SORAA
SIMPLY PERFECT LIGHT

AR111 GU10 18.5W

Output Range: Vivid Series	930 - 1050 lumen
Output Range: Brilliant Series	1190 - 1280 lumen
Beam Angle Range	9°, 25°, 36°, 60°
Color Temperature Range	2700K, 3000K
Application	Halogen replacement for indoor & outdoor applications

gan-on-gan · full spectrum · natural white · dimmable · IR · UV · 230V AC · GU10 · damp rated · snap compatible

POINT SOURCE OPTICS™

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

Single light source, single crisp shadow

SORAA VIVID COLOR™ AND SORAA NATURAL WHITE™

All Soraa VIVID lamps feature the right amount of spectral content from violet to deep red in every wavelength from 400nm to 700nm with 95 CRI, R9>95 and Rw 100 typical

Soraa's whiteness methodology means we render white faithfully, matching or exceeding that of halogen and incandescent sources at 2700K and 3000K

https://www.soraa.com/resources/tm30

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 soraa.com/resources/legal

CERTIFICATIONS

RoHS, CE

HIGHLY COMPATIBLE

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

Compatible with trailing edge phase cut dimmers only. Not for use with leading edge dimmers (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

ACCESSORIES

Narrow spot compatible with the Soraa SNAP System™

GENERAL SPECIFICATIONS

Form Factor

Width: 111mm (4.27")

Height: 95mm (3.47")

Weight: 270g

Operating Temperature

Minimum: -40°C (ambient)

Typical: 70°C - 80°C (base)

Maximum: 90°C (base)

Electrical

Wattage: 18.5W

Power factor: 0.93

Voltage: 230V +/- 23V

Frequency: 50/60Hz

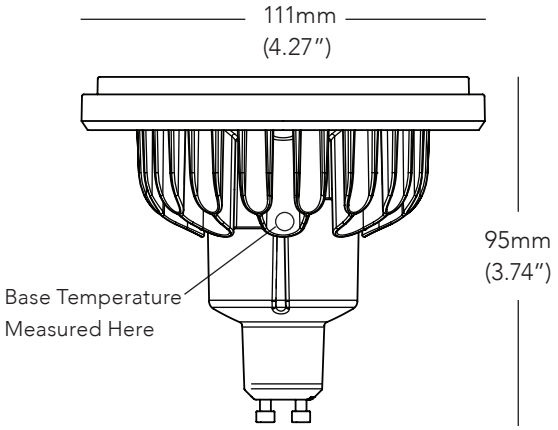
Dimming and Flicker

Dimmable to <20%

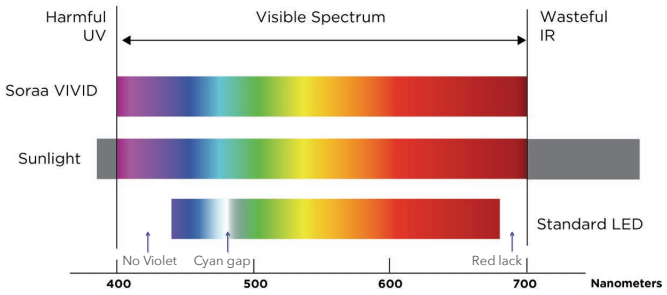
Flicker Index: <0.1

Percent Flicker: 45%

DIMENSIONS

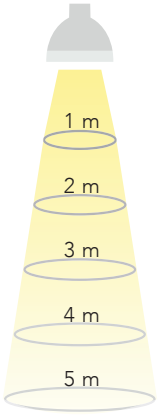


COLOR RENDERING



9 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.2	0.3	77%
0.3	0.6	23%
0.5	0.8	11%
0.6	1.1	6%
0.8	1.4	4%

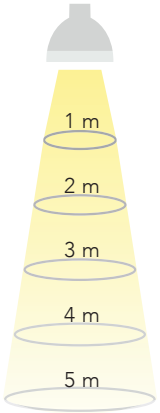


25 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.4	0.7	77%
0.9	1.5	23%
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	77%
1.3	2.3	23%
1.9	3.5	11%
2.6	4.6	6%
3.2	5.8	4%



60 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
1.2	2.0	77%
2.3	4.0	23%
3.5	6.0	11%
4.6	8.0	6%
5.8	10.0	4%

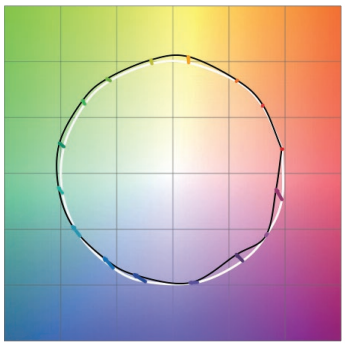
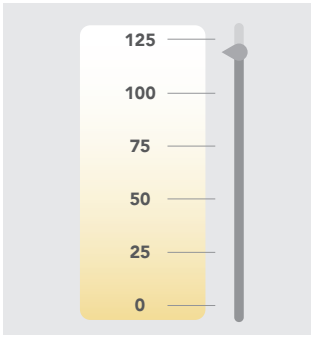
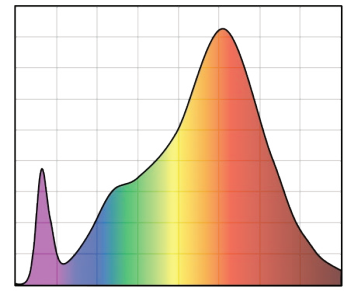
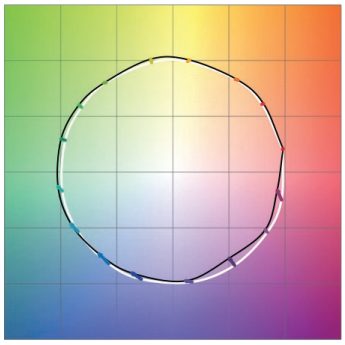
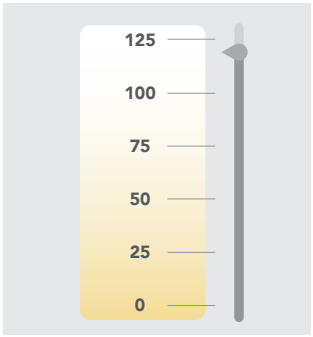
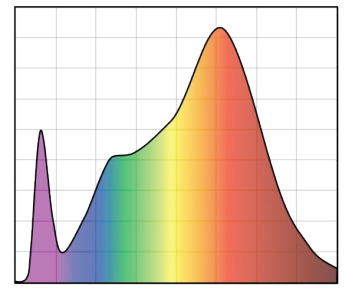
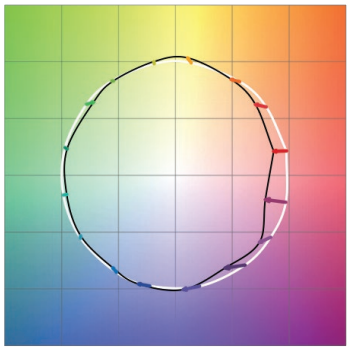
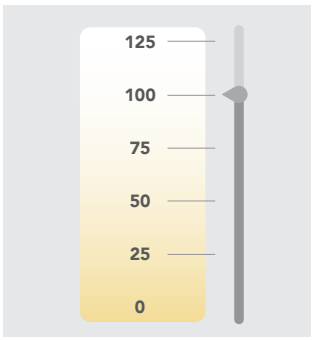
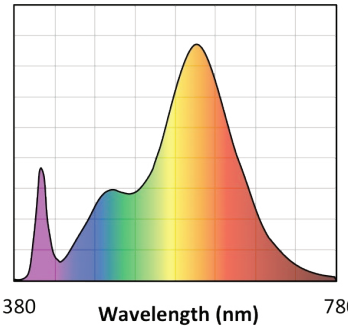
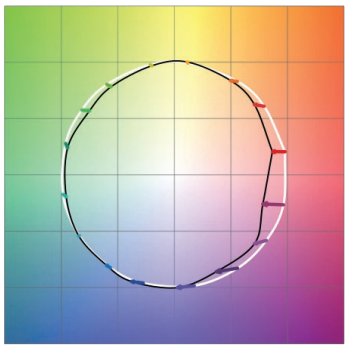
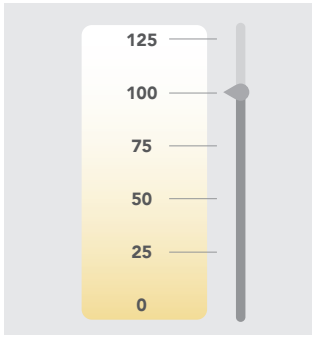
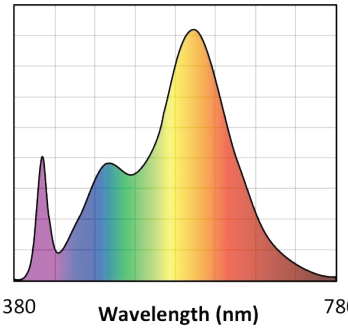
Note: Lux may be calculated by multiplying the peak Intensity of the desired model number by the percentage in the tables above

SPECIFICATIONS BY MODEL NUMBER* SORAA LED AR111 GU10 18.5W

Model #	Product Code	CCT (K)	Beam Angle	Field Angle	Peak Intensity	Total Flux (Lm)	Efficacy (Lm/W)	90° Lumens	McA	EEI	SNAP
VIVID SERIES											
SR111GW-18-09D-927-03-S3	02239	2700	9	16	22400	930	50	835	3	A	YES
SR111GW-18-25D-927-03-S3	02241	2700	25	40	5020	930	50	860	3	A	-
SR111GW-18-36D-927-03-S3	02243	2700	36	60	2320	930	50	855	3	A	-
SR111GW-18-60D-927-03-S3	02245	2700	60	90	1020	930	50	825	3	A	-
SR111GW-18-09D-930-03-S3	02255	3000	9	16	24100	1000	54	900	3	A	YES
SR111GW-18-25D-930-03-S3	02257	3000	25	40	5400	1000	54	930	3	A	-
SR111GW-18-36D-930-03-S3	02259	3000	36	60	2500	1000	54	920	3	A	-
SR111GW-18-60D-930-03-S3	02261	3000	60	90	1100	1000	54	890	3	A	-
BRILLIANT SERIES											
SR111GW-18-09D-827-03-S3	02247	2700	9	16	28660	1190	64	1070	3	A	YES
SR111GW-18-25D-827-03-S3	02249	2700	25	40	6420	1190	64	1105	3	A	-
SR111GW-18-36D-827-03-S3	02251	2700	36	60	2960	1190	64	1090	3	A	-
SR111GW-18-60D-827-03-S3	02253	2700	60	90	1300	1190	64	1055	3	A	-
SR111GW-18-09D-830-03-S3	02263	3000	9	16	30840	1280	69	1150	3	A	YES
SR111GW-18-25D-830-03-S3	02265	3000	25	40	6900	1280	69	1190	3	A	-
SR111GW-18-36D-830-03-S3	02267	3000	36	60	3200	1280	69	1175	3	A	-
SR111GW-18-60D-830-03-S3	02269	3000	60	90	1400	1280	69	1135	3	A	-

CCT: Correlated Color Temperature **McA**: White Point Accuracy in McA step **SNAP:** SORAA SNAP System Compatible **EEI**: 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	 CRI: 95, R9: 95
VIVID 3000K	 Rf: 90, Rg: 100, Rfh1: 95	 Rw: 120	 CRI: 95, R9: 95
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. Rf 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.

Soraa Inc. Unit 38, Ambition Broxbourne Business Centre, Pindar Road
Hoddesdon, EN11 0FJ, United Kingdom +44 (0)1992 535053 www.soraa.com