



L Type Post Top Mounting

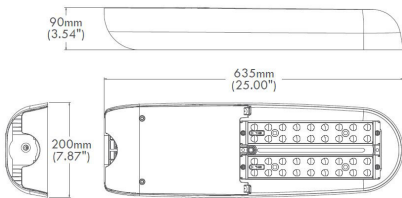
T Type Side Entry Mounting



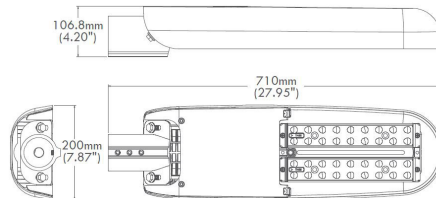
**PRODUCT INTRODUCTION**

Model SP is an ideal solution for street lighting, available with a variety of IESNA optical variants and configuration options. Aluminium Die-casting housing with good corrosion resistance. Optional pole/spigot mounting. Full cut off and Dark Sky friendly.

**TECHNICAL DRAWING**



T Type Mounting



L Type Mounting

## PERFORMANCE SUMMARY

Input Voltage	100-277VAC, 50/60Hz
Nominal Power	80W~160W
Efficiency	Up to 160 LPW
CRI	Ra>70(Default)/ Ra>80/ Ra>90
Power Factor	>0.9 at full load
Total Harmonic Distortion	<20% at full load
Surge Protection Device	Imax 10KA
Optic (IESNA)	Type II, Type III, Type IV
Operating Temperature	-40°C~+50°C
Accessories & Options	1-10V Dimming, Motion Sensor, Photocell, Back Light Shield, Safety Cable
Color Options	Gray
L70/L90	>200,000H/ >60,000H
Limited Warranty	10 years limited warranty



Not all products are qualified on the DLC QPL. To view our DLC qualified products, please consult the DLC Qualified Products List at [www.designlights.org](http://www.designlights.org)

## ORDERING INFORMATION

MODEL	INPUT VOLTAGE	MOUNTING	COMMON OPTIC	CCT	COLOR	OPTIONS
SPAC30	L 100-277VAC	L Post Top Mounting	T2S	19K	GY Gray-RAL7004	DIM 1-10V Dimming
SPAD120			T2M	1900K		
SPA160		T Side Entry Mounting	T2L	22K		MMS Motion Sensor
			T3S	2200K		
			T3M	3000K		PC3 Photocell 3PIN
			T4M	40K		PC7 Photocell 7PIN
			4000K	BLS Back Light Shield		
	50K	5000K		SAC Safety Cable		
	57K	5700K		ORL Optics Rotated Left		
				ORR Optics Rotated Right		

With the exception of the DIM, all options require prior confirmation with the engineer team. Option to equip with NEMA 7 Pin receptacle & Smart Lighting Node, to be compatible with wireless mesh control system.

## SPECIFICATION FEATURES

### Construction:

Die cast aluminum housing. Modular design allows for easy installation, replacement and maintenance. This design also creates a chimney effect which enables passive heat dissipation. IK08 rated. IP66 water-proof and dust-proof rated.

### Optics:

Patented, high-efficiency spill light control technology. With a wide-range of optic lenses and flux options for the luminaire, it can send light exactly in the right direction and illuminate only the area of interest as efficient as possible. This will let you avoid any light waste and shine light only where is needed. With multiple spill light control options, it diminishes the light that shines towards the sky and windows of houses around the field of play to protect night preservation and biodiversity and minimize light nuisance issues.

### Electrical:

100-277VAC 50/60Hz Operation. The SP is suitable for operation in -40°C to 50°C ambient environment. Available in standard 700mA, 1050mA and 1400mA driver current.

### Mounting:

L-Type Post-top mounting allow for mounting flexibility. -6~+15 degree of titling angle adjustment. Adjustable for 1 5/8-2 3/8" (42mm-60mm) O.D. tenon. Brackets are available for different installations. Full cut off and Dark Sky friendly.

### Finish:

Housing finished in super durable powder coat paint, corrosion resistant polyester powder painted 100µm thickness. Meets 1000-hour salt spray certification per ASTM Standard B117. Standard housing color of Gray. Customized colors are available.

### Certification:

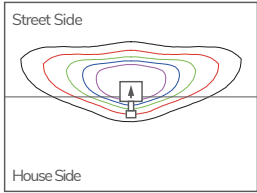
- cULus Listed
- CE-LVD/CE-EMC/CB
- DLC Premium qualified versions available
- IP66 /IK08
- RoHS compliant
- Dark Sky Friendly, IDA Approved when ordered with 3000K CCT
- Endurance tested to withstand 1,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B117
- 10KA surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Certified to ANSI C136.31-2010, 3G bridge and overpass vibration standards

## LUMINAIRE EPA

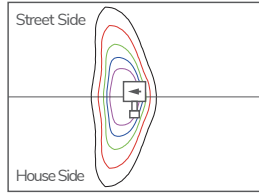


SPAC80	SPAD80	SPAE160
0.066	0.066	0.066

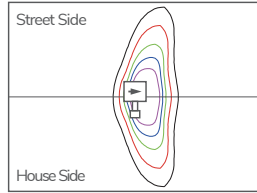
## OPTIC ORIENTATION



Standard



Optics Rotated Left@90°



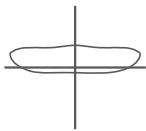
Optics Rotated Right@90°

## OPTICAL DISTRIBUTION

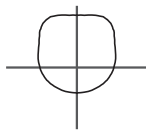
Type II Medium



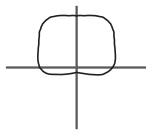
Type II Medium  
Spill Control



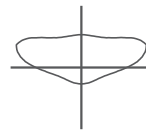
Type III Short



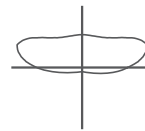
Type III Short  
Spill Control



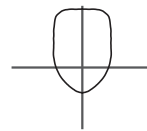
Type III Medium



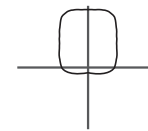
Type III Medium  
Spill Control



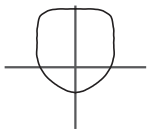
Type IV Very  
Short



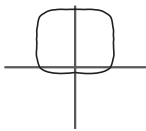
Type IV Very  
Short Spill Control



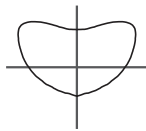
Type IV Short



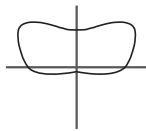
Type IV Short  
Spill Control



Type IV Medium



Type IV Medium  
Spill Control



60° Flood



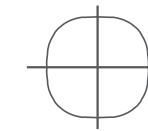
90° Flood



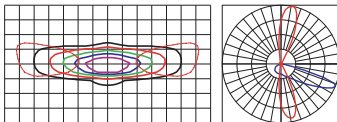
Type V Square  
Medium



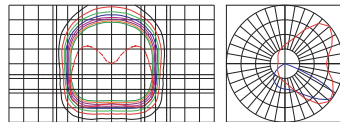
Type V Square  
Wide



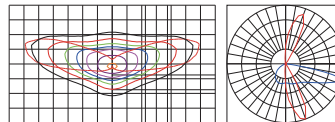
## PHOTOMETRY



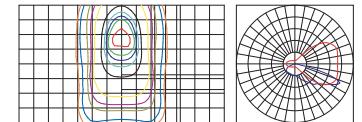
T2M Type II Medium



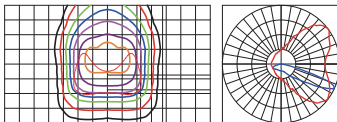
T3S Type III Short



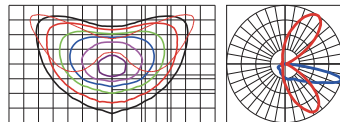
T3M Type III Medium



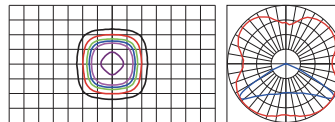
T4VS Type IV Very Short



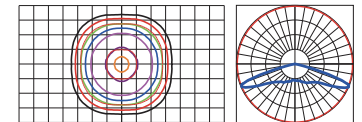
T4S Type IV Short



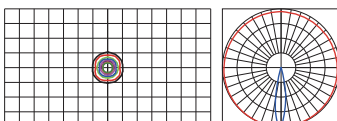
T4M Type IV Medium



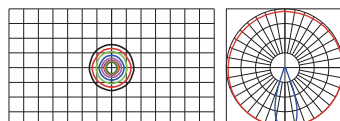
T5M Type V Square Medium



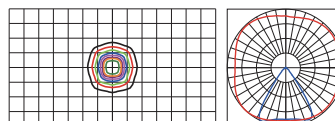
T5W Type V Square Wide



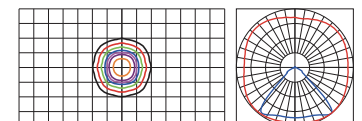
T20D 20° Flood



T40D 40° Flood



T60D 60° Flood



T90D 90° Flood

**PRODUCT IMAGE**



SPAC80/SPAD120/SPAE160

**BRIEF SPECIFICATIONS**

Model	Nominal power	LED current	Module number	Module power	Product size L*W*H (mm/in)	Product size L*W*H (mm/in)	Net weight	Gross weight	Typical luminous flux(lm)	Typical efficiency (lm/W)
<b>100-277VAC</b>										
SPAC80L	80W	700mA	2	40W	710(27.95)*200(7.87)*106.8(4.20)	770(30.31)*255(10.04)*180(7.09)	6.0KG	7.0KG	11120	139
SPAD120L	120W	1050mA	2	60W	710(27.95)*200(7.87)*106.8(4.20)	770(30.31)*255(10.04)*180(7.09)	6.2KG	7.2KG	16080	134
SPAE160L	160W	1400mA	2	80W	710(27.95)*200(7.87)*106.8(4.20)	770(30.31)*255(10.04)*180(7.09)	6.2KG	7.2KG	20480	128

## CERTIFICATION & STANDARDS

Certification	Standards	Remark
CE-LVD Low Voltage Directive (2014/35/EC)	EN 60598-2-3/ A1:2011	Applicable for Street Light
	EN 60598-2-5:2015	Applicable for Flood Light
	EN 60598-1:2015/ A11:2018	
	EN 62471:2008	
	EN 62493:2015	
CE-EMC Electromagnetic Compatibility Directive (2014/30/EU)	EN 55015:2013/ A1:2015	
	EN 61547:2009	
	EN 61000-3-2:2014	
	EN 61000-3-3:2013	
CE-ErP Energy-Related Products Directive (2009/125/EU)	EU 1194/ 2012:2012-12-12	
	EC 244/ 2009:2009-03-18	
	EU 859/ 2009:2009-09-18	
CE-RoHS Directive (2011/65/EU)	EN 62321:2009	
CB	IEC 60598-2-3/ A1:2011	Applicable for Street Light
	IEC 60598-2-5:2015	Applicable for Flood Light
	IEC 60598-1:2014	
	IEC 62471:2006	
	IEC 62471-2:2009	
ENEC	EN 60598-2-3/ A1:2011	Applicable for Street Light
	EN 60598-2-5:2015	Applicable for Flood Light
	EN 60598-1: 2015/ A1: 2018	
	EN 62471:2008	
	EN 62493:2010	
SAA	AS/ NZS60598.2.3:2015	
	AS/ NZS60598.1:2017	
ATEX ATEX 95 Equipment Directive (94/9/EC)	EN 60079-0:12	
	EN 60079-11:12	
	EN 60529:1989+A1:1999	
UL	UL1598	
	UL8750	
	CSA C22.2 No. 250.0-08 CSA C22.2 No. 250.13-14	
FCC	Title 47 CFR Part 15	
PSE	Japan Electrical Appliance and Material Safety Law Ministerial Ordinance Attached Table No. 8 (Safety) Japan Electrical Appliance and Material Safety Law Ministerial Ordinance Attached Table No. 10 (EMC)	
Photobiological Safety	EN 62471:2008 IEC 62471:2006	
Vibration test	ANSI C136.31-2010	Applicable for Street Light
	IEC/ EN 60598-2-5 clause 5.6.7	Applicable for Flood Light
Salt spray test	ISO 9227:2012	
IK08 Impact resistance test IP65 or IP67 test	ASTM B117	
	IEC 62262:2002	
Photometric and Integrating Sphere test	IEC/ EN 60598-1:2015 clause 9.2.2 and clause 9.2.6 or clause 9.2.8	
	IES LM-79-2008	
	ANSI C82.77-2002	
	ANSI C78.377-2011	
	CIE13.3-1995	
	CIE15-2004	
LED Module	IES TM-15-11	
	IES LM-63-2002	
LED Lamps	IEC/ EN 62031:2008+A1:2013	
	IES LM-80-2008	
	ANSI C78.377-2011	
	JESD22 A108	
	JESD22 A101C	
	JESD22 A105	
	JESD22 B104	
JESD22 A114		
LED Driver	EN 61347-1:2008	
	EN 61347-2-13:2006	
	EN 62384:2006+A1:2009	
	EN 55015:2006+A1:2007+A2:2009	
	EN 61000-3-2:2006+A1:2009+A2:2009	
	EN 61000-3-3:2008	
	EN 61547:2009	
	IEC 62386 Part 102 and Part 207	Applicable for DALI
	UL1012 UL879 UL935	
	FCC Title 47 CFR Part 15 Class A	
Surge Protection Device	ANSI/ IEEE C62.41.2-2002 UL1449	
Receptacle	ANSI C136.10-2010	
Dimming Receptacle	ANSI C136.41-2013	