

Project		Catalog #		Type	
Prepared by		Notes		Date	



# HALO

## RA4 High Lumen | Selectable CCT

4" All-Purpose LED retrofit module with SeleCCTable switch  
800 Lumen Series

### Typical Applications

Residential

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### Product Certification



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

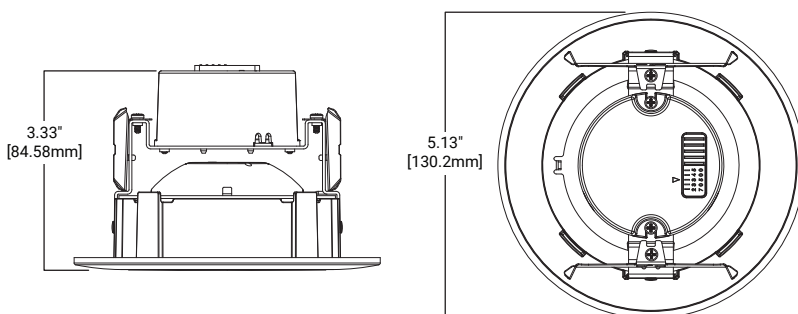
### Product Features



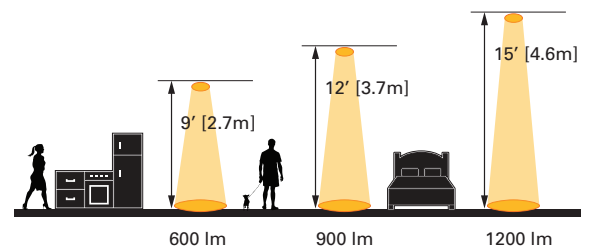
### Top Product Features

- Adjustable gimbal offers 35-degree tilt and up to 360-degree rotation
- Select from 5 CCTs via switch; 2700K, 3000K, 3500K, 4000K, 5000K CCT
- 800 lumen series
- Use with 4" housings with screw-base adapter included
- Dimmable down to 5%

### Dimensional and Mounting Details



### Scale



For use in insulated ceiling and non-insulated ceiling rated housing.  
High-efficacy LED with Integral Driver – Dimmable

## Order Information

SAMPLE ORDER NUMBER: **RA4089S1EWHR**

A complete luminaire consists of a housing, and LED module, order separately.

Models	Lumens	CRI/CCT	Driver	Finish	Packaging
<b>RA4= 4" LED Adjustable Gimbal</b>	<b>08 = 800 lumens (nominal)</b>	<b>9S = 90 CRI minimum, white tuning, selectable CCT 2700K-5000K</b>	<b>1E = 120V 60Hz leading or trailing edge phase cut 5% dimming</b>	<b>WH = Matte white baffle</b>	<b>R = Recyclable 4-color unit carton</b>

## Housings

Housings
<p><b>Halo Ultra-shallow LED Housings</b>  <b>H245ICAT= 4" IC, airtight ultra-shallow new construction housing, LED, 120 - 277V</b>  <b>H245RICAT= 4" IC, airtight ultra-shallow remodeler housing, LED, 120 - 277V</b></p> <p><b>Halo LED Housings</b>  <b>H995ICAT= 4" IC, airtight shallow new construction housing, LED, 120 - 277V</b>  <b>H995RICAT= 4" IC, airtight shallow remodeler housing, LED, 120 - 277V</b>  <b>H450FR2ICATD010= 4" fire safe new construction housing for phase-cut and 0-10V LED retrofit modules, 120-277V</b></p> <p><b>Halo Housings</b>  <b>H99TAT= 4" non-IC, airtight shallow new construction housing, E26, 120V</b>  <b>H99RTAT= 4" non-IC, airtight shallow remodeler housing, E26, 120V</b>  <b>H99ICAT= 4" IC, airtight shallow new construction housing, E26, 120V</b>  <b>E4TATSB= 4" non-IC, airtight shallow new construction housing, adjustable socket bracket, E26, 120V</b>  <b>E4RTATSB= 4" non-IC, airtight shallow remodeler housing, adjustable socket bracket, E26, 120V</b>  <b>E4ICATSB= 4" non-IC, airtight shallow new construction housing, adjustable socket bracket, E26, 120V</b></p>

## Product Specifications

### CCT Select System

- Use the switch to choose between 2700K, 3000K, 3500K, 4000K, and 5000K CCT.

### Module - Trim

- Module construction includes LED array, heat sink, reflector, lens, baffle and trim ring.
- Regressed baffle
- Heat sink designed to conduct heat away from the LED array, keeping the junction temperatures below specified maximums, even when installed in insulated ceiling environments.
- Up to 360-degree rotation
- 35-degree tilt
- Halo matte white paint finish

### 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) has a selectable range from 2700K to 5000K (factory default 3000K)

### Optical Assembly

- Regressed lens
- Impact-resistant polycarbonate
- Convex form and lamp-like appearance
- Diffuse for even illumination

### Driver

- Integral 120V 60 Hz constant current driver provides noise free operation
- Continuous, flicker-free dimming from 100% to 5%.
- Inline electrical quick connect and E26 adapter (provided) provides mains connections
- See Dimming Guide for compatible dimmers

### Retention

- Precision formed spring blades secure module with friction fit to compatible housings.
- Friction blade design allows the RA4 to be installed in any position within the housing aperture (360 degrees)

### Compliance

- UL Certified US and Canada
- Damp location listed
- 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 luminaire compliance. Complies with Title 24 JA8-2019-E.
- Can be used International Energy Conservation Code (IECC) high efficiency luminaire compliance.
- ENERGY STAR® listed, reference database for current listings

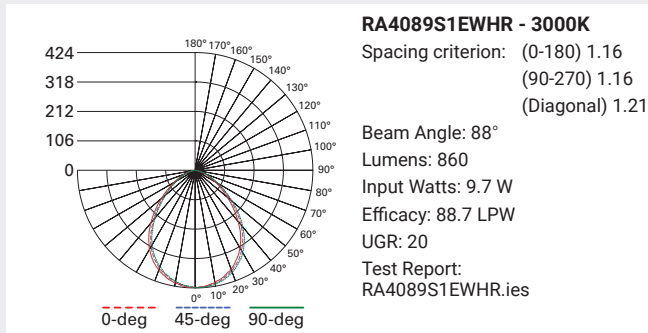
### Warranty

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

## Energy Data

Energy Data @ 3000K	
Lumens	800 Series
Input Voltage	120V
Input Current	0.079 (A)
Input Power	9.12 (W)
Efficiency	87.9 %
Inrush (A)	1.1
THD: ≤ 20%	
PF: ≥ 0.90	
T Ambient -30 - +40°C	
Sound Rating ≤ 22dba	

## Photometric Data



Zonal Lumen	Lumens	% Lumens
0-30	316	36.8
0-40	496	57.7
0-60	759	88.3
0-90	858	99.8

TM-30-15	Rf = 94
	Rg = 101
CRI/CIE	Ra = 95
	R9 = 64

CCT - Range of 2700K - 5000K



RA4089S1EWHR 2700K / 3000K / 3500K / 4000K / 5000K				
CCT	Watts	lumens	LPW	CRI
2700K	9.6	845	88	93
3000K	9.7	860	88.7	94
3500K	9.7	870	89.7	95
4000K	9.7	875	90.2	95
5000K	9.7	880	90.7	94

### RA4089S1EWHR - 3000K

PRODUCT SPECIFICATIONS	
Lumens	860
Watts	9.7
Lumens Per Watt (Efficacy)	88.7
Color Accuracy (CRI)	94
Light Color (CCT) Correlated Color Temperature (CCT)	3000K