SZG555 all-in-one solar led garden light

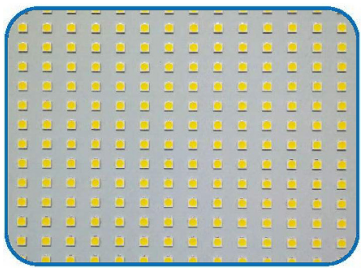
Applications:

- garden and courtyard
- public park
- commercial plaza
- recreation square
- tourist attractions & resort center
- villas and high-end residential

Description of performances:

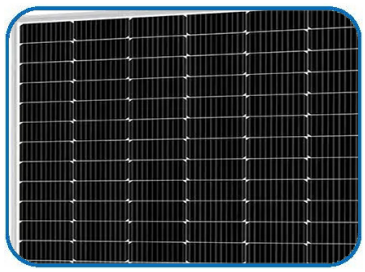
❖ *Super brightness Philips led chip*

- luminous efficiency for led chip：240 lm/W @40mA
- light efficacy for luminaire：200 lm/W
- The thermal resistance is only 3℃ and 75% lower
- The illuminance is 50% higher
- average service life：≥100,000 hours



❖ *High efficiency mono solar panel*

- high efficiency mono solar wafers
- solar conversion efficiency：23%～24%
- wafer specification：182*182 mm
- lifespan：⩾25 years
- Average attenuation speed: 0.6%
- 25 years maximum output power attenuation: 15%



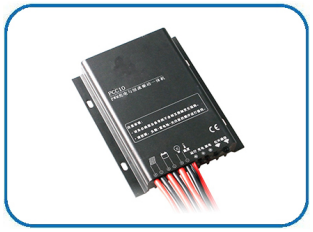
❖ *Low temperature powerful lithium iron phosphate battery*

- Adopt low temperature powerful lithium iron phosphate battery which can discharge at -25℃ reliably.
- cycle life：⩾3000 cycles for more than 8 years' use
- cell capacity：6000mAh
- Less than 3mΩ internal resistance can reduce internal energy loss and offer high current discharge.
- High temperature discharge efficiency is over 95%.
- Low temperature discharge efficiency is about 70%.
- free of cobalt and other heavy metals
- no fire, no explosion, absolutely safe and reliable

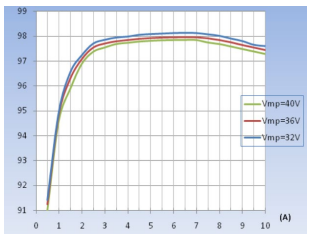
❖ *Intelligent solar controller*

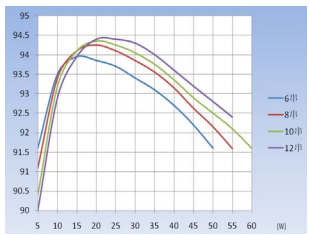
- adopting MPPT technology to track the maximum power of solar panel
- MPPT efficiency：≥99.9%
- charge conversion efficiency：≥98.5%（MPPT）
  ≥94.5%（PWM）
- constant current drive efficiency：≥96%（MPPT）
  ≥95%（PWM）
- IPT(intelligent power technology) can adjust the optimal power according to the weather conditions of the next 7 days and the remaining energy of the battery to ensure 365 days' lighting every day
- control mode: light control, time control, induction control
- 2.4G remoter optional

MPPT controller



PWM controller





Technical parameters:

Parameter items	40W
Brand of led chip	Philips
Luminous efficiency for led chip	240 lm/W
Total luminous flux	9600±5% lm
Luminous efficacy for luminaire	200 lm/W
Beam angle	120°
Correlated color temperature	3000-6500K
Color rendering index	≥75Ra
Type of battery	lithium iron phosphate battery
Capacity of battery	260Wh
Lifespan of battery	≥3000 cycle
Charging time	6-7 hrs
Continuous rainy days	3 days
Induction dimming	microwave sensor
Power of mono solar panel	48Wp
Shell material	extruded aluminum alloy
Discharging temperature	-25～+60℃
Charging temperature	-10～+55℃
IP protection	IP65
Dimensions	720*720*210 mm
Weight	8.5 Kg
Diameter of mounting pipe	Φ60 mm
Recommended mounting height	7-8 m

Product details:

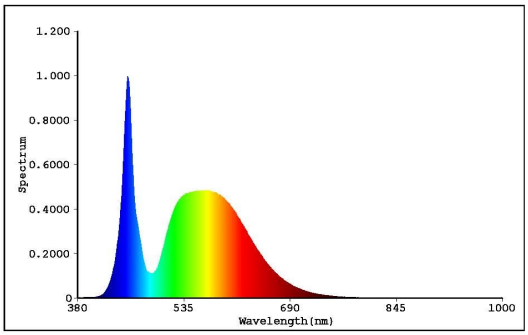
Test report of luminous efficiency for led chip:

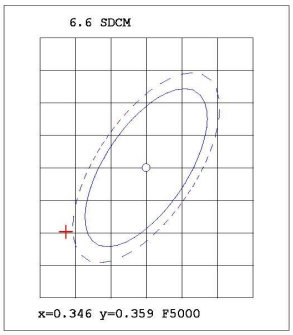
EVERFINE 远方

Test report

EVERFINE LEDspec Test Report 4 Of 4

Spectrum Test Report





Color Parameters:

Chromaticity Coordinate(2Deg):x=0.3347 y=0.3492/u'=0.2053 v'=0.4819 duv=3.134e-003

Tc=5410K Dominant WL:Ld=558.0nm Purity=5.2%

Ratio:R=14.0% G=82.2% B=3.8% Peak WL:Lp=453.1nm HWL:17.2nm

Render Index:Ra=75.9

R1 =73.76	R2 =81.05	R3 =84.21	R4 =75.46	R5 =73.73
R6 =72.76	R7 =84.81	R8 =61.67	R9 =-15.45	R10=52.76
R11=71.59	R12=42.32	R13=75.35	R14=90.99	R15=69.42

TM30 Parameters: Rf = 74.3, Rg:93.3

Photo Parameters:

Flux = 50.96 lm Eff. : 241.29 lm/W Fe = 153.5 mW

Electrical parameters:

VF = 5.294 V IF = 39.90 mA P = 211.2 mW Ch1

LEVEL:**[OUT] WHITE:ANSI_5700K

Status: T=201.00ms Ip=26653 (41%) [HAAS1200_V1_USB] V2.00.288