Project		Catalog #		Type	
Prepared by		Notes		Date	

HALO

RL Direct Mount Series

Canless recessed LED downlight

Typical Applications

Residential

Interactive Menu

- Order Information *page 2*
- Product Specifications *page 3*
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- Product Warranty
- Dimming Guide

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

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

6 seleCCTable colors | dim-to-warm option included | selectable lumens | air-tite | Showerlight

Top Product Features

- Available in 4" and 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
- Canless installation, no housing or j-box required
- Dimmable down to 5%

Dimensional and Mounting Details

RL4-DM

4.04" [102.5mm] WIRE LENGTH

1.94" [49.3mm]

Ø 7.25" [184mm]

Ø 5.75" [146mm] CUTOUT DIAMETER
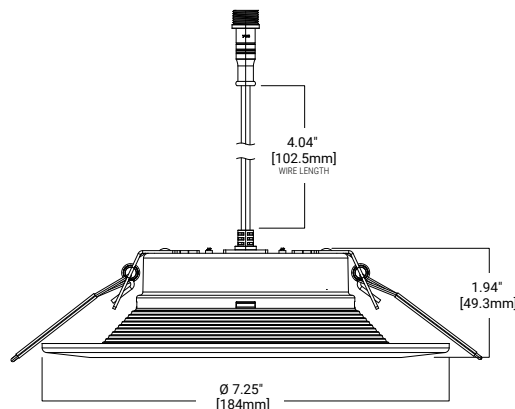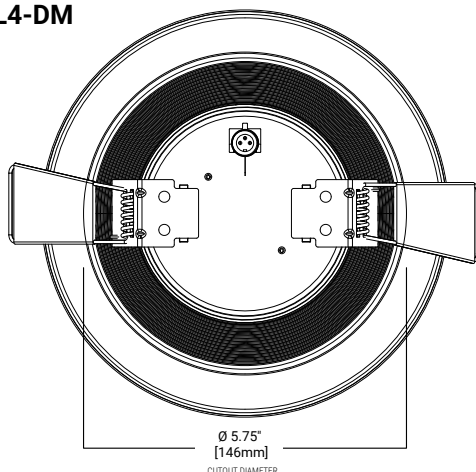
additional product diagrams

Order Information

SAMPLE ORDER NUMBER: **RL6069FSD2W1EWHDM**

4-inch	Lumens	CRI / CCT	Driver	Finish	Installation
4-inch	**Lumens**	**CRI / CCT**	**Driver**	**Finish**	**Installation**
RL4 = 4-inch canless recessed LED downlight	**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	**DM** = direct mount canless installation
Notes	**Notes**	**Notes**	**Notes**	**Notes**	**Notes**

4-inch Accessories

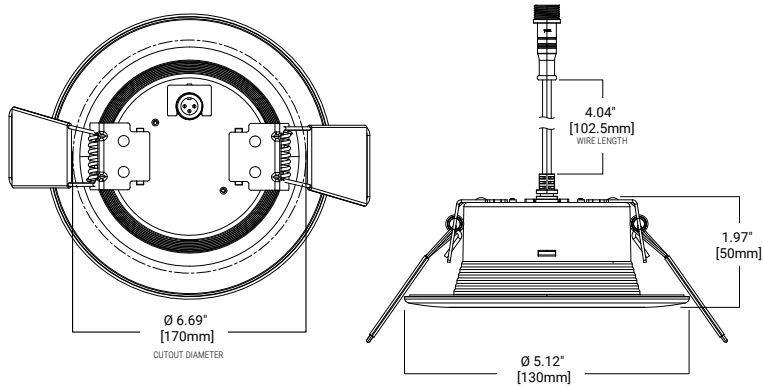| 4-inch Accessories	
RL4TRMWHB = 4-inch overlay, Matte White, Baffle **RL4TRMWBB** = 4-inch overlay, Matte Black, Baffle **RL4TRMSNB** = 4-inch overlay, Satin Nickel, Baffle **RL4TRMTBZB** = 4-inch overlay, Tuscan Bronze, Baffle **RL4TRMWH** = 4-inch overlay, Matte White, Splay **RL4TRMMB** = 4-inch overlay, Matte Black, Splay **RL4TRMSN** = 4-inch overlay, Satin Nickel, Splay **RL4TRMTBZ** = 4-inch overlay, Tuscan Bronze, Splay	**HL4RSMF** = 4" round and square mounting frame **HLB06BLEEC** = 6 ft. extension cable **HLB12BLEEC** = 12 ft. extension cable **HLB20BLEEC** = 20 ft. extension cable
Notes	

6-inch	Lumens	CRI / CCT	Driver	Finish	Installation
6-inch	**Lumens**	**CRI / CCT**	**Driver**	**Finish**	**Installation**
RL6 = 6-inch canless recessed LED downlight	**06** = 600 selectable 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	**DM** = direct mount canless installation
Notes	**Notes**	**Notes**	**Notes**	**Notes**	**Notes**

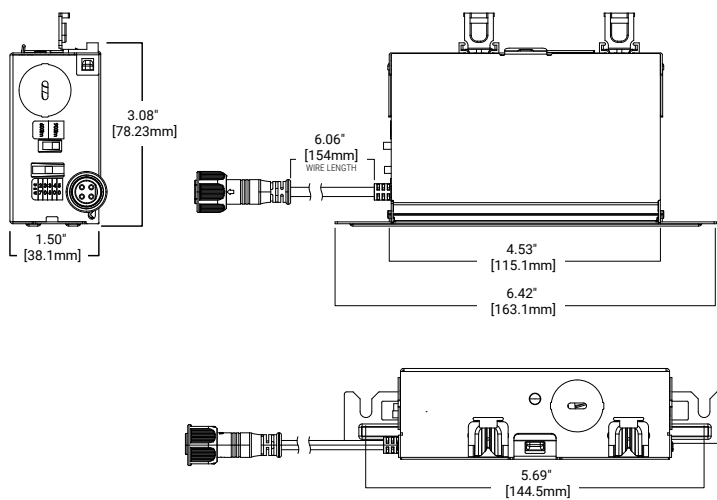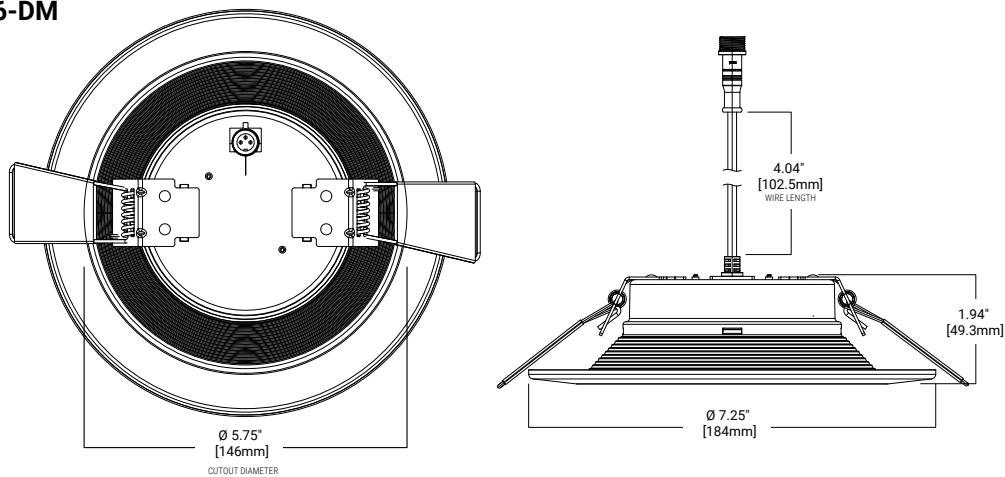### 6-inch Accessories

6-inch Accessories
HL6RSMF = 6" round and square mounting frame **HLB06BLEEC** = 6 ft. extension cable **HLB12BLEEC** = 12 ft. extension cable **HLB20BLEEC** = 20 ft. extension cable
Notes

Dimensional and Mounting Details

RL4-DM

Ø 6.69"
[170mm]
CUTOUT DIAMETER

4.04"
[102.5mm]
WIRE LENGTH

1.97"
[50mm]

Ø 5.12"
[130mm]

RL6-DM

Ø 5.75"
[146mm]
CUTOUT DIAMETER

4.04"
[102.5mm]
WIRE LENGTH

1.94"
[49.3mm]

Ø 7.25"
[184mm]

3.08"
[78.23mm]

1.50"
[38.1mm]

6.06"
[154mm]
WIRE LENGTH

4.53"
[115.1mm]

6.42"
[163.1mm]

5.69"
[144.5mm]

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

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

Gaskets
- Closed cell gaskets achieve restrictive airflow requirements without additional caulking

Driver
- Integral 120V 60 Hz constant current driver provides noise free operation
- Continuous, flicker-free dimming from 100% to 5%
- See Dimming Guide for compatible dimmers

Remote Driver/ Junction Box
- Aluminum 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) ½" conduit pry-outs
- (2) 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

Mounting / Retention
- The RL Direct Mount Series 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 spring clips will rest on to the back side of the drywall
- Not for installation in recessed cans

Compliance
- UL Certified US and Canada Type IC suitable for direct contact with air permeable insulation
- Wet and Damp location listed. Not recommended for use in direct contact with spray foam insulation, reference NEMA LSD57-2013
- 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

RL4 - 600/900 Lumen

|	
Lumens	600/900
Input Voltage	120V
Input current	90mA
Input Power	10.5W
Efficiency	78.99%
Inrush(A)	1.22
THD	16
PF	0.971
Sound Rating	<=22dba

RL56 - 600 Lumen

Lumens	600
Input Voltage	120V
Input current	63mA
Input Power	7.2W
Efficiency	77.69%
Inrush(A)	1.66
THD	18.7
PF	0.956
Sound Rating	<=22dba

RL56 - 900/1200 Lumen

Lumens	900/1200
Input Voltage	120V
Input current	110mA
Input Power	13W
Efficiency	80.50%
Inrush(A)	1.31
THD	13.8
PF	0.997
Sound Rating	<=22dba

COOPER
Lighting Solutions

Photometric Data
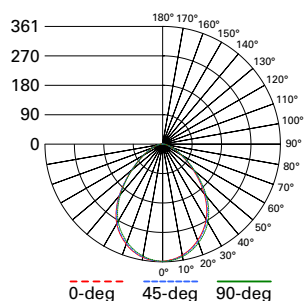
RL4LS9FSD2W1EWHDM -600LM -3000K

Spacing criterion:
(0-180) 1.15 | (90-270) 1.15 | (Diagonal) 1.2
Beam Angle: 86°
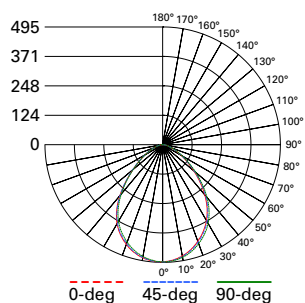Field Angle: 137°
Lumens: 695
Input Watts: 7.6 W
Efficacy: 91.4 LPW
UGR: 19
Test Report: P639480

Zonal Lumen	Lumens	% Lumens
0-30	267	38.4
0-40	418	60.1
0-60	625	89.9
0-90	695	100

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

CCT - Range of 2700K- 5000K

86°

RL4LS9FSD2W1EWHDM -900LM -3000K

Spacing criterion:
(0-180) 1.15 | (90-270) 1.15 | (Diagonal) 1.2
Beam Angle: 86°
Field Angle: 137°
Lumens: 955
Input Watts: 11.5 W
Efficacy: 83 LPW
UGR: 20
Test Report: P639485

Zonal Lumen	Lumens	% Lumens
0-30	367	38.4
0-40	574	60.1
0-60	858	89.9
0-90	955	100

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

CCT - Range of 2700K- 5000K

86°

Product Specifications

RL4LS9FSD2W1EWHDM

PRODUCT SPECIFICATIONS

Lumens	955
Watts	11.5
Lumens Per Watt (Efficacy)	83
Color Accuracy (CRI)	93
Light Color (CCT) Correlated Color Temperature (CCT)	3000K

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

COOPER
Lighting Solutions

Photometric Data
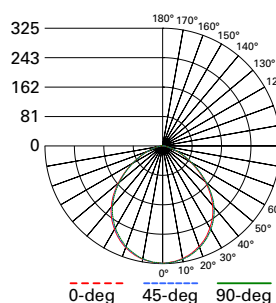
RL6069FSD2W1EWHDM -600LM -3000K

Spacing criterion:
(0-180) 1.21 | (90-270) 1.21 | (Diagonal) 1.3
Beam Angle: 98°
Field Angle: 145°
Lumens: 750
Input Watts: 7.5 W
Efficacy: 100 LPW
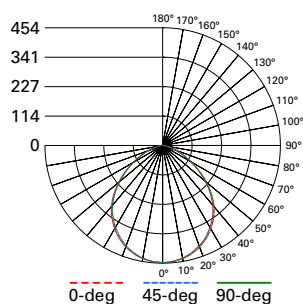UGR: 19
Test Report: P639505

Zonal Lumen	Lumens	% Lumens
0-30	247	33
0-40	399	53.2
0-60	655	87.3
0-90	750	100

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

CCT - Range of 2700K- 5000K

98°

RL6LS9FSD2W1EWHDM -900LM -3000K

Spacing criterion:
(0-180) 1.21 | (90-270) 1.21 | (Diagonal) 1.3
Beam Angle: 98°
Field Angle: 145°
Lumens: 1050
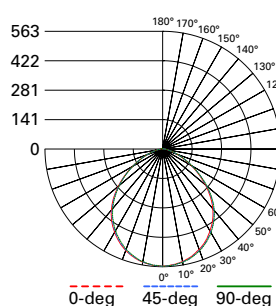Input Watts: 9.9 W
Efficacy: 106.1 LPW
UGR: 20
Test Report: P639515

Zonal Lumen	Lumens	% Lumens
0-30	346	33
0-40	558	53.2
0-60	916	87.3
0-90	1050	100

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

CCT - Range of 2700K- 5000K

98°

RL6LS9FSD2W1EWHDM -1200LM -3000K

Spacing criterion:
(0-180) 1.21 | (90-270) 1.21 | (Diagonal) 1.3
Beam Angle: 98°
Field Angle: 145°
Lumens: 1300
Input Watts: 13.8 W
Efficacy: 94.2 LPW
UGR: 20
Test Report: P639510

Zonal Lumen	Lumens	% Lumens
0-30	429	33
0-40	691	53.2
0-60	1135	87.3
0-90	1300	100

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

CCT - Range of 2700K- 5000K

98°

Product Specifications

RL6069FSD2W1EWHDM

PRODUCT SPECIFICATIONS

Lumens	750
Watts	7.5
Lumens Per Watt (Efficacy)	100
Color Accuracy (CRI)	93
Light Color (CCT) Correlated Color Temperature (CCT)	3000K

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

RL6LS9FSD2W1EWHDM

PRODUCT SPECIFICATIONS

Lumens	1330
Watts	13.8
Lumens Per Watt (Efficacy)	96.4
Color Accuracy (CRI)	93
Light Color (CCT) Correlated Color Temperature (CCT)	3000K

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