



SORAA BRILLIANT HL™

The Soraa Brilliant HL single-source COB lamp combines Soraa’s world-class optics design and driver technology with a photoptically 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

GENERAL SPECIFICATIONS

Form Factor

Width: 49.9mm (1.96")

Height: 53.5mm (2.10")

Weight: 61g

Operating Temperature

Minimum: -40°C (ambient)

Typical: 90°C - 95°C (base)

Maximum: 100°C (base)

Electrical

Wattage: 9W

Power factor: 0.93

Voltage: 120V +/- 12V

Frequency: 50/60Hz

Dimming

Dimmable to <20%

Output Range	690 - 725 lumen
Beam Angle Range	Flood, 25°, 36°, 60°
Color Metrics	CCT: 2700K, 3000K Color Rendering CIE Metrics: CRI 90, R9 50
Application	Not suitable for enclosed, lensed, baffled, or deeply recessed fixtures. Halogen replacement for indoor applications.



HIGHLY COMPATIBLE

Geometrically compatible with standard fixtures and suitable for damp locations

Not suitable for enclosed, lensed, baffled, or deeply recessed fixtures

Suitable for damp locations

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

INTENDED USE AND APPLICATIONS

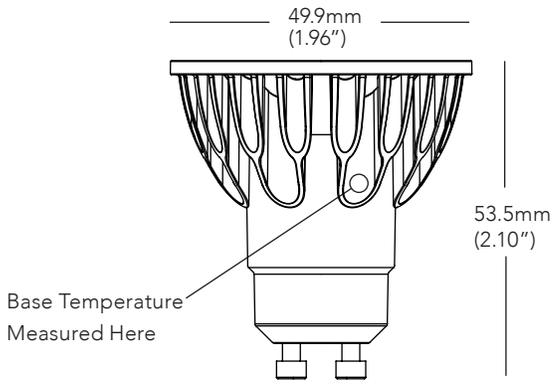
Intended for use in GU10 compatible recessed downlights, track lighting and other indoor applications
Soraa lamps are designed to safely turn down in high temperature environments to protect LED and components. This lamp should not be used in fully enclosed or lensed fixtures

CERTIFICATIONS

Title 20 compliant, UL/CUL, FCC Title 47 Part 15B, RoHS

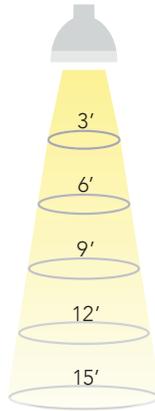


DIMENSIONS



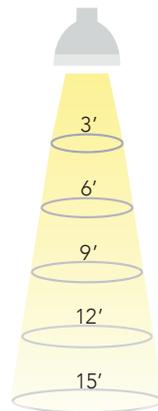
25 DEGREE BEAM

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%



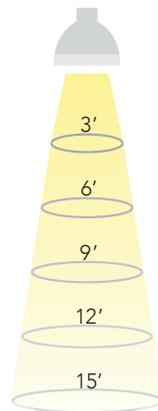
36 DEGREE BEAM

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%



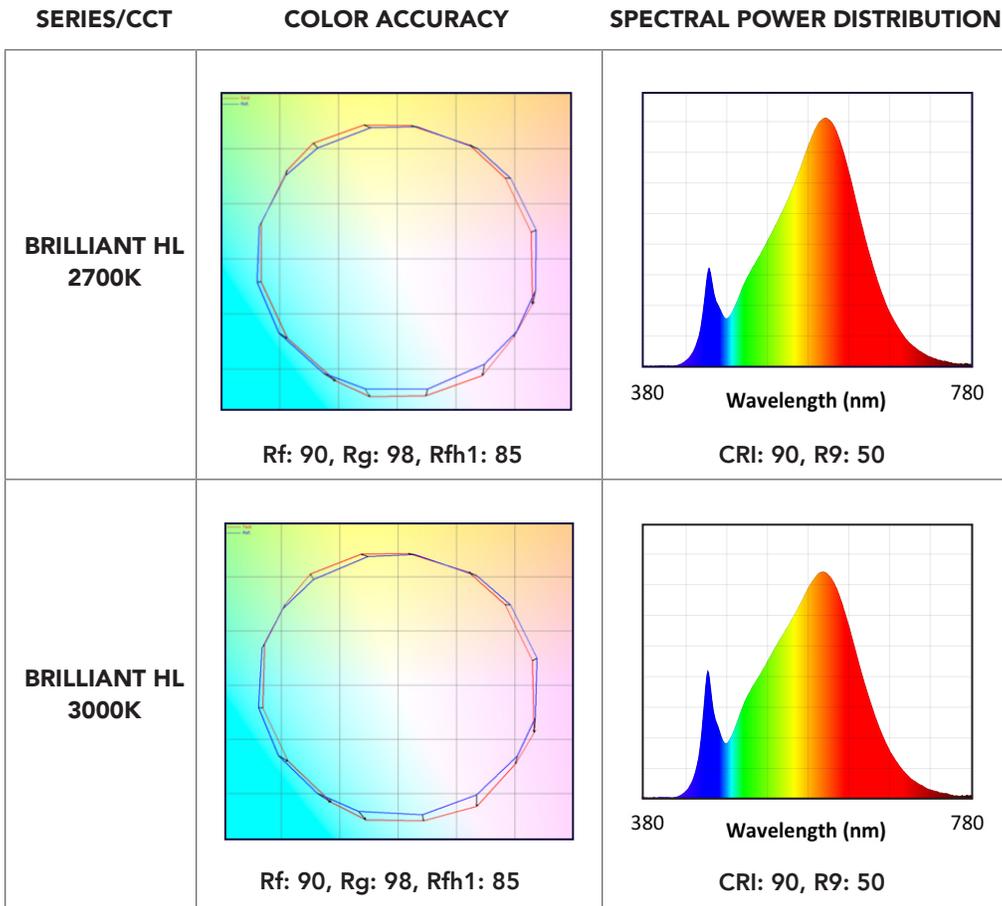
Note: Footcandles may be calculated by multiplying the CBCP of the desired model number by the percentage in the tables above

SPECIFICATIONS BY MODEL NUMBER* SORAA LED MR16-GU10 9W 120V

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-09-25D-827-H1	08758	2700	25	40	3550	75	690	77	90	3	Compliant
SM16GA-09-36D-827-H1	08760	2700	36	57	1700	75	690	77	90	3	Compliant
SM16GA-09-60D-827-H1	08762	2700	60	84	670	75	690	77	90	3	Compliant
SM16GA-09-25D-830-H1	08764	3000	25	40	3730	75	725	81	90	3	Compliant
SM16GA-09-36D-830-H1	08766	3000	36	57	1790	75	725	81	90	3	Compliant
SM16GA-09-60D-830-H1	08768	3000	60	84	700	75	725	81	90	3	Compliant

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

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



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.