

SORAA LED PAR 38 18.5W



OUTPUT RANGE: VIVID SERIES	930-1050 lumen; CRI-95, R9>90
OUTPUT RANGE: BRILLIANT SERIES	1190-1280 lumen; CRI-80
BEAM ANGLE RANGE	9°, 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 9° 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 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

Width: 122mm (4.80")

Height: 125mm (4.92")

Weight: 305g

Operating Temperature

Minimum: -40°C (ambient)

Typical: 70°C - 80°C (base)

Maximum: 90°C (base)

Electrical

Wattage: 18.5W

Power factor: 0.95

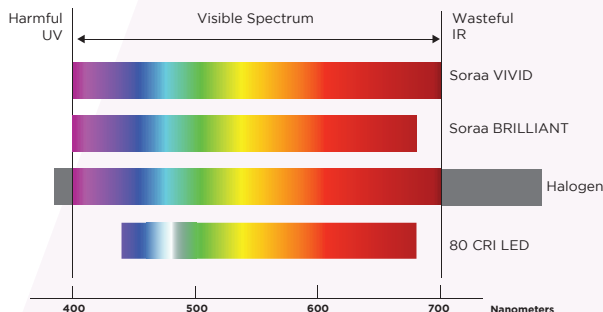
Voltage: 120V +/- 12V

Dimmable to <10%

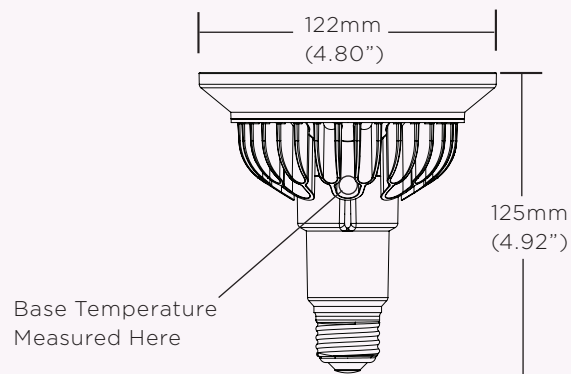
Flicker Index < 0.1

Percent Flicker: 31%

COLOR RENDERING



DIMENSIONS



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BEAM DIAGRAM

Narrow Spot 9°			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	0.8	8.6%	1.3	2.2	8.6%	3	1.9	3.5	8.6%	3.5	6.0	8.6%
0.9	1.7	2.5%	2.7	4.4	2.5%	6	3.9	6.9	2.5%	6.9	12.0	2.5%
1.4	2.5	1.2%	4.0	6.6	1.2%	9	5.8	10.4	1.2%	10.4	18.0	1.2%
1.9	3.4	0.7%	5.3	8.7	0.7%	12	7.8	13.9	0.7%	13.9	24.0	0.7%
2.4	4.2	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										
SP38-18-09D-927-03 ^{SNAP}	00977	2700	9	16	17200	100	930	50	95 / 95	3
SP38-18-25D-927-03	00979	2700	25	40	5020	100	930	50	95 / 95	3
SP38-18-36D-927-03	00981	2700	36	60	2320	100	930	50	95 / 95	3
SP38-18-60D-927-03	00983	2700	60	90	1020	100	930	50	95 / 95	3
SP38-18-09D-930-03 ^{SNAP}	00993	3000	9	16	18500	100	1000	54	95 / 95	3
SP38-18-25D-930-03	00995	3000	25	40	5400	100	1000	54	95 / 95	3
SP38-18-36D-930-03	00997	3000	36	60	2500	100	1000	54	95 / 95	3
SP38-18-60D-930-03	00999	3000	60	90	1100	100	1000	54	95 / 95	3
SP38-18-09D-940-03 ^{SNAP}	01009	4000	9	16	19240	100	1040	56	95 / 95	4
SP38-18-25D-940-03	01011	4000	25	40	5600	100	1040	56	95 / 95	4
SP38-18-36D-940-03	01013	4000	36	60	2600	100	1040	56	95 / 95	4
SP38-18-60D-940-03	01015	4000	60	90	1140	100	1040	56	95 / 95	4
SP38-18-09D-950-03 ^{SNAP}	01017	5000	9	16	19420	100	1050	57	95 / 90	5
SP38-18-25D-950-03	01019	5000	25	40	5660	100	1050	57	95 / 90	5
SP38-18-36D-950-03	01021	5000	36	60	2620	100	1050	57	95 / 90	5
SP38-18-60D-950-03	01023	5000	60	90	1140	100	1050	57	95 / 90	5
SORAA BRILLIANT SERIES										
SP38-18-09D-827-03 ^{SNAP}	00985	2700	9	16	22000	120	1190	64	80 / >0	3
SP38-18-25D-827-03	00987	2700	25	40	6420	120	1190	64	80 / >0	3
SP38-18-36D-827-03	00989	2700	36	60	2960	120	1190	64	80 / >0	3
SP38-18-60D-827-03	00991	2700	60	90	1300	120	1190	64	80 / >0	3
SP38-18-09D-830-03 ^{SNAP}	01001	3000	9	16	23680	120	1280	69	80 / >0	3
SP38-18-25D-830-03	01003	3000	25	40	6900	120	1280	69	80 / >0	3
SP38-18-36D-830-03	01005	3000	36	60	3200	120	1280	69	80 / >0	3
SP38-18-60D-830-03	01007	3000	60	90	1400	120	1280	69	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.

Information and specifications subject to change. SP38 18W Rev 1 5.01.15

Soraa Inc. 6500 Kaiser Drive, Suite 110, Fremont, CA 94555
 855 GO-SORAA / 855 467-6722 www.soraa.com