FCC 47 CFR PART 22 SUBPART H AND PART 24 SUBPART E

TEST REPORT

For

Computer

Model: TREK-550, TREK-550XXXXXXXXXXXXXXXX (where "X" may be any alphanumeric character , "-" or blank)

Trade Name: ADVANTECH

Issued to

Advantech Co. Ltd.
No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District,
Taipei 114, Taiwan, R.O.C.

Issued by

Compliance Certification Services Inc.
No.11, Wugong 6th Rd., Wugu Dist.,
New Taipei City 24891, Taiwan. (R.O.C.)
http://www.ccsrf.com
service@ccsrf.com
Issued Date: June 26, 2013

Testing Laboratory
1309

Revision History

Rev.		Issue Date		Revisions	Effect Page	Revised By
00		June 26, 2013		Initial Issue	ALL	Gina Lo

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1. TEST RESULT CERTIFICATION

Applicant:	Advantech Co. Ltd. No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 114, Taiwan, R.O.C.
Equipment Under Test:	Computer
Trade Name:	ADVANTECH
Model Number:	TREK-550, TREK-550XXXXXXXXXXXXXXX (where "X" may be any alphanumeric character , "-" or blank)
Date of Test:	May 4 ~ June 26, 2013

APPLICABLE STANDARDS	
STANDARD	**TEST RESULT**
FCC 47 CFR Part 22 Subpart H & Part 24 Subpart E	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: 2004 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rule FCC PART 22 Subpart H and PART 24 Subpart E.

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

Approved by:

Miller Lee
Section Manager
Compliance Certification Services Inc.

Reviewed by:

Gina Lo
Section Manager
Compliance Certification Services Inc.

2. EUT DESCRIPTION

Product	Computer
Trade Name	ADVANTECH
Model Number	TREK-550, TREK-550XXXXXXXXXXXXXXX (where "X" may be any alphanumeric character , "-" or blank)
Model Discrepancy	All the specification and layout are identical except they come with different model numbers for marketing purpose. The suffix of "XXXXXXXXXXXXXXX" (X= any alphanumeric character , "-" or blank) on model number is just for marketing purpose only.
Received Date	May 7, 2013
Power Supply	DC 12V
Frequency Range	GPRS / EDGE: 850: 824.2 ~ 848.8 MHz GPRS / EDGE: 1900: 1850.2 ~ 1909.8 MHz WCDMA / HSDPA / HSUPA Band II: 1852.4 ~ 1907.6 MHz WCDMA / HSDPA / HSUPA Band V: 826.4 ~ 846.6MHz
Transmit Power (ERP & EIRP Power)	GPRS 850: 25.89 dBm GPRS 1900: 24.85 dBm EDGE 850: 26.66 dBm EDGE 1900: 30.04 dBm WCDMA Band II: 21.83 dBm HSDPA Band II: 23.22 dBm HSUPA Band II: 23.19 dBm WCDMA Band V: 16.96 dBm HSDPA Band V: 16.95dBm HSUPA Band V: 16.96 dBm
Modulation Technique	GMSK, TDMA
Cellular Phone Protocol	GPRS: GMSK EDGE: 8PSK WCDMA: Quadrature Phase Shift Keying (QPSK) with Root-raised cosine pulse shaping filters (roll off = 0.22)
Type of Emission	GPRS 850: 246KGXW--- GPRS 1900: 248KGXW--- EDGE 850: 245KG7W--- EDGE 1900: 247KG7W--- WCDMA Band II: 4M14F9W--- WCDMA Band V: 4M15F9W--- WCDMA HSDPA Band II: 4M14F9W--- WCDMA HSDPA Band V: 4M14F9W--- WCDMA HSUPA Band II: 4M14F9W--- WCDMA HSUPA Band V: 4M15F9W---

Antenna Gain	GPRS / EDGE 850: 2.1 dBi GPRS / EDGE 1900: 3 dBi WCDMA band II: 3 dBi WCDMA band V: 2.1 dBi
Antenna Type	Loop Antenna

Remark:

1. *The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.*
2. *This submittal(s) (test report) is intended for FCC ID:* ***M82-TREK550A2*** *filing to comply with Part 22 and Part 24 of the FCC 47 CFR Rules.*

3. TEST METHODOLOGY

Both conducted and radiated testing were performed according to the procedures document on chapter 13 of ANSI C63.4: 2009, TIA/EIA-603-C: 2004 and FCC CFR 47, Part 2, PART 22 SUBPART H AND PART 24 SUBPART E

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: 2009.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: 2009.

3.4DESCRIPTION OF TEST MODES

The EUT (model: TREK-550) had been tested under operating condition.

EUT staying in continuous transmitting mode was programmed.

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

GPRS / EDGE 1900:
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.

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

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

After verification, all tests were carried out 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 only.

4. INSTRUMENT CALIBRATION

4.1MEASURING 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	03/27/2014
Power Meter	Anritsu	ML2495A	1012009	06/04/2014
Power Sensor	Anritsu	MA2411A	0917072	06/04/2014
Temp. / Humidity Chamber	Terchy	MHG-150LF	930619	10/16/2013

Wugu 966 Chamber A				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
Spectrum Analyzer	Agilent	E4446A	US42510268	11/06/2013
EMI Test Receiver	R&S	ESCI	100064	02/17/2014
Pre-Amplifier	Mini-Circults	ZFL-1000LN	SF350700823	01/12/2014
Pre-Amplifier	MITEQ	AFS44-00102650-42-10P-44	1415367	11/19/2013
Bilog Antenna	Sunol Sciences	JB3	A030105	10/02/2013
Bilog Antenna	Sunol Sciences	JB3	A030205	10/02/2013
Horn Antenna	EMCO	3117	00055165	02/17/2014
Horn Antenna	EMCO	3117	00055167	01/28/2014
Horn Antenna	EMCO	3116	00026370	10/11/2013
Loop Antenna	EMCO	6502	8905/2356	06/12/2014
Turn Table	CCS	CC-T-1F	N/A	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R
Site NSA	CCS	N/A	N/A	12/22/2013
Test S/W	EZ-EMC (CCS-3A1RE)			

4.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
3M Semi Anechoic Chamber / 30M~200M	+/- 4.0138
3M Semi Anechoic Chamber / 200M~1000M	+/- 3.9483
3M Semi Anechoic Chamber / 1G~8G	+/- 2.5975
3M Semi Anechoic Chamber / 8G~18G	+/- 2.6112
3M Semi Anechoic Chamber / 18G~26G	+/- 2.7389
3M Semi Anechoic Chamber / 26G~40G	+/- 2.9683

***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

5.1FACILITIES

☐ 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 Dist., New Taipei City 24891, Taiwan. (R.O.C.)

Tel: 886-2-2299-9720 / Fax: 886-2-2298-4045

☐ No.81-1, Lane 210, Bade 2nd Rd., Lujhu Township, Taoyuan County 33841, TAIWAN, R.O.C.

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 and CISPR Publication 22.

5.2EQUIPMENT

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.”

5.3TABLE 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 I for the actual connections between EUT and support equipment.

6.2SUPPORT EQUIPMENT

No.	Device Type	Brand	Model	FCC ID	Series No.	Data Cable	Power Cord
	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.*

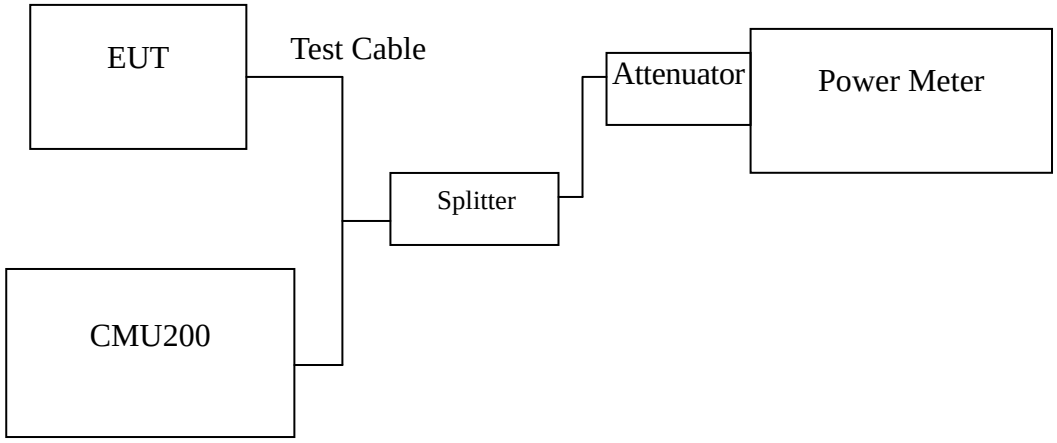
7. FCC PART 22 & 24 REQUIREMENTS

7.1PEAK 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)	Peak Power (dBm)	Output Power (W)
GPRS 850	128	824.20	32.30	1.6982
	190	836.60	32.40	1.7378
	251	848.80	31.90	1.5488
EDGE 850	128	824.20	26.10	0.4074
	190	836.60	26.30	0.4266
	251	848.80	26.90	0.4898

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power (W)
GPRS 1900	512	1850.20	29.90	0.9772
	661	1880.00	29.40	0.8710
	810	1909.80	29.80	0.9550
EDGE 1900	512	1850.20	25.30	0.3388
	661	1880.00	25.10	0.3236
	810	1909.80	25.30	0.3388

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

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power (W)
WCDMA (BAND II)	9262	1852.40	26.80	0.47863
	9400	1880.00	26.70	0.46774
	9538	1907.60	25.80	0.38019
WCDMA (BAND V)	4132	826.40	26.95	0.49545
	4182	836.40	25.85	0.38459
	4233	846.60	26.62	0.45920

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power (W)
WCDMA / HSDPA (BAND II)	9262	1852.40	26.36	0.43251
	9400	1880.00	26.50	0.44668
	9538	1907.60	25.36	0.34356
WCDMA / HSDPA (BAND V)	4132	826.40	26.02	0.39994
	4182	836.40	25.91	0.38994
	4233	846.60	25.16	0.32810

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power (W)
WCDMA / HSUPA (BAND II)	9262	1852.40	25.41	0.34754
	9400	1880.00	25.55	0.35892
	9538	1907.60	24.30	0.26915
WCDMA / HSUPA (BAND V)	4132	826.40	25.50	0.35481
	4182	836.40	24.96	0.31333
	4233	846.60	25.30	0.33884

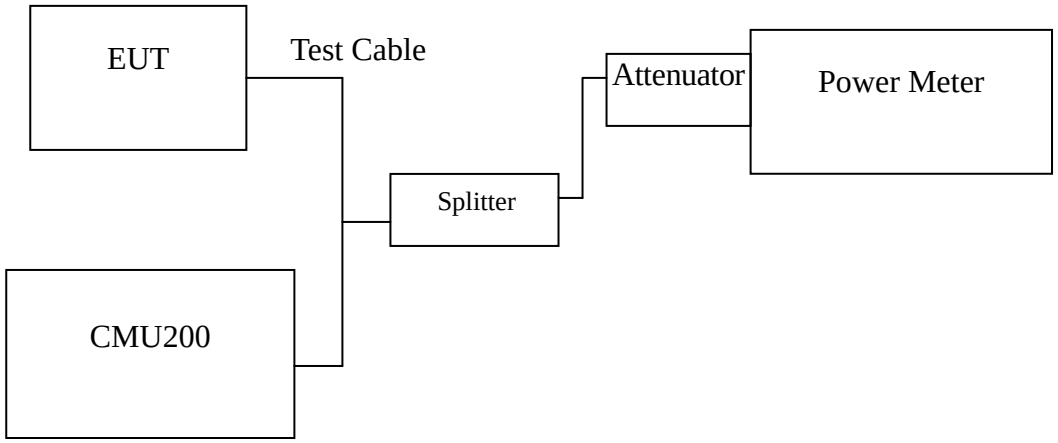
Remark: *The value of factor includes both the loss of cable and external attenuator*

7.2AVERAGE 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)	AVG Power (dBm)	Output Power (W)
GPRS 850	128	824.20	29.29	0.84912
	190	836.60	29.39	0.86890
	251	848.80	28.89	0.77441
EDGE 850	128	824.20	23.09	0.20369
	190	836.60	23.29	0.21329
	251	848.80	23.89	0.24489

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power (W)
GPRS 1900	512	1850.20	26.89	0.48862
	661	1880.00	26.39	0.43548
	810	1909.80	26.79	0.47750
EDGE 1900	512	1850.20	22.29	0.16942
	661	1880.00	22.09	0.16180
	810	1909.80	22.29	0.16942

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

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power (W)
WCDMA (BAND II)	9262	1852.40	23.56	0.22699
	9400	1880.00	23.44	0.22080
	9538	1907.60	22.40	0.17378
WCDMA (BAND V)	4132	826.40	23.52	0.22491
	4182	836.40	22.46	0.17620
	4233	846.60	23.10	0.20417

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power (W)
WCDMA / HSDPA (BAND II)	9262	1852.40	22.30	0.16982
	9400	1880.00	22.16	0.16444
	9538	1907.60	21.20	0.13183
WCDMA / HSDPA (BAND V)	4132	826.40	22.20	0.16596
	4182	836.40	21.64	0.14588
	4233	846.60	21.85	0.15311

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
WCDMA / HSUPA (BAND II)	9262	1852.40	22.02	0.15922
	9400	1880.00	21.98	0.15776
	9538	1907.60	21.05	0.12735
WCDMA / HSUPA (BAND V)	4132	826.40	21.95	0.15668
	4182	836.40	21.38	0.13740
	4233	846.60	21.52	0.14191

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

7.3ERP & EIRP MEASUREMENT

LIMIT

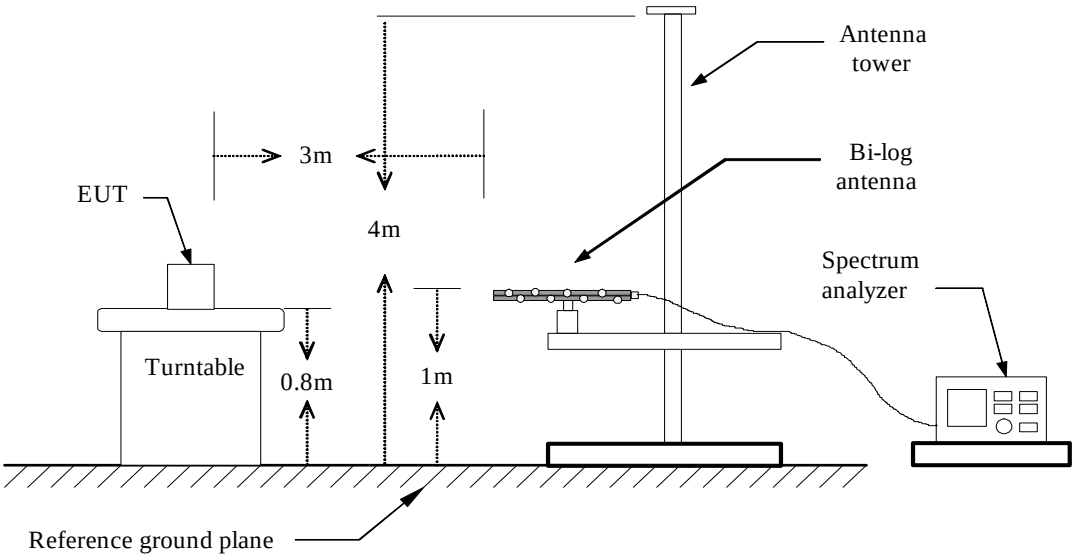
According to FCC §2.1046

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

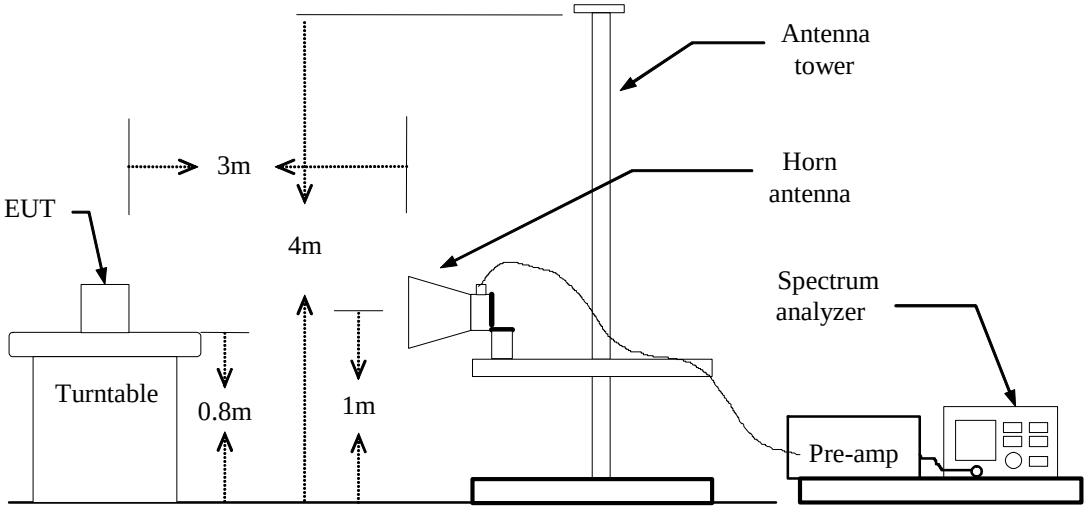
FCC 24.232(b): The equivalent Isotropic Radiated Power (EIRP) must not exceed 2 Watts.

Test Configuration

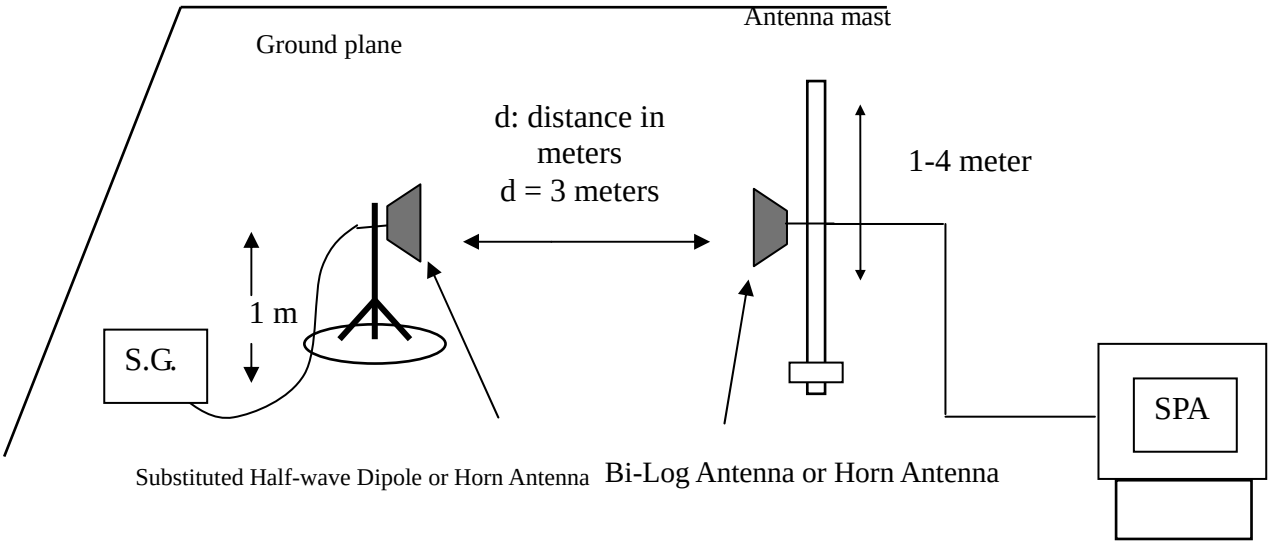
Below 1 GHz



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 5MHz and the average bandwidth was set to 50MHz. 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 (dBi) – Cable (dB)-2.15
EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable (dB)

TEST RESULTS

No non-compliance noted.

GPRS 850 TEST DATA

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)
128	824.20	V	24.21	3.39	6.24	27.06	24.91	38.45	-13.54
	824.20	H	24.39	3.39	6.24	27.24	25.09	38.45	-13.36
190	836.60	V	23.75	3.4	6.36	26.71	24.56	38.45	-13.89
	836.60	H	18.68	3.4	6.36	21.64	19.49	38.45	-18.96
251	848.80	V	25.04	3.4	6.4	**28.04**	***25.89**	38.45	-12.56
	848.80	H	21.77	3.4	6.4	24.77	22.62	38.45	-15.83

GPRS 1900 TEST DATA

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
512	1850.20	V	23.66	5.37	5.67	23.96	33.00	-9.04
	1850.20	H	22.35	5.37	5.67	22.65	33.00	-10.35
661	1880.00	V	23.39	5.42	5.62	23.59	33.00	-9.41
	1880.00	H	20.36	5.42	5.62	20.56	33.00	-12.44
810	1909.80	V	24.77	5.48	5.56	***24.85**	33.00	-8.15
	1909.80	H	22.25	5.48	5.56	22.33	33.00	-10.67

EDGE 850 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)
128	824.20	V	21.4	3.39	6.24	24.25	22.1	38.45	-16.35
	824.20	H	25.8	3.39	6.24	28.65	26.5	38.45	-11.95
190	836.60	V	23.99	3.4	6.36	26.95	24.8	38.45	-13.65
	836.60	H	20.24	3.4	6.36	23.20	21.05	38.45	-17.4
251	848.80	V	21.72	3.4	6.4	24.72	22.57	38.45	-15.88
	848.80	H	25.81	3.4	6.4	**28.81**	***26.66**	38.45	-11.79

EDGE 1900 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
512	1850.20	V	29.08	5.37	5.67	29.38	33.00	-3.62
	1850.20	H	24.3	5.37	5.67	24.60	33.00	-8.40
661	1880.00	V	29.84	5.42	5.62	***30.04**	33.00	-2.96
	1880.00	H	22.18	5.42	5.62	22.38	33.00	-10.62
810	1909.80	V	28.98	5.48	5.56	29.06	33.00	-3.94
	1909.80	H	23.45	5.48	5.56	23.53	33.00	-9.47

WCDMA Test Data (BAND II)

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
9262	1852.40	V	19.84	5.37	5.67	20.14	33.00	-12.86
	1852.40	H	20.48	5.37	5.67	20.78	33.00	-12.22
9400	1880.00	V	21.64	5.42	5.61	***21.83**	33.00	-11.17
	1880.00	H	19.55	5.42	5.62	19.75	33.00	-13.25
9538	1907.60	V	20.73	5.47	5.57	20.83	33.00	-12.17
	1907.60	H	18.77	5.47	5.57	18.87	33.00	-14.13

WCDMA Test Data (BAND V)

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)
4132	826.40	V	14.81	3.39	6.26	17.68	15.53	38.45	-22.92
	826.40	H	16.12	3.39	6.26	18.99	16.84	38.45	-21.61
4182	836.40	V	13.16	3.4	6.37	16.13	13.98	38.45	-24.47
	836.40	H	15.46	3.41	6.38	18.43	16.28	38.45	-22.17
4233	846.60	V	14.48	3.4	6.4	17.48	15.33	38.45	-23.12
	846.60	H	16.11	3.4	6.4	**19.11**	***16.96**	38.45	-21.49

WCDMA / HSDPA BAND II Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
9262	1852.40	V	22.92	5.37	5.67	***23.22**	33.00	-9.78
	1852.40	H	15.69	5.37	5.66	15.98	33.00	-17.02
9400	1880.00	V	22.62	5.42	5.62	22.82	33.00	-10.18
	1880.00	H	14.69	5.42	5.62	14.89	33.00	-18.11
9538	1907.60	V	21.31	5.47	5.57	21.41	33.00	-11.59
	1907.60	H	14.49	5.47	5.57	14.59	33.00	-18.41

WCDMA / HSDPA BAND V Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)
4132	826.40	V	14.74	3.39	6.25	17.60	15.45	38.45	-23
	826.40	H	16.18	3.39	6.26	19.05	16.9	38.45	-21.55
4182	836.40	V	13.3	3.4	6.37	16.27	14.12	38.45	-24.33
	836.40	H	15.5	3.41	6.38	18.47	16.32	38.45	-22.13
4233	846.60	V	14.63	3.4	6.4	17.63	15.48	38.45	-22.97
	846.60	H	16.1	3.4	6.4	**19.10**	***16.95**	38.45	-21.5

WCDMA / HSUPA BAND II Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
9262	1852.40	V	22.89	5.37	5.67	***23.19**	33.00	-9.81
	1852.40	H	15.75	5.37	5.67	16.05	33.00	-16.95
9400	1880.00	V	22.59	5.42	5.62	22.79	33.00	-10.21
	1880.00	H	14.74	5.42	5.62	14.94	33.00	-18.06
9538	1907.60	V	21.29	5.47	5.57	21.39	33.00	-11.61
	1907.60	H	14.39	5.47	5.57	14.49	33.00	-18.51

WCDMA / HSUPA BAND V Test Data

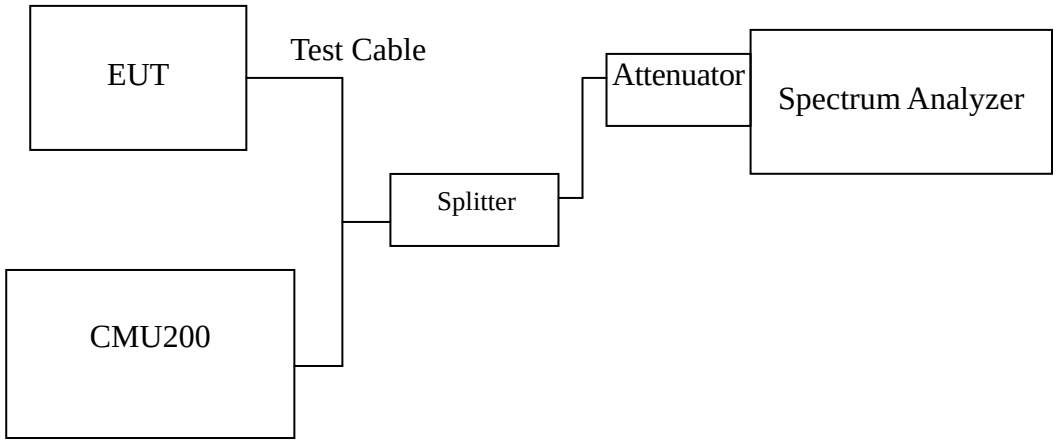
Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)
4132	826.40	V	14.78	3.39	6.26	17.65	15.5	38.45	-22.95
	826.40	H	16.24	3.39	6.26	**19.11**	***16.96**	38.45	-21.49
4182	836.40	V	13.26	3.4	6.37	16.23	14.08	38.45	-24.37
	836.40	H	15.5	3.41	6.38	18.47	16.32	38.45	-22.13
4233	846.60	V	14.49	3.4	6.4	17.49	15.34	38.45	-23.11
	846.60	H	16.08	3.4	6.4	19.08	16.93	38.45	-21.52

7.4OCCUPIED BANDWIDTH MEASUREMENT

LIMIT

According to §FCC 2.1049.

Test Configuration



Remark: *Measurement setup for testing on Antenna connector*

TEST PROCEDURE

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW was set to about 1% of emission BW, VBW is set to 3 times the RBW, -26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.

TEST RESULTS

No non-compliance noted

Test Data

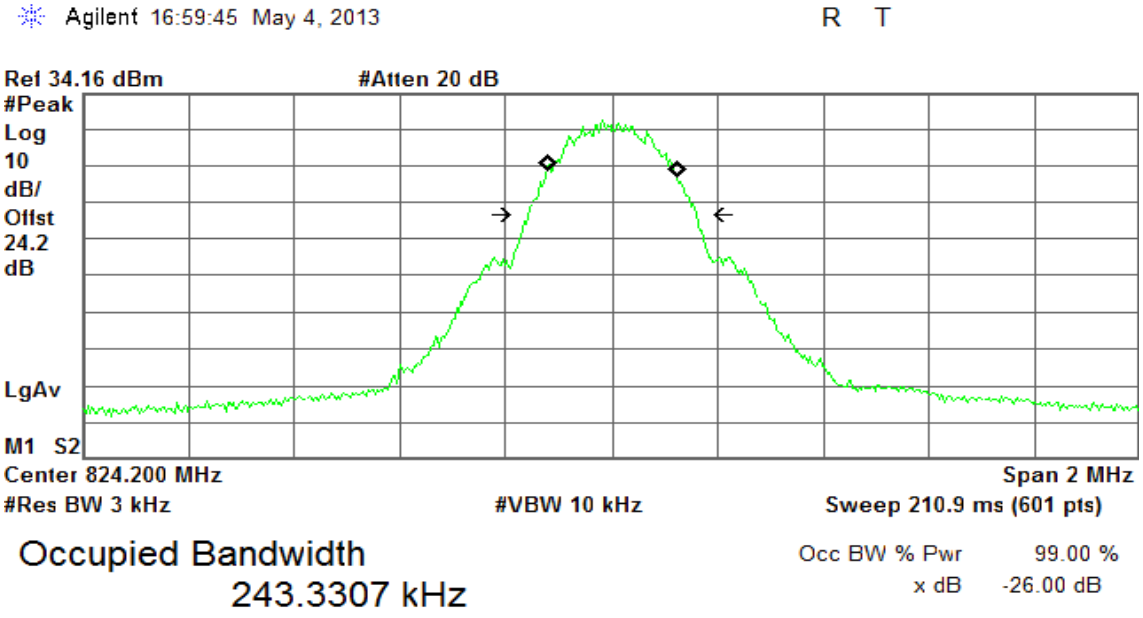
Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
GPRS 850	128	824.20	243.3307
	190	836.60	246.1925
	251	848.80	243.1871
EDGE 850	128	824.20	245.9985
	190	836.60	242.5748
	251	848.80	242.2437

Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
GPRS 1900	512	1850.20	242.7062
	661	1880.00	245.0208
	810	1909.80	248.3395
EDGE 1900	512	1850.20	247.3476
	661	1880.00	240.8590
	810	1909.80	245.0595

Test Mode	CH	Frequency (MHz)	99% Bandwidth (MHz)
WCDMA (Band II)	9262	1852.40	4.1443
	9400	1880.00	4.1230
	9538	1907.60	4.1166
WCDMA (Band V)	4132	826.40	4.1263
	4182	836.40	4.1598
	4233	846.60	4.1418
WCDMA / HSDPA (BAND II)	9262	1852.40	4.1373
	9400	1880.00	4.1367
	9538	1907.60	4.1155
WCDMA / HSDPA (BAND V)	4132	826.40	4.1394
	4182	836.40	4.1423
	4233	846.60	4.1162
WCDMA / HSUPA (BAND II)	9262	1852.40	4.1395
	9400	1880.00	4.1433
	9538	1907.60	4.1171
WCDMA / HSUPA (BAND V)	4132	826.40	4.1375
	4182	836.40	4.1475
	4233	846.60	4.1207

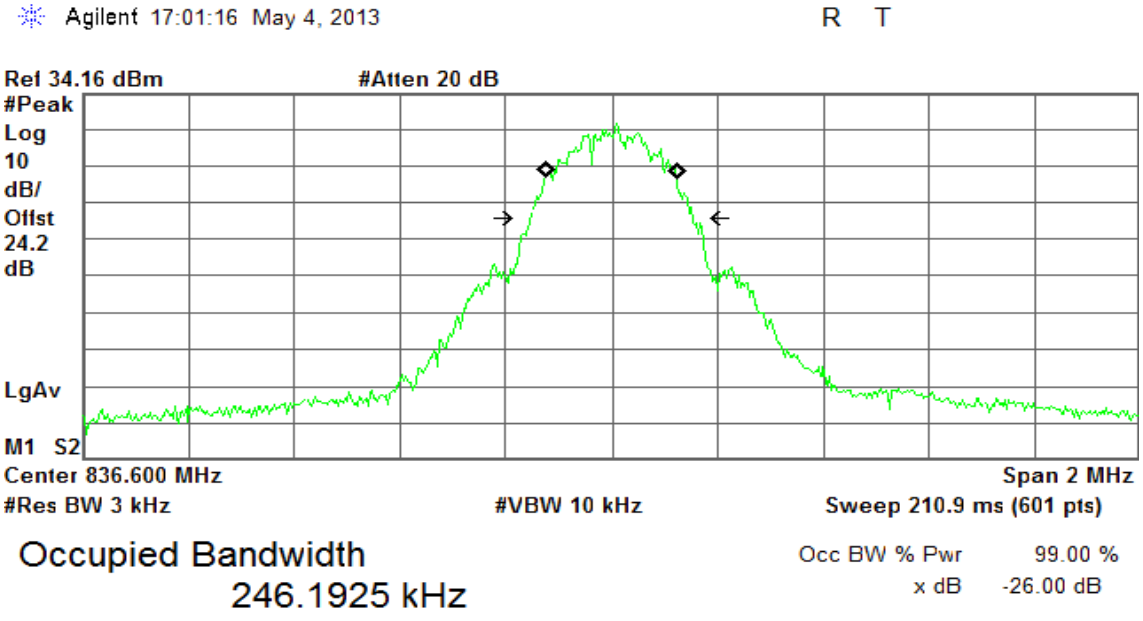
Test Plot

GPRS 850 (CH Low)



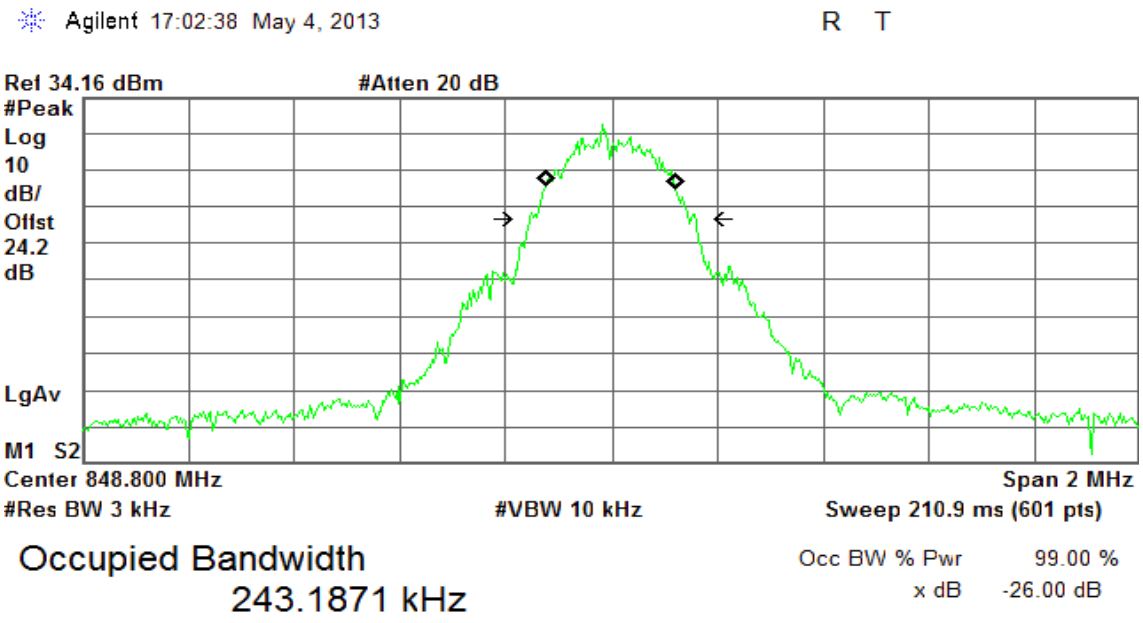
Transmit Freq Error	504.601 Hz
x dB Bandwidth	316.724 kHz

GPRS 850 (CH Mid)



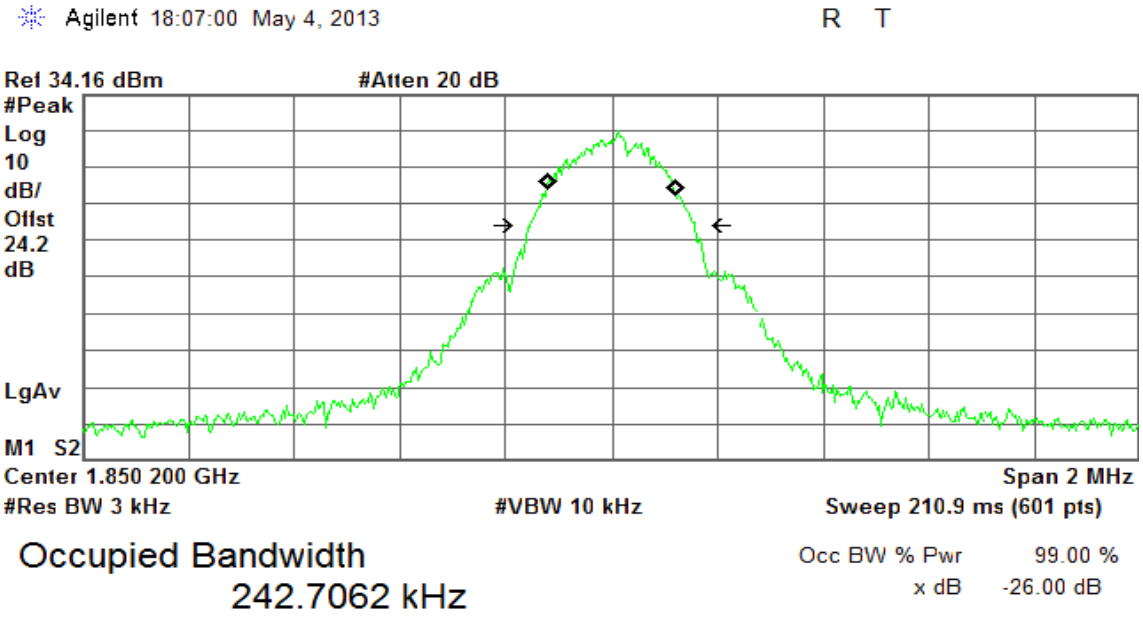
Transmit Freq Error	-755.811 Hz
x dB Bandwidth	304.514 kHz

GPRS 850(CH High)



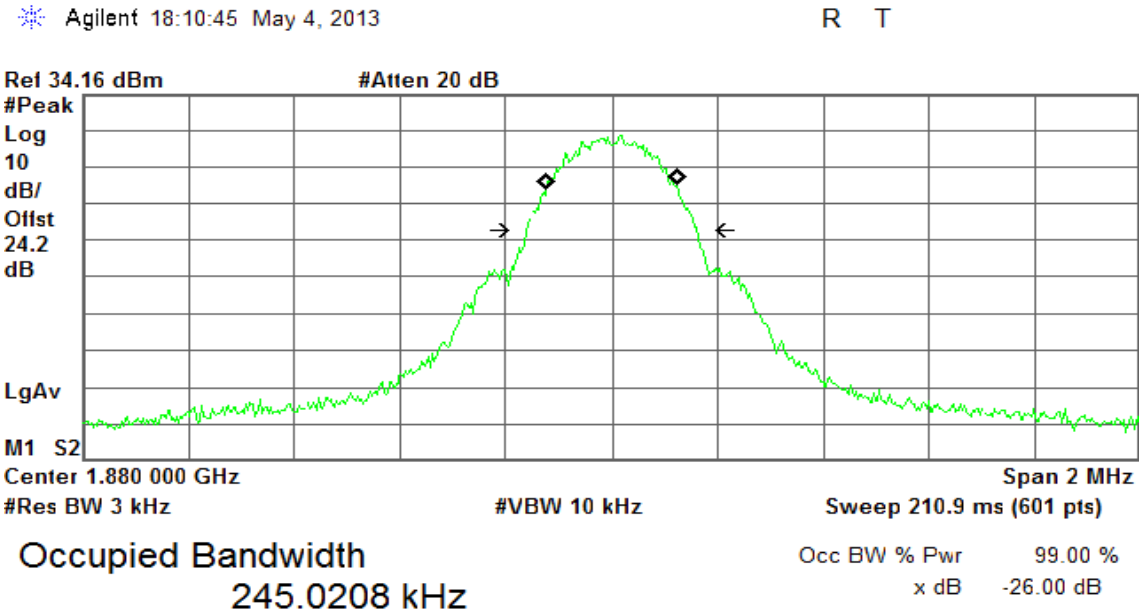
Transmit Freq Error	-744.974 Hz
x dB Bandwidth	312.875 kHz

GPRS 1900 (CH Low)



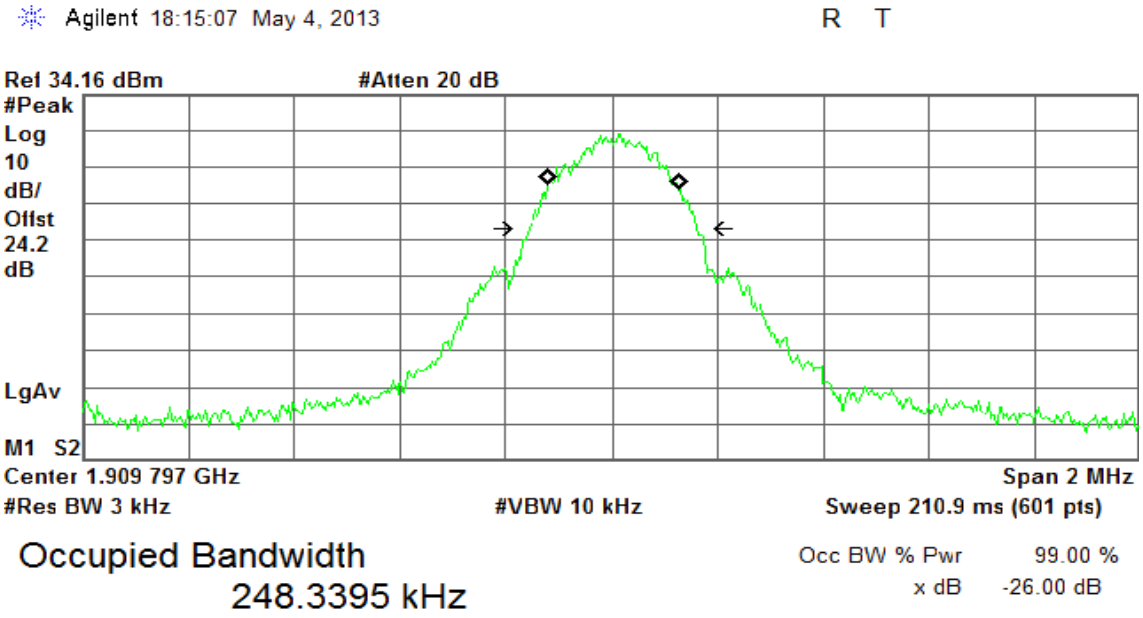
Transmit Freq Error	244.268 Hz
x dB Bandwidth	310.251 kHz

GPRS 1900 (CH Mid)



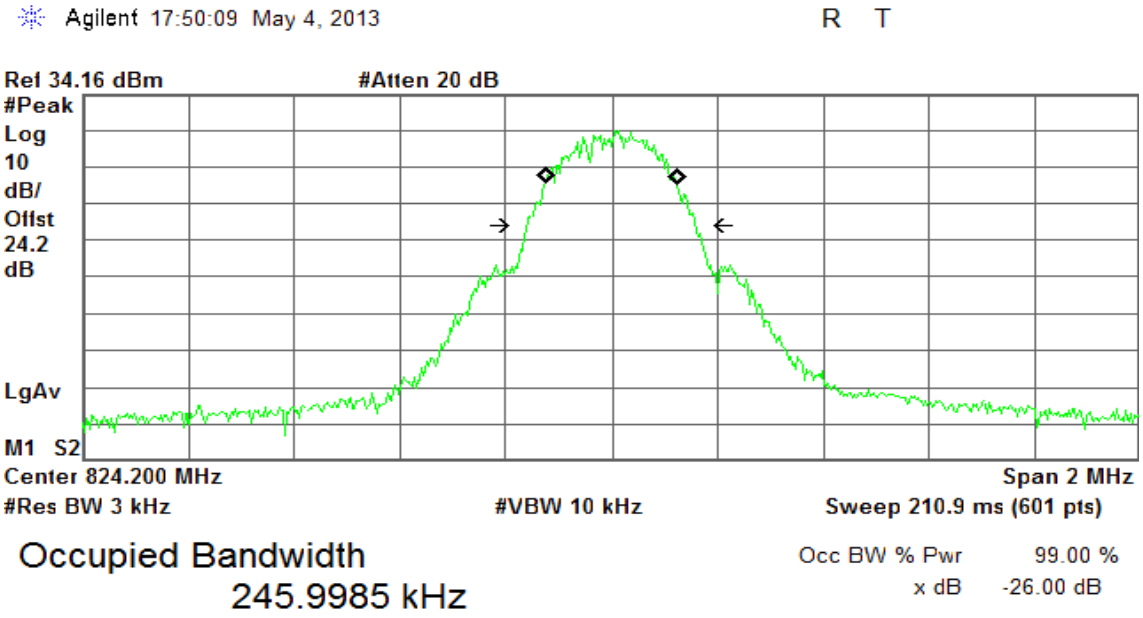
Transmit Freq Error	783.032 Hz
x dB Bandwidth	321.275 kHz

GPRS 1900 (CH High)



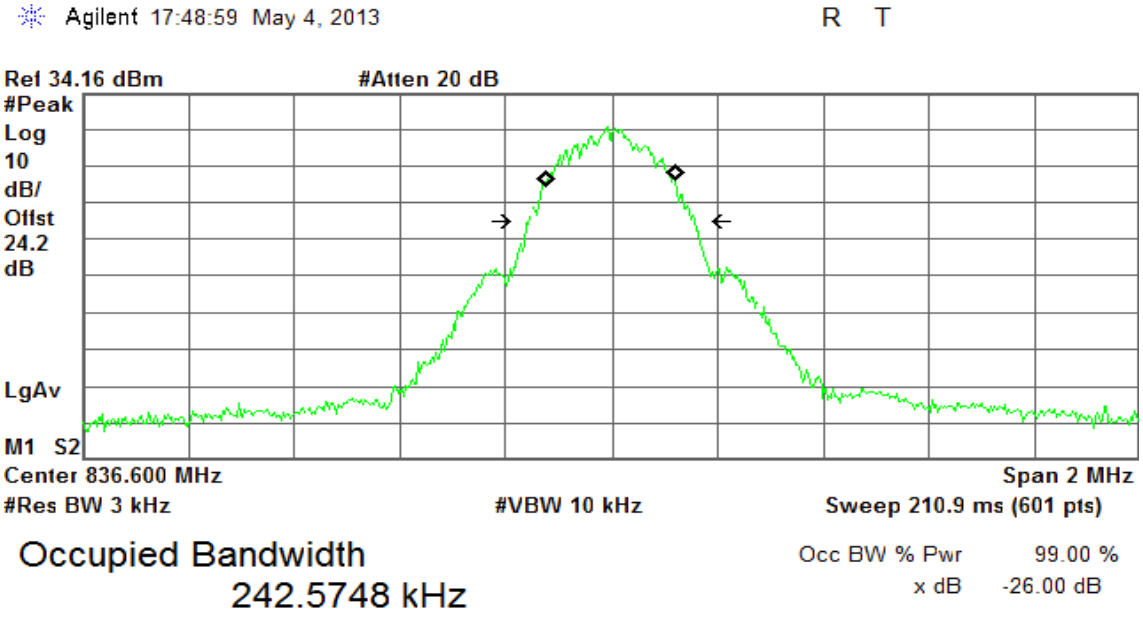
Transmit Freq Error	3.935 kHz
x dB Bandwidth	312.512 kHz

EDGE 850 (CH Low)



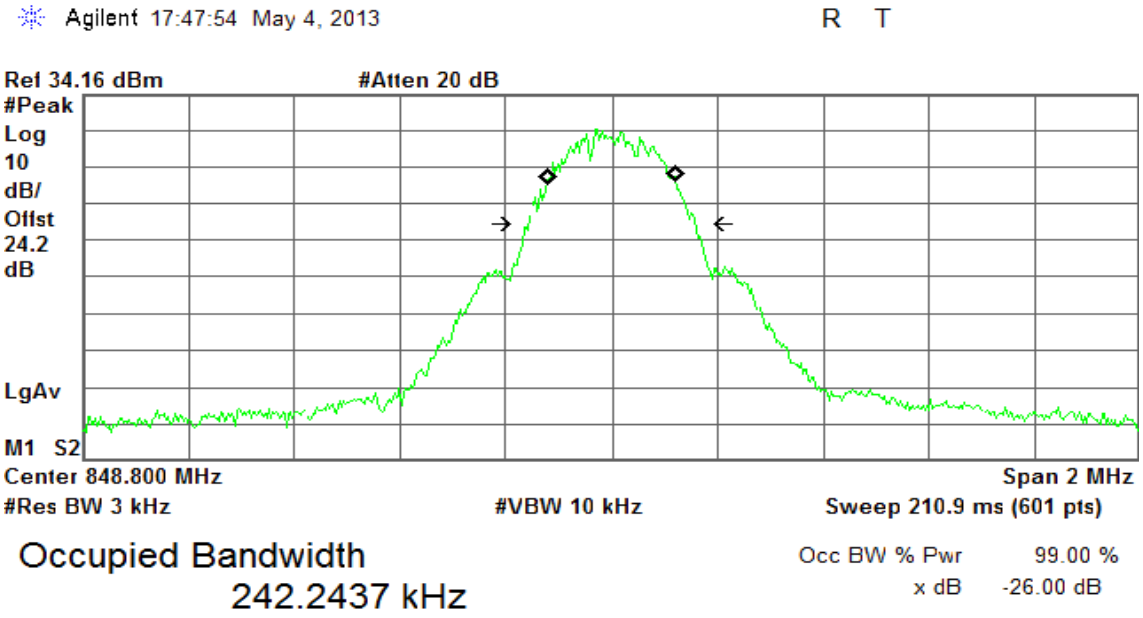
Transmit Freq Error	304.624 Hz
x dB Bandwidth	317.230 kHz

EDGE 850 (CH Mid)



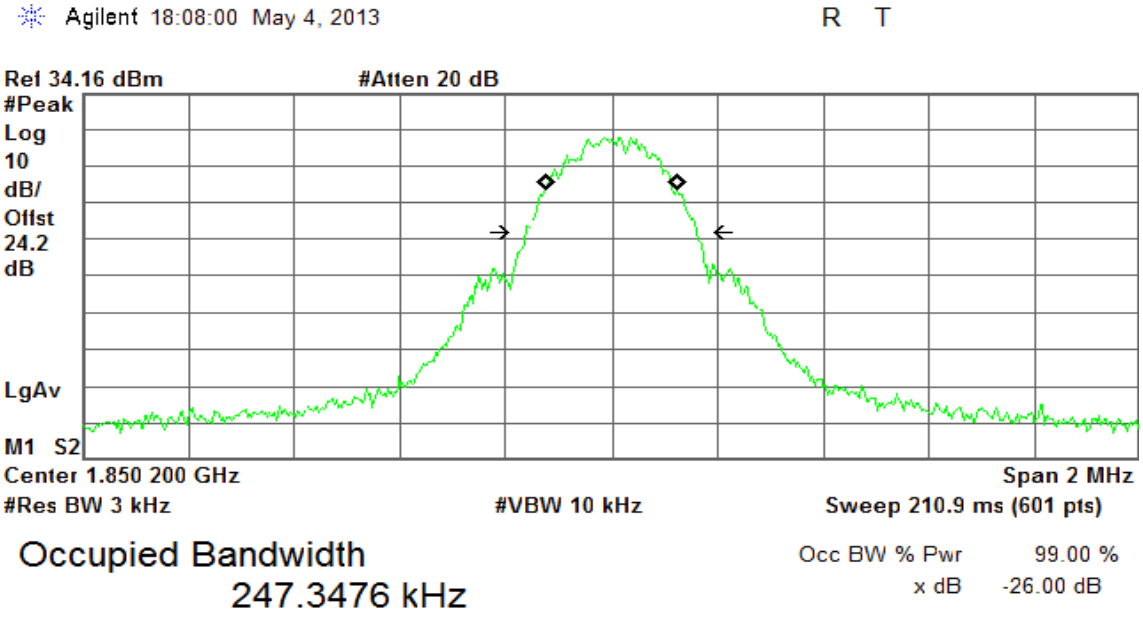
Transmit Freq Error	-2.361 kHz
x dB Bandwidth	312.695 kHz

EDGE 850 (CH High)



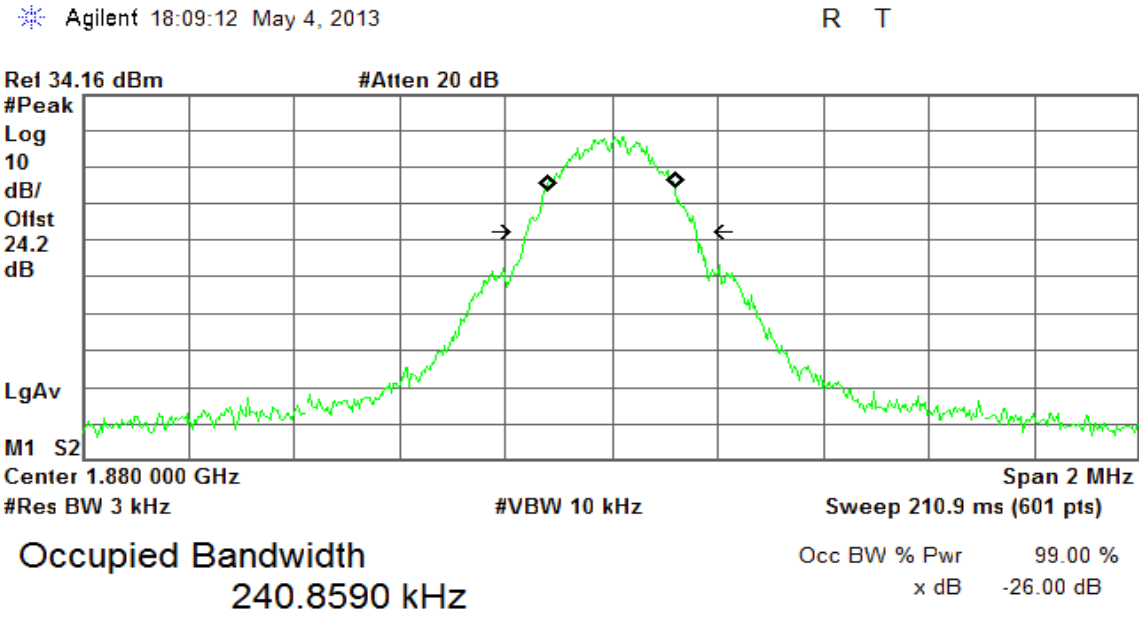
Transmit Freq Error	210.669 Hz
x dB Bandwidth	314.382 kHz

EDGE 1900 (CH Low)



Transmit Freq Error	469.653 Hz
x dB Bandwidth	321.174 kHz

EDGE 1900 (CH Mid)

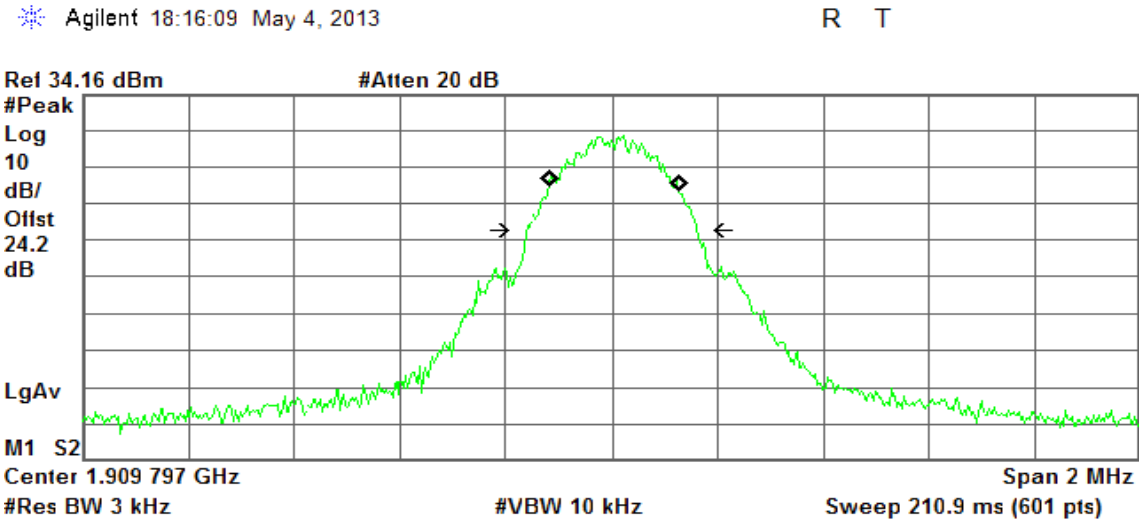


Occupied Bandwidth
240.8590 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -928.336 Hz
x dB Bandwidth 317.680 kHz

EDGE 1900 (CH High)

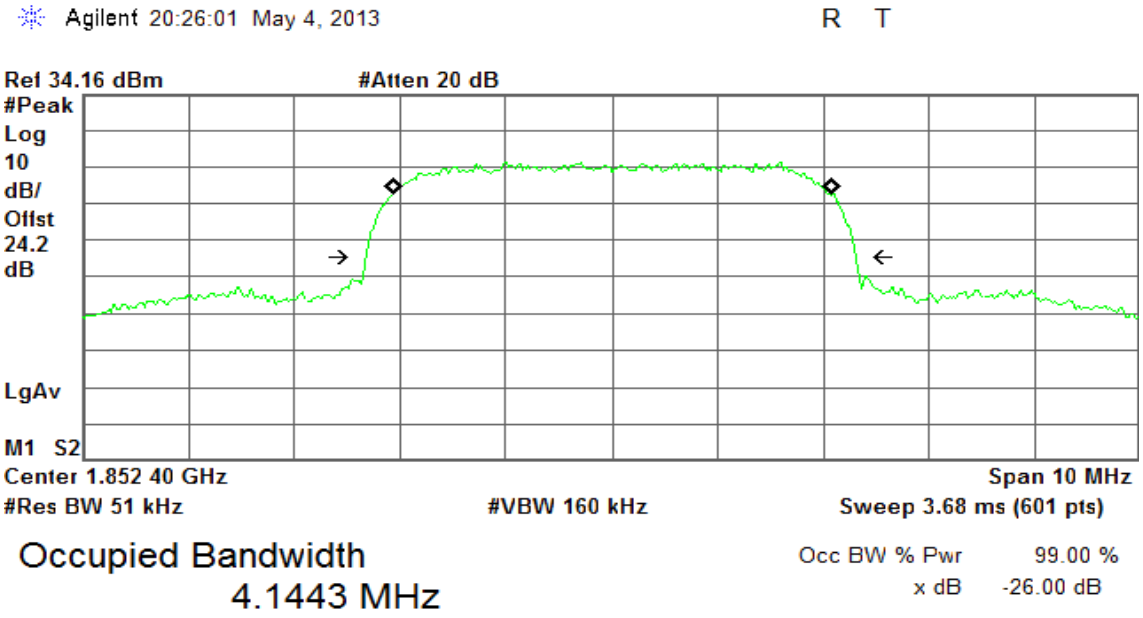


Occupied Bandwidth
245.0595 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 4.809 kHz
x dB Bandwidth 320.111 kHz

WCDMA Band II (CH Low)

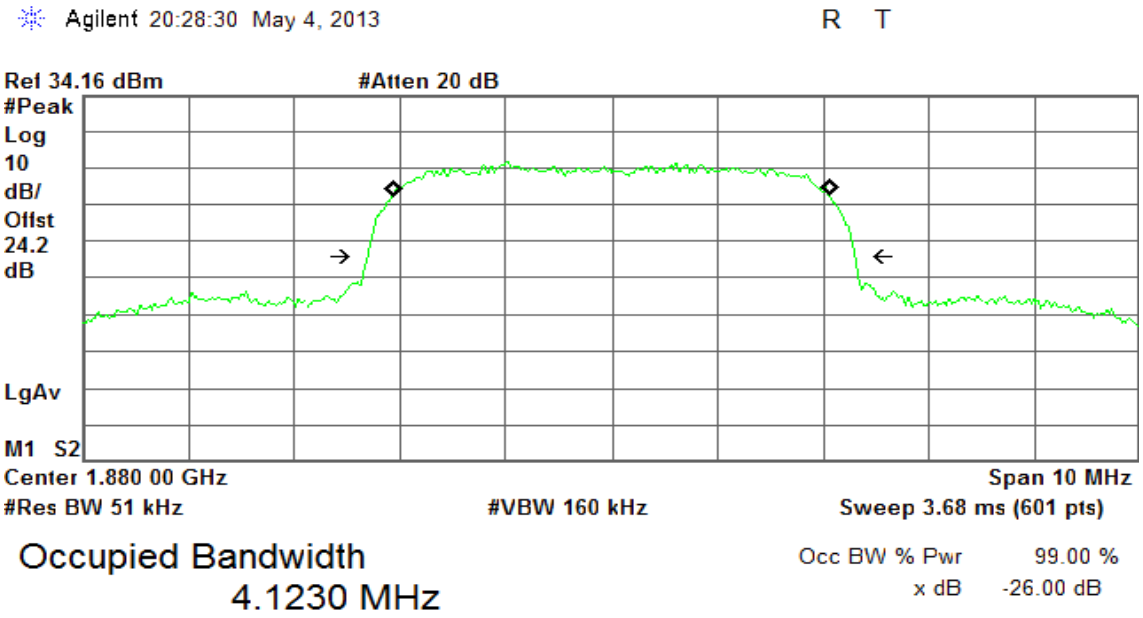


Occupied Bandwidth
4.1443 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 3.222 kHz
x dB Bandwidth 4.640 MHz

WCDMA Band II (CH Mid)

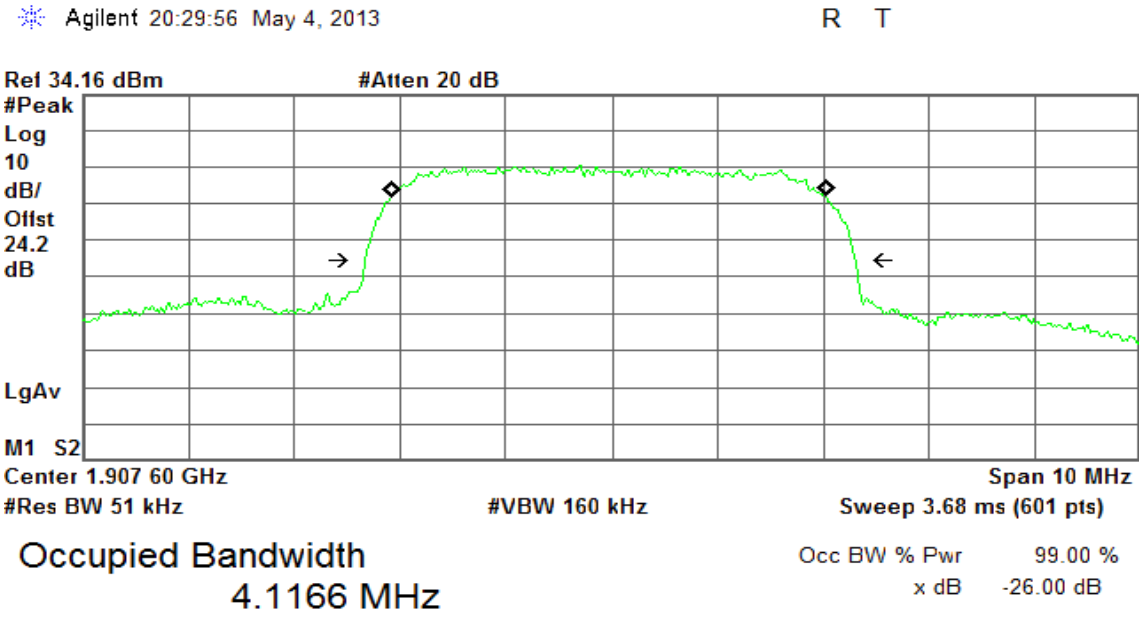


Occupied Bandwidth
4.1230 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -3.056 kHz
x dB Bandwidth 4.618 MHz

WCDMA Band II (CH High)

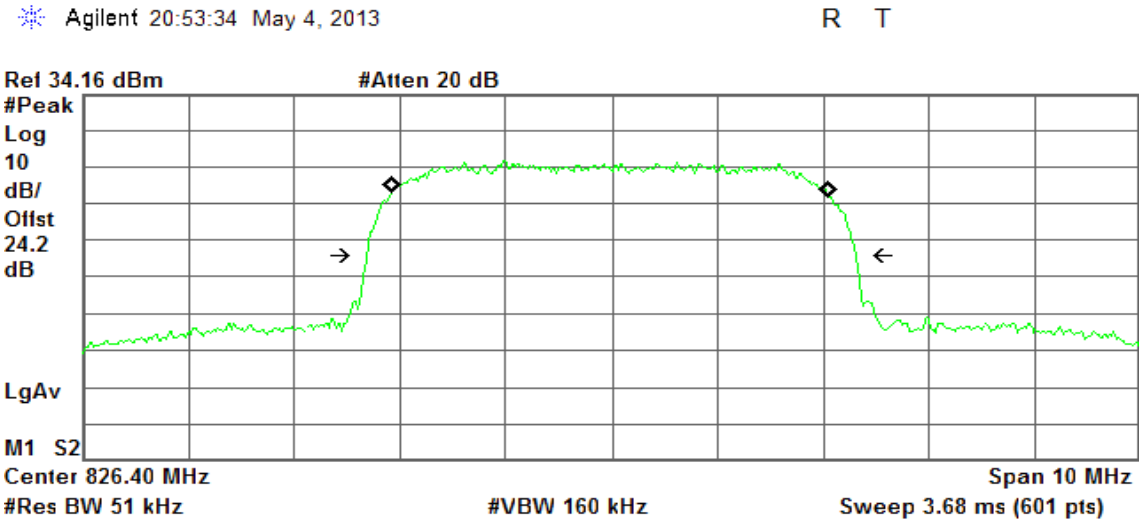


Occupied Bandwidth
4.1166 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -20.656 kHz
x dB Bandwidth 4.641 MHz

WCDMA Band V (CH Low)

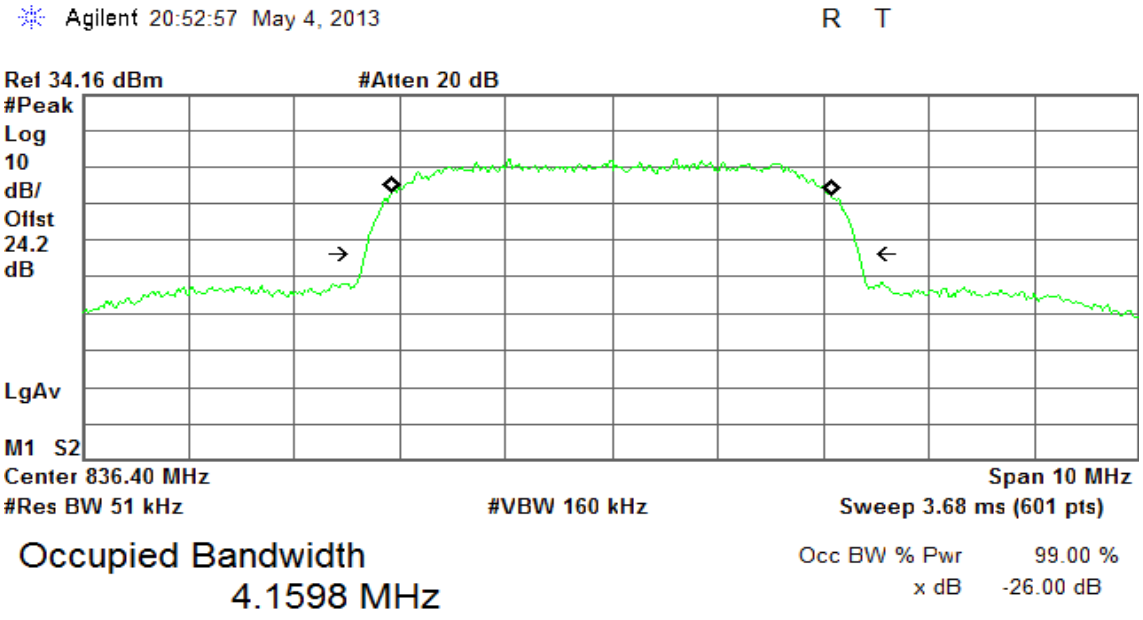


Occupied Bandwidth
4.1263 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -13.426 kHz
x dB Bandwidth 4.631 MHz

WCDMA Band V (CH Mid)

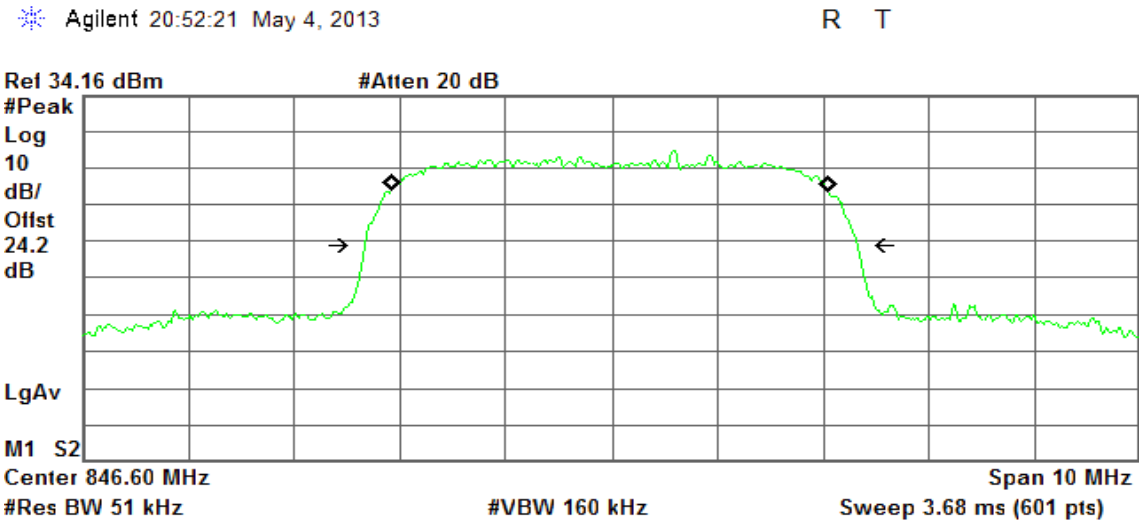


Occupied Bandwidth
4.1598 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 3.268 kHz
x dB Bandwidth 4.679 MHz

WCDMA Band V (CH High)

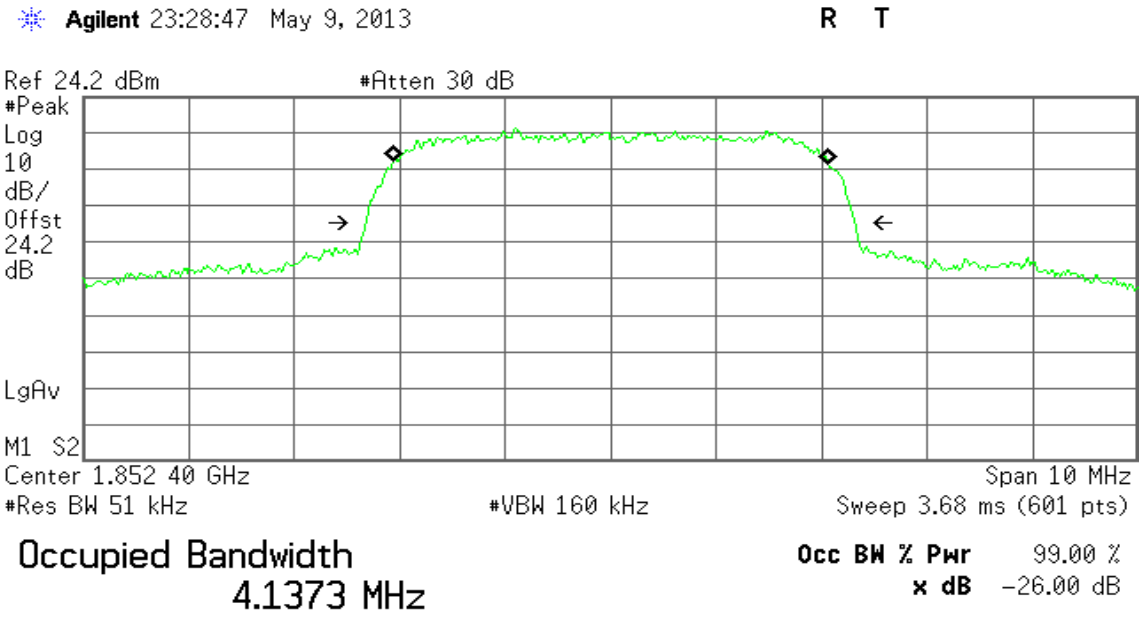


Occupied Bandwidth
4.1418 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

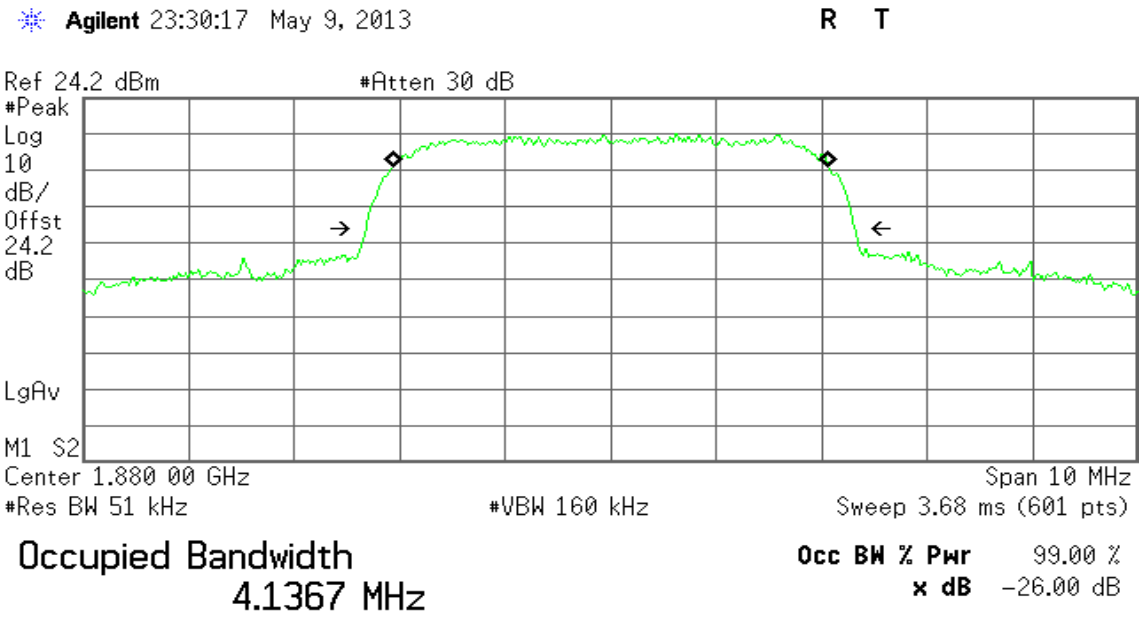
Transmit Freq Error -14.119 kHz
x dB Bandwidth 4.667 MHz

WCDMA / HSDPA Band II (CH Low)



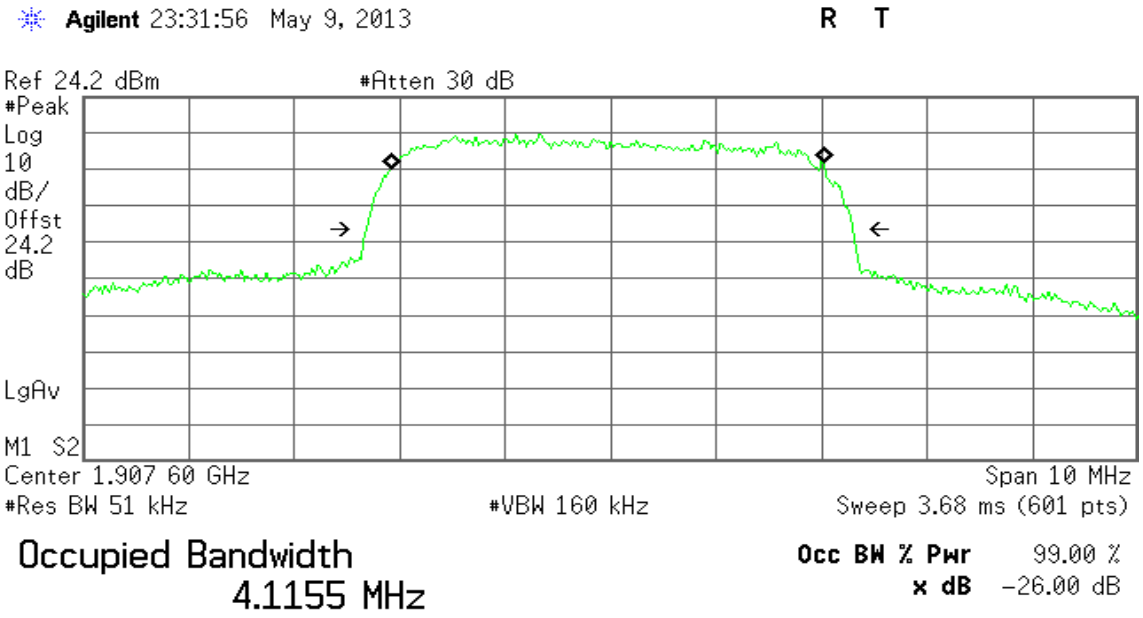
Transmit Freq Error	5.487 kHz
x dB Bandwidth	4.651 MHz

WCDMA / HSDPA Band II (CH Mid)



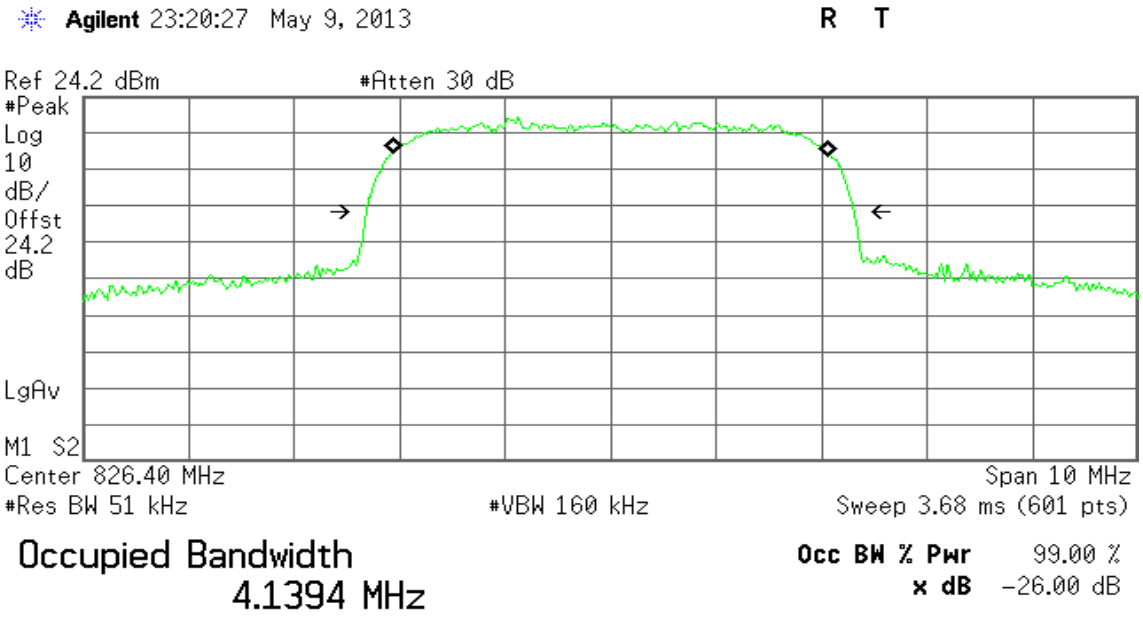
Transmit Freq Error	3.422 kHz
x dB Bandwidth	4.638 MHz

WCDMA / HSDPA Band II (CH High)



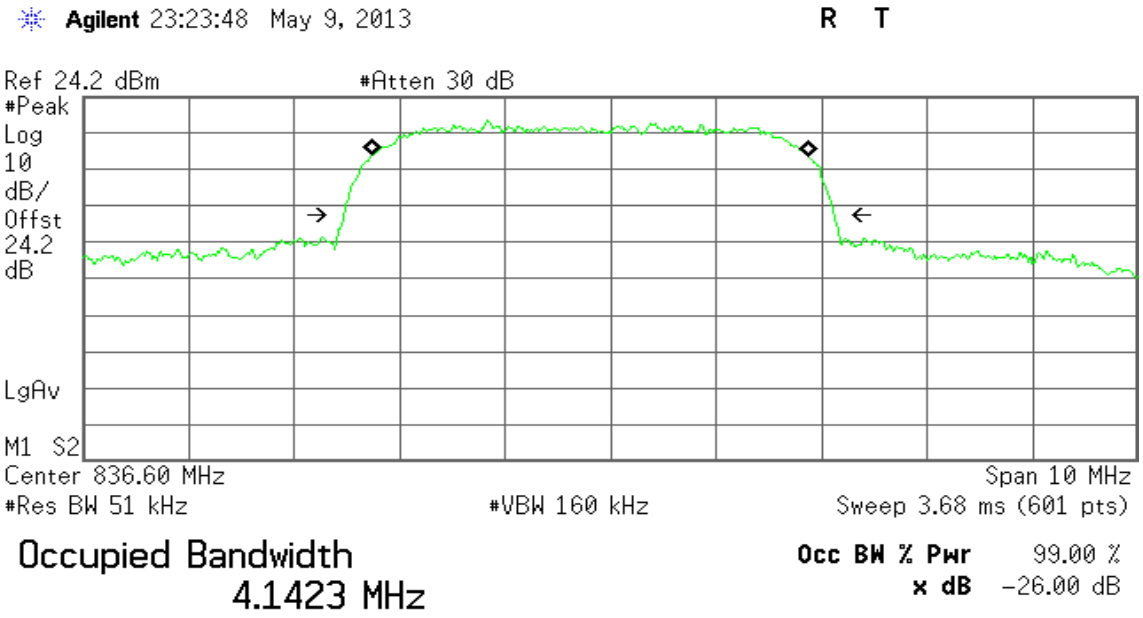
Transmit Freq Error	-27.983 kHz
x dB Bandwidth	4.617 MHz

WCDMA / HSDPA Band V (CH Low)



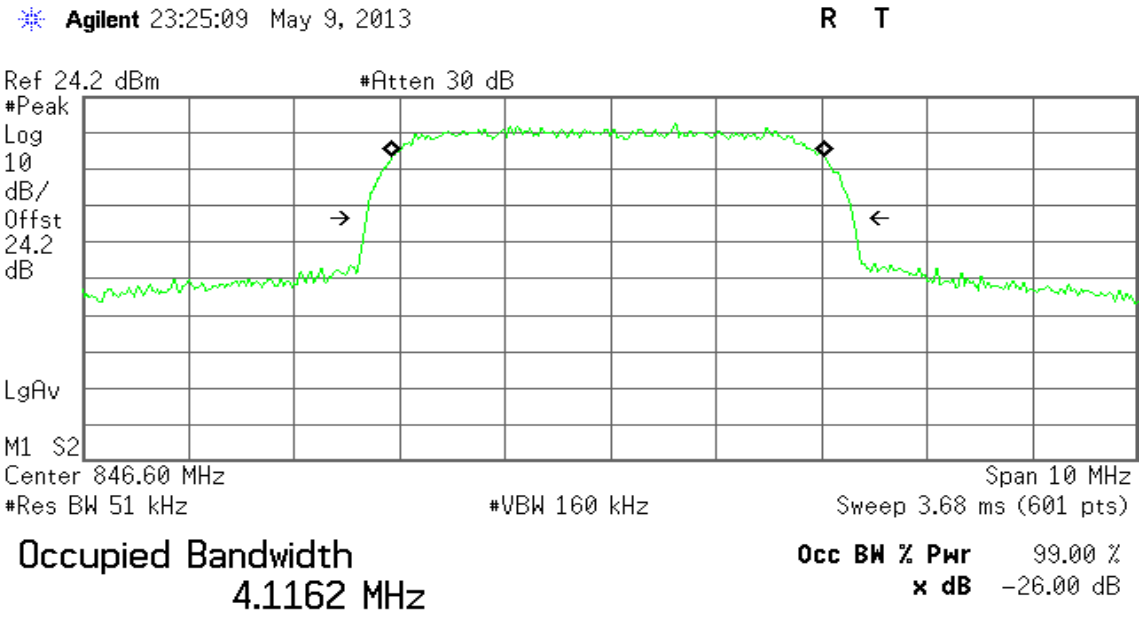
Transmit Freq Error	-1.720 kHz
x dB Bandwidth	4.633 MHz

WCDMA / HSDPA Band V (CH Mid)



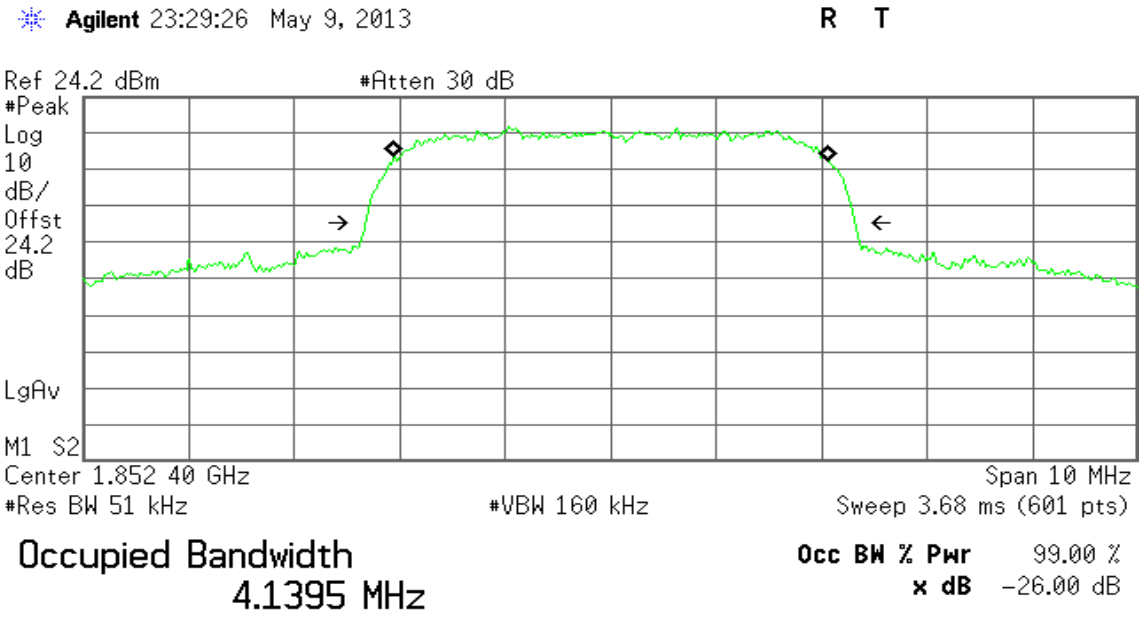
Transmit Freq Error -201.309 kHz
x dB Bandwidth 4.658 MHz

WCDMA / HSDPA Band V (CH High)



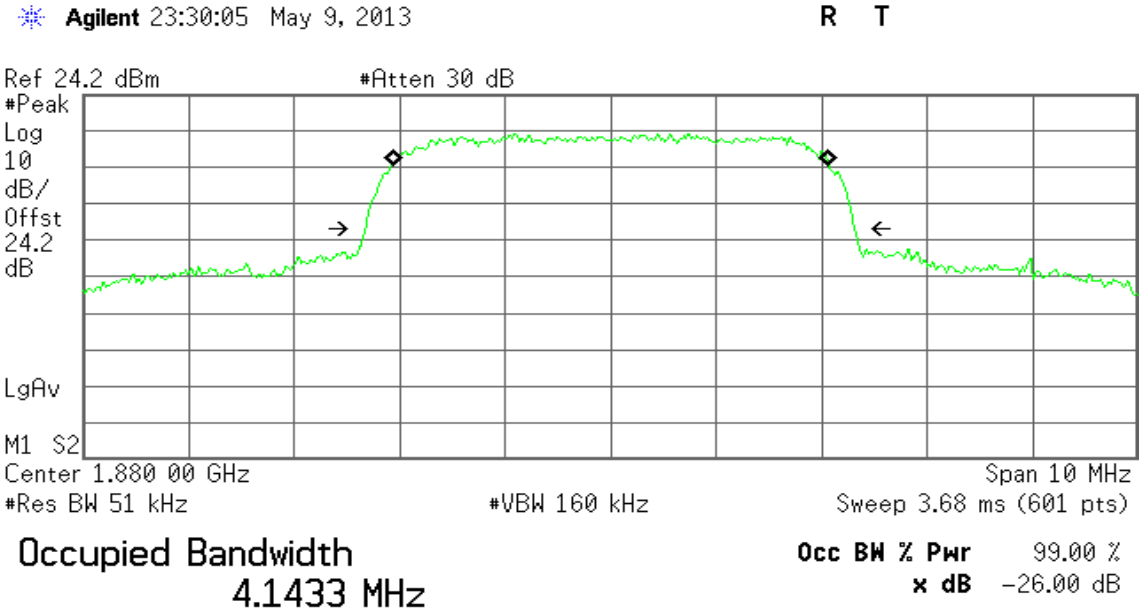
Transmit Freq Error -19.932 kHz
x dB Bandwidth 4.625 MHz

WCDMA / HSUPA Band II (CH Low)



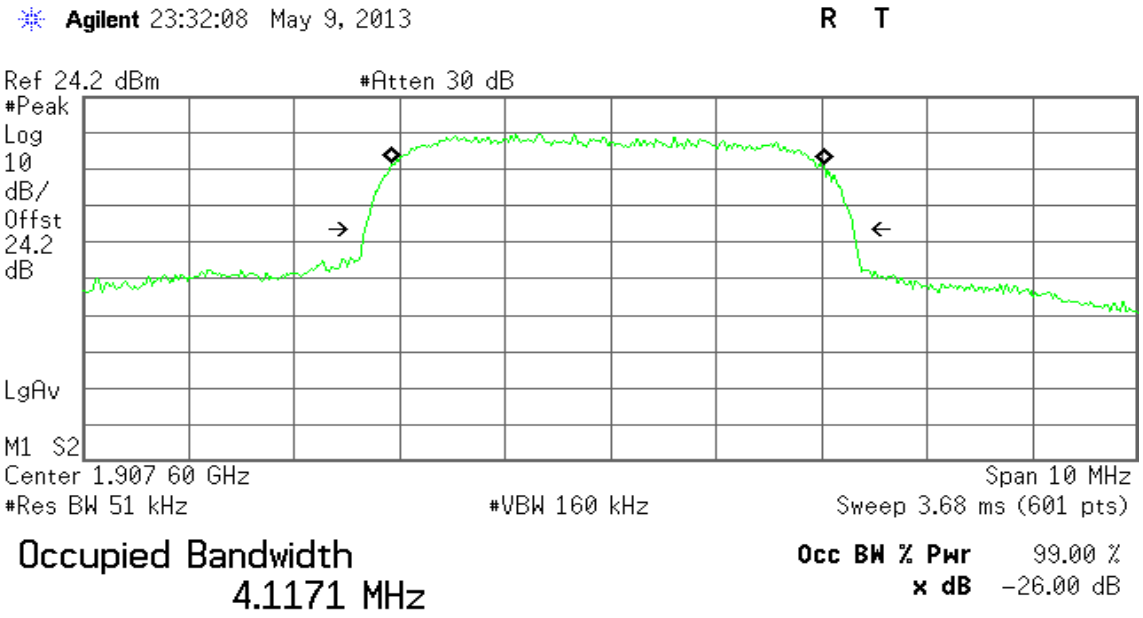
Transmit Freq Error	5.218 kHz
x dB Bandwidth	4.650 MHz

WCDMA / HSUPA Band II (CH Mid)



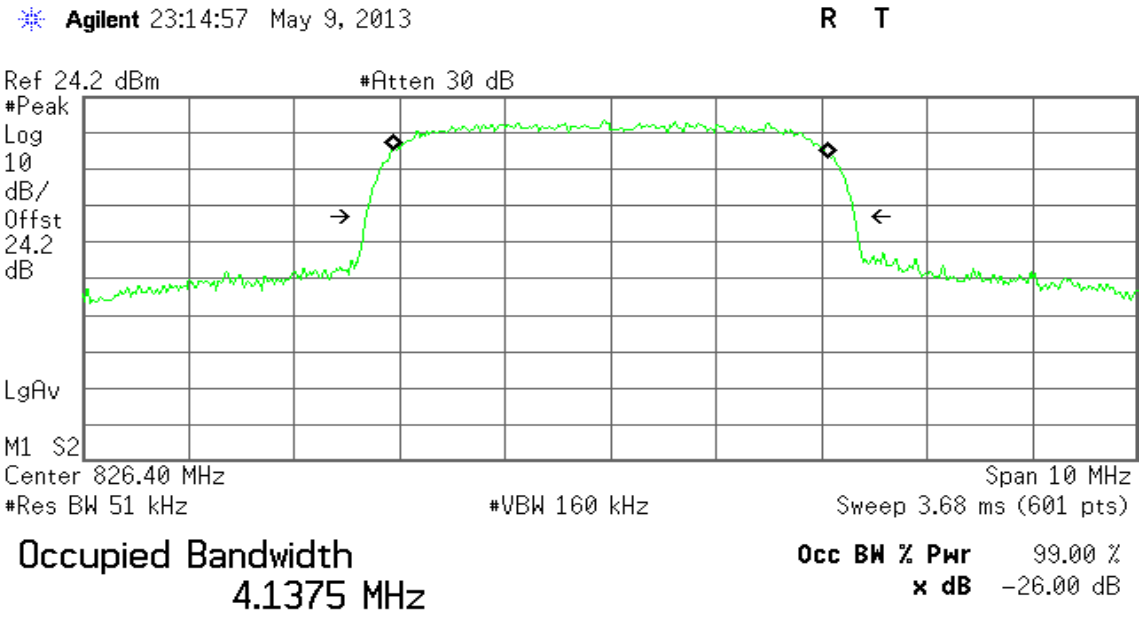
Transmit Freq Error	1.137 kHz
x dB Bandwidth	4.646 MHz

WCDMA / HSUPA Band II (CH High)



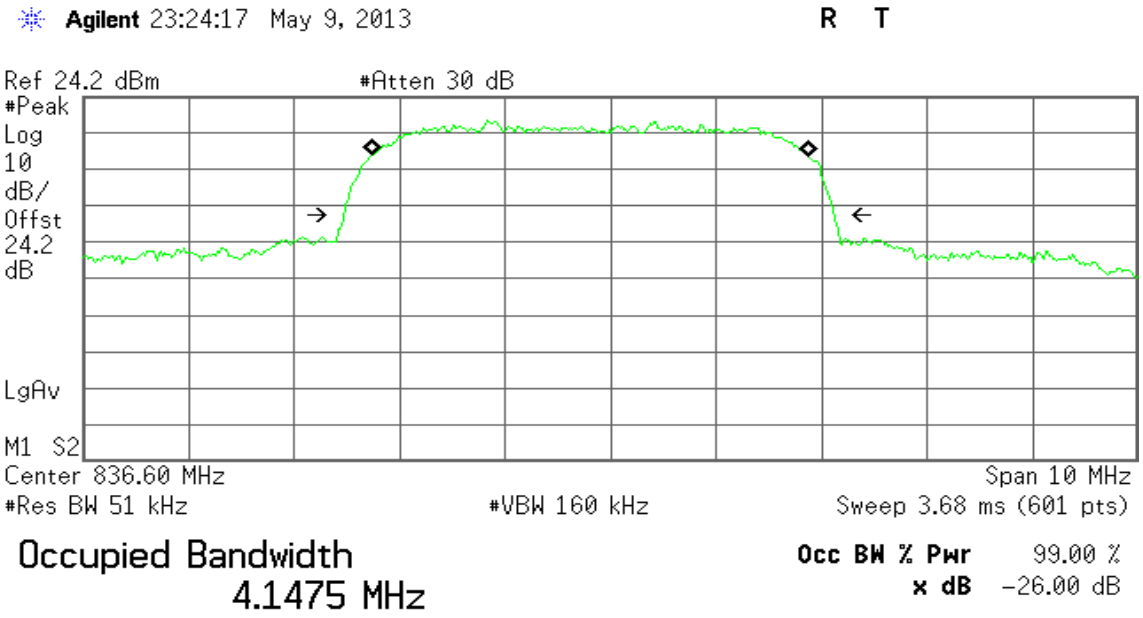
Transmit Freq Error	-22.451 kHz
x dB Bandwidth	4.639 MHz

WCDMA / HSUPA Band V (CH Low)



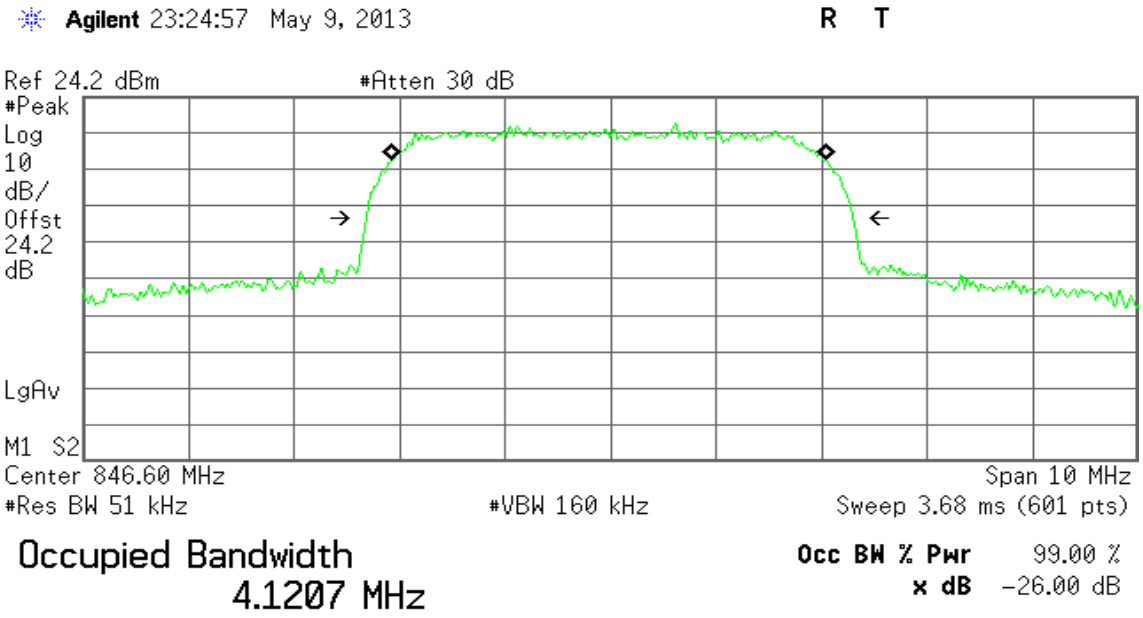
Transmit Freq Error	-4.735 kHz
x dB Bandwidth	4.639 MHz

WCDMA / HSUPA Band V (CH Mid)



Transmit Freq Error -199.296 kHz
x dB Bandwidth 4.658 MHz

WCDMA / HSUPA Band V (CH Mid)



Transmit Freq Error -17.058 kHz
x dB Bandwidth 4.620 MHz

7.5OUT OF BAND EMISSION AT ANTENNA TERMINALS

LIMIT

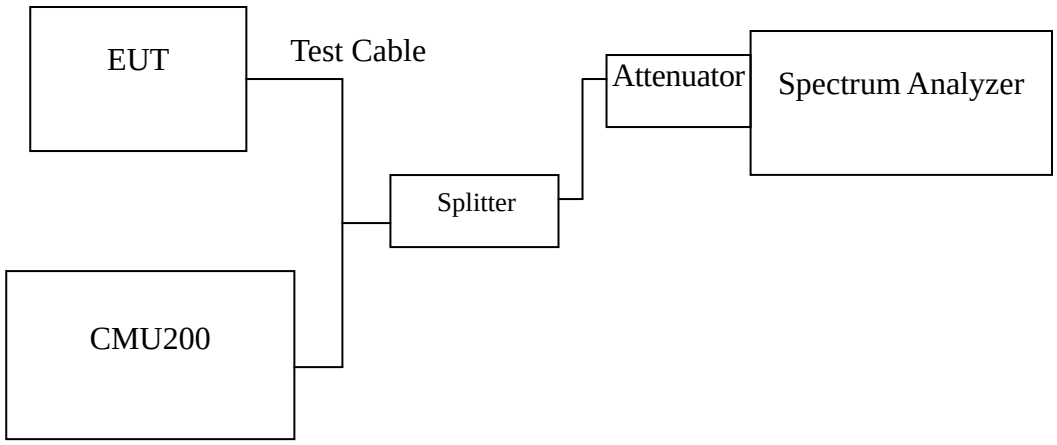
According to FCC §2.1051, FCC §22.917, FCC §24.238(a).

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
GPRS 850	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

Mode	CH	Location	Description
GPRS 1900	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

Mode	CH	Location	Description
GPRS 850	128	Figure 9-1	Band Edge emissions
	251	Figure 9-2	Band Edge emissions

Mode	CH	Location	Description
GPRS 1900	512	Figure 10-1	Band Edge emissions
	810	Figure 10-2	Band Edge emissions

Mode	CH	Location	Description
EDGE 850	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	512	Figure 12-1	Conducted spurious emissions, 30MHz - 20GHz
	661	Figure 12-2	Conducted spurious emissions, 30MHz - 20GHz
	810	Figure 12-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
EDGE 850	128	Figure 13-1	Band Edge emissions
	251	Figure 13-2	Band Edge emissions
EDGE 1900	512	Figure 14-1	Band Edge emissions
	810	Figure 14-2	Band Edge emissions

Mode	CH	Location	Description
WCDMA (Band II)	9262	Figure 15-1	Conducted spurious emissions, 30MHz - 20GHz
	9400	Figure 15-2	Conducted spurious emissions, 30MHz - 20GHz
	9538	Figure 15-3	Conducted spurious emissions, 30MHz - 20GHz
WCDMA (Band V)	4132	Figure 16-1	Conducted spurious emissions, 30MHz - 20GHz
	4182	Figure 16-2	Conducted spurious emissions, 30MHz - 20GHz
	4233	Figure 16-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
WCDMA (Band II)	9262	Figure 17-1	Band Edge emissions
	9538	Figure 17-2	Band Edge emissions
WCDMA (Band V)	4132	Figure 18-1	Band Edge emissions
	4233	Figure 18-2	Band Edge emissions

Mode	CH	Location	Description
HSDPA WCDMA (Band II)	9262	Figure 19-1	Conducted spurious emissions, 30MHz - 20GHz
	9400	Figure 19-2	Conducted spurious emissions, 30MHz - 20GHz
	9538	Figure 19-3	Conducted spurious emissions, 30MHz - 20GHz
HSDPA WCDMA (Band V)	4132	Figure 20-1	Conducted spurious emissions, 30MHz - 20GHz
	4182	Figure 20-2	Conducted spurious emissions, 30MHz - 20GHz
	4233	Figure 20-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
HSDPA WCDMA (Band II)	9262	Figure 21-1	Band Edge emissions
	9538	Figure 21-2	Band Edge emissions
HSDPA WCDMA (Band V)	4132	Figure 22-1	Band Edge emissions
	4233	Figure 22-2	Band Edge emissions

Mode	CH	Location	Description
HSUPA WCDMA (Band II)	9262	Figure 23-1	Conducted spurious emissions, 30MHz - 20GHz
	9400	Figure 23-2	Conducted spurious emissions, 30MHz - 20GHz
	9538	Figure 23-3	Conducted spurious emissions, 30MHz - 20GHz
HSUPA WCDMA (Band V)	4132	Figure 24-1	Conducted spurious emissions, 30MHz - 20GHz
	4182	Figure 24-2	Conducted spurious emissions, 30MHz - 20GHz
	4233	Figure 24-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
HSUPA WCDMA (Band II)	9262	Figure 25-1	Band Edge emissions
	9538	Figure 25-2	Band Edge emissions
HSUPA WCDMA (Band V)	4132	Figure 26-1	Band Edge emissions
	4233	Figure 26-2	Band Edge emissions

Test Plot

GPRS 850

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

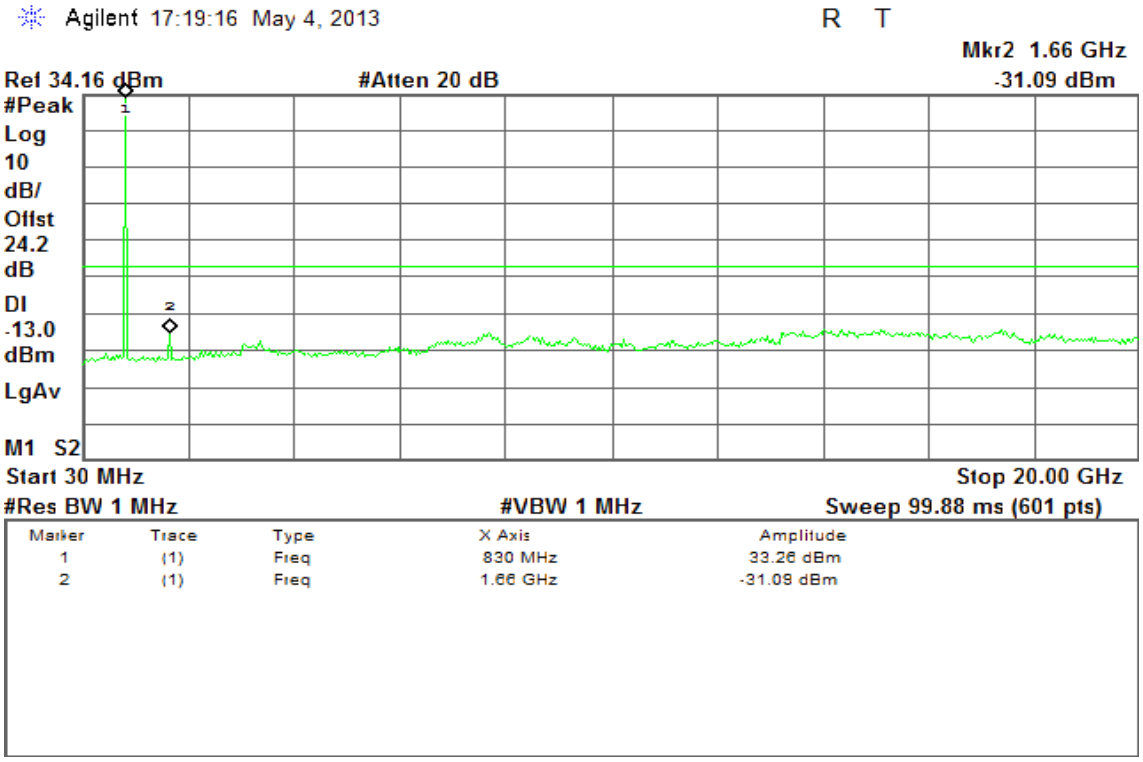


Figure 7-2: Out of Band emission at antenna terminals – GPRS CH Mid

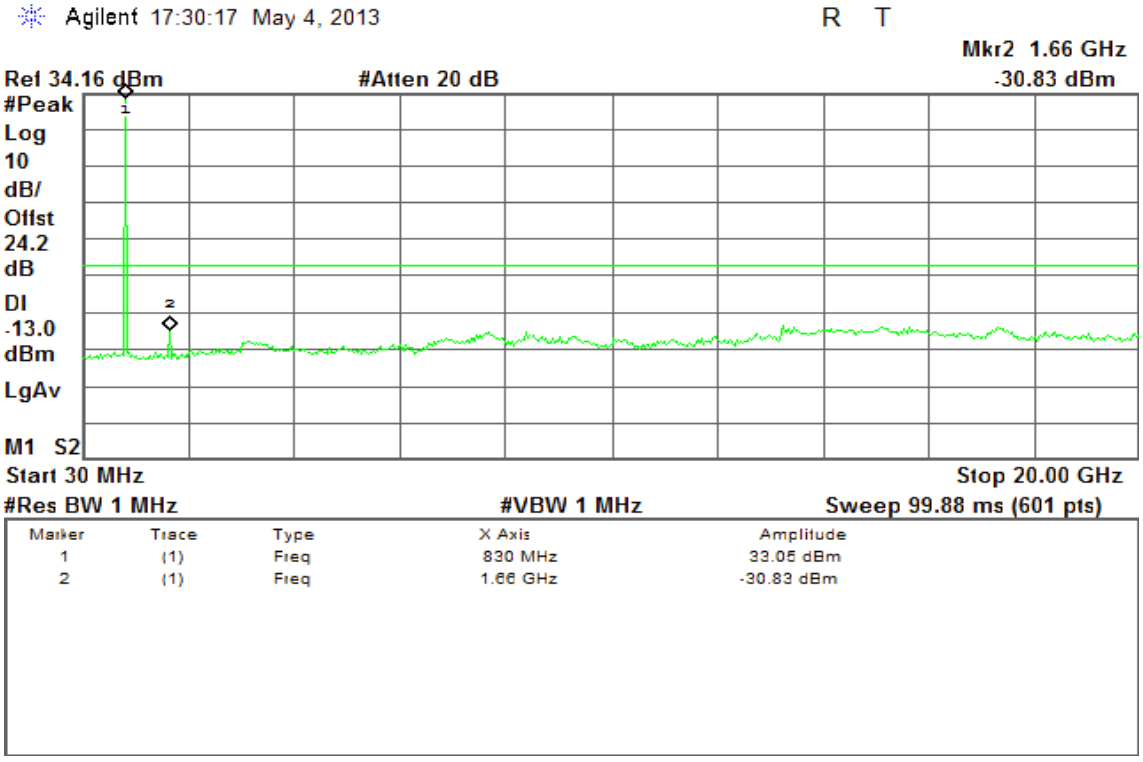
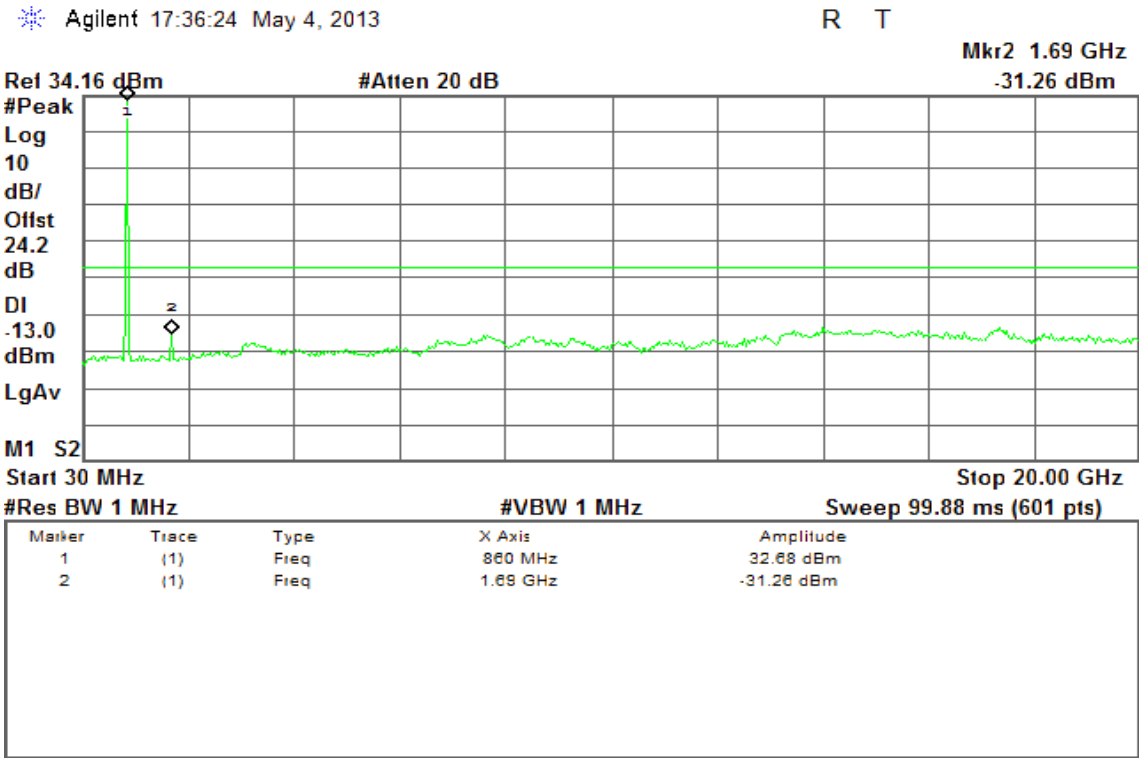


Figure 7-3: Out of Band emission at antenna terminals – GPRS CH High



GPRS 1900

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

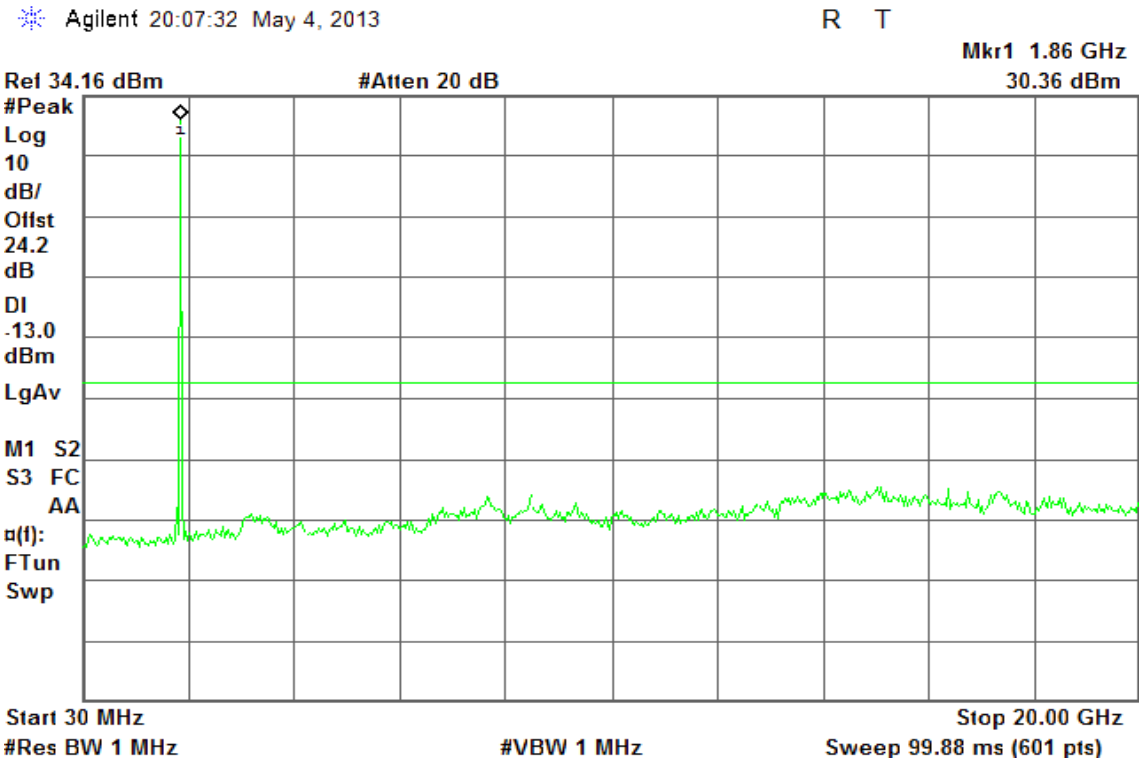


Figure 8-2: Out of Band emission at antenna terminals – GSM CH Mid

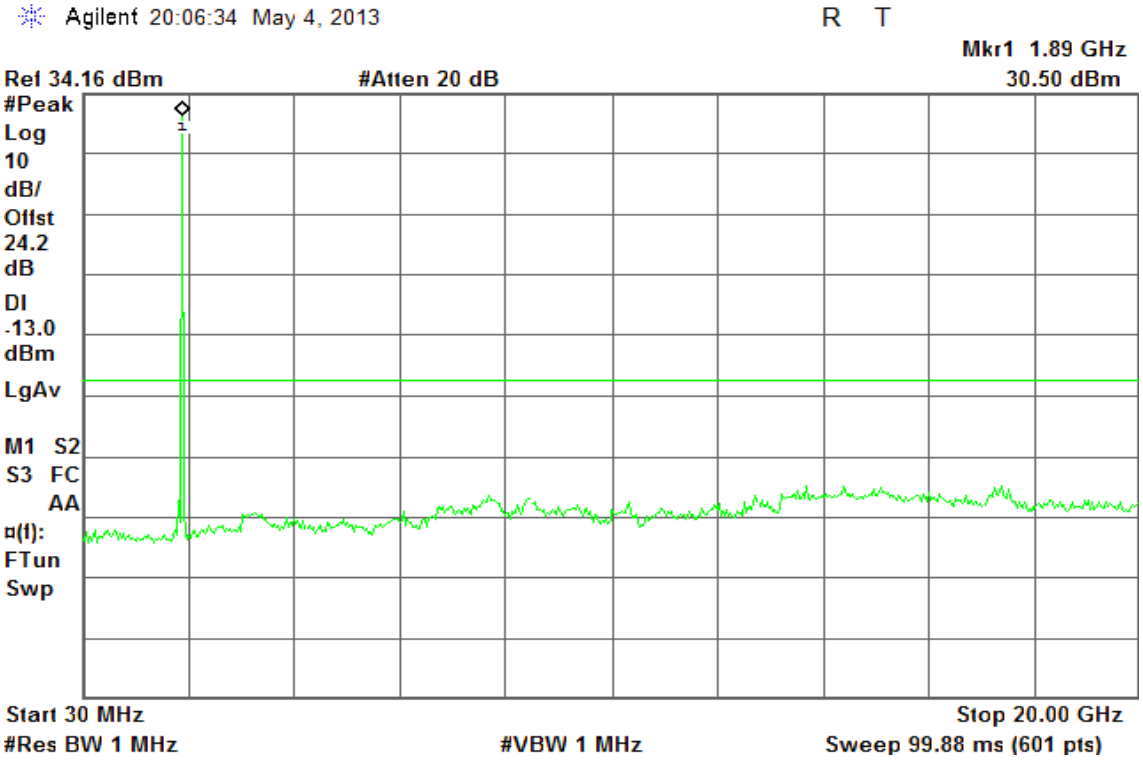
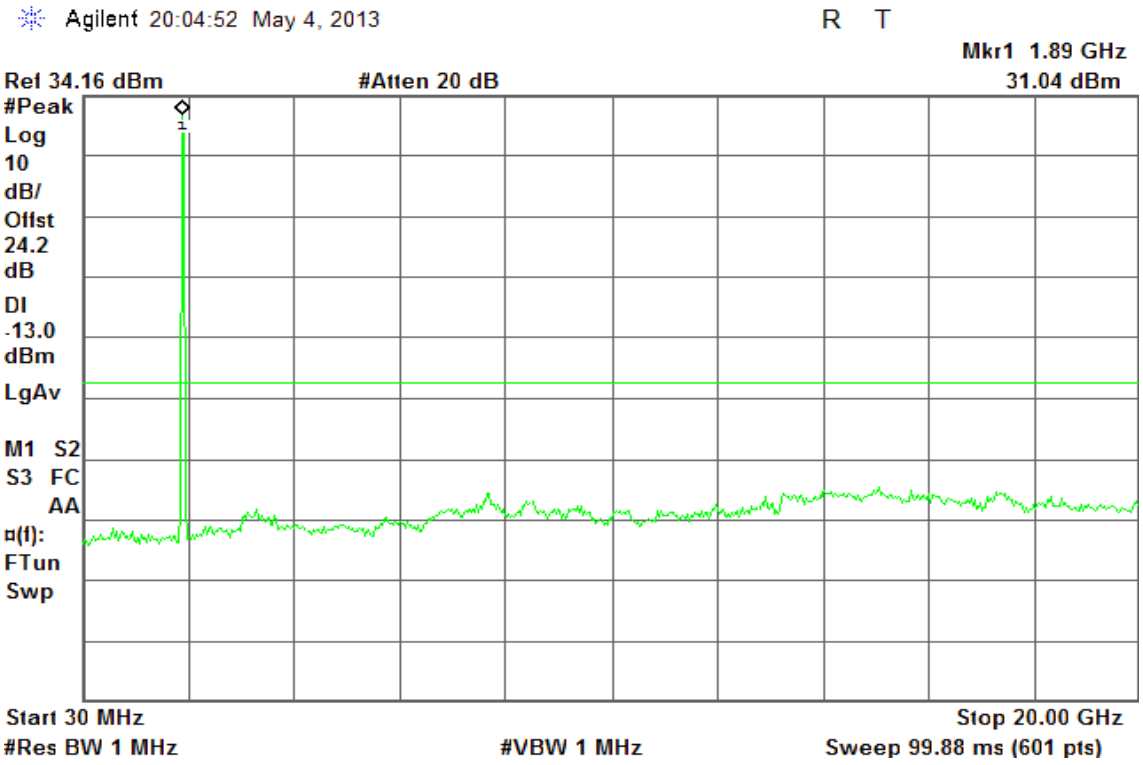


Figure 8-3: Out of Band emission at antenna terminals – GSM CH High



GPRS 850

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

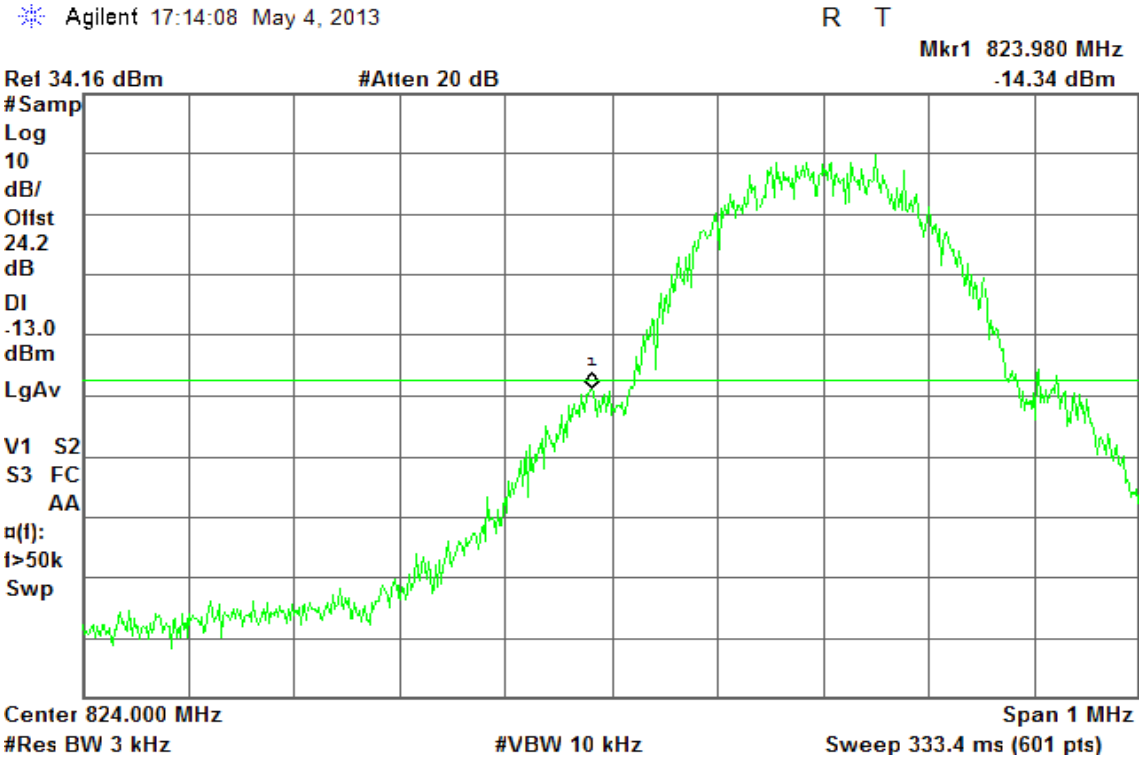
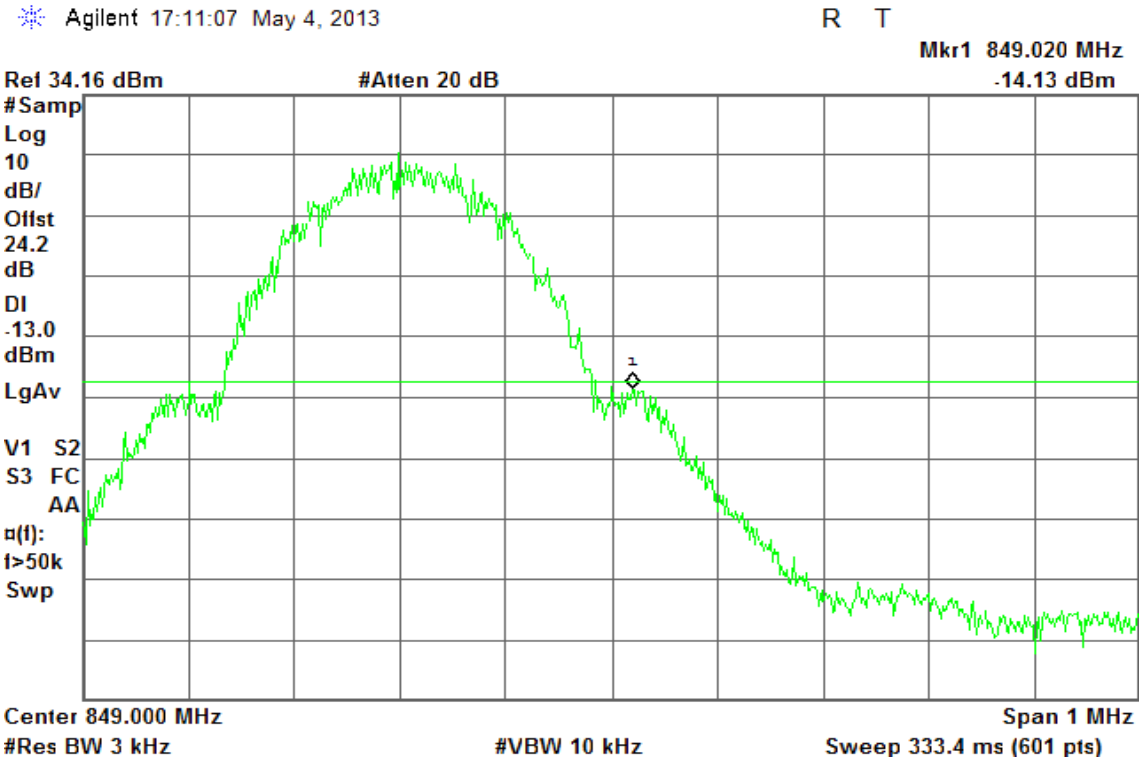


Figure 9-2: Band Edge emissions –GPRS CH High



GPRS 1900

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

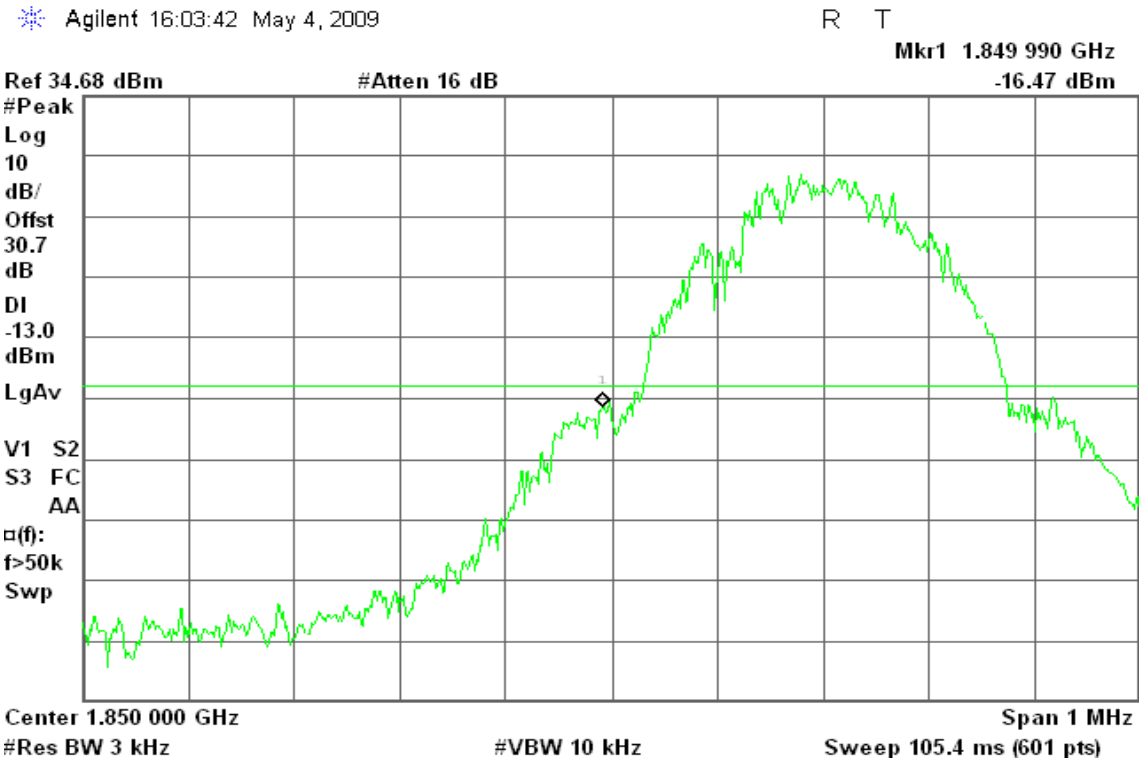
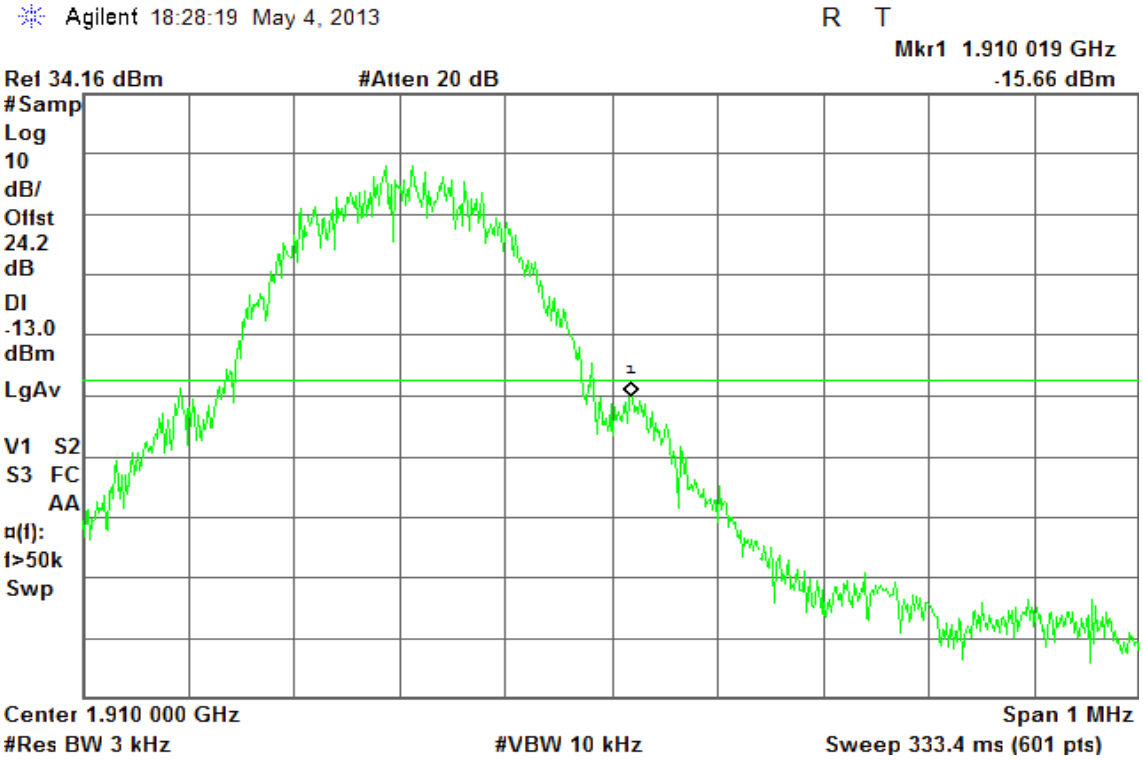


Figure 10-2: Band Edge emissions – GPRS CH High



EDGE 850

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

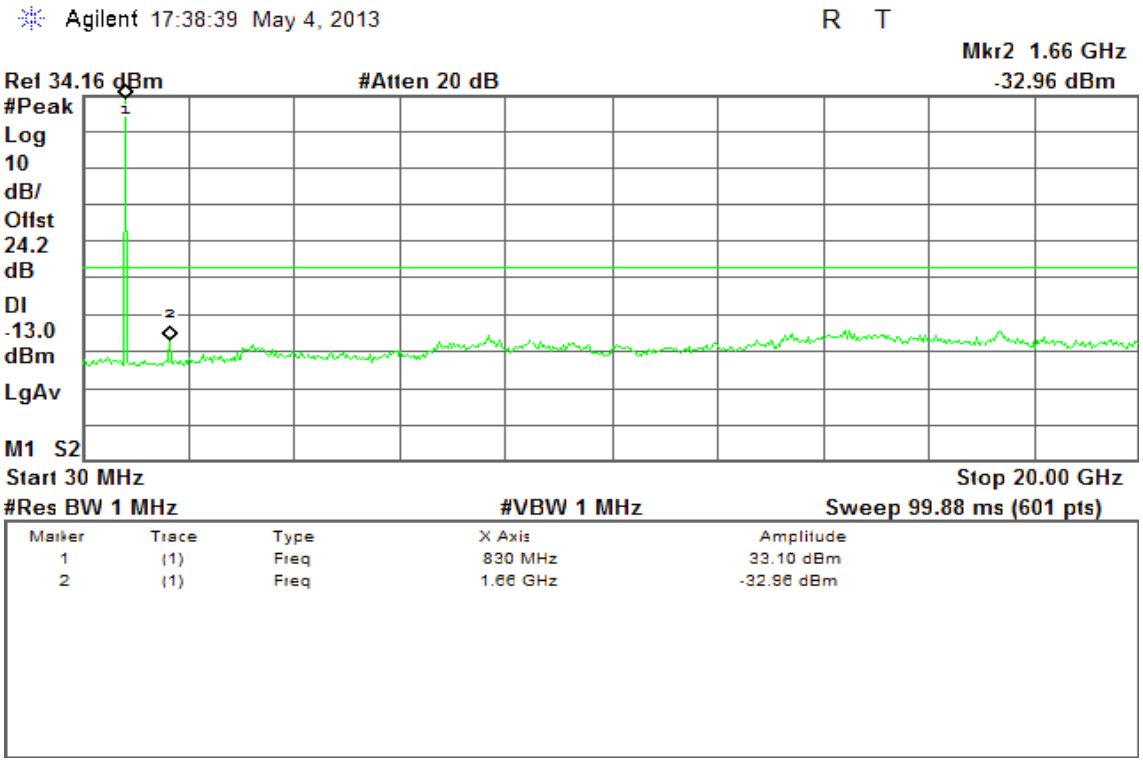


Figure 11-2: Out of Band emission at antenna terminals –EDGE CH Mid

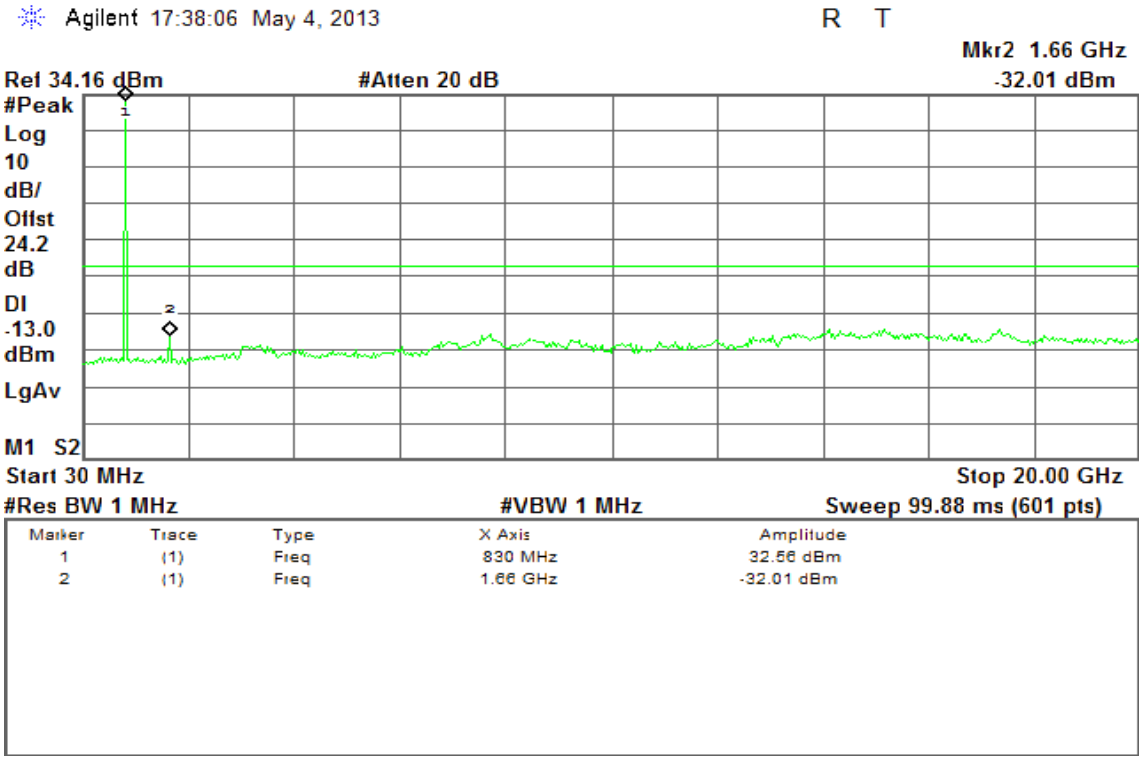
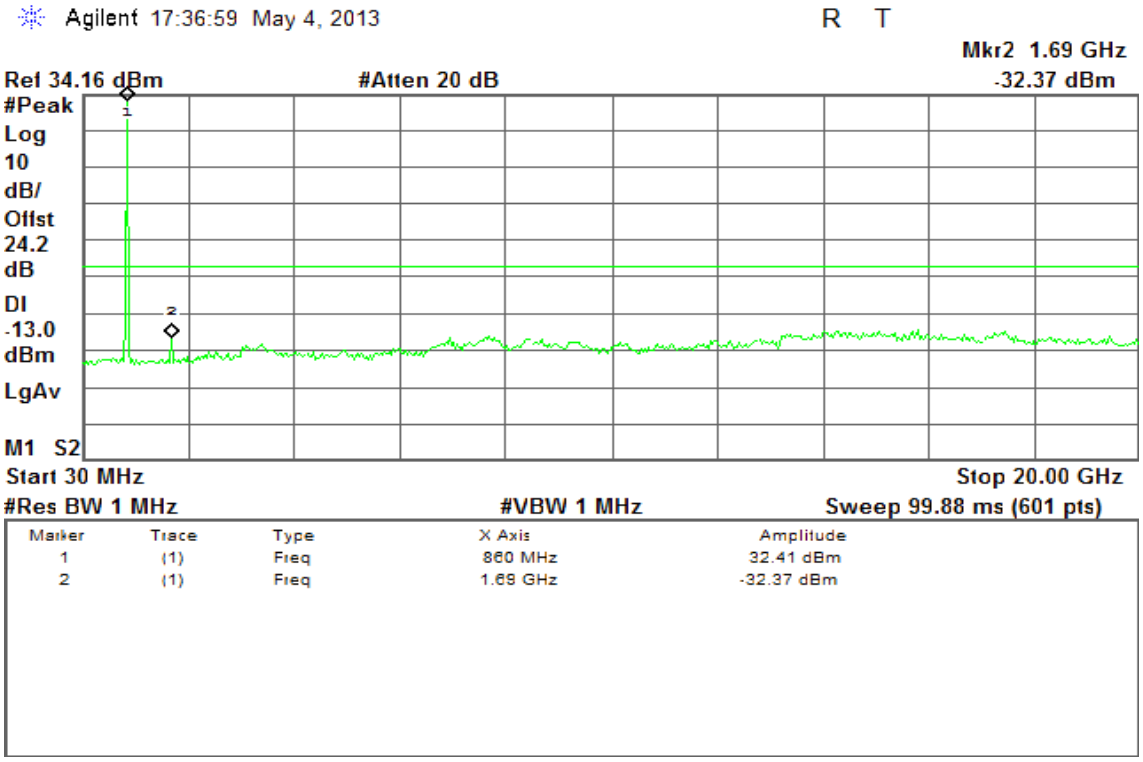


Figure 11-3: Out of Band emission at antenna terminals –EDGE CH High



EDGE 1900

Figure 12-1: Out of Band emission at antenna terminals –EDGE CH Low

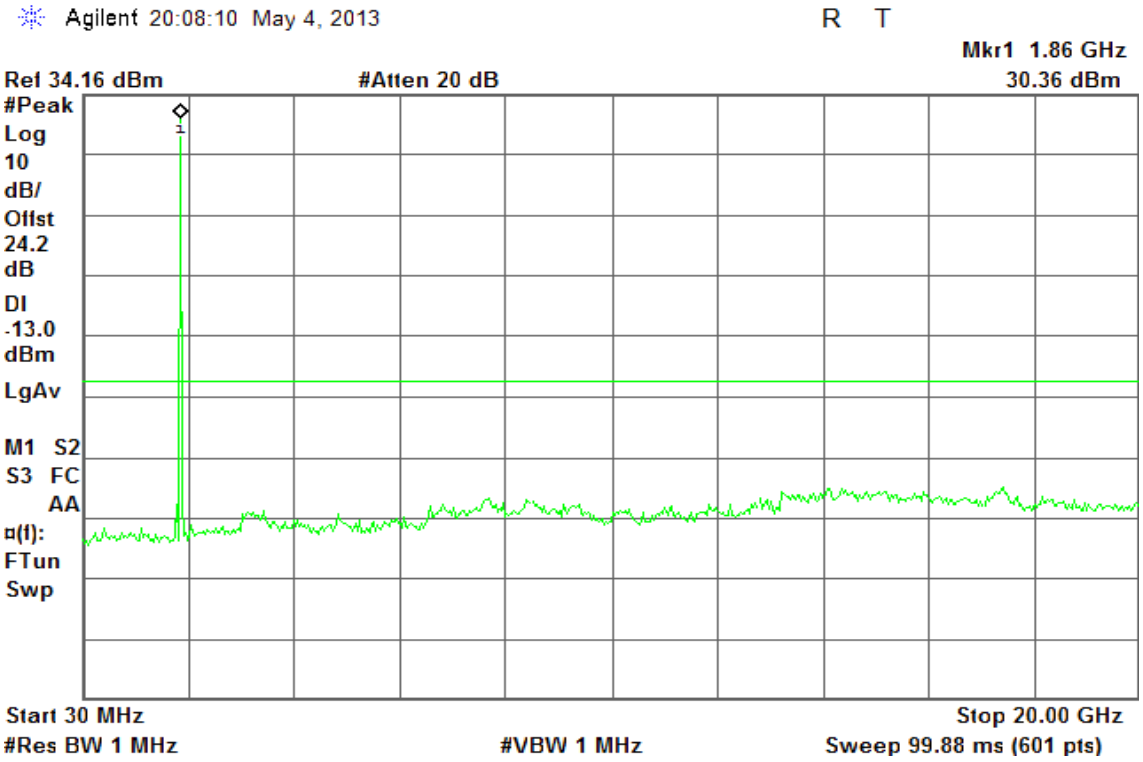


Figure 12-2: Out of Band emission at antenna terminals –EDGE CH Mid

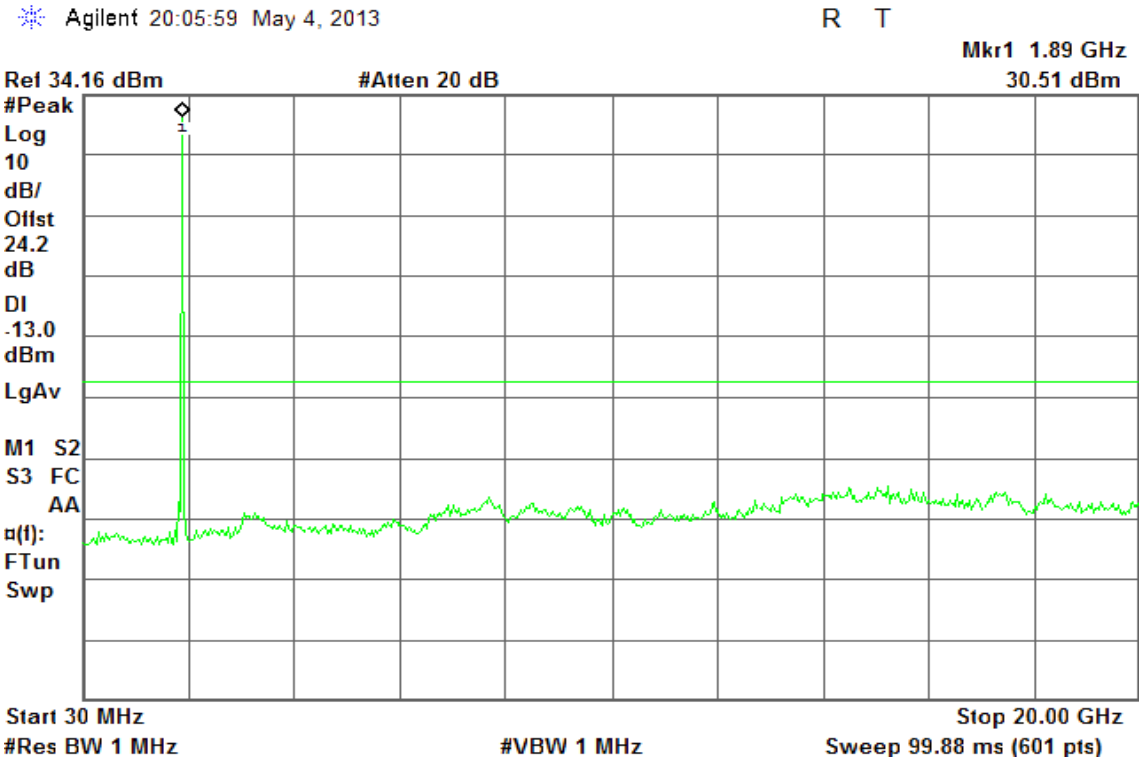
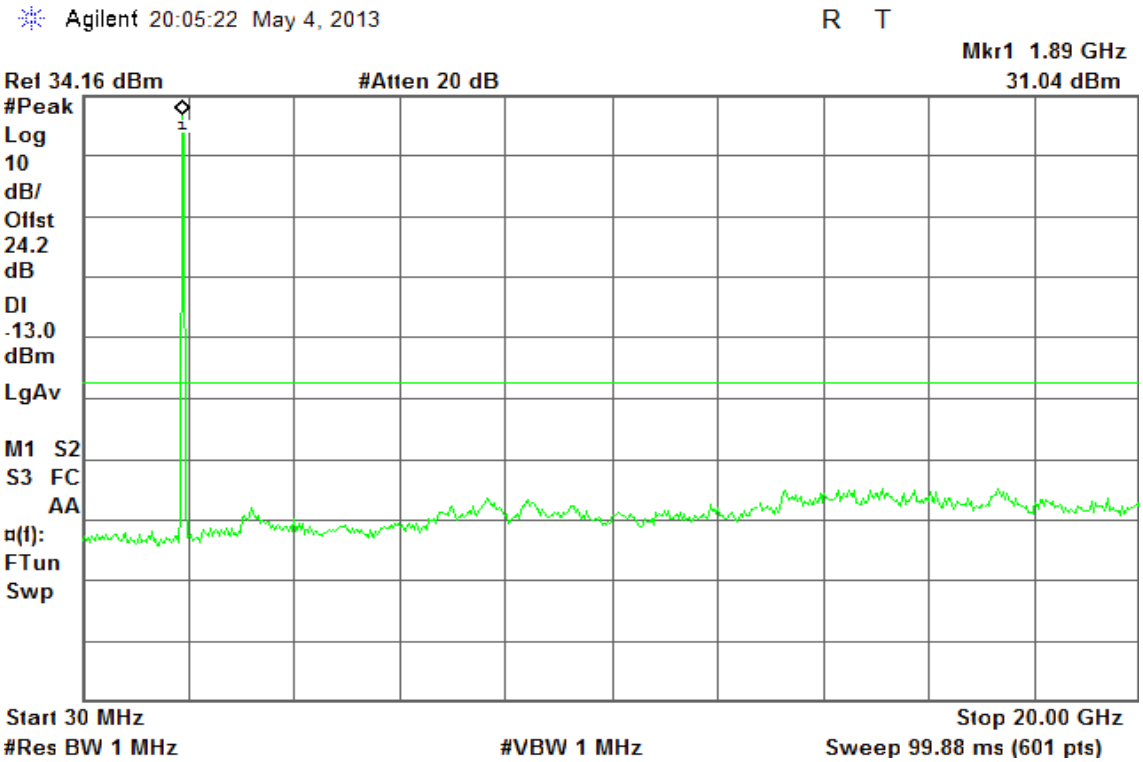


Figure 12-3: Out of Band emission at antenna terminals –EDGE CH High



EDGE 850

Figure 13-1: Band Edge emissions – EDGE CH Low

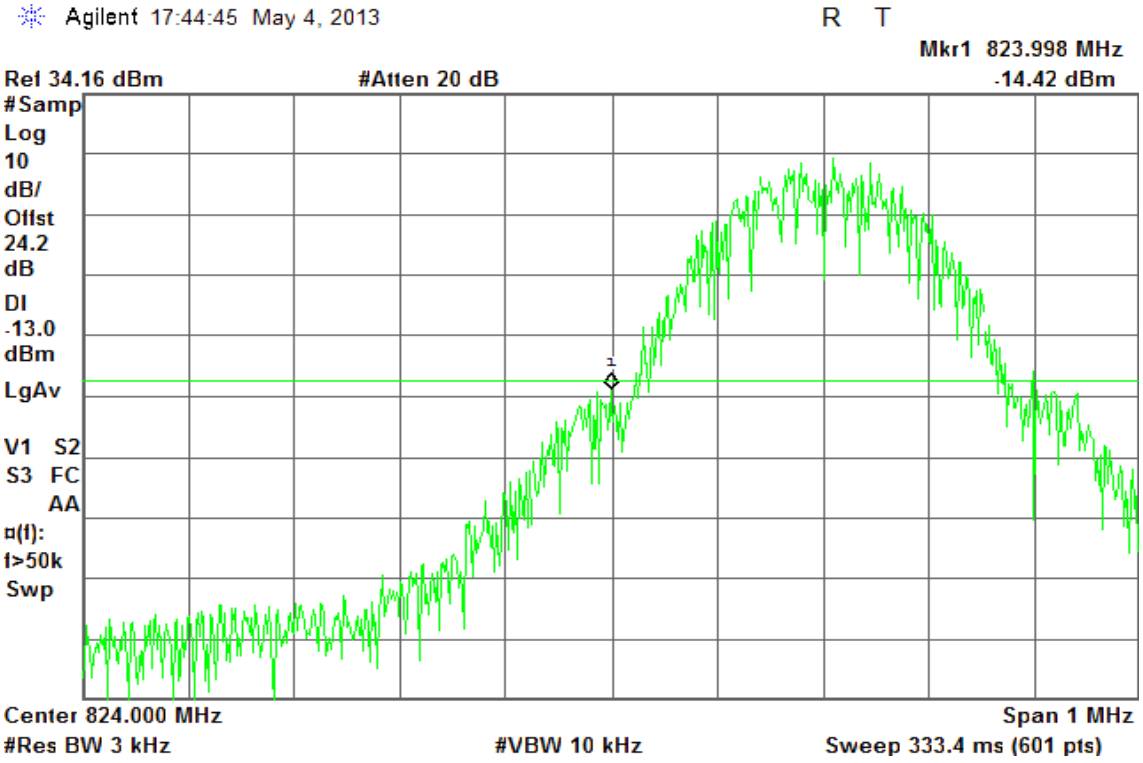
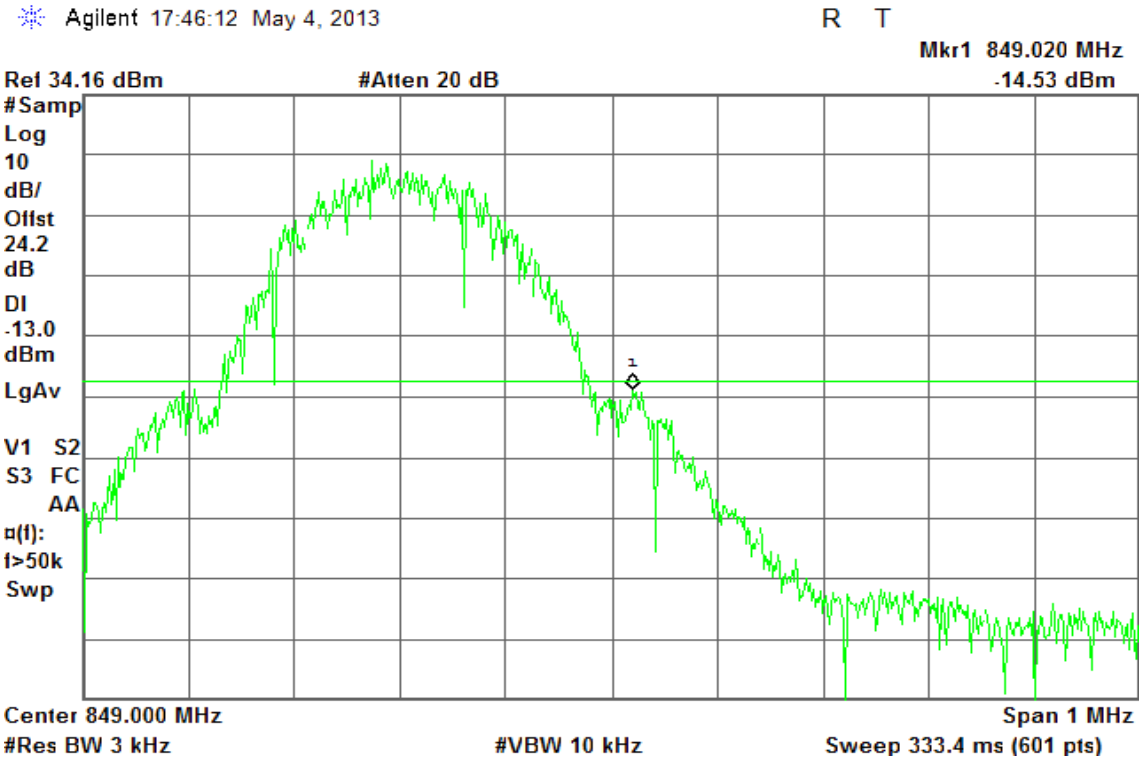


Figure 13-2: Band Edge emissions – EDGE CH High



EDGE 1900

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

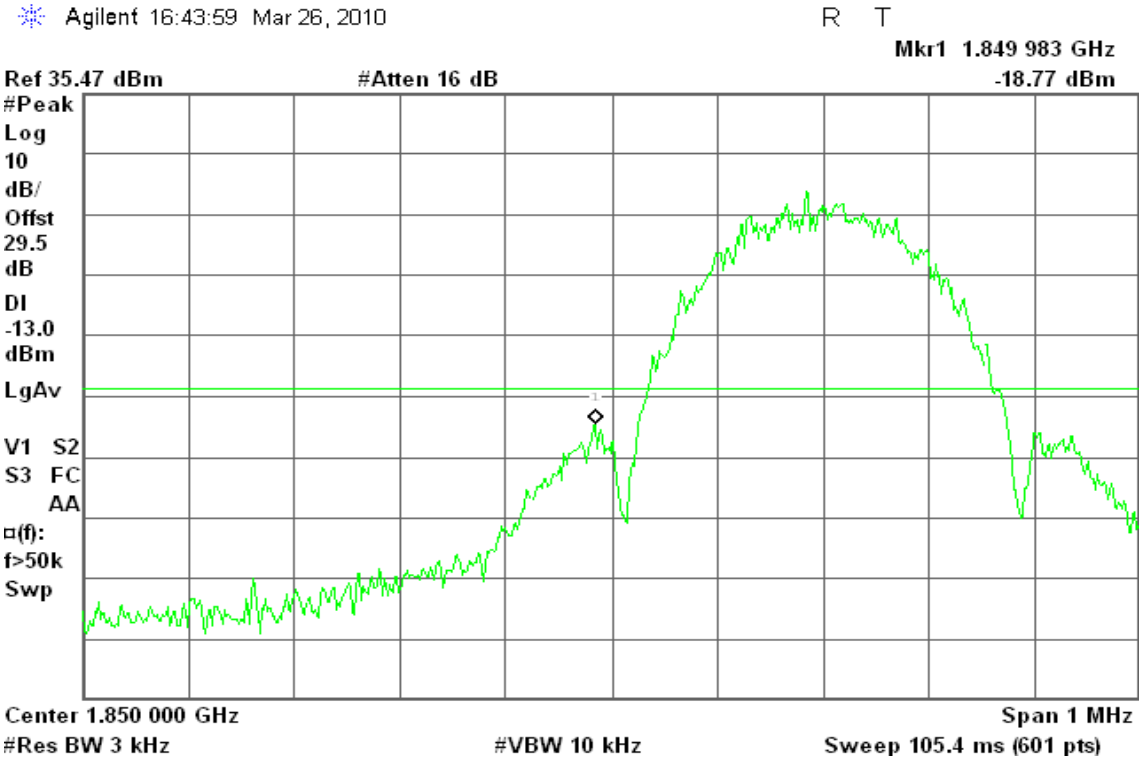
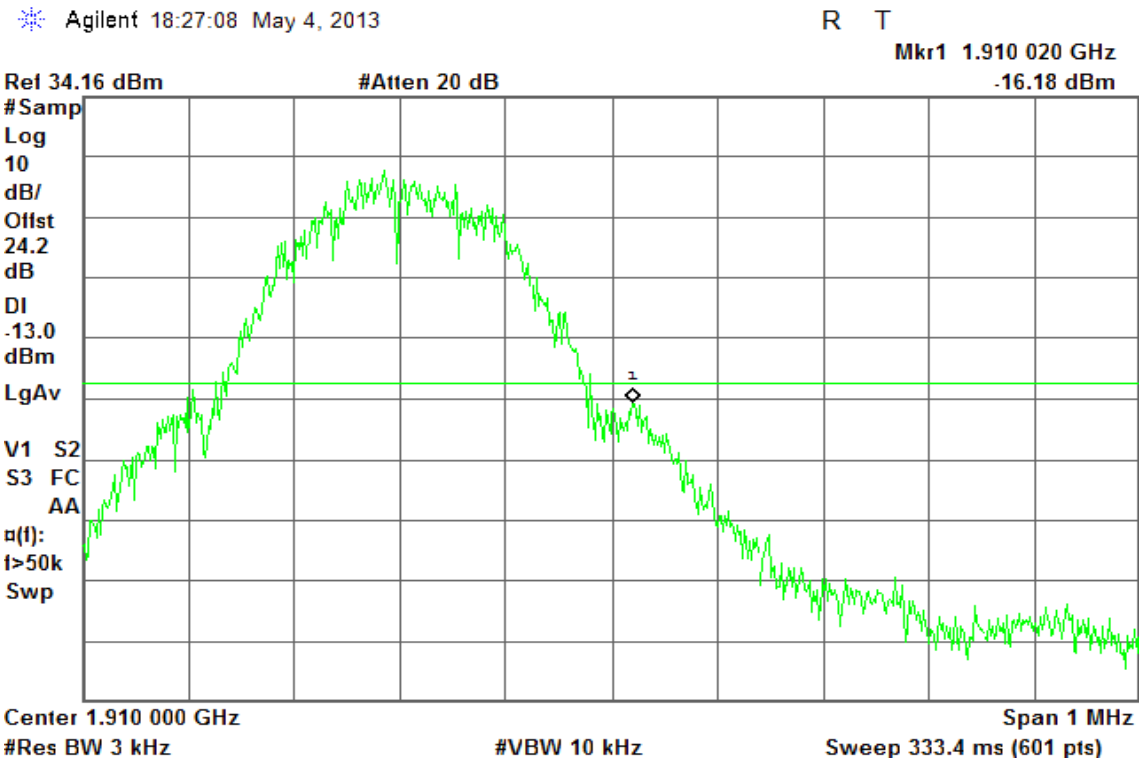


Figure 14-2: Band Edge emissions – EDGE CH High



WCDMA Band II

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

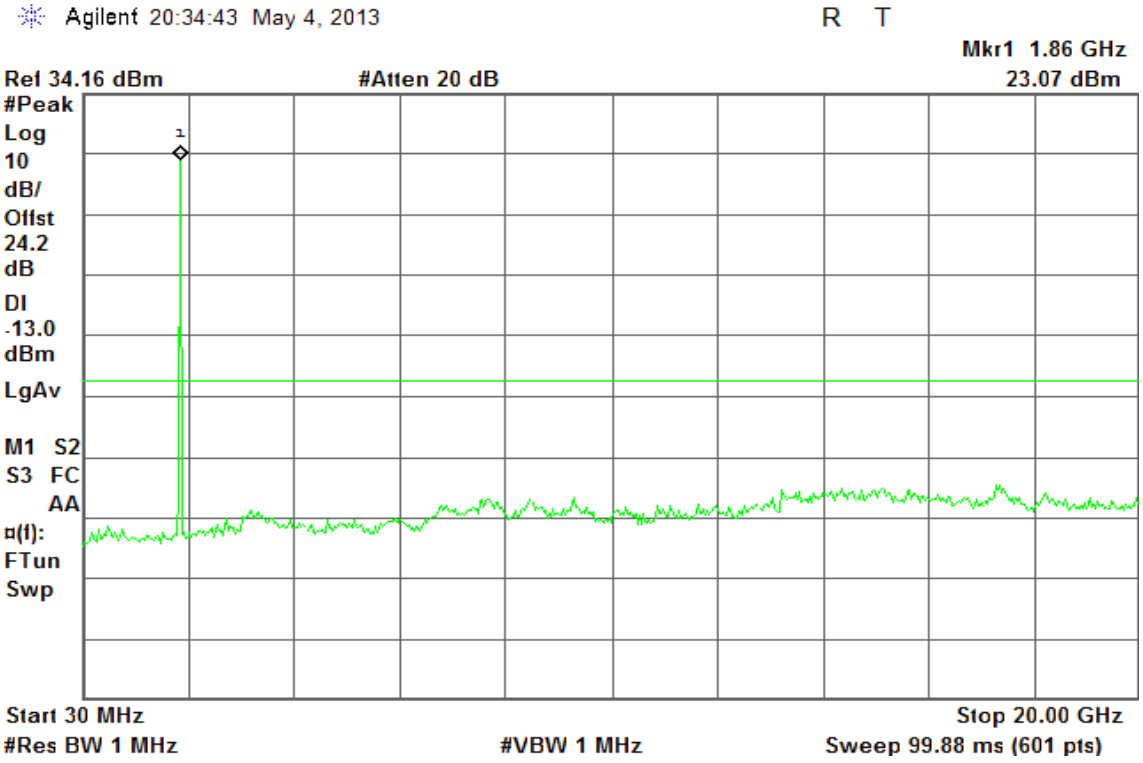


Figure 15-2: Out of Band emission at antenna terminals – WCDMA CH Mid

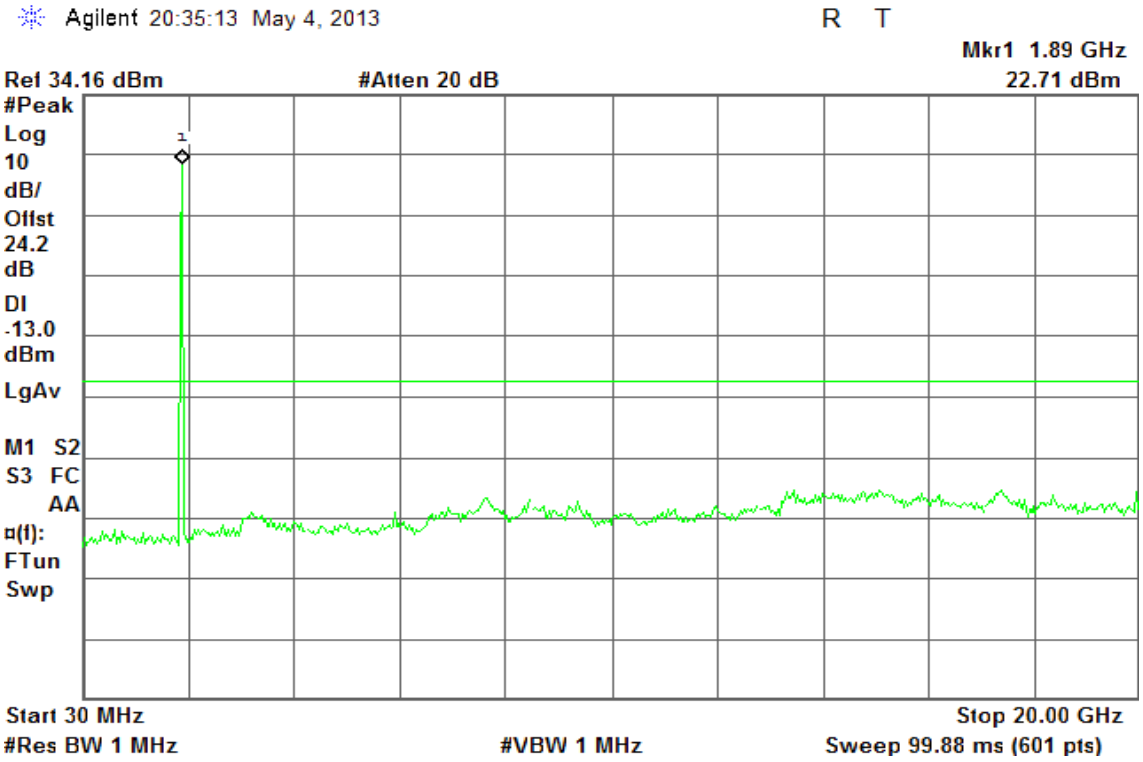
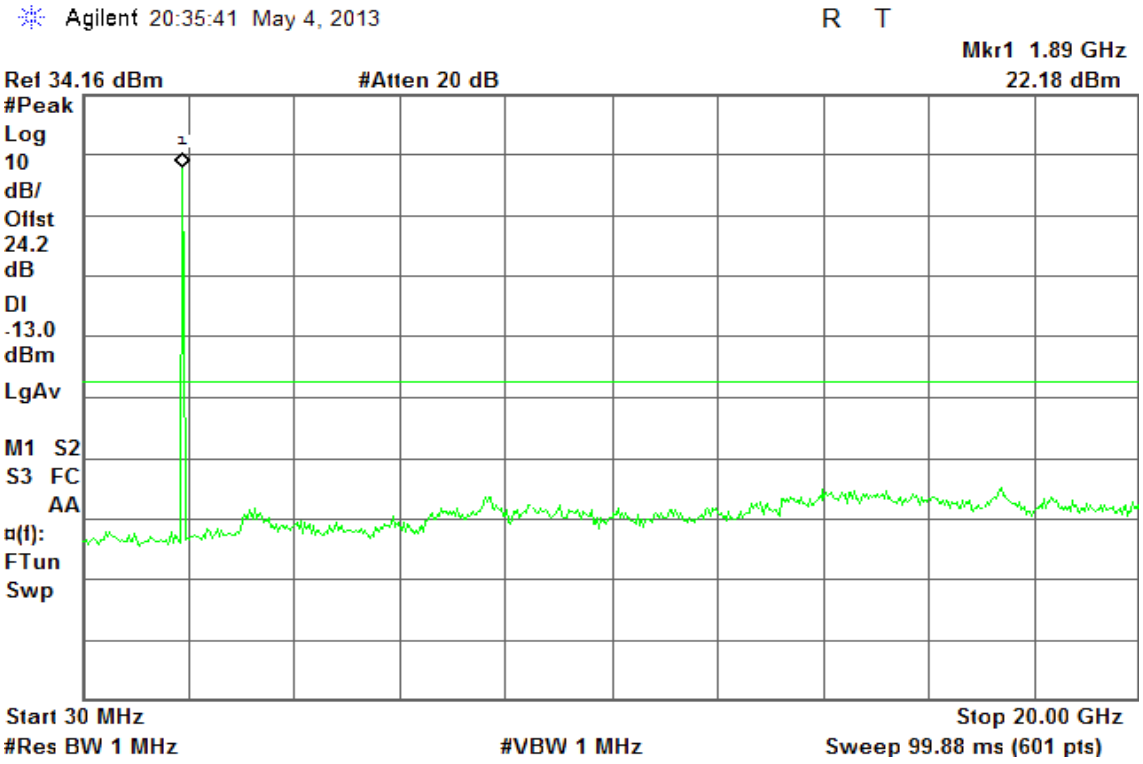


Figure 15-3: Out of Band emission at antenna terminals – WCDMA CH High



WCDMA Band V

Figure 16-1: Out of Band emission at antenna terminals – WCDMA CH Low

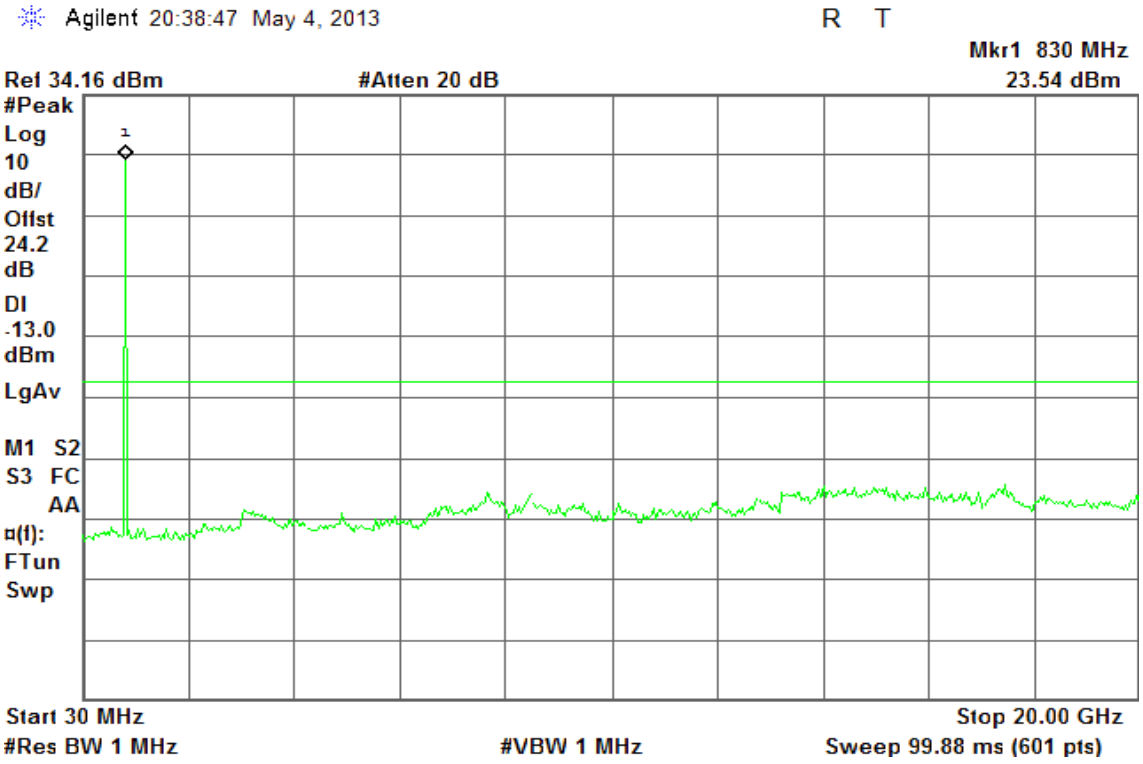


Figure 16-2: Out of Band emission at antenna terminals – WCDMA CH Mid

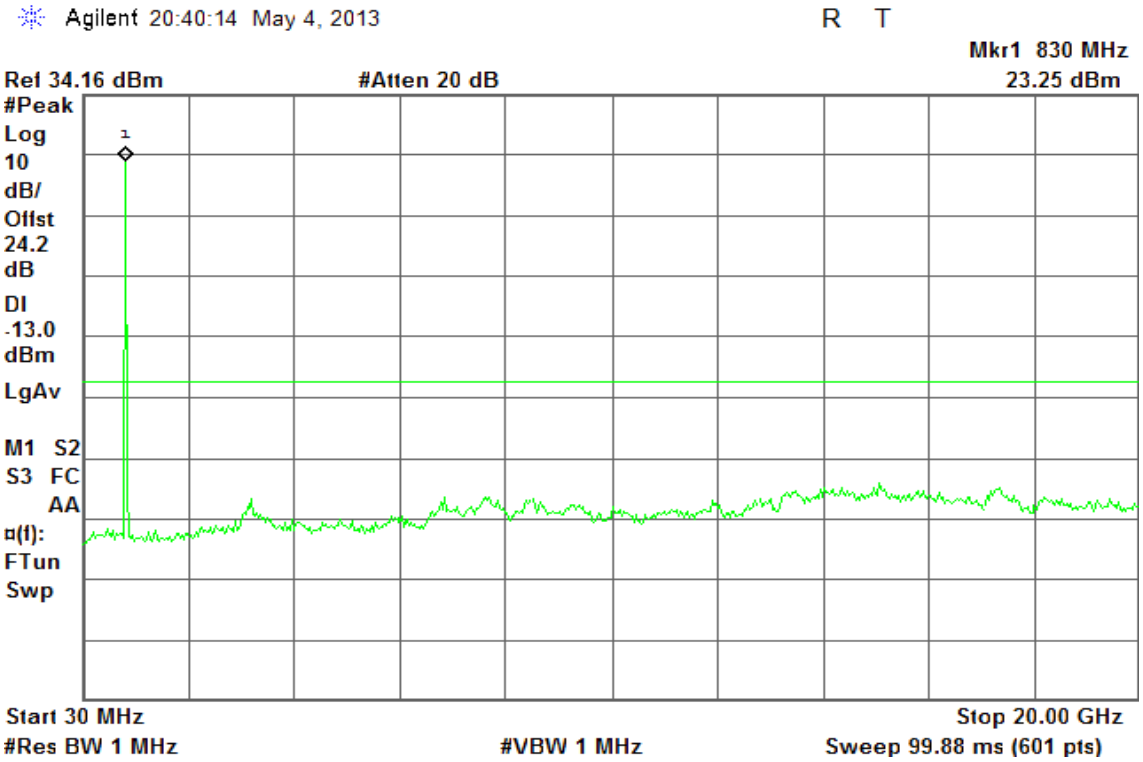
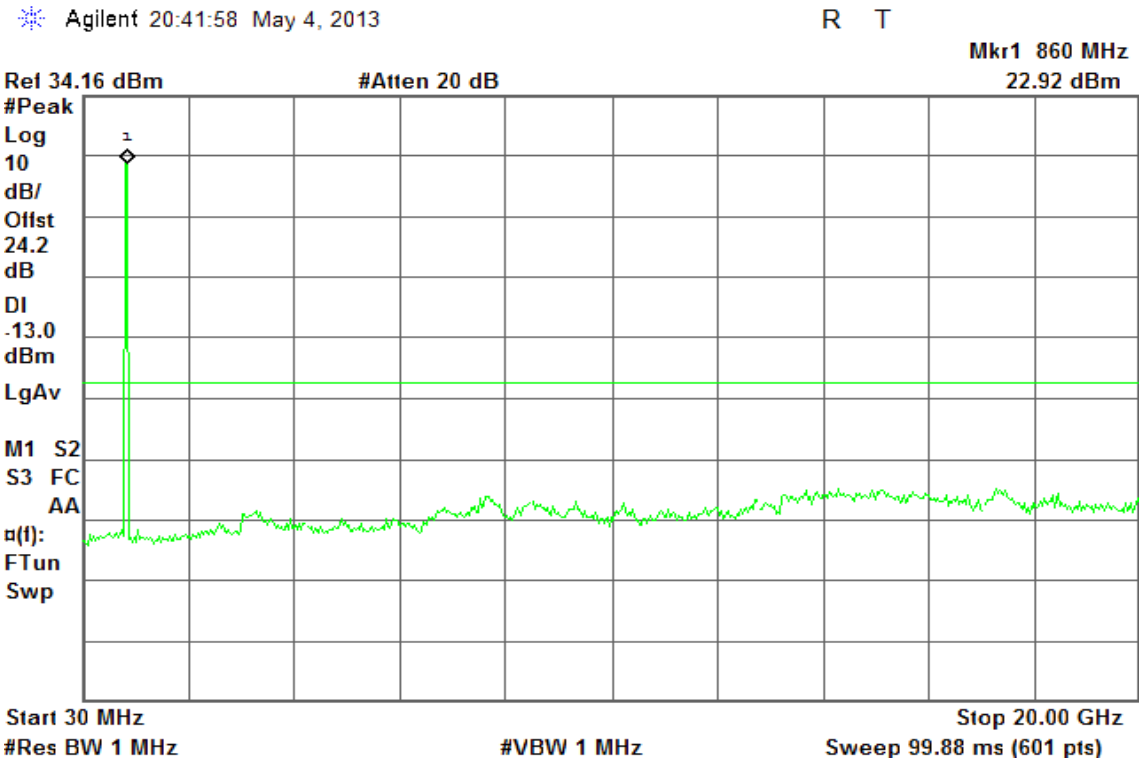


Figure 16-3: Out of Band emission at antenna terminals – WCDMA CH High



WCDMA Band II

Figure 17-1: Band Edge emissions – WCDMA CH Low

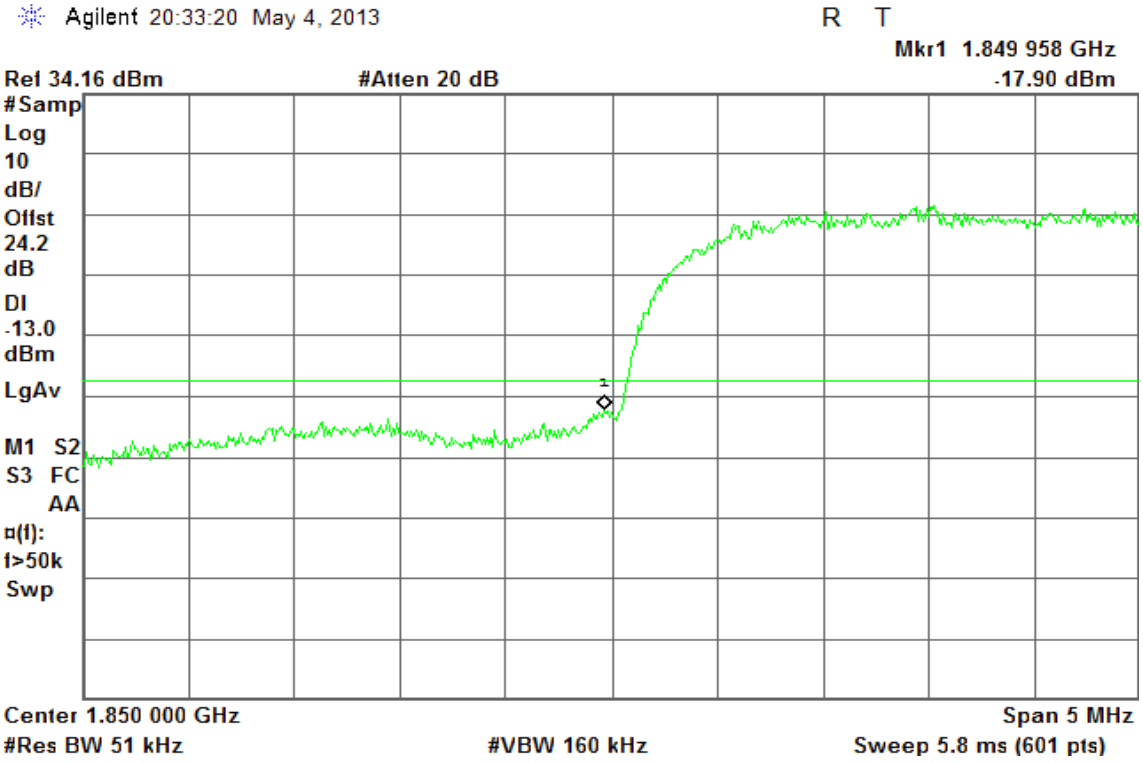
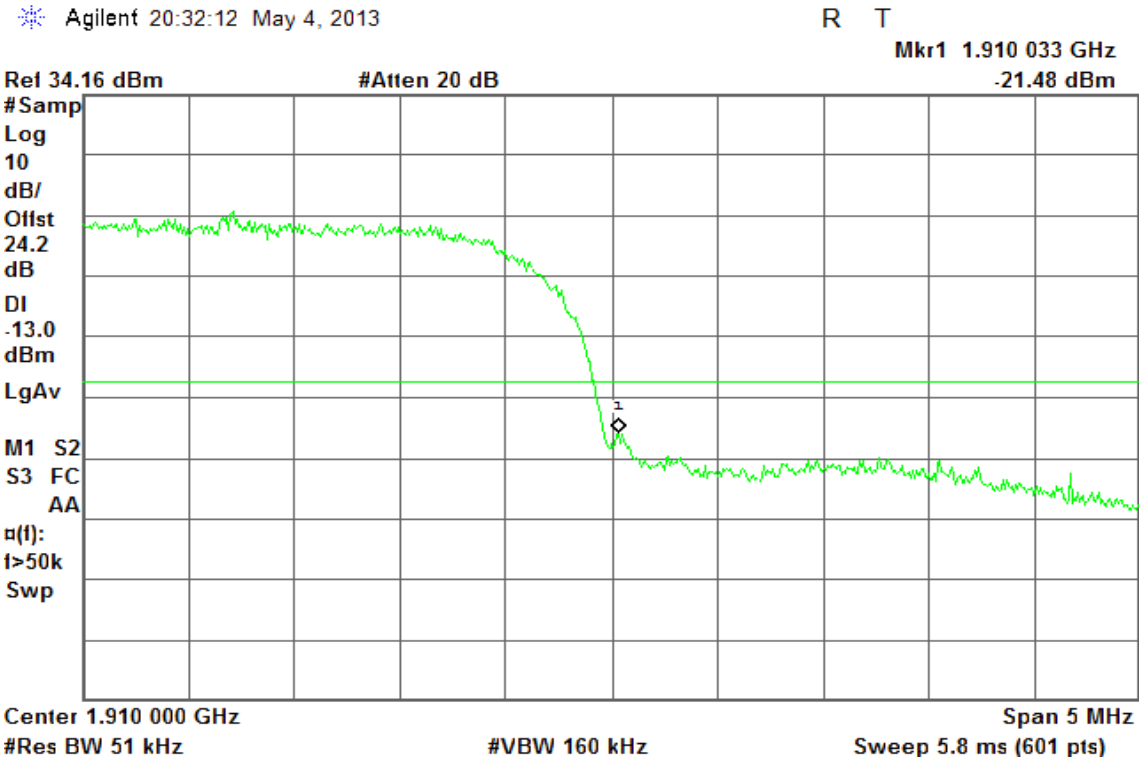


Figure 17-2: Band Edge emissions –WCDMA CH High



WCDMA Band V

Figure 18-1: Band Edge emissions –WCDMA CH Low

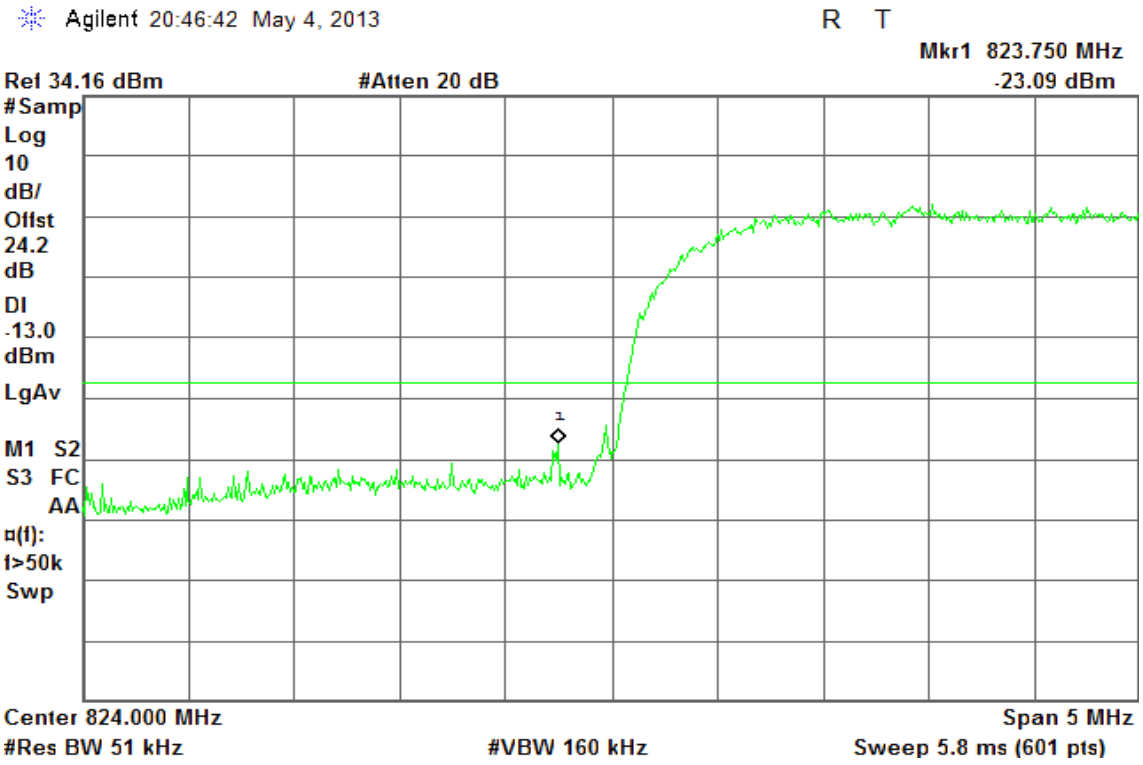
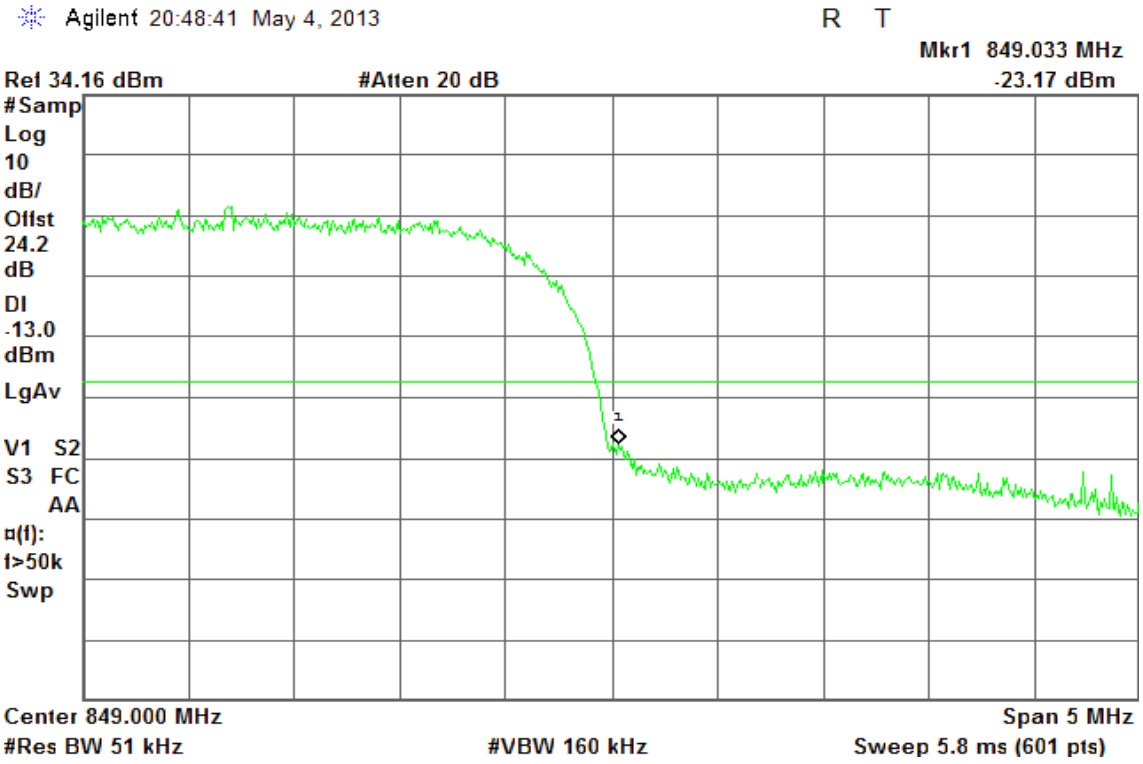


Figure 18-2: Band Edge emissions –WCDMA CH High



WCDMA / HSDPA Band II

Figure 19-1: Out of Band emission at antenna terminals – HSDPA CH Low

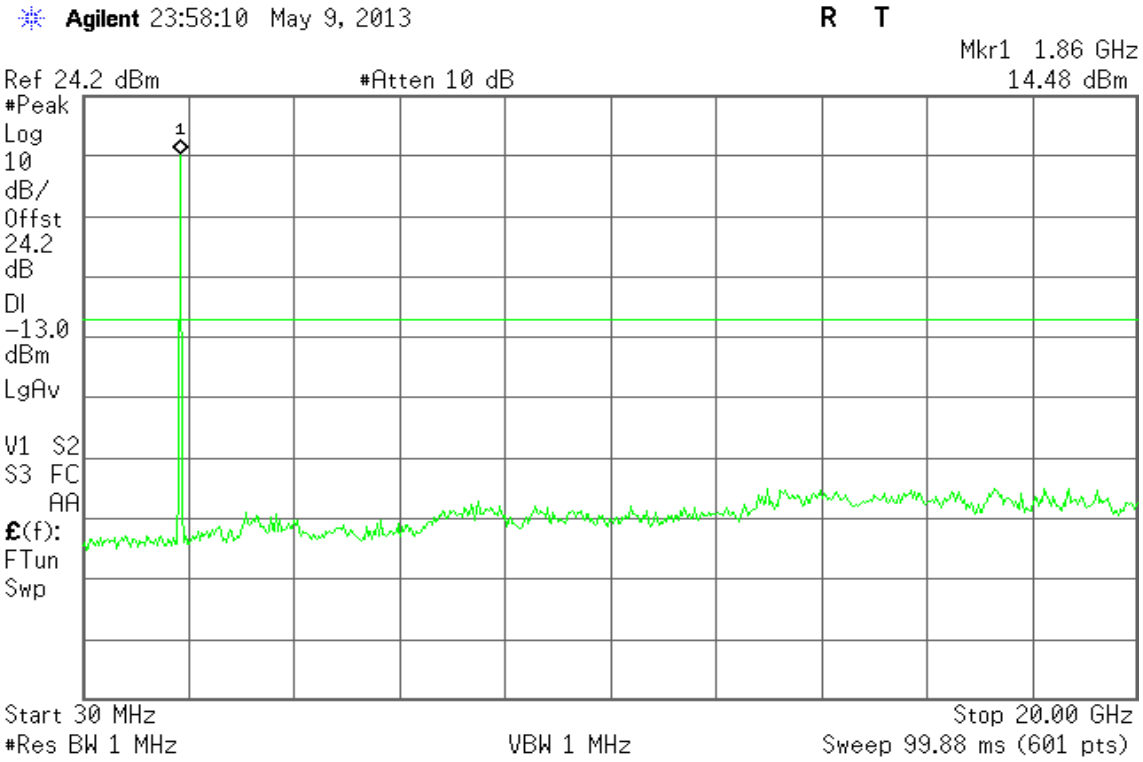


Figure 19-2: Out of Band emission at antenna terminals – HSDPA CH Mid

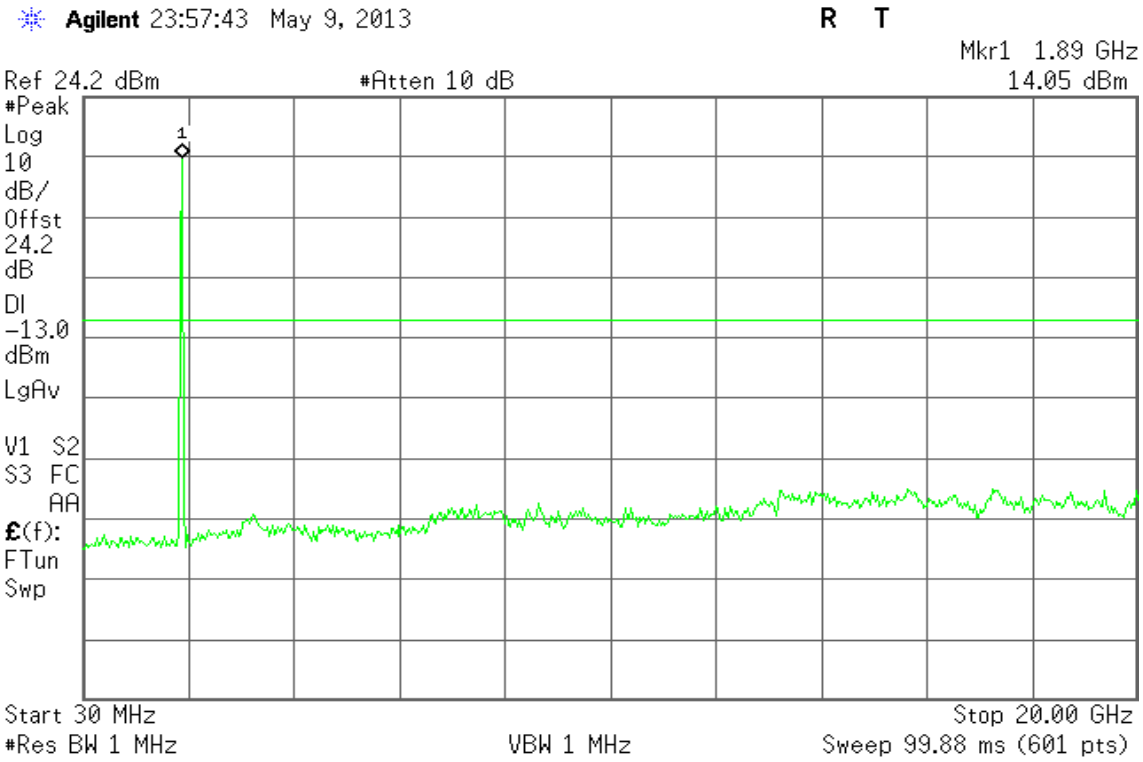
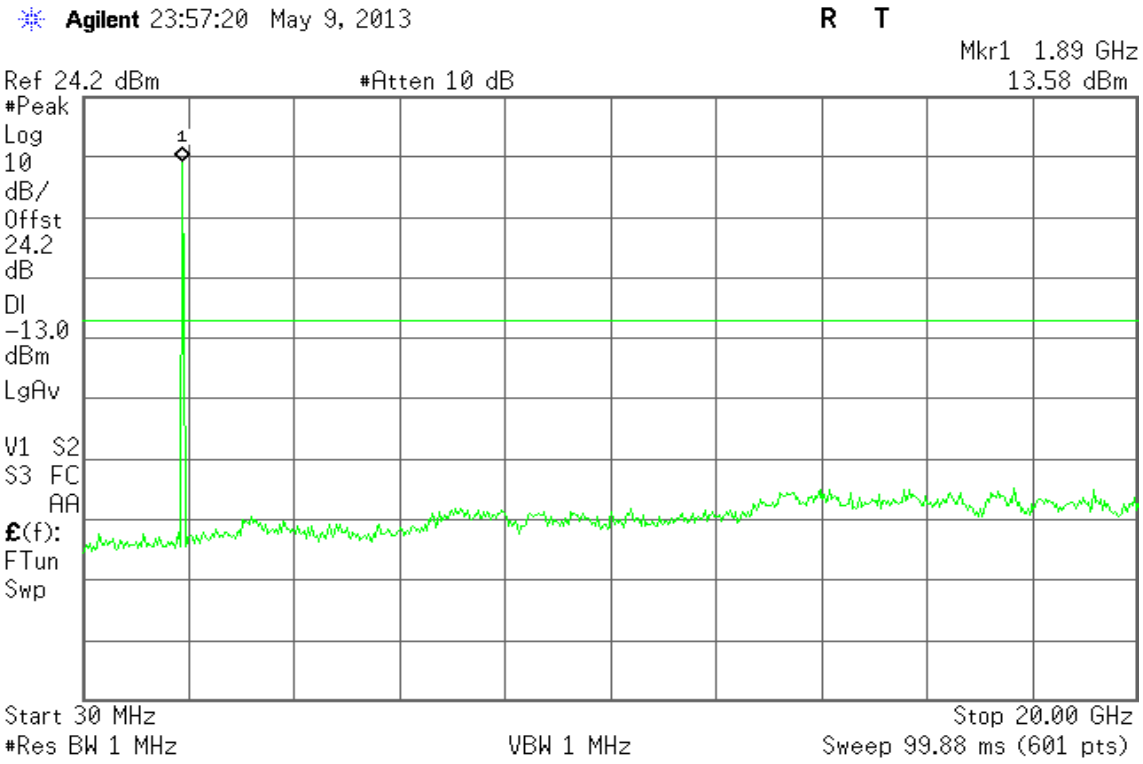


Figure 19-3: Out of Band emission at antenna terminals – HSDPA CH High



WCDMA / HSDPA Band V

Figure 20-1: Out of Band emission at antenna terminals – HSDPA CH Low

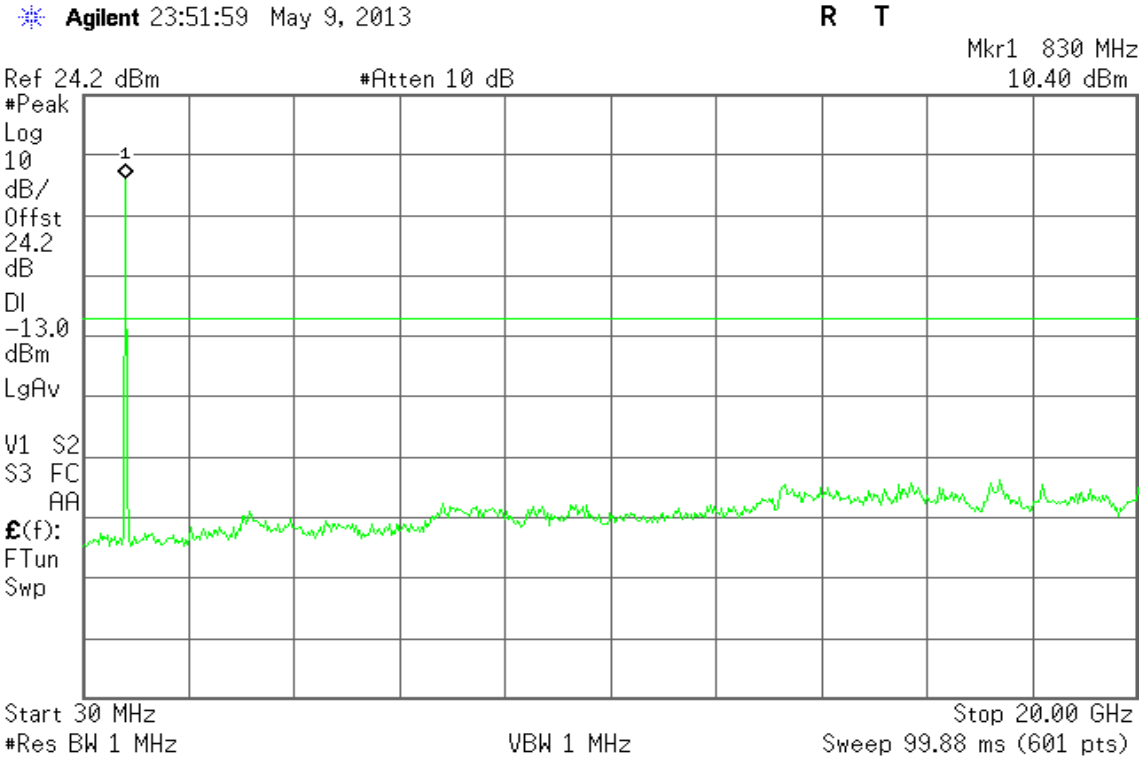


Figure 20-2: Out of Band emission at antenna terminals – HSDPA CH Mid

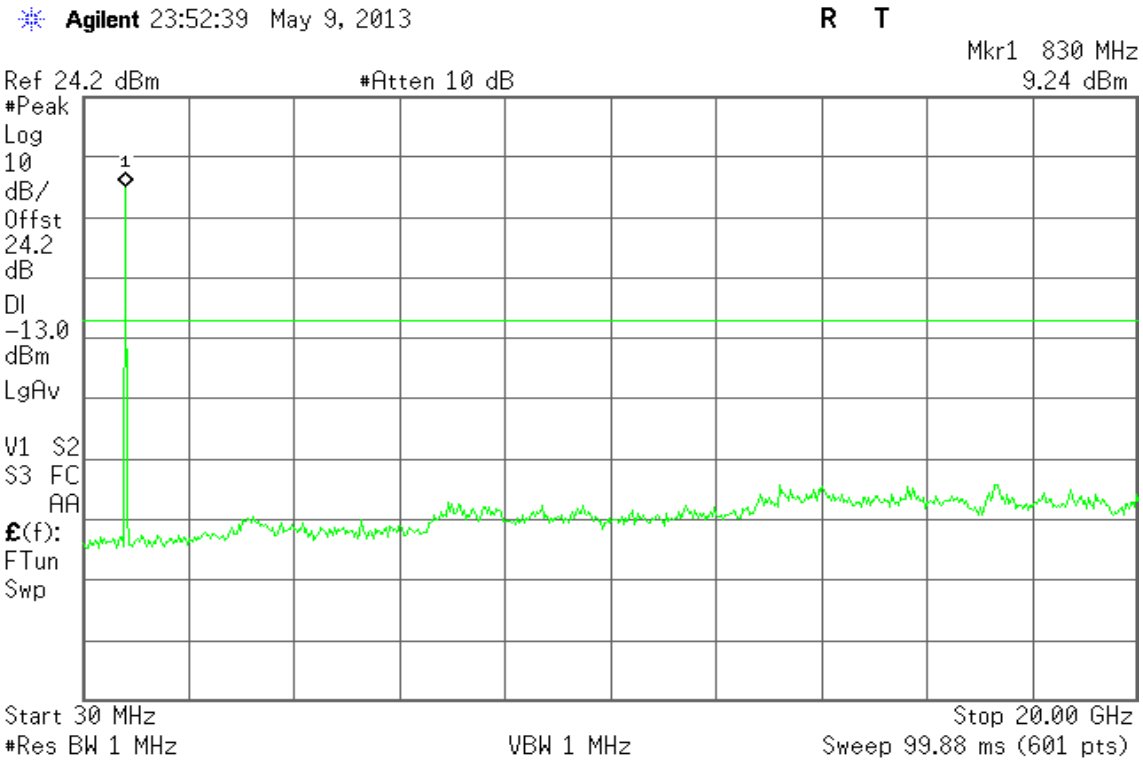
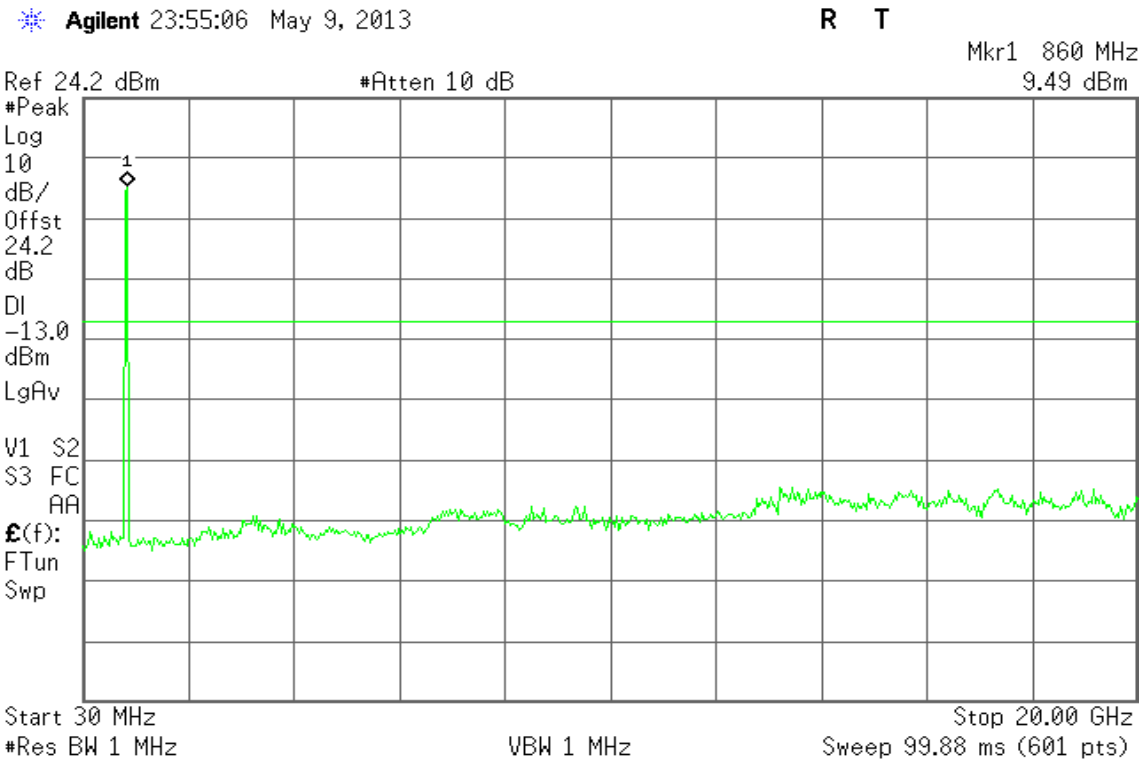


Figure 20-3: Out of Band emission at antenna terminals – HSDPA CH High



WCDMA / HSDPA Band II

Figure 21-1: Band Edge emissions – HSDPA CH Low

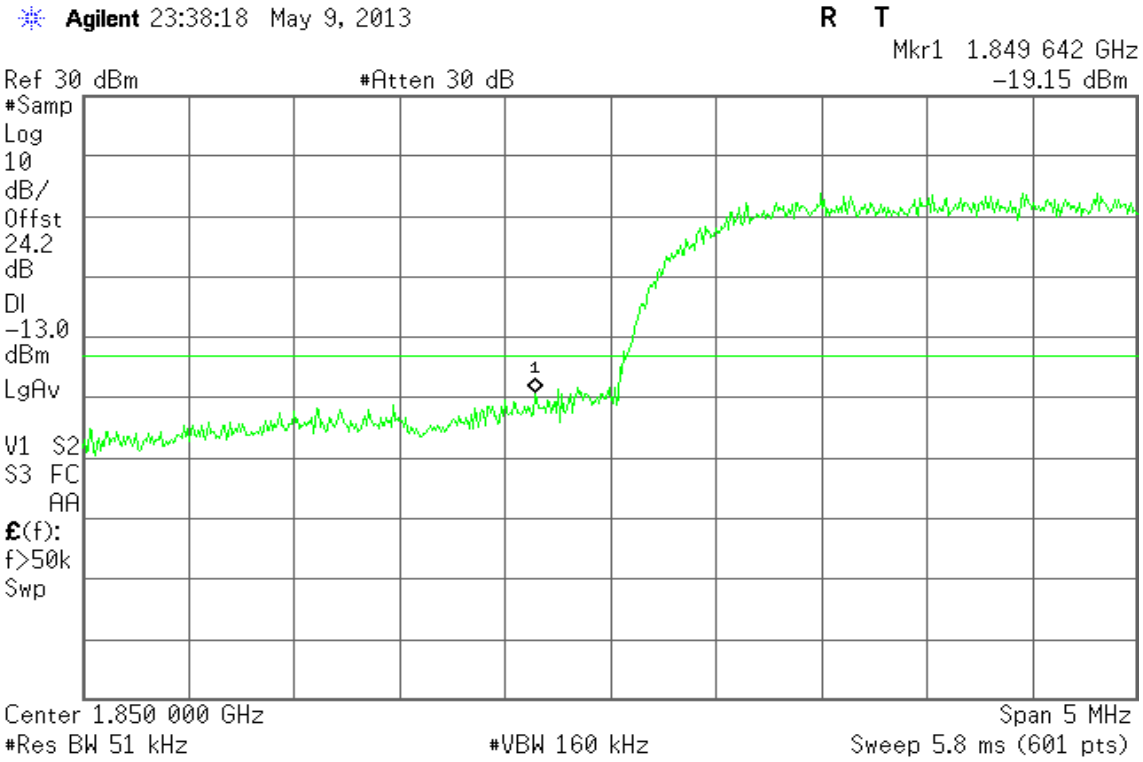
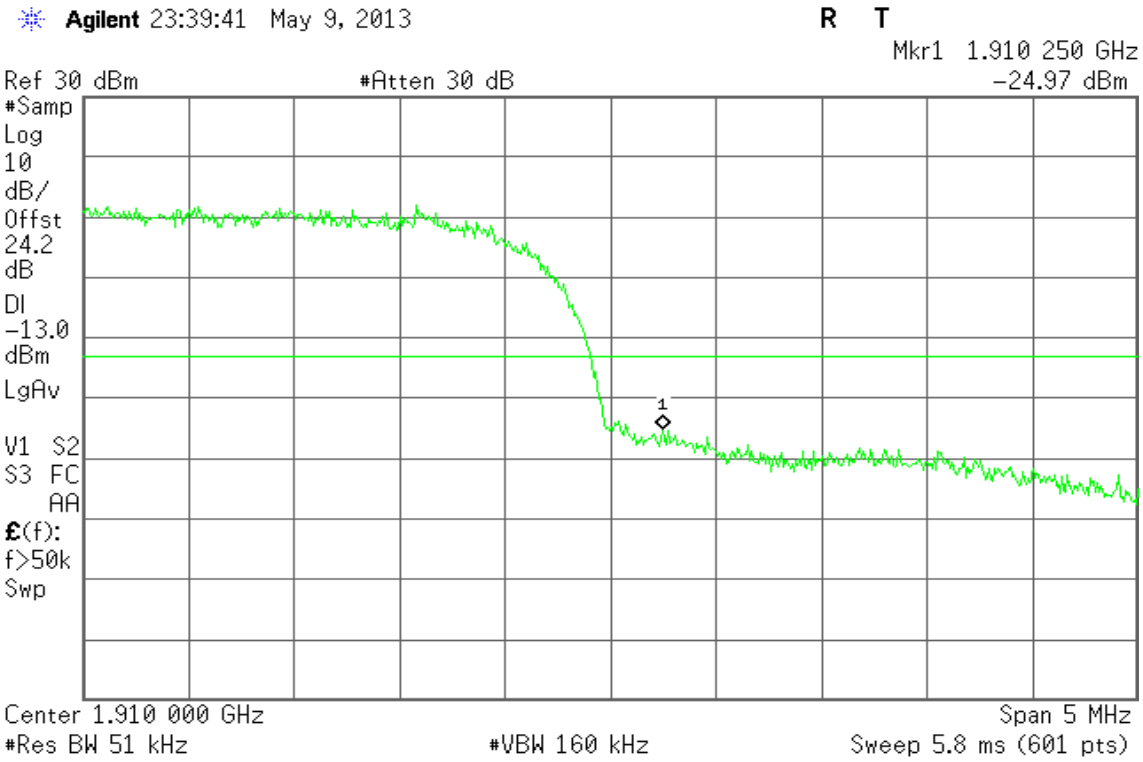


Figure 21-2: Band Edge emissions – HSDPA CH High



WCDMA / HSDPA Band V

Figure 22-1: Band Edge emissions – HSDPA CH Low

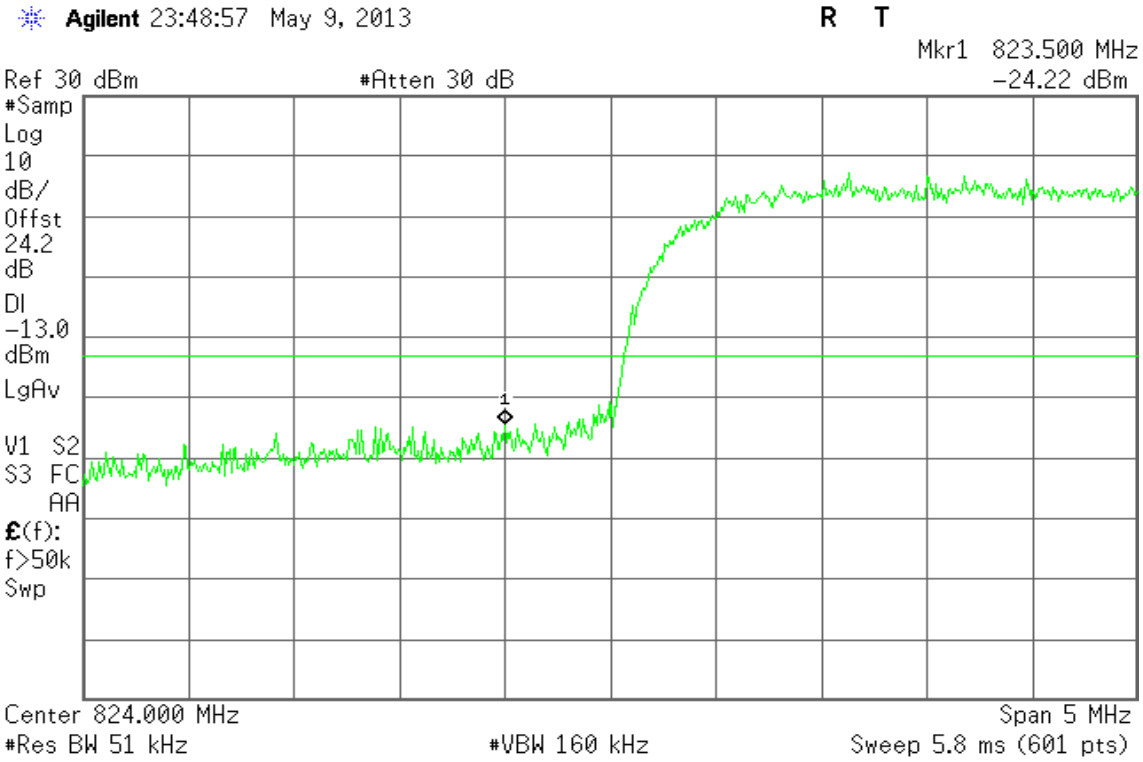
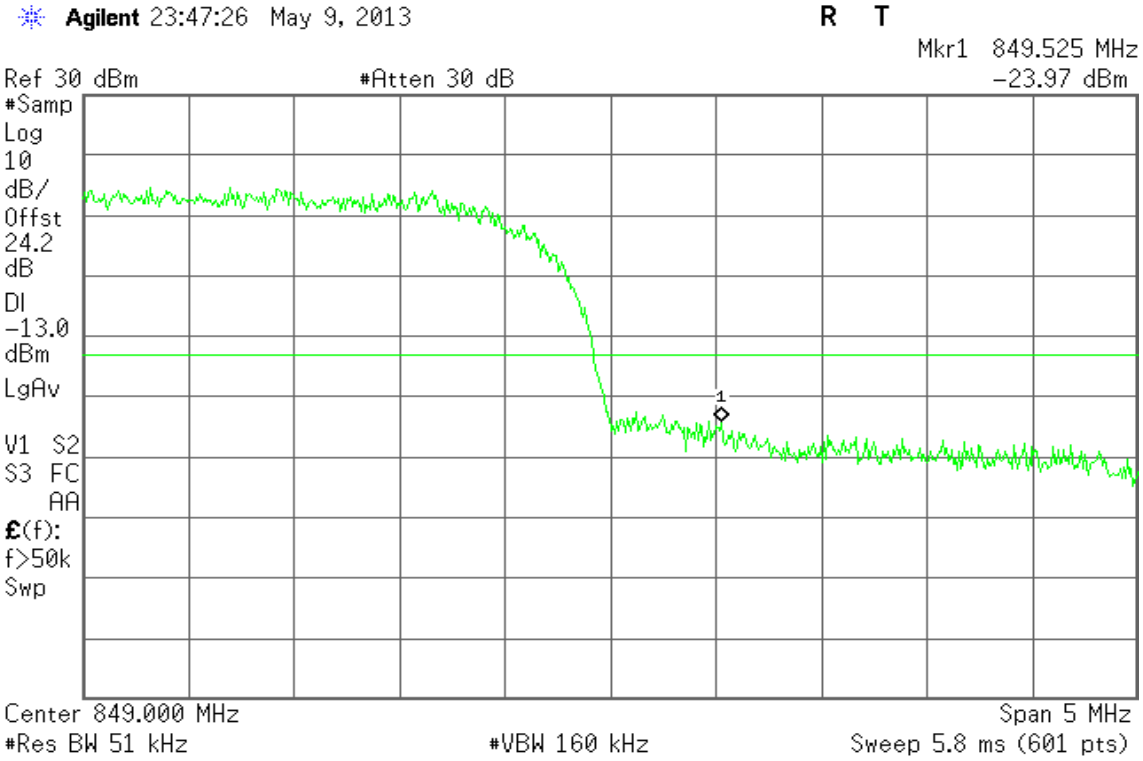


Figure 22-2: Band Edge emissions – HSDPA CH High



WCDMA / HSUPA Band II

Figure 23-1: Out of Band emission at antenna terminals – HSUPA CH Low

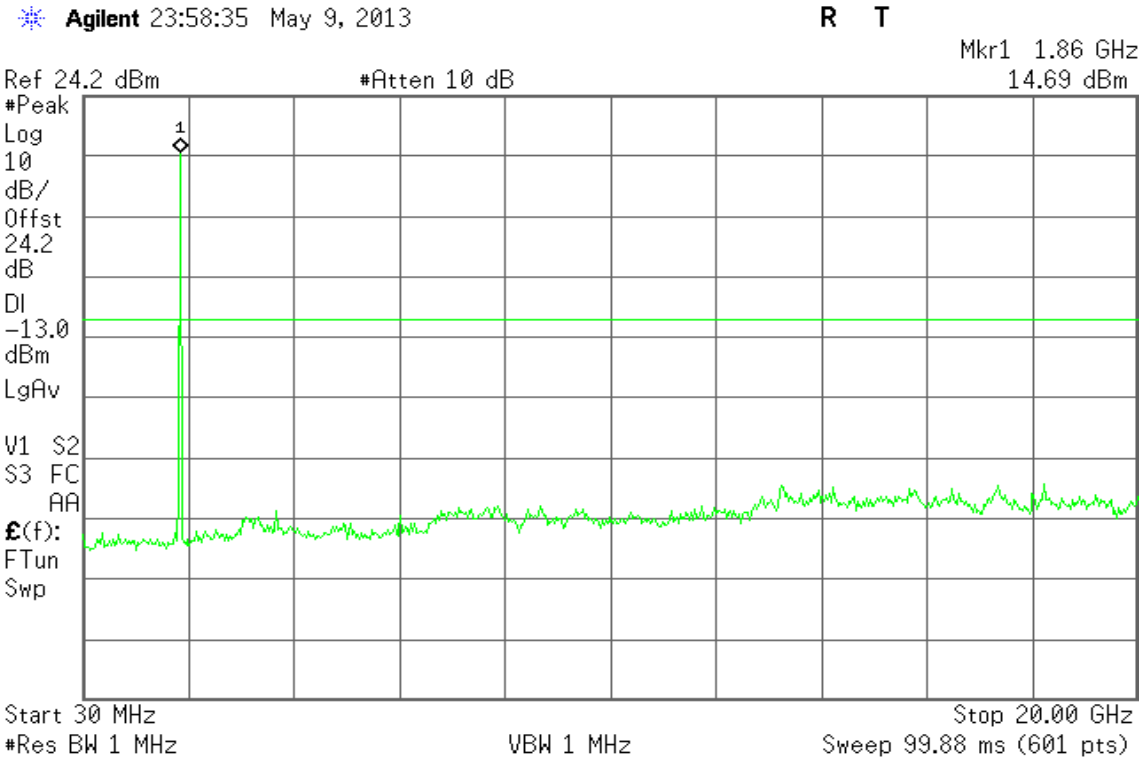


Figure 23-2: Out of Band emission at antenna terminals – HSUPA CH Mid

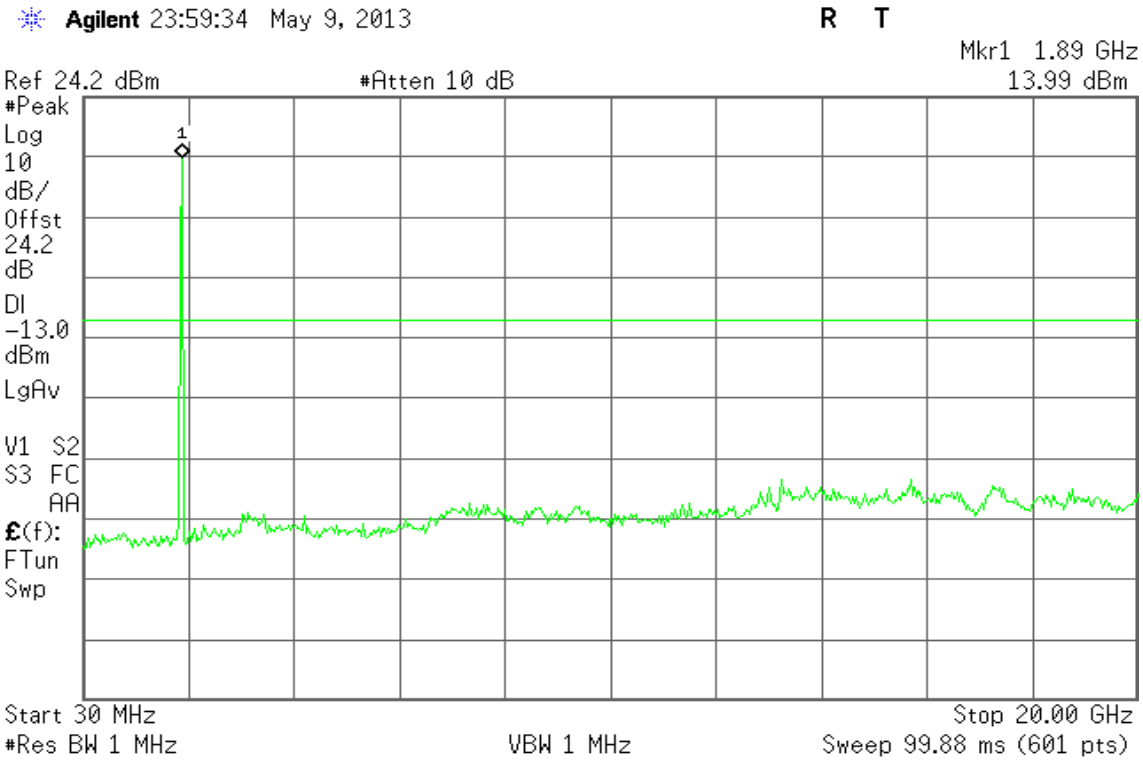
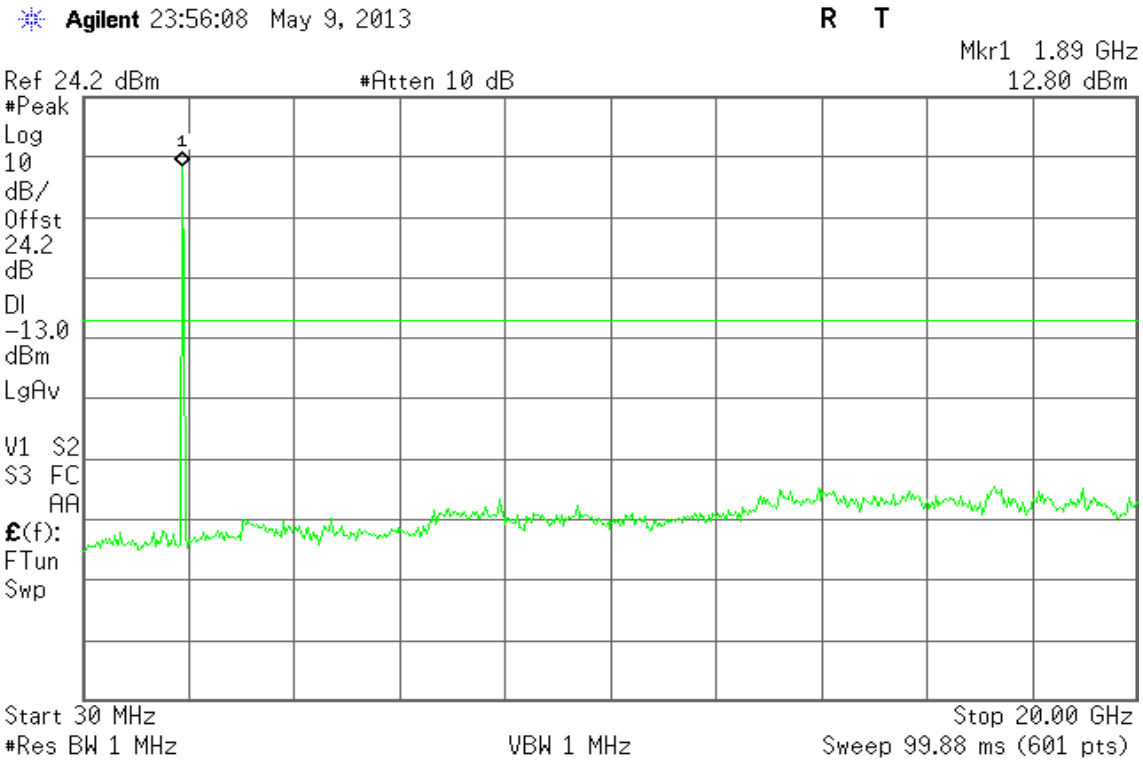


Figure 23-3: Out of Band emission at antenna terminals – HSUPA CH High



HSUPA / WCDMA Band V

Figure 24-1: Out of Band emission at antenna terminals – HSUPA CH Low

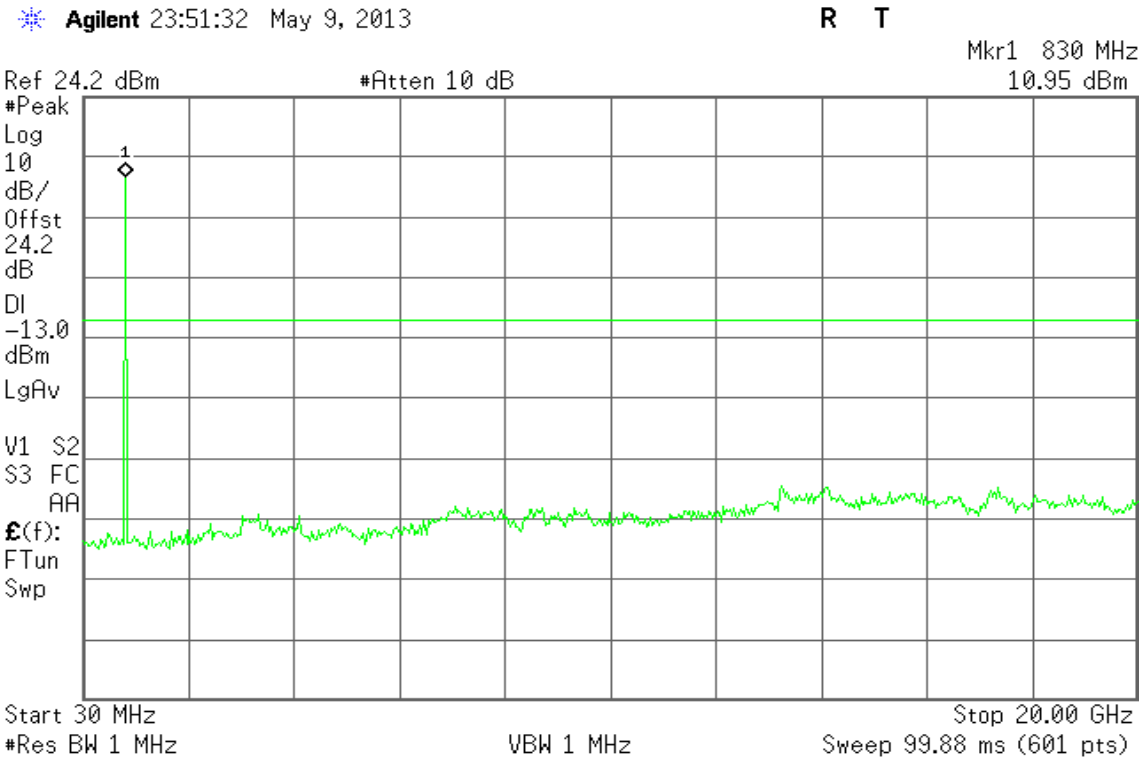


Figure 24-2: Out of Band emission at antenna terminals – HSUPA CH Mid

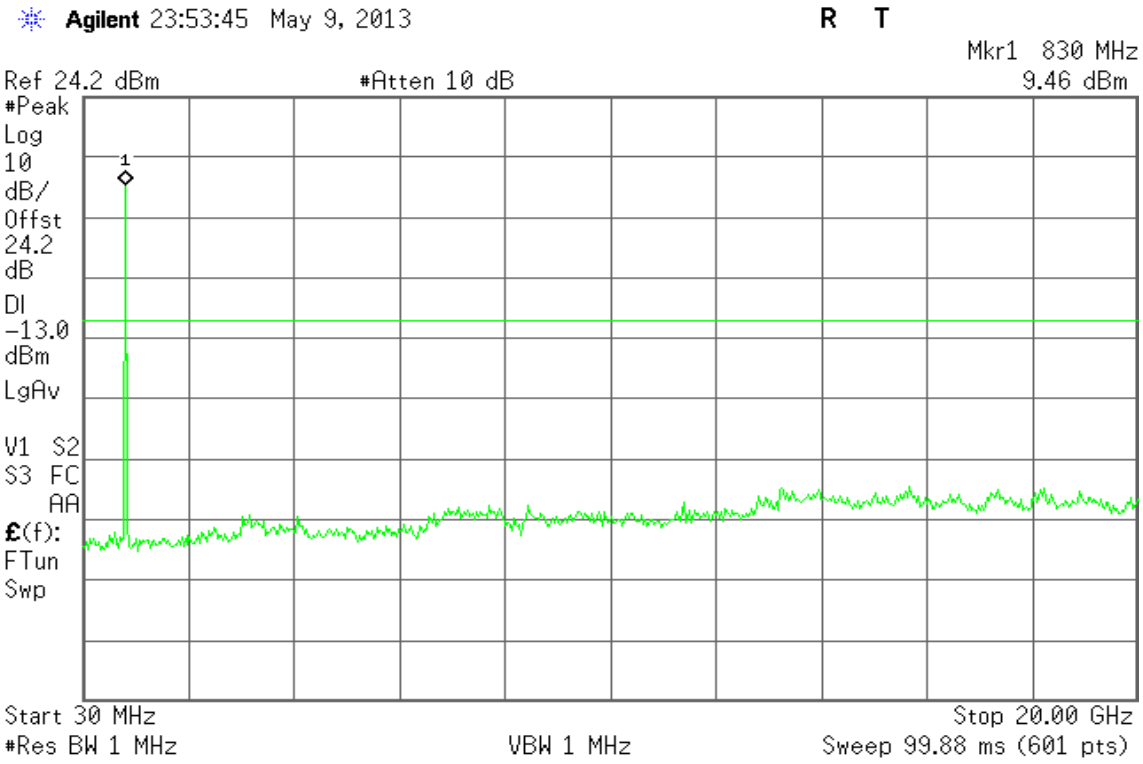
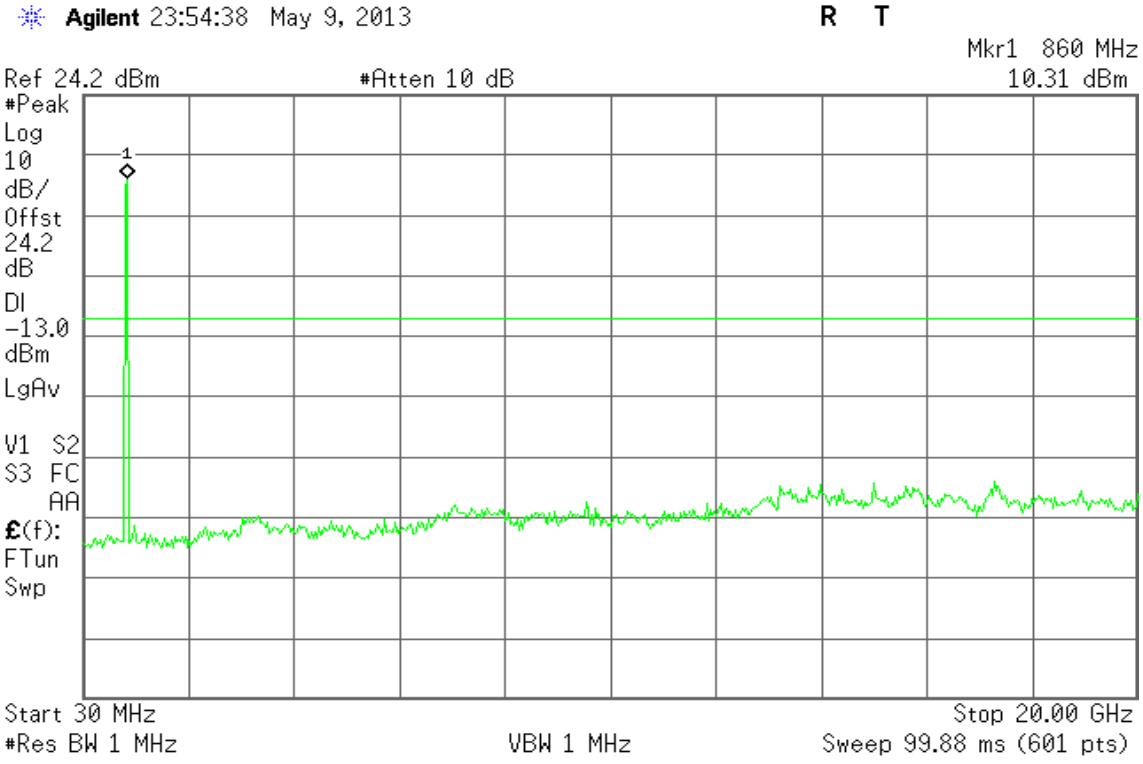


Figure 24-3: Out of Band emission at antenna terminals – HSUPA CH High



WCDMA / HSUPA Band II

Figure 25-1: Band Edge emissions – HSUPA CH Low

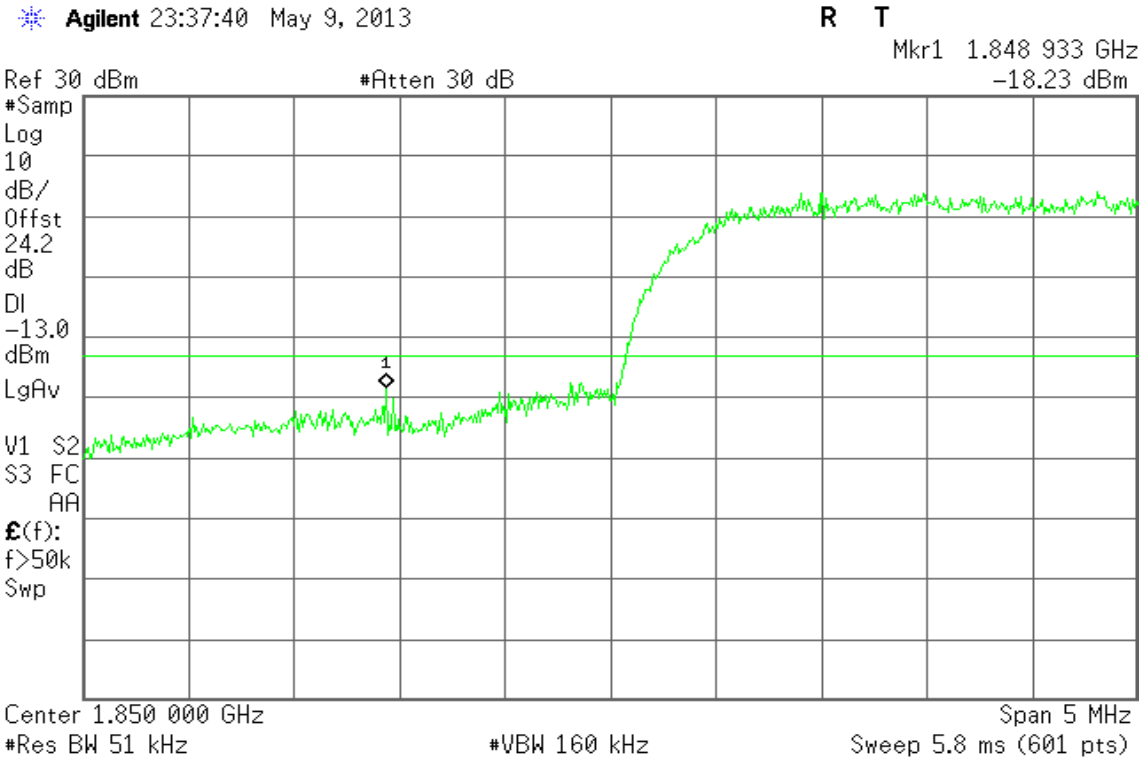
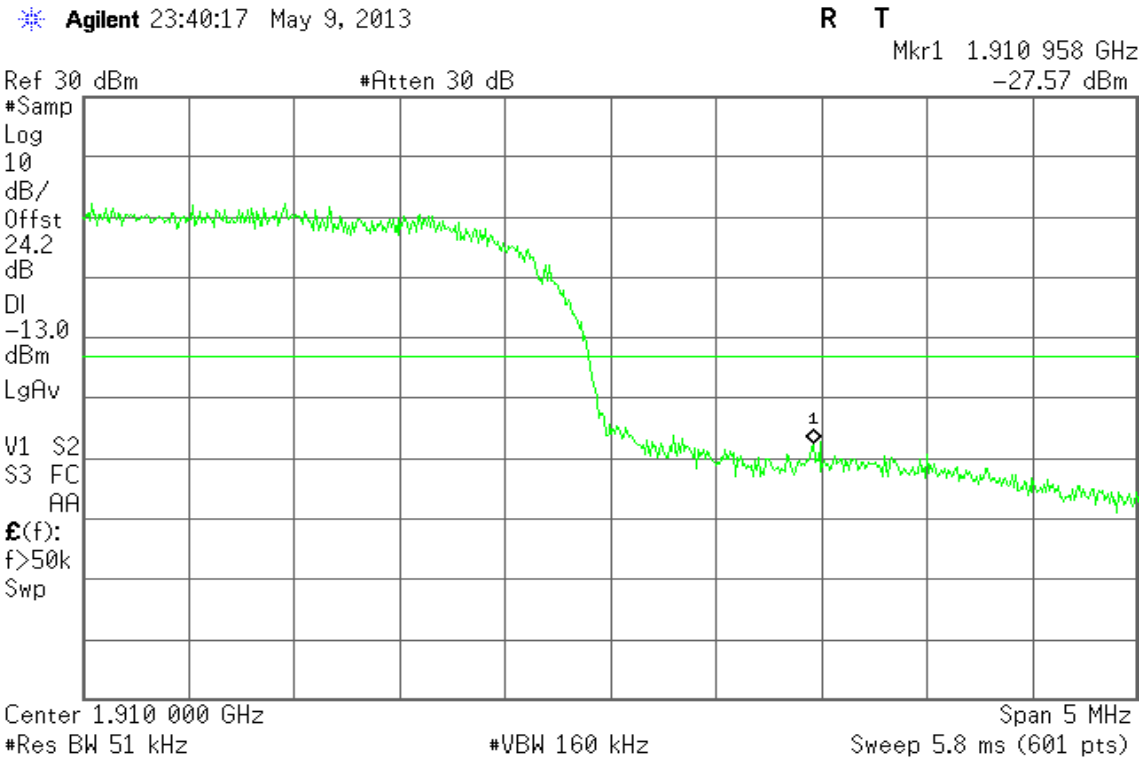


Figure 25-2: Band Edge emissions – HSUPA CH High



WCDMA / HSUPA Band V

Figure 26-1: Band Edge emissions – HSUPA CH Low

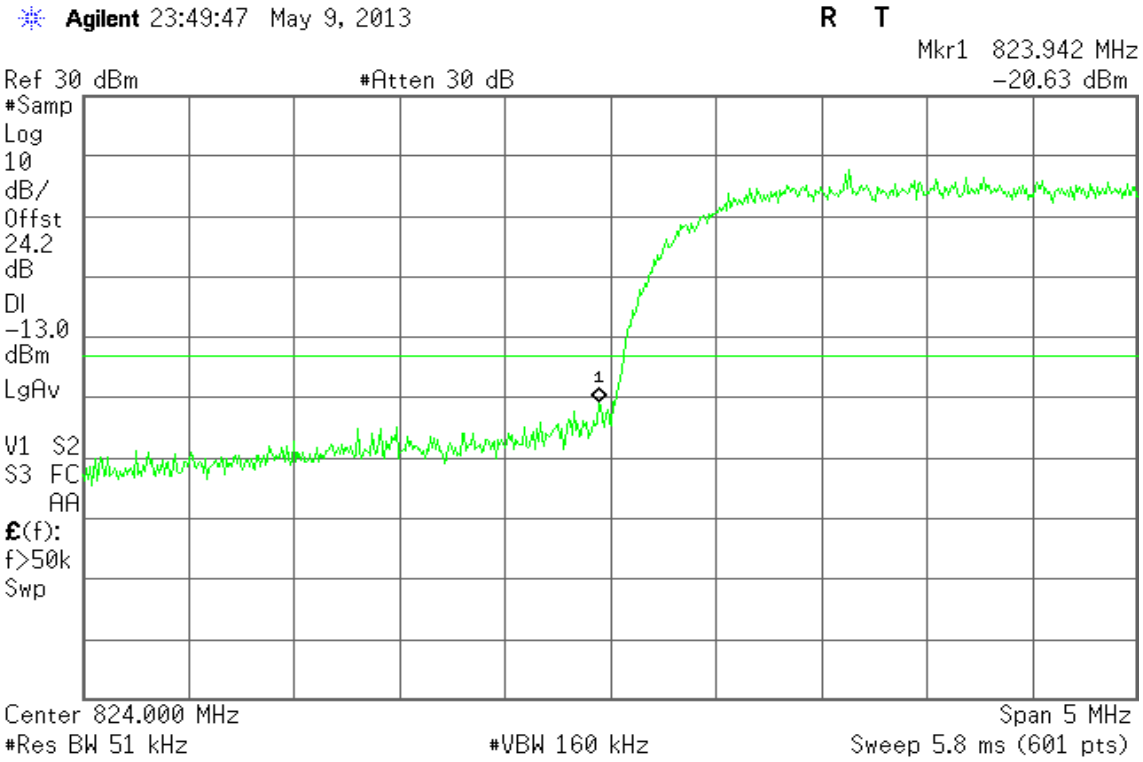
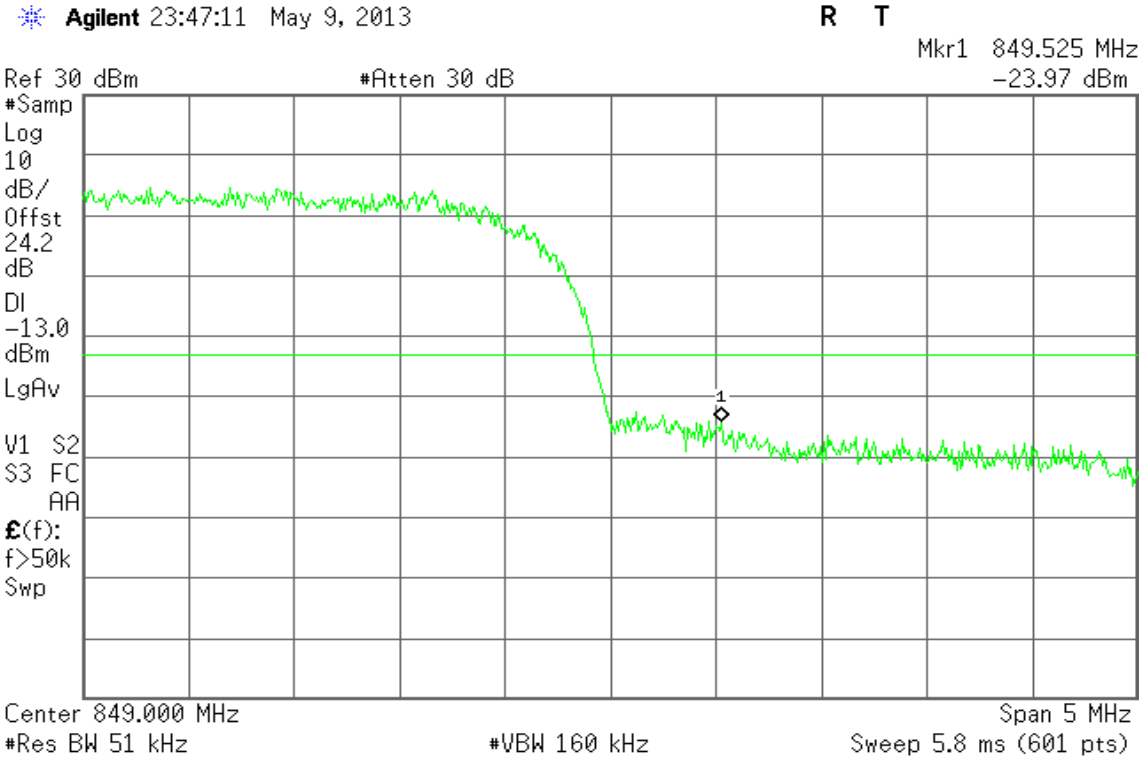


Figure 26-2: Band Edge emissions – HSUPA CH High



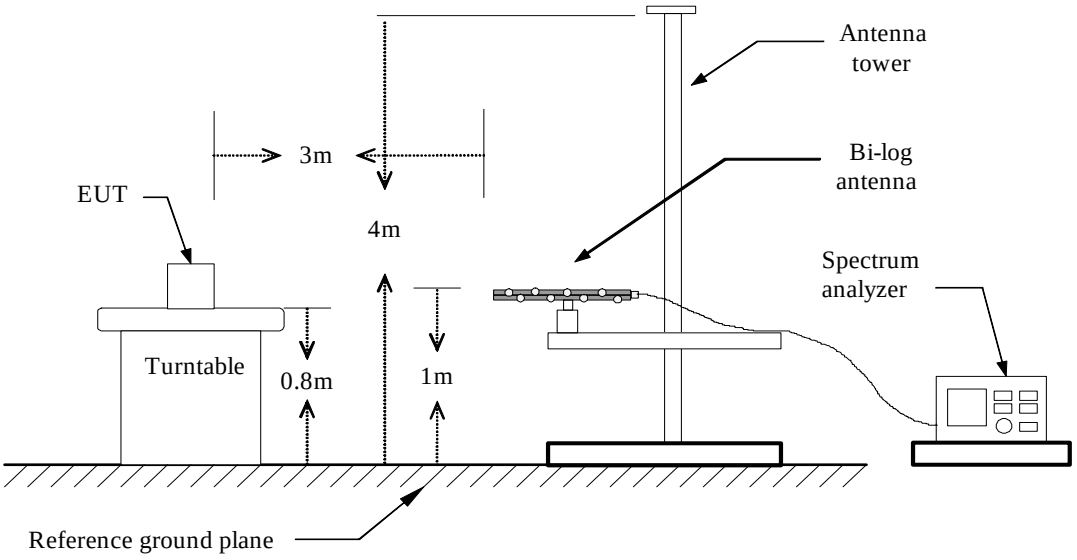
7.6FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

LIMIT

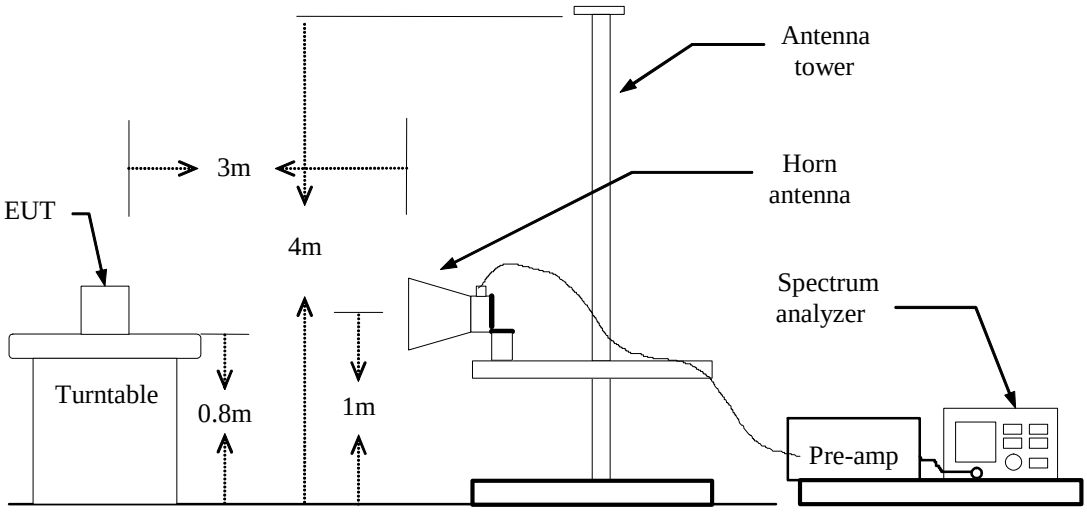
According to FCC §2.1053

Test Configuration

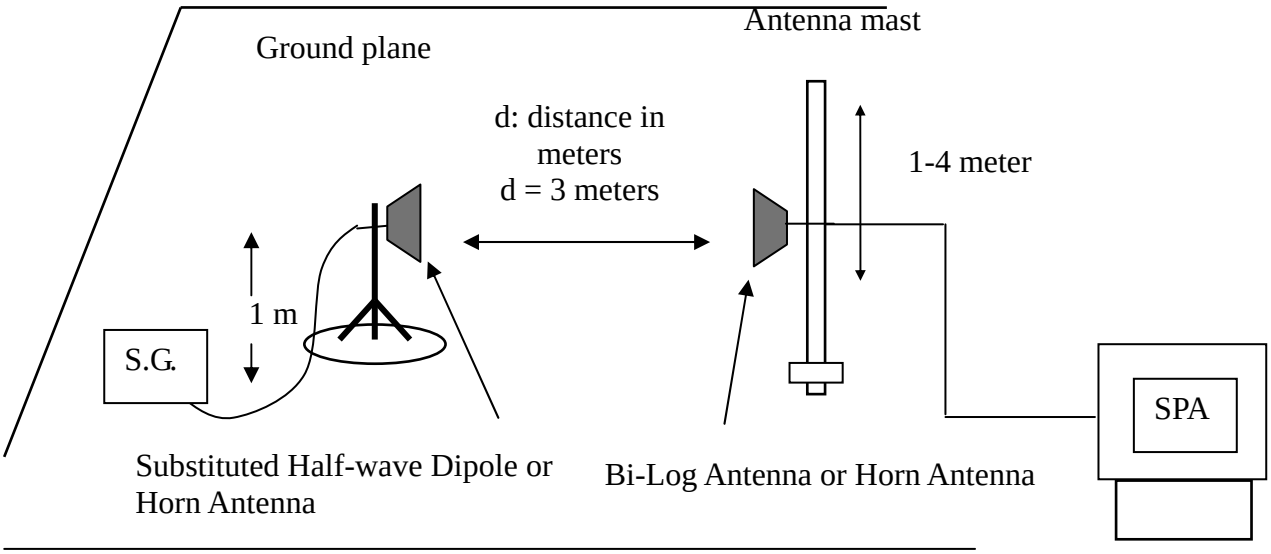
Below 1 GHz



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: GPRS 850 / TX / CH 128 **Test Date:** May 15, 2013

Temperature: 26°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-64.82	1.07	0.39	-65.50	-13.00	-52.50	V
161.9200	-73.73	1.5	1.61	-73.62	-13.00	-60.62	V
266.6800	-79.04	1.96	5.27	-75.73	-13.00	-62.73	V
364.6500	-69.08	2.28	5.75	-65.61	-13.00	-52.61	V
533.4300	-64.77	2.76	6.11	-61.42	-13.00	-48.42	V
623.6400	-74.9	2.95	6.14	-71.71	-13.00	-58.71	V
48.4300	-45.9	0.79	-5.83	-52.52	-13.00	-39.52	H
84.3200	-56.72	1.07	0.39	-57.40	-13.00	-44.40	H
150.2800	-64.52	1.43	0.71	-65.24	-13.00	-52.24	H
265.7100	-73.26	1.95	5.32	-69.89	-13.00	-56.89	H
364.6500	-64.66	2.28	5.75	-61.19	-13.00	-48.19	H
530.5200	-64.75	2.75	6.03	-61.47	-13.00	-48.47	H

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:** May 15, 2013

Temperature: 26°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
51.3400	-64.97	0.81	-4.51	-70.29	-13.00	-57.29	V
84.3200	-65.26	1.07	0.39	-65.94	-13.00	-52.94	V
161.9200	-74.04	1.5	1.61	-73.93	-13.00	-60.93	V
363.6800	-70.04	2.28	5.74	-66.58	-13.00	-53.58	V
533.4300	-65.3	2.76	6.11	-61.95	-13.00	-48.95	V
623.6400	-76.84	2.95	6.14	-73.65	-13.00	-60.65	V
48.4300	-51.25	0.79	-5.83	-57.87	-13.00	-44.87	H
84.3200	-56.7	1.07	0.39	-57.38	-13.00	-44.38	H
120.2100	-61.62	1.27	-2.06	-64.95	-13.00	-51.95	H
161.9200	-65.78	1.5	1.61	-65.67	-13.00	-52.67	H
365.6200	-65.27	2.29	5.76	-61.80	-13.00	-48.80	H
530.5200	-66.28	2.75	6.03	-63.00	-13.00	-50.00	H

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:** May 15, 2013

Temperature: 26°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-64.95	1.07	0.39	-65.63	-13.00	-52.63	V
120.2100	-68.11	1.27	-2.06	-71.44	-13.00	-58.44	V
171.6200	-74.2	1.57	2.69	-73.08	-13.00	-60.08	V
364.6500	-70.2	2.28	5.75	-66.73	-13.00	-53.73	V
533.4300	-64.98	2.76	6.11	-61.63	-13.00	-48.63	V
623.6400	-75.69	2.95	6.14	-72.50	-13.00	-59.50	V
48.4300	-51.13	0.79	-5.83	-57.75	-13.00	-44.75	H
84.3200	-57.33	1.07	0.39	-58.01	-13.00	-45.01	H
161.9200	-66.1	1.5	1.61	-65.99	-13.00	-52.99	H
266.6800	-75.07	1.96	5.27	-71.76	-13.00	-58.76	H
364.6500	-65.49	2.28	5.75	-62.02	-13.00	-49.02	H
533.4300	-67.06	2.76	6.11	-63.71	-13.00	-50.71	H

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 1900 / TX / CH 512 **Test Date:** May 16, 2013

Temperature: 26°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-54.06	0.79	-5.83	-60.68	-13.00	-47.68	V
84.3200	-62.08	1.07	0.39	-62.76	-13.00	-49.76	V
161.9200	-71	1.5	1.61	-70.89	-13.00	-57.89	V
364.6500	-70.56	2.28	5.75	-67.09	-13.00	-54.09	V
533.4300	-64.33	2.76	6.11	-60.98	-13.00	-47.98	V
793.3900	-66.11	3.33	6.33	-63.11	-13.00	-50.11	V
84.3200	-58.11	1.07	0.39	-58.79	-13.00	-45.79	H
120.2100	-57.45	1.27	-2.06	-60.78	-13.00	-47.78	H
363.6800	-67	2.28	5.74	-63.54	-13.00	-50.54	H
530.5200	-64.3	2.75	6.03	-61.02	-13.00	-48.02	H
800.1800	-66.9	3.33	6.52	-63.71	-13.00	-50.71	H
971.8700	-60.42	3.67	6.3	-57.79	-13.00	-44.79	H

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:** May 16, 2013

Temperature: 26°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-54.92	0.79	-5.83	-61.54	-13.00	-48.54	V
84.3200	-62.24	1.07	0.39	-62.92	-13.00	-49.92	V
363.6800	-70.86	2.28	5.74	-67.40	-13.00	-54.40	V
533.4300	-64.73	2.76	6.11	-61.38	-13.00	-48.38	V
796.3000	-61.67	3.33	6.41	-58.59	-13.00	-45.59	V
910.7600	-66.6	3.57	6.6	-63.57	-13.00	-50.57	V
84.3200	-57.88	1.07	0.39	-58.56	-13.00	-45.56	H
161.9200	-65.64	1.5	1.61	-65.53	-13.00	-52.53	H
364.6500	-66.52	2.28	5.75	-63.05	-13.00	-50.05	H
533.4300	-64.85	2.76	6.11	-61.50	-13.00	-48.50	H
800.1800	-65.44	3.33	6.52	-62.25	-13.00	-49.25	H
959.2600	-57.99	3.66	6.4	-55.25	-13.00	-42.25	H

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:** May 16, 2013

Temperature: 26°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
48.4300	-55.27	0.79	-5.83	-61.89	-13.00	-48.89	V
84.3200	-62.54	1.07	0.39	-63.22	-13.00	-50.22	V
161.9200	-71.21	1.5	1.61	-71.10	-13.00	-58.10	V
362.7100	-70.91	2.28	5.73	-67.46	-13.00	-54.46	V
533.4300	-64.81	2.76	6.11	-61.46	-13.00	-48.46	V
797.2700	-64.45	3.33	6.44	-61.34	-13.00	-48.34	V
84.3200	-58.46	1.07	0.39	-59.14	-13.00	-46.14	H
120.2100	-57.77	1.27	-2.06	-61.10	-13.00	-48.10	H
362.7100	-67.05	2.28	5.73	-63.60	-13.00	-50.60	H
533.4300	-64.56	2.76	6.11	-61.21	-13.00	-48.21	H
800.1800	-63.55	3.33	6.52	-60.36	-13.00	-47.36	H
967.9900	-59.61	3.67	6.32	-56.96	-13.00	-43.96	H

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:** June 26, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
117.3000	-57.41	1.26	-1.99	-60.66	-13.00	-47.66	V
147.3700	-57.94	1.42	0.44	-58.92	-13.00	-45.92	V
176.4700	-64.89	1.59	3.21	-63.27	-13.00	-50.27	V
294.8100	-67.88	2.06	5.5	-64.44	-13.00	-51.44	V
367.5600	-58.92	2.29	5.78	-55.43	-13.00	-42.43	V
616.8500	-70.47	2.94	6.16	-67.25	-13.00	-54.25	V
88.2000	-55.53	1.09	0.84	-55.78	-13.00	-42.78	H
147.3700	-56.28	1.42	0.44	-57.26	-13.00	-44.26	H
206.5400	-63.87	1.67	4.7	-60.84	-13.00	-47.84	H
293.8400	-62.97	2.05	5.48	-59.54	-13.00	-46.54	H
366.5900	-52.63	2.29	5.77	-49.15	-13.00	-36.15	H
533.4300	-68.3	2.76	6.11	-64.95	-13.00	-51.95	H

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:** June 26, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
88.2000	-61.48	1.09	0.84	-61.73	-13.00	-48.73	V
147.3700	-57.39	1.42	0.44	-58.37	-13.00	-45.37	V
177.4400	-64.37	1.6	3.31	-62.66	-13.00	-49.66	V
294.8100	-66.28	2.06	5.5	-62.84	-13.00	-49.84	V
367.5600	-58.89	2.29	5.78	-55.40	-13.00	-42.40	V
619.7600	-69.61	2.94	6.11	-66.44	-13.00	-53.44	V
88.2000	-54.9	1.09	0.84	-55.15	-13.00	-42.15	H
118.2700	-52.89	1.26	-2.03	-56.18	-13.00	-43.18	H
177.4400	-62.43	1.6	3.31	-60.72	-13.00	-47.72	H
293.8400	-62.8	2.05	5.48	-59.37	-13.00	-46.37	H
366.5900	-51.77	2.29	5.77	-48.29	-13.00	-35.29	H
530.5200	-68.41	2.75	6.03	-65.13	-13.00	-52.13	H

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:** June 26, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
88.2000	-59.96	1.09	0.84	-60.21	-13.00	-47.21	V
148.8250	-56.49	1.42	0.58	-57.33	-13.00	-44.33	V
177.9250	-63.49	1.6	3.36	-61.73	-13.00	-48.73	V
296.7500	-66.85	2.07	5.53	-63.39	-13.00	-50.39	V
367.0750	-58.14	2.29	5.77	-54.66	-13.00	-41.66	V
621.7000	-70.87	2.95	6.13	-67.69	-13.00	-54.69	V
88.2000	-55.17	1.09	0.84	-55.42	-13.00	-42.42	H
148.8250	-55.3	1.42	0.58	-56.14	-13.00	-43.14	H
294.3250	-62.05	2.05	5.49	-58.61	-13.00	-45.61	H
369.5000	-52.04	2.3	5.8	-48.54	-13.00	-35.54	H
442.2500	-68.18	2.55	5.85	-64.88	-13.00	-51.88	H
531.9750	-68.11	2.76	6.07	-64.80	-13.00	-51.80	H

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:** June 26, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
147.3700	-59.65	1.42	0.44	-60.63	-13.00	-47.63	V
177.4400	-63.59	1.6	3.31	-61.88	-13.00	-48.88	V
294.8100	-69.46	2.06	5.5	-66.02	-13.00	-53.02	V
368.5300	-59.19	2.3	5.79	-55.70	-13.00	-42.70	V
619.7600	-69.24	2.94	6.11	-66.07	-13.00	-53.07	V
960.2300	-63.14	3.67	6.39	-60.42	-13.00	-47.42	V
88.2000	-55.31	1.09	0.84	-55.56	-13.00	-42.56	H
206.5400	-62.6	1.67	4.7	-59.57	-13.00	-46.57	H
369.5000	-52.15	2.3	5.8	-48.65	-13.00	-35.65	H
533.4300	-68.5	2.76	6.11	-65.15	-13.00	-52.15	H
735.1900	-62.06	3.19	6.25	-59.00	-13.00	-46.00	H
796.3000	-55.02	3.33	6.41	-51.94	-13.00	-38.94	H

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:** June 26, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
88.2000	-59.32	1.09	0.84	-59.57	-13.00	-46.57	V
147.3700	-59.82	1.42	0.44	-60.80	-13.00	-47.80	V
294.8100	-68.83	2.06	5.5	-65.39	-13.00	-52.39	V
368.5300	-58.33	2.3	5.79	-54.84	-13.00	-41.84	V
616.8500	-69.47	2.94	6.16	-66.25	-13.00	-53.25	V
913.6700	-60.95	3.57	6.6	-57.92	-13.00	-44.92	V
88.2000	-55.47	1.09	0.84	-55.72	-13.00	-42.72	H
147.3700	-58.21	1.42	0.44	-59.19	-13.00	-46.19	H
294.8100	-62.4	2.06	5.5	-58.96	-13.00	-45.96	H
368.5300	-52.44	2.3	5.79	-48.95	-13.00	-35.95	H
910.7600	-60.94	3.57	6.6	-57.91	-13.00	-44.91	H
960.2300	-56.75	3.67	6.39	-54.03	-13.00	-41.03	H

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:** June 26, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
88.2000	-60.14	1.09	0.84	-60.39	-13.00	-47.39	V
147.3700	-55.59	1.42	0.44	-56.57	-13.00	-43.57	V
177.4400	-64.7	1.6	3.31	-62.99	-13.00	-49.99	V
368.5300	-59.58	2.3	5.79	-56.09	-13.00	-43.09	V
911.7300	-64.27	3.57	6.6	-61.24	-13.00	-48.24	V
981.5700	-61.5	3.69	6.28	-58.91	-13.00	-45.91	V
88.2000	-55.57	1.09	0.84	-55.82	-13.00	-42.82	H
147.3700	-56.22	1.42	0.44	-57.20	-13.00	-44.20	H
294.8100	-62.78	2.06	5.5	-59.34	-13.00	-46.34	H
368.5300	-52.79	2.3	5.79	-49.30	-13.00	-36.30	H
910.7600	-61.42	3.57	6.6	-58.39	-13.00	-45.39	H
960.2300	-56.87	3.67	6.39	-54.15	-13.00	-41.15	H

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:** May 16, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-63	1.07	0.39	-63.68	-13.00	-50.68	V
366.5900	-71.08	2.29	5.77	-67.60	-13.00	-54.60	V
533.4300	-64.98	2.76	6.11	-61.63	-13.00	-48.63	V
798.2400	-61.32	3.33	6.47	-58.18	-13.00	-45.18	V
914.6400	-66.79	3.57	6.6	-63.76	-13.00	-50.76	V
951.5000	-62.6	3.64	6.32	-59.92	-13.00	-46.92	V
84.3200	-57.5	1.07	0.39	-58.18	-13.00	-45.18	H
120.2100	-57.26	1.27	-2.06	-60.59	-13.00	-47.59	H
362.7100	-66.31	2.28	5.73	-62.86	-13.00	-49.86	H
533.4300	-64.06	2.76	6.11	-60.71	-13.00	-47.71	H
797.2700	-65.61	3.33	6.44	-62.50	-13.00	-49.50	H
964.1100	-58.06	3.67	6.36	-55.37	-13.00	-42.37	H

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:** May 16, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-62.99	1.07	0.39	-63.67	-13.00	-50.67	V
161.9200	-72.78	1.5	1.61	-72.67	-13.00	-59.67	V
366.5900	-71.34	2.29	5.77	-67.86	-13.00	-54.86	V
533.4300	-66.21	2.76	6.11	-62.86	-13.00	-49.86	V
800.1800	-65.61	3.33	6.52	-62.42	-13.00	-49.42	V
913.6700	-66.27	3.57	6.6	-63.24	-13.00	-50.24	V
84.3200	-57.54	1.07	0.39	-58.22	-13.00	-45.22	H
120.2100	-56.93	1.27	-2.06	-60.26	-13.00	-47.26	H
363.6800	-66.86	2.28	5.74	-63.40	-13.00	-50.40	H
530.5200	-63.61	2.75	6.03	-60.33	-13.00	-47.33	H
800.1800	-67.28	3.33	6.52	-64.09	-13.00	-51.09	H
949.5600	-60.82	3.63	6.3	-58.15	-13.00	-45.15	H

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:** May 16, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-63.31	1.07	0.39	-63.99	-13.00	-50.99	V
161.9200	-71.7	1.5	1.61	-71.59	-13.00	-58.59	V
365.6200	-70.79	2.29	5.76	-67.32	-13.00	-54.32	V
533.4300	-66.12	2.76	6.11	-62.77	-13.00	-49.77	V
800.1800	-56.91	3.33	6.52	-53.72	-13.00	-40.72	V
937.9200	-67.3	3.6	6.4	-64.50	-13.00	-51.50	V
84.3200	-58.37	1.07	0.39	-59.05	-13.00	-46.05	H
120.2100	-56.97	1.27	-2.06	-60.30	-13.00	-47.30	H
361.7400	-67.1	2.28	5.72	-63.66	-13.00	-50.66	H
533.4300	-63.62	2.76	6.11	-60.27	-13.00	-47.27	H
799.2100	-60.83	3.33	6.49	-57.67	-13.00	-44.67	H
968.9600	-58.41	3.67	6.32	-55.76	-13.00	-42.76	H

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:** May 17, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
71.7100	-60.42	0.97	-1.61	-63.00	-13.00	-50.00	V
84.3200	-59.94	1.07	0.39	-60.62	-13.00	-47.62	V
150.2800	-73.24	1.43	0.71	-73.96	-13.00	-60.96	V
364.6500	-71.76	2.28	5.75	-68.29	-13.00	-55.29	V
530.5200	-67.67	2.75	6.03	-64.39	-13.00	-51.39	V
564.4700	-74.95	2.86	6.03	-71.78	-13.00	-58.78	V
84.3200	-59.58	1.07	0.39	-60.26	-13.00	-47.26	H
126.0300	-61.91	1.32	-1.69	-64.92	-13.00	-51.92	H
161.9200	-69.44	1.5	1.61	-69.33	-13.00	-56.33	H
266.6800	-76.48	1.96	5.27	-73.17	-13.00	-60.17	H
364.6500	-65.07	2.28	5.75	-61.60	-13.00	-48.60	H
530.5200	-65.89	2.75	6.03	-62.61	-13.00	-49.61	H

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 4182 **Test Date:** May 17, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-60.26	1.07	0.39	-60.94	-13.00	-47.94	V
120.2100	-67.18	1.27	-2.06	-70.51	-13.00	-57.51	V
159.0100	-77	1.48	1.36	-77.12	-13.00	-64.12	V
364.6500	-70.73	2.28	5.75	-67.26	-13.00	-54.26	V
530.5200	-68.97	2.75	6.03	-65.69	-13.00	-52.69	V
566.4100	-74.51	2.86	6.06	-71.31	-13.00	-58.31	V
84.3200	-60.46	1.07	0.39	-61.14	-13.00	-48.14	H
120.2100	-60.33	1.27	-2.06	-63.66	-13.00	-50.66	H
150.2800	-67.85	1.43	0.71	-68.57	-13.00	-55.57	H
265.7100	-74.73	1.95	5.32	-71.36	-13.00	-58.36	H
365.6200	-64.84	2.29	5.76	-61.37	-13.00	-48.37	H
530.5200	-65.19	2.75	6.03	-61.91	-13.00	-48.91	H

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:** May 17, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
71.7100	-59.37	0.97	-1.61	-61.95	-13.00	-48.95	V
84.3200	-59.21	1.07	0.39	-59.89	-13.00	-46.89	V
150.2800	-72.93	1.43	0.71	-73.65	-13.00	-60.65	V
364.6500	-70.47	2.28	5.75	-67.00	-13.00	-54.00	V
530.5200	-67.69	2.75	6.03	-64.41	-13.00	-51.41	V
566.4100	-73.93	2.86	6.06	-70.73	-13.00	-57.73	V
48.4300	-55.03	0.79	-5.83	-61.65	-13.00	-48.65	H
84.3200	-60.45	1.07	0.39	-61.13	-13.00	-48.13	H
126.0300	-62.85	1.32	-1.69	-65.86	-13.00	-52.86	H
150.2800	-66.75	1.43	0.71	-67.47	-13.00	-54.47	H
363.6800	-64.73	2.28	5.74	-61.27	-13.00	-48.27	H
533.4300	-66.36	2.76	6.11	-63.01	-13.00	-50.01	H

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:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-60.36	1.07	0.39	-61.04	-13.00	-48.04	V
365.6200	-71.8	2.29	5.76	-68.33	-13.00	-55.33	V
533.4300	-69.02	2.76	6.11	-65.67	-13.00	-52.67	V
564.4700	-75.76	2.86	6.03	-72.59	-13.00	-59.59	V
796.3000	-66.01	3.33	6.41	-62.93	-13.00	-49.93	V
956.3500	-61.36	3.65	6.38	-58.63	-13.00	-45.63	V
84.3200	-58.99	1.07	0.39	-59.67	-13.00	-46.67	H
120.2100	-58.12	1.27	-2.06	-61.45	-13.00	-48.45	H
150.2800	-65.95	1.43	0.71	-66.67	-13.00	-53.67	H
364.6500	-64.94	2.28	5.75	-61.47	-13.00	-48.47	H
533.4300	-65.79	2.76	6.11	-62.44	-13.00	-49.44	H
946.6500	-64.79	3.62	6.33	-62.08	-13.00	-49.08	H
979.6300	-60.45	3.69	6.29	-57.85	-13.00	-44.85	H

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:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-60.66	1.07	0.39	-61.34	-13.00	-48.34	V
150.2800	-73.58	1.43	0.71	-74.30	-13.00	-61.30	V
364.6500	-72.08	2.28	5.75	-68.61	-13.00	-55.61	V
533.4300	-69.11	2.76	6.11	-65.76	-13.00	-52.76	V
800.1800	-64.62	3.33	6.52	-61.43	-13.00	-48.43	V
957.3200	-63.52	3.66	6.39	-60.79	-13.00	-47.79	V
84.3200	-59.19	1.07	0.39	-59.87	-13.00	-46.87	H
120.2100	-58.39	1.27	-2.06	-61.72	-13.00	-48.72	H
150.2800	-65.06	1.43	0.71	-65.78	-13.00	-52.78	H
365.6200	-63.9	2.29	5.76	-60.43	-13.00	-47.43	H
533.4300	-65.53	2.76	6.11	-62.18	-13.00	-49.18	H
910.7600	-67.63	3.57	6.6	-64.60	-13.00	-51.60	H

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:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-59.52	1.07	0.39	-60.20	-13.00	-47.20	V
150.2800	-74.45	1.43	0.71	-75.17	-13.00	-62.17	V
365.6200	-71.87	2.29	5.76	-68.40	-13.00	-55.40	V
530.5200	-69.17	2.75	6.03	-65.89	-13.00	-52.89	V
796.3000	-64.38	3.33	6.41	-61.30	-13.00	-48.30	V
952.4700	-61.92	3.64	6.33	-59.23	-13.00	-46.23	V
84.3200	-59.2	1.07	0.39	-59.88	-13.00	-46.88	H
120.2100	-58.22	1.27	-2.06	-61.55	-13.00	-48.55	H
150.2800	-64.36	1.43	0.71	-65.08	-13.00	-52.08	H
219.1500	-77.28	1.76	5.32	-73.72	-13.00	-60.72	H
364.6500	-64.73	2.28	5.75	-61.26	-13.00	-48.26	H
530.5200	-65.89	2.75	6.03	-62.61	-13.00	-49.61	H

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:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
35.8200	-48.12	0.69	-16.52	-65.33	-13.00	-52.33	V
84.3200	-59.73	1.07	0.39	-60.41	-13.00	-47.41	V
150.2800	-73.9	1.43	0.71	-74.62	-13.00	-61.62	V
365.6200	-71.38	2.29	5.76	-67.91	-13.00	-54.91	V
530.5200	-68.28	2.75	6.03	-65.00	-13.00	-52.00	V
566.4100	-73.83	2.86	6.06	-70.63	-13.00	-57.63	V
84.3200	-58.39	1.07	0.39	-59.07	-13.00	-46.07	H
120.2100	-59.14	1.27	-2.06	-62.47	-13.00	-49.47	H
150.2800	-65.53	1.43	0.71	-66.25	-13.00	-53.25	H
265.7100	-77.23	1.95	5.32	-73.86	-13.00	-60.86	H
365.6200	-64.95	2.29	5.76	-61.48	-13.00	-48.48	H
533.4300	-65.66	2.76	6.11	-62.31	-13.00	-49.31	H

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 4182	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
71.7100	-60.05	0.97	-1.61	-62.63	-13.00	-49.63	V
84.3200	-60.5	1.07	0.39	-61.18	-13.00	-48.18	V
120.2100	-66.81	1.27	-2.06	-70.14	-13.00	-57.14	V
150.2800	-74.12	1.43	0.71	-74.84	-13.00	-61.84	V
365.6200	-71.13	2.29	5.76	-67.66	-13.00	-54.66	V
533.4300	-68.82	2.76	6.11	-65.47	-13.00	-52.47	V
48.4300	-55.35	0.79	-5.83	-61.97	-13.00	-48.97	H
84.3200	-60.16	1.07	0.39	-60.84	-13.00	-47.84	H
150.2800	-67.25	1.43	0.71	-67.97	-13.00	-54.97	H
282.2000	-76.37	2.01	5.33	-73.05	-13.00	-60.05	H
365.6200	-65.44	2.29	5.76	-61.97	-13.00	-48.97	H
530.5200	-66.26	2.75	6.03	-62.98	-13.00	-49.98	H

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:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-59.76	1.07	0.39	-60.44	-13.00	-47.44	V
120.2100	-66.8	1.27	-2.06	-70.13	-13.00	-57.13	V
150.2800	-72.7	1.43	0.71	-73.42	-13.00	-60.42	V
364.6500	-70.72	2.28	5.75	-67.25	-13.00	-54.25	V
533.4300	-68.53	2.76	6.11	-65.18	-13.00	-52.18	V
564.4700	-73.97	2.86	6.03	-70.80	-13.00	-57.80	V
48.4300	-53.67	0.79	-5.83	-60.29	-13.00	-47.29	H
84.3200	-60.38	1.07	0.39	-61.06	-13.00	-48.06	H
126.0300	-64.1	1.32	-1.69	-67.11	-13.00	-54.11	H
219.1500	-77.16	1.76	5.32	-73.60	-13.00	-60.60	H
266.6800	-69.71	1.96	5.27	-66.40	-13.00	-53.40	H
365.6200	-65	2.29	5.76	-61.53	-13.00	-48.53	H
530.5200	-65.67	2.75	6.03	-62.39	-13.00	-49.39	

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 / HSUPA Band II / TX / CH 9262	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-60.91	1.07	0.39	-61.59	-13.00	-48.59	V
120.2100	-66.3	1.27	-2.06	-69.63	-13.00	-56.63	V
364.6500	-71.71	2.28	5.75	-68.24	-13.00	-55.24	V
530.5200	-69.11	2.75	6.03	-65.83	-13.00	-52.83	V
800.1800	-60.93	3.33	6.52	-57.74	-13.00	-44.74	V
950.5300	-64.07	3.63	6.31	-61.39	-13.00	-48.39	V
84.3200	-59.59	1.07	0.39	-60.27	-13.00	-47.27	H
120.2100	-58.14	1.27	-2.06	-61.47	-13.00	-48.47	H
222.0600	-77.45	1.77	5.34	-73.88	-13.00	-60.88	H
365.6200	-64.23	2.29	5.76	-60.76	-13.00	-47.76	H
533.4300	-66.13	2.76	6.11	-62.78	-13.00	-49.78	H
770.1100	-72.45	3.27	6.38	-69.34	-13.00	-56.34	H
972.8400	-62.8	3.67	6.3	-60.17	-13.00	-47.17	H

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 / HSUPA Band II / TX / CH 9400	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-60.2	1.07	0.39	-60.88	-13.00	-47.88	V
120.2100	-66.46	1.27	-2.06	-69.79	-13.00	-56.79	V
365.6200	-71.97	2.29	5.76	-68.50	-13.00	-55.50	V
530.5200	-69.2	2.75	6.03	-65.92	-13.00	-52.92	V
797.2700	-60.96	3.33	6.44	-57.85	-13.00	-44.85	V
954.4100	-61.28	3.65	6.36	-58.57	-13.00	-45.57	V
84.3200	-58.95	1.07	0.39	-59.63	-13.00	-46.63	H
120.2100	-58.31	1.27	-2.06	-61.64	-13.00	-48.64	H
219.1500	-76.48	1.76	5.32	-72.92	-13.00	-59.92	H
364.6500	-64.02	2.28	5.75	-60.55	-13.00	-47.55	H
533.4300	-65.87	2.76	6.11	-62.52	-13.00	-49.52	H
799.2100	-71.46	3.33	6.49	-68.30	-13.00	-55.30	H
963.1400	-61.46	3.67	6.36	-58.77	-13.00	-45.77	H

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 / HSUPA Band II / TX / CH 9538	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-60.77	1.07	0.39	-61.45	-13.00	-48.45	V
365.6200	-71.82	2.29	5.76	-68.35	-13.00	-55.35	V
533.4300	-69.19	2.76	6.11	-65.84	-13.00	-52.84	V
566.4100	-75.22	2.86	6.06	-72.02	-13.00	-59.02	V
799.2100	-61.07	3.33	6.49	-57.91	-13.00	-44.91	V
953.4400	-59.28	3.64	6.34	-56.58	-13.00	-43.58	V
84.3200	-59.92	1.07	0.39	-60.60	-13.00	-47.60	H
120.2100	-57.83	1.27	-2.06	-61.16	-13.00	-48.16	H
222.0600	-76.08	1.77	5.34	-72.51	-13.00	-59.51	H
291.9000	-75.37	2.04	5.44	-71.97	-13.00	-58.97	H
364.6500	-64.38	2.28	5.75	-60.91	-13.00	-47.91	H
533.4300	-65.62	2.76	6.11	-62.27	-13.00	-49.27	H
954.4100	-62.11	3.65	6.36	-59.40	-13.00	-46.40	H

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 / HSUPA Band V / TX / CH 4132	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
84.3200	-61.03	1.07	0.39	-61.71	-13.00	-48.71	V
150.2800	-73.94	1.43	0.71	-74.66	-13.00	-61.66	V
260.8600	-81.12	1.91	5.56	-77.47	-13.00	-64.47	V
366.5900	-71.46	2.29	5.77	-67.98	-13.00	-54.98	V
533.4300	-69.01	2.76	6.11	-65.66	-13.00	-52.66	V
566.4100	-74.06	2.86	6.06	-70.86	-13.00	-57.86	V
84.3200	-58.28	1.07	0.39	-58.96	-13.00	-45.96	H
120.2100	-59.05	1.27	-2.06	-62.38	-13.00	-49.38	H
265.7100	-75.19	1.95	5.32	-71.82	-13.00	-58.82	H
365.6200	-64.7	2.29	5.76	-61.23	-13.00	-48.23	H
450.9800	-75.18	2.59	5.74	-72.03	-13.00	-59.03	H
533.4300	-65.91	2.76	6.11	-62.56	-13.00	-49.56	H

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 / HSUPA Band V / TX / CH 4182	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
71.7100	-59.94	0.97	-1.61	-62.52	-13.00	-49.52	V
84.3200	-60.65	1.07	0.39	-61.33	-13.00	-48.33	V
90.1400	-65.85	1.11	1.07	-65.89	-13.00	-52.89	V
150.2800	-74.08	1.43	0.71	-74.80	-13.00	-61.80	V
365.6200	-71.31	2.29	5.76	-67.84	-13.00	-54.84	V
533.4300	-68.85	2.76	6.11	-65.50	-13.00	-52.50	V
48.4300	-55.42	0.79	-5.83	-62.04	-13.00	-49.04	H
84.3200	-61.15	1.07	0.39	-61.83	-13.00	-48.83	H
150.2800	-67.39	1.43	0.71	-68.11	-13.00	-55.11	H
265.7100	-77.93	1.95	5.32	-74.56	-13.00	-61.56	H
364.6500	-64.91	2.28	5.75	-61.44	-13.00	-48.44	H
533.4300	-65.5	2.76	6.11	-62.15	-13.00	-49.15	H

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 / HSUPA Band V / TX / CH 4233	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
35.8200	-47.7	0.69	-16.52	-64.91	-13.00	-51.91	V
84.3200	-59.72	1.07	0.39	-60.40	-13.00	-47.40	V
120.2100	-66.76	1.27	-2.06	-70.09	-13.00	-57.09	V
159.0100	-77.79	1.48	1.36	-77.91	-13.00	-64.91	V
364.6500	-70.94	2.28	5.75	-67.47	-13.00	-54.47	V
533.4300	-68.75	2.76	6.11	-65.40	-13.00	-52.40	V
564.4700	-74.46	2.86	6.03	-71.29	-13.00	-58.29	V
32.9100	-43.63	0.66	-19.46	-63.75	-13.00	-50.75	H
84.3200	-64.32	1.07	0.39	-65.00	-13.00	-52.00	H
120.2100	-62.96	1.27	-2.06	-66.29	-13.00	-53.29	H
222.0600	-79.34	1.77	5.34	-75.77	-13.00	-62.77	H
364.6500	-67.72	2.28	5.75	-64.25	-13.00	-51.25	H
533.4300	-68.21	2.76	6.11	-64.86	-13.00	-51.86	H

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: GPRS 850 / TX / CH 128 **Test Date:** May 15, 2013

Temperature: 26°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1329.000	-45.74	4.55	5.07	-45.22	-13.00	-32.22	V
1735.000	-41.82	5.17	5.88	-41.11	-13.00	-28.11	V
2491.000	-44.1	6.33	6.09	-44.34	-13.00	-31.34	V
N/A							
1560.000	-47.76	4.93	6.19	-46.50	-13.00	-33.50	H
1742.000	-41.07	5.19	5.86	-40.40	-13.00	-27.40	H
2659.000	-49.32	6.63	6.51	-49.44	-13.00	-36.44	H
N/A							

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:** May 15, 2013

Temperature: 26°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1532.000	-49.48	4.9	6.24	-48.14	-13.00	-35.14	V
1735.000	-42.73	5.17	5.88	-42.02	-13.00	-29.02	V
2652.000	-50.13	6.61	6.5	-50.24	-13.00	-37.24	V
N/A							
1742.000	-44.98	5.19	5.86	-44.31	-13.00	-31.31	H
2491.000	-45.78	6.33	6.09	-46.02	-13.00	-33.02	H
N/A							

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:** May 15, 2013

Temperature: 26°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1735.000	-44.45	5.17	5.88	-43.74	-13.00	-30.74	V
2491.000	-45.35	6.33	6.09	-45.59	-13.00	-32.59	V
N/A							
1742.000	-42.63	5.19	5.86	-41.96	-13.00	-28.96	H
2659.000	-50.26	6.63	6.51	-50.38	-13.00	-37.38	H
N/A							

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 1900 / TX / CH 512 **Test Date:** May 16, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1119.000	-47.42	4.1	3.56	-47.96	-13.00	-34.96	V
1329.000	-46.28	4.55	5.07	-45.76	-13.00	-32.76	V
2491.000	-44.29	6.33	6.09	-44.53	-13.00	-31.53	V
2652.000	-48.25	6.61	6.5	-48.36	-13.00	-35.36	V
N/A							
1119.000	-47.89	4.1	3.56	-48.43	-13.00	-35.43	H
1329.000	-49.07	4.55	5.07	-48.55	-13.00	-35.55	H
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:** May 16, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1343.000	-43.5	4.57	5.17	-42.90	-13.00	-29.90	V
2491.000	-45.91	6.33	6.09	-46.15	-13.00	-33.15	V
2659.000	-48.81	6.63	6.51	-48.93	-13.00	-35.93	V
N/A							
1364.000	-48.62	4.6	5.32	-47.90	-13.00	-34.90	H
1560.000	-50.08	4.93	6.19	-48.82	-13.00	-35.82	H
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:** May 15, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1119.000	-48.67	4.1	3.56	-49.21	-13.00	-36.21	V
1336.000	-45.82	4.56	5.12	-45.26	-13.00	-32.26	V
2498.000	-46.67	6.35	6.1	-46.92	-13.00	-33.92	V
2666.000	-48.9	6.65	6.53	-49.02	-13.00	-36.02	V
N/A							
1119.000	-46.83	4.1	3.56	-47.37	-13.00	-34.37	H
1420.000	-46.67	4.68	5.72	-45.63	-13.00	-32.63	H
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:** June 26, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2662.500	-50.91	6.64	6.52	-51.03	-13.00	-38.03	V
4132.500	-50	8.47	9.51	-48.96	-13.00	-35.96	V
N/A							
2452.500	-38.95	6.27	6.03	-39.19	-13.00	-26.19	H
3887.500	-50.13	8.37	9.29	-49.21	-13.00	-36.21	H
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:** June 26, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2522.500	-48.5	6.38	6.16	-48.72	-13.00	-35.72	V
4027.500	-50.48	8.38	9.42	-49.44	-13.00	-36.44	V
N/A							
2435.000	-37.95	6.24	6.01	-38.18	-13.00	-25.18	H
4290.000	-49.44	8.59	9.63	-48.40	-13.00	-35.40	H
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:** June 26, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2662.500	-51.3	6.64	6.52	-51.42	-13.00	-38.42	V
4762.500	-50.33	9.25	10.22	-49.36	-13.00	-36.36	V
N/A							
3205.000	-50.6	7.27	8.02	-49.85	-13.00	-36.85	H
4482.500	-49.85	8.86	9.79	-48.92	-13.00	-35.92	H
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:** June 26, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2417.500	-45.88	6.21	5.98	-46.11	-13.00	-33.11	V
3712.500	-48.45	8.21	9.11	-47.55	-13.00	-34.55	V
5550.000	-49.02	10.06	10.81	-48.27	-13.00	-35.27	V
N/A							
3677.500	-51.42	8.18	9.08	-50.52	-13.00	-37.52	H
5060.000	-51.06	9.43	10.62	-49.87	-13.00	-36.87	H
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:** June 26, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2662.500	-50.43	6.64	6.52	-50.55	-13.00	-37.55	V
3765.000	-48.51	8.24	9.16	-47.59	-13.00	-34.59	V
5637.500	-47.65	10.18	10.83	-47.00	-13.00	-34.00	V
N/A							
3128.000	-52.25	7.2	7.78	-51.67	-13.00	-38.67	H
4367.000	-51.47	8.63	9.69	-50.41	-13.00	-37.41	H
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:** June 26, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2662.500	-49.79	6.64	6.52	-49.91	-13.00	-36.91	V
3187.500	-49.21	7.25	7.96	-48.50	-13.00	-35.50	V
5742.500	-42.96	10.27	10.85	-42.38	-13.00	-29.38	V
N/A							
3590.000	-50.09	8.09	8.99	-49.19	-13.00	-36.19	H
5515.000	-50.31	9.98	10.8	-49.49	-13.00	-36.49	H
6320.000	-46.28	10.84	11.16	-45.96	-13.00	-32.96	H
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:** May 16, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1147.000	-48.59	4.15	3.76	-48.98	-13.00	-35.98	V
1329.000	-46.65	4.55	5.07	-46.13	-13.00	-33.13	V
2491.000	-45.4	6.33	6.09	-45.64	-13.00	-32.64	V
3709.000	-39.79	8.21	9.11	-38.89	-13.00	-25.89	V
N/A							
1119.000	-47.68	4.1	3.56	-48.22	-13.00	-35.22	H
1567.000	-49.77	4.94	6.18	-48.53	-13.00	-35.53	H
3702.000	-45.41	8.2	9.1	-44.51	-13.00	-31.51	H
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:** May 16, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1119.000	-49.58	4.1	3.56	-50.12	-13.00	-37.12	V
1329.000	-46.75	4.55	5.07	-46.23	-13.00	-33.23	V
2498.000	-46.51	6.35	6.1	-46.76	-13.00	-33.76	V
2666.000	-49.25	6.65	6.53	-49.37	-13.00	-36.37	V
3765.000	-40.19	8.24	9.16	-39.27	-13.00	-26.27	V
N/A							
1119.000	-48.81	4.1	3.56	-49.35	-13.00	-36.35	H
1343.000	-50.38	4.57	5.17	-49.78	-13.00	-36.78	H
1560.000	-49.85	4.93	6.19	-48.59	-13.00	-35.59	H
3765.000	-43.81	8.24	9.16	-42.89	-13.00	-29.89	H
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:** May 16, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1119.000	-49.28	4.1	3.56	-49.82	-13.00	-36.82	V
1329.000	-45.43	4.55	5.07	-44.91	-13.00	-31.91	V
2498.000	-45.92	6.35	6.1	-46.17	-13.00	-33.17	V
2659.000	-48.63	6.63	6.51	-48.75	-13.00	-35.75	V
3821.000	-34.85	8.29	9.22	-33.92	-13.00	-20.92	V
N/A							
1119.000	-48.41	4.1	3.56	-48.95	-13.00	-35.95	H
1357.000	-49.77	4.59	5.27	-49.09	-13.00	-36.09	H
1567.000	-50.08	4.94	6.18	-48.84	-13.00	-35.84	H
3821.000	-40.63	8.29	9.22	-39.70	-13.00	-26.70	H
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:** May 17, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1861.000	-45.84	5.39	5.65	-45.58	-13.00	-32.58	V
2659.000	-48.7	6.63	6.51	-48.82	-13.00	-35.82	V
N/A							
1763.000	-45.13	5.22	5.83	-44.52	-13.00	-31.52	H
2652.000	-50.38	6.61	6.5	-50.49	-13.00	-37.49	H
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 4182 **Test Date:** May 17, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2491.000	-48.45	6.33	6.09	-48.69	-13.00	-35.69	V
3345.000	-49.16	7.51	8.44	-48.23	-13.00	-35.23	V
N/A							
2652.000	-50.42	6.61	6.5	-50.53	-13.00	-37.53	H
3345.000	-50.77	7.51	8.44	-49.84	-13.00	-36.84	H
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:** May 17, 2013

Temperature: 25°C **Tested by:** Wayne Tsai

Humidity: 60 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2659.000	-48.54	6.63	6.51	-48.66	-13.00	-35.66	V
3387.000	-45.47	7.56	8.56	-44.47	-13.00	-31.47	V
N/A							
2659.000	-49.29	6.63	6.51	-49.41	-13.00	-36.41	H
4402.000	-49.81	8.65	9.72	-48.74	-13.00	-35.74	H
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:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2659.000	-48.93	6.63	6.51	-49.05	-13.00	-36.05	V
3709.000	-42.61	8.21	9.11	-41.71	-13.00	-28.71	V
N/A							
2652.000	-51.27	6.61	6.5	-51.38	-13.00	-38.38	H
3709.000	-45.25	8.21	9.11	-44.35	-13.00	-31.35	H
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:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2666.000	-48.35	6.65	6.53	-48.47	-13.00	-35.47	V
3765.000	-41.76	8.24	9.16	-40.84	-13.00	-27.84	V
N/A							
2659.000	-50.34	6.63	6.51	-50.46	-13.00	-37.46	H
3765.000	-42.92	8.24	9.16	-42.00	-13.00	-29.00	H
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:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2666.000	-48.08	6.65	6.53	-48.20	-13.00	-35.20	V
3814.000	-39.41	8.28	9.21	-38.48	-13.00	-25.48	V
N/A							
2659.000	-49.24	6.63	6.51	-49.36	-13.00	-36.36	H
3814.000	-37.04	8.28	9.21	-36.11	-13.00	-23.11	H
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:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1861.000	-43.51	5.39	5.65	-43.25	-13.00	-30.25	V
2498.000	-48.53	6.35	6.1	-48.78	-13.00	-35.78	V
N/A							
1763.000	-45.57	5.22	5.83	-44.96	-13.00	-31.96	H
2659.000	-49.76	6.63	6.51	-49.88	-13.00	-36.88	H
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 4182	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1861.000	-46.13	5.39	5.65	-45.87	-13.00	-32.87	V
3338.000	-49.53	7.5	8.41	-48.62	-13.00	-35.62	V
N/A							
2666.000	-49.42	6.65	6.53	-49.54	-13.00	-36.54	H
4388.000	-49.23	8.64	9.71	-48.16	-13.00	-35.16	H
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:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1868.000	-45.27	5.4	5.64	-45.03	-13.00	-32.03	V
3387.000	-46.16	7.56	8.56	-45.16	-13.00	-32.16	V
N/A							
3380.000	-51.24	7.55	8.54	-50.25	-13.00	-37.25	H
4388.000	-49.49	8.64	9.71	-48.42	-13.00	-35.42	H
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 / HSUPA Band II / TX / CH 9262	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2652.000	-49.03	6.61	6.5	-49.14	-13.00	-36.14	V
3702.000	-41.5	8.2	9.1	-40.60	-13.00	-27.60	V
N/A							
2659.000	-49.74	6.63	6.51	-49.86	-13.00	-36.86	H
3709.000	-45.72	8.21	9.11	-44.82	-13.00	-31.82	H
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 / HSUPA Band II / TX / CH 9400	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2659.000	-46.93	6.63	6.51	-47.05	-13.00	-34.05	V
3765.000	-41.03	8.24	9.16	-40.11	-13.00	-27.11	V
N/A							
2659.000	-50.83	6.63	6.51	-50.95	-13.00	-37.95	H
3758.000	-43.89	8.23	9.16	-42.96	-13.00	-29.96	H
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 / HSUPA Band II / TX / CH 9538	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2652.000	-49.23	6.61	6.5	-49.34	-13.00	-36.34	V
3814.000	-39.9	8.28	9.21	-38.97	-13.00	-25.97	V
N/A							
2659.000	-49.43	6.63	6.51	-49.55	-13.00	-36.55	H
3814.000	-36.03	8.28	9.21	-35.10	-13.00	-22.10	H
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 / HSUPA Band V / TX / CH 4132	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2659.000	-48.08	6.63	6.51	-48.20	-13.00	-35.20	V
3310.000	-50.49	7.47	8.33	-49.63	-13.00	-36.63	V
N/A							
1763.000	-46.12	5.22	5.83	-45.51	-13.00	-32.51	H
2659.000	-49.37	6.63	6.51	-49.49	-13.00	-36.49	H
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 / HSUPA Band V / TX / CH 4182	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2428.000	-40.93	6.23	6	-41.16	-13.00	-28.16	V
3345.000	-48.89	7.51	8.44	-47.96	-13.00	-34.96	V
N/A							
2652.000	-49.75	6.61	6.5	-49.86	-13.00	-36.86	H
6600.000	-46.59	11.23	11.42	-46.40	-13.00	-33.40	H
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 / HSUPA Band V / TX / CH 4233	**Test Date:**	May 17, 2013
Temperature:	25°C	**Tested by:**	Wayne Tsai
Humidity:	60 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1868.000	-44.5	5.4	5.64	-44.26	-13.00	-31.26	V
3387.000	-45.36	7.56	8.56	-44.36	-13.00	-31.36	V
N/A							
2659.000	-49.34	6.63	6.51	-49.46	-13.00	-36.46	H
4570.000	-49.6	9.06	9.91	-48.75	-13.00	-35.75	H
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.*

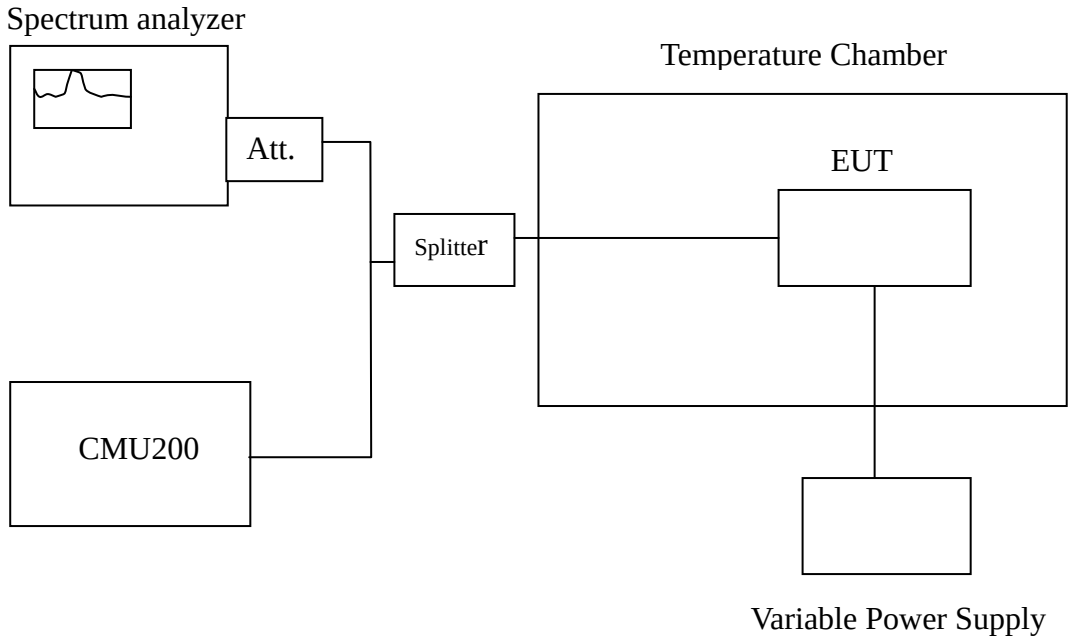
7.7FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

LIMIT

According to FCC §2.1055, FCC §22.355, .FCC §24.235.

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: 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)
12	50	835999993	-13	2090
	40	835999991	-15	
	30	835999988	-18	
	20	836000006	0	
	10	835999987	-19	
	0	835999953	-53	
	-10	835999982	-24	
	-20	835999981	-25	
	-30	835999989	-17	

Reference Frequency: GPRS Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
12	50	1879999997	-5	4700
	40	1879999995	-7	
	30	1879999993	-9	
	20	1880000002	0	
	10	1879999991	-11	
	0	1879999992	-10	
	-10	1879999993	-9	
	-20	1879999992	-10	
	-30	1879999995	-7	

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)
12	50	836000031	73	2090
	40	836000027	69	
	30	836000028	70	
	20	835999958	0	
	10	836000020	62	
	0	836000026	68	
	-10	836000033	75	
	-20	836000025	67	
	-30	836000027	69	

Reference Frequency: EDGE Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
12	50	1880000026	46	4700
	40	1880000015	35	
	30	1880000031	51	
	20	1879999980	0	
	10	1880000022	42	
	0	1880000036	56	
	-10	1880000016	36	
	-20	1880000032	52	
	-30	1880000018	38	

Reference Frequency: WCDMA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
12	50	1880000004	2	4700
	40	1879999998	-4	
	30	1879999986	-16	
	20	1880000002	0	
	10	1880000014	12	
	0	1880000007	5	
	-10	1879999998	-4	
	-20	1879999992	-10	
	-30	1880000014	12	

Reference Frequency: WCDMA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
12	50	836400000	-2	2091
	40	836399996	-6	
	30	836399999	-3	
	20	836400002	0	
	10	836399995	-7	
	0	836399996	-6	
	-10	836400000	-2	
	-20	836399998	-4	
	-30	836399999	-3	

Reference Frequency: WCDMA / HSDPA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
12	50	1880000018	18	4700
	40	1879999975	-25	
	30	1879999984	-16	
	20	1880000000	0	
	10	1880000010	10	
	0	1879999953	-47	
	-10	1879999973	-27	
	-20	1879999945	-55	
	-30	1879999920	-80	

Reference Frequency: WCDMA / HSDPA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
12	50	836399986	-19	2091
	40	836399989	-16	
	30	836399988	-17	
	20	836400005	0	
	10	836400004	-1	
	0	836399985	-20	
	-10	836399994	-11	
	-20	836399988	-17	
	-30	836400000	-5	

Reference Frequency: WCDMA / HSUPA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
12	50	1880000009	14	4700
	40	1880000010	15	
	30	1879999985	-10	
	20	1879999995	0	
	10	1880000010	15	
	0	1879999986	-9	
	-10	1880000008	13	
	-20	1880000004	9	
	-30	1880000017	22	

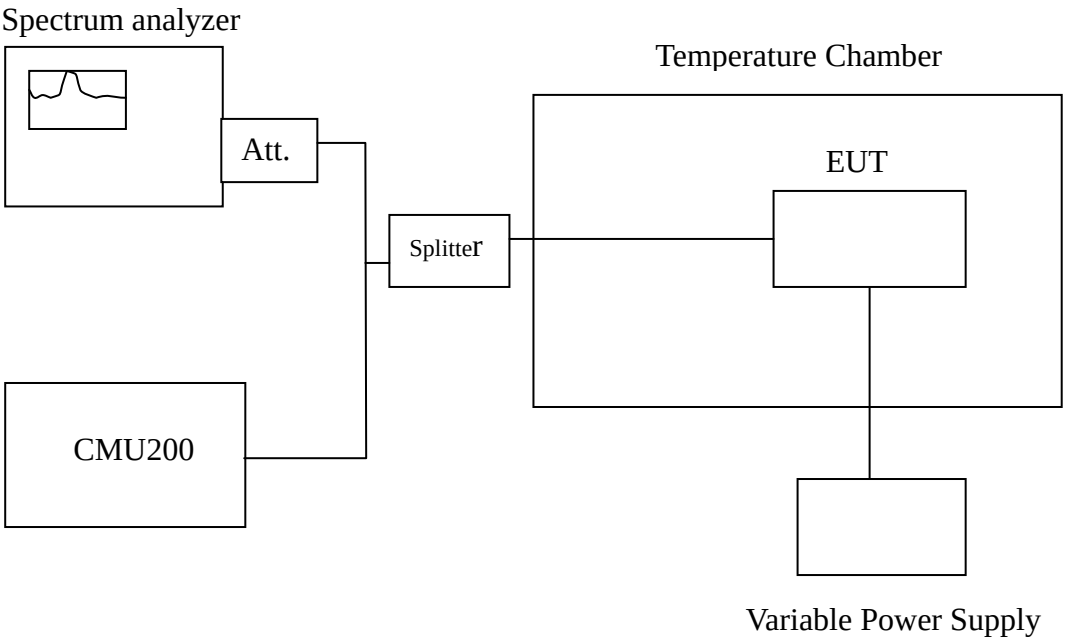
Reference Frequency: WCDMA / HSUPA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
12	50	836400004	3	2091
	40	836400005	4	
	30	836399997	-4	
	20	836400001	0	
	10	836399998	-3	
	0	836399994	-7	
	-10	836400008	7	
	-20	836400009	8	
	-30	836399989	-12	

7.8FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT

LIMIT

According to FCC §2.1055, FCC §22.355, .FCC §24.235,

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.

TEST RESULTS

No non-compliance noted.

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)
13.8	20	836000003	-3	2090
12		836000006	0	
11		836000007	1	
11		836000008	2	

Reference Frequency: GPRS Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
13.8	20	1880000002	0	4700
12		1880000002	0	
11		1880000007	5	
11		1880000008	6	

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)
13.8	20	835999957	-1	2090
12		835999958	0	
11		835999982	24	
11		835999785	-173	

Reference Frequency: EDGE Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
13.8	20	1879999978	-2	4700
12		1879999980	0	
11		1879999979	-1	
11		1879999442	-538	

Reference Frequency: WCDMA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
13.8	20	1880000009	7	4700
12		1880000002	0	
11		1880000017	15	
11		1879999932	-70	

Reference Frequency: WCDMA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
13.8	20	836400001	-1	2091
12		836400002	0	
11		836400003	1	
11		836400073	71	

Reference Frequency: WCDMA HSDPA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
13.8	20	1880000033	33	4700
12		1880000000	0	
11		1880000037	37	
11		1880000094	94	

Reference Frequency: WCDMA HSDPA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
13.8	20	836400004	-1	2091
12		836400005	0	
11		836400000	-5	
11		836400083	78	

Reference Frequency: WCDMA HSUPA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
13.8	20	1879999992	-3	4700
12		1879999995	0	
11		1880000018	23	
11		1879999913	-82	

Reference Frequency: WCDMA HSUPA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
13.8	20	836400002	1	2091
12		836400001	0	
11		836400004	3	
11		836400083	82	