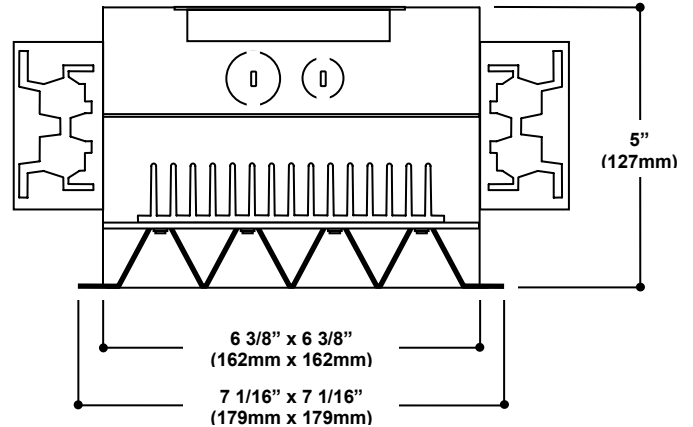


# 6" Square - Nichia NS6 Power LEDs

## FEATURES

- The Gallium GS6-NS6 features sixteen Nichia Power LEDs providing impressive performance:
  - LED array efficacy of up to 59 lumens per watt.
  - Luminaire efficacy of up to 35 lumens per watt.
  - Color rendering index up to 92.
  - 40,000 hour service life, equating to 20 years when operated during normal business hours.
- 1.5" (38mm) LED spacing and heavy duty heat sink maintain junction temperature below 85°C at 25°C ambient (well below Nichia's limit of 120°C) to maximize efficacy and prolong life.
- Electronic drivers provide a constant 350mA current to the LEDs to provide optimum operation and maximum longevity of the LEDs.
- 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, and operate with standard incandescent dimmers.
- The 18 gauge steel housing is compatible with ceiling materials up to 1" (25mm) thick.
- Standard 16-cell reflector is constructed of Alanod 685 G3 grade aluminum and provides a 45° shielding angle.
- The fixture is UL listed for indoor applications, damp locations, insulation contact (IC), and approved for eight #12 AWG conductors (four in, four out) feed-through 75°C branch wiring.
- Environmentally friendly mercury-free technology.
- Fixture manufactured in USA. 5-year warranty on all parts.



## APPLICATIONS

Suitable for commercial applications (such as private offices, conference rooms, circulation spaces, lobbies and retail spaces) as well as residential applications (such as kitchens, bathrooms and media centers). 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>16</b>	<b>NS6x083</b>	
G=Gallium	S=Square	6=6"	H=Housing	120=120V 277=277V 120D=120V Dimming* 277D=277V Dimming*	16=16 LEDs	NS6x083=Nichia NS6x083 series	35-930H=3500K, 930 lumens, 92 CRI 40-930H=4000K, 930 lumens, 92 CRI

### 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 overlay 16SSDL=16 cell reflector with diffuse lens overlay 16WPL=16 cell white reflector with prismatic lens overlay 16WDL=16 cell white reflector with diffuse lens overlay	1=Overlap flange



### Accessories

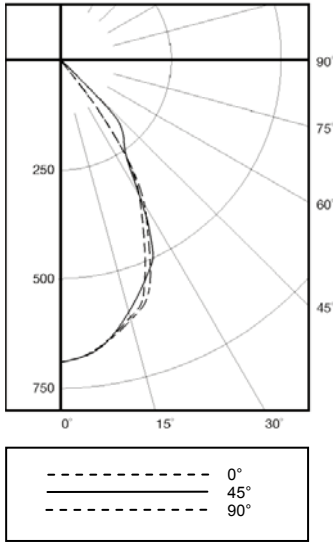
Replacement LED boards:  
**GS6B-16-NS6x083**-[LED Type]

Mounting bars:  
**GBH-1246** (set of 6 pairs) for commercial construction  
**GBH-1287** (set of 6 pairs) for residential/wood construction

\* Consult factory for availability.  
 \*\*Consult factory for other Nichia LED options.

# 6" Square - Nichia NS6 LEDs

## PHOTOMETRIC DATA



### CANDLEPOWER SUMMARY

Angle	0°	45°	90°
0°	689	689	689
10°	645	646	650
20°	556	547	574
30°	372	361	381
40°	12	221	39
50°	3	4	3
60°	1	1	1
70°	0	0	0
80°	0	0	0
90°	0	0	0

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0° - 30°	450	70.2
0° - 40°	610	95.0
0° - 60°	641	99.8
0° - 90°	642	100.0

### Notes

1. Source: Independent Testing Laboratories Test Report 57889.
2. Photometric test performed with Nichia NS6L083-D1P14M LEDs.
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°	249	9075	311
55°	77	153	153
65°	104	104	104
75°	0	0	0
85°	0	0	0

Spacing Criteria:  
0° - 0.9, 90° - 1.0

## 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>
35-930H	3500K	3200K-3800K	92	58	930	42	642	25	100%
40-930H	4000K	3800K-4600K	92	58	930	42	642	25	100%

1. Minimum initial lumens @ 350mA per Nichia.
2. Minimum initial lumens divided by LED input wattage.
3. Based on actual measured output of test luminaire (ITL test report 57889). Other LED options prorated using Nichia's rated lumen output.
4. Represents 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 57889 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	120V	350mA	60Hz	0.24A	26W	<20%	>0.90
277	277V	350mA	60Hz	0.09A	26W	<20%	>0.90
120D <sup>2</sup>	120V Dimming	350mA	60Hz	0.24A	26W	<20%	>0.90
277D <sup>3</sup>	277V Dimming	350mA	60Hz	0.09A	26W	<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.