



# SORAA LED MR16 9W

<b>OUTPUT RANGE: VIVID SERIES</b>	465 - 490 lumen; CRI-95, R9>90
<b>OUTPUT RANGE: BRILLIANT SERIES</b>	560 - 590 lumen; CRI-80
<b>BEAM ANGLE RANGE</b>	25°, 36°
<b>COLOR TEMPERATURE RANGE</b>	2700K, 3000K
<b>APPLICATION</b>	Halogen replacement for indoor & outdoor applications



### POINT SOURCE OPTICS

Exceptional beam control with 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/CUL Class 2 and non-Class 2, FCC Title 47 Part 15B, RoHS, CE

### HIGHLY COMPATIBLE

Thermally and geometrically compatible with standard fixtures

Suitable for fully enclosed fixtures. Not recommended with front glass cover

Suitable for damp locations per UL

Works with trailing edge and leading edge phase cut dimmers, 12V AC magnetic and electronic transformers and 12V DC transformers (see [www.soraa.com/resources](http://www.soraa.com/resources))

### INTENDED USE AND APPLICATIONS

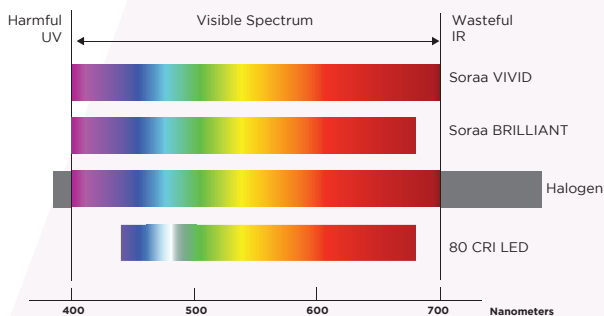
Intended for use in MR16 compatible recessed downlights, track lighting and other indoor and outdoor applications

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

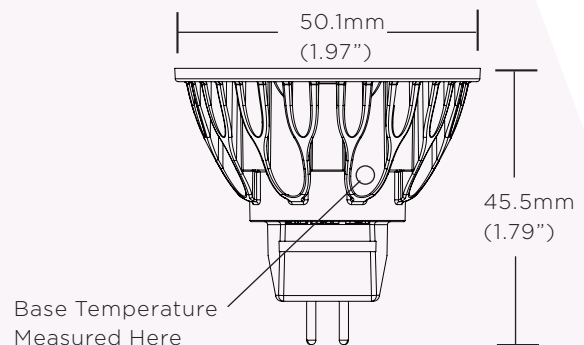
### GENERAL SPECIFICATIONS

Form Factor	Operating Temperature	Electrical	Dimming
Width: 50.1mm (1.97")	Minimum: -40°C (ambient)	Wattage: 9W	Dimmable to < 20%
Height: 45.5mm (1.79")	Typical: 80°C - 90°C (base)	Power factor: 0.92	
Weight: 47g	Maximum: 100°C (base)	Voltage: 12V +/- 1.2V	
		Frequency: 50/60Hz	

### COLOR RENDERING



### DIMENSIONS



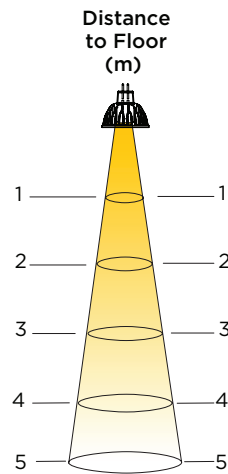
RoHS

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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	1.5	25%
1.3	2.2	11%
1.8	2.9	6%
2.2	3.6	4%



### Flood 36°

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.6	1.1	100%
1.3	2.2	25%
1.9	3.3	11%
2.6	4.3	6%
3.2	5.4	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\*

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)	EEI ***
<b>SORAA VIVID SERIES</b>											
SM16-09-25D-927-03-S3	01221	2700	25	40	2570	465	52	440	95/95	3	A
SM16-09-36D-927-03-S3	01229	2700	36	57	1210	465	52	425	95/95	3	A
SM16-09-25D-930-03-S3	01225	3000	25	40	2700	490	54	465	95/95	3	A
SM16-09-36D-930-03-S3	01233	3000	36	57	1280	490	54	450	95/95	3	A
<b>SORAA BRILLIANT SERIES</b>											
SM16-09-25D-827-03-S3	01219	2700	25	40	3090	560	62	530	80/>0	3	A
SM16-09-36D-827-03-S3	01227	2700	36	57	1460	560	62	515	80/>0	3	A
SM16-09-25D-830-03-S3	01223	3000	25	40	3260	590	66	560	80/>0	3	A
SM16-09-36D-830-03-S3	01231	3000	36	57	1540	590	66	540	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

## 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. SM16 9W Rev 1 6.15.15  
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