



# TEST REPORT

FCC/ISED MPE Test for WL1SB21  
Certification

**APPLICANT**  
LG Electronics Inc.

**REPORT NO.**  
HCT-RF-2103-FI011

**DATE OF ISSUE**  
March 19, 2021

**Tested by**  
Jin Gwan Lee

**Technical Manager**  
Jong Seok Lee

Accredited by KOLAS, Republic of KOREA

**HCT CO., LTD.**

SooChan Lee / CEO

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고객비밀  
CUSTOMER SECRET



# TEST REPORT

FCC MPE Test for  
WL1SB21

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Additional Model  
-

**Applicant**      **LG Electronics Inc.**  
222, LG-ro, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, Korea

**Eut Type**      **Wireless Adapter Card**  
**Model Name**      **WL1SB21**

**FCC ID**      **BEJ-WL1SB21**

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 19, 2021	Initial Release

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)

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 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

#### UNII\_ANT\_A

Max. average output power at antenna input terminal	14.000	dBm
Max. average output power at antenna input terminal	25.119	mW
Prediction distance	20.000	cm
Prediction frequency	5 730.00 ~ 5 845.00	MHz
Antenna Gain(typical)	1.390	dBi
Antenna Gain(numeric)	1.377	-
Power density at prediction frequency( S)	0.0069	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

#### UNII\_ANT\_B

Max. average output power at antenna input terminal	14.000	dBm
Max. average output power at antenna input terminal	25.119	mW
Prediction distance	20.000	cm
Prediction frequency	5 730.00 ~ 5 845.00	MHz
Antenna Gain(typical)	1.450	dBi
Antenna Gain(numeric)	1.396	-
Power density at prediction frequency( S)	0.0070	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>