FCC Part 15B
Measurement and Test Report

For

Amelia World Corporation dba LINSAY

16340 West Dixie Highway, North Miami Beach, Florida

FCC ID: 2AAC3F-7HD4CORE

Test Standards:	FCC Part 15 Subpart B
Product Description:	Tablet PC
Tested Model:	F-7HD4CORE
Report No.:	STR13118151I-2
Tested Date:	2013-11-19 to 2013-11-26
Issued Date:	2013-11-27
Tested By:	Susan Su / Engineer
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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Amelia World Corporation dba LINSAY
Address of applicant:	16340 West Dixie Highway, North Miami Beach, Florida
Manufacturer:	Amelia World Corporation dba LINSAY
Address of manufacturer:	16340 West Dixie Highway, North Miami Beach, Florida

General Description of EUT	
Product Name:	Tablet PC
Trade Name:	LINSAY
Model No.:	F-7HD4CORE
Adding Model(s):	/
Note: The test data is gathered from a production sample, provided by the manufacturer.	

Technical Characteristics of EUT	
Rated Voltage:	DC 3.7V battery, Adapter DC 5V charging
Rated Current:	/
Rated Power:	/
Power Adapter Model:	ZFXPA0200050 Input: AC 100-240V/0.5A; Output: DC 5V/2A
Highest Internal Frequency:	1GHz
Lowest Internal Frequency:	32.768kHz
Classification of ITE:	Class B
Support Interface:	USB 2.0

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 C63.4-2003, 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	Color Bar with 1kHz Audio
TM4	Downloading	Test Software: CT3

EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
USB Cable	0.8	Shielded	WithCore
DC power Cable	1.5	Unshielded	Without Core

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
Notebook	Lenovo	E23	EB12648265
Display	DELL	U2410f	50642P246601H(B) ZL

Special Cable List and Details

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

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.

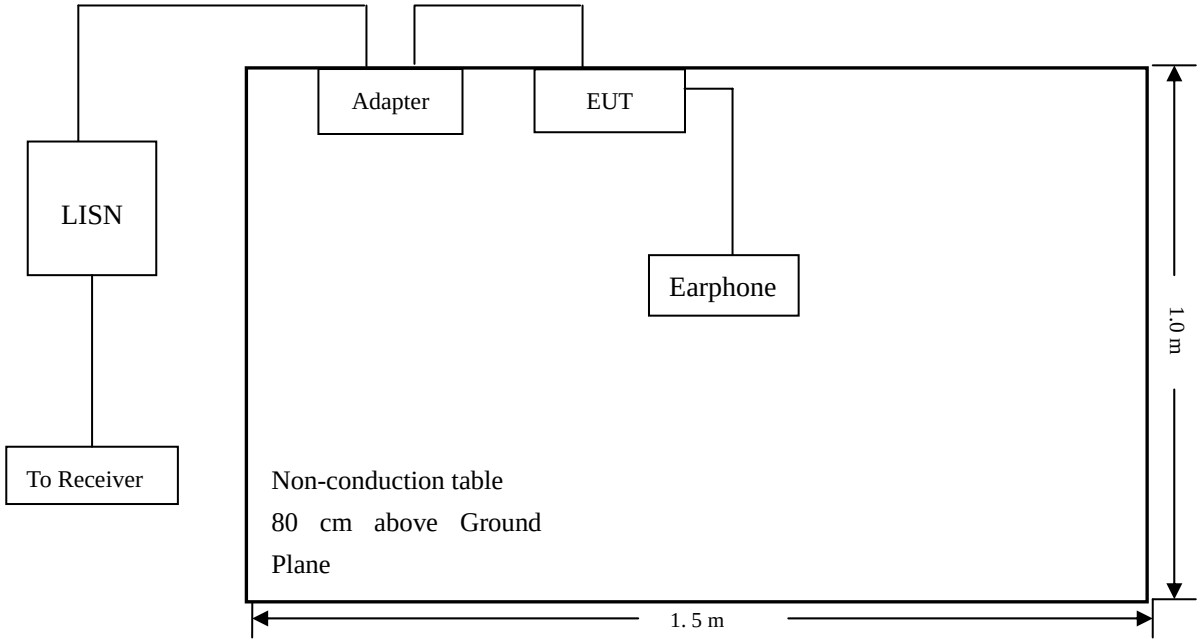
3.2 Test Equipment List and Details

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:

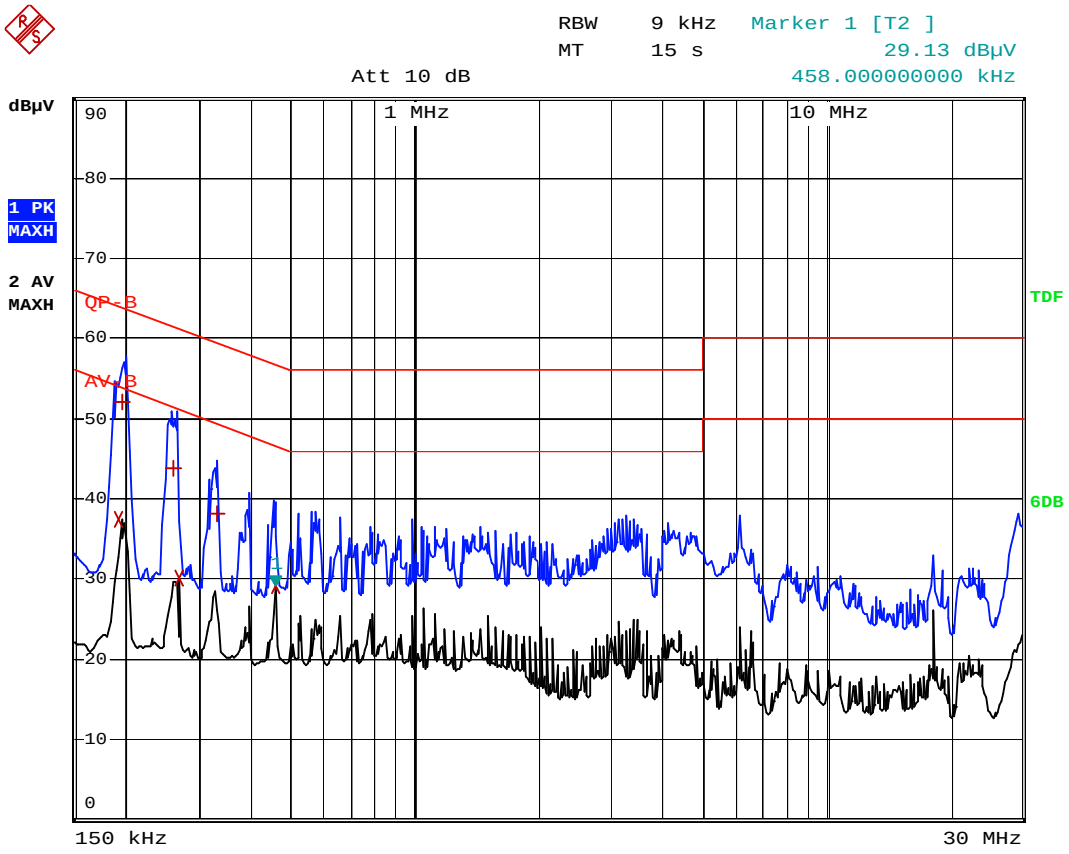
-11.59 dB at 0.198 MHz in the **Neutral** mode**, QP** detector, **0.15-30MHz**

3.7 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data

EUT: *Tablet PC*
Tested Model: *F-7HD4CORE*
Operating Condition: *TM1*
Comment: *AC 120V/60Hz; Adapter DC 5V*

Test Specification: *Neutral*

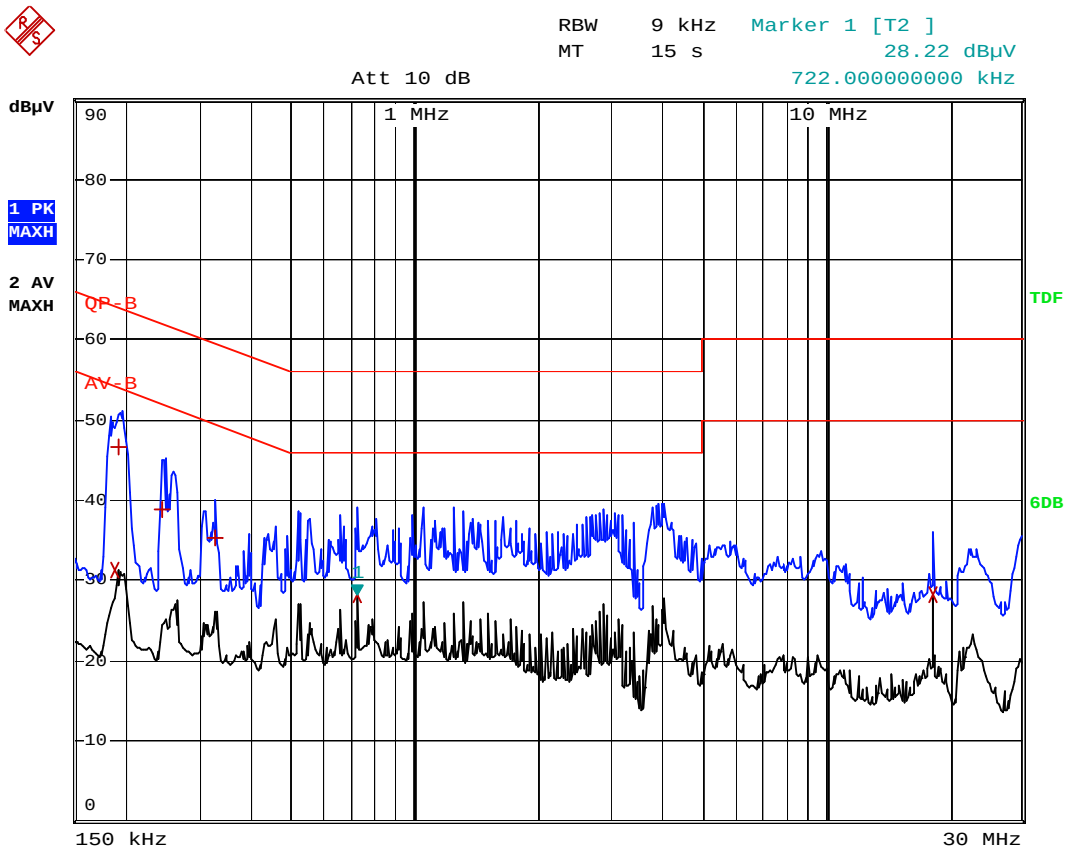


EDIT PEAK LIST (Prescan Results)

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

TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
2 Average	194 kHz	37.42	-16.44
1 Quasi Peak	198 kHz	52.10	-11.59
1 Quasi Peak	262 kHz	43.81	-17.55
2 Average	266 kHz	30.17	-21.06
1 Quasi Peak	330 kHz	38.17	-21.27
2 Average	458 kHz	29.12	-17.60

Test Specification: *Line*



EDIT PEAK LIST (Prescan Results)

Trace1:	QP-B		
Trace2:	AV-B		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
2 Average	190 kHz	31.26	-22.76
1 Quasi Peak	194 kHz	46.60	-17.26
1 Quasi Peak	246 kHz	38.78	-23.10
1 Quasi Peak	326 kHz	35.34	-24.21
2 Average	722 kHz	28.22	-17.78
2 Average	18.166 MHz	28.30	-21.69

4. Radiated Emissions

4.1 Measurement Uncertainty

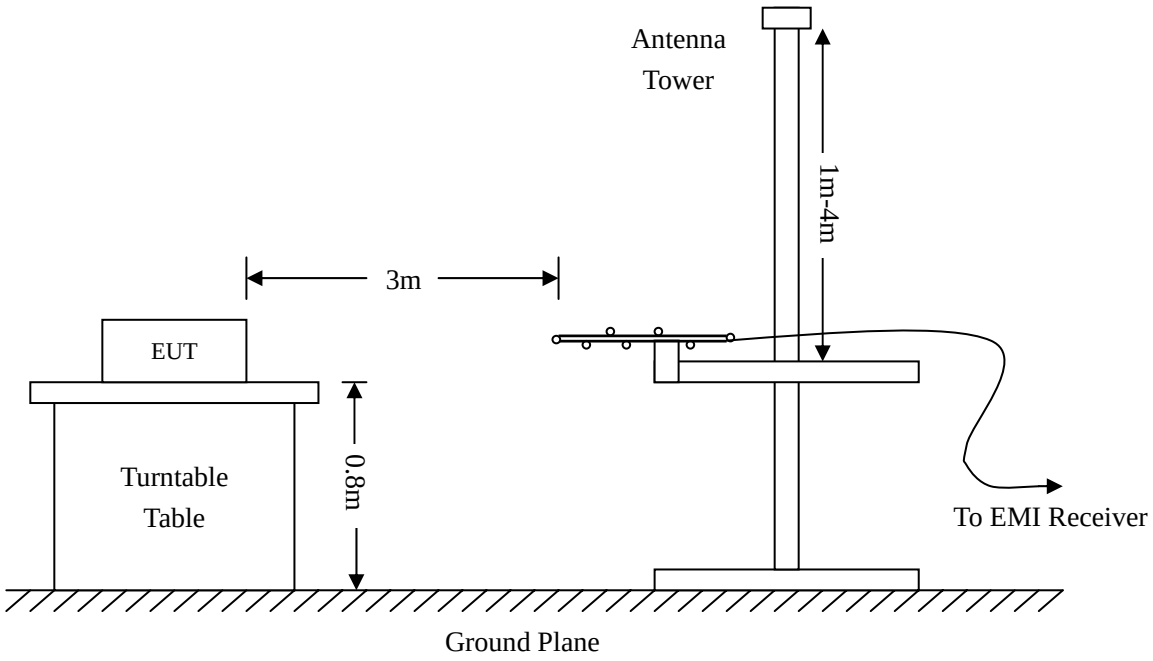
Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is ± 5.10 dB.

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

During the radiated emission test for above 1GHz, the test receiver was set with the following configurations:

For peak detector:
RBW = 1000kHz, VBW = 3000kHz, Sweep Time = Auto

For average detector:
RBW = 1000kHz, VBW = 10Hz, Sweep Time = Auto

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

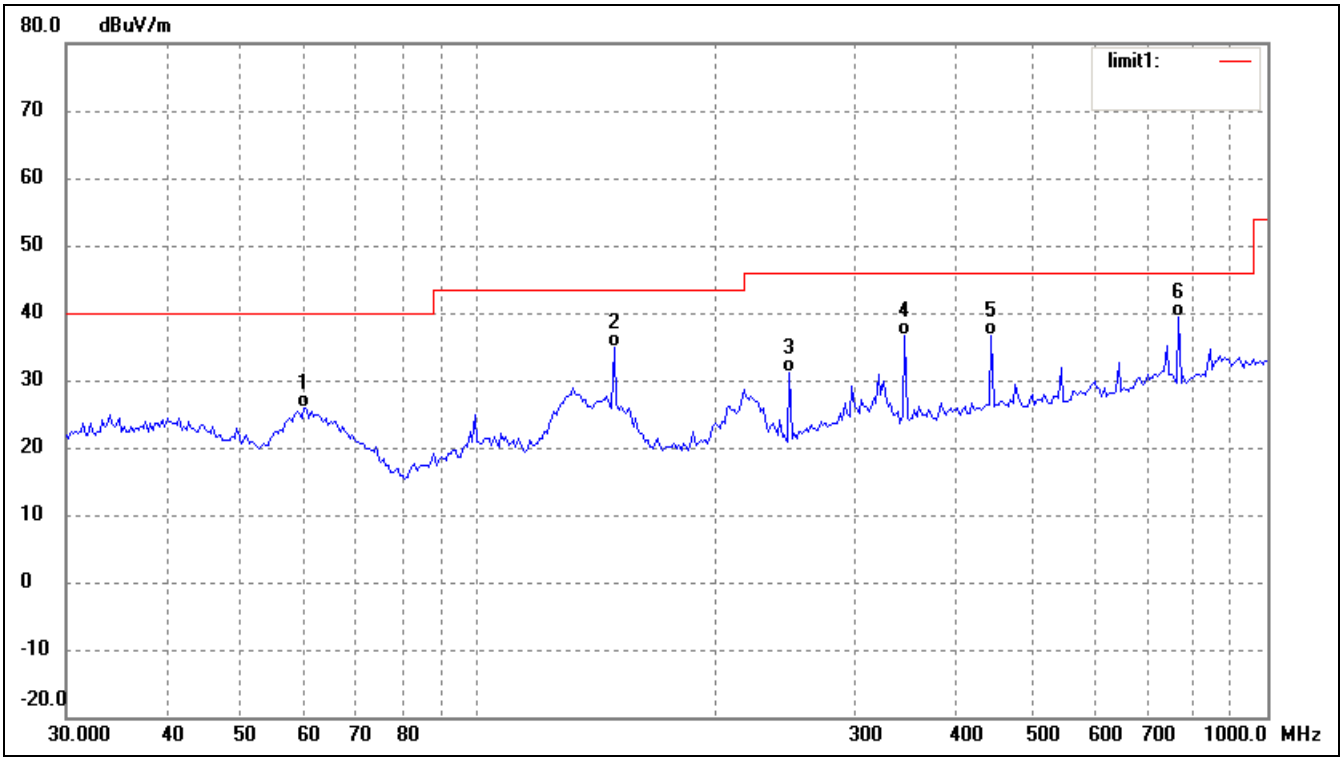
According to the data, the EUT complied with the FCC Part 15.109(a) rule, and had the worst margin of:

-2.02 dB at **41.4215 MHz** in the **Vertical** polarization, **TM3**, **9 kHz** to **6 GHz**, **3Meters**

Plot of Radiated Emissions Test Data (Below 1GHz)

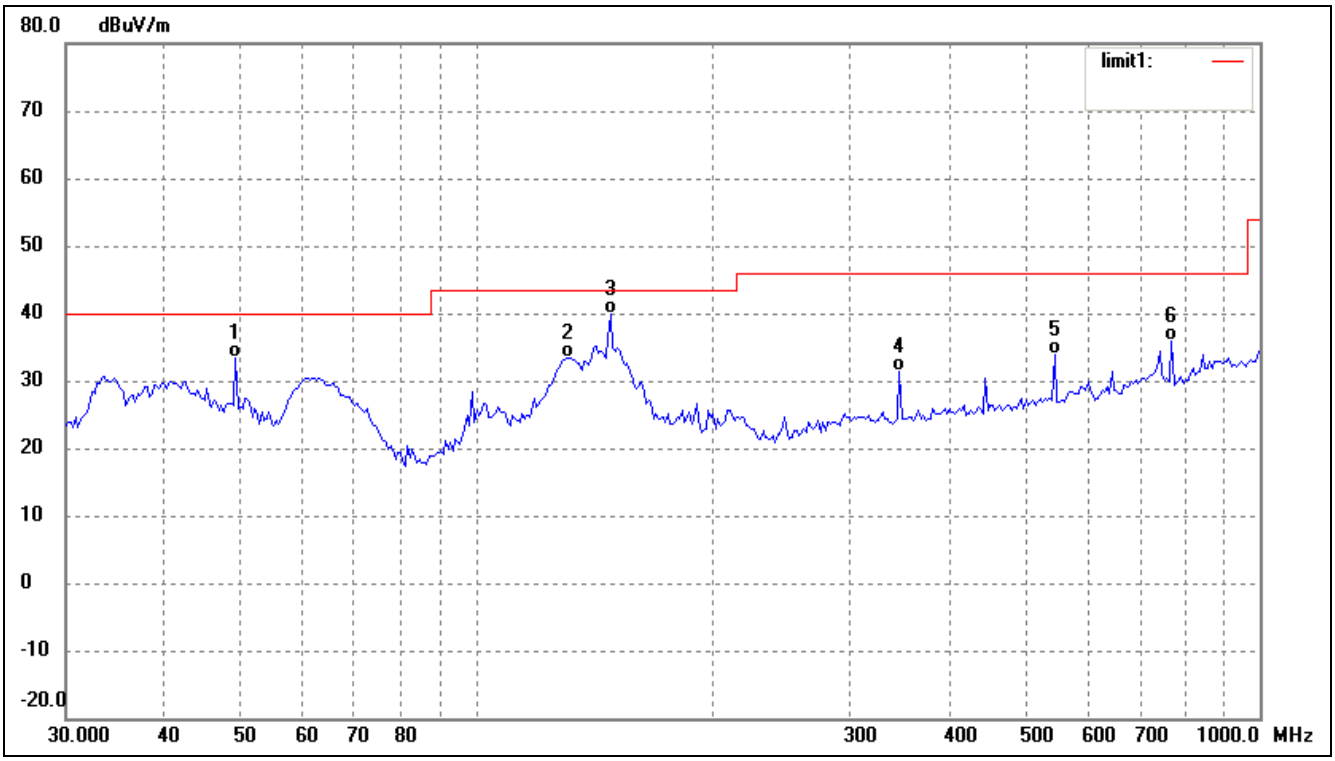
EUT: *Tablet PC*
Tested Model: *F-7HD4CORE*
Operating Condition: *TM1*
Comment: *AC 120V/60Hz; Adapter DC 5V*

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	60.0691	20.61	5.36	25.97	40.00	-14.03	245	100	QP
2	148.4410	32.35	2.49	34.84	43.50	-8.66	67	100	QP
3	247.6819	24.61	6.61	31.22	46.00	-14.78	13	100	QP
4	346.8092	27.76	8.90	36.66	46.00	-9.34	77	100	QP
5	446.4141	26.51	10.19	36.70	46.00	-9.30	125	100	QP
6	771.4486	25.50	13.97	39.47	46.00	-6.53	47	100	QP

Test Specification: *Vertical*

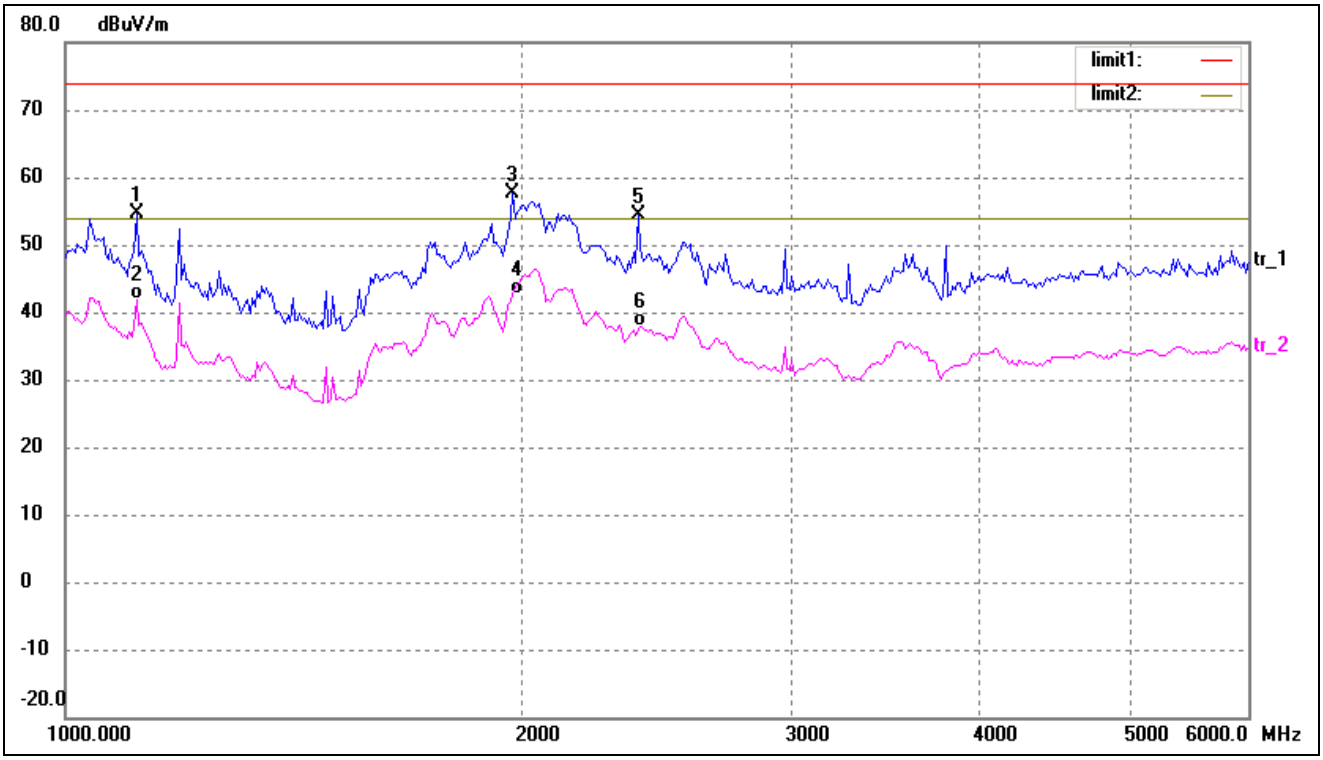


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	49.3594	26.87	6.45	33.32	40.00	-6.68	125	100	QP
2	130.8369	30.23	3.15	33.38	43.50	-10.12	36	100	QP
3	148.4410	37.51	2.49	40.00	43.50	-3.50	147	100	QP
4	346.8092	22.59	8.90	31.49	46.00	-14.51	15	100	QP
5	547.0977	22.45	11.37	33.82	46.00	-12.18	41	100	QP
6	771.4486	21.79	13.97	35.76	46.00	-10.24	77	100	QP

Plot of Radiated Emissions Test Data (Above 1GHz)

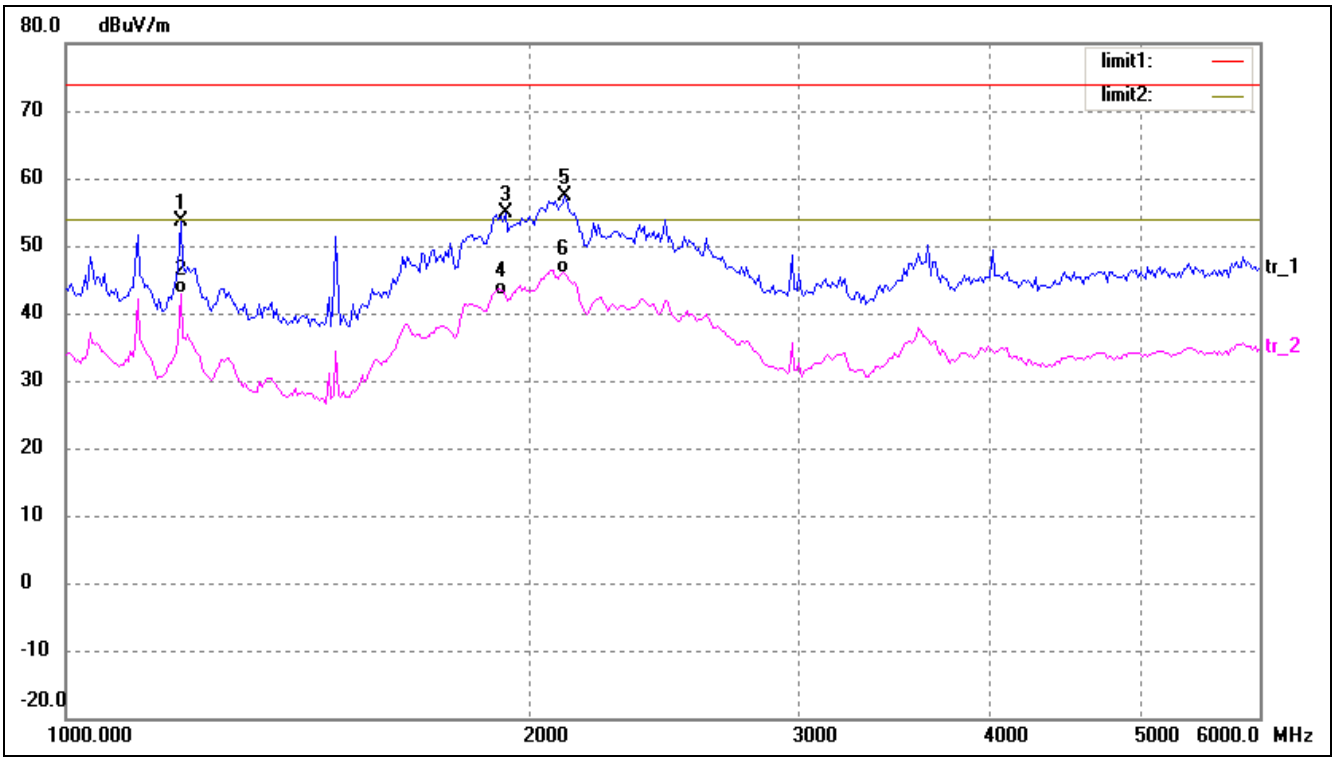
EUT: *Tablet PC*
Tested Model: *F-7HD4CORE*
Operating Condition: *TM1*
Comment: *AC 120V/60Hz; Adapter DC 5V*

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	1113.497	63.28	-8.76	54.52	74.00	-19.48	79	100	peak
2	1113.497	50.64	-8.76	41.88	54.00	-12.12	94	200	AVG
3	1968.526	62.16	-4.64	57.52	74.00	-16.48	136	100	peak
4	1968.526	47.20	-4.64	42.56	54.00	-11.44	133	200	AVG
5	2380.264	57.86	-3.56	54.30	74.00	-19.70	241	100	peak
6	2388.809	41.36	-3.54	37.82	54.00	-16.18	144	100	AVG

Test Specification: *Vertical*

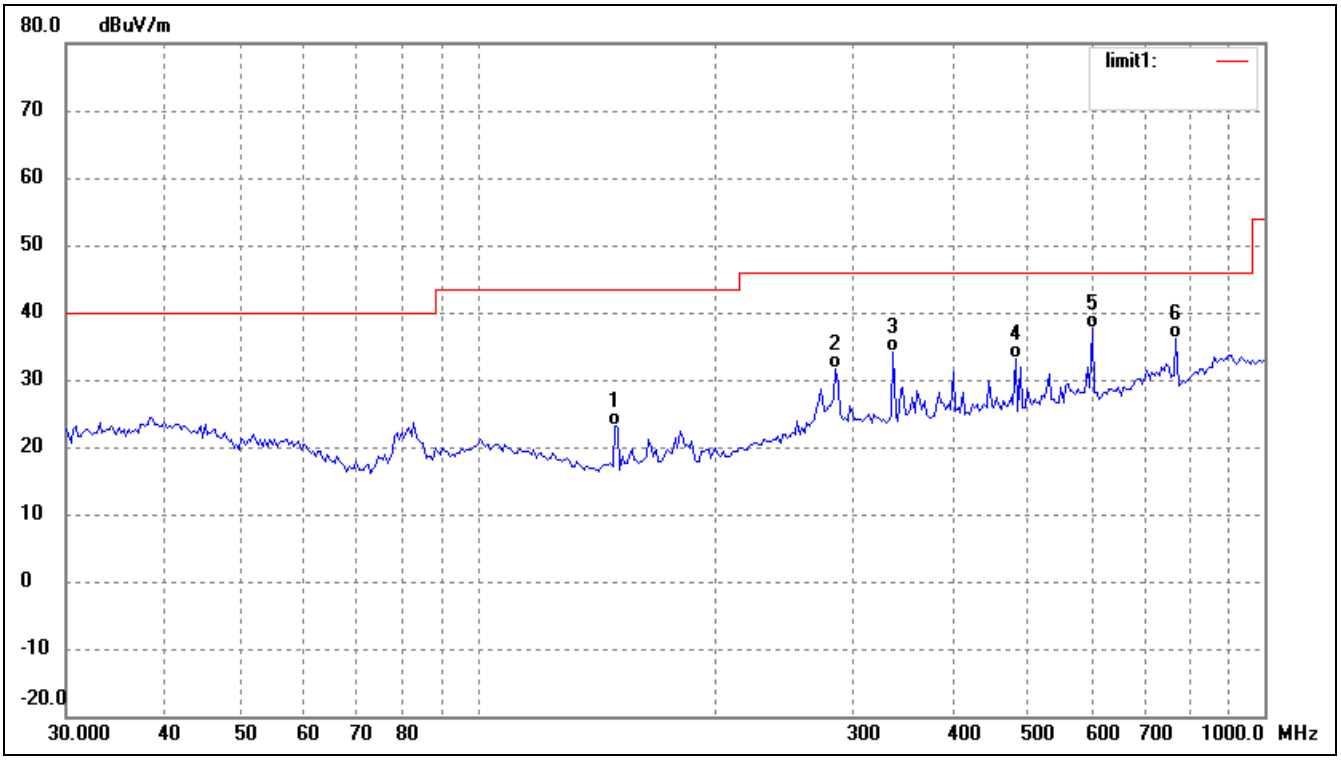


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	1187.688	62.24	-8.58	53.66	74.00	-20.34	76	100	peak
2	1187.688	51.42	-8.58	42.84	54.00	-11.16	331	100	AVG
3	1933.569	59.72	-4.88	54.84	74.00	-19.16	257	200	peak
4	1933.569	47.46	-4.88	42.58	54.00	-11.42	71	100	AVG
5	2114.790	61.55	-4.16	57.39	74.00	-16.61	94	200	peak
6	2114.790	50.02	-4.16	45.86	54.00	-8.14	99	100	AVG

Plot of Radiated Emissions Test Data (Below 1GHz)

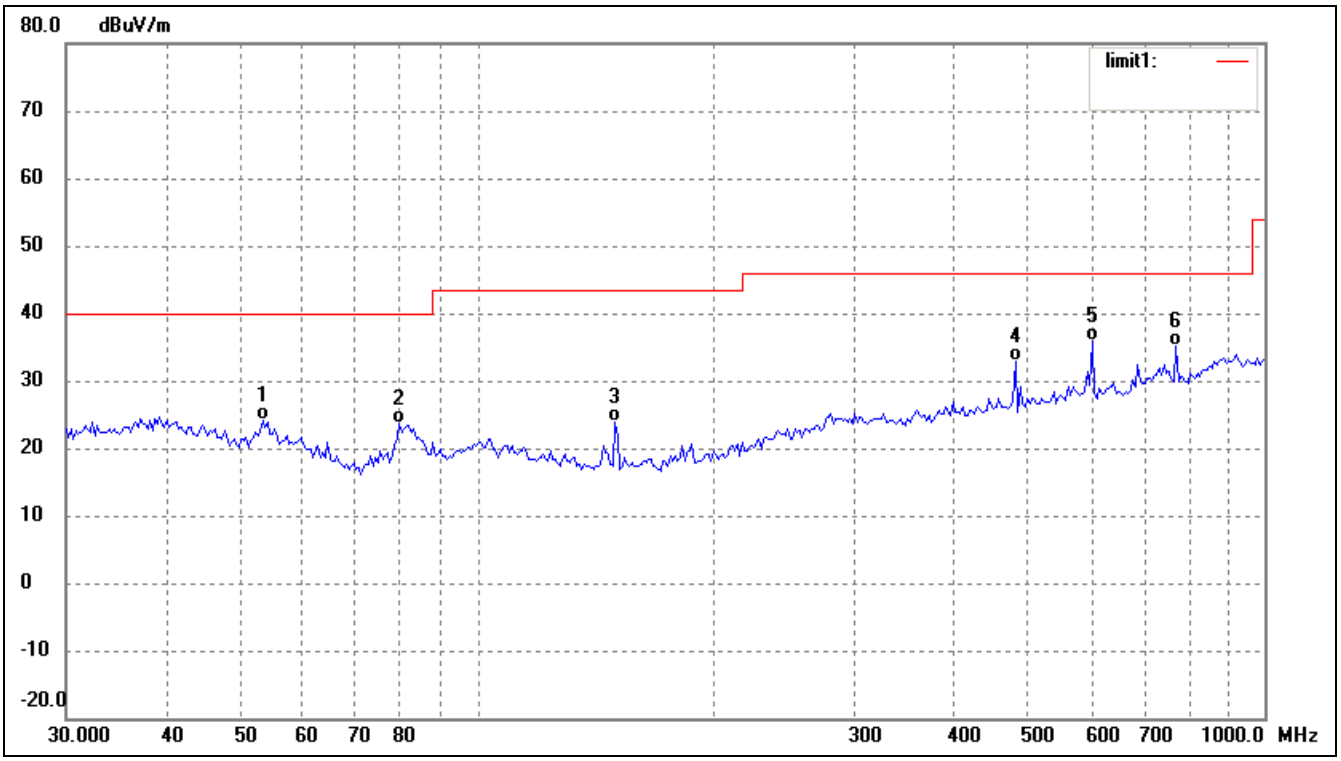
EUT: *Tablet PC*
Tested Model: *F-7HD4CORE*
Operating Condition: *TM2*
Comment: *AC 120V/60Hz; Adapter DC 5V*

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	149.4857	20.61	2.50	23.11	43.50	-20.39	263	100	QP
2	284.9767	23.12	8.58	31.70	46.00	-14.30	44	100	QP
3	337.2155	25.28	8.80	34.08	46.00	-11.92	79	100	QP
4	482.2156	22.91	10.19	33.10	46.00	-12.90	115	100	QP
5	603.5392	24.57	13.06	37.63	46.00	-8.37	264	100	QP
6	771.4486	22.24	13.97	36.21	46.00	-9.79	255	100	QP

Test Specification: *Vertical*

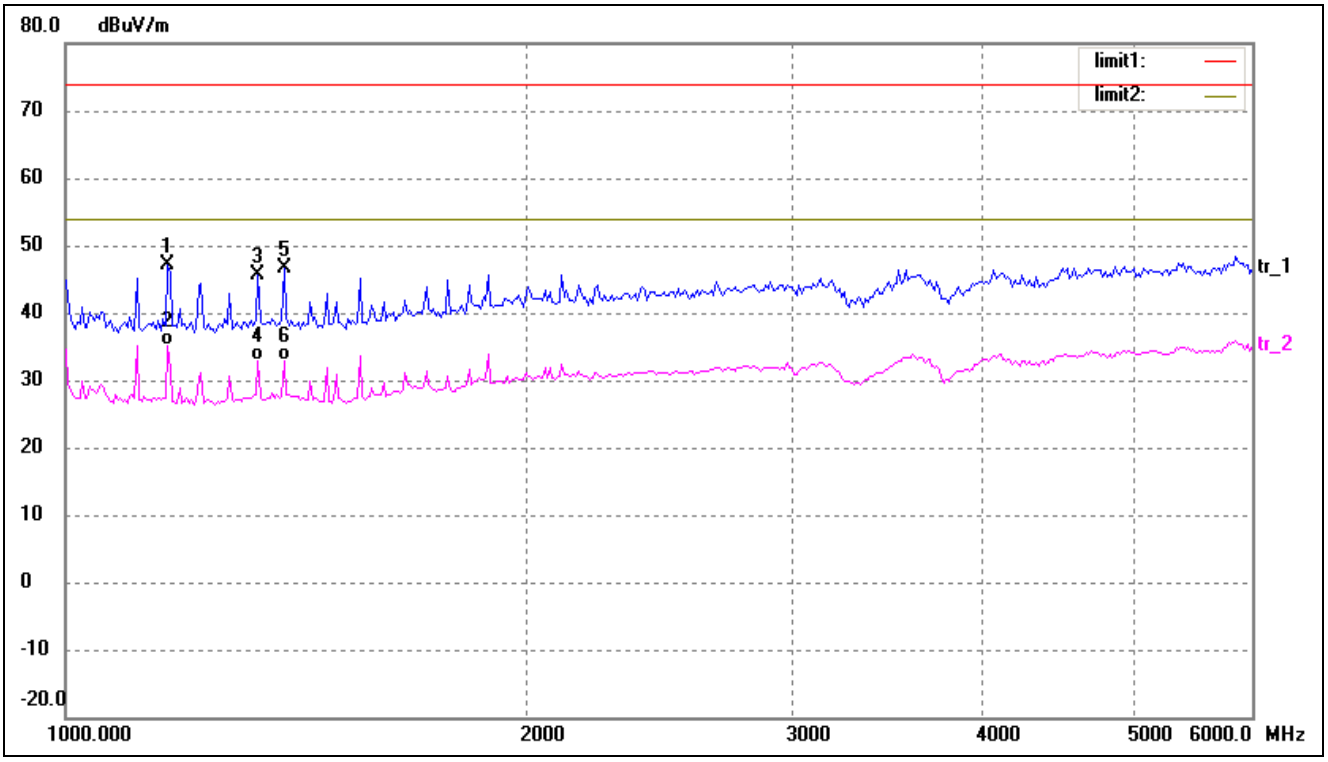


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	53.3179	18.07	5.97	24.04	40.00	-15.96	360	100	QP
2	79.5209	22.67	1.06	23.73	40.00	-16.27	14	100	QP
3	149.4857	21.40	2.50	23.90	43.50	-19.60	64	100	QP
4	482.2156	22.69	10.19	32.88	46.00	-13.12	41	100	QP
5	603.5392	22.85	13.06	35.91	46.00	-10.09	71	100	QP
6	771.4486	21.13	13.97	35.10	46.00	-10.90	26	100	QP

Plot of Radiated Emissions Test Data (Above 1GHz)

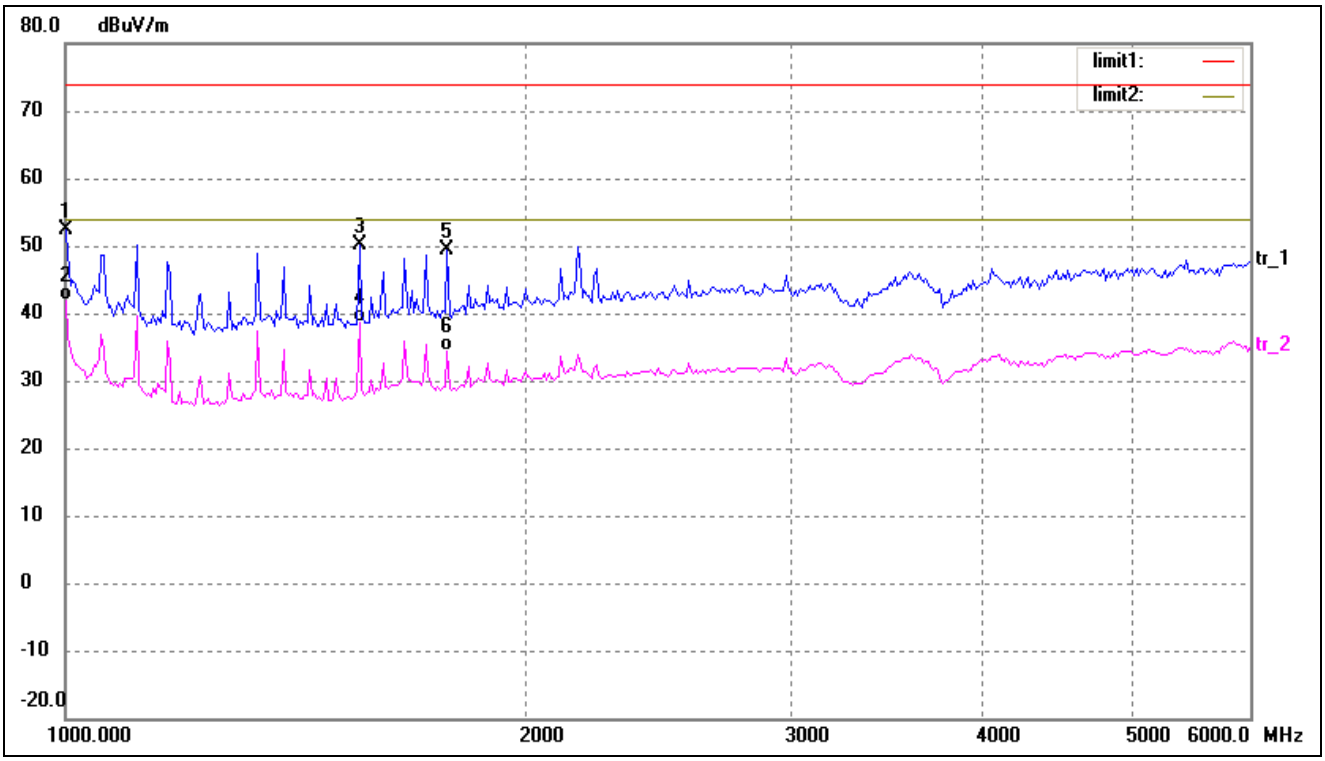
EUT: *Tablet PC*
Tested Model: *F-7HD4CORE*
Operating Condition: *TM2*
Comment: *AC 120V/60Hz; Adapter DC 5V*

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	1166.597	55.75	-8.63	47.12	74.00	-26.88	360	100	peak
2	1166.597	43.78	-8.63	35.15	54.00	-18.85	360	200	AVG
3	1336.782	53.76	-8.25	45.51	74.00	-28.49	180	100	peak
4	1336.782	41.09	-8.25	32.84	54.00	-21.16	180	150	AVG
5	1390.528	54.73	-8.14	46.59	74.00	-27.41	270	150	peak
6	1390.528	41.00	-8.14	32.86	54.00	-21.14	270	100	AVG

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	1000.0000	61.32	-9.00	52.32	74.00	-21.68	360	100	peak
2	1000.0000	50.87	-9.00	41.87	54.00	-12.13	180	200	AVG
3	1559.486	57.60	-7.49	50.11	74.00	-23.89	270	100	peak
4	1559.486	46.22	-7.49	38.73	54.00	-15.27	180	200	AVG
5	1780.593	55.20	-5.94	49.26	74.00	-24.74	270	100	peak
6	1780.593	40.28	-5.94	34.34	54.00	-19.66	360	100	AVG

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