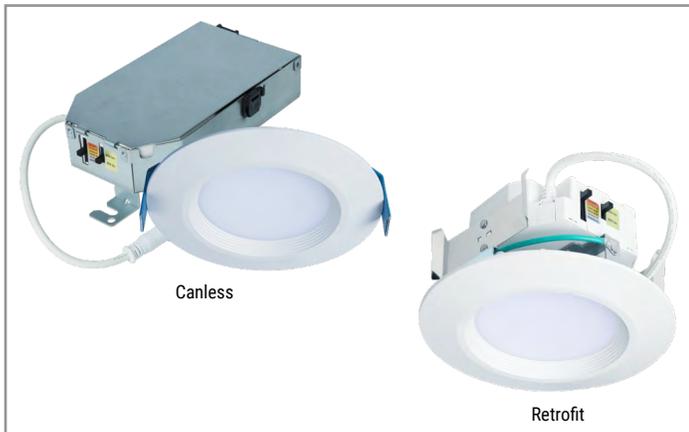


Project		Catalog #		Type	
Prepared by		Notes		Date	



# HALO

## HLBC4 Series

### Ultra-Slim Regressed LED Downlight

#### Typical Applications

Residential • Multi-family/mixed use

#### Interactive Menu

- Order Information page 2
- Product Specifications page 5
- Energy Data page 5
- Photometric Data page 6
- Product Warranty

#### 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.

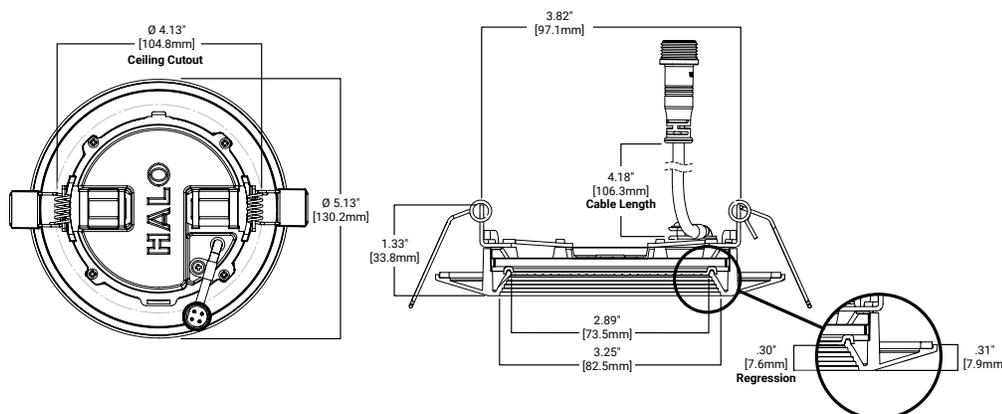
#### Product Features



#### Top Product Features

- Regressed prismatic lens creates superior glare reduction and visual comfort
- Ultra-slim design, installs in 2x4 plenum space
- Dual installation: options with canless or retrofit installation
- 6 selectable color temperature options
  - 2700K, 3000K, 3500K, 4000K, 5000K
  - Dim-to-warm technology included: use your dimmer to warm color temperature from 3000K to 1800K
- Dimmable down to 5%, options with phase cut or 0-10V control

#### Dimensional and Mounting Details



[additional product diagrams](#)

## Order Information

SAMPLE ORDER NUMBER: **HLBC4069FSD2W1EMW**

### Basic version

Canless installation only

Model	Lumens	CRI / CCT	Driver	Finish
Model	Lumens	CRI / CCT	Driver	Finish
<b>HLBC4</b> = 4" ultra-slim regressed LED downlight	<b>06</b> = 600 lumens (nominal)	<b>9FSD2W</b> = 90 CRI, selectable CCT with D2W option	<b>1E</b> = 120V 60Hz, LE & TE phase cut 5% dimming	<b>MW</b> = matte white flange
Notes	Notes	Notes	Notes	Notes

### Dual Installation version

2-in-1 canless and retrofit installation

Model	Lumens	CRI / CCT	Driver	Finish	Installation	Compliance
Model	Lumens	CRI / CCT	Driver	Finish	Installation	Compliance
<b>HLBC4</b> = 4" ultra-slim regressed LED downlight	<b>LS</b> = 600/900 selectable lumens (nominal)	<b>9FSD2W</b> = 90 CRI, selectable CCT with D2W option	<b>1E</b> = 120V 60Hz, LE & TE phase cut 5% dimming <b>E10</b> = 120/277V 50Hz/60Hz, 0-10V dimmable	<b>MW</b> = matte white flange	<b>R</b> = canless or retrofit installation	<b>[Blank]</b> = compliant in all states besides California <b>-CA</b> = state of California compliant
Notes	Notes	Notes	Notes	Notes	Notes	Notes

### Accessories

Accessories		
<b>Mounting Frames</b> <b>HL4RSMF</b> = 4" new construction mounting frame  <b>Extension Cables</b> <b>HLB06BLEEC</b> = 6 ft. extension cable <b>HLB12BLEEC</b> = 12 ft. extension cable <b>HLB20BLEEC</b> = 20 ft. extension cable	<b>Round Designer Trims</b> <b>HLBC4RTRMMW</b> = 4" round designer trim, matte white <b>HLBC4RTRMSN</b> = 4" round designer trim, satin nickel <b>HLBC4RTRMTBZ</b> = 4" round designer trim, tuscan bronze <b>HLBC4RTRMMB</b> = 4" round designer trim, matte black	<b>Square Designer Trims</b> <b>HLBC4STRMMW</b> = 4" square designer trim, matte white <b>HLBC4STRMSN</b> = 4" square designer trim, satin nickel <b>HLBC4STRMTBZ</b> = 4" square designer trim, tuscan bronze <b>HLBC4STRMMB</b> = 4" square designer trim, matte black
Notes		



**HLBC4RTRMMW**  
Matte White



**HLBC4RTRMMB**  
Matte Black



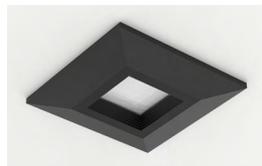
**HLBC4RTRMSN**  
Satin Nickel



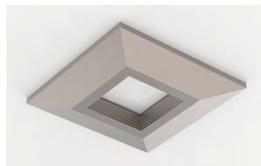
**HLBC4RTRMTBZ**  
Tuscan Bronze



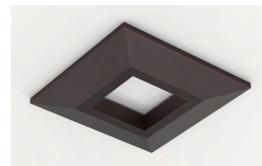
**HLBC4STRMMW**  
Matte White



**HLBC4STRMMB**  
Matte Black

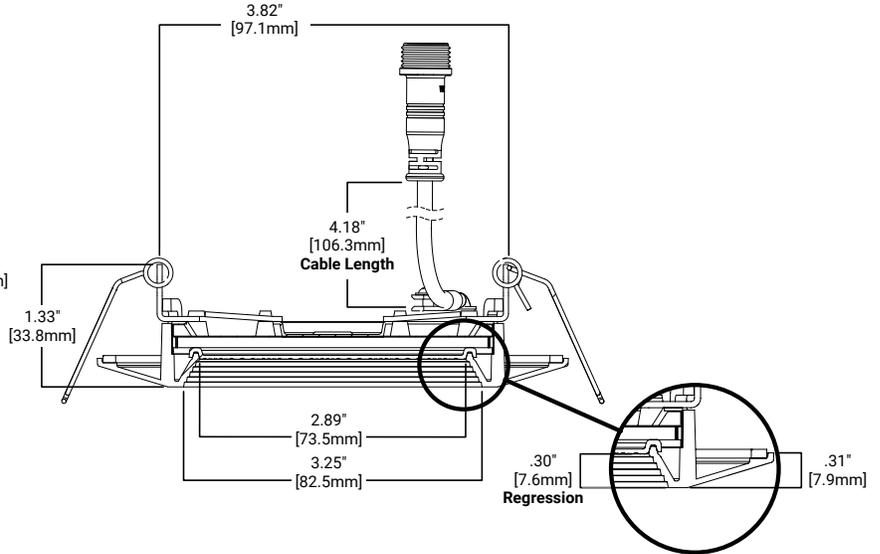
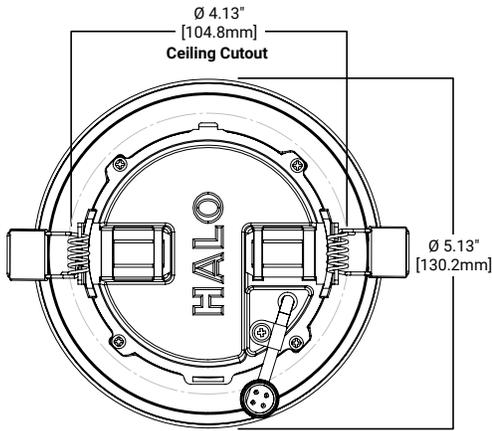


**HLBC4STRMSN**  
Satin Nickel



**HLBC4STRMTBZ**  
Tuscan Bronze

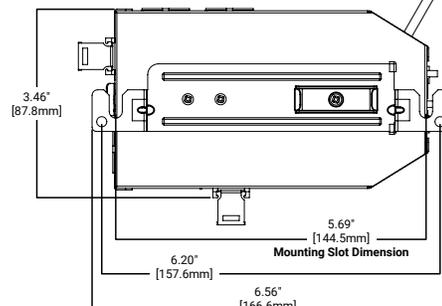
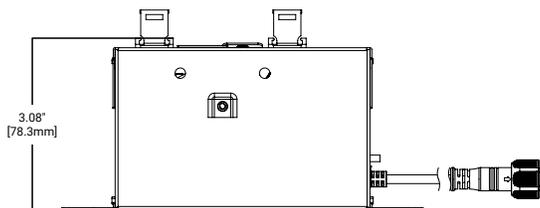
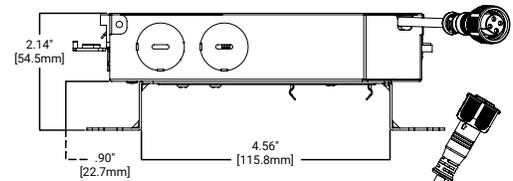
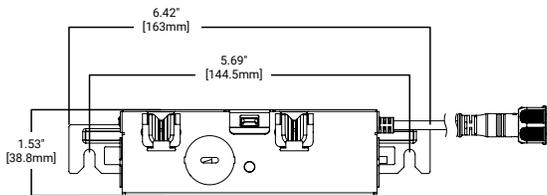
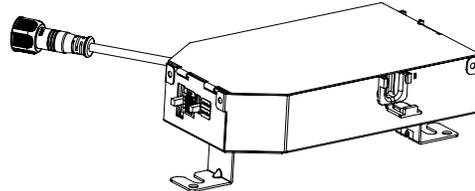
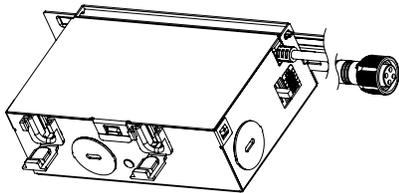
## Dimensional and Mounting Details



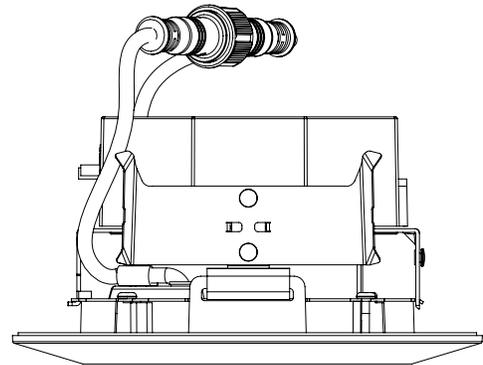
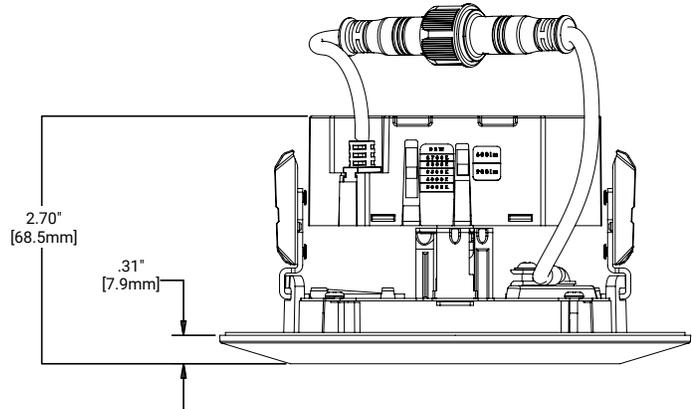
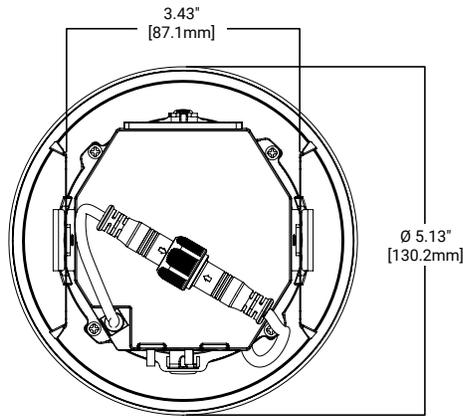
**HLB COMFORT BASIC DRIVER**



**HLB COMFORT PLUS & 0-10V DRIVER, LUMEN SELECTABLE**



## Dimensional and Mounting Details



## Compatible Housings

### HALO - 4" Housings

Halo LED	H45ICAT*, H450FR2ICAT*
Standard Housing	H99ICAT, H99TAT, H995ICAT, H99T, H99ICT, E4ICATSB, E4TATSB
Shallow Housing	H245ICAT

## Product Specifications

### Construction

- Die cast aluminum flange
- Regressed lens
- High impact diffuse lens provides shielding to the light guide minimizing pixilation

### Selectable System

- Use the CCT select switch to choose between D2W, 2700K, 3000K, 3500K, 4000K, and 5000K CCT
- D2W option starts at 3000K and warms to 1800K as fixture dims
- Use the lumen select switch on lumen selectable fixtures to choose brightness level

### LED Array

- Mid power LED array provides a uniform source with high efficiency and no pixilation
- 90 CRI minimum, R9 greater than 50
- Color accuracy at 4 SDCM in between endpoints, provide color accuracy and uniformity
- Color Temperature (CCT) is set to a factory default of 3000K

### Gasket

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

### 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) 1/2" 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) 4-port push wire nuts with clear caps for quick and reliable mains voltage connections
- Integral mounting facilitates direct mounting to building structure or mounting frame

### Driver

- Available in 120V or 120-277V, providing noise free operation
- Continuous flicker-free dimming down to 5% with select dimmers
- Plenum rated inline electrical quick connect provides low voltage connection to fixture fitting, CMP/FT6 rated

### Installation

- Can be installed in 1/2" to 1-1/4" thick ceilings
- Round ceiling cutout
- Option for retrofit installation
- Heat treated springs hold fixture fitting securely in the ceiling eliminating light leaks
- Fixture is less than 1/2" thick and can span a 2" nominal framing member
- Can be removed from below the ceiling for service or replacement

### Compliance

- UL Certified US and Canada 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](http://www.cooperlighting.com/warranty)

## Energy Data

### HLB Comfort Basic 4in 600LM

Lumens	600
Input Voltage	120V
Input Current	72mA
Input Power	8.5W
Efficiency	79.00%
Inrush(A)	1.14
THD	16%
PF	0.96
Sound Rating	<=22dba

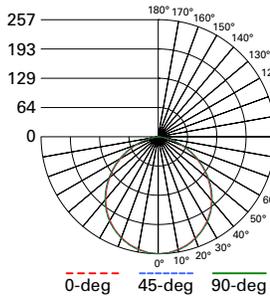
### HLB Comfort Plus 4in 600/900LM

Lumens	600LM	900LM
Input Voltage	120V	120V
Input Current	78mA	110mA
Input Power	9W	13W
Efficiency	79.00%	79.00%
Inrush(A)	1.23	1.23
THD	17%	17%
PF	0.96	0.96
Sound Rating	<=22dba	<=22dba

### HLB Comfort 0-10V 4in 600/900LM

Lumens	600LM	900LM
Input Voltage	120V-277V	120V-277V
Input Current	75mA@120V 35mA@277V	110mA@120V 50mA@277V
Input Power	8.5W	13W
Efficiency	81%@120V 78%@277V	81%@120V 78%@277V
Inrush(A)	2.08@120V 3.48@277V	2.08@120V 3.48@277V
THD	7.5%@120V 18.5%@277V	8.5%@120V 14%@277V
PF	0.991@120V 0.917@277V	0.994@120V 0.95@277V
Sound Rating	<=22dba	<=22dba

## Photometric Data



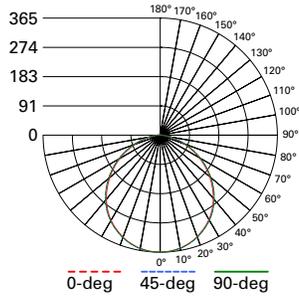
### HLBC4069FSD2W1EMW-3000K

Spacing criterion:  
 (0-180) 1.24 | (90-270) 1.24 | (Diagonal) 1.36  
 Beam Angle: 105°  
 Field Angle: 155°  
 Lumens: 675  
 Input Watts: 8.5 W  
 Efficacy: 79 LPW  
 UGR: 19.5  
 Test Report: P626430

Zonal Lumen	Lumens	% Lumens
0-30	199	29.5
0-40	324	48.1
0-60	558	82.7
0-90	675	100

TM-30-15	Rf = 92
	Rg = 100
CRI/CIE	Ra = 97
	R9 = 81.1

CCT - Range of 2700K- 5000K



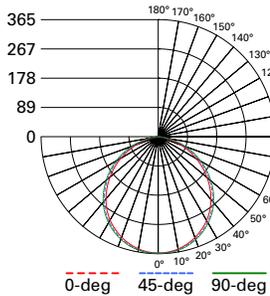
### HLBC4LS9FSD2W1EMWR-3000K-900lm

Spacing criterion:  
 (0-180) 1.26 | (90-270) 1.26 | (Diagonal) 1.36  
 Beam Angle: 106°  
 Field Angle: 155°  
 Lumens: 975  
 Input Watts: 13.2 W  
 Efficacy: 74.3 LPW  
 UGR: 21  
 Test Report: P626437

Zonal Lumen	Lumens	% Lumens
0-30	282	29.0
0-40	460	47.3
0-60	798	81.9
0-90	975	100.0

TM-30-15	Rf = 93
	Rg = 101
CRI/CIE	Ra = 97
	R9 = 81

CCT - Range of 2700K- 5000K



### HLBC4LS9FSD2WE010MWR-3000K-900lm

Spacing criterion:  
 (0-180) 1.24 | (90-270) 1.26 | (Diagonal) 1.38  
 Beam Angle: 105°  
 Field Angle: 155°  
 Lumens: 960  
 Input Watts: 13 W  
 Efficacy: 73.7 LPW  
 UGR: 21.5  
 Test Report: P626457

Zonal Lumen	Lumens	% Lumens
0-30	276	28.8
0-40	451	47.0
0-60	784	81.6
0-90	960	100.0

TM-30-15	Rf = 93
	Rg = 100
CRI/CIE	Ra = 97
	R9 = 80.9

CCT - Range of 2700K- 5000K

