



SORAA LED PAR 20

10.8W

OUTPUT RANGE: VIVID SERIES	500-565 lumen; CRI-95, R9>90
OUTPUT RANGE: BRILLIANT SERIES	640-690 lumen; CRI-80
BEAM ANGLE RANGE	10°, 25°, 36°, 60°
COLOR TEMPERATURE RANGE	2700K, 3000K, 4000K, 5000K
APPLICATION	Halogen replacement for indoor & outdoor applications



POINT SOURCE OPTICS

Exceptional beam control enables unique 10° narrow spot and smooth uniform beams

Single light source, single crisp shadow

VP₃ VIVID COLOR AND VP₃ NATURAL WHITE

VIVID series provides accurate color rendering across the visible spectrum from 400nm to 700nm, CRI-95, R9>90

Accurate white rendering based on >70% excitation of Optical Brightening Agents with emission between 400nm & 440 nm

ENERGY EFFICIENCY AND LONG LIFE

85% more energy efficient than standard halogen lamps

Typical payback of one year or less

Rated lifetime of 35,000 hours. Three year warranty

CERTIFICATIONS

UL/CUL Class 2 and non-Class 2, FCC Title 47 Part 15B, RoHS, CE

HIGHLY COMPATIBLE

Narrow spot compatible with Soraa SNAP System accessories

Thermally and geometrically compatible with standard fixtures

Suitable for fully enclosed fixtures per UL 1993. Can be used with front glass cover

Suitable for damp locations per UL

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

INTENDED USE AND APPLICATIONS

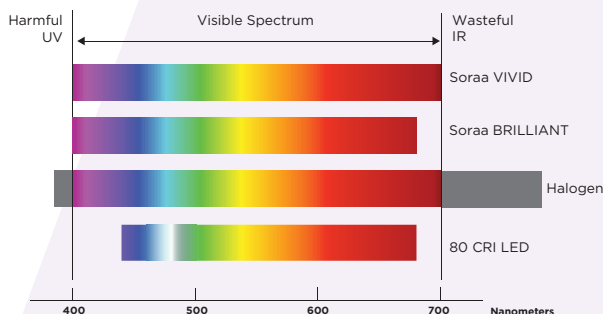
For use in PAR20 compatible recessed downlights, track lighting and other indoor and outdoor applications

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

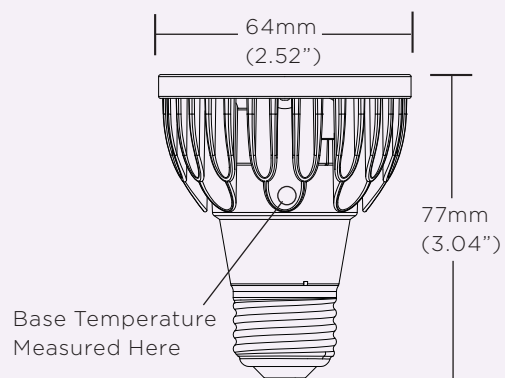
GENERAL SPECIFICATIONS

Form Factor	Operating Temperature	Electrical	
Width: 64mm (2.52")	Minimum: -40°C (ambient)	Wattage: 10.8W	Dimmable to <20%
Height: 77mm (3.04")	Typical: 70°C - 80°C (base)	Power factor: 0.92	Flicker Index < 0.1
Weight: 160g	Maximum: 90°C (base)	Voltage: 120V +/- 12V	Percent Flicker: 23%

COLOR RENDERING



DIMENSIONS



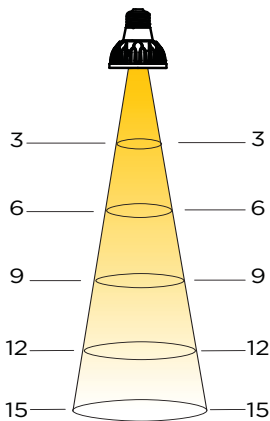
RoHS

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BEAM DIAGRAM

Narrow Spot 10°			Narrow Flood 25°			Distance to Floor (Feet)	Flood 36°			Wide Flood 60°		
Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)	Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)		Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)	Beam Dia at 50% CBCP (ft)	Field Dia at 10% CBCP (ft)	Foot-candles (% of CBCP)
0.5	1.1	11.1%	1.3	2.2	11.1%	3	1.9	3.5	11.1%	3.5	6.0	11.1%
1.0	2.1	2.8%	2.7	4.4	2.8%	6	3.9	6.9	2.8%	6.9	12.0	2.8%
1.6	3.2	1.2%	4.0	6.6	1.2%	9	5.8	10.4	1.2%	10.4	18.0	1.2%
2.1	4.2	0.7%	5.3	8.7	0.7%	12	7.8	13.9	0.7%	13.9	24.0	0.7%
2.6	5.3	0.4%	6.7	10.9	0.4%	15	9.7	17.3	0.4%	17.3	30.0	0.4%

Distance to Floor (Feet)



SPECIFICATIONS BY MODEL NUMBER*

Model Number	Product Code	CCT (K)	Beam Angle (°)	Field Angle (°)	CBCP (cd)	Halogen Equivalent** (Watts)	Total Flux (Lm)	Efficacy (Lm/W)	CRI/R9	White Point (McA)
SORAA VIVID SERIES										
SP20-11-10D-927-03 ^{SNAP}	01599	2700	10	20	8000	75	500	46	95 / 95	3
SP20-11-25D-927-03	01601	2700	25	40	2640	75	500	46	95 / 95	3
SP20-11-36D-927-03	01603	2700	36	60	1240	75	500	46	95 / 95	3
SP20-11-60D-927-03	01605	2700	60	90	540	75	500	46	95 / 95	3
SP20-11-10D-930-03 ^{SNAP}	01615	3000	10	20	8640	75	540	50	95 / 95	3
SP20-11-25D-930-03	01617	3000	25	40	2860	75	540	50	95 / 95	3
SP20-11-36D-930-03	01619	3000	36	60	1340	75	540	50	95 / 95	3
SP20-11-60D-930-03	01621	3000	60	90	580	75	540	50	95 / 95	3
SP20-11-10D-940-03 ^{SNAP}	01631	4000	10	20	8960	75	560	52	95 / 95	4
SP20-11-25D-940-03	01633	4000	25	40	2960	75	560	52	95 / 95	4
SP20-11-36D-940-03	01635	4000	36	60	1400	75	560	52	95 / 95	4
SP20-11-60D-940-03	01637	4000	60	90	600	75	560	52	95 / 95	4
SP20-11-10D-950-03 ^{SNAP}	01639	5000	10	20	9040	75	565	52	95 / 90	5
SP20-11-25D-950-03	01641	5000	25	40	2980	75	565	52	95 / 90	5
SP20-11-36D-950-03	01643	5000	36	60	1400	75	565	52	95 / 90	5
SP20-11-60D-950-03	01645	5000	60	90	620	75	565	52	95 / 90	5
SORAA BRILLIANT SERIES										
SP20-11-10D-827-03 ^{SNAP}	01607	2700	10	20	10240	90	640	59	80 / >0	3
SP20-11-25D-827-03	01609	2700	25	40	3380	90	640	59	80 / >0	3
SP20-11-36D-827-03	01611	2700	36	60	1600	90	640	59	80 / >0	3
SP20-11-60D-827-03	01613	2700	60	90	700	90	640	59	80 / >0	3
SP20-11-10D-830-03 ^{SNAP}	01623	3000	10	20	11040	90	690	64	80 / >0	3
SP20-11-25D-830-03	01625	3000	25	40	3640	90	690	64	80 / >0	3
SP20-11-36D-830-03	01627	3000	36	60	1720	90	690	64	80 / >0	3
SP20-11-60D-830-03	01629	3000	60	90	740	90	690	64	80 / >0	3

*Specifications are at stable warm operating conditions (25°C ambient) **Energy Star Minimum ^{SNAP}SORAA SNAP System Compatible
 CCT = Correlated Color Temperature CRI = Color Rendering Index (Ra-8) White Point = White Point Accuracy in McA step

SAFETY NOTE ON HEAT

Although Soraa's lamps operate at cooler temperatures than halogen lamps, it is recommended that gloves be worn when handling bare lamps that have been energized.