



SORAA LED MR16 - GU10 BASE

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°, 60°
COLOR TEMPERATURE RANGE	2700K, 3000K, 4000K, 5000K
APPLICATION	Halogen replacement for indoor & outdoor applications

230V



DIM



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

HIGHLY COMPATIBLE

Narrow spot compatible with Soraa SNAP System accessories

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.

Compatible with trailing edge phase cut dimmers only. Not for use with leading edge dimmers (see 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: 85°C - 95°C (base)

Maximum: 100°C (base)

Electrical

Wattage: 7.5W

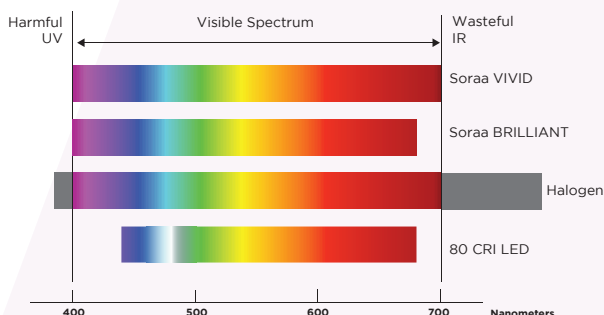
Power factor: 0.80

Voltage: 230V +/- 23V

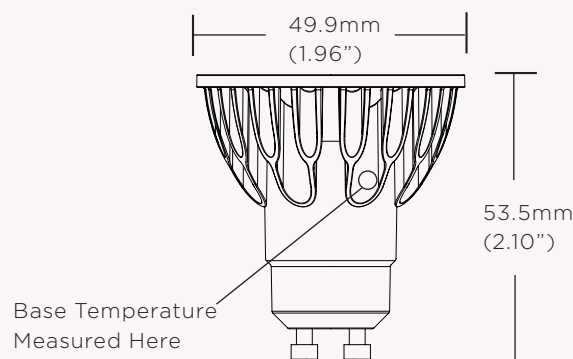
Dimmable to < 20%

Frequency: 50/60Hz

COLOR RENDERING



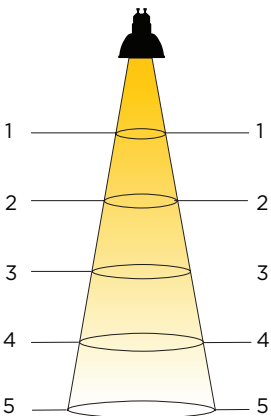
DIMENSIONS



RoHS

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BEAM DIAGRAM

Narrow Spot 10°			Narrow Flood 25°			<div>Distance to Floor (m)</div> 	Flood 36°			Wide Flood 60°		
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)	Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.2	0.3	100%	0.4	0.7	100%	1	0.6	1.0	100%	1.2	1.8	100%
0.3	0.6	25%	0.9	1.4	25%	2	1.3	2.0	25%	2.3	3.6	25%
0.5	0.9	11%	1.3	2.1	11%	3	1.9	3.1	11%	3.5	5.4	11%
0.7	1.2	6%	1.8	2.8	6%	4	2.6	4.1	6%	4.6	7.2	6%
0.9	1.5	4%	2.2	3.4	4%	5	3.2	5.1	4%	5.8	9.0	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)	**EEI
VIVID SERIES											
SM16GW-07-10D-927-03-S3 ^{SNAP}	01075	2700	10	17	5710	390	52	345	95 / 95	3	A
SM16GW-07-25D-927-03-S3	01087	2700	25	38	2260	410	55	385	95 / 95	3	A
SM16GW-07-36D-927-03-S3	01099	2700	36	54	1070	410	55	375	95 / 95	3	A
SM16GW-07-60D-927-03-S3	01585	2700	60	84	440	410	55	375	95 / 95	3	A
SM16GW-07-10D-930-03-S3 ^{SNAP}	01079	3000	10	17	6000	410	55	360	95 / 95	3	A
SM16GW-07-25D-930-03-S3	01091	3000	25	38	2400	435	58	410	95 / 95	3	A
SM16GW-07-36D-930-03-S3	01103	3000	36	54	1130	435	58	400	95 / 95	3	A
SM16GW-07-60D-930-03-S3	01589	3000	60	84	460	435	58	400	95 / 95	3	A
SM16GW-07-10D-940-03-S3 ^{SNAP}	01081	4000	10	17	6290	430	57	380	95 / 95	4	A
SM16GW-07-25D-940-03-S3	01093	4000	25	38	2510	455	61	430	95 / 95	4	A
SM16GW-07-36D-940-03-S3	01105	4000	36	54	1190	455	61	415	95 / 95	4	A
SM16GW-07-60D-940-03-S3	01591	4000	60	84	490	455	61	415	95 / 95	4	A
SM16GW-07-10D-950-03-S3 ^{SNAP}	01083	5000	10	17	6290	430	57	380	95 / 90	5	A
SM16GW-07-25D-950-03-S3	01095	5000	25	38	2510	455	61	430	95 / 90	5	A
SM16GW-07-36D-950-03-S3	01107	5000	36	54	1190	455	61	415	95 / 90	5	A
SM16GW-07-60D-950-03-S3	01593	5000	60	84	490	455	61	415	95 / 90	5	A
BRILLIANT SERIES											
SM16GW-07-10D-827-03-S3 ^{SNAP}	01073	2700	10	17	6950	475	63	420	80 / >0	3	A
SM16GW-07-25D-827-03-S3	01085	2700	25	38	2760	500	67	475	80 / >0	3	A
SM16GW-07-36D-827-03-S3	01097	2700	36	54	1310	500	67	460	80 / >0	3	A
SM16GW-07-60D-827-03-S3	01583	2700	60	84	540	500	67	460	80 / >0	3	A
SM16GW-07-10D-830-03-S3 ^{SNAP}	01077	3000	10	17	7320	500	67	445	80 / >0	3	A
SM16GW-07-25D-830-03-S3	01089	3000	25	38	2900	525	70	495	80 / >0	3	A
SM16GW-07-36D-830-03-S3	01101	3000	36	54	1370	525	70	480	80 / >0	3	A
SM16GW-07-60D-830-03-S3	01587	3000	60	84	560	525	70	480	80 / >0	3	A

*Specifications are at stable warm operating conditions (25°C ambient)
CCT = Correlated Color Temperature CRI = Color Rendering Index (Ra-8) White Point = White Point Accuracy in McA step
^{SNAP}SORAA SNAP System Compatible

**Energy Efficiency Index

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 7W Rev 1 12.02.15
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