

# 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

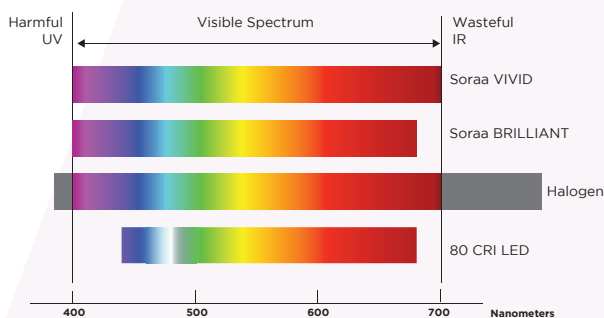
For use in AR111 compatible recessed downlights, track lighting and other indoor and outdoor applications

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

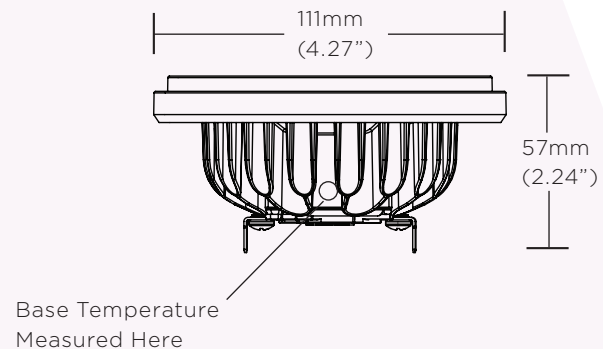
### GENERAL SPECIFICATIONS

Form Factor	Operating Temperature	Electrical	
Width: 111mm (4.37")	Minimum: -40°C (ambient)	Wattage: 18.5W	Dimmable to <20%
Height: 57mm (2.24")	Typical: 70°C - 80°C (base)	Power factor: 0.92	Flicker Index < 0.1
Weight: 250g	Maximum: 90°C (base)	Voltage: 12V +/- 1.2V	Percent Flicker: 28%

### COLOR RENDERING



### DIMENSIONS



# SORAA LED AR111 GU10 18.5W

## BEAM DIAGRAM

Narrow Spot 9°			Narrow Flood 25°			Distance to Floor (m)	Flood 36°			Wide Flood 60°		
Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)	Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)		Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)	Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.2	0.3	77%	0.4	0.7	77%	1	0.6	1.2	77%	1.2	2.0	77%
0.3	0.6	23%	0.9	1.5	23%	2	1.3	2.3	23%	2.3	4.0	23%
0.5	0.8	11%	1.3	2.2	11%	3	1.9	3.5	11%	3.5	6.0	11%
0.6	1.1	6%	1.8	2.9	6%	4	2.6	4.6	6%	4.6	8.0	6%
0.8	1.4	4%	2.2	3.6	4%	5	3.2	5.8	4%	5.8	10.0	4%

Note: Lux may be calculated by multiplying the peak Intensity of the desired model number by the percentage in the tables above

## SPECIFICATIONS BY MODEL NUMBER\*

Model Number	Product Code	CCT (K)	Beam Angle (°)	Field Angle (°)	Peak Intensity	Total Flux (Lm)	Efficacy (Lm/W)	90 ° Lumens	CRI/R9	White Point (McA)	EEI ***
<b>SORAA VIVID SERIES</b>											
SR111-18-09D-927-03-S3 <sup>SNAP</sup>	01025	2700	9	16	22400	930	50	835	95 / 95	3	A
SR111-18-25D-927-03-S3	01027	2700	25	40	5020	930	50	860	95 / 95	3	A
SR111-18-36D-927-03-S3	01029	2700	36	60	2320	930	50	855	95 / 95	3	A
SR111-18-60D-927-03-S3	01031	2700	60	90	1020	930	50	825	95 / 95	3	A
SR111-18-09D-930-03-S3 <sup>SNAP</sup>	01041	3000	9	16	24100	1000	54	900	95 / 95	3	A
SR111-18-25D-930-03-S3	01043	3000	25	40	5400	1000	54	930	95 / 95	3	A
SR111-18-36D-930-03-S3	01045	3000	36	60	2500	1000	54	920	95 / 95	3	A
SR111-18-60D-930-03-S3	01047	3000	60	90	1100	1000	54	890	95 / 95	3	A
SR111-18-09D-940-03-S3 <sup>SNAP</sup>	01057	4000	9	16	25060	1040	56	935	95 / 95	4	A
SR111-18-25D-940-03-S3	01059	4000	25	40	5600	1040	56	965	95 / 95	4	A
SR111-18-36D-940-03-S3	01061	4000	36	60	2600	1040	56	955	95 / 95	4	A
SR111-18-60D-940-03-S3	01063	4000	60	90	1140	1040	56	925	95 / 95	4	A
SR111-18-09D-950-03-S3 <sup>SNAP</sup>	01065	5000	9	16	25300	1050	57	945	95 / 90	5	A
SR111-18-25D-950-03-S3	01067	5000	25	40	5660	1050	57	975	95 / 90	5	A
SR111-18-36D-950-03-S3	01069	5000	36	60	2620	1050	57	965	95 / 90	5	A
SR111-18-60D-950-03-S3	01071	5000	60	90	1140	1050	57	930	95 / 90	5	A
<b>SORAA BRILLIANT SERIES</b>											
SR111-18-09D-827-03-S3 <sup>SNAP</sup>	01033	2700	9	16	28660	1190	64	1070	80 / >0	3	A
SR111-18-25D-827-03-S3	01035	2700	25	40	6420	1190	64	1105	80 / >0	3	A
SR111-18-36D-827-03-S3	01037	2700	36	60	2960	1190	64	1090	80 / >0	3	A
SR111-18-60D-827-03-S3	01039	2700	60	90	1300	1190	64	1055	80 / >0	3	A
SR111-18-09D-830-03-S3 <sup>SNAP</sup>	01049	3000	9	16	30840	1280	69	1150	80 / >0	3	A
SR111-18-25D-830-03-S3	01051	3000	25	40	6900	1280	69	1190	80 / >0	3	A
SR111-18-36D-830-03-S3	01053	3000	36	60	3200	1280	69	1175	80 / >0	3	A
SR111-18-60D-830-03-S3	01055	3000	60	90	1400	1280	69	1135	80 / >0	3	A

\*Specifications are at stable warm operating conditions (25°C ambient) \*\*Energy Star Minimum \*\*\*Energy Efficiency Index

CCT = Correlated Color Temperature CRI = Color Rendering Index (Ra-8) White Point = White Point Accuracy in McA step

<sup>SNAP</sup>SORAA SNAP System Compatible

## 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 & specifications subject to change. SR111 18W Rev 1 Intl 5.19.15

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