GREENSTAR
A TOSHIBA Group Company

AV Series of DOT & Area LED Luminaires

Applications:

The AV LED Luminaire is Greenstar's second generation utility grade Luminaire. Designed to perform in both demanding Roadway and Area Lighting projects. It is ideal for both retrofit and new construction and has a sleek, modern, architecturally pleasing design. An area arm is available for parking lots, auto dealerships, and other area lighting designs where aesthetics are important. This innovative design produces light output equivalent to a 250W—400W HID systems and provides energy savings of 65% or greater.

Features:

Construction—The AV series is designed with rugged, corrosion-resistant, die cast aluminum housing with stainless steel hardware for durability and strength. An epoxy powder-coated finish provides excellent resistance to outdoor conditions.

LED's—The AV incorporates advanced high-efficiency Philips Lumiled Luxeon M 4100K (70CRI) or 5700K (75CRI) components providing optimized combinations of light delivery to uniformly illuminate target areas.

Electrical—The Luminaire is available in 120-277V or 347-480V at 50/60Hz. Power Factor of >90%. Total Harmonic Distortion (THD) is <10%. Exceeding Energy Star requirements, the AV conforms to industry, DOT, and government performance mandates and standards. Efficacy of 90+ lumens per watt enables the AV to properly manage heat dissipation while enhancing performance and longevity.

Optics—Precision-molded, optical grade lenses available in Type II, III, IV, and V distribution patterns. Cutting edge photometric design achieves full cutoff with zero light above the horizontal plane/axis.

LED Rated Life (L75) - These high quality LED's are rated for approx. 100,000 hours @ 25°C (77°F) ambient environment per LM-80, TM21.

Protection/Ingress—LED and driver compartments are IP66 rated. Surge compartment is IP54 rated.

Photocontrol Options—3 pin NEMA receptacle is standard and replaceable. NEMA receptacles also available in 5 and 7 pin configurations.

Surge Protection—10kV/10kA (ANSI/IEEE C64.41.2) is standard and replaceable.

Listings—ETL, UL, CSA, LM79, LM80, NEMA, IESNA, ASTM B117, Dark Sky compliant, ARRA and NAFTA compliant. DLC and NOM design conformance.

Designed to Meet TX DOT and Most All Other DOT Specifications!

Ordering Table:

Example: AAV8421SNXX

Model	LED Quantity	CCT	Distribution	Voltage	Color	Photocell	Dimming	Option 1
AV = Roadway Arm 277V	8	4 = 4100K	2 = Type II	1 = multi volt	S = Silver	C = None/cap	X = None	X = None
AAV = Area Arm 277V	12	6 = 6000K	3 = Type III	90-285 VAC	R = Bronze	N = NEMA Receptacle	D = Dimming	H = House
AVH = Roadway Arm 480V			4 = Type IV	50-60 Hz		R = NEMA Photocell	(0-10vdc)	Side Shield
AAVH = Area Arm 480V			5 = Type V	4 = 347V-480V 50-60Hz				

Accessories:

- NEMA 5 pin and 7 pin receptacles.
- Knuckle Mount, can be used to achieve a higher angle.
- Area Arm Mount fits a 4" square or round pole seamlessly.

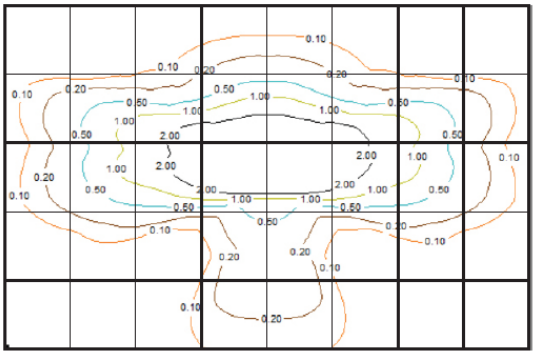
*AV Area Arm Mount

(Silver color shown)

* Silver is standard for Roadway configuration; Dark Bronze is standard for Area configuration.

Photometrics:

AV12, 5700K, Distribution Type II

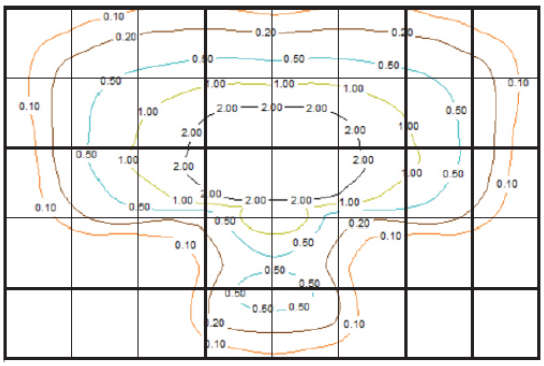


Sample area of 200 by 125 ft at 25 ft height.

	LCS Zone	Lumens	%of Luminaire
Forward Low (FL)	0-30°	2,503.3	16.7%
Forward Medium (FM)	30-60°	6,146	41.0%
Forward High (FH)	60-80°	2,698.2	18.0%
Forward Very High (FVH)	80-90°	60	0.4%
Back Low (BL)	0-30°	750	5.0%
Back Medium (BM)	30-60°	1,304.1	8.7%
Back High (BH)	60-80°	1,424.1	9.5%
Back Very High (BVH)	80-90°	105	0.7%
Uplight Low (UL)	90-100°	0.0	0.0%
Uplight High (UH)	100-180°	0.0	0.0%
Total		14,990	100%

BUG Rating: B2-U0-G2

AV12, 5700K, Distribution Type III

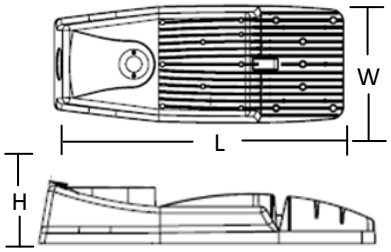


Sample area of 200 by 125 ft at 25 ft height.

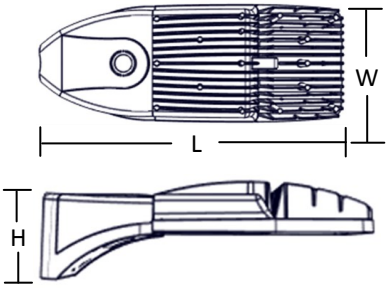
	LCS Zone	Lumens	%of Luminaire
Forward Low (FL)	0-30°	1,888.7	12.6%
Forward Medium (FM)	30-60°	6,026	40.2%
Forward High (FH)	60-80°	3,867.4	25.8%
Forward Very High (FVH)	80-90°	45	0.3%
Back Low (BL)	0-30°	734.5	4.9%
Back Medium (BM)	30-60°	1,409.1	9.4%
Back High (BH)	60-80°	944.4	6.3%
Back Very High (BVH)	80-90°	75	0.5%
Uplight Low (UL)	90-100°	0.0	0.0%
Uplight High (UH)	100-180°	0.0	0.0%
Total		14,990	100%

BUG Rating: B2-U0-G2

Weights/Dimensions:



AV Roadway
EPA: 1.1 sq. ft.
Length: 25 in. (63.5 cm)
Width: 10 in. (25.4 cm)
Height: 6.4 in. (16.25 cm)
Weight: 20 lbs.



AV Area
EPA:
Length: 21.2 in. (54 cm)
Width: 9.8 in. (25 cm)
Height: 7.9 in. (20 cm)
Weight: 22 lbs.

Performance Summary:

Model	Input Watts	Input Current (A)			Distribution Type	4000K and 5700K	
		120V	240V	277V		Lumens	Efficacy (LPW)
AV8	100	0.83	0.42	0.36	II	9,500	95
					III		
					IV		
					V		
AV12	155	1.29	0.65	0.56	II	14,415	93
					III		
					IV		
					V		

Mounting:

A slip fitter mount accepting horizontal arms up to 2.5" OD. Bubble level available inside mounting compartment for simple leveling at time of installation. Area mount easily fits a 4" square or round pole seamlessly with the universal adapter.

Dark Bronze color is shown

Warranty:

5 year limited warranty with a 10 year option when required.

****** All Specifications Are Subject To Change Without Notice ******