

FCC Part 15B Measurement and Test Report

For

Amelia World Corporation dba LINSAY

1841 NE 146 Street Miami, Florida

FCC ID: 2AAC3F-7XIPS

Test Rule(s):	<u>FCC Part 15 Subpart B</u>
Product Description:	<u>Tablet PC</u>
Tested Model:	<u>F-7XIPS</u>
Report No.:	<u>STR16128185I-2</u>
Tested Date:	<u>2016-12-19 to 2017-01-17</u>
Issued Date:	<u>2017-01-18</u>
Tested By:	<u>Terry Su / Engineer</u> <i>Terry Su</i>
Reviewed By:	<u>Silin Chen / EMC Manager</u> <i>Silin Chen</i>
Approved & Authorized By:	<u>Jandy So / PSQ Manager</u> <i>Jandy So</i>
Prepared By:	

Shenzhen SEM.Test Technology Co., Ltd.
1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road,
Bao'an District, Shenzhen, P.R.C. (518101)
Tel.: +86-755-33663308 Fax.: +86-755-33663309 Website: www.semtest.com.cn

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	3
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT).....	3
1.2 TEST STANDARDS.....	4
1.3 TEST METHODOLOGY.....	4
1.4 TEST FACILITY.....	4
1.5 EUT SETUP AND OPERATION MODE.....	5
1.6 MEASUREMENT UNCERTAINTY.....	5
1.7 TEST EQUIPMENT LIST AND DETAILS.....	6
2. SUMMARY OF TEST RESULTS	7
3. CONDUCTED EMISSIONS	8
3.1 TEST PROCEDURE.....	8
3.2 BASIC TEST SETUP BLOCK DIAGRAM.....	8
3.3 ENVIRONMENTAL CONDITIONS.....	8
3.4 SUMMARY OF TEST RESULTS/PLOTS.....	8
3.5 CONDUCTED EMISSIONS TEST DATA.....	9
4. RADIATED EMISSIONS	13
4.1 TEST PROCEDURE.....	13
4.2 TEST RECEIVER SETUP.....	14
4.3 CORRECTED AMPLITUDE & MARGIN CALCULATION.....	14
4.4 ENVIRONMENTAL CONDITIONS.....	14
4.5 SUMMARY OF TEST RESULTS/PLOTS.....	14

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Amelia World Corporation dba LINSAY
Address of applicant: 1841 NE 146 Street Miami, Florida

Manufacturer: Amelia World Corporation dba LINSAY
Address of manufacturer: 1841 NE 146 Street Miami, Florida

General Description of EUT	
Product Name:	Tablet PC
Trade Name:	LINSAY
Model No.:	F-7XIPS
Adding Model(s):	/
<i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i>	

Technical Characteristics of EUT	
Rated Voltage:	DC 3.7V
Rated Current:	/
Rated Power:	/
Power Adapter Model:	XHY050200UUCH
Lowest Internal Frequency of EUT:	32.768kHz
Highest internal frequency of EUT:	1.5GHz

1.2 Test Standards

The following report is prepared on behalf of the Amelia World Corporation dba LINSAY 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 C63.4-2014, 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.

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 & Back Camera	AC Adapter
TM2	Charging & Front Camera	AC Adapter
TM3	Charging & USB Playing	AC Adapter
TM4	Charging & TF Card Playing	AC Adapter
TM5	Downloading	Connected to PC

EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
USB Cable	0.8M	Shielded	Without Core
OTG Cable	0.12M	Shielded	Without Core

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
USB disk	Kingston	DTGE9	/
Earphone	/	/	/
TF Card	SanDisk	Ultra	/
Notebook	ASUS	X42J	/
PC	Dell	/	/

Special Cable List and Details

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

1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Conducted Emissions	Conducted	$\pm 2.88\text{dB}$
Transmitter Spurious Emissions	Radiated	$\pm 5.1\text{dB}$

1.7 Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
SEMT-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2016-06-04	2017-06-03
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2016-06-04	2017-06-03
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2016-06-04	2017-06-03
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2016-06-04	2017-06-03
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2016-06-04	2017-06-03
SEMT-1011	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2016-06-04	2017-06-03
SEMT-1042	Horn Antenna	ETS	3117	00086197	2016-06-04	2017-06-03
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2016-06-04	2017-06-03
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2016-06-04	2017-06-03
SEMT-1003	L.I.S.N	Schwarz beck	NSLK8126	8126-224	2016-06-04	2017-06-03
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2016-06-04	2017-06-03

2. SUMMARY OF TEST RESULTS

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

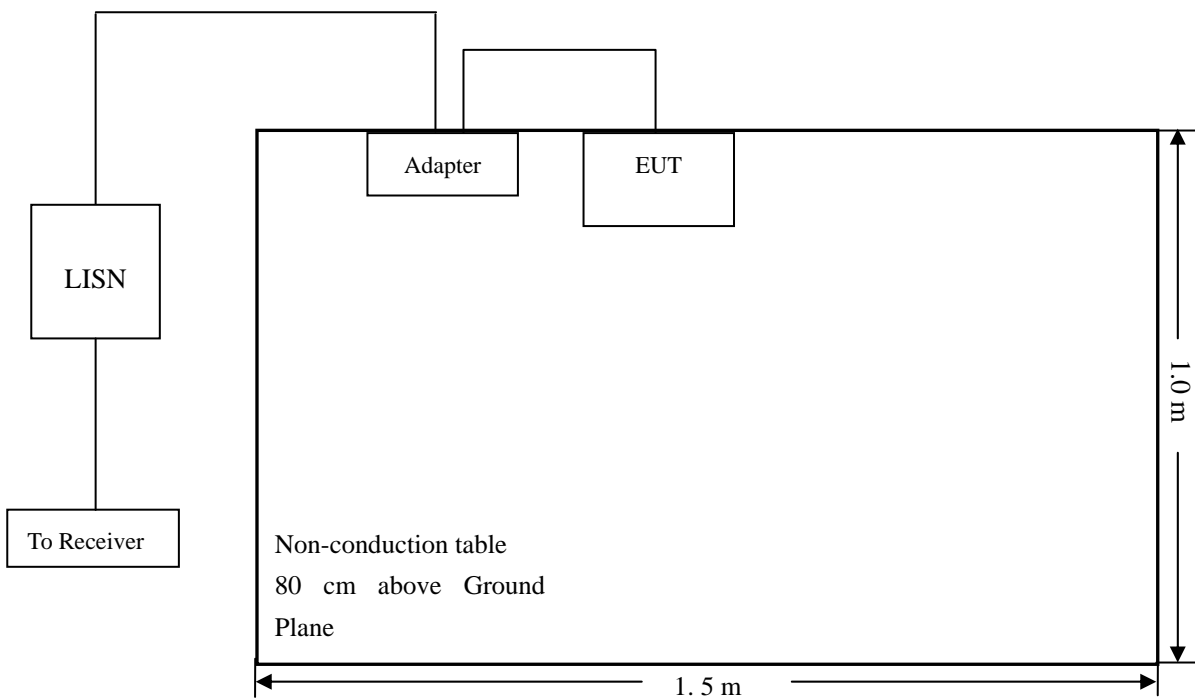
N/A: not applicable

3. Conducted Emissions

3.1 Test Procedure

Test is conducting under the description of 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.

3.2 Basic Test Setup Block Diagram



3.3 Environmental Conditions

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

3.4 Summary of Test Results/Plots

According to the data in section 3.6, the EUT complied with the FCC Part 15.107(a) Conducted margin for a Class B device, with the *worst* margin reading of:

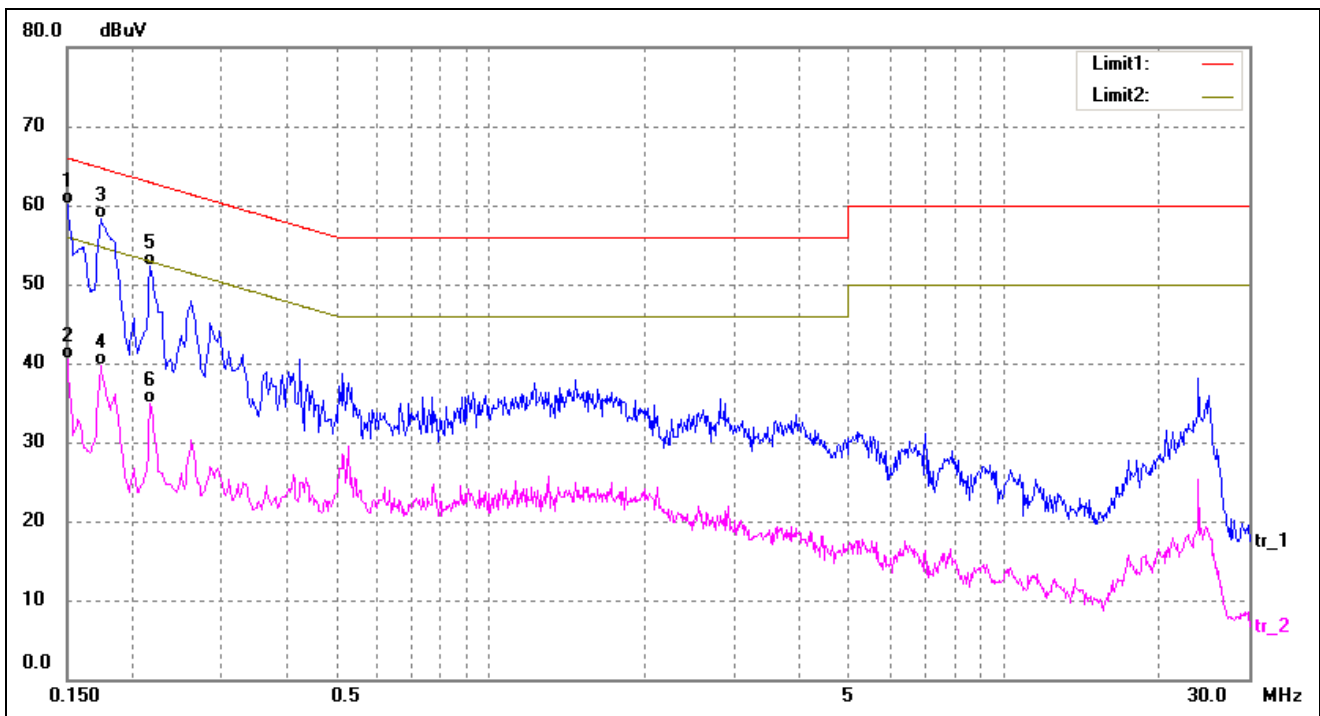
-5.82 dB at 0.1500 MHz in the **Neutral, QP** detector, 0.15-30MHz

3.5 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data

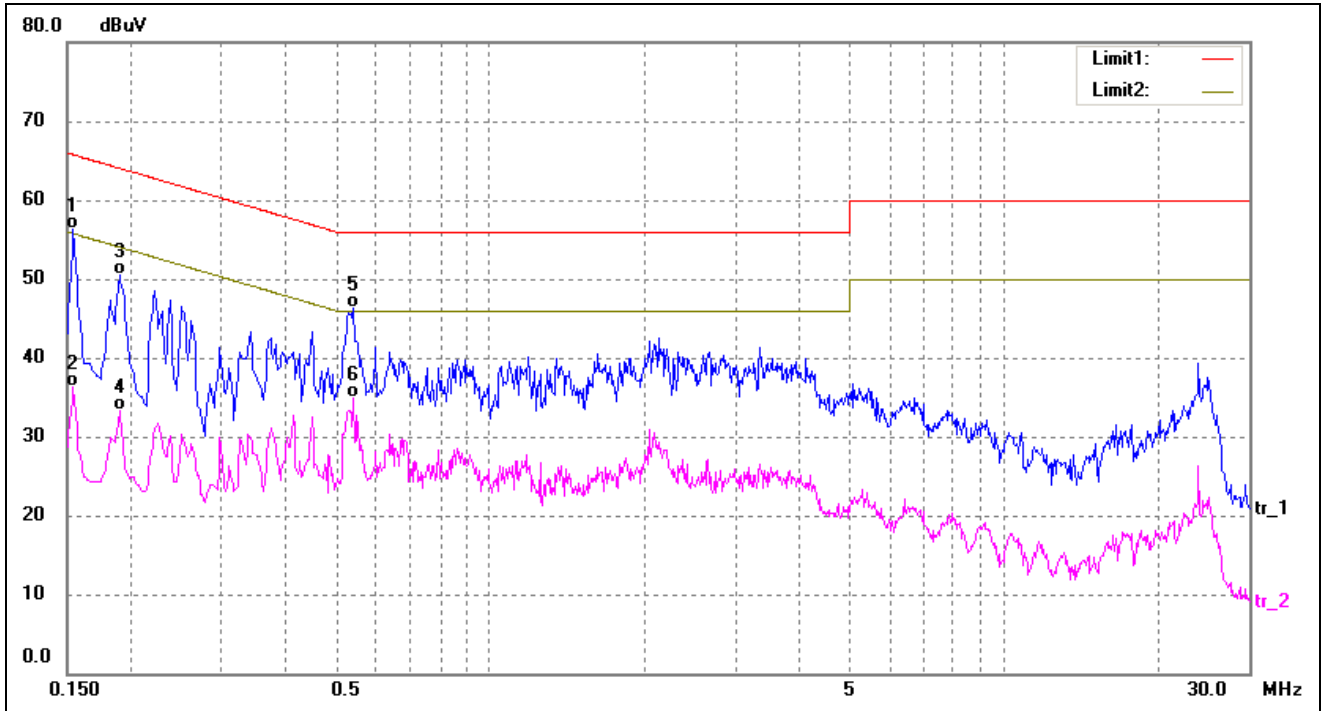
EUT: Tablet PC
 Tested Model: F-7XIPS
 Operating Condition: TM1 (Worst case)
 Comment: AC 120V/60Hz; Adapter DC 5V

Test Specification: Neutral



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1500	50.33	9.85	60.18	66.00	-5.82	QP
2	0.1500	30.60	9.85	40.45	56.00	-15.55	AVG
3	0.1740	48.53	9.83	58.36	64.77	-6.41	QP
4	0.1740	29.88	9.83	39.71	54.77	-15.06	AVG
5	0.2180	42.53	9.80	52.33	62.89	-10.56	QP
6	0.2180	25.10	9.80	34.90	52.89	-17.99	AVG

Test Specification: Line

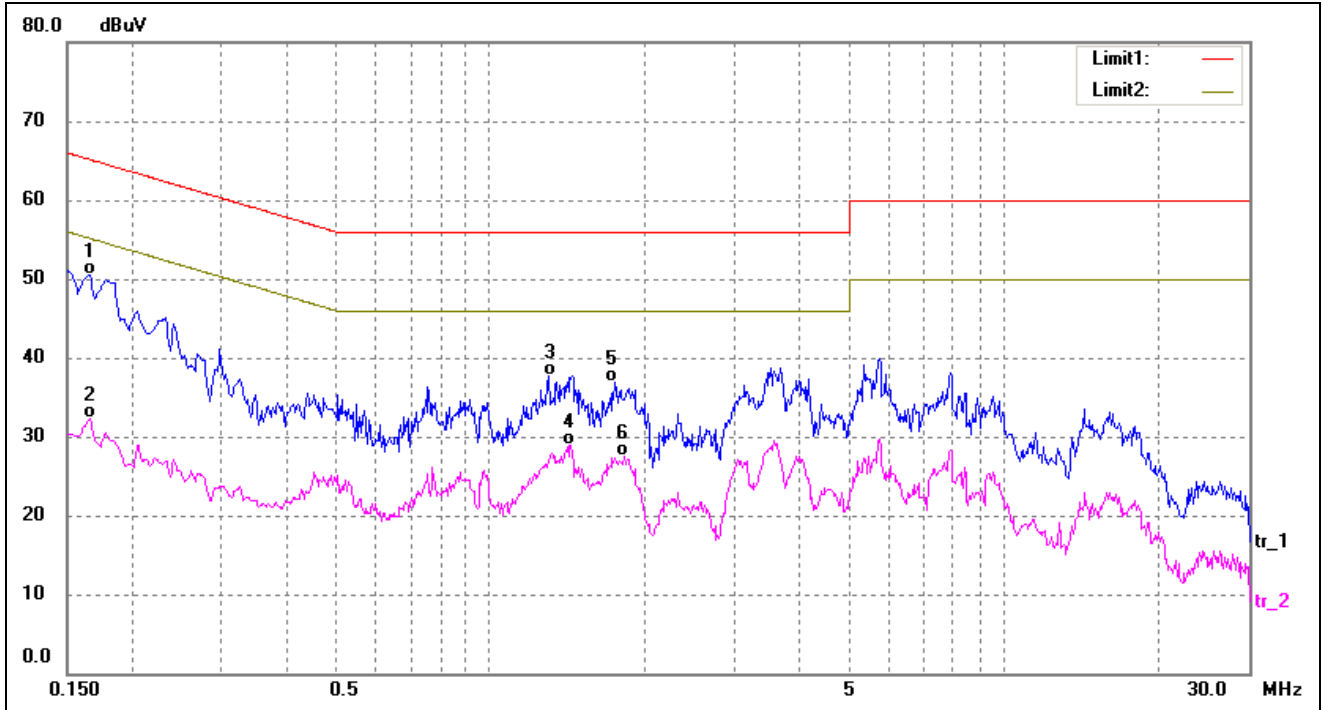


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1540	46.38	9.85	56.23	65.78	-9.55	QP
2	0.1540	26.41	9.85	36.26	55.78	-19.52	AVG
3	0.1900	40.71	9.81	50.52	64.04	-13.52	QP
4	0.1900	23.53	9.81	33.34	54.04	-20.70	AVG
5	0.5420	36.58	9.80	46.38	56.00	-9.62	QP
6	0.5420	25.13	9.80	34.93	46.00	-11.07	AVG

Plot of Conducted Emissions Test Data

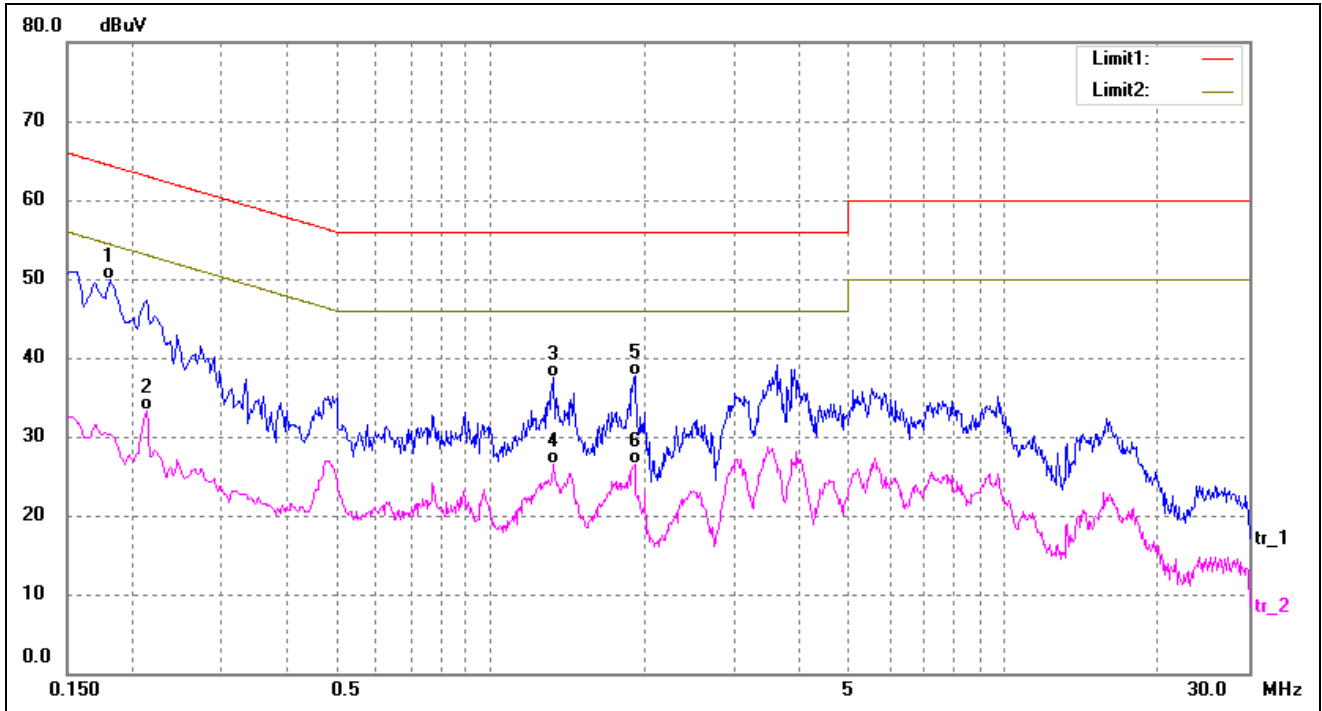
EUT: Tablet PC
 Tested Model: F-7XIPS
 Operating Condition: TM5
 Comment: AC 120V/60Hz USB 5V

Test Specification: Neutral



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1660	40.77	9.83	50.60	65.16	-14.56	QP
2	0.1660	22.55	9.83	32.38	55.16	-22.78	AVG
3	1.2980	28.02	9.75	37.77	56.00	-18.23	QP
4	1.4340	19.11	9.75	28.86	46.00	-17.14	AVG
5	1.7460	27.24	9.74	36.98	56.00	-19.02	QP
6	1.8220	17.69	9.74	27.43	46.00	-18.57	AVG

Test Specification: Line



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1820	40.02	9.82	49.84	64.39	-14.55	QP
2	0.2140	23.47	9.80	33.27	53.05	-19.78	AVG
3	1.3300	27.70	9.75	37.45	56.00	-18.55	QP
4	1.3300	16.68	9.75	26.43	46.00	-19.57	AVG
5	1.9100	27.92	9.74	37.66	56.00	-18.34	QP
6	1.9100	16.72	9.74	26.46	46.00	-19.54	AVG

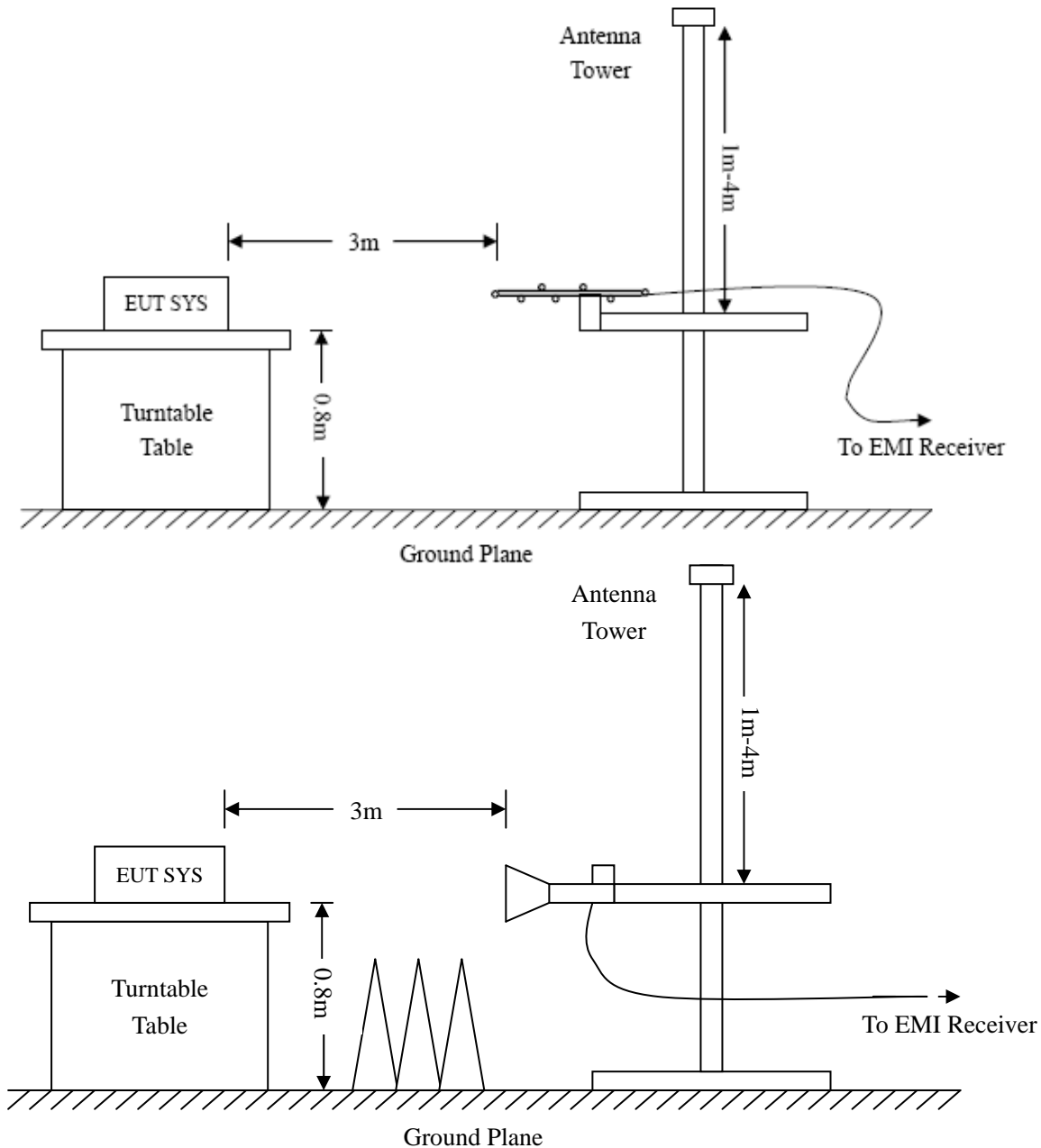
4. Radiated Emissions

4.1 Test Procedure

The setup of EUT is according with per ANSI C63.4-2014 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.



4.2 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

4.3 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:

$$\text{Corr. Ampl.} = \text{Indicated Reading} - \text{Corr. Factor}$$

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

$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15.109(a) Limit}$$

4.4 Environmental Conditions

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

4.5 Summary of Test Results/Plots

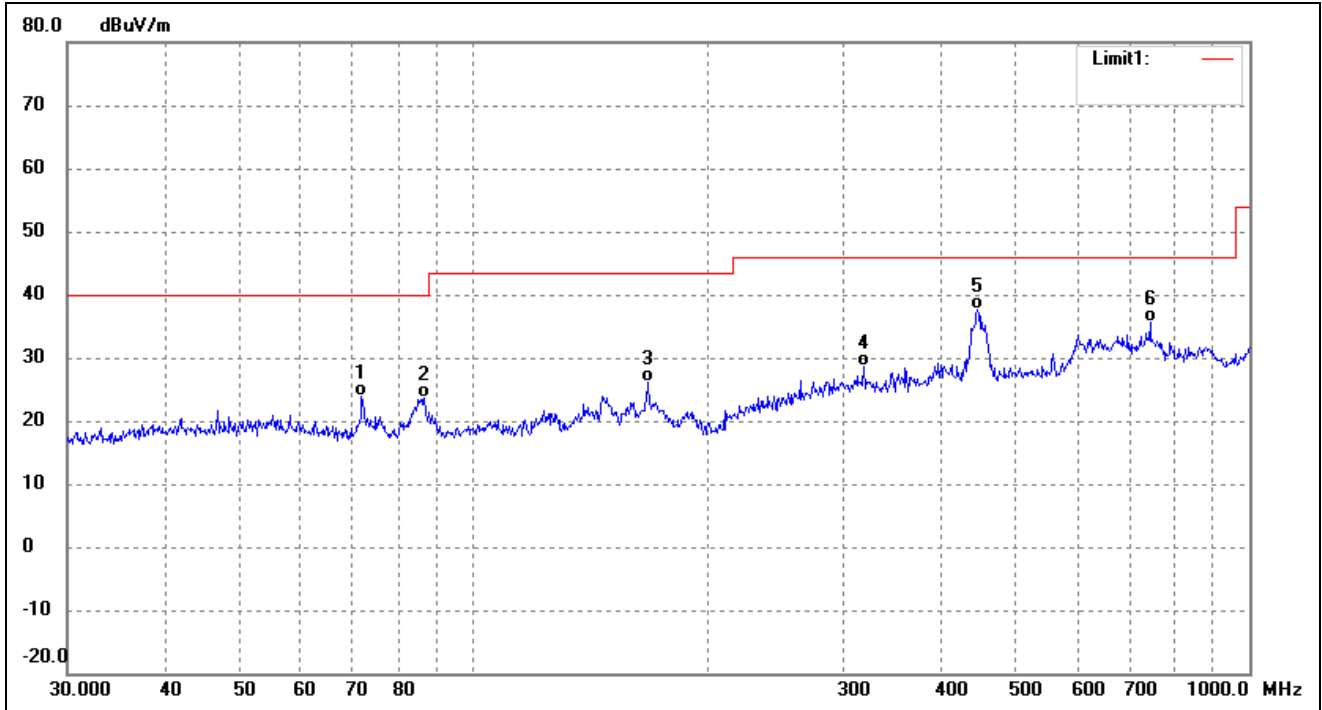
According to the data, the EUT complied with the FCC Part 15.109(a) rule, and had the worst margin of:

-1.70 dB at 440.1963 MHz in the Horizontal polarization, TM4 Mode, 30MHz to 12.75 GHz, 3Meters

Plot of Radiated Emissions Test Data

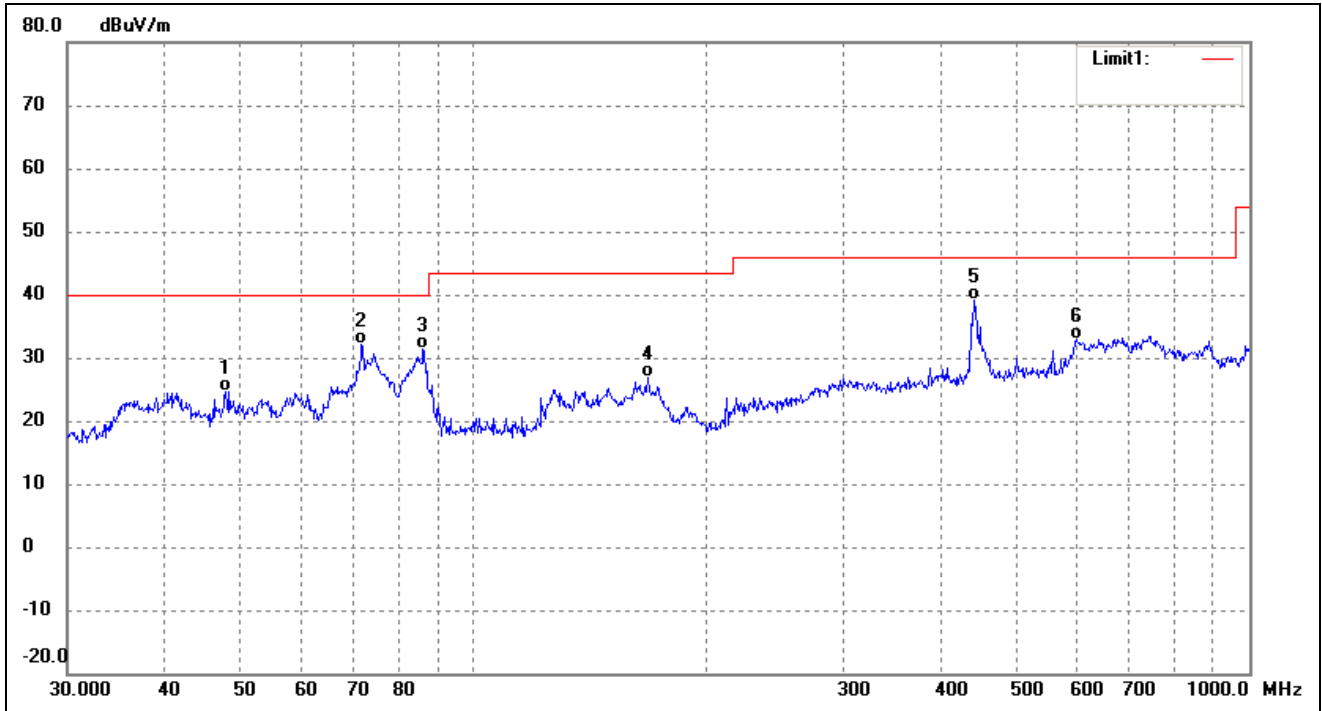
EUT: *Tablet PC*
 Tested Model: *F-7XIPS*
 Operating Condition: *TM1*
 Comment: *AC 120V/60Hz; Adapter DC 5V*

Test Specification: *Horizontal*



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	71.8320	21.45	2.37	23.82	40.00	-16.18	154	100	QP
2	86.5029	21.10	2.45	23.55	40.00	-16.45	230	100	QP
3	167.8243	24.32	1.90	26.22	43.50	-17.28	141	100	QP
4	318.8170	17.53	11.11	28.64	46.00	-17.36	81	100	QP
5	446.4141	25.84	11.80	37.64	46.00	-8.36	296	100	QP
6	744.8661	18.29	17.43	35.72	46.00	-10.28	177	100	QP

Test Specification: Vertical

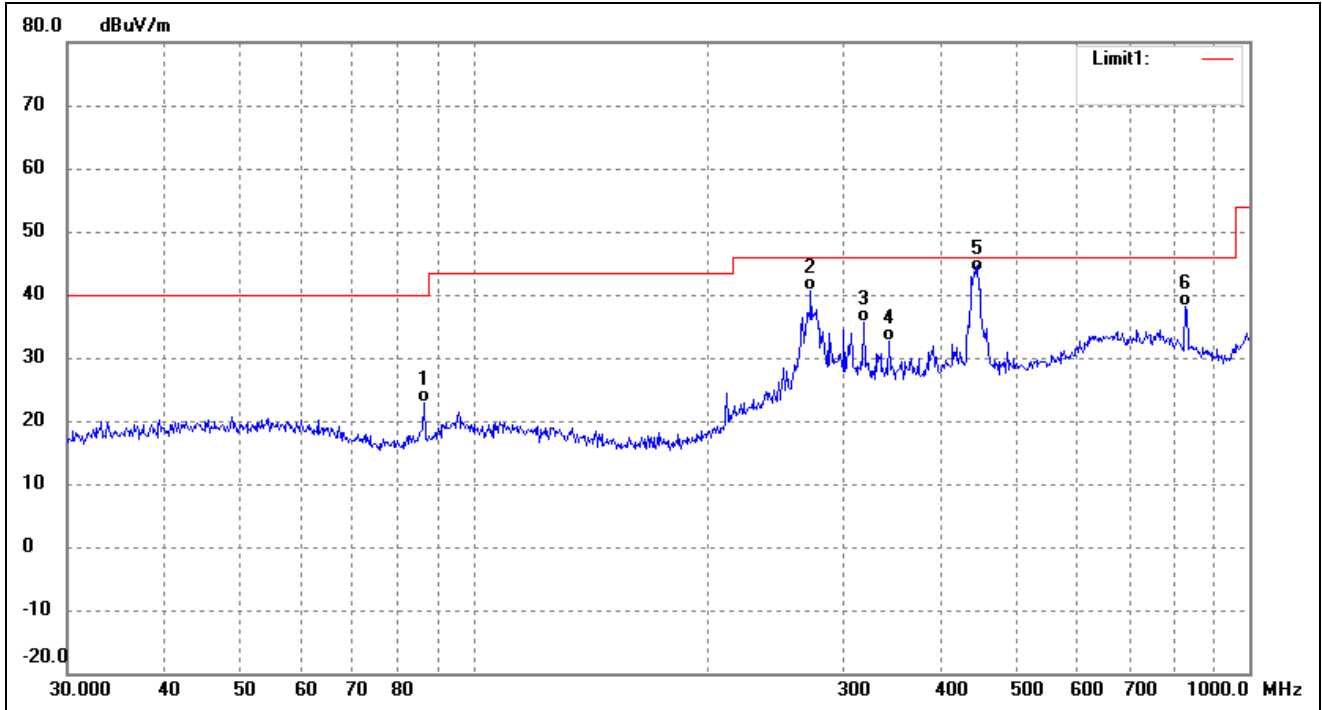


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	47.9940	20.01	4.66	24.67	40.00	-15.33	149	100	QP
2	71.8320	29.87	2.37	32.24	40.00	-7.76	151	100	QP
3	86.2001	28.95	2.40	31.35	40.00	-8.65	168	100	QP
4	167.8243	24.91	1.90	26.81	43.50	-16.69	70	100	QP
5	441.7426	27.41	11.68	39.09	46.00	-6.91	200	100	QP
6	599.3213	15.32	17.44	32.76	46.00	-13.24	227	100	QP

Plot of Radiated Emissions Test Data

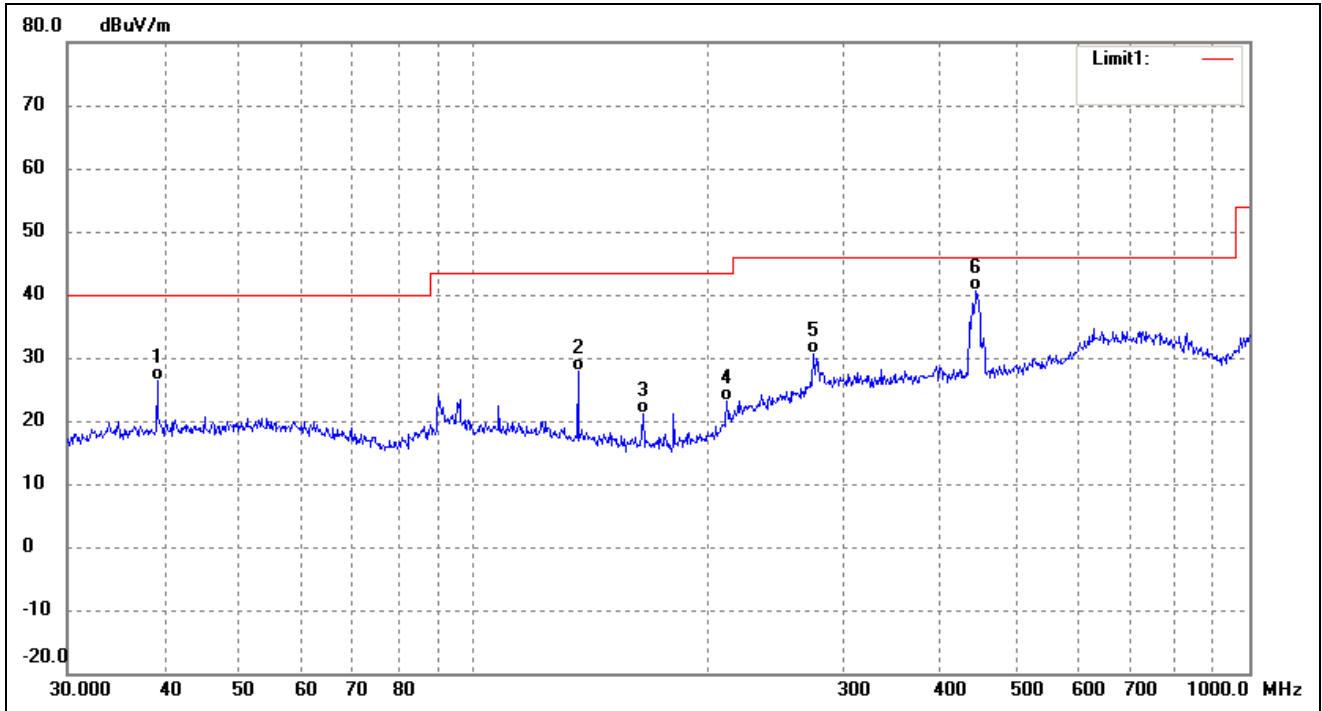
EUT: Tablet PC
 Tested Model: F-7XIPS
 Operating Condition: TM2
 Comment: AC 120V/60Hz; Adapter DC 5V

Test Specification: Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	86.5029	20.20	2.80	23.00	40.00	-17.00	103	100	QP
2	272.2776	29.97	10.58	40.55	46.00	-5.45	349	100	QP
3	318.8170	23.73	11.95	35.68	46.00	-10.32	268	100	QP
4	343.1800	21.07	11.45	32.52	46.00	-13.48	72	100	QP
5	446.4141	30.99	12.67	43.66	46.00	-2.34	51	100	QP
6	827.4934	22.27	15.80	38.07	46.00	-7.93	158	100	QP

Test Specification: Vertical

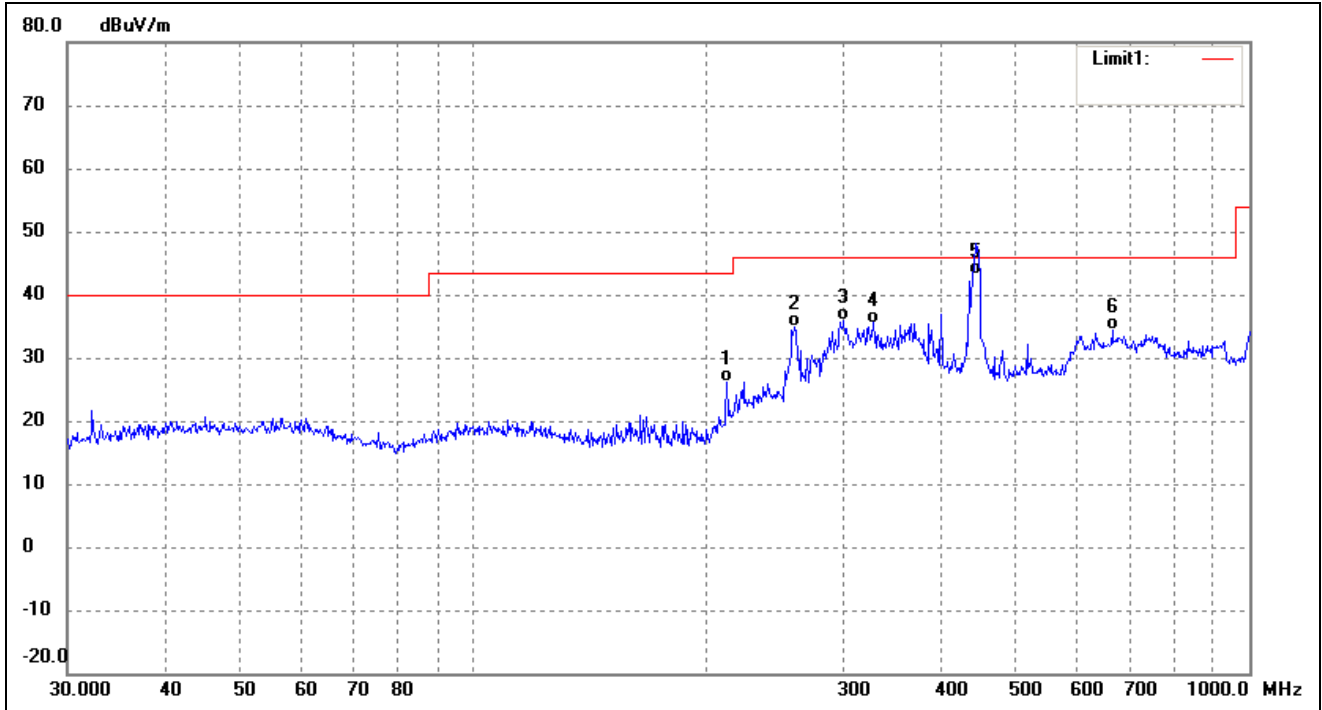


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	39.1616	21.49	4.80	26.29	40.00	-13.71	102	100	QP
2	136.4598	24.39	3.44	27.83	43.50	-15.67	274	100	QP
3	165.4867	18.73	2.45	21.18	43.50	-22.32	151	100	QP
4	212.2695	17.16	6.02	23.18	43.50	-20.32	83	100	QP
5	274.1939	19.88	10.72	30.60	46.00	-15.40	173	100	QP
6	444.8514	27.89	12.62	40.51	46.00	-5.49	300	100	QP

Plot of Radiated Emissions Test Data

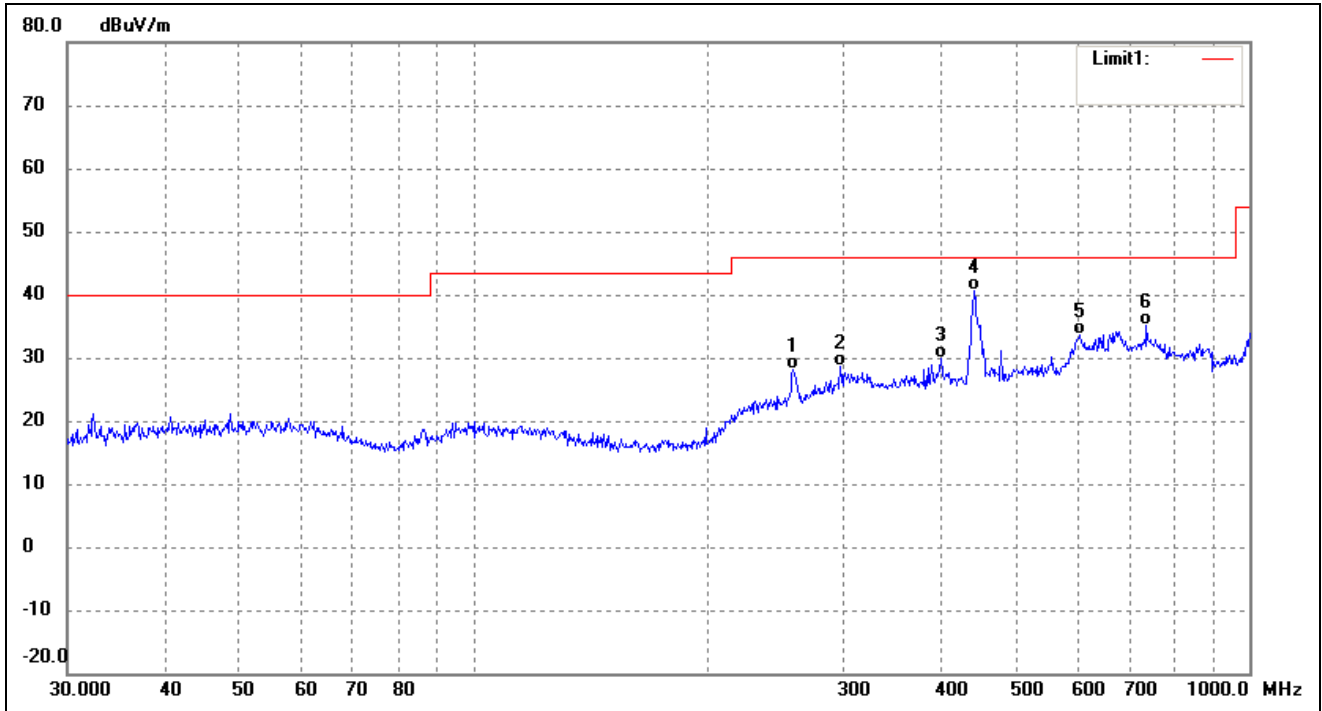
EUT: *Tablet PC*
 Tested Model: *F-7XIPS*
 Operating Condition: *TM3*
 Comment: *AC 120V/60Hz; Adapter DC 5V*

Test Specification: *Horizontal*



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	212.2695	20.19	6.02	26.21	43.50	-17.29	96	100	QP
2	259.2338	25.33	9.66	34.99	46.00	-11.01	206	100	QP
3	300.3672	23.89	11.95	35.84	46.00	-10.16	207	100	QP
4	327.8873	23.79	11.71	35.50	46.00	-10.50	82	100	QP
5	443.2943	30.51	12.59	43.10	46.00	-2.90	79	100	QP
6	665.8035	16.38	17.90	34.28	46.00	-11.72	265	100	QP

Test Specification: Vertical

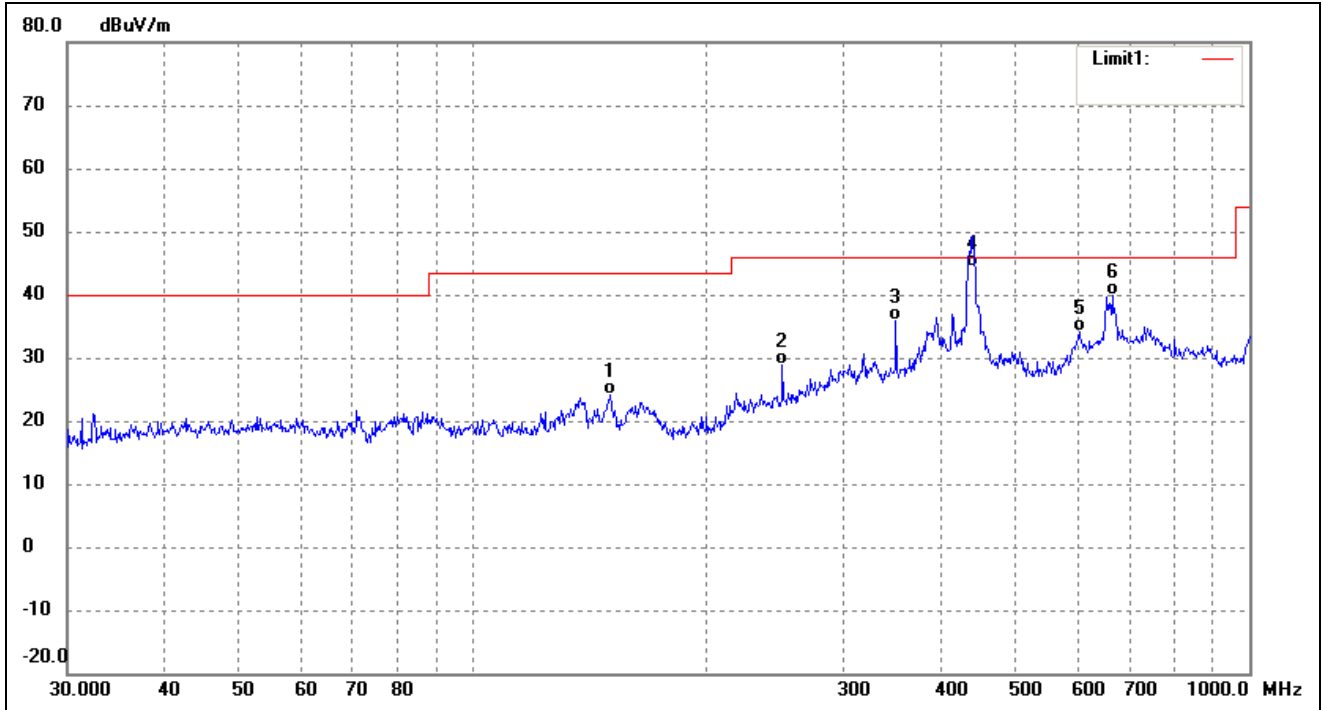


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	258.3263	18.52	9.62	28.14	46.00	-17.86	148	100	QP
2	297.2241	16.82	11.84	28.66	46.00	-17.34	256	100	QP
3	400.4318	17.18	12.67	29.85	46.00	-16.15	149	100	QP
4	441.7425	28.19	12.54	40.73	46.00	-5.27	89	100	QP
5	605.6592	15.17	18.35	33.52	46.00	-12.48	296	100	QP
6	737.0714	16.22	18.84	35.06	46.00	-10.94	93	100	QP

Plot of Radiated Emissions Test Data

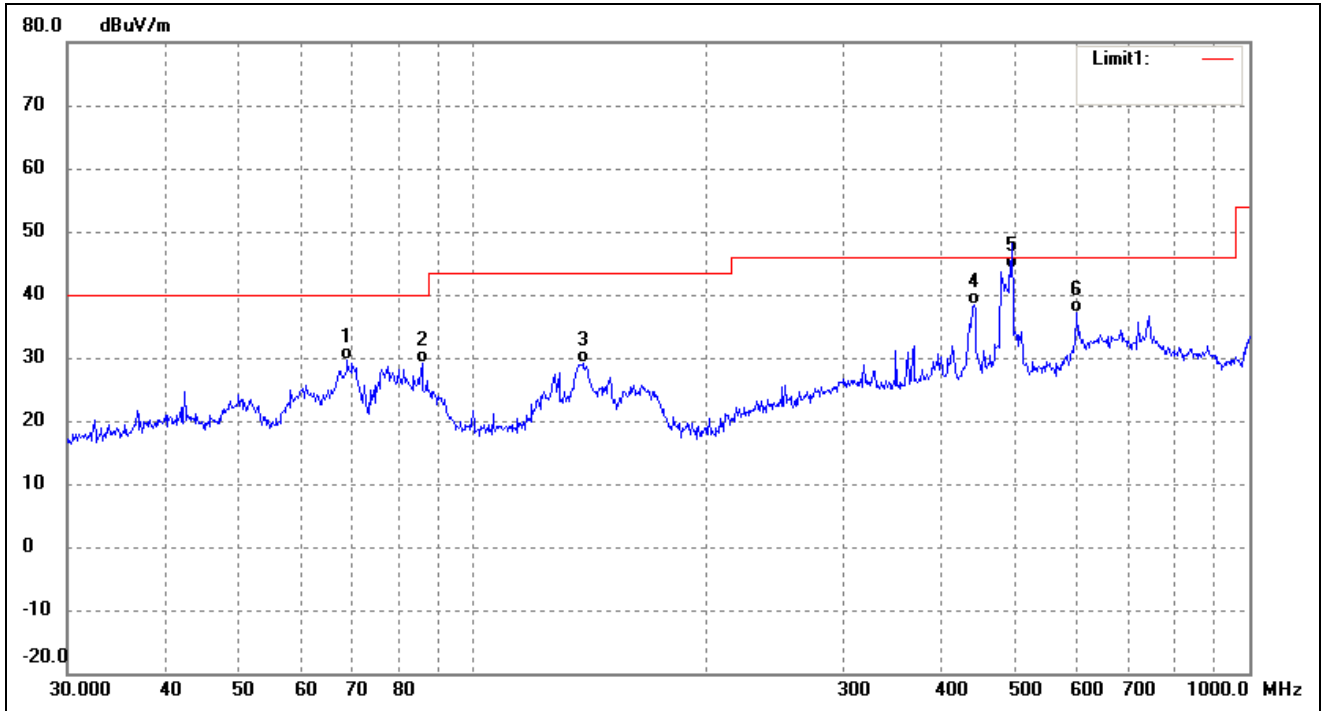
EUT: *Tablet PC*
 Tested Model: *F-7XIPS*
 Operating Condition: *TM4*
 Comment: *AC 120V/60Hz; Adapter DC 5V*

Test Specification: *Horizontal*



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	150.0108	21.44	2.75	24.19	43.50	-19.31	188	100	QP
2	250.3012	19.62	9.32	28.94	46.00	-17.06	126	100	QP
3	350.4768	24.11	11.65	35.76	46.00	-10.24	240	100	QP
4	440.1963	31.79	12.51	44.30	46.00	-1.70	97	100	QP
5	603.5392	15.60	18.50	34.10	46.00	-11.90	303	100	QP
6	665.8035	21.91	17.90	39.81	46.00	-6.19	191	100	QP

Test Specification: Vertical

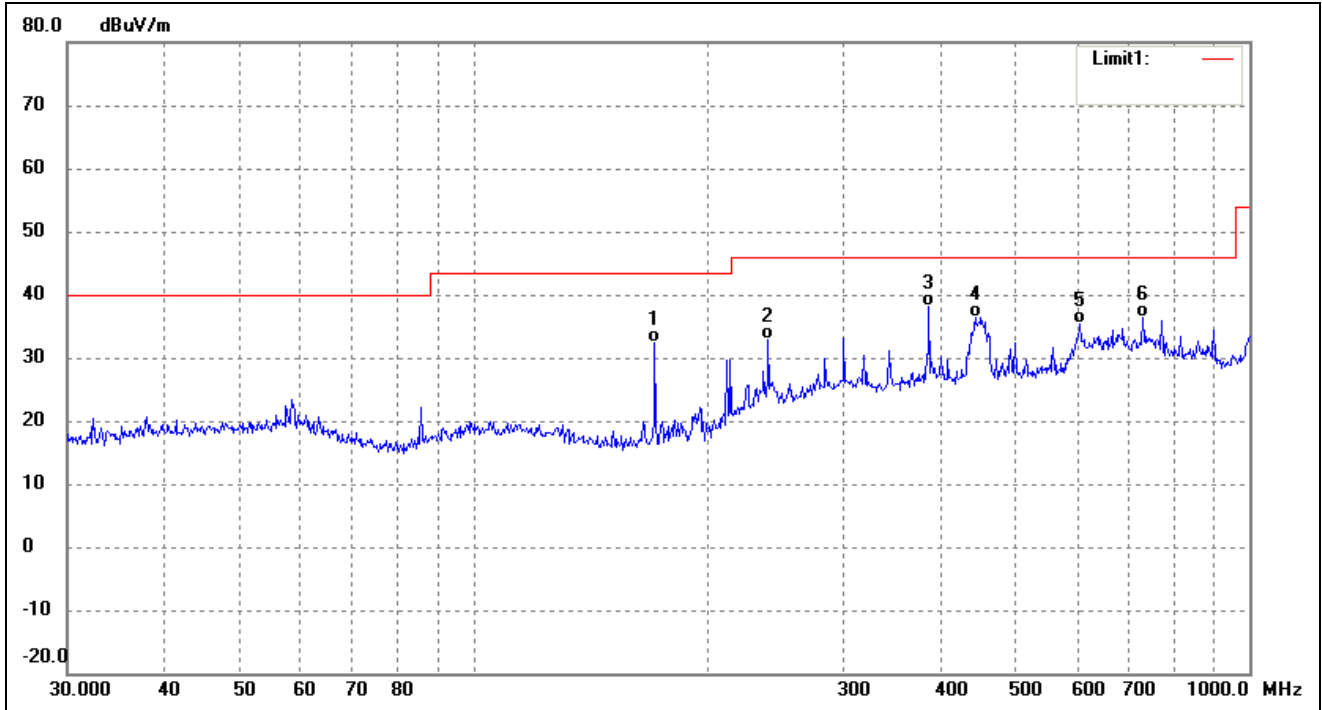


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	68.8721	26.46	3.13	29.59	40.00	-10.41	109	100	QP
2	85.8984	26.43	2.70	29.13	40.00	-10.87	159	100	QP
3	138.3873	25.94	3.28	29.22	43.50	-14.28	115	100	QP
4	441.7426	25.94	12.54	38.48	46.00	-7.52	81	100	QP
5	494.1984	31.09	13.11	44.20	46.00	-1.80	345	100	QP
6	599.3212	18.54	18.62	37.16	46.00	-8.84	336	100	QP

Plot of Radiated Emissions Test Data

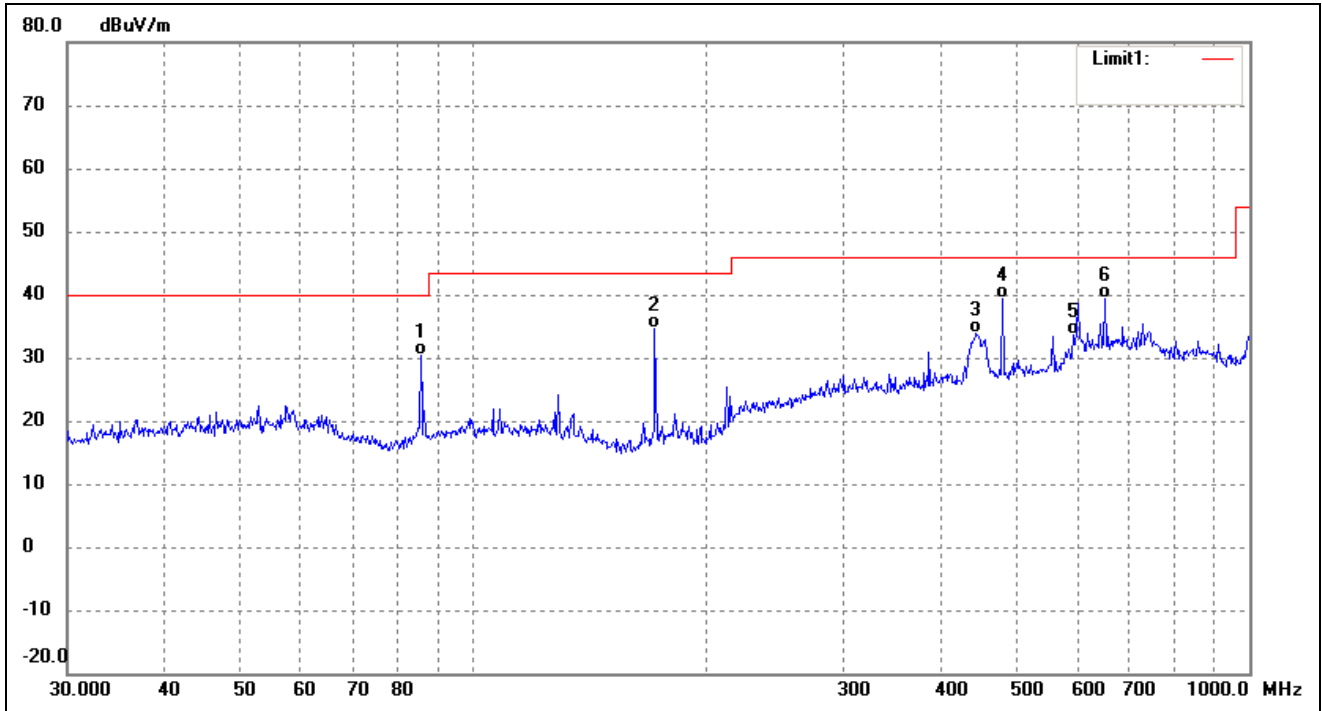
EUT: *Tablet PC*
 Tested Model: *F-7XIPS*
 Operating Condition: *TM5*
 Comment: *AC 120V/60Hz; USB 5V*

Test Specification: *Horizontal*



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	171.3926	29.95	2.47	32.42	43.50	-11.08	127	100	QP
2	239.9874	23.99	8.93	32.92	46.00	-13.08	240	100	QP
3	386.6338	26.06	12.09	38.15	46.00	-7.85	185	100	QP
4	443.2943	23.74	12.59	36.33	46.00	-9.67	97	100	QP
5	605.6592	17.13	18.35	35.48	46.00	-10.52	155	100	QP
6	729.3583	17.91	18.38	36.29	46.00	-9.71	339	100	QP

Test Specification: Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	85.5977	27.73	2.66	30.39	40.00	-9.61	100	100	QP
2	171.3926	32.21	2.47	34.68	43.50	-8.82	162	100	QP
3	444.8514	21.15	12.62	33.77	46.00	-12.23	288	100	QP
4	480.5276	26.68	12.58	39.26	46.00	-6.74	67	100	QP
5	593.0497	16.30	17.45	33.75	46.00	-12.25	258	100	QP
6	651.9417	21.56	17.77	39.33	46.00	-6.67	335	100	QP

Note: Testing is carried out with frequency rang 9kHz to the 12.75GHz, which above 1GHz are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

The measurements greater than 20dB below the limit from 9kHz to 30MHz.

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