

TEST REPORT

FCC SAR Exclusion Test for GVMRS
Certification

APPLICANT
LG Electronics Inc.

REPORT NO.
HCT-SR-2511-FC001

DATE OF ISSUE
November 4, 2025

Tested by
Da Sol Lee

이 다솔

Technical Manager
Yun Jeang Heo

Yin

HCT CO., LTD.
BongJai Huh
BongJai Huh / CEO



HCT CO.,LTD.

2-6, 73, 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea

Tel. +82 31 645 6300 Fax. +82 31 645 6401

TEST REPORT

FCC SAR Exclusion
Report

REPORT NO.

HCT-SR-2511-FC001

DATE OF ISSUE

November 04, 2025

Applicant

LG Electronics Inc.

222, LG-ro, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do 17709, Republic of Korea

EUT Type
Model Name

Generic Video Module
GVMRS

FCC ID

2B03LGVMRS

Application Type

PreTest

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)

Maximum Output Power

Bluetooth : 6.0 dBm

Modulation type

GFSK

FCC Rule

47CFR § 2.1093

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	November 04, 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 / ISED 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)

CONTENTS

1. EUT DESCRIPTION	5
2. TEST METHODOLOGY	6

1. EUT DESCRIPTION

Model Name		GVMRS
EUT Type		Generic Video Module
Frequency Range	Bluetooth	2 402 MHz – 2 480 MHz
Max. RF Output Power	Bluetooth	Peak Target Power : 2.0 dBm Tolerance + 4.0 dBm 6.0 dBm
Modulation Type	Bluetooth	GFSK
Number of Channels	Bluetooth	79 Channels
Antenna Specification		Antenna type: Internal antenna
		Peak Gain: ANT1 : 6.39 dBi, ANT2: 6.94 dBi,

2. TEST METHODOLOGY

2.1 FCC

Body SAR Test Exclusions Applied Bluetooth

According to the FCC KDB 447498 D01 v06 section 4.3.1, for 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

a) For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
 $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR, where

$$\frac{\text{Max Power of Channel(mW)}}{\text{Test Separation Distance (mm)}} * \sqrt{\text{Frequency(GHz)}} \leq 3.0 \text{ For 1g SAR, } 7.5 \text{ for 10g SAR}$$

where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

Bluetooth Calculation Result:

Tx frequency range: 2 402 MHz ~ 2 480 MHz

Body SAR Consideration Min. test separation distance: 36.21 mm

ANT0, ANT1 Maximum Output Power: 8.0 dBm (6.31 mW)

The Highest RF channel frequency: 2 480 MHz

For Body SAR Exclusion

Mode	Frequency	Maximum Allowed Power	Separation Distance	≤ 3.0 for 1 g SAR
	[MHz]	[mW]	[mm]	
Bluetooth	2 480	3.98	35	0.18

Based on the maximum output power of Bluetooth and antenna to use separation distance, Bluetooth Body SAR were not required.

ANT1, ANT2 For Body Estimated SAR

$$\text{Estimated SAR} = \frac{\sqrt{f(\text{GHz})}}{7.5} * \frac{(\text{Max Power of channel mW})}{\text{Min Separation Distance}}$$

Mode	Frequency	Maximum Allowed Power	Separation Distance (Body)	ANT1, ANT2 Estimated 1g SAR (Body)
	[MHz]	[mW]	[mm]	[W/kg]
Bluetooth	2 480	3.98	35	0.024

2.2 Simultaneous SAR Analysis

Mode	ANT1 Bluetooth Estimated SAR	ANT2 Bluetooth Estimated SAR	Σ 1-g SAR
	(W/kg)	(W/kg)	(W/kg)
Bluetooth	0.024	0.024	0.048

The above numerical summed SAR results for all the worst-case simultaneous transmission conditions were below the SAR limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit.