

ELECTROMAGNETIC EMISSION COMPLIANCE REPORT FOR LOW-POWER, NON-LICENSED TRANSMITTER

Test Report No. : E14NR-098

AGR No. : A14OA-259R

Applicant : LG Electronics USA

Address : 1000 Sylvan Avenue Englewood Cliffs, NJ 07632, United States

Manufacturer : PT. LG INNOTEK INDONESIA

Address : Bekasi International Industrial Estate, Block C8 No.12 & 12A, Desa Cibatu,
Cikarang Selatan, Bekasi 17750, Indonesia

Type of Equipment : Wireless Adapter Card

FCC ID. : BEJ9QK-DMWL1NB5

Model Name : WL1NB5

Serial number : N/A

Total page of Report : 6 pages (including this page)

Date of Incoming : October 30, 2014

Date of issue : November 18, 2014

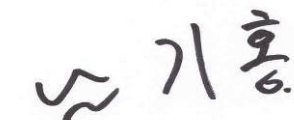
SUMMARY

The equipment complies with the regulation; **FCC PART 15 SUBPART C Section 15.247**

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

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Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
E14NR-098	November 18, 2014	Initial Issue	All

1. VERIFICATION OF COMPLIANCE

Applicant : LG Electronics USA
Address : 1000 Sylvan Avenue Englewood Cliffs, NJ 07632, United States
Contact Person : Jacob Cho / Director, Standards & Compliance
Telephone No. : +201-266-2534
FCC ID : BEJ9QK-DMWL1NB5
Model Name : WL1NB5
Serial Number : N/A
Date : November 18, 2014

EQUIPMENT CLASS	DTS – DIGITAL TRNSMISSION SYSTEM
E.U.T. DESCRIPTION	Modular Transmitter, Wireless Adapter Card
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2009
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification, Modular Approval
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC PART 15 SUBPART C Section 15.212 and 15.247
Modifications on the Equipment to Achieve Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

2. GENERAL INFORMATION

2.1 Product Description

The LG Electronics USA, Model WL1NB5 (referred to as the EUT in this report) is a Wireless Adapter Card for the Compressed wireless digital audio transceiver operating in the 2.4 GHz bands. The product specification described herein was obtained from product data sheet or user's manual.

Device Type	Modular Transmitter, Wireless Adapter Card
Temperature Range	0 °C ~ +60 °C
Operating Frequency	2 402 MHz ~ 2 481 MHz
RF Output Power	6.34 dBm
Number of Channel	39 Channel
Modulation Type	GFSK
Antenna Type	Wireless audio Single Band Antenna (PCB Pattern Antenna)
USED RF CHIP	Marker: SYNCOMM Technology Corp. Model Name:SYNIC-IA3S4
Antenna Gain	1.02 dBi
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)	16 MHz

2.2 Alternative type(s)/model(s); also covered by this test report.

-. None

3. EUT MODIFICATIONS

-. None

4. RADIO FREQUENCY EXPOSURE

4.1 RF Exposure Limit

According to the FCC rule §1.1310, the limit for General Population/Uncontrolled exposure is 1 mW/cm² for the device operating 1 500 ~ 100 000 MHz.

4.2 EUT Description

Kind of EUT	Main Control Unit
Operating Frequency Band	☐ Wireless Microphone: 494.000 MHz ~ 501.000 MHz and 498.200 MHz ~ 505.200 MHz ☐ WLAN: 2 412 MHz ~ 2 462 MHz ☐ WLAN: 5 180 MHz ~ 5 320 MHz / 5 500 MHz ~ 5 700 MHz ☐ WLAN: 5 745 MHz ~ 5 825 MHz ☐ Bluetooth: 2 402 MHz ~ 2 480 MHz ☒ GFSK Modulation: 2 402 MHz , 2 443 MHz , 2 481 MHz
Device Category	☐ Portable (< 20 cm separation) ☐ Mobile (> 20 cm separation) ☒ Others
Max. Output Power	6.34 dBm
Used Antenna	Wireless audio Single Band Antenna (PCB Pattern Antenna)
Used Antenna Gain	1.02 dBi
Exposure Evaluation Applied	☒ MPE ☐ SAR ☐ N/A

4.3 Test Result

According to the procedure, KDB 447498 D01, the standalone SAR test exclusion threshold is

$$[(\text{Max. Power of channel, including tune-up tolerance, mW})/(\text{Mim. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3$$

$$= (4.31/5) \times \sqrt{2.402} = 1.34$$

Conclusion: The SAR test exclusion threshold is less than 3, so the device meets the RF Exposure Requirement and excluded SAR Test.