FCC Part 15B
Measurement and Test Report

For

Applied Medical Resources Corporation

22872 Avenida Empresa, Rancho Santa Margarita, CA 92688, U.S.A.

FCC ID: 2ABCX777033201

Test Rule(s):	FCC Part 15 Subpart B
Product Description:	Tablet Computer
Tested Model:	777033201
Report No.:	STR13108300I-2
Tested Date:	2013-10-31 to 2013-11-22
Issued Date:	2013-12-04
Tested By:	Lebron Wang / Engineer
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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Applied Medical Resources Corporation
Address of applicant:	22872 Avenida Empresa, Rancho Santa Margarita, CA 92688, U.S.A.
Manufacturer:	VJ Electronics & Manufactory Limited
Address of manufacturer:	18 Tong De Road, Chang Hu Wei Village, Tong Le, Longgang District, Shenzhen, China PRC

General Description of EUT	
Product Name:	Tablet Computer
Trade Name:	/
Model No.:	777033201
Adding Model(s):	/
Note: The test data is gathered from a production sample, provided by the manufacturer.	

Technical Characteristics of EUT	
Rated Voltage:	Adapter: DC 5V Battery: DC 7.4V
Rated Current:	1.5A
Rated Power:	/
Lowest Internal Frequency:	32.768kHz
Highest Internal Frequency:	1GHz
Classification of ITE:	Class B

1.2 Test Standards

The following report is prepared on behalf of the Applied Medical Resources Corporation in accordance with Part 2, Subpart J, and Part 15, Subparts A and B of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC Part 15, Subpart B, and section 15.205, 15.107, and 15.109 rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2003, 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.

1.4 Test Facility

FCC – Registration No.: 934118

Shenzhen SEM.Test Technology Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files and the Registration is 934118.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Shenzhen SEM.Test Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

1.5 EUT Setup and Operation Mode

The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted according to the operation manual for use, more detailed description as follows:

Test Mode List:

Test Mode	Description	Remark
TM1	Charging & Playing	Connect to Adapter, Display, Earphone
TM2	Downloading	Connect to PC
TM3	/	/
TM4	/	/

EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
/	/	/	/

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
Display	DELL	IN1920C	Q40G18N-700-1B ZA
Notebook	Lenovo	20007	EB12648265

Special Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
HDMI Cable	2.0	Unshielded	Without Core
USB Cable	1.0	Unshielded	Without Core

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§ 15.107 (a)	Conducted Emissions	Compliant
§ 15.109 (a)	Radiated Emissions	Compliant

N/A: not applicable

3. Conducted Emissions

3.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement is ± 2.88 dB.

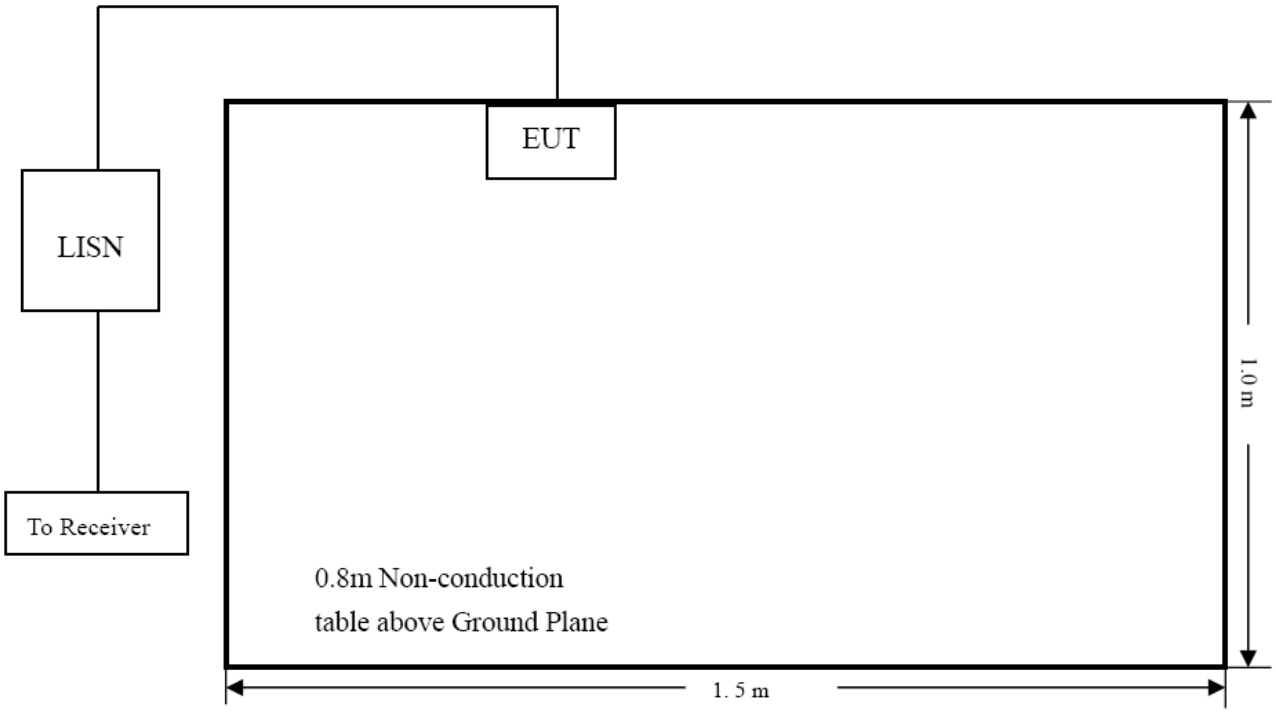
3.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2013-05-07	2014-05-06
L.I.S.N	Schwarz beck	NSLK8126	8126-224	2013-05-07	2014-05-06
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2013-05-07	2014-05-06

3.3 Test Procedure

Test is conducting under the description of ANSI C63.4-2003, 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.

3.4 Basic Test Setup Block Diagram



3.5 Environmental Conditions

Temperature:	23 °C
Relative Humidity:	52%
ATM Pressure:	1011 mbar

3.6 Summary of Test Results/Plots

According to the data in section 3.7, the EUT complied with the FCC Part 15.107(a) Conducted margin for a Class B device, with the *worst* margin reading of:

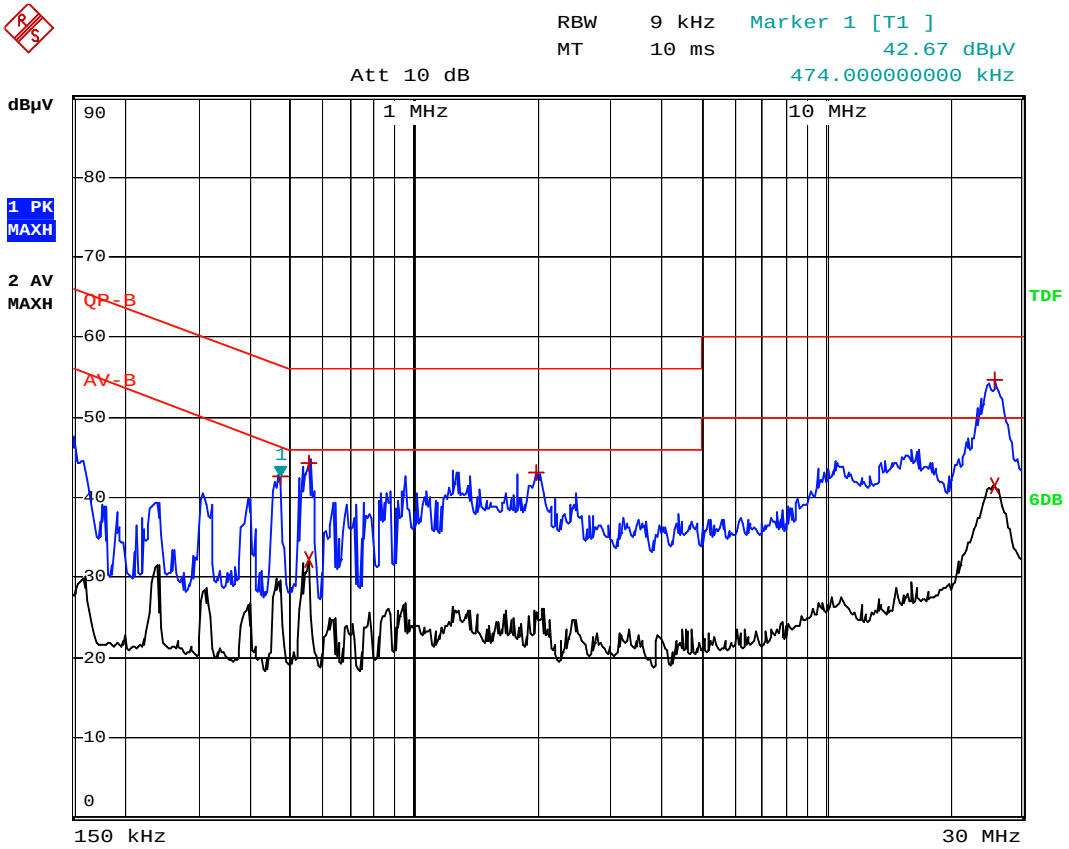
-5.32 dB at **25.814 MHz** in the **Neutral**, **Peak** detector, 0.15-30MHz

3.7 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data

EUT: *Tablet Computer*
Tested Model: *777033201*
Operating Condition: *TM1*
Comment: *AC 120V/60Hz; Adapter DC 5V*

Test Specification: *Line*

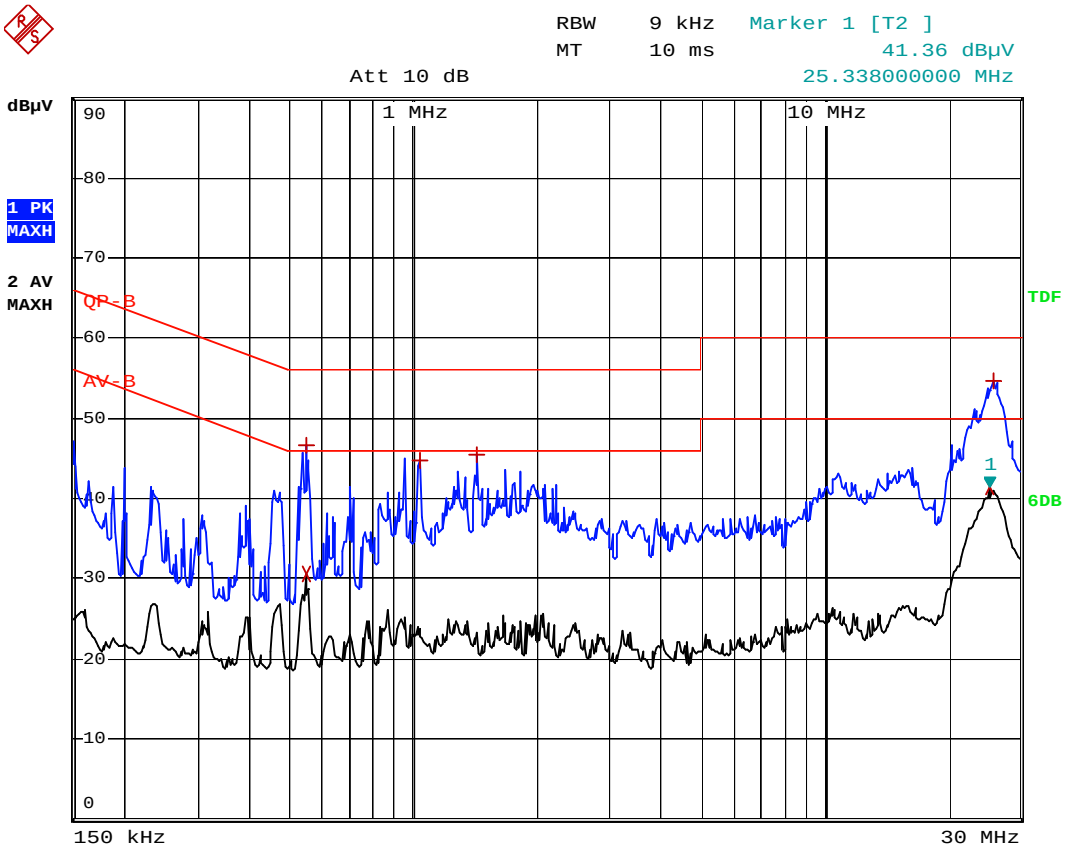


EDIT PEAK LIST (Prescan Results)

Trace1:	QP-B	
Trace2:	AV-B	
Trace3:	---	

TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Max Peak	474 kHz	42.66	-13.77
1 Max Peak	554 kHz	44.22	-11.77
2 Average	554 kHz	32.20	-13.79
1 Max Peak	1.986 MHz	43.19	-12.80
2 Average	25.822 MHz	41.56	-8.43
1 Max Peak	25.854 MHz	54.62	-5.37

Test Specification: *Neutral*



EDIT PEAK LIST (Prescan Results)			
Trace1:	QP-B		
Trace2:	AV-B		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
2 Average	550 kHz	30.48	-15.51
1 Max Peak	550 kHz	46.65	-9.34
1 Max Peak	1.034 MHz	44.70	-11.29
1 Max Peak	1.422 MHz	45.49	-10.51
2 Average	25.338 MHz	41.36	-8.63
1 Max Peak	25.814 MHz	54.67	-5.32

4. Radiated Emissions

4.1 Measurement Uncertainty

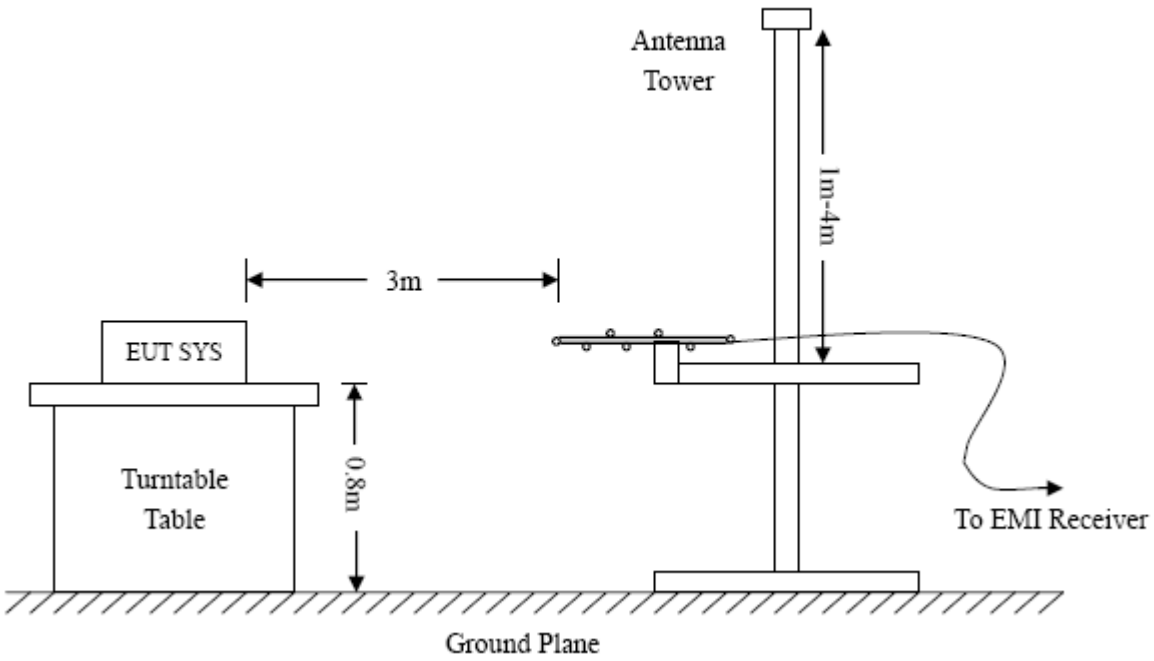
Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is ± 5.10 dB.

4.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2013-05-07	2014-05-06
EMI Test Receiver	R&S	ESVB	825471/005	2013-05-07	2014-05-06
Pre-amplifier	Agilent	8447F	3113A06717	2013-05-07	2014-05-06
Pre-amplifier	Compliance Direction	PAP-0118	24002	2013-05-07	2014-05-06
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2013-04-20	2014-04-19
Horn Antenna	ETS	3117	00086197	2013-04-20	2014-04-19
Loop Antenna	SCHWARZECK	HFRA 5165	9365	2013-04-20	2014-04-19

4.3 Test Procedure

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.109 Limit.
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.
The spacing between the peripherals was 10 cm.



4.4 Test Receiver Setup

Frequency :9kHz-30MHz	Frequency :30MHz-1GHz	Frequency :Above 1GHz
RBW=10KHz,	RBW=120KHz,	RBW=1MHz,
VBW =30KHz	VBW=300KHz	VBW=3MHz(Peak), 10Hz(AV)
Sweep time= Auto	Sweep time= Auto	Sweep time= Auto
Trace = max hold	Trace = max hold	Trace = max hold
Detector function = peak	Detector function = peak, QP	Detector function = peak, AV

4.5 Corrected Amplitude & Margin Calculation

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

Corr. Ampl. = Indicated Reading – Corr. Factor

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for a Class B device. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – FCC Part 15.109(a) Limit

4.6 Environmental Conditions

Temperature:	23 °C
Relative Humidity:	55 %
ATM Pressure:	1011 mbar

4.7 Summary of Test Results/Plots

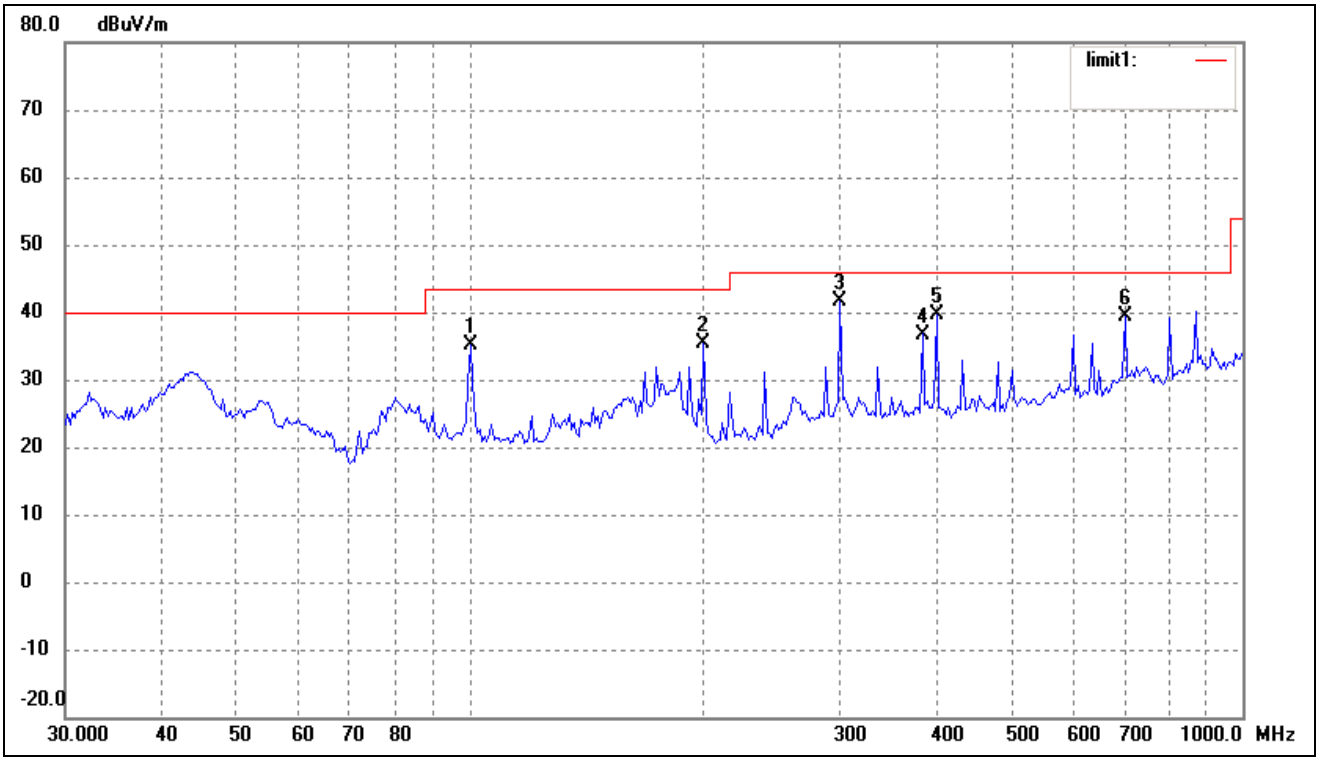
According to the data, the EUT complied with the FCC Part 15.109(a) rule, and had the worst margin of:

-1.33 dB at **32.6340 MHz** in the **Vertical** polarization, **TM1** Mode, **9 kHz** to **5 GHz**, **3Meters**

Plot of Radiated Emissions Test Data

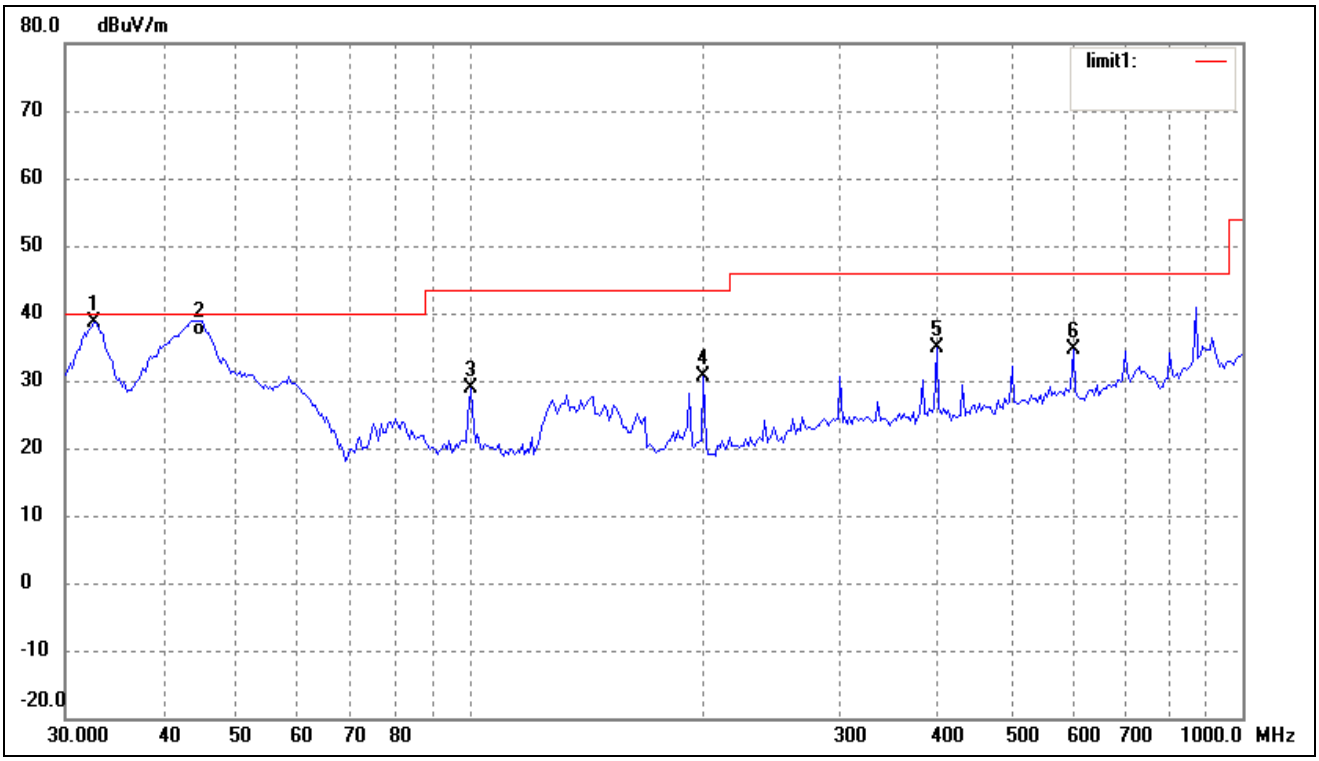
EUT: *Tablet Computer*
Tested Model: *777033201*
Operating Condition: *TM1*
Comment: *AC 120V/60Hz; Adapter DC 5V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(∘)	(cm)	
1	100.2286	28.93	6.10	35.03	43.50	-8.47	168	100	peak
2	200.6881	31.67	3.72	35.39	43.50	-8.11	125	100	peak
3	301.4224	32.39	9.18	41.57	46.00	-4.43	145	100	peak
4	385.2805	27.31	9.44	36.75	46.00	-9.25	132	100	peak
5	401.8385	29.61	10.06	39.67	46.00	-6.33	158	100	peak
6	704.2261	25.44	13.91	39.35	46.00	-6.65	175	100	peak

Test Specification: *Vertical*

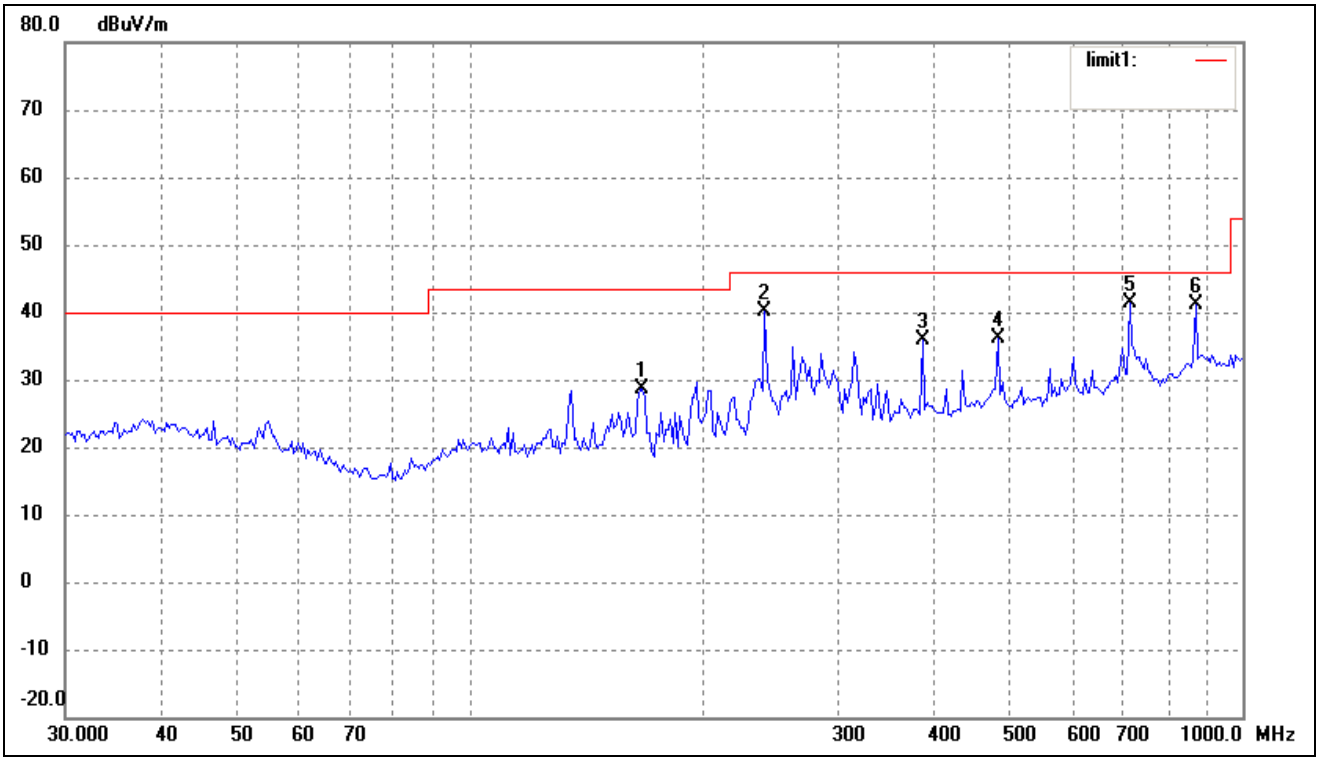


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	32.6340	30.63	8.04	38.67	40.00	-1.33	145	100	peak
2	44.7434	28.80	7.84	36.64	40.00	-3.36	128	100	QP
3	100.2286	22.76	6.10	28.86	43.50	-14.64	132	100	peak
4	200.6881	26.82	3.72	30.54	43.50	-12.96	168	100	peak
5	401.8385	24.87	10.06	34.93	46.00	-11.07	176	100	peak
6	603.5392	21.61	13.06	34.67	46.00	-11.33	205	100	peak

Plot of Radiated Emissions Test Data

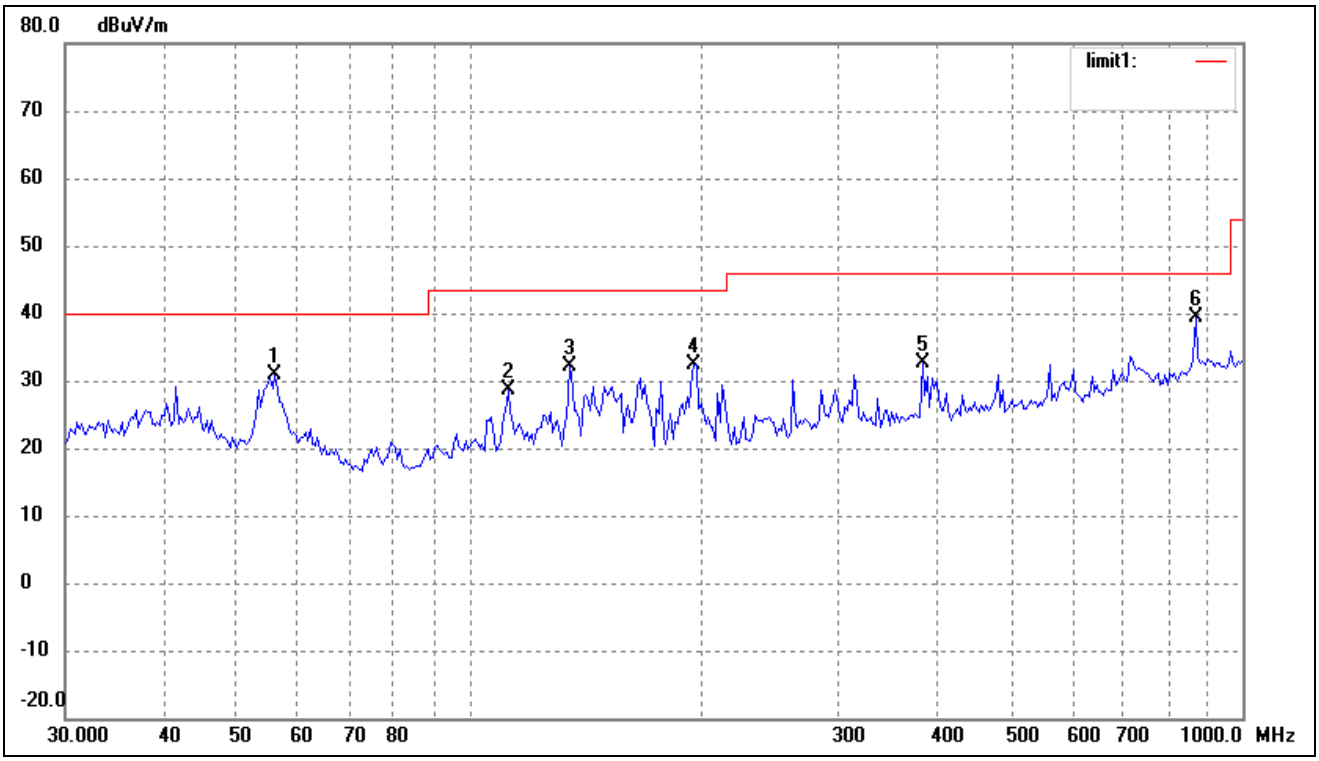
EUT: *Tablet Computer*
Tested Model: *777033201*
Operating Condition: *TM2*
Comment: *AC 120V/60Hz; PC DC 5V*

Test Specification: *Horizontal*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(∘)	(cm)	
1	167.2368	26.01	2.66	28.67	43.50	-14.83	145	100	peak
2	240.8304	33.78	6.36	40.14	46.00	-5.86	125	100	peak
3	385.2805	26.52	9.44	35.96	46.00	-10.04	165	100	peak
4	482.2156	25.90	10.19	36.09	46.00	-9.91	178	100	peak
5	714.1734	27.15	14.20	41.35	46.00	-4.65	195	100	peak
6	869.1302	24.71	16.54	41.25	46.00	-4.75	102	100	peak

Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(。)	(cm)	
1	56.0007	25.18	5.73	30.91	40.00	-9.09	168	100	peak
2	112.1305	23.70	4.85	28.55	43.50	-14.95	152	100	peak
3	134.5592	29.18	2.84	32.02	43.50	-11.48	145	100	peak
4	195.1365	29.01	3.45	32.46	43.50	-11.04	185	100	peak
5	385.2805	23.21	9.44	32.65	46.00	-13.35	255	100	peak
6	869.1302	22.94	16.54	39.48	46.00	-6.52	165	100	peak

Note: Testing is carried out with frequency rang 9kHz to the 5GHz, which above 1GHz is close to the noise base even antenna close up to 1meter distance according the measurement of ANSI C63.4.
The measurements greater than 20dB below the limit from 9kHz to 30MHz and test data are not provided.

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