

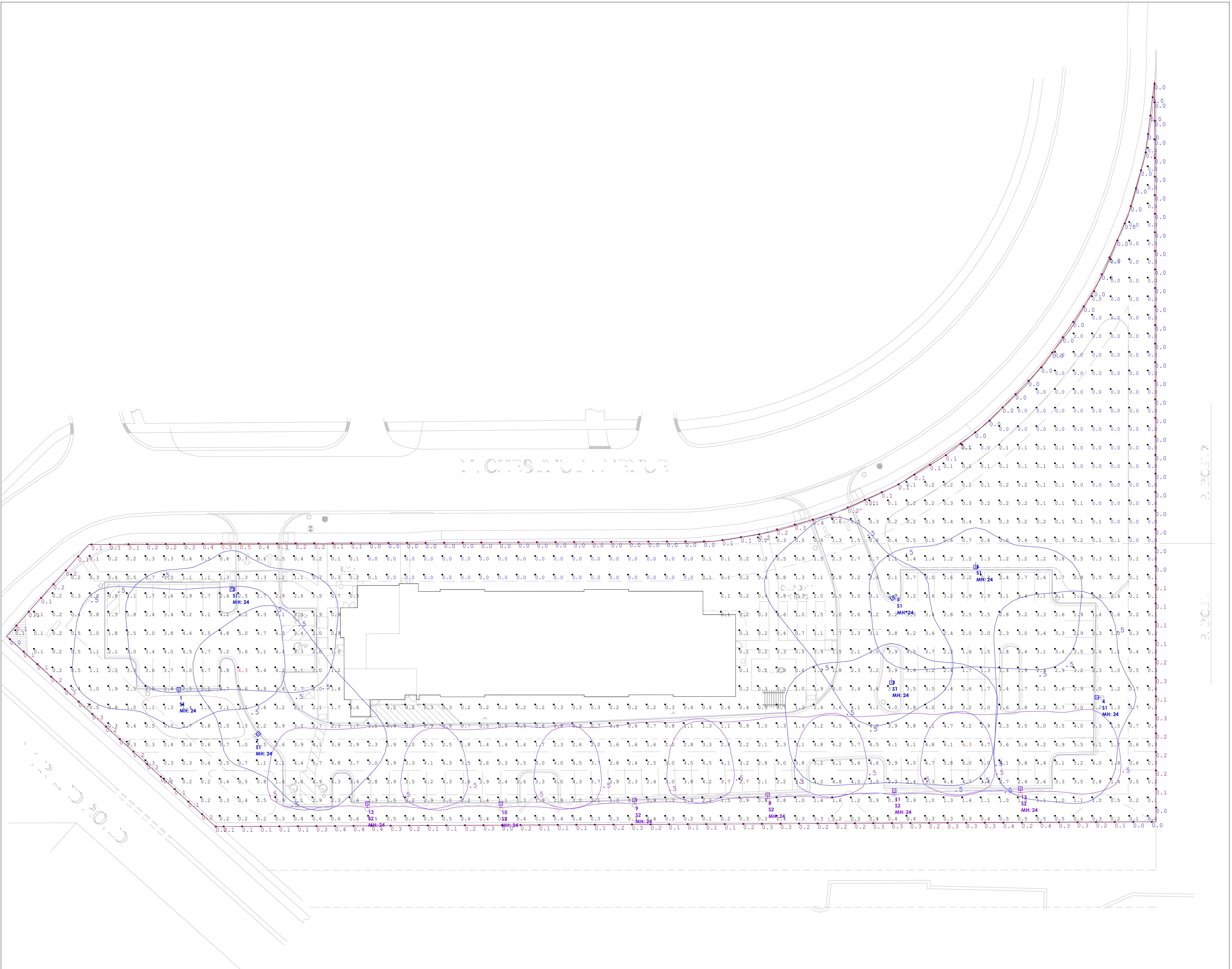
enlighten



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#### Luminaire Location Summary

LumNo	Tag (Qty)	Label	X	Y	Z	Orient	Tilt
1	S1 (1)	ASL1-160L-115-4K7-4W	-420.188	130.164	24	90	0
2	S1 (1)	ASL1-160L-115-4K7-4W	-391.594	188.707	24	270	0
3	S1 (1)	ASL1-160L-115-4K7-4W	-36.258	138.549	24	270	0
4	S1 (1)	ASL1-160L-115-4K7-4W	76.733	128.278	24	180	0
5	S1 (1)	ASL1-160L-115-4K7-4W	-33.747	183.148	24	215.735	0
6	S1 (1)	ASL1-160L-115-4K7-4W	9.031	200.885	24	270	0
7	S1 (1)	ASL1-160L-115-4K7-4W	-379.188	106.997	24	40	0
8	S2 (1)	ASL1-160L-115-4K7-4W-BC	-102.943	73.434	24	92	0
9	S2 (1)	ASL1-160L-115-4K7-4W-BC	-174.658	70.505	24	92	0
10	S2 (1)	ASL1-160L-115-4K7-4W-BC	-246.695	68.495	24	90	0
11	S2 (1)	ASL1-160L-115-4K7-4W-BC	-34.823	75.564	24	90	0
12	S2 (1)	ASL1-160L-115-4K7-4W-BC	-318.597	68.617	24	90	0
13	S2 (1)	ASL1-160L-115-4K7-4W-BC	33.127	76.677	24	90	0

Drawn By: Joell Collins  
Drawn By: joell.collins@pg-enlighten.com  
Date: 5/18/2021  
Scale: Not to scale

Luminaire Schedule- Part numbers are provided by the manufacturer and are only intended to be used as a reference to output and optics used.								
Symbol	Qty	Tag	Label	Arrangement	Lum. Watts	Arr. Watts	Lum. Lumens	Arr. Lum. Lumens
	7	S1	ASL1-160L-115-4K7-4W	SINGLE	109.7	109.7	15232	15232
	6	S2	ASL1-160L-115-4K7-4W-BC	SINGLE	109.7	109.7	9459	9459

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Description
PROPERTY LINE	Illuminance	Fc	0.12	0.5	0.0	N.A.	N.A.	READINGS @ GRADE
PROPERTY_Planar	Illuminance	Fc	1.56	6.3	0.0	N.A.	N.A.	READINGS @ GRADE
PARKING LOT	Illuminance	Fc	3.05	6.3	0.5	6.10	12.60	READINGS @ GRADE

Parking Lot Design Guide	Basic (for typical conditions)		Basic Enhanced Security (in consideration of personal security or vandalism)		Security lighting for public spaces		High Security (security lighting for public spaces)	
	lux/fc	lux/fc	lux/fc	lux/fc	lux/fc	lux/fc	lux/fc	lux/fc
Minimum Horizontal Illuminance (Measured on parking surface without any shadowing from any object)	2.0/0.2		5.0/0.5		10.0/1.0		30.0-60.0/3.0-6.0	
Uniformity Ratio Maximum - to - Minimum	20:1		15:1		15:1		*4:1	
Minimum Vertical Illuminance (for facial recognition measured at 5' above the parking surface at the point of lowest horizontal illuminance)	1.0/0.1		2.5/0.25		5.0-8.0/0.5-0.8		12-60/1.2-6.0	

Recommendations based on RP-33-99, RP-20-98, 9th Edition IESNA Lighting Handbook

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Project Name: CRESCENT PLACE  
Location: 310 W RAND RD, ARLINGTON HEIGHTS, IL

or estimated pole locations based on specified light levels for exterior applications. Any variance from reflectance values, obstructions, light loss factors or dimensional data will affect the actual light levels obtained. This analysis is a mathematical model and can be only as accurate as is permitted by the third party software and the IES standard used. In addition calculated values may vary from actual measurements in certain situations due to variances, such as but not limited to, lamp output, input voltage, ballast variances, manufacturing tolerances and application variances. The presence of obstacles, such as trees, will decrease light levels and may require more shadowing.



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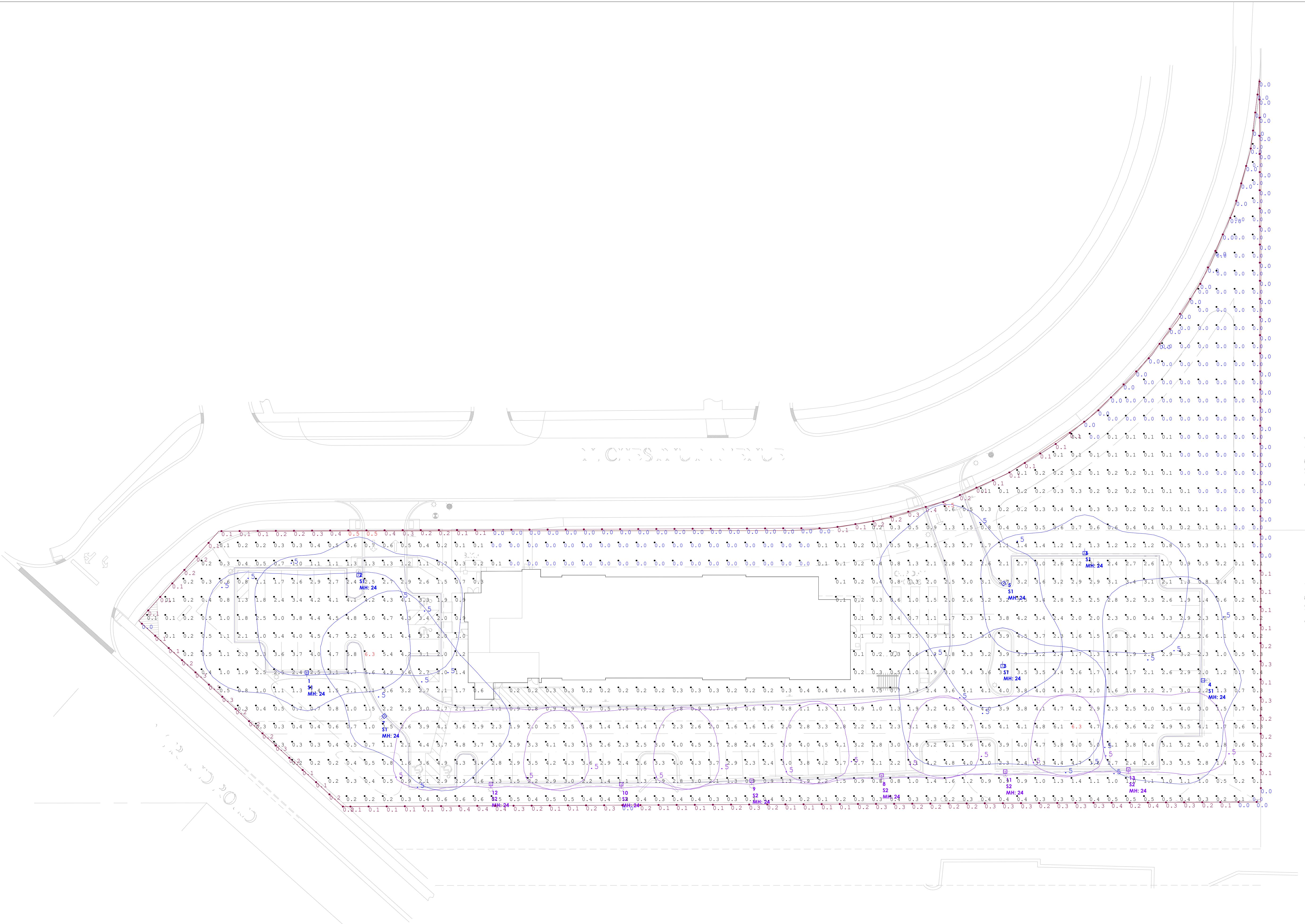
We make no representation as to its completeness, currency or accuracy because of reasons inherent to CAD and the additional digital data used to produce a lighting application. All digital CAD data appear to be extremely accurate; however, this apparent accuracy is an artifact of the techniques used to generate it, and is in no way intended to imply actual accuracy. The user of this data takes full responsibility for the accuracy and correctness of all measurements, area, inventories or other data extracted from this, either manually or with the use of a computer. This light level analysis is an estimate only, and is based on estimated reflectance values for interior applications, or estimated pole locations based on specified light levels for exterior applications. Any variance from reflection values, obstructions, light loss factors or dimensional data will affect the actual light levels obtained. This analysis is a mathematical model and can be only as accurate as is permitted by the third party software and the IES standard used. In addition calculated values may vary from actual measurements in certain situations due to variances, such as but not limited to lamp output, input voltage, ballast variances, manufacturing tolerances and application variances. The presence of objects will decrease flux levels and many causes some shadowing.

Drawn By: joeli.collins@pg-enlighten.com  
Date:5/18/2021  
Scale: 1" = 25'

# CRESCENT PLACE

# CRESCE<sup>N</sup>T PLACE

Page 2 of 2



# AIRO Micro Strike

AREA/SITE/ROAD LIGHTER

## FEATURES

- Compact sleek design with multiple LED configurations and simple installation
- The Airo includes a universal mounting block for easy pole installation or mast arm option for 2-3/8 ft OD roadway brackets
- Capable of replacing up to 1000w HID luminaires
- Micro Strike optical distributions of Type 2, 3, 4W or 5QW
- Tool-less entry option for easy installation and maintenance
- 1.5G rated for high vibration applications including bridges and overpasses



## CONTROL TECHNOLOGY



## SPECIFICATIONS

### CONSTRUCTION

- Die-cast housing with hidden vertical heat fins that are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with powder coat paint finish
- Separate optical and electrical compartment for improved thermal management and optimum component operation
- TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness

### OPTICS

- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance
- Premium engineered individual acrylic lenses deliver IES Type 2, 3, 4W and 5QW distributions
- Lens distributions are field rotatable (in 90° increments) or exchangeable for job site fine-tuning
- 3000K, 4000K, or 5000K (70 CRI) CCT
- 80, 160, or 320 midpower LEDs
- 3000K, 4000K or 5000K (70 CRI) CCT
- Zero uplight at 0 degrees of tilt
- Field rotatable optics

### INSTALLATION

- Tool-less entry to wiring/driver compartment optional
- Universal mounting block works with #2 drill pattern
- Fixture ships with slotted mounting block to accommodate wide range of drill patterns for easy retrofit opportunities



## RELATED PRODUCTS

[8 RAR1 Ratio](#)   [8 RAR2 Ratio](#)   [8 Cimarron LED](#)

### INSTALLATION (CONTINUED)

- Mast arm fitter accessory or option available for 2-3/8" OD brackets with vertical tilt of +3°, 0° or -3°

### ELECTRICAL

- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
- Ambient operating temperature -40°C to 40°C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20KA and 10KV protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is consumed

### CONTROLS

- Photo control, occupancy sensor and wireless available for complete on/off and dimming control
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)
- Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6
- SiteSync™ wireless control system is available via 7-pin See ordering information and details at: [www.hubbellighting.com/sitesync](http://www.hubbellighting.com/sitesync)
- NX Distributed Intelligence™ available with in fixture wireless control module, features dimming and occupancy sensor

### CONTROLS (CONTINUED)

- wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor via 7-pin
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application

### CERTIFICATIONS

- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40°C ambient temperatures
- 1.5G rated for ANSI C136.31 high vibration applications
- IP65 optical assembly
- Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See [Buy American Solutions](#)

### WARRANTY

- 5 Year warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA	
Lumen Range	6,000–36,000
Wattage Range	25–225
Efficacy Range (LPW)	118–148
Weight lbs. (kg)	14.5–17.5 (6.6–8.0)

# AIRO Micro Strike

AREA/SITE/ROAD LIGHTER

## ORDERING GUIDE

Example: ASL1-80L-25-3K7-2-UNV-ASQU-SWP-F-BLT

CATALOG # ASL1-160L-115-4K7-4W-UNV-ASQU-DBT &amp; ASL1-160L-115-4K7-4W-UNV-ASQU-BC-DBT (with Backlight control where applicable)

## ORDERING INFORMATION

ASL1	160L-115	4K7	4W	UNV	ASQU
<b>Series</b>	<b># LEDs</b>	<b>CCT/CRI</b>	<b>Distribution</b>	<b>Rotation/Orientation</b>	<b>Mounting</b>
ASL1 ASL Microstrike Series	80L-25 3,000 lm 80L-39 4,500 lm 80L-50 6,000 lm 160L-70 9,000 lm 160L-100 12,000 lm <b>160L-115 15,000 lm</b> 160L-135 18,000 lm	3K7 3000K, 70 CRI <b>4K7 4000K, 70 CRI</b> 5K7 5000K, 70 CRI	2 Type II 3 Type III <b>4W Type 4W</b> 5QW Type 5QW	L Optic rotation left R Optic rotation right	UNV Universal 120-277V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V
ASL2 ASL Microstrike Series	320L-145 21,000 lm 320L-170 24,000 lm 320L-185 27,000 lm 320L-210 30,000 lm 320L-235 33,000 lm 320L-255 35,000 lm				ASQU Arm Square w/ Universal Mount A3 AS with 3.5-4.13" OD RPA3 & UM A4 AS with 4.18-5.25" OD RPA4 & U A5 AS with 5.5-6.5" OD RPA5 & UM MAF Mast Arm Fitter for 2-3/8" OD

<b>Control Options Network</b>		<b>Options</b>		<b>DBT</b>
SWP <sup>1</sup>	SiteSync pre-commissioned	F <sup>3</sup>	Fusing	BLT Black Matte Textured
SWPM <sup>1</sup>	SiteSync wireless pre-commissioned w/ motion detection	BC	Backlight Control	BLS Black Gloss Smooth
NXSPW14F <sup>1</sup>	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' (use white for WH, black for DB, GT, TT, gray for LG, PS)	TB <sup>4</sup>	Terminal Block	DBT Dark Bronze Matte Textured
NXSPW30F <sup>1</sup>	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 30' (use white for WH, black for DB, GT, TT, gray for LG, PS)	TE	Toolless Entry	DBS Dark Bronze Gloss Smooth
NXSP14F <sup>1</sup>	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' (use white for WH, black for DB, GT, TT, gray for LG, PS)	SSF	Stainless Steel Fasteners	GTT Graphite Matte Textured
NXSP30F <sup>1</sup>	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 30' (use white for WH, black for DB, GT, TT, gray for LG, PS)			LGS Light Grey Gloss Smooth
NXWE <sup>1</sup>	NX Wireless Enabled (module + radio)			LGT Light Grey Matte Textured
<b>Stand Alone Sensors</b>				PSS Platinum Silver Smooth
SCP-8F	Remote control programmable line voltage sensor			WHT White Matte Textured
SCP-40F	Remote control programmable line voltage sensor			WHS White Gloss Smooth
<b>Control Options Other</b>				VGT Verde Green Textured
7PR	7 Pin Receptacle			<b>Color Option</b>
7PR-SC	7 Pin Receptacle with shorting cap			CC Custom Color
7PR-MD8F	7 pin receptacle with low voltage sensor at 8' mounting for external control accessory			
7PR-MD40F	7 pin receptacle with low voltage sensor at 40' mounting for external control accessory			
7PR-TL	7 Pin Receptacle with Photocontrol			

## Notes:

1 Not compatible with 80L configurations

2 Not compatible with 480V configurations

3 Must specify voltage

4 Not available with a combination or 347/480 and fusing

# AIRO Micro Strike

AREA/SITE/ROAD LIGHTER

## PERFORMANCE DATA

Description	Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 80 CRI)				
				Lumens	LPW <sup>1</sup>	B	U	G	Lumens	LPW <sup>1</sup>	B	U	G	Lumens	LPW <sup>1</sup>	B	U	G
<b>ASL1</b>	25	25.4	2	3430	135	2	0	2	3413	134	2	0	2	3225	127	2	0	2
			3	3465	136	2	0	2	3448	136	2	0	2	3259	128	2	0	2
			4W	3401	134	2	0	3	3384	133	2	0	3	3198	126	2	0	3
			5QW	3483	137	4	0	2	3466	136	4	0	2	3274	129	4	0	2
	40	38.0	2	5237	138	3	0	3	5211	137	3	0	3	4924	130	3	0	3
			3	5292	139	2	0	2	5265	139	2	0	2	4976	131	2	0	2
			4W	5193	137	2	0	3	5168	136	2	0	3	4883	129	2	0	3
			5QW	5318	140	4	0	2	5292	139	4	0	2	4999	132	4	0	2
	50	49.7	2	6294	127	2	0	2	6263	126	2	0	2	5918	119	2	0	2
			3	6360	128	2	0	2	6328	127	2	0	2	5980	120	2	0	2
			4W	6242	126	2	0	3	6211	125	2	0	3	5869	118	2	0	3
			5QW	6392	129	4	0	2	6360	128	4	0	2	6008	121	4	0	2
	70	68.4	2	9461	138	3	0	3	9414	138	3	0	3	8897	130	3	0	3
			3	9560	140	2	0	2	9513	139	2	0	2	8989	131	2	0	2
			4W	9383	137	2	0	3	9336	136	2	0	3	8822	129	2	0	3
			5QW	9608	140	4	0	2	9560	140	4	0	2	9032	132	4	0	2
	100	88.0	2	11945	136	2	0	2	11886	135	2	0	2	11232	128	2	0	2
			3	12070	137	2	0	2	12010	136	2	0	2	11349	129	2	0	2
			4W	11846	135	2	0	3	11787	134	2	0	3	11139	127	2	0	3
			5QW	12131	138	4	0	2	12070	137	4	0	2	11403	130	4	0	2
	115	109.7	2	15683	143	2	0	2	15605	142	2	0	2	14977	137	2	0	2
			3	15486	141	2	0	2	15411	140	2	0	2	14819	135	2	0	2
			4W	15305	140	2	0	3	15232	139	2	0	3	14646	134	2	0	3
			5QW	15732	143	4	0	2	15653	143	4	0	2	15024	137	4	0	2
	135	133.3	2	18089	136	3	0	3	17999	135	3	0	3	17275	130	3	0	3
			3	17861	134	2	0	2	17776	133	2	0	2	17092	128	2	0	2
			4W	17653	132	2	0	3	17569	132	2	0	3	16893	127	2	0	3
			5QW	18155	136	4	0	2	18064	136	4	0	2	17338	130	4	0	2

ASL2 Performance Data on next page

- 1 VAC input Lumen values are from photometric test performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations. Actual performance may differ as a result of end-user environment and application.

# AIRO Micro Strike

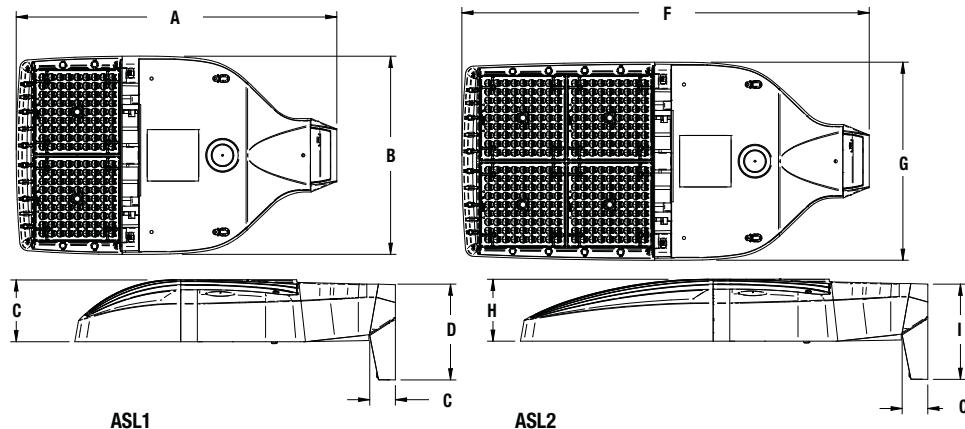
AREA/SITE/ROAD LIGHTER

## PROJECTED LUMEN MAINTENANCE

Ambient Temperature	OPERATING HOURS					
	0	25,000	TM-21-11 <sup>1</sup> L96 60,000	50,000	100,000	L70 (Hours)
25°C / 77°F	1.00	0.97	0.96	0.95	0.91	408,000
40°C / 104°F	0.99	0.96	0.95	0.94	0.89	356,000

1. Projected per IESNA TM-21-11 (\* Cree XP-L, 2100mA, 105°C Ts, 6,000hrs)

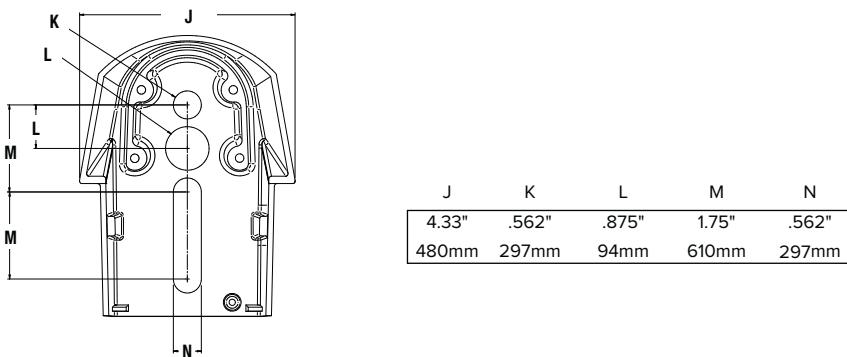
## DIMENSIONS



Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

A	B	C	D	E	F	G	H	I	ASL1 EPA@0°	ASL2 EPA@0°	ASL1 w/ HSS	ASL2 w/ HSS
18.9" 480mm	11.7" 297mm	3.7" 94mm	5.65" 144mm	1.5" 38mm	24.0" 610mm	11.7" 297mm	3.7" 94mm	5.62" 143mm	.46 ft. <sup>2</sup> .14 m <sup>2</sup>	.56 ft. <sup>2</sup> .17 m <sup>2</sup>	.73 ft. <sup>2</sup> .22 m <sup>2</sup>	1.01 ft. <sup>2</sup> .31 m <sup>2</sup>

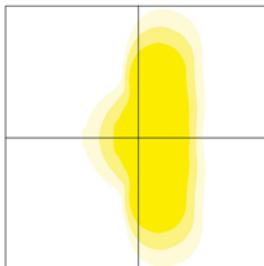
Weight	
ASL1	14.47 lbs (6.56 kgs)
ASL2	17.47 lbs (7.92 kgs)



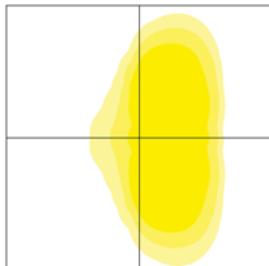
## PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see [website photometric test reports](#).

Type II



Type III



Type IV



Type V

