



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

TEST REPORT

For

Smart Handheld

Model: E210

Trade Name: acer

Issued to

Acer Incorporated

**8F., No.88, Sec. 1, Hsin Tai Wu Rd., Hsichih Town,
Taipei Hsien, Taiwan, R.O.C.**

Issued by

Compliance Certification Services Inc.

**No. 11, Wu-Gong 6th Rd., Wugu Industrial Park,
Taipei Hsien 248, Taiwan (R.O.C.)**

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1. TEST RESULT CERTIFICATION

Applicant: Acer Incorporated
8F., No.88, Sec. 1, Hsin Tai Wu Rd., Hsichih Town,
Taipei Hsien, Taiwan, R.O.C.

Equipment Under Test: Smart Handheld

Trade Name: acer

Model Number: E210

Date of Test: November 22 ~ 26, 2010

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:

Rex Lai
Section Manager
Compliance Certification Services Inc.

Reviewed by:

Gina Lo
Section Manager
Compliance Certification Services Inc.



2. EUT DESCRIPTION

Product	Smart Handheld
Trade Name	acer
Model Number	E210
Model Discrepancy	N/A
Power Supply	1. Power Adapter: Trade Name: PHIHONG / Model: PSAI05R-050Q Input: 100-240V, 0.3A, 50-60Hz Output: 5V, 1.0A 2. Battery: a) Trade Name: acer Model: BAT-310 Rating: 3.7V, 1300mAh, 4.81Wh b) Trade Name: acer Model: BAT-310(1ICP5/42/61) Rating: 3.7V, 1300mAh, 4.81Wh
Frequency Range	GSM / GPRS / EDGE: 850: 824.2 ~ 848.8 MHz GSM / GPRS / EDGE: 1900: 1850.2 ~ 1909.8 MHz WCDMA / HSDPA / HSUPA Band II: 1852.4 ~ 1907.6 MHz WCDMA / HSDPA / HSUPA Band V: 826.4 ~ 846.6MHz
Transmit Power (ERP & EIRP Power)	GSM 850: 33.11 dBm GSM 1900: 29.92 dBm GPRS 850: 29.37 dBm GPRS 1900: 25.81 dBm EDGE 850: 28.37 dBm EDGE 1900: 25.72 dBm WCDMA Band II: 24.57 dBm WCDMA Band V: 24.95 dBm HSDPA Band II: 26.28 dBm HSDPA Band V: 25.30 dBm HSUPA Band II: 26.30 dBm HSUPA Band V: 25.44 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: 253KGXW--- GSM 1900: 248KGXW--- GPRS 850: 252KGXW--- GPRS 1900: 251KGXW--- EDGE 850: 248KG7W--- EDGE 1900: 247KG7W--- WCDMA Band II: 4M17F9W--- WCDMA Band V: 4M16F9W--- WCDMA HSDPA Band II: 4M16F9W--- WCDMA HSDPA Band V: 4M17F9W--- WCDMA HSUPA Band II: 4M16F9W--- WCDMA HSUPA Band V: 4M18F9W---
Antenna Gain	GSM / GPRS / EDGE 850: 1.17 dBi GSM / GPRS / EDGE 1900: 1.04 dBi WCDMA band II: 1.04 dBi WCDMA band V: 1.17 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: **HLZDME210SC** 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: 2003, TIA/EIA-603-C: 2004 and FCC CFR 47, Part 2, PART 22 SUBPART H AND PART 24 SUBPART E

3.1 EUT 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.

3.2 EUT EXERCISE

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

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

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

Radiated Emissions

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



3.4 DESCRIPTION OF TEST MODES

The EUT (model: E210) had been tested under operating condition.

There is one source of power adapter and two batteries (please refer EUT description). After verified, the worst data in the test report is PHIHONG / PSAI05R-050Q.

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.

WCDMA / HSUPA 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 and power line conducted emissions below 30MHz, which worst case was in normal link mode only.

The worst emission was found:

in lie-down (Y axis) for GSM 1900 / GPRS 1900 / EDGE 1900.

and

in stand-up (Z axis) for GSM 850 / GPRS 850 / EDGE 850 / WCDMA Band II / WCDMA Band V / HSDPA Band II / HSDPA Band V / HSUPA Band II / HSUPA Band V.



4. INSTRUMENT CALIBRATION

4.1 MEASURING INSTRUMENT CALIBRATION

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



4.2 MEASUREMENT 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	03/03/2011
Power Meter	Anritsu	ML2495A	1012009	03/28/2011
Power Sensor	Anritsu	MA2411B	0917072	03/09/2011
Temp. / Humidity Chamber	Terchy	MHG-150LF	930619	09/14/2011
DC Power Source	Agilent	E3640A	MY40001774	01/08/2011

3M Semi Anechoic Chamber				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	US42510252	10/25/2011
EMI Test Receiver	R&S	ESCI	100064	02/04/2011
Pre-Amplifier	Mini-Circuits	ZFL-1000LN	SF350700823	01/13/2011
Pre-Amplifier	MITEQ	AFS44-00102650-42-10P-44	1415367	11/19/2011
Bilog Antenna	Sunol Sciences	JB3	A030105	09/10/2011
Horn Antenna	EMCO	3117	00055165	12/07/2010
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	12/31/2010
Test S/W	EZ-EMC (CCS-3A1RE)			

Powerline Conducted Emissions Test Site				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	R&S	ESHS10	843743/015	03/25/2011
LISN	SCHWARZBECK	NSLK 8127	8127-541	03/14/2011
LISN	SCHAFFNER	NNB 41	03/10013	12/02/2011
Test S/W	CCS-3A1-CE-wugu			



4.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
Powerline Conducted Emission	+/- 1.6202
3M Semi Anechoic Chamber / 30M~200M	+/- 4.0606
3M Semi Anechoic Chamber / 200M~1000M	+/- 3.9979
3M Semi Anechoic Chamber / 1G~8G	+/- 2.5790
3M Semi Anechoic Chamber / 8G~18G	+/- 2.5928
3M Semi Anechoic Chamber / 18G~26G	+/- 2.7212
3M Semi Anechoic Chamber / 26G~40G	+/- 2.9520

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 Industrial Park, Taipei Hsien 248, Taiwan

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

No.139, Wugong Rd., Wugu Industrial Park, Taipei Hsien 248, Taiwan

No.81-1, Lane 210, Bade 2nd Rd., Luchu Hsiang, Taoyuan Hsien 338, Taiwan

Tel: 886-3-324-0332 / Fax: 886-3-324-5235

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

5.2 EQUIPMENT

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


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

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

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



5.3 TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
Canada	Industry Canada	3M Semi Anechoic Chamber (IC 2324G-1 / IC 2324G-2) to perform	

** 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
1.	Universal Radio Communication Tester (Remote)	R&S	CMU200	101245	N/A	N/A	Unshielded, 1.8m
2.	SIM Card	N/A	N/A	N/A	N/A	N/A	N/A

Remark:

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



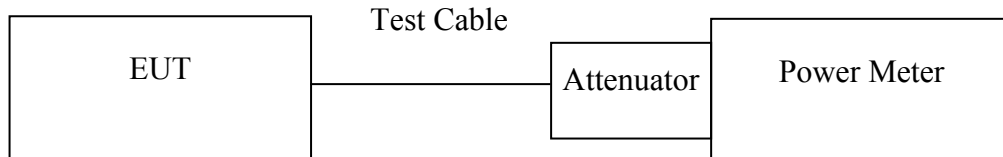
7. FCC PART 22 & 24 REQUIREMENTS

7.1 PEAK 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	32.90	1.94984
	190	836.60	33.00	1.99526
	251	848.80	33.20	2.08930
GPRS 850	128	824.20	28.90	0.77625
	190	836.60	29.00	0.79433
	251	848.80	29.10	0.81283
EDGE 850	128	824.20	27.40	0.54954
	190	836.60	27.50	0.56234
	251	848.80	27.60	0.57544

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power W
GSM 1900	512	1850.20	29.40	0.87096
	661	1880.00	29.30	0.85114
	810	1909.80	29.50	0.89125
GPRS 1900	512	1850.20	25.30	0.33884
	661	1880.00	25.30	0.33884
	810	1909.80	25.20	0.33113
EDGE 1900	512	1850.20	25.00	0.31623
	661	1880.00	24.90	0.30903
	810	1909.80	24.90	0.30903

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	25.96	0.39446
	9400	1880.00	25.79	0.37931
	9538	1907.60	25.05	0.31989
WCDMA (BAND V)	4132	826.40	26.75	0.47315
	4182	836.40	26.33	0.42954
	4233	846.60	26.38	0.43451

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power W
WCDMA / HSDPA (BAND II)	9262	1852.40	26.27	0.42364
	9400	1880.00	25.98	0.39628
	9538	1907.60	25.49	0.35400
WCDMA / HSDPA (BAND V)	4132	826.40	26.76	0.47424
	4182	836.40	26.46	0.44259
	4233	846.60	26.46	0.44259

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power W
WCDMA / HSUPA (BAND II)	9262	1852.40	26.19	0.41591
	9400	1880.00	25.94	0.39264
	9538	1907.60	25.42	0.34834
WCDMA / HSUPA (BAND V)	4132	826.40	26.77	0.47534
	4182	836.40	26.44	0.44055
	4233	846.60	26.43	0.43954

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

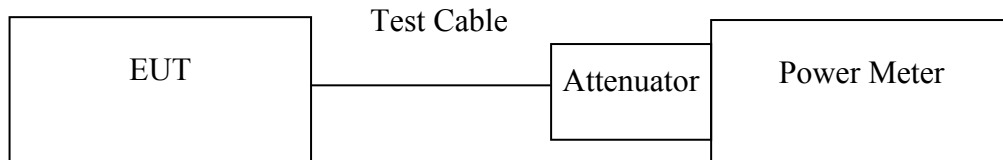


7.2 AVERAGE POWER

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 RESULTS

No non-compliance noted.

Test Data

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
GSM 850	128	824.20	32.50	1.77828
	190	836.60	32.50	1.77828
	251	848.80	32.50	1.77828
GPRS 850	128	824.20	25.89	0.38812
	190	836.60	25.99	0.39716
	251	848.80	26.09	0.40642
EDGE 850	128	824.20	24.39	0.27477
	190	836.60	24.49	0.28117
	251	848.80	24.59	0.28772

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
GSM 1900	512	1850.20	29.20	0.83176
	661	1880.00	29.20	0.83176
	810	1909.80	29.30	0.85114
GPRS 1900	512	1850.20	22.29	0.16942
	661	1880.00	22.29	0.16942
	810	1909.80	22.19	0.16557
EDGE 1900	512	1850.20	21.99	0.15811
	661	1880.00	21.89	0.15451
	810	1909.80	21.89	0.15451

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	22.57	0.18072
	9400	1880.00	22.51	0.17824
	9538	1907.60	21.81	0.15171
WCDMA (BAND V)	4132	826.40	23.30	0.21380
	4182	836.40	22.93	0.19634
	4233	846.60	23.03	0.20091

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
WCDMA / HSDPA (BAND II)	9262	1852.40	22.46	0.17620
	9400	1880.00	22.41	0.17418
	9538	1907.60	21.72	0.14859
WCDMA / HSDPA (BAND V)	4132	826.40	22.97	0.19815
	4182	836.40	22.67	0.18493
	4233	846.60	22.68	0.18535

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
WCDMA / HSUPA (BAND II)	9262	1852.40	22.39	0.17338
	9400	1880.00	22.34	0.17140
	9538	1907.60	21.61	0.14488
WCDMA / HSUPA (BAND V)	4132	826.40	22.88	0.19409
	4182	836.40	22.56	0.18030
	4233	846.60	22.65	0.18408

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



7.3 ERP & EIRP MEASUREMENT

LIMIT

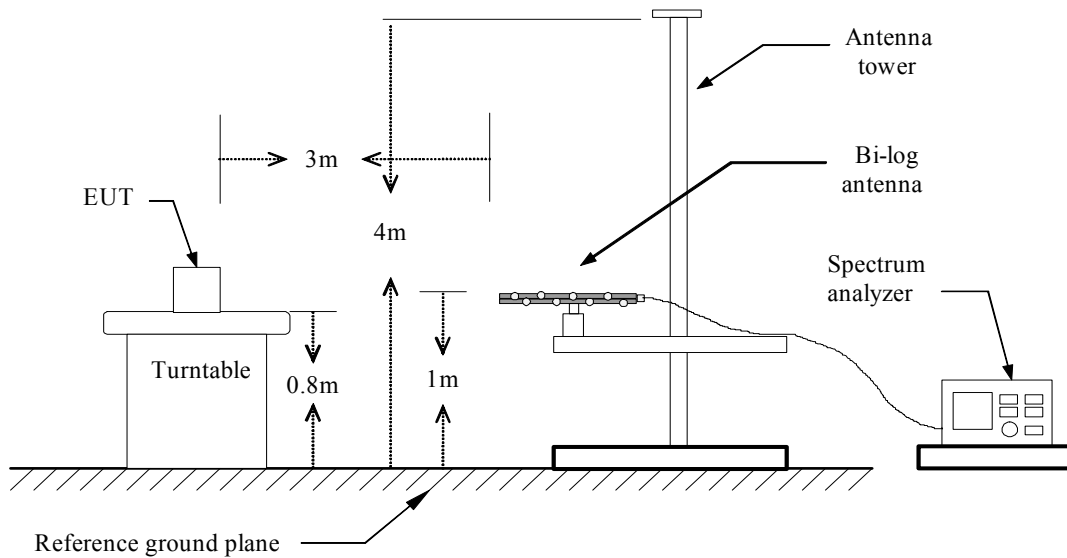
According to FCC §2.1046

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

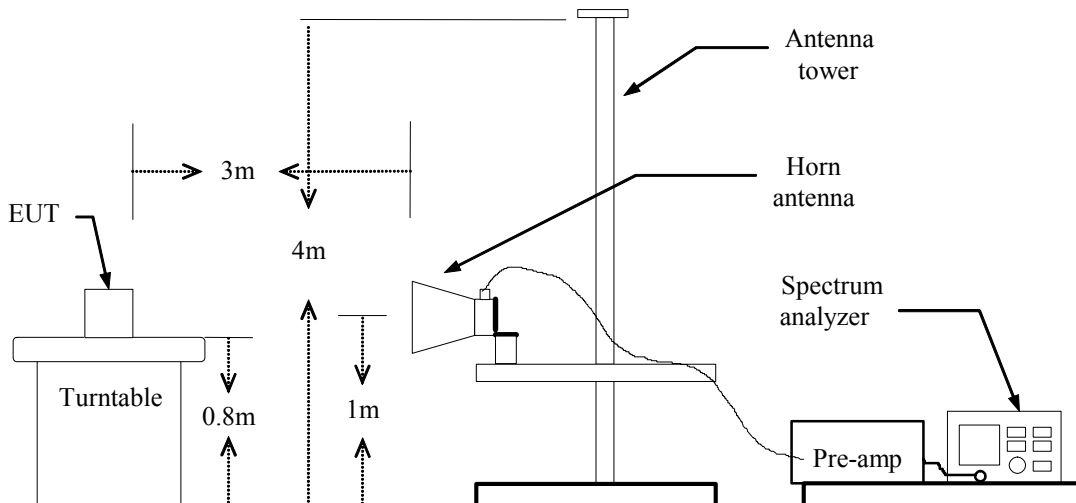
FCC 24.232(b): The equivalent Isotropic Radiated Power (EIRP) must not exceed 2 Watts.

Test Configuration

Below 1 GHz

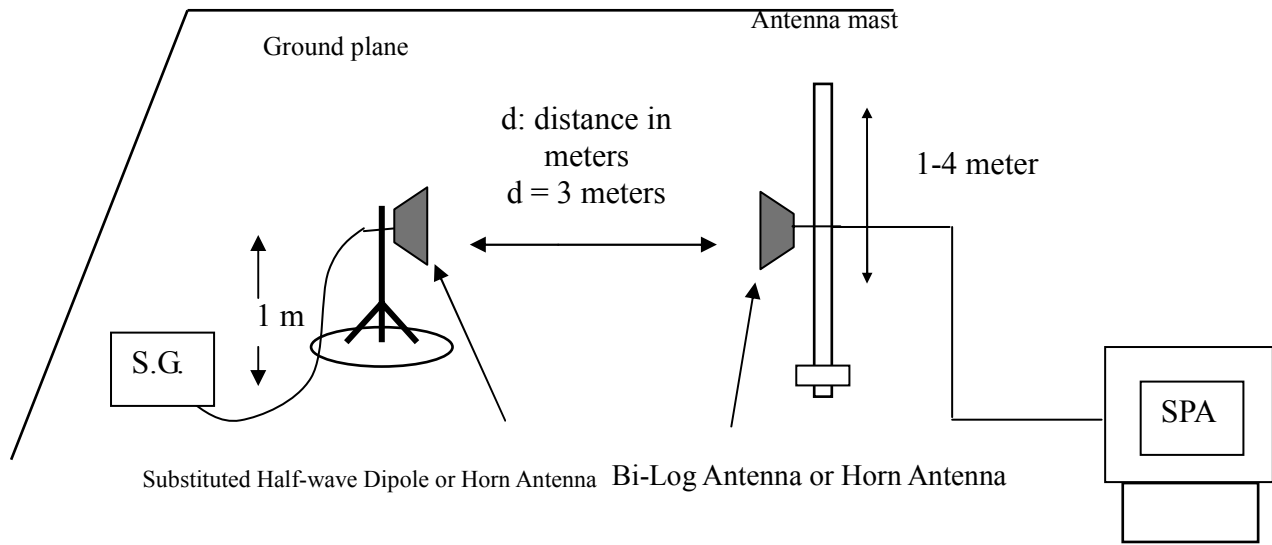


Above 1 GHz





For Substituted Method Test Set-UP



TEST PROCEDURE

The EUT was placed on a 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:

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable (dB)}$$

$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)}$$

TEST RESULTS

No non-compliance noted.

**GSM 850 TEST DATA**

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	128	824.20	V	-12.20	34.62	22.41	38.50	-16.09
		824.20	H	-3.62	34.65	31.02	38.50	-7.48
	190	836.60	V	-12.07	34.53	22.45	38.50	-16.05
		836.60	H	-3.32	34.63	31.31	38.50	-7.19
	251	848.80	V	-10.48	34.63	24.16	38.50	-14.34
		848.80	H	-2.77	34.75	31.98	38.50	-6.52
Y	128	824.20	V	-8.95	34.62	25.67	38.50	-12.83
		824.20	H	-1.92	34.65	32.73	38.50	-5.77
	190	836.60	V	-8.51	34.52	26.02	38.50	-12.48
		836.60	H	-1.86	34.63	32.77	38.50	-5.73
	251	848.80	V	-7.57	34.64	27.07	38.50	-11.43
		848.80	H	-1.79	34.75	32.96	38.50	-5.54
Z	128	824.20	V	-2.62	34.62	31.99	38.50	-6.51
		824.20	H	-7.23	34.65	27.41	38.50	-11.09
	190	836.60	V	-2.17	34.52	32.36	38.50	-6.14
		836.60	H	-6.99	34.63	27.65	38.50	-10.85
	251	848.80	V	-1.53	34.64	*33.11	38.50	-5.39
		848.80	H	-7.06	34.76	27.69	38.50	-10.81

GPRS 850 TEST DATA

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	128	824.20	V	-16.67	34.62	17.95	38.50	-20.55
		824.20	H	-6.50	34.65	28.15	38.50	-10.35
	190	836.60	V	-16.84	34.53	17.69	38.50	-20.81
		836.60	H	-6.12	34.63	28.52	38.50	-9.98
	251	848.80	V	-15.96	34.64	18.68	38.50	-19.82
		848.80	H	-5.84	34.75	28.91	38.50	-9.59
Y	128	824.20	V	-12.10	34.62	22.52	38.50	-15.98
		824.20	H	-5.99	34.65	28.65	38.50	-9.85
	190	836.60	V	-11.89	34.53	22.64	38.50	-15.86
		836.60	H	-5.84	34.63	28.80	38.50	-9.70
	251	848.80	V	-10.96	34.64	23.68	38.50	-14.82
		848.80	H	-5.71	34.75	29.04	38.50	-9.46
Z	128	824.20	V	-6.09	34.62	28.52	38.50	-9.98
		824.20	H	-11.19	34.65	23.46	38.50	-15.04
	190	836.60	V	-5.85	34.53	28.68	38.50	-9.82
		836.60	H	-11.06	34.63	23.57	38.50	-14.93
	251	848.80	V	-5.26	34.64	*29.37	38.50	-9.13
		848.80	H	-16.20	34.75	18.55	38.50	-19.95



GSM 1900 TEST DATA

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	512	1850.20	V	-26.13	41.17	15.04	33.00	-17.96
		1850.20	H	-13.28	40.79	27.51	33.00	-5.49
	661	1880.00	V	-24.05	41.23	17.17	33.00	-15.83
		1880.00	H	-12.96	41.15	28.18	33.00	-4.82
	810	1909.80	V	-23.78	41.30	17.52	33.00	-15.48
		1909.80	H	-12.43	41.38	28.94	33.00	-4.06
Y	512	1850.20	V	-11.79	41.17	29.38	33.00	-3.62
		1850.20	H	-16.34	40.79	24.45	33.00	-8.55
	661	1880.00	V	-11.31	41.23	*29.92	33.00	-3.08
		1880.00	H	-17.02	41.14	24.12	33.00	-8.88
	810	1909.80	V	-11.46	41.30	29.85	33.00	-3.15
		1909.80	H	-16.80	41.38	24.58	33.00	-8.42
Z	512	1850.20	V	-12.77	41.17	28.40	33.00	-4.60
		1850.20	H	-13.36	40.79	27.44	33.00	-5.56
	661	1880.00	V	-12.83	41.23	28.40	33.00	-4.60
		1880.00	H	-11.90	41.14	29.25	33.00	-3.75
	810	1909.80	V	-13.47	41.30	27.83	33.00	-5.17
		1909.80	H	-12.42	41.38	28.95	33.00	-4.05

GPRS 1900 TEST DATA

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	512	1850.20	V	-28.16	41.17	13.01	33.00	-19.99
		1850.20	H	-17.59	40.79	23.20	33.00	-9.80
	661	1880.00	V	-27.91	41.23	13.32	33.00	-19.68
		1880.00	H	-17.11	41.14	24.03	33.00	-8.97
	810	1909.80	V	-27.39	41.30	13.91	33.00	-19.09
		1909.80	H	-16.74	41.38	24.64	33.00	-8.36
Y	512	1850.20	V	-16.10	41.17	25.07	33.00	-7.93
		1850.20	H	-20.49	40.79	20.30	33.00	-12.70
	661	1880.00	V	-15.68	41.23	25.55	33.00	-7.45
		1880.00	H	-19.85	41.14	21.30	33.00	-11.70
	810	1909.80	V	-15.49	41.30	*25.81	33.00	-7.19
		1909.80	H	-20.05	41.38	21.33	33.00	-11.67
Z	512	1850.20	V	-16.80	41.17	24.37	33.00	-8.63
		1850.20	H	-16.40	40.79	24.39	33.00	-8.61
	661	1880.00	V	-16.83	41.23	24.40	33.00	-8.60
		1880.00	H	-15.97	41.15	25.17	33.00	-7.83
	810	1909.80	V	-17.80	41.30	23.50	33.00	-9.50
		1909.80	H	-16.07	41.38	25.30	33.00	-7.70

**EDGE 850 Test Data**

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	128	824.20	V	-18.22	34.62	16.40	38.50	-22.10
		824.20	H	-7.97	34.65	26.67	38.50	-11.83
	190	836.60	V	-18.26	34.53	16.27	38.50	-22.23
		836.60	H	-7.64	34.63	27.00	38.50	-11.50
	251	848.80	V	-17.34	34.64	17.30	38.50	-21.20
		848.80	H	-7.19	34.75	27.56	38.50	-10.94
Y	128	824.20	V	-13.93	34.62	20.68	38.50	-17.82
		824.20	H	-7.13	34.65	27.51	38.50	-10.99
	190	836.60	V	-13.70	34.52	20.83	38.50	-17.67
		836.60	H	-6.74	34.63	27.89	38.50	-10.61
	251	848.80	V	-12.69	34.64	21.95	38.50	-16.55
		848.80	H	-6.48	34.75	28.27	38.50	-10.23
Z	128	824.20	V	-7.60	34.62	27.02	38.50	-11.48
		824.20	H	-13.09	34.65	21.56	38.50	-16.94
	190	836.60	V	-7.09	34.53	27.44	38.50	-11.06
		836.60	H	-17.98	34.63	16.65	38.50	-21.85
	251	848.80	V	-6.26	34.64	*28.37	38.50	-10.13
		848.80	H	-12.57	34.75	22.18	38.50	-16.32

EDGE 1900 Test Data

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	512	1850.20	V	-29.55	41.17	11.62	33.00	-21.38
		1850.20	H	-17.54	40.79	23.25	33.00	-9.75
	661	1880.00	V	-27.73	41.23	13.50	33.00	-19.50
		1880.00	H	-17.07	41.15	24.07	33.00	-8.93
	810	1909.80	V	-27.36	41.30	13.94	33.00	-19.06
		1909.80	H	-16.74	41.38	24.64	33.00	-8.36
Y	512	1850.20	V	-16.02	41.17	25.15	33.00	-7.85
		1850.20	H	-20.19	40.79	20.60	33.00	-12.40
	661	1880.00	V	-15.60	41.23	25.63	33.00	-7.37
		1880.00	H	-19.83	41.14	21.31	33.00	-11.69
	810	1909.80	V	-15.58	41.30	*25.72	33.00	-7.28
		1909.80	H	-22.97	41.38	18.41	33.00	-14.59
Z	512	1850.20	V	-18.53	41.17	22.64	33.00	-10.36
		1850.20	H	-17.02	40.79	23.77	33.00	-9.23
	661	1880.00	V	-16.82	41.23	24.41	33.00	-8.59
		1880.00	H	-16.46	41.14	24.68	33.00	-8.32
	810	1909.80	V	-17.32	41.30	23.98	33.00	-9.02
		1909.80	H	-16.45	41.38	24.93	33.00	-8.07



WCDMA Test Data (BAND II)

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	9262	1850.20	V	-31.02	41.18	10.16	33.00	-22.84
		1850.20	H	-17.43	40.83	23.40	33.00	-9.60
	9400	1880.00	V	-29.93	41.23	11.30	33.00	-21.70
		1880.00	H	-17.36	41.15	23.79	33.00	-9.21
	9538	1909.80	V	-28.99	41.30	12.31	33.00	-20.69
		1909.80	H	-17.74	41.38	23.64	33.00	-9.36
Y	9262	1850.20	V	-17.65	41.17	23.52	33.00	-9.48
		1850.20	H	-22.77	40.82	18.06	33.00	-14.94
	9400	1880.00	V	-16.66	41.23	*24.57	33.00	-8.43
		1880.00	H	-22.39	41.15	18.76	33.00	-14.24
	9538	1909.80	V	-17.04	41.30	24.26	33.00	-8.74
		1909.80	H	-22.16	41.38	19.22	33.00	-13.78
Z	9262	1850.20	V	-17.76	41.17	23.41	33.00	-9.59
		1850.20	H	-17.29	40.82	23.53	33.00	-9.47
	9400	1880.00	V	-17.43	41.23	23.80	33.00	-9.20
		1880.00	H	-16.97	41.15	24.19	33.00	-8.81
	9538	1909.80	V	-18.23	41.30	23.07	33.00	-9.93
		1909.80	H	-17.51	41.38	23.87	33.00	-9.13

WCDMA Test Data (BAND V)

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	4132	824.20	V	-19.51	34.60	15.09	38.50	-23.41
		824.20	H	-10.53	34.64	24.11	38.50	-14.39
	4182	836.40	V	-20.01	34.52	14.51	38.50	-23.99
		836.40	H	-10.84	34.63	23.79	38.50	-14.71
	4233	848.80	V	-19.56	34.61	15.05	38.50	-23.45
		848.80	H	-10.80	34.72	23.92	38.50	-14.58
Y	4132	824.20	V	-16.55	34.60	18.04	38.50	-20.46
		824.20	H	-10.09	34.64	24.55	38.50	-13.95
	4182	836.40	V	-16.49	34.53	18.05	38.50	-20.45
		836.40	H	-10.12	34.63	24.51	38.50	-13.99
	4233	848.80	V	-15.84	34.61	18.77	38.50	-19.73
		848.80	H	-10.24	34.72	24.48	38.50	-14.02
Z	4132	824.20	V	-10.02	34.60	24.58	38.50	-13.92
		824.20	H	-16.51	34.64	18.14	38.50	-20.36
	4182	836.40	V	-9.88	34.53	24.65	38.50	-13.85
		836.40	H	-16.51	34.63	18.12	38.50	-20.38
	4233	848.80	V	-9.66	34.61	*24.95	38.50	-13.55
		848.80	H	-16.46	34.72	18.26	38.50	-20.24

**WCDMA / HSDPA BAND II Test Data**

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	9262	1850.20	V	-30.49	41.18	10.69	33.00	-22.31
		1850.20	H	-17.39	40.83	23.44	33.00	-9.56
	9400	1880.00	V	-29.97	41.23	11.27	33.00	-21.73
		1880.00	H	-17.26	41.15	23.90	33.00	-9.10
	9538	1909.80	V	-27.80	41.29	13.49	33.00	-19.51
		1909.80	H	-18.17	41.38	23.21	33.00	-9.79
Y	9262	1850.20	V	-17.93	41.18	23.25	33.00	-9.75
		1850.20	H	-17.49	40.83	23.35	33.00	-9.65
	9400	1880.00	V	-17.72	41.23	23.51	33.00	-9.49
		1880.00	H	-18.37	41.15	22.78	33.00	-10.22
	9538	1909.80	V	-17.89	41.30	23.41	33.00	-9.59
		1909.80	H	-17.53	41.38	23.84	33.00	-9.16
Z	9262	1850.20	V	-14.90	41.18	*26.28	33.00	-6.72
		1850.20	H	-16.56	40.83	24.28	33.00	-8.72
	9400	1880.00	V	-25.24	41.23	15.99	33.00	-17.01
		1880.00	H	-15.92	41.16	25.24	33.00	-7.76
	9538	1909.80	V	-17.90	41.30	23.40	33.00	-9.60
		1909.80	H	-17.13	41.38	24.24	33.00	-8.76

WCDMA / HSDPA BAND V Test Data

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	4132	824.20	V	-22.88	34.60	11.72	38.50	-26.78
		824.20	H	-11.14	34.64	23.50	38.50	-15.00
	4182	836.40	V	-24.93	34.52	9.59	38.50	-28.91
		836.40	H	-12.28	34.63	22.35	38.50	-16.15
	4233	848.80	V	-24.27	34.62	10.34	38.50	-28.16
		848.80	H	-11.92	34.73	22.81	38.50	-15.69
Y	4132	824.20	V	-19.96	34.59	14.63	38.50	-23.87
		824.20	H	-11.15	34.64	23.49	38.50	-15.01
	4182	836.40	V	-20.00	34.52	14.52	38.50	-23.98
		836.40	H	-12.65	34.63	21.98	38.50	-16.52
	4233	848.80	V	-18.85	34.59	15.73	38.50	-22.77
		848.80	H	-11.63	34.73	23.10	38.50	-15.40
Z	4132	824.20	V	-10.30	34.61	24.31	38.50	-14.19
		824.20	H	-18.71	34.65	15.94	38.50	-22.56
	4182	836.40	V	-10.03	34.52	24.49	38.50	-14.01
		836.40	H	-17.66	34.63	16.98	38.50	-21.52
	4233	848.80	V	-9.28	34.59	*25.30	38.50	-13.20
		848.80	H	-17.47	34.70	17.23	38.50	-21.27



WCDMA / HSUPA BAND II Test Data

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	9262	1850.20	V	-30.99	41.18	10.19	33.00	-22.81
		1850.20	H	-17.42	40.83	23.41	33.00	-9.59
	9400	1880.00	V	-30.06	41.23	11.17	33.00	-21.83
		1880.00	H	-17.39	41.15	23.76	33.00	-9.24
	9538	1909.80	V	-28.09	41.30	13.21	33.00	-19.79
		1909.80	H	-17.97	41.38	23.41	33.00	-9.59
Y	9262	1850.20	V	-17.43	41.18	23.74	33.00	-9.26
		1850.20	H	-17.76	40.83	23.08	33.00	-9.92
	9400	1880.00	V	-17.23	41.23	24.00	33.00	-9.00
		1880.00	H	-18.49	41.15	22.66	33.00	-10.34
	9538	1909.80	V	-18.02	41.29	23.27	33.00	-9.73
		1909.80	H	-17.89	41.38	23.48	33.00	-9.52
Z	9262	1850.20	V	-14.87	41.18	*26.30	33.00	-6.70
		1850.20	H	-16.66	40.81	24.15	33.00	-8.85
	9400	1880.00	V	-25.32	41.23	15.92	33.00	-17.08
		1880.00	H	-15.93	41.15	25.22	33.00	-7.78
	9538	1909.80	V	-17.46	41.30	23.84	33.00	-9.16
		1909.80	H	-19.34	41.38	22.03	33.00	-10.97

WCDMA / HSUPA BAND V Test Data

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	4132	824.20	V	-22.78	34.59	11.81	38.50	-26.69
		824.20	H	-10.73	34.64	23.91	38.50	-14.59
	4182	836.40	V	-25.09	34.53	9.44	38.50	-29.06
		836.40	H	-12.23	34.63	22.41	38.50	-16.09
	4233	848.80	V	-24.25	34.62	10.37	38.50	-28.13
		848.80	H	-12.32	34.73	22.41	38.50	-16.09
Y	4132	824.20	V	-19.81	34.59	14.78	38.50	-23.72
		824.20	H	-11.58	34.64	23.06	38.50	-15.44
	4182	836.40	V	-20.30	34.52	14.22	38.50	-24.28
		836.40	H	-12.53	34.63	22.10	38.50	-16.40
	4233	848.80	V	-18.44	34.62	16.18	38.50	-22.32
		848.80	H	-11.73	34.73	23.00	38.50	-15.50
Z	4132	824.20	V	-9.92	34.61	24.69	38.50	-13.81
		824.20	H	-17.60	34.64	17.04	38.50	-21.46
	4182	836.40	V	-9.67	34.52	24.85	38.50	-13.65
		836.40	H	-17.96	34.64	16.68	38.50	-21.82
	4233	848.80	V	-9.15	34.59	*25.44	38.50	-13.06
		848.80	H	-17.70	34.71	17.01	38.50	-21.49

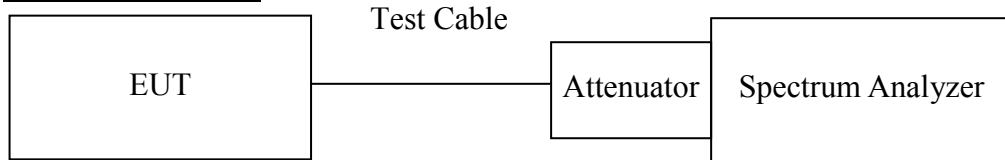


7.4 OCCUPIED BANDWIDTH MEASUREMENT

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	244.9948
	190	836.60	253.0566
	251	848.80	235.9829
GPRS 850	128	824.20	252.4899
	190	836.60	246.1691
	251	848.80	243.6301
EDGE 850	128	824.20	248.6937
	190	836.60	239.6519
	251	848.80	239.1788

Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
GSM 1900	512	1850.20	248.2630
	661	1880.00	246.1695
	810	1909.80	243.2812
GPRS 1900	512	1850.20	248.1627
	661	1880.00	243.1897
	810	1909.80	251.2129
EDGE 1900	512	1850.20	241.4179
	661	1880.00	247.4035
	810	1909.80	243.4437



Test Mode	CH	Frequency (MHz)	99% Bandwidth (MHz)
WCDMA (Band II)	9262	1852.40	4.1511
	9400	1880.00	4.1423
	9538	1907.60	4.1724
WCDMA (Band V)	4132	826.40	4.1640
	4182	836.40	4.1562
	4233	846.60	4.1620
WCDMA / HSDPA (BAND II)	9262	1852.40	4.1600
	9400	1880.00	4.1521
	9538	1907.60	4.1585
WCDMA / HSDPA (BAND V)	4132	826.40	4.1668
	4182	836.40	4.1724
	4233	846.60	4.1726
WCDMA / HSUPA (BAND II)	9262	1852.40	4.1545
	9400	1880.00	4.1462
	9538	1907.60	4.1693
WCDMA / HSUPA (BAND V)	4132	826.40	4.1483
	4182	836.40	4.1857
	4233	846.60	4.1827

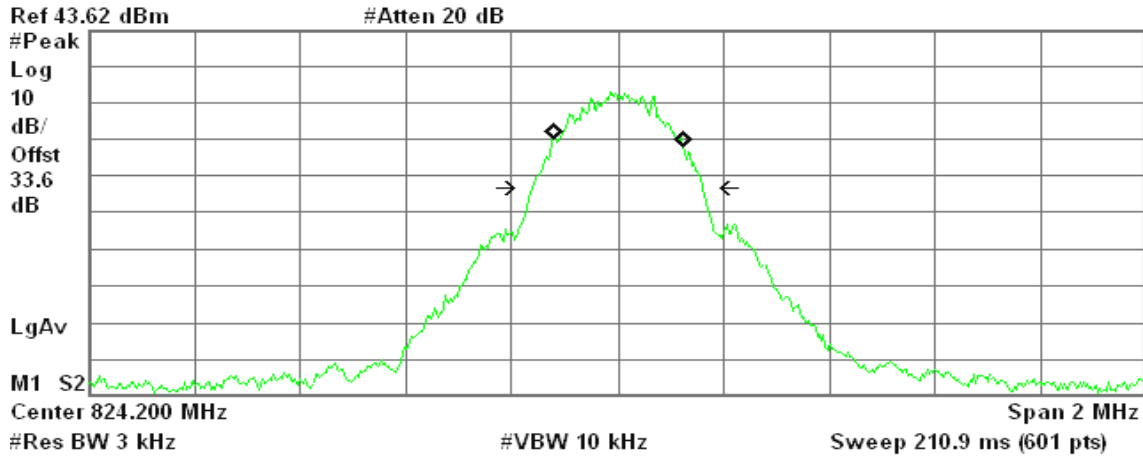


Test Plot

GSM 850 (CH Low)

Agilent 23:42:28 Nov 22, 2010

R T



Occupied Bandwidth
244.9948 kHz

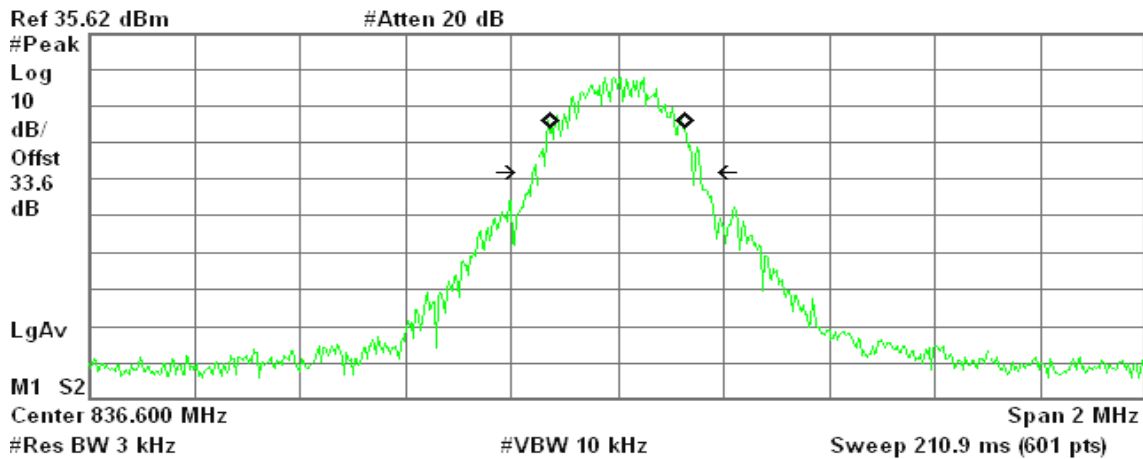
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 1.033 kHz
x dB Bandwidth 319.688 kHz

GSM 850 (CH Mid)

Agilent 23:44:36 Nov 22, 2010

R T



Occupied Bandwidth
253.0566 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

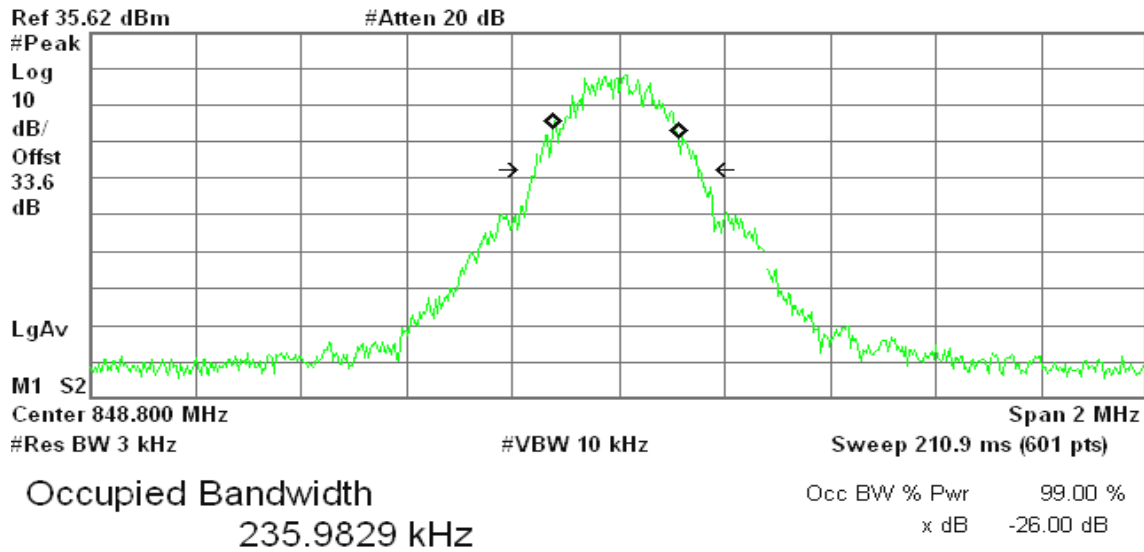
Transmit Freq Error -1.461 kHz
x dB Bandwidth 315.158 kHz



GSM 850 (CH High)

Agilent 23:44:56 Nov 22, 2010

R T

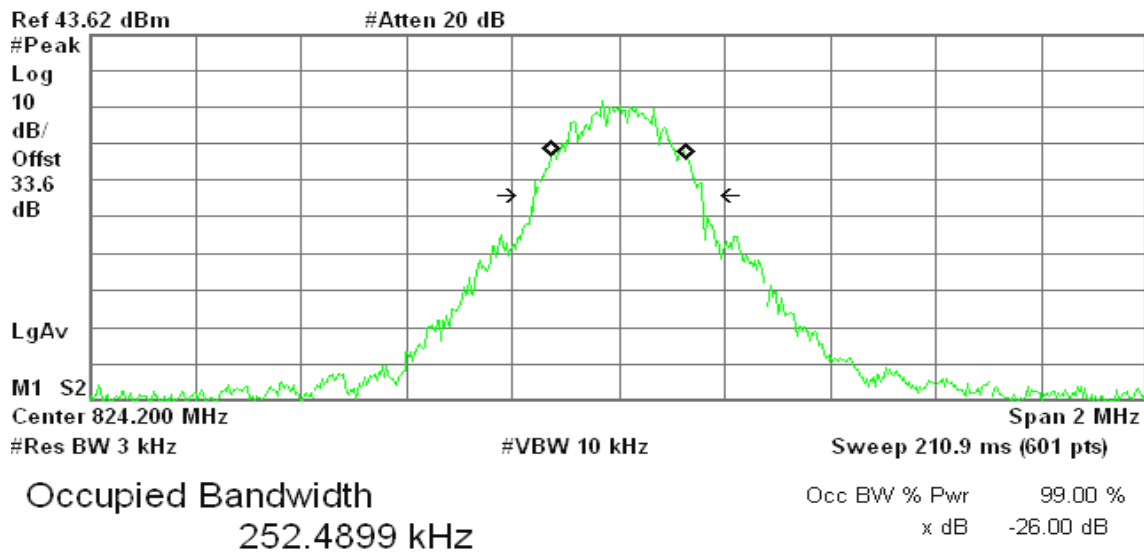


Transmit Freq Error -5.002 kHz
x dB Bandwidth 305.372 kHz

GPRS 850 (CH Low)

Agilent 23:43:12 Nov 22, 2010

R T



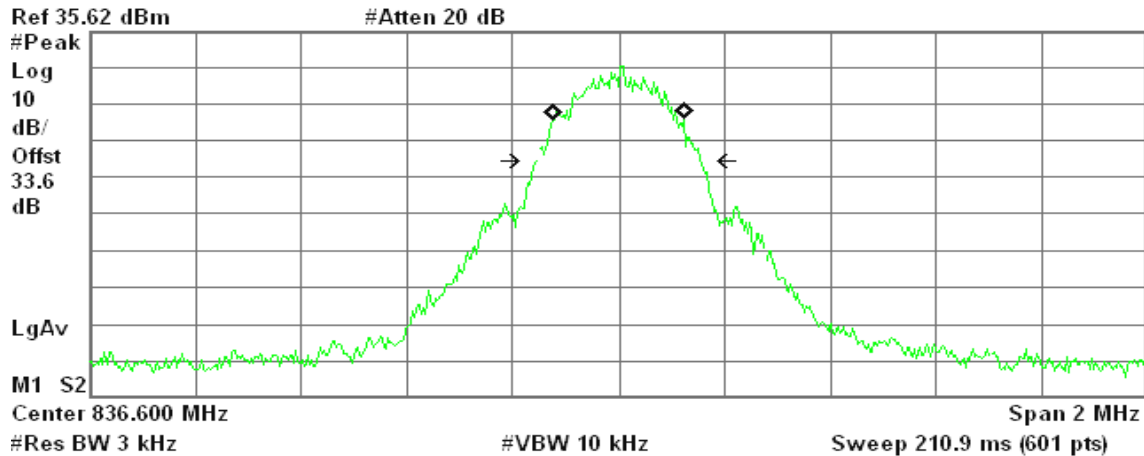
Transmit Freq Error 826.973 Hz
x dB Bandwidth 317.437 kHz



GPRS 850 (CH Mid)

Agilent 23:44:19 Nov 22, 2010

R T



Occupied Bandwidth
246.1691 kHz

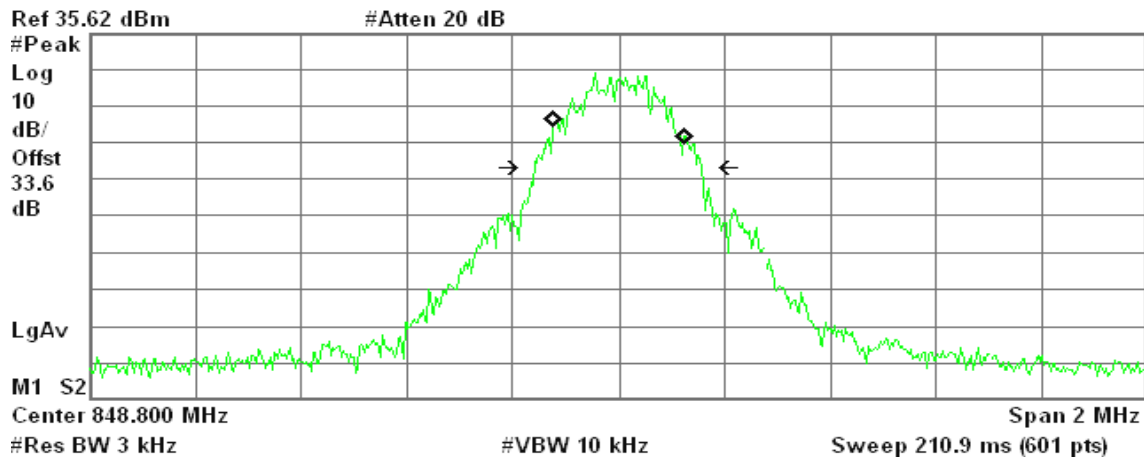
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -240.429 Hz
x dB Bandwidth 308.621 kHz

GPRS 850(CH High)

Agilent 23:45:16 Nov 22, 2010

R T



Occupied Bandwidth
243.6301 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

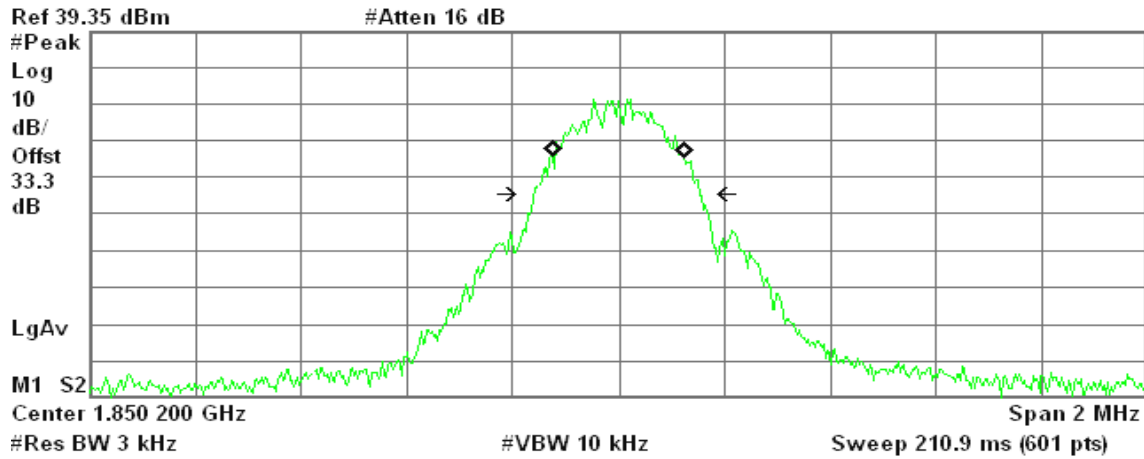
Transmit Freq Error 46.703 Hz
x dB Bandwidth 315.247 kHz



GSM 1900 (CH Low)

Agilent 15:23:09 Nov 23, 2010

R T



Occupied Bandwidth
248.2630 kHz

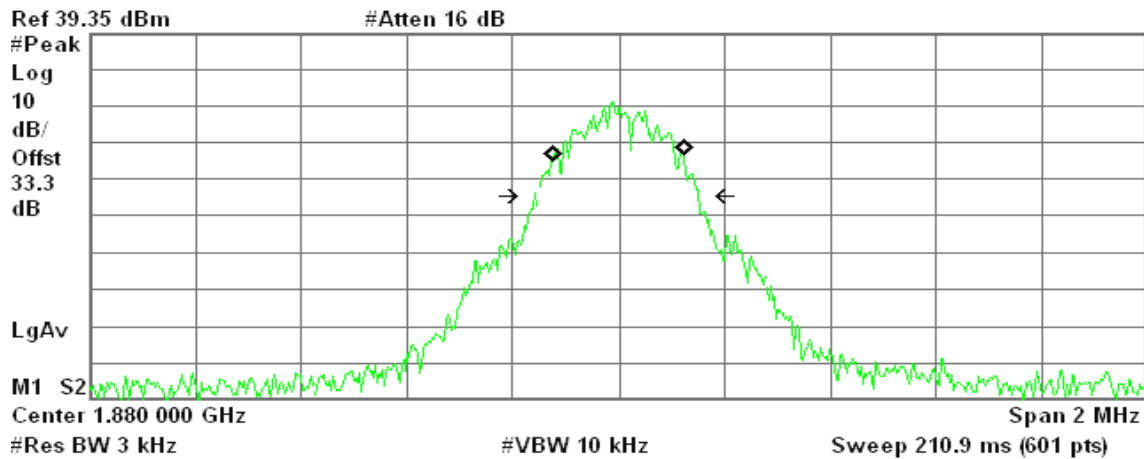
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -519.496 Hz
x dB Bandwidth 311.506 kHz

GSM 1900 (CH Mid)

Agilent 15:24:28 Nov 23, 2010

R T



Occupied Bandwidth
246.1695 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

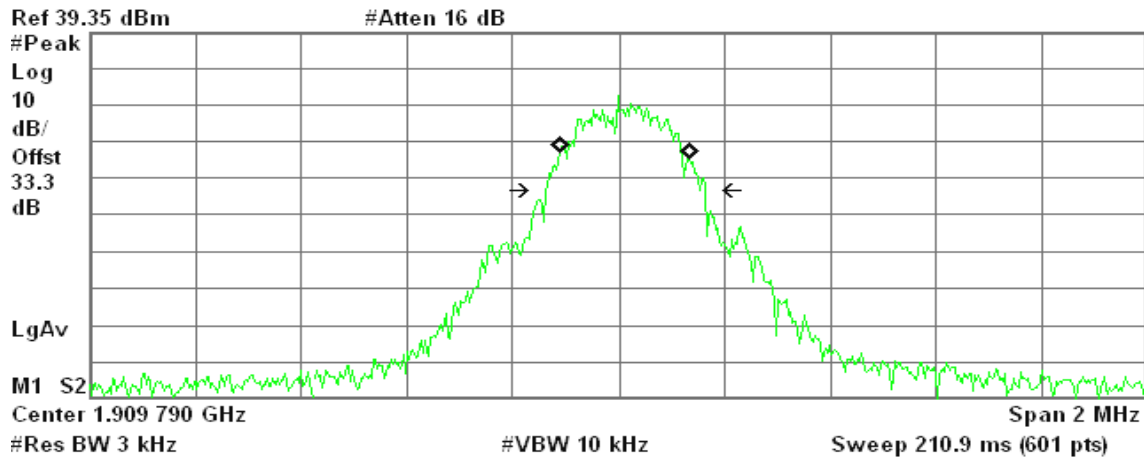
Transmit Freq Error -1.159 kHz
x dB Bandwidth 309.054 kHz



GSM 1900 (CH High)

Agilent 15:55:55 Nov 23, 2010

R T



Occupied Bandwidth
243.2812 kHz

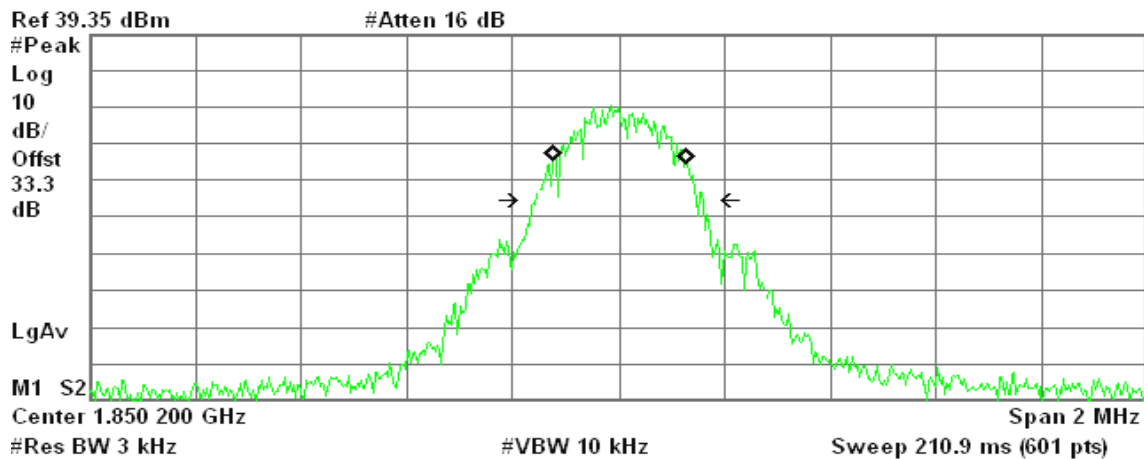
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 11.033 kHz
x dB Bandwidth 300.493 kHz

GPRS 1900 (CH Low)

Agilent 15:23:21 Nov 23, 2010

R T



Occupied Bandwidth
248.1627 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

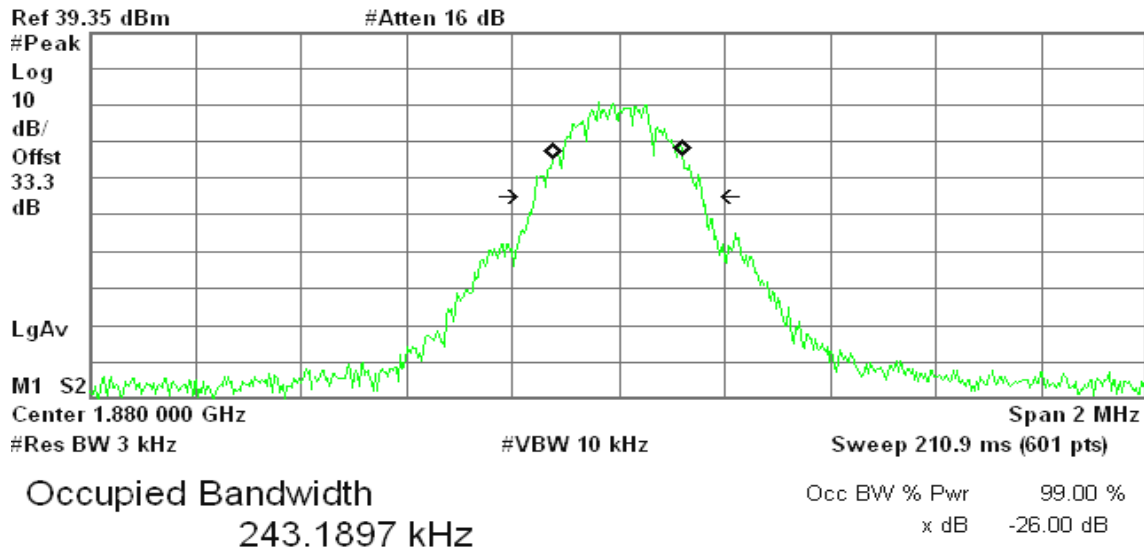
Transmit Freq Error 1.147 kHz
x dB Bandwidth 314.816 kHz



GPRS 1900 (CH Mid)

Agilent 15:24:12 Nov 23, 2010

R T

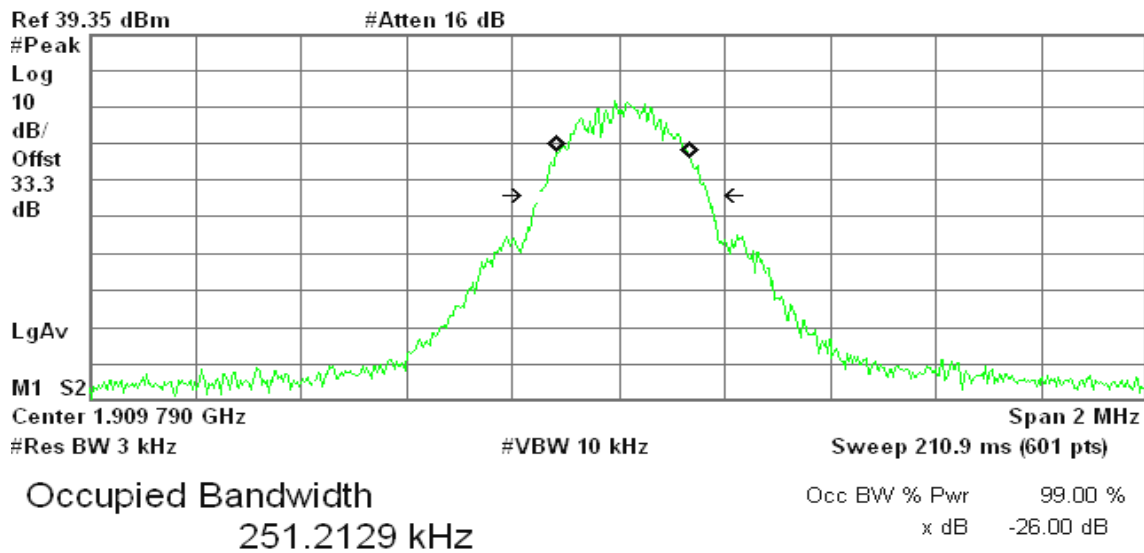


Transmit Freq Error -492.590 Hz
x dB Bandwidth 315.052 kHz

GPRS 1900 (CH High)

Agilent 15:56:31 Nov 23, 2010

R T



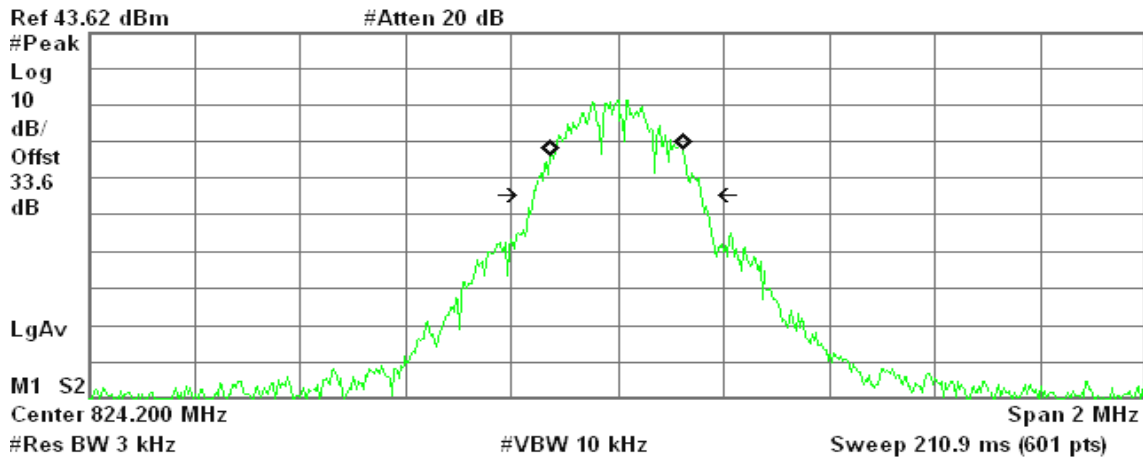
Transmit Freq Error 8.901 kHz
x dB Bandwidth 316.792 kHz



EDGE 850 (CH Low)

Agilent 23:43:30 Nov 22, 2010

R T



Occupied Bandwidth
248.6937 kHz

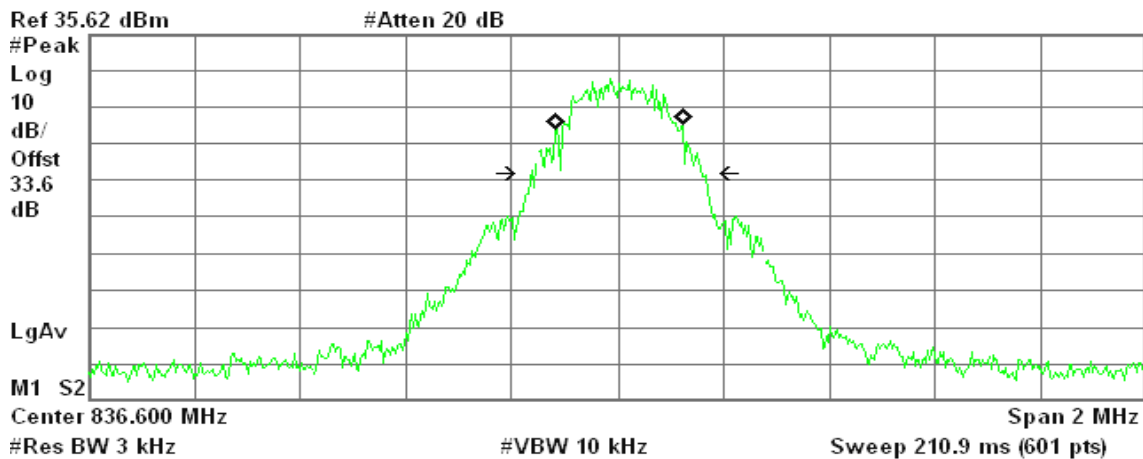
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -1.067 kHz
x dB Bandwidth 314.985 kHz

EDGE 850 (CH Mid)

Agilent 23:44:07 Nov 22, 2010

R T



Occupied Bandwidth
239.6519 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

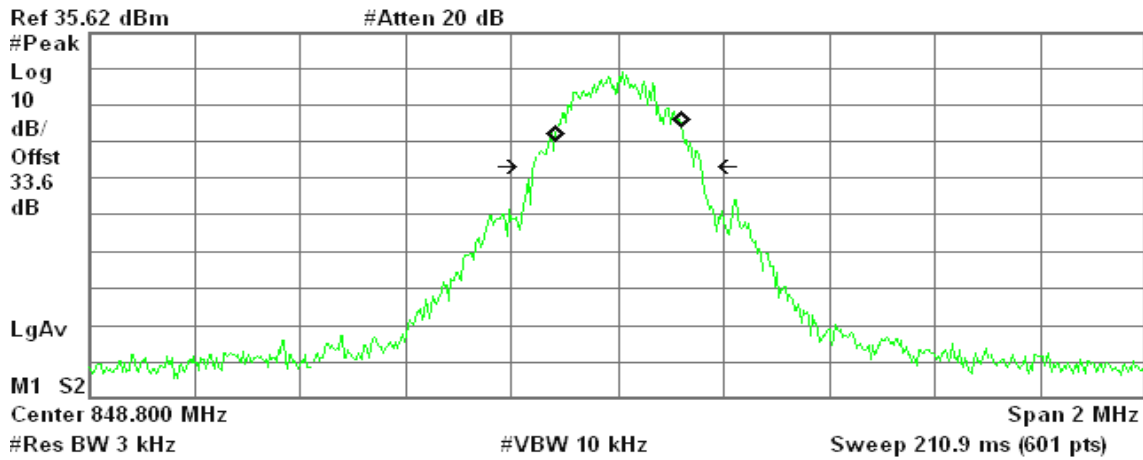
Transmit Freq Error 3.795 kHz
x dB Bandwidth 320.165 kHz



EDGE 850 (CH High)

Agilent 23:45:32 Nov 22, 2010

R T



Occupied Bandwidth
239.1788 kHz

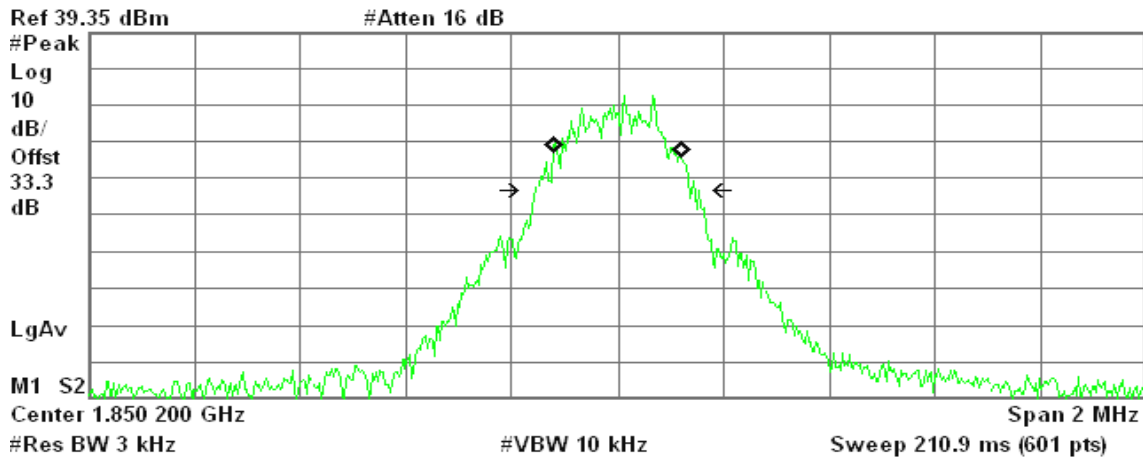
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 1.468 kHz
x dB Bandwidth 316.118 kHz

EDGE 1900 (CH Low)

Agilent 15:23:33 Nov 23, 2010

R T



Occupied Bandwidth
241.4179 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

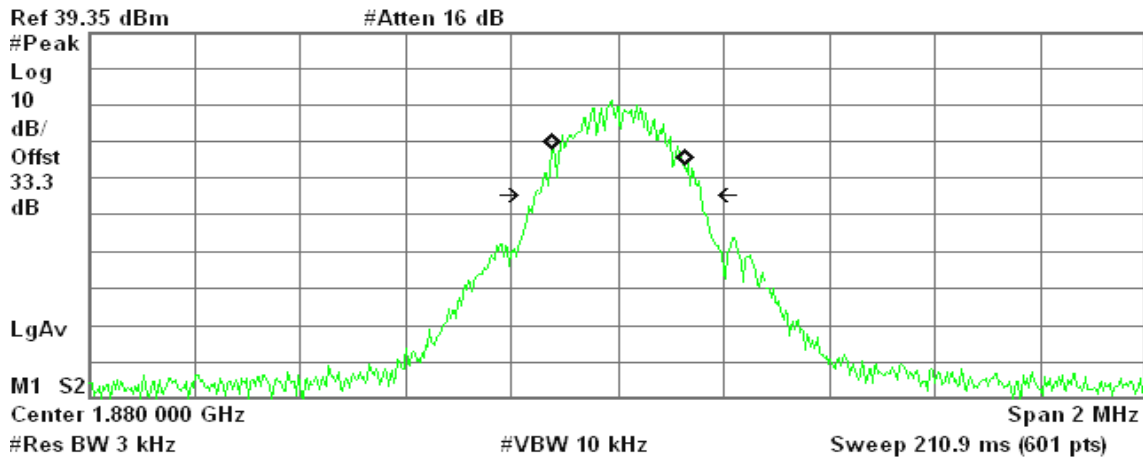
Transmit Freq Error 77.475 Hz
x dB Bandwidth 299.588 kHz



EDGE 1900 (CH Mid)

Agilent 15:23:55 Nov 23, 2010

R T



Occupied Bandwidth
247.4035 kHz

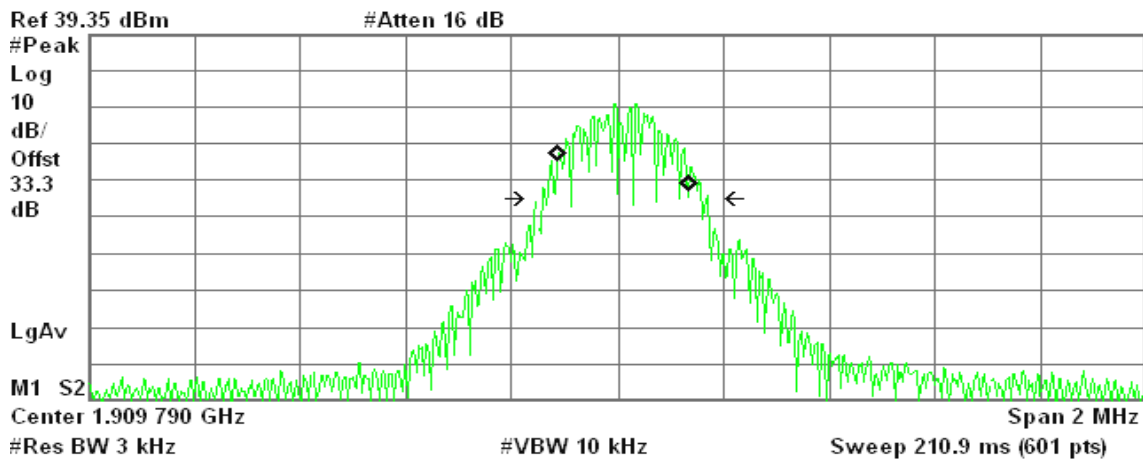
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 1.486 kHz
x dB Bandwidth 311.975 kHz

EDGE 1900 (CH High)

Agilent 15:56:44 Nov 23, 2010

R T



Occupied Bandwidth
243.4437 kHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

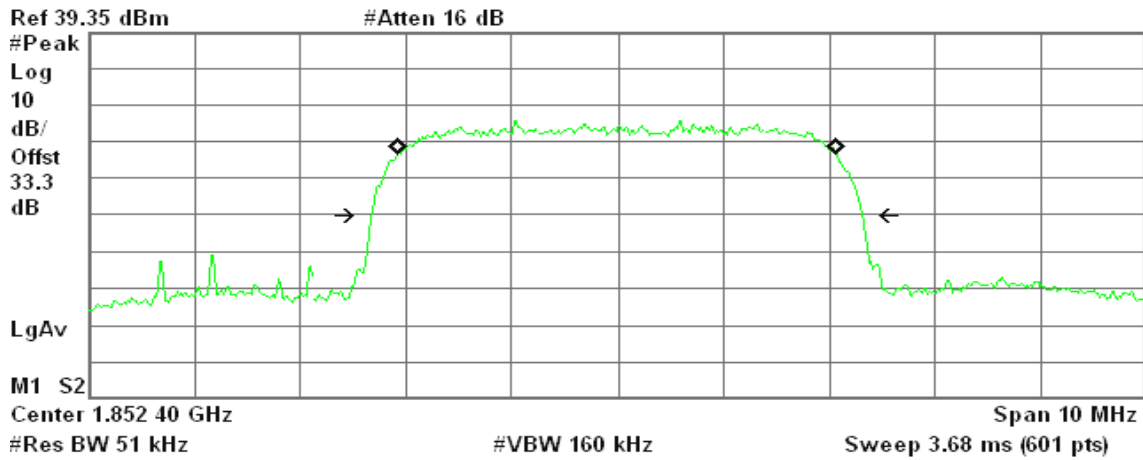
Transmit Freq Error 10.051 kHz
x dB Bandwidth 312.535 kHz



WCDMA Band II (CH Low)

Agilent 14:51:29 Nov 23, 2010

R T



Occupied Bandwidth
4.1511 MHz

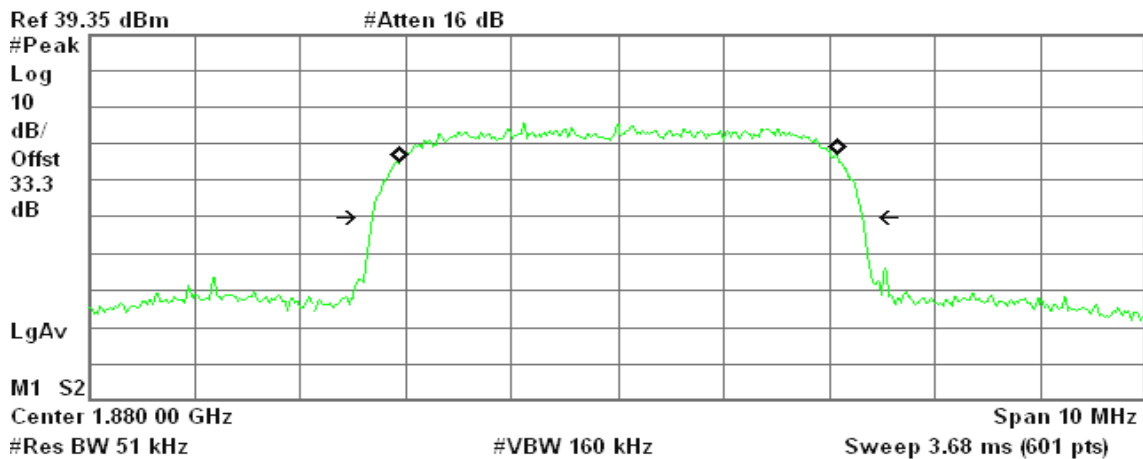
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -8.443 kHz
x dB Bandwidth 4.648 MHz

WCDMA Band II (CH Mid)

Agilent 14:51:51 Nov 23, 2010

R T



Occupied Bandwidth
4.1423 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

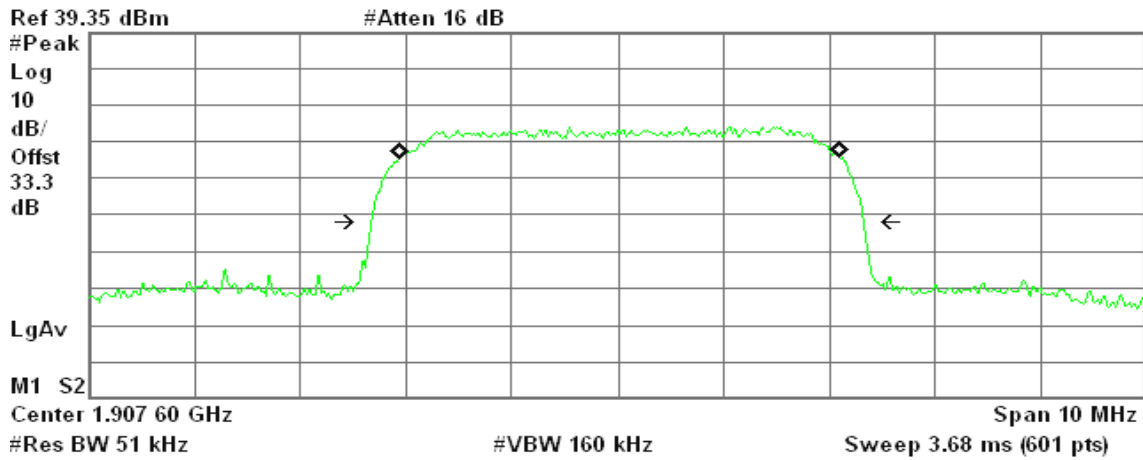
Transmit Freq Error 11.379 kHz
x dB Bandwidth 4.642 MHz



WCDMA Band II (CH High)

Agilent 14:53:04 Nov 23, 2010

R T



Occupied Bandwidth
4.1724 MHz

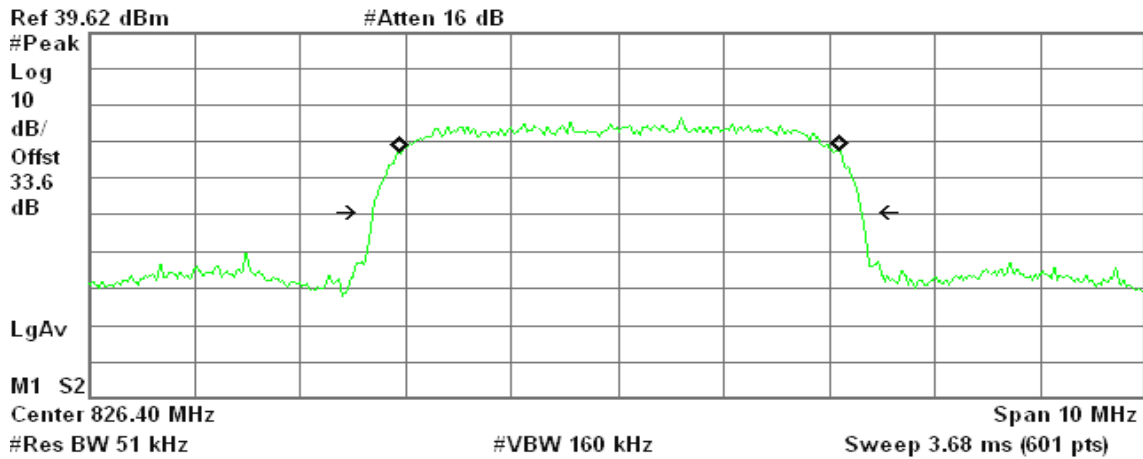
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 15.082 kHz
x dB Bandwidth 4.659 MHz

WCDMA Band V (CH Low)

Agilent 14:40:53 Nov 23, 2010

R T



Occupied Bandwidth
4.1640 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

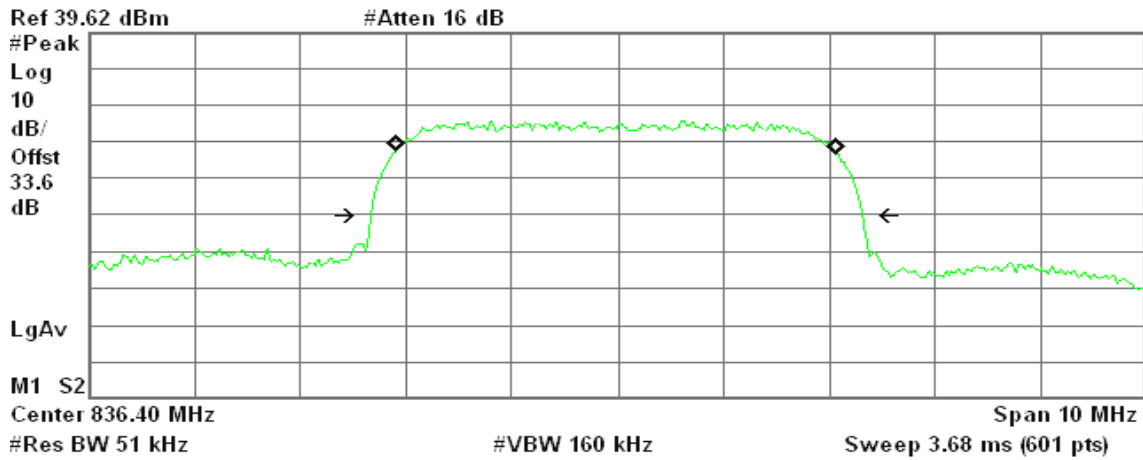
Transmit Freq Error 11.909 kHz
x dB Bandwidth 4.629 MHz



WCDMA Band V (CH Mid)

Agilent 14:47:04 Nov 23, 2010

R T



Occupied Bandwidth
4.1562 MHz

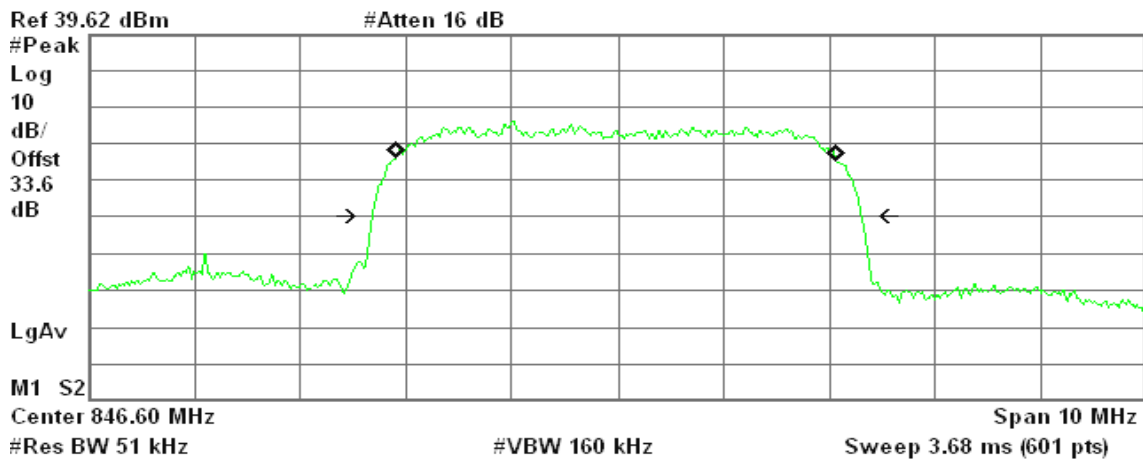
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -17.148 kHz
x dB Bandwidth 4.653 MHz

WCDMA Band V (CH High)

Agilent 14:42:35 Nov 23, 2010

R T



Occupied Bandwidth
4.1620 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

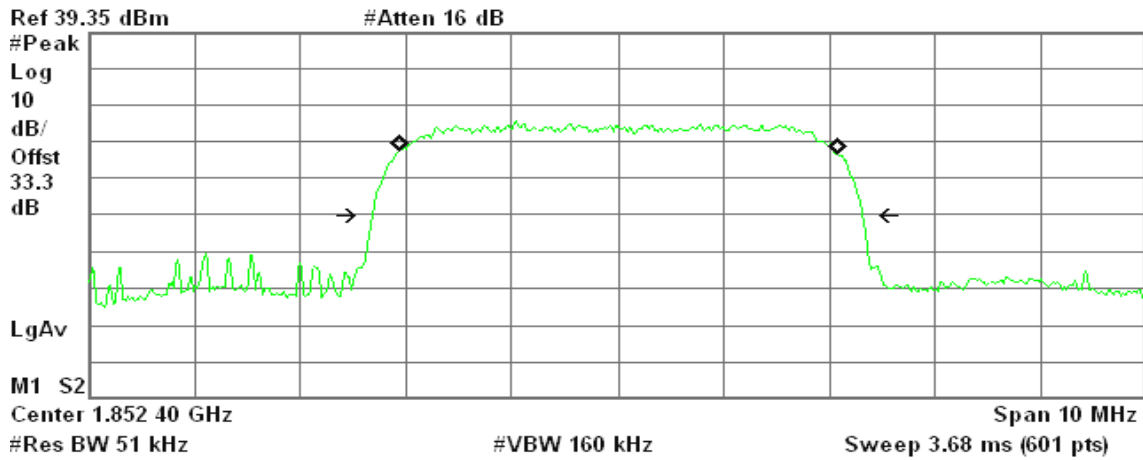
Transmit Freq Error -11.048 kHz
x dB Bandwidth 4.632 MHz



WCDMA / HSDPA Band II (CH Low)

Agilent 14:51:05 Nov 23, 2010

R T



Occupied Bandwidth
4.1600 MHz

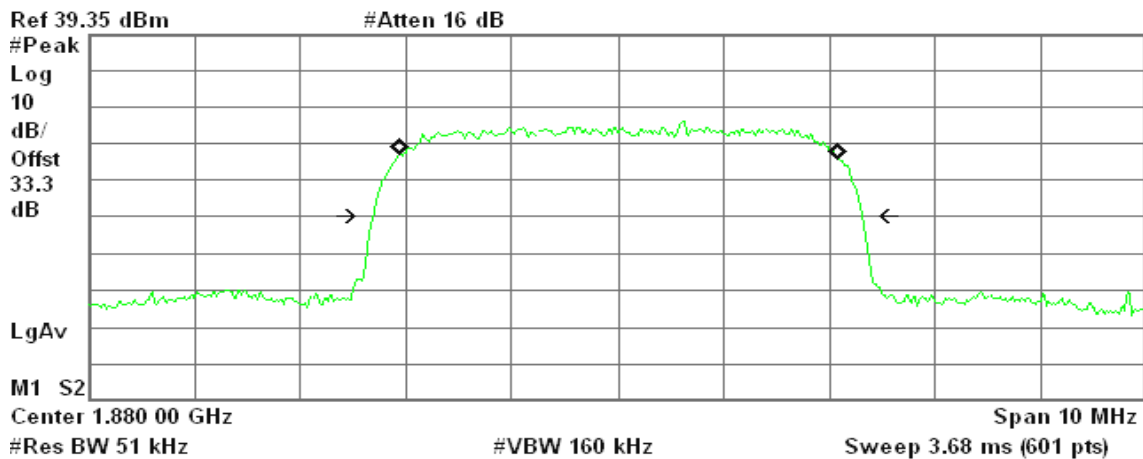
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 6.397 kHz
x dB Bandwidth 4.639 MHz

WCDMA / HSDPA Band II (CH Mid)

Agilent 14:52:16 Nov 23, 2010

R T



Occupied Bandwidth
4.1521 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

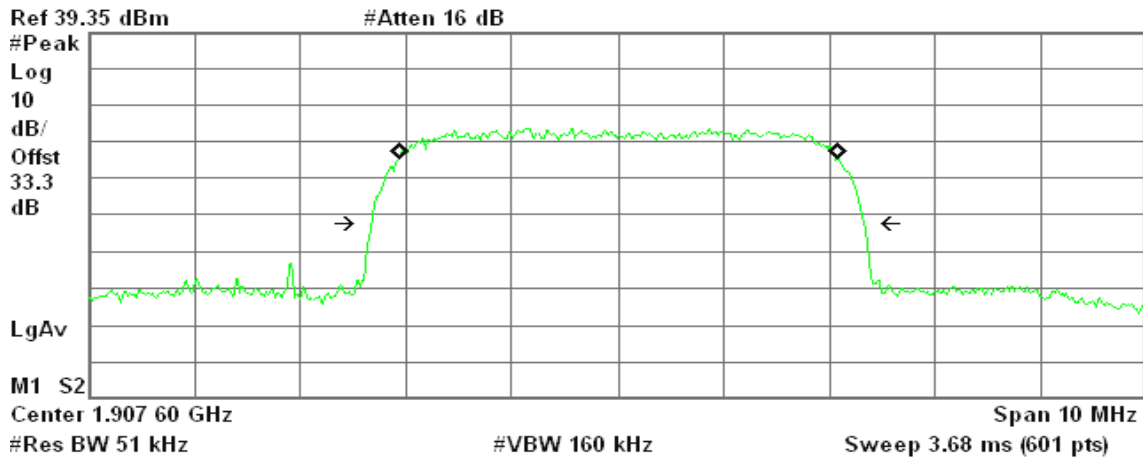
Transmit Freq Error 7.466 kHz
x dB Bandwidth 4.629 MHz



WCDMA / HSDPA Band II (CH High)

Agilent 14:52:37 Nov 23, 2010

R T



Occupied Bandwidth
4.1585 MHz

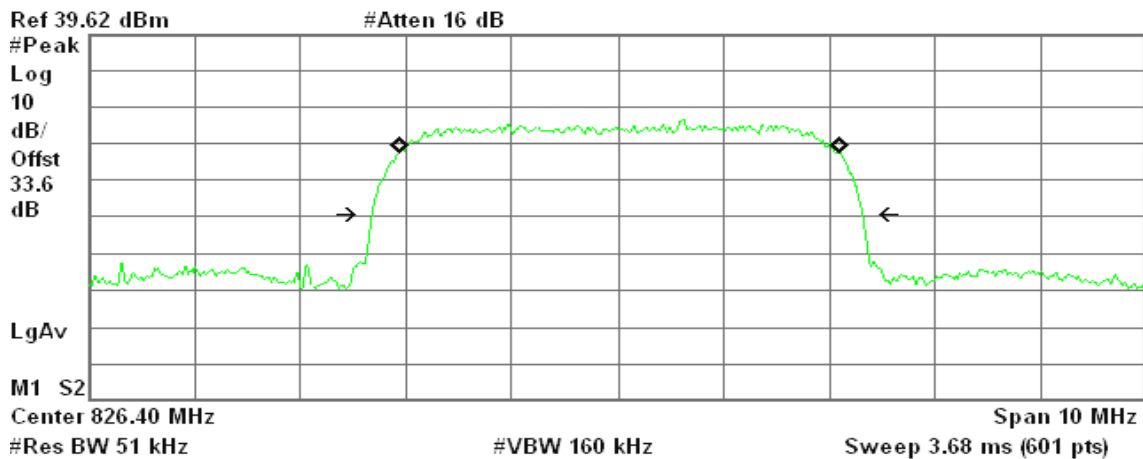
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 9.144 kHz
x dB Bandwidth 4.661 MHz

WCDMA / HSDPA Band V (CH Low)

Agilent 14:40:29 Nov 23, 2010

R T



Occupied Bandwidth
4.1668 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

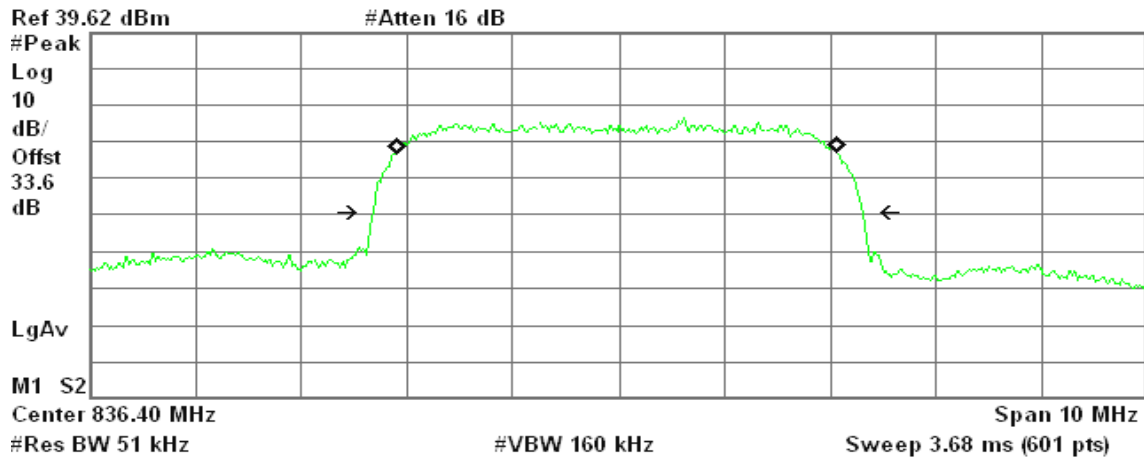
Transmit Freq Error 11.999 kHz
x dB Bandwidth 4.646 MHz



WCDMA / HSDPA Band V (CH Mid)

Agilent 14:47:31 Nov 23, 2010

R T



Occupied Bandwidth
4.1724 MHz

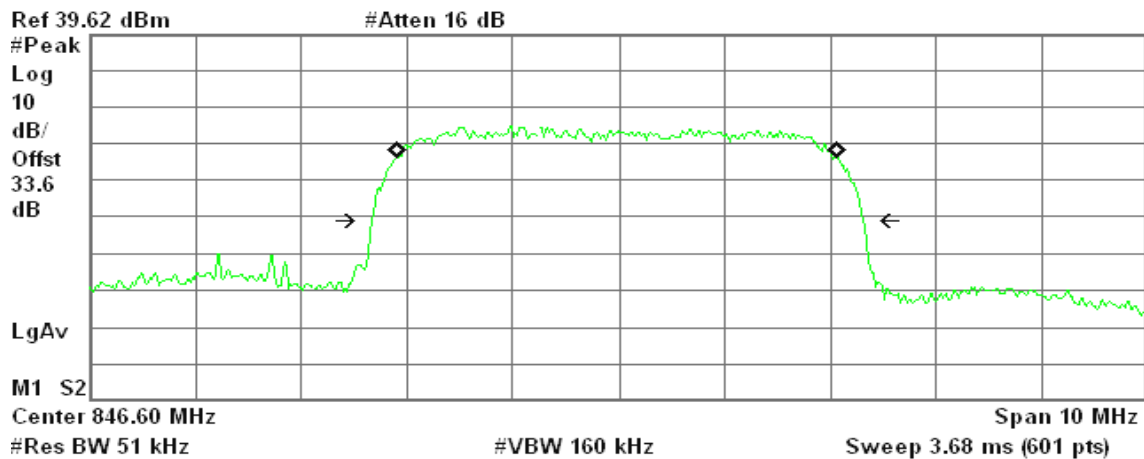
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -15.522 kHz
x dB Bandwidth 4.634 MHz

WCDMA / HSDPA Band V (CH High)

Agilent 14:42:12 Nov 23, 2010

R T



Occupied Bandwidth
4.1726 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

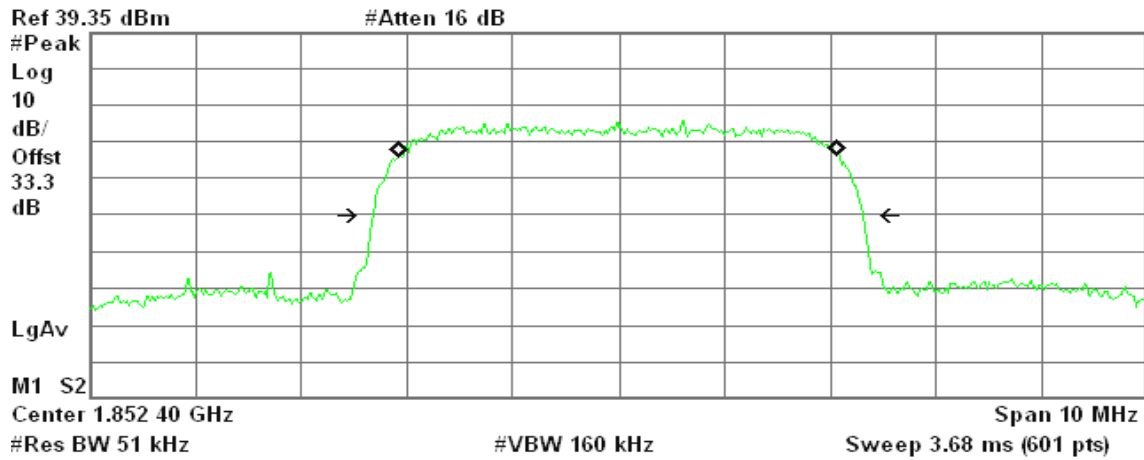
Transmit Freq Error -12.583 kHz
x dB Bandwidth 4.659 MHz



WCDMA / HSUPA Band II (CH Low)

Agilent 14:51:17 Nov 23, 2010

R T



Occupied Bandwidth
4.1545 MHz

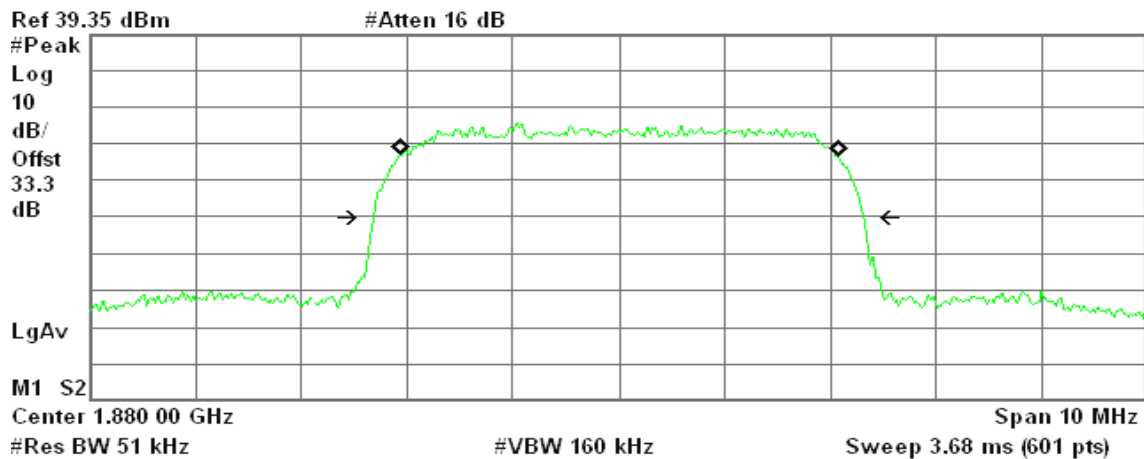
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -2.919 kHz
x dB Bandwidth 4.635 MHz

WCDMA / HSUPA Band II (CH Mid)

Agilent 14:52:01 Nov 23, 2010

R T



Occupied Bandwidth
4.1462 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

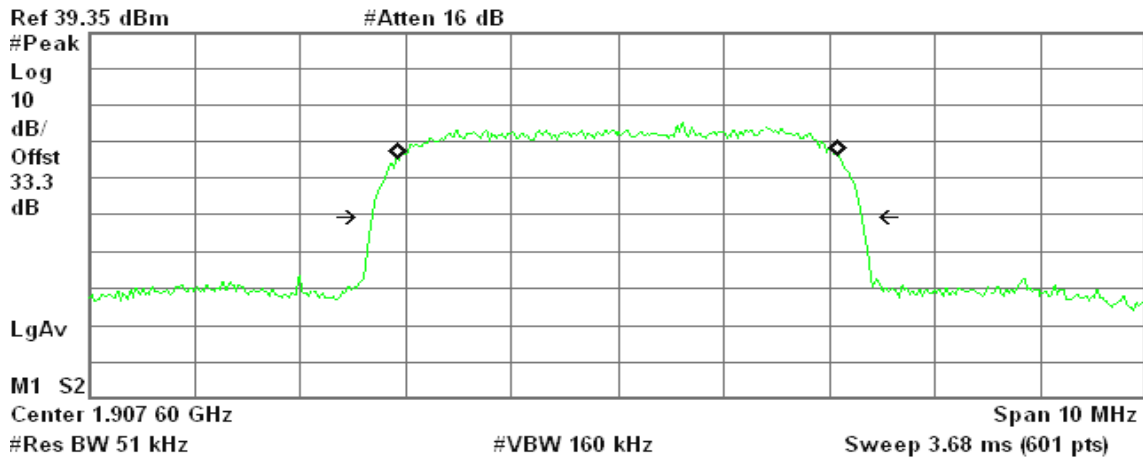
Transmit Freq Error 2.815 kHz
x dB Bandwidth 4.640 MHz



WCDMA / HSUPA Band II (CH High)

Agilent 14:52:49 Nov 23, 2010

R T



Occupied Bandwidth
4.1693 MHz

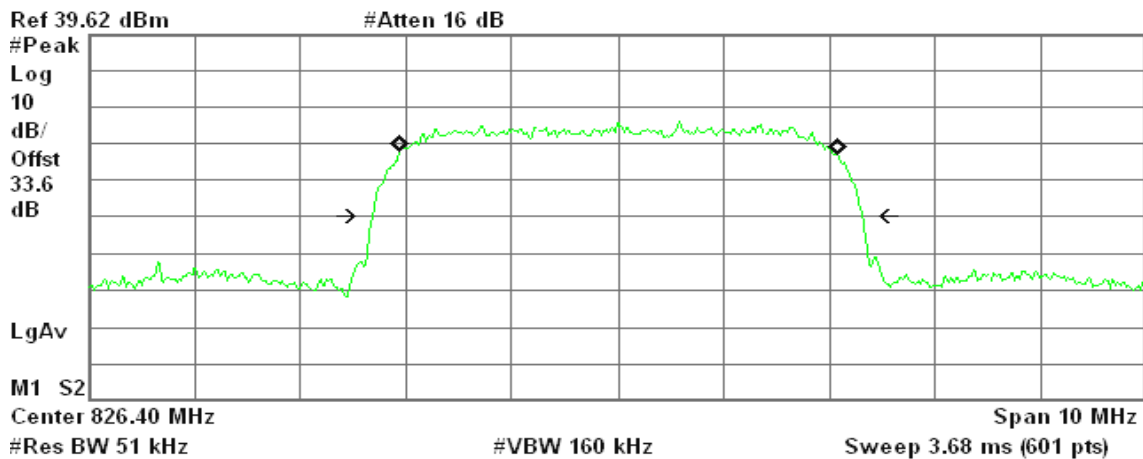
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error 5.594 kHz
x dB Bandwidth 4.634 MHz

WCDMA / HSUPA Band V (CH Low).

Agilent 14:40:43 Nov 23, 2010

R T



Occupied Bandwidth
4.1483 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

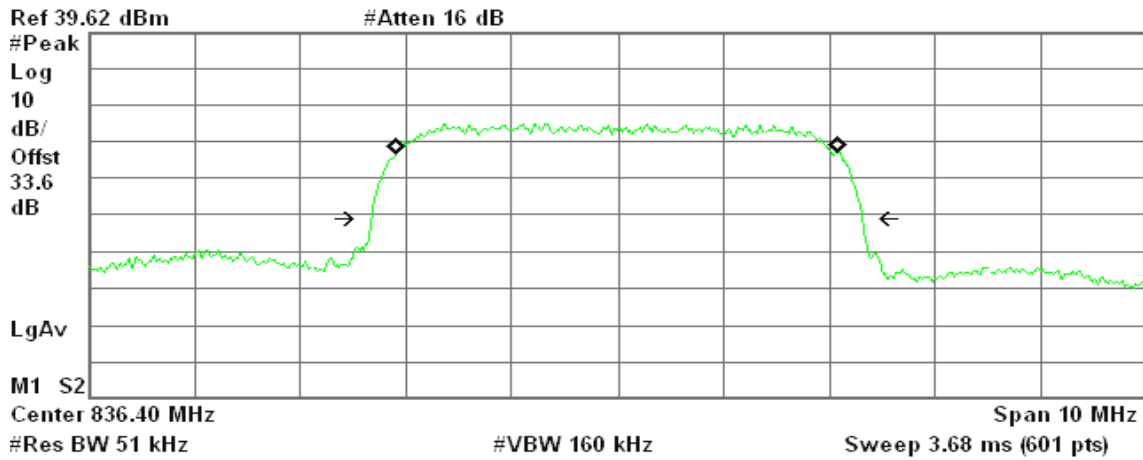
Transmit Freq Error 7.630 kHz
x dB Bandwidth 4.639 MHz



WCDMA / HSUPA Band V (CH Mid)

Agilent 14:47:16 Nov 23, 2010

R T



Occupied Bandwidth
4.1857 MHz

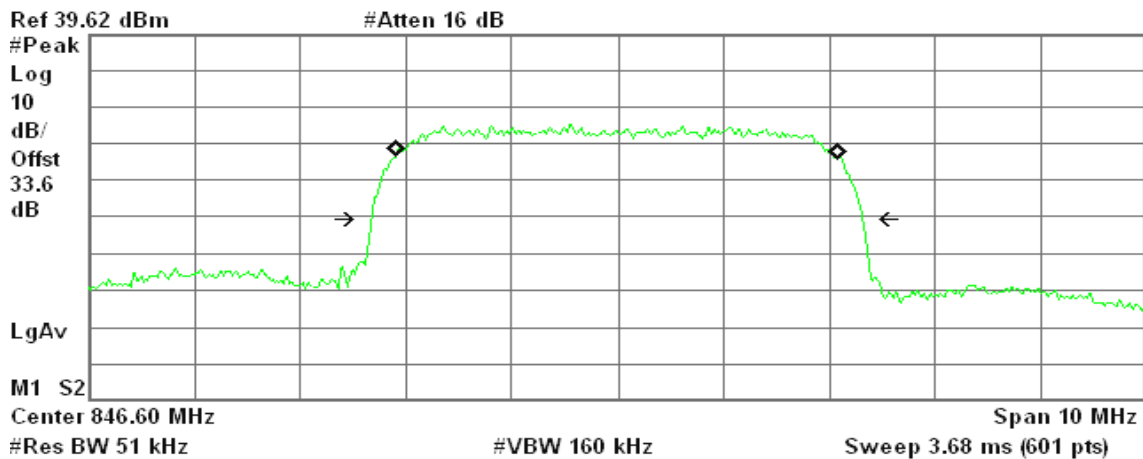
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -2.112 kHz
x dB Bandwidth 4.649 MHz

WCDMA / HSUPA Band V (CH High)

Agilent 14:42:24 Nov 23, 2010

R T



Occupied Bandwidth
4.1827 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -5.953 kHz
x dB Bandwidth 4.651 MHz



7.5 OUT OF BAND EMISSION AT ANTENNA TERMINALS

LIMIT

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

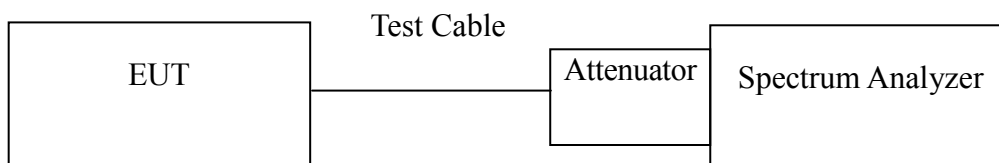
Out of Band Emissions: The mean power of emission must be attenuated below the mean power of the non-modulated carrier (P) on any frequency twice or more than twice the fundamental frequency by at least $43 + 10 \log P$ dB.

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 least 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



Mode	CH	Location	Description
HSUPA WCDMA (Band II)	9262	Figure 27-1	Conducted spurious emissions, 30MHz - 20GHz
	9400	Figure 27-2	Conducted spurious emissions, 30MHz - 20GHz
	9538	Figure 27-3	Conducted spurious emissions, 30MHz - 20GHz
HSUPA WCDMA (Band V)	4132	Figure 28-1	Conducted spurious emissions, 30MHz - 20GHz
	4182	Figure 28-2	Conducted spurious emissions, 30MHz - 20GHz
	4233	Figure 28-3	Conducted spurious emissions, 30MHz - 20GHz

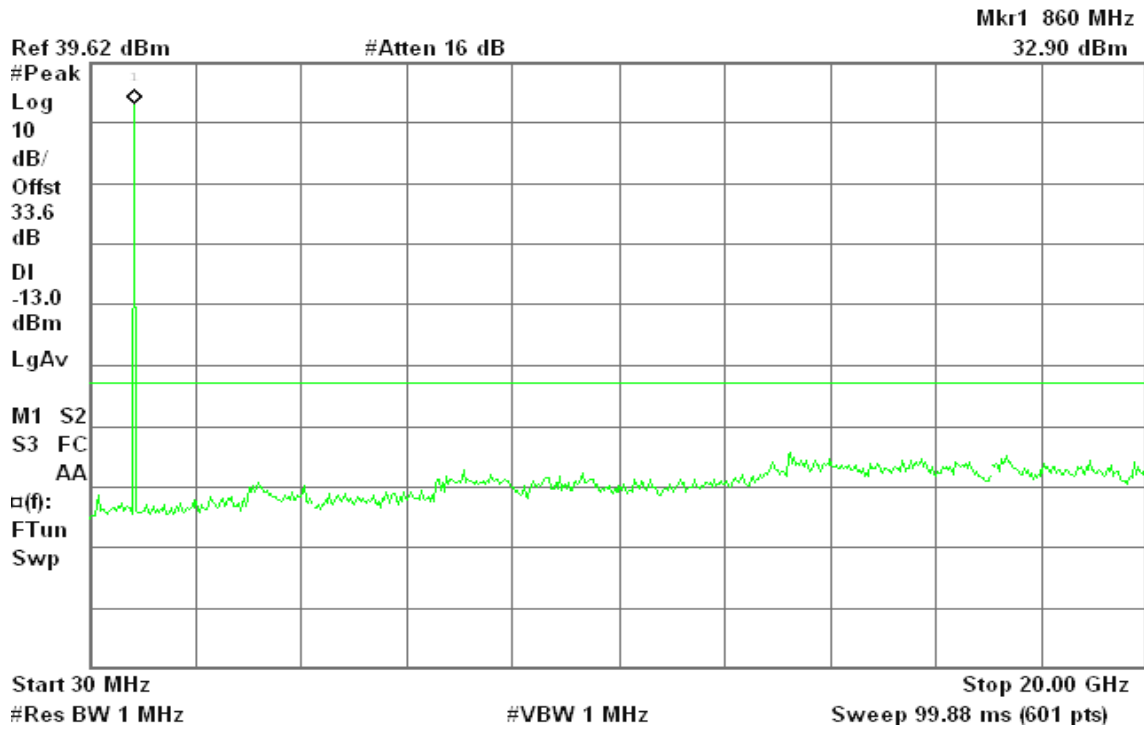
Mode	CH	Location	Description
HSUPA WCDMA (Band II)	9262	Figure 29-1	Band Edge emissions
	9538	Figure 29-2	Band Edge emissions
HSUPA WCDMA (Band V)	4132	Figure 30-1	Band Edge emissions
	4233	Figure 30-2	Band Edge emissions



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

Agilent 14:23:06 Nov 23, 2010

R T



GPRS 850

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

Agilent 14:21:29 Nov 23, 2010

R T

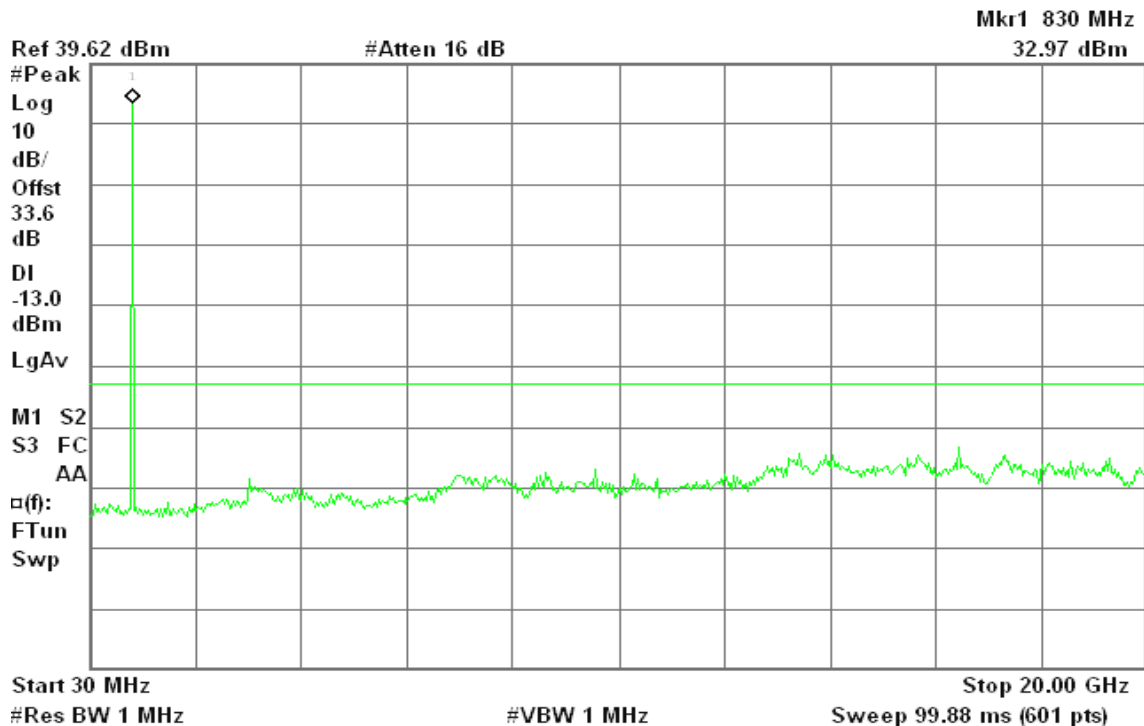




Figure 8-2: Out of Band emission at antenna terminals –GPRS CH Mid

Agilent 14:21:29 Nov 23, 2010

R T

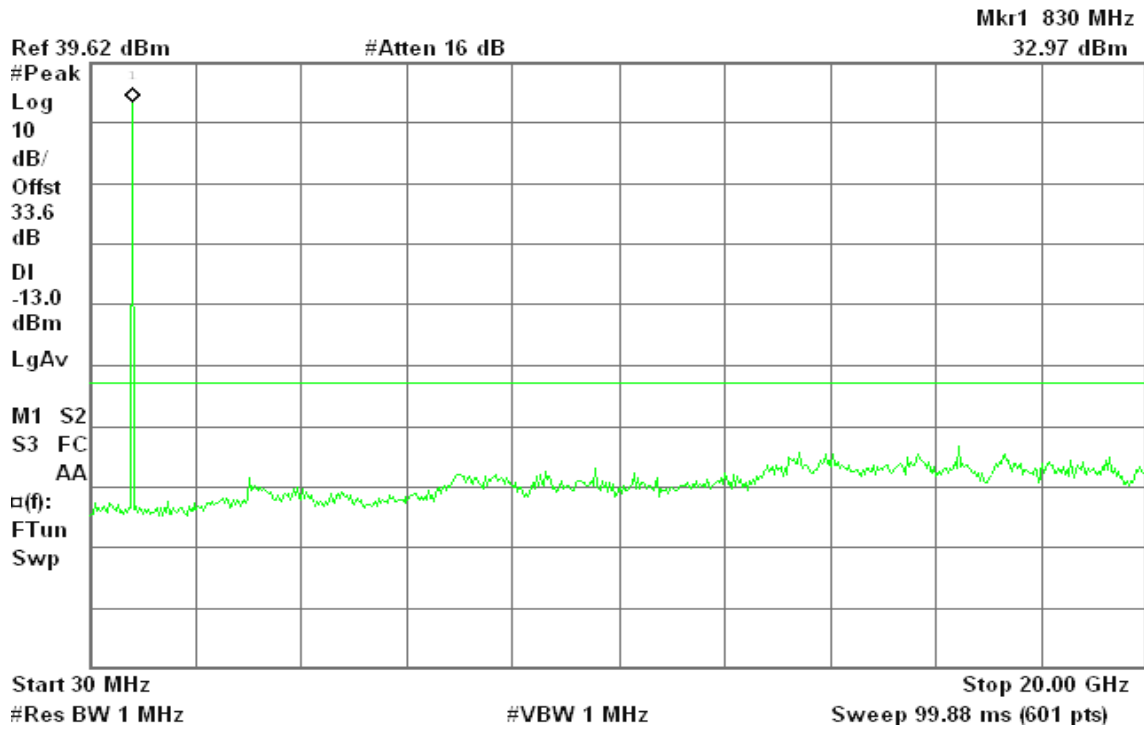
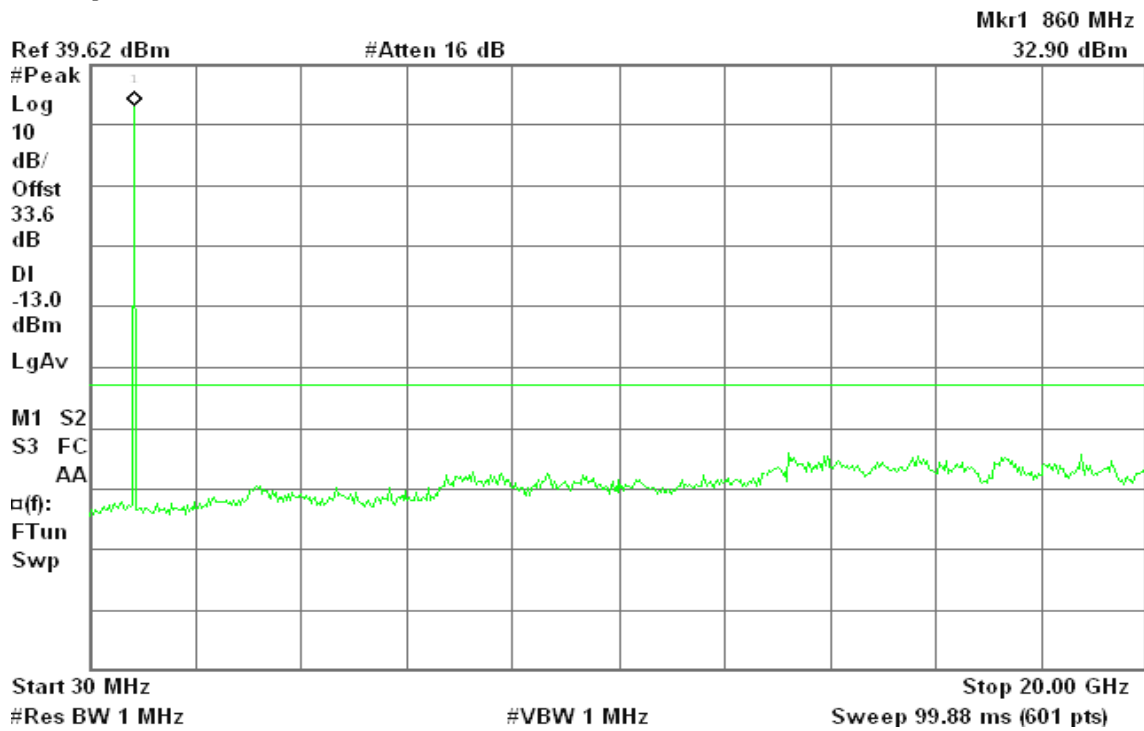


Figure 8-3: Out of Band emission at antenna terminals –GPRS CH High

Agilent 14:21:15 Nov 23, 2010

R T





GSM 1900

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

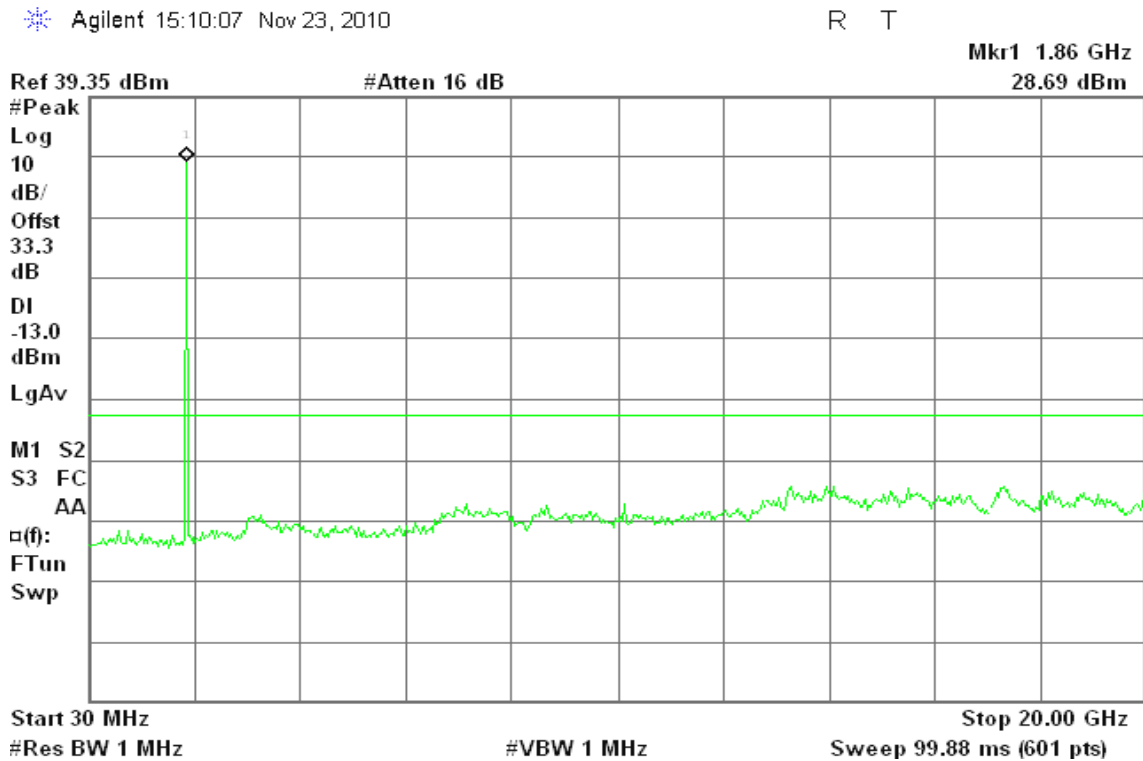


Figure 9-2: Out of Band emission at antenna terminals – GSM CH Mid

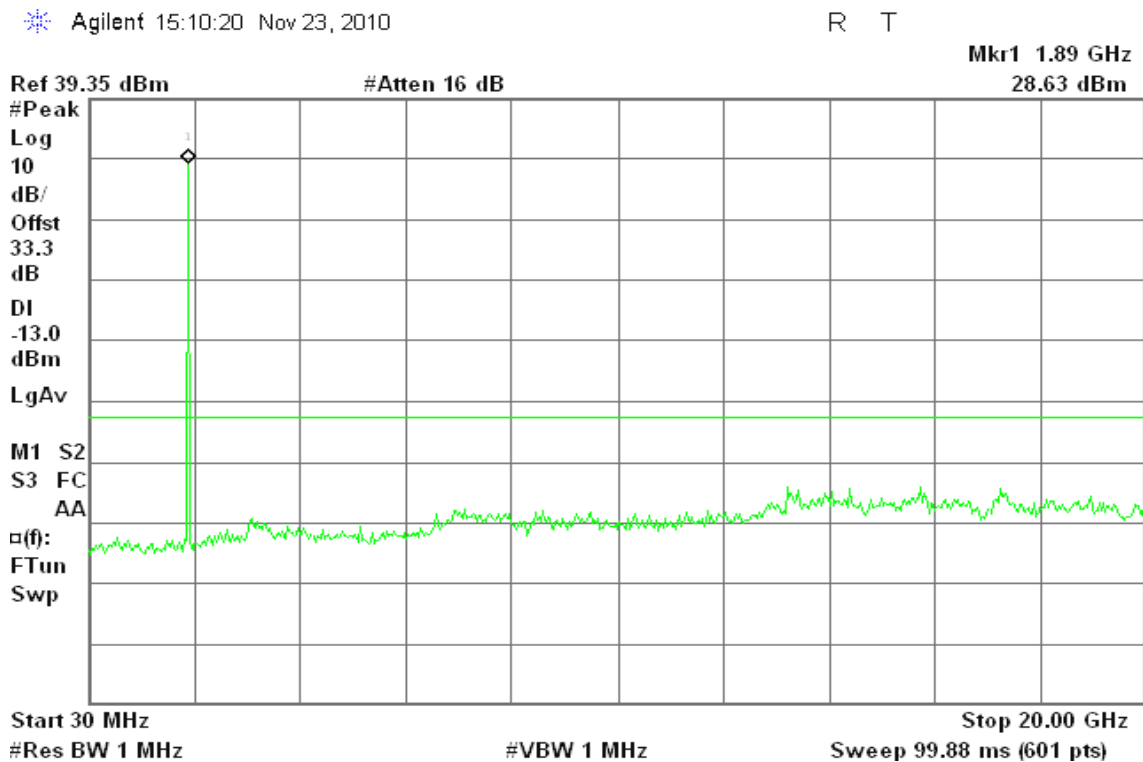
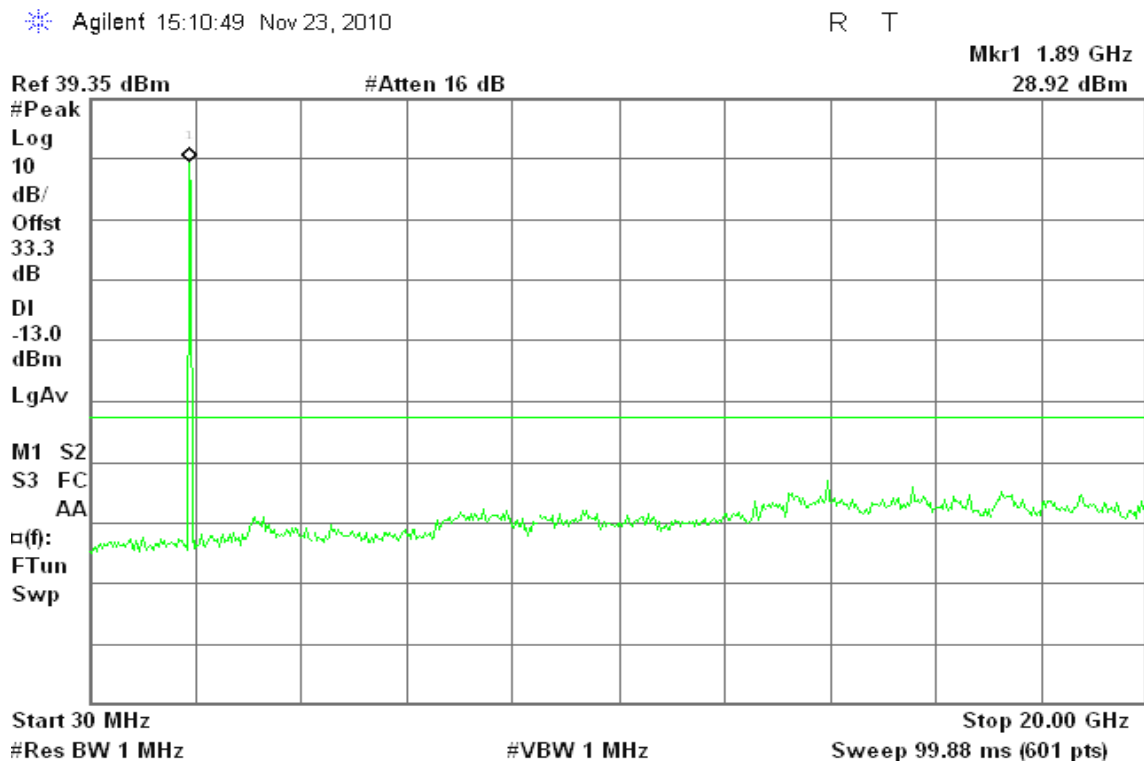


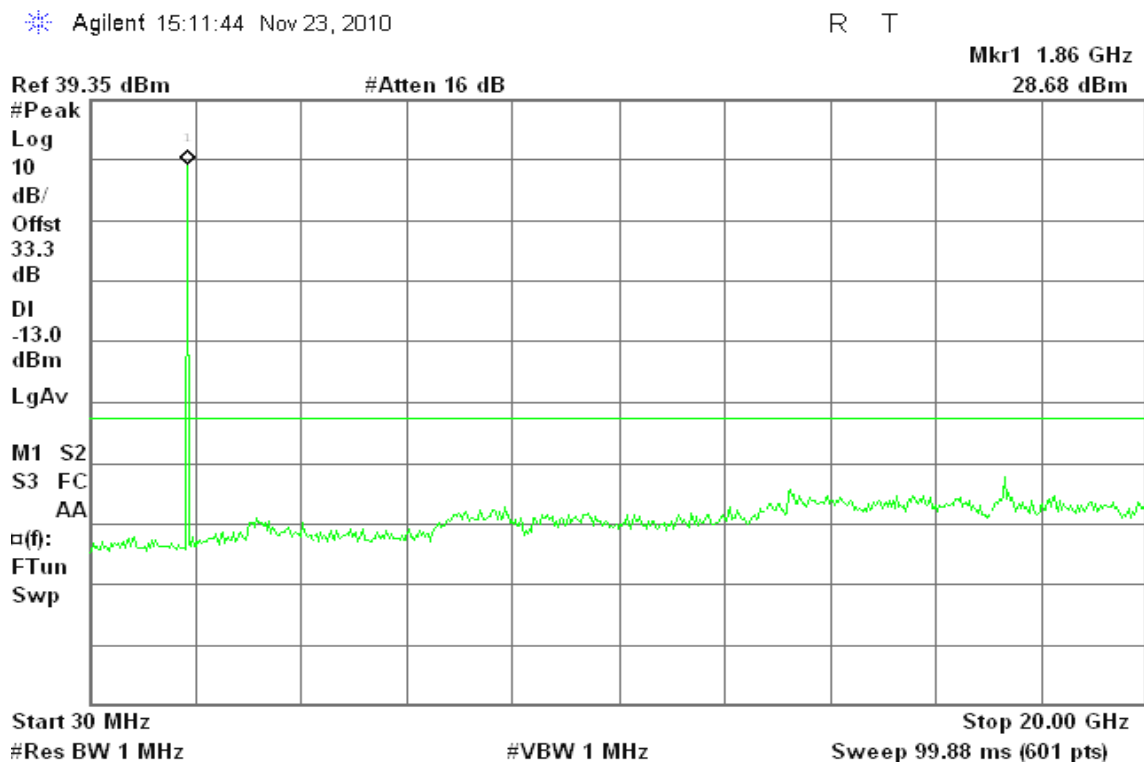


Figure 9-3: Out of Band emission at antenna terminals – GSM CH High



GPRS 1900

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





GSM 850

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

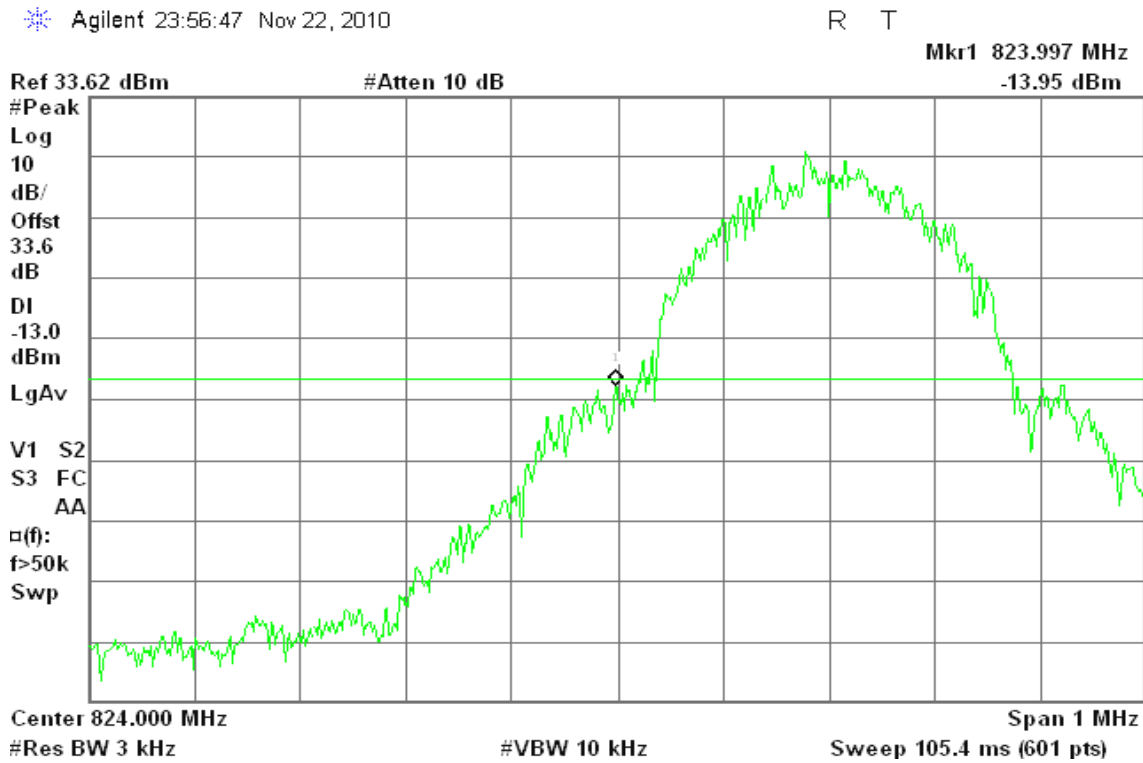
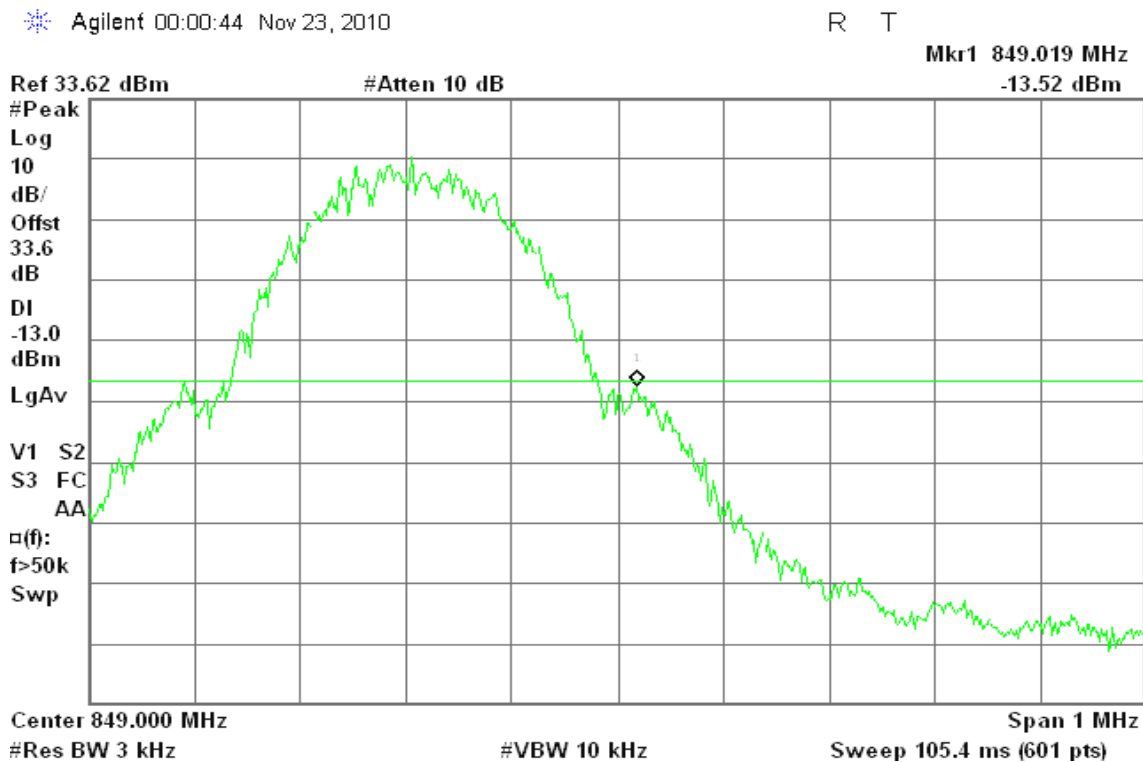


Figure 11-2: Band Edge emissions – GSM CH High





GSM 1900

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

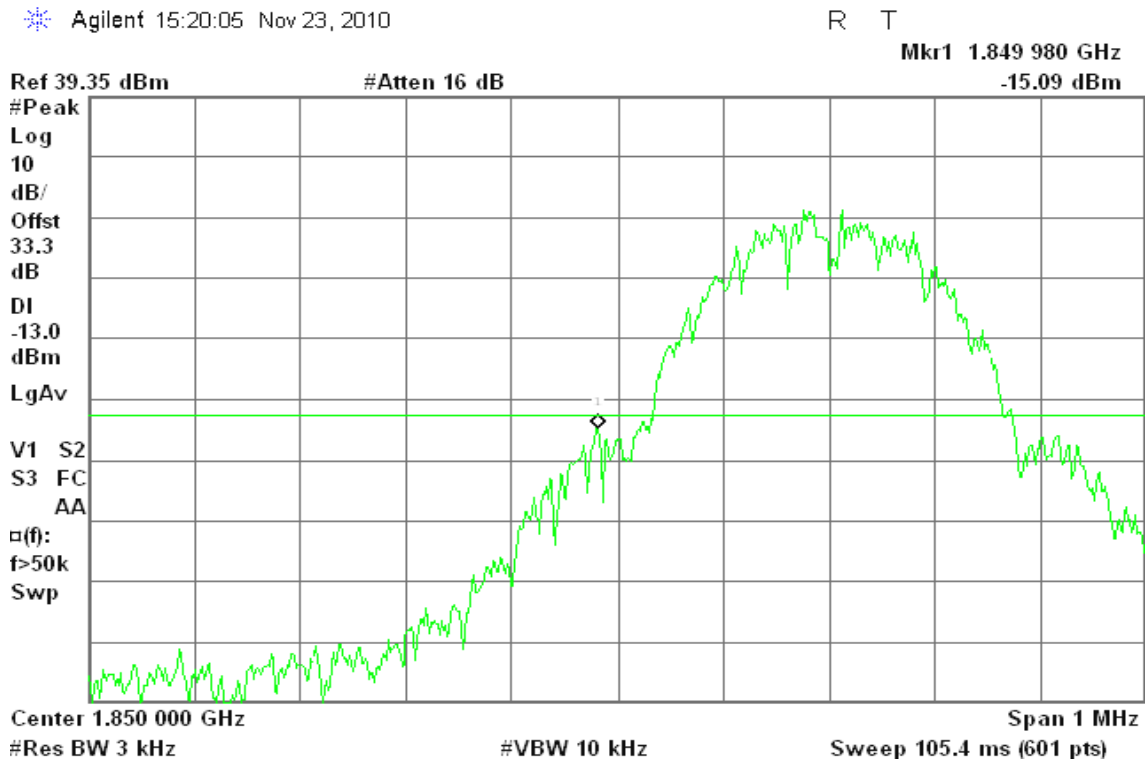
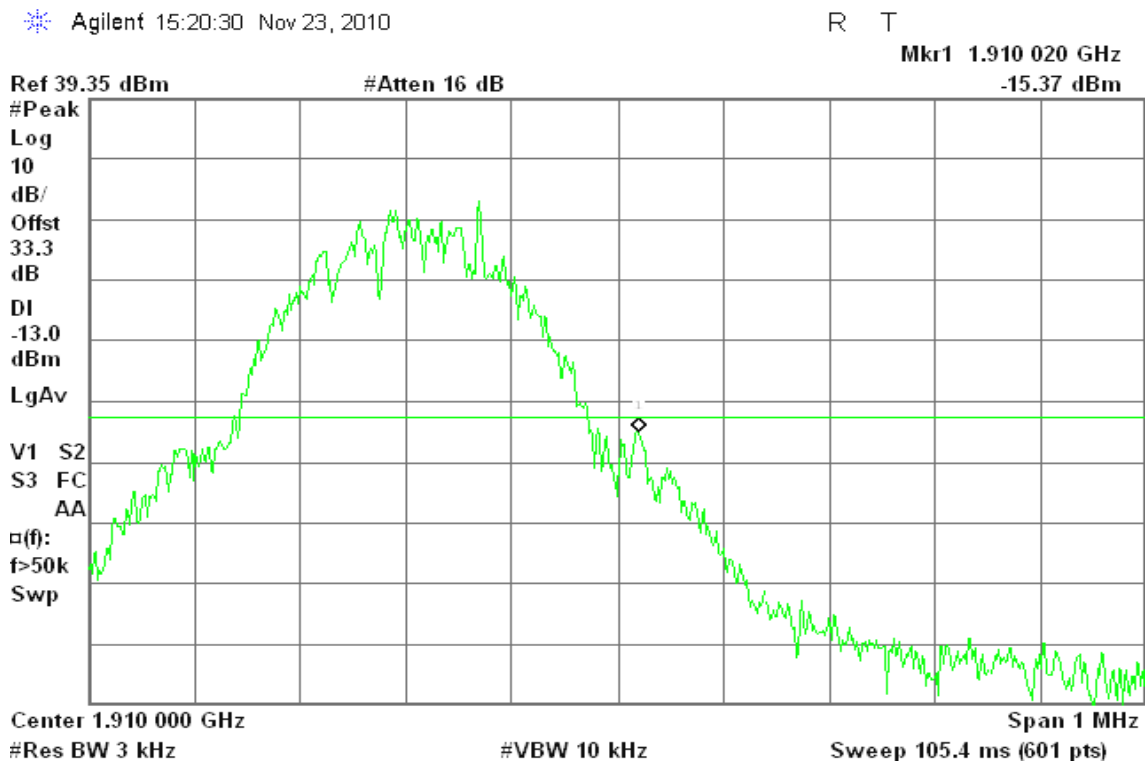


Figure 13-2: Band Edge emissions – GSM CH High





GPRS 1900

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

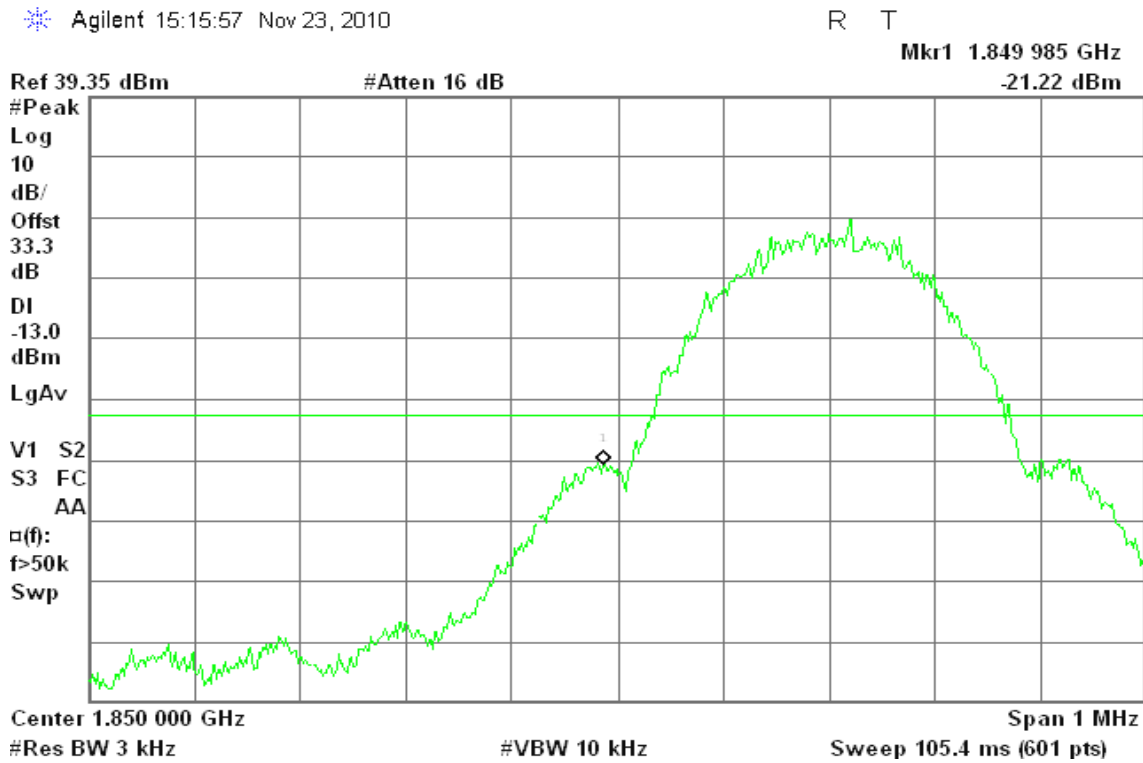
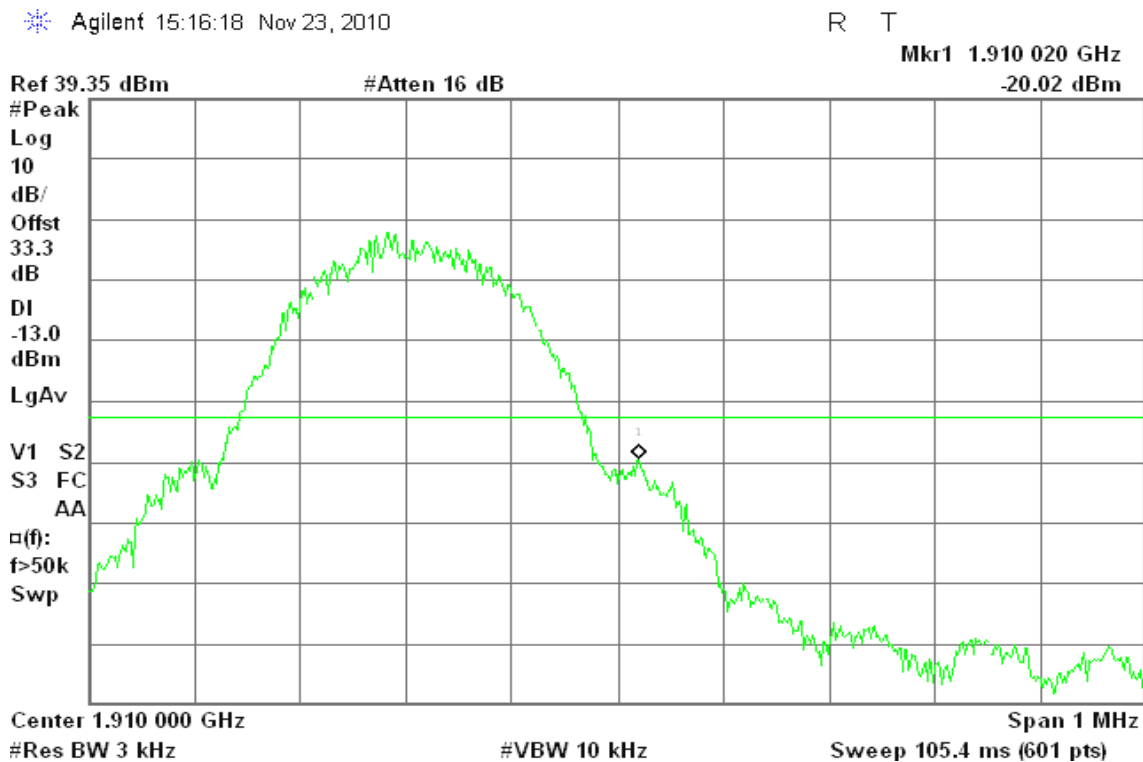


Figure 14-2: Band Edge emissions – GPRS CH High





EDGE 850

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

Agilent 14:24:34 Nov 23, 2010

R T

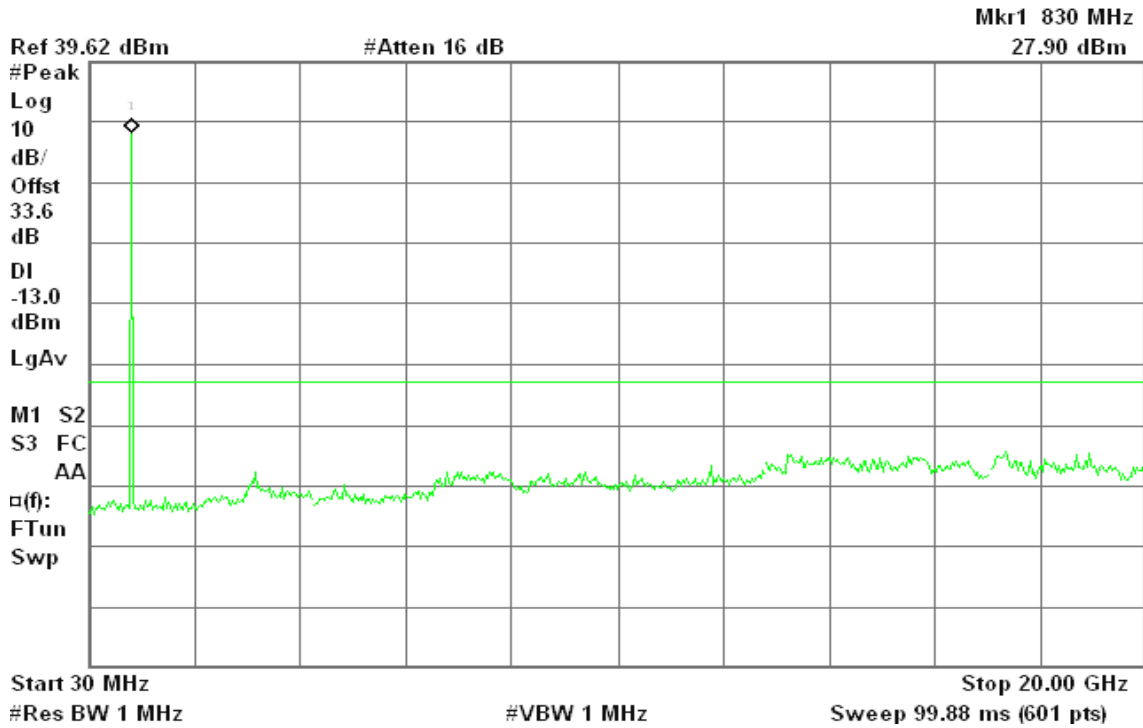


Figure 15-2: Out of Band emission at antenna terminals –EDGE CH Mid

Agilent 14:24:46 Nov 23, 2010

R T

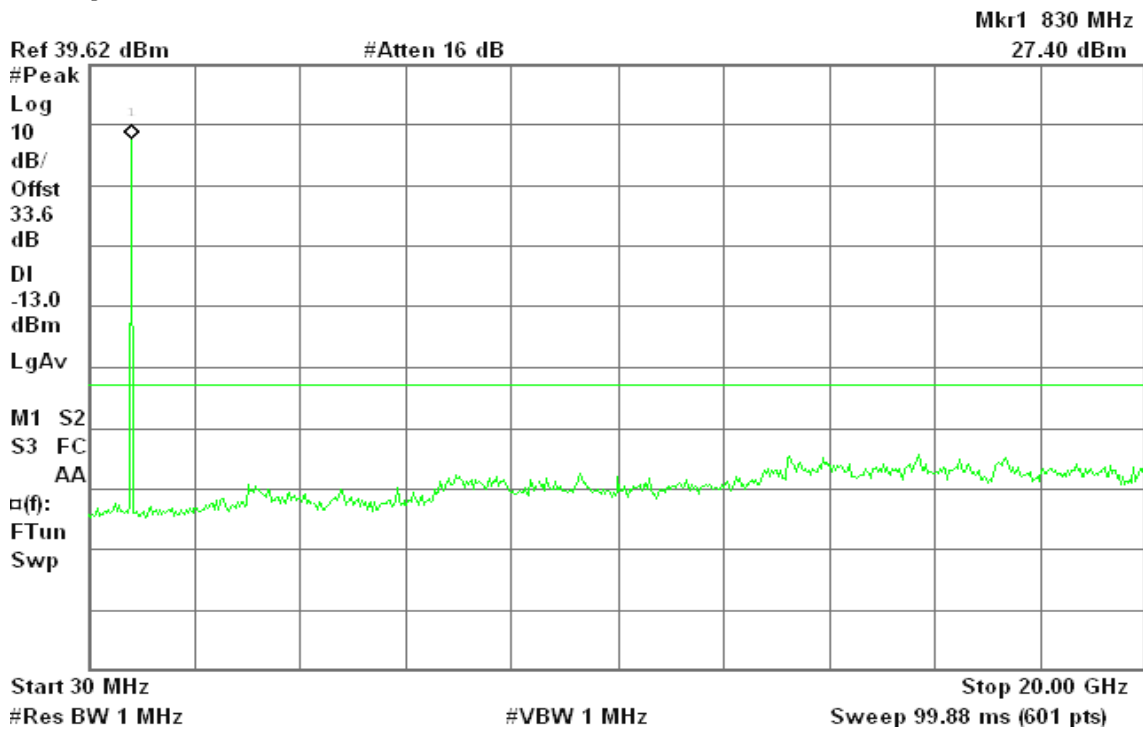
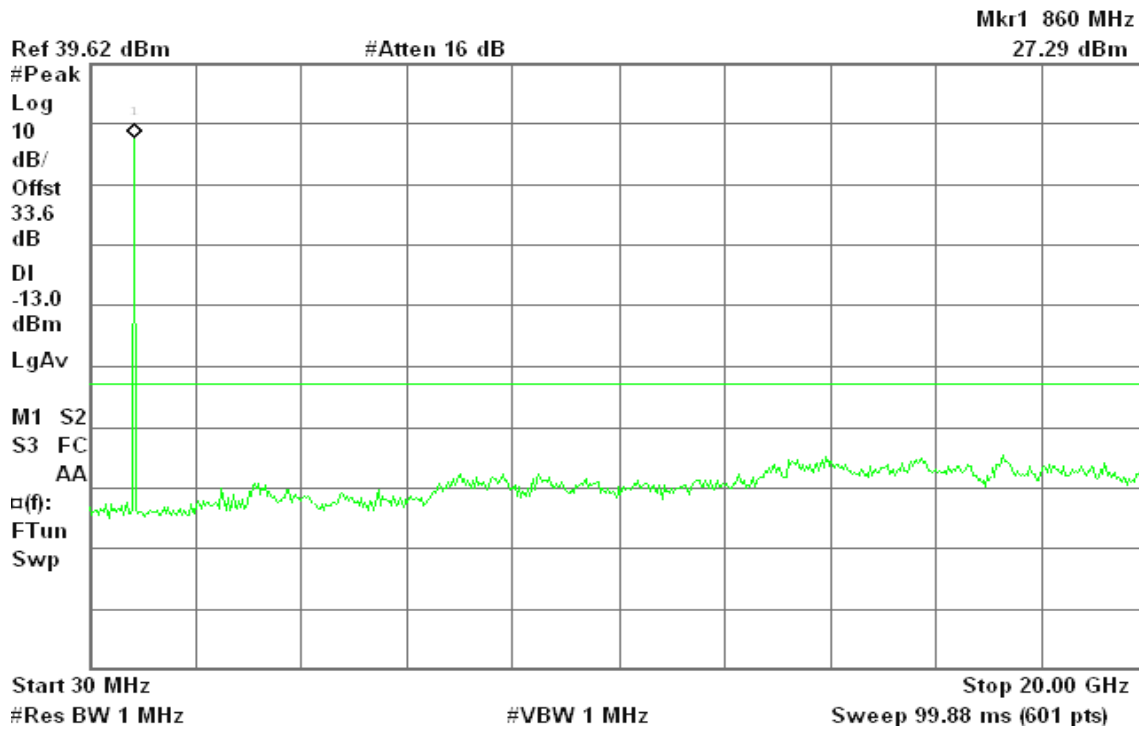




Figure 15-3: Out of Band emission at antenna terminals –EDGE CH High

Agilent 14:24:57 Nov 23, 2010

R T



EDGE 1900

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

Agilent 15:12:48 Nov 23, 2010

R T

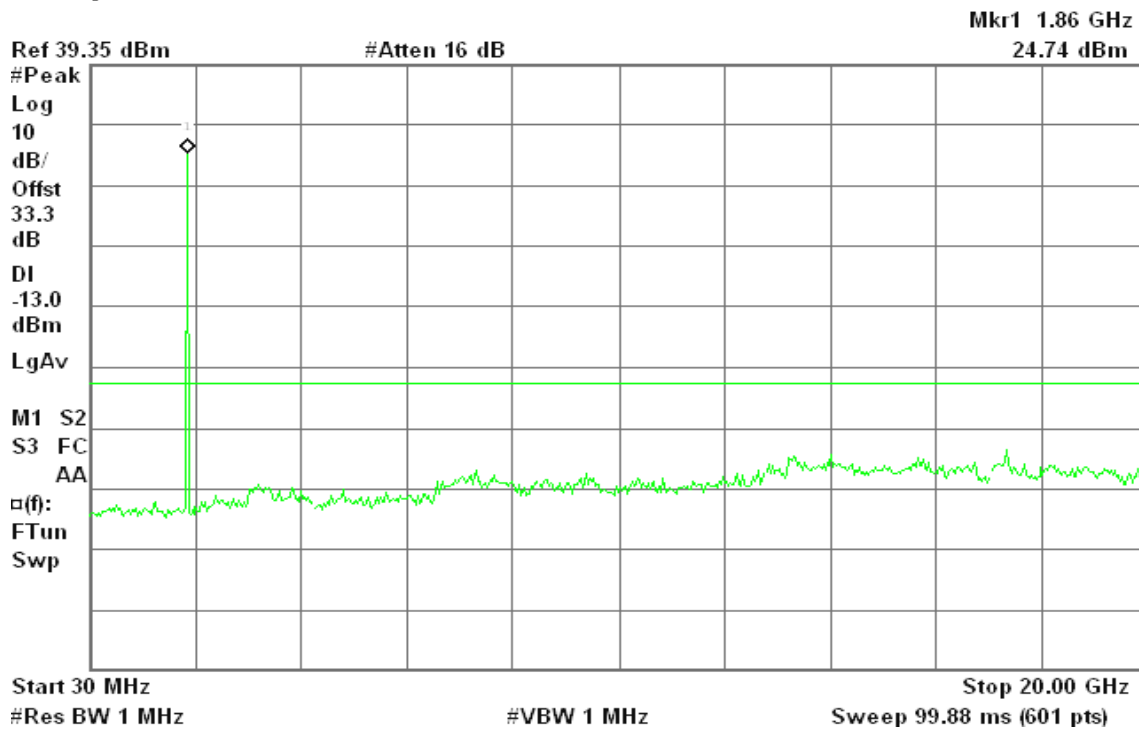




Figure 16-2: Out of Band emission at antenna terminals –EDGE CH Mid

Agilent 15:12:58 Nov 23, 2010

R T

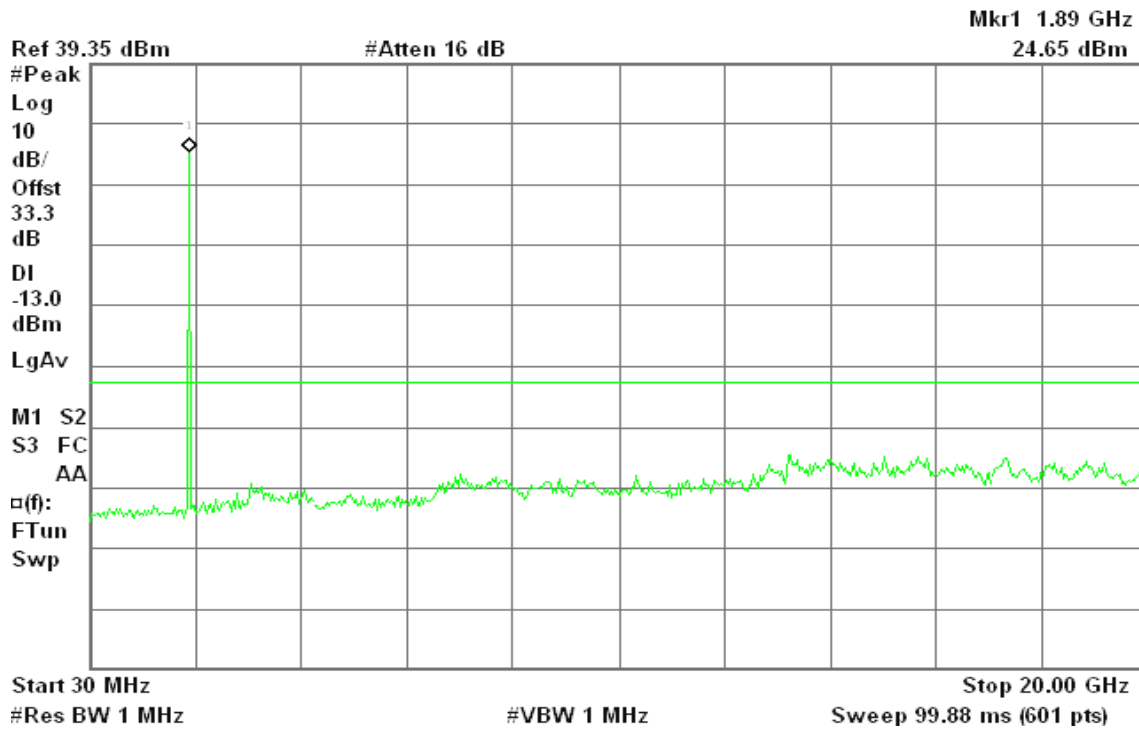
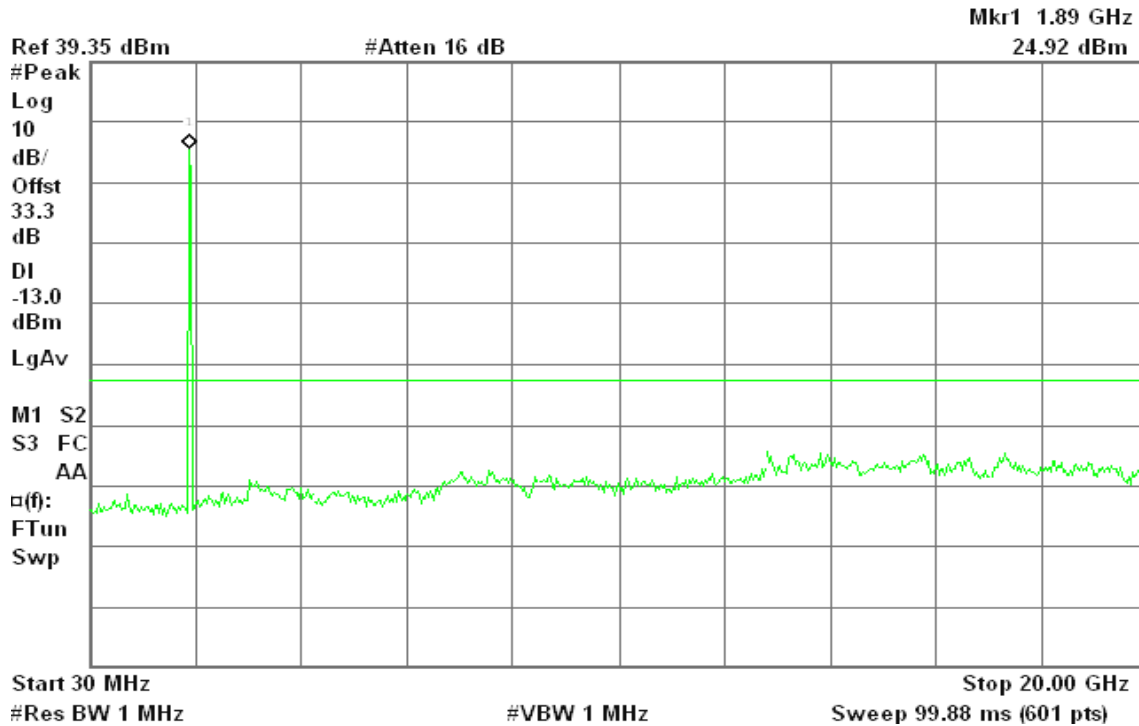


Figure 16-3: Out of Band emission at antenna terminals –EDGE CH High

Agilent 15:13:13 Nov 23, 2010

R T





EDGE 850

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

Agilent 23:57:51 Nov 22, 2010

R T

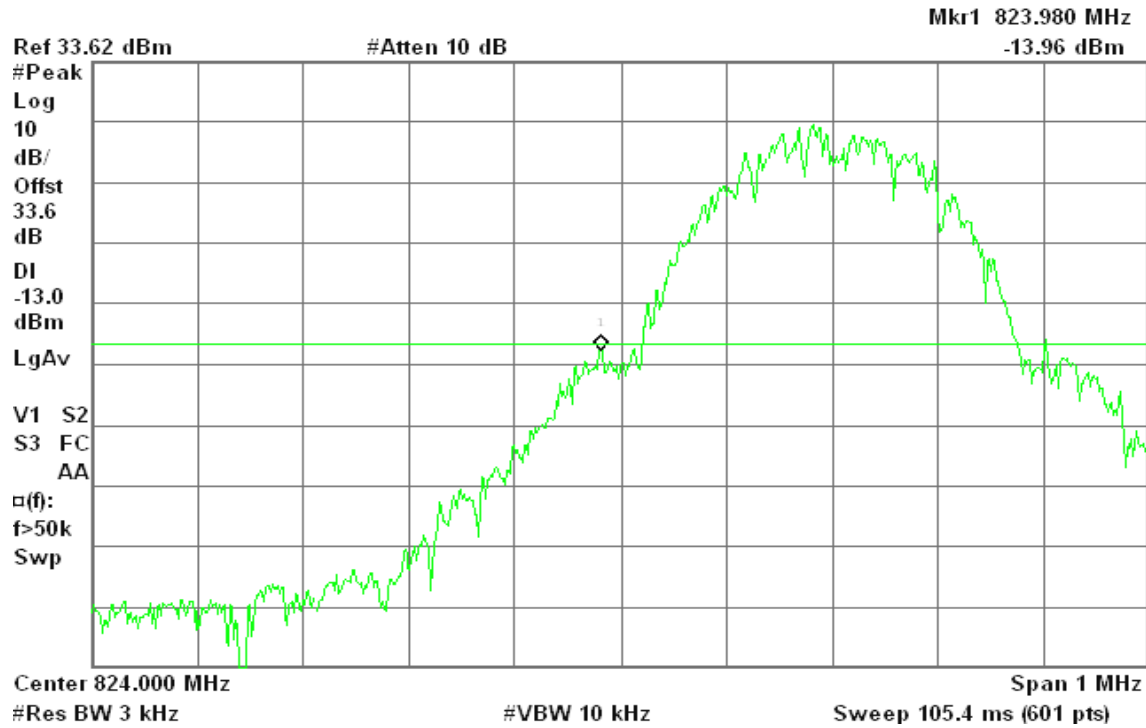
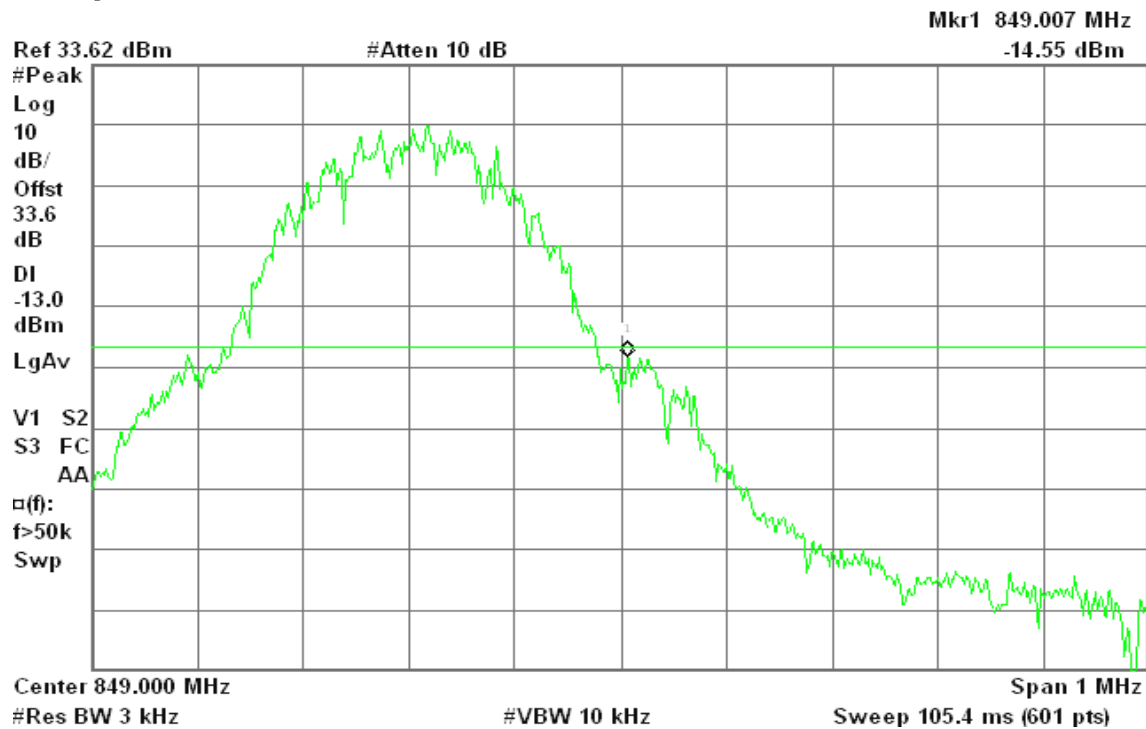


Figure 17-2: Band Edge emissions – EDGE CH High

Agilent 23:58:39 Nov 22, 2010

R T





EDGE 1900

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

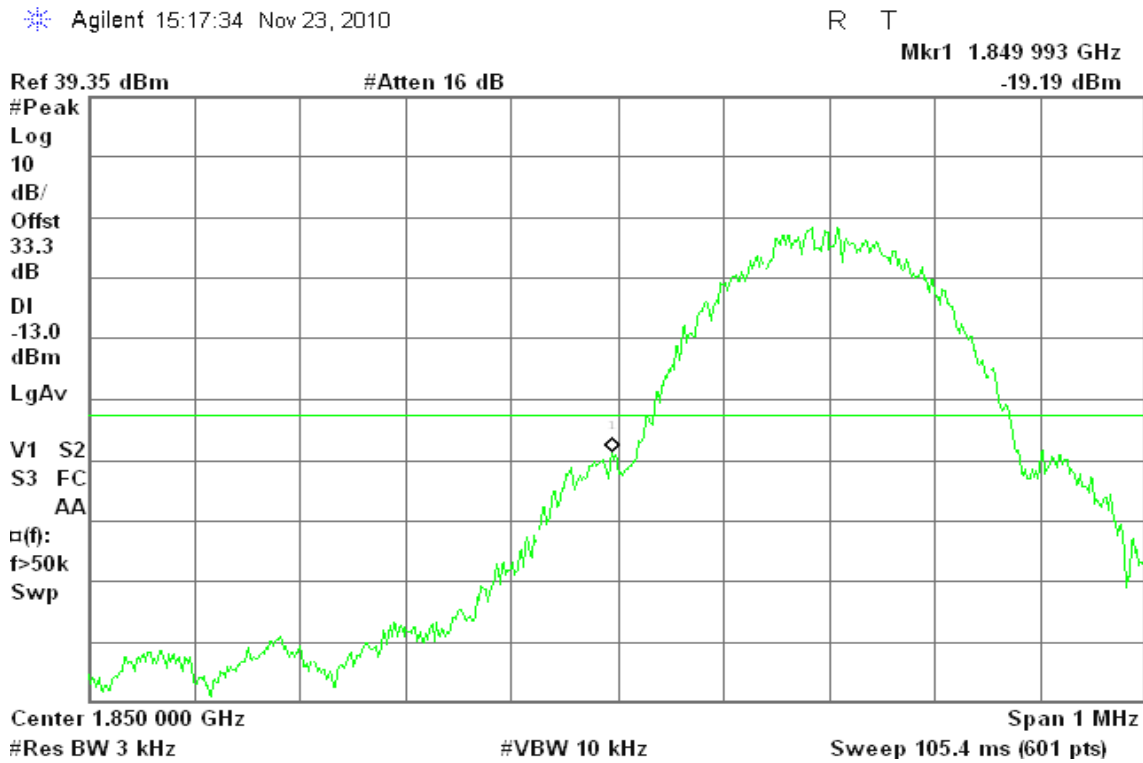
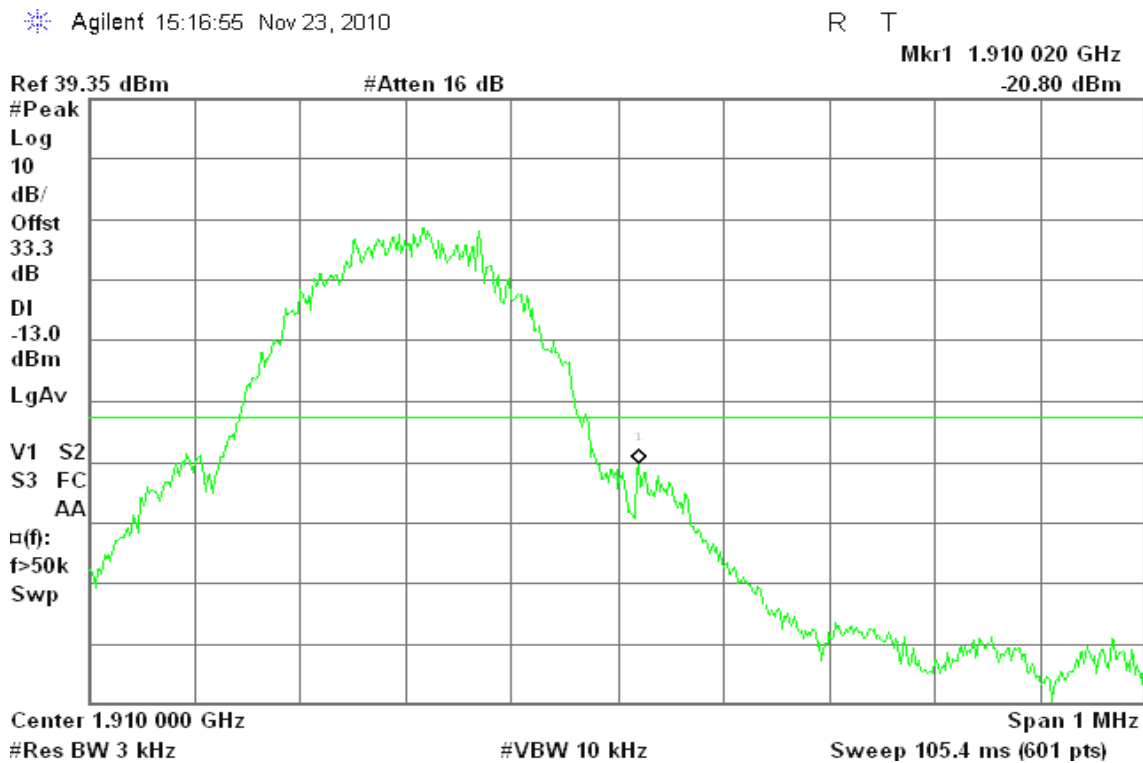


Figure 18-2: Band Edge emissions – EDGE CH High





WCDMA Band II

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

Agilent 15:04:43 Nov 23, 2010

R T

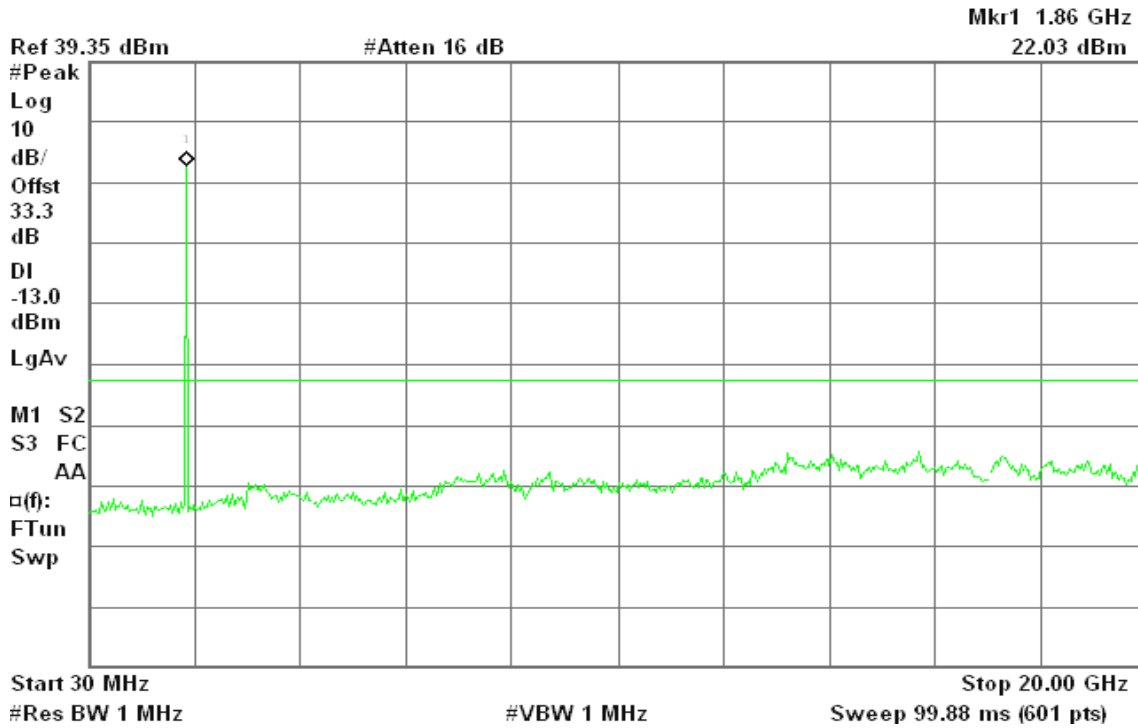


Figure 19-2: Out of Band emission at antenna terminals – WCDMA CH Mid

Agilent 15:04:29 Nov 23, 2010

R T

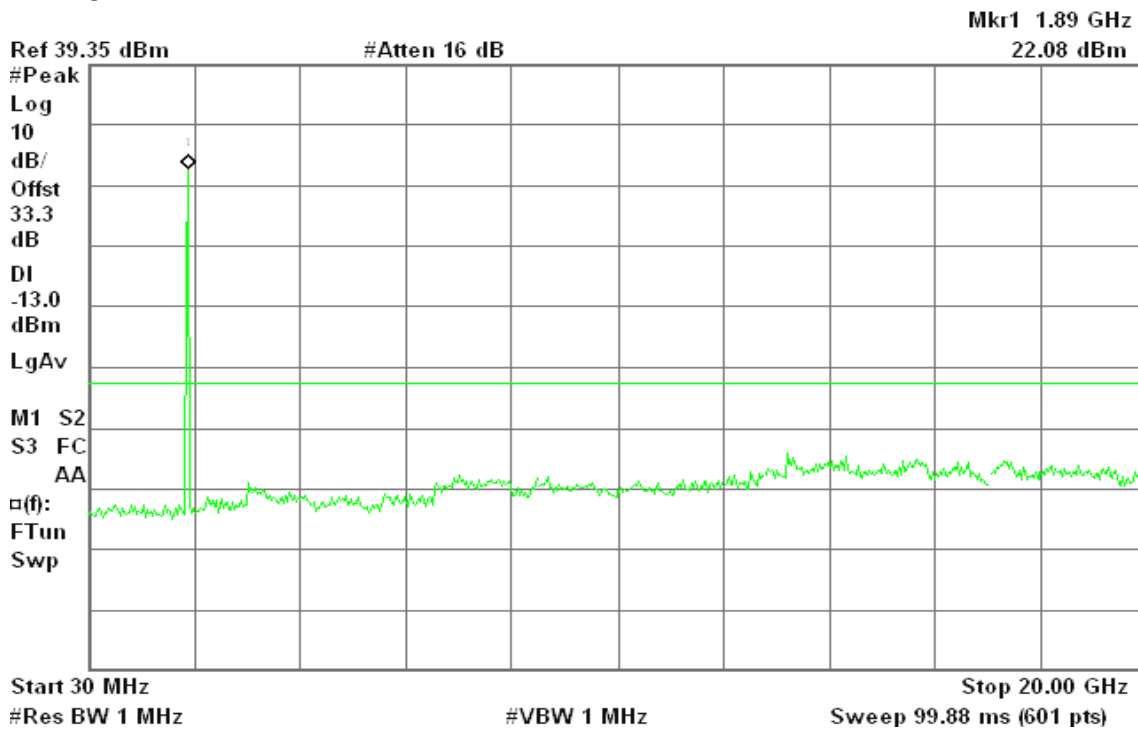
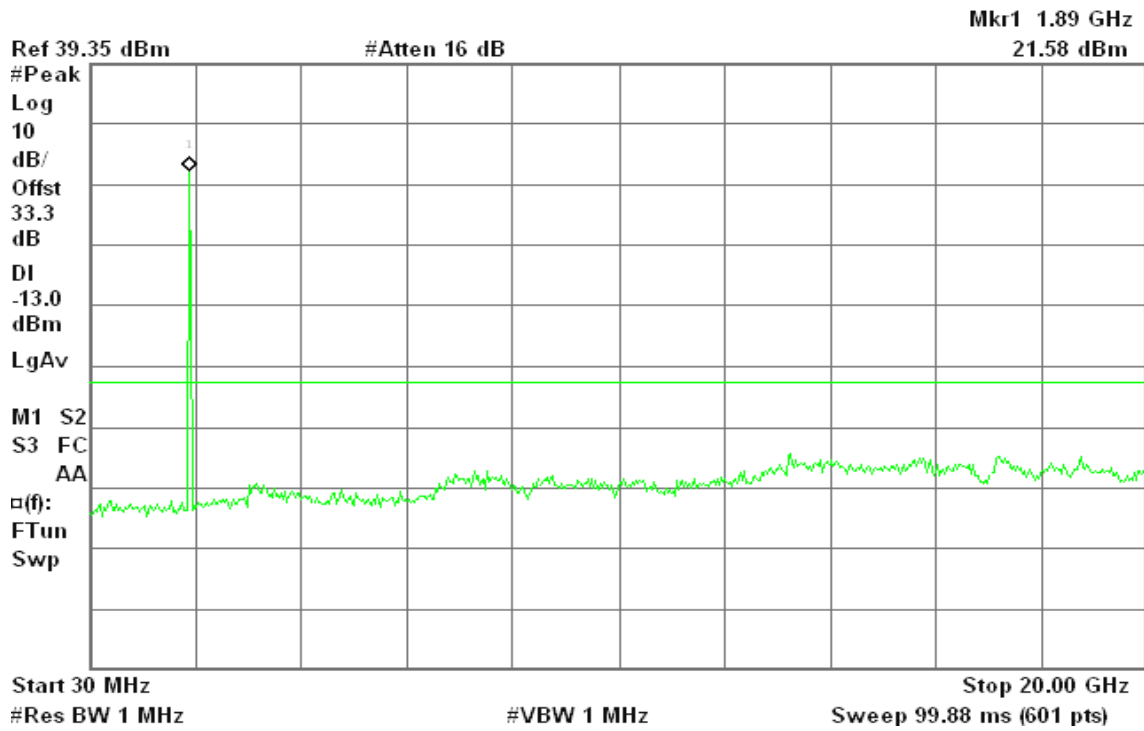




Figure 19-3: Out of Band emission at antenna terminals – WCDMA CH High

Agilent 15:04:17 Nov 23, 2010

R T

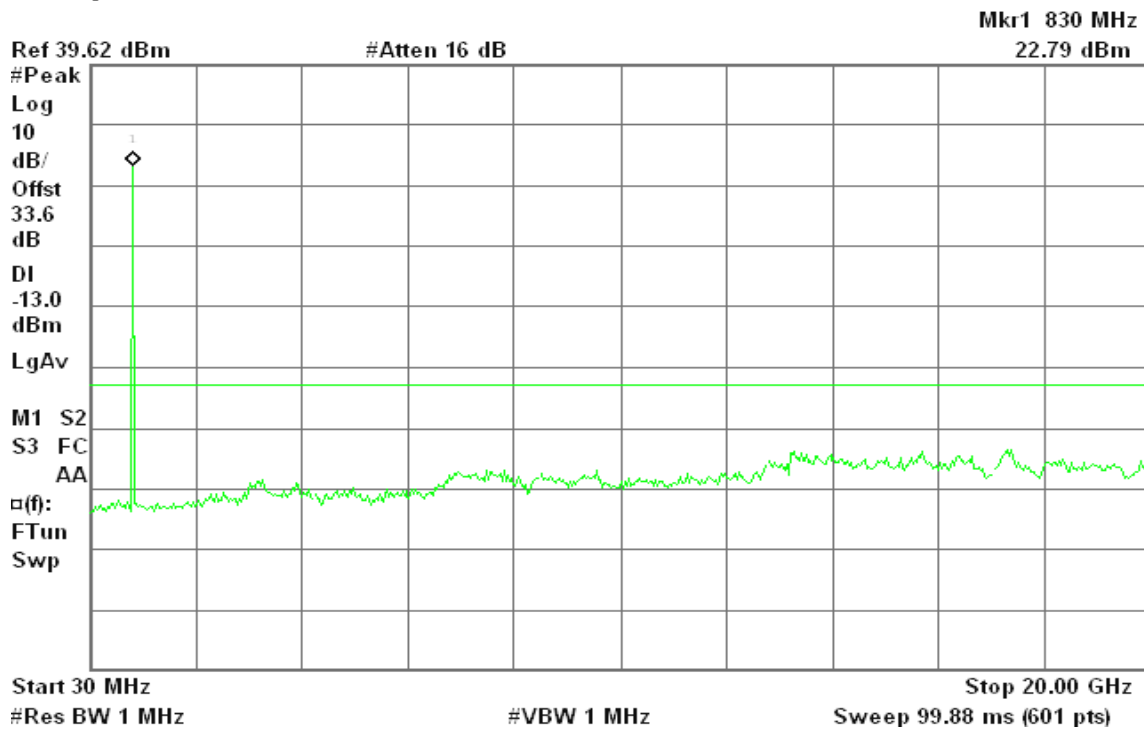


WCDMA Band V

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

Agilent 14:31:45 Nov 23, 2010

R T





WCDMA Band II

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

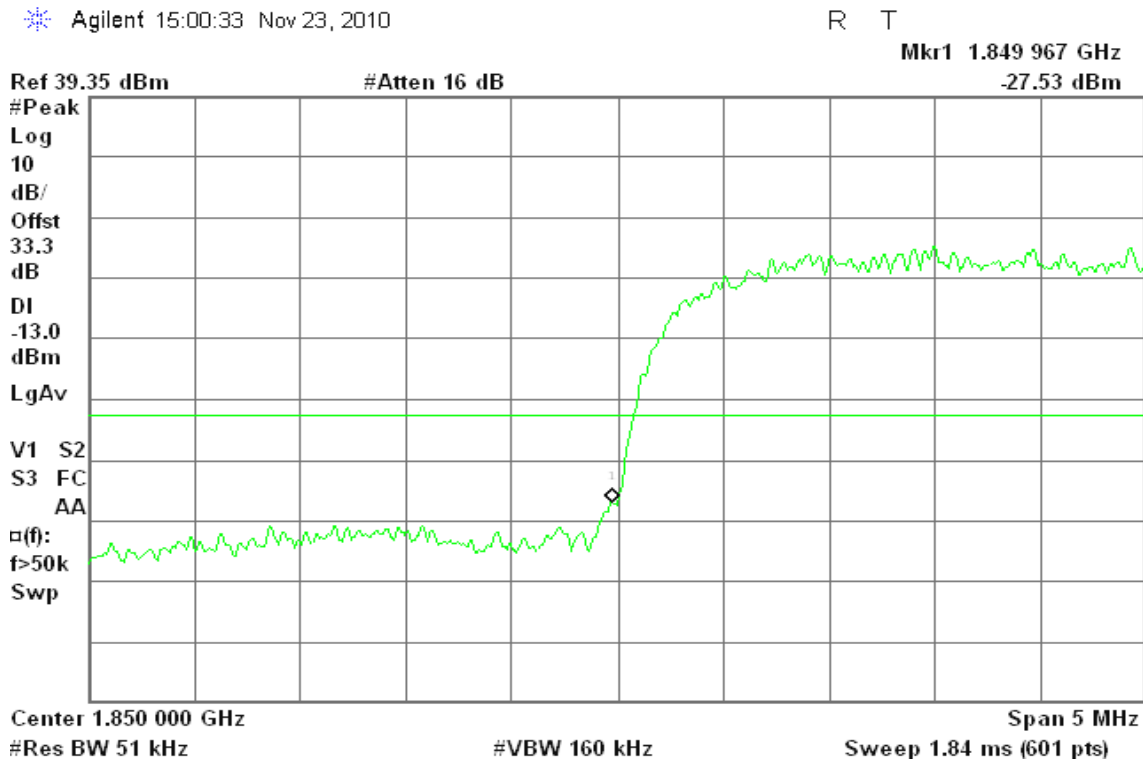
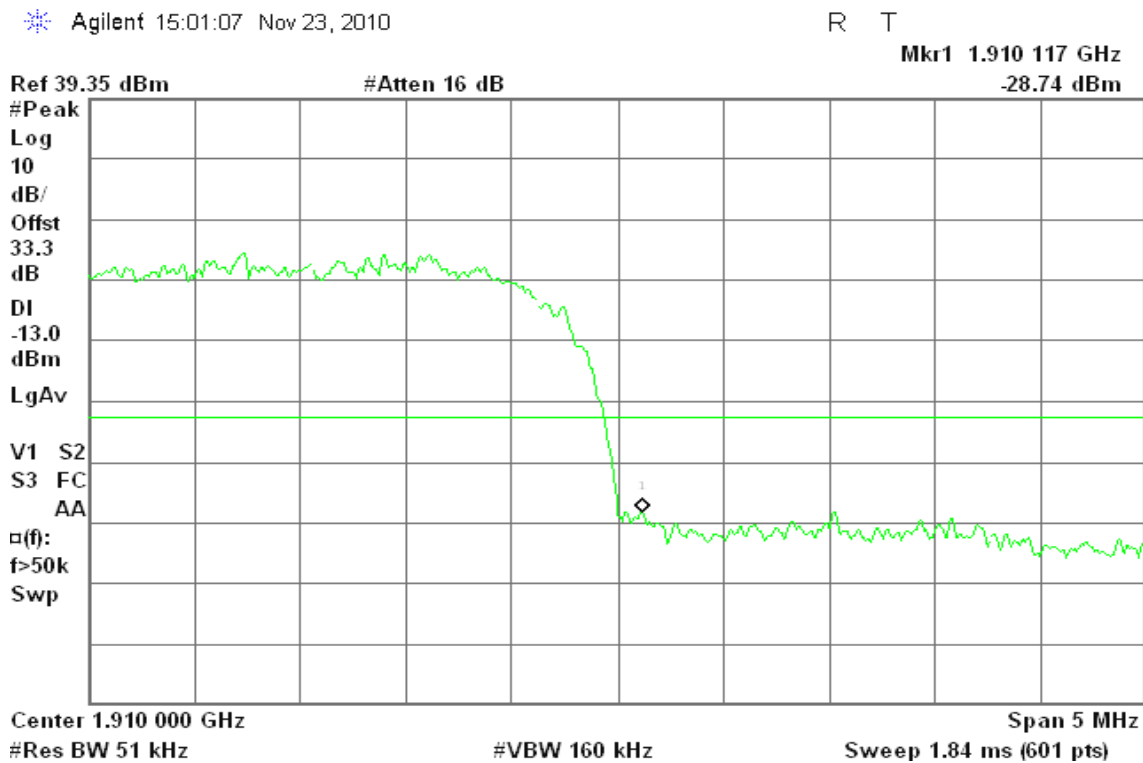


Figure 21-2: Band Edge emissions –WCDMA CH High





WCDMA Band V

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

Agilent 14:36:46 Nov 23, 2010

R T

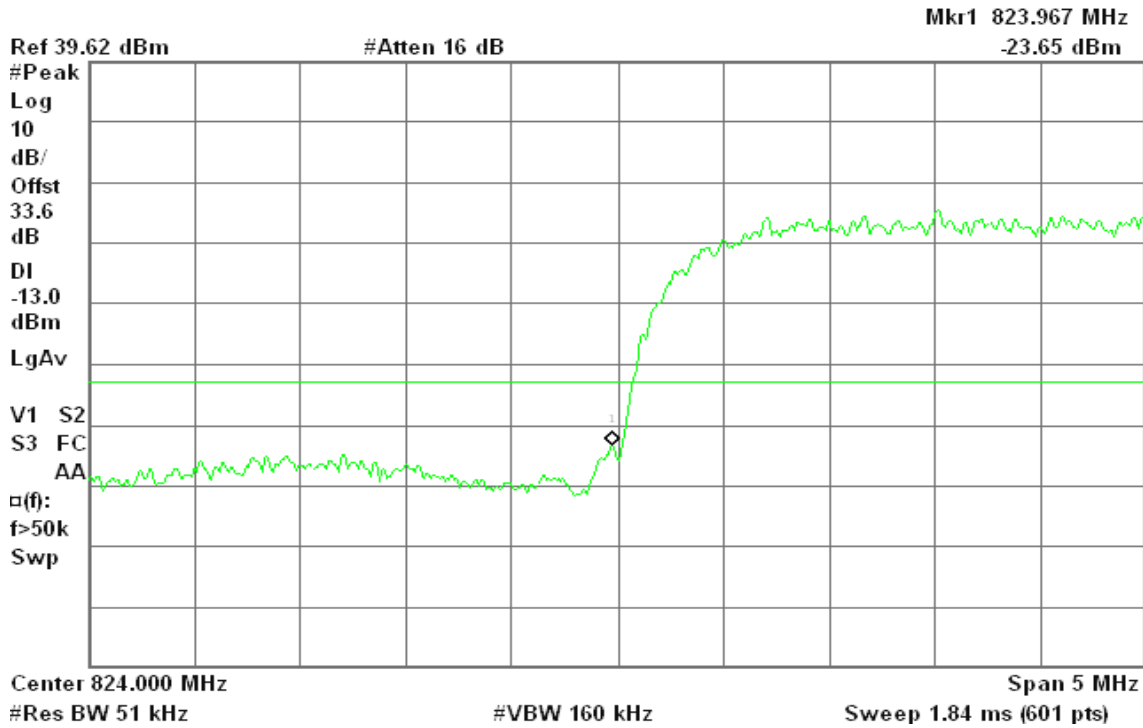
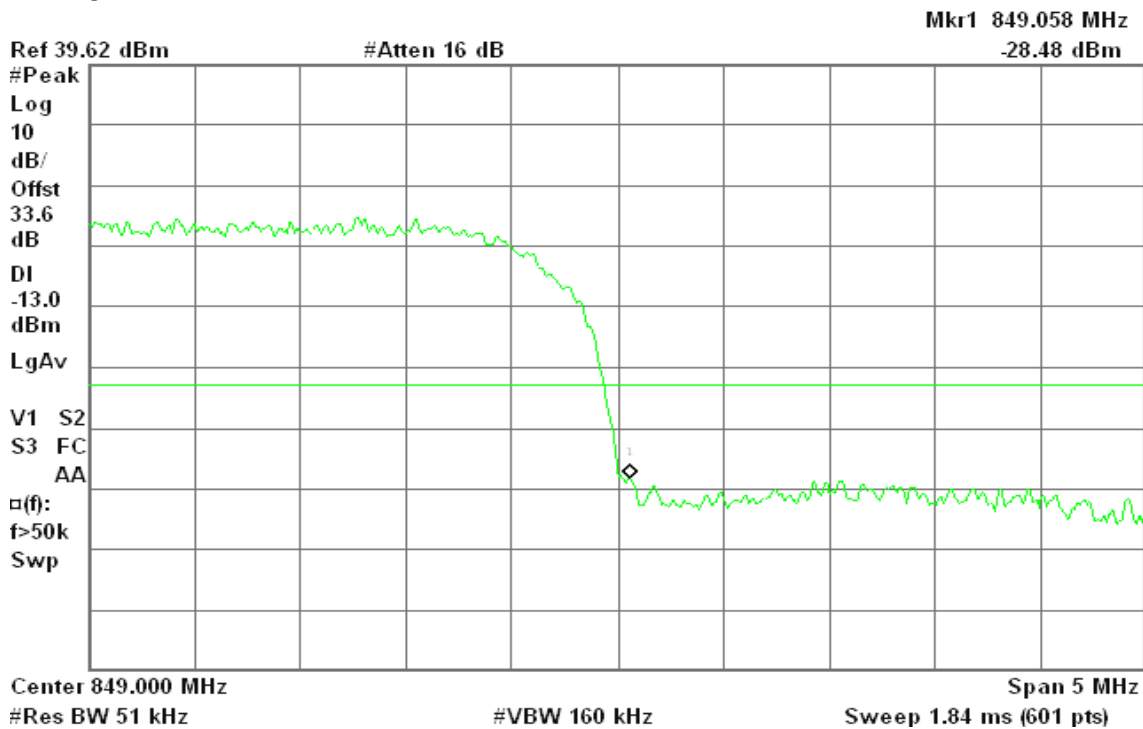


Figure 22-2: Band Edge emissions –WCDMA CH High

Agilent 14:37:53 Nov 23, 2010

R T





WCDMA / HSDPA Band II

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

Agilent 15:03:24 Nov 23, 2010

R T

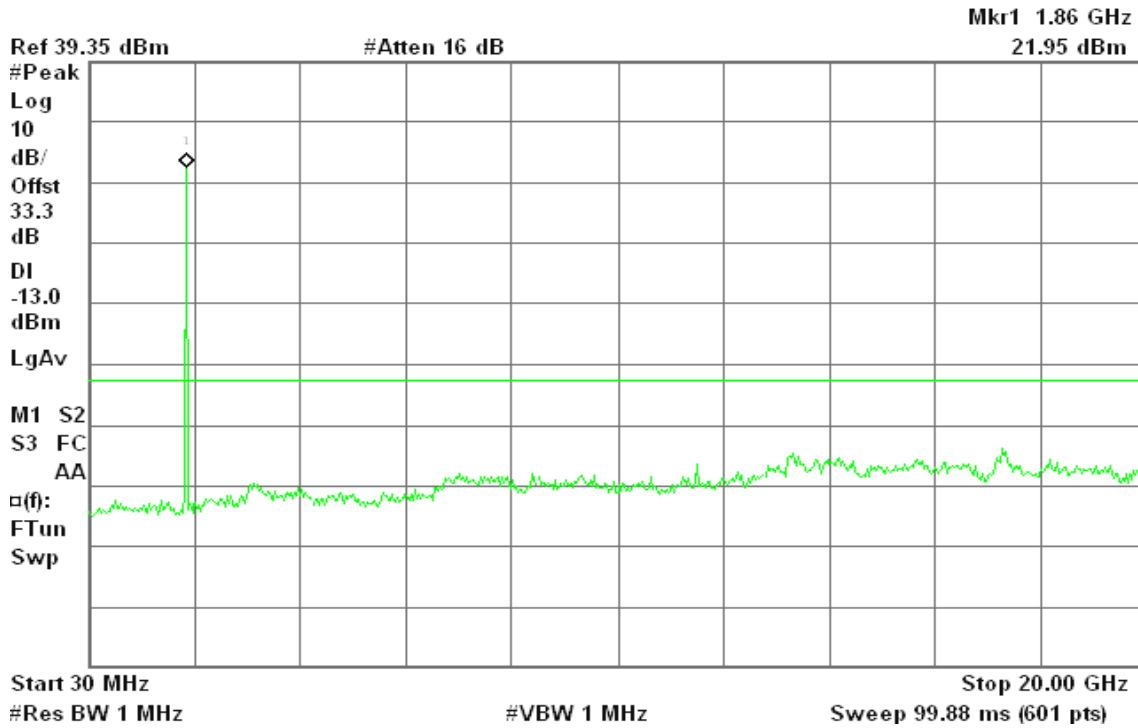


Figure 23-2: Out of Band emission at antenna terminals – HSDPA CH Mid

Agilent 15:03:07 Nov 23, 2010

R T

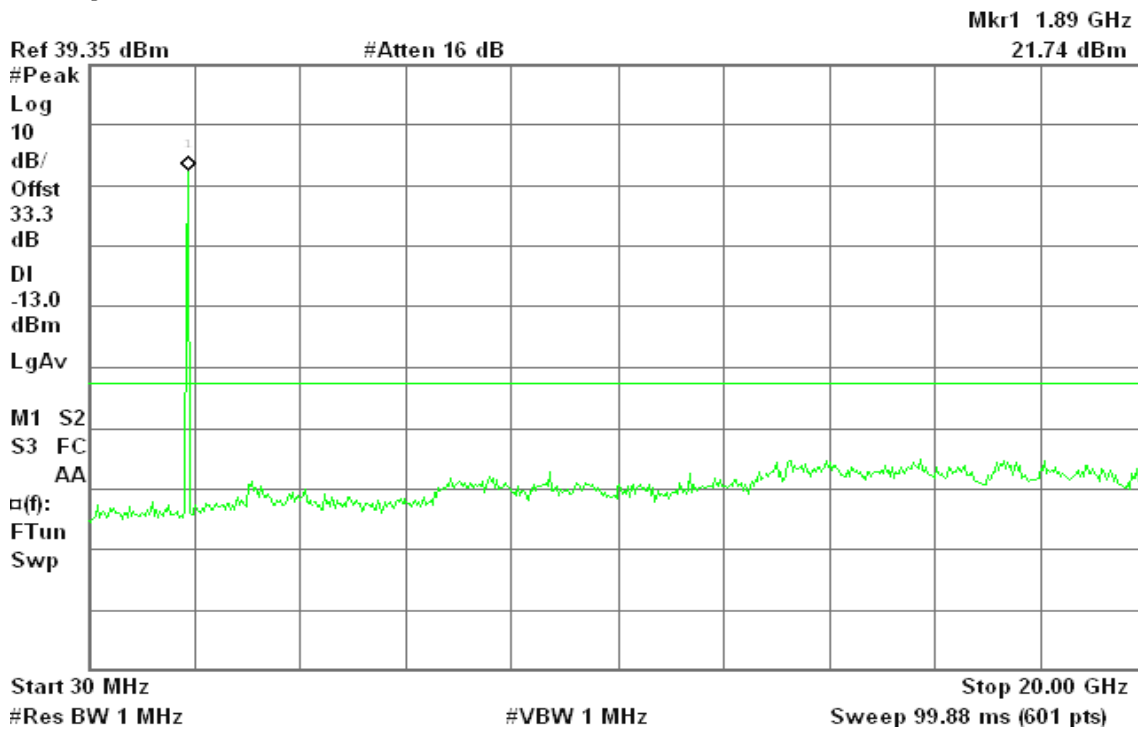
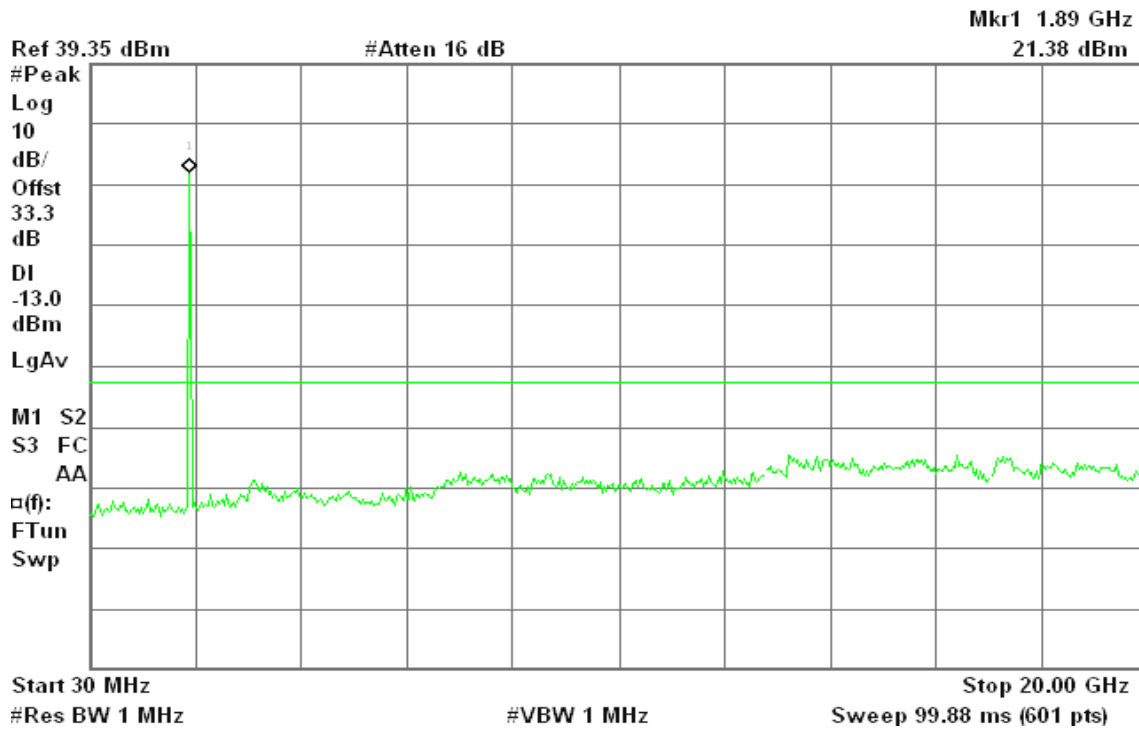




Figure 23-3: Out of Band emission at antenna terminals – HSDPA CH High

Agilent 15:02:50 Nov 23, 2010

R T



WCDMA / HSDPA Band V

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

Agilent 14:32:09 Nov 23, 2010

R T

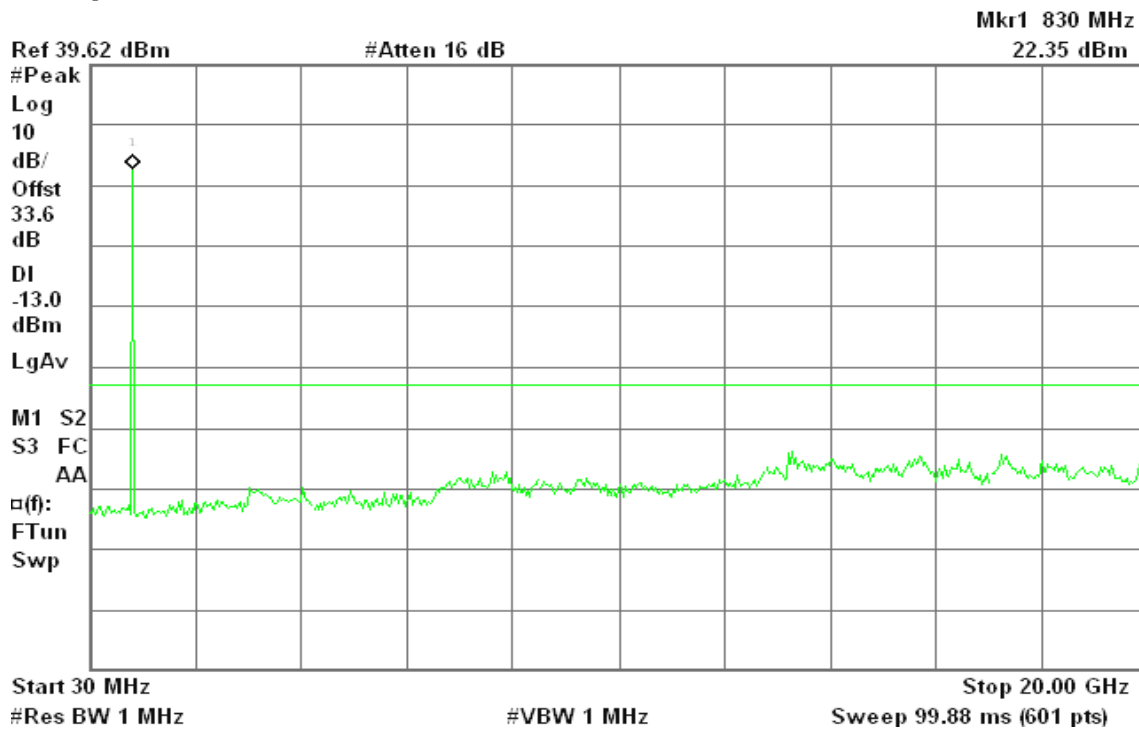




Figure 24-2: Out of Band emission at antenna terminals – HSDPA CH Mid

Agilent 14:32:22 Nov 23, 2010

R T

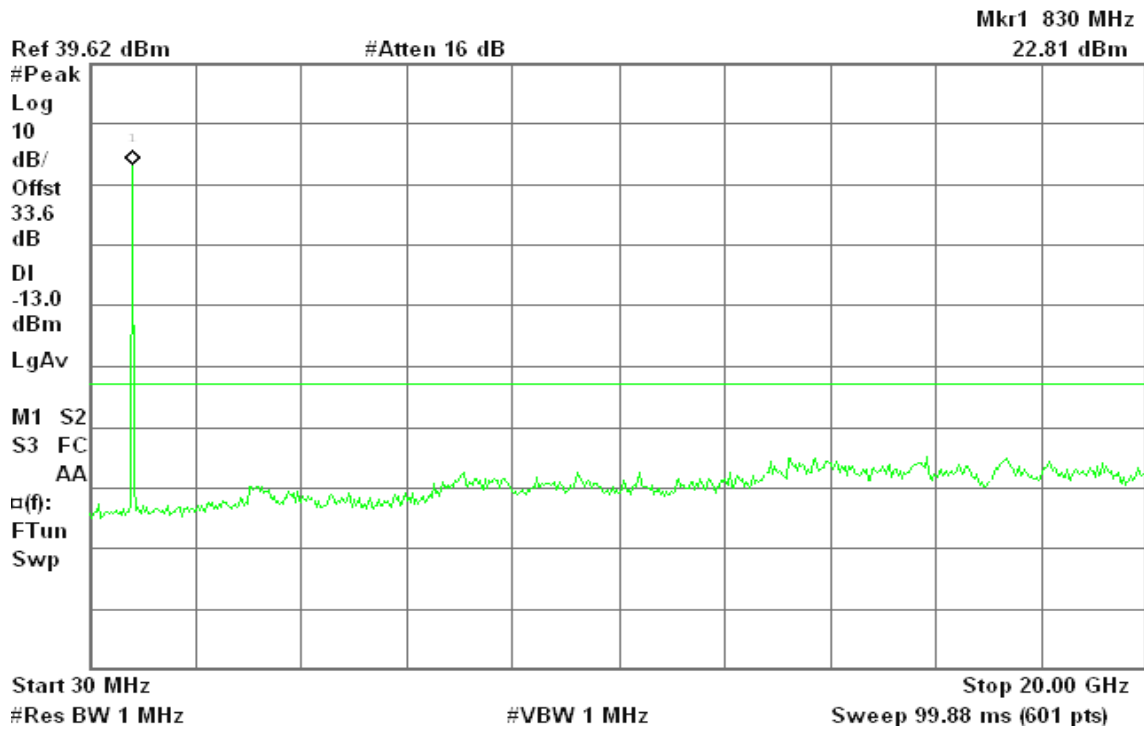
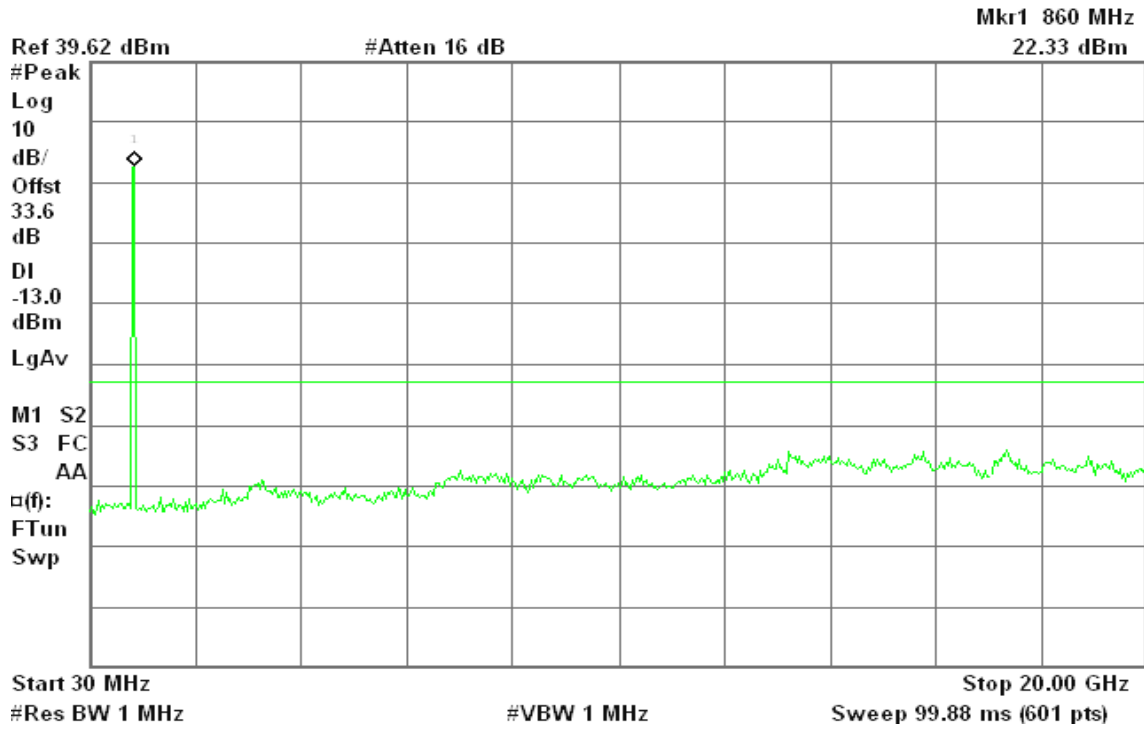


Figure 24-3: Out of Band emission at antenna terminals – HSDPA CH High

Agilent 14:33:57 Nov 23, 2010

R T





WCDMA / HSDPA Band II

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

Agilent 14:59:53 Nov 23, 2010

R T

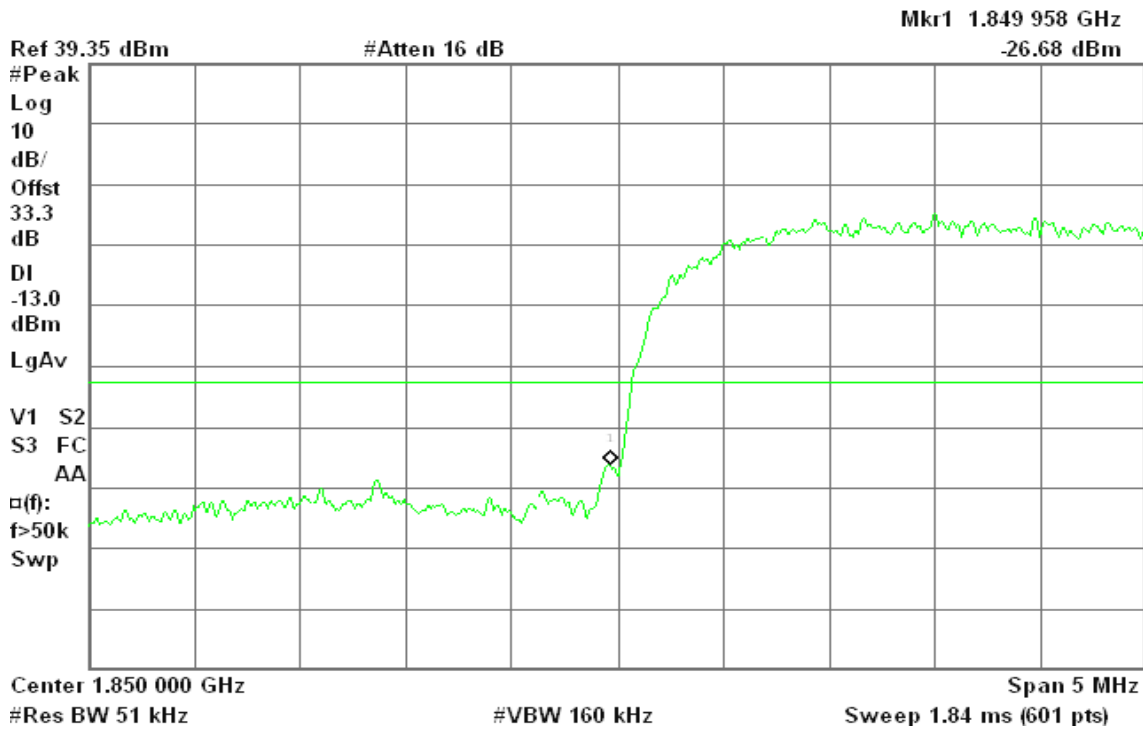
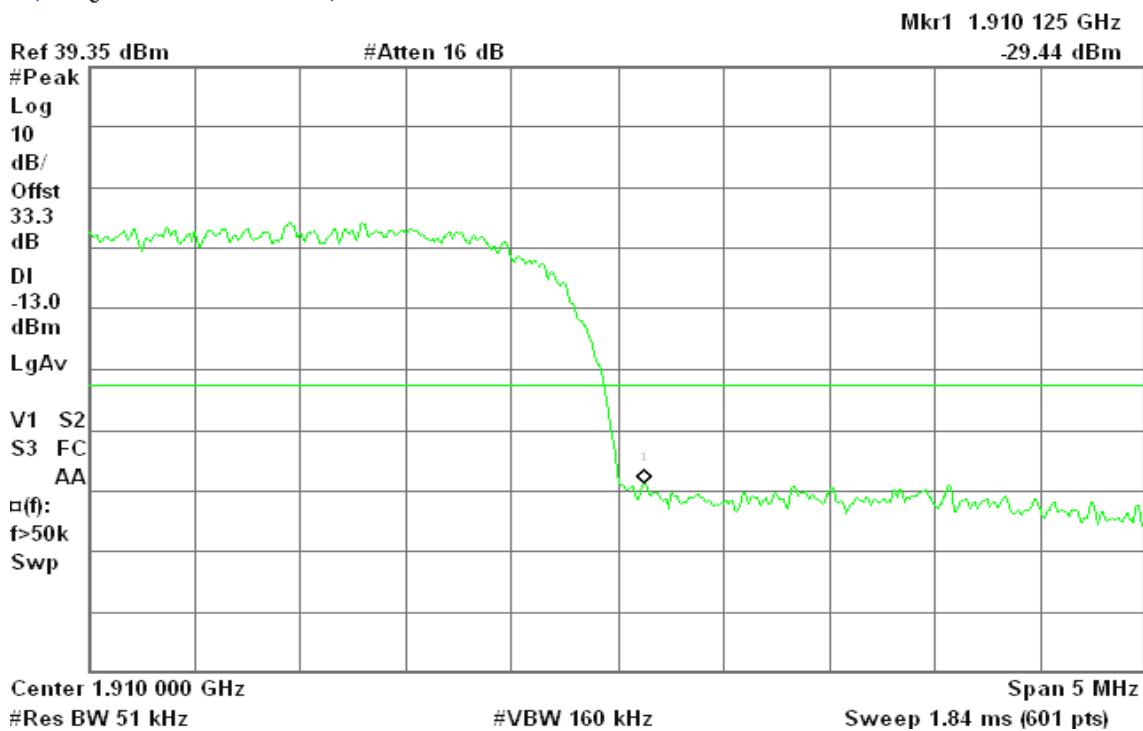


Figure 25-2: Band Edge emissions – HSDPA CH High

Agilent 15:02:08 Nov 23, 2010

R T





WCDMA / HSDPA Band V

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

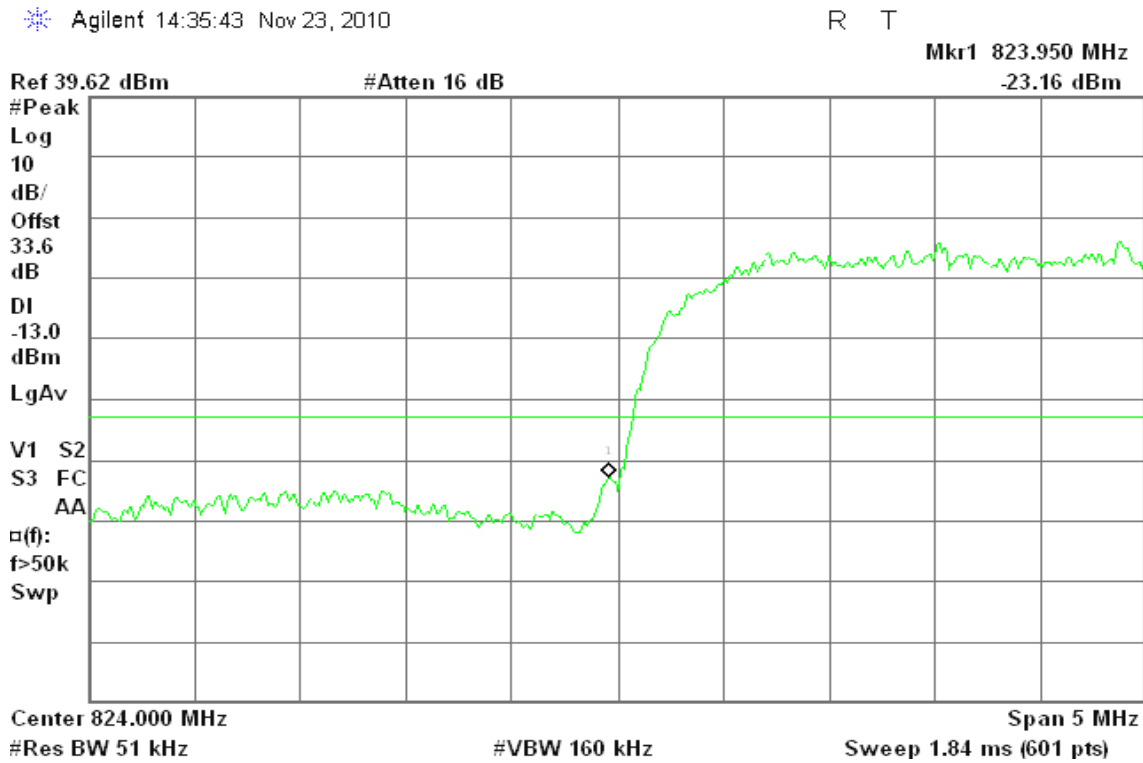


Figure 26-2: Band Edge emissions – HSDPA CH High

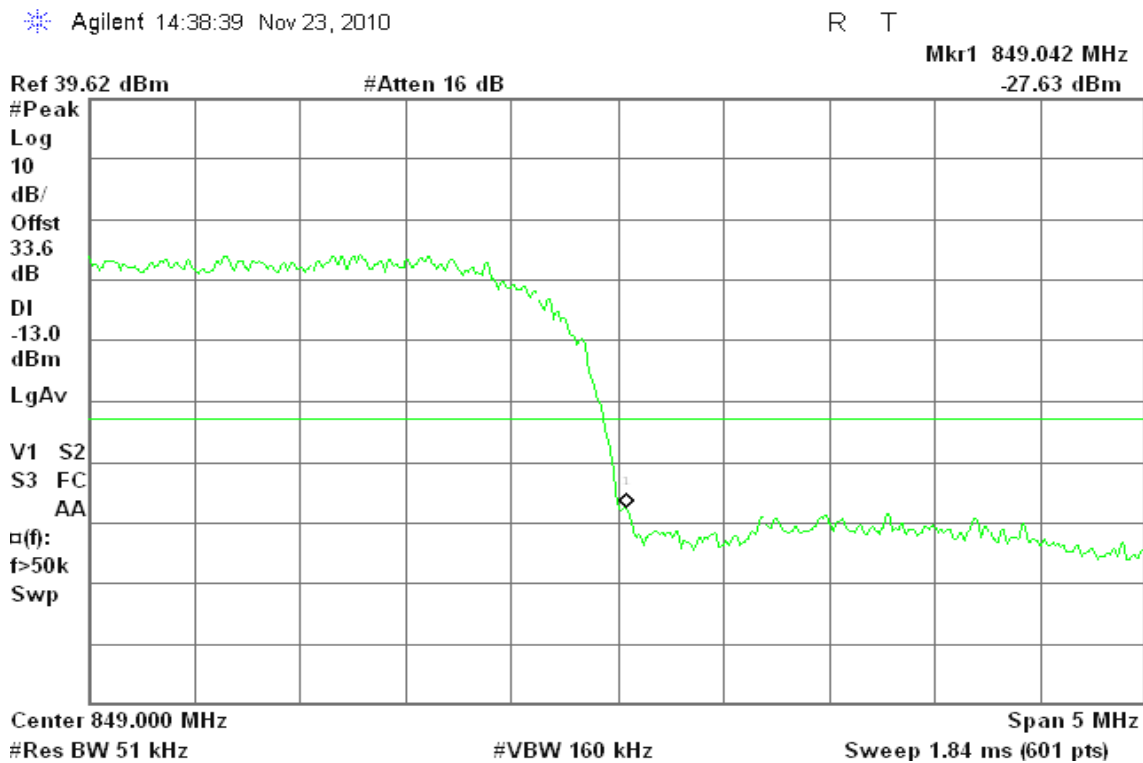
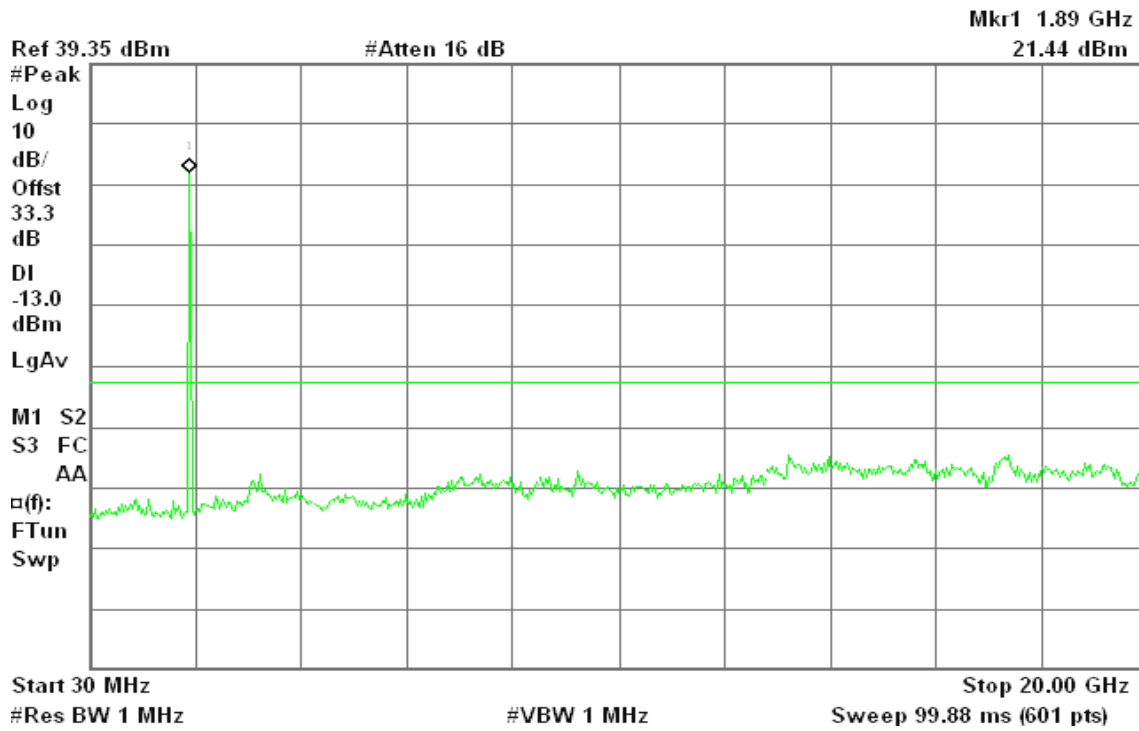




Figure 27-3: Out of Band emission at antenna terminals – HSUPA CH High

Agilent 15:03:59 Nov 23, 2010

R T



HSUPA / WCDMA Band V

Figure 28-1: Out of Band emission at antenna terminals – HSUPA CH Low

Agilent 14:31:58 Nov 23, 2010

R T

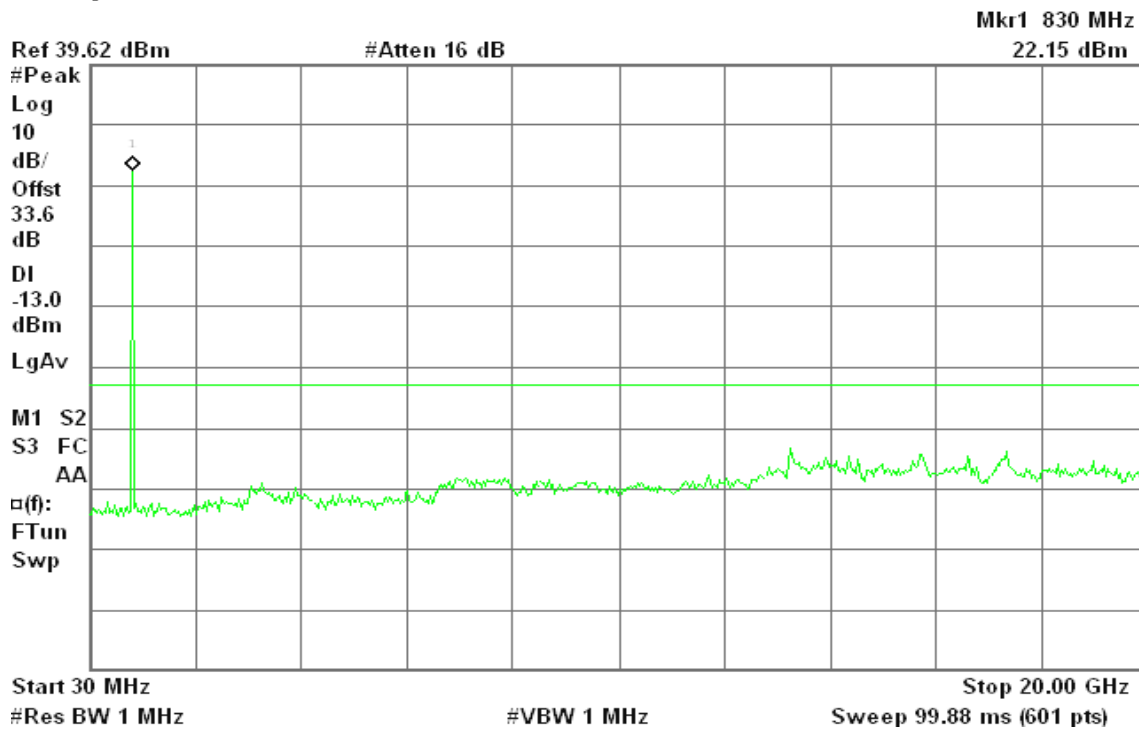




Figure 28-2: Out of Band emission at antenna terminals – HSUPA CH Mid

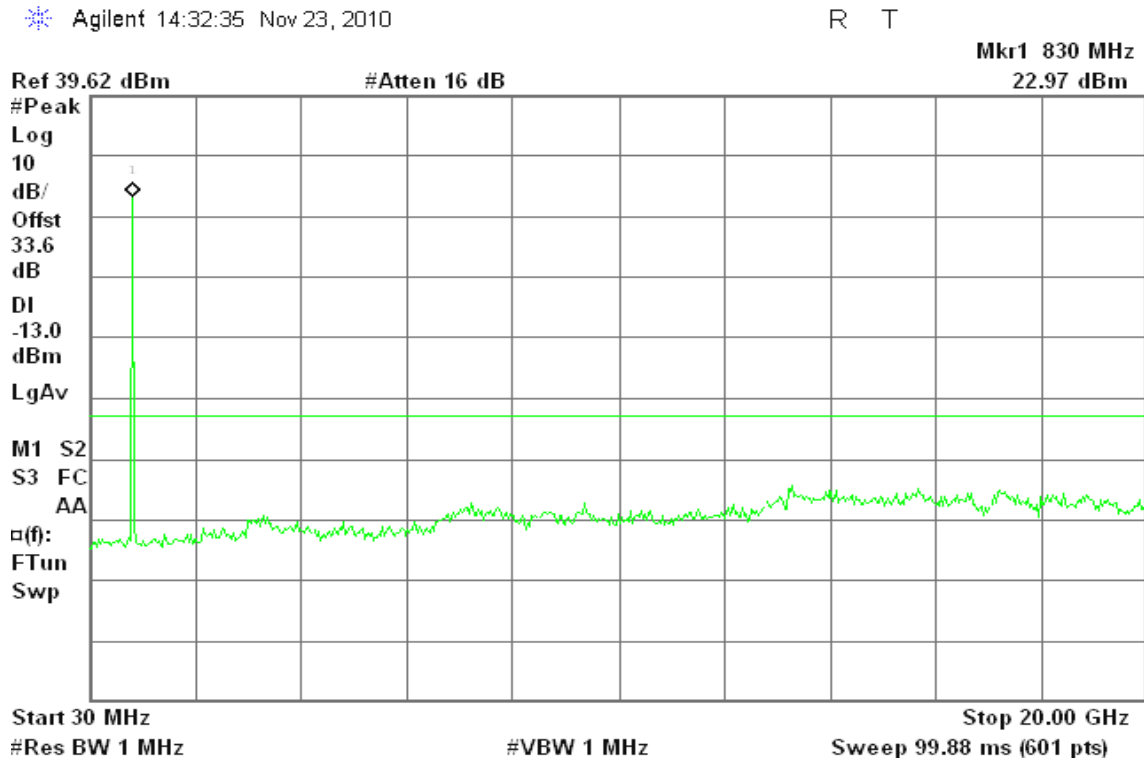
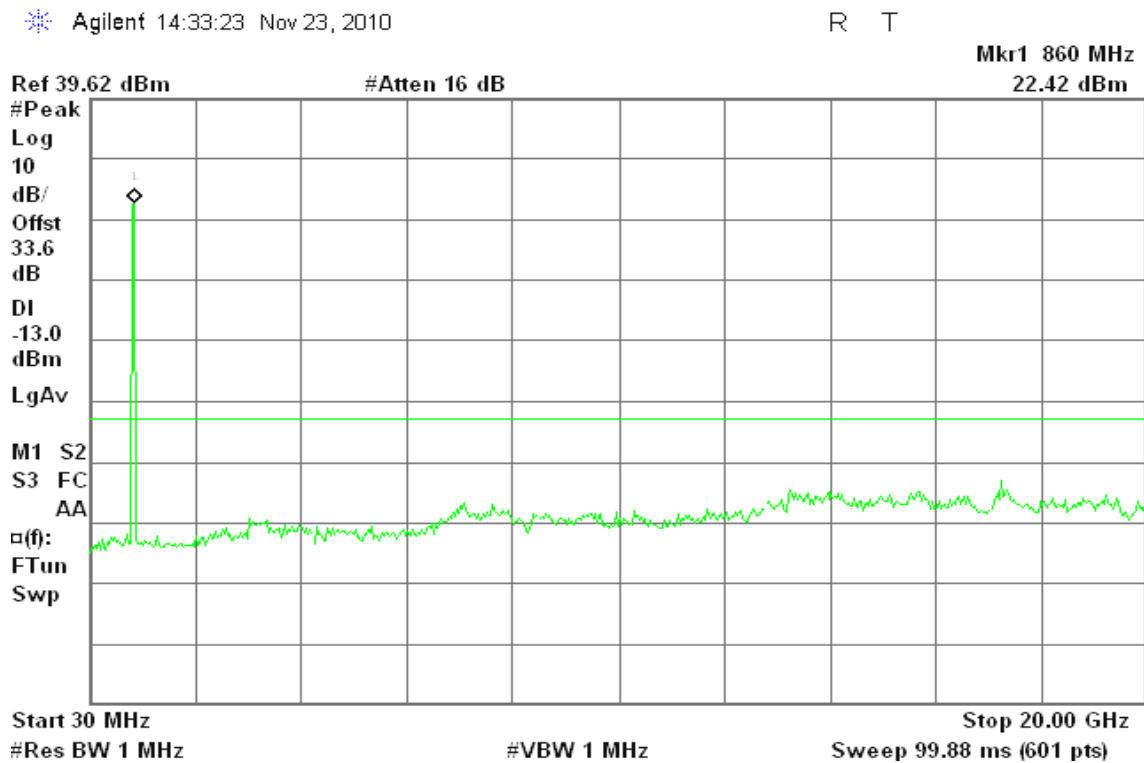


Figure 28-3: Out of Band emission at antenna terminals – HSUPA CH High





WCDMA / HSUPA Band II

Figure 29-1: Band Edge emissions – HSUPA CH Low

Agilent 15:00:14 Nov 23, 2010

R T

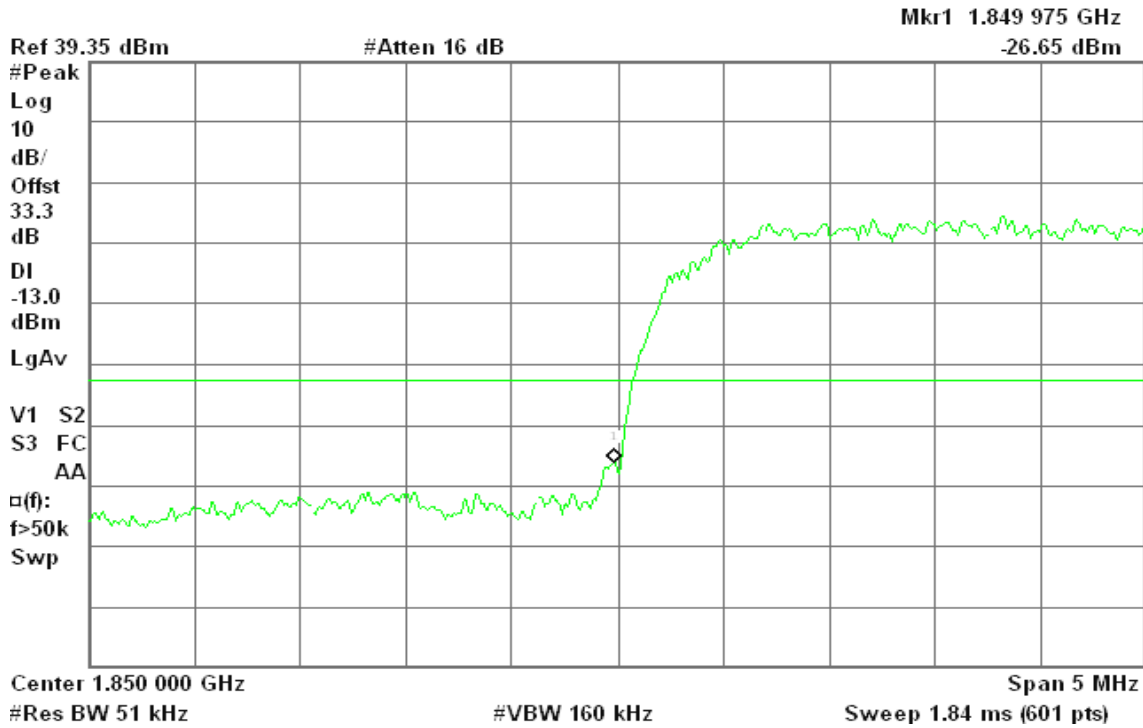
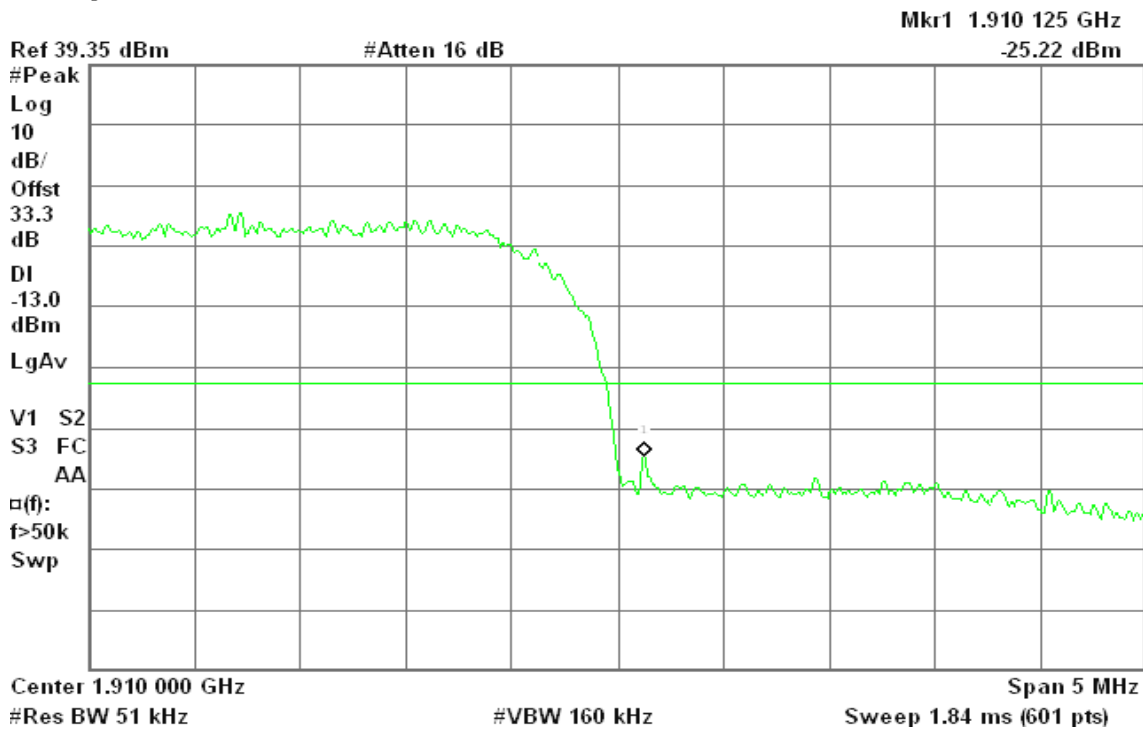


Figure 29-2: Band Edge emissions – HSUPA CH High

Agilent 15:01:46 Nov 23, 2010

R T





WCDMA / HSUPA Band V

Figure 30-1: Band Edge emissions – HSUPA CH Low

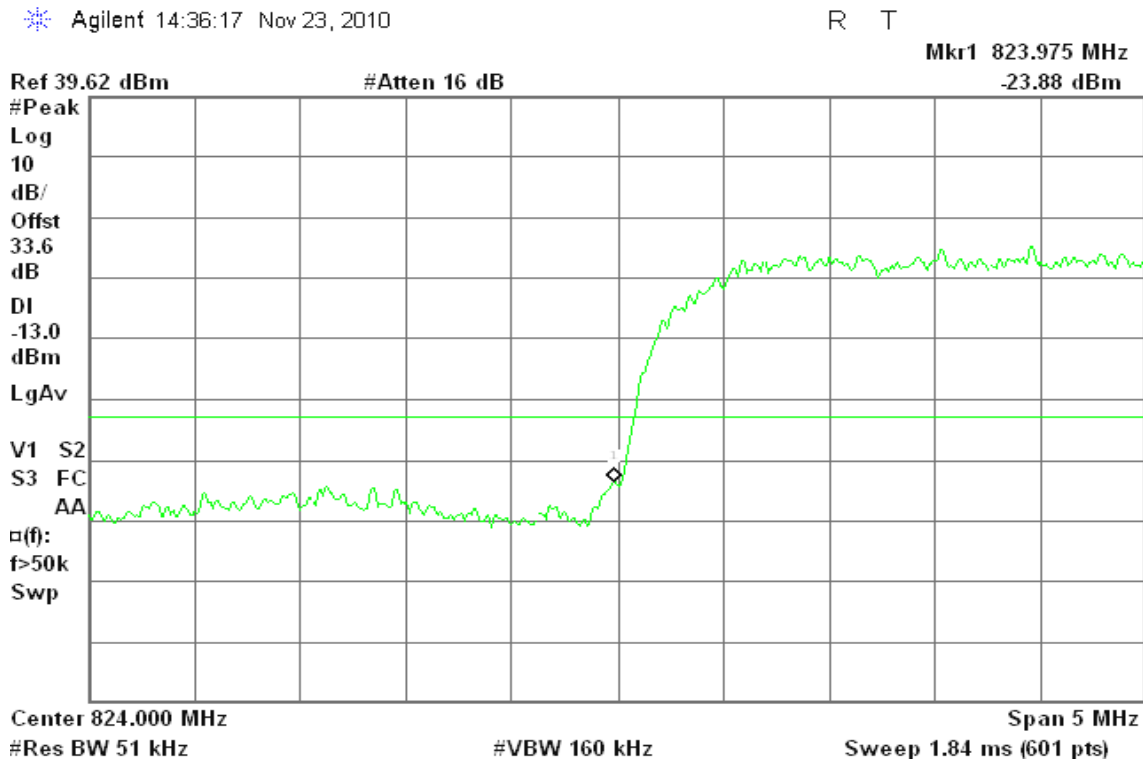
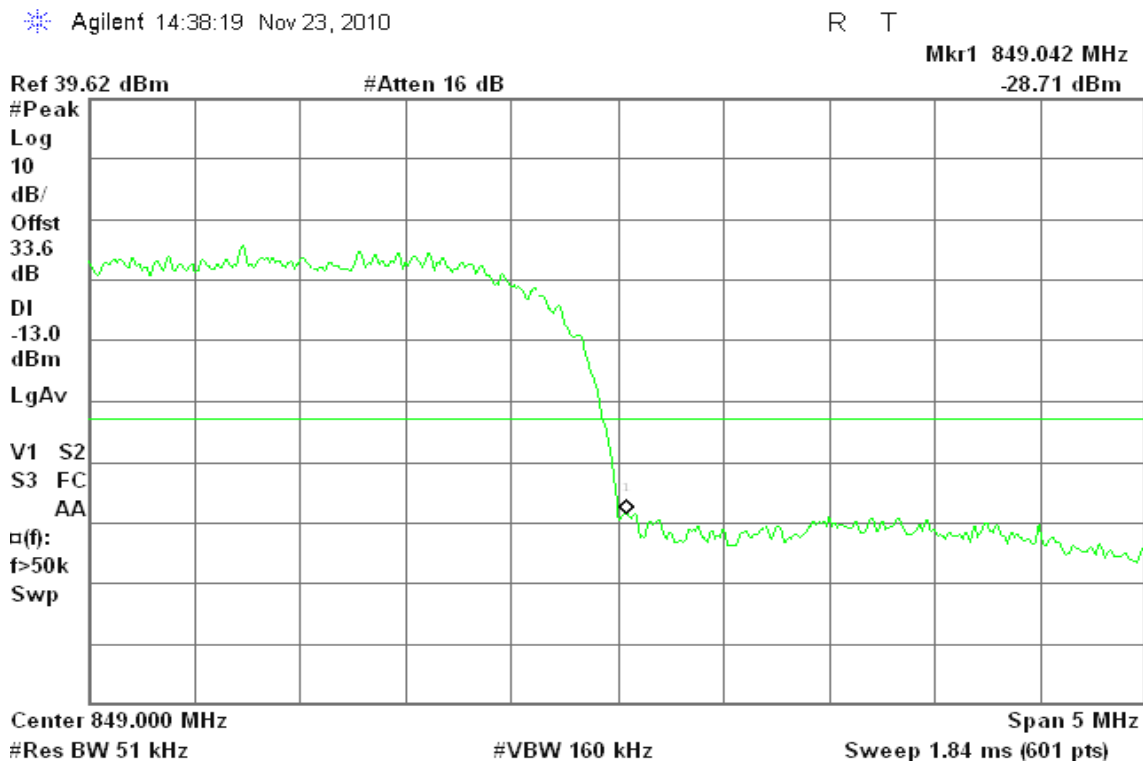


Figure 30-2: Band Edge emissions – HSUPA CH High





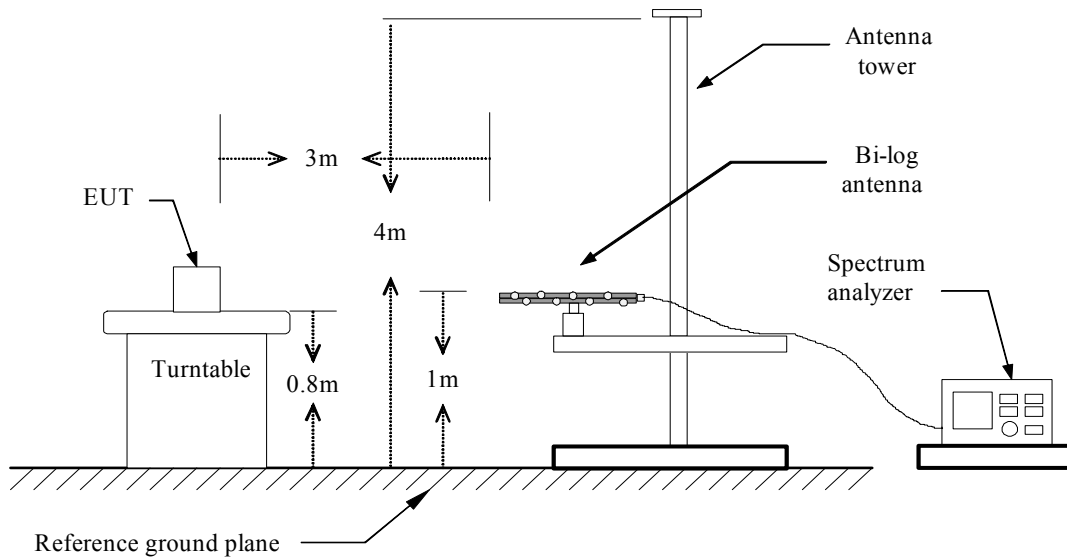
7.6 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

LIMIT

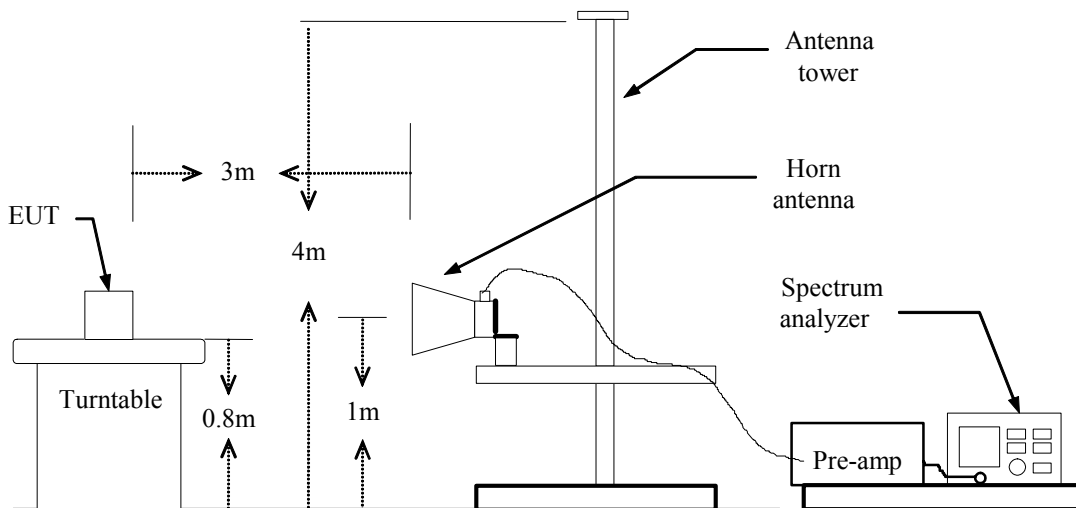
According to FCC §2.1053

Test Configuration

Below 1 GHz

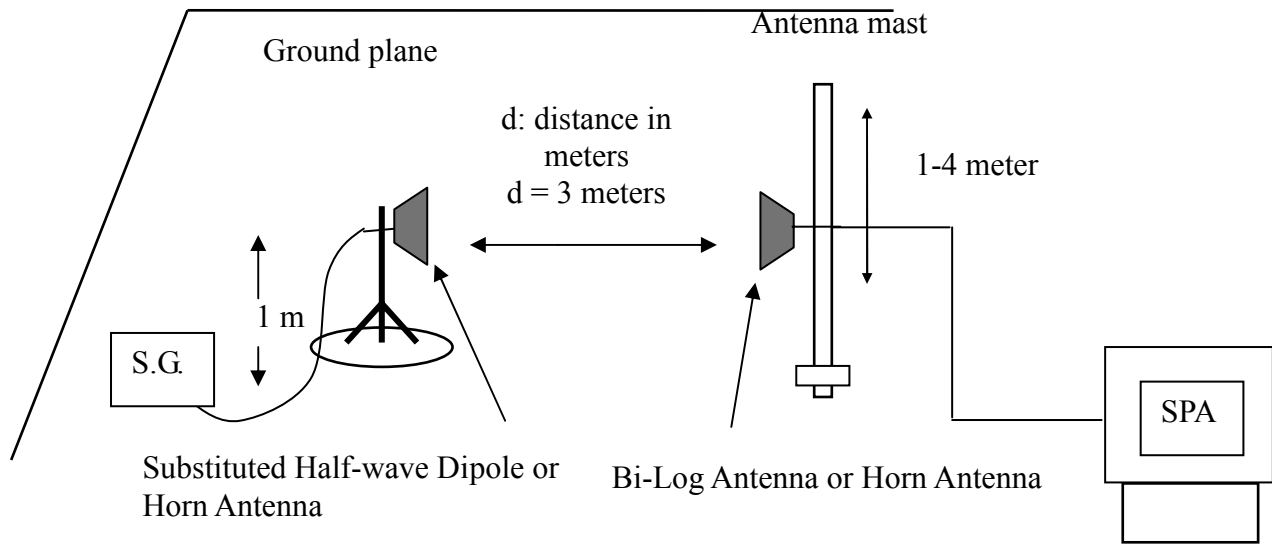


Above 1 GHz





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.

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable (dB)}$$

$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)}$$

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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-57.94	-12.92	-70.86	-13.00	-57.86	V
60.07	-54.99	-16.07	-71.06	-13.00	-58.06	V
78.50	-53.37	-19.12	-72.49	-13.00	-59.49	V
177.44	-60.51	-15.10	-75.61	-13.00	-62.61	V
265.71	-59.07	-13.49	-72.56	-13.00	-59.56	V
355.92	-65.38	-13.13	-78.52	-13.00	-65.52	V
44.55	-63.12	-11.72	-74.85	-13.00	-61.85	H
76.56	-49.77	-20.15	-69.92	-13.00	-56.92	H
140.58	-58.94	-14.66	-73.60	-13.00	-60.60	H
160.95	-56.46	-14.37	-70.84	-13.00	-57.84	H
181.32	-55.84	-14.27	-70.11	-13.00	-57.11	H
278.32	-60.10	-13.20	-73.30	-13.00	-60.30	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
43.58	-55.63	-12.85	-68.48	-13.00	-55.48	V
53.28	-52.19	-16.53	-68.71	-13.00	-55.71	V
77.53	-48.45	-18.72	-67.17	-13.00	-54.17	V
119.24	-61.26	-13.92	-75.18	-13.00	-62.18	V
170.65	-60.89	-14.63	-75.52	-13.00	-62.52	V
276.38	-58.91	-12.38	-71.29	-13.00	-58.29	V
40.67	-62.74	-11.67	-74.41	-13.00	-61.41	H
78.50	-48.46	-20.83	-69.28	-13.00	-56.28	H
177.44	-55.27	-14.12	-69.39	-13.00	-56.39	H
275.41	-59.84	-13.42	-73.26	-13.00	-60.26	H
356.89	-64.67	-13.18	-77.86	-13.00	-64.86	H
498.51	-69.60	-8.82	-78.42	-13.00	-65.42	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-56.26	-12.92	-69.18	-13.00	-56.18	V
77.53	-47.94	-18.72	-66.67	-13.00	-53.67	V
121.18	-62.31	-13.63	-75.94	-13.00	-62.94	V
178.41	-60.04	-15.17	-75.21	-13.00	-62.21	V
199.75	-59.36	-14.21	-73.57	-13.00	-60.57	V
276.38	-59.02	-12.38	-71.39	-13.00	-58.39	V
76.56	-49.03	-20.15	-69.18	-13.00	-56.18	H
117.30	-59.91	-14.62	-74.53	-13.00	-61.53	H
161.92	-56.88	-14.30	-71.18	-13.00	-58.18	H
179.38	-56.12	-14.23	-70.34	-13.00	-57.34	H
275.41	-59.67	-13.42	-73.09	-13.00	-60.09	H
452.92	-67.86	-9.87	-77.72	-13.00	-64.72	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: GPRS 850 / TX / CH 128

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
41.64	-56.82	-12.72	-69.55	-13.00	-56.55	V
76.56	-48.95	-18.32	-67.28	-13.00	-54.28	V
127.00	-63.51	-13.03	-76.53	-13.00	-63.53	V
165.80	-61.16	-14.46	-75.62	-13.00	-62.62	V
275.41	-58.73	-12.45	-71.17	-13.00	-58.17	V
320.03	-63.20	-13.59	-76.79	-13.00	-63.79	V
78.50	-48.29	-20.83	-69.11	-13.00	-56.11	H
117.30	-59.93	-14.62	-74.55	-13.00	-61.55	H
162.89	-56.64	-14.23	-70.87	-13.00	-57.87	H
181.32	-55.52	-14.27	-69.79	-13.00	-56.79	H
275.41	-59.27	-13.42	-72.69	-13.00	-59.69	H
452.92	-67.22	-9.87	-77.09	-13.00	-64.09	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
41.64	-57.35	-12.72	-70.08	-13.00	-57.08	V
54.25	-52.39	-16.46	-68.85	-13.00	-55.85	V
75.59	-49.02	-17.92	-66.94	-13.00	-53.94	V
123.12	-62.99	-13.43	-76.42	-13.00	-63.42	V
177.44	-59.36	-15.10	-74.47	-13.00	-61.47	V
275.41	-58.50	-12.45	-70.94	-13.00	-57.94	V
78.50	-49.10	-20.83	-69.93	-13.00	-56.93	H
118.27	-60.82	-14.40	-75.22	-13.00	-62.22	H
160.95	-56.73	-14.37	-71.10	-13.00	-58.10	H
179.38	-55.50	-14.23	-69.72	-13.00	-56.72	H
276.38	-58.20	-13.35	-71.55	-13.00	-58.55	H
424.79	-67.12	-10.49	-77.61	-13.00	-64.61	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-56.32	-12.92	-69.24	-13.00	-56.24	V
55.22	-52.61	-16.40	-69.01	-13.00	-56.01	V
76.56	-48.31	-18.32	-66.64	-13.00	-53.64	V
120.21	-62.00	-13.73	-75.73	-13.00	-62.73	V
176.47	-60.49	-15.04	-75.53	-13.00	-62.53	V
271.53	-58.57	-12.71	-71.29	-13.00	-58.29	V
44.55	-63.27	-11.72	-74.99	-13.00	-61.99	H
76.56	-49.30	-20.15	-69.45	-13.00	-56.45	H
119.24	-61.23	-14.19	-75.42	-13.00	-62.42	H
179.38	-55.62	-14.23	-69.85	-13.00	-56.85	H
274.44	-60.00	-13.50	-73.50	-13.00	-60.50	H
355.92	-65.31	-13.22	-78.53	-13.00	-65.53	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
41.64	-56.80	-12.72	-69.52	-13.00	-56.52	V
54.25	-52.67	-16.46	-69.13	-13.00	-56.13	V
76.56	-49.71	-18.32	-68.03	-13.00	-55.03	V
119.24	-62.05	-13.92	-75.97	-13.00	-62.97	V
184.23	-57.96	-15.32	-73.28	-13.00	-60.28	V
275.41	-57.67	-12.45	-70.12	-13.00	-57.12	V
44.55	-63.03	-11.72	-74.75	-13.00	-61.75	H
76.56	-50.15	-20.15	-70.30	-13.00	-57.30	H
117.30	-60.64	-14.62	-75.26	-13.00	-62.26	H
162.89	-57.20	-14.23	-71.44	-13.00	-58.44	H
184.23	-55.63	-14.29	-69.93	-13.00	-56.93	H
275.41	-59.42	-13.42	-72.85	-13.00	-59.85	H

Remark:

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



Operation Mode: GSM 1900 / TX / CH 661

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
43.58	-57.12	-12.85	-69.98	-13.00	-56.98	V
55.22	-52.81	-16.40	-69.20	-13.00	-56.20	V
74.62	-50.95	-17.52	-68.48	-13.00	-55.48	V
119.24	-62.30	-13.92	-76.22	-13.00	-63.22	V
168.71	-59.59	-14.55	-74.14	-13.00	-61.14	V
274.44	-57.55	-12.51	-70.07	-13.00	-57.07	V
42.61	-62.85	-11.70	-74.55	-13.00	-61.55	H
76.56	-49.94	-20.15	-70.09	-13.00	-57.09	H
116.33	-59.59	-14.83	-74.42	-13.00	-61.42	H
162.89	-57.73	-14.23	-71.97	-13.00	-58.97	H
184.23	-55.18	-14.29	-69.47	-13.00	-56.47	H
275.41	-59.84	-13.42	-73.27	-13.00	-60.27	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
43.58	-57.27	-12.85	-70.13	-13.00	-57.13	V
54.25	-52.36	-16.46	-68.83	-13.00	-55.83	V
76.56	-49.41	-18.32	-67.73	-13.00	-54.73	V
121.18	-62.11	-13.63	-75.74	-13.00	-62.74	V
166.77	-60.21	-14.49	-74.70	-13.00	-61.70	V
275.41	-57.74	-12.45	-70.18	-13.00	-57.18	V
76.56	-50.12	-20.15	-70.27	-13.00	-57.27	H
118.27	-60.23	-14.40	-74.64	-13.00	-61.64	H
183.26	-55.16	-14.29	-69.44	-13.00	-56.44	H
275.41	-59.78	-13.42	-73.21	-13.00	-60.21	H
344.28	-64.15	-13.64	-77.79	-13.00	-64.79	H
452.92	-66.77	-9.87	-76.63	-13.00	-63.63	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 512

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
43.58	-57.28	-12.85	-70.13	-13.00	-57.13	V
54.25	-53.13	-16.46	-69.60	-13.00	-56.60	V
76.56	-49.88	-18.32	-68.20	-13.00	-55.20	V
168.71	-59.81	-14.55	-74.36	-13.00	-61.36	V
275.41	-57.72	-12.45	-70.17	-13.00	-57.17	V
334.58	-63.77	-13.61	-77.38	-13.00	-64.38	V
40.67	-63.55	-11.67	-75.22	-13.00	-62.22	H
76.56	-50.25	-20.15	-70.39	-13.00	-57.39	H
120.21	-59.83	-14.02	-73.85	-13.00	-60.85	H
185.20	-55.35	-14.30	-69.65	-13.00	-56.65	H
275.41	-60.07	-13.42	-73.50	-13.00	-60.50	H
452.92	-66.41	-9.87	-76.28	-13.00	-63.28	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-56.52	-12.92	-69.44	-13.00	-56.44	V
55.22	-52.64	-16.40	-69.03	-13.00	-56.03	V
76.56	-49.37	-18.32	-67.69	-13.00	-54.69	V
120.21	-62.51	-13.73	-76.23	-13.00	-63.23	V
168.71	-60.36	-14.55	-74.91	-13.00	-61.91	V
275.41	-57.59	-12.45	-70.03	-13.00	-57.03	V
45.52	-62.32	-12.08	-74.40	-13.00	-61.40	H
76.56	-49.93	-20.15	-70.07	-13.00	-57.07	H
119.24	-60.80	-14.19	-74.99	-13.00	-61.99	H
184.23	-55.37	-14.29	-69.67	-13.00	-56.67	H
275.41	-59.66	-13.42	-73.08	-13.00	-60.08	H
429.64	-66.76	-10.45	-77.21	-13.00	-64.21	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-56.29	-12.92	-69.21	-13.00	-56.21	V
53.28	-52.73	-16.53	-69.25	-13.00	-56.25	V
76.56	-49.21	-18.32	-67.53	-13.00	-54.53	V
120.21	-61.74	-13.73	-75.47	-13.00	-62.47	V
169.68	-59.90	-14.58	-74.48	-13.00	-61.48	V
275.41	-58.31	-12.45	-70.76	-13.00	-57.76	V
44.55	-62.60	-11.72	-74.33	-13.00	-61.33	H
75.59	-50.30	-19.81	-70.10	-13.00	-57.10	H
119.24	-61.14	-14.19	-75.33	-13.00	-62.33	H
184.23	-55.31	-14.29	-69.61	-13.00	-56.61	H
274.44	-59.79	-13.50	-73.29	-13.00	-60.29	H
427.70	-67.71	-10.47	-78.17	-13.00	-65.17	H

Remark:

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



Operation Mode: EDGE 850 / TX / CH 128

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-56.44	-12.92	-69.36	-13.00	-56.36	V
53.28	-52.11	-16.53	-68.64	-13.00	-55.64	V
76.56	-48.07	-18.32	-66.39	-13.00	-53.39	V
120.21	-62.35	-13.73	-76.08	-13.00	-63.08	V
165.80	-60.71	-14.46	-75.17	-13.00	-62.17	V
275.41	-59.06	-12.45	-71.51	-13.00	-58.51	V
44.55	-61.88	-11.72	-73.61	-13.00	-60.61	H
76.56	-48.53	-20.15	-68.68	-13.00	-55.68	H
115.36	-59.51	-15.05	-74.55	-13.00	-61.55	H
162.89	-56.75	-14.23	-70.99	-13.00	-57.99	H
180.35	-55.44	-14.26	-69.71	-13.00	-56.71	H
275.41	-59.60	-13.42	-73.02	-13.00	-60.02	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 190

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-56.51	-12.92	-69.43	-13.00	-56.43	V
55.22	-52.93	-16.40	-69.33	-13.00	-56.33	V
76.56	-48.31	-18.32	-66.63	-13.00	-53.63	V
119.24	-60.74	-13.92	-74.66	-13.00	-61.66	V
176.47	-60.10	-15.04	-75.13	-13.00	-62.13	V
276.38	-58.93	-12.38	-71.31	-13.00	-58.31	V
78.50	-48.40	-20.83	-69.23	-13.00	-56.23	H
162.89	-56.46	-14.23	-70.69	-13.00	-57.69	H
179.38	-55.66	-14.23	-69.89	-13.00	-56.89	H
275.41	-59.24	-13.42	-72.67	-13.00	-59.67	H
452.92	-67.47	-9.87	-77.33	-13.00	-64.33	H
612.00	-67.83	-7.21	-75.04	-13.00	-62.04	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
42.61	-56.39	-12.79	-69.18	-13.00	-56.18	V
53.28	-52.31	-16.53	-68.83	-13.00	-55.83	V
73.65	-50.08	-17.12	-67.21	-13.00	-54.21	V
119.24	-62.15	-13.92	-76.07	-13.00	-63.07	V
179.38	-60.37	-15.24	-75.60	-13.00	-62.60	V
274.44	-58.79	-12.51	-71.30	-13.00	-58.30	V
76.56	-49.08	-20.15	-69.23	-13.00	-56.23	H
116.33	-59.80	-14.83	-74.63	-13.00	-61.63	H
161.92	-56.79	-14.30	-71.09	-13.00	-58.09	H
179.38	-55.68	-14.23	-69.91	-13.00	-56.91	H
273.47	-59.96	-13.57	-73.53	-13.00	-60.53	H
381.14	-66.07	-12.02	-78.09	-13.00	-65.09	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
55.22	-52.42	-16.40	-68.81	-13.00	-55.81	V
76.56	-49.30	-18.32	-67.63	-13.00	-54.63	V
119.24	-61.29	-13.92	-75.21	-13.00	-62.21	V
169.68	-60.22	-14.58	-74.80	-13.00	-61.80	V
184.23	-59.25	-15.32	-74.57	-13.00	-61.57	V
273.47	-57.83	-12.58	-70.41	-13.00	-57.41	V
76.56	-49.87	-20.15	-70.01	-13.00	-57.01	H
115.36	-59.58	-15.05	-74.62	-13.00	-61.62	H
168.71	-53.46	-13.82	-67.28	-13.00	-54.28	H
184.23	-55.34	-14.29	-69.64	-13.00	-56.64	H
277.35	-60.44	-13.27	-73.72	-13.00	-60.72	H
452.92	-67.75	-9.87	-77.61	-13.00	-64.61	H

Remark:

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



Operation Mode: EDGE 1900 / TX / CH 661

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
56.19	-53.27	-16.33	-69.60	-13.00	-56.60	V
76.56	-49.95	-18.32	-68.27	-13.00	-55.27	V
123.12	-62.57	-13.43	-76.00	-13.00	-63.00	V
169.68	-59.90	-14.58	-74.48	-13.00	-61.48	V
275.41	-57.34	-12.45	-69.79	-13.00	-56.79	V
452.92	-68.76	-9.95	-78.71	-13.00	-65.71	V
75.59	-50.08	-19.81	-69.89	-13.00	-56.89	H
118.27	-59.44	-14.40	-73.84	-13.00	-60.84	H
182.29	-55.31	-14.28	-69.59	-13.00	-56.59	H
227.88	-61.17	-14.69	-75.86	-13.00	-62.86	H
275.41	-59.77	-13.42	-73.19	-13.00	-60.19	H
452.92	-65.69	-9.87	-75.55	-13.00	-62.55	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
54.25	-52.40	-16.46	-68.86	-13.00	-55.86	V
76.56	-49.01	-18.32	-67.33	-13.00	-54.33	V
120.21	-61.11	-13.73	-74.84	-13.00	-61.84	V
180.35	-50.01	-15.28	-65.29	-13.00	-52.29	V
277.35	-58.35	-12.31	-70.67	-13.00	-57.67	V
353.01	-64.76	-13.22	-77.98	-13.00	-64.98	V
44.55	-62.68	-11.72	-74.40	-13.00	-61.40	H
76.56	-49.06	-20.15	-69.20	-13.00	-56.20	H
120.21	-60.32	-14.02	-74.35	-13.00	-61.35	H
181.32	-55.43	-14.27	-69.70	-13.00	-56.70	H
274.44	-59.91	-13.50	-73.41	-13.00	-60.41	H
452.92	-65.89	-9.87	-75.75	-13.00	-62.75	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-55.52	-12.92	-68.44	-13.00	-55.44	V
76.56	-49.32	-18.32	-67.64	-13.00	-54.64	V
119.24	-60.69	-13.92	-74.61	-13.00	-61.61	V
166.77	-59.60	-14.49	-74.09	-13.00	-61.09	V
275.41	-57.51	-12.45	-69.95	-13.00	-56.95	V
373.38	-64.92	-13.02	-77.95	-13.00	-64.95	V
76.56	-49.95	-20.15	-70.10	-13.00	-57.10	H
117.30	-60.42	-14.62	-75.04	-13.00	-62.04	H
184.23	-55.59	-14.29	-69.88	-13.00	-56.88	H
275.41	-59.66	-13.42	-73.08	-13.00	-60.08	H
399.57	-68.33	-11.72	-80.05	-13.00	-67.05	H
452.92	-66.48	-9.87	-76.34	-13.00	-63.34	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-55.24	-12.92	-68.16	-13.00	-55.16	V
54.25	-52.00	-16.46	-68.47	-13.00	-55.47	V
76.56	-48.80	-18.32	-67.12	-13.00	-54.12	V
120.21	-61.41	-13.73	-75.14	-13.00	-62.14	V
183.26	-59.14	-15.31	-74.45	-13.00	-61.45	V
275.41	-56.90	-12.45	-69.35	-13.00	-56.35	V
43.58	-63.17	-11.71	-74.88	-13.00	-61.88	H
76.56	-49.33	-20.15	-69.48	-13.00	-56.48	H
118.27	-60.10	-14.40	-74.51	-13.00	-61.51	H
184.23	-55.07	-14.29	-69.36	-13.00	-56.36	H
278.32	-59.69	-13.20	-72.89	-13.00	-59.89	H
452.92	-67.00	-9.87	-76.86	-13.00	-63.86	H

Remark:

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



Operation Mode: WCDMA Band II / TX / CH 9538

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
43.58	-56.50	-12.85	-69.35	-13.00	-56.35	V
55.22	-52.50	-16.40	-68.89	-13.00	-55.89	V
76.56	-49.54	-18.32	-67.86	-13.00	-54.86	V
119.24	-60.83	-13.92	-74.75	-13.00	-61.75	V
169.68	-59.45	-14.58	-74.03	-13.00	-61.03	V
275.41	-57.42	-12.45	-69.86	-13.00	-56.86	V
43.58	-62.50	-11.71	-74.21	-13.00	-61.21	H
76.56	-49.64	-20.15	-69.79	-13.00	-56.79	H
118.27	-59.87	-14.40	-74.27	-13.00	-61.27	H
182.29	-54.34	-14.28	-68.62	-13.00	-55.62	H
274.44	-59.41	-13.50	-72.91	-13.00	-59.91	H
452.92	-67.10	-9.87	-76.96	-13.00	-63.96	H

Remark:

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



Operation Mode: WCDMA Band V / TX / CH 4132

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
41.64	-57.02	-12.72	-69.75	-13.00	-56.75	V
55.22	-52.48	-16.40	-68.88	-13.00	-55.88	V
75.59	-50.05	-17.92	-67.97	-13.00	-54.97	V
119.24	-62.86	-13.92	-76.78	-13.00	-63.78	V
164.83	-59.67	-14.43	-74.10	-13.00	-61.10	V
275.41	-57.05	-12.45	-69.49	-13.00	-56.49	V
41.64	-62.34	-11.68	-74.02	-13.00	-61.02	H
75.59	-53.20	-19.81	-73.01	-13.00	-60.01	H
41.64	-63.08	-11.68	-74.77	-13.00	-61.77	H
76.56	-50.33	-20.15	-70.47	-13.00	-57.47	H
116.33	-60.28	-14.83	-75.11	-13.00	-62.11	H
162.89	-56.76	-14.23	-70.99	-13.00	-57.99	H
181.32	-55.40	-14.27	-69.67	-13.00	-56.67	H
275.41	-59.04	-13.42	-72.47	-13.00	-59.47	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
40.67	-56.94	-12.66	-69.60	-13.00	-56.60	V
56.19	-52.46	-16.33	-68.79	-13.00	-55.79	V
76.56	-49.63	-18.32	-67.95	-13.00	-54.95	V
121.18	-63.19	-13.63	-76.82	-13.00	-63.82	V
179.38	-60.05	-15.24	-75.28	-13.00	-62.28	V
275.41	-57.32	-12.45	-69.77	-13.00	-56.77	V
76.56	-50.16	-20.15	-70.30	-13.00	-57.30	H
116.33	-59.95	-14.83	-74.78	-13.00	-61.78	H
162.89	-56.13	-14.23	-70.37	-13.00	-57.37	H
181.32	-54.40	-14.27	-68.67	-13.00	-55.67	H
275.41	-59.79	-13.42	-73.22	-13.00	-60.22	H
356.89	-65.48	-13.18	-78.67	-13.00	-65.67	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-56.09	-12.92	-69.01	-13.00	-56.01	V
54.25	-51.99	-16.46	-68.45	-13.00	-55.45	V
75.59	-50.38	-17.92	-68.31	-13.00	-55.31	V
119.24	-62.10	-13.92	-76.02	-13.00	-63.02	V
162.89	-59.60	-14.37	-73.97	-13.00	-60.97	V
275.41	-57.50	-12.45	-69.94	-13.00	-56.94	V
43.58	-62.79	-11.71	-74.50	-13.00	-61.50	H
75.59	-50.46	-19.81	-70.26	-13.00	-57.26	H
161.92	-56.63	-14.30	-70.93	-13.00	-57.93	H
181.32	-54.90	-14.27	-69.17	-13.00	-56.17	H
277.35	-59.75	-13.27	-73.03	-13.00	-60.03	H
353.98	-65.15	-13.29	-78.44	-13.00	-65.44	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-58.89	-12.92	-71.81	-13.00	-58.81	V
53.28	-55.11	-16.53	-71.64	-13.00	-58.64	V
78.50	-49.43	-19.12	-68.56	-13.00	-55.56	V
177.44	-56.19	-15.10	-71.29	-13.00	-58.29	V
236.61	-56.38	-14.49	-70.87	-13.00	-57.87	V
474.26	-66.27	-9.21	-75.48	-13.00	-62.48	V
45.52	-63.70	-12.08	-75.78	-13.00	-62.78	H
77.53	-48.92	-20.49	-69.41	-13.00	-56.41	H
126.03	-61.23	-14.06	-75.30	-13.00	-62.30	H
162.89	-55.61	-14.23	-69.84	-13.00	-56.84	H
182.29	-53.24	-14.28	-67.52	-13.00	-54.52	H
276.38	-58.33	-13.35	-71.68	-13.00	-58.68	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-59.98	-12.92	-72.90	-13.00	-59.90	V
55.22	-55.66	-16.40	-72.06	-13.00	-59.06	V
79.47	-49.73	-19.52	-69.25	-13.00	-56.25	V
177.44	-56.39	-15.10	-71.50	-13.00	-58.50	V
256.01	-56.75	-14.54	-71.29	-13.00	-58.29	V
520.82	-66.21	-8.42	-74.64	-13.00	-61.64	V
77.53	-50.66	-20.49	-71.14	-13.00	-58.14	H
163.86	-55.61	-14.17	-69.78	-13.00	-56.78	H
182.29	-53.06	-14.28	-67.34	-13.00	-54.34	H
221.09	-57.20	-15.26	-72.45	-13.00	-59.45	H
275.41	-58.33	-13.42	-71.75	-13.00	-58.75	H
520.82	-66.86	-8.54	-75.40	-13.00	-62.40	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 II /
TX / CH 9538

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
40.67	-63.47	-12.66	-76.12	-13.00	-63.12	V
129.91	-65.36	-12.73	-78.09	-13.00	-65.09	V
236.61	-59.71	-14.49	-74.20	-13.00	-61.20	V
256.01	-60.14	-14.54	-74.68	-13.00	-61.68	V
276.38	-61.73	-12.38	-74.11	-13.00	-61.11	V
902.03	-64.13	-3.85	-67.98	-13.00	-54.98	V
43.58	-63.89	-11.71	-75.60	-13.00	-62.60	H
116.33	-61.14	-14.83	-75.97	-13.00	-62.97	H
162.89	-63.37	-14.23	-77.60	-13.00	-64.60	H
183.26	-62.41	-14.29	-76.70	-13.00	-63.70	H
276.38	-62.81	-13.35	-76.16	-13.00	-63.16	H
902.03	-64.90	-3.76	-68.66	-13.00	-55.66	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 / HSDPA Band V /
TX / CH 4132

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-55.04	-12.92	-67.96	-13.00	-54.96	V
52.31	-50.95	-16.59	-67.54	-13.00	-54.54	V
78.50	-44.38	-19.12	-63.50	-13.00	-50.50	V
180.35	-53.13	-15.28	-68.41	-13.00	-55.41	V
236.61	-51.27	-14.49	-65.76	-13.00	-52.76	V
452.92	-65.44	-9.95	-75.39	-13.00	-62.39	V
50.37	-53.40	-15.17	-68.58	-13.00	-55.58	H
77.53	-45.79	-20.49	-66.27	-13.00	-53.27	H
162.89	-52.27	-14.23	-66.51	-13.00	-53.51	H
181.32	-49.60	-14.27	-63.87	-13.00	-50.87	H
275.41	-56.33	-13.42	-69.75	-13.00	-56.75	H
452.92	-64.32	-9.87	-74.18	-13.00	-61.18	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
40.67	-62.56	-12.66	-75.22	-13.00	-62.22	V
79.47	-58.27	-19.52	-77.80	-13.00	-64.80	V
146.40	-64.05	-13.22	-77.27	-13.00	-64.27	V
196.84	-61.82	-14.56	-76.38	-13.00	-63.38	V
236.61	-54.63	-14.49	-69.12	-13.00	-56.12	V
256.01	-56.14	-14.54	-70.68	-13.00	-57.68	V
44.55	-63.36	-11.72	-75.08	-13.00	-62.08	H
116.33	-62.32	-14.83	-77.15	-13.00	-64.15	H
162.89	-62.53	-14.23	-76.76	-13.00	-63.76	H
181.32	-60.77	-14.27	-75.04	-13.00	-62.04	H
256.01	-61.57	-14.99	-76.56	-13.00	-63.56	H
276.38	-62.28	-13.35	-75.63	-13.00	-62.63	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
41.64	-62.50	-12.72	-75.22	-13.00	-62.22	V
61.04	-51.83	-16.02	-67.85	-13.00	-54.85	V
217.21	-58.56	-16.22	-74.78	-13.00	-61.78	V
236.61	-55.00	-14.49	-69.49	-13.00	-56.49	V
256.01	-58.98	-14.54	-73.52	-13.00	-60.52	V
276.38	-59.74	-12.38	-72.12	-13.00	-59.12	V
41.64	-64.08	-11.68	-75.76	-13.00	-62.76	H
120.21	-63.78	-14.02	-77.80	-13.00	-64.80	H
163.86	-62.70	-14.17	-76.87	-13.00	-63.87	H
180.35	-61.01	-14.26	-75.27	-13.00	-62.27	H
276.38	-63.45	-13.35	-76.80	-13.00	-63.80	H
427.70	-66.08	-10.47	-76.54	-13.00	-63.54	H

Remark:

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



Operation Mode: WCDMA / HSUPA Band II /
TX / CH 9262

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-56.29	-12.92	-69.21	-13.00	-56.21	V
56.19	-52.45	-16.33	-68.78	-13.00	-55.78	V
76.56	-49.74	-18.32	-68.07	-13.00	-55.07	V
192.96	-55.45	-15.02	-70.47	-13.00	-57.47	V
277.35	-62.09	-12.31	-74.41	-13.00	-61.41	V
472.32	-66.23	-9.29	-75.52	-13.00	-62.52	V
41.64	-62.69	-11.68	-74.37	-13.00	-61.37	H
75.59	-53.90	-19.81	-73.70	-13.00	-60.70	H
116.33	-60.92	-14.83	-75.75	-13.00	-62.75	H
148.34	-59.01	-14.00	-73.01	-13.00	-60.01	H
176.47	-51.08	-14.07	-65.15	-13.00	-52.15	H
279.29	-62.04	-13.12	-75.17	-13.00	-62.17	H

Remark:

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



Operation Mode: WCDMA / HSUPA Band II /
TX / CH 9400

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-59.98	-12.92	-72.90	-13.00	-59.90	V
55.22	-55.66	-16.40	-72.06	-13.00	-59.06	V
79.47	-49.73	-19.52	-69.25	-13.00	-56.25	V
177.44	-56.39	-15.10	-71.50	-13.00	-58.50	V
256.01	-56.75	-14.54	-71.29	-13.00	-58.29	V
520.82	-66.21	-8.42	-74.64	-13.00	-61.64	V
77.53	-50.66	-20.49	-71.14	-13.00	-58.14	H
163.86	-55.61	-14.17	-69.78	-13.00	-56.78	H
182.29	-53.06	-14.28	-67.34	-13.00	-54.34	H
221.09	-57.20	-15.26	-72.45	-13.00	-59.45	H
275.41	-58.33	-13.42	-71.75	-13.00	-58.75	H
520.82	-66.86	-8.54	-75.40	-13.00	-62.40	H

Remark:

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



Operation Mode: WCDMA / HSUPA Band II /
TX / CH 9538

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
40.67	-63.47	-12.66	-76.12	-13.00	-63.12	V
129.91	-65.36	-12.73	-78.09	-13.00	-65.09	V
236.61	-59.71	-14.49	-74.20	-13.00	-61.20	V
256.01	-60.14	-14.54	-74.68	-13.00	-61.68	V
276.38	-61.73	-12.38	-74.11	-13.00	-61.11	V
902.03	-64.13	-3.85	-67.98	-13.00	-54.98	V
43.58	-63.89	-11.71	-75.60	-13.00	-62.60	H
116.33	-61.14	-14.83	-75.97	-13.00	-62.97	H
162.89	-63.37	-14.23	-77.60	-13.00	-64.60	H
183.26	-62.41	-14.29	-76.70	-13.00	-63.70	H
276.38	-62.81	-13.35	-76.16	-13.00	-63.16	H
902.03	-64.90	-3.76	-68.66	-13.00	-55.66	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 / HSUPA Band V /
TX / CH 4132

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
44.55	-54.91	-12.92	-67.83	-13.00	-54.83	V
77.53	-45.30	-18.72	-64.02	-13.00	-51.02	V
124.09	-59.37	-13.33	-72.70	-13.00	-59.70	V
177.44	-52.80	-15.10	-67.90	-13.00	-54.90	V
236.61	-51.65	-14.49	-66.14	-13.00	-53.14	V
597.45	-66.41	-7.72	-74.13	-13.00	-61.13	V
42.61	-63.08	-11.70	-74.78	-13.00	-61.78	H
120.21	-62.68	-14.02	-76.70	-13.00	-63.70	H
180.35	-60.18	-14.26	-74.44	-13.00	-61.44	H
190.05	-59.03	-14.34	-73.37	-13.00	-60.37	H
256.01	-60.83	-14.99	-75.82	-13.00	-62.82	H
276.38	-62.27	-13.35	-75.62	-13.00	-62.62	H

Remark:

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



Operation Mode: WCDMA / HSUPA Band V /
TX / CH 4182

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
40.67	-62.64	-12.66	-75.30	-13.00	-62.30	V
78.50	-57.95	-19.12	-77.07	-13.00	-64.07	V
217.21	-59.47	-16.22	-75.69	-13.00	-62.69	V
236.61	-55.90	-14.49	-70.39	-13.00	-57.39	V
256.01	-57.55	-14.54	-72.09	-13.00	-59.09	V
276.38	-60.80	-12.38	-73.18	-13.00	-60.18	V
41.64	-63.29	-11.68	-74.97	-13.00	-61.97	H
120.21	-63.99	-14.02	-78.01	-13.00	-65.01	H
162.89	-60.76	-14.23	-74.99	-13.00	-61.99	H
181.32	-60.18	-14.27	-74.45	-13.00	-61.45	H
236.61	-62.82	-13.92	-76.74	-13.00	-63.74	H
276.38	-63.34	-13.35	-76.69	-13.00	-63.69	H

Remark:

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



Operation Mode: WCDMA / HSUPA Band V /
TX / CH 4233

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
39.70	-62.96	-12.78	-75.73	-13.00	-62.73	V
177.44	-61.19	-15.10	-76.29	-13.00	-63.29	V
196.84	-61.74	-14.56	-76.30	-13.00	-63.30	V
236.61	-55.93	-14.49	-70.43	-13.00	-57.43	V
256.01	-58.13	-14.54	-72.67	-13.00	-59.67	V
276.38	-60.44	-12.38	-72.81	-13.00	-59.81	V
41.64	-63.62	-11.68	-75.30	-13.00	-62.30	H
118.27	-61.68	-14.40	-76.09	-13.00	-63.09	H
162.89	-61.97	-14.23	-76.21	-13.00	-63.21	H
181.32	-60.52	-14.27	-74.79	-13.00	-61.79	H
276.38	-62.72	-13.35	-76.06	-13.00	-63.06	H
452.92	-66.53	-9.87	-76.40	-13.00	-63.40	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.*



Above 1GHz

Operation Mode: GSM 850 / TX / CH 128

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1651.00	-49.67	1.61	-48.06	-13.00	-35.06	V
2414.00	-46.61	4.10	-42.51	-13.00	-29.51	V
2470.00	-48.15	4.41	-43.74	-13.00	-30.74	V
3296.00	-44.26	8.35	-35.92	-13.00	-22.92	V
4122.00	-58.52	8.62	-49.90	-13.00	-36.90	V
4948.00	-58.67	10.31	-48.36	-13.00	-35.36	V
1651.00	-48.28	1.42	-46.86	-13.00	-33.86	H
2414.00	-52.45	4.04	-48.40	-13.00	-35.40	H
2470.00	-52.37	4.43	-47.94	-13.00	-34.94	H
3296.00	-48.40	8.22	-40.18	-13.00	-27.18	H
4122.00	-59.34	8.40	-50.95	-13.00	-37.95	H
4948.00	-58.48	10.02	-48.46	-13.00	-35.46	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 850 / TX / CH 190

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1672.00	-43.53	1.63	-41.90	-13.00	-28.90	V
2512.00	-49.83	4.62	-45.21	-13.00	-32.21	V
3345.00	-45.64	8.64	-37.00	-13.00	-24.00	V
5018.00	-58.98	10.42	-48.55	-13.00	-35.55	V
N/A						
1672.00	-39.79	1.40	-38.39	-13.00	-25.39	H
2512.00	-52.88	4.69	-48.20	-13.00	-35.20	H
3345.00	-49.37	8.49	-40.88	-13.00	-27.88	H
4185.00	-61.14	8.49	-52.65	-13.00	-39.65	H
5018.00	-60.10	10.14	-49.97	-13.00	-36.97	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: GSM 850 / TX / CH 251

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1700.00	-43.96	1.64	-42.32	-13.00	-29.32	V
2547.00	-50.49	4.76	-45.73	-13.00	-32.73	V
3394.00	-48.07	8.93	-39.13	-13.00	-26.13	V
5095.00	-61.41	10.40	-51.01	-13.00	-38.01	V
N/A						
1700.00	-42.76	1.38	-41.37	-13.00	-28.37	H
2547.00	-54.35	4.82	-49.52	-13.00	-36.52	H
3394.00	-52.61	8.76	-43.84	-13.00	-30.84	H
5095.00	-60.62	10.13	-50.50	-13.00	-37.50	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 850 / TX / CH 128

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1651.00	-53.76	1.61	-52.15	-13.00	-39.15	V
2470.00	-51.84	4.41	-47.44	-13.00	-34.44	V
3296.00	-49.39	8.35	-41.04	-13.00	-28.04	V
4122.00	-59.33	8.62	-50.71	-13.00	-37.71	V
4948.00	-61.36	10.31	-51.05	-13.00	-38.05	V
N/A						
1651.00	-49.50	1.42	-48.08	-13.00	-35.08	H
2470.00	-53.08	4.43	-48.65	-13.00	-35.65	H
3296.00	-52.77	8.22	-44.54	-13.00	-31.54	H
4122.00	-58.57	8.40	-50.17	-13.00	-37.17	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 850 / TX / CH 190

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1672.00	-46.59	1.63	-44.97	-13.00	-31.97	V
2512.00	-52.44	4.62	-47.82	-13.00	-34.82	V
3345.00	-50.74	8.64	-42.10	-13.00	-29.10	V
4185.00	-61.06	8.72	-52.34	-13.00	-39.34	V
5018.00	-60.92	10.42	-50.50	-13.00	-37.50	V
N/A						
1672.00	-45.65	1.40	-44.25	-13.00	-31.25	H
2512.00	-54.10	4.69	-49.42	-13.00	-36.42	H
3345.00	-54.52	8.49	-46.03	-13.00	-33.03	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 850 / TX / CH 251

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1700.00	-45.59	1.64	-43.94	-13.00	-30.94	V
2547.00	-52.87	4.76	-48.11	-13.00	-35.11	V
3394.00	-53.29	8.93	-44.36	-13.00	-31.36	V
N/A						
1700.00	-43.65	1.38	-42.27	-13.00	-29.27	H
2547.00	-55.47	4.82	-50.65	-13.00	-37.65	H
3394.00	-57.05	8.76	-48.29	-13.00	-35.29	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 512

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3702.00	-58.02	9.11	-48.91	-13.00	-35.91	V
5550.00	-48.29	10.32	-37.97	-13.00	-24.97	V
N/A						
3702.00	-53.86	8.89	-44.97	-13.00	-31.97	H
5550.00	-51.08	10.12	-40.96	-13.00	-27.96	H
7398.00	-57.28	16.51	-40.77	-13.00	-27.77	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3758.00	-62.35	8.98	-53.38	-13.00	-40.38	V
5641.00	-48.72	10.40	-38.32	-13.00	-25.32	V
7524.00	-61.64	17.06	-44.59	-13.00	-31.59	V
N/A						
3758.00	-54.55	8.76	-45.78	-13.00	-32.78	H
5641.00	-54.22	10.23	-43.99	-13.00	-30.99	H
7517.00	-57.61	16.91	-40.71	-13.00	-27.71	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3821.00	-62.67	8.83	-53.84	-13.00	-40.84	V
5732.00	-49.88	10.48	-39.40	-13.00	-26.40	V
N/A						
3821.00	-54.77	8.62	-46.15	-13.00	-33.15	H
5732.00	-53.89	10.33	-43.56	-13.00	-30.56	H
7643.00	-58.59	17.25	-41.35	-13.00	-28.35	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: GPRS 1900 / TX / CH 512

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3702.00	-59.59	9.11	-50.49	-13.00	-37.49	V
5550.00	-50.27	10.32	-39.95	-13.00	-26.95	V
N/A						
3702.00	-56.04	8.89	-47.15	-13.00	-34.15	H
5550.00	-53.48	10.12	-43.35	-13.00	-30.35	H
7398.00	-61.02	16.51	-44.52	-13.00	-31.52	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: GPRS 1900 / TX / CH 661

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3758.00	-61.05	8.98	-52.07	-13.00	-39.07	V
5641.00	-52.12	10.40	-41.71	-13.00	-28.71	V
N/A						
3758.00	-56.73	8.76	-47.97	-13.00	-34.97	H
5641.00	-54.64	10.23	-44.41	-13.00	-31.41	H
7517.00	-60.77	16.91	-43.86	-13.00	-30.86	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3821.00	-61.94	8.83	-53.11	-13.00	-40.11	V
5732.00	-52.80	10.48	-42.31	-13.00	-29.31	V
N/A						
3821.00	-57.06	8.62	-48.44	-13.00	-35.44	H
5732.00	-56.56	10.33	-46.24	-13.00	-33.24	H
7643.00	-60.52	17.25	-43.28	-13.00	-30.28	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1651.00	-55.06	1.61	-53.45	-13.00	-40.45	V
2470.00	-52.72	4.41	-48.32	-13.00	-35.32	V
3296.00	-50.39	8.35	-42.04	-13.00	-29.04	V
4122.00	-58.71	8.62	-50.09	-13.00	-37.09	V
N/A						
1651.00	-53.71	1.42	-52.29	-13.00	-39.29	H
2470.00	-53.27	4.43	-48.84	-13.00	-35.84	H
3296.00	-54.72	8.22	-46.49	-13.00	-33.49	H
4122.00	-59.13	8.40	-50.74	-13.00	-37.74	H
4948.00	-62.29	10.02	-52.27	-13.00	-39.27	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1672.00	-49.34	1.63	-47.71	-13.00	-34.71	V
2512.00	-53.73	4.62	-49.11	-13.00	-36.11	V
3345.00	-52.18	8.64	-43.54	-13.00	-30.54	V
N/A						
1672.00	-49.14	1.40	-47.74	-13.00	-34.74	H
2512.00	-55.17	4.69	-50.49	-13.00	-37.49	H
3345.00	-56.14	8.49	-47.65	-13.00	-34.65	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: EDGE 850 / TX / CH 251

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1700.00	-48.64	1.64	-46.99	-13.00	-33.99	V
2547.00	-53.65	4.76	-48.89	-13.00	-35.89	V
3394.00	-54.27	8.93	-45.33	-13.00	-32.33	V
N/A						
1700.00	-50.59	1.38	-49.21	-13.00	-36.21	H
2547.00	-56.43	4.82	-51.60	-13.00	-38.60	H
3394.00	-59.05	8.76	-50.28	-13.00	-37.28	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3702.00	-59.81	9.11	-50.70	-13.00	-37.70	V
5550.00	-50.73	10.32	-40.41	-13.00	-27.41	V
N/A						
3702.00	-56.50	8.89	-47.61	-13.00	-34.61	H
5550.00	-54.27	10.12	-44.15	-13.00	-31.15	H
7398.00	-60.60	16.51	-44.10	-13.00	-31.10	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 661

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3758.00	-61.81	8.98	-52.83	-13.00	-39.83	V
5641.00	-52.03	10.40	-41.63	-13.00	-28.63	V
N/A						
3758.00	-57.46	8.76	-48.70	-13.00	-35.70	H
5641.00	-56.31	10.23	-46.08	-13.00	-33.08	H
7524.00	-59.02	16.93	-42.09	-13.00	-29.09	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3821.00	-62.32	8.83	-53.49	-13.00	-40.49	V
5732.00	-53.16	10.48	-42.67	-13.00	-29.67	V
N/A						
3821.00	-60.50	8.62	-51.88	-13.00	-38.88	H
5732.00	-57.66	10.33	-47.34	-13.00	-34.34	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3702.00	-50.14	9.11	-41.03	-13.00	-28.03	V
N/A						
3702.00	-51.95	8.89	-43.06	-13.00	-30.06	H
6866.00	-63.27	14.54	-48.74	-13.00	-35.74	H
N/A						

Remark:

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



Operation Mode: WCDMA Band II / TX / CH 9400

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3765.00	-51.84	8.96	-42.87	-13.00	-29.87	V
N/A						
3765.00	-54.39	8.75	-45.64	-13.00	-32.64	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3821.00	-53.53	8.83	-44.70	-13.00	-31.70	V
N/A						
3821.00	-54.74	8.62	-46.12	-13.00	-33.12	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2407.00	-52.62	4.06	-48.56	-13.00	-35.56	V
3310.00	-52.59	8.43	-44.16	-13.00	-31.16	V
4136.00	-59.03	8.64	-50.39	-13.00	-37.39	V
N/A						
1651.00	-54.74	1.42	-53.32	-13.00	-40.32	H
2414.00	-57.11	4.04	-53.06	-13.00	-40.06	H
3310.00	-46.43	8.30	-38.13	-13.00	-25.13	H
4129.00	-57.91	8.41	-49.51	-13.00	-36.51	H
N/A						

Remark:

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



Operation Mode: WCDMA Band V / TX / CH 4182

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2414.00	-51.02	4.10	-46.92	-13.00	-33.92	V
3345.00	-54.28	8.64	-45.64	-13.00	-32.64	V
4192.00	-61.49	8.73	-52.76	-13.00	-39.76	V
N/A						
1672.00	-58.70	1.40	-57.29	-13.00	-44.29	H
2414.00	-51.60	4.04	-47.55	-13.00	-34.55	H
3345.00	-50.41	8.49	-41.91	-13.00	-28.91	H
4178.00	-60.65	8.48	-52.17	-13.00	-39.17	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2414.00	-55.82	4.10	-51.73	-13.00	-38.73	V
3380.00	-50.28	8.85	-41.43	-13.00	-28.43	V
4241.00	-60.97	8.81	-52.16	-13.00	-39.16	V
N/A						
1693.00	-57.93	1.39	-56.55	-13.00	-43.55	H
2414.00	-51.31	4.04	-47.27	-13.00	-34.27	H
3380.00	-46.80	8.69	-38.11	-13.00	-25.11	H
4227.00	-58.99	8.56	-50.44	-13.00	-37.44	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3702.00	-48.16	9.11	-39.06	-13.00	-26.06	V
N/A						
3702.00	-53.27	8.89	-44.38	-13.00	-31.38	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3758.00	-50.08	8.98	-41.10	-13.00	-28.10	V
N/A						
3765.00	-54.45	8.75	-45.71	-13.00	-32.71	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3814.00	-50.83	8.85	-41.98	-13.00	-28.98	V
N/A						
3814.00	-53.17	8.63	-44.54	-13.00	-31.54	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1651.00	-54.08	1.61	-52.47	-13.00	-39.47	V
3310.00	-45.12	8.43	-36.69	-13.00	-23.69	V
4136.00	-55.83	8.64	-47.19	-13.00	-34.19	V
N/A						
1651.00	-51.79	1.42	-50.37	-13.00	-37.37	H
3310.00	-48.11	8.30	-39.81	-13.00	-26.81	H
4129.00	-59.19	8.41	-50.78	-13.00	-37.78	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: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1672.00	-56.54	1.63	-54.91	-13.00	-41.91	V
3345.00	-46.64	8.64	-38.00	-13.00	-25.00	V
4185.00	-60.56	8.72	-51.84	-13.00	-38.84	V
N/A						
1672.00	-53.31	1.40	-51.91	-13.00	-38.91	H
3345.00	-51.39	8.49	-42.90	-13.00	-29.90	H
4178.00	-60.78	8.48	-52.30	-13.00	-39.30	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 / HSDPA Band V / TX / CH 4233

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1693.00	-55.41	1.64	-53.77	-13.00	-40.77	V
3380.00	-45.05	8.85	-36.20	-13.00	-23.20	V
4227.00	-58.21	8.79	-49.42	-13.00	-36.42	V
N/A						
1693.00	-52.92	1.39	-51.54	-13.00	-38.54	H
3387.00	-50.64	8.73	-41.91	-13.00	-28.91	H
4241.00	-59.38	8.58	-50.80	-13.00	-37.80	H
N/A						

Remark:

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



Operation Mode: WCDMA / HSUPA Band II /
TX / CH 9262

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3702.00	-48.18	9.11	-39.08	-13.00	-26.08	V
N/A						
3702.00	-52.71	8.89	-43.82	-13.00	-30.82	H
N/A						

Remark:

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



Operation Mode: WCDMA / HSUPA Band II / TX / CH 9400

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3765.00	-50.16	8.96	-41.20	-13.00	-28.20	V
N/A						
3765.00	-52.97	8.75	-44.22	-13.00	-31.22	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: WCDMA / HSUPA Band II /
TX / CH 9538

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3814.00	-49.59	8.85	-40.74	-13.00	-27.74	V
N/A						
3814.00	-52.96	8.63	-44.32	-13.00	-31.32	H
N/A						

Remark:

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



Operation Mode: WCDMA / HSUPA Band V / TX / CH 4132

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1651.00	-51.81	1.61	-50.20	-13.00	-37.20	V
3310.00	-45.00	8.43	-36.57	-13.00	-23.57	V
4136.00	-55.20	8.64	-46.55	-13.00	-33.55	V
N/A						
1651.00	-51.65	1.42	-50.23	-13.00	-37.23	H
3310.00	-47.34	8.30	-39.04	-13.00	-26.04	H
4136.00	-57.93	8.42	-49.51	-13.00	-36.51	H
N/A						

Remark:

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



Operation Mode: WCDMA / HSUPA Band V /
TX / CH 4182

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1672.00	-57.74	1.63	-56.12	-13.00	-43.12	V
3345.00	-48.00	8.64	-39.36	-13.00	-26.36	V
4185.00	-59.86	8.72	-51.14	-13.00	-38.14	V
N/A						
1672.00	-51.17	1.40	-49.77	-13.00	-36.77	H
3345.00	-52.54	8.49	-44.05	-13.00	-31.05	H
4178.00	-60.91	8.48	-52.43	-13.00	-39.43	H
N/A						

Remark:

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



Operation Mode: WCDMA / HSUPA Band V / TX / CH 4233

Test Date: November 26, 2010

Temperature: 25°C

Tested by: Jerry Lin

Humidity: 50 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
1693.00	-53.34	1.64	-51.70	-13.00	-38.70	V
3387.00	-45.09	8.89	-36.20	-13.00	-23.20	V
4227.00	-58.46	8.79	-49.67	-13.00	-36.67	V
N/A						
1693.00	-52.13	1.39	-50.74	-13.00	-37.74	H
3380.00	-49.66	8.69	-40.97	-13.00	-27.97	H
4227.00	-59.36	8.56	-50.81	-13.00	-37.81	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.



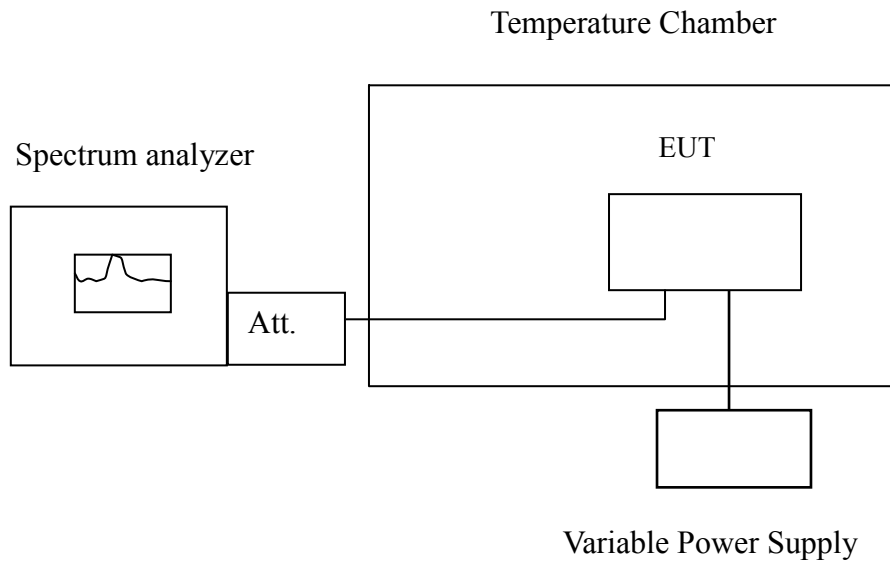
7.7 FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

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)
4.2	50	836600077	151	2090
	40	836600076	150	
	30	836600083	157	
	20	836599926	0	
	10	836600074	148	
	0	836600069	143	
	-10	836600073	147	
	-20	836600081	155	
	-30	836600075	149	

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)
4.2	50	1880000053	115	4700
	40	1880000056	118	
	30	1880000051	113	
	20	1879999938	0	
	10	1880000046	108	
	0	1880000060	122	
	-10	1880000059	121	
	-20	1880000053	115	
	-30	1880000051	113	



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)
4.2	50	836600054	115	2090
	40	836600064	125	
	30	836600060	121	
	20	836599939	0	
	10	836600049	110	
	0	836600048	109	
	-10	836600057	118	
	-20	836600055	116	
	-30	836600059	120	

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)
4.2	50	1880000055	104	4700
	40	1880000049	98	
	30	1880000053	102	
	20	1879999951	0	
	10	1880000060	109	
	0	1880000061	110	
	-10	1880000065	114	
	-20	1880000053	102	
	-30	1880000047	96	



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)
4.2	50	836600027	-5	2090
	40	836599975	-57	
	30	836599974	-58	
	20	836600032	0	
	10	836599968	-64	
	0	836599964	-68	
	-10	836599978	-54	
	-20	836599980	-52	
	-30	836599968	-64	

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)
4.2	50	1879999984	-37	4700
	40	1879999982	-39	
	30	1879999981	-40	
	20	1880000021	0	
	10	1879999986	-35	
	0	1879999980	-41	
	-10	1879999985	-36	
	-20	1879999980	-41	
	-30	1879999978	-43	



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)
4.2	50	1880000001	-2	4700
	40	1879999998	-5	
	30	1880000000	-3	
	20	1880000003	0	
	10	1879999997	-6	
	0	1879999995	-8	
	-10	1880000001	-2	
	-20	1880000000	-3	
	-30	1879999998	-5	

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)
4.2	50	836399997	-8	2090
	40	836399999	-6	
	30	836399998	-7	
	20	836400005	0	
	10	836399991	-14	
	0	836399999	-6	
	-10	836400000	-5	
	-20	836399998	-7	
	-30	836399999	-6	



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)
4.2	50	1879999999	-4	4700
	40	1879999998	-5	
	30	1879999995	-8	
	20	1880000003	0	
	10	1879999997	-6	
	0	1879999989	-14	
	-10	1879999998	-5	
	-20	1879999997	-6	
	-30	1879999992	-11	

Reference Frequency: WCDMA / HSDPA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.2	50	836399999	4	2090
	40	836399997	2	
	30	836399999	4	
	20	836399995	0	
	10	836399998	3	
	0	836399994	-1	
	-10	836399999	4	
	-20	836399998	3	
	-30	836399996	1	



Reference Frequency: WCDMA / HSUPA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.2	50	1879999993	-3	4700
	40	1879999997	1	
	30	1879999998	2	
	20	1879999996	0	
	10	1879999995	-1	
	0	1879999998	2	
	-10	1879999999	3	
	-20	1879999993	-3	
	-30	1879999998	2	

Reference Frequency: WCDMA / HSUPA 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)
4.2	50	836399998	2	2090
	40	836399999	3	
	30	836399996	0	
	20	836399996	0	
	10	836399999	3	
	0	836400001	5	
	-10	836399997	1	
	-20	836399996	0	
	-30	836400000	4	

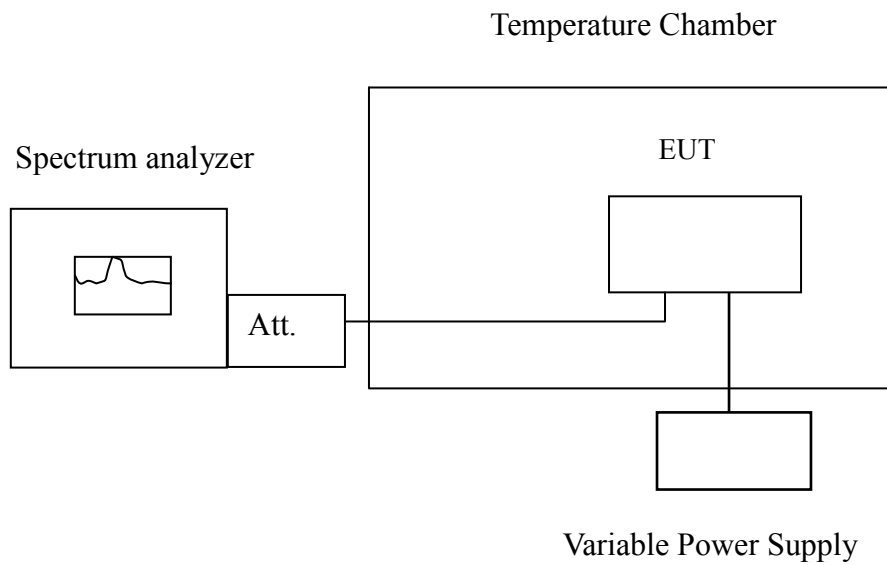


7.8 FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT

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.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

TEST RESULTS

No non-compliance noted.

Reference Frequency: GSM Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.2	20	836599924	-2	2090
3.8		836599926	0	
3.6		836599919	-7	
3.5 END		836599862	-64	

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)
4.2	20	1879999941	3	4700
3.8		1879999938	0	
3.6		1879999940	2	
3.5 END		1879999888	-50	



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)
4.2	20	836599947	8	2090
3.8		836599939	0	
3.6		836599942	3	
3.5 END		836599939	0	

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)
4.2	20	1879999952	1	4700
3.8		1879999951	0	
3.6		1879999939	-12	
3.5 END		1879999903	-48	



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)
4.2	20	836600033	1	2090
3.8		836600032	0	
3.6		836600029	-3	
3.5 END		836600076	44	

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)
4.2	20	1880000013	-8	4700
3.8		1880000021	0	
3.6		1880000026	5	
3.5 END		1880000084	63	



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)
4.2	20	1880000001	-2	4700
3.8		1880000003	0	
3.6		1880000004	1	
3.5 END		1880000034	31	

Reference Frequency: WCDMA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.2	20	836399999	-6	2090
3.8		836400005	0	
3.6		836400002	-3	
3.5 END		836400016	11	



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)
4.2	20	1880000001	-2	4700
3.8		1880000003	0	
3.6		1880000004	1	
3.5 END		1880000084	81	

Reference Frequency: WCDMA HSDPA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.2	20	836399999	4	2090
3.8		836399995	0	
3.6		836400002	7	
3.5 END		836400043	48	



Reference Frequency: WCDMA HSUPA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.2	20	1879999994	-2	4700
3.8		1879999996	0	
3.6		1880000001	5	
3.5 END		1879999949	-47	

Reference Frequency: WCDMA HSUPA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.2	20	836400002	6	2090
3.8		836399996	0	
3.6		836399998	2	
3.5 END		836400065	69	



7.9 POWERLINE 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 (dB μ V)	
	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:** November 25, 2010
Temperature: 26°C **Tested by:** Ali Shi
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
0.2400	35.97	30.87	0.13	36.10	31.00	62.09	52.10	-25.99	-21.10	L1
0.3600	37.86	35.56	0.14	38.00	35.70	58.73	48.73	-20.73	-13.03	L1
0.4800	30.16	27.06	0.14	30.30	27.20	56.34	46.34	-26.04	-19.14	L1
8.8800	23.05	13.95	0.25	23.30	14.20	60.00	50.00	-36.70	-35.80	L1
10.6800	31.50	23.90	0.30	31.80	24.20	60.00	50.00	-28.20	-25.80	L1
13.1100	27.87	16.77	0.33	28.20	17.10	60.00	50.00	-31.80	-32.90	L1
0.1524	40.07	18.87	0.13	40.20	19.00	65.87	55.87	-25.67	-36.87	L2
0.2400	35.28	31.18	0.12	35.40	31.30	62.10	52.10	-26.70	-20.80	L2
0.3000	13.18	1.98	0.12	13.30	2.10	60.24	50.24	-46.94	-48.14	L2
0.3600	36.77	34.27	0.13	36.90	34.40	58.73	48.73	-21.83	-14.33	L2
9.6900	34.85	27.15	0.25	35.10	27.40	60.00	50.00	-24.90	-22.60	L2
13.2900	28.39	17.69	0.31	28.70	18.00	60.00	50.00	-31.30	-32.00	L2

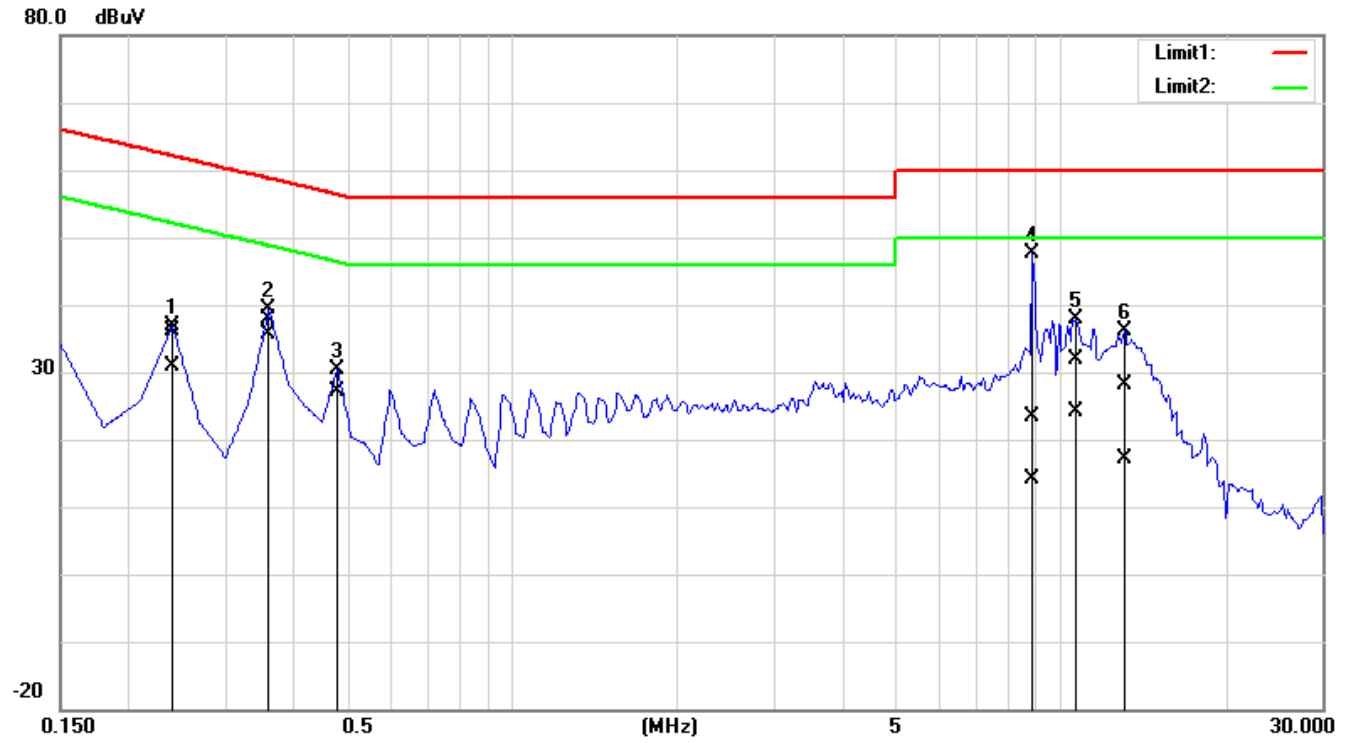
Remark:

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.*

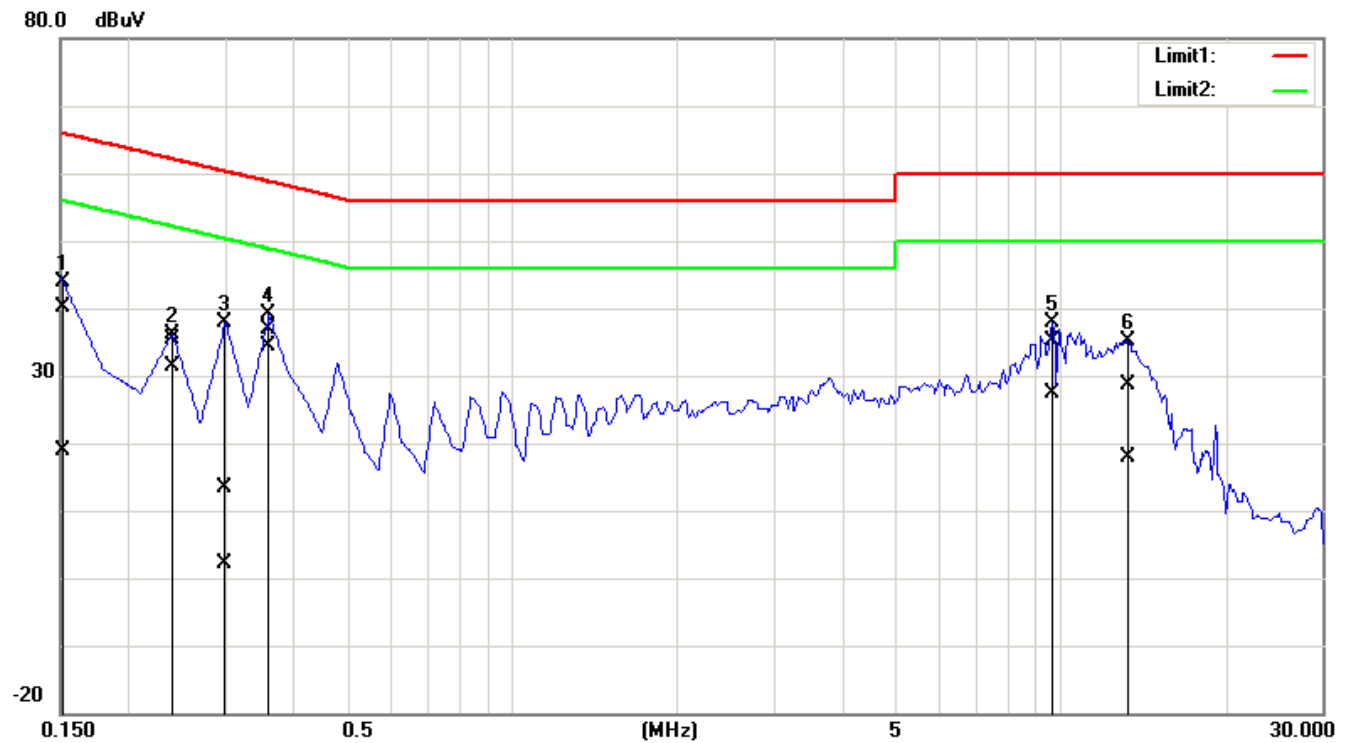


Test Plots

Conducted emissions (Line 1)



Conducted emissions (Line 2)





APPENDIX I RADIO FREQUENCY EXPOSURE

LIMIT

EUT Specification

EUT	Smart Handheld
Frequency band (Operating)	<input type="checkbox"/> WLAN: 2.412GHz ~ 2.462GHz <input type="checkbox"/> WLAN: 5.18GHz ~ 5.32GHz / 5.50GHz ~ 5.70GHz <input type="checkbox"/> WLAN: 5.745GHz ~ 5.825GHz <input checked="" type="checkbox"/> Others: 824 ~ 849 MHz
Device category	<input checked="" type="checkbox"/> Portable (<20cm separation) <input type="checkbox"/> Mobile (>20cm separation) <input type="checkbox"/> Others
Exposure classification	<input type="checkbox"/> Occupational/Controlled exposure (S = 5mW/cm ²) <input checked="" type="checkbox"/> General Population/Uncontrolled exposure (S=1mW/cm ²)
Antenna diversity	<input checked="" type="checkbox"/> Single antenna <input type="checkbox"/> Multiple antennas <input type="checkbox"/> Tx diversity <input type="checkbox"/> Rx diversity <input type="checkbox"/> Tx/Rx diversity
Max. output power	ERP: 33.11 dBm (2046.44 mW)
Antenna gain (Max)	1.17 dBi(Numeric gain: 1.30)
Evaluation applied	<input type="checkbox"/> MPE Evaluation <input checked="" type="checkbox"/> SAR Evaluation* <input type="checkbox"/> N/A

Remark:

1. The maximum output power is 33.11 dBm (2046.44mW) at 848.80MHz (with 1.30 numeric antenna gain.)
2. DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.
3. For mobile or fixed location transmitters, no SAR consideration applied. The maximum power density is 1.0 mW/cm² even if the calculation indicates that the power density would be larger.

TEST RESULTS

No non-compliance noted.

Not applicable, Please refers to the SAR test report.



EUT Specification

EUT	Smart Handheld
Frequency band (Operating)	<input type="checkbox"/> WLAN: 2.412GHz ~ 2.462GHz <input type="checkbox"/> WLAN: 5.725GHz ~ 5.850GHz <input type="checkbox"/> WLAN: 5.15GHz ~ 5.35GHz <input checked="" type="checkbox"/> Others: 1850 ~ 1910 MHz
Device category	<input checked="" type="checkbox"/> Portable (<20cm separation) <input type="checkbox"/> Mobile (>20cm separation) <input type="checkbox"/> Others
Exposure classification	<input type="checkbox"/> Occupational/Controlled exposure (S = 5mW/cm2) <input checked="" type="checkbox"/> General Population/Uncontrolled exposure (S=1mW/cm2)
Antenna diversity	<input checked="" type="checkbox"/> Single antenna <input type="checkbox"/> Multiple antennas <input type="checkbox"/> Tx diversity <input type="checkbox"/> Rx diversity <input type="checkbox"/> Tx/Rx diversity
Max. output power	ERP: 29.92 dBm (981.74 mW)
Antenna gain (Max)	1.04 dBi (Numeric gain: 1.276)
Evaluation applied	<input type="checkbox"/> MPE Evaluation <input checked="" type="checkbox"/> SAR Evaluation* <input type="checkbox"/> N/A

Remark:

- The maximum output power is 29.92 dBm (981.74mW) at 1880.00MHz (with 1.276 numeric antenna gain.)*
- DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.*
- For mobile or fixed location transmitters, no SAR consideration applied. The maximum power density is 1.0 mW/cm² even if the calculation indicates that the power density would be larger.*

TEST RESULTS

No non-compliance noted.

Not applicable, Please refers to the SAR test report.