



AR111 12.5W

OUTPUT RANGE: VIVID SERIES	575 - 650 lumen
OUTPUT RANGE: BRILLIANT SERIES	735 - 795 lumen
BEAM ANGLE RANGE	8°, 25°, 36°, 50°
COLOR TEMPERATURE RANGE	2700K, 3000K, 4000K, 5000K
APPLICATION	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

VP₃ VIVID COLOR & VP₃ 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 & LONG LIFE

85% more energy efficient than standard halogen lamps

Typical payback of one year or less

Rated lifetime of 35,000 hours. 3 year warranty

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.soraa.com/resources)

INTENDED USE AND APPLICATIONS

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

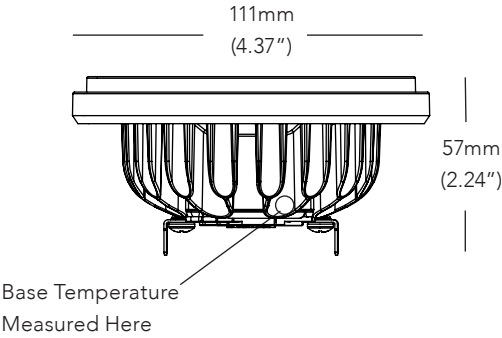
Soraa lamps are designed to safely turn down in any thermal environment not conducive to minimum airflow or proper ventilation

GENERAL SPECIFICATIONS

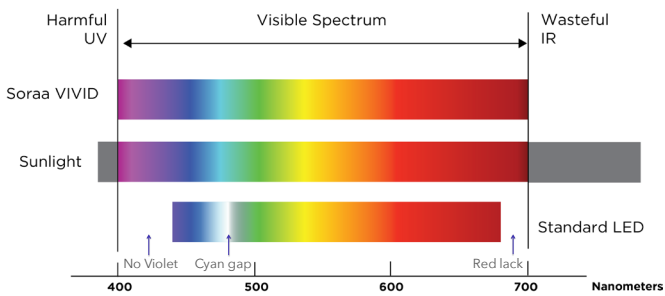
Form Factor	Operating Temperature	Electrical	Dimming and Flicker
Width: 111mm (4.37")	Minimum: -40°C (ambient)	Wattage: 12.5W	Dimmable to <20%
Height: 57mm (2.24")	Typical: 60°C - 70°C (base)	Power factor: 0.92	Flicker Index < 0.1
Weight: 250g	Maximum: 80°C (base)	Voltage: 12V +/- 1.2V	Percent Flicker: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

*Metrics apply to 2700K, 3000K, 4000K. 5000K color metrics are CRI/90, R9/95

DIMENSIONS

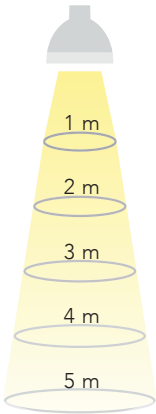


COLOR RENDERING



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%

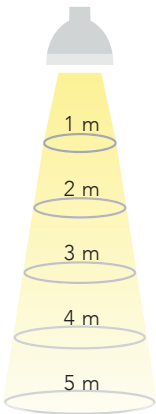


25 DEGREE BEAM

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%

50 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%



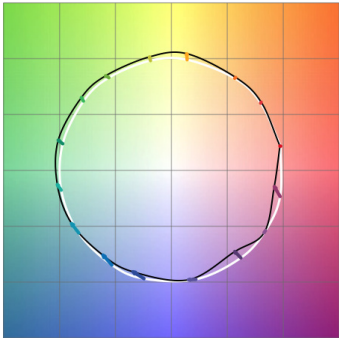
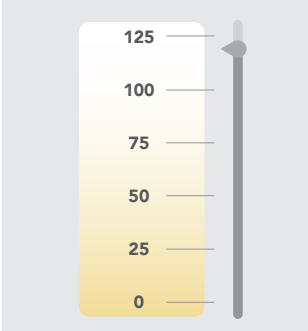
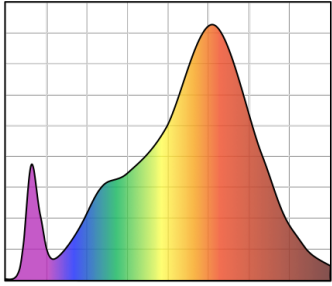
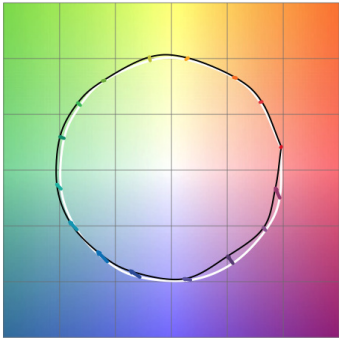
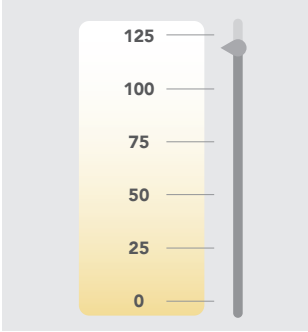
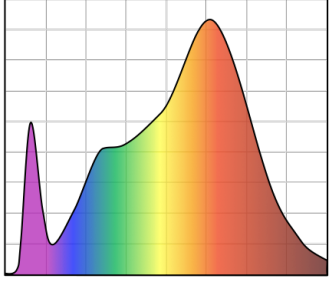
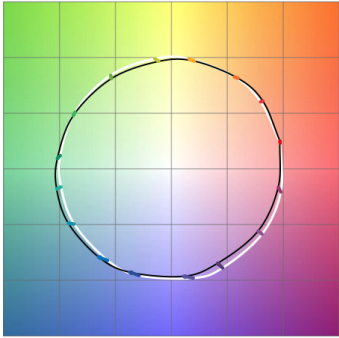
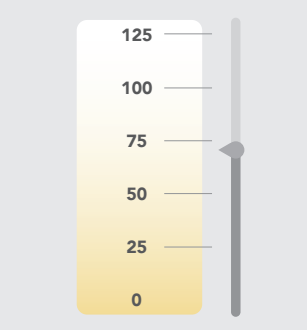
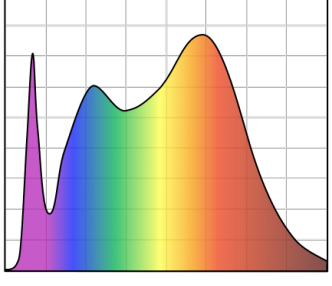
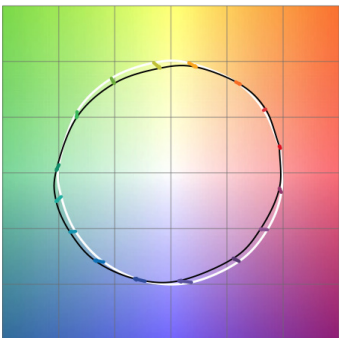
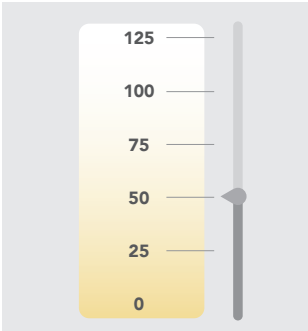
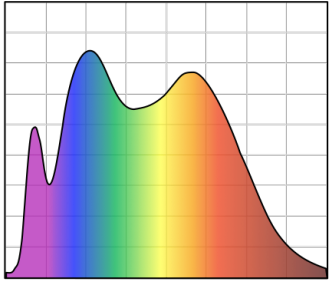
Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.9	1.7	61%
1.9	3.4	21%
2.8	5.0	11%
3.7	6.7	6%
4.7	8.4	4%

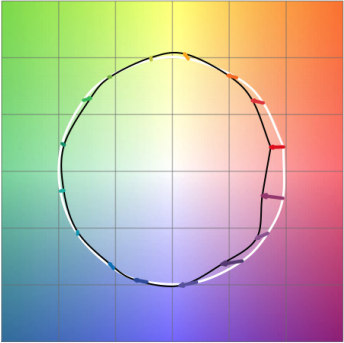
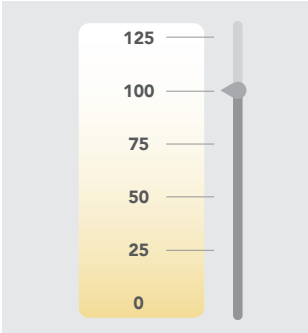
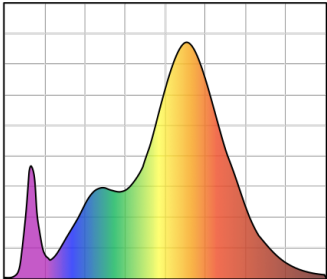
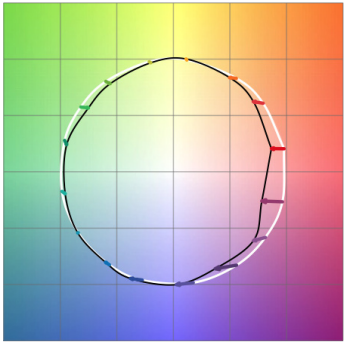
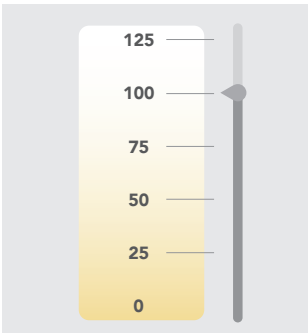
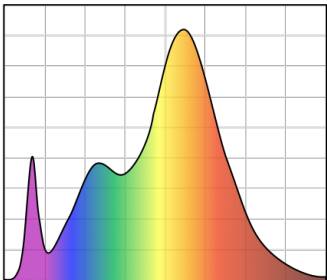
Note: Lux may be calculated by multiplying the peak Intensity of the desired model number by the percentage in the tables above

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	EEl	SNAP
VIVID SERIES											
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	-
SR111-12-50D-927-03-S3	01433	2700	50	80	740	575	46	515	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	-
SR111-12-50D-930-03-S3	01449	3000	50	80	800	620	50	555	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	-
SR111-12-50D-940-03-S3	01465	4000	50	80	820	645	52	580	4	A	-
SR111-12-08D-950-03-S3	01467	5000	8	14	17540	650	52	585	5	A	YES
SR111-12-25D-950-03-S3	01469	5000	25	40	3500	650	52	590	5	A	-
SR111-12-36D-950-03-S3	01471	5000	36	60	1620	650	52	570	5	A	-
SR111-12-50D-950-03-S3	01473	5000	50	80	840	650	52	585	5	A	-
BRILLIANT SERIES											
SR111-12-08D-827-03-S3	01435	2700	8	14	19840	735	59	660	3	A	YES
SR111-12-25D-827-03-S3	01437	2700	25	40	3960	735	59	665	3	A	-
SR111-12-36D-827-03-S3	01439	2700	36	60	1820	735	59	645	3	A	-
SR111-12-50D-827-03-S3	01441	2700	50	80	940	735	59	660	3	A	-
SR111-12-08D-830-03-S3	01451	3000	8	14	21460	795	64	715	3	A	YES
SR111-12-25D-830-03-S3	01453	3000	25	40	4280	795	64	720	3	A	-
SR111-12-36D-830-03-S3	01455	3000	36	60	1980	795	64	695	3	A	-
SR111-12-50D-830-03-S3	01457	3000	50	80	1020	795	64	715	3	A	-

CCT: Correlated Color Temperature **McA**: White Point Accuracy in McA step **SNAP**: SORAA SNAP System Compatible **EEl**: Energy Efficiency Index
*Specifications are at stable warm operating conditions (25°C ambient)

SERIES/CCT	COLOR ACCURACY	WHITENESS INDEX	SPECTRAL POWER DISTRIBUTION
VIVID 2700K	 Rf: 90, Rg: 100, Rfh1: 95	 Rw: 120	 Wavelength (nm) CRI: 95, R9: 95
VIVID 3000K	 Rf: 90, Rg: 100, Rfh1: 95	 Rw: 120	 Wavelength (nm) CRI: 95, R9: 95
VIVID 4000K	 Rf: 90, Rg: 100, Rfh1: 95	 Rw: 70	 Wavelength (nm) CRI: 95, R9: 95
VIVID 5000K	 Rf: 90, Rg: 100, Rfh1: 95	 Rw: 50	 Wavelength (nm) CRI: 90, R9: 95

SERIES/CCT	COLOR ACCURACY	WHITENESS INDEX	SPECTRAL POWER DISTRIBUTION
BRILLIANT 2700K	 Rf: 85, Rg: 92, Rfh1: 77	 Rw: 100	 CRI: 85, R9: >0
BRILLIANT 3000K	 Rf: 85, Rg: 92, Rfh1: 77	 Rw: 100	 CRI: 85, R9: >0

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