TEST REPORT
IEC 62560
Self-Ballasted LED-Lamp
for general lighting services by voltage > 50V Safety specifications

Report Number.....:	LCS220228092BS
Date of issue.....:	April 22, 2022
Total number of pages.....:	22 pages
Name of Testing Laboratory preparing the Report.....:	**Shenzhen Southern LCS Compliance Testing Laboratory Ltd.**
Applicant's name.....:	**Zhongshan SPAR Optoelectronics Technology Co.,ltd**
Address.....:	NO.9, HengKang Street,Caosan Tongyi industrial, GuZHen Town, ZhongShan City, GuangDong province, P.R.China
Test specification:	
Standard.....:	IEC 62560:2011 (First Edition) + A1:2015
Test procedure.....:	CE-LVD
Non-standard test method.....:	N/A
Test Report Form No.....:	IEC62560C
Test Report Form(s) Originator.....:	DEKRA Certification B.V.
Master TRF.....:	Dated 2018-12-21

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Test item description.....:	E14 LED BULB
Trade Mark.....:	S·PAR
Manufacturer.....:	Zhongshan SPAR Optoelectronics Technology Co.,ltd
Address.....:	NO.9, HengKang Street,Caosan Tongyi industrial, GuZHen Town, ZhongShan City, GuangDong province, P.R.China
Model/Type reference.....:	See model list
Ratings.....:	220-240V~, 50/60Hz, ta.25°C, E14 Lamp cap,detail see model list

☒	**Testing Laboratory:**	
Testing location/ address.....:	Shenzhen Southern LCS Compliance Testing Laboratory Ltd. 101-201, No.39 Building, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, China	
Tested by.....:	Yan Shi (Engineer)	
Check by.....:	Torres He (Director)	
Approved by.....:	Jesse Liu (Manager)	

List of Attachments (including a total number of pages in each attachment):

Attachment No. 1: 2 pages of report IEC TR 62778.

Attachment No. 2: Photo documentation.

Summary of testing:

All test items are applied to the models SPARAC-E14-5W-HL2-6 , which are considered representative for the series and give the most unfavourable test result, the other models had been tested with construction check on the provided samples.

Self-Ballasted LED-Lamp relevant were to comply with the requirement of IEC 62560:2011+A1:2015.

Consider the submitted samples were LED-light-source technology, they were need to consider that comply with the requirement of IEC TR 62778:2014.

The submitted samples were LED-light-source technology, they were found to comply with the requirement of IEC 62493:2015 without test.

Tests performed (name of test and test clause):

IEC 62560:2011+A1:2015	
Clause	Measurement/testing
5.3	Durability and legibility of marking
6.1	Cap interchangeability
6.2	Bending moment and mass imparted by the lamp at the lamp holder
7	Protection against accidental contact with live parts
8	Insulation resistance and electric strength after humidity treatment
9	Mechanical strength
10	Cap temperature rise
11	Resistance to heat
12	Resistance to flame and ignition
13	Fault condition
14	Creepage distances and clearance
15	Abnormal operation
16	Test condition for dimmable lamps
17	Photobiological safety

Testing location:

Shenzhen Southern LCS Compliance Testing Laboratory Ltd.

101-201, No.39 Building, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, China

Summary of compliance with National Differences:

List of countries addressed

☒ The product fulfils the requirements of Germany and European Group differences

EN 62560:2012+A11:2019

EN 62493:2015

Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

S·PAR

E14 LED BULB
Model: SPARAC-E14-5W-HL2-6
220-240V~, 50/60Hz, 5W



Importer's name: xxxx;
Address: xxxx

Remarks:

Height of CE mark at least 5mm, height of WEEE symbol should not less than 7mm, height of other marks at least 5mm, height of letters and numerals at least 2mm.

According to the EU directives which have been aligned with EU NLF (new legislative framework), both of manufacturer and importer's name and address shall be affixed on the product or, where that is not possible, on its packaging or in a document accompanying the product before the product is placed on the EU market.

Test item particulars..... :	
Classification of installation and use.....:	Self-Ballasted LED-Lamp for general lighting services by voltage > 50V, for indoor use
Supply Connection.....:	E14 Lamp cap
Possible test case verdicts:	
- test case does not apply to the test object.....:	N/A
- test object does meet the requirement.....:	P (Pass)
- test object does not meet the requirement.....:	F (Fail)
Testing..... :	
Date of receipt of test item.....:	April 06, 2022
Date (s) of performance of tests.....:	April 06, 2022 - April 21, 2022

General remarks:

"(See Enclosure #)" refers to additional information appended to the report.
"(See appended table)" refers to a table appended to the report.
Clause numbers with "*" were not within the scope of CNAS recognition.

The general information of applicant and manufacturer (such as the name and address), product name, model/type reference, trademark and other similar information contained in this report are all provided by the applicant, the laboratory is not responsible for verifying its authenticity.

Throughout this report a ☐ comma / ☒ point is used as the decimal separator.

Modified Information

Version	Report No.	Revision Date	Summary
V1.0	LCS220228092BS	/	Original Version

Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:

The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided..... :	☐ **Yes** ☒ **Not applicable**

When differences exist; they shall be identified in the General product information section.

Name and address of factory (ies).....:	Same as manufacturer' name and address

General product information:

Product: E14 LED BULB
Ratings: AC 220-240V, 50/60Hz, ta.25°C, only for indoor use, details information see below model list.

1. The products are LED lamps which are non-dimmable and indoor use only.
2. All models have the same appearance and construction except size and power.
3. LED control gear of all models have the same schematics and PCB layout.
4. Unless otherwise specified, the model SPARAC-E14-5W-HL2-6 was chosen as representative model to perform all test.

Model List:

Item No.	Model No.	Rating	Lamp cap	CCT
1	SPARAC-E14-2.5W-0S1-3 SPARAC-E14-2.5W-0S1-4 SPARAC-E14-2.5W-0S1-6	220-240V~, 50/60Hz, 2.5W	E14	3000K/ 4000K/ 6500K
2	SPARAC-E14-3W-0S1-3 SPARAC-E14-3W-0S1-4 SPARAC-E14-3W-0S1-6	220-240V~, 50/60Hz, 3W	E14	3000K/ 4000K/ 6500K
3	SPARAC-E14-2W-0S2-3 SPARAC-E14-2W-0S2-4 SPARAC-E14-2W-0S2-6	220-240V~, 50/60Hz, 2W	E14	3000K/ 4000K/ 6500K
4	SPARAC-E14-2.5W-0S2-3 SPARAC-E14-2.5W-0S2-4 SPARAC-E14-2.5W-0S2-6	220-240V~, 50/60Hz, 2.5W	E14	3000K/ 4000K/ 6500K
5	SPARAC-E14-3W-0S2-3 SPARAC-E14-3W-0S2-4 SPARAC-E14-3W-0S2-6	220-240V~, 50/60Hz, 3W	E14	3000K/ 4000K/ 6500K
6	SPARAC-E14-3.5W-0S1-3 SPARAC-E14-3.5W-0S1-4 SPARAC-E14-3.5W-0S1-6	220-240V~, 50/60Hz, 3.5W	E14	3000K/ 4000K/ 6500K
7	SPARAC-E14-1.5W-011-3 SPARAC-E14-1.5W-011-4 SPARAC-E14-1.5W-011-6	220-240V~, 50/60Hz, 1.5W	E14	3000K/ 4000K/ 6500K
8	SPARAC-E14-2W-011-3 SPARAC-E14-2W-011-4 SPARAC-E14-2W-011-6	220-240V~, 50/60Hz, 2W	E14	3000K/ 4000K/ 6500K
9	SPARAC-E14-2W-BX1-3 SPARAC-E14-2W-BX1-4 SPARAC-E14-2W-BX1-6	220-240V~, 50/60Hz, 2W	E14	3000K/ 4000K/ 6500K
10	SPARAC-E14-2.5W-BX1-3 SPARAC-E14-2.5W-BX1-4 SPARAC-E14-2.5W-BX1-6	220-240V~, 50/60Hz, 2.5W	E14	3000K/ 4000K/ 6500K
11	SPARAC-E14-2.5W-011-3 SPARAC-E14-2.5W-011-4 SPARAC-E14-2.5W-011-6	220-240V~, 50/60Hz, 2.5W	E14	3000K/ 4000K/ 6500K

12	SPARAC-E14-3W-011-3 SPARAC-E14-3W-011-4 SPARAC-E14-3W-011-6	220-240V~, 50/60Hz, 3W	E14	3000K/ 4000K/ 6500K
13	SPARAC-E14-3.5W-011-3 SPARAC-E14-3.5W-011-4 SPARAC-E14-3.5W-011-6	220-240V~, 50/60Hz, 3.5W	E14	3000K/ 4000K/ 6500K
14	SPARAC-E14-3W-HL2-3 SPARAC-E14-3W-HL2-4 SPARAC-E14-3W-HL2-6	220-240V~, 50/60Hz, 3W	E14	3000K/ 4000K/ 6500K
15	SPARAC-E14-3.5W-HL2-3 SPARAC-E14-3.5W-HL2-4 SPARAC-E14-3.5W-HL2-6	220-240V~, 50/60Hz, 3.5W	E14	3000K/ 4000K/ 6500K
16	SPARAC-E14-4W-HL2-3 SPARAC-E14-4W-HL2-4 SPARAC-E14-4W-HL2-6	220-240V~, 50/60Hz, 4W	E14	3000K/ 4000K/ 6500K
17	SPARAC-E14-5W-HL2-3 SPARAC-E14-5W-HL2-4 SPARAC-E14-5W-HL2-6	220-240V~, 50/60Hz, 5W	E14	3000K/ 4000K/ 6500K

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict

4	**GENERAL REQUIREMENTS**		**P**
4.1	The lamp shall be so designed and constructed that in normal use cause no danger to the user.		P
4.2	Self-ballasted LED-Lamp are non-repairable.		P

5	**MARKING**		**P**
5.1	Mandatory marking	See copy of marking plate	P
	- mark of origin	See copy of marking plate	P
	- rated supply voltage (V)..... :	220-240V~	P
	- rated wattage (W)..... :	See copy of marking plate	P
	- rated frequency (Hz)..... :	50/60Hz	P
5.2	Addition marking		P
	- rated current (A)..... :	See copy of marking plate	P
	- weight significantly higher	See instruction manual	P
	- special conditions or restrictions		N/A
	Not suitable for dimming; symbol used 	See instruction manual	P
	- not suitable for water contact	See instruction manual	P
5.3	Marking durable and legible		P
	rubbing 15 s water, 15 s petroleum; marking legible	No legible and curling, no easily removable	P

6	**INTERCHANGEABILITY**		**P**
6.1	Cap interchangeability in accordance with IEC 60061-1		P
	Gauge in accordance with IEC 60061-3		P
6.2	Bending moment and mass imparted by the lamp at the lampholder		P
	Bending moment imparted by the lamp at the lampholder (Nm)..... :	0.013Nm	P
	Mass not exceeding value table 2 or as specified in IEC 60061-1 (kg)..... :	15,27g	P

7	**PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS**	**P**
7.Z1	General	P

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict
	Internal, basic insulated or live metal parts not accessible		P
	Tested with a test finger with a force of 10 N		P
	Compliance checked with appropriate gauges		P
7.Z2	Fixing of conductors		P
7.Z2.1	Requirements		P
	A loose or detached conductor do not reduce clearances or creepage distances below the values as specified in 14.		P
	- two independent fixings will not become loose or detached at the same time; and		P
	- parts fixed by means of screws or nuts provided with self-locking washers or other means of locking are not liable to become loose or detached.		P
7.Z2.2	Compliance criteria		P
	Tested with a test force of 10 N in the most unfavourable direction		P
	The conductors do not become loose or detached		P

8	**INSULATION RESISTANCE AND ELECTRIC STRENGTH**		**P**
8.2	After storage 48 h at 91- 95% relative humidity and 20- 30 °C measuring of insulation resistance with d.c. 500 V (MΩ):		P
	≥ 4 MΩ for double or reinforced insulation.....:	>100 MΩ	P
8.3	Immediately after clause 8.2 electric strength test for 1 min		P
	Double or reinforced insulation, 4U + 2000 V	2960V, 1min, no breakdown	P
	No flashover or breakdown		P

9	**MECHANICAL STRENGTH**		**N/A**
	Torsion resistance of unused lamps		N/A
9.2.1	Torque test		N/A
	B15d or E14 Cap..... 1,15 Nm	E14:1,15Nm	P
	B22d, E26, E26d or E27 Cap.....3,0 Nm		N/A
	E11 or E12 Cap.....0,8 Nm		N/A
	E17 Cap.....1,5 Nm		N/A
	E39 or E40 Cap.....5,0 Nm		N/A

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict
	GX53 Cap.....3,0 Nm		N/A
9.3	Compliance criteria		P
	Clause 8 shall comply after the mechanical strength test.	See clause 8	P
9.4	Axial strength of Edison caps		P
	After full insertion into the gauge an axial force of Table 4 is applied to the central contact (N).....:	80N for E14 cap	P
	The insulation around the central contact shall remain intact		N/A
10	**CAP TEMPERATURE RISE**		**P**
	The cap temperature rise Δt_s of the lamp shall not exceed 120 K.	See Annex 2	P
11	**RESISTANCE TO HEAT**		**P**
	Parts of insulating material providing protection against electric shock, retaining live parts in position, ball-pressure test:	(see appended table)	P
12	**RESISTANCE TO FLAME AND IGNITION**		**P**
	External parts of insulating material preventing electric shock glow-wire test 650 °C	(see appended table)	P
13	**FAULT CONDITIONS**		**P**
13.2	Fault conditions: where diagram indicates fault condition impairs safety, electronic components have been short-circuited or disconnected	(see appended table)	P
13.3	When operated under fault conditions the lamp		P
	- does not emit flames or molten material		P
	- does not produce flammable gases or smoke		P
	- live parts not accessible		P
	After the tests the insulation resistance with d.c. 1000 V complies with requirements of Cl. 8.1.....:	>100 MΩ	P
14 (16)	**CREEPAGE DISTANCES AND CLEARANCES**		**P**
	Creepage distances and clearances according to IEC 61347-1	(see appended table)	P

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict
	Conductive accessible parts according to IEC 60598-1	(see appended table)	P
15	**ABNORMAL OPERATION**		**P**
	Non-dimmable self-ballasted lamps are tested on a dimmer or an electronic switch according the test circuit shown in Figure 8		P
	Operate the lamp for 8 h at most onerous dimming level		P
	When operated under abnormal operation the lamp		P
	- does not catch fire		P
	- does not produce flammable gases		P
	- live parts not accessible		P
16	**TEST CONDITIONS FOR DIMMABLE LAMPS**		**N/A**
	Test are carried out at maximum power setting for Clause 10 and Clause 17		N/A
17	**PHOTOBIOLOGICAL SAFETY**		**P**
17.1	UV radiation		N/A
	The LED lamp doesn't exceed 2mW/klm		N/A
17.2	Blue light hazard		P
	Assessed according to IEC TR 62778		P
	LED lamps shall be RG0 or RG1	RG1	P
18	**INGRESS PROTECTION**		**N/A**
18.1	Lamps shall be suitable for water contact unless marked with Figure 6		N/A
18.2	The lamp is subjected to an IPX4 test according to IEC 60598-1		N/A
	The lamp complies with the compliance provisions of 9.2 of IEC 60598-1		N/A
	Lamps constructed so that it is sealed to exclude water need not to be tested		N/A

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict

11	TABLE: Ball Pressure Test of Thermoplastics			P
Allowed impression diameter (mm)		2,0mm		—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)	
LED cover	See Annex 1	82,9°C	1,3mm	
Plastic parts of lamp cap (white)	See Annex 1	125°C	0,8mm	
LED PCB	See Annex 1	125°C	0,7mm	
Driver PCB	See Annex 1	125°C	0,7mm	
Supplementary information:--				

12	TABLE: Resistance to heat and fire - Glow wire tests				P
Glow wire temperature		650°C			—
Object/ Part No./ Material	Manufacturer/ trademark	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict	
LED cover	See Annex 1	30s	No	0s	
Plastic parts of lamp cap (white)	See Annex 1	30s	No	0s	
LED PCB	See Annex 1	30s	No	0s	
Driver PCB	See Annex 1	30s	No	0s	
Any flame or glowing of the sample extinguished within 30 s of withdrawing the glow-wire, and any burning or molten drop did not ignite the underlying parts (Yes/No).....				Yes	
Supplementary information:--					

13	TABLE: tests of fault conditions		P
Part	Simulated fault	Result	Hazard
Output	S-C	Shut down, recoverable, No damage	~~YES~~/NO
Q1	S-C	Fuse opened, No hazard, No damage	~~YES~~/NO
D1	S-C	Fuse opened, No hazard, No damage	~~YES~~/NO
Note:S-C; short circuit ; O-C; open circuit			

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict

14	TABLE: Clearance And Creepage Distance Measurements					P
Test Location	Working voltage	Measured cl (mm)	Required cl (mm)	Measured cr (mm)	Required cr (mm)	Verdict
L/N	240V~	2,6	1,5	2,6	2,5	P
Current-carrying parts and accessible parts	240V~	5,1	3,0	5,1	5,0	P

ANNEX 1	TABLE: Critical components information					
Object / part No.	**Code**	**Manufacturer/ trademark**	**Type / model**	**Technical data**	**Standard**	**Mark(s) of conformity[1)]**
Plastic material of lamp cap	C	KINGFA SCI & TECH CO LTD	PBT-RG301(r1)	V-0; 125°C	--	UL E171666
Fuse resistance	C	XUYI SANWEI ELECTRIC CO LTD	RXF1/2	10Ω, 0,5W	--	UL E330127
Internal wire	B	Guangzhou Tang Yao Wires Co. Ltd.	TY 1963	300/300VAC; 180°C; 22-24AWG	VDE 0250	VDE 40009954
Driver PCB	C	Xiamen Xinantaifa Industrial Co., Ltd.	ATF-04 ATF-05	V-0; 130°C	--	UL E201516
LED cover	C	Xiamen Tianyu Plastic Industry Co., Ltd.	PC-DV	PC; V-2; 130°C	--	UL E309739
LED PCB	C	RONG HUI ELECTRONICS (HUIZHOU) CO LT	RH-4	V-0, 130°C	--	UL E252098
LED	D	Shenzhen MTC Lighting Co., Ltd	2835	IF:60mA VF:9V	IEC TR 62778	Test with appliance

Supplementary information:

[1)] Provided evidence ensures the agreed level of compliance. See OD-CB2039.

The codes above have the following meaning:

A - The component is replaceable with another one, also certified, with equivalent characteristics

B - The component is replaceable if authorised by the test house

C - Integrated component tested together with the appliance

D - Alternative component

ANNEX 2	**TABLE: Temperature measurements, thermal tests of Section 10**		P
	Type reference.....:	SPARAC-E14-5W-HL2-6	—
	Supply wattage (W).....:	4,87W	—
	Supply current (A)..... :	0,022A	—
	Calculated power factor.....:	0,91	—
	Table: measured temperatures corrected for ta = 25 °C except temperature rise for lamp cap:		P
	- abnormal operating mode.....:		—
	- test 1: rated voltage..... :	240V~	—

Temperature measurements, (°C)

Part	Ambient	Clause 10 – normal temperature		
		test 1 (°C)	Limit (°C)	Verdict
E14 Lamp cap	25°C	18,1K	120K	P
Internal wire	25°C	51,3	105	P
LED PCB	25°C	59,2	130	P
LED cover	25°C	57,9	Ref.	P
Driver PCB	25°C	65,7	105	P
Supplementary information:				

	ANNEX 3: EMF test result according to IEC/EN 62493		P
4	**LIMITS**		P
4.1	**General**		P
	Comply with Van der Hoofden test limit in 4.2.3 or inherently compliant in 4.2.2 and pass assessment procedure for intentional radiators in 4.3		P
4.2	**Unintentional radiating part of lighting equipment**		P
4.2.2	Lighting equipment deemed to comply with the Van der Hoofden test without testing		P
	1) electronic controlgear	Yes ☐ No ☒	—
	2) incandescent-lamp technology	Yes ☐ No ☒	—
	3) LED-light-source technology	Yes ☒ No ☐	—
	4) OLED-light-source technology	Yes ☐ No ☒	—
	5) high-pressure discharge lamp	Yes ☐ No ☒	—
	6) low-pressure discharge lamp technologies with exposure distance ≥ 50 cm	Yes ☐ No ☒	—
	7) independent auxiliary	Yes ☐ No ☒	—
	Not fulfil any of 1-7 above subject to 4.2.3		—
4.2.3	Applications of limits		N/A
	Not fulfil any of 1-7 in 4.2.2 but the compliance factor *F* is ≤ 1		N/A
4.3	**Intentional radiating part of lighting equipment**		N/A
	Comply with one of methods in Clause 7 if intentional radiator		N/A

6	**MEASUREMENT PROCEDURE FOR THE VAN DER HOOFDEN TEST**		N/A
6.1	**General**		N/A
	Measurements carried out under conditions according Clause 6.1 – 6.6	See Table 6	N/A

7	**ASSESSMENT PROCEDURE INTENTIONAL RADIATORS**		N/A
7.2	**Low-power exclusion method**		N/A
7.2.1	Input $P_{int,rad}$.....:		—
	Exclusion level P_{max}.....:		—
	Input power $P_{int,rad}$ < exclusion level P_{max}		N/A
7.3	**Application of the EMF product standard for body worn-equipment**		N/A
	If not Clause 7.2 is met and expose distance ≤ 0.05 m, comply with IEC 62209-2		N/A

7.4	**Application of the EMF product standard for base stations**		N/A
	If not Clause 7.2 is met and if intentional radiator is base station, comply with IEC 62232		N/A
7.5	**Application of another EMF standard**		N/A
	If not Clause 7.2 is met and if intentional radiator cannot be considered as in Clause 7.3 or 7.4, comply with IEC 62311		N/A

6	**TABLE: Measurement results with Van der Hoofden test head**				N/A
Location of EUT	Test model	Measuring distance	Result(F)	Limit(F)	Verdict
Reference Annex B of IEC/BS EN 62493:2015	--	--	--	≤1.0	N/A

Attachment No.1

IEC TR 62778 Blue light hazard relevant section tested on product			
Clause	Requirement + Test	Result - Remark	Verdict

7	**MEASUREMENT INFORMATION FLOW**		**--**
7.1	**Basic flow**		**P**
	'Law of conservation of luminance' applied		P
	Use of only true luminance/radiance values		P
	In case of luminaire: The light source is operated in the luminaire under similar conditions as when tested as a component		N/A
	In case E_{thr} value for RG2 was established the peak value was derived from angular light distribution		N/A
7.2	**Conditions for the radiance measurement**		**P**
	Standard condition applied (200mm distance, 0,011rad field of view)		P
	Non-standard condition applied		N/A
7.3	**Special cases (I): Replacement by a lamp or LED module of another type**		N/A
	Light source is a white light source		N/A
	Evaluation done based on highest luminance		N/A
	Evaluation done based on CCT value		N/A
7.4	**Special cases (II): Arrays and clusters of primary light sources**		N/A
	LED package is evaluated as ..... :	☐ RG0 unlimited ☐ RG1 unlimited	N/A
	E_{thr} of LED package applies to array		N/A
8	**RISK GROUP CLASSIFICATION**		**P**
	Risk group achieved:		P
	-... Risk Group 0 unlimited		N/A
	-... Risk Group 1 unlimited		P
	- E_{thr} ..... (lx) : Distance to reach RG1..... (m) :		N/A

Attachment No.1

IEC TR 62778 Blue light hazard relevant section tested on product			
Clause	Requirement + Test	Result - Remark	Verdict

Table	**Spectroradiometric measurement (IEC TR 62778: 2014)**		--
	Measurement performed on:	Self-Ballasted LED-Lamp	--
	Model number.....	SPARAC-E14-5W-HL2-6	--
	Test voltage (V).....	240V	--
	Test current (mA).....	--	--
	Test frequency (Hz).....	50	--
	Ambient, t (°C).....	25,0	--
	Measurement distance.....	☒ 20 cm ☐ ... cm	--
	Source size	☒ Non-small ☐ Small : .... mm	--
	Field of view	☐ 100 mrad ☒ 11 mrad ☐ 1,7 mrad (for small sources)	--

Item	Symbol	Units	Result	Risk Group
Correlated colour temperature	CCT	K	--	
x/y colour coordinates	--	--	--	
Blue light hazard radiance	L_B	W/(m²•sr¹)	811	RG1
Blue light hazard irradiance	E_B	W/m²	--	
Luminance	L	cd/m²	1,124e+006	
Illuminance	E	lx	--	
Supplementary information:				

Attachment No.2

Photo Documentation

Model No.: SPARAC-E14-5W-HL2-6



Figure 1



Figure 2

Attachment No.2

Photo Documentation

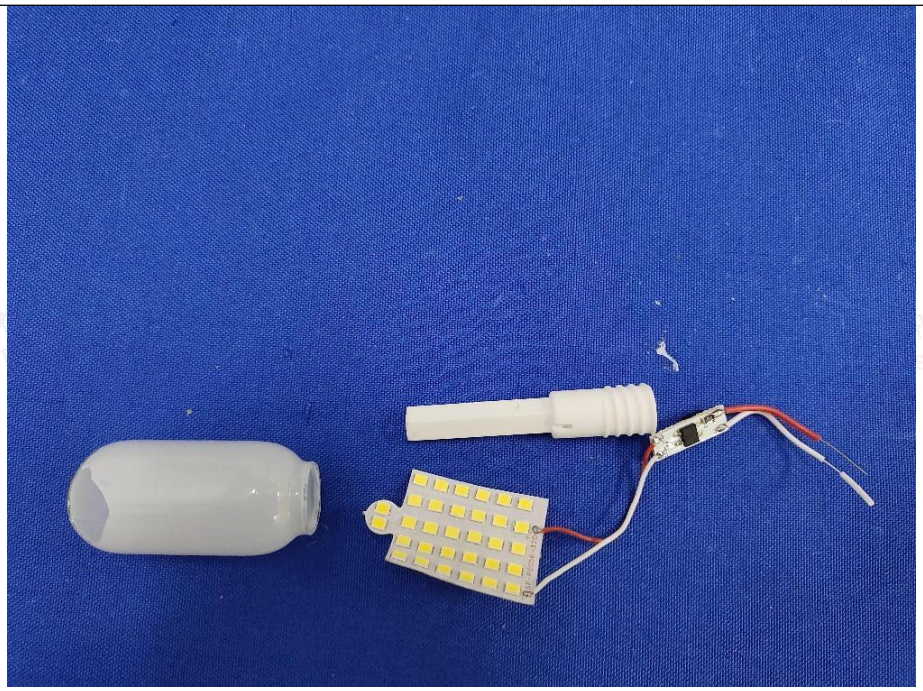


Figure 3

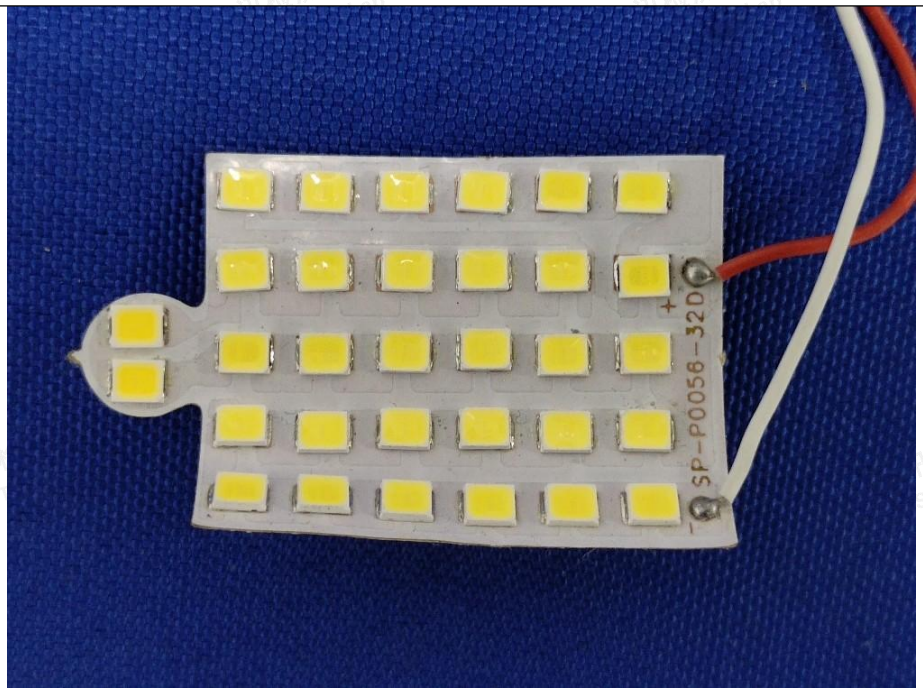


Figure 4

Attachment No.2

Photo Documentation

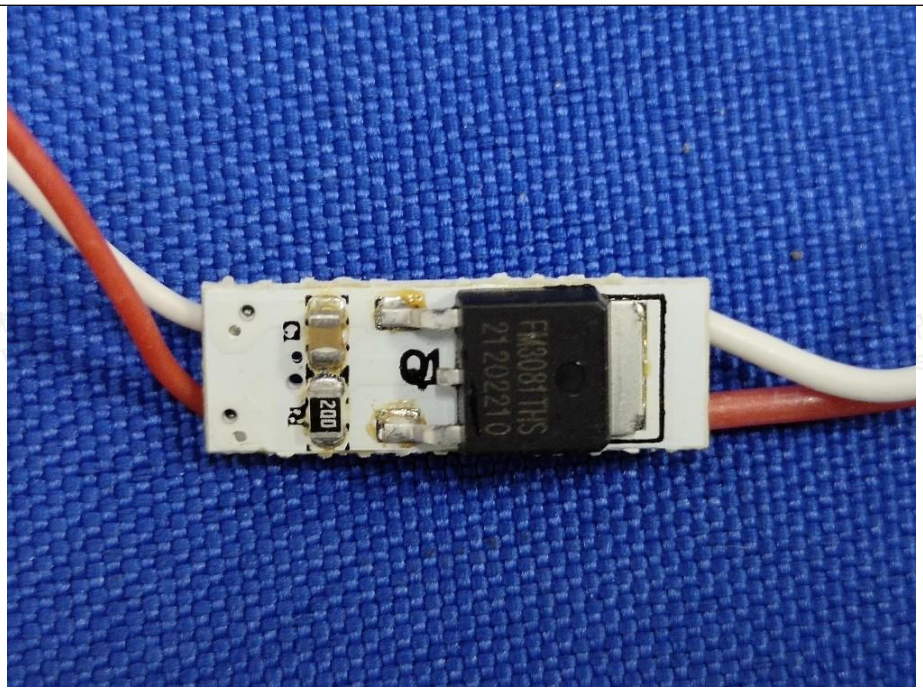


Figure 5

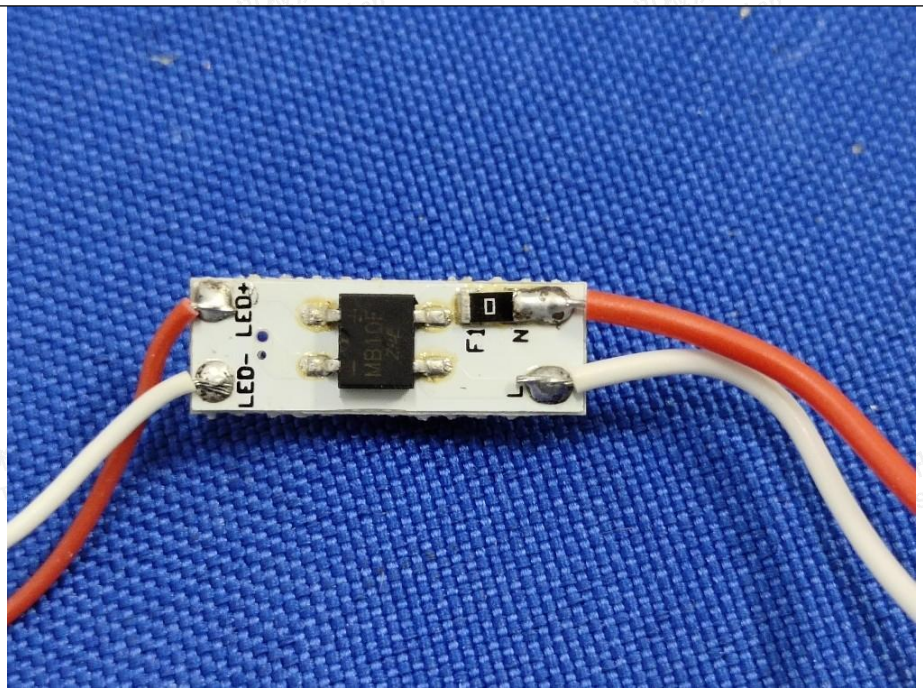


Figure 6

-------- End of Test Report --------