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 4" x 2-1/8" deep square, octagon or round junction boxes. And may also retrofit in 5" and 6" IC and Non-IC recessed housings*. 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 4" square, octagon, and round electrical junction boxes with minimum 2-1/8" depth.
• 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
• Note: SLD is not for use in recessed housings in direct contact with spray foam insulation per NEMA LSD 57-2013.
Torsion Spring 5" & 6"
• Optional precision formed torsion spring bracket kit is included.
• The torsion springs adjust on the frame to fit 5" or 6" compatible housings.
Friction Blade 5" & 6"
• Optional precision formed friction blades included.
• For retrofit in 5" and 6" housings without torsion spring mounting tabs.
• Friction blade design allows the SLD to be installed in any position within the housing aperture (360 degrees).

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
Junction Box
• Required pigtail adapter included
Recessed Housings
• LED connector is compatible with Halo 5" H550 Series and 6" H750 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 connector is a non-screwbase luminaire disconnect for tool-less installation

LED DRIVER
• Driver is 120V and dimmable.
• Driver is a high efficiency, electronic power supply providing DC power to the LED array
• 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% (80CRI) or 6% (90CRI) 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.)

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)
• Meets FCC EMI/RFI Consumer Level limits on 120V main inputs, and is suitable for use in residential and commercial installations

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)

SLD606830WH
SLD606930WH

6" Surface LED Downlight
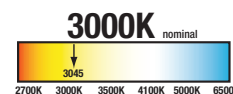
Suitable for ceiling or wall electrical junction boxes

Suitable for 5" & 6" recessed housing retrofit (IC, Non-IC & AIR-TITE™)

ENERGY DATA

	80 CRI	90 CRI
Lumens	675	675
Input Voltage	120V	120V
Frequency	50/60 Hz	50/60 Hz
Input Current	0.15 A	0.15 A
Input Power	12.5 W	12.9 W
Efficiency	54 lm/W	52 lm/W
THD	≤ 20%	
Power Factor	≥ 0.90	
T Ambient	-30 - +40°C	
Sound Rating	≤ 22 dba	

Air-Tite   Showerlight

ENERGY STAR

Can be used for IECC International Energy Conservation Code High Efficacy Compliance

Can be used for T24 California Title 24 High Efficacy Compliance

Can be used for WSEC Washington State Energy Code High Efficacy Compliance

*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

ORDERING INFORMATION

SAMPLE NUMBER: SLD606830WH
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	Color Rendering Index	Color Temperature (CCT)	Finish	
SLD606= 6" Surface LED Downlight, 120V	**8**=80 CRI **9**=90 CRI	**30**=3000K	**WH**=White	

HOUSING COMPATIBILITY

The SLD6 is UL Listed or 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 in³ in addition to those noted below:

Halo and All-Pro UL Listed Compatibility

Compatible Halo LED Housings with LED luminaire connector (high-efficacy compliant)

	Recessed Can Size	Catalog Number	Description
HALO	**5"**	H550ICAT	5" LED, Insulated Ceiling, AIR-TITE, New Construction Housing
		H550RICAT	5" LED, Insulated Ceiling, AIR-TITE, Remodel Housing
	6"	H750ICAT	6" LED, Insulated Ceiling, AIR-TITE, New Construction Housing
		H750RICAT	6" LED, Insulated Ceiling, AIR-TITE, Remodel Housing
		H750T	6" LED, Non-IC, AIR-TITE, New Construction Housing
		H750RINTD010	6" LED, Non-IC, AIR-TITE, Remodel International Housing, 0-10V DC Dimming
		H750TCP	6" LED, Non-IC, New Construction/Remodel Chicago Plenum Housing
		H2750ICAT	6" LED, Shallow, Insulated Ceiling, AIR-TITE, New Construction Housing

Compatible Halo Incandescent E26 Screwbase Housings

	Recessed Can Size	Catalog Number	Description
HALO	**5"**	H5ICAT	5" Insulated Ceiling, AIR-TITE New Construction Housing
		H5RICAT	5" Insulated Ceiling, AIR-TITE Remodel Housing
		H5T	5" Non-IC, New Construction Housing
		H5RT	5" Non-IC, Remodel Housing
		H5TM	5" Non-IC, New Construction Housing (metric version - Canada)
		H25ICAT	5" Shallow, Insulated Ceiling, AIR-TITE New Construction
	6"	H7ICAT	6" Insulated Ceiling, AIR-TITE New Construction Housing
		H7RICAT	6" Insulated Ceiling, AIR-TITE Remodel Housing
		H7ICT	6" Insulated Ceiling, New Construction Housing
		H7RICT	6" Insulated Ceiling, Remodel Housing
		H7ICATNB	6" Insulated Ceiling, AIR-TITE New Construction Housing, No Socket Bracket
		H7ICTNB	6" Insulated Ceiling, New Construction Housing, No Socket Bracket
		H7T	6" Non-IC, New Construction Housing
		H7RT	6" Non-IC, Remodel Housing
		H7TNB	6" Non-IC, New Construction Housing, No Socket Bracket
		H7TCP	6" Non-IC, Chicago Plenum, New Construction/Remodel Housing
		H7UICT	6" Insulated Ceiling, Universal New Construction Housing
		H7UICAT	6" Insulated Ceiling, Universal, AIR-TITE, New Construction Housing
		H27ICAT	6" Shallow, Insulated Ceiling, AIR-TITE New Construction Housing
		H27RICAT	6" Shallow, Insulated Ceiling, AIR-TITE Remodel Housing
		H27ICT	6" Shallow, Insulated Ceiling, New Construction Housing
		H27RICT	6" Shallow, Insulated Ceiling, Remodel Housing
		H27T	6" Shallow, Non-IC, New Construction Housing
		H27RT	6" Shallow, Non-IC, Remodel Housing

Cooper Lighting
by **E·T·N**

Halo and All-Pro UL Listed Compatibility *(continued)*

Halo LED Retrofit Enclosures

HALO	6"	ML7BXRFK	6" Retrofit Enclosure, Non-IC, BX Whip
		ML7E26RFK	6" Retrofit Enclosure, Non-IC, E26 Screw base Interface

Compatible All-Pro Incandescent E26 Screwbase Housings

	Recessed Can Size	Catalog Number	Description
All-Pro	**5"**	EI500AT	5" Insulated Ceiling, AIR-TITE New Construction Housing
		EI500RAT	5" Insulated Ceiling, AIR-TITE Remodel Housing
		ET500	5" Non-IC, New Construction Housing
		ET500R	5" Non-IC, Remodel Housing
	6"	EI700AT	6" Insulated Ceiling, AIR-TITE New Construction Housing
		EI700RAT	6" Insulated Ceiling, AIR-TITE Remodel Housing
		EI700	6" Insulated Ceiling, New Construction Housing
		EI700R	6" Insulated Ceiling, Remodel Housing
		EI700ATNB	6" Insulated Ceiling, AIR-TITE New Construction Housing, No Socket Bracket
		EI700NB	6" Insulated Ceiling, New Construction Housing, No Socket Bracket
		EI700U	6" Insulated Ceiling, Universal New Construction Housing
		EI700UAT	6" Insulated Ceiling, Universal, AIR-TITE, New Construction Housing
		ET700	6" Non-IC, New Construction Housing
		ET700R	6" Non-IC, Remodel Housing
		EI2700AT	6" Shallow, Insulated Ceiling, AIR-TITE New Construction Housing
		EI2700	6" Shallow, Insulated Ceiling, New Construction Housing
		EI2700R	6" Shallow, Insulated Ceiling, AIR-TITE Remodel Housing
		ET2700	6" Shallow, Non-IC, New Construction Housing
		ET2700R	6" Shallow, Non-IC, Remodel Housing

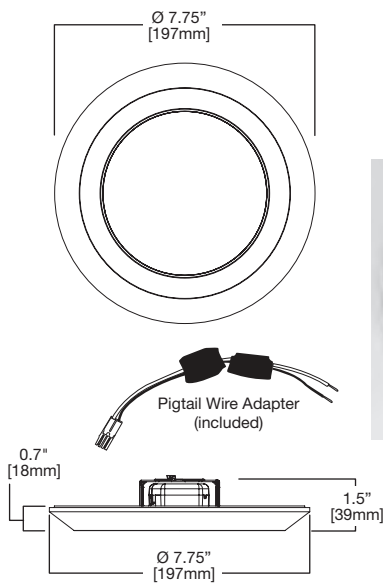### UL Classified for retrofit compatibility

UL Classified for retrofit in the following 5″ and 6″ recessed housings:

Juno®	IC22, IC22R, IC22W, IC22S, IC23, IC23W, IC21, IC21R, IC2, TC2, TC2R, IC20, IC20R, IC25, IC25R, IC25W, IC25S, TC20, TC20R
Capri	CR1, PR1, QL1, R9ASIC, R5*
Lightolier®	1104ICS*, 1104ICR*, 1104SIC*, 1104SICR*, 1004ICS*, 1004ICR*, 1004SIC*, 1004SICR*
	1104ICX - Requires installation of ML7RAB retrofit adapter band accessory (not included).
Progress® Lighting	P87-AT*, P86TG
Lithonia Lighting®	L7X, L7XP
Thomas® Lighting	PS1, R9ASIC/PS9RM
Prescolite®	IBXS
Commercial Electric™	C7ICA (H3), H18
Elco Lighting®	(HL7ICA) EL7ICA

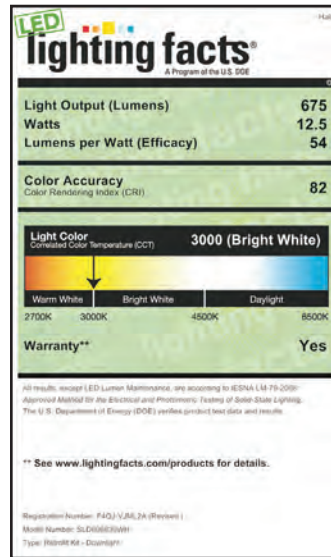*Requires installation with included friction clips.*

Juno®, Capri Lighting, Lightolier®, Lithonia Lighting®, Thomas® Lighting, Elco Lighting®, Progress® Lighting, Prescolite® and Commercial Electric™ and their product brand names, where identified above, are tradenames or trademarks of each respective company and Cooper makes no representations on these trademarks.
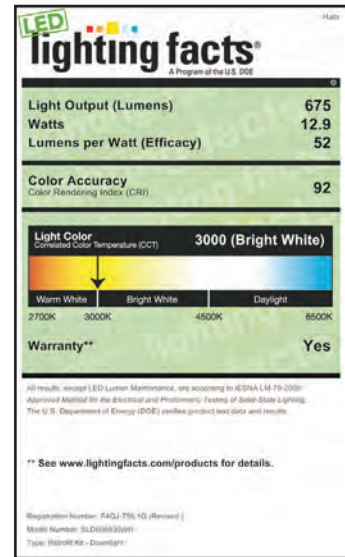
Cooper Lighting
by E:T:N

DIMENSIONS

Ø 7.75"
[197mm]

Pigtail Wire Adapter
(included)

0.7"
[18mm]

1.5"
[39mm]

Ø 7.75"
[197mm]

LIGHTING FACTS

SLD606830WH

LED lighting facts® — A Program of the U.S. DOE — Halo

Light Output (Lumens)	675
Watts	12.5
Lumens per Watt (Efficacy)	54

| Color Accuracy Color Rendering Index (CRI) | 82 |

| Light Color Correlated Color Temperature (CCT) | 3000 (Bright White) |

Warm White — Bright White — Daylight

2700K 3000K 4500K 6500K

| Warranty** | Yes |

All results, except LED Lumen Maintenance, are according to IESNA LM-79-2008/ Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

** See www.lightingfacts.com/products for details.

Registration Number: F4QJ-VJ6L2A (Revised)
Model Number: SLD606830WH
Type: Retrofit Kit - Downlight

SLD606930WH

LED lighting facts® — A Program of the U.S. DOE — Halo

Light Output (Lumens)	675
Watts	12.9
Lumens per Watt (Efficacy)	52

| Color Accuracy Color Rendering Index (CRI) | 92 |

| Light Color Correlated Color Temperature (CCT) | 3000 (Bright White) |

Warm White — Bright White — Daylight

2700K 3000K 4500K 6500K

| Warranty** | Yes |

All results, except LED Lumen Maintenance, are according to IESNA LM-79-2008/ Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

** See www.lightingfacts.com/products for details.

Registration Number: F4QJ-75IL1G (Revised)
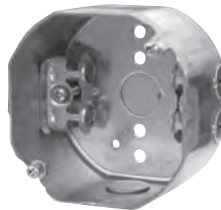Model Number: SLD606930WH
Type: Retrofit Kit - Downlight

COMPATIBLE WITH EATON'S CROUSE-HINDS STANDARD / FIRE-RATED 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
- Two-hour fire-rated ANSI/UL 263
- Refer to www.crouse-hinds.com

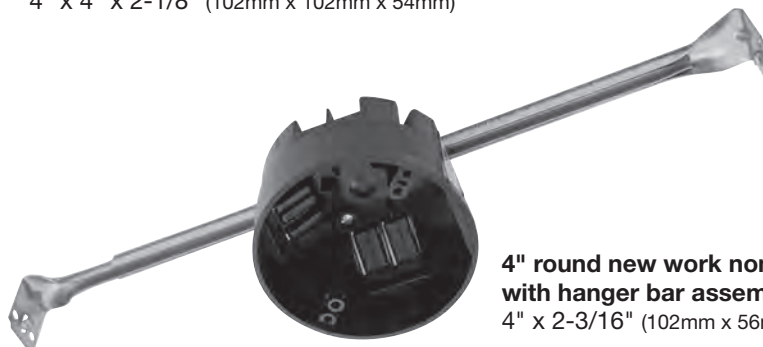## COMPATIBLE WITH MANY OTHER STANDARD AND FIRE-RATED JUNCTION BOXES*

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

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

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

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

*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.