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. SLD6 is designed for installation in many 3-1/2" and 4" 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

DESIGNER TRIMS
Accessories (sold separately)
SLD designer trims are accessory rings that attach to the SLD for a permanent finish.* Refer to SLD accessories specification sheet for details.
- White (Paintable)
- Satin Nickel
- Tuscan Bronze
*SLD accessory trims attach with permanent adhesion and are not interchangeable after installation.

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 3-1/2" and 4" square, octagon, and round electrical junction boxes
  Note: Driver consumes 3 cubic inches of junction box
- 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
- May be installed in IC recessed housings in direct contact with insulation
- **Note:** Not for use in recessed housings in direct contact with spray foam insulation. Refer to 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
- Linear LED arrays are integrated in trim perimeter
- Color Temperature: 2700K, 3000K, 3500K, 4000K
- CRI options: 80 and 90
  - 90 CRI can be used for California Title 24 compliance/certified to Title 20
  - 80 CRI can be used to comply with California Title 24 Non-Residential Lighting Controls as a LED luminaire.

WARRANTY
Cooper Lighting Solutions 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 exceeds ENERGY STAR® color standards per ANSI.
- 90 CRI model features high color performance with R9 greater than 50
- 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
- Compatible with 3-1/2" x 2" and 4" x 1-1/2" deep round, square and octagon boxes (2-1/8" deep boxes recommended)
- Supply Wire Adapter with LED quick connector included

Recessed Housings
- LED connector is compatible with Halo 5" H550 Series and 6" H750 Series LED Housings
- LED Connector meets California Title-24 high-efficacy luminaire standard as a non-screw base
- The included E26 Edison screw-base adapter provides capability for retrofit*
- LED connector is a non-screwbase luminaire disconnect for tool-less installation

SLD 1200 Series
SLD6128xxWH
80CRI
2700K, 3000K, 3500K, and 4000K

SLD6129xxWH
90CRI
2700K, 3000K, 3500K, and 4000K

6" Surface LED Downlight

High Lumen 1200 Series

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 (4000K models)	1215	1000
Input Voltage	120V	120V
Frequency	50/60 Hz	50/60 Hz
Input Current	0.12 A	0.12 A
Input Power	14.8 W	14.8 W
Efficiency (4000K models)	82 lm/W	68 lm/W
THD	≤ 20%	
Power Factor	≥ 0.90	
T Ambient	-30 - +40°C	
Sound Rating	Class A	

NOMENCLATURE

S L D 612 8 30 WH
- **612** = 6" SLD 1200 Series
- **8** = >80 CRI
- **30** = 3000K
- **WH** = Matte White

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80 CRI nominal CCT: 2700K 3000K 3500K 4000K — ENERGY STAR — IECC International Energy Conservation Code High Efficacy Compliance — RoHS — air-tite Showerlight

Refer to ENERGY STAR® Certified Products List.

90 CRI nominal CCT: 2700K 3000K 3500K 4000K — ENERGY STAR — IECC International Energy Conservation Code High Efficacy Compliance — T24 California Title 24 Residential and Non-Residential Compliant — RoHS — air-tite Showerlight

Refer to ENERGY STAR® Qualified Products List.
Can be used to comply with California Title 24 High Efficacy requirements.
Certified to California Appliance Efficiency Database under JA8.
Indoor LED nominal CCT of 4000K or less.

COOPER Lighting Solutions
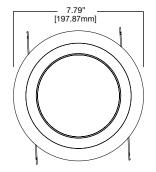
*Non-California Product Only

LED DRIVER
- Driver is a 120V input, high efficiency, dimmable electronic power supply providing DC power to the LED arrays
- 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
- Designed for continuous dimming capability to nominally 5% with many 120V Leading Edge (LE) and Trailing Edge (TE) phase control 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.)

COMPLIANCE
- cULus Listed ceiling and wall
- cULus Damp Location listed ceiling and wall
- cULus Wet Location Listed, ceiling only (shower rated)
- Suitable for use in closets, compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5)
- 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)
- EMI/RFI: meets FCC 47CFR Part 15 Class B limits, and is suitable for use in residential and commercial installations
- Airtight certified per ASTM E283 (not exceeding 2.0 CFM under 57 Pascals pressure difference)
- 90 CRI: Can be used to comply with California Title 24 High Efficacy requirements.
- Can be used for International Energy Conservation Code (IECC) and Washington State Energy Code high efficiency luminaire compliance
- ENERGY STAR® certified luminaire - consult ENERGY STAR® Certified Product List
- Contains no mercury or lead and RoHS compliant.
- Photometric testing in accordance with IES LM-79
- Lumen maintenance projections in accordance with IES LM-80 and TM-21

SLD 1200 Series
SLD6128xxWH
80CRI
2700K, 3000K, 3500K, and 4000K

SLD6129xxWH
90CRI
2700K, 3000K, 3500K, and 4000K

6" Surface LED Downlight

High Lumen 1200 Series

Suitable for ceiling or wall electrical junction boxes

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

DIMENSIONS

7.79" [197.87mm]

.8" [21.46mm]

7.79" [197.87mm]

.7" [17.28mm]

ORDERING INFORMATION

SAMPLE NUMBER: SLD612927WH SLD6TRMSN
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	Accessories
SLD612= 6" Surface LED Downlight, 120V 1200 Series California non-E26 Models **SLD612927WH**-CA **SLD612930WH**-CA **SLD612935WH**-CA **SLD612940WH**-CA	8=80 CRI 9=90 CRI	27=2700K 30=3000K 35=3500K 40=4000K	WH=White	Designer Trims Fit over the SLD for a designer finish SLD6TRMSN=6" SLD Satin Nickel SLD6TRMTBZ=6" SLD Tuscan Bronze SLD6TRMWH=6" SLD White (paintable) *SLD accessory trims attach with permanent adhesion and are not interchangable after installation J-Box Spacer Extension Ring Add 15/16" depth when SLD driver cannot fit into installed junction box SLD6EXT=6" Surface LED J-Box Extender, 9.5" O.D. RAD Adapters When junction box is mounted flat on a ceiling or beam surface (not recessed in ceiling) SLD6RAD=6" SLD Round Surface J-Box Adapter, 7.92" O.D. (for 4-inch round or octagon junction boxes.) SLD6SADPLT=6" SLD Square Surface J-Box Adapter Plate (For 4-inch square junction boxes, use with SLD6RAD.) Spare Parts SLD6ACCKIT=6" Accessory Parts Replacement Kit (Screwbase adapter, torsion springs, friction blades) SLD6BRKT=6" Junction Box Bracket & Screws Refer to SLD Accessories specification sheet for further information.

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HOUSING COMPATIBILITY

The SLD6 is UL Listed in Halo and All-Pro recessed housings, and is UL Classified for use with <u>any</u> 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.
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"**	H5ICAT, H5RICAT, H5ICATNB, H5T, H5RT, H25ICAT, H25ICATNB, E5TAT, E5RTAT, H5TNB, E5TATNB, E5ICAT, E5RICAT, E5ICATNB
	6"	H7ICAT, H7RICAT, H7ICT, H7RICT, H7ICATNB, H7ICTNB, H7T, H7RT, H7TNB, H7TCP, H7UICT, H7UICAT, H27ICAT, H27RICAT, H27T, H27RT, E7ICAT, E7RICAT, E27ICAT, E27RICAT, E7ICATNB, E7TAT, E7RTAT, E7TATNB, E27TAT, E27RTAT

COMPATIBLE WITH COOPER LIGHTING SOLUTIONS' 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
- Refer to 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)

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

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

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)

*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 SLD mounting bracket in the box.

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PRODUCT DATA

Cat No.	CRI	CCT	Lumens	Power (W)	LPW
SLD612827WH	80	2700	1100	14.8	74
SLD612830WH	80	3000	1150	14.8	78
SLD612835WH	80	3500	1200	14.8	81
SLD612840WH	80	4000	1215	14.8	82
SLD612927WH	92	2700	880	14.8	59
SLD612930WH	92	3000	925	14.8	63
SLD612935WH	92	3500	965	14.8	65
SLD612940WH	92	4000	1000	14.8	68

Performance values are presented as typical for the model(s) indicated. Field results may vary.

LIGHTING FACTS®

SLD612827WH - 80 CRI

HALO

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

Light Output (Lumens)	1100
Watts	14.8
Lumens per Watt (Efficacy)	74.32

Color Accuracy
Color Rendering Index (CRI) — 81

Light Color
Correlated Color Temperature (CCT) — 2700 (Warm White)

Warm White | Bright White | Daylight
2700K 3000K   4500K   6500K

All results 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.

Visit www.lightingfacts.com for the *Label Reference Guide.*
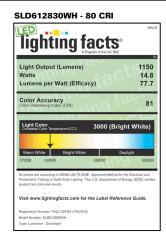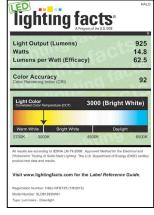
Registration Number: F4QJ-ZW8YLN (7/8/2015)
Model Number: SLD612827WH
Type: Luminaire - Downlight

SLD612830WH - 80 CRI

HALO

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

Light Output (Lumens)	1150
Watts	14.8
Lumens per Watt (Efficacy)	77.7

Color Accuracy
Color Rendering Index (CRI) — 81

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

Warm White | Bright White | Daylight
2700K 3000K   4500K   6500K

All results 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.

Visit www.lightingfacts.com for the *Label Reference Guide.*

Registration Number: F4QJ-33FI83 (7/8/2015)
Model Number: SLD612830WH
Type: Luminaire - Downlight

SLD612835WH - 80 CRI

HALO

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

Light Output (Lumens)	1200
Watts	14.8
Lumens per Watt (Efficacy)	81.08

Color Accuracy
Color Rendering Index (CRI) — 81

Light Color
Correlated Color Temperature (CCT) — 3500 (Bright White)

Warm White | Bright White | Daylight
2700K 3000K   4500K   6500K

All results 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.

Visit www.lightingfacts.com for the *Label Reference Guide.*

Registration Number: F4QJ-1XZ7ZX (7/8/2015)
Model Number: SLD612835WH
Type: Luminaire - Downlight

SLD612840WH - 80 CRI

HALO

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

Light Output (Lumens)	1215
Watts	14.8
Lumens per Watt (Efficacy)	82.09

Color Accuracy
Color Rendering Index (CRI) — 81

Light Color
Correlated Color Temperature (CCT) — 4000 (Bright White)

Warm White | Bright White | Daylight
2700K 3000K   4500K   6500K

All results 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.

Visit www.lightingfacts.com for the *Label Reference Guide.*

Registration Number: F4QJ-PJNPPN (7/8/2015)
Model Number: SLD612840WH
Type: Luminaire - Downlight

SLD612927WH - 90 CRI

HALO

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

Light Output (Lumens)	880
Watts	14.8
Lumens per Watt (Efficacy)	59.46

Color Accuracy
Color Rendering Index (CRI) — 92

Light Color
Correlated Color Temperature (CCT) — 2700 (Warm White)

Warm White | Bright White | Daylight
2700K 3000K   4500K   6500K

All results 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.

Visit www.lightingfacts.com for the *Label Reference Guide.*

Registration Number: F4QJ-2F6TNP (7/8/2015)
Model Number: SLD612927WH
Type: Luminaire - Downlight

SLD612930WH - 90 CRI

HALO

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

Light Output (Lumens)	925
Watts	14.8
Lumens per Watt (Efficacy)	62.5

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

All results 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.

Visit www.lightingfacts.com for the *Label Reference Guide.*

Registration Number: F4QJ-NFQTZ5 (7/8/2015)
Model Number: SLD612930WH
Type: Luminaire - Downlight

SLD612935WH - 90 CRI

HALO

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

Light Output (Lumens)	965
Watts	14.8
Lumens per Watt (Efficacy)	65.2

Color Accuracy
Color Rendering Index (CRI) — 92

Light Color
Correlated Color Temperature (CCT) — 3500 (Bright White)

Warm White | Bright White | Daylight
2700K 3000K   4500K   6500K

All results 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.

Visit www.lightingfacts.com for the *Label Reference Guide.*

Registration Number: F4QJ-BJF8KG (7/8/2015)
Model Number: SLD612935WH
Type: Luminaire - Downlight

SLD612940WH - 90 CRI

HALO

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

Light Output (Lumens)	1000
Watts	14.8
Lumens per Watt (Efficacy)	67.57

Color Accuracy
Color Rendering Index (CRI) — 92

Light Color
Correlated Color Temperature (CCT) — 4000 (Bright White)

Warm White | Bright White | Daylight
2700K 3000K   4500K   6500K

All results 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.

Visit www.lightingfacts.com for the *Label Reference Guide.*

Registration Number: F4QJ-AY5VZE (7/8/2015)
Model Number: SLD612940WH
Type: Luminaire - Downlight