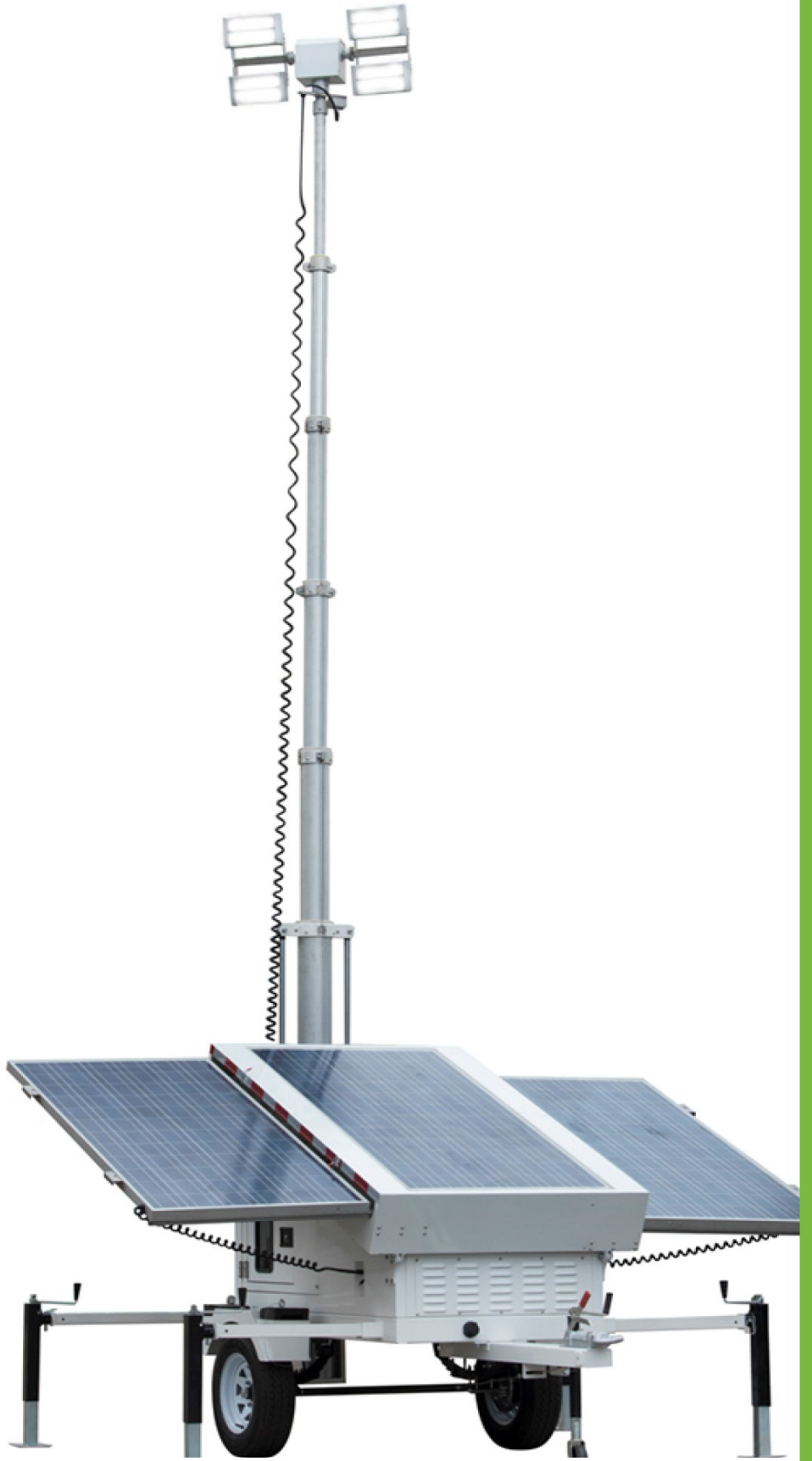


# Greenshine



GS-LT-400



## General Specifications

### **Light Fixture (4 units)**

Luminaire input voltage	DC 24 V
Power consumption	4 x 100 W
Lumen	4 X 13,000 lumens
Color temperature	~5000K
IES lighting type	Flood Optic / 60° Die-cast
Material	aluminum

### **Solar Panel (3 units)**

Rating Power	300 W
Maximum Power Voltage	56.16 V
Maximum Power Current	24.03 A
Open Circuit Voltage	67.2 V
Short Circuit Current	25.83 A
Size	80.3" x 44.4" (1 unit)
Weight	79.5 lb (1 unit)

### **Battery (6 units)**

Battery type	GEL Deep cycle lead-acid
Capacity	6 x 12 V 150AH
Operating voltage	DC 24 V
Dimensions	16(L) × 7(W) × 9.2(H) (in)
Expected life	5 ~ 7 years

### **Operation**

Charging time	12 hours
Operate time	18 hours for 4 x 100W
Voltage	DC 24 V

### **Mast**

Type	Round
Materials	6063 aluminum alloy
Mast height	19' (extended) / 6'3" (retracted)
Stage	4
Mast raise	Manual lift

# GS-LT-400



**Greenshine**

+1-949-609-9636

[sales@streetlights-solar.com](mailto:sales@streetlights-solar.com)

[www.streetlights-solar.com](http://www.streetlights-solar.com)

## Canopy

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Type	2mm cold-rolled steel
Finish	Powder Coating
Color	White

## Trailer

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Type	Single Axle
Tire and rim size	185R 14C
Stabilizers	4 adjustable manual stabilizers
Drawbar	Complies with U.S. D.O.T.



# Solar Light Tower

No Pollution • No Noise • No Smell

- ▶ Bright energy efficient lights
- ▶ Automatic solar charging
- ▶ Silent battery power
- ▶ Manual or automatic controlled on/off
- ▶ Telescoping 6380 mm machinery mast
- ▶ Removable hitch tongue





# Fixtures



**Greenshine**

1-949-609-9636

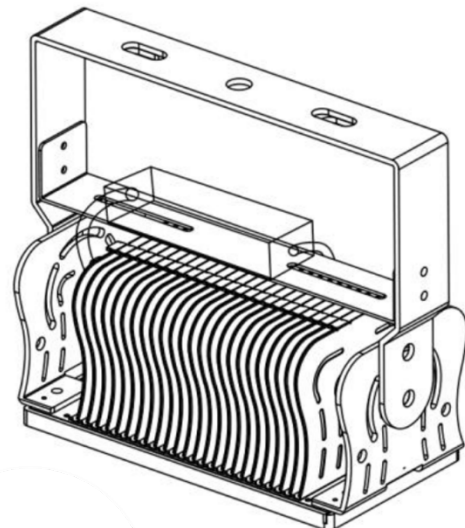
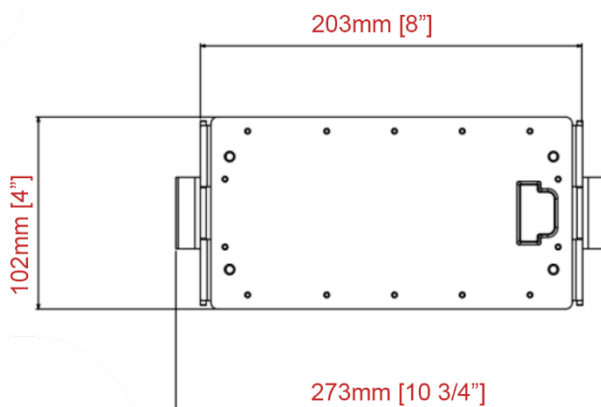
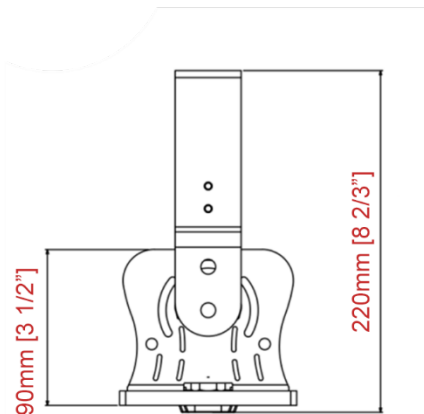
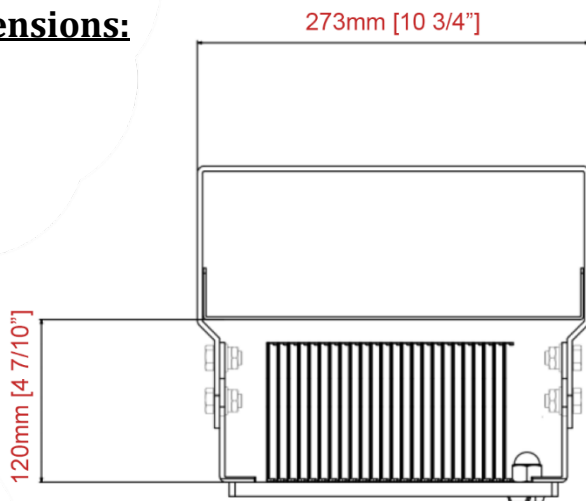
sales@streetlights-solar.com

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## Specifications

Luminaire input voltage	DC 24V
Power consumption	4 x 100W
Lumen output	13,000 lumens
Color temperature	5000 K
IES lighting type	Flood Optic
Material	6063 Aluminum alloy
IP class	IP 65
Insulation	Class I
Operating temperature	-30°C ~+50°C/ -22°F ~+122°F
CRI	≥70

## Dimensions:



*\* Contact us for more details and options*



## 12V 150Ah

GEL deep cycle battery with a 12 year floating design life is especially designed for frequent cyclic discharge under extreme temperature.

<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12V
<b>Capacity</b>	150Ah at 20hr-rate to 1.75V per cell at 25°C/ 77°F
<b>Weight</b>	46 kg/ 100 lb.
<b>Max. Discharge Current</b>	1500 A (5 sec)
<b>Internal Resistance</b>	Approx. 6 m Ω
<b>Operating Temperature Range</b>	Discharge: -40°C ~60°C/ -40°F ~140°F Charge: -20°C~50°C/ -4°F~122°F Storage: -40°C~60°C/ -40°F~140°F
<b>Float charging Voltage</b>	13.6 to 13.8 VDC/ unit average at 25°C/ 77°F
<b>Recommended Max Charging Current Limit</b>	36A
<b>Equalization and Cycle Service</b>	14.6 to 14.8 VDC/unit Average at 25°C/ 77°F
<b>Self Discharge</b>	Valve Regulated Lead Acid can be stored for more than 6 months at 25°C/ 77°F. Self-discharge ratio less than 3% per month at 25°C/ 77°F. Please charge batteries before using.
<b>Terminal</b>	Terminal F5/F12
<b>Size</b>	483(L) X 170(W) X 240(H) (mm) 19(L) × 6.7(W) × 9.5(H) (in)

# Battery

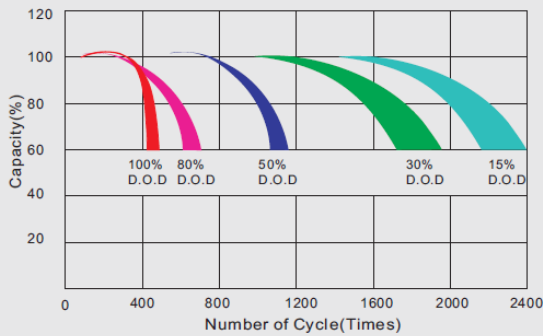


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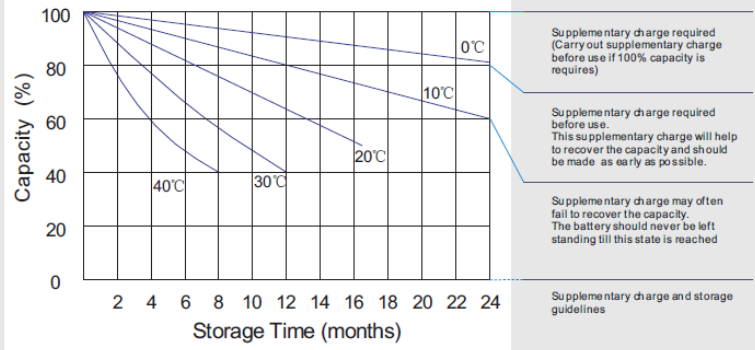
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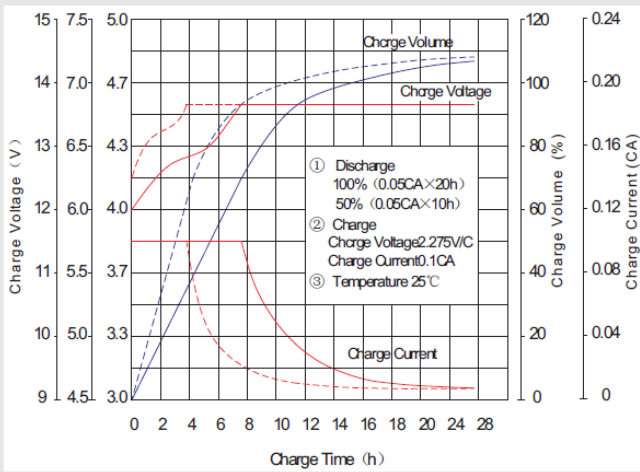
Life characteristics of cyclic use



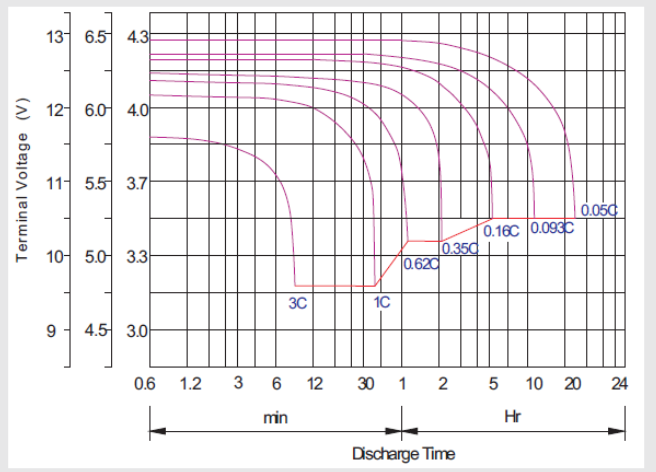
Storage characteristic



Charge characteristic curve for cyclic use



Discharge characteristic curve



## Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Charge the batteries at least once every six months, if they are stored at 25°C.

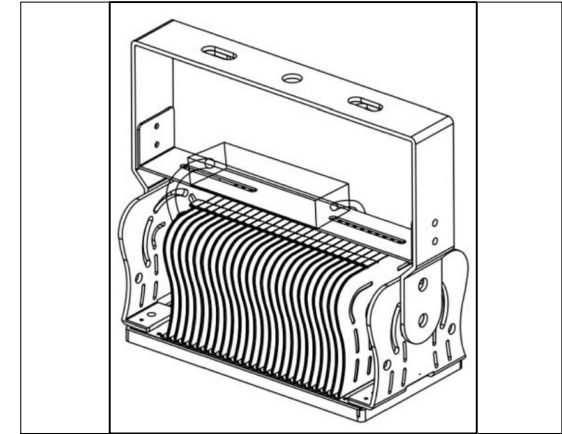
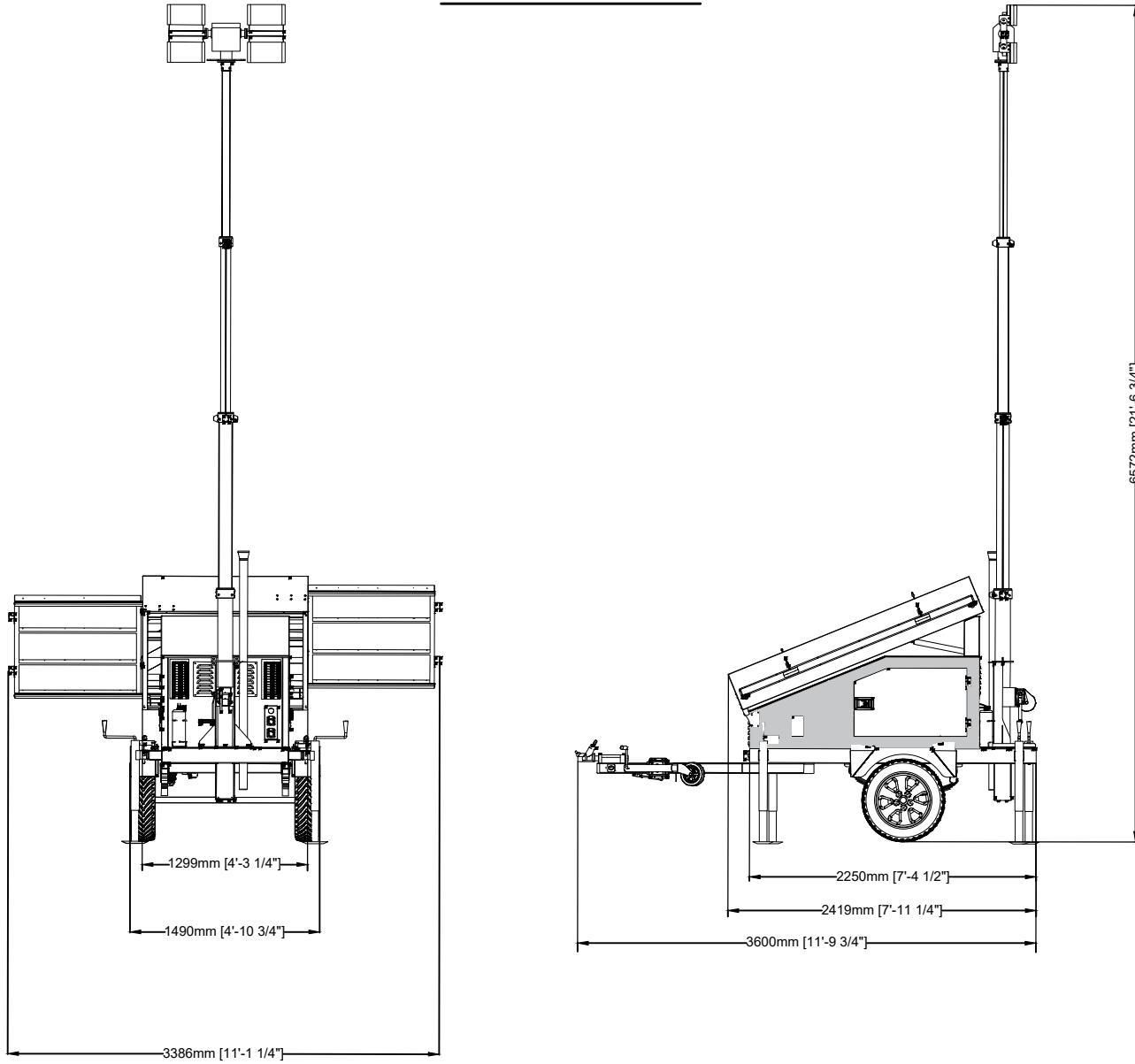
Charging Method:

Constant Voltage	-0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.3CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h

## Maintenance & Cautions

<b>Cycle service</b>
※ Avoid battery over discharge, especially battery series connection use.
※ Charged with recommend voltage, ensure battery can be full recharged.
In general, recharge capacity should be 1.1-1.15 times discharge capacity.
※ Effect of temperature on cycle charge voltage: -4mV/°C/Cell.
※ There are a number of factors that will affect the length of cyclic service.
The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged.
Generally speaking, the most important factors is depth of discharge.

# GS-LT-400



- Drawings are based using hot-dipped galvanized steel, powder coating with a thickness of 5  
 - \*EPA of the system exclude the EPA of the pole, includes the solar panels, brackets, arm and LED fixture and battery box.  
 - \*\*Wind resistance of the poles are indicative and further customization can be provided.

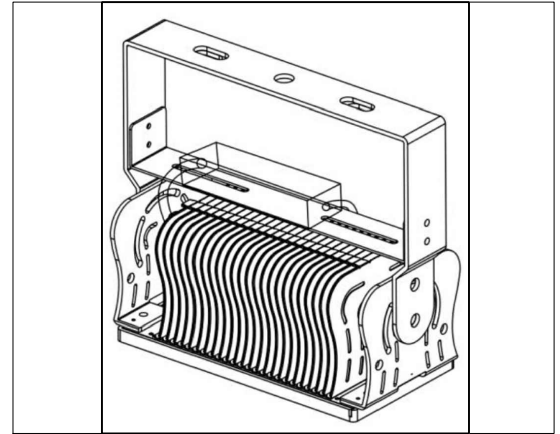
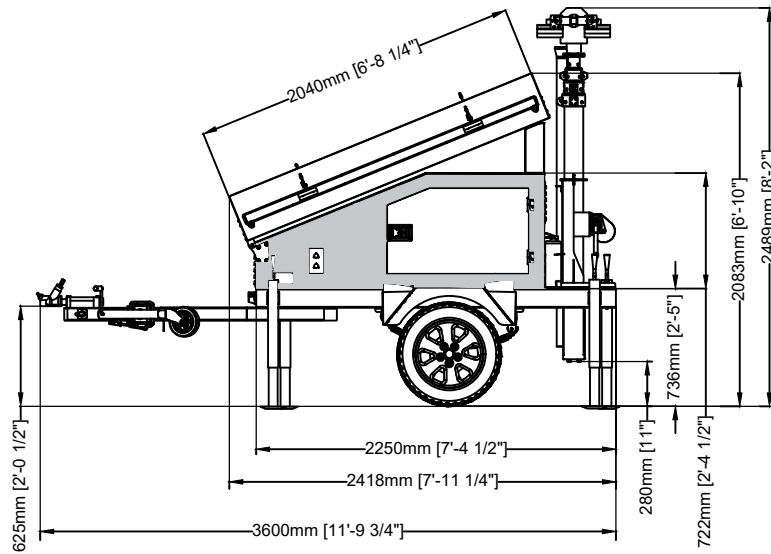
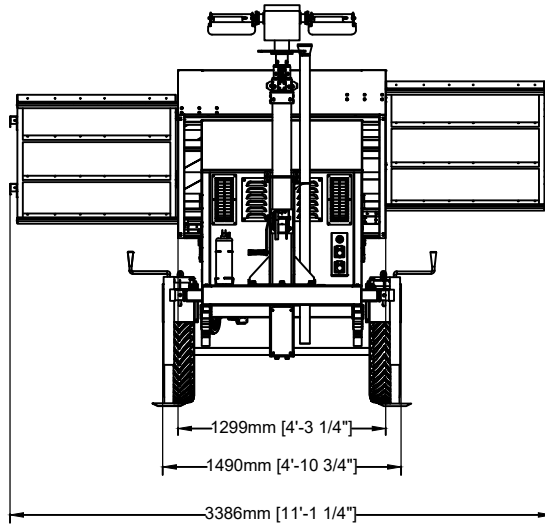
Tilt angle of the solar panels	30
EPA (ft <sup>2</sup> )	13.3
Wind resistance** (mph)	40

Proposal			
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System	GS-LT-400 - 4 Fixtures - 3 panels		
By		Date	8/31/2017



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By		Date	8/31/2017
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