

Project		Catalog #		Type	
Prepared by		Notes		Date	



# HALO

## CJB Integrated JBox Downlight

A slim 2-in-1 installation LED downlight with integral driver and JBox suitable for fast installation directly into a ceiling with no housing needed, or retrofit as an LED Trim into an existing housing.

### Typical Applications

Residential • Hospitality • Retail

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### 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

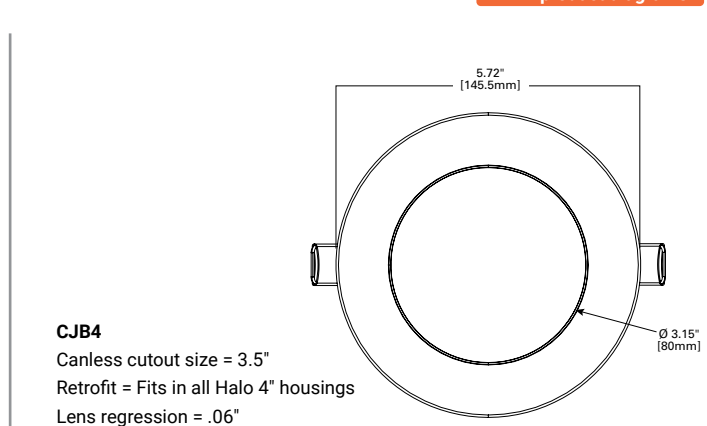
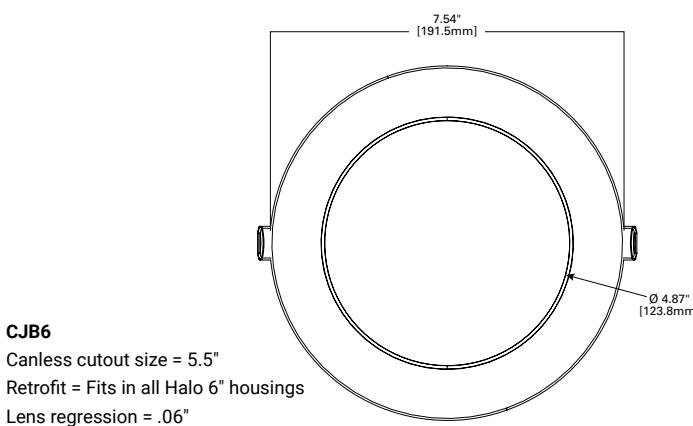


### Top Product Features

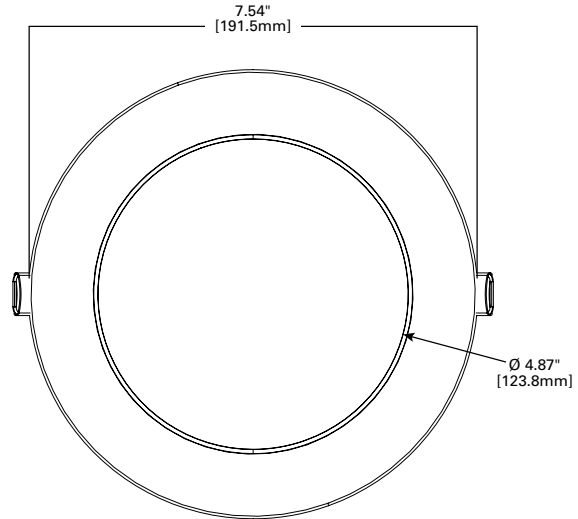
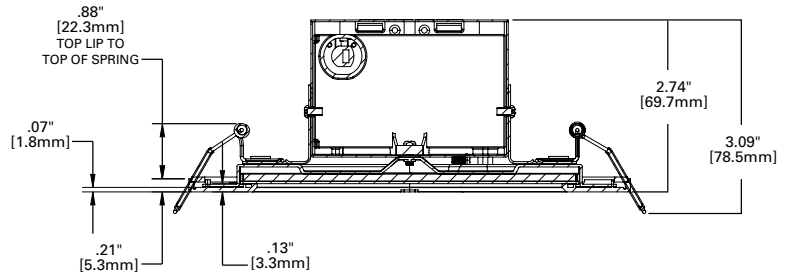
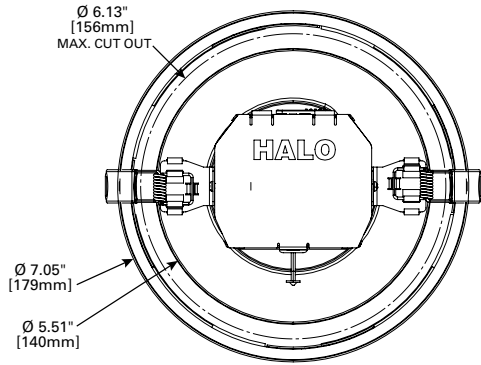
- Slim design 4" and 6" LED recessed downlights for easy installation from below the ceiling
- Provides 35,000 hours of maintenance free operation
- 4" delivers 600 lumens
- 6" delivers 900 lumens
- Field selectable 5-CCT (2700, 3000, 3500, 4000, 5000K), 90 CRI minimum
- 120V LE/TE phase cut dimming to 10% with select controls
- 2-in-1 installation mounting option allows for either canless or LED Trim retrofit in a housing installation

### Dimensional and Mounting Details

[additional product diagrams](#)



## Dimensional and Mounting Details

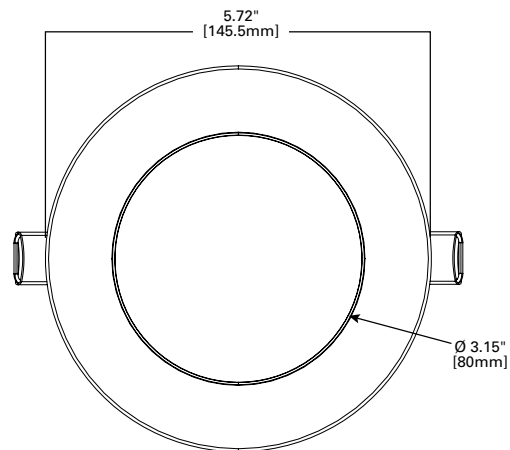
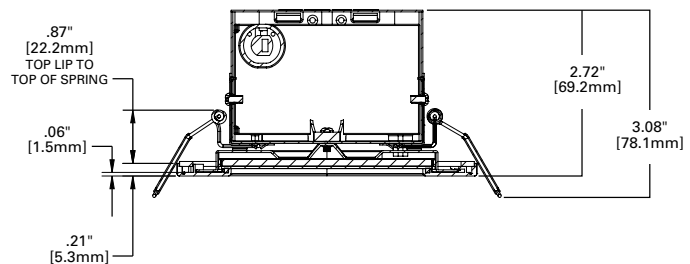
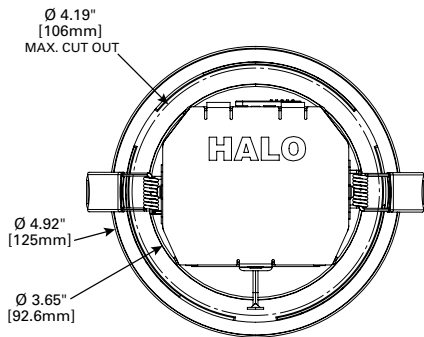


### CJB6

Canless cutout size = 5.5"

Retrofit = Fits in all Halo 6" housings

Lens regression = .06"



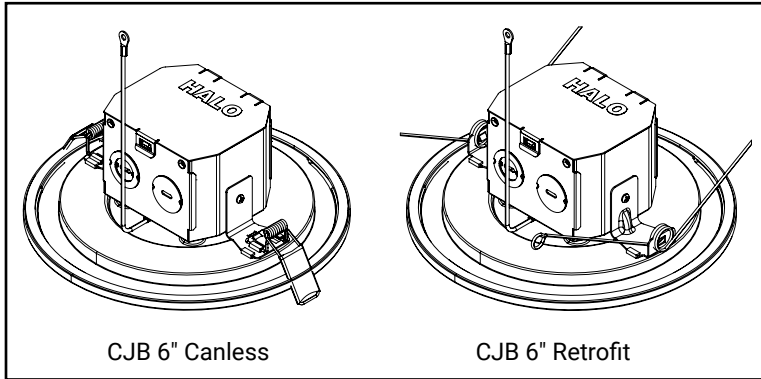
### CJB4

Canless cutout size = 3.5"

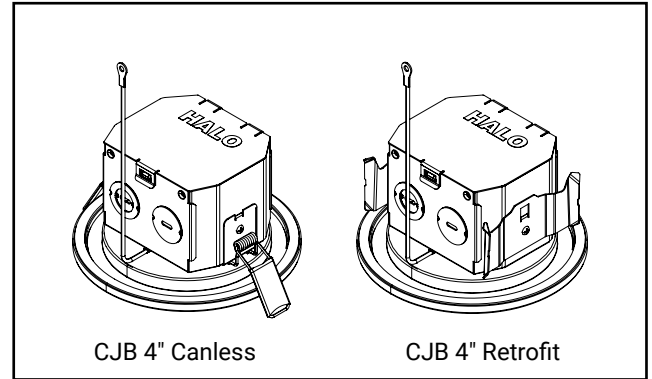
Retrofit = Fits in all Halo 4" housings

Lens regression = .06"

## CJB 6" 2-in-1 Installation



## CJB 4" 2-in-1 Installation



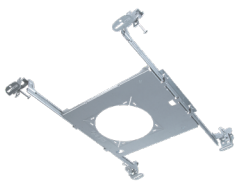
## Order Information

### Module

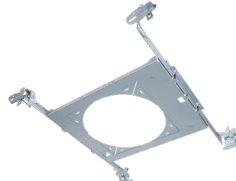
Module
CJB4069FS1EMW = 4" Canless 600lm, 5CCT, integrated JBox, Matte White
CJB6099FS1EMW = 6" Canless 900lm, 5CCT, integrated JBox, Matte White
CJB4069FS1EMWR = 4" 2-in-1 Installation 600lm, 5CCT, integrated JBox, Matte White
CJB6099FS1EMWR = 6" 2-in-1 Installation 900lm, 5CCT, integrated JBox, Matte White
CJB4069FS1EMW-6PK = 4" Canless 600lm, 5CCT, integrated JBox, Matte White, 6 Pack
CJB6099FS1EMW-6PK = 6" Canless 900lm, 5CCT, integrated JBox, Matte White, 6 Pack
CJB4069FS1EMWR-6PK = 4" 2-in-1 Installation 600lm, 5CCT, integrated JBox, Matte White, 6 Pack
CJB6099FS1EMWR-6PK = 6" 2-in-1 Installation 900lm, 5CCT, integrated JBox, Matte White, 6 Pack
CJB4069FS1EMW-12PK = 4" Canless 600lm, 5CCT, integrated JBox, Matte White, 12 Pack
CJB6099FS1EMW-12PK = 6" Canless 900lm, 5CCT, integrated JBox, Matte White, 12 Pack
CJB4069FS1EMWR-12P = 4" 2-in-1 Installation 600lm, 5CCT, integrated JBox, Matte White, 12 Pack
CJB6099FS1EMWR-12P = 6" 2-in-1 Installation 900lm, 5CCT, integrated JBox, Matte White, 12 Pack
Notes

### Accessories

Accessories
<b>Mounting Frames</b>
HL4RSMF = 4" round or square mounting frame
HL6RSMF = 6" round or square mounting frame
MF4RC = 4" round mounting frame with drywall collar
MF6RC = 6" round mounting frame with drywall collar
Notes



HL4RSMF



HL6RSMF



MF4RC



MF6RC

## Compatible Housings

### HALO - 6" Housings<sup>1</sup>

HALO LED	H750ICAT, H750T, H750TCP, H2750ICAT, E750ICAT, H750FR2ICAT
Standard Housing	H7ICAT, H7ICT, H7T, H7ICATNB, H7ICTNB, H7TNB, H7UICAT, H7UICT, H7TCP, E7ICAT, E7ICATNB, E7TAT, E7TATNB,
Shallow Housing	H27ICAT, H27ICT, H27T, E27ICAT, E27TAT
ALL-PRO	EI700, EI700AT, EI700ATNB, EI700NB, EI700U, EI700UAT, EI2700AT, EI2700, ET700, ET2700

### HALO - 4" Housings<sup>2</sup>

Halo LED	H995ICAT, H45ICAT, H450FRICAT
Standard Housing	H99ICAT, H99TAT, H99T, H99ICT, E4ICATSB, E4TATSB, E4RTATSB
ALL-PRO	EI400ATSB, ET400ATSB

### LUMINAIRES - UL Classified for retrofit compatibility

**Note:** Compatible with any 6" diameter recessed luminaire with an internal volume that exceeds 112.2 in<sup>3</sup> in addition to those listed below.

Capri	PR1
Thomas	PS1
Prescolite	IBXS
NORA	NHIC-17QAT, NHIC-17QNBAT, NHIC-27QAT, NHIC-17/100DWQAT
Commercial Electric	C7ICA (H3), CAT7ICATA
Elco	HL7ICA (EL7ICA)

1. The CJB6 is UL Certified for use with any 6" diameter recessed housing constructed of steel or aluminum with an internal volume that exceeds 112.2 in<sup>3</sup> addition to those noted above.

2. The CJB4 is UL Certified for use with any 4" diameter recessed housing constructed of steel or aluminum with an internal volume that exceeds 47.8 in<sup>3</sup> addition to those noted above.

## Product Specifications

### 2-in-1 Installation

- Can be installed in 3/8" to 5/8" thick ceilings
- Round ceiling cutout
  - 4" = 3.75" min  
4.1875" max
  - 6" = 5.625" min  
6.125" max
- Heat treated springs hold fixture fitting securely in the ceiling eliminating light leaks
- Can be removed from below the ceiling for service or replacement
- LED Trim retrofit installation
- Can be installed in 4" or 6" housings
- Round housings
  - 4" = uses friction blades to hold in housing
  - 6" = uses torsion springs to hold in housing

### Trim

- 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
- 5CCT Field Selectable color temperature (2700K, 3000K, 3500K, 4000K, 5000K)
- Color accuracy of 3 step at the ends, 4 step in the middle CCT's

### Integrated Driver / Junction Box

- Die formed metal driver / junction box with captive hinged junction box cover attached to back of the fixtures
- 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

### 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

### Compliance

- cULus certified for use with Halo housings, classified for use with other's housings, see instruction sheet for conditions of acceptability
- Wet location listed, covered ceilings only and IP65, below the ceiling only with lens trims
- Airtight per ASTM-E283
- 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
- ENERGY STAR® certified, reference Certified Light Fixtures database
- Certified to State of California Title 20, State-regulated LED Lamp; reference Modernized Appliance Efficiency Database System (MAEDBS) for State-regulated LED Lamp
- 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

### Warranty

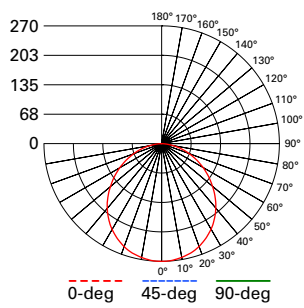
- Five year limited warranty, consult website for details. [www.cooperlighting.com/warranty](http://www.cooperlighting.com/warranty)

## Energy Data

	CJB4069FS1EMW	CJB6099FS1EMW	CJB4069FS1EMWR	CJB6099FS1EMWR
Lumens (nom)	745	920	745	920
Input Voltage (VAC)	120	120	120	120
Input Current (A)	0.067	0.08	0.067	0.08
Efficiency (LpW)	96.8	100	96.8	100
Inrush Current (A)	2.48	2.48	2.48	2.48
Inrush Duration (ms)	0.034	0.034	0.034	0.034
THD	≤ 20%	≤ 20%	≤ 20%	≤ 20%
PF	≥ 0.90	≥ 0.90	≥ 0.90	≥ 0.90
T Ambient (C)	-30 to +40	-30 to +40	-30 to +40	-30 to +40
Sound Rating	≤ 22 dba	≤ 22 dba	≤ 22 dba	≤ 22 dba

## Photometric Data

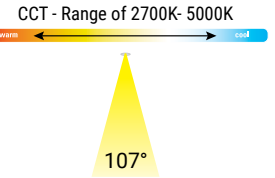
[View IES files](#)



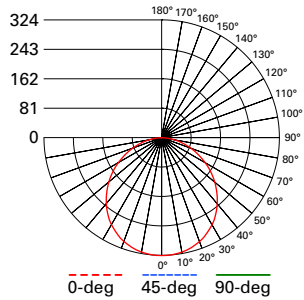
**CJB4069FS1EMW-3000K**  
 Spacing criterion: (0-180) 1.25  
 (90-270) 1.25  
 (Diagonal) 1.35  
 Beam Angle: 107°  
 Field Angle: 159.5°  
 Lumens: 745  
 Input Watts: 7.7 W  
 Efficacy: 96.8 LPW  
 Test Report: P683851

Zonal Lumen	Lumens	% Lumens
0-30	209	28.1
0-40	341	45.8
0-60	593	79.6
0-90	745	100

TM-30-15	Rf = 93
	Rg = 98
CRI/CIE	Ra = 94
	R9 = 67



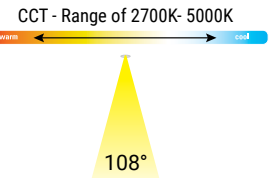
CJB4069FS1EMW				
CCT	Watts	Lumens	LPW	CRI
2700K	7.8	730	93.6	92
3000K	7.7	745	96.8	94
3500K	7.6	760	100.0	95
4000K	7.7	750	97.4	95
5000K	7.6	765	101.3	93



**CJB6099FS1EMW-3000K**  
 Spacing criterion: (0-180) 1.27  
 (90-270) 1.27  
 (Diagonal) 1.37  
 Beam Angle: 108°  
 Field Angle: 160.7°  
 Lumens: 920  
 Input Watts: 9.2 W  
 Efficacy: 100 LPW  
 Test Report: P683856

Zonal Lumen	Lumens	% Lumens
0-30	253	27.5
0-40	414	45.1
0-60	726	79.0
0-90	920	100

TM-30-15	Rf = 90
	Rg = 101
CRI/CIE	Ra = 93
	R9 = 66



CJB4069FS1EMW				
CCT	Watts	Lumens	LPW	CRI
2700K	9.2	905	98.4	92
3000K	9.2	920	100.0	93
3500K	9.3	905	97.8	94
4000K	9.2	915	99.5	94
5000K	9.2	900	97.8	91