

# CR6™

Six-Inch LED Downlight

## Product Description

The CR6™ LED downlight delivers 575 lumens of exceptional 90+ CRI light while achieving over 60 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology. The CR6 is available in a warm color temperature and has a variety of trim options. It easily installs into most standard six-inch recessed IC or non-IC housings, making the CR6 perfect for use in both residential and light commercial, new construction or retrofit, applications.

## Performance Summary

Utilizes Cree TrueWhite® Technology

Active Color Management

**Delivered Light Output:** 575 lumens

**Input Power:** 9.5 watts

**CRI:** 90

**CCT:** 2700K

**Warranty:** 5 years

**Lifetime:** Designed to last 50,000 hours

**Dimming:** Dimmable to 5%\*

## Ordering Information

Example: CR6

Product
<b>CR6</b> Edison Base
<b>CR6-GU24</b> GU24 Base

## Housings & Accessories

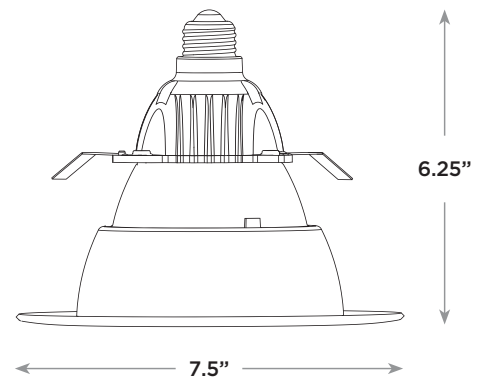
Reference Housing & Accessory documents for more details.

Trims & Reflectors
<b>CT6A</b> Diffuse anodized finish reflector
<b>CT6AW</b> Wheat diffuse anodized finish reflector
<b>CT6AB</b> Black diffuse anodized finish reflector
<b>CT6BB</b> Flat black finish trim and reflector

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

\* Reference CreeLEDLighting.com for recommended dimmers.

CR6



## Product Specifications

### CREE TRUEWHITE® TECHNOLOGY

Cree TrueWhite® Technology begins with the highest performing commercially available LEDs. Cree TrueWhite® Technology mixes the light from red and unsaturated yellow LEDs to create beautiful, warm, white light. This patented approach enables color management to preserve high color consistency over the life of the product. Cree TrueWhite® Technology also enables a CRI of at least 90 while maintaining high luminous efficacy—a no compromise solution.

### 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 both upper housing 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 attic insulation with ambient temperatures exceeding 60 C.
- 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 and easily accommodates CT6 snap-in trims.

### 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

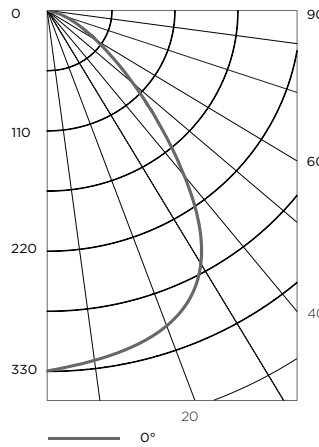
- Integral, high-efficiency driver and power supply.
- **Power Factor** > 0.8 nominal
- **Input Voltage:** 120V, 60Hz
- **Dimming:** Dimmable to 5% with most incandescent dimmers. Reference CreeLEDLighting.com for recommended dimmers.

### REGULATORY & VOLUNTARY QUALIFICATIONS

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

## Photometry

### CR6 BASED ON ONSPEX REPORT #: 30014047-3



### Intensity (Candlepower) Summary

Angle	Mean CP
0°	328
5°	326
15°	311
25°	278
35°	211
45°	125
55°	61
65°	30
75°	18
85°	4
90°	0

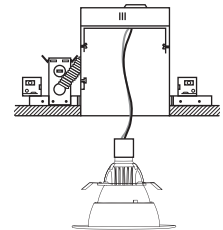
### Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fix
0-30	242	42.10%	42.10%
0-40	371	64.60%	64.60%
0-60	521	90.60%	90.60%
0-90	575	100%	100%

Reference CreeLEDLighting.com 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. Move light to ready position and slide into housing.



NOTE: Reference CreeLEDLighting.com for detailed installation instructions.

\*Reference CreeLEDLighting.com for a list of compatible housings.

## Application Reference

Open Space					
Spacing	Lumens	Wattage	LPW	w/ft²	Average FC
4 x 4	575	9.5	61	0.60	34
6 x 6				0.28	16
8 x 8				0.15	9
10 x 10				0.10	6

10' Ceiling, 80/20/50 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	9.5	61	0.40	12
6' on Center				0.27	8
8' on Center				0.20	6
10' on Center				0.17	5

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

