

# PAR38 18.5W



**OUTPUT RANGE: VIVID SERIES** 930 - 1000 lumen

**BEAM ANGLE RANGE** 9°, 25°, 36°

**COLOR TEMPERATURE RANGE** 2700K, 3000K, 4000K

**APPLICATION** Halogen replacement for indoor & outdoor applications



## POINT SOURCE OPTICS

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

Single light source, single crisp shadow

## VP<sub>3</sub> VIVID COLOR AND VP<sub>3</sub> NATURAL WHITE

VIVID series provides accurate color rendering across the visible spectrum from 400nm to 700nm, with CRI/95, R9/95, Rf/90, Rg/100

Whiteness rendering matches or exceeds that of halogen and incandescent sources at 2700K and 3000K

## 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



## HIGHLY COMPATIBLE

Narrow spot compatible with Soraa SNAP System accessories

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

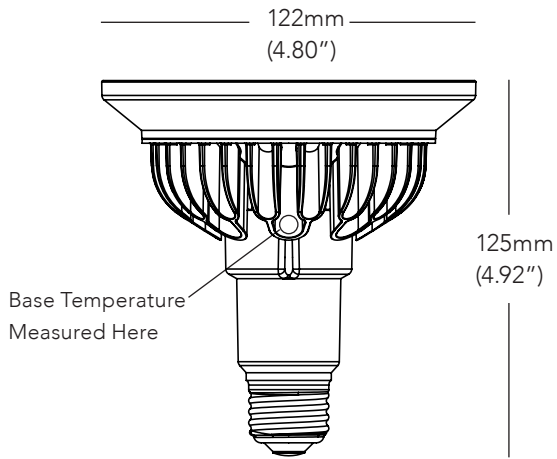
Intended for use in PAR38 compatible recessed downlights, track lighting and other indoor and outdoor applications

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

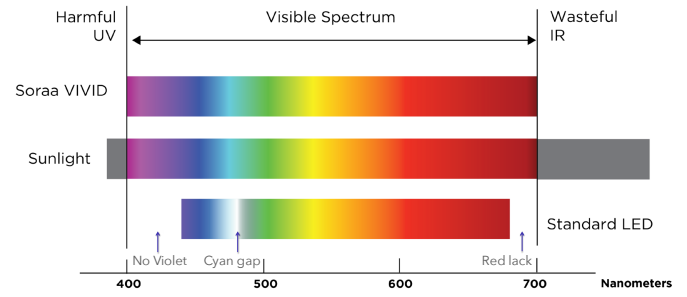
## GENERAL SPECIFICATIONS

Form Factor	Operating Temperature	Electrical	Dimming and Flicker
Width: 122mm (4.80")	Minimum: -40°C (ambient)	Wattage: 18.5W	Dimmable to <20%
Height: 125mm (4.92")	Typical: 70°C - 80°C (base)	Power factor: 0.95	Flicker Index: <0.1
Weight: 305g	Maximum: 90°C (base)	Voltage: 230V +/- 23V	Percent Flicker: 29%
		Frequency: 50/60Hz	

## DIMENSIONS

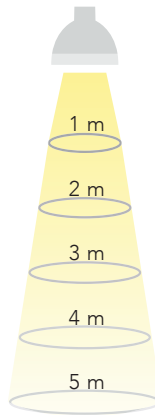


## COLOR RENDERING



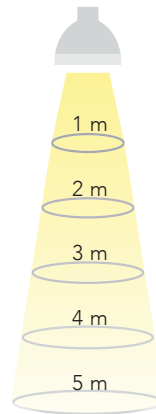
## 9 DEGREE BEAM

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%



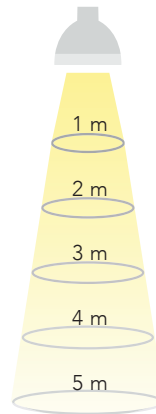
## 25 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.4	0.7	77%
0.9	1.5	23%
1.3	2.2	11%
1.8	2.9	6%
2.2	3.6	4%



## 36 DEGREE BEAM

Beam Dia at 50% Intensity (m)	Field Dia at 10% Intensity (m)	Lux (% of Intensity)
0.6	1.2	77%
1.3	2.3	23%
1.9	3.5	11%
2.6	4.6	6%
3.2	5.8	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 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
<b>VIVID SERIES</b>											
SP38W-18-09D-927-03-S3	02047	2700	9	16	17200	930	50	890	3	A	YES
SP38W-18-25D-927-03-S3	02049	2700	25	40	5020	930	50	890	3	A	-
SP38W-18-36D-927-03-S3	02051	2700	36	60	2320	930	50	900	3	A	-
SP38W-18-09D-930-03-S3	02063	3000	9	16	18500	1000	54	960	3	A	YES
SP38W-18-25D-930-03-S3	02065	3000	25	40	5400	1000	54	960	3	A	-
SP38W-18-36D-930-03-S3	02067	3000	36	60	2500	1000	54	970	3	A	-

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

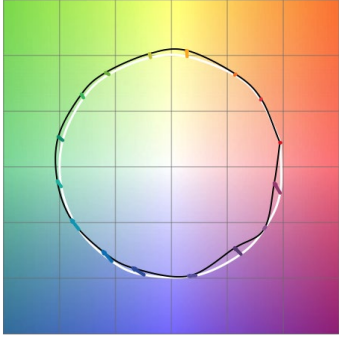
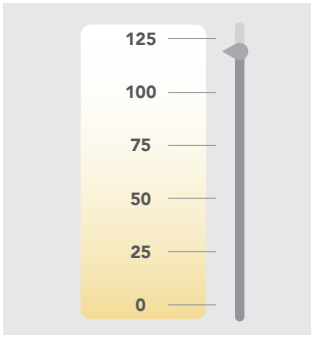
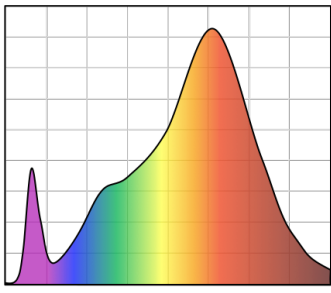
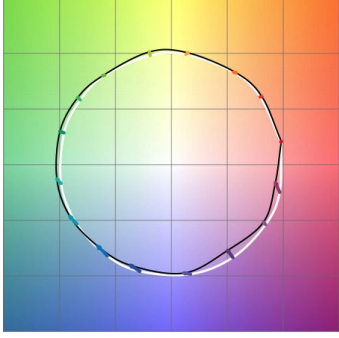
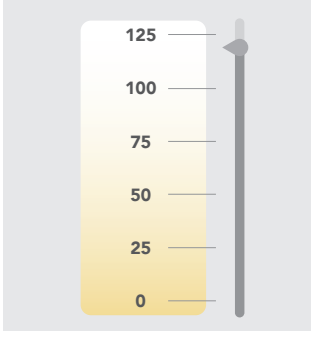
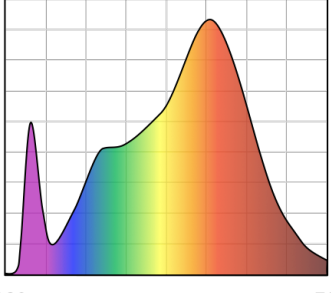
\*Specifications are at stable warm operating conditions (25°C ambient)

**SERIES/CCT**

**COLOR ACCURACY**

**WHITENESS INDEX**

**SPECTRAL POWER DISTRIBUTION**

<p><b>VIVID 2700K</b></p>	 <p><b>Rf: 90, Rg: 100, Rfh1: 95</b></p>	 <p><b>Rw: 120</b></p>	 <p><b>Wavelength (nm)</b> 380 780</p> <p><b>CRI: 95, R9: 95</b></p>
<p><b>VIVID 3000K</b></p>	 <p><b>Rf: 90, Rg: 100, Rfh1: 95</b></p>	 <p><b>Rw: 120</b></p>	 <p><b>Wavelength (nm)</b> 380 780</p> <p><b>CRI: 95, R9: 95</b></p>

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.