

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 250W HID 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—Available in 100-277V or 347-480V at 50/60Hz. Power Factor of >95%. 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, optics 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 with available 7 pin receptacle.

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.

Ordering Table:

Example: XAVX12431SNXXI

Model	LED Quantity	CCT	Distribution	Voltage	Color	Photocell	Dimming	Option 1	Option 2
XAVX = Roadway Arm 277V	8	4 = 4100K	2 = Type II	1 = multi volt	S = Silver	C = None/cap	X = None	X = None	X = None
XAVH = Roadway Arm 480V	12	6 = 5700K	3 = Type III	90-285 VAC	R = Bronze	N = NEMA Receptacle	D = Dimming	H = House	I = Inclinometer
AAVX = Area Arm 277V			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		7 = 7 pin NEMA Receptacle			

Accessories:

- 7 pin NEMA receptacle
- Highway Inclinometer
- Area Arm Mount fits a 4" square or round pole seamlessly.



*AV Area Arm Mount
(Silver color shown)

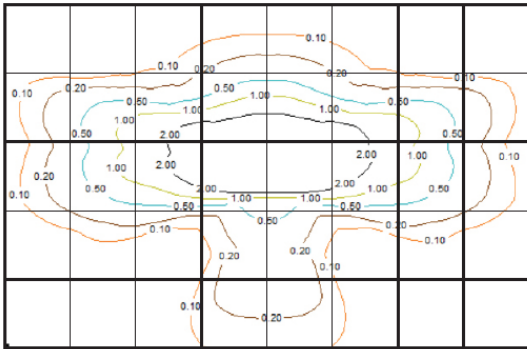
TXDOT Order Codes:

Yellow Highlighted - 277V Product
 XAVX12431SNXXI
 Orange Highlighted - 480V Product
 XAVH12434SNXXI
 Green Highlighted - Both Products

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

Photometrics:

AV12, 5700K, Distribution Type II

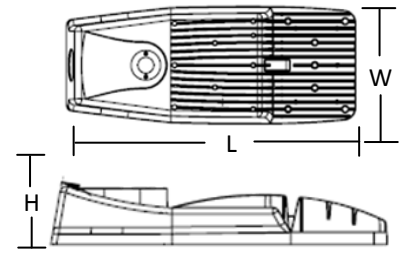


Sample area of 200 by 125 ft at 25 ft height.

	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%

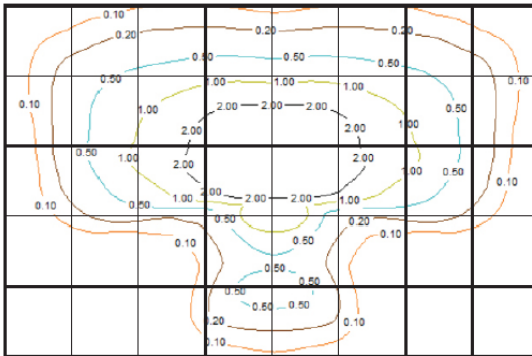
BUG Rating: B2-U0-G2

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.

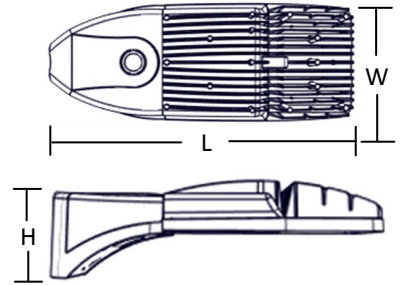
AV12, 5700K, Distribution Type III



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



AV Area
 EPA: 1.0 sq. ft.
 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	4100K		5700K	
		120V	240V	277V		Lumens	Efficacy (LPW)	Lumens	Efficacy (LPW)
AV8	104.7	0.88	0.44	0.38	II	9,828	94	10,287	98
					III				
					IV				
					V				
AV12	159.51	1.31	0.65	0.57	II	14,619	92	14,770	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.

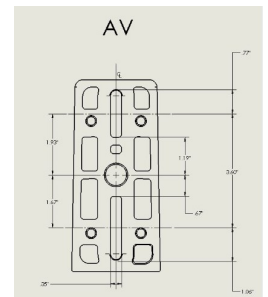
Warranty:

5 year limited warranty with a 10 year option available.

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



Dark Bronze color is shown



*See Bracket Measurement Sheet



ISO9001:2008