

**LLF**™  
Light Reinvented.™

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, energy efficiency, 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

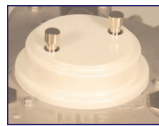
## Ordering Information

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

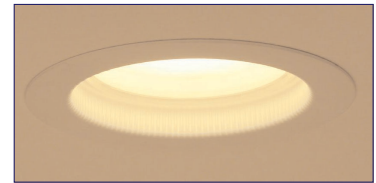
**LR6-GU24** – 120V, Incandescent Color (2700K), GU24 Base

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

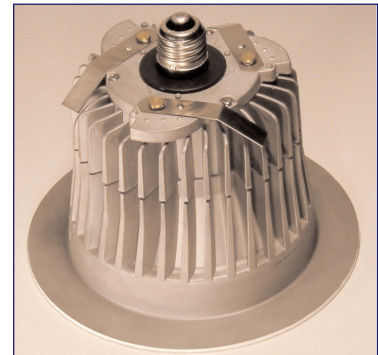
**LR6C-GU24** – 120V, Neutral Color (3500K), GU24 Base



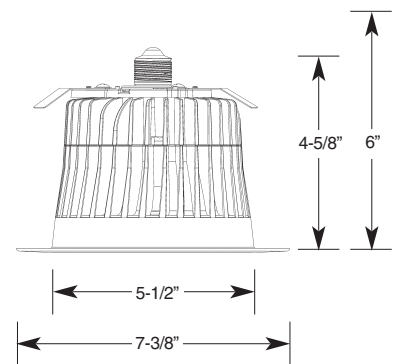
LR6-GU24



LR6



LR6C



## Accessories Compatible with all LR6 Models

- LE6 - Adjustable eyeball trim
- LT6A - Anodized trim
- LT6AW - Wheat anodized trim
- LT6AP - Pewter anodized trim
- LT6AB - Black anodized trim
- LT6WH - Smooth white trim

LE6



LT6



# 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

### 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

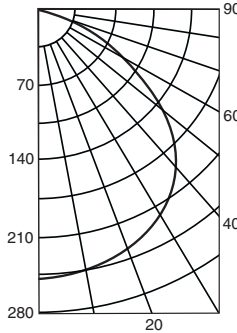
- Integral, high efficiency driver and power supply. Power factor > 0.90 Input voltage = 120V,60Hz
- Controllable with some incandescent forward phase dimmers (reference [www.llfinc.com](http://www.llfinc.com) for recommended dimmers)

### Regulatory

- Tested and certified to UL standards.
- 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

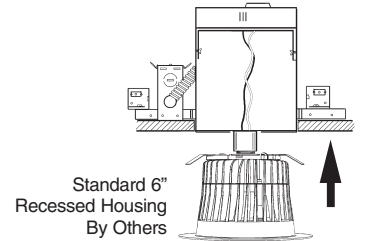


Intensity (Candlepower) Summary	
ANGLE	MEAN CP
0°	249
5°	248
15°	242
25°	228
35°	203
45°	165
55°	115
65°	62
75°	24
85°	6
90°	0

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.LLFinc.com](http://www.LLFinc.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

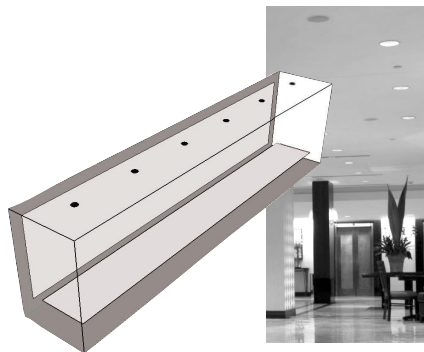
Notes:  
- Average initial illuminance in footcandles, reflectances = 80/50/30, workplane height = 2.5'  
- Nine lights per room. Room sizes = 18'x18', 15'x15', 12'x12'



### 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'  
- Six lights per hall, width = 6'



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