



- Category:** The new AR-111 lamp feature GaN on GaN™ LED technology with outstanding center beam candlepower in 12.5W and 18.5W. Available in 50W-100W (95CRI) halogen equivalent light output. Beam patterns in 8, 9, 25 and 36 Degree with 2700K and 3000K options as well as warm dim with a range of 1800K to 2700K. The 8 and 9 degree lamps work with its magnetic accessory Snap On Media System. With a simple magnetic accessory attachment, beam shapes can be altered and color temperature can be modified, allowing endless design and display possibilities.
Dimmable to 20%.
Weight: 250g
- Material:** Proprietary fanless aluminum design provides superior thermal dissipation.
Width: 111mm (4.37") x Height: 57mm (2.24").
- Finish:** Aluminum
- Source:** LED. Life of 35,000 hours. G53 base. Vivid Series CCT: 2700K or 3000K; CRI 95. Warm Dim Series CCT Range: 1800K to 2700K; CRI 95. White point accuracy within 3 SDCM. Conventional LEDs use a blue emitter pumping two phosphors to make white light. The resulting spectrum does not exactly match the black body curve for visible light – it has a high blue spike and is missing important parts of the spectrum in violet and cyan. These LEDs can also have values either above or below the black body curve, making their light greener or pinker. GaN on GaN enables LEDs to use a violet LED emitter pumping three phosphors, thus achieving a closer match to the black body curve, and delivering a perfectly balanced full-visible-spectrum light closest to daylight - in fact even better, as it has no ultraviolet or infrared emission. Excellent color stability.
- Optics:** 8, 9, 25 and 36 Degree.
GaN on GaN LED technology allows the lamps to operate effectively and efficiently at higher temperatures than other LED lamps, resulting in more light output per diode. Contact factory for photometric charts, lumens and CBCP.
- Electrical:** Dimmable to 20% (Special operating conditions apply - contact factory).
Power factor: 0.92.
Flicker Index < 0.1. Percent Flicker: 28%. Minimum: -40°C (ambient). Voltage: 12V +/- 1.2V. Lamps are designed to safely turn down in any thermal environment not conducive to minimum airflow or proper ventilation. Although LED AR-111 lamps operate at cooler temperatures than halogen lamps, it is recommended that gloves be worn when handling bare lamps. Note that the lamp has higher in-rush current than its rated wattage and has to be taken into consideration when specifying the system and power supply. Dimming and non-dimming; all power supplies. Refer to page 5 for information on in-rush current.. Contact factory for additional information.
- Accessories:** Snap-On Media System (8°, 9° lamps only): Beam Spreader 17° (AC-E-GC-1717-00), Beam Spreader 25° (AC-E-GC-2525-00), Beam Spreader 36° (AC-E-GC-3636-00), Beam Spreader 60° (AC-E-GC-6060-00), Linear Spread Lens 10°x36° (AC-E-GE-1036-00), Linear Spread Lens 10°x60° (AC-E-GE-1060-00), Cutoff Louver 40° (AC-E-LU-4040-00), Color Correction Lens 1/4 (AC-E-CC-0001-00), Color Correction Lens 1/2 (AC-E-CC-0002-00), Color Correction Lens 3/4 (AC-E-CC-0003-00).
- Spotlights:** [Arte-AR-111](#)
- Labels:** Suitable for fully enclosed fixtures per UL 1993. Can be used with front glass cover suitable for damp locations per UL. . Three year warranty. UL, CUL for 12VAC NEC Class 1 and Class 2 systems, FCC 47 CFR Part 15 and Part 18 (EMI), RoHS, CE, C-tick.



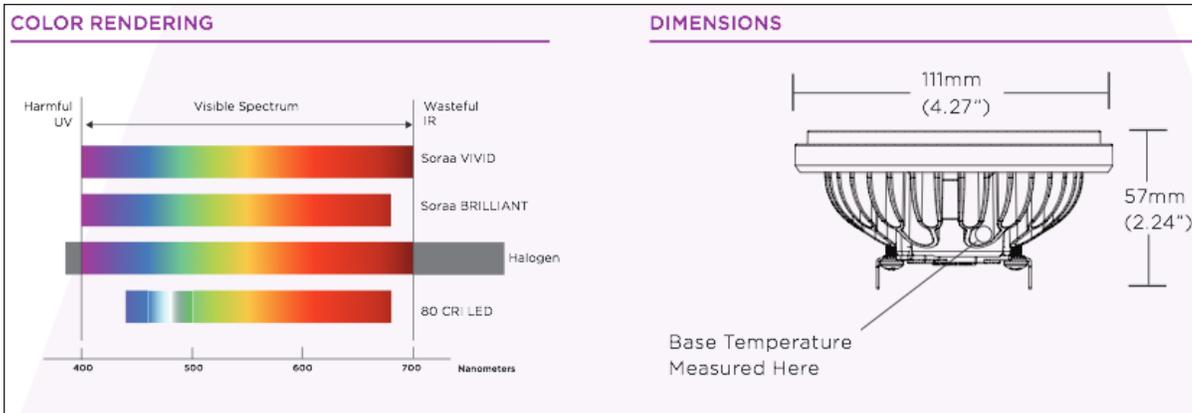
Example: SR111 - 12 - 9D - 927 - 03 - AC-E-GC-6060-00

AR111 Lamp ^{1,2,3}	Wattage ^{1,3}	Beam ¹	CRI, Kelvin Temp, Series ¹	Accessories ^{4,5}
SR111	12 18 19 (WARM-DIM ONLY)	8D (12W only) 9D (18W only) 25D 36D 25DM (WARM-DIM ONLY) 36DM	927-03 930-03 927/918-01 (WARM-DIM ONLY)	17° Beam Spreader (AC-E-GC-1717-00) 25° Beam Spreader (AC-E-GC-2525-00) 36° Beam Spreader (AC-E-GC-3636-00) 60° Beam Spreader (AC-E-GC-6060-00) 10°x36° Linear Spread Lens (AC-E-GE-1036-00) 10°x60° Linear Spread Lens (AC-E-GE-1060-00) 36°x36° Flat Top (AC-E-FR-3636-00) 40° Cutoff Louver (AC-E-LU-4040-00) 1/4 CTO CCT Shifter (AC-E-CC-0001-00) 1/2 CTO CCT Shifter (AC-E-CC-0002-00) 3/4 CTO CCT Shifter (AC-E-CC-0003-00) Clear Snap (AC-E-CL-0000-00)

Notes:

- ¹ Choose one.
- ² AR-111 LED lamps are 12VAC and must be used with a 12VAC magnetic or electronic Power Supply from Tegan Lighting. Refer to [12VAC Electronic Transformer Specs](#) or [12VAC Magnetic Transformer Specs](#) for details.
- ³ See page 5 for in-rush current data. Wattages & performances subject to change with new lamp updates from lamp manufacturer.
- ⁴ Soraa Snap-on Accessory can ONLY be used with 8°, 9° lamps.
- ⁵ Snap-on Accessories can be stacked in combination.

Note that the lamp has higher in-rush current than its rated wattage and has to be taken into consideration when specifying the system and power supply. Dimming and non-dimming; all power supplies. Refer to page 5 for chart of in-rush current. Contact factory for additional information.

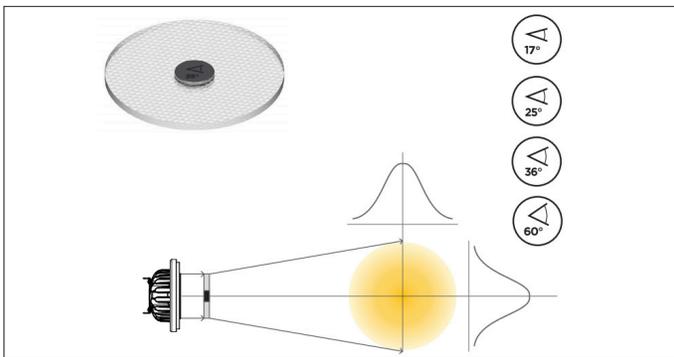


AR-111 LED Accessories



The AR-111 LED Snap System is the first LED lamp/accessory solution that is optimized to work as an integrated system. Based on high brightness single source GaN on GaN™ LED technology, it completely redefines accessory application. The effects that can be achieved are similar to what can be done with halogen sources, but are enabled by a relatively low operating temperature and groundbreaking optical design, materials, and methods of attachment.

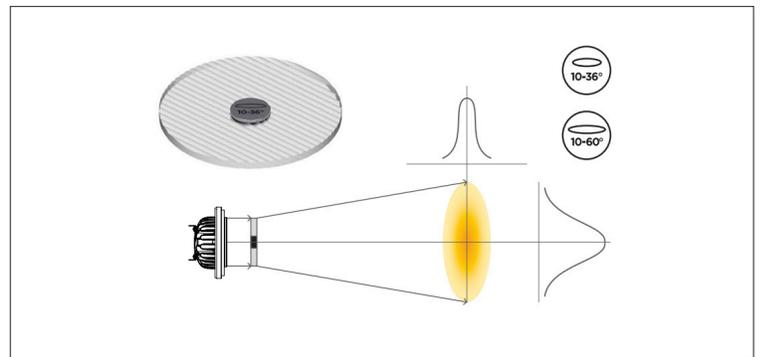
The system's self-centering magnetic interconnect system makes using accessories completely user friendly, and opens up possibilities for accessories to a much wider range of fixtures than ever before. Also, the relatively low temperature of the AR-111 LED Snap System lamps mean that new accessory materials, such as advanced polymer films, can be used for beam and color controls never before possible.



Beam Spreader

Use in any combination where reducing the number of beam angle SKUs is required. Reduces inventory costs. Shortens specification, design, sales cycles. Provides maximum flexibility up to the time of installation.

Beam	Part Number	CBCP of 9° Lamp	Field Angle
17°	AC-E-GC-1717-00	53%	33
25°	AC-E-GC-2525-00	18%	40°
36°	AC-E-GC-3636-00	8%	55°
60°	AC-E-GC-6060-00	3%	90°



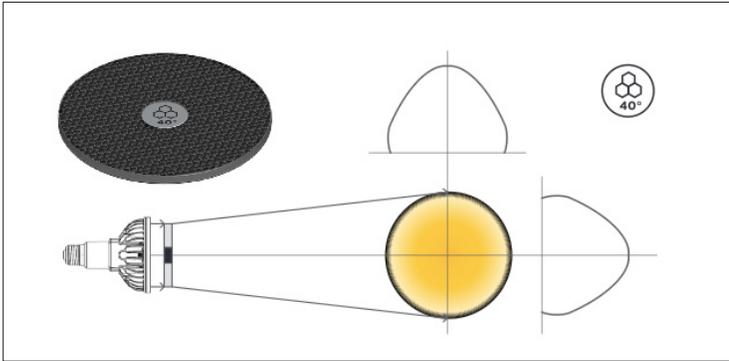
Linear Spread Lens

Use in wall washes and illuminating asymmetric objects. Reduces required number of light fixtures and spill illumination of target objects.

Beam	Part Number	CBCP of 9° Lamp	Field Angle Horiz.	Field Angle Vert.
10° - 36°	AC-E-GE-1036-00	30%	27°	43°
10° - 60°	AC-E-GE-1060-00	20%	20°	70°

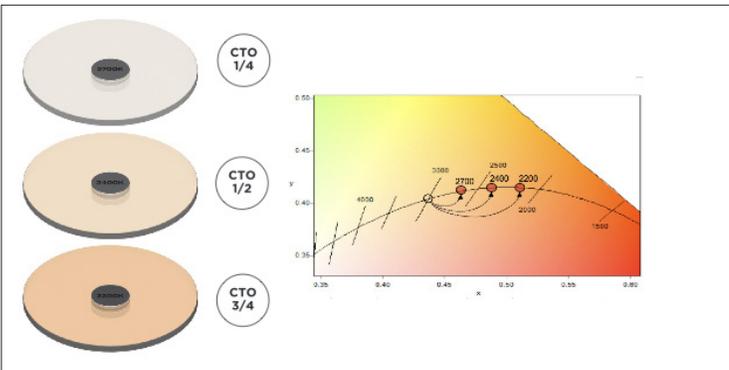


AR-111 LED Accessories



Louver
Eliminates high angle glare, making light beams disappear in downlight applications.

Cutoff Angle	Part Number	CBCP of 10° Lamp
40°	AC-E-LU-4040-00	63%



CCT Shifter
Use in hospitality and restaurant applications to simulate warm dimming. Create custom colors for festive occasions or brand identity. Single Lamp SKU can be used for multiple color temperatures.

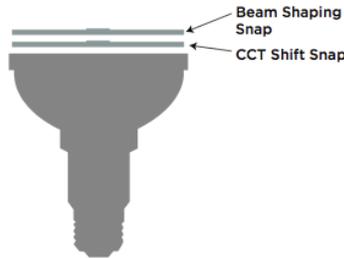
CCT SHIFT EFFECT

CTO*	Part Number	Lumen Transmissivity	Mired Shift	Starting Lamp CCT	1/4 CTO	1/2 CTO	3/4 CTO
1/4	AC-E-CC-0001-00	90%	37	2700K	2450K	2200K	2000K
1/2	AC-E-CC-0002-00	75%	83	3000K	2700K	2400K	2200K
3/4	AC-E-CC-0003-00	60%	120				

* Color Temperature Orange
Diameter: 50.0 mm Thickness: 2 mm
Magnetic Attach Force: 0.45 lb-F

Stacking of Accessories

Snap accessories can be stacked in combination. For example, a beam spreader can be used in combination with a CCT Shifter. When combining beam shaping Snap accessories with CCT Shifting Snap accessories, for best results always place CCT Shifting Snap on lamp first, below beam shapers as shown in diagram at right.



AR-111 LED In-Rush Current

“In-rush current” is a very brief current spike the LED lamp will see twice per cycle. This spike in current has to be provided by the transformer or dimmer feeding power to the lamps, and will affect the recommended lamp load on each transformer or dimmer. This link will display a “Tools” page that includes a calculator as a guideline for system sizing: [In Rush Current Calculator](#).*

* In-Rush Current data provided by lamp manufacturer, not Tegan Lighting. Contact factory for more details and/or updates.

