

SORAA LED MR16 7.5W



OUTPUT RANGE: VIVID SERIES	390-455 lumen; CRI-95, R9>90
OUTPUT RANGE: BRILLIANT SERIES	475-525 lumen; CRI-80
BEAM ANGLE RANGE	10°, 25°, 36°
COLOR TEMPERATURE RANGE	2700K, 3000K, 4000K, 5000K
APPLICATION	Halogen replacement for indoor & outdoor applications

- 12VAC
- GU-5.3
-
-
- DIM
- IR
- UV
- Hg
-

POINT SOURCE OPTICS

Exceptional beam control enables unique 10° narrow spot and smooth uniform beams

Single light source, single crisp shadow

VP₃ VIVID COLOR AND VP₃ 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

Narrow spot compatible with Soraa SNAP System accessories

Thermally and geometrically compatible with standard fixtures

Suitable for fully enclosed fixtures per UL 1993. Can be used 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)

INTENDED USE AND APPLICATIONS

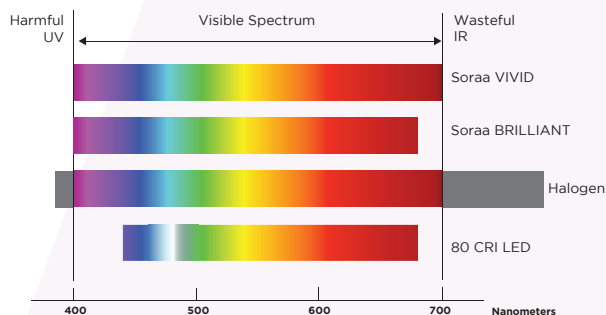
Intended for use in MR16 compatible recessed downlights, track lighting and other indoor and outdoor applications

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

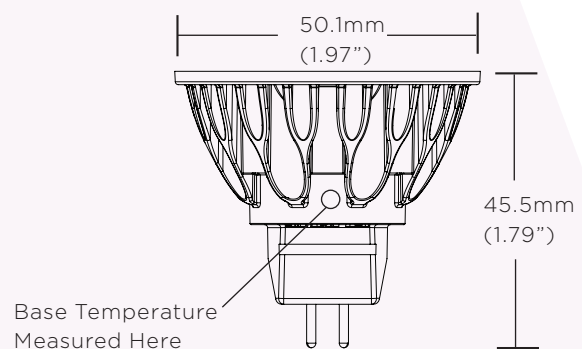
GENERAL SPECIFICATIONS

Form Factor	Operating Temperature	Electrical
Width: 50.1mm (1.97")	Minimum: -40°C (ambient)	Wattage: 7.5W
Height: 45.5mm (1.79")	Typical: 75°C - 85°C (base)	Power factor: 0.92
Weight: 47g	Maximum: 95°C (base)	Voltage: 12V +/- 1.2V
		Dimmable to < 20%

COLOR RENDERING



DIMENSIONS



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BEAM DIAGRAM

Narrow Spot 10°			Distance to Floor (m)	Narrow Flood 25°			Flood 36°		
Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)		Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)	Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.2	0.4	100%	1	0.4	0.7	100%	0.6	1.1	100%
0.3	0.7	25%	2	0.9	1.5	25%	1.3	2.2	25%
0.5	1.1	11%	3	1.3	2.2	11%	1.9	3.3	11%
0.7	1.4	6%	4	1.8	2.9	6%	2.6	4.3	6%
0.9	1.8	4%	5	2.2	3.6	4%	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	Halogen Equivalent** (Watts)	Total Flux (Lm)	Efficacy (Lm/W)	90° Lumens	CRI/R9	White Point (McA)	EELI ***
SORAA VIVID SERIES												
SM16-07-10D-927-03-S3 ^{SNAP}	01185	2700	10	20	5710	50	390	52	350	95/95	3	A
SM16-07-25D-927-03-S3	01197	2700	25	40	2260	50	410	55	380	95/95	3	A
SM16-07-36D-927-03-S3	01209	2700	36	57	1070	50	410	55	380	95/95	3	A
SM16-07-10D-930-03-S3 ^{SNAP}	01189	3000	10	20	6000	50	410	55	380	95/95	3	A
SM16-07-25D-930-03-S3	01201	3000	25	40	2400	50	435	58	415	95/95	3	A
SM16-07-36D-930-03-S3	01213	3000	36	57	1130	50	435	58	415	95/95	3	A
SM16-07-10D-940-03-S3 ^{SNAP}	01191	4000	10	20	6290	50	430	57	395	95/95	4	A
SM16-07-25D-940-03-S3	01203	4000	25	40	2510	50	455	61	435	95/95	4	A
SM16-07-36D-940-03-S3	01215	4000	36	57	1190	50	455	61	435	95/95	4	A
SM16-07-10D-950-03-S3 ^{SNAP}	01193	5000	10	20	6290	50	430	57	395	95/90	5	A
SM16-07-25D-950-03-S3	01205	5000	25	40	2510	50	455	61	435	95/90	5	A
SM16-07-36D-950-03-S3	01217	5000	36	57	1190	50	455	61	435	95/90	5	A
SORAA BRILLIANT SERIES												
SM16-07-10D-827-03-S3 ^{SNAP}	01183	2700	10	20	6950	65	475	63	430	80/>0	3	A
SM16-07-25D-827-03-S3	01195	2700	25	40	2760	65	500	67	465	80/>0	3	A
SM16-07-36D-827-03-S3	01207	2700	36	57	1310	65	500	67	465	80/>0	3	A
SM16-07-10D-830-03-S3 ^{SNAP}	01187	3000	10	20	7320	65	500	67	465	80/>0	3	A
SM16-07-25D-830-03-S3	01199	3000	25	40	2900	65	525	70	500	80/>0	3	A
SM16-07-36D-830-03-S3	01211	3000	36	57	1370	65	525	70	500	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
^{SNAP}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. SM16 7W Rev 1 10.09.14
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