



## POINT SOURCE OPTICS™

Exceptional beam control enables unique 9° narrow spot and smooth uniform beams

Single light source, single crisp shadow

## SORAA VIVID COLOR™ AND SORAA NATURAL WHITE™

All Soraa VIVID lamps feature the right amount of spectral content from violet to deep red in every wavelength from 400nm to 700nm with 95 CRI, 95 R9 and R<sub>w</sub> 100 typical

Soraa's whiteness methodology means we render white faithfully, matching or exceeding that of halogen and incandescent sources at 2700K and 3000K

<https://www.soraa.com/resources/tm30>

## 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



**RoHS CE**

## GENERAL SPECIFICATIONS

### Form Factor

Width: 122mm (4.80")

Height: 125mm (4.92")

Weight: 305g

### Operating Temperature

Minimum: -40°C (ambient)

Typical: 70°C - 80°C (base)

Maximum: 90°C (base)

### Electrical

Wattage: 18.5W

Power factor: 0.95

Voltage: 230V +/- 23V

Frequency: 50/60Hz

### Dimming and Flicker

Dimmable to <20%

Flicker Index: <0.1

Percent Flicker: 29%

Output Range 930 - 1000 lumen

Beam Angle Range 9°

Color Temperature Range 2700K, 3000K

Application Halogen replacement for indoor and outdoor applications



gan-on-gan



full spectrum



natural white



dimmable



UV



230V AC



GU10



damp rated



snap compatible

## HIGHLY COMPATIBLE

Thermally and geometrically compatible with standard fixtures and suitable for damp locations

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

## INTENDED USE AND APPLICATIONS

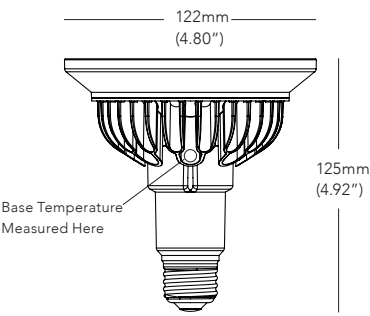
Intended for use in PAR38 compatible recessed downlights, track lighting and other indoor and outdoor applications

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

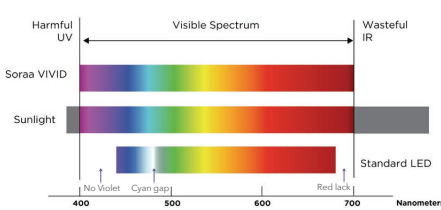


9 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.2	0.3	77%
0.3	0.6	23%
0.5	0.8	11%
0.6	1.1	6%
0.8	1.4	4%

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

COLOR RENDERING



SPECIFICATIONS BY MODEL NUMBER\* SORAA LED PAR38 18.5W

Model #	Product Code	CCT (K)	Beam Angle	Field Angle	Peak Intensity	Total Flux (Lm)	Efficacy (Lm/W)	90° Lumens	McA	EI	SNAP
VIVID SERIES											
SP38W-18-09D-927-03-S3	02047	2700	9	16	17200	930	50	890	3	A	YES
SP38W-18-09D-930-03-S3	02063	3000	9	16	18500	1000	54	960	3	A	YES

CCT: Correlated Color 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)

SERIES/CCT	COLOR ACCURACY	WHITENESS INDEX	SPECTRAL POWER DISTRIBUTION
VIVID 2700K	 Rf: 90, Rg: 100, Rfh1: 95	 Rw: 100	 CRI: 95, R9: 95
VIVID 3000K	 Rf: 90, Rg: 100, Rfh1: 95	 Rw: 100	 CRI: 95, R9: 95

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. Rf is a more accurate version of the CRI R9. Rfh1 is 100 for natural light.  
Rw: Soraa-developed metric to measure white fidelity. Rw measures the magnitude of excitation of whitening agents within whites. Rw is about 100 for natural light.