

AL-LED-X2-OSA-XXXPSHV-8CSB-NM

HIGH VOLTAGE LED AREA LIGHT



Selectable Wattage and CCT with Tool-free Lens Change,
277-480V Input, Bronze Housing,
Multiple Mounting, Optics, and Control Options

PRODUCT FEATURES

- Selectable wattage (see *Performance Specifications* for details)
- Selectable CCT (3000/4000/5000K)
- Quick, tool-free optics lens change
- Two lenses in the box: Type III installed, Type V included
- Type II and Type IV lenses sold separately. See below for details
- Heavy-duty, die-cast aluminum housing with ample heat sinking
- Low-profile design delivers high-performance illumination and improves application site aesthetics
- True U0 design that eliminates undesirable sky glow
- Integrated NEMA/ANSI C136.10 7-pin twist-lock receptacle with shorting cap. Compatible with KT-TLP-HV-3PN, 277-480V photocell (see *Accessories* for details)
- Five contractor-friendly mounting options available: universal slipfitter, trunnion, adjustable pole mount, fixed pole mount, and wall adaptor. Sold separately (see *Accessories* for details)
- 0-10V dimming driver with 6kV surge protection. Additional 10kV included
- Ambient operating temperature: -40°C/-40°F to 50°C/122°F
- UL Certified; IP65 rated
- Power factor: > 0.95
- THD: < 20%
- LED chip lifetime: L70 > 100,000 hrs @ 25°C/77°F ambient fixture temperature
- Meets FCC Part 15, Part B, Class A standards for conducted and radiated emissions



10 YEAR
LIMITED WARRANTY

PERFORMANCE SPECIFICATIONS

Catalog No.	Selectable Wattage	Selectable CCT	Lumens	Efficacy	Input Voltage	Dimming	CRI	Distribution Pattern*	Photocell Included	Housing Color**	Rated Life
AL-LED-M2-OSA-140PSHV-8CSB-NM	140W	3000K	19,000	136 lm/W	277-480V	0-10V	> 80	Type III Installed, Type V Included	No	Bronze	50,000 hrs
		4000K	19,910	142 lm/W							
		5000K	19,600	140 lm/W							
	100W	3000K	14,060	141 lm/W							
		4000K	15,170	152 lm/W							
		5000K	14,790	148 lm/W							
	70W	3000K	10,220	146 lm/W							
		4000K	10,880	155 lm/W							
		5000K	10,730	153 lm/W							
AL-LED-L2-OSA-290PSHV-8CSB-NM	290W	3000K	39,270	135 lm/W	277-480V	0-10V	> 80	Types II and IV Available, Sold Separately	No	Bronze	50,000 hrs
		4000K	40,650	140 lm/W							
		5000K	39,960	138 lm/W							
	210W	3000K	30,450	145 lm/W							
		4000K	31,050	148 lm/W							
		5000K	30,860	147 lm/W							
	185W	3000K	27,030	146 lm/W							
		4000K	27,620	149 lm/W							
		5000K	27,540	149 lm/W							

* For more information, see *Accessories* page below.

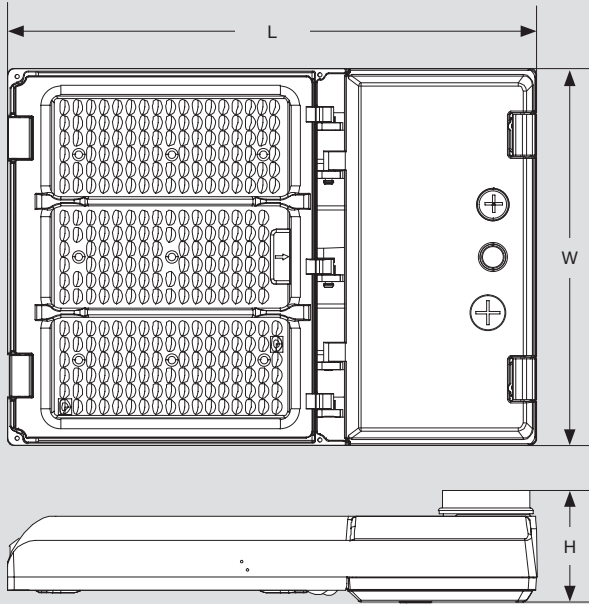
** Fixtures and mounts with alternate housing colors are available and made to order. Extended lead times apply. Please see catalog number breakdown for full ordering code details.

AL-LED-X2-OSA-XXXPSHV-8CSB-NM

HIGH VOLTAGE LED AREA LIGHT

PHYSICAL SPECIFICATIONS

LED AREA LIGHT FIXTURE



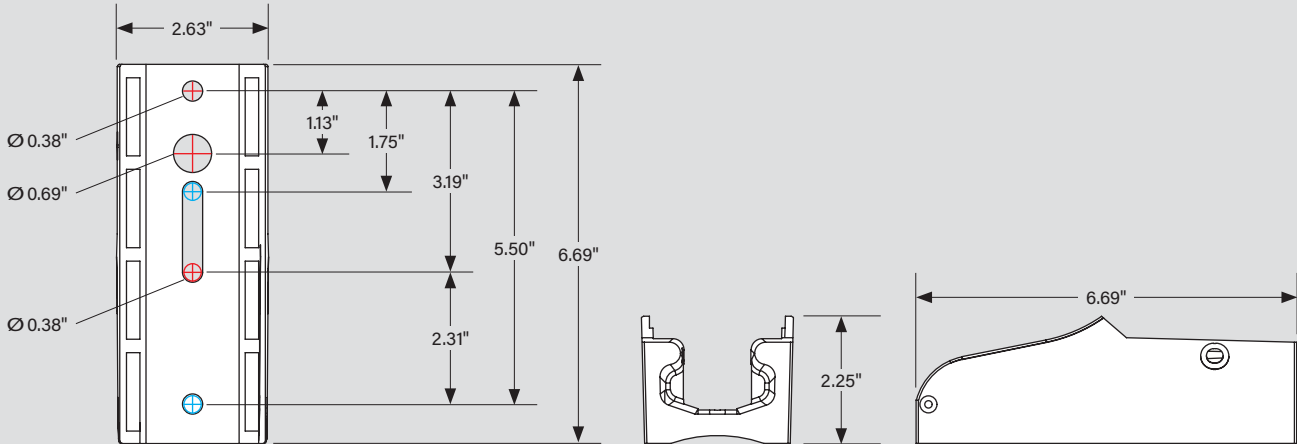
FIXTURE DIMENSIONS

Catalog Number	L (Length)	W (Width)	H (Height)
AL-LED-M2-OSA-140PSHV-8CSB-NM	15.90"	11.40"	3.50"
AL-LED-L2-OSA-290PSHV-8CSB-NM	19.90"	14.20"	3.40"

PACKAGING DIMENSIONS

Catalog Number	Carton Dimensions	Carton Weight
AL-LED-M2-OSA-140PSHV-8CSB-NM	5.63" x 13.15" x 21.65"	10.87 lbs
AL-LED-L2-OSA-290PSHV-8CSB-NM	5.63" x 15.95" x 26.18"	16.58 lbs

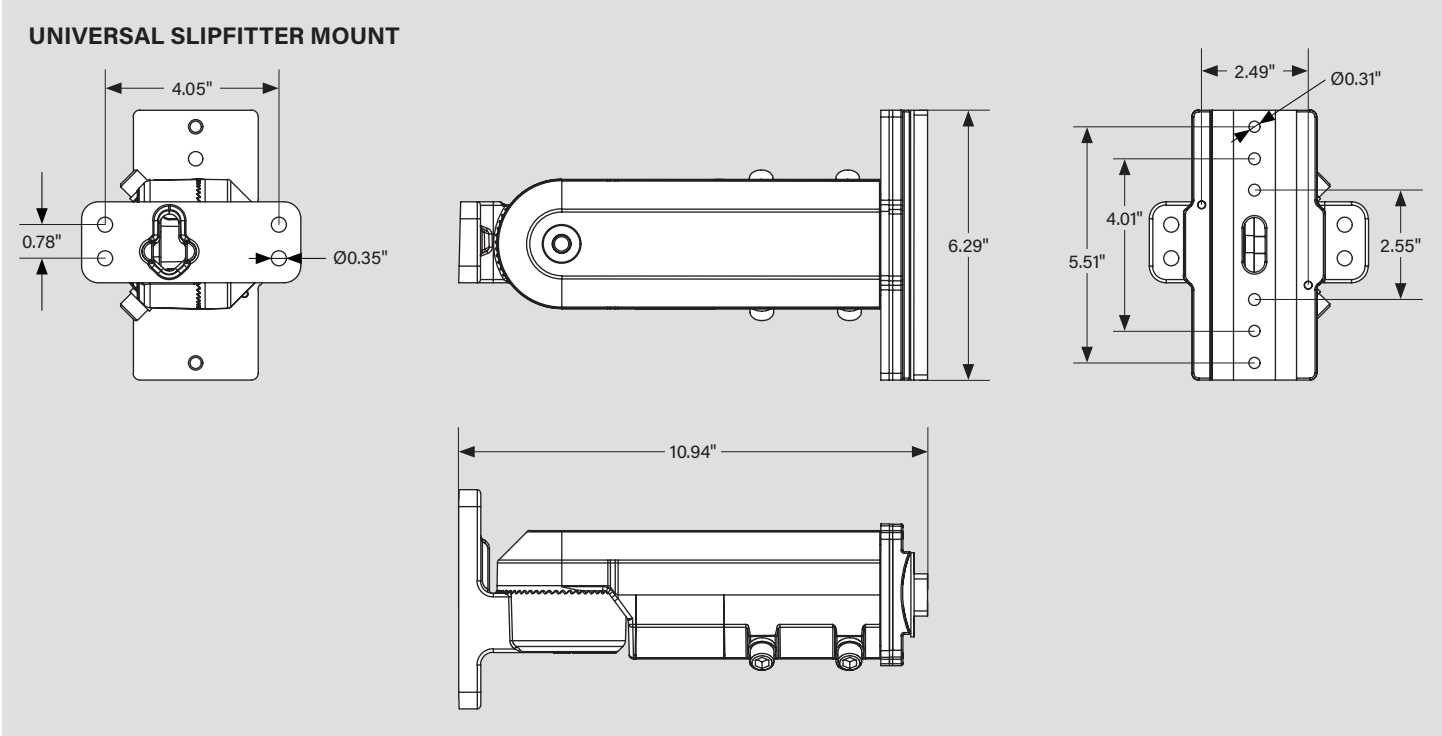
POLE MOUNT (ADJUSTABLE OR FIXED) DRILLING HOLES



AL-LED-X2-OSA-XXXPSHV-8CSB-NM

HIGH VOLTAGE LED AREA LIGHT

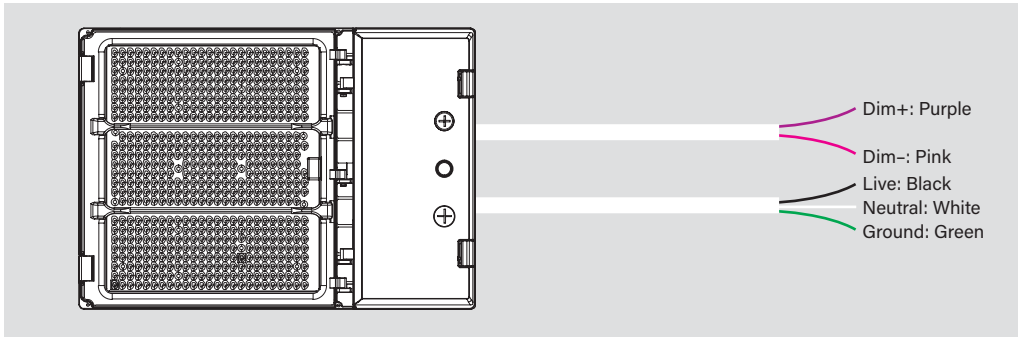
PHYSICAL SPECIFICATIONS (continued)



AL-LED-X2-OSA-XXXPSHV-8CSB-NM

HIGH VOLTAGE LED AREA LIGHT

WIRING DIAGRAM



- Make input connections as needed and ensure connections are protected from exposure to the elements.
- **Input voltage rating: 277-480V**
- Ensure that input voltage on site matches the fixture you intend to install.

KEY FEATURES

This fixture is wattage and CCT selectable.

1. Turn off power to the fixture.
2. Remove the knockout (KO) on the left side of the fixture.
3. Adjust the wattage and CCT dip switches to desired settings.
4. Add the KO back to the fixture, and restore power.

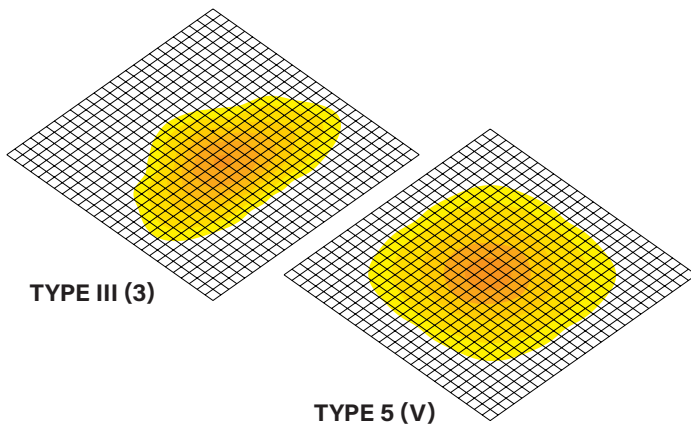


LIGHT DISTRIBUTION PATTERN

Pole mount view from above. Each square is 10 ft x 10 ft

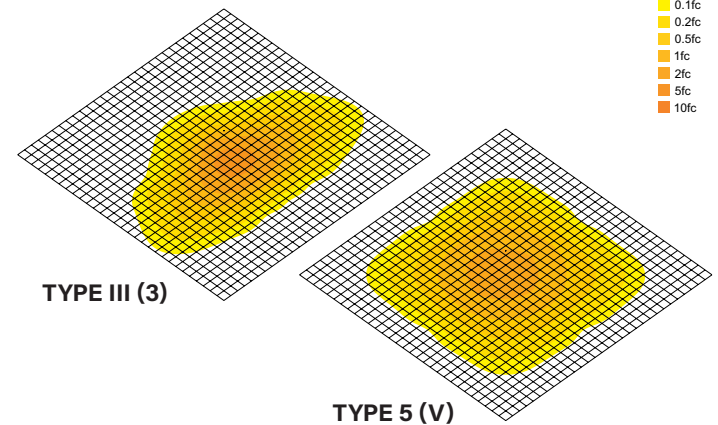
AL-LED-M2-OSA-140PSHV-8CSB-NM

Pole mounted at 30 ft



AL-LED-L2-OSA-290PSHV-8CSB-NM

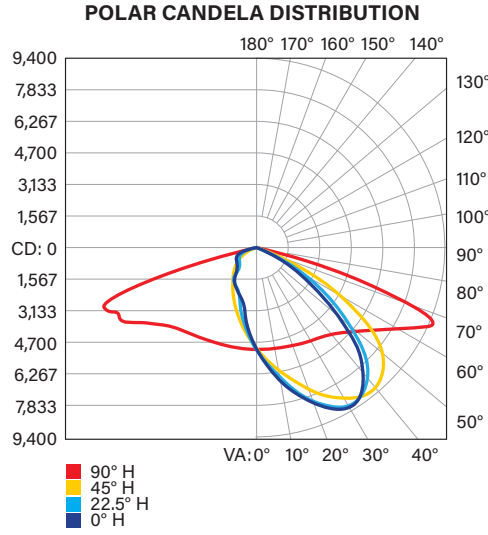
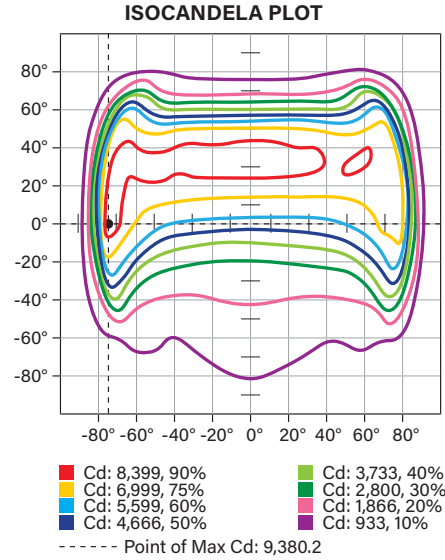
Pole mounted at 35 ft



AL-LED-X2-OSA-XXXPSHV-8CSB-NM

HIGH VOLTAGE LED AREA LIGHT

PHOTOMETRIC SPECIFICATIONS AL-LED-M2-OSA-140PSHV-8CSB-NM (TYPE II [2])

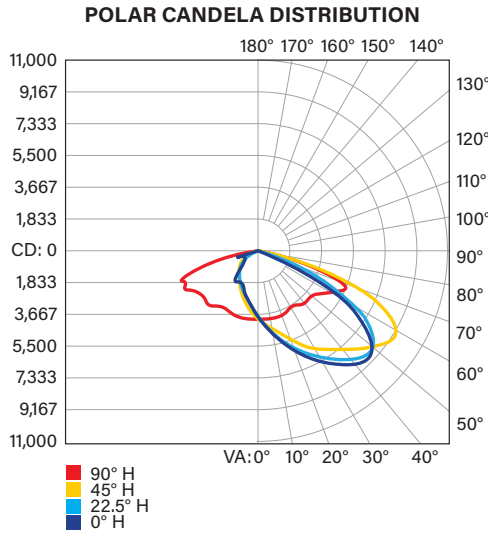
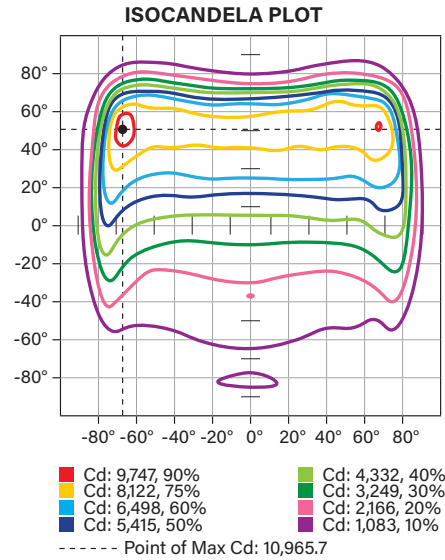


ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Forward Light	14,610.7 lm	71.3%
0°-30°	2,944.5 lm	14.4%
30°-60°	8,224.1 lm	40.1%
60°-80°	3,317.1 lm	16.2%
80°-90°	125.0 lm	0.6%
Back Light	5,888.7 lm	28.8%
0°-30°	1,447.7 lm	7.1%
30°-60°	2,723.4 lm	13.3%
60°-80°	1,619.6 lm	7.9%
80°-90°	98.0 lm	0.5%
Up Light	0.0 lm	0.0%
90°-180°	0.0 lm	0.0%
100°-180°	0.0 lm	0.0%
BUG* Rating		
Asymmetrical Luminaire Types		
Type I, II, III, IV	B3-U0-G3	
Quadrilateral Symmetrical Luminaire Types		
Type V, Area Light	B3-U0-G3	

* Backlight, Uplight, Glare

PHOTOMETRIC SPECIFICATIONS AL-LED-M2-OSA-140PSHV-8CSB-NM (TYPE III [3])



ZONAL LUMEN SUMMARY

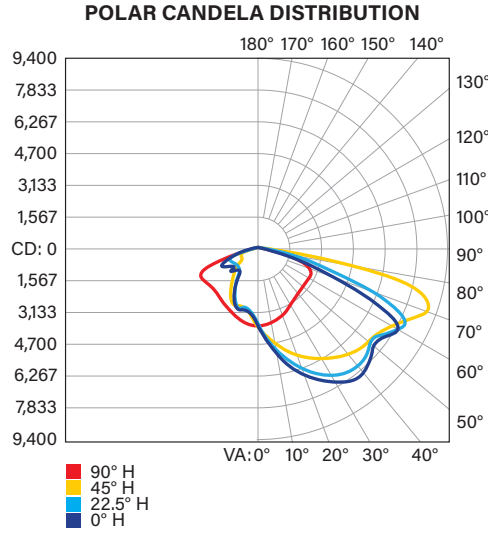
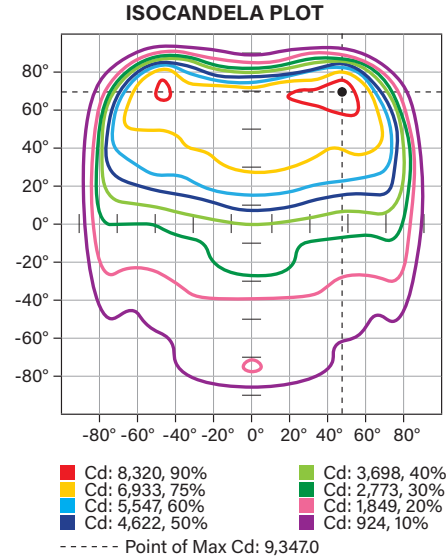
Zone	Lumens	% Luminaire
Forward Light	15,626.4 lm	76.4%
0°-30°	2,209.2 lm	10.8%
30°-60°	8,278.0 lm	40.5%
60°-80°	4,916.0 lm	24.0%
80°-90°	223.2 lm	1.1%
Back Light	4,837.6 lm	23.7%
0°-30°	1,225.4 lm	6.0%
30°-60°	2,260.6 lm	11.0%
60°-80°	1,239.0 lm	6.1%
80°-90°	112.6 lm	0.6%
Up Light	0.0 lm	0.0%
90°-180°	0.0 lm	0.0%
100°-180°	0.0 lm	0.0%
BUG* Rating		
Asymmetrical Luminaire Types		
Type I, II, III, IV	B3-U0-G3	
Quadrilateral Symmetrical Luminaire Types		
Type V, Area Light	B3-U0-G3	

* Backlight, Uplight, Glare

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HIGH VOLTAGE LED AREA LIGHT

PHOTOMETRIC SPECIFICATIONS AL-LED-M2-OSA-140PSHV-8CSB-NM (TYPE IV [4])

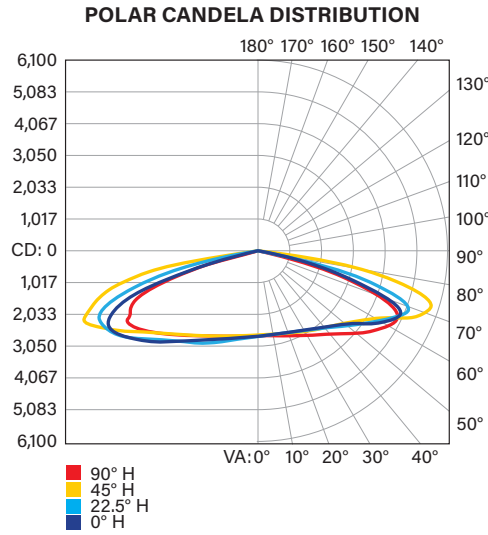
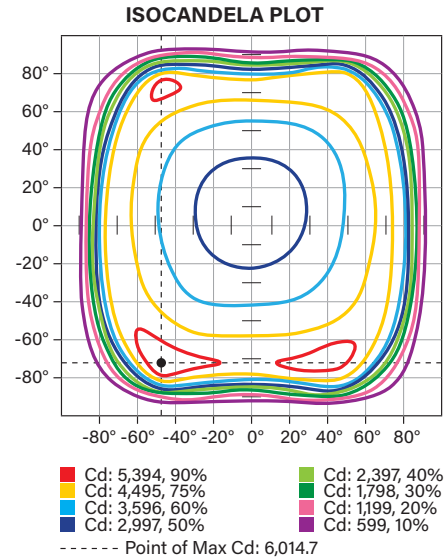


ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Forward Light	15,863.9 lm	77.3%
0°-30°	2,215.4 lm	10.8%
30°-60°	7,366.1 lm	35.9%
60°-80°	5,866.6 lm	28.6%
80°-90°	415.8 lm	2.0%
Back Light	4,649.8 lm	22.6%
0°-30°	1,246.0 lm	6.1%
30°-60°	2,138.8 lm	10.4%
60°-80°	1,177.5 lm	5.7%
80°-90°	87.5 lm	0.4%
Up Light	0.0 lm	0.0%
90°-180°	0.0 lm	0.0%
100°-180°	0.0 lm	0.0%
BUG* Rating		
Asymmetrical Luminaire Types		
Type I, II, III, IV	B3-U0-G3	
Quadrilateral Symmetrical Luminaire Types		
Type V, Area Light	B3-U0-G3	

* Backlight, Uplight, Glare

PHOTOMETRIC SPECIFICATIONS AL-LED-M2-OSA-140PSHV-8CSB-NM (TYPE V [5])



ZONAL LUMEN SUMMARY

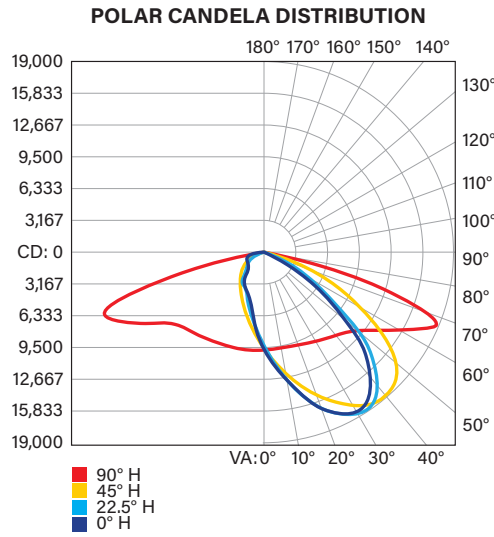
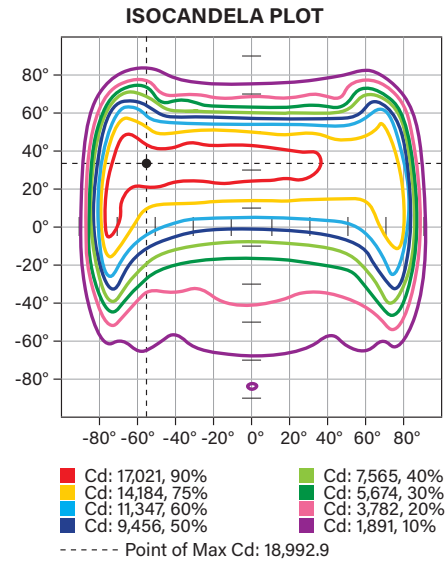
Zone	Lumens	% Luminaire
Forward Light	9,823.7 lm	48.1%
0°-30°	1,183.9 lm	5.8%
30°-60°	4,094.2 lm	20.0%
60°-80°	4,246.2 lm	20.8%
80°-90°	299.4 lm	1.5%
Back Light	10,614.8 lm	52.0%
0°-30°	1,250.4 lm	6.1%
30°-60°	4,577.4 lm	22.4%
60°-80°	4,489.1 lm	22.0%
80°-90°	297.9 lm	1.5%
Up Light	0.0 lm	0.0%
90°-180°	0.0 lm	0.0%
100°-180°	0.0 lm	0.0%
BUG* Rating		
Asymmetrical Luminaire Types		
Type I, II, III, IV	B4-U0-G3	
Quadrilateral Symmetrical Luminaire Types		
Type V, Area Light	B4-U0-G3	

* Backlight, Uplight, Glare

AL-LED-X2-OSA-XXXPSHV-8CSB-NM

HIGH VOLTAGE LED AREA LIGHT

PHOTOMETRIC SPECIFICATIONS AL-LED-L2-OSA-290PSHV-8CSB-NM (TYPE II [2])



ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Forward Light	29,980.3 lm	72.6%
0°-30°	5,900.1 lm	14.3%
30°-60°	16,666.5 lm	40.3%
60°-80°	7,092.0 lm	17.2%
80°-90°	321.7 lm	0.8%
Back Light	11,335.5 lm	27.4%
0°-30°	2,715.1 lm	6.6%
30°-60°	5,133.0 lm	12.4%
60°-80°	3,222.5 lm	7.8%
80°-90°	264.9 lm	0.6%
Up Light	0.0 lm	0.0%
90°-180°	0.0 lm	0.0%
100°-180°	0.0 lm	0.0%

BUG* Rating

Asymmetrical Luminaire Types

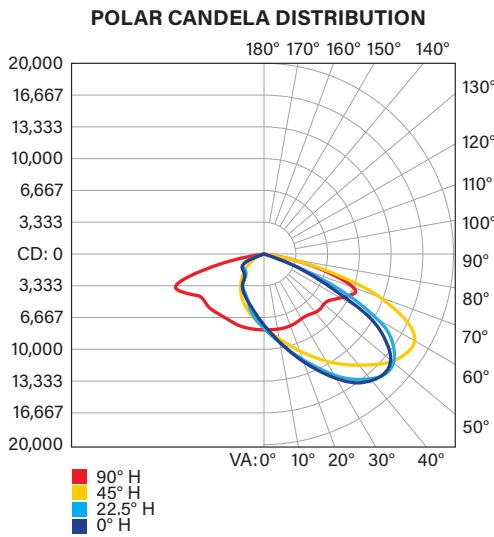
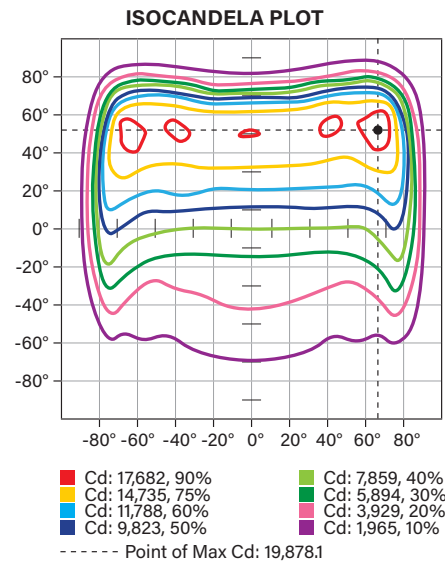
Type I, II, III, IV	B4-U0-G4
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Quadrilateral Symmetrical Luminaire Types

Type V, Area Light	B4-U0-G4
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* Backlight, Uplight, Glare

PHOTOMETRIC SPECIFICATIONS AL-LED-L2-OSA-290PSHV-8CSB-NM (TYPE III [3])



ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Forward Light	31,793.5 lm	76.5%
0°-30°	4,441.9 lm	10.7%
30°-60°	16,583.0 lm	39.9%
60°-80°	10,161.4 lm	24.4%
80°-90°	607.2 lm	1.5%
Back Light	9,772.1 lm	23.5%
0°-30°	2,536.6 lm	6.1%
30°-60°	4,625.7 lm	11.1%
60°-80°	2,394.0 lm	5.8%
80°-90°	215.8 lm	0.5%
Up Light	0.0 lm	0.0%
90°-180°	0.0 lm	0.0%
100°-180°	0.0 lm	0.0%

BUG* Rating

Asymmetrical Luminaire Types

Type I, II, III, IV	B4-U0-G4
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Quadrilateral Symmetrical Luminaire Types

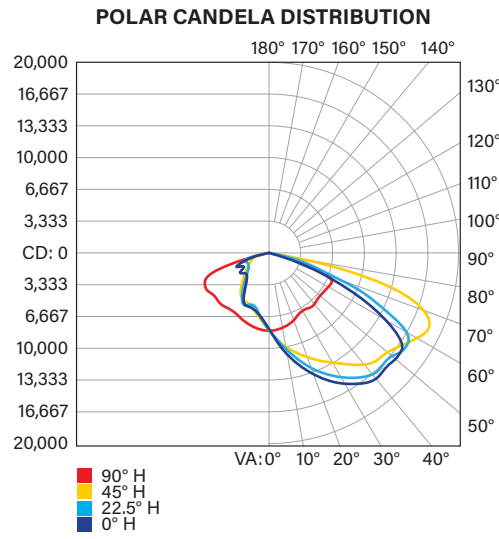
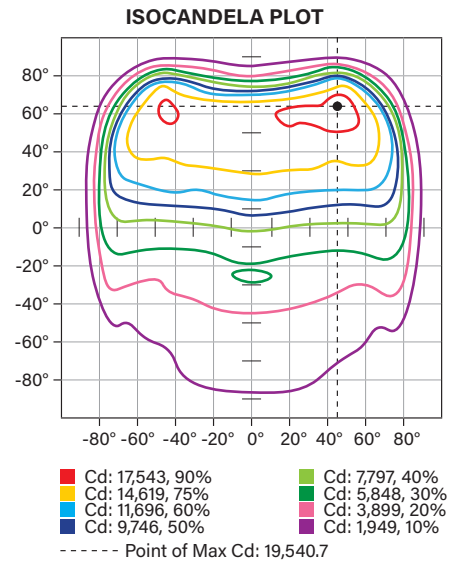
Type V, Area Light	B4-U0-G4
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* Backlight, Uplight, Glare

AL-LED-X2-OSA-XXXPSHV-8CSB-NM

HIGH VOLTAGE LED AREA LIGHT

PHOTOMETRIC SPECIFICATIONS AL-LED-L2-OSA-290PSHV-8CSB-NM (TYPE IV [4])

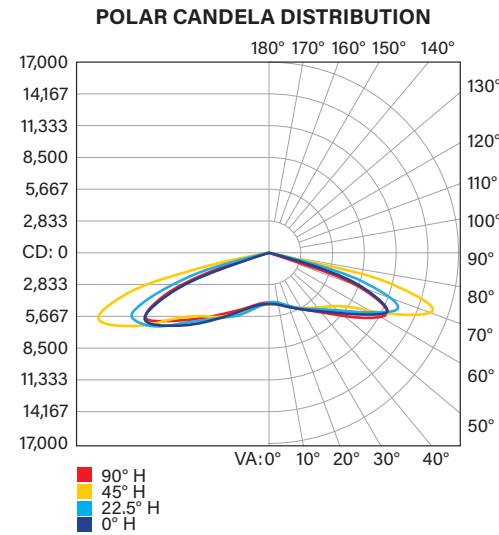
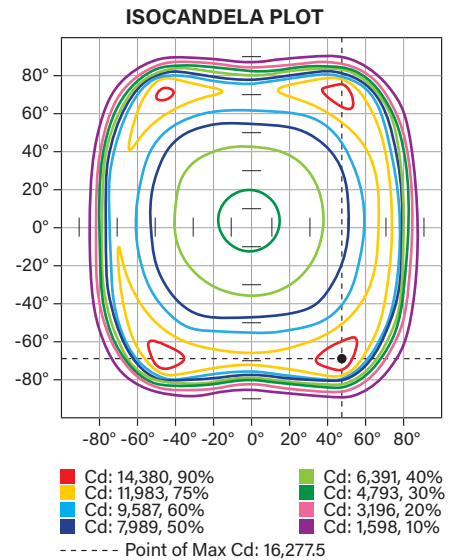


ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Forward Light	32,103.9 lm	75.8%
0°-30°	4,662.6 lm	11.0%
30°-60°	16,554.9 lm	39.1%
60°-80°	10,459.9 lm	24.7%
80°-90°	426.5 lm	1.0%
Back Light	10,229.0 lm	24.2%
0°-30°	2,621.1 lm	6.2%
30°-60°	4,848.5 lm	11.5%
60°-80°	2,536.6 lm	6.0%
80°-90°	222.8 lm	0.5%
Up Light	0.0 lm	0.0%
90°-180°	0.0 lm	0.0%
100°-180°	0.0 lm	0.0%
BUG* Rating		
Asymmetrical Luminaire Types		
Type I, II, III, IV	B4-U0-G4	
Quadrilateral Symmetrical Luminaire Types		
Type V, Area Light	B4-U0-G4	

* Backlight, Uplight, Glare

PHOTOMETRIC SPECIFICATIONS AL-LED-L2-OSA-290PSHV-8CSB-NM (TYPE V [5])



ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Forward Light	21,103.9 lm	48.8%
0°-30°	2,118.6 lm	4.9%
30°-60°	8,936.4 lm	20.7%
60°-80°	9,693.2 lm	22.4%
80°-90°	355.7 lm	0.8%
Back Light	22,099.5 lm	51.2%
0°-30°	2,238.8 lm	5.2%
30°-60°	9,989.6 lm	23.1%
60°-80°	9,617.0 lm	22.3%
80°-90°	254.1 lm	0.6%
Up Light	0.0 lm	0.0%
90°-180°	0.0 lm	0.0%
100°-180°	0.0 lm	0.0%
BUG* Rating		
Asymmetrical Luminaire Types		
Type I, II, III, IV	B5-U0-G4	
Quadrilateral Symmetrical Luminaire Types		
Type V, Area Light	B5-U0-G4	

* Backlight, Uplight, Glare















AL-LED-X2-OSA-XXXPSHV-8CSB-NM

HIGH VOLTAGE LED AREA LIGHT

EPA SPECIFICATIONS

MEDIUM AND LARGE SIZE FIXTURE HOUSINGS

- Conditions: Horizontal winds only for calculations. Worst case total projected area used for calculations.
- All drag coefficients are set as worst case 1.2

EPA Calcs (1.2*ft^2 View)		Single Fixture	2 Fixtures at 90°	2 Fixtures at 180°	3 Fixtures at 90°	3 Fixtures at 120°	4 Fixtures at 90°	2 Fixtures Side-by-Side	3 Fixtures Side-by-Side	4 Fixtures Side-by-Side
Mounting Application	Fixture Position (Size)									
	Adjustable Pole Mount Horizontal (M)	0.50 sq. ft.	0.78 sq. ft.	1.01 sq. ft.	1.19 sq. ft.	1.28 sq. ft.	1.19 sq. ft.	0.74 sq. ft.	1.11 sq. ft.	1.48 sq. ft.
	Horizontal (L)	0.62 sq. ft.	0.90 sq. ft.	1.24 sq. ft.	1.42 sq. ft.	1.48 sq. ft.	1.42 sq. ft.	0.74 sq. ft.	1.11 sq. ft.	1.48 sq. ft.
	Adjustable Pole Mount 45° (M)	1.27 sq. ft.	1.73 sq. ft.	1.27 sq. ft.	2.20 sq. ft.	3.10 sq. ft.	2.20 sq. ft.	2.53 sq. ft.	3.80 sq. ft.	5.07 sq. ft.
	45° (L)	1.85 sq. ft.	2.43 sq. ft.	1.85 sq. ft.	3.01 sq. ft.	4.42 sq. ft.	3.01 sq. ft.	3.70 sq. ft.	5.55 sq. ft.	7.40 sq. ft.
	Slipfitter Mount Horizontal (M)	0.48 sq. ft.	0.87 sq. ft.	0.97 sq. ft.	1.30 sq. ft.	1.37 sq. ft.	1.30 sq. ft.	0.86 sq. ft.	1.30 sq. ft.	1.73 sq. ft.
	Horizontal (L)	0.60 sq. ft.	0.98 sq. ft.	1.20 sq. ft.	1.53 sq. ft.	1.57 sq. ft.	1.53 sq. ft.	0.86 sq. ft.	1.30 sq. ft.	1.73 sq. ft.
	Slipfitter Mount 45° (M)	1.34 sq. ft.	1.80 sq. ft.	1.34 sq. ft.	2.28 sq. ft.	3.06 sq. ft.	2.28 sq. ft.	2.67 sq. ft.	4.01 sq. ft.	5.35 sq. ft.
	45° (L)	1.92 sq. ft.	2.51 sq. ft.	1.92 sq. ft.	3.09 sq. ft.	4.39 sq. ft.	3.09 sq. ft.	3.84 sq. ft.	5.76 sq. ft.	7.68 sq. ft.
	Slipfitter Mount Vertical (M)	1.76 sq. ft.	2.25 sq. ft.	1.76 sq. ft.	2.73 sq. ft.	2.94 sq. ft.	2.73 sq. ft.	3.53 sq. ft.	5.29 sq. ft.	7.06 sq. ft.
	Vertical (L)	2.59 sq. ft.	3.19 sq. ft.	2.59 sq. ft.	3.80 sq. ft.	4.07 sq. ft.	3.80 sq. ft.	5.18 sq. ft.	7.77 sq. ft.	10.35 sq. ft.

AL-LED-X2-OSA-XXXPSHV-8CSB-NM

HIGH VOLTAGE LED AREA LIGHT

ACCESSORIES (SOLD SEPARATELY)

SENSORS/CONTROLLERS

Factory-Installable OR Field-Installable (field-installable purchased separately)

✓	SUFFIX*	CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
	/3PN	KT-TLP-HV-3PN	NEMA Type Twist-Lock 3-Pin Photocell 277-480V 1800VA Max Yellow	843654131832	CGF-01
	/MW3	KTS-MW3-12V-PKO	12V Microwave Occupancy Sensor	843654130637	TRM-32
	/FC3**	KTSL-FC3-12V-PKO-PIR	Bluetooth mesh wireless screw-in LED controller for SmartLoop system integrated daylight sensor PIR motion sensor	843654138862	OCW-60
	/FC4	KTSL-FC4-12V-PKO	Bluetooth mesh wireless screw-in low voltage fixture controller for SmartLoop system	843654149066	RUN-10



* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).

** When installing on area lights, use small thin gasket provided with the sensor to ensure proper electrical connection and a water-tight seal. Hand tighten only. (Do NOT use the larger thick gasket. Sensor will not make electrical contact with thick gasket.) PIR sensors may not always perform reliably in typical outdoor environments. Ensure sensors are used and commissioned with this in mind. When using KTSL-FC3-12V-PKO-PIR in applications with photosensor control for dusk to dawn, use 3-pin twist-lock photocells (KT-TLP-UV-3PN) for optimal functionality.

Field-Installable / Field-Use ONLY (purchased separately)

CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
KTS-MW3-REMOTECONTROL	Remote control for KTS-MW3-12V-XX Sensors Sets and adjusts all sensor performance parameters	843654132020	XSR-61



(Accessories continued on next page)

AL-LED-X2-OSA-XXXPSHV-8CSB-NM

HIGH VOLTAGE LED AREA LIGHT

ACCESSORIES (SOLD SEPARATELY) (continued)

MOUNTS/BRACKETS

Field-Installable / Field-Use ONLY (purchased separately)

CATALOG NUMBER	DESCRIPTION	HOUSING COLOR	UPC	EASY CODE
KT-ALED-GS-M2-KIT	Reversible glare shield Medium size	Bronze	843654153797	HEM-55
KT-ALED-GS-L2-KIT	Reversible glare shield Large size	Bronze	843654153810	RDW-18
KT-ALED-GS-M2-R-KIT	Right-side mounted glare shield Medium size	Bronze	843654163895	OYO-78
KT-ALED-GS-M2-L-KIT	Left-side mounted glare shield Medium size	Bronze	843654163901	GLB-48
KT-ALED-GS-L2-R-KIT	Right-side mounted glare shield Large size	Bronze	843654163871	KAV-10
KT-ALED-GS-L2-L-KIT	Left-side mounted glare shield Large size	Bronze	843654163888	PND-07
KT-ALED-USF-1-KIT	Universal slipfitter mount Fits 2 3/8" tenon, or round or square pole	Bronze	843654173740	PAS-59
KT-ALED-PMA-1-KIT	Adjustable pole mount For round or square pole	Bronze	843654131634	DAQ-87
KT-ALED-PM-1-KIT	Fixed pole mount For round or square pole	Bronze	843654131627	QVG-29
KT-ALED-TM-1-KIT	Trunnion mount	Bronze	843654131658	GTH-37
KT-ALED-WM-1-KIT	Wall mount	Bronze	843654158952	QCV-37



Note: Wall mount adaptor must be used with adjustable or fixed pole mounts

(Accessories continued on next page)

AL-LED-X2-OSA-XXXPSHV-8CSB-NM

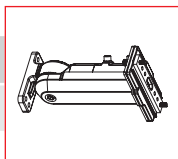
HIGH VOLTAGE LED AREA LIGHT

ACCESSORIES (SOLD SEPARATELY) (continued)

Universal Slipfitter Mount

Fits 2 3/8" tenon OR square pole OR round pole

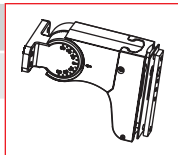
Catalog Number	UPC	Easy Code
KT-ALED-USF-1-KIT	843654173740	PAS-59



Adjustable Pole Mount

For round OR square pole

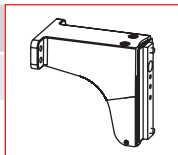
Catalog Number	UPC	Easy Code
KT-ALED-PMA-1-KIT	843654131634	DAQ-87



Fixed Pole Mount

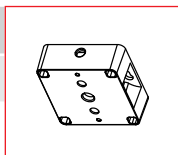
For round OR square pole

Catalog Number	UPC	Easy Code
KT-ALED-PM-1-KIT	843654131627	QVG-29



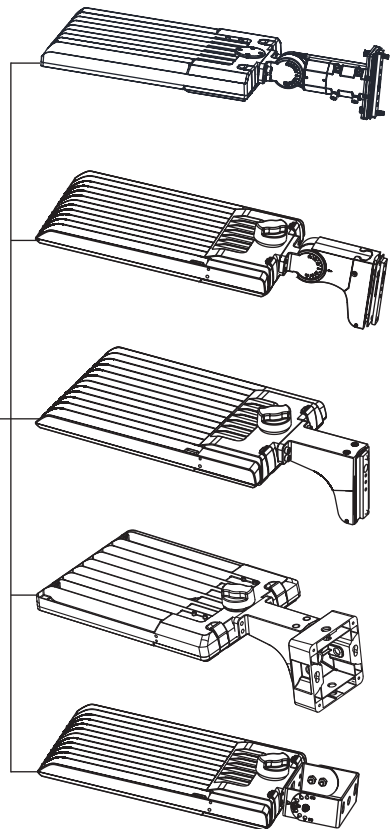
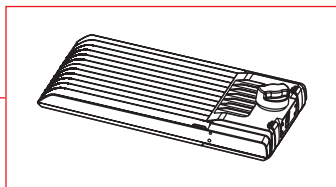
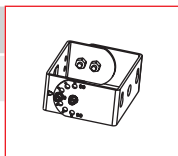
Wall Mount

Catalog Number	UPC	Easy Code
KT-ALED-WM-1-KIT	843654158952	QCV-37



Trunnion Mount

Catalog Number	UPC	Easy Code
KT-ALED-TM-1-KIT	843654131658	GTH-37



Note: Wall mount adaptor must be used with adjustable or fixed pole mounts

(Accessories continued on next page)

AL-LED-X2-OSA-XXXPSHV-8CSB-NM

HIGH VOLTAGE LED AREA LIGHT

ACCESSORIES (SOLD SEPARATELY) (continued)

LENSES/REFLECTORS

Field-Installable / Field-Use **ONLY** (purchased separately)

CATALOG NUMBER	DESCRIPTION	UPC	EASY CODE
KT-ALED-LENS-M2-2-KIT	Type II optics lens Medium size	843654153926	UDR-71
KT-ALED-LENS-M2-4-KIT	Type IV optics lens Medium size	843654153964	PNA-91
KT-ALED-LENS-L2-2-KIT	Type II optics lens Large size	843654153841	NFU-40
KT-ALED-LENS-L2-4-KIT	Type IV optics lens Large size	843654153889	BSU-72



Lenses
KT-ALED-LENS-M2-X-KIT



Lenses
KT-ALED-LENS-L2-X-KIT

ORDERING INFORMATION

ORDER CODE	UPC	Easy Code	DLC PRODUCT ID
AL-LED-M2-OSA-140PSHV-8CSB-NM	843654173719	GPC-10	S-9BQ5W8
AL-LED-L2-OSA-290PSHV-8CSB-NM	843654173733	ONL-49	S-BLS50Q