3W 120V AC 36mm Round LED Module

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

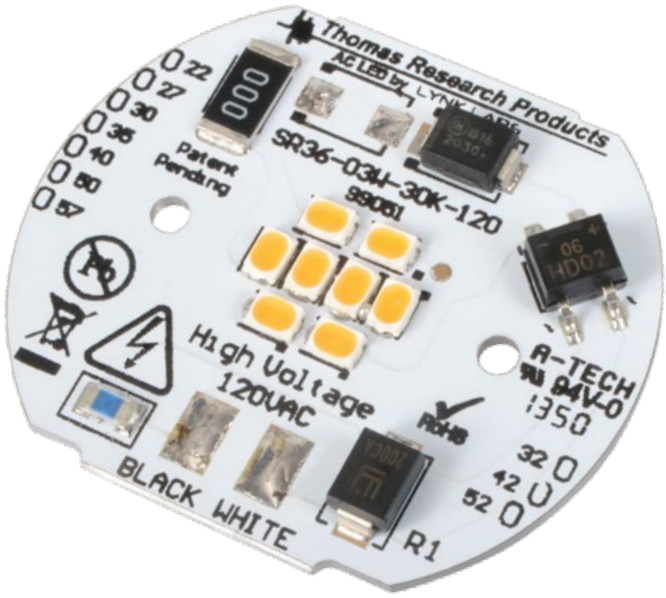
Specifications

Drive Voltage:	120Vac (100-132V Min-Max)
AC Current:	25 mA @25ºC typical; 30 mA max
Power Dissipation:	2.8W typical; 3.5W max
Power Factor:	>0.97
THD:	<20%
Life:	50,000 Hrs, if used as specified
Luminous Flux:	214 lm @3000K (std.)
Luminous Efficacy:	76 LPW ±10% @3000K (std.)
Viewing Angle:	120 deg
Operating Temp:	-25ºC to +100ºC
Storage Temp:	-40ºC to +100ºC
Soldering Temp:	370ºC

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
- CRI of 80+ Minimum

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.



Applications

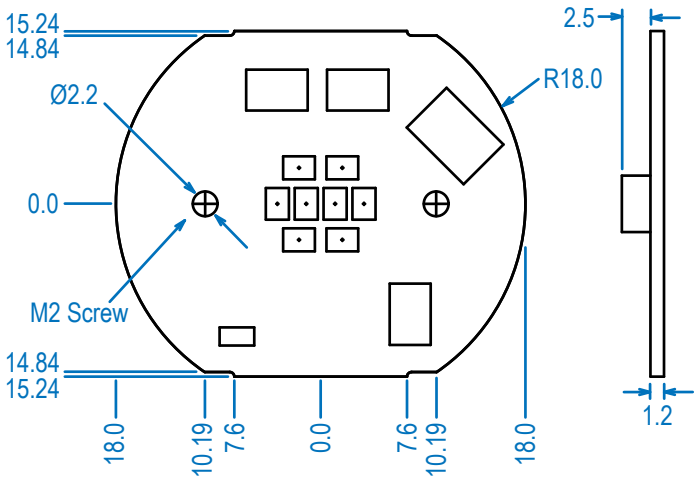
- Puck
- Cove
- Under-Cabinet
- Indoor/Outdoor General Line-voltage Illumination
- Ideal for commercial, hospitality or residential

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.

36mm 120V AC Round LED Module 3W

Model Number	Input Power *(W)*	Input Voltage *(Vac)*	Color Temp *(K)*	Lumens	LPW
99110	2.8	120	2200	198	71
99051	2.8	120	3000	214	76
99052	2.8	120	4000	230	82
99053	2.8	120	5000	238	85



"Warm Dimming" 36mm 120V AC Round LED Module 3W

Model Number	Input Power *(W)*	Input Voltage *(Vac)*	CCT Range *(K)*		Lumens *(full power)*	LPW
			Full Output	Min Output		
99093	2.8	120	2500	2200	211	74
99094	2.8	120	3000	2200	215	76
99095	2.8	120	3500	2200	224	79

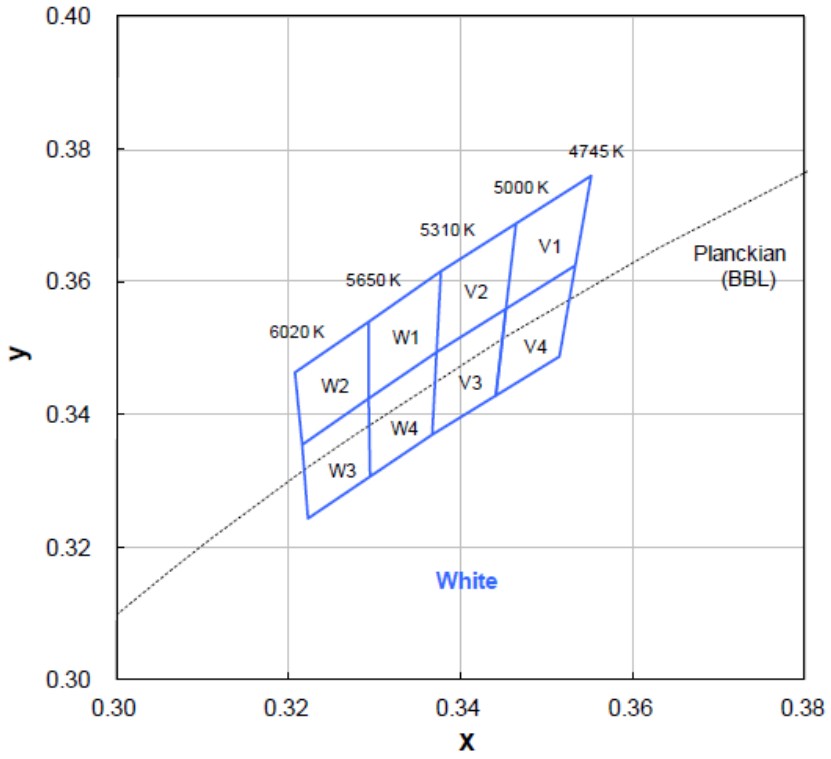
RoHS Compliant

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Rev 7-24-15

CIE Chromaticity Coordinates:

White Binning Structure Graphical Representation

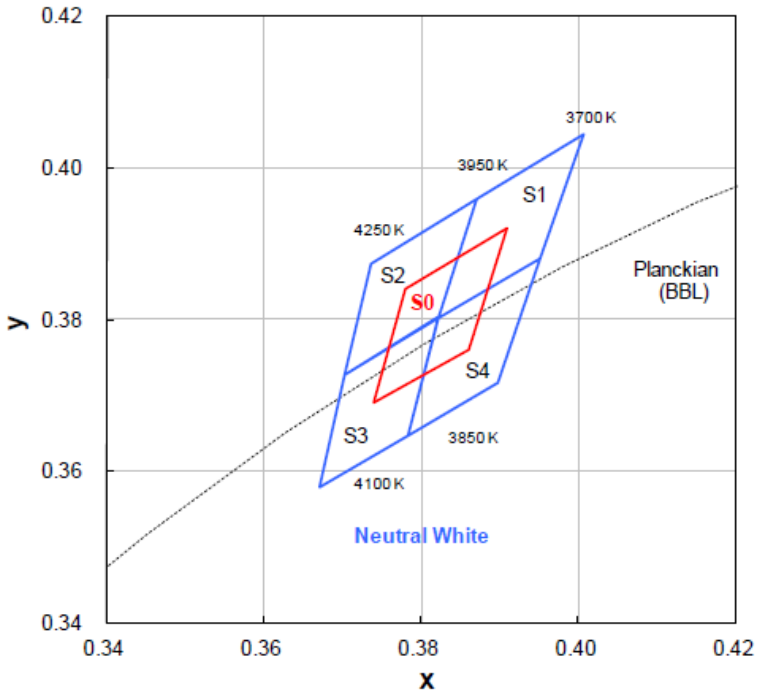


White Bin Structure

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

Neutral White Binning Structure Graphical Representation



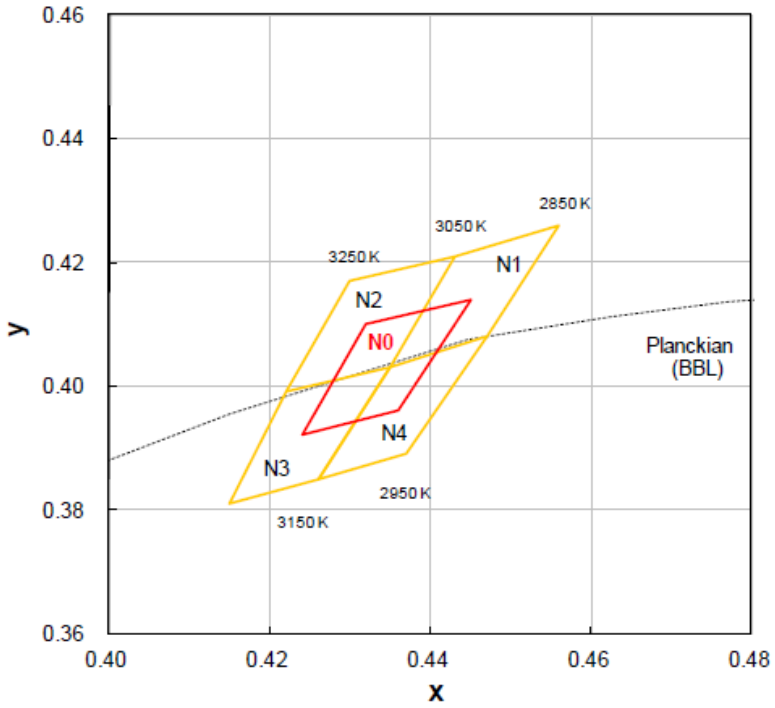
Neutral White Bin Structure

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



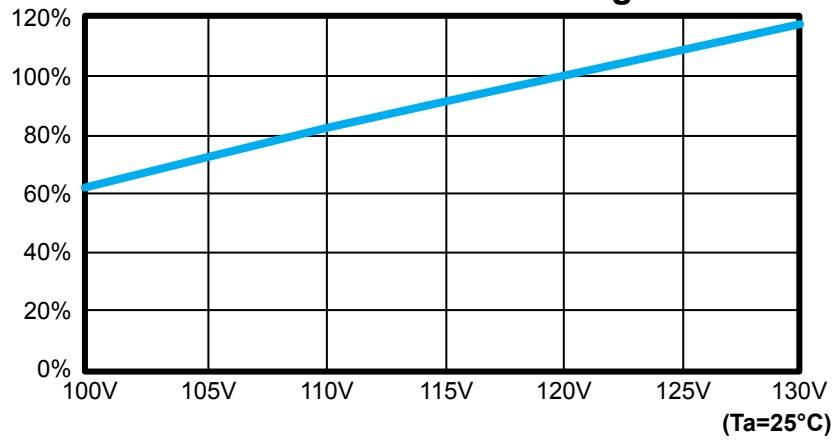
Warm White Bin Structure

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					

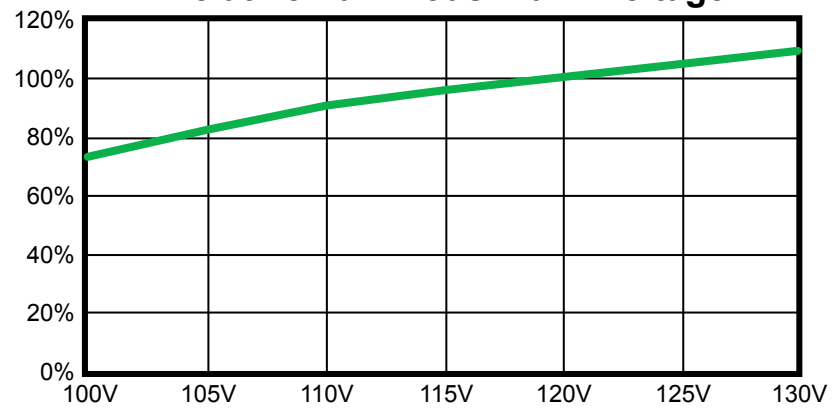
- Tolerance on each color bin (x , y) is ± 0.01

Typical Electrical & Optical Characteristic Curves:

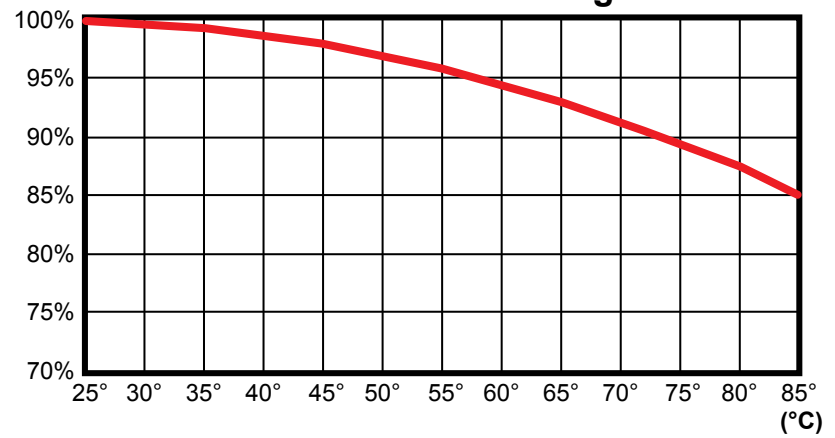
Relative Power / Voltage



Relative Luminous Flux / Voltage

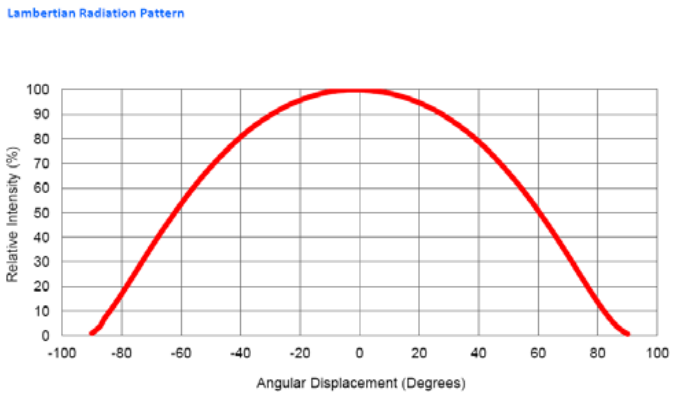


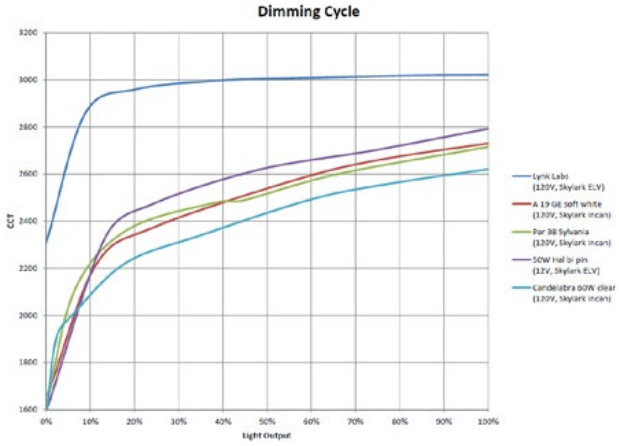
Lumen Thermal De-Rating Curve

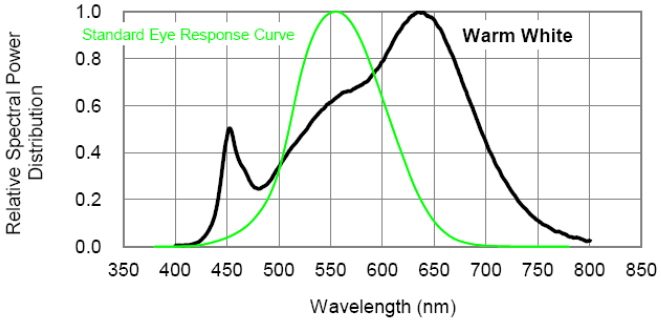


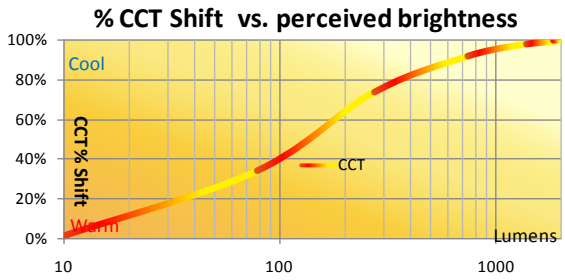
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Typical Electrical & Optical Characteristic Curves:









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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