Test Report issued under the responsibility of:

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

Report Number.....:	AOC250528006S
Date of issue.....:	2025-06-05
Total number of pages.....	16 pages
Name of Testing Laboratory preparing the Report.....:	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
Applicant's name.....:	SARRAR FOR LIGHTENING AND ELECTRIC CO
Address.....:	alyadodah madaba street Amman-Jordan
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

General disclaimer:

The test results presented in this report relate only to the object tested.
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Test item description.....:	LED BULB
Trade Mark.....:	N/A
Manufacturer.....:	SARRAR FOR LIGHTENING AND ELECTRIC CO alyadodah madaba street Amman-Jordan
Model/Type reference.....:	MRB-50W, MRB-45W, MRB-40W, MRB-35W, MRB-30W, MRB-25W, MRB-20W, MRB-15W,,MRB-12W, MRB-9W, MRB-7W, MRB-6.5W, MRB-5W
Ratings.....:	100-250 V~, 50/60 Hz, Max.50W, E27/E14/GU10

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):

☒	**Testing Laboratory:**	Shenzhen AOCE Electronic Technology Service Co., Ltd	
Testing location/ address.....:		Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu Industrial Park, Fuhai Street, Baoan District, Shenzhen, Guangdong, China	
Tested by (name, function, signature).....:		ZhiCong Xian Technical Engineer	ZhiCong
Approved by (name, function, signature)...:		Robin Liu Technical Manager	Robin.Liu
☐	**Testing procedure: CTF Stage 1:**	N/A	
Testing location/ address.....:			
Tested by (name, function, signature).....:			
Approved by (name, function, signature)...:			
☐	**Testing procedure: CTF Stage 2:**	N/A	
Testing location/ address.....:			
Tested by (name + signature).....:			
Witnessed by (name, function, signature)..:			
Approved by (name, function, signature)...:			
☐	**Testing procedure: CTF Stage 3:**	N/A	
☐	**Testing procedure: CTF Stage 4:**	N/A	
Testing location/ address.....:			
Tested by (name, function, signature).....:			
Witnessed by (name, function, signature)..:			
Approved by (name, function, signature)...:			
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 MRB-50W	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:

MRB-50W
100-250 V~, 50-60 Hz, Max.50W

SARRAR FOR LIGHTENING AND ELECTRIC CO

Remark:
1. The marking plate of others models are identical with models MRB-50W, 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.

Test item particulars..... :	
Classification of installation and use.....:	Direct insert into lampholder
Supply Connection.....:	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.....:	2025-05-14
Date (s) of performance of tests.....:	2025-05-14 to 2025-06-05

General remarks:

The tested sample(s) and the sample information are provided by the client.

"(See Enclosure #)" refers to additional information appended to the report.
"(See appended table)" refers to a table appended to the report.
Note: National Conditions, if any, are in the Appendix to the main body of this TRF.
Throughout this report a ☐ comma / ☒ point is used as the decimal separator.

The test report only allows to be revised only within the report defined retention period unless standard or regulation was withdrawn or invalid.

When determining for test conclusion, measurement uncertainty of tests has been considered.

Note: clauses marked '*' not included in CNAS scope.

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)..... :	SARRAR FOR LIGHTENING AND ELECTRIC CO alyadodah madaba street Amman-Jordan

General product information and other remarks:

- *Self-ballasted LED-lamp and non-repairable.*

Models description:

- *The construction and circuit diagrams are identical on* MRB-50W*, all models have the same electrical and mechanical structure.*

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		P
	- mark of origin		P
	- rated supply voltage (V)..... :	100-240 V~	P
	- rated wattage (W)..... :	Max.50W	P
	- rated frequency (Hz)..... :	50/60 Hz	P
5.2	Addition marking		P
	- rated current (A)..... :		N/A
	- weight significantly higher		N/A
	- special conditions or restrictions		P
	Not suitable for dimming; symbol used 		P
	- not suitable for water contact		P
5.3	Marking durable and legible		P
	rubbing 15 s water, 15 s petroleum; marking legible		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)..... :		P
	Mass not exceeding value table 2 or as specified in IEC 60061-1 (kg)..... :		P

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

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict
	Tested with a test finger with a force of 10 N		P
	Compliance checked with appropriate gauges		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	3000 V	P
	No flashover or breakdown		P
9	**MECHANICAL STRENGTH**		**P**
9.2.1	Torsion resistance of unused lamps		P
	B15d or E14 Cap..... 1,15 Nm		P
	B22d, E26, E26d or E27 Cap.....3,0 Nm		P
	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
	GX53 Cap.....3,0 Nm		N/A
9.3	**Compliance criteria**		**P**
	Clause 8 shall comply after the mechanical strength test.		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).....:		P
	The insulation around the central contact shall remain intact		P
10	**CAP TEMPERATURE RISE**		**P**
	The cap temperature rise Δt_s of the lamp shall not exceed 120 K.	54 K	P
11	**RESISTANCE TO HEAT**		**P**

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict
	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.....:		P
14 (16)	**CREEPAGE DISTANCES AND CLEARANCES**		**P**
	Creepage distances and clearances according to IEC 61347-1	(see appended table)	P
	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

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict
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**		P
	The LED lamp doesn't exceed 2mW/klm		P
17.2	**Blue light hazard**		P
	Assessed according to IEC TR 62778		P
	LED BULB shall be RG0 or RG1	RG0	P
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	TABLE: Ball Pressure Test of Thermoplastics		P
Allowed impression diameter (mm) .....:		2	—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)
LED cover	See ANNEX 1	75	1.1
Plastic enclosure	See ANNEX 1	93（67.5+25）	1.2
Plastic material support the lampholder	See ANNEX 1	125	1.1
Supplementary information:			

12	TABLE: Resistance to heat and fire - Glow wire tests			P
Object/ Part No./ Material	**Manufacturer/ trademark**	**Glow wire test (GWT); (°C)**		**Verdict**
		650		
		te	**ti**	
LED cover	See ANNEX 1	0	0	pass
Plastic enclosure	See ANNEX 1	0	0	pass
Plastic material support the lampholder	See ANNEX 1	0	0	pass

13	TABLE: tests of fault conditions		P
Part	Simulated fault	Result	Hazard
BD1	Short-circuit	Fusible resistor (F1) was opened	NO
C1	Short-circuit	Fusible resistor (F1) was opened	NO
C4	Short-circuit	LED packages no working	NO
D1	Short-circuit	LED packages no working	NO

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict

14	TABLE: Clearance And Creepage Distance Measurements					P
clearance cl and creepage distance dcr at/of:	**Up (V)**	**U r.m.s. (V)**	**Required cl (mm)**	**cl (mm)**	**required dcr (mm)**	**dcr (mm)**
Between L and N	-	250	1.5	>1.5	2.5	>2.5
Between live parts and accessible surface	-	250	3.0	>3.0	5	>5.0
Supplementary information:						

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1	**TABLE: Critical components information**					**P**
Object/part No.	**Code**	Manufacturer/ Trademarks	Type/ model	Technical data	Standard	Mark(s) of conformity
Plastic cover	C	IDEMITSU KOSAN CO LTD	(u)Y2200(+)(f1) (No marking)	PC; V-0	EN 62560	Tested with appliance and UL(E48268)
Enclosure plastic	C	BASF SE	B4406 G2(a), B4406 G2 (o) Q717(a) (No marking)	PBT; V-0	EN 62560	Tested with appliance and UL(E41871)
LED PCB	C	IDEMITSU KOSAN CO LTD	(u)Y2200(+)(f1) (No marking)	PC; V-0	EN 62560	Tested with appliance and UL(E48268)
Plastic connector	C	IDEMITSU KOSAN CO LTD	(u)Y2200(+)(f2) (No marking)	PC	EN 62560	Test with appliance UL/E48268
Fuse resistor	C	SHENZHEN GREAT ELECTRONICS CO., LTD.	RXF-1W Series (No marking)	22 Ohm, 1W	EN 62560	Tested with appliance and UL(E301541)
Input wire	C	DONGGUAN YIAO ELECTRONICS CO LTD	3239	24AWG/26AWG, 3000Vdc,200°C	EN 62560	Tested with appliance and UL(E348933)
LED	C	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: [1)] Provided evidence ensures the agreed level of compliance. See OD-CB2039. The codes above have the following meaning:						

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict

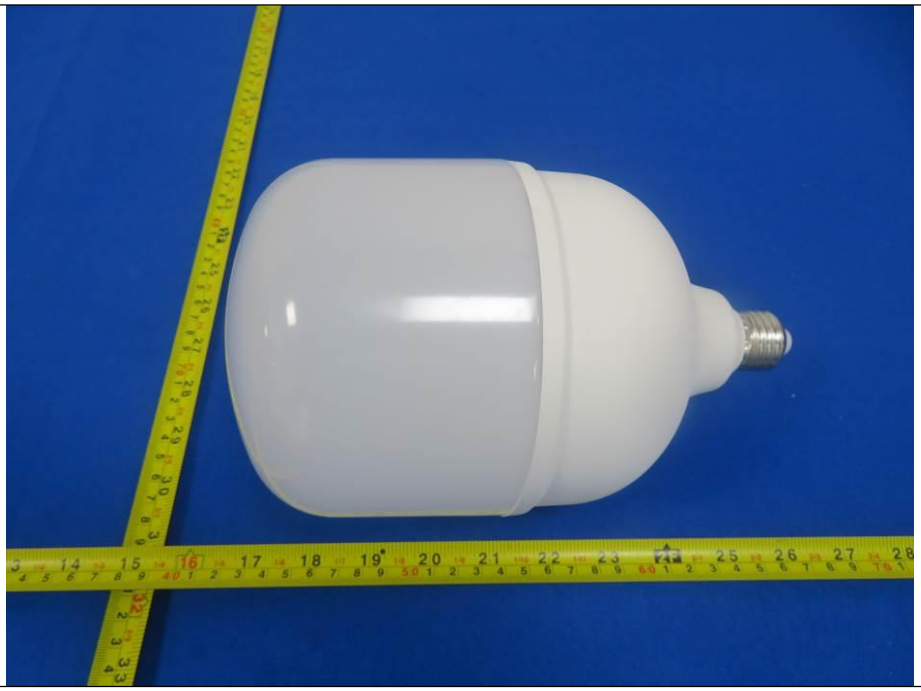
A - The component is replaceable with another one, also certified, with equivalent characteristics
B - The component is replaceable if authorised by the test house
C - Integrated component tested together with the appliance
D - Alternative component

	ANNEX 2: temperature measurements, thermal tests of Section 10		P
	Type referencet.....:	MRB-50W	—
	Used ballast.....:	/	—
	Mounting position of luminaire.....:	Cap Up and Cap down	—
	Supply wattage (W).....:	Max.50W	
	Supply current (A).....:	--	
	Calculated power factor.....:	--	
	Table: measured temperatures corrected for ta = 25°C:		—
	Test: rated voltage.....:	240 V	—

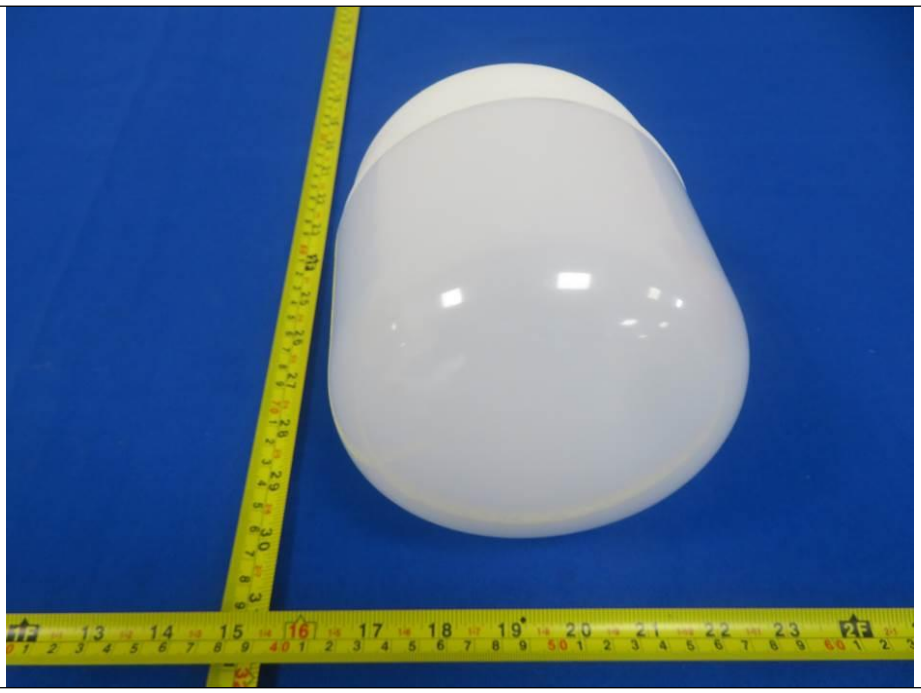
Temperature (°C) of part	Test value	Result	
	Normal (°C)	Abnormal(°C)	Limit(°C)
internal wire	78.3	-	200
E-cap.	74.2	-	180
U2	88.4	-	130
LED PCB	90.7	-	cl.11
LED cover	47.9	-	cl.11
Plastic enclosure	68.4	-	cl.11
plastic material support the lampholder	36.6	-	cl.11

Attachment No.1 **Product Photos**

Details of: Fig. 1

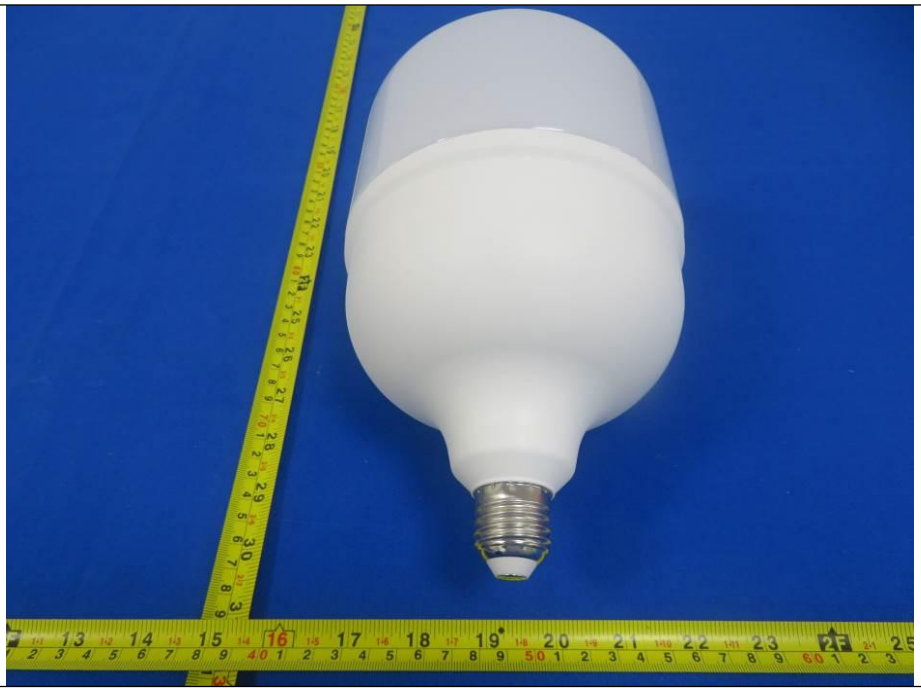


Details of: Fig. 2



Attachment No.1 **Product Photos**

Details of: Fig. 3



-- **End of Report** --