

CATALOG NUMBER:

TYPE:

NOTES:

LR6 6" Downlight Module

Product Description

The LR6 is a downlight module for new construction and retrofit that installs easily in most standard six inch recessed IC or non-IC housings. The LR6 generates white light with LED's in a new way that enables an unprecedented combination of light output, high efficacy, beautiful color, and affordability. U.S. Patent # 7,213,940 issued. Numerous patents pending.

Performance Summary

- Nominal delivered light output = 650 lumens
- Nominal input power = 12 Watts
- CRI = 92
- CCT = 2700k or 3500k
- Dimmable to 20%

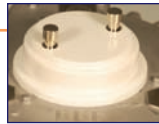
Ordering Information

LR6 – 120V, Incandescent Color (2700K), Edison Base (STANDARD)

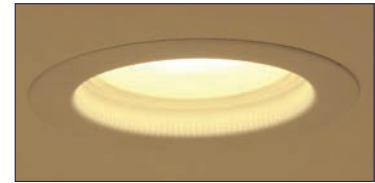
LR6-GU24 – 120V, Incandescent Color (2700K), GU24 Base

LR6C – 120V, Neutral Color (3500K), Edison Base

LR6C-GU24 – 120V, Neutral Color (3500K), GU24 Base



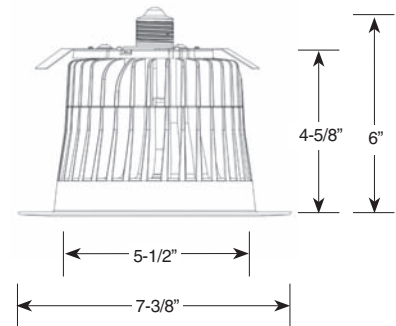
LR6-GU24



LR6



LR6C



Accessories Compatible with all LR6 Models

- LT6A** - Diffuse anodized trim
- LT6AW** - Wheat diffuse anodized trim
- LT6AP** - Pewter diffuse anodized trim
- LT6AB** - Black diffuse anodized trim
- LT6WH** - Smooth white trim
- LT6AG** - Graphite diffuse anodized trim
- LT6AM** - Mocha diffuse anodized trim

LT6A



LR6 6" Downlight Module

Specifications and Features

Light Emitting Diodes

- Proprietary technology delivers high quality white light
- Designed for 50,000 hours lifetime - when light output drops below 70% of initial output
- Active color management system maintains color consistency

Construction

- Durable die-cast aluminum upper housing, lower housing, and upper cover
- Integrated thermal management system conducts heat away from LED and transfers it to the surrounding environment. LED junction temperatures stay below specified maximums when installed in attic insulation with temperatures exceeding 60 degrees Celsius.

Optical System

- Proprietary optical system utilizes a unique combination of reflective and refractive optical components to achieve a uniform, comfortable appearance. Pixelation and direct view of uncomfortable LED's is eliminated.
- White Lower Reflector balances brightness of refractor with the ceiling to create comfortable high-angle appearance. Works with refractor to deliver an optimized distribution that illuminates walls and vertical surfaces increasing the sense of spaciousness.

Electrical System

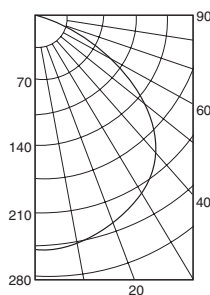
- Integral, high efficiency driver and power supply. Power factor > 0.95 Input voltage = 120V, 60Hz
- Dimmable to 20% with some incandescent dimmers (reference www.creeLLS.com for recommended dimmers)

Regulatory

- Tested and certified to UL standards. Suitable for damp locations.
- Utilize GU-24 base for new construction projects in California or other areas where high efficacy line voltage sockets are required
- Exceeds California Title-24 high efficacy luminaire requirements

Photometry

LR6 – 120V, Incandescent Color (2700K), Edison Base (STANDARD)
Lighting Sciences Inc. Certified Test #22226



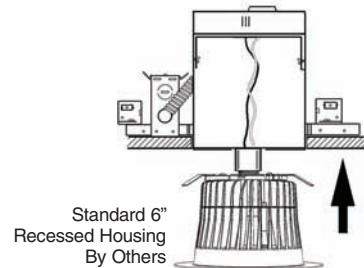
| Intensity (Candlepower) Summary | |
|---------------------------------|---------|
| ANGLE | MEAN CP |
| 0° | 249 |
| 5° | 248 |
| 15° | 242 |
| 25° | 228 |
| 35° | 203 |
| 45° | 165 |
| 55° | 115 |
| 65° | 62 |
| 75° | 24 |
| 85° | 6 |
| 90° | 0 |

Zonal Lumen Summary

| ZONE | LUMENS | %LAMP | %FIX |
|---------|--------|--------|--------|
| 0°- 30° | 196 | 30.39 | 30.39 |
| 0°- 40° | 323 | 49.94 | 49.94 |
| 0°- 60° | 553 | 85.35 | 85.35 |
| 0°- 90° | 647 | 100.00 | 100.00 |

Installation

- Designed to easily install in standard 6" downlight housings from the majority of manufacturers
- Quick install system utilizes a unique retention feature. Attach socket to module. Adjust module to ready position and slide into housing. Rotate module 1/4 turn to the right to lock in place.
- Reference www.creeLLS.com for housing compatibility



Application Comparison

Kitchen

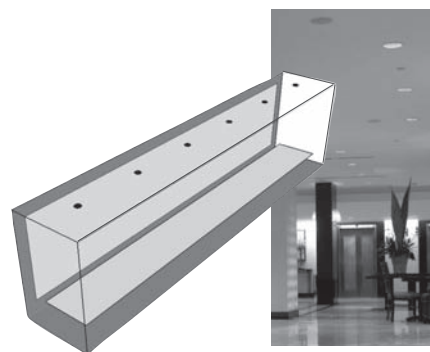
| | 6' x 6' Spacing | | 5' x 5' Spacing | | 4' x 4' Spacing | |
|------------------------|-----------------------|------------------|-----------------------|------------------|-----------------------|------------------|
| | Workplane Illuminance | Wall Illuminance | Workplane Illuminance | Wall Illuminance | Workplane Illuminance | Wall Illuminance |
| LR6 | 15.1 | 8.0 | 19.9 | 10.7 | 27.2 | 15.4 |
| 65W BR30 White Baffle | 14.0 | 6.3 | 18.7 | 8.6 | 26.1 | 12.6 |
| 18W CFL White Baffle | 15.5 | 7.9 | 20.8 | 10.6 | 28.7 | 15.4 |
| 50W PAR30 White Baffle | 16.7 | 4.1 | 22.9 | 5.7 | 34.1 | 8.6 |

Notes:

- Average initial illuminance in footcandles, reflectances = 80/50/30, workplane height = 2.5', ceiling height = 9'
- Nine lights per room. Room sizes = 18'x18', 15'x15', 12'x12'



Hallway



| | 6' Spacing | | 8' Spacing | | 10' Spacing | |
|------------------------|-----------------------|------------------|-----------------------|------------------|-----------------------|------------------|
| | Workplane Illuminance | Wall Illuminance | Workplane Illuminance | Wall Illuminance | Workplane Illuminance | Wall Illuminance |
| LR6 | 12.6 | 6.8 | 9.6 | 5.2 | 7.6 | 4.0 |
| 65W BR30 White Baffle | 12.0 | 5.3 | 9.1 | 4.0 | 7.2 | 3.2 |
| 18W CFL White Baffle | 13.0 | 6.6 | 10.1 | 5.1 | 7.9 | 4.0 |
| 50W PAR30 White Baffle | 14.6 | 3.1 | 11.2 | 2.6 | 9.1 | 1.8 |

Notes:

- Average initial illuminance in footcandles, reflectances = 80/50/30, workplane height = 2.5', ceiling height = 9'
- Six lights per hall, width = 6'



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