Specification of Intrepid Pioneer All-in-one Solar Light

1.Product Overview

This is our patented product, designed to provide users with high-quality solar photovoltaic street lamp, and has passed CE, UL and a number of international certification. “Wiring free, easy to install”, “high charging efficiency”, “strong endurance” and “outstanding light efficiency” are the main advantages of this product. Large capacity lithium battery is built into the lamp body, which can absorb solar energy and convert into electric energy by solar panel is stored in the battery and then supplied to the solar lamp. Products are widely used in courtyard, highway and other areas.

2.Product design

The company's product appearance designing team inherits the future SI-FI sense and the industrial visual style, arming to break through the traditional design of outdoor lighting products. Our patented product (patent number: 202030661742.5) is out there to create a new visual appearance for outdoor lighting products, and strive to create the next hottest product in the market.

100W

200W

300W

3.Product parameter

Product model	100W	200W	300W
Lamp body material	ABS	ABS	ABS
Lens material	polycarbonate	polycarbonate	polycarbonate
Lamp body size	530*270*70mm	645*300*70mm	750*300*70mm
Number of LED （pcs）	360	480	600
Battery capacity (mAh)	12000	18000	24000
Photovoltaic panel	4V/10W (420*210MM)	4V/15W (535*210MM)	4V/18W (635*210MM)
Duration of flight	5 days	5 days	5 days
Discharge current	2.5A	3.5A	4.5A
Luminous flux	1081	1573	2136

4. Product advantages

4.1 Convenient installation

All-in-one solar light means the solar panel is embedded in the lamp body. This design eliminates complex installation accessories such as brackets. It will increase installation efficiency in several times.

4.2 Efficient quick charging scheme

This product adopts the latest quick charging scheme, and charging efficiency can be up to 50% higher than similar products. For example, similar products use 6V/12W solar panel and the peak charging current is 2A; our product uses 4V/12W solar panel and the peak charging current is 3A. By comparison, the charging efficiency of our products has been improved by 50%.

4.3 Multiple functional models

Our product has three brightness, including radar mode for all night, constant lighting mode for all night, and switch to radar mode after constant light mode.

4.4 Smart power management system, extra-long battery life

We are committed to meet the needs of customers "365 days, daily brightness", our company has developed an smart power management system in cooperation with the University of Electronic Science and Technology to make sure our product not only has higher charging efficiency, but also can actively identify the amount of charging per day, so as to independently adjust the capacity to achieve a better rainy day efficiency.

5. Lighting model

Power reduction in different modes	Model-On Time				
	1H	2-3H	4-5H	6H	6H to morning
Auto model	100%-80%	80%-60%	60%-50%	50%-40%	30%
2+X/3+X	100%-80%	80%-60%	60%-50%	50%-40%	30%
Always model	100%-80%	80%-60%	60%-50%	50%-40%	30%

Tips:

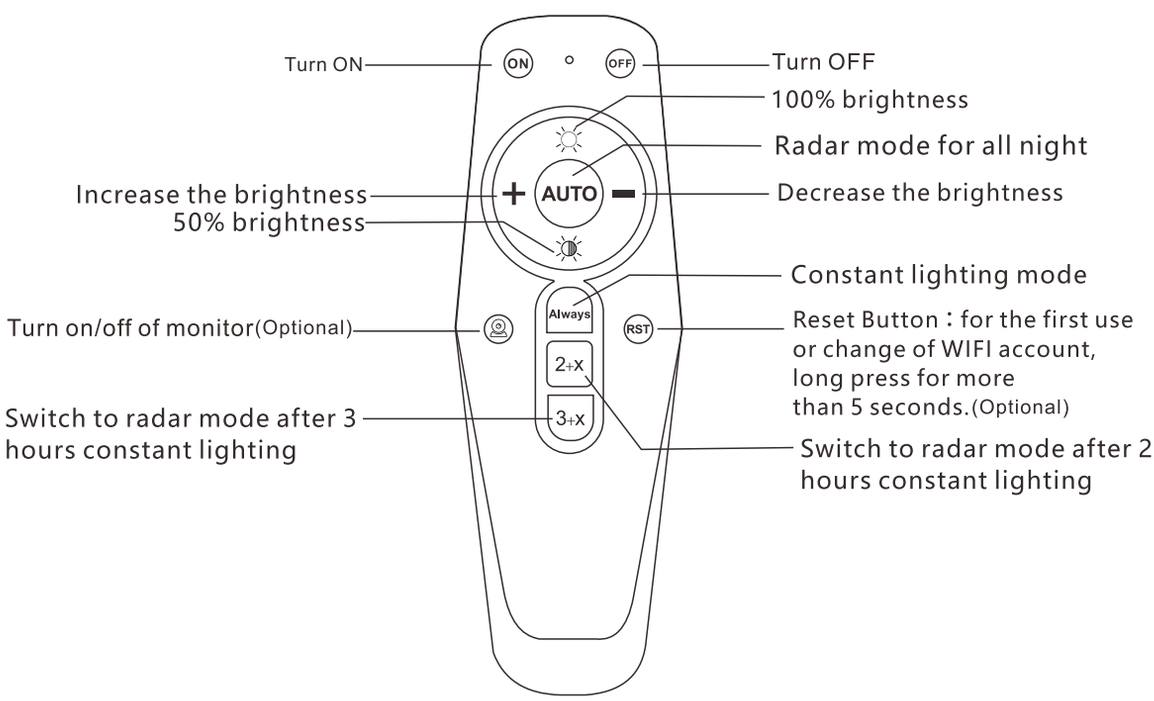
1. The brightness is 70% of radar mode during in 2+X/3+X mode.
2. In constant light mode, 2+X mode, 3+X mode, when the power is lower than 20%, the system will automatically switch to radar mode.)

6. Illustration of remote control

Three Brightness Modes

(The remote control has memory function, you can set only once.)

1. AUTO mode. AUTO mode means radar mode for all night. This mode is the brightest and the discharging time is more than 5 days.
2. Switch to radar mode after constant light mode. The buttons “2+X”, “3+X” means switching to radar mode after 2 or 3 hours constant lighting. The brightness of this mode is 70% of radar mode for all night.
3. Always mode. Always mode means constant lighting for all light. The brightness of this mode is 70% of radar mode for all night.



Tips:

1. Pressing the key “AUTO” the light will automatically turn on in the dark and turn off to charge in the day.
2. The remote control has memory function, you can set according to your preference.
3. The brightness is 70% of radar mode during in constant lighting mode, 2 hours constant lighting mode, 3 hours constant lighting mode.

7. Product packaging

color box

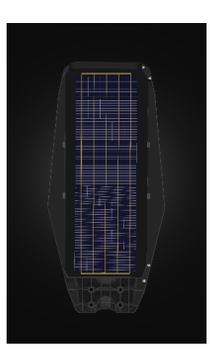
Outer packing

Packing list					
model	Color box size (CM)	Outer box size (CM)	Packing number (PCS)	Gross weight of the whole box(KG)	Net weight(KG)
100W	54.5*27.8*7.1	56*38*30	5	12	10
200W	65.5*30.8*7.1	67*38*33	5	14.8	12.75
300W	76.5*27.8*7.1	78*38*33	5	17.75	15.5
Lamppost	**********	55*42*50	30	22.5	21

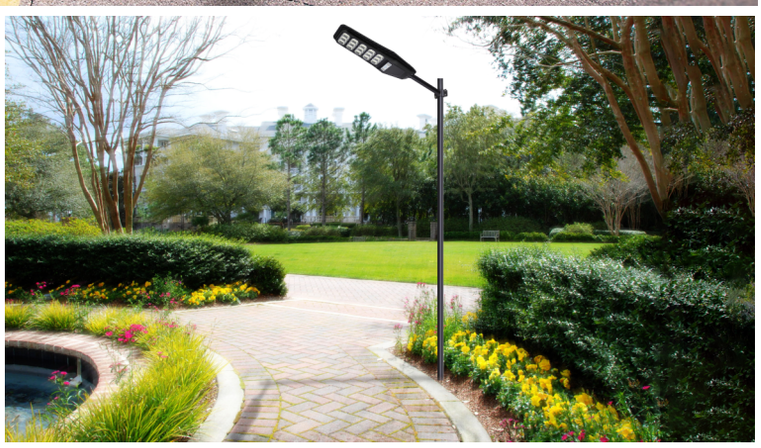
8. Product angle rendering






9. Scene Effect



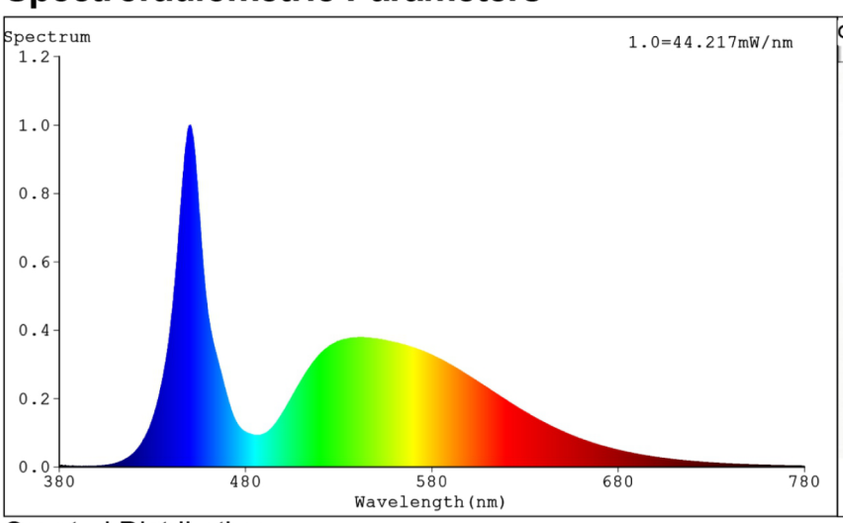
Spectrum Test Report

Product	:100W	Date	: 2021-03-10
Sample No.	:	Instrument	: HAAS-2000(EVERFINE)
Manufacturer	:	Operator	: DAMIN

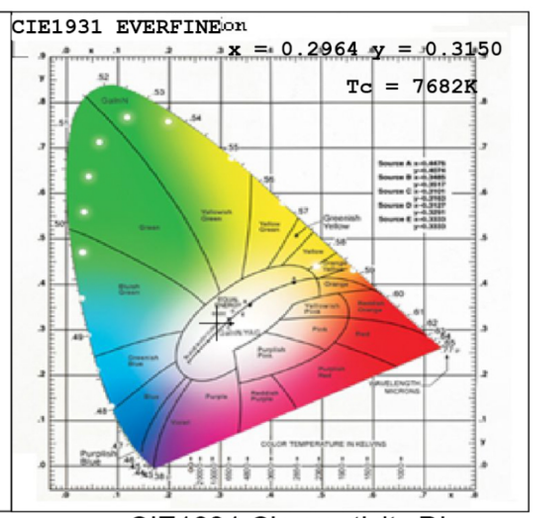
Test Condition

Temprature	: 25.3Deg	RH	: 65.0%
Scan Range	: 380nm-780nm	IP	: 52920 (81%)
		T	: 78 ms
Test Type	: Fast Test	Delicacy	: High

Spectroradiometric Parameters



Spectral Distribution



CIE1931 Chromaticity Diagram

CIE Color Parameters:

Chromaticity Coordinate: x=0.2964 y=0.3150/u'=0.1916 v'=0.4582(duv=4.66e-03)

CCT:Tc= 7682K Prcp WaveL: d=485.1nm Purity=13.9%

Peak WaveL:λp=450nm Half Width:Δλp=17.5nm Ratio:R=12.3% G=83.4% B=4.3%

Render Index:Ra=73.6

R1 =71	R2 =76	R3 =77	R4 =75	R5 =73	R6 =68	R7 =84	
R8 =65	R9 =0	R10=42	R11=72	R12=39	R13=72	R14=87	R15=68

LEVEL:OUT WHITE:OUT

Photo Parameters:

Flux =1081.1lm Eff. : 133.06 lm/W Fe = 3.151 W

Fmol(umol/s):1.400e+000 Fluorescence and blue light ratio:1.976 Fluorescent efficiency:25.75

Electrical parameters:

V = 3.250 V I = 2.500 A P = 8.125 W PF = 1.000

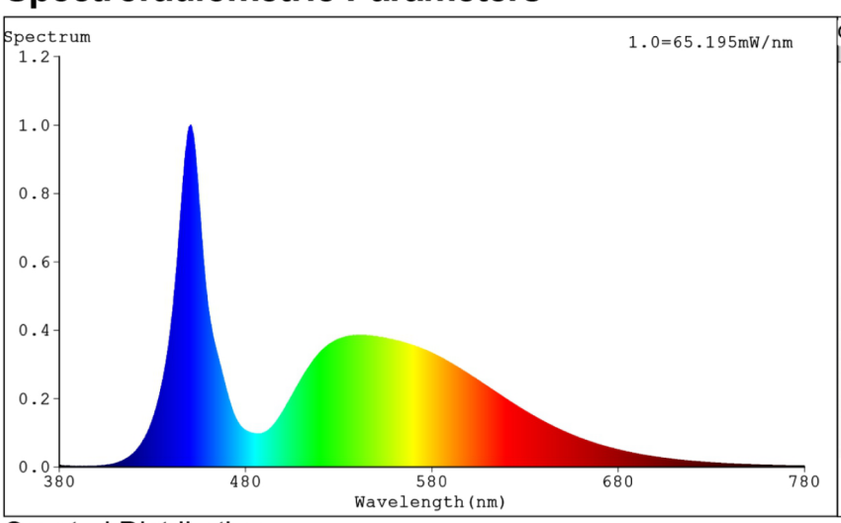
Spectrum Test Report

Product	: 200W	Date	: 2021-03-10
Sample No.	:	Instrument	: HAAS-2000(EVERFINE)
Manufacturer	:	Operator	: DAMIN

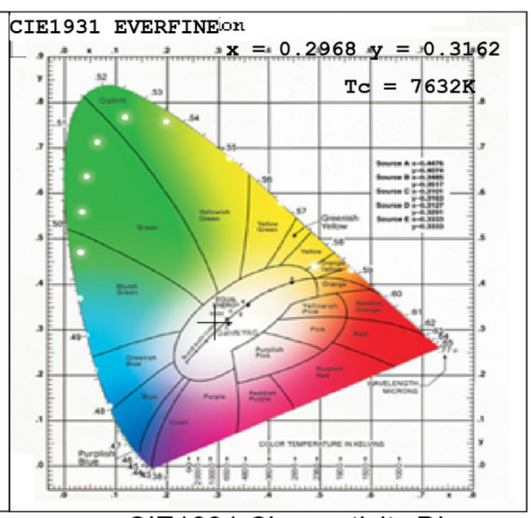
Test Condition

Temprature	: 25.3Deg	RH	: 65.0%
Scan Range	: 380nm-780nm	IP	: 52228 (80%)
		T	: 52 ms
Test Type	: Fast Test	Delicacy	: High

Spectroradiometric Parameters



Spectral Distribution



CIE1931 Chromaticity Diagram

CIE Color Parameters:

Chromaticity Coordinate: x=0.2968 y=0.3162/u'=0.1915 v'=0.4589(duv=5.01e-03)

CCT:Tc= 7632K Prcp WaveL: d=485.4nm Purity=13.7%

Peak WaveL:λp=451nm Half Width:Δλp=17.9nm Ratio:R=12.3% G=83.4% B=4.4%

Render Index:Ra=73.7

R1 =71	R2 =77	R3 =78	R4 =75	R5 =73	R6 =68	R7 =84	
R8 =64	R9 =0	R10=43	R11=71	R12=39	R13=72	R14=88	R15=68

LEVEL:OUT WHITE:OUT

Photo Parameters:

Flux = 1573 lm Eff. : 138.22 lm/W Fe = 4.721 W

Fmol(umol/s):2.099e+000 Fluorescence and blue light ratio:1.984 Fluorescent efficiency:27.60

Electrical parameters:

V = 3.250 V I = 3.500 A P = 11.38 W PF = 1.000

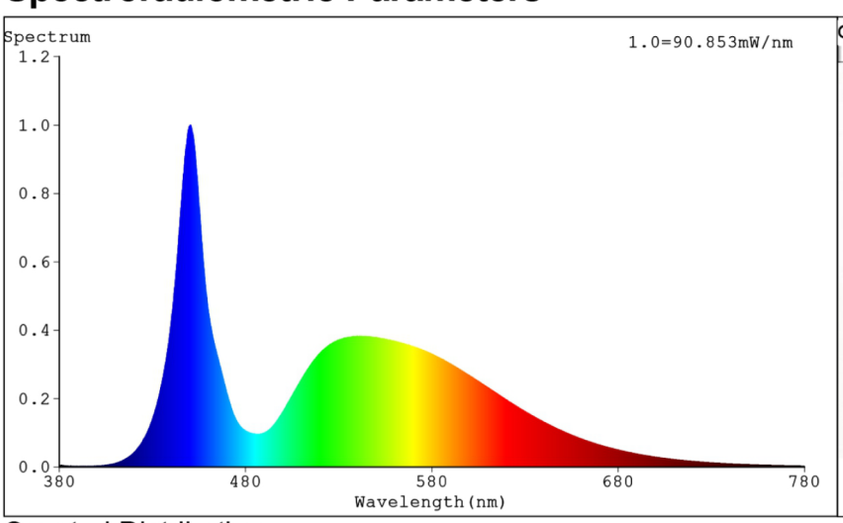
Spectrum Test Report

Product	: 300W	Date	: 2021-03-10
Sample No.	:	Instrument	: HAAS-2000(EVERFINE)
Manufacturer	:	Operator	: DAMIN

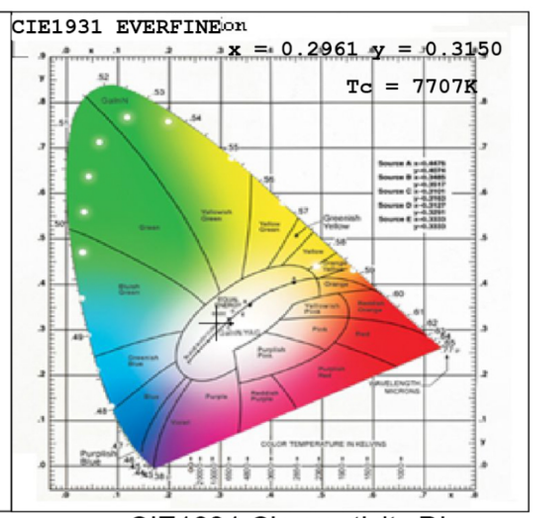
Test Condition

Temprature	: 25.3Deg	RH	: 65.0%
Scan Range	: 380nm-780nm	IP	: 55924 (85%)
		T	: 40 ms
Test Type	: Fast Test	Delicacy	: High

Spectroradiometric Parameters



Spectral Distribution



CIE1931 Chromaticity Diagram

CIE Color Parameters:

Chromaticity Coordinate: x=0.2961 y=0.3150/u'=0.1914 v'=0.4581(duv=4.80e-03)

CCT:Tc= 7707K Prcp WaveL: d=485.1nm Purity=14.0%

Peak WaveL:λp=450nm Half Width:Δλp=17.8nm Ratio:R=12.3% G=83.4% B=4.4%

Render Index:Ra=73.7

R1 =71	R2 =77	R3 =78	R4 =75	R5 =73	R6 =68	R7 =84	
R8 =65	R9 =0	R10=42	R11=72	R12=39	R13=72	R14=87	R15=68

LEVEL:OUT WHITE:OUT

Photo Parameters:

Flux = 2136 lm Eff. : 146.00 lm/W Fe = 6.542 W

Fmol(umol/s):2.907e+000 Fluorescence and blue light ratio:1.966 Fluorescent efficiency:29.66

Electrical parameters:

V = 3.250 V I = 4.500 A P = 14.63 W PF = 1.000