## 47 CFR PART 22 H & PART 24 E

# TEST REPORT

of

**USB Modem**

| | |
|---|---|
| Model Name: | Flying Angel |
| Brand Name: | TechFaith |
| Report No.: | SZ09030017E03 |
| FCC ID: | UJQ-FLYANGEL |

*prepared for*

**TechFaith Wireless Technology Group Limited.**
Building 1, No 13, Yongchang North Road, BDA District, Beijing, China（100176）

*prepared by*

**Shenzhen Electronic Product Quality Testing Center**
**Morlab Laboratory**
3/F, Electronic Testing Building, Shahe Road, Xili,
Nanshan District, Shenzhen, 518055, P. R. China
Tel: +86 755 86130398
Fax: +86 755 86130218

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LAB CODE 20081223-00

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# 1. TEST CERTIFICATION

| | |
|---|---|
| Equipment under Test: | USB Modem |
| Brand Name: | TechFaith |
| Model Name: | Flying Angel |
| FCC ID: | UJQ-FLYANGEL |
| Applicant: | TechFaith Wireless Technology Group Limited. Building 1, No 13, Yongchang North Road, BDA District, Beijing, China（100176） |
| Manufacturer: | TechFaith Wireless Technology Group Limited. No. 10A, Tower D2, IT Park, Electronic Town, Jiu Xian Qiao North Road, Chao Yang District, Beijing, China (100015) |
| Test Standards: | 47 CFR Part 2<br>47 CFR Part 22 Subpart H<br>47 CFR Part 24 Subpart E |
| Test date: | March 10, 2009- July 2, 2009 |
| Test Result: | PASS |

*** We Hereby Certify That:**

The equipment under test was tested by Shenzhen Electronic Product Quality Testing Center Morlab Laboratory. The test data, data evaluation, test procedures and equipment configurations shown in this report were made in accordance with the requirement of related FCC rules.

The test results of this report only apply for the tested sample equipment identified above. The test report shall be invalid without all the signatures of the test engineer, the reviewer and the approver.

Tested by: Ni Yong Dated: 2009.07.02
Ni Yong

Reviewed by: Wei Yanquan Dated: 2009.7.02
Wei Yanquan

Approved by: Shu Luan Dated: 2009.7.2
Shu Luan

# 2. GENERAL INFORMATION

## 2.1 EUT Description

| | |
|---|---|
| Description ..... : | USB Modem |
| Model Name ..... : | Flying Angel |
| Serial No. ..... : | (n.a, marked #1 by test site) |
| MEID ..... : | (n.a) |
| Hardware Version ..... : | 8420002T300 |
| Software Version ..... : | Flying Lark 0.08 |
| Frequency Range ..... : | WCDMA 850MHz<br>Tx: 826.4- 846.6MHz;<br>Rx: 871.4 – 891.6MHz<br>WCDMA 1900MHz<br>Tx: 1852.4 – 1907.6MHz;<br>Rx: 1932.4 – 1987.6MHz |
| Modulation Type ..... : | WCDMA |
| Emission Designators ..... : | 4M20F9W |

*Note 1:* The EUT is a USB Modem; it supports GSM 850MHz,900MHz,1800MHz, 1900MHz bands and WCDMA850MHz,1900MHz.. WCDMA 850MHz and 1900MHz bands are tested in this report. When testing, the EUT was powered by a PC via USB point, and a connecting between EUT and base station was established at the start of the test, and maintained during the all test in this report.

*Note 2:* The transmitter (Tx) frequency arrangement of the WCDMA 850MHz band used by the EUT can be represented with the formula F(n)=0.2*n, 4132<=n<=4233; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 4132 (826.4MHz), 4175 (835MHz) and 4233 (846.6MHz).

*Note 3:* The transmitter (Tx) frequency arrangement of the WCDMA 1900MHz band used by the EUT can be represented with the formula F(n)= 0.2*n, 9262<=n<=9538; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 9262 (1852.4MHz), 9400 (1880MHz) and 9538 (1907.6MHz).

*Note 4:* For a more detailed description, please refer to Specification or User’s Manual supplied by the applicant and/or manufacturer.

## 2.2 Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2, Part 22 and Part 24 for the EUT FCC ID Certification:

| No. | Identity | Document Title |
|---|---|---|
| 1 | 47 CFR Part 2 (10-1-05 Edition) | Frequency Allocations and Radio Treaty Matters; General Rules and Regulations |
| 2 | 47 CFR Part 22 (10-1-05 Edition) | Public Mobile Services |
| 3 | 47 CFR Part 24 (10-1-05 Edition) | Personal Communications Services |

Test detailed items/section required by FCC rules and results are as below:

| No. | Section | Description | Result |
|---|---|---|---|
| 1 | 2.106<br>22.905<br>24.229 | Frequencies | (n.a) |
| 2 | 2.1046 | Conducted RF Output Power | PASS |
| 3 | 2.1049 | Occupied Bandwidth | PASS |
| 4 | 2.1055<br>22.355<br>24.235 | Frequency Stability | PASS |
| 5 | 2.1051<br>22.917<br>24.238 | Conducted Out of Band Emissions | PASS |
| 6 | 2.1051<br>2.1057<br>22.917<br>24.238 | Band Edge | PASS |
| 7 | 22.913<br>24.232 | Radiated RF Output Power | PASS |
| 8 | 2.1053<br>22.917<br>24.238 | Field strength of spurious radiation | PASS |

## 2.3 Facilities and Accreditations

### 2.3.1 Facilities

Shenzhen Electronic Product Quality Testing Center Morlab Laboratory is a testing organization accredited by China National Accreditation Board for Laboratories (CNAL) according to ISO/IEC 17025. The accreditation certificate number is L1659.

All measurement facilities used to collect the measurement data are located at Electronic Testing Building, Shahe Road, Xili, Nanshan District, Shenzhen 518055 CHINA. The test site is constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22; the FCC registration number is 741109.

### 2.3.2 Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

| | |
|---|---|
| Temperature (°C): | 20 - 25 |
| Relative Humidity (%): | 40 - 60 |
| Atmospheric Pressure (kPa): | 96 |

# 3. 47 CFR PART 2, PART 22H REQUIREMENTS

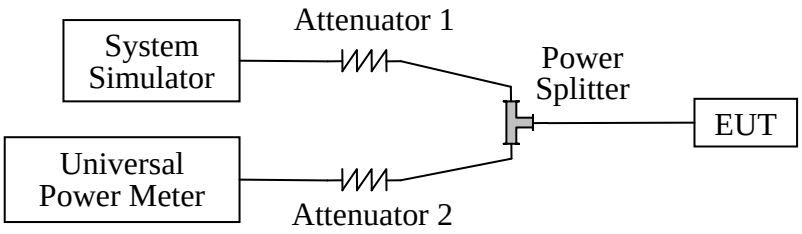
## 3.1 Conducted RF Output Power

### 3.1.1 Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

### 3.1.2 Test Description

#### 3.1.2.1 Test Setup:




The EUT, which is powered by the Battery, is coupled to the Universal Power Meter and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Class = 3. A call is established between the EUT and the SS.

#### 3.1.2.2 Equipments List:

| Description | Manufacturer | Model | Serial No. | Cal. Date | Cal. Due |
|---|---|---|---|---|---|
| System Simulator | Agilent | E5515C | GB43130131 | 2008.09 | 1year |
| Universal Power Meter | Giga - tronics | 8542C | 1832005 | 2008.09 | 1year |
| Power Splitter | Weinschel | 1506A | NW521 | (n.a.) | (n.a.) |
| Attenuator 1 | Resnet | 20dB | (n.a.) | (n.a.) | (n.a.) |
| Attenuator 2 | Resnet | 3dB | (n.a.) | (n.a.) | (n.a.) |

### 3.1.3 Test Result

Here the lowest, middle and highest channels are selected to perform testing to verify the conducted

RF output power of the EUT. For the mobile phone operates at Max Output Power, the rated conducted RF output power of the WCDMA is 24dBm within the tolerance of +1/-3dB and the HSDPA and HSUPA's limits please refer to the test verdict table.

**Test Verdict:**

| ltem | band | WCDMA 850 | | | WCDMA 1900 | | | Rated Output Power | | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| | ARFCN | 4132 | 4175 | 4233 | 9262 | 9400 | 9538 | dBm | Tolerance (dB) | |
| | subtest | | | | | | | | | |
| 5.2 (WCDMA) | non | 23.01 | 22.71 | 24.17 | 21.62 | 21.57 | 22.44 | 24 | +1/-3 | PASS |
| 5.2AA (HSDPA) | 1 | 22.37 | 22.12 | 22.58 | 20.21 | 19.74 | 19.32 | +21 | +2.7/-2.7 | PASS |
| | 2 | 22.23 | 22.05 | 22.46 | 20.33 | 19.67 | 19.88 | +21 | +2.7/-2.7 | PASS |
| | 3 | 21.99 | 21.71 | 22.06 | 20.1 | 19.54 | 19.3 | +20.5 | +3.2/-2.7 | PASS |
| | 4 | 22.34 | 22.13 | 22.73 | 20.11 | 19.6 | 19.28 | +20.5 | +3.2/-2.7 | PASS |
| 5.2B (HSUPA) | 1 | 22.94 | 22.74 | 22.85 | 21.05 | 20.89 | 21.00 | +21 | +2.7/-5.7 | PASS |
| | 2 | 21.12 | 20.88 | 21.01 | 19.21 | 19.07 | 19.19 | +19 | +4.7/-4.2 | PASS |
| | 3 | 21.84 | 21.65 | 21.72 | 20.18 | 20.07 | 20.21 | +20 | +3.7/-4.2 | PASS |
| | 4 | 20.81 | 20.71 | 21.00 | 19.07 | 18.91 | 19.15 | +19 | +4.7/-4.2 | PASS |
| | 5 | 22.96 | 22.69 | 22.88 | 20.96 | 20.87 | 20.87 | +21 | +2.7/-5.7 | PASS |

Note: The measured output power was calculated by the reading of the Power Meter and calibration.

## 3.2 Frequency Stability

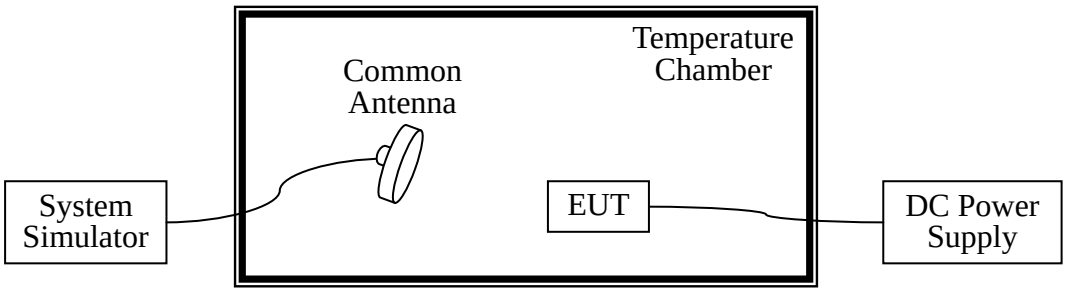
### 3.2.1 Requirement

According to FCC section 22.355 and FCC section 24.235, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

(a) The temperature is varied from -30°C to +50°C at intervals of not more than 10°C.
(b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

### 3.2.2 Test Description

1. Test Setup:




The EUT, which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power. A call is established between the EUT and the SS via a Common Antenna.

2. Equipments List:

| Description | Manufacturer | Model | Serial No. | Cal. Date | Cal. Due |
|---|---|---|---|---|---|
| System Simulator | Agilent | E5515C | GB43130131 | 2008.09 | 1year |
| DC Power Supply | Good Will | GPS-3030DD | EF920938 | 2007.06 | 2year |
| Temperature Chamber | YinHe Experimental Equip. | HL4003T | (n.a.) | 2009.03 | 1year |

### 3.2.3 Test Verdict

The nominal, highest and lowest extreme voltages are separately 3.7VDC, 4.2VDC and 3.6VDC, which are specified by the applicant; the normal temperature here used is 25°C. The frequency deviation limit is ±2.5ppm.

| Band | Test Conditions | | Frequency Deviation | | | | | | Verdict |
|---|---|---|---|---|---|---|---|---|---|
| | Power (VDC) | Temperature (°C) | Channel = 4132 (826.4MHz) | | Channel = 4175 (835MHz) | | Channel = 4233 (846.6MHz) | | |
| | | | Hz | Limit | Hz | Limit | Hz | Limit | |
| WCDMA 850MHz | 3.7 | -30 | 27.95 | ±826.4 | 17.64 | ±835 | -25.51 | ±846.6 | PASS |
| | | -20 | 25.45 | | 31.54 | | 41.77 | | |
| | | -10 | 34.16 | | -25.41 | | 36.31 | | |
| | | 0 | 27.62 | | 44.28 | | 33.16 | | |
| | | +10 | 14.89 | | 9.46 | | -16.32 | | |
| | | +20 | -21.42 | | 42.15 | | 38.78 | | |
| | | +30 | 39.61 | | 25.18 | | -27.47 | | |
| | | +40 | 32.58 | | -15.92 | | 6.55 | | |
| | | +50 | 12.04 | | 14.24 | | 27.57 | | |
| | 4.2 | +25 | -36.73 | | -45.74 | | 35.94 | | |
| | 3.6 | +25 | 22.25 | | 41.26 | | 13.51 | | |
| WCDMA 1900MHz | 3.7 | -30 | -20.5 | ±1852.4 | 15.46 | ±1880 | 13.23 | ±1907.6 | PASS |
| | | -20 | 38.48 | | -39.14 | | 48.24 | | |
| | | -10 | -16.93 | | 25.81 | | -37.78 | | |
| | | 0 | 31.86 | | -34.48 | | 31.53 | | |
| | | +10 | 21.53 | | 21.59 | | 27.18 | | |
| | | +20 | 36.35 | | 33.6 | | 35.29 | | |
| | | +30 | -15.74 | | 34.52 | | -17.69 | | |
| | | +40 | 41.8 | | -28.17 | | 36.34 | | |
| | | +50 | 27.05 | | 24.46 | | 18.45 | | |
| | 4.2 | +25 | -26.34 | | 13.41 | | 39.61 | | |
| | 3.6 | +25 | 23.68 | | 31.74 | | 36.24 | | |

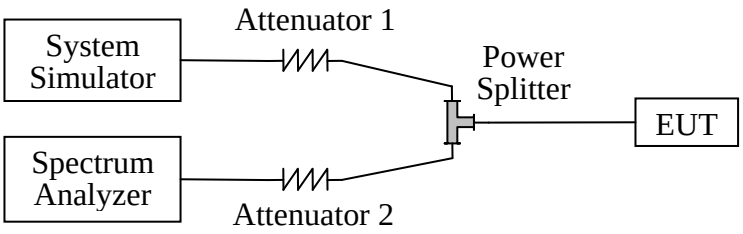
## 3.3 Conducted Out of Band Emissions

### 3.3.1 Requirement

According to FCC section 22.917(a) and FCC section 24.238(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P)dB. This calculated to be -13dBm.

### 3.3.2 Test Description

#### 3.3.2.1 Test Setup:




The EUT, which is powered by the Battery, is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Class = 3. A call is established between the EUT and the SS.

#### 3.3.2.2 Equipments List:

| Description | Manufacturer | Model | Serial No. | Cal. Date | Cal. Due |
|---|---|---|---|---|---|
| System Simulator | Agilent | E5515C | GB43130131 | 2009.09 | 1year |
| Spectrum Analyzer | Agilent | E7405A | US44210471 | 2009.09 | 1year |
| Power Splitter | Weinschel | 1506A | NW521 | (n.a.) | (n.a.) |
| Attenuator 1 | Resnet | 20dB | (n.a.) | (n.a.) | (n.a.) |
| Attenuator 2 | Resnet | 3dB | (n.a.) | (n.a.) | (n.a.) |

### 3.3.3 Test Result

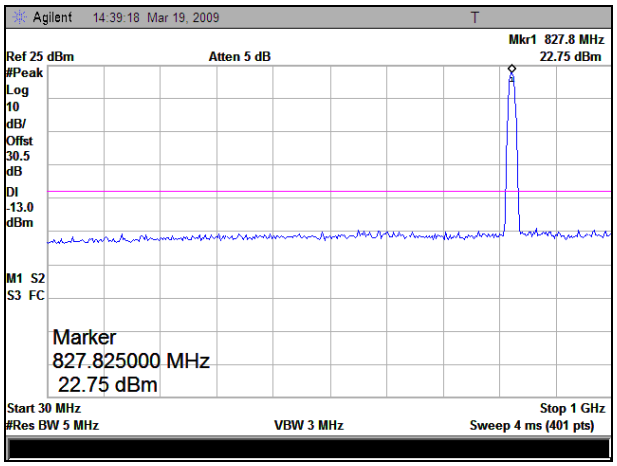
The measurement frequency range is from 30MHz to the 10$^{th}$ harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

1. Test Verdict:

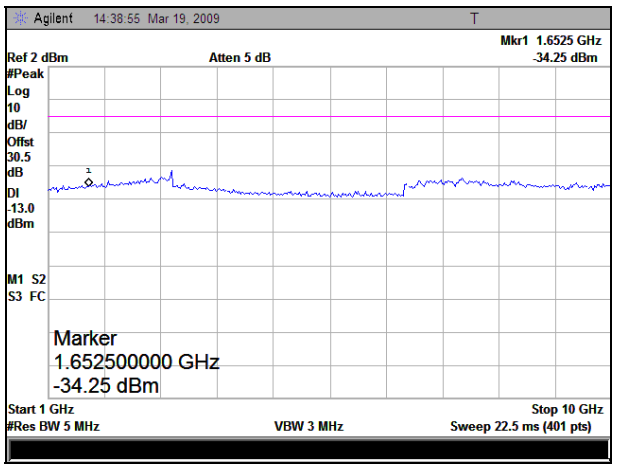
| Band | Channel | Frequency (MHz) | Measured Max. Spurious Emission (dBm) | Refer to Plot | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|
| WCDMA 850MHz | 4132 | 826.4 | --- | Plot A.1/A.2 | -13 | PASS |
| | 4175 | 835 | --- | Plot B.1/B.2 | | PASS |
| | 4233 | 846.6 | --- | Plot C.1/C.2 | | PASS |
| WCDMA 1900MHz | 9262 | 1852.4 | --- | Plot D1/D.2 | -13 | PASS |
| | 9400 | 1880 | --- | Plot E.1/E.2 | | PASS |
| | 9538 | 1907.6 | --- | Plot F.1/F.2 | | PASS |

2. Test Plot for the Whole Measurement Frequency Range:

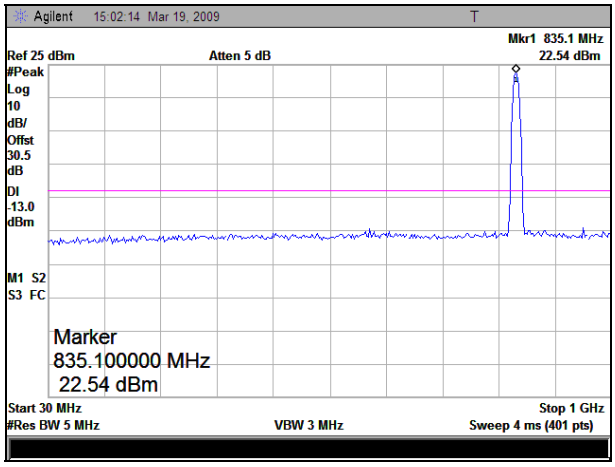
Note: the power of the EUT transmitting frequency should be ignored.



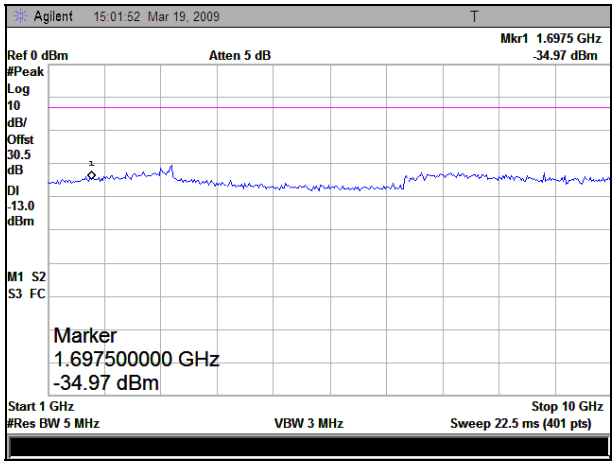

(Plot A.1: Channel = 4132, 30MHz to 1GHz)



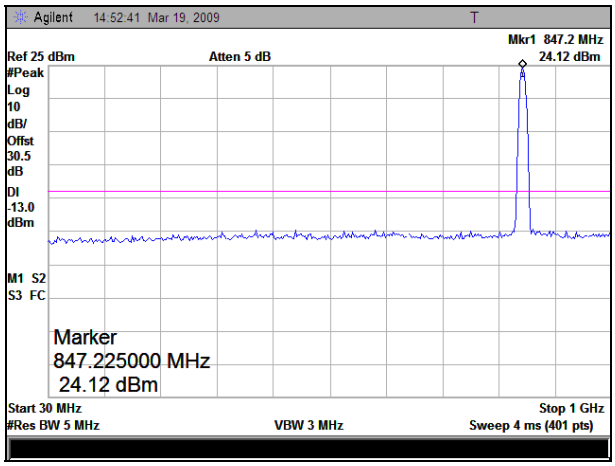

(Plot A.2: Channel = 4132, 1GHz to 10GHz)



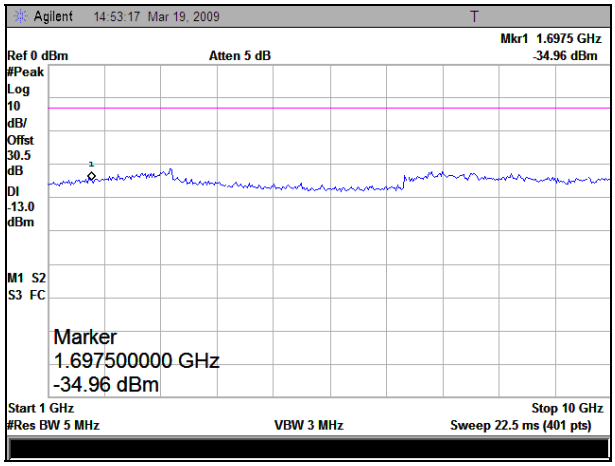

(Plot B.1: Channel = 4175, 30MHz to 1GHz)



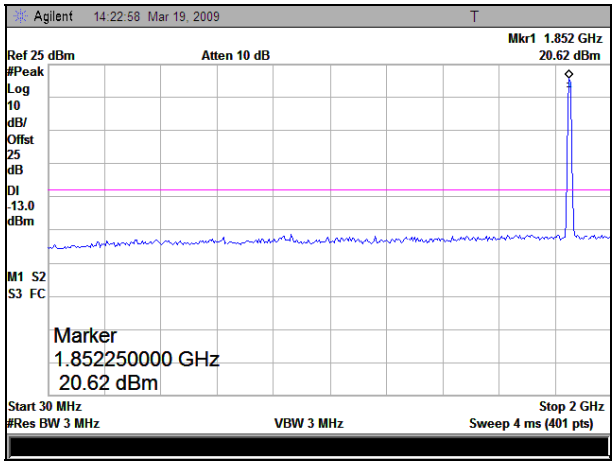

(Plot B.2: Channel = 4175, 1GHz to 10GHz)



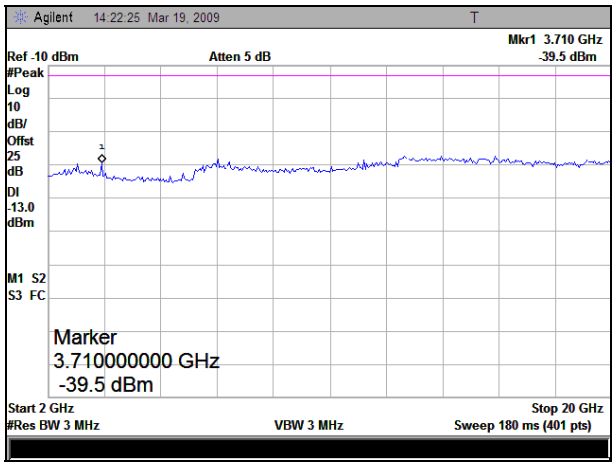

(Plot C.1: Channel = 4233, 30MHz to 1GHz)



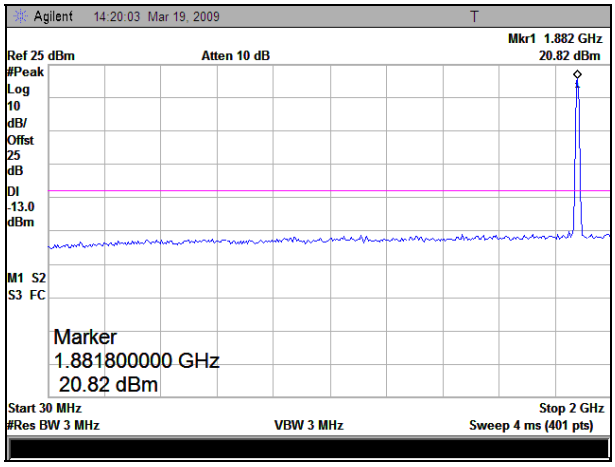

(Plot C.2: Channel = 4233, 1GHz to 10GHz)



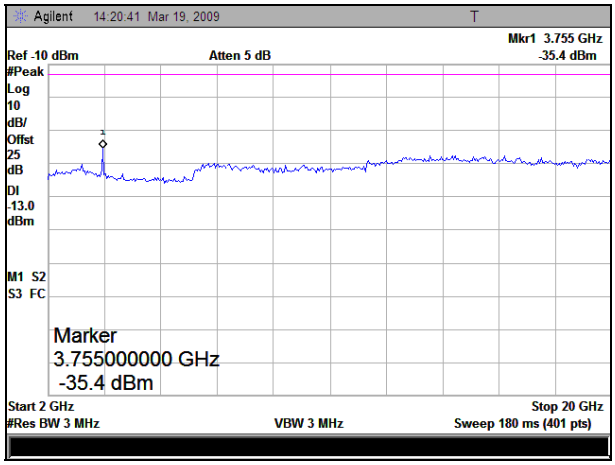

(Plot D.1: Channel = 9262, 30MHz to 2GHz)



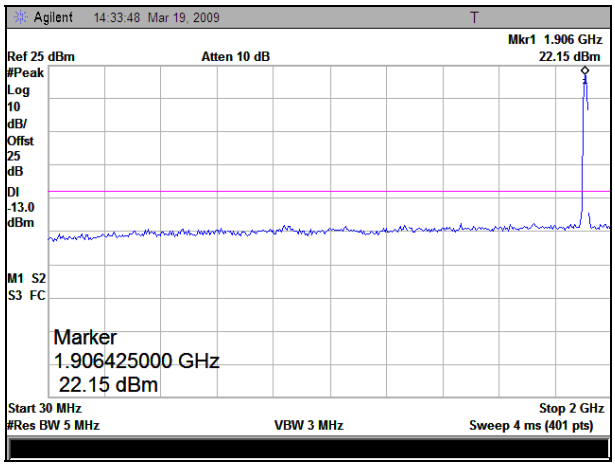

(Plot D.2: Channel = 9262, 2GHz to 20GHz)



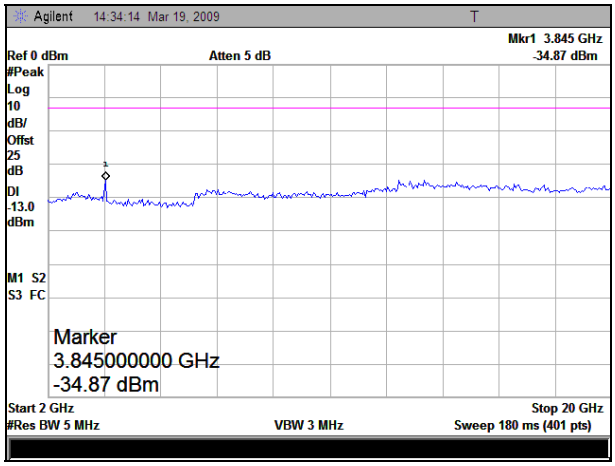

(Plot E.1: Channel = 9400, 30MHz to 2GHz)




(Plot E.2: Channel = 9400, 2GHz to 20GHz)




(Plot F.1: Channel = 9538, 30MHz to 2GHz)




(Plot F.2: Channel = 9538, 2GHz to 20GHz)

## 3.4 Occupied Bandwidth

### 3.4.1 Definition

According to FCC section 2.1049, The EUT was setup to maximum output power at its middle channel. The occupied bandwidth was measured sing a spectrum analyzer. The measurements are repeated for the middle channel. The EUT's occupied bandwidth is measured as the width of the signal between two points, one below the carrier center requency and one above the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. Plots of the EUT's occupied bandwidth are shown herein.

### 3.4.2 Test Description

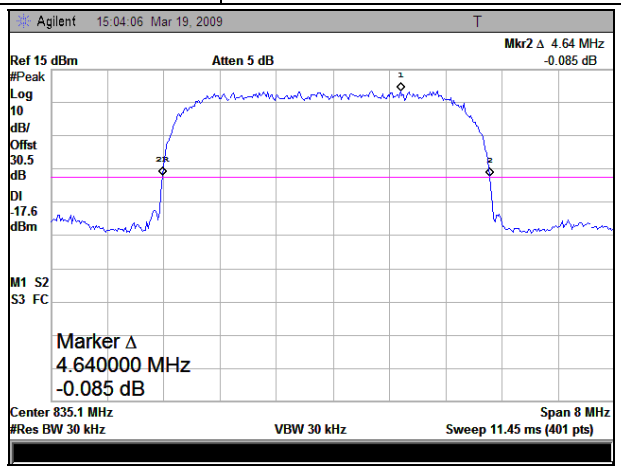
See section 3.3.2 of this report.

### 3.4.3 Test Verdict

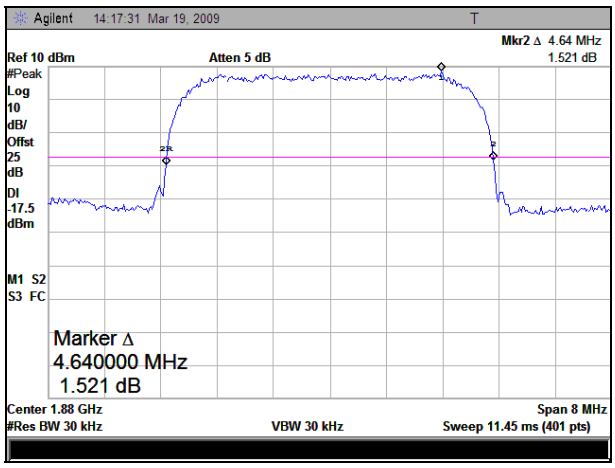
Here the middle channels are tested to record the 26dB occupied bandwidth. The measurement is made according to FCC rules part 22 and 24

3. Test Verdict:

| Band | Channel | Frequency (MHz) | Measured 26dB Occupied Bandwidth (MHz) | Refer to Plot |
|---|---|---|---|---|
| WCDMA 850MHz | 4175 | 835 | 4.64 | Plot A |
| WCDMA 1900MHz | 9400 | 1880 | 4.64 | Plot B |



(Plot A: WCDMA 850MHz Channel = 4175)




(Plot B: WCDMA 1900MHz Channel = 9400)

## 3.5 Band Edge

### 3.5.1 Requirement

According to FCC section 22.917(b) and FCC section 24.238(b), in the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth (26dB emission bandwidth) of the fundamental emission of the transmitter may be employed.

### 3.5.2 Test Description

See section 3.3.2 of this report.

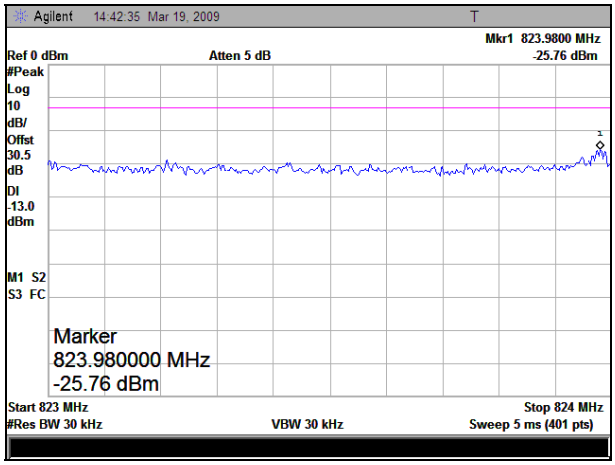
### 3.5.3 Test Result

The lowest and highest channels are tested to verify the band edge emissions.

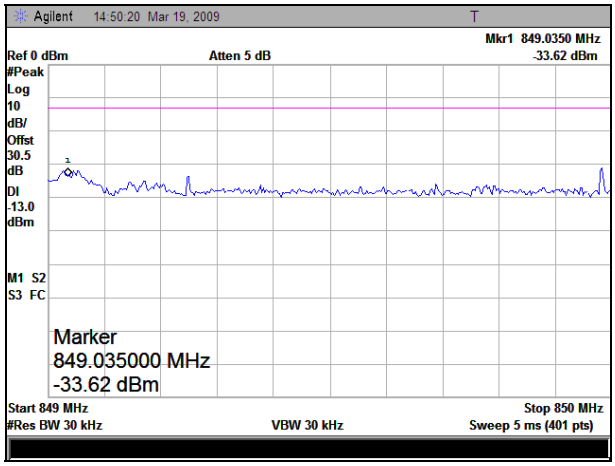
1. Test Verdict:

| Band | Channel | Frequency (MHz) | Measured Max. Band Edge Emission (dBm) | Refer to Plot | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|
| WCDMA 850MHz | 4132 | 823.98 | -25.76 | Plat A | -13 | PASS |
| | 4233 | 849.04 | -33.62 | Plot B | | PASS |
| WCDMA 1900MHz | 9262 | 1849.98 | -26.93 | Plat C | -13 | PASS |
| | 9538 | 1910.00 | -29.35 | Plot D | | PASS |

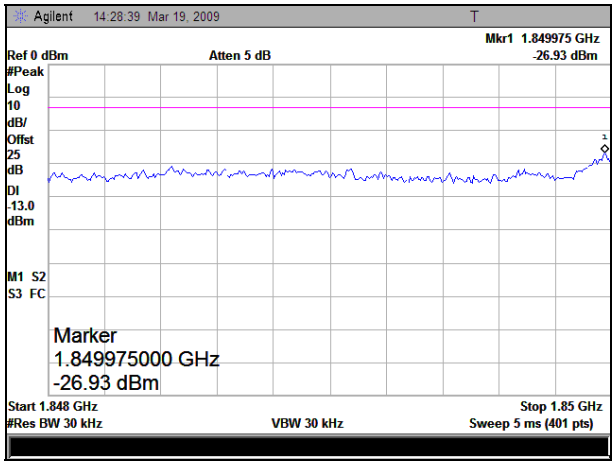
2. Test Plot:



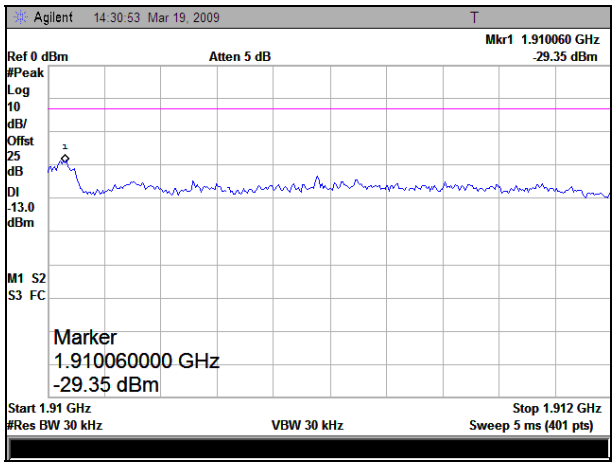

(Plot A: Channel = 4132)




(Plot B: Channel = 4233)




(Plot C: Channel = 9262)




(Plot D: Channel = 9538)

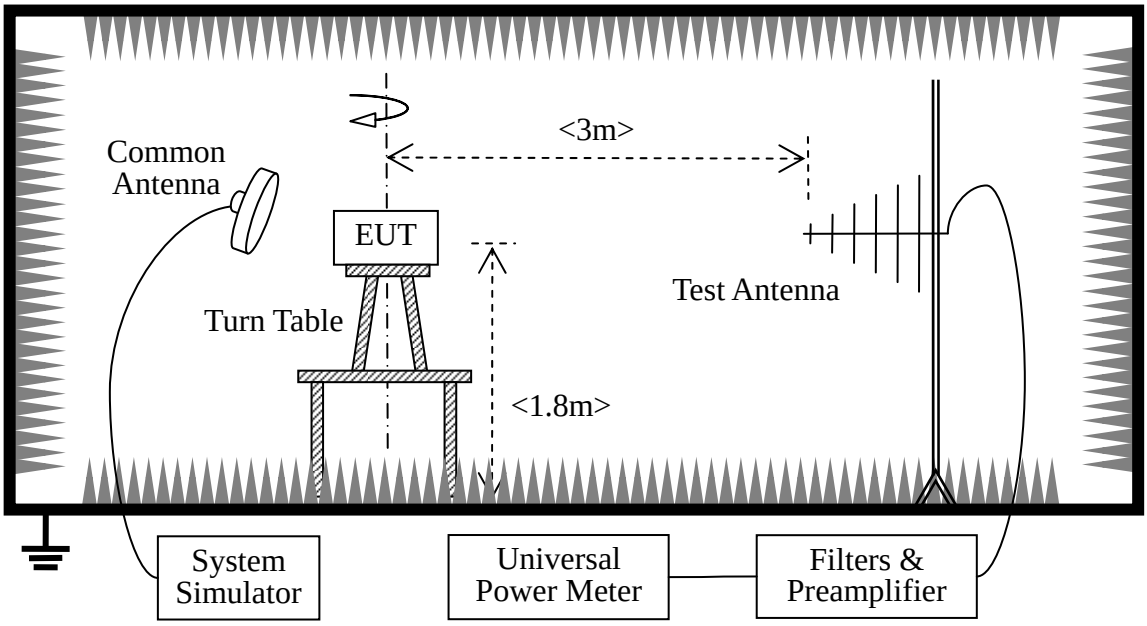
## 3.6 Transmitter Radiated Power (EIRP/ERP)

### 3.6.1 Requirement

According to FCC section 22.913, the mobile station is limited to 7 Watts e.i.r.p. peak power, and according to FCC section 24.232, the mobile station is limited to 2Watts e.i.r.p. peak power.

### 3.6.2 Test Description

1. Test Setup:




The EUT, which is powered by the Battery charged with the AC Adapter, is located in a 3m Full-Anechoic Chamber; the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and are calculated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power; and a call is established between the EUT and the SS via a Common Antenna.

The Test Antenna is a Bi-Log one (used for 30MHz to 1GHz) or a Horn one (used for above 3GHz), and it's located at the same height as the EUT. The Filters consists of Notch Filters and High Pass Filter.

2. Equipments List:

| Description | Manufacturer | Model | Serial No. | Cal. Date | Cal. Due |
|---|---|---|---|---|---|
| System Simulator | Agilent | E5515C | GB43130131 | 2008.09 | 1year |
| Universal Power Meter | Giga - tronics | 8542C | 1832005 | 2008.09 | 1year |
| Spectrum Analyzer | Agilent | E7405A | US44210471 | 2008.09 | 1year |

| Description | Manufacturer | Model | Serial No. | Cal. Date | Cal. Due |
|---|---|---|---|---|---|
| Full-Anechoic Chamber | Albatross | 9m*6m*6m | (n.a.) | 2008.08 | 2year |
| Test Antenna - Bi-Log | Schwarzbeck | VULB 9163 | 9163-274 | 2008.08 | 1year |
| Test Antenna - Horn | Schwarzbeck | BBHA 9120C | 9120C-384 | 2008.08 | 1year |

### 3.6.3 Test Result

The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested.

1. Test Verdict:

| Band | Channel | Frequency (MHz) | Measured ERP /EIRP | | Limit | | Verdict |
|---|---|---|---|---|---|---|---|
| | | | dBm | W | dBm | W | |
| WCDMA 850MHz | 4132 | 826.4 | 21.6 | 0.145 | 38.5 | 7 | PASS |
| | 4175 | 835 | 20.43 | 0.110 | | | PASS |
| | 4233 | 846.6 | 20.08 | 0.102 | | | PASS |
| WCDMA 1900MHz | 9262 | 1852.4 | 19.79 | 0.095 | 33 | 2 | PASS |
| | 9400 | 1880 | 21.25 | 0.133 | | | PASS |
| | 9538 | 1907.6 | 19.73 | 0.094 | | | PASS |
| HSDPA 850MHz | 4132 | 826.4 | 19.20 | 0.083 | 38.5 | 7 | PASS |
| | 4175 | 835 | 18.95 | 0.079 | | | PASS |
| | 4233 | 846.6 | 18.96 | 0.079 | | | PASS |
| HSDPA 1900MHz | 9262 | 1852.4 | 18.20 | 0.066 | 33 | 2 | PASS |
| | 9400 | 1880 | 17.99 | 0.063 | | | PASS |
| | 9538 | 1907.6 | 18.35 | 0.068 | | | PASS |
| HSUPA 850MHz | 4132 | 826.4 | 19.21 | 0.083 | 38.5 | 7 | PASS |
| | 4175 | 835 | 18.98 | 0.079 | | | PASS |
| | 4233 | 846.6 | 18.87 | 0.077 | | | PASS |
| HSUPA 1900MHz | 9262 | 1852.4 | 18.32 | 0.068 | 33 | 2 | PASS |
| | 9400 | 1880 | 18.26 | 0.067 | | | PASS |
| | 9538 | 1907.6 | 17.59 | 0.057 | | | PASS |

Note: The measured output power was calculated by the reading of the Power Meter and calibration

## 3.7 Radiated Out of Band Emissions

### 3.7.1 Requirement

According to FCC section 22.917(a) and FCC section 24.238(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P)dB. This calculated to be -13dBm.

### 3.7.2 Test Description

See section 3.6.2 of this report.

### 3.7.3 Test Result

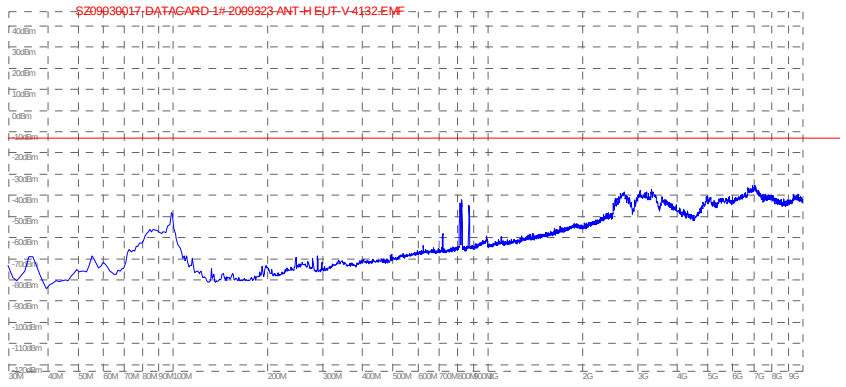
The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested to verify the out of band emissions.

1. Test Verdict:

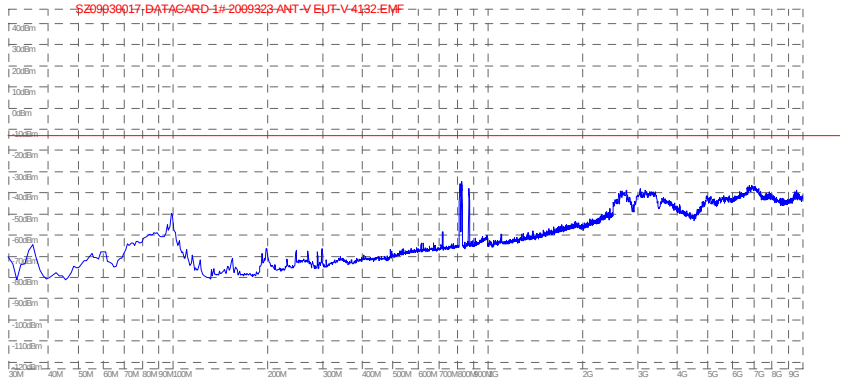
| Brand | Channel | Frequency (MHz) | Measured Max. Spurious Emission (dBm) | | Refer to Plot | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|---|
| | | | Test Antenna Horizontal | Test Antenna Vertical | | | |
| WCDMA 850MHz | 4132 | 826.4 | < -25 | < -25 | Plot A.1/A.2 | -13 | PASS |
| | 4175 | 835 | < -25 | < -25 | Plot B.1/B.2 | | PASS |
| | 4233 | 846.6 | < -25 | < -25 | Plot C.1/C.2 | | PASS |
| WCDMA 1900MHz | 9262 | 1852.4 | < -25 | < -25 | Plot D.1/D.2 | -13 | PASS |
| | 9400 | 1880 | < -25 | < -25 | Plot E.1/E.2 | | PASS |
| | 9538 | 1907.6 | < -25 | < -25 | Plot F.1/F.2 | | PASS |

2. Test Plot for the Whole Measurement Frequency Range:

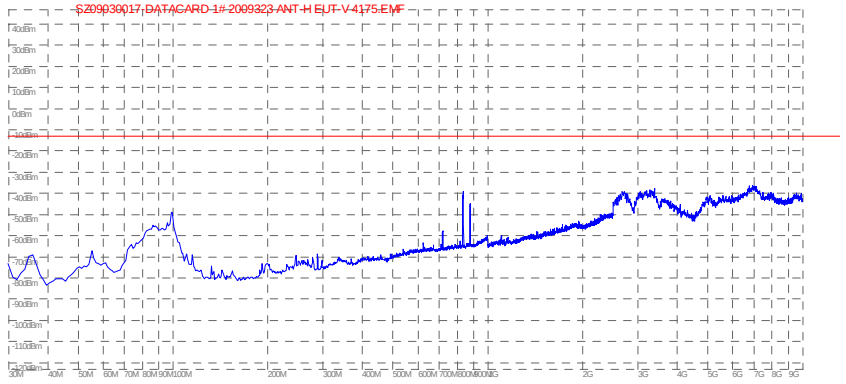
Note: the power of the EUT transmitting frequency should be ignored.



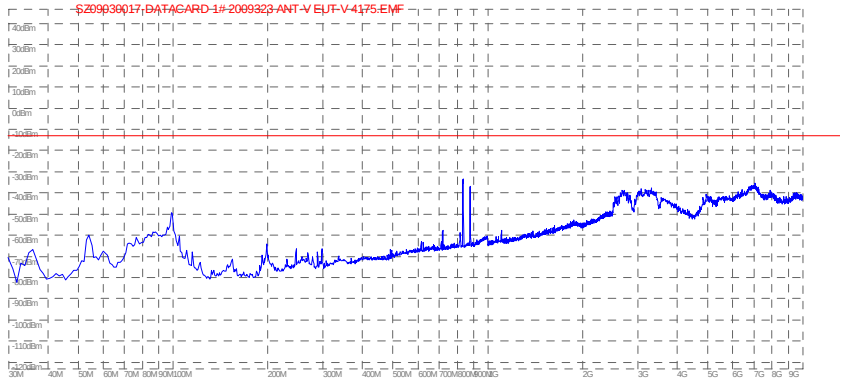

(Plot A.1: CDMA 850MHz Channel = 4132, Test Antenna Horizontal)



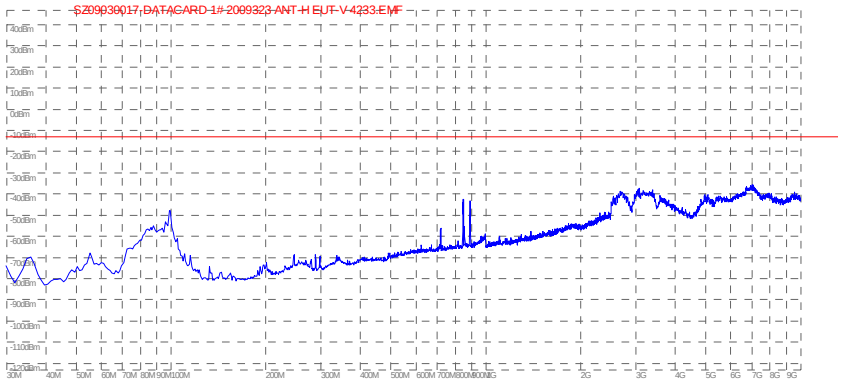

(Plot A.2: CDMA 850MHz Channel = 4132, Test Antenna Vertical)



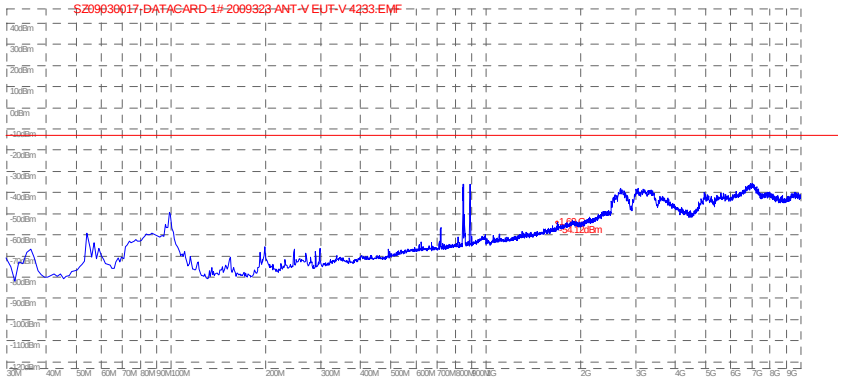

(Plot B.1: CDMA 850MHz Channel = 4175, Test Antenna Horizontal)



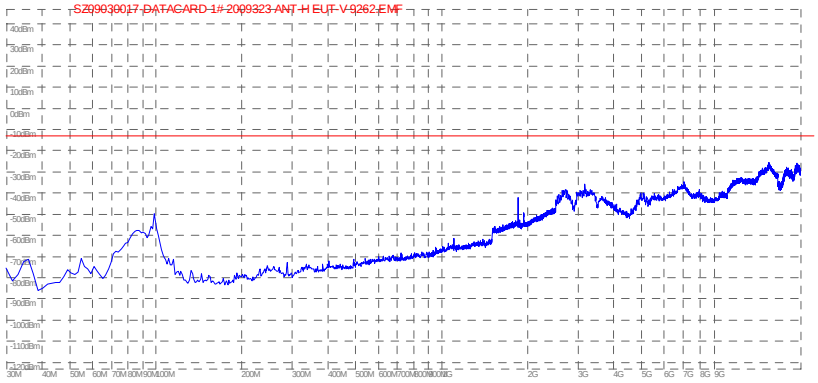
(Plot B.2: CDMA 850MHz Channel = 4175, Test Antenna Vertical)



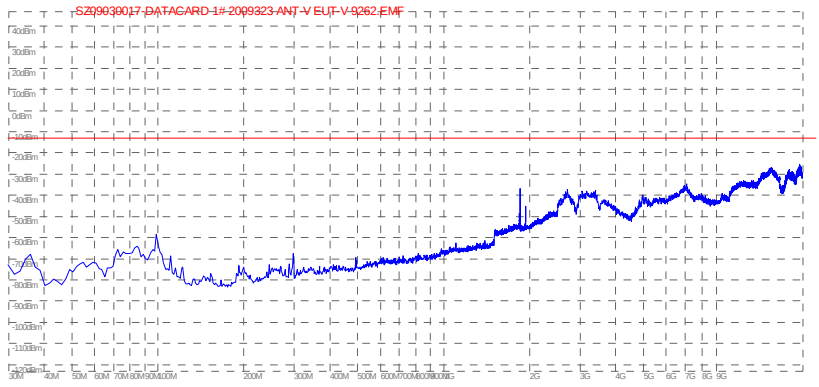

(Plot C.1: CDMA 850MHz Channel = 4233, Test Antenna Horizontal)



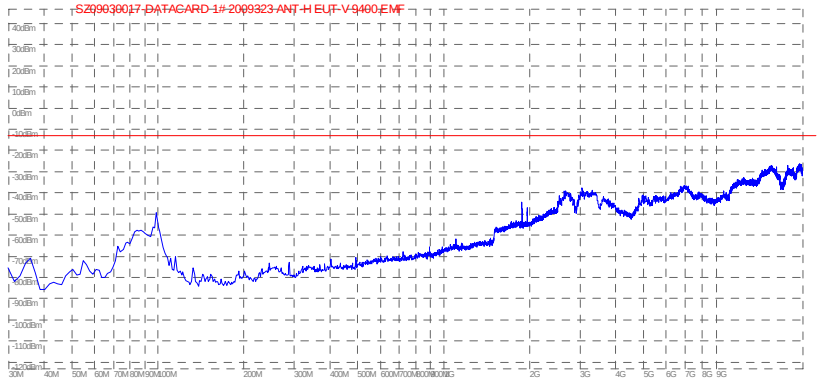

(Plot C.2: CDMA 850MHz Channel = 4233, Test Antenna Vertical)



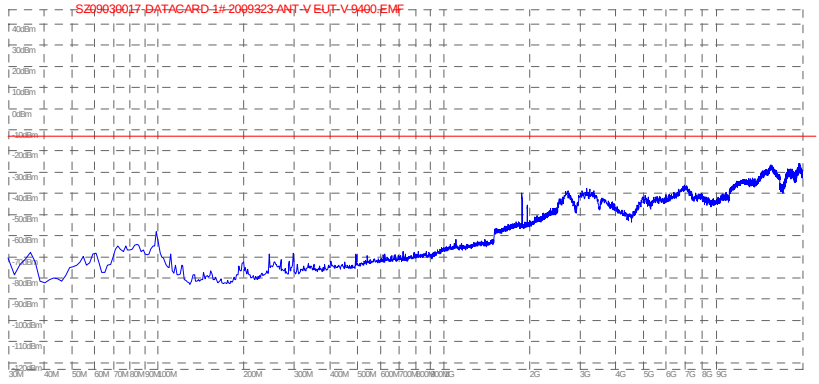

(Plot D.1: CDMA 1900MHz Channel = 9262, Test Antenna Horizontal)



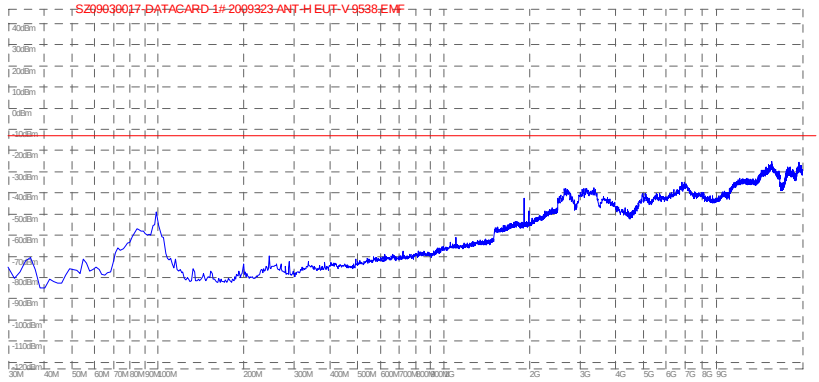

(Plot D.2: CDMA 1900MHz Channel = 9262, Test Antenna Vertical)



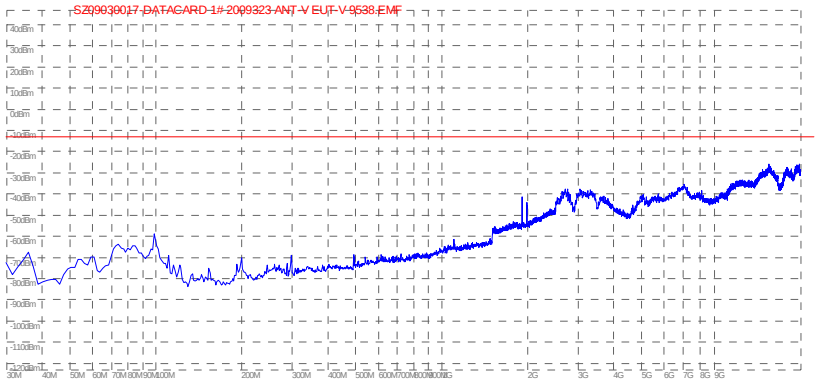

(Plot E.1: CDMA 1900MHz Channel = 9400, Test Antenna Horizontal)




(Plot E.2: CDMA 1900MHz Channel = 9400, Test Antenna Vertical)



(Plot F.1: CDMA 1900MHz Channel = 9538, Test Antenna Horizontal)




(Plot F.2: CDMA 1900MHz Channel = 9538, Test Antenna Vertical)

** END OF REPORT **