

Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO

RL Retrofit Series

Recessed LED retrofit module

Typical Applications

Residential

Interactive Menu

- Order Information page 2
- Product Specifications page 4
- Energy Data page 4
- Photometric Data page 5
- 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

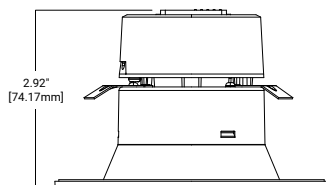


Top Product Features

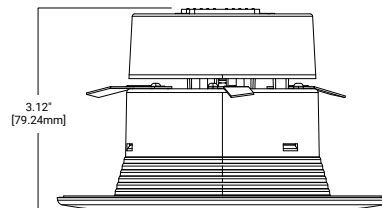
- Available in 3", 4", 5/6" aperture
- 6 selectable color temperature options
 - 2700K, 3000K, 3500K, 4000K, 5000K
 - Dim-to-warm technology included: use your dimmer to warm color temperature from 3000K to 1800K
- Use with compatible recessed housings
- Dimmable down to 5%

Dimensional and Mounting Details

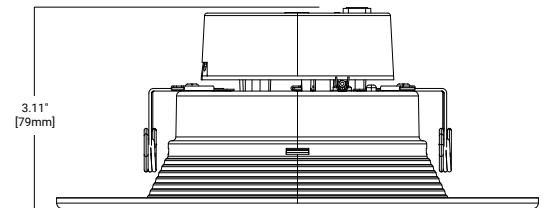
RL3



RL4



RL56



Order Information

SAMPLE ORDER NUMBER: **RL56069FSD2W1EWH**

3-inch	Lumens	CRI / CCT	Driver	Finish
RL3 = 3-inch recessed LED retrofit module	05 = 500 lumens (nominal)	9FSD2W = 90 CRI, selectable CCT with D2W option	1E = 120V 60Hz, LE & TE phase cut 5% dimming	WH = matte white flange
Notes	Notes	Notes	Notes	Notes

4-inch	Lumens	CRI / CCT	Driver	Finish
RL4 = 4-inch recessed LED retrofit module	LS = 600/900 selectable lumens (nominal)	9FSD2W = 90 CRI, selectable CCT with D2W option	1E = 120V 60Hz, LE & TE phase cut 5% dimming	WH = matte white flange
Notes	Notes	Notes	Notes	Notes

5/6-inch	Lumens	CRI / CCT	Driver	Finish
RL56 = 5/6-inch recessed LED retrofit module	06 = 600 lumens (nominal) LS = 900/1200 selectable lumens (nominal)	9FSD2W = 90 CRI, selectable CCT with D2W option	1E = 120V 60Hz, LE & TE phase cut 5% dimming	WH = matte white flange
Notes	Notes	Notes	Notes	Notes

3-inch Accessories
RL3TRMMW = 3-inch overlay, Matte White RL3TRMMB = 3-inch overlay, Matte Black RL3TRMSN = 3-inch overlay, Satin Nickel RL3TRMTBZ = 3-inch overlay, Tuscan Bronze
Notes

4-inch Accessories
RL4TRMWHB = 4-inch overlay, Matte White, Baffle RL4TRMMBB = 4-inch overlay, Matte Black, Baffle RL4TRMSNB = 4-inch overlay, Satin Nickel, Baffle RL4TRMTBZB = 4-inch overlay, Tuscan Bronze, Baffle RL4TRMWH = 4-inch overlay, Matte White, Splay RL4TRMMB = 4-inch overlay, Matte Black, Splay RL4TRMSN = 4-inch overlay, Satin Nickel, Splay RL4TRMTBZ = 4-inch overlay, Tuscan Bronze, Splay
Notes

5/6-inch Accessories
RL56TRMWHB = 5/6-inch overlay, Matte White, Baffle RL56TRMMBB = 5/6-inch overlay, Matte Black, Baffle RL56TRMSNB = 5/6-inch overlay, Satin Nickel, Baffle RL56TRMTBZB = 5/6-inch overlay, Tuscan Bronze, Baffle RL56TRMWH = 5/6-inch overlay, Matte White, Splay RL56TRMMB = 5/6-inch overlay, Matte Black, Splay RL56TRMSN = 5/6-inch overlay, Satin Nickel, Splay RL56TRMTBZ = 5/6-inch overlay, Tuscan Bronze, Splay
Notes



RL3TRMMW
RL4TRMWH
RL56TRMWH

White (Paintable), Splay



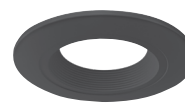
RL3TRMMB
RL4TRMMB
RL56TRMMB

Matte Black, Splay



RL4TRMWHB
RL56TRMWHB

White (Paintable), Baffle



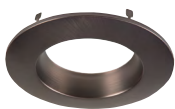
RL4TRMMBB
RL56TRMMBB

Matte Black, Baffle



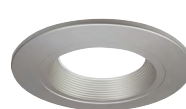
RL3TRMSN
RL4TRMSN
RL56TRMSN

Satin Nickel, Splay



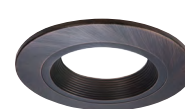
RL3TRMTBZ
RL4TRMTBZ
RL56TRMTBZ

Tuscan Bronze, Splay



RL4TRMSNB
RL56TRMSNB

Satin Nickel, Baffle

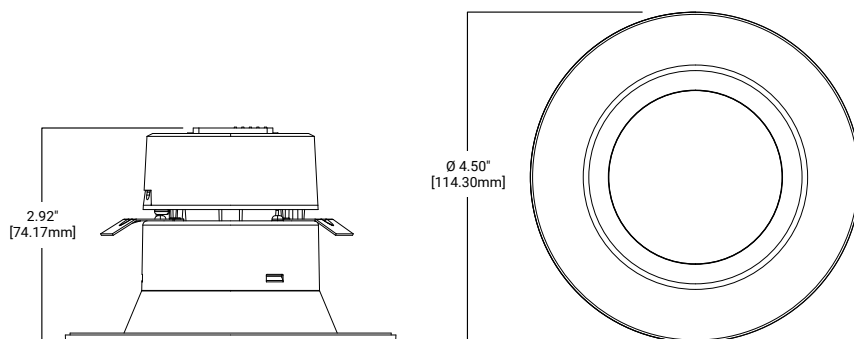


RL4TRMTBZB
RL56TRMTBZB

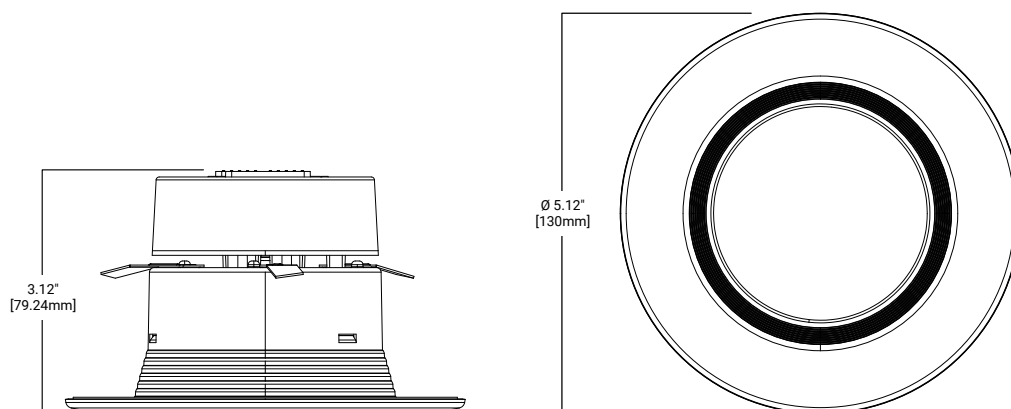
Tuscan Bronze, Baffle

Dimensional and Mounting Details

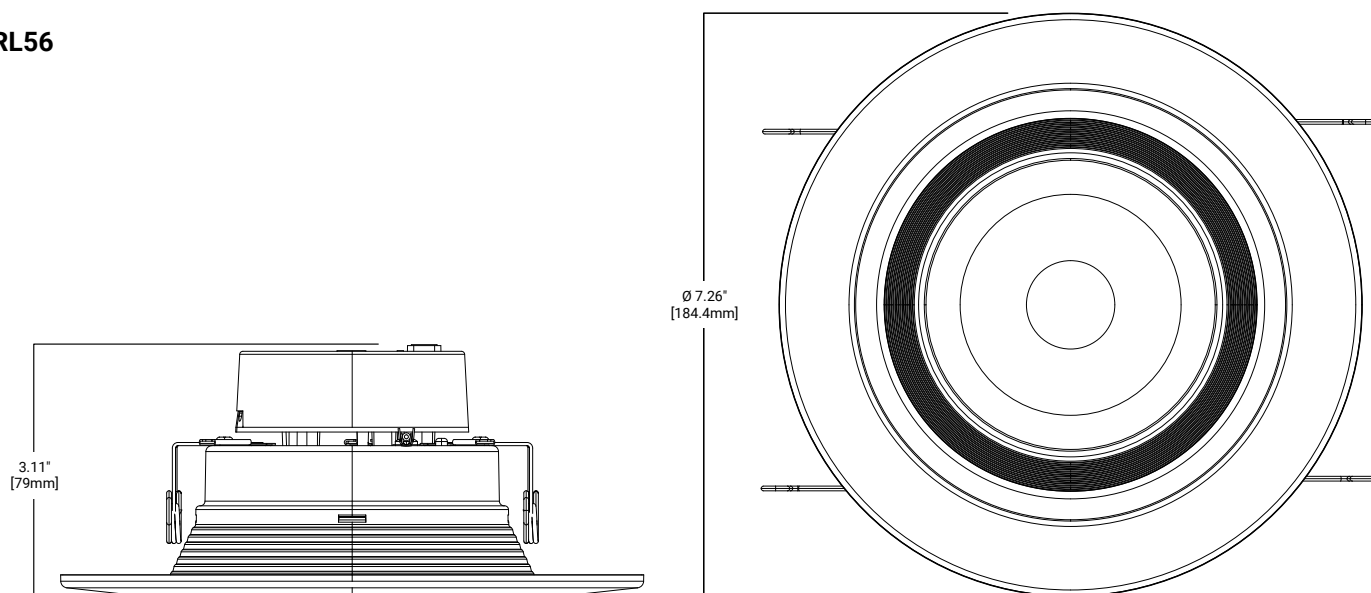
RL3



RL4



RL56



Compatible Housings

HALO - 6" Housings ¹

HALO LED	H750ICAT, H750RICAT, H750T, H750TCP, H2750ICAT, H2750RICAT, H550ICAT, H550RICAT, E550ICAT, E550RICAT, E750ICAT, E750RICAT, H750FR2ICAT
HALO LED Retrofit	ML7BXRFK, ML7E26RFK
Standard Housing	H7ICAT, H7ICT, H7T, H7ICATNB, H7ICTNB, H7TNB, H7UICAT, H7TCP, H7RICAT, H7RICT, H7RT, E7ICAT, E7ICATNB, E7RICAT, E7RTAT, E7TAT, E7TATNB, H7UICAT, H7ICATNB, H7ICTNB, H7TNB, H7UICAT
Shallow Housing	H27ICAT, H27RICAT, H27ICT, H27RICT, H27T, H27RT, EI2700AT, EI2700, EI2700R, ET2700, ET2700R, E27ICAT, E27RICAT, E27TAT, E27RTAT

HALO - 5" Housings ¹

Halo LED	H550ICAT, H550RICAT, E550ICAT, E550RICAT, H550FR2ICAT
Standard Housing	H5ICAT, H5ICATNB, H5RICAT, H5T, H5TNB, H5RT, E5ICAT, E5ICATNB, E5RICAT, E5RTAT, E5TAT, E5TATNB
Shallow Housing	H25ICAT, H25RICAT, H25ICATNB

HALO - 4" Housings ²

Halo LED	H45ICAT*, H45RICAT*, H450FR2ICAT*
Standard Housing	H99ICAT, H99RTAT, H99TAT, H995ICAT, H995RICAT, H99T, H99RT, H99ICT, E4ICATSB, E4TATSB, E4RTATSB
Shallow Housing	H245ICAT, H245RICAT

HALO - 3" Housings ³

Halo LED	H35ICAT, H35RICAT, H350FR2ICAT
Standard Housing	H36ICAT, H38ICAT, H36TAT, H36RTAT, H36PAR16ICAT, H36PAR16RICAT

LUMINAIRES - UL Classified for retrofit compatibility

Note: Compatible with any 5" or 6" diameter recessed luminaire with an internal volume that exceeds 115 in³ in addition to those listed below.

Juno	Standard Housing	IC22, IC22R, IC22W, IC22S, IC23, IC23W, TC2, TC2R, IC2
	Shallow Housing	IC21, IC21R
Capri	Standard Housing	CR1, PR1, QL1
	Shallow Housing	R9ASIC/PS9RM
Elco		HL7ICA (EL7ICA)
Thomas		PS1
Commercial Electric		C7ICA, H3

Lithonia Lighting	Standard Housing	LC6, L7X
	Shallow Housing	L7XP
Progress Lighting	Standard Housing	P87-AT**
	Shallow Housing	P86TG
Lightolier		1104ICS*, 1104ICR**

1. The RL56 SeleCCTable is UL Certified for use with any 5" or 6" diameter recessed luminaire constructed of steel or aluminum with an internal volume that exceeds 97.4" in³ in addition to those noted below and does not exceed the input rating of the luminaire.

2. The RL4 SeleCCTable is UL Certified for use with any 4" diameter recessed luminaire constructed of steel or aluminum with an internal volume that exceeds 47.8" in³ in addition to those noted below and does not exceed the input rating of the luminaire.

3. The RL3 SeleCCTable is UL Certified for use with any 3" diameter recessed luminaire constructed of steel or aluminum with an internal volume that exceeds 42.2" in³ in addition to those noted below and does not exceed the input rating of the luminaire.

Product Specifications

Selectable System

- Use the CCT select switch to choose between D2W, 2700K, 3000K, 3500K, 4000K, and 5000K CCT
- D2W option starts at 3000K and warms to 1800K as fixture dims
- Use the lumen select switch on lumen selectable fixtures to choose brightness level

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

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) is set to a factory default of 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

- For 3-inch and 4-inch: Push-N-Twist universal installation clips are pre-installed and designed to fit compatible recessed housings.
- For 5/6-inch: Torsion springs are pre-installed and adjust to fit 5-inch or 6-inch housings. Push-N-Twist universal installation clips are also included

Overlays (sold separately)

- Overlays are accessory rings that attach to the fixture for a decorative finish. Refer to the accessories table in the ordering information section for details

Gaskets

- Closed cell gaskets achieve restrictive airflow requirements without additional caulking

Compliance

- UL Certified for US and Canada for use with Halo housings, classified for use with other's housings, see instruction sheet for conditions of acceptability
- Wet and Damp location listed
- Airtight certified 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
- Can be used for State of California Title 24 high efficacy luminaire compliance. Complies with Title 24 JA8-2022-E.
- Can be used International Energy Conservation Code (IECC) high efficiency luminaire compliance.
- ENERGY STAR® listed, reference database for current listings
- IP44 Ingress Protection rated

Warranty

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

Energy Data

RL3 - 500 Lumen

Lumens	500
Input Voltage	120V
Input current	55mA
Input Power	6.2W
Efficiency	80.24%
Inrush(A)	1.58
THD	13.7
PF	0.964
Sound Rating	<=22dba

RL4 - 600/900 Lumen

Lumens	600/900
Input Voltage	120V
Input current	95mA
Input Power	11W
Efficiency	80.56%
Inrush(A)	2.5
THD	16.6
PF	0.983
Sound Rating	<=22dba

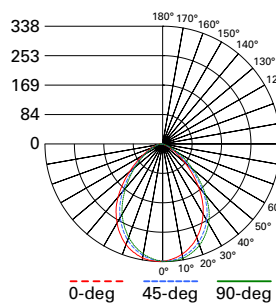
RL56 - 600 Lumen

Lumens	600
Input Voltage	120V
Input current	60mA
Input Power	6.8W
Efficiency	80.80%
Inrush(A)	2.02
THD	18.9
PF	0.937
Sound Rating	<=22dba

RL56 - 900/1200 Lumen

Lumens	900/1200
Input Voltage	120V
Input current	120mA
Input Power	14.5W
Efficiency	80.87%
Inrush(A)	3.8
THD	8.4
PF	0.986
Sound Rating	<=22dba

Photometric Data

**RL3059FSD2W1EWH -500LM -3000K**

Spacing criterion:
(0-180) 1.11 | (90-270) 1.11 | (Diagonal) 1.16
Beam Angle: 83°
Field Angle: 132°
Lumens: 610
Input Watts: 6.4 W
Efficacy: 95.3 LPW
UGR: 17
Test Report: P639465

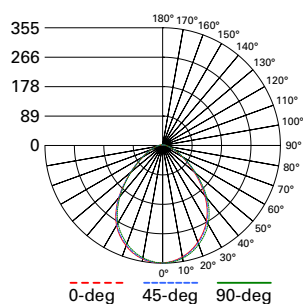
Zonal Lumen	Lumens	% Lumens
0-30	245	40.1
0-40	378	62
0-60	556	91.2
0-90	610	100

TM-30-15	Rf = 93
	Rg = 103
CRI/CIE	Ra = 96.6
	R9 = 89

CCT - Range of 2700K- 5000K



83°

**RL4LS9FSD2W1EWH -600LM -3000K**

Spacing criterion:
(0-180) 1.15 | (90-270) 1.15 | (Diagonal) 1.2
Beam Angle: 86°
Field Angle: 137°
Lumens: 685
Input Watts: 6.9 W
Efficacy: 99.3 LPW
UGR: 19
Test Report: P639470

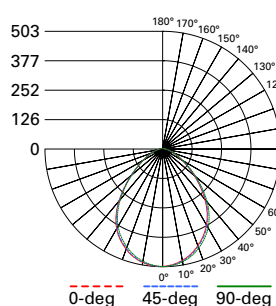
Zonal Lumen	Lumens	% Lumens
0-30	263	38.4
0-40	412	60.1
0-60	616	89.9
0-90	685	100

TM-30-15	Rf = 92
	Rg = 103
CRI/CIE	Ra = 96.3
	R9 = 85

CCT - Range of 2700K- 5000K



86°

**RL4LS9FSD2W1EWH -900LM -3000K**

Spacing criterion:
(0-180) 1.15 | (90-270) 1.15 | (Diagonal) 1.2
Beam Angle: 86°
Field Angle: 137°
Lumens: 970
Input Watts: 10.9 W
Efficacy: 89 LPW
UGR: 20
Test Report: P639475

Zonal Lumen	Lumens	% Lumens
0-30	372	38.4
0-40	583	60.1
0-60	872	89.9
0-90	970	100

TM-30-15	Rf = 92
	Rg = 103
CRI/CIE	Ra = 96.3
	R9 = 85

CCT - Range of 2700K- 5000K



86°

Product Specifications

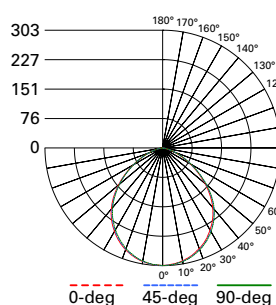
RL3059FSD2W1EWH

PRODUCT SPECIFICATIONS	
Lumens	610
Watts	6.4
Lumens Per Watt (Efficacy)	95.3
Color Accuracy (CRI)	95
Light Color (CCT)	3000K
Correlated Color Temperature (CCT)	
warm white soft white bright white	
2700K 3000K 4500K 6500K	

RL4LS9FSD2W1EWH

PRODUCT SPECIFICATIONS	
Lumens	970
Watts	10.9
Lumens Per Watt (Efficacy)	88.9
Color Accuracy (CRI)	93
Light Color (CCT)	3000K
Correlated Color Temperature (CCT)	
warm white soft white bright white	
2700K 3000K 4500K 6500K	

Photometric Data

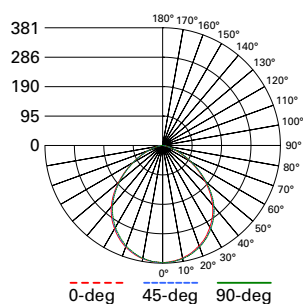
**RL56069FSD2W1EWH - 600LM - 3000K**

Spacing criterion:
(0-180) 1.21 | (90-270) 1.21 | (Diagonal) 1.3
Beam Angle: 98°
Field Angle: 145°
Lumens: 700
Input Watts: 6.8 W
Efficacy: 102.9 LPW
UGR: 19
Test Report: P639490

Zonal Lumen	Lumens	% Lumens
0-30	231	33
0-40	372	53.2
0-60	611	87.3
0-90	700	100

TM-30-15	Rf = 93
	Rg = 103
CRI/CIE	Ra = 96.4
	R9 = 87

CCT - Range of 2700K- 5000K

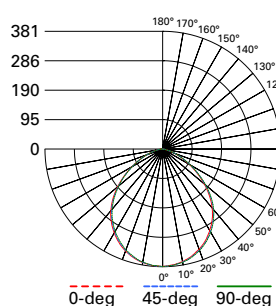
**RL56LS9FSD2W1EWH - 900LM - 3000K**

Spacing criterion:
(0-180) 1.21 | (90-270) 1.21 | (Diagonal) 1.3
Beam Angle: 98°
Field Angle: 145°
Lumens: 880
Input Watts: 8.5 W
Efficacy: 103.5 LPW
UGR: 20
Test Report: P639500

Zonal Lumen	Lumens	% Lumens
0-30	290	33
0-40	468	53.2
0-60	768	87.3
0-90	880	100

TM-30-15	Rf = 92
	Rg = 103
CRI/CIE	Ra = 95.6
	R9 = 81

CCT - Range of 2700K- 5000K

**RL56LS9FSD2W1EWH - 1200LM - 3000K**

Spacing criterion:
(0-180) 1.21 | (90-270) 1.21 | (Diagonal) 1.3
Beam Angle: 98°
Field Angle: 145°
Lumens: 1355
Input Watts: 14.3 W
Efficacy: 94.8 LPW
UGR: 20
Test Report: P639495

Zonal Lumen	Lumens	% Lumens
0-30	447	33
0-40	721	53.2
0-60	1183	87.3
0-90	1355	100

TM-30-15	Rf = 92
	Rg = 103
CRI/CIE	Ra = 95.6
	R9 = 81

CCT - Range of 2700K- 5000K



Product Specifications

RL56069FSD2W1EWH

PRODUCT SPECIFICATIONS	
Lumens	700
Watts	6.8
Lumens Per Watt (Efficacy)	102.9
Color Accuracy (CRI)	95
Light Color (CCT)	3000K
Correlated Color Temperature (CCT)	
warm white soft white bright white	
2700K 3000K 4500K 6500K	

RL56LS9FSD2W1EWH

PRODUCT SPECIFICATIONS	
Lumens	1355
Watts	14.3
Lumens Per Watt (Efficacy)	94.7
Color Accuracy (CRI)	93
Light Color (CCT)	3000K
Correlated Color Temperature (CCT)	
warm white soft white bright white	
2700K 3000K 4500K 6500K	