

EMI CERTIFICATION REPORT

Applicant:

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

Date of Receipt: May 12, 2015**Date of Issue: May 28, 2015****Test Report No. HCT-E-1505-F017****HCT FRN: 0005866421****FCC ID:****ZNFV498**

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: Potable Tablet
Model Name: LG-V498
Additional Model Name: LGV498, V498
Test Port: USB / Earphone Port
Date of Test: May 21, 2015 - May 22, 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

Jeong-Hyun Choi
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EMC Team
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Reviewed By

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Technical Manager
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Certification Division

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DOCUMENT HISTORY

The revision history for this document is shown in table.

Version	Date	Description
HCT-E-1505-F017	May 28, 2015	Initial Release



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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-V498
FCC ID	ZNFV498
Additional Model	LGV498, V498
EUT Type	Potable Tablet
TX / RX Frequency	2 402 MHz to 2 480 MHz (Bluetooth) 2 412 MHz to 2 462 MHz (WLAN 2.4 GHz) 5 180 MHz to 5 240 MHz (WLAN 5 GHz BW 20) 5 260 MHz to 5 320 MHz (WLAN 5 GHz BW 20) 5 500 MHz to 5 700 MHz (WLAN 5 GHz BW 20) 5 745 MHz to 5 825 MHz (WLAN 5 GHz BW 20) 5 190 MHz to 5 230 MHz (WLAN 5 GHz BW 40) 5 270 MHz to 5 310 MHz (WLAN 5 GHz BW 40) 5 510 MHz to 5 670 MHz (WLAN 5 GHz BW 40) 5 755 MHz to 5 795 MHz (WLAN 5 GHz BW 40)

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-V498	LG	ZNFV498	Notebook PC, Earphone
USB cable	EAD62185903	Ningbo broad	-	EUT, Notebook PC
USB cable	EAD62150404	CRESYN	-	EUT, Notebook PC
USB cable	EAD62150407	KSD	-	EUT, Notebook PC
Earphone	EAB62950102	CRESYN	-	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)1.2
	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

※**NOTE:** This tablet device does not contain the minimum number of ports required for personal computer testing per ANSI C63.4, but the EUT is attached to a computer through its only available port, which represents worst case emissions. All other aspects of ANSI C63.4 testing requirements were maintained.



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 (dBμV)	Average (dBμV)
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

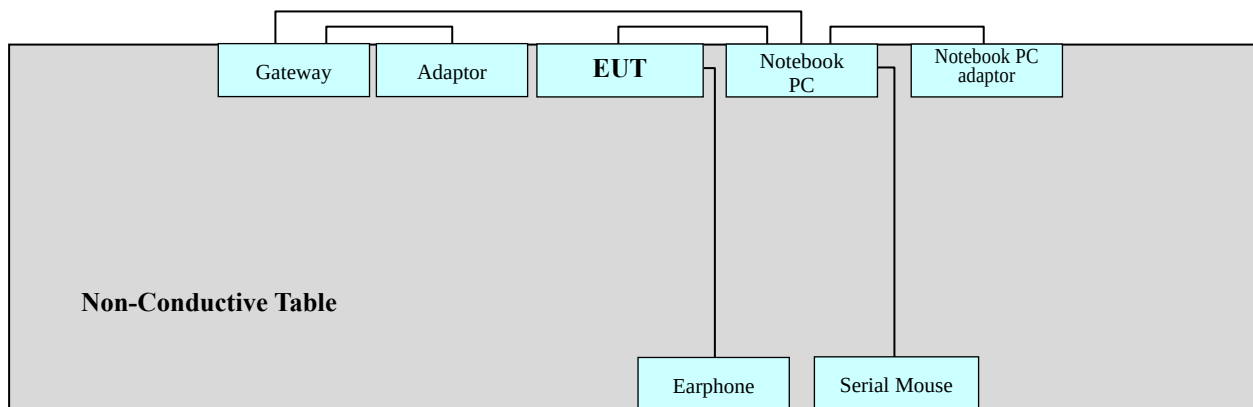


2.2.1 Frequency Range of Radiated Measurements

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

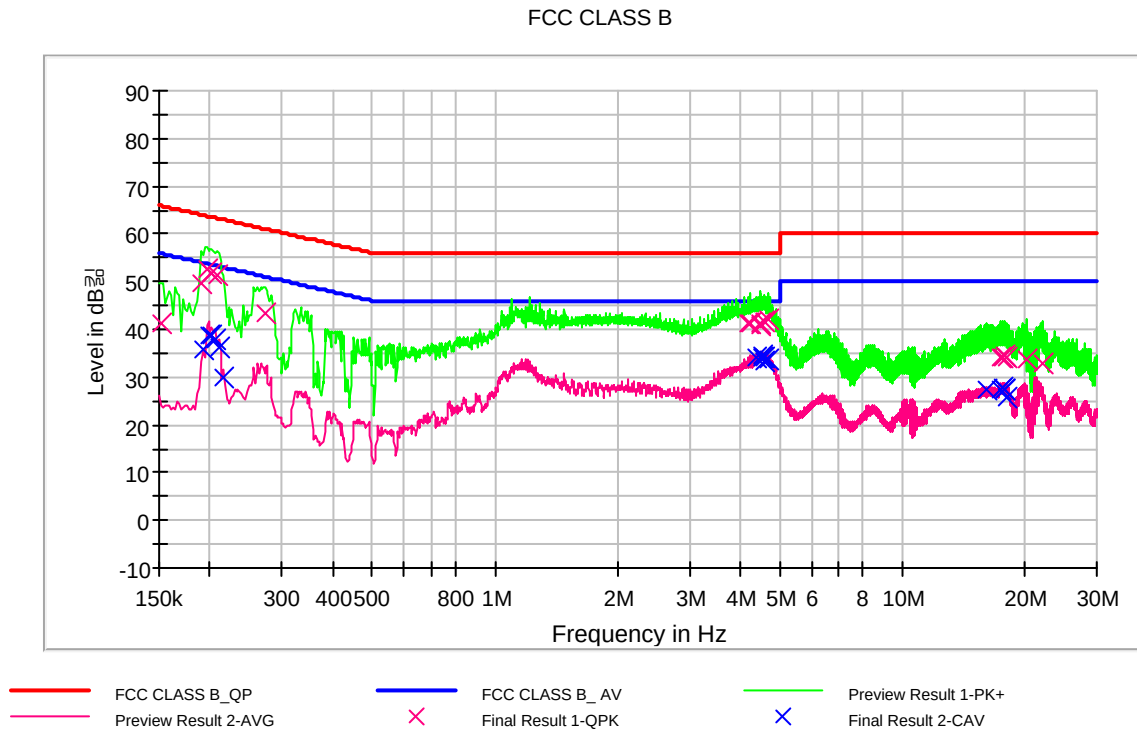
4.1 Conducted Emission Test

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
USB Cable Type	Ningbo Broad (EAD62185903)
Kind of Test Site	Shielded Room
Temperature	24.0 °C
Relative Humidity	41.8 %
Test Date	May 21, 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)**



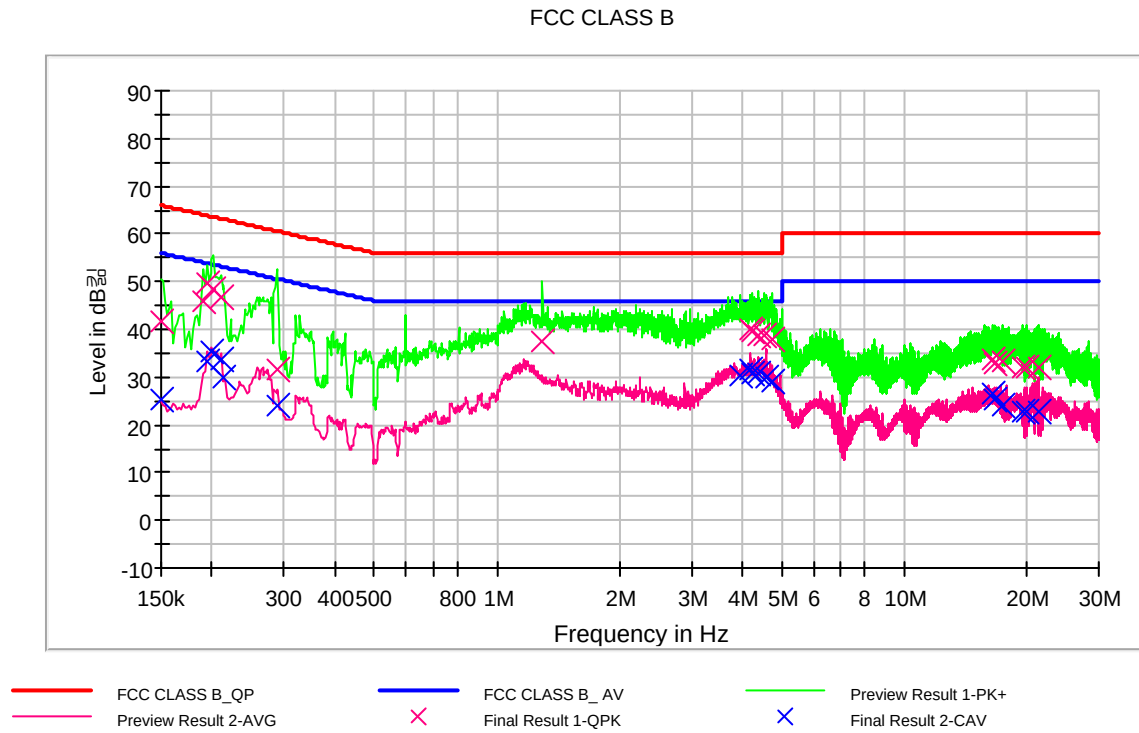
QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	41.3	9.000	L1	9.6	24.6	65.9
0.190000	49.7	9.000	L1	9.6	14.3	64.0
0.196000	52.6	9.000	L1	9.6	11.2	63.8
0.202000	51.9	9.000	L1	9.7	11.6	63.5
0.208000	51.4	9.000	L1	9.7	11.9	63.3
0.274000	43.6	9.000	L1	9.7	17.4	61.0
4.174000	41.2	9.000	L1	9.9	14.8	56.0
4.246000	41.1	9.000	L1	9.9	14.9	56.0
4.458000	41.3	9.000	L1	9.9	14.7	56.0
4.462000	40.7	9.000	L1	9.9	15.3	56.0
4.600000	41.9	9.000	L1	9.9	14.1	56.0
4.668000	42.0	9.000	L1	9.9	14.0	56.0
17.368000	34.1	9.000	L1	10.2	25.9	60.0
17.544000	34.3	9.000	L1	10.3	25.7	60.0
17.754000	34.5	9.000	L1	10.3	25.5	60.0
18.104000	34.0	9.000	L1	10.3	26.0	60.0
20.088000	33.8	9.000	L1	10.3	26.2	60.0
21.990000	33.0	9.000	L1	10.4	27.0	60.0



CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.192000	35.7	9.000	L1	9.6	18.2	53.9
0.198000	38.9	9.000	L1	9.6	14.8	53.7
0.202000	38.6	9.000	L1	9.7	14.9	53.5
0.206000	38.0	9.000	L1	9.7	15.4	53.4
0.210000	36.3	9.000	L1	9.7	16.9	53.2
0.216000	29.7	9.000	L1	9.7	23.3	53.0
4.360000	34.2	9.000	L1	9.9	11.8	46.0
4.530000	34.3	9.000	L1	9.9	11.7	46.0
4.550000	34.4	9.000	L1	9.9	11.6	46.0
4.596000	34.1	9.000	L1	9.9	11.9	46.0
4.600000	33.3	9.000	L1	9.9	12.7	46.0
4.674000	33.5	9.000	L1	9.9	12.5	46.0
16.024000	27.2	9.000	L1	10.2	22.8	50.0
17.368000	27.5	9.000	L1	10.2	22.5	50.0
17.544000	28.0	9.000	L1	10.3	22.0	50.0
17.820000	27.5	9.000	L1	10.3	22.5	50.0
17.824000	27.4	9.000	L1	10.3	22.6	50.0
18.104000	25.8	9.000	L1	10.3	24.2	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)
0.150000	41.8	9.000	N	9.6	24.2	66.0
0.190000	45.8	9.000	N	9.6	18.2	64.0
0.194000	49.8	9.000	N	9.6	14.1	63.9
0.202000	48.3	9.000	N	9.6	15.2	63.5
0.210000	46.8	9.000	N	9.6	16.4	63.2
0.288000	31.6	9.000	N	9.7	29.0	60.6
1.296000	37.6	9.000	N	9.7	18.4	56.0
4.168000	40.1	9.000	N	9.8	15.9	56.0
4.242000	39.6	9.000	N	9.8	16.4	56.0
4.384000	38.7	9.000	N	9.9	17.3	56.0
4.520000	38.9	9.000	N	9.9	17.1	56.0
4.740000	37.8	9.000	N	9.9	18.2	56.0
16.394000	33.5	9.000	N	10.2	26.5	60.0
16.744000	32.8	9.000	N	10.2	27.2	60.0
17.358000	33.1	9.000	N	10.2	26.9	60.0
19.488000	32.2	9.000	N	10.3	27.8	60.0
19.852000	32.0	9.000	N	10.3	28.0	60.0
21.412000	32.2	9.000	N	10.3	27.8	60.0



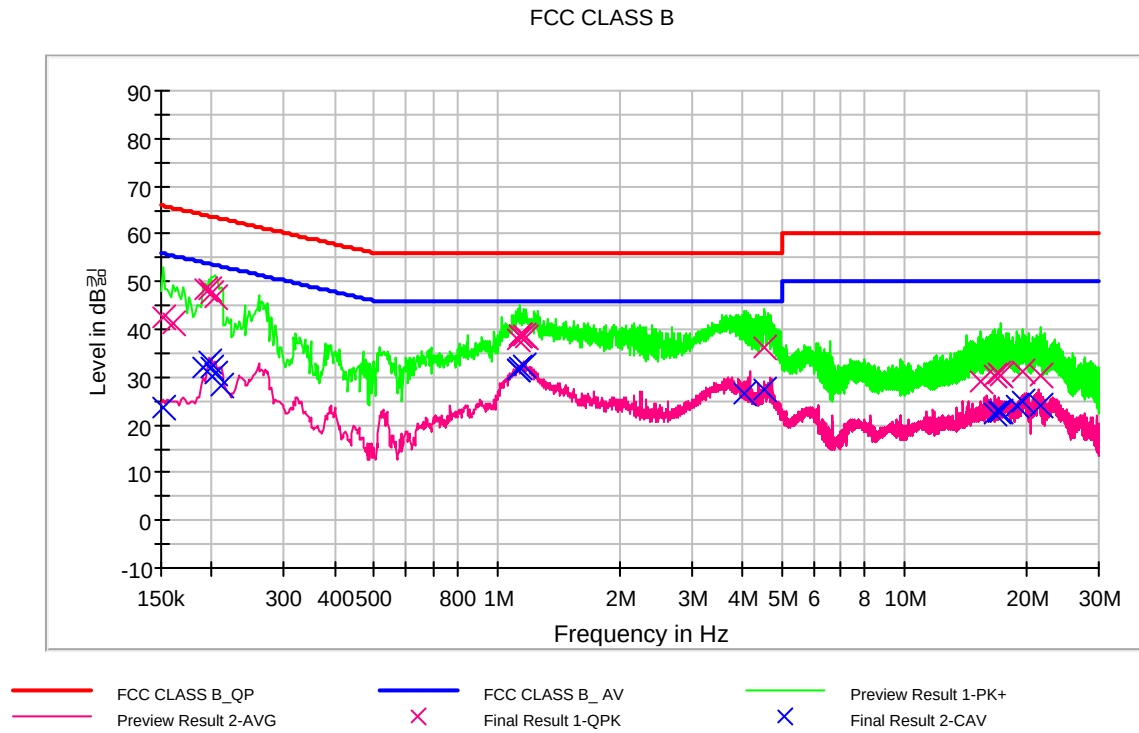
CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	25.2	9.000	N	9.6	30.8	56.0
0.194000	33.3	9.000	N	9.6	20.6	53.9
0.200000	35.3	9.000	N	9.6	18.3	53.6
0.210000	33.7	9.000	N	9.6	19.5	53.2
0.214000	29.8	9.000	N	9.6	23.2	53.0
0.290000	23.9	9.000	N	9.7	26.6	50.5
3.972000	30.4	9.000	N	9.8	15.6	46.0
4.164000	31.4	9.000	N	9.8	14.6	46.0
4.242000	30.9	9.000	N	9.8	15.1	46.0
4.380000	30.6	9.000	N	9.9	15.4	46.0
4.574000	30.1	9.000	N	9.9	15.9	46.0
4.740000	29.3	9.000	N	9.9	16.7	46.0
16.394000	26.4	9.000	N	10.2	23.6	50.0
16.744000	25.3	9.000	N	10.2	24.7	50.0
17.358000	23.9	9.000	N	10.2	26.1	50.0
19.488000	22.6	9.000	N	10.3	27.4	50.0
19.852000	22.6	9.000	N	10.3	27.4	50.0
21.412000	22.7	9.000	N	10.3	27.3	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
USB Cable Type	CRESYN (EAD62150404)
Kind of Test Site	Shielded Room
Temperature	24.0 °C
Relative Humidity	41.8 %
Test Date	May 21, 2015

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



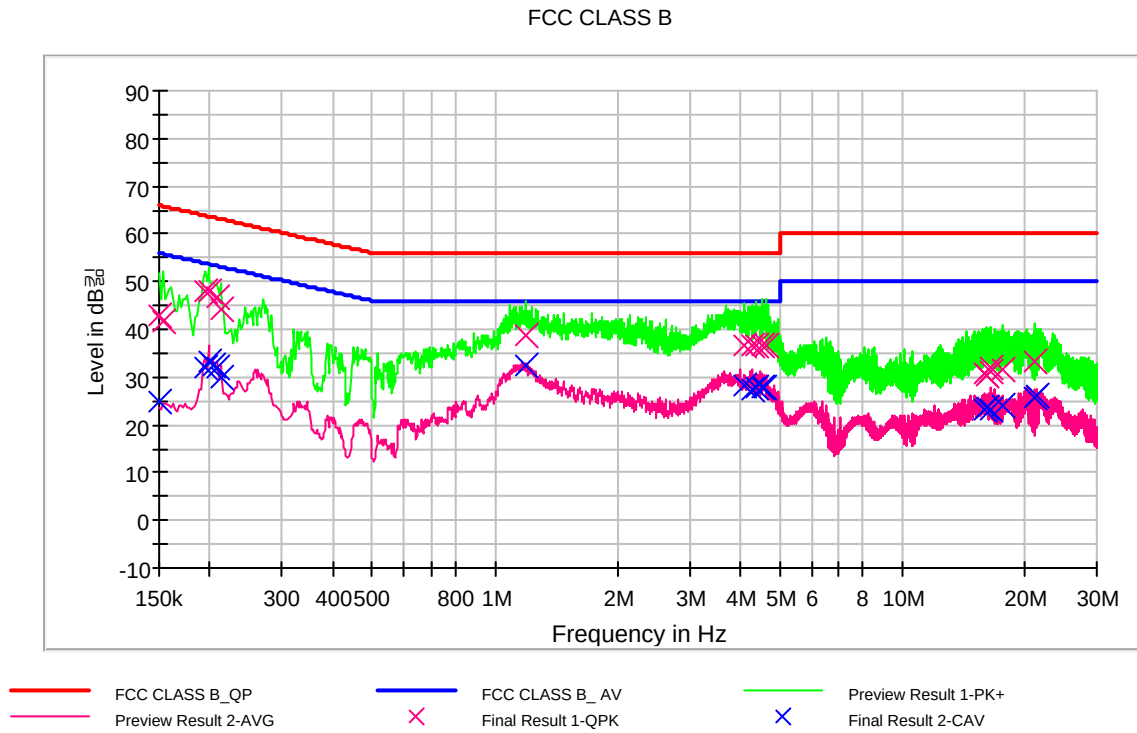
QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	42.6	9.000	L1	9.6	23.3	65.9
0.160000	41.1	9.000	L1	9.6	24.4	65.5
0.192000	48.6	9.000	L1	9.6	15.3	63.9
0.196000	48.4	9.000	L1	9.6	15.4	63.8
0.200000	47.8	9.000	L1	9.7	15.8	63.6
0.204000	46.7	9.000	L1	9.7	16.7	63.4
1.128000	37.9	9.000	L1	9.7	18.1	56.0
1.138000	38.9	9.000	L1	9.7	17.1	56.0
1.142000	38.8	9.000	L1	9.7	17.2	56.0
1.162000	38.9	9.000	L1	9.7	17.1	56.0
1.184000	38.2	9.000	L1	9.7	17.8	56.0
4.520000	36.4	9.000	L1	9.9	19.6	56.0
15.338000	29.2	9.000	L1	10.2	30.8	60.0
16.680000	30.3	9.000	L1	10.2	29.7	60.0
17.108000	30.6	9.000	L1	10.2	29.4	60.0
17.318000	30.3	9.000	L1	10.2	29.7	60.0
19.620000	31.2	9.000	L1	10.3	28.8	60.0
21.626000	30.4	9.000	L1	10.4	29.6	60.0



CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	23.8	9.000	L1	9.6	32.1	55.9
0.190000	32.2	9.000	L1	9.6	21.8	54.0
0.196000	33.3	9.000	L1	9.6	20.5	53.8
0.200000	31.9	9.000	L1	9.7	21.7	53.6
0.204000	30.7	9.000	L1	9.7	22.7	53.4
0.210000	28.2	9.000	L1	9.7	25.0	53.2
1.124000	31.5	9.000	L1	9.7	14.5	46.0
1.128000	31.7	9.000	L1	9.7	14.3	46.0
1.138000	32.2	9.000	L1	9.7	13.8	46.0
1.162000	32.3	9.000	L1	9.7	13.7	46.0
4.026000	26.5	9.000	L1	9.9	19.5	46.0
4.520000	27.5	9.000	L1	9.9	18.5	46.0
16.680000	22.3	9.000	L1	10.2	27.7	50.0
17.108000	22.9	9.000	L1	10.2	27.1	50.0
17.318000	22.9	9.000	L1	10.2	27.1	50.0
18.954000	23.8	9.000	L1	10.3	26.2	50.0
19.620000	25.0	9.000	L1	10.3	25.0	50.0
21.626000	24.1	9.000	L1	10.4	25.9	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)
0.150000	43.0	9.000	N	9.6	23.0	66.0
0.154000	41.7	9.000	N	9.6	24.1	65.8
0.194000	48.2	9.000	N	9.6	15.7	63.9
0.198000	47.8	9.000	N	9.6	15.9	63.7
0.208000	46.6	9.000	N	9.6	16.7	63.3
0.212000	44.0	9.000	N	9.6	19.1	63.1
1.190000	38.7	9.000	N	9.7	17.3	56.0
4.102000	36.5	9.000	N	9.8	19.5	56.0
4.296000	36.8	9.000	N	9.8	19.2	56.0
4.354000	36.7	9.000	N	9.9	19.3	56.0
4.522000	36.7	9.000	N	9.9	19.3	56.0
4.612000	36.5	9.000	N	9.9	19.5	56.0
15.880000	30.8	9.000	N	10.2	29.2	60.0
16.008000	30.4	9.000	N	10.2	29.6	60.0
16.460000	31.3	9.000	N	10.2	28.8	60.0
16.536000	32.1	9.000	N	10.2	27.9	60.0
17.598000	31.5	9.000	N	10.2	28.5	60.0
21.198000	33.1	9.000	N	10.3	26.9	60.0



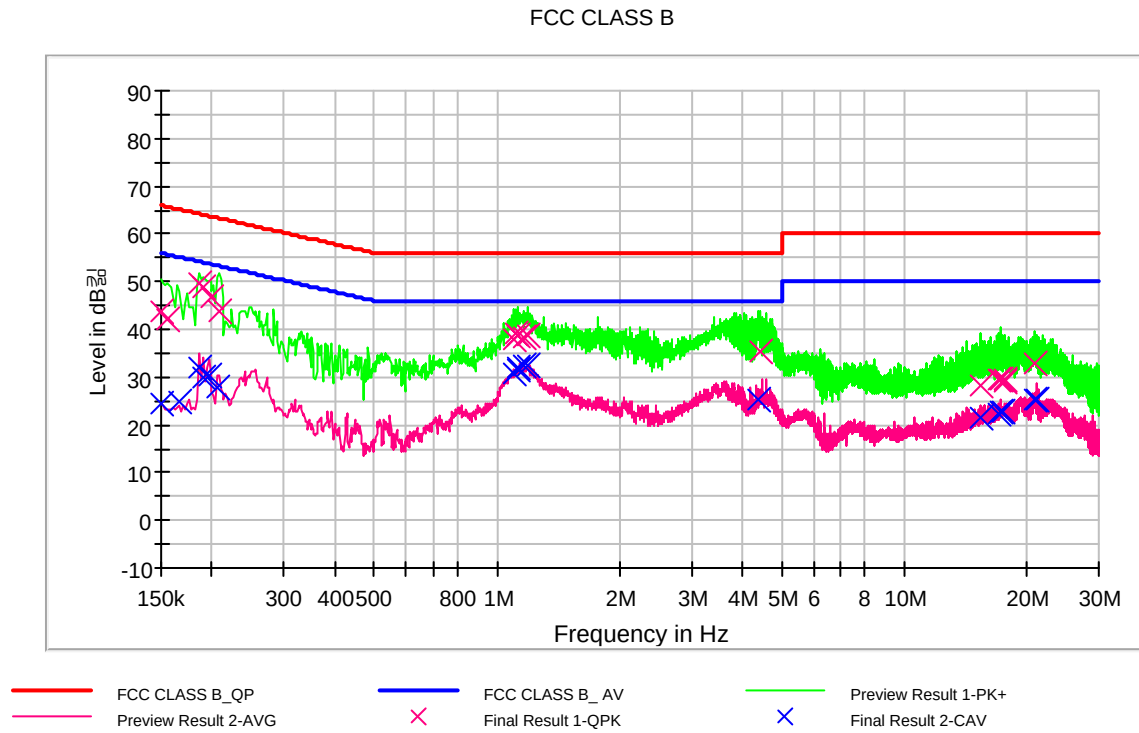
CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	24.8	9.000	N	9.6	31.2	56.0
0.194000	32.1	9.000	N	9.6	21.8	53.9
0.198000	33.2	9.000	N	9.6	20.5	53.7
0.204000	32.3	9.000	N	9.6	21.1	53.4
0.208000	32.1	9.000	N	9.6	21.2	53.3
0.212000	29.8	9.000	N	9.6	23.3	53.1
1.190000	32.5	9.000	N	9.7	13.5	46.0
4.102000	28.3	9.000	N	9.8	17.7	46.0
4.296000	27.3	9.000	N	9.8	18.7	46.0
4.354000	27.9	9.000	N	9.9	18.1	46.0
4.522000	28.0	9.000	N	9.9	18.0	46.0
4.566000	27.9	9.000	N	9.9	18.1	46.0
15.880000	23.4	9.000	N	10.2	26.6	50.0
16.008000	23.4	9.000	N	10.2	26.6	50.0
16.460000	23.3	9.000	N	10.2	26.7	50.0
17.598000	24.0	9.000	N	10.2	26.0	50.0
21.198000	25.6	9.000	N	10.3	24.4	50.0
21.404000	26.1	9.000	N	10.3	23.9	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
USB Cable Type	KSD (EAD62150407)
Kind of Test Site	Shielded Room
Temperature	24.0 °C
Relative Humidity	41.8 %
Test Date	May 21, 2015

**Figure 5: Spectral Diagrams, Conducted Emission, AC Main Port, Line (L1)**



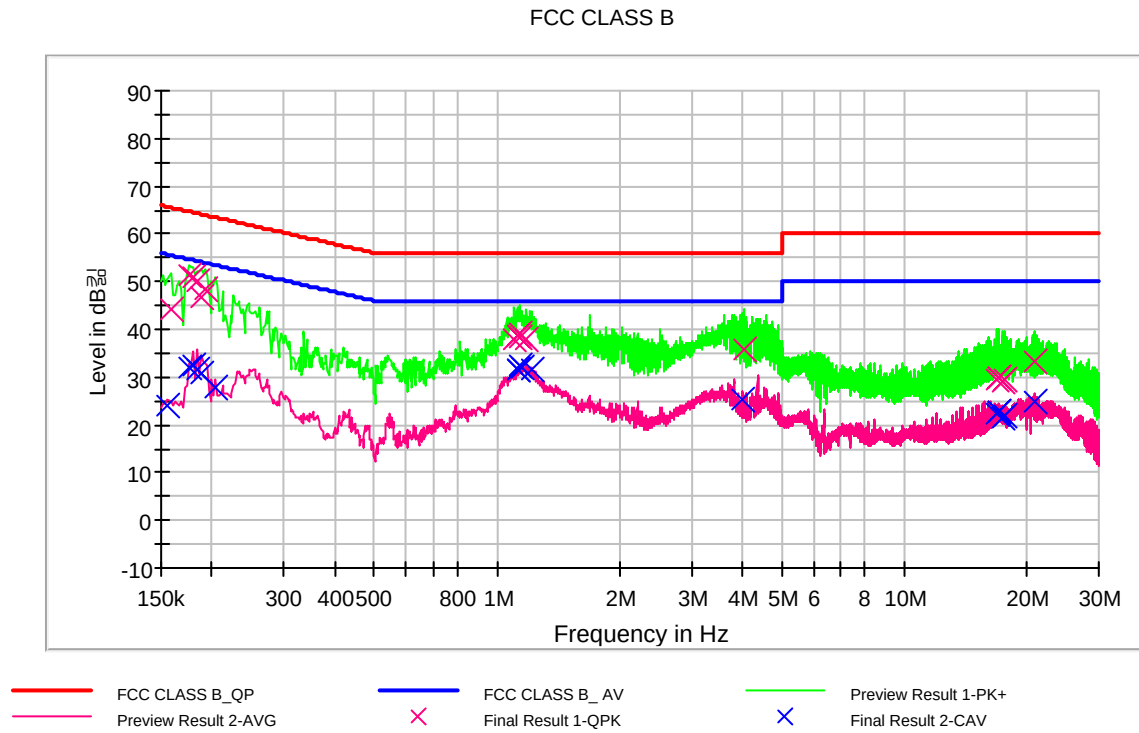
QuasiPeak Final Result, Line (L1)

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	43.8	9.000	L1	9.6	22.2	66.0
0.156000	42.1	9.000	L1	9.6	23.6	65.7
0.186000	49.5	9.000	L1	9.6	14.7	64.2
0.190000	49.0	9.000	L1	9.6	15.0	64.0
0.198000	46.5	9.000	L1	9.6	17.2	63.7
0.208000	43.9	9.000	L1	9.7	19.4	63.3
1.100000	38.0	9.000	L1	9.7	18.0	56.0
1.118000	39.0	9.000	L1	9.7	17.0	56.0
1.124000	38.7	9.000	L1	9.7	17.3	56.0
1.168000	38.5	9.000	L1	9.7	17.5	56.0
1.190000	38.7	9.000	L1	9.7	17.3	56.0
4.424000	35.4	9.000	L1	9.9	20.6	56.0
15.416000	28.1	9.000	L1	10.2	31.9	60.0
16.940000	29.3	9.000	L1	10.2	30.7	60.0
17.252000	29.6	9.000	L1	10.2	30.4	60.0
17.546000	29.5	9.000	L1	10.3	30.5	60.0
17.706000	29.0	9.000	L1	10.3	31.0	60.0
20.864000	32.7	9.000	L1	10.3	27.3	60.0



CAverage Final Result, Line (L1)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	24.4	9.000	L1	9.6	31.6	56.0
0.166000	25.0	9.000	L1	9.6	30.2	55.2
0.186000	32.1	9.000	L1	9.6	22.1	54.2
0.190000	30.0	9.000	L1	9.6	24.0	54.0
0.196000	30.5	9.000	L1	9.6	23.3	53.8
0.206000	27.9	9.000	L1	9.7	25.5	53.4
1.100000	30.9	9.000	L1	9.7	15.1	46.0
1.124000	31.4	9.000	L1	9.7	14.6	46.0
1.130000	31.9	9.000	L1	9.7	14.1	46.0
1.168000	32.3	9.000	L1	9.7	13.7	46.0
1.190000	32.3	9.000	L1	9.7	13.7	46.0
4.384000	25.5	9.000	L1	9.9	20.5	46.0
15.416000	21.5	9.000	L1	10.2	28.5	50.0
16.940000	22.2	9.000	L1	10.2	27.8	50.0
17.252000	22.6	9.000	L1	10.2	27.4	50.0
17.364000	22.7	9.000	L1	10.2	27.3	50.0
20.864000	25.4	9.000	L1	10.3	24.6	50.0
21.068000	25.1	9.000	L1	10.3	24.9	50.0

**Figure 6: 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)
0.158000	44.0	9.000	N	9.6	21.6	65.6
0.176000	51.2	9.000	N	9.6	13.5	64.7
0.180000	50.8	9.000	N	9.6	13.7	64.5
0.184000	49.9	9.000	N	9.6	14.4	64.3
0.188000	46.8	9.000	N	9.6	17.3	64.1
0.192000	48.2	9.000	N	9.6	15.7	63.9
1.106000	38.1	9.000	N	9.7	17.9	56.0
1.120000	38.7	9.000	N	9.7	17.3	56.0
1.134000	38.5	9.000	N	9.7	17.5	56.0
1.142000	39.1	9.000	N	9.7	16.9	56.0
1.184000	38.0	9.000	N	9.7	18.0	56.0
4.040000	35.8	9.000	N	9.8	20.2	56.0
16.832000	29.3	9.000	N	10.2	30.7	60.0
16.974000	29.9	9.000	N	10.2	30.1	60.0
17.114000	29.9	9.000	N	10.2	30.1	60.0
17.334000	28.9	9.000	N	10.2	31.1	60.0
17.560000	29.6	9.000	N	10.2	30.4	60.0
20.934000	33.2	9.000	N	10.3	26.8	60.0



CAverage Final Result, Line (N)

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.156000	24.0	9.000	N	9.6	31.7	55.7
0.176000	32.1	9.000	N	9.6	22.6	54.7
0.180000	32.6	9.000	N	9.6	21.9	54.5
0.184000	31.8	9.000	N	9.6	22.5	54.3
0.188000	30.7	9.000	N	9.6	23.4	54.1
0.204000	28.0	9.000	N	9.6	25.4	53.4
1.120000	31.5	9.000	N	9.7	14.5	46.0
1.128000	31.7	9.000	N	9.7	14.3	46.0
1.140000	32.4	9.000	N	9.7	13.6	46.0
1.148000	31.9	9.000	N	9.7	14.1	46.0
1.212000	31.7	9.000	N	9.7	14.3	46.0
4.016000	25.2	9.000	N	9.8	20.8	46.0
16.832000	22.5	9.000	N	10.2	27.5	50.0
16.974000	22.7	9.000	N	10.2	27.3	50.0
17.114000	22.6	9.000	N	10.2	27.4	50.0
17.334000	21.6	9.000	N	10.2	28.4	50.0
17.560000	21.8	9.000	N	10.2	28.2	50.0
20.934000	24.9	9.000	N	10.3	25.1	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
USB Cable Type	Ningbo Broad (EAD62185903)
Kind of Test Site	3 m semi anechoic chamber
Temperature	22.7
Relative Humidity	40.7
Test Date	May 21, 2015

Frequency (MHz)	Quasi Peak (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)
32.943888	23.8	100.0	V	284.0	14.9	16.2	40.0
50.542766	23.2	100.0	V	275.0	15.9	16.8	40.0
84.628858	35.2	265.0	H	76.0	11.6	4.8	40.0
266.554309	34.1	100.0	H	301.0	16.9	11.9	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
USB Cable Type	CRESYN (EAD62150404)
Kind of Test Site	3 m semi anechoic chamber
Temperature	22.7
Relative Humidity	40.7
Test Date	May 21, 2015

Frequency (MHz)	Quasi Peak (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)
33.487776	16.4	150.0	V	273.0	14.9	23.6	40.0
60.038317	21.1	100.0	V	18.0	15.5	18.9	40.0
84.668858	34.2	350.0	H	267.0	11.6	5.8	40.0



Rule Part / Standard	FCC PART 15 Subpart B Class B
Detector	Quasi-Peak
Bandwidth	120 kHz (6 dB)
Operation Mode	Data Communication mode
USB Cable Type	KSD (EAD62150407)
Kind of Test Site	3 m semi anechoic chamber
Temperature	22.7
Relative Humidity	40.7
Test Date	May 21, 2015

Frequency (MHz)	Quasi Peak (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)
39.479439	23.1	100.0	V	30.0	15.4	16.9	40.0
48.838878	23.1	100.0	V	109.0	15.9	16.9	40.0
84.588858	33.5	350.0	H	246.0	11.6	6.5	40.0



-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	1.2 GHz
Testing Frequency Range	1 GHz to 6 GHz
Operation Mode	Data Communication mode
USB Cable Type	Ningbo Broad (EAD62185903)
Kind of Test Site	3 m semi anechoic chamber
Temperature	23.2
Relative Humidity	41.2
Test Date	May 22, 2015

Frequency (MHz)	Peak (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)
1331.212425	52.5	100.0	V	28.0	-9.3	21.5	74.0
2074.398797	52.5	100.0	V	28.0	-7.4	21.6	74.0
2660.370741	50.4	100.0	V	198.0	-4.8	23.6	74.0

Frequency (MHz)	CAverage (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)
1331.212425	27.8	100.0	V	28.0	-9.3	26.2	54.0
2074.398797	29.7	100.0	V	28.0	-7.4	24.3	54.0
2660.370741	31.0	100.0	V	198.0	-4.8	23.0	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	1.2 GHz
Testing Frequency Range	1 GHz to 6 GHz
Operation Mode	Data Communication mode
USB Cable Type	CRESYN (EAD62150404)
Kind of Test Site	3 m semi anechoic chamber
Temperature	23.2
Relative Humidity	41.2
Test Date	May 22, 2015

Frequency (MHz)	Peak (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)
1331.012024	51.6	100.0	V	28.0	-9.3	22.4	74.0
1991.833667	55.4	100.0	V	28.0	-7.8	18.6	74.0
2657.064128	50.3	100.0	V	42.0	-4.8	23.7	74.0

Frequency (MHz)	CAverage (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)
1331.012024	27.6	100.0	V	28.0	-9.3	26.4	54.0
1991.833667	29.3	100.0	V	28.0	-7.8	24.7	54.0
2657.064128	31.6	100.0	V	42.0	-4.8	22.4	54.0



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	1.2 GHz
Testing Frequency Range	1 GHz to 6 GHz
Operation Mode	Data Communication mode
USB Cable Type	KSD (EAD62150407)
Kind of Test Site	3 m semi anechoic chamber
Temperature	23.2
Relative Humidity	41.2
Test Date	May 22, 2015

Frequency (MHz)	Peak (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)
1333.016032	52.6	100.0	V	27.0	-9.3	21.4	74.0
2075.701403	53.6	100.0	V	27.0	-7.4	20.4	74.0
2657.264529	52.0	100.0	V	27.0	-4.8	22.0	74.0

Frequency (MHz)	CAverage (dBuV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)
1333.016032	27.7	100.0	V	27.0	-9.3	26.3	54.0
2075.701403	28.7	100.0	V	27.0	-7.4	25.3	54.0
2657.264529	31.8	100.0	V	27.0	-4.8	22.2	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>					
☒ EMI Test Receiver	Rohde & Schwarz	ESCI	100584	1 year	01.13.2015
☒ LISN	Rohde & Schwarz	ESH3-Z5	100282	1 year	06.10.2014
☒ LISN	Rohde & Schwarz	ENV216	100073	1 year	01.13.2015
☒ Software	Rohde & Schwarz	EMC32	-	-	-
<u>Radiated Emission</u>					
-For measurement below 1 GHz					
☒ EMI Test Receiver	Rohde & Schwarz	ESI40	831564103	1 year	04.01.2015
☒ Trilog Antenna	Schwarzbeck	VULB9160	3301	2 year	11.17.2014
☒ Antenna master	HD GmbH	MA240	240/520	N/A	-
☒ Antenna master controller	HD GmbH	HD 100	100/637	N/A	-
☒ Turn Table	EMCO	1060-2M	-	N/A	-
☒ Turn Table controller	EMCO	2090	9702-1224	N/A	-
☐ EMI Test Receiver	Rohde & Schwarz	ESU 26	100241	1 year	06.18.2014
☐ Antenna master	INNCO Systems	MA4000-EP	MA4000/283	N/A	-
☐ Turn Table	INNCO Systems	DT3000-3T	DT3000/69	N/A	-
☒ Software	Rohde & Schwarz	EMC32	-	-	-
-For measurement above 1 GHz					
☒ EMI Test Receiver	Rohde & Schwarz	ESI40	831564103	1 year	04.01.2015
☒ Antenna master	HD GmbH	MA240	240/520	N/A	-
☒ Antenna master controller	HD GmbH	HD 100	100/637	N/A	-
☒ Turn Table	EMCO	1060-2M	-	N/A	-
☒ Turn Table controller	EMCO	2090	9702-1224	N/A	-
☐ Power Amplifier	CERNEX	CBLU1183540	21691	1 year	07.11.2014
☒ Power Amplifier	CERNEX	CBLU5183530	24348	1 year	06.11.2014
☒ Horn Antenna	Schwarzbeck	BBHA 9120D	296	2 year	10.07.2014
☐ Horn Antenna	Schwarzbeck	BBHA 9120D	1151	2 year	07.05.2013
☐ EMI Test Receiver	Rohde & Schwarz	ESU 26	100241	1 year	06.18.2014
☐ Turn Table	INNCO Systems	DT3000-3T	DT3000/69	N/A	-
☐ Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170124	2 year	10.30.2013
☐ Power Amplifier	CERNEX	CBL18265035	22966	1 year	07.23.2014
☒ Software	Rohde & Schwarz	EMC32	-	-	-



6. CONCLUSION

The data collected shows that the **EUT Type: Potable Tablet, FCC ID: ZNFV498, Model: LG-V498** complies with §15.107 and §15.109 of the FCC rules.