Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO

HLBSL6

6-Inch LED Lens Downlight with Remote Driver / Junction Box

Typical Applications

Residential

Interactive Menu

- Order Information page 2
- Product Specifications page 2
- Photometric Data page 3
- Energy & Performance Data page 3
- Product Warranty
- Dimming Guide

Product Certification

JA8-2022-E

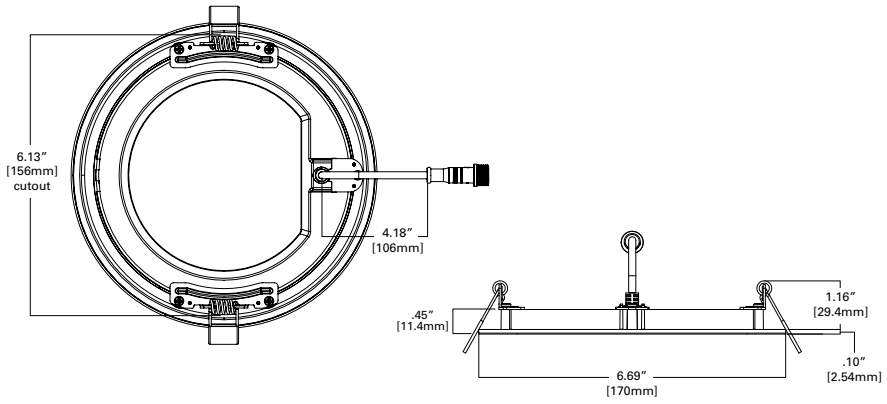
Refer to ENERGY STAR® Certified Products List.
Can be used to comply with California Title 24 High Efficacy requirements.
Certified to California Appliance Efficiency Database under JA8.

Product Features

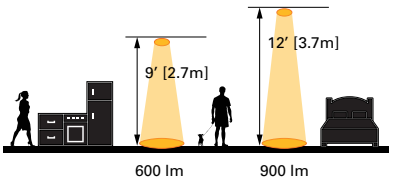
Top Product Features

- Direct mount - does not require recessed housing or junction box
- Delivers up to 994 lumens
- Achieves L70 at 35,000 hours in IC and non-IC applications
- 2700, 3000, 3500, 4000 and 5000, 6000K field selectable CCT

Dimensional and Mounting Details



Scale



additional product diagrams

Order Information

SAMPLE ORDER NUMBER: **HLBSL6099FS351EMWR**

Models | Lumens | CRI / CCT | Driver | Finish | Packaging

Models	Lumens	CRI / CCT	Driver	Finish	Packaging
HLBSL6 = 6-Inch LED smooth lens downlight with plastic housing and remote driver / junction box	**09** = 900 lumens (nominal)	**9FS23** = 90 CRI minimum, field selectable 2700K, 3000K, 3500K CCT **9FS35** = 90 CRI minimum, field selectable 3000K, 4000K, 5000K CCT **9FS46** = 90 CRI minimum, field selectable 4000K, 5000K, 6000K CCT	**1E** = 120V 60Hz, LE & TE phase cut 10% 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		
HL6RSMF = 6" new construction mounting frame **HLB6ROTMW** = 6" round oversized trim ring, 8.875" OD, matte white	**Designer Trims** **HLB6RTRMMW** = 6" round decorative overlay, matte white **HLB6RTRMMB** = 6" round decorative overlay, matte black **HLB6RTRMSN** = 6" round decorative overlay, satin nickel **HLB6RTRMTBZ** = 6" round decorative overlay, tuscan bronze	**Extension Cable | seleCCTable Driver/Jbox** **HLB06FSEC** = 6 ft. extension cable **HLB12FSEC** = 12 ft. extension cable **HLB20FSEC** = 20 ft. extension cable
Notes		



HLB6RTRMMW
White (Paintable), Splay



HLB6RTRMMB
Matte Black, Splay



HLB6RTRMSN
Satin Nickel, Splay



HLB6RTRMTBZ
Tuscan Bronze, Splay

Product Specifications

Housing
- Plastic mounting frame with integral flange provides passive thermal cooling achieving L70 at 35,000 hours in IC and non-IC applications

Optics
- Precision acrylic light guide organizes source flux into wide distribution with 1.28 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
- Field Selectable color temperature (3 colors)
  - 2700K, 3000K, 3500K
  - 3000K, 4000K, 5000K
  - 4000K, 5000K, 6000K
  - Color accuracy of 4 step at the ends, 7 step in the middle
- Meets ENERGY STAR® color angular uniformity requirements, deviation is less than 0.006 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
- (4) ½" conduit pry-outs
- Accepts 14-2, 14-3, 12-2, 12-3 U.S. and 14-2, 14-3, 12-2 Canadian NM cable
- (3) wire nuts for quick and reliable mains voltage connections
- Integral mounting facilitates 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 10% with select leading or trailing edge 120V phase cut dimmers

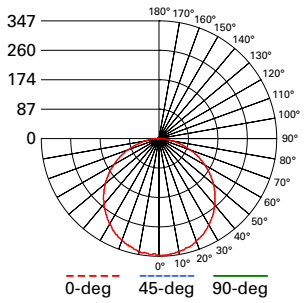
Installation
- Can be installed in 3/8" to 5/8" thick ceilings
- Round ceiling cutout
- Heat treated springs hold fixture fitting securely in the ceiling eliminating light leaks
- Housing is less than ½" thick and can span a 2" nominal framing member
- Can be removed from below the ceiling for service 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
- 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 2022 JA8 High Efficacy Lighting
- ENERGY STAR® certified, reference "Certified Light Fixtures" database

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

Photometric Data

View IES files



HLBSL6099FS351EMWR

Spacing criterion: (0-180) 1.28
(90-270) 1.24
(Diagonal) 1.38

Beam Angle: 113°
Field Angle: 162°
Lumens: 987
Input Watts: 11.9 W
Efficacy: 83 LPW
Test Report: HLBSL6099FS351EMWR.ies

Zonal Lumen	Lumens	% Lumens
0-30	268	27.1
0-40	439	44.5
0-60	778	78.9
0-90	987	100



COLOR METRIC SUMMARY

HLBSL6099FS231EMW

2700K		3000K		3500K	
TM-30-15	Rf = 92	TM-30-15	Rf = 91	TM-30-15	Rf = 90
	Rg = 98		Rg = 98		Rg = 97
CRI/CIE	Ra = 94	CRI/CIE	Ra = 94	CRI/CIE	Ra = 94
	R9 = 58		R9 = 66		R9 = 65

HLBSL6099FS351EMW

3000K		4000K		5000K	
TM-30-15	Rf = 92	TM-30-15	Rf = 90	TM-30-15	Rf = 90
	Rg = 98		Rg = 98		Rg = 97
CRI/CIE	Ra = 94	CRI/CIE	Ra = 95	CRI/CIE	Ra = 94
	R9 = 95		R9 = 78		R9 = 72

HLBSL6099FS461EMW

4000K		5000K		6000K	
TM-30-15	Rf = 87	TM-30-15	Rf = 89	TM-30-15	Rf = 89
	Rg = 94		Rg = 96		Rg = 96
CRI/CIE	Ra = 93	CRI/CIE	Ra = 92	CRI/CIE	Ra = 94
	R9 = 68		R9 = 80		R9 = 76

Energy and Performance Data

		Lumens	Power (W)	LPW
HLBSL6099FS231EMW	2700K	885	12.5	70.8
	3000K	955	12.2	78.3
	3500K	925	12.5	74.0
HLBSL6099FS351EMW	3000K	885	12.5	70.8
	4000K	950	12.1	78.5
	5000K	915	12.5	73.2
HLBSL6099FS461EMW	4000K	935	12.4	75.4
	5000K	985	12.1	81.4
	6000K	935	12.3	76.0

Note: Refer to IES files for more product data.

HLBSL6099FS231EMW

PRODUCT SPECIFICATIONS	
Lumens	955
Watts	12.2
Lumens Per Watt (Efficacy)	78.3
Color Accuracy (CRI)	93
Light Color (CCT)	3000K

Correlated Color Temperature (CCT)

warm white | soft white | bright white

2700K 3000K 4500K 6500K

HLBSL6099FS351EMW

PRODUCT SPECIFICATIONS	
Lumens	885
Watts	12.5
Lumens Per Watt (Efficacy)	70.8
Color Accuracy (CRI)	93
Light Color (CCT)	3000K

Correlated Color Temperature (CCT)

warm white | soft white | bright white

2700K 3000K 4500K 6500K

HLBSL6099FS461EMW

PRODUCT SPECIFICATIONS	
Lumens	935
Watts	12.4
Lumens Per Watt (Efficacy)	75.4
Color Accuracy (CRI)	91
Light Color (CCT)	4000K

Correlated Color Temperature (CCT)

warm white | soft white | bright white

2700K 3000K 4500K 6500K

Dimensional Details

