

CR4™ FD

Four-Inch LED Downlight

Product Description

The CR4™ FD LED downlight delivers up to 575 lumens of warm, 2700K light at up to 46 lumens per watt. Using just one-fifth of the energy used by comparable incandescent lamps, the CR4™ FD is a direct replacement for most four-inch recessed downlights, using up to a 50 watt incandescent bulb, in existing IC or non-IC housings. With a wet location rating and commercial ENERGY STAR® qualification, this product is ideal for use in many residential and light commercial applications.

Performance Summary

Utilizes Cree Full Definition Color Quality Technology

Delivered Light Output: 575 lumens

Input Power: 12.5 watts

CRI: 83

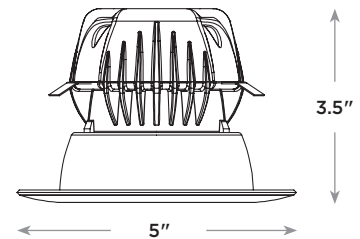
CCT: 2700K

Warranty: 5 years†

Lifetime: Designed to last 35,000 hours

Dimming: Dimmable to 5%*

CR4™ FD



Ordering Information

Example: CR4-575L-27K-12-E26-FD

| CR4™ FD | | Source Lumen Output | | CCT | Voltage | | Base Type | | Options | |
|---------|------|---------------------|------------|-----------|---------|-----------|-----------------|-------------------------------------|---------|-----------------|
| Series | Size | 575L | 575 Lumens | 27K 2700K | 12 | 120 Volts | E26 Edison Base | GU24 GU24 Base (Title 24 Compliant) | FD | Full Definition |

* Reference www.cree.com/lighting for recommended dimmers.

† See www.cree.com/lighting for warranty terms.



Rev. Date 05/09/2013



Product Specifications

CONSTRUCTION & MATERIALS

- Durable upper housing protects LEDs, driver and power supply. Adjustable flip clips resist heat while providing retention for flush ceiling fit.
- Thermal management system uses the lower reflector to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum even when installed in attic insulation.
- Suitable for insulated and non-insulated ceilings.
- One-piece aluminum lower reflector redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane.

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens shields direct view of LEDs .

ELECTRICAL SYSTEM

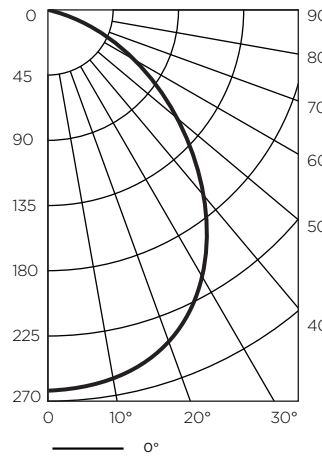
- Integral, high-efficiency driver and power supply.
- **Power Factor** > 0.9
- **Input Voltage:** 120V, 60Hz
- **Dimming:** Dimmable to 5% with most incandescent dimmers. Reference www.cree.com/lighting for recommended dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

- ENERGY STAR® qualified.
- cULus Listed
- Exceeds California Title-24 high efficacy luminaire requirements.
- Suitable for wet locations.

Photometry

CR4™ FD



Zonal Lumen Summary

| Zone | Lumens | % Luminaire |
|------|--------|-------------|
| 0-30 | 201.2 | 34.8% |
| 0-40 | 319.7 | 55.3% |
| 0-60 | 511.3 | 88.4% |
| 0-90 | 578.4 | 100% |

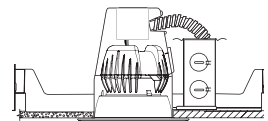
Intensity (Candlepower) Summary

| Angle | Mean CP |
|-------|---------|
| 0° | 265 |
| 5° | 264 |
| 15° | 253 |
| 25° | 228 |
| 35° | 190 |
| 45° | 143 |
| 55° | 91 |
| 65° | 44 |
| 75° | 18 |
| 85° | 2 |
| 90° | 0 |

Reference www.cree.com/lighting for detailed photometric data.

Installation

- Designed to easily install in standard 4" downlight housings.*
- Quick install system utilizes a unique retention feature. Simply attach socket to CR4™ FD. Move light to ready position and slide into housing.



NOTE: Reference www.cree.com/lighting for detailed installation instructions.

*Reference www.cree.com/lighting for a list of compatible housings.

Application Reference

| Open Space | | | | | |
|------------|--------|---------|-----|-------|------------|
| Spacing | Lumens | Wattage | LPW | w/ft² | Average FC |
| 4 x 4 | 575 | 12.5 | 46 | 0.59 | 37 |
| 6 x 6 | | | | 0.28 | 18 |
| 8 x 8 | | | | 0.16 | 10 |
| 10 x 10 | | | | 0.09 | 6 |

10' Ceiling, 80/50/20 Reflectances, 2.5 workplane.
LLF: 1.0 Initial. Open Space: 50' x 40' x 10'

| Corridor | | | | | |
|---------------|--------|---------|-----|-------|------------|
| Spacing | Lumens | Wattage | LPW | w/ft² | Average FC |
| 4' on Center | 575 | 12.5 | 46 | 0.38 | 14 |
| 6' on Center | | | | 0.26 | 9 |
| 8' on Center | | | | 0.2 | 7 |
| 10' on Center | | | | 0.15 | 6 |

10' Ceiling, 80/50/20 Reflectances, Light levels on the ground.
LLF: 1.0 Initial. Corridor: 6' Wide x 100' Long

