

## SOLID STATE AREA LIGHTING



## CONTEMPORARY, ROUND FORM WALL MOUNT

**Optical Housing**

Heavy cast, low copper aluminum assembly (A356 alloy, <0.2% copper) with a minimum wall thickness of 0.188". Integrated optical and electrical chamber. LED module and heatsink are removable for servicing. Formed aluminum wall bracket mounts over recessed j-box with suitable hardware (by others) for wall material. All hardware is stainless steel. Housing is built to an IP65 standard.

**Electrical Housing**

Heavy cast low copper aluminum (A356 alloy; <0.2% copper) assembly. Minimum wall thickness is .188". Fixture Mounting Plate affixes to mounting surface over a recessed j-box. Electrical Housing anchors on the top edge of the Mounting Plate and stainless steel recessed socket head screws tighten the Electrical Housing to the Mounting Plate from the bottom.

**PLED™ Optics**

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side, maximizing usable light. Optional house side shields are available that cover each individual optic. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments. Quick-disconnects are provided above each panel for fast field replacement. All fixture optical options will provide a "UO" no uplight optical package and is dark sky friendly.

**Ambience™ Low Luminance Lens**

Optional Ambience Lens (AL) provides low luminance reduced glare distributions. Lens diffuses the PLED Optics and provides a more uniform luminance across the aperture reducing glare at all angles. Lens is provided with an aluminum frame and is sealed to the housing with high temp gasketing.

**LED Emitters**

LED thermal management is designed to maintain LED operating temperature below 90 °C, well below the manufacturers thermal max of 150 °C for long life, high lumen maintenance and color stability. High Power White LED's are driven between 350mA and 875mA for a maximum output of 2.5 Watts nominal. LED's are available in standard Warm White (2700K & 3000K), Neutral White (4000K), or Cool White (5000K). All Standard LED's have a minimum of 70 CRI. Consult Factory for other LED options. Lumen Maintenance of L94 at 60,000 hours (TM-21 calculated at 6x Test Time).

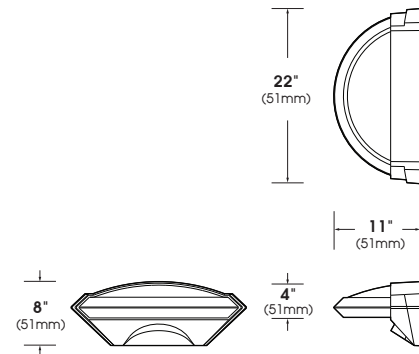
**True Amber LED's** TRA-True Amber LED's emit light in the amber spectral bandwidth centered on 585-590nm. True Amber has negligible blue light and is suitable for wildlife.

**LED Driver**

Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50/60Hz. 0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with a separate 20KV surge protector for field installation.

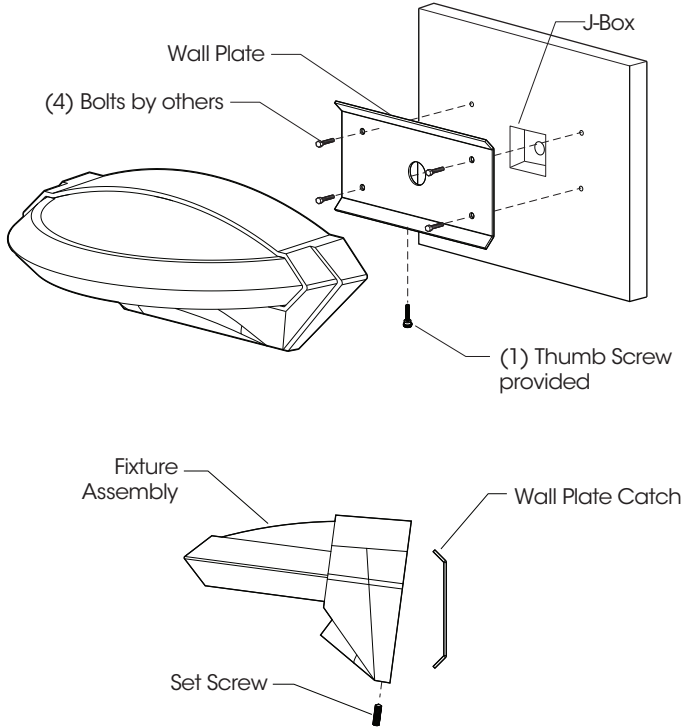
**Finish**

Super TGIC polyester powder coating is applied onto a metal substrate this has been pretreated with a four-stage process for maximum adhesion and color retention. The top coat is baked at 400° F for maximum hardness and exterior durability.

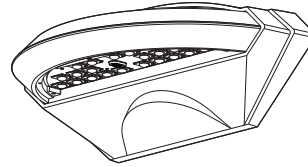

**PAC-WM**


2023308

## INSTALLATION DETAIL

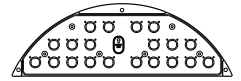


## EPA & WEIGHT



**PAC-WM**  
Max Weight = 25 lbs  
20 LED Max

## PLED™ MODULES



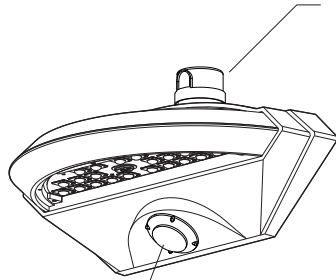
20 LED Module

## ORDERING INFORMATION

Spec/Order Example: PAC-WM/AL-ASY-HS/20LED-525mA/30K/240/RAL-8019-S/TPR7

Luminaire	Optics	LED Mode			Voltage	Finish	Options
Luminaire	Optics	LED			Voltage	Finish	Options
<input type="checkbox"/> PAC-WM	<b>PLED™</b> Distribution Type <input type="checkbox"/> Type II <b>PLED-II</b> <input type="checkbox"/> Type II Front Row <b>PLED-II-FR</b> <input type="checkbox"/> Type III Median Illuminator <b>PLED-II-MIL</b> <input type="checkbox"/> Type III Med. <b>PLED-III</b> <input type="checkbox"/> Type III Wide <b>PLED-III-W</b> <input type="checkbox"/> Type IV <b>PLED-IV</b> <input type="checkbox"/> Type IV <b>PLED-IV-FT</b> <input type="checkbox"/> Type V Narrow <b>PLED-VSQ-N</b> <input type="checkbox"/> Type V Med. <b>PLED-VSQ-M</b> <input type="checkbox"/> Type V Wide <b>PLED-VSQ-W</b>  Ambience™ Lens <input type="checkbox"/> AL-ASY <input type="checkbox"/> AL-ASY-HS <input type="checkbox"/> AL-SYM	<input type="checkbox"/> 20LED	<input type="checkbox"/> 875mA <input type="checkbox"/> 700mA <input type="checkbox"/> 525mA <input type="checkbox"/> 350mA	<input type="checkbox"/> 27K (2700K) <input type="checkbox"/> 30K (3000K) <input type="checkbox"/> 40K (4000K) <input type="checkbox"/> 50K (5000K)  <input type="checkbox"/> TRA True Amber*  Consult Factory for Other LED Color, CCT, & CRI Options	<input type="checkbox"/> UNV (120-277) <input type="checkbox"/> 347 <input type="checkbox"/> 480	<b>Standard Textured Finish</b> <input type="checkbox"/> Black <b>RAL-9005-T</b> <input type="checkbox"/> White <b>RAL-9003-T</b> <input type="checkbox"/> Grey <b>RAL-7004-T</b> <input type="checkbox"/> Dark Bronze <b>RAL-8019-T</b> <input type="checkbox"/> Green <b>RAL-6005-T</b>  <b>Premium Finishes</b> <input type="checkbox"/> Rust <input type="checkbox"/> Patina Copper <b>PC</b>  For smooth finish replace suffix "T" with suffix "S" (Example: RAL-9500-S)  Consult factor for custom colors	<input type="checkbox"/> Internal House Side Shield inc. LED Count (Example: HS-PLED/48) <b>HS-PLED</b> <input type="checkbox"/> Twist Lock Receptacle Only <b>TPR</b> <input type="checkbox"/> 7-Pin Twist Lock Receptacle Only <b>TPR7</b> <input type="checkbox"/> High-Low Dimming for Switch by Others/Select Levels 50/100 or 25/100 (Example: HLSW/25) <b>HLSW</b> <input type="checkbox"/> Photo Cell + Voltage (Example: PC120V) <b>PC+V</b> <input type="checkbox"/> Single Fuse (120V, 277V) <b>SF</b> <input type="checkbox"/> Double Fuse (208V, 240V) <b>DF</b> <input type="checkbox"/> Blue-Tooth Programmable Photo/Motion Sensor (Factory - Motion 50/100; Photo 75fc) <b>MS-F311</b> <input type="checkbox"/> Emergency Battery Backup <b>EM</b>
		# of LEDs Drive Current Color Temp - CCT	*TRA Available only in 350mA and 525mA Drive Currents  Consult Factory for Other Drive Currents				

**OPTIONS**



**Optional: PHOTOCELL SENSOR (TPC+V),  
3-PIN RECEPTACLE (TPR) or  
7-PIN RECEPTACLE (TPR7)**  
TPR = TWIST LOCK PHOTOCELL RECEPTACLE

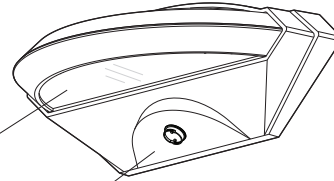
**MS-F311 BLUETOOTH  
PHOTO/MOTION SENSOR**

Factory Settings:  
No Motion - 50%  
Motion - 100%  
Delay - 15 min.  
Photocell - 75fc

Sensors can be Field  
Programmed With  
Bluetooth App

**Ambience™ LOW  
LUMINANCE LENS  
& LENS FRAME**

**BUTTON PHOTOCELL**



**High Low Dimming For Switches (HLSW)**

The HLSW is a Small Electronic Switch which Provides High Low Dimming Control Through the LED Driver's 0-10V Control. Switching is Done by Adding a Secondary AC Switched Hot Trigger Line to the HLSW in Addition to the Normal AC Power Line. When the Secondary Trigger Line is Powered, the Fixture will go to 100% Dimming. With no Power to the Trigger, the Fixture will operate at 50% or 25% Dimming. Switches for the Trigger Line can be a Normal AC Switch/Breaker or Timed Switch/Breaker.

**Wireless and Other Fixture Controls**

Contact Factory for Wireless and Other Fixture Controls and Recommendations. Most Controls Can be Integrated and Factory Installed.

## ELECTRICAL DATA GUIDE - AMPERAGE CHART

# of LEDs	mA	System Watts	120V	208V	277V	347V	480V
20	350	23.6	0.20	0.11	0.09	0.07	0.05
20	525	35.5	0.30	0.17	0.13	0.10	0.07
20	700	47.0	0.39	0.23	0.17	0.14	0.10
20	875	58.4	0.49	0.28	0.21	0.17	0.12

## ELECTRICAL DATA GUIDE - LM-80 LUMEN MAINTENANCE

LED LUMEN MAINTENANCE		
LED Life / Operating Hours	Lumen Depreciation	Lumen Depreciation Scale Factor
60,000	L96	0.96x
100,000 (6X LED Test Hrs)	L93	0.93x
150,000 (Theoretical)	L89	0.90x
200,000 (Theoretical)	L86	0.87x

TM-21 6x Test Time Dictates that L93 > 100,000 Hours.

Lumen Depreciation Calculations Done in Accordance With IESNA TM-21 & LM-80 (25°C Ambient)



## PHOTOMETRIC DATA GUIDE - LUMEN TABLES

PAC-WM-PLED																			
LED Count	Drive Current (mA)	System Watts	Dist'n Type	27K (2700K - 70CRI)			30K (3000K - 70CRI)			40K (4000K - 70CRI)			50K (5000K - 70CRI)			System Watts	TRA (590nm)		
				LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING		LUMENS	LPW	BUG RATING
20	350	23.6	II	3152	134	B1-U0-G1	3288	139	B1-U0-G1	3426	145	B1-U0-G1	3563	151	B1-U0-G1	18.2	1096	60	B0-U0-G0
			II-FR	3173	134	B1-U0-G1	3311	140	B1-U0-G1	3449	146	B1-U0-G1	3587	152	B1-U0-G1		1104	61	B0-U0-G0
			III-M	3207	136	B1-U0-G1	3346	142	B1-U0-G1	3486	148	B1-U0-G1	3625	154	B1-U0-G1		1115	61	B0-U0-G0
			III-W	2978	126	B1-U0-G1	3107	132	B1-U0-G1	3237	137	B1-U0-G1	3366	143	B1-U0-G1		1036	57	B0-U0-G1
			IV	3183	135	B1-U0-G1	3321	141	B1-U0-G1	3459	147	B1-U0-G1	3598	152	B1-U0-G1		1107	61	B0-U0-G0
			IV-FT	2899	123	B1-U0-G1	3025	128	B1-U0-G1	3151	134	B1-U0-G1	3277	139	B1-U0-G1		1008	55	B0-U0-G1
			II-HS	2305	98	B0-U0-G1	2405	102	B0-U0-G1	2505	106	B0-U0-G1	2606	110	B0-U0-G1		802	44	B0-U0-G0
			II-FR-HS	2345	99	B0-U0-G0	2447	104	B0-U0-G0	2549	108	B0-U0-G0	2651	112	B0-U0-G0		816	45	B0-U0-G0
			III-M-HS	2332	99	B0-U0-G1	2433	103	B0-U0-G1	2535	107	B0-U0-G1	2636	112	B0-U0-G1		811	45	B0-U0-G0
			III-W-HS	2282	97	B0-U0-G1	2382	101	B0-U0-G1	2481	105	B0-U0-G1	2580	109	B0-U0-G1		794	44	B0-U0-G1
			IV-HS	2409	102	B0-U0-G1	2513	106	B0-U0-G1	2618	111	B0-U0-G1	2722	115	B0-U0-G1		838	46	B0-U0-G0
			IV-FT-HS	2277	96	B0-U0-G1	2376	101	B0-U0-G1	2475	105	B0-U0-G1	2574	109	B0-U0-G1		792	44	B0-U0-G1
20	525	35.5	II	4481	126	B1-U0-G1	4676	132	B1-U0-G1	4871	137	B1-U0-G1	5066	143	B1-U0-G1	27.3	1266	46	B1-U0-G0
			II-FR	4511	127	B1-U0-G1	4707	133	B1-U0-G1	4904	138	B1-U0-G1	5100	144	B1-U0-G1		1275	47	B1-U0-G0
			III-M	4560	128	B1-U0-G1	4758	134	B1-U0-G1	4956	140	B1-U0-G1	5154	145	B1-U0-G1		1288	47	B0-U0-G0
			III-W	4234	119	B1-U0-G2	4418	124	B1-U0-G2	4602	130	B1-U0-G2	4786	135	B1-U0-G2		1196	44	B0-U0-G1
			IV	4525	127	B1-U0-G1	4722	133	B1-U0-G1	4919	139	B1-U0-G1	5116	144	B1-U0-G1		1279	47	B0-U0-G1
			IV-FT	4123	116	B1-U0-G2	4302	121	B1-U0-G2	4481	126	B1-U0-G2	4660	131	B1-U0-G2		1165	43	B0-U0-G1
			II-HS	3278	92	B0-U0-G1	3420	96	B0-U0-G1	3563	100	B0-U0-G1	3705	104	B0-U0-G1		926	34	B0-U0-G0
			II-FR-HS	3334	94	B0-U0-G1	3479	98	B0-U0-G1	3624	102	B0-U0-G1	3768	106	B0-U0-G1		942	35	B0-U0-G0
			III-M-HS	3316	93	B0-U0-G1	3460	97	B0-U0-G1	3604	102	B0-U0-G1	3748	106	B0-U0-G1		937	34	B0-U0-G0
			III-W-HS	3246	91	B0-U0-G1	3387	95	B0-U0-G1	3528	99	B0-U0-G1	3669	103	B0-U0-G2		917	34	B0-U0-G1
			IV-HS	3425	96	B0-U0-G1	3574	101	B0-U0-G1	3722	105	B0-U0-G1	3871	109	B0-U0-G1		968	35	B0-U0-G0
			IV-FT-HS	3237	91	B0-U0-G2	3377	95	B0-U0-G2	3518	99	B0-U0-G2	3659	103	B0-U0-G2		915	34	B0-U0-G1
20	700	47.0	II	5637	120	B1-U0-G1	5882	125	B2-U0-G1	6127	130	B2-U0-G1	6372	136	B2-U0-G2	N/A	N/A		
			II-FR	5674	121	B2-U0-G1	5921	126	B2-U0-G1	6168	131	B2-U0-G1	6414	136	B2-U0-G1				
			III-M	5735	122	B1-U0-G2	5984	127	B1-U0-G2	6234	133	B2-U0-G2	6483	138	B2-U0-G2				
			III-W	5325	113	B1-U0-G2	5556	118	B1-U0-G2	5788	123	B1-U0-G2	6019	128	B1-U0-G2				
			IV	5692	121	B1-U0-G1	5939	126	B1-U0-G2	6187	132	B2-U0-G2	6435	137	B2-U0-G2				
			IV-FT	5185	110	B1-U0-G2	5410	115	B1-U0-G2	5636	120	B1-U0-G2	5861	125	B1-U0-G2				
			II-HS	4122	88	B0-U0-G1	4302	92	B0-U0-G1	4481	95	B0-U0-G1	4660	99	B1-U0-G1				
			II-FR-HS	4193	89	B0-U0-G1	4376	93	B0-U0-G1	4558	97	B0-U0-G1	4740	101	B0-U0-G1				
			III-M-HS	4170	89	B0-U0-G1	4351	93	B0-U0-G2	4533	96	B0-U0-G2	4714	100	B0-U0-G2				
			III-W-HS	4082	87	B0-U0-G2	4259	91	B0-U0-G2	4437	94	B0-U0-G2	4614	98	B0-U0-G2				
			IV-HS	4308	92	B0-U0-G1	4495	96	B0-U0-G1	4682	100	B0-U0-G2	4869	104	B0-U0-G2				
			IV-FT-HS	4071	87	B0-U0-G2	4248	90	B0-U0-G2	4425	94	B0-U0-G2	4602	98	B0-U0-G2				
20	875	58.4	II	6639	114	B2-U0-G2	6928	119	B2-U0-G2	7216	124	B2-U0-G2	7505	129	B2-U0-G2	N/A	N/A		
			II-FR	6683	114	B2-U0-G1	6974	119	B2-U0-G1	7264	124	B2-U0-G1	7555	129	B2-U0-G1				
			III-M	6755	116	B2-U0-G2	7048	121	B2-U0-G2	7342	126	B2-U0-G2	7636	131	B2-U0-G2				
			III-W	6272	107	B1-U0-G2	6545	112	B1-U0-G2	6817	117	B1-U0-G2	7090	121	B1-U0-G2				
			IV	6704	115	B2-U0-G2	6996	120	B2-U0-G2	7287	125	B2-U0-G2	7579	130	B2-U0-G2				
			IV-FT	6107	105	B1-U0-G2	6373	109	B1-U0-G2	6638	114	B1-U0-G2	6904	118	B1-U0-G2				
			II-HS	4855	83	B1-U0-G2	5066	87	B1-U0-G2	5278	90	B1-U0-G2	5489	94	B1-U0-G2				
			II-FR-HS	4939	85	B0-U0-G1	5154	88	B0-U0-G1	5368	92	B0-U0-G1	5583	96	B0-U0-G1				
			III-M-HS	4912	84	B0-U0-G2	5126	88	B0-U0-G2	5339	91	B0-U0-G2	5553	95	B0-U0-G2				
			III-W-HS	4808	82	B0-U0-G2	5017	86	B0-U0-G2	5226	89	B0-U0-G2	5436	93	B0-U0-G2				
			IV-HS	5074	87	B0-U0-G2	5295	91	B0-U0-G2	5515	94	B0-U0-G2	5735	98	B0-U0-G2				
			IV-FT-HS	4795	82	B0-U0-G2	5003	86	B0-U0-G2	5212	89	B0-U0-G2	5420	93	B0-U0-G2				

PAC-WM-PLD-AL																			
LED Count	Drive Current (mA)	System Watts	Dist'n Type	27K (2700K - 70CRI)			30K (3000K - 70CRI)			40K (4000K - 70CRI)			50K (5000K - 70CRI)			System Watts	TRA (590nm)		
				LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING		LUMENS	LPW	BUG RATING
20	350	23.6	ASY	2558	104	B1-U0-G1	2558	108	B1-U0-G1	2665	113	B1-U0-G1	2771	117	B1-U0-G1	18.2	853	47	B0-U0-G0
			ASY-HS	1754	74	B1-U0-G1	1831	78	B1-U0-G1	1907	81	B1-U0-G1	1983	84	B1-U0-G1		610	34	B0-U0-G0
20	525	35.5	ASY	3638	98	B1-U0-G1	3638	102	B1-U0-G1	3789	107	B1-U0-G1	3941	111	B1-U0-G1	27.3	985	36	B1-U0-G1
			ASY-HS	2495	70	B1-U0-G1	2603	73	B1-U0-G1	2712	76	B1-U0-G1	2820	79	B1-U0-G1		705	26	B0-U0-G0
20	700	47.0	ASY	4525	92	B2-U0-G1	4525	96	B2-U0-G1	4713	100	B2-U0-G1	4902	104	B2-U0-G1	N/A	#N/A		
			ASY-HS	3103	66	B1-U0-G1	3238	69	B1-U0-G1	3373	72	B1-U0-G1	3507	75	B1-U0-G1		#N/A		
20	875	58.4	ASY	5327	87	B2-U0-G1	5327	91	B2-U0-G1	5548	95	B2-U0-G1	5770	99	B2-U0-G1	N/A	#N/A		
			ASY-HS	3653	63	B1-U0-G1	3811	65	B1-U0-G1	3970	68	B1-U0-G1	4129	71	B1-U0-G1		#N/A		