# **Product Description**

The CR6<sup>™</sup> LED downlight delivers up to 800 lumens of exceptional 90+ CRI light while achieving up to 67 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<sup>®</sup> Technology Delivered Light Output: 625, 800 lumens Input Power: 9.5, 12 watts CRI: 90 CCT: 2700K, 3000K, 3500K, 4000K Warranty: 5 years<sup>†</sup> Lifetime: Designed to last 50,000 hours

# Dimming: Dimmable to 5%\*

## Housings & Accessories

Reference Housing & Accessory documents for more details.

CT6A Diffuse silver reflector CT6AW Diffuse wheat reflector CT6AB Diffuse black reflector СТ6ВВ Flat black flange and reflector Н6 SC6 Architectural Cylindrical Surface Mount SC6-CM RC6 New Construction Cylindrical Cord Mount

SC6-WM

Cylindrical Wall Mount

Ordering Information

RR6

Retrofit



Click below to select Quick Ship products

7.5″

6.25"

P<sup>™</sup> CR6-800L-40K-12-GU24

Ordering Information Example: CR6-800L-27K-12-

For full list of Cree Quick Ship products visit www.cree.com/lighting/quickship

CR6™

xample: CR6-800L-27K-12-E26				
	1			

CR6						
Series		Source Lumen Output	сст			
CR	<b>6</b> 6 inch	625L 625 Lumens	<b>27K</b> 2700K	12 120 Volts	E26 Edison Base	
			<b>30K</b> 3000K		GU24 GU24 Base (Title 24 Compliant)	
			<b>35K</b> 3500K			
			<b>40K</b> 4000K			
CR	<b>6</b> 6 inch	800L 800 Lumens	27K 2700K	12 120 Volts	E26 Edison Base	
			<b>30K</b> 3000K		GU24 GU24 Base (Title 24 Compliant)	
			<b>35K</b> 3500K			
			<b>40K</b> 4000K			

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

<sup>+</sup> See www.cree.com/lighting/products/warranty for warranty terms.





Rev. Date 01/24/2014



# **Product Specifications**

## **CREE TRUEWHITE® TECHNOLOGY**

A revolutionary way to generate high-quality white light, Cree TrueWhite\* Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true 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 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 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 > 0.9
- 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<sup>®</sup> qualified.
- cULus Listed
- Exceeds California Title-24 high efficacy luminaire requirements.
- Suitable for wet locations.

# Application Reference

Open Space					
Spacing	Lumens	Wattage	LPW	w/ft²	Average FC
4 x 4	625	9.5	61	0.60	36
6 x 6				0.28	18
8 x 8				0.15	10
10 x 10				0.10	7
4 x 4	- 800	12	67	0.76	47
6 x 6				0.35	22
8 x 8				0.19	13
10 x 10				0.13	8

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

© 2014 Cree, Inc. and/or one of its subsidiaries. All rights reserved. For informational purposes only. Content is subject to change. See www.cree.com/patents for patents that cover these products. Cree\*, and the Cree logo are registered trademarks, and CR6<sup>™</sup> and the Quick Ship logo are trademarks of Cree, Inc. and/or one of its subsidiaries. ENERGY STAR\* and the ENERGY STAR logo are registered trademarks of the U.S. Environmental Protection Agency. The UL logo is a registered trademark of ULLC.

# Photometry

#### CR6 BASED ON ONSPEX REPORT #: 30014047-3 CR6-625L: MULTIPLY BY 0.78





# .

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

## Installation

Zone

0-30

0-40

0-60

0-90

336

516

724

800

 Designed to easily install in standard 6" downlight housings from Cree and other manufacturers.\*

Zonal Lumen Summary

42.10%

64.60%

90.60%

100%

% Fix

42.10%

64.60%

90.60%

100%

Lumens % Lamp

 Quick install system utilizes a unique retention feature. Simply attach socket to CR6. 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.



Corridor					
Spacing	Lumens	Wattage	LPW	w/ft²	Average FC
4' on Center	625	9.5	61	0.40	13
6' on Center				0.27	9
8' on Center				0.20	7
10' on Center				0.17	6
4' on Center	800	12	67	0.51	17
6' on Center				0.34	11
8' on Center				0.25	8
10' on Center				0.21	7

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

