On your side

고 객 비 밀
CUSTOMER SECRET

TEST REPORT

FCC MPE Test for LCWB-002EA
Certification

APPLICANT
LG Electronics, Inc.

REPORT NO.
HCT-RF-2303-FI005

DATE OF ISSUE
March 31, 2023

Tested by
Chang Hee Hwang

Technical Manager
Jong Seok Lee

Accredited by KOLAS, Republic of KOREA

HCT CO., LTD.
BongJai Huh / CEO

HCT CO., LTD.
74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si,
Gyeonggi-do, 17383 KOREA
Tel. +82 31 634 6300 Fax. +82 31 645 6401

고 객 비 밀
CUSTOMER SECRET

HCT Co., Ltd.
74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 KOREA
Tel. +82 31 634 6300 Fax. +82 31 645 6401

TEST REPORT

FCC MPE Test for LCWB-002EA

REPORT NO.
HCT-RF-2303-FI005

DATE OF ISSUE
March 31, 2023

Additional Model
-

Applicant	**LG Electronics Inc.** 170, Seongsanpaechong-ro, Seongsan-gu, Changwon-si Gyeongsangnam-do 51533 Republic of Korea
Eut Type Model Name	RF Module LCWB-002EA
FCC ID	BEJ-LCWB002EA
Frequency range	2 402 MHz – 2 480 MHz (BT LE) 2 412 MHz ~ 2 462 MHz (WLAN)

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.
This test results were applied only to the test methods required by the standard.

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	March 31, 2023	Initial Release

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

If this report is required to confirmation of authenticity, please contact to www.hct.co.kr

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	*(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

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. BT LE

Average output Power at antenna input terminal	7.500	dBm
Average output Power at antenna input terminal	5.623	mW
Prediction distance	20.000	cm
Prediction frequency	2 402 ~ 2 480	MHz
Antenna Gain(typical)	4.200	dBi
Antenna Gain(numeric)	2.630	-
Power density at prediction frequency(S)	0.0029	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm^2

2.1091

EIRP	11.70	(dBm)
ERP	9.55	(dBm)
ERP	0.009	(W)
ERP Limit	3.00	(W)
MARGIN	25.22	(dB)

3-2. WLAN DTS Band (802.11b,g,n)

Average output Power at antenna input terminal	17.000	dBm
Average output Power at antenna input terminal	50.119	mW
Prediction distance	20.000	cm
Prediction frequency	2 412 ~ 2 462	MHz
Antenna Gain(typical)	4.200	dBi
Antenna Gain(numeric)	2.630	-
Power density at prediction frequency(S)	0.0262	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm^2

2.1091

EIRP	21.20	(dBm)
ERP	19.05	(dBm)
ERP	0.080	(W)
ERP Limit	3.00	(W)
MARGIN	15.72	(dB)