



# AR111 12.5W

<b>OUTPUT RANGE: VIVID SERIES</b>	575 - 645 lumen
<b>BEAM ANGLE RANGE</b>	8°, 25°, 36°
<b>COLOR TEMPERATURE RANGE</b>	2700K, 3000K, 4000K
<b>APPLICATION</b>	Halogen replacement for indoor & outdoor applications



## POINT SOURCE OPTICS

Exceptional beam control enables unique 8° 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, with CRI/95, R9/95, Rf/90, Rg/100

Whiteness rendering matches or exceeds that of halogen and incandescent sources at 2700K and 3000K

## ENERGY EFFICIENCY AND LONG LIFE

85% more energy efficient than standard halogen lamps

Typical payback of one year or less

Rated lifetime to L70: 35,000hrs

Warranty: 3yrs or 25,000hrs whichever comes first

Detailed warranty information available at [soraalighting.com/resources/legal](http://soraalighting.com/resources/legal)

## CERTIFICATIONS

FCC Title 47 Part 15B, RoHS, CE



## HIGHLY COMPATIBLE

Narrow spot compatible with Soraa SNAP System accessories

Thermally and geometrically compatible with standard fixtures and suitable for damp locations

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

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

## INTENDED USE AND APPLICATIONS

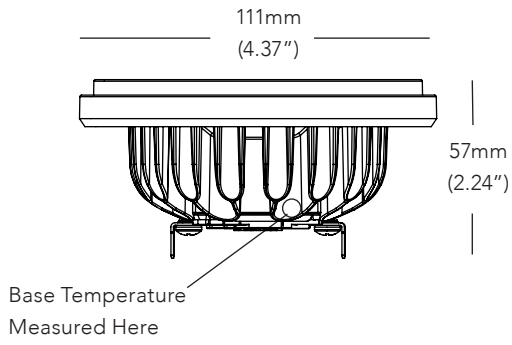
Intended for use in AR111 compatible recessed downlights, track lighting and other indoor and outdoor applications

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

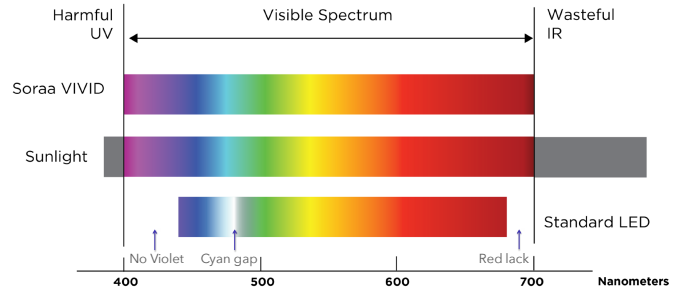
## GENERAL SPECIFICATIONS

Form Factor	Operating Temperature	Electrical	Dimming and Flicker
Width: 111mm (4.37")	Minimum: -40°C (ambient)	Wattage: 12.5W	Dimmable to <20%
Height: 57mm (2.24")	Typical: 60°C - 70°C (base)	Power factor: 0.92	Flicker Index <0.1
Weight: 250g	Maximum: 80°C (base)	Voltage: 12V +/- 1.2V	Percent Flicker: 28%
		Frequency: 50/60Hz	

## DIMENSIONS

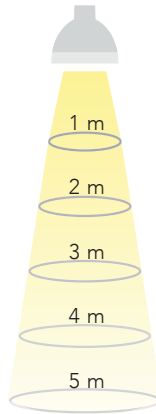


## COLOR RENDERING



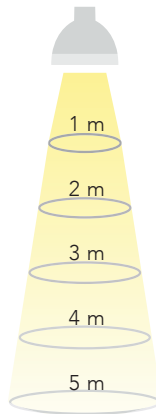
## 8 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.1	0.2	61%
0.3	0.5	21%
0.4	0.7	11%
0.6	1.0	6%
0.7	1.2	4%



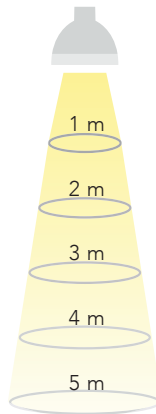
## 25 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.4	0.7	61%
0.9	1.5	21%
1.3	2.2	11%
1.8	2.9	6%
2.2	3.6	4%



## 36 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.6	1.2	61%
1.3	2.3	21%
1.9	3.5	11%
2.6	4.6	6%
3.2	5.8	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\* SORAA LED AR111 12.5W

Model #	Product Code	CCT (K)	Beam Angle	Field Angle	Peak Intensity	Total Flux (Lm)	Efficacy (Lm/W)	90° Lumens	McA	EI	SNAP
<b>VIVID SERIES</b>											
SR111-12-08D-927-03-S3	01427	2700	8	14	15520	575	46	515	3	A	YES
SR111-12-25D-927-03-S3	01429	2700	25	40	3100	575	46	520	3	A	-
SR111-12-36D-927-03-S3	01431	2700	36	60	1420	575	46	505	3	A	-
SR111-12-08D-930-03-S3	01443	3000	8	14	16740	620	50	555	3	A	YES
SR111-12-25D-930-03-S3	01445	3000	25	40	3340	620	50	560	3	A	-
SR111-12-36D-930-03-S3	01447	3000	36	60	1540	620	50	545	3	A	-
SR111-12-08D-940-03-S3	01459	4000	8	14	17400	645	52	580	4	A	YES
SR111-12-25D-940-03-S3	01461	4000	25	40	3480	645	52	585	4	A	-
SR111-12-36D-940-03-S3	01463	4000	36	60	1600	645	52	565	4	A	-

**CCT:** Correlated Color Temperature **McA:** White Point Accuracy in McA step **SNAP:** SORAA SNAP System Compatible **EI:** Energy Efficiency Index

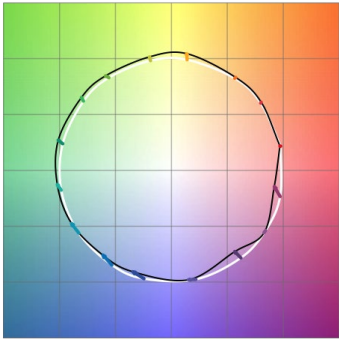
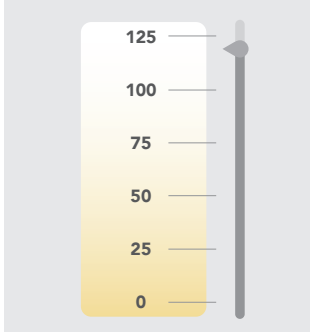
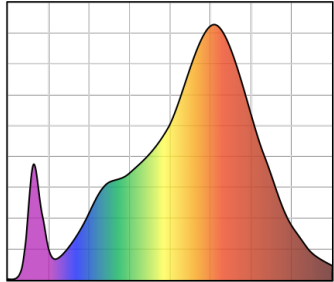
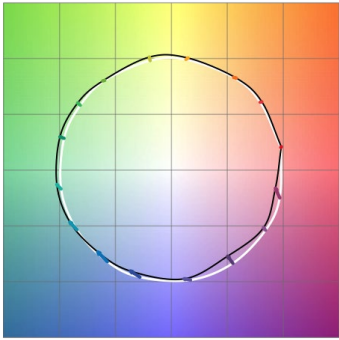
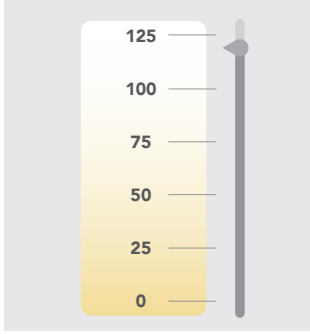
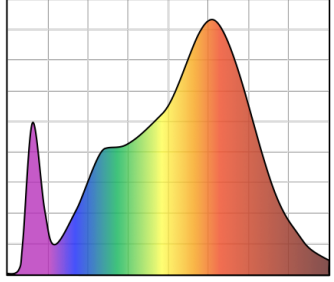
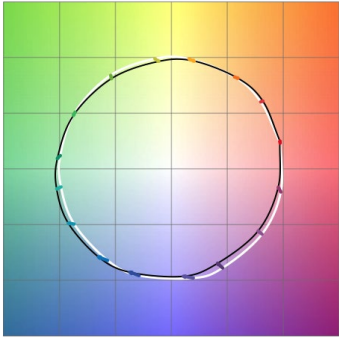
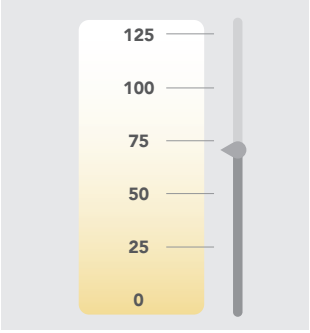
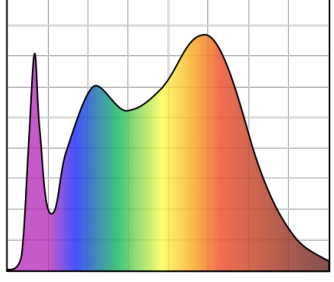
\*Specifications are at stable warm operating conditions (25°C ambient)

**SERIES/CCT**

**COLOR ACCURACY**

**WHITENESS INDEX**

**SPECTRAL POWER DISTRIBUTION**

<p><b>VIVID 2700K</b></p>	 <p><b>Rf: 90, Rg: 100, Rfh1: 95</b></p>	 <p><b>Rw: 120</b></p>	 <p><b>Wavelength (nm)</b> 380 780</p> <p><b>CRI: 95, R9: 95</b></p>
<p><b>VIVID 3000K</b></p>	 <p><b>Rf: 90, Rg: 100, Rfh1: 95</b></p>	 <p><b>Rw: 120</b></p>	 <p><b>Wavelength (nm)</b> 380 780</p> <p><b>CRI: 95, R9: 95</b></p>
<p><b>VIVID 4000K</b></p>	 <p><b>Rf: 90, Rg: 100, Rfh1: 95</b></p>	 <p><b>Rw: 70</b></p>	 <p><b>Wavelength (nm)</b> 380 780</p> <p><b>CRI: 95, R9: 95</b></p>

Rf: TM-30 metric measuring color fidelity (whether colors are similar to those under natural light). Rf is a more accurate version of the CRI Ra. Rf is 100 for natural light.

Rg: TM-30 metric measuring color gamut (whether colors are more saturated than under natural light). Rg is 100 for natural light.

Rfh1: TM-30 metric measuring color fidelity for red tones. Rfh1 is a more accurate version of the CRI R9. Rfh1 is 100 for natural light.

Rw: Sora-developed metric to measure white fidelity. Rw measures the magnitude of excitation of whitening agents within whites. Rw is about 100 for natural light.