

# REL-FR

## Fire Rated, Recessed LED Downlight

### Product Description

The Fire Rated REL Recessed Downlight meets the latest codes for multi-family fire rating with a 2-hour certification per UL263. The edge-lit technology makes it a practical solution with high performance and five CCT selectability options (2700K, 3000K, 3500K, 4000K, and 5000K) for ultimate customization. Adjustable spring-loaded retention tabs allow a secure fit for easy installation in both new construction and remodel applications. The REL-FR is an ideal solution for apartment buildings, townhomes, condos, and commercial applications.

#### Construction

- Steel housing provides durability and fire resistance
- Edge-lit technology allows for extremely thin fixture depth
- Off-board driver minimizes installation height and maximizes fixture life through improved heat management

#### Optical System

- Precision engineered optical stack creates uniform light distribution that maximizes lumen output
- Offered with 5CCT selection of 2700K, 3000K, 3500K, 4000K, and 5000K
- Utilizes high performing LEDs with 90+ CRI and an R9 > 60

#### Electrical

- Input voltage of 120VAC, 60Hz
- Dimmable to 5% with compatible leading edge (TRIAC) or trailing edge (ELV) dimmers
- Operating temperature rating of -4°F to 104°F (-20°C to 40°C)

#### Finish

- White powder coat finish trim
- Red powder coat finish backside to denote fire resistance

#### Mounting and Installation

- Spring-loaded retention tabs allow for easy installation into ceilings up to 3/4" thick with no need for recessed housing.
- Remote driver/junction box includes four 1/2" KO's and three-port poke-in connectors
- Included paper cut-out template
- Accessory steel rough-in frames and templates available
- Accessory extension power cables (2' and 10') are available.
- For installations where power surges may be possible, NICOR recommends installing additional surge protection at the electrical distribution panel.

#### Listings

- UL 1598 listed for wet locations
- UL263 certified for 2hr fire resistance
- Energystar listed
- CA Title 24 compliant (JA8)
- Certified for direct contact with insulation (IC-rated)
- Meets Air Tight requirements per ASTM E283
- Compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5) for closet use
- RoHS Compliant: Free from harmful and hazardous materials
- Meets FCC Part 15, Subpart B, Class B standards for conducted and radiated emissions
- LED lumen maintenance: L70(9k)>72,000 hrs
- LM-79, LM-80 testing performed in accordance with IESNA standards

#### Warranty

- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge)

Project

Catalog

Type

Date



## REL-FR 4" & 6" Fire Rated Edgelit LED Downlight 900, 1200 lumen



# Ordering

## Ordering Information

Example : REL6FR1 120SRD9WH

Series	Version	Voltage	CCT's	Trim Shape	CRI	Trim Color
REL4	FR1 (Fire Rated)	120	S (Selectable)	RD (Round)	9 (90)	WH (White)
REL6						

Specifications and dimensions subject to change without notice

## Accessories

accessories sold separately

2' Extension Cable	EXTCABLE-SELECT-02
10' Extension Cable	EXTCABLE-SELECT-10
3", 4", 6" Multi-Diameter Frame	MULTIFRAME-346-1
4" Rough-in Frame with Lip	DLE4-ROUGHIN-FRAME
6" Rough-in Frame with Lip	DLE6-ROUGHIN-FRAME
3", 4", 6" Rough In Flat Template	ROUGHIN-TEMPLATE-346
4" White Goof Ring	REL4-1-GR-RD-WH

## Performance Data and Dimming

Performance Data				
Model Number	CCT	Lumens	Watts	Lumens/Watt
REL4FR1 120SRD9WH	2700	914	10.9	83.9
	3000	957		87.8
	3500	1001		91.8
	4000	1007		92.4
	5000	958		87.9
REL6FR1 120SRD9WH	2700	1251	14.6	85.7
	3000	1281		87.7
	3500	1327		90.9
	4000	1338		91.6
	5000	1279		87.6

## Recommended Dimmers\*

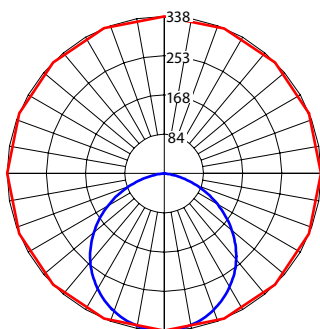
Lutron Skylark SELV-300P  
 Lutron Skylark SCL-153P  
 Lutron DIVA DVCL-153P  
 Lutron DIVA DVELV-300P  
 Lutron MAELV-600  
 Lutron PD-10NXD

\*Not a complete list. Check compatibility before installation.

## Photometric Data

### REL4FR1 (2700K)

Input Voltage (VAC)	120
System Level Power (W)	10.9
Delivered Lumens (Lm)	914
System Efficacy (Lm/W)	83.9
Correlated Color Temp (K)	2745
Color Rendering Index (CRI)	95 R9=71
Beam Angle (°)	109
Spacing Criteria	1.25



### Intensity Summary (Candle Power)

Angle	Mean CP
0	338
5	336
15	323
25	298
35	263
45	217
55	163
65	104
75	46
85	5
90	0

### Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	21.1	11.3
6	9.4	17.0
8	5.3	22.7
10	3.4	28.4

### Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	262	28.6%
0-40	428	46.8%
0-60	747	81.7%
0-90	914	100%
90-180	0	0%
0-180	914	100%

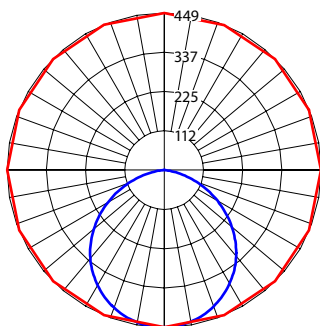
### CCT Data Multiplier

3000K	1.047
3500K	1.095
4000K	1.102
5000K	1.048

# Photometric Data

## REL6FR1 (2700K)

Input Voltage (VAC)	120
System Level Power (W)	14.6
Delivered Lumens (Lm)	1251
System Efficacy (Lm/W)	85.7
Correlated Color Temp (K)	2739
Color Rendering Index (CRI)	93 R9=64
Beam Angle (°)	111
Spacing Criteria	1.27



Angle	Mean CP
0	449
5	447
15	431
25	400
35	355
45	298
55	230
65	154
75	78
85	14
90	0

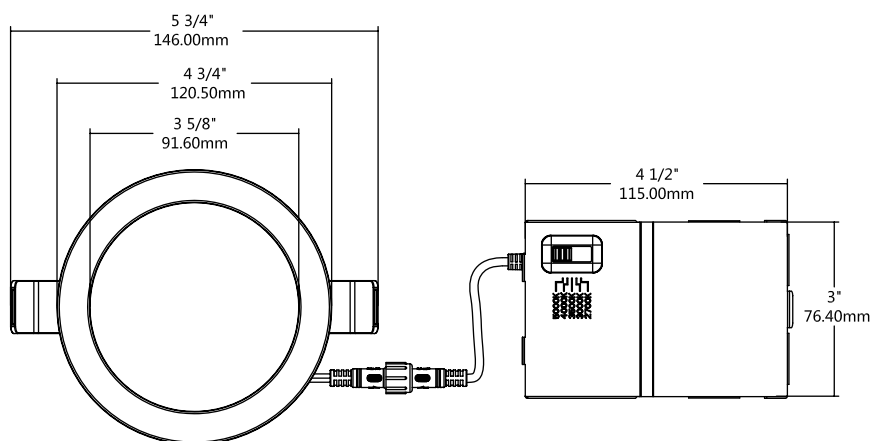
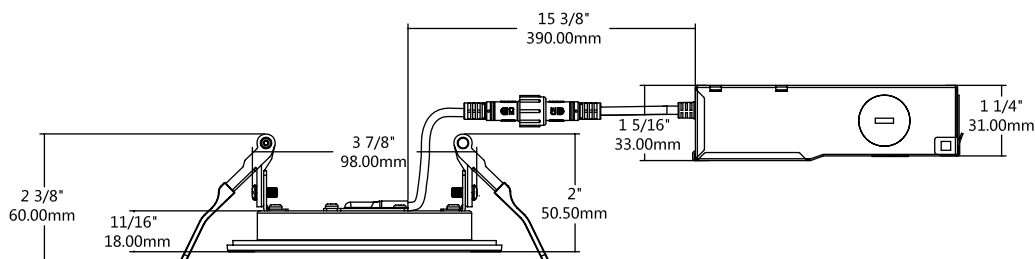
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	28.1	11.6
6	12.5	17.4
8	7.0	23.2
10	4.5	29.0

Zone	Lumens	% of Luminaire
0-30	348	27.8%
0-40	569	45.5%
0-60	1002	80.1%
0-90	1251	100%
90-180	0	0%
0-180	1251	100%

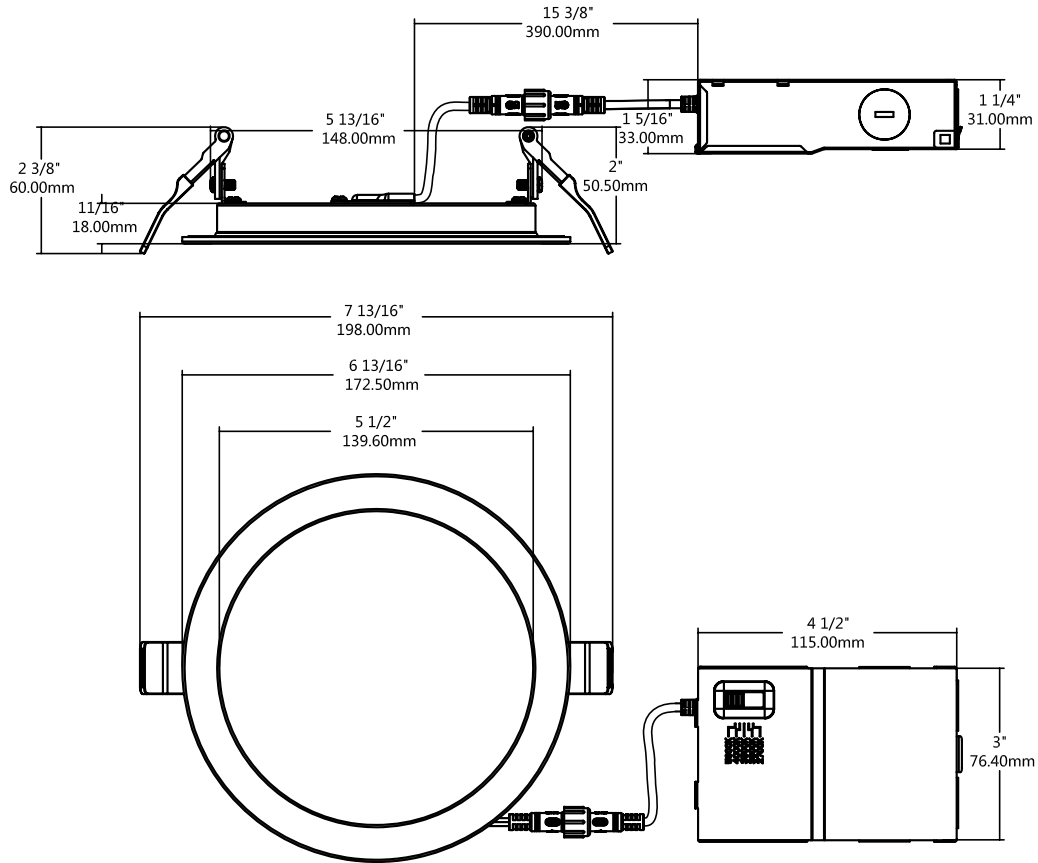
3000K	1.024
3500K	1.061
4000K	1.070
5000K	1.022

# Dimensions

## REL4FR1



# REL6FR1



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.