SORAA brilliant™ HL

MR16 GU10 7.5W

Output Range	600 - 630 lumen
Beam Angle Range	Flood 25°, 36°, 60°
Color Metrics	CCT: 2700K, 3000K Color Rendering CIE Metrics: CRI 90, R9 50
Application	**This lamp is suitable for use in fully enclosed fixtures, subject to the maximum heatsink temperature limits stated in this data sheet.** Halogen replacement for indoor applications.

TITLE 20 pending · flicker free · dimmable · IR · UV · 120V AC · GU10

SORAA BRILLIANT HL™

The Soraa Brilliant HL single-source COB lamp combines Soraa's world-class optics design and driver technology with a photopically efficacious LED

SORAA POINT SOURCE OPTICS™

With a point source and sophisticated folded optics, Soraa creates very controlled beam angles from 25 to 60 degrees, in form factors as challenging as the compact GU10 resulting in smooth uniform beams and crisp shadows

FLICKER

Soraa lamps demonstrate low levels of flicker in both dimmed and undimmed states

ENERGY EFFICIENCY AND LONG LIFE

85% more energy efficient than standard halogen lamps

Typical payback of one year or less

Rated lifetime to L70: 35,000hrs

Warranty: 3yrs or 25,000hrs whichever comes first

Warranty information: soraa.com/resources/legal

CERTIFICATIONS

Title 20 certification **pending**, UL/CUL, FCC Title 47 Part 15B, RoHS

c UL us · RoHS · TITLE 20 pending

HIGHLY COMPATIBLE

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. A list of qualified enclosed fixtures can be found at www.soraa.com/resources

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

INTENDED USE AND APPLICATIONS

Intended for use in GU10 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

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: 0.93

Voltage: 120V +/- 12V

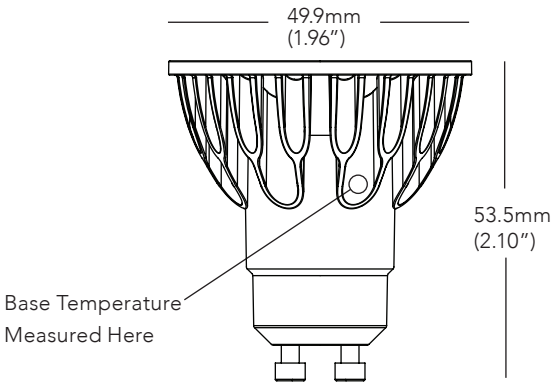
Frequency: 50/60Hz

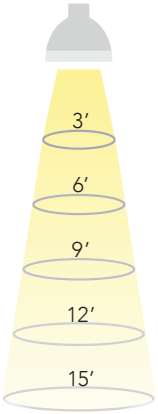
Dimming

Dimmable to <20%

SORAA
SIMPLY PERFECT LIGHT

DIMENSIONS



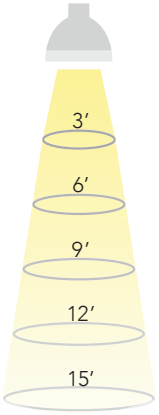


25 DEGREE BEAM

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
1.3	2.1	11.1%
2.7	4.1	2.8%
4.0	6.2	1.2%
5.3	8.3	0.7%
6.7	10.3	0.4%

36 DEGREE BEAM

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
1.9	3.1	11.1%
3.9	6.1	2.8%
5.8	9.2	1.2%
7.8	12.2	0.7%
9.7	15.3	0.4%



60 DEGREE BEAM

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
3.5	5.4	11.1%
6.9	10.8	2.8%
10.4	16.2	1.2%
13.9	21.6	0.7%
17.3	27.0	0.4%

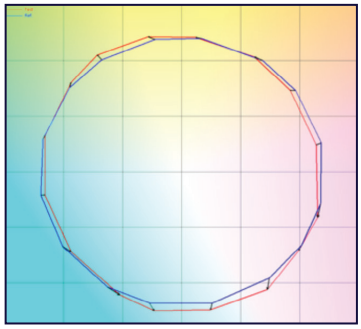
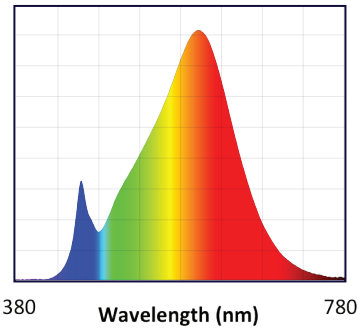
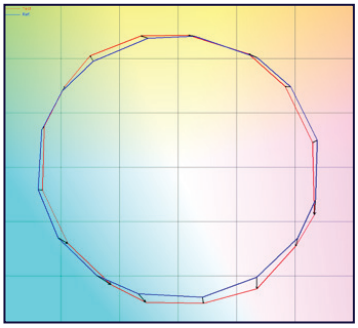
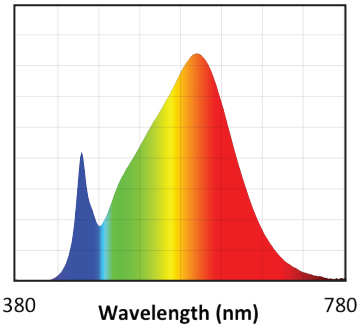
Note: Footcandles may be calculated by multiplying the CBCP of the desired model number by the percentage in the tables above

SPECIFICATIONS BY MODEL NUMBER* SORAA LED MR16-GU10 7.5W

Model #	Product Code	CCT (K)	Beam Angle	Field Angle	CBCP (Cd)	Halogen Equiv	Total Flux (Lm)	Efficacy (Lm/W)	CRI	McA	Title 20
BRILLIANT HL SERIES											
SM16GA-07-25D-827-H1	08744	2700	25	40	3170	65	600	80	90	3	pending
SM16GA-07-36D-827-H1	08746	2700	36	57	1550	65	600	80	90	3	pending
SM16GA-07-60D-827-H1	08748	2700	60	84	610	65	600	80	90	3	pending
SM16GA-07-25D-830-H1	08752	3000	25	40	3300	65	630	84	90	3	pending
SM16GA-07-36D-830-H1	08754	3000	36	57	1650	65	630	84	90	3	pending
SM16GA-07-60D-830-H1	08756	3000	60	84	650	65	630	84	90	3	pending

CCT: Correlated Color Temperature **McA**: White Point Accuracy in McA step

***Specifications are at stable warm operating conditions (25°C ambient)

SERIES/CCT	COLOR ACCURACY	SPECTRAL POWER DISTRIBUTION
BRILLIANT HL 2700K	 Rf: 90, Rg: 98, Rfh1: 85	 CRI: 90, R9: 50
BRILLIANT HL 3000K	 Rf: 90, Rg: 98, Rfh1: 85	 CRI: 90, R9: 50

Rf: TM-30 metric measuring color fidelity (whether colors are similar to those under natural light). Rf is a more accurate version of the CRI Ra. Rf is 100 for natural light.
Rg: TM-30 metric measuring color gamut (whether colors are more saturated than under natural light). Rg is 100 for natural light.
Rfh1: TM-30 metric measuring color fidelity for red tones. Rfh1 is a more accurate version of the CRI R9. Rfh1 is 100 for natural light.