



SORAA VIVID™

Soraa VIVID lamps offer beautiful and accurate color and white rendering across the entire visible spectrum, mimicking the natural range of sunlight to deliver unmatched quality of light for color critical applications.

POINT SOURCE OPTICS™

Point Source Optics deliver exceptional beam quality with crisp shadows, perfect uniformity and precisely controlled beam distributions from 9° to 36°.

SORAA VIVID COLOR™

Soraa VIVID lamps utilize full spectrum light to provide industry-leading color rendition of CRI/95, R9/95, Rf/90, Rg/100 for precise color reproduction.

SORAA NATURAL WHITE™

Soraa VIVID lamps are engineered to deliver outstanding whiteness rendering for true-to-life whites, which matches or exceeds incandescent sources at 2700K and 3000K.

ACCESSORIES

Narrow spot compatible with the Soraa SNAP SYSTEM

GENERAL SPECIFICATIONS

Form Factor

Width: 111mm (4.37")

Height: 57mm (2.24")

Weight: 250g

Operating Temperature

Minimum: -40°C (ambient)

Typical: 70°C - 80°C (base)

Maximum: 90°C (base)

Electrical

Wattage: 18.5W

Power factor: 0.92

Voltage: 12V +/- 1.2V

Frequency: 50/60Hz

Dimming

Please reference our compatibility chart for dimmer and transformer information.

| | |
|-------------------|--------------------------------------------------------------------------------------|
| Output | 930 - 1000 lumen |
| Beam Angle | 9°, 25°, 36° |
| Color Temperature | 2700K, 3000K |
| Color Metrics | CIE Metrics: CRI 95, R9 95 TM30 Metrics: Rf 90, Rg 100 Whiteness Index: Rw 100 |
| Applications | Hotels & Hospitality Galleries & Museums High-End Retail |



ENERGY EFFICIENCY

85% more energy efficient than standard halogen lamps, with typical payback of one year or less.

THERMAL COMPATIBILITY

Suitable for use in fully enclosed fixtures, included glass-fronted fixtures, subject to the maximum heatsink temperature limits stated in this data sheet. Designed to safely turn down in high temperature environments to protect LED and components.

ELECTRICAL COMPATIBILITY

Works with trailing edge and leading edge phase cut dimmers, 12V AC magnetic and electronic transformers and 12V DC transformers. Check individual lamp website pages for compatibility data. For more information visit: www.soraa.com.

INTENDED USE & LOCATION RATING

Intended for use in AR111 compatible recessed downlights, track lighting and other indoor and outdoor applications. Suitable for damp locations, not rated for use in wet locations.

LIFETIME & WARRANTY

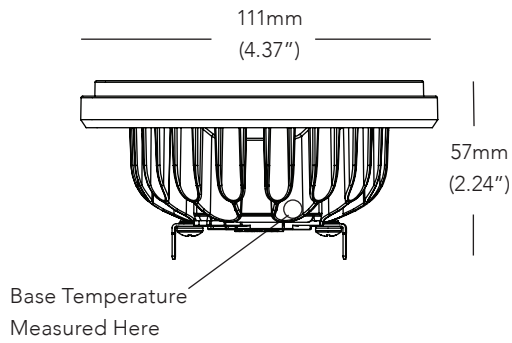
Rated lifetime to L70: 35,000hrs

Warranty: 3yrs or 25,000hrs whichever comes first

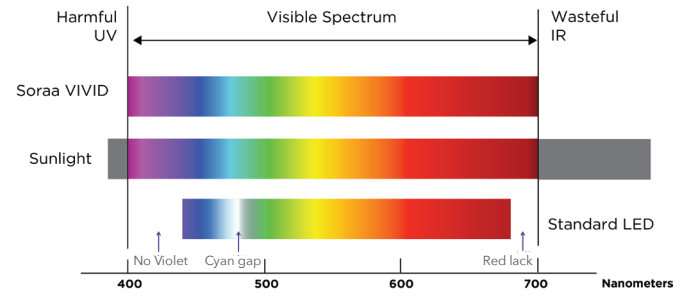
For warranty information visit: www.soraa.com/resources/legal



DIMENSIONS

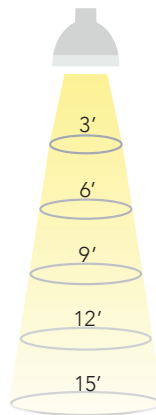


COLOR RENDERING



9 DEGREE BEAM

| Beam Dia at 50% CBCP (ft) | Field Dia at 10% CBCP (ft) | Foot-candles (% of CBCP) |
|---------------------------|----------------------------|--------------------------|
| 0.5 | 0.8 | 8.6% |
| 0.9 | 1.7 | 2.5% |
| 1.4 | 2.5 | 1.2% |
| 1.9 | 3.4 | 0.7% |
| 2.4 | 4.2 | 0.4% |

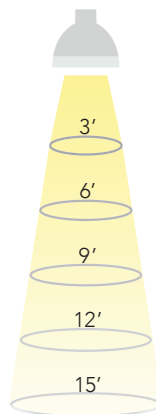


25 DEGREE BEAM

| Beam Dia at 50% CBCP (ft) | Field Dia at 10% CBCP (ft) | Foot-candles (% of CBCP) |
|---------------------------|----------------------------|--------------------------|
| 1.3 | 2.2 | 8.6% |
| 2.7 | 4.4 | 2.5% |
| 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 | 8.6% |
| 3.9 | 6.9 | 2.5% |
| 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 AR111 18.5W 12V

| Model # | Product Code | CCT (K) | Beam Angle | Field Angle | CBCP (Cd) | Total Flux (Lm) | Efficacy (Lm/W) | McA | SNAP |
|---------------------|--------------|---------|------------|-------------|-----------|-----------------|-----------------|-----|------|
| VIVID SERIES | | | | | | | | | |
| SR111-18-09D-927-03 | 00869 | 2700 | 9 | 16 | 22400 | 930 | 50 | 3 | YES |
| SR111-18-25D-927-03 | 00871 | 2700 | 25 | 40 | 5020 | 930 | 50 | 3 | - |
| SR111-18-36D-927-03 | 00873 | 2700 | 36 | 60 | 2320 | 930 | 50 | 3 | - |
| SR111-18-09D-930-03 | 00885 | 3000 | 9 | 16 | 24100 | 1000 | 54 | 3 | YES |
| SR111-18-25D-930-03 | 00887 | 3000 | 25 | 40 | 5400 | 1000 | 54 | 3 | - |
| SR111-18-36D-930-03 | 00889 | 3000 | 36 | 60 | 2500 | 1000 | 54 | 3 | - |

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

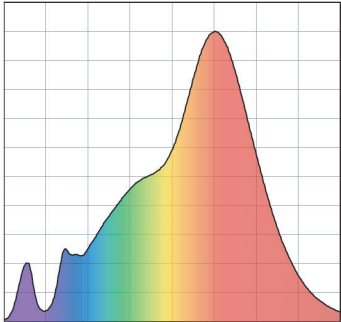
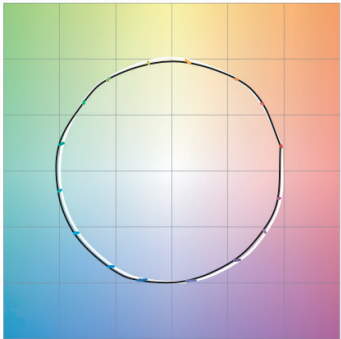
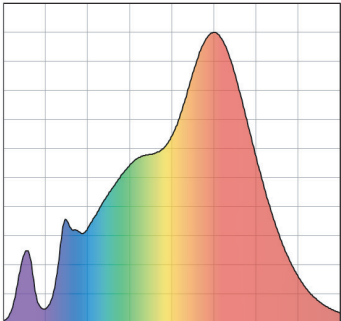
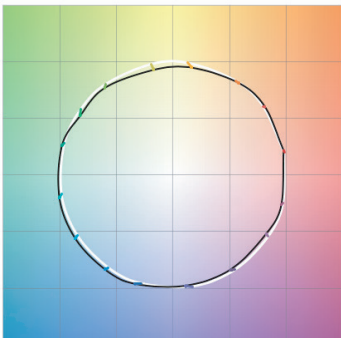
*Specifications are at stable warm operating conditions (25°C ambient)

CCT

SPECTRAL POWER DISTRIBUTION

COLOR QUALITY METRICS

COLOR ACCURACY

| | | | |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <p>VIVID 2700K</p> |  <p>CRI: 95, R9: 95</p> | <p>CRI 95</p> <p>R9 95</p> <p>Rf 95</p> <p>Rg 100</p> <p>Rf-h1 95</p> <p>Rw 90</p> |  |
| <p>VIVID 3000K</p> |  <p>CRI: 95, R9: 95</p> | <p>CRI 95</p> <p>R9 95</p> <p>Rf 95</p> <p>Rg 100</p> <p>Rf-h1 95</p> <p>Rw 90</p> |  |