

AV Series of DOT & Area High Output 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. This innovative design produces light output equivalent to 400W—1000W HID and provides energy savings of 65% or greater.

Features:

Construction—The High Output 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 High Output 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

Model	LED Quantity	CCT	Distribution	Voltage	Color	Photocell	Dimming	Shield	Option 2
XAVX = Roadway Arm 277V	16	4 = 4100K	2 = Type II	1 = multi volt	S = Silver	C = None/cap	X = None	X = None	X = None
XAVH = Roadway Arm 480V	20	6 = 6000K	3 = Type III	90-285 VAC	R = Bronze	N = NEMA Receptacle	D = Dimming	H = House	B = Bubble Level
	24		4 = Type IV 5 = Type V	50-60 Hz 4 = 347V-480V 50-60Hz		R = NEMA Photocell 7 = 7 pin NEMA Receptacle	(0-10vdc)	Side Shield L R	I = Inclinometer

Accessories:

- NEMA 7 pin receptacles.
- Highway Inclinometer

TXDOT Order Codes:

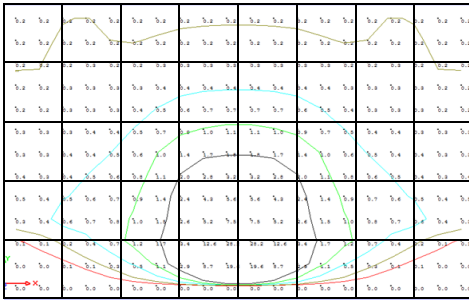
Yellow Highlighted - 277V Product - XAVX20431SNXXI

Orange Highlighted - 480V Product - XAVH20434SNXXI

Green Highlighted - Both Products

Photometrics:

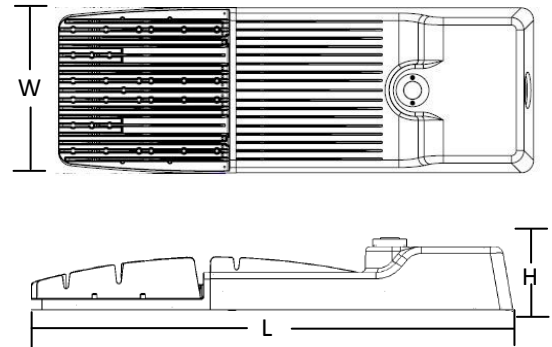
XAVX20, 4100K, Distribution Type III



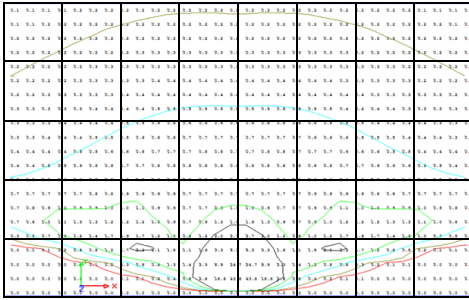
Sample area of 125 ft. by 200ft at 25ft height

Description	Classification	LCS	
LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	3356.5	N.A.	12.2
FM (30-60)	10872.3	N.A.	39.5
FH (60-80)	7403.2	N.A.	26.9
FVH (80-90)	191.0	N.A.	0.7
BL (0-30)	1170.0	N.A.	4.3
BM (30-60)	2565.9	N.A.	9.3
BH (60-80)	1767.3	N.A.	6.4
BVH (80-90)	177.5	N.A.	0.6
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	27503.7	N.A.	100.0
BUG Rating	B3-U0-G3		

Weights/Dimensions:



XAVX20, 4100K, Distribution Type II



Sample area of 200 ft. by 300 ft. at 25ft height

Description	Classification	LCS	
LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	4530.1	N.A.	16.3
FM (30-60)	10752.1	N.A.	38.6
FH (60-80)	4640.1	N.A.	16.7
FVH (80-90)	106.9	N.A.	0.4
BL (0-30)	1679.0	N.A.	6.0
BM (30-60)	2877.2	N.A.	10.3
BH (60-80)	3059.5	N.A.	11.0
BVH (80-90)	221.2	N.A.	0.8
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	27866.1	N.A.	100.0
BUG Rating	B4-U0-G4		

EPA: 1.3 sq. ft.

Length: 36.5 in. (92.71 cm)

Width: 13 in. (33.02 cm)

Height: 5.5 in. (13.97 cm)

Weight: 38.5 lbs.

Performance Summary:

Model	Input Watts	Input Current (A)			Distribution Type	4100K		5700K	
		120V	240V	277V		Lumens	Efficacy (LPW)	Lumens	Efficacy (LPW)
AV16	177	1.47	0.74	0.65	II	18,616	105	18,527	105
					III				
					IV				
					V				
AV20	223	1.87	1.02	0.83	II	22,703	102	22,987	103
					III				
					IV				
					V				
AV24	269	1.80	1.24	1.02	II	27,305	102	27,440	102
					III				
					IV				
					V				

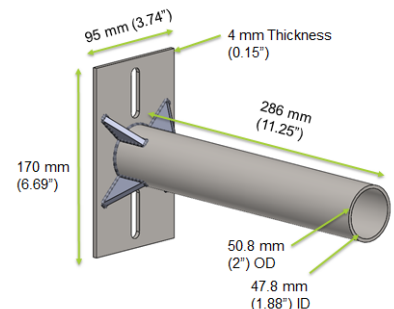
Mounting:

Four bolt/two bracket slip-fitter mounting with built-in tenon stop and step levels accepting horizontal arms up to 2.5" OD. Bubble level available for simple leveling at time of installation. Inclinator available for DOT applications. Side arm tenon included with AAVX and AAVH models.

Warranty:

5 year limited warranty with a 10 year option available.

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



ISO9001:2008