

# LR6-18L

LR6-18L LED Downlight - 6" (152mm)

## 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™ is available in warm or neutral 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.

**Applications:** Commercial new construction and retrofit

## Performance Summary

Utilizes Cree TrueWhite® Technology
<b>Delivered Light Output:</b> 1,800 lumens
<b>Input Power:</b> 20 watts
<b>CRI:</b> 90
<b>CCT:</b> 3000K, 3500K, 4000K
<b>Limited Warranty*:</b> 10 years
<b>Lifetime:</b> Designed to last 50,000 hours
<b>Dimming:</b> Dimmable to 5%
<b>Suitable for non-insulated ceilings only</b>

\* See <http://lighting.cree.com/warranty> for warranty terms

## Accessories

<b>Field-Installed</b>
<b>GU24 Adapter</b> - Adapter to convert existing housings from Edison socket to GU24

## Housing & Trims

Reference Housing & Trim documents for more details.

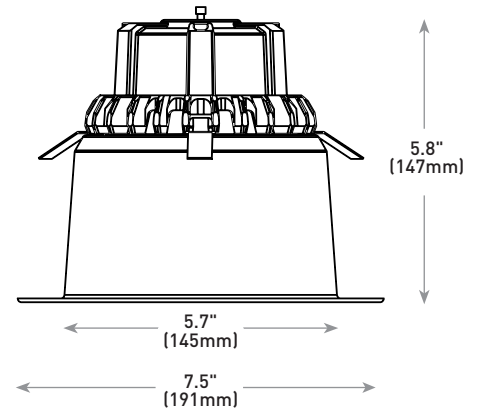
Housings		
<b>120V GU24 Base Recessed Housings</b> H6-GU24 - Architectural new construction RC6-GU24 - New construction RR6-GU24 - Retrofit <b>120V GU24 Base Recessed "Pan" Conversion Kit</b> C6-GU24 C6-120V-LSA - Less socket adapter <b>120V GU24 Base Surface Mount Housings</b> SC6-GU24 - Textured white finish SC6-BL-GU24 - Textured black finish	<b>120V GU24 Base Cord Mount Housings</b> SC6-CM-GU24 - Textured white finish SC6-CM-BL-GU24 - Textured black finish <b>120V GU24 Base Wall Mount Housings</b> SC6-WM-GU24 - Textured white finish <b>277V Recessed Housings</b> H6-277V - Architectural new construction RC6-277V - New construction RR6-277V - Retrofit	<b>277V Recessed "Pan" Conversion Kit</b> C6-277V-LSA - Less socket adapter <b>277V Surface Mount Housings</b> SC6-277V - Textured white finish SC6-BL-277V - Textured black finish <b>277V Cord Mount Housings</b> SC6-CM-277V - Textured white finish SC6-CM-BL-277V - Textured black finish <b>277V Wall Mount Housings</b> SC6-WM-277V - Textured white finish

Trims		
<b>LT6A-DR</b> Diffuse anodized reflector w/white flange <b>LT6AW-DR</b> Wheat diffuse anodized reflector w/white flange	<b>LT6AP-DR</b> Pewter diffuse anodized reflector w/white flange <b>LT6AB-DR</b> Black anodized reflector w/white flange	<b>LT6WH-DR</b> Smooth white painted reflector/flange <b>LT6BB-DR</b> Flat black reflector/flange

## 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	30K 3000K 35K 3500K 40K 4000K	120V 120 Volts - GU24 Base	A Version	DR Deep Recess - 20° Shield



US: [lighting.cree.com](http://lighting.cree.com)



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Canada: [lighting.cree.com/canada](http://lighting.cree.com/canada)



T (800) 473-1234 F (800) 890-7507

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**Product Specifications**

**CREE TRUEWHITE® TECHNOLOGY**

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that 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**

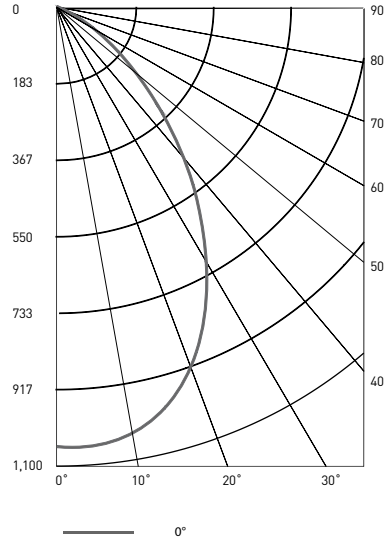
- Integral, high-efficiency driver and power supply
- **Power Factor:** > 0.9
- **Input Voltage:** 120V, 60Hz
- Dimmable to 5% with certain incandescent dimmers
- Use only lighting controls with neutral connection or controls intended for use with LED luminaires
- Reference <https://www.creelink.com/exLink.asp?111913560S88R78126360807> for recommended dimmers

**REGULATORY & VOLUNTARY QUALIFICATIONS**

- cULus Listed
- Exceeds California Title-24 high efficacy luminaire requirements
- Suitable for damp locations
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

**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

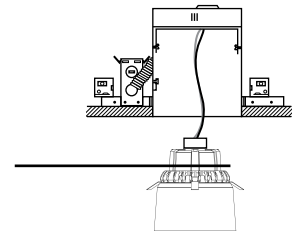
Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fix
0-30	424	42.42%	42.42%
0-40	629	62.89%	62.89%
0-60	897	89.71%	89.71%
0-90	1000	100%	100%

Reference <http://lighting.cree.com/products/indoor/retrofit-downlights/lr6-series> for detailed photometric data

**Installation**

- Designed to easily install in standard 6" (152mm) 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](http://www.cree.com/lighting) for detailed installation instructions



**Application Reference**

Open Space					
Spacing	Lumens	Wattage	LPW	w/ft²	Average FC
4 x 4	1800	20	90	0.56	50
6 x 6				0.31	27
8 x 8				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
4' on Center	1800	20	90	0.53	25
6' on Center				0.40	18
8' on Center				0.33	16

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