

56W 120V AC 204mm Square LED Module

AC LED Technology by Lynk Labs Compatible with Phase-cut Dimmers, Warm Dimming Option 5 yr. Warranty

Specifications

Drive Voltage: 120Vac (100-132V Min-Max)

AC Current: 460 mA @25°C typical; 520 mA max

Power Dissipation: 56W typical; 65W max

Power Factor: >0.97 THD: <20%

Life: 50,000 Hrs, if used as specified

 Luminous Flux:
 3838 lm @3000K

 Luminous Efficacy:
 70 LPW ±10% @3000K

Viewing Angle: 120 deg

Operating Temp: -25°C to +100°C Storage Temp: -40°C to +100°C

Soldering Temp: 370°C

Features

- · Direct 120V line connection
- Compatible with most existing leading edge or trailing edge phase cut AC Dimmers
- · High Efficiency
- · Significant Energy Savings
- · Reliable, fast and easy
- · Durable Light Source
- · Long Operating Life

Applications

• Highbay/Midbay

• Indoor/Outdoor General Line-voltage Illumination

commercial, hospitality

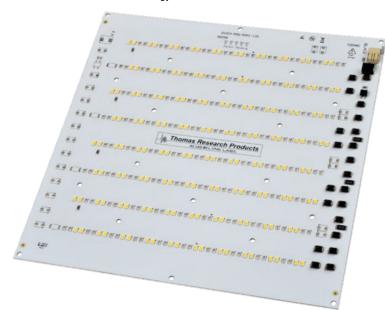
· Ideal for parking lot,

Warm Dimming

Warm-Dimming models change the CCT with the dimming level, mimicking how an incandescent lamp appears to warm as the light level reduces. Perfect for hospitality and residential applications. Warms to 2200K.

applications.	vvaiiiis	10 220011.	

Line voltage AC LED modules are easy to use, offering direct	
connectivity and effectively replacing traditional lamp technologies.	
Patented AC LED technology eliminates the need for an AC-DC drive	er.



3.2 mm	
	00
	<u>_</u> _
0 mm _	
0 mm	203.2 mm

204mm 120V AC Square LED Module 56W								
Model Number	Input Power (W)	Input Voltage (Vac) Color Temp (K) Lumens		LPW				
99255	56	120	2200	3727	67			
99320	56	120	2700	3812	68			
99256	56	120	3000	3855	69			
99321	56	120	3500	3894	70			
99257	56	120	4000	3975	71			
99258	56	120	5000	4067	73			
99259	56	120	5700	4121	74			

"Warm Dimming" 204mm 120V AC Square LED Module 56W									
Model	Input	Input	CCT Range (K)		Lumens	LPW			
Number	Power (W)	Voltage (Vac)	Full Output	Min Output	(full power)	LPVV			
99317	56	120	2500	2200	3707	66			
99318	56	120	3000	2200	3855	69			
99319	56	120	3500	2200	3929	70			



Specifications subject to change without notice. Trademarks are property of their respective owners.

Rev 4-9-15



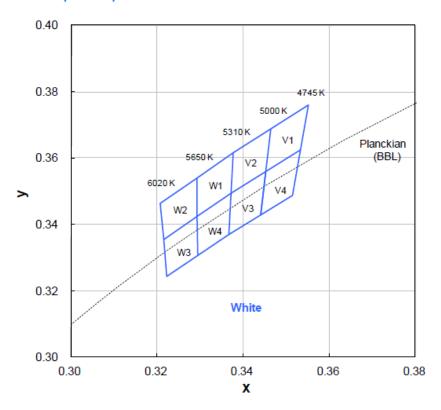
56W 204mm 120V Square AC LED Light Engine

SSL Solutions Faster Than The Speed Of Light®

Pg 2 of 6

CIE Chromaticity Coordinates:

White Binning Structure Graphical Representation



White Bin Structure

Bin Code	х	у	Typ. CCT (K)	Bin Code	х	у	Typ. CCT (K)	
	0.346	0.369			0.329	0.354		
V1	0.355	0.376	4070	W4	0.338	0.362	E 17E	
VI	0.353	0.362	4870	W1	0.337	0.349	5475	
	0.345	0.356			0.329	0.342		
	0.345	0.356			0.329	0.342		
1/4	0.353	0.362	4070	10/4	0.337	0.349	E 47E	
V4	0.352	0.349	4870	4870	4870 W4	0.337	0.337	5475
	0.344	0.343				0.329	0.331	
	0.338	0.362			0.321	0.346		
1/0	0.346	0.369	5455	WO	0.329	0.354	5000	
V2	0.345	0.356	5155	W2	0.329	0.342	5830	
	0.337	0.349			0.322	0.335		
	0.337	0.349			0.322	0.335		
V3	0.345	0.356	E455	WO	0.329	0.342	5000	
	0.344	0.343	5155	W3	0.329	0.331	5830	
	0.337	0.337			0.322	0.324		

Tolerance on each color bin (x , y) is ± 0.01

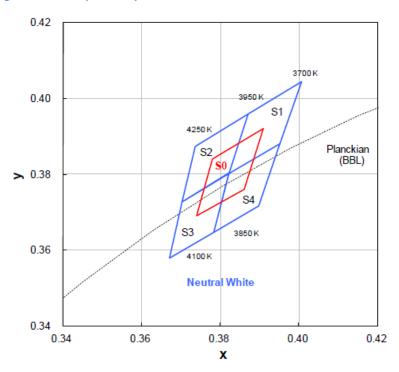


56W 204mm 120V Square AC LED Light Engine

SSL Solutions Faster Than The Speed Of Light®

Pg 3 of 6

Neutral White Binning Structure Graphical Representation



Neutral White Bin Structure

Bin Code	х	у	Typ. CCT (K)	Bin Code	x	у	Typ. CCT (K)
	0.387	0.396			0.374	0.387	
S1	0.401	0.404	3825	S2	0.387	0.396	4100
31	0.395	0.388	3023	52	0.382	0.380	4100
	0.382	0.380			0.370	0.373	
	0.382	0.380			0.370	0.373	•••••
C/	0.395	0.388	3825	S3	0.382	0.380	4400
S4	0.390	0.372		33	0.378	0.365	4100
	0.378	0.365			0.367	0.358	
	0.374	0.369					
S0	0.378	0.384	2075				
	0.391	0.392	3975				
	0.386	0.376					

• Tolerance on each color bin (x , y) is ± 0.01

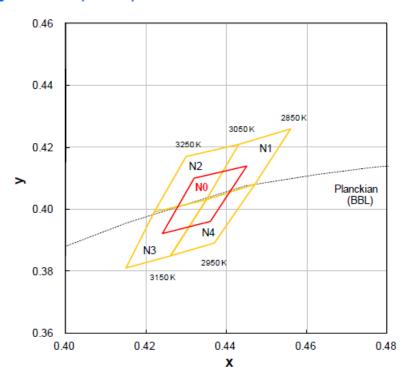


56W 204mm 120V Square AC LED Light Engine

SSL Solutions Faster Than The Speed Of Light®

Pg 4 of 6

Warm White Binning Structure Graphical Representation



Warm White Bin Structure

Bin Code	х	у	Typ. CCT (K)	Bin Code	х	у	Typ. CCT (K)
	0.443	0.421			0.430	0.417	
N1	0.456	0.426	2950	N2	0.443	0.421	3150
INI	0.447	0.408	2930	INZ	0.435	0.403	3130
	0.435	0.403			0.422	0.399	
	0.435	0.403			0.422	0.399	
N4	0.447	0.408	2050	N3	0.435	0.403	3150
IN4	0.437	0.389	2950	INS	0.426	0.385	3130
	0.426	0.385			0.415	0.381	
	0.424	0.392					
NO	0.432	0.410	2050				
N0	0.445	0.414	3050				
	0.436	0.396					

• Tolerance on each color bin (x, y) is ± 0.01

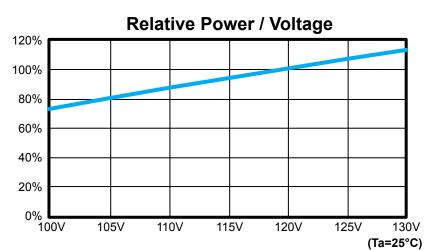


56W 204mm 120V Square AC LED Light Engine

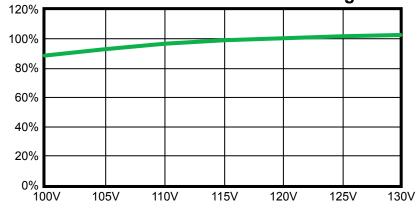
SSL Solutions Faster Than The Speed Of Light®

Pg 5 of 6

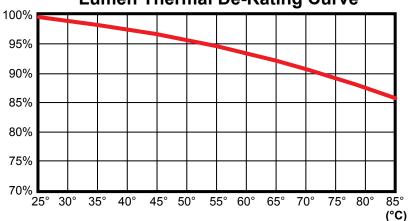
Typical Electrical & Optical Characteristic Curves:



Relative Luminous Flux / Voltage



Lumen Thermal De-Rating Curve





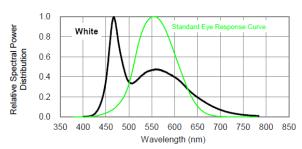
56W 204mm 120V Square AC LED Light Engine

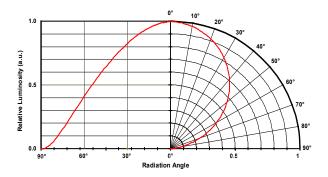
SSL Solutions Faster Than The Speed Of Light®

Pg 6 of 6

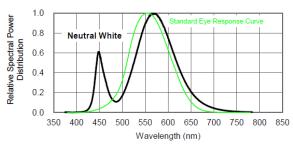


1. White

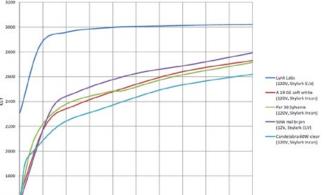




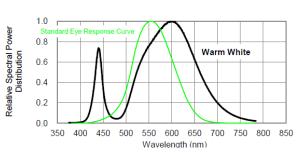
2. Neutral White

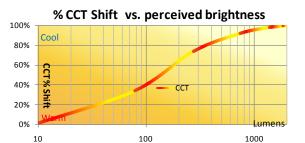


Dimming Cycle



3. Warm White





Packaging

- LED Modules will be packaged in trays for primary protection.
- · According to the total delivery amount, cardboard boxes will be used to protect the trays of LED Modules from mechanical shocks during transportation.
- The boxes are not water resistant and therefore must be kept away from water and moisture.

Reliability and Average Lumen Maintenance

Before releasing new products the manufacturer puts a representative product sample set through an entire suite of qualification tests, including the most stressful test for high power LEDs, the Wet High-Temperature Operating Life (WHTOL) test at 85°C/85%RH for 1000 hours at the specified operating current.

LED lifetime has been extrapolated based on the accumulated operating and accelerated aging data. Based on this data, the manufacturer projects that the LED products will deliver, on average, 70% lumen maintenance at 50,000 hours of operation at the specified operating current, provided that the case temperature is maintained at or below 80°C.