

MR16-GU10 9W



OUTPUT RANGE: VIVID SERIES 465 - 490 lumen

OUTPUT RANGE: BRILLIANT SERIES 560 - 590 lumen

BEAM ANGLE RANGE 25°, 36°, 60°

COLOR TEMPERATURE RANGE 2700K, 3000K

APPLICATION Not suitable for enclosed, lensed, baffled, or deeply recessed fixtures. Halogen replacement for indoor applications.



120V



GU10



DIM



POINT SOURCE OPTICS

Exceptional beam control with 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 to L70: 35,000hrs

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

Detailed warranty information available at soraa.com/resources/legal

CERTIFICATIONS

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



RoHS

HIGHLY COMPATIBLE

Geometrically compatible with standard fixtures and suitable for damp locations

Not suitable for enclosed, lensed, baffled, or deeply recessed fixtures

Suitable for damp locations

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

INTENDED USE AND APPLICATIONS

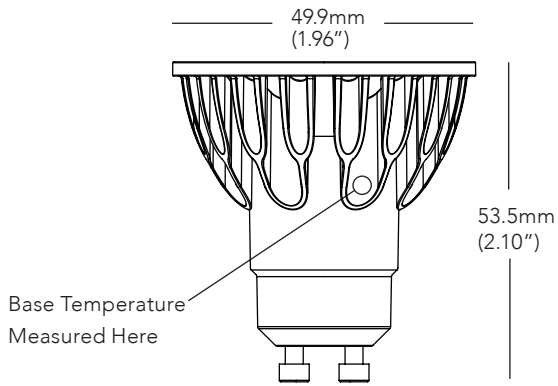
Intended for use in GU10 compatible recessed downlights, track lighting and other indoor applications

Soraa lamps are designed to safely turn down in high temperature environments to protect LED and components. This lamp should not be used in fully enclosed or lensed fixtures

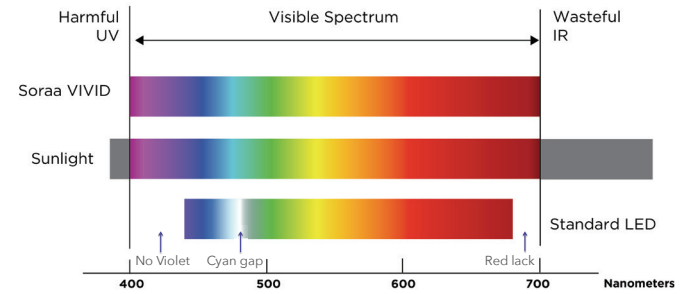
GENERAL SPECIFICATIONS

| Form Factor | Operating Temperature | Electrical | Dimming and Flicker |
|------------------------|-----------------------------|-----------------------|----------------------|
| Width: 49.9mm (1.96") | Minimum: -40°C (ambient) | Wattage: 9W | Dimmable to <20% |
| Height: 53.5mm (2.10") | Typical: 90°C - 95°C (base) | Power factor: 0.93 | Flicker Index: <0.12 |
| Weight: 61g | Maximum: 100°C (base) | Voltage: 120V +/- 12V | Percent Flicker: 40% |
| | | Frequency: 50/60Hz | |

DIMENSIONS

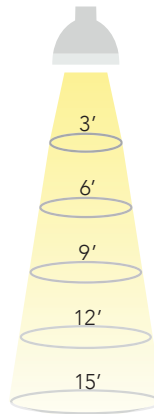


COLOR RENDERING



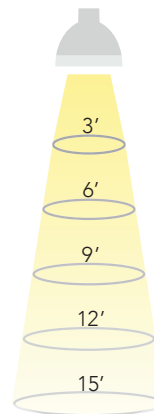
25 DEGREE BEAM

| Beam Dia at 50% CBCP (ft) | Field Dia at 10% CBCP (ft) | Foot-candles (% of CBCP) |
|---------------------------|----------------------------|--------------------------|
| 1.3 | 2.1 | 11.1% |
| 2.7 | 4.1 | 2.8% |
| 4.0 | 6.2 | 1.2% |
| 5.3 | 8.3 | 0.7% |
| 6.7 | 10.3 | 0.4% |



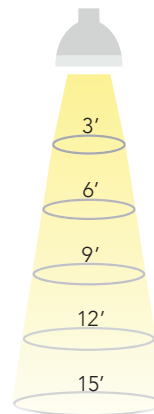
36 DEGREE BEAM

| Beam Dia at 50% CBCP (ft) | Field Dia at 10% CBCP (ft) | Foot-candles (% of CBCP) |
|---------------------------|----------------------------|--------------------------|
| 1.9 | 3.1 | 11.1% |
| 3.9 | 6.1 | 2.8% |
| 5.8 | 9.2 | 1.2% |
| 7.8 | 12.2 | 0.7% |
| 9.7 | 15.3 | 0.4% |



60 DEGREE BEAM

| Beam Dia at 50% CBCP (ft) | Field Dia at 10% CBCP (ft) | Foot-candles (% of CBCP) |
|---------------------------|----------------------------|--------------------------|
| 3.5 | 5.4 | 11.1% |
| 6.9 | 10.8 | 2.8% |
| 10.4 | 16.2 | 1.2% |
| 13.9 | 21.6 | 0.7% |
| 17.3 | 27.0 | 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 MR16-GU10 9W

| Model # | Product Code | CCT (K) | Beam Angle | Field Angle | CBCP (Cd) | Halogen Equivalent | Total Flux (Lm) | Efficacy (Lm/W) | McA | SNAP |
|-------------------------|--------------|---------|------------|-------------|-----------|--------------------|-----------------|-----------------|-----|------|
| VIVID SERIES | | | | | | | | | | |
| SM16GA-09-25D-927-03 | 02489 | 2700 | 25 | 38 | 2570 | 65 | 465 | 52 | 3 | - |
| SM16GA-09-36D-927-03 | 02497 | 2700 | 36 | 54 | 1210 | 65 | 465 | 52 | 3 | - |
| SM16GA-09-60D-927-03 | 02505 | 2700 | 60 | 84 | 470 | 65 | 465 | 52 | 3 | - |
| SM16GA-09-25D-930-03 | 02493 | 3000 | 25 | 38 | 2700 | 65 | 490 | 54 | 3 | - |
| SM16GA-09-36D-930-03 | 02501 | 3000 | 36 | 54 | 1280 | 65 | 490 | 54 | 3 | - |
| SM16GA-09-60D-930-03 | 02509 | 3000 | 60 | 84 | 500 | 65 | 490 | 54 | 3 | - |
| BRILLIANT SERIES | | | | | | | | | | |
| SM16GA-09-25D-827-03 | 02487 | 2700 | 25 | 38 | 3090 | 75 | 560 | 62 | 3 | - |
| SM16GA-09-36D-827-03 | 02495 | 2700 | 36 | 54 | 1460 | 75 | 560 | 62 | 3 | - |
| SM16GA-09-60D-827-03 | 02503 | 2700 | 60 | 84 | 570 | 75 | 560 | 62 | 3 | - |
| SM16GA-09-25D-830-03 | 02491 | 3000 | 25 | 38 | 3260 | 75 | 590 | 66 | 3 | - |
| SM16GA-09-36D-830-03 | 02499 | 3000 | 36 | 54 | 1540 | 75 | 590 | 66 | 3 | - |
| SM16GA-09-60D-830-03 | 02507 | 3000 | 60 | 84 | 600 | 75 | 590 | 66 | 3 | - |

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

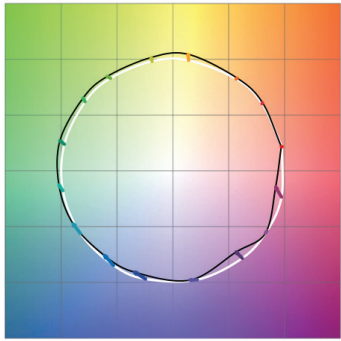
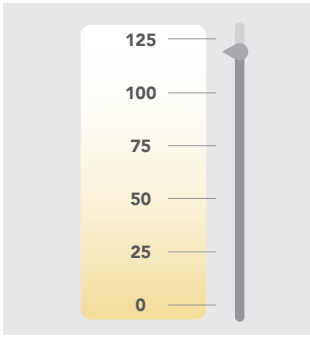
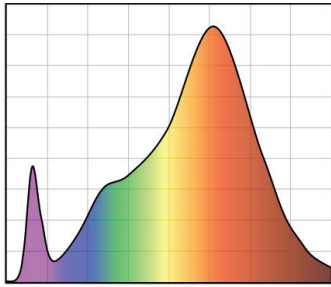
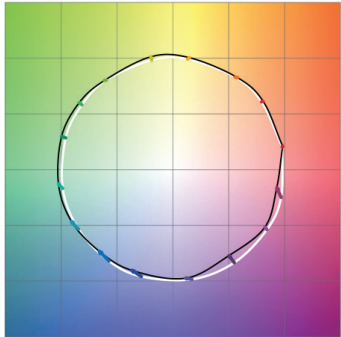
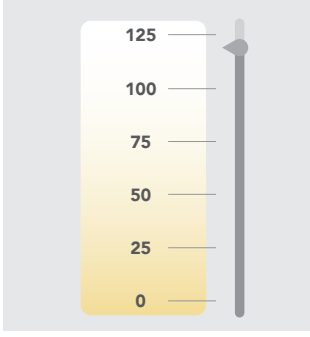
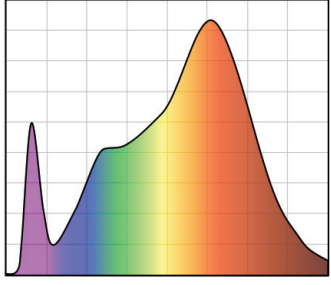
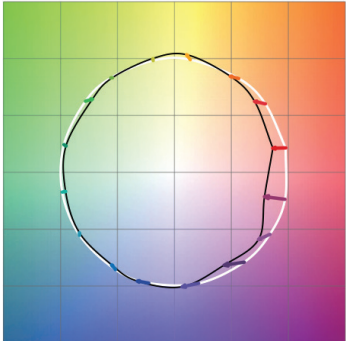
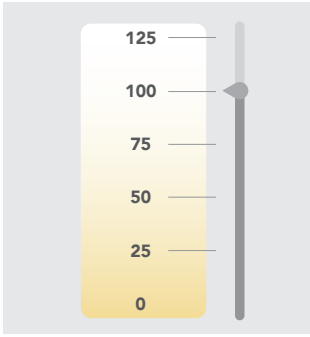
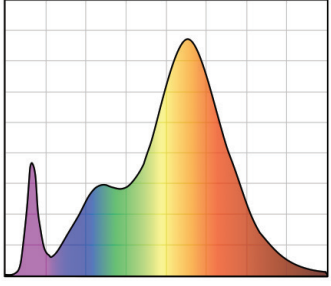
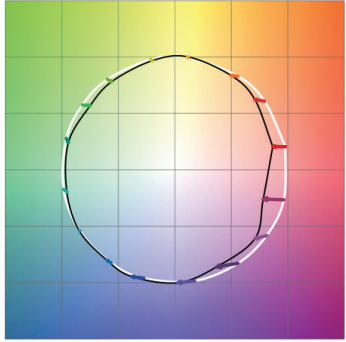
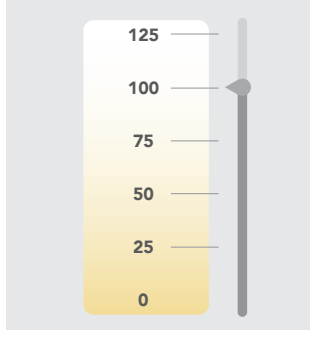
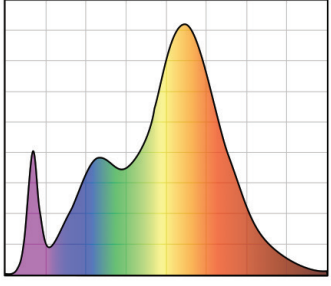
*Specifications are at stable warm operating conditions (25°C ambient)

SERIES/CCT

COLOR ACCURACY

WHITENESS INDEX

SPECTRAL POWER DISTRIBUTION

| | | | |
|-----------------------------------|--|--|--|
| <p>VIVID 2700K</p> |  <p>Rf: 90, Rg: 100, Rfh1: 95</p> |  <p>Rw: 120</p> |  <p>Wavelength (nm) 380 780</p> <p>CRI: 95, R9: 95</p> |
| <p>VIVID 3000K</p> |  <p>Rf: 90, Rg: 100, Rfh1: 95</p> |  <p>Rw: 120</p> |  <p>Wavelength (nm) 380 780</p> <p>CRI: 95, R9: 95</p> |
| <p>BRILLIANT 2700K</p> |  <p>Rf: 85, Rg: 92, Rfh1: 77</p> |  <p>Rw: 100</p> |  <p>Wavelength (nm) 380 780</p> <p>CRI: 85, R9: >0</p> |
| <p>BRILLIANT 3000K</p> |  <p>Rf: 85, Rg: 92, Rfh1: 77</p> |  <p>Rw: 100</p> |  <p>Wavelength (nm) 380 780</p> <p>CRI: 85, R9: >0</p> |

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.