FCC 47 CFR PART 22 SUBPART H AND PART 24 SUBPART E
&
INDUSTRY CANADA RSS-132 & RSS-133

TEST REPORT

For

Generic Signal Module

Trade Name: Wistron

Model: EM300

Issued to

Wistron Corporation
21F, 88, Sec. 1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Issued by

Compliance Certification Services Inc.
No. 11, Wu-Gong 6th Rd., Wugu Industrial Park,
Taipei Hsien 248, Taiwan (R.O.C.)
http://www.ccsemc.com.tw
service@tw.ccsemc.com

Testing Laboratory
1309

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1. TEST RESULT CERTIFICATION

Applicant:	Wistron Corporation 21F, 88, Sec. 1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.
Manufacturer:	Wistron Corporation 21F, 88, Sec. 1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.
Equipment Under Test:	Generic Signal Module
Trade Name:	Wistron
Model Number:	EM300
Date of Test:	October 10, 2008 ~ January 4, 2009

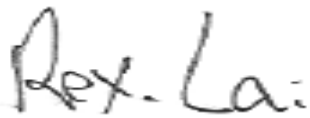
APPLICABLE STANDARDS	
STANDARD	**TEST RESULT**
FCC 47 CFR PART 22 SUBPART H AND PART 24 SUBPART E & IC RSS-132 Issue 2: September 2005 and IC RSS-133 Issue 4: Feb. 2008	No non-compliance noted

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in TIA/EIA-603-C and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rule FCC PART 22 Subpart H, PART 24 Subpart E, IC RSS-132 Issue 2 and IC RSS-133 Issue 4.

The test results of this report relate only to the tested sample identified in this report.

Approved by:



Rex Lai
Section Manager
Compliance Certification Services Inc.

Reviewed by:

Amanda Wu
Section Manager
Compliance Certification Services Inc.

2. EUT DESCRIPTION

Product	Generic Signal Module
Trade Name	Wistron
Model Number	EM300
Model Discrepancy	N/A
Power Supply	DC 3.3V powered from Host device.
Frequency Range	GSM / GPRS / EDGE 850MHz: 824 ~ 849 MHz GSM / GPRS / EDGE: 1900MHz: 1850 ~ 1910 MHz WCDMA Band II: 1852.4 ~ 1907.6 MHz WCDMA Band V: 826.4 ~ 846.6 MHz
Modulation Technique	GSM: GMSK GPRS: GMSK EDGE: 8PSK WCDMA: Quadrature Phase Shift Keying (QPSK) with Root-raised cosine pulse shaping filters (roll off = 0.22)
Antenna Gain	GSM / GPRS / EDGE 850MHz: -4dBi GSM / GPRS / EDGE: 1900MHz: 0.29dBi WCDMA Band II: 0.29dBi WCDMA Band V: -4dBi
Antenna Type	Omni Antenna

Remark: *The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.*

Mode	ERP Power (dBm)	Type of Emission
GSM 850MHz	28.50	244GXW
GPRS 850MHz	29.12	252GXW
EDGE 850MHz	25.21	245G7W
WCDMA Band V	19.25	4M17F9W
WCDMA HSDPA Band V	18.80	4M17F9W

Mode	EIRP Power (dBm)	Type of Emission
GSM 1900MHz	30.17	246GXW
GPRS 1900MHz	29.27	244GXW
EDGE 1900MHz	25.93	246G7W
WCDMA Band II	23.25	4M16F9W
WCDMA HSDPA Band II	22.38	4M17F9W

3. TEST METHODOLOGY

Both conducted and radiated testing were performed according to the procedures document on chapter 13 of ANSI C63.4: 2003, TIA/EIA-603-C: 2004 and FCC CFR 47, Part 2 and Part 22 Subpart H & Part 24 Subpart E.

The tests documented in this report were performed in accordance with IC RSS-132, SPSR503, RSS-133, SPSR510 and ANSI C63.4 and TIA/EIA-603-C.

3.1EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

3.2EUT EXERCISE

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

3.3GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4: 2003.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4: 2003.

3.4DESCRIPTION OF TEST MODES

The EUT (model: EM300) had been tested under operating condition.

EUT staying in continuous transmitting mode was programmed.

After verification, all tests carried out are with the worst-case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode and receiving radiated spurious emission above 1GHz, which worst case was in CH Mid mode only.

GSM / GPRS / EDGE 850MHz:
Channel Low (CH128), Channel Mid (CH190) and Channel High (CH251) were chosen for full testing.

GSM / GPRS / EDGE 1900MHz:
Channel Low (CH512), Channel Mid (CH661) and Channel High (CH810) were chosen for full testing.

WCDMA Band II:
Channel Low (CH9262), Channel Mid (CH9400) and Channel High (CH9538) were chosen for full testing.

WCDMA Band V:
Channel Low (CH4132), Channel Mid (CH4182) and Channel High (CH4233) were chosen for full testing.

WCDMA / HSDPA Band II:
Channel Low (CH9262), Channel Mid (CH9400) and Channel High (CH9538) were chosen for full testing.
WCDMA / HSDPA Band V:
Channel Low (CH4132), Channel Mid (CH4182) and Channel High (CH4233) were chosen for full testing.

Based on the above results from the different modulations, GSM850 / GSM1900 / GPRS 850 / GPRS1900 / EDGE 850 / EDGE 1900 / WCDMA Band II / WCDMA Band V / HSDPA Band II / HSDPA Band V were determined to be the worst-case scenario for all tests.

4. INSTRUMENT CALIBRATION

4.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

4.2MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

Remark: *Each piece of equipment is scheduled for calibration once a year.*

Conducted Emissions Test Site				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
Spectrum Analyzer	Agilent	E4446A	MY43360131	02/24/2009
Power Meter	Agilent	E4416A	GB41291611	04/06/2009
Power Sensor	Agilent	E9327A	US40441097	06/19/2009
Temp. / Humidity Chamber	Terchy	MHG-150LF	930619	08/06/2009
DC Power Source	Agilent	E3640A	MY40001774	01/10/2009

3M Semi Anechoic Chamber				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
Spectrum Analyzer	Agilent	E4446A	US42510252	09/10/2009
Test Receiver	Rohde & Schwarz	ESCI	100064	11/30/2009
Switch Controller	TRC	Switch Controller	SC94050010	05/03/2009
4 Port Switch	TRC	4 Port Switch	SC94050020	05/03/2009
Horn-Antenna	TRC	HA-0502	06	06/04/2009
Horn-Antenna	TRC	HA-0801	04	06/19/2009
Bilog- Antenna	Sunol Sciences	JB3	A030205	03/28/2009
Loop Antenna	EMCO	6502	8905/2356	05/29/2009
Turn Table	Max-Full	MFT-120S	T120S940302	N.C.R.
Antenna Tower	Max-Full	MFA-430	A440940302	N.C.R.
Controller	Max-Full	MF-CM886	CC-C-1F-13	N.C.R.
Site NSA	CCS	N/A	FCC MRA: TW1039 IC: IC 2324G-1/-2	10/17/2010 11/04/2010
Reject Filter	Micro-Tronics	HPM13194	003	04/24/2009
S.G.	HP	83630B	3844A01022	04/17/2009
Substituted Dipole	Schwazbeck	VHAP/UHAP	998 +999/ 981+982	06/09/2009
Substituted Horn	EMCO	3115	00022257	12/16/2009
Test S/W	LABVIEW (V 6.1)			

Powerline Conducted Emissions Test Site				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
EMI Test Receiver 9kHz-30MHz	Rohde & Schwarz	ESHS30	828144/003	11/18/2009
Two-Line V-Network 9kHz-30MHz	Schaffner	NNB41	03/10013	06/11/2009
LISN 10kHz-100MHz	EMCO	3825/2	9106-1809	04/09/2009
Test S/W	LABVIEW (V 6.1)			

4.3MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
Powerline Conducted Emission	+/- 2.81
3M Semi Anechoic Chamber / 30MHz ~ 1GHz	+/-3.7046
3M Semi Anechoic Chamber / Above 1GHz	+/-3.0958

***Remark**: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.*

5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

☐ No.199, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan, R.O.C.
Tel: 886-2-2217-0894 / Fax: 886-2-2217-1029

☒ No.11, Wugong 6th Rd., Wugu Industrial Park, Taipei Hsien 248, Taiwan
Tel: 886-2-2299-9720 / Fax: 886-2-2298-4045

☐ No.81-1, Lane 210, Bade 2nd Rd., Luchu Hsiang, Taoyuan Hsien 338, Taiwan
Tel: 886-3-324-0332 / Fax: 886-3-324-5235

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4: 2003 and CISPR Publication 22.

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, “Radio Interference Measuring Apparatus and Measurement Methods.”

5.3 LABORATORY ACCREDITATIONS AND LISTING

The test facilities used to perform radiated and conducted emissions tests are accredited by American Association for Laboratory Accreditation Program for the specific scope accreditation under Lab Code: 0824-01 to perform Electromagnetic Interference tests according to FCC Part 15 and CISPR 22 requirements. In addition, the test facilities are listed with Industry Canada, Certification and Engineering Bureau, IC 2324G-1 for 3M Semi Anechoic Chamber A, 2324G-2 for 3M Semi Anechoic Chamber B.

5.4TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
USA	FCC	3M Semi Anechoic Chamber (FCC MRA: TW1039) to perform FCC Part 15 measurements	FCC MRA: TW1039
Taiwan	TAF	LP0002, RTTE01, FCC Method-47 CFR Part 15 Subpart C, D, E, RSS-210, RSS-310 IDA TS SRD, AS/NZS 4268, AS/NZS 4771, TS 12.1 & 12,2, ETSI EN 300 440-1, ETSI EN 300 440-2, ETSI EN 300 328, ETSI EN 300 220-1, ETSI EN 300 220-2, ETSI EN 301 893, ETSI EN 301 489-1/3/7/17 FCC OET Bulletin 65 + Supplement C, EN 50360, EN 50361, EN 50371, RSS 102, EN 50383, EN 50385, EN 50392, IEC 62209, CNS 14958-1, CNS 14959 FCC Method –47 CFR Part 15 Subpart B IEC / EN 61000-3-2, IEC / EN 61000-3-3, IEC / EN 61000-4-2/3/4/5/6/8/11	TAF Testing Laboratory 1309
Canada	Industry Canada	3M Semi Anechoic Chamber (IC 2324G-1 / IC 2324G-2) to perform	Canada IC 2324G-1 IC 2324G-2

** No part of this report may be used to claim or imply product endorsement by A2LA or any agency of the US Government.*

6. SETUP OF EQUIPMENT UNDER TEST

6.1SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.

6.2SUPPORT EQUIPMENT

No.	Device Type	Brand	Model	Series No.	FCC ID	Data Cable	Power Cord
1.	Test Kit	N/A	N/A	N/A	N/A	N/A	N/A

Remark:

1. *All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.*
2. *Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.*

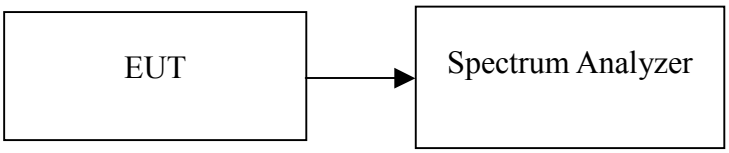
7. FCC PART 22 & 24 REQUIREMENTS & INDUSTRY CANADA RSS-132 & RSS-133

7.199% BANDWIDTH

LIMIT

None; for reporting purposes only.

Test Configuration



TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled.

TEST RESULTS

No non-compliance noted.

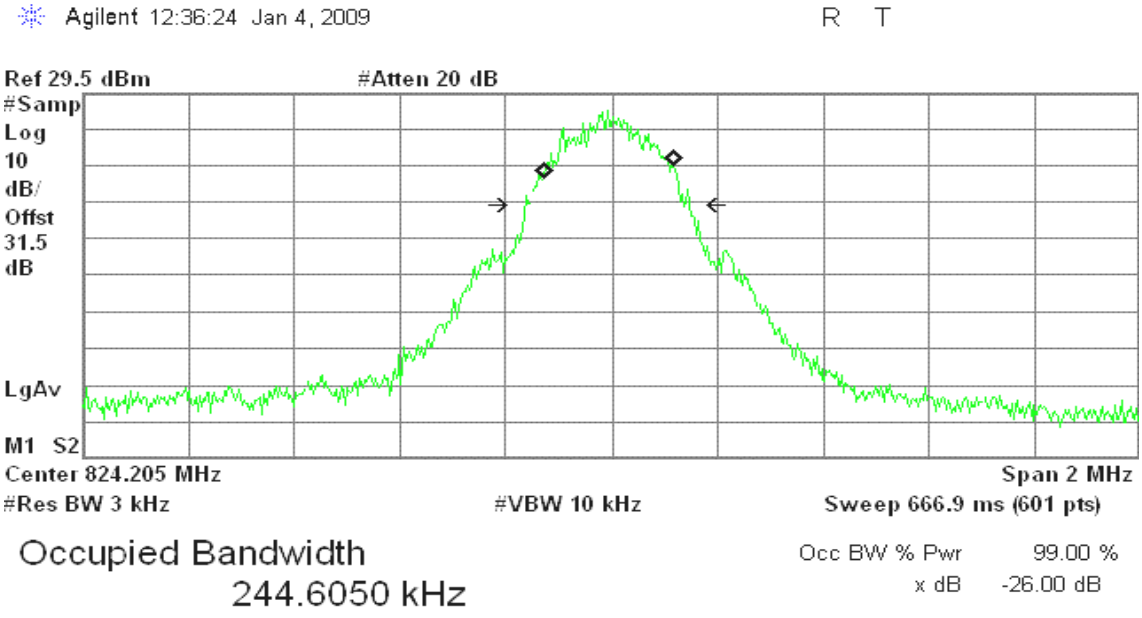
Test Data

Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
GSM 850 (Class 12)	128	824.200	244.6050
	190	836.600	240.1162
	251	848.800	242.1895
GPRS 850 (Class 12)	128	824.200	247.5077
	190	836.600	252.0876
	251	848.800	248.0490
EDGE 850 (Class 12)	128	824.200	245.0002
	190	836.570	241.7002
	251	848.800	243.7267
GSM 1900 (Class 12)	512	1850.210	246.4167
	661	1880.000	240.3608
	810	1909.823	245.7491
GPRS 1900 (Class 12)	512	1850.210	244.2666
	661	1880.000	238.4518
	810	1909.823	240.9559
EDGE 1900 (Class 12)	512	1850.173	246.3766
	661	1880.000	241.8137
	810	1909.800	245.9085

Test Mode	CH	Frequency (MHz)	99% Bandwidth (MHz)
WCDMA (Band II)	9262	1852.40	4.1482
	9400	1880.00	4.1571
	9538	1907.60	4.1663
WCDMA (Band V)	4132	826.40	4.1453
	4183	836.60	4.1646
	4233	846.60	4.1794
WCDMA / HSDPA (BAND II)	9262	1852.40	4.1592
	9400	1880.00	4.1565
	9538	1907.60	4.1937
WCDMA / HSDPA (BAND V)	4132	826.40	4.1501
	4183	836.60	4.1665
	4233	846.60	4.1719

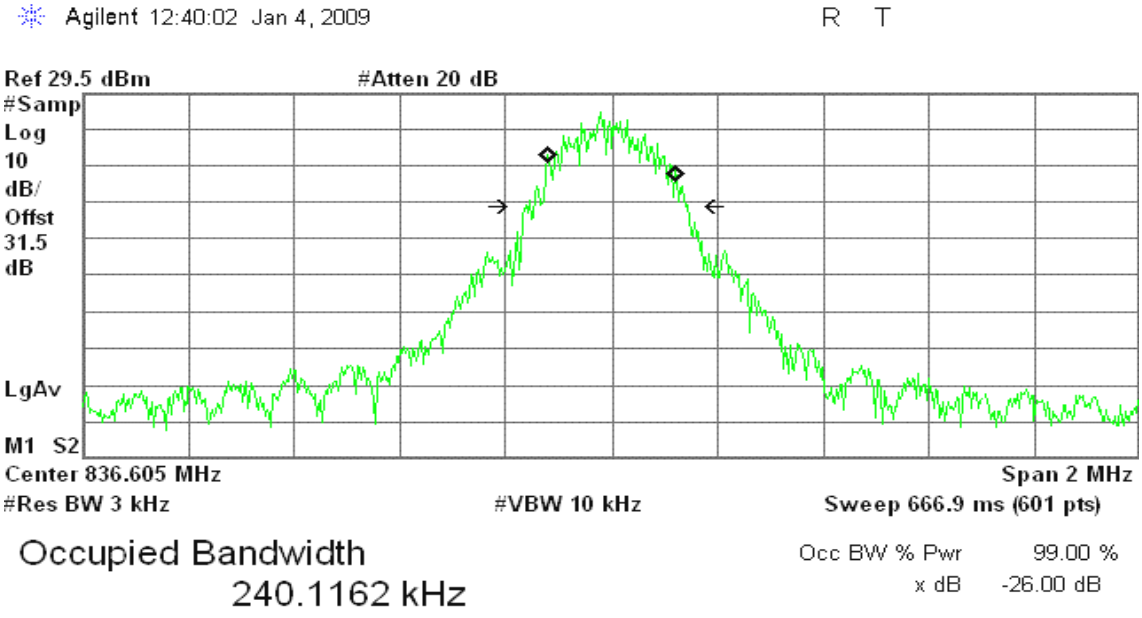
Test Plot

GSM 850 (CH Low)



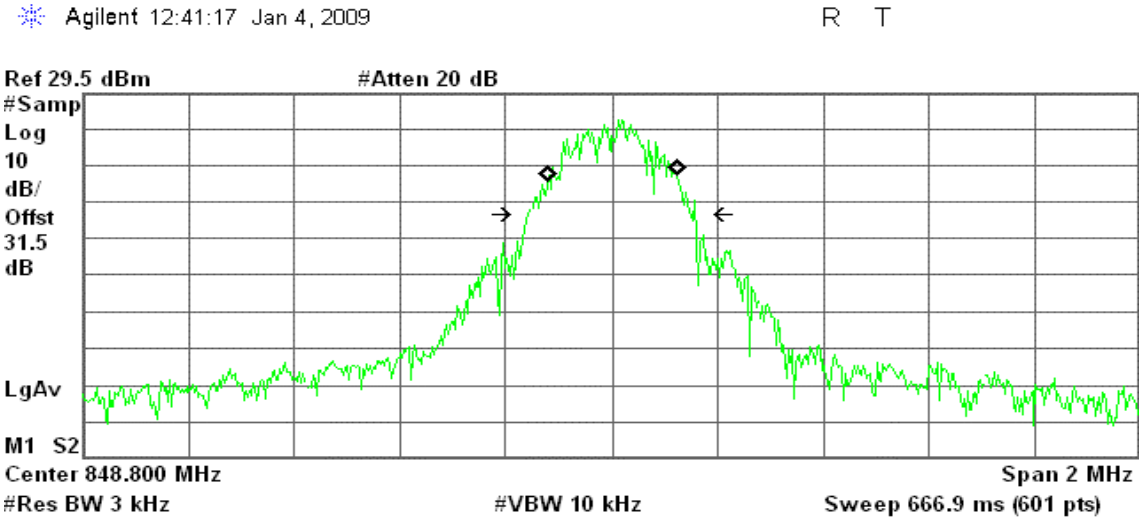
Transmit Freq Error	-4.970 kHz
x dB Bandwidth	309.539 kHz*

GSM 850 (CH Mid)



Transmit Freq Error	-1.361 kHz
x dB Bandwidth	306.046 kHz*

GSM 850 (CH High)

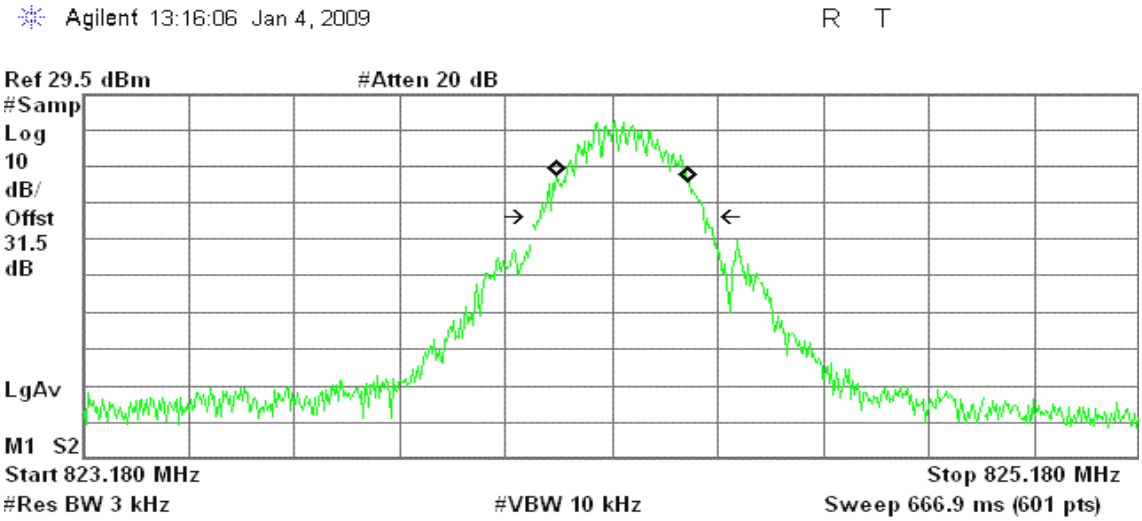


Occupied Bandwidth
242.1895 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 2.328 kHz
x dB Bandwidth 315.167 kHz*

GPRS 850 (CH Low)

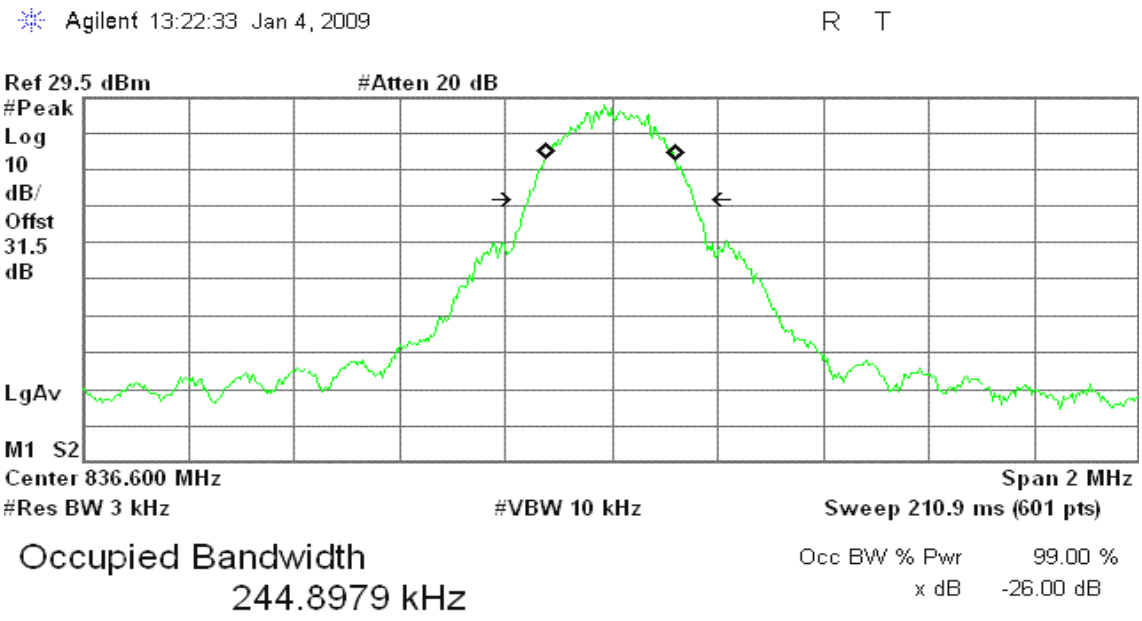


Occupied Bandwidth
247.5077 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

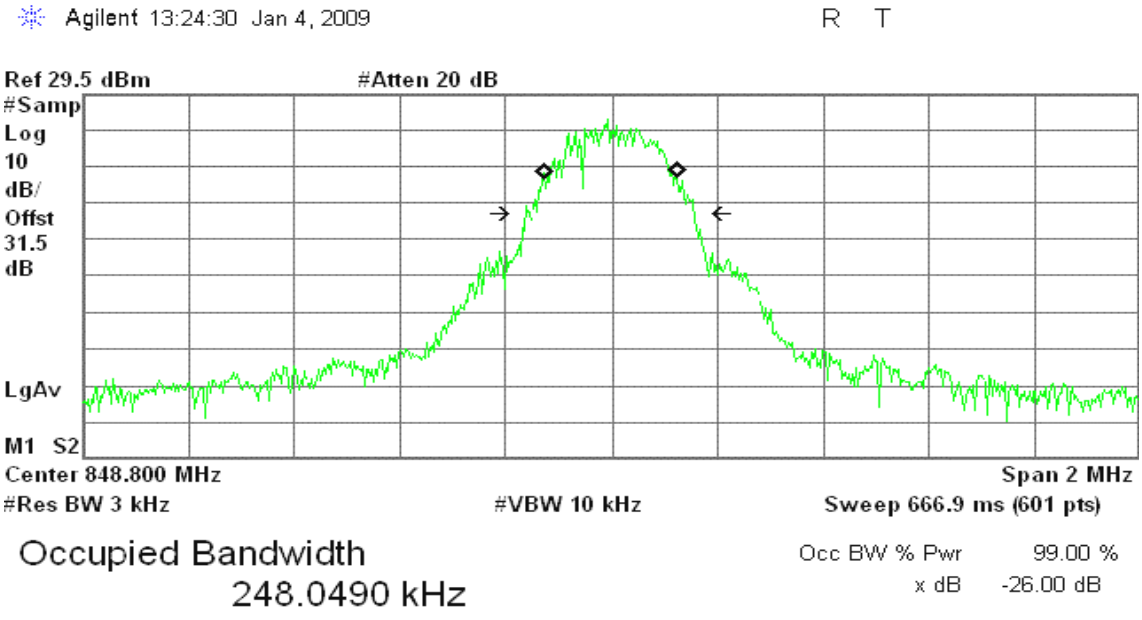
Transmit Freq Error 20.332 kHz
x dB Bandwidth 308.061 kHz*

GPRS 850 (CH Mid)



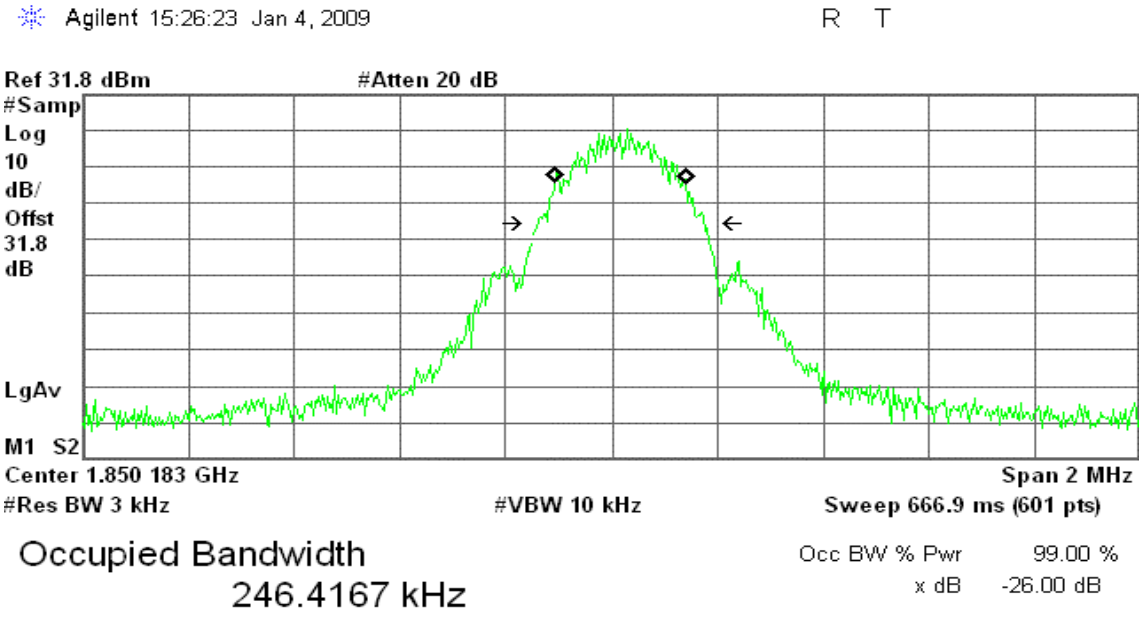
Transmit Freq Error	-1.856 kHz
x dB Bandwidth	310.959 kHz

GPRS 850(CH High)



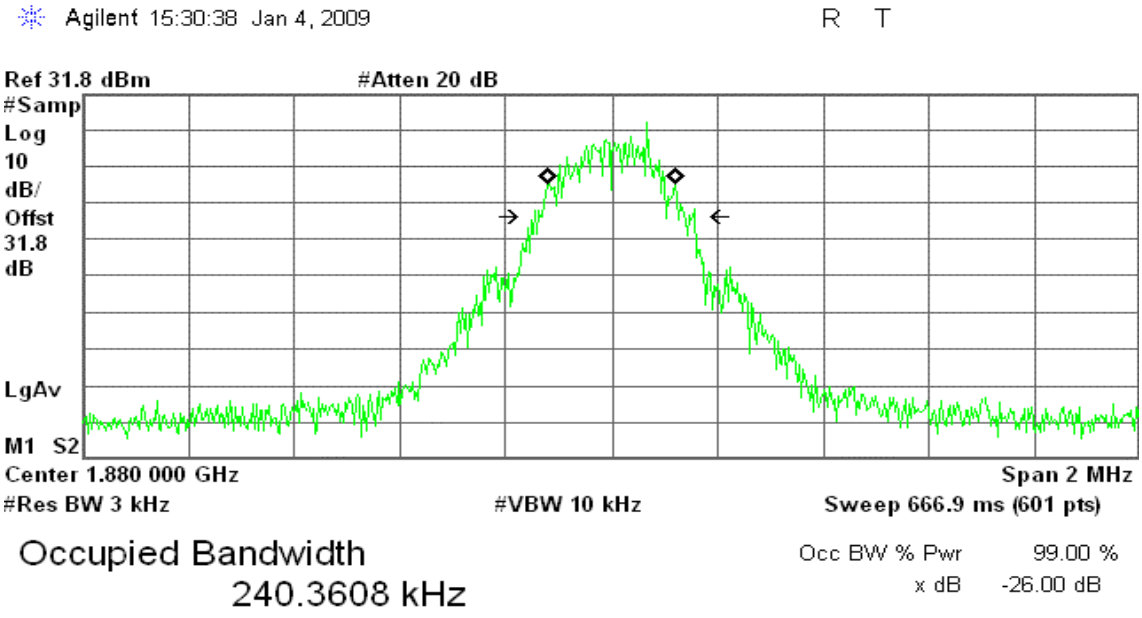
Transmit Freq Error	-1.122 kHz
x dB Bandwidth	317.397 kHz*

GSM 1900 (CH Low)



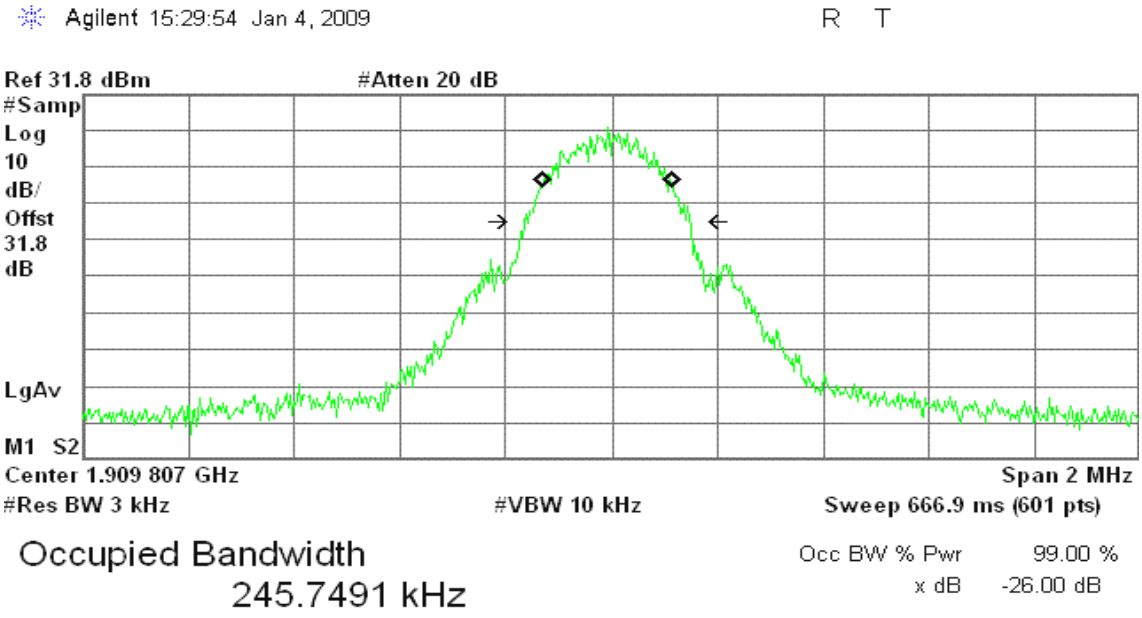
Transmit Freq Error	17.460 kHz
x dB Bandwidth	313.017 kHz*

GSM 1900 (CH Mid)



Transmit Freq Error	182.028 Hz
x dB Bandwidth	298.689 kHz*

GSM 1900 (CH High)

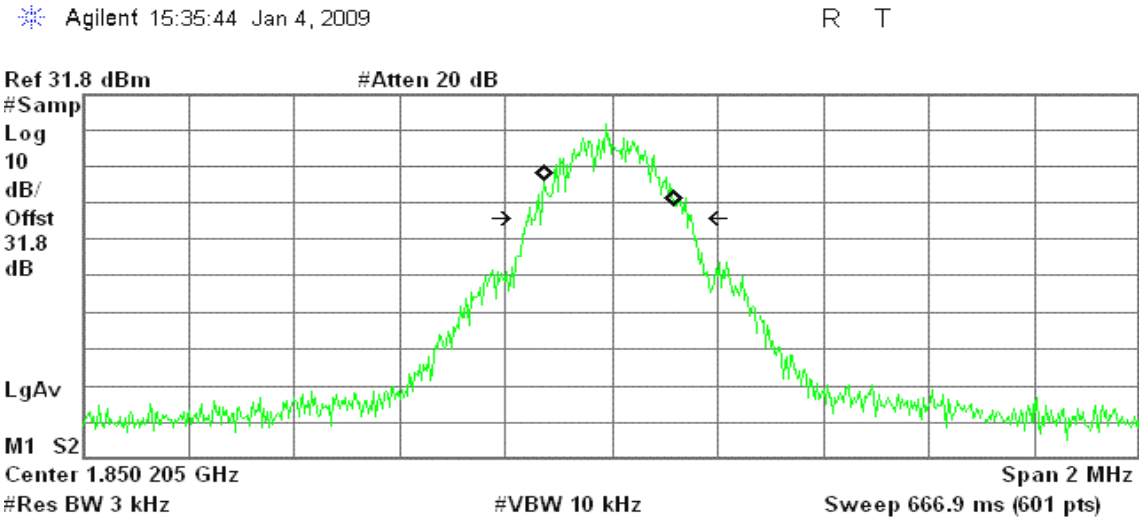


Occupied Bandwidth
245.7491 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error	-8.056 kHz
x dB Bandwidth	311.149 kHz*

GPRS 1900 (CH Low)

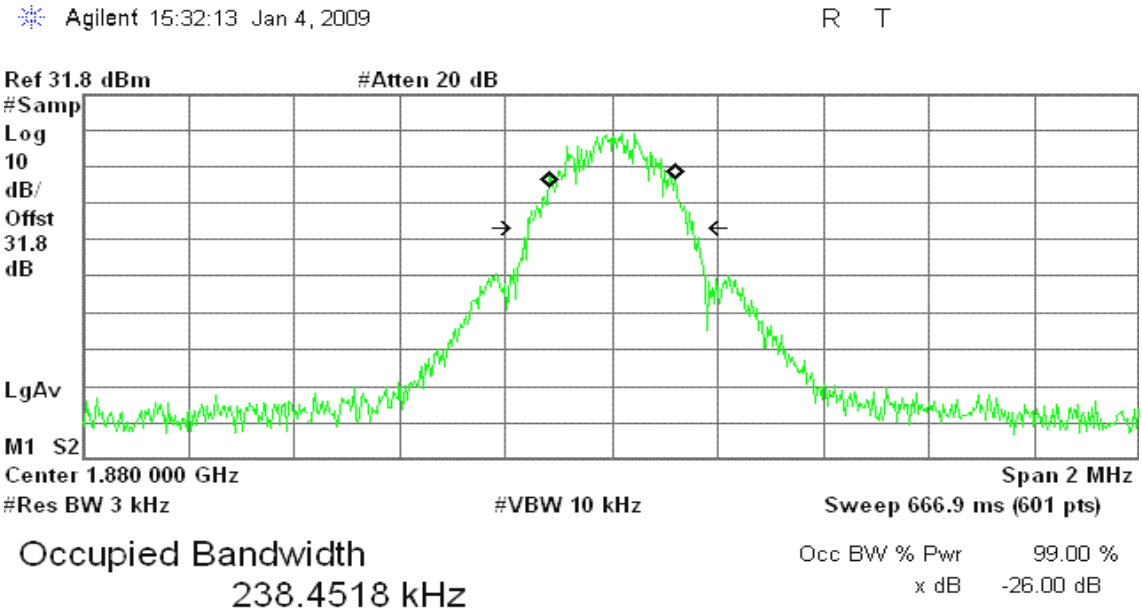


Occupied Bandwidth
244.2666 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

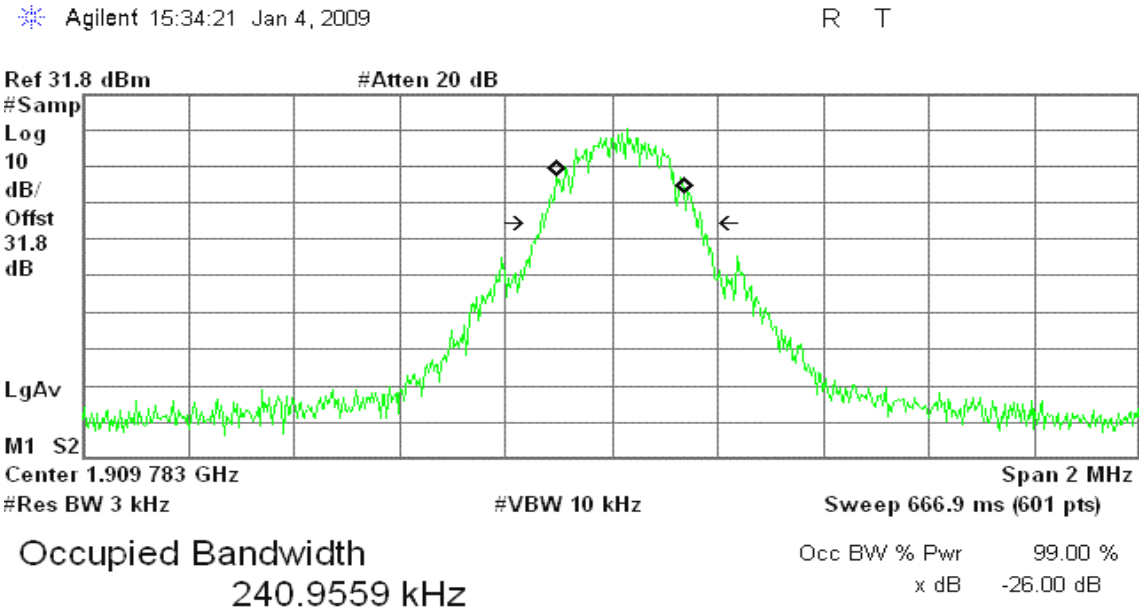
Transmit Freq Error	-4.457 kHz
x dB Bandwidth	307.445 kHz*

GPRS 1900 (CH Mid)



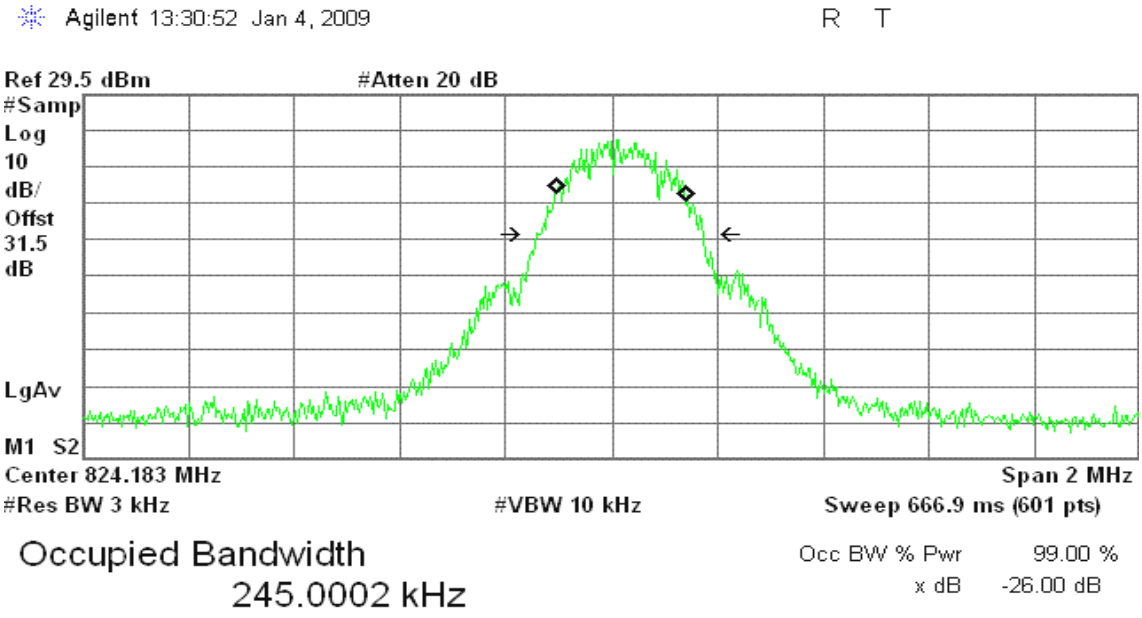
Transmit Freq Error	1.117 kHz
x dB Bandwidth	308.102 kHz*

GPRS 1900 (CH High)



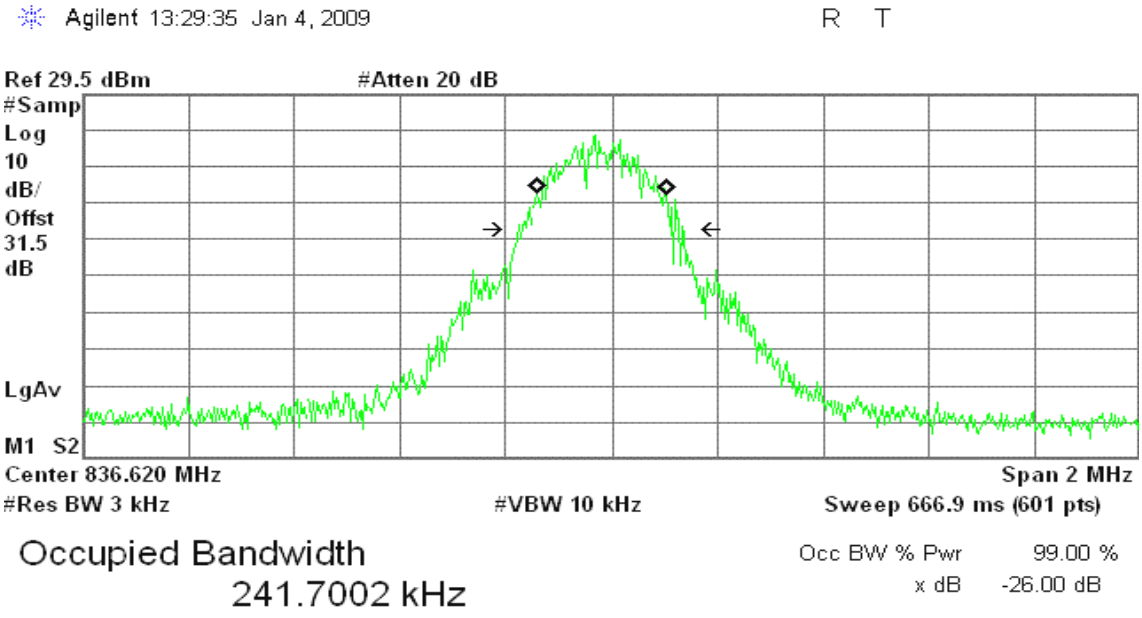
Transmit Freq Error	16.844 kHz
x dB Bandwidth	302.114 kHz*

EDGE 850 (CH Low)



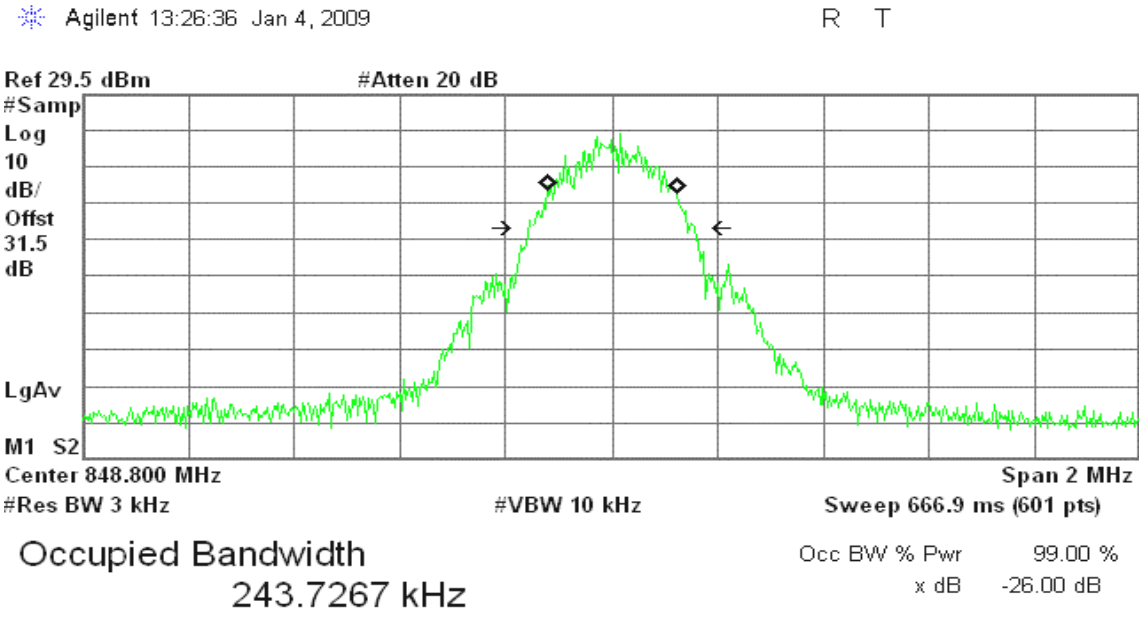
Transmit Freq Error	18.347 kHz
x dB Bandwidth	313.898 kHz*

EDGE 850 (CH Mid)



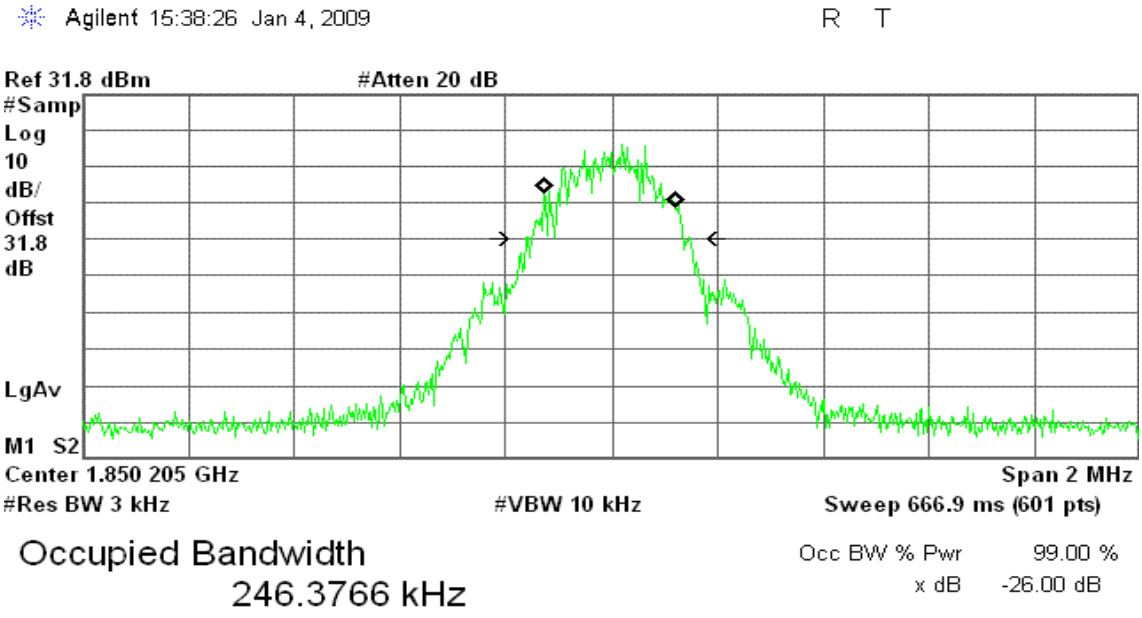
Transmit Freq Error	-19.114 kHz
x dB Bandwidth	310.179 kHz*

EDGE 850 (CH High)



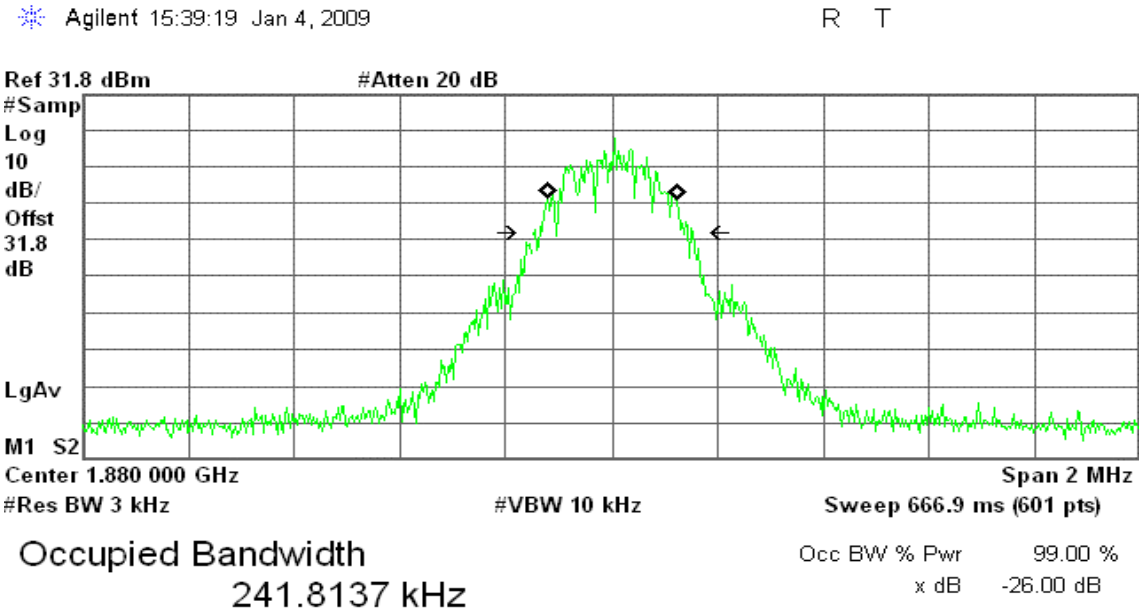
Transmit Freq Error	1.142 kHz
x dB Bandwidth	312.489 kHz*

EDGE 1900 (CH Low)



Transmit Freq Error	-3.611 kHz
x dB Bandwidth	307.687 kHz*

EDGE 1900 (CH Mid)

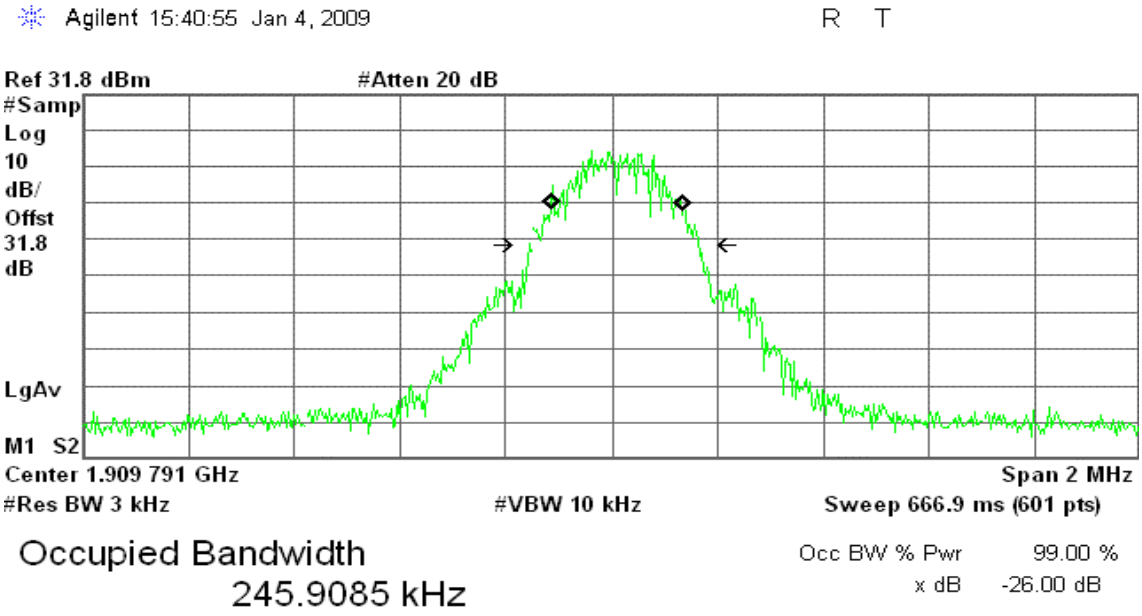


Occupied Bandwidth
241.8137 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error	1.165 kHz
x dB Bandwidth	298.405 kHz*

EDGE 1900 (CH High)

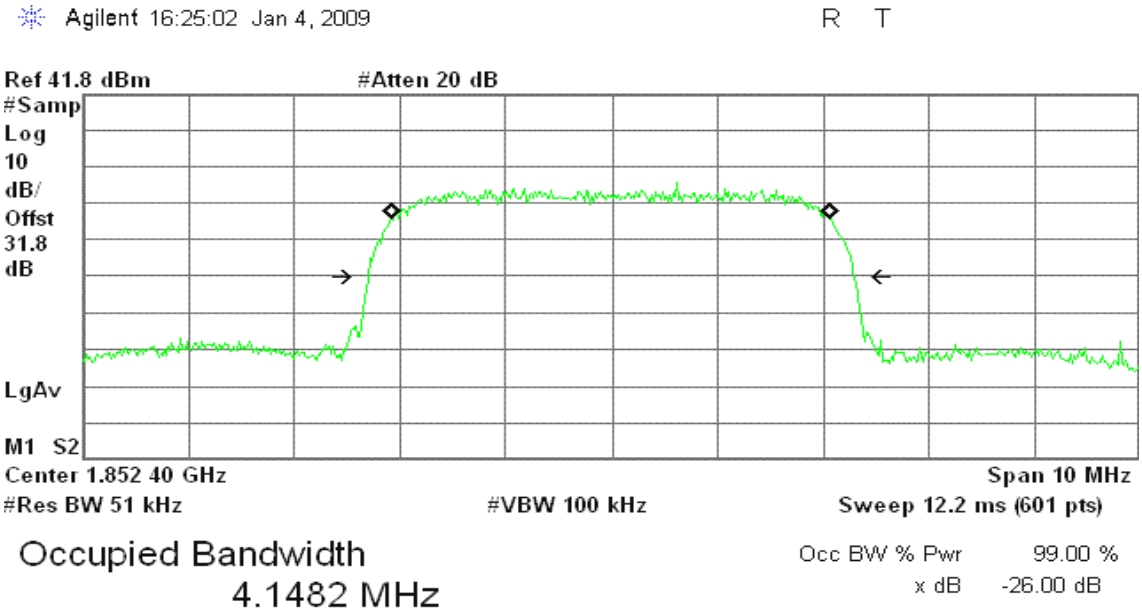


Occupied Bandwidth
245.9085 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

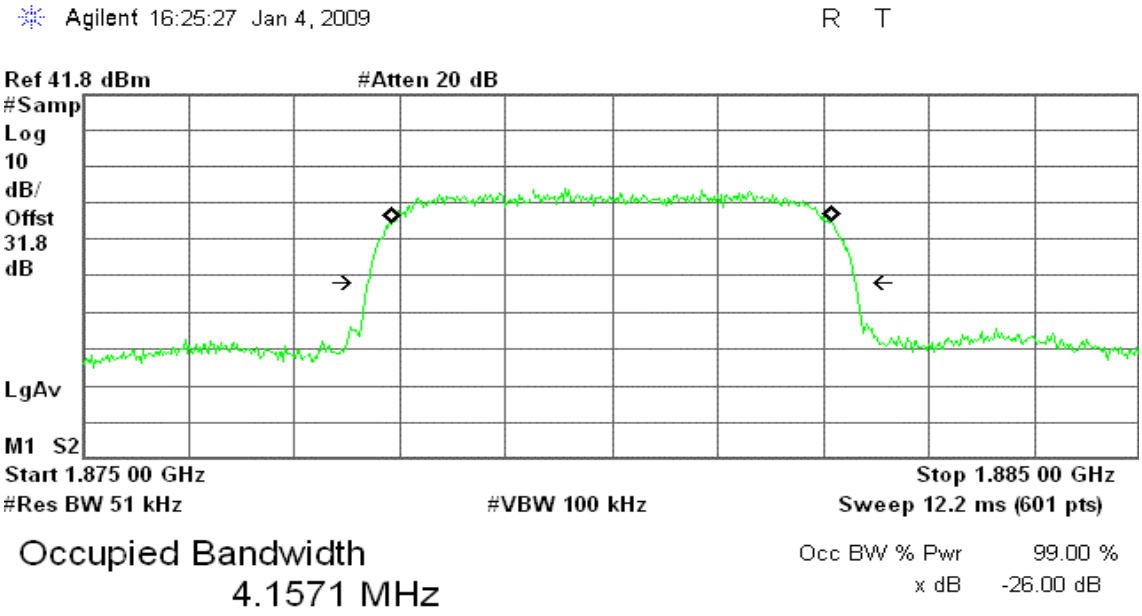
Transmit Freq Error	9.463 kHz
x dB Bandwidth	319.234 kHz*

WCDMA Band II (CH Low)



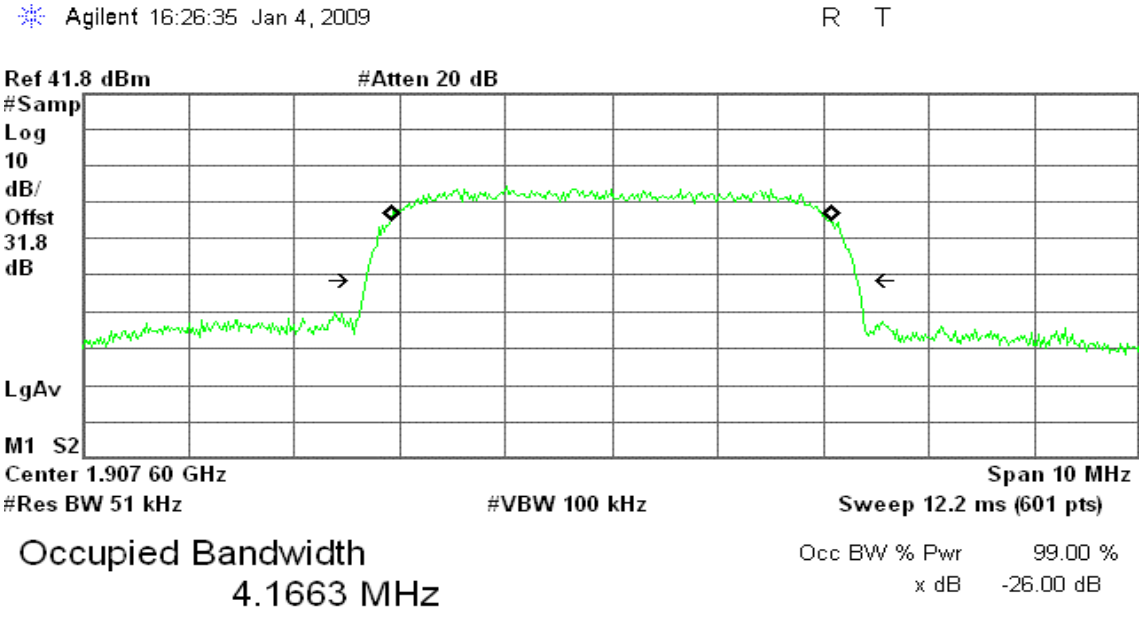
Transmit Freq Error	-1.340 kHz
x dB Bandwidth	4.594 MHz*

WCDMA Band II (CH Mid)



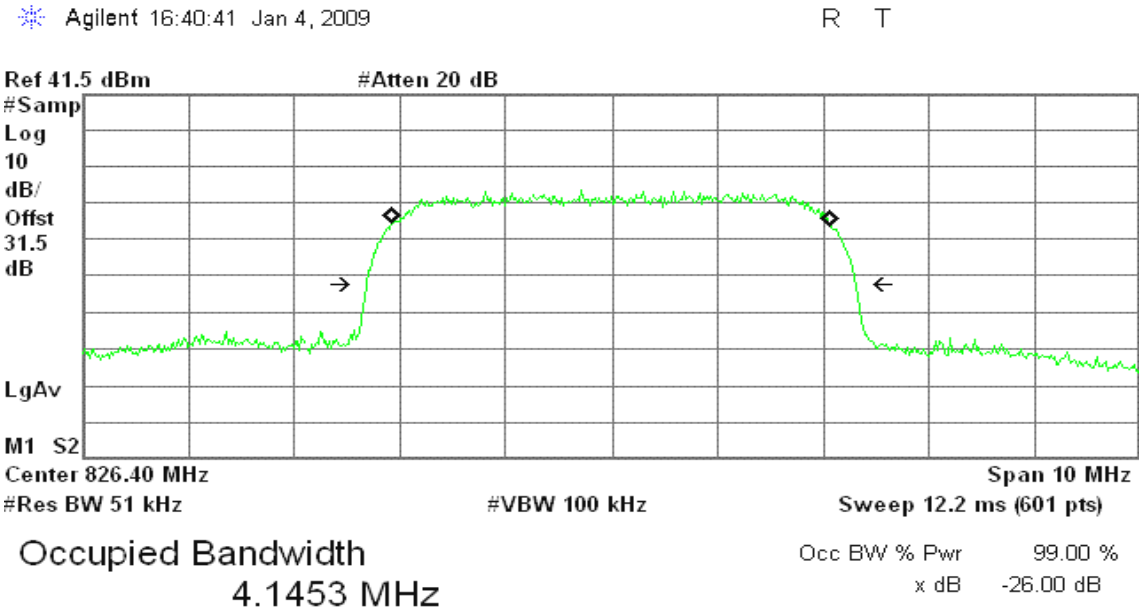
Transmit Freq Error	-734.942 Hz
x dB Bandwidth	4.614 MHz*

WCDMA Band II (CH High)



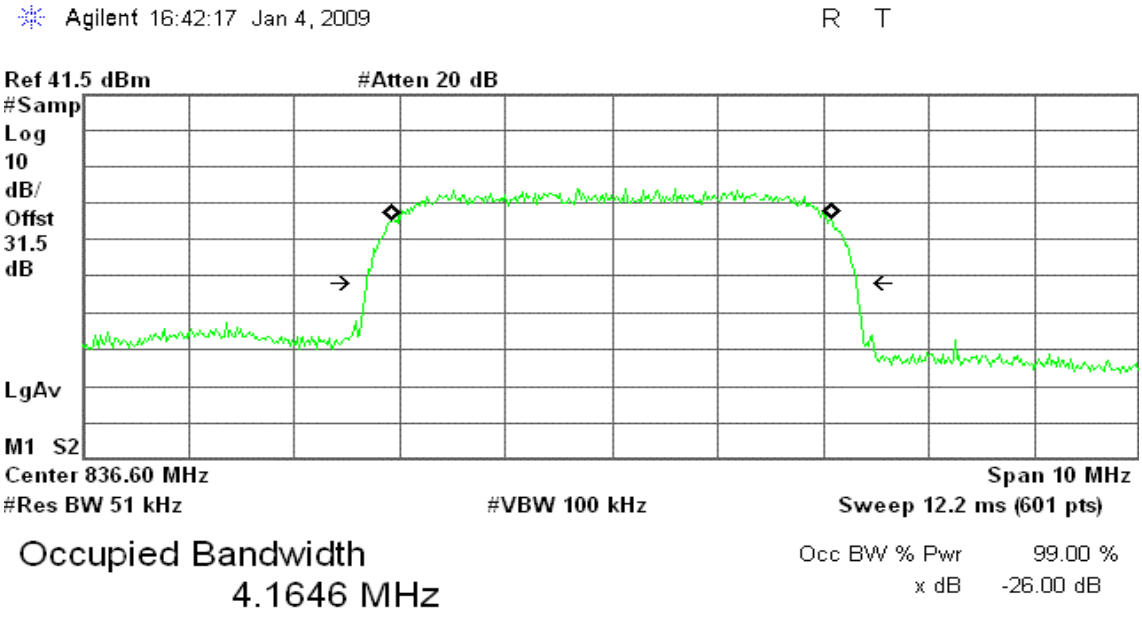
Transmit Freq Error	-4.021 kHz
x dB Bandwidth	4.659 MHz*

WCDMA Band V (CH Low)



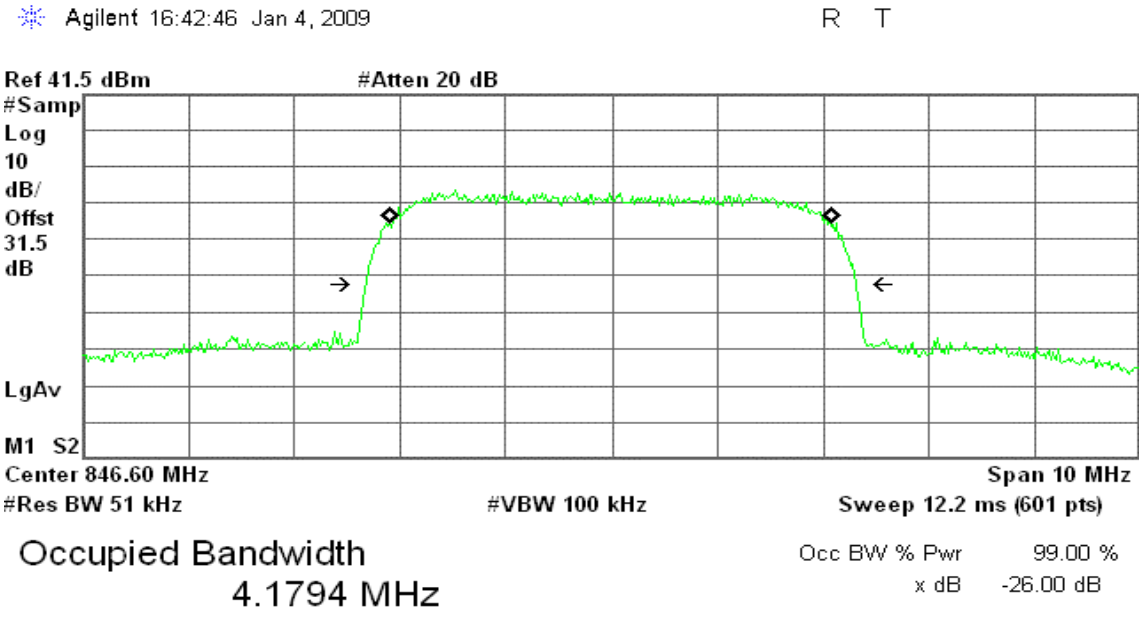
Transmit Freq Error	-2.658 kHz
x dB Bandwidth	4.631 MHz*

WCDMA Band V (CH Mid)



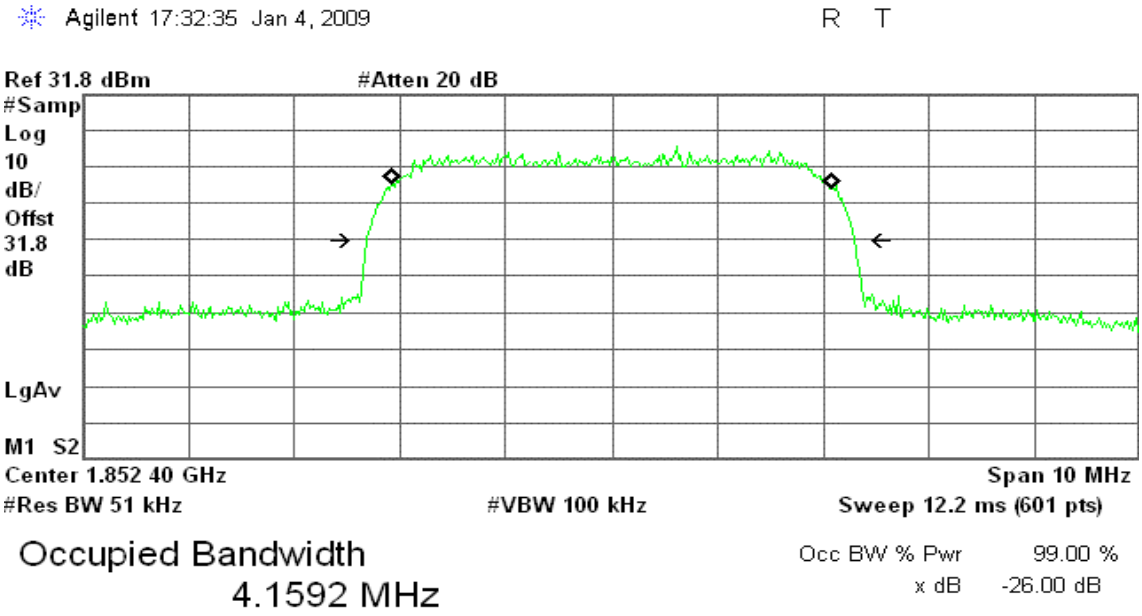
Transmit Freq Error	2.289 kHz
x dB Bandwidth	4.637 MHz*

WCDMA Band V (CH High)



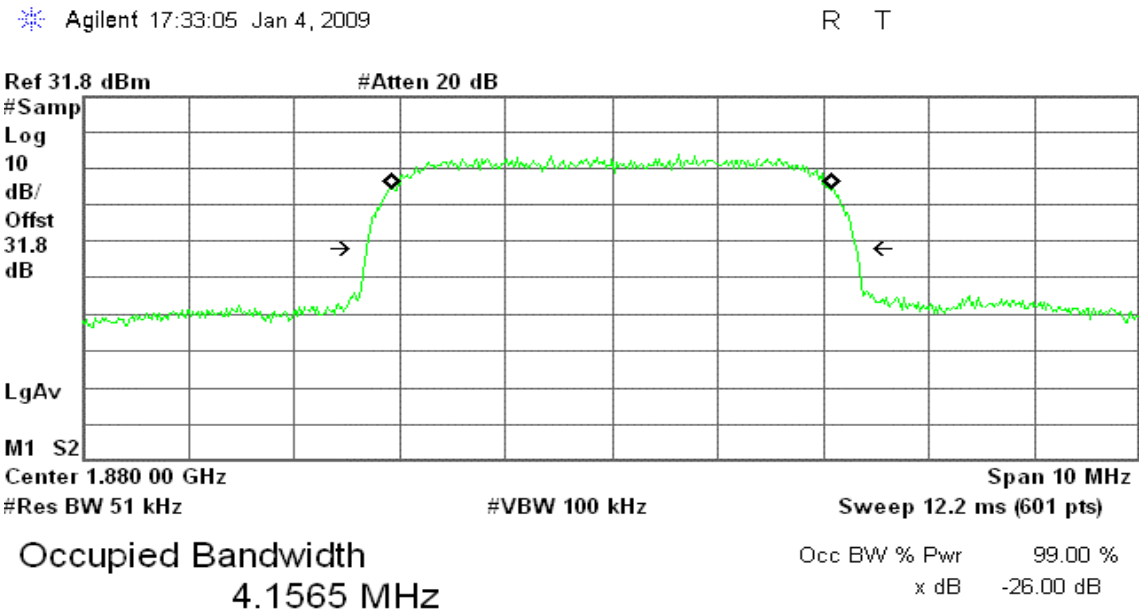
Transmit Freq Error	-12.407 kHz
x dB Bandwidth	4.640 MHz*

WCDMA / HSDPA Band II (CH Low)



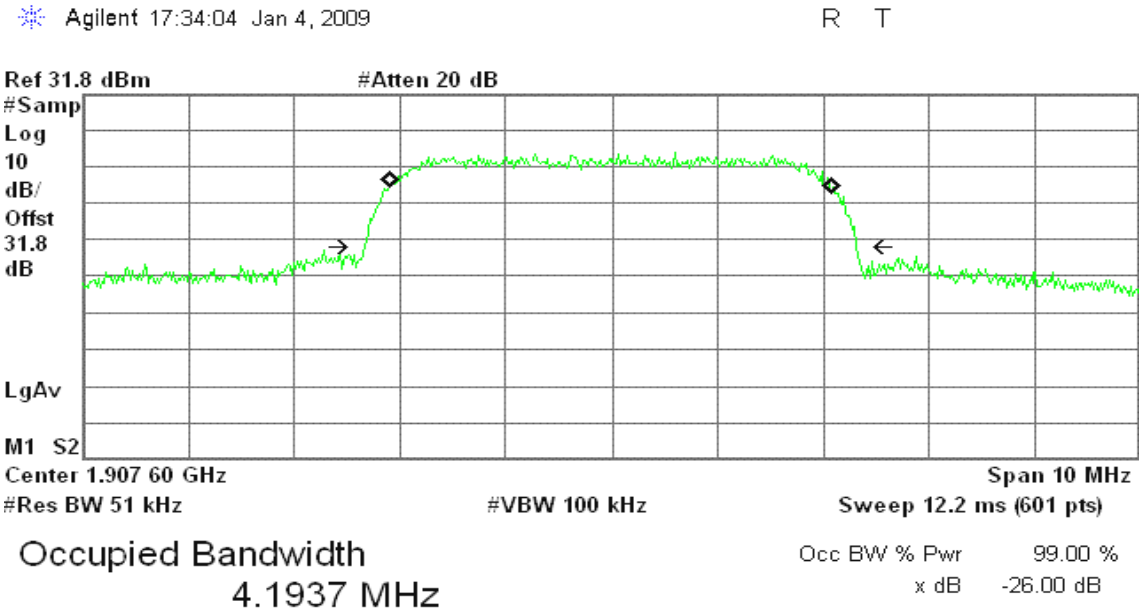
Transmit Freq Error	-627.871 Hz
x dB Bandwidth	4.625 MHz*

WCDMA / HSDPA Band II (CH Mid)



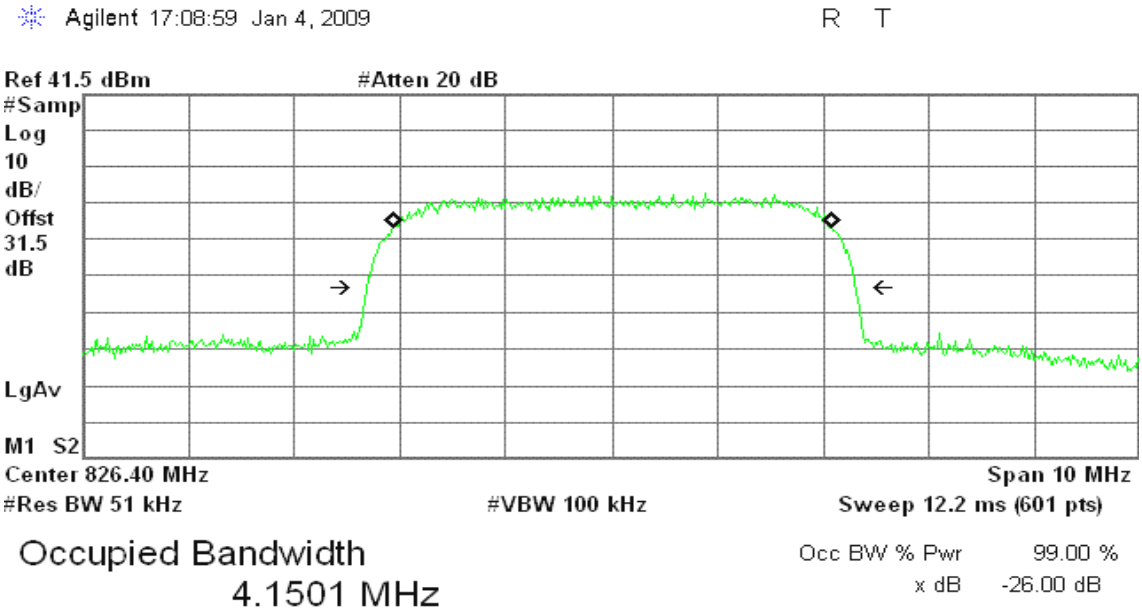
Transmit Freq Error	-1.969 kHz
x dB Bandwidth	4.639 MHz*

WCDMA / HSDPA Band II (CH High)



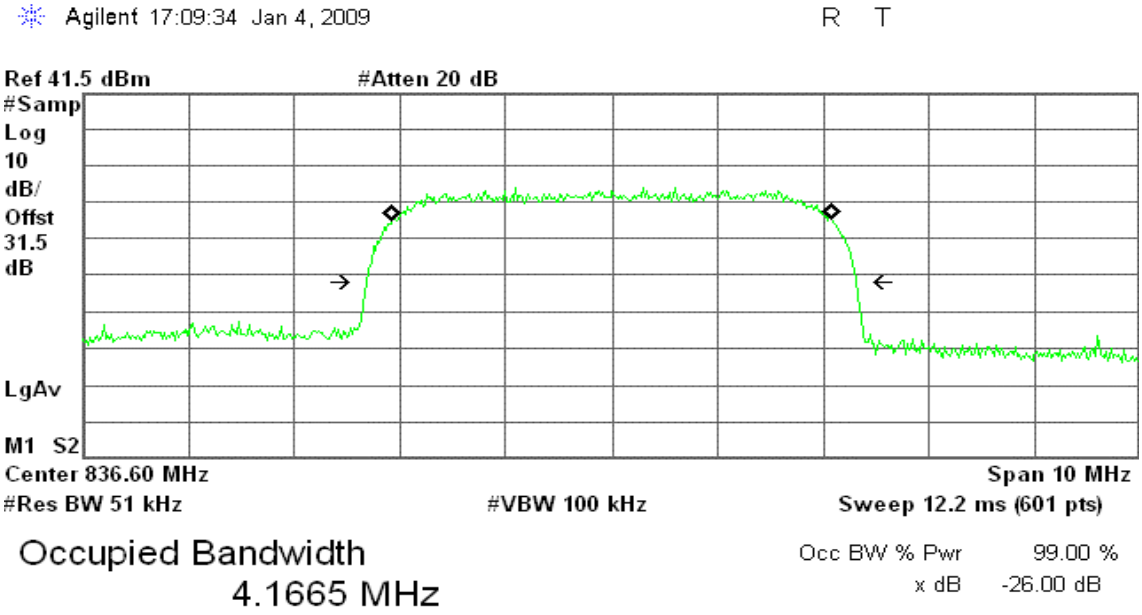
Transmit Freq Error	-10.288 kHz
x dB Bandwidth	4.653 MHz*

WCDMA / HSDPA Band V (CH Low)



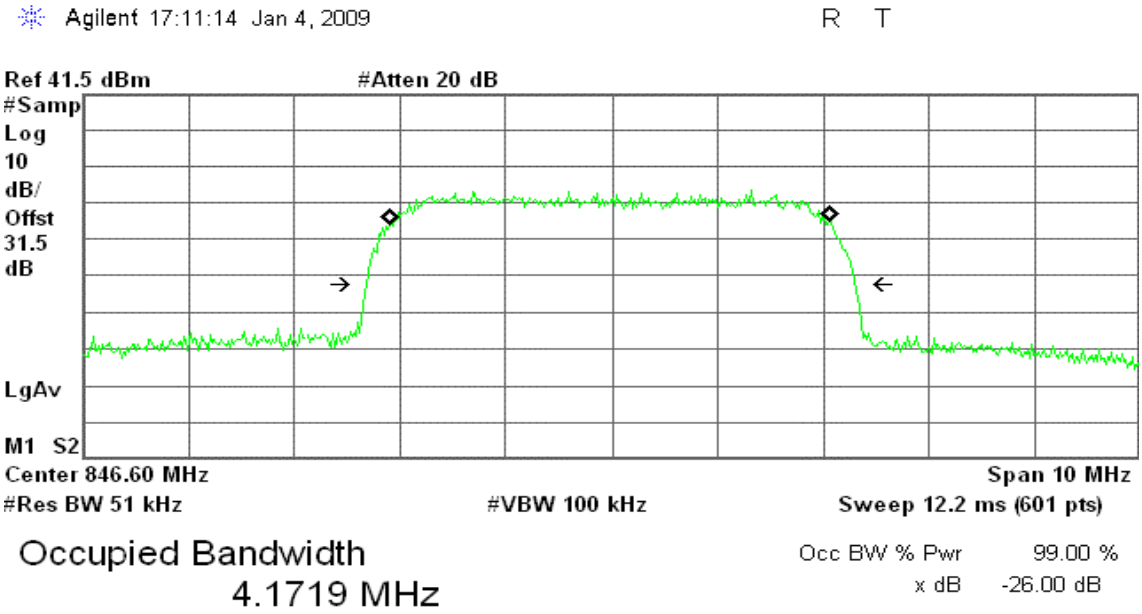
Transmit Freq Error	10.926 kHz
x dB Bandwidth	4.626 MHz*

WCDMA / HSDPA Band V (CH Mid)



Transmit Freq Error	5.678 kHz
x dB Bandwidth	4.636 MHz*

WCDMA / HSDPA Band V (CH High)



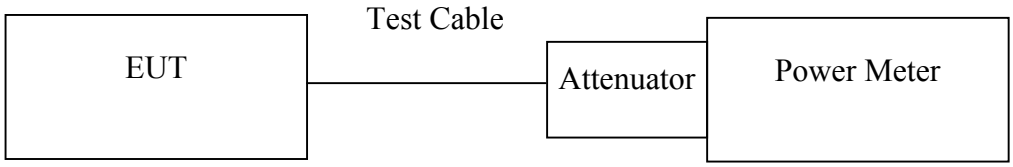
Transmit Freq Error	-15.694 kHz
x dB Bandwidth	4.627 MHz*

7.2PEAK POWER

LIMIT

According to FCC §2.1046.

Test Configuration



Remark: *Measurement setup for testing on Antenna connector*

TEST PROCEDURE

The transmitter output was connected to a calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power meter in dBm. The power output at the transmitter antenna port was determined by adding the value of the attenuator to the power meter reading.

TEST RESULTS

No non-compliance noted.

Test Data

Test Mode	CH	Frequency (MHz)	Power Meter Reading (dBm)	Attenuator (dB)	Peak Power (dBm)
GSM 850 (Class B)	128	824.20	33.19	0.00	33.19
	190	836.60	33.50		33.50
	251	848.80	33.38		33.38
GPRS 850 (Class 12)	128	824.20	33.18	0.00	33.18
	190	836.60	33.48		33.48
	251	848.80	33.36		33.36
EDGE 850 (Class 12)	128	824.20	26.68	0.00	26.68
	190	836.60	26.63		26.63
	251	848.80	26.82		26.82

Test Mode	CH	Frequency (MHz)	Power Meter Reading (dBm)	Attenuator (dB)	Peak Power (dBm)
GSM 1900 (Class B)	512	1850.20	31.46	0.00	31.46
	661	1880.00	31.40		31.40
	810	1910.00	31.54		31.54
GPRS 1900 (Class 12)	512	1850.20	31.45	0.00	31.45
	661	1880.00	31.39		31.39
	810	1910.00	31.58		31.58
EDGE 1900 (Class 12)	512	1850.20	27.61	0.00	27.61
	661	1880.00	27.91		27.91
	810	1910.00	28.19		28.19

Remark: *The value of factor includes both the loss of cable and external attenuator*

Test Mode	CH	Frequency (MHz)	Power Meter Reading (dBm)	Attenuator (dB)	Peak Power (dBm)
WCDMA (BAND II)	9262	1852.40	25.05	0.0	25.05
	9400	1880.00	26.19		26.19
	9538	1907.60	25.53		25.53
WCDMA (BAND V)	4132	826.40	26.85	0.0	26.85
	4183	836.60	26.67		26.67
	4233	846.60	26.94		26.94

Test Mode	CH	Frequency (MHz)	Power Meter Reading (dBm)	Attenuator (dB)	Peak Power (dBm)
WCDMA / HSDPA (BAND II)	9262	1852.40	25.08	0.0	25.08
	9400	1880.00	26.19		26.19
	9538	1907.60	25.36		25.36
WCDMA / HSDPA (BAND V)	4132	826.40	26.82	0.0	26.82
	4183	836.60	26.81		26.81
	4233	846.60	26.88		26.88

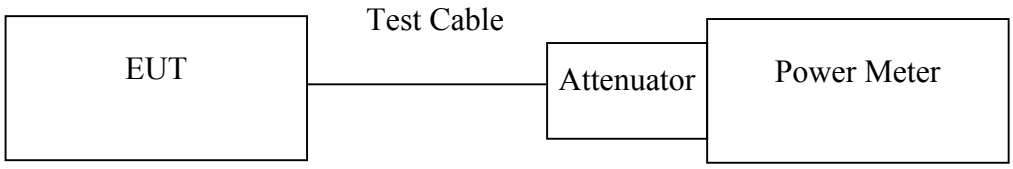
Remark: *The value of factor includes both the loss of cable and external attenuator*

7.3AVERAGE POWER

LIMIT

For reporting purposes only.

Test Configuration



Remark: *Measurement setup for testing on Antenna connector*

TEST PROCEDURE

The transmitter output was connected to a calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power meter in dBm. The power output at the transmitter antenna port was determined by adding the value of the attenuator to the power meter reading.

TEST RESULTS

No non-compliance noted.

Test Data

Test Mode	CH	Frequency (MHz)	Power Meter Reading (dBm)	Attenuator (dB)	Average Power (dBm)
GSM 850 (Class 12)	128	824.20	33.01	0.00	33.01
	190	836.60	33.34		33.34
	251	848.80	33.29		33.29
GPRS 850 (Class 12)	128	824.20	33.03		33.03
	190	836.60	33.36		33.36
	251	848.80	33.25		33.25
EDGE 850 (Class 12)	128	824.20	26.50		26.50
	190	836.60	26.45		26.45
	251	848.80	26.58		26.58

Test Mode	CH	Frequency (MHz)	Power Meter Reading (dBm)	Attenuator (dB)	Average Power (dBm)
GSM 1900 (Class 12)	512	1850.20	31.24	0.00	31.24
	661	1880.00	31.19		31.19
	810	1909.80	31.35		31.35
GPRS 1900 (Class 12)	512	1850.20	31.26		31.26
	661	1880.00	31.17		31.17
	810	1909.80	31.35		31.35
EDGE 1900 (Class 12)	512	1850.20	27.48		27.48
	661	1880.00	27.77		27.77
	810	1909.80	28.00		28.00

Remark: *The value of factor includes both the loss of cable and external attenuator*

Test Mode	CH	Frequency (MHz)	Power Meter Reading (dBm)	Attenuator (dB)	Average Power (dBm)
WCDMA (BAND II)	9262	1852.40	22.81	0.00	22.81
	9400	1880.00	22.82		22.82
	9538	1907.60	22.66		22.66
WCDMA (BAND V)	4132	826.40	22.31	0.00	22.31
	4183	836.60	23.27		23.27
	4233	846.60	23.41		23.41

Test Mode	CH	Frequency (MHz)	Power Meter Reading (dBm)	Attenuator (dB)	Average Power (dBm)
WCDMA / HSDPA (BAND II)	9262	1852.40	22.84	0.00	22.84
	9400	1880.00	22.80		22.80
	9538	1907.60	22.47		22.47
WCDMA / HSDPA (BAND V)	4132	826.40	23.40	0.00	23.40
	4183	836.60	23.33		23.33
	4233	846.60	23.46		23.46

Remark: *The value of factor includes both the loss of cable and external attenuator*

7.4ERP & EIRP MEASUREMENT

LIMIT

According to FCC §2.1046

FCC 22.913(b): The Effective Radiated Power (ERP) of mobile transmitters must not exceed 7 Watts.

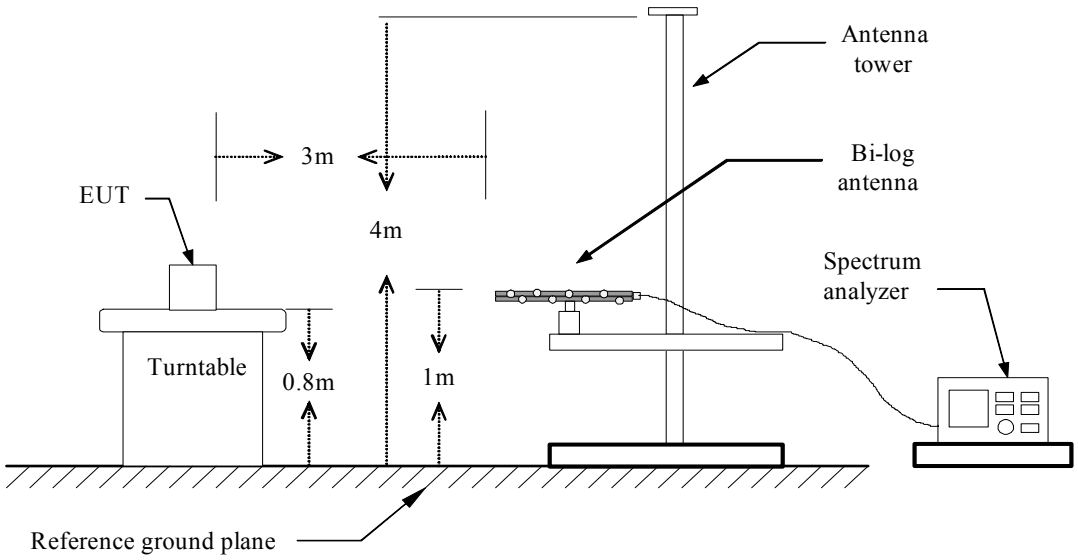
RSS-132 § 4.4 The maximum (ERP) shall be 6.3 Watts for mobile stations.

FCC 24.232(b): The equivalent Isotropic Radiated Power (EIRP) must not exceed 2 Watts.

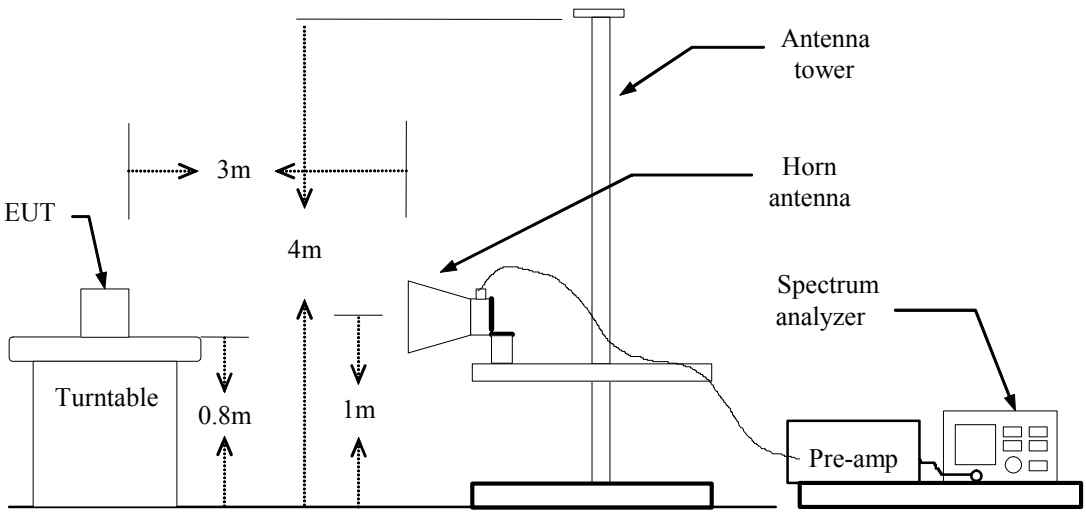
RSS133 § 6.4: Mobile stations and hand-held portables are limited to 2 watts maximum (EIRP).

Test Configuration

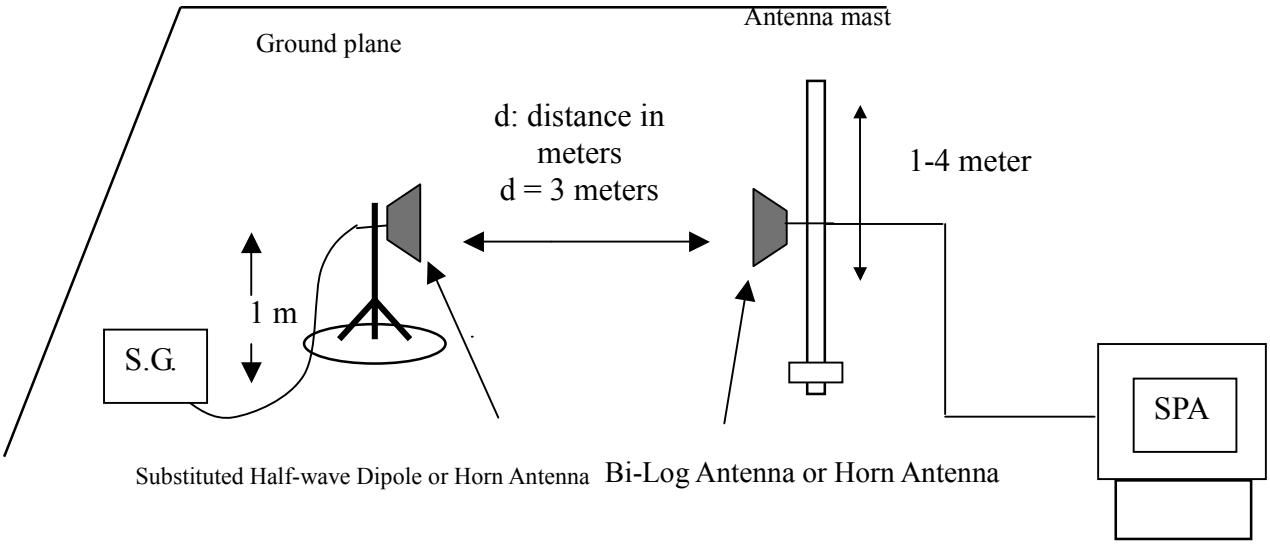
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



TEST PROCEDURE

The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.

During the measurement of the EUT, the resolution bandwidth was set to 3MHz and the average bandwidth was set to 3MHz. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna. The reading was recorded and the field strength (E in dBuV/m) was calculated.

ERP in frequency band 824-849MHz, and EIRP in frequency band 1851.25 –1910MHz were measured using a substitution method. The EUT was replaced by half-wave dipole (824-849MHz) or horn antenna (1851.25-1910MHz) connected to a signal generator. The spectrum analyzer reading was recorded and ERP/EIRP was calculated as follows:

ERP = S.G. output (dBm) + Antenna Gain (dBd) – Cable (dB)
EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable (dB)

TEST RESULTS

No non-compliance noted.

GSM 850 Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
128	824.00	V	-13.15	36.28	23.12	38.50	-15.38
	824.30	H	-12.01	36.22	24.20	38.50	-14.30
190	836.45	V	-10.10	36.35	26.26	38.50	-12.24
	836.30	H	-11.75	36.38	24.63	38.50	-13.87
251	848.75	V	-7.95	36.45	***28.50**	38.50	-10.00
	848.60	H	-8.28	36.53	28.24	38.50	-10.26

GPRS 850 Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
128	824.30	V	-10.97	36.28	25.30	38.50	-13.20
	824.42	H	-11.98	36.22	24.24	38.50	-14.26
190	836.36	V	-8.67	36.35	27.68	38.50	-10.82
	836.30	H	-9.60	36.38	26.78	38.50	-11.72
251	849.02	V	-7.53	36.45	28.93	38.50	-9.57
	848.96	H	-7.41	36.53	***29.12**	38.50	-9.38

GSM 1900 Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
512	1850.20	V	-16.54	42.27	25.74	33.00	-7.26
	1850.20	H	-12.34	42.51	***30.17**	33.00	-2.83
661	1880.00	V	-15.03	42.16	27.14	33.00	-5.86
	1880.00	H	-12.53	42.46	29.93	33.00	-3.07
810	1909.80	V	-14.57	42.03	27.46	33.00	-5.54
	1909.80	H	-13.35	42.38	29.03	33.00	-3.97

GPRS 1900 Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
512	1850.20	V	-16.85	42.27	25.42	33.00	-7.58
	1850.20	H	-13.24	42.51	***29.27**	33.00	-3.73
661	1880.00	V	-15.57	42.16	26.59	33.00	-6.41
	1880.00	H	-13.71	42.46	28.75	33.00	-4.25
810	1909.80	V	-14.93	42.03	27.11	33.00	-5.89
	1909.80	H	-14.65	42.38	27.73	33.00	-5.27

EDGE 850 Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
128	824.18	V	-16.15	36.28	20.13	38.50	-18.37
	824.18	H	-17.78	36.22	18.44	38.50	-20.06
190	836.78	V	-13.05	36.36	23.31	38.50	-15.19
	836.66	H	-14.53	36.38	21.85	38.50	-16.65
251	848.78	V	-11.90	36.45	24.55	38.50	-13.95
	848.84	H	-11.31	36.53	***25.21**	38.50	-13.29

EDGE 1900 TEST DATA

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
512	1850.20	V	-20.17	42.27	22.10	33.00	-10.90
	1850.20	H	-16.58	42.51	***25.93**	33.00	-7.07
661	1880.00	V	-18.84	42.16	23.32	33.00	-9.68
	1880.00	H	-16.96	42.46	25.50	33.00	-7.50
810	1909.80	V	-18.04	42.03	23.99	33.00	-9.01
	1909.80	H	-17.83	42.38	24.55	33.00	-8.45

WCDMA BAND II Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
9262	1853.80	V	-22.28	42.49	20.21	33.00	-12.79
	1853.30	H	-18.03	41.28	***23.25**	33.00	-9.75
9400	1878.80	V	-21.24	42.49	21.25	33.00	-11.75
	1878.80	H	-18.61	41.32	22.71	33.00	-10.29
9538	1907.40	V	-21.56	42.49	20.93	33.00	-12.07
	1906.50	H	-19.60	41.36	21.76	33.00	-11.24

WCDMA BAND V Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4132	826.58	V	-19.64	36.29	16.65	38.50	-21.85
	826.88	H	-19.99	36.25	16.26	38.50	-22.24
4183	836.18	V	-17.10	36.35	***19.25**	38.50	-19.25
	837.14	H	-17.99	36.39	18.40	38.50	-20.10
4233	845.24	V	-17.65	36.42	18.77	38.50	-19.73
	847.10	H	-17.70	36.51	18.81	38.50	-19.69

HSDPA BAND II Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
9262	1852.90	V	-22.66	42.49	19.83	33.00	-13.17
	1853.10	H	-18.94	41.28	22.34	33.00	-10.66
9400	1878.70	V	-21.54	42.49	20.95	33.00	-12.05
	1878.70	H	-18.94	41.32	***22.38**	33.00	-10.62
9538	1906.10	V	-21.51	42.49	20.98	33.00	-12.02
	1906.60	H	-20.02	41.36	21.34	33.00	-11.66

HSDPA BAND V Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4132	827.12	V	-19.61	36.30	16.69	38.50	-21.81
	826.94	H	-19.61	36.25	16.65	38.50	-21.85
4183	835.04	V	-17.22	36.35	19.12	38.50	-19.38
	835.70	H	-17.97	36.37	18.40	38.50	-20.10
4233	845.60	V	-17.64	36.42	18.78	38.50	-19.72
	845.78	H	-17.70	36.49	***18.80**	38.50	-19.70

7.5OUT OF BAND EMISSION AT ANTENNA TERMINALS

LIMIT

According to FCC §2.1051, FCC §22.917, FCC §24.238(a). RSS-132 (4.5.2), RSS-133 (6.6).

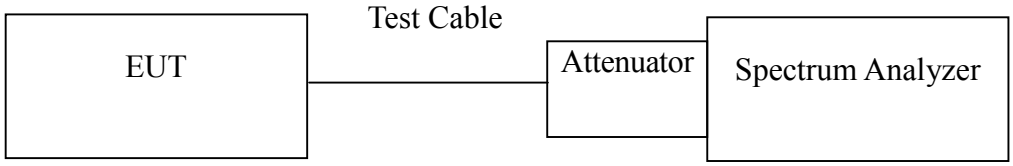
Out of Band Emissions: The mean power of emission must be attenuated below the mean power of the non-modulated carrier (P) on any frequency twice or more than twice the fundamental frequency by at lease 43 + 10 log P dB.

Mobile Emissions in Base Frequency Range: The mean power of any emissions appearing in the base station frequency range from cellular mobile transmitters operated must be attenuated to a level not exceed –80 dBm at the transmit antenna connector.

Band Edge Requirements: In the 1MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at lease 1% of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the Out of band Emission

Test Configuration

Out of band emission at antenna terminals:



TEST PROCEDURE

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.

For the out of band: Set the RBW, VBW = 1MHz, Start=30MHz, Stop= 10 th harmonic. Limit = -13dBm

Band Edge Requirements (824 MHz and 849 MHz /1850MHz and 1910MHz): In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions. Limit, -13dBm.

TEST RESULTS

No non-compliance noted.

Test Data

Mode	CH	Location	Description
GSM 850 (Class 12)	128	Figure 7-1	Conducted spurious emissions, 30MHz - 20GHz
	190	Figure 7-2	Conducted spurious emissions, 30MHz - 20GHz
	251	Figure 7-3	Conducted spurious emissions, 30MHz - 20GHz
GPRS 850 (Class 12)	128	Figure 7-4	Conducted spurious emissions, 30MHz - 20GHz
	190	Figure 7-5	Conducted spurious emissions, 30MHz - 20GHz
	251	Figure 7-6	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
GSM 1900 (Class 12)	512	Figure 8-1	Conducted spurious emissions, 30MHz - 20GHz
	661	Figure 8-2	Conducted spurious emissions, 30MHz - 20GHz
	810	Figure 8-3	Conducted spurious emissions, 30MHz - 20GHz
GPRS 1900 (Class 12)	512	Figure 8-4	Conducted spurious emissions, 30MHz - 20GHz
	661	Figure 8-5	Conducted spurious emissions, 30MHz - 20GHz
	810	Figure 8-6	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
GSM 850 (Class 12)	128	Figure 9-1	Band Edge emissions
	251	Figure 9-2	Band Edge emissions
GPRS 850 (Class 12)	128	Figure 9-3	Band Edge emissions
	251	Figure 9-4	Band Edge emissions

Mode	CH	Location	Description
GSM 1900 (Class 12)	512	Figure 10-1	Band Edge emissions
	810	Figure 10-2	Band Edge emissions
GPRS 1900 (Class 12)	512	Figure 10-3	Band Edge emissions
	810	Figure 10-4	Band Edge emissions

Mode	CH	Location	Description
EDGE 850 (Class 12)	128	Figure 11-1	Conducted spurious emissions, 30MHz - 20GHz
	190	Figure 11-2	Conducted spurious emissions, 30MHz - 20GHz
	251	Figure 11-3	Conducted spurious emissions, 30MHz - 20GHz
EDGE 1900 (Class 12)	512	Figure 11-4	Conducted spurious emissions, 30MHz - 20GHz
	661	Figure 11-5	Conducted spurious emissions, 30MHz - 20GHz
	810	Figure 11-6	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
EDGE 850 (Class 12)	128	Figure 12-1	Band Edge emissions
	251	Figure 12-2	Band Edge emissions
EDGE 1900 (Class 12)	512	Figure 12-3	Band Edge emissions
	810	Figure 12-4	Band Edge emissions

Test Plot

GSM 850

Figure 7-1: Out of Band emission at antenna terminals – GSM CH Low

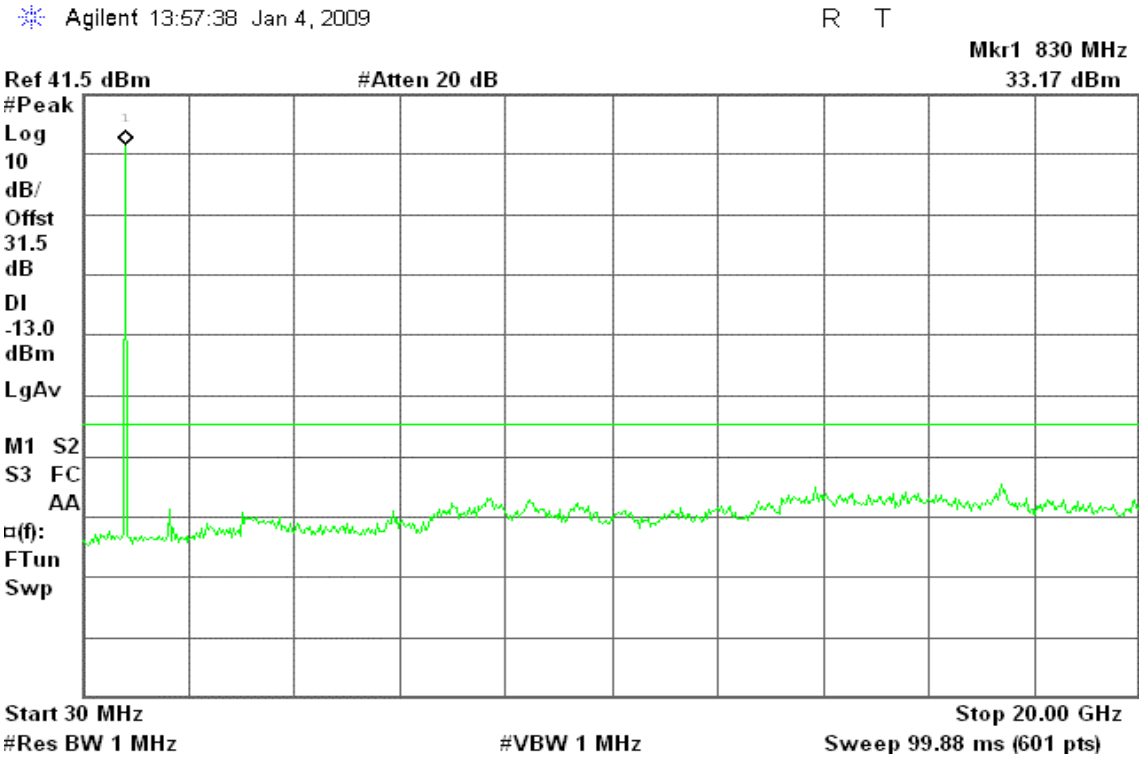


Figure 7-2: Out of Band emission at antenna terminals – GSM CH Mid

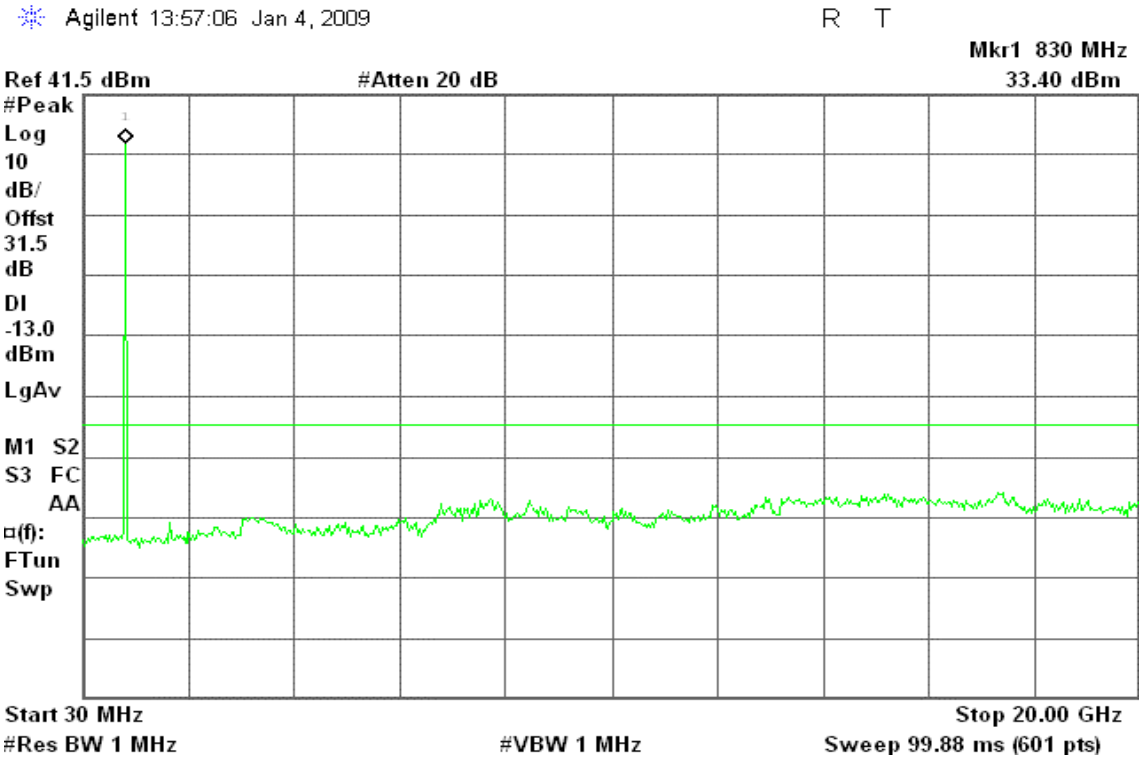
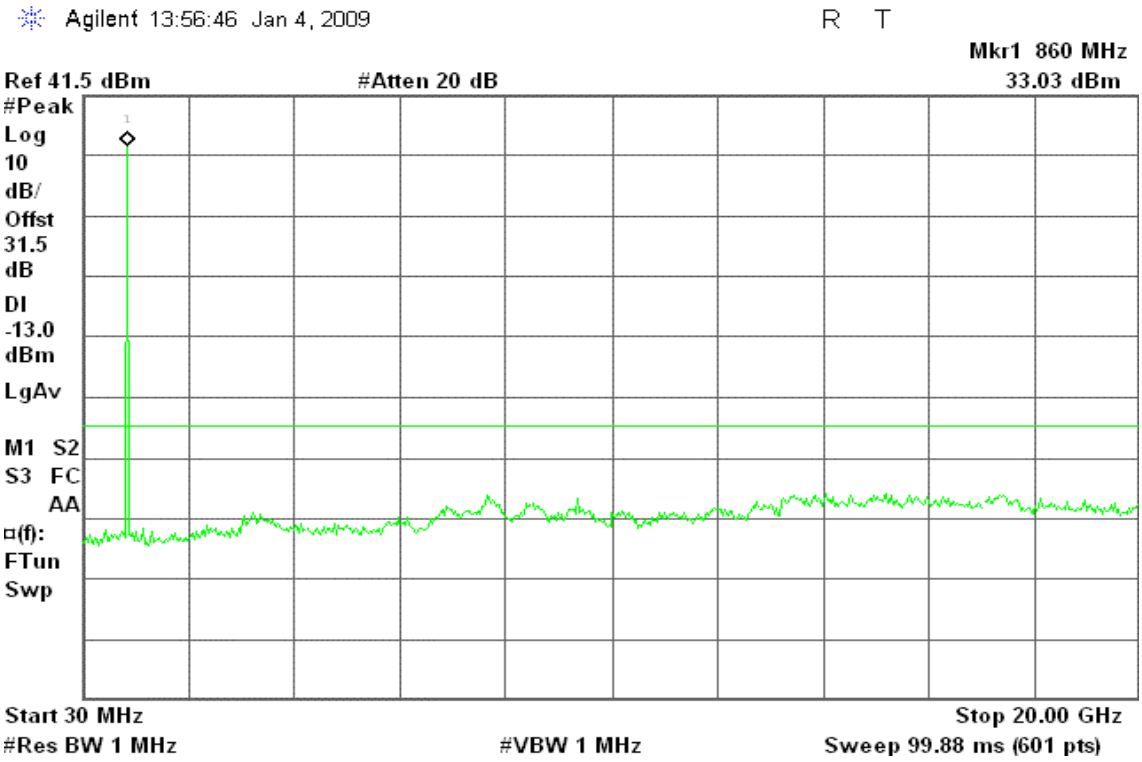


Figure 7-3: Out of Band emission at antenna terminals – GSM CH High



GPRS 850

Figure 7-4: Out of Band emission at antenna terminals – GPRS CH Low

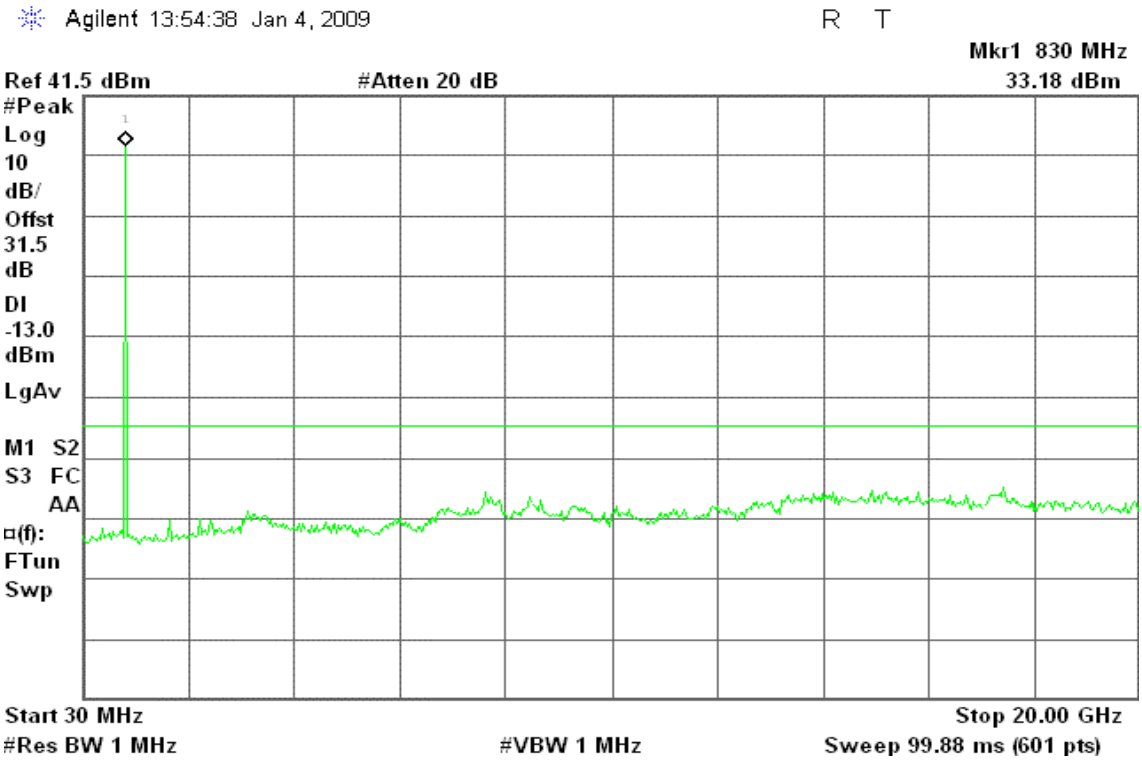


Figure 7-5: Out of Band emission at antenna terminals – GPRS CH Mid

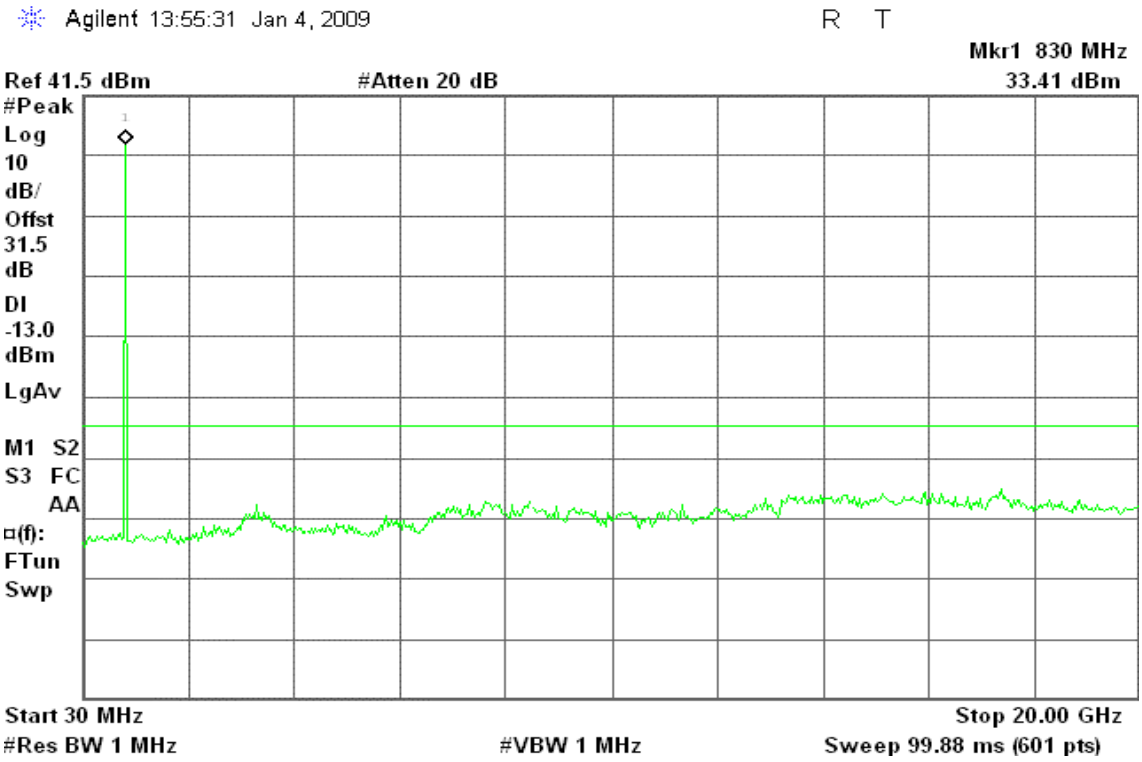
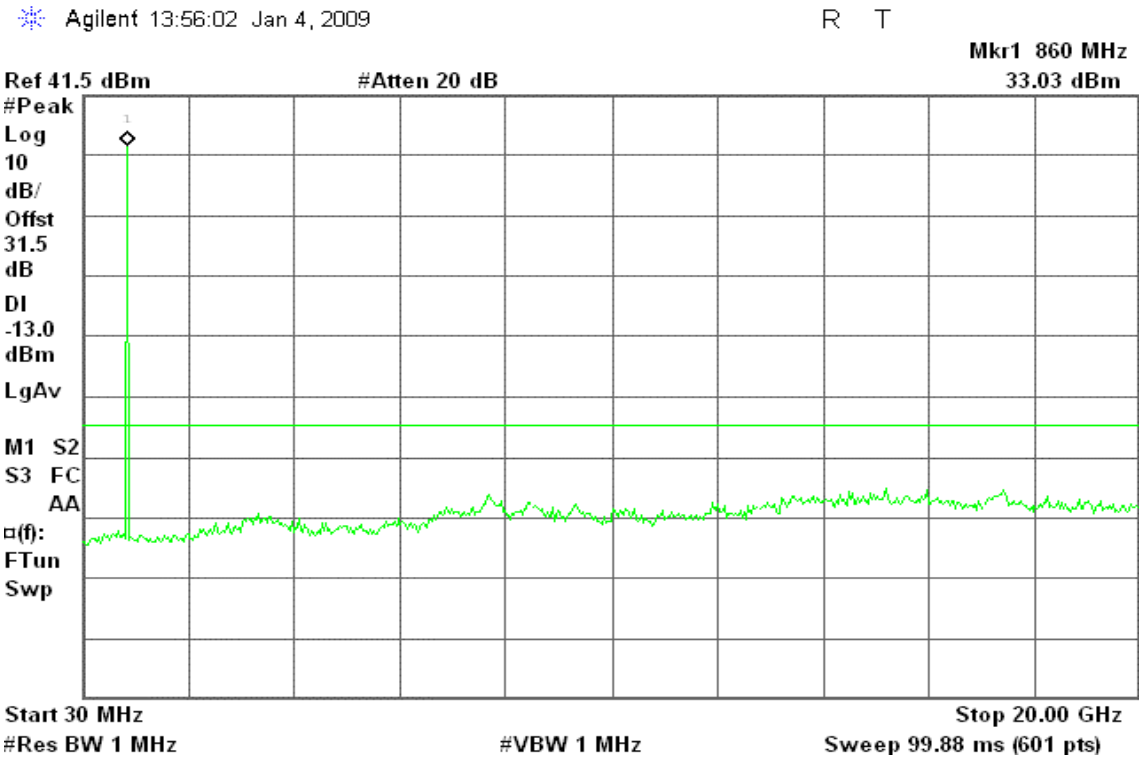


Figure 7-6: Out of Band emission at antenna terminals – GPRS CH High



GSM 1900

Figure 8-1: Out of Band emission at antenna terminals – GSM CH Low

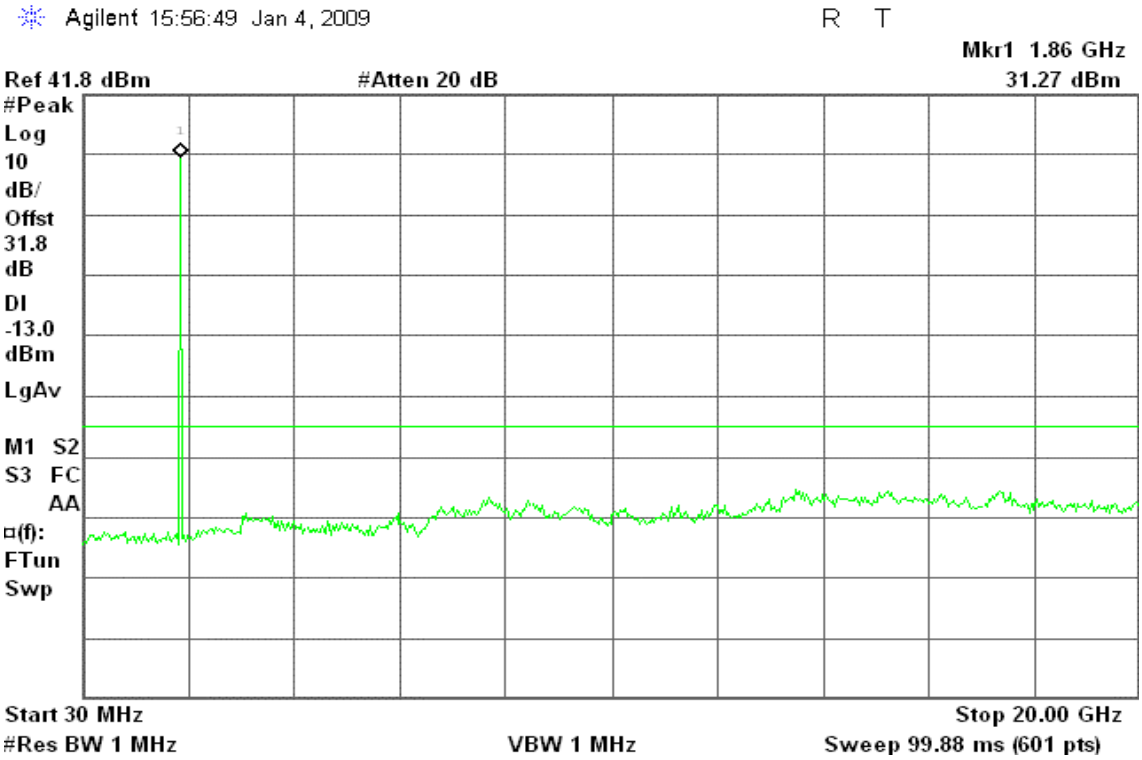


Figure 8-2: Out of Band emission at antenna terminals – GSM CH Mid

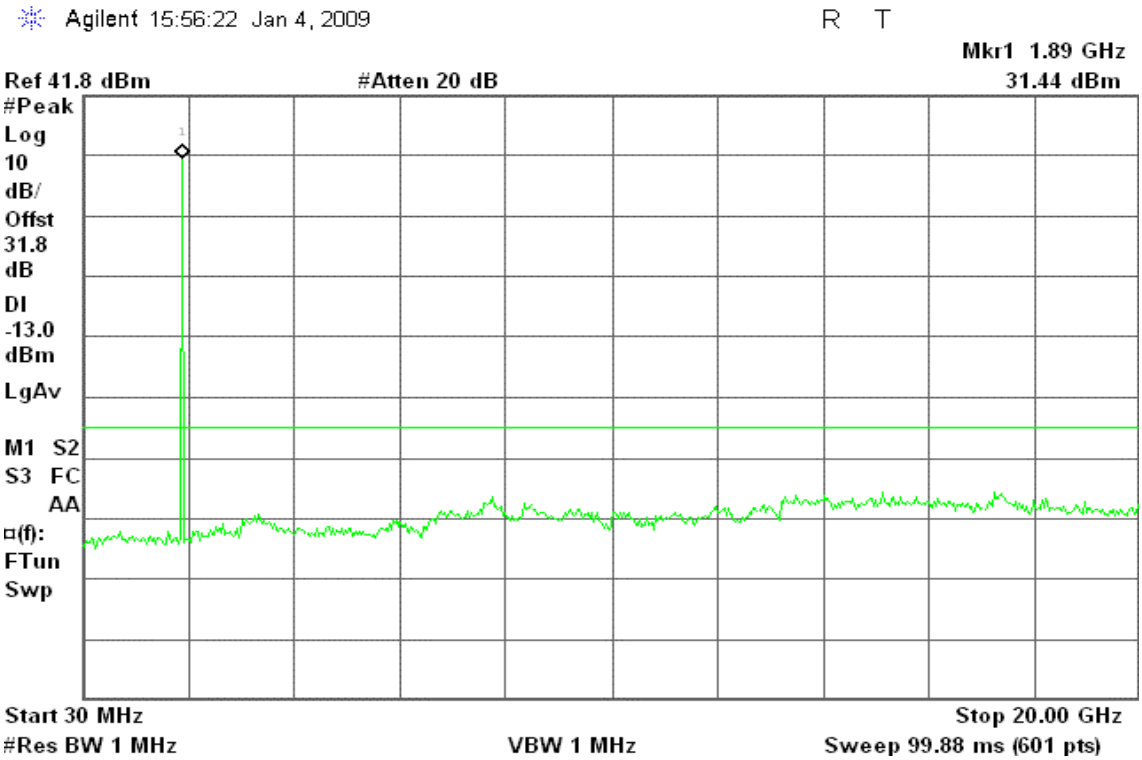
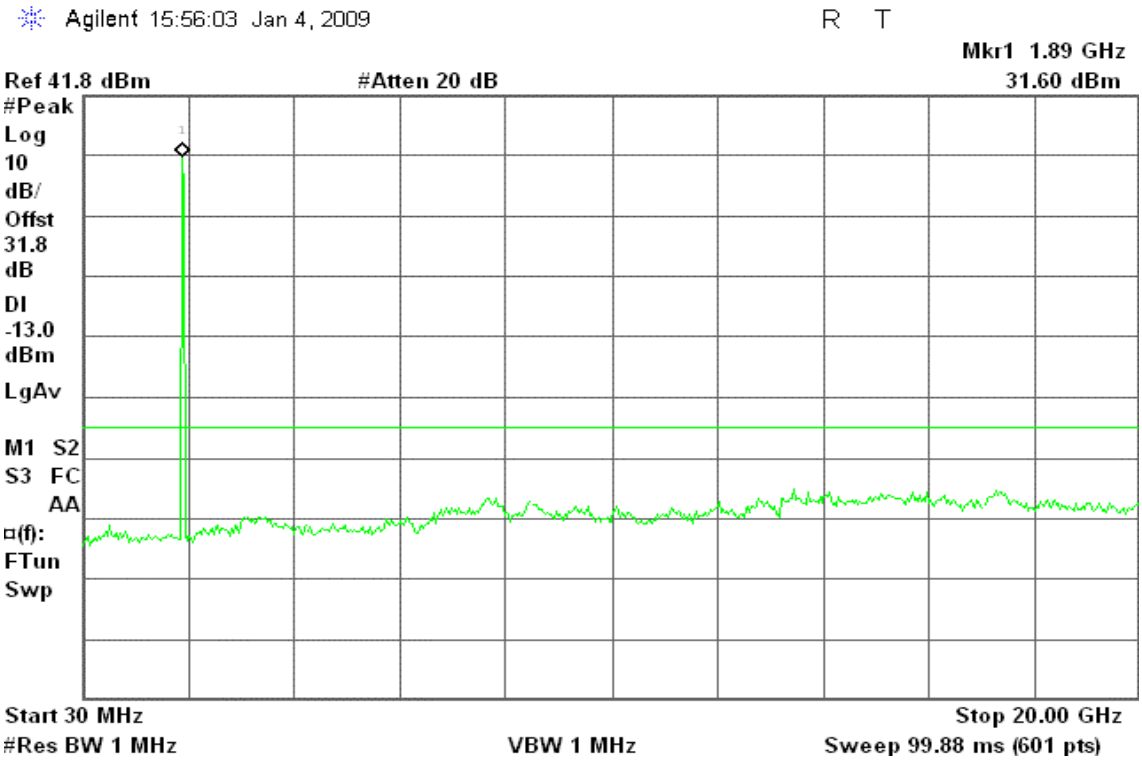


Figure 8-3: Out of Band emission at antenna terminals – GSM CH High



GPRS 1900

Figure 8-4: Out of Band emission at antenna terminals – GPRS CH Low

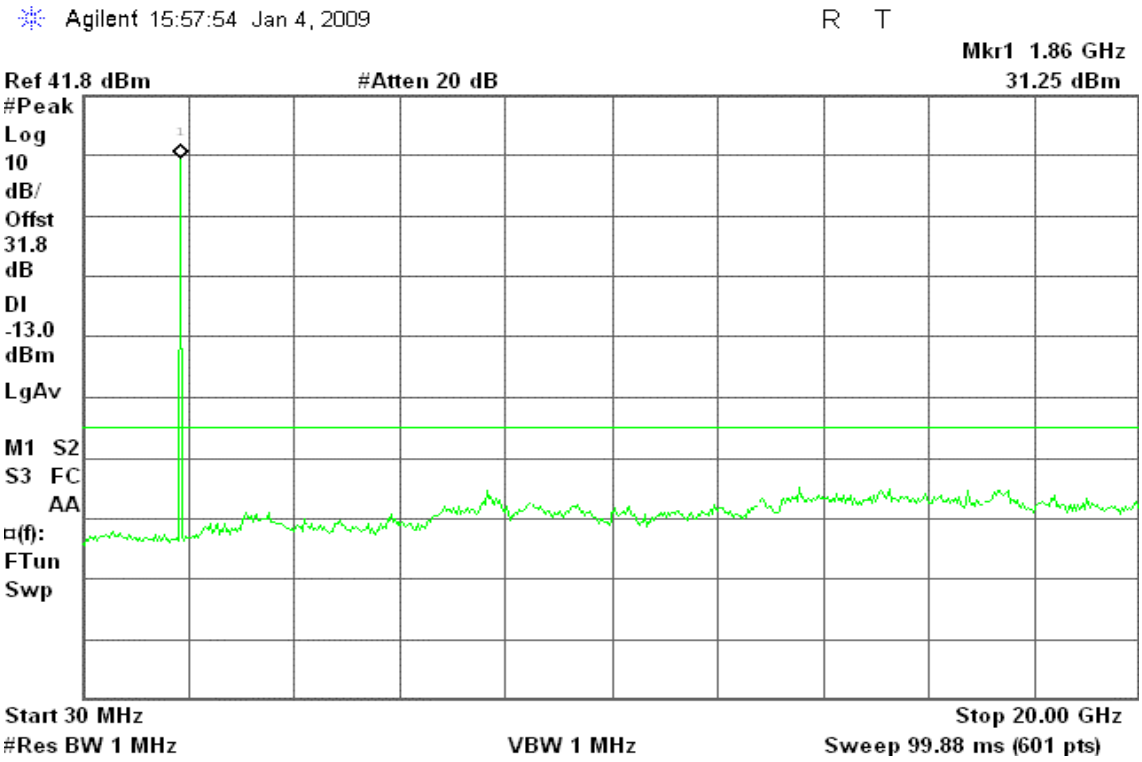


Figure 8-5: Out of Band emission at antenna terminals – GPRS CH Mid

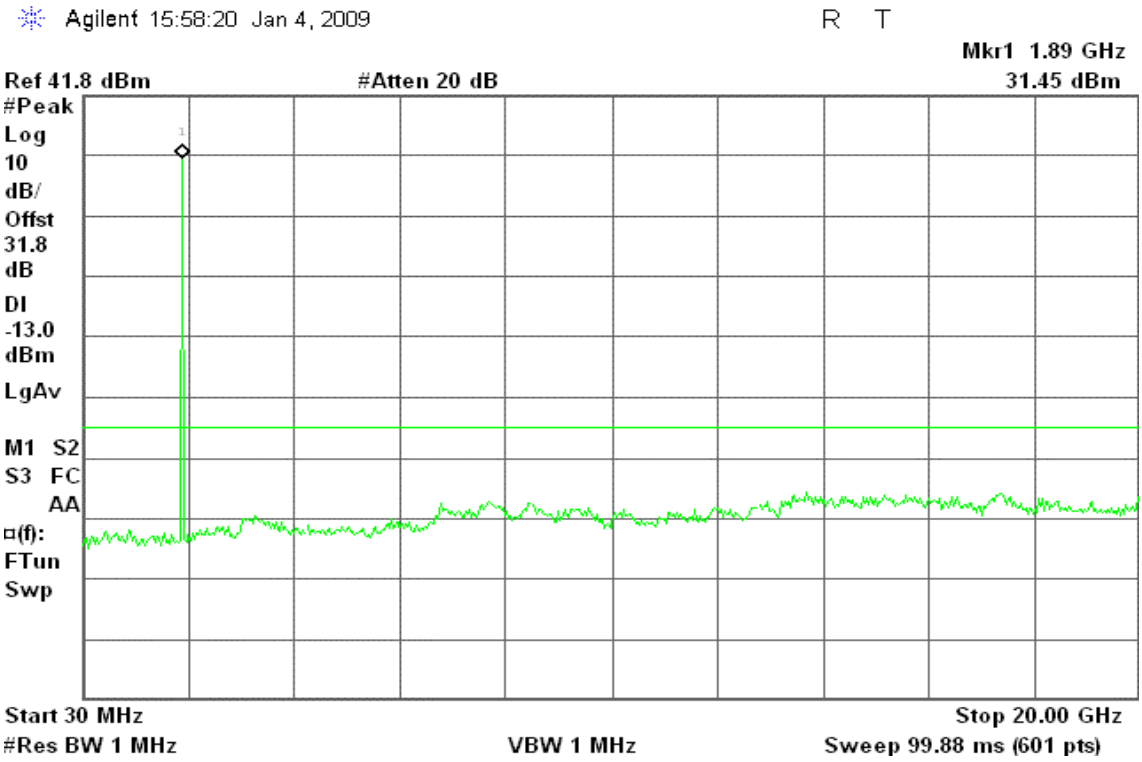
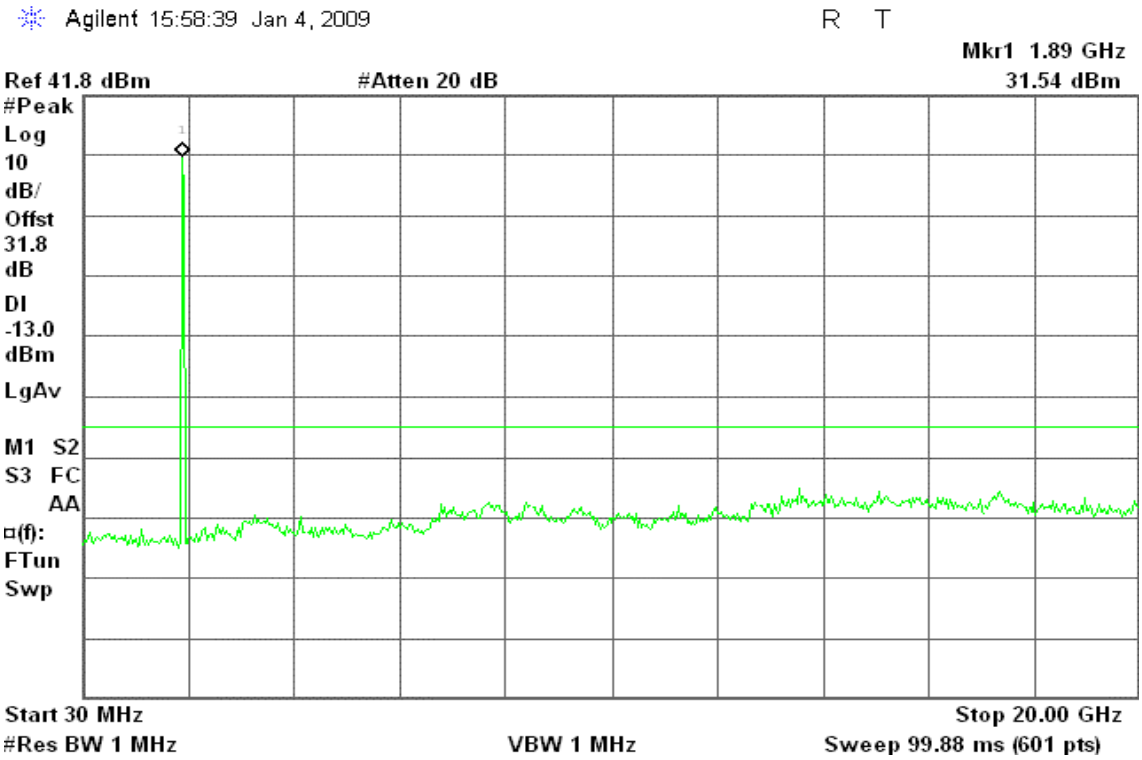


Figure 8-6: Out of Band emission at antenna terminals – GPRS CH High



GSM 850

Figure 9-1: Band Edge emissions – GSM CH Low

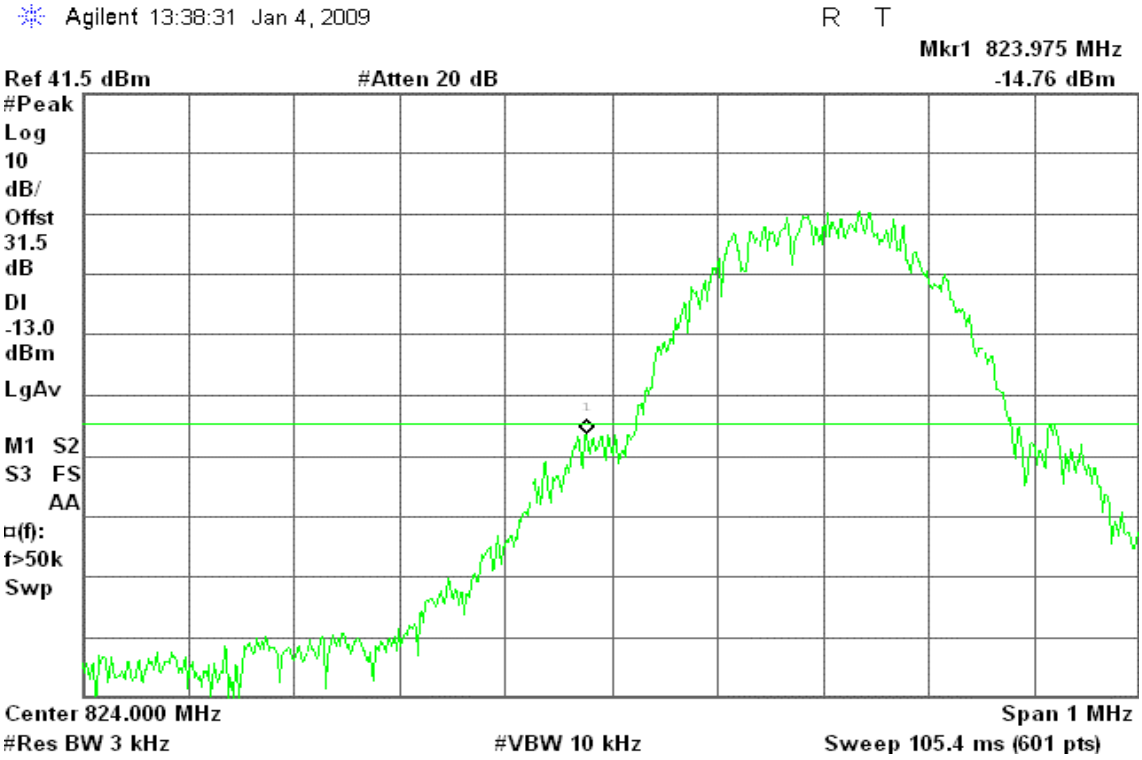
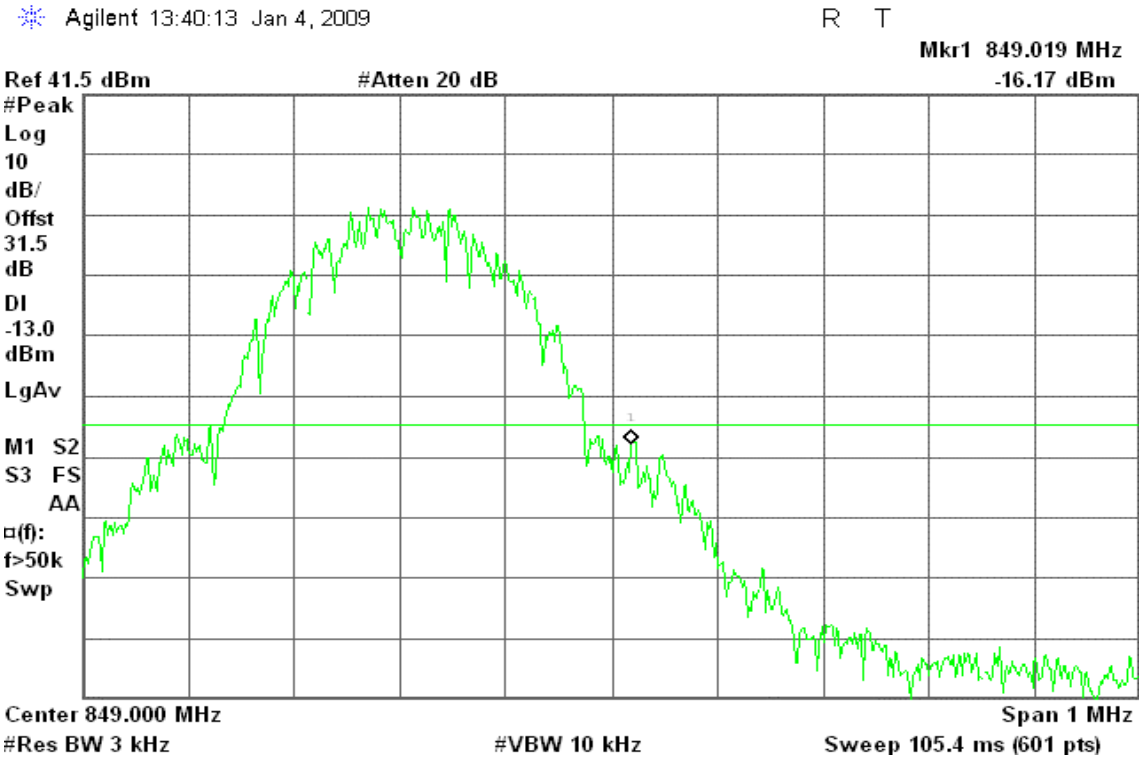


Figure 9-2: Band Edge emissions – GSM CH High



GPRS 850

Figure 9-3: Band Edge emissions – GPRS CH Low

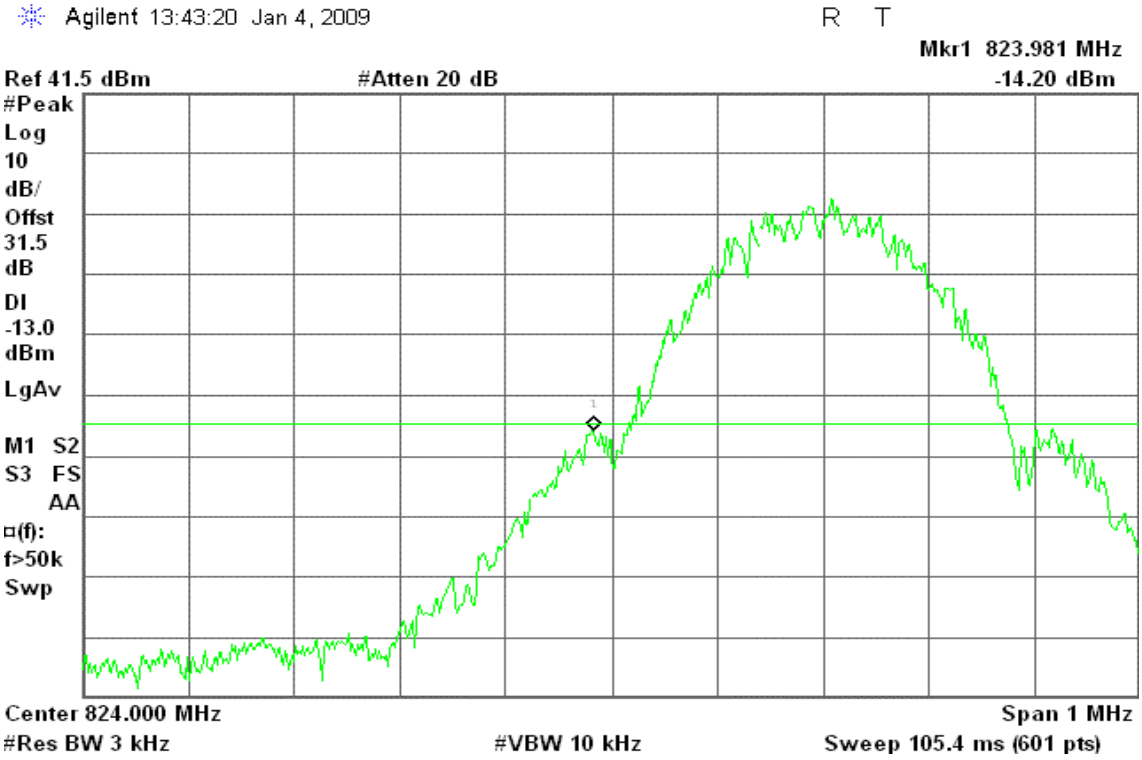
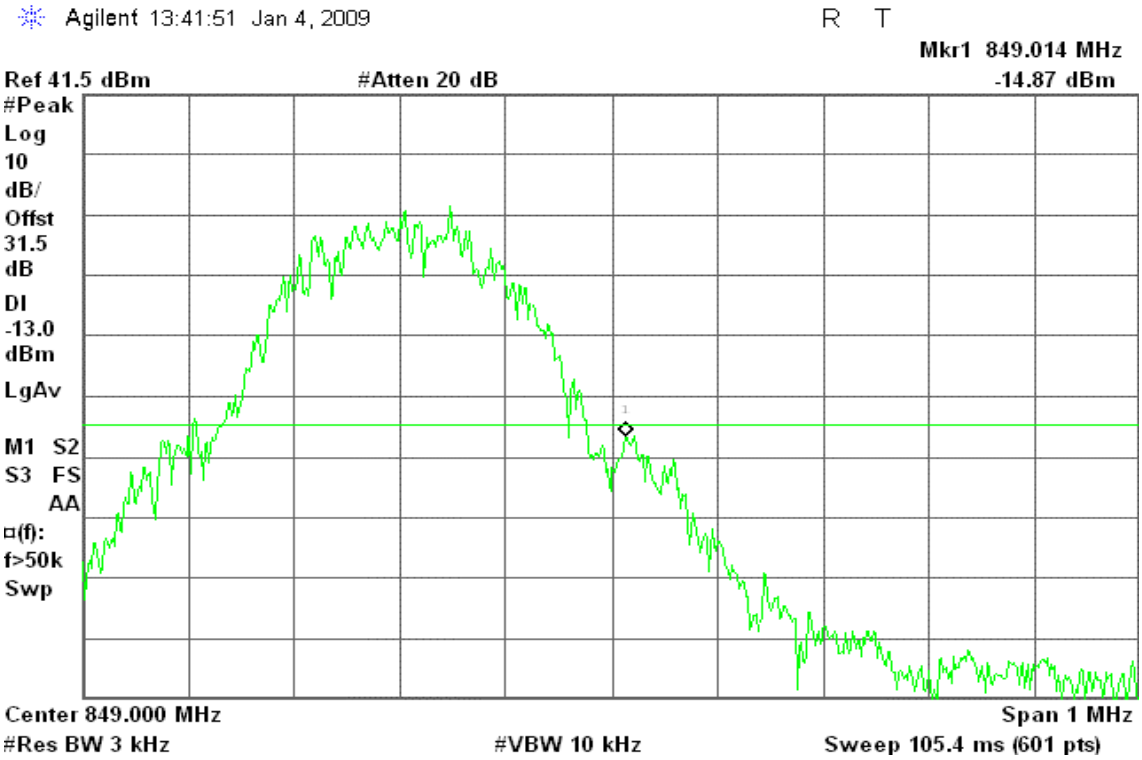


Figure 9-4: Band Edge emissions –GPRS CH High



GSM 1900

Figure 10-1: Band Edge emissions – GSM CH Low

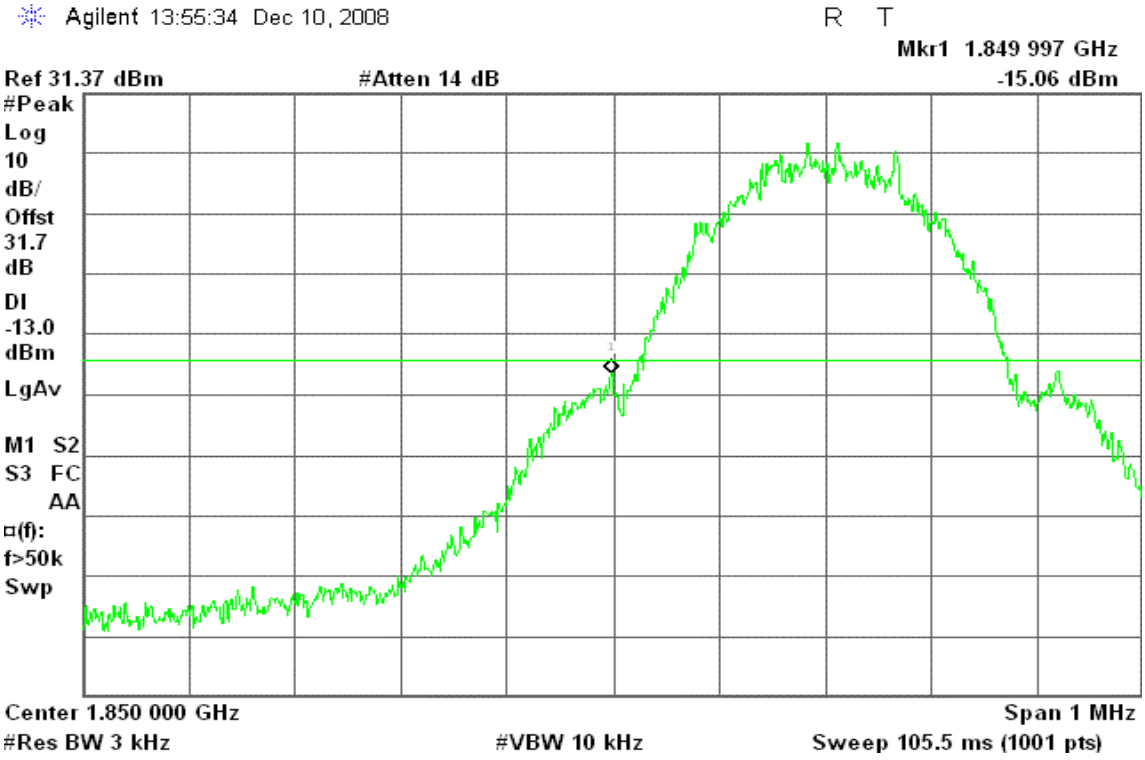
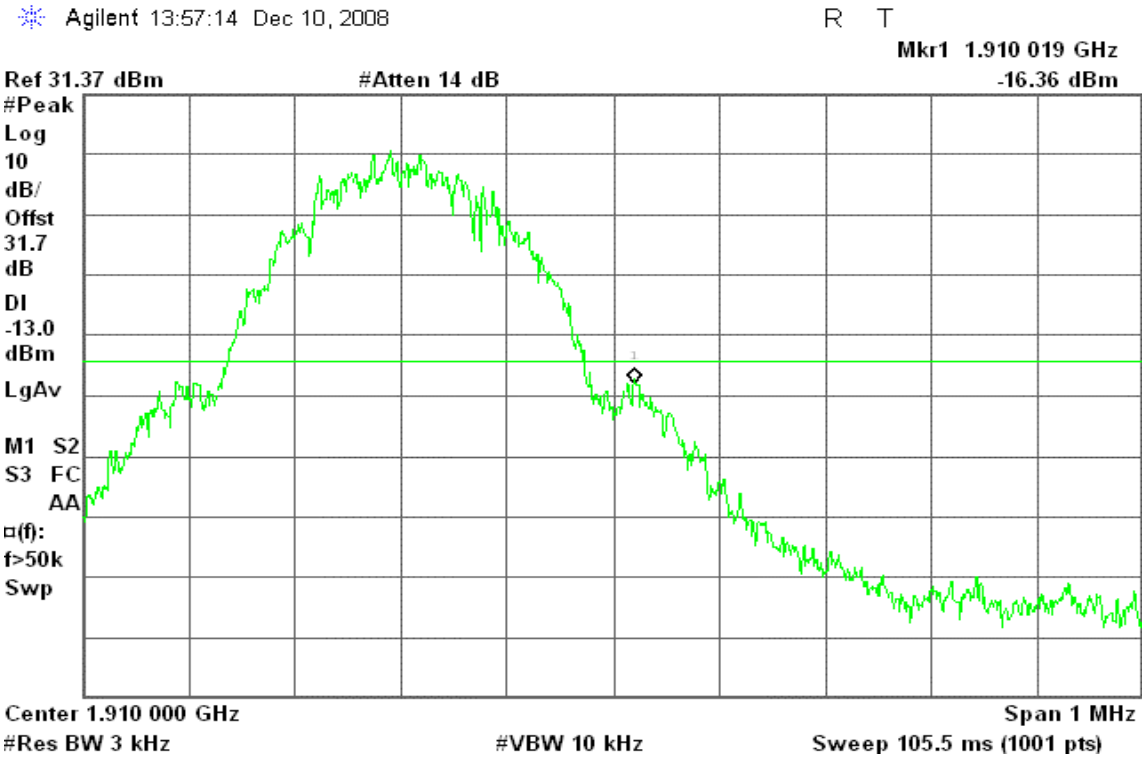


Figure 10-2: Band Edge emissions – GSM CH High



GPRS 1900

Figure 10-3: Band Edge emissions – GPRS CH Low

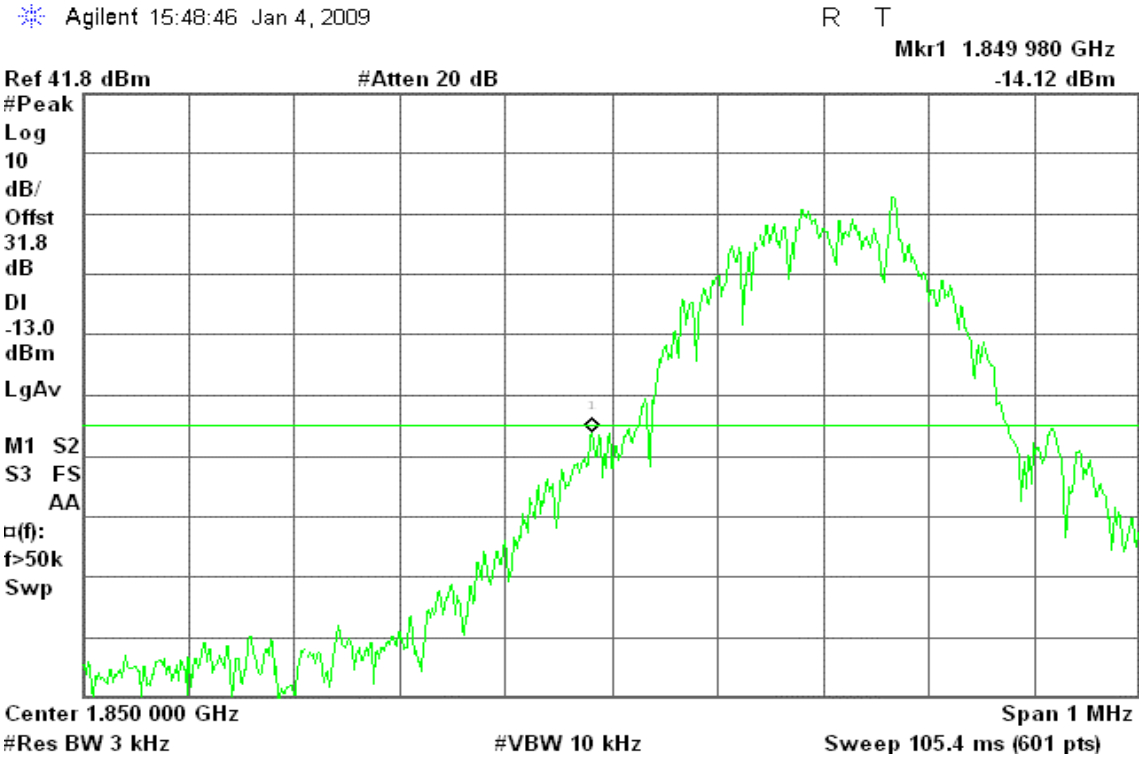
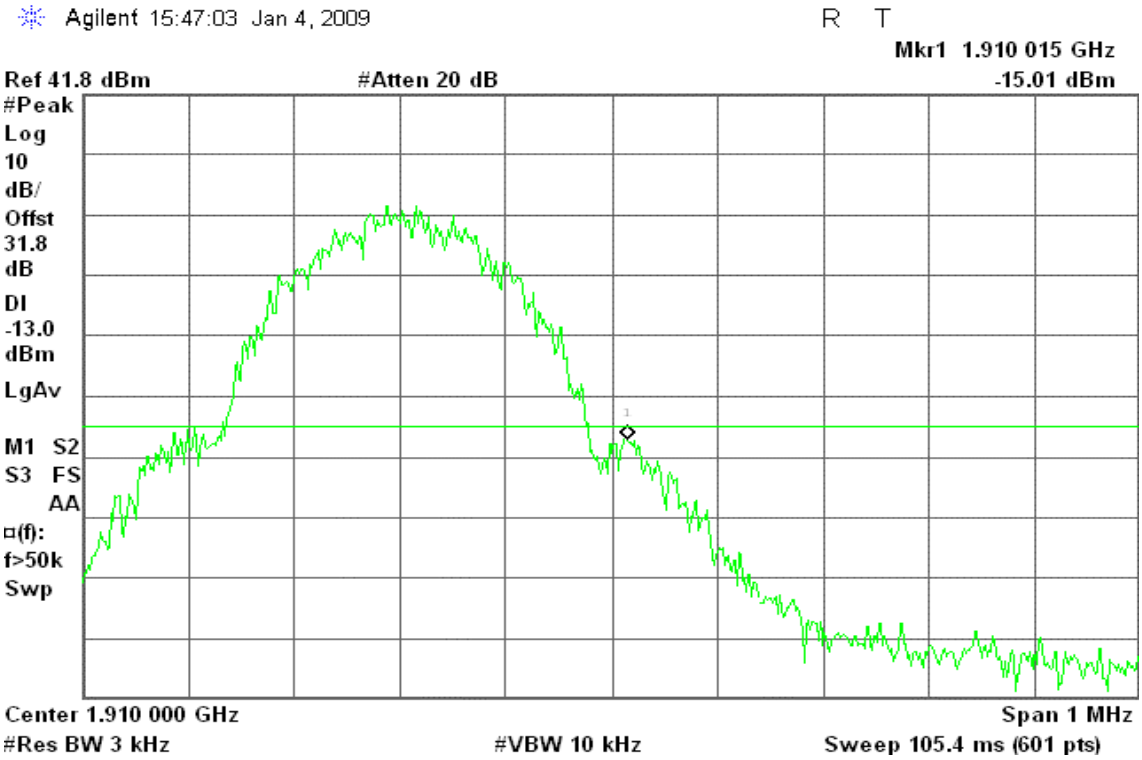


Figure 10-4: Band Edge emissions – GPRS CH High



EDGE 850

Figure 11-1: Out of Band emission at antenna terminals –EDGE CH Low

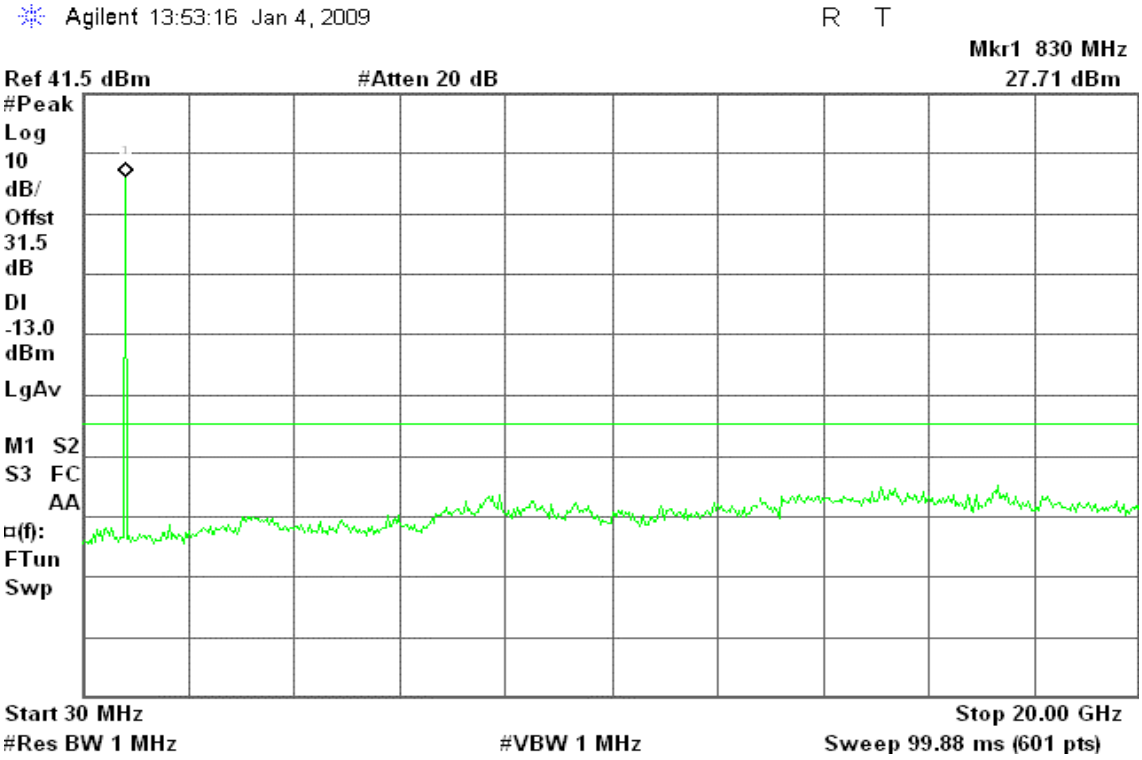


Figure 11-2: Out of Band emission at antenna terminals –EDGE CH Mid

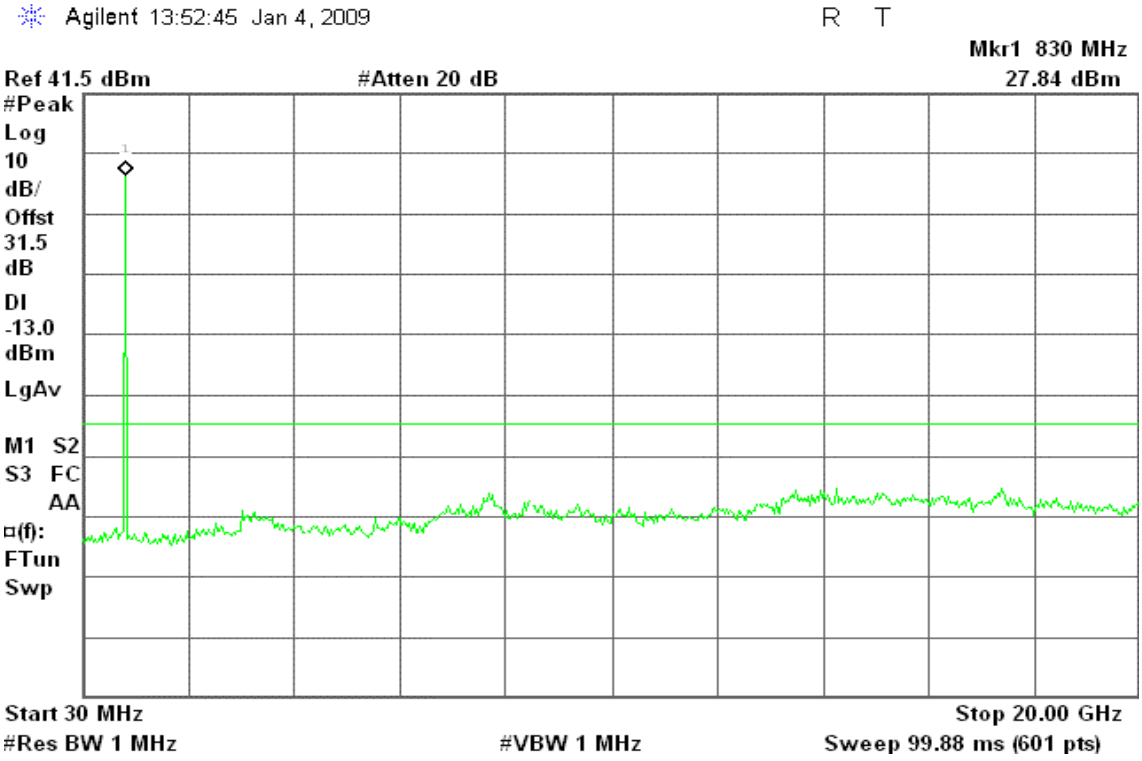
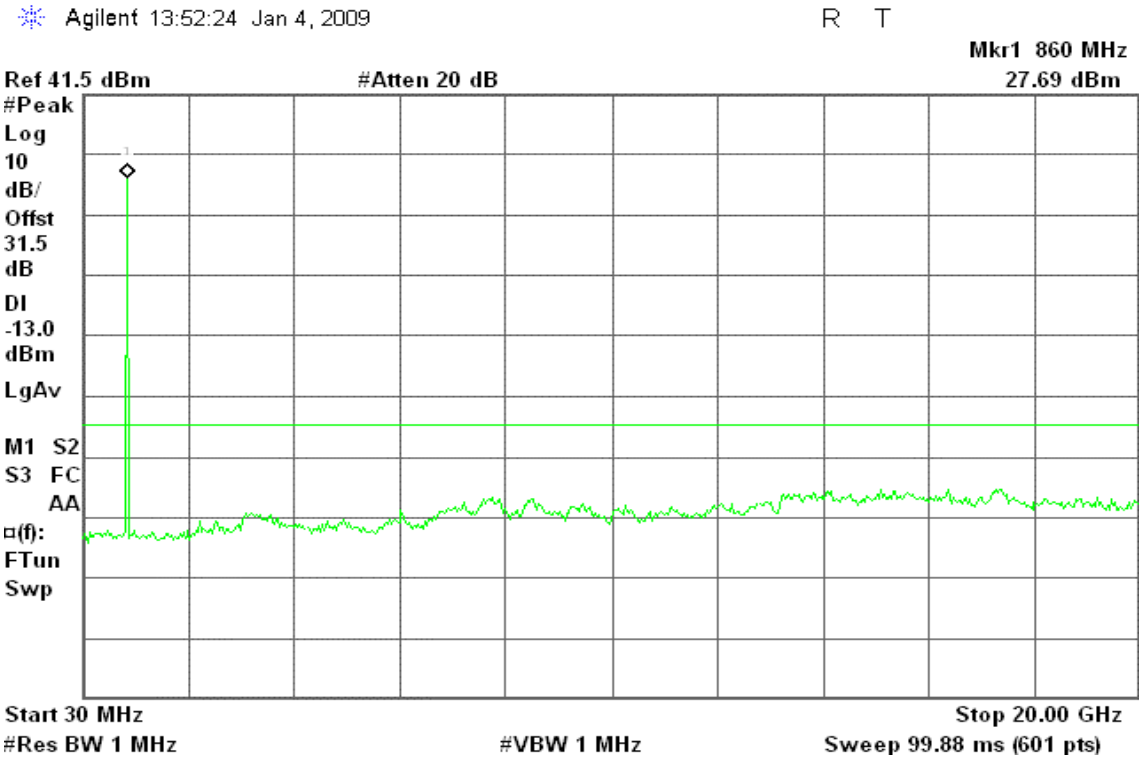


Figure 11-3: Out of Band emission at antenna terminals –EDGE CH High



EDGE 1900

Figure 11-4: Out of Band emission at antenna terminals –EDGE CH Low

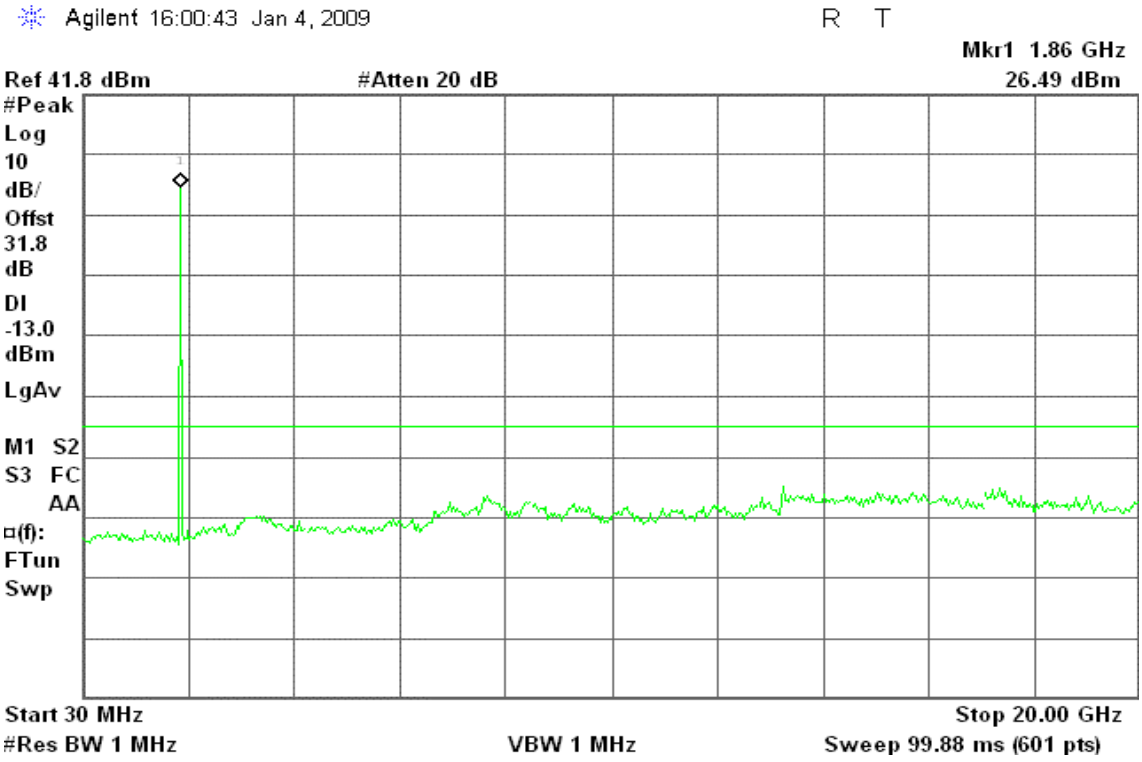


Figure 11-5: Out of Band emission at antenna terminals –EDGE CH Mid

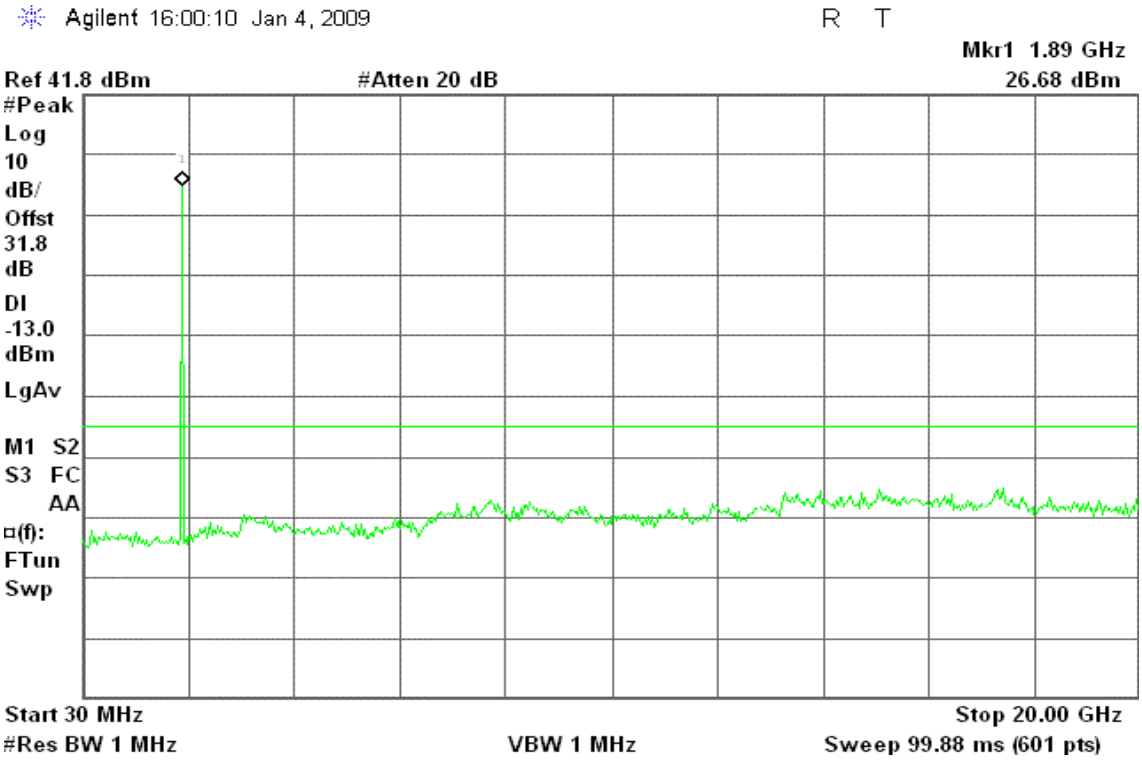
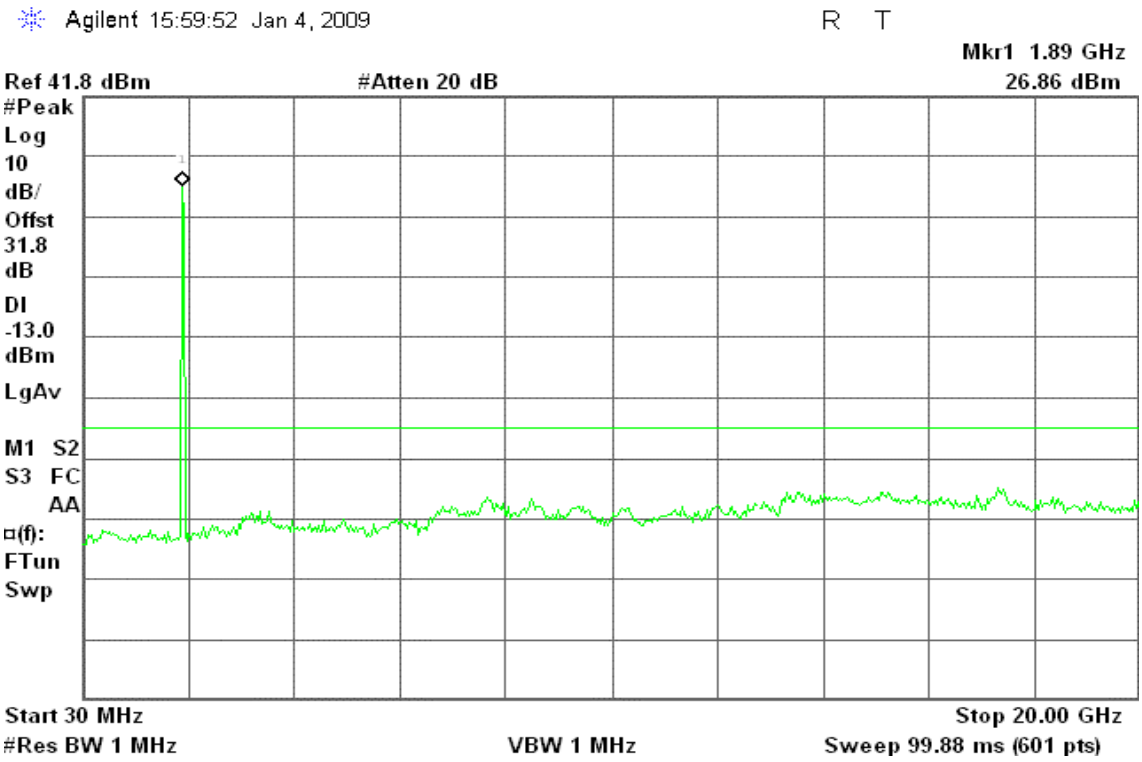


Figure 11-6: Out of Band emission at antenna terminals –EDGE CH High



EDGE 850

Figure 12-1: Band Edge emissions – EDGE CH Low

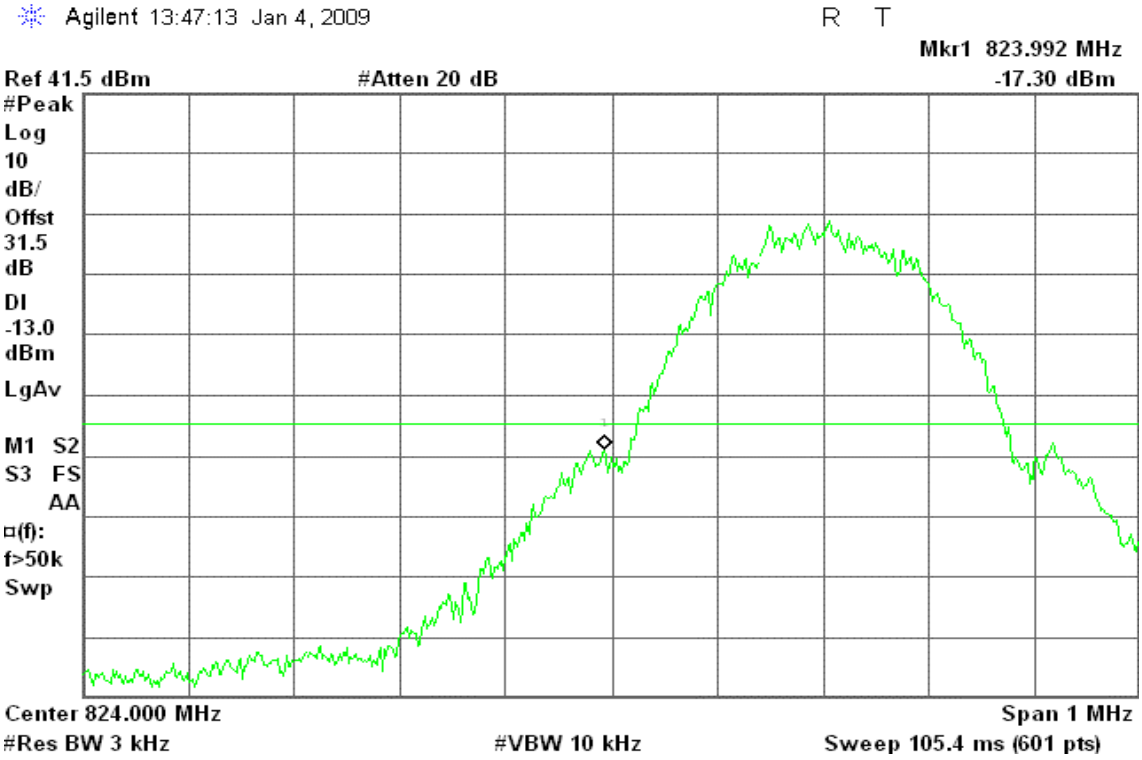
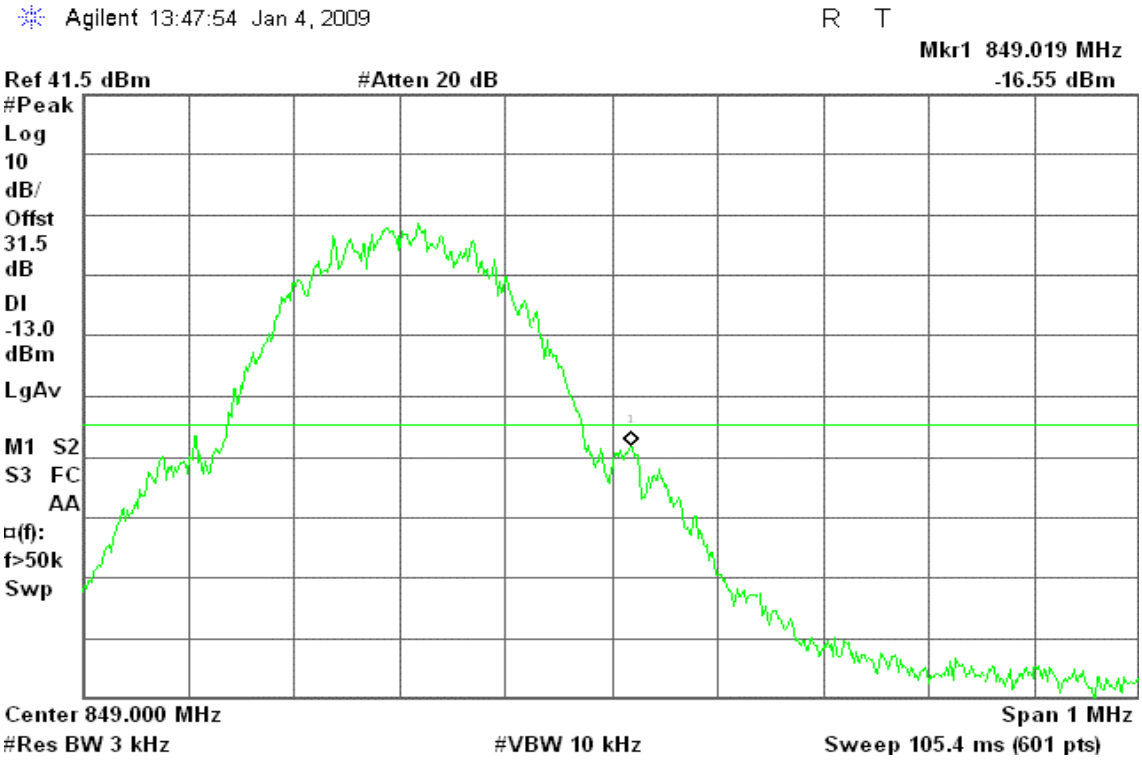


Figure 12-2: Band Edge emissions – EDGE CH High



EDGE 1900

Figure 12-3: Band Edge emissions – EDGE CH Low

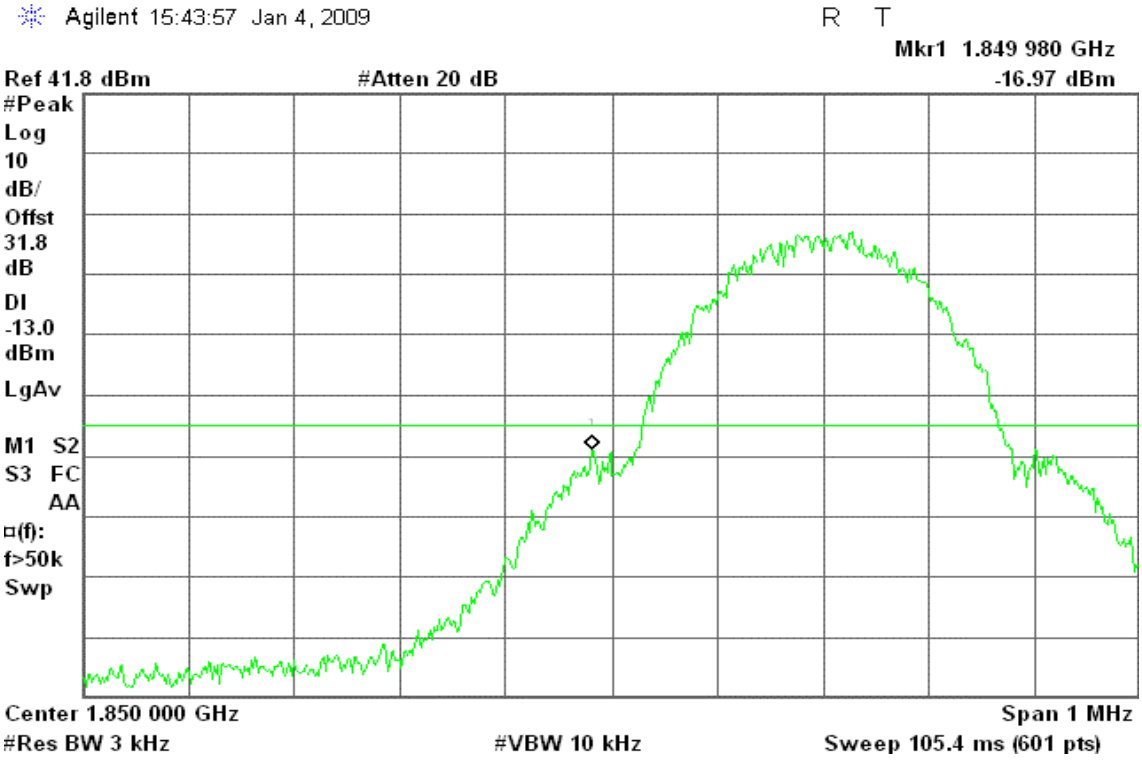
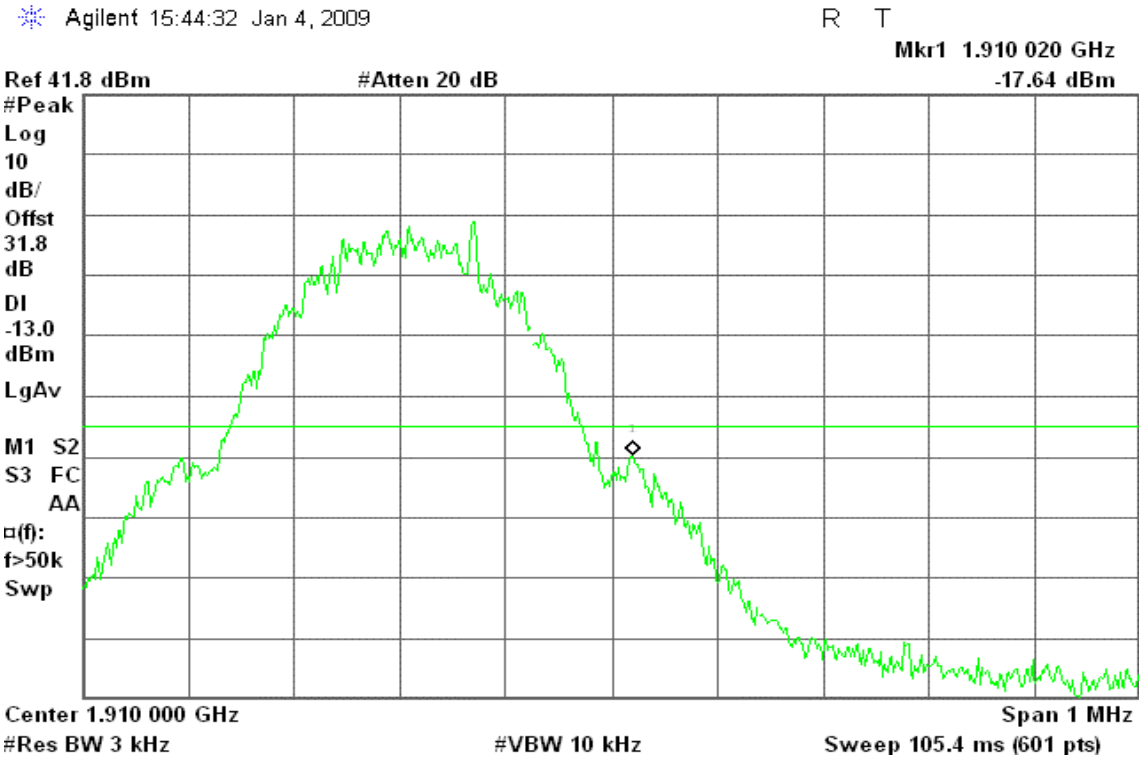


Figure 12-4: Band Edge emissions – EDGE CH High



WCDMA Band II

Figure 13-1: Out of Band emission at antenna terminals – WCDMA CH Low

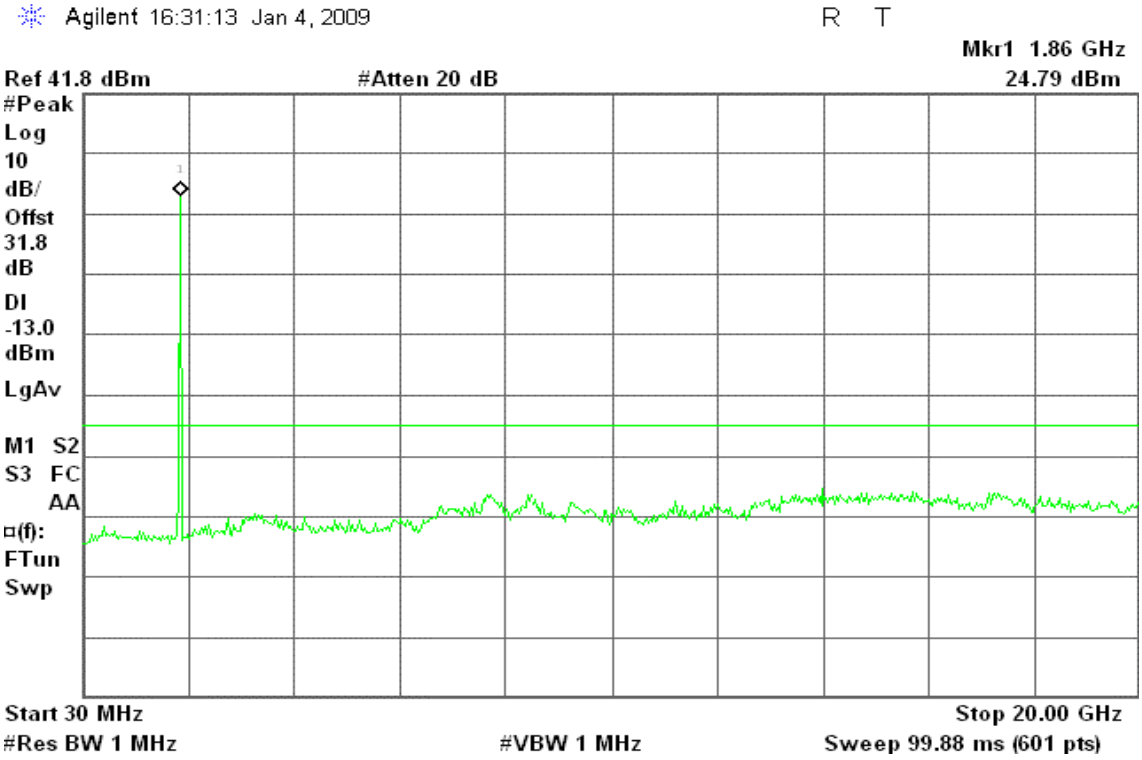


Figure 13-2: Out of Band emission at antenna terminals – WCDMA CH Mid

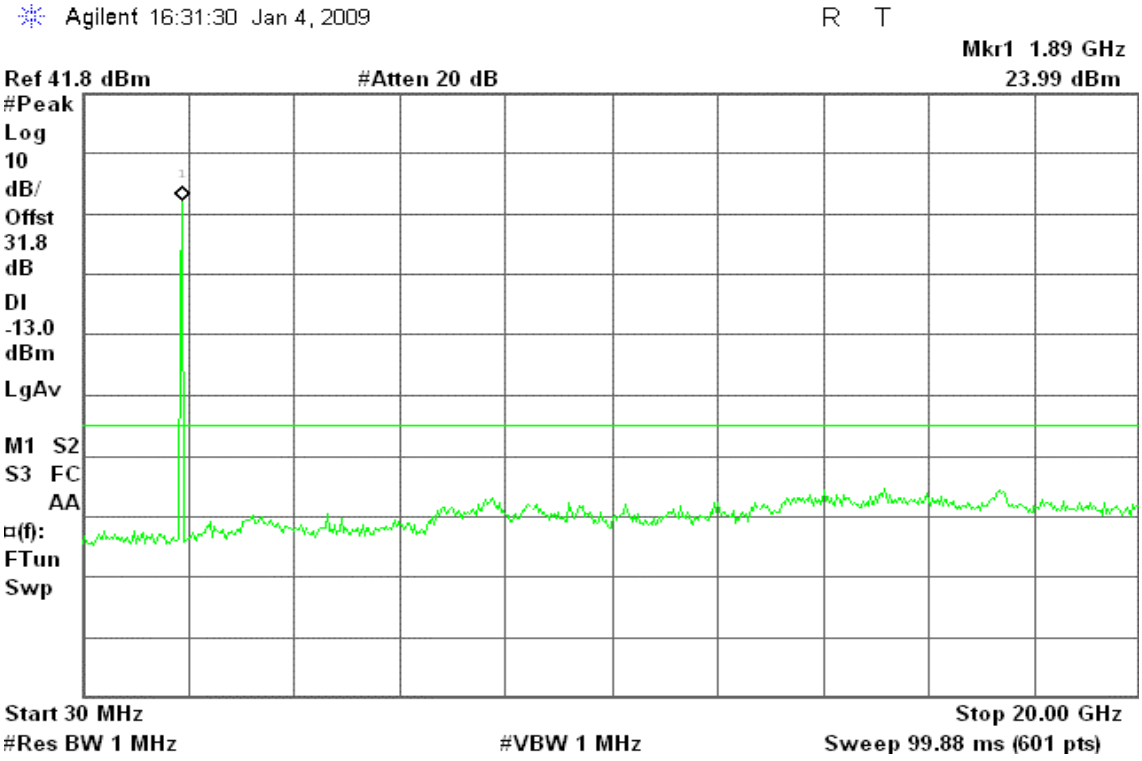
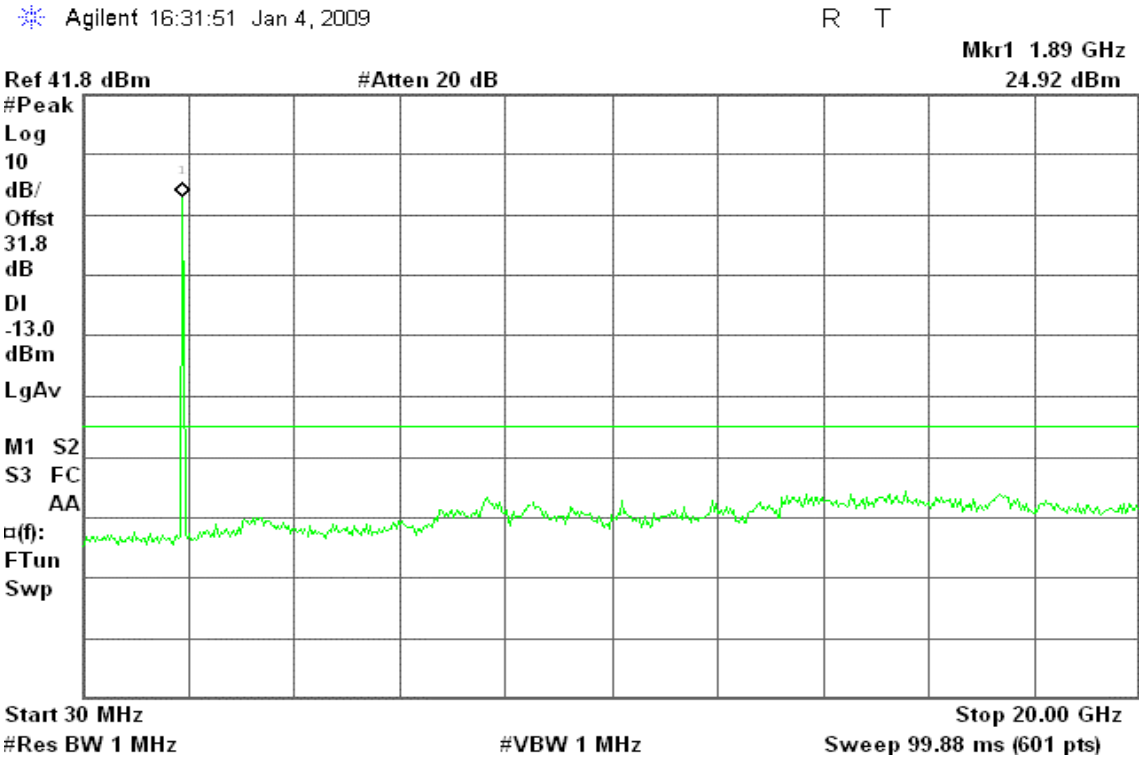


Figure 13-3: Out of Band emission at antenna terminals – WCDMA CH High



WCDMA Band V

Figure 13-4: Out of Band emission at antenna terminals – WCDMA CH Low

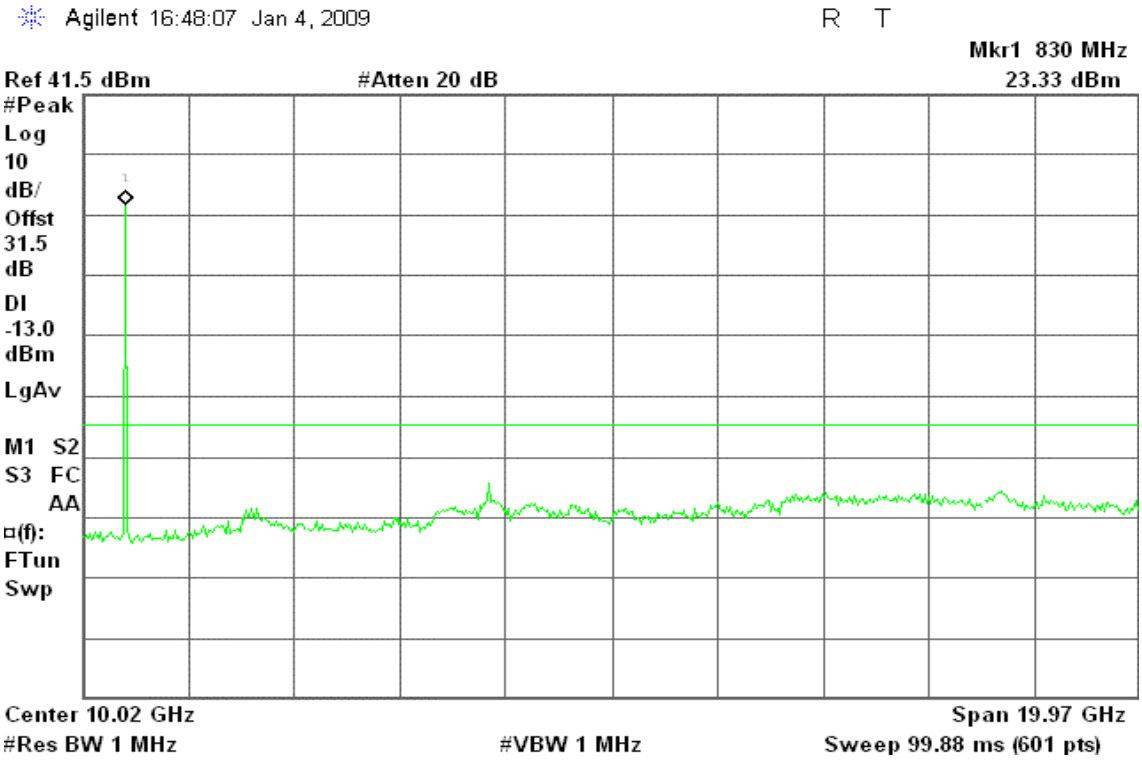


Figure 13-5: Out of Band emission at antenna terminals – WCDMA CH Mid

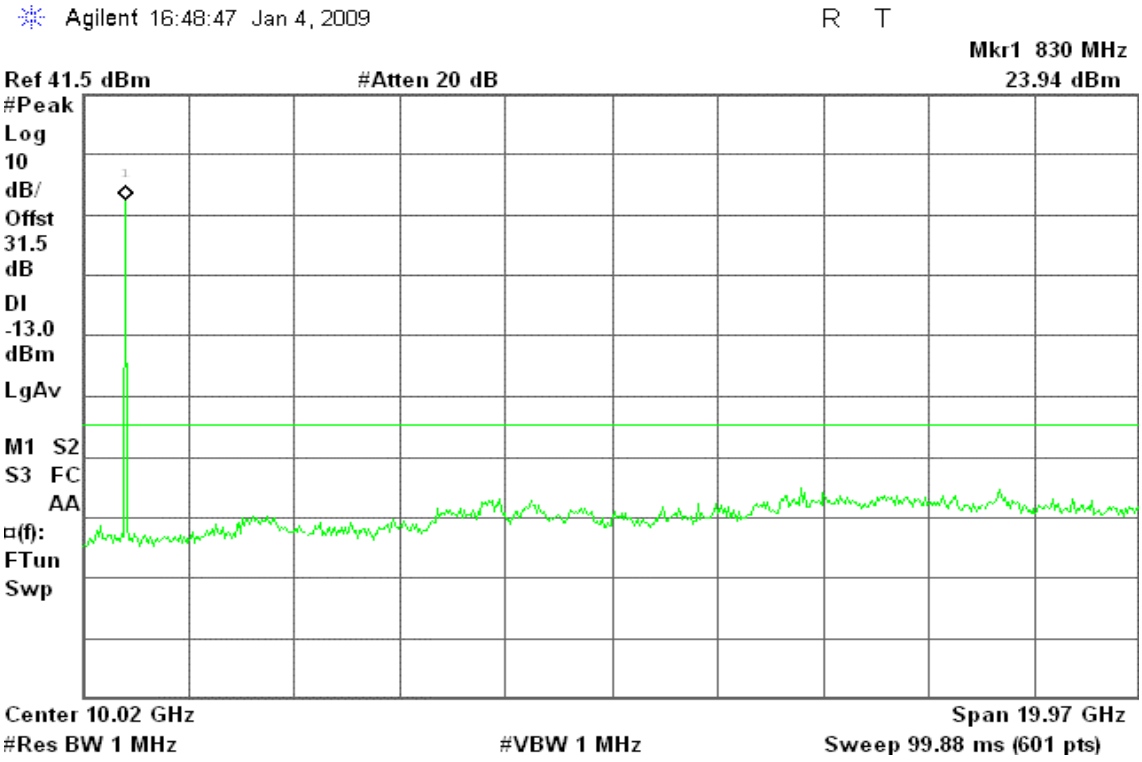
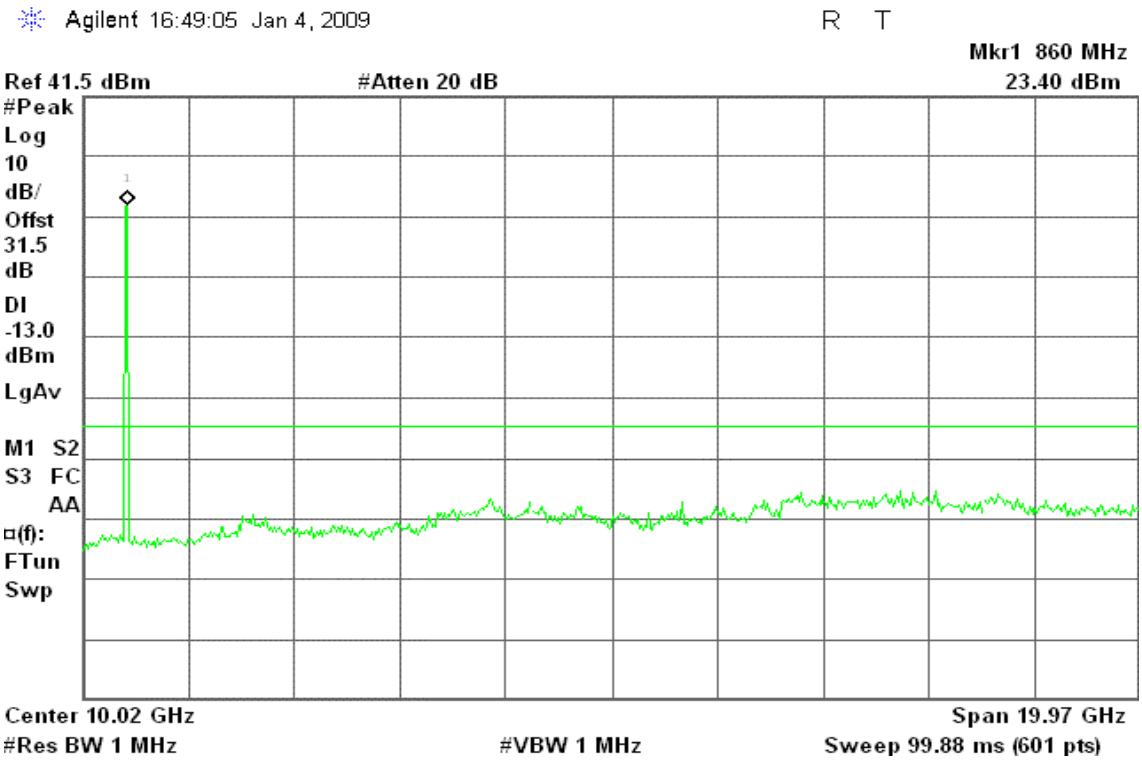


Figure 13-6: Out of Band emission at antenna terminals – WCDMA CH High



WCDMA Band II

Figure 14-1: Band Edge emissions – WCDMA CH Low

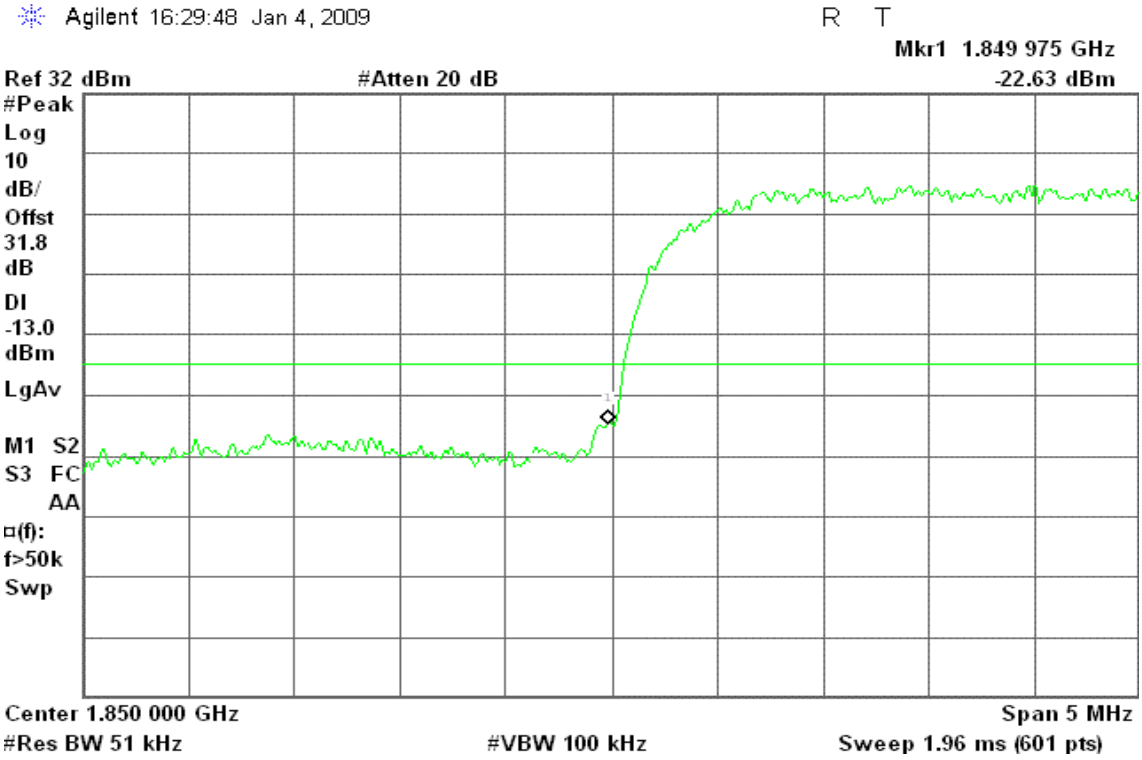
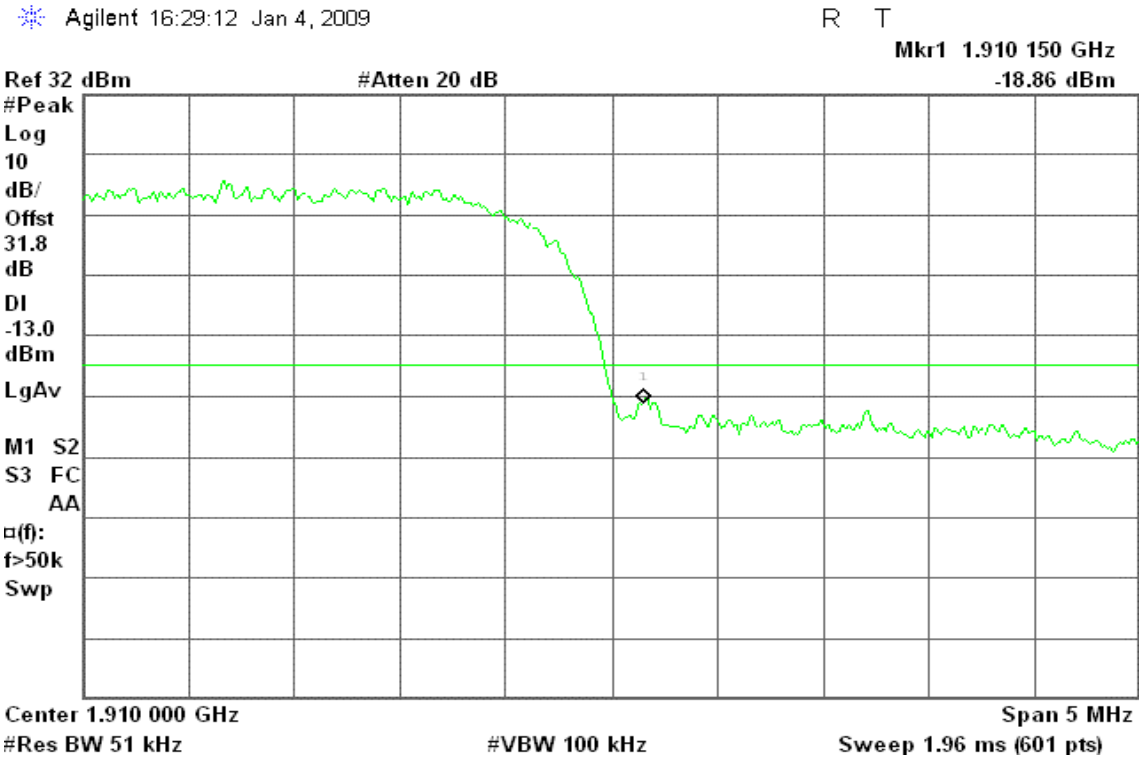


Figure 14-2: Band Edge emissions –WCDMA CH High



WCDMA Band V

Figure 14-3: Band Edge emissions –WCDMA CH Low

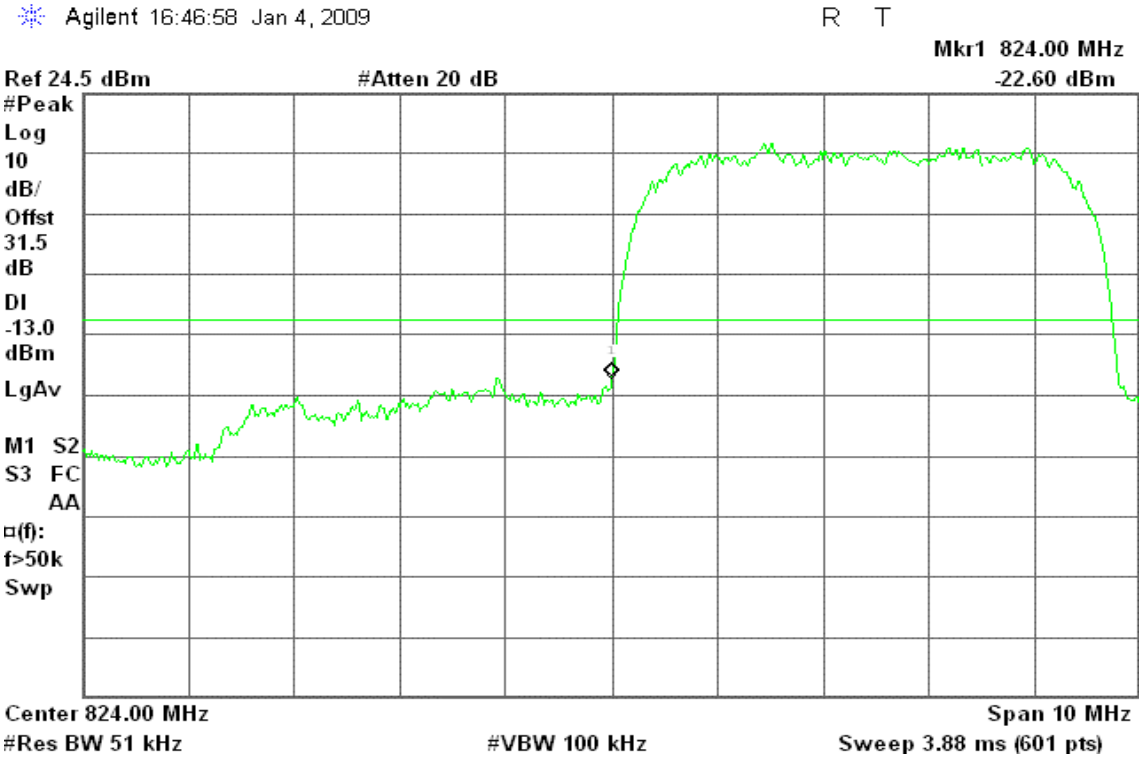
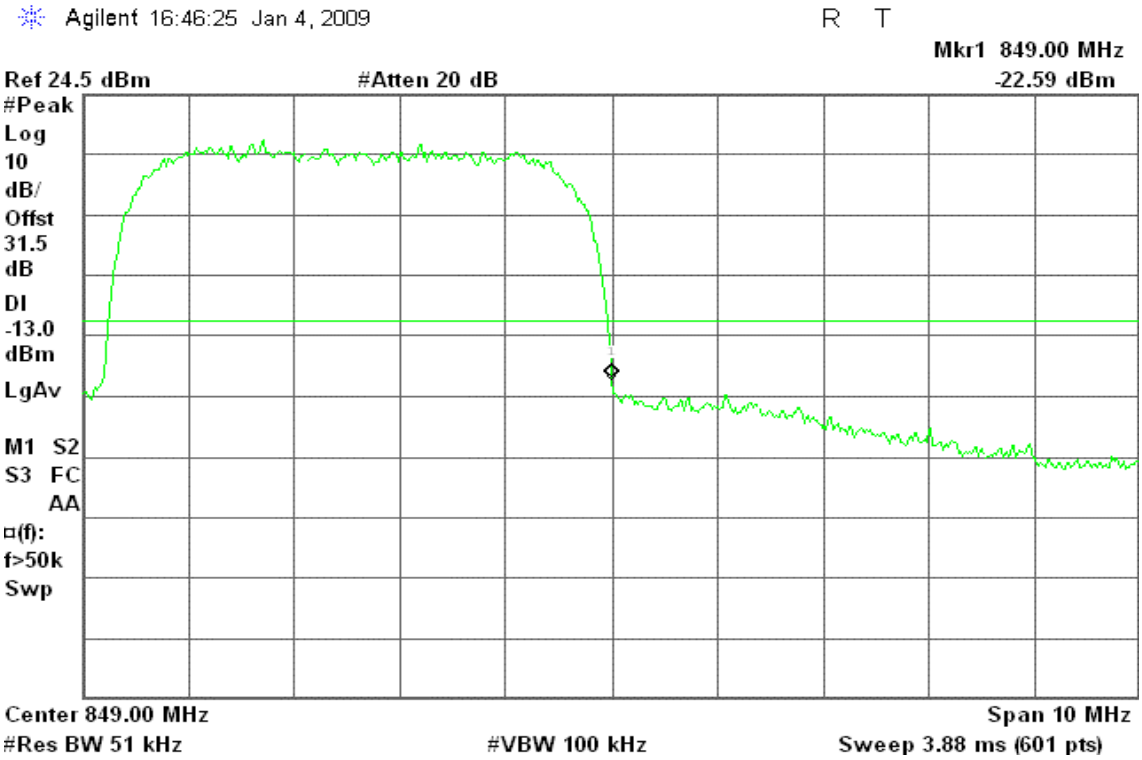


Figure 14-4: Band Edge emissions –WCDMA CH High



WCDMA / HSDPA Band II

Figure 15-1: Out of Band emission at antenna terminals –HSDPA CH Low

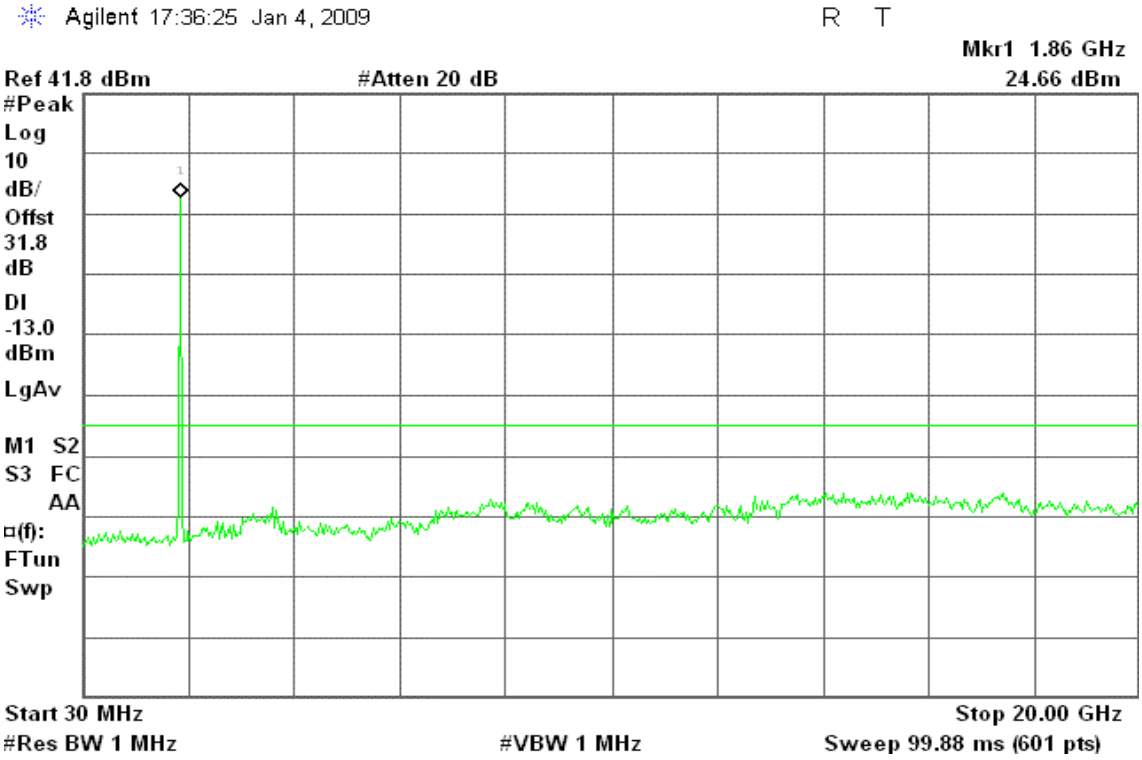


Figure 15-2: Out of Band emission at antenna terminals –HSDPA CH Mid

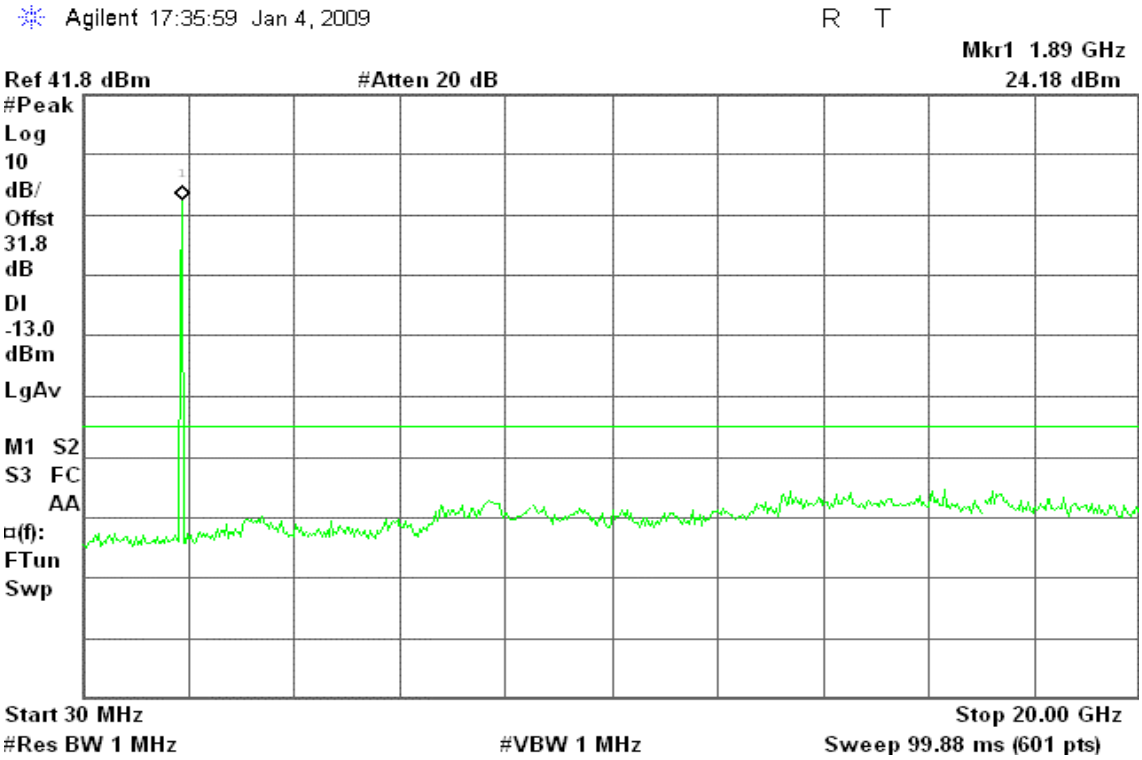
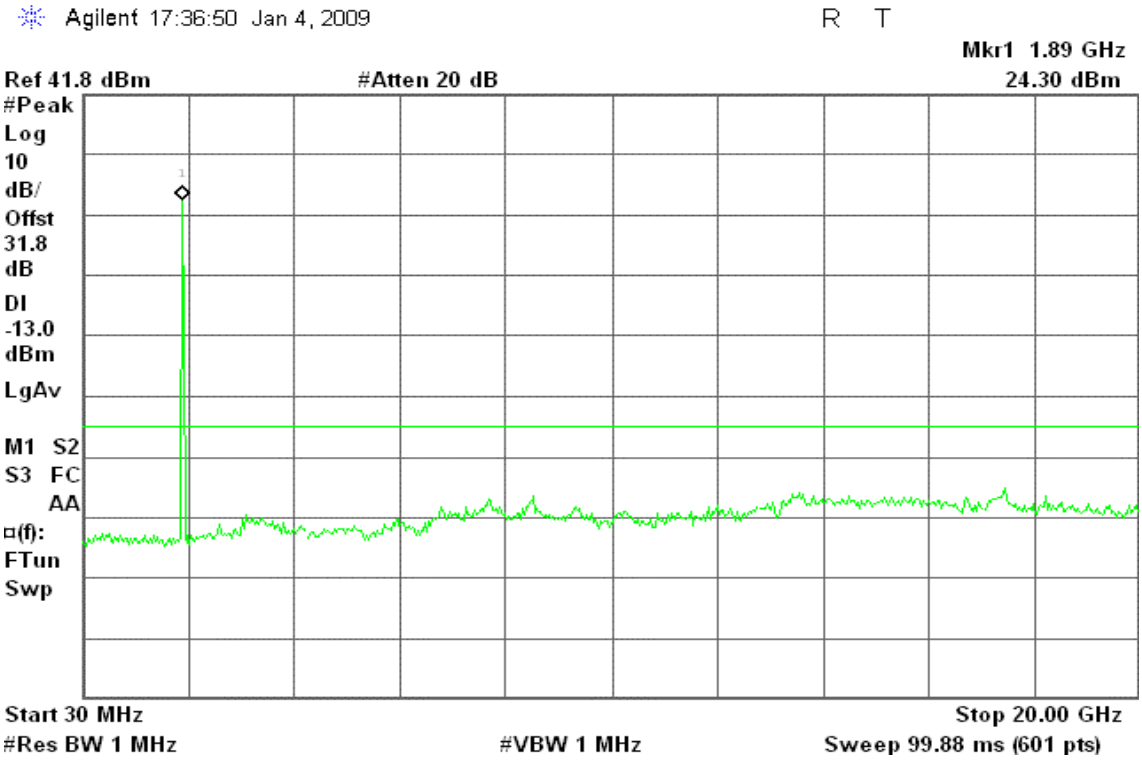


Figure 15-3: Out of Band emission at antenna terminals –HSDPA CH High



WCDMA / HSDPA Band V

Figure 15-4: Out of Band emission at antenna terminals –HSDPA CH Low

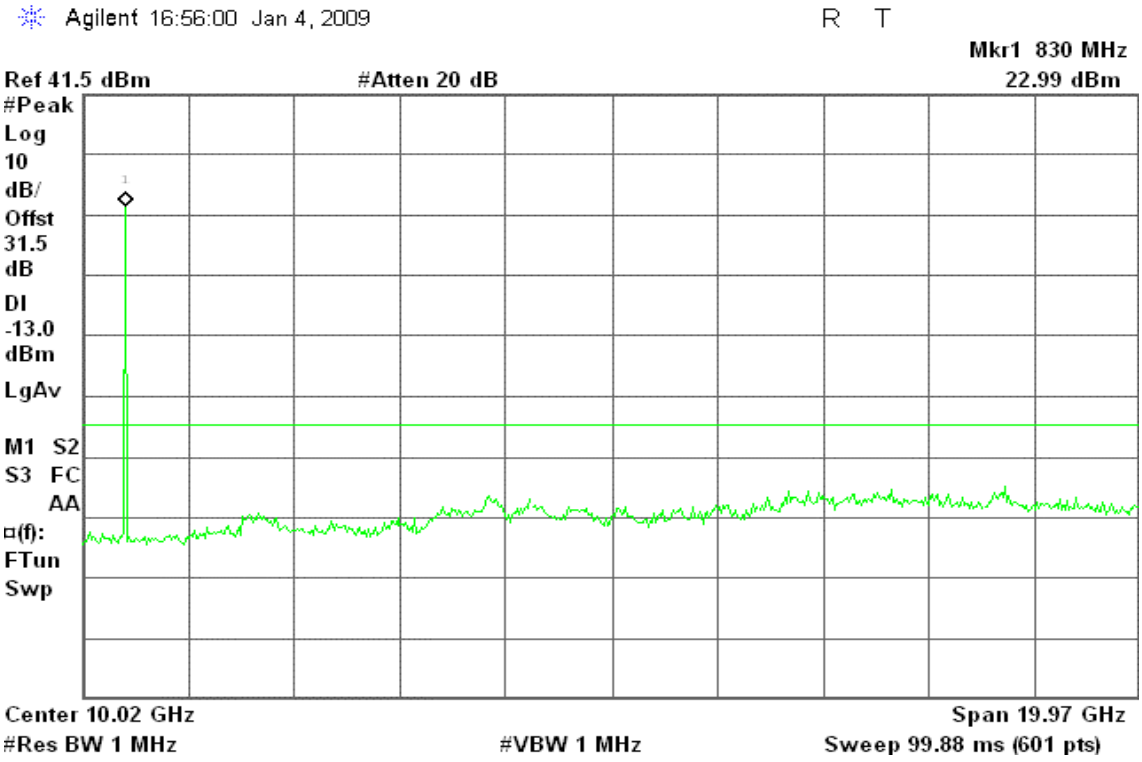


Figure 15-5: Out of Band emission at antenna terminals –HSDPA CH Mid

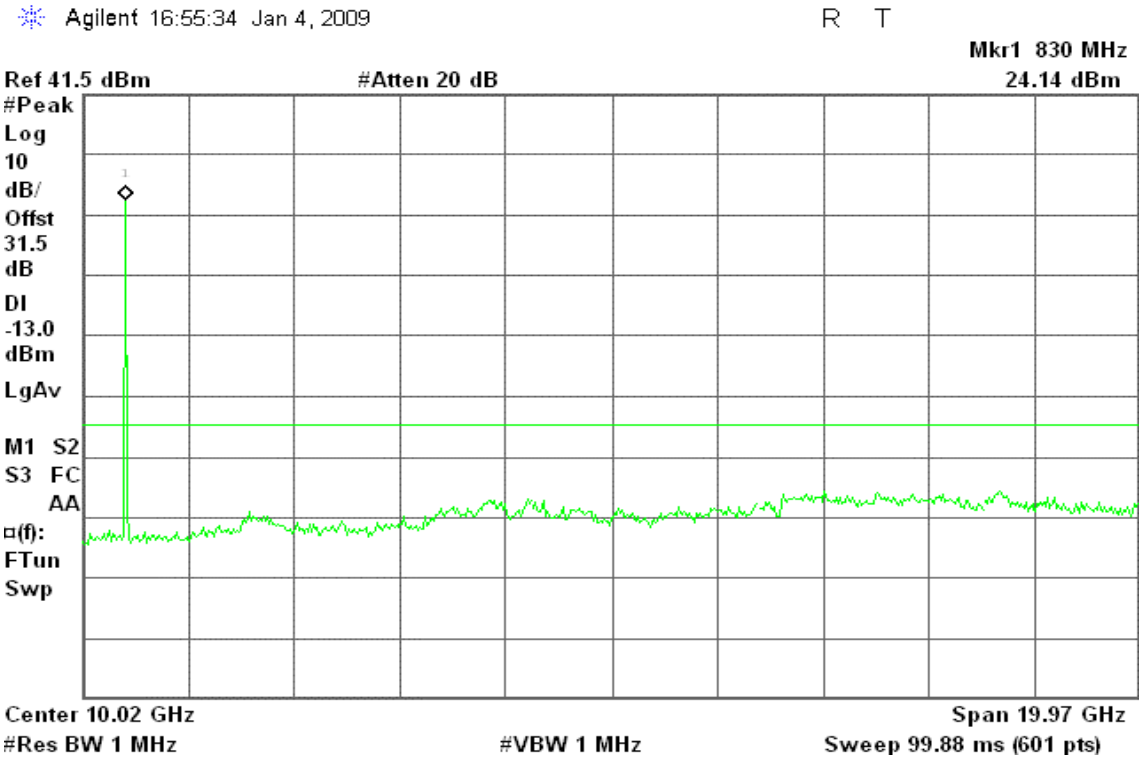
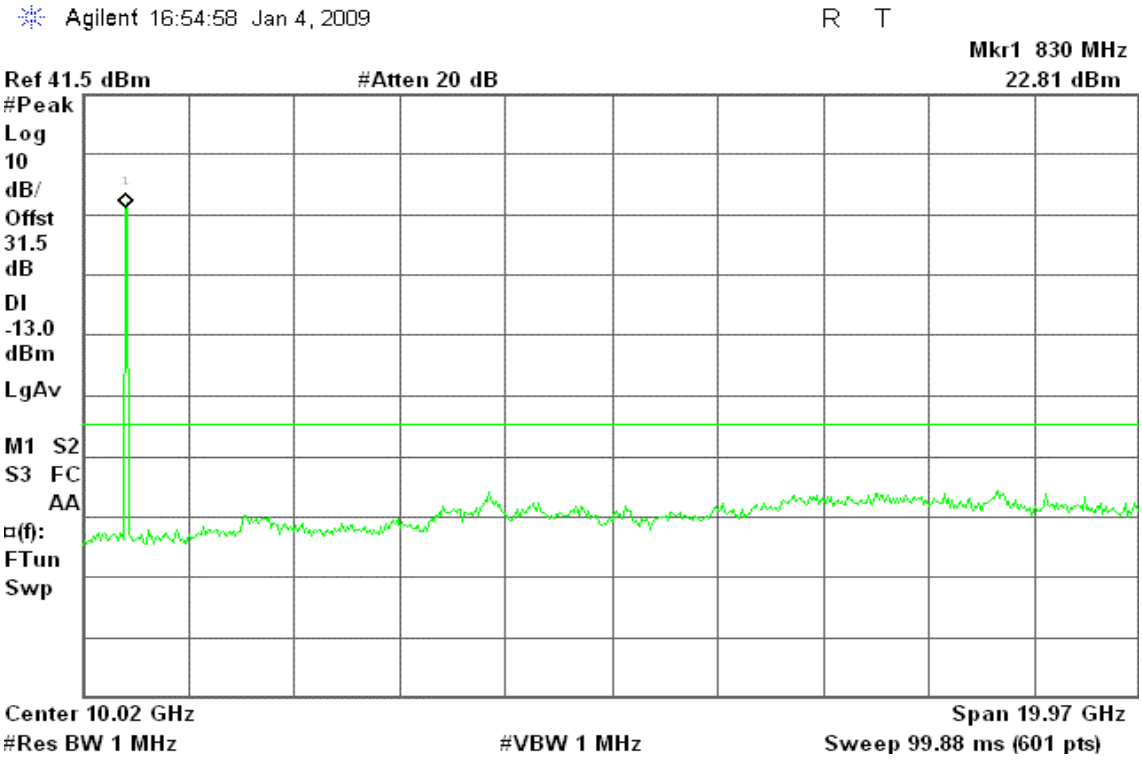


Figure 15-6: Out of Band emission at antenna terminals –HSDPA CH High



WCDMA / HSDPA Band II

Figure 16-1: Band Edge emissions –HSDPA CH Low

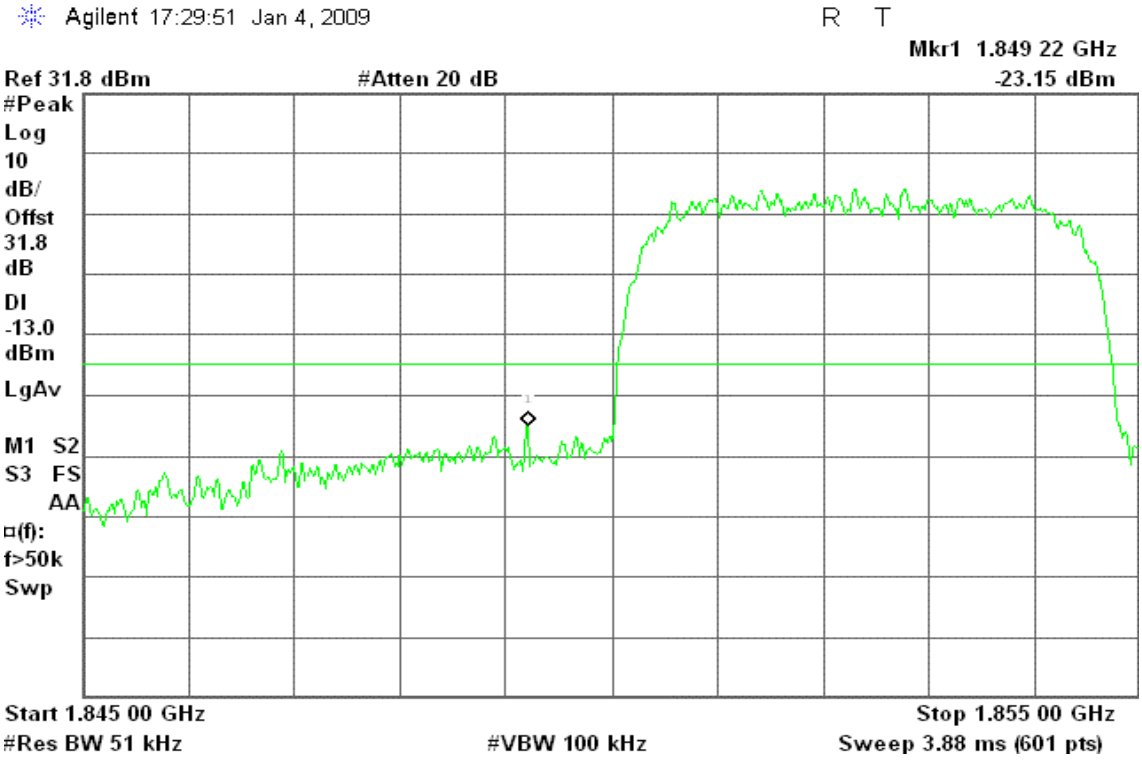
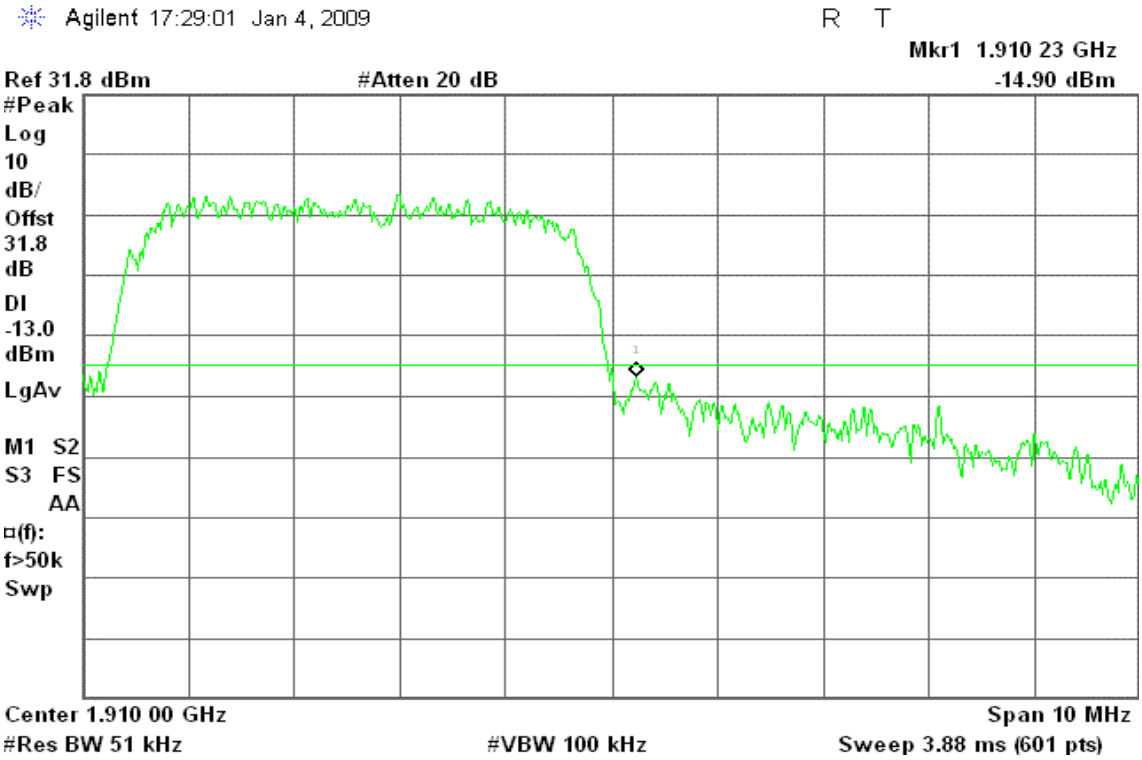


Figure 16-2: Band Edge emissions –HSDPA CH High



WCDMA / HSDPA Band V

Figure 16-3: Band Edge emissions –HSDPA CH Low

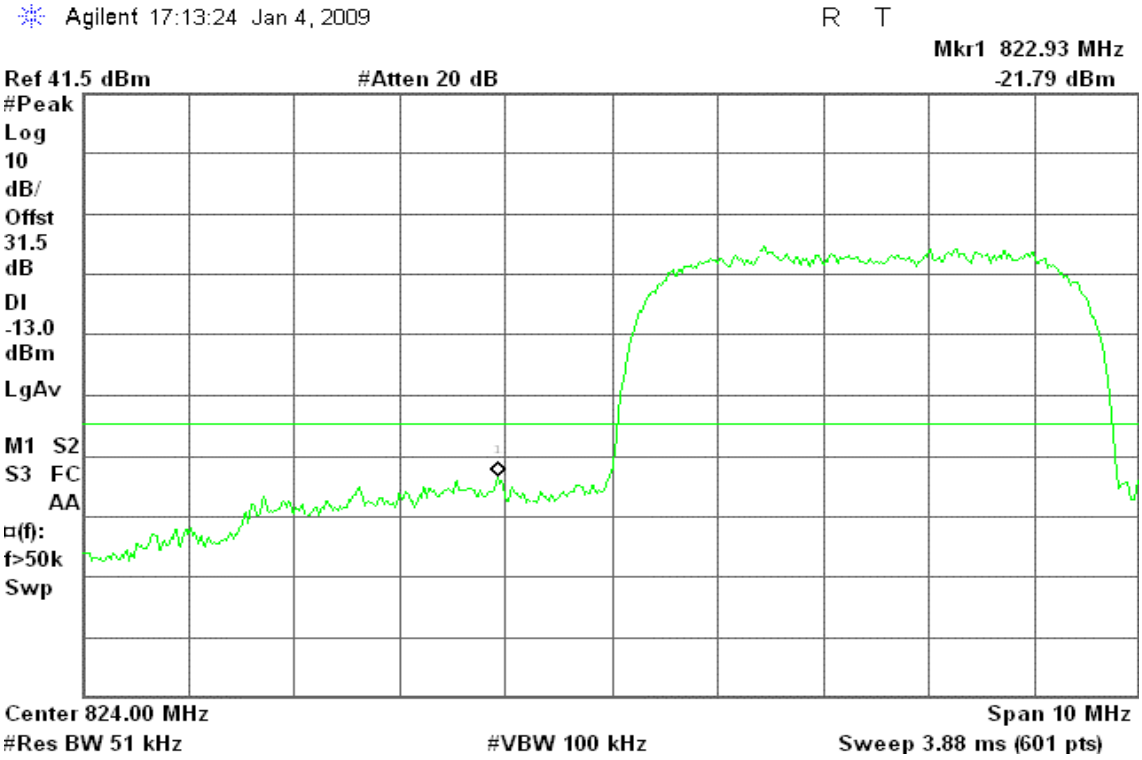
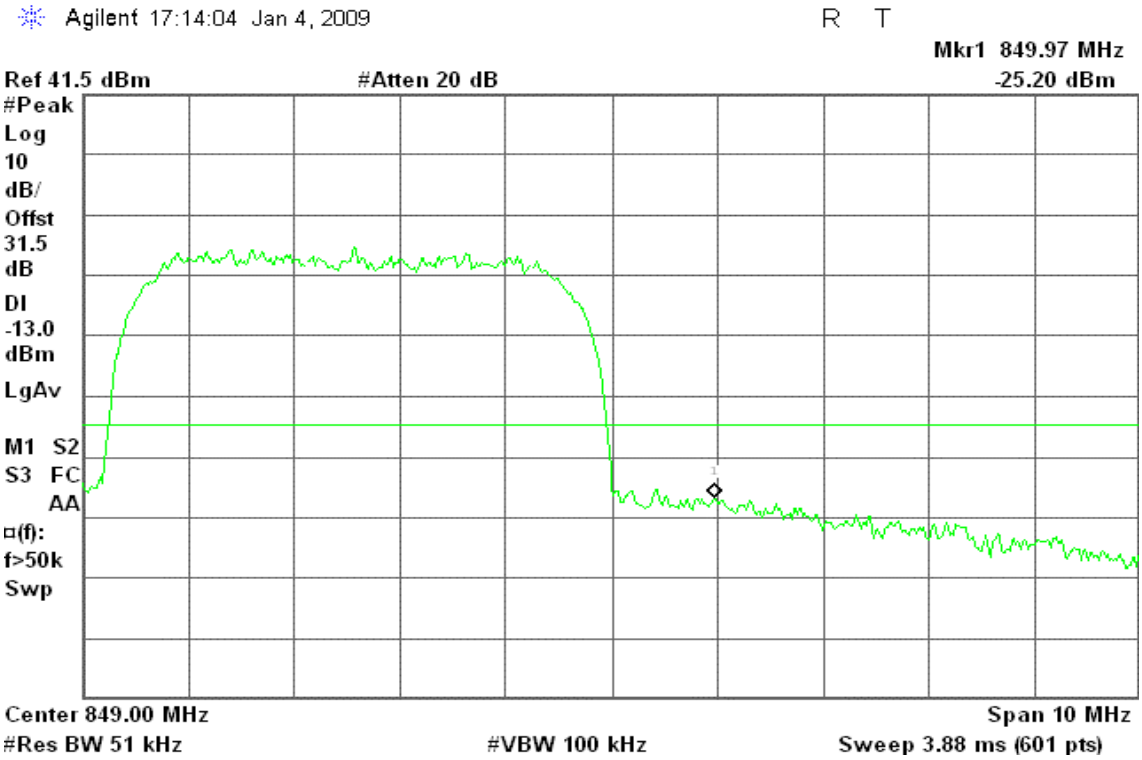


Figure 16-4: Band Edge emissions –HSDPA CH High



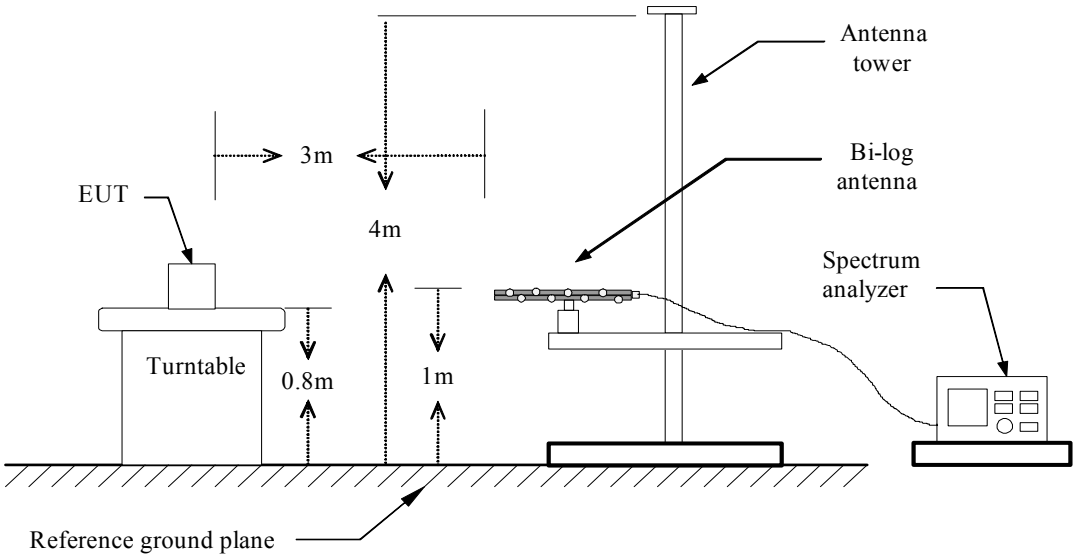
7.6FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

LIMIT

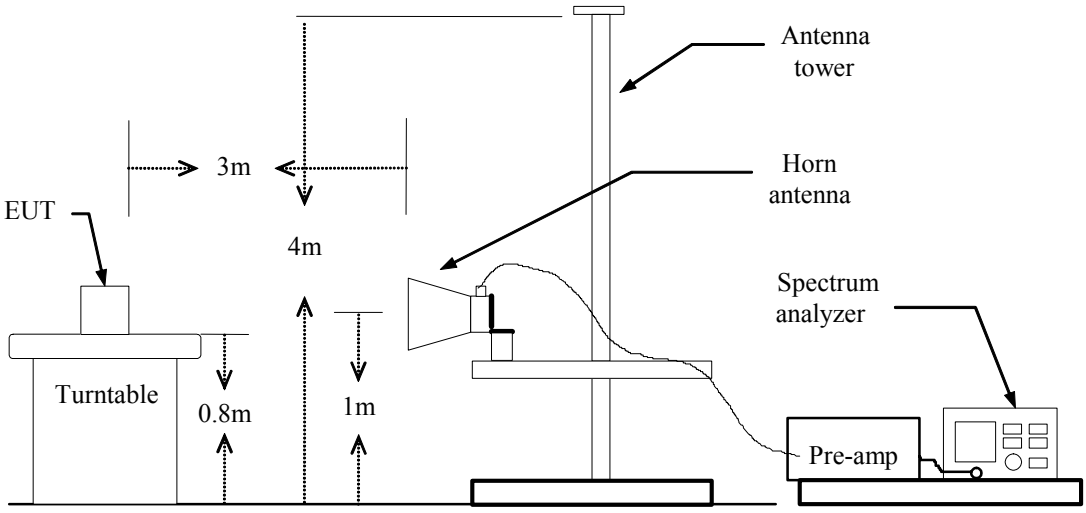
According to FCC §2.1053, RSS-132 (4.6) & RSS-133 (6.5).

Test Configuration

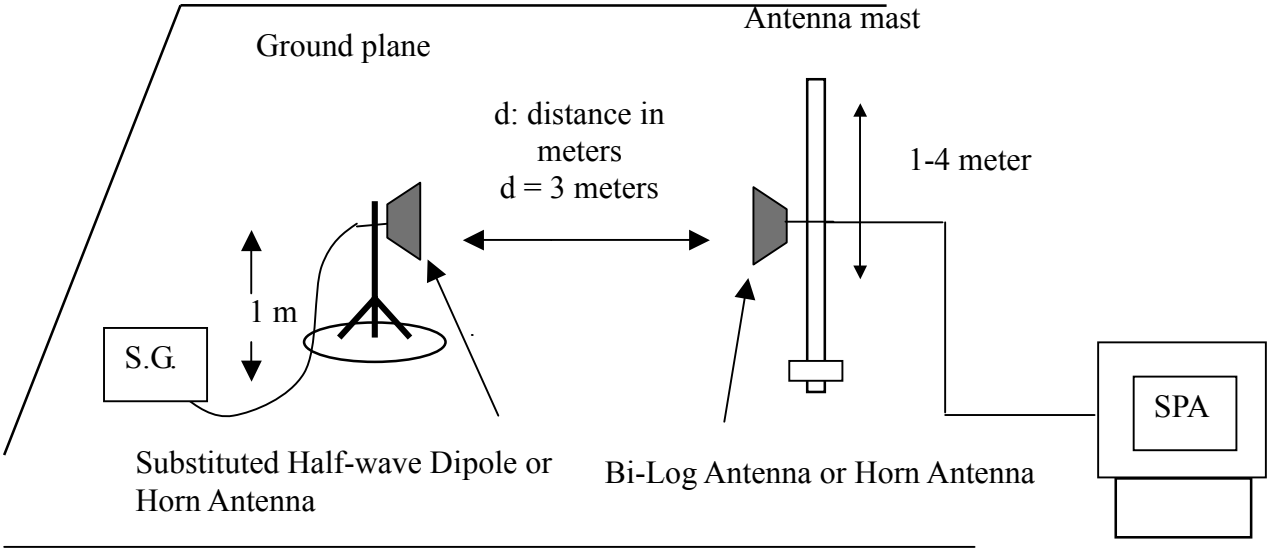
Below 1 GHz



Above 1 GHz



Substituted Method Test Set-up



TEST PROCEDURE

The EUT was placed on a non-conductive, the measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission were identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

ERP = S.G. output (dBm) + Antenna Gain (dBd) – Cable (dB)

EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable (dB)

TEST RESULTS

Refer to the attached tabular data sheets.

Radiated Spurious Emission Measurement Result / Below 1GHz

Operation Mode: GSM 850 / TX / CH 128 **Test Date:** December 3, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
118.27	V	-46.17	-14.25	-60.42	-13.00	-47.42
162.89	V	-47.39	-13.38	-60.77	-13.00	-47.77
252.13	V	-45.62	-13.95	-59.57	-13.00	-46.57
341.37	V	-48.87	-12.65	-61.52	-13.00	-48.52
429.64	V	-50.29	-9.48	-59.77	-13.00	-46.77
652.74	V	-56.47	-6.11	-62.58	-13.00	-49.58
32.91	H	-41.70	-17.31	-59.01	-13.00	-46.01
57.16	H	-48.08	-15.33	-63.41	-13.00	-50.41
120.21	H	-45.09	-14.13	-59.22	-13.00	-46.22
165.80	H	-44.04	-12.94	-56.98	-13.00	-43.98
247.28	H	-44.86	-14.32	-59.18	-13.00	-46.18
652.74	H	-49.10	-5.88	-54.98	-13.00	-41.98

Remark:

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GSM 850 / TX / CH 190 **Test Date:** December 3, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
119.24	V	-43.28	-14.08	-57.36	-13.00	-44.36
167.74	V	-44.48	-13.51	-57.99	-13.00	-44.99
206.54	V	-43.95	-14.52	-58.47	-13.00	-45.47
252.13	V	-44.48	-13.95	-58.43	-13.00	-45.43
429.64	V	-51.89	-9.48	-61.37	-13.00	-48.37
652.74	V	-57.75	-6.11	-63.85	-13.00	-50.85
32.91	H	-41.80	-17.31	-59.11	-13.00	-46.11
119.24	H	-44.15	-14.26	-58.41	-13.00	-45.41
162.89	H	-42.23	-13.18	-55.41	-13.00	-42.41
248.25	H	-44.46	-14.37	-58.83	-13.00	-45.83
652.74	H	-48.93	-5.88	-54.81	-13.00	-41.81
672.14	H	-53.25	-5.98	-59.23	-13.00	-46.23

Remark:

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GSM 850 / TX / CH 251 **Test Date:** December 3, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
119.24	V	-39.98	-14.08	-54.05	-13.00	-41.05
166.77	V	-38.59	-13.48	-52.07	-13.00	-39.07
206.54	V	-37.61	-14.52	-52.14	-13.00	-39.14
248.25	V	-38.65	-13.88	-52.53	-13.00	-39.53
293.84	V	-43.89	-11.69	-55.59	-13.00	-42.59
339.43	V	-45.71	-12.70	-58.41	-13.00	-45.41
32.91	H	-40.08	-17.31	-57.38	-13.00	-44.38
121.18	H	-41.01	-14.16	-55.17	-13.00	-42.17
166.77	H	-40.63	-12.85	-53.48	-13.00	-40.48
206.54	H	-42.80	-13.39	-56.19	-13.00	-43.19
251.16	H	-42.28	-14.40	-56.69	-13.00	-43.69
652.74	H	-47.84	-5.88	-53.72	-13.00	-40.72

Remark:

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 850 / TX / CH 128 **Test Date:** December 3, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
118.27	V	-46.07	-14.25	-60.32	-13.00	-47.32
167.74	V	-46.70	-13.51	-60.21	-13.00	-47.21
248.25	V	-46.39	-13.88	-60.27	-13.00	-47.27
294.81	V	-49.88	-11.80	-61.68	-13.00	-48.68
429.64	V	-50.54	-9.48	-60.02	-13.00	-47.02
652.74	V	-58.47	-6.11	-64.57	-13.00	-51.57
163.86	H	-44.58	-13.10	-57.68	-13.00	-44.68
206.54	H	-48.04	-13.39	-61.43	-13.00	-48.43
250.19	H	-46.17	-14.44	-60.61	-13.00	-47.61
429.64	H	-50.46	-9.49	-59.96	-13.00	-46.96
652.74	H	-50.34	-5.88	-56.22	-13.00	-43.22
672.14	H	-52.78	-5.98	-58.76	-13.00	-45.76

Remark:

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 850 / TX / CH 190 **Test Date:** December 3, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
119.24	V	-43.30	-14.08	-57.38	-13.00	-44.38
165.80	V	-44.16	-13.46	-57.61	-13.00	-44.61
206.54	V	-43.77	-14.52	-58.29	-13.00	-45.29
247.28	V	-44.51	-13.82	-58.32	-13.00	-45.32
293.84	V	-48.62	-11.69	-60.31	-13.00	-47.31
339.43	V	-49.69	-12.70	-62.40	-13.00	-49.40
120.21	H	-43.56	-14.13	-57.69	-13.00	-44.69
166.77	H	-42.95	-12.85	-55.80	-13.00	-42.80
206.54	H	-45.75	-13.39	-59.14	-13.00	-46.14
250.19	H	-44.77	-14.44	-59.21	-13.00	-46.21
293.84	H	-49.08	-12.21	-61.29	-13.00	-48.29
652.74	H	-50.92	-5.88	-56.80	-13.00	-43.80

Remark:

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 850 / TX / CH 251 **Test Date:** December 3, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
117.30	V	-42.83	-14.43	-57.25	-13.00	-44.25
161.92	V	-44.29	-13.35	-57.64	-13.00	-44.64
206.54	V	-44.22	-14.52	-58.74	-13.00	-45.74
250.19	V	-42.96	-13.99	-56.95	-13.00	-43.95
293.84	V	-48.14	-11.69	-59.83	-13.00	-46.83
429.64	V	-50.91	-9.48	-60.39	-13.00	-47.39
120.21	H	-44.39	-14.13	-58.52	-13.00	-45.52
165.80	H	-44.08	-12.94	-57.02	-13.00	-44.02
205.57	H	-47.80	-13.17	-60.97	-13.00	-47.97
251.16	H	-45.71	-14.40	-60.12	-13.00	-47.12
429.64	H	-51.01	-9.49	-60.51	-13.00	-47.51
652.74	H	-50.13	-5.88	-56.01	-13.00	-43.01

Remark:

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GSM 1900 / TX / CH 512 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
122.15	V	-52.77	-13.72	-66.49	-13.00	-53.49
161.92	V	-50.12	-13.35	-63.47	-13.00	-50.47
208.48	V	-46.54	-14.93	-61.47	-13.00	-48.47
253.10	V	-47.88	-13.93	-61.81	-13.00	-48.81
295.78	V	-51.12	-11.90	-63.02	-13.00	-50.02
338.46	V	-56.00	-12.71	-68.71	-13.00	-55.71
31.94	H	-42.30	-18.25	-60.55	-13.00	-47.55
163.86	H	-53.33	-13.10	-66.44	-13.00	-53.44
207.51	H	-52.47	-13.61	-66.09	-13.00	-53.09
251.16	H	-50.05	-14.40	-64.46	-13.00	-51.46
293.84	H	-55.00	-12.21	-67.21	-13.00	-54.21
336.52	H	-55.39	-13.15	-68.54	-13.00	-55.54

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GSM 1900 / TX / CH 661 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
121.18	V	-52.54	-13.82	-66.36	-13.00	-53.36
163.86	V	-48.35	-13.40	-61.76	-13.00	-48.76
206.54	V	-47.00	-14.52	-61.52	-13.00	-48.52
251.16	V	-47.79	-13.97	-61.76	-13.00	-48.76
292.87	V	-51.01	-11.59	-62.60	-13.00	-49.60
339.43	V	-56.29	-12.70	-68.99	-13.00	-55.99
31.94	H	-42.26	-18.25	-60.51	-13.00	-47.51
164.83	H	-53.87	-13.02	-66.89	-13.00	-53.89
206.54	H	-51.38	-13.39	-64.77	-13.00	-51.77
250.19	H	-50.54	-14.44	-64.98	-13.00	-51.98
297.72	H	-56.11	-12.73	-68.84	-13.00	-55.84
341.37	H	-55.63	-13.08	-68.71	-13.00	-55.71

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GSM 1900 / TX / CH 810 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
121.18	V	-52.62	-13.82	-66.44	-13.00	-53.44
166.77	V	-48.51	-13.48	-61.99	-13.00	-48.99
207.51	V	-45.95	-14.72	-60.68	-13.00	-47.68
254.07	V	-47.29	-13.91	-61.20	-13.00	-48.20
292.87	V	-51.31	-11.59	-62.90	-13.00	-49.90
336.52	V	-56.02	-12.72	-68.74	-13.00	-55.74
32.91	H	-42.63	-17.31	-59.93	-13.00	-46.93
163.86	H	-53.43	-13.10	-66.53	-13.00	-53.53
207.51	H	-50.07	-13.61	-63.68	-13.00	-50.68
250.19	H	-48.92	-14.44	-63.37	-13.00	-50.37
294.81	H	-54.31	-12.34	-66.65	-13.00	-53.65
383.08	H	-56.64	-11.26	-67.90	-13.00	-54.90

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 1900 / TX / CH 512 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
122.15	V	-52.42	-13.72	-66.14	-13.00	-53.14
166.77	V	-49.93	-13.48	-63.42	-13.00	-50.42
208.48	V	-46.96	-14.93	-61.89	-13.00	-48.89
251.16	V	-47.90	-13.97	-61.87	-13.00	-48.87
294.81	V	-51.58	-11.80	-63.38	-13.00	-50.38
340.40	V	-56.51	-12.69	-69.19	-13.00	-56.19
31.94	H	-41.05	-18.25	-59.31	-13.00	-46.31
163.86	H	-54.17	-13.10	-67.27	-13.00	-54.27
205.57	H	-53.70	-13.17	-66.87	-13.00	-53.87
251.16	H	-50.37	-14.40	-64.78	-13.00	-51.78
295.78	H	-56.01	-12.47	-68.48	-13.00	-55.48
337.49	H	-55.33	-13.15	-68.48	-13.00	-55.48

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 1900 / TX / CH 661 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
121.18	V	-52.19	-13.82	-66.01	-13.00	-53.01
163.86	V	-48.79	-13.40	-62.19	-13.00	-49.19
208.48	V	-46.80	-14.93	-61.73	-13.00	-48.73
252.13	V	-47.82	-13.95	-61.77	-13.00	-48.77
295.78	V	-51.35	-11.90	-63.25	-13.00	-50.25
336.52	V	-56.16	-12.72	-68.88	-13.00	-55.88
32.91	H	-46.31	-17.31	-63.62	-13.00	-50.62
163.86	H	-54.60	-13.10	-67.70	-13.00	-54.70
209.45	H	-51.51	-14.06	-65.57	-13.00	-52.57
251.16	H	-49.98	-14.40	-64.38	-13.00	-51.38
295.78	H	-55.63	-12.47	-68.10	-13.00	-55.10
383.08	H	-56.75	-11.26	-68.01	-13.00	-55.01

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 1900 / TX / CH 810 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
121.18	V	-52.12	-13.82	-65.94	-13.00	-52.94
163.86	V	-48.06	-13.40	-61.47	-13.00	-48.47
209.45	V	-46.02	-15.13	-61.14	-13.00	-48.14
250.19	V	-48.07	-13.99	-62.06	-13.00	-49.06
292.87	V	-51.45	-11.59	-63.04	-13.00	-50.04
344.28	V	-56.84	-12.55	-69.39	-13.00	-56.39
167.74	H	-55.68	-12.77	-68.45	-13.00	-55.45
208.48	H	-50.77	-13.84	-64.61	-13.00	-51.61
251.16	H	-50.04	-14.40	-64.44	-13.00	-51.44
295.78	H	-56.29	-12.47	-68.76	-13.00	-55.76
342.34	H	-55.76	-13.03	-68.79	-13.00	-55.79
383.08	H	-57.28	-11.26	-68.55	-13.00	-55.55

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 850 / TX / CH 128 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
119.24	V	-44.57	-14.08	-58.65	-13.00	-45.65
163.86	V	-46.31	-13.40	-59.72	-13.00	-46.72
251.16	V	-46.82	-13.97	-60.79	-13.00	-47.79
294.81	V	-49.07	-11.80	-60.87	-13.00	-47.87
341.37	V	-49.40	-12.65	-62.06	-13.00	-49.06
429.64	V	-53.20	-9.48	-62.68	-13.00	-49.68
119.24	H	-45.48	-14.26	-59.73	-13.00	-46.73
164.83	H	-44.77	-13.02	-57.79	-13.00	-44.79
250.19	H	-46.44	-14.44	-60.89	-13.00	-47.89
429.64	H	-49.00	-9.49	-58.49	-13.00	-45.49
652.74	H	-49.95	-5.88	-55.83	-13.00	-42.83
672.14	H	-53.49	-5.98	-59.47	-13.00	-46.47

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 850 / TX / CH 190 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
119.24	V	-44.53	-14.08	-58.61	-13.00	-45.61
166.77	V	-44.56	-13.48	-58.05	-13.00	-45.05
206.54	V	-44.10	-14.52	-58.62	-13.00	-45.62
251.16	V	-44.84	-13.97	-58.80	-13.00	-45.80
294.81	V	-49.34	-11.80	-61.14	-13.00	-48.14
429.64	V	-50.57	-9.48	-60.05	-13.00	-47.05
162.89	H	-45.24	-13.18	-58.43	-13.00	-45.43
249.22	H	-46.80	-14.41	-61.21	-13.00	-48.21
429.64	H	-51.31	-9.49	-60.80	-13.00	-47.80
552.83	H	-56.11	-7.46	-63.57	-13.00	-50.57
652.74	H	-50.64	-5.88	-56.51	-13.00	-43.51
672.14	H	-53.59	-5.98	-59.57	-13.00	-46.57

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 850 / TX / CH 251 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
120.21	V	-43.30	-13.92	-57.22	-13.00	-44.22
165.80	V	-43.39	-13.46	-56.84	-13.00	-43.84
206.54	V	-44.02	-14.52	-58.54	-13.00	-45.54
252.13	V	-42.40	-13.95	-56.35	-13.00	-43.35
292.87	V	-48.26	-11.59	-59.85	-13.00	-46.85
429.64	V	-51.37	-9.48	-60.85	-13.00	-47.85
120.21	H	-45.05	-14.13	-59.18	-13.00	-46.18
162.89	H	-44.40	-13.18	-57.58	-13.00	-44.58
205.57	H	-47.62	-13.17	-60.78	-13.00	-47.78
429.64	H	-50.87	-9.49	-60.36	-13.00	-47.36
652.74	H	-50.82	-5.88	-56.70	-13.00	-43.70
672.14	H	-53.66	-5.98	-59.64	-13.00	-46.64

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 1900 / TX / CH 512 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Jerry Lin

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
39.70	V	-56.31	-13.50	-69.81	-13.00	-56.81
121.18	V	-53.18	-13.82	-67.00	-13.00	-54.00
162.89	V	-49.49	-13.38	-62.87	-13.00	-49.87
207.51	V	-47.04	-14.72	-61.76	-13.00	-48.76
250.19	V	-48.32	-13.99	-62.30	-13.00	-49.30
292.87	V	-50.93	-11.59	-62.52	-13.00	-49.52
32.91	H	-50.88	-17.31	-68.18	-13.00	-55.18
162.89	H	-54.34	-13.18	-67.53	-13.00	-54.53
204.60	H	-53.10	-12.94	-66.04	-13.00	-53.04
250.19	H	-50.04	-14.44	-64.48	-13.00	-51.48
296.75	H	-55.65	-12.60	-68.25	-13.00	-55.25
384.05	H	-56.82	-11.21	-68.03	-13.00	-55.03

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 1900 / TX / CH 661 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
32.91	V	-50.25	-17.07	-67.33	-13.00	-54.33
120.21	V	-53.73	-13.92	-67.65	-13.00	-54.65
163.86	V	-49.67	-13.40	-63.07	-13.00	-50.07
206.54	V	-53.13	-14.52	-67.65	-13.00	-54.65
249.22	V	-54.51	-13.94	-68.45	-13.00	-55.45
293.84	V	-55.44	-11.69	-67.14	-13.00	-54.14
33.88	H	-42.86	-16.36	-59.22	-13.00	-46.22
163.86	H	-54.99	-13.10	-68.09	-13.00	-55.09
207.51	H	-51.88	-13.61	-65.49	-13.00	-52.49
252.13	H	-50.62	-14.37	-64.99	-13.00	-51.99
295.78	H	-55.44	-12.47	-67.91	-13.00	-54.91
335.55	H	-56.56	-13.16	-69.72	-13.00	-56.72

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 1900 / TX / CH 810 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
121.18	V	-52.90	-13.82	-66.72	-13.00	-53.72
163.86	V	-50.09	-13.40	-63.50	-13.00	-50.50
206.54	V	-48.96	-14.52	-63.49	-13.00	-50.49
250.19	V	-48.71	-13.99	-62.70	-13.00	-49.70
292.87	V	-52.41	-11.59	-64.00	-13.00	-51.00
384.05	V	-57.04	-11.57	-68.61	-13.00	-55.61
30.97	H	-42.18	-19.20	-61.37	-13.00	-48.37
166.77	H	-55.24	-12.85	-68.10	-13.00	-55.10
207.51	H	-52.38	-13.61	-66.00	-13.00	-53.00
250.19	H	-50.76	-14.44	-65.21	-13.00	-52.21
294.81	H	-56.56	-12.34	-68.90	-13.00	-55.90
340.40	H	-57.37	-13.13	-70.50	-13.00	-57.50

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band II / TX / CH 9262 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
57.16	V	-52.91	-15.80	-68.71	-13.00	-55.71
122.15	V	-53.65	-13.72	-67.38	-13.00	-54.38
165.80	V	-51.27	-13.46	-64.73	-13.00	-51.73
208.48	V	-46.38	-14.93	-61.31	-13.00	-48.31
252.13	V	-50.06	-13.95	-64.01	-13.00	-51.01
293.84	V	-52.33	-11.69	-64.02	-13.00	-51.02
122.15	H	-58.07	-14.19	-72.26	-13.00	-59.26
166.77	H	-54.79	-12.85	-67.65	-13.00	-54.65
207.51	H	-52.19	-13.61	-65.80	-13.00	-52.80
294.81	H	-55.51	-12.34	-67.85	-13.00	-54.85
342.34	H	-55.45	-13.03	-68.48	-13.00	-55.48
474.26	H	-64.48	-8.50	-72.99	-13.00	-59.99

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band II / TX / CH 9400 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
57.16	V	-53.19	-15.80	-68.99	-13.00	-55.99
121.18	V	-54.37	-13.82	-68.19	-13.00	-55.19
165.80	V	-50.82	-13.46	-64.28	-13.00	-51.28
208.48	V	-45.58	-14.93	-60.51	-13.00	-47.51
254.07	V	-50.14	-13.91	-64.05	-13.00	-51.05
293.84	V	-51.75	-11.69	-63.44	-13.00	-50.44
121.18	H	-60.21	-14.16	-74.37	-13.00	-61.37
165.80	H	-56.55	-12.94	-69.49	-13.00	-56.49
207.51	H	-54.63	-13.61	-68.25	-13.00	-55.25
254.07	H	-56.56	-14.29	-70.85	-13.00	-57.85
296.75	H	-57.31	-12.60	-69.92	-13.00	-56.92
344.28	H	-58.22	-12.93	-71.16	-13.00	-58.16

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band II / TX / CH 9538 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
122.15	V	-54.46	-13.72	-68.18	-13.00	-55.18
166.77	V	-52.36	-13.48	-65.85	-13.00	-52.85
209.45	V	-47.49	-15.13	-62.62	-13.00	-49.62
254.07	V	-51.23	-13.91	-65.14	-13.00	-52.14
293.84	V	-53.39	-11.69	-65.09	-13.00	-52.09
341.37	V	-56.34	-12.65	-68.99	-13.00	-55.99
121.18	H	-60.40	-14.16	-74.56	-13.00	-61.56
168.71	H	-57.56	-12.69	-70.25	-13.00	-57.25
210.42	H	-54.03	-14.19	-68.22	-13.00	-55.22
251.16	H	-55.99	-14.40	-70.40	-13.00	-57.40
293.84	H	-57.37	-12.21	-69.57	-13.00	-56.57
342.34	H	-56.47	-13.03	-69.50	-13.00	-56.50

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band V / TX / CH 4132 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
32.91	V	-43.11	-17.07	-60.19	-13.00	-47.19
121.18	V	-55.27	-13.82	-69.09	-13.00	-56.09
164.83	V	-52.60	-13.43	-66.03	-13.00	-53.03
207.51	V	-51.58	-14.72	-66.31	-13.00	-53.31
254.07	V	-52.05	-13.91	-65.96	-13.00	-52.96
294.81	V	-54.94	-11.80	-66.74	-13.00	-53.74
107.60	H	-56.41	-16.61	-73.02	-13.00	-60.02
121.18	H	-59.98	-14.16	-74.14	-13.00	-61.14
166.77	H	-58.06	-12.85	-70.91	-13.00	-57.91
206.54	H	-55.67	-13.39	-69.06	-13.00	-56.06
251.16	H	-53.31	-14.40	-67.72	-13.00	-54.72
382.11	H	-58.43	-11.31	-69.74	-13.00	-56.74

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band V / TX / CH 4183 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
31.94	V	-41.38	-17.67	-59.05	-13.00	-46.05
122.15	V	-55.15	-13.72	-68.87	-13.00	-55.87
163.86	V	-51.35	-13.40	-64.76	-13.00	-51.76
207.51	V	-50.33	-14.72	-65.05	-13.00	-52.05
249.22	V	-50.95	-13.94	-64.89	-13.00	-51.89
293.84	V	-52.58	-11.69	-64.28	-13.00	-51.28
33.88	H	-46.22	-16.36	-62.58	-13.00	-49.58
127.00	H	-54.83	-14.36	-69.19	-13.00	-56.19
166.77	H	-58.02	-12.85	-70.88	-13.00	-57.88
208.48	H	-54.91	-13.84	-68.75	-13.00	-55.75
251.16	H	-52.70	-14.40	-67.10	-13.00	-54.10
294.81	H	-58.38	-12.34	-70.72	-13.00	-57.72

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band V / TX / CH 4233 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
31.94	V	-41.25	-17.67	-58.92	-13.00	-45.92
122.15	V	-55.50	-13.72	-69.22	-13.00	-56.22
165.80	V	-50.55	-13.46	-64.01	-13.00	-51.01
207.51	V	-49.52	-14.72	-64.25	-13.00	-51.25
249.22	V	-49.69	-13.94	-63.63	-13.00	-50.63
295.78	V	-52.52	-11.90	-64.42	-13.00	-51.42
32.91	H	-43.88	-17.31	-61.19	-13.00	-48.19
163.86	H	-56.55	-13.10	-69.65	-13.00	-56.65
207.51	H	-54.86	-13.61	-68.47	-13.00	-55.47
248.25	H	-52.61	-14.37	-66.97	-13.00	-53.97
295.78	H	-56.87	-12.47	-69.34	-13.00	-56.34
340.40	H	-57.20	-13.13	-70.33	-13.00	-57.33

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode:	WCDMA / HSDPA Band II / TX / CH 9262	**Test Date:**	December 24, 2008
Temperature:	24°C	**Tested by:**	Mark Yang
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
121.18	V	-54.96	-13.82	-68.78	-13.00	-55.78
165.80	V	-51.96	-13.46	-65.42	-13.00	-52.42
208.48	V	-46.97	-14.93	-61.89	-13.00	-48.89
252.13	V	-50.59	-13.95	-64.54	-13.00	-51.54
294.81	V	-53.48	-11.80	-65.28	-13.00	-52.28
342.34	V	-56.66	-12.62	-69.28	-13.00	-56.28
122.15	H	-59.89	-14.19	-74.08	-13.00	-61.08
165.80	H	-56.62	-12.94	-69.56	-13.00	-56.56
207.51	H	-54.08	-13.61	-67.70	-13.00	-54.70
252.13	H	-55.52	-14.37	-69.89	-13.00	-56.89
295.78	H	-57.01	-12.47	-69.48	-13.00	-56.48
343.31	H	-57.50	-12.98	-70.48	-13.00	-57.48

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode:	WCDMA / HSDPA Band II / TX / CH 9400	**Test Date:**	December 24, 2008
Temperature:	24°C	**Tested by:**	Mark Yang
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
121.18	V	-55.27	-13.82	-69.09	-13.00	-56.09
166.77	V	-52.86	-13.48	-66.34	-13.00	-53.34
209.45	V	-47.28	-15.13	-62.40	-13.00	-49.40
254.07	V	-51.29	-13.91	-65.20	-13.00	-52.20
295.78	V	-53.38	-11.90	-65.28	-13.00	-52.28
342.34	V	-57.04	-12.62	-69.66	-13.00	-56.66
120.21	H	-60.67	-14.13	-74.80	-13.00	-61.80
165.80	H	-56.37	-12.94	-69.30	-13.00	-56.30
207.51	H	-54.24	-13.61	-67.86	-13.00	-54.86
252.13	H	-56.47	-14.37	-70.83	-13.00	-57.83
295.78	H	-57.28	-12.47	-69.75	-13.00	-56.75
342.34	H	-57.06	-13.03	-70.09	-13.00	-57.09

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode:	WCDMA / HSDPA Band II / TX / CH 9538	**Test Date:**	December 24, 2008
Temperature:	24°C	**Tested by:**	Mark Yang
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
122.15	V	-55.31	-13.72	-69.03	-13.00	-56.03
166.77	V	-51.57	-13.48	-65.05	-13.00	-52.05
207.51	V	-47.53	-14.72	-62.25	-13.00	-49.25
294.81	V	-52.89	-11.80	-64.69	-13.00	-51.69
342.34	V	-56.90	-12.62	-69.52	-13.00	-56.52
386.96	V	-59.12	-11.39	-70.51	-13.00	-57.51
120.21	H	-59.68	-14.13	-73.80	-13.00	-60.80
165.80	H	-56.59	-12.94	-69.53	-13.00	-56.53
208.48	H	-53.81	-13.84	-67.65	-13.00	-54.65
252.13	H	-57.14	-14.37	-71.51	-13.00	-58.51
295.78	H	-56.15	-12.47	-68.62	-13.00	-55.62
343.31	H	-57.92	-12.98	-70.90	-13.00	-57.90

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA / HSDPA Band V / TX / CH 4132 **Test Date:** December 24, 2008

Temperature: 24°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
30.97	V	-40.50	-18.26	-58.76	-13.00	-45.76
121.18	V	-55.46	-13.82	-69.28	-13.00	-56.28
164.83	V	-50.39	-13.43	-63.82	-13.00	-50.82
206.54	V	-50.70	-14.52	-65.22	-13.00	-52.22
249.22	V	-50.72	-13.94	-64.66	-13.00	-51.66
293.84	V	-53.86	-11.69	-65.55	-13.00	-52.55
32.91	H	-48.84	-17.31	-66.15	-13.00	-53.15
102.75	H	-52.82	-17.93	-70.75	-13.00	-57.75
166.77	H	-58.16	-12.85	-71.02	-13.00	-58.02
206.54	H	-54.88	-13.39	-68.27	-13.00	-55.27
252.13	H	-52.31	-14.37	-66.68	-13.00	-53.68
340.40	H	-56.94	-13.13	-70.07	-13.00	-57.07

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA / HSDPA Band V / TX / CH 4183 **Test Date:** December 24, 2008

Temperature: 24°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
31.94	V	-41.58	-17.67	-59.24	-13.00	-46.24
122.15	V	-53.88	-13.72	-67.60	-13.00	-54.60
164.83	V	-49.44	-13.43	-62.87	-13.00	-49.87
207.51	V	-47.73	-14.72	-62.46	-13.00	-49.46
252.13	V	-47.89	-13.95	-61.84	-13.00	-48.84
293.84	V	-51.52	-11.69	-63.22	-13.00	-50.22
33.88	H	-45.56	-16.36	-61.92	-13.00	-48.92
127.97	H	-55.13	-14.39	-69.52	-13.00	-56.52
164.83	H	-55.17	-13.02	-68.19	-13.00	-55.19
207.51	H	-54.20	-13.61	-67.81	-13.00	-54.81
251.16	H	-51.64	-14.40	-66.04	-13.00	-53.04
382.11	H	-56.97	-11.31	-68.28	-13.00	-55.28

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA / HSDPA Band V / TX / CH 4233 **Test Date:** December 11, 2008

Temperature: 24°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
30.97	V	-38.12	-18.26	-56.37	-13.00	-43.37
120.21	V	-52.34	-13.92	-66.26	-13.00	-53.26
165.80	V	-47.89	-13.46	-61.34	-13.00	-48.34
206.54	V	-47.27	-14.52	-61.79	-13.00	-48.79
253.10	V	-46.26	-13.93	-60.19	-13.00	-47.19
293.84	V	-50.01	-11.69	-61.70	-13.00	-48.70
66.86	H	-43.68	-17.04	-60.71	-13.00	-47.71
86.26	H	-40.09	-21.33	-61.42	-13.00	-48.42
206.54	H	-50.98	-13.39	-64.37	-13.00	-51.37
252.13	H	-47.55	-14.37	-61.91	-13.00	-48.91
381.14	H	-54.00	-11.35	-65.35	-13.00	-52.35
452.92	H	-55.96	-9.00	-64.96	-13.00	-51.96

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Above 1GHz

Operation Mode: GSM 850 / TX / CH 128 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1651.00	V	-48.20	1.63	-46.58	-13.00	-33.58
2470.00	V	-51.33	4.75	-46.57	-13.00	-33.57
3296.00	V	-56.92	6.32	-50.61	-13.00	-37.61
4948.00	V	-59.71	8.80	-50.91	-13.00	-37.91
5396.00	V	-59.92	8.31	-51.61	-13.00	-38.61
N/A						
1651.00	H	-43.19	1.63	-41.56	-13.00	-28.56
2470.00	H	-54.09	4.74	-49.35	-13.00	-36.35
3296.00	H	-60.52	6.02	-54.50	-13.00	-41.50
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GSM 850 / TX / CH 190 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-45.64	1.64	-44.00	-13.00	-31.00
2512.00	V	-50.67	4.96	-45.71	-13.00	-32.71
3345.00	V	-59.71	6.41	-53.30	-13.00	-40.30
N/A						
1672.00	H	-39.88	1.66	-38.22	-13.00	-25.22
2512.00	H	-53.93	4.94	-48.99	-13.00	-35.99
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GSM 850 / TX / CH 251 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1700.00	V	-46.59	1.65	-44.94	-13.00	-31.94
2547.00	V	-55.22	5.02	-50.20	-13.00	-37.20
3394.00	V	-60.59	6.50	-54.09	-13.00	-41.09
N/A						
1700.00	H	-41.45	1.68	-39.77	-13.00	-26.77
2547.00	H	-56.58	4.98	-51.60	-13.00	-38.60
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 850 / TX / CH 128 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1651.00	V	-47.86	1.63	-46.24	-13.00	-33.24
2470.00	V	-49.94	4.75	-45.19	-13.00	-32.19
3296.00	V	-56.48	6.32	-50.16	-13.00	-37.16
4948.00	V	-59.01	8.80	-50.21	-13.00	-37.21
N/A						
1651.00	H	-42.45	1.63	-40.81	-13.00	-27.81
2470.00	H	-53.22	4.74	-48.48	-13.00	-35.48
3296.00	H	-59.39	6.02	-53.38	-13.00	-40.38
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 850 / TX / CH 190 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-45.42	1.64	-43.78	-13.00	-30.78
2512.00	V	-51.30	4.96	-46.33	-13.00	-33.33
3345.00	V	-58.74	6.41	-52.34	-13.00	-39.34
N/A						
1672.00	H	-39.34	1.66	-37.69	-13.00	-24.69
2512.00	H	-53.04	4.94	-48.10	-13.00	-35.10
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 850 / TX / CH 251 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1700.00	V	-46.38	1.65	-44.73	-13.00	-31.73
2547.00	V	-55.51	5.02	-50.49	-13.00	-37.49
3394.00	V	-59.88	6.50	-53.38	-13.00	-40.38
5095.00	V	-58.89	8.70	-50.19	-13.00	-37.19
N/A						
1700.00	H	-41.18	1.68	-39.50	-13.00	-26.50
2547.00	H	-58.45	4.98	-53.46	-13.00	-40.46
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GSM 1900 / TX / CH 512 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
2610.00	V	-59.95	5.12	-54.83	-13.00	-41.83
5550.00	V	-58.85	8.19	-50.66	-13.00	-37.66
N/A						
2988.00	H	-60.78	5.57	-55.21	-13.00	-42.21
3709.00	H	-61.70	6.73	-54.98	-13.00	-41.98
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GSM 1900 / TX / CH 661 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4689.00	V	-61.56	8.68	-52.88	-13.00	-39.88
N/A						
5270.00	H	-61.20	10.16	-51.03	-13.00	-38.03
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GSM 1900 / TX / CH 810 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3611.00	V	-60.37	7.17	-53.19	-13.00	-40.19
3821.00	V	-57.21	8.09	-49.12	-13.00	-36.12
N/A						
3821.00	H	-59.15	6.95	-52.20	-13.00	-39.20
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 1900 / TX / CH 512 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3772.00	V	-61.55	7.88	-53.67	-13.00	-40.67
N/A						
4094.00	H	-61.41	7.43	-53.97	-13.00	-40.97
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 1900 / TX / CH 661 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3891.00	V	-61.58	8.39	-53.18	-13.00	-40.18
5641.00	V	-58.46	8.23	-50.22	-13.00	-37.22
N/A						
4780.00	H	-60.77	9.07	-51.71	-13.00	-38.71
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 1900 / TX / CH 810 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3821.00	V	-57.44	8.09	-49.35	-13.00	-36.35
N/A						
3401.00	H	-60.81	6.17	-54.65	-13.00	-41.65
3821.00	H	-58.11	6.95	-51.16	-13.00	-38.16
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 850 / TX / CH 128 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1651.00	V	-53.45	1.63	-51.82	-13.00	-38.82
2470.00	V	-57.86	4.75	-53.11	-13.00	-40.11
N/A						
1651.00	H	-50.00	1.63	-48.36	-13.00	-35.36
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 850 / TX / CH 190 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-49.47	1.64	-47.83	-13.00	-34.83
2512.00	V	-56.88	4.96	-51.92	-13.00	-38.92
N/A						
1672.00	H	-45.39	1.66	-43.74	-13.00	-30.74
2183.00	H	-59.39	3.05	-56.34	-13.00	-43.34
2512.00	H	-57.38	4.94	-52.45	-13.00	-39.45
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 850 / TX / CH 251 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1700.00	V	-50.66	1.65	-49.01	-13.00	-36.01
N/A						
1700.00	H	-45.87	1.68	-44.19	-13.00	-31.19
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 1900 / TX / CH 512 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3576.00	V	-60.24	7.02	-53.22	-13.00	-40.22
N/A						
3401.00	H	-60.87	6.17	-54.70	-13.00	-41.70
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 1900 / TX / CH 661 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3506.00	V	-60.43	6.72	-53.71	-13.00	-40.71
N/A						
3429.00	H	-60.55	6.21	-54.34	-13.00	-41.34
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 1900 / TX / CH 810 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3821.00	V	-57.60	8.09	-49.51	-13.00	-36.51
N/A						
3821.00	H	-60.24	6.95	-53.29	-13.00	-40.29
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band II / TX / CH 9262 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
2918.00	V	-59.36	5.64	-53.72	-13.00	-40.72
5564.00	V	-57.39	8.20	-49.19	-13.00	-36.19
N/A						
2974.00	H	-60.62	5.56	-55.07	-13.00	-42.07
5557.00	H	-60.47	10.19	-50.28	-13.00	-37.28
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band II / TX / CH 9400 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3758.00	V	-59.99	7.81	-52.18	-13.00	-39.18
6831.00	V	-59.60	12.09	-47.51	-13.00	-34.51
N/A						
2974.00	H	-59.43	5.56	-53.87	-13.00	-40.87
5214.00	H	-59.97	10.11	-49.85	-13.00	-36.85
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band II / TX / CH 9538 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3814.00	V	-56.55	8.06	-48.49	-13.00	-35.49
N/A						
3814.00	H	-58.47	6.94	-51.53	-13.00	-38.53
5585.00	H	-59.29	10.10	-49.19	-13.00	-36.19
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band V / TX / CH 4132 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1658.00	V	-58.34	1.63	-56.71	-13.00	-43.71
N/A						
1658.00	H	-53.33	1.64	-51.68	-13.00	-38.68
2477.00	H	-59.02	4.78	-54.24	-13.00	-41.24
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band V / TX / CH 4183 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-56.64	1.64	-55.00	-13.00	-42.00
6117.00	V	-59.71	8.99	-50.72	-13.00	-37.72
N/A						
1672.00	H	-49.88	1.66	-48.23	-13.00	-35.23
2512.00	H	-58.20	4.94	-53.26	-13.00	-40.26
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band V / TX / CH 4233 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1693.00	V	-55.19	1.64	-53.55	-13.00	-40.55
N/A						
1693.00	H	-48.54	1.68	-46.87	-13.00	-33.87
2540.00	H	-57.03	4.97	-52.06	-13.00	-39.06
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA / HSDPA Band II / TX / CH 9262 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3996.00	V	-62.85	8.85	-54.00	-13.00	-41.00
6530.00	V	-60.88	11.04	-49.83	-13.00	-36.83
N/A						
4066.00	H	-62.53	7.40	-55.13	-13.00	-42.13
6642.00	H	-62.05	11.33	-50.71	-13.00	-37.71
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA / HSDPA Band II / TX / CH 9400 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3758.00	V	-61.98	7.81	-54.17	-13.00	-41.17
5641.00	V	-60.79	8.23	-52.56	-13.00	-39.56
N/A						
3163.00	H	-61.70	5.82	-55.88	-13.00	-42.88
5151.00	H	-61.48	10.06	-51.42	-13.00	-38.42
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA / HSDPA Band II / TX / CH 9538 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3954.00	V	-59.42	8.67	-50.75	-13.00	-37.75
7251.00	V	-61.12	13.14	-47.98	-13.00	-34.98
N/A						
3954.00	H	-60.63	7.22	-53.42	-13.00	-40.42
7020.00	H	-61.87	12.63	-49.24	-13.00	-36.24
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA / HSDPA Band V / TX / CH 4132 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1658.00	V	-57.25	1.63	-55.62	-13.00	-42.62
N/A						
1658.00	H	-53.82	1.64	-52.18	-13.00	-39.18
2477.00	H	-58.04	4.78	-53.25	-13.00	-40.25
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA / HSDPA Band V / TX / CH 4183 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-56.89	1.64	-55.25	-13.00	-42.25
2589.00	V	-60.62	5.09	-55.53	-13.00	-42.53
N/A						
1672.00	H	-51.46	1.66	-49.81	-13.00	-36.81
2505.00	H	-60.01	4.93	-55.08	-13.00	-42.08
2981.00	H	-60.13	5.56	-54.56	-13.00	-41.56
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA / HSDPA Band V / TX / CH 4233 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1693.00	V	-55.42	1.64	-53.78	-13.00	-40.78
N/A						
1693.00	H	-50.69	1.68	-49.01	-13.00	-36.01
2540.00	H	-56.97	4.97	-52.00	-13.00	-39.00
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

7.7RADIATED RECEIVER SPURIOUS EMISSIONS

LIMIT

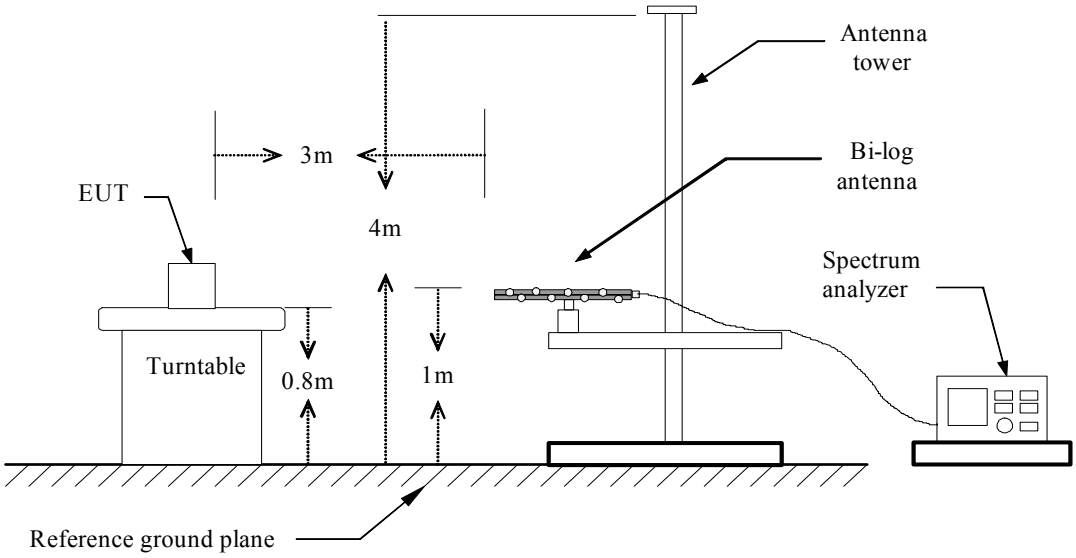
According to RSS-132 (4.6) & RSS-133 (6.7).

If a radiated measurement is made, all spurious emissions shall comply with the limits of Table below. The resolution bandwidth of the spectrum analyzer shall be 100 kHz for spurious emissions measurements below 1.0 GHz, and 1.0 MHz for measurements above 1.0 GHz.

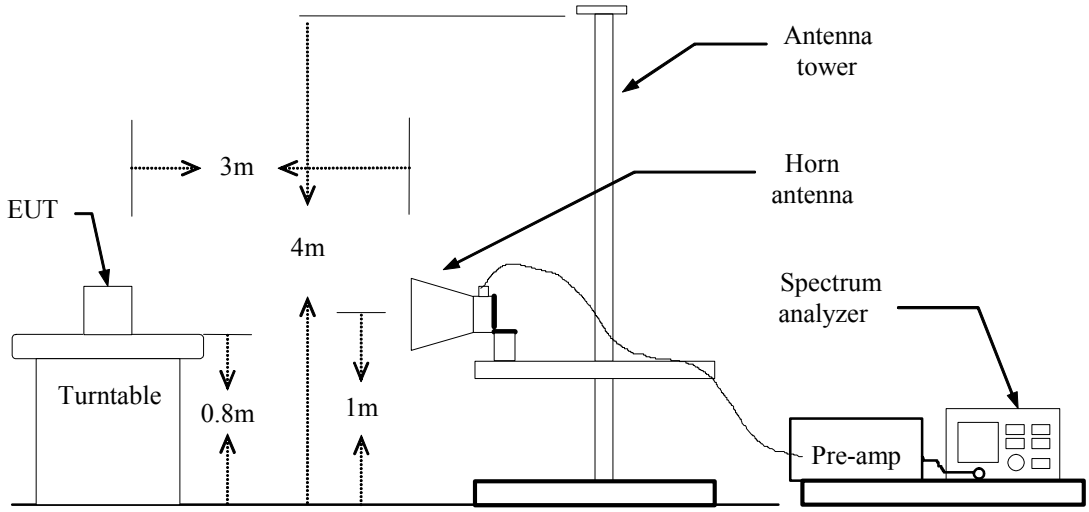
Spurious Frequency (MHz)	Field Strength (microvolts/m at 3 metres)
30-88	100
88-216	150
216-960	200
Above 960	500

Test Configuration

Below 1 GHz



Above 1 GHz



TEST PROCEDURE

The search for spurious emissions shall be from the lowest frequency internally generated or used in the receiver (local oscillator frequency, intermediate frequency or carrier frequency), or 30 MHz, whichever is the higher, to at least 3 times the highest tunable and local oscillator frequencies.

TEST RESULTS

No non-compliance noted.

Radiated Spurious Emission Measurement Result / Below 1GHz

Operation Mode: GSM 850 / RX / CH 190 **Test Date:** December 3, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
119.24	V	-43.28	-14.08	-57.36	-13.00	-44.36
167.74	V	-44.48	-13.51	-57.99	-13.00	-44.99
206.54	V	-43.95	-14.52	-58.47	-13.00	-45.47
252.13	V	-44.48	-13.95	-58.43	-13.00	-45.43
429.64	V	-51.89	-9.48	-61.37	-13.00	-48.37
652.74	V	-57.75	-6.11	-63.85	-13.00	-50.85
32.91	H	-41.80	-17.31	-59.11	-13.00	-46.11
119.24	H	-44.15	-14.26	-58.41	-13.00	-45.41
162.89	H	-42.23	-13.18	-55.41	-13.00	-42.41
248.25	H	-44.46	-14.37	-58.83	-13.00	-45.83
652.74	H	-48.93	-5.88	-54.81	-13.00	-41.81
672.14	H	-53.25	-5.98	-59.23	-13.00	-46.23

Remark:

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 850 / RX / CH 190 **Test Date:** December 3, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
119.24	V	-43.30	-14.08	-57.38	-13.00	-44.38
165.80	V	-44.16	-13.46	-57.61	-13.00	-44.61
206.54	V	-43.77	-14.52	-58.29	-13.00	-45.29
247.28	V	-44.51	-13.82	-58.32	-13.00	-45.32
293.84	V	-48.62	-11.69	-60.31	-13.00	-47.31
339.43	V	-49.69	-12.70	-62.40	-13.00	-49.40
120.21	H	-43.56	-14.13	-57.69	-13.00	-44.69
166.77	H	-42.95	-12.85	-55.80	-13.00	-42.80
206.54	H	-45.75	-13.39	-59.14	-13.00	-46.14
250.19	H	-44.77	-14.44	-59.21	-13.00	-46.21
293.84	H	-49.08	-12.21	-61.29	-13.00	-48.29
652.74	H	-50.92	-5.88	-56.80	-13.00	-43.80

Remark:

1. *The emission behaviour belongs to narrowband spurious emission.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GSM 1900 / RX / CH 661 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
121.18	V	-52.54	-13.82	-66.36	-13.00	-53.36
163.86	V	-48.35	-13.40	-61.76	-13.00	-48.76
206.54	V	-47.00	-14.52	-61.52	-13.00	-48.52
251.16	V	-47.79	-13.97	-61.76	-13.00	-48.76
292.87	V	-51.01	-11.59	-62.60	-13.00	-49.60
339.43	V	-56.29	-12.70	-68.99	-13.00	-55.99
31.94	H	-42.26	-18.25	-60.51	-13.00	-47.51
164.83	H	-53.87	-13.02	-66.89	-13.00	-53.89
206.54	H	-51.38	-13.39	-64.77	-13.00	-51.77
250.19	H	-50.54	-14.44	-64.98	-13.00	-51.98
297.72	H	-56.11	-12.73	-68.84	-13.00	-55.84
341.37	H	-55.63	-13.08	-68.71	-13.00	-55.71

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 1900 / RX / CH 661 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
121.18	V	-52.19	-13.82	-66.01	-13.00	-53.01
163.86	V	-48.79	-13.40	-62.19	-13.00	-49.19
208.48	V	-46.80	-14.93	-61.73	-13.00	-48.73
252.13	V	-47.82	-13.95	-61.77	-13.00	-48.77
295.78	V	-51.35	-11.90	-63.25	-13.00	-50.25
336.52	V	-56.16	-12.72	-68.88	-13.00	-55.88
32.91	H	-46.31	-17.31	-63.62	-13.00	-50.62
163.86	H	-54.60	-13.10	-67.70	-13.00	-54.70
209.45	H	-51.51	-14.06	-65.57	-13.00	-52.57
251.16	H	-49.98	-14.40	-64.38	-13.00	-51.38
295.78	H	-55.63	-12.47	-68.10	-13.00	-55.10
383.08	H	-56.75	-11.26	-68.01	-13.00	-55.01

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 850 / RX / CH 190 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
119.24	V	-44.53	-14.08	-58.61	-13.00	-45.61
166.77	V	-44.56	-13.48	-58.05	-13.00	-45.05
206.54	V	-44.10	-14.52	-58.62	-13.00	-45.62
251.16	V	-44.84	-13.97	-58.80	-13.00	-45.80
294.81	V	-49.34	-11.80	-61.14	-13.00	-48.14
429.64	V	-50.57	-9.48	-60.05	-13.00	-47.05
162.89	H	-45.24	-13.18	-58.43	-13.00	-45.43
249.22	H	-46.80	-14.41	-61.21	-13.00	-48.21
429.64	H	-51.31	-9.49	-60.80	-13.00	-47.80
552.83	H	-56.11	-7.46	-63.57	-13.00	-50.57
652.74	H	-50.64	-5.88	-56.51	-13.00	-43.51
672.14	H	-53.59	-5.98	-59.57	-13.00	-46.57

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 1900 / RX / CH 661 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
32.91	V	-50.25	-17.07	-67.33	-13.00	-54.33
120.21	V	-53.73	-13.92	-67.65	-13.00	-54.65
163.86	V	-49.67	-13.40	-63.07	-13.00	-50.07
206.54	V	-53.13	-14.52	-67.65	-13.00	-54.65
249.22	V	-54.51	-13.94	-68.45	-13.00	-55.45
293.84	V	-55.44	-11.69	-67.14	-13.00	-54.14
33.88	H	-42.86	-16.36	-59.22	-13.00	-46.22
163.86	H	-54.99	-13.10	-68.09	-13.00	-55.09
207.51	H	-51.88	-13.61	-65.49	-13.00	-52.49
252.13	H	-50.62	-14.37	-64.99	-13.00	-51.99
295.78	H	-55.44	-12.47	-67.91	-13.00	-54.91
335.55	H	-56.56	-13.16	-69.72	-13.00	-56.72

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band II / RX / CH 9400 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
57.16	V	-53.19	-15.80	-68.99	-13.00	-55.99
121.18	V	-54.37	-13.82	-68.19	-13.00	-55.19
165.80	V	-50.82	-13.46	-64.28	-13.00	-51.28
208.48	V	-45.58	-14.93	-60.51	-13.00	-47.51
254.07	V	-50.14	-13.91	-64.05	-13.00	-51.05
293.84	V	-51.75	-11.69	-63.44	-13.00	-50.44
121.18	H	-60.21	-14.16	-74.37	-13.00	-61.37
165.80	H	-56.55	-12.94	-69.49	-13.00	-56.49
207.51	H	-54.63	-13.61	-68.25	-13.00	-55.25
254.07	H	-56.56	-14.29	-70.85	-13.00	-57.85
296.75	H	-57.31	-12.60	-69.92	-13.00	-56.92
344.28	H	-58.22	-12.93	-71.16	-13.00	-58.16

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band V / RX / CH 4183 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
31.94	V	-41.38	-17.67	-59.05	-13.00	-46.05
122.15	V	-55.15	-13.72	-68.87	-13.00	-55.87
163.86	V	-51.35	-13.40	-64.76	-13.00	-51.76
207.51	V	-50.33	-14.72	-65.05	-13.00	-52.05
249.22	V	-50.95	-13.94	-64.89	-13.00	-51.89
293.84	V	-52.58	-11.69	-64.28	-13.00	-51.28
33.88	H	-46.22	-16.36	-62.58	-13.00	-49.58
127.00	H	-54.83	-14.36	-69.19	-13.00	-56.19
166.77	H	-58.02	-12.85	-70.88	-13.00	-57.88
208.48	H	-54.91	-13.84	-68.75	-13.00	-55.75
251.16	H	-52.70	-14.40	-67.10	-13.00	-54.10
294.81	H	-58.38	-12.34	-70.72	-13.00	-57.72

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode:	WCDMA / HSDPA Band II / RX / CH 9400	**Test Date:**	December 24, 2008
Temperature:	24°C	**Tested by:**	Mark Yang
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
121.18	V	-55.27	-13.82	-69.09	-13.00	-56.09
166.77	V	-52.86	-13.48	-66.34	-13.00	-53.34
209.45	V	-47.28	-15.13	-62.40	-13.00	-49.40
254.07	V	-51.29	-13.91	-65.20	-13.00	-52.20
295.78	V	-53.38	-11.90	-65.28	-13.00	-52.28
342.34	V	-57.04	-12.62	-69.66	-13.00	-56.66
120.21	H	-60.67	-14.13	-74.80	-13.00	-61.80
165.80	H	-56.37	-12.94	-69.30	-13.00	-56.30
207.51	H	-54.24	-13.61	-67.86	-13.00	-54.86
252.13	H	-56.47	-14.37	-70.83	-13.00	-57.83
295.78	H	-57.28	-12.47	-69.75	-13.00	-56.75
342.34	H	-57.06	-13.03	-70.09	-13.00	-57.09

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA / HSDPA Band V / RX / CH 4183 **Test Date:** December 24, 2008

Temperature: 24°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
31.94	V	-41.58	-17.67	-59.24	-13.00	-46.24
122.15	V	-53.88	-13.72	-67.60	-13.00	-54.60
164.83	V	-49.44	-13.43	-62.87	-13.00	-49.87
207.51	V	-47.73	-14.72	-62.46	-13.00	-49.46
252.13	V	-47.89	-13.95	-61.84	-13.00	-48.84
293.84	V	-51.52	-11.69	-63.22	-13.00	-50.22
33.88	H	-45.56	-16.36	-61.92	-13.00	-48.92
127.97	H	-55.13	-14.39	-69.52	-13.00	-56.52
164.83	H	-55.17	-13.02	-68.19	-13.00	-55.19
207.51	H	-54.20	-13.61	-67.81	-13.00	-54.81
251.16	H	-51.64	-14.40	-66.04	-13.00	-53.04
382.11	H	-56.97	-11.31	-68.28	-13.00	-55.28

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Above 1GHz

Operation Mode: GSM 850 / RX / CH 190 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-45.64	1.64	-44.00	-13.00	-31.00
2512.00	V	-50.67	4.96	-45.71	-13.00	-32.71
3345.00	V	-59.71	6.41	-53.30	-13.00	-40.30
N/A						
1672.00	H	-39.88	1.66	-38.22	-13.00	-25.22
2512.00	H	-53.93	4.94	-48.99	-13.00	-35.99
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 850 / RX / CH 190 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-45.42	1.64	-43.78	-13.00	-30.78
2512.00	V	-51.30	4.96	-46.33	-13.00	-33.33
3345.00	V	-58.74	6.41	-52.34	-13.00	-39.34
N/A						
1672.00	H	-39.34	1.66	-37.69	-13.00	-24.69
2512.00	H	-53.04	4.94	-48.10	-13.00	-35.10
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GSM 1900 / RX / CH 661 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4689.00	V	-61.56	8.68	-52.88	-13.00	-39.88
N/A						
5270.00	H	-61.20	10.16	-51.03	-13.00	-38.03
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: GPRS 1900 / RX / CH 661 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3891.00	V	-61.58	8.39	-53.18	-13.00	-40.18
5641.00	V	-58.46	8.23	-50.22	-13.00	-37.22
N/A						
4780.00	H	-60.77	9.07	-51.71	-13.00	-38.71
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 850 / RX / CH 190 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-49.47	1.64	-47.83	-13.00	-34.83
2512.00	V	-56.88	4.96	-51.92	-13.00	-38.92
N/A						
1672.00	H	-45.39	1.66	-43.74	-13.00	-30.74
2183.00	H	-59.39	3.05	-56.34	-13.00	-43.34
2512.00	H	-57.38	4.94	-52.45	-13.00	-39.45
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: EDGE 1900 / RX / CH 661 **Test Date:** December 23, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3506.00	V	-60.43	6.72	-53.71	-13.00	-40.71
N/A						
3429.00	H	-60.55	6.21	-54.34	-13.00	-41.34
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band II / RX / CH 9400 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3758.00	V	-59.99	7.81	-52.18	-13.00	-39.18
6831.00	V	-59.60	12.09	-47.51	-13.00	-34.51
N/A						
2974.00	H	-59.43	5.56	-53.87	-13.00	-40.87
5214.00	H	-59.97	10.11	-49.85	-13.00	-36.85
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA Band V / RX / CH 4183 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-56.64	1.64	-55.00	-13.00	-42.00
6117.00	V	-59.71	8.99	-50.72	-13.00	-37.72
N/A						
1672.00	H	-49.88	1.66	-48.23	-13.00	-35.23
2512.00	H	-58.20	4.94	-53.26	-13.00	-40.26
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA / HSDPA Band II / RX / CH 9400 **Test Date:** December 24, 2008

Temperature: 25°C **Tested by:** Mark Yang

Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3758.00	V	-61.98	7.81	-54.17	-13.00	-41.17
5641.00	V	-60.79	8.23	-52.56	-13.00	-39.56
N/A						
3163.00	H	-61.70	5.82	-55.88	-13.00	-42.88
5151.00	H	-61.48	10.06	-51.42	-13.00	-38.42
N/A						

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

Operation Mode: WCDMA / HSDPA Band V / RX / CH 4183 **Test Date:** December 24, 2008
Temperature: 25°C **Tested by:** Mark Yang
Humidity: 50 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-56.89	1.64	-55.25	-13.00	-42.25
2589.00	V	-60.62	5.09	-55.53	-13.00	-42.53
N/A						
1672.00	H	-51.46	1.66	-49.81	-13.00	-36.81
2505.00	H	-60.01	4.93	-55.08	-13.00	-42.08
2981.00	H	-60.13	5.56	-54.56	-13.00	-41.56
N/A						

Remark:

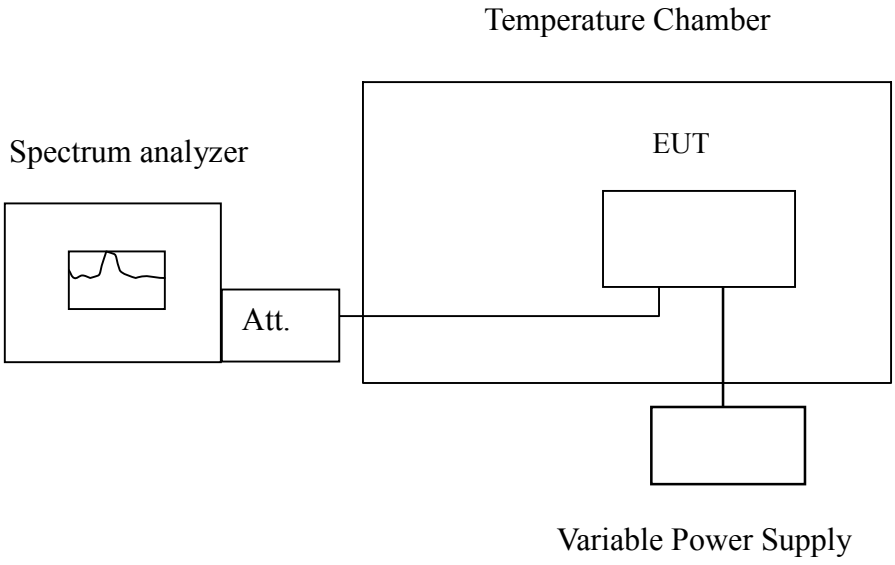
1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*

7.8FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

LIMIT

According to FCC §2.1055, FCC §24.235, RSS-132 (4.3) & RSS-133 (6.3).
Frequency Tolerance: 2.5 ppm

Test Configuration



Remark: *Measurement setup for testing on Antenna connector.*

TEST PROCEDURE

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to –30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

TEST RESULTS

No non-compliance noted.

Reference Frequency: GSM Mid Channel 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.3	50	83600034	45	2090
	40	83600031	42	
	30	83600039	50	
	20	83599989	0	
	10	83600041	52	
	0	83600035	46	
	-10	83600036	47	
	-20	83600041	52	
	-30	83600036	47	

Reference Frequency: GSM Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.3	50	1880000034	49	4700
	40	1880000035	50	
	30	1880000041	56	
	20	1879999985	0	
	10	1880000025	40	
	0	1880000024	39	
	-10	1880000020	35	
	-20	1880000018	33	
	-30	1880000026	41	

Reference Frequency: GPRS Mid Channel 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.3	50	83599979	-13	2090
	40	83599969	-23	
	30	83599980	-12	
	20	83599992	0	
	10	83599969	-23	
	0	83599980	-12	
	-10	83599968	-24	
	-20	83599979	-13	
	-30	83599985	-7	

Reference Frequency: GPRS Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.3	50	1879999979	4	4700
	40	1879999974	-1	
	30	1879999980	5	
	20	1879999975	0	
	10	1879999984	9	
	0	1879999980	5	
	-10	1879999975	0	
	-20	1879999969	-6	
	-30	1879999972	-3	

Reference Frequency: EDGE Mid Channel 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.3	50	83599959	-45	2090
	40	83599965	-39	
	30	83599964	-40	
	20	83600004	0	
	10	83599980	-24	
	0	83599972	-32	
	-10	83599969	-35	
	-20	83599974	-30	
	-30	83599985	-19	

Reference Frequency: EDGE Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.3	50	1879999985	-3	4700
	40	1879999987	-1	
	30	1879999979	-9	
	20	1879999988	0	
	10	1879999978	-10	
	0	1879999969	-19	
	-10	1879999986	-2	
	-20	1879999979	-9	
	-30	1879999986	-2	

Reference Frequency: WCDMA Band V Mid Channel 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.3	50	83599998	-33	2090
	40	83599999	-32	
	30	83599995	-36	
	20	83600031	0	
	10	83599992	-39	
	0	83599991	-40	
	-10	83600001	-30	
	-20	83600006	-25	
	-30	83599998	-33	

Reference Frequency: WCDMA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.3	50	1879999997	-15	4700
	40	1879999997	-15	
	30	1879999995	-17	
	20	1880000012	0	
	10	1879999998	-14	
	0	1880000004	-8	
	-10	1880000003	-9	
	-20	1880000003	-9	
	-30	1880000001	-11	

Reference Frequency: WCDMA / HSDPA Band V Mid Channel 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.3	50	83600009	9	2090
	40	83600004	4	
	30	83600010	10	
	20	83600000	0	
	10	83600009	9	
	0	83600018	18	
	-10	83600002	2	
	-20	83600010	10	
	-30	83600008	8	

Reference Frequency: WCDMA / HSDPA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.3	50	1880000003	83	4700
	40	1880000004	84	
	30	1880000009	89	
	20	1879999920	0	
	10	1880000000	80	
	0	1880000005	85	
	-10	1879999994	74	
	-20	1879999999	79	
	-30	1880000005	85	

7.9FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT

LIMIT

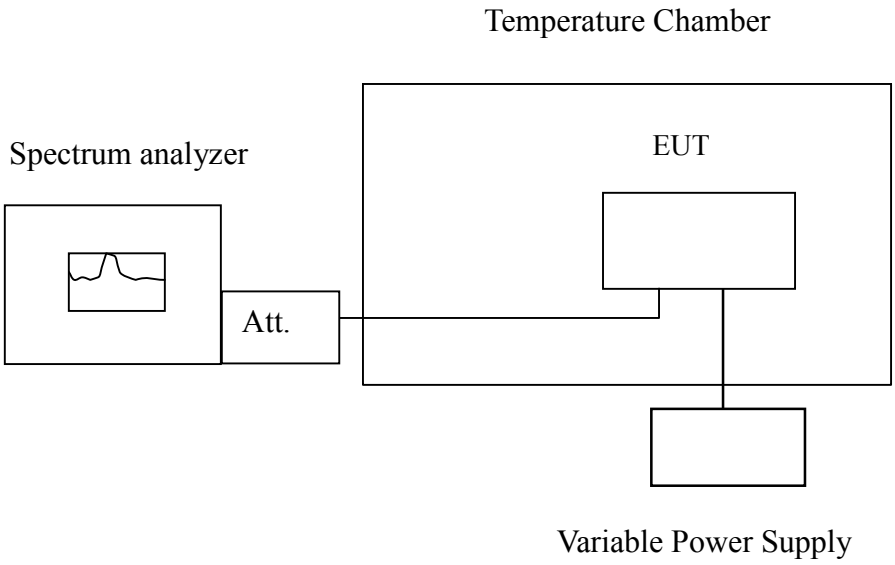
According to FCC §2.1055, FCC §24.235,

Frequency Tolerance: 2.5 ppm.

According to RSS-132 (4.3) & RSS-133 (6.3).

The carrier frequency shall not depart from the reference frequency in excess of ±2.5 ppm for mobile stations and ±1.0 ppm for base stations.

Test Configuration



Remark: *Measurement setup for testing on Antenna connector.*

TEST PROCEDURE

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.
Reduce the input voltage to specify extreme voltage variation (± 15%) and endpoint, record the maximum frequency change.

TEST RESULTS

No non-compliance noted.

Reference Frequency: GSM Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.63	20	83599988	-1	2090
3.3		83599989	0	
2.97		83599992	3	
2.75		83599987	-5	

Reference Frequency: GSM Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.63	20	1879999988	3	4700
3.3		1879999985	0	
2.97		1879999983	-2	
2.75		1879999979	-6	

Reference Frequency: GPRS Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.63	20	83599988	-4	2090
3.3		83599992	0	
2.97		83600008	16	
2.75		83599974	-34	

Reference Frequency: GPRS Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.63	20	1879999960	-11	4700
3.3		1879999971	0	
2.97		1879999966	-5	
2.75		1879999754	-217	

Reference Frequency: EDGE Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.63	20	83600009	5	2090
3.3		83600004	0	
2.97		83600003	-1	
2.75		83600024	21	

Reference Frequency: EDGE Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.63	20	1879999990	2	4700
3.3		1879999988	0	
2.97		1879999947	-41	
2.75		1879999474	-514	

Reference Frequency: WCDMA Band V Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.63	20	83600017	-14	2090
3.3		83600031	0	
2.97		83600025	-6	
2.75		83600278	253	

Reference Frequency: WCDMA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.63	20	1880000016	4	4700
3.3		1880000012	0	
2.97		1880000013	1	
2.75		1879999890	-122	

Reference Frequency: WCDMA / HSDPA Band V Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.63	20	83600001	1	2090
3.3		83600000	0	
2.97		83599994	-6	
2.75		83599256	-738	

Reference Frequency: WCDMA / HSDPA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.63	20	1879999943	23	4700
3.3		1879999920	0	
2.97		1879999938	18	
2.75		1879999642	-278	

7.10 POWERLINE CONDUCTED EMISSIONS

LIMIT

According to §15.207(a) & RSS-Gen §7.2.2, except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency Range (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Configuration

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.

TEST PROCEDURE

1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

TEST RESULTS

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

Operation Mode: Normal Link **Test Date:** December 31, 2008

Temperature: 22°C **Tested by:** Jerry Lin

Humidity: 45% RH

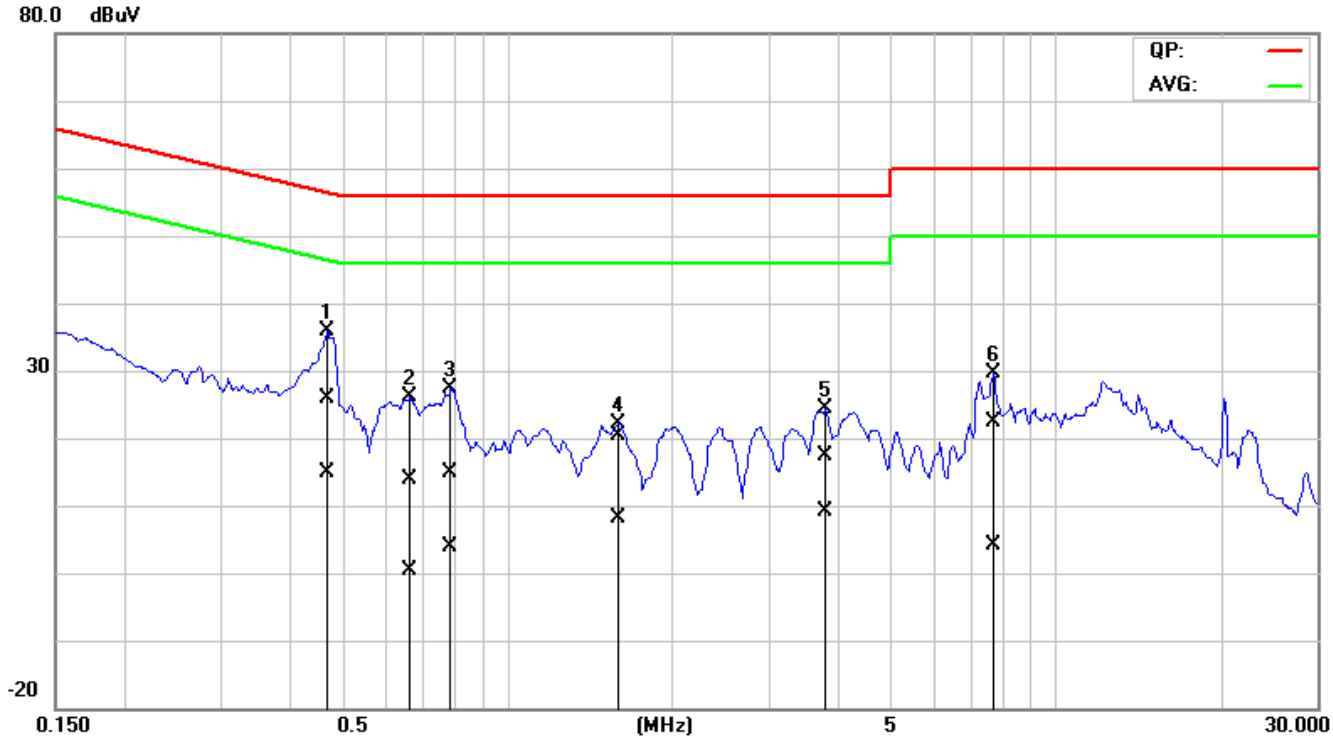
Freq. (MHz)	QP Reading (dBuV)	AV Reading (dBuV)	Corr. factor (dB)	QP Result (dBuV)	AV Result (dBuV)	QP Limit (dBuV)	AV Limit (dBuV)	QP Margin (dB)	AV Margin (dB)	Note
0.4700	25.96	14.86	0.04	26.00	14.90	56.51	46.51	-30.51	-31.61	L1
0.6650	13.87	0.27	0.03	13.90	0.30	56.00	46.00	-42.10	-45.70	L1
0.7900	14.77	3.77	0.03	14.80	3.80	56.00	46.00	-41.20	-42.20	L1
1.6000	20.47	8.07	0.03	20.50	8.10	56.00	46.00	-35.50	-37.90	L1
3.8000	17.35	8.95	0.15	17.50	9.10	56.00	46.00	-38.50	-36.90	L1
7.7150	21.99	3.79	0.41	22.40	4.20	60.00	50.00	-37.60	-45.80	L1
0.1900	24.24	6.34	0.16	24.40	6.50	64.04	54.04	-39.64	-47.54	L2
0.4550	28.05	1.85	0.05	28.10	1.90	56.78	46.78	-28.68	-44.88	L2
0.6550	12.37	3.37	0.03	12.40	3.40	56.00	46.00	-43.60	-42.60	L2
1.6100	12.97	1.67	0.03	13.00	1.70	56.00	46.00	-43.00	-44.30	L2
3.7250	17.85	3.85	0.15	18.00	4.00	56.00	46.00	-38.00	-42.00	L2
12.6800	15.58	5.98	0.62	16.20	6.60	60.00	50.00	-43.80	-43.40	L2

Remark:

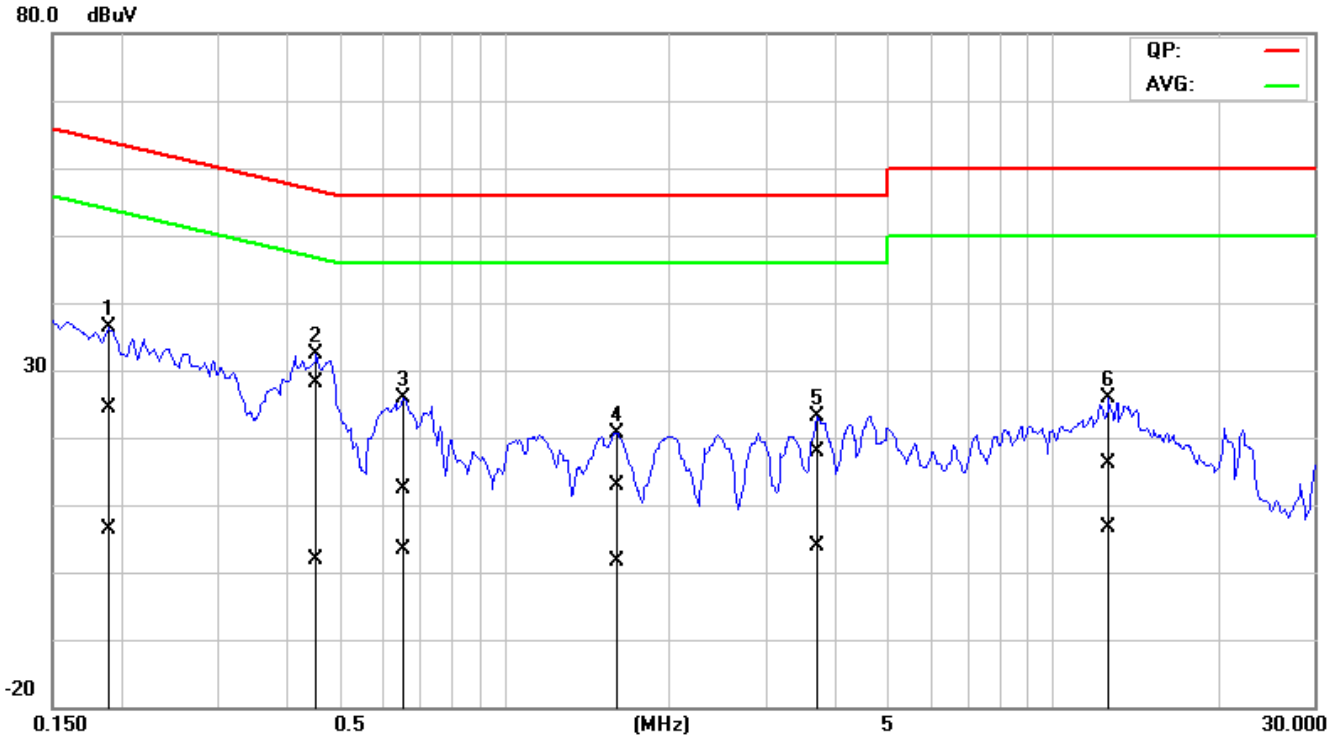
1. *Measuring frequencies from 0.15 MHz to 30MHz.*
2. *The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Quasi-peak detector and average detector.*
3. *The IF bandwidth of SPA between 0.15MHz to 30MHz was 10kHz; the IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9kHz;*
4. *L1 = Line One (Live Line) / L2 = Line Two (Neutral Line)*

Test Plots

Conducted emissions (Line 1)



Conducted emissions (Line 2)



APPENDIX I
RADIO FREQUENCY EXPOSURE

LIMIT

EUT Specification

EUT	Generic Signal Module
Frequency band (Operating)	☐ WLAN: 2.412GHz ~ 2.462GHz ☐ WLAN: 5.18GHz ~ 5.32GHz / 5.50GHz ~ 5.70GHz ☐ WLAN: 5.745GHz ~ 5.825GHz ☒ Others: GSM / GPRS / EDGE 850MHz: 824 ~ 849 MHz
Device category	☐ Portable (<20cm separation) ☒ Mobile (>20cm separation) ☐ Others
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm^2) ☒ General Population/Uncontrolled exposure (S=1mW/cm^2)
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Max. output power	ERP: 34.69 dBm (2944.4216mW)
Antenna gain (Max)	-4 dBi (Numeric gain: 0.39)
Evaluation applied	☒ MPE Evaluation ☐ SAR Evaluation ☐ N/A

Remark:

1. *The maximum output power is 34.69dBm (2944.4216mW) at 836.60MHz (with 0.39 numeric antenna gain.)*
2. *DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.*
3. *For mobile or fixed location transmitters, no SAR consideration applied. The maximum power density is 1.0 mW/cm^2 even if the calculation indicates that the power density would be larger.*

TEST RESULTS

No non-compliance noted.

Calculation

Given $E = \frac{\sqrt{30 \times P \times G}}{d}$ & $S = \frac{E^2}{3770}$

Where *E = Field strength in Volts / meter*
P = Power in Watts
G = Numeric antenna gain
d = Distance in meters
S = Power density in milliwatts / square centimeter

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{3770 d^2}$$

Changing to units of mW and cm, using:

P (mW) = P (W) / 1000 and

d (cm) = d(m) / 100

Yields

$$S = \frac{30 \times (P/1000) \times G}{3770 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2}$$ ***Equation 1***

Where *d = Distance in cm*
P = Power in mW
G = Numeric antenna gain
S = Power density in mW / cm²

Maximum Permissible Exposure

EUT output power = 2944.4216mW

Numeric Antenna gain = 0.39

Substituting the MPE safe distance using d = 20 cm into Equation 1:

Yields

$$S = 0.000199 \times P \times G$$

Where *P = Power in mW*
G = Numeric antenna gain
S = Power density in mW / cm²

→ Power density = 0.2285 mW / cm²

(For mobile or fixed location transmitters, the maximum power density is 1.0 mW/cm² even if the calculation indicates that the power density would be larger.)

LIMIT

EUT Specification

EUT	Generic Signal Module
Frequency band (Operating)	☐ WLAN: 2.412GHz ~ 2.462GHz ☐ WLAN: 5.18GHz ~ 5.32GHz / 5.50GHz ~ 5.70GHz ☐ WLAN: 5.745GHz ~ 5.825GHz ☒ Others: GSM / GPRS / EDGE: 1900MHz: 1850 ~ 1910 MHz
Device category	☐ Portable (<20cm separation) ☒ Mobile (>20cm separation) ☐ Others
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm^2) ☒ General Population/Uncontrolled exposure (S=1mW/cm^2)
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Max. output power	EIRP: 30.17 dBm (1039.92mW)
Antenna gain (Max)	0.29 dBi (Numeric gain: 1.06)
Evaluation applied	☒ MPE Evaluation ☐ SAR Evaluation ☐ N/A

Remark:

1. *The maximum output power is 30.17dBm (1039.92 mW) at 1850.20 MHz (with 1.06 numeric antenna gain.)*
2. *DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.*
3. *For mobile or fixed location transmitters, no SAR consideration applied. The maximum power density is 1.0 mW/cm^2 even if the calculation indicates that the power density would be larger.*

TEST RESULTS

No non-compliance noted.

Given $E = \frac{\sqrt{30 \times P \times G}}{d}$ & $S = \frac{E^2}{3770}$

Where E = *Field strength in Volts / meter*
P = *Power in Watts*
G = *Numeric antenna gain*
d = *Distance in meters*
S = *Power density in milliwatts / square centimeter*

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{3770 d^2}$$

Changing to units of mW and cm, using:

P (mW) = P (W) / 1000 and

d (cm) = d(m) / 100

Yields

$$S = \frac{30 \times (P/1000) \times G}{3770 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2} \qquad \textbf{\textit{Equation 1}}$$

Where d = *Distance in cm*
P = *Power in mW*
G = *Numeric antenna gain*
S = *Power density in mW / cm²*

Maximum Permissible Exposure

EUT output power = 1039.92mW

Numeric Antenna gain = 1.06

Substituting the MPE safe distance using d = 20 cm into Equation 1:

Yields

$$S = 0.000199 \times P \times G$$

Where P = *Power in mW*
G = *Numeric antenna gain*
S = *Power density in mW / cm²*

→ Power density = 0.2193 mW / cm²

(For mobile or fixed location transmitters, the maximum power density is 1.0 mW/cm² even if the calculation indicates that the power density would be larger.)

EUT Specification

EUT	Generic Signal Module
Frequency band (Operating)	☐ WLAN: 2.412GHz ~ 2.462GHz ☐ WLAN: 5.18GHz ~ 5.32GHz / 5.50GHz ~ 5.70GHz ☐ WLAN: 5.745GHz ~ 5.825GHz ☒ Others: WCDMA Band II: 1852.4 ~ 1907.6 MHz
Device category	☐ Portable (<20cm separation) ☒ Mobile (>20cm separation) ☐ Others
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm^2) ☒ General Population/Uncontrolled exposure (S=1mW/cm^2)
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Max. output power	23.59 dBm (228.55mW)
Antenna gain (Max)	0.29 dBi (Numeric gain: 1.06)
Evaluation applied	☒ MPE Evaluation ☐ SAR Evaluation ☐ N/A
Remark: *1. The maximum output power is 23.59dBm (228.55mW) at 1907.60MHz (with 1.06 numeric antenna gain.)* *2. DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.* *3. For mobile or fixed location transmitters, no SAR consideration applied. The maximum power density is 1.0 mW/cm^2 even if the calculation indicates that the power density would be larger.*	

TEST RESULTS

No non-compliance noted.

Given $E = \frac{\sqrt{30 \times P \times G}}{d}$ & $S = \frac{E^2}{3770}$

Where E = *Field strength in Volts / meter*
P = *Power in Watts*
G = *Numeric antenna gain*
d = *Distance in meters*
S = *Power density in milliwatts / square centimeter*

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{3770 d^2}$$

Changing to units of mW and cm, using:

P (mW) = P (W) / 1000 and

d (cm) = d(m) / 100

Yields

$$S = \frac{30 \times (P/1000) \times G}{3770 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2}$$ ***Equation 1***

Where d = *Distance in cm*
P = *Power in mW*
G = *Numeric antenna gain*
S = *Power density in mW / cm²*

Maximum Permissible Exposure

EUT output power = 228.55mW

Numeric Antenna gain = 1.06

Substituting the MPE safe distance using d = 20 cm into Equation 1:

Yields

$$S = 0.000199 \times P \times G$$

Where P = *Power in mW*
G = *Numeric antenna gain*
S = *Power density in mW / cm²*

→ *Power density = 0.0482 mW / cm²*

(For mobile or fixed location transmitters, the maximum power density is 1.0 mW/cm² even if the calculation indicates that the power density would be larger.)

EUT Specification

EUT	Generic Signal Module
Frequency band (Operating)	☐ WLAN: 2.412GHz ~ 2.462GHz ☐ WLAN: 5.18GHz ~ 5.32GHz / 5.50GHz ~ 5.70GHz ☐ WLAN: 5.745GHz ~ 5.825GHz ☒ Others: WCDMA Band V: 826.4 ~ 846.6 MHz
Device category	☐ Portable (<20cm separation) ☒ Mobile (>20cm separation) ☐ Others
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm^2) ☒ General Population/Uncontrolled exposure (S=1mW/cm^2)
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Max. output power	28.07dBm (641.20mW)
Antenna gain (Max)	-4 dBi (Numeric gain: 0.39)
Evaluation applied	☒ MPE Evaluation ☐ SAR Evaluation ☐ N/A

Remark:

1. *The maximum output power is 28.07dBm (641.20mW) at 846.60MHz (with 0.39 numeric antenna gain.)*
2. *DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.*
3. *For mobile or fixed location transmitters, no SAR consideration applied. The maximum power density is 1.0 mW/cm^2 even if the calculation indicates that the power density would be larger.*

TEST RESULTS

No non-compliance noted.

Given $E = \frac{\sqrt{30 \times P \times G}}{d}$ & $S = \frac{E^2}{3770}$

Where E = *Field strength in Volts / meter*
P = *Power in Watts*
G = *Numeric antenna gain*
d = *Distance in meters*
S = *Power density in milliwatts / square centimeter*

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{3770 d^2}$$

Changing to units of mW and cm, using:

P (mW) = P (W) / 1000 and

d (cm) = d(m) / 100

Yields

$$S = \frac{30 \times (P/1000) \times G}{3770 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2}$$ ***Equation 1***

Where d = *Distance in cm*
P = *Power in mW*
G = *Numeric antenna gain*
S = *Power density in mW / cm²*

Maximum Permissible Exposure

EUT output power = 641.20mW

Numeric Antenna gain = 0.39

Substituting the MPE safe distance using d = 20 cm into Equation 1:

Yields

$$S = 0.000199 \times P \times G$$

Where P = *Power in mW*
G = *Numeric antenna gain*
S = *Power density in mW / cm²*

→ *Power density = 0.0497mW / cm²*

(For mobile or fixed location transmitters, the maximum power density is 1.0 mW/cm² even if the calculation indicates that the power density would be larger.)