

# PAL1

## LED Area Light



### DESCRIPTION

Pantheon's PAL1 is a high performance area light with an architectural design delivering cost effective illumination for parking areas, walkways, and street lighting applications. The available distribution types II, III, IV, and V combined with four lumen packages offers tremendous flexibility for your applications. Depending on the required light level and uniformity, the PAL1 can be mounted at a height from 12 to 30 feet and is capable of replacing metal halide fixtures up to 400W.



Date: \_\_\_\_\_ Type: \_\_\_\_\_ Catalog Number: \_\_\_\_\_

Project Name: \_\_\_\_\_



### ORDERING INFORMATION

FIXTURE	MODEL	CCT.	DRIVER	OPTICS	LENS	FINISH	MOUNTING	OPTIONS
PAL1 LED AREA LIGHT	37W	30K 3000K	UNV 120-277V	T2 Type II	C Clear	BRZ Bronze	ARM Mounting Arm	SF Single Fuse 120-277VAC
	65W	40K 4000K	347V 347-480V	T3 Type III		BL Black	PMA Pole Mount Arm	DF Double Fuse 120-277VAC
	100W	50K 5000K		T4 Type IV		CC Custom		SP Surge Protection
	140W			T5 Type V				PCR3 3-Pin Twist Lock Photocell Receptacle

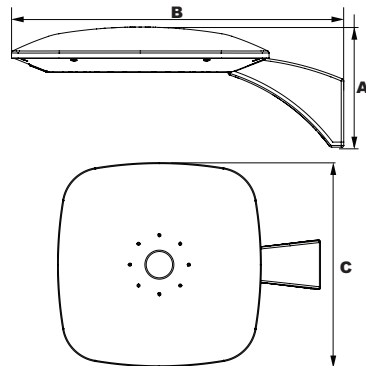
### ACCESSORY & REPLACEMENT PARTS

- TLNSC**  
Twist Lock Non-Shorting (Open) Cap Disconnects Service to Fixture for Temporary or Permanent Disabling (Fixture Always Off). IP65, 480V Maximum.
- TLSC**  
Twist Lock Shorting Cap Provides Fixed Service to Fixture (Fixture Always on). IP65, Rated Load 7200w Tungsten.
- PCTD120**  
120VAC Time Delay Twist Lock Photocell
- PCTD277**  
277VAC Time Delay Twist Lock Photocell
- PCUNVTL**  
120-277VAC Universal Twist Lock Photocell
- PC480TL**  
480VAC Time Delay Twist Lock Photocell. For 480V use only.
- RPADPT**  
Die-Cast Adaptor for 3" to 4" Round Poles, Powdercoat Finish.

- PCR5**  
5-Pin Twist Lock  
Photocell Receptacle
- PCR7**  
7-Pin Twist Lock  
Photocell Receptacle
- MSD**  
Microwave Motion Sensor with  
Dimming for  
Mounting Heights 8'-40'  
(120-277VAC)
- MS**  
Microwave On/Off Motion Sen-  
sor for Mounting Heights 8'-19'  
(120-277VAC)
- EM**  
Battery Backup 90 minutes  
(37W and 65W only)

DIMENSIONS

WIDTH ( A )	8 3/8" (213mm)
LENGTH ( B )	23 3/4" (589mm)
WIDTH ( C )	18" (457mm)



PHOTOMETRIC PERFORMANCE

LED Board Watts	Drive Current (mA)	Input Watts		Optics	4000 CCT 70 CRI				
					Lumens	LPW	B	U	G
37W	525	42	T2	Type II Clear	5,469	130	1	0	1
			T3	Type III Clear	5,491	131	2	0	2
			T4	Type IV Clear	5,010	119	1	0	2
			T5	Type V Clear	5,495	131	3	0	1
65W		74	T2	Type II Clear	9,608	130	2	0	2
			T3	Type III Clear	9,646	130	3	0	3
			T4	Type IV Clear	8,803	119	2	0	3
			T5	Type V Clear	9,653	130	3	0	2
100W		114	T2	Type II Clear	14,782	130	2	0	2
			T3	Type III Clear	14,842	130	3	0	3
			T4	Type IV Clear	13,543	119	3	0	3
			T5	Type V Clear	14,851	130	4	0	2
140W		159	T2	Type II Clear	20,694	130	3	0	3
			T3	Type III Clear	20,777	131	3	0	3
			T4	Type IV Clear	18,959	119	3	0	4
			T5	Type V Clear	20,791	131	4	0	2

PROJECTED LUMEN MAINTENANCE

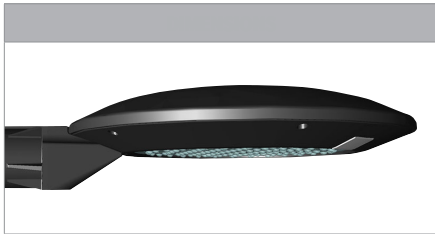
Data shown for 5000 CCT		Compare to MH				
TM-21-11	Input Watts	Initial	25,000 Hrs	50,000 Hrs	100,000 Hrs	Calculated LED Life
L70 Lumen Maintenance @ 25°C / 77°F	All wattages up to and including 159w	1.00	0.98	0.95	0.91	327,000
L70 Lumen Maintenance @ 50°C / 122°F		1.00	0.94	0.89	0.78	134,000
L80 Lumen Maintenance @ 40°C / 104°F		1.00	0.96	0.93	0.86	141,000

NOTES:  
 1. Projected per IESNA TM-21-11. Data references the extrapolated performance projections for the 525mA base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.  
 2. Compare to MH box indicates suggested Light Loss Factor (LLF) to be used when comparing to Metal Halide (MH) systems.

CONTROLS

Fixtures Ordered with Factory-Installed Photocell or Motion Sensor Controls are Internally Wired for Switching and/or 1-10V Dimming Within the Housing. Remote Direct Wired Interface of 1-10V Dimming is Not Implied and May Not Be Available, Please Consult Factory.

MOUNTING OPTIONS



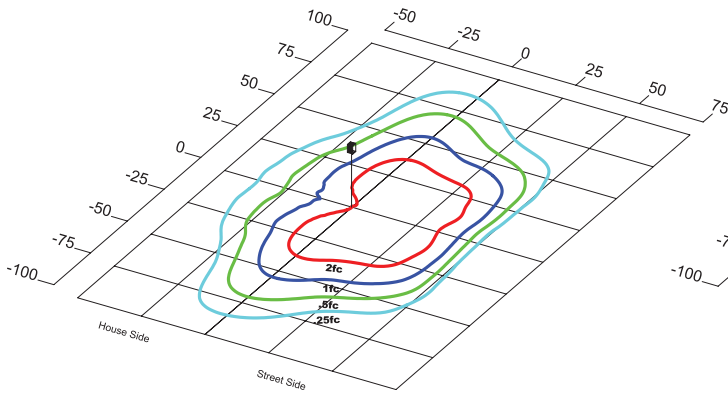
PAL1 with Mounting Arm Adaptor (ARM)

Die-Cast Adaptor for 2 3/8" Horizontal Mounting Arms, Powdercoat Finish, Includes Hardware.

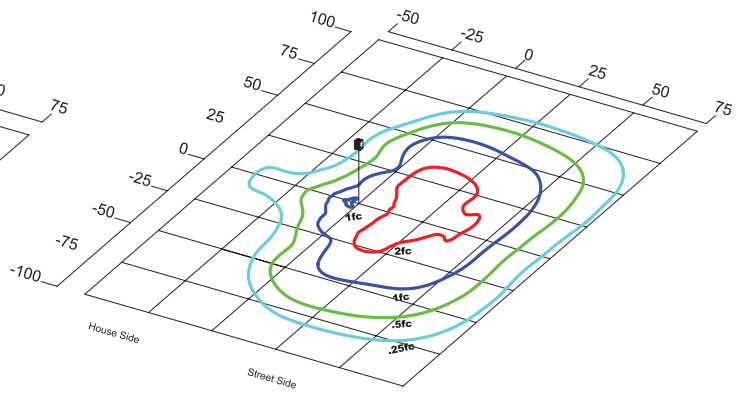
EPA (EFFECTIVE PROJECTED AREA) Shown with Mounting Arm

Configuration	EPA (Sq. Ft.)	Weight (lbs.)
	1.00	21 lbs.
	2.00	42 lbs.
	1.36	42 lbs.
	2.00	63 lbs.
	2.20	63 lbs.
	2.20	84 lbs.

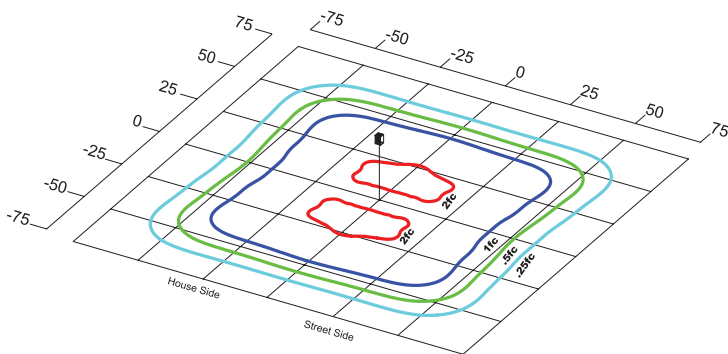
PHOTOMETRIC DATA



**PAL1-140W-40K-UNV-T3-C**  
Type III  
Grid in MH  
MH=25 Feet





**PAL1-140W-40K-UNV-T4-C**  
Type IV  
Grid in MH  
MH=25 Feet



**PAL1-140W-40K-UNV-T5-C**  
Type V  
Grid in MH  
MH=25 Feet

PRODUCT SPECIFICATIONS

<b>LUMEN OUTPUT</b>	Up to 20,791 @ 4000K (see photometric data chart for details)
<b>EFFICACY</b>	Up to 131 Lm/W (see photometric data chart for details)
<b>LUMEN MAINTENANCE</b>	(L70): >327,000 hours @ 25C
<b>COLOR TEMPERATURES</b>	3000, 4000K, 5000K
<b>CRI</b>	80CRI
<b>OPTICS</b>	Clear UV-Stabilized Polycarbonate Vandal-Resistant Array Lens with Integral Optics. Gasketed to Seal LED Array
<b>OPERATING TEMPERATURE</b>	-40°C to +50°C (-40F to +122F)
<b>POWER CONSUMPTION</b>	37w Array: 37w, System: 41w 65w Array: 65.3w, System: 72w 100w Array: 100w, System: 111w 140w Array: 139.9w, System: 156w
<b>DRIVERS</b>	Electronic Driver, 120-277V, 50/60Hz or 347-480V, 50/60Hz; Less Than 20% THD and PF>0.90. Standard Internal Surge Protection 6kV. 0-10V Dimming Standard for a Dimming Range of 100% to 10%; Dimming Source Current is 150 Microamps.
<b>CERTIFICATIONS</b>	 
<b>INGRESS PROTECTION</b>	IP66, Listed for Wet Locations
<b>HOUSING</b>	Die Cast and Sand Cast Aluminum Housing, Integral Heat Sinking. Photocell Adaptable.
<b>FINISH</b>	Black or Bronze Powdercoat Finish Over a Chromate Conversion Coating. Custom Colors Available Upon Request.
<b>MOUNTING OPTIONS</b>	Mounts to Square Poles or Walls with Standard Arm, or to Round Poles Using the RPADPT Adaptor (Sold Separately). Mounts to 2 3/8" Horizontal Mounting Arms with Optional Mounting Arm Adaptor.
<b>WARRANTY</b>	5-Year Warranty for -40°C to +50°C Environment.