AccessFixtures
High-Performance Lighting Solutions

APTA Marine Grade Area/Flood Lights

High-Performance Commercial and Industrial Area Lighting



APTA fixtures provide reliable, zero-maintenance upriver illumination for a hydroelectric dam. LED optics double the projection distance, providing twice the warning time for incoming objects while reducing energy consumption by over 50%, compared to MH.

Rugged luminaires for industrial, commercial, transportation, energy, mining, and security applications where reliability is not optional:
IP66, IK10 and EXTREME-LIFE L70 @ 200,000-hour rated

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WHY APTA

Industrial Engineering. Uncompromised Reliability.

Heavy rail classification yards, deep-pit mining operations, hydroelectric infrastructure, and hardened tactical perimeters demand zero-fault visibility under continuous environmental stress. Coastal salt spray, blowing dirt and debris, driving precipitation, high-amplitude structural vibration, and deliberate ballistic impact rapidly cause catastrophic failure in standard commercial luminaires. In these critical mission profiles, a dark zone is a severe security breach or an accident waiting to happen, not a maintenance item. APTA is a specialized, high-efficacy luminaire family engineered for deployment where component replacement is cost-prohibitive, and downtime is unacceptable.



APTA area lighting over a rail yard. Optics direct the light only where it is needed.

Extreme Longevity

L70B10 >200,000h EXTREME-LIFE Rating: Thermally isolated LED matrices sustain 70% lumen output for over 45 years of nightly operation.

Rugged Survivability

Hardened Construction: IP66 ingress sealing, IK10 impact resistance, 20kA surge protection, and 5,000-hour salt-spray marine finish.

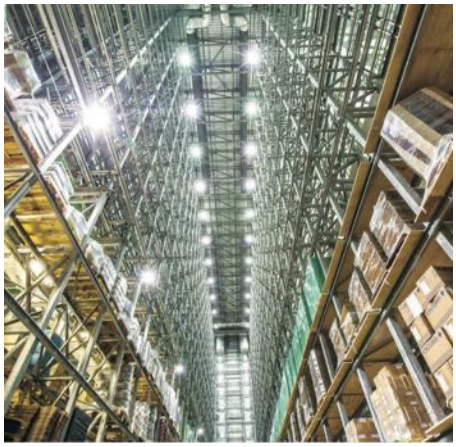
Maximum Efficiency

Fourteen advanced optics project light exactly where it is needed and nowhere else, eliminating wasted energy and maximizing visibility.

APPLICATIONS

Engineered for the World's Most Punishing Environments

APTA is a high-performance area, flood, and security luminaire family built to survive extreme industrial, physical, and environmental stress. Available in eighteen models ranging from 40W to 1,440W, a single, standardized fixture housing adapts seamlessly to any application. Whether deploying an area optic for uniform surface coverage or a flood optic for long-range target illumination, APTA delivers uncompromised visibility where failure is not an option.



Industrial

Powers continuous visibility across heavy-equipment bays, processing yards, and high-vibration manufacturing plants.



Commercial

Delivers bright, reliable illumination for campuses, transit structures, and high-capacity retail parking facilities.



Transportation

Maximizes logistical safety and workflow speed across heavy rail yards, marine ports, and container terminals.



Energy

Hardens critical infrastructure defenses across hydroelectric dams, electrical substations, tank farms, and generation sites.



Mining & Resources

Illuminates high-risk zones including heavy laydown yards, crushing stations, and remote haul-road infrastructure.



Security

Eliminates blind spots along hardened fence lines, tactical perimeters, and high-value facility loading docks.

1,440W	184,320	180	200,000h
MAX POWER	MAX LUMENS	LM/W, UP TO	L70 EXTREME-LIFE

Lumen and efficacy figures are shown for the T5M optic per the fixture test data.

SPECIFICATIONS

Performance Summary

Light source	LED
Nominal power	40W – 1,440W (18 models)
Efficacy	up to 180 lm/W
Luminous output	up to 184,320 lm
CCT	2200K, 2700K, 3000K, 4000K, 5000K, 5700K, 590nm Amber
CRI	Ra>70 default / Ra>80 / Ra>90
Input voltage	100-277VAC or 277-480VAC, 50/60Hz
Drive current	700mA, 1050mA, 1400mA
Power factor	>0.95 at full load

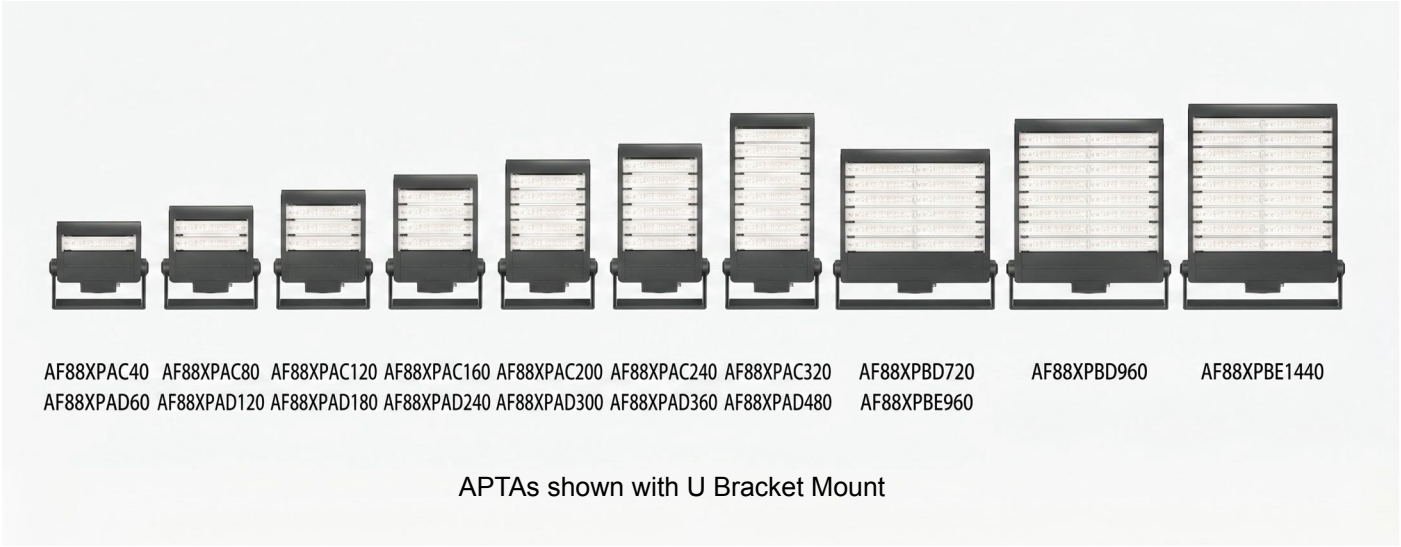
Harmonic distortion	<10% at full load
Surge protection	20kA, per IEEE/ANSI C62.41.2
Ingress / impact	IP66 / IK10
Salt spray	5,000-hour, ASTM B117 / ISO 9227
Operating temp.	-40°C to +50°C (to +80°C customizable)
Rated life	L70B10 >200,000h; L90B10 >60,000h
Optics	Type II, III, IV, V; 10°–90° flood
Housing / finish	Aluminum; 100µm marine-grade powder coat
Warranty	10 years

Flux & efficacy at the T5M optic

Model	Power	Modules	Flux	lm/W
AF88XPAC40	40W	1×40W	6,080	152
AF88XPAC80	80W	2×40W	12,160	152
AF88XPAC120	120W	3×40W	18,360	153
AF88XPAC160	160W	4×40W	24,960	156
AF88XPAC200	200W	5×40W	30,800	154
AF88XPAC240	240W	6×40W	36,960	154
AF88XPAC320	320W	8×40W	49,920	156
AF88XPAD60	60W	1×60W	8,340	139
AF88XPAD120	120W	2×60W	16,560	138

Model	Power	Modules	Flux	lm/W
AF88XPAD180	180W	3×60W	25,200	140
AF88XPAD240	240W	4×60W	34,080	142
AF88XPAD300	300W	5×60W	42,600	142
AF88XPAD360	360W	6×60W	50,040	139
AF88XPAD480	480W	8×60W	67,200	140
AF88XPBD720	720W	6×120W	100,080	139
AF88XPBD960	960W	8×120W	133,440	139
AF88XPBE960	960W	6×160W	122,880	128
AF88XPBE1440	1,440W	9×160W	184,320	128

Flux shown at the T5M optic per the fixture test data; other optics vary. PAC models run at 700mA, PAD at 1050mA, PBE at 1400mA. Add the voltage code L (100-277VAC) or H (277-480VAC) to the model number.

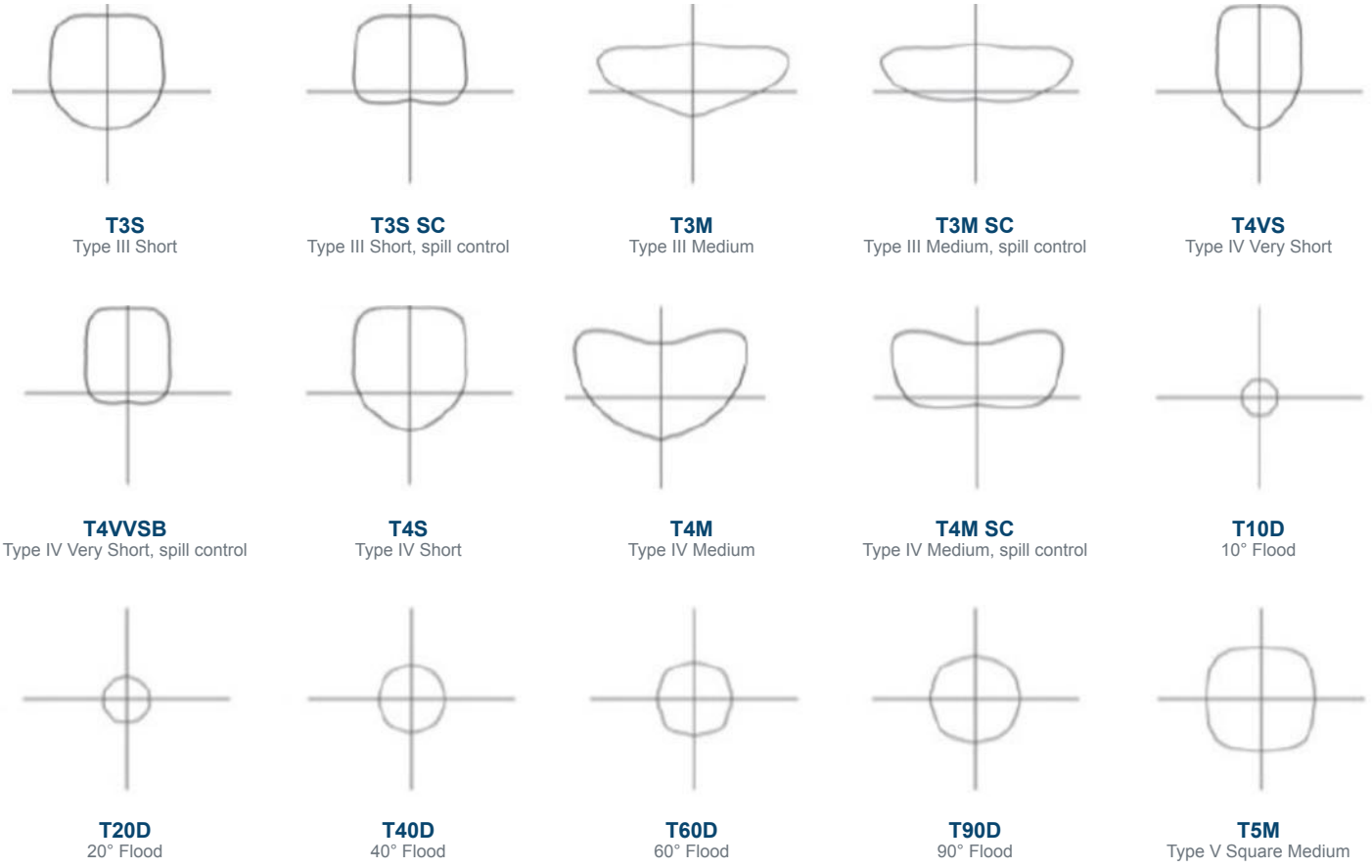


APTAs shown with U Bracket Mount

OPTICS

Optics & Light Distribution

Light needs optics to send it where it belongs. These are the beam distributions APTA is built with — Type III through Type V, the spill-control beams, and floods from 10° to 90° — so a lighting engineer can put footcandles on the ground and nowhere else. Every optic can be rotated 90° left or right to shift the throw.



T3S
Type III Short

T3S SC
Type III Short, spill control

T3M
Type III Medium

T3M SC
Type III Medium, spill control

T4VS
Type IV Very Short

T4VVSB
Type IV Very Short, spill control

T4S
Type IV Short

T4M
Type IV Medium

T4M SC
Type IV Medium, spill control

T10D
10° Flood

T20D
20° Flood

T40D
40° Flood

T60D
60° Flood

T90D
90° Flood

T5M
Type V Square Medium

Beam distribution diagrams, shown in section. Two further codes complete the fourteen: T2S (Type II Short) and T5W (Type V Square Wide) — the T5W candela plots appear in the photometry on page 6, and T2S photometric files are supplied on request. Candela plots for every distribution follow on page 6.

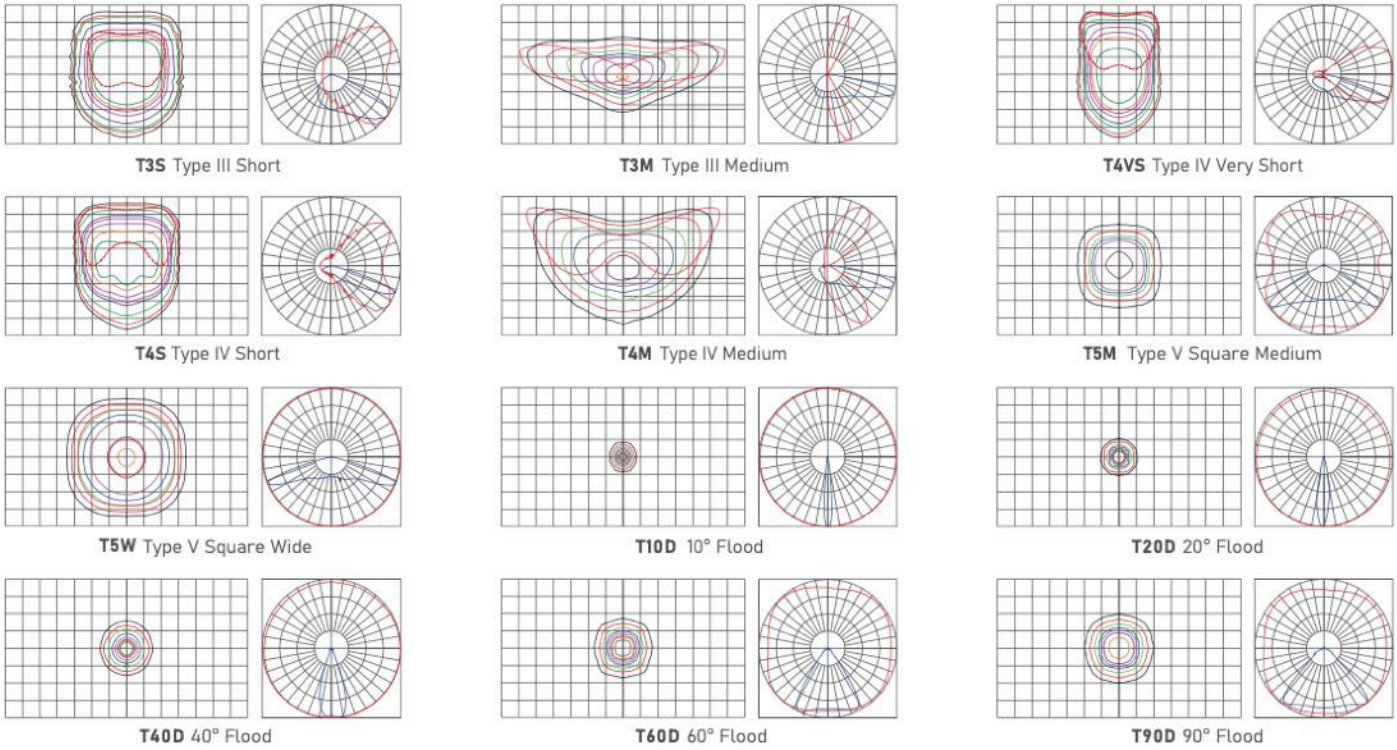


APTA high-mast area lighting illuminates a high-capacity transportation facility. Four pole-mounted luminaire clusters deliver wide, uniform surface coverage across a truck depot and trailer staging yard, maximizing overnight logistical safety and operational efficiency.

PHOTOMETRY

Candela Plots and the Ordering Codes

The plots below pair an iso-candela footprint with a polar candela curve for each published distribution. A lighting engineer reads them alongside your site geometry, selects the optic and its orientation, then hands back a photometric study and the electronic files that prove it.



Iso-candela plots (left of each pair) and polar candela plots (right), tested per IES LM-79-19 and reported per IES TM-15-20.

The fourteen optic codes

T2S	Type II Short
T3S	Type III Short
T3M	Type III Medium
T4VVSB	Type IV V. Short, spill-control
T4VS	Type IV Very Short
T4S	Type IV Short
T4M	Type IV Medium
T5M	Type V Square Medium
T5W	Type V Square Wide
T10D	10° Flood
T20D	20° Flood
T40D	40° Flood
T60D	60° Flood
T90D	90° Flood

Orientation and data

Standard throws toward the street side; **ORL** and **ORR** rotate the optics left or right 90° to move light between the street side and the house side without moving the fixture.

Electronic photometric files are published per IES LM-63-23 for import into AGi32 or Visual, with chromaticity to ANSI C78.377 and color rendering to CIE 13.3 and CIE 15 — your engineer models the site with the same numbers we publish.

Spill-control optics keep light below horizontal and off the neighbors' property, which protects night skies, reduces trespass complaints, and helps a project meet most local ordinances. APTA is dark sky friendly with 590nm Amber, 2200K, 2700K, or 3000K, mounted horizontally.

DURABILITY

Built for Harsh Places

APTA is designed for the outdoors at its worst — coastal salt, driving rain, freeze-thaw, vibration, and impact. The result is a luminaire a facility can install and forget.

IP66	IK10	5,000h	20kA
DUST & WATER	IMPACT RATED	SALT SPRAY	SURGE

EXTREME-LIFE thermal design

A passive heat-sink design with no fans or moving parts, thermally isolated from the driver enclosure, cools the LEDs for an L70B10 rating above 200,000 hours.



Marine-grade finish

A corrosion-resistant polyester powder coat, 100µm thick, endurance tested to 5,000 hours of elevated ambient salt fog per ASTM B117 and ISO 9227.

Sealed and impact-rated

IP66 sealing per IEC 60529 keeps out dust and strong water jets; IK10 impact resistance per IEC 62262 stands up to abuse and vandalism.

Protected electronics

20kA surge suppression tested per IEEE/ANSI C62.41.2 guards the LEDs; the fixture is certified to ANSI C136.31 3G bridge and overpass vibration standards.

Field-serviceable

A patent-pending interlocking housing and a removable driver tray mean a rare repair happens on the ground, not on a lift. Optional tool-less hardware speeds entry to the electrical chamber.



MOUNTING & DIMENSIONS

Mounting, Size, and Weight

APTA mounts in three ways. The T-type extruded aluminum arm fits round and square poles with no extra adapter and includes internal bolt guides for easy positioning. The L-type post-top mount slips onto round poles. Both keep the fixture's low-profile housing close to the pole, which reduces wind load. An adjustable wire mount is available for inside structures with high mounting heights.



T — Fixed arm



L — Slip fitter



U — Bracket mount

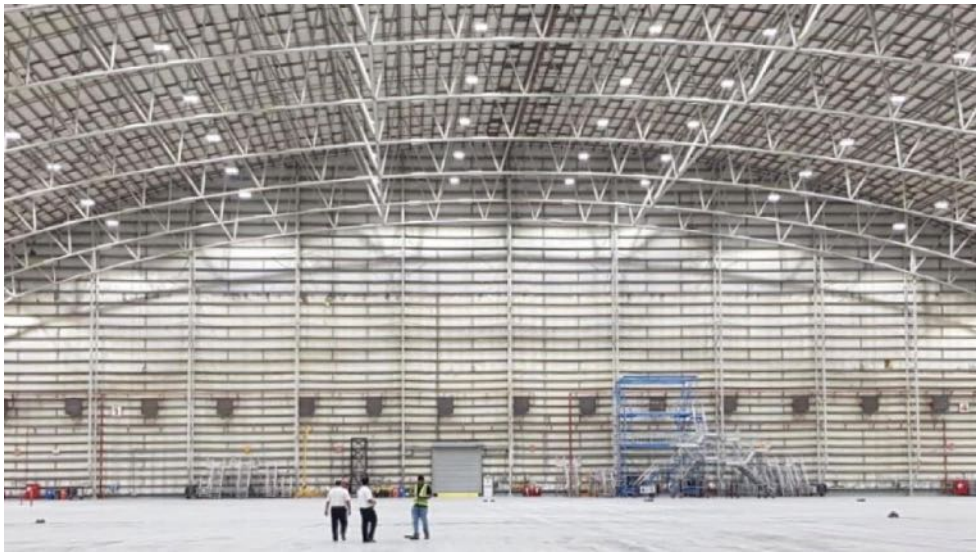
T — Fixed arm	Extruded aluminum arm for round or square poles; internal bolt guides for positioning during mounting.
L — Slip fitter	Post-top mount for round poles, for parking-lot and walkway layouts.
U — Bracket mount	Bracket mount for walls, ceilings, and structural members at high mounting heights.
Pole loading	Effective projected area is confirmed per project against the pole schedule and ASCE 7 with the specifying lighting engineer.

Fixture dimensions & net weight

Model	Length	Width	Depth	Weight
AF88XPAC40	17.91"	13.15"	2.95"	11.5 lb
AF88XPAC80	20.35"	13.15"	2.95"	13.4 lb
AF88XPAC120	22.83"	13.15"	2.95"	15.4 lb
AF88XPAC160	25.28"	13.15"	2.95"	16.8 lb
AF88XPAC200	27.76"	13.15"	2.95"	18.7 lb
AF88XPAC240	30.20"	13.15"	2.95"	20.3 lb
AF88XPAC320	35.12"	13.15"	2.95"	24.5 lb
AF88XPAD60	17.91"	13.15"	2.95"	11.7 lb
AF88XPAD120	20.35"	13.15"	2.95"	13.7 lb

Model	Length	Width	Depth	Weight
AF88XPAD180	22.83"	13.15"	2.95"	15.9 lb
AF88XPAD240	25.38"	13.15"	2.95"	17.2 lb
AF88XPAD300	27.76"	13.15"	2.95"	20.3 lb
AF88XPAD360	30.20"	13.15"	2.95"	21.8 lb
AF88XPAD480	35.12"	13.15"	2.95"	25.1 lb
AF88XPBD720	30.20"	23.94"	2.95"	34.6 lb
AF88XPBD960	35.12"	23.94"	2.95"	39.0 lb
AF88XPBE960	30.20"	23.94"	2.95"	32.0 lb
AF88XPBE1440	37.60"	23.94"	2.95"	43.4 lb

Net fixture weight, excluding mount. Dimensions converted from the fixture data sheet: PA-series housing 334mm (13.15") wide, PB-series 608mm (23.94") wide, both 75mm (2.95") deep; length scales with module count.



EPA & POLE LOADING

Effective Projected Area

Effective projected area is the wind-catching area of the luminaire and its mount, in square feet. Every pole has a published maximum EPA at each design wind speed, and the EPA of everything mounted on that pole has to stay under it. Tilt matters: a fixture aimed at 45 degrees loads a pole far harder than the same fixture aimed flat. Total the values below for the pole, then confirm the total against the pole schedule and ASCE 7 with the specifying lighting engineer.

Arm mount — T

Wattage	40-60W	80-120W	120-180W	160-240W	200-300W	240-360W	320-480W	720W	960W
EPA, ft²	0.32	0.36	0.41	0.45	0.50	0.55	0.65	0.60	0.69

Fixed-arm mounting does not tilt, so one EPA value covers each wattage band.

Slip-fitter mount — L

	0°	10°	20°	30°	45°	60°	70°	80°	90°
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 — U

	0°	10°	20°	30°	45°	60°	70°	80°	90°
40-60W	0.36	0.44	0.50	0.58	0.66	0.73	0.81	0.87	0.95
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
720W	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

Tilt angle, measured from horizontal.

EPA in square feet, per luminaire, including its mount. Values are as published in the APTA fixture data sheet. Multiply by the number of luminaires on the pole and add any brackets, banner arms, or signage before comparing the total to the pole's rated EPA.

CONTROLS & OPTIONS

Configure It to the Job

APTA works with the controls a modern site expects and configures to the application. Every option below is a factory build — a lighting specialist confirms the combination before the order is released.

Dimming & control

DIM0	0-10V dimming
DALI	DALI control
MMS	Motion sensor
NEMA3 / NEMA7	3-pin or 7-pin photocell receptacle
PCM	Photocell, mini
ZHAGA	Zhaga socket for networked controls

Site & environment

BLS	Back light shield
BSP	Bird spike
S5K	5,000-hour salt-spray tested finish
ORL / ORR	Optics rotated left / right 90°
AMB	590nm true amber, for turtle-nesting and dark-sky-sensitive sites
Ra>90	High-CRI LEDs where color rendering matters

Amber for sensitive sites



590nm amber APTA area lighting, port facility, Okinawa, Japan.

The 590nm true amber option uses a long-wavelength source that helps sea-turtle hatchlings navigate from nest to shore and meets Florida Fish and Wildlife Conservation Commission guidance. It is also the first choice on dark-sky-sensitive projects, alongside 2200K and 2700K.

Finishes



APTA in a custom RAL finish.

Gray (RAL7004) is standard; black (RAL9011) is a stocked alternative. Other housing colors are available as a custom finish. Most finishes carry the same 100µm marine-grade powder coat and 5,000-hour salt-spray endurance.

Broadcast color, when cameras are present

A TLCI 90+ broadcast option is available for venues that stream or televise. A TLCI Qa above 90 is rated perfect for film-style production and very good for live multi-camera work — skin tones and uniforms read correctly on camera.

ORDERING INFORMATION

Build the Part Number

EXAMPLE **AF88XPAC320L-T-T3M-40K-GY-DIM0**

320W, 100-277VAC, fixed-arm mount, Type III Medium optic, 4000K, gray, 0-10V dimming

MODEL
AF88XPAC40
AF88XPAC80
AF88XPAC120
AF88XPAC160
AF88XPAC200
AF88XPAC240
AF88XPAC320
AF88XPAD60
AF88XPAD120
AF88XPAD180
AF88XPAD240
AF88XPAD300
AF88XPAD360
AF88XPAD480
AF88XPBD720
AF88XPBD960
AF88XPBE960
AF88XPBE1440

VOLTAGE	
L	100-277VAC
H	277-480VAC

Appended to the model number, e.g. AF88XPAC320L.

MOUNTING	
T	Fixed arm
L	Slip fitter
U	Bracket mount

OPTIC
T2S
T3S
T3M
T4VVSB
T4VS
T4S
T4M
T5M
T5W
T10D
T20D
T40D
T60D
T90D

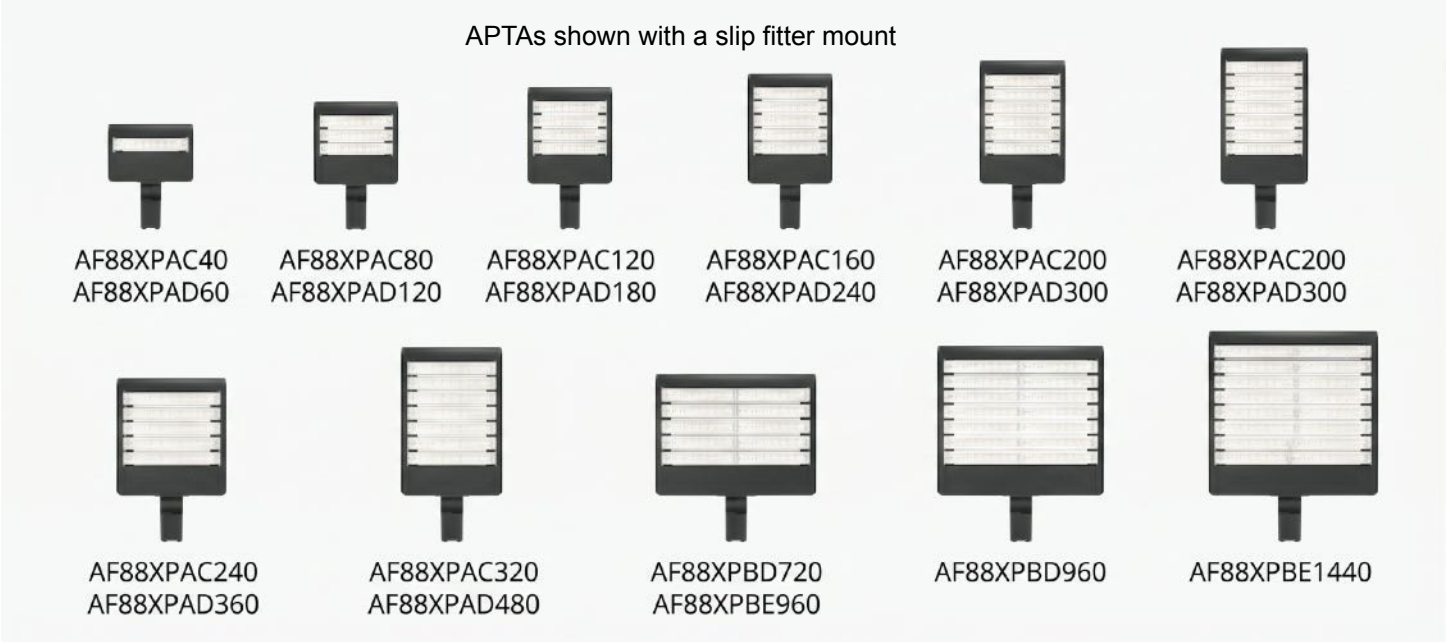
CCT	
22K	2200K
27K	2700K
30K	3000K
40K	4000K
50K	5000K
57K	5700K
AMB	590nm amber

COLOR	
GY	Gray, RAL7004
BK	Black, RAL9011
RAL	Custom color, specify RAL

OPTIONS	
DIM0	0-10V dimming
DALI	DALI control
MMS	Motion sensor
NEMA3	3-pin receptacle
NEMA7	7-pin receptacle
PCM	Photocell, mini
BLS	Back light shield
BSP	Bird spike
ZHAGA	Zhaga socket
S5K	5,000h salt spray
ORL	Optics rotated left
ORR	Optics rotated right

Read the part number left to right: model and voltage, mounting, optic, CCT, color, then options. Separate multiple options with a slash. Except for dimming, every configuration option is confirmed with a lighting engineer before release. Not every combination is stocked in every model.

APTAs shown with a slip fitter mount



CERTIFICATIONS & STANDARDS

Listed and Certified

Certification	Scope	Standards
cULus	North American safety standards	UL 1598:2023; UL 8750:2023; CSA C22.2 No. 250.0:2022; CSA C22.2 No. 250.13:2022
FCC	Federal Communications Commission	Title 47 CFR Part 15
CE-LVD	Low Voltage Directive	EN IEC 60598-1:2021; EN IEC 60598-2-3:2023; EN IEC 60598-2-5:2023; IEC TR 62471:2023; EN IEC 62493:2023
CE-EMC	Electromagnetic Compatibility Directive	EN IEC 55015:2019; EN IEC 61547:2023; EN IEC 61000-3-2:2024; EN IEC 61000-3-3:2023
CE-ErP	Energy-Related Products Directive	(EU) 2019/2020; (EU) 2019/2015
RoHS	RoHS Directive	EN IEC 62321-3-1:2019; EN IEC 62321-4:2023
CB	International electrical certification	IEC 60598-1:2020; IEC 60598-2-3:2023; IEC 60598-2-5:2023; IEC TR 62471:2023
ENEC	European Norms electrical certification	EN IEC 60598-1:2021; EN IEC 60598-2-3:2023; EN IEC 60598-2-5:2023; IEC TR 62471:2023; EN IEC 62493:2023
SAA	Australia / New Zealand standards	AS/NZS 60598.1:2021; AS/NZS 60598.2.3:2021
PSE	Product safety, electrical appliances & materials (Japan)	JIS C 8105-1:2021
ATEX	ATEX Directive	EN IEC 60079-0:2018; EN IEC 60079-11:2023; EN 60529:1991+A1:2000+A2:2013
IEC TR 62471	Photobiological safety	IEC TR 62471:2023

cULus	**CE**	**CB**	**ENEC**	**SAA**	**PSE**
FCC	**RoHS**	**IP66**	**IK10**	**DLC Premium**	**DarkSky**

Certification is model-specific. Not every listing applies to every configuration — confirm the exact build with a lighting specialist before it is quoted as listed or approved.



Oceanside pool safety lighting at a coastal Florida condominium complex. Four pole-mounted APTA area fixtures provide high-visibility illumination for critical life safety zones. Engineered with an IP66-sealed housing and a marine-grade finish, the rugged system delivers uncompromised reliability in high-vibration, hurricane-prone environments.

CERTIFICATIONS & STANDARDS

Performance and Durability Testing

Certification	Scope	Standards
IP66	Ingress protection — dust tight, strong water jets	IEC 60529:2013
IK10	Impact resistance	IEC 62262:2022
Salt spray	5,000-hour salt-spray endurance	ASTM B117-22; ISO 9227:2022
Vibration	3G bridge and overpass vibration standard	ANSI C136.31:2022
Surge protection	Surge protection performance	IEEE C62.41.2-2023; UL 1449:2023
Photometrics	Photometric and integrating-sphere testing	IES LM-79-19; IES LM-63-23; IES TM-15-20; ANSI C82.77:2023; ANSI C78.377:2023; CIE 13.3:2023; CIE 15:2023
LED lamps	LED lamp performance and reliability	IES LM-80-23; ANSI C78.377:2023; JESD22-A108F; JESD22-A101E; JESD22-A105D; JESD22-B104D; JESD22-A114F
LED module	LED module safety	EN IEC 62031:2023
LED driver	LED driver safety and EMC	EN IEC 61347-1:2023; EN IEC 61347-2-13:2023; EN IEC 62384:2023; EN IEC 55015:2019; EN IEC 61000-3-2:2024; EN IEC 61000-3-3:2023; EN IEC 61547:2023; IEC 62386-102:2014+A1:2019; IEC 62386-207:2022; UL 8750:2023; FCC Part 15
Receptacle	Luminaire receptacle standard	ANSI C136.10:2023
Dimming receptacle	Dimming control receptacle standard	ANSI C136.41:2023

DLC

DLC Premium qualified versions are available. Qualification is model-specific and not family-wide.

DarkSky

APTAs can be dark sky-friendly when equipped with 590nm Amber, 2200K, 2700K, or 3000K and mounted horizontally.

Rated life is stated as L70B10 above 200,000 hours and L90B10 above 60,000 hours, projected from IES LM-80-23 lumen-maintenance data. Test reports for any standard listed here are available on request.



High-velocity hurricane winds, abrasive sandstorms, and extreme ambient heat are no match for the APTA housing. Engineered with passive heat-sinking to lower junction temperatures, IP66-rated sand sealing, and standard 3G vibration resistance, this rugged luminaire sustains maximum performance through the absolute worst environmental torture.

NEXT STEPS

Light Your Project With Confidence

Before a single fixture ships, a photometric analysis models your site — average and minimum footcandles, uniformity ratios, spacing, and light-trespass detail — so you know the result before you buy. A lighting specialist walks you through every number.

STEP ONE

Share the project

Send your site dimensions, mounting heights, and target light level, and a lighting engineer builds your photometric study.

STEP TWO

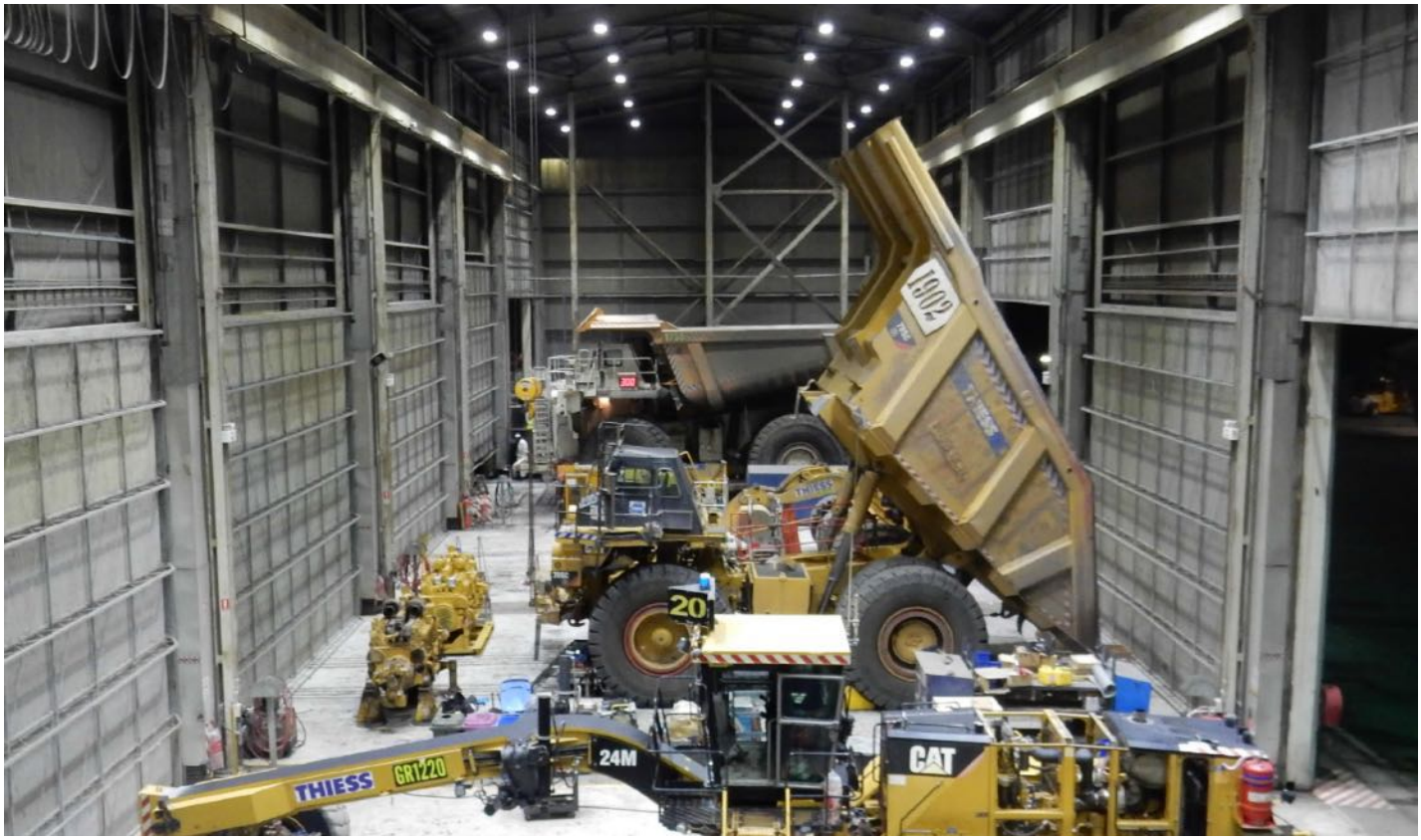
Match the site

Tell us the environment — coastal, high-vibration, dark-sky-sensitive — and we match the finish, optics, and controls to it.

STEP THREE

Confirm the build

Review the layout, the part numbers, and the lead time with your specialist, and place the order on schedule.



Talk to a lighting specialist today.

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