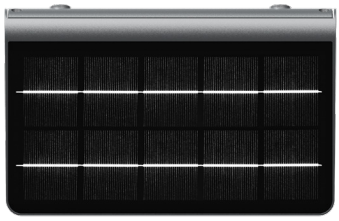
SOLW SERIES

OUTDOOR LIGHTING

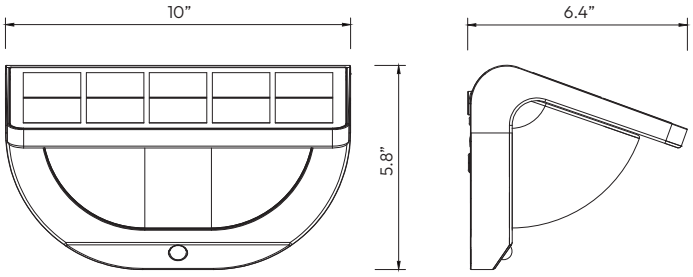
SOLW-TSP-MS-40K

Back View



Solar View

Night View



Technical Drawing: 6.4” (D) x 10” (W) x 5.8” (H)

The WallRay Solar Luminaire features programmable remote control and an integrated motion sensor for flexible and energy-efficient outdoor lighting. Powered by solar energy, it provides convenient wireless operation with adjustable lighting modes for reliable wall-mounted illumination.

Customer Name:

Project Name:

Note: | Type:

FEATURES:

- No trenching or utility wiring required
- Zero electricity operating cost
- Ideal for residential and commercial perimeter lighting
- Fast surface mount installation

SPECIFICATIONS:

ELECTRICAL:

- PWM smart solar charge controller
- 5W mono crystalline solar panel
- 5V panel voltage
- 3W nominal LED power
- Up to 380 lumens output
- 20 lm/W efficacy @ 4000K
- Electrical Class III

MECHANICAL:

- IK08 vandal-resistant aluminum housing
- IP65 weatherproof construction
- C3 corrosion-resistant powder coating
- Type IV Very Short distribution (102° x 151° tilt 35°)
- Mono crystalline solar panel

LIGHTING:

- Wattage & CCT Selectable Switches inside fixture
- Lumens: 380LM Max.
- Color Temperatures: 4000K
- Color Rendering Index: CRI ≥ 80
- Beam Angle : 135°
- Lifespan: 50000 Hours

BATTERY:

- Battery Type: Ternary lithium battery
- Voltage: 3.7V
- Capacity: 2.6Ah
- Energy: 9.62Wh
- Cycle Life: >1,000 cycles at 80% DOD
- Operating Time: Full power 3–3.5 hours / Intelligent mode up to 1.5 days
- Charging Time: 2.6 hours (under full sunlight conditions)

PIR MOTION SENSOR:

- 110° horizontal sensing angle
- Recommended mounting height 6.5–8 ft
- 30-second motion activation
- Detection range up to 16 ft

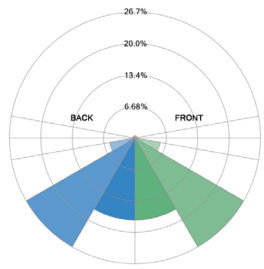
APPLICATIONS:

- Ideal for exterior walls, pathways, entrances, and building perimeters requiring energy-efficient, solar-powered lighting with motion-activated security.

Phone/Fax: (877) 805-2252
www.westgatemfg.com

PHOTOMETRICS

BUG rating

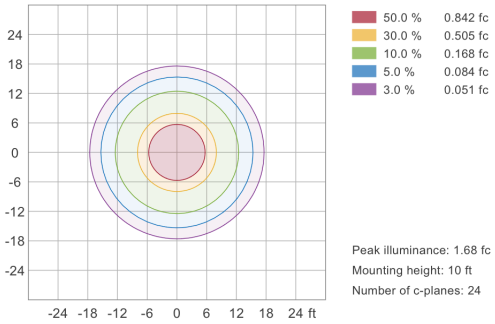


Rating: B0 U1 G0		
Forward Light		
Low (0-30°)	62.03	17.5%
Medium (30-60°)	94.94	26.7%
High (60-80°)	19.45	5.47%
Very High (80-90°)	0.3665	0.103%
Back Light		
Low (0-30°)	62.03	17.5%
Medium (30-60°)	94.94	26.7%
High (60-80°)	19.45	5.47%
Very High (80-90°)	0.3665	0.103%
Uplight		
Low (90-100°)	60.41	0.0170%
High (100-180°)	1.678	0.472%
Total		
Sum	355.3	100%

IESNA TM-15-07 Luminaire Classification System For Outdoor Luminaires

BUG Rating: B0-U1-G0

Iso-illuminance plot



Peak illuminance: 1.68 fc
Mounting height: 10 ft
Number of c-planes: 24

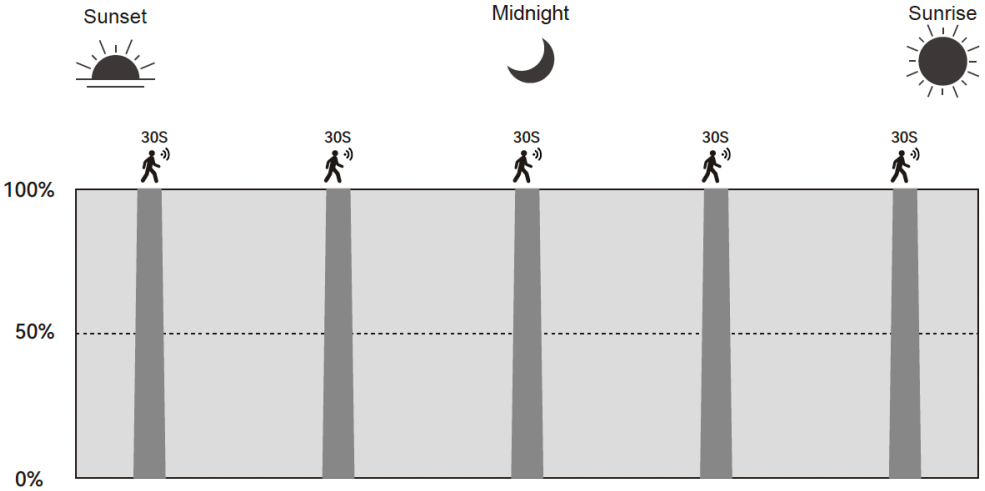
Area 24'x24'

PERFORMANCE TABLE

MODEL NO.	WATTAGE	VOLTAGE	LUMENS	COLOR TEMP.	BUG RATING	LPW
SOLW-TSP-MS-40K	3W	120-277V	380LM	4000K	B0-U1-G0	126

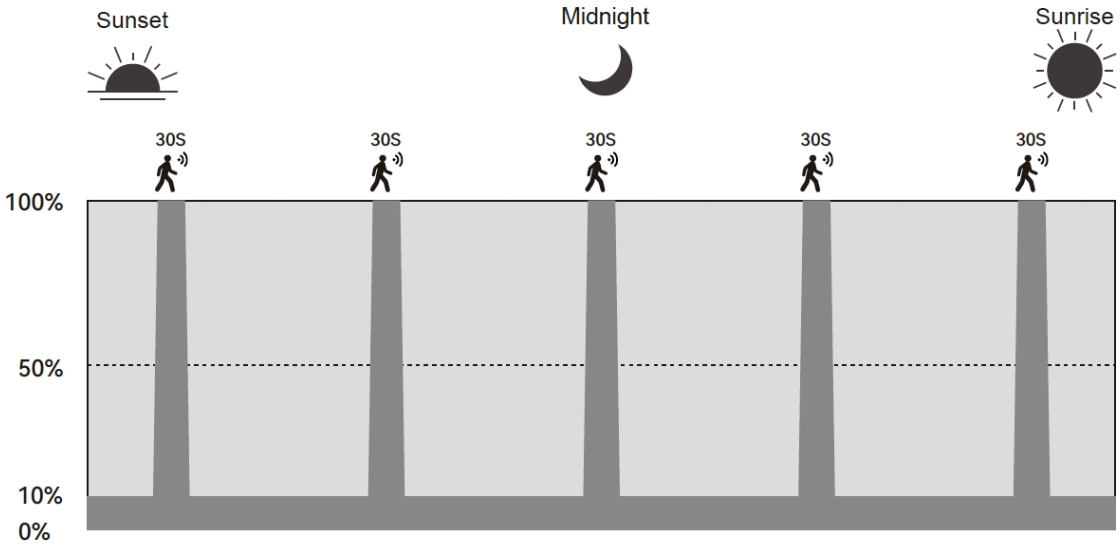
LIGHTING MODE

1



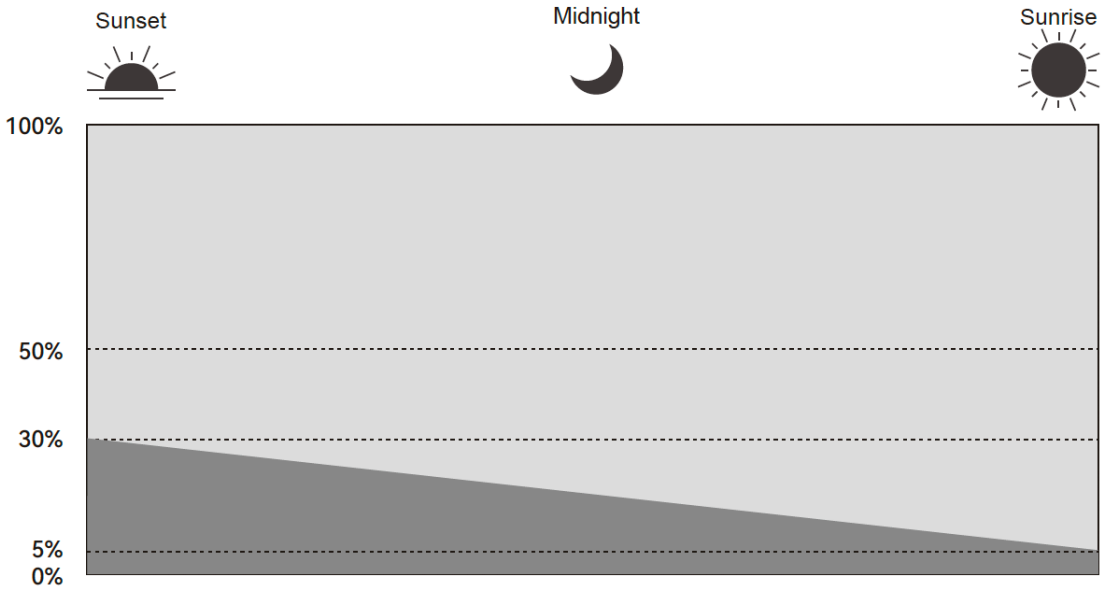
Mode 1	Working hours	From sunset to sunrise
	Not detected	0%
	Detected	100%
	Light up for 30 seconds when detected	

2



Mode 2	Working hours	From sunset to sunrise
	Not detected	10%
	Detected	100%
	Light up for 30 seconds when detected	

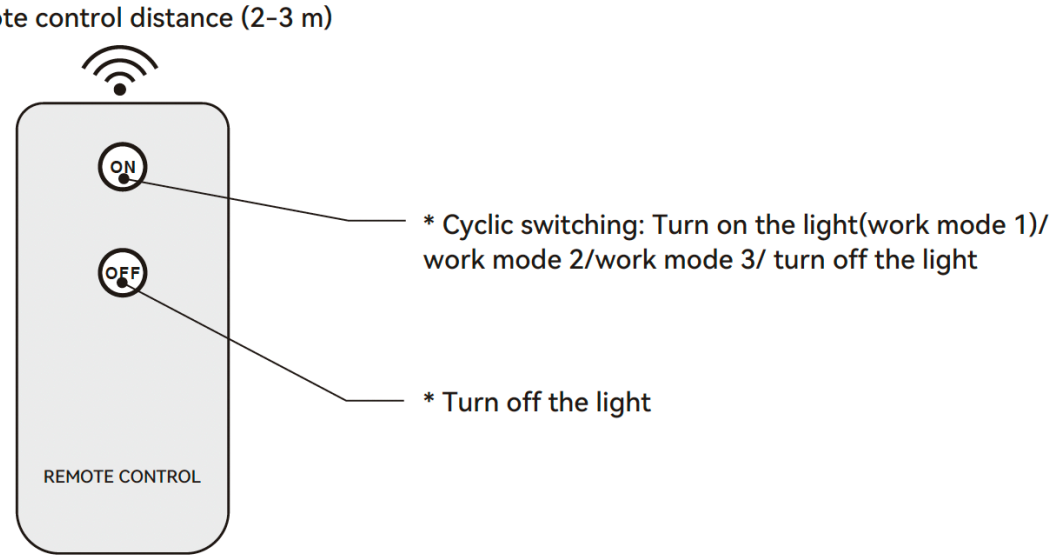
3



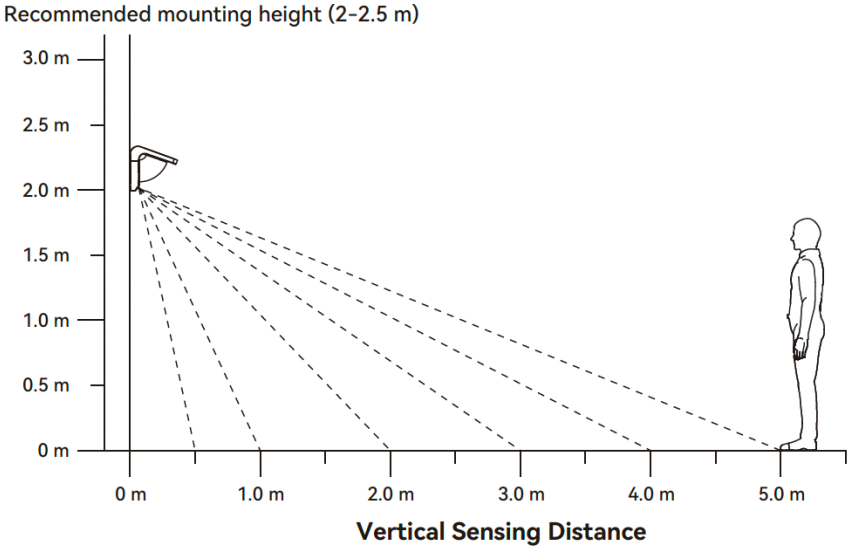
Mode 3	Working hours	From sunset to sunrise
	The initial 30% Power drops linearly to 5% in 12hours	
	This working mode has no sensing function	

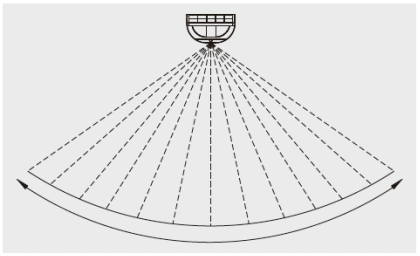
REMOTE CONTROL DESCRIPTION

Optional



PIR SENSING DISTANCE





Horizontal Sensing Angle (110°)

AVERAGE DAILY SOLAR REDIATION PER MONTH

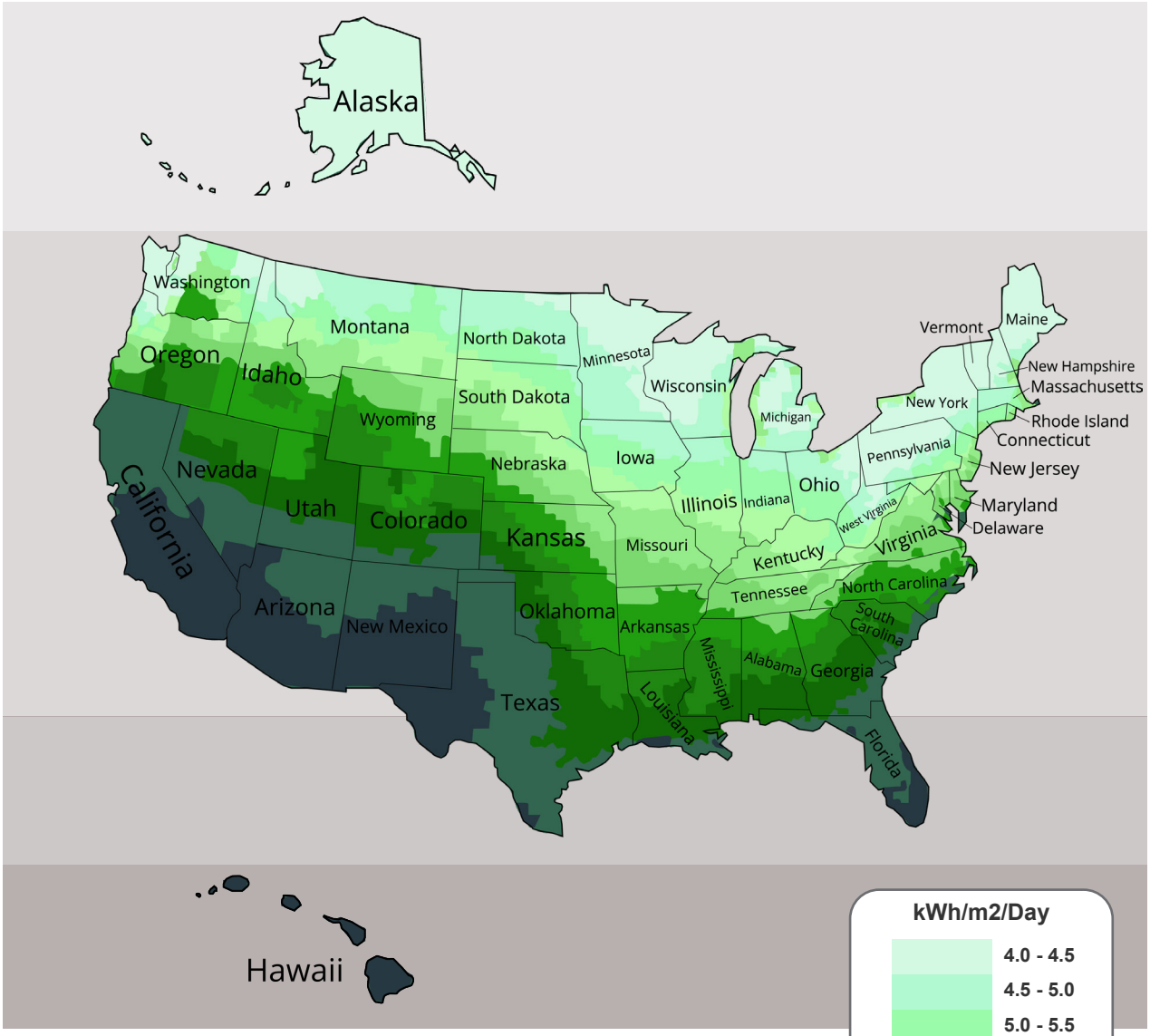
Increasing the tilt 15° in the winter or decreasing 15° in the summer gives the maximum sunlight for recharging the battery.

37°-46°

26°-37°

13°-26°

0°-13°



- The best facing direction for the solar panel is toward the south. facing west & east & north will provide less sunlight, resulting in a long time to charge the battery. The solar charge will be less optimal if the installation is facing north.