

# 6" Recessed Downlight

# LR6-277V

## Product Description

The LR6-277V is a downlight module for new construction. The LR6-277V downlight generates white light with LEDs 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

- Utilizes Cree TrueWhite® Technology
- Delivered Light Output = 650 lumens
- Input Power = 10.5 Watts
- CRI = 92
- CCT = 2700K or 3500K
- Not Dimmable
- Five Year Warranty

## Ordering Information Example: H6-277V, LR6-277V

Must be used with Cree H6-277V Housing (See page 40)

### Housings:

- H6-277V - New construction

### Light Engine:

- LR6-277V - 277V, Incandescent Color (2700K)
- LR6C-277V - 277V, Neutral Color (3500K)

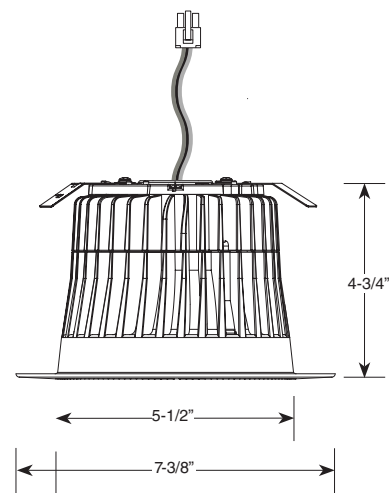
## Accessories - Reference accessory product information sheets for more detail

### Accessory Trims

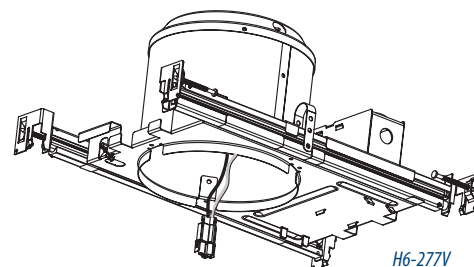
- LT6A - Diffuse anodized
- LT6AW - Wheat diffuse anodized
- LT6AP - Pewter diffuse anodized
- LT6AB - Black diffuse anodized
- LT6WH - Smooth white
- LT6AG - Graphite diffuse anodized



LR6-277V



LR6C-277V



H6-277V

# LR6-277V

## 6" Recessed Downlight

### Product Information

#### Cree TrueWhite® Technology

- A better way to generate white light that utilizes a patented mixture of unsaturated yellow and saturated red LEDs.
- Tuned to optimal color point before shipment.
- Color management system maintains color consistency over time and temperature.
- Designed to last 50,000 hours and maintain at least 70% of initial lumen output.

#### Construction

- Durable die-cast aluminum upper housing, lower housing, and upper cover.
- Integrated thermal management system conducts heat away from LEDs and transfers it to the surrounding environment. LED junction temperatures stay below specified maximums even 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 unshielded LEDs are 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 perception of spaciousness.

#### Electrical System

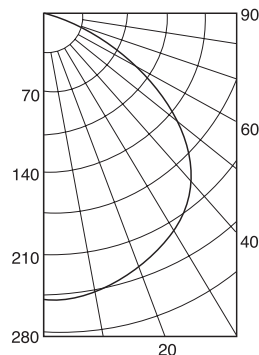
- Integral, high efficiency driver and power supply.
- Power factor > 0.9
- Input voltage = 277V, 60Hz.
- Not Dimmable

#### Regulatory and Voluntary Qualifications

- cULus Listed®. Suitable for damp locations.

### Photometry

LR6-277V  
Lighting Sciences Inc. Certified Test #22226



#### Intensity (Candlepower) Summary

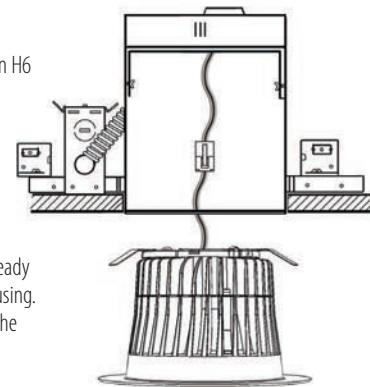
ANGLE	MEAN CP
0°	249
5°	248
15°	242
25°	228
35°	203
45°	165
55°	115
65°	62
75°	24
85°	6
90°	0

#### Zonal Lumen Summary

ZONE	LUMENS	%LAMP	%FIX
0° - 30°	197	30.39	30.39
0° - 40°	325	49.94	49.94
0° - 60°	556	85.35	85.35
0° - 90°	650	100.00	100.00

### Installation

- Designed to easily install in H6 downlight housings from Cree.
- Quick install system utilizes a unique retention feature. Simply attach socket to LR6-277V. Move light to ready position and slide into housing. Rotate module ¼ turn to the right to lock in place.



### Application Comparison

#### Room

	6' x 6' Spacing		5' x 5' Spacing		4' x 4' Spacing	
	Workplane Illuminance	Wall Illuminance	Workplane Illuminance	Wall Illuminance	Workplane Illuminance	Wall Illuminance
LR6-277V	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 = 18x18', 15x15', 12x12'

#### Hallway

	6' Spacing		8' Spacing		10' Spacing	
	Workplane Illuminance	Wall Illuminance	Workplane Illuminance	Wall Illuminance	Workplane Illuminance	Wall Illuminance
LR6-277V	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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