

FCC MPE REPORT

FCC Certification

Applicant Name:
LG Electronics USA**Address:**
1000 Sylvan Avenue Englewood Cliffs New Jersey United
States 07632**Date of Issue:**
June 10, 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-1606-F005
HCT FRN: 0005866421
IC Recognition No.: 5944A-5**FCC ID:** **BEJ-LCW004****APPLICANT:** **LG Electronics USA****Model(s):** LCW-004**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
: Kyung Soo Kang
Test engineer of RF Team



Approved by
: Jong Seok Lee
Manager of RF Team

This report only responds to the tested sample and may not be reproduced, except in full, without written approval of the HCT Co., Ltd.

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-R-1606-F005	June 10, 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	22.4400	dBm
Max Peak output Power at antenna input terminal	175.388	mW
Prediction distance	20.00000	cm
Prediction frequency	2437.00000	MHz
Antenna Gain(Peak)	2.54000	dBi
Antenna Gain(numeric)	1.79473	-
Power density at prediction frequency (S)	0.062622	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.00000	mW/cm ²

***. 802.11g Mode**

Max Peak output Power at antenna input terminal	24.6800	dBm
Max Peak output Power at antenna input terminal	293.765	mW
Prediction distance	20.00000	cm
Prediction frequency	2412.00000	MHz
Antenna Gain(Peak)	2.54000	dBi
Antenna Gain(numeric)	1.79473	-
Power density at prediction frequency (S)	0.104889	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.00000	mW/cm ²

***. 802.11n HT20 Mode**

Max Peak output Power at antenna input terminal	24.1100	dBm
Max Peak output Power at antenna input terminal	257.632	mW
Prediction distance	20.00000	cm
Prediction frequency	2412.00000	MHz
Antenna Gain(Peak)	2.54000	dBi
Antenna Gain(numeric)	1.79473	-
Power density at prediction frequency (S)	0.091988	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.00000	mW/cm ²