

FCC Part 15B Measurement and Test Report

For

Amelia World Corporation dba LINSAY

16340 West Dixie Highway, North Miami Beach, Florida

FCC ID: 2AAC3F7HD2CORENEW

| | |
|--------------------------------------|--|
| Test Standards: | <u>FCC Part 15 Subpart B</u> |
| Product Description: | <u>Tablet PC</u> |
| Tested Model: | <u>F-7HD2CORE</u> |
| Report No.: | <u>STR14048346I-2</u> |
| Tested Date: | <u>2014-04-23 to 2014-05-06</u> |
| Issued Date: | <u>2014-05-08</u> |
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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.

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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-7HD2CORE |
| Add Models: | / |
| <i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i> | |

| Technical Characteristics of EUT | |
|----------------------------------|---|
| Rated Voltage: | Operating: DC 3.7V battery, Charging: DC 5V/2A |
| Power Adapter Model: | PSYA05010US (Input: AC 100-240V, Output: DC 5V 2A) |
| Highest Internal Frequency: | 1.5GHz |
| Lowest Internal Frequency: | 32.768kHz |
| Classification of ITE: | Class B |

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.

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 |
| TM2 | Downloading | Connected to PC |

EUT Cable List and Details

| Cable Description | Length (m) | Shielded/Unshielded | With / Without Ferrite |
|-------------------|------------|---------------------|------------------------|
| Adapter Cable | 1.0 | Unshielded | Without Ferrite |
| USB Cable | 0.8 | Unshielded | Without Ferrite |
| USB Patch Cord | 0.15 | Unshielded | Without Ferrite |

Special Cable List and Details

| Cable Description | Length (m) | Shielded/Unshielded | With / Without Ferrite |
|-------------------|------------|---------------------|------------------------|
| / | / | / | / |

Auxiliary Equipment List and Details

| Description | Manufacturer | Model | Serial Number |
|-------------|--------------|-------|---------------|
| TF Card | Kingston | 4GB | / |
| Notebook | Lenovo | 20007 | EB12648265 |

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.

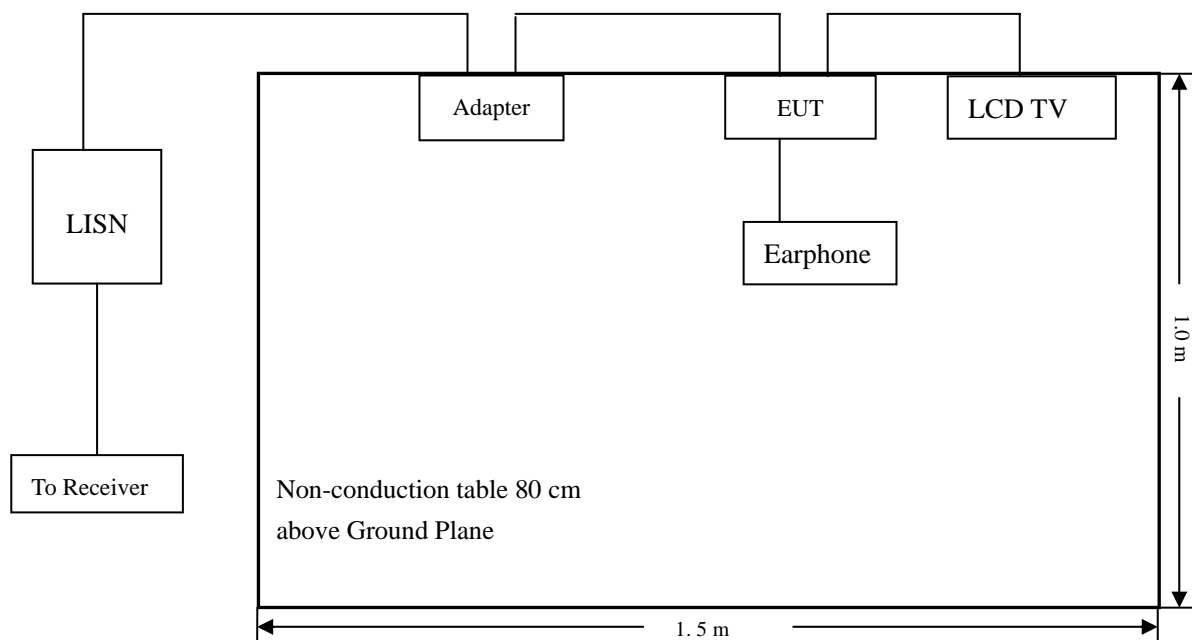
3.2 Test Equipment List and Details

| 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

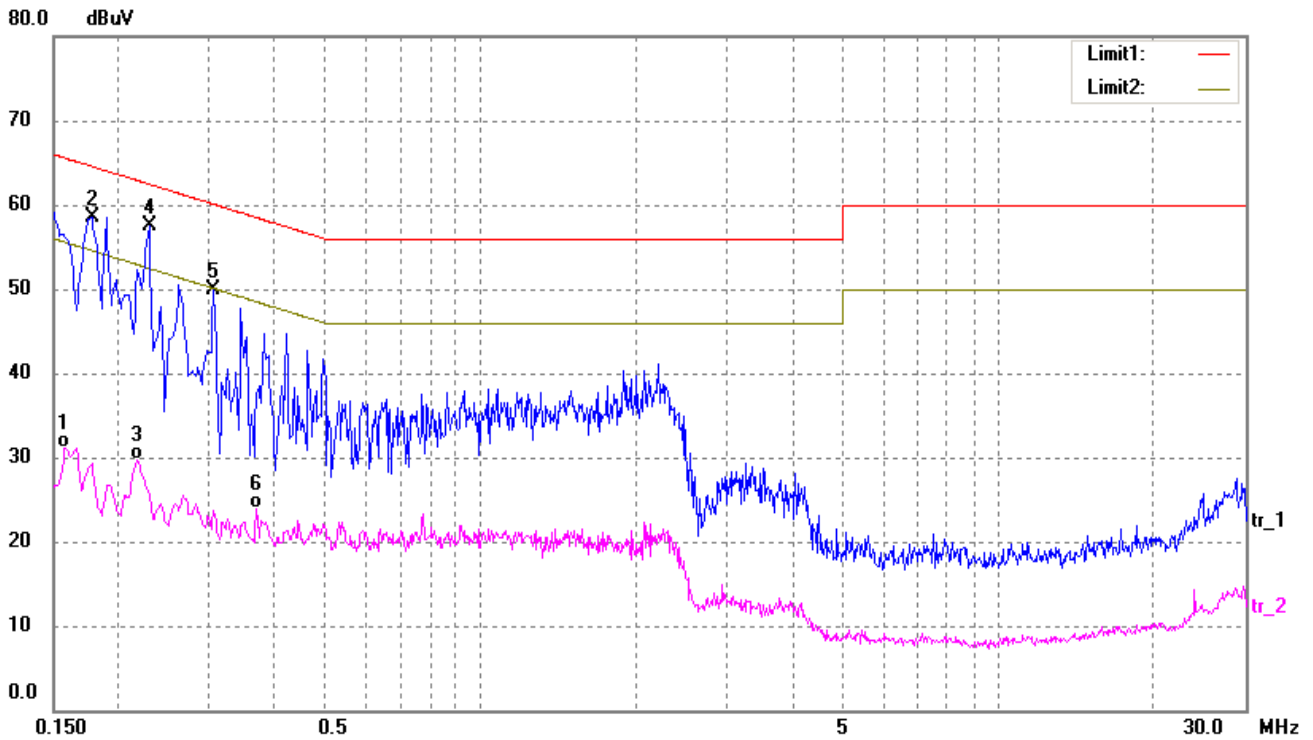
According to the data in section 3.7, the EUT complied with the FCC Part 15.107(a) Conducted margin for a Class B device, with the *worst* margin reading of:

-4.94 dB at 0.2300 MHz in the Neutral mode, Peak detector, 0.15-30MHz

3.7 Conducted Emissions Test Data

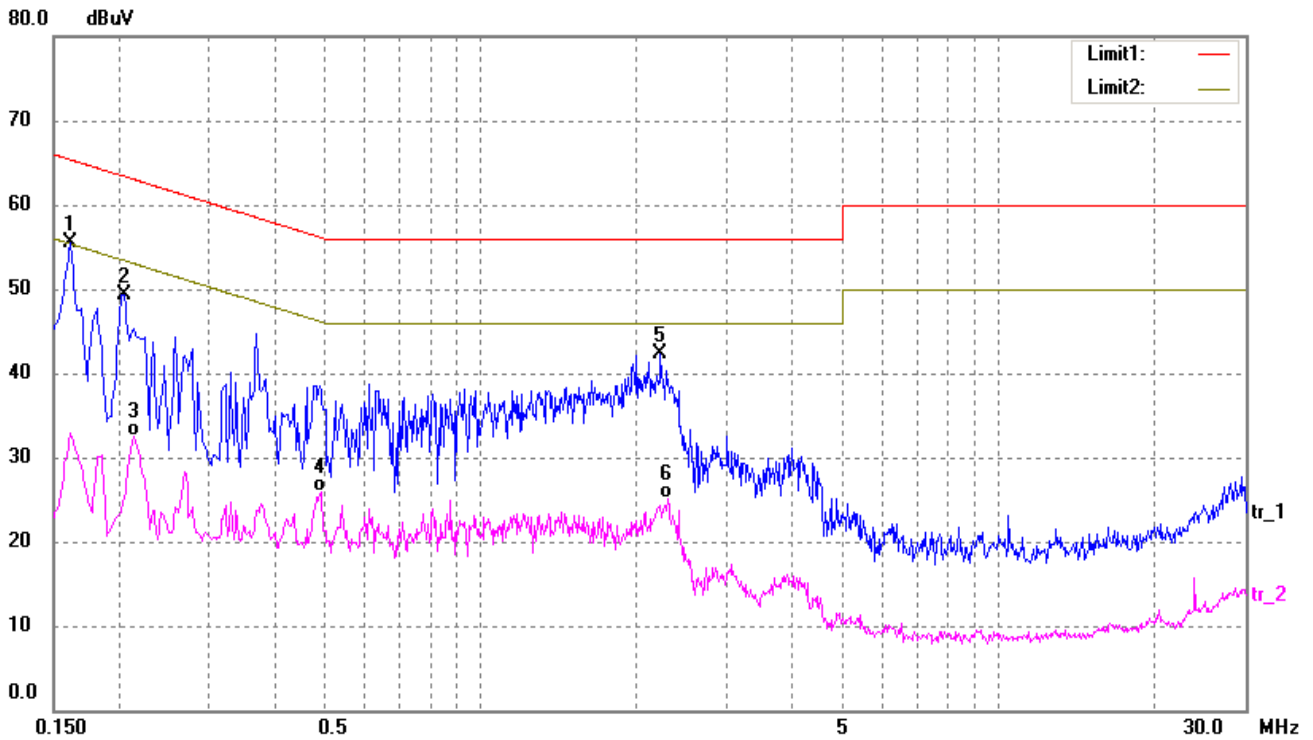
Plot of Conducted Emissions Test Data

EUT: Tablet PC
 Tested Model: TM1
 Operating Condition: Charging & Playing
 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 | 0.1580 | 21.68 | 9.50 | 31.18 | 55.57 | -24.39 | AVG |
| 2 | 0.1780 | 48.98 | 9.50 | 58.48 | 64.58 | -6.10 | peak |
| 3 | 0.2180 | 20.18 | 9.50 | 29.68 | 52.89 | -23.21 | AVG |
| 4 | 0.2300 | 48.01 | 9.50 | 57.51 | 62.45 | -4.94 | peak |
| 5 | 0.3060 | 40.32 | 9.50 | 49.82 | 60.08 | -10.26 | peak |
| 6 | 0.3700 | 14.31 | 9.50 | 23.81 | 48.50 | -24.69 | AVG |

Test Specification: Line



| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Detector |
|-----|-----------------|----------------|----------------|---------------|--------------|-------------|----------|
| 1 | 0.1620 | 45.97 | 9.50 | 55.47 | 65.36 | -9.89 | peak |
| 2 | 0.2060 | 39.75 | 9.50 | 49.25 | 63.37 | -14.12 | peak |
| 3 | 0.2140 | 23.02 | 9.50 | 32.52 | 53.05 | -20.53 | AVG |
| 4 | 0.4940 | 16.43 | 9.50 | 25.93 | 46.10 | -20.17 | AVG |
| 5 | 2.2260 | 32.21 | 10.00 | 42.21 | 56.00 | -13.79 | peak |
| 6 | 2.2980 | 15.16 | 10.00 | 25.16 | 46.00 | -20.84 | AVG |

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.

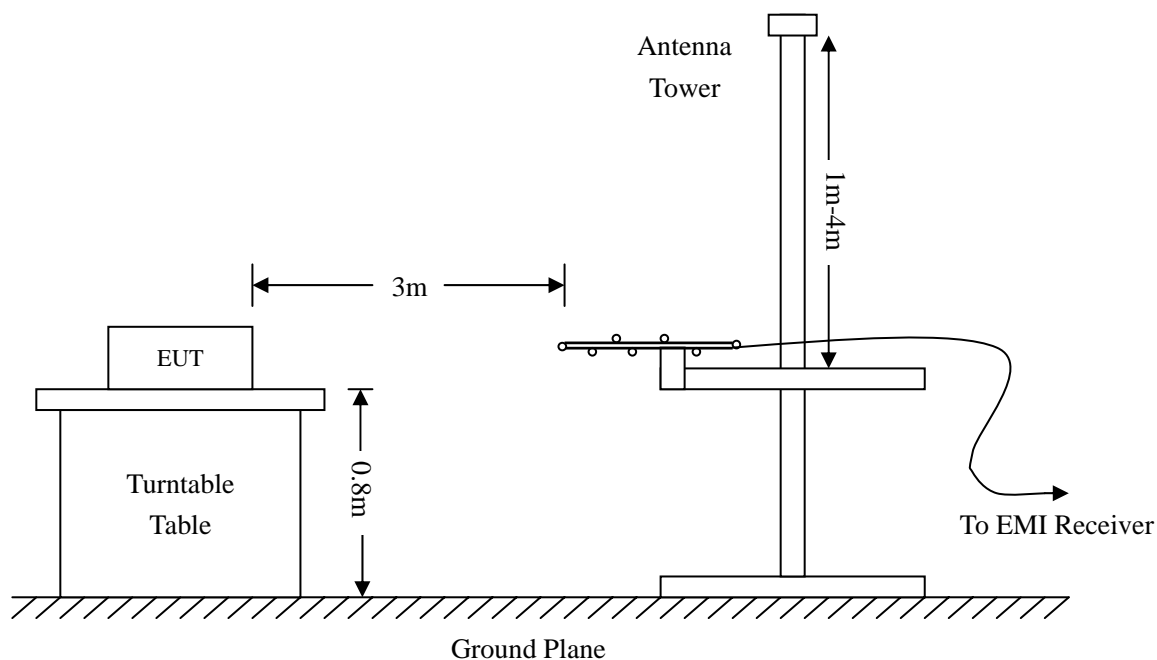
4.2 Test Equipment List and Details

| 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 | 2014-04-20 | 2015-04-19 |
| Horn Antenna | ETS | 3117 | 00086197 | 2014-04-20 | 2015-04-19 |
| Loop Antenna | SCHWARZECK | HFRA 5165 | 9365 | 2014-04-20 | 2015-04-19 |

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:

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

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:

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

4.6 Environmental Conditions

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

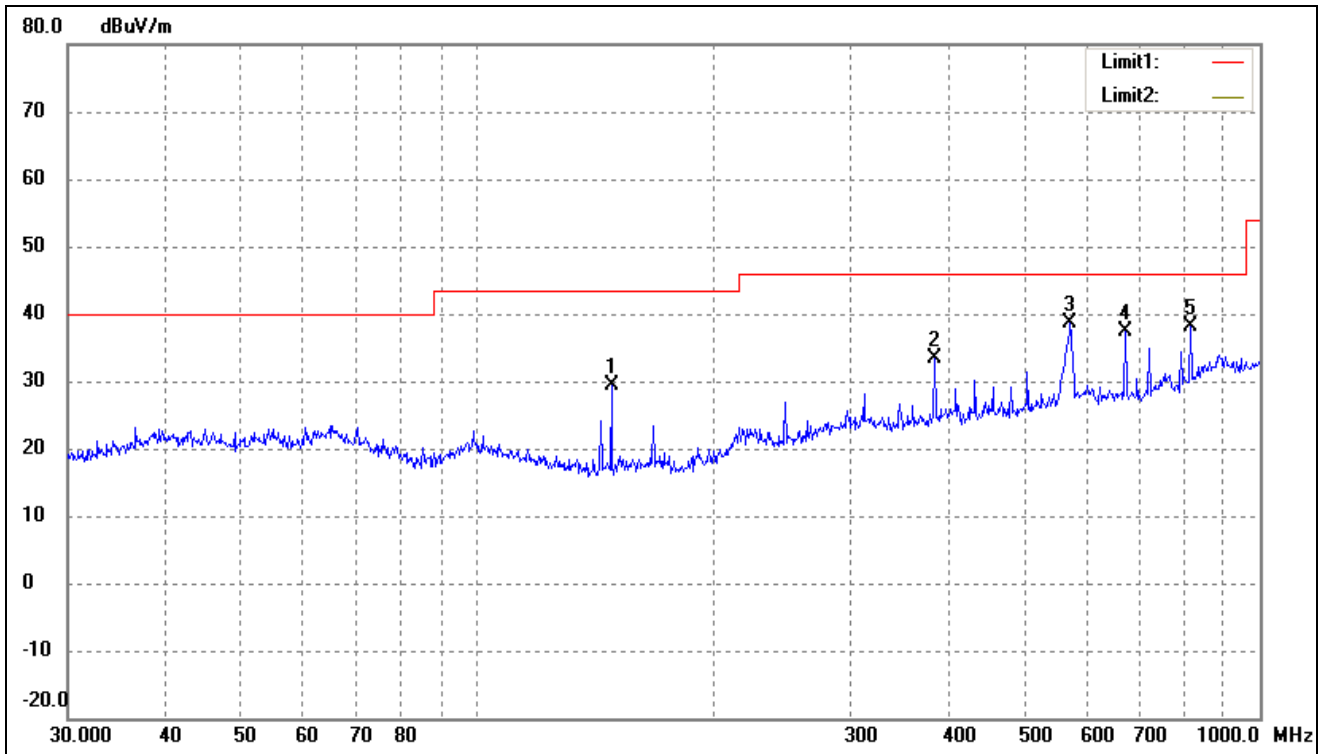
4.7 Summary of Test Results/Plots

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

-7.31 dB at 572.6144 MHz in the Horizontal polarization, TM1 mode, 9 kHz to 5 GHz, 3Meters

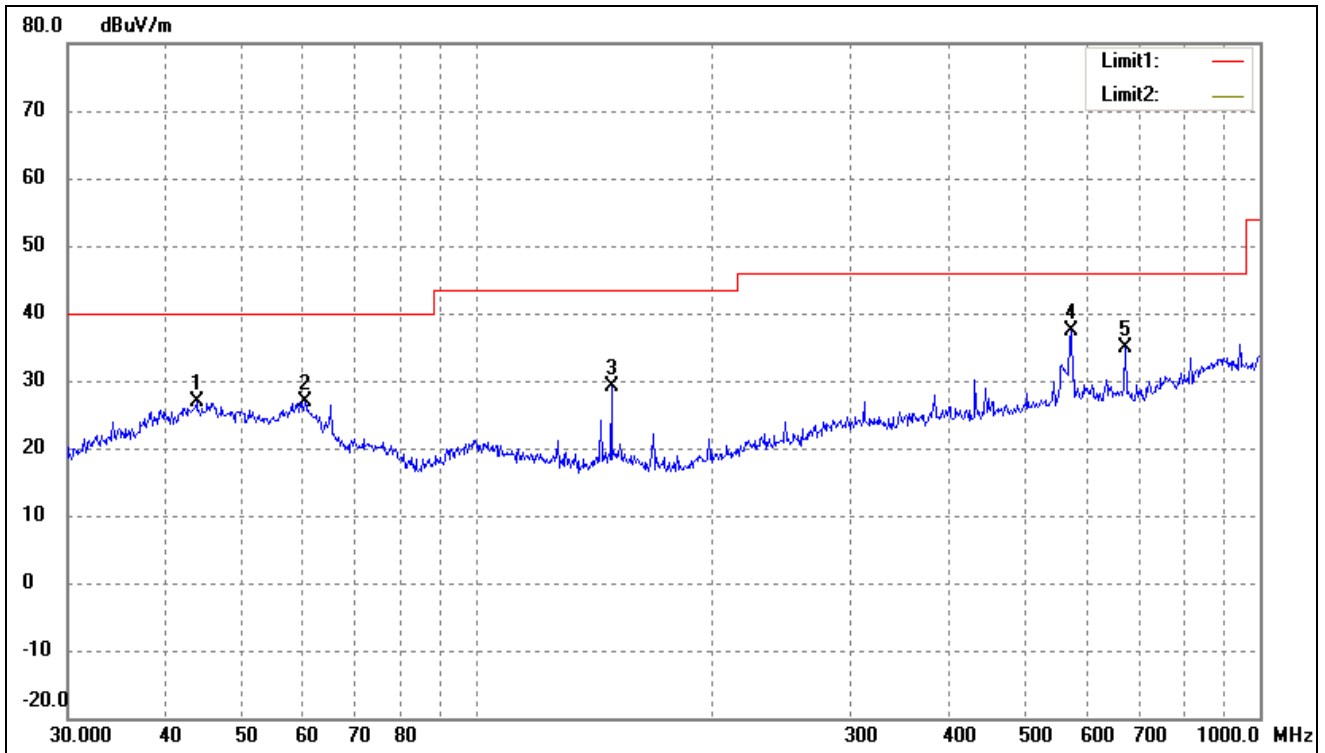
Plot of Radiated Emissions Test Data(30MHz-1GHz)

EUT: Tablet PC
 Tested Model: F-7HD2CORE
 Operating Condition: TM1
 Comment: AC 120V/60Hz; adapter DC 5V
 Test Specification: Horizontal



| No. | Frequency (MHz) | Reading (dBuV/m) | Correct Factor(dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (°) | Height (cm) | Remark |
|-----|-----------------|------------------|--------------------|-----------------|----------------|-------------|------------|-------------|--------|
| 1 | 148.4410 | 27.00 | 2.49 | 29.49 | 43.50 | -14.01 | 235 | 100 | peak |
| 2 | 383.9318 | 24.06 | 9.38 | 33.44 | 46.00 | -12.56 | 44 | 100 | peak |
| 3 | 572.6144 | 26.50 | 12.19 | 38.69 | 46.00 | -7.31 | 79 | 100 | peak |
| 4 | 672.8445 | 25.27 | 12.22 | 37.49 | 46.00 | -8.51 | 85 | 100 | peak |
| 5 | 815.9678 | 23.33 | 14.80 | 38.13 | 46.00 | -7.87 | 124 | 100 | peak |

Test Specification: Vertical

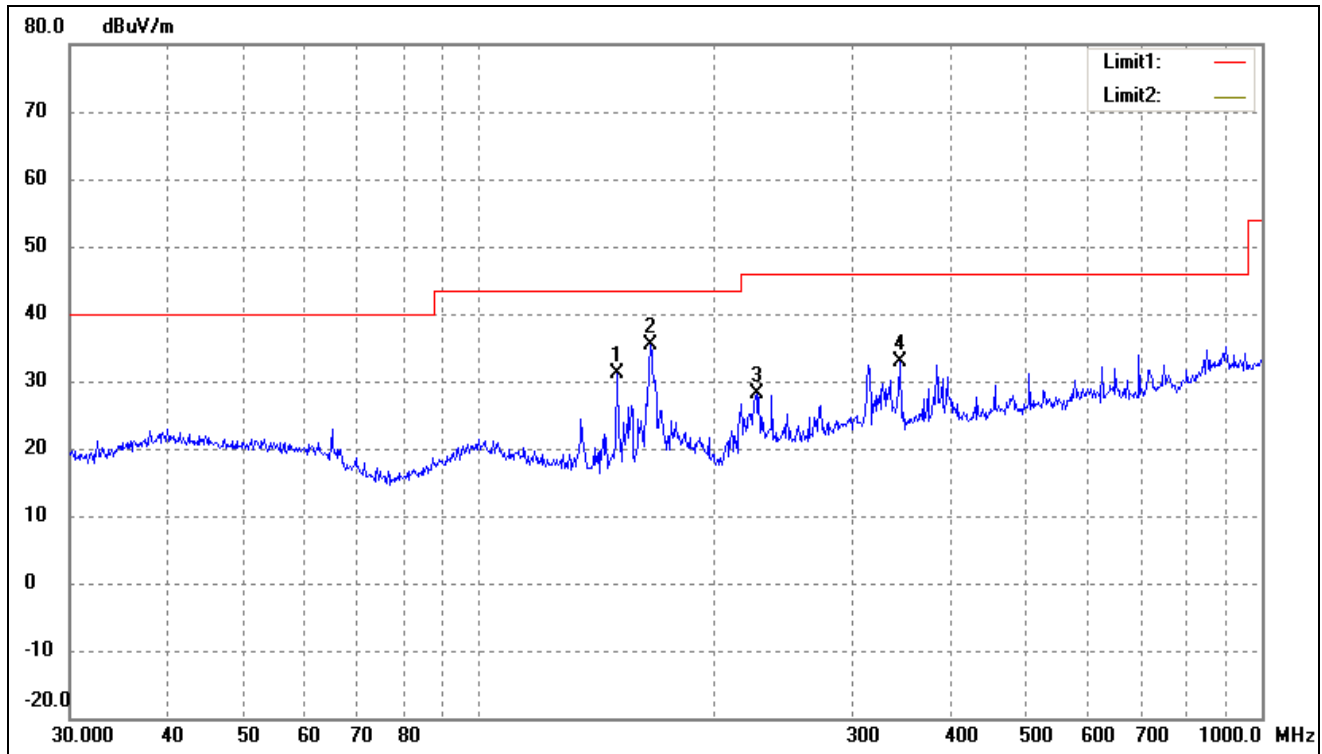


| No. | Frequency (MHz) | Reading (dBuV/m) | Correct Factor(dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (°) | Height (cm) | Remark |
|-----|-----------------|------------------|--------------------|-----------------|----------------|-------------|------------|-------------|--------|
| 1 | 43.8119 | 18.79 | 8.12 | 26.91 | 40.00 | -13.09 | 306 | 100 | peak |
| 2 | 60.2801 | 21.51 | 5.29 | 26.80 | 40.00 | -13.20 | 54 | 100 | peak |
| 3 | 148.4410 | 26.58 | 2.49 | 29.07 | 43.50 | -14.43 | 258 | 100 | peak |
| 4 | 574.6258 | 25.17 | 12.29 | 37.46 | 46.00 | -8.54 | 162 | 100 | peak |
| 5 | 672.8445 | 22.06 | 12.87 | 34.93 | 46.00 | -11.07 | 57 | 100 | peak |

Plot of Radiated Emissions Test Data(30MHz-1GHz)

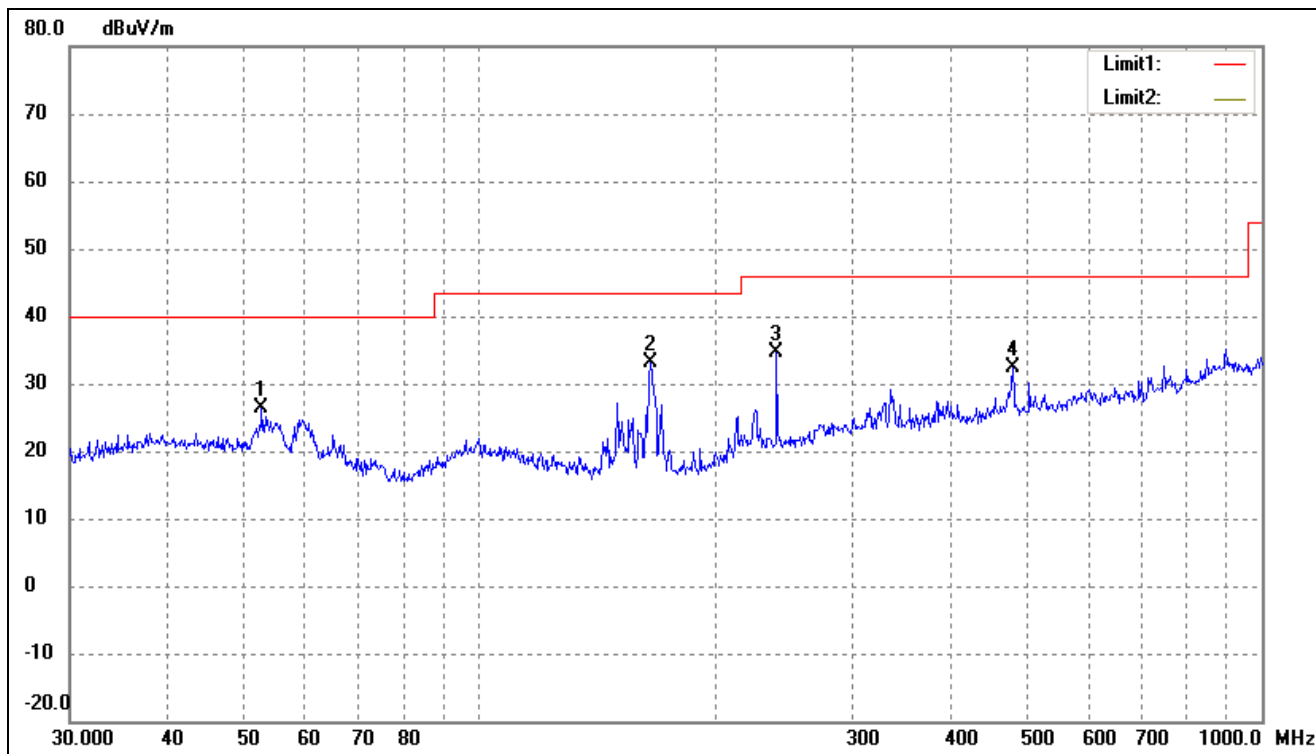
EUT: Tablet PC
 Tested Model: F-7HD2CORE
 Operating Condition: TM2
 Comment: Connected to PC

 Test Specification: Horizontal



| No. | Frequency (MHz) | Reading (dBuV/m) | Correct Factor(dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (°) | Height (cm) | Remark |
|-----|-----------------|------------------|--------------------|-----------------|----------------|-------------|--------------|-------------|--------|
| 1 | 150.0108 | 28.53 | 2.50 | 31.03 | 43.50 | -12.47 | 245 | 100 | peak |
| 2 | 165.4867 | 32.61 | 2.65 | 35.26 | 43.50 | -8.24 | 15 | 100 | peak |
| 3 | 226.0994 | 22.59 | 5.48 | 28.07 | 46.00 | -17.93 | 32 | 100 | peak |
| 4 | 345.5952 | 23.90 | 8.87 | 32.77 | 46.00 | -13.23 | 54 | 100 | peak |

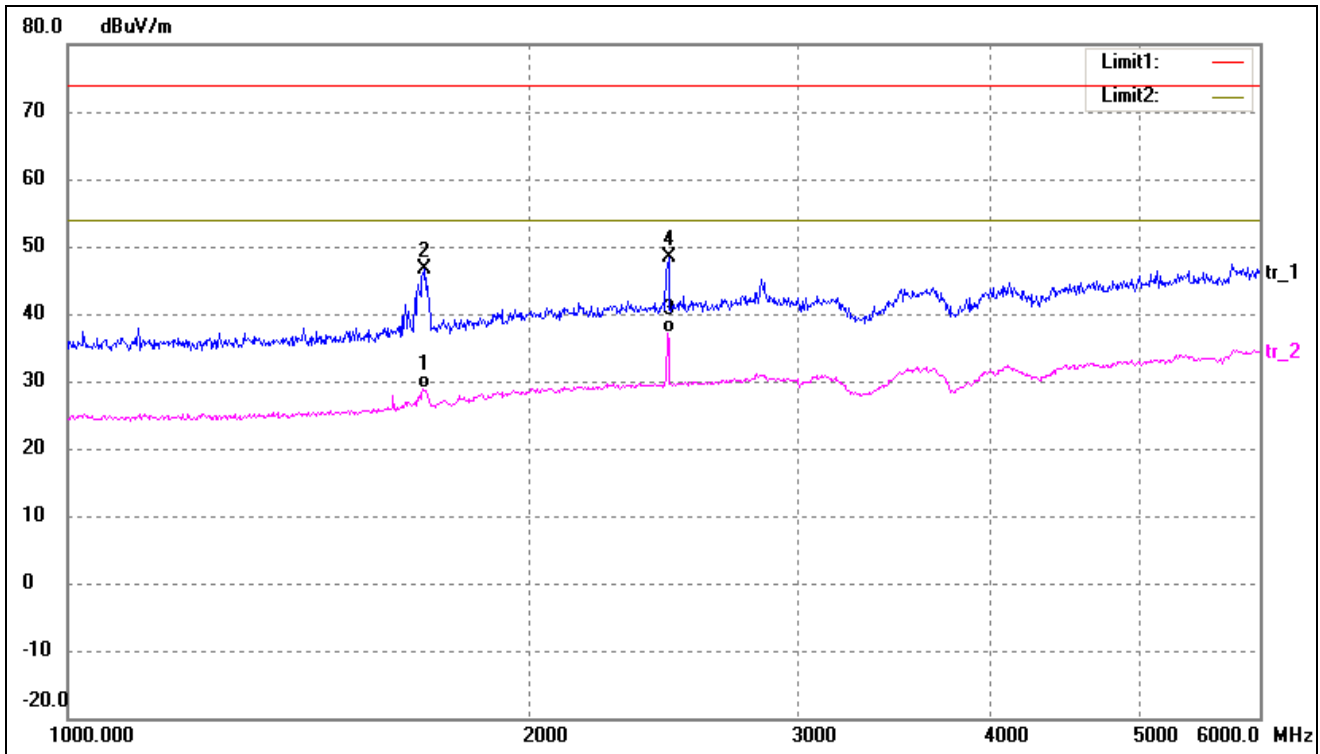
Test Specification: Vertical



| No. | Frequency (MHz) | Reading (dBuV/m) | Correct Factor(dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (°) | Height (cm) | Remark |
|-----|-----------------|------------------|--------------------|-----------------|----------------|-------------|--------------|-------------|--------|
| 1 | 52.7600 | 20.26 | 6.02 | 26.28 | 40.00 | -13.72 | 102 | 100 | peak |
| 2 | 165.4867 | 30.37 | 2.65 | 33.02 | 43.50 | -10.48 | 154 | 100 | peak |
| 3 | 239.9874 | 28.34 | 6.33 | 34.67 | 46.00 | -11.33 | 114 | 100 | peak |
| 4 | 480.5276 | 22.27 | 10.12 | 32.39 | 46.00 | -13.61 | 111 | 100 | peak |

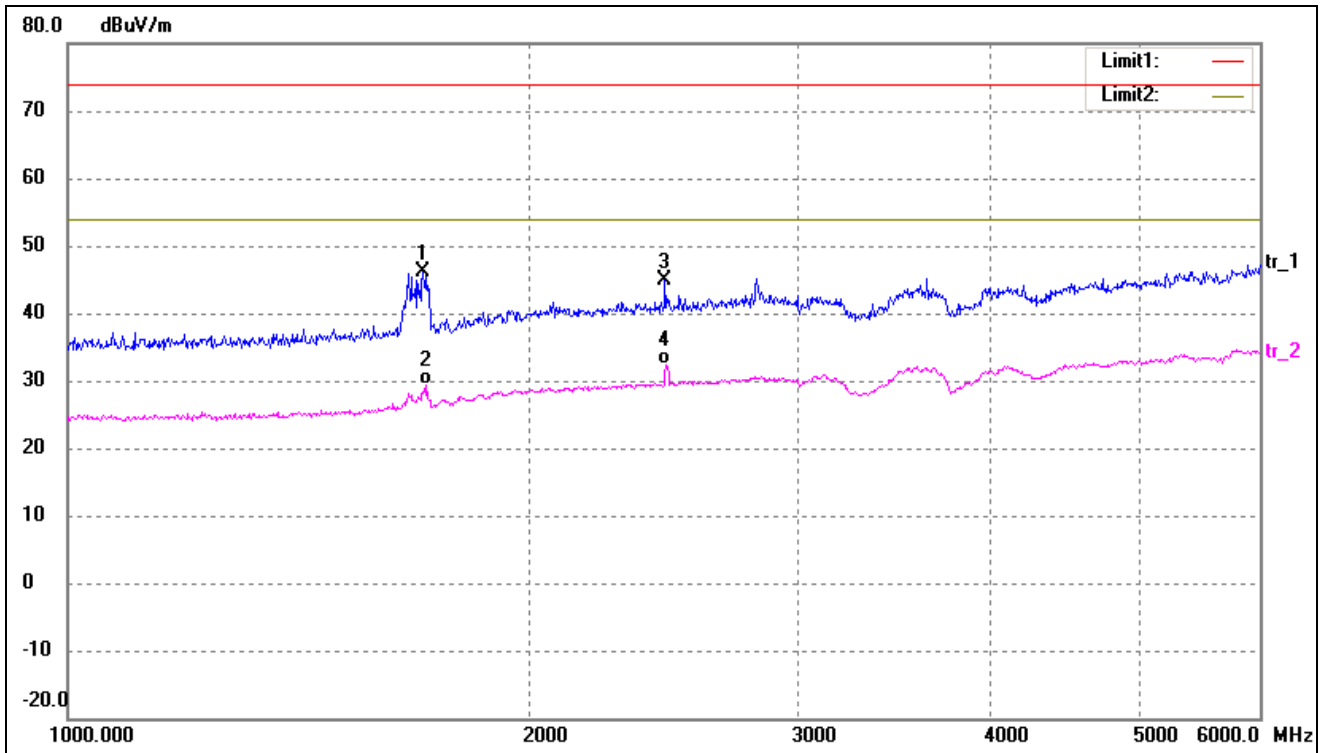
Plot of Radiated Emissions Test Data(Above 1GHz)

EUT: Tablet PC
 Tested Model: F-7HD2CORE
 Operating Condition: TM1
 Comment: AC 120V/60Hz; Adapter DC 5V
 Test Specification: Horizontal



| No. | Frequency (MHz) | Reading (dBuV/m) | Correct Factor(dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (°) | Height (cm) | Remark |
|-----|-----------------|------------------|--------------------|-----------------|----------------|-------------|------------|-------------|--------|
| 1 | 1705.647 | 35.41 | -6.46 | 28.95 | 54.00 | -25.05 | 235 | 100 | peak |
| 2 | 1708.706 | 53.01 | -6.44 | 46.57 | 74.00 | -27.43 | 44 | 100 | AVG |
| 3 | 2462.692 | 40.48 | -3.37 | 37.11 | 54.00 | -16.89 | 79 | 100 | peak |
| 4 | 2467.108 | 51.69 | -3.35 | 48.34 | 74.00 | -25.66 | 85 | 100 | AVG |

Test Specification: Vertical

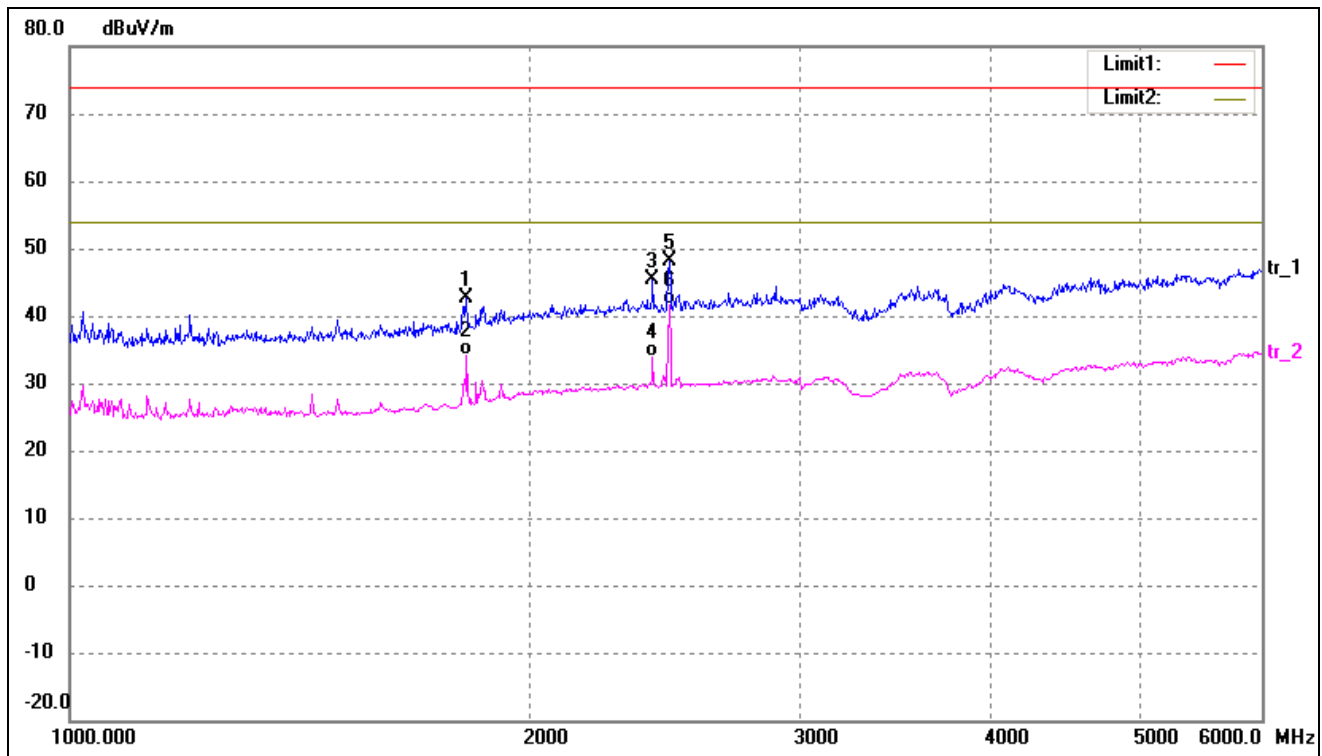


| No. | Frequency (MHz) | Reading (dBuV/m) | Correct Factor(dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (°) | Height (cm) | Remark |
|-----|-----------------|------------------|--------------------|-----------------|----------------|-------------|------------|-------------|--------|
| 1 | 1705.647 | 52.69 | -6.46 | 46.23 | 74.00 | -27.77 | 306 | 100 | peak |
| 2 | 1714.840 | 35.67 | -6.40 | 29.27 | 54.00 | -24.73 | 54 | 100 | AVG |
| 3 | 2453.883 | 48.30 | -3.38 | 44.92 | 74.00 | -29.08 | 258 | 100 | peak |
| 4 | 2458.283 | 35.76 | -3.38 | 32.38 | 54.00 | -21.62 | 162 | 100 | AVG |

Plot of Radiated Emissions Test Data(Above 1G)

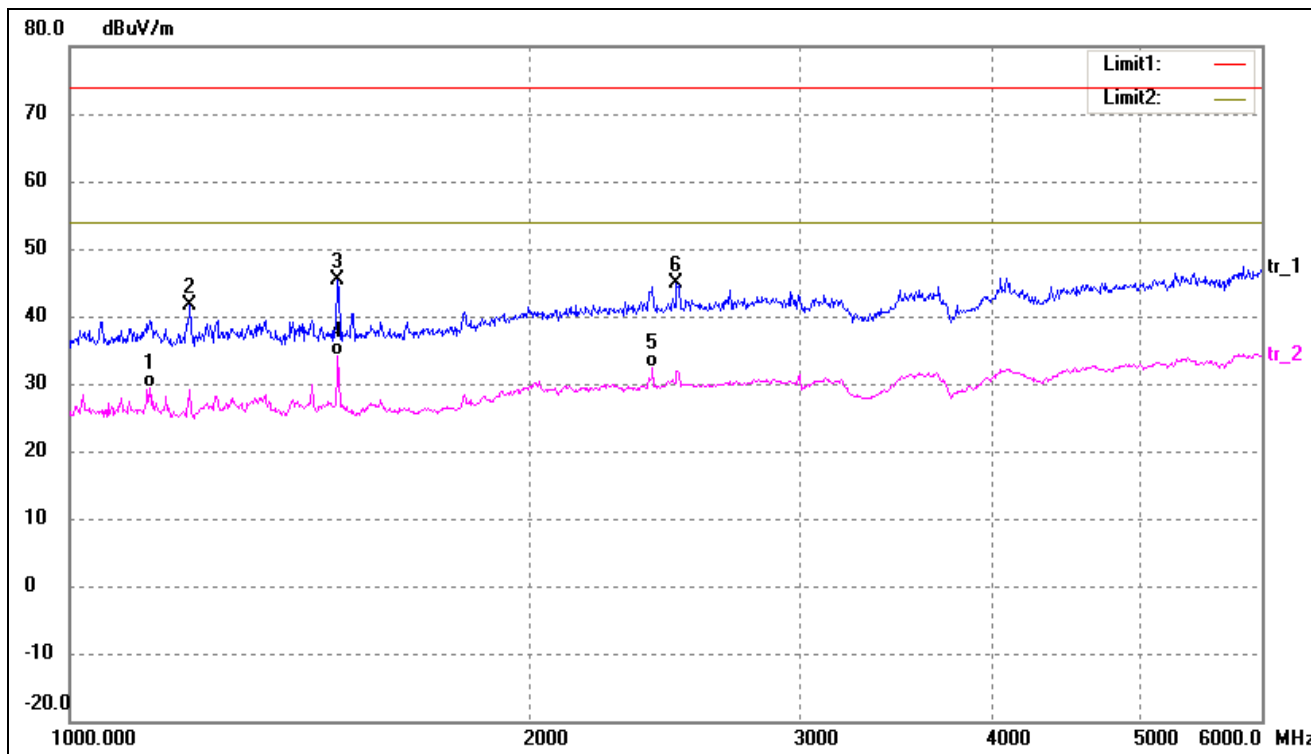
EUT: Tablet PC
 Tested Model: F-7HD2CORE
 Operating Condition: TM2
 Comment: Connected to PC

 Test Specification: Horizontal



| No. | Frequency (MHz) | Reading (dBuV/m) | Correct Factor(dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (°) | Height (cm) | Remark |
|-----|-----------------|------------------|--------------------|-----------------|----------------|-------------|--------------|-------------|--------|
| 1 | 1812.785 | 48.33 | -5.71 | 42.62 | 74.00 | -31.38 | 245 | 100 | peak |
| 2 | 1816.036 | 39.88 | -5.69 | 34.19 | 54.00 | -19.81 | 15 | 100 | AVG |
| 3 | 2401.684 | 48.88 | -3.51 | 45.37 | 74.00 | -28.63 | 32 | 100 | peak |
| 4 | 2401.684 | 37.29 | -3.51 | 33.78 | 54.00 | -20.22 | 54 | 100 | AVG |
| 5 | 2462.692 | 51.51 | -3.37 | 48.14 | 74.00 | -25.86 | 288 | 100 | peak |
| 6 | 2462.692 | 44.91 | -3.37 | 41.54 | 54.00 | -12.46 | 231 | 100 | AVG |

Test Specification: Vertical



| No. | Frequency (MHz) | Reading (dBuV/m) | Correct Factor(dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (°) | Height (cm) | Remark |
|-----|-----------------|------------------|--------------------|-----------------|----------------|-------------|------------|-------------|--------|
| 1 | 1127.551 | 38.09 | -8.71 | 29.38 | 54.00 | -24.62 | 0 | 100 | AVG |
| 2 | 1198.377 | 50.11 | -8.56 | 41.55 | 74.00 | -32.45 | 15 | 100 | peak |
| 3 | 1493.846 | 53.27 | -7.92 | 45.35 | 74.00 | -28.65 | 114 | 100 | peak |
| 4 | 1496.525 | 42.06 | -7.90 | 34.16 | 54.00 | -19.84 | 111 | 100 | AVG |
| 5 | 2401.684 | 35.84 | -3.51 | 32.33 | 54.00 | -21.67 | 254 | 100 | AVG |
| 6 | 2489.310 | 48.15 | -3.31 | 44.84 | 74.00 | -29.16 | 125 | 100 | peak |

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