Project		Catalog #		Type	
Prepared by		Notes		Date	

HALO

HLC9

9" LED Surface Luminaire
1200 Lumen Series

Typical Applications

Residential

Interactive Menu

- Order Information page 2
- Photometric Data page 4
- Product Warranty

Product Certification

ENERGY STAR

Can be used for IECC
International Energy
Conservation Code
High Efficacy
Compliance

Efficiency Standards
T24
Can be used to comply
with 2016 Title 24 Part 6
LED Enclosed Light
Source Requirements (JA8)

UL CERTIFIED SAFETY

RoHS COMPLIANT

Refer to ENERGY STAR® Certified Products List.
Can be used to comply with California Title 24 High Efficacy requirements.
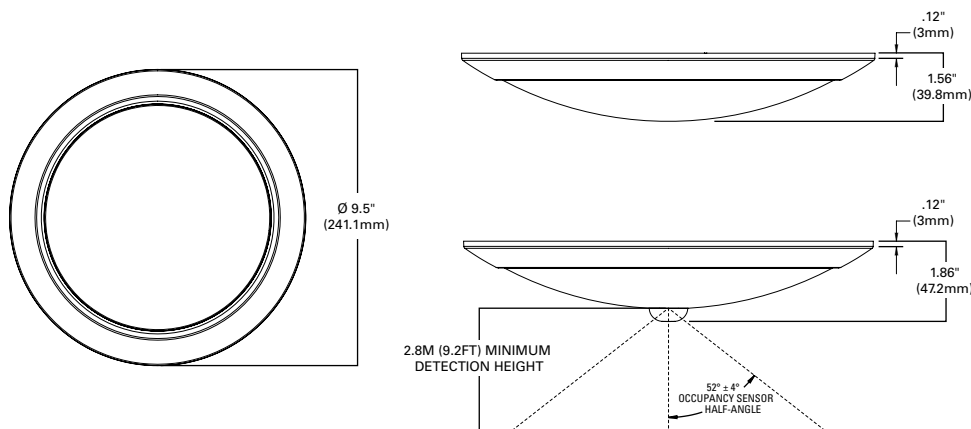Certified to California Appliance Efficiency Database under JA8.

Product Features

air-tite™

Top Product Features

- Below the ceiling installation, no clips or plates needed
- Installs in many 3-1/2" and 4" ceiling junction and pancake boxes
- 3000K, or 4000K fixed CCT
- Dimmable down to 10%
- Clothes closet compliant, damp location listed
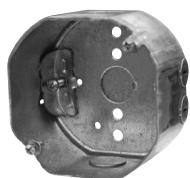
Dimensional and Mounting Details

.12" (3mm)
1.56" (39.8mm)

Ø 9.5" (241.1mm)

.12" (3mm)
1.86" (47.2mm)

2.8M (9.2FT) MINIMUM DETECTION HEIGHT

52° ± 4°
OCCUPANCY SENSOR
HALF-ANGLE

COOPER Lighting Solutions

Order Information

SAMPLE ORDER NUMBER: **HLC9129301EWH**

Models	Lumens	CRI / CCT	Driver	Finish
Models	**Lumens**	**CRI / CCT**	**Driver**	**Finish**
HLC9 = 9-Inch LED surface light **HLCMS9** = 9-Inch Motion Sensor, LED surface light	**12** = 1200 lumens (nominal)	**930** = 90 CRI minimum, 3000K CCT **940** = 90 CRI minimum, 4000K CCT	**1E** = 120V 60Hz, LE & TE phase cut 10% dimming	**WH** = matte white flange
Notes	**Notes**	**Notes**	**Notes**	**Notes**

COMPATIBLE WITH EATON'S CROUSE-HINDS JUNCTION BOXES

TP316
for non-metallic cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

TP317
for metal clad cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

- **TP316** - for non-metallic cable
- **TP317** - for metal clad cable
- UL Listed
- Refer to www.crouse-hinds.com

COMPATIBLE WITH MANY OTHER JUNCTION BOXES*

4" octagon light fixture/fan steel box
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

4" octagon steel box
4" x 4" x 1-1/2"
(102mm x 102mm x 38mm)

**4" round new work non-metallic
light fixture/fan box**
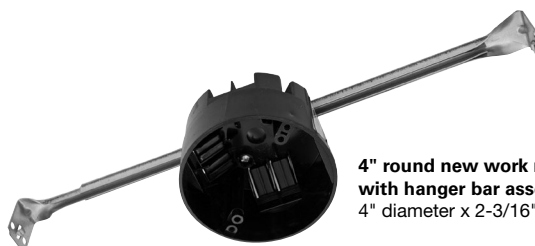4" diameter x 2-3/16"
(102mm x 56mm)

**3-1/2" round new work
non-metallic ceiling box**
3-1/2" diameter x 2-3/4"
(89mm x 70mm)

**3-1/2" round old work
non-metallic box**
4-1/4" O.D. flange, 3-1/2" I.D. x 2-5/8"
(108mm O.D., 89mm I.D. x 67mm)

4" round surface mount box
4" diameter x 1-1/2"
(102mm x 38mm)

**4" round new work non-metallic box
with hanger bar assembly**
4" diameter x 2-3/16" (102mm x 56mm)

Round ceiling pan
4" diameter x 13/16"
(102mm x 21mm)

*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. Eaton 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 of the mounting bracket in the box.

Product Specifications

Construction
- Stamped aluminum

Optics
- Precision engineered optic provides uniform luminance from a low profile convex lens
- Removable lens for easy install from below installation

LED
- Backlit LED technology
- Color Temperature options include: 3000K or 4000K
- 90 CRI is standard
- L70 at 50,000 hours projected in accordance with TM-21

Driver
- Integral 120V 60Hz constant current driver provides virtually noise free operation.
- Continuous, flicker-free dimming from 100% to 10% with select leading or trailing edge 120V phase cut dimmers. See dimming guide.
- Dimming to 10% is best assured using dimmers with low end trim adjustment. Consult dimmer manufacturer for compatibility and conditions of use. (Note some dimmers require a neutral in the wallbox.)
- Inline electrical quick connect (provided) provides mains connections

Electrical Junction Box Mounting
- HLC9 may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- Install from below design
- Suitable for installation in many 3-1/2" and 4" octagon and round electrical junction boxes.
- Compatible with compact (pancake) junction boxes
- 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

Compliance
- UL certified for US and Canada
- Damp Location listed
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements.
- EMI/RFI emissions per FCC 47CFR Part 15B
- 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 luminaire compliance, reference the California Energy Commission Title 20 Appliance Efficiency Database for current listings.
- Can be used for International Energy Conservation Code (IECC) and Washington State Energy Code high efficiency luminaire Compliance
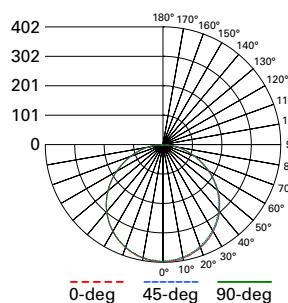- ENERGY STAR® Certified luminaire - consult ENERGY STAR® Certified Product List

Warranty
- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

Energy Data

Lumens	1230 Series
Input Voltage	120V
Input Current	132 (mA)
Input Power	17.6 (W)
Efficiency	69.9 (LPW)
Inrush (A)	2.1 A @ 14mS
THD	≤ 20%
PF	≥ 0.90
T Ambient	-30° - +40°C
Sound Rating	≤ 22 dba

COOPER
Lighting Solutions
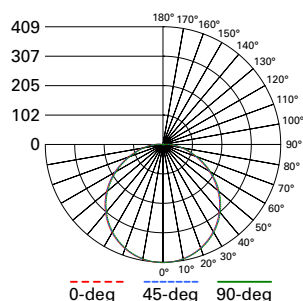
Photometric Data

HLC9129301EWH

Spacing criterion: (0-180) 1.27
(90-270) 1.27
(Diagonal) 1.4

Beam Angle: 115°
Lumens: 1255
Input Watts: 17.41 W
Efficacy: 72.1 LPW
Test Report:
HLC9129301EWH.IES

Zonal Lumen	Lumens	% Lumens
0-30	312	24.9
0-40	514	41
0-60	921	73.4
0-90	1227	97.8

TM-30-15	Rf = 94
	Rg = 98
CRI/CIE	Ra = 94.6
	R9 = 58.4

CCT - Range of 2700K- 5000K

warm ← → cool
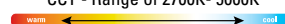
115°

HLCMS9129301EWH

Spacing criterion: (0-180) 1.27
(90-270) 1.27
(Diagonal) 1.39

Beam Angle: 115°
Lumens: 1285
Input Watts: 17.24 W
Efficacy: 74.6 LPW
Test Report:
HLCMS9129301EWH.IES

Zonal Lumen	Lumens	% Lumens
0-30	320	24.9
0-40	526	40.9
0-60	941	73.2
0-90	1256	97.7

TM-30-15	Rf = 94
	Rg = 98
CRI/CIE	Ra = 94.6
	R9 = 58.4

CCT - Range of 2700K- 5000K

warm ← → cool

115°

Product Specifications

PRODUCT SPECIFICATIONS

Lumens	1230
Watts	17.6
Lumens Per Watt (Efficacy)	69.9
Color Accuracy (CRI)	93
Light Color (CCT) Correlated Color Temperature (CCT)	4000K

warm white | soft white | bright white
2700K | 3000K | 4500K | 6500K

HLC9129301EWH

PRODUCT SPECIFICATIONS

Lumens	1291
Watts	17.6
Lumens Per Watt (Efficacy)	73.4
Color Accuracy (CRI)	93
Light Color (CCT) Correlated Color Temperature (CCT)	4000K

warm white | soft white | bright white
2700K | 3000K | 4500K | 6500K

HLC9129401EWH

PRODUCT SPECIFICATIONS

Lumens	1282
Watts	17.6
Lumens Per Watt (Efficacy)	72.8
Color Accuracy (CRI)	93
Light Color (CCT) Correlated Color Temperature (CCT)	3000K

warm white | soft white | bright white
2700K | 3000K | 4500K | 6500K

HLCMS9129301EWH

PRODUCT SPECIFICATIONS

Lumens	1353
Watts	17.6
Lumens Per Watt (Efficacy)	76.9
Color Accuracy (CRI)	93
Light Color (CCT) Correlated Color Temperature (CCT)	3000K

warm white | soft white | bright white
2700K | 3000K | 4500K | 6500K

HLCMS9129401EWH