

Catalog #	Type
Project	
Notes	Date
Prepared by	



# 6"x6" LED/F-Class GEN V

LED 6"x6" Lensed Square Downlight, non-IC, 750-7000 Lumens

## Description

6 inch LED recessed, non-IC luminaire with medium beam spread, featuring superior thermal management with low profile projection into the plenum. Light engine features LED module and LED driver with outputs ranging from 750 to 7000 lumens and color temperatures from 2700 to 5000K. A wide selection of driver, reflector finishes and emergency battery back-up options available.

## Specifications and Features

### Construction

Galvanized steel mounting frame with integral junction box featuring hinged access covers and spring retaining latches; (3) 3/4" knockouts allowing straight conduit runs. Listed for (8) #12 AWG (4 in, 4 out), 90° C conductors and feed through branch wiring. Driver, LED module and optional battery backup accessible from below ceiling. Reflectors are held in place by friction clips, securing reflector flange tightly to finished ceiling.

Vertically adjustable mounting brackets, accessible from below, accept a variety of mounting bars. Provided as standard with rigid formed, galvanized bar hangers which incorporating joist positioning tabs, integral nails, auxiliary nail holes and T-bar slots. Suitable for joist spacing from 12 to 24".

### Light Engine

LED module is DLM Flex, producing up to 107 lumens per watt. Output ranges from 750 to 7000 lumens with (4) standard color temperatures. Color variations are less than 3-step MacAdam ellipses and have greater than 80 CRI at all color temperatures. Rated life in excess of 50,000 hours at 70% of lumen output (L70≥50,000 hours). Standard driver is Advance Xitanium featuring auto reset thermal protection and 0-10V dimming to 1% of initial light output with flicker

free operation. Optional Triac (phase control) and Lutron Hi-Lume 2 and 3 wire dimming drivers available.

### Optics

LED module features soft white acrylic window, obscuring LED's, preventing pixilation and producing uniform brightness. Reflectors are a one-piece spinning from heavy gauge, high purity aluminum and are self-flanged. Reflectors are available in both Alzak® and painted finishes, producing a uniform distribution free of streaks, striations or hotspots while also providing superior cutoff and brightness control. Standard distribution is medium with lens options are available including glass and polycarbonate materials with a variety of optical properties.

### Controls

Compatible with a wide range of controls systems depending on driver selected. Standard driver features SensorReady technology for simple 2 wire connection to motion and daylight harvesting sensors. An open source architecture allows for the use of a wide variety of sensors and the ability to control individual or grouped luminaires through wireless communications. Contact factory for option controls and sensors.

### Listings

Manufactured and Listed to UL 1598, ETL and CSA standards. Non-IC rated. Insulation to be kept 3" from luminaire. Suitable for Damp Locations; Wet locations under covered ceiling. All photometric tests performed by an accredited NVLP facility and in accordance to IESNA LM-79-2008 testing procedures.

### Warranty

5-year warranty on LED components.

## Ordering Information

EXAMPLE: SQ66VEFLED1-4030K-LSQ6611P-ECL

Series/Source	Voltage	Lumens	Kelvin	Reflector	Lens	Finish	Options
SQ66VEFLED 6"x6" enclosed, square non-IC	U <sup>1</sup> - 120V-277V 1 - 120 Volts 2 - 277 Volts	-07 <sup>8</sup> - 750 -11 <sup>8</sup> - 1100 -15 <sup>8</sup> - 1500 -20 <sup>8</sup> - 2000 -30 - 3000 -40 <sup>3</sup> - 4000 -50 <sup>3,4</sup> - 5000 -60 <sup>2,3,4</sup> - 6000 -70 <sup>2,3,4</sup> - 7000	27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 50K - 5000K TWC <sup>9</sup> - 2700K-5000K	LSQ661(X)	1 1P 1FR 1FRP 4 4P 2D 4D 6D 8D	SCL SGC WHT	DL-2 <sup>2</sup> DL-3 <sup>3</sup> LDE1 <sup>3</sup> TDM <sup>4</sup> DMX <sup>5</sup> DTD <sup>6</sup> EM-17 <sup>7</sup> EM-20 <sup>8</sup> HCR <sup>10</sup> PF

### Reflector Finish Options

SCL - Specular Clear  
SGC - Soft Glow Clear  
WHT - White Painted

All trims supplied standard with white painted flange.

### Kelvin Options

TWC<sup>9</sup> - Tunable white color 2700K - 5000K

### Lens Options

1 - Clear Glass  
1P - Clear Polycarbonate  
1FR - Frosted Glass  
1FRP - Frosted Polycarbonate  
4 - Prismatic Glass  
4P - Prismatic Acrylic

### Special Optics

2D - Optical Diffuser - 20°  
4D - Optical Diffuser - 40°  
6D - Optical Diffuser - 60°  
8D - Optical Diffuser - 80°

### Options

DL-2<sup>2</sup> - Lutron 2 wire Hi-Lume Dimming Driver.  
DL-3<sup>3</sup> - Lutron 3 wire Hi-Lume Dimming Driver.  
LDE1<sup>3</sup> - Lutron EcoSystem Fade-to-Black™.  
TDM<sup>4</sup> - Triac Dimming Driver.  
DMX<sup>5</sup> - DMX Dimming Driver with RDM.  
DTD<sup>6</sup> - 0.1% dimming.  
EM-17<sup>7</sup> - Emergency battery back-up. Remote test button & indicator Light.

EM-20<sup>8</sup> - Emergency battery back-up. Remote test button & indicator Light.  
HCR<sup>10</sup> - 90 CRI (minimum).  
PF - Polished Flange.

▲ Consultate Page OP-1 for additional housing and trim options.  
▲ Consultate Page LED-DD for decorative trim options.

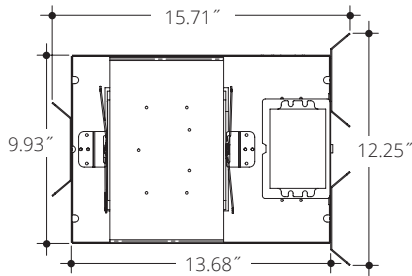
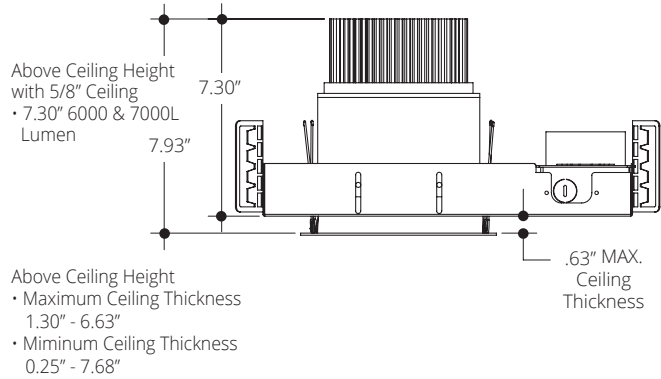
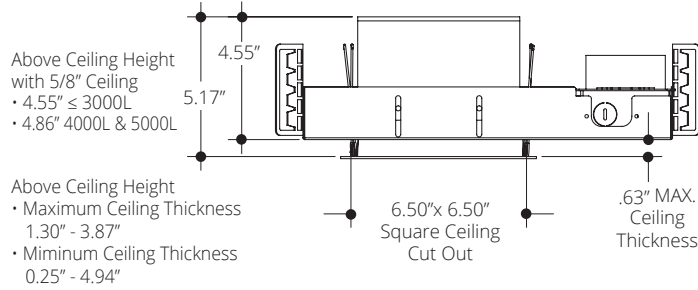
### Notes

- 1 - Must provide voltage when optional drivers are selected.
- 2 - DL-2 Not available above 3000 Lumens.
- 3 - DL-3 & LDE1 not available above 4000 Lumens.
- 4 - TDM driver not available above 5000 Lumens.
- 5 - DMX not available above 6000 Lumens.
- 6 - DTD not available above 4000 Lumens.
- 7 - EM17 for use up to 5000 Lumens.
- 8 - EM20 for use above 5000 Lumens.
- 9 - Tunable white not available above 2000 Lumens and not available with other options.
- 10 - HCR not available above 2000 Lumens.

Vantage reserves the right to change components, finishes or design details in any manner which does not alter the installed appearance or reduce performance and intended function.

# LED 6"x6" Lensed Square Downlight, non-IC, 750-7000 Lumens

Ceiling Cut Out 6.50" x 6.50"



Lumens	Wattage*
750	9.4
1100	15.4
1500	21.6
2000	27.2
3000	33.2
4000	45.6
5000	58.5
6000	60.1
7000	85.3

*All measured at 3000K*  
*\*Actual Wattage/Lumens may vary.*



## Photometrics

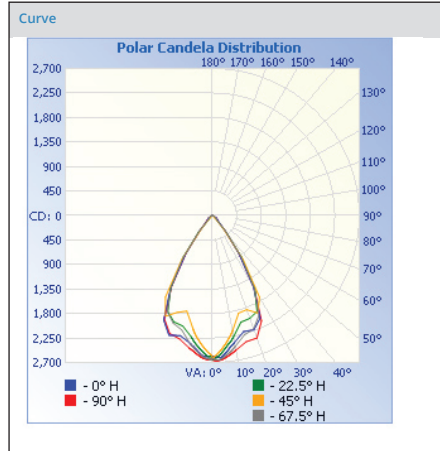
Test Number  
PHM-RPT-180223-04

Model  
SQ66VEFLEDU-3035K

Lumens  
2571.65

Efficacy  
69.90

SC  
0.9960



Cone of Light

	Center Beam fc	Beam Width	
1.7	904	2.1	2.1
3.3	240	4.0	4.0
5.0	104	6.1	6.1
6.7	58.2	8.2	8.2
8.3	37.9	10.1	10.1
10.0	26.1	12.2	12.2

Candela Table

Degrees Vertical	Candela
0.0	2612
1.0	2589
3.0	2607
5.0	2556
7.0	2470
9.0	2398
10.0	2360
15.0	2206
20.0	2230
25.0	2077
30.5	1509
35.5	842
40.5	369
45.0	173
50.0	118
55.0	101
60.5	85
65.5	41
70.0	14
75.0	10
80.0	9
85.0	8
90.0	6
100.0	6

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1719.7	66.9
0-40	2295.3	89.3
0-60	2480.0	96.4
60-90	46.3	1.8
70-100	26.4	1
90-120	19.6	0.8
0-90	2626.3	98.2
90-180	45.3	1.8
0-180	2571.6	100

VANTAGE LIGHTING F-CLASS GEN V Multipliers

CRI	MULTIPLIER	KELVIN	MULTIPLIER	FINISH	MULTIPLIER
80	1	5000K	1.098	SCL	1
90	0.81	4000K	1.035	SGC	0.95
		3500K	1	WHT	0.87
		3000K	0.975		
		2700K	0.939		