

# CR150-650L

150mm LED Downlight



**CREE** LIGHTING

## Product Description

The CR150™ LED downlight delivers up to 650 lumens of exceptional 90+ CRI light while achieving over 68 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology.

The CR150 is available in a warm and cool color temperatures and has a variety of trim options. It easily installs into 150-175mm diameter ceiling openings, making the CR150 perfect for use in both residential and commercial applications.

## Performance Summary

Utilizes Cree TrueWhite® Technology

Active Color Management

**Delivered Light Output:** 650 lumens

**Input Power:** 9,5 watts

**CRI:** 90

**CCT:** 3000K, 4000K

**Input Voltage:** 220-240 VAC

**Warranty:** 5 years†

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

**Dimming:** Dimmable to 5%

## Installation

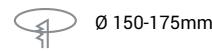
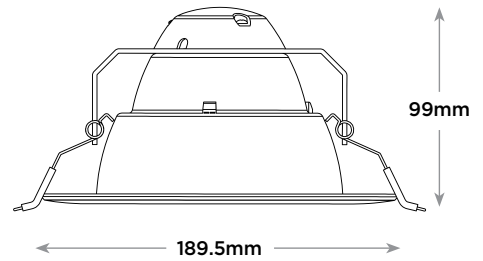
- Designed to easily install in 150-175mm diameter ceiling openings
- Spring clips engage with ceiling to hold luminaire in place
- Remote gear box contains a conduit installation plate and a sheathed wire installation plate

NOTE: Reference CreeLighting.com/International for detailed installation instructions

## Accessories

Reference Downlight Trims Section for more details

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



Ordering Information					
Example: CR150-650L-30K-23					
Product	Product Lumen Output	Color Temperature	Voltage	Control	Options
CR150	650L 650 lumens	30K 3000 Kelvin 40K 4000 Kelvin	23 220-240V	No code Triac Dimming to 5%*	No code CE/CB certified

\* Reference CreeLighting.com/International for recommended dimmers

† Reference CreeLighting.com/International for recommended dimming control options

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150mm LED Downlight



## 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 die-cast aluminum housing protects LEDs, driver and power supply. Spring clips resist heat while providing retention for flush ceiling fit
- Engineered polycarbonate remote gear box protects driver, power supply and terminal block
- 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 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
- UGR <22 Reflection factors 0,2/0,5/0,7

### SISTEMA ELETTRICO

- Remote high-efficiency driver and power supply
- Power Factor 0,9
- Input Voltage: 220-240V, 50/60Hz
- Dimming: Dimmable to 5% with recommended dimmers. Reference CreeLighting.com/International for recommended dimmers

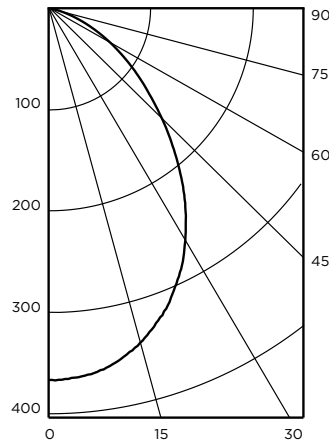
### REGULATORY & VOLUNTARY QUALIFICATIONS

- CE/CB certified.

## Photometry

### CR150-650L-3000 BASED ON LTL REPORT TEST #: 28506

Fixture photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.



Intensity (Candlepower) Summary	
Angle	Mean CP
0°	353
5°	351
15°	337
25°	305
35°	234
45°	142
55°	70
65°	35
75°	20
85°	6
90°	0

Reference [www.cree.com/lighting](http://www.cree.com/lighting) for detailed photometric data

Zonal Lumen Summary		
Zone	Lumen	% Lamp
0-30	268	41%
0-40	414	64%
0-60	587	90%
0-90	650	100%

## Application Reference

Open Space					
Spacing (m)	Lumens	Wattage	LPW	w/m <sup>2</sup>	Average Lux
1.2 x 1.2	650	9.5	68	6.33	462
1.8 x 1.8		9.5	68	2.96	214
2.4 x 2.4		9.5	68	1.58	117
3.0 x 3.0		9.5	68	1.06	78

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

Corridor					
Spacing (m)	Lumens	Wattage	LPW	w/m <sup>2</sup>	Average Lux
1.2 m al centro	650	9.5	68	1.32	181
1.8 m al centro		9.5	68	0.90	153
2.4 m al centro		9.5	68	0.63	110
3.0 m al centro		9.5	68	0.53	91

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

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