

MR16-GU10 5.4W



OUTPUT RANGE: VIVID SERIES	245 - 260 lumen
OUTPUT RANGE: BRILLIANT SERIES	295 - 310 lumen
BEAM ANGLE RANGE	25°, 36°, 50°
COLOR TEMPERATURE RANGE	2700K, 3000K
APPLICATION	Halogen replacement for indoor & outdoor applications



POINT SOURCE OPTICS

Exceptional beam control with 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

CUL, FCC 47 CFR Part 15 and Part 18 (EMI), RoHS



HIGHLY COMPATIBLE

Geometrically compatible with standard fixtures and suitable for damp locations

This lamp is suitable for use in fully enclosed fixtures, subject to the maximum heatsink temperature limits stated in this data sheet.

Works with trailing edge and leading edge phase cut dimmers (see www.soraa.com/resources)

INTENDED USE AND APPLICATIONS

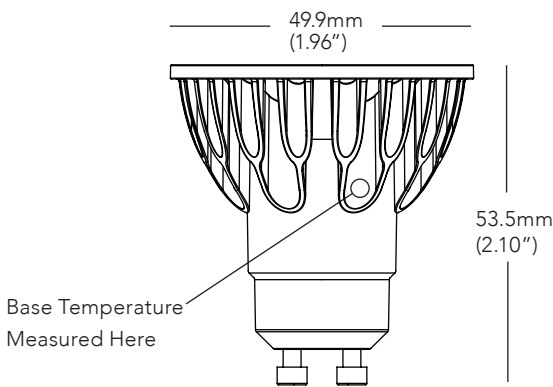
Intended for use in GU10 compatible recessed downlights, track lighting and other indoor and outdoor applications

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

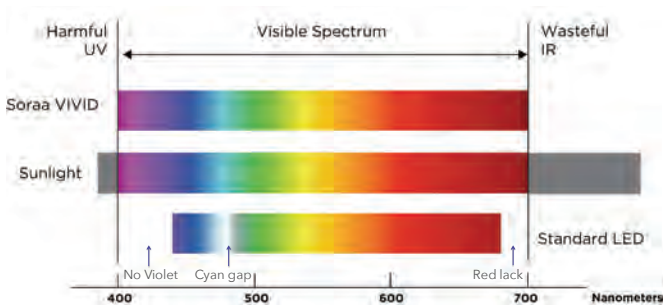
GENERAL SPECIFICATIONS

Form Factor	Operating Temperature	Electrical	Dimming and Flicker
Width: 49.9mm (1.96")	Minimum: -40°C (ambient)	Wattage: 5.4W	Dimmable to <20%
Height: 53.5mm (2.10")	Typical: 60°C - 70°C (base)	Power factor: 0.70	Flicker Index: <0.06
Weight: 61g	Maximum: 80°C (base)	Voltage: 230V +/- 23V	Percent Flicker: 20%
		Frequency: 50/60Hz	

DIMENSIONS

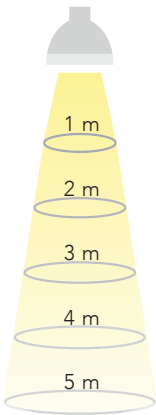


COLOR RENDERING



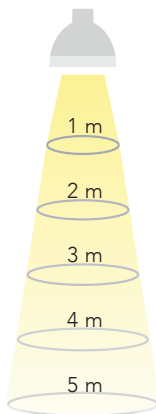
25 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.4	0.7	100%
0.9	1.4	25%
1.3	2.1	11%
1.8	2.8	6%
2.2	3.4	4%



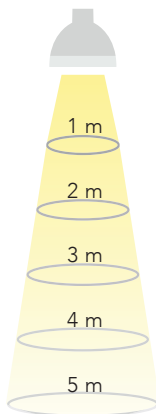
36 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.6	1.0	100%
1.3	2.0	25%
1.9	3.1	11%
2.6	4.1	6%
3.2	5.1	4%



50 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.9	1.7	100%
1.9	3.4	25%
2.8	5.0	11%
3.7	6.7	6%
4.7	8.4	4%

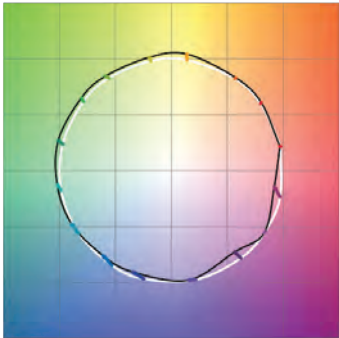
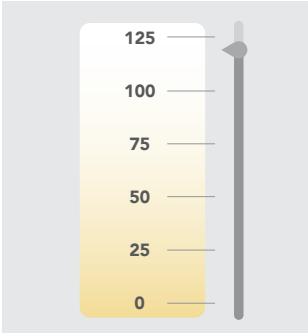
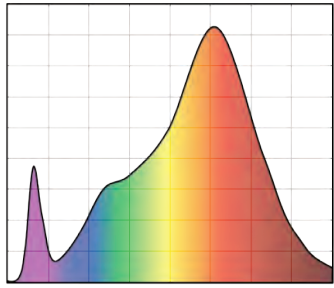
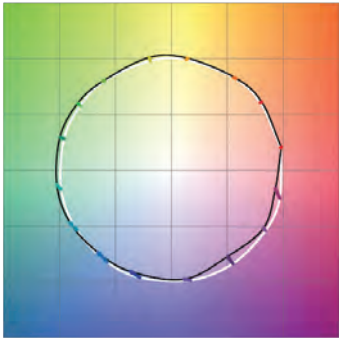
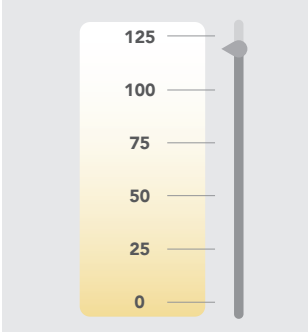
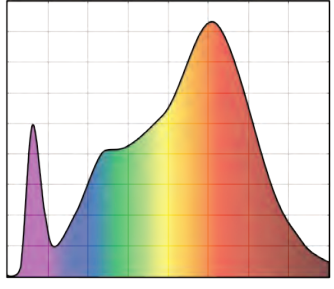
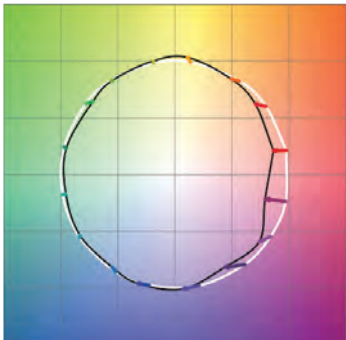
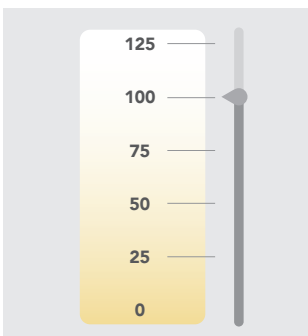
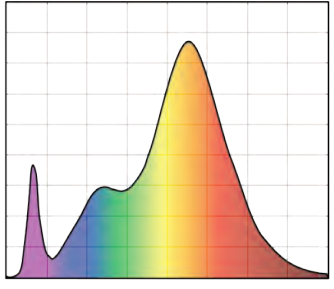
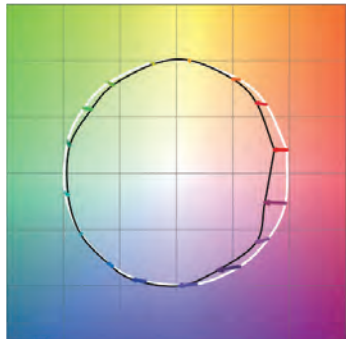
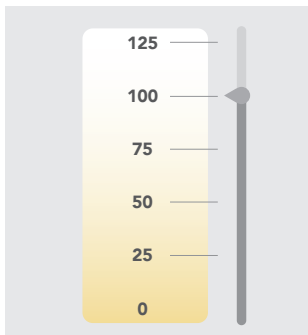
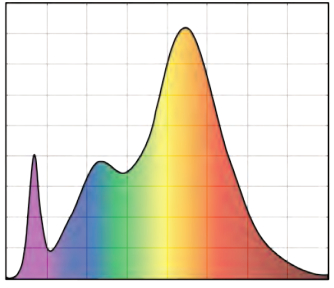


Note: Lux may be calculated by multiplying the peak Intensity of the desired model number by the percentage in the tables above

SPECIFICATIONS BY MODEL NUMBER* SORAA LED MR16-GU10 5.4W

Model #	Product Code	CCT (K)	Beam Angle	Field Angle	Peak Intensity	Total Flux (Lm)	Efficacy (Lm/W)	90° Lumens	McA	EEI	SNAP
VIVID SERIES											
SM16GW-05-25D-927-03-S3	01297	2700	25	38	1350	245	49	230	3	A	-
SM16GW-05-36D-927-03-S3	01309	2700	36	54	640	245	49	225	3	A	-
SM16GW-05-50D-927-03-S3	01321	2700	50	80	300	245	49	225	3	A	-
SM16GW-05-25D-930-03-S3	01301	3000	25	38	1430	260	52	245	3	A	-
SM16GW-05-36D-930-03-S3	01313	3000	36	54	680	260	52	235	3	A	-
SM16GW-05-50D-930-03-S3	01325	3000	50	80	310	260	52	235	3	A	-
BRILLIANT SERIES											
SM16GW-05-25D-827-03-S3	01295	2700	25	40	1630	295	59	280	3	A	-
SM16GW-05-36D-827-03-S3	01307	2700	36	57	770	295	59	270	3	A	-
SM16GW-05-50D-827-03-S3	01319	2700	50	85	360	295	59	270	3	A	-
SM16GW-05-25D-830-03-S3	01299	3000	25	40	1710	310	62	290	3	A	-
SM16GW-05-36D-830-03-S3	01311	3000	36	57	810	310	62	285	3	A	-
SM16GW-05-50D-830-03-S3	01323	3000	50	85	380	310	62	285	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	 <p>Rf: 90, Rg: 100, Rfh1: 95</p>	 <p>Rw: 120</p>	 <p>Wavelength (nm)</p> <p>CRI: 95, R9: 95</p>
VIVID 3000K	 <p>Rf: 90, Rg: 100, Rfh1: 95</p>	 <p>Rw: 120</p>	 <p>Wavelength (nm)</p> <p>CRI: 95, R9: 95</p>
BRILLIANT 2700K	 <p>Rf: 85, Rg: 92, Rfh1: 77</p>	 <p>Rw: 100</p>	 <p>Wavelength (nm)</p> <p>CRI: 80, R9: >0</p>
BRILLIANT 3000K	 <p>Rf: 85, Rg: 92, Rfh1: 77</p>	 <p>Rw: 100</p>	 <p>Wavelength (nm)</p> <p>CRI: 80, R9: >0</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: 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.