

# MR16-GU10 9.5W



<b>OUTPUT RANGE: VIVID SERIES</b>	440 - 490 lumen
<b>OUTPUT RANGE: BRILLIANT SERIES</b>	535 - 590 lumen
<b>BEAM ANGLE RANGE</b>	25°, 36°, 60°
<b>COLOR TEMPERATURE RANGE</b>	2700K, 3000K
<b>APPLICATION</b>	<b>Not suitable for enclosed or lensed fixtures.</b> Halogen replacement for indoor applications.



## POINT SOURCE OPTICS

Exceptional beam control with smooth uniform beams  
Single light source, single crisp shadow

## VP<sub>3</sub> VIVID COLOR & 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 & 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

RoHS, CE



## HIGHLY COMPATIBLE

Geometrically compatible with standard fixtures and suitable for damp locations

This lamp is not recommended for use in enclosed fixtures or for use with front glass cover.

Compatible with trailing edge phase cut dimmers only. Not for use with leading edge dimmers (see [www.soraa.com/resources](http://www.soraa.com/resources))

## INTENDED USE AND APPLICATIONS

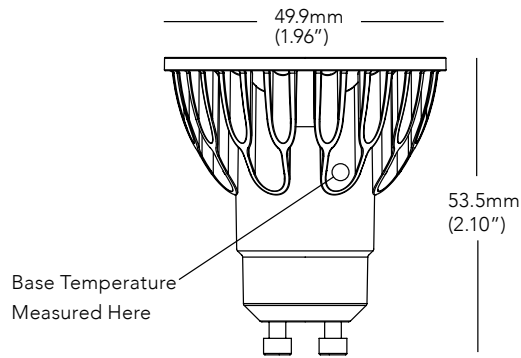
Intended for use in GU10 compatible recessed downlights, track lighting and other indoor applications

Soraa lamps are designed to safely turn down in high temperature environments to protect LED and components. This lamp should not be used in fully enclosed or lensed fixtures

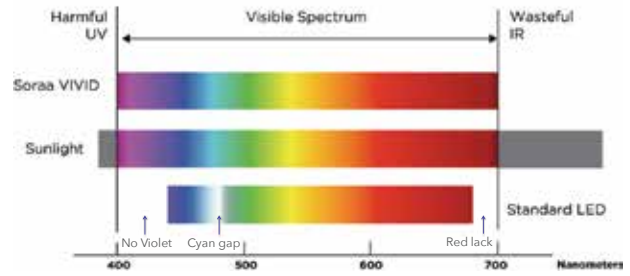
## GENERAL SPECIFICATIONS

Form Factor	Operating Temperature	Electrical	Dimming and Flicker
Width: 49.9mm (1.96")	Minimum: -40°C (ambient)	Wattage: 9.5W	Dimmable to <20%
Height: 53.5mm (2.10")	Typical: 90°C - 95°C (base)	Power factor: 0.80	Flicker Index: <0.12
Weight: 61g	Maximum: 100°C (base)	Voltage: 230V +/- 23V	Percent Flicker: 50%
		Frequency: 50/60Hz	

## DIMENSIONS

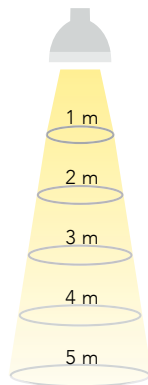


## COLOR RENDERING



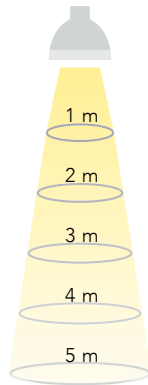
## 25 DEGREE BEAM

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%



## 60 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
1.2	1.8	100%
2.3	3.6	25%
3.5	5.4	11%
4.6	7.2	6%
5.8	9.0	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 MR16-GU10 9.5W

Model #	Product Code	CCT (K)	Beam Angle	Field Angle	Peak Intensity	Total Flux (Lm)	Efficacy (Lm/W)	90° Lumens	McA	EEI	SNAP
<b>VIVID SERIES</b>											
SM16GW-09-25D-927-03-S3	01969	2700	25	38	2570	465	49	440	3	A	-
SM16GW-09-36D-927-03-S3	01977	2700	36	54	1210	465	49	425	3	A	-
SM16GW-09-60D-927-03-S3	01985	2700	60	84	500	465	49	425	3	A	-
SM16GW-09-25D-930-03-S3	01973	3000	25	38	2700	490	52	465	3	A	-
SM16GW-09-36D-930-03-S3	01981	3000	36	54	1280	490	52	450	3	A	-
SM16GW-09-60D-930-03-S3	01989	3000	60	84	520	490	52	450	3	A	-
<b>BRILLIANT SERIES</b>											
SM16GW-09-25D-827-03-S3	01967	2700	25	38	3090	560	59	530	3	A	-
SM16GW-09-36D-827-03-S3	01975	2700	36	54	1460	560	59	515	3	A	-
SM16GW-09-60D-827-03-S3	01983	2700	60	84	600	560	59	515	3	A	-
SM16GW-09-25D-830-03-S3	01971	3000	25	38	3260	590	62	560	3	A	-
SM16GW-09-36D-830-03-S3	01979	3000	36	54	1540	590	62	540	3	A	-
SM16GW-09-60D-830-03-S3	01987	3000	60	84	630	590	62	540	3	A	-

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

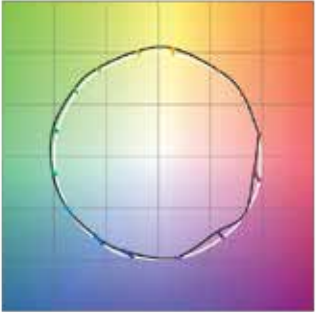
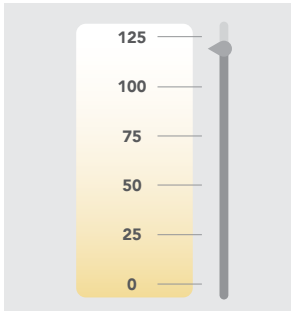
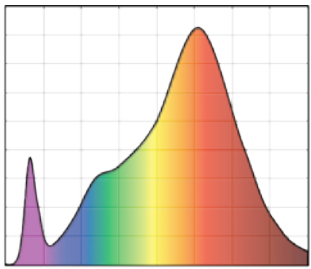
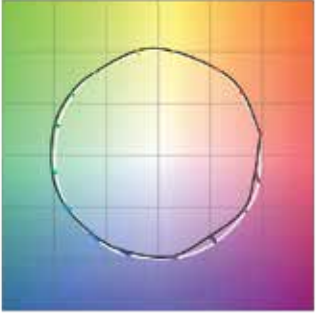
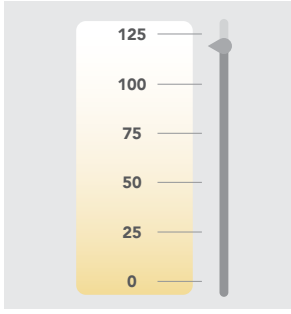
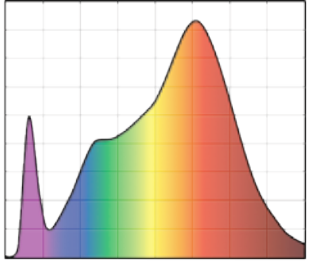
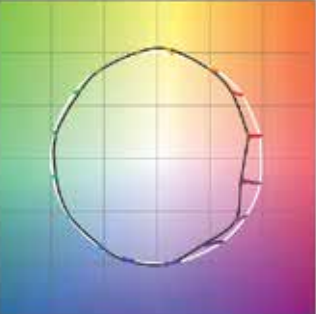
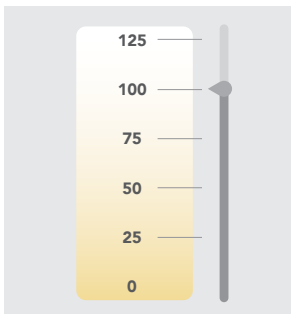
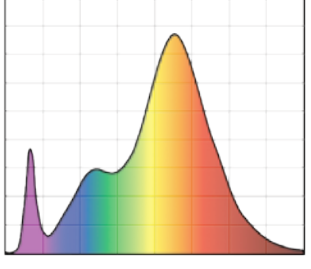
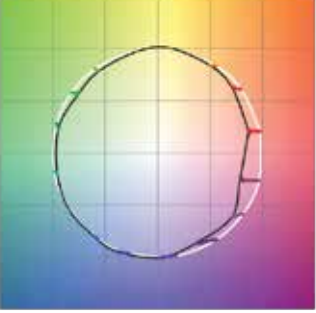
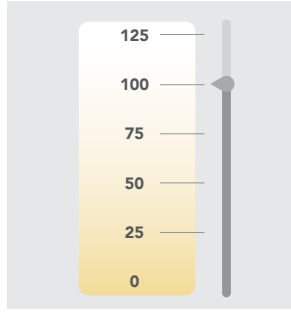
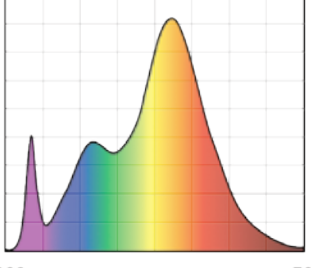
\*Specifications are at stable warm operating conditions (25°C ambient)

**SERIES/CCT**

**COLOR ACCURACY**

**WHITENESS INDEX**

**SPECTRAL POWER DISTRIBUTION**

<p><b>VIVID 2700K</b></p>	 <p><b>Rf: 90, Rg: 100, Rfh1: 95</b></p>	 <p><b>Rw: 120</b></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>CRI: 95, R9: 95</b></p>
<p><b>BRILLIANT 2700K</b></p>	 <p><b>Rf: 85, Rg: 92, Rfh1: 77</b></p>	 <p><b>Rw: 100</b></p>	 <p><b>CRI: 85, R9: &gt;0</b></p>
<p><b>BRILLIANT 3000K</b></p>	 <p><b>Rf: 85, Rg: 92, Rfh1: 77</b></p>	 <p><b>Rw: 100</b></p>	 <p><b>CRI: 85, R9: &gt;0</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. 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.