



## FCC PART 15 B

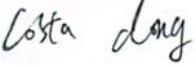
## TEST REPORT

For

### Hena Digital Technology (Shenzhen) Co., Ltd.

3F, South Tower, Jiuzhou Electric Building, Southern No, 12Rd, High-tech Industrial Park,  
Nanshan District, Shenzhen, China

**FCC ID: M7C-MD92**

<b>Report Type:</b> Original Report	<b>Product Type:</b> Tablet with DVD player
<b>Test Engineer:</b> <u>Costa Dong</u> 	
<b>Report Number:</b> <u>RDG160223004-00B</u>	
<b>Report Date:</b> <u>2016-04-12</u>	
<b>Reviewed By:</b> <u>Dean Liu</u> <u>RF Engineer</u>	
<b>Test Laboratory:</b> Bay Area Compliance Laboratories Corp. (Dongguan) No.69 Pulongcun, Puxinhu Industrial Zone, Tangxia, Dongguan, Guangdong, China Tel: +86-769-86858888 Fax: +86-769-86858891 <a href="http://www.baclcorp.com.cn">www.baclcorp.com.cn</a>	

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Dongguan).

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## GENERAL INFORMATION

### Product Description for Equipment Under Test (EUT)

The *Hena Digital Technology (Shenzhen) Co., Ltd.*'s product, model number: *MD-92(FCC ID: M7C-MD92)* (the "EUT") in this report was a *Tablet with DVD player*, which was measured approximately: 22.4cm (L) x 17.0cm (W) x 3.4cm (H), rated input voltage: DC3.7V rechargeable Li-ion battery or DC5.0V charging from adapter. The highest operating frequency is 2462 MHz.

Adapter information:

Model: K15S050250U

Input: 100-240V~ 50/60Hz 0.5A

Output: DC 5.0V, 2.5A

*Note: The series product, model MD-92, MD-91, MD-93, MD-94, MD-95, MD-96, MD-97, MD-98, MD-99, MD91, MD92, MD93, MD94, MD95, MD96, MD97, MD98, MD99, MD91L, MD-91L, MD92L, MD-92L, MD9x\*, MD-9x\** (*x* can be 0-9, \*can be A-Z), *SY-Z4900, NID-9004, TBDV986W* are electrically identical, the difference between them just is the model name, we selected MD-92 for fully testing, the details was explained in the attached declaration letter.

All measurement and test data in this report was gathered from production sample serial number: 160223004 (Assigned by BACL, Dongguan). The EUT was received on 2016-03-02.

### Objective

This test report is prepared on behalf of *Hena Digital Technology (Shenzhen) Co., Ltd.* in accordance with Part 2, Subpart J, and Part 15-Subparts A and B of the Federal Communications Commission's rules.

The objective of the manufacturer is to determine the compliance of EUT with FCC Part 15 B Class B.

### Related Submittal(s)/Grant(s)

FCC Part 15C DTS submissions with FCC ID: M7C-MD92.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All radiated and conducted emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Dongguan).

**Test Facility**

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industrial Zone, Tangxia, Dongguan, Guangdong, China

Test site at Bay Area Compliance Laboratories Corp. (Dongguan) has been fully described in reports submitted to the Federal Communications Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February 06, 2015.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 273710. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration

The system was configured for testing in a typical fashion (as normally used by a typical user).

### EUT Exercise Software

The software “winthrax.exe” was used during test.

### Equipment Modifications

No modification was made to the EUT tested.

### Support Equipment List and Details

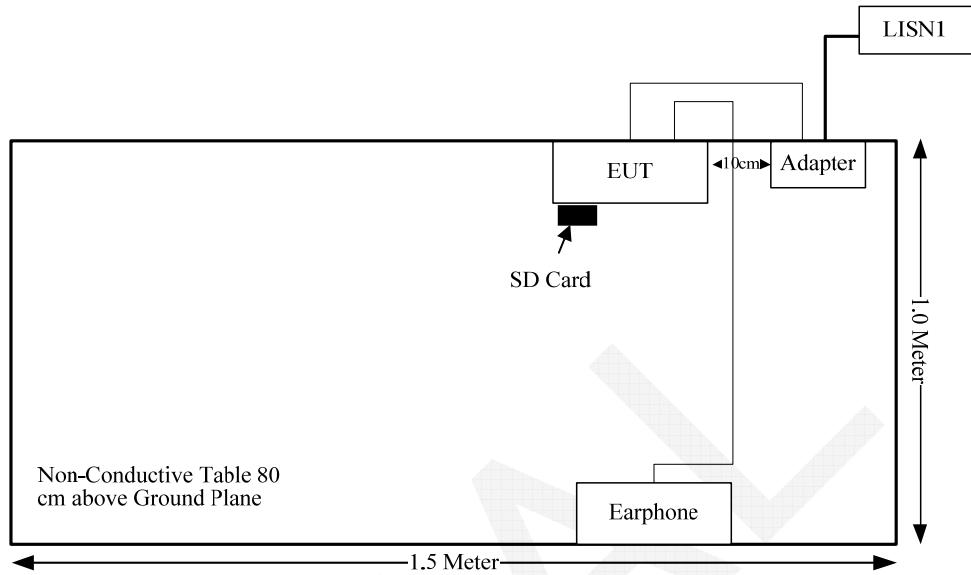
Manufacturer	Description	Model	Serial Number
DELL	Laptop	PP11L	QDS-BRCM1017
HP	Printer	C3941A	JPTVOB2337
DELL	Keyboard	L100	CNORH656658907BL05DC
AST	Modem	AEM-2100	0293
SanDisk	SD Card	2.0GB	/
Pro-Instrument	DC power	pps3300	/

### Support Cable List and Details

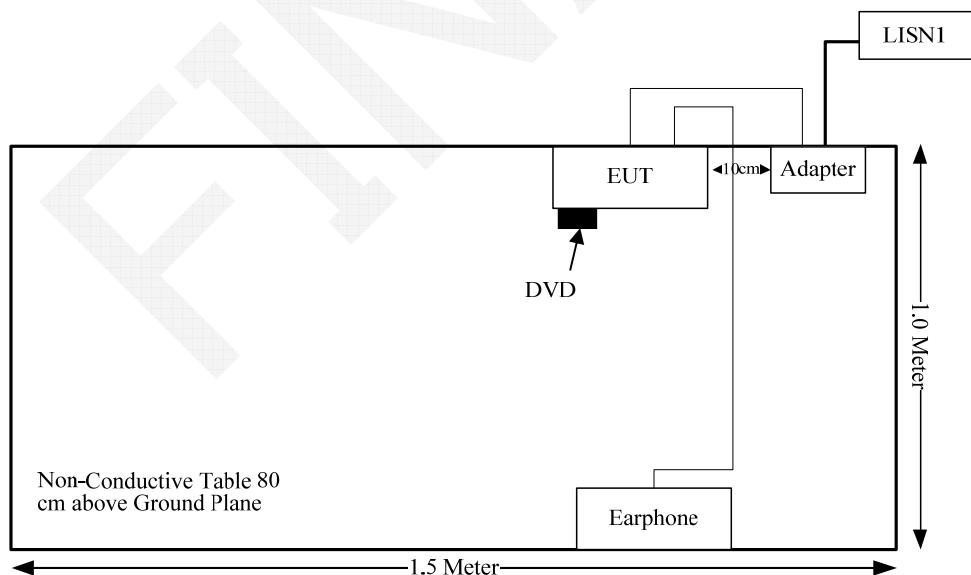
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Serial Cable	yes	no	1.2	Serial Port of Laptop	Modem
Parallel Cable	yes	no	1.2	Parallel Port of Laptop	Printer
Keyboard Cable	yes	no	1.8	USB Port of Laptop	Keyboard
Adapter Cable	no	no	1	Adapter	EUT
USB Cable	no	no	0.23	USB Port of Laptop	EUT
Earphone Cable	no	no	1.2	EUT	N/A

## Configuration of Test Setup

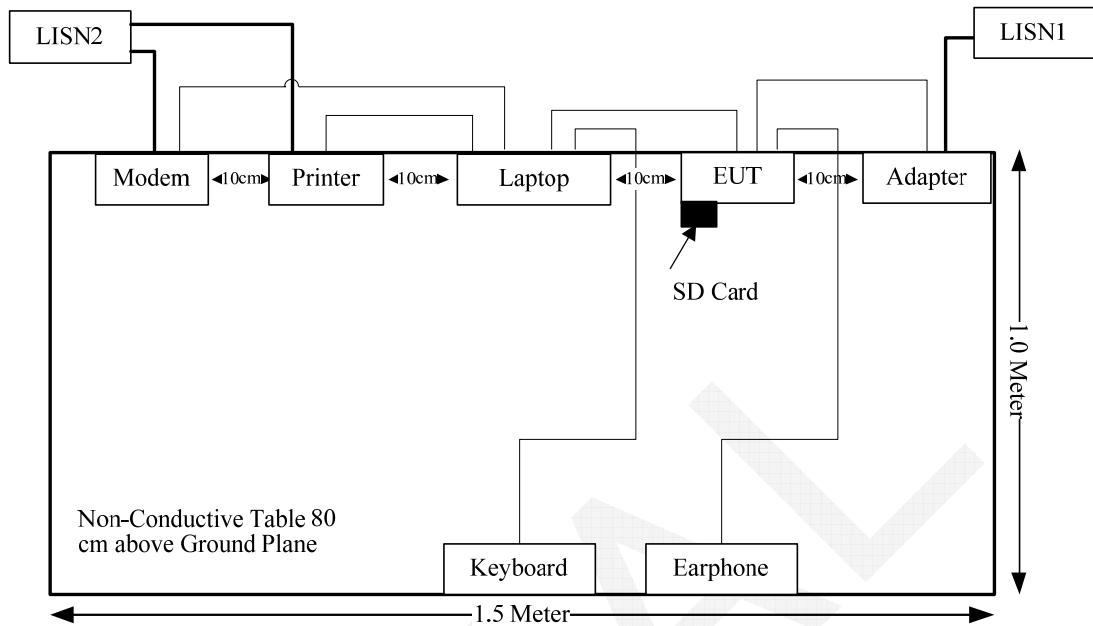
Tested Mode: SD Card Playing



Tested Mode: DVD Playing



Tested Mode: Downloading



## SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§15.107	Conducted Emissions	Compliance
§15.109	Radiated Emissions	Compliance

## FCC§15.107 - CONDUCTED EMISSIONS

### Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are Receiver, cable loss, and LISN.

Compliance or non-compliance with a disturbance limit shall be determined in the following manner:

If  $U_{\text{lab}}$  is less than or equal to  $U_{\text{cispr}}$  of Table 1, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

If  $U_{\text{lab}}$  is greater than  $U_{\text{cispr}}$  of Table 1, then:

- compliance is deemed to occur if no measured disturbance level, increased by  $(U_{\text{lab}} - U_{\text{cispr}})$ , exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by  $(U_{\text{lab}} - U_{\text{cispr}})$ , exceeds the disturbance limit.

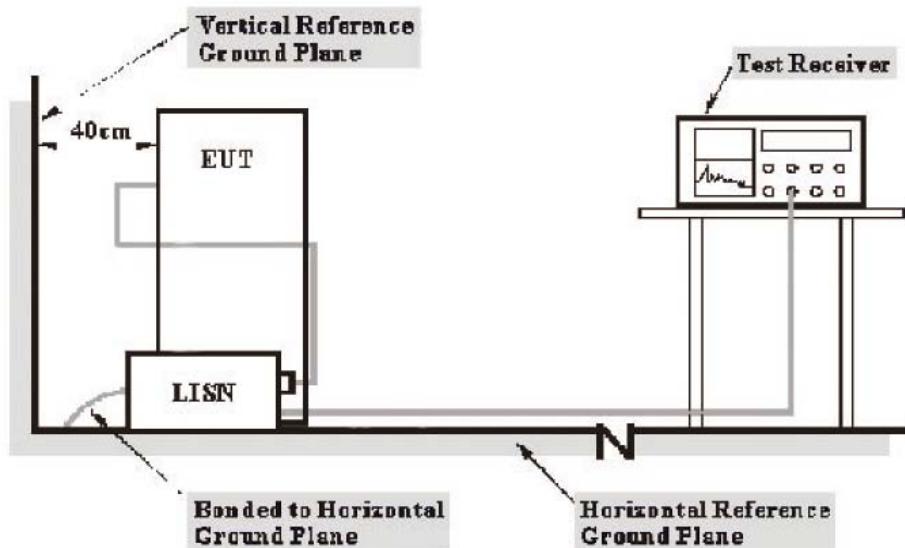
Based on CISPR 16-4-2: 2011, measurement uncertainty of conducted disturbance at mains port using AMN at Bay Area Compliance Laboratories Corp. (Dongguan) is 3.12 dB (150 kHz to 30 MHz).

Table 1 – Values of  $U_{\text{cispr}}$

Measurement	$U_{\text{cispr}}$
Conducted disturbance at mains port using AMN (150 kHz to 30 MHz)	3.4 dB

Note: The  $U_{\text{lab}} > U_{\text{cispr}}$ , so the  $U_{\text{lab}}$  is add in the calculation.

### EUT Setup



**Note:** 1. Support units were connected to second LISN.  
2. Both of LISNs (AMN) 80 cm from EUT and at the least 30 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15 B Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The adapter of laptop was connected to a 120V/60Hz AC power source.

### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

### Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCS 30	830245/006	2015-10-20	2016-10-20
R&S	L.I.S.N	ESH2-Z5	892107/021	2015-07-16	2016-07-15
R&S	Two-line V-network	ENV 216	3560.6550.12	2015-11-26	2016-11-25
N/A	Coaxial Cable	1.8m	N/A	2015-05-06	2016-05-06
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A

\* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

### Test Procedure

During the conducted emission test, the adapter of laptop was connected to the outlet of the first LISN and the other support equipments were connected to the outlet of the second LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

### Corrected Amplitude & Margin Calculation

The basic equation is as follows:

$$V_C = V_R + A_C + VDF$$

Herein,

$V_C$ : corrected voltage amplitude

$V_R$ : reading voltage amplitude

$A_c$ : attenuation caused by cable loss

VDF: voltage division factor of AMN or ISN

The “Margin” column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of 7dB means the emission is 7dB below the maximum limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

## Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15 B Class B, with the worst margin reading of:

**6.8dB at 0.415949 MHz** in the **Neutral** conducted mode for *Downloading*

## Test Data

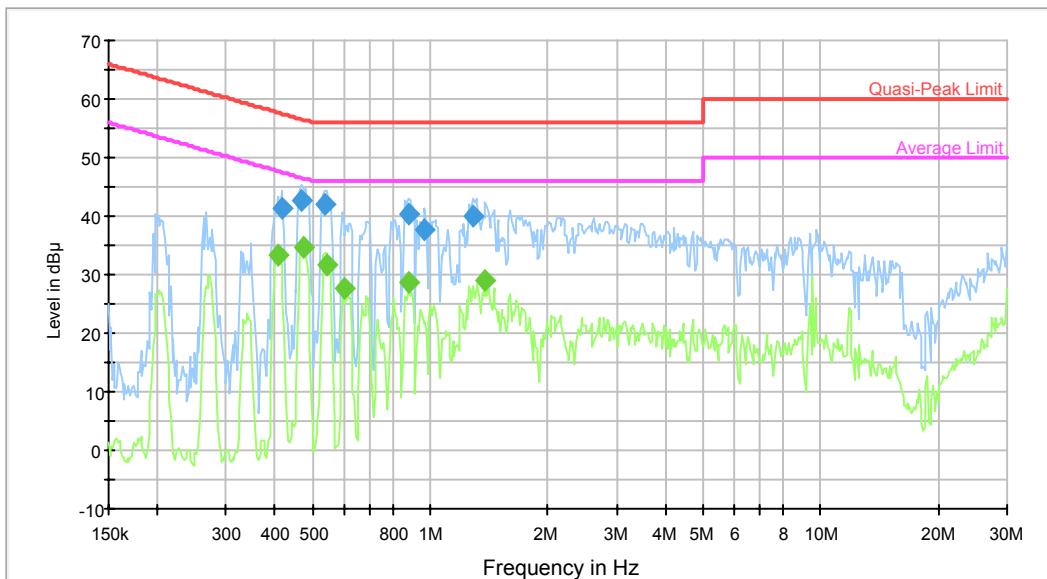
### Environmental Conditions

<b>Temperature:</b>	22.8°C
<b>Relative Humidity:</b>	40 %
<b>ATM Pressure:</b>	101.6kPa

*The testing was performed by Costa Dong on 2016-03-03.*

*Test Mode: SD Card Playing*

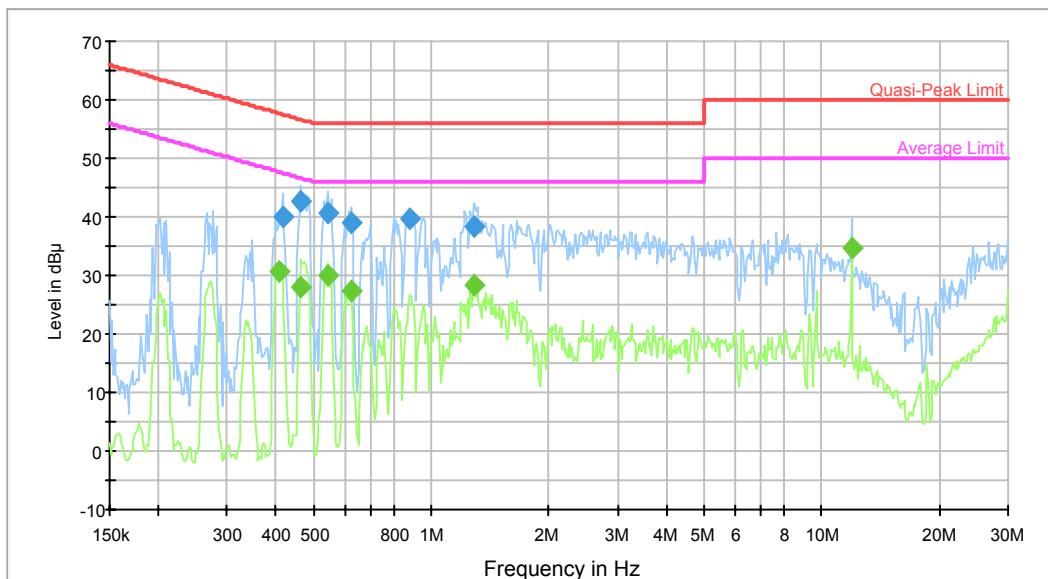
**AC120V, 60Hz, Line:**



Frequency (MHz)	Quasi Peak (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
0.415949	41.2	9.000	L1	9.8	16.3	57.5	Compliance
0.468757	42.5	9.000	L1	9.8	14.0	56.5	Compliance
0.536756	42.0	9.000	L1	9.8	14.0	56.0	Compliance
0.879690	40.4	9.000	L1	9.8	15.6	56.0	Compliance
0.967957	37.5	9.000	L1	9.8	18.5	56.0	Compliance
1.289541	39.9	9.000	L1	9.8	16.1	56.0	Compliance

Frequency (MHz)	Average (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
0.409372	33.2	9.000	L1	9.8	14.5	47.7	Compliance
0.472507	34.6	9.000	L1	9.8	11.9	46.5	Compliance
0.541050	31.7	9.000	L1	9.8	14.3	46.0	Compliance
0.600101	27.8	9.000	L1	9.8	18.2	46.0	Compliance
0.879690	28.6	9.000	L1	9.8	17.4	46.0	Compliance
1.385415	29.2	9.000	L1	9.8	16.8	46.0	Compliance

**AC120V, 60Hz, Neutral:**

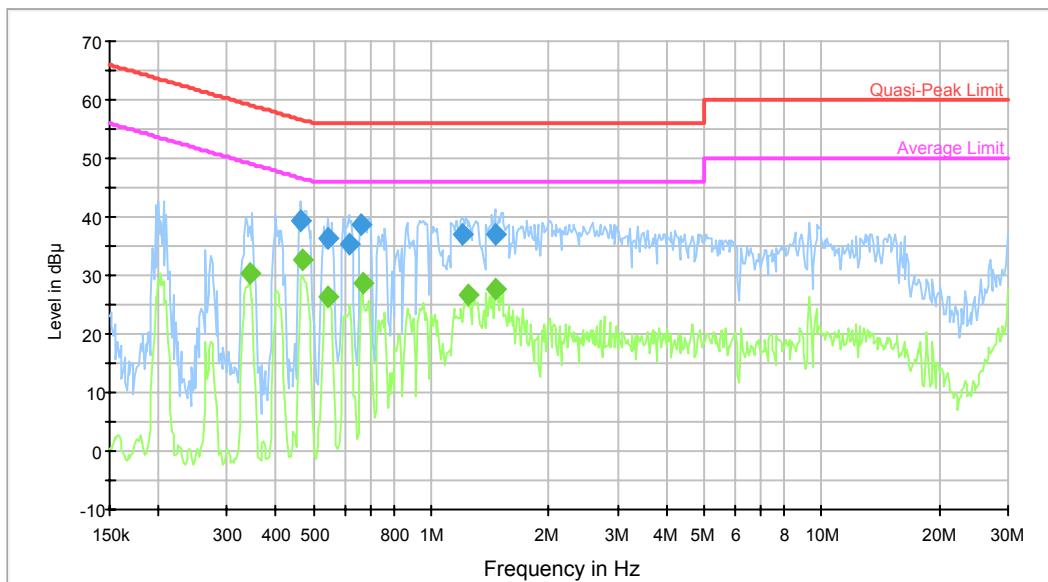


Frequency (MHz)	Quasi Peak (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
0.415949	40.1	9.000	N	9.7	17.4	57.5	Compliance
0.465037	42.6	9.000	N	9.7	14.0	56.6	Compliance
0.541050	40.6	9.000	N	9.7	15.4	56.0	Compliance
0.624492	38.9	9.000	N	9.7	17.1	56.0	Compliance
0.879690	39.6	9.000	N	9.8	16.4	56.0	Compliance
1.289541	38.2	9.000	N	9.8	17.8	56.0	Compliance

Frequency (MHz)	Average (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
0.409372	30.8	9.000	N	9.7	16.8	47.7	Compliance
0.465037	27.9	9.000	N	9.7	18.7	46.6	Compliance
0.541050	29.9	9.000	N	9.7	16.1	46.0	Compliance
0.624492	27.3	9.000	N	9.7	18.7	46.0	Compliance
1.289541	28.4	9.000	N	9.8	17.6	46.0	Compliance
11.910327	34.7	9.000	N	10.1	15.4	50.0	Compliance

*Test Mode: DVD Playing*

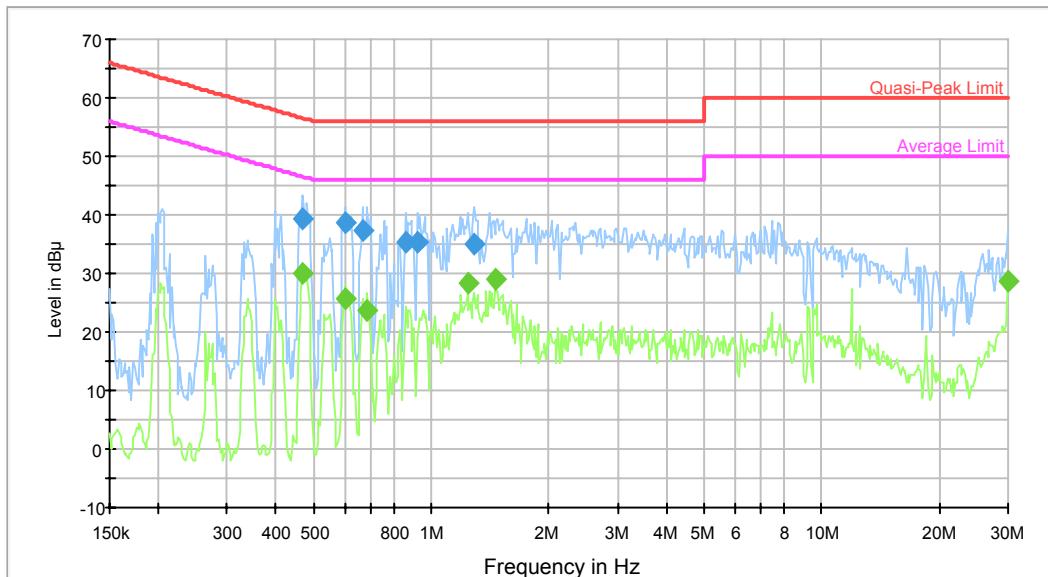
**AC120V, 60Hz, Line:**



Frequency (MHz)	Quasi Peak (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
0.461346	39.5	9.000	L1	9.8	17.2	56.7	Compliance
0.545378	36.3	9.000	L1	9.8	19.7	56.0	Compliance
0.614619	35.3	9.000	L1	9.8	20.7	56.0	Compliance
0.660314	38.8	9.000	L1	9.8	17.2	56.0	Compliance
1.200302	37.1	9.000	L1	9.8	18.9	56.0	Compliance
1.453260	36.8	9.000	L1	9.8	19.2	56.0	Compliance

Frequency (MHz)	Average (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
0.343548	30.2	9.000	L1	9.7	18.9	49.1	Compliance
0.468757	32.5	9.000	L1	9.8	14.0	46.5	Compliance
0.545378	26.3	9.000	L1	9.8	19.7	46.0	Compliance
0.665597	28.6	9.000	L1	9.8	17.4	46.0	Compliance
1.239175	26.6	9.000	L1	9.8	19.4	46.0	Compliance
1.453260	27.6	9.000	L1	9.8	18.4	46.0	Compliance

**AC120V, 60Hz, Neutral:**

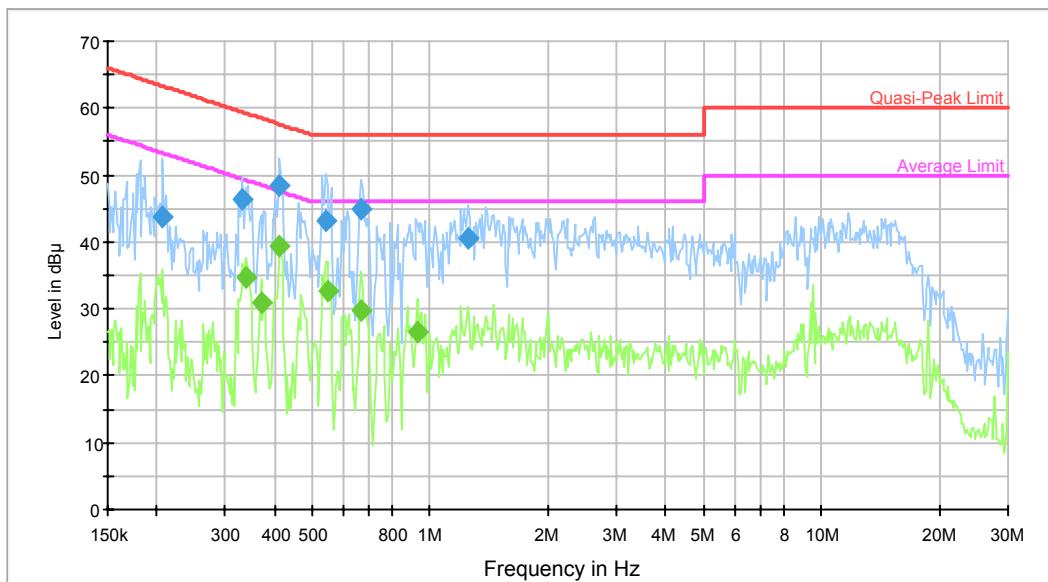


Frequency (MHz)	Quasi Peak (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
0.468757	39.3	9.000	N	9.7	17.2	56.5	Compliance
0.600101	38.8	9.000	N	9.7	17.2	56.0	Compliance
0.665597	37.3	9.000	N	9.7	18.7	56.0	Compliance
0.858911	35.4	9.000	N	9.8	20.6	56.0	Compliance
0.922769	35.5	9.000	N	9.8	20.5	56.0	Compliance
1.289541	34.9	9.000	N	9.8	21.1	56.0	Compliance

Frequency (MHz)	Average (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
0.468757	30.1	9.000	N	9.7	16.5	46.5	Compliance
0.600101	25.5	9.000	N	9.7	20.5	46.0	Compliance
0.687153	23.8	9.000	N	9.7	22.2	46.0	Compliance
1.239175	28.4	9.000	N	9.8	17.6	46.0	Compliance
1.453260	29.1	9.000	N	9.8	16.9	46.0	Compliance
30.000000	28.7	9.000	N	10.1	21.3	50.0	Compliance

*Test Mode: Downloading*

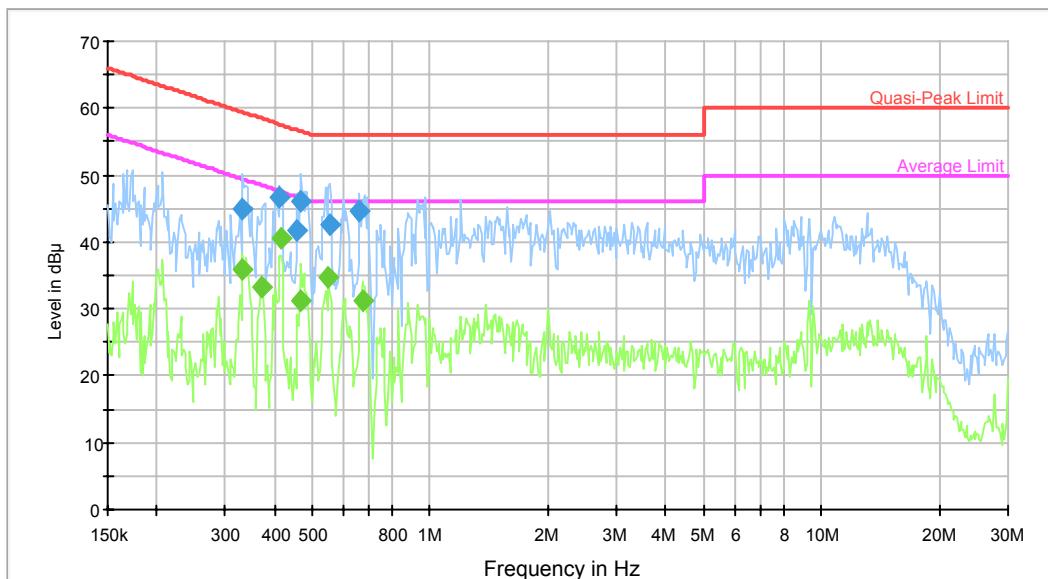
**AC120V, 60Hz, Line:**



Frequency (MHz)	Quasi Peak (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
0.207957	43.8	9.000	L1	9.7	19.5	63.3	Compliance
0.332770	46.3	9.000	L1	9.7	13.1	59.4	Compliance
0.412647	48.3	9.000	L1	9.8	9.3	57.6	Compliance
0.541050	43.1	9.000	L1	9.8	12.9	56.0	Compliance
0.665597	45.0	9.000	L1	9.8	11.0	56.0	Compliance
1.249088	40.6	9.000	L1	9.8	15.4	56.0	Compliance

Frequency (MHz)	Average (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
0.338116	34.8	9.000	L1	9.7	14.4	49.2	Compliance
0.369089	31.0	9.000	L1	9.7	17.5	48.5	Compliance
0.412647	39.4	9.000	L1	9.8	8.2	47.6	Compliance
0.545378	32.7	9.000	L1	9.8	13.3	46.0	Compliance
0.665597	29.9	9.000	L1	9.8	16.1	46.0	Compliance
0.930151	26.5	9.000	L1	9.8	19.5	46.0	Compliance

**AC120V, 60Hz, Neutral:**



Frequency (MHz)	Quasi Peak (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
0.332770	44.9	9.000	N	9.7	14.5	59.4	Compliance
0.412647	46.5	9.000	N	9.7	11.1	57.6	Compliance
0.457684	41.6	9.000	N	9.7	15.1	56.7	Compliance
0.468757	46.0	9.000	N	9.7	10.6	56.5	Compliance
0.554139	42.6	9.000	N	9.7	13.4	56.0	Compliance
0.660314	44.7	9.000	N	9.7	11.3	56.0	Compliance

Frequency (MHz)	Average (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
0.332770	35.8	9.000	N	9.7	13.6	49.4	Compliance
0.369089	33.2	9.000	N	9.7	15.4	48.5	Compliance
0.415949	40.7	9.000	N	9.7	6.8	47.5	Compliance
0.468757	31.2	9.000	N	9.7	15.3	46.5	Compliance
0.549741	34.6	9.000	N	9.7	11.4	46.0	Compliance
0.670921	31.3	9.000	N	9.7	14.7	46.0	Compliance

## FCC §15.109 - RADIATED SPURIOUS EMISSIONS

### Measurement Uncertainty

Compliance or non-compliance with a disturbance limit shall be determined in the following manner:

If  $U_{\text{lab}}$  is less than or equal to  $U_{\text{cisp}}_r$  of Table 1, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

If  $U_{\text{lab}}$  is greater than  $U_{\text{cisp}}_r$  of Table 1, then:

- compliance is deemed to occur if no measured disturbance level, increased by  $(U_{\text{lab}} - U_{\text{cisp}}_r)$ , exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by  $(U_{\text{lab}} - U_{\text{cisp}}_r)$ , exceeds the disturbance limit.

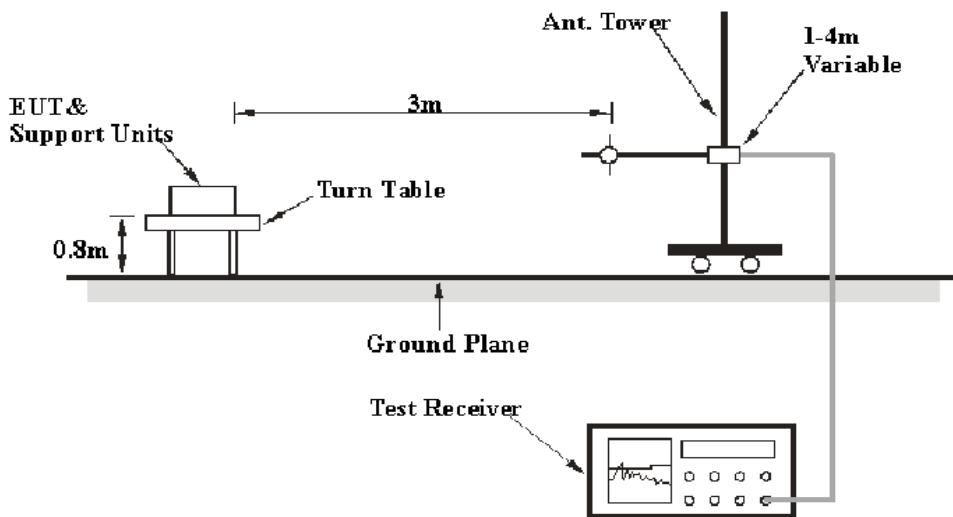
Based on CISPR 16-4-2: 2011, measurement uncertainty of radiated emission at a distance of 3m at Bay Area Compliance Laboratories Corp. (Dongguan) is: 30M~200MHz: 4.58 dB for Horizontal, 4.59 dB for Vertical; 200M~1GHz: 4.83 dB for Horizontal, 5.85 dB for Vertical; 1G~6GHz: 4.45 dB, 6G~18GHz: 5.23 dB

Table 1 – Values of  $U_{\text{cisp}}_r$

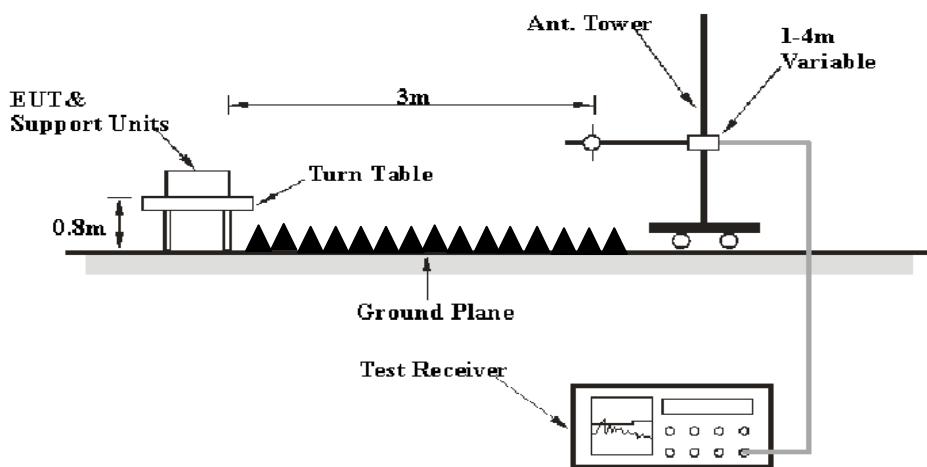
Measurement	$U_{\text{cisp}}_r$
Radiated disturbance (electric field strength at an OATS or in a SAC) (30 MHz to 1000 MHz)	6.3 dB
Radiated disturbance (electric field strength in a FAR) (1 GHz to 6 GHz)	5.2 dB
Radiated disturbance (electric field strength in a FAR) (6 GHz to 18 GHz)	5.5 dB

### EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15.109 Class B limits.

### EMI Test Receiver Setup

The system was investigated from 30 MHz to 13 GHz.

During the radiated emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30 MHz – 1000 MHz	120 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	Peak
	1 MHz	10 Hz	/	AVG

### Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

The data was recorded in the Quasi-peak detection mode for below 1 GHz, peak and average detection mode above 1 GHz.

## Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCI	100224	2015-08-03	2016-08-02
Sunol Sciences	Antenna	JB3	A060611-3	2014-11-06	2017-11-05
HP	Amplifier	8447E	2434A02181	2015-09-01	2016-09-01
Agilent	Spectrum Analyzer	E4440A	SG43360054	2015-11-23	2016-11-22
ETS-Lindgren	Horn Antenna	3115	9808-5557	2015-09-06	2018-09-06
Mini-Circuit	Amplifier	ZVA-213-S+	054201245	2016-02-19	2017-02-19
Farad	Test Software	EZ-EMC	V1.1.4.2	N/A	N/A
N/A	Coaxial Cable	14m	N/A	2015-05-06	2016-05-06
N/A	Coaxial Cable	8m	N/A	2015-05-06	2016-05-06

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

## Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Loss and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Loss} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7 dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

## Test Results Summary

According to the data in the following table, the EUT complied with the FCC Part 15 B Class B, with the worst margin reading of:

**2.08 dB at 1247.500 MHz** in the **Horizontal** polarization for *SD Card Playing*

## Test Data

### Environmental Conditions

Temperature:	25.3 °C
Relative Humidity:	74 %
ATM Pressure:	100.7 kPa

*The testing was performed by Costa Dong on 2016-04-11*

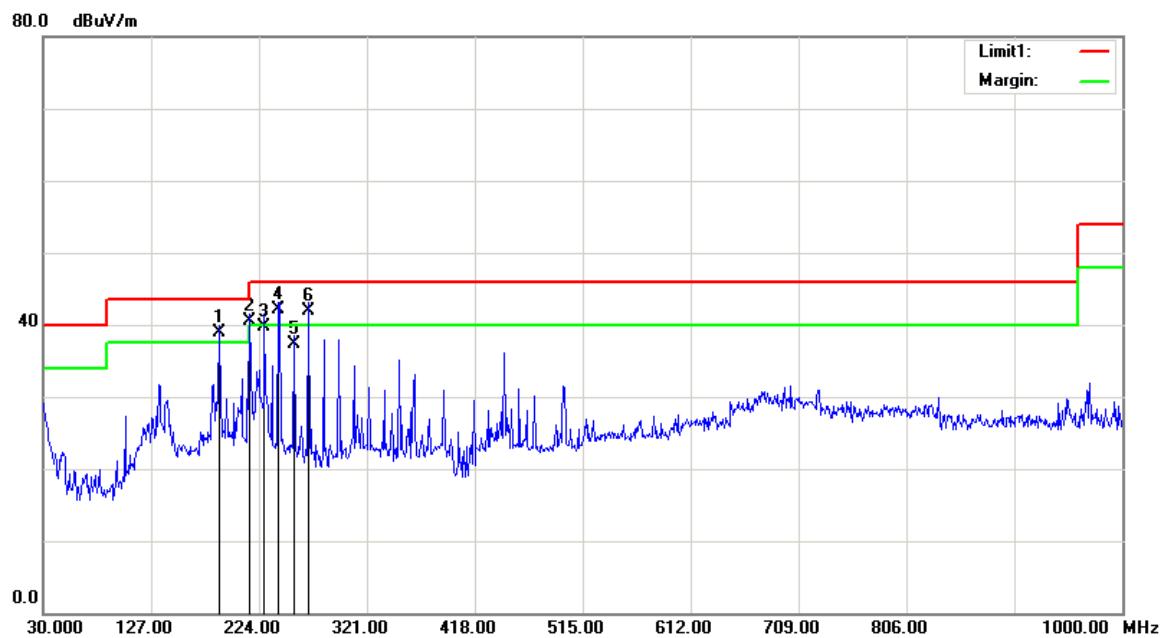
*Test Result: Compliance*

*Test Mode: SD Card Playing*

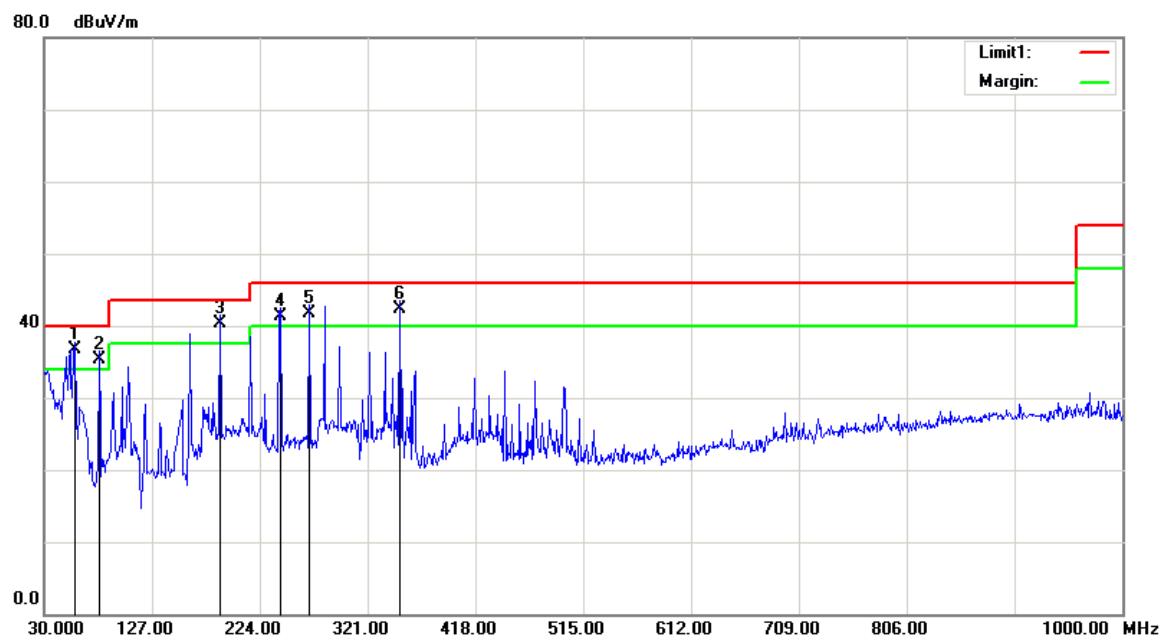
**AC120V, 60Hz**

**1) Below 1GHz:**

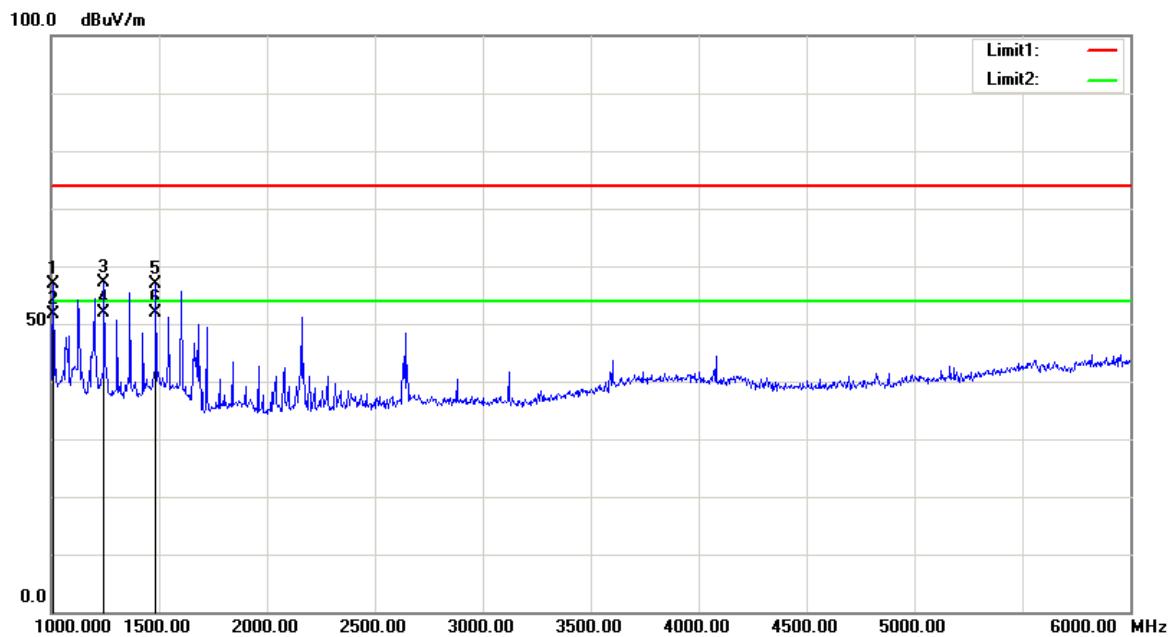
**Horizontal**



Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
188.1100	46.87	QP	-7.97	38.90	43.50	4.60
215.2700	49.35	QP	-8.85	40.50	43.50	3.00
228.8500	47.90	QP	-8.10	39.80	46.00	6.20
241.4600	49.56	QP	-7.46	42.10	46.00	3.90
255.0400	44.88	QP	-7.48	37.40	46.00	8.60
268.6200	47.99	QP	-5.99	42.00	46.00	4.00

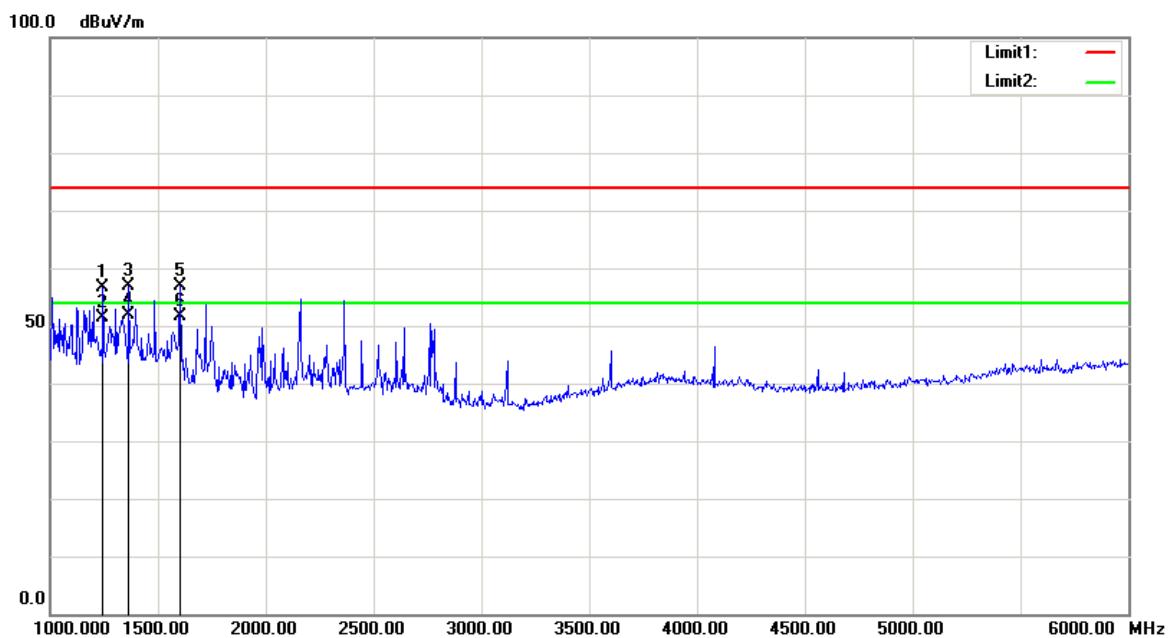
**Vertical**

Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
58.1300	49.70	QP	-13.00	36.70	40.00	3.30
79.4700	47.57	QP	-12.17	35.40	40.00	4.60
188.1100	48.37	QP	-7.97	40.40	43.50	3.10
242.4300	48.84	QP	-7.44	41.40	46.00	4.60
268.6200	47.79	QP	-5.99	41.80	46.00	4.20
350.1000	47.18	QP	-4.78	42.40	46.00	3.60

**2) Above 1GHz:****Horizontal**

Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
1010.000	51.66	peak	5.28	56.94	74.00	17.06
1010.000	46.47	AVG	5.28	51.75	54.00	2.25
1247.500	52.68	peak	4.44	57.12	74.00	16.88
1247.500	47.48	AVG	4.44	51.92	54.00	2.08
1485.000	53.98	peak	2.81	56.79	74.00	17.21
1485.000	49.08	AVG	2.81	51.89	54.00	2.11

Note: For above 6 GHz, no emissions were detected.

**Vertical**

Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
1247.500	52.19	peak	4.44	56.63	74.00	17.37
1247.500	47.03	AVG	4.44	51.47	54.00	2.53
1367.500	53.11	peak	3.84	56.95	74.00	17.05
1367.500	48.03	AVG	3.84	51.87	54.00	2.13
1605.000	53.40	peak	3.39	56.79	74.00	17.21
1605.000	48.26	AVG	3.39	51.65	54.00	2.35

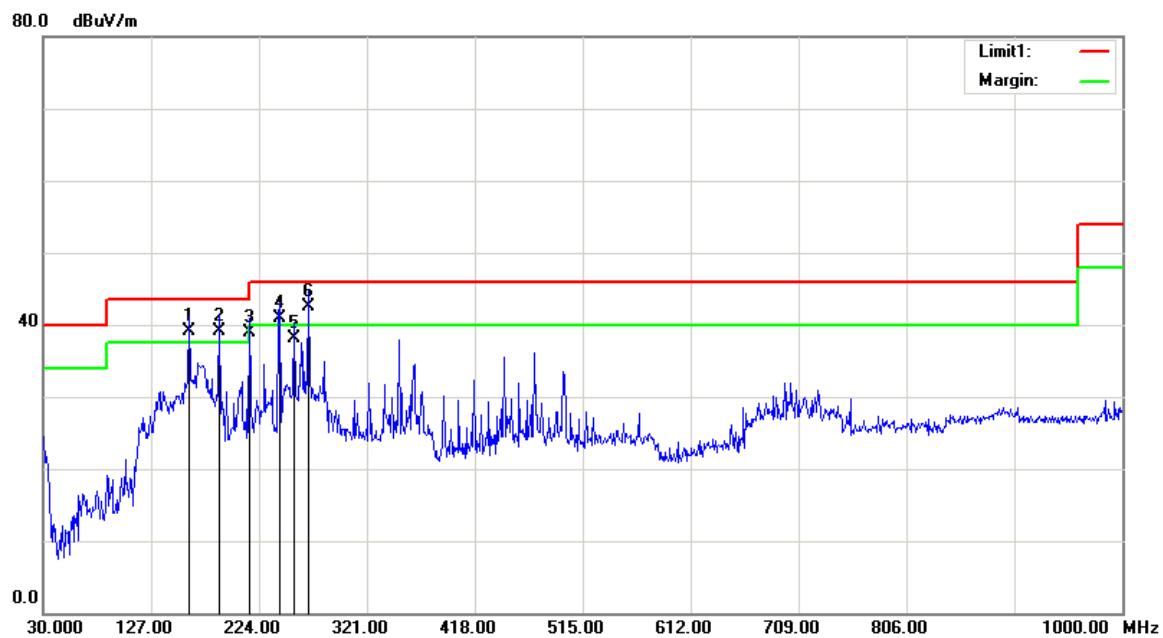
Note: For above 6 GHz, no emissions were detected.

*Test Mode: DVD Playing*

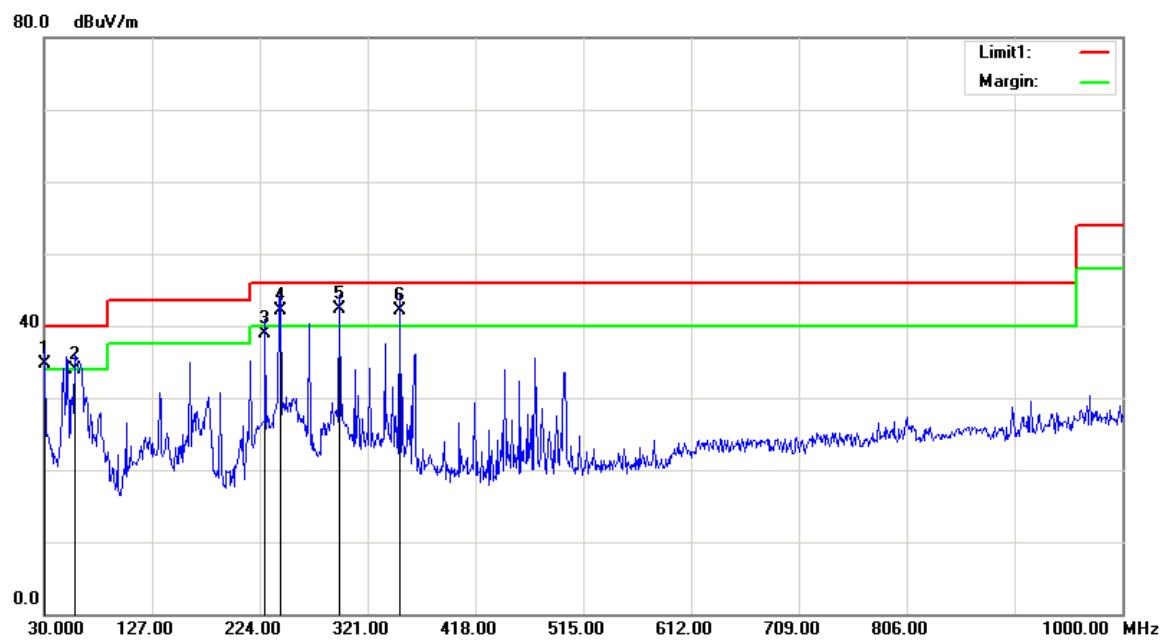
**AC120V, 60Hz**

**1) Below 1GHz:**

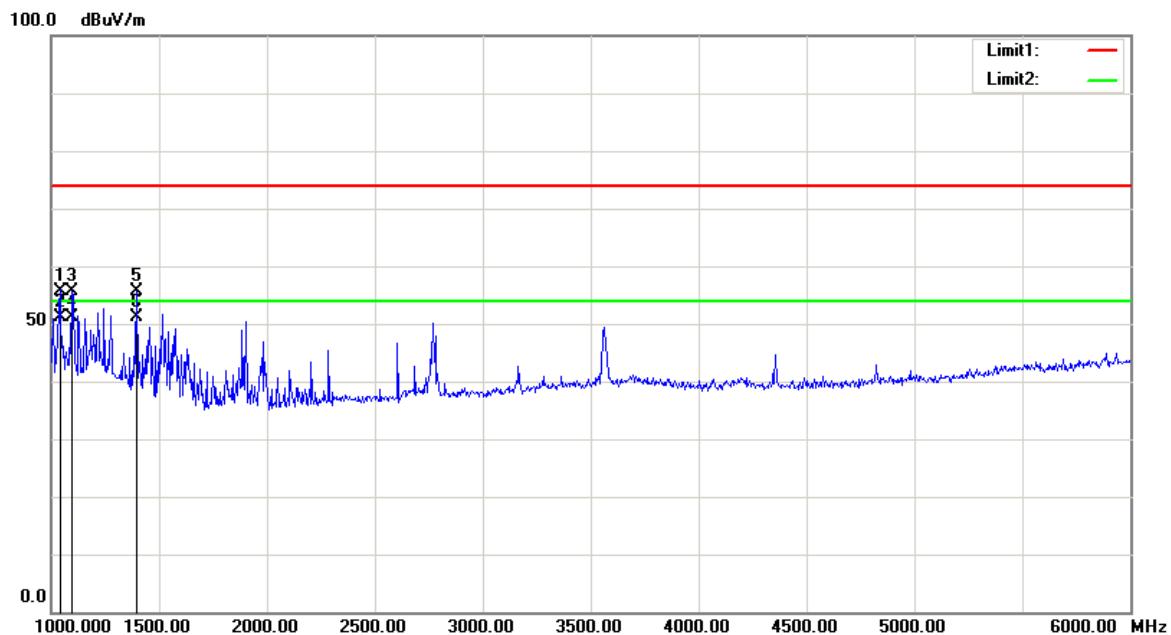
**Horizontal**



Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
160.9500	46.54	QP	-7.44	39.10	43.50	4.40
188.1100	47.17	QP	-7.97	39.20	43.50	4.30
215.2700	47.75	QP	-8.85	38.90	43.50	4.60
242.4300	48.44	QP	-7.44	41.00	46.00	5.00
255.0400	45.68	QP	-7.48	38.20	46.00	7.80
268.6200	48.59	QP	-5.99	42.60	46.00	3.40

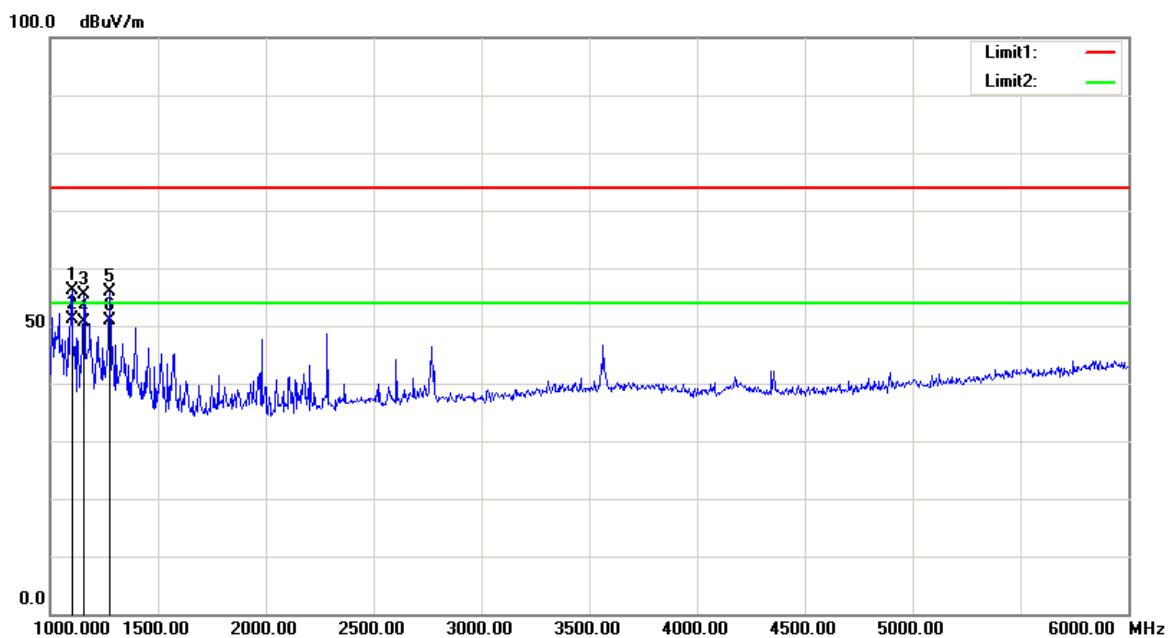
**Vertical**

Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
30.0000	31.35	QP	3.45	34.80	40.00	5.20
57.1600	47.05	QP	-13.05	34.00	40.00	6.00
228.8500	47.00	QP	-8.10	38.90	46.00	7.10
242.4300	49.64	QP	-7.44	42.20	46.00	3.80
295.7800	48.00	QP	-5.70	42.30	46.00	3.70
350.1000	46.98	QP	-4.78	42.20	46.00	3.80

**2) Above 1GHz:****Horizontal**

Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
1040.000	50.72	peak	5.03	55.75	74.00	18.25
1040.000	46.00	AVG	5.03	51.03	54.00	2.97
1097.500	51.09	peak	4.58	55.67	74.00	18.33
1097.500	46.43	AVG	4.58	51.01	54.00	2.99
1395.000	52.17	peak	3.54	55.71	74.00	18.29
1395.000	47.55	AVG	3.54	51.09	54.00	2.91

Note: For above 6 GHz, no emissions were detected.

**Vertical**

Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
1100.000	51.55	peak	4.56	56.11	74.00	17.89
1100.000	46.53	AVG	4.56	51.09	54.00	2.91
1157.500	51.03	peak	4.43	55.46	74.00	18.54
1157.500	46.21	AVG	4.43	50.64	54.00	3.36
1277.500	51.36	peak	4.51	55.87	74.00	18.13
1277.500	46.48	AVG	4.51	50.99	54.00	3.01

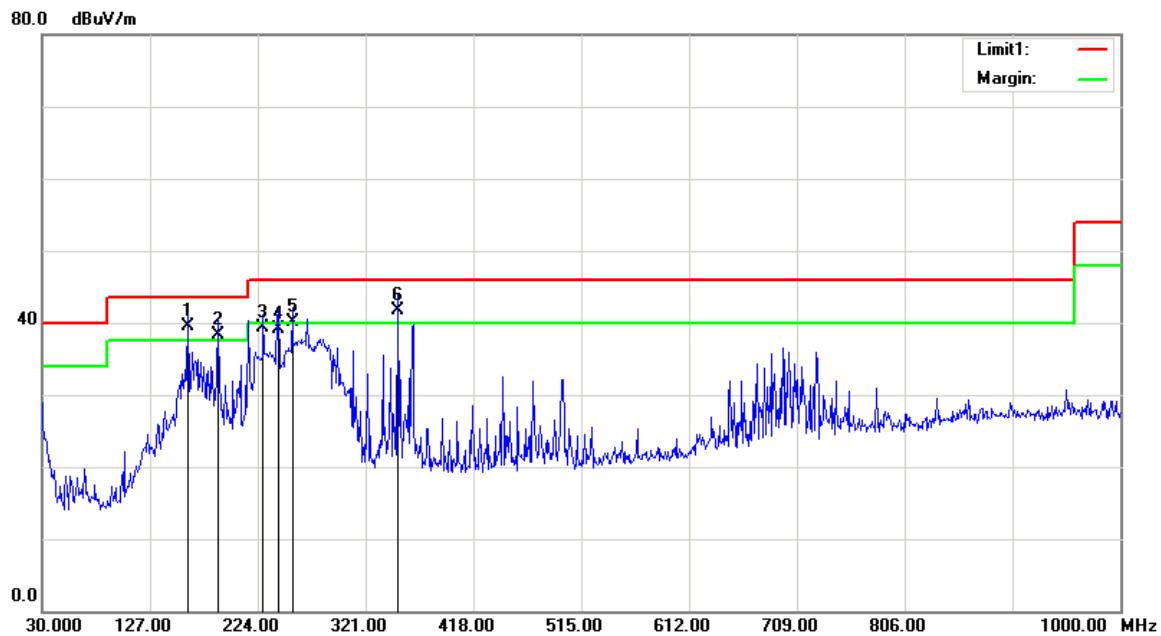
Note: For above 6 GHz, no emissions were detected.

*Test Mode: DVD Playing for Car charger*

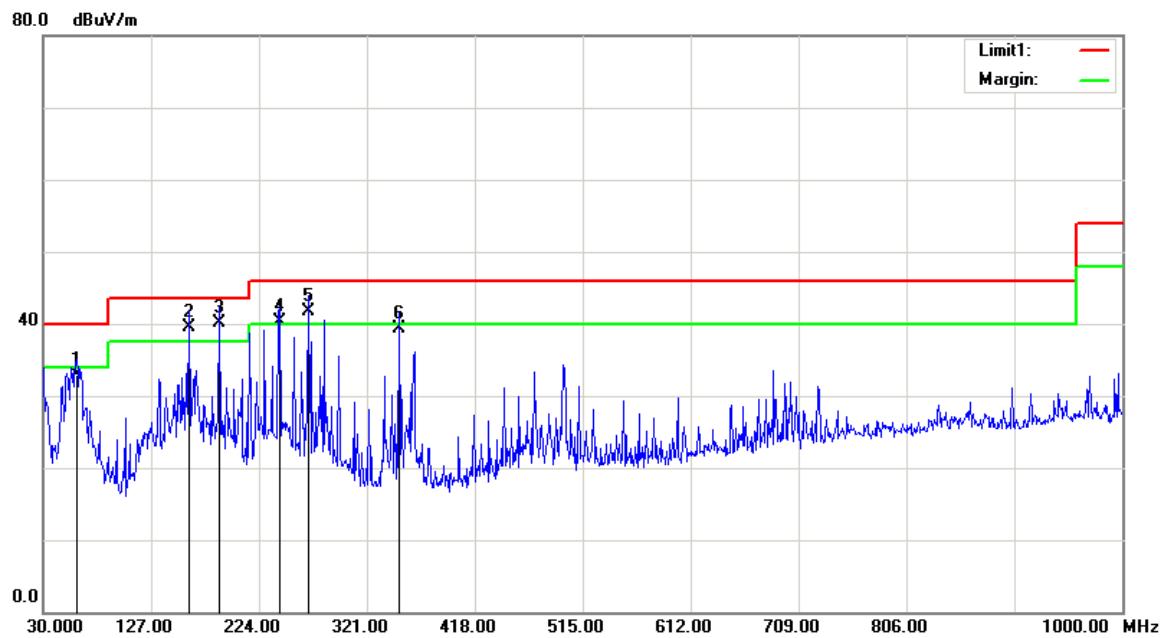
**DC 13.6V**

**1) Below 1GHz:**

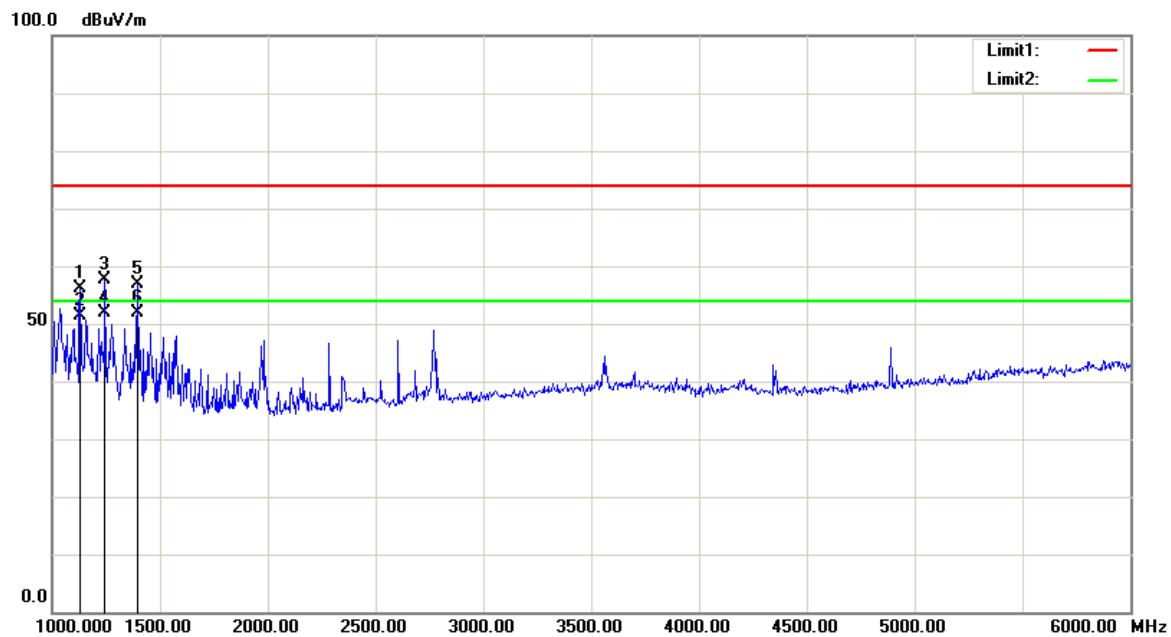
**Horizontal**



Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
160.9500	46.94	QP	-7.44	39.50	43.50	4.00
188.1100	46.27	QP	-7.97	38.30	43.50	5.20
228.8500	47.50	QP	-8.10	39.40	46.00	6.60
242.4300	46.54	QP	-7.44	39.10	46.00	6.90
255.0400	47.58	QP	-7.48	40.10	46.00	5.90
350.1000	46.58	QP	-4.78	41.80	46.00	4.20

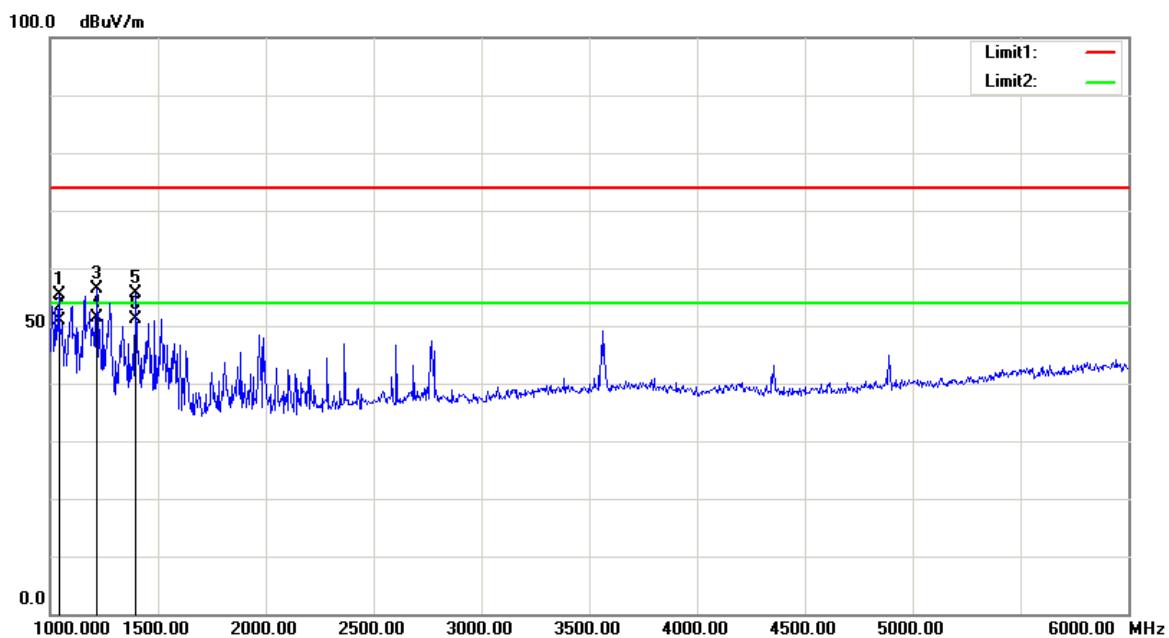
**Vertical**

Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
60.0700	45.91	QP	-12.91	33.00	40.00	7.00
160.9500	47.04	QP	-7.44	39.60	43.50	3.90
188.1100	48.17	QP	-7.97	40.20	43.50	3.30
242.4300	47.74	QP	-7.44	40.30	46.00	5.70
268.6200	47.79	QP	-5.99	41.80	46.00	4.20
350.1000	44.18	QP	-4.78	39.40	46.00	6.60

**2) Above 1GHz:****Horizontal**

Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
1130.000	51.61	peak	4.50	56.11	74.00	17.89
1130.000	46.88	AVG	4.50	51.38	54.00	2.62
1247.500	53.23	peak	4.44	57.67	74.00	16.33
1247.500	47.47	AVG	4.44	51.91	54.00	2.09
1395.000	53.40	peak	3.54	56.94	74.00	17.06
1395.000	48.45	AVG	3.54	51.99	54.00	2.01

Note: For above 6 GHz, no emissions were detected.

**Vertical**

Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
1040.000	50.37	peak	5.03	55.40	74.00	18.60
1040.000	45.97	AVG	5.03	51.00	54.00	3.00
1217.500	51.93	peak	4.39	56.32	74.00	17.68
1217.500	46.89	AVG	4.39	51.28	54.00	2.72
1395.000	52.18	peak	3.54	55.72	74.00	18.28
1395.000	47.52	AVG	3.54	51.06	54.00	2.94

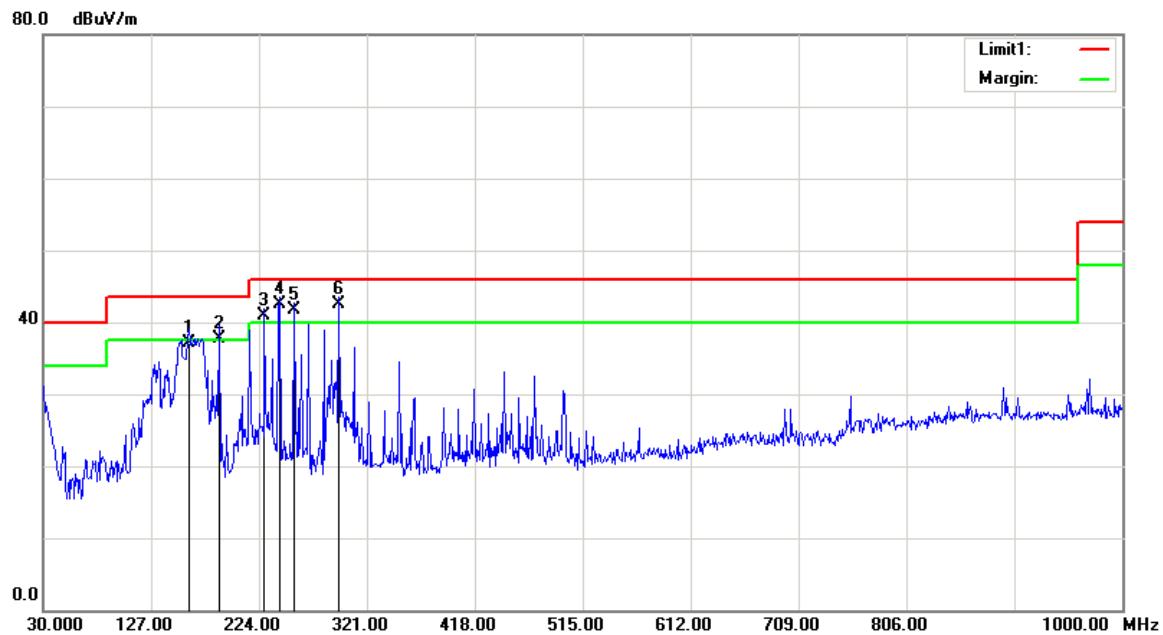
Note: For above 6 GHz, no emissions were detected.

*Test Mode: Downloading*

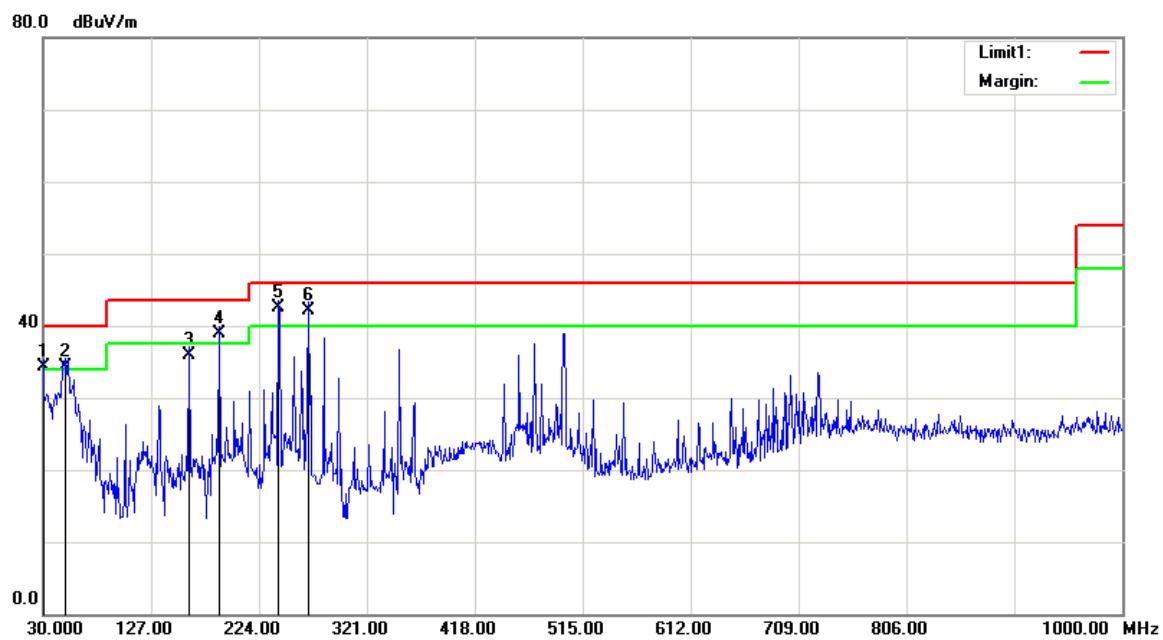
**AC120V, 60Hz**

**1) Below 1GHz:**

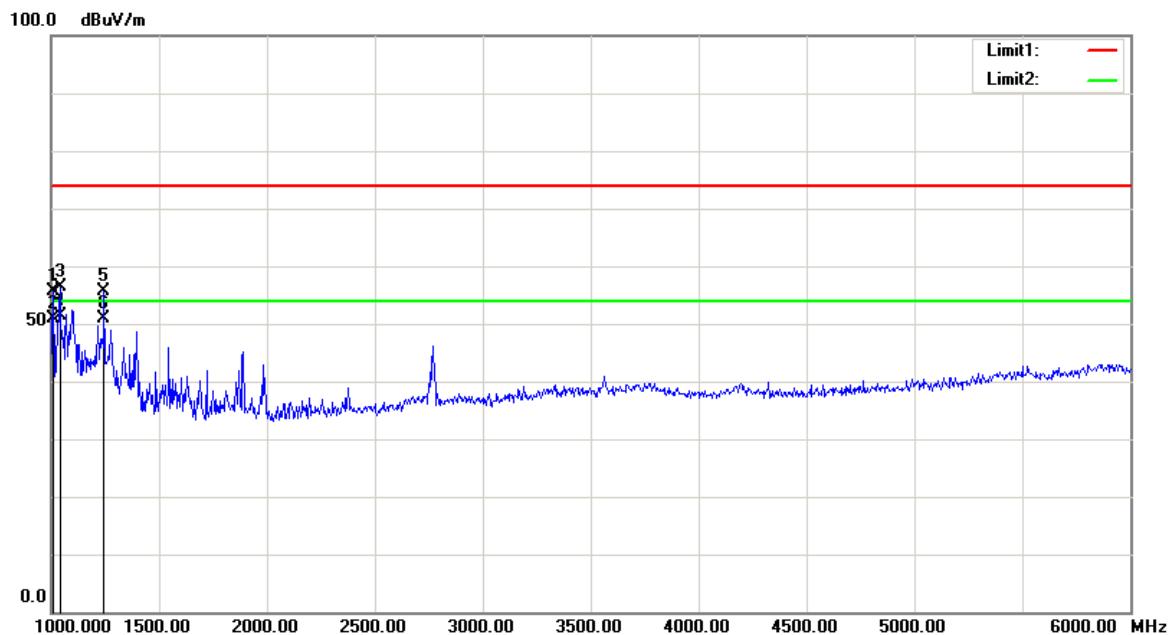
**Horizontal**



Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
160.9500	44.54	QP	-7.44	37.10	43.50	6.40
188.1100	45.67	QP	-7.97	37.70	43.50	5.80
228.8500	49.00	QP	-8.10	40.90	46.00	5.10
242.4300	49.94	QP	-7.44	42.50	46.00	3.50
255.0400	49.18	QP	-7.48	41.70	46.00	4.30
295.7800	48.20	QP	-5.70	42.50	46.00	3.50

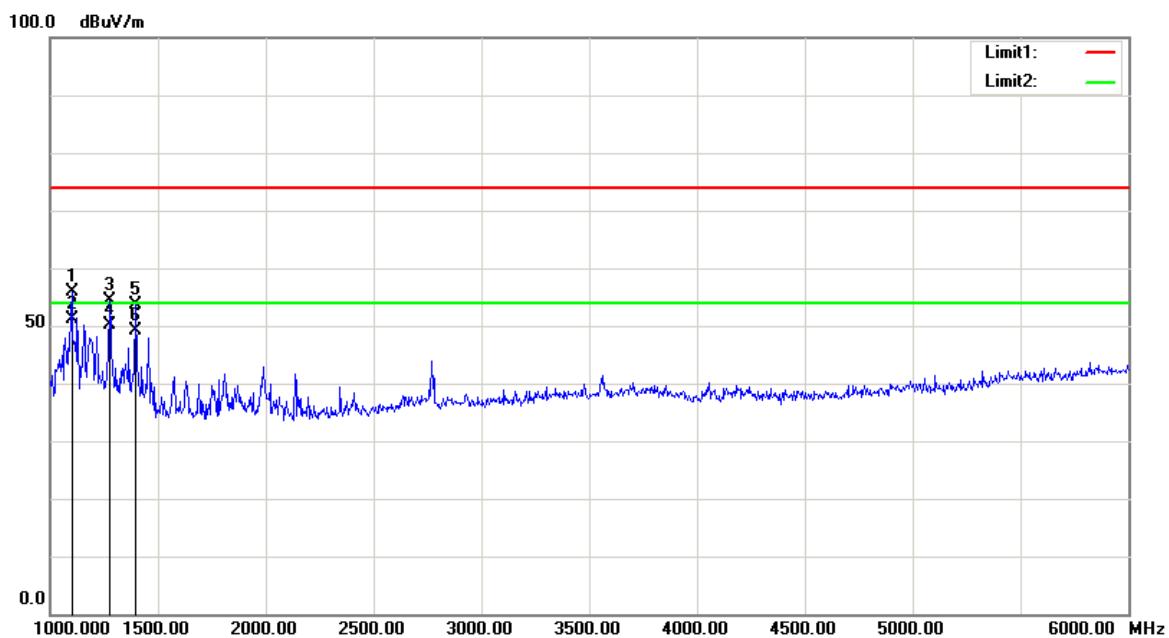
**Vertical**

Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
30.0000	30.85	QP	3.45	34.30	40.00	5.70
49.4000	46.04	QP	-11.64	34.40	40.00	5.60
160.9500	43.44	QP	-7.44	36.00	43.50	7.50
188.1100	46.87	QP	-7.97	38.90	43.50	4.60
241.4600	49.96	QP	-7.46	42.50	46.00	3.50
268.6200	48.19	QP	-5.99	42.20	46.00	3.80

**2) Above 1GHz:****Horizontal**

Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
1010.000	50.41	peak	5.28	55.69	74.00	18.31
1010.000	45.56	AVG	5.28	50.84	54.00	3.16
1040.000	51.28	peak	5.03	56.31	74.00	17.69
1040.000	46.26	AVG	5.03	51.29	54.00	2.71
1247.500	51.27	peak	4.44	55.71	74.00	18.29
1247.500	46.54	AVG	4.44	50.98	54.00	3.02

Note: For above 6 GHz, no emissions were detected.

**Vertical**

Frequency (MHz)	Receiver Reading (dB $\mu$ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
1100.000	51.28	peak	4.56	55.84	74.00	18.16
1100.000	46.47	AVG	4.56	51.03	54.00	2.97
1277.500	49.99	peak	4.51	54.50	74.00	19.50
1277.500	45.66	AVG	4.51	50.17	54.00	3.83
1395.000	50.10	peak	3.54	53.64	74.00	20.36
1395.000	45.49	AVG	3.54	49.03	54.00	4.97

Note: For above 6 GHz, no emissions were detected.

## **DECLARATION LETTER**

Hena Digital Technology (Shenzhen) Co., Ltd.  
ADD: 3F, South Tower, Jinzhou Electric Building, Southern No, 12Rd, High-tech Industrial Park,  
Shenzhen, China  
Tel: (86)0755-8287 7246      Fax: (86)0755-8287 9070  
E-mail: yjliu@henag.com.cn

### **DECLARATION OF SIMILARITY**

Date: 2016-3-8

FEDERAL COMMUNICATIONS COMMISSION  
Authorization and Evaluation Division  
7435 Oakland Mills Road  
Columbia, MD 21046  
FCC ID: M7C-MD92

Dear Sir or Madam:

We, Hena Digital Technology (Shenzhen) Co., Ltd., hereby declare that product: Tablet with DVD player, model number: MD-91, MD-93, MD-94, MD-95, MD-96, MD-97, MD-98, MD-99, MD91, MD92, MD93, MD94, MD95, MD96, MD97, MD98, MD99, MD91L, MD-91L, MD92L, MD-92L, MD9x\*, MD-9x\* (x can be 0-9, \*can be A-Z), SY-Z4900, NID-9004 and TBDV986W are electrically identical with the model number MD-92 which was tested by BACL. They have the same electromagnetic emissions and electromagnetic compatibility characteristics. The results of which are featured in BACL project: RDG160223004.

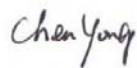
A description of the difference among those models and those that are declared similar are as follows:

They are the same product, and just have the different model name, the rest are the same.

Please contact me should there be need for any additional clarification or information.

Best Regards,

Chen Yong  
Manager



**\*\*\*\*\* END OF REPORT \*\*\*\*\***