

PAR20 5.4W



OUTPUT RANGE: VIVID SERIES 245 - 265 lumen

OUTPUT RANGE: BRILLIANT SERIES 315 - 335 lumen

BEAM ANGLE RANGE 8°, 25°, 36°

COLOR TEMPERATURE RANGE 2700K, 3000K

APPLICATION Halogen replacement for indoor & outdoor applications



120V



E26



DIM



POINT SOURCE OPTICS

Exceptional beam control enables unique 8° narrow spot and smooth uniform beams

Single light source, single crisp shadow

VP₃ VIVID COLOR & VP₃ 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 & LONG LIFE

85% more energy efficient than standard halogen lamps

Typical payback of one year or less

Rated lifetime of 35,000 hours. 3 year warranty

CERTIFICATIONS

RoHS, CE, UL/CUL, FCC Title 47 Part 15B



RoHS

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

INTENDED USE AND APPLICATIONS

Intended for use in PAR20 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

Width: 64mm (2.52")

Height: 77mm (3.04")

Weight: 160g

Operating Temperature

Minimum: -40°C (ambient)

Typical: 60°C - 70°C (base)

Maximum: 80°C (base)

Electrical

Wattage: 5.4W

Power factor: 0.92

Voltage: 120V +/- 12V

Frequency: 50/60Hz

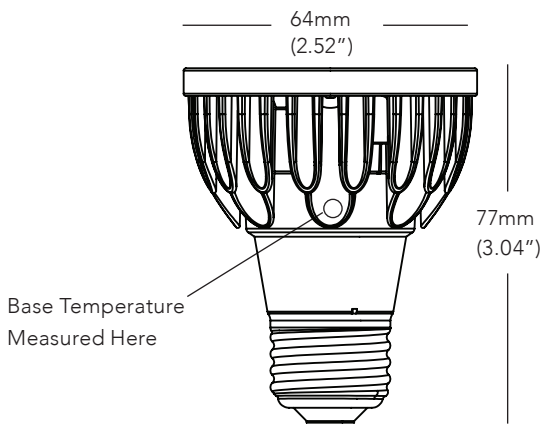
Dimming and Flicker

Dimmable to <20%

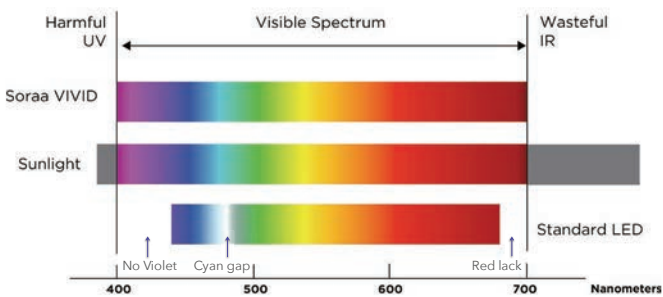
Flicker Index: <0.10

Percent Flicker: 23%

DIMENSIONS

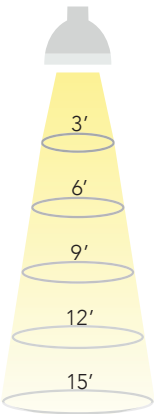


COLOR RENDERING



8 DEGREE BEAM

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
0.4	1.1	11.1%
0.8	2.1	2.8%
1.3	3.2	1.2%
1.7	4.2	0.7%
2.1	5.3	0.4%

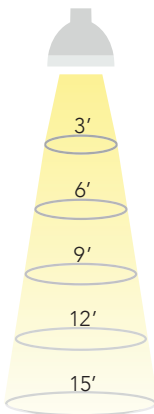


25 DEGREE BEAM

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
1.3	2.2	11.1%
2.7	4.4	2.8%
4.0	6.6	1.2%
5.3	8.7	0.7%
6.7	10.9	0.4%

36 DEGREE BEAM

Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
1.9	3.5	11.1%
3.9	6.9	2.8%
5.8	10.4	1.2%
7.8	13.9	0.7%
9.7	17.3	0.4%

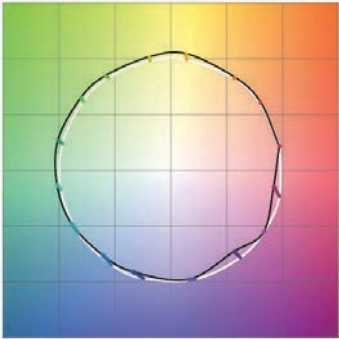
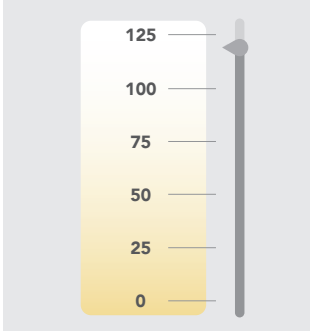
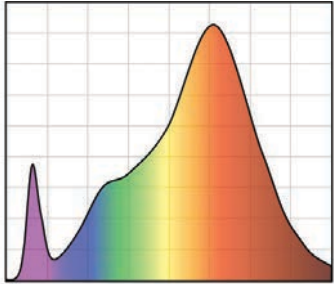
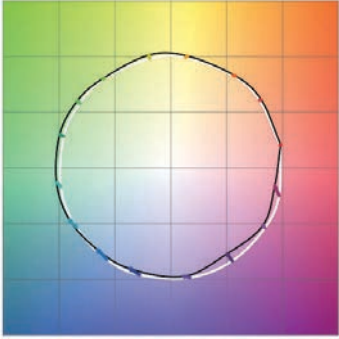
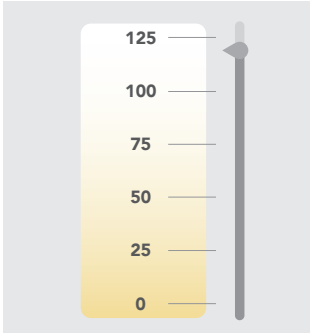
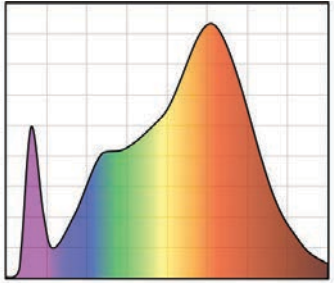
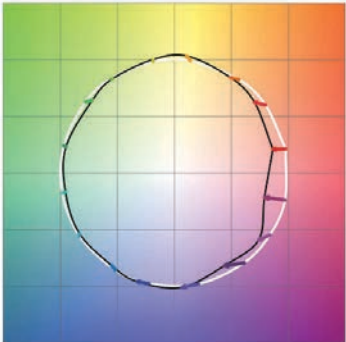
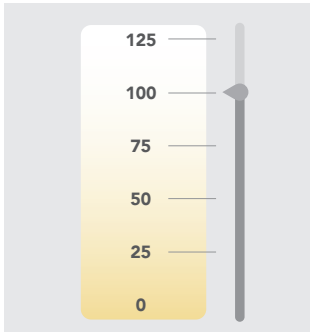
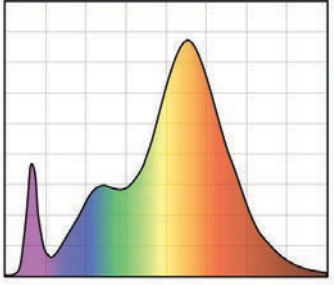
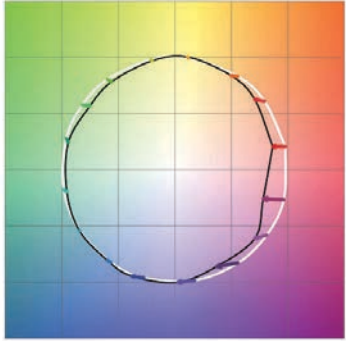
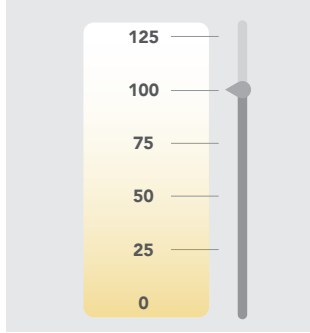
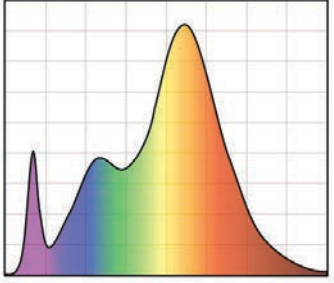


Note: Footcandles may be calculated by multiplying the CBCP of the desired model number by the percentage in the tables above

SPECIFICATIONS BY MODEL NUMBER* SORAA LED PAR20 5.4W

Model #	Product Code	CCT (K)	Beam Angle	Field Angle	CBCP (Cd)	Halogen Equivalent	Total Flux (Lm)	Efficacy (Lm/W)	McA	Energy Star	SNAP
VIVID SERIES											
SP20-05-08D-927-03	01659	2700	8	20	6360	50	245	45	3	-	YES
SP20-05-25D-927-03	01951	2700	25	40	1280	50	245	45	3	-	-
SP20-05-36D-927-03	01953	2700	36	60	600	50	245	45	3	-	-
SP20-05-08D-930-03	01661	3000	8	20	6880	50	265	49	3	-	YES
SP20-05-25D-930-03	01955	3000	25	40	1400	50	265	49	3	-	-
SP20-05-36D-930-03	01957	3000	36	60	660	50	265	49	3	-	-
BRILLIANT SERIES											
SP20-05-08D-827-03	01647	2700	8	20	8180	60	315	58	3	-	YES
SP20-05-25D-827-03	01649	2700	25	40	1660	60	315	58	3	-	-
SP20-05-36D-827-03	01651	2700	36	60	780	60	315	58	3	-	-
SP20-05-08D-830-03	01653	3000	8	20	8700	60	335	62	3	-	YES
SP20-05-25D-830-03	01655	3000	25	40	1760	60	335	62	3	-	-
SP20-05-36D-830-03	01657	3000	36	60	820	60	335	62	3	-	-

CCT: Correlated Color Temperature **McA**: White Point Accuracy in McA step **SNAP**: SORAA SNAP System Compatible
*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: 120	 380 Wavelength (nm) 780 CRI: 95, R9: 95
VIVID 3000K	 Rf: 90, Rg: 100, Rfh1: 95	 Rw: 120	 380 Wavelength (nm) 780 CRI: 95, R9: 95
BRILLIANT 2700K	 Rf: 85, Rg: 92, Rfh1: 77	 Rw: 100	 380 Wavelength (nm) 780 CRI: 85, R9: >0
BRILLIANT 3000K	 Rf: 85, Rg: 92, Rfh1: 77	 Rw: 100	 380 Wavelength (nm) 780 CRI: 85, R9: >0

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.