



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

Report Number.....: AOC250806006S

Date of issue.....: August 7, 2025

Total number of pages.....: 47 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.....: MOHAMMAD AND HASSAN JABER COMPANY

Address.....: Abu Alanda-Juthamah Al-Kentani St., Jordan -Amman

Test specification:

Standard.....: IEC 62560:2011, AMD1:2015

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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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..... :	LEMAR	
Manufacturer..... :	ZHONGSHAN LEMAR LIGHTING CO.,LTD Room 2101, 2nd Buliding , Liufang Commercial Plaza, Guzhen Town ,Zhongshan City, Guangdong Province, China. code:528415	
Model/Type reference..... :	See Model List	
Ratings..... :	220 V~, 50/60 Hz, 100W, ta:25°C	
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 <i>ZhiCong Xian</i>
	Approved by (name, function, signature)... :	Robin Liu Technical Manager <i>Robin. Liu</i>
☐	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)..... :	

Tel: (86)755-85277785

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E-mail: postmaster@aoc-cert.comWebsite: [Http://www.aoc-cert.com](http://www.aoc-cert.com)

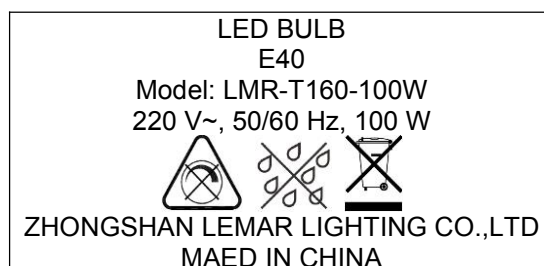
TRF No. IEC62560C

Supervised by (name, function, signature) :		
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List of Attachments (including a total number of pages in each attachment):	
- Photo document	
Summary of testing:	
Tests performed (name of test and test clause): Full tests are carried out on LMR-T160-100W Cl.17.2 retinal blue light hazard (IEC/TR 62778) Reference the report No. TSGK-2024-1713-R (Guangdong Tsaint Hi-tech Co., Ltd.)	Testing location: 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:

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.

**Remark:**

The mark as above is the requirements required by the safety standard. For the final production, the additional marks which do not give rise to misunderstanding may be added.

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..... :	July 23, 2025
Date (s) of performance of tests..... :	July 23, 2025 to August 7, 2025
General remarks:	
"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.	
Throughout this report a ☐ comma / ☒ point is used as the decimal separator.	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC60598-2:	
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)..... :	ZHONGSHAN LEMAR LIGHTING CO.,LTD Room 2101, 2nd Buliding , Liufang Commercial Plaza, Guzhen Town ,Zhongshan City, Guangdong Province, China. code:528415

General product information and other remarks:

- Self-ballasted LED-lamp and dimming is not allowed.

Model List					
LMR-T160-100W	LMR-T160N-100W	LMR-T140-50W	LMR-T140N-50W	LMR-T120-40W	LMR-T120N-40W
LMR-T100-30W	LMR-T100N-30W	LMR-A80-18W	LMR-A80N-18W	LMR-A70-15W	LMR-A70N-15W
LMR-A60-12W	LMR-A60N-12W	LMR-P45-12W	LMR-P45N-12W	LMR-T35-10W	LMR-T35N-10W
LMR-A60-9W	LMR-A60N-9W	LMR-T37-9W	LMR-T37N-9W	LMR-T35N-9W	LMR-G125-8W
LMR-G125N-8W	LMR-A60-8W	LMR-A60N-8W	LMR-ST64-8W	LMR-ST64N-8W	LMR-C37-7W
LMR-C37N-7W	LMR-GU5.3-7W	LMR-GU5.3N-7W	LMR-GU10-7W	LMR-GU10N-7W	LMR-C35-6W
LMR-C35N-6W	LMR-G45-5W	LMR-G45N-5W	LMR-G45-4W	LMR-G45N-4W	LMR-FC35N-4W

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.		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).....:	220 V~	P
	- rated wattage (W).....:	100 W	P
	- rated frequency (Hz).....:	50/60 Hz	P
5.2	Addition marking		N/A
	- rated current (A).....:		N/A
	- weight significantly higher		N/A
	- special conditions or restrictions		N/A
	Not suitable for dimming; used	 symbol	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		-
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		-
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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

8	INSULATION RESISTANCE AND ELECTRIC STRENGTH		-
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	2880 V	P
	No flashover or breakdown		P

9	MECHANICAL STRENGTH		-
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		-
	The cap temperature rise Δt_s of the lamp shall not exceed 120 K.		P

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict
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		-
	External parts of insulating material preventing electric shock glow-wire test 650 °C	(see appended table)	P
13	FAULT CONDITIONS		-
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		-
	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		-
	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		-
	Test are carried out at maximum power setting for Clause 10 and Clause 17		N/A

17	PHOTOBIOLOGICAL SAFETY		-
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	RG0	P

18	INGRESS PROTECTION		-
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

11	TABLE: Ball Pressure Test of Thermoplastics		P
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IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict
Allowed impression diameter (mm)		2	—
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diameter (mm)
LED PCB	See ANNEX 1	148 (123+25)	0.6
Plastic enclosure	See ANNEX 1	125	1.4
LED cover	See ANNEX 1	103 (78+25)	1.2
Plastic material support the electronic component	See ANNEX 1	144 (119+25)	1.3
Bobbin	See ANNEX 1	146 (121+25)	1.0
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 PCB	See ANNEX 1	0	0	P	
Plastic enclosure	See ANNEX 1	0	0	P	
LED cover	See ANNEX 1	0	0	P	
Plastic material support the electronic component	See ANNEX 1	0	0	P	
Bobbin	See ANNEX 1	0	0	P	

13	TABLE: tests of fault conditions		P
Part	Simulated fault	Result	Hazard
DB1	Short-circuit	fuse resistor opened	NO
U1	Short-circuit	fuse resistor opened	NO
C1	Short-circuit	fuse resistor opened	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 before fusible resistor	-	240	1,5	>1.5	2,5	>2.5
Between live parts and accessible surface	-	240	3,0	>3.0	5.0	>5.0
Supplementary information:						

IEC 62560			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 1	TABLE: Critical components information					P
Object / part No.	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
Lamp cap	C	Foshan Nanhai Rijing Metal Products Co., Ltd.	E27 E26 E14 B22 GU10	Cu: 58.6%	IEC 62560	Tested with appliance
LED cover	C	Fujian Huasu Innovative Plastics Material Co Ltd	HS109	PC , V-0	IEC 62560	Tested with appliance UL E477366
Plastic enclosure (plastic material support the electronic component)	C	Hangzhou BOSOM New Materials Technology Co Ltd	A2300(k)(f1)	PA, V-0	IEC 62560	Tested with appliance UL E333445
Internal wire	A	Foshan City Zheng Guan Fluoroplastics Wire Factory	ZG-FEP-01	300/500 V, 180 °C	DIN 57250	VDE 40023039
Fusible resistor	B	Anhui Changsheng, Electronics Co., Ltd	RXF21-1W	0.5 W, 10 Ω	IEC 62368	VDE 40024768
Heat shrinkable tube	C	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	RSFR	600 V, 125 °C	IEC 62560	Tested with appliance UL E203950
LED module	C	Hangzhou Tiger Electron & Electric CO., LTD	A65-15W-LEDs	15 W, CCT: 2700-6400 K	IEC 62031 IEC/TR 62778	Tested with appliance
LED package	C	MLS	2835	Vf: 8.8-9.7 V, If: 120 mA, CCT: 2700-6400 K	IEC 62031 IEC/TR 62778	Tested with appliance
-LED module PCB	C	JIANGXI HONGYU CIRCUIT TECHNOLOGY CO LTD	HY series	130 °C, V-0	IEC 62560	Tested with appliance UL E309772

IEC 62560						
Clause	Requirement + Test			Result - Remark		Verdict
-Bobbin	C	CHANG CHUN PLASTICS CO LTD	T378JB, PMC	150 °C, V-0	IEC 62560	Tested with appliance UL E59481
-Magnet wire	C	HUZHOU NANXUN SHANGFU CABLE CO LTD	QA/155	155 °C	IEC 62560	Tested with appliance UL E330288
- Insulating Tape	C	Haining ChuLong Tape Co Ltd	CL All Color-1	130 °C	IEC 62560	Tested with appliance UL E464604
Supplementary information: 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						

Attachment No.1**Product Photos**

Details of: Fig.1. LMR-T160-100W



Details of: Fig.2. LMR-T160-100W



Details of: Fig.3. LMR-T160-100W

Attachment No.1

Product Photos



Details of: Fig.4. LMR-T160-100W



Details of: Fig.5. LMR-T100-30W

Attachment No.1

Product Photos



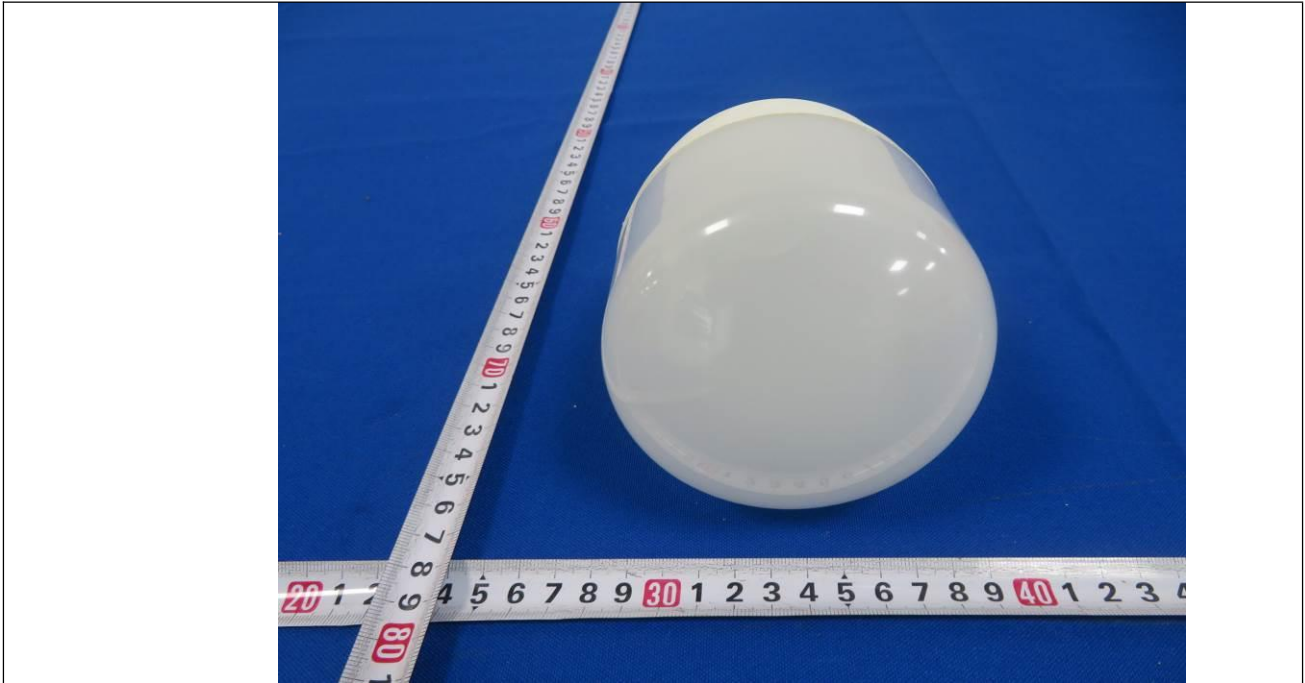
Details of: Fig.6. LMR-T100-30W



Details of: Fig.7. LMR-T100-30W

Attachment No.1

Product Photos



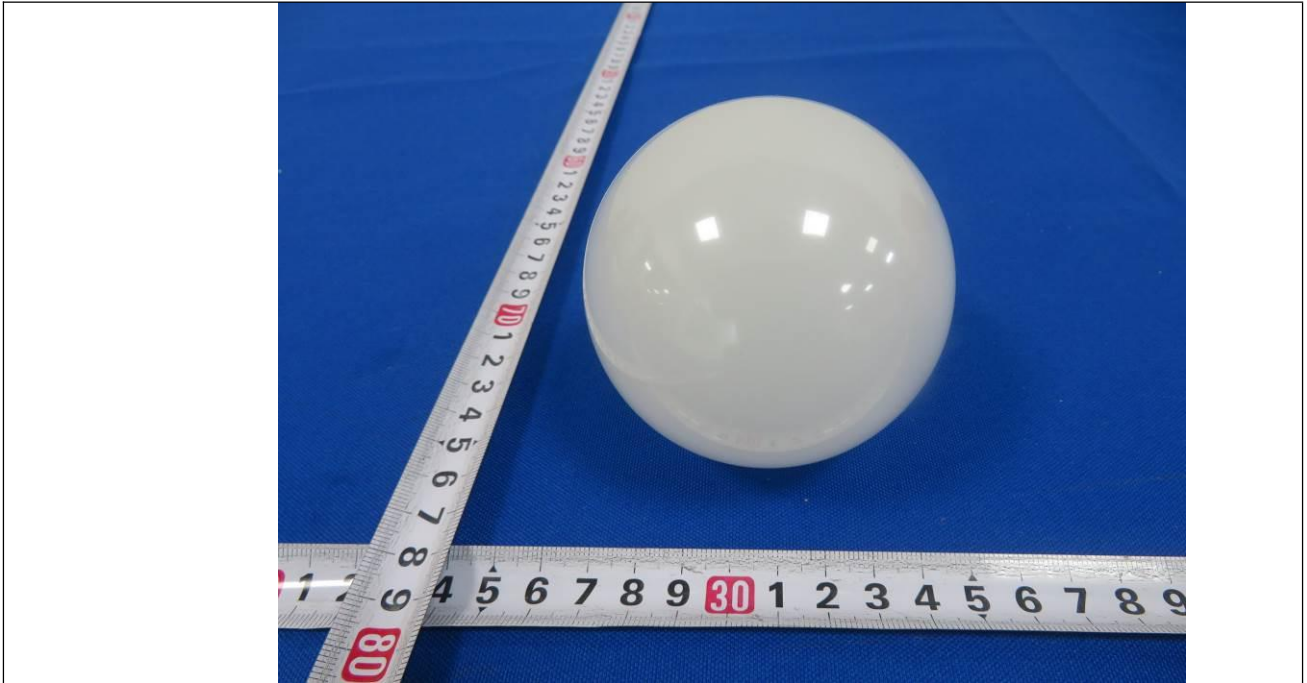
Details of: Fig.8. LMR-T100-30W



Details of: Fig.9. LMR-A80-18W

Attachment No.1

Product Photos



Details of: Fig.10. LMR-A80-18W



Details of: Fig.11. LMR-A80-18W

Attachment No.1

Product Photos



Details of: Fig.12. LMR-A80-18W



Details of: Fig.13. LMR-P45-12W

Attachment No.1

Product Photos



Details of: Fig.14. LMR-P45-12W



Details of: Fig.15. LMR-P45-12W

Attachment No.1

Product Photos



Details of: Fig.16. LMR-P45-12W



Details of: Fig.17. LMR-A60-12W

Attachment No.1

Product Photos



Details of: Fig.18. LMR-A60-12W



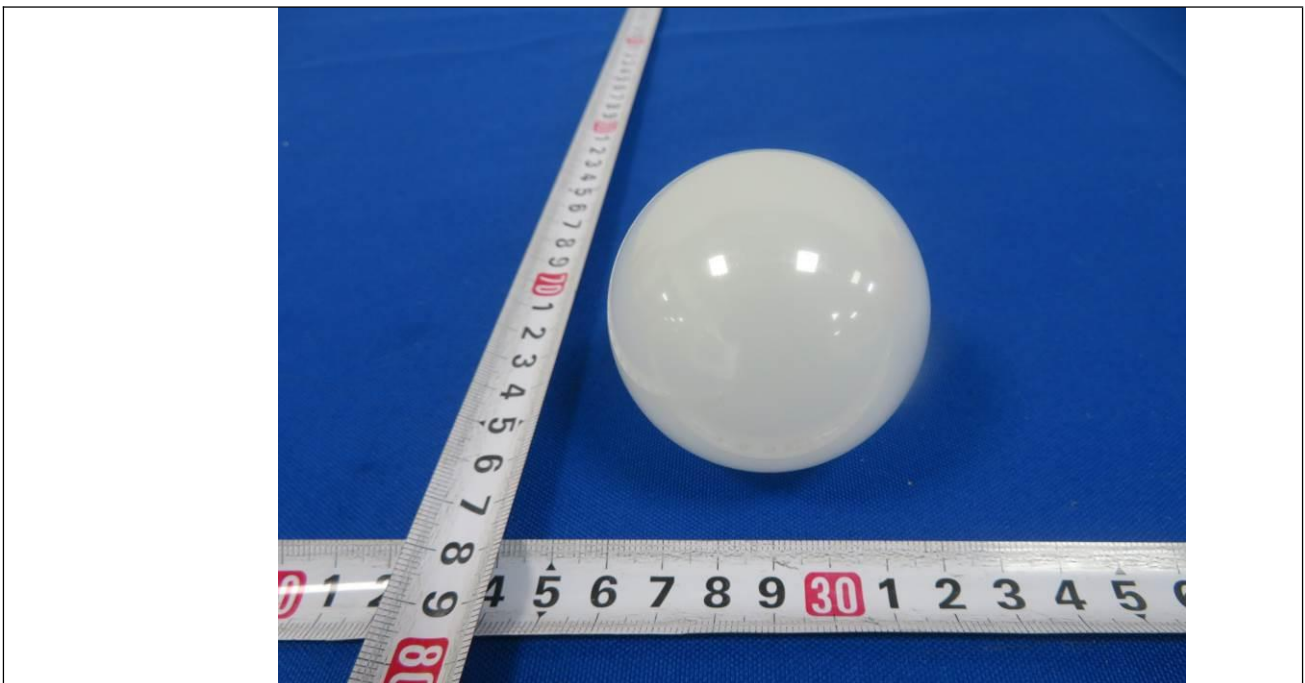
Details of: Fig.19. LMR-A60-12W

Attachment No.1

Product Photos



Details of: Fig.20. LMR-A60-12W



Details of: Fig.21. LMR-A60-9W

Attachment No.1

Product Photos



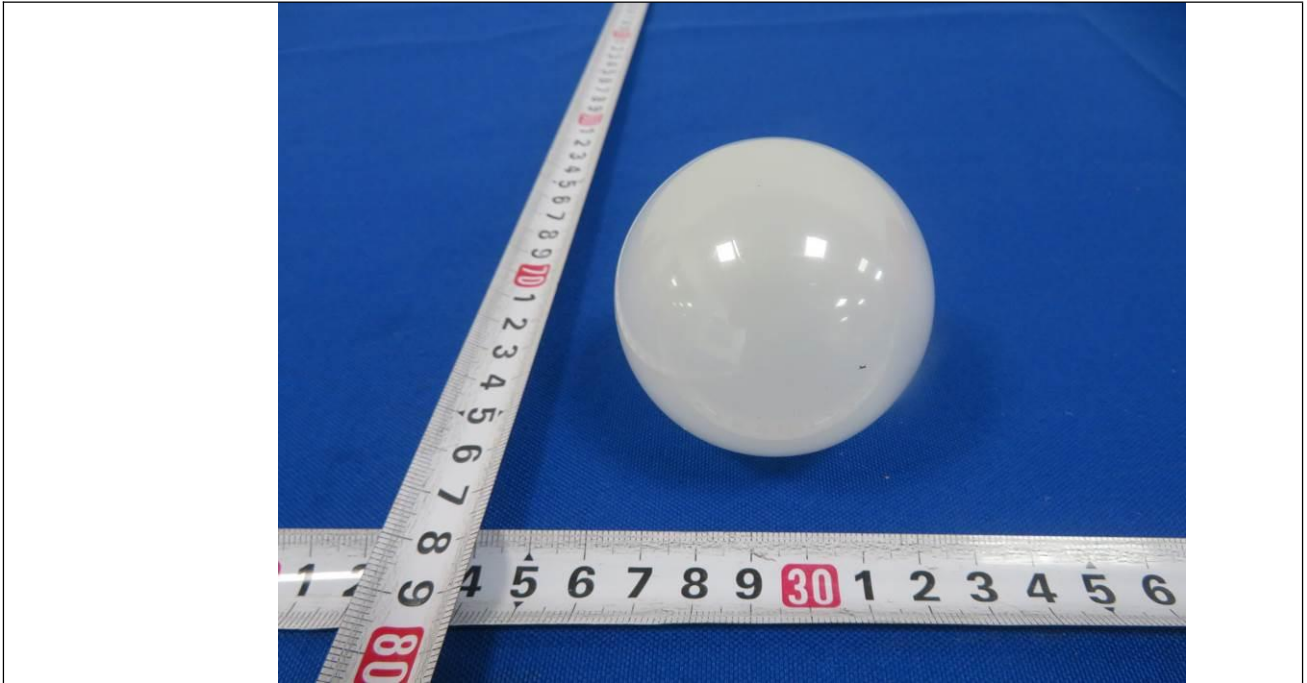
Details of: Fig.22. LMR-A60-9W



Details of: Fig.23. LMR-A60-9W

Attachment No.1

Product Photos



Details of: Fig.24. LMR-A60-9W



Details of: Fig.25. LMR-C37-7W

Attachment No.1

Product Photos



Details of: Fig.26. LMR-C37-7W



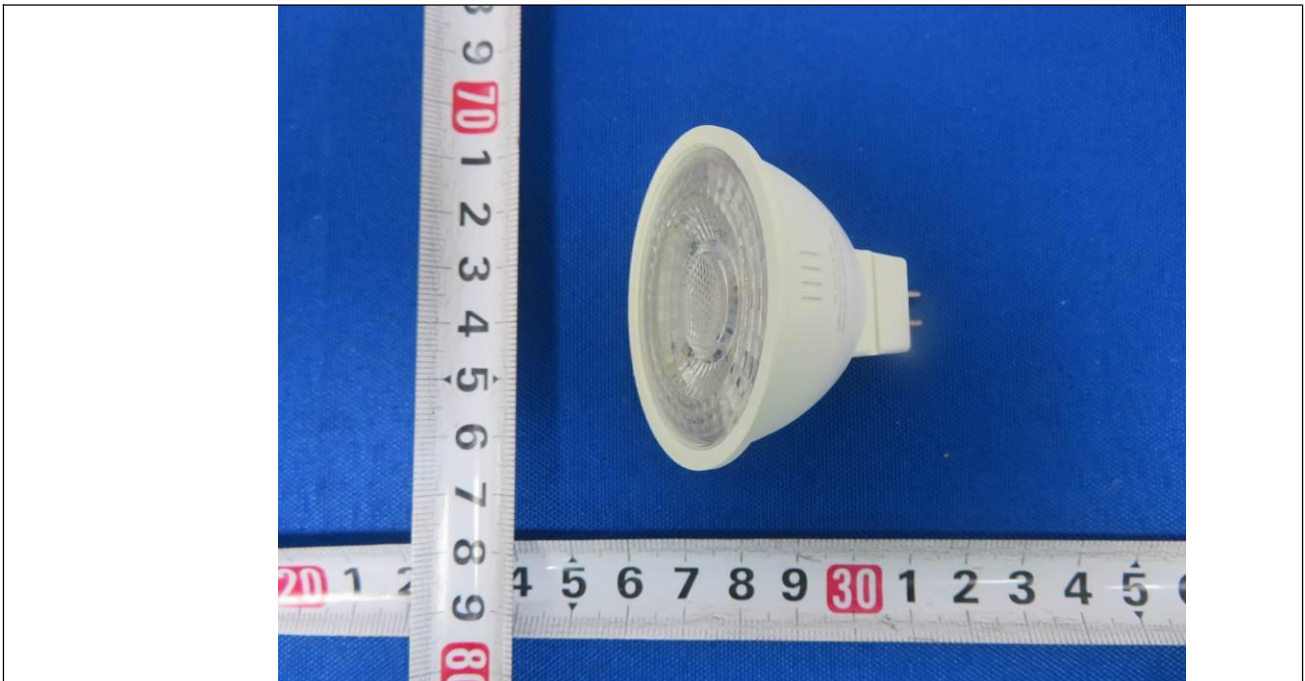
Details of: Fig.27. LMR-C37-7W

Attachment No.1

Product Photos



Details of: Fig.28. LMR-GU5.3-7W



Details of: Fig.29. LMR-GU5.3-7W

Attachment No.1

Product Photos



Details of: Fig.30. LMR-GU5.3-7W



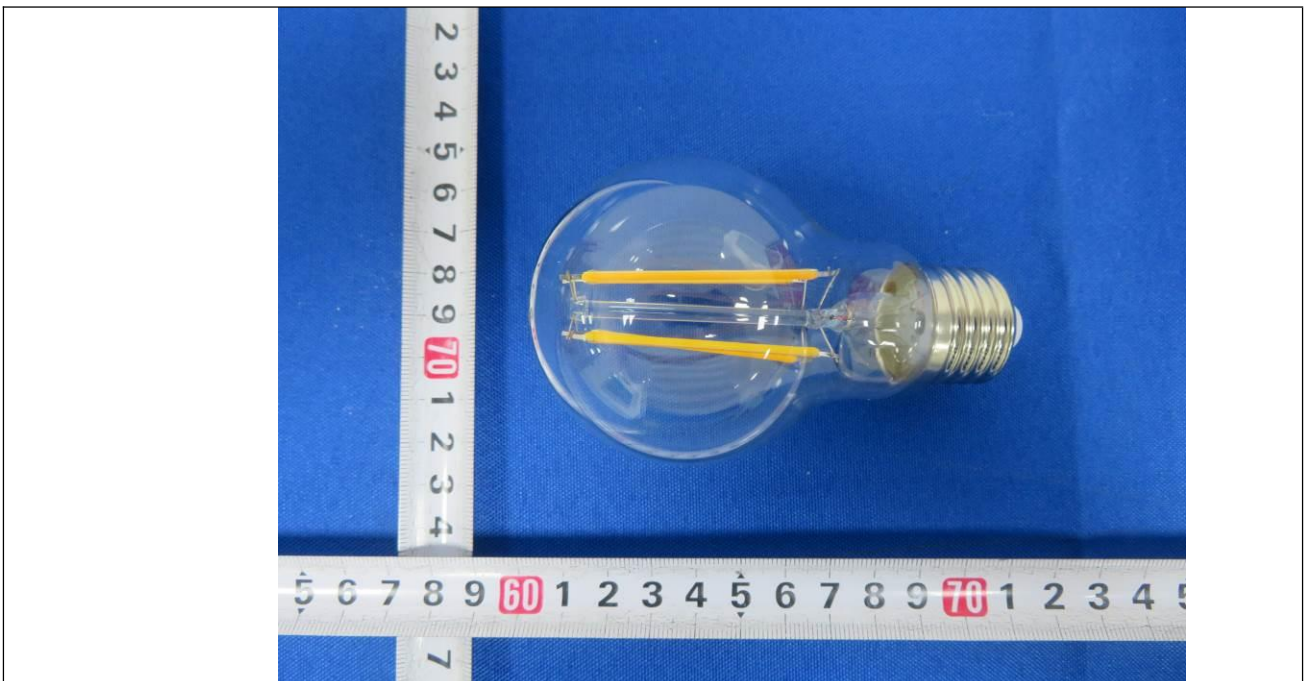
Details of: Fig.31. LMR-GU5.3-7W

Attachment No.1

Product Photos



Details of: Fig.32. LMR-A60-8W



Details of: Fig.33. LMR-A60-8W

Attachment No.1

Product Photos



Details of: Fig.34. LMR-A60-8W



Details of: Fig.35. LMR-A60N-12W

Attachment No.1

Product Photos



Details of: Fig.36. LMR-A60N-12W



Details of: Fig.37. LMR-A70N-15W

Attachment No.1

Product Photos



Details of: Fig.38. LMR-A70N-15W



Details of: Fig.39. LMR-C35-6W

Attachment No.1

Product Photos



Details of: Fig.40. LMR-C35-6W



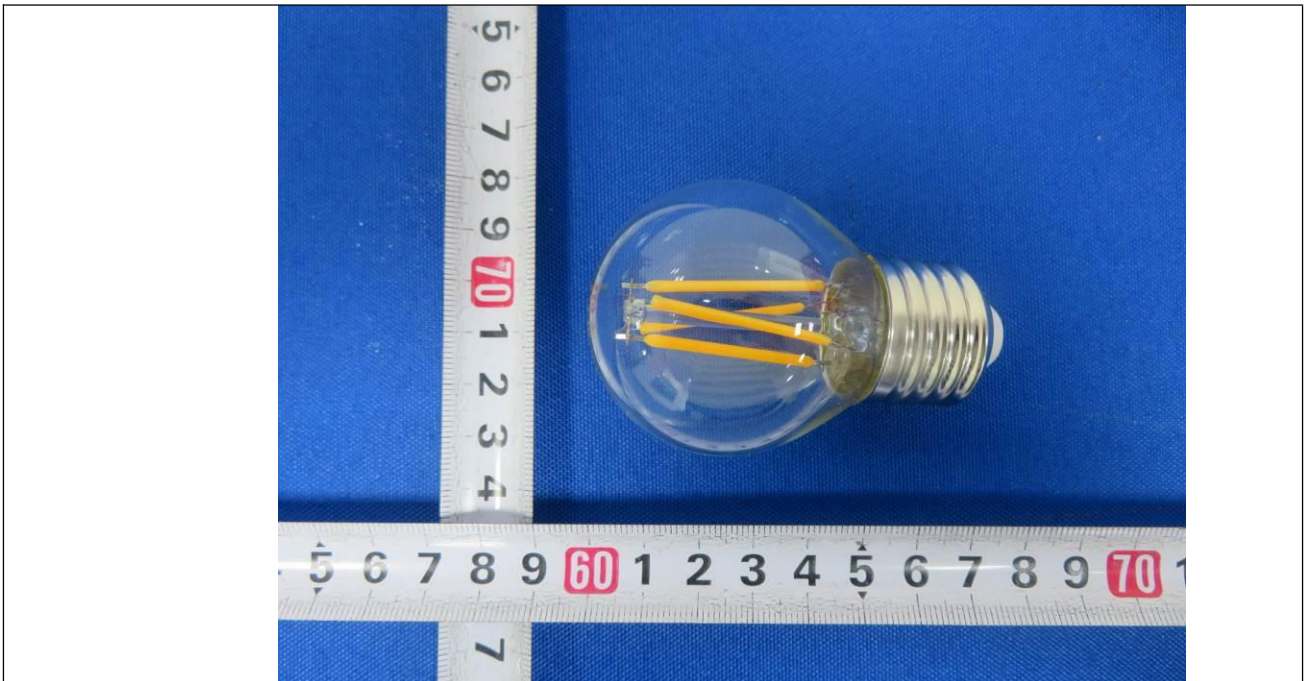
Details of: Fig.41. LMR-C35-6W

Attachment No.1

Product Photos



Details of: Fig.42. LMR-G45-4W



Details of: Fig.43. LMR-G45-4W

Attachment No.1

Product Photos



Details of: Fig.44. LMR-G45-4W



Details of: Fig.45. LMR-G45N-5W

Attachment No.1

Product Photos



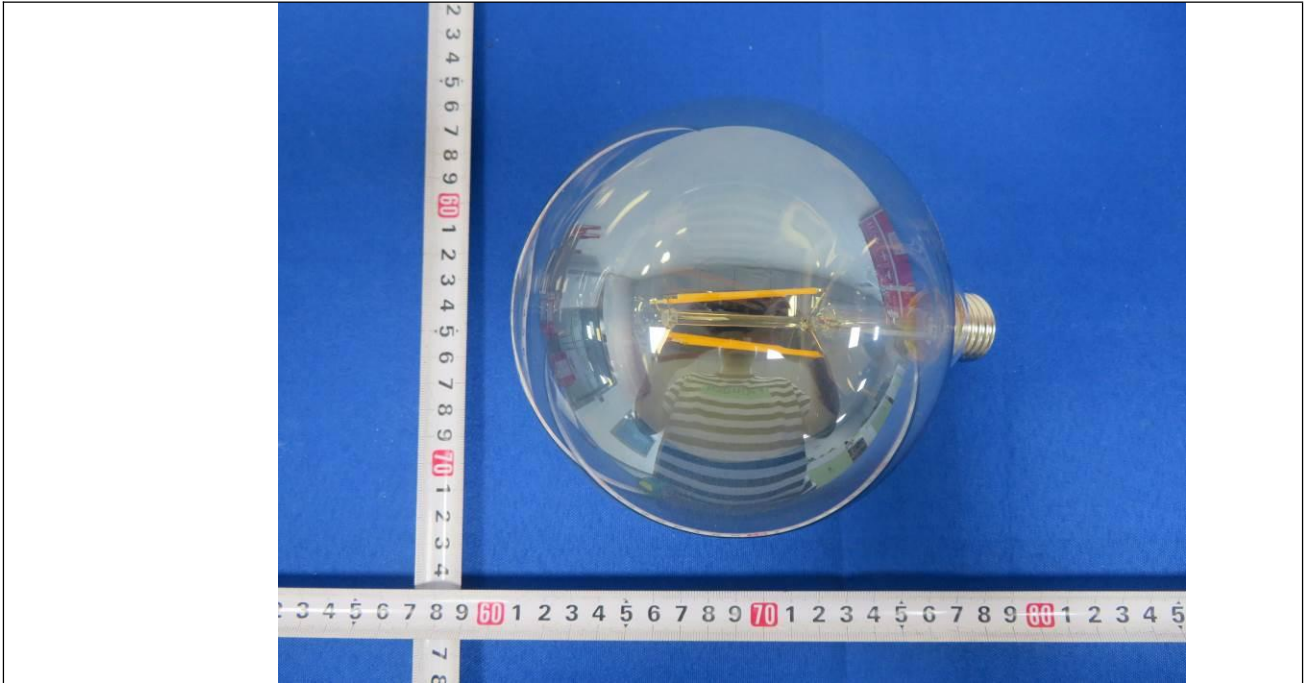
Details of: Fig.46. LMR-G45N-5W



Details of: Fig.47. LMR-G125-8W

Attachment No.1

Product Photos



Details of: Fig.48. LMR-G125-8W



Details of: Fig.49. LMR-G125-8W

Attachment No.1

Product Photos



Details of: Fig.50. LMR-ST64-8W



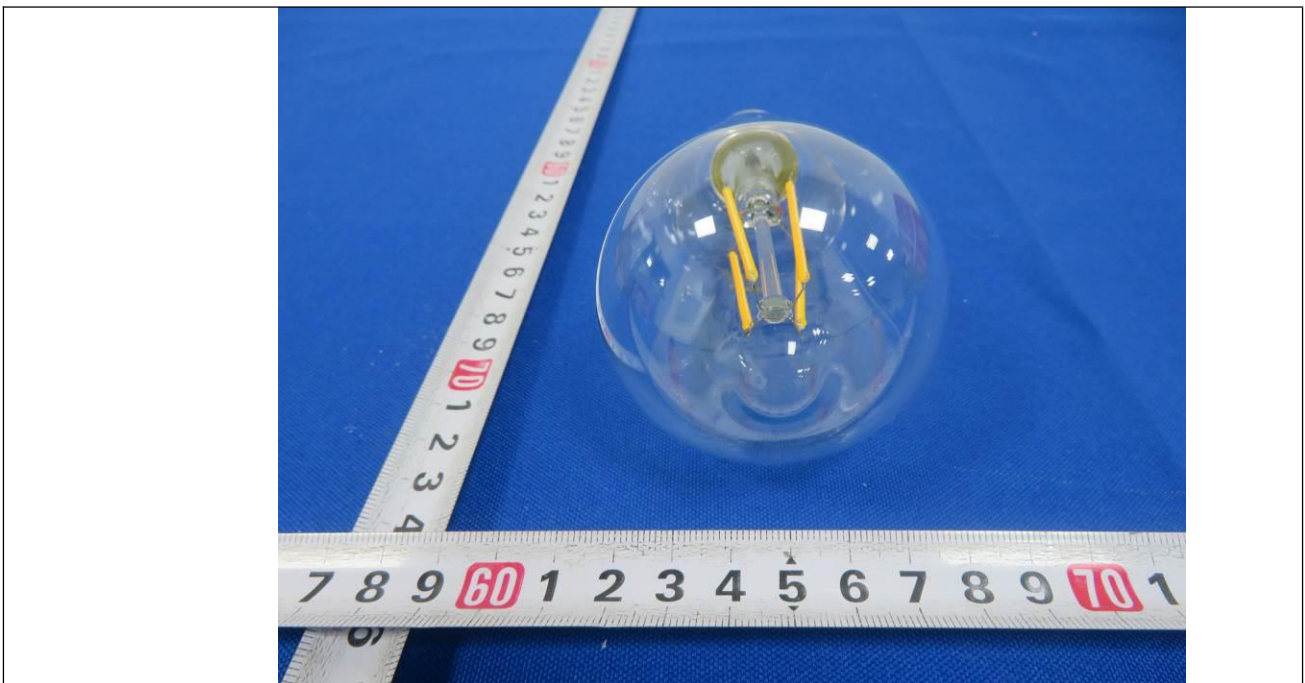
Details of: Fig.51. LMR-ST64-8W

Attachment No.1

Product Photos



Details of: Fig.52. LMR-ST64-8W



Details of: Fig.53. LMR-T35-10W

Attachment No.1

Product Photos



Details of: Fig.54. LMR-T35-10W



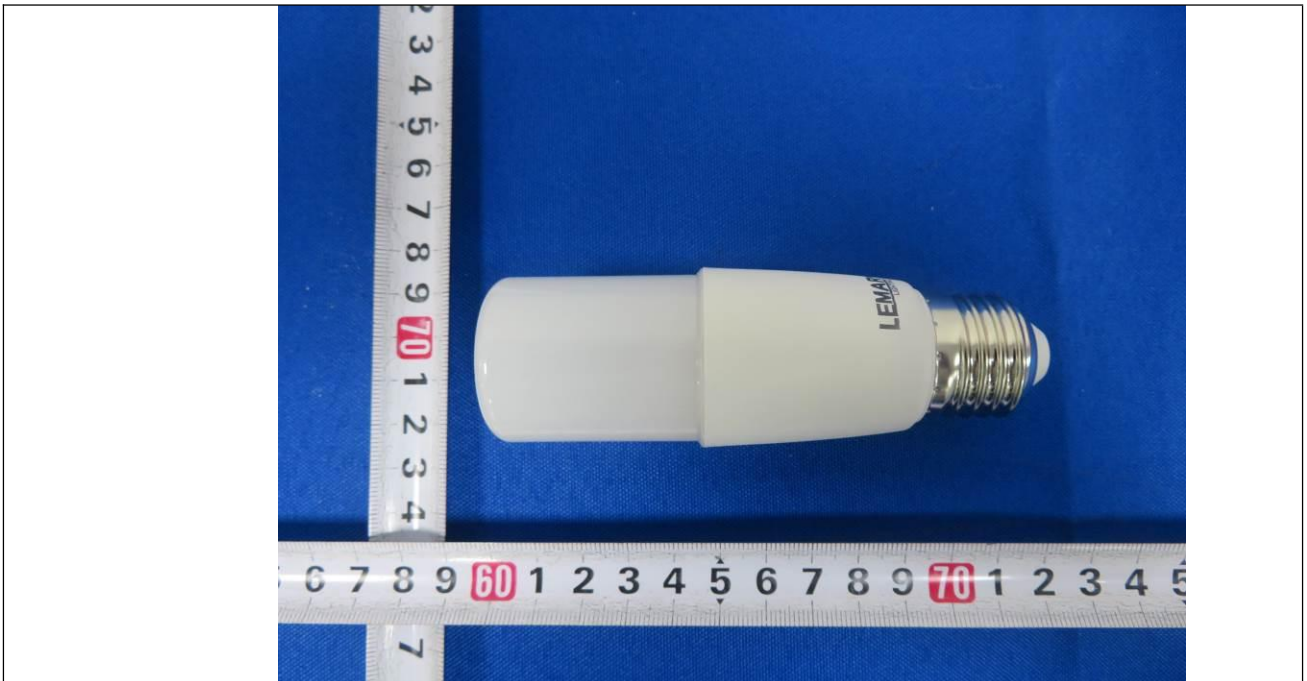
Details of: Fig.55. LMR-T35-10W

Attachment No.1

Product Photos



Details of: Fig.56. LMR-T37-9W



Details of: Fig.57. LMR-T37-9W

Attachment No.1

Product Photos



Details of: Fig.58. LMR-T37-9W



Details of: Fig.59. LMR-T120N-40W

Attachment No.1

Product Photos



Details of: Fig.60. LMR-T120N-40W



Details of: Fig.61. LMR-T120N-40W

Attachment No.1

Product Photos



Details of: Fig.62. LMR-T140N-50W



Details of: Fig.63. LMR-T140N-50W

Attachment No.1

Product Photos



Details of: Fig.64. LMR-T140N-50W



--- End of test report ---