FCC Part 15B
Measurement and Test Report

For

Wisky (Hong Kong) Co Limited

Flat/RM1202, 12F, Tung Chun Commercial Centre 438 - 444

Shanghai Street, Kowloon, Hong Kong

FCC ID: 2ACGUW032I

FCC Rule(s):	FCC Part 15 Subpart B
Product Description:	Entertainment Tablet
Tested Model:	W032I
Report No.:	STR14068019I-4
Tested Date:	2014-06-03 to 2014-06-18
Issued Date:	2014-06-18
Tested By:	Tony Lan / Engineer
Reviewed By:	Lahm Peng / EMC Manager
Approved & Authorized By:	Jandy so / PSQ Manager

Prepared By:

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Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen SEM.Test Technology Co., Ltd.

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Wisky (Hong Kong) Co Limited
Address of applicant:	Flat/RM1202, 12F, Tung Chun Commercial Centre 438 – 444 Shanghai Street, Kowloon, Hong Kong
Manufacturer:	Shenzhen Wisky Technology Co., LTD.
Address of manufacturer:	5th Floor, W2-A Building, Hi-tech Park South 1st Road, Nanshan District, Shenzhen

General Description of EUT	
Product Name:	Entertainment Tablet
Trade Name:	/
Model No.:	W032I
Adding Model(s):	TM785CH (Trade Name: APEX)
Note: The test data is gathered from a production sample, provided by the manufacturer. The appearance of others models listed in the report is different from main-test model W032I, but the circuit and the electronic construction do not change, declared by the manufacturer.	

Technical Characteristics of EUT	
Rated Voltage:	5V
Rated Current:	2A
Rated Power:	DC 5V Adapter, Battery: DC 3.7V
Power Adapter Model:	FY0502000 /SAPA05010US
Lowest Internal Frequency:	32.768 kHz
Highest Internal Frequency:	1.0 GHz
Classification of ITE:	Class B

1.2 Test Standards

The following report is prepared on behalf of the Wisky (Hong Kong) Co Limited 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.

CNAS Registration No.: L4062

Shenzhen SEM.Test Technology Co., Ltd. is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L4062. All measurement facilities used to collect the measurement data are located at 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C (518101).

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, Earphone
TM2	Downloading	Connected to PC

EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
USB Cable	1.2	Unshielded	Without Ferrite

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
Notebook Computer	Lenovo	E10	LR-63C8R
TF Card	Kingston	4GB	/

Special Cable List and Details

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

2. SUMMARY OF TEST RESULTS

Description of Test	Result
§15.107 (a) Conducted Emission	Compliant
§15.109(a) Radiated Emission	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.

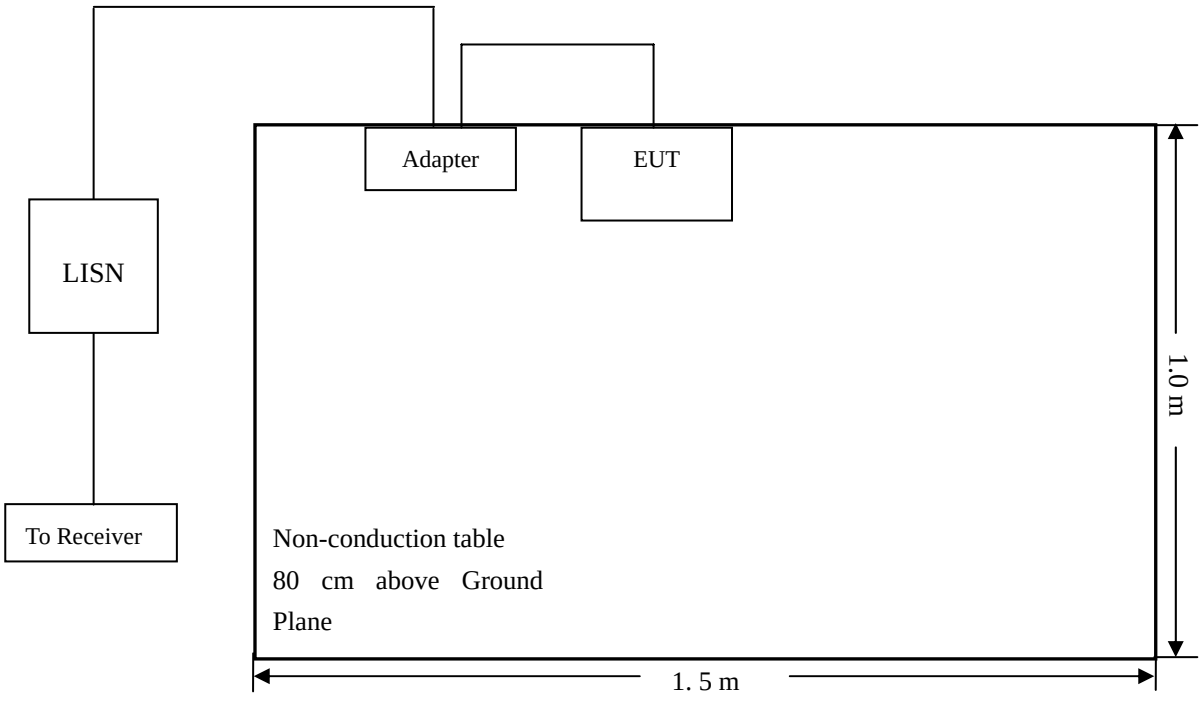
3.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2014-05-28	2015-05-27
L.I.S.N	Schwarz beck	NSLK8126	8126-224	2014-05-28	2015-05-27
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2014-05-28	2015-05-27

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:	50%
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:

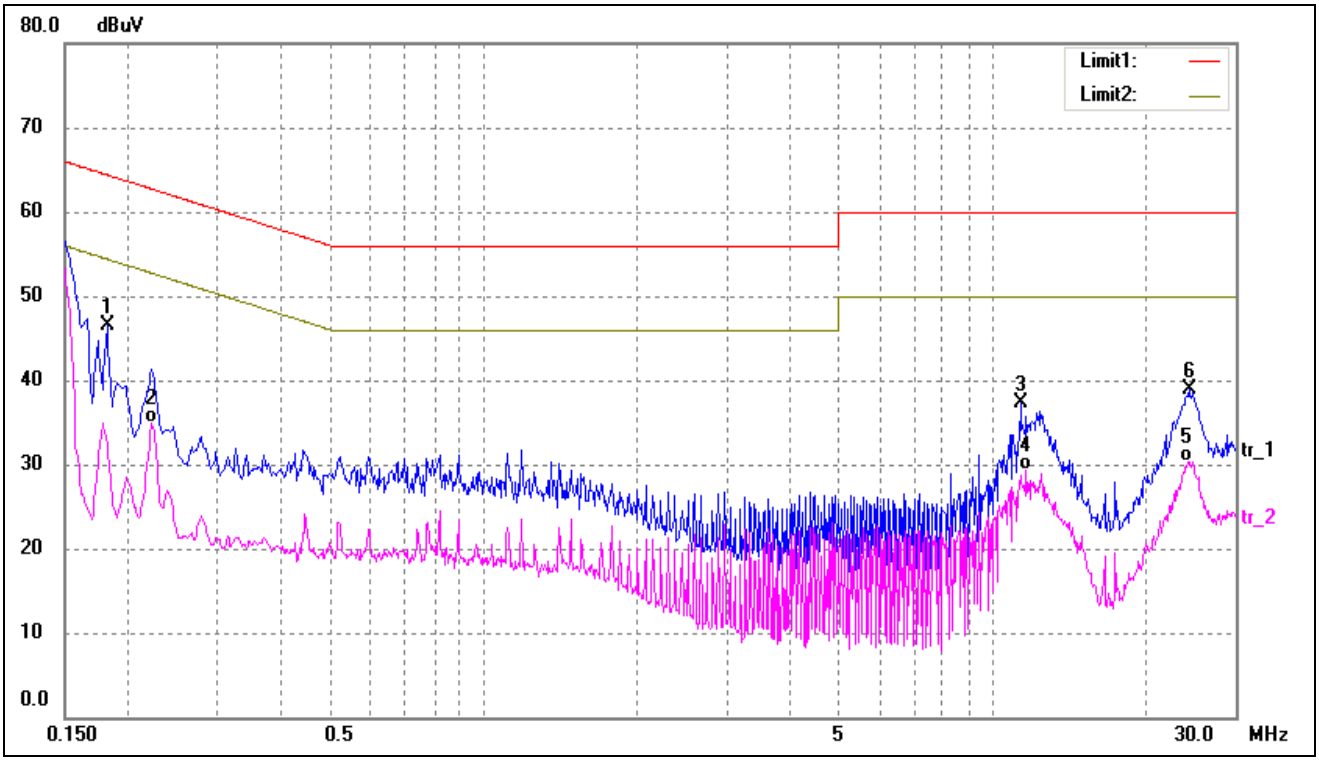
--7.19 dB at **0.1820MHz** in the **Line**, **Average** detector, 0.15-30MHz

3.7 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data

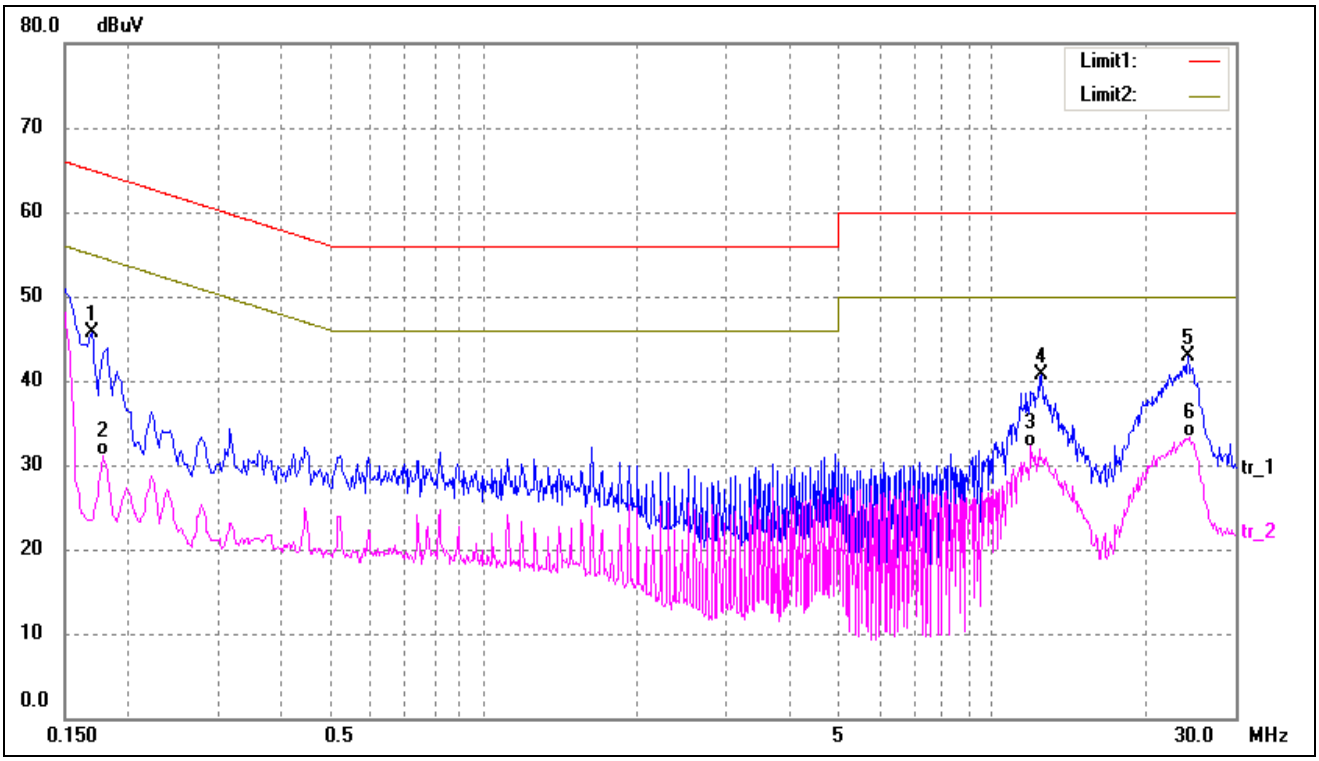
EUT: *Entertainment Tablet*
Tested Model: *W032I*
Operating Condition: *TM1 Adapter Model: FY0502000*
Comment: *AC 120V/60Hz; Adapter DC 5V*

Test Specification: *Neutral*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1820	36.98	9.50	46.48	64.39	-17.91	peak
2*	0.2220	25.44	9.50	34.94	52.74	-17.80	AVG
3	11.3620	27.06	10.27	37.33	60.00	-22.67	peak
4	11.6420	19.00	10.33	29.33	50.00	-20.67	AVG
5	24.2060	17.61	12.74	30.35	50.00	-19.65	AVG
6	24.2820	26.12	12.76	38.88	60.00	-21.12	peak

Test Specification: *Line*

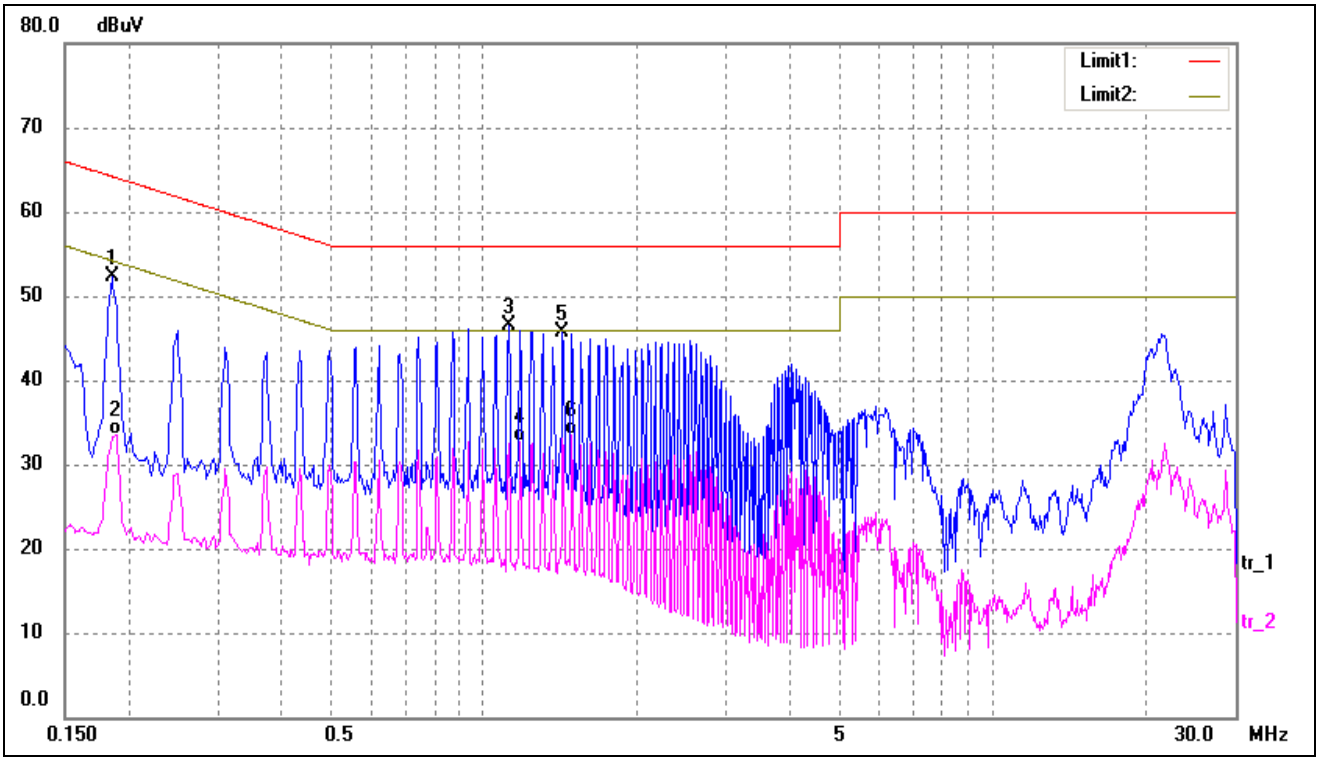


No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1700	36.25	9.50	45.75	64.96	-19.21	peak
2	0.1780	21.59	9.50	31.09	54.58	-23.49	AVG
3	11.8860	21.82	10.38	32.20	50.00	-17.80	AVG
4	12.4780	30.12	10.50	40.62	60.00	-19.38	peak
5	24.1820	30.24	12.73	42.97	60.00	-17.03	peak
6*	24.4180	20.57	12.81	33.38	50.00	-16.62	AVG

Plot of Conducted Emissions Test Data

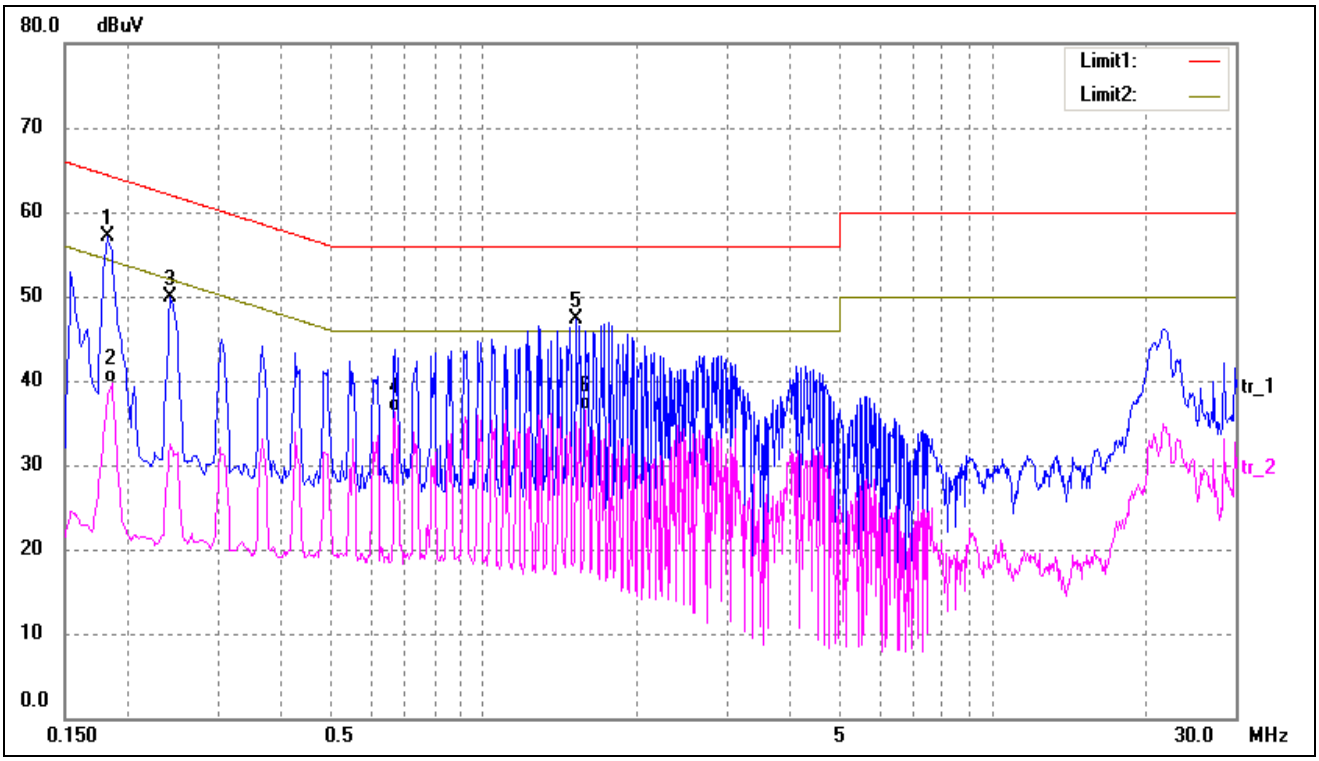
EUT: *Entertainment Tablet*
Tested Model: *W032I*
Operating Condition: *TM1 Adapter Model: SAPA05010US*
Comment: *AC 120V/60Hz; Adapter DC 5V*

Test Specification: *Neutral*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1860	42.77	9.50	52.27	64.21	-11.94	peak
2	0.1900	24.02	9.50	33.52	54.04	-20.52	AVG
3*	1.1180	36.50	10.00	46.50	56.00	-9.50	peak
4	1.1820	22.73	10.00	32.73	46.00	-13.27	AVG
5	1.4260	35.72	10.00	45.72	56.00	-10.28	peak
6	1.4940	23.44	10.00	33.44	46.00	-12.56	AVG

Test Specification: *Line*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1*	0.1820	47.70	9.50	57.20	64.39	-7.19	peak
2	0.1860	30.22	9.50	39.72	54.21	-14.49	AVG
3	0.2420	40.37	9.50	49.87	62.03	-12.16	peak
4	0.6700	26.69	9.67	36.36	46.00	-9.64	AVG
5	1.5220	37.24	10.00	47.24	56.00	-8.76	peak
6	1.5820	26.50	10.00	36.50	46.00	-9.50	AVG

4. RADIATED EMISSION

4.1 Measurement Uncertainty

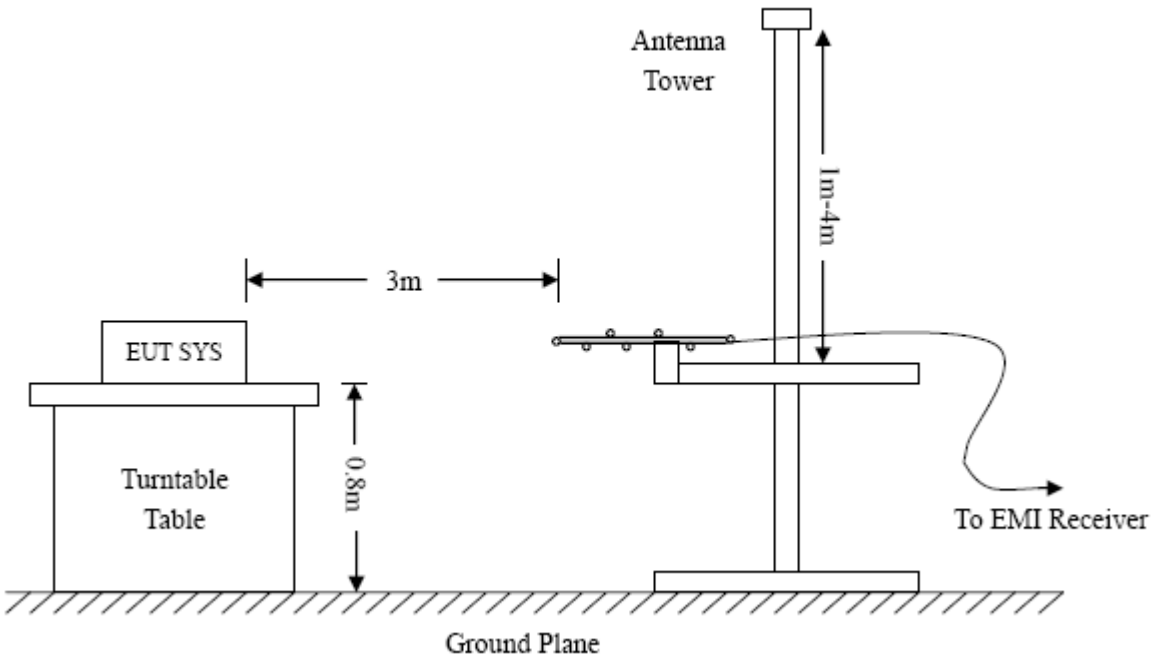
Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is ± 5.10 dB.

4.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2014-05-28	2015-05-27
EMI Test Receiver	R&S	ESVB	825471/005	2014-05-28	2015-05-27
Pre-amplifier	Agilent	8447F	3113A06717	2014-05-28	2015-05-27
Pre-amplifier	Compliance Direction	PAP-0118	24002	2014-05-28	2015-05-27
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2014-05-24	2015-05-23
Horn Antenna	ETS	3117	00086197	2014-05-24	2015-05-23
Loop Antenna	SCHWARZECK	HFRA 5165	9365	2014-05-24	2015-05-23

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

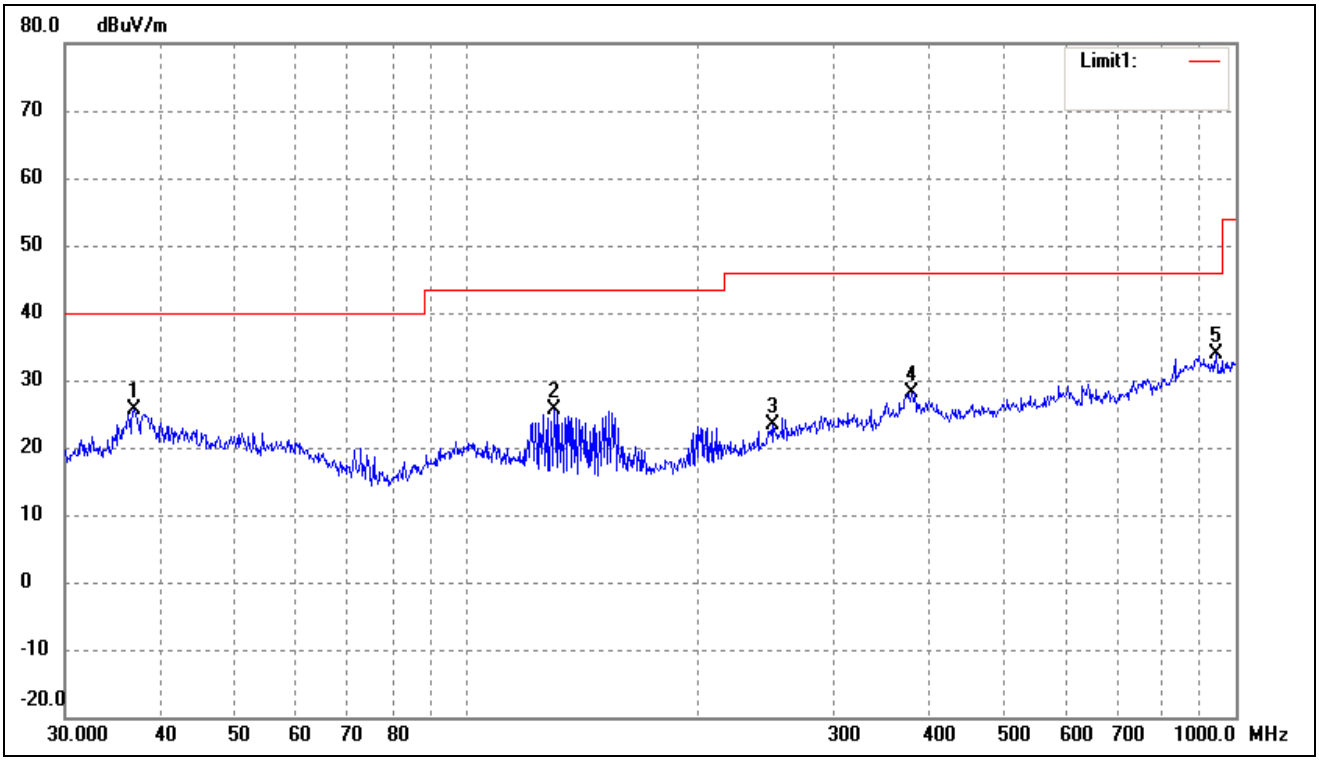
According to the data, the EUT complied with the FCC Part 15.109(a) rule, and had the worst margin of:

-**3.41dB** at **37.0249 MHz** in the **Horizontal** polarization, TM1 Adapter Model: FY0502000, **30 MHz** to **6 GHz**, **3Meters**

Plot of Conducted Emissions Test Data

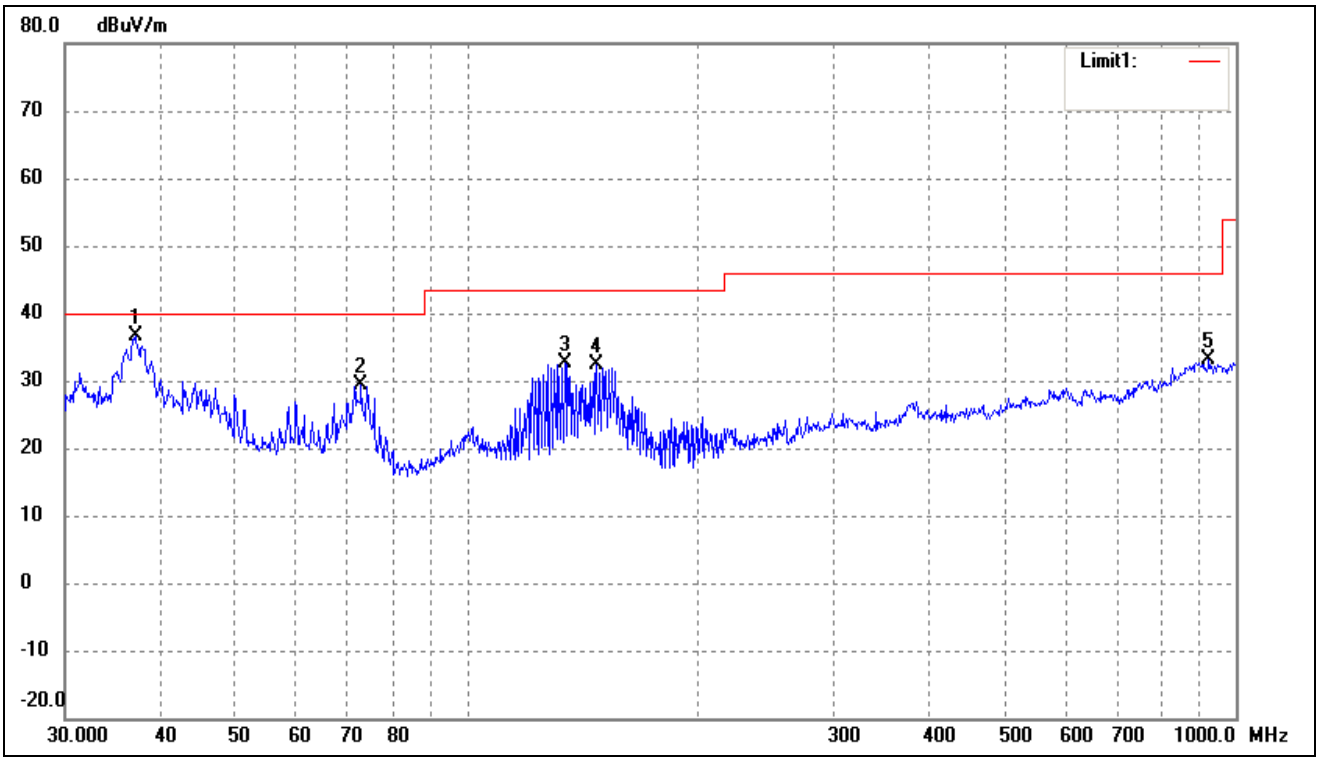
EUT: *Entertainment Tablet*
Tested Model: *W032I*
Operating Condition: *TM1 Adapter Model: FY0502000*
Comment: *AC 120V/60Hz; Adapter DC 5V*

Test Specification: *Neutral*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	36.8953	19.24	6.41	25.65	40.00	-14.35	214	100	peak
2	129.9226	22.53	3.22	25.75	43.50	-17.75	336	100	peak
3	250.3012	16.63	6.71	23.34	46.00	-22.66	272	100	peak
4	378.5843	18.88	9.20	28.08	46.00	-17.92	214	100	peak
5*	942.1305	17.56	16.23	33.79	46.00	-12.21	336	100	peak

Test Specification: *Vertical*

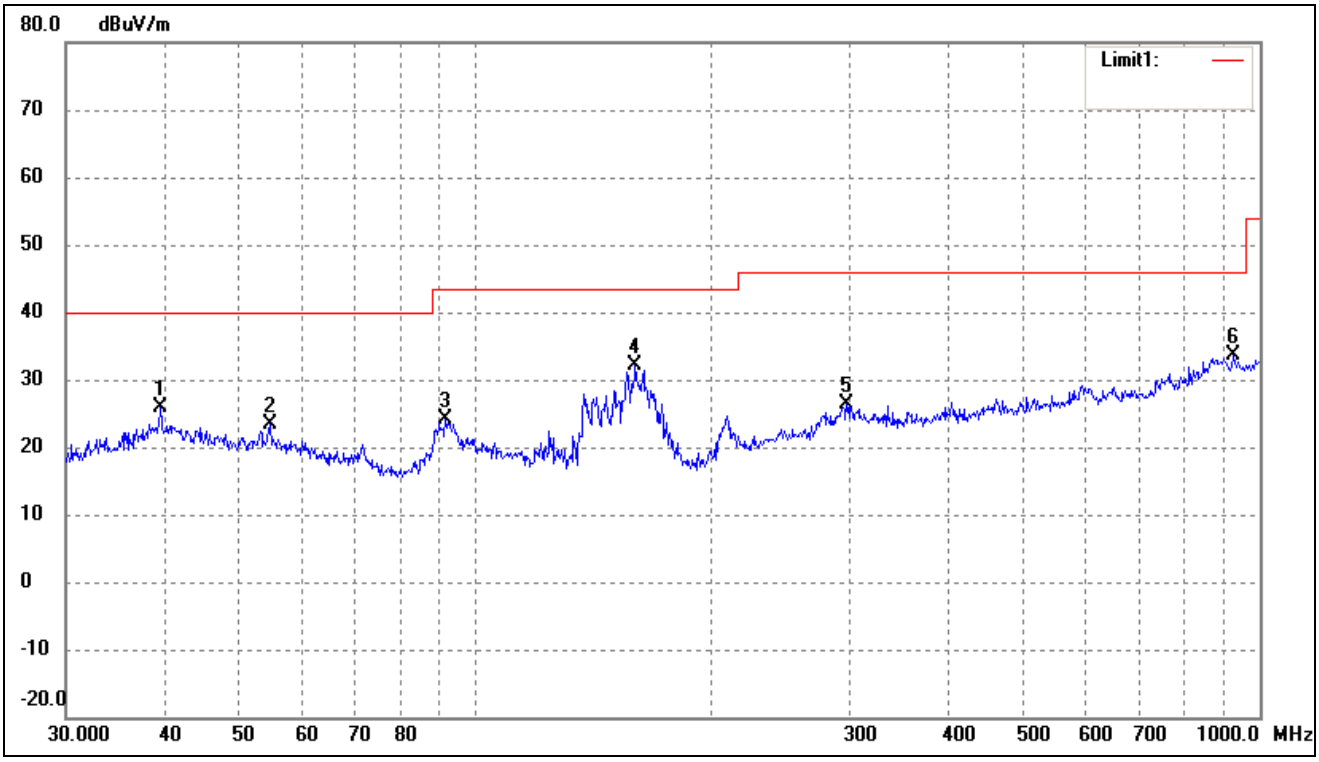


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1*	37.0249	27.85	8.74	36.59	40.00	-3.41	178	100	peak
2	72.8466	27.41	1.85	29.26	40.00	-10.74	152	200	peak
3	134.0882	29.69	2.88	32.57	43.50	-10.93	165	200	peak
4	147.4036	29.83	2.48	32.31	43.50	-11.19	135	100	peak
5	922.5157	16.57	16.45	33.02	46.00	-12.98	189	100	peak

Plot of Conducted Emissions Test Data

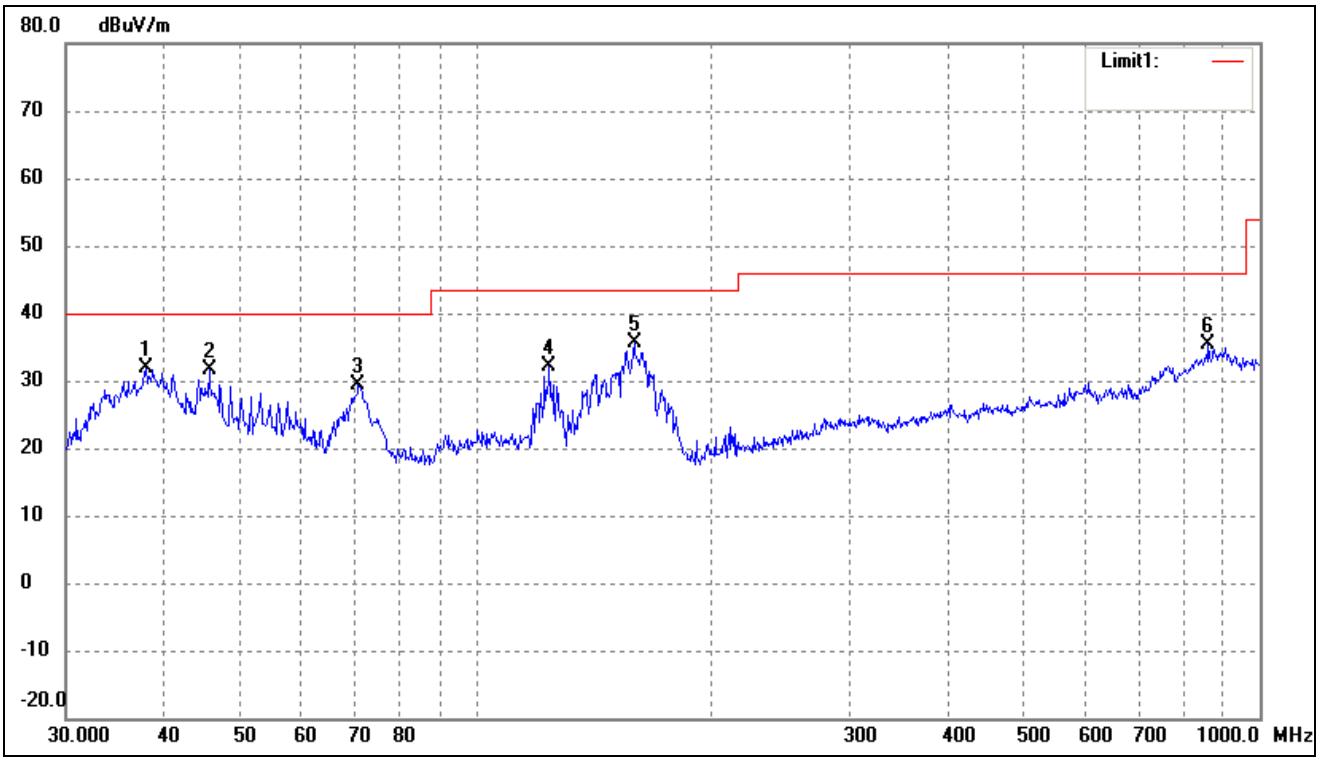
EUT: *Entertainment Tablet*
Tested Model: *W032I*
Operating Condition: *TM1 Adapter Model: SAPA05010US*
Comment: *AC 120V/60Hz; Adapter DC 5V*

Test Specification: *Neutral*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	39.5756	18.68	7.13	25.81	40.00	-14.19	137	150	peak
2	54.6428	17.50	5.85	23.35	40.00	-16.65	326	100	peak
3	91.4949	20.06	3.99	24.05	43.50	-19.45	129	150	peak
4	159.7844	29.42	2.62	32.04	43.50	-11.46	209	100	peak
5	297.2241	17.32	9.06	26.38	46.00	-19.62	145	100	peak
6	925.7563	17.14	16.40	33.54	46.00	-12.46	359	200	peak

Test Specification: *Vertical*

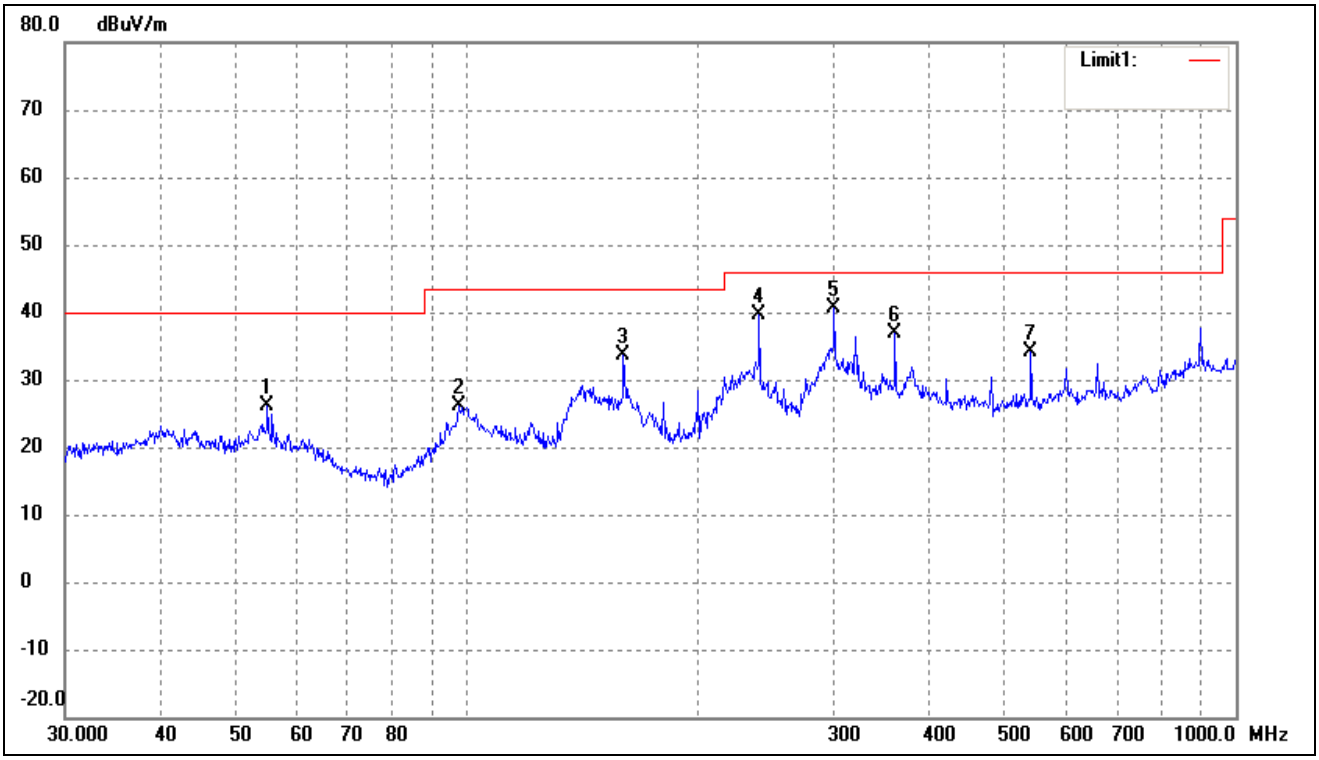


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	37.9450	23.06	8.90	31.96	40.00	-8.04	154	100	peak
2	45.6948	24.15	7.55	31.70	40.00	-8.30	308	100	peak
3	70.8315	27.17	2.09	29.26	40.00	-10.74	120	100	peak
4	124.1329	28.35	3.69	32.04	43.50	-11.46	359	100	peak
5	159.2249	33.03	2.62	35.65	43.50	-7.85	145	100	peak
6	860.0352	19.03	16.29	35.32	46.00	-10.68	359	100	peak

Plot of Conducted Emissions Test Data

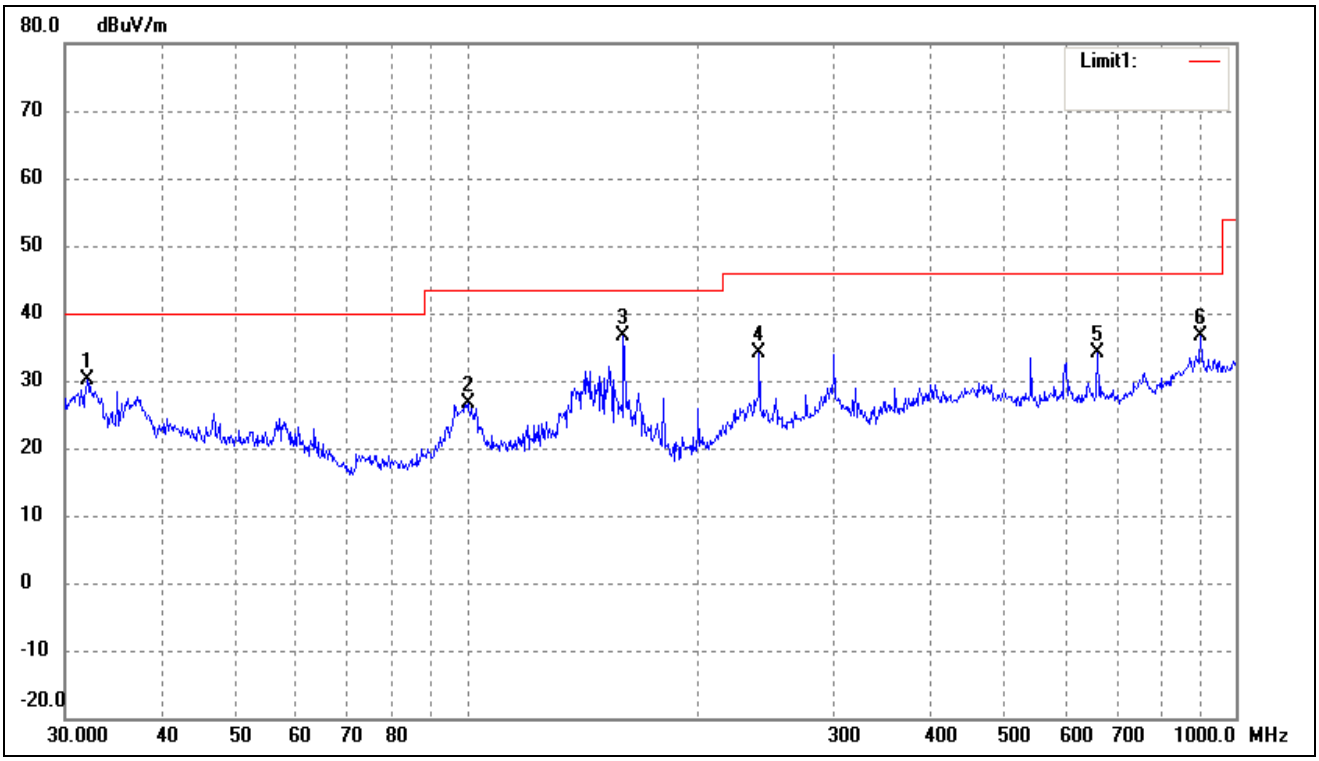
EUT: *Entertainment Tablet*
Tested Model: *W032I*
Operating Condition: *TM2*
Comment: *USB DC 5V*

Test Specification: *Neutral*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	55.0274	20.29	5.82	26.11	40.00	-13.89	360	100	peak
2	97.4560	20.75	5.49	26.24	43.50	-17.26	226	200	peak
3	159.7844	30.90	2.62	33.52	43.50	-9.98	360	100	peak
4	239.9874	33.35	6.33	39.68	46.00	-6.32	360	200	peak
5*	300.3673	31.55	9.18	40.73	46.00	-5.27	226	100	peak
6	360.4477	27.73	9.24	36.97	46.00	-9.03	360	100	peak
7	541.3725	22.76	11.31	34.07	46.00	-11.93	360	100	peak

Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	32.0668	22.16	7.95	30.11	40.00	-9.89	360	200	peak
2	100.2286	20.52	6.10	26.62	43.50	-16.88	145	100	peak
3*	159.7844	34.13	2.62	36.75	43.50	-6.75	168	100	peak
4	239.9874	27.90	6.33	34.23	46.00	-11.77	178	100	peak
5	661.1505	21.82	12.20	34.02	46.00	-11.98	360	200	peak
6	900.1474	19.71	16.85	36.56	46.00	-9.44	145	100	peak

Note: Testing is carried out with frequency rang 9kHz to the 6GHz, 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 *******