

# CR150™

## 150mm LED Downlight

### Product Description

The CR150™ LED downlight delivers up to 1000 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, 1000 lumens

**Input Power:** 9.5, 14 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.

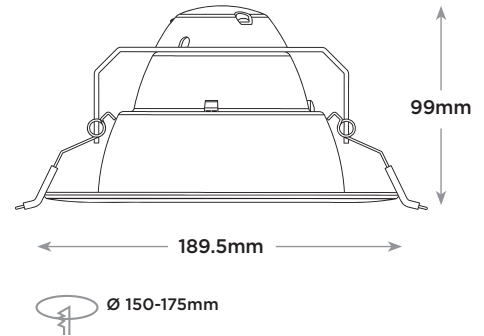
NOTE: Reference CreeLighting.com/International for detailed installation instructions.

### Accessories

Reference Downlight Trims Section for more details.

Trims & Reflectors
<b>CT6A</b> Diffuse anodized finish reflector
<b>CT6AW</b> Wheat diffuse anodized finish reflector
<b>CT6AB</b> Black diffuse anodized finish reflector
<b>CT6BB</b> Flat black finish trim and reflector
<b>Reference back page for Trim Finish Options</b>

CR150



### Ordering Information

Example: CR150-1000L-40K-23

CR150					
Product	Lumen Output	Color Temperature	Voltage	Control	Options
CR150	<b>650L</b> 9.5W 650 lumens <b>1000L</b> 14W 1000 lumens	<b>30K</b> 3000 Kelvin <b>40K</b> 4000 Kelvin	<b>23</b> 220-240 Volt	<b>BLANK</b> Triac Dimming to 5%*	<b>BLANK</b> CE/CB certified <b>CP</b> Pending CCC certification

\* Reference CreeLighting.com/International for recommended dimmers.

**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.

**ELECTRICAL SYSTEM**

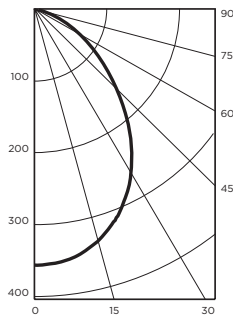
- Remote high-efficiency driver and power supply.
- **Power Factor** > 0.9
- **Input Voltage:** 220-240V, 50/60Hz
- **Dimming:** Dimmable to 5% with recommended dimmers. Reference CreeLighting.com/International for recommended dimmers.

**REGULATORY & VOLUNTARY QUALIFICATIONS**

- CE/CB certified.
- Pending CCC certification.

**Photometry**

**CR150-650L-3000K BASED ON LTL REPORT #: 28506**  
**CR150-1000L-3000K BASED ON LTL REPORT #: 28507**

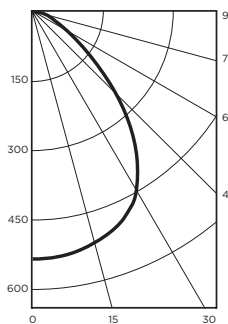


**Zonal Lumen Summary**

Zone	Lumens	% Lamp
0-30	268	41%
0-40	414	64%
0-60	587	90%
0-90	650	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



**Zonal Lumen Summary**

Zone	Lumens	% Lamp
0-30	413	41%
0-40	637	64%
0-60	902	90%
0-90	1000	100%

**Intensity (Candlepower) Summary**

Angle	Mean CP
0°	543
5°	541
15°	519
25°	472
35°	361
45°	217
55°	107
65°	54
75°	33
85°	8
90°	0

Reference CreeLighting.com/International for detailed photometric data.

**Application Reference**

Open Space					
Spacing (m)	Lumens	Wattage	LPW	w/m²	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
1.2 x 1.2	1000	14	71	9.33	733
1.8 x 1.8		14	71	4.36	340
2.4 x 2.4		14	71	2.33	186
3.0 x 3.0		14	71	1.56	123

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

Corridor					
Spacing (m)	Lumens	Wattage	LPW	w/m²	Average Lux
1.2m on Center	650	9.5	68	1.32	181
1.8m on Center		9.5	68	0.90	153
2.4m on Center		9.5	68	0.63	110
3.0m on Center		9.5	68	0.53	91
1.2m on Center	1000	14	71	1.94	287
1.8m on Center		14	71	1.32	242
2.4m on Center		14	71	0.93	175
3.0m on Center		14	71	0.78	144

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