

LR6-230V

165mm LED Downlight

Product Description

The LR6-230V LED downlight delivers 650 lumens of exceptional 90+ CRI light while achieving over 54 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite[®] Technology. The LR6-230V is available in warm or neutral color temperatures and has a variety of trim options. It is designed to easily install in 165mm diameter ceiling openings, making the LR6-230V perfect for use as a CFL downlight replacement in commercial new construction or retrofit applications.

Performance Summary

Utilizes Cree TrueWhite[®] Technology

Active Color Management

Delivered Light Output: 650 lumens

Input Power: 12 watts

CRI: 90

CCT: 2700K, 3500K

Input Voltage: 220-240V

Warranty: 5 years[†]

Lifetime: Designed to last 50,000 hours

Dimming: Dimmable to 20%*

Ordering Information

Example: LR6-230V

Product
LR6-230V 2700K
LR6C-230V 3500K
LR6-230V-CP 2700K, CCC Certified
LR6C-230V-CP 3500K, CCC Certified

Housings & Accessories

Reference Housing & Accessory documents for more details.

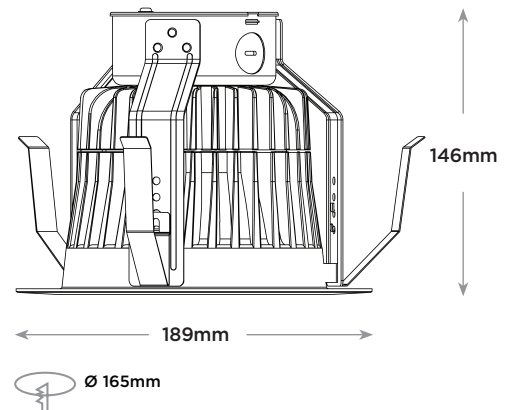
Trims
LT6A Diffuse anodized finish
LT6AW Wheat diffuse anodized finish
LT6AP Pewter diffuse anodized finish
LT6AB Black anodized finish
LT6WH Smooth white
LT6BB Flat black finish

NOTE: Not for US shipment.

* Reference www.cree.com/lighting for recommended dimming control options.

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

LR6-230V



Rev. Date 12/06/2012



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 die-cast aluminum housing protects LEDs, driver and power supply. Integral spring clips resist heat while providing retention for flush ceiling fit.
- Thermal management system uses integral heat sink to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum when installed in non-insulated ceiling applications. Not for direct burial in insulation.
- 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 LT6 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

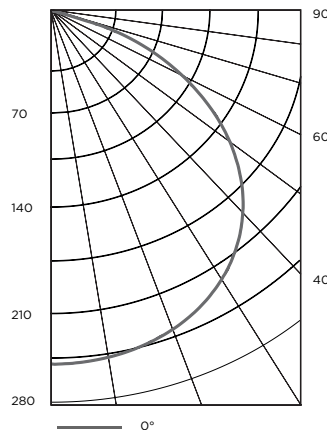
- Integral, high-efficiency driver and power supply.
- **Power Factor:** 0.9 nominal
- **Input Voltage:** 220-240V, 50Hz
- **Dimming:** Compatible with most incandescent and electronic dimmers. Reference www.cree.com/lighting for recommended dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

- CE certified. Complies to EN60598.
- CCC certified.

Photometry

LR6-230V, INCANDESCENT COLOR (2700K) LIGHTING SCIENCES INC. CERTIFIED TEST #: 22226



Intensity (Candlepower) Summary

Angle	Mean CP
0°	249
5°	248
15°	242
25°	228
35°	203
45°	165
55°	115
65°	62
75°	24
85°	6
90°	0

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fix
0-30	197	30.39%	30.39%
0-40	325	49.94%	49.94%
0-60	556	85.35%	85.35%
0-90	650	100%	100%

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

Installation

- Designed to easily install in 165mm diameter ceiling opening.
 - Integral spring clips engage with ceiling to hold luminaire in place.
- NOTE: Reference www.cree.com/lighting for detailed installation instructions.

Application Reference

Open Space					
Spacing (m)	Lumens	Wattage	LPW	w/m ²	Average Lux
1.2 x 1.2	650	12	54	8.00	432
1.8 x 1.8				3.73	200
2.4 x 2.4				2.00	110
3.0 x 3.0				1.33	73

Ceiling Height = 2.7m, 80/20/50 Reflectances, 0.75m workplane. LLF: 1.0 Initial. Open Space: 15m x 12m

Corridor					
Spacing (m)	Lumens	Wattage	LPW	w/m ²	Average Lux
1.2m on Center	650	12	54	6.67	152
1.8m on Center				4.53	104
2.4m on Center				3.20	75
3.0m on Center				2.67	62

Ceiling Height = 2.7m, 80/20/50 Reflectances, light levels on ground. LLF: 1.0 Initial. Corridor: 1.5m Wide x 30m Long

