

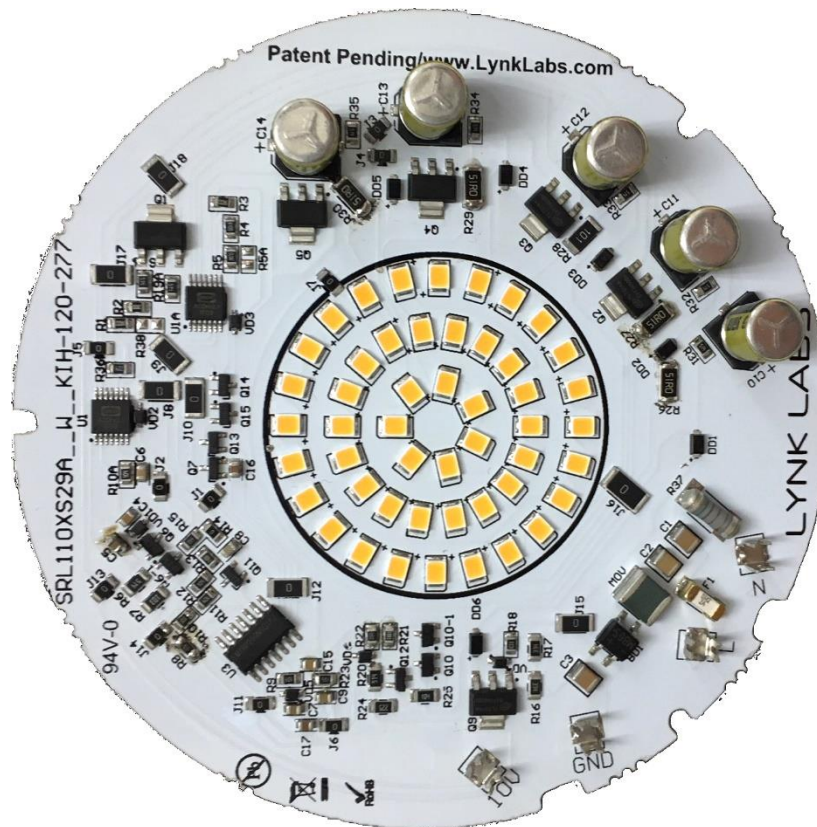


# SnapBrite® UV DoB

## SRL100-20W- 120/277

90 – 300 Vac Universal Voltage  
California Title 24 compliant  
0-10V dimmable / Low THD / Flicker Free  
110mm dia / 20 Watt / 2000 lm

### Technical Data Sheet





## Direct Connect AC LED lighting technology

# SnapBrite® SR110XS29A20WLXXKIH120-277



### 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 flicker free, low THD efficiency, reliability and a high power factor, Tesla ACOB 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 0-10V dimming systems .

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

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

Universal voltage means that this light engine can be connected directly to any voltage source from 90V through 300V AC.

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!

### Features

- Universal Voltage 90V -300V
- Direct Connect - No Drivers/PSU's
- Lower Cost - Higher Reliability AC LED Module
- 0-10V Dimmable
- High Efficiency
- High Power Factor >0.97
- Low THD <20%
- California Title 24 Flicker Compliant
- Significant Energy Savings
- Long Operating Life
- Reliable, Fast & Easy

### Applications

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

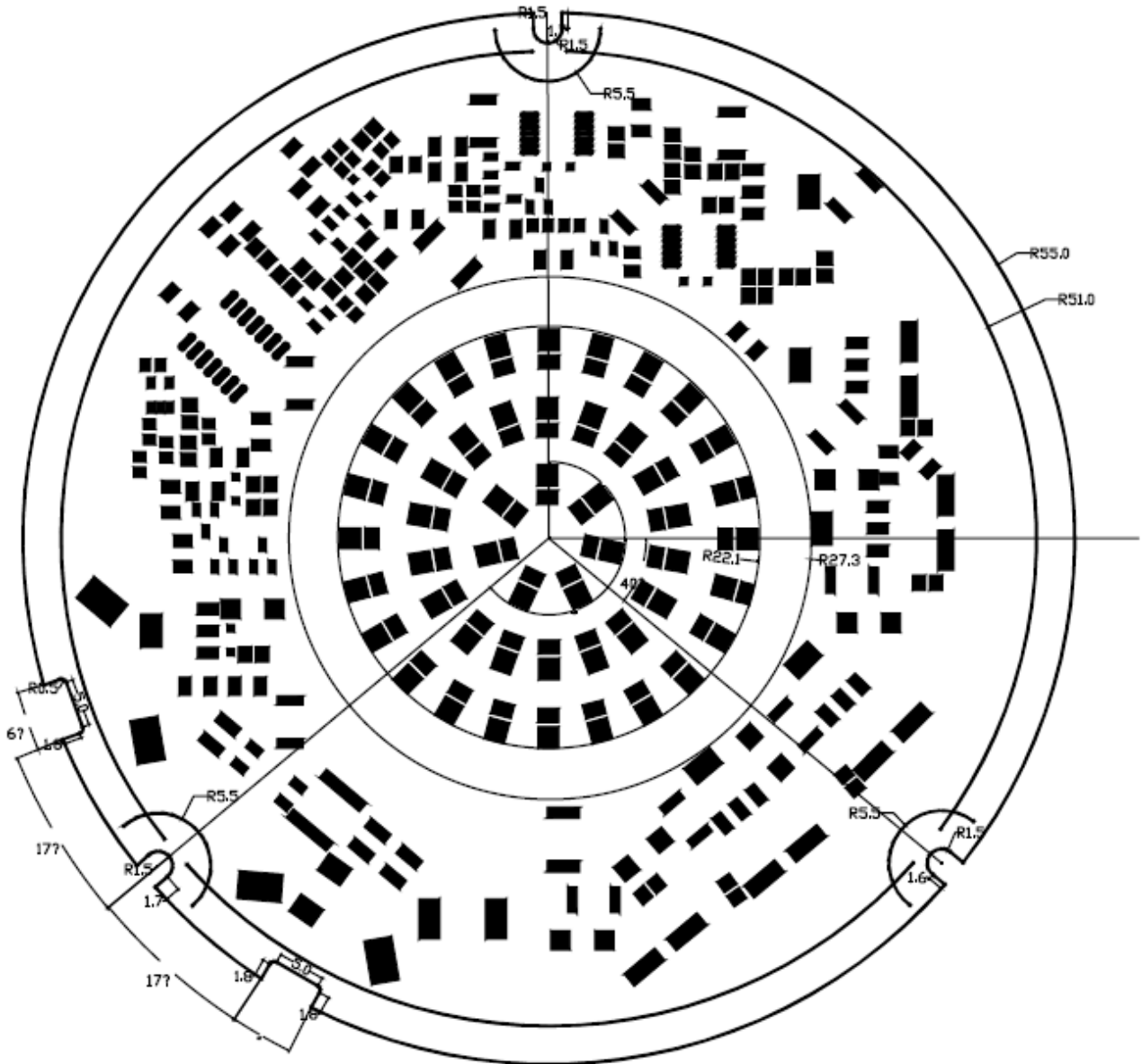


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### 3. Mechanical Dimensions



Notes :

1. All dimensions are in millimeters.
2. Tolerance is  $\pm 0.05\text{mm}$  unless otherwise noted.







## 4. Electrical & Optical Characteristics

ITEM	SYMBOL	CONDITION	UNIT	120	230	277
Universal Drive Voltage (UV)	V <sub>f</sub>	connected to line	V <sub>rms</sub>	120	240	277
Viewing Angle	2θ <sup>1/2</sup>		deg	120	120	120
Operating/Case Temperature	T <sub>o</sub> /T <sub>c</sub>	I <sub>f</sub> =127mA@120V	°C		70	max 90
Typical Op Power (no Dimmer)	W <sub>T</sub>	I <sub>f</sub> =127mA@120V	W	19.6	21.1	18.7
Luminous Flux (3000°K) (no dimm)	Φ		lm	1,724	2,002	1,917
Power Factor		I <sub>f</sub> =127mA@120V		>.97	>.97	>.97
Total Harmonic Distortion	ATHD		%	<20%	<20%	<20%
Luminous Efficacy (4000K)	η <sub>v</sub>		lm/w	87	95	103
Flicker% at Full Power		200Hz Step Filter	%		<3%	
Flicker% at 20% Dimming		200Hz Step Filter	%		<23%	

\*Measurement Uncertainty of Luminous Flux: ± 10%

\*Values given are for specified drive current at 25°C case temperature

## Module Variants

MODEL NUMBER	CCT	CRI	Dimmer	VAC	POWER	LUMEN	lm/W
SR110XS29A20WL35KIH-120-277	3500K	90	No	277	18.7	1917	103
SR110XS29A20WL35KIH-120-277	3500K	90	1-10	277	14.5	1551	107
SR110XS29A20WL35KIH-120-277	3500K	90	1-10	230	15.3	1533	100
SR110XS29A20WL35KIH-120-277	3500K	90	1-10	120	15.3	1459	95

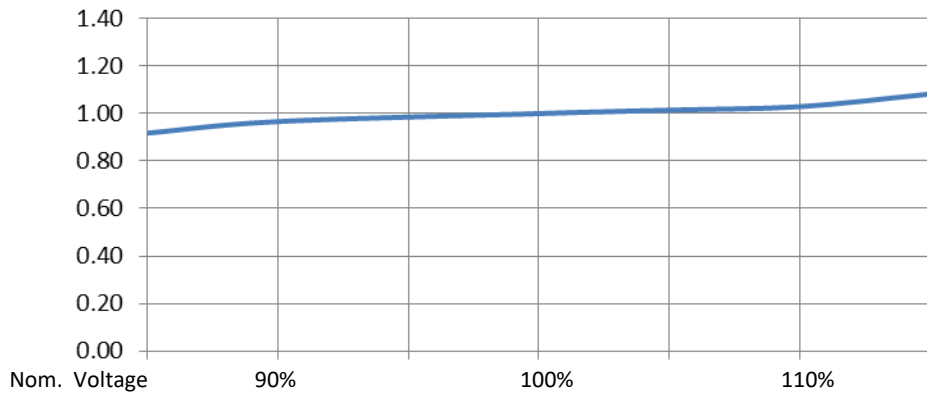
## 5. Absolute Maximum Ratings (@ Ta=25°C)

ITEM	SYMBOL	ABSOLUTE MAXIMUM RATING	UNIT
Power Dissipation	P <sub>d</sub>	22	W
A.C. Current	I <sub>f</sub>	150	mArms
AC Voltage	V <sub>f</sub>	300	V
Operating Temperature	T <sub>o</sub>	-25 ~ +90	°C
Storage Temperature	T <sub>s</sub>	-40 ~ +100	°C
Soldering Temperature(Reflow)	T <sub>sld</sub>	N/A	°C
Soldering Temperature(Hand)	T <sub>sld</sub>	370	°C



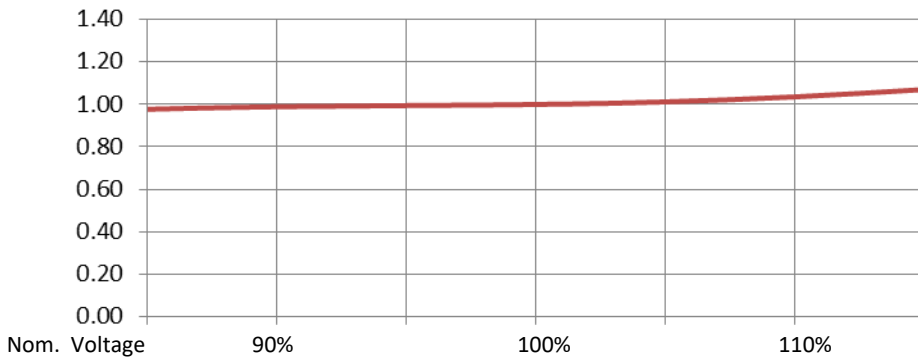
## 7. Typical Electrical & Optical Characteristic Curves

### Relative Power vs Voltage

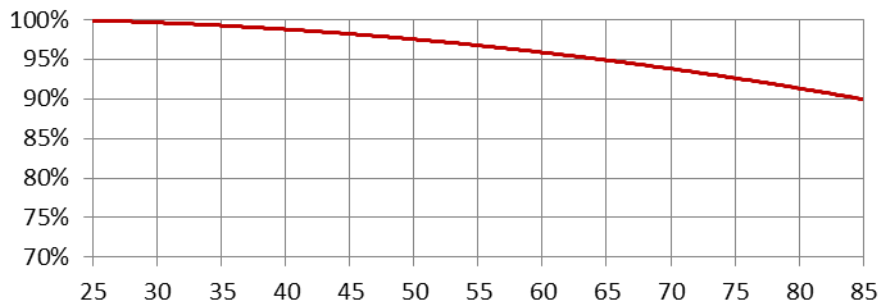


Ta=25°C

### Relative Luminous Flux vs. Voltage



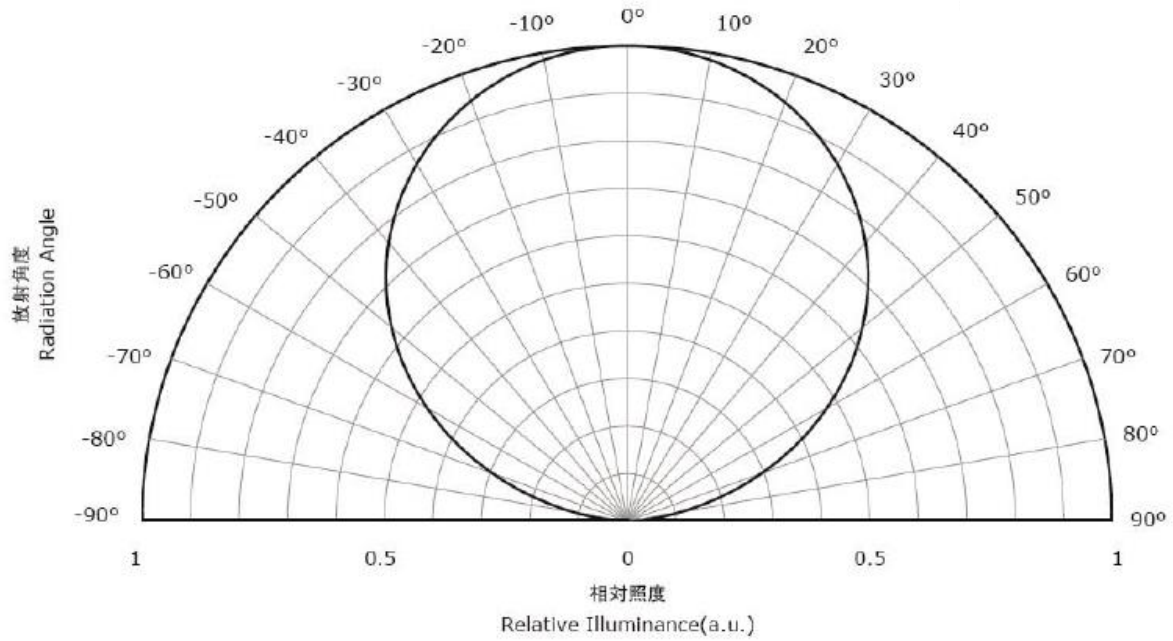
### Lumen Thermal de-rating curve





Directivity

$T_A = 25^\circ\text{C}$





## 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	1	1	0	X	S	2	9	A	2	0	W	L	3	5	K	I	H	U

Model Number														
Product Code	Shape	Dimension/Diameter			Module Power	aTHD	CCT (XXK) Warm on Dim (XYWD)		Connection Type	CRI	Input Voltage	Miscellaneous		
S	R	1	1	0	2	0	W	L	3	5	K	I	H	U

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	= Insulation 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 Source
12E	= 12 VAC, Electronic Transformer Source Only
120V	= 120 VAC
230V	= 230 VAC
U	= 90 - 277 VAC Universal Voltage





## 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 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.

## 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 warranty will be voided