Project	Catalog #	Туре	
Prepared by	Notes	Date	



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# HALO

# **RLFR 4" Fire Rated Recessed Baffle Canless Downlights**

Safe, tested, and trustworthy fixtures that meet the latest fire rating construction codes with a 2-hour certification per testing requirement UL263. The spring-loaded arms securely hold these canless fixtures directly to fire rated ceiling for a secure, air-tite fit. The RLFR fixtures are 5-color field-seleCCTable and offer flicker-free 5% dimming making for easy lighting customization. HALO RLFR fixtures are the ideal solution for apartment buildings, townhomes, condos, and commercial applications where safety is paramount.

#### **Typical Applications**

Residential • Hospitality • Retail • Single Family • Multi Family

# Product Certification



# **Product Features**

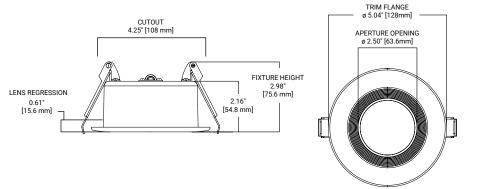


Refer to ENERGY STAR<sup>®</sup> Certified Products List. Can be used to comply with California Title 24 High Efficacy requirements Certified to California Appliance Efficiency Database under JA8.

# **Top Product Features**

- · Round 4" canless downlights suitable for installation in IC (insulation contact) or non-IC fire-rated applications
- Canless springs fit fire-rated ceilings between  $\frac{1}{2}$ " 2" thick
- · Lens & Trim: Recessed baffle trim and curved diffuse lens
- Color Temperature (CCT): 5-color Field-SeleCCTable (2700K, 3000K, 3500K, 4000K, 5000K); 90+ CRI
- Brightness (Lumens): 900 to 1000 lm (nominal)
- Dimming: Dims to 5% (phase cut LE/TE); 120V input
- AIR-TITE, wet location-listed, and ENERGY STAR<sup>®</sup>
- · 50,000 hrs of maintenance-free operation in damp or wet locations
- 5-year warranty

# **Dimensional and Mounting Details**





additional product diagrams

HALO

# **Order Information**

Catalog Number	Description	Lumens (nominal)	CRI	ССТ	Driver	Finish
RLFRC4FS	4-inch Round Fire Rated Canless Downlight	1000 lumens	90+ CRI	5-Color Field-SeleCCTable: 2700K, 3000K, 3500K, 4000K, 5000K	5% Phase Cut LE/TE Dimming, 120V 60Hz	Matte White
RLFRC4FSMBB	4-inch Round Fire Rated Canless Downlight	900 lumens	90+ CRI	5-Color Field-SeleCCTable: 2700K, 3000K, 3500K, 4000K, 5000K	5% Phase Cut LE/TE Dimming, 120V 60Hz	Matte Black

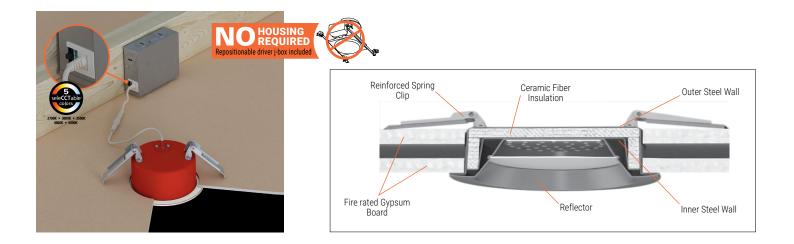


#### Accessories (sold separately)

Accessories				
Extension Cables	New Construction Mounting Frames*			
HLB06FSEC = 6 ft. Extension Cable	MF4RC = 4" Round Mounting Frame with Drywall Collar			
HLB12FSEC = 12 ft. Extension Cable HLB20FSEC = 20 ft. Extension Cable	HL4RSMF = 4" Round or Square Mounting Frame			
	New Construction Smash Plate*			
	SP346RS = 3", 4", and 6" Canless New Construction Smash Plate			



\* When installing with HALO Canless Mounting Frames or smash plate, RLFR junction boxes must be mounted to framing.





# HALO

# **Product Specifications**

#### 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**

- Use the CCT select switch to choose between 2700K, 3000K, 3500K, 4000K, and 5000K CCT
- 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
- Provides 50,000 hours of maintenance free operation

#### **Optical Assembly**

- Regressed lens
- Impact-resistant polycarbonate
- Convex form and lamp-like appearance
- Diffuse for even illumination
- Optical assembly provides wide light distribution useful for general area and task lighting
- Meets ENERGY STAR® color angular uniformity requirements

#### Gaskets

 Closed cell gaskets achieve restrictive airflow requirements without additional caulking

#### **Fire Rating & Certifications**

- Compact fire resistant design with reinforced and heat resistant steel casing.
- · Built in ceramic fiber insulation
- Fire-rated canless LED recessed downlight withstands temperatures up to 1850°F for up to 2-hours
- Prevents the passage of flames and toxic gases for up to 2 hours in accordance with UL 263 and ASTM E119

#### Driver

- Integral 120V 60Hz constant current driver provides noise-free, high-efficiency operation
- **Dimmable:** Continuous, flicker-free dimming from 100% to 5% with compatible leading or trailing edge (LE/TE) 120V phase cut dimmers.
- Tip: For optimal dimming performance, consider dimmers with low-end trim adjustment; note that some dimmers require a neutral wire in the box. (See the <u>RLFR Dimming Guide</u> and then consult dimmer manufacturer for compatibility and conditions of use.)

#### **Remote Driver/ Junction Box**

- Plenum rated cable used to connect RLFRC and junction box
- Steel 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
- (4) 1/2" pry-outs
- 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 RLFR Canless Series is designed to mount directly to 1/2" to 2" thick ceilings
- Not for installation into any recessed housing or third-party junction boxes.
- The fixture and remote junction box may be used in direct contact with insulation.
- For new construction applications, use a new construction mounting frame or smash plate and mount remote junction box to structure/framing
- Installer must cut hole out of ceiling using the included templates and install fixture through the opening with the clips compressed. When released, the spring clips will rest on the back side of the drywall/ceiling material (see installation instructions)

#### Compliance

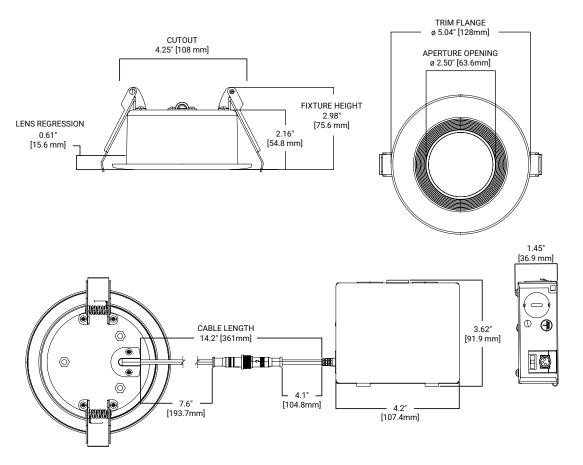
- Complies with ASTM E119, UL263 and certified to UL standard 1598 and CSA standard C22.2.
- Meets the 2-hour rating with most floor-ceiling assemblies including the following: UL L505, L511, L536, L538, L541, L556, L577, M500, M510, M521 and M543
- ETL US and Canada Type IC suitable for direct contact 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<sup>®</sup> listed, reference database for current listings
- IP64 Ingress Protection rated

#### Warranty

Five year limited warranty, consult website for details. <u>www.cooperlighting.com/warranty</u>



# **Dimensional and Mounting Details**





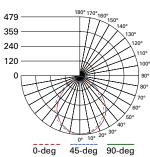
# **Energy Data**

	RLFRC4FS	RLFRC4FSMBB
Lumens (nom)	1000	900
Input Voltage (VAC)	120	120
Input Current (A)	0.087	0.094
Efficiency (LpW)	95.7	82
Inrush Current (A)	2.08	2.03
Inrush Duration (ms)	0.145	0.141
THD	≤ 20%	≤ 20%
PF	≥ 0.90	≥ 0.90
T Ambient (C)	-30 to +40	-30 to +40
Sound Rating	≤ 22 dba	≤ 22 dba

RLFRC4FS (Equivalent to 60W Incandescent)						
сст	Watts	Lumens	LPW	CRI		
2700K	10.7	988	92.8	93		
3000K	10.5	1005	95.7	93		
3500K	10.3	1049	101.5	93		
4000K	10.6	1063	100.6	93		
5000K	10.6	1041	98.2	93		

RLFRC4FSMBB (Equivalent to 60W Incandescent)						
сст	Watts	Lumens	LPW	CRI		
2700K	11.0	870	78.9	93		
3000K	11.0	902	82	93		
3500K	11.0	919	83.8	93		
4000K	11.0	929	84.8	93		
5000K	11.0	924	83.9	93		

# **Photometric Data**



# RLFRC4FS-3000K

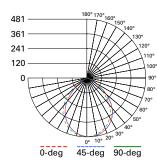
Spacing criterion: (0-180) 1.2 | (90-270) 1.2 | (Diagonal) 1.26 Beam Angle: 92.8° Field Angle: 91.8° Lumens: 1005 Input Watts: 10.5 W Efficacy: 95.7 LPW UGR: 19.3 Test Report: P851813

тм	% Lumens	Lumens	Zonal Lumen
1 191	36.3	365	0-30
CF	58	583	0-40
	90.1	906	0-60
CC	100	1005	0-90

TM-30-15	Rf = 90	
	Rg = 102	
CRI/CIE	Ra = 95	
	R9 = 70	
CCT - Range of 2700K- 5000K		
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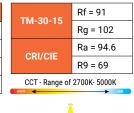
Yiew IES files





RLFRC4FSMBB-3000K
Spacing criterion:
(0-180) 1.17   (90-270) 1.17   (Diagonal) 1.23
Beam Angle: 88.9°
Field Angle: 88.2°
Lumens: 902
Input Watts: 11 W
Efficacy: 82 LPW
UGR: 21.2
Test Report: P851818

Zonal Lumen	Lumens	% Lumens
0-30	362	40.1
0-40	572	63.4
0-60	855	94.8
0-90	902	100



89°



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