



# TEST REPORT

FCC/ISED MPE Test for LGSBT12  
Certification

**APPLICANT**  
LG Electronics Inc.

**REPORT NO.**  
HCT-RF-2106-FI012

**DATE OF ISSUE**  
June 11, 2021

**Tested by**  
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**Technical Manager**  
Jong Seok Lee

Accredited by KOLAS, Republic of KOREA

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# TEST REPORT

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LGSBT12

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Additional Model

-

Applicant

**LG Electronics Inc.**

222, LG-ro, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

Eut Type  
Model Name

RF Module  
LGSBT12

FCC ID

BEJLGSBT12

Date of Receipt

April 09, 2021

Frequency range

2 402 MHz – 2 480 MHz (Bluetooth)

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	June 11, 2021	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

This laboratory is not accredited for the test results marked \*.

The above Test Report is the accredited test result by (KS Q) ISO/IEC 17025 AND KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA.(HCT Accreditation No.: KT197)

\* The report shall not be reproduced except in full(only partly) without approval of the laboratory.

## 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 <sup>2</sup> )	Averaging time (minutes)
0.3 - 1.34.....	614	1.63	*(100)	30
1.34 - 30.....	824/f	2.19/f	*(180/ f <sup>2</sup> )	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	8.00	dBm
Average output Power at antenna input terminal	6.31	mW
Prediction distance	20.00	cm
Prediction frequency	2402 – 2480	MHz
Antenna Gain(typical)	1.500	dBi
Antenna Gain(numeric)	1.413	-
Power density at prediction frequency( S)	0.0018	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

#### 2.1091

EIRP	9.50	(dBm)
ERP	7.35	(dBm)
ERP	0.005	(W)
ERP Limit	3.00	(W)
MARGIN	27.42	(dB)