24W 120V AC 114mm Round 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:	200 mA @25ºC typical; 250 mA max
Power Dissipation:	24W typical; 28W max
Power Factor:	>0.97
THD:	<20%
Life:	50,000 Hrs, if used as specified
Luminous Flux:	2000 lm @3000K (std. models)
Luminous Efficacy:	83 LPW±10% @3000K (std. models)
Viewing Angle:	120 deg
Operating Temp:	-25ºC to +100ºC
Storage Temp:	-40ºC to +100ºC
Soldering Temp:	370ºC

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 driver.

Features

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

Applications

- Recessed and Flush-mounts
- Ceiling Fans
- Pendants
- Indoor/Outdoor General Line-voltage Illumination
- Ideal mood lighting for hospitality or residential

Warm Dimming

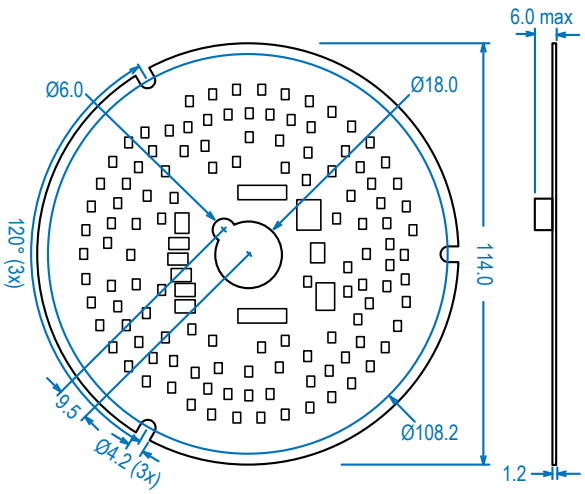
Warm-Dimming models change the CCT with the dimming level, mimicking how an incandescent lamp appears to warm as the light level reduces. Perfect for hospitality and residential applications. Warms to 2200K.

114mm 120V AC Round LED Module 24W

Model Number	Input Power *(W)*	Input Voltage *(Vac)*	Color Temp *(K)*	Lumens	LPW
99115	24	120	2200	1880	78
99282	24	120	2700	1960	82
99116	24	120	3000	2000	83
99283	24	120	3500	2052	86
99117	24	120	4000	2080	87
99118	24	120	5000	2120	88
99119	24	120	5700	2140	89

"Warm Dimming" 114mm 120V AC Round LED Module 24W

Model Number	Input Power *(W)*	Input Voltage *(Vac)*	CCT Range *(K)*		Lumens *(full power)*	LPW
			Full Output	Min Output		
99107	24	120	2500	2200	1787	74
99108	24	120	3000	2200	1858	77
99109	24	120	3500	2200	1894	79



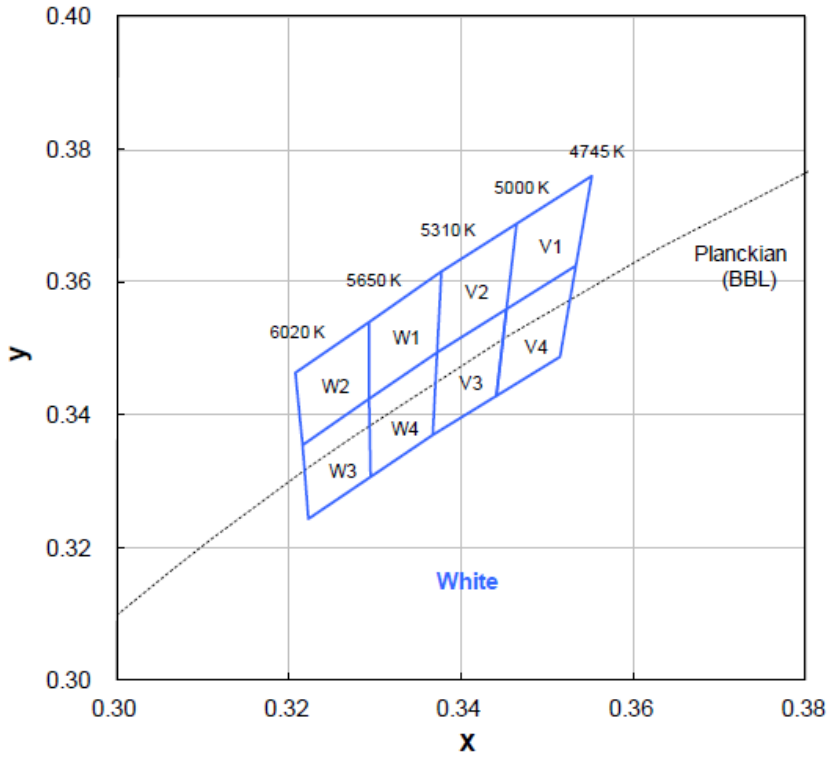
RoHS Compliant

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

Rev 4-9-15

CIE Chromaticity Coordinates:

White Binning Structure Graphical Representation



White Bin Structure

Bin Code	x	y	Typ. CCT (K)	Bin Code	x	y	Typ. CCT (K)
V1	0.346	0.369	4870	W1	0.329	0.354	5475
	0.355	0.376			0.338	0.362	
	0.353	0.362			0.337	0.349	
	0.345	0.356			0.329	0.342	
V4	0.345	0.356	4870	W4	0.329	0.342	5475
	0.353	0.362			0.337	0.349	
	0.352	0.349			0.337	0.337	
	0.344	0.343			0.329	0.331	
V2	0.338	0.362	5155	W2	0.321	0.346	5830
	0.346	0.369			0.329	0.354	
	0.345	0.356			0.329	0.342	
	0.337	0.349			0.322	0.335	
V3	0.337	0.349	5155	W3	0.322	0.335	5830
	0.345	0.356			0.329	0.342	
	0.344	0.343			0.329	0.331	
	0.337	0.337			0.322	0.324	

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

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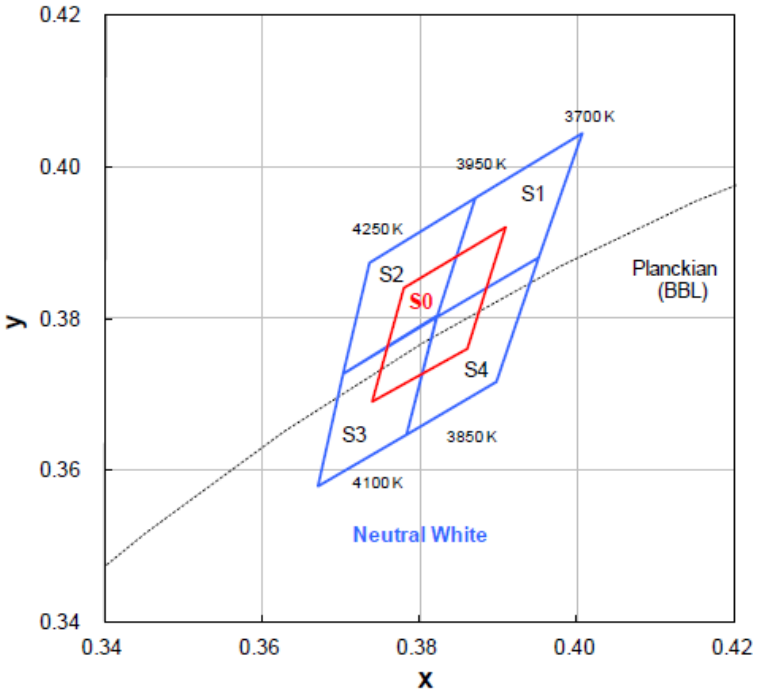
Neutral White Binning Structure Graphical Representation



Neutral White Bin Structure

Bin Code	x	y	Typ. CCT (K)	Bin Code	x	y	Typ. CCT (K)
S1	0.387	0.396	3825	S2	0.374	0.387	4100
	0.401	0.404			0.387	0.396	
	0.395	0.388			0.382	0.380	
	0.382	0.380			0.370	0.373	
S4	0.382	0.380	3825	S3	0.370	0.373	4100
	0.395	0.388			0.382	0.380	
	0.390	0.372			0.378	0.365	
	0.378	0.365			0.367	0.358	
S0	0.374	0.369	3975				
	0.378	0.384					
	0.391	0.392					
	0.386	0.376					

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

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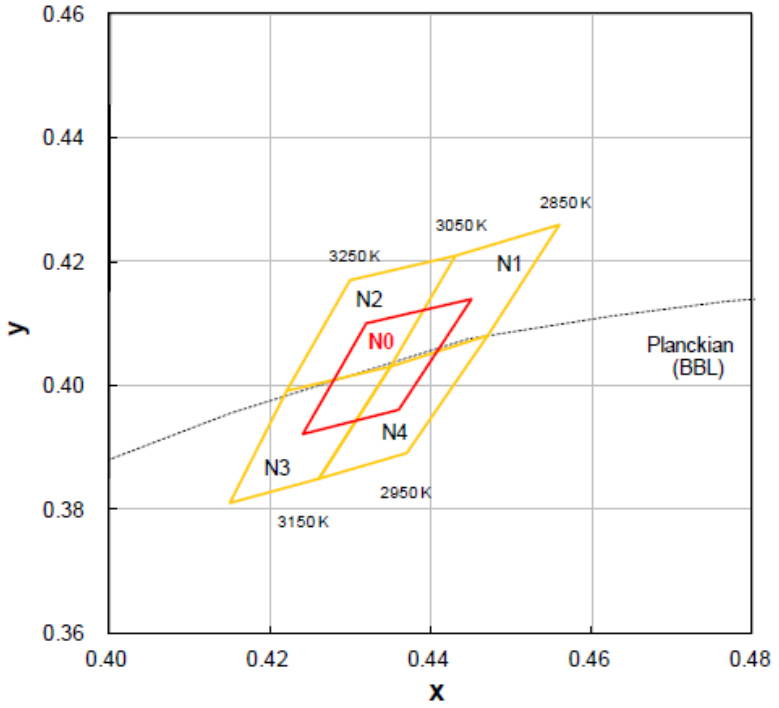
Warm White Binning Structure Graphical Representation



Warm White Bin Structure

Bin Code	x	y	Typ. CCT (K)	Bin Code	x	y	Typ. CCT (K)
N1	0.443	0.421	2950	N2	0.430	0.417	3150
	0.456	0.426			0.443	0.421	
	0.447	0.408			0.435	0.403	
	0.435	0.403			0.422	0.399	
N4	0.435	0.403	2950	N3	0.422	0.399	3150
	0.447	0.408			0.435	0.403	
	0.437	0.389			0.426	0.385	
	0.426	0.385			0.415	0.381	
N0	0.424	0.392	3050				
	0.432	0.410					
	0.445	0.414					
	0.436	0.396					

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

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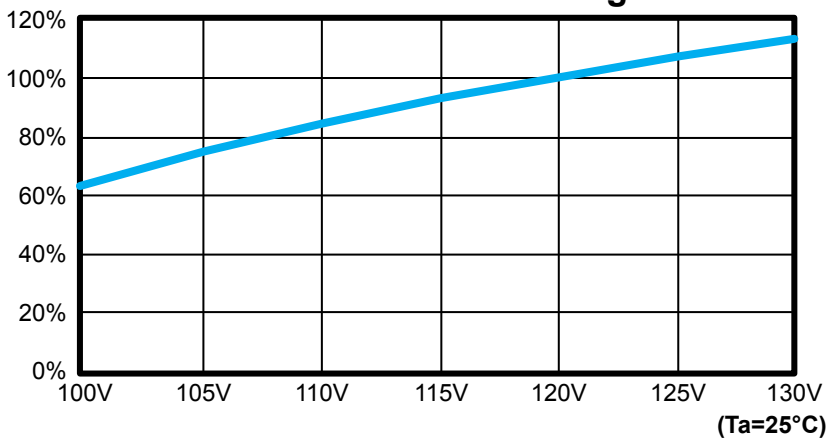
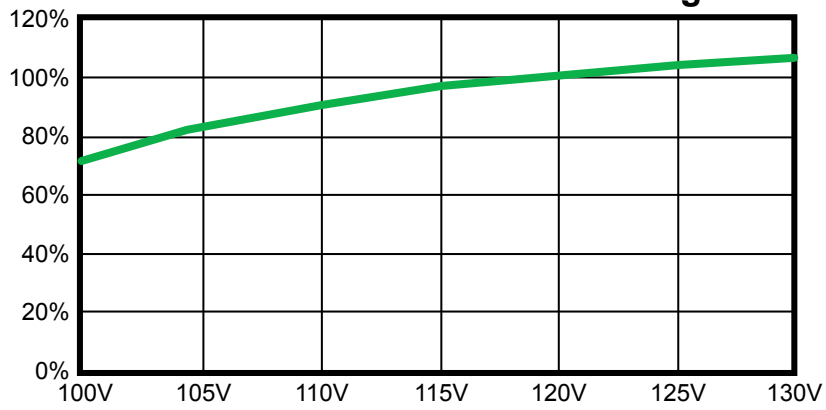
Typical Electrical & Optical Characteristic Curves:

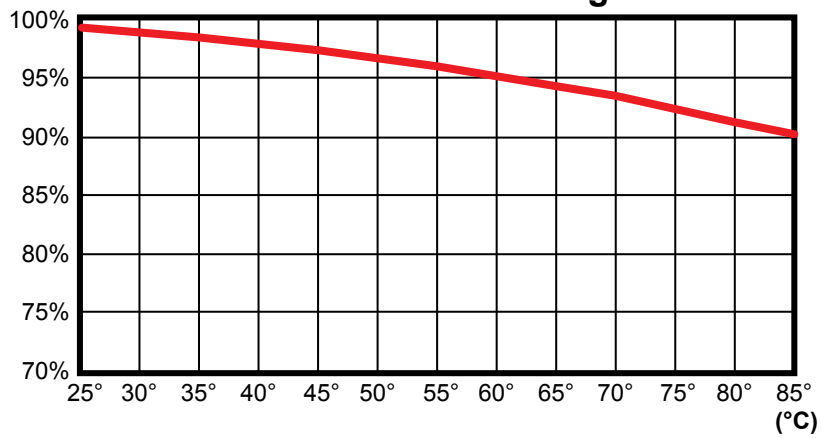
Relative Power / Voltage



Relative Luminous Flux / Voltage



Lumen Thermal De-Rating Curve



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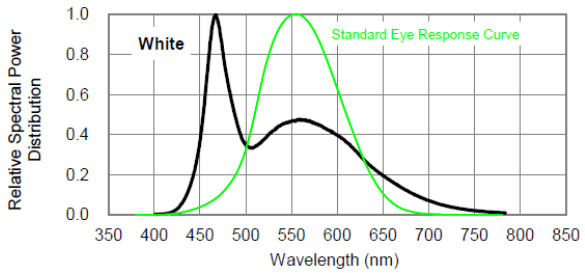
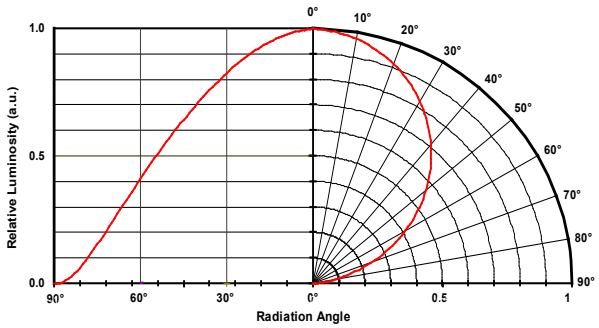
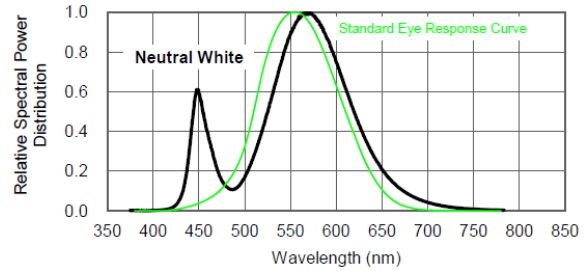
Typical Electrical & Optical Characteristic Curves:

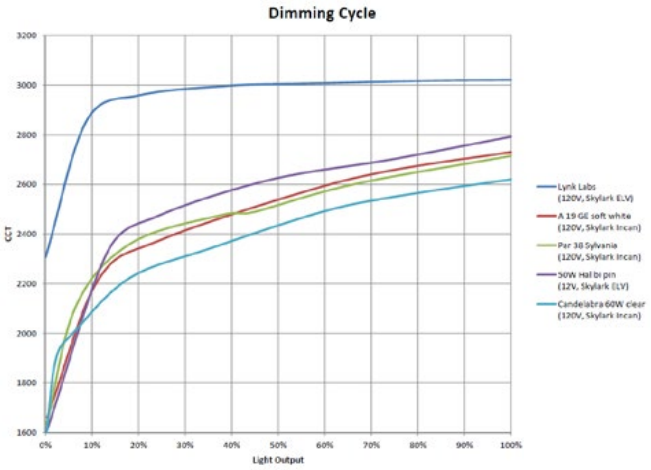
1. White



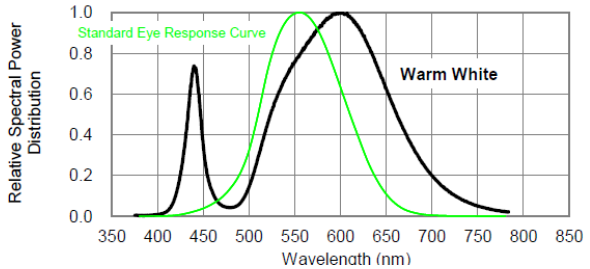


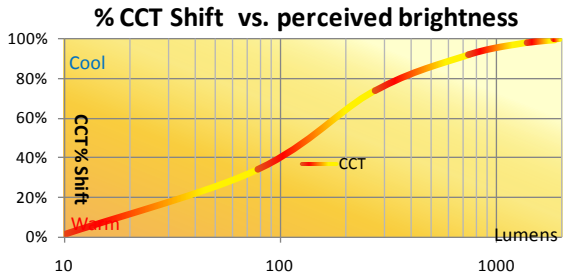
2. Neutral White





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.

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