

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

Report Number.: AOC251118001S

 Date of issue
 2025-11-25

 Total number of pages
 16 pages

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preparing the Report: Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial

Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China

Applicant's name.....: ZHONGSHAN SUDI LIGHTING CO.,LTD

Address: A12-2 Card, First Floor, Liufang Zhonghuan Lighting Plaza, Guzhen

Town, Zhongshan City, Guangdong Province

Test specification:

Standard: IEC 62560:2011+A1:2015

Test procedure.....: Type testing

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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LED B	ULE		
N/A			
		•	
		dustrial Avenue, Gusan Village,	
		K, A60-12W-8000K, A60-12W-	
		2W-8000K, A70-15W-8000K, A70-	
		00K, MR16-7W-4000K, MR16-7W-	
3000K, GU10-7W-8000K, GU10-7W-4000K, GU10-7W-3000K,			
T100-30W-8000K, T120-40W-8000K, T140-50W-8000K			
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pplicab	le), testing procedure a	and testing location(s):	
	Shenzhen AOCE Electro	onic Technology Service Co., Ltd	
<u> </u>		o.12th Building of Xinhe Tongfuyu	
	Industrial Park, Fuhai St	reet, Baoan District, Shenzhen,	
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	N/A ZHONINO. 17 Guzhe A45-5\ 4000K 15W-3 A95-28 3000K T100-3 220-25 pplicab : re): re): re): ire): ire): ire):	ZHONGSHAN SEVEN LIGHT On No. 17, Southeast 7th Road, Incomplete Town, Zhongshan City A45-5W-8000K, A60-9W-8000K, A60-12W-3000K, A65-15W-3000K, A95-20W-8000K, A95-25W-3000K, MR16-7W-80 3000K, GU10-7W-8000K, GU10-7W-8000K, T120-40W-80 220-250 V~, 50-60 Hz, 50 W pplicable), testing procedure a Shenzhen AOCE Electrons Guangdong, China China Technical Engineer Room 202, 2nd Floor, North Industrial Park, Fuhai Stong Guangdong, China Technical Engineer Robin Liu Technical Manager N/A N/A N/A N/A N/A N/A N/A N/	

Supervised by (name, function, signature) :	

List of Attachments (including a total number of pages in each attachment): Attachment No.1: Photo document.				
Summary of testing:				
Tests performed (name of test and test clause):	Testing location:			
All testing were performed on model T140-50W-8000K	Shenzhen AOCE Electronic Technology Service Co., Ltd Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China			
Summary of compliance with National Differences (List of countries addressed):				
None				

Copy of marking plate:



Remark:

- 1. The marking plate of others models are identical with models T140-50W-8000K, except with different model number, and rated power.
- 2. The above mark is the minimum requirements required by the safety standard. For the final production, the additional marks which do not give rise to misunderstanding may be added.
- 3. The height of graphical symbols shall not be less than 5 mm
- 4. The height of letters shall not be less than 2 mm.

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Test item particulars:				
Classification of installation and use:	Direct insert into lampholder			
Supply Connection:	E27 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	2025-11-03			
Date (s) of performance of tests	2025-11-03 to 2025-11-25			
General remarks:				
The tested sample(s) and the sample information are p	•			
"(See Enclosure #)" refers to additional information ap "(See appended table)" refers to a table appended to t Note: National Conditions, if any, are in the Append Throughout this report a ☐ comma / ☒ point is u	he report. dix to the main body of this TRF.			
The test report only allows to be revised only within the regulation was withdrawn or invalid.	·			
When determining for test conclusion, measurement	uncertainty of tests has been considered.			
Note: clauses marked '*' not included in CNAS sco	ppe.			
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 t	When differences exist; they shall be identified in the General product information section.			
Name and address of factory (ies)	ZHONGSHAN SEVEN LIGHT CO.,LTD			
	No. 17, Southeast 7th Road, Industrial Avenue, Gusan Village, Guzhen Town, Zhongshan City			

General product information and other remarks:			
All models have the same electrical and mechanical construction, only model name, appearance and ampholder are different.			

	IEC 62560		
Clause	Requirement + Test	Result - Remark	Verdict

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

5	MARKING		Р
5.1	Mandatory marking		Р
	- mark of origin		Р
	- rated supply voltage (V):	220-250 V~	Р
	- rated wattage (W)	50 W	Р
	- rated frequency (Hz):	50-60 Hz	Р
5.2	Addition marking		Р
	- rated current (A)		N/A
	- weight significantly higher		N/A
	- special conditions or restrictions		Р
	Not suitable for dimming; symbol used		Р
	- not suitable for water contact		Р
5.3	Marking durable and legible		Р
	rubbing 15 s water, 15 s petroleum; marking legible		Р

6	INTERCHANGEABILITY		Р
6.1	Cap interchangeability in accordance with IEC 60061-1		Р
	Gauge in accordance with IEC 60061-3		Р
6.2	Bending moment and mass imparted by the lamp at the lampholder		Р
	Bending moment imparted by the lamp at the lampholder (Nm):	2.0 Nm	Р
	Mass not exceeding value table 2 or as specified in IEC 60061-1 (kg):		Р

7	7	PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS		Р
		Internal, basic insulated or live metal parts not accessible		Р

	IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict	
	Tested with a test finger with a force of 10 N		Р	
	Compliance checked with appropriate gauges		Р	
8	INSULATION RESISTANCE AND ELECTRIC STRENGTH		Р	
8.2	After storage 48 h at 91-95% relative humidity and 20-30 °C measuring of insulation resistance with d.c. 500 V (M Ω):		Р	
	\geq 4 $M\Omega$ for double or reinforced insulation :	>100 MΩ	Р	
8.3	Immediately after clause 8.2 electric strength test for 1 min		Р	
	Double or reinforced insulation, 4U + 2000 V	3000 V	Р	
	No flashover or breakdown		Р	

9	MECHANICAL STRENGTH		Р
9.2.1	Torsion resistance of unused lamps		Р
	B15d or E14 Cap1,15 Nm		N/A
	B22d, E26, E26d or E27 Cap3,0 Nm	E 27	Р
	E11 or E12 Cap0,8 Nm		N/A
	E17 Cap1,5 Nm		N/A
	E39 or E40 Cap5,0 Nm		N/A
	GX53 Cap3,0 Nm		N/A
9.3	Compliance criteria		Р
	Clause 8 shall comply after the mechanical strength test.		Р
9.4	Axial strength of Edison caps		Р
	After full insertion into the gauge an axial force of Table 4 is applied to the central contact (N):		Р
	The insulation around the central contact shall remain intact		Р

10	CAP TEMPERATURE RISE		Р
	The cap temperature rise Δt_s of the lamp shall not exceed 120 K.		Р

11	RESISTANCE TO HEAT	Р

	IEC 62560				
Clause Requirement + Test Result - Remark Verd					
	Parts of insulating material providing protection against electric shock, retaining live parts in position, ball-pressure test:	(see appended table)	Р		

12	RESISTANCE TO FLAME AND IGNITION	
	External parts of insulating material preventing electric shock glow-wire test 650 °C (see appended table)	Р

13	FAULT CONDITIONS		Р
13.2	Fault conditions: where diagram indicates fault condition impairs safety, electronic components have been short-circuited or disconnected	(see appended table)	Р
13.3	When operated under fault conditions the lamp		Р
	- does not emit flames or molten material		Р
	- does not produce flammable gases or smoke		Р
	- live parts not accessible		Р
	After the tests the insulation resistance with d.c. 1000 V complies with requirements of Cl. 8.1:		Р
14 (16)	CREEPAGE DISTANCES AND CLEARANCES		Р
	Creepage distances and clearances according to IEC 61347-1	(see appended table)	Р
	Conductive accessible parts according to IEC 60598-1	(see appended table)	Р

15	ABNORMAL OPERATION	Р
	Non-dimmable self-ballasted lamps are tested on a dimmer or an electronic switch according the test circuit shown in Figure 8	Р
	Operate the lamp for 8 h at most onerous dimming level	Р
	When operated under abnormal operation the lamp	Р
	- does not catch fire	Р
	- does not produce flammable gases	Р
	- live parts not accessible	Р

	IEC 62560					
Clause	Requirement + Test	Result - Remark	Verdict			
16	16 TEST CONDITIONS FOR DIMMABLE LAMPS					
	Test are carried out at maximum power setting for Clause 10 and Clause 17		N/A			

17	PHOTOBIOLOGICAL SAFETY	
17.1	UV radiation	
	The LED lamp doesn't exceed 2mW/klm	Р
17.2	Blue light hazard	
	Assessed according to IEC TR 62778	Р
	LED BULB shall be RG0 or RG1 RG0	Р

18	INGRESS PROTECTION		N/A
18.1	Lamps shall be suitable for water contact unless marked with Figure 6	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	11 TABLE: Ball Pressure Test of Thermoplastics				Р	
Allowed impression diameter (mm):		2		_		
Object/ Part No./ Material Manufacturer/ trademark		Test temperature (°C) Impression diameter (m		ter (mm)		
Translucent cover See An		See Annex 1	125°C	0.8mm		
Supplementary information:						

12	2 TABLE: Resistance to heat and fire - Glow wire tests				
	Object/		Glow wire to	Glow wire test (GWT); (°C)	
	Part No./ Material	Manufacturer/ trademark 650			
		ii aasiii ai k	te	ti	
Tran	slucent cover	See Annex 1	0	0	pass

13	TABLE: tests of fault conditions		Р
Part	Simulated fault	Result	Hazard
Output	Short-circuit	Shut down, recoverable, no damage	NO
U1(1-8)	Short-circuit	Shut down, recoverable, no damage	NO
C1	Short-circuit	Fuse opened. No hazard, No damage.	NO
C3	Short-circuit	Shut down, recoverable, no damage	NO
D2	Short-circuit	Fuse opened. No hazard, No damage.	NO
BD1	Short-circuit	Fuse opened. No hazard, No damage.	NO

IEC 62560				
Clause	Requirement + Test	Result - Remark	Verdict	

required dcr (mm)	dcr
(111111)	(mm)
2.5	>2.5
5	>5.0
_	5

	IEC 62	560	
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1	TABLE: Critical components information					Р	
Object/part No.	Code	Manufacturer/ Trademarks	Type/ model	Technical data	Standard	Mark(s) of conformity	
Plastic cover	С	IDEMITSU KOSAN CO LTD	(u)Y2200(+) (f1) (No marking)	PC; V-0	EN 62560	Tested with appliance and UL(E4826 8)	
Enclosure plastic	С	BASF SE	B4406 G2(a), B4406 G2 (o) Q717(a) (No marking)	PBT; V-0	EN 62560	Tested with appliance and UL(E4187 1)	
LED PCB	С	IDEMITSU KOSAN CO LTD	(u)Y2200(+) (f1) (No marking)	PC; V-0	EN 62560	Tested with appliance and UL(E4826 8)	
Plastic connector	С	IDEMITSU KOSAN CO LTD	(u)Y2200(+) (f2) (No marking)	PC	EN 62560	Test with appliance UL/E4826	
Fuse resistor	С	SHENZHEN GREAT ELECTRONICS CO., LTD.	RXF-1W Series (No marking)	22 Ohm, 1W	EN 62560	Tested with appliance and UL(E3015 41)	
Input wire	С	DONGGUAN YIAO ELECTRONICS CO LTD	3239	24AWG/26AW G, 3000Vdc,200° C	EN 62560	Tested with appliance and UL(E3489 33)	
LED	С	NINGBO SUNPULED CO., LTD	ST- 283565WTH- 36V30	VF= 17V~20V, IF=30mA; CCT: Max. 7000K	EN 62471 IEC TR 62778	Test with appliance	

Supplementary information:

The codes above have the following meaning:

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

IEC 62560					
Clause	Requirement + Test	Result - Remark	Verdict		

- A The component is replaceable with another one, also certified, with equivalent characteristics
 - The component is replaceable if authorised by the test house
- C Integrated component tested together with the appliance
- D Alternative component

В

ANNEX 2: temperature m	ANNEX 2: temperature measurements, thermal tests of Section 10			
Type referencet	Type referencet:			_
Used ballast	Used ballast			_
Mounting position of lumina	Mounting position of luminaire		Cap Up and Cap down	
Supply wattage (W)	Supply wattage (W):		6 W	
Supply current (A)	Supply current (A):			
Calculated power factor	Calculated power factor:			
Table: measured temperat	Table: measured temperatures corrected for ta = 25°C:			_
Test: rated voltage	Test: rated voltage			_
Temperature (%C) of part	Test value	Result		
Temperature (°C) of part	Normal (°C)	Abnormal(°C)	Limit(°C)	
Lamp cap	27.4K	-	120K	
LED PCB	75.8	-	90	
Translucent cover	40.3	-	Ref	
Internal wire	67.1	-	105	
C1	99.7	-	105	
C3	101.2	-	105	
Winding of transformer T1	114.7	-	130	
PCB under T1	103.6	-	130	

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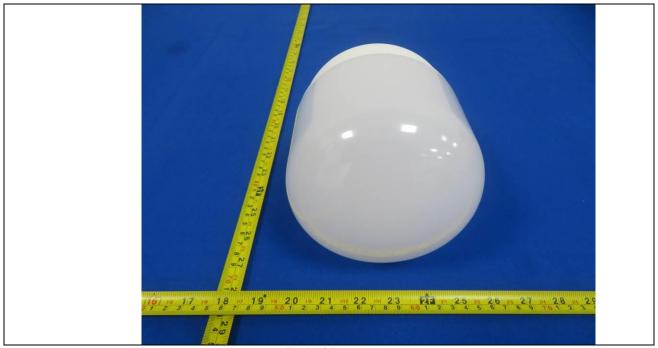
Attachment No.1

Product Photos

Details of: Fig. 1



Details of: Fig. 2



-- End of Report --

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