

LG Electronics USA, Inc.

MPE ASSESSMENT REPORT

Report Type:

FCC Part §2.1091, §2.1093 and §1.1307(b) assessment report

Model:

MSER1590#

REPORT NUMBER:

240200162SHA-002

ISSUE DATE:

February 3, 2024

DOCUMENT CONTROL NUMBER:

TTRFFCCMPE-01_V1 © 2018 Intertek



Applicant: LG Electronics USA, Inc.
111 Sylvan Avenue North Building, Englewood Cliffs, New Jersey, United States

Manufacturing Site: LG Electronics Tianjin Appliances Co., Ltd.
No.9 Jinwei Road, Bei Chen Dist., Tianjin 300402, People's Republic of China

Product Name: Microwave oven

Type/Model: MSER1590#
("#"Suffix from A to Z or 0 to 9 for inventory control.)

FCC ID: BEJS1592FAF

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

47CFR Part 18 (2018)
FCC/OET MP-5 (1986)
KDB447498 D01 General RF Exposure Guidance v06
FCC Part2.1093 FCC Part1.1307(b), 1.1310, 2.1091

PREPARED BY:



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REVIEWED BY:



Reviewer
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Revision History

Report No.	Version	Description	Issued Date
240200162SHA-002	Rev. 01	Initial issue of report	February 3, 2024

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	Microwave oven
Type/Model:	MSER1590# (“#”: Suffix from A to Z or 0 to 9 for inventory control.)
Brand Name:	LG
Description of EUT:	The EUT is a Microwave oven which have series models, and they are electric identical. The model MSER1590S was chosen to testing.
Rating:	AC 120V 60Hz Output: 1200W
Frequency:	2450MHz
EUT type:	<input checked="" type="checkbox"/> Table top <input type="checkbox"/> Floor standing
Software Version:	/
Hardware Version:	/
Sample received date:	January 15, 2024
Date of test:	January 15, 2024~ February 2, 2024

1.2 Description of Test Facility

Name:	Intertek Testing Services Shanghai
Address:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L0139
	FCC Accredited Lab Designation Number: CN0175
	IC Registration Lab CAB identifier.: CN0014
	VCCI Registration Lab Registration No.: R-14243, G-10845, C-14723, T-12252
	A2LA Accreditation Lab Certificate Number: 3309.02

2 Radiation Hazard Measurement

Test result: Pass

2.1 Limit

A maximum of 1.0mW/cm² is allowed in accordance with the applicable FCC standards. Hence, microwave leakage in the as-received condition with the oven door closed was below the maximum allowed.

2.2 Radiation Hazard (Health) Requirement

For ISM equipment operating on higher frequencies (above 900 MHz), in particular microwave ovens and medical diathermy equipment, radiation leakage should be measured in accordance with the current Bureau of Radiological Health standard, employing an electromagnetic radiation monitor. This test is made primarily to assure that personnel will not be exposed to radiation hazard in testing the equipment. Equipment submitted to the FCC which have radiation leakage apparently in excess of BRH limit will be reported to BRH for their evaluation. See FCC Bulletin OST 56, "Questions and Answers about Biological Effects and Potential Hazards of Radiofrequency Radiation".

2.3 Measurement Procedure

The EUT was set-up according to the FCC MP-5 and FCC Part 18 for Radiation Hazard Measurement. The measurement was using a microwave leakage meter to measure the Radiation leakage in the as-received condition with the oven door closed. A 1000ml water load in a beaker was located in the center of the oven and the Microwave Oven was set to maximum power. While the oven operating, the microwave meter will check the leakage and then record the maximum leakage.

2.4 MPE Assessment Limit

Mobile device exposure for standalone operations:

According to §1.1310, the limit for general population/uncontrolled exposures

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
Limits For General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

F=Frequency in MHz; *Plane-wave equivalent power density

A maximum of 1.0mW/cm² is allowed in accordance with the applicable FCC standards. Hence, microwave leakage in the as-received condition with the oven door closed was below the maximum allowed.

2.3 Test Results

There was no microwave leakage exceeding a power level of 0.15mW/cm² observed at any point 5cm or more from the external surface of the oven.

*****END*****