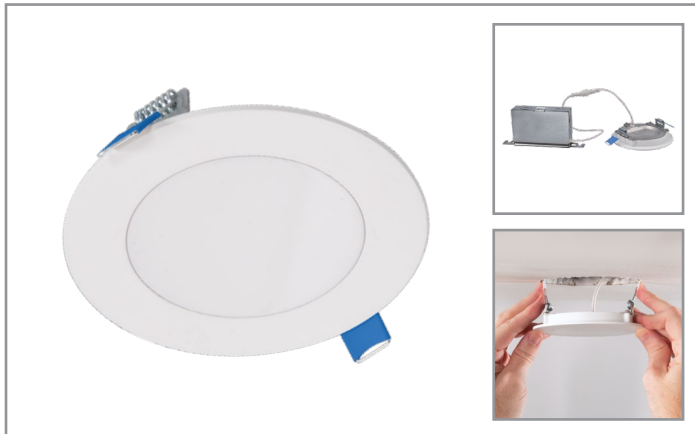


Project		Catalog #		Type	
Prepared by		Notes		Date	



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 Part 1, 2019 Efficiency and 2019 Energy Requirements Code.

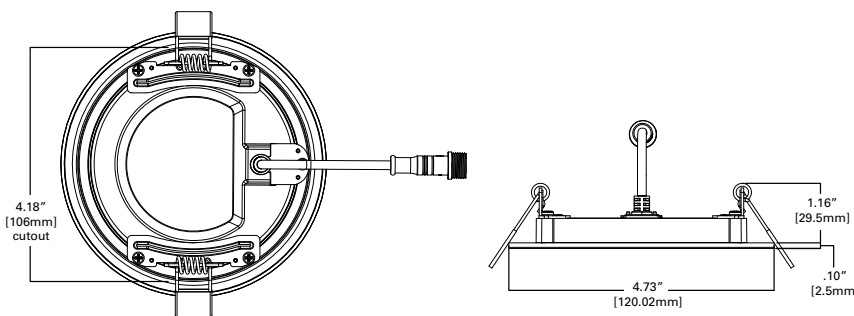
Product Features



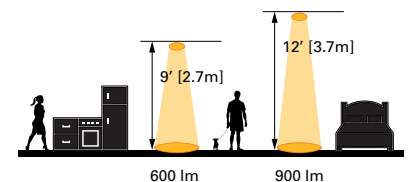
Top Product Features

- Direct mount - does not require recessed housing or junction box
- Delivers up to 800 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

Icon Key: ▲ Configurable Product

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
Extension Cable seleCCTable Driver/Jbox HLB06FSEC = 6 ft. extension cable HLB12FSEC = 12 ft. extension cable HLB20FSEC = 20 ft. extension cable
Notes

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

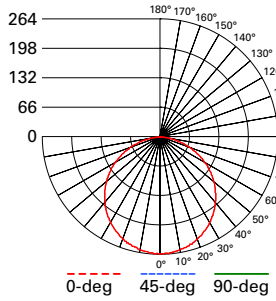
- cULus certified type IC suitable for direct contact with air permeable insulation
- Not recommended for use in direct contact with spray foam insulation, reference NEMA LSD57-2013
- Wet location listed and IP44 ingress protection
- Airtight per ASTM-E283-04
- Suitable for use in clothes closets when 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 2019 JA8 High Efficacy Lighting
- ENERGY STAR® certified, reference "Certified Light Fixtures" database

Warranty

- Five year warranty standard.

Photometric Data

[View IES files](#)



HLBSL4069FS351EMWR
 Spacing criterion: (0-180) 1.26
 (90-270) 1.26
 (Diagonal) 1.38
 Beam Angle: 112.7°
 Field Angle: 161.5°
 Lumens: 716
 Input Watts: 10.1 W
 Efficacy: 70.89 LPW
 Test Report:
 HLBSL4069FS351EMWR.ies

Zonal Lumen	Lumens	% Lumens
0-30	194.0	27.1
0-40	318.6	44.5
0-60	564.9	78.9
0-90	716.0	100



COLOR METRIC SUMMARY

HLBSL4069FS231EMW

2700K		3000K		3500K	
TM-30-15	Rf = 93.0 Rg = 98.0	TM-30-15	Rf = 90.0 Rg = 96.0	TM-30-15	Rf = 89.0 Rg = 95.0
CRI/CIE	Ra = 93.0 R9 = 54.1	CRI/CIE	Ra = 92.8 R9 = 61.6	CRI/CIE	Ra = 92.5 R9 = 61.5

HLBSL4069FS351EMW

3000K		4000K		5000K	
TM-30-15	Rf = 92.0 Rg = 97.0	TM-30-15	Rf = 93.0 Rg = 99.0	TM-30-15	Rf = 93.0 Rg = 100.0
CRI/CIE	Ra = 93.3 R9 = 57.5	CRI/CIE	Ra = 96.3 R9 = 75.8	CRI/CIE	Ra = 95.3 R9 = 77.4

HLBSL4069FS461EMW

4000K		5000K		6000K	
TM-30-15	Rf = 88.0 Rg = 96.0	TM-30-15	Rf = 89.0 Rg = 97.0	TM-30-15	Rf = 89.0 Rg = 96.0
CRI/CIE	Ra = 93.9 R9 = 75.6	CRI/CIE	Ra = 93.7 R9 = 82.9	CRI/CIE	Ra = 93.4 R9 = 76.3

Energy and Performance Data

		Lumens	Power (W)	LPW
HLBSL4069FS231EMW	2700K	703	10	70.3
	3000K	753	10	75.3
	3500K	726	10	72.6
HLBSL4069FS351EMW	3000K	716	10.1	70.9
	4000K	778	10	77.8
	5000K	768	10.2	75.3
HLBSL4069FS461EMW	4000K	761	9.9	76.9
	5000K	793	9.9	80.1
	6000K	771	9.9	77.9

Note: Refer to IES files for more product data.

HLBSL4069FS231EMW

PRODUCT SPECIFICATIONS	
Lumens	753
Watts	10.0
Lumens Per Watt (Efficacy)	75.3
Color Accuracy (CRI)	92
Light Color (CCT) Correlated Color Temperature (CCT)	3000K
warm white soft white bright white 2700K 3000K 4500K 6500K	

HLBSL4069FS351EMW

PRODUCT SPECIFICATIONS	
Lumens	716
Watts	10.1
Lumens Per Watt (Efficacy)	70.9
Color Accuracy (CRI)	92
Light Color (CCT) Correlated Color Temperature (CCT)	3000K
warm white soft white bright white 2700K 3000K 4500K 6500K	

HLBSL4069FS461EMW

PRODUCT SPECIFICATIONS	
Lumens	761
Watts	9.9
Lumens Per Watt (Efficacy)	76.9
Color Accuracy (CRI)	93
Light Color (CCT) Correlated Color Temperature (CCT)	4000K
warm white soft white bright white 2700K 3000K 4500K 6500K	

Dimensional Details

