

PAR36 18.5W



OUTPUT RANGE: VIVID SERIES	930 - 1040 lumen
OUTPUT RANGE: BRILLIANT SERIES	1190 - 1280 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 [soraalighting.com/resources/legal](http://soraalighting.com/resources/legal)

CERTIFICATIONS

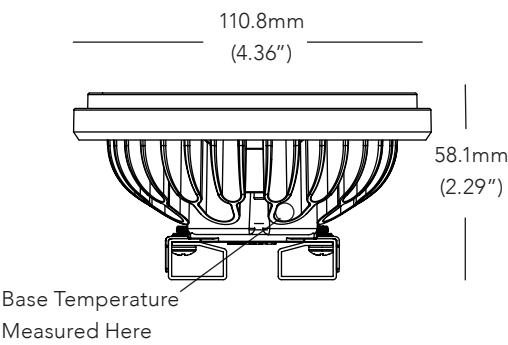
FCC Title 47 Part 15B, RoHS, CE



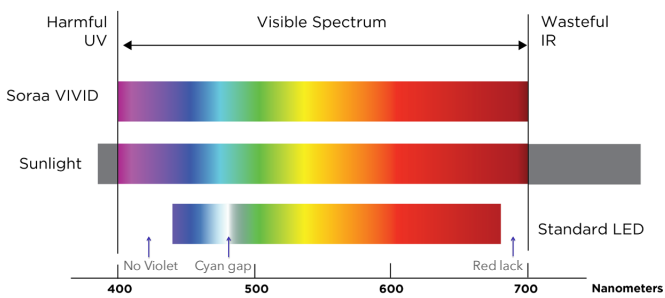
GENERAL SPECIFICATIONS

Form Factor	Operating Temperature	Electrical	Dimming and Flicker
Width: 110.8mm (4.36")	Minimum: -40°C (ambient)	Wattage: 18.5W	Dimmable to <20%
Height: 58.1mm (2.29")	Typical: 70°C - 80°C (base)	Power factor: 0.92	Flicker Index <0.1
Weight: 280g	Maximum: 90°C (base)	Voltage: 12V +/- 1.2V	Percent Flicker: 28%
		Frequency: 50/60Hz	

DIMENSIONS

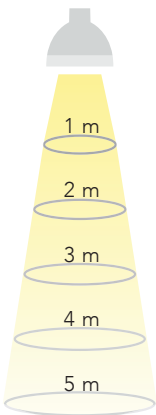


COLOR RENDERING



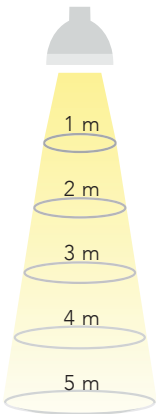
9 DEGREE BEAM

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%



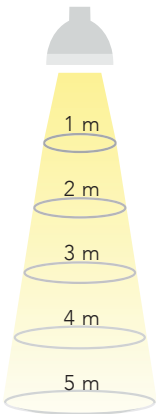
25 DEGREE BEAM

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%

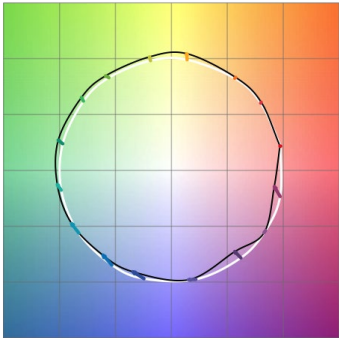
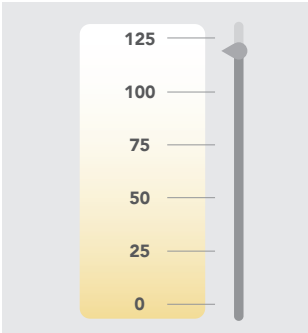
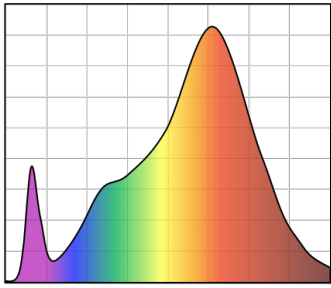
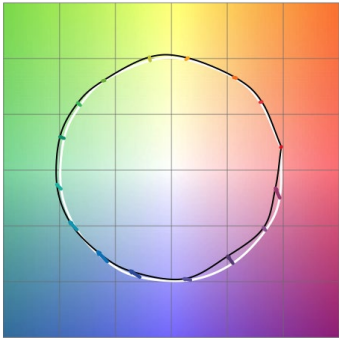
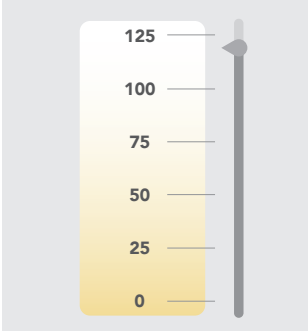
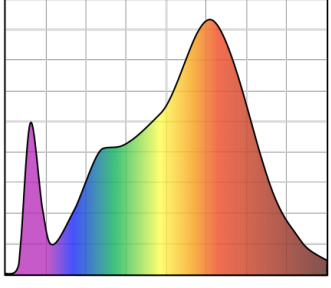
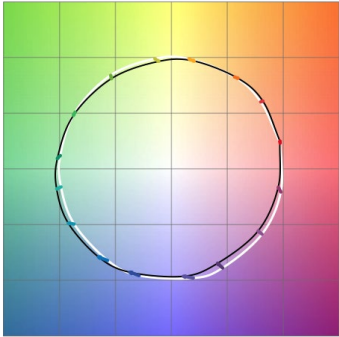
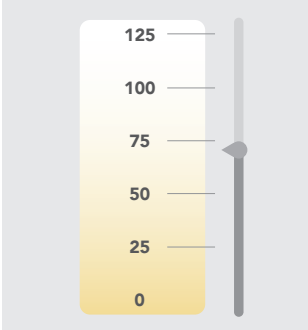
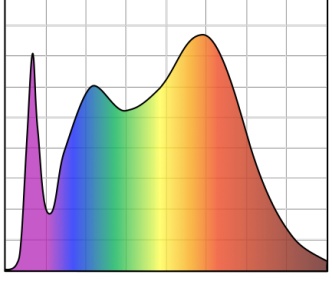


Note: Lux may be calculated by multiplying the peak Intensity of the desired model number by the percentage in the tables above

SPECIFICATIONS BY MODEL NUMBER\* SORAA LED PAR36 18.5W

Model #	Product Code	CCT (K)	Beam Angle	Field Angle	Peak Intensity	Total Flux (Lm)	Efficacy (Lm/W)	90° Lumens	McA	EEI	SNAP
VIVID SERIES											
SP36-18-09D-927-03-S3	03405	2700	9	16	22400	930	50	835	3	A	YES
SP36-18-25D-927-03-S3	03407	2700	25	40	5020	930	50	860	3	A	-
SP36-18-36D-927-03-S3	03409	2700	36	60	2320	930	50	855	3	A	-
SP36-18-09D-930-03-S3	03421	3000	9	16	24100	1000	54	900	3	A	YES
SP36-18-25D-930-03-S3	03423	3000	25	40	5400	1000	54	930	3	A	-
SP36-18-36D-930-03-S3	03425	3000	36	60	2500	1000	54	920	3	A	-
SP36-18-09D-940-03-S3	03437	4000	9	16	25060	1040	56	935	4	A	YES
SP36-18-25D-940-03-S3	03439	4000	25	40	5600	1040	56	965	4	A	-
SP36-18-36D-940-03-S3	03441	4000	36	60	2600	1040	56	955	4	A	-
BRILLIANT SERIES											
SP36-18-09D-827-03-S3	03413	2700	9	16	28660	1190	64	1070	3	A	YES
SP36-18-25D-827-03-S3	03415	2700	25	40	6420	1190	64	1105	3	A	-
SP36-18-36D-827-03-S3	03417	2700	36	60	2960	1190	64	1090	3	A	-
SP36-18-09D-830-03-S3	03429	3000	9	16	30840	1280	69	1150	3	A	YES
SP36-18-25D-830-03-S3	03431	3000	25	40	6900	1280	69	1190	3	A	-
SP36-18-36D-830-03-S3	03433	3000	36	60	3200	1280	69	1175	3	A	-

CCT: Correlated Color 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)

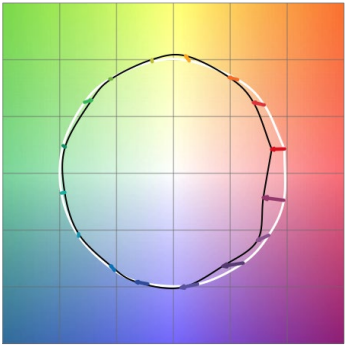
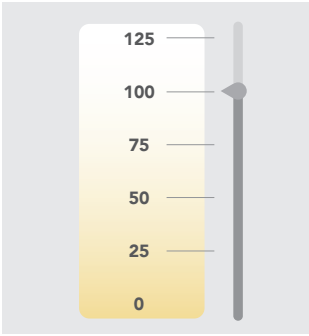
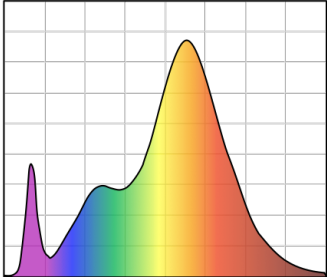
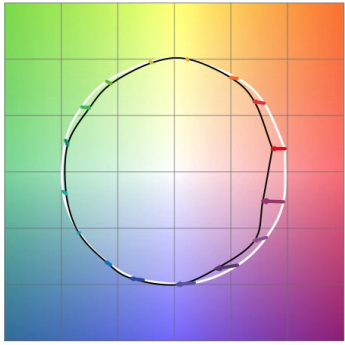
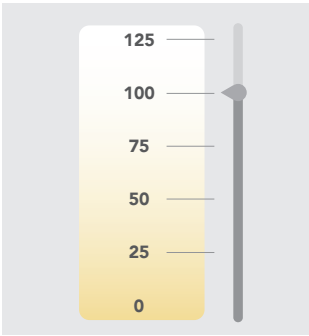
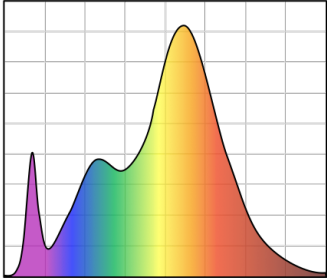
SERIES/CCT	COLOR ACCURACY	WHITENESS INDEX	SPECTRAL POWER DISTRIBUTION
VIVID 2700K	 <p>Rf: 90, Rg: 100, Rfh1: 95</p>	 <p>Rw: 120</p>	 <p>380 Wavelength (nm) 780</p> <p>CRI: 95, R9: 95</p>
VIVID 3000K	 <p>Rf: 90, Rg: 100, Rfh1: 95</p>	 <p>Rw: 120</p>	 <p>380 Wavelength (nm) 780</p> <p>CRI: 95, R9: 95</p>
VIVID 4000K	 <p>Rf: 90, Rg: 100, Rfh1: 95</p>	 <p>Rw: 70</p>	 <p>380 Wavelength (nm) 780</p> <p>CRI: 95, R9: 95</p>

SERIES/CCT

COLOR ACCURACY

WHITENESS INDEX

SPECTRAL POWER DISTRIBUTION

<div>BRILLIANT 2700K</div>	<div><p>Rf: 85, Rg: 92, Rfh1: 77</p></div>	<div><p>Rw: 100</p></div>	<div><p>380 Wavelength (nm) 780</p><p>CRI: 85, R9: &gt;0</p></div>
<div>BRILLIANT 3000K</div>	<div><p>Rf: 85, Rg: 92, Rfh1: 77</p></div>	<div><p>Rw: 100</p></div>	<div><p>380 Wavelength (nm) 780</p><p>CRI: 85, R9: &gt;0</p></div>

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.  
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.