Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO

LCR2

2-Inch Round All-Purpose LED Retrofit Module

Typical Applications

Residential • Multi-family • Mixed-Use

Interactive Menu

- Order Information page 2
- Product Specifications page 2
- Photometric Data page 3
- Energy & Performance Data page 3
- Product Warranty
- Dimming Guide

Product Certification

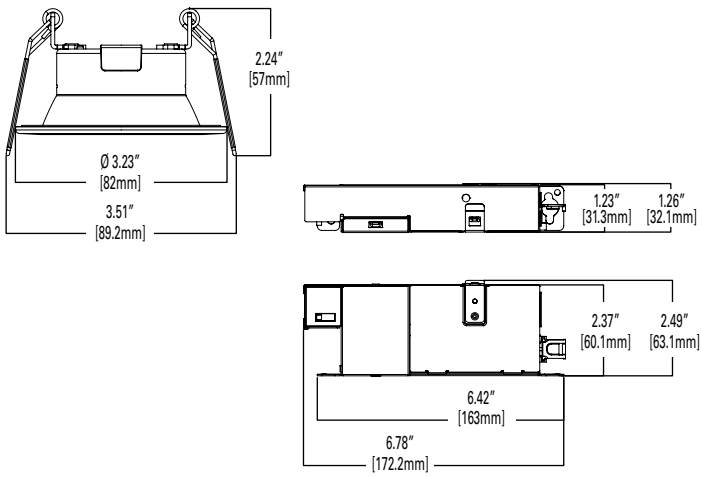
Refer to ENERGY STAR® Certified Products List.
Can be used to comply with California Title 24 High Efficacy requirements.
Certified to California Appliance Efficiency Database under JA8.

Product Features

Top Product Features

- Select from 5 CCTs via switch; 2700K, 3000K, 3500K, 4000K, 5000K CCT; 90 CRI
- Up to 800 Lumens; IC rated
- Direct mount - does not require recessed housing or junction box
- Dimmable down to 5%, 0-10V
- Wet location listed for showers and protected ceilings

Dimensional and Mounting Details



Order Information*

Icon Key: Δ Configurable Product

SAMPLE ORDER NUMBER: **LCR2089FSE010MW**

Models | Lumens | CRI/CCT | Driver | Finish

Models	Lumens	CRI/CCT	Driver	Finish
LCR2 = 2" all- purpose round LED module	**08 =** 800 lumens (nominal)	**9FS =** 90 CRI minimum, field selectable CCT, choose 2700K, 3000K, 3500K, 4000K or 5000K CCT	**E010 =** UNV 120-277V, 50/60Hz, 0-10V analog 100% to 5% dimming **1E =** UNV 120-277V, 50/60Hz, 120V analog 100% to 5% dimming	**MW =** Matte white
Notes	**Notes**	**Notes**	**Notes**	**Notes**

Accessories

Accessories	
Designer Trims **LCR2TRMAH** = 2" Haze, white flange **LCR2TRMSC** = 2" Specular, white flange **LCR2TRMTBZ** = 2" Tuscan bronze **LCR2TRMWH** = 2" Paintable white	**Extension Cable | seleCCTable Driver/Jbox** **HLB06FSEC** – 6 ft. extension cable **HLB12FSEC** – 12 ft. extension cable **HLB20FSEC** – 20 ft. extension cable

Product Specifications

Module

- Module construction includes LED Array, heat sink, reflector, lens, housing and heat sink where applicable
- Integral aluminum heat sink provides passive thermal cooling achieving L70 at 50,000 hours in IC and non-IC applications

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 within 3 SDCM at the CCT endpoints and 4 SDCM in between endpoints, provide color accuracy and uniformity.
- Correlated Color Temperature (CCT) has a selectable range from 2700K to 5000K (factory default 3000K)
- Use the switch to choose between 2700K, 3000K, 3500K, 4000K, and 5000K CCT

Optical Assembly

- Regressed flat lens provides uniformity, UGR ≤ 10
- Exceeds ENERGY STAR® color angular uniformity requirements

Remote Driver/Junction Box

- 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
- (2) 1/2" conduit pry-outs
- (1) Slide-N-Side™ non-metallic (NM) wire traps all 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 keyhole mounting slots facilitate direct mounting to building structure or new construction mounting frame

Driver

- Integral 120-277V, 50/60Hz constant current driver provides noise free operation
- Continuous, flicker-free dimmer from 100% to 5%
- Plenum rated inline electrical quick connect provides low voltage connection to fixture fitting

Installation

- Can be installed in 3/8" to 1-1/4" thick ceilings
- Cutout can utilize standard round hole saw sizes, cutout template provided
- Mousetrap springs hold fixture fitting securely in the ceiling eliminating light leaks
- Can be removed from below the ceiling for service or replacement

Mounting / Retention

- The LCR2 requires no housing or third party junction box
- The remote enclosure may be used in direct contact with insulation.
- Installer must cut template out of drywall and install into aperture with the clips compressed.
- When released, the mousetrap springs will rest on to the back side of the drywall
- Not for installation in recessed cans

Compliance

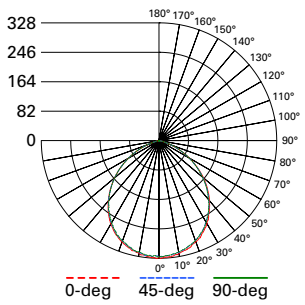
- UL certified US and Canada
- Wet location listed and IP64 ingress protection rated, covered ceiling only
- Airtight per ASTM-E283-04
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- EMI/RFI emissions per FCC 47CFR Part 15 consumer limits, CAN ICES-005(B)/NMB-005 (B)
- 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 2019 JA8 High Efficacy Lighting
- ENERGY STAR® certified, reference "Certified Light Fixtures" database

Warranty

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

Photometric Data

View IES files



LCR2089FSE010MW

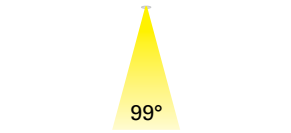
Spacing criterion: (0-180) 1.22
(90-270) 1.21
(Diagonal) 1.30

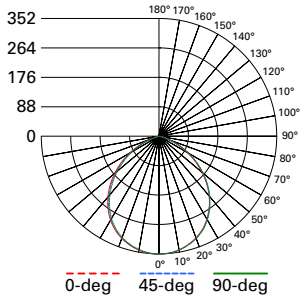
Beam Angle: 99°
Lumens: 755
Input Watts: 8.93 W
Efficacy: 84.6 LPW
Test Report:
LCR2089FSE010MW.IES

Zonal Lumen	Lumens	% Lumens
0-30	248	32.8
0-40	399	52.9
0-60	662	87.6
0-90	755	100

TM-30-15	Rf = 94
	Rg = 99
CRI/CIE	Ra = 95
	R9 = 64

CCT - Range of 2700K- 5000K





LCR2089FS1EMW

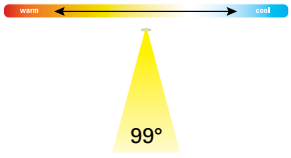
Spacing criterion: (0-180) 1.22
(90-270) 1.21
(Diagonal) 1.29

Beam Angle: 99°
Lumens: 802
Input Watts: 9.77 W
Efficacy: 82.1 LPW
Test Report:
LCR2089FS1EMW.IES

Zonal Lumen	Lumens	% Lumens
0-30	269	33.6
0-40	432	53.9
0-60	709	88.5
0-90	801	100

TM-30-15	Rf = 94
	Rg = 99
CRI/CIE	Ra = 95.3
	R9 = 67.3

CCT - Range of 2700K- 5000K



Energy and Performance Data

LCR2089FSE010MW		
	120V	277V
Max. Lumens	787 @ 5000K	
Input Voltage	120-277V	
Input Frequency	50/60Hz	
Input Power	9.11W	9.26W
Input Current	0.077A	0.035A
Power Factor	>0.90	
THD	<20%	
EMI/RFI	FCC Title 47 CFR, Part 15, Class B CAN ICES-005(B)	
Sound Rating	Class A	
Minimum Starting Temp	-30°C (-22°F)	

Tested in accordance with IES LM63. Field results may vary.

Note: Refer to IES files for more product data.

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

© 2020 Cooper Lighting Solutions
All Rights Reserved.

Specifications and dimensions
subject to change without notice.