



POINT SOURCE OPTICS™

Exceptional beam control enables unique 10° 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_w 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

CERTIFICATIONS

RoHS, CE



GENERAL SPECIFICATIONS

Form Factor

Width: 64mm (2.52")

Height: 89mm (3.50")

Weight: 160g

Operating Temperature

Minimum: -40°C (ambient)

Typical: 70°C - 80°C (base)

Maximum: 90°C (base)

Electrical

Wattage: 10.8W

Power factor: 0.80

Voltage: 230V +/- 23V

Frequency: 50/60Hz

Dimming and Flicker

Dimmable to <20%

Flicker Index: <0.10

Percent Flicker: 50%

Output Range	500 - 540 lumen
Beam Angle Range	10°
Color Temperature Range	2700K, 3000K
Application	Halogen replacement for indoor and outdoor applications



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)

INTENDED USE AND APPLICATIONS

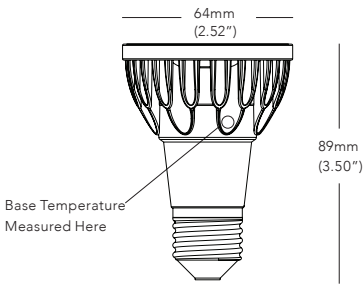
Intended for use in PAR20 compatible recessed downlights, track lighting and other indoor and outdoor applications

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

ACCESSORIES

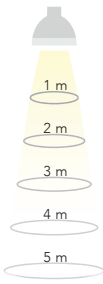
Narrow spot compatible with the Soraa SNAP System™

DIMENSIONS



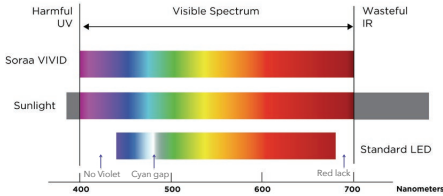
10 DEGREE BEAM

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%



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 PAR20 10.8W

Model #	Product Code	CCT (K)	Beam Angle	Field Angle	Peak Intensity	Total Flux (Lm)	Efficacy (Lm/W)	90° Lumens	McA	EEL	SNAP
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VIVID SERIES

SP20W-11-10D-927-03-S3	02679	2700	10	20	8000	500	46	465	3	A	YES
SP20W-11-10D-930-03-S3	02695	3000	10	20	8640	540	50	500	3	A	YES

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