HALO

DESCRIPTION

The Halo Surface LED Downlight (SLD) incorporates WaveStream™ technology to create an ultra-low profile surface mounting luminaire with the performance and look of a traditional downlight. SLD is designed for installation in standard and fire-rated 3.5" and 4" junction boxes, and may also retrofit in 4" aperture IC and Non-IC recessed housings*. Dedicated LED wiring connector meets high-efficacy code requirement in recessed downlighting. Suitable for residential or commercial installations. Ideal for closets, storage areas, attics and basements. Compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5).

Catalog #		Type	
Project			
Comments		Date	
Prepared by			

SPECIFICATION FEATURES

CONSTRUCTION
- Die cast aluminum trim ring, and die formed aluminum frame

OPTICS
- WaveStream™ technology provides uniform luminance from a low profile flat lens
- AccuAim™ optics provide directional control for the "cone-of-light" beam distribution of a traditional downlight.
- Precision molded lens features high transmission polymer with UV stabilized protecting film

ELECTRICAL JUNCTION BOX MOUNTING
- SLD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation.
- Suitable for installation in many standard and fire-rated 3-1/2" and 4" square, octagon, and round electrical junction boxes.
- Surface mounting in a fire-rated electrical box offers a cost-effective alternative to fire-rated recessed housings.
  Note: Fire-rating is per listing of the junction box, not the SLD.
- 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 codes.
- Proprietary Slot-N-Lock quick installation system for junction box installation.
- T-bracket with Slot-N-Lock mounting tabs included.

RECESSED HOUSING MOUNTING
Friction Blade
- Pre-installed precision formed friction blades included.
- Friction blade design allows the SLD to be installed in any position within the housing aperture (360 degrees).
- Note: Not for use in recessed housings in direct contact with spray foam insulation refer to NEMA LSD 57-2013.

LED
- Trilateral linear LED assembly is integrated in trim perimeter.
- Color Temperature: 3000K
- CRI options: 80 and 90
- L70 at 50,000 hours projected in accordance with TM-21

WARRANTY
Cooper Lighting provides a five year limited warranty on the SLD LED.

LED CHROMATICITY
- A tight chromaticity specification ensures LED color uniformity, sustainable Color Rendering Index (CRI) and Correlated Color Temperature (CCT) over the useful life of the LED
- LED chromaticity of 3 SDCM initial and 5 SDCM life exceeds ENERGY STAR® color standards per ANSI C78.377-2008.
- Every Halo LED is quality tested, measured, and serialized in a permanent record to register lumens, wattage, CRI and CCT.
- Halo LED serialized testing and measurement ensures color and lumen consistency on a per-unit basis, and validates long-term product consistency over time.

ELECTRICAL CONNECTIONS
- The included E26 Edison screw-base adapter provides capability for retrofit.
- LED connector is a non-screwbase luminaire disconnect for tool-less installation
Junction Box
- Pigtail adapter included for ease of installation
Recessed Housings
- LED connector is compatible with Halo 4" H995 Series LED Housings.
- LED Connector meets California Title-24 and Washington State high-efficacy luminaire standard as a non-screw base socket
- The included E26 Edison screw-base adapter provides capability for retrofit.

LED DRIVER
- Driver is 120V and dimmable.
- Driver is a high efficiency, electronic power supply providing DC power to the LED array
- Driver meets FCC EMI/RFI Consumer Level limits on 120V main inputs, and is suitable for use in residential and commercial installations
- Driver features high power factor, low THD, and has integral thermal protection in the event of over temperature or internal failure.
- Driver is replaceable if it should be required.

DIMMING
- SLD is designed for dimming capability to nominally 10% with many 120V Leading Edge (LE) and Trailing Edge (TE) Phase Control dimmers. Dimming capability to 5% (80 CRI) or 6% (90 CRI) is possible using select dimmers with low end trim adjustment (Consult dimmer manufacturer for compatibility and details. Note some dimmers require a neutral in the wallbox.)

CODE COMPLIANCE
- cULus Listed ceiling and wall
- cULus Damp Location listed ceiling and wall
- cULus Wet Location Listed, ceiling only (shower rated)
- RoHS Compliant
- SLD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation.
- May be installed in IC recessed housings in direct contact with insulation (Not for use in recessed housings in direct contact with spray foam insulation. Refer to NEMA LSD 57-2013.)
- UL Classified when used in retrofit with listed housings (See Housing Compatibility)

QUALIFICATION
- ENERGY STAR® Qualified (refer to ENERGY STAR® Qualified Products List)
- May be used for high efficacy luminaire code compliance
  - State of California Title 24 and registered in the CEC T20 Appliance Database
  - International Energy Conservation Code (IECC)
  - Washington State Energy Code (WSEC)
- Suitable for use in closets, compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5).

AIR-TITE™
- Certified under ASTM-E283 to meet insulated ceiling and restricted air-flow requirements such as:
  - State of California Title 24 "Recessed Luminaires in Insulated Ceilings"
  - International Energy Conservation Code (IECC)
  - Washington State Energy Code (WSEC)
  - New York State Energy Conservation Construction Code (NY-ECCC)

SLD405830WH
SLD405930WH

4" Surface LED Downlight

Suitable for ceiling or wall electrical junction boxes

Suitable for 4" recessed housing retrofit (IC, Non-IC & AIR-TITE™)

ENERGY DATA

	80 CRI	90 CRI
Lumens	650	625
Input Voltage	120V	120V
Frequency	50/60 Hz	50/60 Hz
Input Current	0.15 A	0.15 A
Input Power	12.5 W	12 W
Efficiency	52 lm/W	52 lm/W
THD	≤ 20%	
Power Factor	≥ 0.90	
T Ambient	-30 - +40°C	
Sound Rating	≤ 22 dba	

*Qualified and compliant. Refer to ENERGY STAR® Qualified Products List and CEC (T24) Appliance Database for listings.

3000K nominal

3045

2700K 3000K 3500K 4100K 5000K 6500K

Cooper Lighting
by EATON
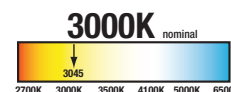
ADV131305
March 17, 2014 10:20 AM

ORDERING INFORMATION

SAMPLE NUMBER: SLD405830WH
Order junction box separately, as supplied by others, to complete installation.
Order Halo recessed housing separately to complete installation.

Models	Color Rendering Index	Color Temperature (CCT)	Finish	
SLD405= 4" Surface LED Downlight, 120V	**8**=80 CRI **9**=90 CRI	**30**=3000K	**WH**=White	

LED Housing

Series
H995ICAT=4" Dedicated LED Insulated Ceiling, AIR-TITE New Construction Housing with LED luminaire connector (high efficacy compliant)   **H995RICAT**=4" Dedicated LED Insulated Ceiling, AIR-TITE Remodel Housing with LED luminaire connector (high efficacy compliant)

HOUSING COMPATIBILTY - E26 SCREW BASE RETROFIT

UL Listed UL/cUL Listed for installation in the following Halo and All-Pro 4" recessed E26 screw based and LED dedicated housings.	All-Pro	ET400ATSB, ET400RATSB, EI400ATSB
	Halo	H99ICAT, H99RTAT, H99TAT, H995ICAT, H995RICAT
UL Classified UL Classified for retrofit in the following 4" recessed E26 screw based housings.	Utilitech	CR04ICAT
	Thomas	PS4
	Lithonia Lighting	L3, L3R
	Commercial Electric	HBR2000B
	Juno	IC1, TC1, TC1R
	Progress Lighting	P830-TG, P832-TG

DIMENSIONS

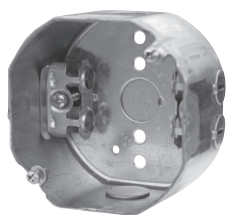Ø 6"
[152mm]

0.7"
[18mm]

2"
[53mm]

Ø 6"
[152mm]
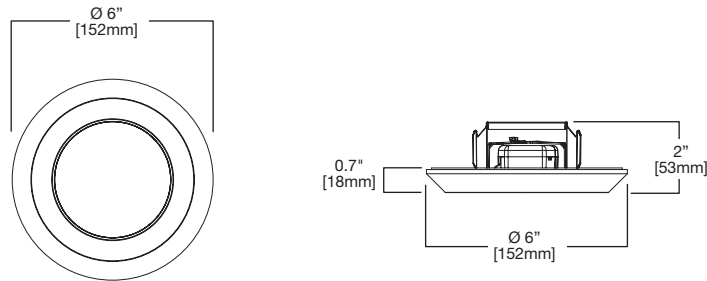
COMPATIBLE WITH EATON'S CROUSE-HINDS STANDARD / FIRE-RATED JUNCTION BOXES
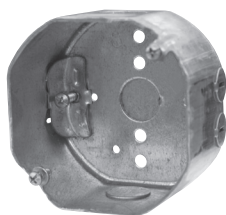
TP316
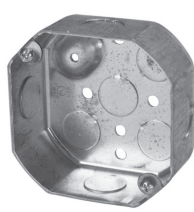for non-metallic cable

TP317
for metal clad cable

- **TP316 -** for non-metallic cable
- **TP317 -** for metal clad cable
- UL Listed
- Two-hour fire-rated ANSI/UL 263
- Refer to www.crouse-hinds.com

COMPATIBLE WITH MANY OTHER STANDARD AND FIRE-RATED JUNCTION BOXES*

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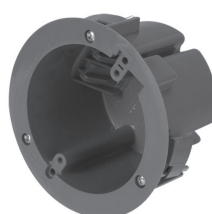4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

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

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

**3-1/2" round new work
non-metallic ceiling box**
3-1/2" x 2-3/4"
(89mm x 70mm)

**3-1/2" round old work
non-metallic box**
4-1/4" flange x 2-5/8",
3-1/2" I.D.
(108mm x 67mm, 89mm I.D.)

*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 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 SLD mounting bracket in the box.