

SHINING STAR LIGHTING CO.

ALL IN ONE SOLAR STREET LIGHT 100 - 120 W

Model: SH-S/SLS-160W









SHINING STAR LIGHTING CO.

Solar Street Light Model:

SH-S/SLS-160W

Catalog Content

- 1. Company Profile
- 2. Our Products Parameters
- 3. Our Project Solar Street light
- 4. Product Advantages And Parts
- 5. Certified Product







1. Company Profile

SHINING STAR LIGHTING

Shining Star Lighting Co., is a leading manufacturer for LED lighting and Solar Light for 8 years we are professional in outdoor lighting. we are member in Qndiao inventors Academy in china - we have three factories to do our products parts and assamble it plus we have Markteing Managment office in Shanghai S our factories Located in:

AC outdoor lighting Factory Address:

Guangdong Province, Zhongshan City, West Ganglong South Road No. 20 Industrial Factory Building 2 China Solar lighting Factory Address:

Tongyi Science and Technology Innovation Park,3rd Floor, Building 7, Guzhen Town, Zhongshan City Cable Factory Address:

Shenzhen City Longgang District Pinghu Street Pingxin North Road No. 83 Shenzhen - china Shanghai office Address:

No. 8 , 1098 Chuansha Road Pudong new District Shanghai - China

www.shiningstarlighting.com info@shiningstarlighting.com

Tel: +86 15093375674

: + 86 15618601747



2. Our Products Parameters





model	SH-S/SLS-60	SH-S/SLS- 90	SH-S/SLS- 120	SH-S/SLS- 160
Power	35W	45W	70W	110W
monocrystalline silicon Solar panel	18V 60W	18V 80W	36V 100W	36V 160 W
Battery Life time	5 years	5 years	5 years	5 years
Battery Type	Lithium	Lithium	Lithium	Lithium
Lumen(LM)	184 lm /w	184 lm /w	184 lm /w	184 lm /w
Product size	659*367*63.5mm	789*367*64mm	1000*430*83.5mm	1195*505*83.5mm
Viewing Angle		55*150 degre	ee - 70 *145 degree	е
Induction mode	Light control+remote control			
Material	Die-cast aluminum			
Charge time:by sun	7 hours (with enough strong shine)			e)
Working time (Count by hours)	4 rainy days			
Working Temperature:	-30℃ ~+70℃			
IP rating	IP 66 waterproof & dustproof			
Colour temperature:k	2700k-6500k			
Certificate	CE/RoHS/EMC/FCC			
Application	garden/courtyard/road/parking lot/outdoor,etc.			

3. Our Project Model Solar Street light







Model: SH-S/SLS-160W

item	discription		
Solar	Monocrystaline, Heavy dust resistant		
Fixture	LED, 100W, high purity lenses		
opration	It has an automatic sensor, Depending on the nature of the atmosphere		
power	100W		
battery	Integrated Lithium Battery, 48 amp/h, 24 volt,3000 cycles		
Battery Charging Time	7h		
The time required to save charging	4 days straight		
IP	66		
Fixture manufacture properties	Resistant to bad weather conditions, such as dust, high humidity, temperature of 55 degrees Celsius, and wind speeds of 220 km per hour.		
industry technology	smart		
Lumens	16000 lm		
Color Temperature (K)	4000 k		
Warranty on fixture	5 years for fixture, sensor,battery and 10 years for solar panel		

4. Product Advantages And Parts



HIGH LIGHT OF PRODCUT





Fix easlly with screws



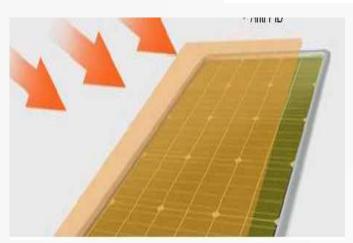
Whole Shape Die-casting Aluminum Body

perfect seal

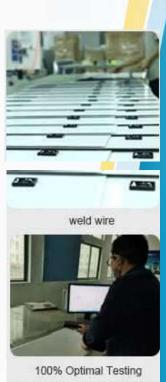


Diecasting aluminum body, whole shap technology, better heat dissipation, easy to replace spare parts, low maintenance cost.

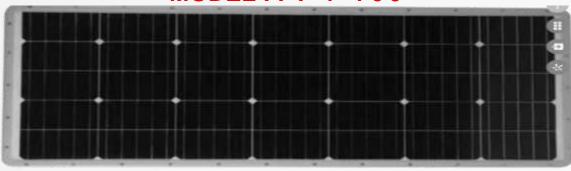
Self-produced solar panel 100% strict quality control



- Conversion
 Rate up to 22%
 > Power error
 range less than
 3%
- > Service life is as long as 25 years



MODEL: PT-4-160



High

body 1195*505*83.5mm panel size 1160 *475 * 3.5 mm

Efficient

A-grade monocrystalline silicon solar panel, conversion efficiency can sixe 1195*505*83.5mm

Solar Panel

reach 22%, to reach the max conversion from light to electricity.

Lithium Battary

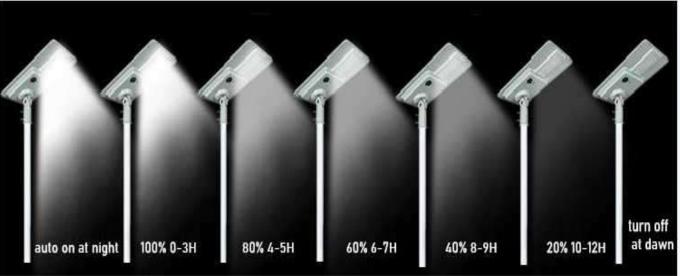
PT-24V-48A

Model	Specifications		
PT-24V- 48A	Lithium Battery		
Size	272*218*45mm		
Weight	5.35KG		
Rated Battery Voltage	24V		
Rated Battery Capacity	48Ah		
Max. constant charge current	15A		
Max. constant discharge current	10A		
Packing	Epoxy Board + PVC Film		
Cycle Life	3000 times		
Lifespan	8 years		
Others	24V 48Ah 24V 54Ah		

Mode: MPPT1075-DCLi







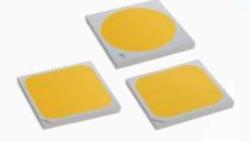
MPPT Controller

6-8 periods dimmable

MPPT controller optional, Strong samrt power and battery capcacity detection, the light runs on more than 4 rainy days.

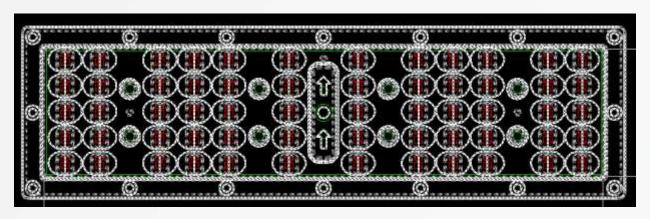
luXeon Xr-5050 He

LUXEON 5050 LED CRI (Ra>): 80



184lm/w>4000 k





Product combined with Geometric Surface Design, High light efficiency;

● 75 / 140 beam angle. With high light transformer 92% On the basic character of 3030series light, show the application of the Combination of optical and construction.



Die casting aluminum installation hodler. 90-180° adjustable, sturdy and durable, to make the solar panel orientation and light angle better.



Form QAT_10-M04, version 02, effective since October 07th, 2022.

CERTIFICATE

No. 3K230303.SSL0O70

Test Report / Technical Construction File no. HTT202206275ER

Certificate's SHINING STAR LIGHTING LLC - CHINA SHINING STAR Holder: 16w115 Hillside Lane Burr Ridge, IL 60527 Chicago USA.

16w115 Hillside Lane Burr Ridge, IL 60527 Chicago USA.
Build 8, No.1098, Chuansha Road, Pudong Shanghai China

Certification ECM Mark



Product: Security Cable
Trademark: SHINING STAR



Model(s): (see the following annex)

Verification to: Standard:

EN 55032:2015+A1:2020, EN IEC 61000-3-2:2019, EN 61000-3-3:2013+A1:2019, EN 55035:2017+A11:2020

related to CE Directive(s):

2014/30/EU (Bectromagnetic Compatibility)

This document has been issued in accordance with the European Commission's note of 14 September 2022 ref. Ares (2022) 6342894 concerning voluntary certifications with a non-notified procedure.

The manufacturer has voluntarily decided to submit its documents concerning the above-mentioned product for verification. Ente Certificazione Macchine confirms that the documentation made available and immediately returned to it, as containing sensitive data, meets the essential requirements of the above-mentioned directives. The verification activity carried out exclusively concerned the technical documentation and no verification was carried out on the product. This document cannot replace the EC Declaration of Conformity. The above conformity mark can be affixed to the technical documentation in accordance with the ECM regulation on its issue and use, published on the website www.entecerma.it

Issuance date: 03 March 2023 Expiry date: 02 March 2028

For online check:



Approver
Ente Certificazione Macchine
Legal Representative
Luca Bedonni







Ref. Certif. No.

DE 2-025876

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product

Name and address of the applicant

Name and address of the manufacturer

Name and address of the factory

Ratings and principal characteristics

Trademark (if any)

Customer's Testing Facility (CTF) Stage used

Model / Type Ref.

Additional information (if necessary may also be reported on page 2)

A sample of the product was tested and found to be in conformity with

As shown in the Test Report Ref. No. which forms part of this Certificate

Solar Street Light

CHINA SHINING STAR IMPORT AND EXPORT CO.,LTD 416 Rm, No.6, Lane No. 199, Jingang Road Jingiao free trade zone, Shanghai, China

CHINA SHINING STAR IMPORT AND EXPORT CO.,LTD 416 Rm, No.6, Lans No. 199, Jingeng Road Jingiao free trade zone, Shanghai, China

CHINA SHINING STAR IMPORT AND EXPORT CO.,LTD 416 Rm, No.6, Lane No. 199, Jingang Road Jingiao free trade zone, Shanghai, China

Class III; IP66; ta:45°C; For other ratings, see test report.

SHINING STAR

N/A

SH-S/SLS-3W; SH-S/SLS-5W; SH-S/SLS-6W; SH-S/SLS-8W; SH-S/SLS-15W; SH-S/SLS-20W; SH-S/SLS-30W; SH-S/SLS-40W; SH-S/SLS-50W; SH-S/SLS-60W

-see also test report ref. no. 50266453 001.

IEC 60598-2-3:2002+A1 IEC 60598-1:2014+A1 for national deviations see test report

50266453 001

This CB Test Certificate is issued by the National Certification Body



TÜV Rheinland LGA Products GmbH Tillystraße 2 - 90431 Nürnberg, Germany Phone + 49 221 806-1371 Fax + 49 221 806-3935 Mail: cert-validity@de.tuv.com

Web: www.tuv.com

Signature:

Welerungs Dipl.-Ing. Wriv. S. O. Steinke

LOVEDRING

Date:

11.09.2019



Form QAT_10-M07, version 02, effective since October 07th, 2022

RoHS

ATTESTATION

ECM

No. 3K230227, SSLOW39

Test Report / Technical Construction File no. HTT202206276CH

Attestation's

SHINING STAR LIGHTING LLC - CHINA SHINING STAR

Holder: 16w115 Hillside Lane Burr Ridge, IL 60527 Chicago USA.
Build 8, No.1098, Chuansha Road, Pudang Shanghai China

Product: Lan Cables - Coaxial Cable - Security Cable

Trademark: SHINING STAR



Model(s): (see the following annex)

Verification to: Standard:

IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-6:2015, IEC 62321-7-1:2015,

EC 62321-7-2:2017, IEC 62321-8:2017

Related to Directive(s):

2011/65/EU amended by 2015/863/EU Restriction of the use of certain hazardous substances (RoHS)

This document has been issued in accordance with the European Commission's note of 14 September 2022 ret. Ares (2022) 6342894 concerning voluntary certifications with a non-notified procedure as it does not fall within the scope of Ente Certificazione Macchine notification under harmonised Union legislation.

The manufacturer has valuntarily decided to submit its documents concerning the above-mentioned product for verification. Enter Certificatione Macchine confirms that the documentation made available and immediately returned to it, as containing sensitive data, meets the essential requirements of the above-mentioned directives. The verification activity carried out exclusively concerned the technical documentation and no verification was carried out on the product. This document cannot replace the EC Declaration of Conformity. The above conformity mark can be affixed to the technical documentation in accordance with the ECM regulation on its issue and use, published on the website www.entecerna.it

Issuance date: 27 February 2023 Expiry date: 26 February 2028

For online check:











SHENZHEN HTT TECHNOLOGY CO., LTD.

HOTLINE: 400-6655-351

WWW.HTTPRC.COM

Certificate of Compliance

Certificate No. : HTT170101033R

Applicant : CHINA SHINING STAR IMPORT AND EXPORT COMPANY

Applicant :

416 Room, No. 6 Lane 199, Jingang road, Free Trade Zone Shanghai

China

Manufacturer : CHINA SHINING STAR IMPORT AND EXPORT COMPANY

Manufacturer Address

Model No.

: 2nd Floor East HuaSheng Road, Guzhen, Zhongshan City

Product : LED Street Light

SH-S/ST-IP65-20W,SH-S/ST-IP65-30W,SH-S/ST-IP65-40W, SH-S/ST-IP65-50W,SH-S/ST-IP65-60W,SH-S/ST-IP65-70W,

SH-S/ST-IP65-30W,SH-S/ST-IP65-90W,SH-S/ST-IP65-100W,

SH-S/ST-IP65-120W,SH-S/ST-IP65-150W,SH-S/ST-IP65-180W,

SH-S/ST-IP65-200W,SH-S/ST-IP65-220W

Trademark : Shining

This is to certify that, on the basis of the tests undertaken as per Report No.: HTT170101033RR, the submitted sample of the above item complies with:

IEC62321-4:2013

IEC62321-5:2013

IEC62321-6:2015

IEC62321-7:2015

And fulfills testing requirement of the RoHS directive 2011/65/EU.



HTT

Date of Issue: Jan.09, 2017

TEL: 0755-23595200 FAX: 0755-23595201

7F. A BUILDING, SMART VALLEY SCIENCE AND TECHNOLOGY INNOVATION PARK, XIXLANG, BAOAN DISTRICT. SHENZHEN, GUANGDONG, CHINA





SHENZHEN HTT TECHNOLOGY CO., LTD.

HOTLINE: 400-6655-351

WWW.HTTPRC.COM

Certificate of Compliance

Certificate No. : HTT170101033L

CHINA SHINING STAR IMPORT AND EXPORT COMPANY Applicant

Applicant

Address

416 Room, No.6 Lane 199, Jingang road, Free Trade Zone Shanghai

Manufacturer

CHINA SHINING STAR IMPORT AND EXPORT COMPANY

Manufacturer

Address

2nd Floor East HuaSheng Road, Guzhen, Zhongshan City

: LED Street Light Product

> SH-S/ST-IP65-20W,SH-S/ST-IP65-30W,SH-S/ST-IP65-40W, SH-S/ST-IP65-50W, SH-S/ST-IP65-60W, SH-S/ST-IP65-70W,

Model No. SH-S/ST-IP65-80W,SH-S/ST-IP65-90W,SH-S/ST-IP65-100W,

SH-S/ST-IP65-120W, SH-S/ST-IP65-150W, SH-S/ST-IP65-180W,

SH-S/ST-IP65-200W, SH-S/ST-IP65-220W

Trademark

The above products have been tested by us with listed standards and found in compliance with the council LVD (Low Voltage Directive) 2014/35/EU. It is possible to use CE marking to demonstrate the compliance with this Low Voltage Directive.

Test stundards:	Report(s) Number	Issued By	Issued Date
EN 60598-1:2008+A11:2009 EN 60598-2-3:2003	HTT170101033LR	нтт	Jan.09.2017
EN 62471:2008	***************************************		or maken pylone a y

This certificate of conformity is not transferable and based on an evaluation of a sample of the above mentioned product.

Authorized Signer:

Jan.09,2017

TEL: 0755-23595200 FAX: 0755-23595201 7F, A BUILDING, SMART VALLEY SCIENCE AND TECHNOLOGY INNOVATION PARK, XIXIANG, BAOAN DISTRICT, SHENZHEN, GUANGDONG, CHINA



SHINING STAR





MONOCRYSTALLINE SOLAR PANEL MODULE







Catalog Content

- 1. Company Profile
- 2. Our Factory
- 3. Product Advantages
 - 4. Our Project Solar Panel Details
 - 5. Certified Product





1. Company Profile

PUTIAN Photoelectric Technology Co., Ltd., established in June 2015, is located in Guzhen, the lighting capital of China.

The factory covers an area of 3,500 square meters. It is a technology enterprise integrating the development, production and sales of solar photovoltaic and solar lamps. The main products produced by the company are: solar battery , solar polycrystalline panelsMONOCRYSTALLINE MODULE, single crystal panels, private model solar street lights, private model solar panels Garden lights, photovoltaic power generation systems, solar advertising light boxes, solar commonly used LED light sources and lighting kits and other products





2. Our Factory







Solar Panel Manufucturing Machine





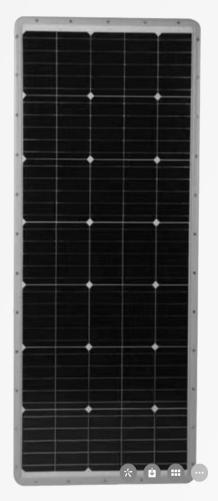




3. Product Advantages

PT-4-160

MONOCRYSTALLINE MODULE



Passionately committed to delivering innovative

energy solution

ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 18.15% by using high efficient solar cells and advanced manufacturing technology.
- Low degradation and excellent performance under high **₹** temperature and low light conditions.
- cat) Robust aluminum frame ensures the modules to withstand wind loads up to 2400Pa and snow loads up to 5400Pa.
- ୍ଜୀ High reliability against extreme environmental conditions (passing salt mist, ammonia and hail tests).
- Potential induced degradation (PID) resistance. _ବର୍ଷ**ି**
- e@ Positive power tolerance of $0 \sim +3 \%$.

CERTIFICATIONS

- IEC61215, IEC61730. IEC62716, IEC61701, CE, ISO9001:2008: Quality management system
- ଜ୍ଜୀ ISO14001:2004: Environmental management system

SPECIAL WARRANTY **@**

- 12 years limited product warranty. ୍ଜି^୮)
- Limited linear power warranty: 12 years 91.2% **₹** of the nominal power output, 30 years 80.6% of the nominal power output.



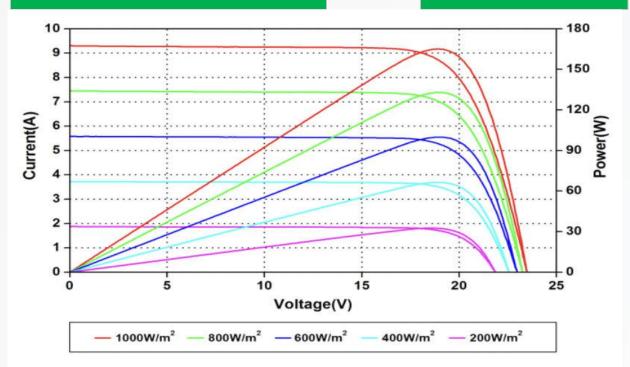


4. Our Project Solar Panel Details

ELECTRICAL CHA	ARACI	TERIS	TICS A	AT STO	C	
Nominal Power (Pmax)	155W	160W	165W	170W	175W	180W
Open Circuit Voltage (VOC)	36.2V	36.2V	36.2V	36.2V	36.2V	36.2V
Short Circuit Current (Isc)	14.48A	14.48A	14.55A	14.55A	14.85A	15.10A
Voltage at Nominal Power (Vmp)	36.2V	36.2V	36.2V	36.2V	36.2V	36.2V
Current at Nominal Power (Imp)	14.48A	14.48A	14.55A	14.55A	14.85A	15.10A
Module Efficiency (%)	16.63	16.74	16.84	17.24	17.85	18.85
Operating Temperature	-40°C to +85°C					
Fire Resistance Rating	Type 1(in accordance with UL1703)/Class C(IEC61730)					
Maximum Series Fuse Rating	15A					

ENGINEERING DRAWINGS

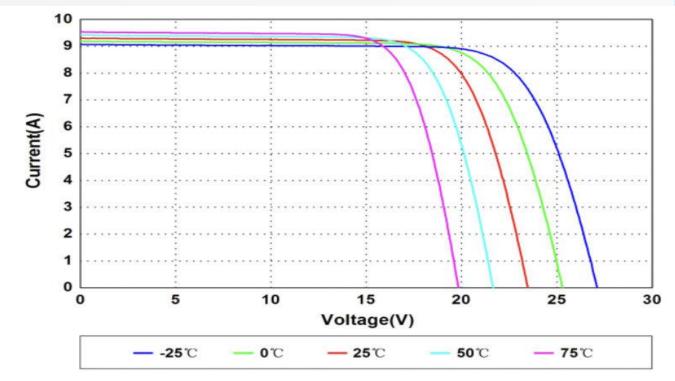
IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances







Current-Voltage Curves at Different Temperatures







5. Certified Product



Verification of Compliance

Verification No.: TMC210906102-C

Zhongshan Putian Solar Energy Equipment Co. LTD Name and address of

3rd Floor, Building 7, Tongyi Science Innovation Park, Guzhen Town, Applicant

Zhongshan City, Guangdong Province

Zhongshan Putian Solar Energy Equipment Co. LTD Name and address of

3rd Floor, Building 7, Tongyi Science Innovation Park, Guzhen Town, Manufacturer:

Zhongshan City, Guangdong Province

Product name: Solar integrated street lamp

PT~F80, PT~F20, PT~F40, PT~F60, PT~F120 Product model(s):

Product trademark:

This verification confirms that the product meets the requirements of the following standard.

The conformity was demonstrated based on following standard(s) listed by European Commission as harmonized with Directive RoHS 2.0 Directive (EU) 2015/863 and (EU) 2017/2102 amending Annex II to Directive 201 1/65/EU

> IEC 62321-1:2013 IEC 62321-3-1:2013 IEC 62321-4:2013/AMD1:2017 IEC 62321-5:2013 IEC 62321:6-2015 IEC 62321-7-1:2015 IEC 62321-7-2:2017 IEC 62321-8:2017

The verification has been carried out in accordance with individual rules and conditions agreed with the applicant. Evaluation has been carried out in accordance with:

Test report(s) No.: TMC210906102-C

TMC Testing Services (Shenzhen) Co., Ltd. Test conducted by:

Verification issue date: September 11, 2021

This verification refers to the above mentioned product and its conformity in regards of above mentioned standard(s) was proven on test sample.

This verification does not imply meeting all essential requirements, assessment of the series-production or any other restricted Notified Bodies conformity assessment procedure appropriate for the product.

This verification holder shall use this verification in connection to verification of conformity and technical data relevant for the product the verification was issued.

TMC Testing Services (Shenzhen) Co., Ltd.

t:86-755-86642861 cert@tmc-lab.com www.tmc-lab.com

1st Floor, Block A1, Zone A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road, Shiyan Street, Baoan District, Shenzhen, China













深圳市环通认证中心有限公司

质量管理体系认证证书

编号: 02422Q32280058R0S

兹证明

中山市普天太阳能设备有限公司

(统一社会信用代码: 91442000MA510N0C8G)

(地址:中山市古镇镇古四村同益工业园区厂房7栋三层之二(住所申报)邮编:528421) 质量管理体系符合标准:

GB/T19001-2016/ISO9001:2015

质量管理体系覆盖范围:

太阳能 LED 路灯生产及销售服务(36V以下)

发证日期: 2022-01-13

证书有效期至: 2025-01-12

(本证书有效期内每年需进行监督审核,证书是否继续有效以是否加贴监督合格标志为准。)

机构印章:

















中国认可 MANAGEMENT SYSTEM CNAS C024-M

证书查询方式:可通过深圳市环道认证中心有限公司官用(www.ucccert.com),或国家认证认可监督管理委员会官网(www.cnca.gov.cn)查询

The most recent information and status of the certificate are available from the UCC website/www.ucccert.com) or CNCA website/www.ucccert.com) or CNCA website/www.uccca.gov.cn/ UCC telephone number: (+96 755/83355888 Address: 6/F/tube Building.Qlazoriang Road, Shenzhen, P.R.China









SHENZHEN UNIVERSAL CERTIFICATION CENTRE CO., LTD. QUALITY MANAGEMENT SYSTEM CERTIFICATE

No.: 02422Q32280058R0S

This is to certify that the quality management system of

PUTIAN ENERGY TECHNOLOGY(GUANGDONG) CO., LTD

(UNIFIED SOCIAL CREDIT CODE: 91442000MA510N0C8G)

(ADD: 3FLR, 7BLOCK, TONGYI INDUSTRIAL AREA, GUZHEN TOWN, ZHONGSHAN CITY, P.R. CHINA ZIP: 528421) is in conformity with:

GB/T19001-2016/ISO9001:2015

This system is valid to:

MANUFACTURING SERVICE AND SALE OF SOLAR LED STREET LIGHT (UNDER 36V)

Issue date: 01-13-2022

This Certificate is validity until: 01-12-2025

(The surveillance audits shall be performed in a yearly manner during the validation. The continual effectiveness of the certificate shall be marked by the surveillance qualification logo as pasted below.)

Organization stamp:

Representative of the centre (Director):



1st surveillance logo











中国认可 国际互认 管理体系 MANAGEMENT SYSTEM CNAS C024-M

证书面观方式:可题过深圳市环道认证中心有限公司宣问(www.ucccert.com),或国家认证认可监督管理费员会官词(www.cnca.gov.cn)查询 认证机构联络电话:(+86 755)83355888 地址:深圳市提回区侨着路报和大缆大楼

The most recent information and status of the certificate are available from the UCC website(www.ucccert.com) or CNCA website(www.ucca.gov.on) UCC telephone number: (+86 755)83355888. Address: 6/F,Yuhe Building,Qlaoxiang Road,Shenzhen,PR.China







Report No.: TMC210906104-S



Test Report

On Behalf of

Zhongshan Putian Solar Energy Equipment Co. LTD Solar integrated street lamp

Model: PT~F80,PT~F20,PT~F40,PT~F60,PT~F120

Prepared for: Zhongshan Putian Solar Energy Equipment Co. LTD

3rd Floor, Building 7, Tongyi Science Innovation Park, Guzhen

Town, Zhongshan City, Guangdong Province

Prepared By: TMC Testing Services (Shenzhen) Co., Ltd.

1st Floor, Block A1, Zone A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road, Shiyan Street, Baoan District, Shenzhen,

China

Tel: +86-755- 86642861 Web: www.tmc-lab.com E-mail: Cert@tmc-lab.com

TMC Testing Services(Shenzhen) Co., Ltd.

Approved by name, function, signature : Bart Deng



TMC Testing Services (Shenzhen) Co., Ltd. Testing& Certification Services

1/F., Block A, Xinshidai Gongrong Industrial Park, No. 2, Shihuan Road, Shilong Community, Shiyan Street, Baoan District,

Shenzhen, China t (86)755 86642861 Cert@tmc-lab.com www.tmc-lab.com

Page 1 of 5







MODEL: PT-4-160

160 W 36 V

MODULETYPE: MONOCRYSTALLINE MODULE

Maximum Power(Pmax)	160W
Power Tolerance	3%
Maximun Power Current (Imp)	4.35A
Maximum Power Voltage(Vmp)	36.8V
Short Circuit Current(Isc)	4.79A
Open Circuit Current(Voc)	45.6V
Mzximum Series Fuse Rating	10A
Dimensions(L*W*H)	1160*475*3.5MM
Maximum System Voltage (VDC):1000	

Wind Resistance (Pa):2400

All technical data at standard test condition E=1000W/M2 Tc=25℃ AM = 1.5



WARNING!EL ECTRICAL HAZARD

This unit produces electrical power when exposed to light. Cover glass before opening terminal junction box.

PUTIAN Photoelectric **Technology**

MADE IN CHINA

Thank you!





Super Energy Co.,Ltd.



SAMSUNG cell

A- grade INR18650 -29E

Battery Model :PT-24V-48A

24 V 48 AH









Catalog Content

- 1. Company Profile
- 2. Product Parameters
- 3. Product Advantages
 - 4. Our Project Battery Details









1. Company Profile

Super Energy Co.,Ltd is a field of new energy sources, lithium ion battery research and development production and sales of high-tech enterprises.
Located in Tangxia Town, Dongguan City, Guangdong Province, China.
Super Energy is established in 2005, the factory covers more than 2000 square meter with 10 production lines.A year

production capacity of a hundred million.

We specialize in energy storage power, portable power source station and various specifications of lithium batteries for all parts of the world.

The Lithium batteries can be widely used in household energy storage, outdoor mobile power supply, energy storage base stations, solar energy storage projects, UPS power supply, emergency lights, electric tools, electric bicycles and

追求卓越 坚持创新

other fields.









2. Product Parameters

Size	Capacity	Max Output/Day	Delivery time (days) Temperatur e Range		Cycle Life
18650	2900mAh	100k	30	-20~65℃	3000

100F0 P (1 0 10 11					
18650 Battery Specifications					
Item	s	Spec	Remark		
Nominal ca	pacity	2900mAh	0.2 C5ADischarge		
Standard v	oltage	22-24V			
Discharge ter voltag		22.2-24V	0.2 C5ADischarge		
Charging limi	t voltage	25.6±0.03V	0℃~60℃		
Standard charg	ing current	0.2 C8A	0℃~60℃		
Standard discha	rge current	0.2 C8A	-10℃~ +60℃		
Fast charging	g current	0.5C8A	0℃~60℃		
Fast discharg	e current	0.5C8A	-10℃~ +60℃		
Discharge (current	3C8A	Termination voltage 19.0V		
Maximum pulse current (instant		5C8A	Instantaneous ms		
Internal resistance Weight		≤25m Ω	AC 1kHz Under conditions		
		140g	±1g		
Battery storage temperature	≤1Month	-20℃~ 45℃	Shipping voltage 22.8V ~ 23.0V		
	≤3 Months	-20℃ ~ 35℃			
range	≤12 Months	-20℃ ~ 25℃			









3. Product Advantages

our strategic advantages:

- The R & D center can test various aspects of battery materials and auxiliary materials, such as metal hardness, coating thickness, specific surface area of powders, particle size distribution, tap density, metal content, and the resistance of separators and foils. Pull and puncture, diaphragm air permeability, heat shrinkage, microwater content, melting point, powder resistance, etc.;
- Independent development capability of high-capacity batteries;
- Leading high-capacity battery: AAJ2700; AAAJ1100; reliable safety performance, passed IEC62133 test and obtained CB certification;
- High and low temperature battery, -20 degrees-+65 degrees, can be used in harsh environments;
- High rate battery, up to 30C charge and discharge performance requirements;
- High degree of automation, leading domestic technology;
- High safety 32700 cylindrical lithium iron phosphate battery with 3C continuous charge and discharge, 3000 cycles performance.











4. Our Project Battery Details

Model	Specifications
PT-24V- 48A	Lithium Battery
Size	272*218*45mm
Weight	5.35KG
Rated Battery Voltage	24V
Rated Battery Capacity	48Ah
Max. constant charge current	15A
Max. constant discharge current	10A
Packing	Epoxy Board + PVC Film
Cycle Life	3000 times
Lifespan	8 years
Others	24V 48Ah 24V 54Ah

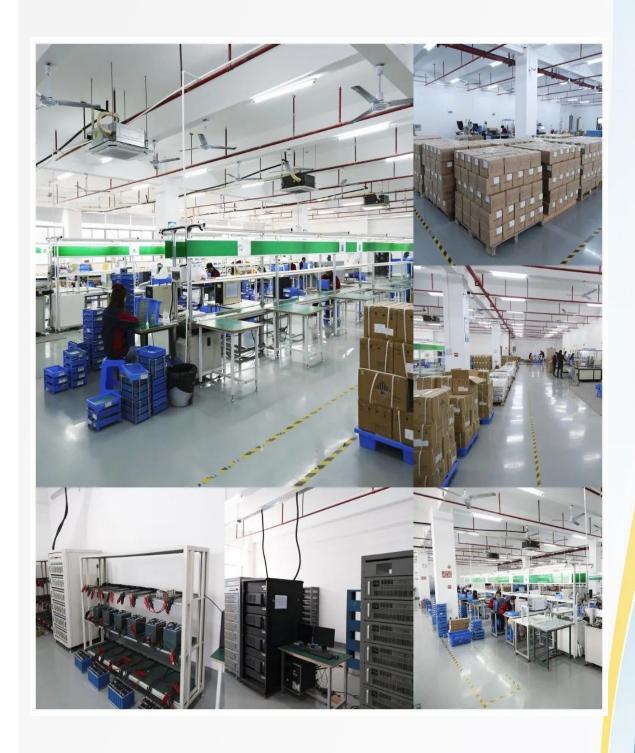


















Add: Building 6,No.10,Keyuan 4th Road,Tangxia Town, Donguan City,Guangdong Province,China

https://catl.en.alibaba.com







MPPT1075-DCLi MPPT Solar charge controller





Lumiax

MPPT1075-DCLi

Catalog Content

- 1. Company Profile
- 2. Product Parameters
- 3. Product Advantages
 - 4. Controller Test
 - 5. Certified Product



1. Company Profile







- •Lumiax was established in year 2007 and is registered trademark of Qingdao Skywise Technolo-gy Co. Ltd.
- •We are an ISO9001 and ISO14001 certified Company; We are one of the Leading innovators of solar and street lighting power solutions since year 2008.
- •Lumiax develops and produces a full range of he controllers and matching accessories. Lumiax chalso Maximize battery life: Your solar charging soptimally charged in fixed or mobile application preventing "dead battery" situations where department of the control of the contro









Magic your solar life

2. Product Parameters

		Item	MPPT1075-DCLi	
Battery	System Voltage		12V/24V automatical recognization	
Parameters	Max Charging Current		10A	
	Max volt on Bat. Terminal		35V	
	Battery Ty	ре	Liquid, Gel, AGM and Lithium (Programmable, default: Lithium)	
	Liquid, Gel, AGM	MPPT Charging Voltage	<14. 5/29. 0¥@25℃	
	You	Boost Voltage	14. 5/29. 0V @ 25℃	
		Equalization Voltage	14.8/29.6V @25°C (Liquid, AGM)	
		Float Voltage	13. 7/27. 4V @25℃	
		Low Volt. Disconnect	10.8~11.8V/21.6~23.6V (Programmable)	
		Reconnect Voltage	11.4~12.8V/22.8~25.6V (Programmable)	
		Overcharge Protect	15. 5/31. 0V	
		Temp. Compensation	-4.17mV/K per cell (Boost, Equalization), -3.33mV/K per cell (Float)	
	Lithium	Charging voltage target	10.0~32.0V (Programmable, default: 12.6V)	
		Charging voltage recovery	9.2~31.8V (Programmable, default: 12.4V)	
			9.0~30.0V (Programmable, default: 9.0V)	
		Low voltage reconnect	9.6~31.0V (Programmable, default: 9.8V)	
		0°C Charging protection	Yes, Slow, No (Programmable)	
Panel	Max volt on PV terminal *1		55V	
Parameters	Max input power		130/260W	
	Dusk/Dawn detect volt.		3.0~20.0V (Programmable)	
	Day/Night delay time		0~30min (Programmable)	
	MPPT tracking range		(Battery Voltage +1.0V) Voc*0.9 *2	
Load	Output Power		10~90W/20~180W	
Parameters	Output Voltage		20~55V/30~55V	
	Current setting range		0.15~6.0A (Programmable)	
	Min current		100mA (Dimming)	
	Current precision		±2%	
	Dimming		0~100% (Programmable)	
	Voltage of start dimming		11.8~12.5V/23.6~25.0V (Gel, AGM and Liquid); 10.0~32.0V (Lithium)	
	Dimming percentage		1~20% (Programmable)	
System	Max tracking efficiency		>99. 9%	
Parameters	Max charge	conversion	97. 5%	
	Max LED dr	iver efficiency	96. 5%	
	Communication mode		Infrared/2.4G/IOT	
	Induction mode		Infrared Human Sensing/Microwave Sensing	
	Self consu	mption	6-25mA	
	Dimensions		85. 8*145*30mm	
	Weight		550g	
	Ambient temperature		-35~+60°C	
	Ambient humidity		0~100%RH	
	Protection degree		IP67	
	May Altitudo		4000m	

7.Parameters setting

Num	Name	Range		Name describe	Step Length	Factory Default
1	Time1	0~6.5H+24H+D2D *1		The first working time	0.5H	4H
2	Dim1	0~100%		Dimming of the first working time	10%	100%
3	Time2	0~7.5H		The second working time	0.5H	OH
4	Dim2	0~100%		Dimming of the second working time	10%	100%
5	Time3	0~7.5H		The third working time	0.5H	0H
6	Dim3	0~100%		Dimming of the third working time	10%	100%
7	Time4	0~7.0H+T0T		The fourth working time	0.5H	OH
8	Dim4	0~100%		Dimming of the fourth working time	10%	0%
9	Time5	0~7.5H		The fifth working time	0.5H	OH
10	Dim5	0~100%		Dimming of the fifth working time	10%	100%
11	D/N Thr	3.0~20.0V		Day/Night Threshold voltage	0.5V	5V
12	D/N Dly	0~30min		Day/Night open load delay time	5min	0min
13	Load I	0.15~6.0A		Load current	0.05A	0.3A
14	Dim Auto	Yes/No/365	*2	Automatic dimming	_	Yes
15	Dim V	8.0~32.0V	*3	The voltage of start dimming	0.1V	12.5V
16	Dim %	1~20%		Automatic dimming percentage	1%	10%
17	Battery	LIQ/GEL/LI	*4	Battery type	_	GEL
18	CVT	8.0~32.0V		Charging voltage target	0.1V	14.6V
19	CVR	7.5~31.8V	*5	Charging voltage recovery	0.1V	14.0V
20	LVD	10.8~11.8V,		Low voltage disconnect	0.1V	11.0V
		Soc1~Soc5	*6			
21	LVR	11.4~12.8V	*7	Low voltage reconnect	0.1V	12.0V
22	0°C Chg	Yes/No/Slow	*8	0°C Charging Protection	_	Yes
23	DelayOff	10~150s	*9	Sensing delay off time	10s	10s
24	Dim NP	0~100%	*10	Dimming when no people	10%	10%





Name	Name Describe
Charge	charging
Discharge	discharging
Convert	in charge and discharge conversion
OverCD	Over current disconnect
Short CD	Short circuit disconnect
Low VD	Low voltage disconnect
Over VP	Overvoltage protection
Over TD	Over temperature disconnect
Open CP	Open circuit protection
HardwareP	Hardware protection

Num	Name	Name describe	Unit
	Status:	Charge	
1	Batt V	Battery voltage	V
2	LoadI	Load current	Α
3	Load V	Load voltage	V
4	PV V	PV voltage	V
5	PV I	PV current *1	Α
6	Energy	Total generating capacity	AH
7	OD Times	Over discharge times	Times
8	FC Times	Fully charge times	Times
9	Day1-HV	A day ago highest voltage	V
10	Day1-LV	A day ago lowest voltage	V
11	Day2-HV	Two days ago highest voltage	V
12	Day2-LV	Two days ago lowest voltage	V
13	Day3-HV	Three days ago highest voltage	e V
14	Day3-LV	Three days ago lowest voltage	V





3. Product Advantages

MPPT1075-DCLi

MPPT Solar charge controller

PRODUCT MODEL : MPPT 1075-DCLi

Description of Function

MPPT-DC series intelligent MPPT solar controller is programmable and especially for boost mode LED solar street light system. It includes constant current driver function. The charging efficiency is about 20% higher than the traditional PWM controller, which can drop the cost of the whole system.

- Innovative Max Power Point Tracking(MPPT) technology, tracking efficiency >99.9%
- Full digital technology, high charge conversion efficiency up to 97.5%,
- discharge conversion efficiency up to 96.5%
- Can output constant current (output current can be set) Can read
- parameters and running status
- If battery voltage is low, it can be set to dimming
- Dimming start voltage and percentage can be set Day/Night threshold can
- adjust automatically
- When BMS power off because of LVD, it can activate the system
- automatically
 - External temperature sensor, automatic temperature compensation(AGM,
- Liquid and GEL) Four stages charge way: MPPT, boost, equalization, float
- IP67, Strong and durable aluminum caseFull automatic electronic protect function

5 stages time and dimming can be adjusted

AGM, Liquid, GEL and Lithium battery for

selection 0°C Charging Protection(Lithium)

Remote Unit to configure, with LCD display * High protections IP 67

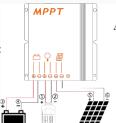
- * Auto Dimming
- * Infrared Remote controller
- * MPPT

Remote controller



Setting can be changed using the "S/SG-Unit" infared remote programmer. For detailed instructions and settings, please see the S/SG-Unit programmer remote manual.

The following diagrams provide an overview of the connections and the proper order.



Hot plugging is prohibited!
Please connect the
inductive sensor to R series
controller first!

Web: www.lumiax.com E-3



Lumiax

4. Controller Test

Test Capacity

Solar Simulator









High Precision- Multimeter



Electrostatic Discharge Test



Constant





5. Certified Product



Registration No.: 07621O9204R3M-SD/001



QUALITY MANAGEMENT SYSTEM CERTIFICATE

The certificate information is available on the CNCA of the official website (www.cnca.gov.cn)

This is to certify that the quality management system of

Qingdao Skywise Technology Co., Ltd

Uniform Code of Social Credit: 91370212664502812L

Reg Add: 4F North Building 3, No. 192, Zhuzhou Road, Laoshen District, Qingdao, 266101, China Business Add: 3F, Building 1, No. 192, Zhuzhou Road, Laoshen District, Qingdao, 266101, China

Which is in conformity with

GB/T19001-2016/ISO9001:2015

This certificate covers the following scope of

Assembly production and Sales of Solar controller

This certificate will not remain valid unless and until the certified customers accepts at least once surveillance audit annually within the validity period of the certificate. Please login into www.zrxbj.com for this certificate's validity status.

Issue Date: 10. 27. 2021

Expiration Date: 11. 05. 2024























TÜV Rheinland (China) Ltd. Member of TÜV Rheinland Group



Qingdao Skywise Technology Co.,

Ltd. Mr. Zhou Yuntian

Date : 22.04.2020 Our ref. : Y.Y.D 01 Your ref.: Z.Y.T.

No.192 Zhuzhou Road Hi-tech Park Qingdao 266000 Shandong P.R. China

Ref : AE Certificate of Conformity EMC

Type of Equipment : Solar Charge Controller

Model Designation : See Certificate Certificate No. : AE 50465499 0001 Report No. : 60359266 001

Dear Mr. Zhou Yuntian,

We herewith confirm that a sample of the above mentioned technical equipment has been tested and was found to be in accordance with the relevant requirements.

Enclosed please find your Certificate of Conformity.

We appreciate your kind support and would like to offer our assistance and continuous services in the future.

With kind regards,

Certification Body

Enclosure

证书的详细资料清费陆www.certipedia.com查阅,或拨打我司客服热线800 898 3668 / 400 883 1300容询



Certification Body

CERTIFICATE

of Conformity

EC Council Directive 2014/30/EU Electromagnetic Compatibility

AE 50465499 0001 Registration No.:

60359266 001 Report No .:

Qingdao Skywise Technology Co., Ltd. No.192 Zhuzhou Road Hi-tech Park Holder:

Qingdao 266000 Shandong P.R. China

Product: Electronic Control Unit

(Solar Charge Controller)

Identification: Type Designation :

MPPTa35-DCb MPPTa50-DCb MPPTa75-DCb

(#a# can be 08,10,15 or 20)

(#b# can be H, I, Li, RS, LR, 32 or blank)

Serial No. : Engineering sample

Remark: Refer to test report 60359266 001 for details.

Tested acc. to: EN IEC 55015:2019 EN 61547:2009

EN 61000-6-3:2007+A1

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal. This is to certify that the tested sample is in conformity with all provisions of Annex I of Council Directive 2014/30/EU. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to the a.m. Directive.

Date ____22.04.2020

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

€ The CE marking may only be used if all relevant and effective EC Directives are complied with. €

Lumiax

Location	Laoshan	Chengyang
Factory Area	1846m²	1600m²
Working Staffs	14	14
Quality Staffs	4	4
RD staffs	15	0
Office staffs	28	1
Daily Capacity(pcs)	1500	4500

Qingdao Skywise Technology Co.,Ltd

NO.192,Zhuzhou Road,Qingdao Tel: 0086-532-80776031 Fax: 0086-532-80776757 Email: Web: www.Lumiax.com

Solar Charge Controller

Thank you!



LUMILEDS



LUXEON XR-5050 HE

MODEL:

LuXeon Xr-5050 He
184 Lm/W





LUXEON XR-5050 HE

LUXEON 5050

High efficacy and lumens in a multi-die, high power package, enabling low system costs

LUXEON 5050 is a multi-die, high power package that provides high luminance from a single package to enable cost effective, single optic and directional fixture designs. LUXEON 5050 uses an industry standard 5050 surface mount package with the smallest round Light Emitting Surface (LES). LUXEON 5050 comes in 70CRI, 80CRI and 90CRI with a wide range of CCTs, and offers hot-color targeting to ensure that the LEDs are within color target at application conditions of 85°C.







luXeon Xr-5050 He



New Form-Factor Compatible with Off-the-Shelf Optics

LUXEON XR-5050 HE products are standard integrated modules compatible with off-the-shelf drivers, optics and heat sinks. They are constructed with

MCPCB substrates for thermal efficiency and mechanical robustness, and eliminate engineering design costs, tooling costs, and material inventory costs. This versatile building-block approach simplifies system integration and accelerates time-to-market.



Efficacy and Luminous flux of up to 184lm/W typ and 8600lm available Available CCT/CRI combinations: 70CRI (2200K, 2700K, 3000K, 4000K, 5000K

and 5700K), 80CRI (2700K, 3000K, 4000K, 5000K and

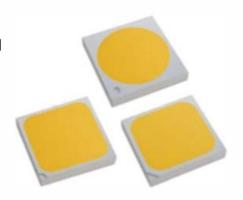
5700K) and 90CRI (5700K)

Superior board level color control of ≤3SDCM

MCPCB for efficient heat dissipation and mechanical robustness

UL 8750, ENEC, CE, UKCA compliance

5-year limited guarantee



PrImary aPPIIcatIons

High Bay

Low Bay

Sport Lights

Outdoor Area Lights















General Product Information



Product Test Conditions

LUXEON XR-5050 HE modules are tested using a 20ms monopulse (MP) at 1050mA, case temperature Tc of 85°C.

Part Number Nomenclature

Part numbers for LUXEON XR-5050 HE follow the convention below:

L 2 2 5 - A A B B 0 CC M D D 1 0

A A

- designates nominal ANSI CCT (22=2200K, 27=2700K, 30=3000K, 40=4000K, 50=5000K, 57=5700K)

B B

- designates minimum CRI (70=70CRI, 80=80CRI and 90=90CRI)

C C

- designates number of emitters (24=24 emitters)

D D

- designates internal Lumileds program code

1 0

- designates internal Lumileds program code

therefore, a LUXEON XR-5050 HE 4000K 80CRI with 24 emitters, will have the following part number:

L 2 2 5 - 4 0 8 0 0 2 4 M L U 0 1 0

Lumen Maintenance

please contact your local Sales Representative or Lumileds Technical Solutions Manager for more information about the long- term performance of this product.

Environmental Compliance

<u>lumileds LLC</u> is committed to <u>providing</u> environmentally friendly products to the solid-state lighting market. LUXEON XR-5050 HE is compliant to the European Union directives on the restriction of hazardous substances in electronic equipment, namely the RoHS Directive 2011/65/EU and REACH Regulation (EC) 1907/2006. Lumileds LLC will not intentionally add the following restricted materials to its products: lead, mercury, cadmium,

hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE).

Performance Characteristics Product Selection Guide



Table 1. Product performance of LUXEON XR-5050 HE at 1050mA, Tc=85°C.

nomĮnal	mInImum crI [1, 2]	lumInous FluX [1] (lm)		tyPIcal lumInous	enerGy eFFIcIency	Part numBer
cct		mInImum	tyPIcal	eFFIcacy (lm/W)	class [3]	7 BIC Hattibel
2200K	70	6856	7272	155	E L225	-2270024MLU010
2700K	70	7618	8042	171	Ď	L225- 2770024MLU010
3000K	70	7923	8328	177	Ď	L225- 3070024MLU010
4000K	70	8317	8636	184	С	L225 4070024MLU010
5000K	70	8317	8636	184	С	L225- 5070024MLU010
5700K	70	8121	8442	179	D	L225 5770024MLU010
2700K	80	6733	7241	154	E	L225 2780024MLU010
3000K	80	7039	7553	161	D	L225- 3080024MLU010
4000K	80	7661	8025	171	D	L225- 4080024MLU010
5000K	80	7661	8025	171	D	L225- 5080024MLU010
5700K	80	7578	7914	168	Ď	L225 5780024MLU010
5700K	90	6396	6834	145	E	L225 5790024MLU010

Electrical and Thermal Characteristics

Table 2. Electrical characteristics for LUXEON XR-5050 HE at 1050mA, Tc=85°C.

Part numBer		ForWard VoltaGe [1	1 (V _f)
	mInImum	tyPIcal	maXImum
L225-xxxx024MLU010	42.0	44.8	45.2

Notes for Table 2:

1. Lumileds maintains a tolerance of $\pm 0.1 \text{V}$ on forward voltage measurements.

Board Level Color Control

Table 3. Board Level Color Control for LUXEON XR-5050 HE.

Part numBer	color control
L225-xxxx024MLU010	3SDCM



Absolute Maximum Ratings



Table 4. Absolute maximum ratings for LUXEON XR-5050 HE.

Parameter	maXImum PerFormance
RS Forward Current	2000mA
Peak Pulsed Forward Current (1, 3)	4000mA
Maximum Working Voltage (4)	250Vdc
ESD Sensitivity (ANSI/ESDA/JEDECJS- 001-2012)	Class 2
Operating Case Temperature at Tc point [1]	-40 to 85℃
LED Storage Temperature	-40°C to 105°C
Reverse Voltage (V _{reverse})	LUXEON LEDs are not designed to be driven in reverse bias

Notes for Table 4:

- Proper current derating must be observed to maintain the Tc temperature below the maximum allowable Tc
- 2. Residual periodic variations due to power conversion from alternating current (AC) to direct current (DC), also

called "ripple," are acceptable if the following conditions are met:

- The frequency of the ripple current is 100Hz or higher
- The average current for each cycle does not exceed the maximum allowable DC forward current
- The maximum amplitude of the ripple does not exceed the maximum peak pulsed forward current
- 3. At <=50% duty cycle with pulse width of 5ms.
- Basic insulation between live parts on the LED module and mounting surface or touchable parts
 when mounted in a luminaire for SELV and other than SELV operations has been evaluated

Application Information

Table 5 . Approbation for LUXEON XR-5050 HE.

Th.o.	nom DIV and to	
Item	comPliantto	
	UKCA	
	E	
Test and	UL8750 (UL file no. E335118)	
Certification	ENEC	
Declaration	RoHS	
	REACH	

Recommended Wire

Table 6 . Recommended Wire for LUXEON XR-5050 HE.

recommended WIre	Insulator dIameter	strIP lenGtH
AWG	Maximum	4mm to
26-18	2.5mm	5mm



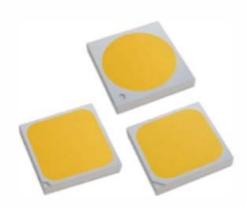




Figure 3 . Typical normalized power vs . wavelength for 90CRI LUXEON XR-5050 HE at 1050mA, $Tc=25^{\circ}C$.

Light Output Characteristics

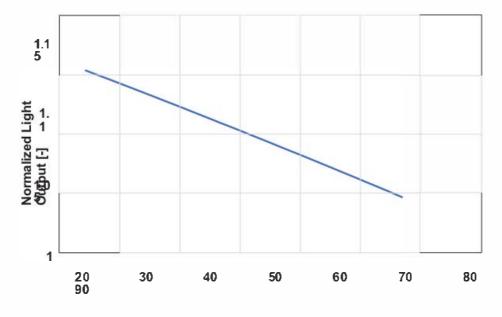


Figure 4 . Typical normalized light output vs
Tc temperature for LUXEON XR-5050 HE at 1050mA.



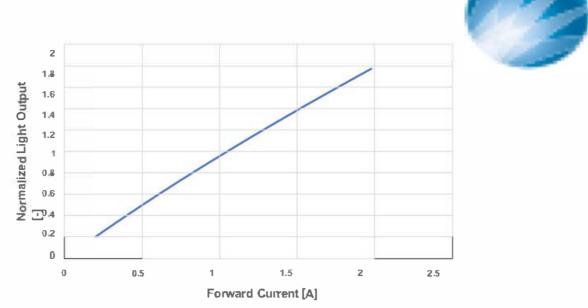


figure 5 . Typical normalized light output vs . forward current for XR-5050 HE at $$\text{Tc}=85^{\circ}\text{C}$$.

Efficacy Characteristics

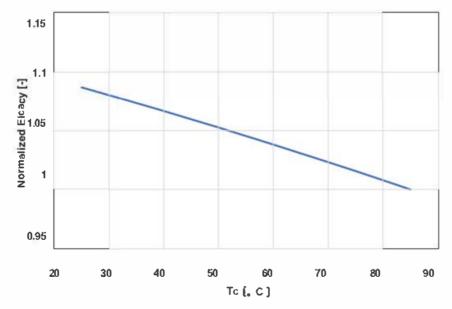


Figure 6. Typical normalized efficacy vs. Tc temperature for LUXEON XR-5050 HE at 1050mA.





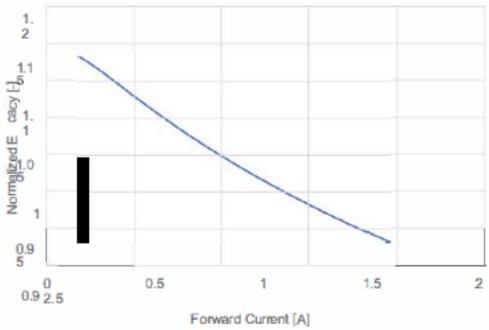


Figure 7. Typical normalized efficacy vs. forward current for LUXEON XR-5050 HE at Tc=85°C.

Mechanical Dimensions



Figure 8 . Mechanical dimensions for LUXEON XR-5050 HE . Notes for Figure 8:

- 1. Drawings are not to scale.
- 2. All dimensions are in millimeters.

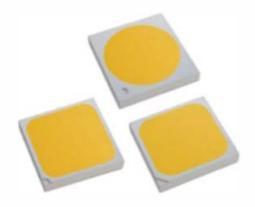


About Lumileds

Companies developing automotive, mobile, IoT and illumination lighting applications need a partner who can collaborate with them to push the boundaries of light. With over 100 years of inventions and industry firsts, Lumileds is a global lighting company that helps customers around the world deliver differentiated solutions to gain and maintain a competitive edge. As the inventor of Xenon technology, a pioneer in halogen lighting and the leader in high performance LEDs, Lumileds builds innovation, quality and reliability into its technology, products and every customer engagement. Together with its customers, Lumileds is

making the world safer, better and more beautiful—with light.

To learn more about our lighting solutions, visit lumileds.com.





@2022 Lumileds Holding B.V. All rights reserved LUXEON is a registered trademark of the Lumileds

Holding B.V. in the United States and other

lumileds.com

Neither Lumileds Holding B.V. nor its affiliates shall be liable for any kind of loss of data or any other damages,

direct, indirect or consequential, resulting from the use of the provided information and data. Although Lumileds Holding B.V. and/or its affiliates have attempted to provide the most accurate information and data, the materials and services information and data are provided "as is," and neither Lumileds Holding B.V. nor its affiliates

warrants or guarantees the contents and correctness of the provided information and data. Lumileds Holding B.V. and its affiliates reserve the right to make changes without notice. You as user agree to this disclaimer user agreement with the download or use of the provided materials, information and data. A listing of Lumileds product/patent coverage may be accessed at lumileds.com/patents.