

FCC MPE REPORT

Certification

Applicant Name:
LG Electronics USA**Address:**
1000 Sylvan Avenue, Englewood Cliffs NJ 07632**Date of Issue:**

October 17, 2016

Test Site/Location:

HCT CO., LTD., 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA

Report No.: HCT-R-1610-E017**HCT FRN:** 0005866421**ISED Registration Number :** 5944A-6**FCC ID:** BEJ-LCW005**APPLICANT:** LG Electronics USA**Model(s):** LCW-005**EUT Type:** WLAN Module**Frequency Range:** 2412 MHz - 2462 MHz (2.4 GHz Band)

The measurements shown in this report were made in accordance with the procedures specified in §2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998, 21 U.S.C. 853(a)



Report prepared by
: Seoul Ki Lee
Test engineer of RF Team



Approved by
: Jong Seok Lee
Manager of RF Team

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Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-R-1610-E017	October 17, 2016	- First Approval Report

RF Exposure Statement

1. LIMITS

According to §1.1310 and §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 ²)	Averaging time (minutes)
0.3 - 1.34.....	614	1.63	* (100)	30
1.34 - 30.....	824/f	2.19/f	* (180/ f ²)	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 of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

3. RESULTS

***. 802.11b Mode**

Max Peak output Power at antenna input terminal	19.750	dBm
Max Peak output Power at antenna input terminal	94.406	mW
Prediction distance	20.000	cm
Prediction frequency	2462.000	MHz
Antenna Gain(typical)	1.720	dBi
Antenna Gain(numeric)	1.486	-
Power density at prediction frequency(S)	0.028	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²

***. 802.11g Mode**

Max Peak output Power at antenna input terminal	25.760	dBm
Max Peak output Power at antenna input terminal	376.704	mW
Prediction distance	20.000	cm
Prediction frequency	2412.000	MHz
Antenna Gain(typical)	1.720	dBi
Antenna Gain(numeric)	1.486	-
Power density at prediction frequency(S)	0.111	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²

***. 802.11n HT20 Mode**

Max Peak output Power at antenna input terminal	25.440	dBm
Max Peak output Power at antenna input terminal	349.945	mW
Prediction distance	20.000	cm
Prediction frequency	2437.000	MHz
Antenna Gain(typical)	1.720	dBi
Antenna Gain(numeric)	1.486	-
Power density at prediction frequency(S)	0.103	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²