

EMI CERTIFICATION REPORT

Applicant:

LG Electronics MobileComm U.S.A., Inc.
1000 Sylvan Avenue, Englewood Cliffs NJ 07632

Date of Receipt: April 28, 2015**Date of Issue: July 02, 2015****Test Report No. HCT-E-1505-F026-1****HCT FRN: 0005866421****FCC ID:****ZNFH735**

Rule Part(s) / Standard(s): FCC CFR 47 PART 15 Subpart B Class B
FCC Classification: JBP (Part 15 B – Class B Computing Device Peripheral)
EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA
and LTE Phone with Bluetooth, Wi-Fi and NFC
Model Name: LG-H735
Additional Model Name: LGH735, H735, LG-H735L, LGH735L, H735L
Test Port: USB / Earphone Port
Date of Test: May 11, 2015 - May 26, 2015

The device bearing the trade name and model specified above, has been shown to comply with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-2003. (See Test Report if any modifications were made for compliance)

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

HCT certifies that no party to application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C 862

Tested By

Gu-Cheol Yoon
Test Engineer
EMC Team
Certification Division

Reviewed By

Jin-Pyo Hong
Technical Manager
EMC Team
Certification Division

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



DOCUMENT HISTORY

The revision history for this document is shown in table.

Version	Date	Description
HCT-E-1505-F026	May 29, 2015	Initial Release
HCT-E-1505-F026-1	July 02, 2015	Added the additional model names.



TABLE OF CONTENTS

	PAGE
1. GENERAL INFORMATION	4
1.1 Description of EUT	4
1.2 Related Submittal(s) / Grant(s).....	4
1.3 Test Facility	5
1.4 Tested System Details.....	6
1.5 Cable Description	7
1.6 Noise Suppression Parts on Cable. (I/O Cable)	7
2. DESCRIPTION OF TEST	8
3. PRELIMINARY TEST	11
3.1 Conducted Emission Test	11
3. 2 Radiated Emission Test	11
4. CONDUCTED AND RADIATED EMISSION TEST SUMMARY	12
4.1 Conducted Emission Test	12
4.2 Radiated Emission Test	26
5. LIST OF TEST EQUIPMENT	30
6. CONCLUSION	31

ATTACHMENT: TEST SETUP PHOTOGRAPHS



1. GENERAL INFORMATION

1.1 Description of EUT

Equipment Under Test is manufactured by **LG Electronics MobileComm U.S.A., Inc.**
Its basic purpose is used for communications.

Model	LG-H735
FCC ID	ZNFH735
Additional Model	LGH735, H735, LG-H735L, LGH735L, H735L
EUT Type	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA and LTE Phone with Bluetooth, Wi-Fi and NFC
TX Frequency	824.20 MHz to 848.80 MHz (GSM 850) 1 850.20 MHz to 1 909.80 MHz (GSM 1 900) 826.40 MHz to 846.60 MHz (WCDMA 850) 1 852.4 MHz to 1 907.6 MHz (WCDMA 1 900) 824 MHz to 849 MHz (LTE B5) 2 496 MHz to 2 570 MHz (LTE B7) 832 MHz to 862 MHz (LTE B20)
RX Frequency	869.20 MHz to 893.80 MHz (GSM 850) 1 930.20 MHz to 1 989.80 MHz (GSM 1 900) 871.40 MHz to 891.60 MHz (WCDMA 850) 1 932.4 MHz to 1 987.6 MHz (WCDMA 1 900) 869 MHz to 894 MHz (LTE B5) 2 516 MHz to 2 690 MHz (LTE B7) 791 MHz to 821 MHz (LTE B20)

1.2 Related Submittal(s) / Grant(s)

Original submittal only.



1.3 Test Facility

Test site is located at 74, SEOICHEON-RO, 578BEON-GIL, MAJANG-MYEON, ICHEON-SI, GYEONGGI-DO, SOUTH KOREA. Those measurement facilities are constructed in conformance with the requirements of ANSI C63.4-2003.

Measurement Facilities	Reg. No.
Radiated Field strength measurement facility (3 m)	90661 (February 28, 2014)
Radiated Field strength measurement facility (10 m)	90661 (February 28, 2014)



1.4 Tested System Details

All equipment descriptions used in the tested system (including inserted cards) are:

Device Type	Model Name	Manufacturer	FCC ID / DoC	Connected To
EUT	LG-H735	LG	ZNFH735	Notebook PC, Earphone
USB cable	EAD62377902	Ningbo broad	-	EUT, Notebook PC
Earphone	EAB62209201	I-SOUND	-	EUT
Standard cover	-	-	-	EUT
Quick cover	CFV-110	Young Kwang	-	EUT
Notebook PC	ProBook6560b	HP	DoC	EUT, Notebook PC adaptor
Notebook PC adaptor	PPP009D	DELTA Electronics (Jiangsu) LTD	-	Notebook PC
Gateway	MV440	Axesstel	PH7MV440	Notebook PC, Adaptor
Serial mouse	Serial 2 button mouse	Radio shack	FSUGMZE3	Notebook PC
Adaptor	DA-60M12	Yang Ming Industrial	-	Gateway
RJ45 cable	-	-	-	Notebook PC, Gateway
Micro SD card	16 GB	Samsung	-	EUT



1.5 Cable Description

Product Name	Port	Power Cord Shielded (Y/N)	I/O Cable Shielded (Y/N)	Length (m)
EUT	Micro USB	Y	Y	(P,D)1.0
	Earphone	N/A	Y	(D)1.2
Notebook PC	RJ 45	N/A	N	(D)1.5
	Serial (Mouse)	N/A	Y	(D)1.8
	DC in	N	N/A	(P)1.8
Gateway	DC in	N	N/A	(P)1.8

* The marked "(D)" means the data cable and "(P)" means the power cable.

1.6 Noise Suppression Parts on Cable. (I/O Cable)

Product Name	Port	Ferrite Bead (Y/N)	Location	Metal Hood (Y/N)	Location
EUT	Micro USB	N	N/A	Y	Both End
	Earphone	N	N/A	Y	EUT End
Notebook PC	RJ 45	N	N/A	N	N/A
	Serial (Mouse)	N	N/A	Y	Notebook PC End



2. DESCRIPTION OF TEST

2.1 Measurement of Conducted Emission

The test procedure was in accordance with ANSI C63.4-2003, Clause 7

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN).
If the EUT is connected to the PC through USB, the AC power-line adapter of the PC is directly connected to a line impedance stabilization network (LISN).
Other support units were connected to the power mains through another LISN. The two LISNs provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both conducted lines are measured in Quasi-Peak and Average mode, including the worst-case data points for each tested configuration.
- c. The frequency range from 150 kHz to 30 MHz was searched.

[Conducted Emission Limits]

Frequency (MHz)	Resolution Bandwidth (kHz)	Quasi-Peak (dB μ V)	Average (dB μ V)
0.15 to 0.5	9	66 to 56*	56 to 46*
0.5 to 5	9	56	46
5 to 30	9	60	50

**Decreases with the logarithm of the frequency.*



2.2 Measurement of Radiated Emission

The test procedure was in accordance with ANSI C63.4-2003, Clause 8

- a. The EUT was placed on the top of a turn table 0.8 meters above the ground at a semi anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 m away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from 1 m to 4 m above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 m to 4 m and the turn table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to Peak and Average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
- g. The antenna height scans apply for both horizontal and vertical polarizations, except that for vertical polarization, the minimum height of the center of the antenna shall be increased so that the lowest point of the bottom of the lowest antenna element clears the site reference ground plane by at least 25 cm. (below 1 GHz)

[Radiated Emission Limits]

Frequency (MHz)	Antenna Distance (m)	Field Strength ($\mu\text{V/m}$)	Quasi-Peak (dB $\mu\text{V/m}$)
30 to 88	3	100	40.0
88 to 216	3	150	43.5
216 to 960	3	200	46.0
Above 960	3	500	54.0
Frequency (MHz)	Antenna Distance (m)	Peak (dB $\mu\text{V/m}$)	Average (dB $\mu\text{V/m}$)
Above 1 000	3	74	54

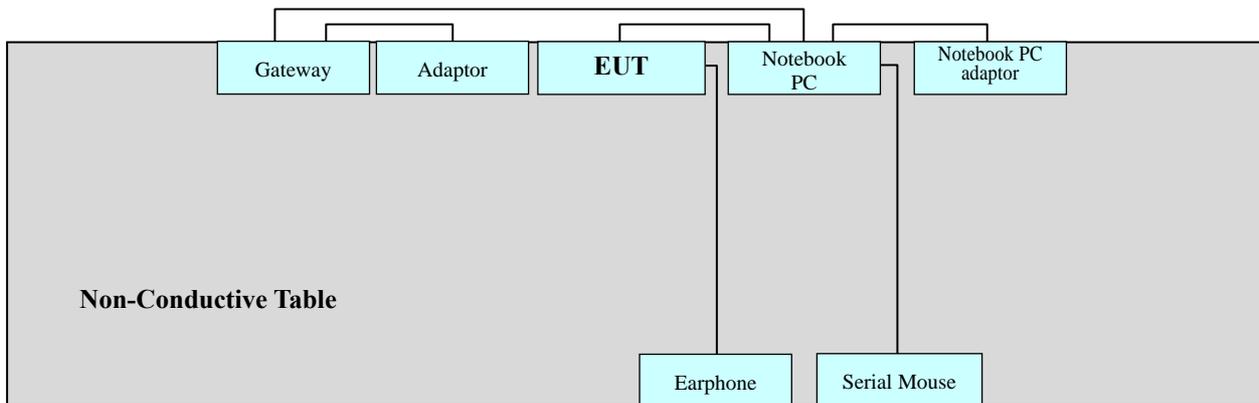


2.2.1 Frequency Range of Radiated Measurements

An unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a Radiated Emission limit is specified, up to the frequency shown in the following table

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705 to 108	1 000
108 to 500	2 000
500 to 1 000	5 000
Above 1 000	5 th harmonic of the highest frequency or 40 GHz, whichever is lower

2.3 Configuration of Tested System



Power Line: 120 VAC, 60 Hz



3. PRELIMINARY TEST

3.1 Conducted Emission Test

It was tested Data Communication mode, after connecting all peripheral devices.

Operation Mode: Data Communication mode

3.2 Radiated Emission Test

It was tested Data Communication mode, after connecting all peripheral devices.

Operation Mode: Data Communication mode



4. CONDUCTED AND RADIATED EMISSION TEST SUMMARY

4.1 Conducted Emission Test

The test results of conducted emission at mains ports provide the following information:

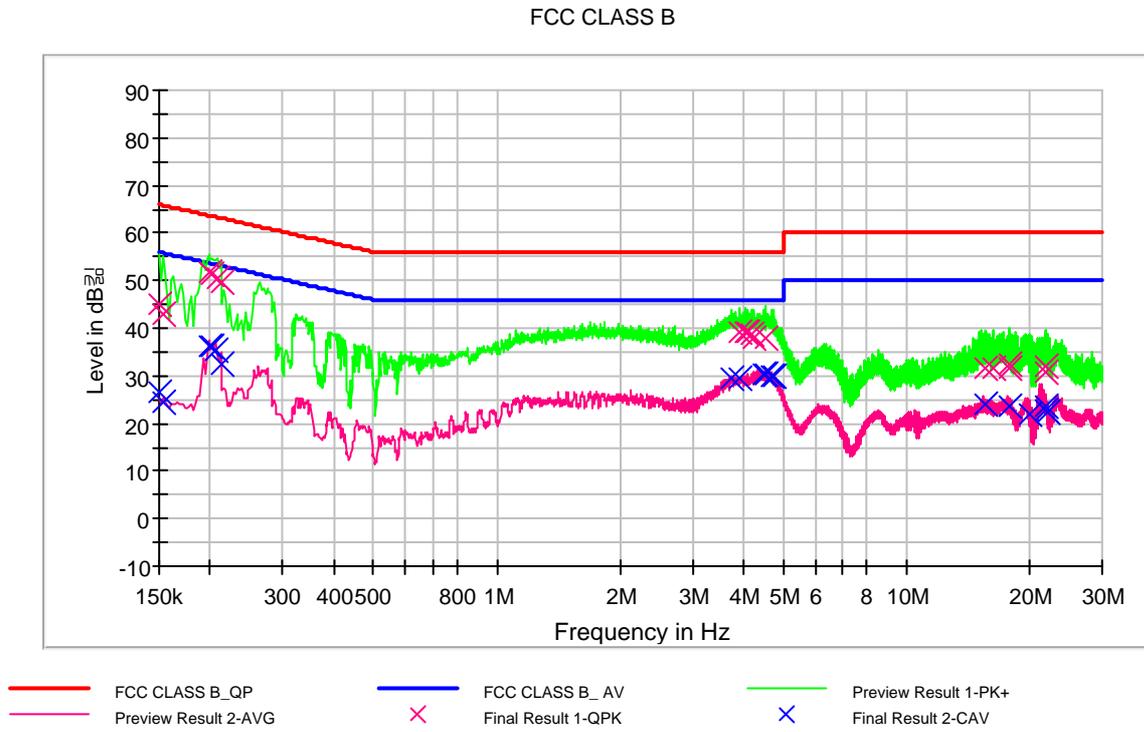
Rule Part / Standard	FCC PART 15 Subpart B Class B
Detector	Quasi-Peak, CISPR-Average
Bandwidth	9 kHz (6 dB)
Operation Mode	Data Communication mode
EUT Cover Type	Standard Cover
Kind of Test Site	Shielded Room
Temperature	22.7 °C
Relative Humidity	43.1 %
Test Date	May 12, 2015

- Calculation Formula:

1. Conductor L1 = Hot, Conductor N = Neutral
2. Corr. = LISN Factor + Cable Loss
3. QuasiPeak or CAverage= Receiver Reading + Corr.
4. Margin = Limit – QuasiPeak or CAverage



Figure 1: Spectral Diagrams, Conducted Emission, AC Main Port, Line (L1)





QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	45.2	9.000	L1	9.6	20.8	66.0
0.154000	42.8	9.000	L1	9.6	23.0	65.8
0.198000	51.7	9.000	L1	9.6	12.0	63.7
0.202000	51.3	9.000	L1	9.7	12.2	63.5
0.208000	50.4	9.000	L1	9.7	12.9	63.3
0.212000	49.6	9.000	L1	9.7	13.5	63.1
3.892000	39.2	9.000	L1	9.9	16.8	56.0
4.034000	39.0	9.000	L1	9.9	17.0	56.0
4.108000	39.1	9.000	L1	9.9	16.9	56.0
4.170000	38.9	9.000	L1	9.9	17.1	56.0
4.252000	38.0	9.000	L1	9.9	18.0	56.0
4.534000	37.9	9.000	L1	9.9	18.1	56.0
15.646000	31.7	9.000	L1	10.2	28.3	60.0
16.210000	31.4	9.000	L1	10.2	28.6	60.0
17.762000	32.4	9.000	L1	10.3	27.6	60.0
17.840000	31.6	9.000	L1	10.3	28.4	60.0
21.870000	32.2	9.000	L1	10.4	27.8	60.0
21.944000	30.8	9.000	L1	10.4	29.2	60.0

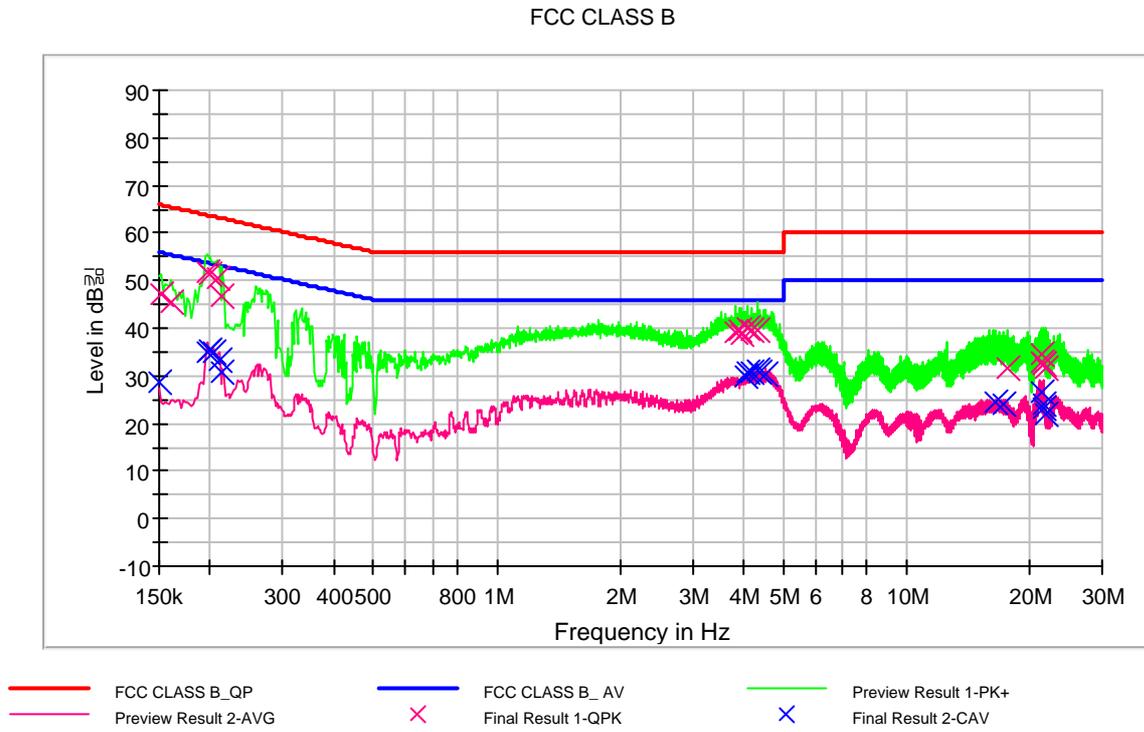


CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	26.5	9.000	L1	9.6	29.5	56.0
0.154000	24.4	9.000	L1	9.6	31.4	55.8
0.198000	36.0	9.000	L1	9.6	17.7	53.7
0.202000	36.0	9.000	L1	9.7	17.5	53.5
0.206000	35.4	9.000	L1	9.7	18.0	53.4
0.212000	32.5	9.000	L1	9.7	20.6	53.1
3.752000	29.4	9.000	L1	9.9	16.6	46.0
3.892000	29.5	9.000	L1	9.9	16.5	46.0
4.462000	30.3	9.000	L1	9.9	15.7	46.0
4.534000	30.3	9.000	L1	9.9	15.7	46.0
4.674000	30.1	9.000	L1	9.9	15.9	46.0
4.744000	30.0	9.000	L1	9.9	16.0	46.0
15.646000	23.9	9.000	L1	10.2	26.1	50.0
17.840000	23.5	9.000	L1	10.3	26.5	50.0
19.892000	22.1	9.000	L1	10.3	27.9	50.0
21.870000	23.5	9.000	L1	10.4	26.5	50.0
21.944000	22.6	9.000	L1	10.4	27.4	50.0
22.046000	22.5	9.000	L1	10.4	27.5	50.0



Figure 2: Spectral Diagrams, Conducted Emission, AC Main Port, Line (N)





QuasiPeak Final Result, Line (N)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	46.9	9.000	N	9.6	19.0	65.9
0.160000	45.5	9.000	N	9.6	20.0	65.5
0.196000	51.8	9.000	N	9.6	12.0	63.8
0.200000	51.3	9.000	N	9.6	12.3	63.6
0.208000	50.5	9.000	N	9.6	12.8	63.3
0.214000	46.8	9.000	N	9.6	16.2	63.0
3.822000	39.0	9.000	N	9.8	17.0	56.0
3.890000	39.5	9.000	N	9.8	16.5	56.0
3.970000	38.8	9.000	N	9.8	17.2	56.0
4.104000	40.1	9.000	N	9.8	15.9	56.0
4.174000	39.7	9.000	N	9.8	16.3	56.0
4.316000	39.4	9.000	N	9.8	16.6	56.0
17.688000	31.6	9.000	N	10.3	28.4	60.0
21.366000	34.4	9.000	N	10.3	25.6	60.0
21.440000	33.0	9.000	N	10.3	27.0	60.0
21.510000	32.4	9.000	N	10.3	27.6	60.0
21.580000	32.4	9.000	N	10.3	27.6	60.0
21.790000	31.4	9.000	N	10.3	28.6	60.0



CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	28.5	9.000	N	9.6	27.5	56.0
0.196000	34.9	9.000	N	9.6	18.9	53.8
0.200000	35.2	9.000	N	9.6	18.4	53.6
0.204000	34.8	9.000	N	9.6	18.6	53.4
0.210000	33.5	9.000	N	9.6	19.7	53.2
0.214000	30.7	9.000	N	9.6	22.3	53.0
4.044000	29.9	9.000	N	9.8	16.1	46.0
4.102000	30.8	9.000	N	9.8	15.2	46.0
4.176000	30.5	9.000	N	9.8	15.5	46.0
4.316000	31.0	9.000	N	9.8	15.0	46.0
4.362000	30.7	9.000	N	9.9	15.3	46.0
4.530000	30.5	9.000	N	9.9	15.5	46.0
16.556000	24.5	9.000	N	10.2	25.5	50.0
17.260000	23.9	9.000	N	10.2	26.1	50.0
21.366000	26.5	9.000	N	10.3	23.5	50.0
21.510000	23.9	9.000	N	10.3	26.1	50.0
21.580000	23.0	9.000	N	10.3	27.0	50.0
21.790000	21.9	9.000	N	10.3	28.1	50.0



The test results of conducted emission at mains ports provide the following information:

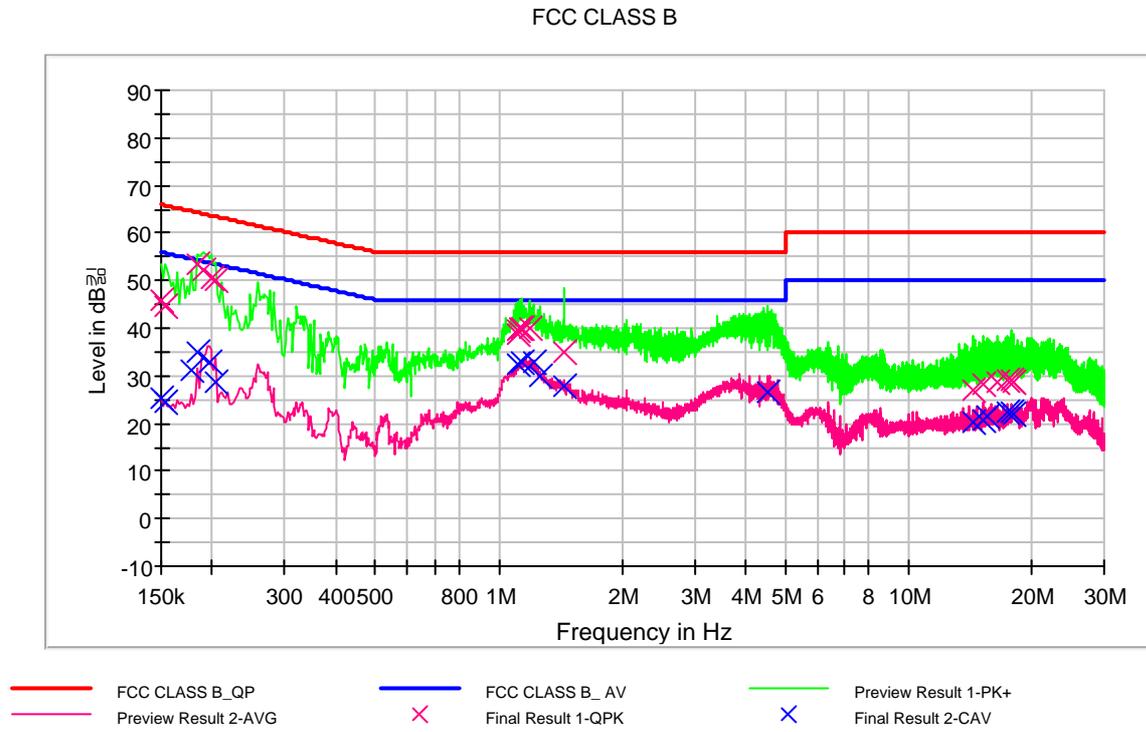
Rule Part / Standard	FCC PART 15 Subpart B Class B
Detector	Quasi-Peak, CISPR-Average
Bandwidth	9 kHz (6 dB)
Operation Mode	Data Communication mode
EUT Cover Type	Quick Cover
Kind of Test Site	Shielded Room
Temperature	24.3 °C
Relative Humidity	43.8 %
Test Date	May 19, 2015

- Calculation Formula:

1. Conductor L1 = Hot, Conductor N = Neutral
2. Corr. = LISN Factor + Cable Loss
3. QuasiPeak or CAverage= Receiver Reading + Corr.
4. Margin = Limit – QuasiPeak or CAverage



Figure 3: Spectral Diagrams, Conducted Emission, AC Main Port, Line (L1)





QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	45.8	9.000	L1	9.6	20.2	66.0
0.154000	44.5	9.000	L1	9.6	21.3	65.8
0.184000	53.3	9.000	L1	9.6	11.0	64.3
0.190000	52.4	9.000	L1	9.6	11.6	64.0
0.198000	50.5	9.000	L1	9.6	13.2	63.7
0.204000	50.0	9.000	L1	9.7	13.4	63.4
1.112000	38.9	9.000	L1	9.7	17.1	56.0
1.118000	39.7	9.000	L1	9.7	16.3	56.0
1.126000	40.0	9.000	L1	9.7	16.0	56.0
1.132000	40.1	9.000	L1	9.7	15.9	56.0
1.186000	40.0	9.000	L1	9.7	16.0	56.0
1.444000	35.0	9.000	L1	9.8	21.0	56.0
14.364000	27.2	9.000	L1	10.2	32.8	60.0
15.260000	28.3	9.000	L1	10.2	31.7	60.0
16.474000	28.8	9.000	L1	10.2	31.2	60.0
17.422000	29.1	9.000	L1	10.3	30.9	60.0
17.902000	29.0	9.000	L1	10.3	31.0	60.0
18.024000	28.6	9.000	L1	10.3	31.4	60.0

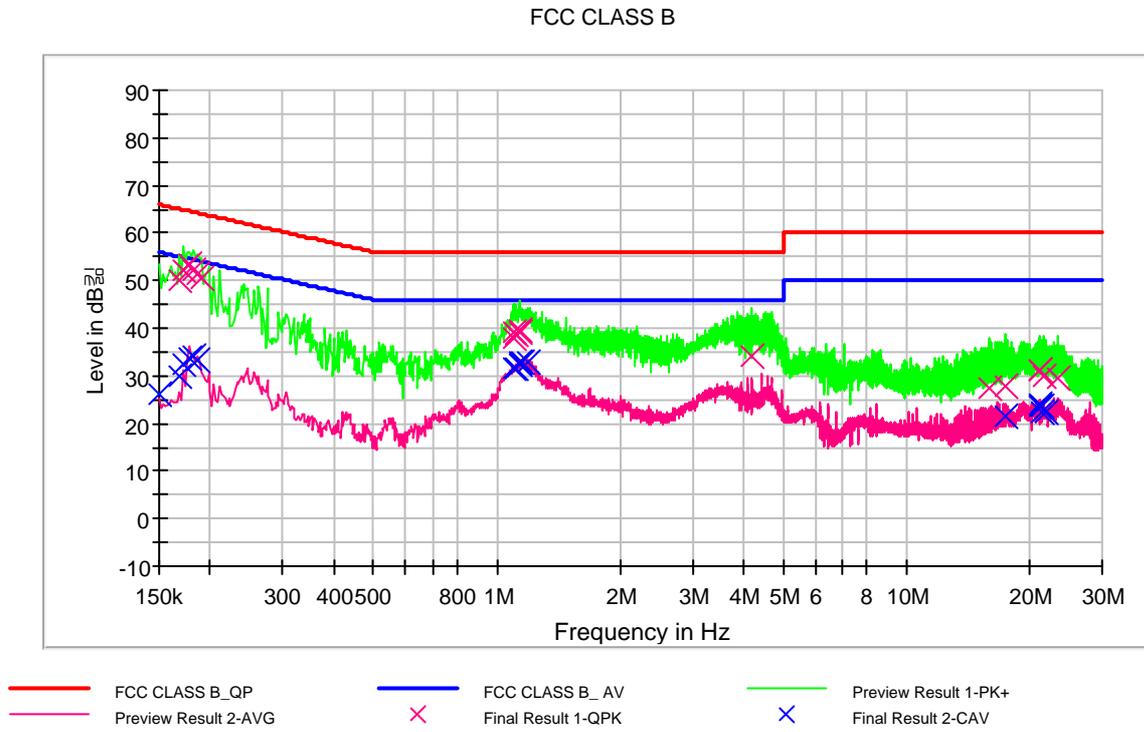


CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	25.4	9.000	L1	9.6	30.6	56.0
0.154000	24.5	9.000	L1	9.6	31.3	55.8
0.178000	31.0	9.000	L1	9.6	23.6	54.6
0.184000	35.1	9.000	L1	9.6	19.2	54.3
0.196000	32.9	9.000	L1	9.6	20.9	53.8
0.204000	28.6	9.000	L1	9.7	24.8	53.4
1.118000	32.3	9.000	L1	9.7	13.7	46.0
1.132000	32.7	9.000	L1	9.7	13.3	46.0
1.212000	32.9	9.000	L1	9.7	13.1	46.0
1.266000	30.0	9.000	L1	9.7	16.0	46.0
1.444000	27.7	9.000	L1	9.8	18.3	46.0
4.520000	26.4	9.000	L1	9.9	19.6	46.0
14.364000	20.1	9.000	L1	10.2	29.9	50.0
15.260000	20.9	9.000	L1	10.2	29.1	50.0
15.628000	21.4	9.000	L1	10.2	28.6	50.0
17.422000	22.3	9.000	L1	10.3	27.7	50.0
17.902000	22.3	9.000	L1	10.3	27.7	50.0
18.024000	22.0	9.000	L1	10.3	28.0	50.0



Figure 4: Spectral Diagrams, Conducted Emission, AC Main Port, Line (N)





QuasiPeak Final Result, Line (N)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.168000	50.2	9.000	N	9.6	14.9	65.1
0.172000	52.4	9.000	N	9.6	12.5	64.9
0.178000	53.3	9.000	N	9.6	11.3	64.6
0.182000	52.0	9.000	N	9.6	12.4	64.4
0.186000	51.4	9.000	N	9.6	12.8	64.2
0.190000	50.4	9.000	N	9.6	13.6	64.0
1.096000	37.9	9.000	N	9.7	18.1	56.0
1.102000	39.0	9.000	N	9.7	17.0	56.0
1.108000	38.6	9.000	N	9.7	17.4	56.0
1.132000	39.5	9.000	N	9.7	16.5	56.0
1.144000	39.3	9.000	N	9.7	16.7	56.0
4.176000	34.0	9.000	N	9.8	22.0	56.0
15.920000	27.2	9.000	N	10.2	32.8	60.0
17.404000	27.9	9.000	N	10.2	32.1	60.0
21.010000	31.1	9.000	N	10.3	28.9	60.0
21.082000	31.0	9.000	N	10.3	29.0	60.0
21.576000	29.8	9.000	N	10.3	30.2	60.0
23.348000	29.3	9.000	N	10.4	30.7	60.0



CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	26.0	9.000	N	9.6	30.0	56.0
0.168000	29.8	9.000	N	9.6	25.3	55.1
0.172000	32.3	9.000	N	9.6	22.6	54.9
0.178000	33.7	9.000	N	9.6	20.9	54.6
0.182000	33.9	9.000	N	9.6	20.5	54.4
0.186000	33.4	9.000	N	9.6	20.8	54.2
1.096000	31.4	9.000	N	9.7	14.6	46.0
1.108000	31.6	9.000	N	9.7	14.4	46.0
1.132000	32.5	9.000	N	9.7	13.5	46.0
1.144000	32.8	9.000	N	9.7	13.2	46.0
1.156000	32.9	9.000	N	9.7	13.1	46.0
1.192000	33.0	9.000	N	9.7	13.0	46.0
17.404000	21.4	9.000	N	10.2	28.6	50.0
21.010000	23.7	9.000	N	10.3	26.3	50.0
21.082000	23.9	9.000	N	10.3	26.1	50.0
21.296000	22.5	9.000	N	10.3	27.5	50.0
21.360000	23.7	9.000	N	10.3	26.3	50.0
21.934000	22.5	9.000	N	10.3	27.5	50.0



4.2 Radiated Emission Test

The test results of radiated emission provide the following information:

-For Measurement Below 1 GHz

Rule Part / Standard	FCC PART 15 Subpart B Class B
Detector	Quasi-Peak
Bandwidth	120 kHz (6 dB)
Operation Mode	Data Communication mode
EUT Cover Type	Standard Cover
Kind of Test Site	3 m semi anechoic chamber
Temperature	22.3 °C
Relative Humidity	40.1 %
Test Date	May 11, 2015

Frequency (MHz)	Quasi Peak (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)
32.783888	25.1	100.0	V	275.0	14.9	14.9	40.0
85.028858	27.9	222.0	H	256.0	11.6	12.1	40.0
240.339880	34.9	150.0	H	169.0	15.8	11.1	46.0

- Calculation Formula:

1. POL. H = Horizontal, POL. V = Vertical
2. QuasiPeak = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor + Cable Loss
4. Margin = Limit - QuasiPeak



Rule Part / Standard	FCC PART 15 Subpart B Class B
Detector	Quasi-Peak
Bandwidth	120 kHz (6 dB)
Operation Mode	Data Communication mode
EUT Cover Type	Quick Cover
Kind of Test Site	3 m semi anechoic chamber
Temperature	24.9 °C
Relative Humidity	42.3 %
Test Date	May 26, 2015

Frequency (MHz)	Quasi Peak (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
55.910541	22.8	124.0	V	330.0	15.7	17.2	40.0
85.732745	25.7	250.0	H	1.0	11.6	14.3	40.0
266.554309	35.8	115.0	H	311.0	16.9	10.2	46.0
850.000641	39.9	125.0	H	116.0	29.0	6.1	46.0



-For Measurement Above 1 GHz

Rule Part / Standard	FCC PART 15 Subpart B Class B
Detector	Peak mode: Peak (RBW: 1 MHz, VBW: 3 MHz) CISPR-Average mode: Peak (RBW: 1 MHz, VBW: 10 Hz)
Highest Operating Frequency	1.5 GHz
Testing Frequency Range	1 GHz to 7.5 GHz
Operation Mode	Data Communication mode
EUT Cover Type	Standard Cover
Kind of Test Site	3 m semi anechoic chamber
Temperature	22.3 °C
Relative Humidity	40.1 %
Test Date	May 11, 2015

Frequency (MHz)	Peak (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1332.114229	50.5	100.0	V	27.0	-9.3	23.5	74.0
1981.112225	52.6	100.0	V	14.0	-7.9	21.4	74.0

Frequency (MHz)	CAverage (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1332.114229	26.3	100.0	V	27.0	-9.3	27.7	54.0
1981.112225	28.3	100.0	V	14.0	-7.9	25.7	54.0

- Calculation Formula:

1. POL. H = Horizontal, POL. V = Vertical
2. Peak or CAverage = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor+ Cable Loss –Amplifier Gain
4. Margin = Limit - Peak or CAverage



Rule Part / Standard	FCC PART 15 Subpart B Class B
Detector	Peak mode: Peak (RBW: 1 MHz, VBW: 3 MHz) CISPR-Average mode: Peak (RBW: 1 MHz, VBW: 10 Hz)
Highest Operating Frequency	1.5 GHz
Testing Frequency Range	1 GHz to 7.5 GHz
Operation Mode	Data Communication mode
EUT Cover Type	Quick Cover
Kind of Test Site	3 m semi anechoic chamber
Temperature	22.5 °C
Relative Humidity	42.7 %
Test Date	May 19, 2015

Frequency (MHz)	Peak (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1333.116233	51.2	100.0	V	29.0	-9.3	22.8	74.0
1995.140281	54.5	100.0	V	28.0	-7.8	19.5	74.0

Frequency (MHz)	CAverage (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1333.116233	27.0	100.0	V	29.0	-9.3	27.0	54.0
1995.140281	29.6	100.0	V	28.0	-7.8	24.4	54.0



5. LIST OF TEST EQUIPMENT

<u>Type</u>	<u>Manufacturer</u>	<u>Model Name</u>	<u>Serial Number</u>	<u>Calibration Cycle</u>	<u>CAL Date</u>
<u>Conducted Emission</u>					
<input checked="" type="checkbox"/> EMI Test Receiver	Rohde & Schwarz	ESCI	100584	1 year	01.13.2015
<input checked="" type="checkbox"/> LISN	Rohde & Schwarz	ESH3-Z5	100282	1 year	06.10.2014
<input checked="" type="checkbox"/> LISN	Rohde & Schwarz	ENV216	100073	1 year	01.13.2015
<input checked="" type="checkbox"/> Software	Rohde & Schwarz	EMC32	-	-	-
<u>Radiated Emission</u>					
-For measurement below 1 GHz					
<input checked="" type="checkbox"/> EMI Test Receiver	Rohde & Schwarz	ESI40	831564103	1 year	04.01.2015
<input checked="" type="checkbox"/> Trilog Antenna	Schwarzbeck	VULB9160	3301	2 year	11.17.2014
<input checked="" type="checkbox"/> Antenna master	HD GmbH	MA240	240/520	N/A	-
<input checked="" type="checkbox"/> Antenna master controller	HD GmbH	HD 100	100/637	N/A	-
<input checked="" type="checkbox"/> Turn Table	EMCO	1060-2M	-	N/A	-
<input checked="" type="checkbox"/> Turn Table controller	EMCO	2090	9702-1224	N/A	-
<input type="checkbox"/> EMI Test Receiver	Rohde & Schwarz	ESU 26	100241	1 year	06.18.2014
<input type="checkbox"/> Antenna master	INNCO Systems	MA4000-EP	MA4000/283	N/A	-
<input type="checkbox"/> Turn Table	INNCO Systems	DT3000-3T	DT3000/69	N/A	-
<input checked="" type="checkbox"/> Software	Rohde & Schwarz	EMC32	-	-	-
-For measurement above 1 GHz					
<input checked="" type="checkbox"/> EMI Test Receiver	Rohde & Schwarz	ESI40	831564103	1 year	04.01.2015
<input checked="" type="checkbox"/> Antenna master	HD GmbH	MA240	240/520	N/A	-
<input checked="" type="checkbox"/> Antenna master controller	HD GmbH	HD 100	100/637	N/A	-
<input checked="" type="checkbox"/> Turn Table	EMCO	1060-2M	-	N/A	-
<input checked="" type="checkbox"/> Turn Table controller	EMCO	2090	9702-1224	N/A	-
<input type="checkbox"/> Power Amplifier	CERNEX	CBLU1183540	21691	1 year	07.11.2014
<input checked="" type="checkbox"/> Power Amplifier	CERNEX	CBLU5183530	24348	1 year	06.11.2014
<input checked="" type="checkbox"/> Horn Antenna	Schwarzbeck	BBHA 9120D	296	2 year	10.07.2014
<input type="checkbox"/> Horn Antenna	Schwarzbeck	BBHA 9120D	1151	2 year	07.05.2013
<input type="checkbox"/> EMI Test Receiver	Rohde & Schwarz	ESU 26	100241	1 year	06.18.2014
<input type="checkbox"/> Turn Table	INNCO Systems	DT3000-3T	DT3000/69	N/A	-
<input type="checkbox"/> Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170124	2 year	10.30.2013
<input type="checkbox"/> Power Amplifier	CERNEX	CBL18265035	22966	1 year	07.23.2014
<input checked="" type="checkbox"/> Software	Rohde & Schwarz	EMC32	-	-	-



6. CONCLUSION

The data collected shows that the **EUT Type: Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA and LTE Phone with Bluetooth, Wi-Fi and NFC, FCC ID: ZNFH735, Model: LG-H735** complies with §15.107 and §15.109 of the FCC rules.