



FCC RADIO TEST REPORT

FCC ID : 2BO3L-14U40V
Equipment : Notebook Computer
Brand Name : LG
Model Name : 14U40V
Series Model Name : 14UD40V, 14UG40V, 14UB40V, 14US40V, 14UT40V
Applicant : LG Electronics Inc.
222, LG-ro, Jinwi-myeon Pyeongtaek-si, Gyeonggi-do
17709, REPUBLIC OF KOREA
Manufacturer : LG Electronics Inc.
222, LG-ro, Jinwi-myeon Pyeongtaek-si, Gyeonggi-do
17709, REPUBLIC OF KOREA
Standard : FCC Part 15 Subpart C §15.247

The product was received on Jun. 01, 2026 and testing was performed from Jun. 05, 2026 to Jun. 27, 2026. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this partial report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.



Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issue Date
FR651934B	01	Initial issue of report	Jul. 09, 2026

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.247(b)(3) 15.247(b)(4)	Output Power	Pass	-
3.2	15.247(d)	Radiated Band Edges and Spurious Emission	Pass	-
3.3	15.203	Antenna Requirement	Pass	-

Note:

- The original module test report (Report No.: 201120-03.TR04) was referenced for applicable test data. Conducted Power and Unwanted Radiated Emissions (Spurious Emissions) were verified on the host.

Conformity Assessment Condition:

- The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
- The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sheng Kuo

Report Producer: Dara Chiu



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
General Specs Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, and Wi-Fi 6GHz 802.11ax.	
Antenna Type WLAN <Main / Antenna 2>: PIFA Antenna <Aux. / Antenna 1>: PIFA Antenna Bluetooth: <Aux. / Antenna 1>: PIFA Antenna	
Integrated WLAN module	Brand Name: Intel Model Name: AX211D2W FCC ID: PD9AX211D2
Remark: The detailed sample list is shown in Appendix G.	

Antenna Information	
Manufacturer	INNOWAVE
Antenna Type	PIFA Antenna
Model number	F001R7113111000
Peak gain (dBi)	Antenna 1
	Bluetooth: 1.67
Manufacturer	SPEED
Antenna Type	PIFA Antenna
Model number	F-0G-XZ-0446-000-K0
Peak gain (dBi)	Antenna 1
	Bluetooth: 1.86

Remark:

1. The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

The test location is accredited based on TAF code 3786 designated by NCC (National Communication Commission).

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No.
	TH05-HY, 03CH21-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC designation No.: TW3786

1.4 Applicable Standards

According to the specifications declared by the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC KDB Publication No. 558074 D01 15.247 Meas Guidance v05r02
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01
- ♦ FCC Part 15 Subpart C §15.247
- ♦ ANSI C63.10-2020

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	0	2402	21	2444
	1	2404	22	2446
	2	2406	23	2448
	3	2408	24	2450
	4	2410	25	2452
	5	2412	26	2454
	6	2414	27	2456
	7	2416	28	2458
	8	2418	29	2460
	9	2420	30	2462
	10	2422	31	2464
	11	2424	32	2466
	12	2426	33	2468
	13	2428	34	2470
	14	2430	35	2472
	15	2432	36	2474
	16	2434	37	2476
	17	2436	38	2478
	18	2438	39	2480
	19	2440	-	-
	20	2442	-	-

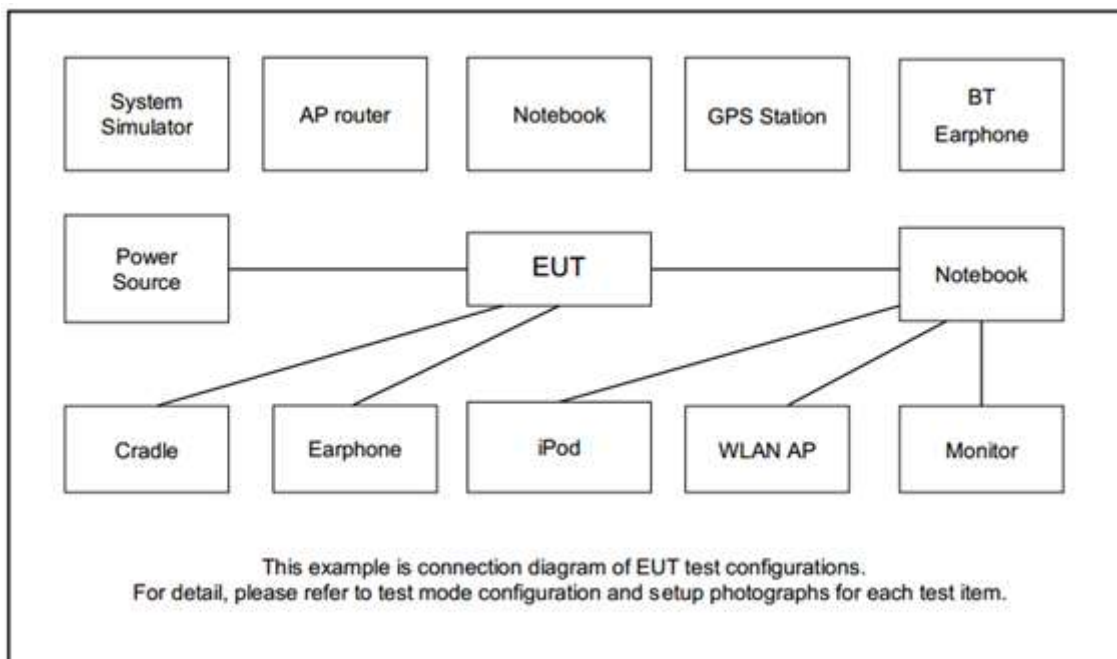
2.2 Test Mode

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz) radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

The following summary table is showing all test modes to demonstrate in compliance with the standard.

Summary table of Test Cases	
Test Item	Data Rate / Modulation
Conducted Test Cases	Bluetooth – LE / GFSK
	Mode 1: Bluetooth Tx CH00_2402 MHz_1Mbps
	Mode 2: Bluetooth Tx CH19_2440 MHz_1Mbps
	Mode 3: Bluetooth Tx CH39_2480 MHz_1Mbps
	Mode 4: Bluetooth Tx CH00_2402 MHz_2Mbps
	Mode 5: Bluetooth Tx CH19_2440 MHz_2Mbps
	Mode 6: Bluetooth Tx CH39_2480 MHz_2Mbps
Remark: - For Radiated Test Cases, the tests were performed with Sample 3. - For Conducted Test Cases, the tests were performed with Sample 1. - The detailed Radiated test modes are shown in Appendix D.	

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Earphone	Apple	A1475	N/A	Shielded, 1.2m	N/A

2.5 EUT Operation Test Setup

The RF test items, utility "DRTU.10389.24.30.0" was installed in EUT which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.



2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10 dB attenuator.

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 4.2 + 10 = 14.2 \text{ (dB)}\end{aligned}$$

3 Test Result

3.1 Output Power Measurement

3.1.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5 MHz, the limit for output power is 30 dBm. If transmitting antenna of directional gain greater than 6 dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

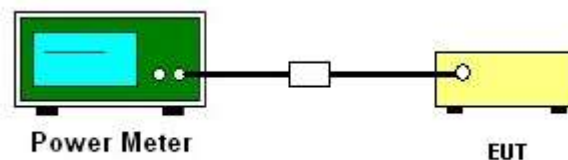
3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.1.3 Test Procedures

1. For Average Power, the testing follows ANSI C63.10 Section 11.9.2.3.2 Method AVGPM-G
2. The RF output of EUT is connected to the power meter by RF cable and attenuator.
3. The path loss is compensated to the results for each measurement.
4. Set the maximum power setting and enable the EUT to transmit continuously.
5. Measure the conducted output power and record the results in the test report.

3.1.4 Test Setup



3.1.5 Test Result of Average Output Power

Please refer to Appendix A.

3.2 Radiated Band Edges and Spurious Emission Measurement

3.2.1 Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.2.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.



3.2.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.12.2 Antenna-port conducted measurements.
2. Measure the conducted output power (in dBm) using the peak detector.
3. Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP.
4. Add the appropriate maximum ground reflection factor to the EIRP (6 dB for frequencies ≤ 30 MHz; 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive; and 0 dB for frequencies > 1000 MHz).
5. Convert the resultant EIRP to an equivalent electric field strength using the following relationship:
$$E = \text{EIRP} - 20 \log d + 104.8,$$
where
E is the electric field strength in dB μ V/m
EIRP is the equivalent isotropically radiated power in dBm
d is the specified measurement distance in 3m
6. Compare the resultant electric field strength level with the applicable regulatory limit.
7. Corrected Reading for conducted spurious emission: Antenna Factor + Cable Loss + Read Level = Level.
8. The EUT is arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
9. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
10. The EUT is set 3 meters away from the receiving antenna, which is mounted on the top of a variable height antenna tower.
11. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
12. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as "-".
13. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as "-".

14. Use the following spectrum analyzer settings:

- (1) Span shall wide enough to fully capture the emission being measured;
- (2) Set RBW = 100 kHz for $f < 1$ GHz; VBW $\geq$ RBW; Sweep = auto; Detector function = peak;
Trace = max hold;
- (3) Set RBW = 1 MHz, VBW = 3 MHz for $f \geq 1$ GHz for peak measurement.

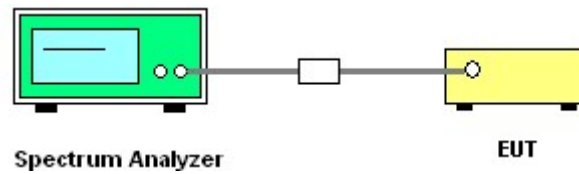
For average measurement:

The procedure for method trace average as follows:

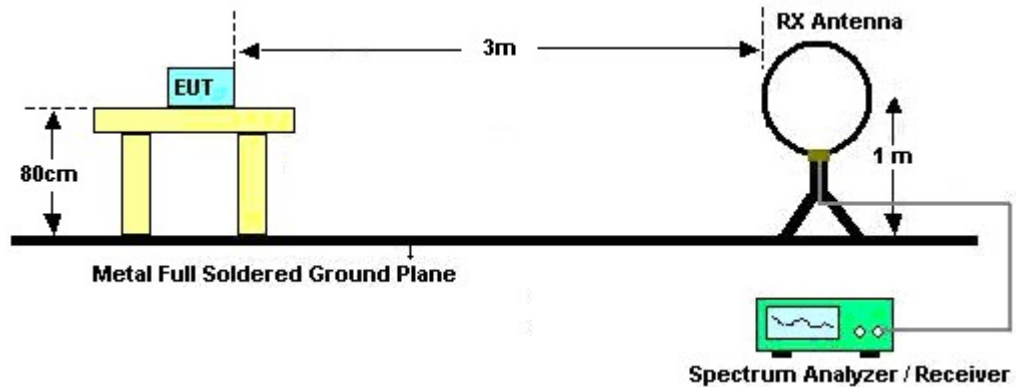
- a) RBW = 1MHz
- b) VBW $\geq [3 \times \text{RBW}]$.
- c) Detector = Power averaging (rms), if $[\text{span} / (\# \text{ of points in sweep})] \leq (\text{RBW} / 2)$.
Satisfying this condition might require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.
- d) Averaging type = power (i.e., rms):
As an alternative, the detector and averaging type may be set for linear voltage averaging.
- e) Sweep time = auto.
- f) Perform a trace average of at least 100 traces.
- g) A correction factor shall be added to the measurement results prior to comparing with the emission limit to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:
 - 1) If power averaging (rms) mode was used in step d), then the applicable correction factor is
 $[10 \log (1 / D)]$, where D is the duty cycle.
 - 2) If a specific emission is demonstrated to be continuous ($D \geq 98\%$) rather than turning ON and OFF with the transmit cycle, then no duty cycle correction is required for that emission.

3.2.4 Test Setup

For Conducted Measurement Setup



For radiated test below 30MHz



For radiated test from 30MHz to 1GHz

