



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 10 to 60 degrees, in form factors as challenging as the compact GU10 resulting in smooth uniform beams and crisp shadows.

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

Detailed warranty information available at soraa.com/resources/legal

CERTIFICATIONS

RoHS, CE



All 25D and 36D lamps are class F;
All 10D lamps are class G.

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

Frequency: 50/60Hz

Dimming and Flicker

T24/JA8 compliant.

Please reference our compatibility chart for dimmer and transformer information.

Output Range	575 - 630 lumen
Beam Angle Range	10°, 25°, 36°, 60°
Colour Metrics	CCT: 2700K, 3000K Colour 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.



HIGHLY COMPATIBLE

Geometrically compatible with standard fixtures and suitable for damp locations.

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.

Check individual lamp website pages for compatibility data. For more information visit: www.soraa.com.

INTENDED USE AND APPLICATIONS

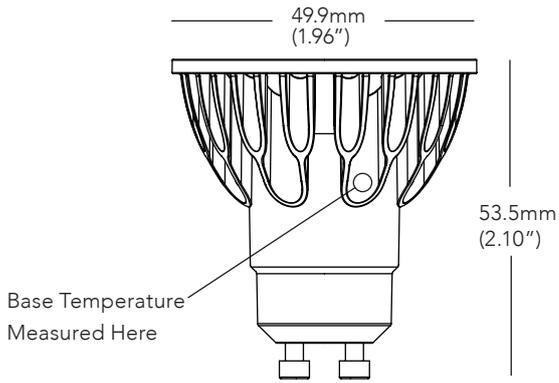
Intended for use in GU10 compatible recessed downlights, track lighting and other indoor and outdoor applications.

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

ACCESSORIES

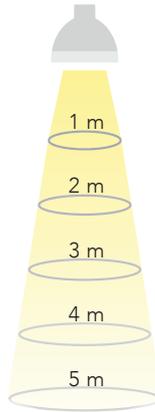
Narrow spot compatible with the Soraa SNAP System™

DIMENSIONS



10 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.2	0.4	100%
0.3	0.7	25%
0.5	1.1	11%
0.7	1.4	6%
0.9	1.8	4%

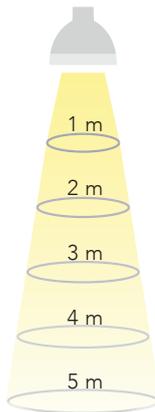


25 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.4	0.7	100%
0.9	1.5	25%
1.3	2.2	11%
1.8	2.9	6%
2.2	3.6	4%

60 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.6	1.1	100%
1.3	2.2	25%
1.9	3.3	11%
2.6	4.3	6%
3.2	5.4	4%



Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
1.2	1.8	100%
2.3	3.6	25%
3.5	5.4	11%
4.6	7.2	6%
5.8	9.0	4%

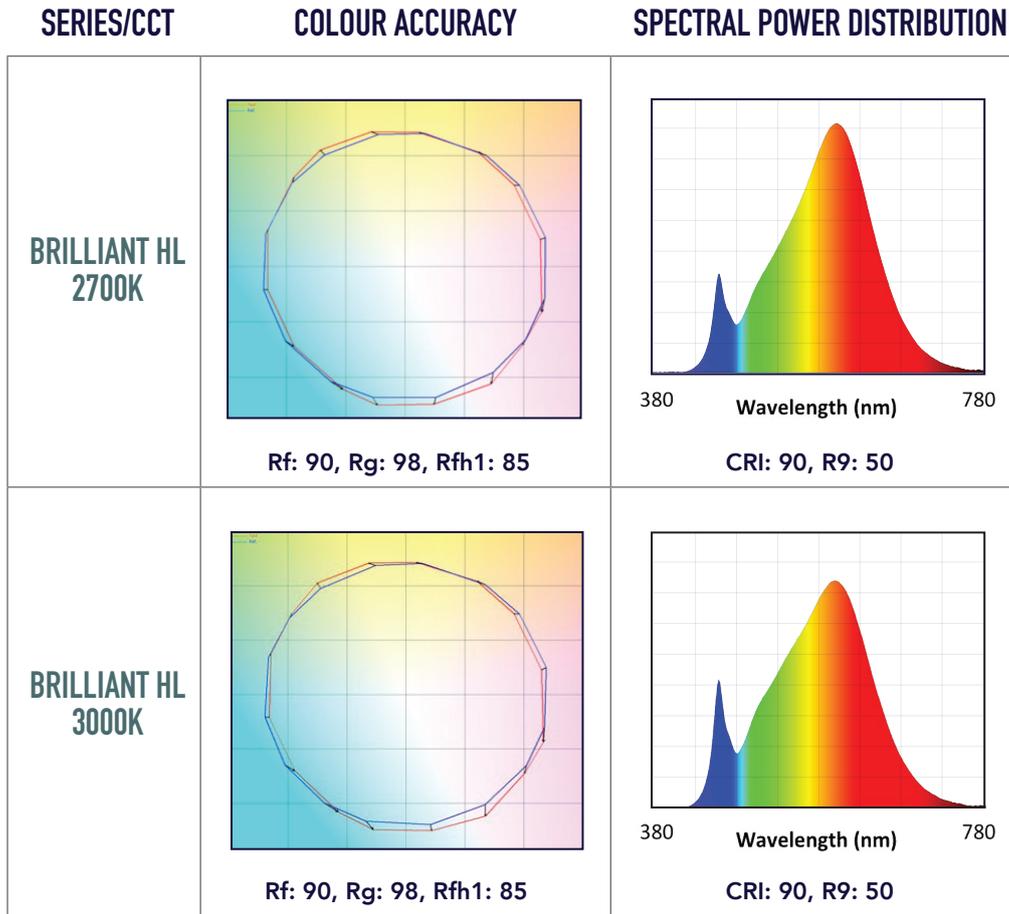
Note: Lux may be calculated by multiplying the peak Intensity of the desired model number by the percentage in the tables above

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

Model #	Product Code	CCT (K)	Beam Angle	Field Angle	Peak Intensity	Total Flux (Lm)	Efficacy (Lm/W)	CRI	90° Lumens	McA	SNAP
BRILLIANT HL SERIES											
SM16GW-07-10D-827-H1-S3	11283	2700	10	17	8000	620	77	90	540	3	YES
SM16GW-07-25D-827-H1-S3	11287	2700	25	38	3170	650	80	90	610	3	-
SM16GW-07-36D-827-H1-S3	11291	2700	36	54	1550	650	80	90	600	3	-
SM16GW-07-60D-827-H1-S3	11295	2700	60	84	610	650	80	90	550	3	-
SM16GW-07-10D-830-H1-S3	11281	3000	10	17	8400	640	80	90	560	3	YES
SM16GW-07-25D-830-H1-S3	11285	3000	25	38	3300	660	84	90	620	3	-
SM16GW-07-36D-830-H1-S3	11289	3000	36	54	1650	660	84	90	610	3	-
SM16GW-07-60D-830-H1-S3	11293	3000	60	84	650	660	84	90	560	3	-

CCT: Correlated Colour Temperature **McA**: White Point Accuracy in McA step **SNAP**: SORAA SNAP System Compatible **EEI**: Energy Efficiency Index

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



Rf: TM-30 metric measuring colour fidelity (whether colours 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 colour gamut (whether colours are more saturated than under natural light). Rg is 100 for natural light.

Rfh1: TM-30 metric measuring colour fidelity for red tones. Rfh1 is a more accurate version of the CRI R9. Rfh1 is 100 for natural light.