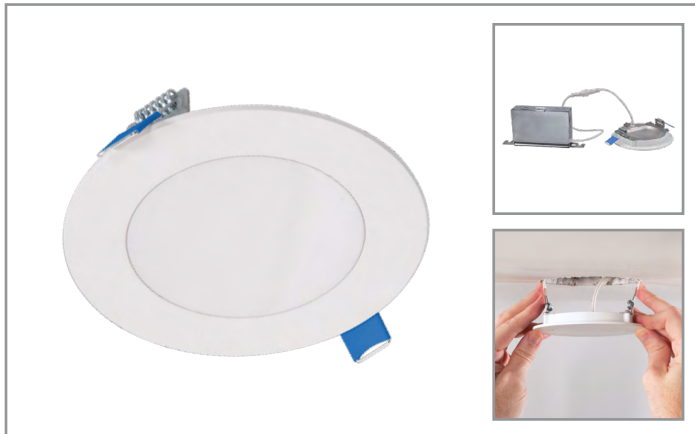


Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO

HLBSL4

4-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



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.

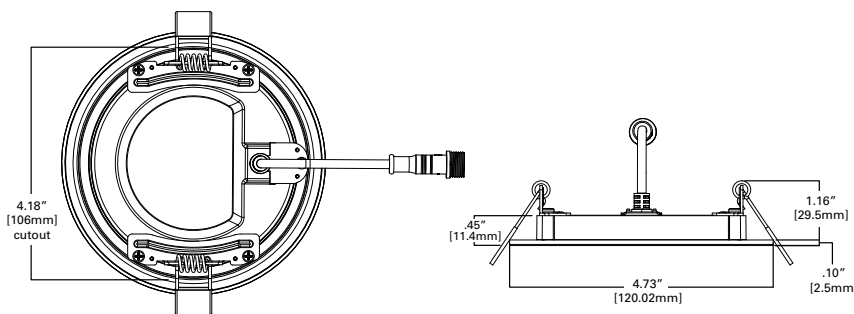
Product Features



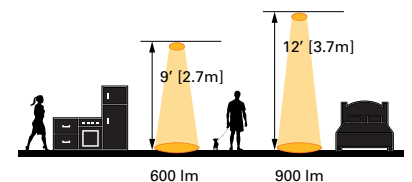
Top Product Features

- Direct mount - does not require recessed housing or junction box
- Delivers up to 750 lumens
- Achieves L70 at 35,000 hours in IC and non-IC applications
- Field Selectable color temperature (3 colors), select
 - 2700K, 3000K, 3500K
 - 3000K, 4000K, 5000K
 - 4000K, 5000K, 6000K

Dimensional and Mounting Details



Scale



[additional product diagrams](#)

Order Information

SAMPLE ORDER NUMBER: **HLBSL4069FS351EMWR**

Models	Lumens	CRI / CCT	Driver	Finish	Packaging
HLBSL4 = 4-Inch LED smooth lens downlight with plastic housing and remote driver / junction box	06 = 650 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		
HL4RSMF = 4" new construction mounting frame HLB4ROTMW = 4" round oversized trim ring, 6.875" OD, matte white	Designer Trims HLB4RTRMMW = 4" round decorative overlay, matte white HLB4RTRMMB = 4" round decorative overlay, matte black HLB4RTRMSN = 4" round decorative overlay, satin nickel HLB4RTRMTBZ = 4" 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		



HLB4RTRMMW
White (Paintable), Splay



HLB4RTRMMB
Matte Black, Splay



HLB4RTRMSN
Satin Nickel, Splay



HLB4RTRMTBZ
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 1.26 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

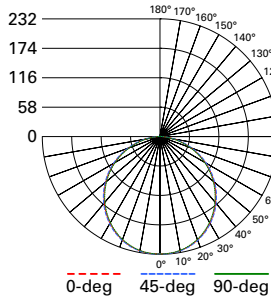
- cULus certified type IC suitable for direct contact with air permeable insulation
- Not recommended for use in direct contact with spray foam insulation, reference NEMA LSD57-2013
- Wet location listed and IP44 ingress protection
- Airtight per ASTM-E283-04
- Suitable for use in clothes closets when 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](#)



HLBSL4069FS351EMWR
 Spacing criterion: (0-180) 1.26
 (90-270) 1.26
 (Diagonal) 1.38
 Beam Angle: 110°
 Field Angle: 160°
 Lumens: 735
 Input Watts: 9.7 W
 Efficacy: 76 LPW
 Test Report:
 HLBSL4069FS351EMWR.ies

Zonal Lumen	Lumens	% Lumens
0-30	206	28
0-40	336	45.7
0-60	588	80
0-90	735	100



110°

COLOR METRIC SUMMARY

HLBSL4069FS231EMW

2700K		3000K		3500K	
TM-30-15	Rf = 92 Rg = 97	TM-30-15	Rf = 91 Rg = 98	TM-30-15	Rf = 90 Rg = 98
CRI/CIE	Ra = 93 R9 = 58	CRI/CIE	Ra = 94 R9 = 67	CRI/CIE	Ra = 94 R9 = 65

HLBSL4069FS351EMW

3000K		4000K		5000K	
TM-30-15	Rf = 92 Rg = 99	TM-30-15	Rf = 90 Rg = 97	TM-30-15	Rf = 90 Rg = 97
CRI/CIE	Ra = 94 R9 = 61	CRI/CIE	Ra = 95 R9 = 79	CRI/CIE	Ra = 94 R9 = 70

HLBSL4069FS461EMW

4000K		5000K		6000K	
TM-30-15	Rf = 87 Rg = 94	TM-30-15	Rf = 89 Rg = 96	TM-30-15	Rf = 89 Rg = 96
CRI/CIE	Ra = 93 R9 = 67	CRI/CIE	Ra = 92 R9 = 80	CRI/CIE	Ra = 94 R9 = 76

Energy and Performance Data

		Lumens	Power (W)	LPW
HLBSL4069FS231EMW	2700K	675	10.0	67.5
	3000K	745	9.8	76.0
	3500K	710	10.0	71.0
HLBSL4069FS351EMW	3000K	675	10.2	66.2
	4000K	735	9.9	74.2
	5000K	695	10.1	68.8
HLBSL4069FS461EMW	4000K	660	10.0	66.0
	5000K	710	9.6	74.0
	6000K	665	9.9	67.2

Note: Refer to IES files for more product data.

HLBSL4069FS231EMW

PRODUCT SPECIFICATIONS	
Lumens	745
Watts	9.8
Lumens Per Watt (Efficacy)	76.0
Color Accuracy (CRI)	93
Light Color (CCT) Correlated Color Temperature (CCT)	3000K
warm white	soft white
2700K	3000K
4500K	6500K

HLBSL4069FS351EMW

PRODUCT SPECIFICATIONS	
Lumens	675
Watts	10.2
Lumens Per Watt (Efficacy)	66.2
Color Accuracy (CRI)	93
Light Color (CCT) Correlated Color Temperature (CCT)	3000K
warm white	soft white
2700K	3000K
4500K	6500K

HLBSL4069FS461EMW

PRODUCT SPECIFICATIONS	
Lumens	660
Watts	10.0
Lumens Per Watt (Efficacy)	66.0
Color Accuracy (CRI)	91
Light Color (CCT) Correlated Color Temperature (CCT)	4000K
warm white	soft white
2700K	3000K
4500K	6500K

Dimensional Details

