

PRELIMINARY



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

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

GENERAL SPECIFICATIONS

Form Factor

Width: 49.9mm (1.96")

Height: 53.5mm (2.10")

Weight: 61g

Operating Temperature

Minimum: -40°C (ambient)

Typical: 75°C - 85°C (base)

Maximum: 95°C (base)

Electrical

Wattage: 7.5W

Power factor: 0.93

Voltage: 12V +/- 1.2V

Dimmable to < 20%

HIGHLY COMPATIBLE

Narrow spot compatible with Soraa SNAP System accessories

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)

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

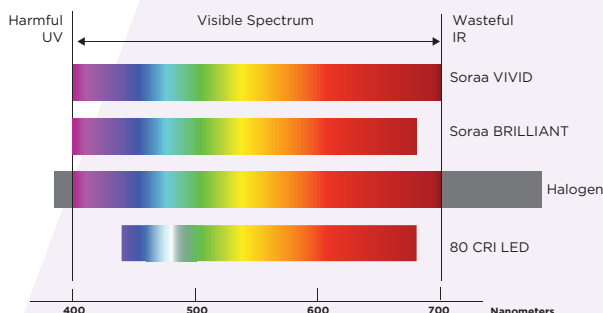
120V



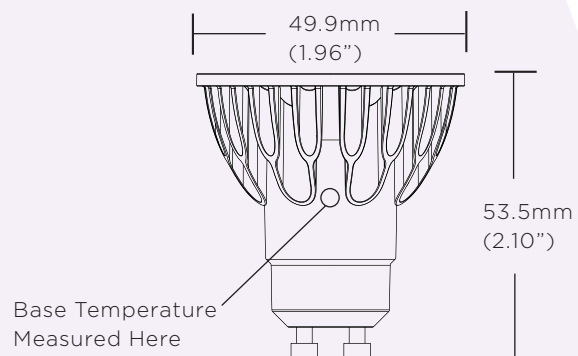
DIM



COLOR RENDERING



DIMENSIONS

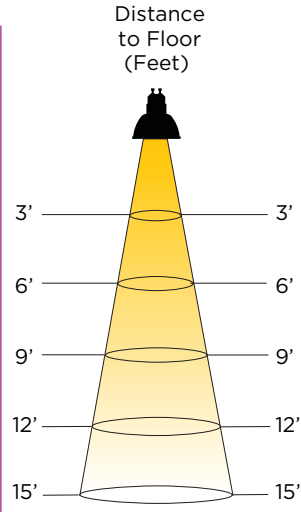


RoHS

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BEAM DIAGRAM

Narrow Spot 10°			Narrow Flood 25°			Distance to Floor (Feet)	Flood 36°			Wide Flood 60°		
Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)	Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)		Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)	Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
0.5	1.1	11.1%	1.3	2.1	11.1%	3'	1.9	3.1	11.1%	3.5	5.4	11.1%
1.0	2.1	2.8%	2.7	4.1	2.8%	6'	3.9	6.1	2.8%	6.9	10.8	2.8%
1.6	3.2	1.2%	4.0	6.2	1.2%	9'	5.8	9.2	1.2%	10.4	16.2	1.2%
2.1	4.2	0.7%	5.3	8.3	0.7%	12'	7.8	12.2	0.7%	13.9	21.6	0.7%
2.6	5.3	0.4%	6.7	10.3	0.4%	15'	9.7	15.3	0.4%	17.3	27.0	0.4%



SPECIFICATIONS BY PART NUMBER*

Model Number	Reference Number	Product Code	CCT (K)	Beam Angle (°)	Field Angle (°)	CBCP (Cd)	Total Flux (Lm)	Efficacy (Lm/W)	CRI/R9	White Point (McA)
VIVID SERIES: 50W Halogen Equivalent**										
SM16GA-07-10D-927-03 ^{SNAP}	MR16-50-B03-120-927-10	01111	2700	10	20	5710	390	52	95 / 95	3
SM16GA-07-25D-927-03	MR16-50-B03-120-927-25	01123	2700	25	40	2260	410	55	95 / 95	3
SM16GA-07-36D-927-03	MR16-50-B03-120-927-36	01135	2700	36	57	1070	410	55	95 / 95	3
SM16GA-07-60D-927-03	MR16-50-B03-120-927-60	01573	2700	60	85	440	410	55	95 / 95	3
SM16GA-07-10D-930-03 ^{SNAP}	MR16-50-B03-120-930-10	01115	3000	10	20	6000	410	55	95 / 95	3
SM16GA-07-25D-930-03	MR16-50-B03-120-930-25	01127	3000	25	40	2400	435	58	95 / 95	3
SM16GA-07-36D-930-03	MR16-50-B03-120-930-36	01139	3000	36	57	1130	435	58	95 / 95	3
SM16GA-07-60D-930-03	MR16-50-B03-120-930-60	01577	3000	60	85	460	435	58	95 / 95	3
SM16GA-07-10D-940-03 ^{SNAP}	MR16-50-B03-120-940-10	01117	4000	10	20	6290	430	57	95 / 95	4
SM16GA-07-25D-940-03	MR16-50-B03-120-940-25	01129	4000	25	40	2510	455	61	95 / 95	4
SM16GA-07-36D-940-03	MR16-50-B03-120-940-36	01141	4000	36	57	1190	455	61	95 / 95	4
SM16GA-07-60D-940-03	MR16-50-B03-120-940-60	01579	4000	60	85	490	455	61	95 / 95	4
SM16GA-07-10D-950-03 ^{SNAP}	MR16-50-B03-120-950-10	01119	5000	10	20	6290	430	57	95 / 90	5
SM16GA-07-25D-950-03	MR16-50-B03-120-950-25	01131	5000	25	40	2510	455	61	95 / 90	5
SM16GA-07-36D-950-03	MR16-50-B03-120-950-36	01143	5000	36	57	1190	455	61	95 / 90	5
SM16GA-07-60D-950-03	MR16-50-B03-120-950-60	01581	5000	60	85	490	455	61	95 / 90	5
BRILLIANT SERIES: 65W Halogen Equivalent**										
SM16GA-07-10D-827-03 ^{SNAP}	MR16-65-B03-120-827-10	01109	2700	10	20	6950	475	63	80 / >0	3
SM16GA-07-25D-827-03	MR16-65-B03-120-827-25	01121	2700	25	40	2760	500	67	80 / >0	3
SM16GA-07-36D-827-03	MR16-65-B03-120-827-36	01133	2700	36	57	1310	500	67	80 / >0	3
SM16GA-07-60D-827-03	MR16-65-B03-120-827-60	01571	2700	60	85	540	500	67	80 / >0	3
SM16GA-07-10D-830-03 ^{SNAP}	MR16-65-B03-120-830-10	01113	3000	10	20	7320	500	67	80 / >0	3
SM16GA-07-25D-830-03	MR16-65-B03-120-830-25	01125	3000	25	40	2900	525	70	80 / >0	3
SM16GA-07-36D-830-03	MR16-65-B03-120-830-36	01137	3000	36	57	1370	525	70	80 / >0	3
SM16GA-07-60D-830-03	MR16-65-B03-120-830-60	01575	3000	60	85	560	525	70	80 / >0	3

*Specifications are at stable warm operating conditions (25°C ambient) **Energy Star Minimum ^{SNAP}SORAA SNAP System Compatible
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. SM16GA 7W Rev 1 9.30.14