

AFFO

LED FLANKING LIGHTS



AFFO LED Flanking Lights are high-performance, marine-grade lighting solutions engineered to thrive in the harshest ocean environments. Designed for commercial fishing vessels, workboats, and maritime operations, these rugged flanking lights deliver powerful, controlled illumination for riverbanks and shorelines during navigation, detecting or avoiding submerged objects, and safely lighting work areas alongside the ship.

SUPERIOR PERFORMANCE

Delivering powerful, high-output illumination up to 2400W, AFFOs are crafted with precision optics that brightly light riverbanks, shorelines, submerged hazards, and work areas for safe navigation and operations. Their fail-safe modular design keeps critical side lighting running even if modules are damaged, while the low-EPA aerodynamic profile reduces wear and boosts fuel efficiency.

MARINE GRADE FINISH

Engineered with a rugged anti-corrosive marine-grade finish, 10kA surge protection, IP66 weather sealing, and IK10 impact resistance, AFFO flanking lights are built to withstand storms, extreme vibration, salt spray, impacts, and heavy seas. Their advanced fail-safe design ensures critical side lighting remains operational even if individual modules are damaged.

EXTREME-LIFE

Crafted for relentless ocean duty, AFFO flanking lights feature superior thermal management and a rugged heat-sink design that delivers an industry-leading L70 lifespan of 200,000 hours — delivering years of powerful, consistent illumination with virtually zero maintenance.

SPECIFICATION FEATURES

WATTAGES	40w, 60w, 80w, 120w, 180w, 160w, 240w, 320w, 360w, 480w, 720w, 960w, 1440w, 1920w, 2400w,
EFFICIENCY	Up to 160 LPW
KELVIN TEMPERATURES	2200K, 3000K, 4000K, 5000K, 5700K
MOUNTING	T Mount (Arm Mount) L Mount (SlipFitter Mount) U Mount (Bracket Mount)
HOUSING COLORS	Black, Bronze, Gray, White Green, Custom RAL
HOUSING FINISH	Super Durable and Corrosion resistant Polyester Powder Paint.
CONSTRUCTION	Premium Die-Cast Aluminum
OPTICS	T2S, T3S, T3M, T4VVS, T4VS, T4S, T4M, T10D, T20D, T40D, T60D, T90D, T5M
CRI	70+, 80+, 90+
VOLTAGE	100-277V, 277-480V
OPERATING TEMPERATURE	-40°c~+50°C
SURGE PROTECTION	10KA, 20KA
CONTROLS and ADD-Ons	0-10V Dimming, 1-10V Dimming, Vandal Resistant Screws, Power Cords, Safety Cables, Microwave Motion Sensor, Photocell, Backlight Shield, Bird Spikes, Emergency Power Supply
CERTIFICATIONS	<ul style="list-style-type: none"> ·cULus Listed ·CE-LVD/CE-EMC/CB ·SAA ·DLC Premium qualified versions available ·RoHS compliant ·Endurance tested to withstand 5,000H 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
WARRANTY	5 Year Warranty, 10 Year Warranty

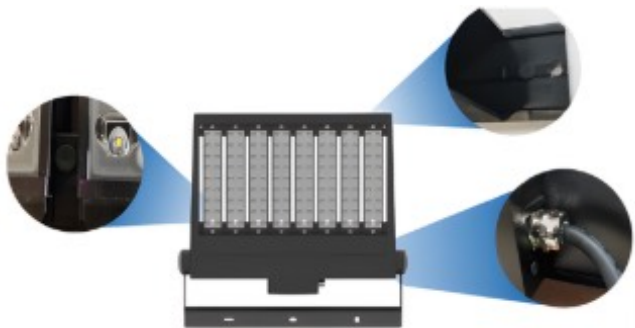


SCREWLESS DESIGN LENS

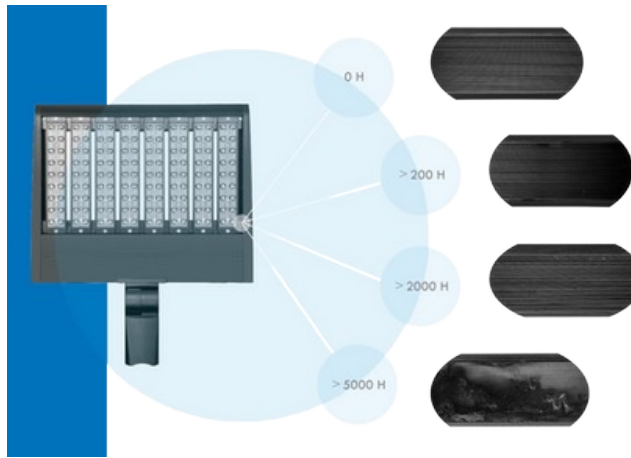


NO SCREW ON THE LENS

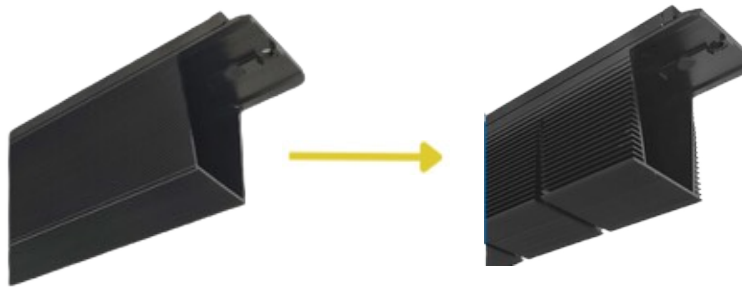
IP68 waterproof
Better corrosion resistance IK10
level impact resistance



ANTI-CORROSION TEST STANDARD ASTM-B117



UPGRADED HEAT SINK

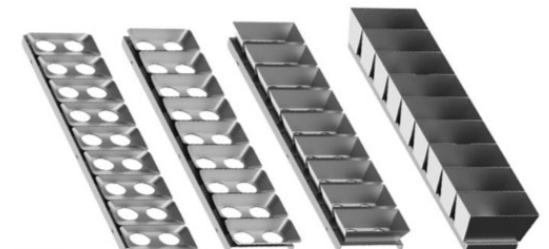


Air Tight Test at 30KPa
100% test via the test points on
each LED Module, supporting frame
and junction box.

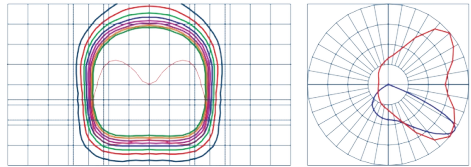
HEAT SINKS



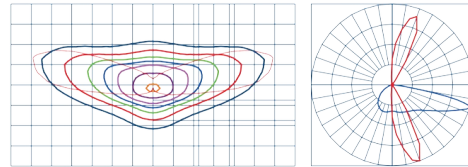
SPILL CONTROL



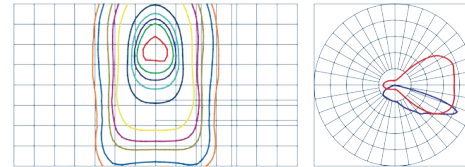
PHOTOMETRIC PERFORMANCE



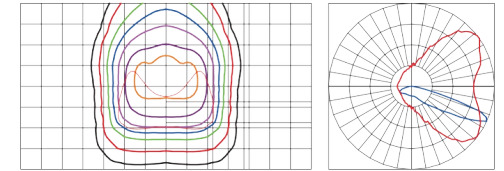
T3S Type III short



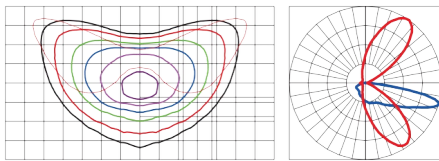
T3M Type III medium



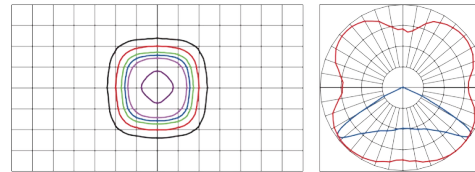
T4VS Type IV very short



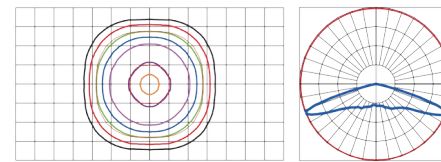
T4VS Type IV very short



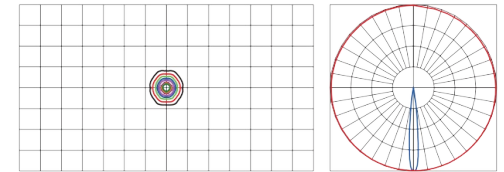
T4M Type IV Medium



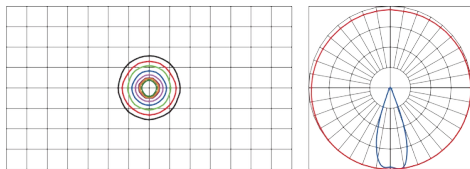
T5M Type V Square Medium



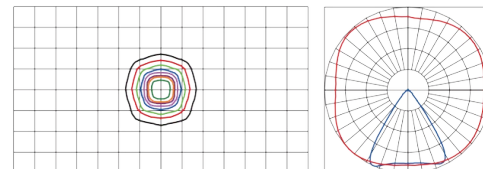
T5W Type V Square Wide



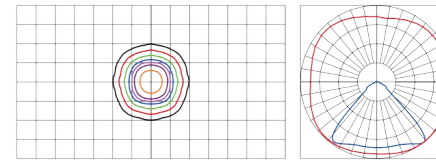
T10D 10° Flood



T40D 40° Flood

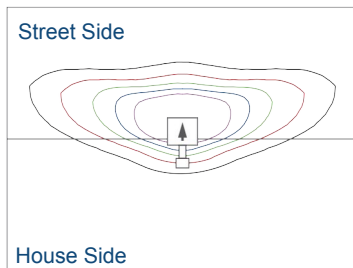


T60D 60° Flood

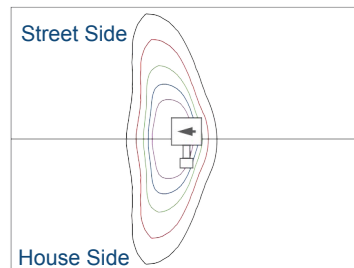


T90D 90° Flood

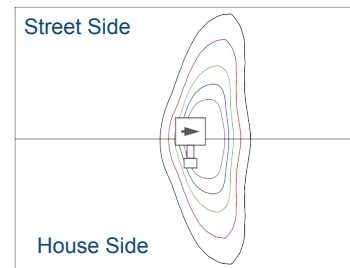
OPTIC ORIENTATION



Standard



Optics Rotated Left@90°

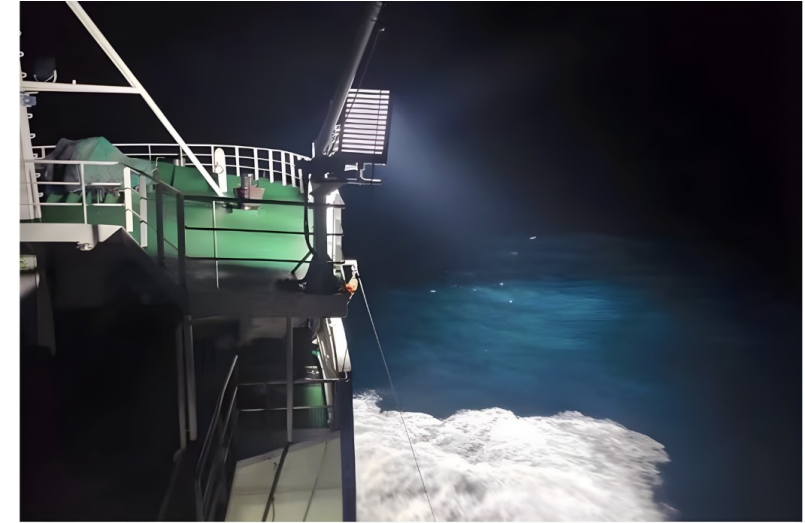


Optics Rotated Right @90°

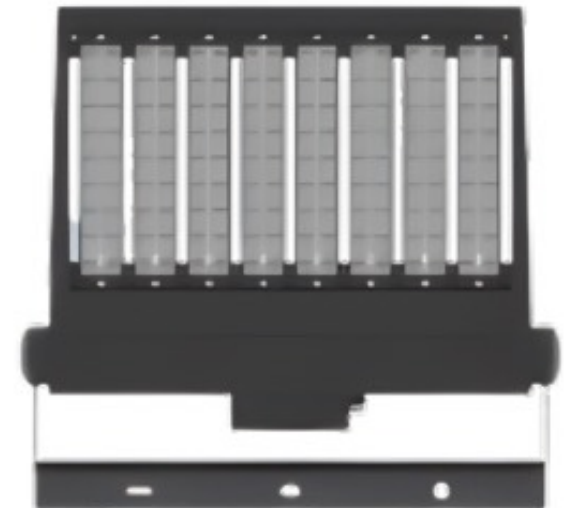
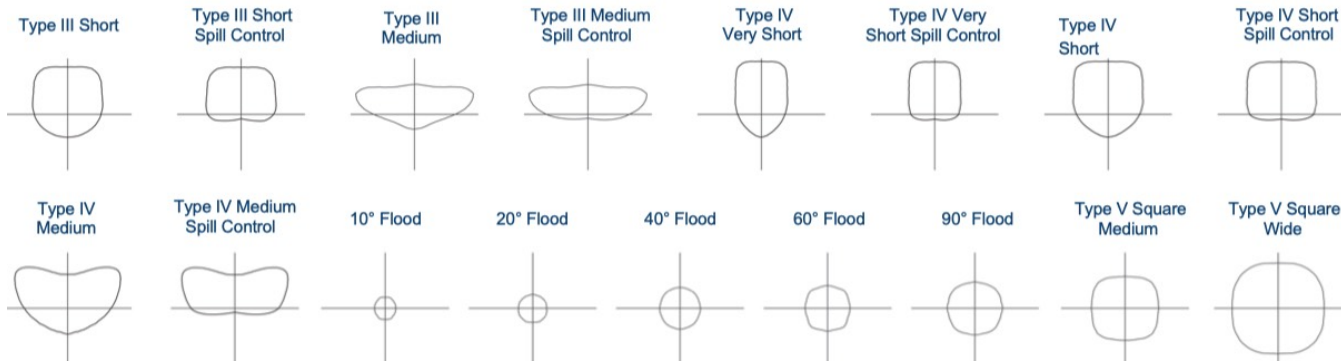


ORDERING INFORMATION

MODEL	VOLTAGE	MOUNTING	OPTIC	CCT	COLOR FINISH	OPTIONS
AF88XPAC40	100-277v 277-480v	L Mount (SlipFitter Mount)	T2S	2700K	Black	1-10V Dimming
AF88XPAC80		T Mount (Fixed Arm Mount)	T3S	3000K	Bronze	Vandal Resistant Screws
AF88XPAC120		U Mount (Bracket Mount)	T3M	4000K	Gray	Power Cords
AF88XPAC160			T5M	5000K	White	Safety Cables
AF88XPAC200			T4M	5700K	Green	Microwave Motion Sensor
AF88XPAC240			T4S		Custom RAL	Photocell
AF88XPAC320			T4VS			Backlight Shield
AF88XPAD60			T4VVSB			Bird Spikes
AF88XPAD120			T10D			Emergency PowerSupply
AF88XPAD180			T20D			
AF88XPAD240			T40D			
AF88XPAD300			T60D			
AF88XPAD360			T90D			
AF88XPAD480						
AF88XPBD720						
AF88XPBD960						
AF88XPBE960						
AF88XPBE1440						



OPTICAL DISTRIBUTION



BRIEF SPECIFICATIONS

Model	Nominal power	LED current	Module number	Module power	Product size LWH (mm/in)	Packing size LWH (mm/in)	Net weight	Gross weight	Typical luminous flux(lm)	Typical efficiency (lm/W)
AF88XPAC40L	40W	700mA	1	40W	455(17.91)*334(13.15)*75(2.95)	505(19.88)*425(16.73)*160(6.30)	5.2KG	6.1KG	6080	152
AF88XPAC80L	80W	700mA	2	40W	517(20.35)*334(13.15)*75(2.95)	567(22.32)*425(16.73)*160(6.30)	6.1KG	7.1KG	12160	152
AF88XPAC120L	120W	700mA	3	40W	580(22.83)*334(13.15)*75(2.95)	630(24.80)*425(16.73)*160(6.30)	7.0KG	8.0KG	18360	153
AF88XPAC160L	160W	700mA	4	40W	642(25.28)*334(13.15)*75(2.95)	692(27.24)*425(16.73)*160(6.30)	7.6KG	8.7KG	24960	156
AF88XPAC200L	200W	700mA	5	40W	705(27.76)*334(13.15)*75(2.95)	755(29.72)*425(16.73)*160(6.30)	8.5KG	9.8KG	30800	154
AF88XPAC240L	240W	700mA	6	40W	767(30.20)*334(13.15)*75(2.95)	817(32.17)*425(16.73)*160(6.30)	9.2KG	10.4KG	36960	154
AF88XPAC320L	320W	700mA	8	40W	892(35.12)*334(13.15)*75(2.95)	943(37.13)*425(16.73)*160(6.30)	11.1KG	12.5KG	49920	156
AF88XPAD60L	60W	1050mA	1	60W	455(17.91)*334(13.15)*75(2.95)	505(19.88)*425(16.73)*160(6.30)	5.3KG	6.2KG	8340	139
AF88XPAD120L	120W	1050mA	2	60W	517(20.35)*334(13.15)*75(2.95)	567(22.32)*425(16.73)*160(6.30)	6.2KG	7.2KG	16560	138
AF88XPAD180L	180W	1050mA	3	60W	580(22.83)*334(13.15)*75(2.95)	630(24.80)*425(16.73)*160(6.30)	7.2KG	8.2KG	25200	140
AF88XPAD240L	240W	1050mA	4	60W	642(25.38)*334(13.15)*75(2.95)	692(27.24)*425(16.73)*160(6.30)	7.8KG	8.9KG	34080	142
AF88XPAD300L	300W	1050mA	5	60W	705(27.76)*334(13.15)*75(2.95)	755(29.72)*425(16.73)*160(6.30)	9.2KG	10.5KG	42600	142
AF88XPAD360L	360W	1050mA	6	60W	767(30.20)*334(13.15)*75(2.95)	817(32.17)*425(16.73)*160(6.30)	9.9KG	11.1KG	50040	139
AF88XPAD480L	480W	1050mA	8	60W	892(35.12)*334(13.15)*75(2.95)	943(37.13)*425(16.73)*160(6.30)	11.4KG	12.8KG	67200	140
AF88XPBD720L	720W	1050mA	6	120W	767(30.20)*608(23.94)*75(2.95)	823(32.40)*700(27.56)*160(6.30)	15.7KG	18.1KG	100080	139
AF88XPBD960L	960W	1050mA	8	120W	892(35.12)*608(23.94)*75(2.95)	948(37.32)*700(27.56)*160(6.30)	17.7KG	20.1KG	133440	139
AF88XPBE960L	960W	1400mA	6	160W	767(27.76)*608(23.94)*75(2.95)	823(32.40)*700(27.56)*160(6.30)	14.5KG	16.5KG	122880	128
AF88XPBE1440	1440W	1400mA	9	160W	955(37.60)*608(23.94)*75(2.95)	1011(39.80)*700(27.56)*160(6.30)	19.7KG	21.8KG	184320	128
277v-480v										
AF88XPAC40L	40W	700mA	1	40W	455(17.91)*334(13.15)*75(2.95)	505(19.88)*425(16.73)*160(6.30)	5.2KG	6.1KG	6080	152
AF88XPAC80L	80W	700mA	2	40W	517(20.35)*334(13.15)*75(2.95)	567(22.32)*425(16.73)*160(6.30)	6.1KG	7.1KG	12160	152
AF88XPAC120L	120W	700mA	3	40W	580(22.83)*334(13.15)*75(2.95)	630(24.80)*425(16.73)*160(6.30)	7.0KG	8.0KG	18360	153
AF88XPAC160L	160W	700mA	4	40W	642(25.28)*334(13.15)*75(2.95)	692(27.24)*425(16.73)*160(6.30)	7.6KG	8.7KG	24960	156
AF88XPAC200L	200W	700mA	5	40W	705(27.76)*334(13.15)*75(2.95)	755(29.72)*425(16.73)*160(6.30)	8.5KG	9.8KG	30800	154
AF88XPAC240L	240W	700mA	6	40W	767(30.20)*334(13.15)*75(2.95)	817(32.17)*425(16.73)*160(6.30)	9.2KG	10.4KG	36960	154
AF88XPAC320L	320W	700mA	8	40W	892(35.12)*334(13.15)*75(2.95)	943(37.13)*425(16.73)*160(6.30)	11.1KG	12.5KG	49920	156
AF88XPAD60L	60W	1050mA	1	60W	455(17.91)*334(13.15)*75(2.95)	505(19.88)*425(16.73)*160(6.30)	5.3KG	6.2KG	8340	139
AF88XPAD120L	120W	1050mA	2	60W	517(20.35)*334(13.15)*75(2.95)	567(22.32)*425(16.73)*160(6.30)	6.2KG	7.2KG	16560	138
AF88XPAD180L	180W	1050mA	3	60W	580(22.83)*334(13.15)*75(2.95)	630(24.80)*425(16.73)*160(6.30)	7.2KG	8.2KG	25200	140
AF88XPAD240L	240W	1050mA	4	60W	642(25.38)*334(13.15)*75(2.95)	692(27.24)*425(16.73)*160(6.30)	7.8KG	8.9KG	34080	142
AF88XPAD300L	300W	1050mA	5	60W	705(27.76)*334(13.15)*75(2.95)	755(29.72)*425(16.73)*160(6.30)	9.2KG	10.5KG	42600	142
AF88XPAD360L	360W	1050mA	6	60W	767(30.20)*334(13.15)*75(2.95)	817(32.17)*425(16.73)*160(6.30)	9.9KG	11.1KG	50040	139
AF88XPAD480L	480W	1050mA	8	60W	892(35.12)*334(13.15)*75(2.95)	943(37.13)*425(16.73)*160(6.30)	11.4KG	12.8KG	67200	140
AF88XPBD720L	720W	1050mA	6	120W	767(30.20)*608(23.94)*75(2.95)	823(32.40)*700(27.56)*160(6.30)	15.7KG	18.1KG	100080	139
AF88XPBD960L	960W	1050mA	8	120W	892(35.12)*608(23.94)*75(2.95)	948(37.32)*700(27.56)*160(6.30)	17.7KG	20.1KG	133440	139
AF88XPBE960L	960W	1400mA	6	160W	767(27.76)*608(23.94)*75(2.95)	823(32.40)*700(27.56)*160(6.30)	14.5KG	16.5KG	122880	128
AF88XPBE1440	1440W	1400mA	9	160W	955(37.60)*608(23.94)*75(2.95)	1011(39.80)*700(27.56)*160(6.30)	19.7KG	21.8KG	184320	128











BRIEF SPECIFICATIONS

Model	Nominal power	LED current	Module number	Module power	Product size LWH (mm/in)	Packing size LWH (mm/in)	Net weight	Gross weight	Typical luminous flux(lm)	Typical efficiency (lm/W)
AF88XPAC40L	40W	700mA	1	40W	455(17.91)*334(13.15)*75(2.95)	505(19.88)*425(16.73)*160(6.30)	5.2KG	6.1KG	6080	152
AF88XPAC80L	80W	700mA	2	40W	517(20.35)*334(13.15)*75(2.95)	567(22.32)*425(16.73)*160(6.30)	6.1KG	7.1KG	12160	152
AF88XPAC120L	120W	700mA	3	40W	580(22.83)*334(13.15)*75(2.95)	630(24.80)*425(16.73)*160(6.30)	7.0KG	8.0KG	18360	153
AF88XPAC160L	160W	700mA	4	40W	642(25.28)*334(13.15)*75(2.95)	692(27.24)*425(16.73)*160(6.30)	7.6KG	8.7KG	24960	156
AF88XPAC200L	200W	700mA	5	40W	705(27.76)*334(13.15)*75(2.95)	755(29.72)*425(16.73)*160(6.30)	8.5KG	9.8KG	30800	154
AF88XPAC240L	240W	700mA	6	40W	767(30.20)*334(13.15)*75(2.95)	817(32.17)*425(16.73)*160(6.30)	9.2KG	10.4KG	36960	154
AF88XPAC320L	320W	700mA	8	40W	892(35.12)*334(13.15)*75(2.95)	943(37.13)*425(16.73)*160(6.30)	11.1KG	12.5KG	49920	156
AF88XPAD60L	60W	1050mA	1	60W	455(17.91)*334(13.15)*75(2.95)	505(19.88)*425(16.73)*160(6.30)	5.3KG	6.2KG	8340	139
AF88XPAD120L	120W	1050mA	2	60W	517(20.35)*334(13.15)*75(2.95)	567(22.32)*425(16.73)*160(6.30)	6.2KG	7.2KG	16560	138
AF88XPAD180L	180W	1050mA	3	60W	580(22.83)*334(13.15)*75(2.95)	630(24.80)*425(16.73)*160(6.30)	7.2KG	8.2KG	25200	140
AF88XPAD240L	240W	1050mA	4	60W	642(25.38)*334(13.15)*75(2.95)	692(27.24)*425(16.73)*160(6.30)	7.8KG	8.9KG	34080	142
AF88XPAD300L	300W	1050mA	5	60W	705(27.76)*334(13.15)*75(2.95)	755(29.72)*425(16.73)*160(6.30)	9.2KG	10.5KG	42600	142
AF88XPAD360L	360W	1050mA	6	60W	767(30.20)*334(13.15)*75(2.95)	817(32.17)*425(16.73)*160(6.30)	9.9KG	11.1KG	50040	139
AF88XPAD480L	480W	1050mA	8	60W	892(35.12)*334(13.15)*75(2.95)	943(37.13)*425(16.73)*160(6.30)	11.4KG	12.8KG	67200	140
AF88XPBD720L	720W	1050mA	6	120W	767(30.20)*608(23.94)*75(2.95)	823(32.40)*700(27.56)*160(6.30)	15.7KG	18.1KG	100080	139
AF88XPBD960L	960W	1050mA	8	120W	892(35.12)*608(23.94)*75(2.95)	948(37.32)*700(27.56)*160(6.30)	17.7KG	20.1KG	133440	139
AF88XPBE960L	960W	1400mA	6	160W	767(27.76)*608(23.94)*75(2.95)	823(32.40)*700(27.56)*160(6.30)	14.5KG	16.5KG	122880	128
AF88XPBE1440	1440W	1400mA	9	160W	955(37.60)*608(23.94)*75(2.95)	1011(39.80)*700(27.56)*160(6.30)	19.7KG	21.8KG	184320	128
277v-480v										
AF88XPAC40L	40W	700mA	1	40W	455(17.91)*334(13.15)*75(2.95)	505(19.88)*425(16.73)*160(6.30)	5.2KG	6.1KG	6080	152
AF88XPAC80L	80W	700mA	2	40W	517(20.35)*334(13.15)*75(2.95)	567(22.32)*425(16.73)*160(6.30)	6.1KG	7.1KG	12160	152
AF88XPAC120L	120W	700mA	3	40W	580(22.83)*334(13.15)*75(2.95)	630(24.80)*425(16.73)*160(6.30)	7.0KG	8.0KG	18360	153
AF88XPAC160L	160W	700mA	4	40W	642(25.28)*334(13.15)*75(2.95)	692(27.24)*425(16.73)*160(6.30)	7.6KG	8.7KG	24960	156
AF88XPAC200L	200W	700mA	5	40W	705(27.76)*334(13.15)*75(2.95)	755(29.72)*425(16.73)*160(6.30)	8.5KG	9.8KG	30800	154
AF88XPAC240L	240W	700mA	6	40W	767(30.20)*334(13.15)*75(2.95)	817(32.17)*425(16.73)*160(6.30)	9.2KG	10.4KG	36960	154
AF88XPAC320L	320W	700mA	8	40W	892(35.12)*334(13.15)*75(2.95)	943(37.13)*425(16.73)*160(6.30)	11.1KG	12.5KG	49920	156
AF88XPAD60L	60W	1050mA	1	60W	455(17.91)*334(13.15)*75(2.95)	505(19.88)*425(16.73)*160(6.30)	5.3KG	6.2KG	8340	139
AF88XPAD120L	120W	1050mA	2	60W	517(20.35)*334(13.15)*75(2.95)	567(22.32)*425(16.73)*160(6.30)	6.2KG	7.2KG	16560	138
AF88XPAD180L	180W	1050mA	3	60W	580(22.83)*334(13.15)*75(2.95)	630(24.80)*425(16.73)*160(6.30)	7.2KG	8.2KG	25200	140
AF88XPAD240L	240W	1050mA	4	60W	642(25.38)*334(13.15)*75(2.95)	692(27.24)*425(16.73)*160(6.30)	7.8KG	8.9KG	34080	142
AF88XPAD300L	300W	1050mA	5	60W	705(27.76)*334(13.15)*75(2.95)	755(29.72)*425(16.73)*160(6.30)	9.2KG	10.5KG	42600	142
AF88XPAD360L	360W	1050mA	6	60W	767(30.20)*334(13.15)*75(2.95)	817(32.17)*425(16.73)*160(6.30)	9.9KG	11.1KG	50040	139
AF88XPAD480L	480W	1050mA	8	60W	892(35.12)*334(13.15)*75(2.95)	943(37.13)*425(16.73)*160(6.30)	11.4KG	12.8KG	67200	140
AF88XPBD720L	720W	1050mA	6	120W	767(30.20)*608(23.94)*75(2.95)	823(32.40)*700(27.56)*160(6.30)	15.7KG	18.1KG	100080	139
AF88XPBD960L	960W	1050mA	8	120W	892(35.12)*608(23.94)*75(2.95)	948(37.32)*700(27.56)*160(6.30)	17.7KG	20.1KG	133440	139
AF88XPBE960L	960W	1400mA	6	160W	767(27.76)*608(23.94)*75(2.95)	823(32.40)*700(27.56)*160(6.30)	14.5KG	16.5KG	122880	128
AF88XPBE1440	1440W	1400mA	9	160W	955(37.60)*608(23.94)*75(2.95)	1011(39.80)*700(27.56)*160(6.30)	19.7KG	21.8KG	184320	128

LUMINAIRE EPA

ARM MOUNT











	40-60W	80-120W	120-180W	160-240W	200-300W	240-360W	320-480W	720W	960W
									
	0.32	0.36	0.41	0.45	0.50	0.55	0.65	0.60	0.69

SLIP-FITTER MOUNT



	0°Tilt	10°Tilt	20°Tilt	30°Tilt	45°Tilt	60°Tilt	70°Tilt	80°Tilt	90°Tilt
									
40-60W	0.36	0.44	0.50	0.58	0.66	0.73	0.81	0.87	0.95
80-120W	0.41	0.51	0.60	0.70	0.80	0.89	0.99	1.08	1.18
120-180W	0.46	0.58	0.70	0.82	0.94	1.05	1.17	1.29	1.41
160-240W	0.51	0.65	0.79	0.93	1.07	1.21	1.35	1.49	1.63
200-300W	0.56	0.72	0.89	1.05	1.21	1.37	1.54	1.70	1.86
240-360W	0.60	0.79	0.97	1.16	1.34	1.53	1.71	1.90	2.08
320-480W	0.70	0.93	1.16	1.39	1.62	1.84	2.07	2.30	2.53
720W	0.65	1.03	1.41	1.79	2.17	2.54	2.92	3.30	3.68
960W	0.74	1.22	1.70	2.17	2.65	3.13	3.61	4.08	4.56

U-BRACKET MOUNT

	0° Tilt	10° Tilt	20° Tilt	30° Tilt	45° Tilt	60° Tilt	70° Tilt	80° Tilt	90° Tilt
									
40-60W	0.36	0.44	0.50	0.58	0.66	0.73	0.81	0.87	0.93
80-120W	0.42	0.51	0.60	0.68	0.77	0.86	0.95	1.03	1.12
120-180W	0.46	0.57	0.68	0.79	0.91	1.02	1.13	1.24	1.35
160-240W	0.50	0.63	0.77	0.90	1.04	1.17	1.30	1.44	1.57
200-300W	0.55	0.71	0.86	1.02	1.18	1.33	1.49	1.64	1.80
240-360W	0.59	0.77	0.95	1.13	1.31	1.48	1.66	1.84	2.02
320-480W	0.68	0.90	1.13	1.35	1.58	1.80	2.02	2.25	2.47
720-960W	0.74	1.11	1.48	1.85	2.22	2.59	2.96	3.33	3.70
960W	0.82	1.28	1.75	2.21	2.67	3.13	3.60	4.06	4.52
1440W	0.86	1.32	1.79	2.36	2.82	3.38	3.86	4.46	4.80
1920W	0.96	1.52	2.20	3.48	4.11	4.70	5.34	5.34	6.02
2400W	1.04	1.65	2.38	3.77	4.45	5.10	5.78	5.78	6.52

Max 5000H Salt Spray Test

Test Condition	ASTM B117-2018
Test Standard	<ol style="list-style-type: none"> 1. Neutral Salt Spray Test 2. Solution concentration: 50 g ± 5 g/L 3. Chamber temperature: 35°C 4. Pressure barrel temperature: 47°C 5. PH value of solution: 6.5-7.2 6. Salt spray deposition(80cm²): 1.0-2.0 7. Spray duration: 5000hours 8. Spray model: Continued <p>Samples should be carefully removed. Samples may be washed gently or immersed in a clean flow of water not exceeding 38°C to remove salt deposits from the surface and then dried immediately.</p>
Test Result	After visual inspection, the appearance of the sample after the test has slight corrosion, loss of light phenomenon.

3G Vibration Test

Test Standard	ANSI C136.31-2018
Test Standard	<ol style="list-style-type: none"> 1. Frequency/Hz: 2-30 2. Acceleration/(g): 0.2 3. Sweep rate/(oct/min): 1 4. Times of frequency sweep: 1 5. Test axial: X,Y,Z 6. Test Mode: Power Off
Fixed Vibration	<ol style="list-style-type: none"> 1. Frequency/Hz: 13.5(X), 18.6(Y), 12(Z) 2. Acceleration/(g): 3 3. Test axial: X, Y, Z 4. Test cycle/(times): 100,000 5. Test Mode: Power Off
Test Result	Sample appearance and structure are normal during and after testing.

