

Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO

HLB3S

3" LED Square Lens Downlight with Remote Driver / Junction Box

Typical Applications

Residential

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Product Certification



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.

Product Features

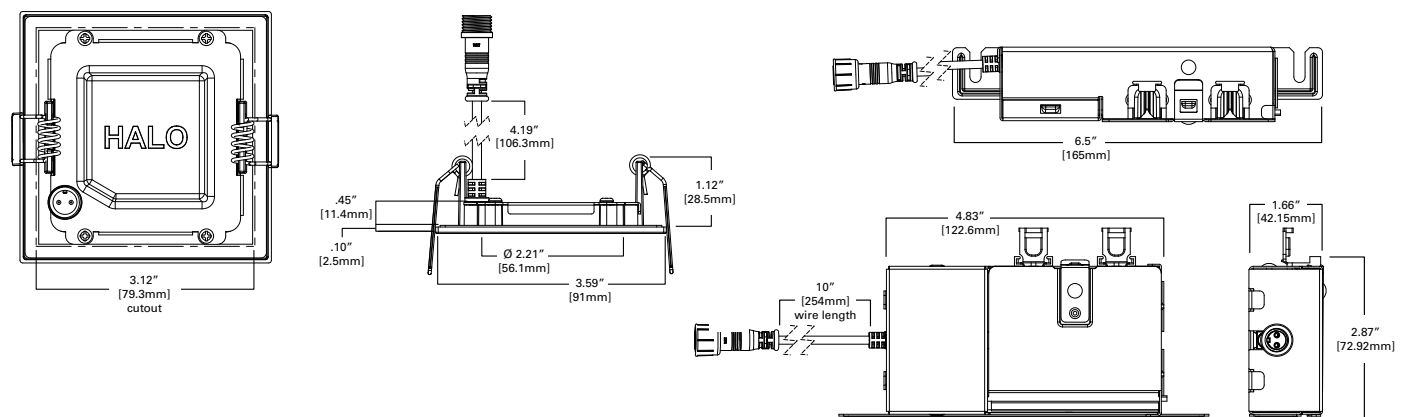


Top Product Features

- Direct mount (does not require recessed housing or junction box)
- Delivers up to 550 lumens; Achieves L70 at 50,000 hours in IC and non-IC applications
- 2700K, 3000K, 3500K, 4000K and 5000K field selectable CCT
- 2700, 3000K, 3500K and 4000K fixed CCT
- 90 CRI (min), R9 50 and color accuracy within 4 SDCM
- Wet location listed for showers and protected ceilings

Dimensional and Mounting Details

[additional product diagrams](#)



Order Information

SAMPLE ORDER NUMBER: **HLB3S059301EMWR**

Models	Lumens	CRI / CCT	Driver	Finish	Packaging
HLB3S = 3-Inch LED square lens downlight with remote driver / junction box	05 = 500 lumens (nominal)	927 = 90 CRI minimum, 2700K CCT 930 = 90 CRI minimum, 3000K CCT 935 = 90 CRI minimum, 3500K CCT 940 = 90 CRI minimum, 4000K CCT 9FS = 90 CRI minimum, field selectable 2700K, 3000K, 3500K, 4000K or 5000K CCT	1E = 120V 60Hz, LE & TE phase cut 5% dimming	MW = matte white flange	R = recyclable 4-color unit carton suitable for point of purchase merchandising display
Notes	Notes	Notes	Notes	Notes	Notes

Accessories

Accessories	
HLB3SROTMW = 3" square oversized trim, matte white Designer Trims HLB3STRMMW = 3" square decorative overlay, matte white HLB3STRMSN = 3" square decorative overlay, satin nickel HLB3STRMTBZ = 3" square decorative overlay, tuscan bronze	Extension Cable Dedicated Driver/Jbox HLB06EC = 6 ft. extension cable HLB12EC = 12 ft. extension cable HLB20EC = 20 ft. extension cable Extension Cable selectTable Driver/Jbox HLB06FSEC = 6 ft. extension cable HLB12FSEC = 12 ft. extension cable HLB20FSEC = 20 ft. extension cable

Product Specifications

Housing

- Die cast aluminum mounting frame with integral flange provides passive thermal cooling achieving L70 at 50,000 hours in IC and non-IC applications
- High impact diffuse lens provides shielding to the light guide minimizing pixilation

Gasket

- Closed cell gasket achieves restrictive airflow and wet location listing without additional gaskets or caulking

Optics

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

LED Array

- Plurality of mid power LED's provides a uniform source with high efficiency and long life
- 90 color rendering index (CRI) minimum; R9 greater than 50 provides high color rendering
- Fixed 2700K, 3000K, 3500K and 4000K correlated color temperatures (CCT); color accuracy within 3 SDCM
- Optional field selectable color temperature, select 2700K, 3000K, 3500K, 4000K or 5000K CCT; color accuracy within 4 SDCM
- Meets ENERGY STAR® color angular uniformity requirements, deviation is less than 0.004 u' v'

Remote Driver / Junction Box

- Die formed metal driver / junction box with captive hinged junction box cover
- Listed for (6) #12 AWG 90° C splice conductors, 2-in, 2-out plus (2) ground
- (2) ½" conduit pry-outs
- (2) Slide-N-Side™ non-metallic (NM) wire traps allows wiring outside the box
- Accepts 14-2, 14-3, 12-2, 12-3 U.S. and 14-2, 14-3, 12-2 Canadian NM cable
- (3) 4-port push wire nuts with clear caps for quick and reliable mains voltage connections
- Integral mounting slots facilitate direct mounting to building structure or mounting frame

Driver

- 120V 60 Hz constant current driver provides noise free operation
- Continuous, flicker-free dimming from 100% to 5% with select leading or trailing edge 120V phase cut dimmers
- Plenum rated inline electrical quick connect provides low voltage connection to fixture fitting

Installation

- Can be installed in 1/2" to 1-1/4" thick ceilings
- Cutout template provided
- Heat treated springs hold fixture fitting securely in the ceiling eliminating light leaks nominal framing member
- Can be removed from below the ceiling for service or replacement

Compliance

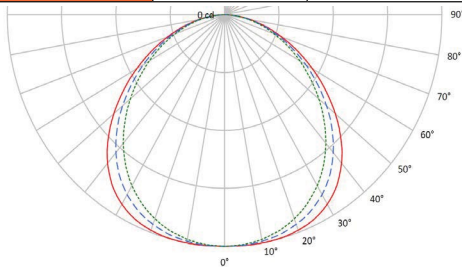
- cULus certified type IC suitable for direct contact with air permeable insulation
- Not recommended for use in direct contact with spray foam insulation, reference NEMA LSD57-2013
- Wet location listed and IP44 ingress protection
- Airtight per ASTM-E283-04
- Multi-conductor jacketed cable complies with UL CMP/CSA FT-6 and is not required to be installed in conduit or raceway
- 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
- 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, reference Modernized Appliance Efficiency Database System (MAEDBS) for 2016 JA8 High Efficacy Lighting
- ENERGY STAR® certified, reference "Certified Light Fixtures" database

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

Photometric Data

HLB3S059301EMW-3000K		
Luminaire lumens	553	
Input watts	9	
LER (LPW)	61.44	
Spacing Criteria	0-180	1.39
	90-270	1.26
	Diagonal	1.4
Beam angle (degrees)	107.3	
Field angle (degrees)	161.5	
Zonal lumen	Lumens	% Lumens
0-30	151.5	27.4
0-40	251.1	45.4
0-60	441.3	79.8
0-90	553.0	100



* Tested in accordance with IES LM63. Field results may vary.

Color Metric Summary - 3000K

TM-30-15	Rf = 88
	Rg = 96
CRI/CIE	Ra = 94
	R9 = 70



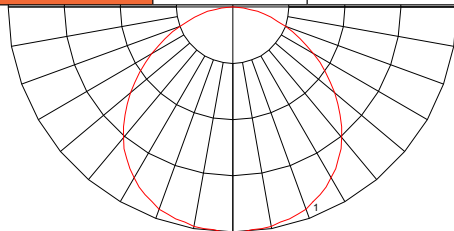
CCT - Range of 2700K- 5000K

Product Specifications

PRODUCT SPECIFICATIONS	
Lumens	551
Watts	9.1
Lumens Per Watt (Efficacy)	60.5
Color Accuracy (CRI)	92
Light Color (CCT)	3000K
Correlated Color Temperature (CCT)	
warm white	soft white
2700K	3000K
4500K	6500K

HLB3S 3-inch	CCT	Lumens	Power (W)	LPW
Fixed CCT	2700K	574	9	63.8
	3000K	553	9	61.4
	3500K	562	9	62.4
	4000K	573	9	63.7

HLB3S059FS1EMW-3000K		
Luminaire lumens	595	
Input watts	8.4	
LER (LPW)	70.8	
Spacing Criteria	0-180	1.12
	90-270	1.12
	Diagonal	1.22
Beam angle (degrees)	87.9	
Field angle (degrees)	141.2	
Zonal lumen	Lumens	% Lumens
0-30	166.0	27.9
0-40	273.1	45.9
0-60	476.0	80
0-90	595.0	100



* Tested in accordance with IES LM63. Field results may vary.

Color Metric Summary - 3000K

TM-30-15	Rf = 92
	Rg = 99
CRI/CIE	Ra = 96.1
	R9 = 78.6

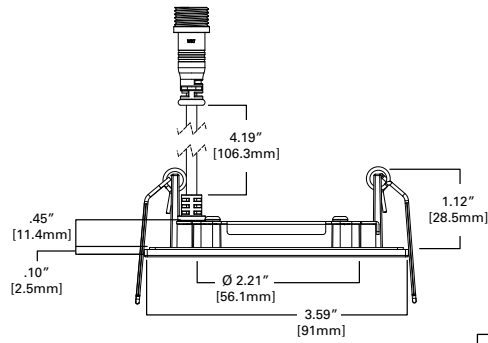
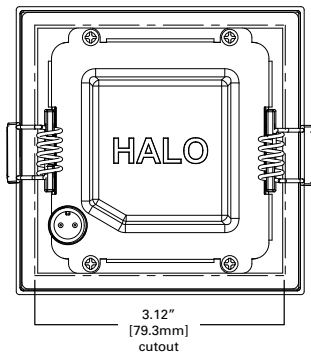


CCT - Range of 2700K- 5000K

Product Specifications

PRODUCT SPECIFICATIONS	
Lumens	595
Watts	8.4
Lumens Per Watt (Efficacy)	70.8
Color Accuracy (CRI)	93
Light Color (CCT)	3000K
Correlated Color Temperature (CCT)	
warm white	soft white
2700K	3000K
4500K	6500K

HLBS3059FS1EMW	CCT	Lumens	Power (W)	LPW
Selectable CCT	2700K	580	8.4	69.0
	3000K	595	8.4	70.8
	3500K	605	8.4	72.0
	4000K	618	8.4	73.6
	5000K	627	8.4	74.6



HLB3SOTMW
Oversized trim

