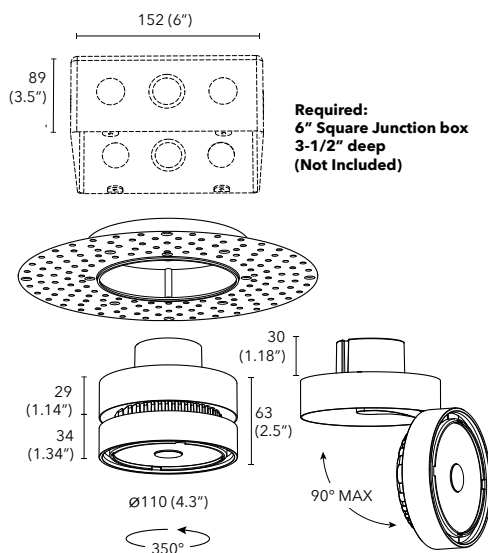


# 100mm (4") LED Adjustable, Recessed Mount - 120VAC

**SORAA** arc™

The Soraa Arc™ Adjustable luminaire combines elegant design with Soraa's unique quality of light to create a dynamic and versatile solution for retail, hospitality, and residential applications. The Soraa Arc gets its name from the form of its unique die-cast curved heat sink, which is carefully engineered for optimal thermal performance. Soraa Arc is compatible with the Soraa SNAP System™, which allows you to shape beams, shift color, and more – in a snap.



## Soraa VIVID™ LED

Soraa Full Spectrum integral LED Light Engine available in 2700K, 3000K, and 4000K with 95 CRI and 95 R9. IR and UV free.

## Soraa Optics

Soraa optic technology with exceptional beam control and smooth uniform light distribution. The 9° beam version is compatible with Soraa SNAP accessories.

## Construction and Finish

Light engine is made of die cast aluminium, transformer case from extruded aluminum. Durable satin finish. Custom colors available. Tilt: 0-90°, rotation: 350°.

## Applications

Suitable for damp or dry locations. For interior use only.

## Installation

**Requires 6" Square junction Box 3-1/2" deep. (Not included).** Recessed mounting. 5.25" (133mm) ceiling opening recommended. Junction box mounts to mud ring (included).

## Electrical

120VAC integrated electronic constant current LED driver (included).  
Frequency: 50/60Hz  
Power Factor: 0.93  
Wattage: 20W

## Dimming and Flicker

Dimmable to <1%  
Percent Flicker: < 30%  
Triac and ELV dimming standard  
Visit [www.soraa.com](http://www.soraa.com) for details

## Operating Temperature

Minimum -40°C, 25°C typical.

## Accessories

Luminaire accommodates both Arc accessories and the Soraa SNAP System simultaneously.

## Compliance

cULus Listed. Damp location rated. FCC CFR Title 47 Part 15 Class B compliant. NOM compliant.

## Warranty

Five year warranty. See [www.soraa.com](http://www.soraa.com).



**W**  
White



**B**  
Black



**S**  
Silver



Full Spectrum



Natural White



No IR



No UV



Dimmable



CRI 95



R9 95



Soraa SNAP Compatible



IP 20

## Build Your Luminaire

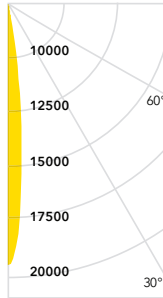
Sample Number: ARA100-25D-927-U-R-W

| Series                                    | Beam & Wattage             | CCT              | Driver                      | Mounting          | Finish          |
|-------------------------------------------|----------------------------|------------------|-----------------------------|-------------------|-----------------|
| <b>ARA100</b> Soraa Arc Adjustable, 100mm | <b>09D</b> 9° Narrow Spot  | <b>927</b> 2700K | <b>U</b> 120VAC Triac & ELV | <b>R</b> Recessed | <b>B</b> Black  |
|                                           | <b>25D</b> 25° Narrow Spot | <b>930</b> 3000K |                             |                   | <b>W</b> White  |
|                                           | <b>36D</b> 36° Flood       | <b>940</b> 4000K |                             |                   | <b>S</b> Silver |
|                                           | <b>60D</b> 60° Wide Flood  |                  |                             |                   | <b>C</b> Custom |

# Photometrics - Soraa Arc™ 100mm (4") - NA

Data is shown for 3000K, for 2700K multiply FC by 0.95, for 4000K by 1.04.

**Narrow Spot 9°**

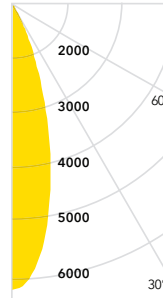


| W  | CCT  | Lm   | CBCP     |
|----|------|------|----------|
| 20 | 2700 | 950  | 17500 cd |
| 20 | 3000 | 1000 | 18500 cd |
| 20 | 4000 | 1040 | 19240 cd |

**Candelas at Nadir**

|     |       |
|-----|-------|
| 0°  | 20732 |
| 5°  | 9736  |
| 15° | 437   |
| 25° | 171   |
| 35° | 106   |
| 45° | 48    |

**Narrow Flood 25°**

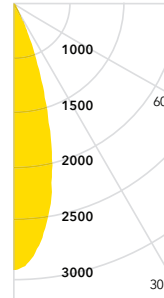


| W  | CCT  | Lm   | CBCP    |
|----|------|------|---------|
| 20 | 2700 | 995  | 5770 cd |
| 20 | 3000 | 1050 | 6090 cd |
| 20 | 4000 | 1090 | 6320 cd |

**Candelas at Nadir**

|     |      |
|-----|------|
| 0°  | 5689 |
| 5°  | 4891 |
| 15° | 1558 |
| 25° | 165  |
| 35° | 52   |
| 45° | 36   |

**Flood 36°**

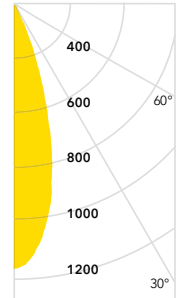


| W  | CCT  | Lm   | CBCP    |
|----|------|------|---------|
| 20 | 2700 | 995  | 2680 cd |
| 20 | 3000 | 1050 | 2830 cd |
| 20 | 4000 | 1090 | 2940 cd |

**Candelas at Nadir**

|     |      |
|-----|------|
| 0°  | 2939 |
| 5°  | 2759 |
| 15° | 1608 |
| 25° | 427  |
| 35° | 93   |
| 45° | 46   |

**Wide Flood 60°**



| W  | CCT  | Lm   | CBCP    |
|----|------|------|---------|
| 20 | 2700 | 995  | 1090 cd |
| 20 | 3000 | 1050 | 1150 cd |
| 20 | 4000 | 1090 | 1190 cd |

**Candelas at Nadir**

|     |     |
|-----|-----|
| 0°  | 958 |
| 5°  | 953 |
| 15° | 905 |
| 25° | 701 |
| 35° | 342 |
| 45° | 108 |



Soraa SNAP  
Compatible

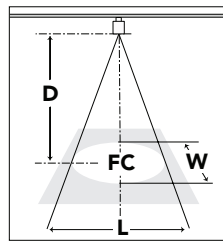
## Aiming Angles

L and W refer to outer points where footcandles drop to 50% of maximum. FC refers to initial footcandles at the center of the beam.

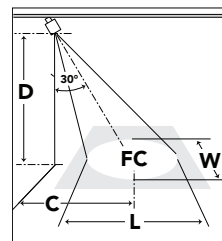
Key (Distances in feet)

**L** Beam Distance    **FC** Footcandles  
**D** Distance        **C** Distance to Center Beam  
**W** Beam Width

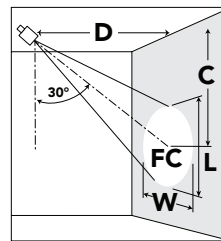
**0° Horizontal**



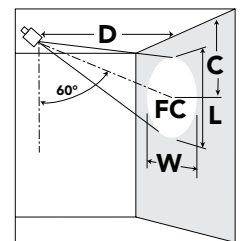
**30° Horizontal**



**30° Vertical**



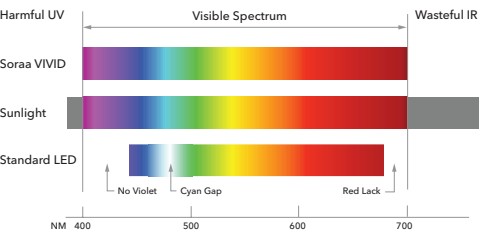
**60° Vertical**



|                         | D  | FC  | L    | W    | D  | C   | FC  | L   | W    | D | C   | FC  | L   | W   | D | C   | FC   | L   | W   |
|-------------------------|----|-----|------|------|----|-----|-----|-----|------|---|-----|-----|-----|-----|---|-----|------|-----|-----|
| <b>Narrow Spot 9°</b>   | 6  | 556 | 1.0  | 1.0  | 6  | 3.7 | 380 | 1.3 | 1.1  | 2 | 3.7 | 650 | 1.2 | 0.7 | 2 | 1.4 | 2766 | 0.5 | 0.4 |
|                         | 8  | 322 | 1.3  | 1.3  | 8  | 4.8 | 213 | 1.7 | 1.5  | 3 | 5.4 | 297 | 1.8 | 1.0 | 3 | 2.0 | 1379 | 0.7 | 0.6 |
|                         | 10 | 207 | 1.6  | 1.6  | 10 | 5.9 | 136 | 2.2 | 1.9  | 4 | 7.0 | 171 | 2.4 | 1.3 | 4 | 2.7 | 807  | 0.9 | 0.8 |
|                         | 12 | 145 | 2.0  | 2.0  | 12 | 6.9 | 97  | 2.5 | 2.2  | 5 | 8.6 | 111 | 3.0 | 1.6 | 5 | 3.3 | 530  | 1.1 | 1.0 |
| <b>Narrow Flood 25°</b> | 6  | 157 | 2.2  | 2.2  | 6  | 3.7 | 105 | 2.9 | 2.5  | 2 | 3.9 | 229 | 2.1 | 1.3 | 2 | 1.3 | 915  | 1.0 | 0.9 |
|                         | 8  | 88  | 3.0  | 3.0  | 8  | 4.8 | 60  | 3.8 | 3.4  | 3 | 5.7 | 103 | 3.2 | 1.9 | 3 | 2.0 | 416  | 1.4 | 1.3 |
|                         | 10 | 57  | 3.7  | 3.7  | 10 | 6.0 | 39  | 4.6 | 4.2  | 4 | 7.5 | 58  | 4.3 | 2.5 | 4 | 2.6 | 236  | 1.9 | 1.7 |
|                         | 12 | 40  | 4.4  | 4.4  | 12 | 7.1 | 27  | 5.6 | 4.9  | 5 | 9.2 | 39  | 5.2 | 3.1 | 5 | 3.2 | 152  | 2.4 | 2.1 |
| <b>Flood 36°</b>        | 6  | 82  | 3.2  | 3.2  | 6  | 3.8 | 57  | 3.8 | 3.5  | 2 | 4.2 | 151 | 2.2 | 1.6 | 2 | 1.4 | 503  | 1.3 | 1.2 |
|                         | 8  | 46  | 4.2  | 4.2  | 8  | 5.0 | 32  | 5.0 | 4.6  | 3 | 5.9 | 68  | 3.3 | 2.3 | 3 | 2.1 | 226  | 1.9 | 1.8 |
|                         | 10 | 30  | 5.3  | 5.3  | 10 | 6.1 | 21  | 6.3 | 5.8  | 4 | 7.6 | 38  | 4.4 | 3.1 | 4 | 2.7 | 128  | 2.6 | 2.3 |
|                         | 12 | 21  | 6.3  | 6.3  | 12 | 7.1 | 15  | 7.5 | 6.9  | 5 | 9.1 | 25  | 5.5 | 3.8 | 5 | 3.3 | 83   | 3.2 | 2.9 |
| <b>Wide Flood 60°</b>   | 6  | 27  | 5.8  | 5.8  | 6  | 4.3 | 23  | 5.0 | 5.3  | 2 | 4.4 | 96  | 2.0 | 1.9 | 2 | 1.7 | 200  | 1.7 | 1.9 |
|                         | 8  | 16  | 7.5  | 7.5  | 8  | 5.3 | 13  | 6.3 | 7.1  | 3 | 5.9 | 44  | 2.9 | 2.9 | 3 | 2.4 | 90   | 2.5 | 2.7 |
|                         | 10 | 10  | 9.5  | 9.5  | 10 | 6.1 | 9   | 7.8 | 8.8  | 4 | 7.2 | 24  | 3.9 | 3.7 | 4 | 3.2 | 51   | 3.4 | 3.7 |
|                         | 12 | 7   | 10.5 | 10.5 | 12 | 6.7 | 6   | 9.6 | 10.1 | 5 | 8.3 | 16  | 5.5 | 3.8 | 5 | 3.9 | 33   | 4.1 | 4.5 |

# Soraa Arc™ Color and Whiteness Rendering

| CCT  | CRI | R9 | Rf | Rg  | Rfh1 | Rw  | McA |
|------|-----|----|----|-----|------|-----|-----|
| 2700 | 95  | 95 | 90 | 100 | 95   | 120 | 3   |
| 3000 | 95  | 95 | 90 | 100 | 95   | 120 | 3   |
| 4000 | 95  | 95 | 90 | 100 | 95   | 70  | 4   |



Soraa has engineered the perfect balance between color rendering and white rendering. Soraa's core technology uses a violet LED emitter as the basis for full spectrum light. This allows both Vivid™ color rendering and Natural White™ white rendering, which creates whiteness by exciting fluorescing agents with violet radiation, without the harmful effect of UV.

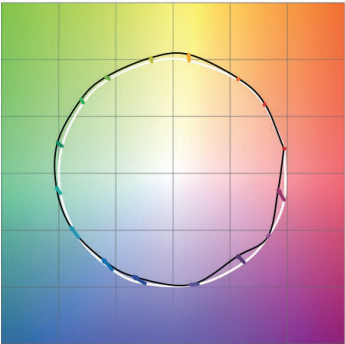
**Rf:** The TM-30 metric for color fidelity (similarity to colors under natural light), a more accurate version of the CRI Ra. Rf is 100 for natural light.

**Rg:** The TM-30 metric for color gamut (whether colors are more saturated than under natural light). Rg is 100 for natural light.

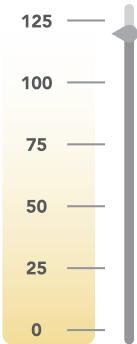
**Rfh1:** The TM-30 metric for color fidelity for red tones. Rfh1 is a more accurate version of the CRI R9. Rfh1 is 100 for natural light.

**Rw:** The Soraa-developed metric for white fidelity. Rw measures the magnitude of excitation of whitening agents within white materials. Rw is 100 for natural light.

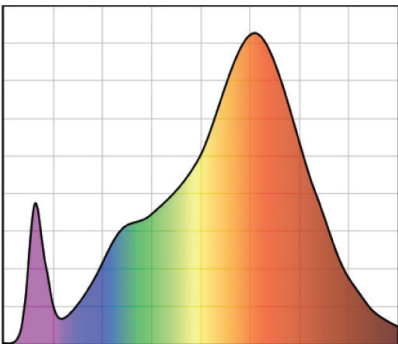
## 2700K



Rf: 90, Rg: 100, Rfh1: 95

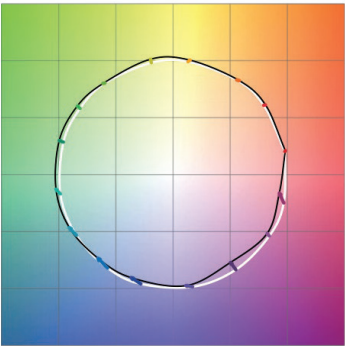


Rw: 120

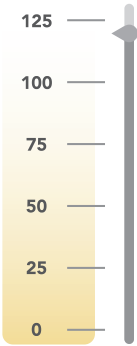


CRI: 95, R9: 95

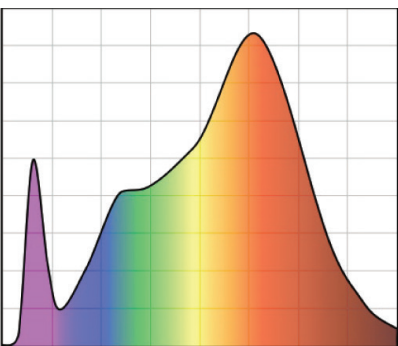
## 3000K



Rf: 90, Rg: 100, Rfh1: 95

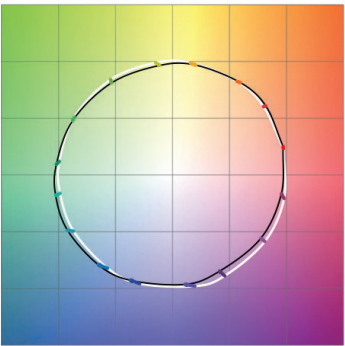


Rw: 120

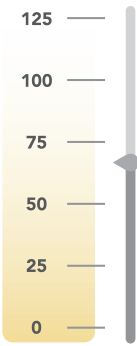


CRI: 95, R9: 95

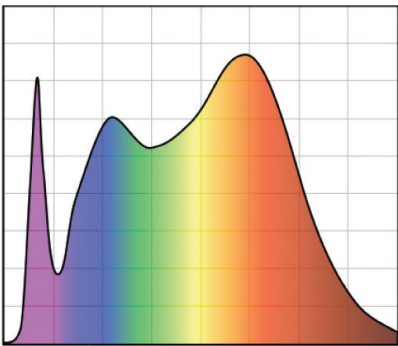
## 4000K



Rf: 90, Rg: 100, Rfh1: 95



Rw: 70



CRI: 95, R9: 95