

CR6™ FD

Six-Inch LED Downlight

Product Description

The CR6™ FD LED downlight delivers up to 625 lumens of warm, 2700K light at up to 50 lumens per watt. Using just one-fifth of the energy used by comparable incandescent lamps, the CR6™ FD is a direct replacement for most six-inch recessed downlights, using up to a 65 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: 625 lumens

Input Power: 12.5 watts

CRI: 80

CCT: 2700K

Warranty: 5 years*

Lifetime: Designed to last 35,000 hours

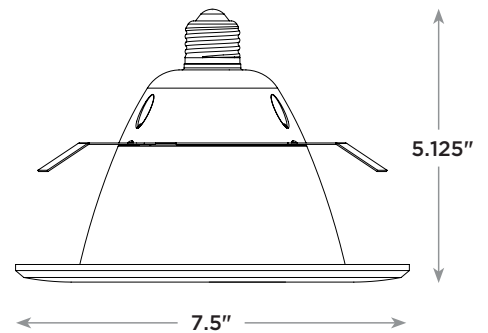
Dimming: Dimmable to 5%*

Housings & Accessories

Reference Housing & Accessory documents for more details.

Housings (Edison or GU24)	
H6 Architectural	SC6 Cylindrical Surface Mount
RC6 New Construction	SC6-CM Cylindrical Cord Mount
RR6 Retrofit	SC6-WM Cylindrical Wall Mount

CR6™ FD



Ordering Information

Example: CR6-625L-27K-12-E26-FD

CR6™ FD							
Series	Size	Source Lumen Output		CCT	Voltage	Base Type	Options
CR	6 6 inch	625L	625 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 07/02/2013



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 an upper and 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 insulated ceilings.
- 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 while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

ELECTRICAL SYSTEM

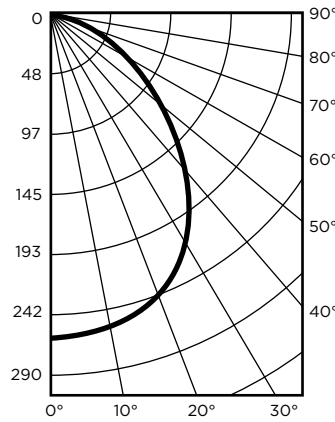
- Integral, high-efficiency driver and power supply.
- **Power Factor** > 0.9
- **Input Voltage:** 120V, 60Hz
- **Dimming:** Dimmable to 5% with most incandescent dimmers. Reference www.cree.com/lighting for recommended dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

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

Photometry

CR6™ FD



Intensity (Candlepower) Summary

Angle	Mean CP
0°	284
5°	284
15°	273
25°	251
35°	210
45°	155
55°	94
65°	42
75°	18
85°	3
90°	0

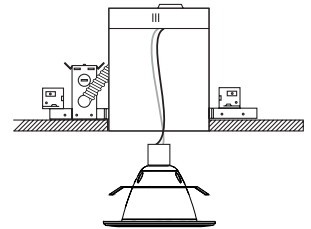
Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	215.6	35.9%
0-40	342.4	57%
0-60	537.9	89.6%
0-90	600.6	100%

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

Installation

- Designed to easily install in standard 6" downlight housings from Cree and other manufacturers.*
- Quick install system utilizes a unique retention feature. Simply attach socket to CR6™ 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/ft ²	Average FC
4 x 4	625	12	50	0.78	38
6 x 6				0.38	19
8 x 8				0.21	10
10 x 10				0.12	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/ft ²	Average FC
4' on Center	625	12	50	0.50	15
6' on Center				0.34	10
8' on Center				0.26	8
10' on Center				0.20	6

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

