

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

Test Report No. : E151R-083

AGR No. : A151A-047

Applicant : LG Electronics USA

Address : 1000 Sylvan Avenue, Englewood Cliffs, New Jersey, United States, 07632

Manufacturer : LG Electronics Inc.

Address : 222 LG-ro, Jinwi-Myeon, Pyeongtaek -Si, Gyeonggi-Do, 451-713, Korea

Type of Equipment : Pocket Photo

FCC ID. : BEJ9QK-DMPD251

Model Name : PD251

Multiple Model Name: PD251W, PD251P, PD251Y

Serial number : N/A

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

Date of Incoming : January 05, 2015

Date of issue : January 26, 2015

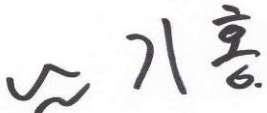
SUMMARY

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
E151R-083	January 26, 2015	Initial Issue	All

1. VERIFICATION OF COMPLIANCE

APPLICANT : LG Electronics USA
 ADDRESS : 1000 Sylvan Avenue, Englewood Cliffs, New Jersey, United States, 07632
 CONTACT PERSON : Jongchul, Lee / Director
 TELEPHONE NO : +201-408-9181
 FCC ID : BEJ9QK-DMPD251
 MODEL NAME : PD251
 BRAND NAME : -
 SERIAL NUMBER : N/A
 DATE : January 26, 2015

EQUIPMENT CLASS	<i>DSS – PART 15 SPREAD SPECTRUM TRANSMITTER</i>
KIND OF EQUIPMENT	Pocket Photo
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2009
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC PART 15 SUBPART C Section 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 PD251 (referred to as the EUT in this report) is a Pocket Photo. The product specification described herein was obtained from product data sheet or user's manual.

DEVICE TYPE	Portable Device	
OPERATING FREQUENCY	2 402 MHz ~ 2 480 MHz	
RF OUTPUT POWER	1 Mbps	5.76 dBm
	2 Mbps	4.20 dBm
	3 Mbps	4.62 dBm
NUMBER OF CHANNEL	79 Channels	
MODULATION TYPE	GFSK for 1 Mbps, DQPSK for 2 Mbps, 8-DPSK for 3 Mbps	
ANTENNA TYPE	Chip Antenna	
ANTENNA GAIN	-0.22 dBi	
LIST OF EACH OSC. OR CRYSTAL. FREQ.(FREQ.>=1 MHz)	24 MHz	
RATED SUPPLY VOLTAGE	DC 7.4 V	

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

-. The following lists consist of the added model and their differences.

Model Name	Differences	Tested
PD251	Basic Model	☒
PD251W, PD251P, PD251Y	These models are identical to basic model except for the model name only.	☐

Note: 1. Applicant consigns only basic model to test. Therefore this test report just guarantees the units, which have been tested.

2. The Applicant/manufacturer is responsible for the compliance of all variants.

3. EUT MODIFICATIONS

-. None

4. RADIO FREQUENCY EXPOSURE

4.1 Test Data for FCC

4.1.1 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.

4.1.2 EUT Description

Kind of EUT	Pocket Photo	
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	
Device Category	☒ Portable (< 20 cm separation) ☐ Mobile (> 20 cm separation) ☐ Others	
Max. Output Power	1 Mbps	5.76 dBm
	2 Mbps	4.20 dBm
	3 Mbps	4.62 dBm
Used Antenna	Chip Antenna	
Used Antenna Gain	-0.22 dBi	
Exposure Evaluation Applied	☐ MPE ☐ SAR ☒ N/A	

4.1.3 Test Result

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

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

$$= (3.98/5) \times \sqrt{2.402} = 1.23$$

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

	Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune up power (dBm)	Max tune up power (mW)	Separation distance (mm)	RF exposure
Bluetooth	2 402	5.0 ± 1	6.0	3.98	5	1.23