

# Features & Specifications

**PLT**  
&  
**AREA LIGHTS**

**INTENDED USE** – LED area lights are all-purpose site lighting fixtures that can be used for parking lots, car dealerships, outdoor stadiums, pathways, and parks. These LED fixtures will yield a significant reduction in energy consumption compared to standard HID systems and virtually eliminate ongoing maintenance expenses with a long-lasting lifespan. Designed for outdoor applications, the LED area light fixtures will provide reduced offsite visibility as well as effective security lighting.

**CONSTRUCTION** – Heavy-duty die cast aluminum housing with bronze polyester powder paint for corrosion-free durability. Resistant to rough vibrations and external impacts. Acrylic lens protects the LEDs and provides even light distribution. Housing is sealed with a silicone gasket, protecting against moisture and environmental contaminants (IP65 rated). Modular LED bricks wired in parallel for ease of maintenance.

**OPTICS** – High-performance LEDs maintain a 10,400 Lumen output at 4000K for 70,000 hours of use.  $\geq 70$  CRI.

Type III light distribution is intended for perimeter lighting of parking lots and along the edges of an open area as well as large roadways and parking lot aisles. It casts more light forward so that it can be used to light roads and pathways from the side of the road rather than being installed in the median.

LED area lights are designed to have a more directional beam angle than metal halide and high pressure sodium fixtures so no light is lost within or above the fixture. These LED fixtures also do not lose Lumens in the same way as a HID fixture, meaning the brightness stays consistent longer and needs to be replaced far less frequently.

**ELECTRICAL** – Input voltage of 120-277 VAC, 50/60Hz. Includes 4kV surge protection standard. 10kV and 20kV optional. Includes a shorting cap and photocell receptacle. Features a Sosen LED Driver.

**INSTALLATION** – Versatile mount design can be used with different styles of mounts, including slipfitter, straight arm, trunnion, and u brackets. Mounts sold separately.

**LISTINGS** – UL Certified to safety standards for wet location. Rated for -40°F - +104°F ambient temperature. IP-65 Rated. IK10 rated - protected against 20 joules of impact. DesignLights Consortium® (DLC) qualified product. DLC Part Number @: PLTB933X11X1.

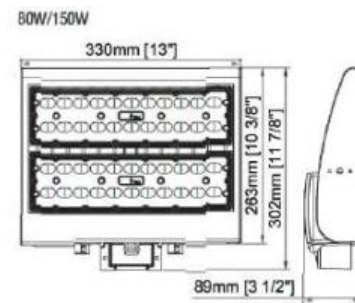
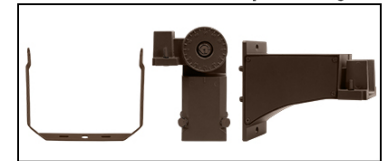
**WARRANTY** – 5-year warranty. PLT products that are damaged or defective will be repaired or replaced at PLT's choosing for a period of 5 years. Contact 1-800-624-4488 for more information.

**ADD-ONS** – Pair with timers, photocells, and motion sensors for hassle free bright night time lighting and energy savings during the day. If pairing with a photocell, it must be LED compatible in order to operate properly. If using a conventional photocell, be sure to replace it with one rated for use with LEDs. While conventional light sensors will still work with LED fixtures at first, they will burn out prematurely. The same is true for motion sensors.

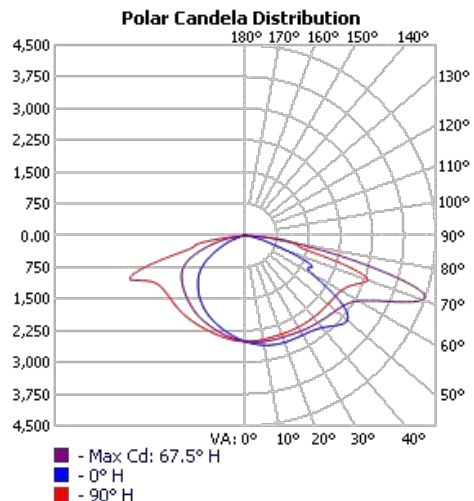
If you live in the northern hemisphere, your photocells should face north whenever possible. North-facing light sensors allow for the most balanced on/off schedule based on the arc of the sun. If pointed west, it will turn on and off late and vice versa for east-facing light sensors. Photocells facing the south will be exposed to the most direct sunlight which can burn out the components and cause premature failure. If you want your lights to come on early or late, we recommend pointing the light sensor northeast or northwest, respectfully. The opposite is true south of the equator.



Mounts Sold Separately



Dimensions  
Height: 13 in.  
Width: 11.9 in.  
Depth: 3.5 in.



SKU #	Kelvin	Lumens	CRI	Wattage	Voltage	DLC?	Mounting	Life Hours	Warranty
PLT-11542	4000K	10,400	70	80	120-277	Yes	Pole or Wall	70,000	5 Years

# Photometrics

## ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	2,041.3	19.1%	19.1%
0-40	3,504.8	32.8%	32.8%
0-60	7,292.9	68.3%	68.3%
60-90	3,330.2	31.2%	31.2%
70-100	1,478.6	13.8%	13.8%
90-120	19.9	0.2%	0.2%
0-90	10,623.1	99.4%	99.5%
90-180	57.6	0.5%	0.5%
0-180	10,680.7	100%	100%

## ROADWAY SUMMARY

CUTOFF CLASSIFICATION:	SEMICUTOFF	
DISTRIBUTION:	TYPE III, MEDIUM	
MAX CD, 90 DEG VERT:	5.2	
MAX CD, 80 TO <90 DEG:	1,512.6	
	LUMENS	% LAMP
DOWNWARD STREET SIDE:	6,508.4	60.9%
DOWNWARD HOUSE SIDE:	4,115.2	38.5%
DOWNWARD TOTAL:	10,623.7	99.5%
UPWARD STREET SIDE:	25.3	0.2%
UPWARD HOUSE SIDE:	32.3	0.3%
UPWARD TOTAL:	57.6	0.5%
TOTAL LUMENS:	10,681.2	100%

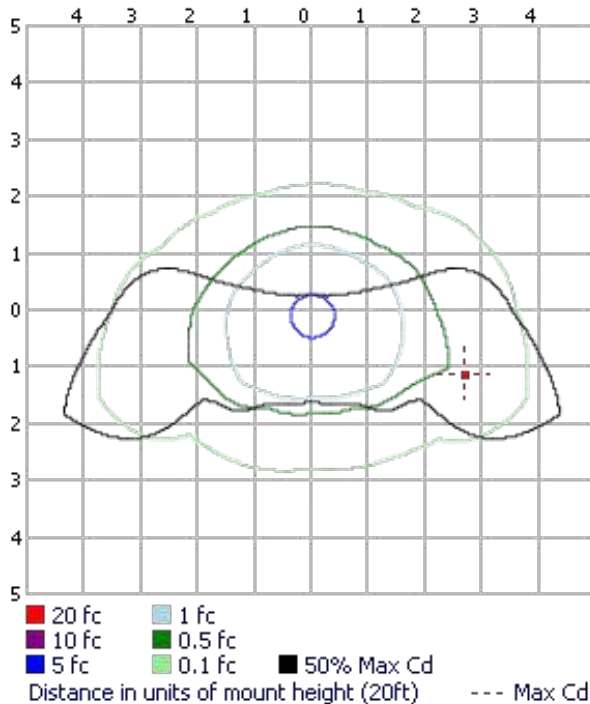
## LUMENS PER ZONE

ZONE	LUMENS	% TOTAL	ZONE	LUMENS	% TOTAL
0-10	237.8	2.2%	90-100	4.0	0%
10-20	695.4	6.5%	100-110	6.9	0.1%
20-30	1,108.1	10.4%	110-120	9.0	0.1%
30-40	1,463.5	13.7%	120-130	9.6	0.1%
40-50	1,781.0	16.7%	130-140	9.1	0.1%
50-60	2,007.1	18.8%	140-150	7.8	0.1%
60-70	1,855.6	17.4%	150-160	6.0	0.1%
70-80	1,233.8	11.6%	160-170	3.8	0%
80-90	240.8	2.3%	170-180	1.3	0%

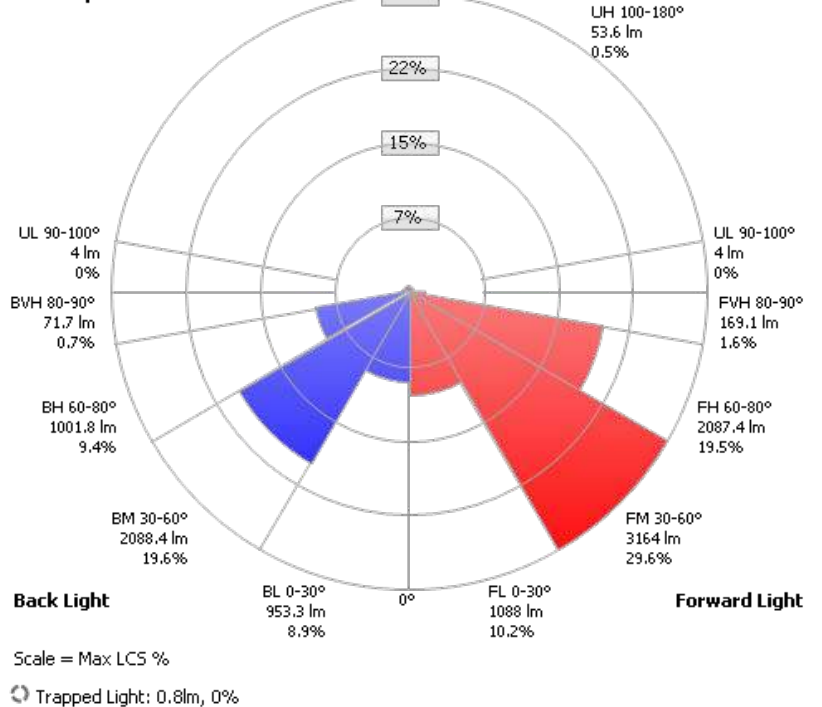
## LCS TABLE

BUG RATING	B3 - U3 - G3
FORWARD LIGHT	LUMENS LUMENS %
LOW(0-30):	1,088.0 10.2%
MEDIUM(30-60):	3,164.0 29.6%
HIGH(60-80):	2,087.4 19.5%
VERY HIGH(80-90):	169.1 1.6%
BACK LIGHT	
LOW(0-30):	953.3 8.9%
MEDIUM(30-60):	2,088.4 19.6%
HIGH(60-80):	1,001.8 9.4%
VERY HIGH(80-90):	71.7 0.7%
UPLIGHT	
LOW(90-100):	4.0 0%
HIGH(100-180):	53.6 0.5%
TRAPPED LIGHT:	0.8 0%

## Isofootcandle Plot



## LCS Graph



# Photometrics

CANDELA TABLE - TYPE C																	
	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	360
0	2502	2502	2502	2502	2502	2502	2502	2502	2502	2502	2502	2502	2502	2502	2502	2502	2502
5	2573	2568	2553	2528	2501	2472	2447	2429	2421	2425	2440	2464	2490	2520	2547	2565	2573
10	2630	2620	2589	2543	2492	2436	2387	2352	2336	2343	2371	2416	2468	2525	2576	2614	2630
15	2668	2652	2607	2549	2482	2401	2324	2272	2252	2259	2298	2362	2440	2516	2585	2642	2668
20	2689	2667	2615	2559	2481	2372	2257	2189	2165	2175	2219	2310	2415	2504	2579	2649	2689
25	2699	2672	2621	2577	2490	2347	2182	2098	2073	2083	2132	2258	2397	2498	2569	2645	2699
30	2713	2677	2634	2607	2500	2320	2096	1991	1970	1979	2027	2203	2385	2503	2565	2639	2713
35	2749	2697	2656	2643	2508	2288	1999	1871	1854	1859	1908	2138	2371	2516	2576	2647	2749
40	2839	2764	2696	2679	2516	2257	1891	1741	1724	1725	1783	2064	2356	2533	2605	2696	2839
45	3010	2925	2769	2722	2526	2228	1784	1605	1584	1584	1655	1991	2336	2551	2656	2832	3010
50	3134	3157	2932	2773	2536	2201	1671	1454	1428	1433	1531	1917	2314	2572	2759	3061	3134
55	2760	3120	3242	2863	2557	2174	1547	1264	1219	1232	1397	1834	2311	2607	2993	3129	2760
60	1833	2245	3469	3087	2611	2143	1365	1001	924	932	1200	1732	2350	2705	3346	2369	1833
65	1744	1700	2376	3672	2781	2098	1105	706	632	628	924	1553	2539	3053	2770	1604	1744
70	1054	1330	1442	4448	3082	1889	782	437	390	381	633	1236	2906	3957	1463	1415	1054
75	456	629	1504	3512	1969	1261	429	210	184	190	330	833	1706	3451	1471	709	456
80	173	251	856	1513	1234	658	162	110	103	104	140	436	1156	1211	1256	292	173
85	45	68	189	630	427	120	60	44	31	41	48	86	273	464	254	77	45
90	1	1	2	3	4	5	3	2	1	2	3	5	5	4	2	1	1
95	1	1	2	4	5	6	5	3	2	2	4	6	8	5	2	2	1
100	2	2	3	5	6	8	7	4	3	4	6	8	10	7	3	2	2
105	4	4	4	7	8	9	8	6	5	6	8	10	11	8	4	3	4
110	6	5	5	8	9	10	10	8	7	7	10	11	12	9	6	5	6
115	7	6	6	8	10	11	11	9	9	9	12	12	13	10	7	6	7
120	8	7	7	9	11	12	12	10	10	11	13	13	13	11	8	7	8
125	9	8	8	10	11	13	12	11	12	12	13	14	14	11	8	8	9
130	10	9	9	10	12	13	12	12	12	12	13	14	14	12	9	9	10
135	10	10	9	11	12	13	13	13	13	13	14	14	13	12	10	10	10
140	11	10	10	11	12	13	14	13	13	13	14	14	13	12	10	10	11
145	11	11	11	11	12	13	14	14	14	14	14	13	13	12	11	11	11
150	12	12	11	12	12	13	13	14	14	14	14	13	13	13	12	12	12
155	12	12	12	12	12	13	14	14	14	15	14	14	13	13	13	12	12
160	12	13	12	13	13	13	14	14	14	15	14	14	13	13	13	12	12
165	13	13	13	13	13	13	14	14	14	15	14	14	14	14	13	13	13
170	14	14	13	14	14	14	14	14	15	14	14	14	14	14	13	13	14
175	14	14	14	14	14	14	14	14	15	14	14	14	14	14	14	14	14
180	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14





## Plug & Play Mount Design

LED: LUMILEDS SMD 3030. 135LPW for fixture.

Driver: 100-277VAC, 200-480VAC/50-60Hz

Light Distribution: TypeII/ III/TypeIV/V/ 90x120°

Surge Protection: 4KV standard, 20KV for option

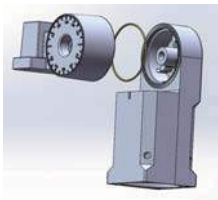
3G Vibration Test: Passed

Salt-Spray Test: 30,000hrs

IK10 Rated.

IP65 Rated.

Slip Fitter



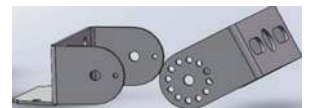
Straight Mount For Round Pole



Straight Mount for Square Pole



Trunnion



### Installation Remarks

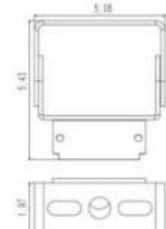
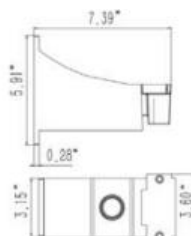
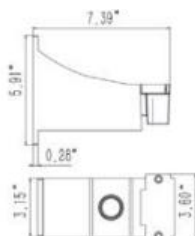
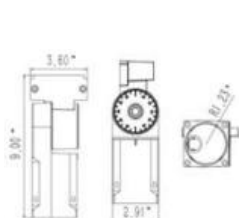
1. Installation angle: 0-90°
2. Max Pole size: 2-3/8"
3. Each rotation is 4°
4. Max Load Weight: 110lbs

1. Installation: wall mount or for Round Pole.
2. Pole size: 4",5",6"
3. Max Load Weight:110lbs

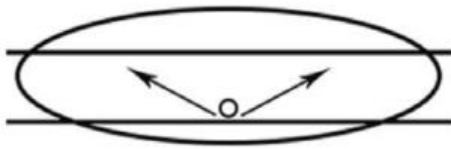
1. Installation: wall mount or for Round Pole.
2. Min Pole size: 3"x3"
3. Max Load Weight:110lbs

1. Installation angle: 0-180°
2. Max Pole size: 2-3/8"
3. Each rotation is 30°
4. Max Load Weight:110lbs

### Dimensions

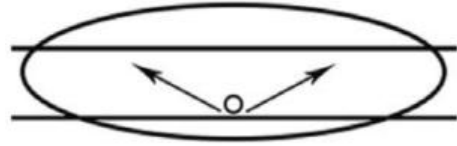


## Type II



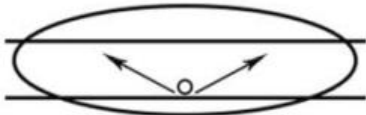
The Type II distribution is used for wide walkways, on ramps and entrance roadways, as well as other long, narrow lighting. This type is meant for lighting larger areas and usually is located near the roadside. You'll find this type of lighting mostly on smaller side streets or jogging paths. Type II light distributions have a preferred lateral width of 25 degrees. They are generally applicable to luminaires located at or near the side of relatively narrow roadways, where the width of the roadway does not exceed 1.75 times the designed mounting height.

## Type III



The Type III distribution is meant for roadway lighting, general parking areas and other areas where a larger area of lighting is required. Type III lighting needs to be placed to the side of the area, allowing the light to project outward and fill the area. This produces a filling light flow. Type III light distributions have a preferred lateral width of 40 degrees. This distribution is intended for luminaires mounted at or near the side of medium width roadways or areas, where the width of the roadway or area does not exceed 2.75 times the mounting height.

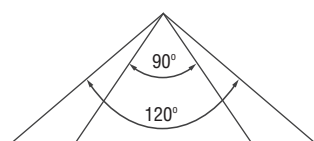
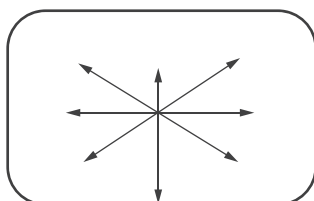
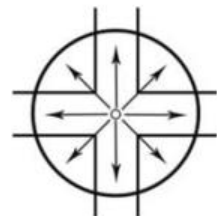
## Type IV



Type IV The Type IV distribution produces a semicircular light meant for mounting on the sides of buildings and walls. It's best for illuminating the perimeter of parking areas and businesses. The intensity of the Type IV lighting has the same intensity at angles from 90 degrees to 270 degrees. Type IV light distributions have a preferred lateral width of 60 degrees. This distribution is intended for side-of-road mounting and is generally used on wide roadways where the roadway width does not exceed 3.7 times the mounting height.

## Type V

Type V produces a circular distribution that has the same intensity at all angles. This distribution has a circular symmetry of candlepower that is essentially the same at all lateral angles. It is intended for luminaire mounting at or near center of roadways, center islands of parkway, and intersections. It is also meant for large, commercial parking lot lighting as well as areas where sufficient, evenly distributed light is necessary



## 90x120°

90x120° distribution is meant for flood light luminaires and is ideal for large open areas, building outside areas, stadiums, parks, billboards, etc.



Parking Lots



Campuses



Auto Dealerships