



FCC TEST REPORT

Issued to

TELEPOCH Limited.

For

CDMA Handset

Model Name

CDM2080US

Brand Name

PCD

Trade Name

PCD

FCC ID

U46-CDM2080

Standard

47 CFR Part 2

47 CFR Part 22 Subpart H

47 CFR Part 24 Subpart E

47 CFR Part 27 Subpart L

Test date

April 23, 2011 -May 10, 2011

Issue date

May 27, 2011

Date

Shenzhen Morlab Communications Technology Co., Ltd.

Tested by

Cao Shaodong

Date

2011.5.2

Certification

roved by

Shu Luan

Review by

Huang Pulong

Date

20/1.5.27



LAB CODE 20081223-00

IEEE 1725 OTA



電訊管理局





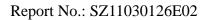




BQTF

Reg. No. 741109

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| | Change Tristory | | | | | | |
|-------|-----------------|-------------------|--|--|--|--|--|
| Issue | Date | Reason for change | | | | | |
| 1.0 | May 27, 2011 | First edition | | | | | |
| | | | | | | | |
| | | | | | | | |



1. GENERAL INFORMATION

1.1 EUT Description

EUT Type CDMA Handset

Serial No.....: (n.a, marked #1 by test site)

Applicant TELEEPOCH Limited.

5A, B1 Building, Digital Tech Zone, High-Tech Park(South),

Nanshan District, Shenzhen, Guangdong Province, China

Manufacturer TELEEPOCH Limited.

5A, B1 Building, Digital Tech Zone, High-Tech Park(South),

Nanshan District, Shenzhen, Guangdong Province, China

Frequency Range CDMA 800MHz:

Tx: 824.7 – 848.31 MHz; Rx: 869.7-893.31MHz

CDMA 1900MHz:

Tx: 1851.25 MHz -1908.75 MHz; Rx: 1931.25 MHz-1988.75 MHz

AWS 1700MHz:

Tx:1710MHz -1755MHz; Rx:2110MHz -2155MHz

Modulation Type..... CDMA 1X, AWS

Emission Designators: 1M25F9W Power Supply Battery

Brand Name: PCD

Model No.: BTR2080B

Serial No.: (n.a. marked #1 by test site)

Capacitance: 800mAh Rated Voltage: 3.7V Charge Limit: 4.2V

Ancillary Equipment A...... AC Adapter (Charger for Battery)

Brand Name: PCD Model Name: CNR2080

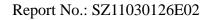
Serial No.: (n.a. marked #1 by test site)
Rated Input: ~ 100-240V, 0.2A, 50/60Hz

Rated Output: = 5V, 500 mA

Note 1: The EUT is a model of CDMA 1X mobile station operating in Cellular, PCS and AWS bands.



| Note 2: The normal configuration for the EUT is the Mobile Phone (MS) associated with ancillary equipments e.g. the Battery and/or the AC Adapter (Charger).Note 3: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer. |
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1.2 Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2, Part 22, Part 24 and part 27 for the EUT FCC ID Certification:

| No. | Identity | Document Title |
|-----|-------------------|---|
| 1 | 47 CFR Part 2 | Frequency Allocations and Radio Treaty Matters; General |
| | (10-1-09 Edition) | Rules and Regulations |
| 2 | 47 CFR Part 22 | Public Mobile Services |
| | (10-1-09 Edition) | |
| 3 | 47 CFR Part 24 | Personal Communications Services |
| | (10-1-09 Edition) | |
| 4 | 47 CFR Part 27 | Miscellaneous Wireless Communications Services |
| | (10-1-09 Edition) | |

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

| No. | Section | Description | Result |
|-----|---------|---------------------------------------|--------|
| 1 | 2.1046 | Conducted RF Output Power | PASS |
| 2 | 2.1049 | 20dB Occupied Bandwidth | PASS |
| | 27.53 | | |
| 3 | 2.1055 | Frequency Stability | PASS |
| | 22.355 | | |
| | 24.235 | | |
| | 27.54 | | |
| 4 | 2.1051 | Conducted Out of Band Emissions | PASS |
| | 2.1057 | | |
| | 22.917 | | |
| | 24.238 | | |
| 5 | 2.1051 | Band Edge | PASS |
| | 2.1057 | | |
| | 22.917 | | |
| | 24.238 | | |
| | 27.53 | | |
| 6 | 22.913 | Transmitter Radiated Power (EIPR/ERP) | PASS |
| | 24.232 | | |
| | 27.50 | | |
| 7 | 2.1053 | Radiated Out of Band Emissions | PASS |
| | 2.1057 | | |
| | 22.917 | | |
| | 24.238 | | |
| | 27.53 | | |



| NOTE: | Measurement method according to TIA/EIA 603.C-2004 |
|-------|--|
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1.3 Facilities and Accreditations

1.3.1 Facilities

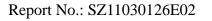
Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L3572.

All measurement facilities used to collect the measurement data are located at 3/F, Electronic Testing Building, Shahe Road, Xili, Nanshan District, Shenzhen, 518055 P. R. 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.

1.3.2 Test Environment Conditions

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

| Temperature (°C): | 15 - 35 |
|-----------------------------|---------|
| Relative Humidity (%): | 30 -60 |
| Atmospheric Pressure (kPa): | 86-106 |





2. 47 CFR PART 2, PART 22H & 24E, 27L REQUIREMENTS

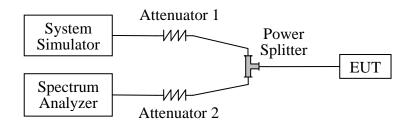
2.1 Conducted RF Output Power

2.1.1 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).

2.1.2 Test Description

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 500hm; 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 Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

2. Equipments List:

| Description | Manufacturer | Model | Serial No. | Cal. Date |
|-------------------|--------------|--------|------------|-----------|
| System Simulator | Agilent | E5515C | GB43130131 | 2010.09 |
| Spectrum Analyzer | Agilent | E7405A | US44210471 | 2010.09 |
| Power Splitter | Weinschel | 1506A | NW521 | (n.a.) |
| Attenuator 1 | Resnet | 20dB | (n.a.) | (n.a.) |
| Attenuator 2 | Resnet | 3dB | (n.a.) | (n.a.) |

2.1.3 Test Result

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



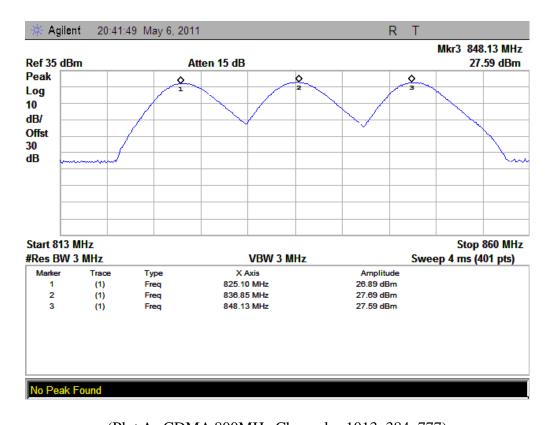


RF output power of the EUT. For the CDMA 800MHz operates at PCL=5 (where Power Class is 4), the rated conducted RF output power is 33dBm, and For the CDMA 1900MHz operates at PCL=0 (where Power Class is 1), the rated conducted RF output power is 30dBm.

1. Test Verdict:

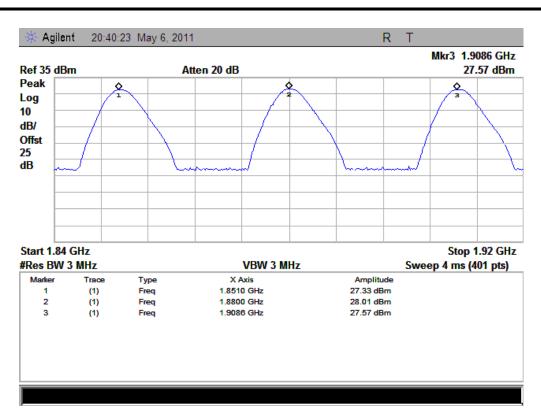
| No. | Channel Number | Frequency (MHz) | Measur | red Power | Rated Power | |
|----------------|----------------|------------------|--------|-----------|-------------|---|
| NO. | Chamie Number | Frequency (MITZ) | dBm | W | dBm | W |
| CDMA | 1013 | 824.7 | 26.89 | 0.49 | | |
| 800MHz | 384 | 836.52 | 27.69 | 0.59 | 33 | 2 |
| 800MHZ | 777 | 848.31 | 27.56 | 0.57 | | |
| CDMA | 25 | 1851.30 | 27.33 | 0.54 | | |
| 1900MHz | 600 | 1880.0 | 28.01 | 0.63 | 30 | 1 |
| 190011112 | 1175 | 1908.8 | 27.57 | 0.57 | | |
| AWS | 25 | 1711.25 | 26.17 | 0.41 | | |
| AWS 1700MHz | 450 | 1732.5 | 27.18 | 0.52 | 30 | 1 |
| 1 / UUIVITIZ | 875 | 1753.75 | 26.76 | 0.47 | | |

2. Test Plots:

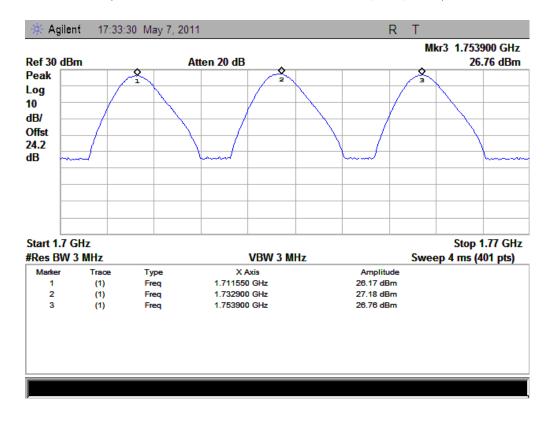


(Plot A: CDMA 800MHz Channel = 1013, 384, 777)





(Plot B: CDMA 1900MHz Channel = 25, 600, 1175)



(Plot C: GPRS 850MHz Channel = 25, 450, 875)



2.2 99% Occupied Bandwidth

2.2.1 Definition

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

Occupied bandwidth is also known as the 99% emission bandwidth,.

2.2.2 Test Description

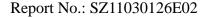
See section 2.1.2 of this report.

2.2.3 Test Verdict

Here the lowest, middle and highest channels are tested to record the 99% occupied bandwidth, it's about 280kHz.

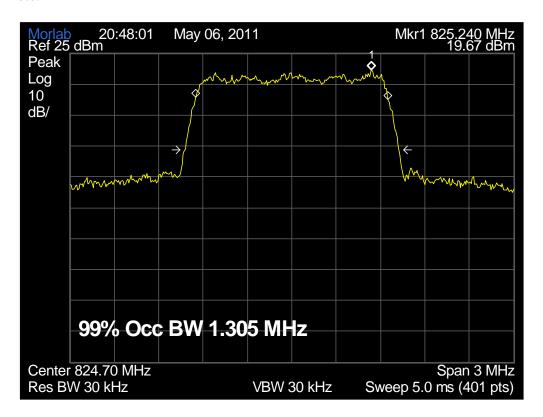
1. Test Verdict:

| Band | Channel | Frequency (MHz) | Measured 20dB Occupied Bandwidth (MHz) | Refer to Plot |
|-----------------|---------|-----------------|--|---------------|
| CDMA | 1013 | 824.7 | 1.305 | Plot A |
| 800MHz | 384 | 836.52 | 1.297 | Plot B |
| OUDVITIZ | 777 | 848.31 | 1.305 | Plot C |
| CDMA | 25 | 1850.2 | 1.313 | Plot D |
| CDMA 1900MHz | 600 | 1880.0 | 1.305 | Plot E |
| 1900MHZ | 1175 | 1909.8 | 1.328 | Plot F |
| AWC | 25 | 1711.25 | 1.298 | Plot G |
| AWS 1700MHz | 450 | 1732.5 | 1.298 | Plot H |
| 1 / UUIVIMZ | 875 | 1753.75 | 1.290 | Plot I |

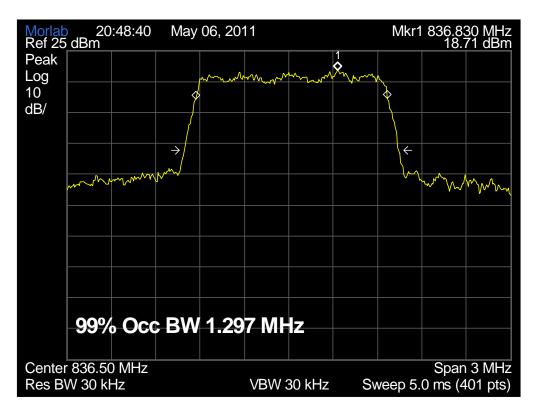




2. Test Plots:

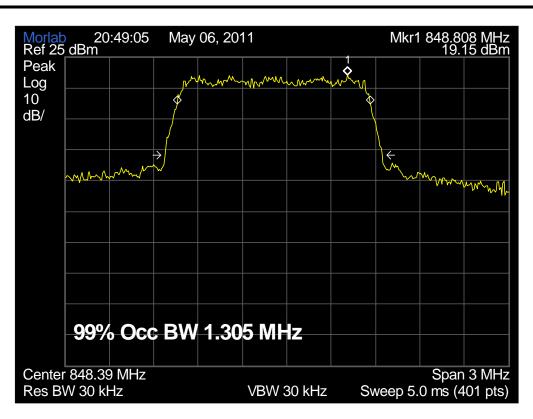


(Plot A: CDMA 800MHz Channel = 1013)

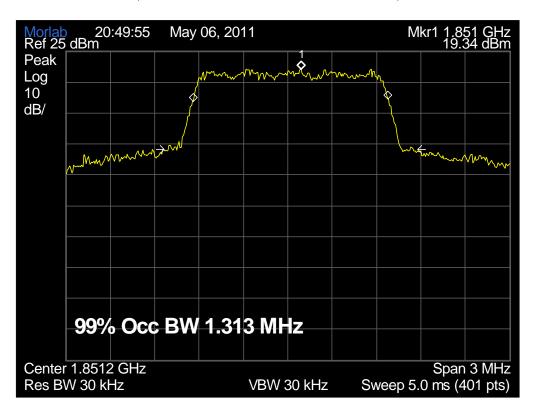


(Plot B: CDMA 800MHz Channel = 384)

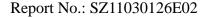




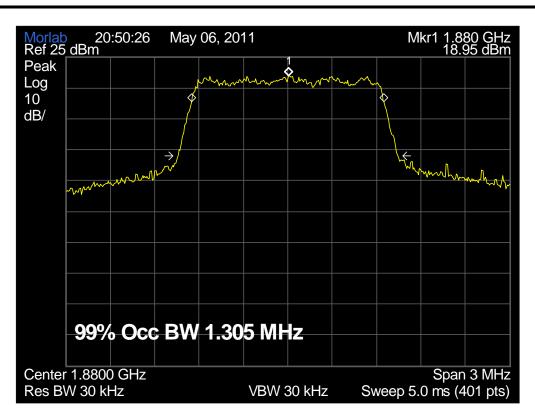
(Plot C: CDMA 800MHz Channel = 777)



(Plot D: CDMA 1900MHz Channel = 25)





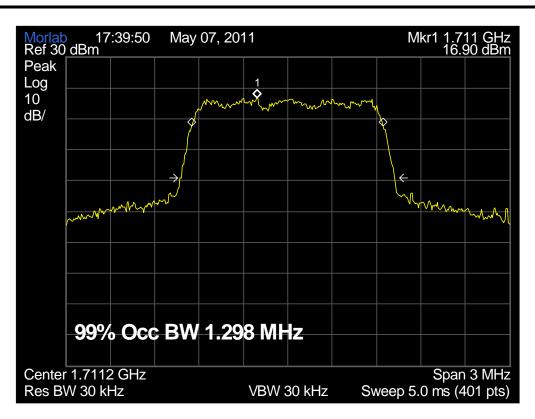


(Plot E: CDMA 1900MHz Channel = 600)

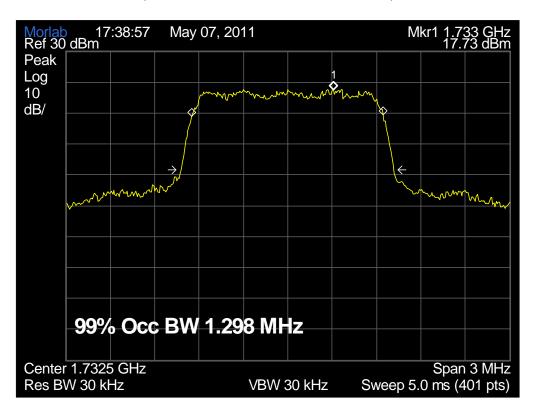


(Plot F: CDMA 1900MHz Channel = 1175)



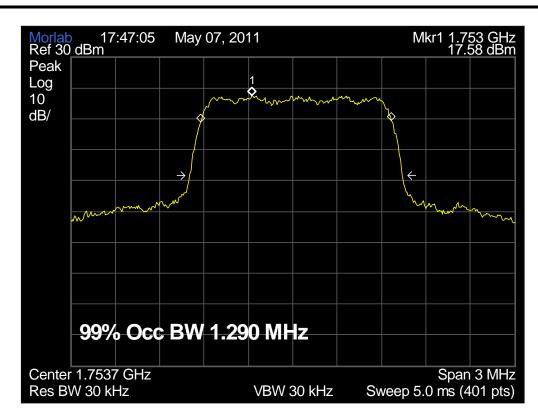


(Plot G: AWS 1700MHz Channel = 25)



(Plot H: AWS 1700MHz Channel = 450)





(Plot I: AWS 1700MHz Channel = 875)



2.3 Frequency Stability

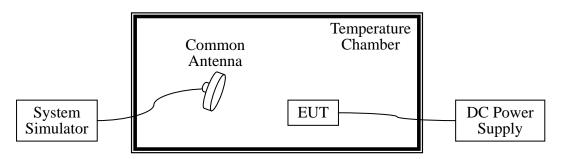
2.3.1 Requirement

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 $+50^{\circ}$ 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.

2.3.2 Test Description

1. Test Setup:



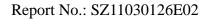
The EUT, which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS via a Common Antenna.

2. Equipments List:

| Description | Manufacturer | Model | Serial No. | Cal. Date |
|------------------|--------------------|------------|------------|-----------|
| System Simulator | Agilent | E5515C | GB43130131 | 2010.09 |
| DC Power Supply | Good Will | GPS-3030DD | EF920938 | 2010.09 |
| Temperature | YinHe Experimental | HL4003T | (n.a.) | 2010.09 |
| Chamber | Equip. | | | |

2.3.3 Test Verdict

The nominal, highest and lowest extreme voltages are separately 3.7VDC, 4.2VDC and 3.4VDC, which are specified by the applicant; the normal temperature here used is 25°C. The frequency





deviation limit of CDMA 800MHz band is $\pm 2.5 ppm$, CDMA 1900MHz is $\pm 1 ppm$, and AWS 1700MHz is $\pm 2.5 ppm$.

| Test Conditions Frequency Deviation | | | | | | | | | |
|-------------------------------------|-------------|-----------|---------------------|-------------|---|--------------|--------|---------------|---------|
| | | Tempera | Channe | el = 1013 | , * | | | Channel = 777 | |
| Band | Power | ture | (824.7MHz) | | | (836.52MHz) | | (848.31MHz) | |
| | (VDC) | (°C) | Hz | Limits | Hz | Limits | Hz | Limits | |
| | | -30 | 15.06 | | 26.75 | | -16.29 | | |
| | | | | | -11.0 | | | | |
| | | -20 | -25.16 | | 8 | | 29.37 | | |
| | | -10 | 24.03 | | 21.44 | - | -11.06 | | |
| | | 0 | -23.21 | | -7.85 | 1 | 35.04 | | |
| CDMA | 3.7 | +10 | 9.85 | 12061.7 | 25.32 | .2001.2 | -22.26 | 12120.7 | |
| CDMA 800MHz | | +20 | 27.01 | ±2061.7 | 5.09 | ±2091.3 0 | 35.09 | ±2120.7 | PASS |
| OUUNITIZ | | +30 | 26.09 | | 35.04 | | 26.75 | | |
| | | +40 | | | -22.2 | | | | |
| | | +40 | -8.15 | | 6 | | -11.08 | | |
| | | +50 | 27.23 | | 15.09 | | 21.44 | - | |
| | 4.2 | +25 | 24.37 | | -7.85 | | -7.85 | | |
| | 3.4 | +25 | 24.26 | | 25.32 | | 25.32 | | |
| | Test Co | onditions | Frequency Deviation | | | | | | |
| Band | Power (VDC) | Tempera | | nel = 25 | | rel = 600 | | el = 1175 | Verdict |
| Bana | | ture | (1851. | 2MHz) | (1880 | .0MHz) | (1908 | B.8MHz) | verdict |
| | (120) | (°C) | Hz | Limits | Hz | Limits | Hz | Limits | |
| | | -30 | -16.11 | _ | 15.06 | | -9.54 | | |
| | | -20 | 9.35 | _ | -25.16 | | 18.17 | | |
| | | -10 | -25.21 | = | 24.03 | - | -24.09 | _ | |
| | | 0 | 32.11 | | -23.21 | | 23.41 | | |
| CDMA | 3.7 | +10 | -29.31 | _ | 9.85 | - | -16.07 | | |
| 1900MHz | | +20 | 26.52 | ±1851.2 | 27.01 | ±1880.0 | 29.16 | ±1908.8 | PASS |
| 17001/1112 | | +30 | -8.99 | _ | 26.09 | - | -17.54 | | |
| | | +40 | 17.92 | _ | -8.15 | - | 11.74 | | |
| | | +50 | -10.25 | _ | 27.23 | - | 28.05 | | |
| | 4.2 | +25 | 26.98 | = | 24.37 | - | -20.13 | | |
| | 3.4 | +25 | 7.39 | | 24.26 | | 33.70 | | |
| | Test Co | onditions | | | | y Deviation | 1 | | |
| | Power | Tempera | | nel = 25 | | nel = 450 | | nel = 875 | Verdi |
| Band | Power | | | 25MH2) | (1732 | 2.5MHz) | (1753) | 3.75MHz) | ct |
| Band | Power (VDC) | ture | (1711.2 | · · · · · · | ` | | ` | , | |
| | (VDC) | (°C) | Hz | Limits | Hz | Limits | Hz | Limits | |
| Band | | | , | · · · · · · | ` | | ` | , | PASS |



| | Test Conditions | | Frequency Deviation | | | | | | |
|---------|-----------------|---------|---------------------|----------|---------------|----------|-----------------|----------|---------|
| Band | Power | Tempera | Channel = 1013 | | Channel = 384 | | Channel $= 777$ | | Verdict |
| | (VDC) | ture | (824.7MHz) | | (836.52MHz) | | (848.31MHz) | | |
| | (VDC) | (°C) | Hz | Limits | Hz | Limits | Hz | Limits | _ |
| 1700MHz | | -20 | 1.8 | | 3.5 | | 9.6 | | |
| | | -10 | -9.1 | | -9.4 | | -3.8 | | |
| | | 0 | -0.4 | ±4278.12 | -3.6 | ±4331.25 | 5.3 | ±4384.37 | |
| | | +10 | 4.2 | 5 | 6.1 | | 5.3 | 5 | |
| | | +20 | 29.2 | | 30.9 | | 29.3 | | |
| | | +30 | 21.7 | | 22.3 | | 23.9 | | |
| | | +40 | 3.0 | | 5.3 | | 0.8 | | |
| | | +50 | 19.4 | | 18.2 | | 19.7 | | |
| | 4.2 | +25 | 6.8 | | 7.0 | | 10.5 | | |
| | 3.4 | +25 | 13.1 | | 15.2 | | 15.0 | | |



2.4 Conducted Out of Band Emissions

2.4.1 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.

2.4.2 Test Description

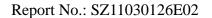
See section 2.1.2 of this report.

2.4.3 Test Result

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

1. Test Verdict:

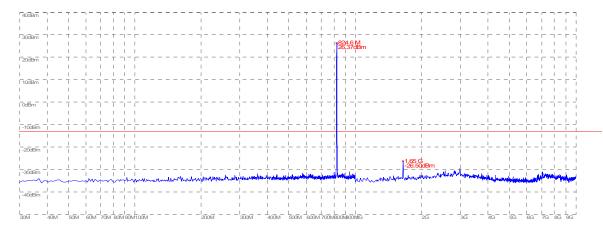
| No. | Channel Frequency(MHz) Sp | | Measured Max Spurious Emission(dBm) | Limit(dBm) | |
|----------------|----------------------------|---------|-------------------------------------|------------|--|
| CDMA | 1013 | 824.7 | -26.50 | -13 | |
| 800MHz | 384 | 836.52 | -25.05 | -13 | |
| SUOMITIZ | 777 | 848.31 | -28.49 | -13 | |
| CDMA | 25 | 1850.2 | -18.49 | -13 | |
| 1900MHz | 600 | 1880.0 | -26.56 | -13 | |
| 1900МП2 | 1175 | 1909.8 | -20.47 | -13 | |
| AWS 1700MHz | 25 | 1711.25 | -27.49 | -13 | |
| | 450 | 1732.5 | -24.63 | -13 | |
| | 875 | 1753.75 | -26.78 | -13 | |



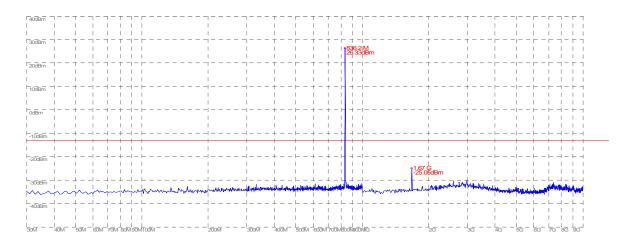


2. Test Plots for the Whole Measurement Frequency Range:

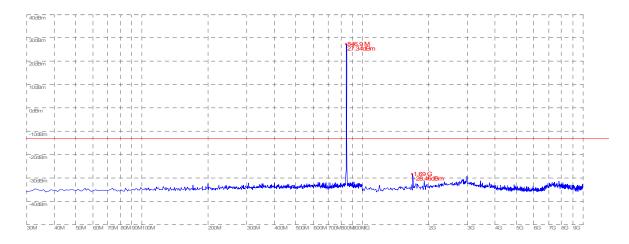
Note: the power of the EUT transmitting frequency should be ignored.



(Plot A: CDMA 800MHz Channel = 1013, 30MHz to 10GHz)

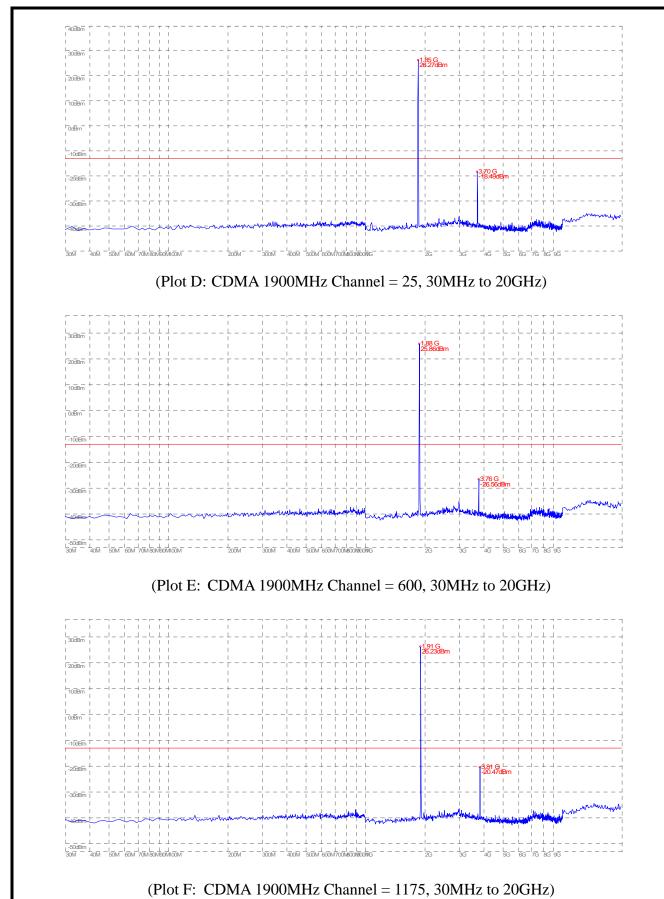


(Plot B: CDMA 800MHz Channel = 384, 30MHz to 10GHz)

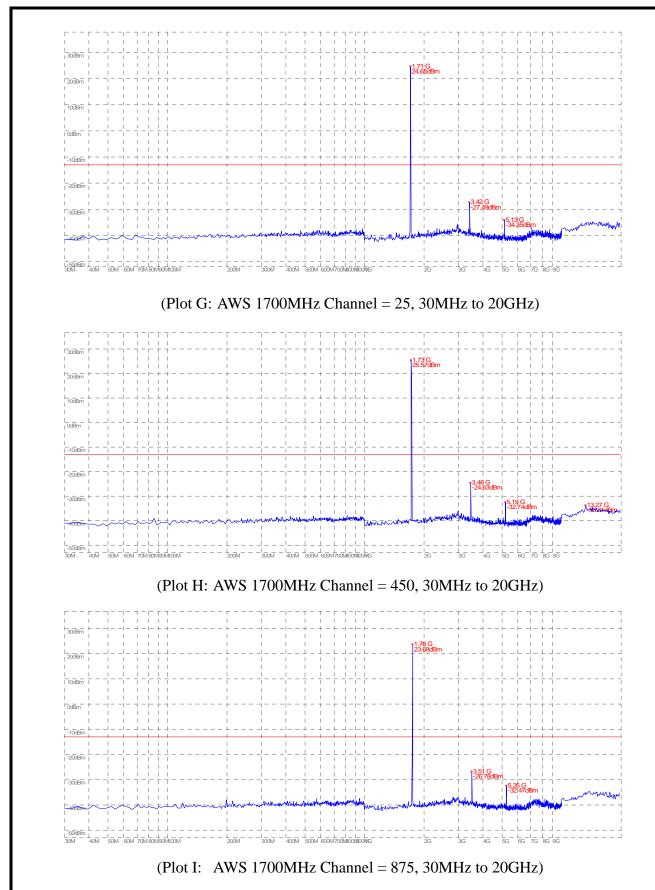


(Plot C: CDMA 800MHz Channel = 777, 30MHz to 10GHz)











2.5 Band Edge

2.5.1 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.

2.5.2 Test Description

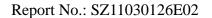
See section 2.1.2 of this report.

2.5.3 Test Result

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

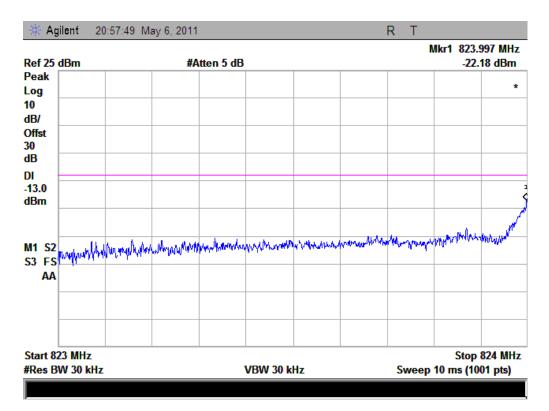
1. Test Verdict:

| Dand | Channel | Frequenc | Measured Max. Band | Refer to | Limit | Verdict | |
|---------|---------|----------|---------------------|----------|-------|---------|--|
| Band | | y (MHz) | Edge Emission (dBm) | Plot | (dBm) | verdict | |
| CDMA | 1013 | 824.7 | -22.18 | Plat A | -13 | PASS | |
| 800MHz | 777 | 848.31 | -15.99 | Plot B | -13 | PASS | |
| CDMA | 25 | 1851.2 | -15.01 | Plat C | 12 | PASS | |
| 1900MHz | 1175 | 1908.8 | -19.00 | Plot D | -13 | PASS | |
| AWS | 25 | 1711.25 | -20.48 | Plat E | -13 | PASS | |
| 1700MHz | 875 | 1753.75 | -29.82 | Plot F | -13 | PASS | |

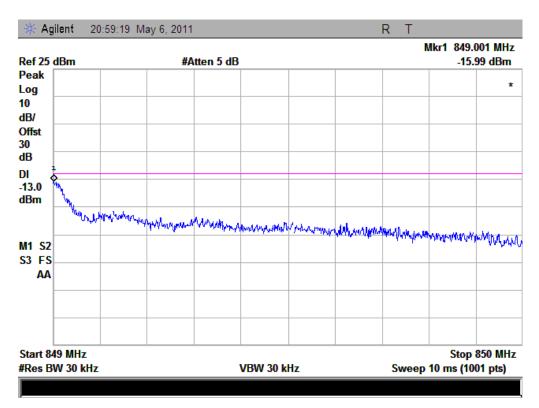




2. Test Plots:

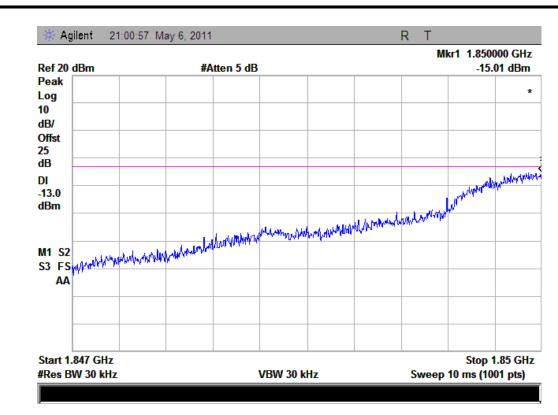


(Plot A: CDMA 800MHz Channel = 1013)

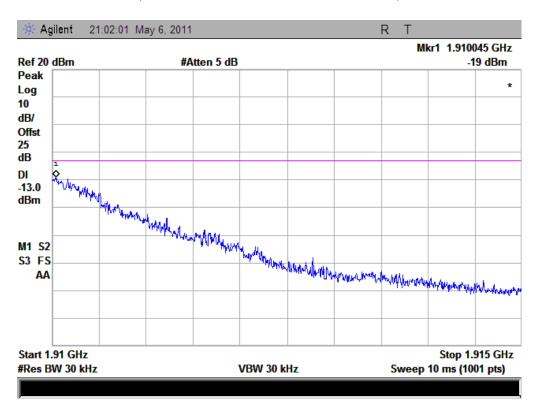


(Plot B: CDMA 800MHz Channel = 777)



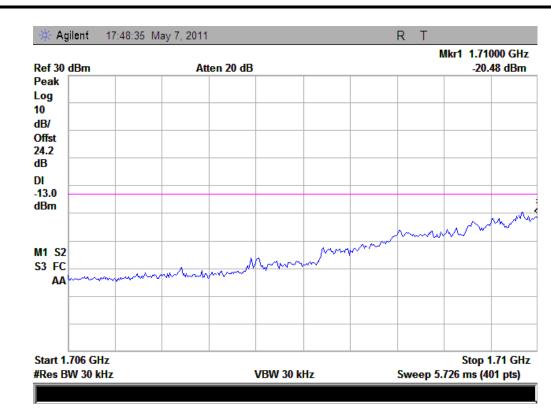


(Plot C: CDMA 1900MHz Channel = 25)

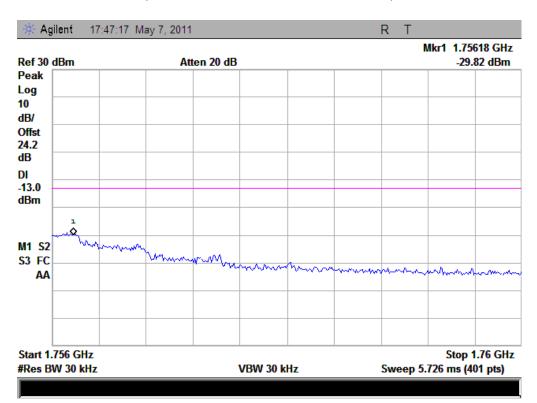


(Plot D: CDMA 1900MHz Channel = 1175)

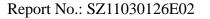




(Plot D: AWS 1700MHz Channel = 25)



(Plot D: AWS 1700MHz Channel = 875)





2.6 Transmitter Radiated Power (EIRP/ERP)

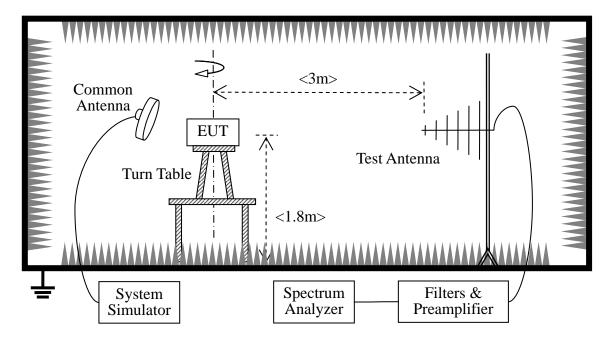
2.6.1 Requirement

According to FCC section 22.913, the Effective Radiated Power (ERP) of mobile transmitters and auxiliary test transmitters must not exceed 7Watts, and FCC section 24.232, the broadband PCS mobile station is limited to 2Watts e.i.r.p. peak power.

FCC section 27.50(d)(4) Fixed, mobile, and portable(hand-held) stations operating in the 1710-1755MHz band are limited to 1 watt EIRP. Fixed stations operating in this band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in this band must employ a means for limiting power to the minimum necessary for successful communications.

2.6.2 Test Description

1. Test Setup:



- 1. The resolution bandwidth of the Spectrum Analyzer is set to be comparable to the emission bandwidth of the transmitter, e.g. for GSM modulated signal (here used): RBW=VBW=1MHz, for CDMA modulated signal: RBW=VBW=3MHz.
- 2. The low, middle and the high channels are selected to perform tests respectively.
- 3. Employ the bi-log Test Antenna as the test system receiving antenna; set the polarization of the Test Antenna to be the same as that of the EUT transmitting antenna.

Set the frequency range of the Spectrum Analyzer suitably to capture the waveform; actuate the Turn



Table to turn from 0 degrees to 360 degrees to find the maximum reading via the Spectrum Analyzer, mark the peak; finally record the peak and the plot.

2. Equipments List:

| Description | Manufacturer | Model | Serial No. | Cal. Date |
|-----------------------|--------------|------------|------------|-----------|
| System Simulator | Agilent | E5515C | GB43130131 | 2010.09 |
| Spectrum Analyzer | Agilent | E7405A | US44210471 | 2010.09 |
| Full-Anechoic Chamber | Albatross | 9m*6m*6m | (n.a.) | 2010.09 |
| Test Antenna - Bi-Log | Schwarzbeck | VULB 9163 | 9163-274 | 2010.09 |
| Test Antenna - Horn | Schwarzbeck | BBHA 9120C | 9120C-384 | 2010.09 |

2.6.3 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.

The substitution corrections are obtained as described below:

 $A_{SUBST} = P_{SUBST_TX} - P_{SUBST_RX} - L_{SUBST_CABLES} + G_{SUBST_TX_ANT}$

 $A_{TOT} = L_{CABLES} + A_{SUBST}$

Where A_{SUBST} is the final substitution correction including receive antenna gain.

P_{SUBST_TX} is signal generator level,

P_{SUBST_RX} is receiver level,

L_{SUBST CABLES} is cable losses including TX cable,

G_{SUBST_TX_ANT} is substitution antenna gain.

A_{TOT} is total correction factor including cable loss and substitution correction

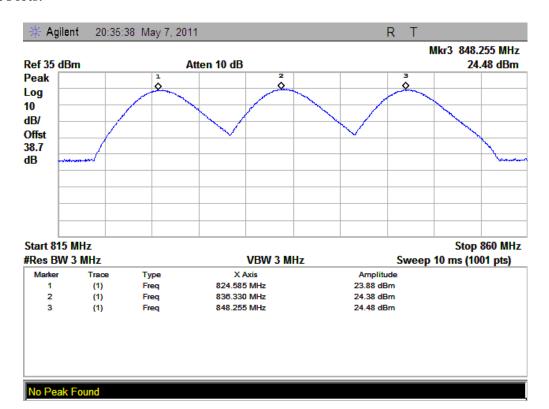
During the test, the data of A_{TOT} was added in the Test Spectrum Analyze, so Spectrum Analyze reading is the final values which contain the data of A_{TOT} .



1. Test Verdict:

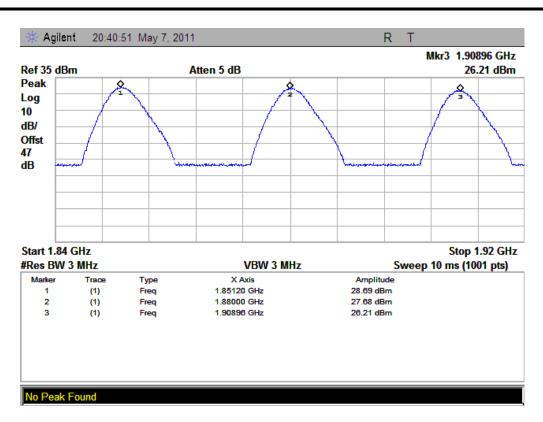
| No. | Channel | Fraguency (MHz) | Measu | red ERP | Limit ERP | |
|----------------|---------|-----------------|-------|---------|-----------|---|
| | Chamiei | Frequency (MHz) | dBm | W | dBm | W |
| CDMA | 1013 | 824.7 | 23.88 | 0.24 | | |
| CDMA 800MHz | 384 | 836.52 | 24.38 | 0.27 | 38.5 | 7 |
| 800MHZ | 777 | 848.31 | 24.48 | 0.28 | | |
| CDMA | 25 | 1850.2 | 28.69 | 0.74 | | |
| 1900MHz | 600 | 1880.0 | 27.68 | 0.59 | 33 | 2 |
| 1900MHZ | 1175 | 1909.8 | 26.21 | 0.42 | | |
| AWS 1700MHz | 25 | 1711.25 | 21.18 | 0.13 | | |
| | 450 | 1732.5 | 20.29 | 0.11 | 38.5 | 7 |
| | 875 | 1753.75 | 21.82 | 0.15 | | |

2. Test Plots:

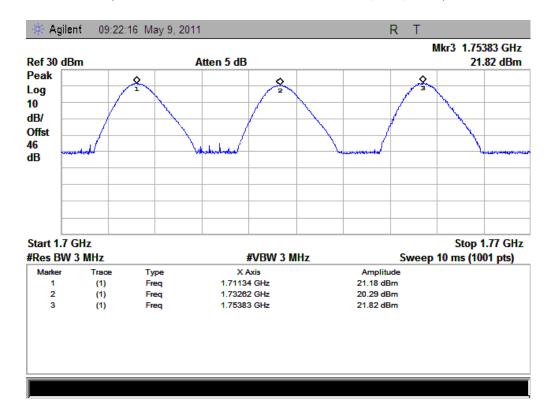


(Plot A: CDMA 800MHz Channel = 1013,384, 777)





(Plot B: CDMA 1900MHz Channel = 25, 600, 1175)



(Plot C: AWS 1700MHz Channel = 25,450,875)



2.7 Radiated Out of Band Emissions

2.7.1 Requirement

According to FCC section 22.917(a), section 24.238(a) and section 27.53(h), 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.

2.7.2 Test Description

See section 2.6.2 of this report.

Note: when doing measurements above 1GHz, the EUT has been within the 3dB cone width of the horn antenna during horizontal antenna.

2.7.3 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:

| Band | Channe 1 | Frequenc y (MHz) | Measured M Emissio | • | Refer to Plot | Limit (dBm) | Verdict |
|----------------|-------------|---------------------|-----------------------|-----------------|---------------|----------------|---------|
| | | | Test Antenna | Test Antenna | | | |
| | | | Horizontal | Vertical | | | |
| CDMA | 1013 | 1649 | < -25 | < -25 | Plot A.1/A.2 | | PASS |
| 800MHz | 384 | 1673 | < -25 | < -25 | Plot B.1/B.2 | -13 | PASS |
| 800MHZ | 777 | 1696 | < -25 | < -25 | Plot C.1/C.2 | | PASS |
| CDMA | 25 | 3700 | < -25 | < -25 | Plot D.1/D.2 | | PASS |
| 1900MHz | 600 | 3760 | < -25 | < -25 | Plot E.1/E.2 | -13 | PASS |
| 1900MHZ | 1175 | 1909.8 | < -25 | < -25 | Plot F.1/F.2 | | PASS |
| AWS 1700MHz | 25 | 1711.25 | < -25 | < -25 | Plot G.1/G.2 | | PASS |
| | 450 | 1732.5 | < -25 | < -25 | Plot H.1/H.2 | -13 | PASS |
| | 875 | 1753.75 | < -25 | < -25 | Plot I.1/I.2 | | PASS |

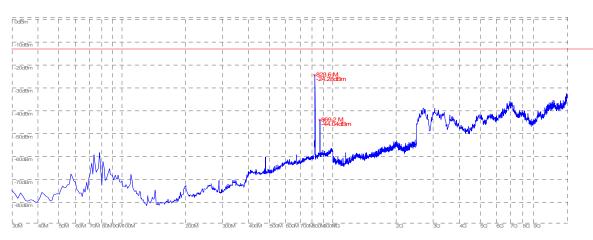




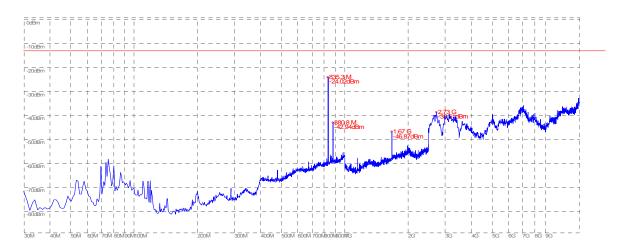
Note: the power of the EUT transmitting frequency should be ignored.



(Plot A.1: CDMA 800MHz Channel = 1013, Test Antenna Horizontal)

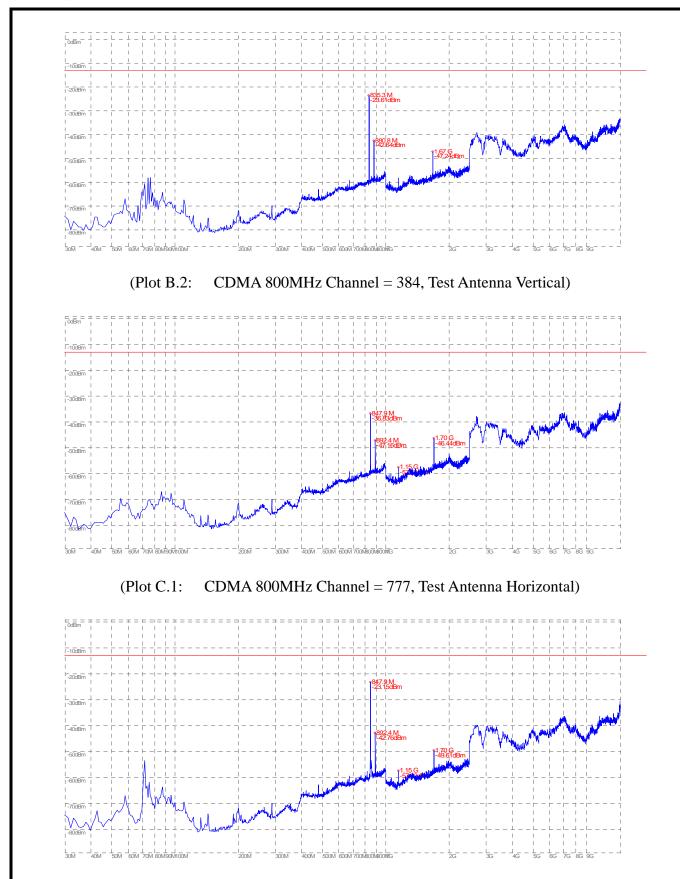


(Plot A.2: CDMA 800MHz Channel = 1013, Test Antenna Vertical)



(Plot B.1: CDMA 800MHz Channel = 384, Test Antenna Horizontal)

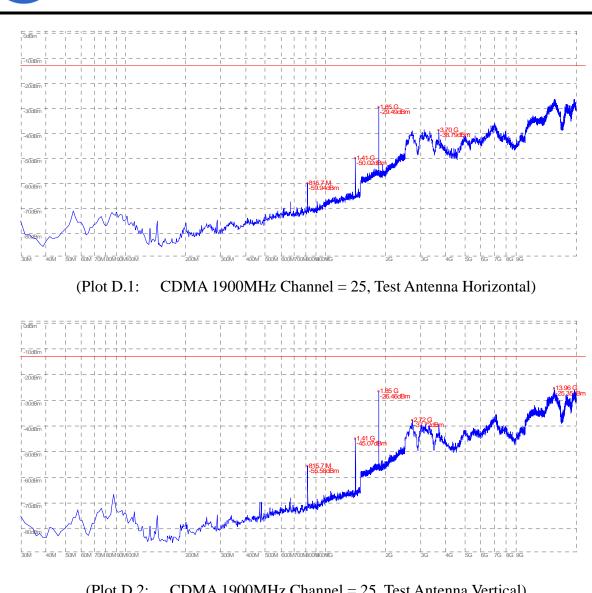


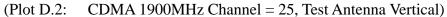


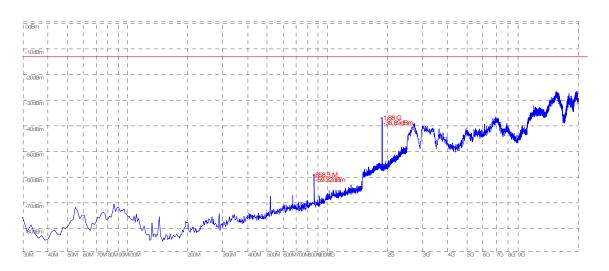
CDMA 800MHz Channel = 777, Test Antenna Vertical)

(Plot C.2:



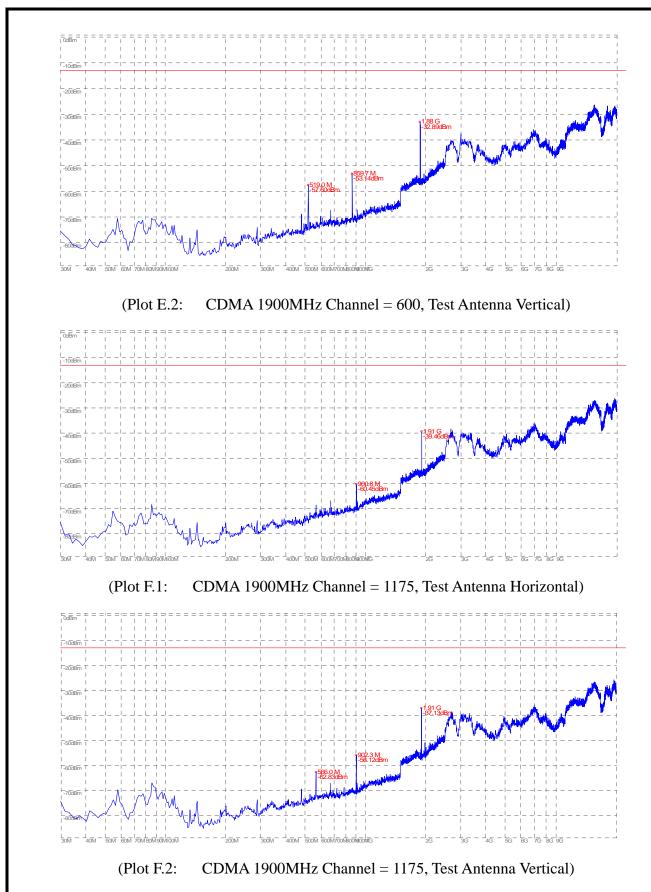




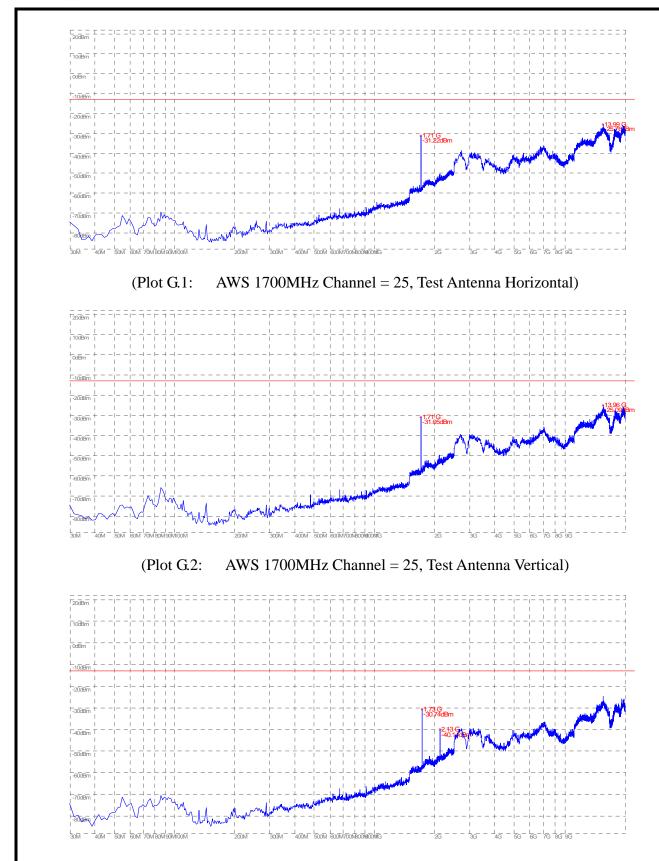


(Plot E.1: CDMA 1900MHz Channel = 600, Test Antenna Horizontal)









(Plot H.1: AWS 1700MHz Channel = 450, Test Antenna Horizontal)



