



# SORAA LED MR16 - GU10 BASE

## 5W

OUTPUT RANGE: VIVID SERIES	245-260 lumen; CRI-95, R9>90
OUTPUT RANGE: BRILLIANT SERIES	295-310 lumen; CRI-80
BEAM ANGLE RANGE	25°, 36°, 50°
COLOR TEMPERATURE RANGE	2700K, 3000K
APPLICATION	Halogen replacement for indoor & outdoor applications

- 230V
- GU-10
- 
- 
- DIM
- 
- 
- 
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### POINT SOURCE OPTICS

Exceptional beam control enables unique and smooth uniform beams

Single light source, single crisp shadow

### VP<sub>3</sub> VIVID COLOR AND VP<sub>3</sub> NATURAL WHITE

VIVID series provides accurate color rendering across the visible spectrum from 400nm to 700nm, CRI-95, R9>90

Accurate white rendering based on >70% excitation of Optical Brightening Agents with emission between 400nm & 440 nm

### ENERGY EFFICIENCY AND LONG LIFE

85% more energy efficient than standard halogen lamps

Typical payback of one year or less

Rated lifetime of 35,000 hours. Three year warranty

### CERTIFICATIONS

UL Class 2 and non-class 2, CUL, FCC 47 CFR Part 15 and Part 18 (EMI), RoHS

### HIGHLY COMPATIBLE

Thermally and geometrically compatible with standard fixtures

Lightweight, similar to halogen lamps

Suitable for fully enclosed fixtures per UL. Can be used with front glass cover

Suitable for damp locations per UL

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

### INTENDED USE AND APPLICATIONS

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

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

### GENERAL SPECIFICATIONS

#### Form Factor

Width: 49.9mm (1.96")

Height: 53.5mm (2.10")

Weight: 61g

#### Operating Temperature

Minimum: -40°C (ambient)

Typical: 60°C - 70°C (base)

Maximum: 80°C (base)

#### Electrical

Wattage: 5W

Power factor: 0.80

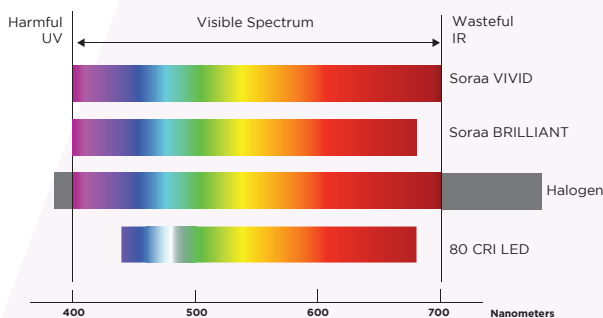
Voltage: 230V +/- 23V

Dimmable to < 20%

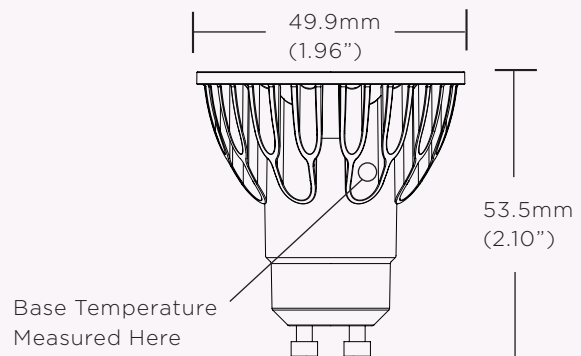
Flicker Index <.06

Percent Flicker: 20%

### COLOR RENDERING



### DIMENSIONS



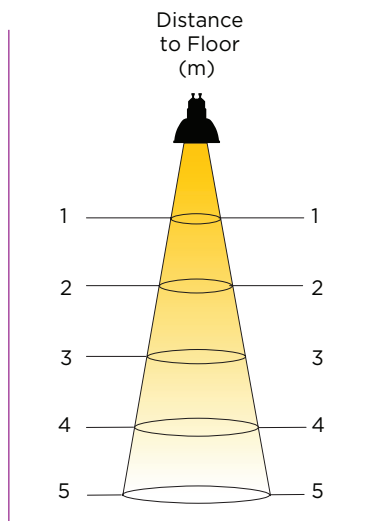
RoHS

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## BEAM DIAGRAM

### Narrow Flood 25°

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%



### Flood 36°

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%

### Wide Flood 50°

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%

## SPECIFICATIONS BY PART NUMBER\*

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

\*Specifications are at stable warm operating conditions (25°C ambient) \*\*Energy Star Minimum \*\*\*Energy Efficiency Index

CCT = Correlated Color Temperature CRI = Color Rendering Index (Ra-8) White Point = White Point Accuracy in McA step

<sup>SNAP</sup>SORAA SNAP System Compatible

## SAFETY NOTE ON HEAT

Although Soraa's lamps operate at cooler temperatures than halogen lamps, it is recommended that gloves be worn when handling bare lamps that have been energized.

Information and specifications subject to change. SM16GW 5W Rev 1 4.30.15

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