DESCRIPTION

The HLB3S is a 3-inch ultra-thin LED square lens downlight with remote driver / junction box suitable for new construction and remodel applications. Simplified installation in drywall or suspended ceilings eliminates recessed cans saving time and money. Installs from below the ceiling in as little as 3-1/2" plenum height, can be used in direct contact with insulation and is airtight. Use for general area lighting in low to medium height ceilings where energy savings, long life and economy are required.

Catalog #		Type
Project		
Comments		Date
Prepared by		



HLB3S

3-Inch LED Square Lens Downlight with Remote Driver / Junction Box

Up to 550 Lumens

SPECIFICATION FEATURES

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
- Available in 90 CRI minimum, R9 greater than 50 provides high color rendering
- Fixed 2700, 3000, 3500 and 4000 K CCT color temperatures, color accuracy within 3 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

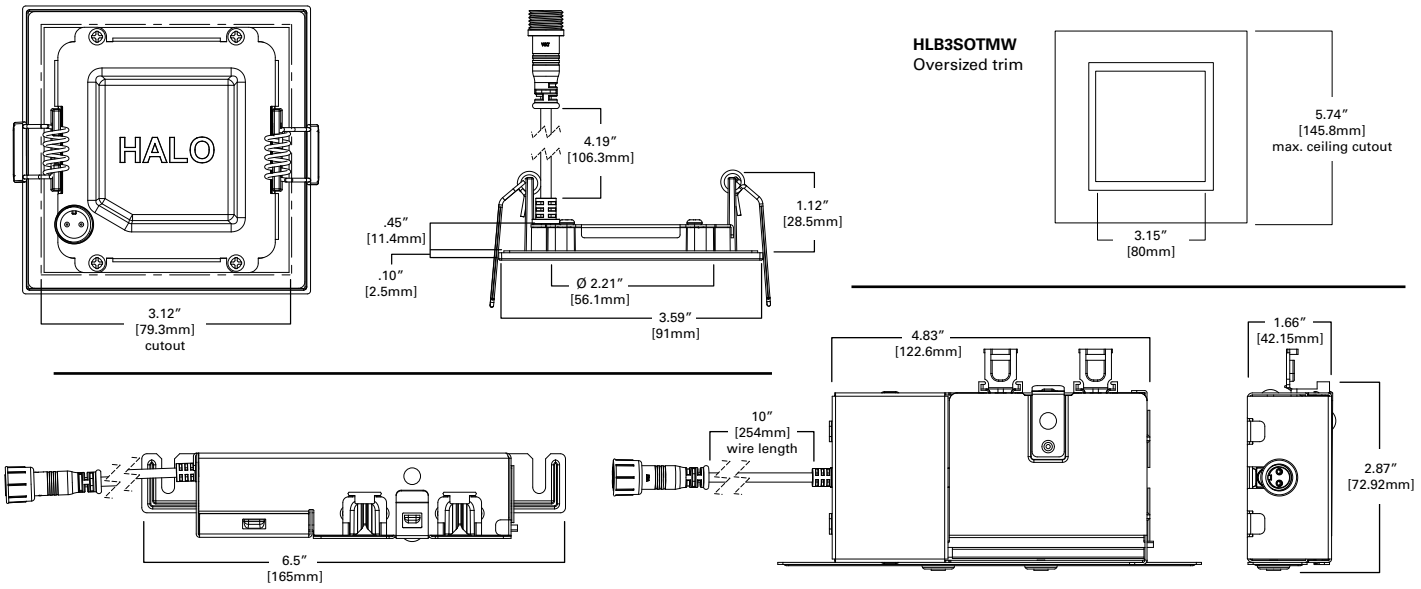
COMPLIANCE
- cULus certified type IC suitable for direct contact with air permeable insulation
- Not recommended for use in direct contact with spray foam insulation, reference NEMA LSD57-2013
- Wet location listed and IP44 ingress protection
- Airtight per ASTM-E283-04
- Multi-conductor jacketed cable 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

ENERGY DATA	
Lumens	500 Series
Input Voltage	120V
Input Current	100 (mA)
Input Power	9.0 (W)
Efficiency	60 (LPW)
Inrush (A)	2.2 A @ 42mS
THD	≤ 20%
PF	≥ 0.90
T Ambient	-30° - +40°C
Sound Rating	≤ 22 dba

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 JA8.

DIMENSIONS



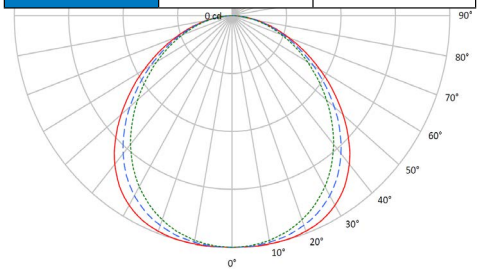
ORDERING INFORMATION

SAMPLE NUMBER: HLB3S059301EMWR

Models	Lumens	CRI / CCT	Driver	Finish	Packaging	Accessories
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	**1E**= 120V 60Hz, LE & TE phase cut 5% dimming	**MW**= matte white flange	**R**= recyclable 4-color unit carton suitable for point of purchase merchandizing display	**HLB3SOTMW** = 3″ square oversized trim, matte white **HLB3STRMMW** = 3″ square decorative overlay, matte white **HLB3STRMSN** = 3″ square decorative overlay, satin nickel **HLB3STRMTBZ** = 3″ square decorative overlay, tuscan bronze **HLB06EC** = 6 ft. extension cable **HLB12EC** = 12 ft. extension cable **HLB20EC** = 20 ft. extension cable

PHOTOMETRIC DATA

HLB3S05930EMW-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.

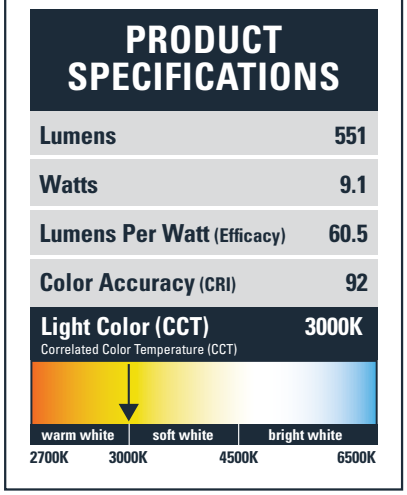
Color Metric Summary - 3000K

TM-30-15	R_f = 88
	R_g = 96
CRI/CIE	R_a = 94
	R_9 = 70



CCT - Range of 2700K- 4000K

Product Specifications



HLB3 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

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Specifications and dimensions subject to change without notice.