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

TEST REPORT

For

Mobile phone

Model: CAP8

Trade Name: COMPALCOMM

Issued to

COMPAL COMMUNICATIONS, INC.
No. 385, Yangguang Street, Neihu, Taipei. (11491) Tawain

Issued by

Compliance Certification Services Inc.
No. 81-1, Lane 210, Pa-De 2nd Rd., Luchu Hsiang,
Taoyuan Shien, (338), Taiwan, R.O.C.
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Testing Laboratory
0363

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1. TEST RESULT CERTIFICATION

Applicant:	COMPAL COMMUNICATIONS, INC. No. 385, Yangguang Street, Neihu, Taipei. (11491) Tawain
Equipment Under Test:	Mobile phone
Trade Name:	COMPALCOMM
Model Number:	CAP8
Date of Test:	September 16 ~ 1, 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	Mobile phone
Trade Name	COMPALCOMM
Model Number	CAP8
Model Discrepancy	N/A
Power Supply	1. Power from Power Adapter Model Number: ASUC1-050055 P/N : ASUC309004 I/P: 100-240V, 50-60Hz, 0.3A O/P: 5V, 550mA 2. Power from Battery 3.7V, 1000mAh, 3.7wh 3. Power by host device via USB Cable
Frequency Range	TX: 824.2 ~ 848.8 MHz / 1850.2 ~ 1909.8 MHz RX: 869 ~ 894 MHz / 1930 ~ 1989.8 MHz GSM / GPRS / EDGE: 850: 824.2 ~ 848.8 MHz GSM / GPRS / EDGE: 1900: 1850.2 ~ 1909.8 MHz WCDMA / HSDPA Band II: 1852.4 ~ 1907.6 MHz WCDMA / HSDPA Band V: 826.4 ~ 846.6MHz
Transmit Power (ERP & EIRP Power)	GSM 850: 27.80dBm GSM 1900: 28.93 dBm GPRS 850: 25.40 dBm GPRS 1900: 28.41 dBm EDGE 850: 23.95 dBm EDGE 1900: 27.77 dBm WCDMA Band II: 24.26 dBm HSDPA Band II: 23.28 dBm WCDMA Band V: 17.80 dBm HSDPA Band V: 21.32 dBm
Modulation Technique	GSM: GMSK GPRS: GMSK EDGE: 8PSK WCDMA: Quadrature Phase Shift Keying (QPSK) with Root-raised cosine pulse shaping filters (roll off = 0.22)
Type of Emission	GSM 850: 246KGXW--- GSM 1900: 247KGXW--- GPRS 850: 247KGXW--- GPRS 1900: 246KGXW--- EDGE 850: 250KG7W--- EDGE 1900: 244KG7W--- WCDMA Band II: 4M17F9W--- WCDMA Band V: 4M18F9W--- WCDMA HSDPA Band II: 4M17F9W--- WCDMA HSDPA Band V: 4M18F9W---

Antenna Gain	GSM / GPRS / EDGE 850: -1.2 dBi GSM / GPRS / EDGE 1900: 2.1 dBi WCDMA band II: 2.1 dBi WCDMA band V: -1.2 dBi
Antenna Type	Embedded shorting monopole 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:* ***QQX-CAP8*** *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

3.1EUT CONFIGURATION

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

3.2EUT EXERCISE

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

3.3GENERAL TEST PROCEDURES

Conducted Emissions

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

Radiated Emissions

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

3.4DESCRIPTION OF TEST MODES

The EUT (model: CAP8) had been tested under operating condition.

EUT staying in continuous transmitting mode was programmed.

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

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

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

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

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

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

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

The worst emission was found:

GPRS1900 / WCDMA Band II / WCDMA Band V in lie-down (X axis) mode,

GSM850 / GSM1900 / GPRS 850 / EDGE 850 / EDGE 1900 / HSDPA Band II / HSDPA Band V in stand-up (Z axis) mode.

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

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

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

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 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.”

4. INSTRUMENT CALIBRATION

4.1 MEASURING INSTRUMENT CALIBRATION

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

4.2MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

Remark: *Each piece of equipment is scheduled for calibration once a year 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	Agilent	E4416A	GB41291611	06/27/2011
Power Sensor	Agilent	E9327A	US40441097	06/27/2011
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-Circults	ZFL-1000LN	SF350700823	01/13/2011
Pre-Amplifier	MITEQ	AFS44-00102650-42-10P-44	1415367	11/20/2010
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	ESHS30	828144/003	12/06/2010
LISN	EMCO	3825/2	9106-1809	05/02/2011
LISN	SCHAFFNER	NNB 41	03/10013	12/03/2010
Test S/W	CCS-3A1-CE			

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.*

5.3TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
USA	A2LA	CFR 47, FCC Part15/18, CISPR 22, EN 55022, ICES-003, AS/NZS CISPR 22, VCCI V-3, EN 55011, CISPR 11, IEC/EN 61000-4-2/3/4/5/6/8/11, EN 61000-6-1/2/3/4, EN 55024, CISPR 24, AS/NZS CISPR 24, AS/NZS 61000.6.2, EN 55014-1/-2, ETSI EN 300 386 v1.3.2/v1.3.3, IEC/EN 61000-3-2, AS/NZS 61000.3.2, IEC/EN 61000-3-3, AS/NZS 61000.3.3	ACCREDITED No. 0824-01
USA	FCC MRA	3/10 meter Open Area Test Sites to perform FCC Part 15/18 measurements	TW1026
Japan	VCCI	3/10 meter Open Area Test Sites and conducted test sites to perform radiated/conducted measurements	VCCI R-2882/2541/2798/725/1868 C-402/747/912 T-321/325
Taiwan	TAF	EN 55014-1, CISPR 14, CNS 13781-1, EN 55013, CISPR 13, CNS 13439, EN 55011, CISPR 11, CNS 13803, PLMN09, IS2045-0, LP0002 FCC Part 27/90, Part 15B/C/D/E, RSS-192/193/210/310 ETSI EN 300 328/ 300 220-1/ 300 220-2/ 301 893/ 301 489-01/ 301 489-03/ 301 489-07 / 301 489-17/ 300 440-1/ 300 440-2 AS/NZS 4268, AS/NZS 4771 CISPR 22, EN 55022, CNS 13438, AS/NZS CISPR 22, VCCI, IEC/EN 61000-4-2/3/4/5/6/8/11, CNS 14676-2/3/4/5/6/8, CNS 14934-2/3, CNS 13783-1, CNS 13439, CNS 13803	ilac-MRA TAF Testing Laboratory 0363
Taiwan	BSMI	CNS 13438, CNS 13783-1, CNS 13439, CNS 14115	SL2-IS-E-0014 / IN-E-0014 /A1-E-0014 /R1-E-0014 /R2-E-0014 /L1-E-0014
Canada	Industry Canada	RSS212, Issue 1	Canada IC 2324C-3 IC 2324C-5

** 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.	Sim Card	N/A	N/A	N/A	N/A	N/A	N/A
2	Bluetooth earphone	corega	10T	CG-BTHS01	BTHS01	N/A	N/A
3	Universal Radio Communication Tester (Remote)	R&S	CMU200	101245	N/A	N/A	Unshielded, 1.8m

Remark:

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

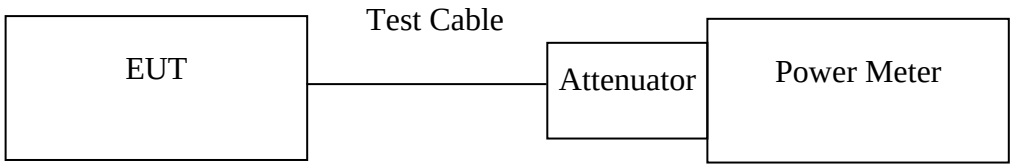
7. FCC PART 22 & 24 REQUIREMENTS

7.1PEAK POWER

LIMIT

According to FCC §2.1046.

Test Configuration



Remark: *Measurement setup for testing on Antenna connector*

TEST PROCEDURE

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

TEST RESULTS

No non-compliance noted.

Test Data

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power W
GSM 850 (Class B)	128	824.20	32.24	1.675
	190	836.40	32.34	1.714
	251	848.80	32.50	***1.778**
GPRS 850 (Class 12)	128	824.20	28.30	0.676
	190	836.40	28.44	***0.698**
	251	848.80	28.33	0.681
EDGE 850 (Class 12)	128	824.20	22.31	0.170
	190	836.40	22.41	***0.174**
	251	848.80	22.34	0.171

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power W
GSM 1900 (Class B)	512	1850.20	29.16	***0.824**
	661	1880.00	28.98	0.791
	810	1909.80	29.12	0.817
GPRS 1900 (Class 12)	512	1850.20	25.22	***0.333**
	661	1880.00	25.09	0.323
	810	1909.80	25.14	0.327
EDGE 1900 (Class 12)	512	1850.20	21.18	***0.131**
	661	1880.00	20.99	0.126
	810	1909.80	21.03	0.127

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

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power W
WCDMA (BAND II)	9262	1852.40	26.43	***0.440**
	9400	1880.00	26.40	0.437
	9538	1907.60	26.24	0.421
WCDMA (BAND V)	4132	826.40	26.46	0.443
	4182	836.40	26.67	***0.465**
	4233	846.60	26.31	0.428

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power W
WCDMA / HSDPA (BAND II)	9262	1852.40	26.43	0.440
	9400	1880.00	26.50	***0.447**
	9538	1907.60	26.33	0.430
WCDMA / HSDPA (BAND V)	4132	826.40	26.56	0.453
	4182	836.40	27.07	***0.509**
	4233	846.60	26.36	0.433

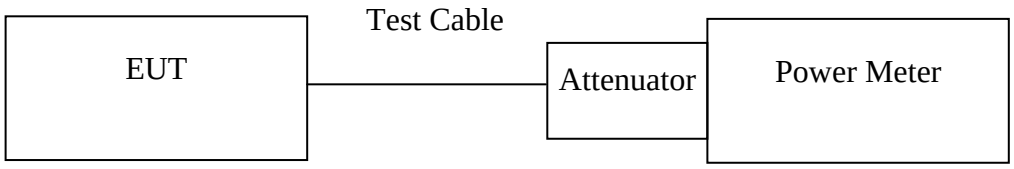
Remark: *The value of factor includes both the loss of cable and external attenuator*

7.2AVERAGE POWER

LIMIT

For reporting purposes only.

Test Configuration



Remark: *Measurement setup for testing on Antenna connector*

TEST PROCEDURE

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

TEST RESULTS

No non-compliance noted.

TEST RESULTS

No non-compliance noted.

Test Data

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
GSM 850 (Class B)	128	824.20	23.03	0.201
	190	836.40	23.12	0.205
	251	848.80	23.38	***0.218**
GPRS 850 (Class 12)	128	824.20	24.97	0.314
	190	836.40	25.14	***0.327**
	251	848.80	25.05	0.320
EDGE 850 (Class 12)	128	824.20	20.15	0.104
	190	836.40	20.26	***0.106**
	251	848.80	20.16	0.104

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
GSM 1900 (Class B)	512	1850.20	19.93	***0.098**
	661	1880.00	19.75	0.094
	810	1909.80	19.91	0.098
GPRS 1900 (Class 12)	512	1850.20	21.92	***0.156**
	661	1880.00	21.79	0.151
	810	1909.80	21.88	0.154
EDGE 1900 (Class 12)	512	1850.20	18.84	***0.077**
	661	1880.00	18.74	0.075
	810	1909.80	18.78	0.076

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

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
WCDMA (BAND II)	9262	1852.40	23.02	0.200
	9400	1880.00	23.06	***0.202**
	9538	1907.60	23.04	0.201
WCDMA (BAND V)	4132	826.40	22.95	0.197
	4182	836.40	23.63	***0.231**
	4233	846.60	22.85	0.193

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power W
WCDMA / HSDPA (BAND II)	9262	1852.40	22.98	0.199
	9400	1880.00	23.05	0.202
	9538	1907.60	23.06	***0.202**
WCDMA / HSDPA (BAND V)	4132	826.40	23.02	0.200
	4182	836.40	23.60	***0.229**
	4233	846.60	22.85	0.193

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

7.3ERP & EIRP MEASUREMENT

LIMIT

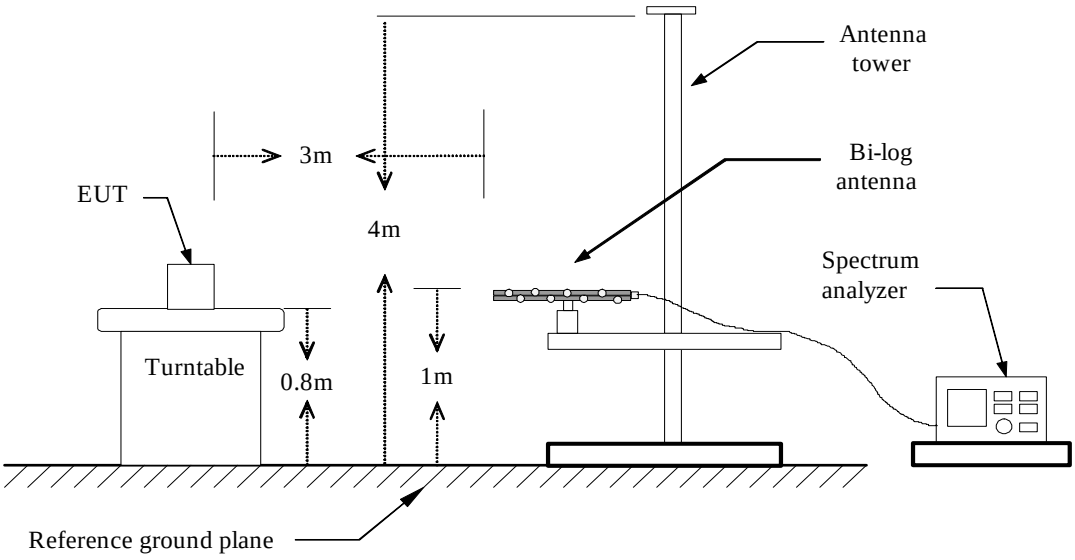
According to FCC §2.1046

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

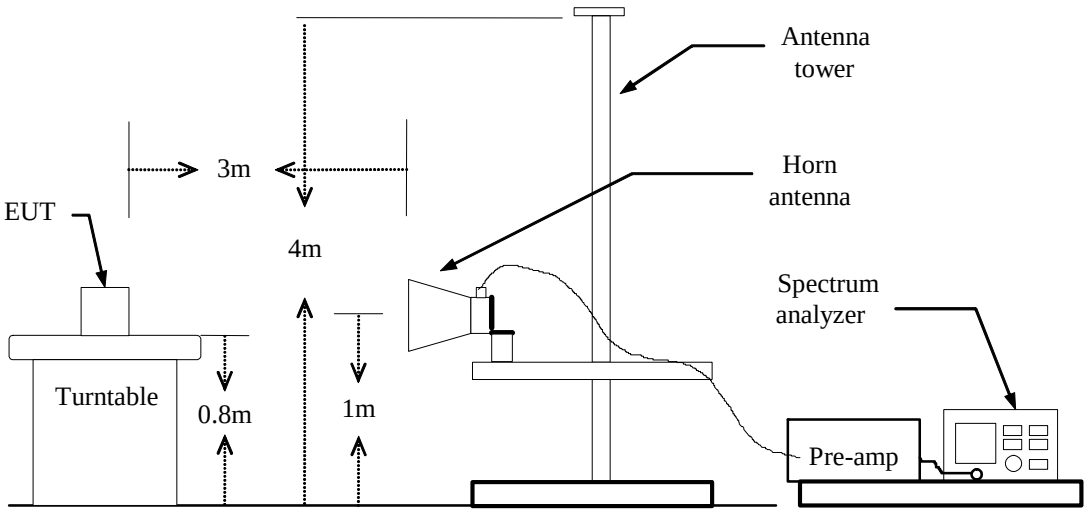
FCC 24.232(b): The equivalent Isotropic Radiated Power (EIRP) must not exceed 2 Watts.

Test Configuration

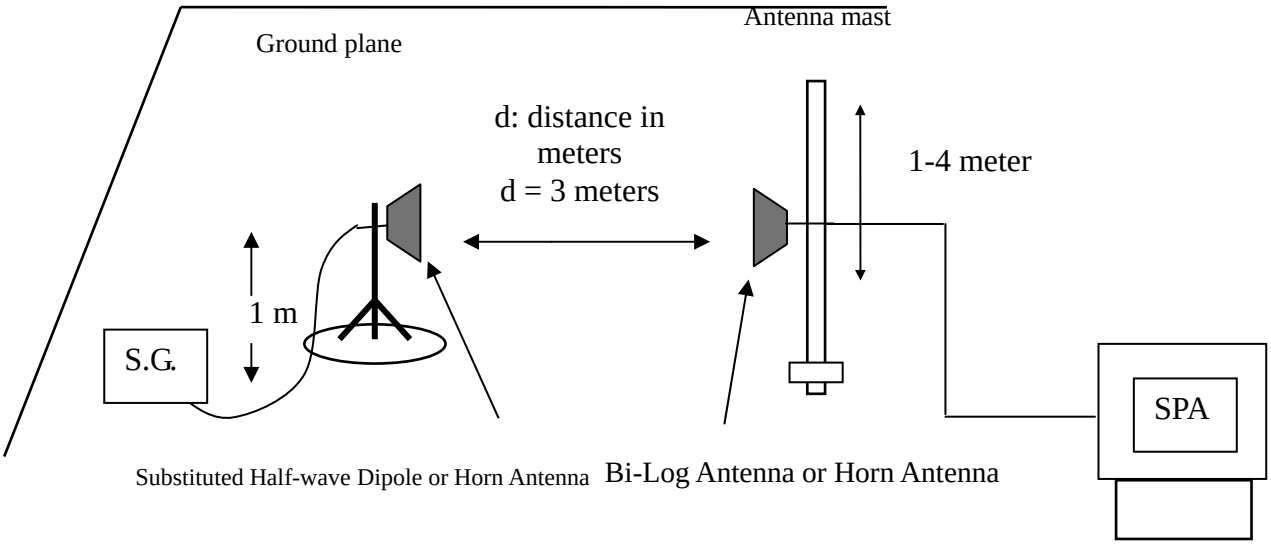
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



TEST PROCEDURE

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

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

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

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

TEST RESULTS

No non-compliance noted.

GSM 850 TEST DATA (CLASS B)

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	128	824.20	V	-16.04	34.62	18.58	38.50	-19.92
		824.20	H	-11.84	34.65	22.81	38.50	-15.69
	190	836.40	V	-15.49	34.53	19.04	38.50	-19.46
		836.40	H	-10.85	34.63	23.79	38.50	-14.71
	251	848.80	V	-14.00	34.64	20.64	38.50	-17.86
		848.80	H	-9.65	34.75	25.10	38.50	-13.40
Y	128	824.20	V	-16.39	34.62	18.22	38.50	-20.28
		824.20	H	-12.19	34.65	22.45	38.50	-16.05
	190	836.40	V	-16.42	34.53	18.11	38.50	-20.39
		836.40	H	-11.48	34.63	23.16	38.50	-15.34
	251	848.80	V	-15.56	34.64	19.08	38.50	-19.42
		848.80	H	-10.12	34.75	24.62	38.50	-13.88
Z	128	824.20	V	-8.42	34.62	26.20	38.50	-12.30
		824.20	H	-18.37	34.65	16.28	38.50	-22.22
	190	836.40	V	-8.22	34.52	26.31	38.50	-12.19
		836.40	H	-18.09	34.63	16.54	38.50	-21.96
	251	848.80	V	-6.83	34.64	***27.80**	38.50	-10.70
		848.80	H	-17.66	34.75	17.09	38.50	-21.41

GPRS 850 TEST DATA (CLASS 12)

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	128	824.20	V	-14.99	34.62	19.63	38.50	-18.87
		824.20	H	-12.12	34.65	22.53	38.50	-15.97
	190	836.40	V	-14.21	34.53	20.32	38.50	-18.18
		836.40	H	-11.97	34.63	22.66	38.50	-15.84
	251	848.80	V	-14.85	34.65	19.79	38.50	-18.71
		848.80	H	-9.52	34.75	25.23	38.50	-13.27
Y	128	824.20	V	-15.34	34.62	19.28	38.50	-19.22
		824.20	H	-11.70	34.65	22.95	38.50	-15.55
	190	836.40	V	-14.06	34.52	20.47	38.50	-18.03
		836.40	H	-11.12	34.63	23.52	38.50	-14.98
	251	848.80	V	-14.42	34.64	20.21	38.50	-18.29
		848.80	H	-9.56	34.75	25.19	38.50	-13.31
Z	128	824.20	V	-10.49	34.62	24.13	38.50	-14.37
		824.20	H	-14.35	34.65	20.30	38.50	-18.20
	190	836.40	V	-10.63	34.52	23.90	38.50	-14.60
		836.40	H	-12.41	34.63	22.23	38.50	-16.27
	251	848.80	V	-9.24	34.64	***25.40**	38.50	-13.10
		848.80	H	-11.12	34.75	23.63	38.50	-14.87

GSM 1900 TEST DATA (CLASS B)

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	512	1850.20	V	-21.32	41.17	19.85	33.00	-13.15
		1850.20	H	-13.31	40.79	27.48	33.00	-5.52
	661	1880.00	V	-22.24	41.23	18.99	33.00	-14.01
		1880.00	H	-13.23	41.14	27.91	33.00	-5.09
	810	1909.80	V	-23.73	41.30	17.57	33.00	-15.43
		1909.80	H	-13.85	41.38	27.53	33.00	-5.47
Y	512	1850.20	V	-15.91	41.17	25.26	33.00	-7.74
		1850.20	H	-14.30	40.79	26.49	33.00	-6.51
	661	1880.00	V	-17.38	41.23	23.85	33.00	-9.15
		1880.00	H	-16.22	41.15	24.93	33.00	-8.07
	810	1909.80	V	-17.76	41.30	23.54	33.00	-9.46
		1909.80	H	-16.99	41.38	24.39	33.00	-8.61
Z	512	1850.20	V	-12.24	41.17	***28.93**	33.00	-4.07
		1850.20	H	-16.10	40.79	24.69	33.00	-8.31
	661	1880.00	V	-13.82	41.23	27.41	33.00	-5.59
		1880.00	H	-16.58	41.14	24.57	33.00	-8.43
	810	1909.80	V	-15.77	41.30	25.53	33.00	-7.47
		1909.80	H	-17.55	41.38	23.83	33.00	-9.17

GPRS 1900 TEST DATA (CLASS 12)

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	512	1850.20	V	-20.35	41.17	20.82	33.00	-12.18
		1850.20	H	-12.38	40.79	***28.41**	33.00	-4.59
	661	1880.00	V	-23.14	41.23	18.09	33.00	-14.91
		1880.00	H	-12.85	41.14	28.30	33.00	-4.70
	810	1909.80	V	-23.72	41.30	17.58	33.00	-15.42
		1909.80	H	-13.98	41.38	27.40	33.00	-5.60
Y	512	1850.20	V	-15.45	41.17	25.72	33.00	-7.28
		1850.20	H	-14.82	40.79	25.98	33.00	-7.02
	661	1880.00	V	-13.90	41.23	27.33	33.00	-5.67
		1880.00	H	-14.42	41.14	26.72	33.00	-6.28
	810	1909.80	V	-17.45	41.30	23.85	33.00	-9.15
		1909.80	H	-17.12	41.38	24.26	33.00	-8.74
Z	512	1850.20	V	-23.72	41.30	17.58	33.00	-15.42
		1850.20	H	-13.98	41.38	27.40	33.00	-5.60
	661	1880.00	V	-17.45	41.30	23.85	33.00	-9.15
		1880.00	H	-17.12	41.38	24.26	33.00	-8.74
	810	1909.80	V	-17.17	41.30	24.14	33.00	-8.86
		1909.80	H	-18.17	41.38	23.20	33.00	-9.80

EDGE 850 Test Data (Class 12)

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	128	824.27	V	-19.40	34.62	15.21	38.50	-23.29
		824.27	H	-16.11	34.65	18.54	38.50	-19.96
	190	836.64	V	-18.23	34.52	16.29	38.50	-22.21
		836.64	H	-16.19	34.63	18.44	38.50	-20.06
	251	848.79	V	-19.52	34.63	15.11	38.50	-23.39
		848.79	H	-14.54	34.75	20.21	38.50	-18.29
Y	128	824.27	V	-19.67	34.62	14.94	38.50	-23.56
		824.13	H	-15.37	34.65	19.27	38.50	-19.23
	190	836.73	V	-19.77	34.53	14.76	38.50	-23.74
		836.40	H	-14.46	34.63	20.17	38.50	-18.33
	251	849.02	V	-18.43	34.63	16.20	38.50	-22.30
		848.88	H	-13.15	34.75	21.60	38.50	-16.90
Z	128	824.22	V	-11.87	34.62	22.75	38.50	-15.75
		824.13	H	-22.86	34.65	11.79	38.50	-26.71
	190	836.64	V	-11.81	34.53	22.72	38.50	-15.78
		836.55	H	-22.92	34.63	11.71	38.50	-26.79
	251	849.02	V	-10.69	34.63	***23.95**	38.50	-14.55
		848.70	H	-20.51	34.75	14.24	38.50	-24.26

EDGE 1900 Test Data (Class 12)

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	512	1850.16	V	-22.84	41.17	18.33	33.00	-14.67
		1849.98	H	-13.12	40.80	27.67	33.00	-5.33
	661	1879.86	V	-23.07	41.23	18.16	33.00	-14.84
		1879.86	H	-13.78	41.15	27.37	33.00	-5.63
	810	1910.01	V	-26.29	41.30	15.02	33.00	-17.98
		1910.01	H	-16.09	41.38	25.29	33.00	-7.71
Y	512	1850.34	V	-14.97	41.17	26.20	33.00	-6.80
		1850.34	H	-14.74	40.79	26.05	33.00	-6.95
	661	1880.04	V	-17.08	41.23	24.15	33.00	-8.85
		1880.31	H	-15.85	41.14	25.29	33.00	-7.71
	810	1910.01	V	-16.28	41.30	25.02	33.00	-7.98
		1910.01	H	-17.82	41.38	23.56	33.00	-9.44
Z	512	1849.98	V	-13.40	41.17	***27.77**	33.00	-5.23
		1850.16	H	-15.87	40.80	24.93	33.00	-8.07
	661	1880.04	V	-15.12	41.23	26.11	33.00	-6.89
		1880.04	H	-17.89	41.14	23.25	33.00	-9.75
	810	1880.04	V	-15.92	41.30	25.38	33.00	-7.62
		1909.56	H	-18.01	41.38	23.37	33.00	-9.63

WCDMA Test Data (BAND II)

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	9262	1853.52	V	-18.57	40.82	22.25	33.00	-10.75
		1853.36	H	-21.22	40.83	19.61	33.00	-13.39
	9400	1880.88	V	-19.91	41.23	21.32	33.00	-11.68
		1881.12	H	-19.12	41.14	22.02	33.00	-10.98
	9538	1908.32	V	-19.83	41.29	21.47	33.00	-11.53
		1908.40	H	-17.12	41.38	***24.26**	33.00	-8.74
Y	9262	1853.36	V	-21.10	41.18	20.08	33.00	-12.92
		1853.52	H	-20.29	40.83	20.54	33.00	-12.46
	9400	1881.20	V	-21.54	41.23	19.69	33.00	-13.31
		1880.80	H	-21.54	41.14	19.60	33.00	-13.40
	9538	1906.56	V	-20.11	41.29	21.18	33.00	-11.82
		1906.72	H	-21.70	41.38	19.68	33.00	-13.32
Z	9262	1853.12	V	-20.62	41.18	20.56	33.00	-12.44
		1853.28	H	-21.35	40.83	19.48	33.00	-13.52
	9400	1881.04	V	-20.42	41.23	20.81	33.00	-12.19
		1880.80	H	-19.32	41.13	21.81	33.00	-11.19
	9538	1908.80	V	-19.63	41.29	21.66	33.00	-11.34
		1908.56	H	-20.06	41.38	21.31	33.00	-11.69

WCDMA Test Data (BAND V)

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	4132	826.91	V	-21.04	34.59	13.55	38.50	-24.95
		826.91	H	-17.94	34.64	16.70	38.50	-21.80
	4182	837.49	V	-21.71	34.53	12.82	38.50	-25.68
		837.49	H	-20.09	34.63	14.55	38.50	-23.95
	4233	845.59	V	-21.32	34.63	13.31	38.50	-25.19
		846.05	H	-16.94	34.73	***17.80**	38.50	-20.70
Y	4132	825.49	V	-21.68	34.59	12.91	38.50	-25.59
		826.87	H	-16.98	34.64	17.66	38.50	-20.84
	4182	837.22	V	-21.59	34.53	12.94	38.50	-25.56
		837.40	H	-22.55	34.63	12.08	38.50	-26.42
	4233	845.77	V	-21.98	34.62	12.64	38.50	-25.86
		846.05	H	-17.73	34.74	17.01	38.50	-21.49
Z	4132	825.49	V	-18.27	34.60	16.33	38.50	-22.17
		825.49	H	-18.89	34.64	15.76	38.50	-22.74
	4182	837.63	V	-20.81	34.53	13.72	38.50	-24.78
		837.63	H	-22.64	34.63	12.00	38.50	-26.50
	4233	846.60	V	-17.81	34.62	16.81	38.50	-21.69
		846.00	H	-19.91	34.73	14.83	38.50	-23.67

WCDMA / HSDPA BAND II Test Data

EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	9262	1851.20	V	-19.55	41.18	21.63	33.00	-11.37
		1851.36	H	-17.79	40.83	23.05	33.00	-9.95
	9400	1878.96	V	-31.34	41.23	9.89	33.00	-23.11
		1878.96	H	-18.00	41.13	23.13	33.00	-9.87
	9538	1906.64	V	-31.65	41.29	9.64	33.00	-23.36
		1906.56	H	-18.33	41.38	23.05	33.00	-9.95
Y	9262	1851.44	V	-19.34	41.18	21.83	33.00	-11.17
		1851.36	H	-19.52	40.82	21.30	33.00	-11.70
	9400	1881.20	V	-20.91	41.23	20.32	33.00	-12.68
		1881.36	H	-19.49	41.14	21.65	33.00	-11.35
	9538	1908.88	V	-20.61	41.29	20.68	33.00	-12.32
		1909.20	H	-20.48	41.38	20.89	33.00	-12.11
Z	9262	1851.20	V	-17.90	41.18	***23.28**	33.00	-9.72
		1851.44	H	-20.43	40.83	20.40	33.00	-12.60
	9400	1878.88	V	-18.43	41.23	22.80	33.00	-10.20
		1878.88	H	-20.54	41.13	20.59	33.00	-12.41
	9538	1906.32	V	-19.45	41.29	21.84	33.00	-11.16
		1906.48	H	-20.31	41.38	21.07	33.00	-11.93

WCDMA / HSDPA BAND V Test Data

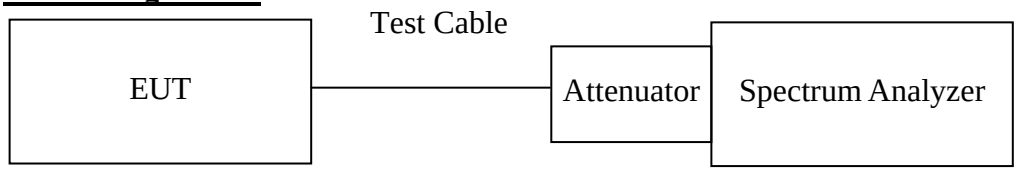
EUT Pol.	Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
X	4132	827.33	V	-23.94	34.60	10.65	38.50	-27.85
		827.42	H	-14.27	34.64	20.38	38.50	-18.12
	4182	837.50	V	-25.49	34.52	9.03	38.50	-29.47
		837.50	H	-15.38	34.63	19.25	38.50	-19.25
	4233	847.89	V	-23.91	34.58	10.67	38.50	-27.83
		845.82	H	-14.03	34.74	20.71	38.50	-17.79
Y	4132	826.43	V	-24.53	34.60	10.07	38.50	-28.43
		827.73	H	-14.45	34.64	20.19	38.50	-18.31
	4182	837.81	V	-25.91	34.52	8.61	38.50	-29.89
		837.59	H	-14.99	34.63	19.64	38.50	-18.86
	4233	845.55	V	-25.07	34.62	9.55	38.50	-28.95
		845.69	H	-13.41	34.73	***21.32**	38.50	-17.18
Z	4132	827.82	V	-13.70	34.60	20.90	38.50	-17.60
		827.51	H	-22.95	34.64	11.69	38.50	-26.81
	4182	838.04	V	-14.54	34.52	19.98	38.50	-18.52
		837.72	H	-23.21	34.63	11.42	38.50	-27.08
	4233	845.51	V	-13.42	34.62	21.20	38.50	-17.30
		845.55	H	-25.43	34.74	9.31	38.50	-29.19

7.4OCCUPIED BANDWIDTH MEASUREMENT

LIMIT

According to §FCC 2.1049.

Test Configuration



Remark: *Measurement setup for testing on Antenna connector*

TEST PROCEDURE

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

TEST RESULTS

No non-compliance noted

Test Data

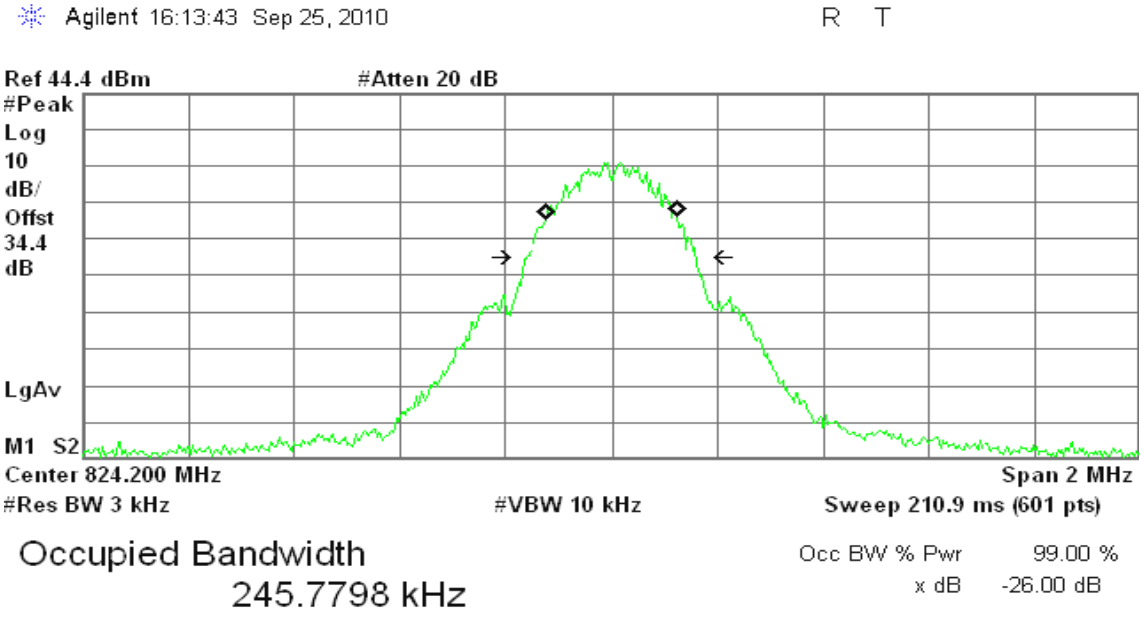
Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
GSM 850 (Class B)	128	824.20	245.7798
	190	836.60	246.3071
	251	848.80	244.3352
GPRS 850 (Class 12)	128	824.20	244.7757
	190	836.60	246.3476
	251	848.80	247.8032
EDGE 850 (Class 12)	128	824.20	240.1142
	190	836.60	242.8485
	251	848.80	250.6480

Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
GSM 1900 (Class B)	512	1850.20	247.3772
	661	1880.00	247.4262
	810	1909.80	246.0077
GPRS 1900 (Class 12)	512	1850.20	244.5412
	661	1880.00	246.0754
	810	1909.80	246.4761
EDGE 1900 (Class 12)	512	1850.20	244.4650
	661	1880.00	240.3032
	810	1909.80	239.8425

Test Mode	CH	Frequency (MHz)	99% Bandwidth (MHz)
WCDMA (Band II)	9262	1852.40	4.1742
	9400	1880.00	4.1520
	9538	1907.60	4.1739
WCDMA (Band V)	4132	826.40	4.1706
	4182	836.40	4.1824
	4233	846.60	4.1852
WCDMA / HSDPA (BAND II)	9262	1852.40	4.1553
	9400	1880.00	4.1755
	9538	1907.60	4.1773
WCDMA / HSDPA (BAND V)	4132	826.40	4.1597
	4182	836.40	4.1893
	4233	846.60	4.1731

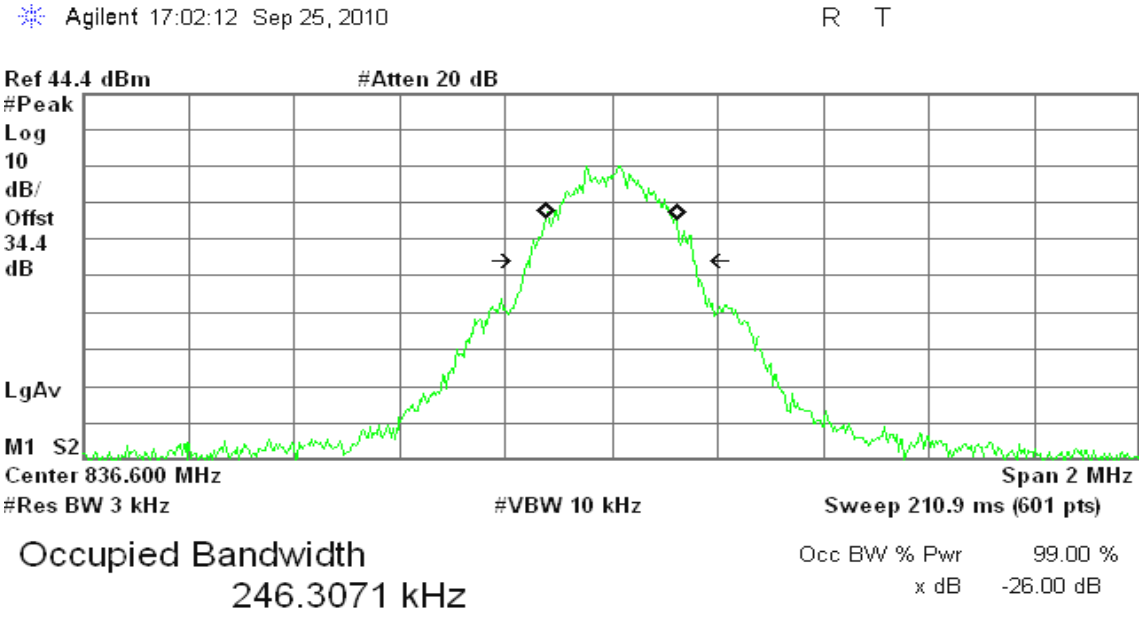
Test Plot

GSM 850 (CH Low)



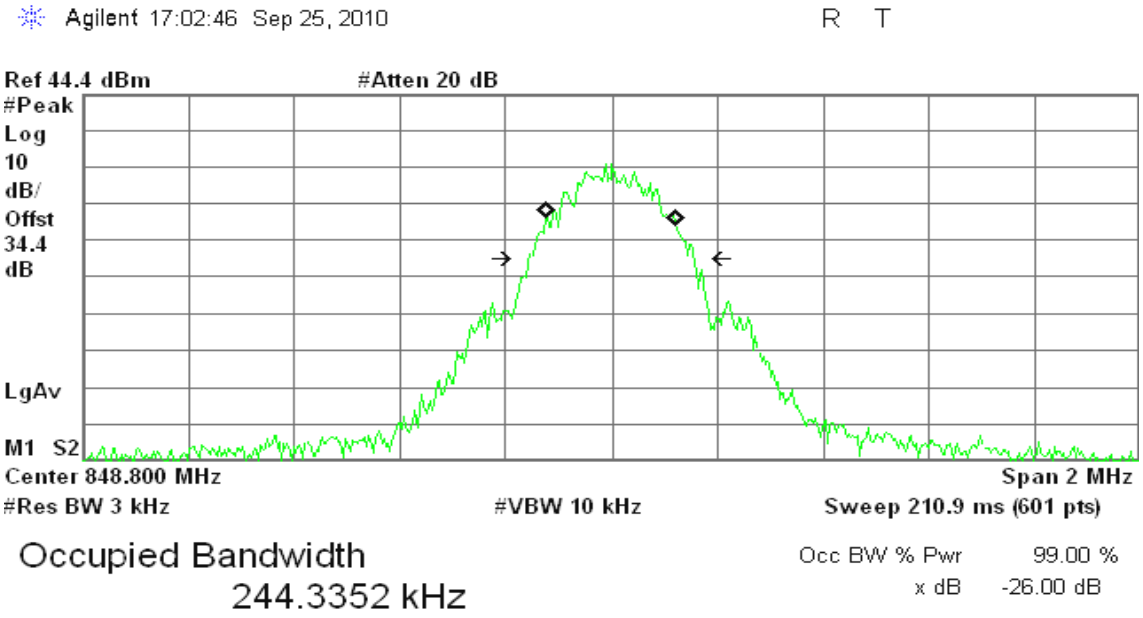
Transmit Freq Error	-20.618 Hz
x dB Bandwidth	316.734 kHz

GSM 850 (CH Mid)



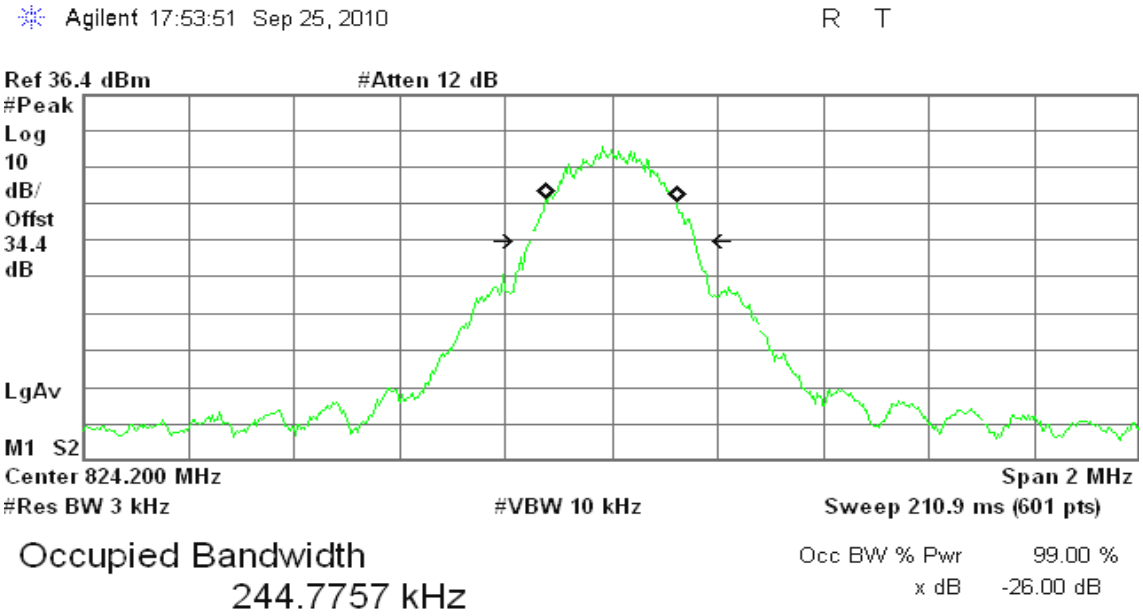
Transmit Freq Error	-258.837 Hz
x dB Bandwidth	309.982 kHz

GSM 850 (CH High)



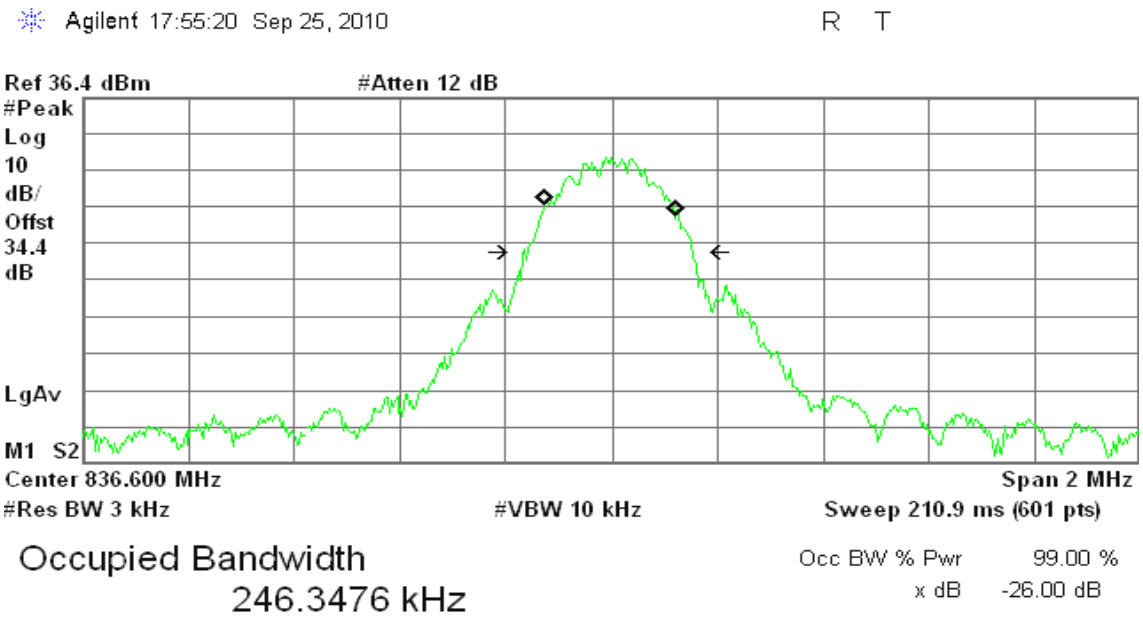
Transmit Freq Error	-1.464 kHz
x dB Bandwidth	311.272 kHz

GPRS 850 (CH Low)



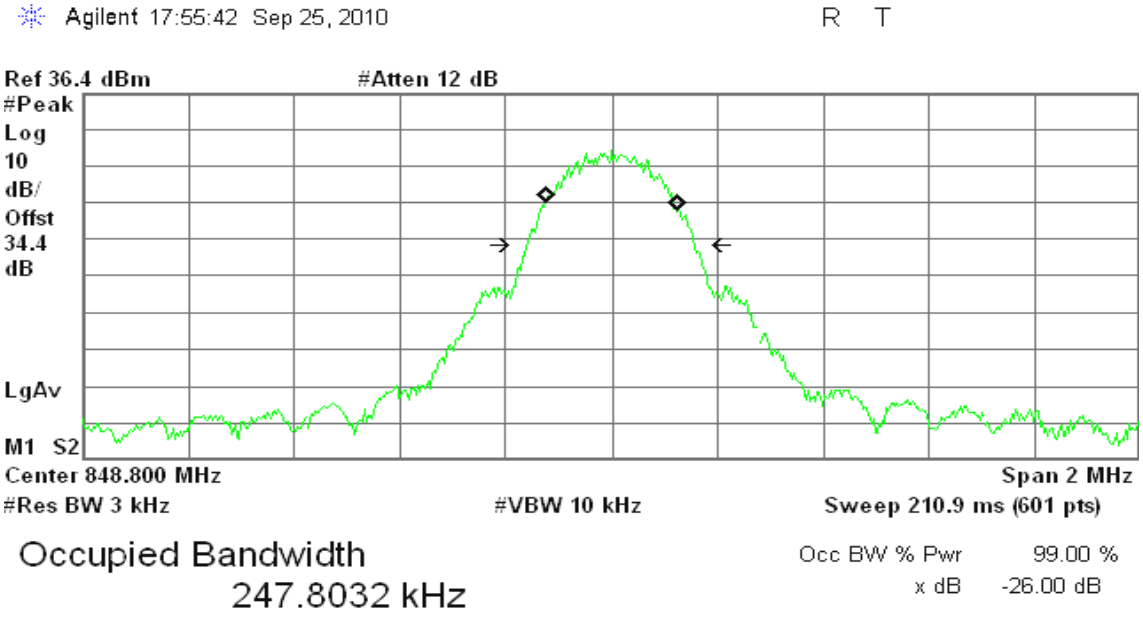
Transmit Freq Error	358.036 Hz
x dB Bandwidth	311.412 kHz

GPRS 850 (CH Mid)



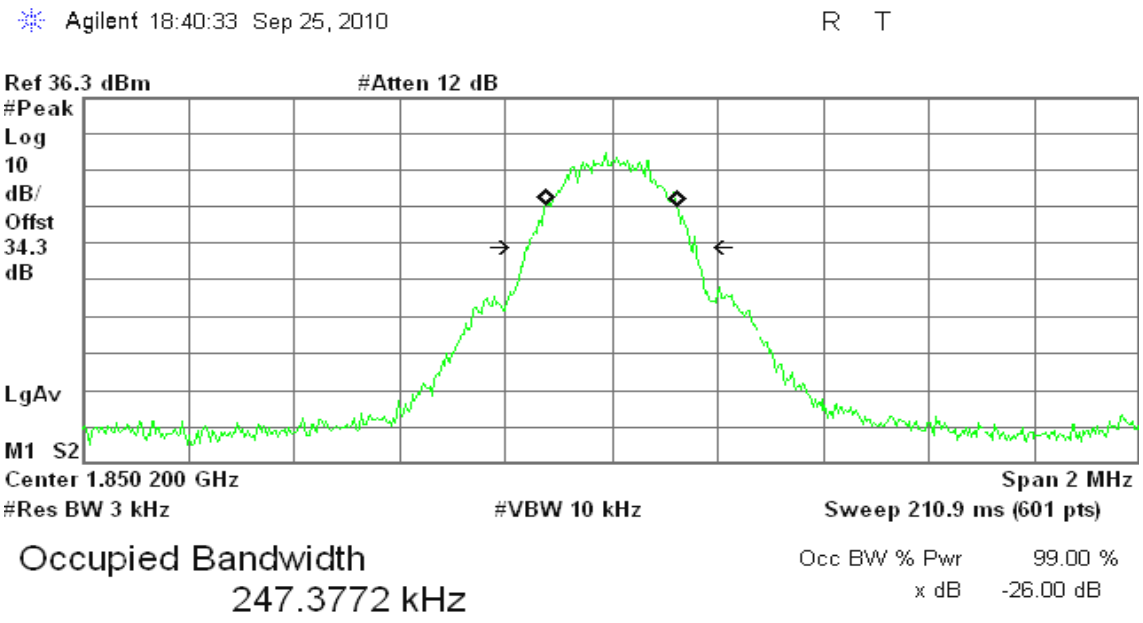
Transmit Freq Error	-2.117 kHz
x dB Bandwidth	317.556 kHz

GPRS 850(CH High)



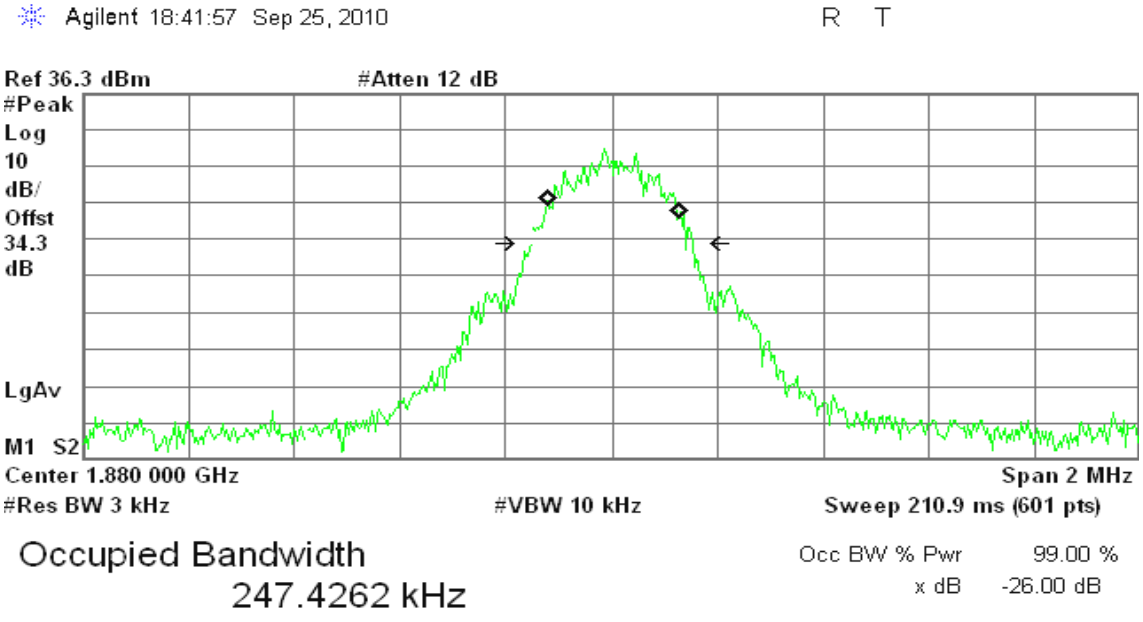
Transmit Freq Error	-763.619 Hz
x dB Bandwidth	315.450 kHz

GSM 1900 (CH Low)



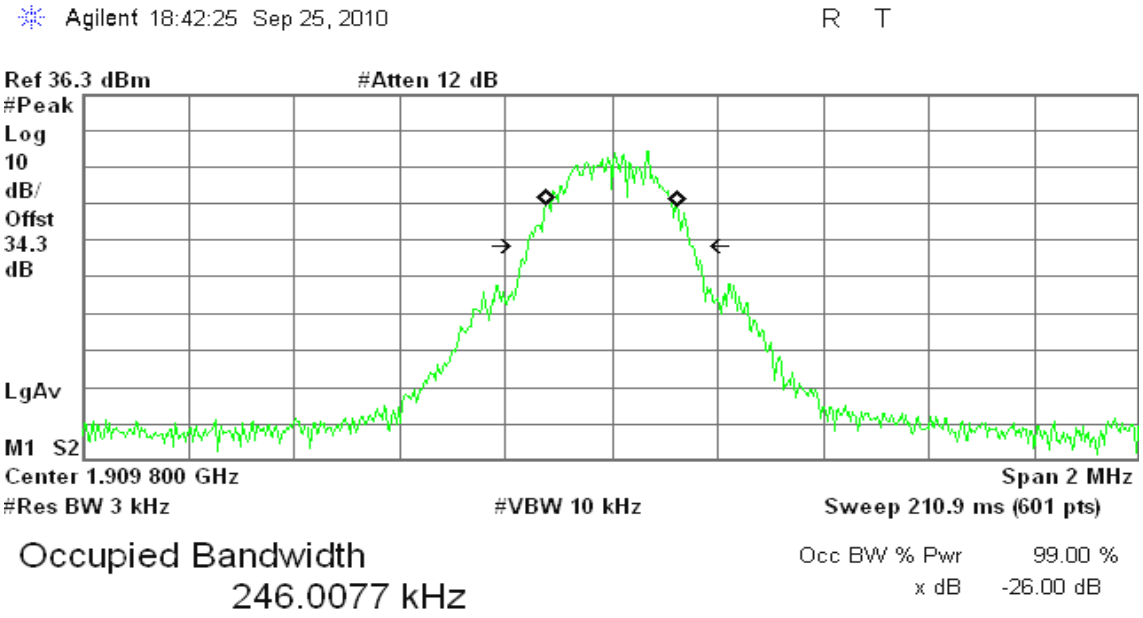
Transmit Freq Error	-38.093 Hz
x dB Bandwidth	319.517 kHz

GSM 1900 (CH Mid)



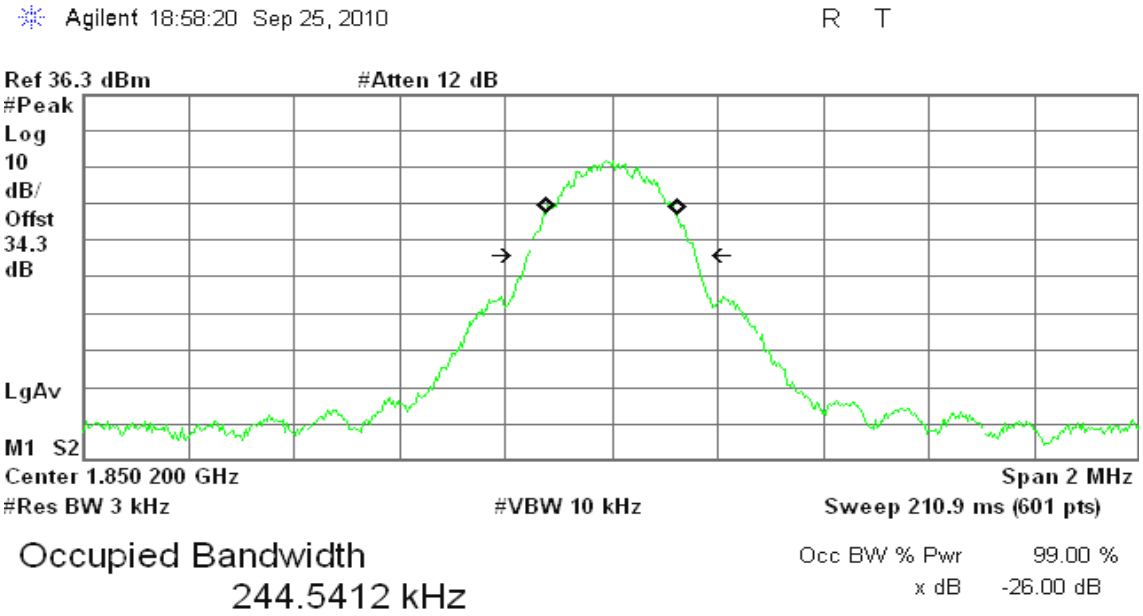
Transmit Freq Error	2.339 kHz
x dB Bandwidth	303.916 kHz

GSM 1900 (CH High)



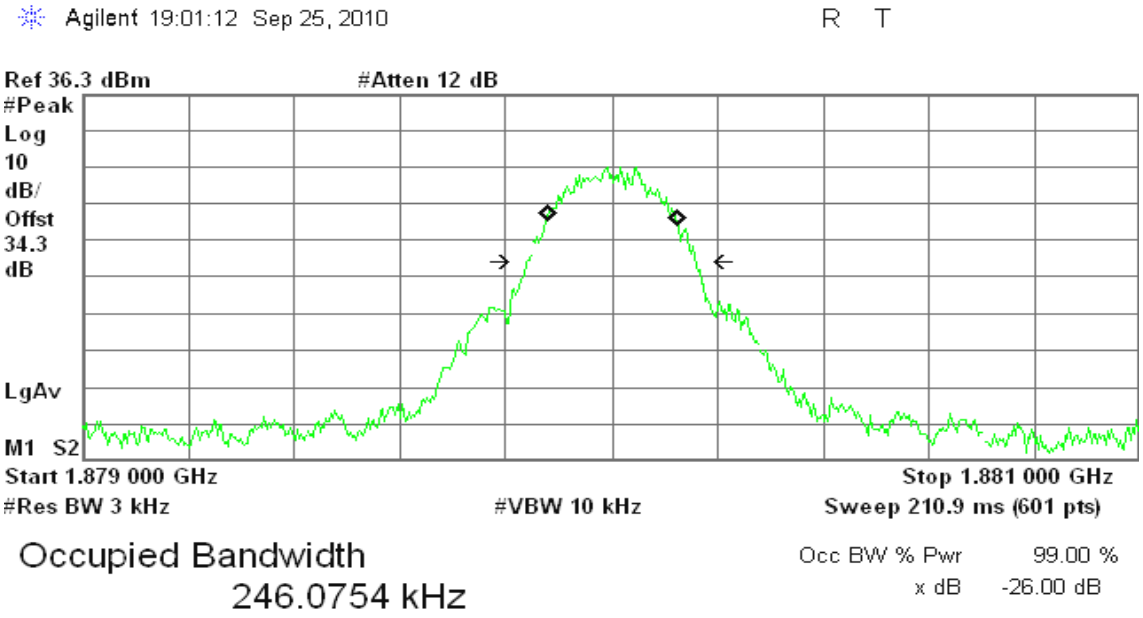
Transmit Freq Error	-57.591 Hz
x dB Bandwidth	311.195 kHz

GPRS 1900 (CH Low)



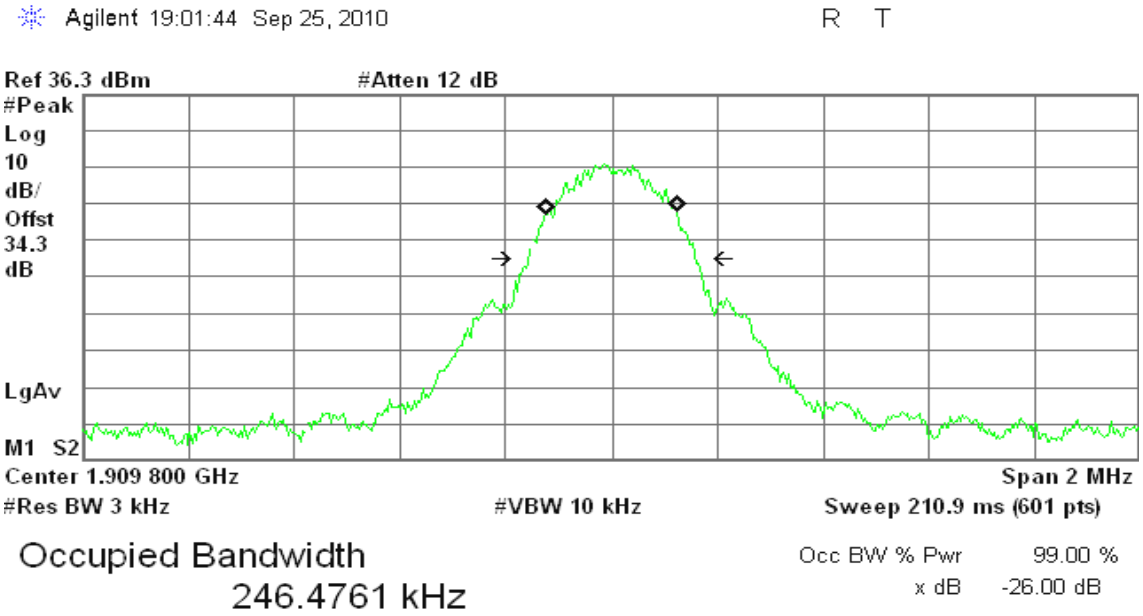
Transmit Freq Error	-587.846 Hz
x dB Bandwidth	314.141 kHz

GPRS 1900 (CH Mid)



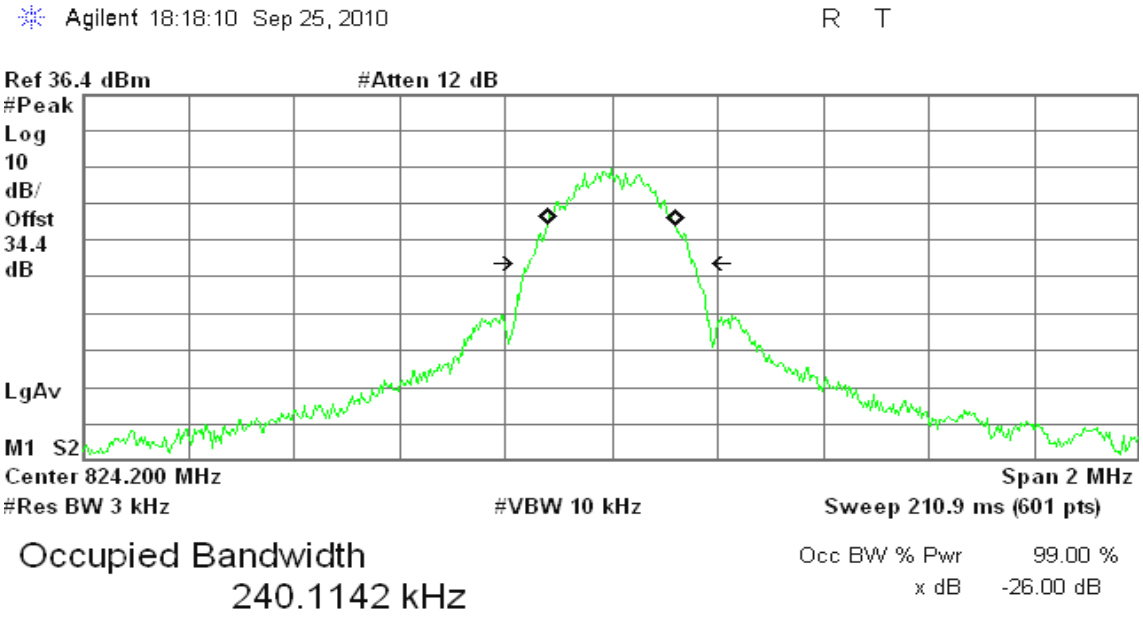
Transmit Freq Error	1.474 kHz
x dB Bandwidth	318.470 kHz

GPRS 1900 (CH High)



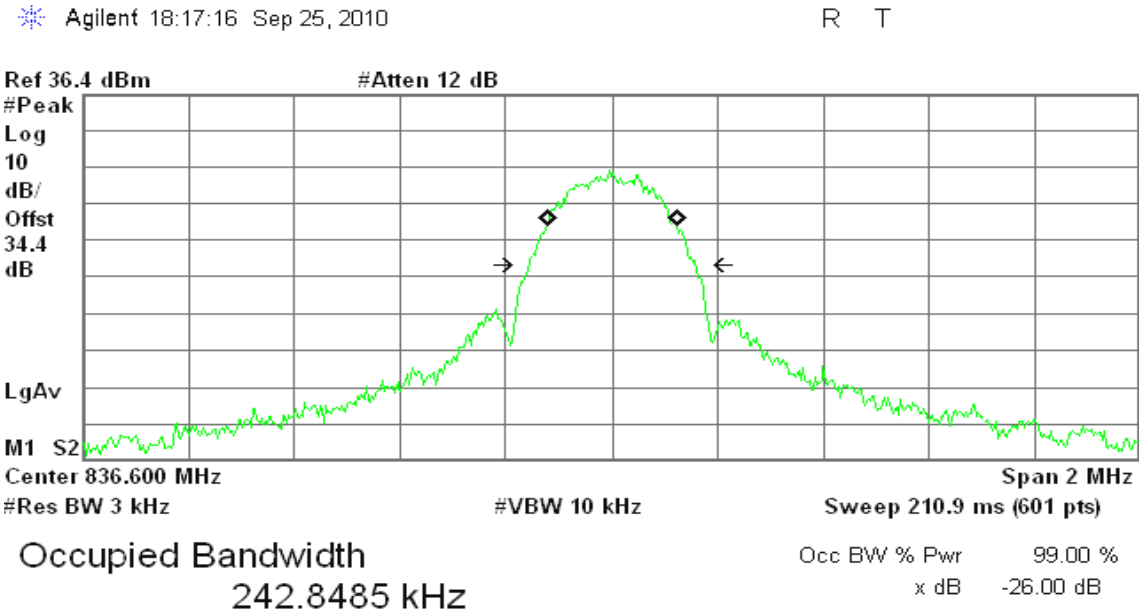
Transmit Freq Error	37.258 Hz
x dB Bandwidth	314.704 kHz

EDGE 850 (CH Low)



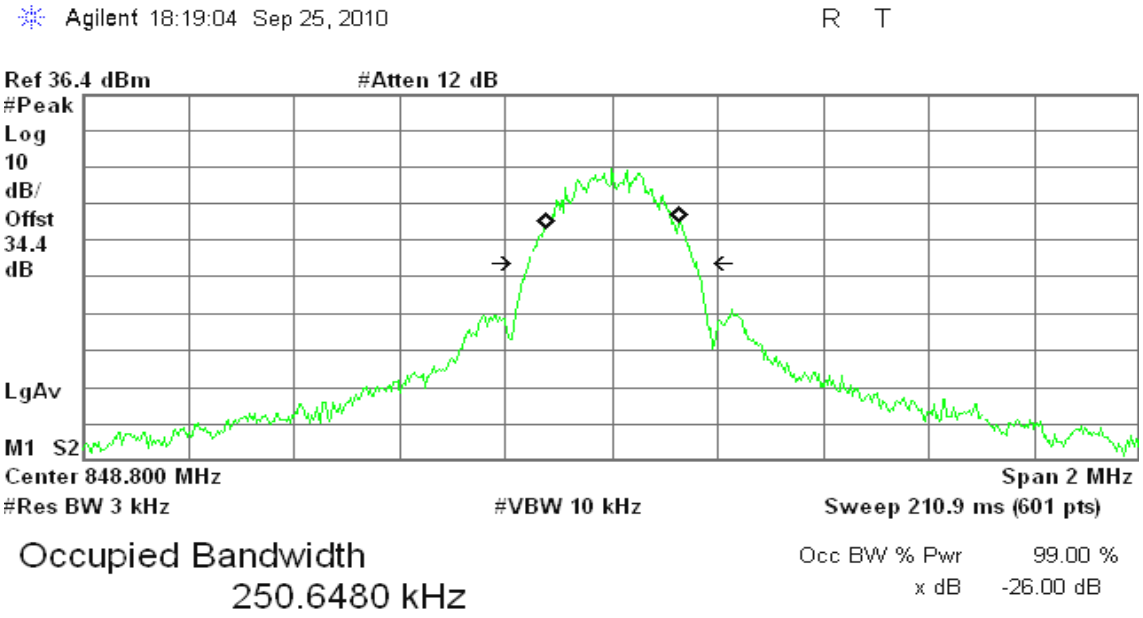
Transmit Freq Error	1.015 kHz
x dB Bandwidth	311.596 kHz

EDGE 850 (CH Mid)



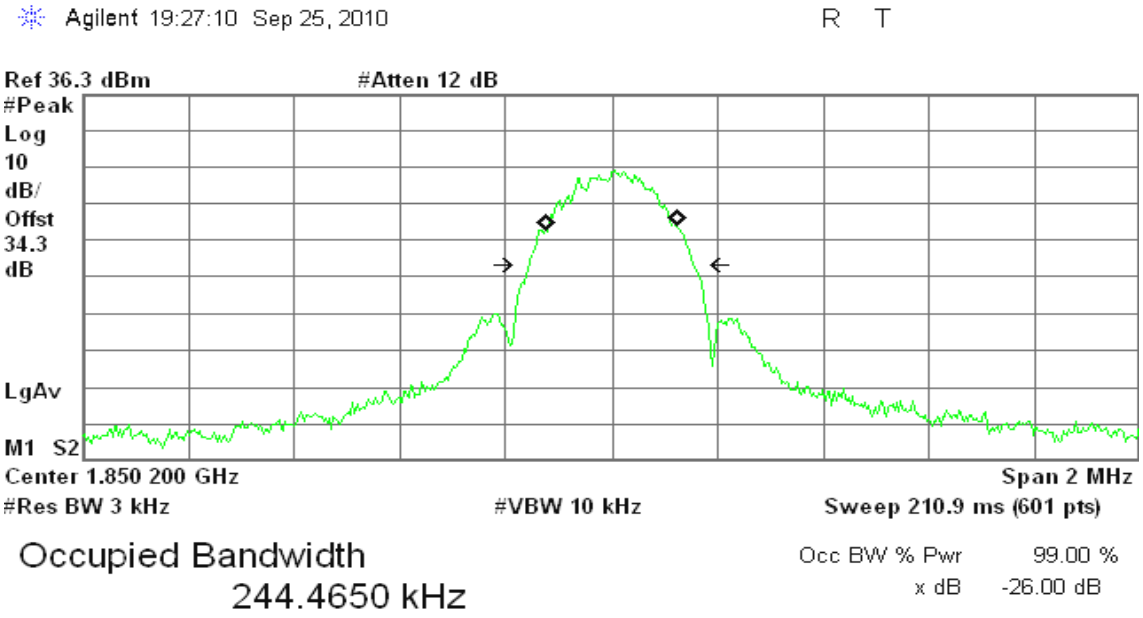
Transmit Freq Error	1.155 kHz
x dB Bandwidth	313.307 kHz

EDGE 850 (CH High)



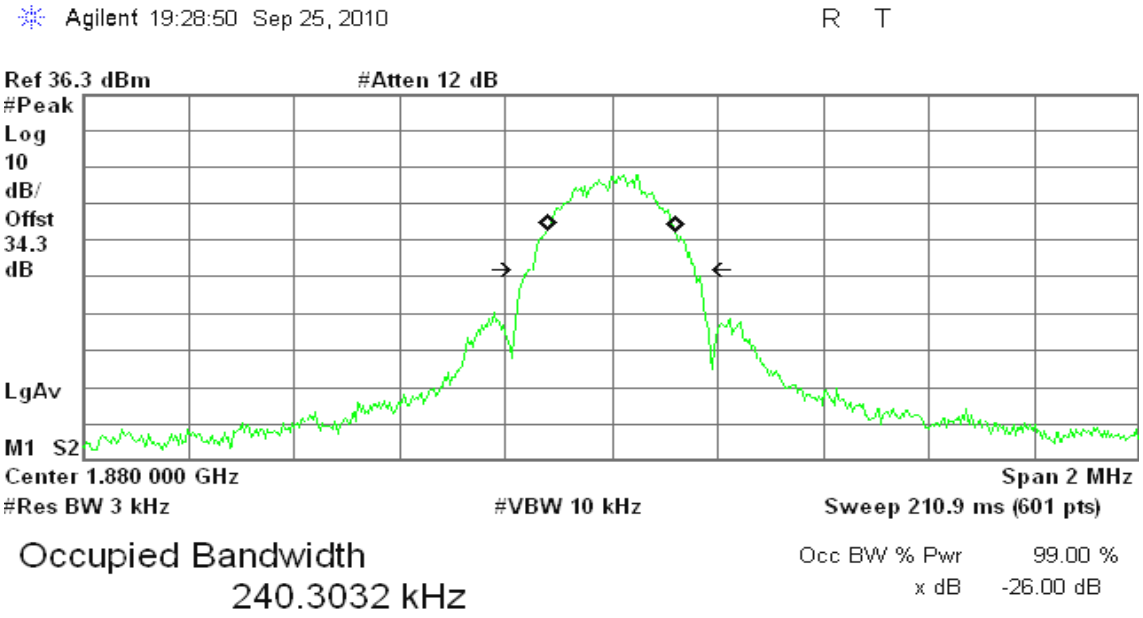
Transmit Freq Error	2.967 kHz
x dB Bandwidth	316.762 kHz

EDGE 1900 (CH Low)



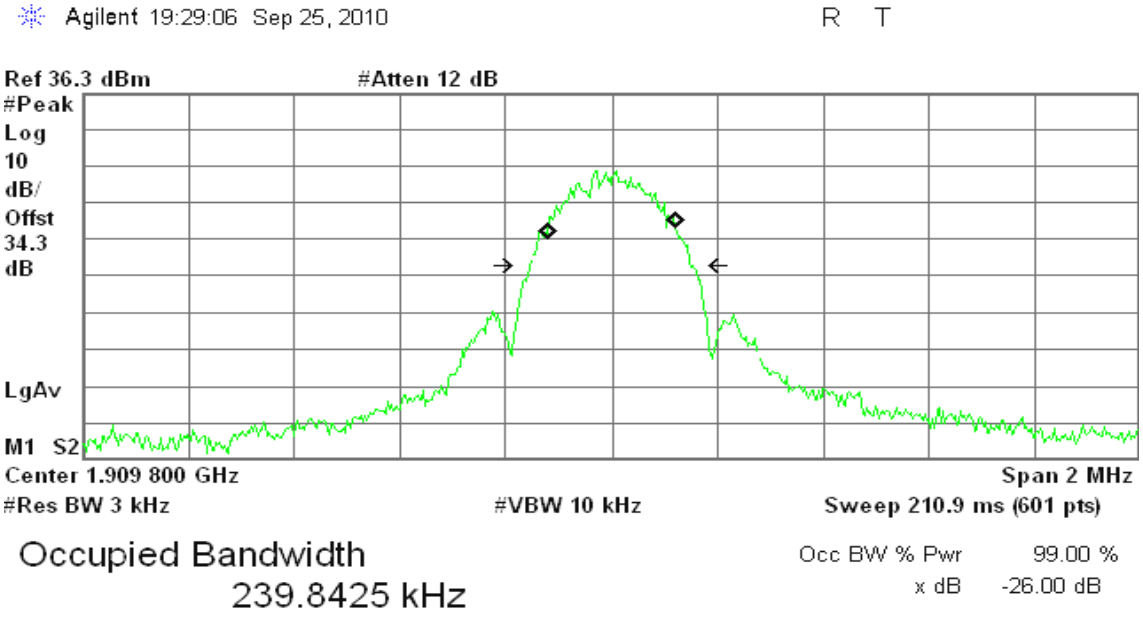
Transmit Freq Error	177.477 Hz
x dB Bandwidth	308.995 kHz

EDGE 1900 (CH Mid)



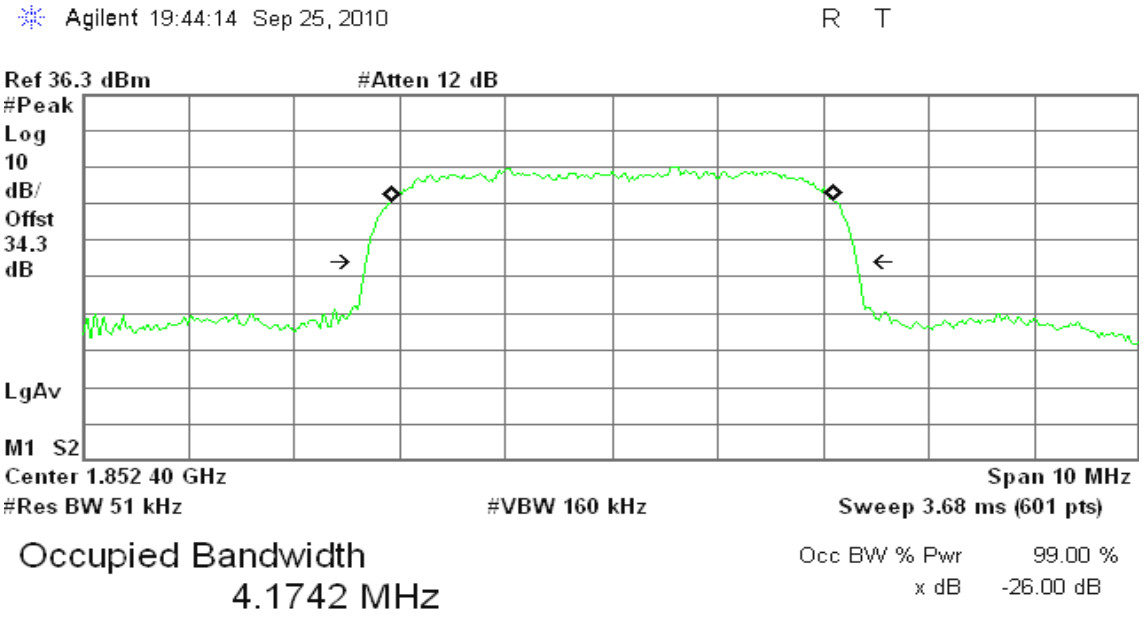
Transmit Freq Error	100.153 Hz
x dB Bandwidth	314.213 kHz

EDGE 1900 (CH High)



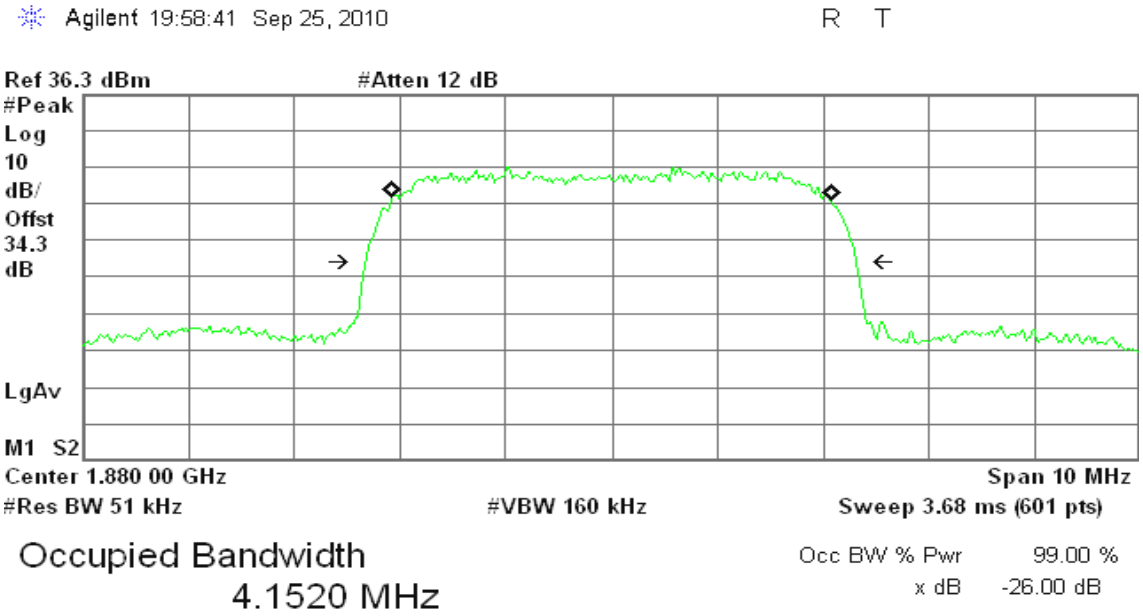
Transmit Freq Error	125.241 Hz
x dB Bandwidth	300.452 kHz

WCDMA Band II (CH Low)



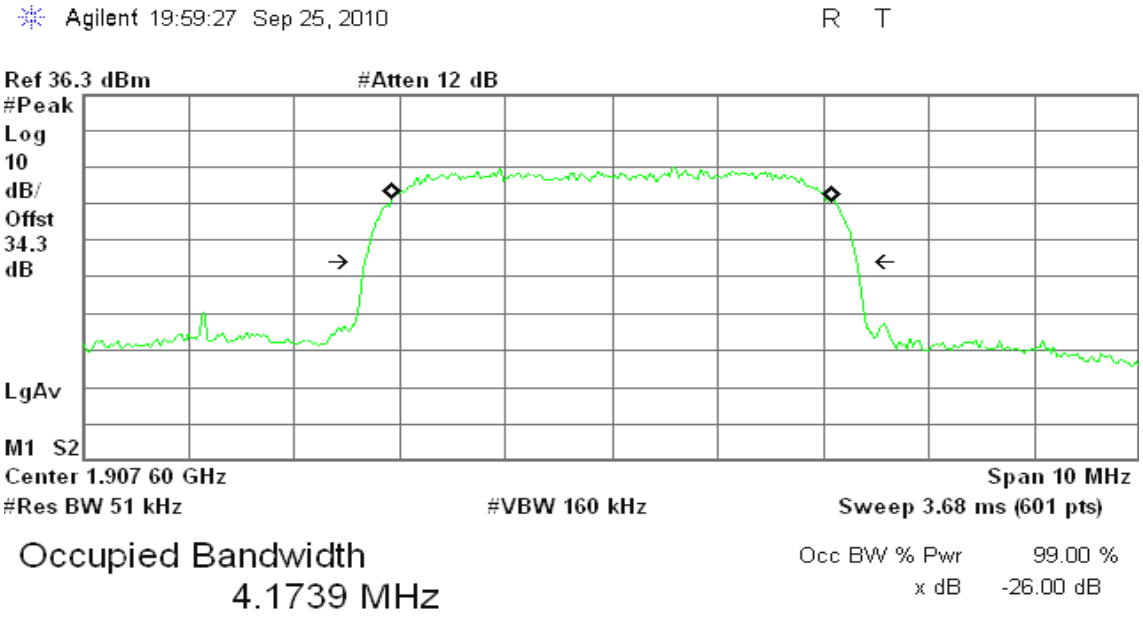
Transmit Freq Error	9.782 kHz
x dB Bandwidth	4.646 MHz

WCDMA Band II (CH Mid)



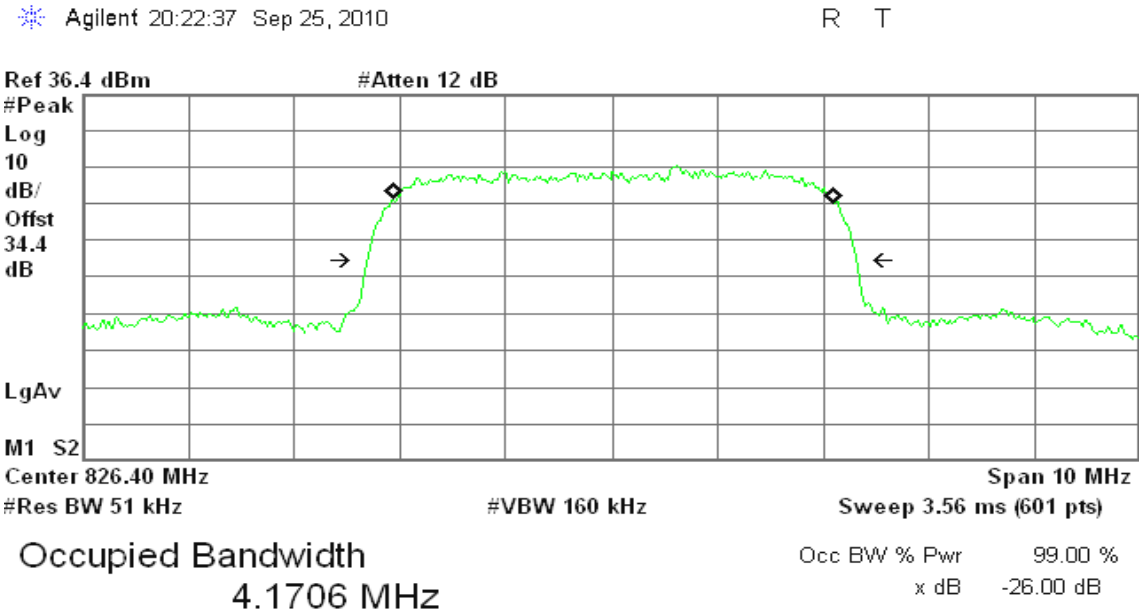
Transmit Freq Error	-433.610 Hz
x dB Bandwidth	4.642 MHz

WCDMA Band II (CH High)



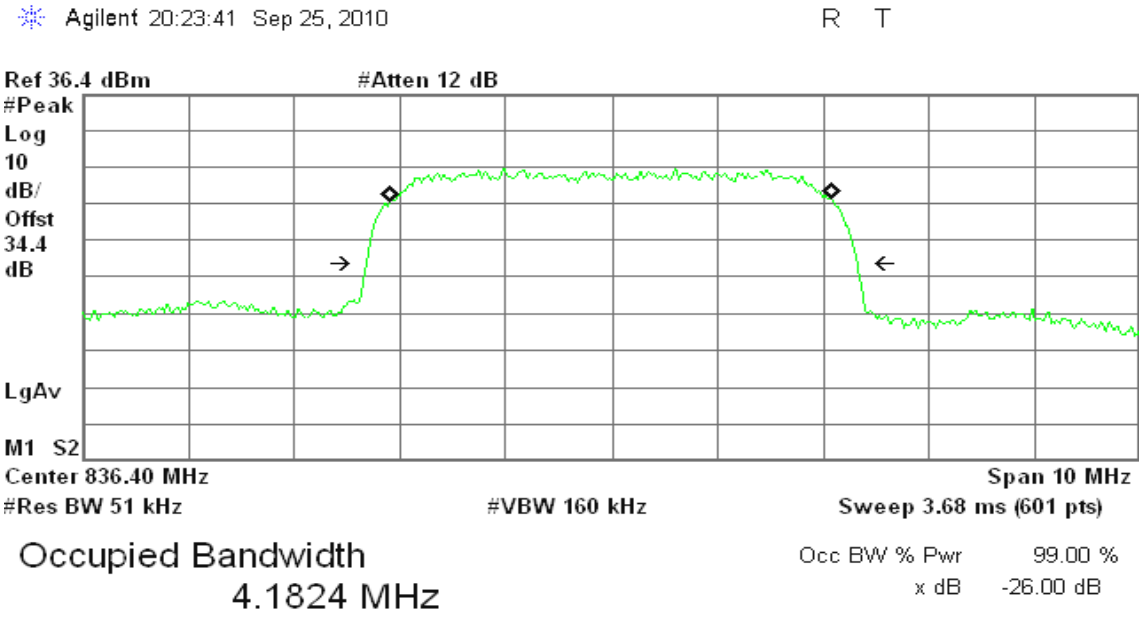
Transmit Freq Error	4.487 kHz
x dB Bandwidth	4.662 MHz

WCDMA Band V (CH Low)



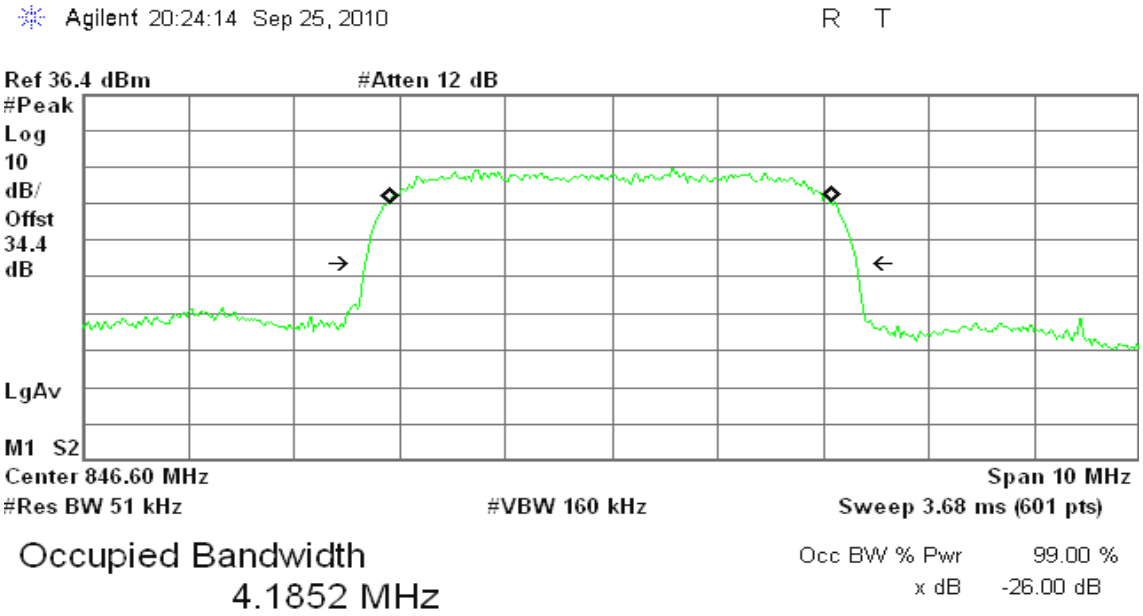
Transmit Freq Error	11.935 kHz
x dB Bandwidth	4.632 MHz

WCDMA Band V (CH Mid)



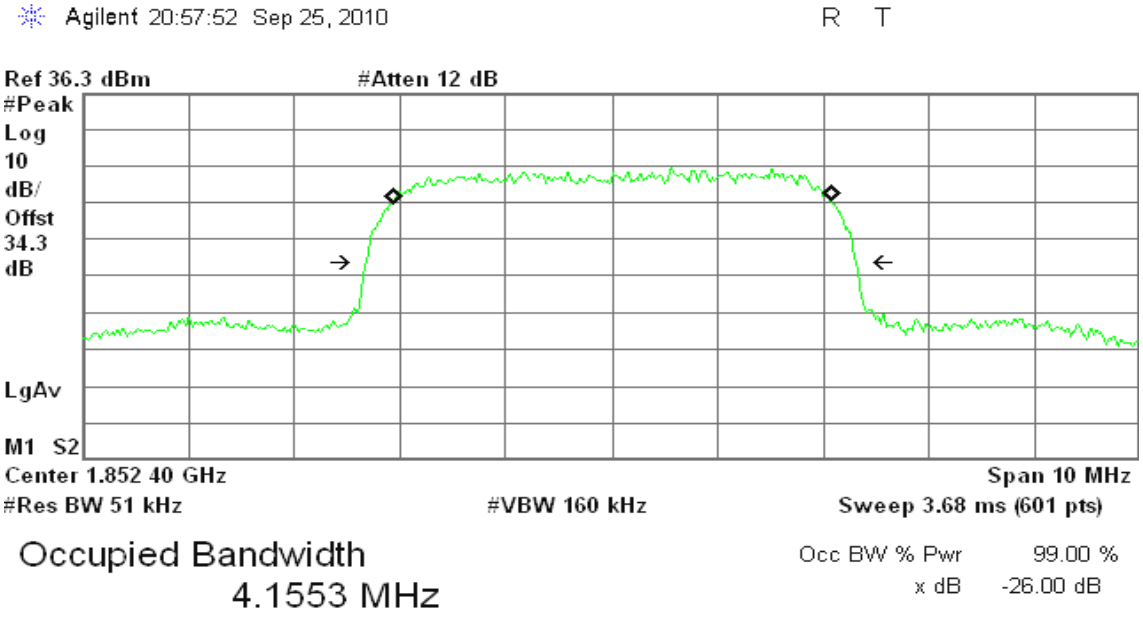
Transmit Freq Error	-5.983 kHz
x dB Bandwidth	4.645 MHz

WCDMA Band V (CH High)



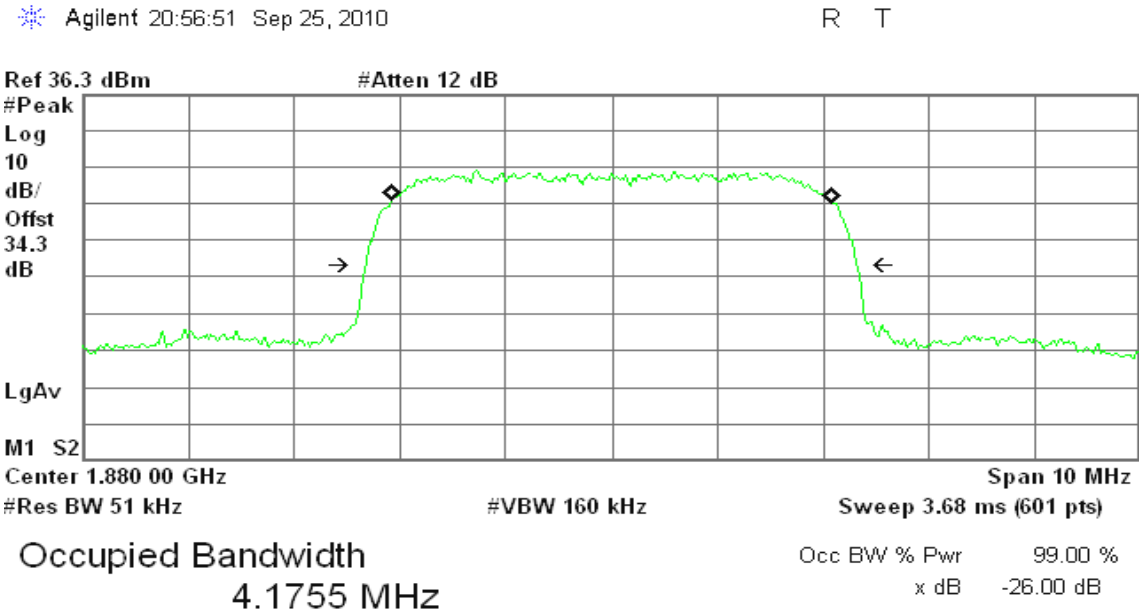
Transmit Freq Error	-9.832 kHz
x dB Bandwidth	4.653 MHz

WCDMA / HSDPA Band II (CH Low)



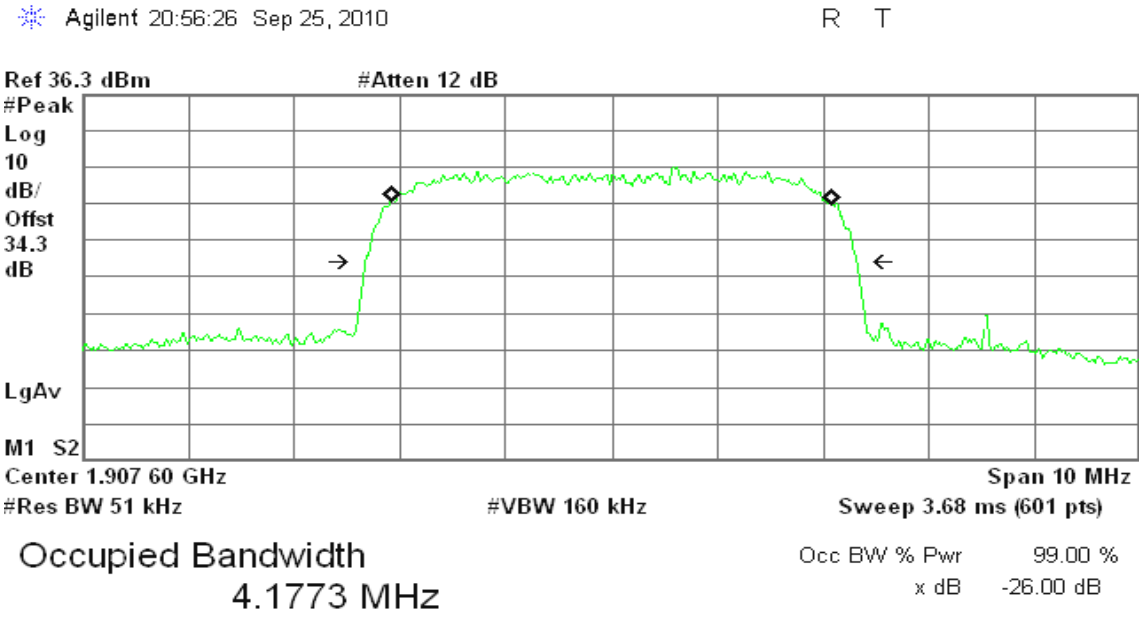
Transmit Freq Error	3.571 kHz
x dB Bandwidth	4.644 MHz

WCDMA / HSDPA Band II (CH Mid)



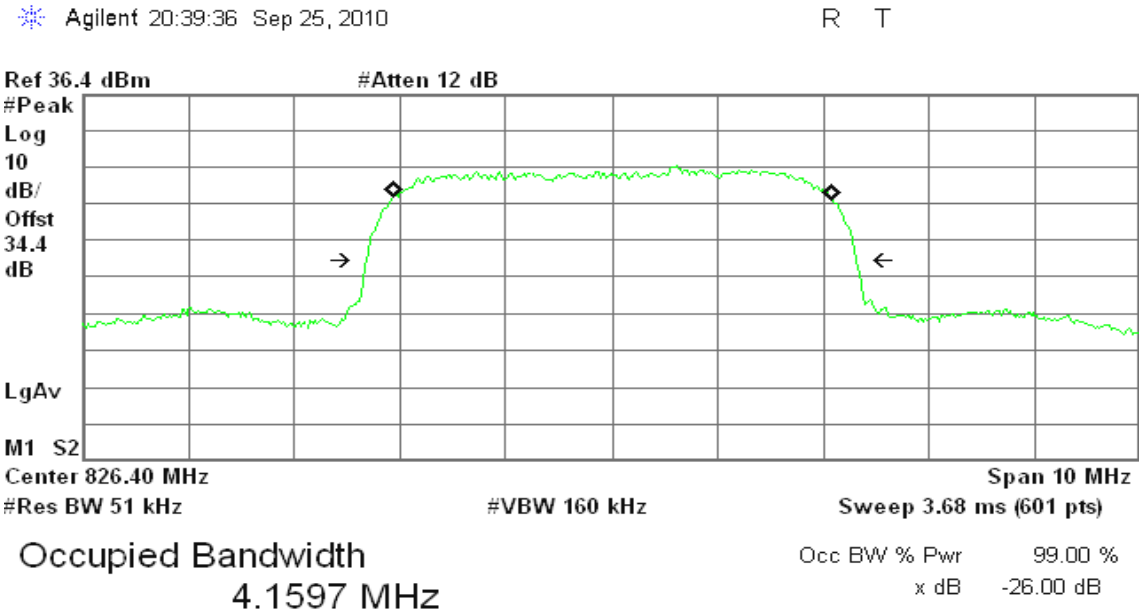
Transmit Freq Error	900.477 Hz
x dB Bandwidth	4.650 MHz

WCDMA / HSDPA Band II (CH High)



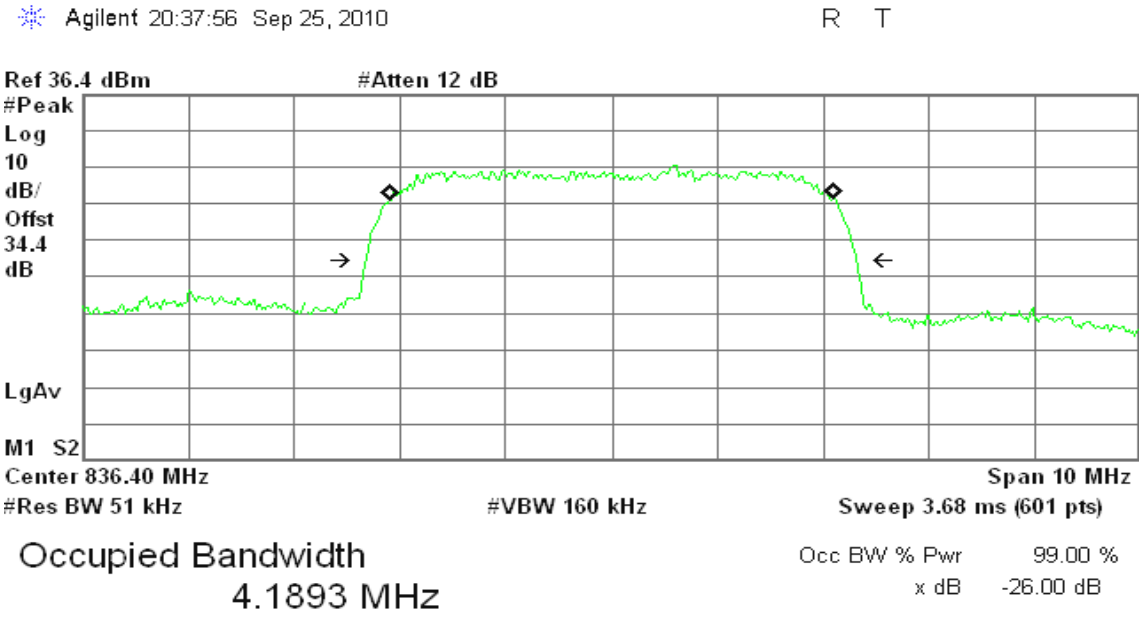
Transmit Freq Error	-1.808 kHz
x dB Bandwidth	4.654 MHz

WCDMA / HSDPA Band V (CH Low)



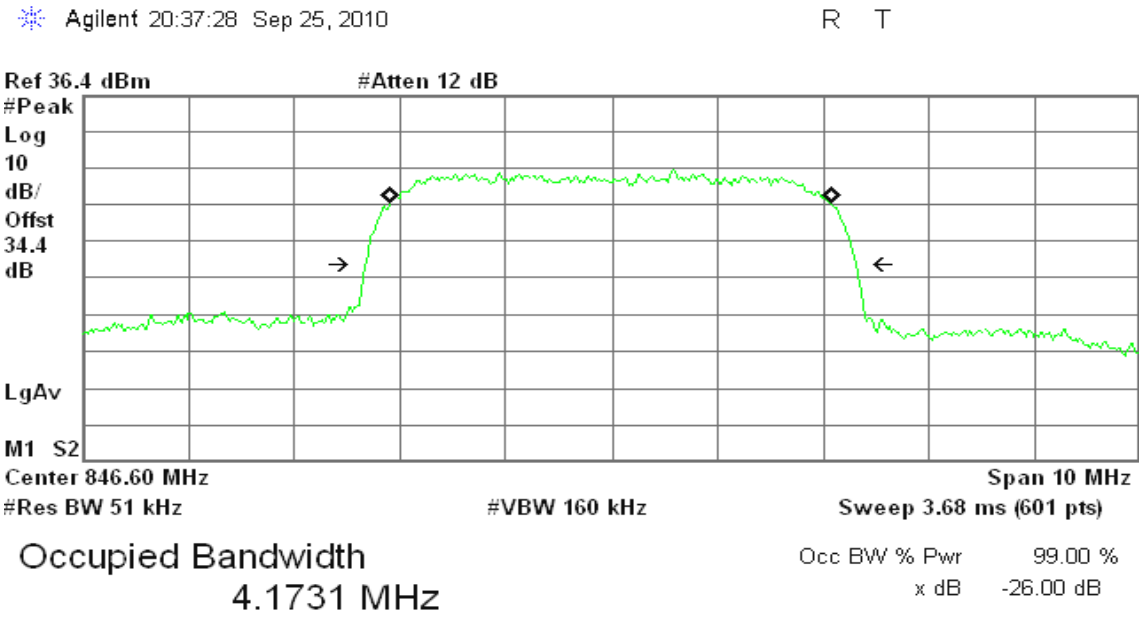
Transmit Freq Error	7.897 kHz
x dB Bandwidth	4.638 MHz

WCDMA / HSDPA Band V (CH Mid)



Transmit Freq Error	1.602 kHz
x dB Bandwidth	4.650 MHz

WCDMA / HSDPA Band V (CH High)



Transmit Freq Error	-9.444 kHz
x dB Bandwidth	4.650 MHz

7.5OUT OF BAND EMISSION AT ANTENNA TERMINALS

LIMIT

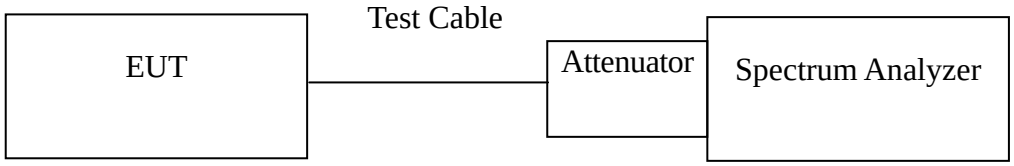
According to FCC §2.1051, FCC §22.917, FCC §24.238(a).

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

Mobile Emissions in Base Frequency Range: The mean power of any emissions appearing in the base station frequency range from cellular mobile transmitters operated must be attenuated to a level not exceed –80 dBm at the transmit antenna connector.
Band Edge Requirements: In the 1MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at lease 1% of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the Out of band Emission

Test Configuration

Out of band emission at antenna terminals:



TEST PROCEDURE

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

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

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

TEST RESULTS

No non-compliance noted.

Test Data

Mode	CH	Location	Description
GSM 850 (Class B)	128	Figure 7-1	Conducted spurious emissions, 30MHz - 20GHz
	190	Figure 7-2	Conducted spurious emissions, 30MHz - 20GHz
	251	Figure 7-3	Conducted spurious emissions, 30MHz - 20GHz
GPRS 850 (Class 12)	128	Figure 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 (Class B)	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 (Class 12)	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 (Class B)	128	Figure 11-1	Band Edge emissions
	251	Figure 11-2	Band Edge emissions
GPRS 850 (Class 12)	128	Figure 12-1	Band Edge emissions
	251	Figure 12-2	Band Edge emissions

Mode	CH	Location	Description
GSM 1900 (Class B)	512	Figure 13-1	Band Edge emissions
	810	Figure 13-2	Band Edge emissions
GPRS 1900 (Class 12)	512	Figure 14-1	Band Edge emissions
	810	Figure 14-2	Band Edge emissions

Mode	CH	Location	Description
EDGE 850 (Class 12)	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 (Class 12)	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 (Class 12)	128	Figure 17-1	Band Edge emissions
	251	Figure 17-2	Band Edge emissions
EDGE 1900 (Class 12)	512	Figure 18-1	Band Edge emissions
	810	Figure 18-2	Band Edge emissions

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

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

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

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

Test Plot

GSM 850

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

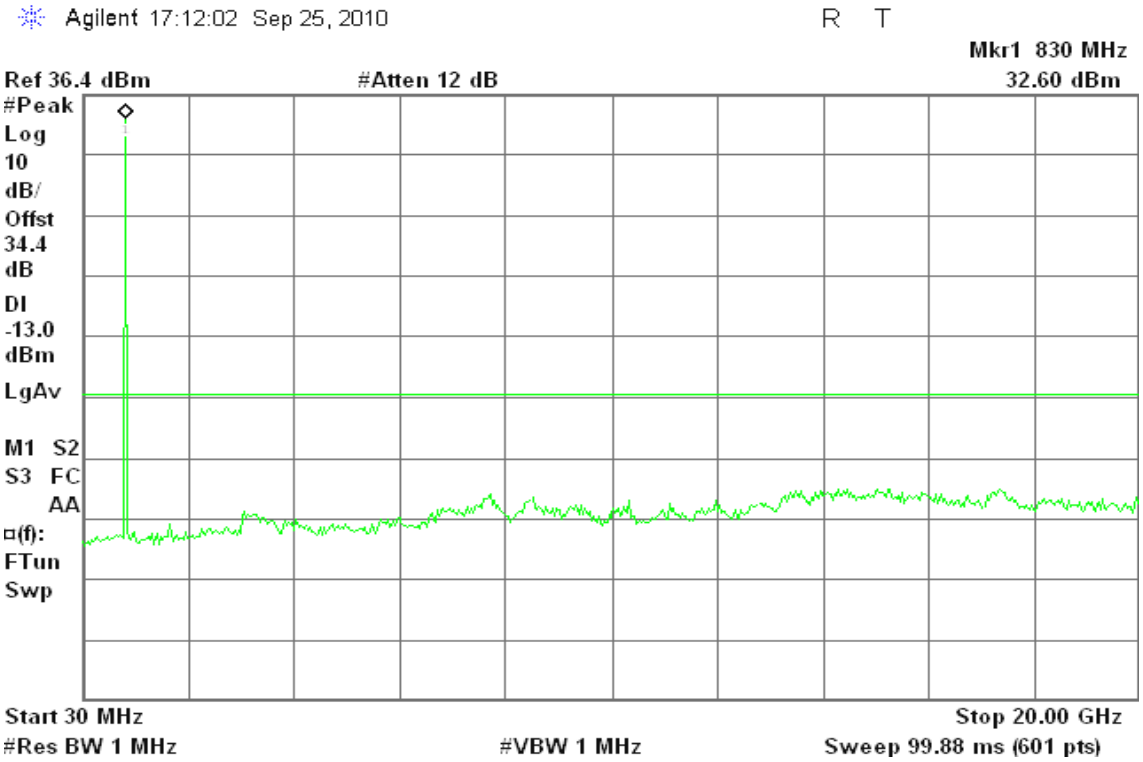


Figure 7-2: Out of Band emission at antenna terminals – GSM CH Mid

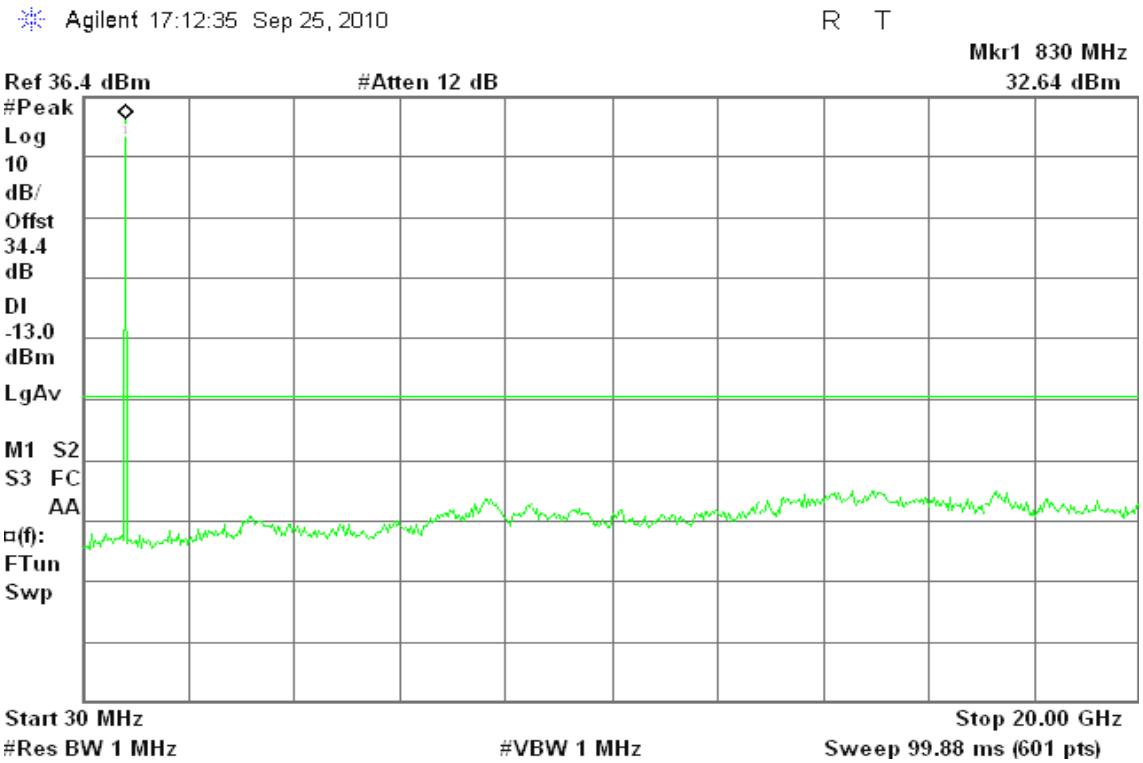
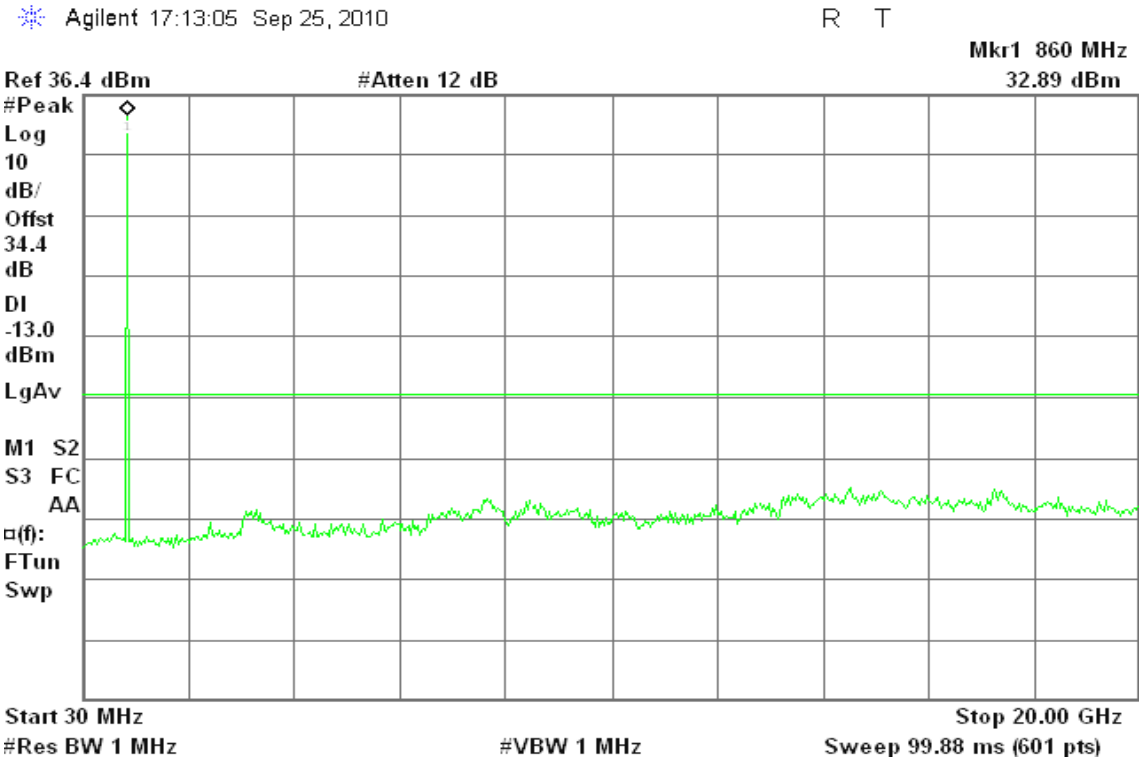


Figure 7-3: Out of Band emission at antenna terminals – GSM CH High



GPRS 850

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

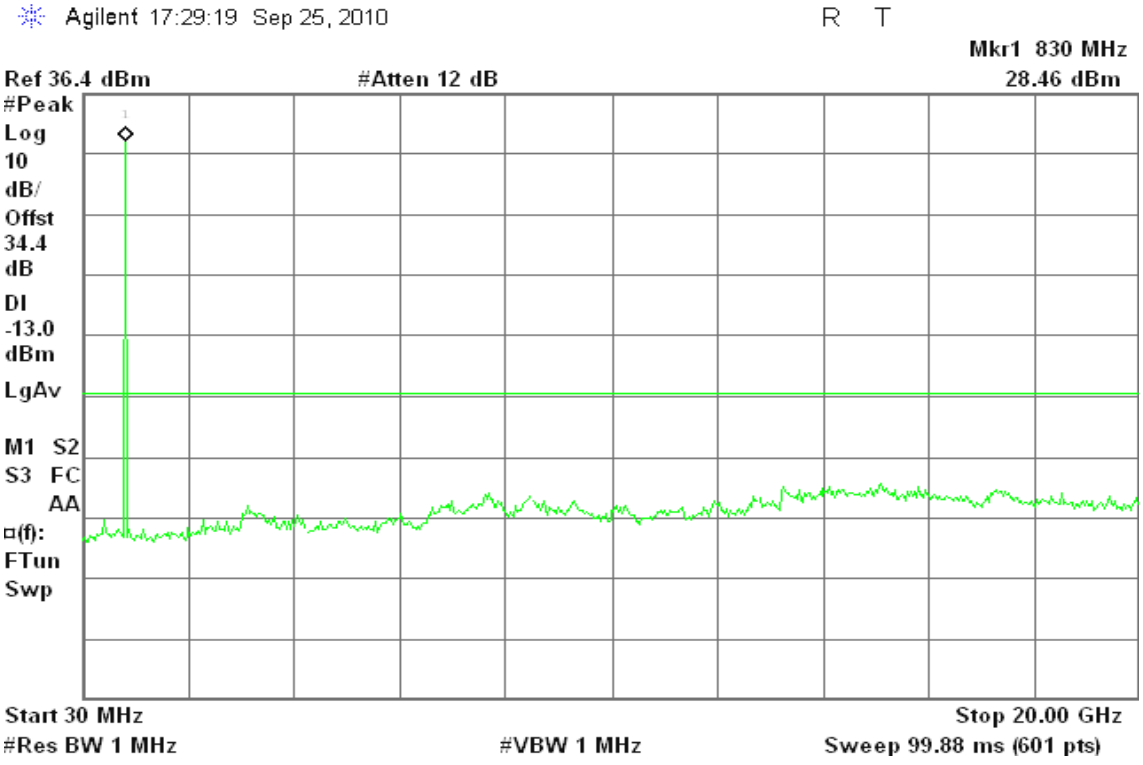


Figure 8-2: Out of Band emission at antenna terminals –GPRS CH Mid

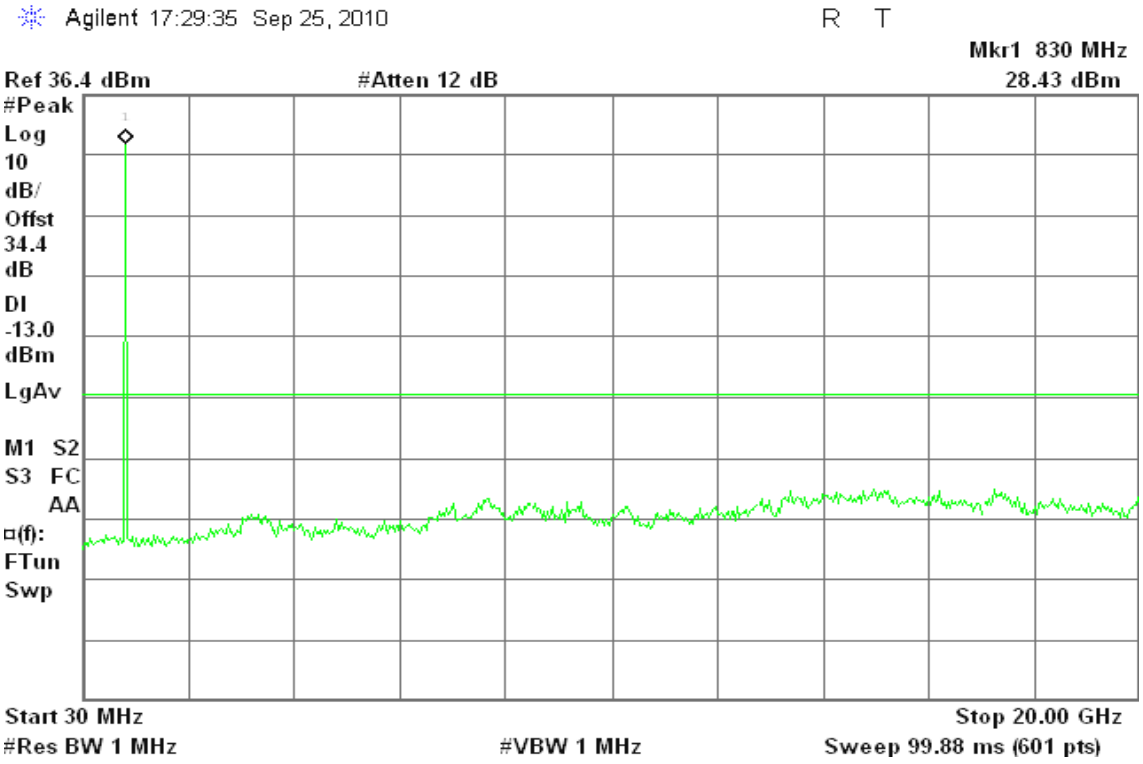
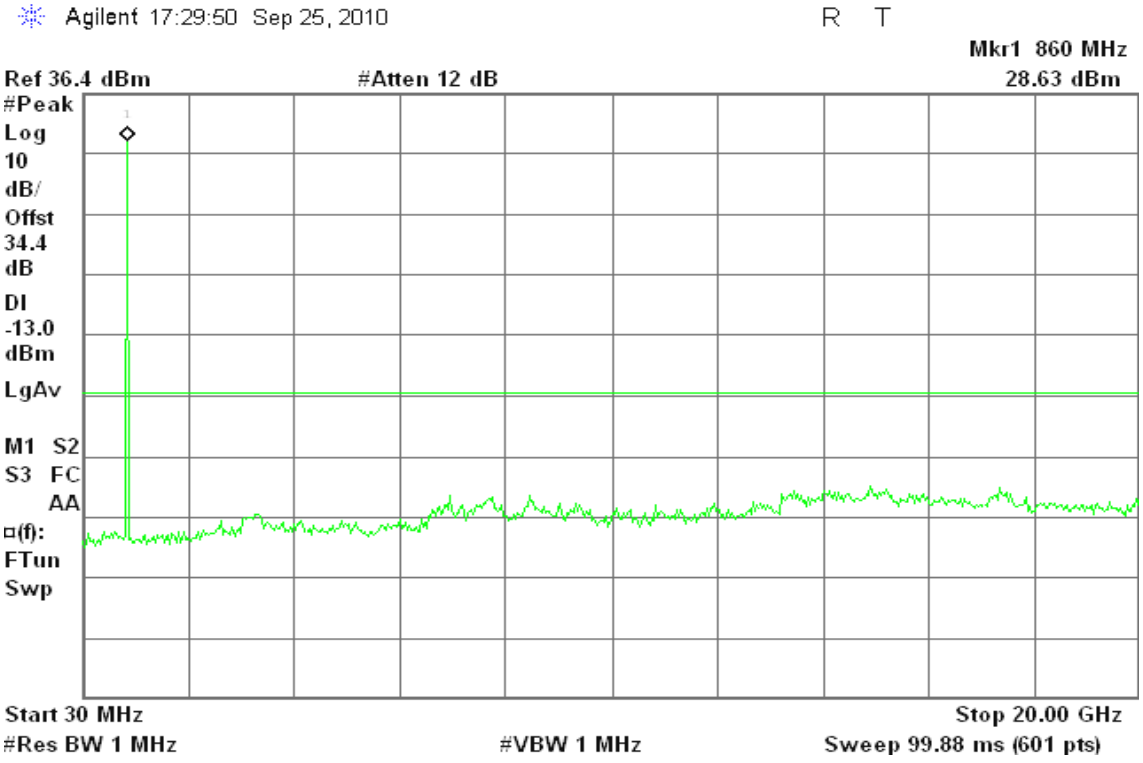


Figure 8-3: Out of Band emission at antenna terminals –GPRS CH High



GSM 1900

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

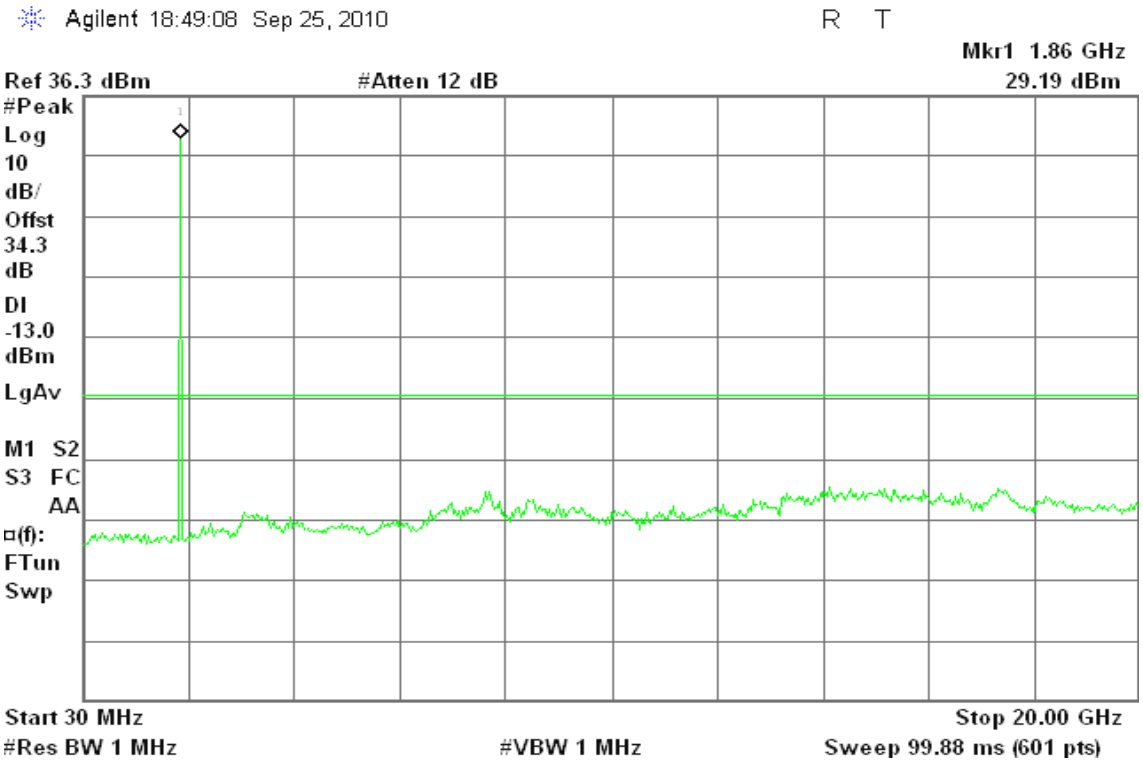


Figure 9-2: Out of Band emission at antenna terminals – GSM CH Mid

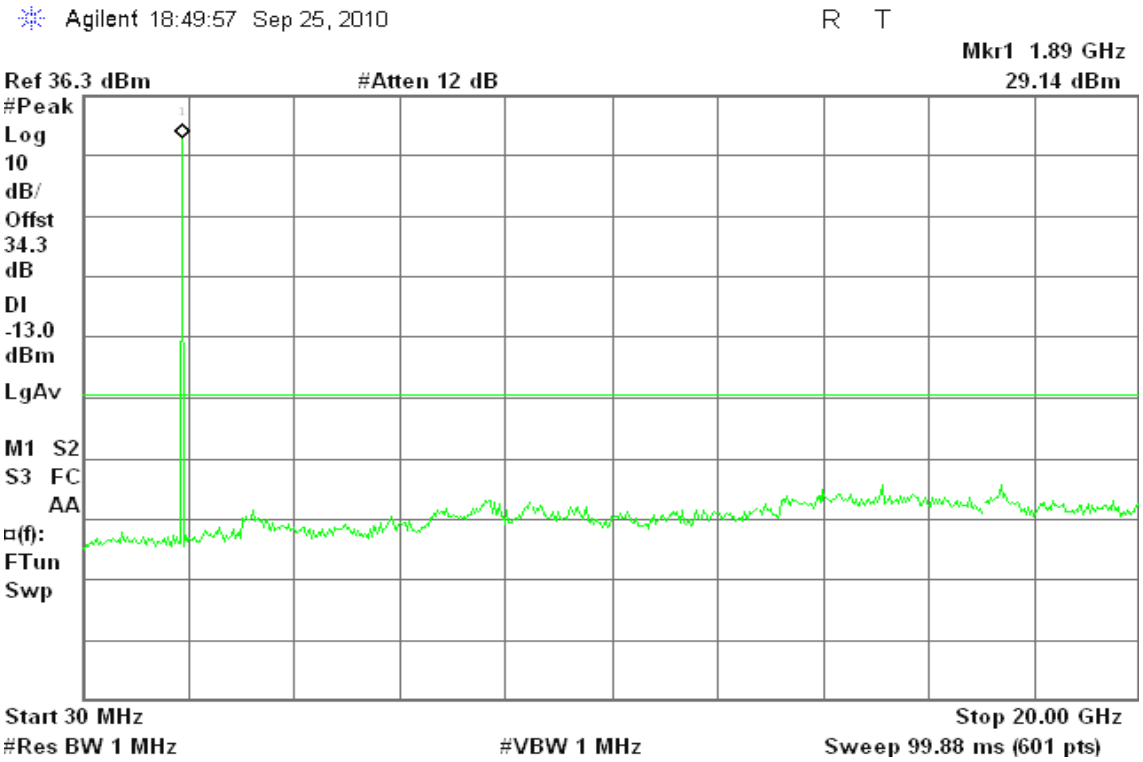
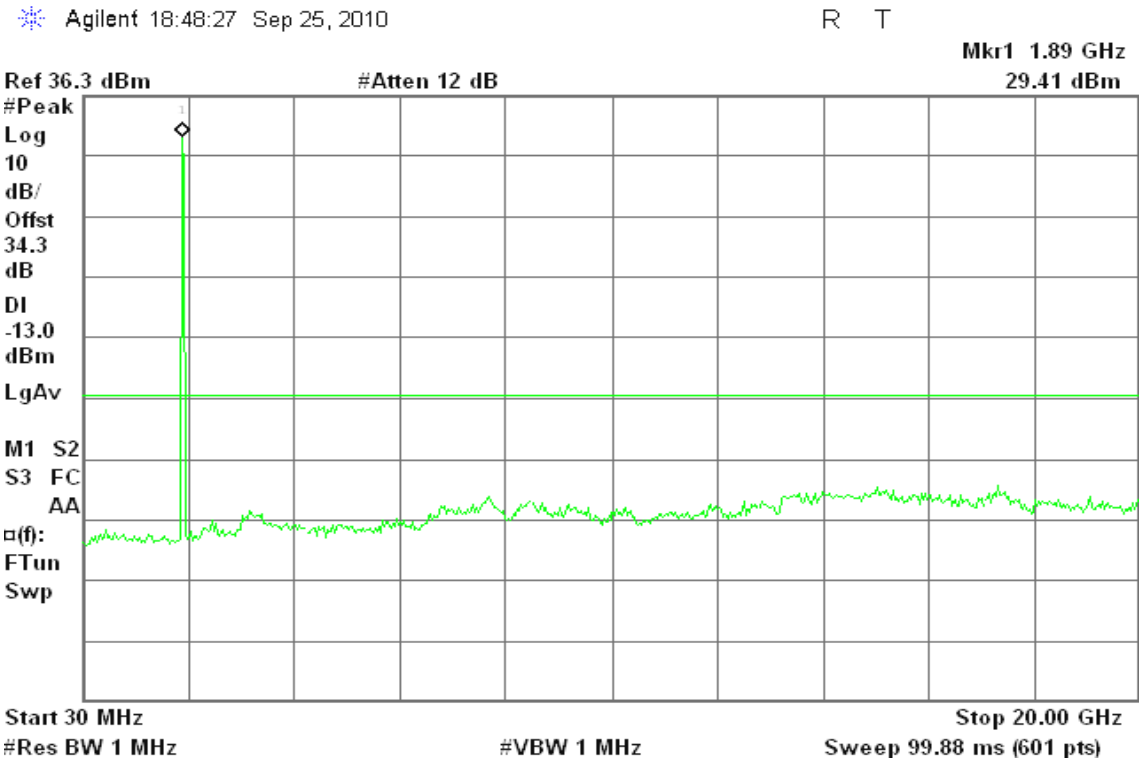


Figure 9-3: Out of Band emission at antenna terminals – GSM CH High



GPRS 1900

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

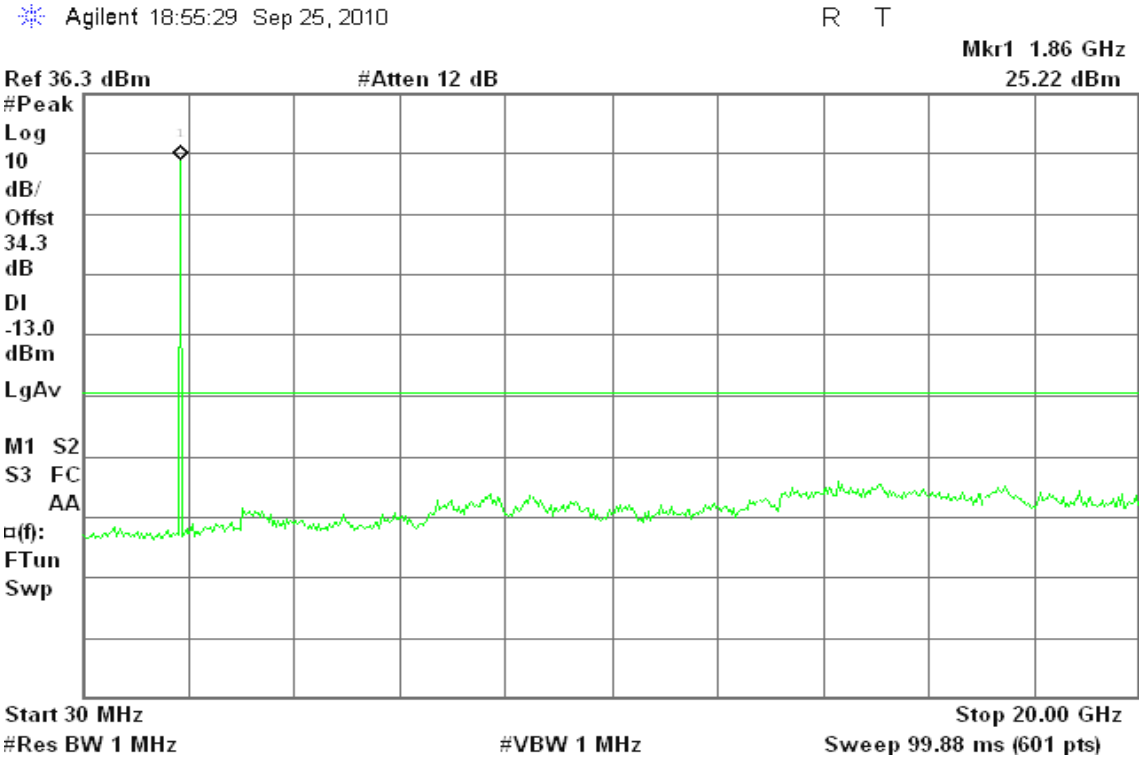


Figure 10-2: Out of Band emission at antenna terminals –GPRS CH Mid

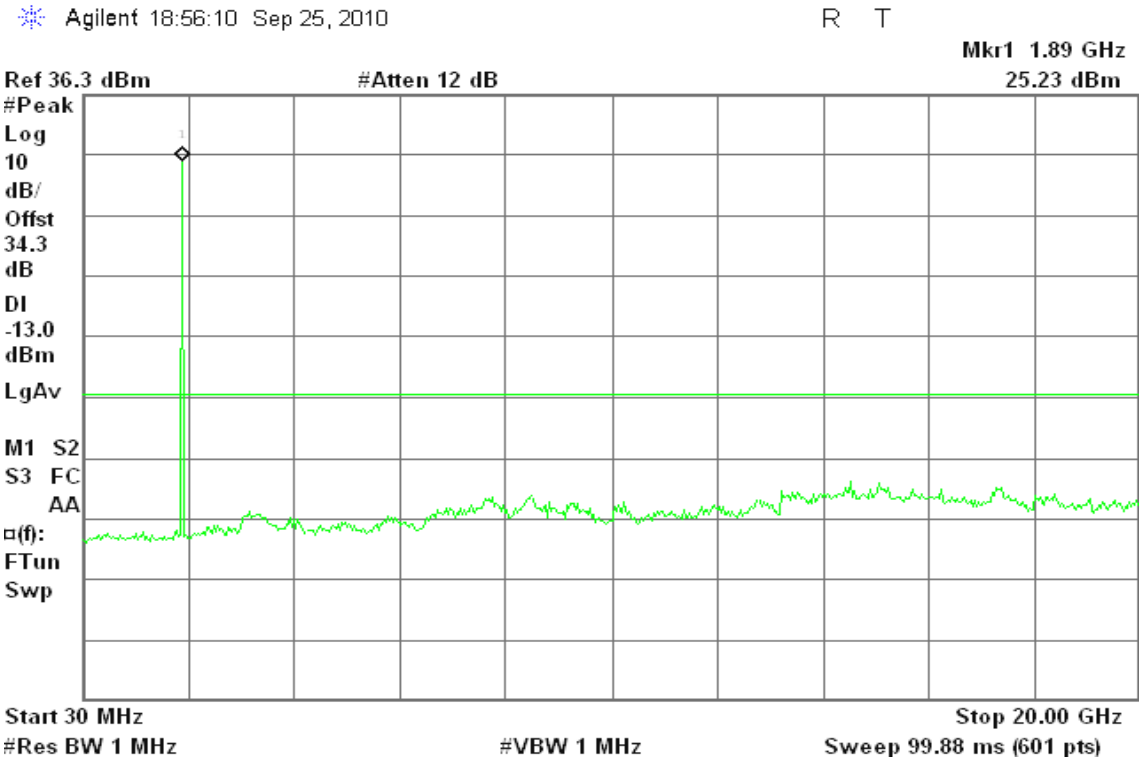
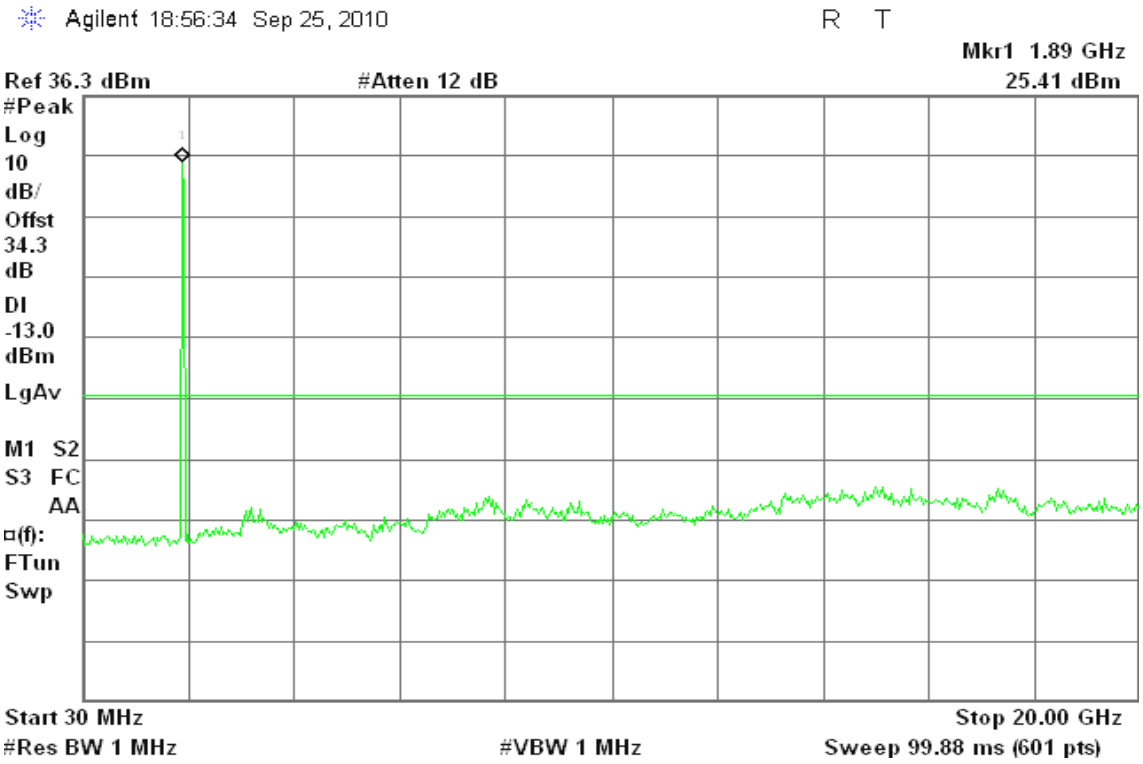


Figure 10-3: Out of Band emission at antenna terminals –GPRS CH High



GSM 850

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

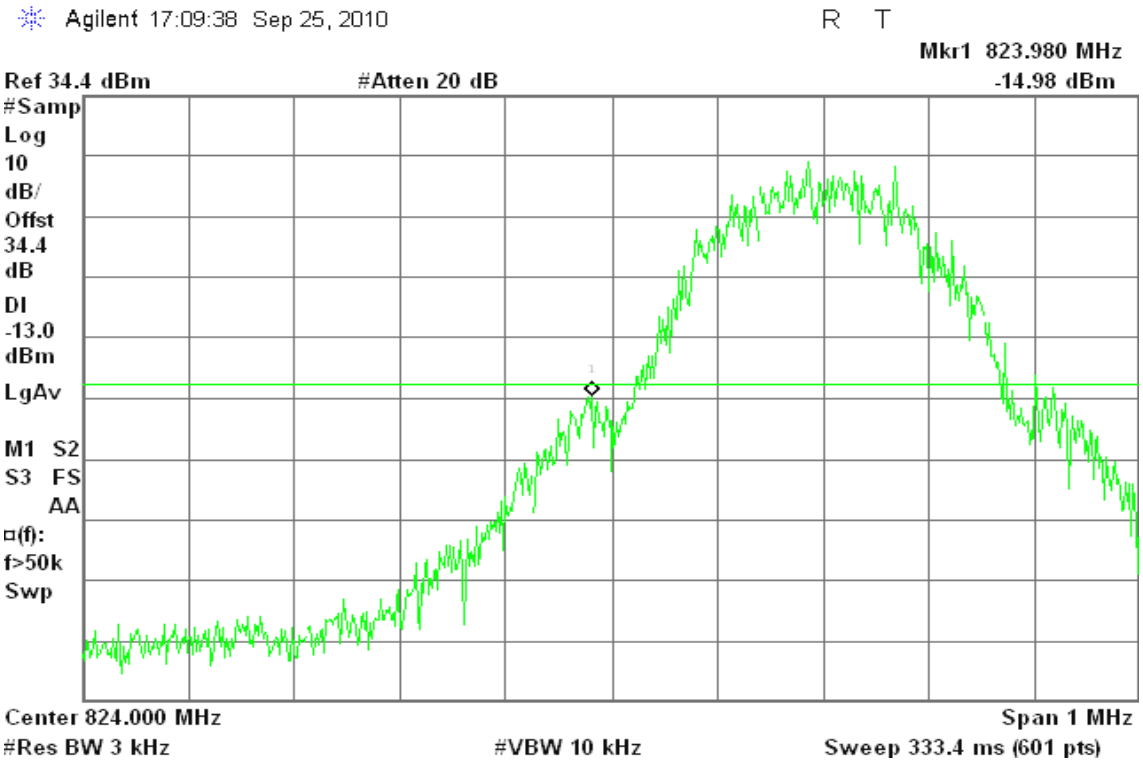
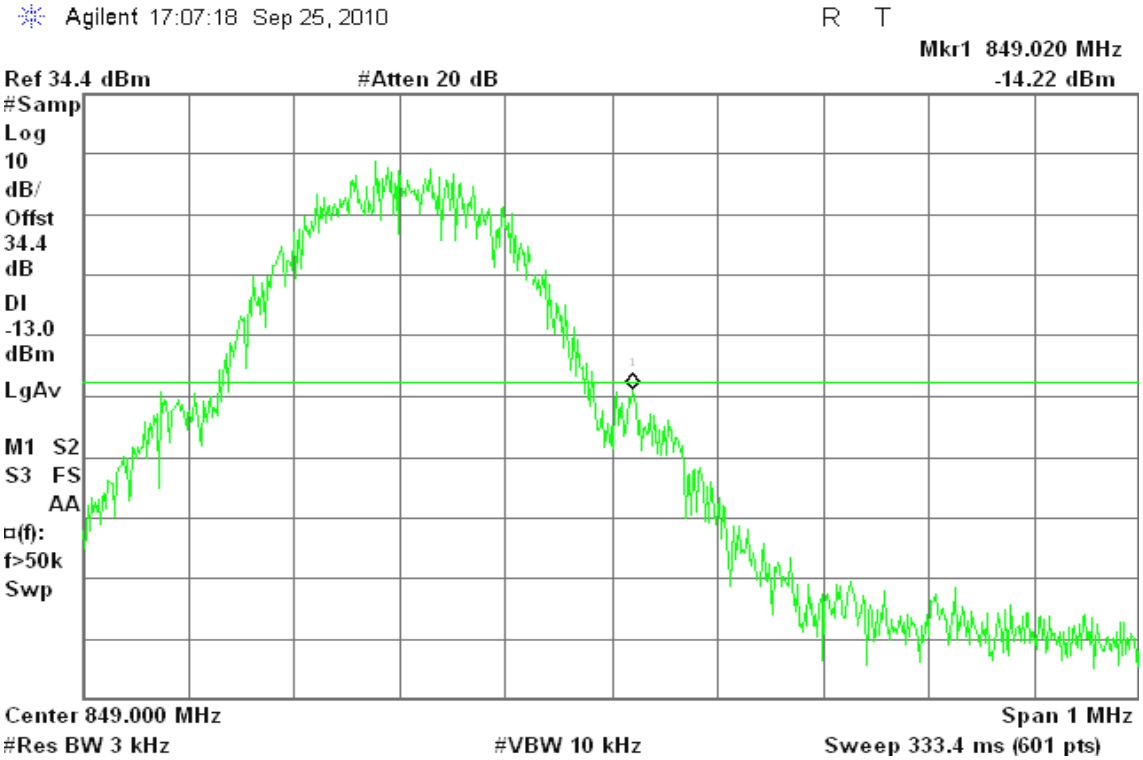


Figure 11-2: Band Edge emissions – GSM CH High



GPRS 850

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

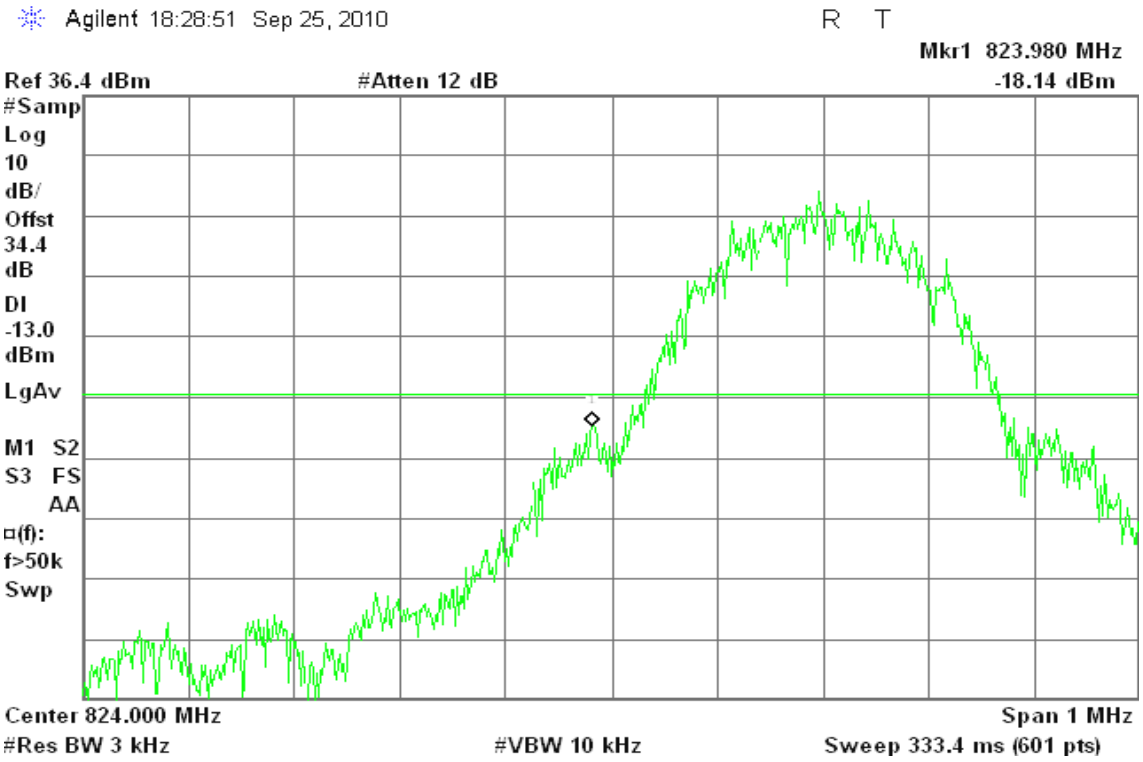
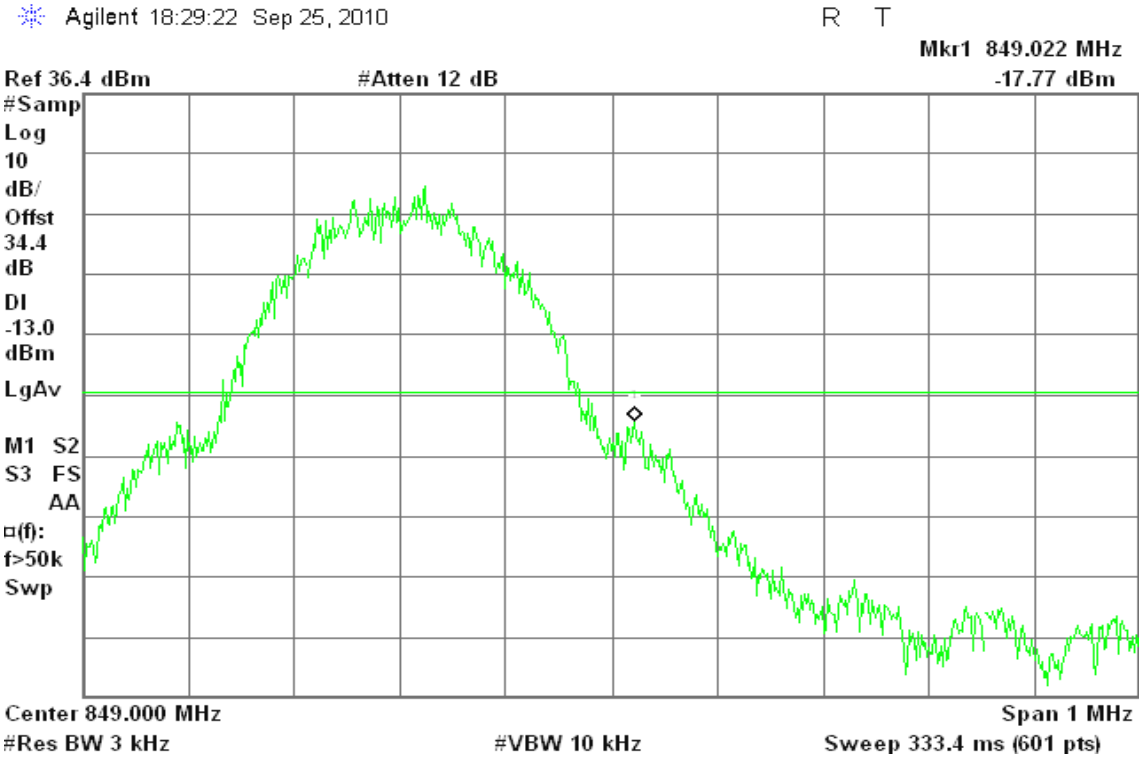


Figure 12-2: Band Edge emissions –GPRS CH High



GSM 1900

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

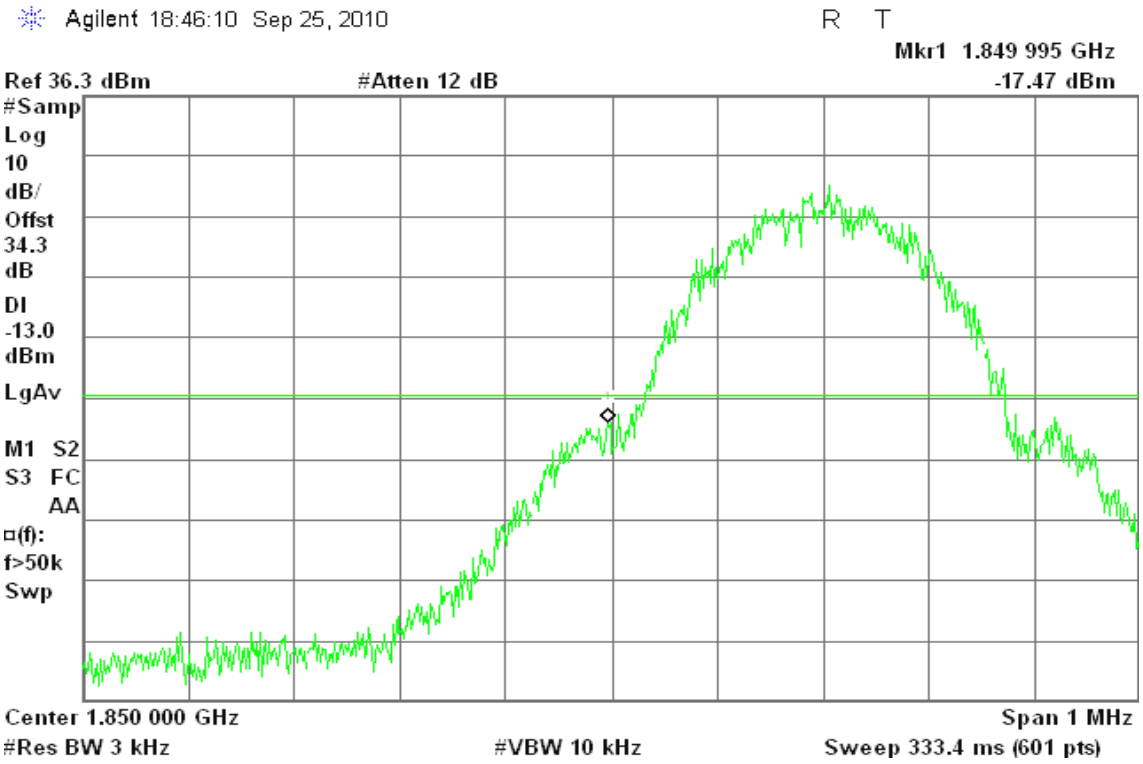
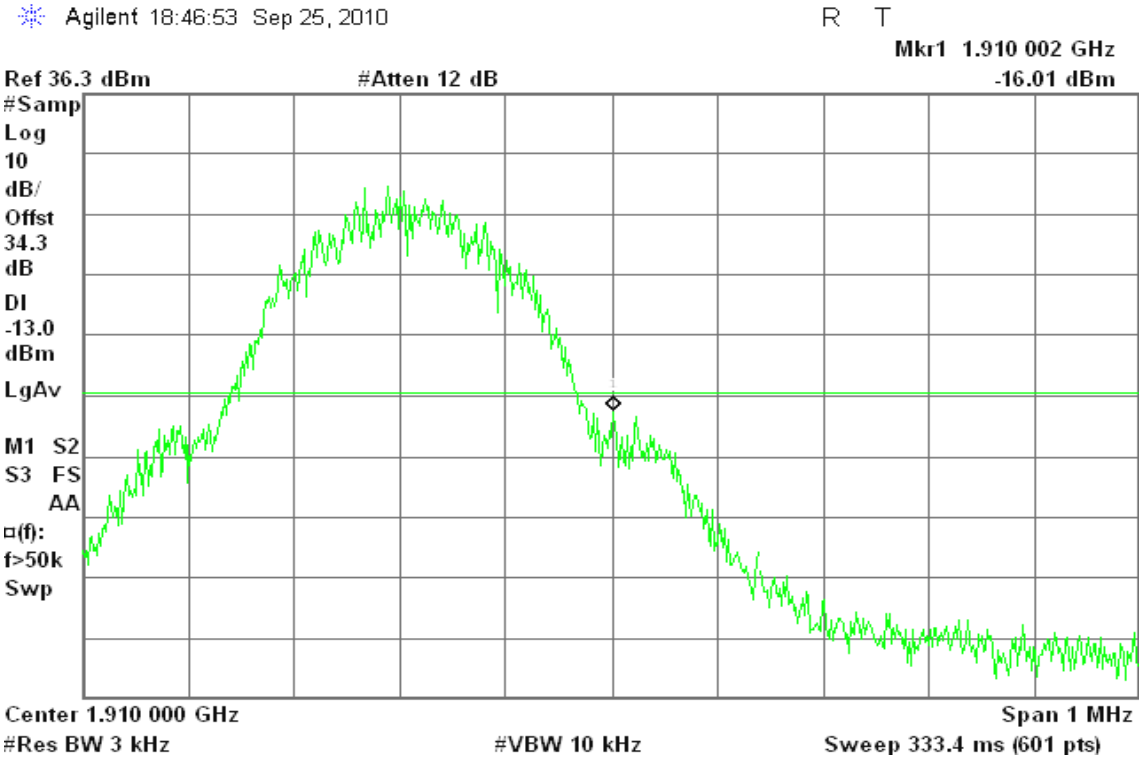


Figure 13-2: Band Edge emissions – GSM CH High



GPRS 1900

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

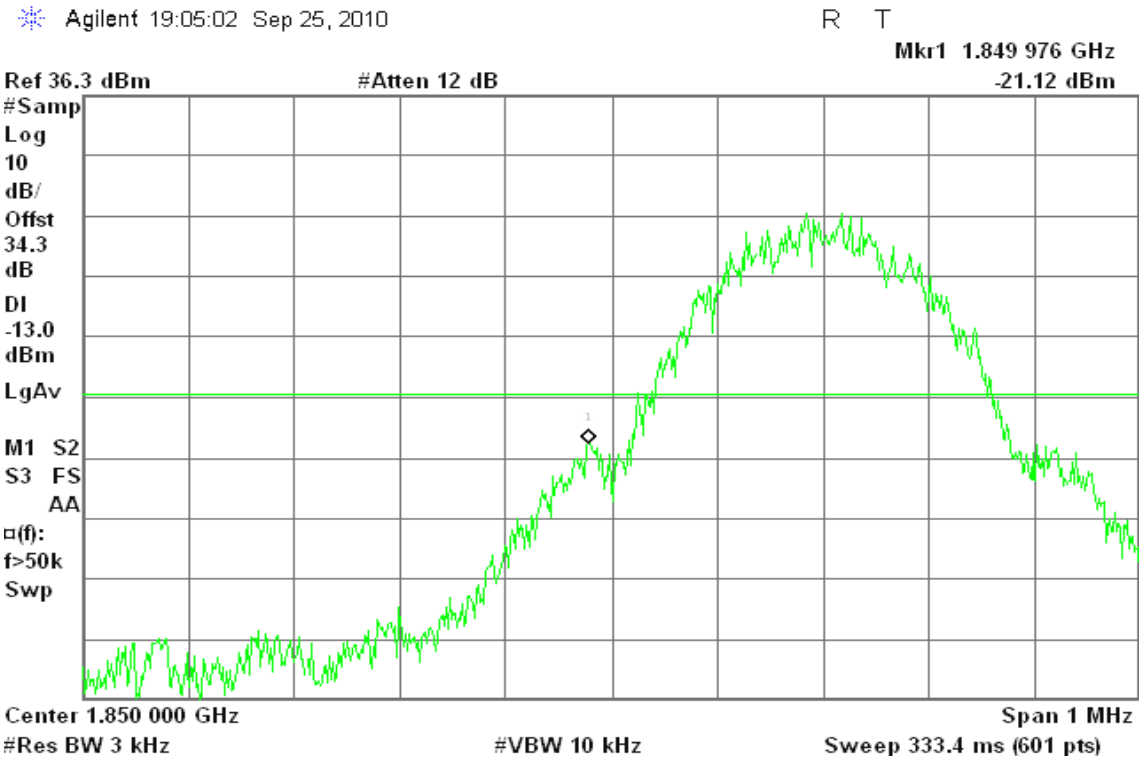
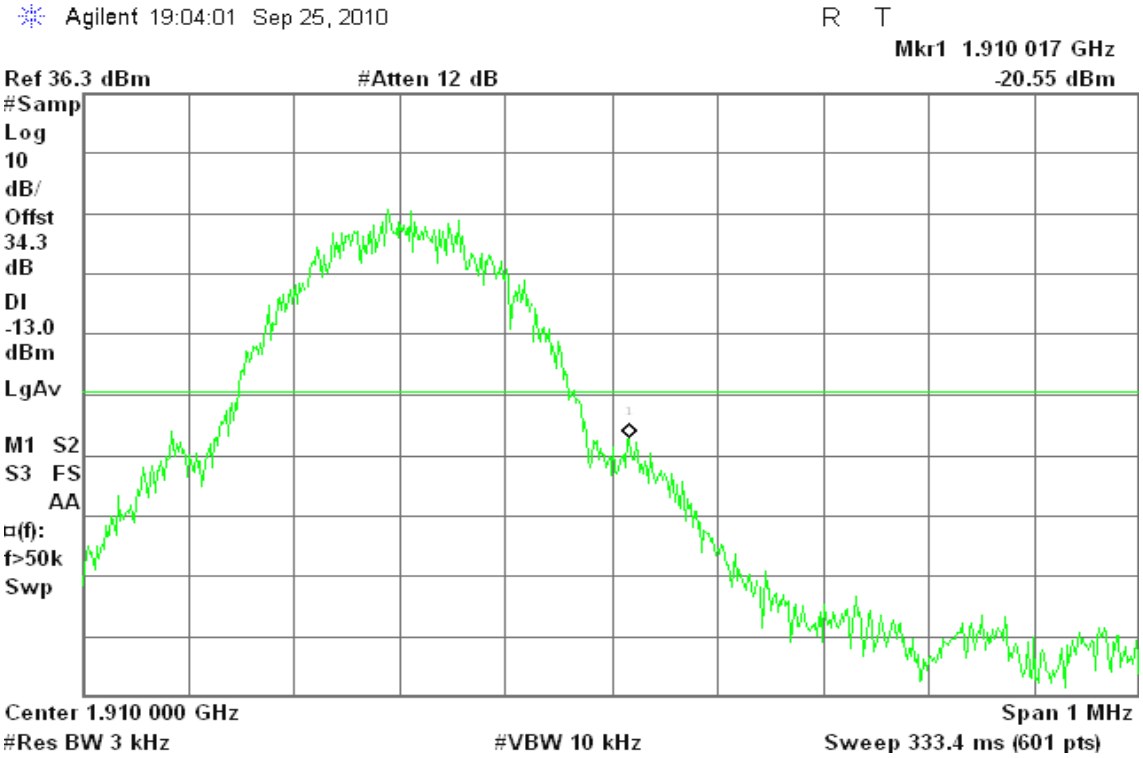


Figure 14-2: Band Edge emissions – GPRS CH High



EDGE 850

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

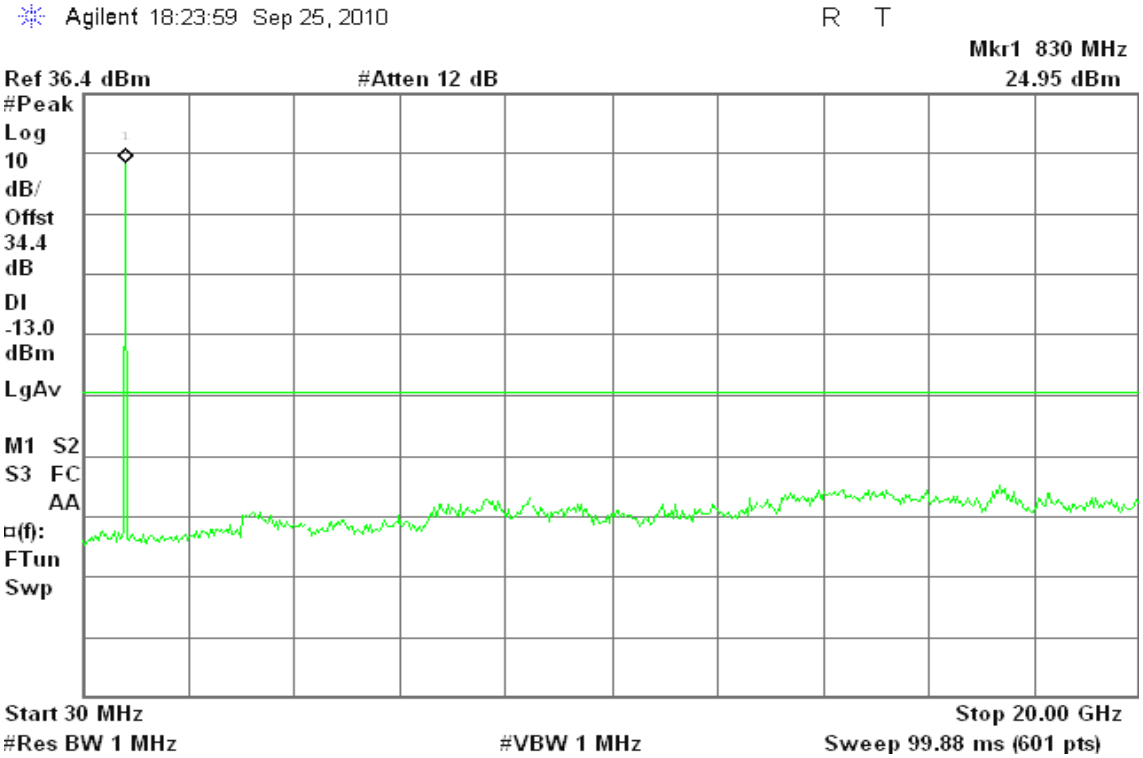


Figure 15-2: Out of Band emission at antenna terminals –EDGE CH Mid

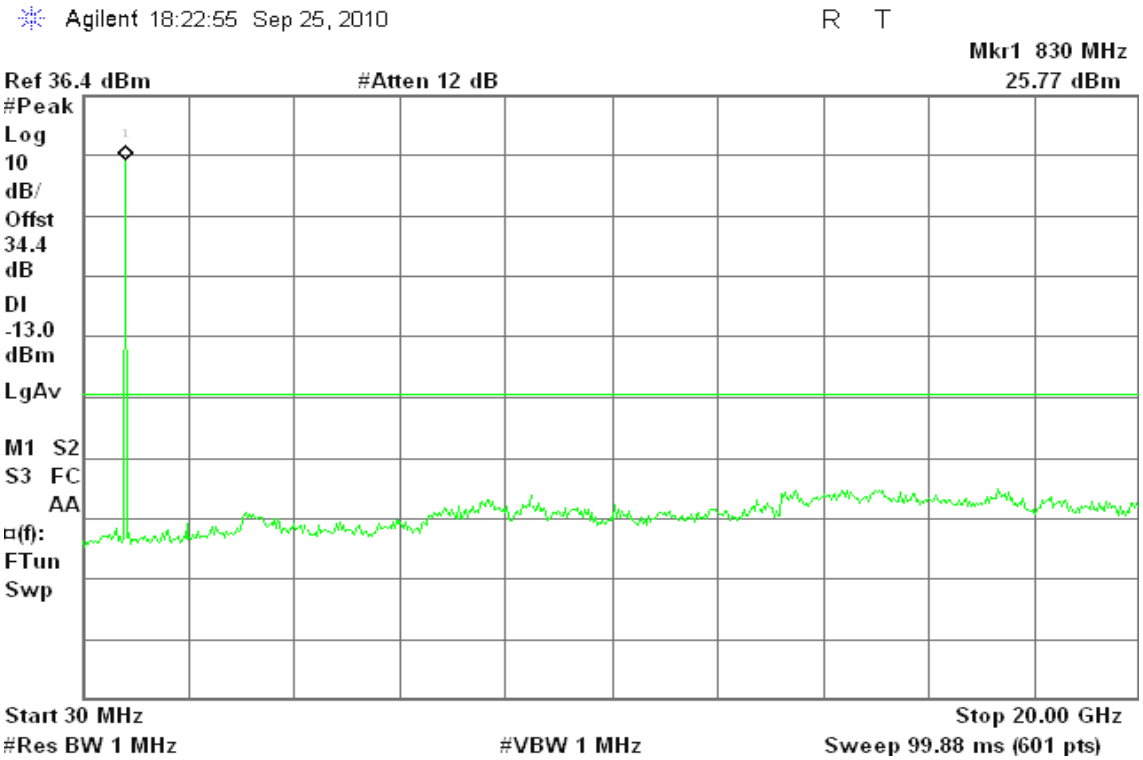
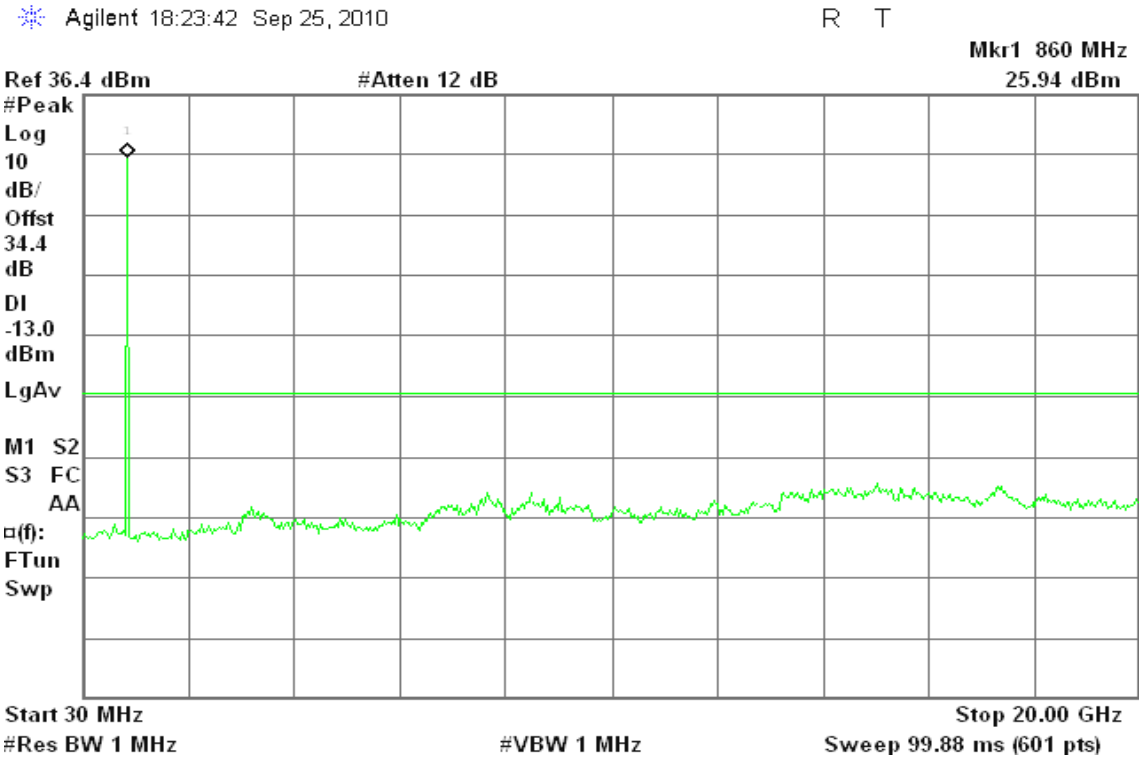


Figure 15-3: Out of Band emission at antenna terminals –EDGE CH High



EDGE 1900

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

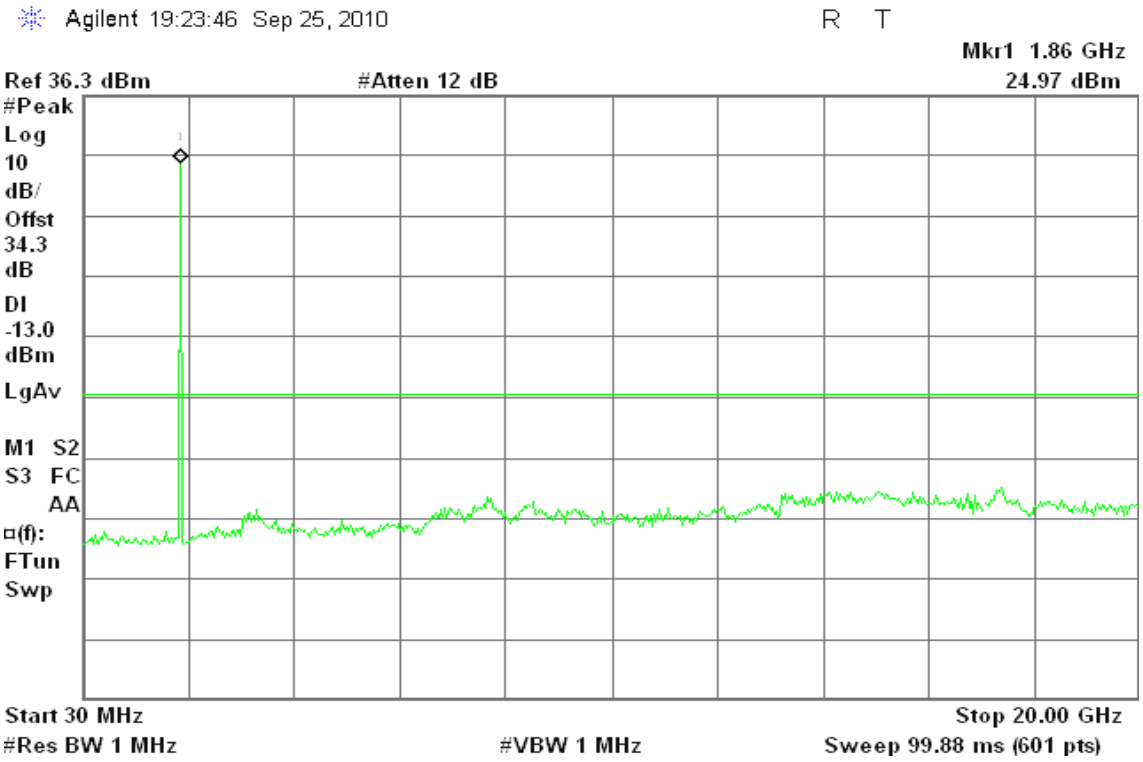


Figure 16-2: Out of Band emission at antenna terminals –EDGE CH Mid

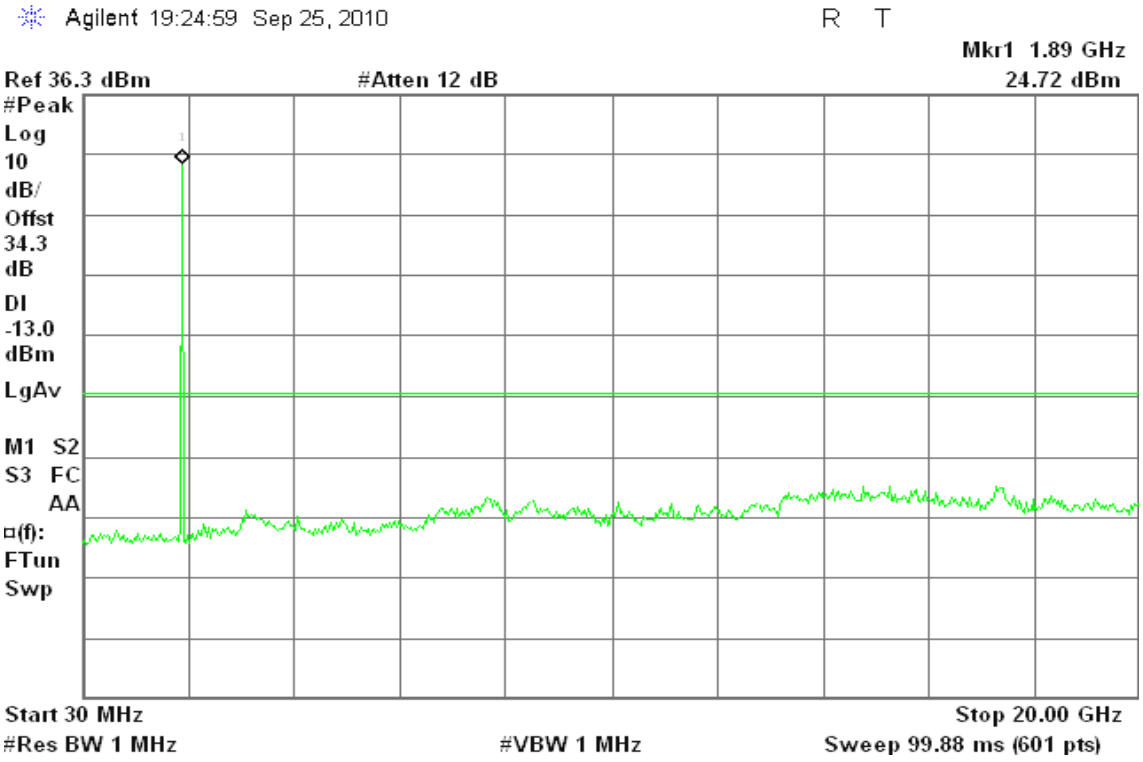
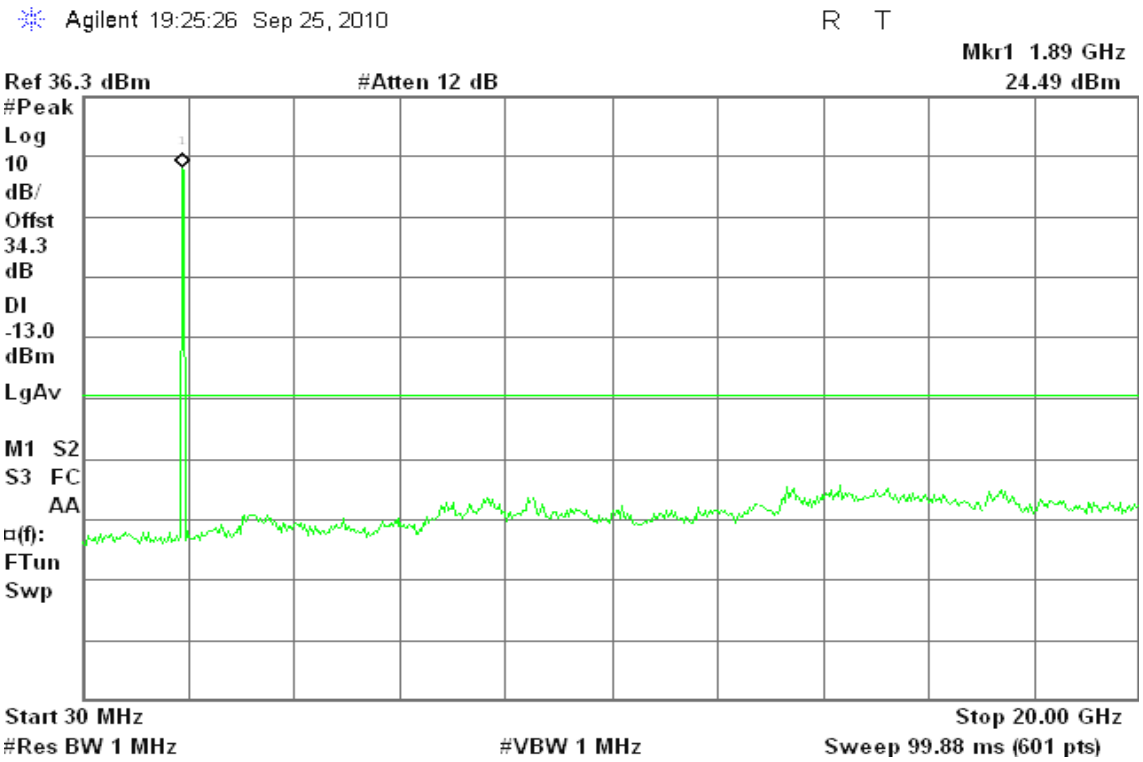


Figure 16-3: Out of Band emission at antenna terminals –EDGE CH High



EDGE 850

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

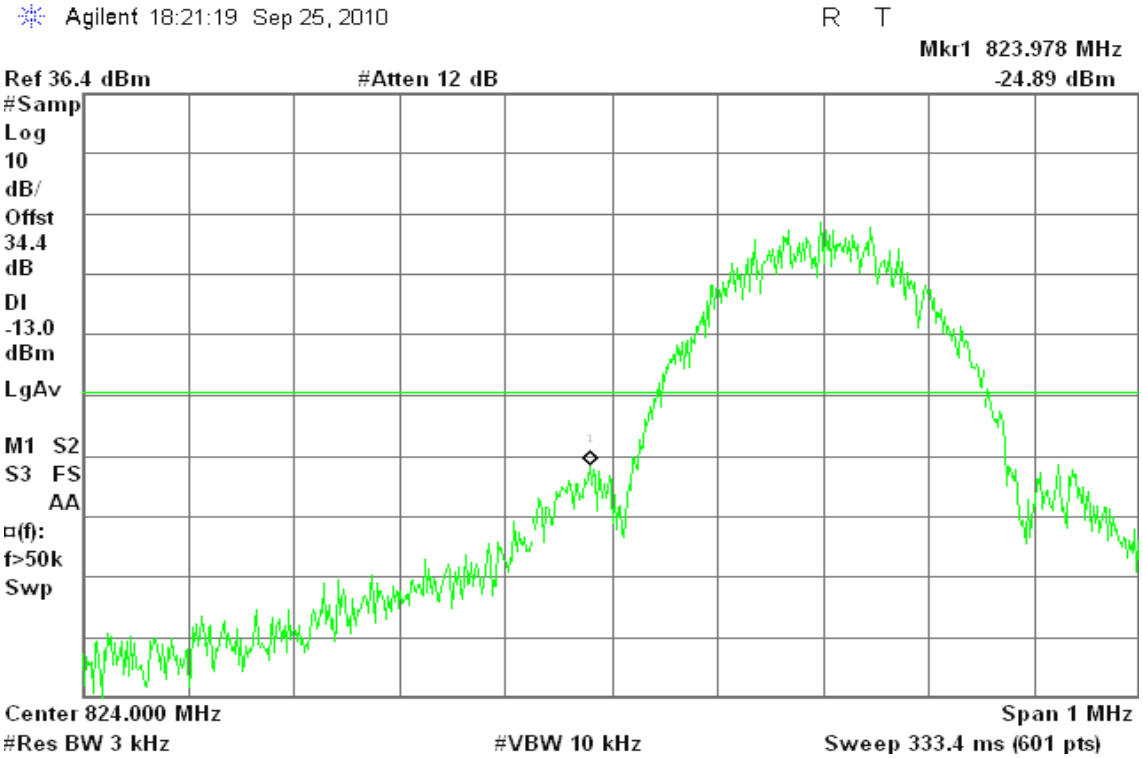
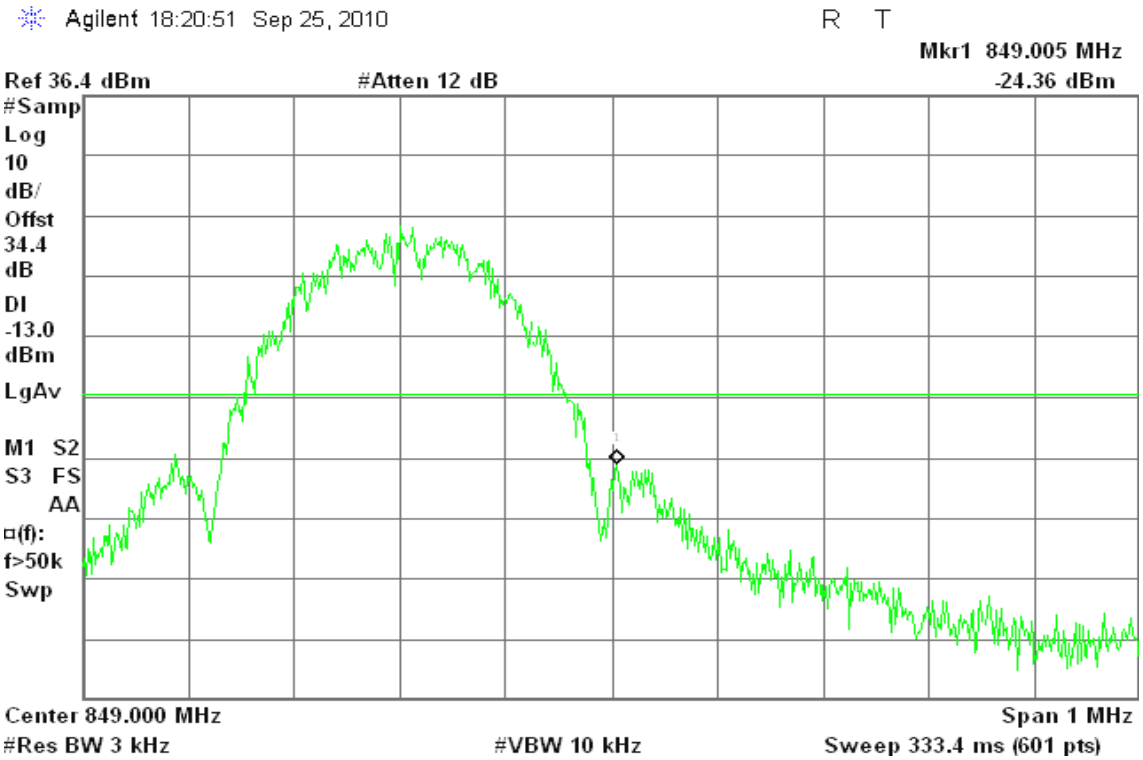


Figure 17-2: Band Edge emissions – EDGE CH High



EDGE 1900

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

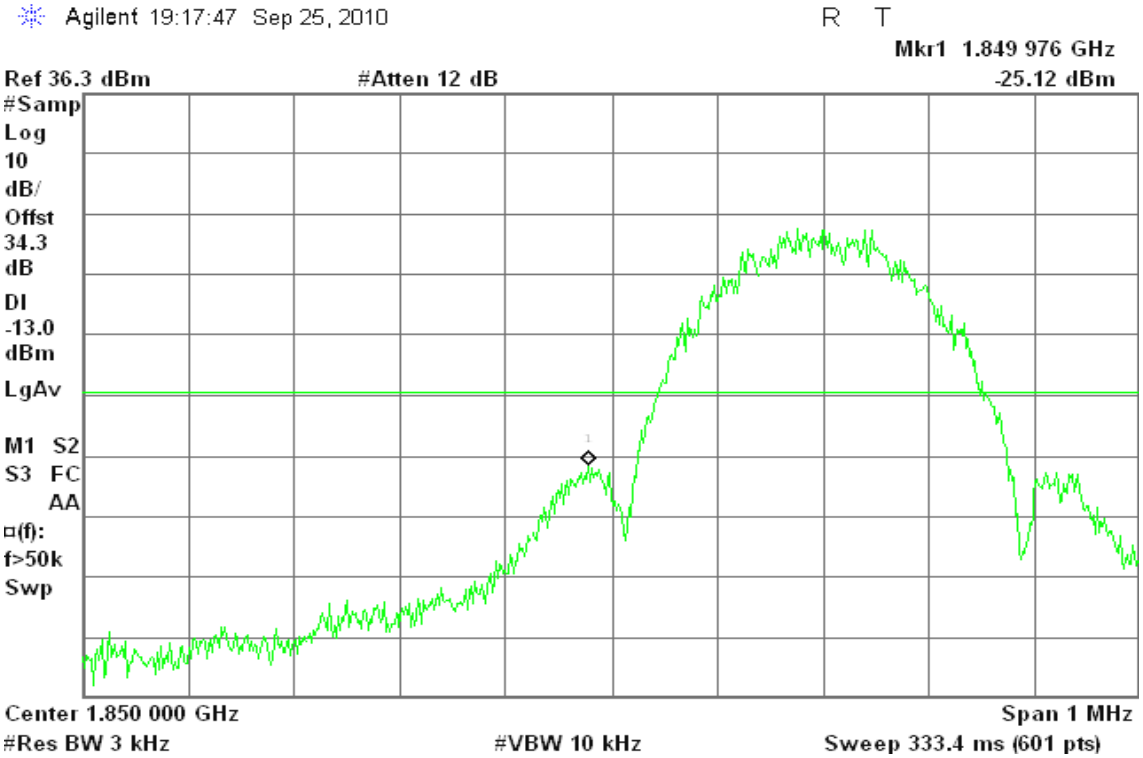
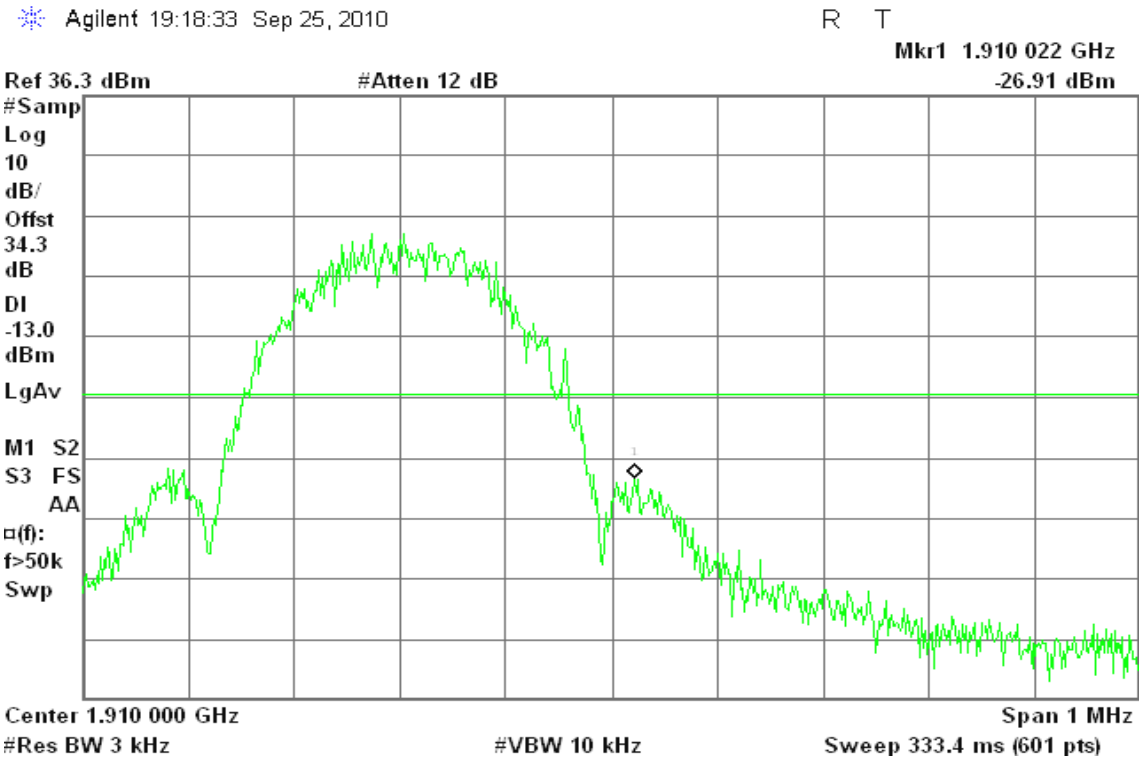


Figure 18-2: Band Edge emissions – EDGE CH High



WCDMA Band II

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

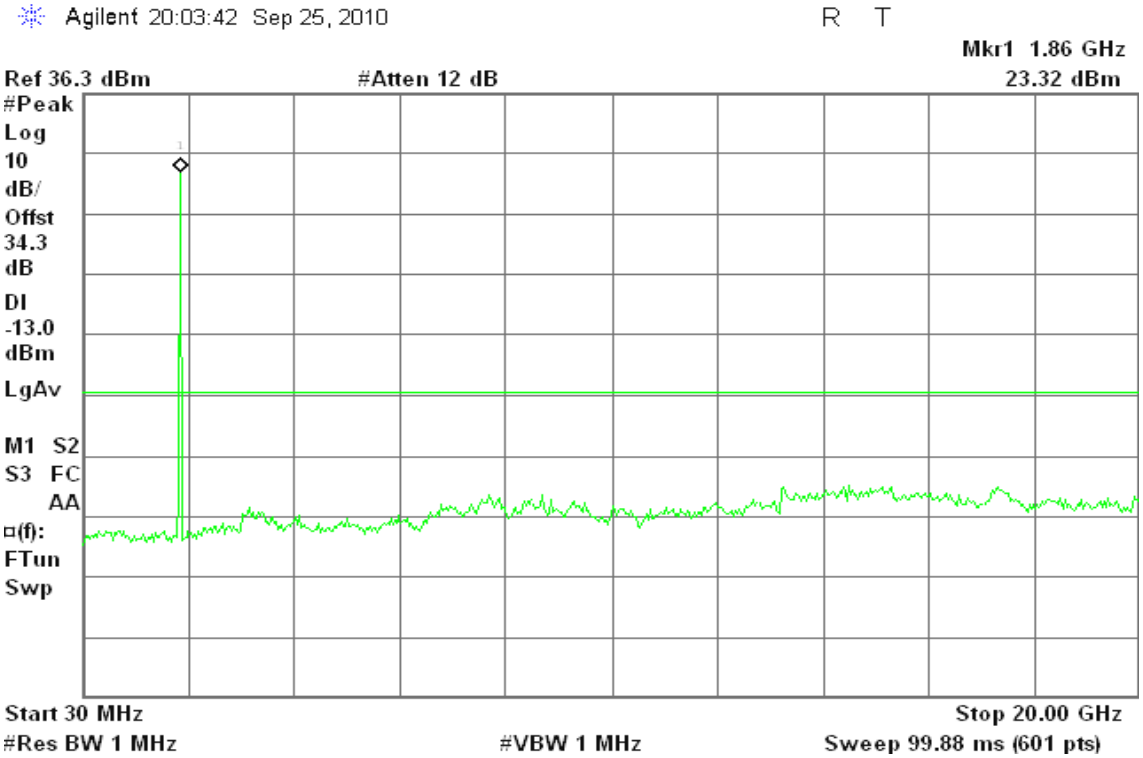


Figure 19-2: Out of Band emission at antenna terminals – WCDMA CH Mid

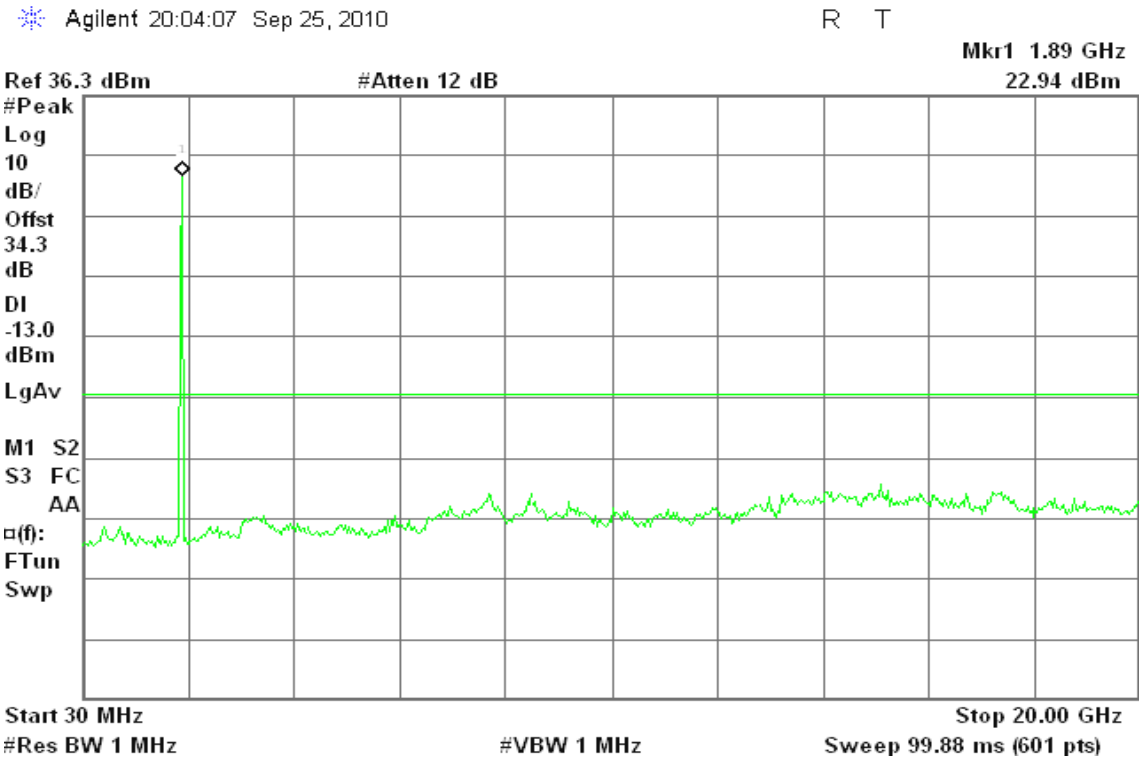
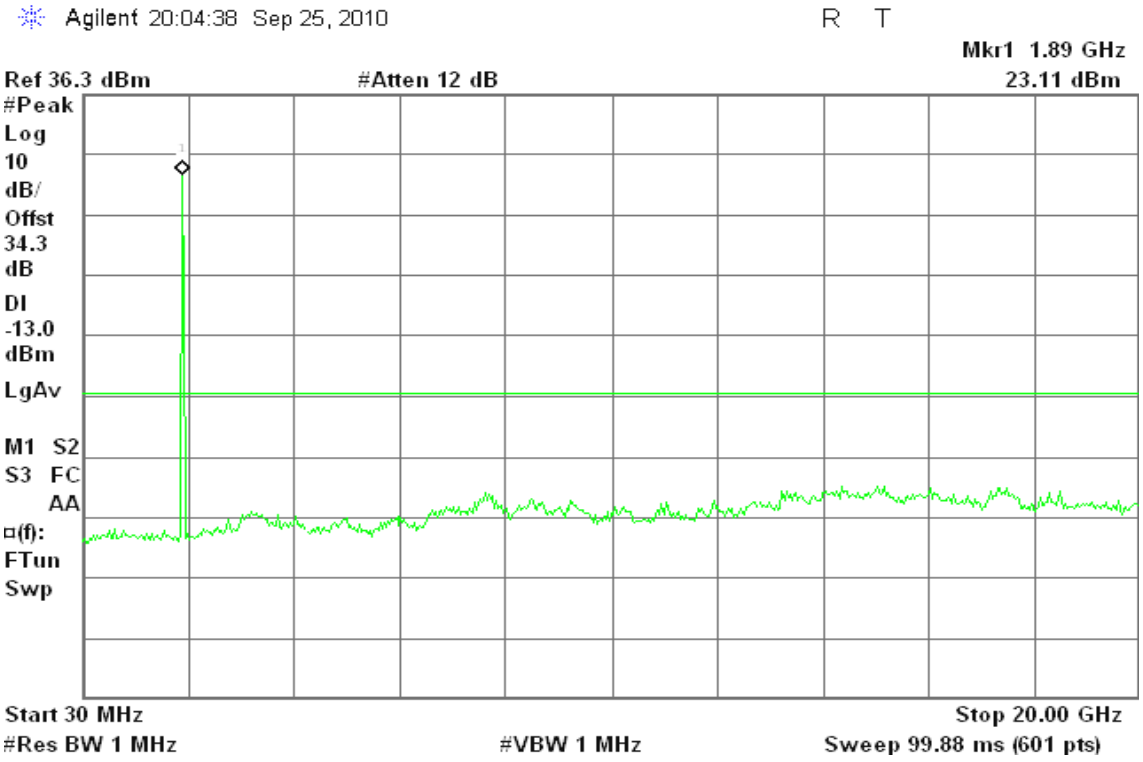


Figure 19-3: Out of Band emission at antenna terminals – WCDMA CH High



WCDMA Band V

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

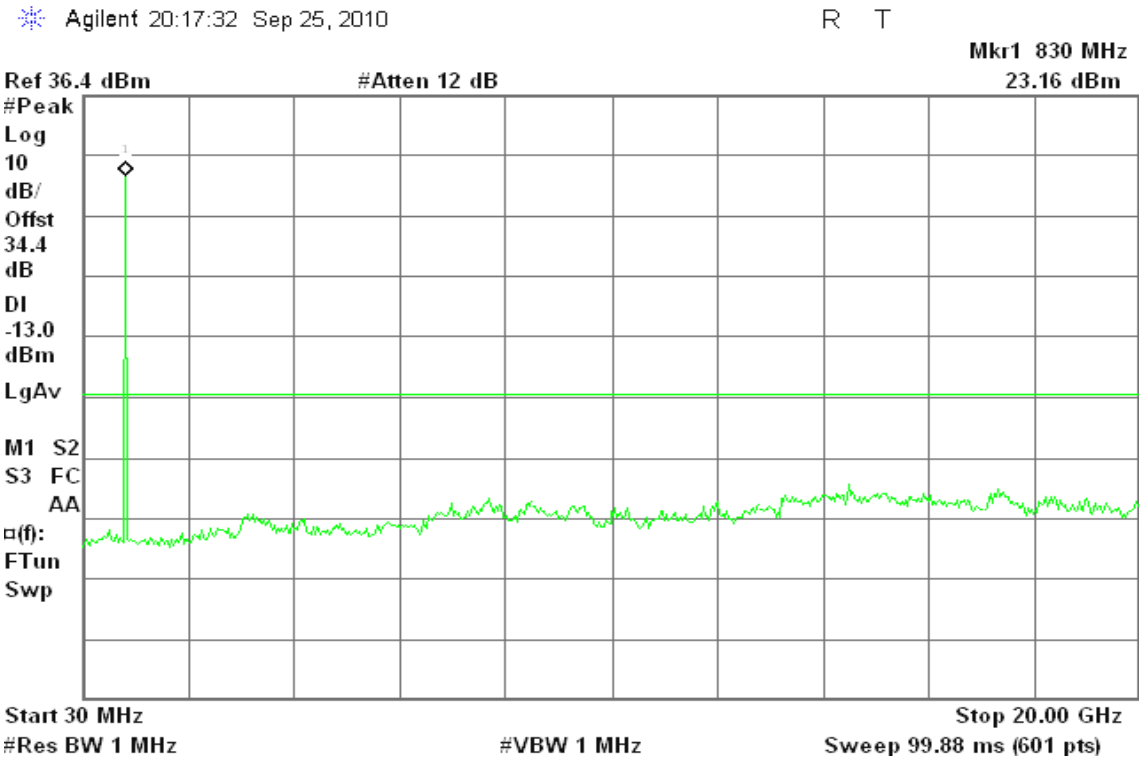


Figure 20-2: Out of Band emission at antenna terminals – WCDMA CH Mid

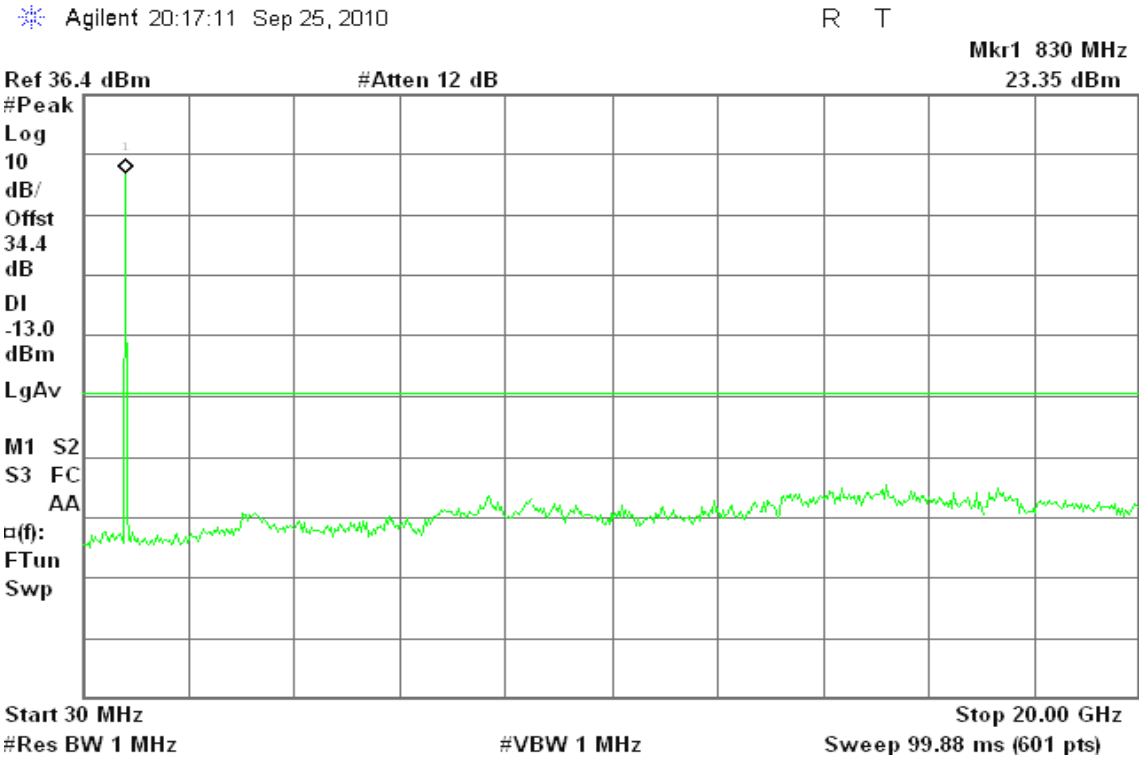
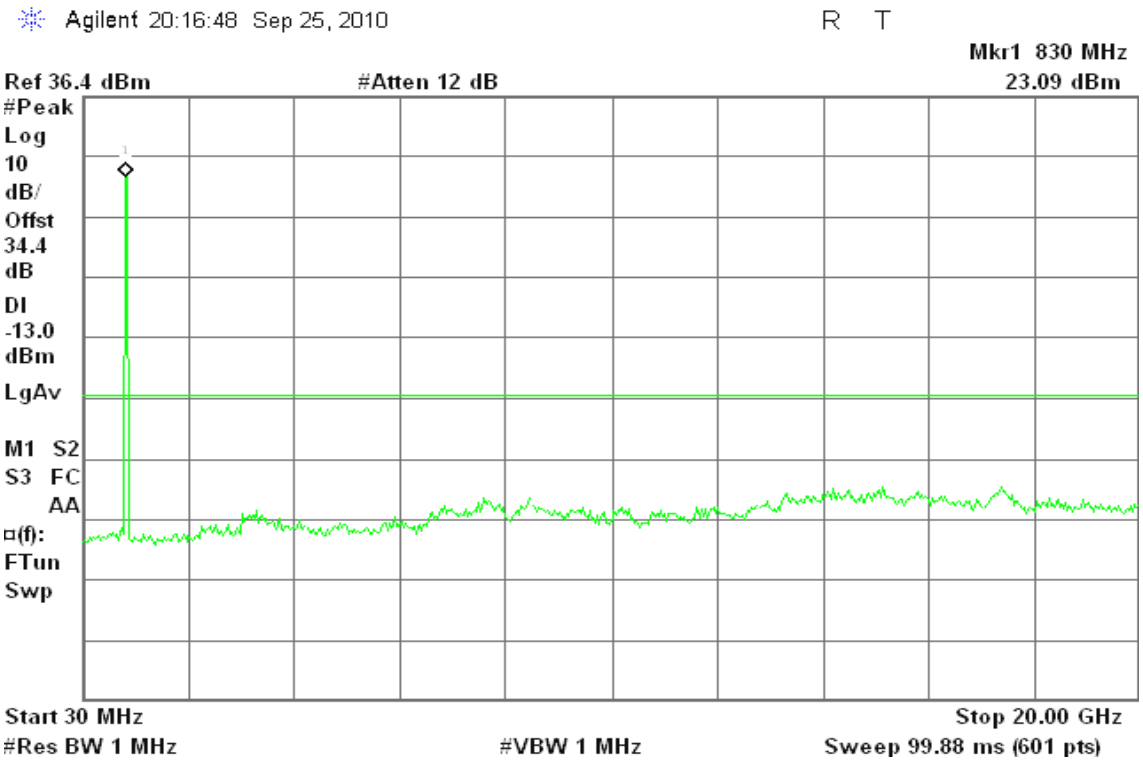


Figure 20-3: Out of Band emission at antenna terminals – WCDMA CH High



WCDMA Band II

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

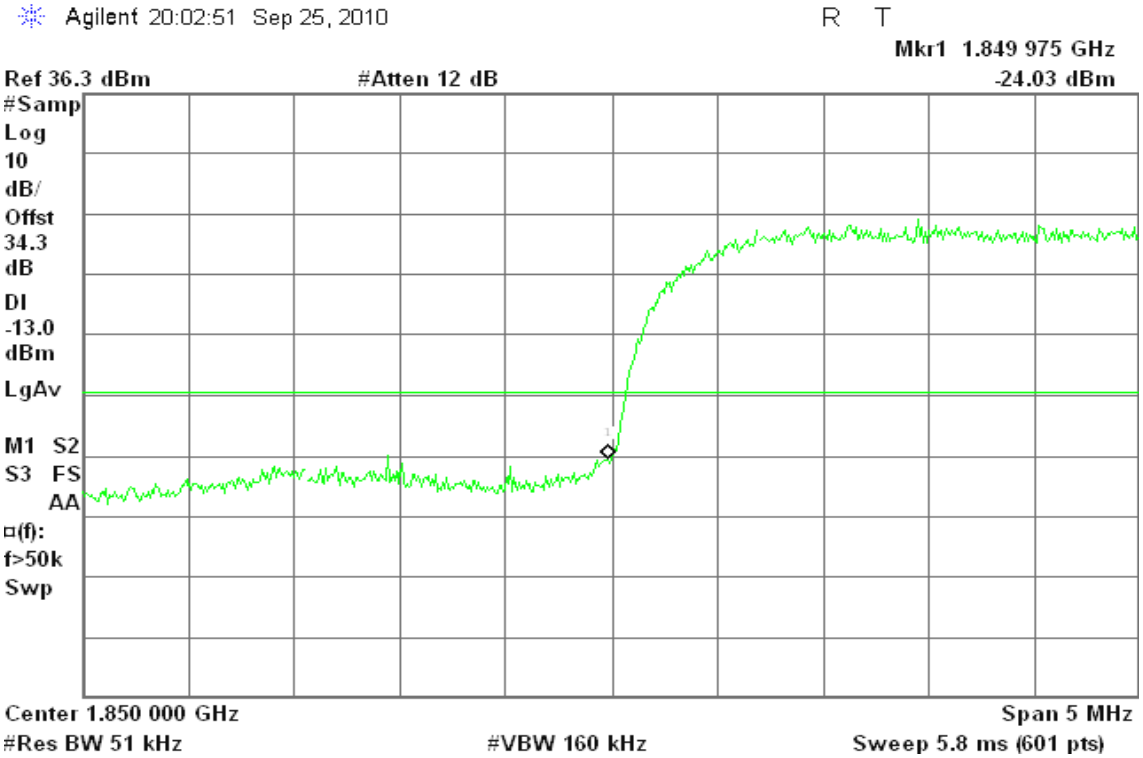
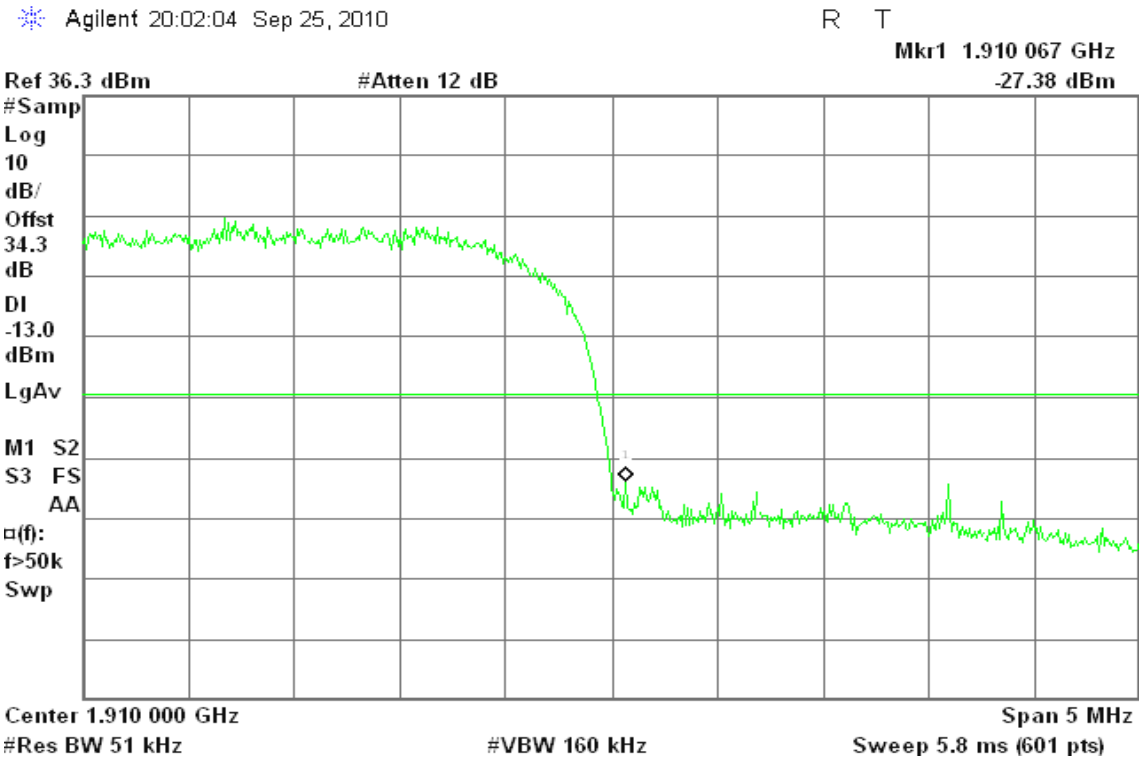


Figure 21-2: Band Edge emissions –WCDMA CH High



WCDMA Band V

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

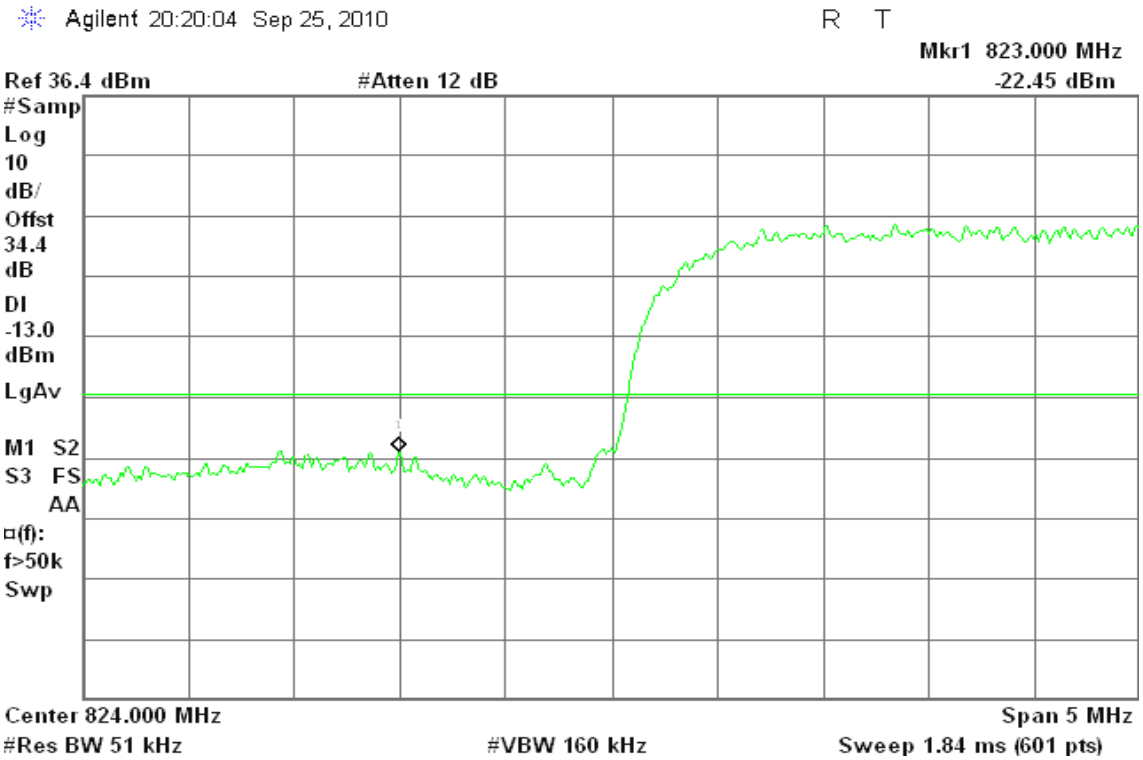
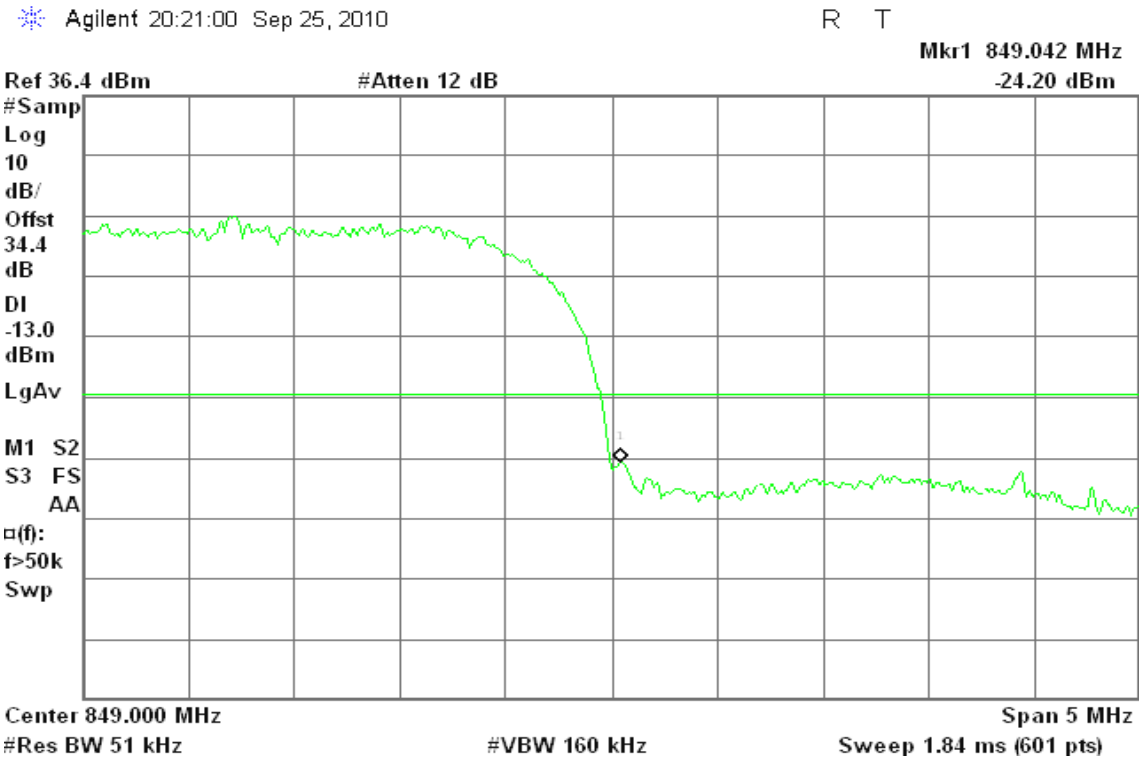


Figure 22-2: Band Edge emissions –WCDMA CH High



WCDMA / HSDPA Band II

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

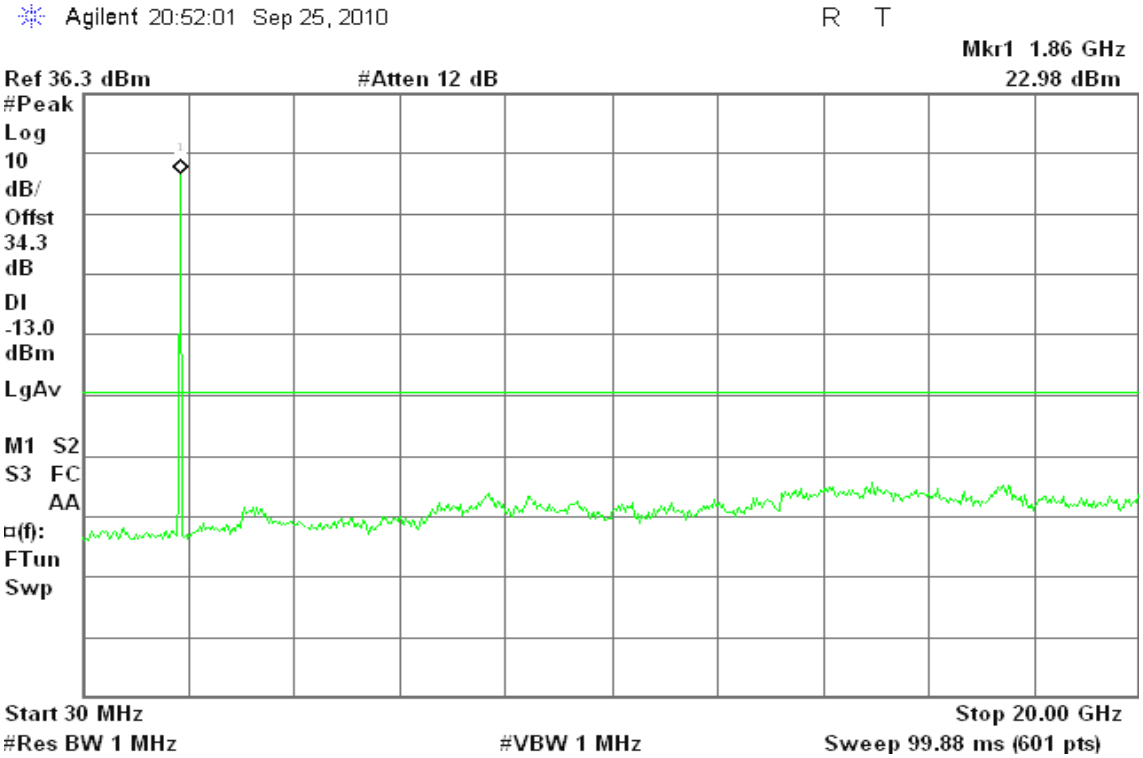


Figure 23-2: Out of Band emission at antenna terminals – HSDPA CH Mid

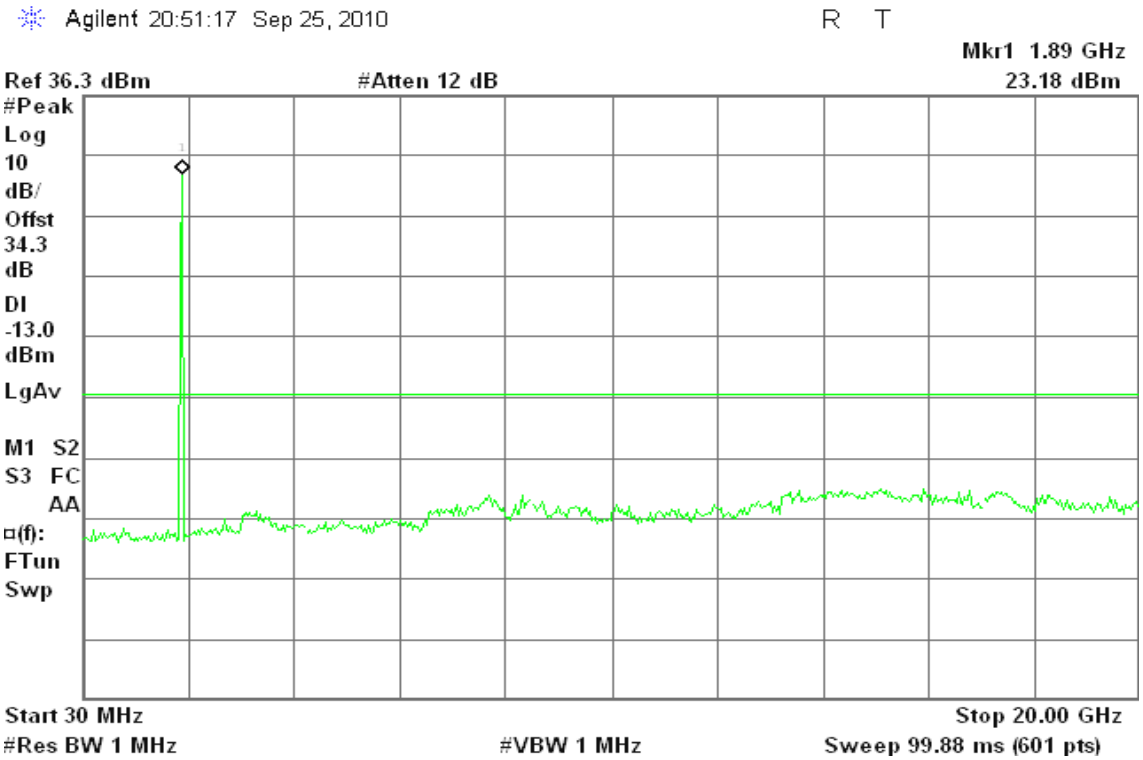
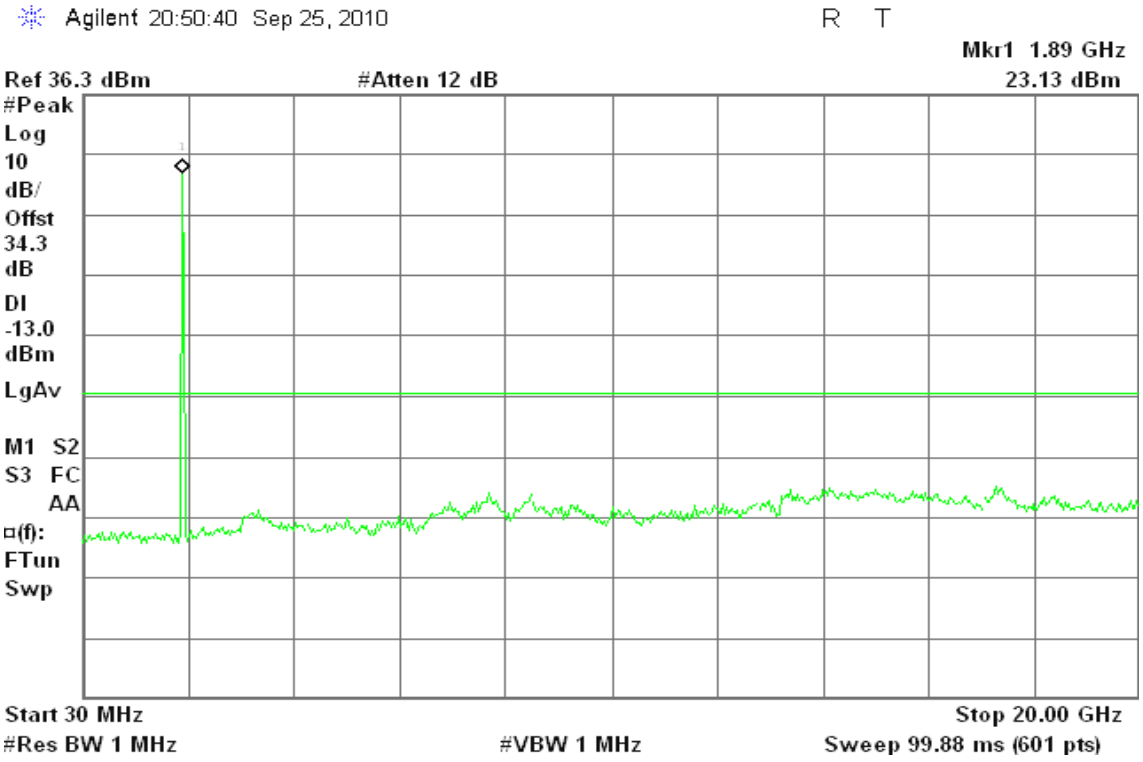


Figure 23-3: Out of Band emission at antenna terminals – HSDPA CH High



WCDMA / HSDPA Band V

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

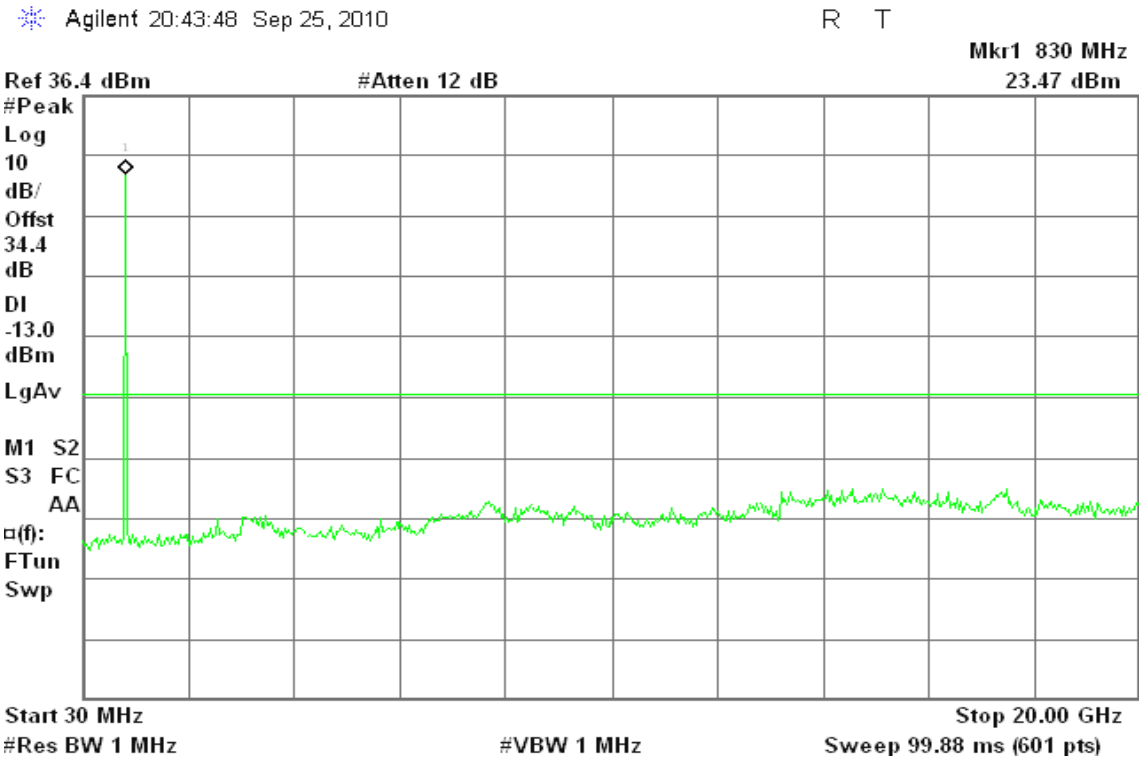


Figure 24-2: Out of Band emission at antenna terminals – HSDPA CH Mid

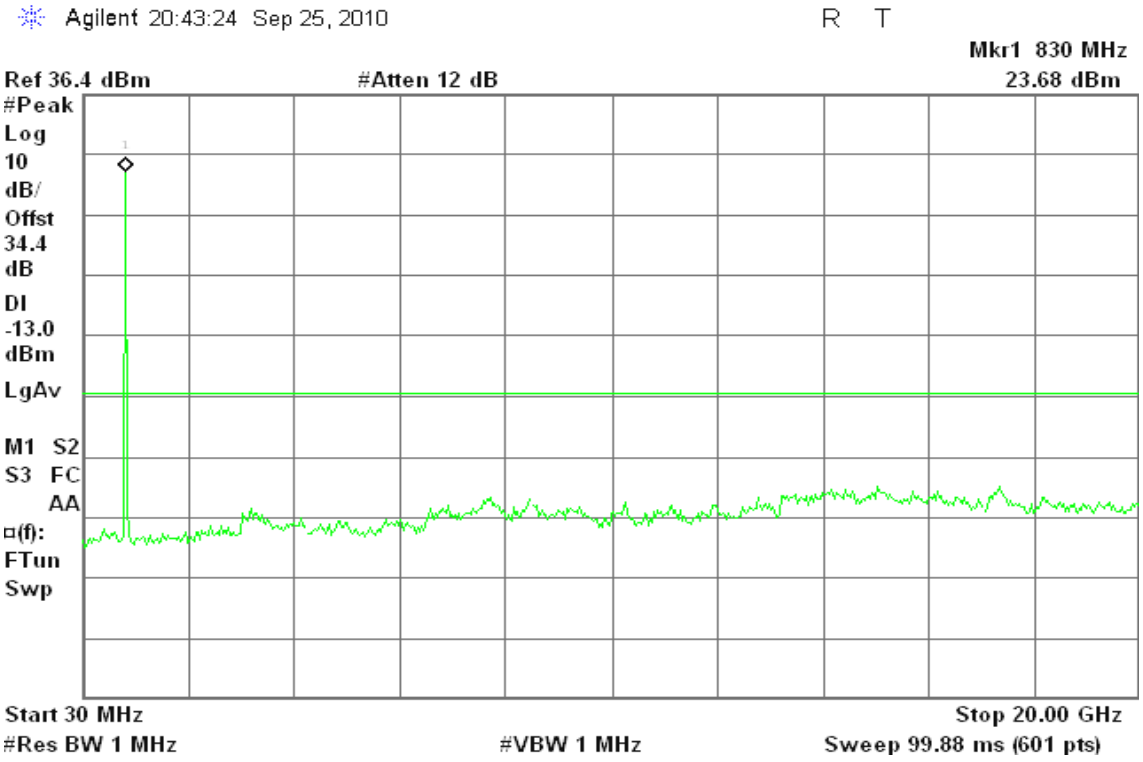
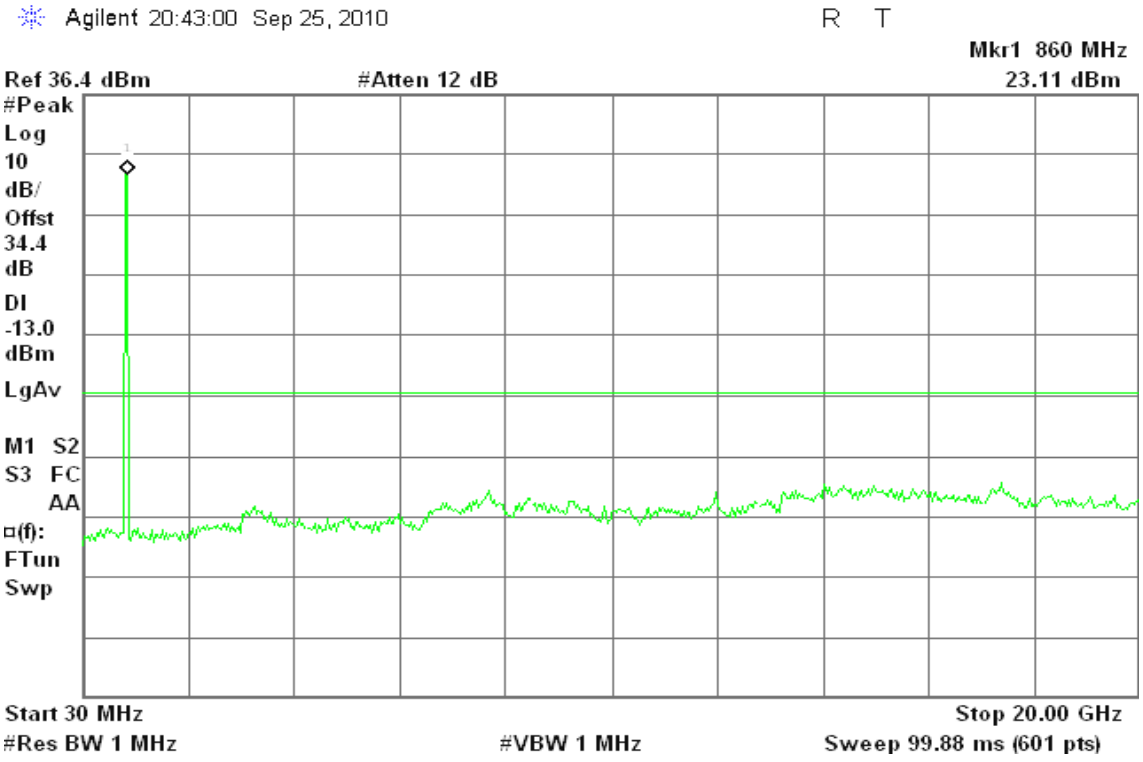


Figure 24-3: Out of Band emission at antenna terminals – HSDPA CH High



WCDMA / HSDPA Band II

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

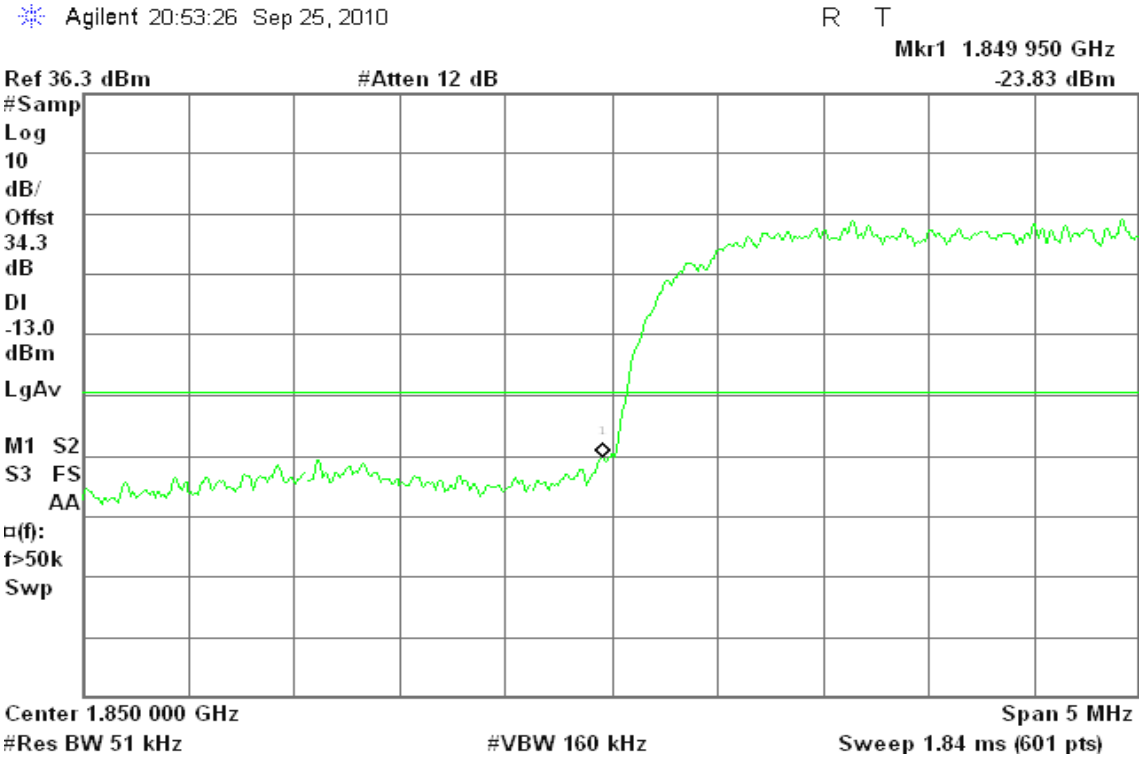
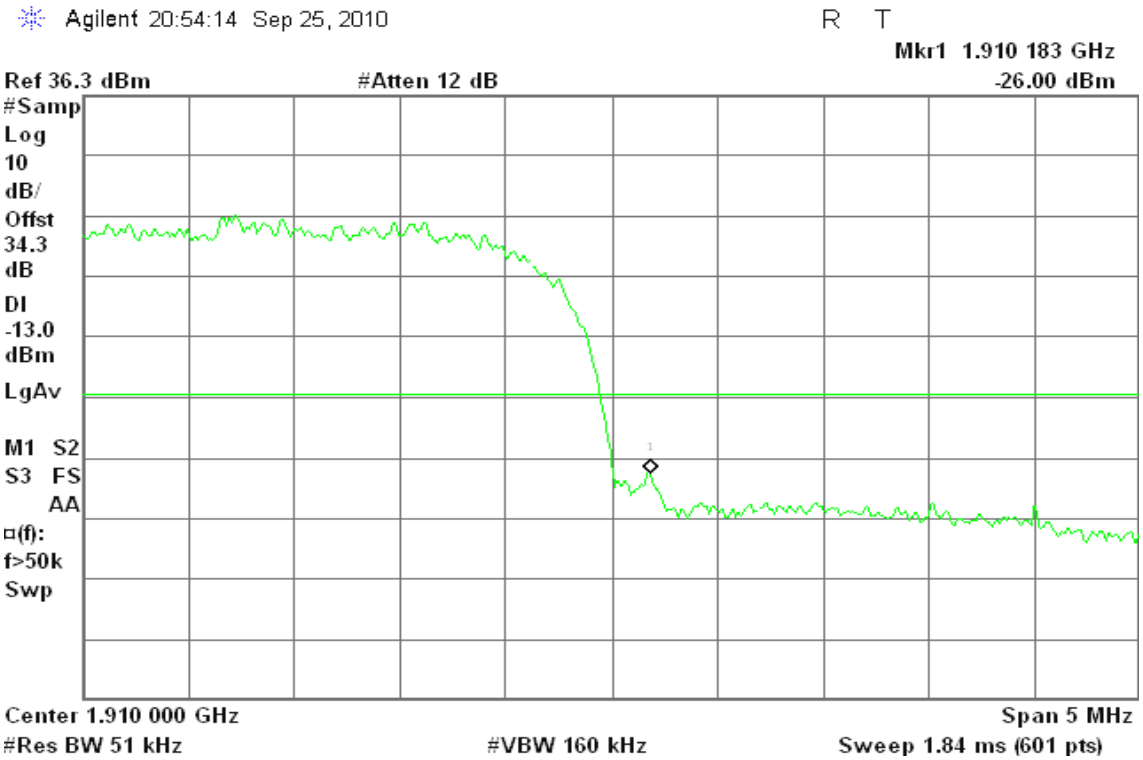


Figure 25-2: Band Edge emissions – HSDPA CH High



WCDMA / HSDPA Band V

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

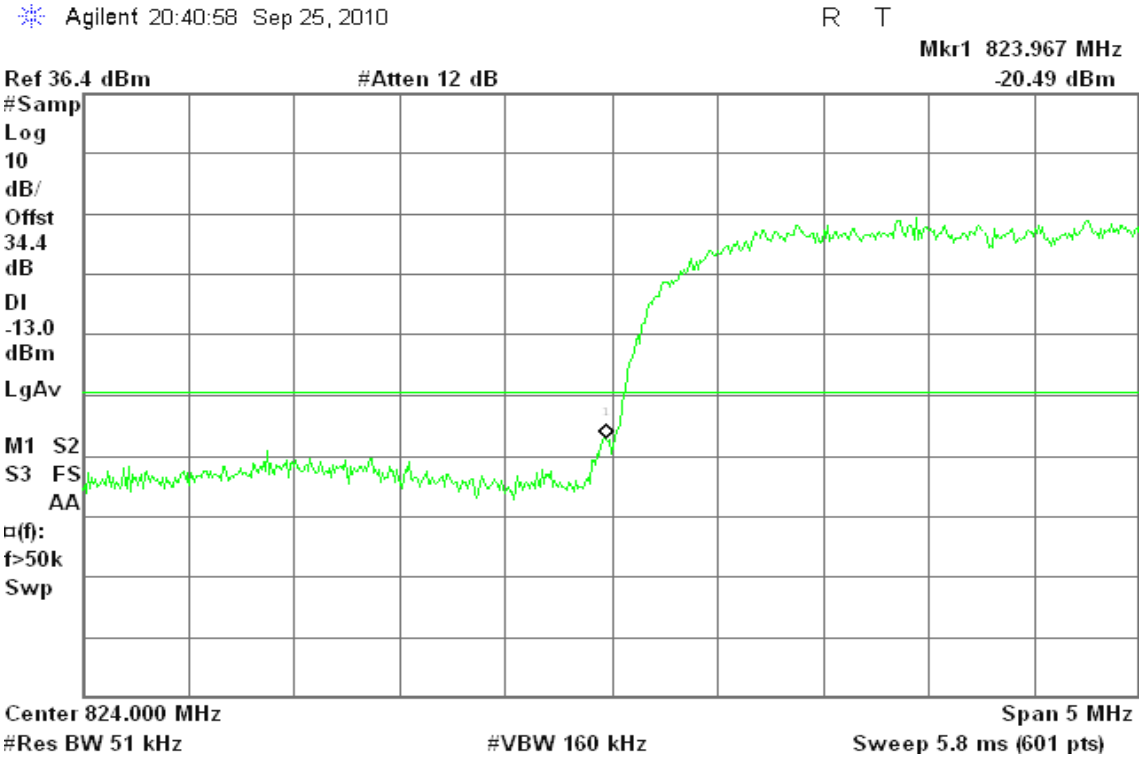
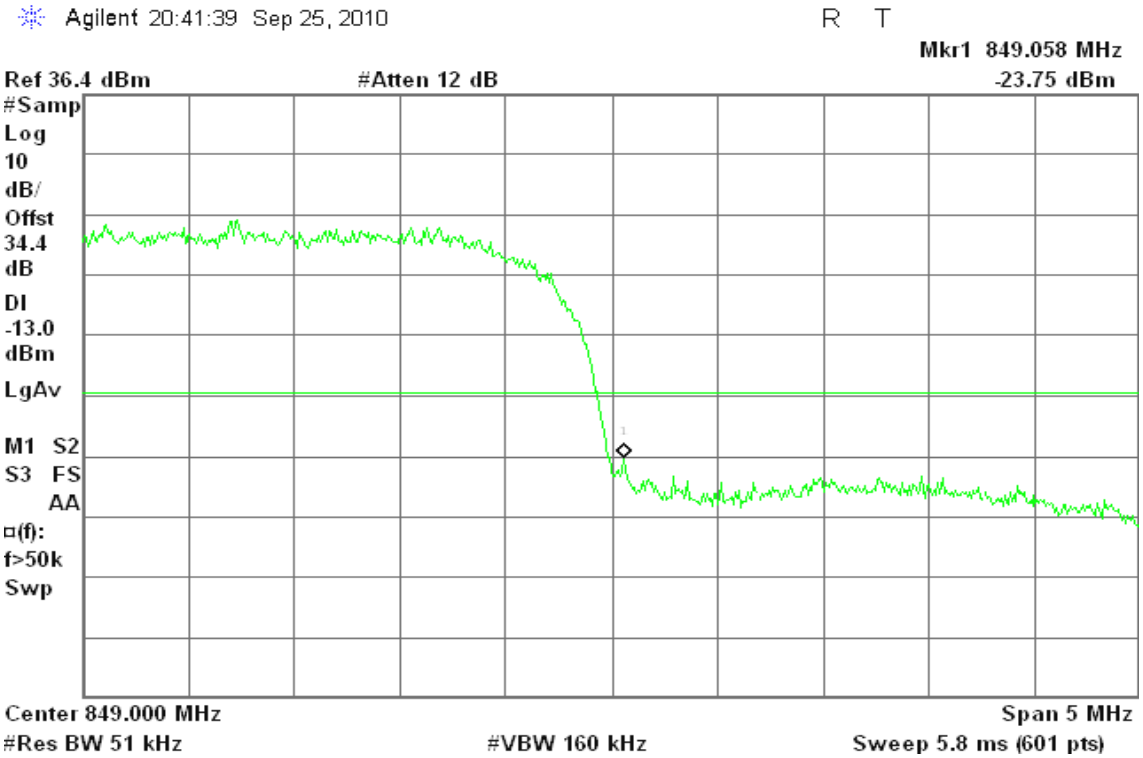


Figure 26-2: Band Edge emissions – HSDPA CH High



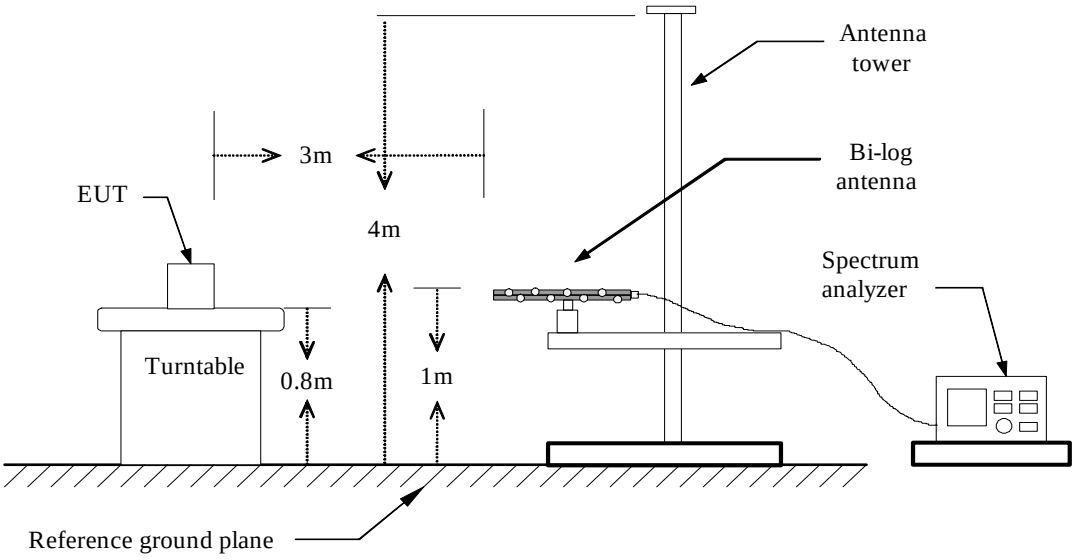
7.6FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

LIMIT

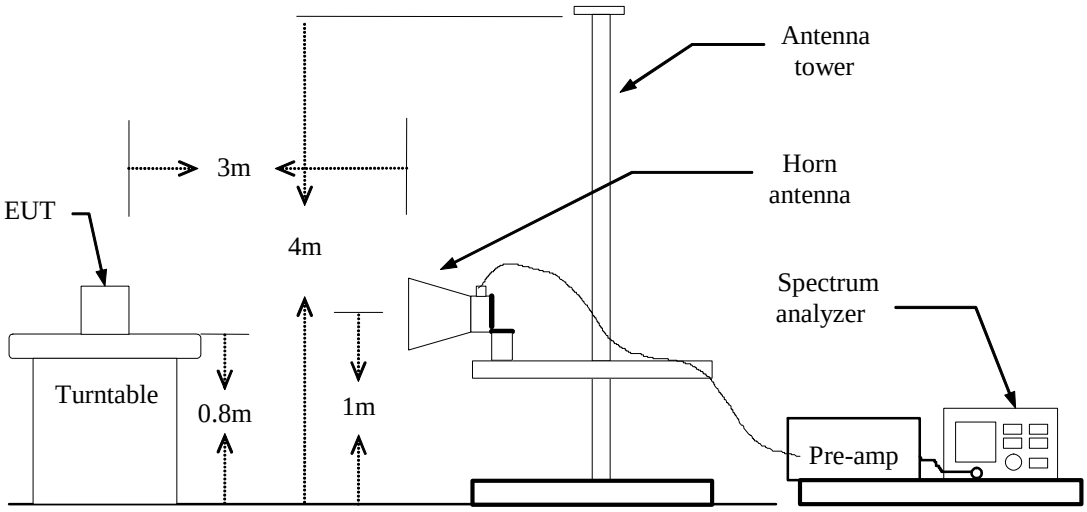
According to FCC §2.1053

Test Configuration

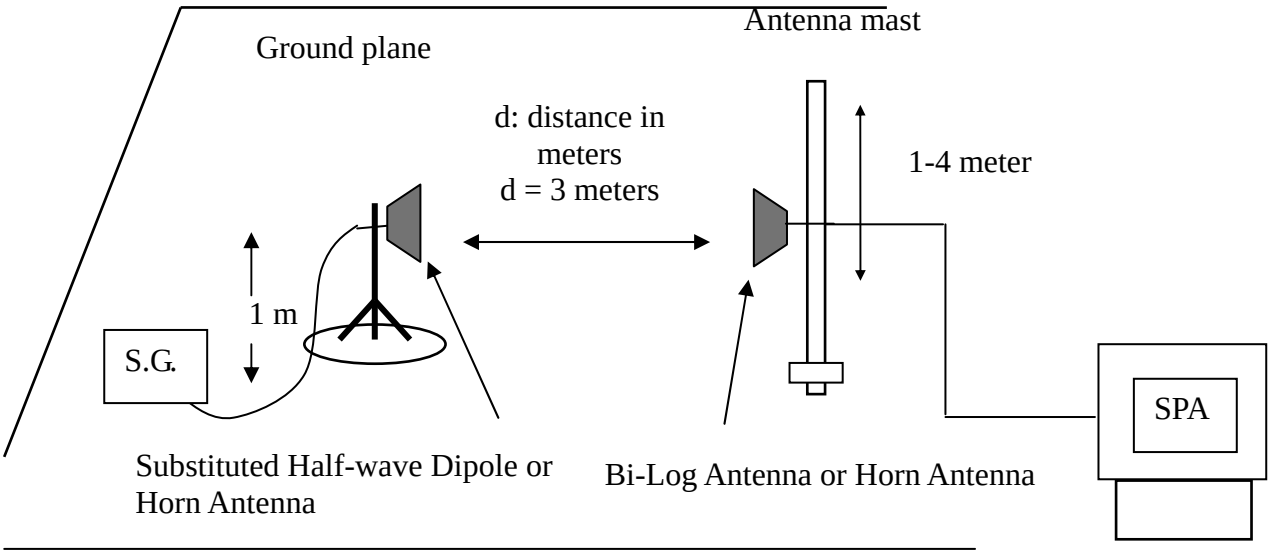
Below 1 GHz



Above 1 GHz



Substituted Method Test Set-up



TEST PROCEDURE

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

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

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

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

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

TEST RESULTS

Refer to the attached tabular data sheets.

Radiated Spurious Emission Measurement Result / Below 1GHz

Operation Mode: GSM 850 / TX / CH 128 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
45.52	V	-52.53	-13.35	-65.87	-13.00	-52.87
99.84	V	-46.60	-18.10	-64.70	-13.00	-51.70
398.60	V	-57.85	-12.15	-70.00	-13.00	-57.00
408.30	V	-58.56	-11.56	-70.12	-13.00	-57.12
681.84	V	-61.37	-6.58	-67.95	-13.00	-54.95
924.34	V	-65.67	-3.68	-69.35	-13.00	-56.35
99.84	H	-45.83	-18.04	-63.87	-13.00	-50.87
132.82	H	-55.04	-14.26	-69.31	-13.00	-56.31
399.57	H	-56.28	-11.72	-67.99	-13.00	-54.99
407.33	H	-53.77	-11.28	-65.06	-13.00	-52.06
512.09	H	-60.90	-8.65	-69.55	-13.00	-56.55
681.84	H	-60.19	-6.57	-66.76	-13.00	-53.76

Remark:

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

Operation Mode: GSM 850 / TX / CH 190 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
49.40	V	-49.76	-16.29	-66.05	-13.00	-53.05
76.56	V	-57.41	-18.32	-75.73	-13.00	-62.73
130.88	V	-47.12	-12.79	-59.90	-13.00	-46.90
453.89	V	-56.83	-9.93	-66.76	-13.00	-53.76
522.76	V	-60.06	-8.41	-68.46	-13.00	-55.46
967.99	V	-61.97	-3.14	-65.11	-13.00	-52.11
130.88	H	-46.02	-14.14	-60.17	-13.00	-47.17
174.53	H	-64.67	-13.97	-78.64	-13.00	-65.64
333.61	H	-63.76	-13.93	-77.69	-13.00	-64.69
452.92	H	-54.48	-9.87	-64.34	-13.00	-51.34
522.76	H	-61.19	-8.52	-69.71	-13.00	-56.71
967.02	H	-61.47	-3.33	-64.79	-13.00	-51.79

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
48.43	V	-51.35	-15.56	-66.91	-13.00	-53.91
76.56	V	-58.53	-18.32	-76.85	-13.00	-63.85
161.92	V	-58.18	-14.34	-72.52	-13.00	-59.52
291.90	V	-67.42	-12.37	-79.79	-13.00	-66.79
382.11	V	-66.25	-12.93	-79.18	-13.00	-66.18
708.03	V	-68.68	-6.33	-75.00	-13.00	-62.00
41.64	H	-61.93	-11.68	-73.61	-13.00	-60.61
161.92	H	-49.85	-14.30	-64.15	-13.00	-51.15
414.12	H	-65.13	-10.88	-76.01	-13.00	-63.01
498.51	H	-64.40	-8.82	-73.22	-13.00	-60.22
585.81	H	-65.66	-7.83	-73.49	-13.00	-60.49
645.95	H	-63.11	-6.63	-69.75	-13.00	-56.75

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
99.84	V	-47.73	-18.10	-65.82	-13.00	-52.82
132.82	V	-57.45	-12.93	-70.38	-13.00	-57.38
399.57	V	-56.91	-12.10	-69.02	-13.00	-56.02
407.33	V	-58.90	-11.62	-70.52	-13.00	-57.52
512.09	V	-62.59	-8.54	-71.12	-13.00	-58.12
682.81	V	-64.93	-6.57	-71.50	-13.00	-58.50
99.84	H	-46.36	-18.04	-64.40	-13.00	-51.40
118.27	H	-57.45	-14.40	-71.85	-13.00	-58.85
136.70	H	-57.74	-14.51	-72.25	-13.00	-59.25
398.60	H	-57.54	-11.73	-69.27	-13.00	-56.27
407.33	H	-54.12	-11.28	-65.40	-13.00	-52.40
682.81	H	-62.18	-6.57	-68.74	-13.00	-55.74

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
44.55	V	-52.76	-12.92	-65.68	-13.00	-52.68
76.56	V	-56.30	-18.32	-74.62	-13.00	-61.62
130.88	V	-46.49	-12.79	-59.28	-13.00	-46.28
452.92	V	-56.29	-9.95	-66.24	-13.00	-53.24
523.73	V	-60.61	-8.40	-69.01	-13.00	-56.01
967.02	V	-63.01	-3.16	-66.17	-13.00	-53.17
44.55	H	-61.58	-11.72	-73.30	-13.00	-60.30
130.88	H	-46.08	-14.14	-60.23	-13.00	-47.23
174.53	H	-62.79	-13.97	-76.76	-13.00	-63.76
453.89	H	-55.48	-9.83	-65.31	-13.00	-52.31
522.76	H	-61.67	-8.52	-70.18	-13.00	-57.18
967.99	H	-63.04	-3.31	-66.35	-13.00	-53.35

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
45.52	V	-52.22	-13.35	-65.57	-13.00	-52.57
71.71	V	-57.03	-16.32	-73.36	-13.00	-60.36
160.95	V	-52.17	-14.31	-66.48	-13.00	-53.48
288.99	V	-66.37	-12.08	-78.44	-13.00	-65.44
550.89	V	-67.46	-8.08	-75.54	-13.00	-62.54
644.98	V	-66.76	-6.67	-73.43	-13.00	-60.43
44.55	H	-59.74	-11.72	-71.46	-13.00	-58.46
161.92	H	-48.72	-14.30	-63.03	-13.00	-50.03
452.92	H	-65.57	-9.87	-75.44	-13.00	-62.44
497.54	H	-63.26	-8.83	-72.09	-13.00	-59.09
585.81	H	-64.64	-7.83	-72.47	-13.00	-59.47
645.95	H	-59.85	-6.63	-66.48	-13.00	-53.48

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
46.49	V	-53.43	-14.08	-67.51	-13.00	-54.51
116.33	V	-63.79	-14.58	-78.37	-13.00	-65.37
193.93	V	-61.10	-14.90	-76.00	-13.00	-63.00
322.94	V	-59.01	-13.59	-72.60	-13.00	-59.60
384.05	V	-58.77	-12.84	-71.61	-13.00	-58.61
420.91	V	-61.96	-10.79	-72.76	-13.00	-59.76
45.52	H	-62.98	-12.08	-75.06	-13.00	-62.06
115.36	H	-62.45	-15.05	-77.50	-13.00	-64.50
181.32	H	-60.40	-14.27	-74.67	-13.00	-61.67
215.27	H	-57.16	-15.28	-72.45	-13.00	-59.45
328.76	H	-56.60	-14.04	-70.64	-13.00	-57.64
389.87	H	-57.05	-11.88	-68.93	-13.00	-55.93

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
45.52	V	-52.86	-13.35	-66.21	-13.00	-53.21
150.28	V	-64.73	-13.10	-77.83	-13.00	-64.83
193.93	V	-60.54	-14.90	-75.45	-13.00	-62.45
230.79	V	-61.60	-14.86	-76.46	-13.00	-63.46
291.90	V	-60.46	-12.37	-72.82	-13.00	-59.82
371.44	V	-58.00	-13.02	-71.02	-13.00	-58.02
51.34	H	-60.12	-15.32	-75.44	-13.00	-62.44
178.41	H	-60.13	-14.18	-74.30	-13.00	-61.30
212.36	H	-56.59	-15.24	-71.83	-13.00	-58.83
313.24	H	-57.25	-14.23	-71.48	-13.00	-58.48
322.94	H	-56.70	-14.16	-70.86	-13.00	-57.86
384.05	H	-55.83	-11.97	-67.80	-13.00	-54.80

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
45.52	V	-52.49	-13.35	-65.83	-13.00	-52.83
114.39	V	-62.17	-15.01	-77.18	-13.00	-64.18
202.66	V	-61.14	-14.80	-75.94	-13.00	-62.94
288.99	V	-62.27	-12.08	-74.35	-13.00	-61.35
334.58	V	-58.26	-13.61	-71.87	-13.00	-58.87
359.80	V	-57.27	-13.02	-70.29	-13.00	-57.29
43.58	H	-62.19	-11.71	-73.90	-13.00	-60.90
181.32	H	-59.69	-14.27	-73.96	-13.00	-60.96
215.27	H	-57.35	-15.28	-72.63	-13.00	-59.63
304.51	H	-56.42	-14.25	-70.67	-13.00	-57.67
325.85	H	-56.22	-14.10	-70.32	-13.00	-57.32
378.23	H	-55.30	-12.13	-67.43	-13.00	-54.43

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
44.55	V	-54.80	-12.92	-67.72	-13.00	-54.72
72.68	V	-59.49	-16.72	-76.22	-13.00	-63.22
114.39	V	-64.35	-15.01	-79.36	-13.00	-66.36
276.38	V	-67.44	-12.38	-79.82	-13.00	-66.82
381.14	V	-66.72	-12.98	-79.69	-13.00	-66.69
851.59	V	-69.11	-4.54	-73.66	-13.00	-60.66
44.55	H	-62.10	-11.72	-73.82	-13.00	-60.82
69.77	H	-59.71	-17.82	-77.53	-13.00	-64.53
184.23	H	-61.66	-14.29	-75.95	-13.00	-62.95
333.61	H	-64.46	-13.93	-78.40	-13.00	-65.40
363.68	H	-66.40	-12.88	-79.28	-13.00	-66.28
452.92	H	-68.04	-9.87	-77.91	-13.00	-64.91

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
44.55	V	-61.82	-11.72	-73.54	-13.00	-60.54
191.02	V	-56.63	-14.24	-70.87	-13.00	-57.87
332.64	V	-61.91	-13.95	-75.86	-13.00	-62.86
355.92	V	-62.95	-13.22	-76.17	-13.00	-63.17
498.51	V	-64.72	-8.82	-73.54	-13.00	-60.54
635.28	V	-68.16	-6.68	-74.83	-13.00	-61.83
44.55	H	-53.96	-12.92	-66.88	-13.00	-53.88
72.68	H	-59.46	-16.72	-76.18	-13.00	-63.18
125.06	H	-65.97	-13.23	-79.20	-13.00	-66.20
237.58	H	-64.50	-14.43	-78.93	-13.00	-65.93
666.32	H	-68.99	-6.76	-75.75	-13.00	-62.75
826.37	H	-68.77	-4.71	-73.47	-13.00	-60.47

Remark:

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

Operation Mode: GPRS 1900 / TX / CH 810 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
45.52	V	-62.26	-12.08	-74.34	-13.00	-61.34
158.04	V	-63.64	-14.33	-77.97	-13.00	-64.97
213.33	V	-54.48	-15.26	-69.74	-13.00	-56.74
286.08	V	-68.08	-13.10	-81.18	-13.00	-68.18
413.15	V	-61.37	-10.94	-72.31	-13.00	-59.31
630.43	V	-69.31	-6.73	-76.05	-13.00	-63.05
45.52	H	-53.24	-13.35	-66.59	-13.00	-53.59
73.65	H	-58.95	-17.12	-76.07	-13.00	-63.07
149.31	H	-66.68	-13.10	-79.78	-13.00	-66.78
228.85	H	-66.10	-15.05	-81.15	-13.00	-68.15
397.63	H	-64.50	-12.19	-76.69	-13.00	-63.69
459.71	H	-68.30	-9.79	-78.09	-13.00	-65.09

Remark:

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

Operation Mode: EDGE 850 / TX / CH 128 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
47.46	V	-52.56	-14.82	-67.38	-13.00	-54.38
99.84	V	-47.84	-18.10	-65.94	-13.00	-52.94
132.82	V	-61.98	-12.93	-74.91	-13.00	-61.91
399.57	V	-61.05	-12.10	-73.15	-13.00	-60.15
408.30	V	-58.76	-11.56	-70.31	-13.00	-57.31
512.09	V	-61.77	-8.54	-70.31	-13.00	-57.31
99.84	H	-45.30	-18.04	-63.34	-13.00	-50.34
132.82	H	-57.63	-14.26	-71.89	-13.00	-58.89
399.57	H	-55.55	-11.72	-67.27	-13.00	-54.27
407.33	H	-54.95	-11.28	-66.23	-13.00	-53.23
512.09	H	-62.44	-8.65	-71.09	-13.00	-58.09
682.81	H	-62.16	-6.57	-68.72	-13.00	-55.72

Remark:

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

Operation Mode: EDGE 850 / TX / CH 190 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
44.55	V	-53.82	-12.92	-66.74	-13.00	-53.74
117.30	V	-62.65	-14.36	-77.01	-13.00	-64.01
130.88	V	-47.18	-12.79	-59.96	-13.00	-46.96
452.92	V	-55.11	-9.95	-65.06	-13.00	-52.06
522.76	V	-66.06	-8.41	-74.47	-13.00	-61.47
967.02	V	-64.77	-3.16	-67.93	-13.00	-54.93
130.88	H	-47.55	-14.14	-61.69	-13.00	-48.69
176.47	H	-60.44	-14.07	-74.52	-13.00	-61.52
452.92	H	-60.39	-9.87	-70.25	-13.00	-57.25
522.76	H	-62.69	-8.52	-71.21	-13.00	-58.21
548.95	H	-66.39	-8.07	-74.46	-13.00	-61.46
967.02	H	-63.79	-3.33	-67.12	-13.00	-54.12

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
45.52	V	-52.16	-13.35	-65.50	-13.00	-52.50
77.53	V	-56.90	-18.72	-75.62	-13.00	-62.62
160.95	V	-59.10	-14.31	-73.41	-13.00	-60.41
245.34	V	-63.91	-14.54	-78.44	-13.00	-65.44
463.59	V	-66.10	-9.64	-75.74	-13.00	-62.74
670.20	V	-67.85	-6.71	-74.56	-13.00	-61.56
41.64	H	-61.59	-11.68	-73.28	-13.00	-60.28
160.95	H	-52.80	-14.37	-67.18	-13.00	-54.18
298.69	H	-54.08	-14.11	-68.19	-13.00	-55.19
333.61	H	-63.25	-13.93	-77.19	-13.00	-64.19
394.72	H	-65.45	-11.80	-77.25	-13.00	-64.25
644.98	H	-64.58	-6.63	-71.21	-13.00	-58.21

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
44.55	V	-57.51	-12.92	-70.43	-13.00	-57.43
70.74	V	-61.78	-15.92	-77.71	-13.00	-64.71
152.22	V	-54.37	-13.34	-67.71	-13.00	-54.71
283.17	V	-66.85	-12.11	-78.96	-13.00	-65.96
474.26	V	-68.21	-9.21	-77.42	-13.00	-64.42
633.34	V	-69.05	-6.72	-75.78	-13.00	-62.78
43.58	H	-62.82	-11.71	-74.53	-13.00	-61.53
132.82	H	-64.38	-14.26	-78.64	-13.00	-65.64
169.68	H	-66.48	-13.75	-80.23	-13.00	-67.23
293.84	H	-67.03	-13.56	-80.59	-13.00	-67.59
326.82	H	-65.61	-14.08	-79.68	-13.00	-66.68
745.86	H	-68.92	-5.65	-74.57	-13.00	-61.57

Remark:

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

Operation Mode: EDGE 1900 / TX / CH 661 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
43.58	V	-57.05	-12.85	-69.90	-13.00	-56.90
77.53	V	-60.00	-18.72	-78.72	-13.00	-65.72
131.85	V	-64.59	-12.86	-77.45	-13.00	-64.45
202.66	V	-66.72	-14.80	-81.53	-13.00	-68.53
525.67	V	-67.26	-8.38	-75.64	-13.00	-62.64
757.50	V	-68.60	-5.74	-74.35	-13.00	-61.35
45.52	H	-62.96	-12.08	-75.04	-13.00	-62.04
132.82	H	-64.77	-14.26	-79.03	-13.00	-66.03
195.87	H	-63.94	-13.76	-77.70	-13.00	-64.70
452.92	H	-66.62	-9.87	-76.49	-13.00	-63.49
561.56	H	-68.52	-7.79	-76.30	-13.00	-63.30
679.90	H	-68.63	-6.57	-75.20	-13.00	-62.20

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
44.55	V	-57.52	-12.92	-70.43	-13.00	-57.43
73.65	V	-59.65	-17.12	-76.77	-13.00	-63.77
180.35	V	-59.35	-15.28	-74.63	-13.00	-61.63
287.05	V	-67.39	-12.09	-79.48	-13.00	-66.48
448.07	V	-67.94	-10.07	-78.01	-13.00	-65.01
540.22	V	-68.63	-8.25	-76.87	-13.00	-63.87
42.61	H	-63.25	-11.70	-74.94	-13.00	-61.94
100.81	H	-51.24	-17.85	-69.09	-13.00	-56.09
176.47	H	-63.23	-14.07	-77.30	-13.00	-64.30
277.35	H	-62.95	-13.27	-76.23	-13.00	-63.23
380.17	H	-66.13	-12.04	-78.17	-13.00	-65.17
452.92	H	-67.13	-9.87	-77.00	-13.00	-64.00

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
43.58	V	-51.23	-12.85	-64.09	-13.00	-51.09
76.56	V	-56.69	-18.32	-75.02	-13.00	-62.02
135.73	V	-63.61	-13.16	-76.77	-13.00	-63.77
218.18	V	-59.97	-16.18	-76.15	-13.00	-63.15
652.74	V	-66.95	-6.76	-73.71	-13.00	-60.71
840.92	V	-66.98	-4.67	-71.65	-13.00	-58.65
42.61	H	-60.42	-11.70	-72.11	-13.00	-59.11
77.53	H	-58.31	-20.49	-78.80	-13.00	-65.80
128.94	H	-63.45	-14.08	-77.53	-13.00	-64.53
237.58	H	-64.92	-13.84	-78.76	-13.00	-65.76
383.08	H	-63.64	-11.99	-75.63	-13.00	-62.63
427.70	H	-64.16	-10.47	-74.62	-13.00	-61.62

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
45.52	V	-50.71	-13.35	-64.06	-13.00	-51.06
75.59	V	-55.90	-17.92	-73.82	-13.00	-60.82
121.18	V	-62.57	-13.63	-76.20	-13.00	-63.20
204.60	V	-62.47	-15.26	-77.72	-13.00	-64.72
245.34	V	-63.57	-14.54	-78.10	-13.00	-65.10
290.93	V	-65.42	-12.22	-77.64	-13.00	-64.64
48.43	H	-53.35	-14.06	-67.41	-13.00	-54.41
76.56	H	-56.93	-20.15	-77.07	-13.00	-64.07
402.48	H	-63.18	-11.56	-74.75	-13.00	-61.75
427.70	H	-64.04	-10.47	-74.51	-13.00	-61.51
622.67	H	-65.76	-6.83	-72.58	-13.00	-59.58
680.87	H	-66.04	-6.57	-72.61	-13.00	-59.61

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
43.58	V	-51.84	-12.85	-64.70	-13.00	-51.70
76.56	V	-57.56	-18.32	-75.89	-13.00	-62.89
122.15	V	-63.37	-13.53	-76.90	-13.00	-63.90
188.11	V	-63.79	-15.35	-79.14	-13.00	-66.14
563.50	V	-67.14	-7.94	-75.08	-13.00	-62.08
922.40	V	-67.64	-3.68	-71.32	-13.00	-58.32
43.58	H	-61.53	-11.71	-73.24	-13.00	-60.24
73.65	H	-58.57	-19.13	-77.70	-13.00	-64.70
139.61	H	-63.18	-14.69	-77.87	-13.00	-64.87
277.35	H	-64.39	-13.27	-77.67	-13.00	-64.67
452.92	H	-65.71	-9.87	-75.57	-13.00	-62.57
773.02	H	-66.49	-5.42	-71.92	-13.00	-58.92

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
46.49	V	-52.03	-14.08	-66.11	-13.00	-53.11
108.57	V	-56.43	-16.29	-72.72	-13.00	-59.72
245.34	V	-67.84	-14.54	-82.37	-13.00	-69.37
280.26	V	-69.22	-12.13	-81.35	-13.00	-68.35
417.03	V	-66.25	-11.01	-77.26	-13.00	-64.26
517.91	V	-68.39	-8.46	-76.84	-13.00	-63.84
45.52	H	-60.59	-12.08	-72.67	-13.00	-59.67
107.60	H	-55.93	-16.65	-72.58	-13.00	-59.58
245.34	H	-66.86	-14.20	-81.06	-13.00	-68.06
329.73	H	-66.72	-14.02	-80.73	-13.00	-67.73
417.03	H	-66.11	-10.71	-76.82	-13.00	-63.82
773.99	H	-67.55	-5.41	-72.96	-13.00	-59.96

Remark:

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

Operation Mode: WCDMA Band V / TX / CH 4182 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
45.52	V	-51.18	-13.35	-64.53	-13.00	-51.53
76.56	V	-57.43	-18.32	-75.75	-13.00	-62.75
195.87	V	-65.20	-14.67	-79.87	-13.00	-66.87
221.09	V	-65.30	-15.97	-81.27	-13.00	-68.27
426.73	V	-66.77	-10.63	-77.41	-13.00	-64.41
715.79	V	-68.84	-6.18	-75.02	-13.00	-62.02
46.49	H	-60.10	-12.74	-72.84	-13.00	-59.84
76.56	H	-59.68	-20.15	-79.82	-13.00	-66.82
127.97	H	-58.01	-14.08	-72.09	-13.00	-59.09
161.92	H	-66.09	-14.30	-80.39	-13.00	-67.39
452.92	H	-67.20	-9.87	-77.07	-13.00	-64.07
737.13	H	-68.39	-5.76	-74.16	-13.00	-61.16

Remark:

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

Operation Mode: WCDMA Band V / TX / CH 4233 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
45.52	V	-50.65	-13.35	-64.00	-13.00	-51.00
76.56	V	-57.90	-18.32	-76.22	-13.00	-63.22
121.18	V	-64.66	-13.63	-78.28	-13.00	-65.28
199.75	V	-66.02	-14.21	-80.22	-13.00	-67.22
285.11	V	-66.95	-12.10	-79.05	-13.00	-66.05
646.92	V	-68.33	-6.70	-75.03	-13.00	-62.03
45.52	H	-61.33	-12.08	-73.42	-13.00	-60.42
123.12	H	-64.11	-14.04	-78.15	-13.00	-65.15
153.19	H	-63.35	-14.05	-77.40	-13.00	-64.40
205.57	H	-63.89	-14.39	-78.27	-13.00	-65.27
326.82	H	-61.28	-14.08	-75.36	-13.00	-62.36
571.26	H	-67.80	-7.83	-75.63	-13.00	-62.63

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:**	September 16, 2010
Temperature:	25°C	**Tested by:**	David Lee
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
44.55	V	-54.83	-12.92	-67.75	-13.00	-54.75
136.70	V	-64.77	-13.23	-78.00	-13.00	-65.00
175.50	V	-58.94	-14.97	-73.91	-13.00	-60.91
356.89	V	-65.81	-13.10	-78.92	-13.00	-65.92
515.00	V	-67.37	-8.50	-75.87	-13.00	-62.87
978.66	V	-68.55	-2.91	-71.46	-13.00	-58.46
43.58	H	-61.24	-11.71	-72.95	-13.00	-59.95
56.19	H	-60.44	-16.02	-76.46	-13.00	-63.46
194.90	H	-64.81	-13.85	-78.67	-13.00	-65.67
290.93	H	-65.69	-13.23	-78.92	-13.00	-65.92
452.92	H	-65.79	-9.87	-75.66	-13.00	-62.66
720.64	H	-67.72	-6.35	-74.06	-13.00	-61.06

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
43.58	V	-54.28	-12.85	-67.13	-13.00	-54.13
77.53	V	-57.83	-18.72	-76.55	-13.00	-63.55
122.15	V	-64.80	-13.53	-78.33	-13.00	-65.33
187.14	V	-65.84	-15.34	-81.19	-13.00	-68.19
281.23	V	-66.05	-12.12	-78.17	-13.00	-65.17
484.93	V	-67.83	-8.91	-76.74	-13.00	-63.74
43.58	H	-61.34	-11.71	-73.05	-13.00	-60.05
73.65	H	-59.15	-19.13	-78.27	-13.00	-65.27
136.70	H	-60.38	-14.51	-74.89	-13.00	-61.89
153.19	H	-59.82	-14.05	-73.87	-13.00	-60.87
565.44	H	-67.11	-7.80	-74.92	-13.00	-61.92
663.41	H	-67.75	-6.65	-74.41	-13.00	-61.41

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:**	September 16, 2010
Temperature:	25°C	**Tested by:**	David Lee
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
44.55	V	-55.37	-12.92	-68.29	-13.00	-55.29
75.59	V	-58.67	-17.92	-76.59	-13.00	-63.59
127.97	V	-64.34	-12.93	-77.27	-13.00	-64.27
191.02	V	-65.69	-15.25	-80.94	-13.00	-67.94
275.41	V	-66.49	-12.45	-78.94	-13.00	-65.94
588.72	V	-67.19	-7.84	-75.02	-13.00	-62.02
40.67	H	-62.63	-11.67	-74.30	-13.00	-61.30
74.62	H	-59.65	-19.47	-79.11	-13.00	-66.11
136.70	H	-56.34	-14.51	-70.85	-13.00	-57.85
195.87	H	-64.79	-13.76	-78.55	-13.00	-65.55
452.92	H	-66.70	-9.87	-76.57	-13.00	-63.57
818.61	H	-67.76	-4.85	-72.62	-13.00	-59.62

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
43.58	V	-54.09	-12.85	-66.95	-13.00	-53.95
74.62	V	-57.92	-17.52	-75.44	-13.00	-62.44
121.18	V	-63.80	-13.63	-77.43	-13.00	-64.43
346.22	V	-64.14	-13.43	-77.57	-13.00	-64.57
521.79	V	-67.03	-8.41	-75.45	-13.00	-62.45
705.12	V	-68.19	-6.38	-74.57	-13.00	-61.57
43.58	H	-60.62	-11.71	-72.34	-13.00	-59.34
107.60	H	-56.28	-16.65	-72.93	-13.00	-59.93
287.05	H	-65.50	-13.11	-78.60	-13.00	-65.60
414.12	H	-64.72	-10.88	-75.60	-13.00	-62.60
474.26	H	-66.15	-9.14	-75.30	-13.00	-62.30
681.84	H	-66.47	-6.57	-73.03	-13.00	-60.03

Remark:

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

Operation Mode:	WCDMA / HSDPA Band V / TX / CH 4182	**Test Date:**	September 16, 2010
Temperature:	25°C	**Tested by:**	David Lee
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
43.58	V	-52.52	-12.85	-65.37	-13.00	-52.37
76.56	V	-55.56	-18.32	-73.89	-13.00	-60.89
127.00	V	-62.22	-13.03	-75.25	-13.00	-62.25
255.04	V	-58.49	-14.57	-73.06	-13.00	-60.06
322.94	V	-59.72	-13.59	-73.32	-13.00	-60.32
583.87	V	-64.95	-7.90	-72.85	-13.00	-59.85
43.58	H	-60.01	-11.71	-71.72	-13.00	-58.72
129.91	H	-51.15	-14.09	-65.24	-13.00	-52.24
287.05	H	-64.43	-13.11	-77.54	-13.00	-64.54
341.37	H	-63.37	-13.75	-77.12	-13.00	-64.12
452.92	H	-65.00	-9.87	-74.86	-13.00	-61.86
613.94	H	-67.03	-7.13	-74.16	-13.00	-61.16

Remark:

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

Operation Mode:	WCDMA / HSDPA Band V / TX / CH 4233	**Test Date:**	September 16, 2010
Temperature:	25°C	**Tested by:**	David Lee
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
42.61	V	-54.67	-12.79	-67.46	-13.00	-54.46
76.56	V	-57.90	-18.32	-76.22	-13.00	-63.22
126.03	V	-63.53	-13.13	-76.66	-13.00	-63.66
277.35	V	-66.74	-12.31	-79.05	-13.00	-66.05
610.06	V	-67.20	-7.31	-74.51	-13.00	-61.51
658.56	V	-66.98	-6.82	-73.81	-13.00	-60.81
43.58	H	-61.21	-11.71	-72.92	-13.00	-59.92
122.15	H	-63.84	-14.04	-77.87	-13.00	-64.87
200.72	H	-64.54	-13.48	-78.02	-13.00	-65.02
286.08	H	-66.53	-13.10	-79.63	-13.00	-66.63
452.92	H	-66.33	-9.87	-76.19	-13.00	-63.19
623.64	H	-67.20	-6.82	-74.02	-13.00	-61.02

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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1651.00	V	-44.75	1.61	-43.14	-13.00	-30.14
2470.00	V	-46.91	4.41	-42.50	-13.00	-29.50
N/A						
1651.00	H	-42.74	1.42	-41.32	-13.00	-28.32
2470.00	H	-47.81	4.43	-43.37	-13.00	-30.37
N/A						

Remark:

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

Operation Mode: GSM 850 / TX / CH 190 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-45.95	1.63	-44.33	-13.00	-31.33
2512.00	V	-43.74	4.62	-39.12	-13.00	-26.12
4185.00	V	-60.45	8.72	-51.73	-13.00	-38.73
7531.00	V	-59.03	17.08	-41.95	-13.00	-28.95
N/A						
1672.00	H	-46.78	1.40	-45.38	-13.00	-32.38
2512.00	H	-45.32	4.69	-40.63	-13.00	-27.63
4185.00	H	-59.03	8.49	-50.54	-13.00	-37.54
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1700.00	V	-41.11	1.64	-39.47	-13.00	-26.47
2547.00	V	-43.20	4.76	-38.45	-13.00	-25.45
7643.00	V	-60.85	17.38	-43.47	-13.00	-30.47
N/A						
1700.00	H	-34.45	1.38	-33.06	-13.00	-20.06
2547.00	H	-44.00	4.82	-39.17	-13.00	-26.17
3394.00	H	-60.37	8.76	-51.60	-13.00	-38.60
4248.00	H	-61.23	8.59	-52.64	-13.00	-39.64
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1651.00	V	-47.97	1.61	-46.36	-13.00	-33.36
2470.00	V	-47.93	4.41	-43.52	-13.00	-30.52
N/A						
1651.00	H	-45.88	1.42	-44.47	-13.00	-31.47
2470.00	H	-48.90	4.43	-44.47	-13.00	-31.47
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-49.47	1.63	-47.84	-13.00	-34.84
2512.00	V	-44.41	4.62	-39.79	-13.00	-26.79
7531.00	V	-60.52	17.08	-43.45	-13.00	-30.45
N/A						
1672.00	H	-47.81	1.40	-46.40	-13.00	-33.40
2512.00	H	-44.35	4.69	-39.66	-13.00	-26.66
7531.00	H	-62.51	16.94	-45.56	-13.00	-32.56
N/A						

Remark:

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

Operation Mode: GPRS 850 / TX / CH 251 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1700.00	V	1.64	-40.21	-13.00	-27.21	-30.28
2547.00	V	4.76	-38.24	-13.00	-25.24	-36.83
7643.00	V	17.38	-43.55	-13.00	-30.55	-34.16
N/A						
1700.00	H	-33.80	1.38	-32.41	-13.00	-19.41
2547.00	H	-41.95	4.82	-37.12	-13.00	-24.12
3394.00	H	-56.35	8.76	-47.58	-13.00	-34.58
4248.00	H	-60.81	8.59	-52.23	-13.00	-39.23
7643.00	H	-62.20	17.25	-44.95	-13.00	-31.95
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3702.00	V	-55.92	9.11	-46.82	-13.00	-33.82
5550.00	V	-44.30	10.32	-33.98	-13.00	-20.98
N/A						
3702.00	H	-54.81	8.89	-45.92	-13.00	-32.92
5550.00	H	-52.27	10.12	-42.14	-13.00	-29.14
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
2981.00	V	-59.98	6.49	-53.48	-13.00	-40.48
3758.00	V	-56.30	8.98	-47.33	-13.00	-34.33
5641.00	V	-50.89	10.40	-40.48	-13.00	-27.48
7524.00	V	-61.27	17.06	-44.21	-13.00	-31.21
N/A						
3758.00	H	-59.65	8.76	-50.89	-13.00	-37.89
5641.00	H	-55.79	10.23	-45.56	-13.00	-32.56
N/A						

Remark:

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

Operation Mode: GSM 1900 / TX / CH 810 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3821.00	V	-54.37	8.83	-45.54	-13.00	-32.54
5270.00	V	-61.89	10.35	-51.54	-13.00	-38.54
5732.00	V	-63.18	10.48	-52.69	-13.00	-39.69
7643.00	V	-61.57	17.38	-44.18	-13.00	-31.18
N/A						
3821.00	H	-58.20	8.62	-49.59	-13.00	-36.59
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
5550.00	V	-49.72	10.32	-39.40	-13.00	-26.40
7398.00	V	-61.32	16.59	-44.73	-13.00	-31.73
N/A						
3702.00	H	-59.18	8.89	-50.29	-13.00	-37.29
5550.00	H	-52.54	10.12	-42.42	-13.00	-29.42
N/A						

Remark:

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

Operation Mode: GPRS 1900 / TX / CH 661 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3758.00	V	-62.00	8.98	-53.03	-13.00	-40.03
5641.00	V	-53.78	10.40	-43.38	-13.00	-30.38
N/A						
3758.00	H	-60.16	8.76	-51.40	-13.00	-38.40
5641.00	H	-56.26	10.23	-46.03	-13.00	-33.03
N/A						

Remark:

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

Operation Mode: GPRS 1900 / TX / CH 810 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3821.00	V	-58.32	8.83	-49.49	-13.00	-36.49
5732.00	V	-62.87	10.48	-52.39	-13.00	-39.39
7643.00	V	-60.80	17.38	-43.42	-13.00	-30.42
N/A						
3821.00	H	-55.14	8.62	-46.52	-13.00	-33.52
3905.00	H	-61.79	8.43	-53.36	-13.00	-40.36
N/A						

Remark:

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

Operation Mode: EDGE 850 / TX / CH 128 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1651.00	V	-52.34	1.61	-50.72	-13.00	-37.72
2470.00	V	-53.39	4.41	-48.98	-13.00	-35.98
7384.00	V	-62.77	16.54	-46.23	-13.00	-33.23
7769.00	V	-61.93	17.73	-44.20	-13.00	-31.20
N/A						
1651.00	H	-47.34	1.42	-45.93	-13.00	-32.93
2470.00	H	-51.71	4.43	-47.28	-13.00	-34.28
N/A						

Remark:

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

Operation Mode: EDGE 850 / TX / CH 190 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1672.00	V	-52.13	1.63	-50.50	-13.00	-37.50
2512.00	V	-48.23	4.62	-43.61	-13.00	-30.61
7370.00	V	-62.02	16.48	-45.54	-13.00	-32.54
N/A						
1672.00	H	-50.40	1.40	-49.00	-13.00	-36.00
2512.00	H	-46.47	4.69	-41.78	-13.00	-28.78
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1700.00	V	-50.74	1.64	-49.10	-13.00	-36.10
2547.00	V	-51.34	4.76	-46.58	-13.00	-33.58
N/A						
1700.00	H	-50.21	1.38	-48.83	-13.00	-35.83
2547.00	H	-45.44	4.82	-40.62	-13.00	-27.62
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3702.00	V	-61.25	9.11	-52.15	-13.00	-39.15
5550.00	V	-46.85	10.32	-36.53	-13.00	-23.53
N/A						
3702.00	H	-60.81	8.89	-51.92	-13.00	-38.92
5550.00	H	-51.80	10.12	-41.67	-13.00	-28.67
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
5641.00	V	-54.68	10.40	-44.28	-13.00	-31.28
5851.00	V	-63.18	10.59	-52.59	-13.00	-39.59
N/A						
3758.00	H	-55.50	8.76	-46.74	-13.00	-33.74
5641.00	H	-60.69	10.23	-50.46	-13.00	-37.46
N/A						

Remark:

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

Operation Mode: EDGE 1900 / TX / CH 810 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
2701.00	V	-61.55	5.37	-56.18	-13.00	-43.18
3821.00	V	-61.62	8.83	-52.78	-13.00	-39.78
N/A						
3821.00	H	-56.11	8.62	-47.49	-13.00	-34.49
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3709.00	V	-60.21	9.09	-51.12	-13.00	-38.12
N/A						
3709.00	H	-57.16	8.87	-48.29	-13.00	-35.29
N/A						

Remark:

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

Operation Mode: WCDMA Band II / TX / CH 9400 **Test Date:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3646.00	V	-62.46	9.23	-53.22	-13.00	-40.22
N/A						
3681.00	H	-62.61	8.94	-53.68	-13.00	-40.68
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
5718.00	V	-63.16	10.47	-52.69	-13.00	-39.69
N/A						
5718.00	H	-63.65	10.31	-53.34	-13.00	-40.34
6551.00	H	-61.95	13.17	-48.77	-13.00	-35.77
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4920.00	V	-62.32	10.24	-52.09	-13.00	-39.09
6698.00	V	-63.02	13.88	-49.14	-13.00	-36.14
N/A						
4556.00	H	-62.11	9.10	-53.01	-13.00	-40.01
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
2064.00	V	-60.91	2.18	-58.73	-13.00	-45.73
5256.00	V	-62.68	10.35	-52.33	-13.00	-39.33
N/A						
2351.00	H	-61.15	3.60	-57.54	-13.00	-44.54
5039.00	H	-63.22	10.13	-53.09	-13.00	-40.09
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:** September 16, 2010

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

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

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1693.00	V	-55.84	1.64	-54.20	-13.00	-41.20
2547.00	V	-60.07	4.76	-55.31	-13.00	-42.31
4297.00	V	-61.17	8.90	-52.27	-13.00	-39.27
N/A						
1693.00	H	-53.90	1.39	-52.51	-13.00	-39.51
2540.00	H	-58.21	4.80	-53.42	-13.00	-40.42
N/A						

Remark:

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

Operation Mode:	WCDMA / HSDPA Band II / TX / CH 9262	**Test Date:**	September 16, 2010
Temperature:	25°C	**Tested by:**	David Lee
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3709.00	V	-56.81	9.09	-47.72	-13.00	-34.72
N/A						
3702.00	H	-52.77	8.89	-43.88	-13.00	-30.88
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:**	September 16, 2010
Temperature:	25°C	**Tested by:**	David Lee
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3765.00	V	-59.37	8.96	-50.41	-13.00	-37.41
5641.00	V	-61.53	10.40	-51.13	-13.00	-38.13
N/A						
3758.00	H	-59.52	8.76	-50.76	-13.00	-37.76
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:**	September 16, 2010
Temperature:	25°C	**Tested by:**	David Lee
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3814.00	V	-60.31	8.85	-51.47	-13.00	-38.47
5718.00	V	-58.53	10.47	-48.06	-13.00	-35.06
N/A						
3821.00	H	-59.02	8.62	-50.41	-13.00	-37.41
5718.00	H	-59.91	10.31	-49.60	-13.00	-36.60
N/A						

Remark:

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

Operation Mode:	WCDMA / HSDPA Band V / TX / CH 4132	**Test Date:**	September 16, 2010
Temperature:	25°C	**Tested by:**	David Lee
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3156.00	V	-60.50	7.51	-53.00	-13.00	-40.00
4353.00	V	-61.44	8.99	-52.45	-13.00	-39.45
N/A						
1658.00	H	-58.90	1.41	-57.48	-13.00	-44.48
3506.00	H	-60.92	9.34	-51.58	-13.00	-38.58
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:**	September 16, 2010
Temperature:	25°C	**Tested by:**	David Lee
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
2106.00	V	-60.78	2.41	-58.37	-13.00	-45.37
7034.00	V	-61.63	15.17	-46.46	-13.00	-33.46
N/A						
3611.00	H	-62.11	9.10	-53.01	-13.00	-40.01
4941.00	H	-62.15	10.00	-52.14	-13.00	-39.14
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:**	September 16, 2010
Temperature:	25°C	**Tested by:**	David Lee
Humidity:	50 % RH	**Polarity:**	Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
2540.00	V	-59.39	4.73	-54.66	-13.00	-41.66
3478.00	V	-61.31	9.44	-51.87	-13.00	-38.87
6866.00	V	-61.85	14.53	-47.33	-13.00	-34.33
N/A						
1693.00	H	-55.82	1.39	-54.44	-13.00	-41.44
2239.00	H	-60.32	2.82	-57.50	-13.00	-44.50
2547.00	H	-58.64	4.82	-53.82	-13.00	-40.82
3275.00	H	-60.48	8.11	-52.37	-13.00	-39.37
N/A						

Remark:

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

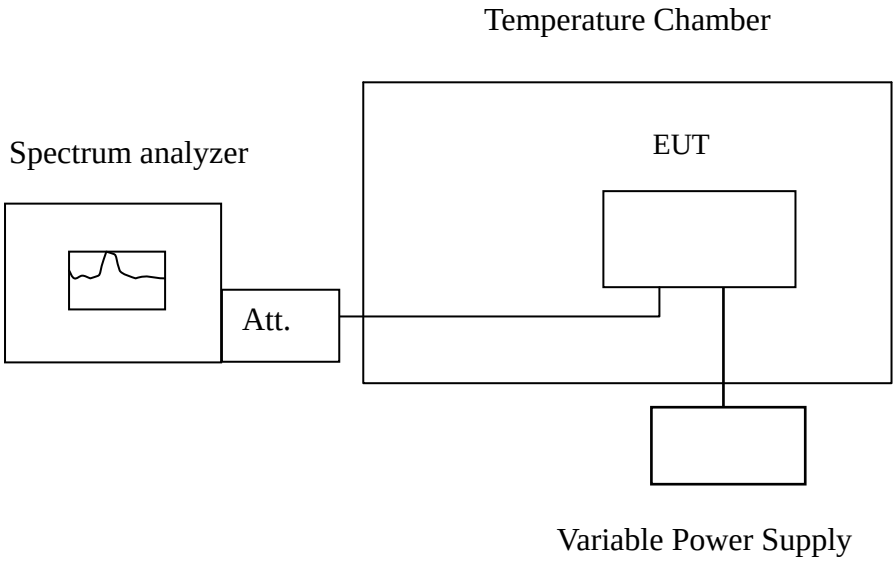
7.7FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

LIMIT

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

Frequency Tolerance: 2.5 ppm

Test Configuration



Remark: *Measurement setup for testing on Antenna connector*

TEST PROCEDURE

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

TEST RESULTS

No non-compliance noted.

Reference Frequency: GSM Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	836600041	65	2090
	40	836600036	60	
	30	836600029	53	
	20	836599976	0	
	10	836600034	58	
	0	836600020	44	
	-10	836600046	70	
	-20	836600039	63	
	-30	836600032	56	

Reference Frequency: GSM Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	1880000060	96	4700
	40	1880000054	90	
	30	1880000039	75	
	20	1879999964	0	
	10	1880000044	80	
	0	1880000063	99	
	-10	1880000059	95	
	-20	1880000041	77	
	-30	1880000034	70	

Reference Frequency: GPRS Mid Channel 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	836600011	26	2090
	40	836600013	28	
	30	836600009	24	
	20	836599985	0	
	10	836600016	31	
	0	836600007	22	
	-10	836600002	17	
	-20	836600019	34	
	-30	836600017	32	

Reference Frequency: GPRS Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	1880000052	112	4700
	40	1880000062	122	
	30	1880000051	111	
	20	1879999940	0	
	10	1880000039	99	
	0	1880000061	121	
	-10	1880000048	108	
	-20	1880000066	126	
	-30	1880000067	127	

Reference Frequency: EDGE Mid Channel 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	836600029	59	2090
	40	836600032	62	
	30	836600037	67	
	20	836599970	0	
	10	836600012	42	
	0	836600017	47	
	-10	836600022	52	
	-20	836600016	46	
	-30	836600019	49	

Reference Frequency: EDGE Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	1880000031	77	4700
	40	1880000039	85	
	30	1880000046	92	
	20	1879999954	0	
	10	1880000036	82	
	0	1880000040	86	
	-10	1880000029	75	
	-20	1880000033	79	
	-30	1880000049	95	

Reference Frequency: WCDMA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	1880000030	66	4700
	40	1880000016	52	
	30	1880000027	63	
	20	1879999964	0	
	10	1880000046	82	
	0	1880000030	66	
	-10	1880000012	48	
	-20	1880000017	53	
	-30	1880000031	67	

Reference Frequency: WCDMA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	836400011	15	2090
	40	836400003	7	
	30	836400007	11	
	20	836399996	0	
	10	836400012	16	
	0	836400013	17	
	-10	836400007	11	
	-20	836400025	29	
	-30	836400036	40	

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)
120	50	1880000030	66	4700
	40	1880000016	52	
	30	1880000027	63	
	20	1879999964	0	
	10	1880000046	82	
	0	1880000030	66	
	-10	1880000012	48	
	-20	1880000017	53	
	-30	1880000031	67	

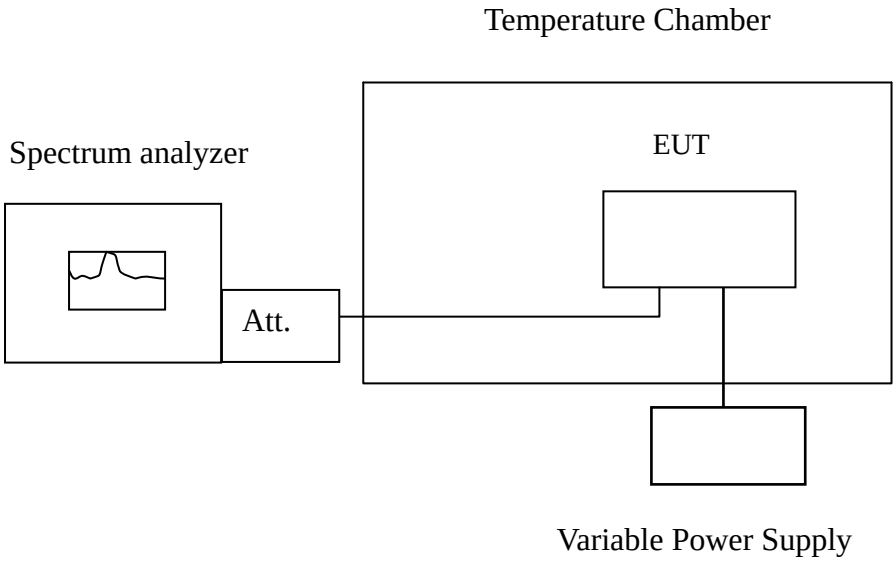
Reference Frequency: WCDMA / HSDPA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
120	50	836400011	15	2090
	40	836400003	7	
	30	836400007	11	
	20	836399996	0	
	10	836400012	16	
	0	836400013	17	
	-10	836400007	11	
	-20	836400025	29	
	-30	836400036	40	

7.8FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT

LIMIT

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

Test Configuration



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

TEST PROCEDURE

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

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

TEST RESULTS

No non-compliance noted.

Reference Frequency: GSM Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.255	20	836599964	-12	2090
3.7		836599976	0	
3.145		836599971	-5	
3.0 END		836599511	-460	

Reference Frequency: GSM Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.255	20	1879999949	-15	4700
3.7		1879999964	0	
3.145		1879999951	-13	
2.9 END		1879999550	-414	

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)
4.255	20	836599987	2	2090
3.7		836599985	0	
3.145		836599991	6	
3.0END		836599577	-414	

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)
4.255	20	1879999950	10	4700
3.7		1879999940	0	
3.145		1879999947	7	
2.9END		1879999820	-120	

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)
4.255	20	836599968	-2	2090
3.7		836599970	0	
3.145		836599972	2	
2.9END		836599870	-102	

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)
4.255	20	1879999967	13	4700
3.7		1879999954	0	
3.145		1879999962	8	
2.9END		1879999490	-464	

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)
4.255	20	1879999980	-22	4700
3.7		1880000002	0	
3.145		1879999960	-42	
end2.7		1880000080	78	

Reference Frequency: WCDMA Band V Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.255	20	836399991	3	2090
3.7		836399988	0	
3.145		836399980	-8	
2.9end		836399952	-28	

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)
4.255	20	1879999982	18	4700
3.7		1879999964	0	
3.145		1879999956	-8	
2.9		1879999950	-14	

Reference Frequency: WCDMA HSDPA Band V Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vdc	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.255	20	836399988	-8	2090
3.7		836399996	0	
3.145		836399990	-6	
2.9		836399967	-23	

7.9POWERLINE CONDUCTED EMISSIONS

LIMIT

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

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

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

Test Configuration

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

TEST PROCEDURE

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

TEST RESULTS

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

Operation Mode:	Normal Link	**Test Date:**	October 1, 2010
Temperature:	26°C	**Tested by:**	Edward Lin
Humidity:	60% RH		

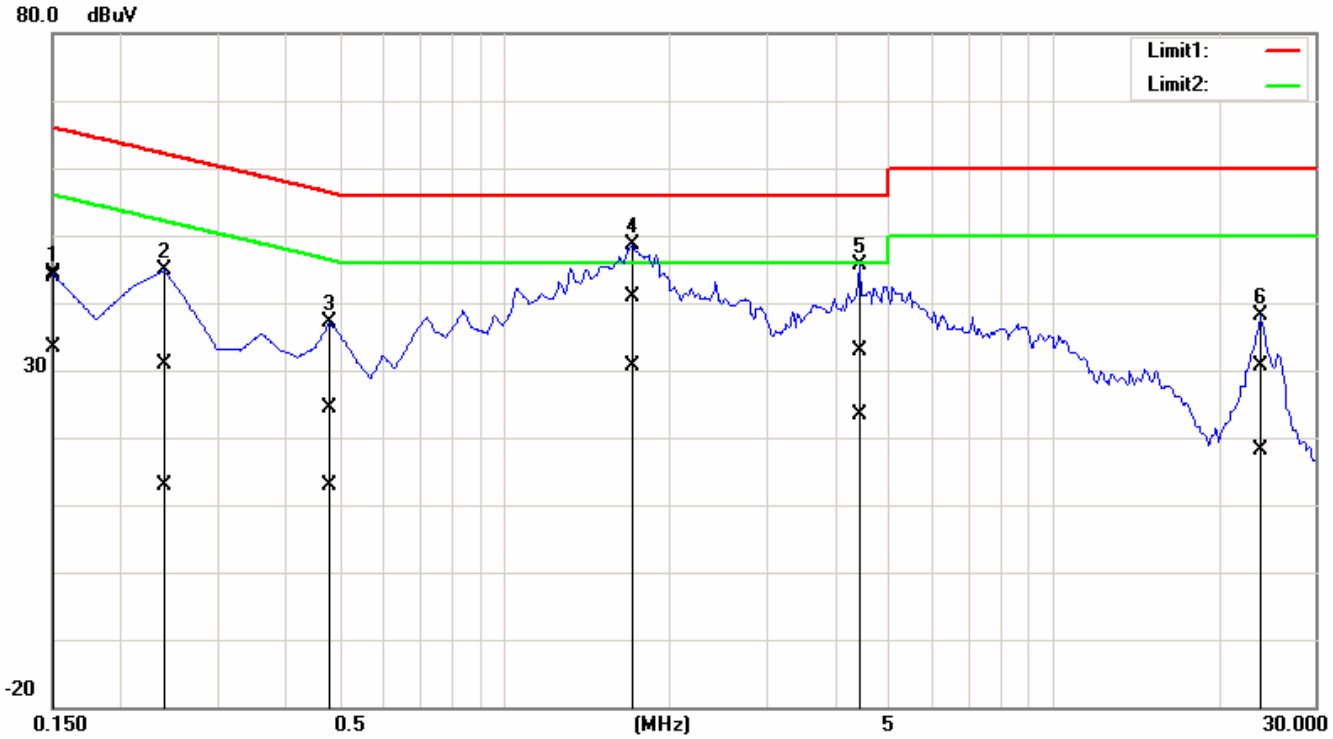
Freq. (MHz)	QP Reading (dBuV)	AV Reading (dBuV)	Corr. factor (dB)	QP Result (dBuV)	AV Result (dBuV)	QP Limit (dBuV)	AV Limit (dBuV)	QP Margin (dB)	AV Margin (dB)	Note
0.1500	43.66	33.36	0.14	43.80	33.50	66.00	56.00	-22.20	-22.50	L1
0.2400	30.77	12.67	0.13	30.90	12.80	62.10	52.10	-31.20	-39.30	L1
0.4800	24.36	12.86	0.14	24.50	13.00	56.34	46.34	-31.84	-33.34	L1
1.7100	40.71	30.61	0.09	40.80	30.70	56.00	46.00	-15.20	-15.30	L1
4.4400	32.79	23.39	0.11	32.90	23.50	56.00	46.00	-23.10	-22.50	L1
23.8200	30.03	17.63	0.57	30.60	18.20	60.00	50.00	-29.40	-31.80	L1
0.2400	37.70	22.40	0.10	37.80	22.50	62.10	52.10	-24.30	-29.60	L2
0.3300	37.90	21.10	0.10	38.00	21.20	59.45	49.45	-21.45	-28.25	L2
0.4500	38.20	24.40	0.10	38.30	24.50	56.88	46.88	-18.58	-22.38	L2
1.7400	41.87	32.17	0.03	41.90	32.20	56.00	46.00	-14.10	-13.80	L2
4.9200	35.08	26.78	0.02	35.10	26.80	56.00	46.00	-20.90	-19.20	L2
24.8400	28.80	19.30	0.20	29.00	19.50	60.00	50.00	-31.00	-30.50	L2

Remark:

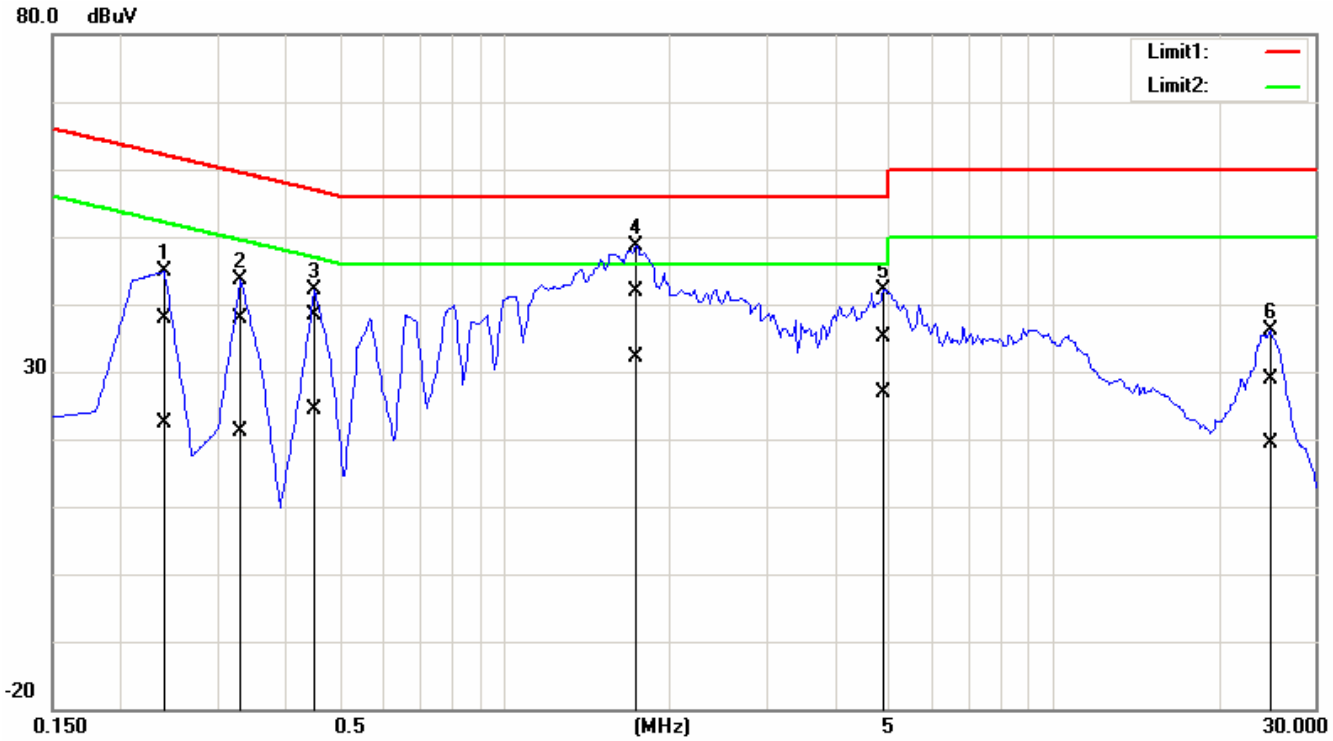
1. *Measuring frequencies from 0.15 MHz to 30MHz.*
2. *The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Quasi-peak detector and average detector.*
3. *The IF bandwidth of SPA between 0.15MHz to 30MHz was 10kHz; the IF bandwidth of Test Receiver between 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	Mobile phone
Frequency band (Operating)	☐ WLAN: 2.412GHz ~ 2.462GHz ☐ WLAN: 5.18GHz ~ 5.32GHz / 5.50GHz ~ 5.70GHz ☐ WLAN: 5.745GHz ~ 5.825GHz ☒ Others: GSM / GPRS / EDGE 850: 824 ~ 849 MHz
Device category	☒ Portable (<20cm separation) ☐ Mobile (>20cm separation) ☐ Others
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm^2) ☒ General Population/Uncontrolled exposure (S=1mW/cm^2)
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Max. output power	ERP: 27.80 dBm (602.56mW)
Antenna gain (Max)	-1.2 dBi (Numeric gain: 0.76)
Evaluation applied	☐ MPE Evaluation ☒ SAR Evaluation ☐ N/A

Remark:

1. *The maximum output power is 27.80dBm (602.56mW) at 848.80MHz (with 0.76 numeric antenna gain.)*
2. *DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.*
3. *For mobile or fixed location transmitters, no SAR consideration applied. The maximum power density is 1.0 mW/cm^2 even if the calculation indicates that the power density would be larger.*

TEST RESULTS

No non-compliance noted.

Not applicable, Please refers to the SAR test report.

EUT Specification

EUT	Mobile phone
Frequency band (Operating)	☐ WLAN: 2.412GHz ~ 2.462GHz ☐ WLAN: 5.725GHz ~ 5.850GHz ☐ WLAN: 5.15GHz ~ 5.35GHz ☒ Others: _1850 ~ 1910 MHz __
Device category	☒ Portable (<20cm separation) ☐ Mobile (>20cm separation) ☐ Others
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm2) ☒ General Population/Uncontrolled exposure (S=1mW/cm2)
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Max. output power	ERP: 28.93 dBm (781.627mW)
Antenna gain (Max)	2.1 dBi (Numeric gain: 1.62)
Evaluation applied	☐ MPE Evaluation ☒ SAR Evaluation ☐ N/A
Remark: *1. The maximum output power is 28.93dBm (781.627mW) at 1850.20MHz (with 1.62 numeric antenna gain.)* *2. DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.* *3. For mobile or fixed location transmitters, no SAR consideration applied. The maximum power density is 1.0 mW/cm^2 even if the calculation indicates that the power density would be larger.*	

TEST RESULTS

No non-compliance noted.