Square

### 6" Universal Voltage Surface Mount Downlight

Suitable for ceiling or wall electrical junction boxes

Suitable for 5" and 6" recessed housing retrofit

Non-conductive Dead Front

## ENERGY DATA

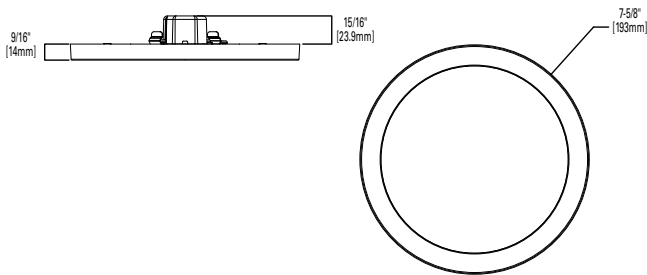
	Round	Square
Lumens (5000K models)	1253	1235
Input Power	15.2	15.7
Input Current	0.133 A	0.132 A
Efficiency	82 lm/W	79 lm/W
THD	15.3	15.7
Input Voltage	120V-277V	
Frequency	50/60 Hz	
CRI	92 CRI	
Power Factor	0.98	
T Ambient	-30 - +40°C	
Sound Rating	Class A	



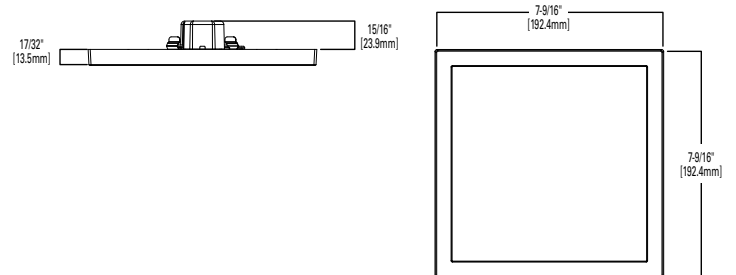
Refer to ENERGY STAR® Certified Products List. Can be used to comply with California Title 24 High Efficacy requirements. Certified to California Appliance Efficiency Database under JAB.

## DIMENSIONS

SMD6RXXXWH



SMD6SXXXWH



## ORDERING INFORMATION

**SAMPLE NUMBER:** SMD6R12930WH=6" 1200 Lumen Round Surface Mount Downlight, 90CRI, 3000K  
**Junction Box Installation:** Order junction box separately, as supplied by others, to complete installation.  
**Recessed Installation:** Order Halo recessed housing separately to complete installation.

Models	Lumens	CRI / CCT	Finish	Voltage	Accessories
<b>SMD6R</b> = 6" Round Surface Mount Downlight <b>SMD6S</b> = 6" Square Surface Mount Downlight	<b>12</b> =1200 lumen series	<b>927</b> =90CRI, 2700K <b>930</b> =90CRI, 3000K <b>935</b> =90CRI, 3500K <b>940</b> =90CRI, 4000K <b>950</b> =90CRI, 5000K	<b>WH</b> = Matte White	<b>E</b> = UNV Universal 120-277V, 0-10V	<b>Designer Trims</b> <b>SMD6RTRMSN</b> =6" Round SMD Satin Nickel <b>SMD6RTRMTBZ</b> =6" Round SMD Tuscan Bronze <b>SMD6RTRMWH</b> =6" Round SMD White (paintable)  <b>SMD6STRMSN</b> =6" Square SMD Satin Nickel <b>SMD6STRMTBZ</b> =6" Square SMD Tuscan Bronze <b>SMD6STRMWH</b> =6" Square SMD White (paintable)  <b>T24HWKIT</b> = Title 24 Cable harness kit used to convert incandescent and low voltage housings to LED <b>HE26LED</b> = E26 Screw base adapter for retrofit (included)



## ACCESSORIES

### Designer Trims



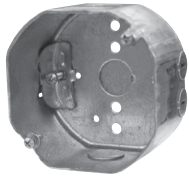
## HOUSING COMPATIBILITY

The SMD6 is UL Listed in Halo recessed housings, and is UL Classified for use with **any** 5 or 6 inch diameter recessed housing constructed of steel or aluminum with an internal volume that exceeds 107.9 in<sup>3</sup> in addition to those noted below. **Note:** Some other's housings require installation with included friction clips.

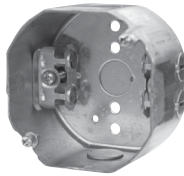
Compatible Halo LED Housings with LED luminaire connector (high-efficacy compliant)		
HALO LED	Recessed Can Size	Catalog Number
	5"	H550ICAT, H550RICAT, E550ICAT, E550RICAT
	6"	H750ICAT, H750RICAT, H750T, H750RINTD010, H750TCP, H2750ICAT, H2750RICAT, E750ICAT, E750RICAT
Halo LED Retrofit Enclosures		
HALO	6"	ML7BXRFK, ML7E26RFK

Compatible Halo Incandescent E26 Screwbase Housings		
HALO	5"	H51CAT, H51RICAT, H51CATNB, H51T, H51RT, H251CAT, H251CATNB, E51TAT, E51RTAT, H51TNB, E51TATNB, E51CAT, E51RICAT, E51CATNB
	6"	H71CAT, H71RICAT, H71CT, H71RICT, H71CATNB, H71CTNB, H7T, H7RT, H7TNB, H7TCP, H7UICAT, H7UICATNB, H271CAT, H271RICAT, H27T, H27RT, E71CAT, E71RICAT, E271CAT, E271RICAT, E71CATNB, E71TAT, E71RTAT, E71TATNB, E271TAT, E271RTAT

## COMPATIBLE WITH EATON'S CROUSE-HINDS JUNCTION BOXES



**TP316**  
for non-metallic cable  
4" x 4" x 2-1/8"  
(102mm x 102mm x 54mm)



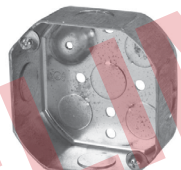
**TP317**  
for metal clad cable  
4" x 4" x 2-1/8"  
(102mm x 102mm x 54mm)

- TP316 - for non-metallic cable
- TP317 - for metal clad cable
- UL Listed
- Suitable for two-hour fire-rated ANSI/UL 263 when properly installed in a fire-rated ceiling or wall
- Refer to [www.crouse-hinds.com](http://www.crouse-hinds.com)

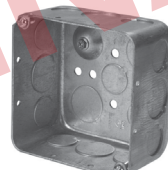
## COMPATIBLE WITH MANY OTHER JUNCTION BOXES\*



**4" octagon light fixture/fan steel box**  
4" x 4" x 2-1/8"  
(102mm x 102mm x 54mm)



**4" octagon steel box**  
4" x 4" x 1-1/2"  
(102mm x 102mm x 38mm)



**4" square deep steel box**  
4" x 4" x 2-1/8"  
(102mm x 102mm x 54mm)



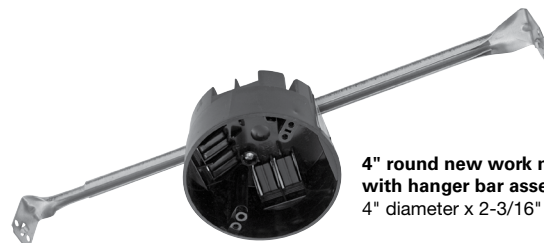
**4" square standard steel box**  
4" x 4" x 1-1/2"  
(102mm x 102mm x 38mm)



**4" round new work non-metallic light fixture/fan box**  
4" diameter x 2-3/16"  
(102mm x 56mm)



**4" round surface mount box**  
4" diameter x 1-1/2"  
(102mm x 38mm)  
Requires SLD6RAD adapter



**4" round new work non-metallic box with hanger bar assembly**  
4" diameter x 2-3/16" (102mm x 56mm)

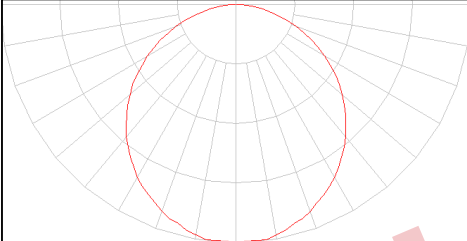
Surface mounting in a fire-rated ceiling using an appropriate electrical box offers a cost-effective alternative to fire-rated recessed housings.

**Note:** Fire-rating is per the rating of the ceiling and applicable junction box, not the SMD.

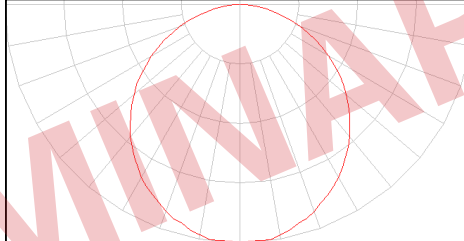
\*This is a representative list of compatible junction boxes only. Information contained in this literature about other manufacturers' products is from published information made available by the manufacturer and is deemed to be reliable, but has not been verified. Eaton makes no specific recommendation 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.

## PHOTOMETRIC DATA

SMD6S12927WHE		
Luminaire lumens		1187
Input watts		15.9
LER (LPW)		75
Spacing Criteria	0-180	1.26
	90-270	1.26
	Diagonal	1.38
Beam angle (degrees)		113
Field angle (degrees)		165
Max. Candela		408
Zonal lumen	Lumens	% Lumens
0-30	316	26.6%
0-40	518	43.7%
0-60	920	77.5%
0-90	1187	100.00%

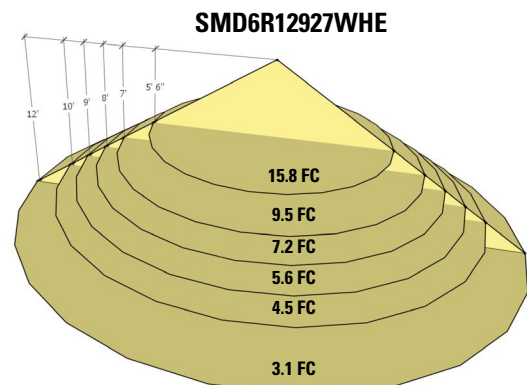


SMD6R12927WHE		
Luminaire lumens		1235
Input watts		15.9
LER (LPW)		78
Spacing Criteria	0-180	1.26
	90-270	1.26
	Diagonal	1.38
Beam angle (degrees)		113
Field angle (degrees)		164
Max. Candela		426
Zonal lumen	Lumens	% Lumens
0-30	336	27.2%
0-40	550	44.5%
0-60	971	78.6%
0-90	1235	100.00%



Cat. No.	CRI	CCT	Lumens	Power (W)	LPW
SMD6R12927WHE	92	2700	1244	15.7	79.0
SMD6R12930WHE	92	3000	1242.0	15.1	82.1
SMD6R12935WHE	92	3500	1264.1	15.3	82.8
SMD6R12940WHE	92	4000	1223.0	15.3	79.9
SMD6R12950WHE	92	5000	1252.0	15.3	81.9
SMD6S12927WHE	92	2700	1190	15.7	76.0
SMD6S12930WHE	92	3000	1180.3	15.6	75.6
SMD6S12935WHE	92	3500	1237.3	15.6	79.5
SMD6S12940WHE	92	4000	1215.9	15.8	76.9
SMD6S12950WHE	92	5000	1235.6	15.7	78.9

Foot-candle Values at Nadir 0 degree Aiming Angle			
DD (FT)	SMD6R12927WHE (FC)	SMD6S12927WHE (FC)	DIA (FT)
5.5	15.8	15.1	16.6
7	9.5	9.1	21.1
8	7.2	6.9	24.2
9	5.6	5.4	27.2
10	4.5	4.3	30.2
12	3.1	3.0	36.2



DD = distance down to illuminated work plane  
FC = initial foot-candles at nadir  
DIA = diameter

Multiplier Table					
CCT Option	2700K	3000K	3500K	4000K	5000K
CCT Multiplier	1.000	0.997	1.039	1.021	1.037