

# SORAA LED AR111

## 18.5W



OUTPUT RANGE: VIVID SERIES	930-1050 lumen; CRI-95, R9>90
OUTPUT RANGE: BRILLIANT SERIES	1190-1280 lumen; CRI-80
BEAM ANGLE RANGE	9°, 25°, 36°, 60°
COLOR TEMPERATURE RANGE	2700K, 3000K, 4000K, 5000K
APPLICATION	Halogen replacement for indoor & outdoor applications



### POINT SOURCE OPTICS

Exceptional beam control enables unique 9° narrow spot and smooth uniform beams

Single light source, single crisp shadow

### VP<sub>3</sub> VIVID COLOR AND VP<sub>3</sub> NATURAL WHITE

VIVID series provides accurate color rendering across the visible spectrum from 400nm to 700nm, CRI-95, R9>90

Accurate white rendering based on >70% excitation of Optical Brightening Agents with emission between 400nm & 440 nm

### ENERGY EFFICIENCY AND LONG LIFE

85% more energy efficient than standard halogen lamps

Typical payback of one year or less

Rated lifetime of 35,000 hours. Three year warranty

### CERTIFICATIONS

UL/CUL Class 2 and non-Class 2, FCC Title 47 Part 15B, RoHS, CE

### HIGHLY COMPATIBLE

Narrow spot compatible with Soraa SNAP System accessories

Thermally and geometrically compatible with standard fixtures

Suitable for fully enclosed fixtures per UL 1993. Can be used with front glass cover

Suitable for damp locations per UL

Works with trailing edge and leading edge phase cut dimmers, 12V AC magnetic and electronic transformers and 12V DC transformers (see [www.soraa.com/resources](http://www.soraa.com/resources))

### INTENDED USE AND APPLICATIONS

For use in AR111 compatible recessed downlights, track lighting and other indoor and outdoor applications

Soraa lamps are designed to safely turn down in any thermal environment not conducive to minimum airflow or proper ventilation

### GENERAL SPECIFICATIONS

#### Form Factor

Width: 111mm (4.37")

Height: 57mm (2.24")

Weight: 260g

#### Operating Temperature

Minimum: -40°C (ambient)

Typical: 70°C - 80°C (base)

Maximum: 90°C (base)

#### Electrical

Wattage: 18.5W

Power factor: 0.92

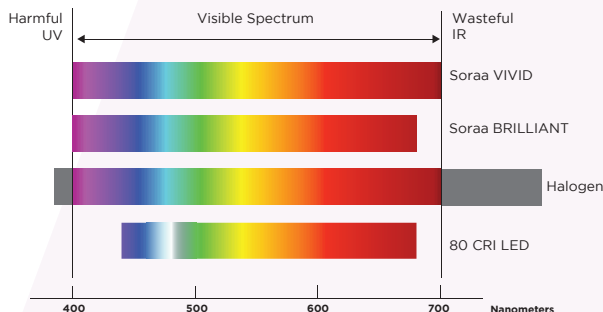
Voltage: 12V +/- 1.2V

Dimmable to <20%

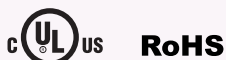
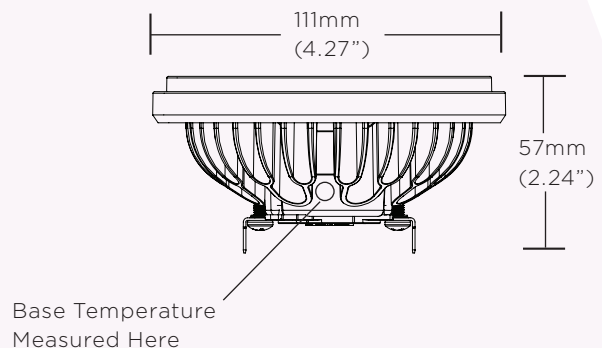
Flicker Index < 0.1

Percent Flicker: 28%

### COLOR RENDERING



### DIMENSIONS



# SORAA LED AR111 18.5W

## BEAM DIAGRAM

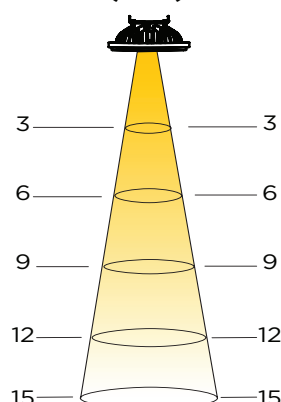
### Narrow Spot 9°

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
0.5	0.8	11.1%
0.9	1.7	2.8%
1.4	2.5	1.2%
1.9	3.4	0.7%
2.4	4.2	0.4%

### Narrow Flood 25°

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
1.3	2.2	11.1%
2.7	4.4	2.8%
4.0	6.6	1.2%
5.3	8.7	0.7%
6.7	10.9	0.4%

Distance to Floor (Feet)



### Flood 36°

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
1.9	3.5	11.1%
3.9	6.9	2.8%
5.8	10.4	1.2%
7.8	13.9	0.7%
9.7	17.3	0.4%

### Wide Flood 60°

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
3.5	6.0	11.1%
6.9	12.0	2.8%
10.4	18.0	1.2%
13.9	24.0	0.7%
17.3	30.0	0.4%

## SPECIFICATIONS BY MODEL NUMBER\*

Model Number	Product Code	CCT (K)	Beam Angle (°)	Field Angle (°)	CBCP (cd)	Halogen Equivalent** (Watts)	Total Flux (Lm)	Efficacy (Lm/W)	CRI/R9	White Point (McA)
<b>SORAA VIVID SERIES</b>										
SR111-18-09D-927-03 <sup>SNAP</sup>	00869	2700	9	16	22400	75	930	50	95 / 95	3
SR111-18-25D-927-03	00871	2700	25	40	5020	75	930	50	95 / 95	3
SR111-18-36D-927-03	00873	2700	36	60	2320	75	930	50	95 / 95	3
SR111-18-60D-927-03	00875	2700	60	90	1020	75	930	50	95 / 95	3
SR111-18-09D-930-03 <sup>SNAP</sup>	00885	3000	9	16	24100	75	1000	54	95 / 95	3
SR111-18-25D-930-03	00887	3000	25	40	5400	75	1000	54	95 / 95	3
SR111-18-36D-930-03	00889	3000	36	60	2500	75	1000	54	95 / 95	3
SR111-18-60D-930-03	00891	3000	60	90	1100	75	1000	54	95 / 95	3
SR111-18-09D-940-03 <sup>SNAP</sup>	00901	4000	9	16	25060	75	1040	56	95 / 95	4
SR111-18-25D-940-03	00903	4000	25	40	5600	75	1040	56	95 / 95	4
SR111-18-36D-940-03	00905	4000	36	60	2600	75	1040	56	95 / 95	4
SR111-18-60D-940-03	00907	4000	60	90	1140	75	1040	56	95 / 95	4
SR111-18-09D-950-03 <sup>SNAP</sup>	00909	5000	9	16	25300	75	1050	57	95 / 90	5
SR111-18-25D-950-03	00911	5000	25	40	5660	75	1050	57	95 / 90	5
SR111-18-36D-950-03	00913	5000	36	60	2620	75	1050	57	95 / 90	5
SR111-18-60D-950-03	00915	5000	60	90	1140	75	1050	57	95 / 90	5
<b>SORAA BRILLIANT SERIES</b>										
SR111-18-09D-827-03 <sup>SNAP</sup>	00877	2700	9	16	28660	100	1190	64	80 / >0	3
SR111-18-25D-827-03	00879	2700	25	40	6420	100	1190	64	80 / >0	3
SR111-18-36D-827-03	00881	2700	36	60	2960	100	1190	64	80 / >0	3
SR111-18-60D-827-03	00883	2700	60	90	1300	100	1190	64	80 / >0	3
SR111-18-09D-830-03 <sup>SNAP</sup>	00893	3000	9	16	30840	100	1280	69	80 / >0	3
SR111-18-25D-830-03	00895	3000	25	40	6900	100	1280	69	80 / >0	3
SR111-18-36D-830-03	00897	3000	36	60	3200	100	1280	69	80 / >0	3
SR111-18-60D-830-03	00899	3000	60	90	1400	100	1280	69	80 / >0	3

\*Specifications are at stable warm operating conditions (25°C ambient) \*\*Energy Star Minimum <sup>SNAP</sup>SORAA SNAP System Compatible  
 CCT = Correlated Color Temperature CRI = Color Rendering Index (Ra-8) White Point = White Point Accuracy in McA step

## SAFETY NOTE ON HEAT

Although Soraa's lamps operate at cooler temperatures than halogen lamps, it is recommended that gloves be worn when handling bare lamps that have been energized.

Information and specifications subject to change. SR111 18W Rev 1 8.24.14

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