

# MORAGA Turtle Friendly 18W

### APPLICATIONS

MORAGA solar light efficiently illuminates outdoor spaces like recreational living areas, gardens, and pathways. This solar light fixture has an integrated 360-degree glare-free, beam-styled lighting. Powered solely on renewable solar energy, MORAGA is a stand-alone, off-grid, functioning pathway light with zero operational costs. Designed with an elegant form, it is ideal for comfortable living areas and hospitality applications. Additional applications include perimeter, backyard/front yard, residential streets, pedestrian paths, outdoor walkways, and more.

### DESCRIPTION

Incorporated with a simplified cosmetic appearance, MORAGA combines the latest technology of lithium batteries, efficient solar panels, and a smart control system to cultivate the ultimate design and experience for users. The high efficiency 42W solar panel and MPPT solar charge controllers are adopted to ensure sufficient electrical power could be generated every day to ensure stable luminaire work without blackout year-round.

### ORDERING INFORMATION

SERIES	WATTAGE	MOUNTING OPTIONS	FINISH
STL-MORTF= MORAGA Turtle Friendly	18=18W 2,800 Lumens	PT=POST TOP	BK=Black

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### Example: STL-MORTF18PTBK

This example product number is for MORAGA Turtle Friendly 18 watt, Dual-color 3000K/4000K CCT, Post Top installation, with a black finish.

### FEATURES & BENEFITS



#### Efficiently Collects Solar Energy

- An efficient mono solar panel is equipped to generate electricity power continuously and keep the system working stably during daylight.
- 150lm/Watts high luminous efficiency. Color temperature is adjustable between 3000K and 4000K; brightness is adjustable between 20%~100%.
- Bonus feature: Slanted solar panel provides additional solar energy harvesting and reduces dust collection on the surface.



#### Multifunctional & Flexible

- Suitable for pole diameter 2 3/8" to 3".
- Professionally designed structure ensures that all water will empty out from built-in drainage holes. Even if rainwater enters the interior of the lamp body, it will not affect the fixture's performance and normal operation.
- Ideal for both residential and commercial use.



#### Cost Saving

- All solar fixtures avoid trenching, wiring, and the need for on-grid electricity, cutting down maintenance and installation costs.
- Built-in lithium battery has up to 2000 cycles; ensuring up to 5 years of independent system operation without any maintenance.



#### Durable & Dirt Resistant

- The aluminum body received sophisticated surface treatment, preventing possibilities of rust or oxidation over time.
- Specially customized 304 stainless steel anti-theft screws are easy to install, provide strong linkage, no rust.
- Tough and transparent polycarbonate cover protects the milky optics and LEDs from any damage and keeps insects from entering.

### CERTIFICATION DATA



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### MPPT Charger+Sensor

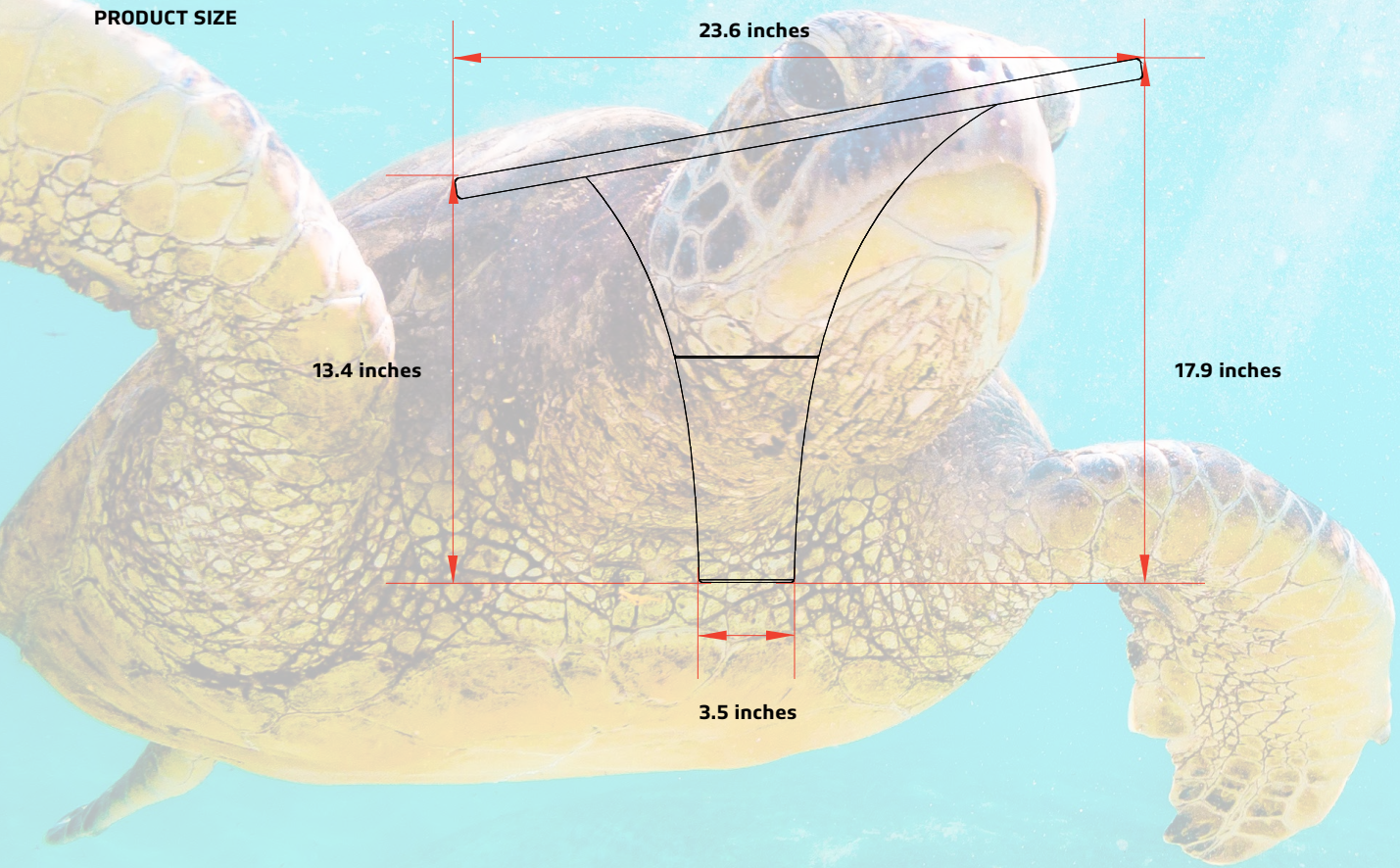
- Equipped with a sensitive microwave sensor; contains a motion detection mode that is available on the remote control. MPPT charge controllers are adopted to save more energy, ensuring 30% more power generated than PWM controllers' counterparts.



### User-Friendly

- Remote control has a longer control distance and 360-degree signal transmission. Wide range of modes on the remote control, including functions for setting the light power, color temperature, and working hours.
- Remote control provides programmable lighting duration: options are 6 hours, 8 hours, or 12 hours. Color temperature can be adjusted between warm white and cool white to ensure the perfect lighting atmosphere. All operations can be executed via the provided remote control.

### PRODUCT SIZE



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## SPECIFICATIONS

Specifications	MORAGA
LED Nominal Power	18W
Solar Panel	Mono-Crystalline 18V 42W
Lithium Ion Battery	154WH 12.8V
Wavelength	580-595 nanometer
Lumen Output	2,800LM
CRI	>80
Product Size	23.6 X 23.6 X 17.9 Inches
Controller	MPPT Controller
Beam Angle	150°
IP Rating	IP65
Casting	Aluminum Die Casting + Polycarbonate
* Charging Time	7.5hrs@(1000W/m <sup>2</sup> )
Run Time (@Full Power)	12-14 Hours
Operation Mode	5 Operating Modes
* Operating Temperature	-30°C/-20°F to 158°F
* Charging Temperature	-30°C/-20°F to 158°F

\* The temperature can impact the battery's charging and normal operation.

\* The solar charge time data is base on 77 degree F ambient temperature with the panel pointed directly at the solar radiation. The standard radiation value is 1000W/m<sup>2</sup>.



# MORAGA Turtle Friendly 18W

Round Non-Tapered Steel Pole—10Ft

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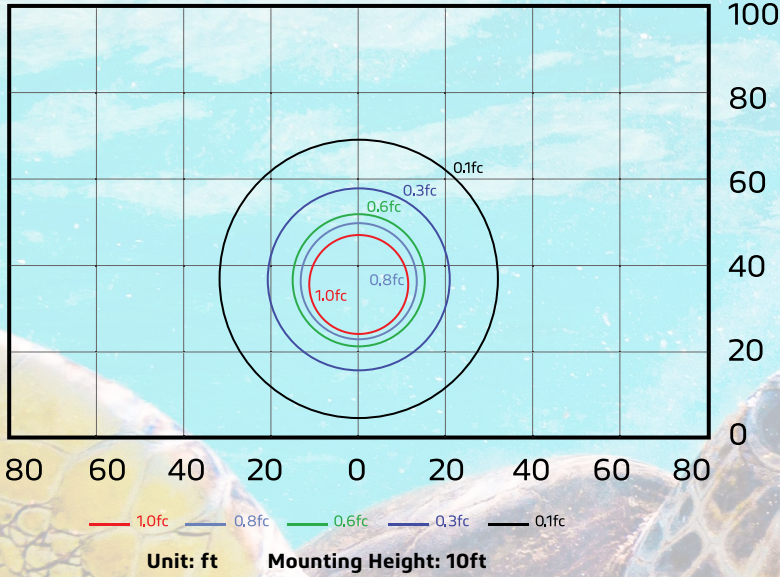


SWJRS4001110-BK-3-BC					
CATALOG LOGIC		CODE	EXPLANATION		
<b>SERIES:</b>		RS	Round Non-Tapered Steel Poles		
<b>BASE DIAMETER:</b>		400	4.0" Base Bottom Diameter		
<b>GAUGE:</b>		11	11 Gauge Thickness		
<b>NOMINAL HEIGHT:</b>		10	10 Feet Tall		
<b>FINISH:</b>		BK	Black Finish Colors		
<b>MOUNTING DESIGNATION:</b>		3	2 7/8" OD Tenon		
<b>OPTIONS:</b>		BC	Base Cover		
HEIGHT (FT.)	POLE SHAFT (IN.)X(FT.)	GAUGE	HANDHOLE SIZE (IN.)X(IN.)	ANCHOR BOLT (IN.)X(IN.)X(IN.)	BOLT CIRCLE (IN.)
10	4.0 X 10.0	11	2 X 4	0.75 X 17 X 3	8
EPA	80 MPH (FT. <sup>2</sup> )	90 MPH (FT. <sup>2</sup> )	100 MPH (FT. <sup>2</sup> )	WEIGHT	SHIP WT. (LBS.)
	31	24	19		78

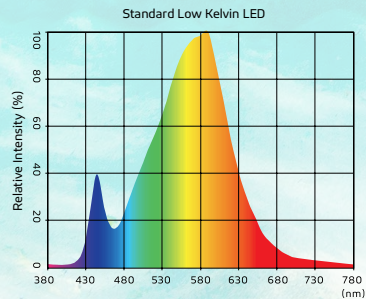
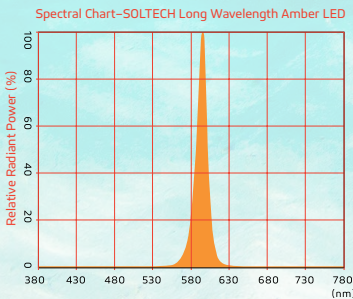
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## Light Distribution



MORAGA Turtle Friendly 18W



(Left) The Soltech turtle & marine LED nanometer light range is a narrow window invisible to turtles and safe for human eyes, marine-animal eyes, the night sky, and the general environment. Keeping the spectrum in this narrow window optimizes these functions. Regular LEDs (right) can produce a low 2,500 Kelvin spectrum that might appear equivalent to our amber LEDs, but the nanometer spectrum is still wide and therefore visible to marine life, more harmful to retinas, and causes more light pollution.

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## INSTALLATION—POLE MOUNT

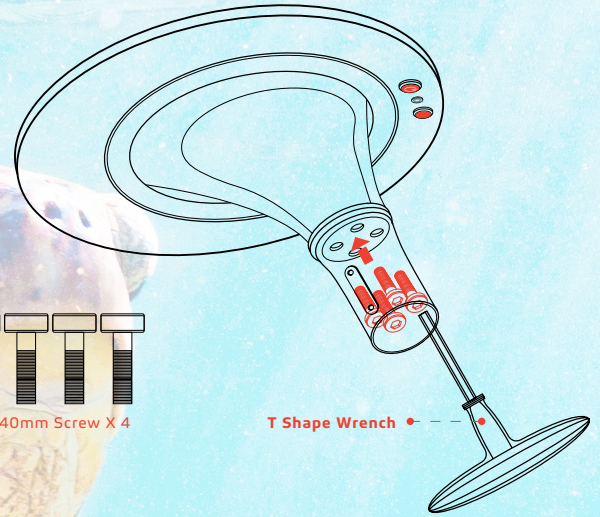
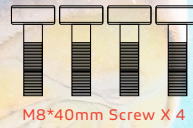
### 01

Connect the light head holder with the light head, and rotate the holder to the right position. There should be NO gap between the light head and the holder.



### 02

Tilt the light head, place the screw on the T shape wrench. Install the 4pcs of M8\*40mm screws screw inside of the light holder, and tighten them.

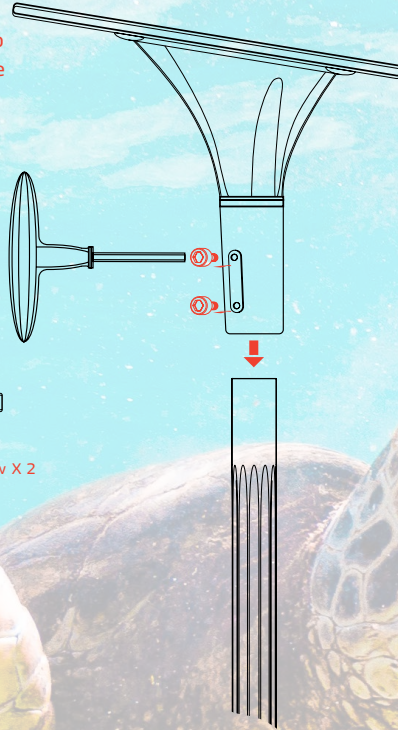


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## 03

Place the light head on top of the pole and tighten the two M8\*16mm screws by T shape wrench into proper position.



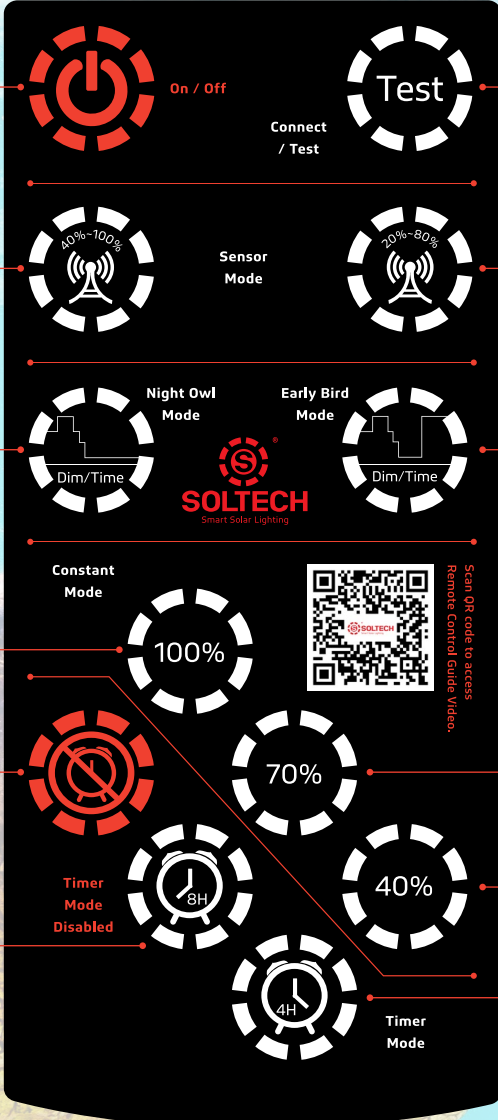
## 04

Press the **ON/OFF Button** on the light head to turn the light on. Then use remote control to set the lighting mode.



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1. On/Off

2. Connect/Test

3. 40%~100% Motion Sensor Mode

4. 20%~80% Motion Sensor Mode (Default)

5. Night Owl Mode

6. Early Bird Mode

7. 100% Constant Mode

8. 70% Constant Mode

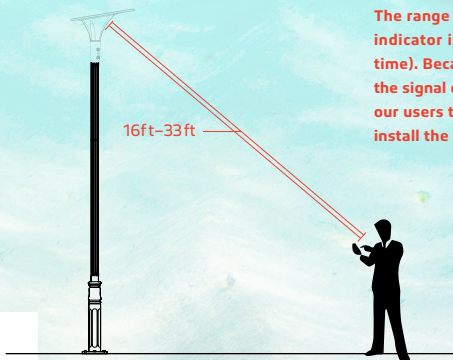
9. 40% Constant Mode

10. Timer Mode Disabled

11. Timer Mode 4 Hours

12. Time Mode 8 Hours

Scan QR code to access Remote Control Guide Video.



The range of the remote control to the indicator is 16ft (Day time) to 33ft (Night time). Because the sunlight will impact the signal of the remote control, we suggest our users to setup the mode before they install the light.

### 1. On/Off

When off is selected, the light will stop working. The solar panel will not charge the battery and the battery will not supply electricity to the light.

### 2. Connect/Test

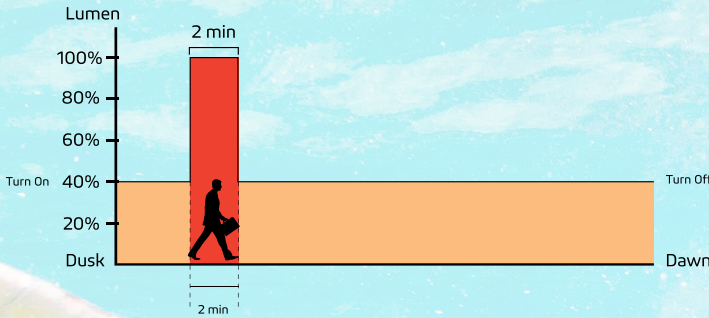
Remote control device can be connected with any lighting fixture. When all cables are connected and solar panel detects sunlight, the fixture will automatically turn on. To test, press the "Test" button once, the LED light will turn on to indicate the fixture has been turned on. During the day time, the indicator will slowly flashing red. That means the battery is charging.



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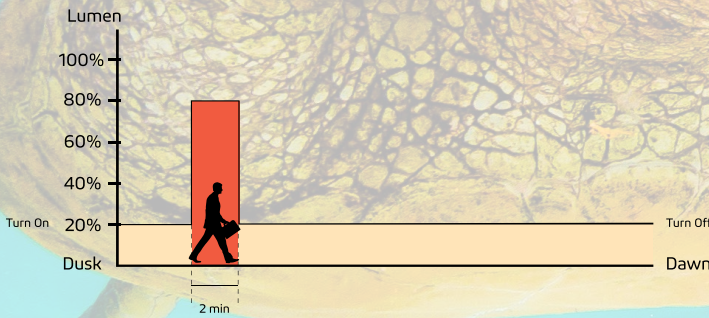
### 3. 40%-100% Motion Sensor Mode

Constant 40% brightness (turns on at dusk, turns off at dawn); 100% brightness turns on for 2 minutes when motion is detected.



### 4. 20%-80% Motion Sensor Mode (Default)

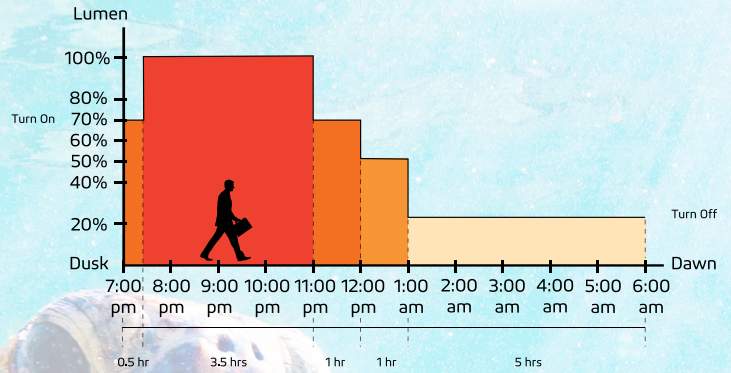
Constant 20% brightness (turns on at dusk, turns off at dawn); 80% brightness turns on for 2 minutes when motion is detected.



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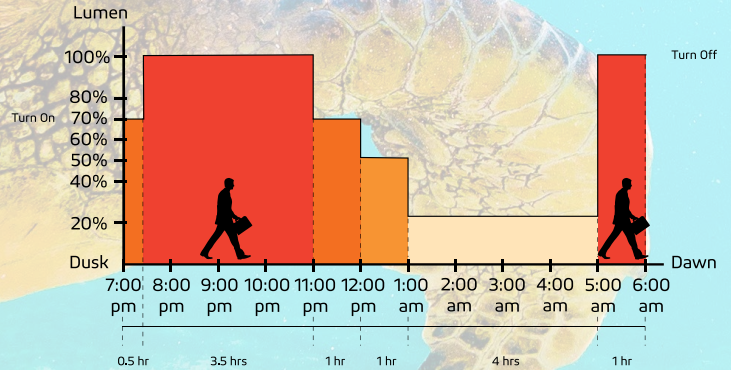
### 5. Night Owl Mode

Changes as natural light decreases/increases (turns on at dusk); 70% brightness for 0.5 hour, 100% brightness for 3.5 hours, 70% brightness for 1 hour, 50% brightness for 1 hour, 20% brightness for 5 hours (turns off at Dawn).



### 6. Early Bird Mode

Changes as natural light decreases/increases with increased brightness near dawn for early risers (turns on at dusk); 70% brightness for 0.5 hour, 100% brightness for 3.5 hours, 70% brightness for 1 hour, 50% brightness for 1 hour, 20% brightness for 4 hours, 100% brightness for 1 hour (turns off at Dawn).



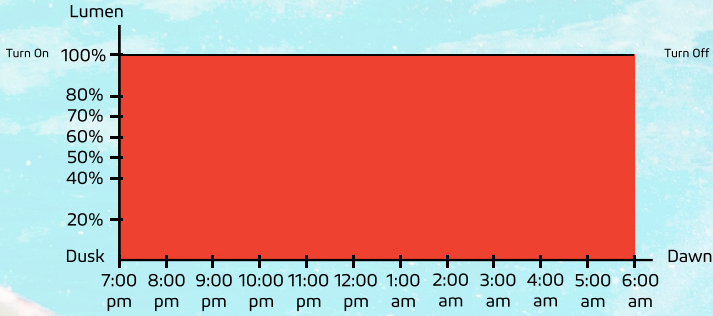
### Important

Dusk and dawn time may be different in other locations and seasons. The sensors of our products will follow the light patterns of where it is installed. The time period shown in the chart above is just an example to help you understand the different lighting modes only.

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## 7. 100% Constant Mode

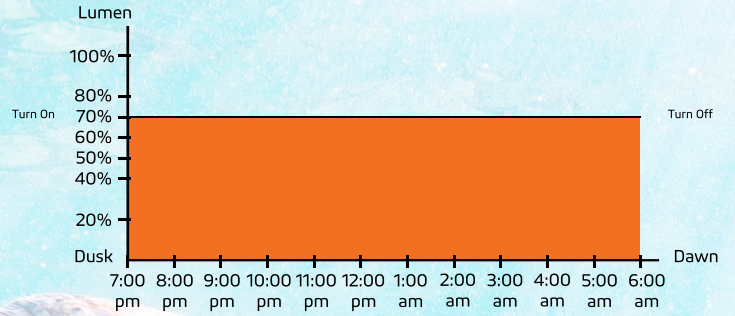
100% brightness from dusk to dawn.



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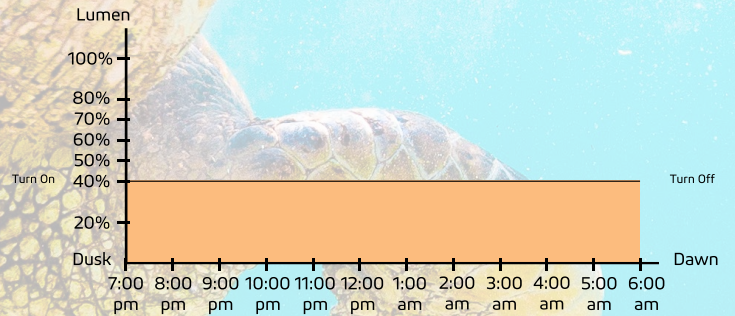
## 8. 70% Constant Mode

70% brightness from dusk to dawn.



## 9. 40% Constant Mode

40% brightness from dusk to dawn.



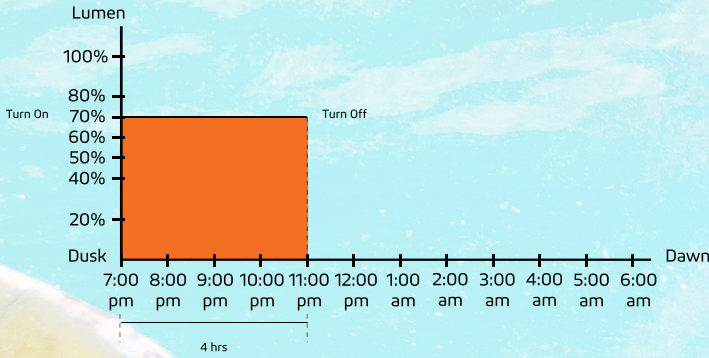
## 10. Timer Mode Disabled

Press this button to turn off Timer Mode; settings revert back to before Timer Mode was last activated.

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## 11. Timer Mode 4 Hours

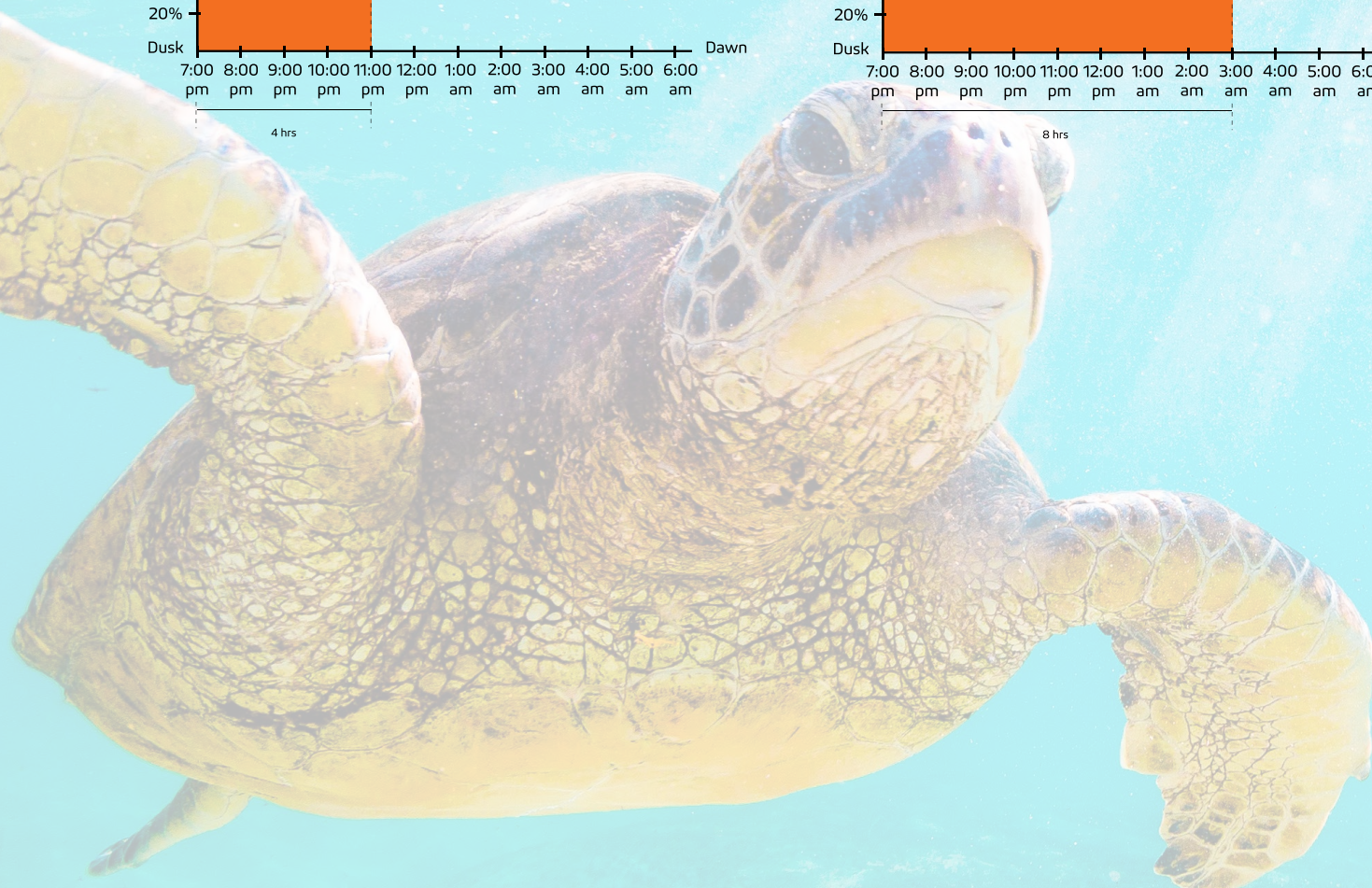
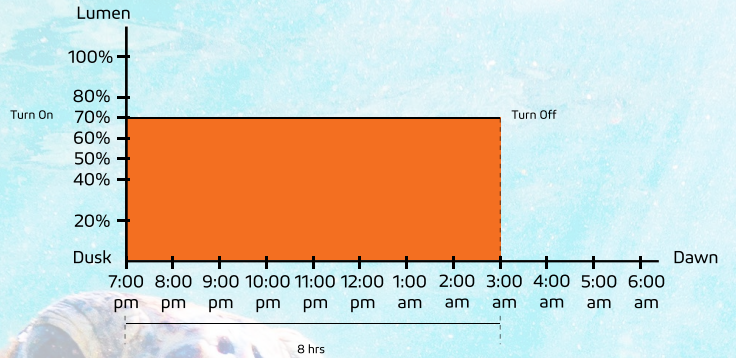
This is an additional mode which can work with any other modes. For example: press this button at any time after you turn on 70% Constant Mode. If the light turns on at 7pm at dusk, it will turn off at 11pm. It will repeat the same schedule hereafter until it is canceled by pressing Timer Mode Disabled.



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## 12. Time Mode 8 Hours

This is an additional mode which can work with any other modes. For example: press this button at any time after you turn on 70% Constant Mode. If the light turns on at 7pm at dusk, it will turn off at 3am. It will repeat the same schedule hereafter until it is canceled by pressing Timer Mode Disabled.



### Important

Dusk and dawn time can vary for different locations and seasons. The sensors in our products will monitor the light levels where it is installed. The time period shown in the chart above is just an example to help you understand the different lighting modes.



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MORAGA is covered by a 3 year limited warranty. SOLTECH urban light warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 3 years from date of purchase. To obtain warranty service please contact your local distributor or sales rep for further instruction.

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Smart Solar Lighting

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