



# SnapBrite® SSL100-15W-SS-27K/30K/40K-120

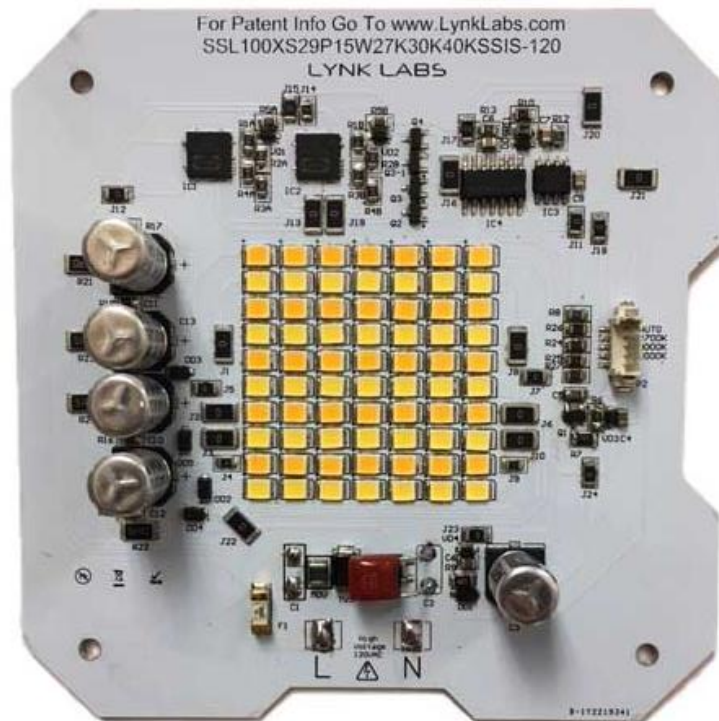
120VAC Direct Connect – AC LED Module

IEEE/CEC-T24 Flicker Compliance

2700K/3000K/4000K Switch Selectable CCT, ~1600 Lumens

100mm (3.94 inch) Diameter Square X 11.2mm (0.41 inch) Height

## Technical Data Sheet





## Direct Connect AC LED lighting Technology

### SnapBrite® SSL100-15W-SS-27K/30K/40K-120

#### Description

The SSL100-15W-SS-120 module utilizes Lynk Labs patented “Driver on Board” technology to provide a compact, self-contained, highly reliable, easy to install module that can connect directly to 120VAC mains.

This SSL100-SS-120 module can be set for one of three CCTs (2700K, 3000K or 4000K) using a three-position slide switch that can be mounted directly to the module or connected via the S1 connector.

This module has been designed to meet the following standards; UL8750, CSA-C22.2 No 250, UL 94V0, RoHS, IEEE-1789, CEC-Title-24 (JA8).

This module is compatible with most ELV type Triac dimmers hooked in series with the power input.

This module is designed for long life based on the thermal performance of the fixture in which it is implemented. We recommend that the fixture be designed for a temperature  $\leq 85^{\circ}\text{C}$  @ the thermal Test Points located on the module.

This module employs several Lynk Labs patents to cover the product from circuit to system. More information on Lynk Labs Intellectual Property is available at [www.lynkylabs.com](http://www.lynkylabs.com).

#### Features

- ✓ 2700K/3000K/4000K, Selectable-CCT  
**(Reduces Inventory and Customer Returns)**
- ✓ 15W, 1475 to 1640 Lumens
- ✓ Direct Mains; 90 to 132 VAC
- ✓ Low Flicker – Meets CEC T24 & IEEE-1798
- ✓ Driver on Board – **Cost/Reliability**
- ✓ Simple Installation
- ✓ Low THD
- ✓ Switch Selectable CCT
- ✓ Phase-Cut Dimming
- ✓ ETL Recognition to UL8750 & CAS; C22.2 #250 Pending.
- ✓ **Patent Protected Circuit-to-System**

#### Applications

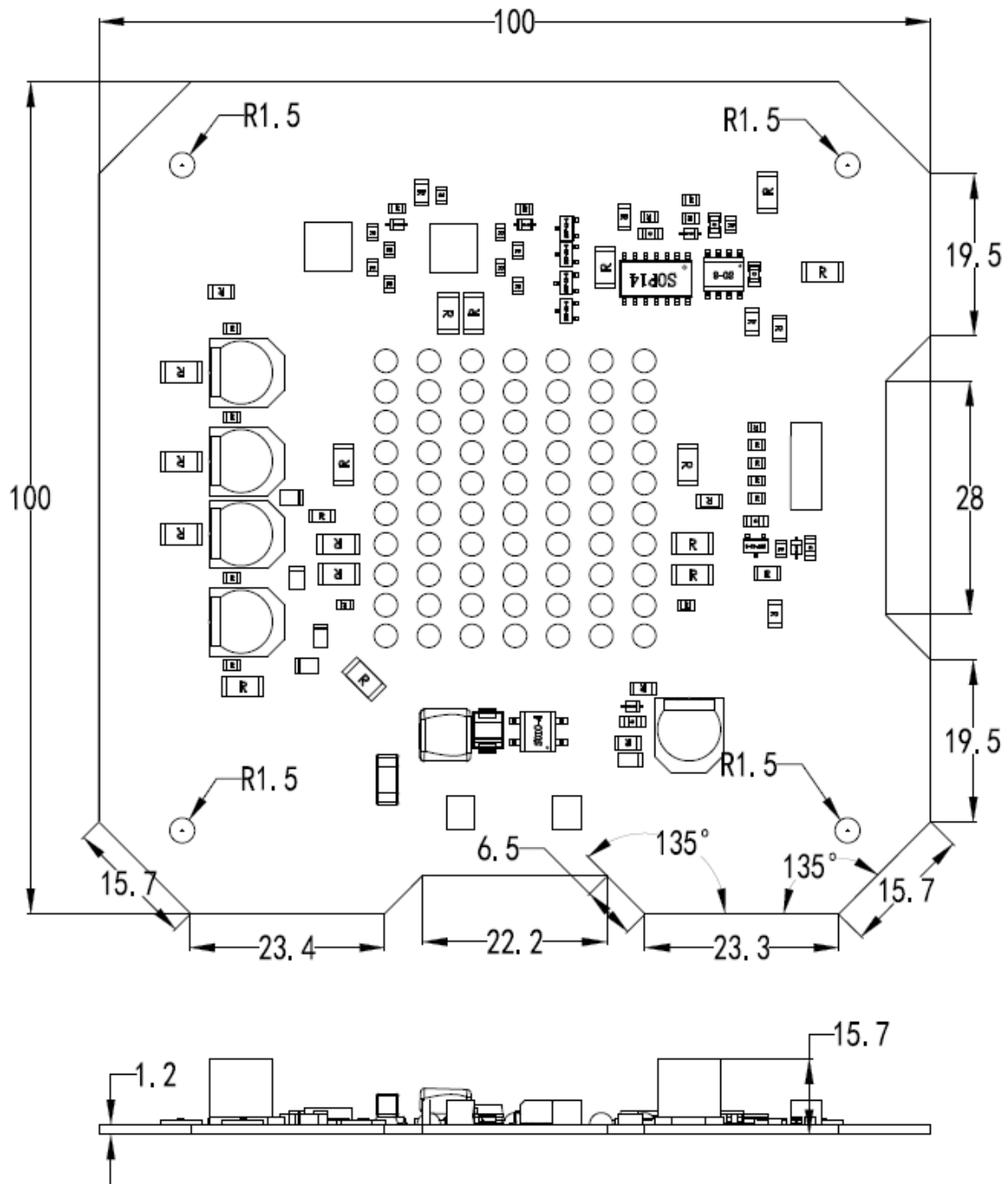
- Downlights
- Flush Mounts
- Pendants
- Sconces
- Fan Light
- Architectural Lighting



## **Contents**

Title.....	1
Description, Features and Applications.....	2
Contents.....	3
Mechanical Dimensions .....	4
Electrical & Optical Characteristics.....	5
Typical Electrical & Optical Characteristic Curves.....	6
Part Number Identification.....	7
Installation.....	8
ETL Recognition.....	8
Flicker Performance.....	8
High Voltage Warning.....	8

## Mechanical Dimensions



### Notes:

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



## Electrical & Optical Characteristics

Item	Symbol	Condition	Unit	Min.	Typ.	Max.
Drive Voltage	V <sub>f</sub>	Connected to Line	V <sub>rms</sub>	100	120	132
Viewing Angle	2θ <sub>½</sub>		Deg		120	
Case Temperature	T <sub>c</sub>	I <sub>f</sub> = 120 mA	°C		70	90
Life at Nominal Case Temp		T <sub>c</sub> ≤ 70°C	kHrs		50	
Typical Operating Power	W <sub>T</sub>	I <sub>f</sub> = 120 mA	W		16	
Luminous Flux (4000K)	Φ		Lm		1,600	
Total Harmonic Distortion	ATHD		%		≤20	
Luminous Efficacy (4000K)	η <sub>v</sub>		lm/W		100	
Flicker% Dimmer @ Max		200Hz Step Filter	%		<30%	
Flicker% Dimmer @ 20%		200Hz Step Filter	%		<30%	
Flicker% Dimmer @ Min		200Hz Step Filter	%		<30%	

\*Measurement Uncertainty of the Luminous Flux: ± 10%

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

Part Number Variants	CCT	CRI	VAC	Power	Lumen	Lm/W
SSL100XS29P15W27K30K40KSSIS-120	2700K	>80	120	16.4	1474	90
	3000K	>80	120	15.8	1635	103
	4000K	>80	120	16.4	1603	97

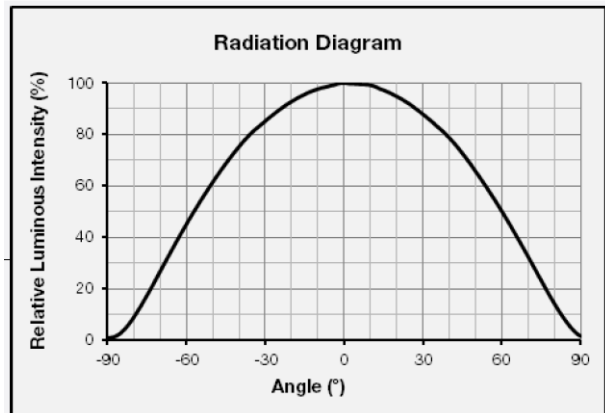
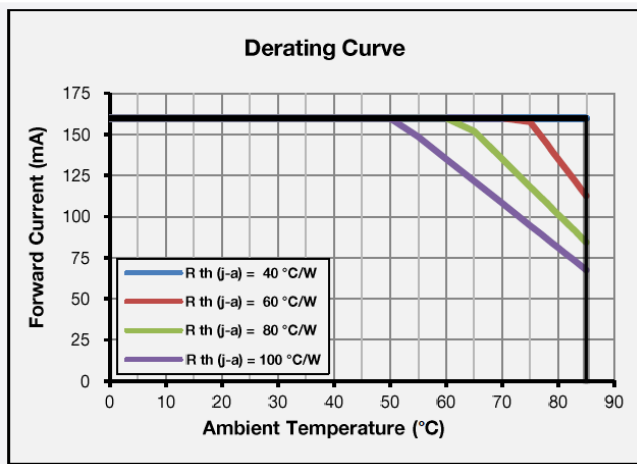
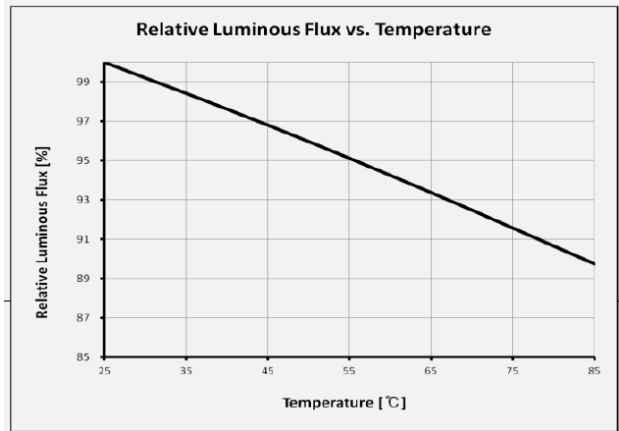
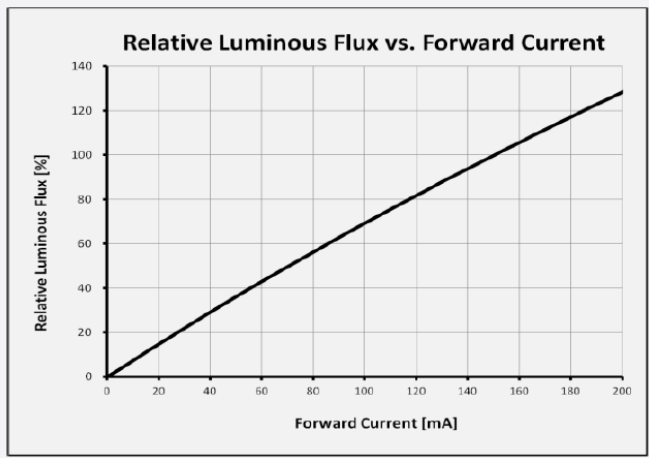
\*Other CCTs may be Available to Special Order

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

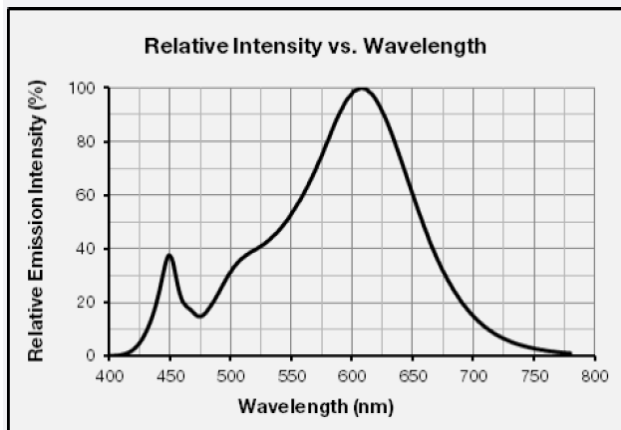
Item	Symbol	Absolute Maximum Rating	Unit
Power Dissipation	P <sub>d</sub>	17	W
AC Current	I <sub>f</sub>	140	mA <sub>rms</sub>
AC Voltage	V <sub>f</sub>	132	V
Operating Temperature	T <sub>o</sub>	-25 to +70	°C
Storage Temperature	T <sub>s</sub>	-40 to +100	°C
Soldering Temp (Hand)	T <sub>sld</sub>	370	°C



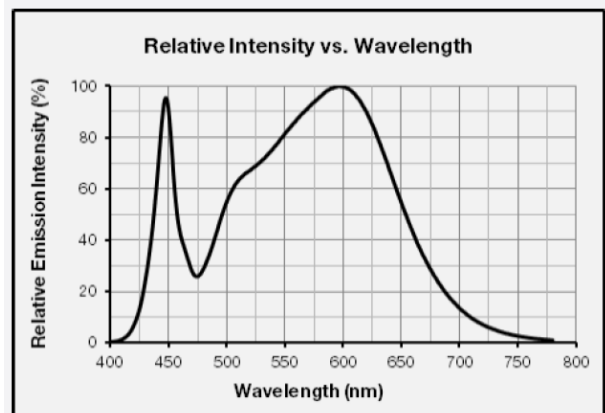
## Typical Electrical & Optical Characteristic Curves



CCT: 2700 K (80 CRI)



CCT: 4000 K (80 CRI)

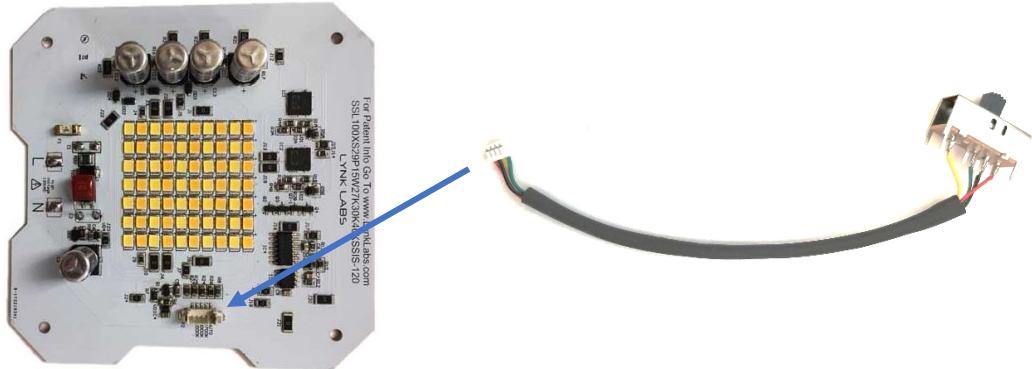
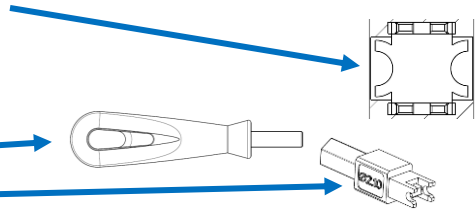








- The Connector used is a AVX, IDC, Part Number; 709176001501006.
  - Will work with 18 AWG Fine-Stranded or Solid Wire.
  - Insulation Diameter 1.6mm to 2.1mm.
  - Use AVX Punch Down Tool, 067000763001000 with 069176701901000 Metal tool
- Attach Switch to the S1 connector and mount the switch to the fixture based on the application and usage plan.



**ETL Recognized UL9750 & CSA-C22.2; Report # *In Process***



**Flicker Performance (Pass = <30% @ ≥200 Hz):**

Dimmer set to Maximum (100%)	0-40 Hz	0-90 Hz	0-200 Hz	Pass/Fail
Percent Flicker	23%	25%	26%	Pass
Amplitude Modulation	0.23	0.25	0.26	
Dimmer set to 20%	0-40 Hz	0-90 Hz	0-200 Hz	Pass/Fail
Percent Flicker	24%	24%	24%	Pass
Amplitude Modulation	0.24	0.24	0.24	
Dimmer set to Minimum	0-40 Hz	0-90 Hz	0-200 Hz	Pass/Fail
Percent Flicker	7%	11%	16%	Pass
Amplitude Modulation	0.07	0.11	0.16	

**Caution; High-Voltage is Present on the Top Surface of the Module!**

**Customer Service; 847-783-0123**