







TEST REPORT

FCC MPE Test for LCWB-007 Certification

APPLICANT LG Electronics Inc.

REPORT NO. HCT-RF-2501-FC004

DATE OF ISSUE January 10, 2025

> Tested by Jin Gwan Lee

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Technical Manager Jong Seok Lee



Accredited by KOLAS, Republic of KOREA

HCT CO., LTD. Bonejai Huh BongJai Huh **I** CEO

F-TP22-03(Rev.06)

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T E S T R E P O R T	REPORT NO. HCT-RF-2501-FC004 DATE OF ISSUE January 10, 2025
Applicant	LG Electronics Inc. 170, Seongsan Pachong-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do 51533, Republic of Korea
Product Name Model Name	RF Module LCWB-007
FCC ID	BEJ-LCWB007
Date of Test	December 23, 2024 ~ January 07, 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)



REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	January 10, 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

This test report provides test result(s) under the scope accredited by the Korea Laboratory Accreditation Scheme (KOLAS), which signed the ILAC-MRA. (KOLAS (KS Q ISO/IEC 17025) Accreditation No. KT197)

This test report provides test result(s) under the lab's valid Scope of Accreditation by A2LA (American Association for Laboratory Accreditation), signatory of the ILAC-MRA. (A2LA (ISO/IEC 17025) Certificate No. 4114.01)



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)	Magneticfield Strength (A/m)	Powerdensity (mW/cm²)	Averagingtime (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	6.00	dBm
Maximum output Power at antenna input terminal	3.98	mW
Prediction distance	20.00	cm
Prediction frequency	2402 - 2480	MHz
Antenna Gain(typical)	1.70	dBi
Antenna Gain(numeric)	1.479	-
Power density at prediction frequency(S)	0.0012	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	18.50	dBm
Maximum output Power at antenna input terminal	70.79	mW
Prediction distance	20.00	cm
Prediction frequency	2412 - 2462	MHz
Antenna Gain(typical)	1.70	dBi
Antenna Gain(numeric)	1.479	-
Power density at prediction frequency(S)	0.0208	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²