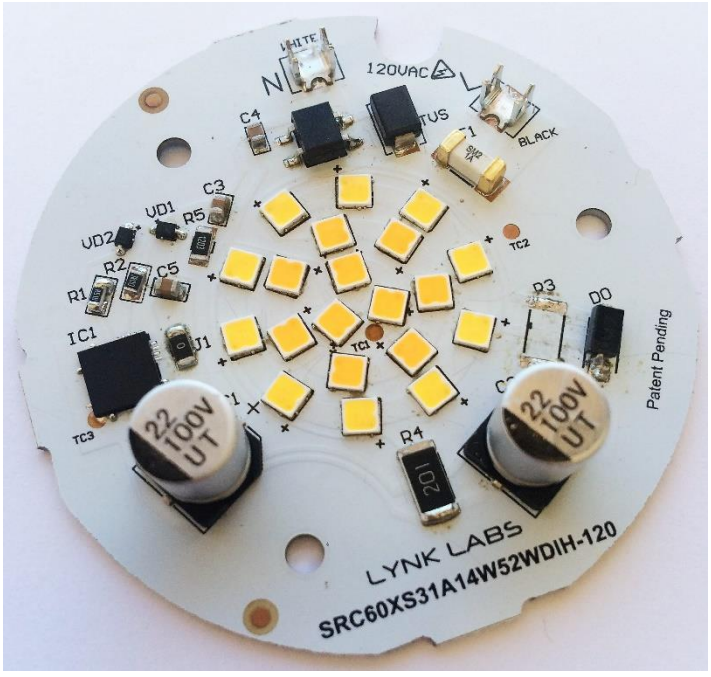
SnapBrite® SRL60-14W- 120

120Vac Direct Connect - AC LED MODULE
Triac Dimmable
California Title 24 compliant
60mm dia. 14 Watt 980 lm

Technical Data Sheet



RoHS 2002/95/EC

2511 Technology Drive – Suite 108, Elgin IL 60124. Tel: 847.783.0123 – Fax: 847.783.0130 – www.lynklabs.com

Direct Connect AC LED lighting technology

SnapBrite® SRL60-14W-120

RoHS 2002/95/EC

Description

SnapBrite high voltage AC LED modules are fast, easy and reliable LED light sources for lighting OEMs in need of LED solutions that offer direct AC line voltage connectivity.

Lynk's patented AC LED technology eliminates the requirement for an expensive, bulky and failure prone AC – DC power supply or driver. Delivering efficiency, reliability and a high power factor, SnapBrite modules can be used by lighting manufacturers in many types of fixture as an effective replacement for energy hungry incandescent or CFL lamps. Additionally, the modules will dim with many popular leading and trailing edge phase cut dimmers.

Unlike other AC LED light sources, these SnapBrite modules offer a very unique but optional Warm-On-Dim feature that can change CCT from cooler to warmer as the dimming level changes. This mimics the way a traditional light bulb or halogen lamp becomes warmer to look at as the light level reduces. WOD is a great feature for hospitality and residential applications.

Lynk Low THD Technology provides under 20% ATHD and a power factor of better than 0.97 for applications demanding minimal EMC disturbance.

Meets California's Title 24 specification which requires that the flicker % at 200Hz remains below 30% at full power and at 20% dimming. This effectively eliminates perceptible flicker.

Look for the Lynk Labs name or this private label mark to ensure you are always backed by Lynk Labs high quality AC LED technology, IP, and reliability. Lynk Labs - Your AC LED Experts!

LLI®

Features

- 120V Direct Connect - No Drivers/PSU's
- Lower Cost - Higher Reliability AC LED Module
- California Title 24 Compliant
- Triac Dimmable
- Warm-On-Dim Option
- Work with most existing AC Dimmers
- High Efficiency
- High Power Factor >0.97
- Low THD <20%
- Significant Energy Savings
- Long Operating Life
- Reliable, Fast & Easy

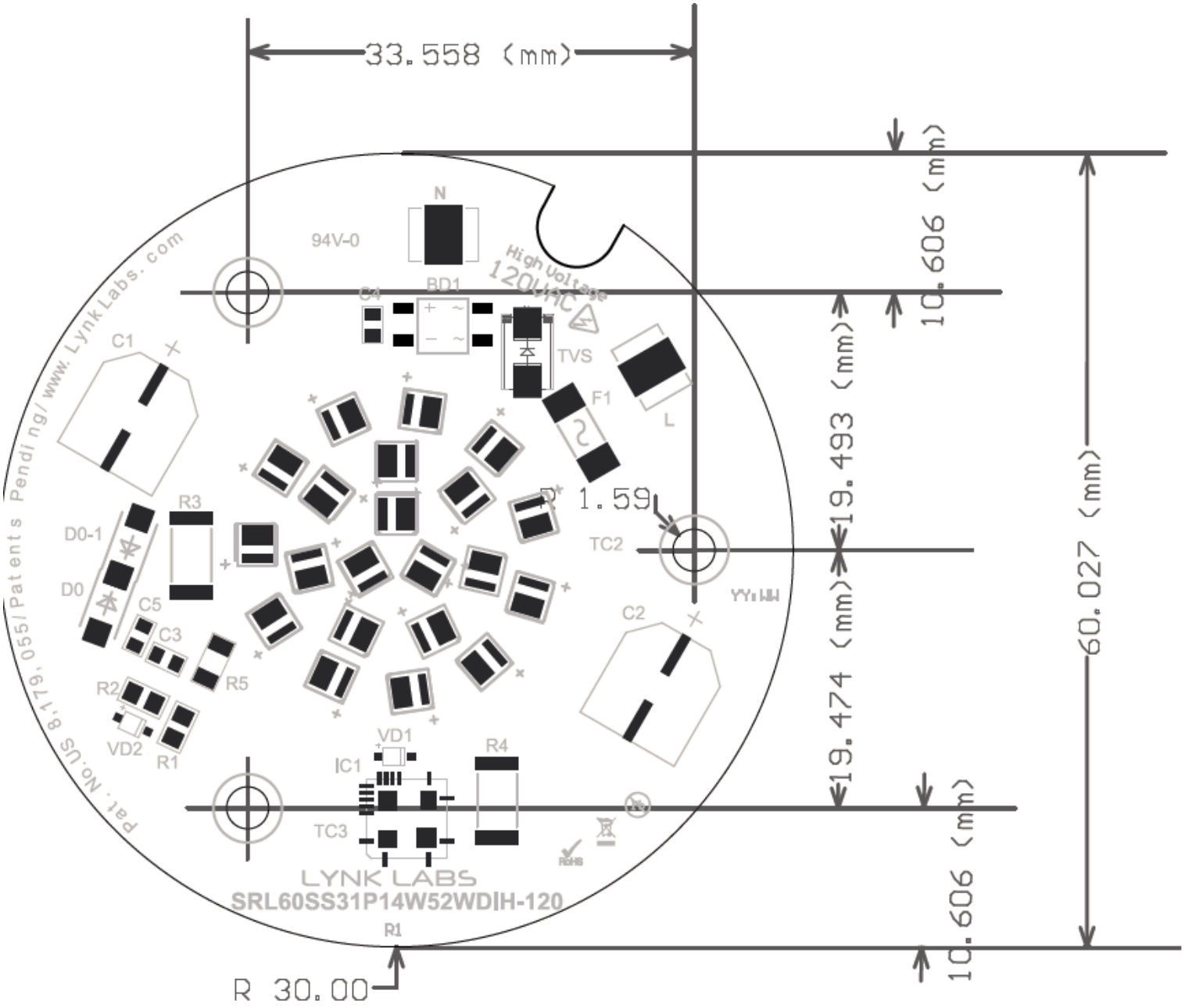
Applications

- Down Lighting
- Flush mounts,
- Ceiling Fans,
- Indoor/Outdoor General line voltage Illumination
- Ideal for commercial, hospitality and residential

2511 Technology Drive – Suite 108, Elgin IL 60124. Tel: 847.783.0123 – Fax: 847.783.0130 – www.lynklabs.com

Contents:

3. Mechanical Dimensions



Notes：

1. All dimensions are in millimeters.
2. Tolerance is ±0.05mm unless otherwise noted.

4. Electrical & Optical Characteristics

ITEM	SYMBOL	CONDITION	UNIT	MIN.	120	MAX.
Drive Voltage	Vf	conected to line	Vrms	100	120	132
Viewing Angle	2θ½		deg		120	
Operating/Case Temperature	To/Tc	If=120 mA	℃		70	90
Typical Operating Power	W_T	If=120 mA	W		14	
Luminous Flux (WD52)	Φ		lm		980	
Total Harmonic Distortion	ATHD		%		18	
Luminous Efficacy (WD52)	η_v		lm/w		70	
Flicker% at Full Power	200Hz Step Filter		%		<1%	
Flicker% at 20% Dimming	200Hz Step Filter		%		<3%	

*Measurement Uncertainty of the Luminous Flux: ± 10%
*Values given are for specified drive current at 25℃ case temperature

Module Variants

MODEL NUMBER	CCT	CRI	VAC	POWER	LUMEN	lm/W
SRL60SS31P14W42WD1H-120	2200/2700K	90	120	14	963	69
SRL60SS31P14W52WD1H-120	2200/3000K	90	120	14	982	70

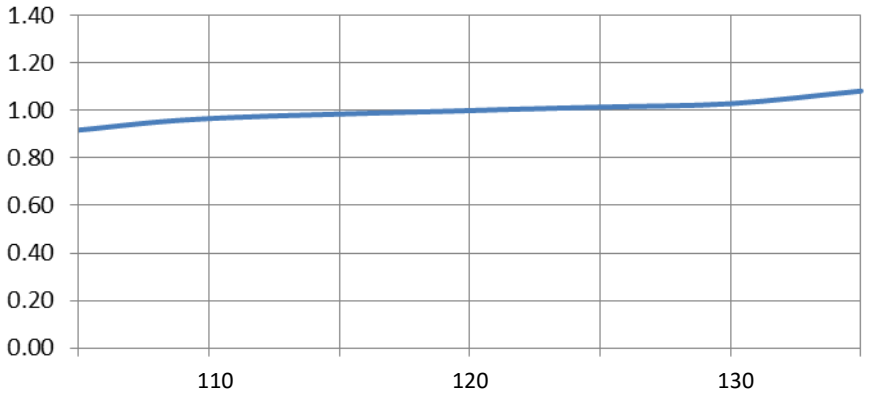
Other CCTs may be Available to Special Order

5. Absolute Maximum Ratings (@ Ta=25°C)

ITEM	SYMBOL	ABSOLUTE MAXIMUM RATING	UNIT
Power Dissipation	Pd	17	W
A.C. Current	If	140	mArms
AC Voltage	Vf	132	V
Operatiing Temperature	To	-25 ~ +90	℃
Storage Temperature	Ts	-40 ~ +100	℃
Soldering Temperature(Reflow)	Tsld	N/A	℃
Soldering Temperature(Hand)	Tsld	370	℃

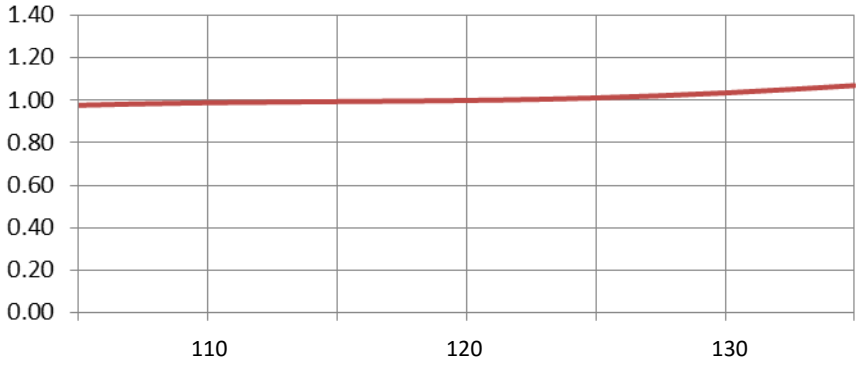
7. Typical Electrical & Optical Characteristic Curves

Relative Power vs Voltage

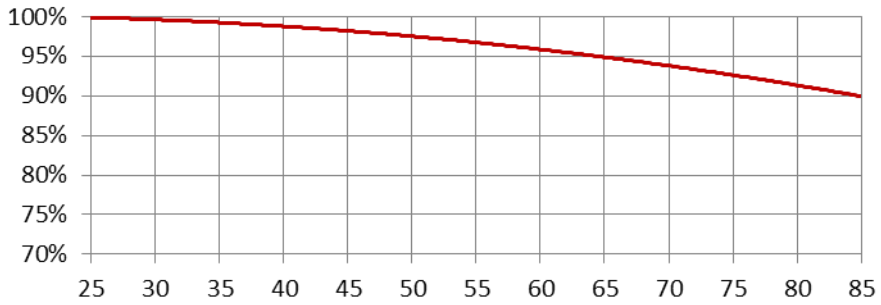


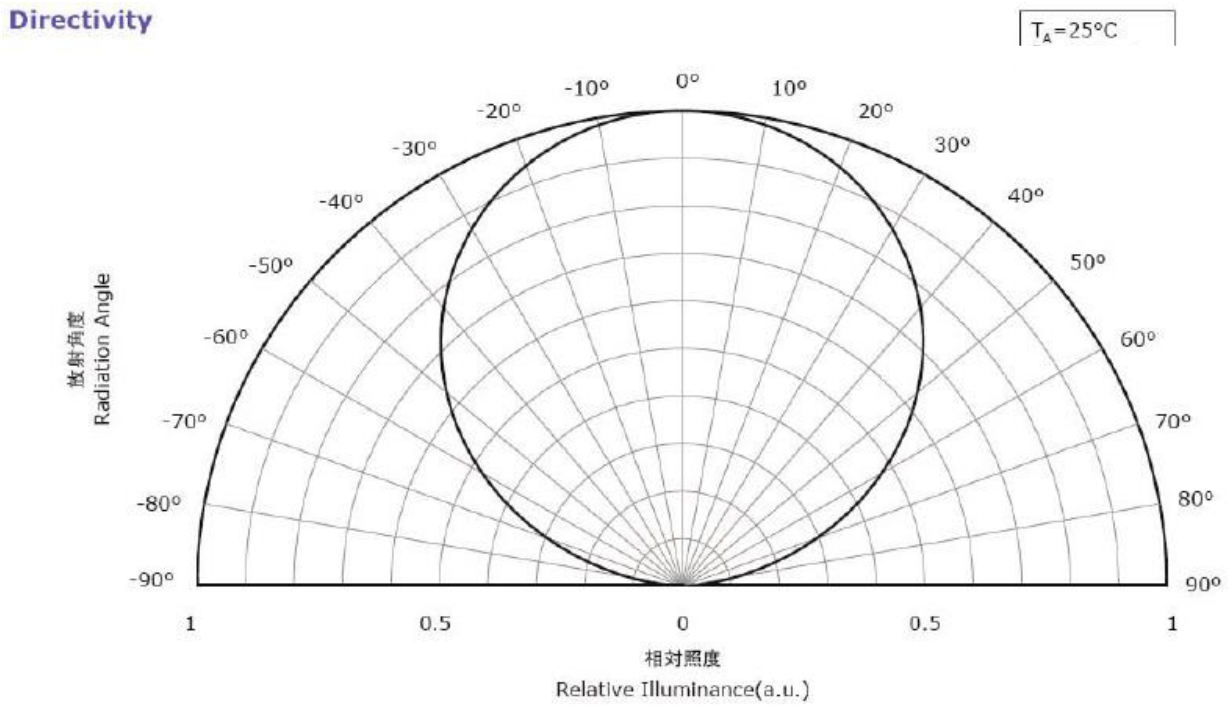
Ta=25˚C

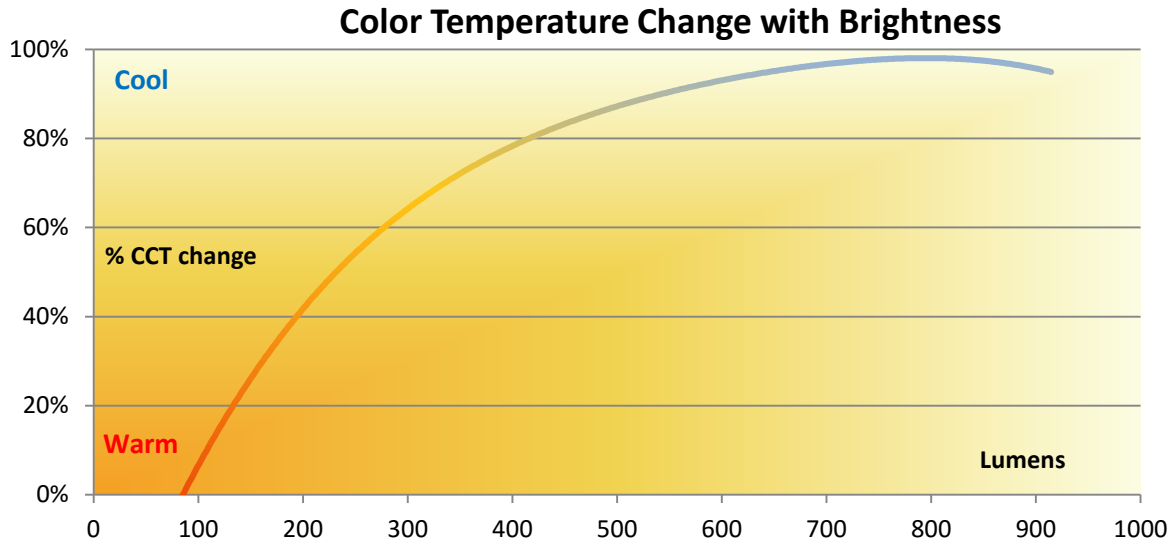
Relative Luminous Flux vs. Voltage



Lumen Thermal de-rating curve




Directivity
T_A=25°C
-10°
0°
10°
-20°
20°
-30°
30°
-40°
40°
-50°
50°
-60°
60°
-70°
70°
-80°
80°
-90°
90°
辐射角度
Radiation Angle
1
0.5
0
0.5
1
相对照度
Relative Illuminance(a.u.)


Color Temperature Change with Brightness
100%
80%
60%
40%
20%
0%
Cool
% CCT change
Warm
Lumens
0
100
200
300
400
500
600
700
800
900
1000

8.Part Number Identification

Part Number											
Product Code	Shape	Dimension/Diameter (mm)	Internal Codes	Module Power	aTHD	CCT (XXK) Warm on Dim (XYWD)	Connection Type	CRI		Input Voltage	Miscellaneous
S	R	L 6 0	S S 3 1 P	1 4 W	L	5 2 W D	I	H		120	

Model Number											
Product Code	Shape	Dimension/Diameter		Module Power	aTHD		CCT (XXK) Warm on Dim (XYWD)	Connection Type	CRI	Input Voltage	Miscellaneous
S	R	L 6 0		1 4 W	L		5 2 W D	I	H	120	

Product Code		
S	=	SnapBrite™
T	=	Tesla™
G	=	GeoLite™
B	=	BriteDriver®

Shape		
R	=	Round
S	=	Square
T	=	Star
L	=	Linear

Dimension/Diameter				
L	=	X	X	X
W	=	Y	Y	Y
D	=	Z	Z	Z

Module Power		
Q	=	0.25W
H	=	0.5W
T	=	0.75W
R	=	Decimal Point

aTHD		
L	=	< 20%
H	=	≥ 20%

CCT/WOD					
2	2	K		=	2200K
2	7	K		=	2700K
3	0	K		=	3000K
3	5	K		=	3500K
4	0	K		=	4000K
5	0	K		=	5000K
5	7	K		=	5700K
3	2	W	D	=	~ 2700K To 2200K Warm on Dim
4	2	W	D	=	~ 3000K To 2200K Warm on Dim
5	2	W	D	=	~ 3500K To 2200K Warm on Dim

Connection Type		
C	=	Poke-In Connector
I	=	Insullation Displacement Connector
O	=	Connector + Solder Pads
W	=	Wire "Pigtail"
X	=	Solder Pads

CRI		
L	=	< 80 CRI
S	=	≥ 80 CRI
H	=	≥ 90 CRI

Input Voltage		
12V	=	12 VAC, Magnetic or Electronic Transformer Sourse
12E	=	12 VAC, Electronic Transformer Sourse Only
120V	=	120 VAC
120R	=	Rectified 120 VAC
230V	=	230 VAC

2511 Technology Drive – Suite 108, Elgin IL 60124. Tel: 847.783.0123 – Fax: 847.783.0130 – www.lynklabs.com

9.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.

10. 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 85ºC/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 80ºC.

11. Moisture Sensitivity

The module can operate for up to 1000hrs at 85 ˚C and 65% Relative Humidity.
It is not designed for operation in wet conditions without an additional conformal coating which must be approved and supplied by the manufacturer during the module build process or warrantee will be voided