



L Type Mounting



T Type Mounting



U Type Mounting



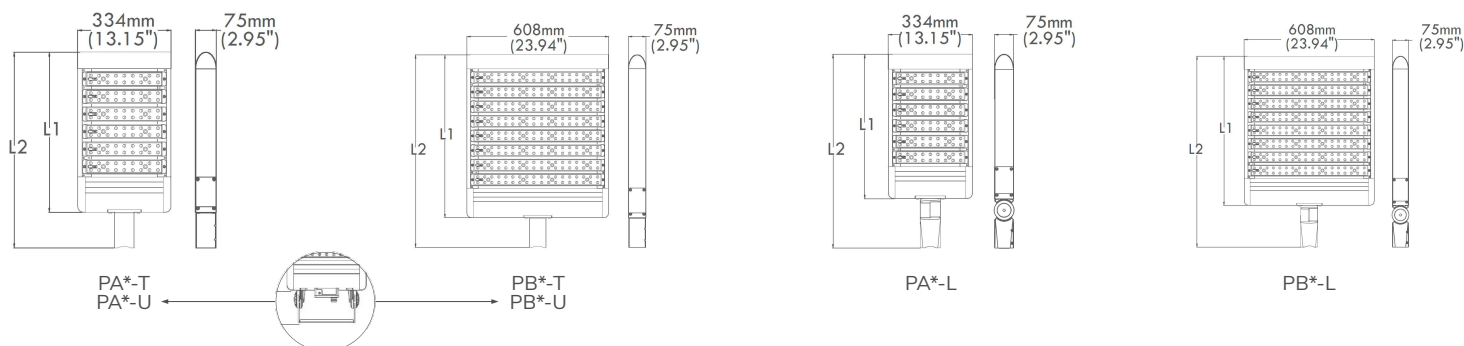
PRODUCT INTRODUCTION

The Model P has been designed to either provide reliable area lighting (Area Light) for applications such as sports venues, airports, ports or to provide the most powerful & reliable high-power lighting for high-mast applications (Flood Light).

With superior spill light control design, high light output and low weight, these fixtures are designed to provide a superior quality anti-glare light, that can be used for both airports and recreational & professional sports venues.

The modern, yet rugged fixture housing is constructed of high grade aluminum with exceptional heat sink design, insure that these flood light fixtures will last for more than 20 years or 100,000 hours of operation, making them virtually maintenance free for a lifetime.

TECHNICAL DRAWING



PERFORMANCE SUMMARY

Input Voltage	100-277VAC or 277-480VAC, 50/ 60Hz
Nominal Power	40W~960W
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, Type V
Operating Temperature	-40°C~+50°C
Accessories & Options	1-10V Dimming, PWM, DALI, Motion Sensor, Photocell, Back Light Shield, Bird Spike
Color Options	Gray, Black, Bronze
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

ORDERING INFORMATION

MODEL	INPUT VOLTAGE	MOUNTING	COMMON OPTIC	CCT	COLOR	OPTIONS
PAC40	L 100-277VAC	T	T2S	19K	GY	DIM
PAC80		L	T3S	1900K	Gray-RAL7004	1-10V Dimming
PAC120	H 277-480VAC	U	T3M	22K	BK	PWM
PAC160			T4VS	2200K	Black-RAL9011	10V PWM Control
PAC200			T4S	30K	BZ	DALI
PAC240			T4M	3000K	Bronze-RAL8019	DALI Control
PAC320			T5M	40K		MMS
PAD60			T5W	4000K		Motion Sensor
PAD120			T10D	50K		PC3
PAD180			T20D	5000K		Photocell 3PIN
PAD240			T40D	57K		PC7
PAD300			T60D	5700K		Photocell 7PIN
PAD360			T90D			PCM
PAD480						Photocell MINI
PBD720						BLS
PBD960						Back Light Shield
						BSP
						Bird Spike
						ORL
						Optics Rotated Left
						ORR
						Optics Rotated Right

SPECIFICATION FEATURES

Construction:

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die cast aluminum end caps enclose housing and extruded aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. 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:

LED drivers can be mounted to removable tray assembly, which is separated drivers pack, for ease of maintenance. 100-277VAC 50/60Hz, 277-480VAC 50/60Hz Operation. The Model P is suitable for operation in -40°C to 50°C ambient environment. Available in standard 700mA, 1050mA driver current.

Mounting:

T-type and L-type Post-top mounting allow for mounting flexibility. Each type of mounting method can be shifted by only change the mounting bracket for ease of installation and stock. Extruded aluminum arm includes internal bolt builders allowing for easy positioning of fixture during mounting. The T-type bracket can be mounted on both round pole and square square pole without extra adapter.

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 colors of Gray, other housing colors can be customized.

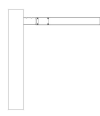
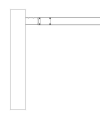
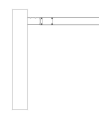
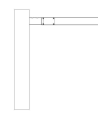
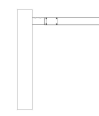
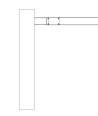
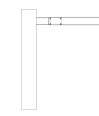
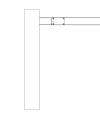
Certification:

- cULus Listed
- CE-LVD/CE-EMC/CB
- SAA
- DLC Premium qualified versions available
- IP66 /IK10
- RoHS compliant
- 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

T Type Fixed Arm Mount



PAC40 PAD60	PAC80 PAD120	PAC120 PAD180	PAC160 PAD240	PAC200 PAD300	PAC240 PAD360	PAC320 PAD480	PBD720	PBD960
								
0.32	0.36	0.41	0.45	0.50	0.55	0.65	0.60	0.69

L Type Adjustable Arm Mount

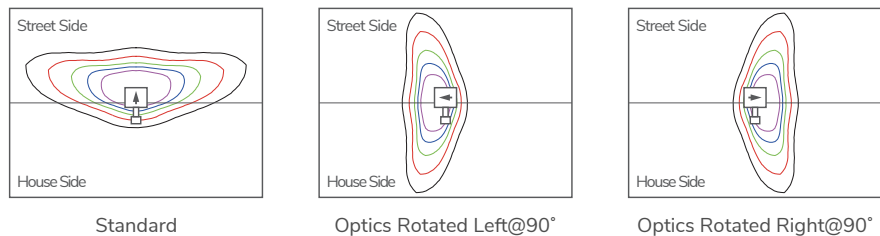


	0° Tilt	10° Tilt	20° Tilt	30° Tilt	45° Tilt	60° Tilt	70° Tilt	80° Tilt	90° Tilt
									
PAC40 PAD60	0.36	0.44	0.50	0.58	0.66	0.73	0.81	0.87	0.95
PAC80 PAD120	0.41	0.51	0.60	0.70	0.80	0.89	0.99	1.08	1.18
PAC120 PAD180	0.46	0.58	0.70	0.82	0.94	1.05	1.17	1.29	1.41
PAC160 PAD240	0.51	0.65	0.79	0.93	1.07	1.21	1.35	1.49	1.63
PAC200 PAD300	0.56	0.72	0.89	1.05	1.21	1.37	1.54	1.70	1.86
PAC240 PAD360	0.60	0.79	0.97	1.16	1.34	1.53	1.71	1.90	2.08
PAC320 PAD480	0.70	0.93	1.16	1.39	1.62	1.84	2.07	2.30	2.53
PBD720	0.65	1.03	1.41	1.79	2.17	2.54	2.92	3.30	3.68
PBD960	0.74	1.22	1.70	2.17	2.65	3.13	3.61	4.08	4.56

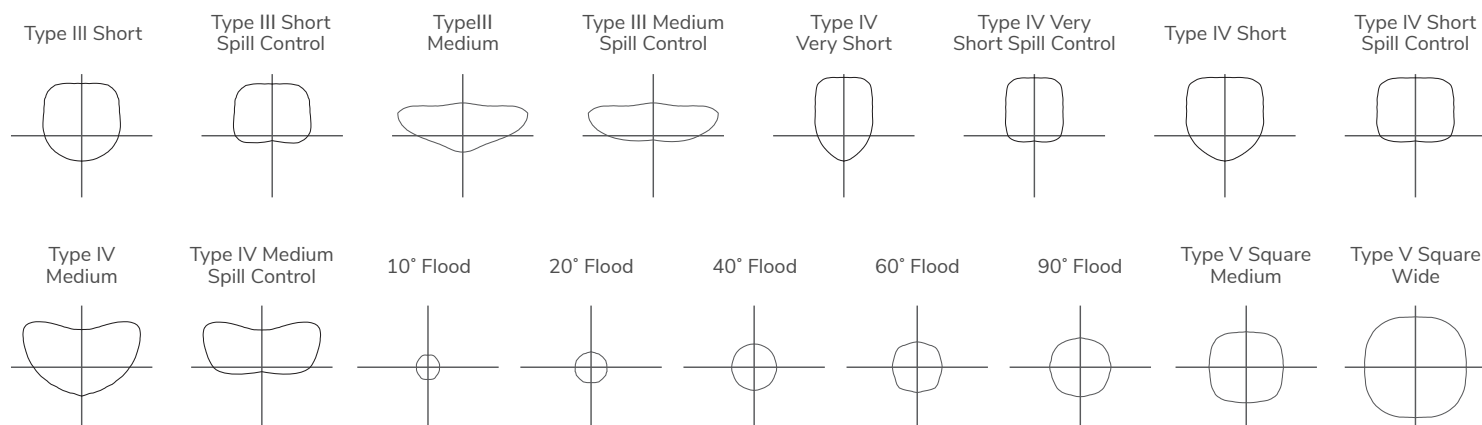
U Type Adjustable Arm Mount

	0° Tilt	10° Tilt	20° Tilt	30° Tilt	45° Tilt	60° Tilt	70° Tilt	80° Tilt	90° Tilt
PAC40 PAD60	0.36	0.44	0.50	0.58	0.66	0.73	0.81	0.87	0.95
PAC80 PAD120	0.42	0.51	0.60	0.68	0.77	0.86	0.95	1.03	1.12
PAC120 PAD180	0.46	0.57	0.68	0.79	0.91	1.02	1.13	1.24	1.35
PAC160 PAD240	0.50	0.63	0.77	0.90	1.04	1.17	1.30	1.44	1.57
PAC200 PAD300	0.55	0.71	0.86	1.02	1.18	1.33	1.49	1.64	1.80
PAC240 PAD360	0.59	0.77	0.95	1.13	1.31	1.48	1.66	1.84	2.02
PAC320 PAD480	0.68	0.90	1.13	1.35	1.58	1.80	2.02	2.25	2.47
PBD720	0.74	1.11	1.48	1.85	2.22	2.59	2.96	3.33	3.70
PBD960	0.82	1.28	1.75	2.21	2.67	3.13	3.60	4.06	4.52

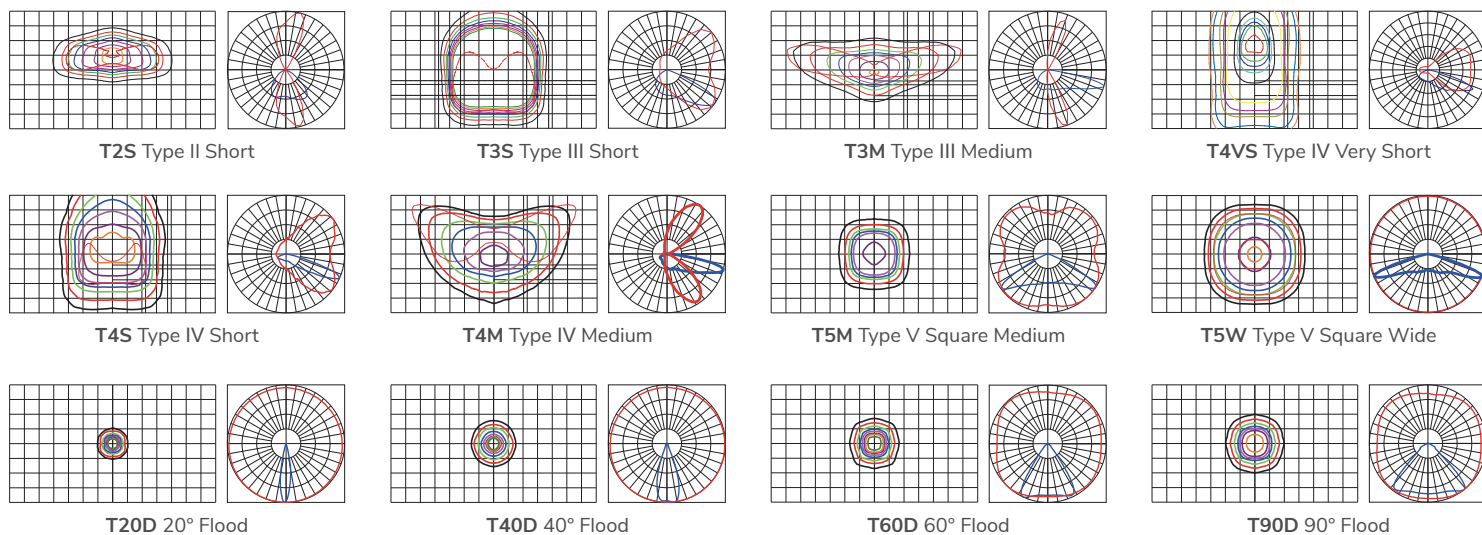
OPTIC ORIENTATION



OPTICAL DISTRIBUTION



PHOTOMETRY



PRODUCT IMAGE



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)
-------	---------------	-------------	---------------	--------------	----------------------------	----------------------------	------------	--------------	---------------------------	---------------------------

100-277VAC

PAC40L	40W	700mA	1	40W	455(17.91)*334(13.15)*75(2.95)	477(18.78)*425(16.73)*160(6.30)	5.5KG	6.5KG	6080	152
PAC80L	80W	700mA	2	40W	517(20.35)*334(13.15)*75(2.95)	540(21.26)*425(16.73)*160(6.30)	6.6KG	7.7KG	12160	152
PAC120L	120W	700mA	3	40W	580(22.83)*334(13.15)*75(2.95)	603(23.74)*425(16.73)*160(6.30)	7.3KG	8.6KG	18360	153
PAC160L	160W	700mA	4	40W	642(25.28)*334(13.15)*75(2.95)	665(26.18)*425(16.73)*160(6.30)	8.0KG	9.2KG	24960	156
PAC200L	200W	700mA	5	40W	705(27.76)*334(13.15)*75(2.95)	728(28.66)*425(16.73)*160(6.30)	8.8KG	10.0KG	30800	154
PAC240L	240W	700mA	6	40W	767(30.20)*334(13.15)*75(2.95)	790(31.10)*425(16.73)*160(6.30)	9.5KG	10.8KG	36960	154
PAC320L	320W	700mA	8	40W	892(35.12)*334(13.15)*75(2.95)	915(36.02)*425(16.73)*160(6.30)	11.5KG	12.9KG	49920	156
PAD60L	60W	1050mA	1	60W	455(17.91)*334(13.15)*75(2.95)	477(18.78)*425(16.73)*160(6.30)	5.5KG	6.5KG	8340	139
PAD120L	120W	1050mA	2	60W	517(20.35)*334(13.15)*75(2.95)	540(21.26)*425(16.73)*160(6.30)	6.7KG	7.8KG	16560	138
PAD180L	180W	1050mA	3	60W	580(22.83)*334(13.15)*75(2.95)	603(23.74)*425(16.73)*160(6.30)	7.2KG	8.5KG	25200	140
PAD240L	240W	1050mA	4	60W	642(25.38)*334(13.15)*75(2.95)	665(26.18)*425(16.73)*160(6.30)	8.2KG	9.4KG	34080	142
PAD300L	300W	1050mA	5	60W	705(27.76)*334(13.15)*75(2.95)	728(28.66)*425(16.73)*160(6.30)	9.5KG	10.7KG	42600	142
PAD360L	360W	1050mA	6	60W	767(30.20)*334(13.15)*75(2.95)	790(31.10)*425(16.73)*160(6.30)	10.2KG	11.5KG	50040	139
PAD480L	480W	1050mA	8	60W	892(35.12)*334(13.15)*75(2.95)	915(36.02)*425(16.73)*160(6.30)	11.5KG	12.9KG	67200	140
PBD720L	720W	1050mA	6	120W	767(27.76)*608(23.94)*75(2.95)	790(31.10)*700(27.56)*160(6.30)	17.0KG	19.5KG	100080	139
PBD960L	960W	1050mA	8	120W	892(35.12)*608(23.94)*75(2.95)	915(36.02)*700(27.56)*160(6.30)	20.8KG	23.5KG	133440	139

277-480VAC

PAC80H	80W	700mA	2	40W	517(20.35)*334(13.15)*75(2.95)	540(21.26)*425(16.73)*160(6.30)	6.6KG	7.7KG	12160	152
PAC120H	120W	700mA	3	40W	580(22.83)*334(13.15)*75(2.95)	603(23.74)*425(16.73)*160(6.30)	7.3KG	8.6KG	18360	153
PAC160H	160W	700mA	4	40W	642(25.28)*334(13.15)*75(2.95)	665(26.18)*425(16.73)*160(6.30)	8.0KG	9.2KG	24960	156
PAC200H	200W	700mA	5	40W	705(27.76)*334(13.15)*75(2.95)	728(28.66)*425(16.73)*160(6.30)	8.8KG	10.0KG	30800	154
PAC240H	240W	700mA	6	40W	767(30.20)*334(13.15)*75(2.95)	790(31.10)*425(16.73)*160(6.30)	9.5KG	10.8KG	36960	154
PAC320H	320W	700mA	8	40W	892(35.12)*334(13.15)*75(2.95)	915(36.02)*425(16.73)*160(6.30)	11.5KG	12.9KG	49920	156
PAD120H	120W	1050mA	2	60W	517(20.35)*334(13.15)*75(2.95)	540(21.26)*425(16.73)*160(6.30)	6.7KG	7.8KG	16560	138
PAD180H	180W	1050mA	3	60W	580(22.83)*334(13.15)*75(2.95)	603(23.74)*425(16.73)*160(6.30)	7.2KG	8.5KG	25200	140
PAD240H	240W	1050mA	4	60W	642(25.38)*334(13.15)*75(2.95)	665(26.18)*425(16.73)*160(6.30)	8.2KG	9.4KG	34080	142
PAD300H	300W	1050mA	5	60W	705(27.76)*334(13.15)*75(2.95)	728(28.66)*425(16.73)*160(6.30)	9.5KG	10.7KG	42600	142
PAD360H	360W	1050mA	6	60W	767(30.20)*334(13.15)*75(2.95)	790(31.10)*425(16.73)*160(6.30)	10.2KG	11.5KG	50040	139
PAD480H	480W	1050mA	8	60W	892(35.12)*334(13.15)*75(2.95)	915(36.02)*425(16.73)*160(6.30)	11.5KG	12.9KG	67200	140
PBD720H	720W	1050mA	6	120W	767(27.76)*608(23.94)*75(2.95)	790(31.10)*700(27.56)*160(6.30)	17.0KG	19.5KG	100080	139
PBD960H	960W	1050mA	8	120W	892(35.12)*608(23.94)*75(2.95)	915(36.02)*700(27.56)*160(6.30)	20.8KG	23.5KG	133440	139

*The above produce size is shown as L type arm mount only.

PRODUCT IMAGE



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)
-------	---------------	-------------	---------------	--------------	----------------------------	----------------------------	------------	--------------	---------------------------	---------------------------

100-277VAC

PAC40L	40W	700mA	1	40W	398(15.67)*334(13.15)*75(2.95)	477(18.78)*425(16.73)*160(6.30)	4.9KG	5.9KG	6080	152
PAC80L	80W	700mA	2	40W	460(18.11)*334(13.15)*75(2.95)	540(21.26)*425(16.73)*160(6.30)	6.0KG	7.1KG	12160	152
PAC120L	120W	700mA	3	40W	523(20.59)*334(13.15)*75(2.95)	603(23.74)*425(16.73)*160(6.30)	6.7KG	8.0KG	18360	153
PAC160L	160W	700mA	4	40W	585(23.03)*334(13.15)*75(2.95)	665(26.18)*425(16.73)*160(6.30)	7.4KG	8.6KG	24960	156
PAC200L	200W	700mA	5	40W	648(25.51)*334(13.15)*75(2.95)	728(28.66)*425(16.73)*160(6.30)	8.2KG	9.4KG	30800	154
PAC240L	240W	700mA	6	40W	710(27.95)*334(13.15)*75(2.95)	790(31.10)*425(16.73)*160(6.30)	8.9KG	10.2KG	36960	154
PAC320L	320W	1050mA	8	60W	835(32.87)*334(13.15)*75(2.95)	915(36.02)*425(16.73)*160(6.30)	10.9KG	12.3KG	49920	156
PAD60L	60W	1050mA	1	60W	398(15.67)*334(13.15)*75(2.95)	477(18.78)*425(16.73)*160(6.30)	4.9KG	5.9KG	8340	139
PAD120L	120W	1050mA	2	60W	460(18.11)*334(13.15)*75(2.95)	540(21.26)*425(16.73)*160(6.30)	6.1KG	7.2KG	16560	138
PAD180L	180W	1050mA	3	60W	523(20.59)*334(13.15)*75(2.95)	603(23.74)*425(16.73)*160(6.30)	6.6KG	7.9KG	25200	140
PAD240L	240W	1050mA	4	60W	585(23.03)*334(13.15)*75(2.95)	665(26.18)*425(16.73)*160(6.30)	7.6KG	8.8KG	34080	142
PAD300L	300W	1050mA	5	60W	648(25.51)*334(13.15)*75(2.95)	728(28.66)*425(16.73)*160(6.30)	8.9KG	10.1KG	42600	142
PAD360L	360W	1050mA	6	120W	710(27.95)*334(13.15)*75(2.95)	790(31.10)*425(16.73)*160(6.30)	9.6KG	10.7KG	50040	139
PAD480L	480W	700mA	8	40W	835(32.87)*334(13.15)*75(2.95)	915(36.02)*425(16.73)*160(6.30)	10.9KG	12.3KG	67200	140
PBD720L	720W	1050mA	6	60W	720(28.35)*608(23.94)*75(2.95)	790(31.10)*700(27.56)*160(6.30)	18.3KG	20.8KG	100080	139
PBD960L	960W	1050mA	8	120W	845(33.27)*608(23.94)*75(2.95)	915(36.02)*700(27.56)*160(6.30)	22.1KG	24.8KG	133440	139

277-480VAC

PAC80H	80W	700mA	2	40W	460(18.11)*334(13.15)*75(2.95)	540(21.26)*425(16.73)*160(6.30)	6.0KG	7.1KG	12160	152
PAC120H	120W	700mA	3	40W	523(20.59)*334(13.15)*75(2.95)	603(23.74)*425(16.73)*160(6.30)	6.7KG	8.0KG	18360	153
PAC160H	160W	700mA	4	40W	585(23.03)*334(13.15)*75(2.95)	665(26.18)*425(16.73)*160(6.30)	7.4KG	8.6KG	24960	156
PAC200H	200W	700mA	5	40W	648(25.51)*334(13.15)*75(2.95)	728(28.66)*425(16.73)*160(6.30)	8.2KG	9.4KG	30800	154
PAC240H	240W	700mA	6	40W	710(27.95)*334(13.15)*75(2.95)	790(31.10)*425(16.73)*160(6.30)	8.9KG	10.2KG	36960	154
PAC320H	320W	1050mA	8	60W	835(32.87)*334(13.15)*75(2.95)	915(36.02)*425(16.73)*160(6.30)	10.9KG	12.3KG	49920	156
PAD120H	120W	1050mA	2	60W	460(18.11)*334(13.15)*75(2.95)	540(21.26)*425(16.73)*160(6.30)	6.1KG	7.2KG	16560	138
PAD180H	180W	1050mA	3	60W	523(20.59)*334(13.15)*75(2.95)	603(23.74)*425(16.73)*160(6.30)	6.6KG	7.9KG	25200	140
PAD240H	240W	1050mA	4	60W	585(23.03)*334(13.15)*75(2.95)	665(26.18)*425(16.73)*160(6.30)	7.6KG	8.8KG	34080	142
PAD300H	300W	1050mA	5	60W	648(25.51)*334(13.15)*75(2.95)	728(28.66)*425(16.73)*160(6.30)	8.9KG	10.1KG	42600	142
PAD360H	360W	1050mA	6	60W	710(27.95)*334(13.15)*75(2.95)	790(31.10)*425(16.73)*160(6.30)	9.6KG	10.7KG	50040	139
PAD480H	480W	1050mA	8	120W	835(32.87)*334(13.15)*75(2.95)	915(36.02)*425(16.73)*160(6.30)	10.9KG	12.3KG	67200	140
PBD720H	720W	700mA	6	40W	720(28.35)*608(23.94)*75(2.95)	790(31.10)*700(27.56)*160(6.30)	18.3KG	20.8KG	100080	139
PBD960H	960W	1050mA	8	120W	845(33.27)*608(23.94)*75(2.95)	915(36.02)*700(27.56)*160(6.30)	22.1KG	24.8KG	133440	139

*The above produce size is shown as U type arm mount only.

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
Salt spray test	IEC/ EN 60598-2-5 clause 5.6.7	Applicable for Flood Light
	ISO 9227:2012	
IK08 Impact resistance test IP65 or IP67 test	ASTM	
	IEC 60226:2002	
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	
	IES TM-15-	
LED Module	IES LM-63-2002	
	IEC/ EN 62031:2008+A1:2013	
LED Lamps	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	