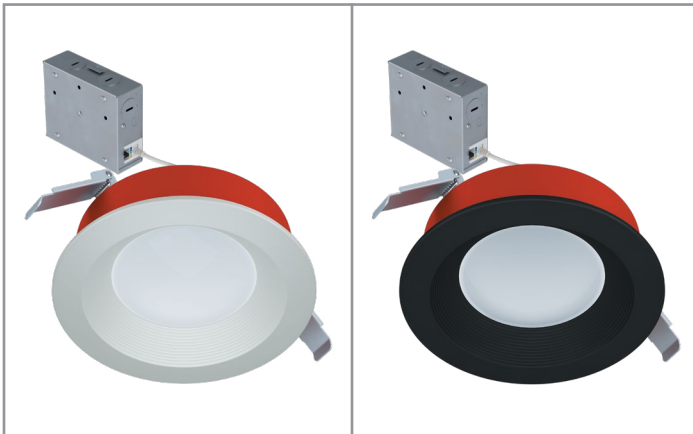


Project		Catalog #		Type	
Prepared by		Notes		Date	



# HALO

## RLFR 6" 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-selectable 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



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 J48.

### Product Features



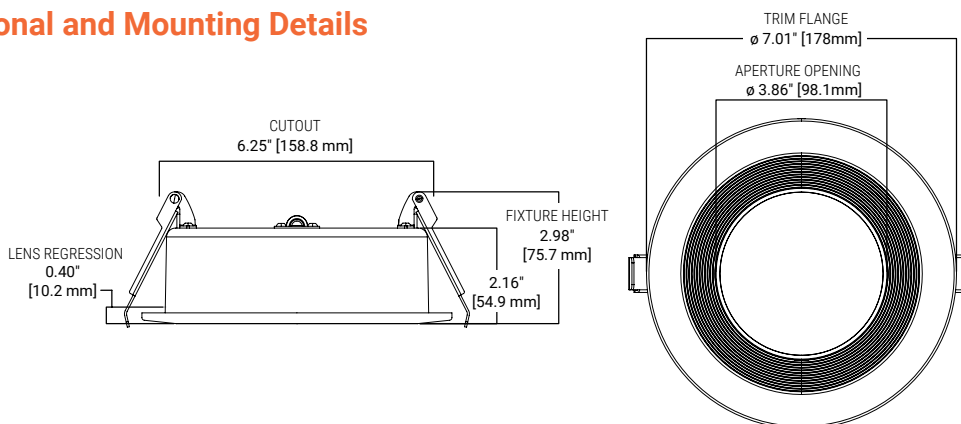
### Interactive Menu

- Order Information page 3
- Product Specifications page 5
- Energy Data page 5
- Photometric Data page 6
- Product Warranty

### 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 ½" – 2" thick
- **Lens & Trim:** Recessed baffle trim and curved diffuse lens
- **Color Temperature (CCT):** 5-color Field-SelectCCTable (2700K, 3000K, 3500K, 4000K, 5000K); 90+ CRI
- **Brightness (Lumens):** 1250 to 1400 lm (nominal)
- **Dimming:** Dims to 5% (phase cut LE/TE); 120V input
- AIR-TITE, wet location-listed, and ENERGY STAR®
- 50,000 hrs of maintenance-free operation in damp or wet locations
- 5-year warranty

### Dimensional and Mounting Details



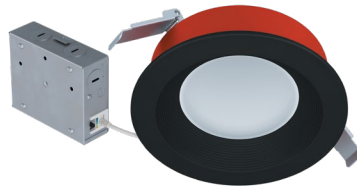
[additional product diagrams](#)

## Order Information

Catalog Number	Description	Lumens (nominal)	CRI	CCT	Driver	Finish
RLFRC6FS	6-inch Round Fire Rated Canless Downlight	1400 lumens	90+ CRI	5-Color Field-SeleCCTable: 2700K, 3000K, 3500K, 4000K, 5000K	5% Phase Cut LE/TE Dimming, 120V 60Hz	Matte White
RLFRC6FSMBB	6-inch Round Fire Rated Canless Downlight	1250 lumens	90+ CRI	5-Color Field-SeleCCTable: 2700K, 3000K, 3500K, 4000K, 5000K	5% Phase Cut LE/TE Dimming, 120V 60Hz	Matte Black



RLFRC6FS



RLFRC6FSMBB

## Accessories (sold separately)

Accessories	
<b>Extension Cables</b> HLB06FSEC = 6 ft. Extension Cable HLB12FSEC = 12 ft. Extension Cable HLB20FSEC = 20 ft. Extension Cable	<b>New Construction Mounting Frames*</b> MF6RC = 6" Round Mounting Frame with Drywall Collar HL6RSMF = 6" Round or Square Mounting Frame  <b>New Construction Smash Plate*</b> SP346RS = 3", 4", and 6" Canless New Construction Smash Plate



MF6RC



HL6RSMF

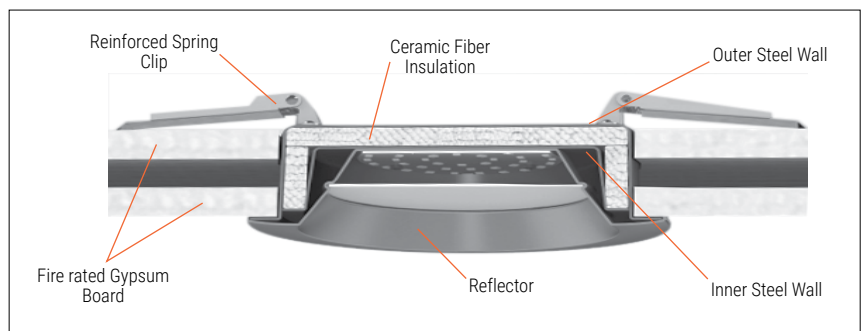


SP346RS

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



**NO HOUSING REQUIRED**  
 Repositionable driver j-box included



## 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 [RLFR Dimming Guide](#) and then consult dimmer manufacturer for compatibility and conditions of use.)

### Remote Driver/ Junction Box

- Plenum rated cable used to connect RLFR 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)

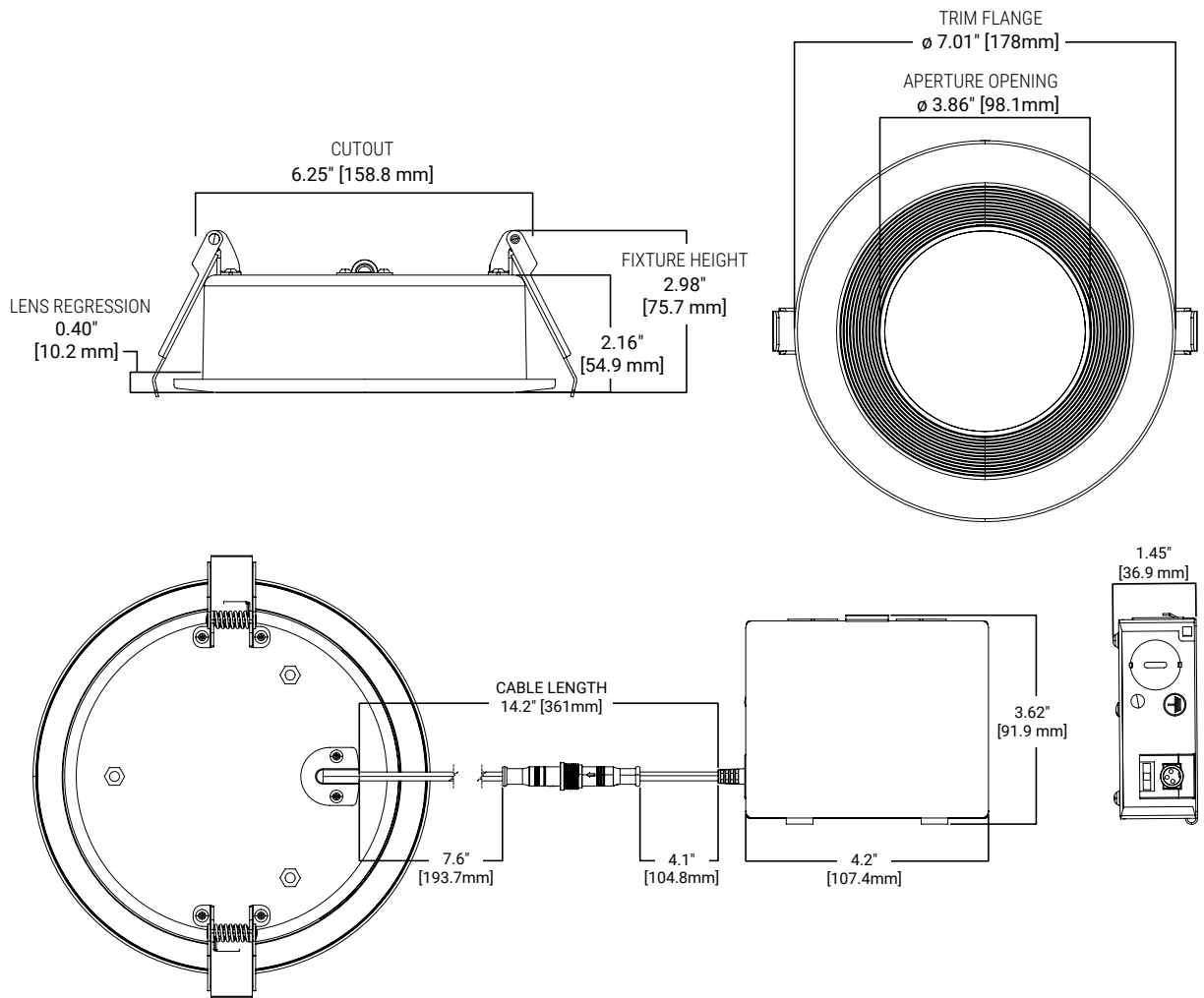
### Compliance

- 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® listed, reference database for current listings
- IP64 Ingress Protection rated

### Warranty

- Five year limited warranty, consult website for details. [www.cooperlighting.com/warranty](http://www.cooperlighting.com/warranty)

## Dimensional and Mounting Details



## Energy Data

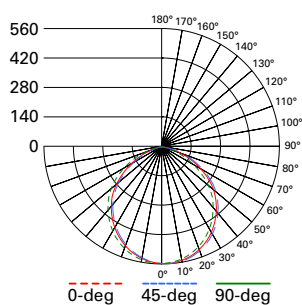
	RLFR6FS	RLFR6FSMBB
Lumens (nom)	1400	1250
Input Voltage (VAC)	120	120
Input Current (A)	0.110	0.110
Efficiency (LpW)	106.1	94.7
Inrush Current (A)	2.41	2.46
Inrush Duration (ms)	0.146	0.148
THD	≤ 20%	≤ 20%
PF	≥ 0.90	≥ 0.90
T Ambient (C)	-30 to +40	-30 to +40
Sound Rating	≤ 22 dba	≤ 22 dba

RLFR6FS (Equivalent to 75W Halogen)				
CCT	Watts	Lumens	LPW	CRI
2700K	13.1	1339	102.0	93
3000K	13.2	1400	106.1	93
3500K	13.1	1441	110.3	93
4000K	13.0	1463	112.3	93
5000K	13.1	1453	111.1	93

RLFR6FSMBB (Equivalent to 75W Halogen)				
CCT	Watts	Lumens	LPW	CRI
2700K	13.1	1215	92.6	93
3000K	13.2	1250	94.7	93
3500K	13.1	1274	97.6	93
4000K	13.0	1289	99.0	93
5000K	13.0	1265	97.0	93

## Photometric Data

[View IES files](#)



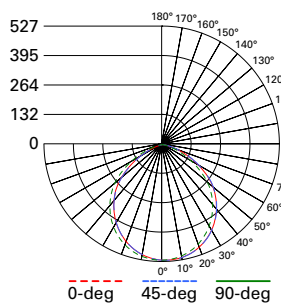
### RLFR6FS-3000K

Spacing criterion:  
(0-180) 1.23 | (90-270) 1.23 | (Diagonal) 1.34  
Beam Angle: 105.4°  
Field Angle: 105°  
Lumens: 1400  
Input Watts: 13.2 W  
Efficacy: 106.1 LPW  
UGR: 27.8  
Test Report: P851823

Zonal Lumen	Lumens	% Lumens
0-30	428	30.6
0-40	696	49.7
0-60	1192	85.1
0-90	1400	100

TM-30-15	Rf = 93
	Rg = 102
CRI/CIE	Ra = 94.7
	R9 = 73

CCT - Range of 2700K- 5000K



### RLFR6FSMBB-3000K

Spacing criterion:  
(0-180) 1.22 | (90-270) 1.22 | (Diagonal) 1.33  
Beam Angle: 88.9°  
Field Angle: 88.4°  
Lumens: 1250  
Input Watts: 13.2 W  
Efficacy: 94.7 LPW  
UGR: 21.2  
Test Report: P851828

Zonal Lumen	Lumens	% Lumens
0-30	404	32.3
0-40	654	52.3
0-60	1102	88.1
0-90	1250	100

TM-30-15	Rf = 91
	Rg = 102
CRI/CIE	Ra = 94.7
	R9 = 71

CCT - Range of 2700K- 5000K

