Project		Catalog #		Type	
Prepared by		Notes		Date	

HALO

RL4 Slope Ceiling | Direct Mount

4" Slope Ceiling LED Direct Mount Module
900 Lumen Series

Typical Applications

Residential

Interactive Menu

- Order Information page 2
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Product Certification

ENERGY STAR

IECC
International Energy
Conservation Code
High Efficacy
Compliance

Efficiency Standards
T24
Can be used to comply
with 2019 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.
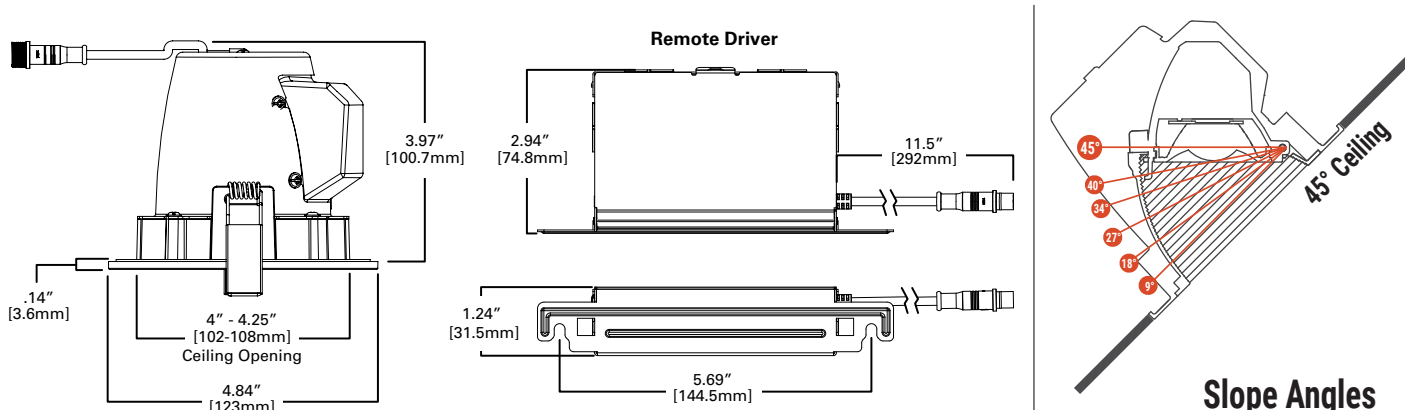Certified to California Appliance Efficiency Database under JA8.

Product Features

5 seleCCTable colors
2700K • 3000K • 3500K
4000K • 5000K

airtite™

IC RATED

damp location

Top Product Features

- Adjusts from 9° to 45° to match virtually any ceiling pitch
- Select from 5 CCTs via switch: 2700K, 3000K, 3500K, 4000K, 5000K
- Canless installation, no housing required
- 120V input, phase cut dimming to 5%
- Perfect for new construction or remodel work

Dimensional and Mounting Details

.14"
[3.6mm]

3.97"
[100.7mm]

4" - 4.25"
[102-108mm]
Ceiling Opening

4.84"
[123mm]

Remote Driver

2.94"
[74.8mm]

11.5"
[292mm]

1.24"
[31.5mm]

5.69"
[144.5mm]

45°
40°
34°
27°
18°
9°

45° Ceiling

Slope Angles

Order Information

SAMPLE ORDER NUMBER: **RLS4099FS1EWHDMR**

A complete luminaire consists of an LED module and remote driver/junction box.

Models	Lumens	CRI/CCT	Driver	Finish	Mounting	Packaging
RLS4 = 4" RL Slope Ceiling direct mount module	**09** = 900 lumen series (nominal)	**9FS** = 90 CRI min, 5-color selectable CCT	**1E** = 120V 60Hz, LE & TE phase cut 5% dimming	**WH =** Matte white baffle	**DM =** Direct Mount	**R** = recyclable 4-color unit carton
Notes	Notes	Notes	Notes	Notes	Notes	Notes

Accessories

Accessories
Mounting Frame **HL4RSMF** = 4" round and square new construction mounting frame **Extension Cable	seleCCTable Driver/Jbox** **HLB06FSEC** – 6 ft. extension cable **HLB12FSEC** – 12 ft. extension cable **HLB20FSEC** – 20 ft. extension cable

Product Specifications

Module
- LED module consists of LED (chip on board), optical assembly, driver and self-flanged trim
- Regressed baffle style trim
- Achieving L70 at 50,000 hours in IC and non-IC applications
- Adjustment mechanism tilts the light engine from 9° up to 45° to match 2/12 to 12/12 ceiling pitches

Gaskets
- Closed cell gasket achieves restrictive airflow requirements without additional caulking

LED
- Chip on board LEDs provide a uniform source with high efficiency and no pixilation
- Available in 90 CRI minimum, R9 greater than 50 and color accuracy within 4 SDCM provide color accuracy and uniformity
- Available in 5-color field selectable CCT: 2700K, 3000K, 3500K, 4000K, 5000K

Optical Assembly
- Optical assembly provides flood distribution useful for general and task lighting in sloped ceiling applications
- Diffuse injection molded lens with contoured profile provides uniformity and a familiar lamp like appearance
- Meets ENERGY STAR® color angular uniformity requirements

Junction Box
- Die formed 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) ½" conduit pry-outs
- (3) 4-port push wire nuts for quick and reliable mains voltage connections
- Integral mounting facilitates direct mounting to building structure or mounting frame

Driver
- Remote 120V 60 Hz constant current driver provides high efficiency operation
- Continuous, flicker-free dimming from 100% to 5% with select leading or trailing edge 120V phase cut dimmers – consult dimming guide for more information
- Consult dimmer manufacturer for compatibility and conditions of use

Installation
- Can be installed in 1/2" to 1-1/4" thick ceilings
- Round ceiling cutout
- Heat treated springs hold fixture fitting securely in the ceiling eliminating light leaks
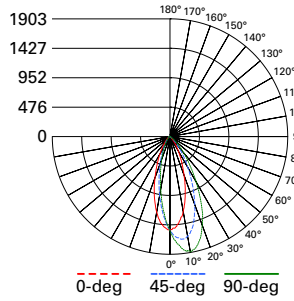- Can be removed from below the ceiling for service or replacement

Compliance
- UL Certified for US and Canada, type IC suitable for direct contact with air permeable insulation
- Not for use in direct contact with spray foam insulation, reference NEMA LSD57-2013
- Damp location listed
- Air-tite 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 is RoHS compliant
- Photometric testing in accordance with IES LM79-08
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11
- Compliant with California Title 24 High Efficiency LED 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/legal

Photometric Data

RLS4099FSE1WHDM-3000K

Spacing criterion: (0-180) 0.61
(90-270) 0.76
(Diagonal) 0.7

Beam Angle: 37°
Field Angle: 73°
Lumens: 966
Input Watts: 11.1 W
Efficacy: 87.0 LPW
Test Report:
RLS4099FSE1WHDM 3000K.ies

Polar diagram axis values: 1903, 1427, 952, 476, 0

Legend: 0-deg (red dashed), 45-deg (blue dashed), 90-deg (green solid)

Zonal Lumen	Lumens	% Lumens
0-30	693	71.8
0-40	849	87.9
0-60	946	98
0-90	963	99.7

TM-30-15	Rf = 92
	Rg = 98
CRI/CIE	Ra = 94
	R9 = 63

CCT - Range of 2700K- 5000K

37°

Energy Data

Energy Data @ 3000K	
Lumens	900 Series
Input Voltage	120V
Input Current	93.76 (mA)
Input Power	11.1 (W)
Efficiency	87.0 (LPW)
Inrush (A)	1.66 (A)
THD: ≤ 20%	
PF: ≥ 0.90	
T Ambient -30 - +40°C	
Sound Rating ≤ 22dBA	

RLS4-DM	CCT	Lumens	Power (W)	LPW
Field Selectable CCT	2700K	950	11.1	85.6
	3000K	966	11.1	87.0
	3500K	986	11.1	88.8
	4000K	1003	11.2	89.6
	5000K	1027	11.2	91.7

Product Specifications

RLS4099FS1EWHDMR

PRODUCT SPECIFICATIONS	
Lumens	**966**
Watts	**11.1**
Lumens Per Watt (Efficacy)	**87.0**
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