TEST REPORT

FCC MPE Test for EBR23709201
Certification

APPLICANT
LG Electronics Inc.

REPORT NO.
HCT-RF-2502-FC060

DATE OF ISSUE
February 18, 2025

Tested by
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Applicant	**LG Electronics Inc.** 84, Wanam-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do 51554, Republic of Korea
Product Name Model Name	RF Module EBR23709201
FCC ID	BEJ-EBR237092
Date of Test	January 06, 2025 ~ February 18, 2025
Frequency range	2 402 MHz – 2 480 MHz (Bluetooth LE) 2 412 MHz ~ 2 462 MHz (WLAN)
Brand	LG
Location of Test	■ Permanent Testing Lab ☐ On Site Testing Lab (Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea)
Test Results	PASS

REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	February 18, 2025	Initial Release

Notice

Content
Engineering Statement: The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of the FCC Rules under normal use and maintenance. The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated. The test results have only been applied with the test methods required by the standard(s). The laboratory is not accredited for the test results marked *. Information provided by the applicant is marked **. Test results provided by external providers are marked ***. When confirmation of authenticity of this test report is required, please contact www.hct.co.kr The test results in this test report are not associated with the ((KS Q) ISO/IEC 17025) accreditation by KOLAS (Korea Laboratory Accreditation Scheme) / A2LA (American Association for Laboratory Accreditation) that are under the ILAC (International Laboratory Accreditation Cooperation) Mutual Recognition Agreement (MRA).

RF Exposure Statement

1. Limit

According to § 1.1310, § 2.1091 RF exposure is calculated.

(B) Limits 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)
0.3 - 1.34	614	1.63	[a](100)	30
1.34 - 30	824/f	2.19/f	[a](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

[a] = Plane-wave equivalent power density

2. Maximum Permissible Exposure Prediction

Prediction of MPE limit at a given distance

$$S = PG/4\pi R^2$$

S = Power density

P = Power input to antenna

G = Power gain to the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation of the antenna

3. RESULTS

3-1. Bluetooth LE

Maximum output Power at antenna input terminal	10.00	dBm
Maximum output Power at antenna input terminal	10.00	mW
Prediction distance	20.00	cm
Prediction frequency	2402 – 2480	MHz
Antenna Gain(typical)	1.640	dBi
Antenna Gain(numeric)	1.459	-
Power density at prediction frequency(S)	0.0029	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm^2

3-2. DTS

Maximum output Power at antenna input terminal	20.00	dBm
Maximum output Power at antenna input terminal	100.00	mW
Prediction distance	20.00	cm
Prediction frequency	2412 – 2462	MHz
Antenna Gain(typical)	1.640	dBi
Antenna Gain(numeric)	1.459	-
Power density at prediction frequency(S)	0.0290	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm^2