

# Solar LED Flood Light



Our Beyond Solar BLK series flood light can be used in parking lot, on building or any location where having traditional lighting would costly. You don't have to invest thousands of dollars to run power and no messy wiring into an electrical system.

- Adjusting the solar panel angle maximizes solar collection and allows snow to slide off
- Light fixture can also be adjusted to the direction light is needed
- The Solar panel and Light Fixture can be installed on any pole
- The Eco Friendly and safe LifePo4 Battery improves the cycle charge and discharge over 2000 times
- Auto identify day/night, smart mode operation
- 140 Lumen per watt and IP65 rated
- 3 years warranty on all components



## KEY FEATURES



### ANTI BLACK OUT

BY CHOOSING THE RIGHT COMPONENTS AND DIMENSIONING OUR ENGINEERS HAVE CALIBRATED ALL OUR SOLUTIONS FOR A PERFECT LIGHTING AUTONOMY. YOU WILL NEVER FACE A LIGHTING BLACK OUT.



### UNEQUALED LIFETIME

BY CHOOSING ONLY HIGHEST COMPONENT AND ESPECIALLY LIFEPO4 BATTERY AND ELECTRONICS OUR PRODUCTS ARE MADE TO LAST.



### EXTREME TEMPERATURE RESISTANCE

ALL OUR COMPONENTS ARE IP65 RATED. ALUMINIUM BODY AND FRAME AND STAINLESS BRACKET AVOID ANY RISK OF CORROSION



### EASY INSTALLATION

THE BRACKET AND THE LIGHT FIXTURE CAN BE INSTALLED ON ANY POLE

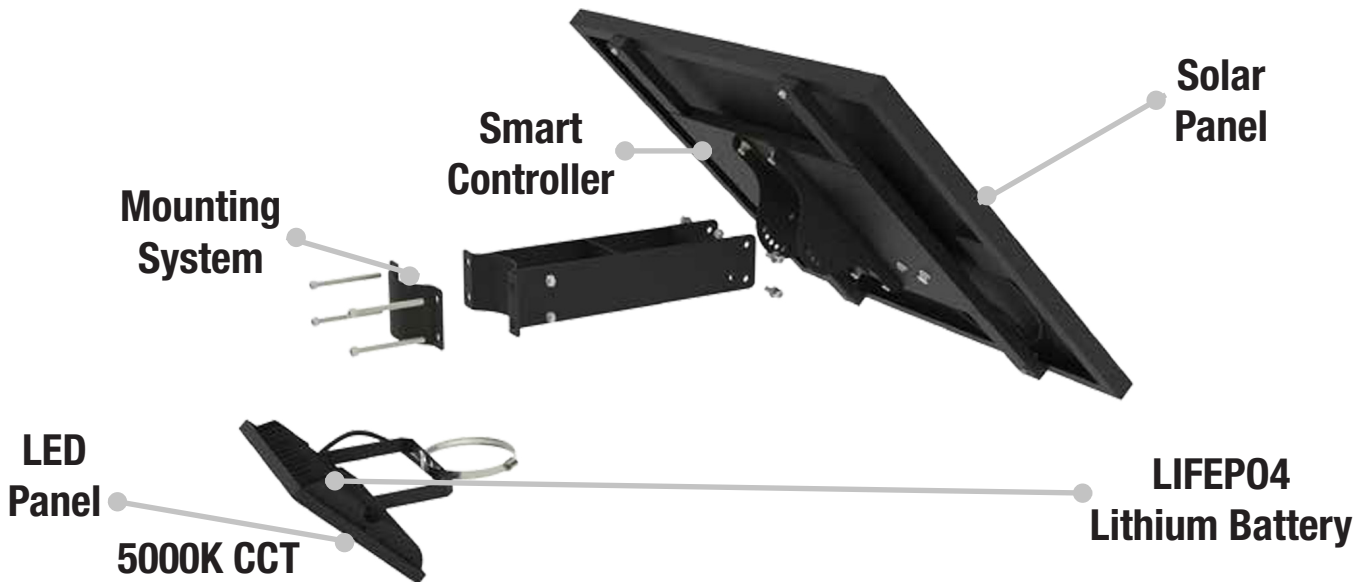


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## EXPLODED VIEW

### THE COMPACT SOLAR LIGHTING SOLUTION

The Beyond Solar LED Flood Light kit (BLK), is what we can call an All in Two. The bracket allows you to choose any angle or direction for the solar panel. The Light Fixture can also be adjusted to the right direction.



| Model #     | SKU #  | Power | PV Type | Solar Panel     | Lumens | Battery Capacity | Beam Angle | Working Time (Hrs) | IP Rating | Installation Height (Ft) |
|-------------|--------|-------|---------|-----------------|--------|------------------|------------|--------------------|-----------|--------------------------|
| AVS-BLK-15W | 786101 | 15W   | MONO    | 50 Watts / 18V  | 2100   | 15 Ah 12.8 Volts | 120°       | +24H               | IP65      | 6.5-9.8                  |
| AVS-BLK-20W | 786102 | 20W   | MONO    | 60 Watts / 18V  | 2800   | 18 Ah 12.8 Volts | 120°       | +24H               | IP65      | 6.5-13.1                 |
| AVS-BLK-30W | 786103 | 30W   | MONO    | 80 Watts / 18V  | 4200   | 24 Ah 12.8 Volts | 120°       | +24H               | IP65      | 9.8-16.4                 |
| AVS-BLK-40W | 786104 | 40W   | MONO    | 100 Watts / 18V | 5600   | 28 Ah 12.8 Volts | 120°       | +24H               | IP65      | 13.1-19.7                |
| AVS-BLK-50W | 786105 | 50W   | MONO    | 110 Watts / 18V | 7000   | 32 Ah 12.8 Volts | 120°       | +24H               | IP65      | 13.1-23                  |
| AVS-BLK-60W | 786106 | 60W   | MONO    | 120 Watts / 18V | 8400   | 38 Ah 12.8 Volts | 120°       | +24H               | IP65      | 16.4-26.2                |



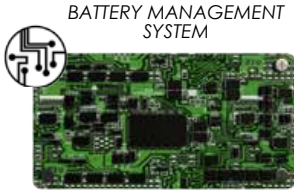
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## LIFEPO4 BATTERY

### ULTRA-LONG LIFE LIFEPO4 LITHIUM BATTERY

The Eco-friendly and safe LiFePO4 Li-ion battery improves the cyclic charge and discharge over 2000 times and has a life span of more than 8 years.

10 YEARS LIFE TIME



Electronic Algorithm Protection and battery management system for best use of the battery capacity.



| LIFEPO4              | VS | LI ION                                       |
|----------------------|----|--|
| Over 2000 cycles     | ☹️ | Over 500 cycles                              |
| No Risk of Explosion | ✅  | Very High Risk Explosion in High Temperature |
| -10 to 75 Degree     | 🌡️ | 0 to 45 Degree                               |
| Over 10 Years        | 🕒  | 24 to 32 Months                              |
|                      | 💰  | 50% Cheaper than LiFePO4                     |

High Temperature Resistant -20°C to +65°C

SAFETY No Explosion Risk

Best Technology in the Market

## SMART CONTROLLER

### 97 % CHARGING EFFICIENCY

MPPT (maximum power point tracking) controller automatically tracks the maximum power point according to the weather variation. Its charging rate is 16-30%

10 YEARS LIFE TIME

#### FEATURES

- Maximum power point tracking charging
- Auto identify day/night
- 4 levels dimming design
- Smart mode operation
- Waterproof IP68



#### MULTI PROTECTION

OVER LOAD

OVER CURRENT

OVER TEMPERATURE

OVER VOLTAGE

OVER CHARGE

OVER DISCHARGE

#### IR REMOTE CONTROL MONITORING



- Check the state of the battery
- Check the charging history
- Settle different running time slots
- Issue diagnostic

#### MPPT VS PWM



Charging efficiency vs time



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## LED LIGHTING

### PHILIPS LUXEON HIGH EFFICACY LIGHTING

Combined with a heat dissipation design, pure aluminum lamp base with a sealed lens for optimal lighting and life span. Batwing lens is perfect for illumination and uniformity.

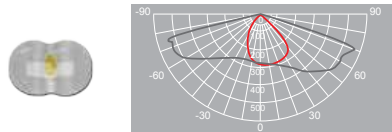
# PHILIPS

150 Lumens per Watt

WATERPROOF CASING



BATWING LENSE LIGHT DISTRIBUTION CURVE



Light distribution with greater than 93% uniformity

Available power :



## EASY INSTALLATION

### INSTALL ON ANY POLE OR WALL

With a well designed bracket support, the Solar Light Kit is very Easy and Flexible to install on Any pole.



SOLAR AREA LIGHTS

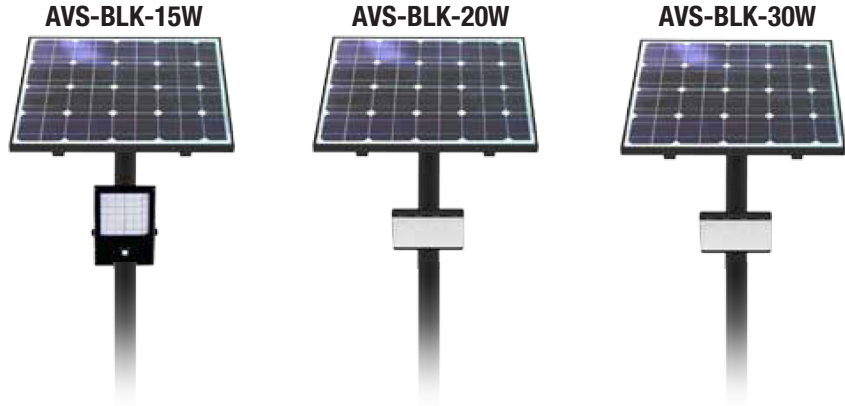


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## TECHNICAL SPECIFICATIONS

MADE FROM THE HIGHEST QUALITY COMPONENTS

We at Beyond Solar, have selected the best components for the highest level of performance and durability.



|            | AVS-BLK-15W                            | AVS-BLK-20W   | AVS-BLK-30W               |                          |
|------------|--|---|---------------------------|--------------------------|
| LIGHTING   | LED POWER                              | 15 Watts  | 20 Watts                  | 30 Watts                 |
|            | LUMINOUS FLUX                          | 2100 Lumens   | 2800 Lumens               | 4200 Lumens              |
|            | EFFICIENCY                             | 150 Lumens / Watts  |                           |                          |
|            | CHIPS                                  | <b>PHILIPS</b>  |                           |                          |
|            | LED LIFETIME                           | Over 50000 hours  |                           |                          |
|            | LIGHTING ANGLE                         | 120 degree  |                           |                          |
|            | MOUNTING HEIGHT                        | 6.5-9.8 FT  | 6.5-13.1 FT               | 9.8-16.4 FT              |
| STORAGE    | TECHNOLOGY                             | Lithium Iron Phosphate <b>LIFEPO4</b> 18650 Cells including Battery Management System BMS |                           |                          |
|            | CAPACITY                               | 15 Ah 12.8 Volts  | 18 Ah 12.8 Volts          | 24 Ah 12.8 Volts         |
|            | AUTONOMY                               | Over 24 hours at full Charge - 4 Rainy Days Back up                                       |                           |                          |
|            | CHARGING TIME                          | 6-7 hours   |                           |                          |
|            | LIFESPAN                               | Over 2500 cycles - 8 to 10 years Lifetime   |                           |                          |
|            | CERTIFICATE                            | En 61427 MSDS   |                           |                          |
| ENERGY     | SOLAR PANEL                            | 50 Watts / 18V  | 60 Watts / 18V            | 80 Watts / 18V           |
|            | LIFESPAN                               | Monocrystalline Panel Grade A 25 Years  |                           |                          |
|            | CERTIFICATES                           | IEC 61215 ; IEC 61730 I and II ; IEC 60904  |                           |                          |
| ELECTRONIC | CONTROLLER                             | MPPT SMART CONTROLLER   |                           |                          |
|            | SENSOR                                 | PIR Sensor Optional   |                           |                          |
|            | CABLING                                | Waterproof Connector, Plug and Play   |                           |                          |
|            | CERTIFICATES                           | En 55015 ; En 61000   |                           |                          |
| DIMENSIONS | UNIT SIZE (in)                         | 20.0787*24.0157*4.0354331   | 27.9528*20.0787*4.0354331 | 29.1339*26.378*5.3346457 |
|            | CARTON SIZE (in)                       | 26.7717*22.4409*7.28346   | 29.5276*22.4409*6.49606   | 28.3465*35.4331*7.87402  |
|            | NET WEIGHT (lb)                        | 19.6211   | 30.930855                 | 35.274                   |
|            | GROSS WEIGHT (lb)                      | 22.156457   | 33.135478                 | 40.78552                 |
|            | QTY PER CONTAINER<br>20» / 40» / 40 HQ | 417pcs/883pcs   | 423pcs/896pcs             | 220pcs/470pcs            |

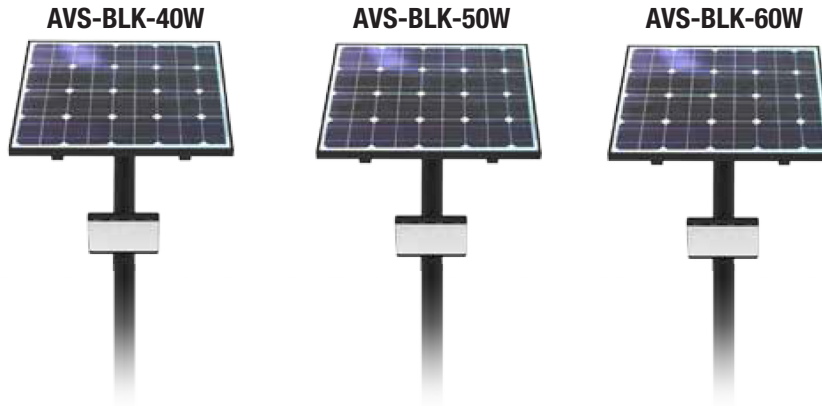


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|            | AVS-BLK-40W                            | AVS-BLK-50W  | AVS-BLK-60W               |                           |
|------------|--|--|---------------------------|---------------------------|
| LIGHTING   | LED POWER                              | 40 Watts   | 50 Watts                  | 60 Watts                  |
|            | LUMINOUS FLUX                          | 5600 Lumens  | 7000 Lumens               | 8400 Lumens               |
|            | EFFICIANCY                             | 150 Lumens / Watts   |                           |                           |
|            | CHIPS                                  | PHILIPS Luxeon   |                           |                           |
|            | LED LIFETIME                           | Over 50000 hours   |                           |                           |
|            | LIGHTING ANGLE                         | 120 degree   |                           |                           |
|            | MOUNTNING HEIGHT                       | 13.1-19.7 FT   | 13.1-23 FT                | 16.4-26.2 FT              |
| STORAGE    | TECHNOLOGY                             | Lithium Iron Phosphate LIFEPO4 18650 Cells including Battery Management System BMS |                           |                           |
|            | CAPACITY                               | 28 Ah 12.8 Volts   | 32 Ah 12.8 Volts          | 38 Ah 12.8 Volts          |
|            | AUTONOMY                               | Over 24 hours at full Charge - 4 Rainy Days Back up                                |                           |                           |
|            | CHARGING TIME                          | 6-7 hours  |                           |                           |
|            | LIFESPAN                               | Over 2500 cycles - 8 to 10 years Lifetime  |                           |                           |
|            | CERTIFICATE                            | En 61427 MSDS  |                           |                           |
| ENERGY     | SOLAR PANEL                            | 100 Watts / 18V  | 110 Watts / 18V           | 120 Watts / 18V           |
|            | LIFESPAN                               | Monocrystalline Panel Grade A 25 Years   |                           |                           |
|            | CERTIFICATES                           | IEC 61215 ; IEC 61730 I and II ; IEC 60904   |                           |                           |
| ELECTRONIC | CONTROLLER                             | MPPT SMART CONTROLLER  |                           |                           |
|            | SENSOR                                 | PIR Sensor Optional  |                           |                           |
|            | CABLING                                | Waterproof Connector, Plug and Play  |                           |                           |
|            | CERTIFICATES                           | En 55015 ; En 61000  |                           |                           |
| DIMENSIONS | UNIT SIZE (in)                         | 29.1339*26.378*5.3346457   | 43.77953*26.378*5.3346457 | 43.77953*26.378*5.3346457 |
|            | CARTON SIZE (in)                       | 35.4331*29.1339*7.87402  | 46.06299*28.7402*7.48031  | 46.06299*28.7402*7.48031  |
|            | NET WEIGHT (lb)                        | 35.274   | 41.8878                   | 44.53338                  |
|            | GROSS WEIGHT (lb)                      | 41.468952  | 46.2971                   | 49.471732                 |
|            | QTY PER CONTAINER<br>20» / 40» / 40 HQ | 204pcs/452pcs  | 194pcs/390pcs             | 194pcs/pcs                |



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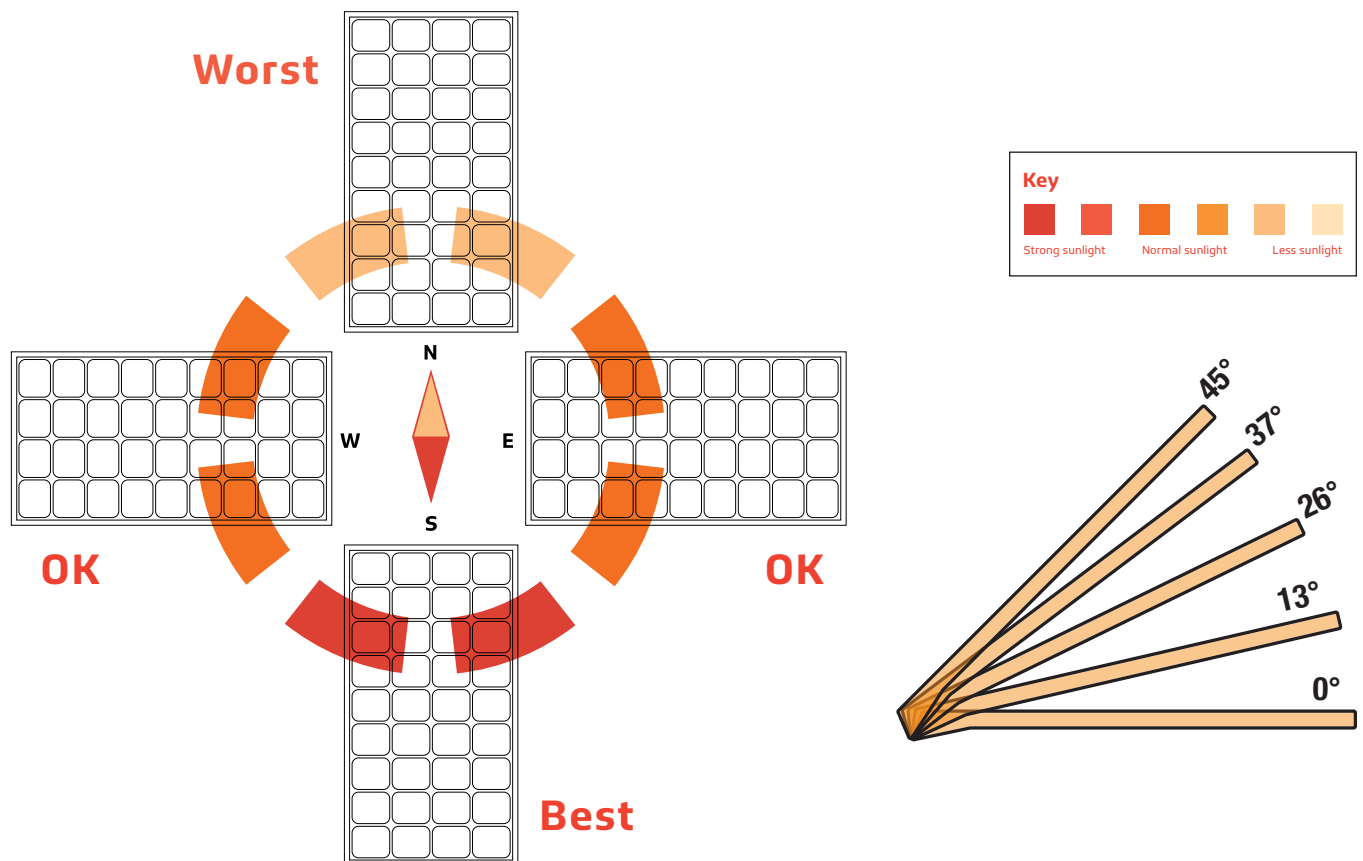
## Optimum Panel Orientation

The Solar charge in a battery pack won't last forever. The off-grid system relies on stored solar energy for autonomy. Angling your solar panels properly can boost the power intake of your solar lighting system. You want to angle your solar panels at a tilt based on the area's latitude.

### Tip for Maximum Power

You can increase the tilt 15° in the winter or decrease 15° in the summer. In this way you can get the maximum sunlight to recharge the battery.

## Best Facing Direction of Solar Panel

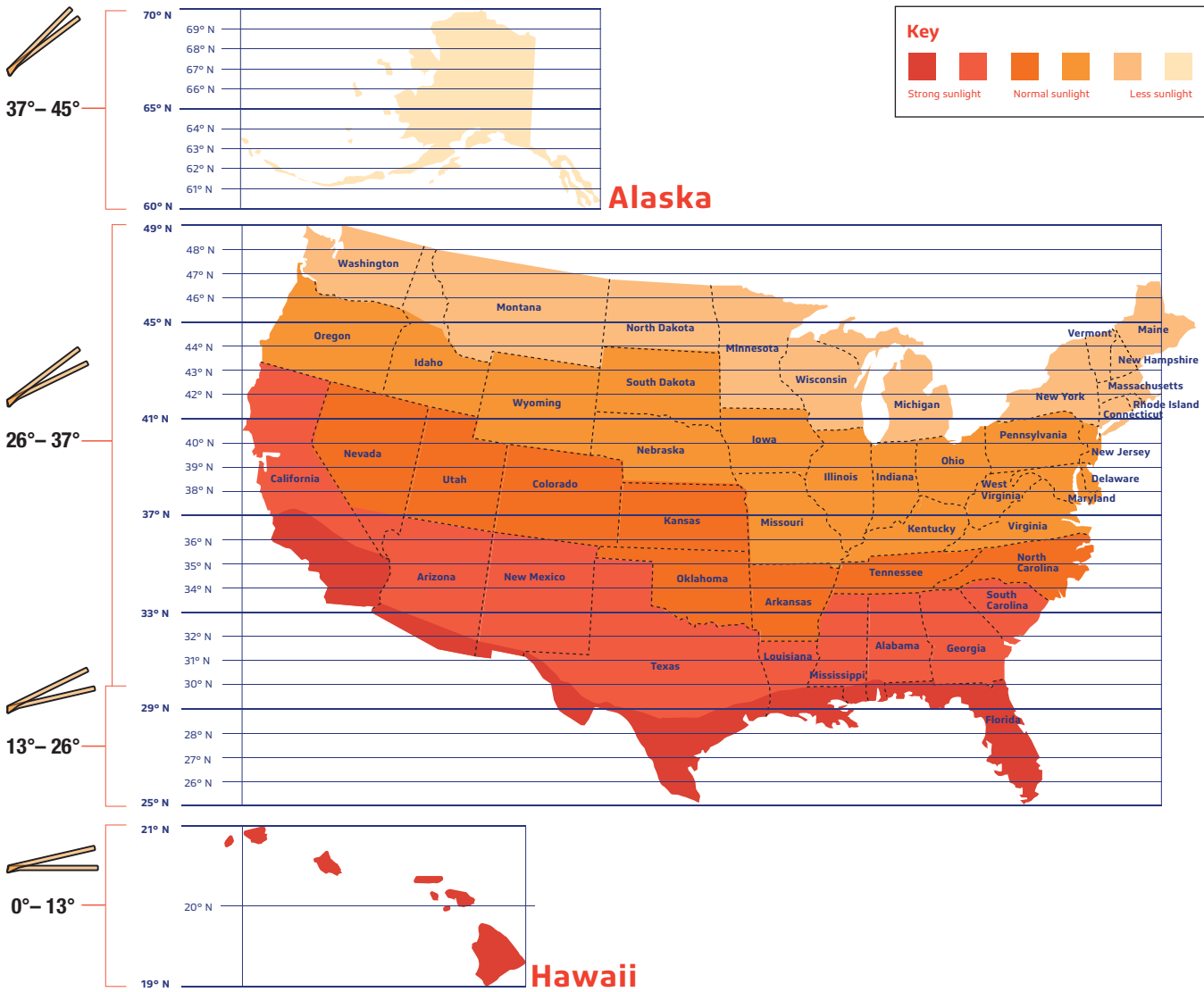


The area will dictate the installation of the fixtures and will sometimes prevent the lights from facing south. Panels facing West & East won't get as much light as Southern facing panels, but will still collect a good amount of sunlight. A North facing panel also works, but it will take longer to charge than any other direction. This would mean that the solar charge will be less optimal if installations are facing North.

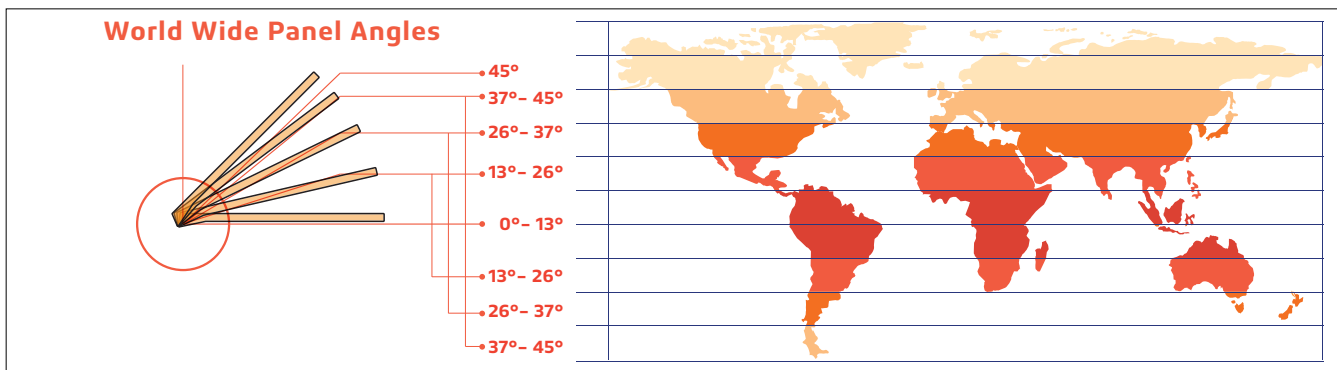


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## Optimum Panel Orientation



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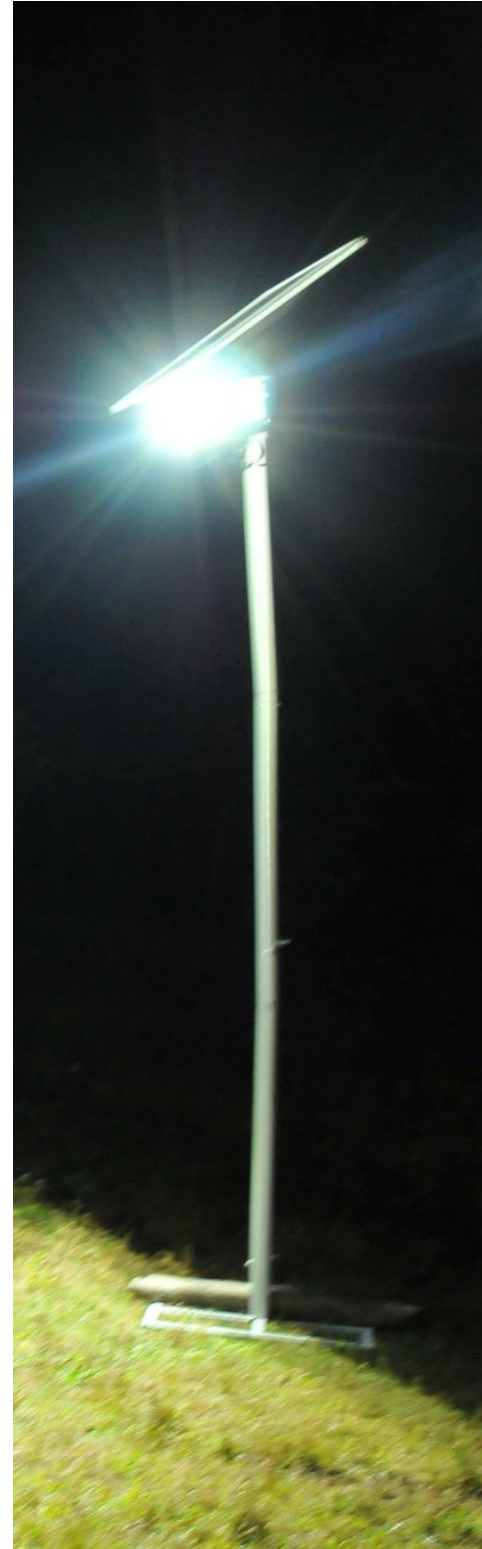


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