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

TEST REPORT

For

Rugged Handheld Device

Model: IMX-2000

Trade Name: ADLINK TECHNOLOGY INC.

Issued to

ADLINK TECHNOLOGY INC.
9F, No.166 Jian Yi Road, Zhonghe District
New Taipei City 235, Taiwan

Issued by

Compliance Certification Services Inc.
No.11, Wugong 6th Rd., Wugu Dist.,
New Taipei City 24891, Taiwan. (R.O.C.)
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Issued Date: February 5, 2013

TAF
Testing Laboratory
1309

Revision History

Rev.		Issue Date		Revisions	Effect Page	Revised By
00		February 5, 2013		Initial Issue	ALL	Angel Cheng

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1. TEST RESULT CERTIFICATION

Applicant: ADLINK TECHNOLOGY INC.
9F, No.166 Jian Yi Road, Zhonghe District
New Taipei City 235, Taiwan

Equipment Under Test: Rugged Handheld Device

Trade Name: ADLINK TECHNOLOGY INC.

Model: IMX-2000

Date of Test: January 10 ~ 11, 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	Rugged Handheld Device
Trade Name	ADLINK TECHNOLOGY INC.
Model Number	IMX-2000
Model Discrepancy	N/A
Received Date	December 21, 2012
Power Supply	Power from Power Adapter Model: STD-05035V I/P: 100-240V, 47-63Hz, 0.48A MAX O/P: 5V, 3.5A, 17.5W MAX
Frequency Range	GSM / GPRS / EDGE: 850: 824.2 ~ 848.8 MHz GSM / GPRS / EDGE: 1900: 1850.2 ~ 1909.8 MHz WCDMA / HSDPA Band II: 1852.4 ~ 1907.6 MHz WCDMA / HSDPA Band V: 826.4 ~ 846.6MHz
Transmit Power (ERP & EIRP Power)	GSM 850: 9.39dBm GSM 1900: 28.18 dBm GPRS 850: 9.42 dBm GPRS 1900: 28.37 dBm EDGE 850: 9.43 dBm EDGE 1900: 28.30 dBm WCDMA Band II: 22.99 dBm HSDPA Band II: 20.54 dBm WCDMA Band V: 19.43 dBm HSDPA Band V: 19.33 dBm
Cellular Phone Protocol	GSM: GMSK GPRS: GMSK EDGE: 8PSK WCDMA: Quadrature Phase Shift Keying (QPSK) with Root-raised cosine pulse shaping filters (roll off = 0.22)
Type of Emission	GSM 850: 247KGXW--- GSM 1900: 249KGXW--- GPRS 850: 247KGXW--- GPRS 1900: 2464KGXW--- EDGE 850: 248KG7W--- EDGE 1900: 247KG7W--- WCDMA Band II: 4M21F9W--- WCDMA Band V: 4M20F9W--- WCDMA HSDPA Band II: 4M20F9W--- WCDMA HSDPA Band V: 4M21F9W---
Antenna Gain	GSM / GPRS / EDGE 850: 0.09 dBi GSM / GPRS / EDGE 1900: 2.53 dBi WCDMA band II: 2.53 dBi WCDMA band V: 0.09 dBi
Antenna Type	PIFA 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: **X4D-IMX-2000**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: IMX-2000) had been tested under operating condition.

EUT staying in continuous transmitting mode was programmed.

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

GSM / 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.

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz.

The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (Y axis) and the worst case was recorded.

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 and Loop Antenna is scheduled for calibration once three years.*

Conducted Emissions Test Site				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
Spectrum Analyzer	Agilent	E4446A	MY43360131	03/16/2013
Power Meter	Anritsu	ML2495A	1012009	04/26/2013
Power Sensor	Anritsu	MA2411B	0917072	04/26/2013

Wugu 966 Chamber A				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
Spectrum Analyzer	Agilent	E4446A	US42510252	11/01/2013
EMI Test Receiver	R&S	ESCI	100064	02/16/2013
Pre-Amplifier	Mini-Circults	ZFL-1000LN	SF350700823	01/11/2014
Pre-Amplifier	MITEQ	AFS44-00102650-42-10P-44	1415367	11/18/2013
Bilog Antenna	Sunol Sciences	JB3	A030105	10/02/2013
Horn Antenna	EMCO	3117	00055165	01/10/2014
Horn Antenna	EMCO	3116	00026370	10/11/2013
Loop Antenna	EMCO	6502	8905/2356	06/10/2013
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	12/24/2013
Test S/W	EZ-EMC (CCS-3A1RE)			

Conducted Emission room # A				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
EMI Test Receiver	R&S	ESCI	101203	09/13/2013
LISN	R&S	ESH3-Z5	848773/014	12/10/2013
ISN	FCC	FCC-TLISN-T4-02	20395	05/31/2013
ISN	FCC	FCC-TLISN-T8-02-09	101131	09/05/2013
Coaxial Cable	Commate	CFD300-NL	NA	12/06/2013
Test S/W	CCS-3A1-CE			

4.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
Powerline Conducted Emission	+/- 1.2575
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

5.1 FACILITIES

☐ 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.

5.2 EQUIPMENT

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

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

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

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

5.3TABLE 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

6.1 SETUP CONFIGURATION OF EUT

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

6.2 SUPPORT 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.*

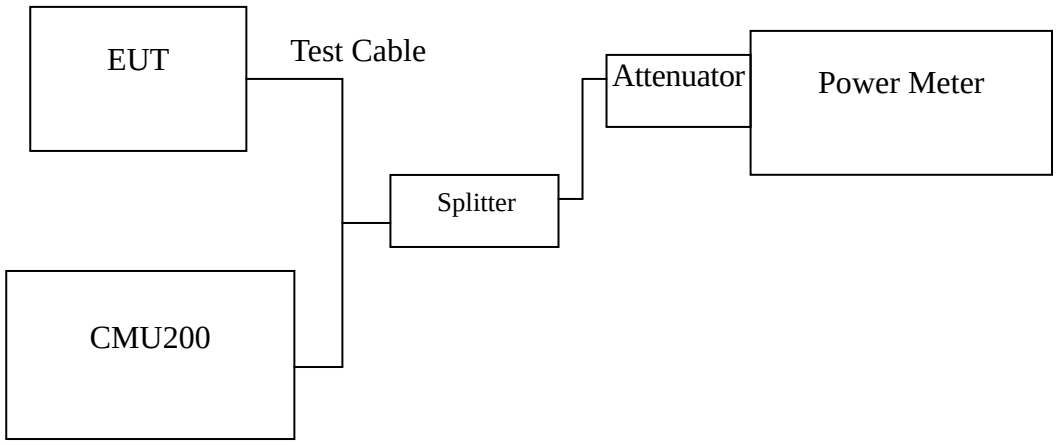
7. FCC PART 22 & 24 REQUIREMENTS

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)
GSM 850	128	824.20	32.70	1.86209
	190	836.60	32.90	1.94984
	251	848.80	33.00	1.99526
GPRS 850	128	824.20	32.10	1.62181
	190	836.60	32.20	1.65959
	251	848.80	32.30	1.69824
EDGE 850	128	824.20	27.80	0.60256
	190	836.60	28.00	0.63096
	251	848.80	28.00	0.63096

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power (W)
GSM 1900	512	1850.20	30.10	1.02329
	661	1880.00	30.20	1.04713
	810	1909.80	30.30	1.07152
GPRS 1900	512	1850.20	30.30	1.07152
	661	1880.00	30.50	1.12202
	810	1909.80	30.60	1.14815
EDGE 1900	512	1850.20	29.60	0.91201
	661	1880.00	29.90	0.97724
	810	1909.80	30.00	1.00000

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	25.62	0.36475
	9400	1880.00	25.93	0.39174
	9538	1907.60	25.83	0.38282
WCDMA (BAND V)	4132	826.40	25.31	0.33963
	4182	836.40	25.47	0.35237
	4233	846.60	25.46	0.35156

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power (W)
WCDMA / HSDPA (BAND II)	9262	1852.40	26.05	0.40272
	9400	1880.00	26.13	0.41020
	9538	1907.60	26.48	0.44463
WCDMA / HSDPA (BAND V)	4132	826.40	25.89	0.38815
	4182	836.40	25.89	0.38815
	4233	846.60	25.75	0.37584

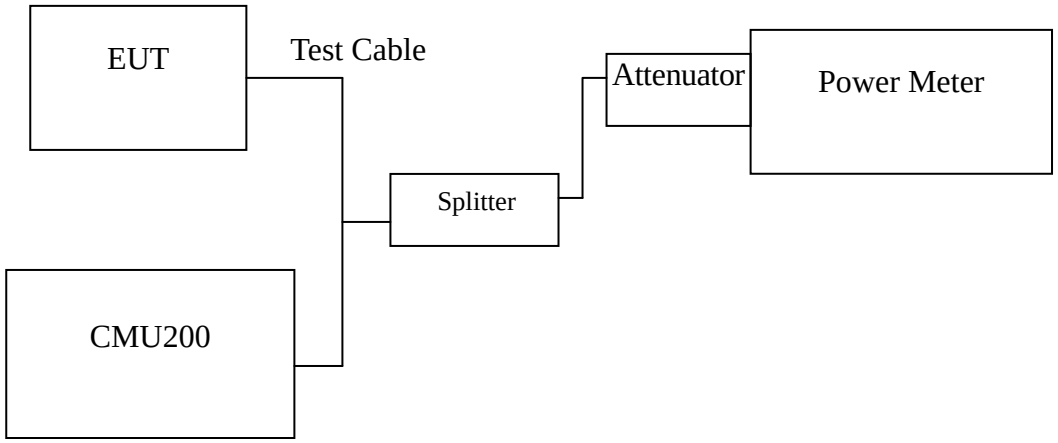
Remark: *The value of factor includes both the loss of cable and external attenuator*

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)
GSM 850	128	824.20	32.30	1.69824
	190	836.60	32.40	1.73780
	251	848.80	32.20	1.65959
GPRS 850	128	824.20	32.00	1.58489
	190	836.60	32.10	1.62181
	251	848.80	32.20	1.65959
EDGE 850	128	824.20	26.60	0.45709
	190	836.60	26.70	0.46774
	251	848.80	26.70	0.46774

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power (W)
GSM 1900	512	1850.20	29.70	0.93325
	661	1880.00	30.00	1.00000
	810	1909.80	29.80	0.95499
GPRS 1900	512	1850.20	29.80	0.95499
	661	1880.00	30.00	1.00000
	810	1909.80	29.80	0.95499
EDGE 1900	512	1850.20	26.30	0.42658
	661	1880.00	26.50	0.44668
	810	1909.80	26.40	0.43652

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	22.48	0.17701
	9400	1880.00	23.08	0.20324
	9538	1907.60	22.44	0.17539
WCDMA (BAND V)	4132	826.40	21.82	0.15205
	4182	836.40	21.76	0.14997
	4233	846.60	21.94	0.15631

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power (W)
WCDMA / HSDPA (BAND II)	9262	1852.40	22.07	0.16106
	9400	1880.00	22.33	0.17100
	9538	1907.60	22.46	0.17620
WCDMA / HSDPA (BAND V)	4132	826.40	21.58	0.14388
	4182	836.40	21.63	0.14555
	4233	846.60	21.68	0.14723

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

7.3ERP & EIRP MEASUREMENT

LIMIT

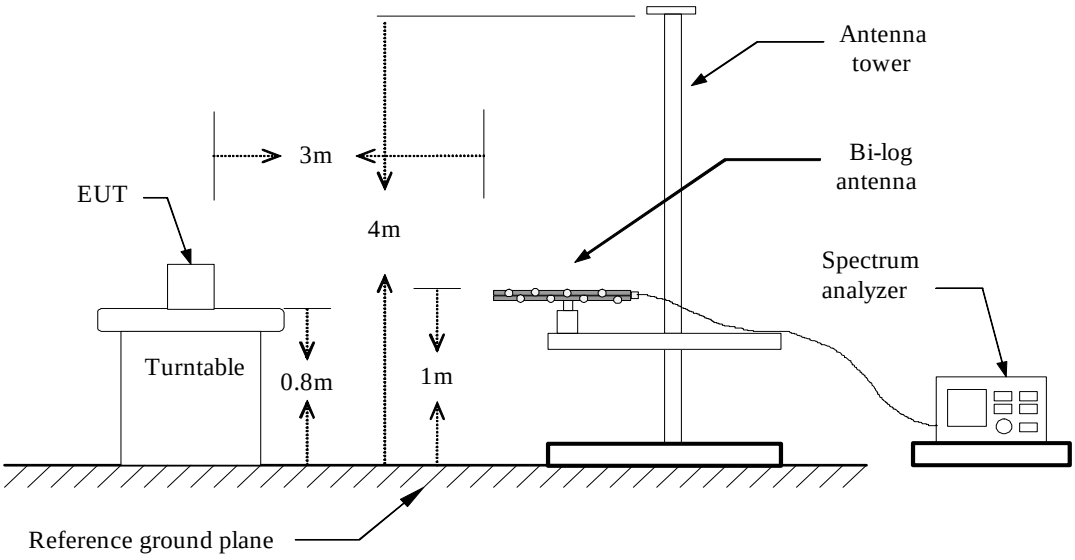
According to FCC §2.1046

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

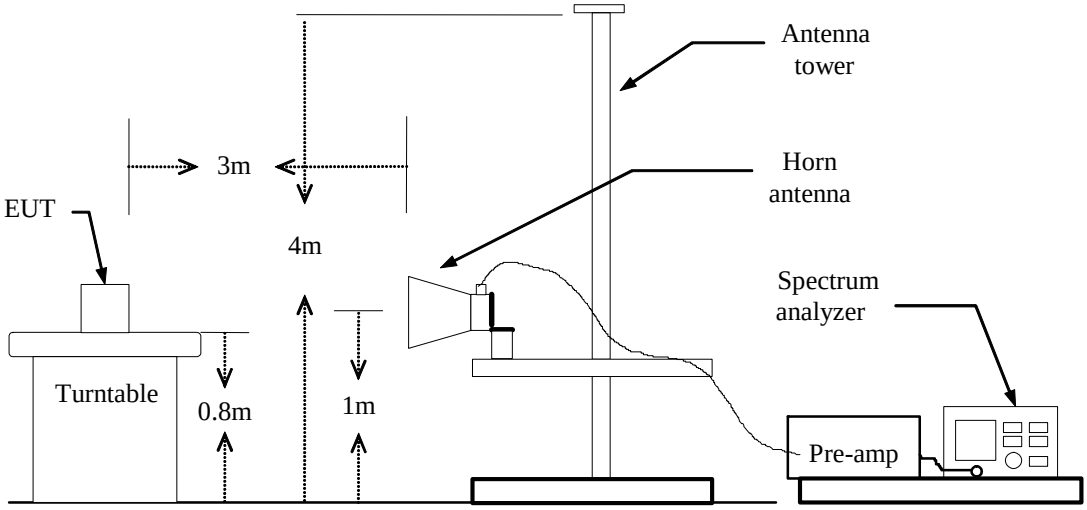
FCC 24.232(b): The equivalent Isotropic Radiated Power (EIRP) must not exceed 2 Watts.

Test Configuration

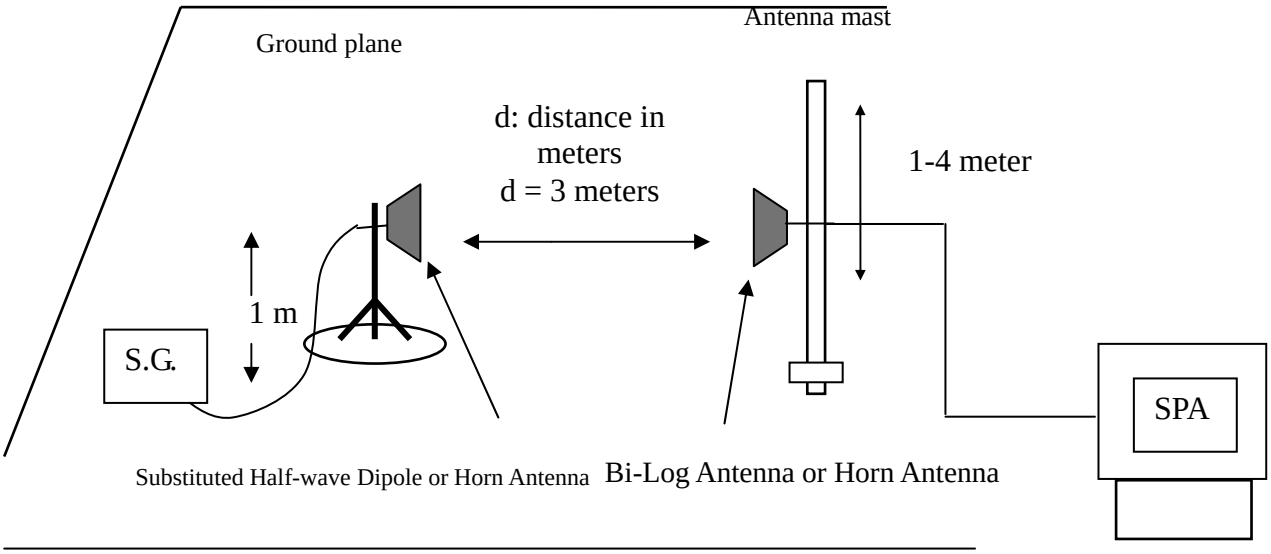
Below 1 GHz



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

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

ERP = S.G. output (dBm) + Antenna Gain (dBi) – Cable (dB)-2.15
EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable (dB)

TEST RESULTS

No non-compliance noted.

GSM 850 TEST DATA

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
128	824.20	V	6.54	3.39	6.24	***9.39**	38.45	-29.06
	824.20	H	4.29	3.39	6.24	7.14	38.45	-31.31
190	836.60	V	3.73	3.4	6.36	6.69	38.45	-31.76
	836.60	H	3.52	3.4	6.36	6.48	38.45	-31.97
251	848.80	V	4.4	3.4	6.4	7.40	38.45	-31.05
	848.80	H	6.02	3.4	6.4	9.02	38.45	-29.43

GPRS 850 TEST DATA

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
128	824.20	V	6.57	3.39	6.24	***9.42**	38.45	-29.03
	824.20	H	4.41	3.39	6.24	7.26	38.45	-31.19
190	836.60	V	5.85	3.4	6.37	8.82	38.45	-29.63
	836.60	H	3.9	3.4	6.36	6.86	38.45	-31.59
251	848.80	V	4.57	3.4	6.4	7.57	38.45	-30.88
	848.80	H	6.14	3.4	6.4	9.14	38.45	-29.31

GSM 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	27.88	5.37	5.67	***28.18**	33.00	-4.82
	1850.20	H	23.43	5.37	5.67	23.73	33.00	-9.27
661	1880.00	V	25.13	5.42	5.62	25.33	33.00	-7.67
	1880.00	H	21.96	5.42	5.62	22.16	33.00	-10.84
810	1909.80	V	24.51	5.48	5.56	24.59	33.00	-8.41
	1909.80	H	19.55	5.48	5.56	19.63	33.00	-13.37

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	28.07	5.37	5.67	***28.37**	33.00	-4.63
	1850.20	H	23.51	5.37	5.67	23.81	33.00	-9.19
661	1880.00	V	25.21	5.42	5.62	25.41	33.00	-7.59
	1880.00	H	22.07	5.42	5.62	22.27	33.00	-10.73
810	1909.80	V	24.43	5.48	5.56	24.51	33.00	-8.49
	1909.80	H	19.58	5.48	5.56	19.66	33.00	-13.34

EDGE 850 Test Data

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
128	824.20	V	6.58	3.39	6.24	***9.43**	38.45	-29.02
	824.20	H	4.45	3.39	6.24	7.30	38.45	-31.15
190	836.60	V	5.61	3.4	6.36	8.57	38.45	-29.88
	836.60	H	1.63	3.4	6.36	4.59	38.45	-33.86
251	848.80	V	-2.77	3.4	6.4	0.23	38.45	-38.22
	848.80	H	6.21	3.4	6.4	9.21	38.45	-29.24

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	28	5.37	5.67	***28.30**	33.00	-4.70
	1850.20	H	23.08	5.37	5.67	23.38	33.00	-9.62
661	1880.00	V	25.14	5.42	5.62	25.34	33.00	-7.66
	1880.00	H	21.89	5.42	5.62	22.09	33.00	-10.91
810	1909.80	V	24.52	5.48	5.56	24.60	33.00	-8.40
	1909.80	H	19.46	5.48	5.56	19.54	33.00	-13.46

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	22.69	5.37	5.67	***22.99**	33.00	-10.01
	1852.40	H	17.19	5.37	5.67	17.49	33.00	-15.51
9400	1880.00	V	19.54	5.42	5.61	19.73	33.00	-13.27
	1880.00	H	15.02	5.42	5.61	15.21	33.00	-17.79
9538	1907.60	V	19.48	5.47	5.57	19.58	33.00	-13.42
	1907.60	H	17.11	5.47	5.57	17.21	33.00	-15.79

WCDMA Test Data (BAND V)

Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4132	826.40	V	10.82	3.39	6.27	13.70	38.45	-24.75
	826.40	H	14.42	3.39	6.27	17.30	38.45	-21.15
4182	836.40	V	9.44	3.4	6.37	12.41	38.45	-26.04
	836.40	H	13.66	3.4	6.36	16.62	38.45	-21.83
4233	846.60	V	12.71	3.4	6.4	15.71	38.45	-22.74
	846.60	H	16.43	3.4	6.4	***19.43**	38.45	-19.02

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	22.82	5.37	5.67	23.12	33.00	-9.88
	1852.40	H	17.23	5.37	5.67	17.53	33.00	-15.47
9400	1880.00	V	20.34	5.42	5.62	***20.54**	33.00	-12.46
	1880.00	H	15.39	5.42	5.61	15.58	33.00	-17.42
9538	1907.60	V	19.69	5.47	5.57	19.79	33.00	-13.21
	1907.60	H	16.82	5.47	5.57	16.92	33.00	-16.08

WCDMA / HSDPA BAND V Test Data

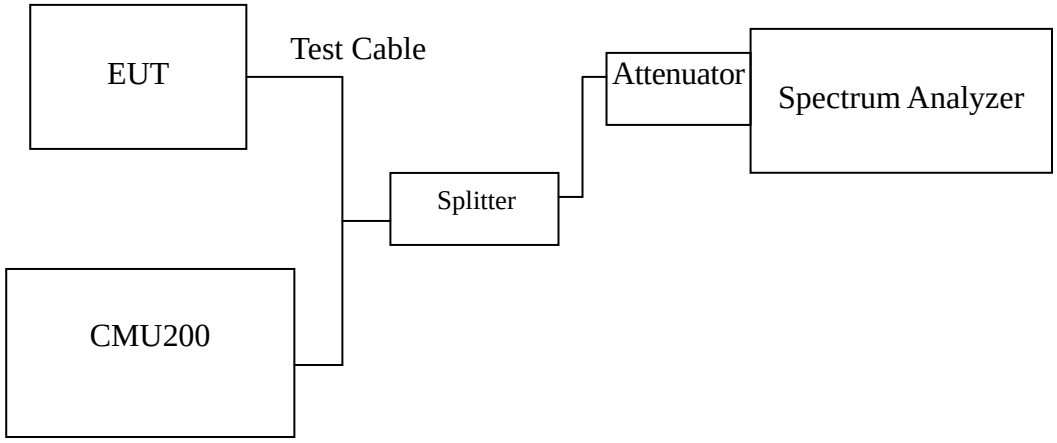
Channel	Frequency (MHz)	Antenna Pol.	S.G. (dBm)	Cable loss (dB)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4132	826.40	V	10.8	3.39	6.27	13.68	38.45	-24.77
	826.40	H	14.63	3.39	6.27	17.51	38.45	-20.94
4182	836.40	V	9.3	3.4	6.37	12.27	38.45	-26.18
	836.40	H	13.67	3.4	6.36	16.63	38.45	-21.82
4233	846.60	V	12.68	3.4	6.4	15.68	38.45	-22.77
	846.60	H	16.33	3.4	6.4	***19.33**	38.45	-19.12

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

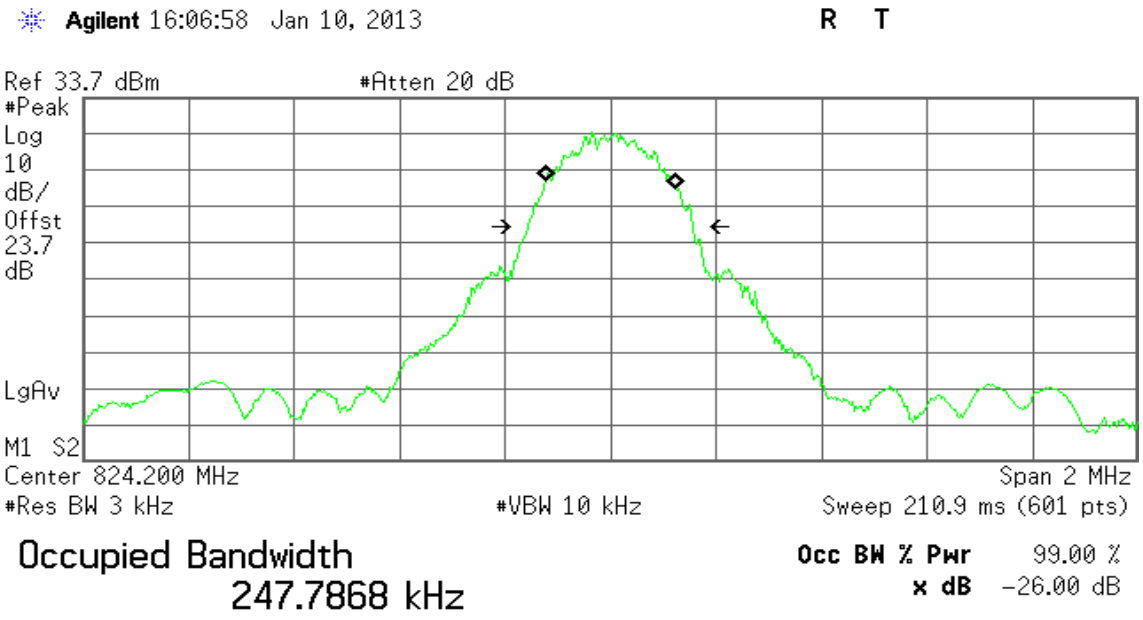
Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
GSM 850	128	824.20	247.7868
	190	836.60	247.2861
	251	848.80	245.0000
GPRS 850	128	824.20	244.3571
	190	836.60	247.5457
	251	848.80	245.1602
EDGE 850	128	824.20	248.5898
	190	836.60	246.3475
	251	848.80	243.8483

Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
GSM 1900	512	1850.20	249.7010
	661	1880.00	244.9559
	810	1909.80	248.3728
GPRS 1900	512	1850.20	246.0036
	661	1880.00	244.7996
	810	1909.80	245.1470
EDGE 1900	512	1850.20	244.0347
	661	1880.00	247.8092
	810	1909.80	242.5187

Test Mode	CH	Frequency (MHz)	99% Bandwidth (MHz)
WCDMA (Band II)	9262	1852.40	4.1806
	9400	1880.00	4.2129
	9538	1907.60	4.1872
WCDMA (Band V)	4132	826.40	4.1836
	4182	836.40	4.1909
	4233	846.60	4.2086
WCDMA / HSDPA (BAND II)	9262	1852.40	4.1896
	9400	1880.00	4.2000
	9538	1907.60	4.2012
WCDMA / HSDPA (BAND V)	4132	826.40	4.2005
	4182	836.40	4.1824
	4233	846.60	4.2163

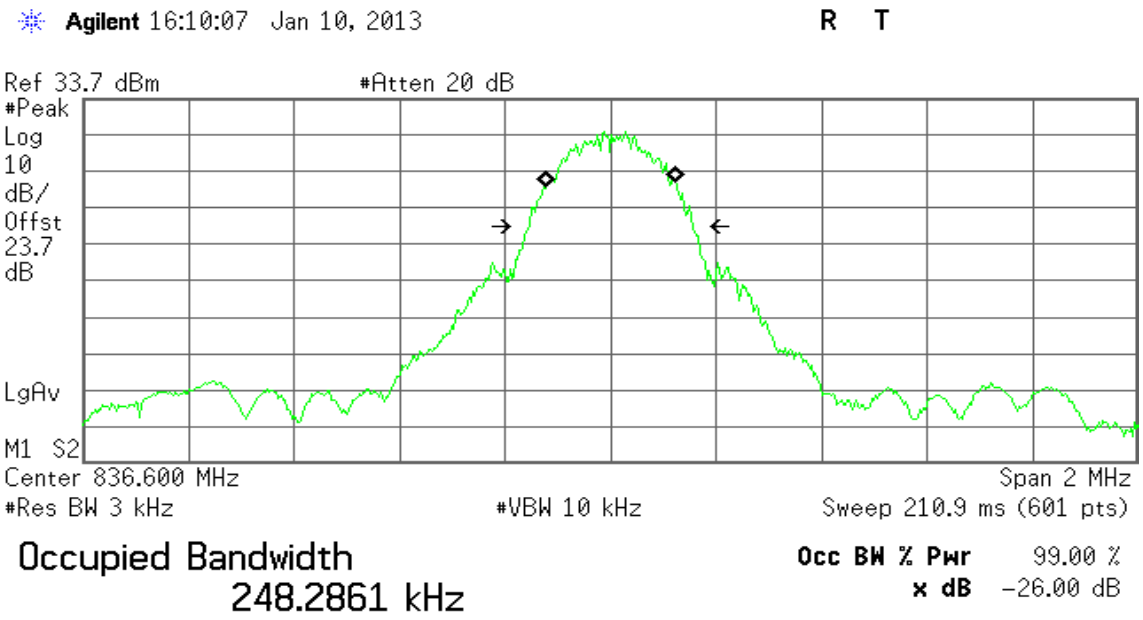
Test Plot

GSM 850 (CH Low)



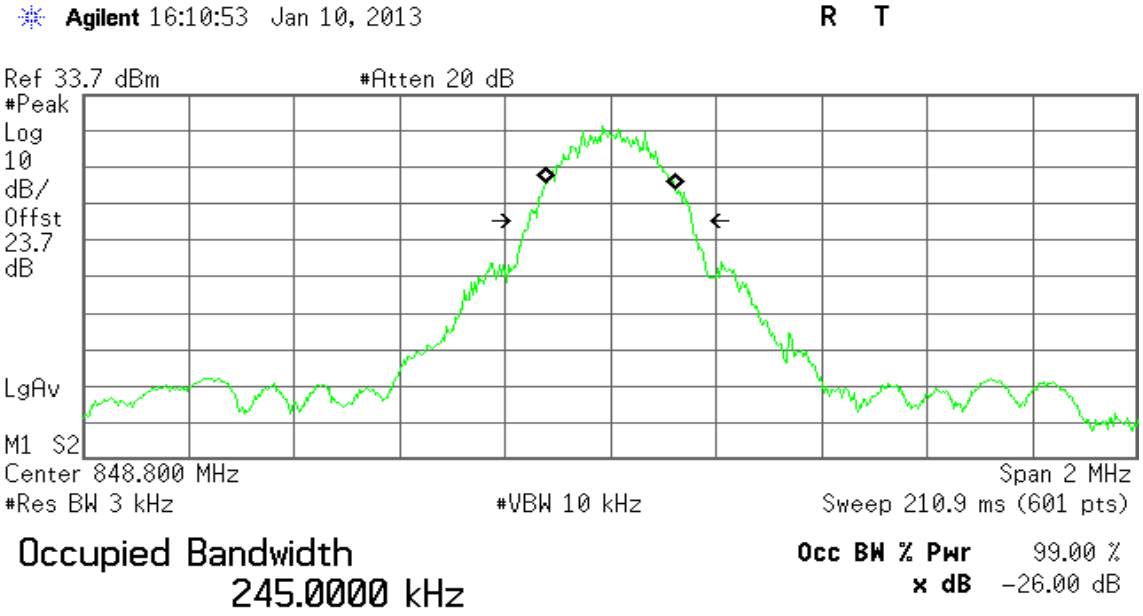
Transmit Freq Error	-280.169 Hz
x dB Bandwidth	313.369 kHz

GSM 850 (CH Mid)



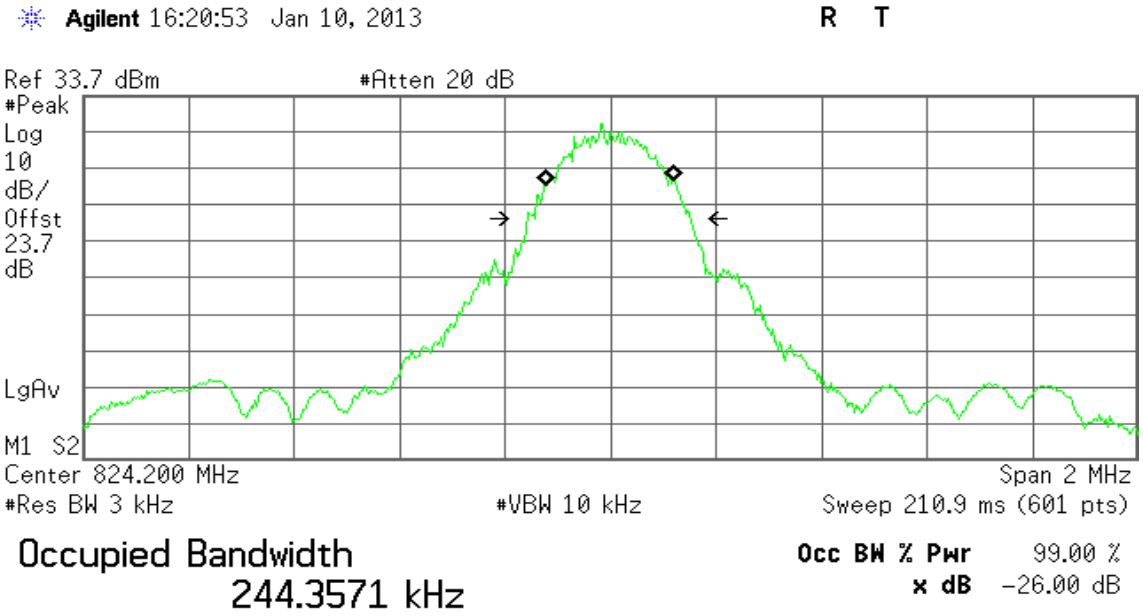
Transmit Freq Error	-105.487 Hz
x dB Bandwidth	311.566 kHz

GSM 850 (CH High)



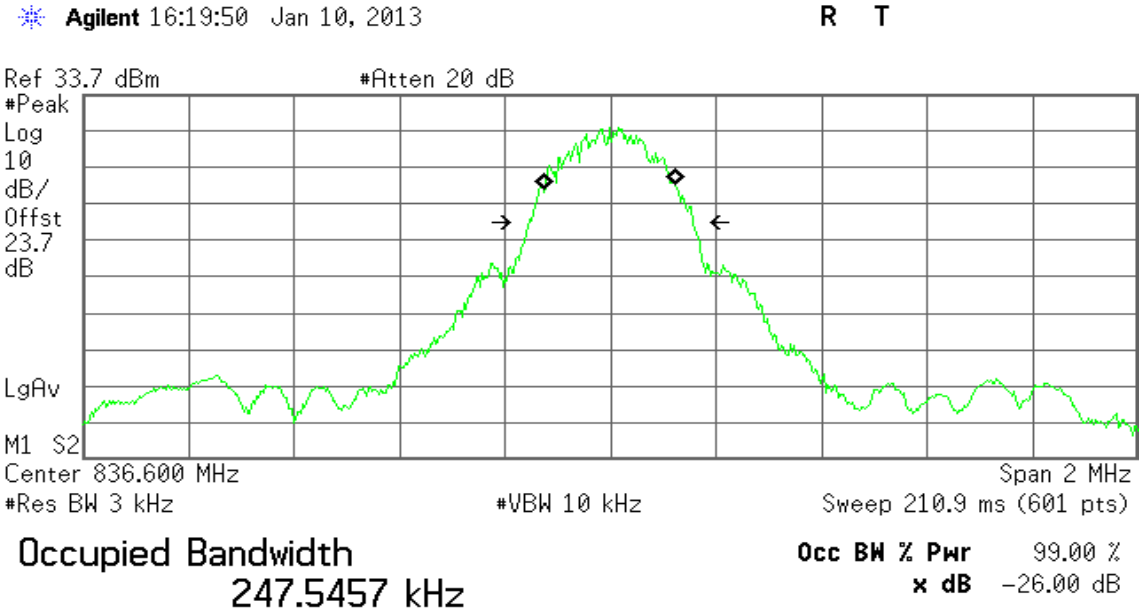
Transmit Freq Error	572.519 Hz
x dB Bandwidth	310.504 kHz

GPRS 850 (CH Low)



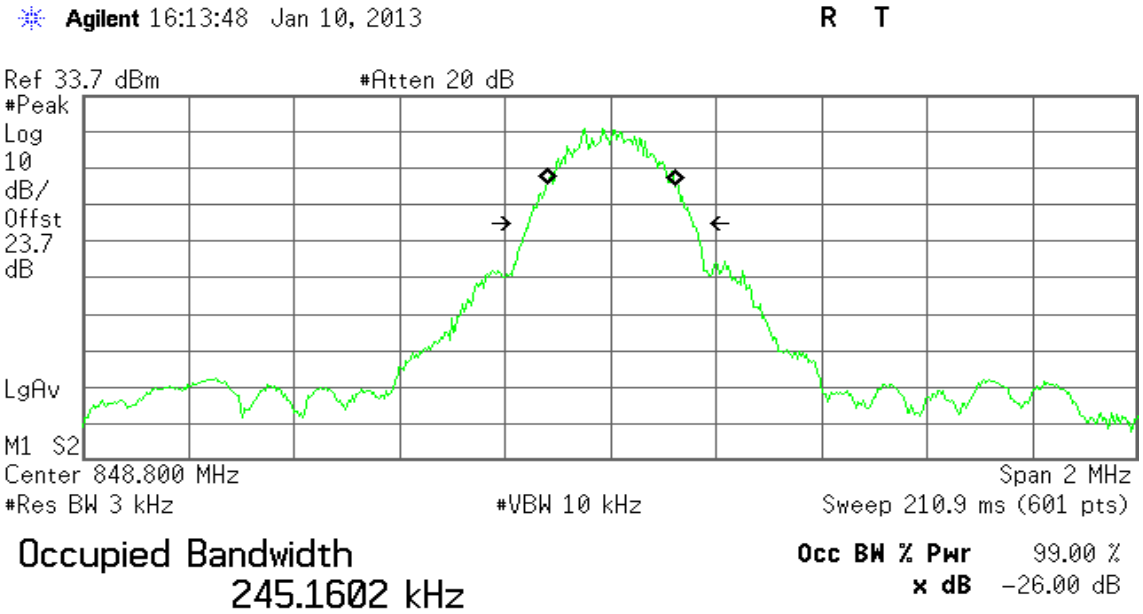
Transmit Freq Error	-533.410 Hz
x dB Bandwidth	311.012 kHz

GPRS 850 (CH Mid)



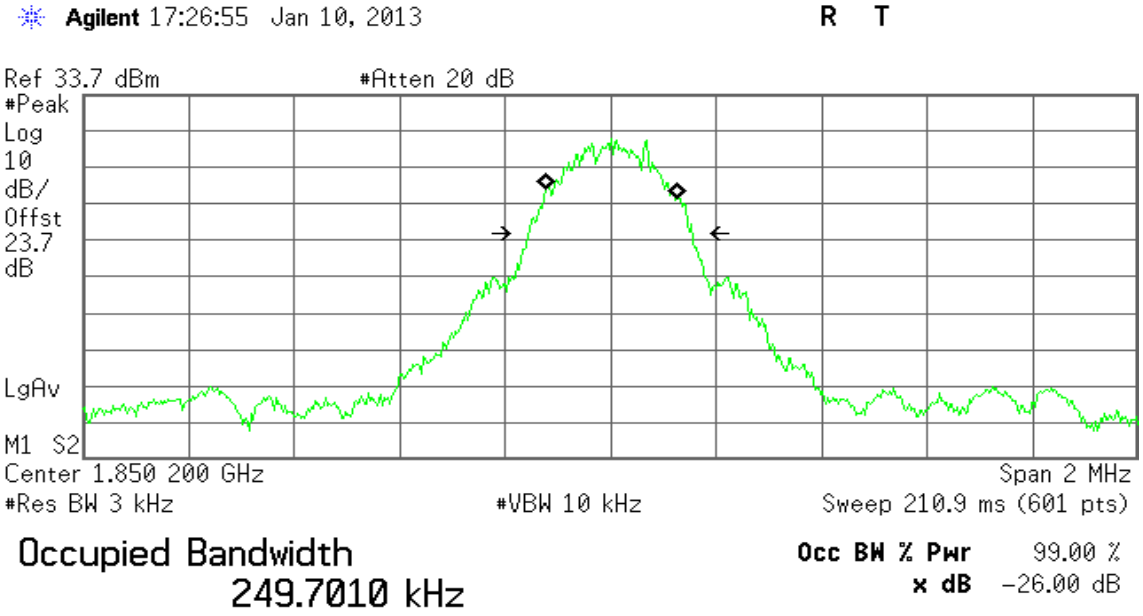
Transmit Freq Error	-1.590 kHz
x dB Bandwidth	311.605 kHz

GPRS 850(CH High)



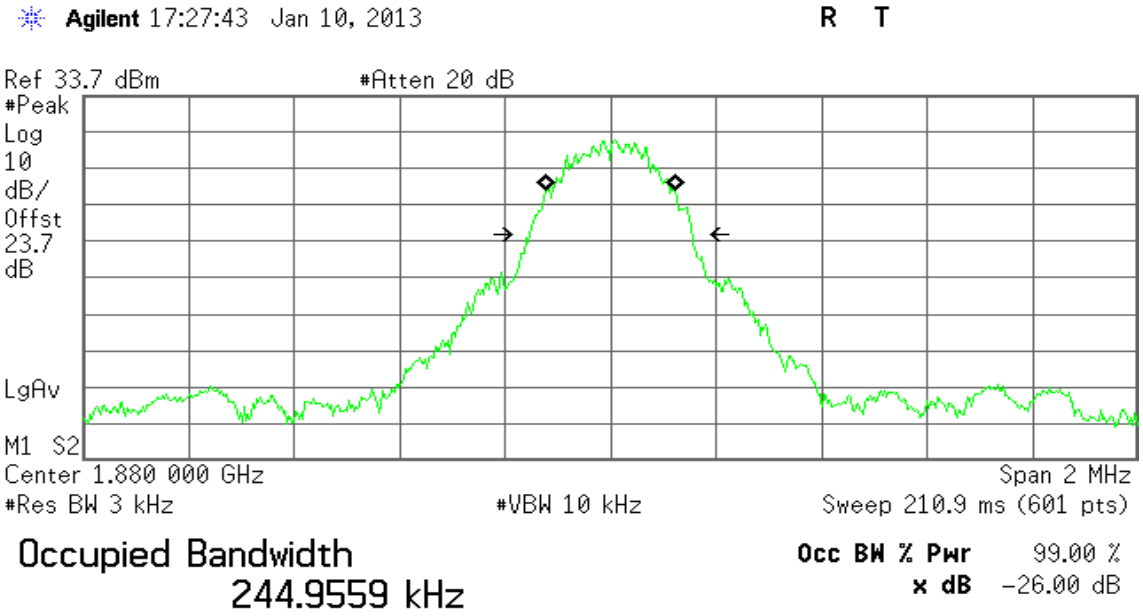
Transmit Freq Error	1.616 kHz
x dB Bandwidth	311.437 kHz

GSM 1900 (CH Low)



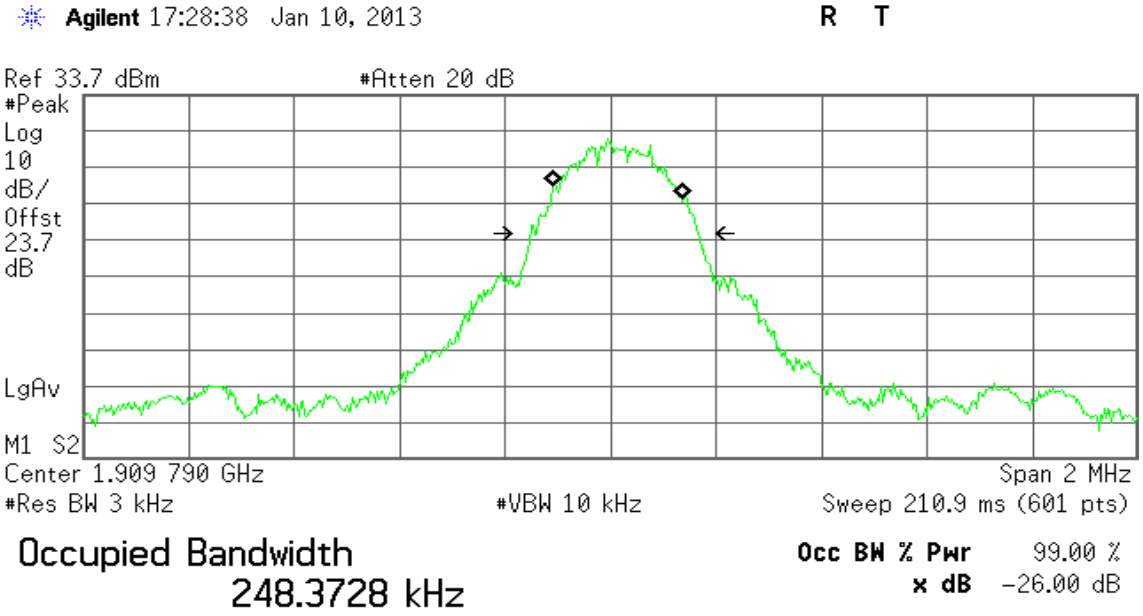
Transmit Freq Error	1.769 kHz
x dB Bandwidth	311.916 kHz

GSM 1900 (CH Mid)



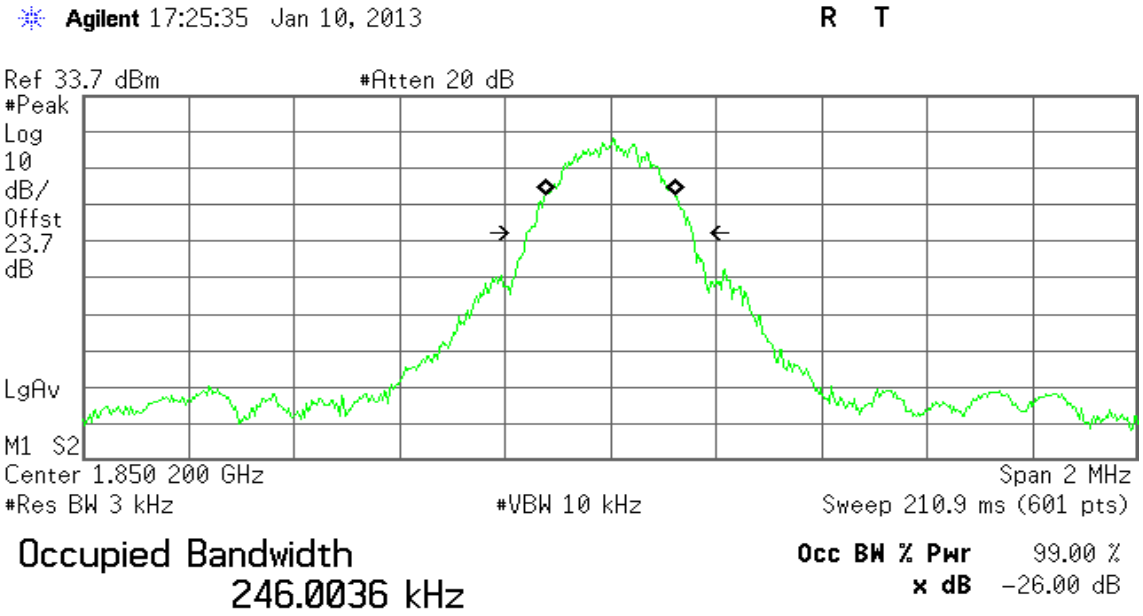
Transmit Freq Error	720.505 Hz
x dB Bandwidth	309.820 kHz

GSM 1900 (CH High)



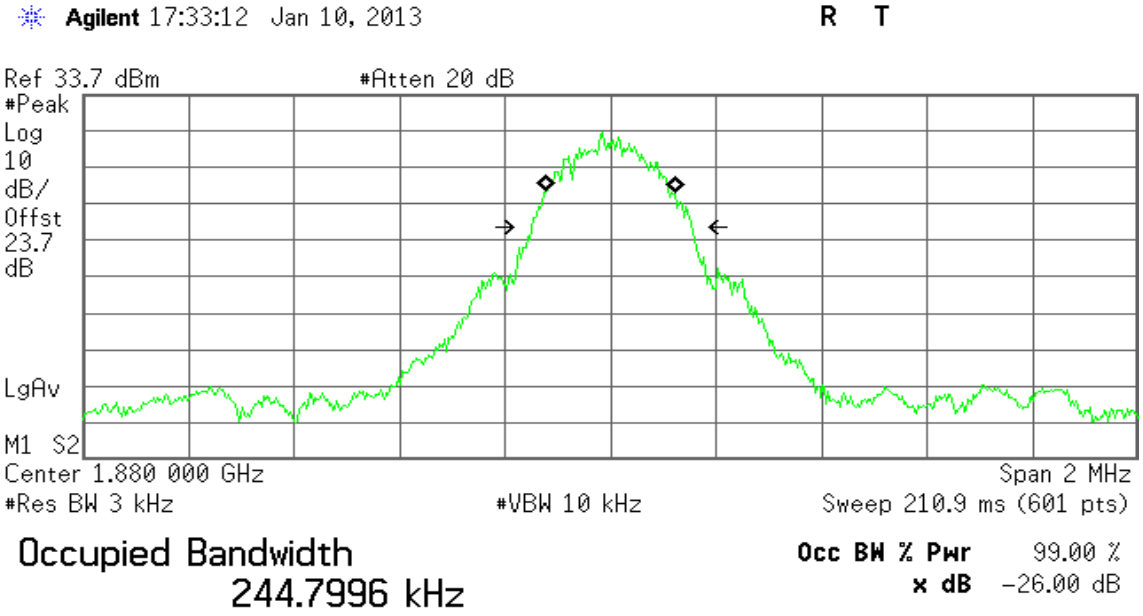
Transmit Freq Error	13.746 kHz
x dB Bandwidth	317.772 kHz

GPRS 1900 (CH Low)



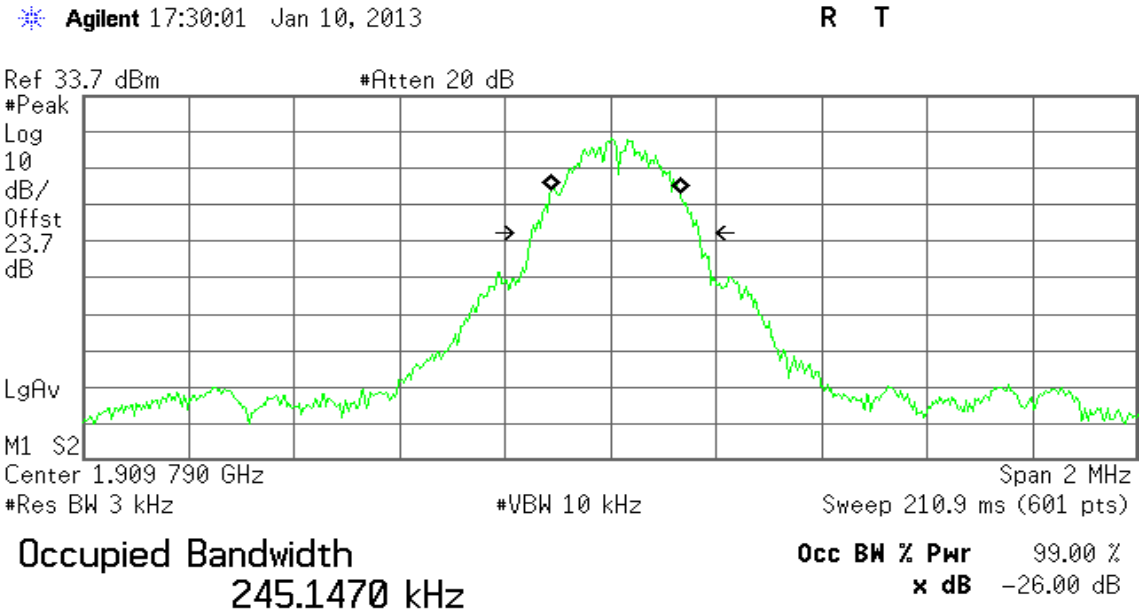
Transmit Freq Error	-455.795 Hz
x dB Bandwidth	314.936 kHz

GPRS 1900 (CH Mid)



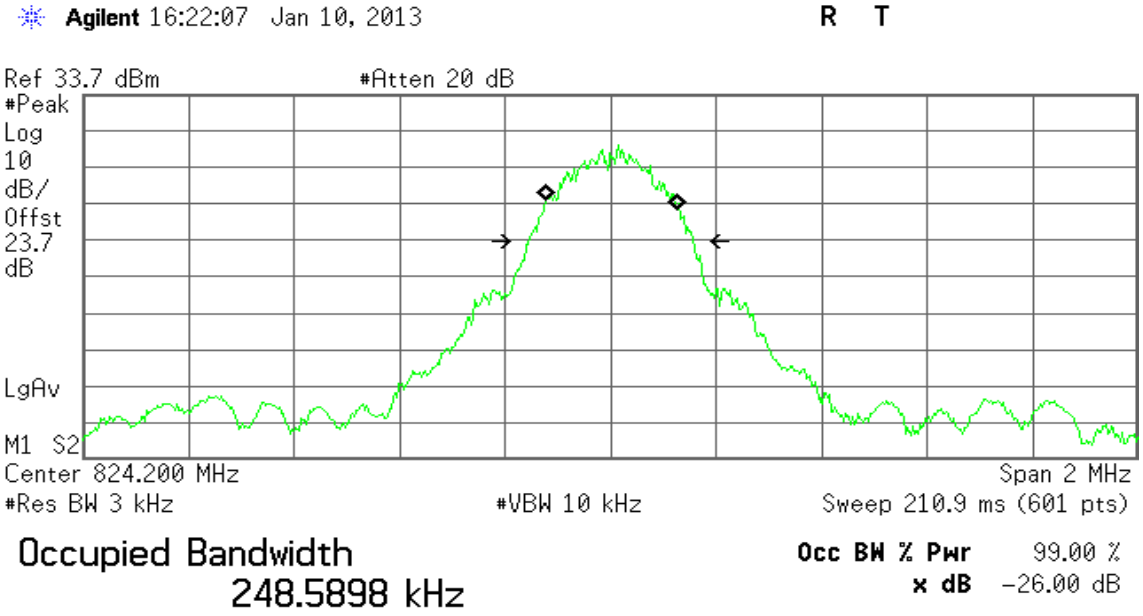
Transmit Freq Error	74.214 Hz
x dB Bandwidth	304.895 kHz

GPRS 1900 (CH High)



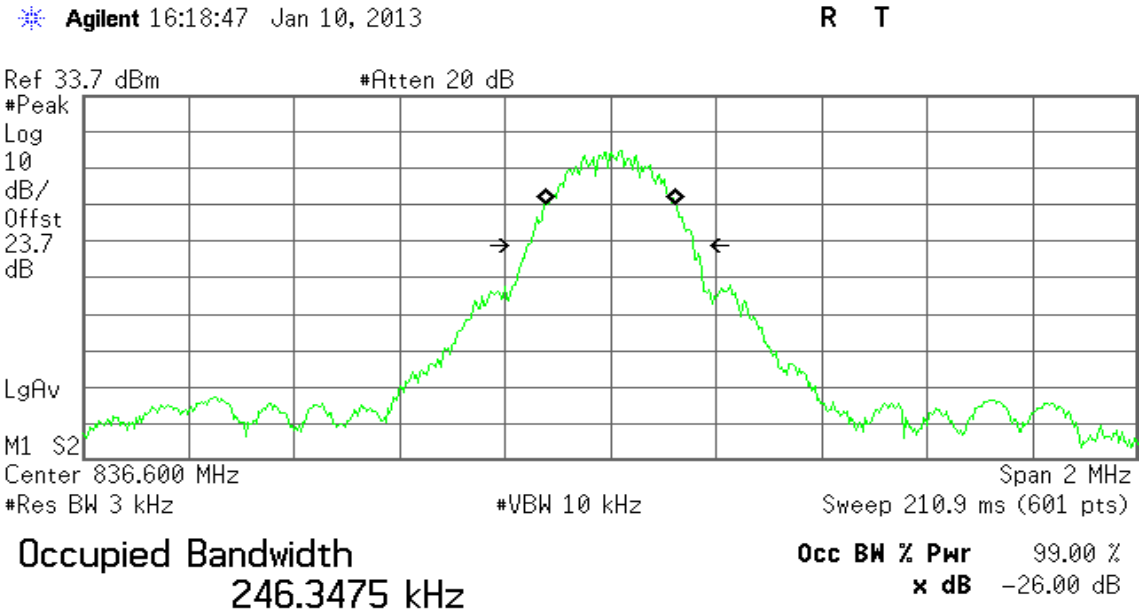
Transmit Freq Error	9.476 kHz
x dB Bandwidth	317.644 kHz

EDGE 850 (CH Low)



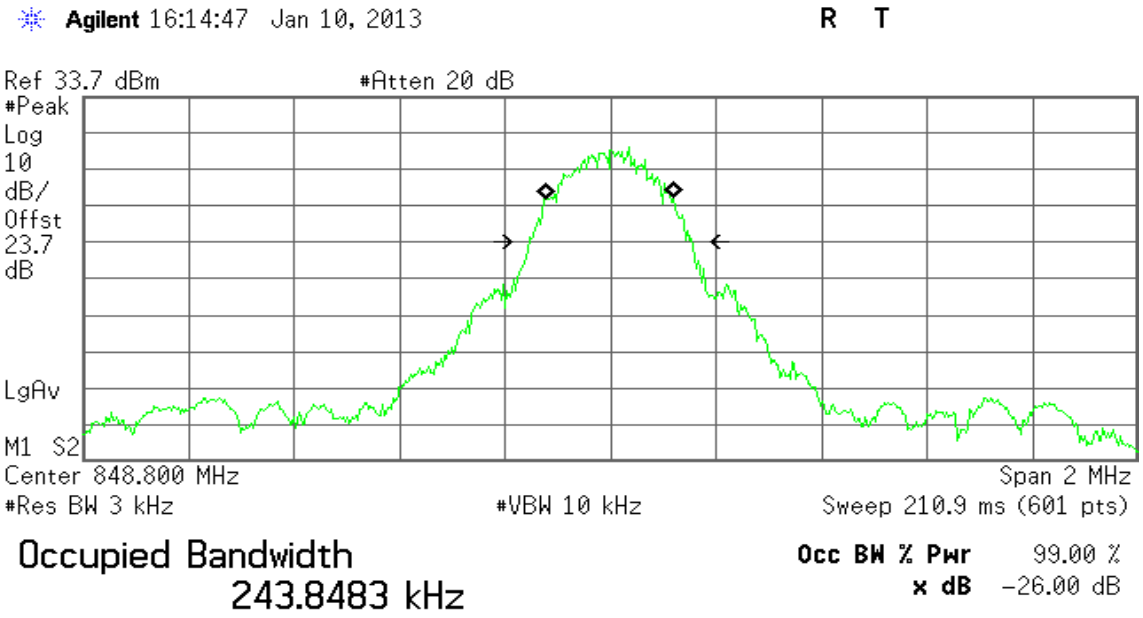
Transmit Freq Error	979.960 Hz
x dB Bandwidth	312.347 kHz

EDGE 850 (CH Mid)



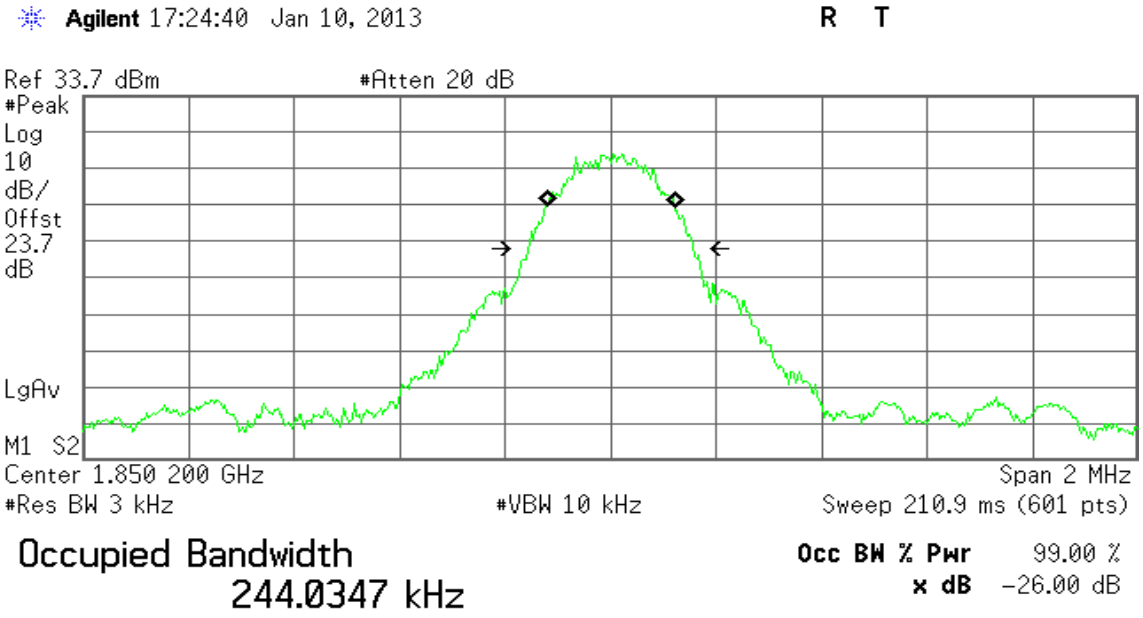
Transmit Freq Error	-371.927 Hz
x dB Bandwidth	317.601 kHz

EDGE 850 (CH High)



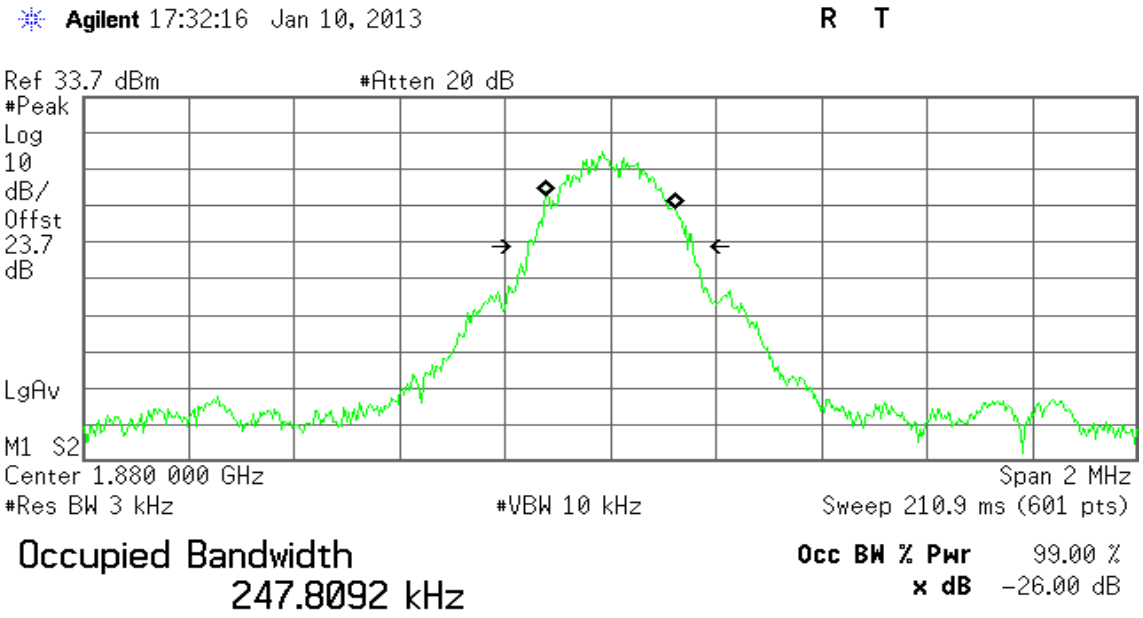
Transmit Freq Error	-1.644 kHz
x dB Bandwidth	310.123 kHz

EDGE 1900 (CH Low)



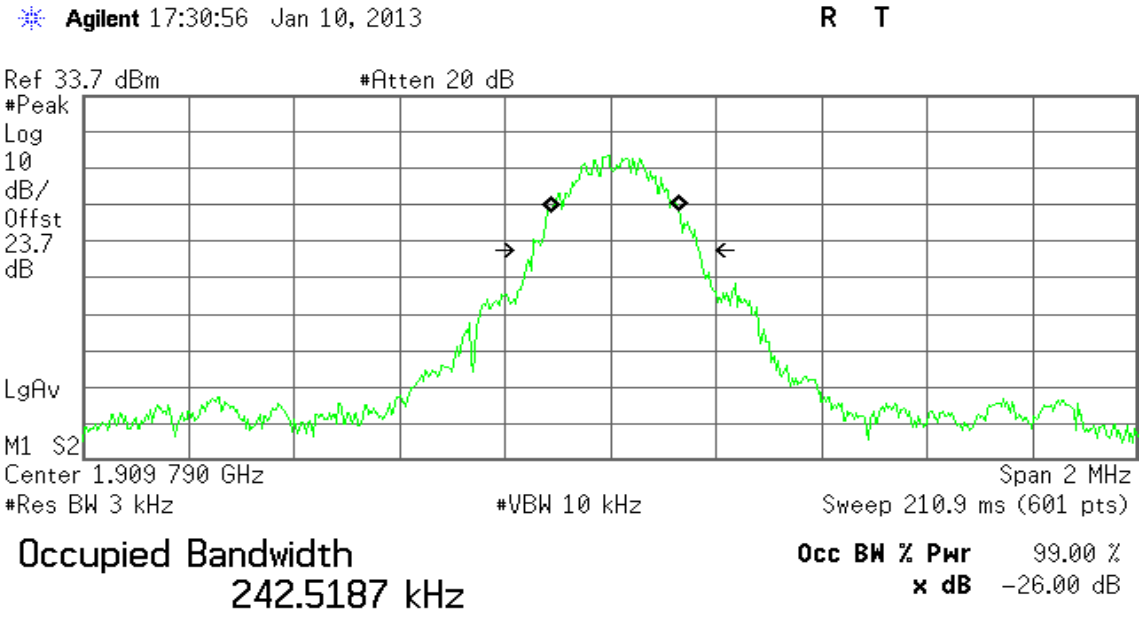
Transmit Freq Error	469.280 Hz
x dB Bandwidth	314.544 kHz

EDGE 1900 (CH Mid)



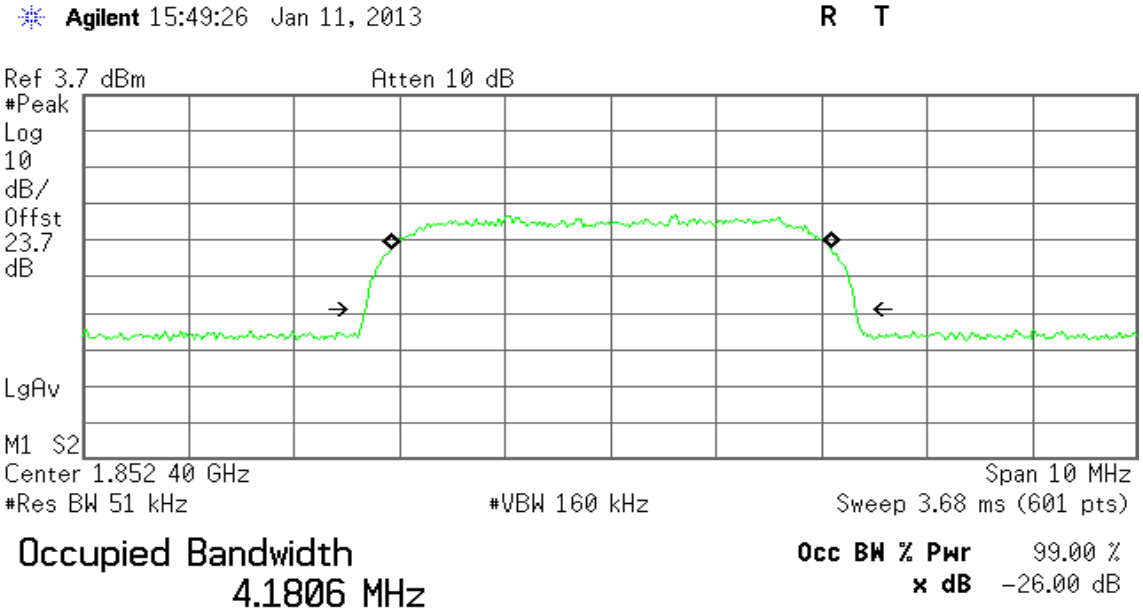
Transmit Freq Error	-375.517 Hz
x dB Bandwidth	313.227 kHz

EDGE 1900 (CH High)



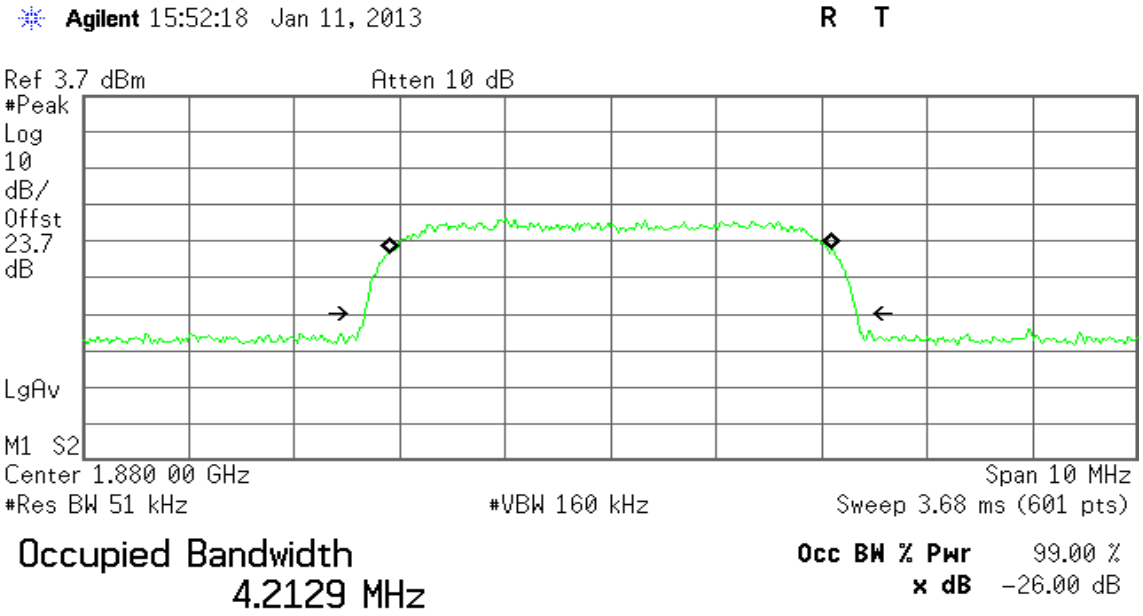
Transmit Freq Error	8.508 kHz
x dB Bandwidth	316.210 kHz

WCDMA Band II (CH Low)



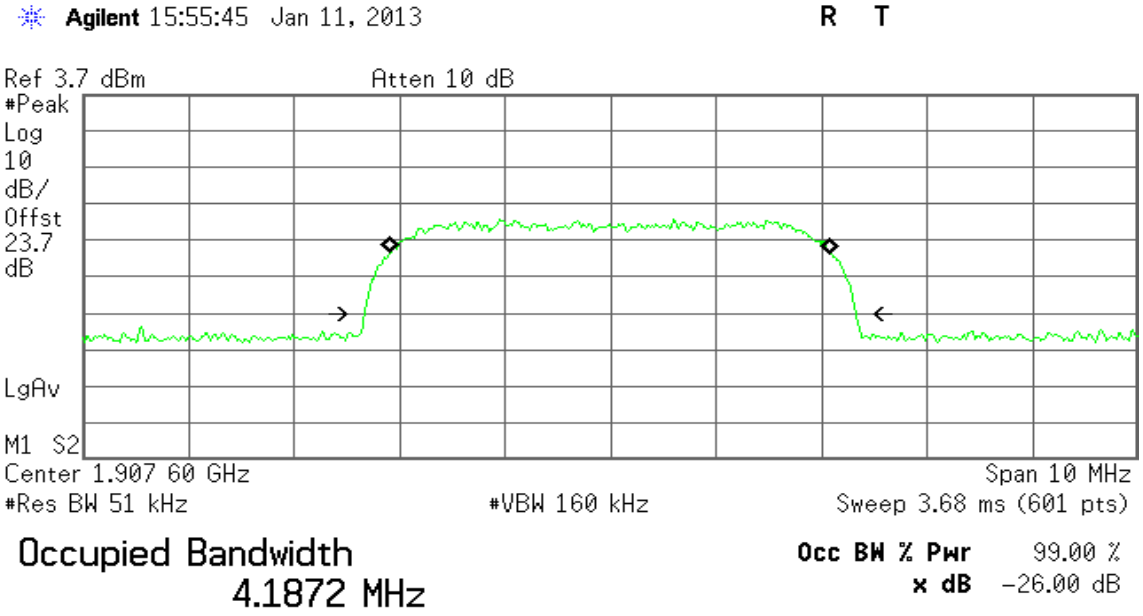
Transmit Freq Error	1.886 kHz
x dB Bandwidth	4.660 MHz

WCDMA Band II (CH Mid)



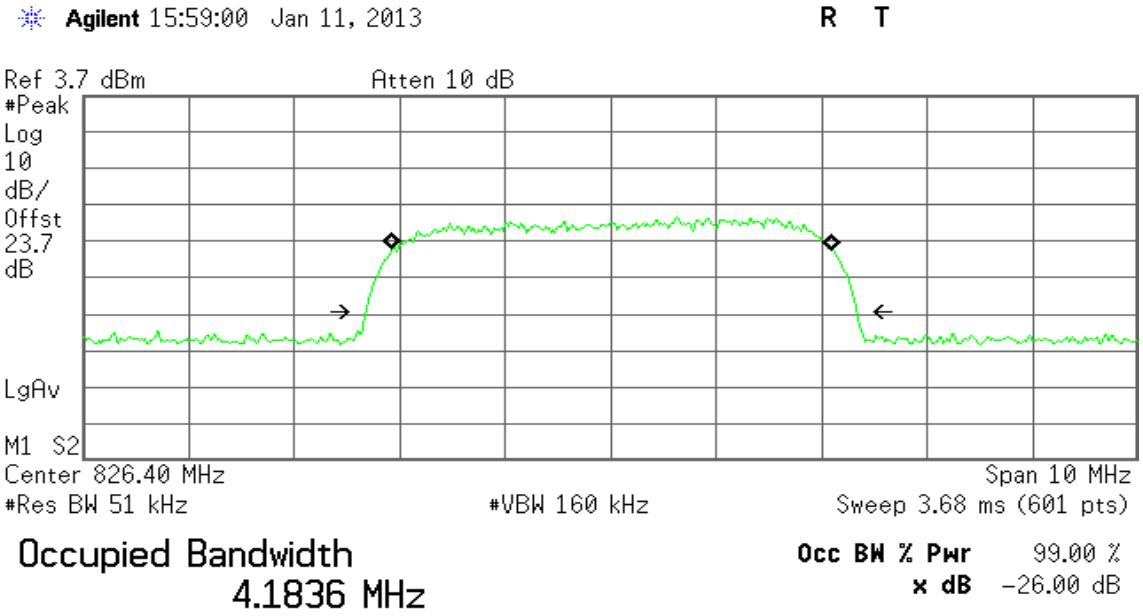
Transmit Freq Error	938.165 Hz
x dB Bandwidth	4.677 MHz

WCDMA Band II (CH High)



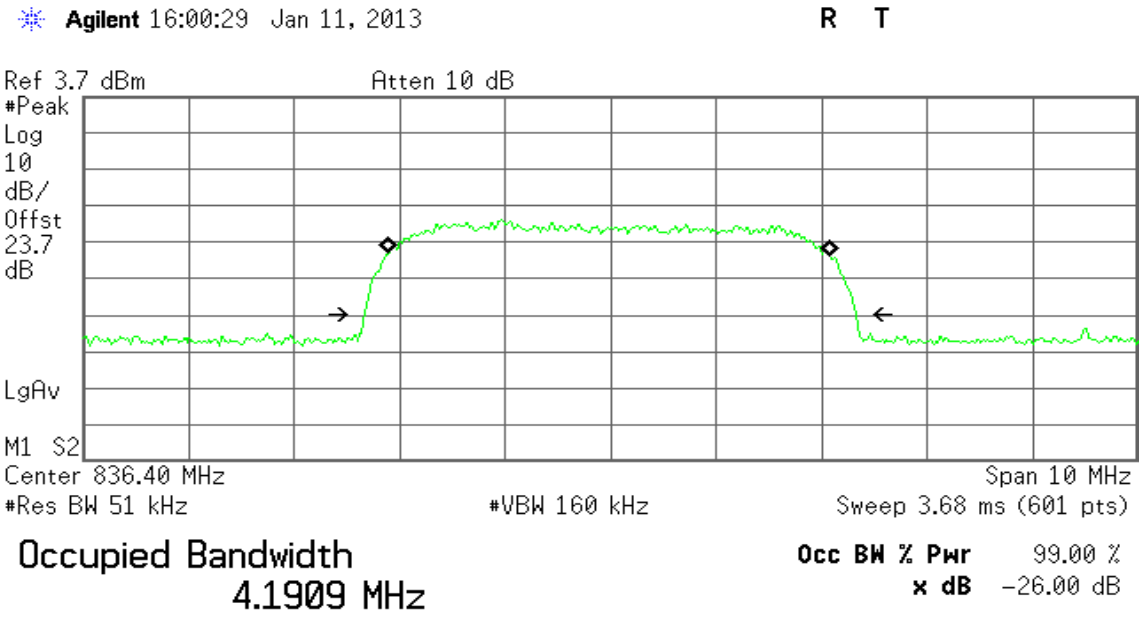
Transmit Freq Error -3.292 kHz
x dB Bandwidth 4.671 MHz

WCDMA Band V (CH Low)



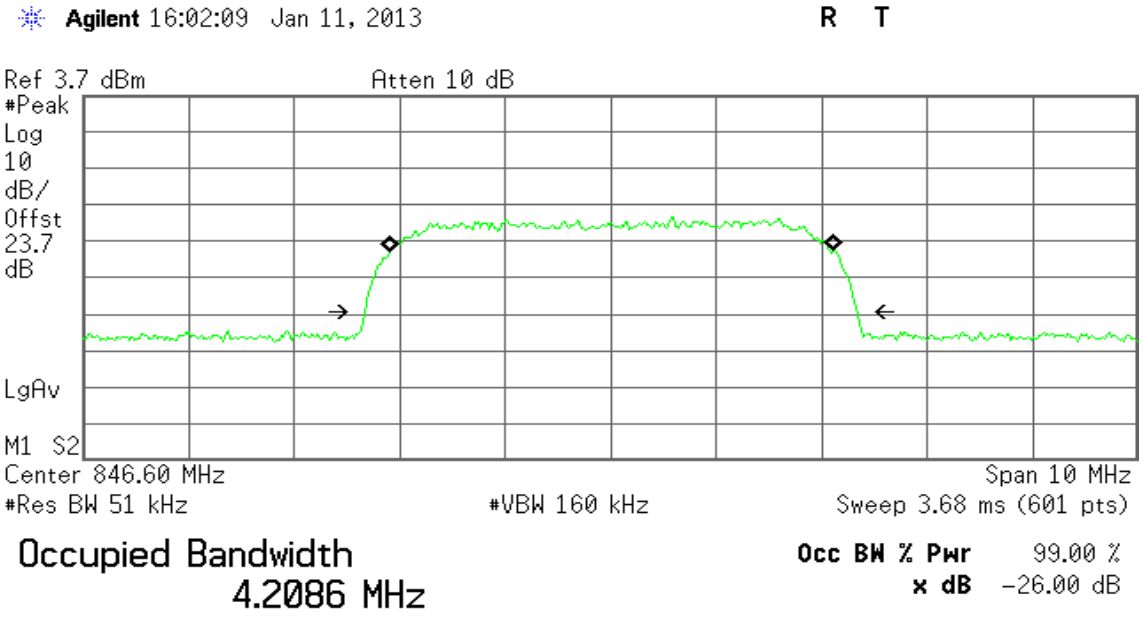
Transmit Freq Error 14.986 kHz
x dB Bandwidth 4.663 MHz

WCDMA Band V (CH Mid)



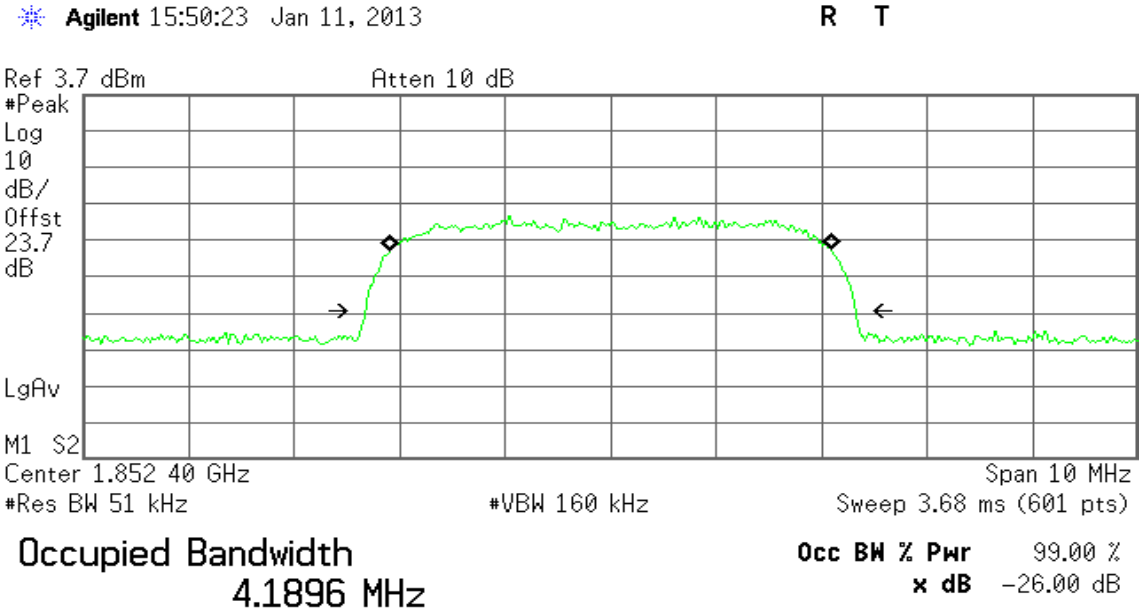
Transmit Freq Error	-16.294 kHz
x dB Bandwidth	4.673 MHz

WCDMA Band V (CH High)



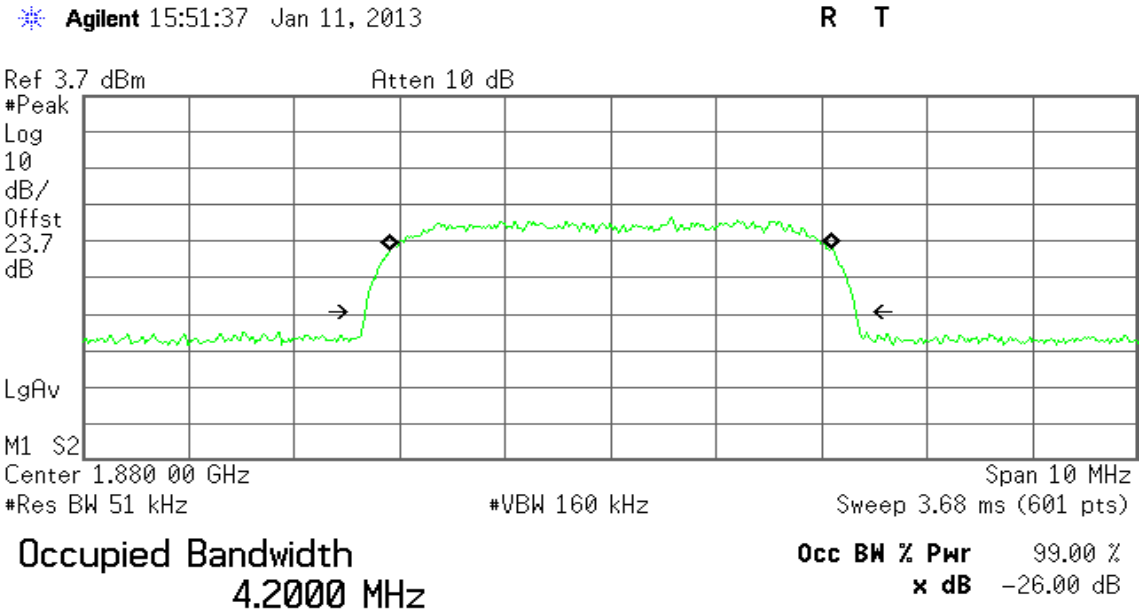
Transmit Freq Error	8.271 kHz
x dB Bandwidth	4.678 MHz

WCDMA / HSDPA Band II (CH Low)



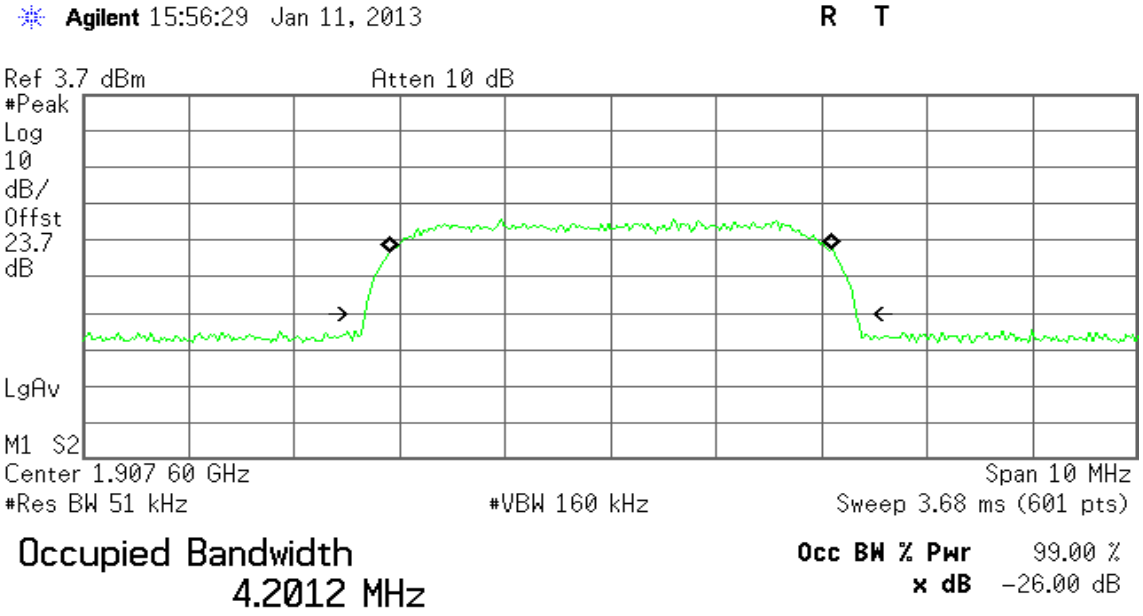
Transmit Freq Error	-760.705 Hz
x dB Bandwidth	4.655 MHz

WCDMA / HSDPA Band II (CH Mid)



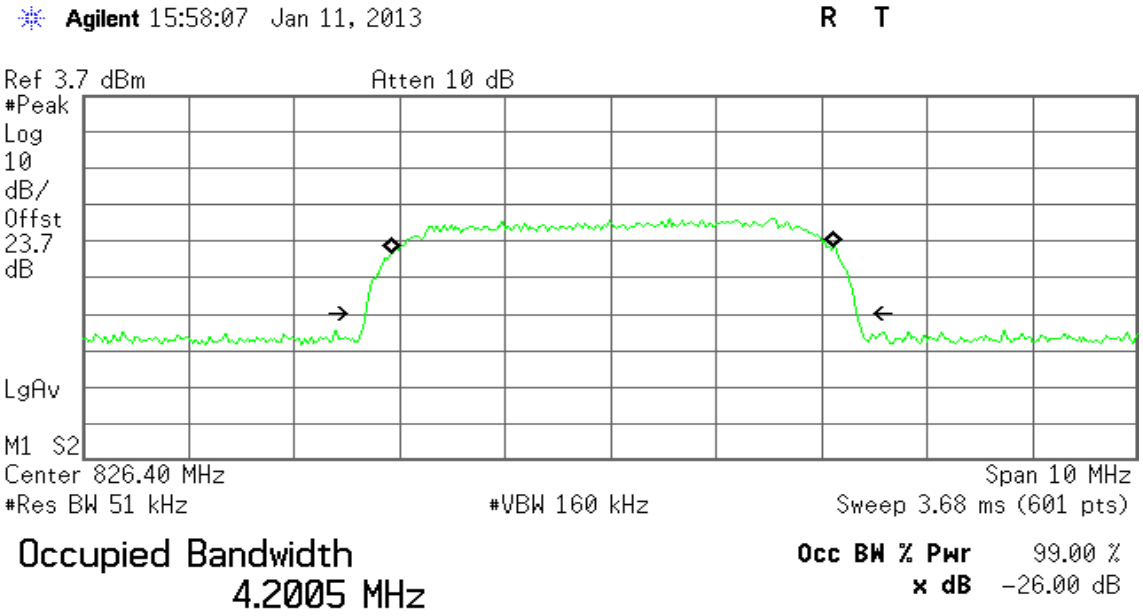
Transmit Freq Error	1.571 kHz
x dB Bandwidth	4.659 MHz

WCDMA / HSDPA Band II (CH High)



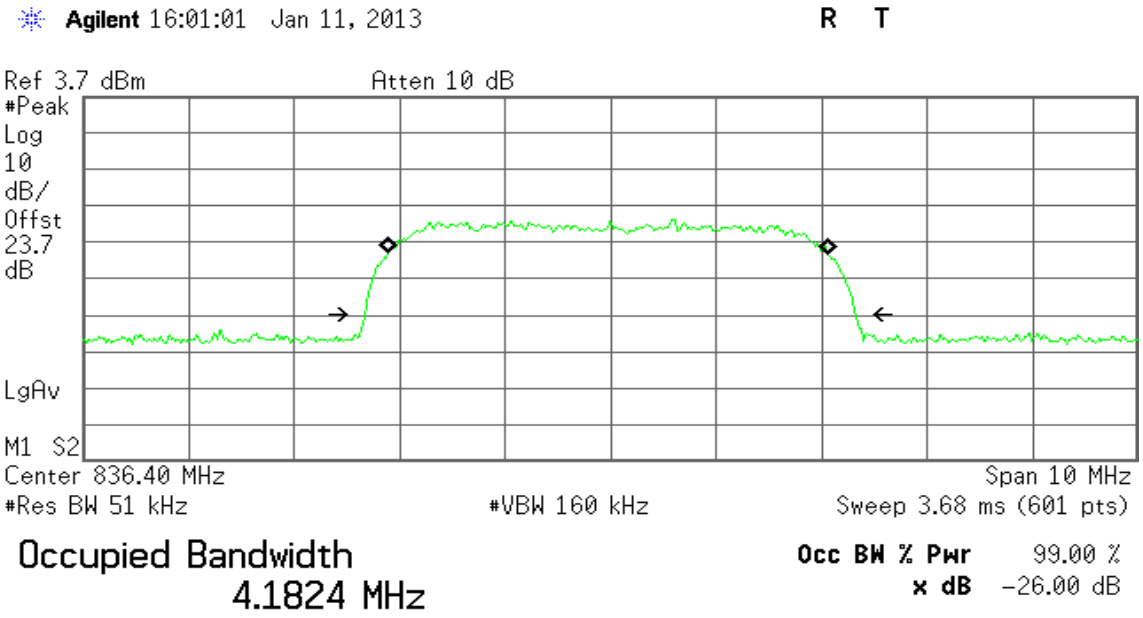
Transmit Freq Error	5.691 kHz
x dB Bandwidth	4.663 MHz

WCDMA / HSDPA Band V (CH Low)



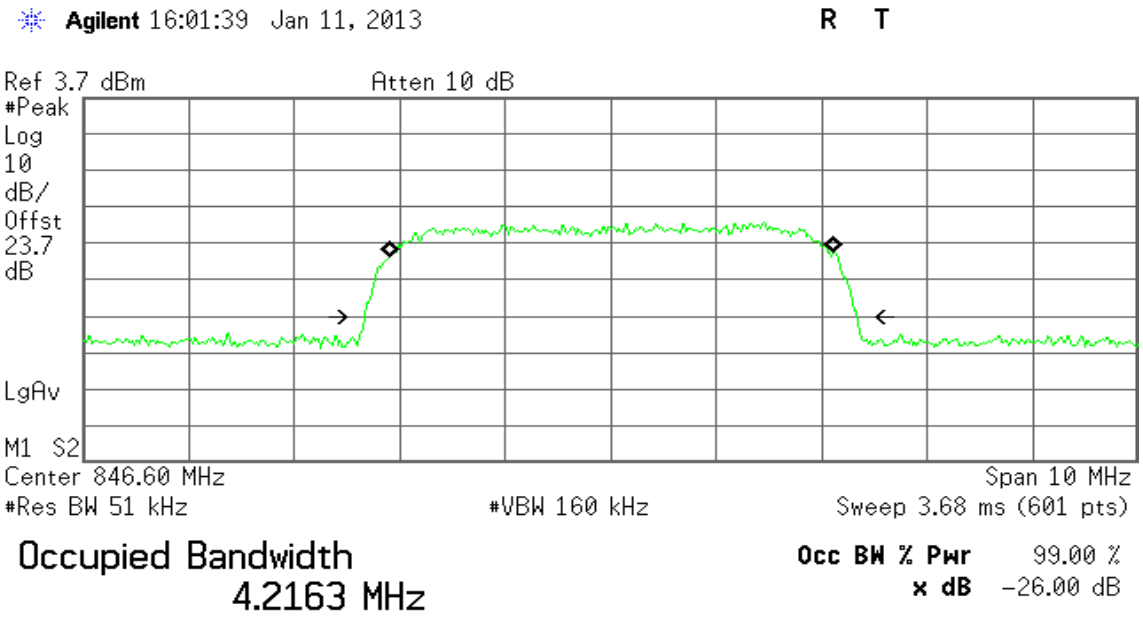
Transmit Freq Error	22.845 kHz
x dB Bandwidth	4.667 MHz

WCDMA / HSDPA Band V (CH Mid)



Transmit Freq Error	-20.414 kHz
x dB Bandwidth	4.659 MHz

WCDMA / HSDPA Band V (CH High)



Transmit Freq Error	8.782 kHz
x dB Bandwidth	4.678 MHz

7.5OUT OF BAND EMISSION AT ANTENNA TERMINALS

LIMIT

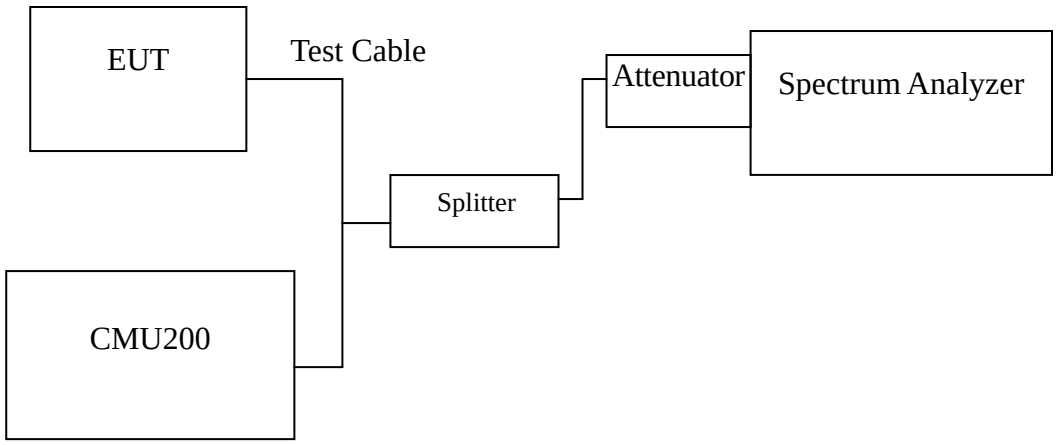
According to FCC §2.1051, FCC §22.917, FCC §24.238(a).

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
GSM 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
GPRS 850	128	Figure 8-1	Conducted spurious emissions, 30MHz - 20GHz
	190	Figure 8-2	Conducted spurious emissions, 30MHz - 20GHz
	251	Figure 8-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
GSM 1900	512	Figure 9-1	Conducted spurious emissions, 30MHz - 20GHz
	661	Figure 9-2	Conducted spurious emissions, 30MHz - 20GHz
	810	Figure 9-3	Conducted spurious emissions, 30MHz - 20GHz
GPRS 1900	512	Figure 10-1	Conducted spurious emissions, 30MHz - 20GHz
	661	Figure 10-2	Conducted spurious emissions, 30MHz - 20GHz
	810	Figure 10-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
GSM 850	128	Figure 11-1	Band Edge emissions
	251	Figure 11-2	Band Edge emissions
GPRS 850	128	Figure 12-1	Band Edge emissions
	251	Figure 12-2	Band Edge emissions

Mode	CH	Location	Description
GSM 1900	512	Figure 13-1	Band Edge emissions
	810	Figure 13-2	Band Edge emissions
GPRS 1900	512	Figure 14-1	Band Edge emissions
	810	Figure 14-2	Band Edge emissions

Mode	CH	Location	Description
EDGE 850	128	Figure 15-1	Conducted spurious emissions, 30MHz - 20GHz
	190	Figure 15-2	Conducted spurious emissions, 30MHz - 20GHz
	251	Figure 15-3	Conducted spurious emissions, 30MHz - 20GHz
EDGE 1900	512	Figure 16-1	Conducted spurious emissions, 30MHz - 20GHz
	661	Figure 16-2	Conducted spurious emissions, 30MHz - 20GHz
	810	Figure 16-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
EDGE 850	128	Figure 17-1	Band Edge emissions
	251	Figure 17-2	Band Edge emissions
EDGE 1900	512	Figure 18-1	Band Edge emissions
	810	Figure 18-2	Band Edge emissions

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

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

Test Plot

GSM 850

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

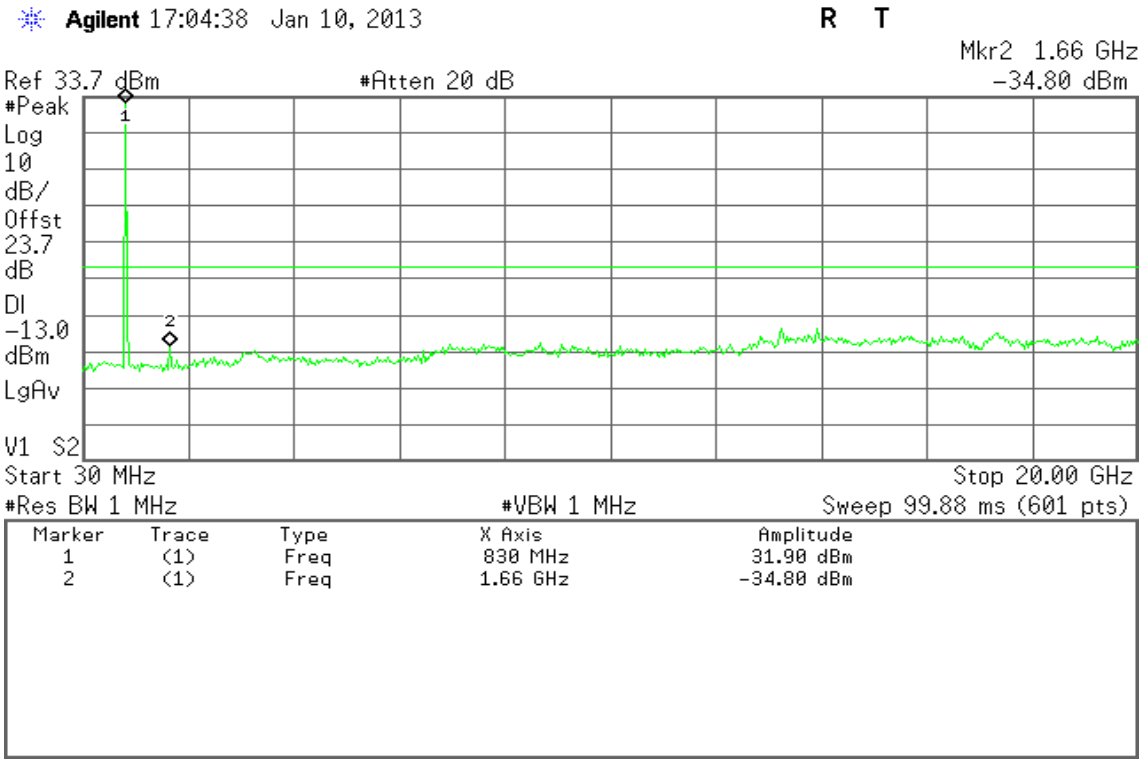


Figure 7-2: Out of Band emission at antenna terminals – GSM CH Mid

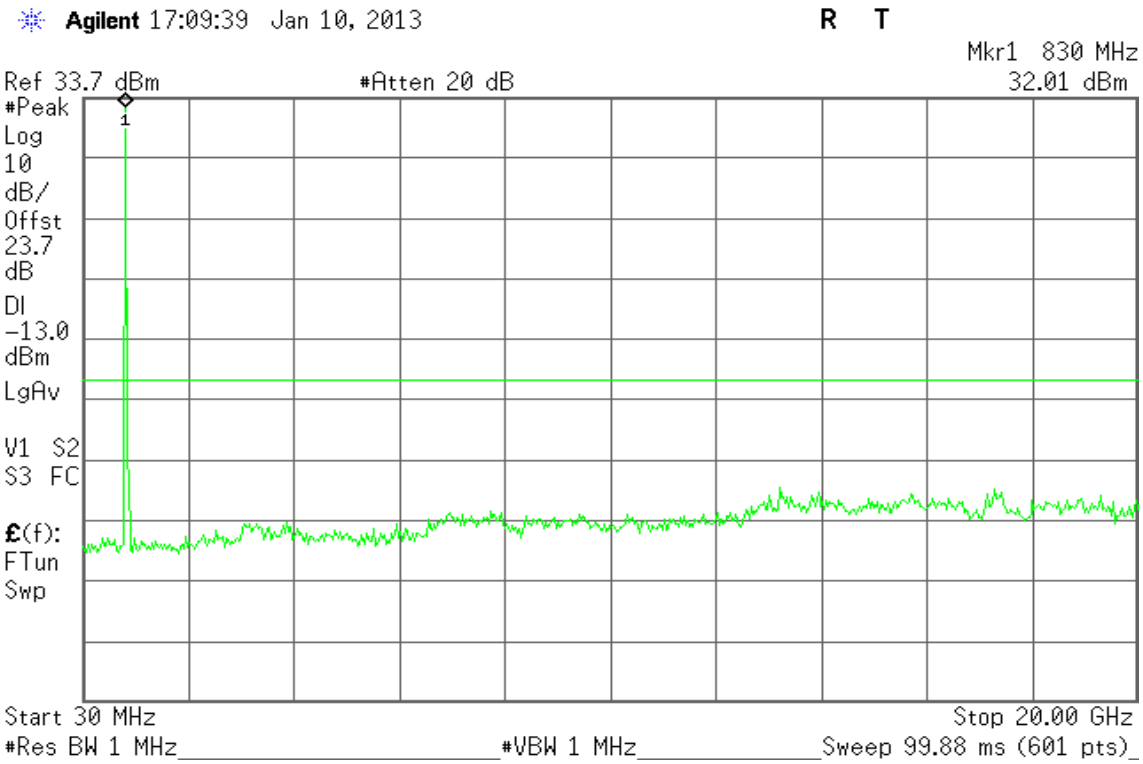
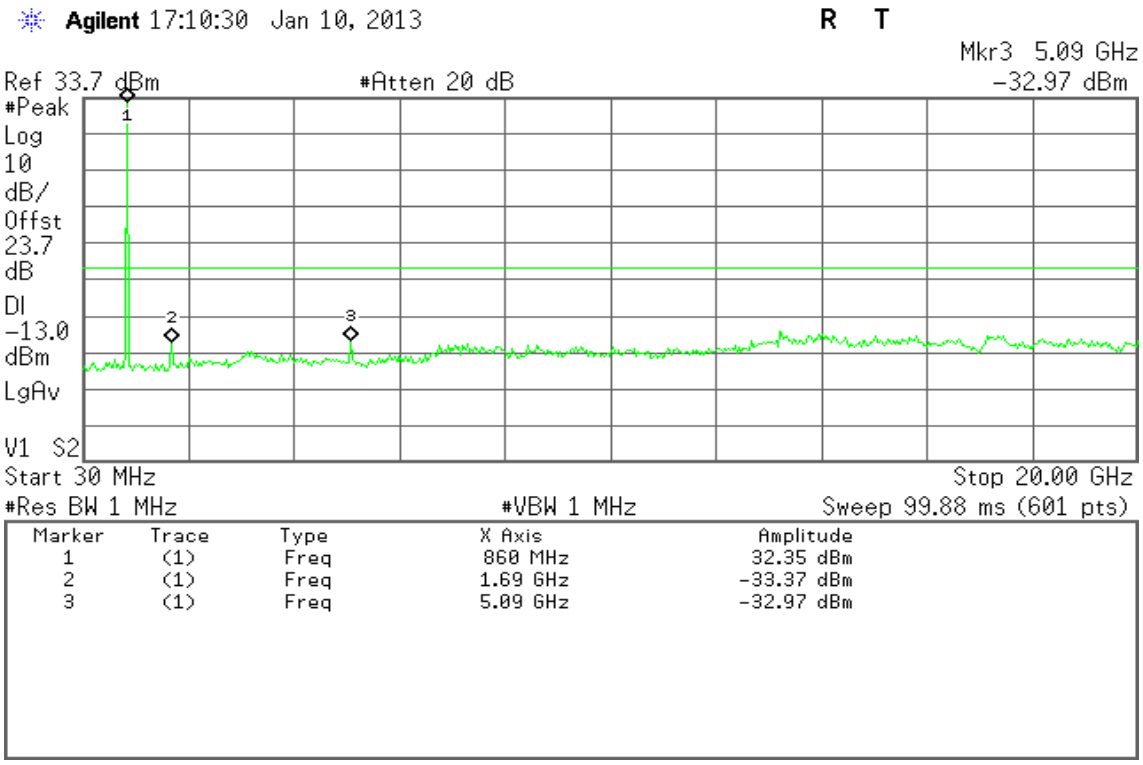


Figure 7-3: Out of Band emission at antenna terminals – GSM CH High



GPRS 850

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

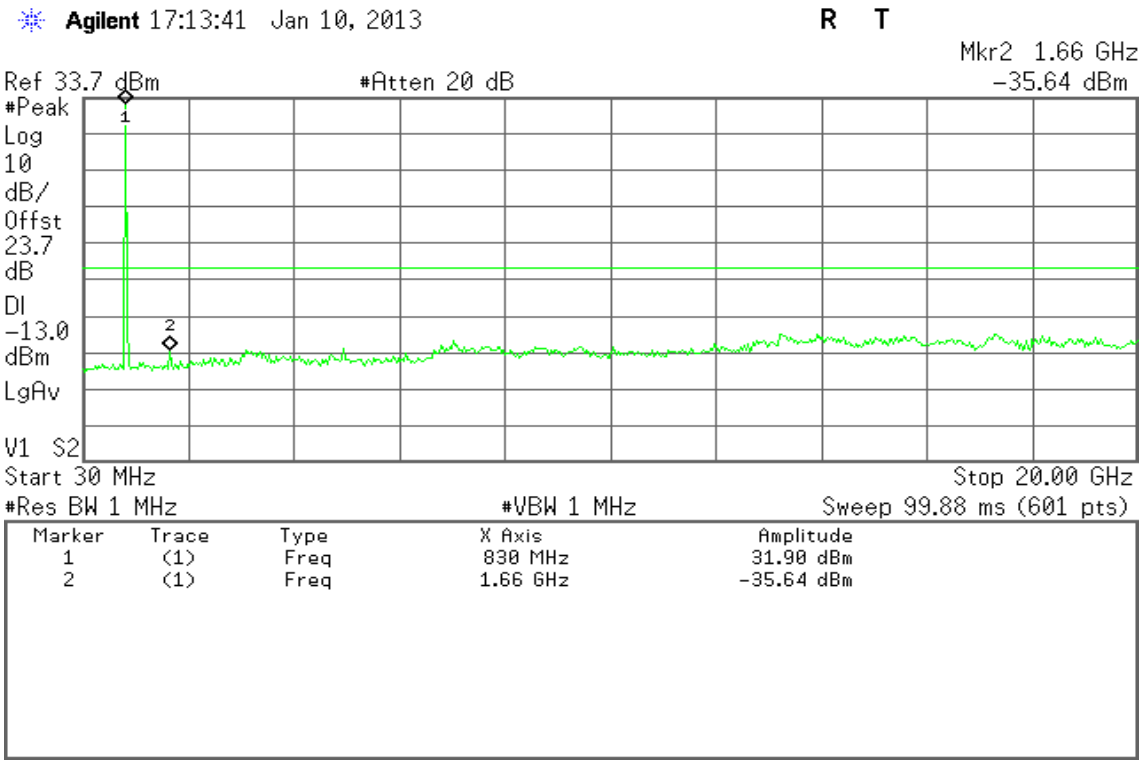


Figure 8-2: Out of Band emission at antenna terminals – GPRS CH Mid

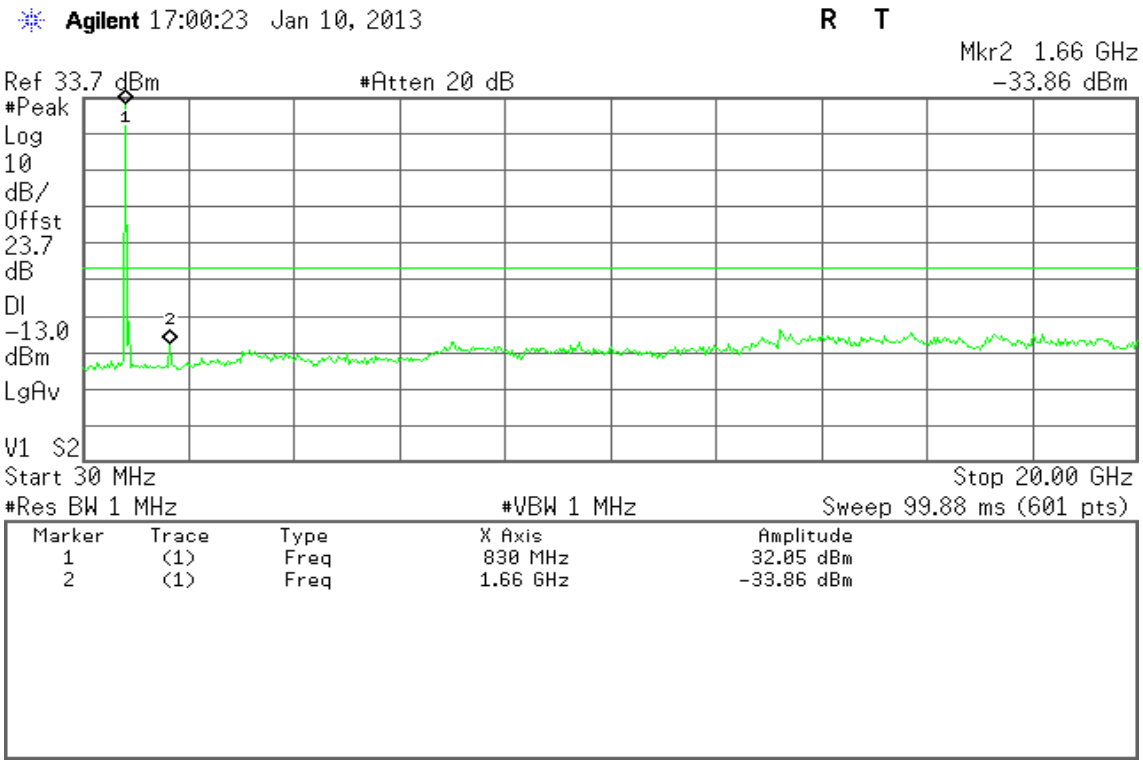
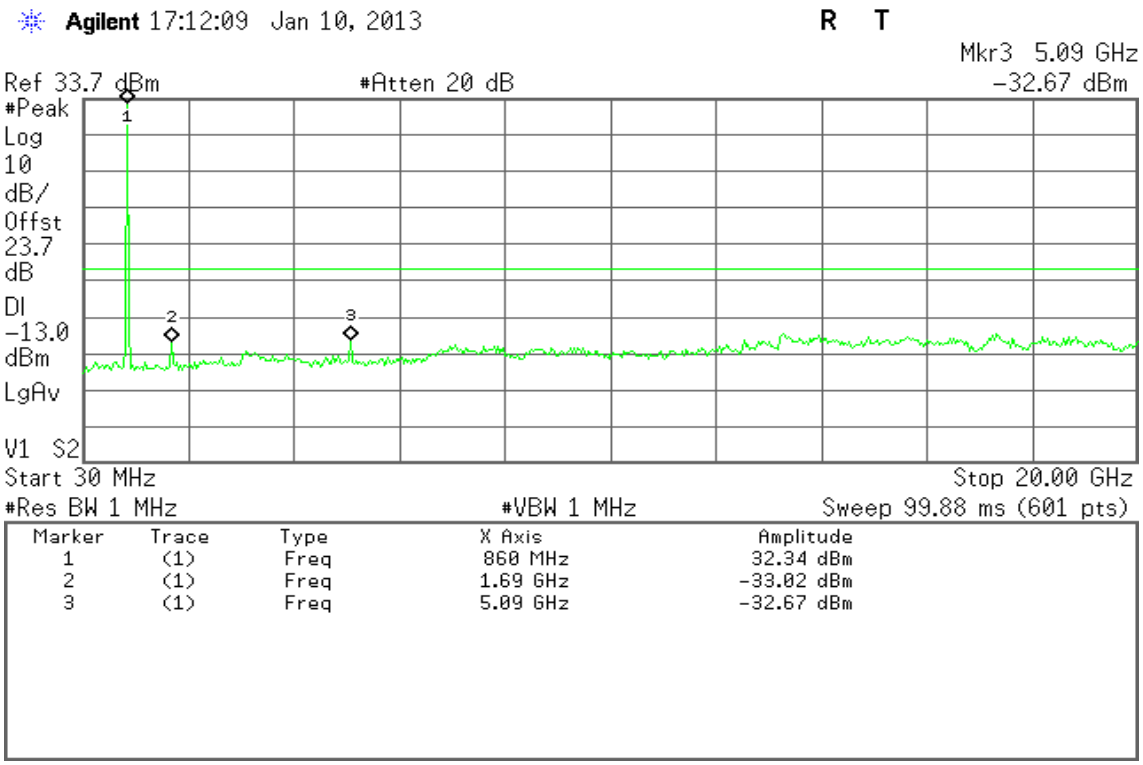


Figure 8-3: Out of Band emission at antenna terminals – GPRS CH High



GSM 1900

Figure 9-1: Out of Band emission at antenna terminals – GSM CH Low

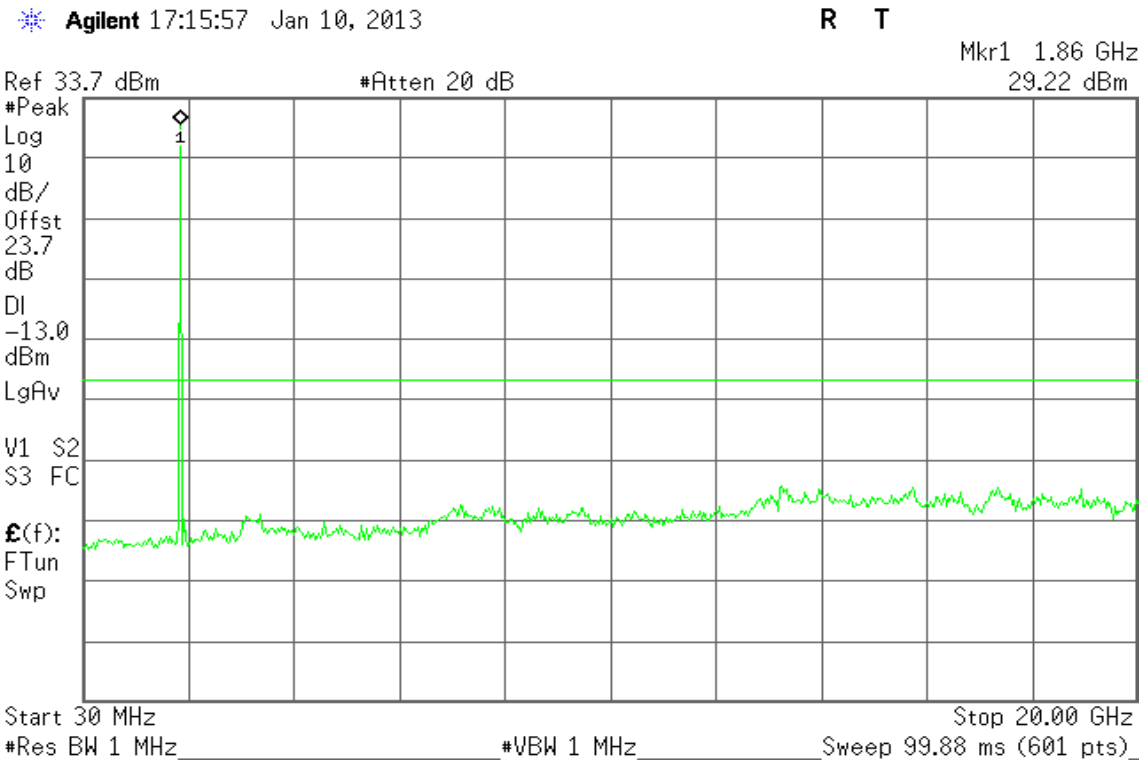


Figure 9-2: Out of Band emission at antenna terminals – GSM CH Mid

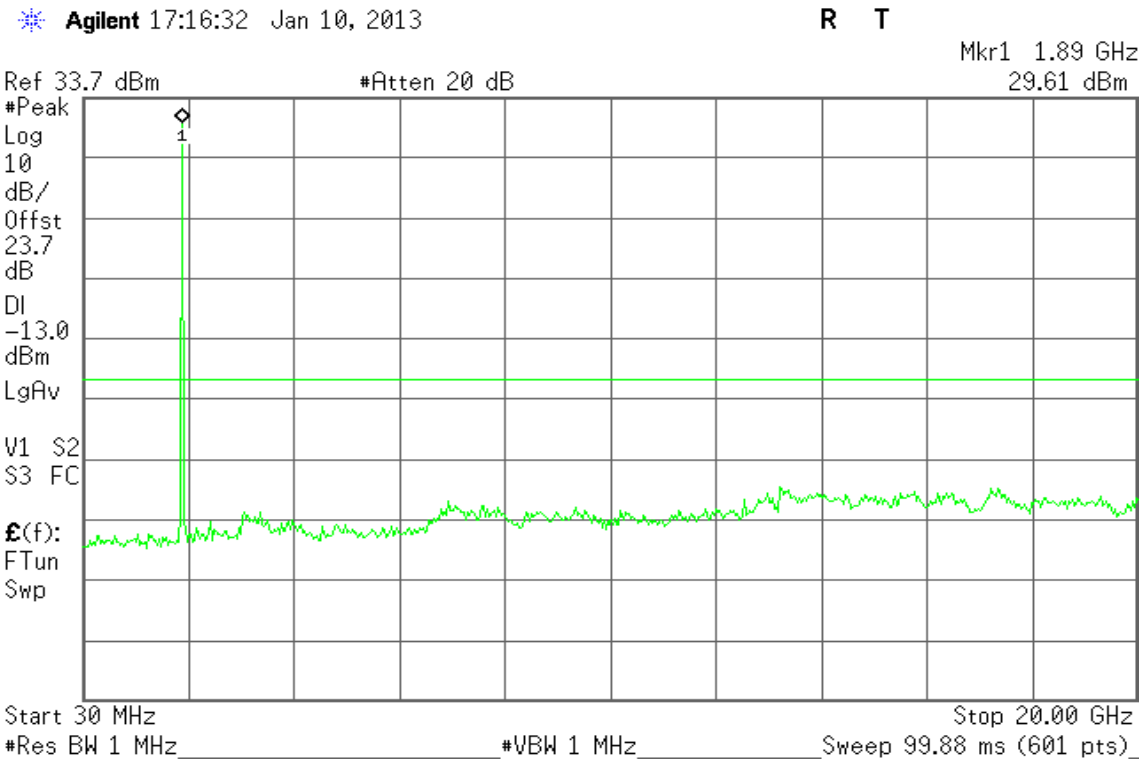
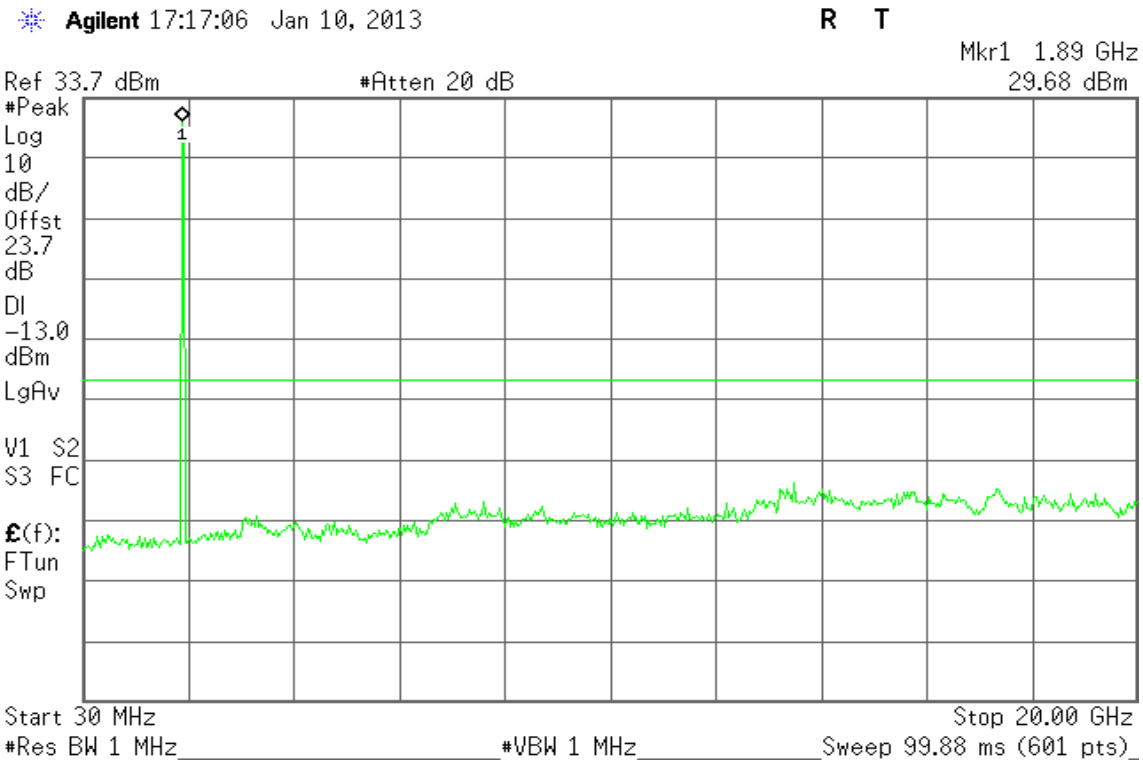


Figure 9-3: Out of Band emission at antenna terminals – GSM CH High



GPRS 1900

Figure 10-1: Out of Band emission at antenna terminals –GPRS CH Low

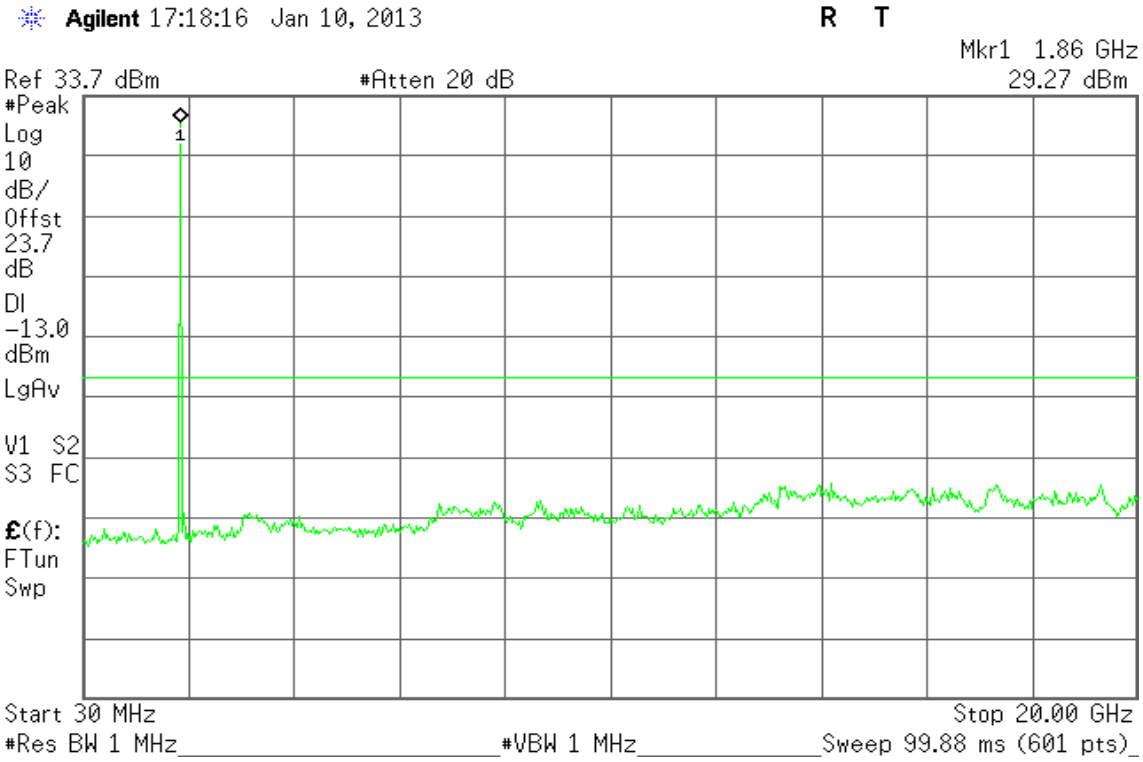


Figure 10-2: Out of Band emission at antenna terminals –GPRS CH Mid

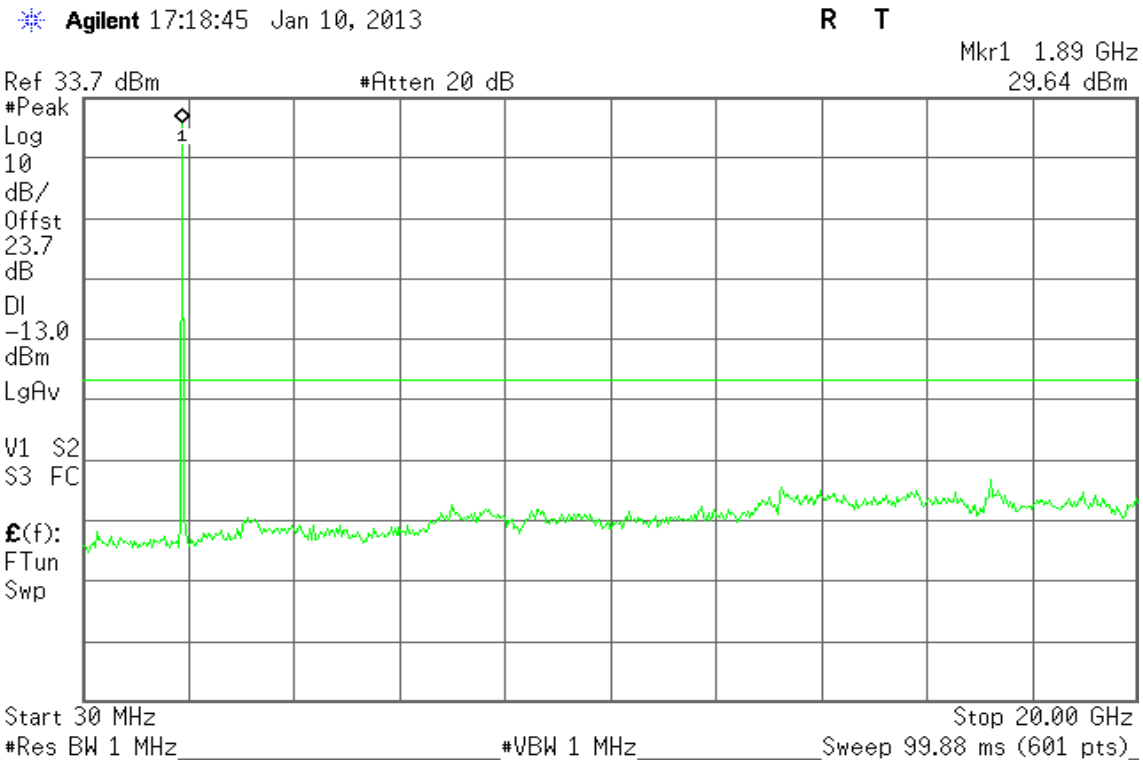
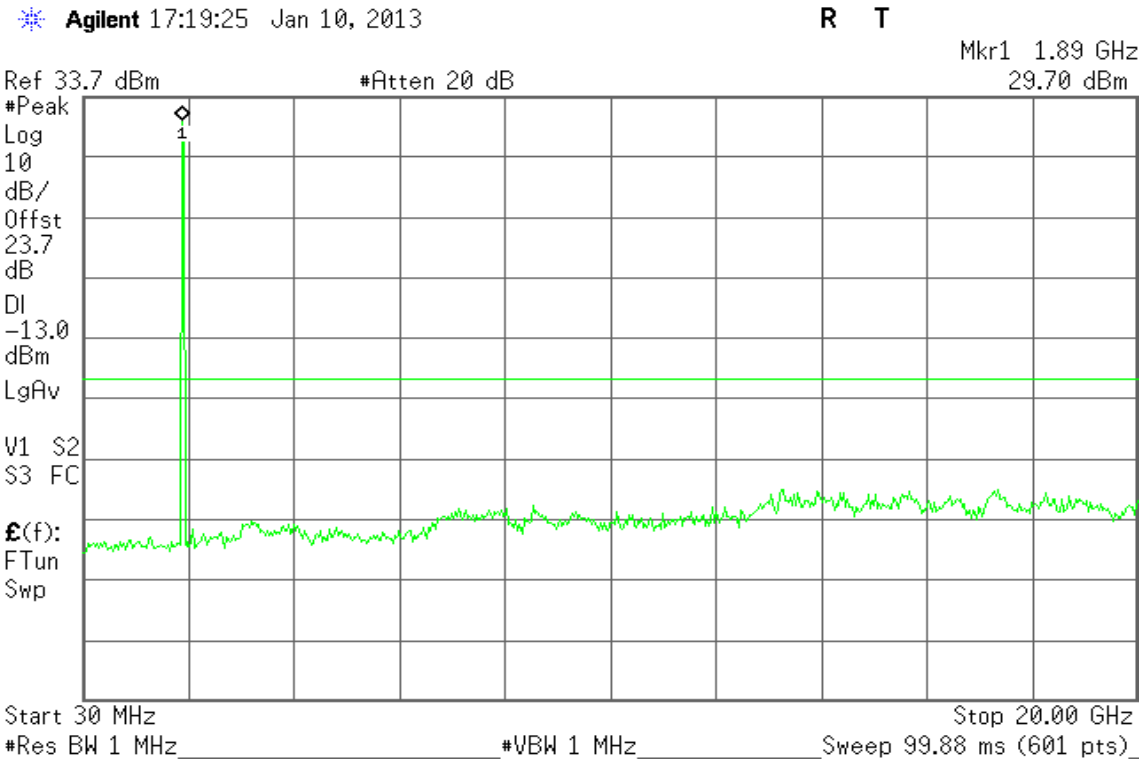


Figure 10-3: Out of Band emission at antenna terminals – GPRS CH High



GSM 850

Figure 11-1: Band Edge emissions – GSM CH Low

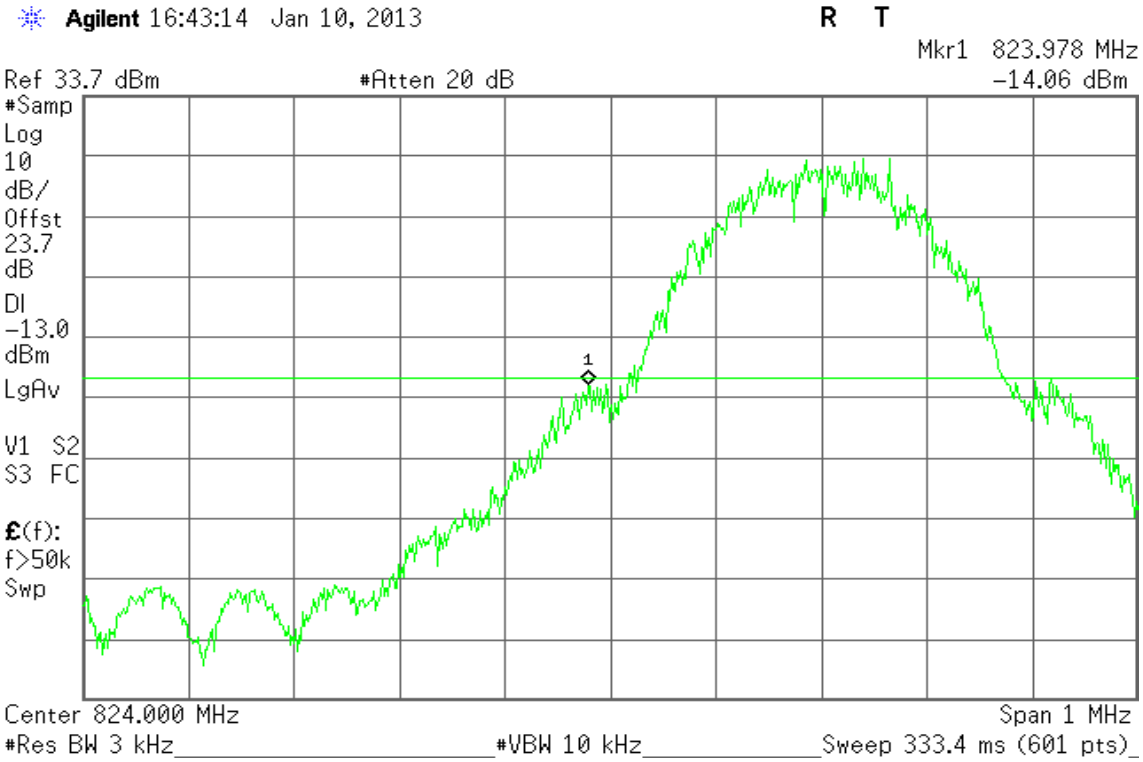
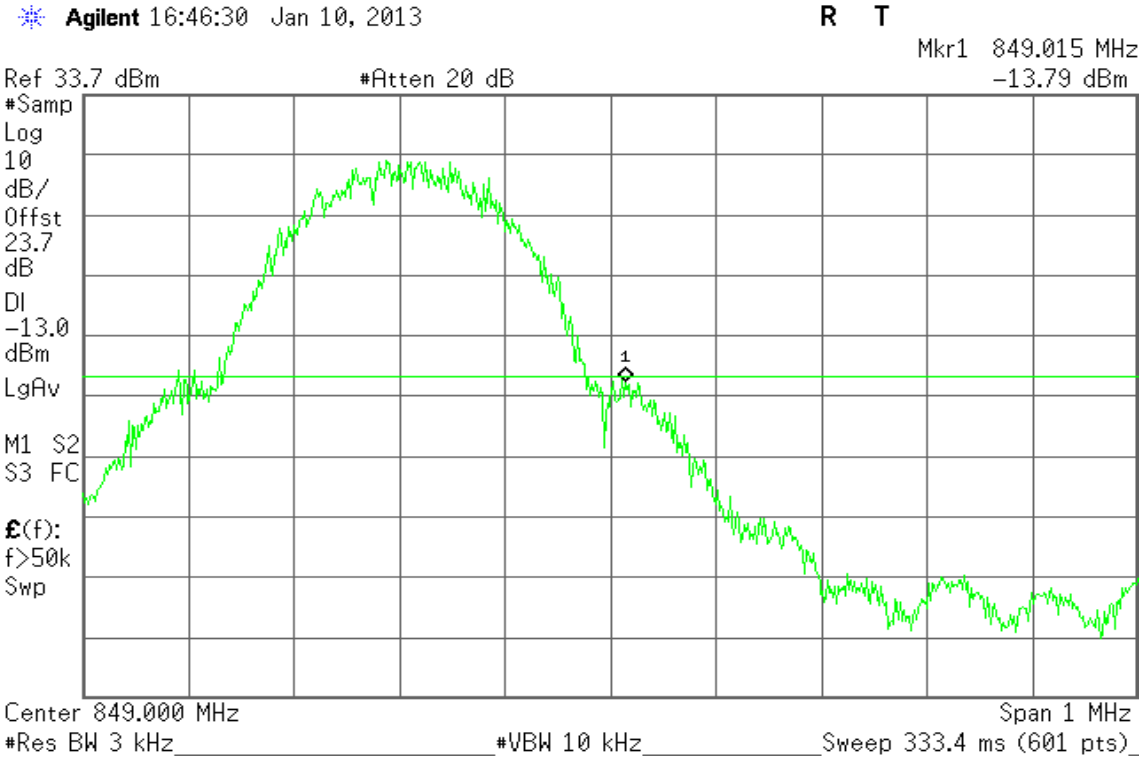


Figure 11-2: Band Edge emissions – GSM CH High



GPRS 850

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

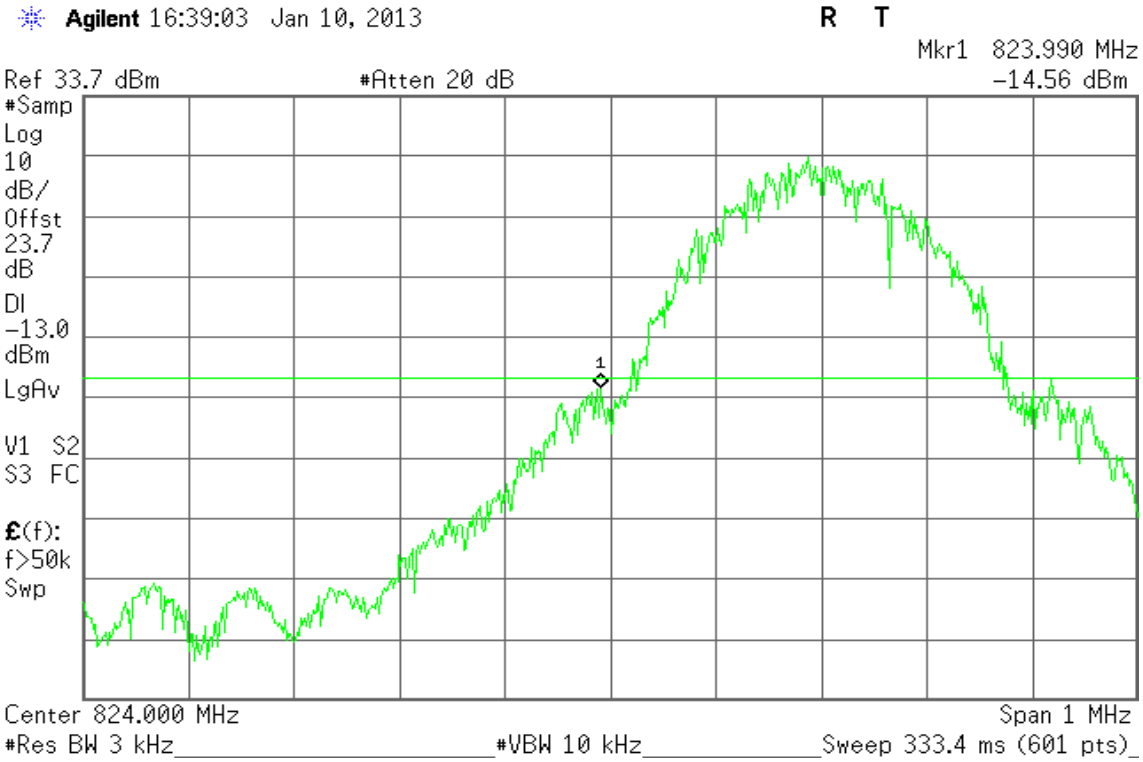
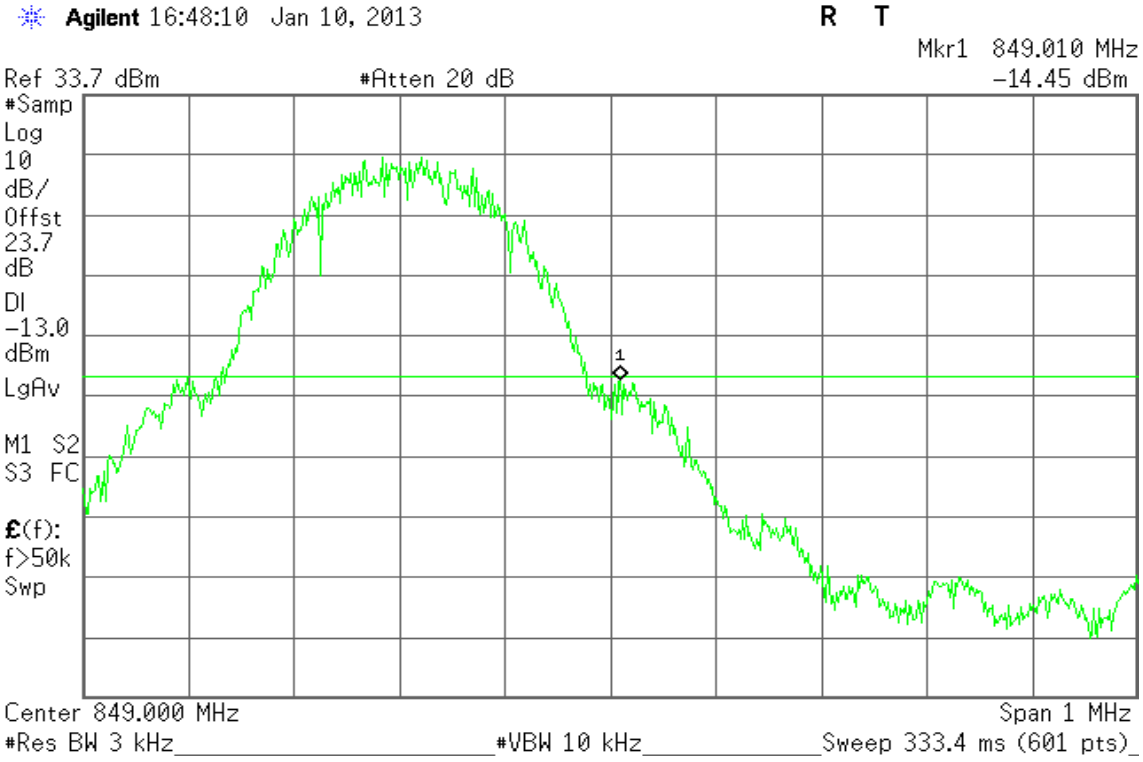


Figure 12-2: Band Edge emissions –GPRS CH High



GSM 1900

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

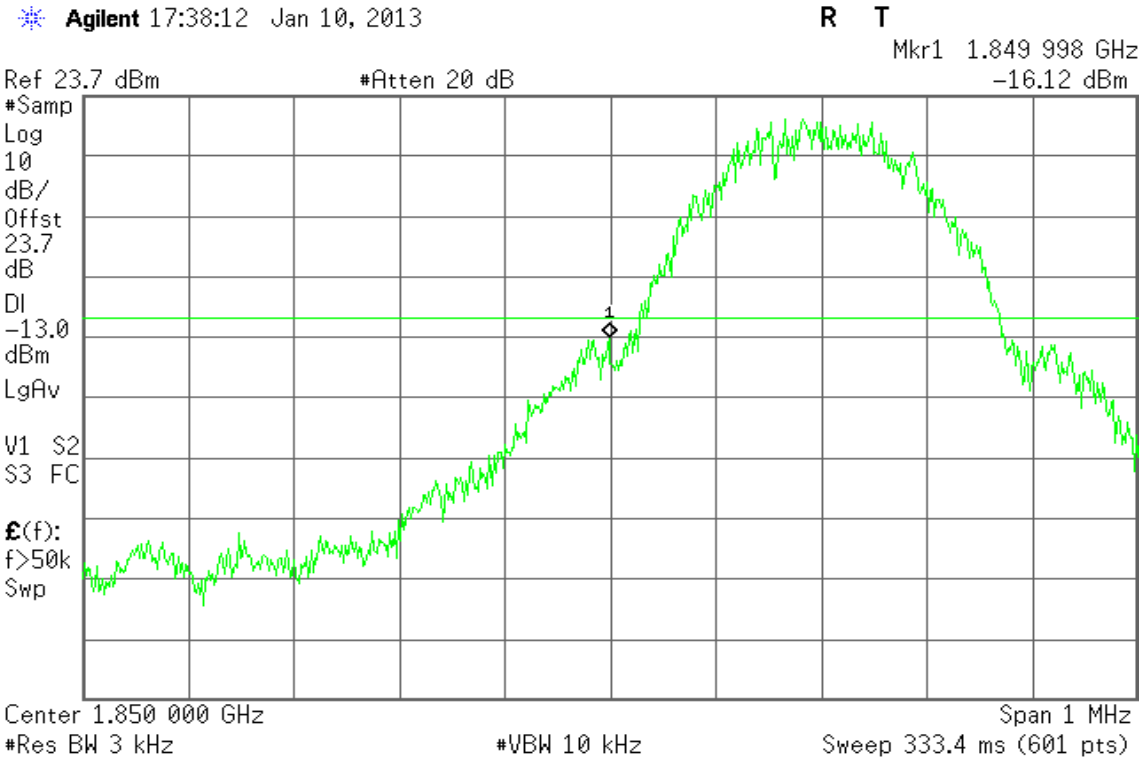
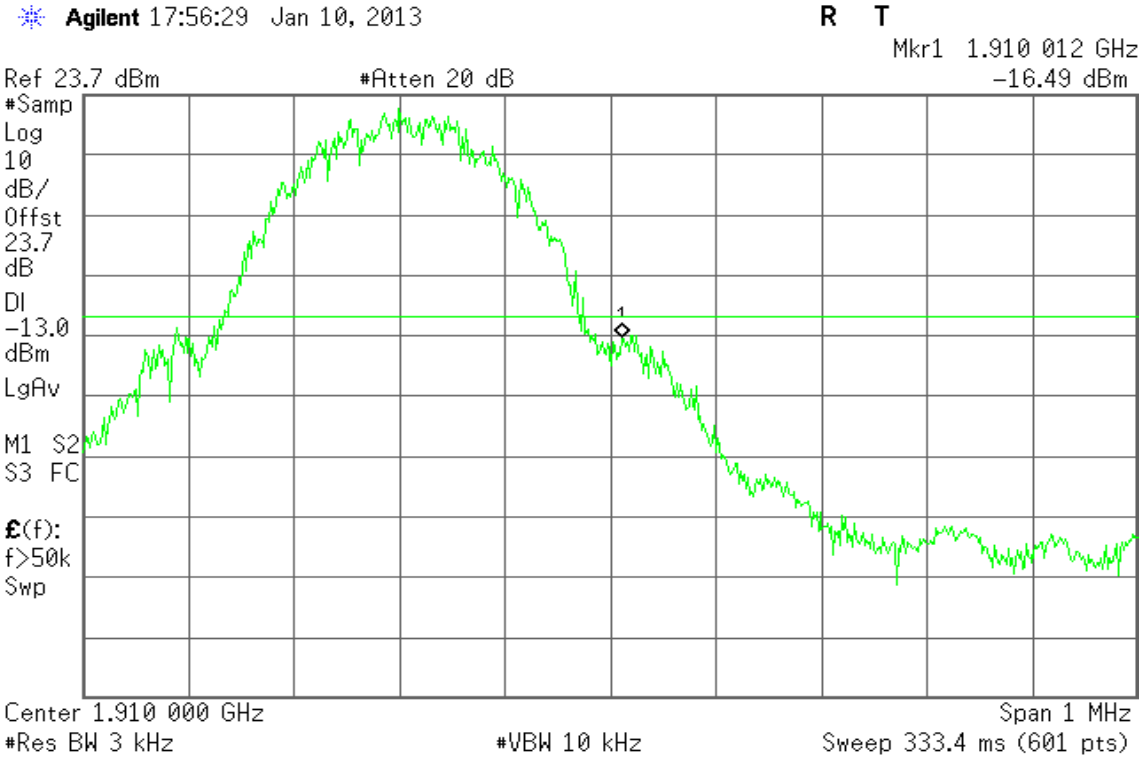


Figure 13-2: Band Edge emissions – GSM CH High



GPRS 1900

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

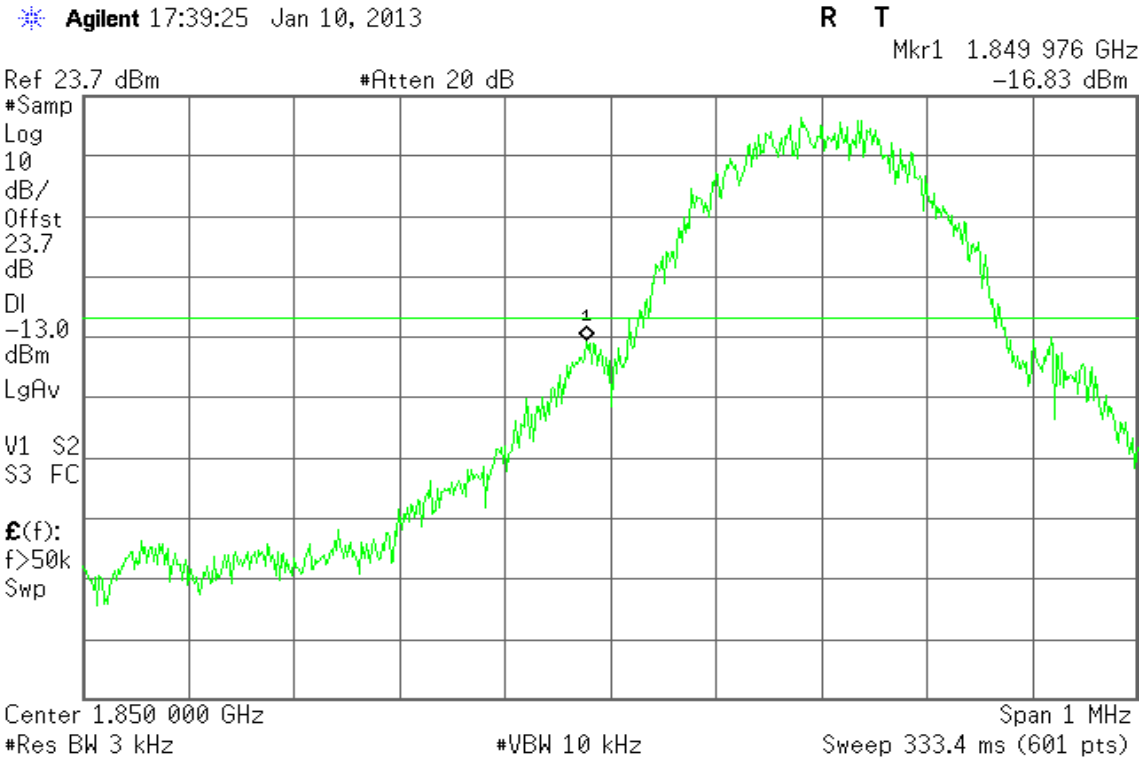
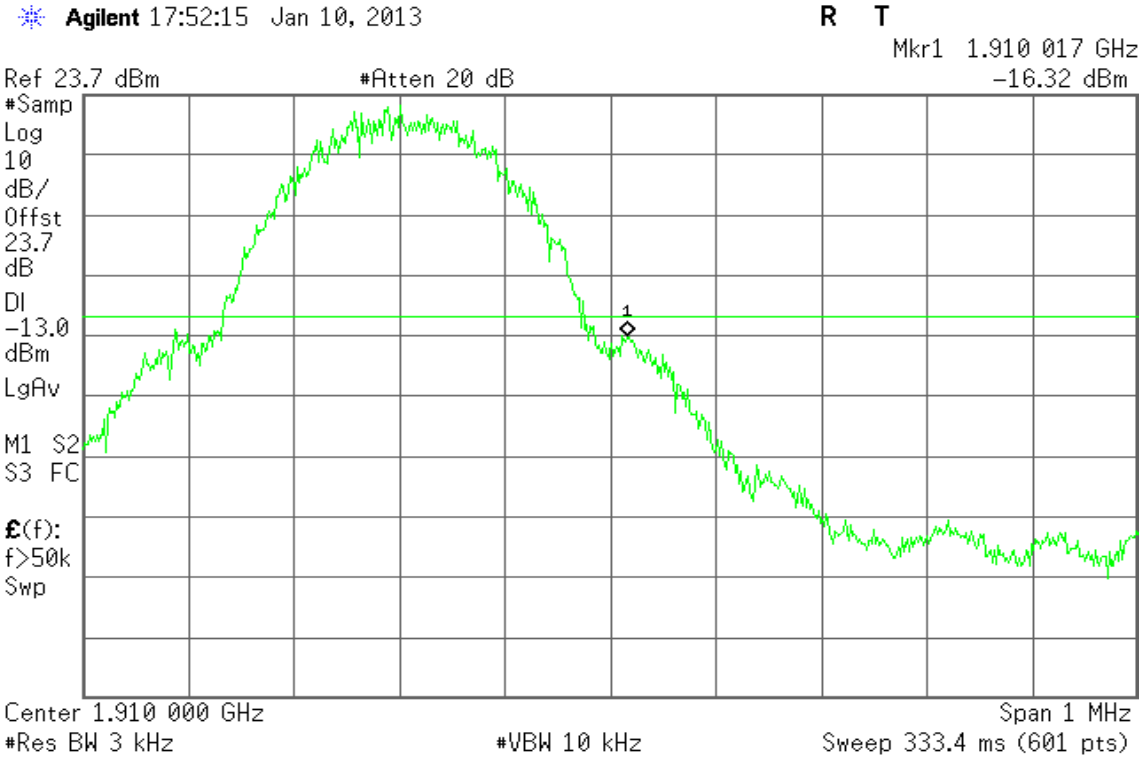


Figure 14-2: Band Edge emissions – GPRS CH High



EDGE 850

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

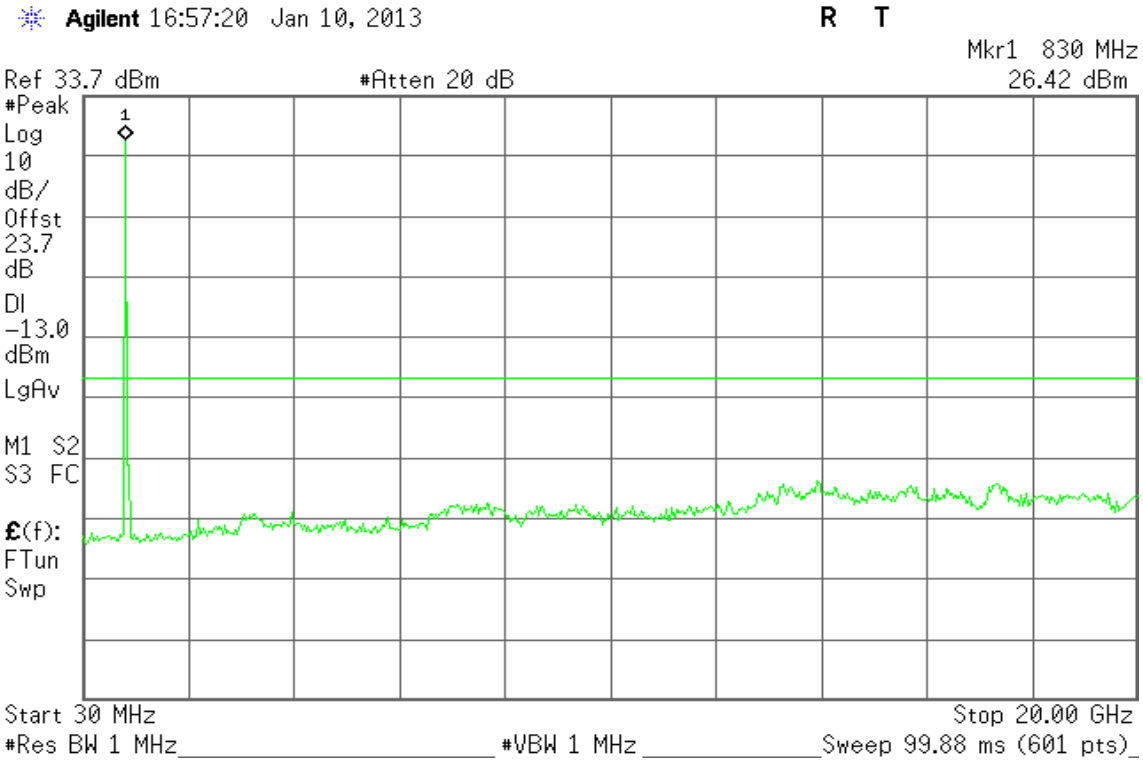


Figure 15-2: Out of Band emission at antenna terminals –EDGE CH Mid

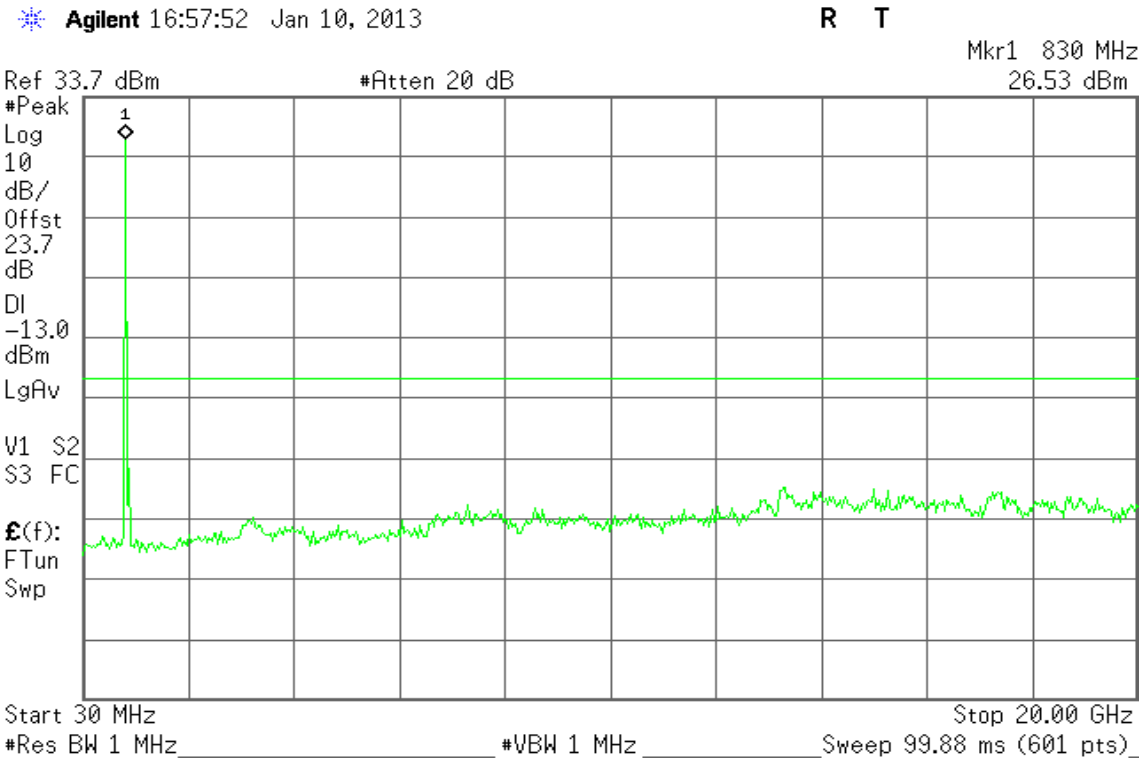
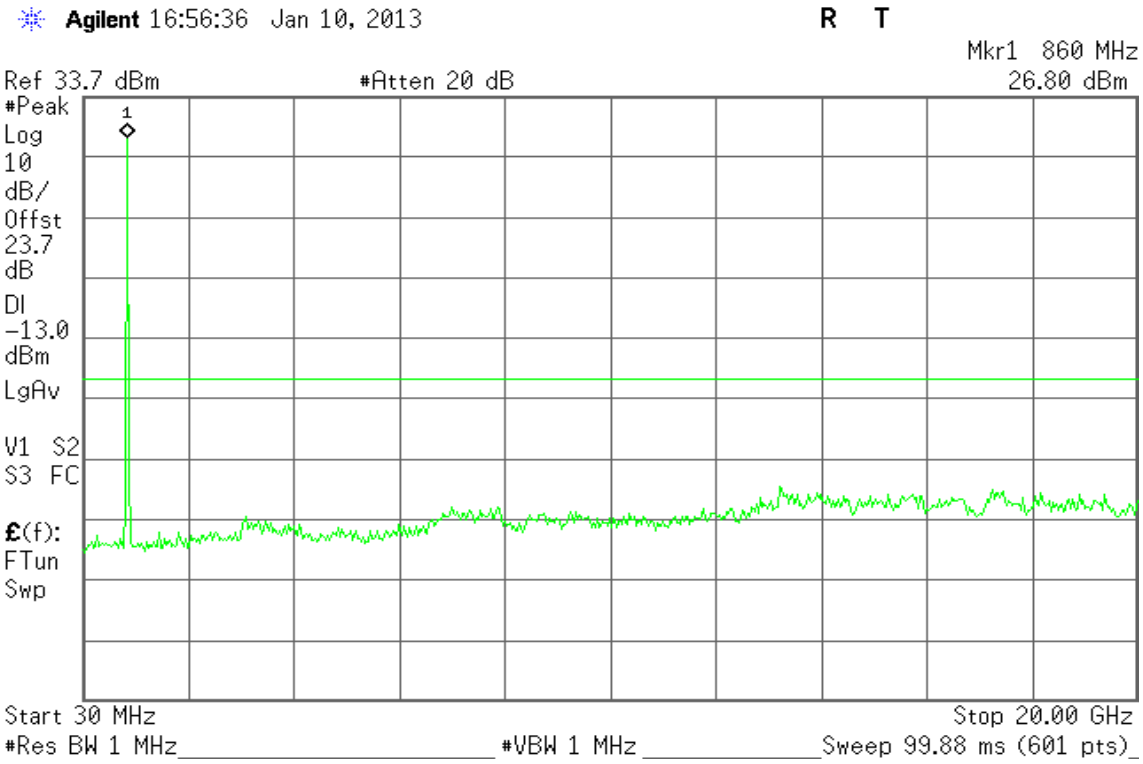


Figure 15-3: Out of Band emission at antenna terminals –EDGE CH High



EDGE 1900

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

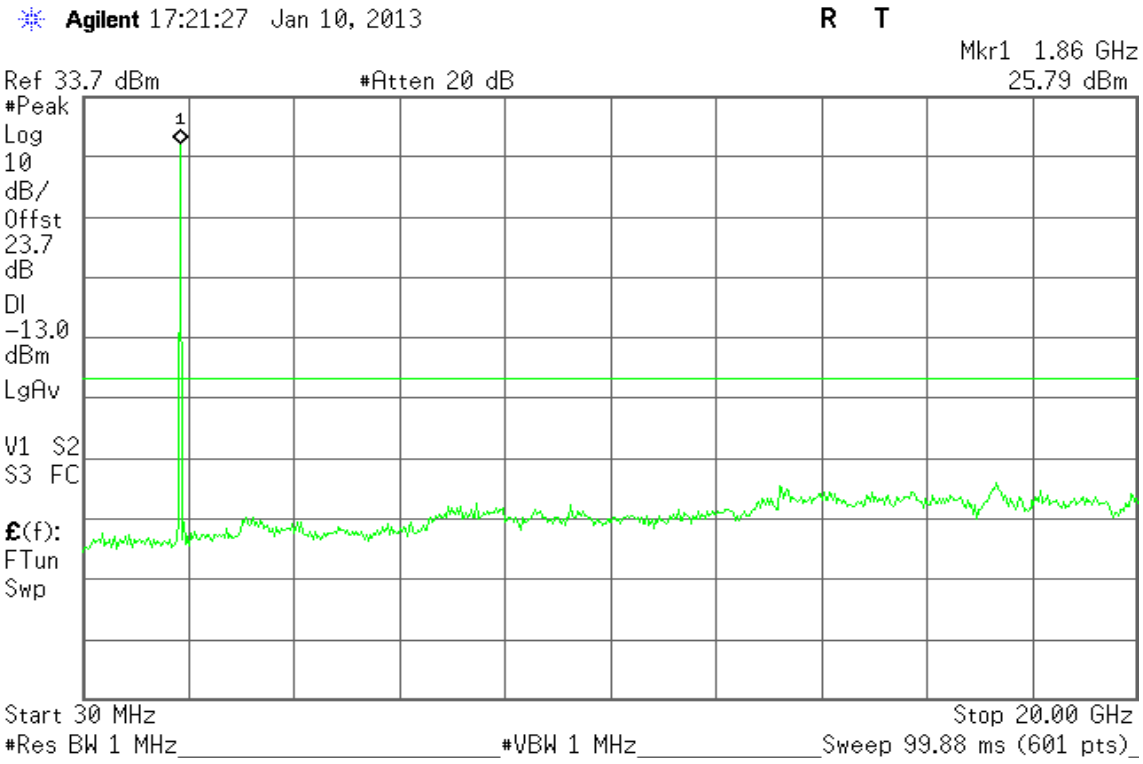


Figure 16-2: Out of Band emission at antenna terminals –EDGE CH Mid

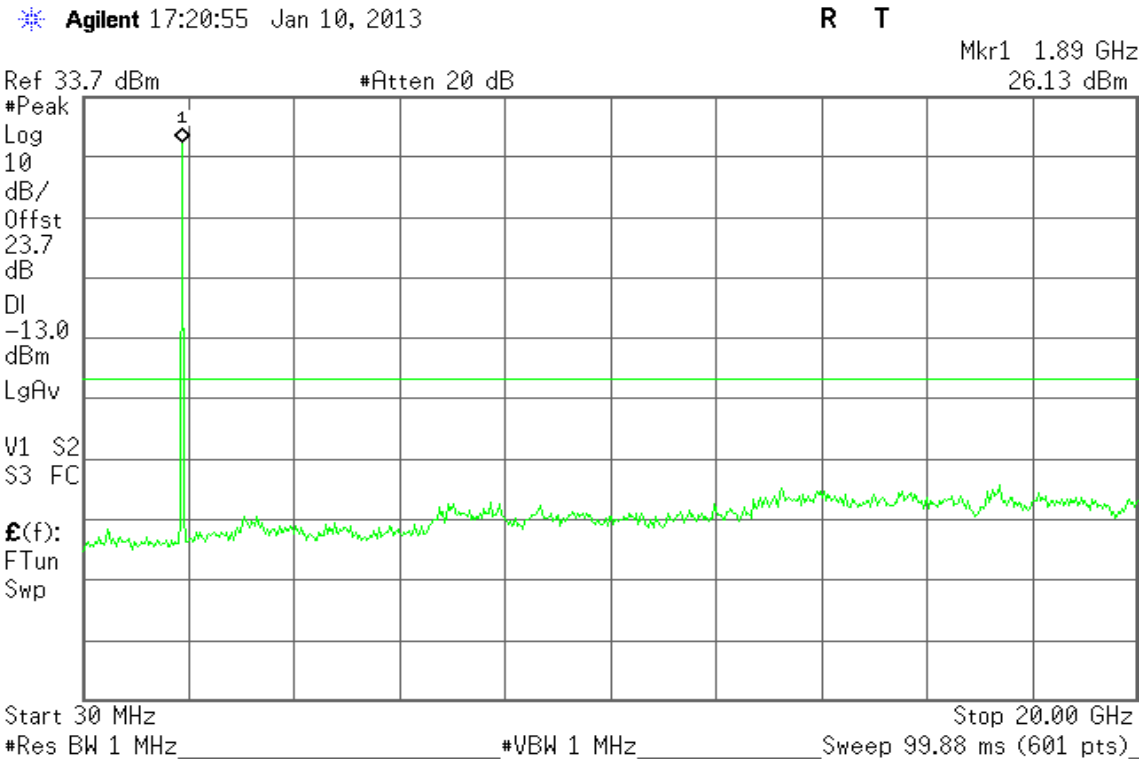
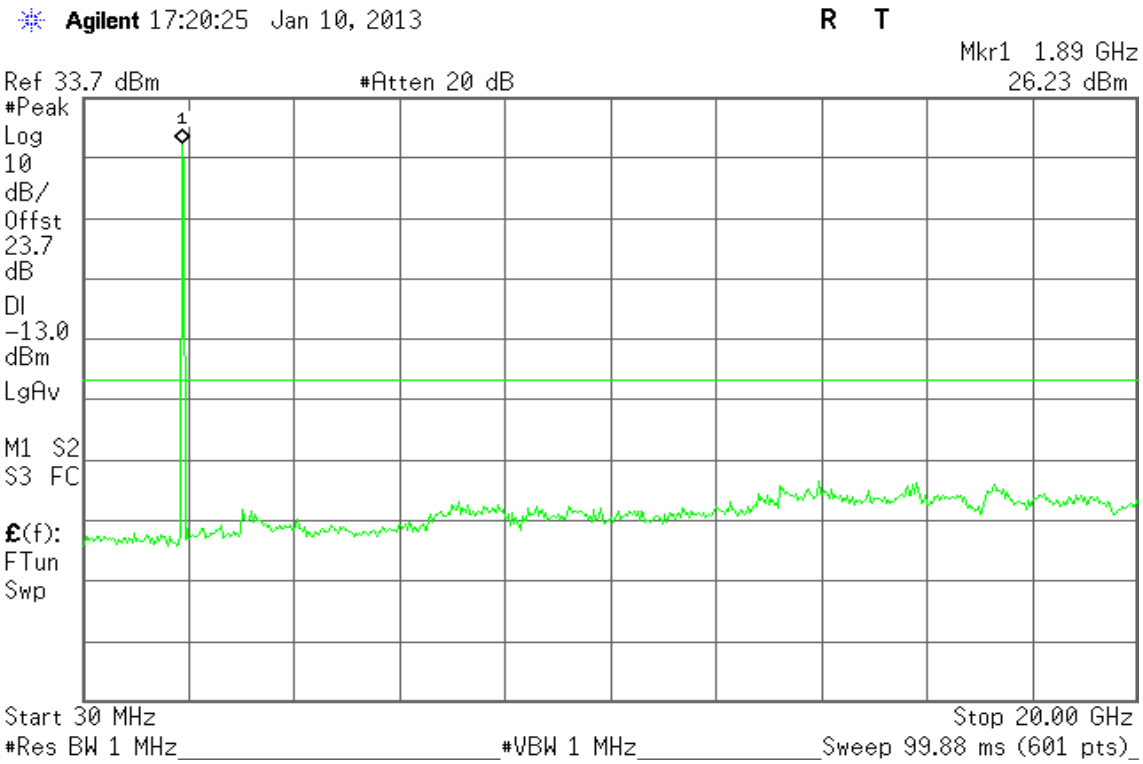


Figure 16-3: Out of Band emission at antenna terminals –EDGE CH High



EDGE 850

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

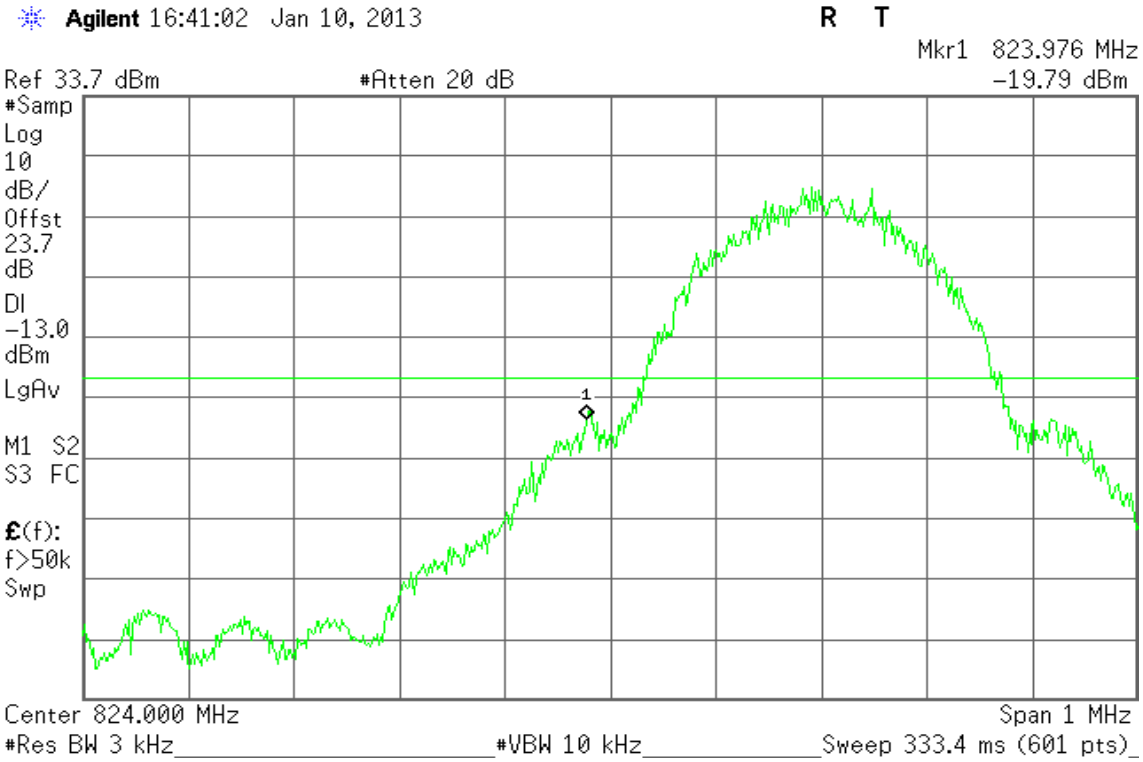
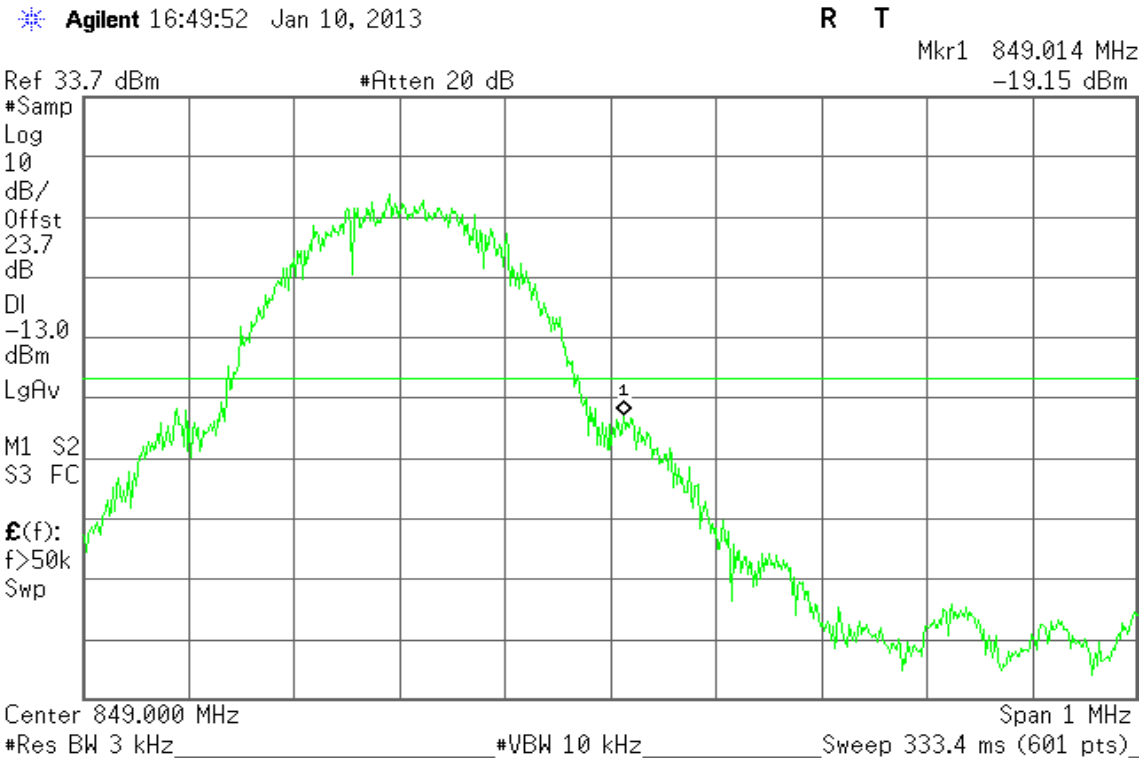


Figure 17-2: Band Edge emissions – EDGE CH High



EDGE 1900

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

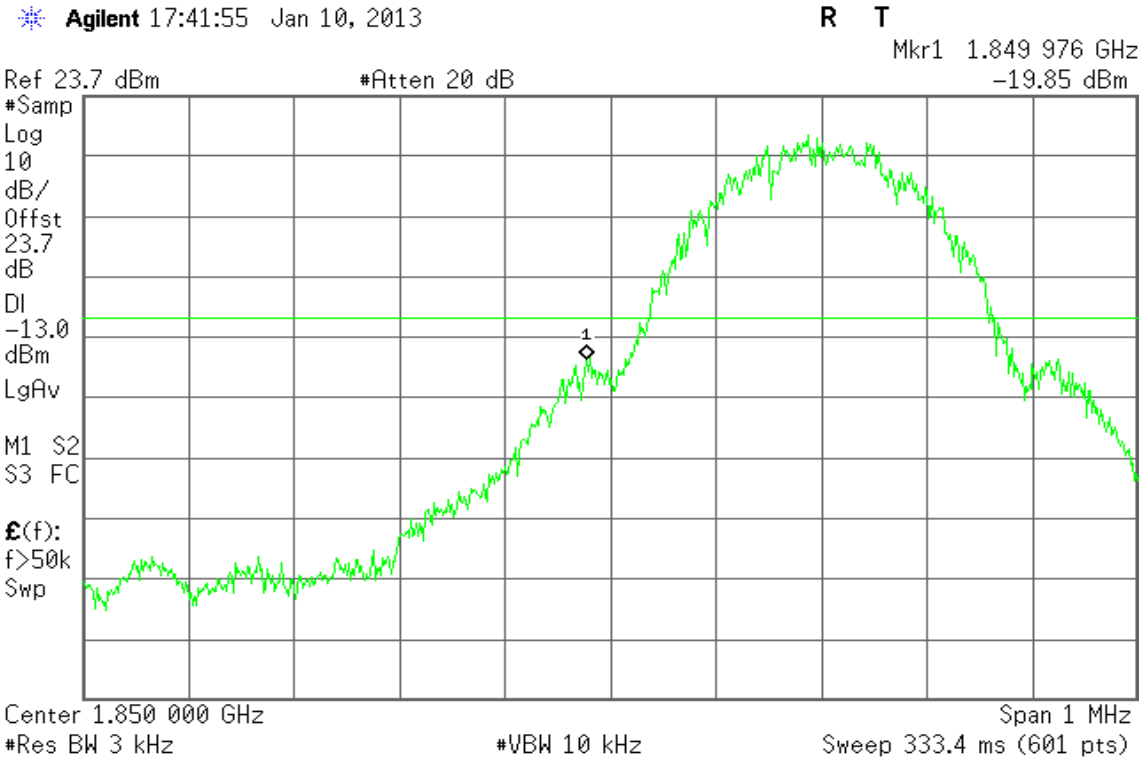
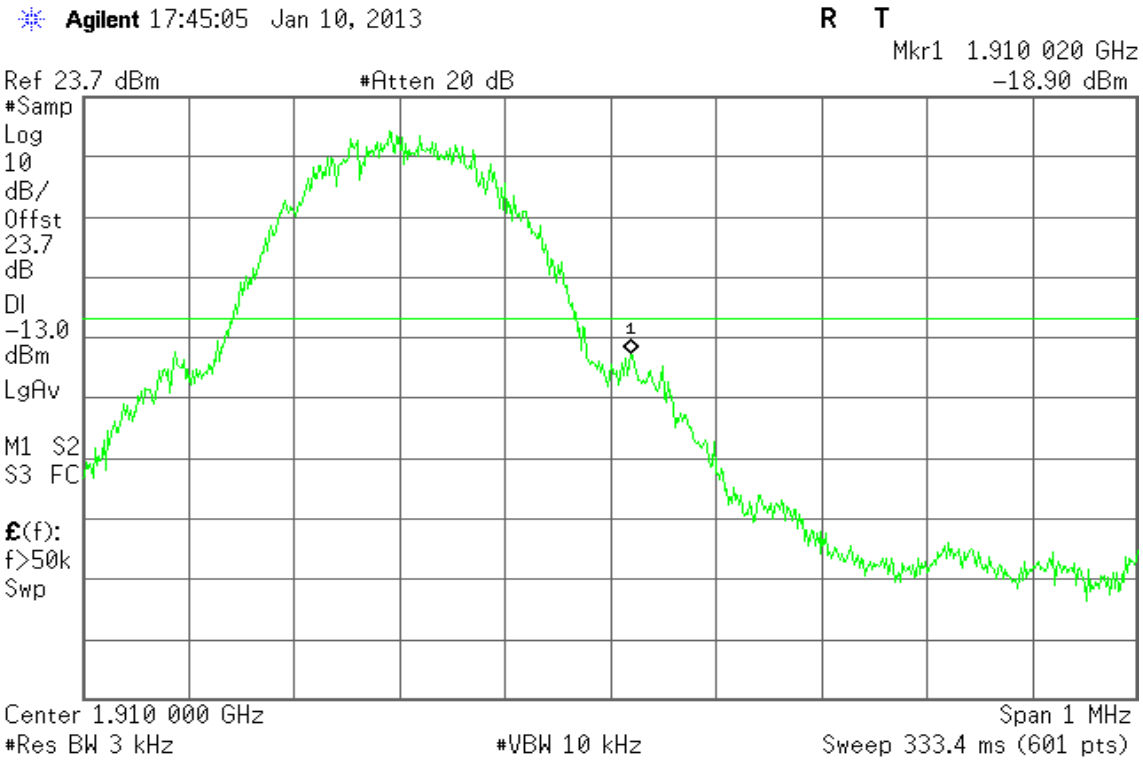


Figure 18-2: Band Edge emissions – EDGE CH High



WCDMA Band II

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

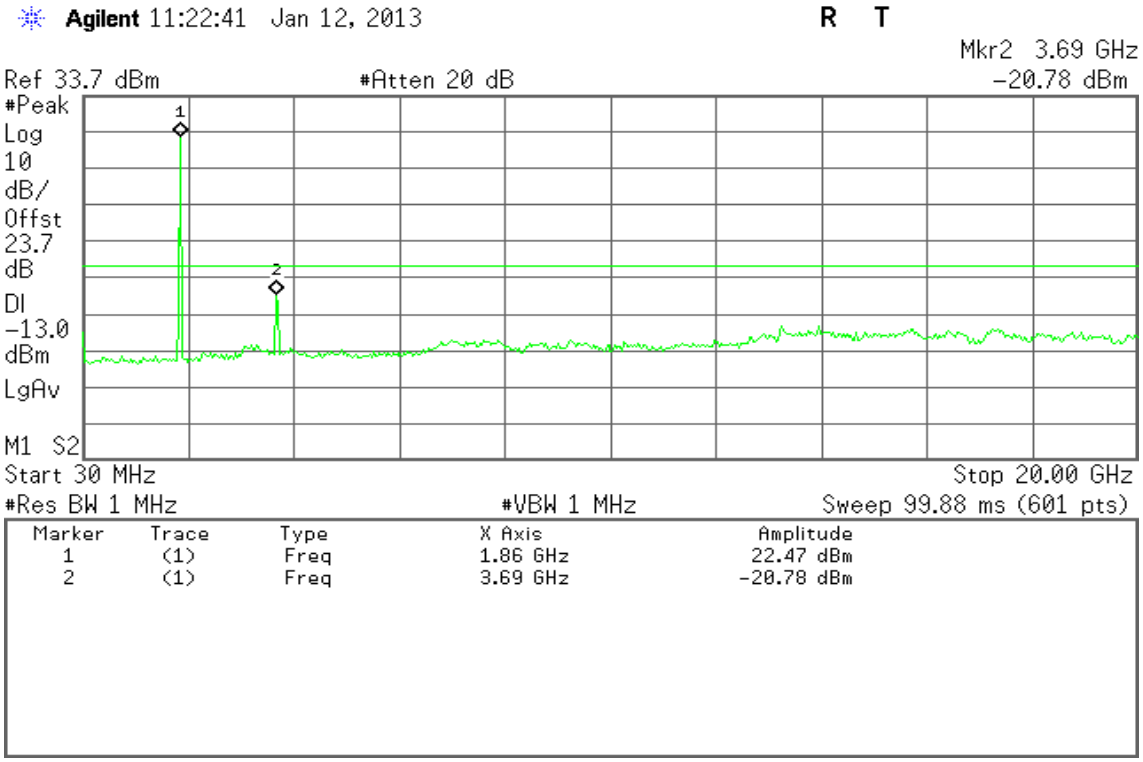


Figure 19-2: Out of Band emission at antenna terminals – WCDMA CH Mid

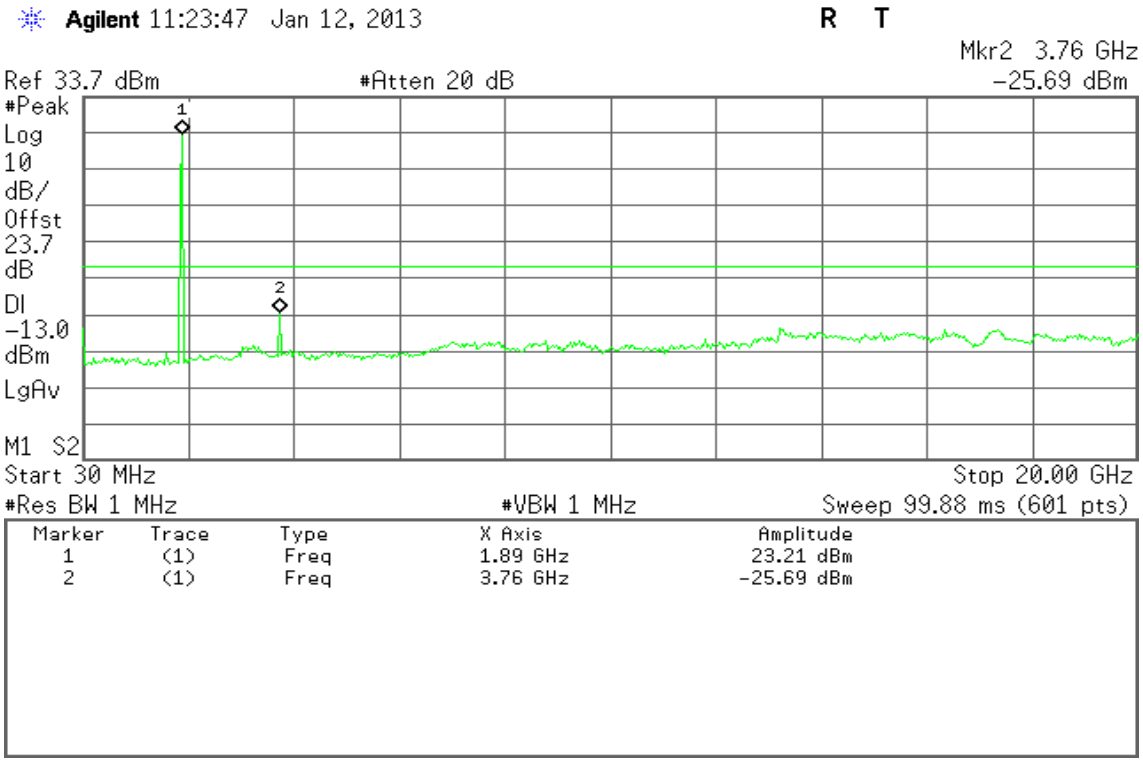
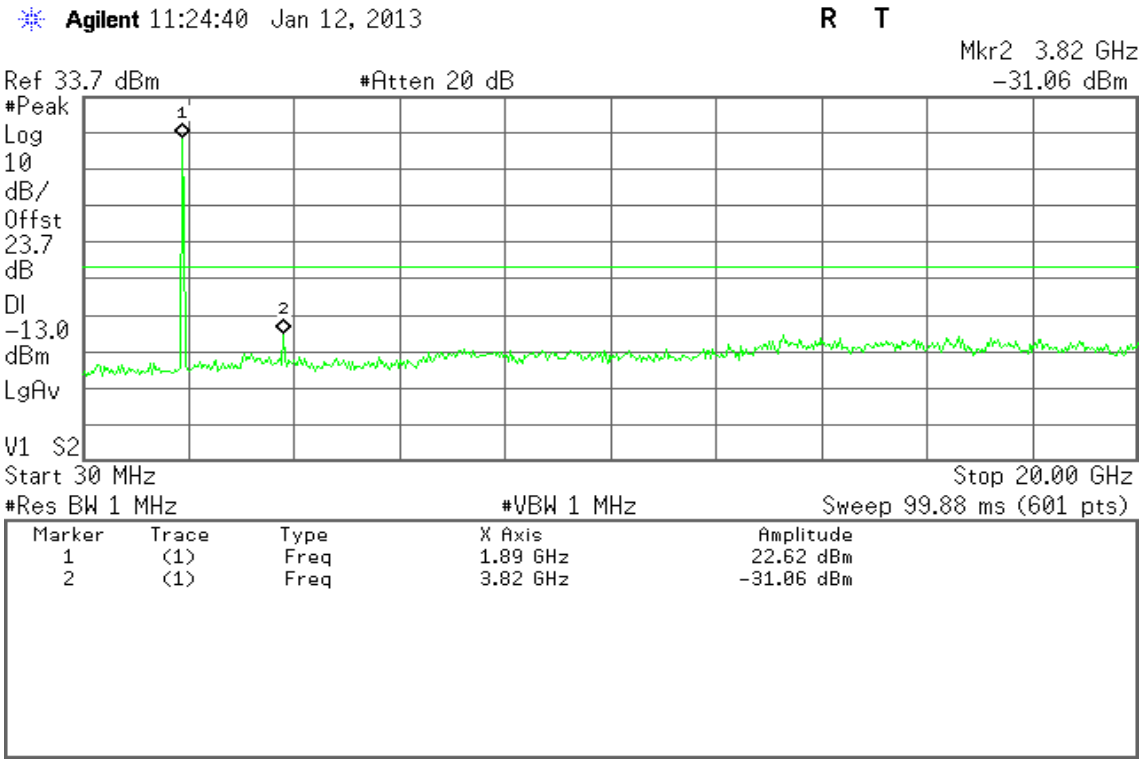


Figure 19-3: Out of Band emission at antenna terminals – WCDMA CH High



WCDMA Band V

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

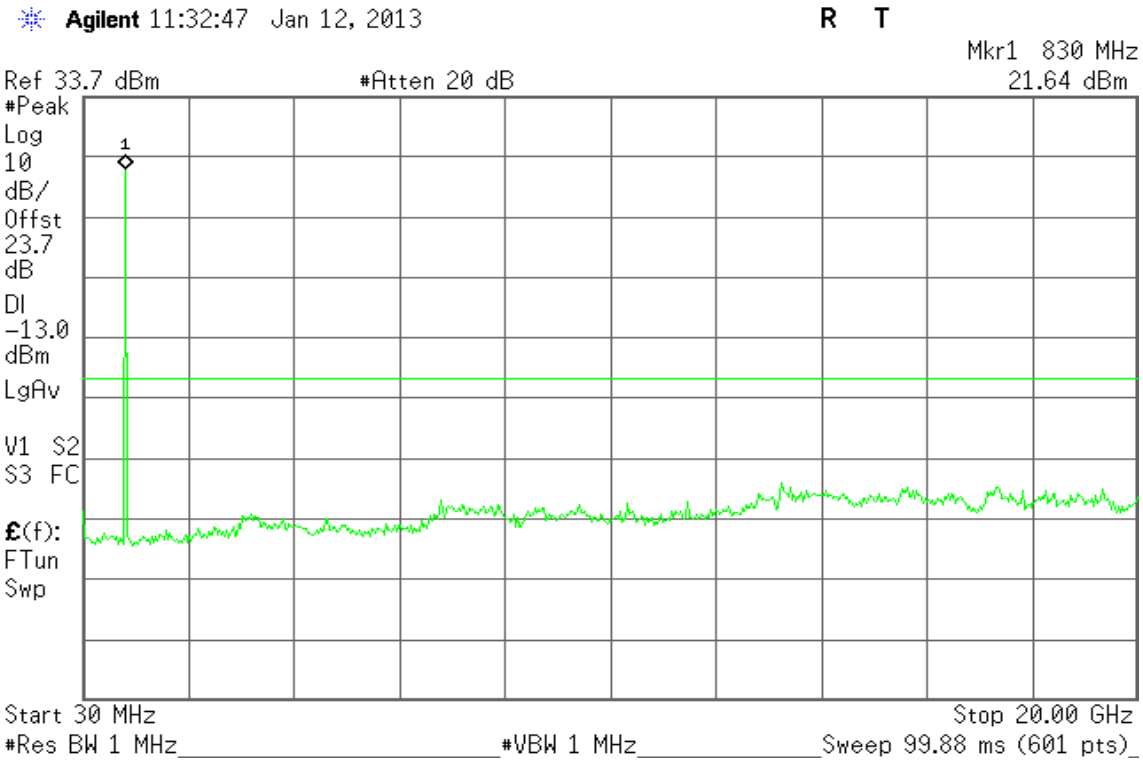


Figure 20-2: Out of Band emission at antenna terminals – WCDMA CH Mid

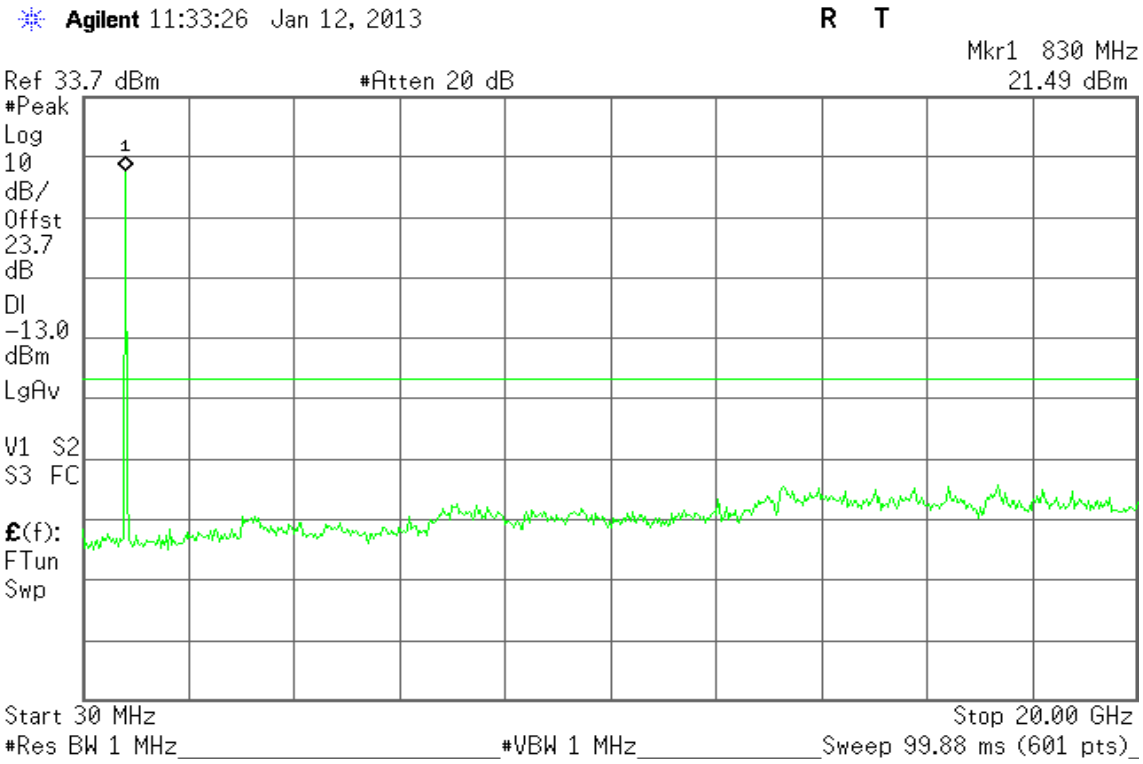
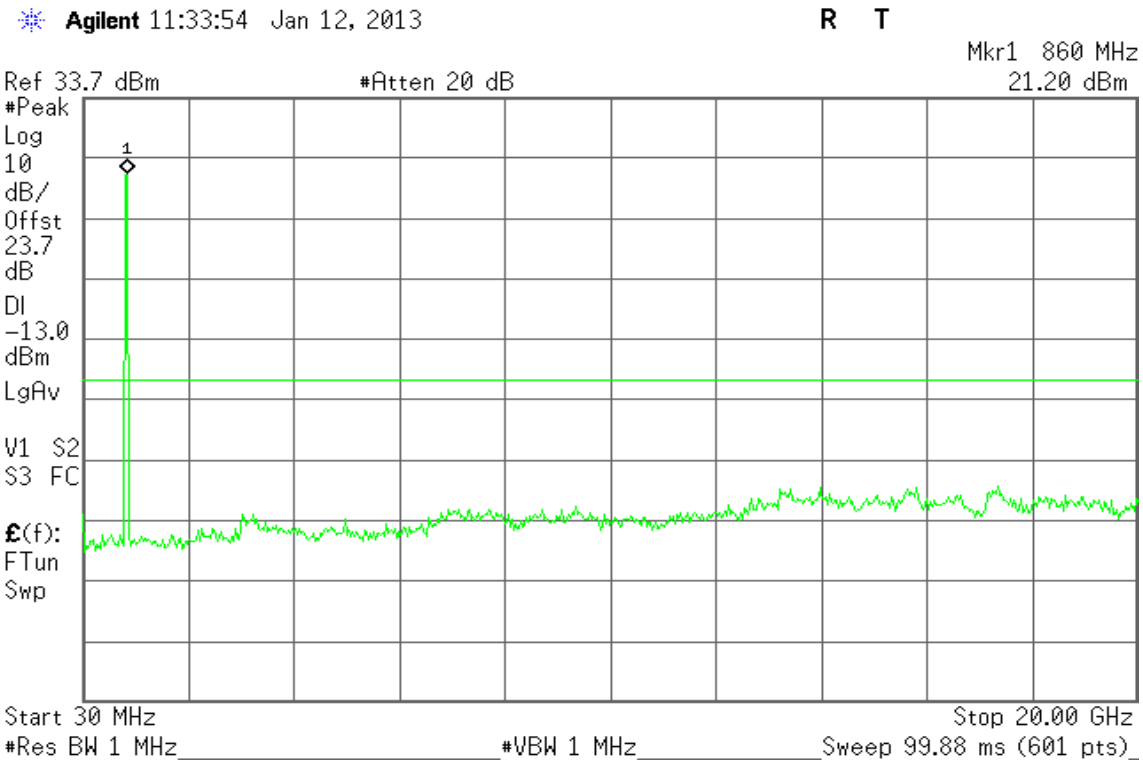


Figure 20-3: Out of Band emission at antenna terminals – WCDMA CH High



WCDMA Band II

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

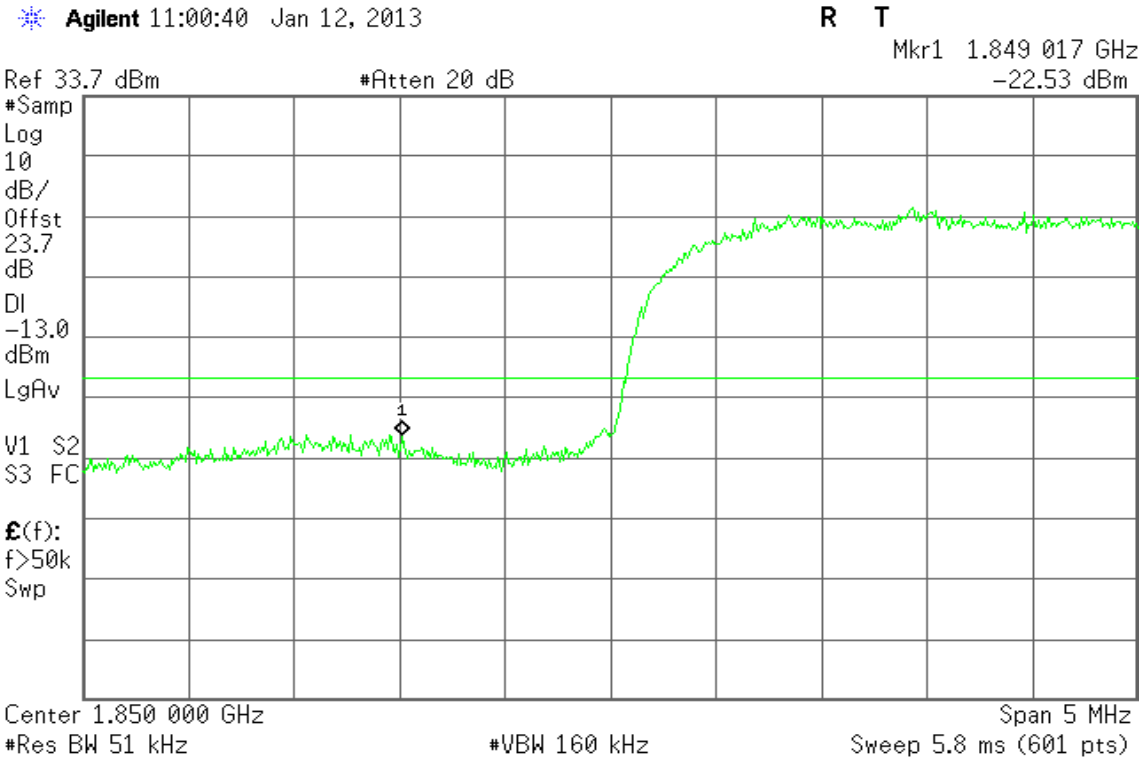
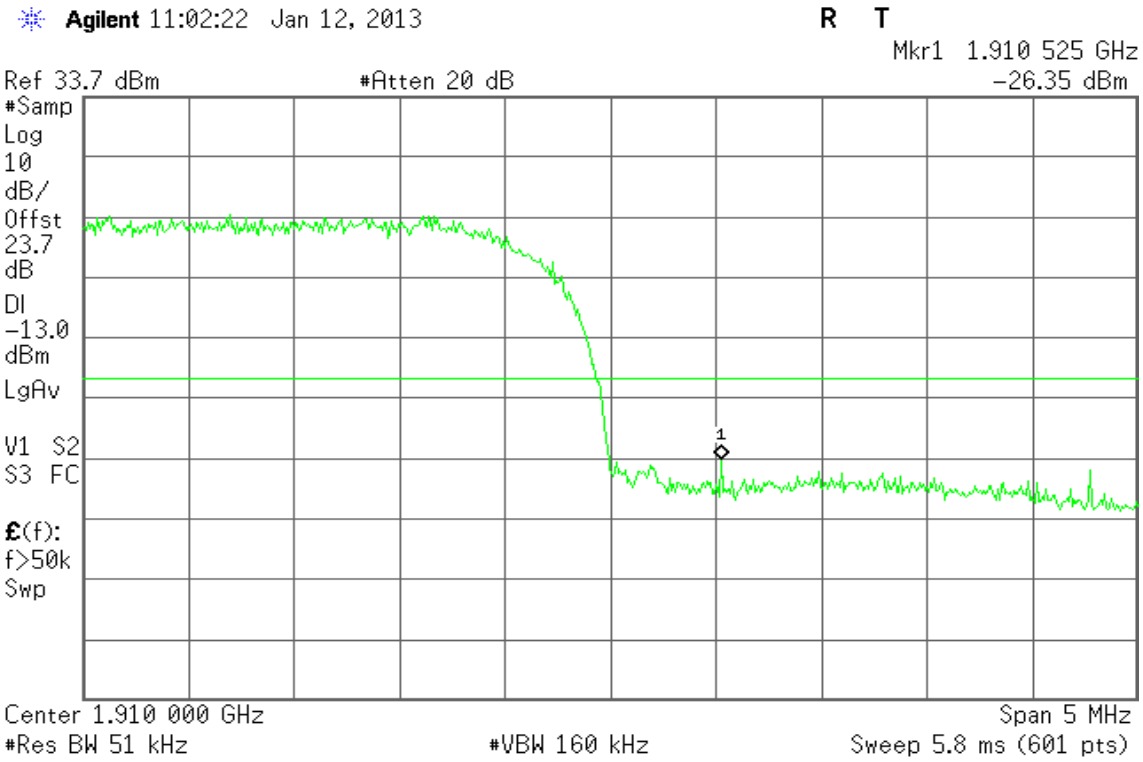


Figure 21-2: Band Edge emissions –WCDMA CH High



WCDMA Band V

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

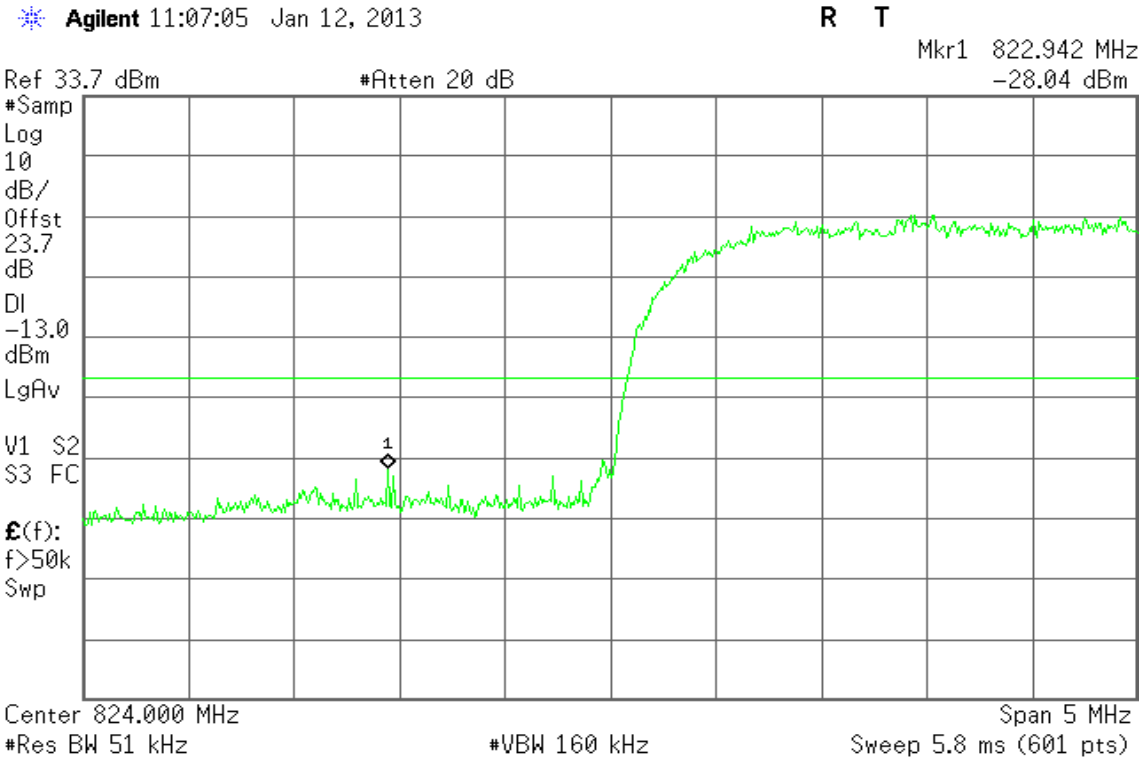
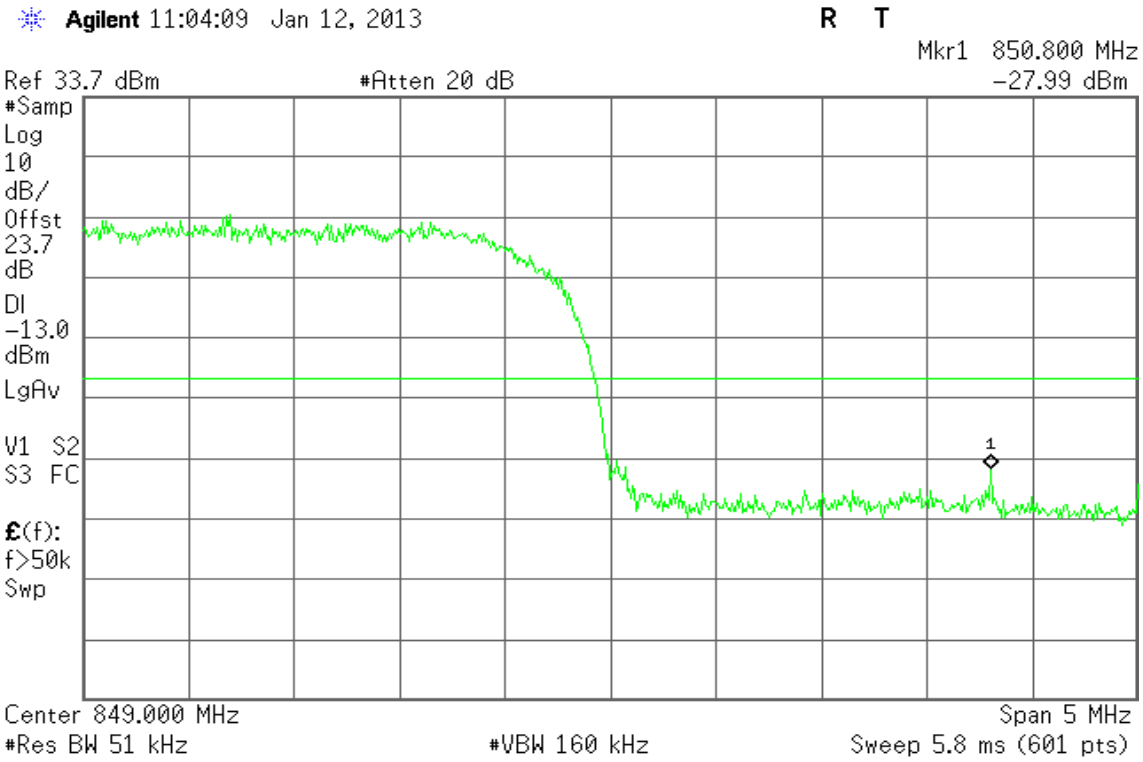


Figure 22-2: Band Edge emissions –WCDMA CH High



WCDMA / HSDPA Band II

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

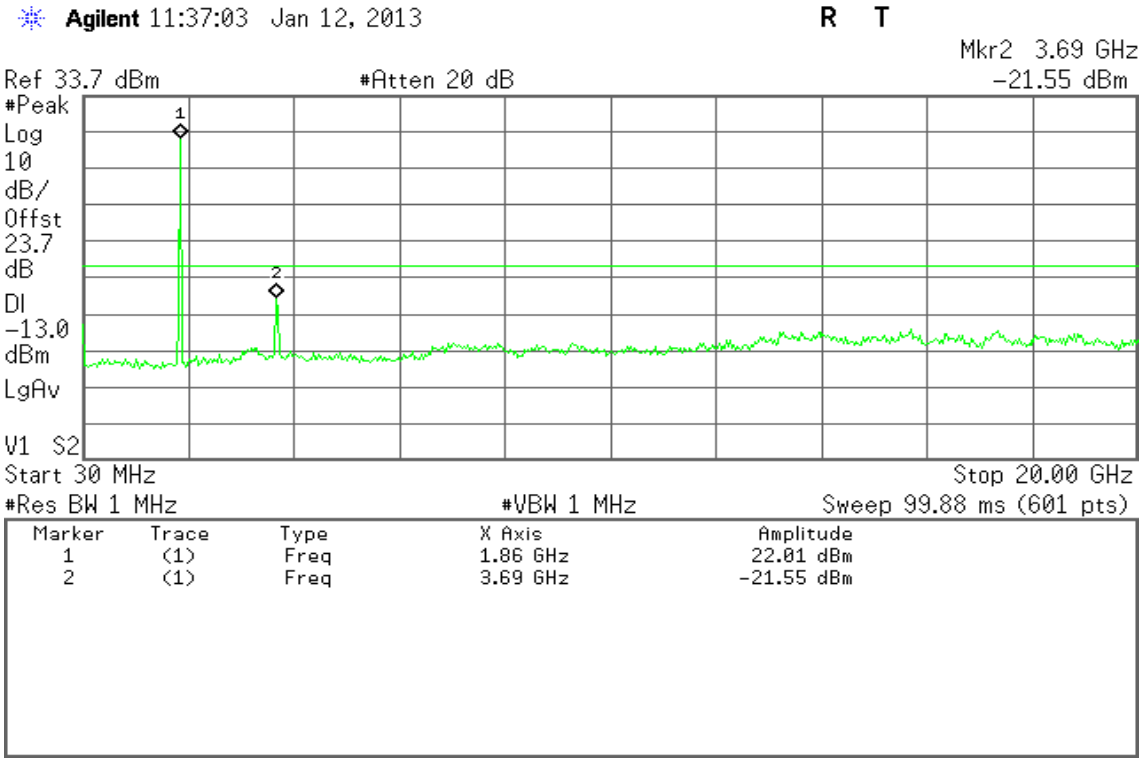


Figure 23-2: Out of Band emission at antenna terminals – HSDPA CH Mid

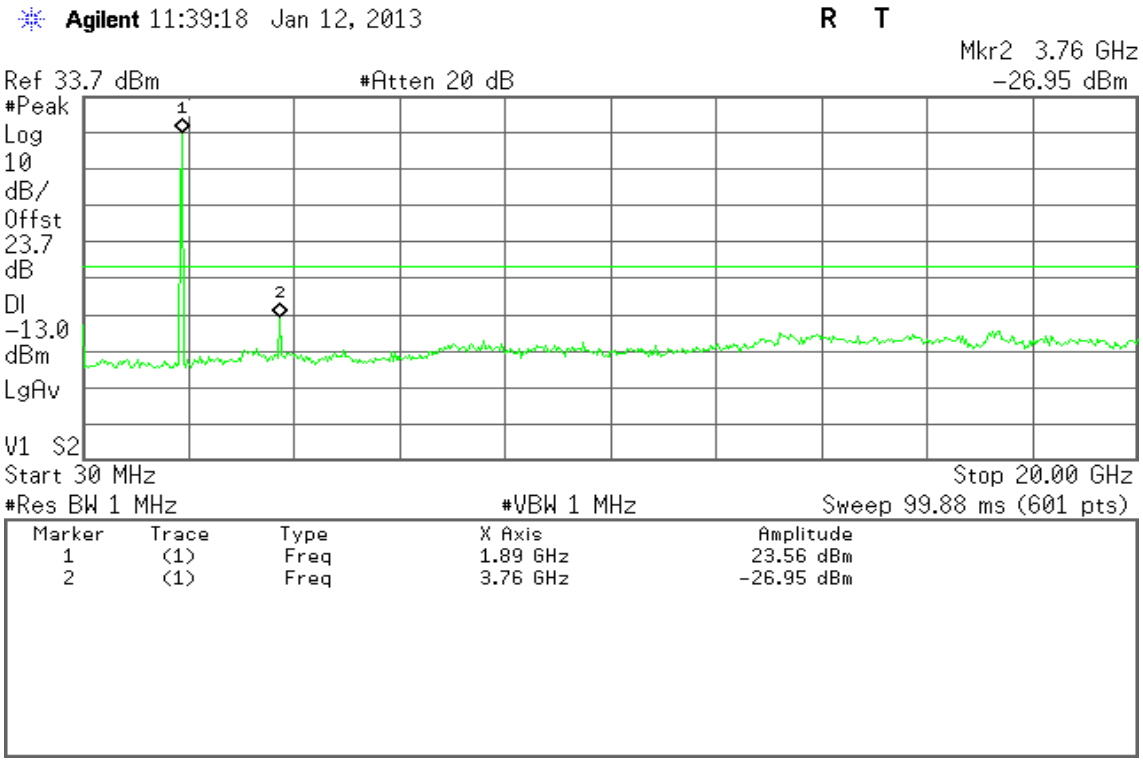
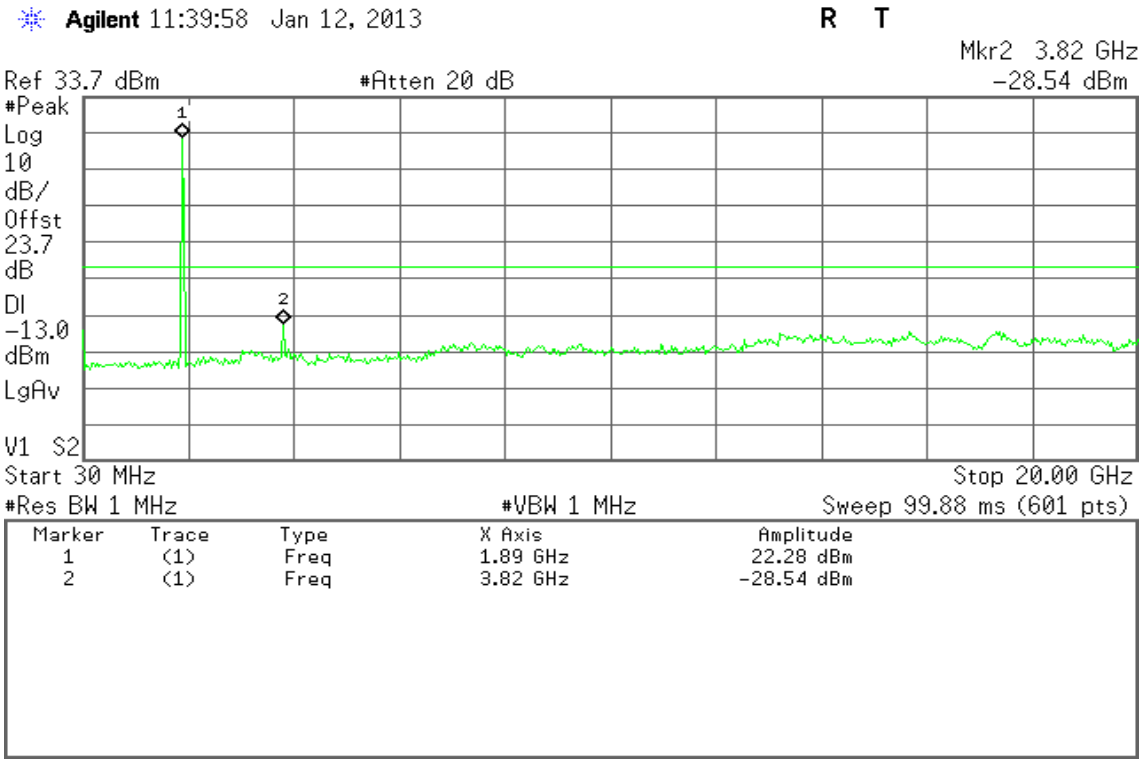


Figure 23-3: Out of Band emission at antenna terminals – HSDPA CH High



WCDMA / HSDPA Band V

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

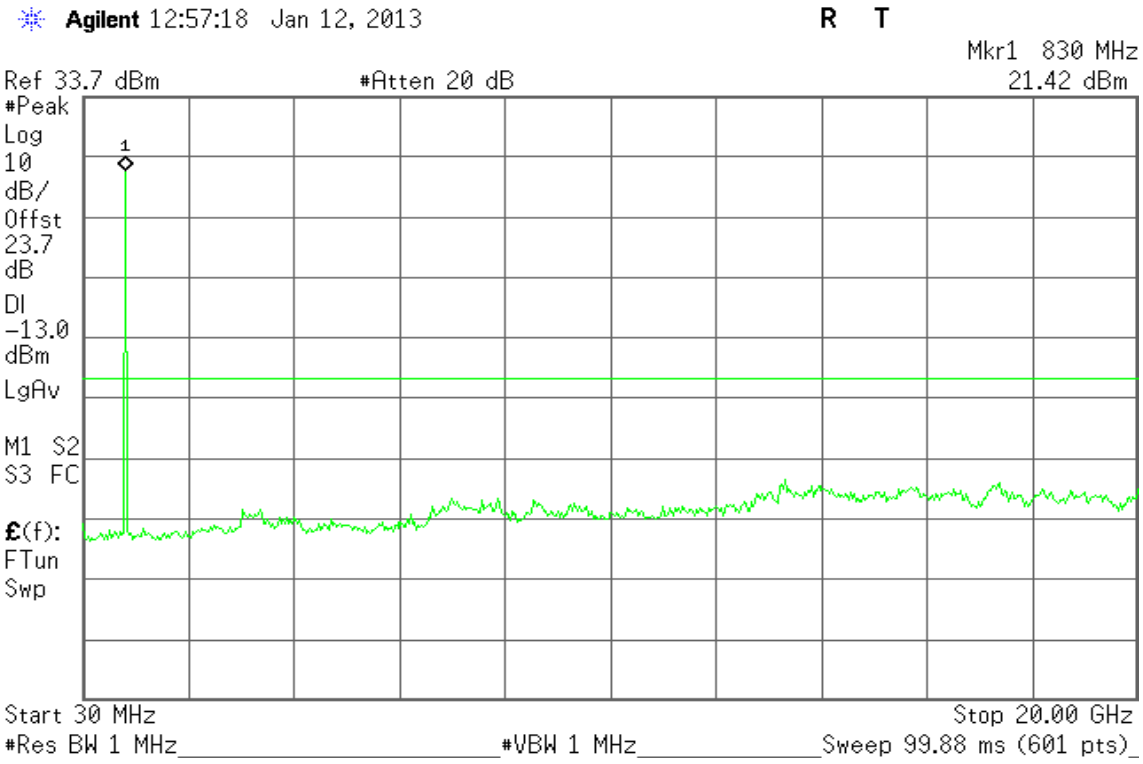


Figure 24-2: Out of Band emission at antenna terminals – HSDPA CH Mid

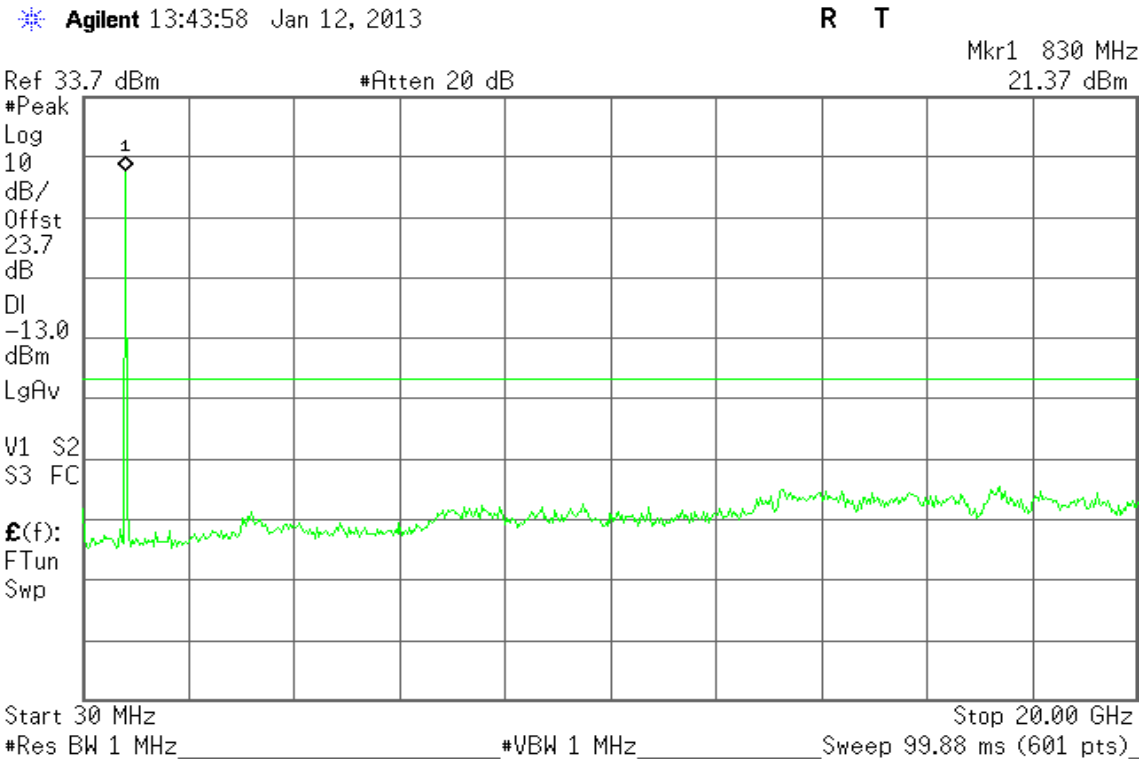
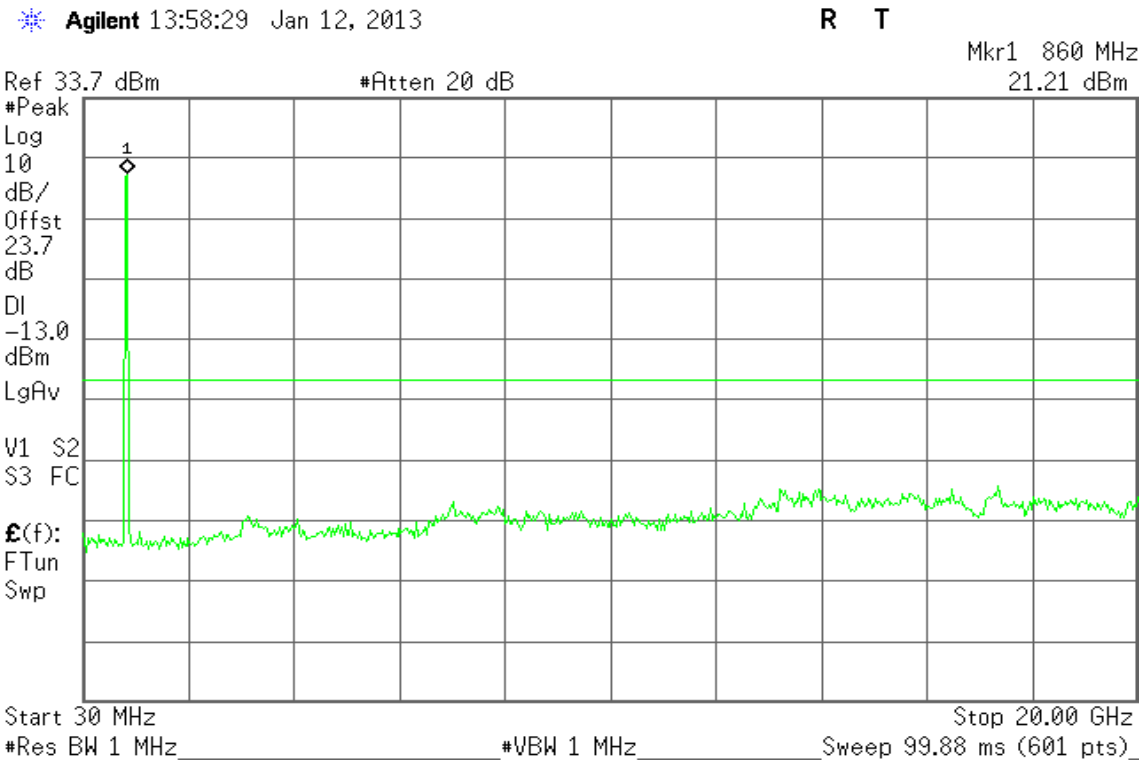


Figure 24-3: Out of Band emission at antenna terminals – HSDPA CH High



WCDMA / HSDPA Band II

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

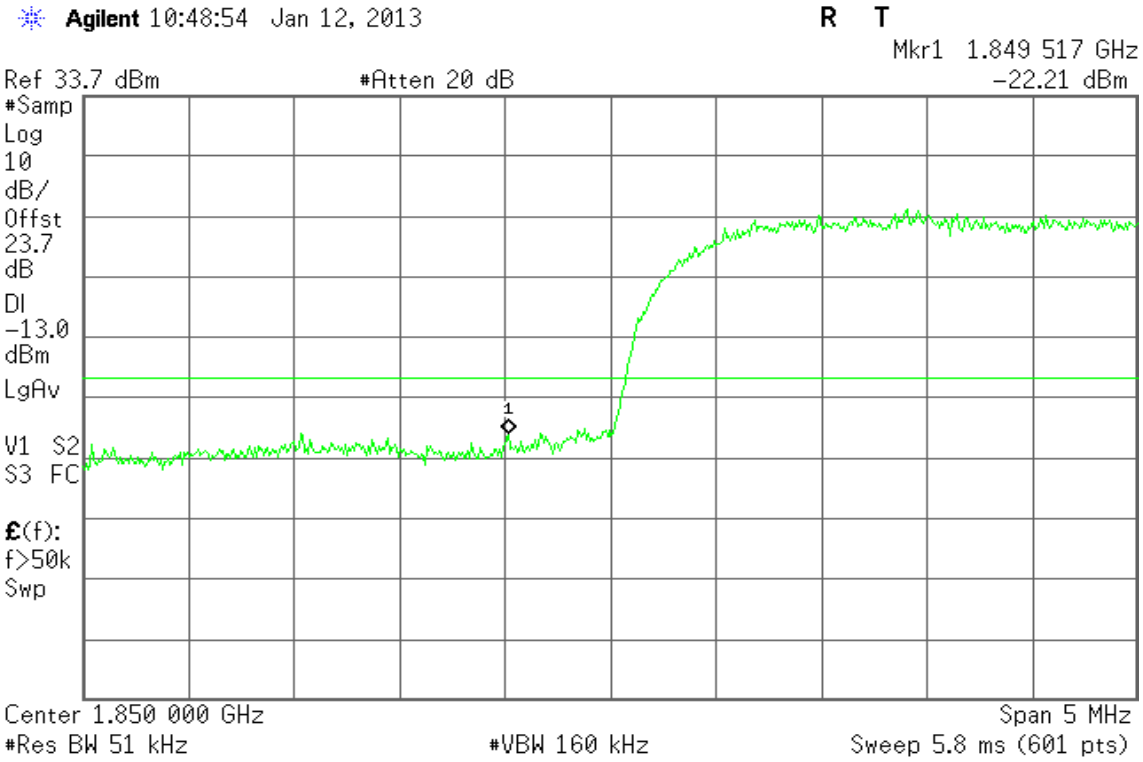
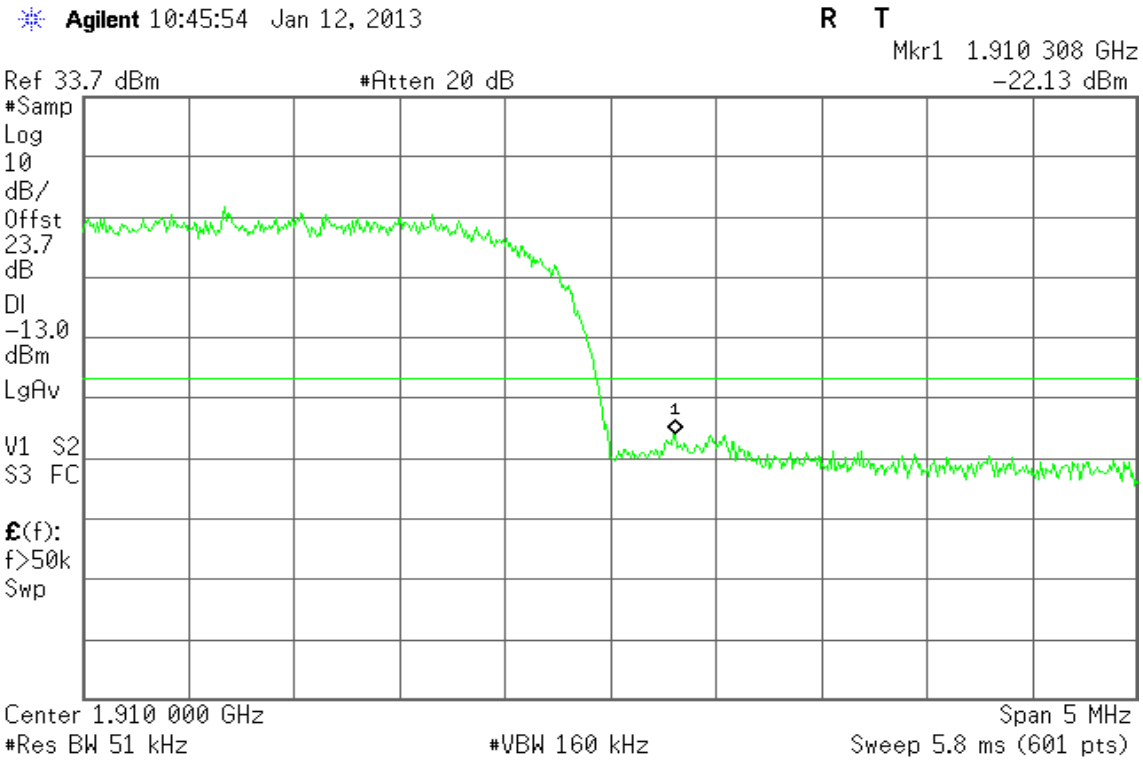


Figure 25-2: Band Edge emissions – HSDPA CH High



WCDMA / HSDPA Band V

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

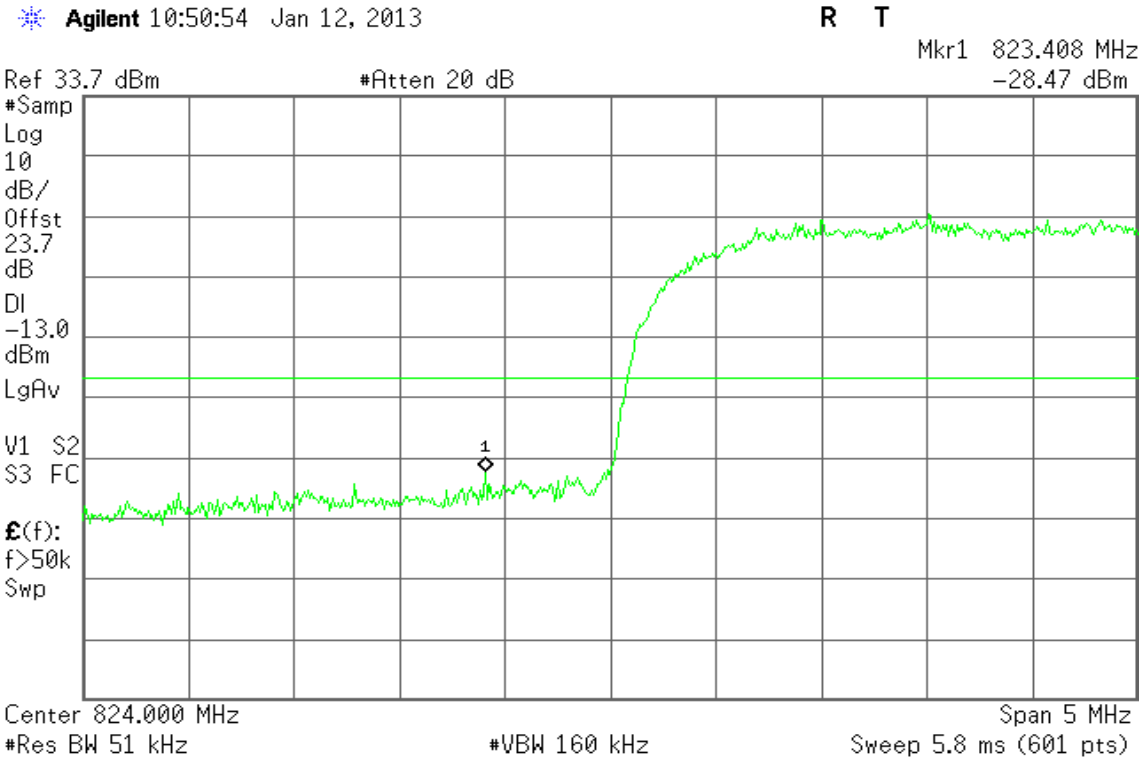
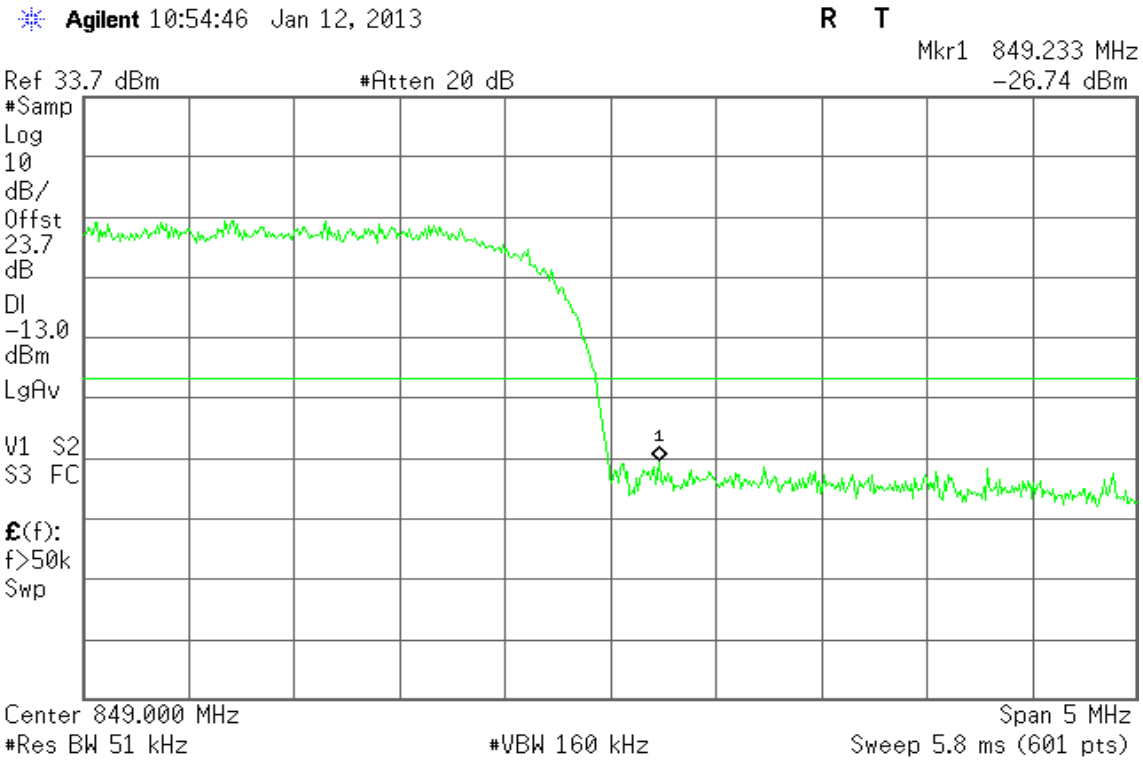


Figure 26-2: Band Edge emissions – HSDPA CH High



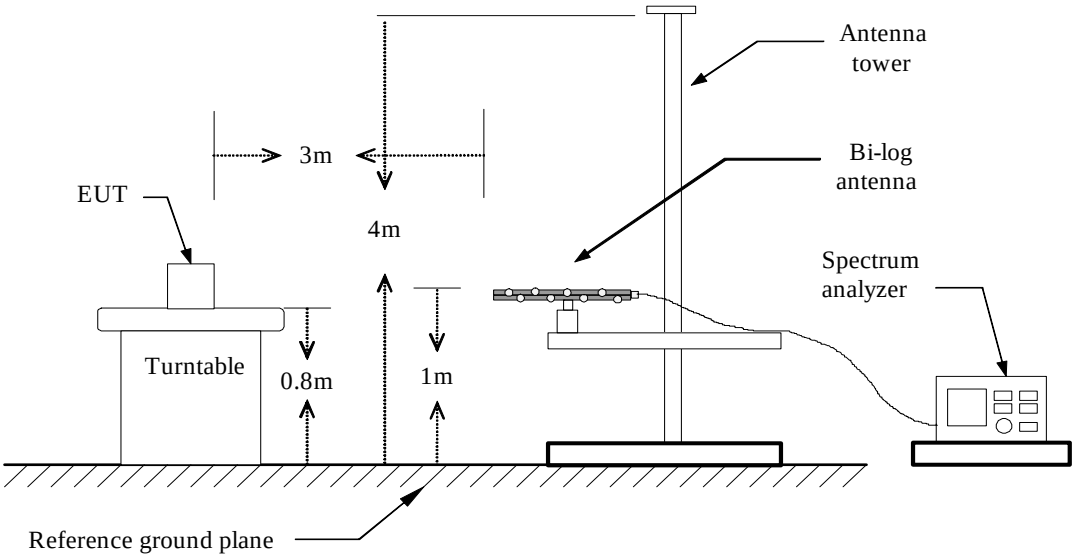
7.6FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

LIMIT

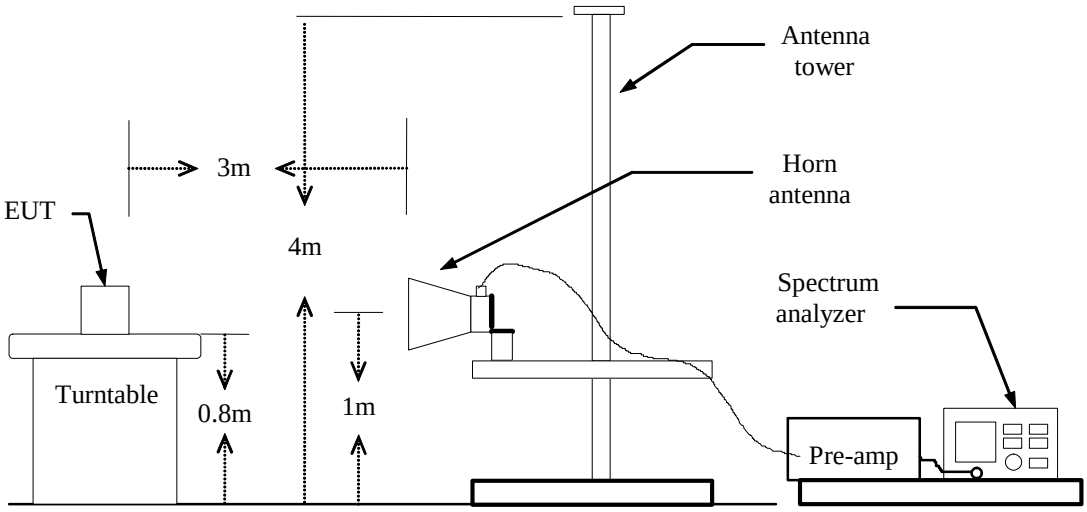
According to FCC §2.1053

Test Configuration

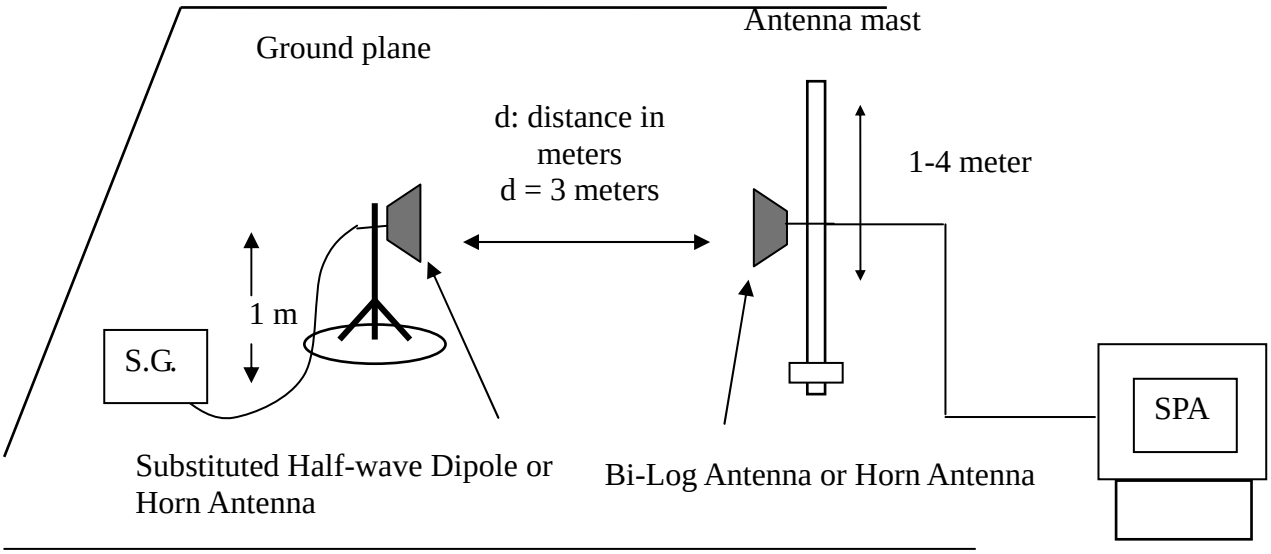
Below 1 GHz



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: GSM 850 / TX / CH 128 **Test Date:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
74.6200	-68.25	1	-1.11	-70.36	-13.00	-57.36	V
188.1100	-72.46	1.62	3.92	-70.16	-13.00	-57.16	V
275.4100	-79.32	1.99	5.21	-76.10	-13.00	-63.10	V
388.9000	-74.2	2.32	6	-70.52	-13.00	-57.52	V
441.2800	-74.39	2.54	5.87	-71.06	-13.00	-58.06	V
480.0800	-75.55	2.64	5.54	-72.65	-13.00	-59.65	V
74.6200	-67.48	1	-1.11	-69.59	-13.00	-56.59	H
170.6500	-71.54	1.57	2.59	-70.52	-13.00	-57.52	H
316.1500	-69.95	2.16	5.73	-66.38	-13.00	-53.38	H
385.0200	-71.81	2.31	5.99	-68.13	-13.00	-55.13	H
480.0800	-73.48	2.64	5.54	-70.58	-13.00	-57.58	H
633.3400	-78.82	2.99	6.18	-75.63	-13.00	-62.63	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: GSM 850 / TX / CH 190 **Test Date:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
74.6200	-70.77	1	-1.11	-72.88	-13.00	-59.88	V
182.2900	-74.28	1.61	3.7	-72.19	-13.00	-59.19	V
224.9700	-82.85	1.78	5.36	-79.27	-13.00	-66.27	V
381.1400	-78.82	2.31	5.98	-75.15	-13.00	-62.15	V
441.2800	-78.7	2.54	5.87	-75.37	-13.00	-62.37	V
480.0800	-79.15	2.64	5.54	-76.25	-13.00	-63.25	V
74.6200	-70.45	1	-1.11	-72.56	-13.00	-59.56	H
120.2100	-68.46	1.27	-2.06	-71.79	-13.00	-58.79	H
177.4400	-73.06	1.6	3.31	-71.35	-13.00	-58.35	H
378.2300	-73.35	2.31	5.96	-69.70	-13.00	-56.70	H
441.2800	-73.16	2.54	5.87	-69.83	-13.00	-56.83	H
480.0800	-73.62	2.64	5.54	-70.72	-13.00	-57.72	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: GSM 850 / TX / CH 251 **Test Date:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
74.6200	-70.17	1	-1.11	-72.28	-13.00	-59.28	V
187.1400	-74.79	1.62	3.89	-72.52	-13.00	-59.52	V
279.2900	-83.55	2	5.29	-80.26	-13.00	-67.26	V
347.1900	-78.15	2.21	5.8	-74.56	-13.00	-61.56	V
441.2800	-77.71	2.54	5.87	-74.38	-13.00	-61.38	V
480.0800	-79.67	2.64	5.54	-76.77	-13.00	-63.77	V
120.2100	-66.74	1.27	-2.06	-70.07	-13.00	-57.07	H
177.4400	-72.37	1.6	3.31	-70.66	-13.00	-57.66	H
382.1100	-70.54	2.31	5.99	-66.86	-13.00	-53.86	H
441.2800	-72.1	2.54	5.87	-68.77	-13.00	-55.77	H
480.0800	-74.48	2.64	5.54	-71.58	-13.00	-58.58	H
729.3700	-78.04	3.18	6.4	-74.82	-13.00	-61.82	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 128 **Test Date:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
73.6500	-69.36	0.99	-1.28	-71.63	-13.00	-58.63	V
188.1100	-75.2	1.62	3.92	-72.90	-13.00	-59.90	V
280.2600	-83.05	2	5.31	-79.74	-13.00	-66.74	V
382.1100	-76.37	2.31	5.99	-72.69	-13.00	-59.69	V
441.2800	-75.92	2.54	5.87	-72.59	-13.00	-59.59	V
480.0800	-77.37	2.64	5.54	-74.47	-13.00	-61.47	V
118.2700	-66.93	1.26	-2.03	-70.22	-13.00	-57.22	H
170.6500	-72.34	1.57	2.59	-71.32	-13.00	-58.32	H
258.9200	-77.67	1.9	5.6	-73.97	-13.00	-60.97	H
385.0200	-72.3	2.31	5.99	-68.62	-13.00	-55.62	H
441.2800	-73.09	2.54	5.87	-69.76	-13.00	-56.76	H
480.0800	-73.19	2.64	5.54	-70.29	-13.00	-57.29	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
74.6200	-71.22	1	-1.11	-73.33	-13.00	-60.33	V
180.3500	-74.08	1.61	3.62	-72.07	-13.00	-59.07	V
288.0200	-84.13	2.02	5.38	-80.77	-13.00	-67.77	V
388.9000	-78.5	2.32	6	-74.82	-13.00	-61.82	V
441.2800	-78.55	2.54	5.87	-75.22	-13.00	-62.22	V
480.0800	-79.15	2.64	5.54	-76.25	-13.00	-63.25	V
74.6200	-70	1	-1.11	-72.11	-13.00	-59.11	H
120.2100	-69.09	1.27	-2.06	-72.42	-13.00	-59.42	H
176.4700	-73.63	1.59	3.21	-72.01	-13.00	-59.01	H
369.5000	-72.63	2.3	5.8	-69.13	-13.00	-56.13	H
441.2800	-73.28	2.54	5.87	-69.95	-13.00	-56.95	H
480.0800	-74.42	2.64	5.54	-71.52	-13.00	-58.52	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
74.6200	-70.73	1	-1.11	-72.84	-13.00	-59.84	V
180.3500	-74.06	1.61	3.62	-72.05	-13.00	-59.05	V
382.1100	-77.34	2.31	5.99	-73.66	-13.00	-60.66	V
441.2800	-77.11	2.54	5.87	-73.78	-13.00	-60.78	V
480.0800	-79.17	2.64	5.54	-76.27	-13.00	-63.27	V
644.0100	-83.29	3.02	6.17	-80.14	-13.00	-67.14	V
74.6200	-70.52	1	-1.11	-72.63	-13.00	-59.63	H
179.3800	-73.12	1.61	3.52	-71.21	-13.00	-58.21	H
373.3800	-71.23	2.3	5.87	-67.66	-13.00	-54.66	H
441.2800	-72.58	2.54	5.87	-69.25	-13.00	-56.25	H
480.0800	-74.28	2.64	5.54	-71.38	-13.00	-58.38	H
518.8800	-78.06	2.7	6.09	-74.67	-13.00	-61.67	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: GSM 1900 / TX / CH 512 **Test Date:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
74.6200	-70.83	1	-1.11	-72.94	-13.00	-59.94	V
191.0200	-75.96	1.62	3.89	-73.69	-13.00	-60.69	V
224.9700	-78.92	1.78	5.36	-75.34	-13.00	-62.34	V
364.6500	-81.57	2.28	5.75	-78.10	-13.00	-65.10	V
441.2800	-78.85	2.54	5.87	-75.52	-13.00	-62.52	V
480.0800	-81.31	2.64	5.54	-78.41	-13.00	-65.41	V
120.2100	-67.61	1.27	-2.06	-70.94	-13.00	-57.94	H
173.5600	-72.65	1.58	2.9	-71.33	-13.00	-58.33	H
364.6500	-75.33	2.28	5.75	-71.86	-13.00	-58.86	H
441.2800	-74.46	2.54	5.87	-71.13	-13.00	-58.13	H
480.0800	-74.14	2.64	5.54	-71.24	-13.00	-58.24	H
614.9100	-77.82	2.94	6.2	-74.56	-13.00	-61.56	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: GSM 1900 / TX / CH 661 **Test Date:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
75.5900	-70.35	1.01	-0.94	-72.30	-13.00	-59.30	V
188.1100	-76.82	1.62	3.92	-74.52	-13.00	-61.52	V
218.1800	-82.16	1.75	5.33	-78.58	-13.00	-65.58	V
362.7100	-76.62	2.28	5.73	-73.17	-13.00	-60.17	V
441.2800	-79.28	2.54	5.87	-75.95	-13.00	-62.95	V
480.0800	-80.67	2.64	5.54	-77.77	-13.00	-64.77	V
75.5900	-71.71	1.01	-0.94	-73.66	-13.00	-60.66	H
121.1800	-69.84	1.28	-2	-73.12	-13.00	-60.12	H
175.5000	-73.99	1.59	3.1	-72.48	-13.00	-59.48	H
344.2800	-72.45	2.19	5.8	-68.84	-13.00	-55.84	H
441.2800	-74.1	2.54	5.87	-70.77	-13.00	-57.77	H
480.0800	-73.29	2.64	5.54	-70.39	-13.00	-57.39	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: GSM 1900 / TX / CH 810 **Test Date:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
75.5900	-71.49	1.01	-0.94	-73.44	-13.00	-60.44	V
173.5600	-71.58	1.58	2.9	-70.26	-13.00	-57.26	V
227.8800	-82.84	1.79	5.38	-79.25	-13.00	-66.25	V
321.9700	-85.03	2.18	5.7	-81.51	-13.00	-68.51	V
364.6500	-80.54	2.28	5.75	-77.07	-13.00	-64.07	V
441.2800	-82.64	2.54	5.87	-79.31	-13.00	-66.31	V
121.1800	-68.03	1.28	-2	-71.31	-13.00	-58.31	H
176.4700	-72.26	1.59	3.21	-70.64	-13.00	-57.64	H
364.6500	-71.55	2.28	5.75	-68.08	-13.00	-55.08	H
480.0800	-73.88	2.64	5.54	-70.98	-13.00	-57.98	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 512 **Test Date:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
74.6200	-70.67	1	-1.11	-72.78	-13.00	-59.78	V
174.5300	-75.15	1.59	3	-73.74	-13.00	-60.74	V
224.9700	-80.41	1.78	5.36	-76.83	-13.00	-63.83	V
364.6500	-80.28	2.28	5.75	-76.81	-13.00	-63.81	V
441.2800	-79.22	2.54	5.87	-75.89	-13.00	-62.89	V
480.0800	-81.41	2.64	5.54	-78.51	-13.00	-65.51	V
102.7500	-68.13	1.16	-0.76	-70.05	-13.00	-57.05	H
173.5600	-72.09	1.58	2.9	-70.77	-13.00	-57.77	H
256.0100	-81.19	1.88	5.63	-77.44	-13.00	-64.44	H
364.6500	-74.4	2.28	5.75	-70.93	-13.00	-57.93	H
441.2800	-73.69	2.54	5.87	-70.36	-13.00	-57.36	H
480.0800	-73.55	2.64	5.54	-70.65	-13.00	-57.65	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
75.5900	-71.29	1.01	-0.94	-73.24	-13.00	-60.24	V
189.0800	-77.66	1.62	3.96	-75.32	-13.00	-62.32	V
336.5200	-78.18	2.17	5.76	-74.59	-13.00	-61.59	V
362.7100	-77.47	2.28	5.73	-74.02	-13.00	-61.02	V
441.2800	-80.14	2.54	5.87	-76.81	-13.00	-63.81	V
480.0800	-80.42	2.64	5.54	-77.52	-13.00	-64.52	V
75.5900	-70.28	1.01	-0.94	-72.23	-13.00	-59.23	H
119.2400	-69.05	1.27	-2.07	-72.39	-13.00	-59.39	H
172.5900	-73.1	1.58	2.8	-71.88	-13.00	-58.88	H
364.6500	-74.79	2.28	5.75	-71.32	-13.00	-58.32	H
441.2800	-74.1	2.54	5.87	-70.77	-13.00	-57.77	H
480.0800	-74.81	2.64	5.54	-71.91	-13.00	-58.91	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: GPRS 1900 / TX / CH 810 **Test Date:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
75.5900	-72.26	1.01	-0.94	-74.21	-13.00	-61.21	V
183.2600	-77.41	1.61	3.73	-75.29	-13.00	-62.29	V
257.9500	-84.84	1.89	5.61	-81.12	-13.00	-68.12	V
364.6500	-81.98	2.28	5.75	-78.51	-13.00	-65.51	V
441.2800	-82.11	2.54	5.87	-78.78	-13.00	-65.78	V
480.0800	-82.46	2.64	5.54	-79.56	-13.00	-66.56	V
75.5900	-71.49	1.01	-0.94	-73.44	-13.00	-60.44	H
121.1800	-67.19	1.28	-2	-70.47	-13.00	-57.47	H
174.5300	-73.32	1.59	3	-71.91	-13.00	-58.91	H
259.8900	-80.87	1.91	5.59	-77.19	-13.00	-64.19	H
364.6500	-76.08	2.28	5.75	-72.61	-13.00	-59.61	H
441.2800	-75.35	2.54	5.87	-72.02	-13.00	-59.02	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
75.5900	-70.07	1.01	-0.94	-72.02	-13.00	-59.02	V
188.1100	-75.72	1.62	3.92	-73.42	-13.00	-60.42	V
277.3500	-79	2	5.25	-75.75	-13.00	-62.75	V
382.1100	-77	2.31	5.99	-73.32	-13.00	-60.32	V
441.2800	-78.41	2.54	5.87	-75.08	-13.00	-62.08	V
480.0800	-78.58	2.64	5.54	-75.68	-13.00	-62.68	V
74.6200	-69.11	1	-1.11	-71.22	-13.00	-58.22	H
117.3000	-67.61	1.26	-1.99	-70.86	-13.00	-57.86	H
172.5900	-72.98	1.58	2.8	-71.76	-13.00	-58.76	H
359.8000	-71.83	2.27	5.7	-68.40	-13.00	-55.40	H
441.2800	-73.3	2.54	5.87	-69.97	-13.00	-56.97	H
480.0800	-73.61	2.64	5.54	-70.71	-13.00	-57.71	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
75.5900	-70.74	1.01	-0.94	-72.69	-13.00	-59.69	V
180.3500	-74.36	1.61	3.62	-72.35	-13.00	-59.35	V
280.2600	-84.8	2	5.31	-81.49	-13.00	-68.49	V
377.2600	-78.39	2.31	5.94	-74.76	-13.00	-61.76	V
441.2800	-78.89	2.54	5.87	-75.56	-13.00	-62.56	V
480.0800	-79.16	2.64	5.54	-76.26	-13.00	-63.26	V
49.4000	-68.05	0.8	-5.08	-73.93	-13.00	-60.93	H
118.2700	-68.48	1.26	-2.03	-71.77	-13.00	-58.77	H
179.3800	-73.96	1.61	3.52	-72.05	-13.00	-59.05	H
372.4100	-72.46	2.3	5.85	-68.91	-13.00	-55.91	H
441.2800	-72.8	2.54	5.87	-69.47	-13.00	-56.47	H
480.0800	-73.87	2.64	5.54	-70.97	-13.00	-57.97	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
74.6200	-70.68	1	-1.11	-72.79	-13.00	-59.79	V
187.1400	-74.44	1.62	3.89	-72.17	-13.00	-59.17	V
280.2600	-82.97	2	5.31	-79.66	-13.00	-66.66	V
378.2300	-77.33	2.31	5.96	-73.68	-13.00	-60.68	V
441.2800	-77.59	2.54	5.87	-74.26	-13.00	-61.26	V
480.0800	-78.81	2.64	5.54	-75.91	-13.00	-62.91	V
128.9400	-67.39	1.34	-1.5	-70.23	-13.00	-57.23	H
180.3500	-73.02	1.61	3.62	-71.01	-13.00	-58.01	H
353.0100	-71.89	2.24	5.77	-68.36	-13.00	-55.36	H
441.2800	-72.02	2.54	5.87	-68.69	-13.00	-55.69	H
480.0800	-73.83	2.64	5.54	-70.93	-13.00	-57.93	H
613.9400	-77.85	2.94	6.21	-74.58	-13.00	-61.58	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
74.6200	-71.47	1	-1.11	-73.58	-13.00	-60.58	V
186.1700	-76.72	1.62	3.85	-74.49	-13.00	-61.49	V
223.0300	-79.68	1.77	5.35	-76.10	-13.00	-63.10	V
364.6500	-79.98	2.28	5.75	-76.51	-13.00	-63.51	V
441.2800	-78.77	2.54	5.87	-75.44	-13.00	-62.44	V
480.0800	-80.98	2.64	5.54	-78.08	-13.00	-65.08	V
122.1500	-69.2	1.29	-1.93	-72.42	-13.00	-59.42	H
174.5300	-72.92	1.59	3	-71.51	-13.00	-58.51	H
364.6500	-74.72	2.28	5.75	-71.25	-13.00	-58.25	H
441.2800	-73.19	2.54	5.87	-69.86	-13.00	-56.86	H
480.0800	-74.22	2.64	5.54	-71.32	-13.00	-58.32	H
537.3100	-78.67	2.77	6.22	-75.22	-13.00	-62.22	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
76.5600	-72.72	1.01	-0.77	-74.50	-13.00	-61.50	V
180.3500	-76.23	1.61	3.62	-74.22	-13.00	-61.22	V
248.2500	-84.09	1.83	5.61	-80.31	-13.00	-67.31	V
337.4900	-78.33	2.17	5.77	-74.73	-13.00	-61.73	V
441.2800	-79.55	2.54	5.87	-76.22	-13.00	-63.22	V
480.0800	-80.12	2.64	5.54	-77.22	-13.00	-64.22	V
120.2100	-68.94	1.27	-2.06	-72.27	-13.00	-59.27	H
172.5900	-73.32	1.58	2.8	-72.10	-13.00	-59.10	H
364.6500	-73.48	2.28	5.75	-70.01	-13.00	-57.01	H
441.2800	-74.19	2.54	5.87	-70.86	-13.00	-57.86	H
480.0800	-74.3	2.64	5.54	-71.40	-13.00	-58.40	H
499.4800	-77.85	2.7	5.89	-74.66	-13.00	-61.66	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
74.6200	-72.07	1	-1.11	-74.18	-13.00	-61.18	V
119.2400	-77.72	1.27	-2.07	-81.06	-13.00	-68.06	V
184.2300	-77.21	1.61	3.77	-75.05	-13.00	-62.05	V
224.0000	-82.82	1.78	5.35	-79.25	-13.00	-66.25	V
364.6500	-82.88	2.28	5.75	-79.41	-13.00	-66.41	V
441.2800	-81.69	2.54	5.87	-78.36	-13.00	-65.36	V
74.6200	-69.93	1	-1.11	-72.04	-13.00	-59.04	H
120.2100	-67.9	1.27	-2.06	-71.23	-13.00	-58.23	H
173.5600	-74.44	1.58	2.9	-73.12	-13.00	-60.12	H
364.6500	-75.38	2.28	5.75	-71.91	-13.00	-58.91	H
441.2800	-74.63	2.54	5.87	-71.30	-13.00	-58.30	H
480.0800	-76.54	2.64	5.54	-73.64	-13.00	-60.64	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
73.6500	-72.05	0.99	-1.28	-74.32	-13.00	-61.32	V
188.1100	-77.29	1.62	3.92	-74.99	-13.00	-61.99	V
364.6500	-83.61	2.28	5.75	-80.14	-13.00	-67.14	V
441.2800	-80.78	2.54	5.87	-77.45	-13.00	-64.45	V
480.0800	-79.68	2.64	5.54	-76.78	-13.00	-63.78	V
633.3400	-82.95	2.99	6.18	-79.76	-13.00	-66.76	V
126.0300	-72.51	1.32	-1.69	-75.52	-13.00	-62.52	H
245.3400	-80.39	1.82	5.5	-76.71	-13.00	-63.71	H
441.2800	-77	2.54	5.87	-73.67	-13.00	-60.67	H
480.0800	-75.34	2.64	5.54	-72.44	-13.00	-59.44	H
576.1100	-78.22	2.88	6.05	-75.05	-13.00	-62.05	H
864.2000	-76.6	3.44	6.45	-73.59	-13.00	-60.59	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
73.6500	-73.33	0.99	-1.28	-75.60	-13.00	-62.60	V
188.1100	-77.38	1.62	3.92	-75.08	-13.00	-62.08	V
227.8800	-81.18	1.79	5.38	-77.59	-13.00	-64.59	V
441.2800	-80.69	2.54	5.87	-77.36	-13.00	-64.36	V
518.8800	-82.64	2.7	6.09	-79.25	-13.00	-66.25	V
613.9400	-82.97	2.94	6.21	-79.70	-13.00	-66.70	V
48.4300	-67.93	0.79	-5.83	-74.55	-13.00	-61.55	H
120.2100	-68.09	1.27	-2.06	-71.42	-13.00	-58.42	H
171.6200	-75.08	1.57	2.69	-73.96	-13.00	-60.96	H
403.4500	-77.68	2.41	5.96	-74.13	-13.00	-61.13	H
637.2200	-78.97	3	6.15	-75.82	-13.00	-62.82	H
733.2500	-77.9	3.19	6.31	-74.78	-13.00	-61.78	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
73.6500	-71.94	0.99	-1.28	-74.21	-13.00	-61.21	V
185.2000	-76.75	1.61	3.81	-74.55	-13.00	-61.55	V
226.9100	-84.52	1.79	5.37	-80.94	-13.00	-67.94	V
362.7100	-83.83	2.28	5.73	-80.38	-13.00	-67.38	V
441.2800	-80.67	2.54	5.87	-77.34	-13.00	-64.34	V
480.0800	-79.65	2.64	5.54	-76.75	-13.00	-63.75	V
73.6500	-69.24	0.99	-1.28	-71.51	-13.00	-58.51	H
121.1800	-68.29	1.28	-2	-71.57	-13.00	-58.57	H
180.3500	-76.23	1.61	3.62	-74.22	-13.00	-61.22	H
364.6500	-76.85	2.28	5.75	-73.38	-13.00	-60.38	H
403.4500	-77.66	2.41	5.96	-74.11	-13.00	-61.11	H
902.0300	-76.19	3.53	6.6	-73.12	-13.00	-60.12	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
74.6200	-76.86	1	-1.11	-78.97	-13.00	-65.97	V
154.1600	-70.53	1.45	1.01	-70.97	-13.00	-57.97	V
195.8700	-83.82	1.63	3.36	-82.09	-13.00	-69.09	V
342.3400	-85.91	2.18	5.8	-82.29	-13.00	-69.29	V
460.6800	-84.9	2.6	5.87	-81.63	-13.00	-68.63	V
634.3100	-83.24	2.99	6.18	-80.05	-13.00	-67.05	V
126.0300	-73.86	1.32	-1.69	-76.87	-13.00	-63.87	H
214.3000	-78.21	1.72	5.38	-74.55	-13.00	-61.55	H
403.4500	-78.89	2.41	5.96	-75.34	-13.00	-62.34	H
460.6800	-76.64	2.6	5.87	-73.37	-13.00	-60.37	H
499.4800	-77.48	2.7	5.89	-74.29	-13.00	-61.29	H
613.9400	-77.42	2.94	6.21	-74.15	-13.00	-61.15	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 V / TX / CH 4182 **Test Date:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
73.6500	-76.42	0.99	-1.28	-78.69	-13.00	-65.69	V
167.7400	-82.49	1.55	2.26	-81.78	-13.00	-68.78	V
295.7800	-83.67	2.07	5.52	-80.22	-13.00	-67.22	V
364.6500	-85.1	2.28	5.75	-81.63	-13.00	-68.63	V
422.8500	-85.18	2.47	5.8	-81.85	-13.00	-68.85	V
570.2900	-83.8	2.87	6.1	-80.57	-13.00	-67.57	V
239.5200	-78.36	1.81	5.35	-74.82	-13.00	-61.82	H
257.9500	-81.99	1.89	5.61	-78.27	-13.00	-65.27	H
403.4500	-78.58	2.41	5.96	-75.03	-13.00	-62.03	H
460.6800	-76.12	2.6	5.87	-72.85	-13.00	-59.85	H
537.3100	-78.97	2.77	6.22	-75.52	-13.00	-62.52	H
613.9400	-77.93	2.94	6.21	-74.66	-13.00	-61.66	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:** January 11, 2013

Temperature: 26°C **Tested by:** David Shu

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)
74.6200	-70.78	1	-1.11	-72.89	-13.00	-59.89	V
184.2300	-75.73	1.61	3.77	-73.57	-13.00	-60.57	V
233.7000	-80.51	1.8	5.39	-76.92	-13.00	-63.92	V
315.1800	-81.84	2.16	5.74	-78.26	-13.00	-65.26	V
363.6800	-82.3	2.28	5.74	-78.84	-13.00	-65.84	V
621.7000	-80.48	2.95	6.13	-77.30	-13.00	-64.30	V
118.2700	-68.14	1.26	-2.03	-71.43	-13.00	-58.43	H
233.7000	-79.32	1.8	5.39	-75.73	-13.00	-62.73	H
334.5800	-80.01	2.16	5.75	-76.42	-13.00	-63.42	H
403.4500	-77.22	2.41	5.96	-73.67	-13.00	-60.67	H
437.4000	-73.82	2.52	5.88	-70.46	-13.00	-57.46	H
499.4800	-75.11	2.7	5.89	-71.92	-13.00	-58.92	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:**	January 11, 2013
Temperature:	26°C	**Tested by:**	David Shu
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)
74.6200	-70.23	1	-1.11	-72.34	-13.00	-59.34	V
188.1100	-77.59	1.62	3.92	-75.29	-13.00	-62.29	V
255.0400	-84.84	1.87	5.65	-81.06	-13.00	-68.06	V
364.6500	-83.37	2.28	5.75	-79.90	-13.00	-66.90	V
441.2800	-80.17	2.54	5.87	-76.84	-13.00	-63.84	V
480.0800	-80.21	2.64	5.54	-77.31	-13.00	-64.31	V
119.2400	-68.32	1.27	-2.07	-71.66	-13.00	-58.66	H
170.6500	-73.95	1.57	2.59	-72.93	-13.00	-59.93	H
225.9400	-81.68	1.78	5.36	-78.10	-13.00	-65.10	H
364.6500	-76.96	2.28	5.75	-73.49	-13.00	-60.49	H
403.4500	-77.89	2.41	5.96	-74.34	-13.00	-61.34	H
478.1400	-80.2	2.63	5.59	-77.24	-13.00	-64.24	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:**	January 11, 2013
Temperature:	26°C	**Tested by:**	David Shu
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)
73.6500	-70.38	0.99	-1.28	-72.65	-13.00	-59.65	V
141.5500	-71.22	1.4	-0.1	-72.72	-13.00	-59.72	V
187.1400	-77.17	1.62	3.89	-74.90	-13.00	-61.90	V
219.1500	-81.66	1.76	5.32	-78.10	-13.00	-65.10	V
441.2800	-80.42	2.54	5.87	-77.09	-13.00	-64.09	V
480.0800	-79.29	2.64	5.54	-76.39	-13.00	-63.39	V
73.6500	-69.57	0.99	-1.28	-71.84	-13.00	-58.84	H
119.2400	-68.24	1.27	-2.07	-71.58	-13.00	-58.58	H
171.6200	-73.03	1.57	2.69	-71.91	-13.00	-58.91	H
257.9500	-82.15	1.89	5.61	-78.43	-13.00	-65.43	H
364.6500	-77.14	2.28	5.75	-73.67	-13.00	-60.67	H
441.2800	-77.47	2.54	5.87	-74.14	-13.00	-61.14	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:**	January 11, 2013
Temperature:	26°C	**Tested by:**	David Shu
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)
73.6500	-69.88	0.99	-1.28	-72.15	-13.00	-59.15	V
187.1400	-77.36	1.62	3.89	-75.09	-13.00	-62.09	V
217.2100	-82.93	1.74	5.35	-79.32	-13.00	-66.32	V
364.6500	-83.51	2.28	5.75	-80.04	-13.00	-67.04	V
441.2800	-81.11	2.54	5.87	-77.78	-13.00	-64.78	V
480.0800	-79.21	2.64	5.54	-76.31	-13.00	-63.31	V
74.6200	-70.95	1	-1.11	-73.06	-13.00	-60.06	H
118.2700	-67.95	1.26	-2.03	-71.24	-13.00	-58.24	H
171.6200	-73.78	1.57	2.69	-72.66	-13.00	-59.66	H
263.7700	-82.24	1.93	5.41	-78.76	-13.00	-65.76	H
364.6500	-77.38	2.28	5.75	-73.91	-13.00	-60.91	H
441.2800	-78.81	2.54	5.87	-75.48	-13.00	-62.48	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:**	January 11, 2013
Temperature:	26°C	**Tested by:**	David Shu
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)
73.6500	-76.54	0.99	-1.28	-78.81	-13.00	-65.81	V
199.7500	-78.72	1.63	2.94	-77.41	-13.00	-64.41	V
354.9500	-86.07	2.25	5.75	-82.57	-13.00	-69.57	V
465.5300	-85.29	2.61	5.83	-82.07	-13.00	-69.07	V
610.0600	-82.81	2.94	6.29	-79.46	-13.00	-66.46	V
759.4400	-82.53	3.22	6.29	-79.46	-13.00	-66.46	V
233.7000	-80.06	1.8	5.39	-76.47	-13.00	-63.47	H
364.6500	-79.87	2.28	5.75	-76.40	-13.00	-63.40	H
403.4500	-79.66	2.41	5.96	-76.11	-13.00	-63.11	H
460.6800	-74.67	2.6	5.87	-71.40	-13.00	-58.40	H
499.4800	-77.4	2.7	5.89	-74.21	-13.00	-61.21	H
613.9400	-77.67	2.94	6.21	-74.40	-13.00	-61.40	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 / HSDPA Band V / TX / CH 4182	**Test Date:**	January 11, 2013
Temperature:	26°C	**Tested by:**	David Shu
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)
74.6200	-76.93	1	-1.11	-79.04	-13.00	-66.04	V
193.9300	-82.1	1.62	3.58	-80.14	-13.00	-67.14	V
307.4200	-85.28	2.12	5.75	-81.65	-13.00	-68.65	V
422.8500	-84.09	2.47	5.8	-80.76	-13.00	-67.76	V
617.8200	-83.45	2.94	6.14	-80.25	-13.00	-67.25	V
709.9700	-82	3.14	6.32	-78.82	-13.00	-65.82	V
133.7900	-73.98	1.36	-0.95	-76.29	-13.00	-63.29	H
233.7000	-79.59	1.8	5.39	-76.00	-13.00	-63.00	H
403.4500	-78.6	2.41	5.96	-75.05	-13.00	-62.05	H
460.6800	-76.33	2.6	5.87	-73.06	-13.00	-60.06	H
537.3100	-77.99	2.77	6.22	-74.54	-13.00	-61.54	H
576.1100	-78.12	2.88	6.05	-74.95	-13.00	-61.95	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:	WCDMA / HSDPA Band V / TX / CH 4233	**Test Date:**	January 11, 2013
Temperature:	26°C	**Tested by:**	David Shu
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)
33.8800	-46.99	0.67	-18.48	-66.14	-13.00	-53.14	V
184.2300	-78.92	1.61	3.77	-76.76	-13.00	-63.76	V
307.4200	-85.46	2.12	5.75	-81.83	-13.00	-68.83	V
364.6500	-84.65	2.28	5.75	-81.18	-13.00	-68.18	V
453.8900	-84.39	2.59	5.79	-81.19	-13.00	-68.19	V
510.1500	-85.03	2.69	6	-81.72	-13.00	-68.72	V
117.3000	-70.08	1.26	-1.99	-73.33	-13.00	-60.33	H
188.1100	-72.52	1.62	3.92	-70.22	-13.00	-57.22	H
289.9600	-78.86	2.02	5.41	-75.47	-13.00	-62.47	H
403.4500	-77.47	2.41	5.96	-73.92	-13.00	-60.92	H
460.6800	-76.01	2.6	5.87	-72.74	-13.00	-59.74	H
537.3100	-78.35	2.77	6.22	-74.90	-13.00	-61.90	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: GSM 850 / TX / CH 128 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 55 % 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)
1651.000	-40.47	5.05	6.03	-39.49	-13.00	-26.49	V
3296.000	-52.2	7.45	8.29	-51.36	-13.00	-38.36	V
5767.000	-46.79	10.33	10.85	-46.27	-13.00	-33.27	V
N/A							
1651.000	-39.01	5.05	6.03	-38.03	-13.00	-25.03	H
4122.000	-47.81	8.47	9.5	-46.78	-13.00	-33.78	H
5767.000	-42.66	10.33	10.85	-42.14	-13.00	-29.14	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: GSM 850 / TX / CH 190 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 55 % 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)
1672.000	-43.99	5.07	5.99	-43.07	-13.00	-30.07	V
4185.000	-45.34	8.49	9.55	-44.28	-13.00	-31.28	V
5858.000	-45.3	10.41	10.87	-44.84	-13.00	-31.84	V
N/A							
1672.000	-38.14	5.07	5.99	-37.22	-13.00	-24.22	H
4185.000	-40.98	8.49	9.55	-39.92	-13.00	-26.92	H
5858.000	-43.4	10.41	10.87	-42.94	-13.00	-29.94	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: GSM 850 / TX / CH 251 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 55 % 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)
1651.000	-35.58	5.05	6.03	-34.60	-13.00	-21.60	V
2470.000	-43.26	6.3	6.06	-43.50	-13.00	-30.50	V
4948.000	-48.15	9.33	10.52	-46.96	-13.00	-33.96	V
N/A							
1651.000	-29.66	5.05	6.03	-28.68	-13.00	-15.68	H
2470.000	-45.34	6.3	6.06	-45.58	-13.00	-32.58	H
4948.000	-45.16	9.33	10.52	-43.97	-13.00	-30.97	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 128 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 55 % 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)
1651.000	-40.8	5.05	6.03	-39.82	-13.00	-26.82	V
3296.000	-51.09	7.45	8.29	-50.25	-13.00	-37.25	V
5767.000	-44.89	10.33	10.85	-44.37	-13.00	-31.37	V
N/A							
1651.000	-38	5.05	6.03	-37.02	-13.00	-24.02	H
4122.000	-48.39	8.47	9.5	-47.36	-13.00	-34.36	H
5767.000	-41.01	10.33	10.85	-40.49	-13.00	-27.49	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:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 55 % 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)
1672.000	-43.75	5.07	5.99	-42.83	-13.00	-29.83	V
4185.000	-46.07	8.49	9.55	-45.01	-13.00	-32.01	V
5858.000	-45.12	10.41	10.87	-44.66	-13.00	-31.66	V
N/A							
1672.000	-38.66	5.07	5.99	-37.74	-13.00	-24.74	H
4185.000	-41.43	8.49	9.55	-40.37	-13.00	-27.37	H
5858.000	-42.64	10.41	10.87	-42.18	-13.00	-29.18	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:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 55 % 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)
1651.000	-35.45	5.05	6.03	-34.47	-13.00	-21.47	V
2470.000	-41.92	6.3	6.06	-42.16	-13.00	-29.16	V
4948.000	-48.59	9.33	10.52	-47.40	-13.00	-34.40	V
N/A							
1651.000	-25.53	5.05	6.03	-24.55	-13.00	-11.55	H
2470.000	-44.79	6.3	6.06	-45.03	-13.00	-32.03	H
4948.000	-46.07	9.33	10.52	-44.88	-13.00	-31.88	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: GSM 1900 / TX / CH 512 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 55 % 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)
3702.000	-49.09	8.2	9.1	-48.19	-13.00	-35.19	V
5550.000	-46.68	10.06	10.81	-45.93	-13.00	-32.93	V
N/A							
3702.000	-44.96	8.2	9.1	-44.06	-13.00	-31.06	H
5550.000	-43.76	10.06	10.81	-43.01	-13.00	-30.01	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: GSM 1900 / TX / CH 661 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 55 % 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)
3758.000	-50.64	8.23	9.16	-49.71	-13.00	-36.71	V
5641.000	-52.03	10.18	10.83	-51.38	-13.00	-38.38	V
N/A							
3758.000	-52.26	8.23	9.16	-51.33	-13.00	-38.33	H
5641.000	-50.73	10.18	10.83	-50.08	-13.00	-37.08	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: GSM 1900 / TX / CH 810 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 55 % 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)
3821.000	-51.11	8.29	9.22	-50.18	-13.00	-37.18	V
6285.000	-49.45	10.82	11.13	-49.14	-13.00	-36.14	V
N/A							
4157.000	-51.15	8.48	9.53	-50.10	-13.00	-37.10	H
7349.000	-42.08	12.06	12.46	-41.68	-13.00	-28.68	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 512 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 55 % 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)
3702.000	-46.6	8.2	9.1	-45.70	-13.00	-32.70	V
5550.000	-45.15	10.06	10.81	-44.40	-13.00	-31.40	V
N/A							
3702.000	-48.95	8.2	9.1	-48.05	-13.00	-35.05	H
5550.000	-46	10.06	10.81	-45.25	-13.00	-32.25	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:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 55 % 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)
3758.000	-51.34	8.23	9.16	-50.41	-13.00	-37.41	V
5984.000	-52.09	10.76	10.9	-51.95	-13.00	-38.95	V
N/A							
3758.000	-51.51	8.23	9.16	-50.58	-13.00	-37.58	H
5641.000	-50.78	10.18	10.83	-50.13	-13.00	-37.13	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:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 55 % 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)
3933.000	-52.65	8.38	9.33	-51.70	-13.00	-38.70	V
6957.000	-46.93	11.54	11.85	-46.62	-13.00	-33.62	V
N/A							
4325.000	-51.44	8.61	9.66	-50.39	-13.00	-37.39	H
5732.000	-49.83	10.24	10.85	-49.22	-13.00	-36.22	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:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 50 % 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)
1651.000	-40.38	5.05	6.03	-39.40	-13.00	-26.40	V
2470.000	-49.86	6.3	6.06	-50.10	-13.00	-37.10	V
5767.000	-44.86	10.33	10.85	-44.34	-13.00	-31.34	V
N/A							
1651.000	-37.85	5.05	6.03	-36.87	-13.00	-23.87	H
4122.000	-48	8.47	9.5	-46.97	-13.00	-33.97	H
5767.000	-44.11	10.33	10.85	-43.59	-13.00	-30.59	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:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 50 % 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)
1672.000	-43.44	5.07	5.99	-42.52	-13.00	-29.52	V
4185.000	-44.73	8.49	9.55	-43.67	-13.00	-30.67	V
5858.000	-45.18	10.41	10.87	-44.72	-13.00	-31.72	V
N/A							
1672.000	-40.59	5.07	5.99	-39.67	-13.00	-26.67	H
4185.000	-43.06	8.49	9.55	-42.00	-13.00	-29.00	H
5858.000	-42.04	10.41	10.87	-41.58	-13.00	-28.58	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:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 50 % 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)
1651.000	-36.74	5.05	6.03	-35.76	-13.00	-22.76	V
2470.000	-42.25	6.3	6.06	-42.49	-13.00	-29.49	V
4948.000	-48.02	9.33	10.52	-46.83	-13.00	-33.83	V
N/A							
1651.000	-24.81	5.05	6.03	-23.83	-13.00	-10.83	H
2470.000	-44.28	6.3	6.06	-44.52	-13.00	-31.52	H
4948.000	-46.42	9.33	10.52	-45.23	-13.00	-32.23	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:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 50 % 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)
3702.000	-48.66	8.2	9.1	-47.76	-13.00	-34.76	V
5550.000	-46.28	10.06	10.81	-45.53	-13.00	-32.53	V
N/A							
3702.000	-44.17	8.2	9.1	-43.27	-13.00	-30.27	H
5550.000	-44.1	10.06	10.81	-43.35	-13.00	-30.35	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: EDGE 1900 / TX / CH 661 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 50 % 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)
3758.000	-52.95	8.23	9.16	-52.02	-13.00	-39.02	V
5641.000	-51.98	10.18	10.83	-51.33	-13.00	-38.33	V
N/A							
3758.000	-51.51	8.23	9.16	-50.18	-13.00	-37.18	H
5641.000	-50.78	10.18	10.83	-49.10	-13.00	-36.10	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: EDGE 1900 / TX / CH 810 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 50 % 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)
4003.000	-53.28	8.35	9.4	-52.23	-13.00	-39.23	V
6096.000	-50.95	10.63	10.98	-50.60	-13.00	-37.60	V
N/A							
3821.000	-52.59	8.29	9.22	-51.66	-13.00	-38.66	H
7370.000	-43.57	12.07	12.49	-43.15	-13.00	-30.15	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:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 50 % 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)
3709.000	-30.24	8.21	9.11	-29.34	-13.00	-16.34	V
N/A							
3709.000	-23.84	8.21	9.11	-22.94	-13.00	-9.94	H
7349.000	-43.7	12.06	12.46	-43.30	-13.00	-30.30	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:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 50 % 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)
3758.000	-38.16	8.23	9.16	-37.23	-13.00	-24.23	V
7384.000	-44.92	12.08	12.51	-44.49	-13.00	-31.49	V
N/A							
3758.000	-29.22	8.23	9.16	-30.18	-13.00	-17.18	H
7373.000	-43.13	12.05	12.41	-40.55	-13.00	-27.55	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: WCDMA Band II / TX / CH 9538 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 50 % 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)
3814.000	-35.75	8.28	9.21	-34.82	-13.00	-21.82	V
6341.000	-50.81	10.94	11.17	-50.58	-13.00	-37.58	V
N/A							
3814.000	-27.59	8.28	9.21	-26.66	-13.00	-13.66	H
6194.000	-50.23	11.18	11.06	-50.35	-13.00	-37.35	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 Band V / TX / CH 4132 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 50 % 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)
1658.000	-39.65	5.06	6.02	-38.69	-13.00	-25.69	V
2484.000	-49.65	6.32	6.08	-49.89	-13.00	-36.89	V
N/A							
1658.000	-34.21	5.06	6.02	-33.25	-13.00	-20.25	H
2477.000	-51.41	6.31	6.07	-51.65	-13.00	-38.65	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:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 50 % 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)
1672.000	-49.77	5.07	5.99	-48.85	-13.00	-35.85	V
2505.000	-55.32	6.36	6.11	-55.57	-13.00	-42.57	V
N/A							
1672.000	-46.3	5.07	5.99	-45.38	-13.00	-32.38	H
7405.000	-44.15	12.1	12.55	-43.70	-13.00	-30.70	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 4233 **Test Date:** January 11, 2013

Temperature: 25°C **Tested by:** David Shu

Humidity: 50 % 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)
1693.000	-44.49	5.1	5.95	-43.64	-13.00	-30.64	V
5508.000	-53.97	9.96	10.8	-53.13	-13.00	-40.13	V
N/A							
1693.000	-37.53	5.1	5.95	-36.68	-13.00	-23.68	H
5886.000	-51.69	10.4	10.88	-51.21	-13.00	-38.21	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:	WCDMA / HSDPA Band II / TX / CH 9262	**Test Date:**	January 11, 2013
Temperature:	25°C	**Tested by:**	David Shu
Humidity:	50 % 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)
3709.000	-30.09	8.21	9.11	-29.19	-13.00	-16.19	V
N/A							
3709.000	-23.1	8.21	9.11	-22.20	-13.00	-9.20	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:**	January 11, 2013
Temperature:	25°C	**Tested by:**	David Shu
Humidity:	50 % 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)
3758.000	-37.72	8.23	9.16	-36.79	-13.00	-23.79	V
7027.000	-46.4	11.62	11.94	-46.08	-13.00	-33.08	V
N/A							
3758.000	-28.96	8.23	9.16	-28.03	-13.00	-15.03	H
7342.000	-45.06	12.06	12.45	-44.67	-13.00	-31.67	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:**	January 11, 2013
Temperature:	25°C	**Tested by:**	David Shu
Humidity:	50 % 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)
3814.000	-35.64	8.28	9.21	-34.71	-13.00	-21.71	V
7433.000	-44.29	12.15	12.59	-43.85	-13.00	-30.85	V
N/A							
3814.000	-27.57	8.28	9.21	-26.64	-13.00	-13.64	H
7552.000	-43.53	12.19	12.75	-42.97	-13.00	-29.97	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:**	January 11, 2013
Temperature:	25°C	**Tested by:**	David Shu
Humidity:	50 % 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)
1658.000	-39.62	5.06	6.02	-38.66	-13.00	-25.66	V
2484.000	-50.31	6.32	6.08	-50.55	-13.00	-37.55	V
N/A							
1658.000	-34.75	5.06	6.02	-33.79	-13.00	-20.79	H
2484.000	-51.28	6.32	6.08	-51.52	-13.00	-38.52	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:**	January 11, 2013
Temperature:	25°C	**Tested by:**	David Shu
Humidity:	50 % 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)
1672.000	-49.81	5.07	5.99	-48.89	-13.00	-35.89	V
1959.000	-50.68	5.61	5.47	-50.82	-13.00	-37.82	V
N/A							
1749.000	-37.72	5.2	5.85	-37.07	-13.00	-24.07	H
6999.000	-46.57	11.54	11.9	-46.21	-13.00	-33.21	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:	WCDMA / HSDPA Band V / TX / CH 4233	**Test Date:**	January 11, 2013
Temperature:	25°C	**Tested by:**	David Shu
Humidity:	50 % 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)
1693.000	-44.15	5.1	5.95	-43.30	-13.00	-30.30	V
5067.000	-53.35	9.44	10.63	-52.16	-13.00	-39.16	V
N/A							
1693.000	-38.11	5.1	5.95	-37.26	-13.00	-24.26	H
5823.000	-51.27	10.42	10.86	-50.83	-13.00	-37.83	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.*

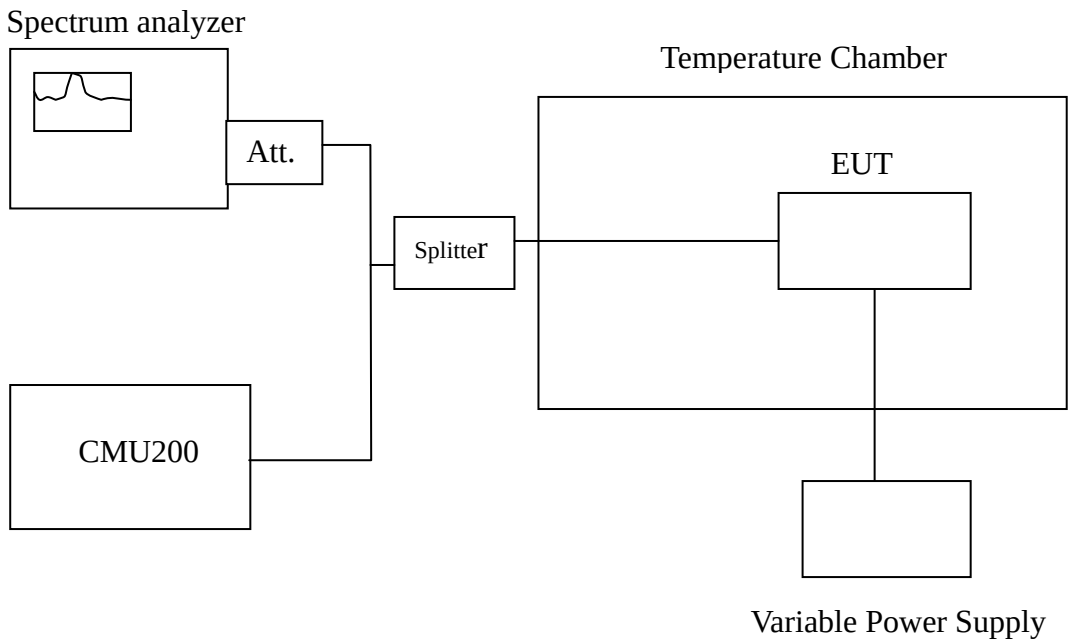
7.7FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

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: GSM Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	836599988	-41	2090
	40	836599983	-46	
	30	836599975	-54	
	20	836600029	0	
	10	836599972	-57	
	0	836599971	-58	
	-10	836599989	-40	
	-20	836599976	-53	
	-30	836599975	-54	

Reference Frequency: GSM Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	1879999997	-4	4700
	40	1879999998	-3	
	30	1879999995	-6	
	20	1880000001	0	
	10	1879999979	-22	
	0	1879999998	-3	
	-10	1879999989	-12	
	-20	1880000007	6	
	-30	1880000012	11	

Reference Frequency: GPRS Mid Channel 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	836599994	1	2090
	40	836599997	4	
	30	836599998	5	
	20	836599993	0	
	10	836599998	5	
	0	836599987	-6	
	-10	836599998	5	
	-20	836599981	-12	
	-30	836599982	-11	

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)
3.7	50	1879999998	-6	4700
	40	1879999996	-8	
	30	1879999993	-11	
	20	1880000004	0	
	10	1879999995	-9	
	0	1879999992	-12	
	-10	1879999990	-14	
	-20	1879999986	-18	
	-30	1879999998	-6	

Reference Frequency: EDGE Mid Channel 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	836600004	2	2090
	40	836600007	5	
	30	836600011	9	
	20	836600002	0	
	10	836599994	-8	
	0	836600000	-2	
	-10	836599993	-9	
	-20	836599997	-5	
	-30	836599999	-3	

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)
3.7	50	1879999998	-9	4700
	40	1879999994	-13	
	30	1879999997	-10	
	20	1880000007	0	
	10	1879999995	-12	
	0	1879999991	-16	
	-10	1879999999	-8	
	-20	1880000008	1	
	-30	1879999998	-9	

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)
3.7	50	1879999975	-36	4700
	40	1879999973	-38	
	30	1879999971	-40	
	20	1880000011	0	
	10	1879999976	-35	
	0	1879999974	-37	
	-10	1879999990	-21	
	-20	1879999975	-36	
	-30	1879999974	-37	

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)
3.7	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)
3.7	50	1879999975	-55	4700
	40	1879999972	-58	
	30	1879999974	-56	
	20	1880000030	0	
	10	1879999963	-67	
	0	1879999961	-69	
	-10	1879999975	-55	
	-20	1879999972	-58	
	-30	1879999964	-66	

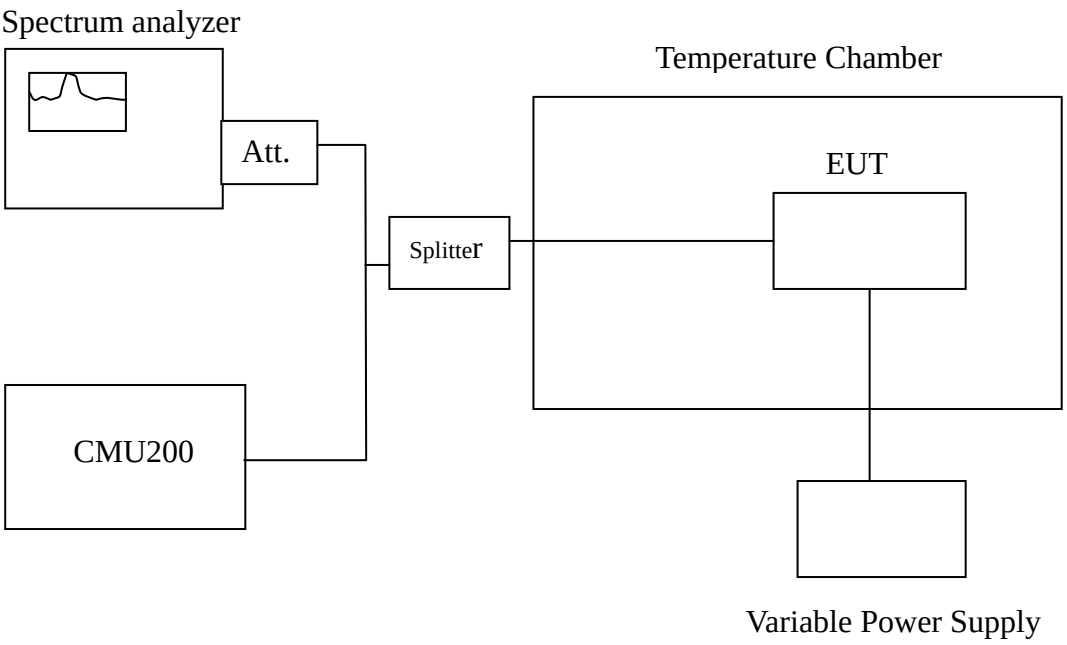
Reference Frequency: WCDMA / HSDPA Band V Mid Channel 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	836399986	-19	2091
	40	836399989	-16	
	30	836399988	-17	
	20	836400005	0	
	10	836400004	-1	
	0	836399985	-20	
	-10	836399994	-11	
	-20	836399988	-17	
	-30	836400000	-5	

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: GSM Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.255	20	836600025	-4	2090
3.7		836600029	0	
3.145		836600033	4	
2.9END		836600123	94	

Reference Frequency: GSM Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.255	20	1880000002	1	4700
3.7		1880000001	0	
3.145		1880000007	6	
2.9END		1879999922	-79	

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)
4.07	20	836599982	-11	2090
3.7		836599993	0	
3.33		836600004	11	
3.1END		836599882	-111	

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)
4.07	20	1880000008	4	4700
3.7		1880000004	0	
3.33		1880000002	-2	
2.9		1880000079	75	

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)
4.07	20	836600003	1	2090
3.7		836600002	0	
3.33		836600006	4	
3		836600087	85	

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)
4.07	20	1880000002	-5	4700
3.7		1880000007	0	
3.33		1880000003	-4	
3.1		1879999903	-104	

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)
4	20	1880000010	-1	4700
3.7		1880000011	0	
3.3		1880000015	4	
3.1		1880000016	5	

Reference Frequency: WCDMA Band V Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4	20	836400001	-1	2091
3.7		836400002	0	
3.3		836400003	1	
3.1		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)
4	20	1880000055	25	4700
3.7		1880000030	0	
3.3		1880000024	-6	
3		1880000026	-4	

Reference Frequency: WCDMA HSDPA Band V Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4	20	836400004	-1	2091
3.7		836400005	0	
3.3		836400000	-5	
3.1		836400083	78	

7.9POWERLINE CONDUCTED EMISSIONS

LIMIT

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

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

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

Test Configuration

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

TEST PROCEDURE

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

TEST RESULTS

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

Operation Mode:	Normal Link	**Test Date:**	2013/1/31
Temperature:	26°C	**Tested by:**	Rex Huang
Humidity:	60% RH		

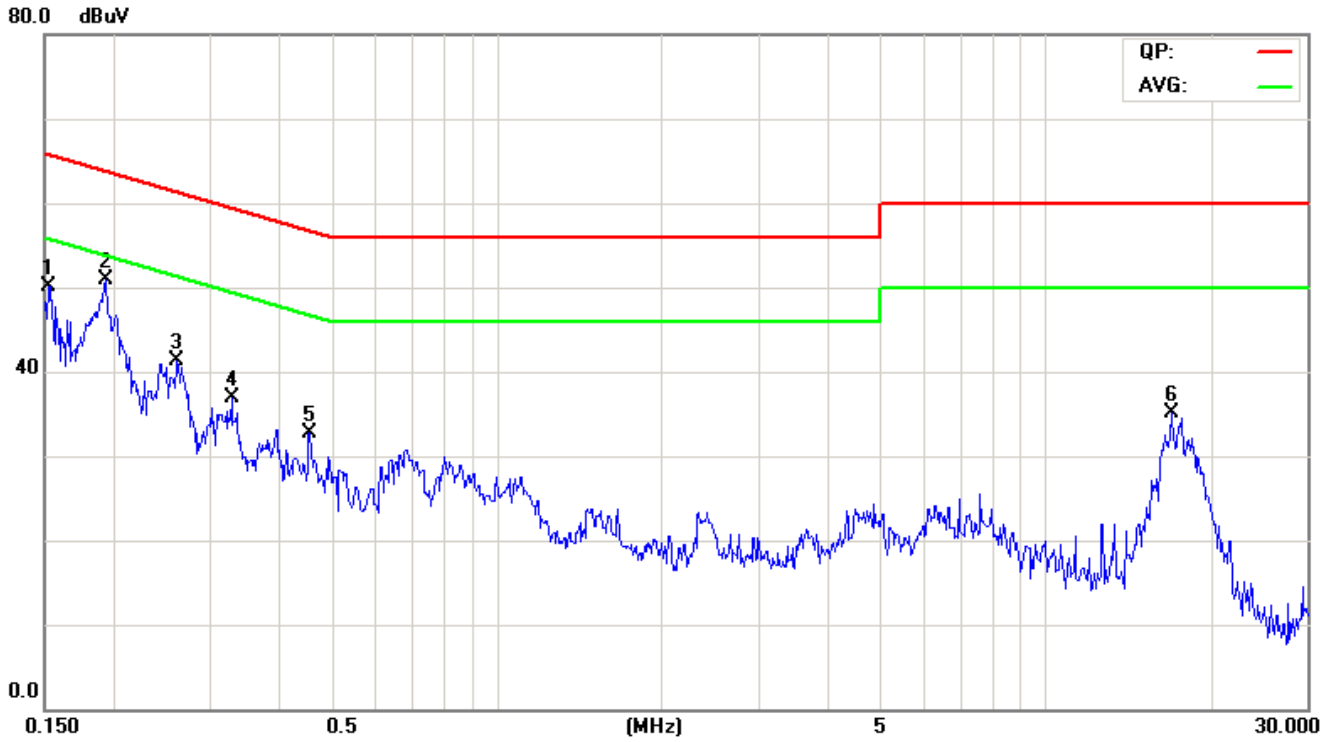
Freq. (MHz)	QP Reading (dBuV)	AV Reading (dBuV)	Corr. factor (dB)	QP Result (dBuV)	AV Result (dBuV)	QP Limit (dBuV)	AV Limit (dBuV)	QP Margin (dB)	AV Margin (dB)	Note
0.1502	41.62	28.46	0.07	41.69	28.53	65.99	55.99	-24.30	-27.46	L1
0.1949	47.33	35.83	0.06	47.39	35.89	63.83	53.83	-16.44	-17.94	L1
0.2600	36.93	27.74	0.06	36.99	27.80	61.43	51.43	-24.44	-23.63	L1
0.3260	33.14	22.94	0.07	33.21	23.01	59.55	49.55	-26.34	-26.54	L1
0.4544	26.83	19.27	0.07	26.90	19.34	56.79	46.79	-29.89	-27.45	L1
16.9751	28.79	22.41	0.29	29.08	22.70	60.00	50.00	-30.92	-27.30	L1
0.1947	47.75	38.30	0.03	47.78	38.33	63.83	53.83	-16.05	-15.50	L2
0.3246	38.89	30.55	0.02	38.91	30.57	59.59	49.59	-20.68	-19.02	L2
0.4551	34.73	27.18	0.02	34.75	27.20	56.78	46.78	-22.03	-19.58	L2
0.6583	32.31	26.30	0.02	32.33	26.32	56.00	46.00	-23.67	-19.68	L2
1.1031	27.61	22.05	0.03	27.64	22.08	56.00	46.00	-28.36	-23.92	L2
16.6374	31.38	23.86	0.22	31.60	24.08	60.00	50.00	-28.40	-25.92	L2

Remark:

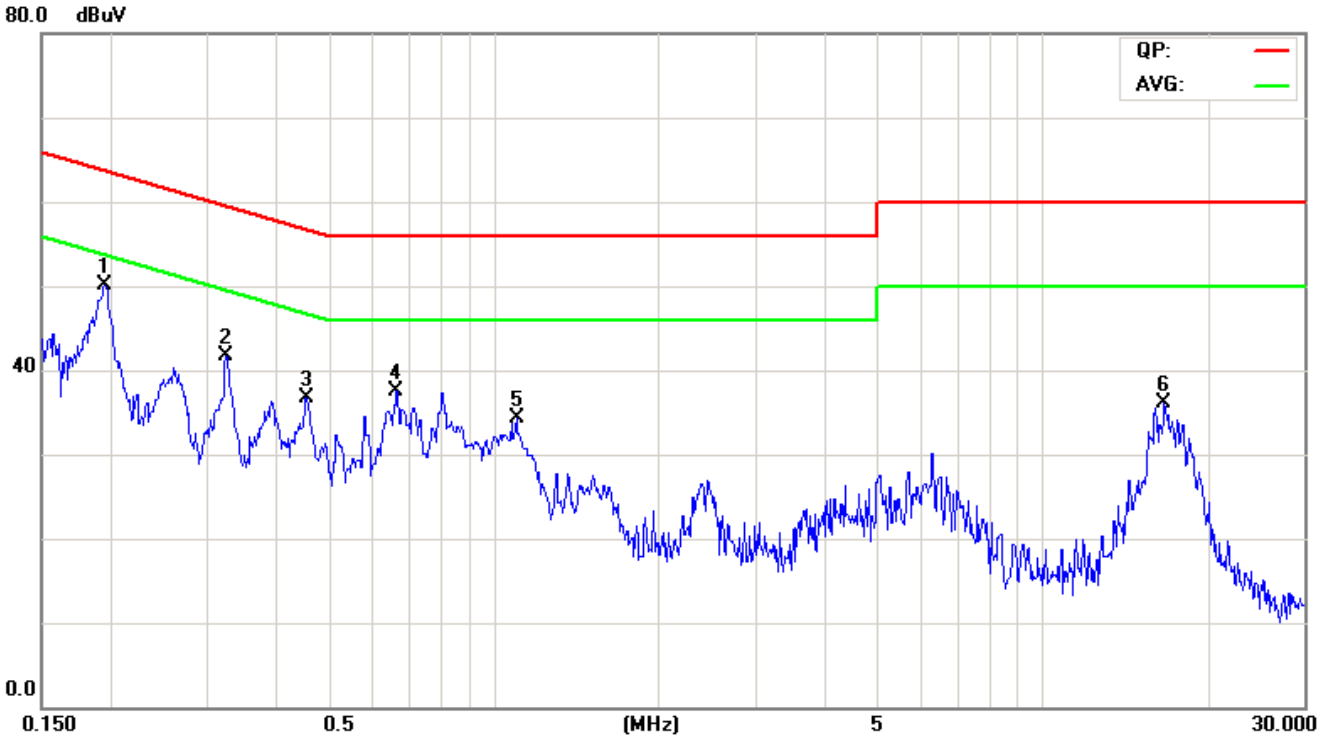
1. *Measuring frequencies from 0.15 MHz to 30MHz.*
2. *The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Quasi-peak detector and average detector.*
3. *The IF bandwidth of SPA between 0.15MHz to 30MHz was 10kHz; the IF bandwidth of Test Receiver between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

Test Plots

Conducted emissions (Line 1)



Conducted emissions (Line 2)



APPENDIX I
RADIO FREQUENCY EXPOSURE

LIMIT

EUT Specification

EUT	Rugged Handheld Device
Frequency band (Operating)	☐ WLAN: 2.412GHz ~ 2.462GHz ☐ WLAN: 5.18GHz ~ 5.32GHz / 5.50GHz ~ 5.70GHz ☐ WLAN: 5.745GHz ~ 5.825GHz ☒ Others: GSM / GPRS / EDGE 850: 824 ~ 849 MHz
Device category	☒ Portable (<20cm separation) ☐ Mobile (>20cm separation) ☐ Others _____
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm^2) ☒ General Population/Uncontrolled exposure (S=1mW/cm^2)
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Max. output power	ERP: 22.99 dBm (199.06mW)
Antenna gain (Max)	0.09 dBi (Numeric gain: 1.25)
Evaluation applied	☐ MPE Evaluation ☒ SAR Evaluation* ☐ N/A
Remark: *1. The maximum output power is 22.99dBm (199.06mW) at 1852.40MHz (with 1.25 numeric antenna gain.)*	

TEST RESULTS

No non-compliance noted.
Remark: Please refer to the separated SAR report.

EUT Specification

EUT	Rugged Handheld Device
Frequency band (Operating)	☐ WLAN: 2.412GHz ~ 2.462GHz ☐ WLAN: 5.725GHz ~ 5.850GHz ☐ WLAN: 5.15GHz ~ 5.35GHz ☒ Others: _1850 ~ 1910 MHz __
Device category	☒ Portable (<20cm separation) ☐ Mobile (>20cm separation) ☐ Others _____
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm2) ☒ General Population/Uncontrolled exposure (S=1mW/cm2)
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Max. output power	ERP: 28.37 dBm (687.06mW)
Antenna gain (Max)	2.53 dBi (Numeric gain: 1.83)
Evaluation applied	☐ MPE Evaluation ☒ SAR Evaluation* ☐ N/A
Remark: *1. The maximum output power is 28.37dBm (687.06mW) at 1850.20MHz (with 1.83 numeric antenna gain.)*	

TEST RESULTS

No non-compliance noted.

Remark: Please refer to the separated SAR report.