

LR6-18L

Six-Inch LED Downlight

Product Description

The LR6-18L LED downlight delivers 1800 lumens of exceptional 90+ CRI light while achieving 90 lumens per watt. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite[®] Technology, with an integrated driver and thermal management design. The LR6-18L is available in four color temperatures and has a variety of trim options. It easily installs into Cree six-inch GU24 housings or may be retrofitted with a GU24 whip adapter, making the LR6-18L perfect for use in commercial new construction or retrofit applications.

Performance Summary

Utilizes Cree TrueWhite [®] Technology
Active Color Management
Delivered Light Output: 1800 lumens
Input Power: 20 watts
CRI: 90
CCT: 2700K, 3000K, 3500K, 4000K
Warranty: 10 years [†]
Lifetime: Designed to last 50,000 hours
Dimming: Dimmable to 5% [*]
Suitable for non-insulated ceilings only

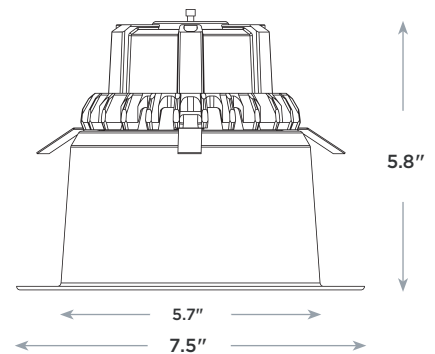
Housings & Accessories

Reference Housing & Accessory documents for more details.

Trims	
LT6A-DR Diffuse anodized finish	LT6AB-DR Black anodized finish
LT6AW-DR Wheat diffuse anodized finish	LT6WH-DR Smooth white
LT6AP-DR Pewter diffuse anodized finish	LT6BB-DR Flat black finish trim and reflector

Housings (GU24 Only)	
H6 Architectural	SC6 Cylindrical Surface Mount
RC6 New Construction	SC6-CM Cylindrical Cord Mount
RR6 Retrofit	SC6-WM Cylindrical Wall Mount

LR6-18L



Ordering Information

Example: LR6-18L-35K-120V-A-DR

LR6™	18L		120V	A	DR
Series	Lumen Output	Color Temperature	Voltage	Version	Options
LR6™	18L 20W 1800 lumens - 90 LPW	27K 2700 Kelvin 30K 3000 Kelvin 35K 3500 Kelvin 40K 4000 Kelvin	120V 120 Volts - GU24 Base	A Version A	DR Deep Recess - 20° Shield

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

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



Rev. Date: 01/18/13



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 aluminum housing protects the light source. Adjustable flip clips provide robust retention for flush ceiling fit.
- Thermal management system uses integral heat sink to conduct heat away from LEDs for optimal performance. LED junction temperatures stay below specified maximum even when installed in with worst case installations.
- **Suitable for non-insulated ceilings only.**
- 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, hot spots and minimizing glare.
- 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.
- Deep set diffusing lens shields direct view of LEDs and provides greater visual cut-off.

ELECTRICAL SYSTEM

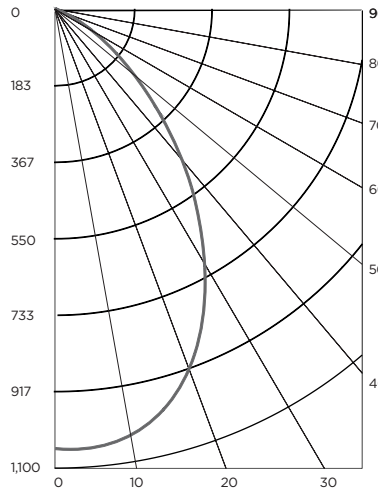
- Integral, high-efficiency driver and power supply.
- **Power Factor** > 0.9 nominal
- **Input Voltage:** 120V, 60Hz
- **Dimming:** Dimmable to 5% with certain incandescent dimmers. Reference www.cree.com/lighting for recommended dimmers.

REGULATORY & VOLUNTARY QUALIFICATIONS

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

Photometry

LR6-18L



Intensity (Candlepower) Summary

Angle	Mean CP
0°	1059
5°	1056
15°	1007
25°	846
35°	602
45°	369
55°	212
65°	106
75°	55
85°	10
90°	0

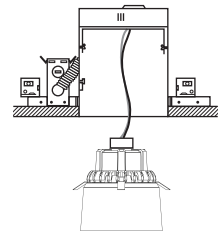
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fix
0-30	424	42.42%	42.42%
0-40	629	62.89%	62.89%
0-60	897	89.71%	89.71%
0-90	1000	100%	100%

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

Installation

- Designed to easily install in standard 6" housings from Cree and other manufacturers.*
- Quick install system utilizes a unique retention feature. Simply attach socket to LR6-18L. 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.

Application Reference

Open Space					
Spacing	Lumens	Wattage	LPW	w/ft²	Average FC
6 x 6	1800	20	90	0.56	50
8 x 8				0.31	27
10 x 10				0.20	18

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

Corridor					
Spacing	Lumens	Wattage	LPW	w/ft²	Average FC
6' on Center	1800	20	90	0.53	25
8' on Center				0.40	18
10' on Center				0.33	16

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

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