SORAA vivid™

AR111 G53 18.5W 12V

Output	930 - 1000 lumen
Beam Angle	9°, 25°, 36°
Color Temperature	2700K, 3000K
Color Metrics	CIE Metrics: CRI 95, R9 95 TM30 Metrics: Rf 90, Rg 100 Whiteness Index: Rw 100
Applications	Hotels & Hospitality Galleries & Museums High-End Retail

SORAA VIVID™
Soraa VIVID lamps offer beautiful and accurate color and white rendering across the entire visible spectrum, mimicking the natural range of sunlight to deliver unmatched quality of light for color critical applications.

POINT SOURCE OPTICS™
Point Source Optics deliver exceptional beam quality with crisp shadows, perfect uniformity and precisely controlled beam distributions from 9° to 36°.

SORAA VIVID COLOR™
Soraa VIVID lamps utilize full spectrum light to provide industry-leading color rendition of CRI/95, R9/95, Rf/90, Rg/100 for precise color reproduction.

SORAA NATURAL WHITE™
Soraa VIVID lamps are engineered to deliver outstanding whiteness rendering for true-to-life whites, which matches or exceeds incandescent sources at 2700K and 3000K.

FLICKER
Soraa lamps demonstrate low levels of flicker in both dimmed and undimmed states.

ACCESSORIES
Narrow spot compatible with the Soraa SNAP SYSTEM™

ENERGY EFFICIENCY
85% more energy efficient than standard halogen lamps, with typical payback of one year or less.

THERMAL COMPATIBILITY
Suitable for use in fully enclosed fixtures, included glass-fronted fixtures, subject to the maximum heatsink temperature limits stated in this data sheet. Designed to safely turn down in high temperature environments to protect LED and components.

ELECTRICAL COMPATIBILITY
Works with trailing edge and leading edge phase cut dimmers, 12V AC magnetic and electronic transformers and 12V DC transformers. Check individual lamp website pages for compatibility data. For more information visit: www.soraa.com.

INTENDED USE & LOCATION RATING
Intended for use in AR111 compatible recessed downlights, track lighting and other indoor and outdoor applications.
Suitable for damp locations, not rated for use in wet locations.

LIFETIME & WARRANTY
Rated lifetime to L70: 35,000hrs
Warranty: 3yrs or 25,000hrs whichever comes first
For warranty information visit: www.soraa.com/resources/legal

GENERAL SPECIFICATIONS

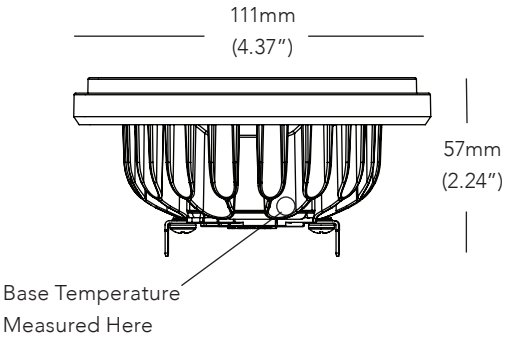
Form Factor
Width: 111mm (4.37")
Height: 57mm (2.24")
Weight: 250g

Operating Temperature
Minimum: -40°C (ambient)
Typical: 70°C - 80°C (base)
Maximum: 90°C (base)

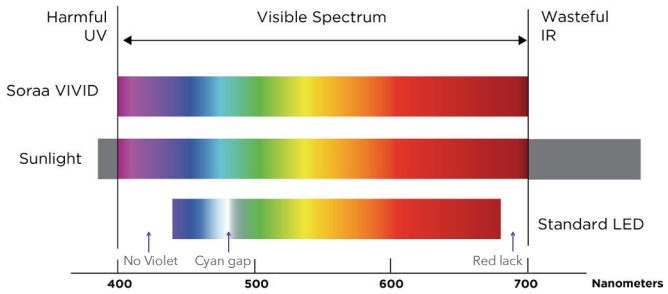
Electrical
Wattage: 18.5W
Power factor: 0.92
Voltage: 12V +/- 1.2V
Frequency: 50/60Hz

Dimming and Flicker
Dimmable to <20%
Flicker Index < 0.10
Percent Flicker: 28%

DIMENSIONS

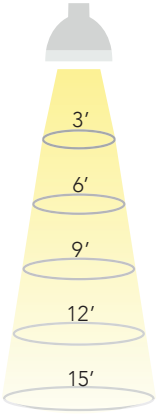


COLOR RENDERING



9 DEGREE BEAM

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
0.5	0.8	8.6%
0.9	1.7	2.5%
1.4	2.5	1.2%
1.9	3.4	0.7%
2.4	4.2	0.4%

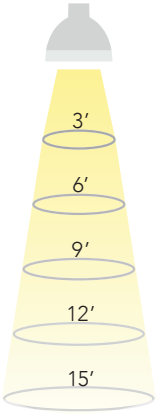


25 DEGREE BEAM

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
1.3	2.2	8.6%
2.7	4.4	2.5%
4.0	6.6	1.2%
5.3	8.7	0.7%
6.7	10.9	0.4%

36 DEGREE BEAM

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
1.9	3.5	8.6%
3.9	6.9	2.5%
5.8	10.4	1.2%
7.8	13.9	0.7%
9.7	17.3	0.4%



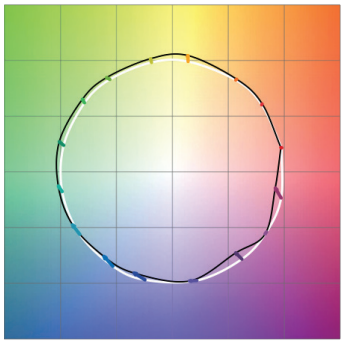
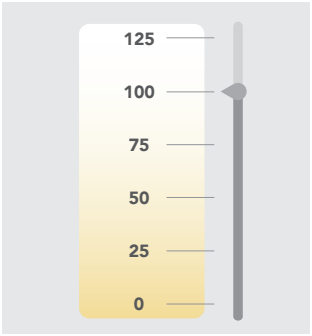
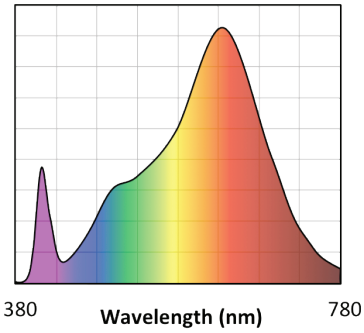
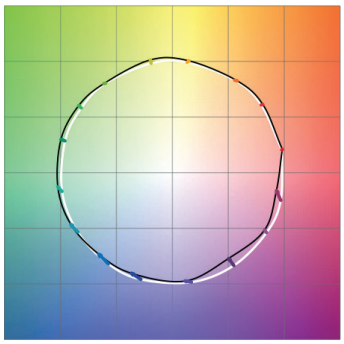
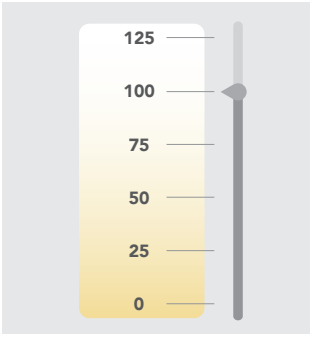
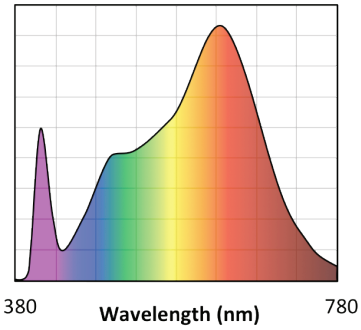
Note: Footcandles may be calculated by multiplying the CBCP of the desired model number by the percentage in the tables above

SPECIFICATIONS BY MODEL NUMBER* SORAA LED AR111 18.5W 12V

Model #	Product Code	CCT (K)	Beam Angle	Field Angle	CBCP (Cd)	Total Flux (Lm)	Efficacy (Lm/W)	McA	SNAP
VIVID SERIES									
SR111-18-09D-927-03	00869	2700	9	14	22400	930	50	3	YES
SR111-18-25D-927-03	00871	2700	25	40	5020	930	50	3	-
SR111-18-36D-927-03	00873	2700	36	60	2320	930	50	3	-
SR111-18-09D-930-03	00885	3000	9	14	24100	1000	54	3	YES
SR111-18-25D-930-03	00887	3000	25	40	5400	1000	54	3	-
SR111-18-36D-930-03	00889	3000	36	60	2500	1000	54	3	-

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

***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: 100**	 **CRI: 95, R9: 95**
VIVID 3000K	 **Rf: 90, Rg: 100, Rfh1: 95**	 **Rw: 100**	 **CRI: 95, R9: 95**

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.

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