

**200+** Patent Certificates  
**\$1,000,000+** Annual Energy Saving  
**20,000+** Projects Successfully Installed



HIGH LUMEN  
OUTPUT UP TO **220** lm/W

# SAA All in One Solar Street Light

Power: 30W - 300W



Innovative & Tailored  
Lighting Solutions for **Success**  
[www.aokledlight.com](http://www.aokledlight.com)

# Discover **SAA** Series



**30W-120W:**  
Bracket is adjustable

**150W-300W:**  
Bracket is unadjustable



**WARRANTY**

3 Year Limited Warranty,  
5 Year Preferred Warranty.  
Please consult with our sales for detailed agreement.

- Charging time: 5 hours to 8 hours (standard).
- External power switch, optional external charging interface (requires additional configuration).
- Built-in/external grid complementary power supply.
- Lighting options: T203, T212 (T2M), T304, T402, T502;
- The controller uses IP67 waterproof connectors for easy assembly and disassembly. IP65 waterproof switch ensures minimal energy consumption during transportation.

# Advantages of SAA All in One Solar Street Light



**Adjustable &  
Reinforced Bracket**



**Monocrystalline  
Silicon Solar Panel**



**Long Lifespan  
Li-ion Battery & MPPT**



**Aviation Aluminum  
Profile Frame**



**Strong Corrosion  
Resistance**



**Intelligent Lighting  
Control**



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# Key Components



## LiFePO4 Battery

Uses LiFePO4 batteries, enduring over 2000 charge/discharge cycles for safety, compactness, and longer lifespan.



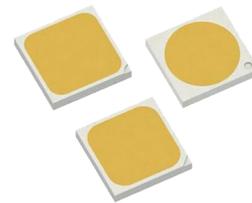
## Remote Control

The lighting program can be easily modified to save more energy and extend working time during low sunlight, thereby prolonging battery life.



## MPPT Charge Controller

All street lights use the MPPT solar controller, boosting charging efficiency by 30% compared to PWM and ensuring more stable performance.



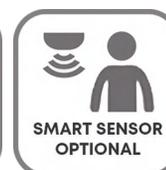
## TYF LED Chips

It uses ultra-high brightness TYF LED chips to provide the best lighting performance with minimal power consumption.



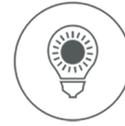
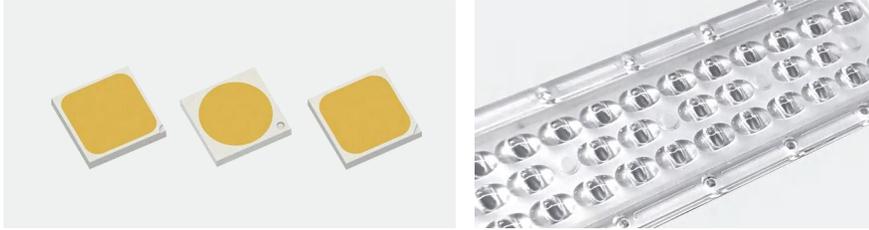
## Optics Lens

The distributions design focused on the road's center, reducing light pollutions. Various lens patterns are available to meet different project needs.



# Energy-efficient Lighting Systems

Single lumen efficiency **>220lm/W**  
achieve higher illumination



High Efficiency



Long Lifespan



Less Calorific Value

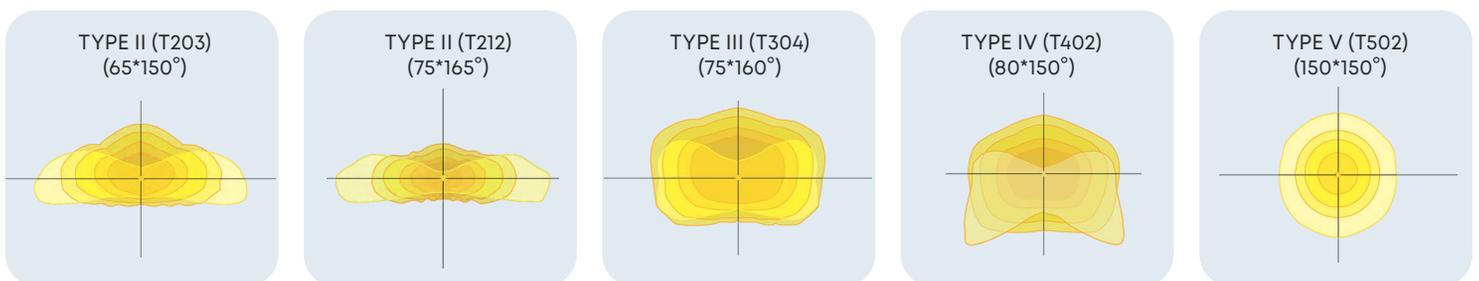


Low Light Decay

- Aerospace aluminum profile frame, strong corrosion resistance, lightweight;
- Akzo powder neutral salt spray corrosion for 1000 hours;
- Featuring the 5050 LED chip, it serves as a top-tier light source up to 200lm/W;
- The well-optimized light distribution ensures a more uniform illuminated area, minimizing upper light pollution;

## Multiple Distribution Options

General solution, accurate light distribution design, flexible to match the project requirements:



\* Due to working temperature and CCT/CRI adjustments, actual photometric values may vary slightly. Please consult the measured IES file for accurate data. The above information is for reference purposes only.

# Smart Control Ready For Efficient Management

Application of **Typical Networking** of Smart Street Light (optional)



## Single lamp control

Control street light switch, brightness adjustment, current acquisition. Voltage acquisition, power calculation and power factor functions.



## Wireless network

From the device to the cloud, NB-IoT, GPRS, LTE and other cellular networks are used, without cabling.



## Fault management

The street light can automatically report fault information, troubleshoot faults through the platform, and query historical faults.



## Energy management

Supports online monitoring and storage of energy consumption and configuring energy saving policies.



## Intelligent monitoring

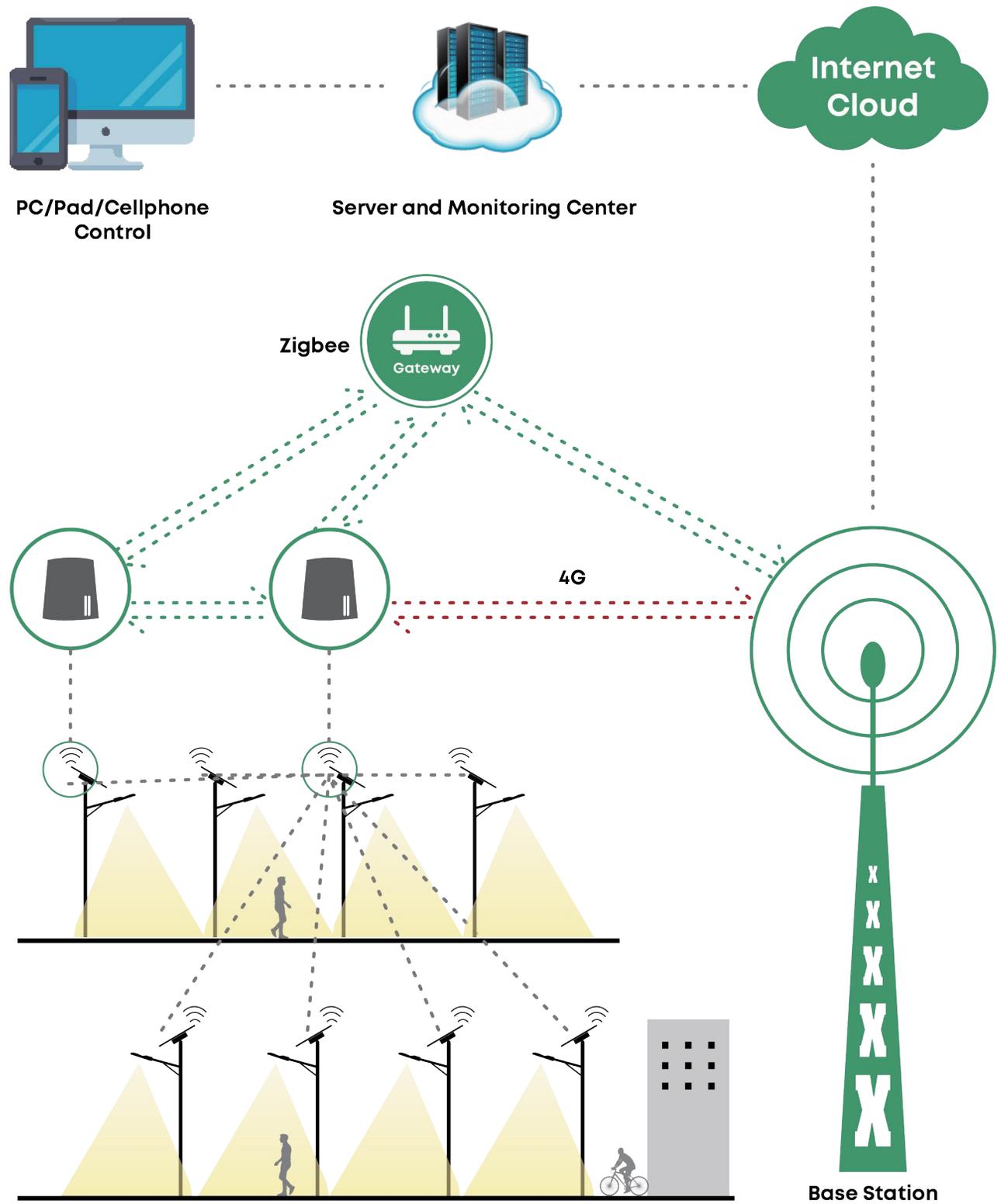
Support remote monitoring and remote control through PC web and mobile APP.



## Big data analysis

Based on the massive data of the platform, street light fault analysis and energy consumption analysis can be carried out to provide a basis for the maintenance of street light equipment to save energy and reduce consumption.

# Application of Typical IOT networking



# Application Reference

- Road & street lighting
- Residential area lighting
- Garden, parks & perimeter lighting
- Parking lot lighting
- Industrial and commercial park lighting
- Railway & station side lighting
- Riverside & jogging track lighting



Main road & Highway



Secondary Roads



Riverside & Jogging track



Residential & Area

# Parameter Table

Electrical Data						
Model	AOK-30WSAA	AOK-40WSAA	AOK-50WSAA	AOK-60WSAA	AOK-80WSAA	AOK-100WSAA
Power	30W	40W	50W	60W	80W	100W
Control Option	Photocell sensor, Timing, dimming, intelligent power saving, microwave sensor or PIR sensor.					
Grid Hybrid Power Solution(optional) Driver	Inventronics/Moso					
Work Mode	4H-Detected 100%, None 30% ;3H-Detected 70%, None 30% ;3H-Detected 50%, None 20%; 4H-Detected 30%, None 10%					
Photometric Data						
LED Model	5050, custom on request					
Lens	Polycarbonate					
Efficacy (lm/W, Std. Dev. ±5%)@5700K, Ra70	5050	220lm/W	220lm/W	220lm/W	220lm/W	220lm/W
Luminous Flux (lm, Std. Dev. ±5%)@5700K, Ra70	5050	6600lm	8800lm	11000lm	13200lm	22000lm
ULOR	= 0%, @ Luminaire inclination 0°					
CCT	3000K, 4000K, 5000K, 5700K, 6500K					
CRI	70Ra/80Ra optional					
Beam Angle	T203(65°*150°) / T212(75°*165°) / T304(75°*160°) / T402(80°*150°) / T502(150°*150°)					
Mechanical Data						
IP Rating	IP65, according to standard EN 60529					
Housing	Alluminum+SPCC					
Surface Treatment	Anti-UV thermosetting polyester / 80 micron epoxy primer + Anti-UV thermosetting polyester (for extremely corrosive environments).					
Painting	Black, custom color on request, C5-grade painting.					
Mounting	Post Top					
Configuration Data						
Photovoltaic Panel	Single side monocrystalline solar panel					
Solar Panel Voltage(W)	18V 40W	18V 60W	18V 70W	18V 80W	18V 100W	36V 120W
Battery Voltage(AH)	12.8V 15AH	12.8V 30AH	12.8V 30AH	12.8V 45AH	12.8V 45AH	25.6V 30AH
Li-ion Battery(WH)	192WH	384WH	384WH	576WH	576WH	768WH
Charing Time	5.05Hrs	6.74Hrs	5.77Hrs	7.58Hrs	6.06Hrs	6.74Hrs
Run Time(@full power)	5.76hrs	8.64hrs	6.91hrs	8.64hrs	6.48Hrs	6.91Hrs
Battery Lifespan	>2000 times cycle					
Ambient Temperature	-10°C to 50°C (14°F to 122°F)					
Storage Temperature	-20°C to 45°C (-4°F to 113°F)					
Control System	MPPT/PWM optional, custom IOT or remote control on request					
Maximum Autonomy	Operate 2~3 rainy days under intelligent model.					
Others						
Lifespan	L90B10 - 100000 hrs, @Tq 25°C					
Warranty	3 years as standard (Warranty extension to 5 years on request)					
Certification	Please consult for certification					
Product Size	625*365*55mm 24.61*14.4*2.2 in	885*365*55mm 34.8*14.4*2.2 in	1055*365*55mm 41.5*14.4*2.2 in	1170*365*55mm 46.1*14.4*2.2 in	1060*525*55mm 41.7*20.7*2.2 in	1145*525*55mm 45.1*20.7*2.2 in
Carton Size	852*435*140mm 41.0*17.1*5.5 in	1112*435*140mm 43.8*17.1*5.5 in	1282*435*140mm 50.5*17.1*5.5 in	1397*435*140mm 55.0*17.1*5.5 in	1305*620*140mm 51.3*24.2*5.5 in	1389*615*140mm 54.7*24.2*5.5 in
Net Weight	8.6 kg/19.0 lbs	10.5 kg/23.1 lbs	12.8 kg/28.2 lbs	13.5 kg/29.8 lbs	18.8 kg/41.4 lbs	19.9 kg/43.9 lbs
Gross Weight	10.6 kg/23.4 lbs	12.5 kg/27.6 lbs	15 kg/33.1 lbs	16.2 kg/35.7 lbs	21.8 kg/48.1 lbs	23 kg/50.7 lbs
Recommend Installation Height	4-7m	5-7m	5-7m	6-8m	7-9m	8-10m
Application Field	Road & street, residential area, garden, parks, parking lot, industrial and commercial parks, railway & station side, riverside & jogging track					
Storage Instruction	For long-term storage, it is advisable to charge 30% for the battery, then discharge it for 2 to 3 hours. This should be done every 3 months to prevent battery damage and extend the battery lifespan.					
<b>Important Note!</b>	<b>The provided information is solely for reference; the official measurement report holds higher authority.</b>					

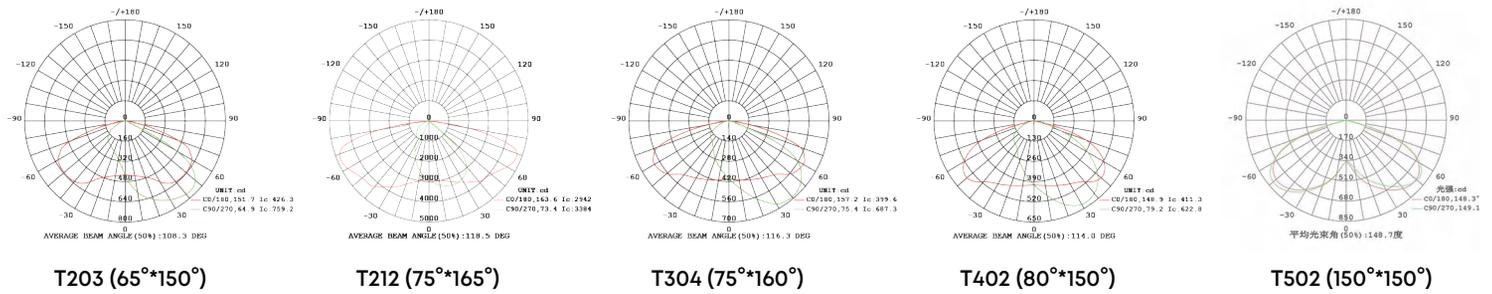
# Parameter Table

Electrical Data						
Model	AOK-120WSAA	AOK-150WSAA	AOK-180WSAA	AOK-200WSAA	AOK-240WSAA	AOK-300WSAA
Power	120W	150W	180W	200W	240W	300W
Control Option	Photocell sensor, Timing, dimming, intelligent power saving, microwave sensor or PIR sensor.					
Grid Hybrid Power Solution(optional) Driver	Inventronics/Moso					-
Work Mode	4H-Detected 100%, None 30% ;3H-Detected 70%, None 30% ;3H-Detected 50%, None 20%; 4H-Detected 30%, None 10%					
Photometric Data						
LED Model	5050, custom on request					
Lens	Polycarbonate					
Efficacy (lm/W, Std. Dev. ±5%)@5700K, Ra70	5050	220lm/W	220lm/W	220lm/W	220lm/W	220lm/W
Luminous Flux (lm, Std. Dev. ±5%)@5700K, Ra70	5050	26400lm	33000lm	39600lm	44000lm	66000lm
ULOR	= 0%, @ Luminaire inclination 0°					
CCT	3000K, 4000K, 5000K, 5700K, 6500K					
CRI	70Ra/80Ra optional					
Beam Angle	T203(65°*150°) / T212(75°*165°) / T304(75°*160°) / T402(80°*150°) / T502(150°*150°)					
Mechanical Data						
IP Rating	IP65, according to standard EN 60529					
Housing	Alluminum+SPCC					
Surface Treatment	Anti-UV thermosetting polyester / 80 micron epoxy primer + Anti-UV thermosetting polyester (for extremely corrosive environments).					
Painting	Black, custom color on request, C5-grade painting.					
Mounting	Post Top					
Configuration Data						
Photovoltaic Panel	Single side monocrystalline solar panel					
Solar Panel Voltage(W)	36V 150W	36V 180W	36V 200W	36V 240W	36V 300W	36V 360W
Battery Voltage(AH)	25.6V 45AH	25.6V 45AH	25.6V 60AH	25.6V 60AH	25.6V 75AH	25.6V 90AH
Li-ion Battery(WH)	1152WH	1152WH	1536WH	1536WH	1920WH	2304WH
Charing Time	8.08Hrs	6.06Hrs	8.08Hrs	6.74Hrs	6.74Hrs	6.74Hrs
Run Time(@full power)	8.64Hrs	6.91Hrs	7.68Hrs	6.91Hrs	7.2Hrs	6.91Hrs
Battery Lifespan	>2000 times cycle					
Ambient Temperature	-10°C to 50°C (14°F to 122°F)					
Storage Temperature	-20°C to 45°C (-4°F to 113°F)					
Control System	MPPT/PWM optional, custom IOT or remote control on request					
Maximum Autonomy	Operate 2~3 rainy days under intelligent model.					
Others						
Lifespan	L90B10 - 100000 hrs, @Tq 25°C					
Warranty	3 years as standard (Warranty extension to 5 years on request)					
Certification	Please consult for certification					
Product Size	1391*525*55mm 54.8*20.7*2.2 in	1385*705*55mm 54.5*27.8*2.2 in	1472*705*55mm 58.0*27.8*2.2 in	1617*765*55mm 63.7*30.1*2.2 in	1647*955*55mm 64.8*37.6*2.2 in	1847*955*55mm 72.7*37.6*2.2 in
Carton Size	1635*615*140mm 64.4*24.2*5.5 in	1575*790*140mm 62.0*31.1*5.5 in	1632*790*140mm 64.3*31.1*5.5 in	1807*790*140mm 67.6*31.1*5.5 in	1837*1040*140mm 73.3*33.5*5.5 in	2092*1040*140mm 82.4*40.9*5.5 in
Net Weight	24.6 kg/54.2 lbs	30.5 kg/67.2 lbs	36.2 kg/79.7 lbs	37.6 kg/82.8 lbs	43.5 kg/95.8 lbs	49.6 kg/109.3 lbs
Gross Weight	27.5 kg/60.6 lbs	33.6kg / 74.1 lbs	39.2kg / 86.3 lbs	43.5kg / 95.8 lbs	47 kg/103.6 lbs	53.2 kg/117.3 lbs
Recommend Installation Height	8-12m	8-12m	8-12m	10-12m	10-12m	10-12m
Application Field	Road & street, residential area, garden, parks, parking lot, industrial and commercial parks, railway & station side, riverside & jogging track					
Storage Instruction	For long-term storage, it is advisable to charge 30% for the battery, then discharge it for 2 to 3 hours. This should be done every 3 months to prevent battery damage and extend the battery lifespan.					
<b>Important Note!</b>	<b>The provided information is solely for reference; the official measurement report holds higher authority.</b>					

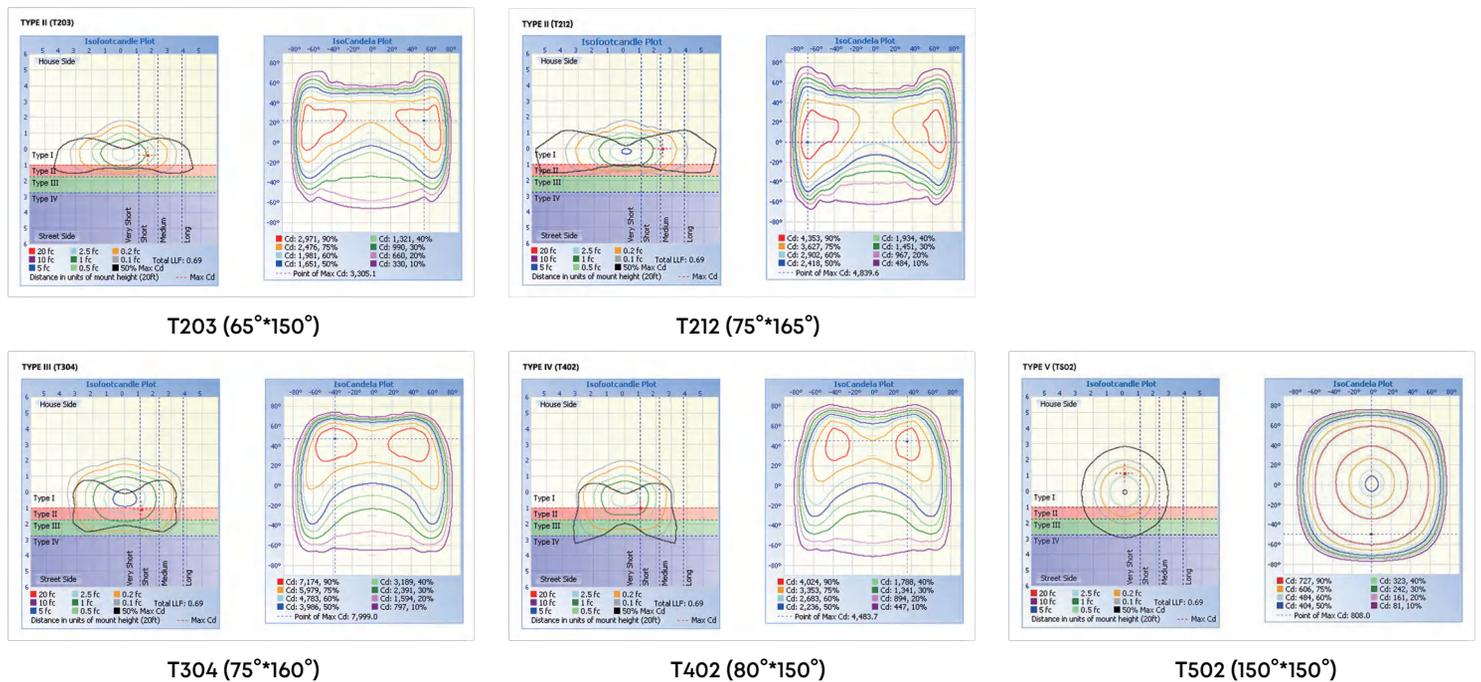
# Ordering Information

AOK	LED CHIPS	TYPE OF SENSOR	CCT&CRI	DISTRIBUTION	MOUNT	HOUSING
MODEL	LED CHIPS	TYPE OF SENSOR	CCT&CRI	DISTRIBUTION	MOUNT	HOUSING
30WSAA	A5=5050	00=Without Sensor	3070=3000K 70CRI	T203 (65°*150°)	A=Post Top	BK=Black
40WSAA		PIR=PIR Sensor	4070=4000K 70CRI	T212 (75°*165°)		SI=Silver
50WSAA		MS=Microwave Sensor	5070=5000K 70CRI	T304 (75°*160°)		Custom request
60WSAA			5770=5700K 70CRI	T402 (80°*150°)		
80WSAA			6570=6500K 70CRI	T502 (150°*150°)		
100WSAA			3080=3000K 80CRI			
120WSAA			4080=4000K 80CRI			
150WSAA			5080=5000K 80CRI			
180WSAA			5780=5700K 80CRI			
200WSAA						
240WSAA						
300WSAA						

## Photometry

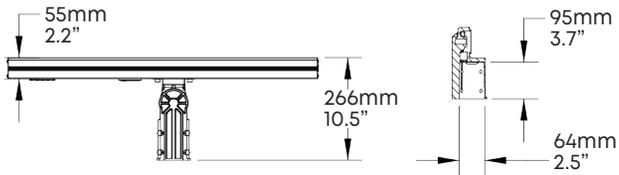
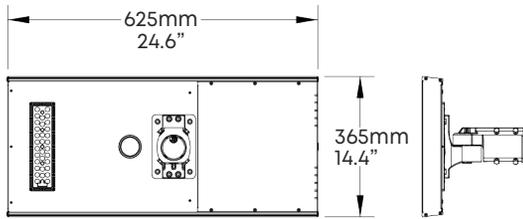


## Illuminance Diagram

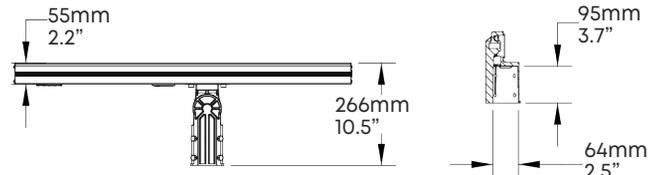
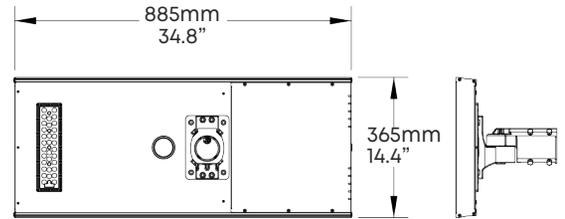


# Dimensions

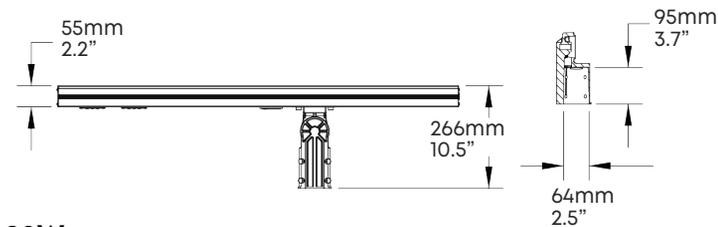
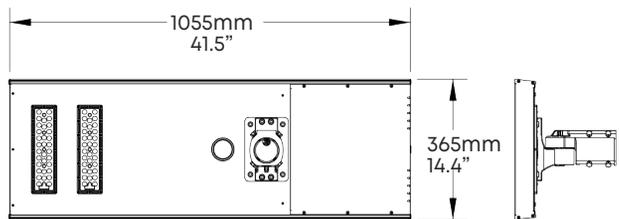
## 30W



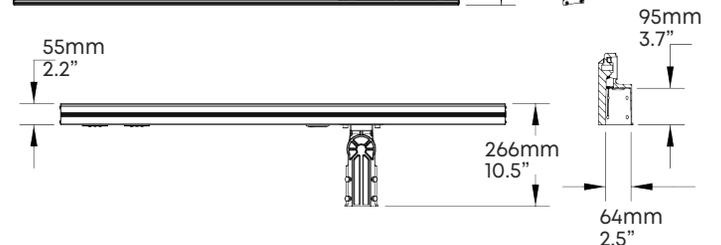
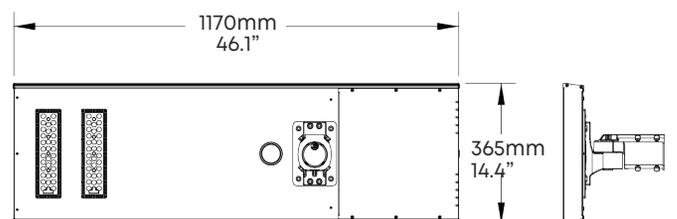
## 40W



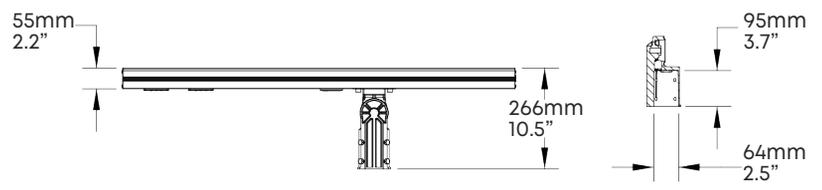
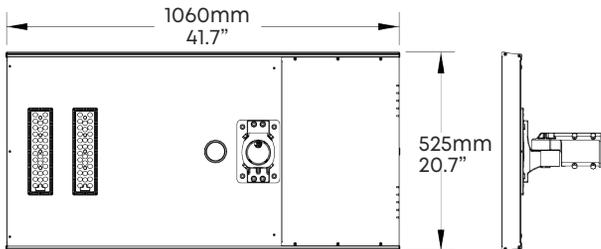
## 50W



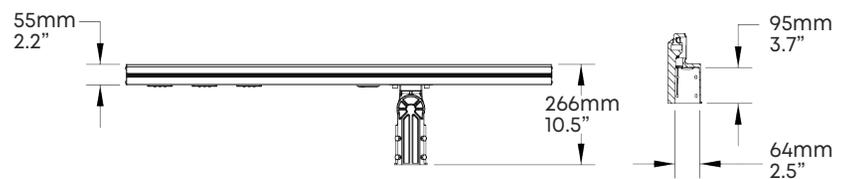
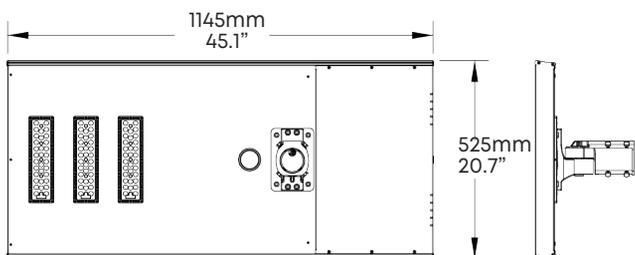
## 60W



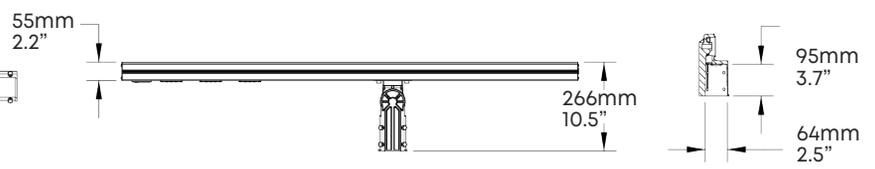
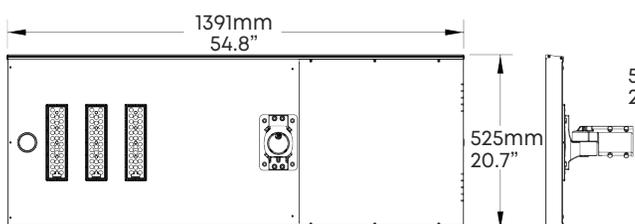
## 80W



## 100W

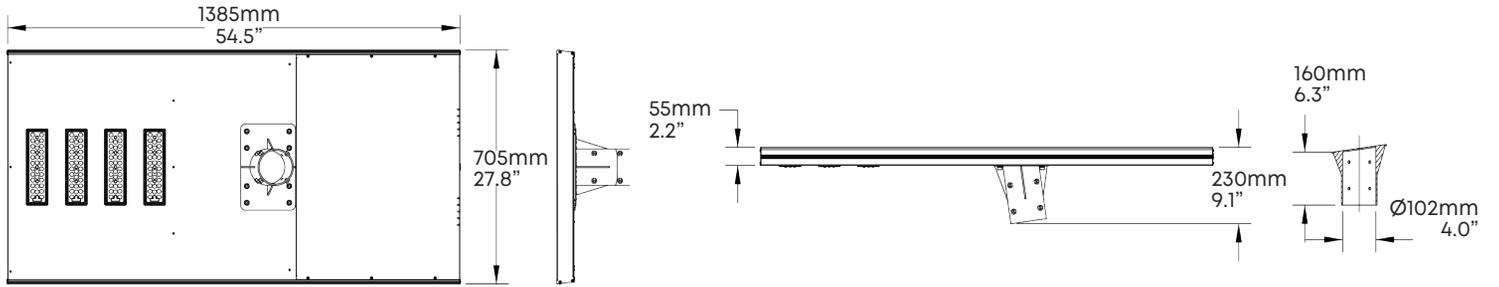


## 120W

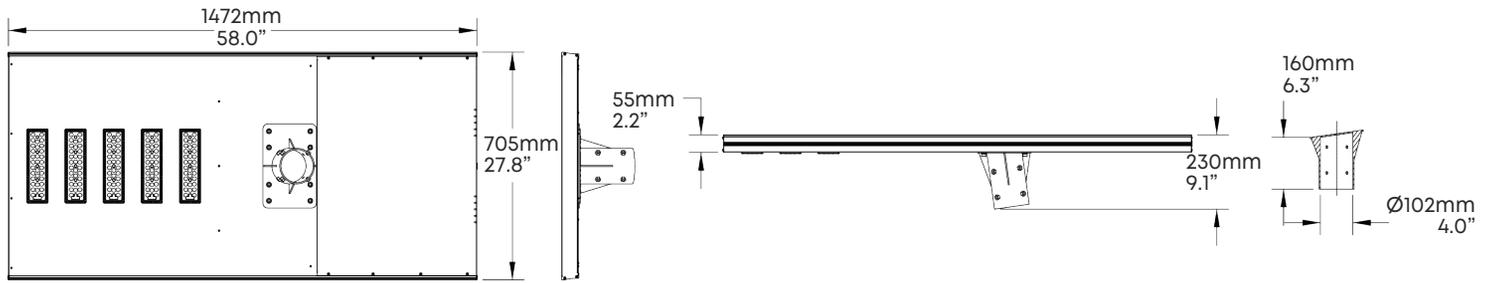


# Dimensions

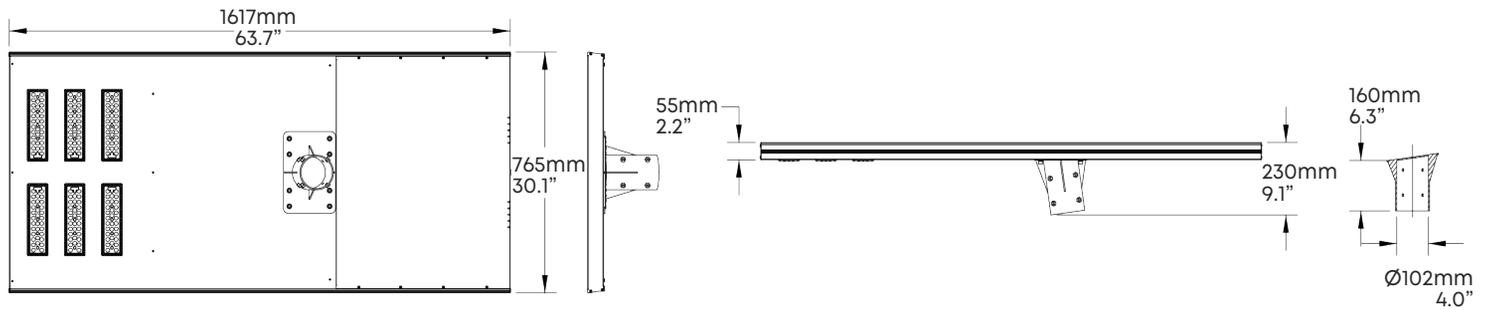
## 150W



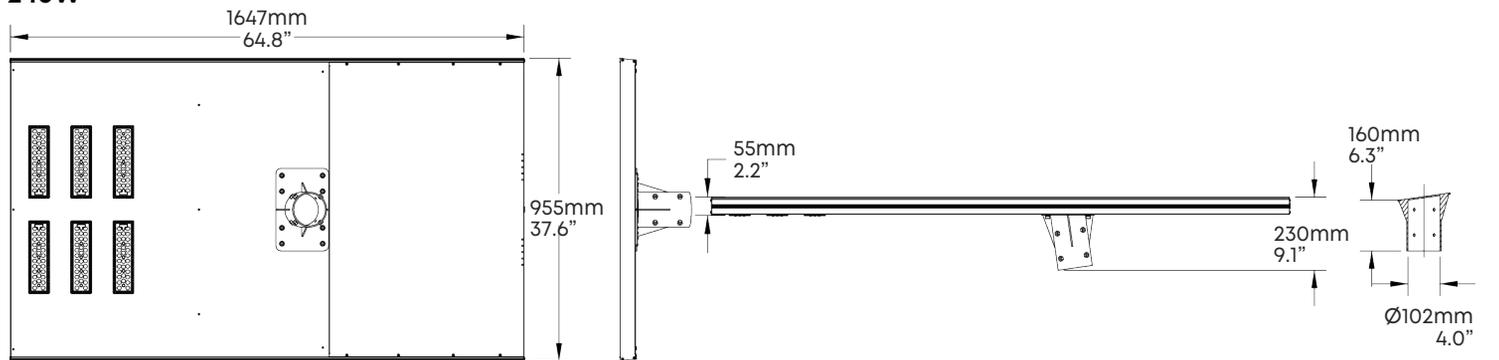
## 180W



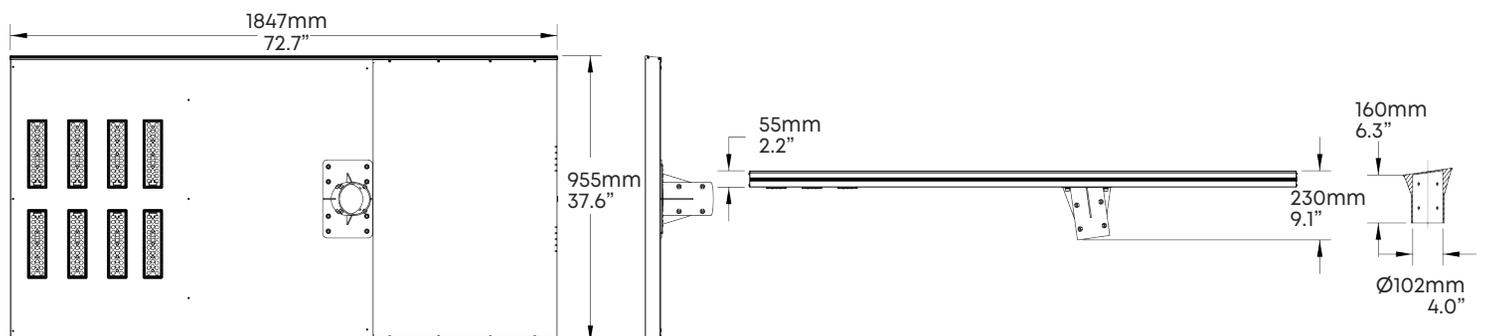
## 200W



## 240W



## 300W





Quality, Honesty, Service and Innovation

# Innovative & Tailored Lighting Solutions for **Success**



3 Year Limited Warranty,  
5 Year Preferred Warranty.  
Please consult with our sales for detailed agreement.

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