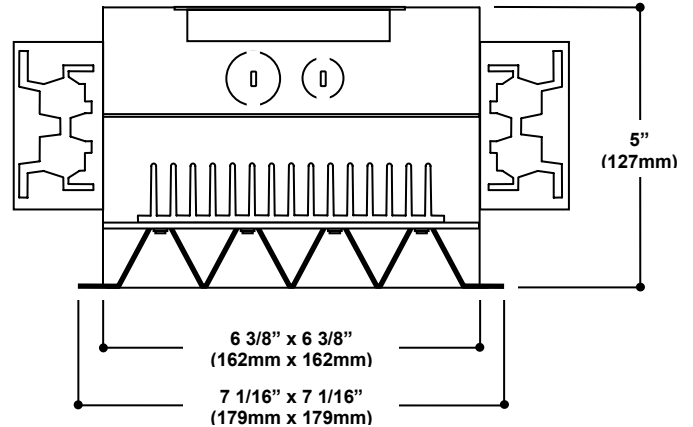


# 6" Square LED Downlight – High Performance

## FEATURES

- The Gallium GS6-CXRE features sixteen Cree XR-E power LEDs providing unsurpassed performance:
  - LED efficacy up to 93 lumens per watt - 20% higher than the most efficient compact fluorescent lamps.
  - Hemispherical light distribution providing high optical efficiency, resulting in luminaire efficacy up to 65 lumens per watt.
  - 50,000 hour service life, equating to 25 years when operated during normal business hours.
- 1.5" (38mm) LED spacing and heavy duty heat sink maintain junction temperature below 75°C at 25°C ambient (well below Cree's limit of 150°C) to maximize efficacy and prolong life.
- Drivers and printed circuit board are accessible from below the fixture. A quick disconnect plug simplifies board replacement.
- Optional dimming drivers provide full range (0-100%) flicker-free dimming with standard incandescent dimmers.
- The 18 gauge steel housing is compatible with ceiling materials up to 1" (25mm) thick. Mounting bars included.
- Standard 16-cell reflector is constructed of Alanod 685 G3 grade aluminum and provides a 45° shielding angle to eliminate glare.
- The fixture is UL listed for damp locations and approved for eight #12 AWG conductors (four in, four out) feed-through 75°C branch wiring.
- Rated for ambient temperatures of -40°C (-40°F) to 60°C (140°F).
- Environmentally-friendly, mercury-free technology.
- Fixture manufactured in USA. 5-year warranty on all parts.



## APPLICATIONS

The GS6-CXRE delivers more light than many 32-watt compact fluorescent downlights, yet consumes only 21 watts. Ideal for use with occupancy sensors since LED life is unaffected by frequent on/off cycling.

## ORDERING INFORMATION

### Housing

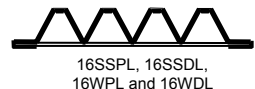
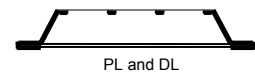
Prefix	Shape	Size	Part	Driver	LEDs	LED Model	LED Type**
<b>G</b>	<b>S</b>	<b>6</b>	<b>H</b>	<b>-350</b>	<b>16</b>	<b>CXRE</b>	
G=Gallium S=Square 6=6" H=Housing				120-350=120V, 350mA 277-350=277V, 350mA 120D-350=120V Dimming* 277D-350=277V Dimming*	16=16 LEDs	CXRE=Cree XR-E Series	27-1180=2700K, 1180 LED lumens 30-1290=3000K, 1290 LED lumens 35-1400=3500K, 1400 LED lumens 40-1400=4000K, 1400 LED lumens 50-1710=5000K, 1710 LED lumens

### Trim

Prefix	Shape	Size	Part	Style	Flange
<b>G</b>	<b>S</b>	<b>6</b>	<b>T</b>		<b>1</b>
G=Gallium S=Square 6=6" T=Trim				16SS=16 cell semi-specular 16W=16 cell white PL=Prismatic lens DL=Diffuse lens 16SSPL=16 cell reflector with prismatic lens 16SSDL=16 cell reflector with diffuse lens 16WPL=16 cell white reflector with prismatic lens 16WDL=16 cell white reflector with diffuse lens	1=Overlap flange

### Accessories

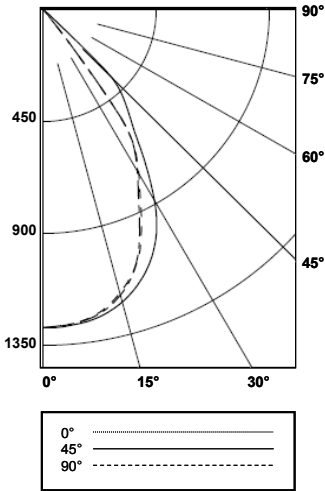
Replacement LED boards:  
**GS6B-16-CXRE**-[LED Type]



\* Consult factory for availability.

# 6" Square LED Downlight – High Performance

## PHOTOMETRIC DATA



Spacing Criteria:  
0° - 1.0, 90° - 1.0

### CANDLEPOWER SUMMARY

Angle	0°	45°	90°
0°	1,279	1,279	1,279
10°	1,242	1,257	1,246
20°	1,086	1,150	1,084
30°	761	886	751
40°	41	522	39
50°	8	31	8
60°	3	2	3
70°	1	1	1
80°	0	0	0
90°	0	0	0

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0° - 30°	907	67.2
0° - 40°	1,279	94.8
0° - 60°	1,349	99.9
0° - 90°	1,350	100.0

### Notes

1. Source: Independent Testing Laboratories Test Report 59900.
2. Photometric test performed with Cree XR-E LEDs (XRE WHT-L1-0000-00D01).
3. The test was performed using the absolute method, i.e. photometric performance is reported as measured, without adjustment for LED manufacturer's lumen output ratings.
4. Photometric data are available in electronic IES format at [www.galliumlighting.com](http://www.galliumlighting.com).

### LUMINANCE DATA (cd/m<sup>2</sup>)

Angle	0°	45°	90°
45°	1,016	24,832	953
55°	313	313	313
65°	106	106	106
75°	0	0	0
85°	0	0	0

## LED DATA

Gallium LED Ordering Code	Nominal Color Temp.	Color Temperature Range	Color Rendering Index	LED Lumens <sup>1</sup>	LED Array Lumens	LED Lumens Per Watt <sup>2</sup>	Luminaire Lumens <sup>3</sup>	Luminaire Lumens Per Watt <sup>4</sup>	Photometric Data Adjustment Multiplier <sup>5</sup>
27-1180	2700K	2600-2900K	80	74	1,180	64	934	45	69%
30-1290	3000K	2900-3300K	80	81	1,290	70	1,022	49	76%
35-1400	3500K	3300-3700K	80	87	1,400	76	1,105	54	82%
40-1400	4000K	3700-4300K	80	87	1,400	76	1,105	54	82%
50-1710	5000K	4800-6000K	75	107	1,710	93	1,350	65	100%

1. Minimum initial lumens @ 350mA per Cree.
2. Minimum initial lumens divided by LED input wattage.
3. Based on actual measured output of test luminaire (ITL test report 59900). Other LED options prorated using Cree's rated lumen output.

4. Total luminaire efficacy, i.e., lumens delivered from the luminaire divided by luminaire input wattage. This includes the effects of driver losses, optical losses and thermal losses.
5. Use these factors to adjust the photometric data from ITL report 59900 for the specified LED.

## ELECTRICAL DATA

Driver	Description	LED Drive Current	Input Frequency	Input Current @120V	Input Power <sup>1</sup>	Total Harmonic Distortion	Power Factor
120-350	120V	350mA	60Hz	0.17A	21W	<20%	>0.90
277-350	277V	350mA	60Hz	0.07A	21W	<20%	>0.90
120D-350 <sup>2</sup>	120V Dimming	350mA	60Hz	0.17A	21W	<20%	>0.90
277D-350 <sup>3</sup>	277V Dimming	350mA	60Hz	0.07A	21W	<20%	>0.90

1. The fixture consumes no power when switched off.
2. Compatible with Lutron Nova N-600 dimmer or equivalent.
3. Compatible with Lutron Nova T NTLV-600-277 or equivalent.