

Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO

HLCEMS 6" Surface Mount LED Disk Light with Integrated Motion Sensor

HLC LED Disk Light now comes with an integrated Motion Sensor in 4" and 6" sizes. This product mounts directly to the ceiling or junction box and creates a stylish look. It comes with 5CCT selection to create a perfect ambience to match your style. HLC MS delivers higher lumens and allows for lower installation cost by removing the switch from the circuit.

Typical Applications Residential • Multifamily • Hospitality

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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.



Top Product Features

- 6" Surface Mount LED Disk Light (Round)
- Ultra-fast below-the-ceiling installation; no clips or plates needed.
- Installs in many 3-1/2" and 4" (30/40) octagonal, or round standard and pancake junction boxes and recessed housings ([See compatibility lists](#))
- **Color Temperature (CCT):** 5-color Field-SeleCCTable (2700K,3000K,3500K,4000K,5000K); 90+ CRI
- **Brightness (@3000K):** 1260 lumens
- **Dimming:** Dims to 10% (phase cut LE/TE) with compatible dimmers; 120V input
- Matte Black and Paintable Matte White Decorative Overlays (sold separately)
- Mounting hardware and E26 adapter included
- AIR-TITE, wet location-listed, IC-rated, and ENERGY STAR® certified
- 50,000 hrs of maintenance-free operation
- 5-year warranty

Order Information

Catalog Number	Module	Lumens (@3000K)	CRI/CCT	Driver	Finish	Packaging
HLCEMS612FS1E	6-inch LED Disk Light with Integrated Motion Sensor	1260 lm	90+ CRI, 5-color Field-Selectable CCT: 2700/3000/3500/4000/5000K	10% Phase Cut LE/TE Dimming, 120V 60Hz	Matte White	Recyclable 4-color plastic-free packaging
HLCEMS612FS1E-CA	6-inch LED Disk Light Integrated Motion Sensor (California Version) ²	1260 lm	90+ CRI, 5-color Field-Selectable CCT: 2700/3000/3500/4000/5000K	10% Phase Cut LE/TE Dimming, 120V 60Hz	Matte White	Recyclable 4-color plastic-free packaging
HLCEMS612FS1E-6BP	6-inch LED Disk Light with Integrated Motion Sensor (6-pack)	1260 lm	90+ CRI, 5-color Field-Selectable CCT: 2700/3000/3500/4000/5000K	10% Phase Cut LE/TE Dimming, 120V 60Hz	Matte White	6 Pack Recyclable 4-color plastic-free packaging

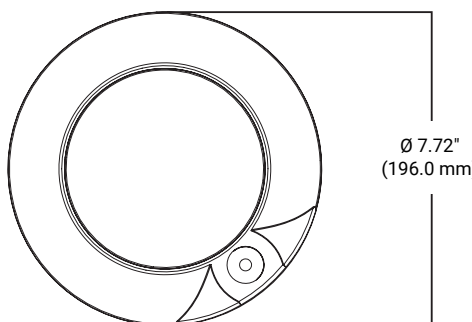
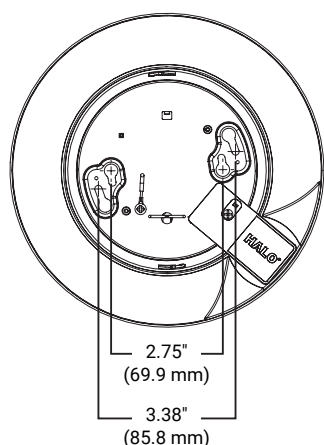
² California versions do not include Recessed Housing Mounting Hardware (Retrofit Springs, E26 Edison Socket Adapter) for mounting to compatible housings.

Accessories (sold separately)

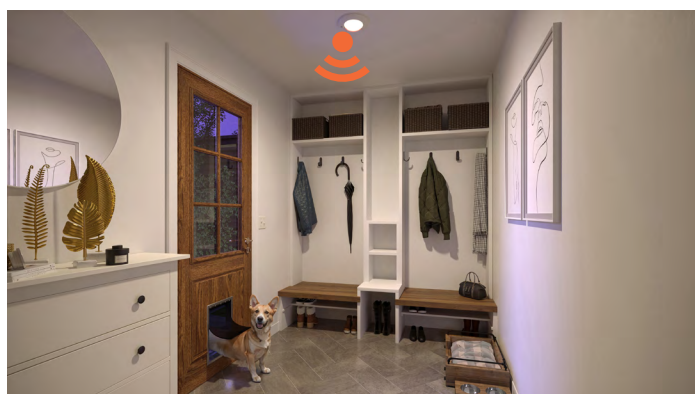
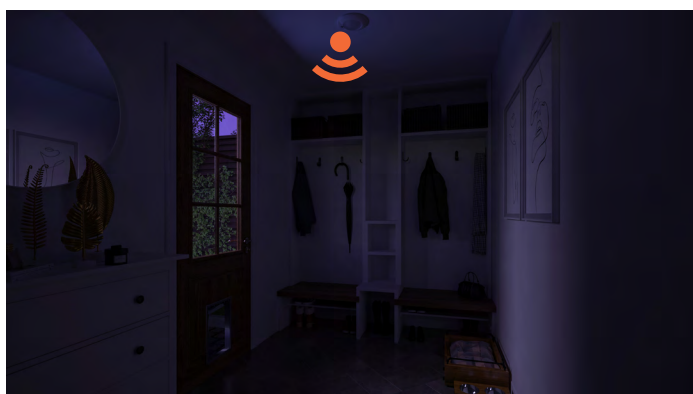
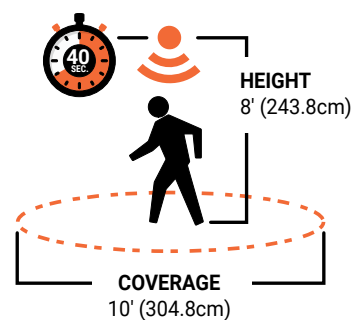
Accessories
Decorative Trim Overlays
HLCEMS6TRMMB = 6" Round Decorative Overlay, Matte Black
HLCEMS6TRMWH = 6" Round Decorative Overlay, Paintable Matte White



Dimensional and Mounting Details



MOTION SENSOR



Compatible Junction Boxes⁴

	Octagon Steel Light Fixture w/Fan Box 4" x 4" x 2-1/8"
	4" octagon steel box 4" x 4" x 1-1/2" (102mm x 102mm x 38mm)
	Round New Work Fixture Box (Plastic) 4" Diameter x 2-3/16"
	Round New Work Ceiling Box (Plastic) 3-1/2" Diameter x 2-3/4"
	Round Old Work Box (Plastic) 4-1/4" Diameter flange (3-1/2" I.D.) x 2-5/8"
	Round New Work Fixture Box (Plastic) w/Bar Hanger 4" x 2-3/16"
	4" round surface mount box 4" diameter x 1-1/2" (102mm x 38mm)
	Round ceiling pan 4" diameter x 13/16" (102mm x 21mm)
	JB4FR2 4" NC JBox for Fire Rated Ceilings 4" diameter x 5-1/2" (102mm x 140mm)

⁴ This is a representative list of compatible junction boxes only. Information contained in this literature about other manufacturers' products is from published information made available by the manufacturer and is deemed to be reliable, but has not been verified. Cooper Lighting Solutions makes no specific recommendation on product selection and there are no warranties of performance or compatibility implied. Installer must determine that site conditions are suitable to allow proper installation.

Compatible Housings

The non-California HLCE Series LED Disc Light is UL Certified for use with the following recessed housings.

HALO - 4" Housings

Standard Housings	E4ICATSB, E4TATSB, E4RTATSB
Junction Box Housings	JB4FR2

HALO - 5" Housings

Standard Housings	H5ICAT, H5RICAT, E5ICAT, E5RICAT
Shallow Housings	H25ICAT

HALO - 6" Housings

Standard Housing	H7ICAT, H7RICAT, E7ICAT, E7RICAT, E7RTAT, E7TAT
Shallow Housing	H27ICAT, H27RICAT, E27ICAT, E27RICAT, E27TAT, E27RTAT

Product Specifications

Fixture

- Twist-release polycarbonate lens
- Stamped aluminum fixture
- Integrated PIR Motion Sensor

LED Array

- Color Temperature: Field selectable color temperatures (CCT): 2700K, 3000K, 3500K, 4000K, 5000K
- Color Quality: 90+ CRI minimum
- Color Accuracy within 4 on the end and 6 in the middle provides excellent color quality and uniformity
- Factory default color temperature (CCT) is set to bright white (3000K)
- Backlit LED technology
- Expected Life: L70 at 50,000 hours projected in accordance with TM-21

Optical Assembly

- Precision engineered optic provides uniform luminance from a low-profile convex lens
- Removable lens for easy installation from below the ceiling.

Driver & Dimming

- Integral 120V 60Hz constant current driver provides noise-free, high-efficiency operation
- Dimmable: Continuous, flicker-free phase cut (leading-edge/trailing-edge - LE/TE) dimming from 100% to 10% output with compatible dimmers
- See this fixture's Dimming Guide for compatible dimmers
 - Tip: For optimal dimming performance, consider dimmers with low-end trim adjustment; note that some dimmers require a neutral wire in the box

Wiring

- Wire nuts provided for mains connections
- The included E26 medium screw-base Edison adapter provides easy retrofit of incandescent housings (non-California product only).
- Includes E26 medium socket adapter provides mains connections for recessed housing installations.
- Reference installation instructions for complete mounting steps

Electrical Junction Box Mounting

- HLCE fixtures may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- Installs from below the ceiling
- Suitable for installation in most 3-1/2" and 4" octagon and round electrical junction boxes.
- Compatible with compact (pancake) junction boxes
- The installer must ensure compatibility of fit, wiring and proper mounting in the electrical junction box. This includes all applicable national and local electrical and building coded NEMA LSD 57-2013
- Reference installation instructions for complete mounting steps

Recessed Housing Mounting

- Extension Springs for 4", 5" & 6" housings included in the box (Compatible with Halo 4", 5" and 6" housings, refer list)
- Not for use in recessed housings in direct contact with spray foam insulation refer to NEMA LSD 57-2013
- The included wire nuts and E26 medium socket adapter provide easy mounting to recessed housings (non-California product only)
- Reference installation instructions for complete mounting steps

Compliance

- cULus certified for US and Canada
- Damp location listed
- Airtight per ASTM-E283 (no gasket necessary)
- 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 compliant¹
- 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 JA8¹, 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

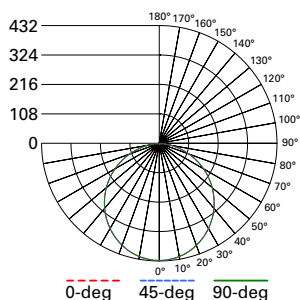
¹. T24 and RoHS are self-tested by Cooper Lighting Solutions. Not a third party certification.

Energy Data

HLCEMS612FS1E	
Lumens	1200 (nominal)
Input Voltage	120V
Input Current	0.135
Input Power	14.6W
Driver Efficiency	68%
Inrush(A)	3.8
THDi	43%
PF	>0.9
T Ambient	-30°C to +40°C
Sound Rating	<22dBA
Efficacy (LPW)	82 LPW

Catalog Number	CCT	Watts	lumens	LPW	CRI
HLCEMS612FS1E	2700K	14.7	1205	82.1	92
	3000K	14.8	1260	85.1	94
	3500K	14.8	1295	87.6	95
	4000K	14.7	1305	88.8	95
	5000K	14.7	1295	88.2	92

Photometric Data



HLCEMS612FS1E-3000K

Spacing criterion:
(0-180) 1.25 | (90-270) 1.25 |
(Diagonal) 1.37
Beam Angle (50%): 113°
Field Angle (10%): 166°
Lumens: 1260
Input Watts: 14.8 W
Efficacy: 85.1 LPW
UGR: 26.5
Test Report: P1145870

Zonal Lumen	Lumens	% Lumens
0-30	334	26.5
0-40	546	43.4
0-60	968	76.8
0-90	1252	99.3

CCT: Range of 2700K - 5000K



TM-30-15	Rf = 91
	Rg = 100
CRI/CIE	Ra = 94
	R9 = 68.7

113°