



## 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](http://soraa.com/resources/legal)

## CERTIFICATIONS

RoHS, CE



## 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

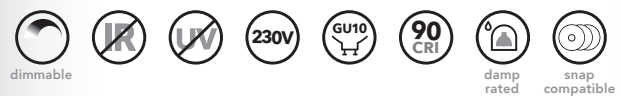
Frequency: 50/60Hz

### Dimming and Flicker

Dimmable to <20%

Percent Flicker: 12%

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](http://www.soraa.com).

## INTENDED USE AND APPLICATIONS

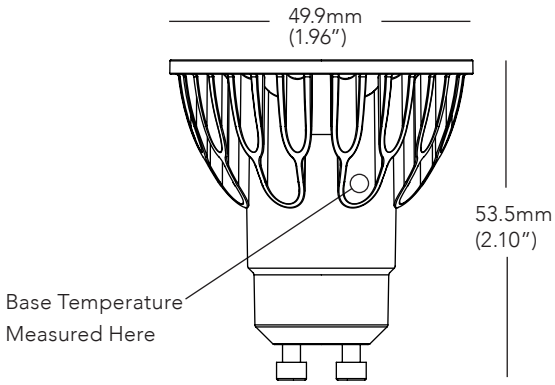
Intended for use in GU10 compatible recessed downlights, track lighting and other indoor and outdoor applications.

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

## ACCESSORIES

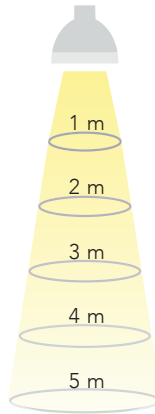
Narrow spot compatible with the Soraa SNAP System™

## 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%

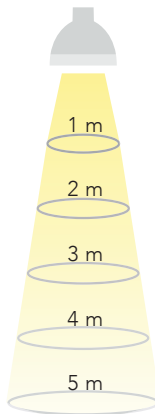


### 25 DEGREE BEAM

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%

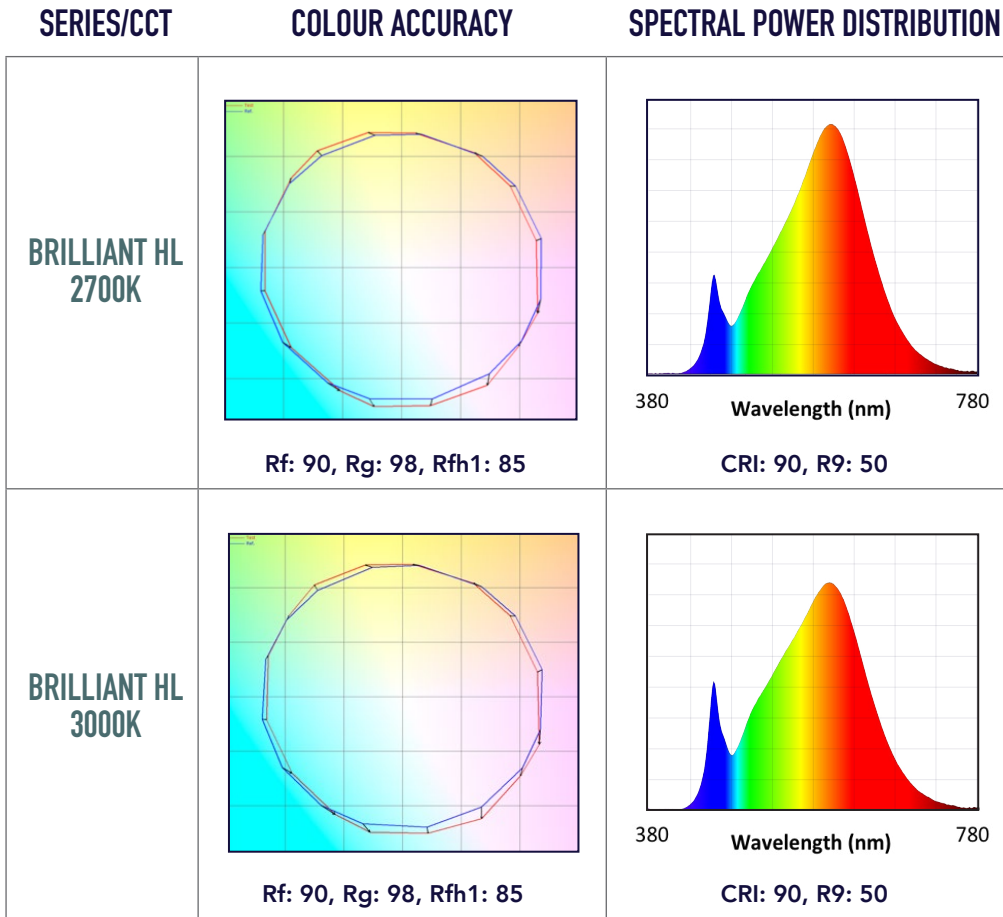
Note: Lux may be calculated by multiplying the peak Intensity of the desired model number by the percentage in the tables above

# 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	EI	SNAP
<b>BRILLIANT HL SERIES</b>												
SM16GW-07-10D-827-H1-S3	11283	2700	10	17	8000	575	77	90	505	3	A+	YES
SM16GW-07-25D-827-H1-S3	11287	2700	25	38	3170	600	80	90	570	3	A+	-
SM16GW-07-36D-827-H1-S3	11291	2700	36	54	1550	600	80	90	550	3	A+	-
SM16GW-07-60D-827-H1-S3	11295	2700	60	84	610	600	80	90	550	3	A+	-
SM16GW-07-10D-830-H1-S3	11281	3000	10	17	8400	600	80	90	545	3	A+	YES
SM16GW-07-25D-830-H1-S3	11285	3000	25	38	3300	630	84	90	615	3	A+	-
SM16GW-07-36D-830-H1-S3	11289	3000	36	54	1650	630	84	90	595	3	A+	-
SM16GW-07-60D-830-H1-S3	11293	3000	60	84	650	630	84	90	595	3	A+	-

**CCT:** Correlated Colour Temperature **McA:** White Point Accuracy in McA step **SNAP:** SORAA SNAP System Compatible **EI:** 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.