



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

TEST REPORT

For

Notebook PC System

Model:

LGX20, X200, XB200, XD200, XV200

Trade Name: LG

Issued to

LG Electronics Inc.

1000 Sylvan Avenue Englewood Cliffs, NJ 07632. U.S.A.

Issued by



Compliance Certification Services Inc.
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1. TEST RESULT CERTIFICATION

Applicant: LG Electronics Inc.
1000 Sylvan Avenue Englewood Cliffs, NJ 07632. U.S.A.

Manufacturer: LG Electronics Inc
19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do,
451-713, Korea

Factory: Protek Asia(Shanghai) Limited

Factory address: No.3768, Xiuyan Road, NanHui District, ShangHai, P.R. China

Equipment Under Test: Notebook PC System

Trade Name: LG

Model: LGX20, X200, XB200, XD200, XV200

Date of Test: November 29 ~ December 7, 2009

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	Notebook PC System
Trade Name	LG
Model Number	LGX20, X200, XB200, XD200, XV200
Model Discrepancy	All the specification and layout are identical except they come with different model numbers for marketing purposes.
Module Trade Name	ERICSSON
Module Model Number	F3307
Power Supply	1. Power Adapter: LIETON / PA-1400-11 I/P: 100-240V, 1.0A, 50-60Hz O/P: 20V, 2.0A Delta / ADP-40PH AD I/P: 100-240V, 1.2A, 50-60Hz O/P: 20V, 2A, 40W MAX 2. Battery: PEGATRON / NBP4B27(H00J) Rating: 29Wh
M/B	N450 Rev.
CPU	N450, 1.66GHz/667MHz/512K L2
LCD	LGD 10.1" HD(1366*768) LED LCD; LP101WH1-TLB5
HDD	Fujitsu/SATA HDD 250G 5400R 2.5"/HM250HI
WLAN Module	AW-NE104H 802.11bgn 1x2 (Half)
WWAN Module	ERICSSON/F3307/KRD 131 16/02 (900SKU)
CMOS	Foxlink FS13FF-183 1.3M
Battery	H00J SAN 2000 4S1P STL /UF103450P 14.8V/29WH



Frequency Range	GPRS / EDGE: 850: 824 ~ 849 MHz GPRS / EDGE: 1900: 1850 ~ 1910 MHz WCDMA Band II: 1852.4 ~ 1907.6 MHz WCDMA Band V: 826.4 ~ 846.6MHz
Transmit Power (ERP & EIRP Power)	GPRS 850: 27.52 dBm GPRS 1900: 21.62 dBm EDGE 850: 23.17 dBm EDGE 1900: 18.72 dBm WCDMA Band II: 18.12 dBm HSDPA Band II: 18.56 dBm HSUPA Band II: 18.60 dBm WCDMA Band V: 18.75 dBm HSDPA Band V: 19.47 dBm HSUPA Band V: 19.15 dBm
Cellular Phone Protocol	GPRS: GMSK EDGE: 8PSK WCDMA: Quadrature Phase Shift Keying (QPSK) with Root-raised cosine pulse shaping filters (roll off = 0.22)
Type of Emission	GPRS 850 MHz: 250KGXW --- GPRS 1900 MHz: 245KGXW --- EDGE 850 MHz: 245KG7W --- EDGE 1900 MHz: 241KG7W --- WCDMA Band II: 4M19F9W --- WCDMA Band V: 4M18F9W --- WCDMA HSDPA Band II: 4M18F9W --- WCDMA HSDPA Band V: 4M20F9W --- WCDMA HSUPA Band II: 4M18F9W --- WCDMA HSUPA Band V: 4M20F9W ---
Antenna Gain	GPRS / EDGE 850MHz: -1.28dBi GPRS / EDGE: 1900MHz: -0.92dBi WCDMA Band II: -0.92dBi WCDMA Band V: -1.28dBi
Antenna Type	PIFA Antenna

Remark:

1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.
2. This submittal(s) (test report) is intended for FCC ID: **BEJNT-LGX20B** filing to comply with Part 22 and Part 24 of the FCC 47 CFR Rules.



3. TEST METHODOLOGY

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

3.1 EUT CONFIGURATION

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

3.2 EUT EXERCISE

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

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

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

Radiated Emissions

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



3.4 DESCRIPTION OF TEST MODES

The EUT (model: LGX20) comes with two different adapters (PA-1400-11 & ADP-40PH AD) for sale. After the preliminary test, the adapter with model number PA-1400-11 was found to emit the worst emissions and therefore had been tested under operating condition.

EUT staying in continuous transmitting mode was programmed.

GPRS / EDGE 850:

Channel Low (CH128), Channel Mid (CH190) and Channel High (CH251) were chosen for full testing.

GPRS / EDGE 1900:

Channel Low (CH512), Channel Mid (CH661) and Channel High (CH810) were chosen for full testing.

WCDMA Band II:

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

WCDMA Band V:

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

WCDMA / HSDPA Band II:

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

WCDMA / HSDPA Band V:

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

WCDMA / HSUPA Band II:

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

WCDMA / 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.



4. INSTRUMENT CALIBRATION

4.1 MEASURING INSTRUMENT CALIBRATION

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



4.2 MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

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

Conducted Emissions Test Site				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360131	03/05/2010
Power Meter	Agilent	E4416A	GB41291611	06/28/2010
Power Sensor	Agilent	E9327A	US40441097	06/28/2010
Temp. / Humidity Chamber	Terchy	MHG-150LF	930619	09/15/2010
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	09/09/2010
Test Receiver	Rohde & Schwarz	ESCI	100064	11/29/2010
Switch Controller	TRC	Switch Controller	SC94050010	05/02/2010
4 Port Switch	TRC	4 Port Switch	SC94050020	05/02/2010
Horn-Antenna	TRC	HA-0502	06	06/03/2010
Horn-Antenna	TRC	HA-0801	04	06/18/2010
Bilog- Antenna	Sunol Sciences	JB3	A030205	03/27/2010
Loop Antenna	EMCO	6502	8905/2356	05/28/2010
Turn Table	Max-Full	MFT-120S	T120S940302	N.C.R.
Antenna Tower	Max-Full	MFA-430	A440940302	N.C.R.
Controller	Max-Full	MF-CM886	CC-C-1F-13	N.C.R.
Site NSA	CCS	N/A	FCC MRA: TW1039 IC: IC 2324G-1/-2	10/17/2010 11/04/2010
Reject Filter	Micro-Tronics	HPM13194	003	04/23/2010
S.G.	HP	83630B	3844A01022	04/16/2010
Substituted Dipole	Schwazbeck	VHAP/UHAP	998 +999/ 981+982	06/08/2010
Substituted Horn	EMCO	3115	00022257	12/15/2010
Test S/W	LABVIEW (V 6.1)			

Powerline Conducted Emissions Test Site				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver 9kHz-30MHz	Rohde & Schwarz	ESHS30	828144/003	11/17/2010
Two-Line V-Network 9kHz-30MHz	Schaffner	NNB41	03/10013	06/10/2010
LISN 10kHz-100MHz	EMCO	3825/2	9106-1809	04/08/2010
Test S/W	LABVIEW (V 6.1)			



4.3 MEASUREMENT UNCERTAINTY

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

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



5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

☐ No.199, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan, R.O.C.

Tel: 886-2-2217-0894 / Fax: 886-2-2217-1029

☒ No.11, Wugong 6th Rd., Wugu Industrial Park, Taipei Hsien 248, Taiwan

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

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

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

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

5.2 EQUIPMENT

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

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

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

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



5.3 TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
USA	FCC	3M Semi Anechoic Chamber (FCC MRA: TW1039) to perform FCC Part 15 measurements	 FCC MRA: TW1039
Taiwan	TAF	LP0002, RTTE01, FCC Method-47 CFR Part 15 Subpart C, D, E, RSS-210, RSS-310 IDA TS SRD, AS/NZS 4268, AS/NZS 4771, TS 12.1 & 12.2, ETSI EN 300 440-1, ETSI EN 300 440-2, ETSI EN 300 328, ETSI EN 300 220-1, ETSI EN 300 220-2, ETSI EN 301 893, ETSI EN 301 489-1/3/7/17 FCC OET Bulletin 65 + Supplement C, EN 50360, EN 50361, EN 50371, RSS 102, EN 50383, EN 50385, EN 50392, IEC 62209, CNS 14958-1, CNS 14959 FCC Method -47 CFR Part 15 Subpart B IEC / EN 61000-3-2, IEC / EN 61000-3-3, IEC / EN 61000-4-2/3/4/5/6/8/11	 Testing Laboratory 1309
Canada	Industry Canada	3M Semi Anechoic Chamber (IC 2324G-1 / IC 2324G-2) to perform	 IC 2324G-1 IC 2324G-2

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



6. SETUP OF EQUIPMENT UNDER TEST

6.1 SETUP CONFIGURATION OF EUT

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

6.2 SUPPORT EQUIPMENT

No.	Equipment	Brand	Model	Series No.	FCC ID	Data Cable	Power Cord
1.	LCD Monitor	SAMSUNG	959NF	AQ19H2RT706126P	FCC DoC	Shielded, 1.8m with 2 cores	AC I/P: Unshielded, 1.8m DC O/P: Unshielded, 1.8m with a core
2.	USB Mouse	Logitech	M-UAG96B	HC8500L	FCC DoC	Shielded, 1.8m	N/A
3.	USB Keyboard	HP	KU-0316	N/A	FCC DoC	Shielded, 1.8m	N/A
4.	USB 2.0 External HDD	TeraSyS	F12-U	A0100214-43b0007	FCC DoC	Shielded, 1.8m	N/A
5.	USB 2.0 External HDD	TeraSyS	F12-U	A0100214-43b0012	FCC DoC	Shielded, 1.8m	N/A
6.	Multimedia Earphone	Labtec	Axis-301	N/A	FCC DoC	Unshielded, 1.8m*2	N/A
7.	Notebook PC (Remote)	DELL	PP05L	7T390 A03	E2K5HCKT	LAN Cable: Unshielded, 10m	AC I/P: Unshielded, 1.8m DC O/P: Unshielded, 1.8m with a core
8.	Wireless Pre-N Router (Remote)	BELKIN	F5D8230-4	N/A	SA3-AGNO901AP O100	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.



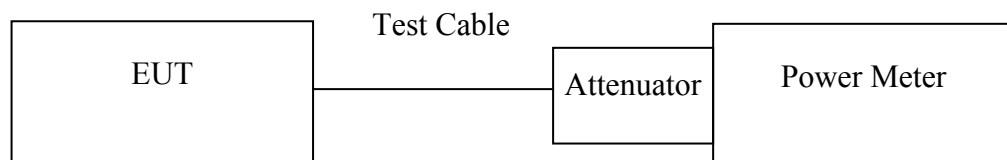
7. FCC PART 22 & 24 REQUIREMENTS

7.1 PEAK POWER

LIMIT

According to FCC §2.1046.

Test Configuration



Remark: Measurement setup for testing on Antenna connector

TEST PROCEDURE

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

TEST RESULTS

No non-compliance noted.

**Test Data**

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power (W)
GPRS 850 (Class 12)	128	824.20	31.48	1.40605
	190	836.60	31.51	1.41579
	251	848.80	31.64	*1.45881
EDGE 850 (Class 12)	128	824.20	26.34	0.43053
	190	836.60	26.34	0.43053
	251	848.80	26.45	*0.44157

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power (W)
GPRS 1900 (Class 12)	512	1850.20	29.38	*0.86696
	661	1880.00	28.60	0.72444
	810	1909.80	27.82	0.60534
EDGE 1900 (Class 12)	512	1850.20	25.82	*0.38194
	661	1880.00	25.62	0.36475
	810	1909.80	24.57	0.28642

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



Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power (W)
WCDMA (BAND II)	9262	1852.40	25.70	0.37154
	9400	1880.00	26.10	*0.40738
	9538	1907.60	26.00	0.39811
WCDMA (BAND V)	4132	826.40	25.66	0.36813
	4182	836.40	26.01	*0.39902
	4233	846.60	25.80	0.38019

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power (W)
WCDMA / HSDPA (BAND II)	9262	1852.40	25.94	0.39264
	9400	1880.00	26.39	*0.43551
	9538	1907.60	26.11	0.40832
WCDMA / HSDPA (BAND V)	4132	826.40	25.71	0.37239
	4182	836.60	26.02	*0.39994
	4233	846.60	25.82	0.38194

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power (W)
WCDMA / HSUPA (BAND II)	9262	1852.40	26.01	0.39902
	9400	1880.00	26.40	*0.43652
	9538	1907.60	26.23	0.41976
WCDMA / HSUPA (BAND V)	4132	826.40	25.78	0.37844
	4182	836.40	26.75	*0.47315
	4233	846.60	26.18	0.41495

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

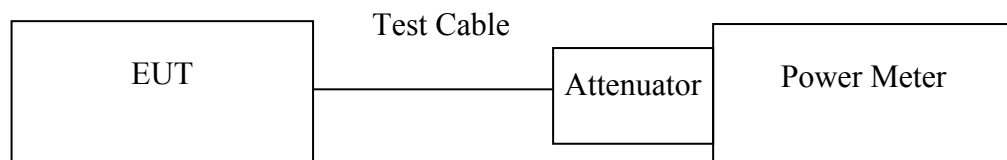


7.2 AVERAGE POWER

LIMIT

For reporting purposes only.

Test Configuration



Remark: Measurement setup for testing on Antenna connector

TEST PROCEDURE

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

TEST RESULTS

No non-compliance noted.



TEST RESULTS

No non-compliance noted.

Test Data

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power (W)
GPRS 850 (Class 12)	128	824.20	25.46	0.35151
	190	836.60	25.49	0.35395
	251	848.80	25.62	0.36470
EDGE 850 (Class 12)	128	824.20	20.32	0.10763
	190	836.60	20.32	0.10763
	251	848.80	20.43	0.11039

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power (W)
GPRS 1900 (Class 12)	512	1850.20	23.36	0.21674
	661	1880.00	22.58	0.18111
	810	1909.80	21.80	0.15134
EDGE 1900 (Class 12)	512	1850.20	19.80	0.09549
	661	1880.00	19.60	0.09119
	810	1909.80	18.55	0.07160

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



Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power (W)
WCDMA (BAND II)	9262	1852.40	22.90	0.19498
	9400	1880.00	23.00	0.19953
	9538	1907.60	22.99	0.19907
WCDMA (BAND V)	4132	826.40	22.78	0.18967
	4182	836.40	22.98	0.19861
	4233	846.60	22.92	0.19588

Test Mode	CH	Frequency (MHz)	AVG Power (dBm)	Output Power (W)
WCDMA / HSDPA (BAND II)	9262	1852.40	22.50	0.17783
	9400	1880.00	22.98	0.19861
	9538	1907.60	22.79	0.19011
WCDMA / HSDPA (BAND V)	4132	826.40	22.76	0.18880
	4182	836.60	23.00	0.19953
	4233	846.60	22.97	0.19815

Test Mode	CH	Frequency (MHz)	Peak Power (dBm)	Output Power (W)
WCDMA / HSUPA (BAND II)	9262	1852.40	22.41	0.17418
	9400	1880.00	22.95	0.19724
	9538	1907.60	22.68	0.18535
WCDMA / HSUPA (BAND V)	4132	826.40	22.25	0.16788
	4182	836.40	22.95	0.19724
	4233	846.60	22.40	0.17378

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

7.3 ERP & EIRP MEASUREMENT

LIMIT

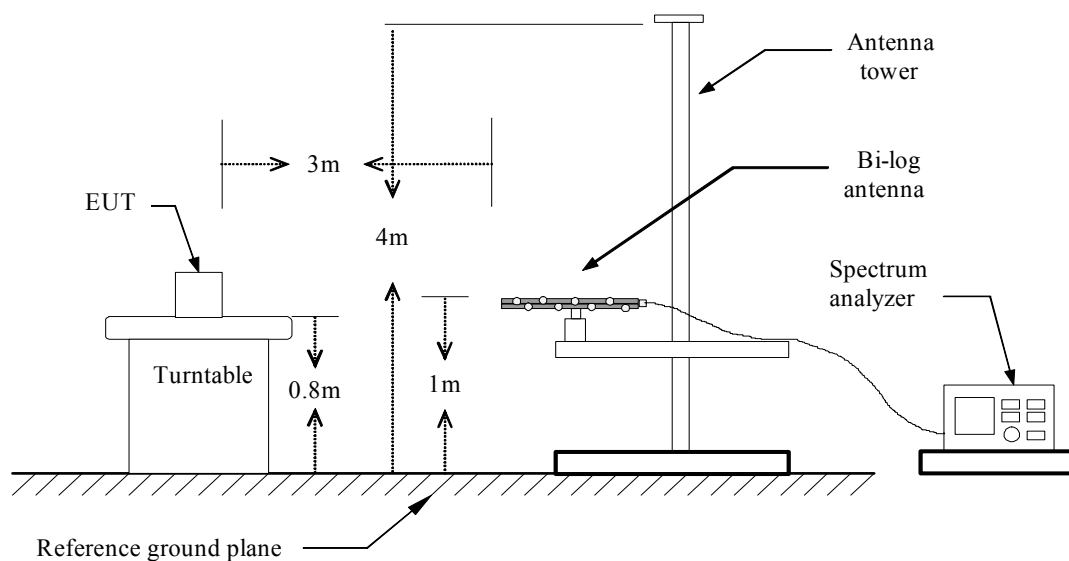
According to FCC §2.1046

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

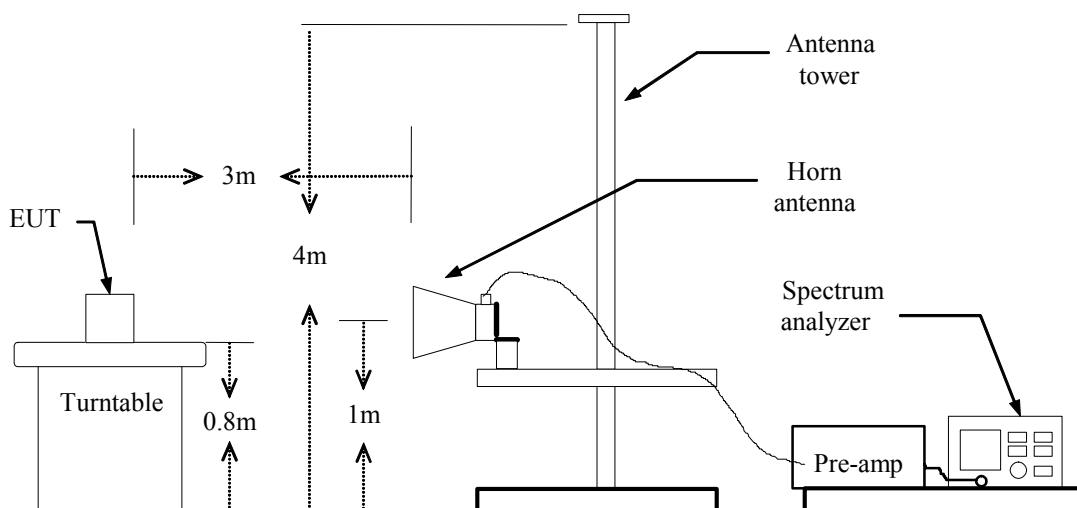
FCC 24.232(b): The equivalent Isotropic Radiated Power (EIRP) must not exceed 2 Watts.

Test Configuration

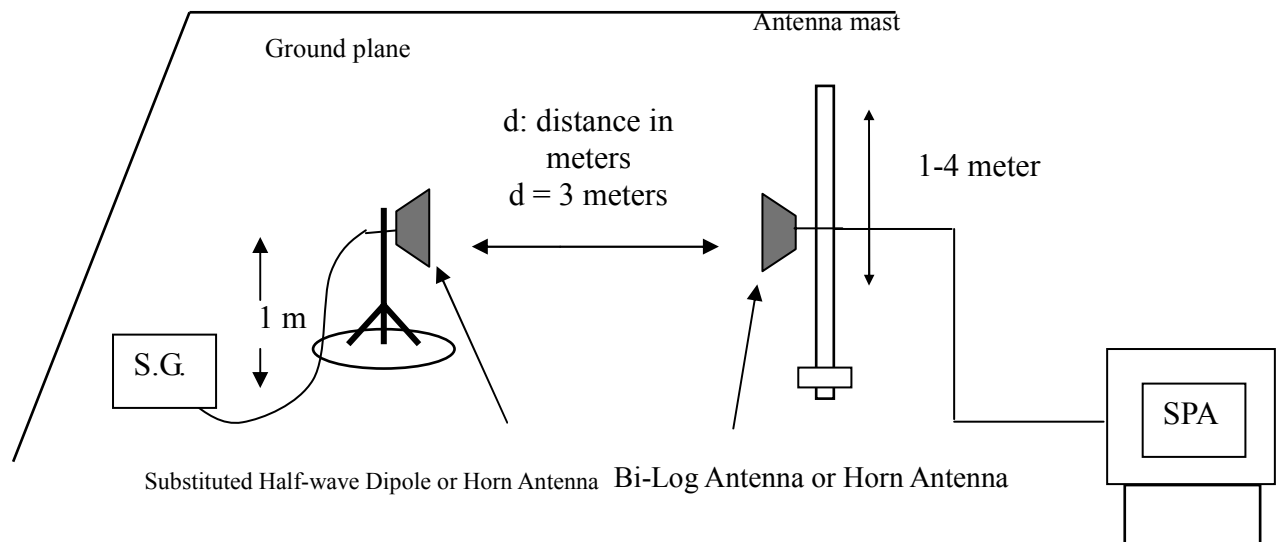
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



TEST PROCEDURE

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

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

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

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

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

TEST RESULTS

No non-compliance noted.

**GPRS 850 Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
128	824.30	V	-8.24	34.62	26.38	38.50	-12.12
	824.42	H	-12.67	34.65	21.97	38.50	-16.53
190	836.36	V	-7.00	34.53	*27.52	38.50	-10.98
	836.30	H	-11.82	34.63	22.81	38.50	-15.69
251	849.02	V	-7.21	34.64	27.42	38.50	-11.08
	848.96	H	-11.82	34.75	22.92	38.50	-15.58

GPRS 1900 Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
512	1850.20	V	-20.51	41.17	20.66	33.00	-12.34
	1850.20	H	-21.57	40.79	19.22	33.00	-13.78
661	1880.00	V	-21.32	41.23	19.91	33.00	-13.09
	1880.00	H	-21.01	41.14	20.13	33.00	-12.87
810	1909.80	V	-20.12	41.30	21.18	33.00	-11.82
	1909.80	H	-19.76	41.38	*21.62	33.00	-11.38

EDGE 850 Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
128	824.18	V	-12.88	34.62	21.74	38.50	-16.76
	824.18	H	-17.27	34.65	17.37	38.50	-21.13
190	836.78	V	-11.72	34.53	22.80	38.50	-15.70
	836.66	H	-16.54	34.63	18.10	38.50	-20.40
251	848.78	V	-11.46	34.63	*23.17	38.50	-15.33
	848.84	H	-16.04	34.75	18.71	38.50	-19.79

EDGE 1900 TEST DATA

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
512	1850.20	V	-23.12	41.17	18.05	33.00	-14.95
	1850.20	H	-24.31	40.79	16.48	33.00	-16.52
661	1880.00	V	-24.59	41.23	16.64	33.00	-16.36
	1880.00	H	-24.15	41.14	16.99	33.00	-16.01
810	1909.80	V	-23.14	41.30	18.16	33.00	-14.84
	1909.80	H	-22.66	41.38	*18.72	33.00	-14.28

**WCDMA BAND II Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
9262	1853.80	V	-24.50	41.17	16.67	33.00	-16.33
	1853.30	H	-25.19	40.82	15.63	33.00	-17.37
9400	1878.80	V	-23.85	41.23	17.38	33.00	-15.62
	1878.80	H	-23.01	41.13	*18.12	33.00	-14.88
9538	1907.40	V	-23.37	41.29	17.92	33.00	-15.08
	1906.50	H	-23.31	41.38	18.07	33.00	-14.93

WCDMA BAND V Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4132	826.58	V	-16.84	34.59	17.75	38.50	-20.75
	826.88	H	-16.94	34.64	17.70	38.50	-20.80
4182	836.18	V	-16.29	34.54	18.25	38.50	-20.25
	837.14	H	-17.86	34.63	16.77	38.50	-21.73
4233	845.24	V	-15.86	34.61	*18.75	38.50	-19.75
	847.10	H	-18.38	34.73	16.35	38.50	-22.15

HSDPA BAND II Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
9262	1852.90	V	-24.17	41.17	17.01	33.00	-15.99
	1853.10	H	-24.80	40.83	16.04	33.00	-16.96
9400	1878.70	V	-23.63	41.23	17.60	33.00	-15.40
	1878.70	H	-22.71	41.16	18.44	33.00	-14.56
9538	1906.10	V	-22.86	41.29	18.43	33.00	-14.57
	1906.60	H	-22.82	41.38	*18.56	33.00	-14.44

HSDPA BAND V Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4132	827.12	V	-15.12	34.59	*19.47	38.50	-19.03
	826.94	H	-18.30	34.64	16.35	38.50	-22.15
4182	835.04	V	-15.64	34.54	18.90	38.50	-19.60
	835.70	H	-18.37	34.63	16.26	38.50	-22.24
4233	845.60	V	-15.46	34.58	19.12	38.50	-19.38
	845.78	H	-19.02	34.70	15.68	38.50	-22.82

**HSUPA BAND II Test Data**

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
9262	1852.90	V	-23.79	41.17	17.38	33.00	-15.62
	1853.10	H	-25.00	40.81	15.81	33.00	-17.19
9400	1878.70	V	-23.28	41.23	17.94	33.00	-15.06
	1878.70	H	-22.53	41.13	*18.60	33.00	-14.40
9538	1906.10	V	-23.02	41.29	18.27	33.00	-14.73
	1906.60	H	-22.88	41.38	18.50	33.00	-14.50

HSUPA BAND V Test Data

Channel	Frequency (MHz)	Antenna Pol.	Reading level (dBuV)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
4132	827.12	V	-16.19	34.59	18.40	38.50	-20.10
	826.94	H	-16.53	34.64	18.12	38.50	-20.38
4182	835.04	V	-15.62	34.54	18.91	38.50	-19.59
	835.70	H	-17.53	34.63	17.11	38.50	-21.39
4233	845.60	V	-15.43	34.59	*19.15	38.50	-19.35
	845.78	H	-17.38	34.73	17.35	38.50	-21.15

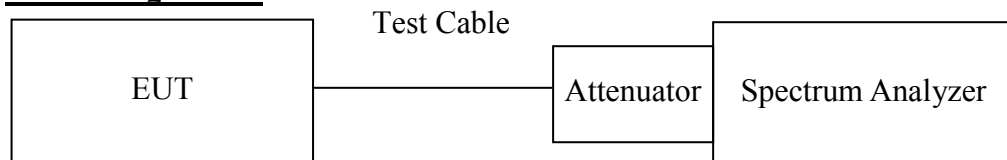


7.4 OCCUPIED BANDWIDTH MEASUREMENT

LIMIT

According to §FCC 2.1049.

Test Configuration



Remark: Measurement setup for testing on Antenna connector

TEST PROCEDURE

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

TEST RESULTS

No non-compliance noted

**Test Data****Test Data**

Test Mode	CH	Frequency (MHz)	99% Bandwidth (kHz)
GPRS 850 (Class 12)	128	824.200	242.9268
	190	836.600	240.9487
	251	848.800	250.5838
EDGE 850 (Class 12)	128	824.200	236.1433
	190	836.600	245.7428
	251	848.800	237.6275
GPRS 1900 (Class 12)	512	1850.200	245.6505
	661	1880.000	245.4415
	810	1909.800	241.4644
EDGE 1900 (Class 12)	512	1850.200	241.5802
	661	1880.000	234.9960
	810	1909.800	234.9603



Test Mode	CH	Frequency (MHz)	99% Bandwidth (MHz)
WCDMA (Band II)	9262	1852.40	4.1672
	9400	1880.00	4.1954
	9538	1907.60	4.1965
WCDMA (Band V)	4132	826.40	4.1482
	4182	836.40	4.1829
	4233	846.60	4.1699
WCDMA / HSDPA (BAND II)	9262	1852.40	4.1694
	9400	1880.00	4.1876
	9538	1907.60	4.1838
WCDMA / HSDPA (BAND V)	4132	826.40	4.1602
	4182	836.40	4.1727
	4233	846.60	4.2047
WCDMA / HSUPA (BAND II)	9262	1852.40	4.1867
	9400	1880.00	4.1790
	9538	1907.60	4.1750
WCDMA / HSUPA (BAND V)	4132	826.40	4.1637
	4182	836.40	4.1784
	4233	846.60	4.2011

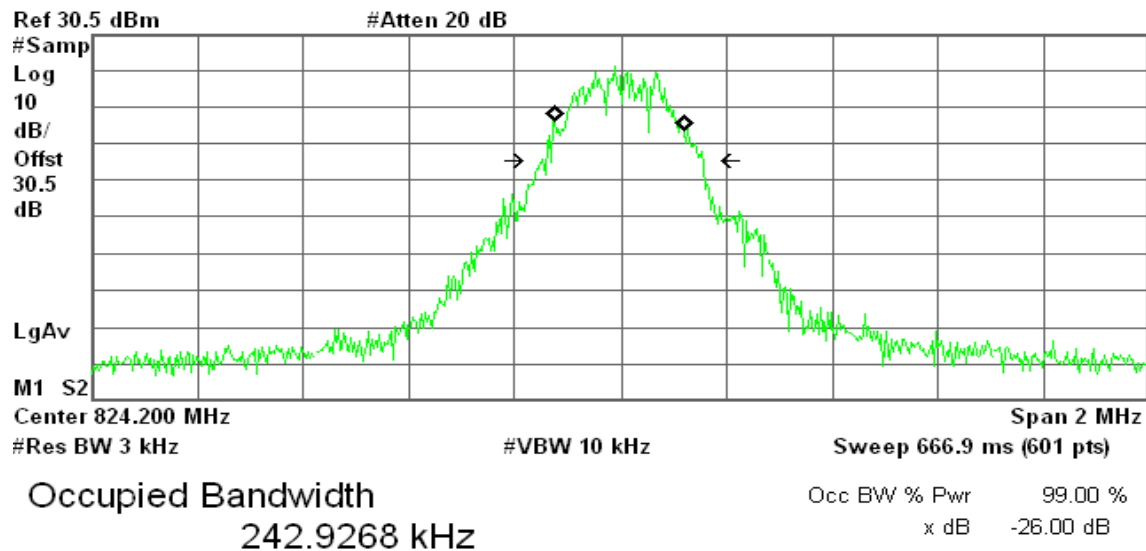


Test Plot

GPRS 850 (CH Low)

Agilent 18:55:05 Dec 1, 2009

R T

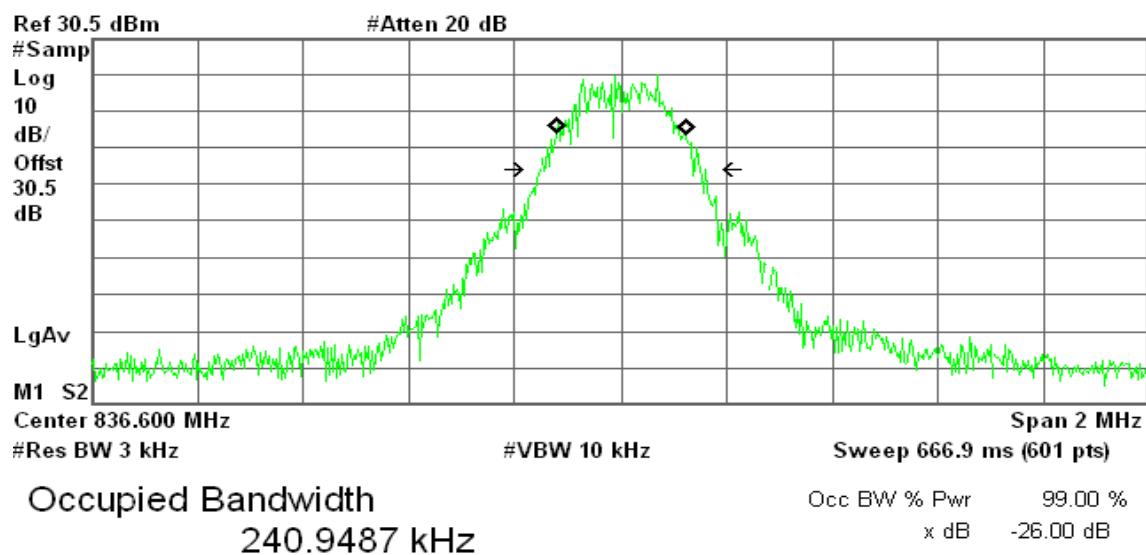


Transmit Freq Error -1.836 kHz
Occupied Bandwidth 306.445 kHz*

GPRS 850 (CH Mid)

Agilent 18:55:55 Dec 1, 2009

R T



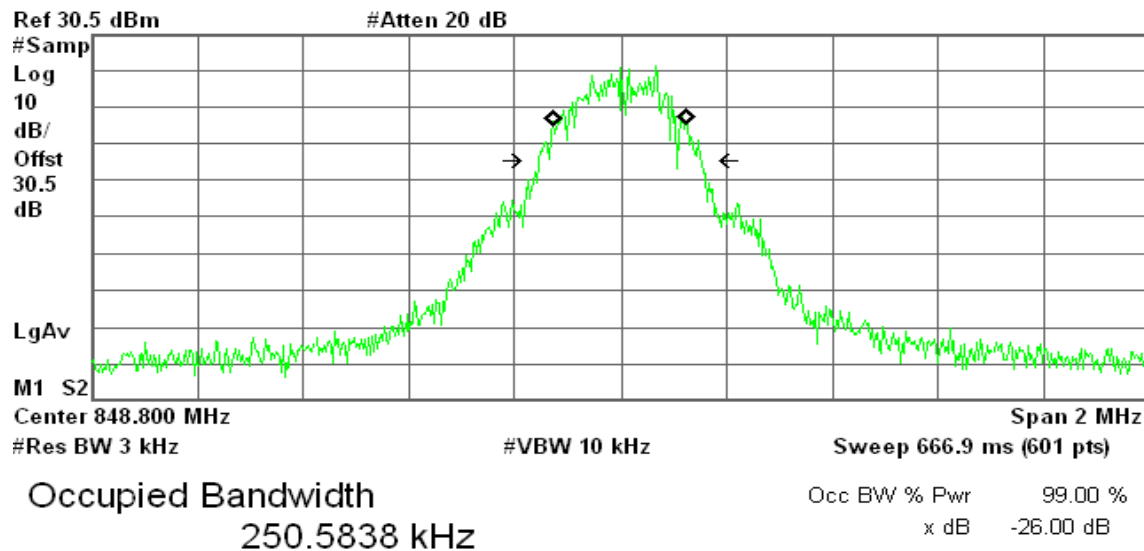
Transmit Freq Error 1.427 kHz
x dB Bandwidth 311.437 kHz*



GPRS 850(CH High)

Agilent 18:59:57 Dec 1, 2009

R T

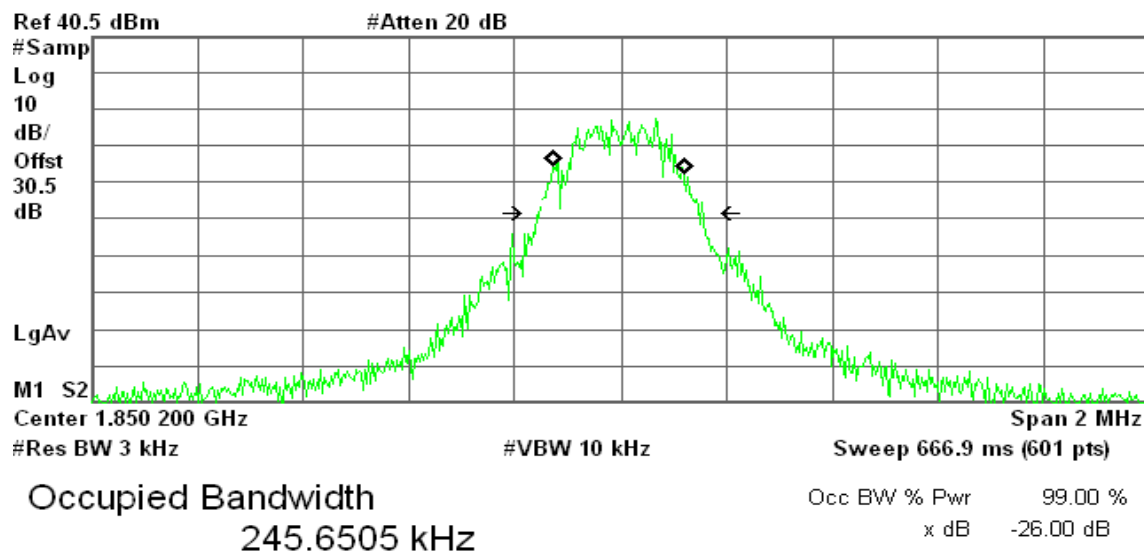


Transmit Freq Error -489.103 Hz
x dB Bandwidth 306.117 kHz*

GPRS 1900 (CH Low)

Agilent 20:21:14 Dec 1, 2009

R T



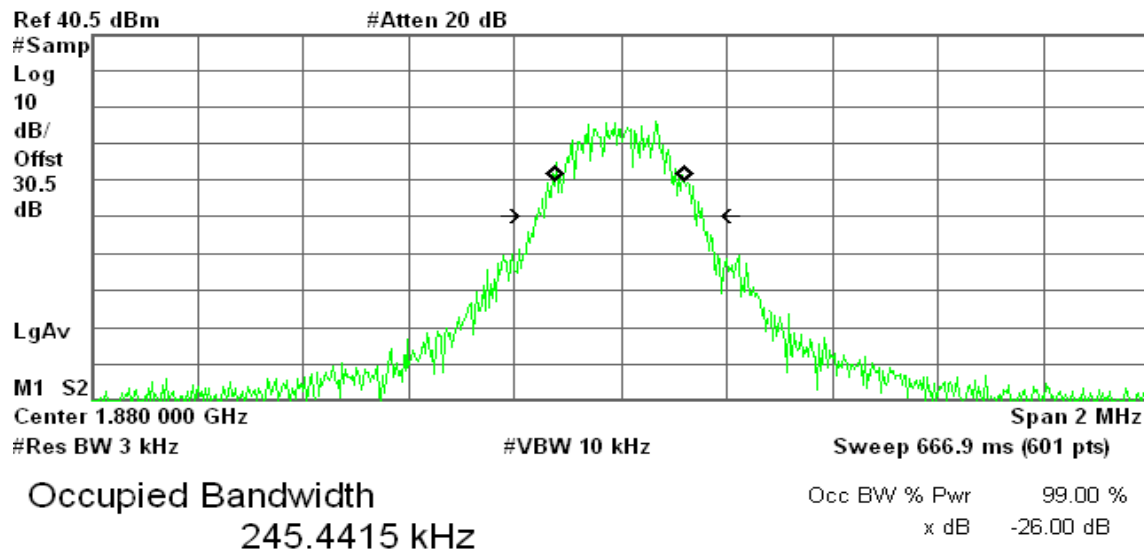
Transmit Freq Error -4.159 kHz
x dB Bandwidth 307.685 kHz*



GPRS 1900 (CH Mid)

Agilent 20:22:05 Dec 1, 2009

R T

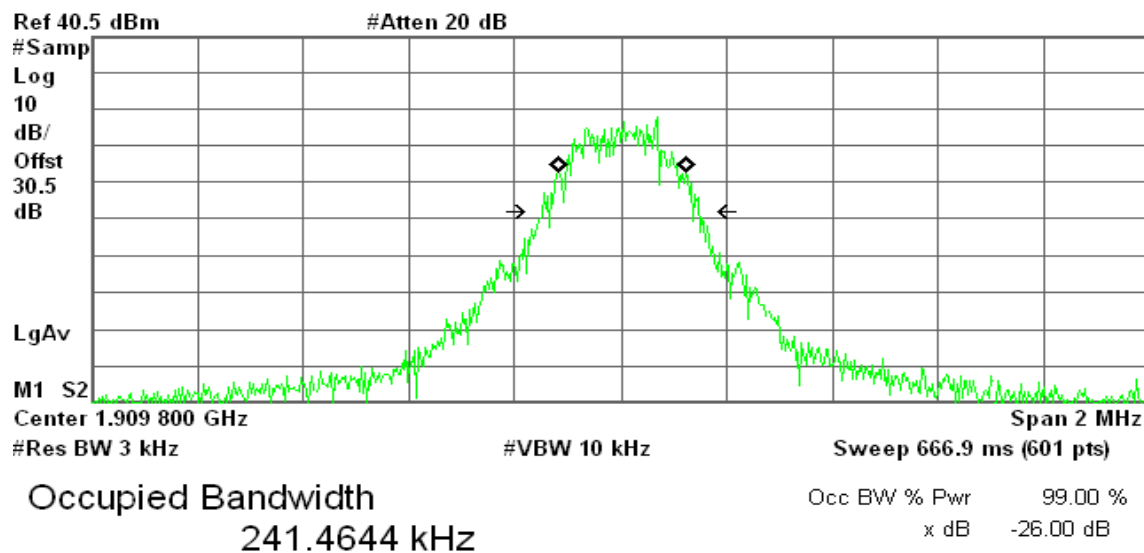


Transmit Freq Error -1.885 kHz
x dB Bandwidth 311.589 kHz*

GPRS 1900 (CH High)

Agilent 20:24:45 Dec 1, 2009

R T



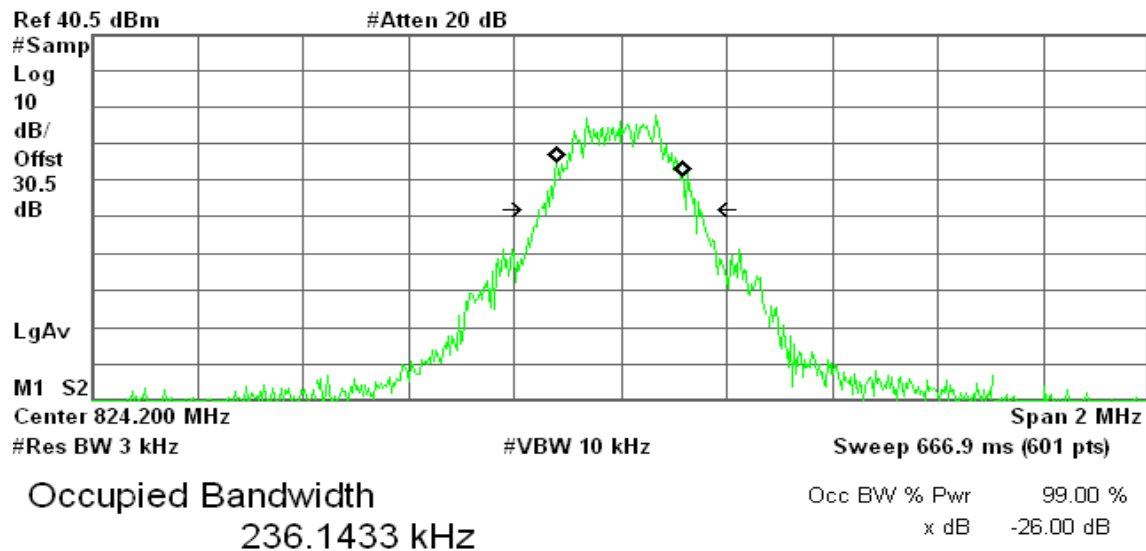
Transmit Freq Error 2.914 kHz
x dB Bandwidth 295.294 kHz*



EDGE 850 (CH Low)

Agilent 20:36:47 Dec 1, 2009

R T

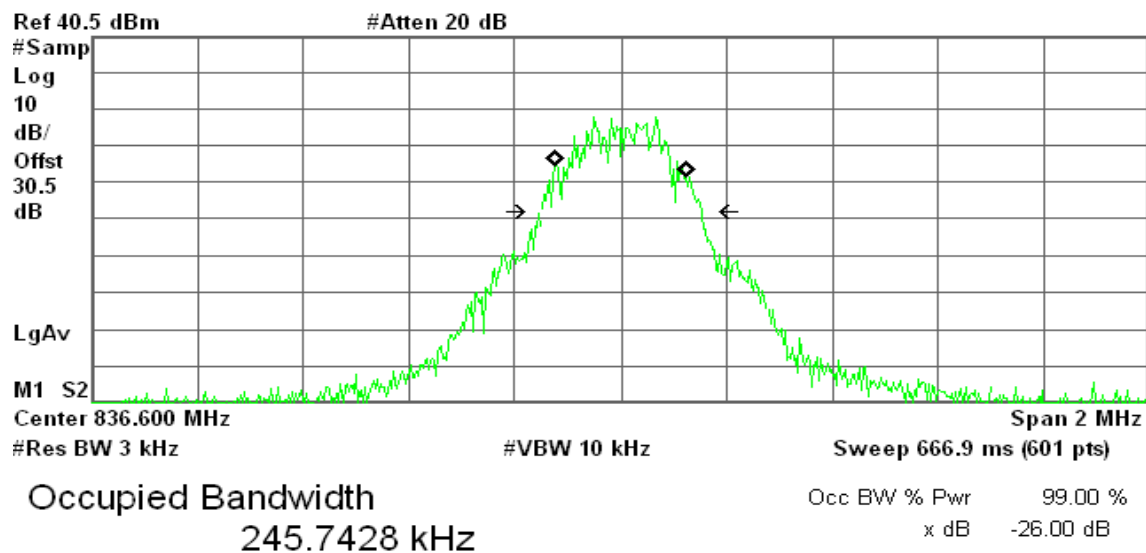


Transmit Freq Error -1.764 kHz
x dB Bandwidth 302.003 kHz*

EDGE 850 (CH Mid)

Agilent 20:37:46 Dec 1, 2009

R T



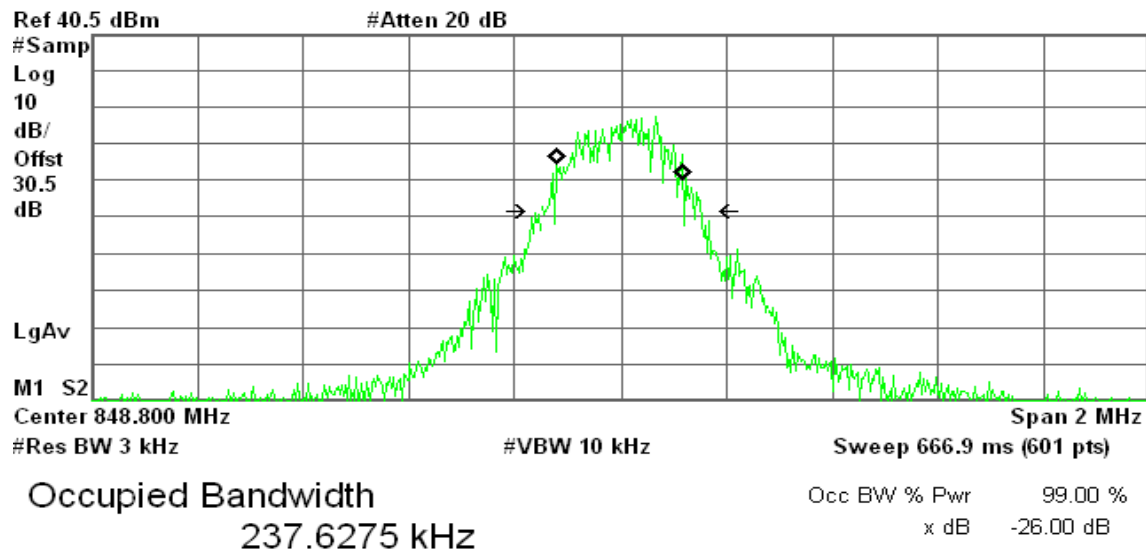
Transmit Freq Error -238.851 Hz
x dB Bandwidth 300.342 kHz*



EDGE 850 (CH High)

Agilent 20:40:13 Dec 1, 2009

R T

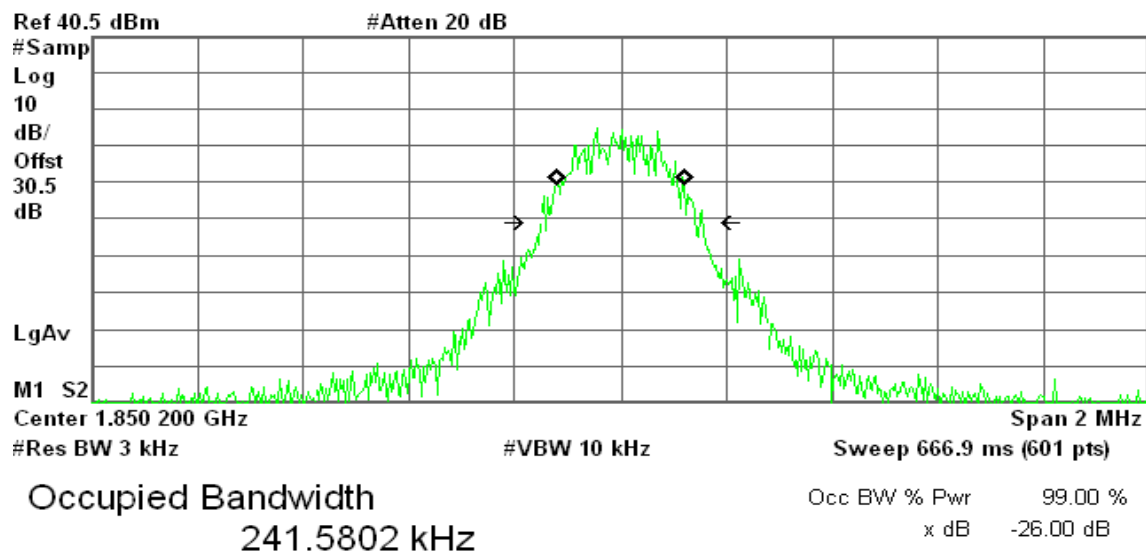


Transmit Freq Error -973.044 Hz
x dB Bandwidth 299.850 kHz*

EDGE 1900 (CH Low)

Agilent 21:04:53 Dec 1, 2009

R T



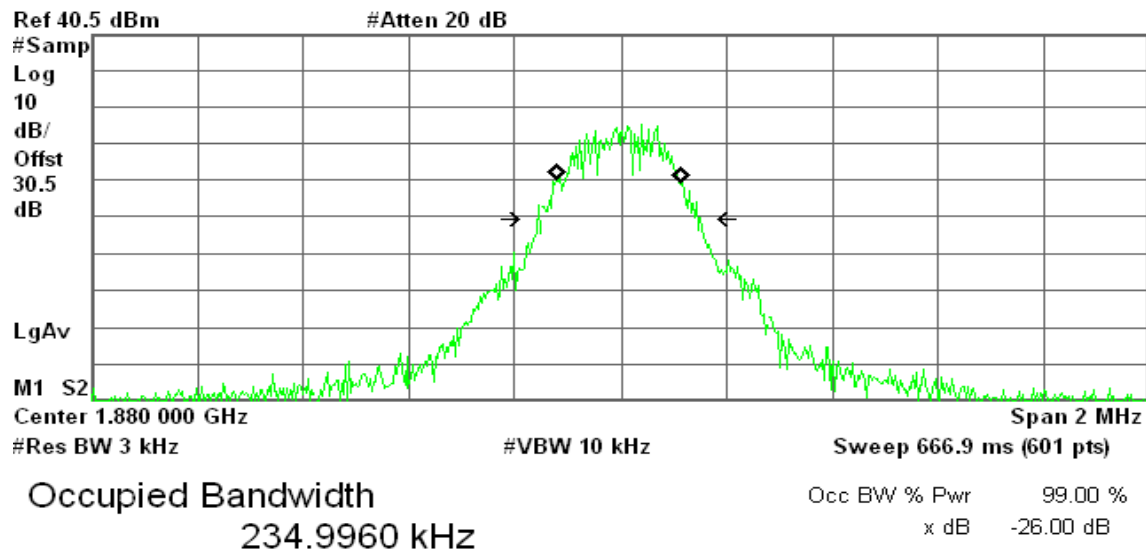
Transmit Freq Error -342.260 Hz
x dB Bandwidth 305.565 kHz*



EDGE 1900 (CH Mid)

Agilent 21:05:50 Dec 1, 2009

R T

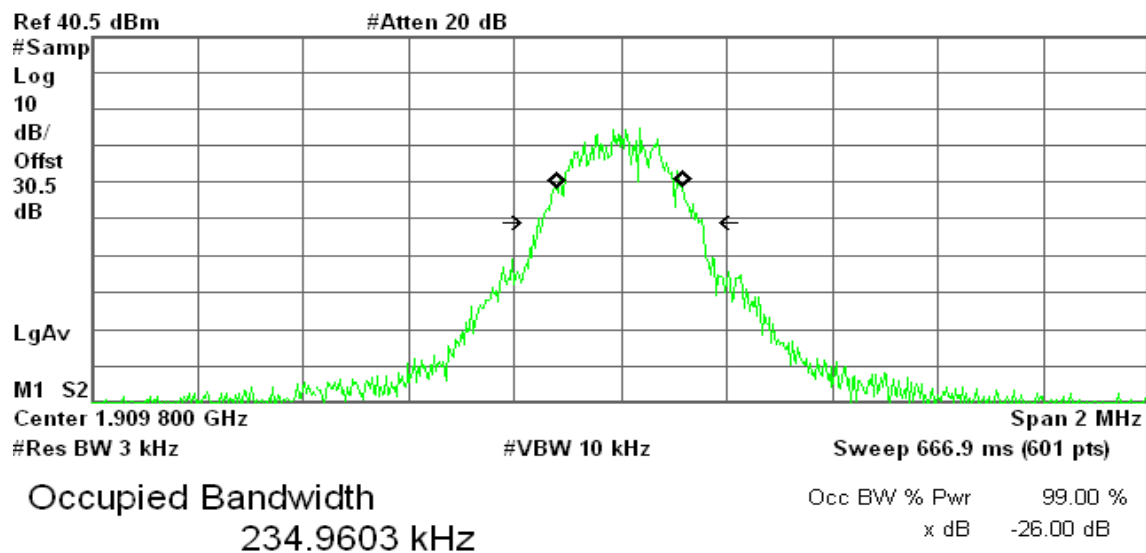


Transmit Freq Error -3.180 kHz
x dB Bandwidth 306.137 kHz*

EDGE 1900 (CH High)

Agilent 21:08:33 Dec 1, 2009

R T



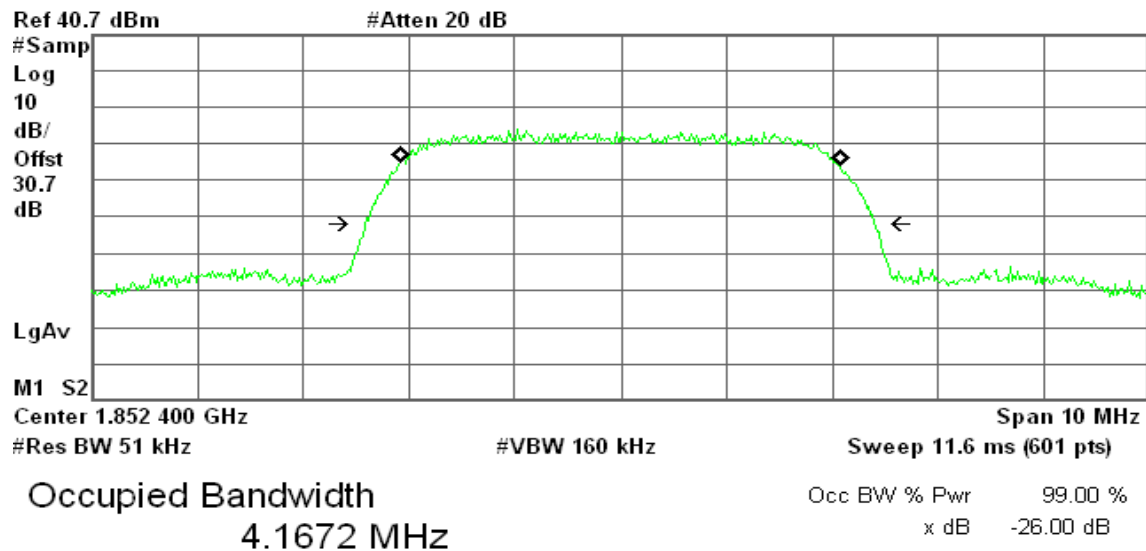
Transmit Freq Error -1.874 kHz
x dB Bandwidth 309.196 kHz*



WCDMA Band II (CH Low)

Agilent 22:40:21 Dec 7, 2009

R T

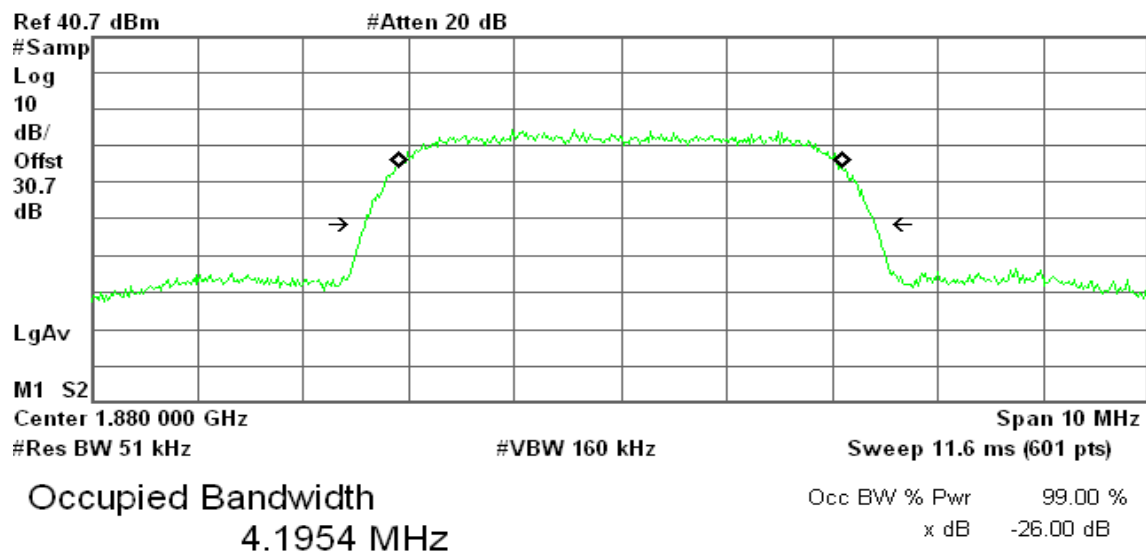


Transmit Freq Error -6.545 kHz
x dB Bandwidth 4.820 MHz*

WCDMA Band II (CH Mid)

Agilent 22:39:30 Dec 7, 2009

R T



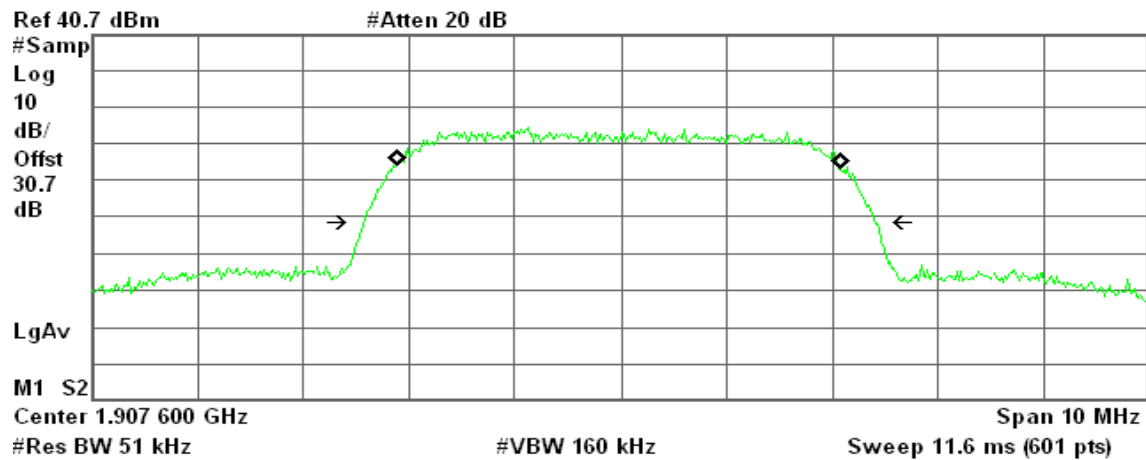
Transmit Freq Error -4.936 kHz
x dB Bandwidth 4.826 MHz*



WCDMA Band II (CH High)

Agilent 22:38:47 Dec 7, 2009

R T



Occupied Bandwidth
4.1965 MHz

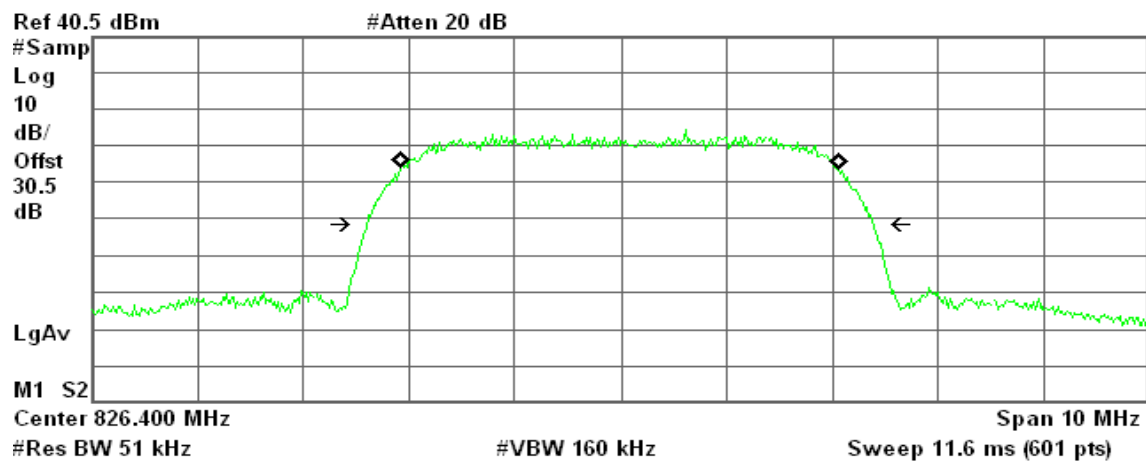
Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -17.684 kHz
x dB Bandwidth 4.838 MHz*

WCDMA Band V (CH Low)

Agilent 20:42:23 Dec 7, 2009

R T



Occupied Bandwidth
4.1482 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

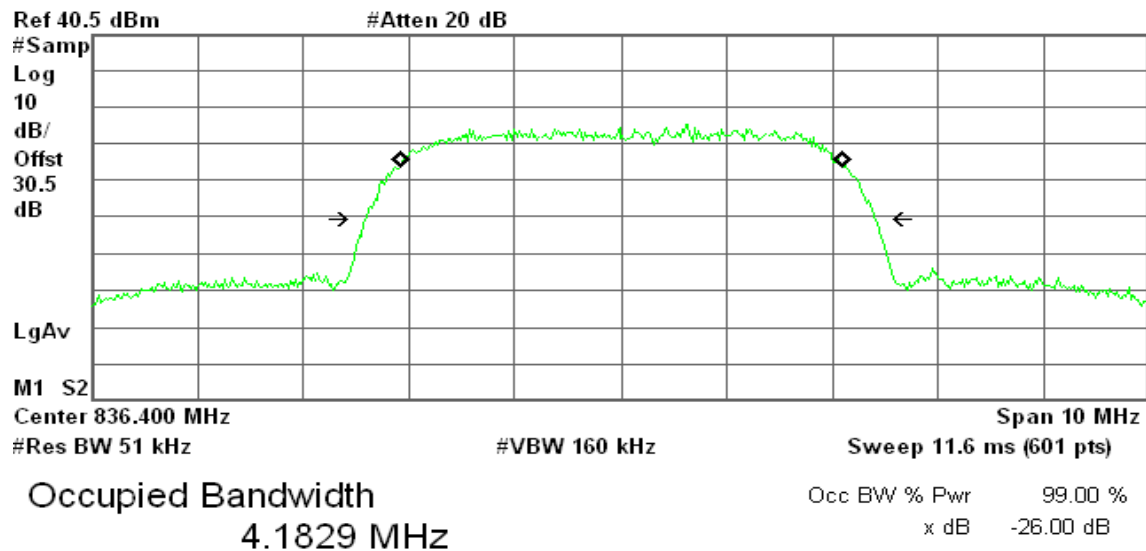
Transmit Freq Error -4.834 kHz
x dB Bandwidth 4.790 MHz*



WCDMA Band V (CH Mid)

Agilent 20:42:55 Dec 7, 2009

R T

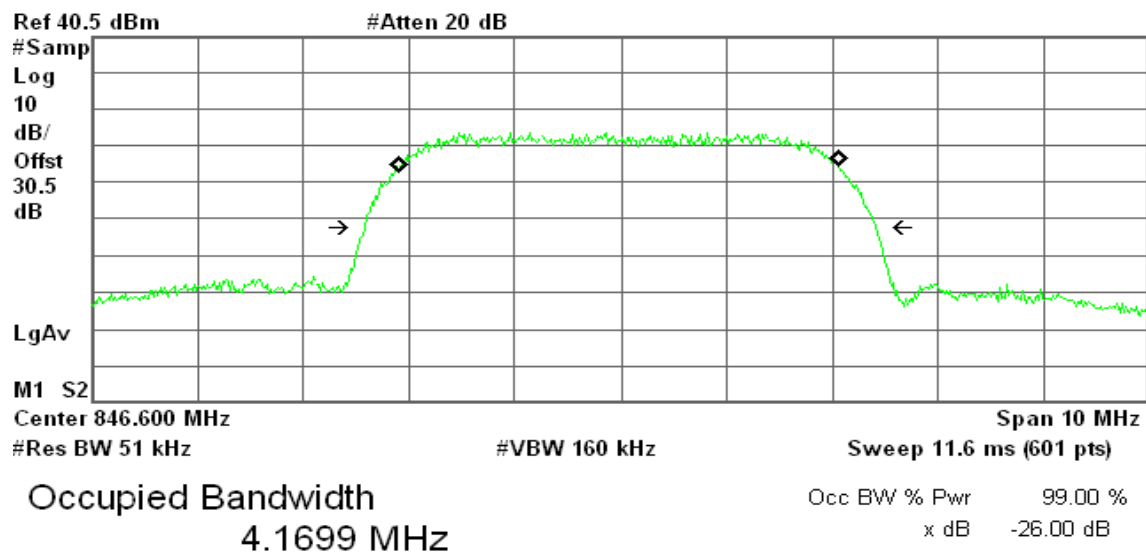


Transmit Freq Error 6.768 kHz
x dB Bandwidth 4.830 MHz*

WCDMA Band V (CH High)

Agilent 20:44:08 Dec 7, 2009

R T



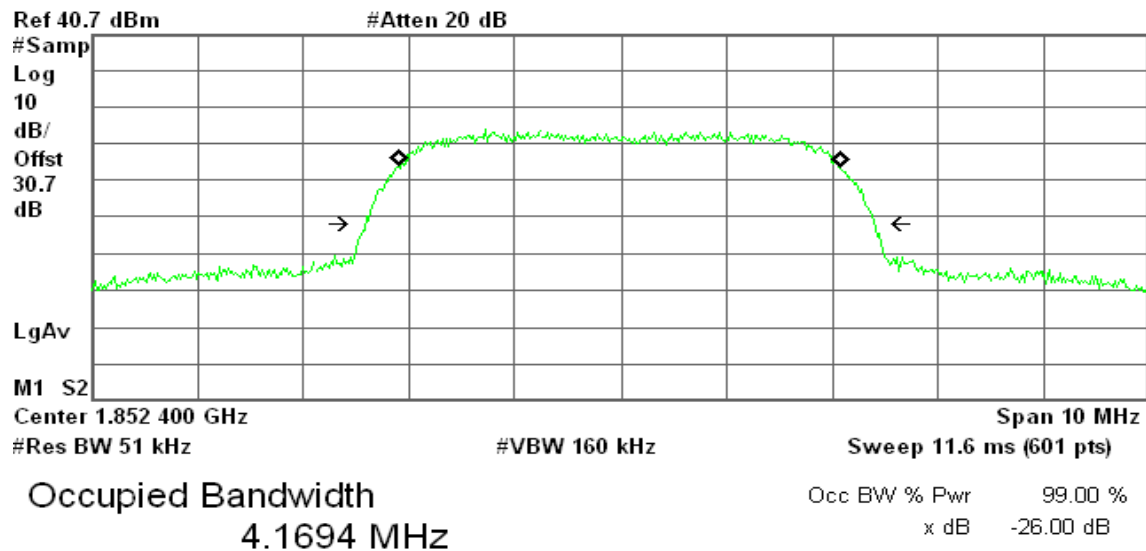
Transmit Freq Error -14.829 kHz
x dB Bandwidth 4.836 MHz*



WCDMA / HSDPA Band II (CH Low)

Agilent 23:15:03 Dec 7, 2009

R T

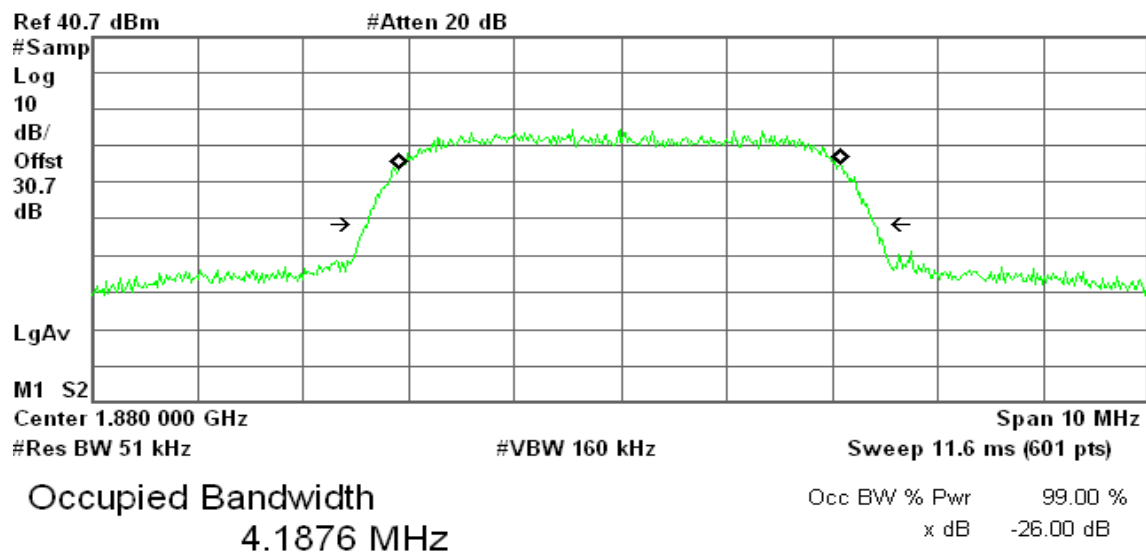


Transmit Freq Error -8.810 kHz
x dB Bandwidth 4.818 MHz*

WCDMA / HSDPA Band II (CH Mid)

Agilent 23:15:23 Dec 7, 2009

R T



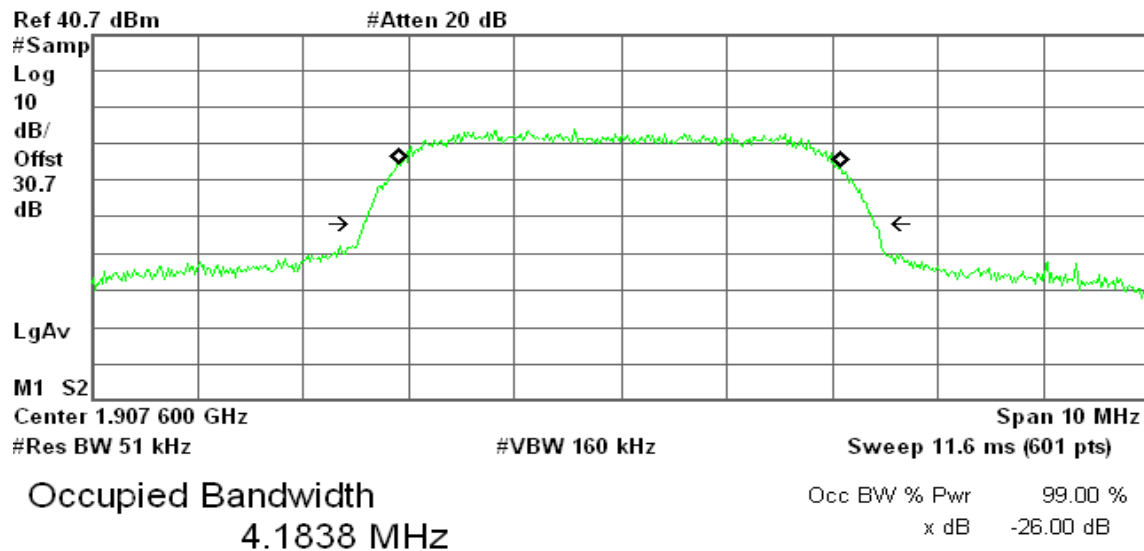
Transmit Freq Error -2.873 kHz
x dB Bandwidth 4.792 MHz*



WCDMA / HSDPA Band II (CH High)

Agilent 23:16:09 Dec 7, 2009

R T

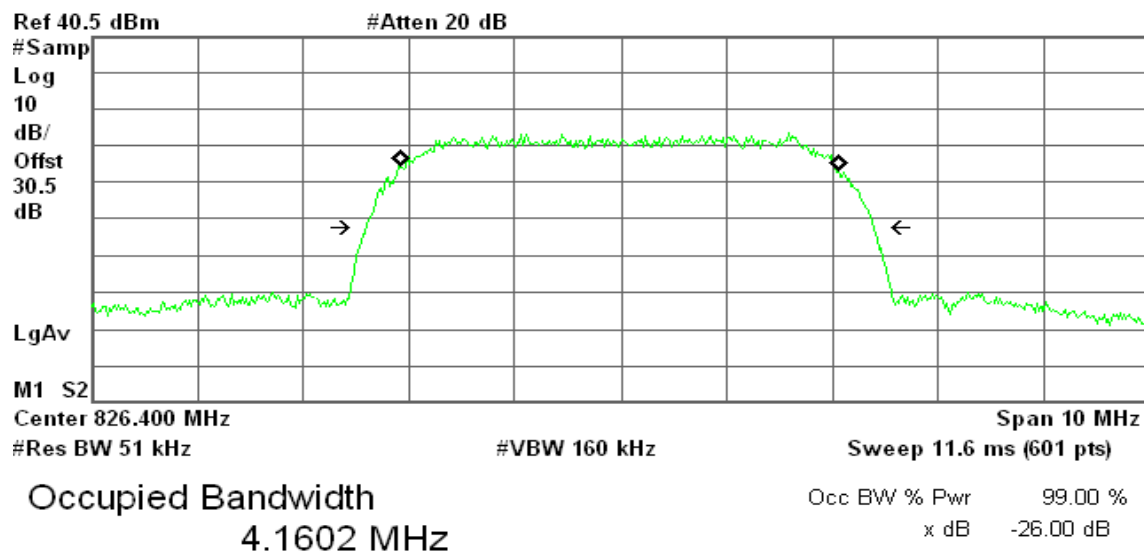


Transmit Freq Error -16.331 kHz
x dB Bandwidth 4.823 MHz*

WCDMA / HSDPA Band V (CH Low)

Agilent 00:07:33 Dec 8, 2009

R T



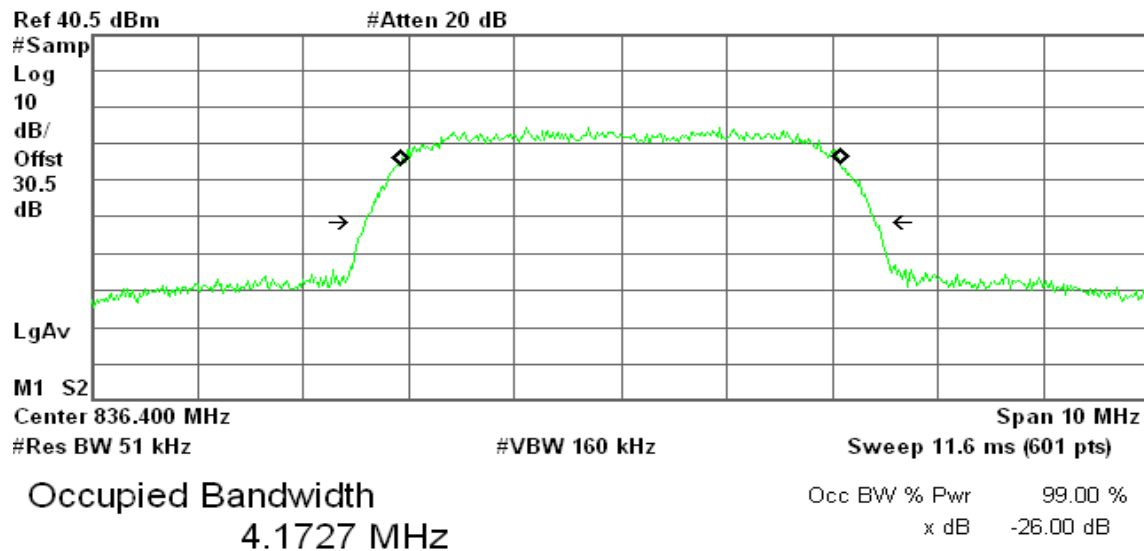
Transmit Freq Error -11.038 kHz
x dB Bandwidth 4.806 MHz*



WCDMA / HSDPA Band V (CH Mid)

Agilent 00:07:56 Dec 8, 2009

R T

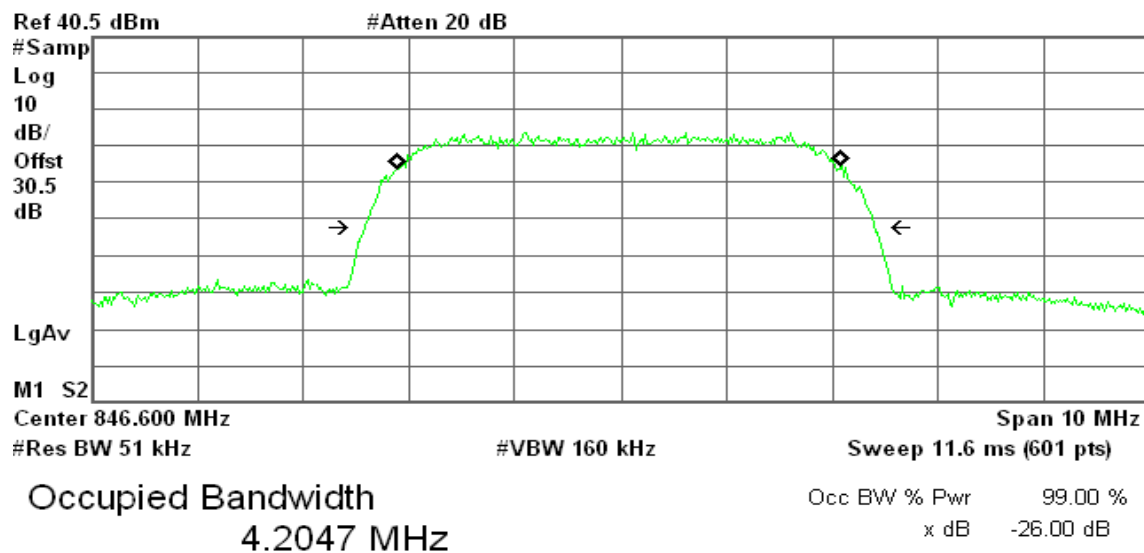


Transmit Freq Error -1.670 kHz
x dB Bandwidth 4.825 MHz*

WCDMA / HSDPA Band V (CH High)

Agilent 00:08:46 Dec 8, 2009

R T



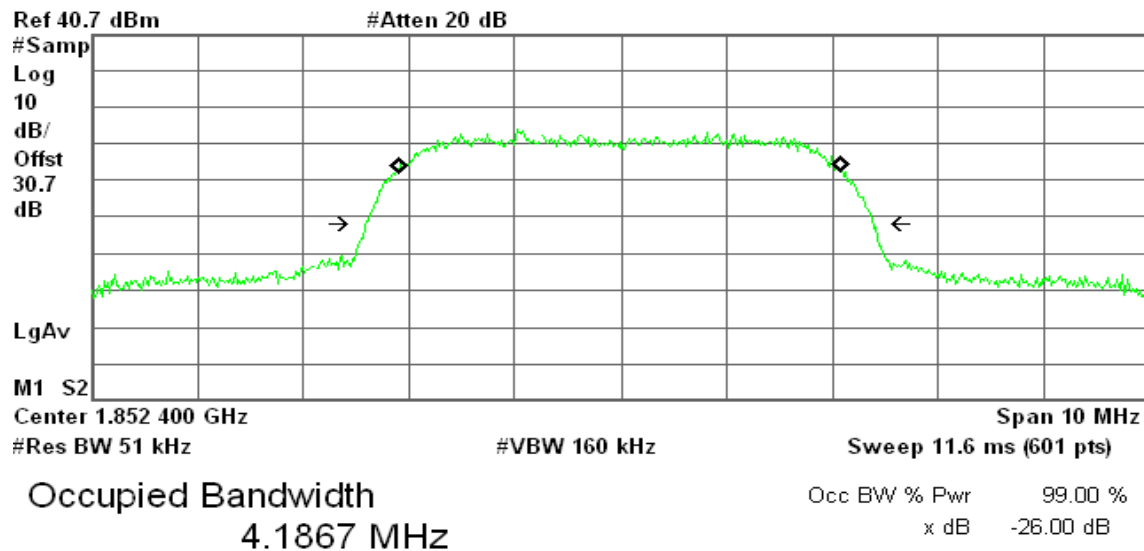
Transmit Freq Error -10.938 kHz
x dB Bandwidth 4.827 MHz*



WCDMA / HSUPA Band II (CH Low)

Agilent 23:30:05 Dec 7, 2009

R T

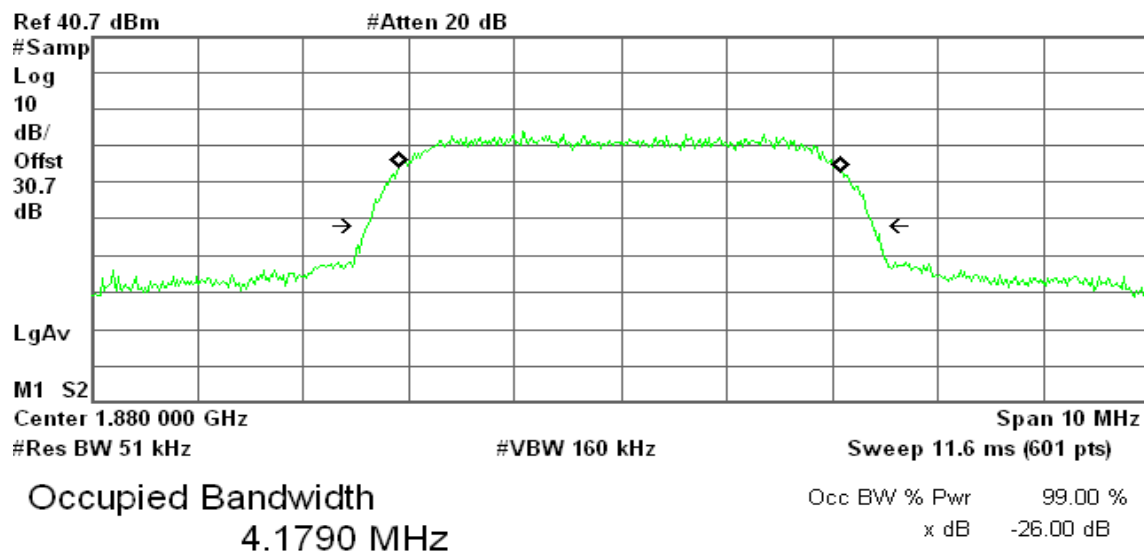


Transmit Freq Error -11.215 kHz
x dB Bandwidth 4.805 MHz*

WCDMA / HSUPA Band II (CH Mid)

Agilent 23:30:23 Dec 7, 2009

R T



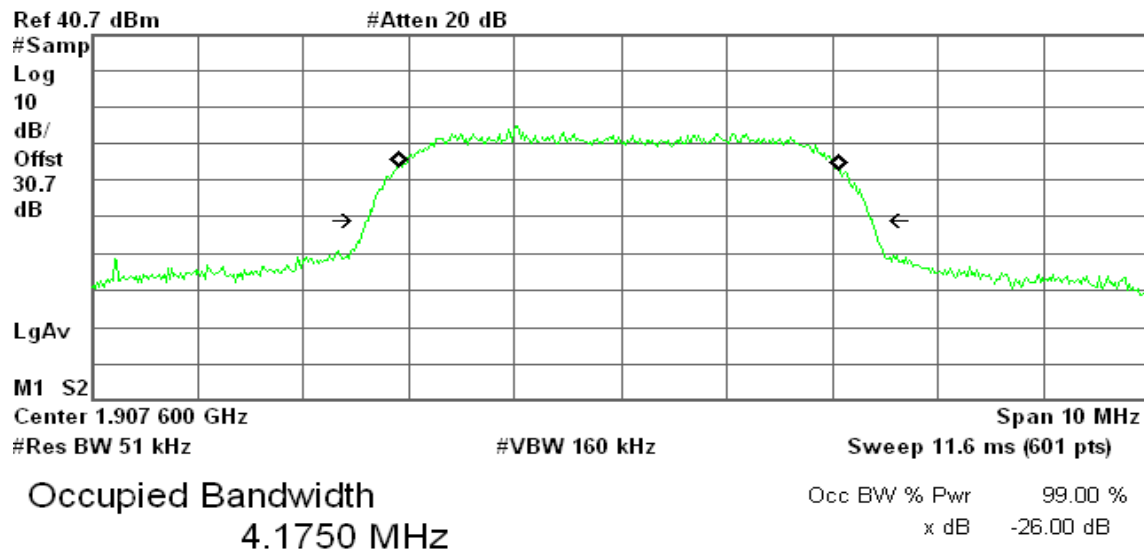
Transmit Freq Error -2.533 kHz
x dB Bandwidth 4.781 MHz*



WCDMA / HSUPA Band II (CH High)

Agilent 23:31:17 Dec 7, 2009

R T

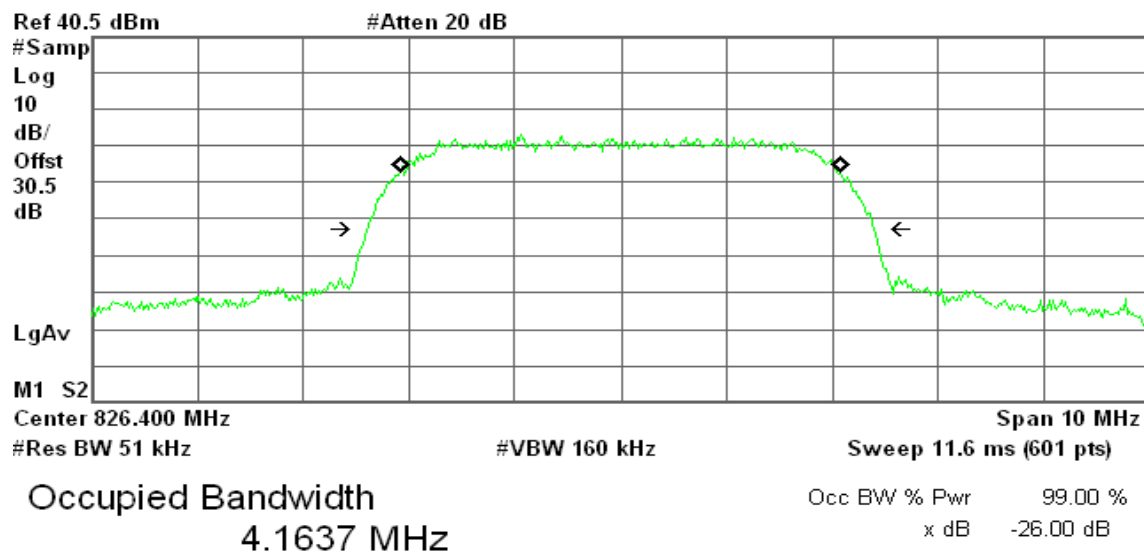


Transmit Freq Error -20.394 kHz
x dB Bandwidth 4.769 MHz*

WCDMA / HSUPA Band V (CH Low)

Agilent 23:43:11 Dec 7, 2009

R T



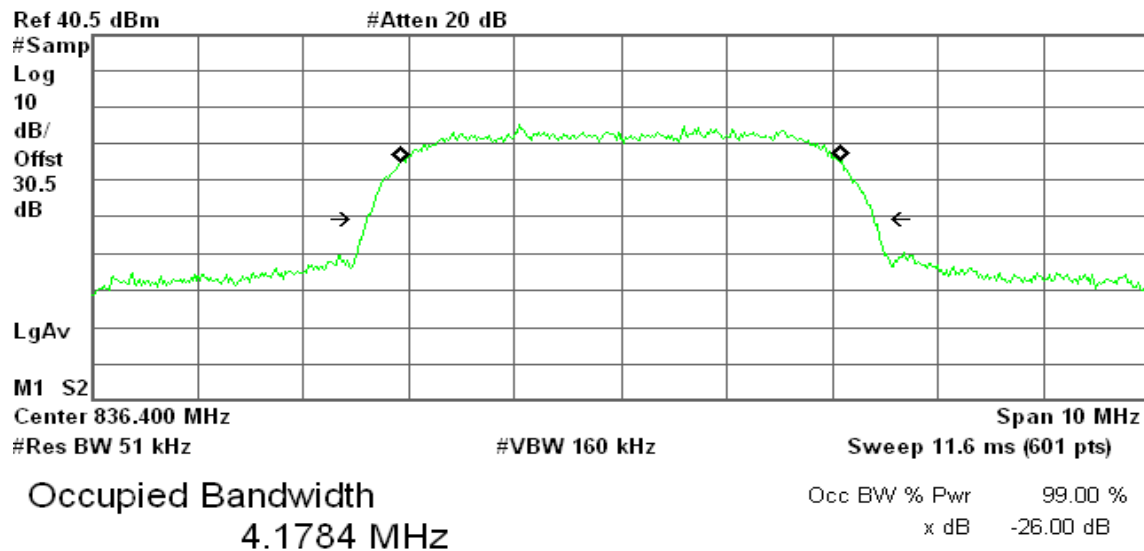
Transmit Freq Error -4.822 kHz
x dB Bandwidth 4.799 MHz*



WCDMA / HSUPA Band V (CH Mid)

Agilent 23:43:53 Dec 7, 2009

R T

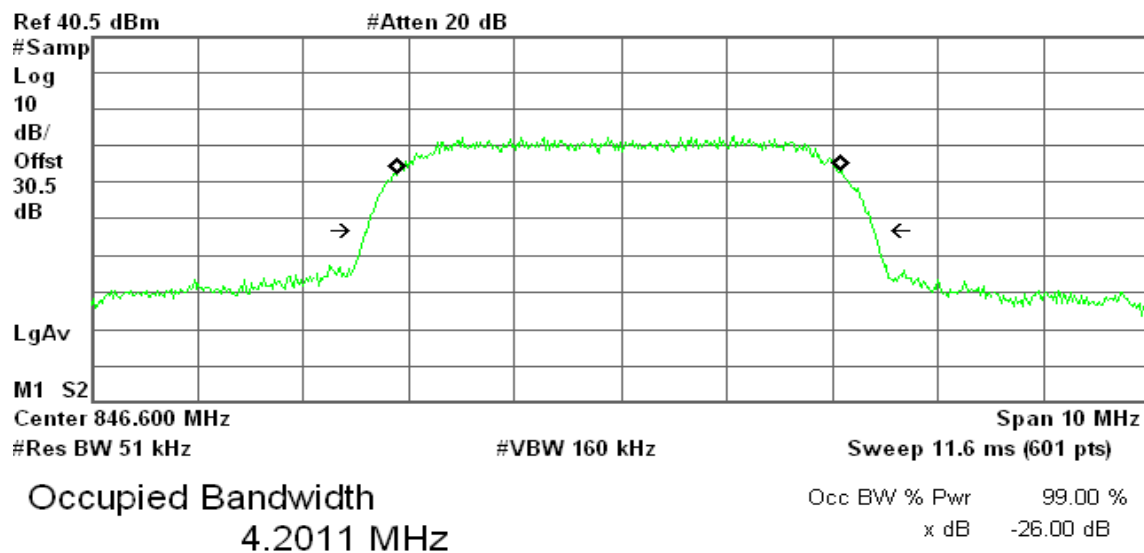


Transmit Freq Error 1.210 kHz
x dB Bandwidth 4.795 MHz*

WCDMA / HSUPA Band V (CH High)

Agilent 23:44:53 Dec 7, 2009

R T



Transmit Freq Error -10.979 kHz
x dB Bandwidth 4.800 MHz*



7.5 OUT OF BAND EMISSION AT ANTENNA TERMINALS

LIMIT

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

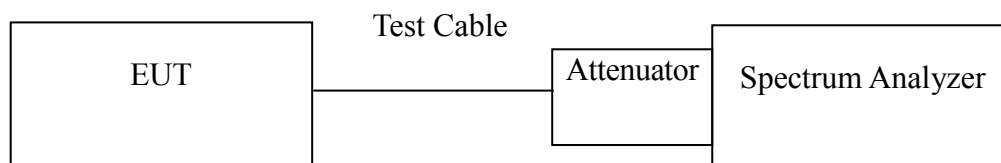
Out of Band Emissions: The mean power of emission must be attenuated below the mean power of the non-modulated carrier (P) on any frequency twice or more than twice the fundamental frequency by at least $43 + 10 \log P$ dB.

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

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

Test Configuration

Out of band emission at antenna terminals:



TEST PROCEDURE

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

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

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

TEST RESULTS

No non-compliance noted.

**Test Data**

Mode	CH	Location	Description
GPRS 850 (Class 12)	128	Figure 7-1	Conducted spurious emissions, 30MHz - 20GHz
	190	Figure 7-2	Conducted spurious emissions, 30MHz - 20GHz
	251	Figure 7-3	Conducted spurious emissions, 30MHz - 20GHz
GPRS 1900 (Class 12)	512	Figure 8-1	Conducted spurious emissions, 30MHz - 20GHz
	661	Figure 8-2	Conducted spurious emissions, 30MHz - 20GHz
	810	Figure 8-3	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
GPRS 850 (Class 12)	128	Figure 9-1	Band Edge emissions
	251	Figure 9-2	Band Edge emissions
GPRS 1900 (Class 12)	512	Figure 10-1	Band Edge emissions
	810	Figure 10-2	Band Edge emissions

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

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



Mode	CH	Location	Description
WCDMA (Band II)	9262	Figure 13-1	Conducted spurious emissions, 30MHz - 20GHz
	9400	Figure 13-2	Conducted spurious emissions, 30MHz - 20GHz
	9538	Figure 13-3	Conducted spurious emissions, 30MHz - 20GHz
WCDMA (Band V)	4132	Figure 13-4	Conducted spurious emissions, 30MHz - 20GHz
	4182	Figure 13-5	Conducted spurious emissions, 30MHz - 20GHz
	4233	Figure 13-6	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
WCDMA (Band II)	9262	Figure 14-1	Band Edge emissions
	9538	Figure 14-2	Band Edge emissions
WCDMA (Band V)	4132	Figure 14-3	Band Edge emissions
	4233	Figure 14-4	Band Edge emissions

Mode	CH	Location	Description
HSDPA WCDMA (Band II)	9262	Figure 15-1	Conducted spurious emissions, 30MHz - 20GHz
	9400	Figure 15-2	Conducted spurious emissions, 30MHz - 20GHz
	9538	Figure 15-3	Conducted spurious emissions, 30MHz - 20GHz
HSDPA WCDMA (Band V)	4132	Figure 15-4	Conducted spurious emissions, 30MHz - 20GHz
	4182	Figure 15-5	Conducted spurious emissions, 30MHz - 20GHz
	4233	Figure 15-6	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
HSDPA WCDMA (Band II)	9262	Figure 16-1	Band Edge emissions
	9538	Figure 16-2	Band Edge emissions
HSDPA WCDMA (Band V)	4132	Figure 16-3	Band Edge emissions
	4233	Figure 16-4	Band Edge emissions



Mode	CH	Location	Description
HSUPA WCDMA (Band II)	9262	Figure 17-1	Conducted spurious emissions, 30MHz - 20GHz
	9400	Figure 17-2	Conducted spurious emissions, 30MHz - 20GHz
	9538	Figure 17-3	Conducted spurious emissions, 30MHz - 20GHz
HSUPA WCDMA (Band V)	4132	Figure 17-4	Conducted spurious emissions, 30MHz - 20GHz
	4182	Figure 17-5	Conducted spurious emissions, 30MHz - 20GHz
	4233	Figure 17-6	Conducted spurious emissions, 30MHz - 20GHz

Mode	CH	Location	Description
HSUPA WCDMA (Band II)	9262	Figure 18-1	Band Edge emissions
	9538	Figure 18-2	Band Edge emissions
HSUPA WCDMA (Band V)	4132	Figure 18-3	Band Edge emissions
	4233	Figure 18-4	Band Edge emissions



Test Plot

GPRS 850

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

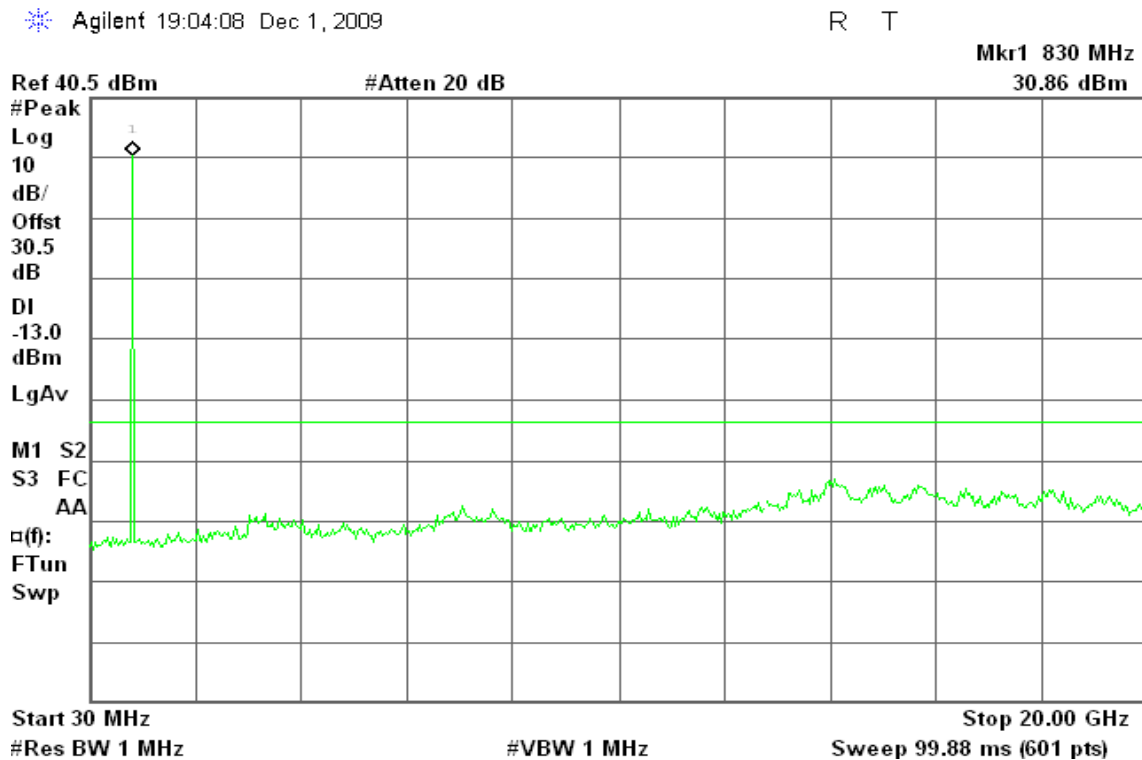


Figure 7-2: Out of Band emission at antenna terminals – GPRS CH Mid

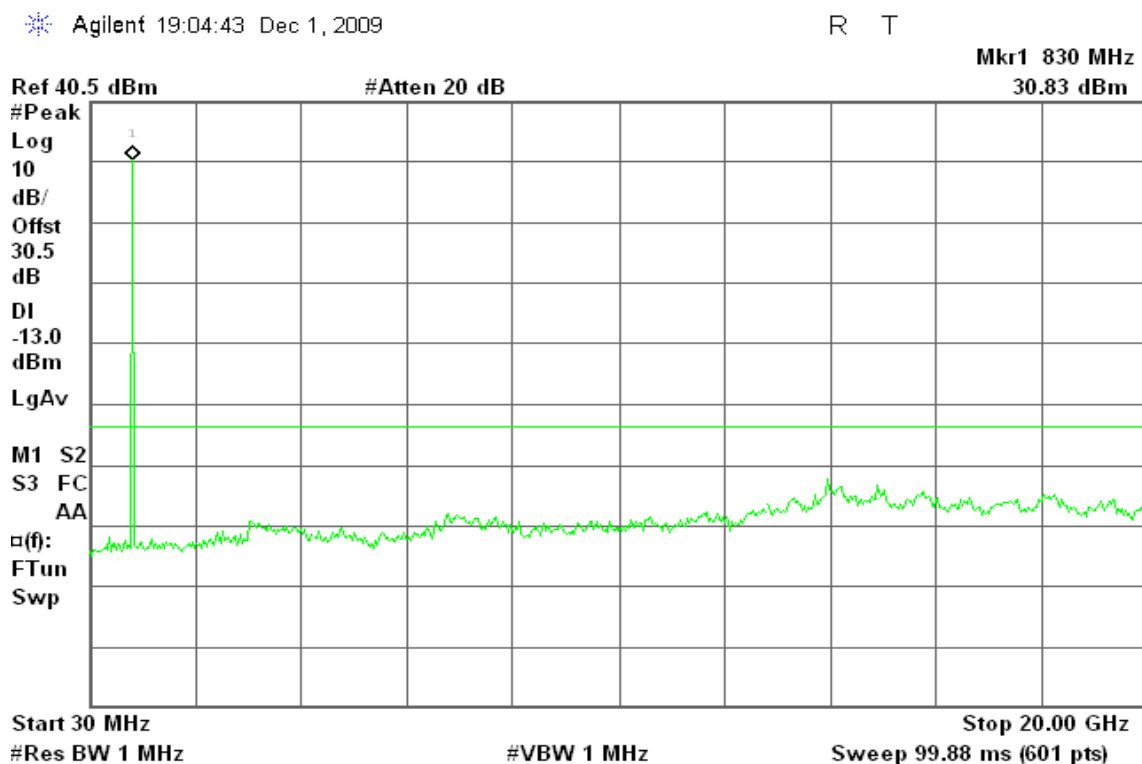




Figure 7-3: Out of Band emission at antenna terminals – GPRS CH High

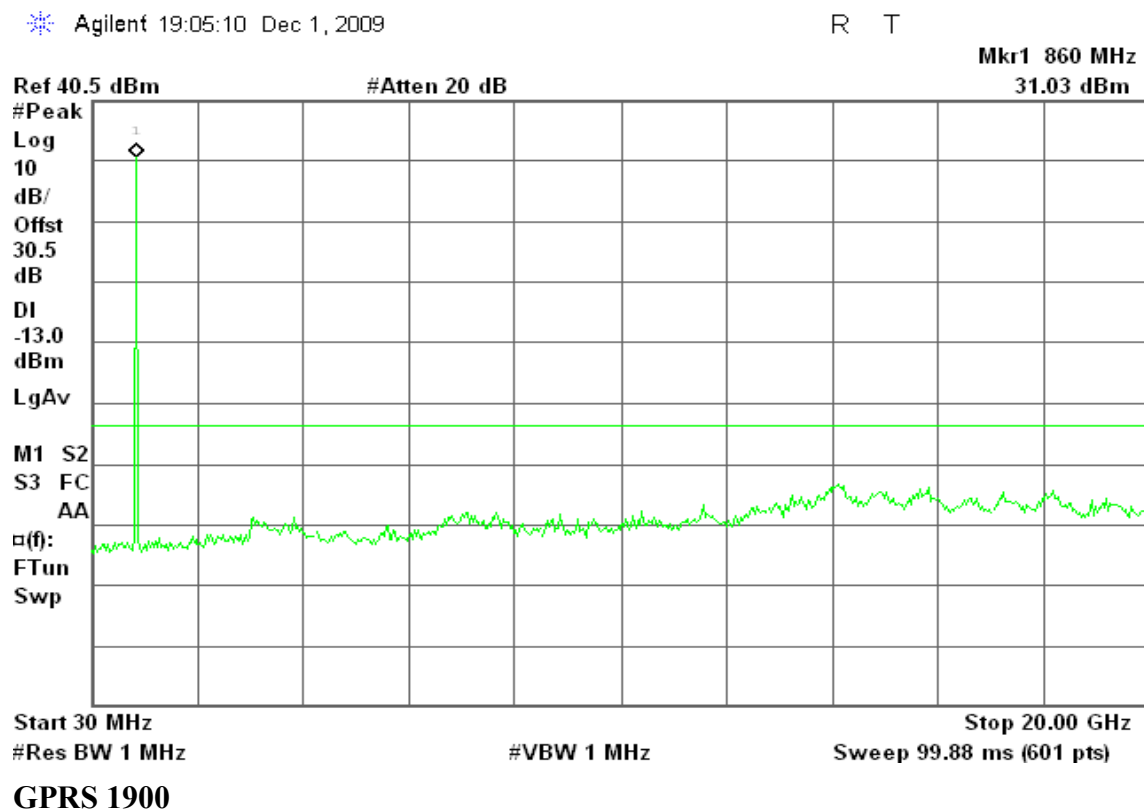


Figure 8-1: Out of Band emission at antenna terminals – GPRS CH Low

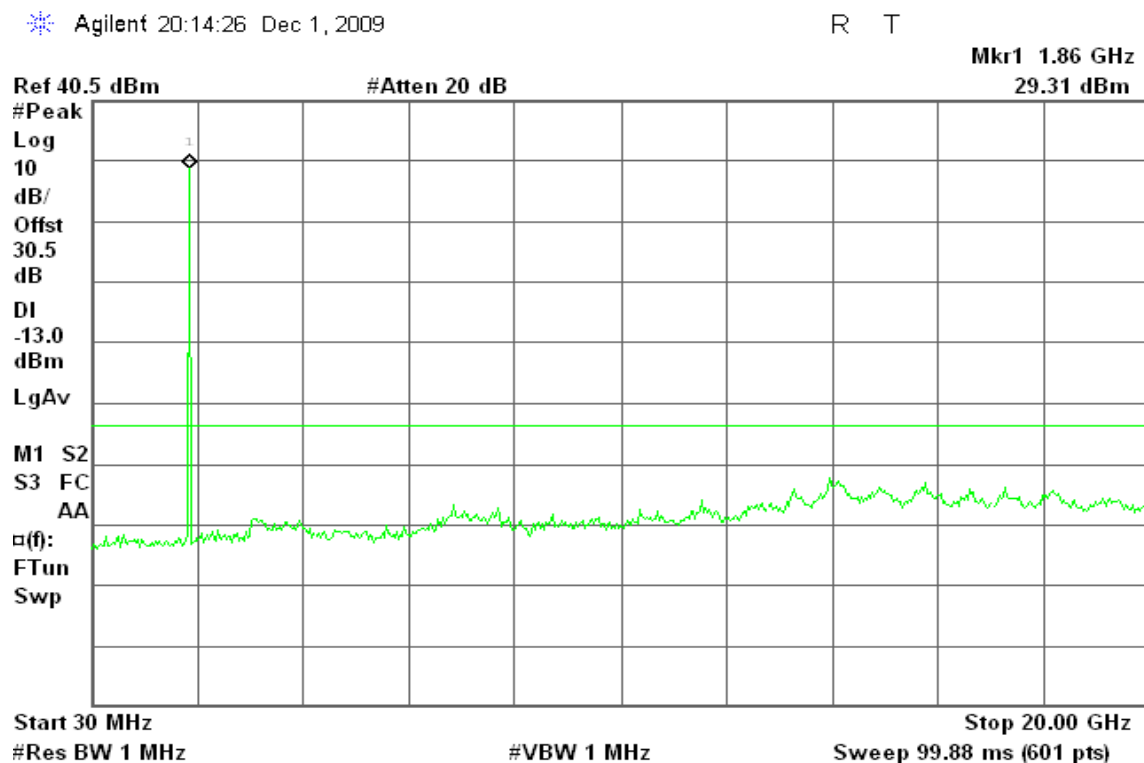
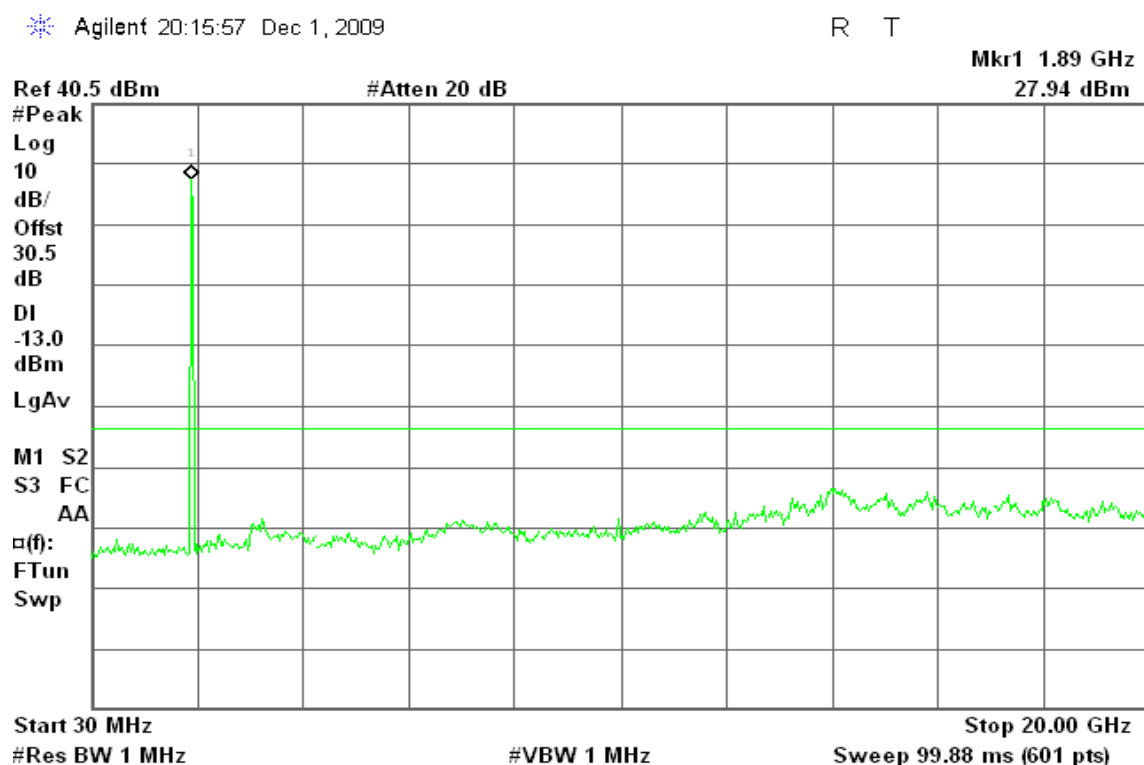




Figure 8-2: Out of Band emission at antenna terminals – GPRS CH Mid



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





GPRS 850

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

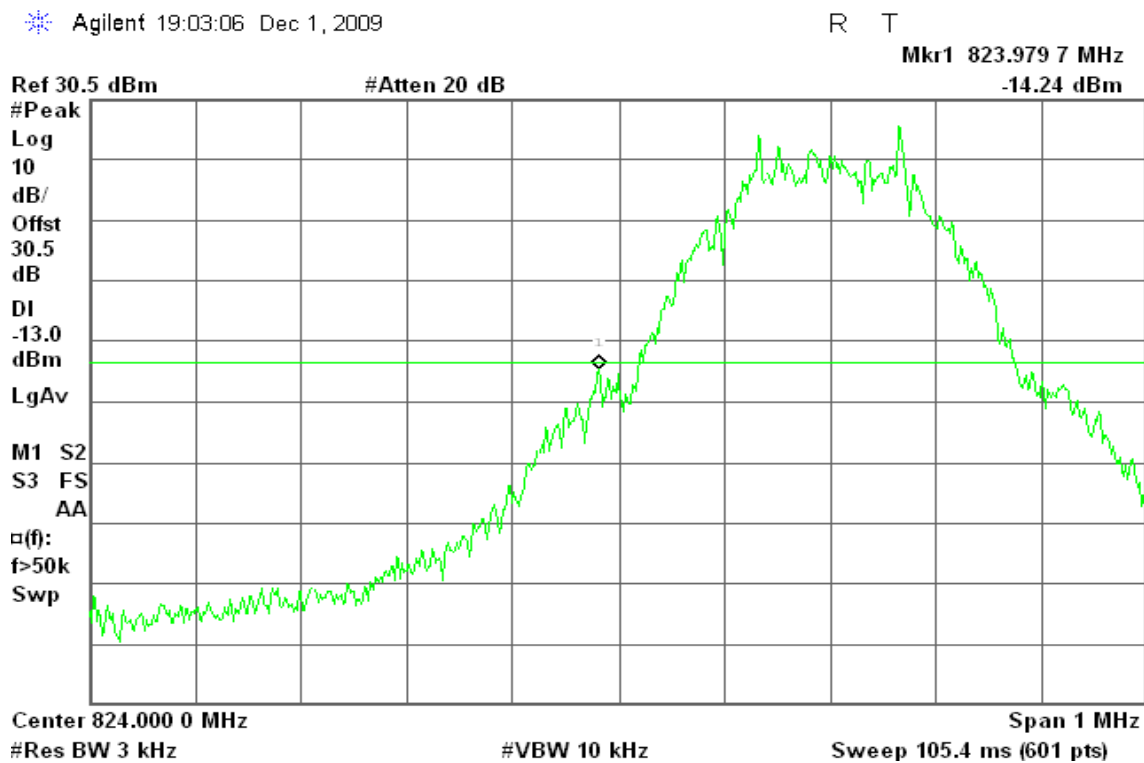
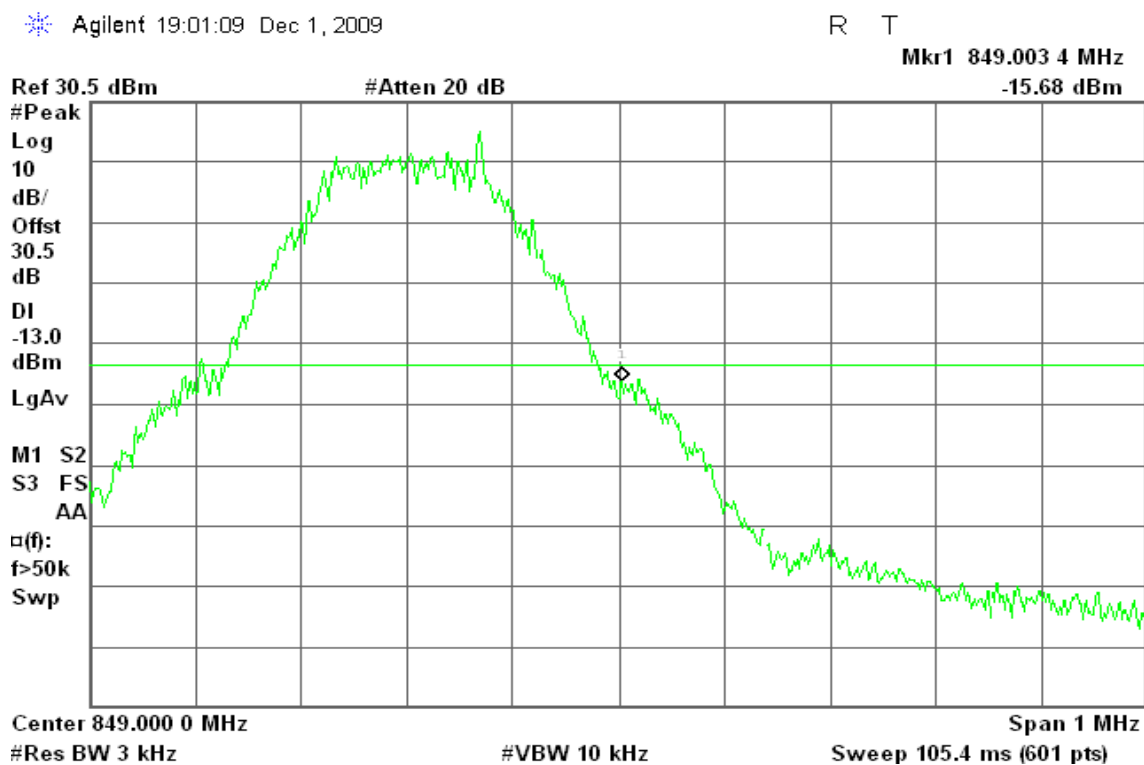


Figure 9-2: Band Edge emissions –GPRS CH High





GPRS 1900

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

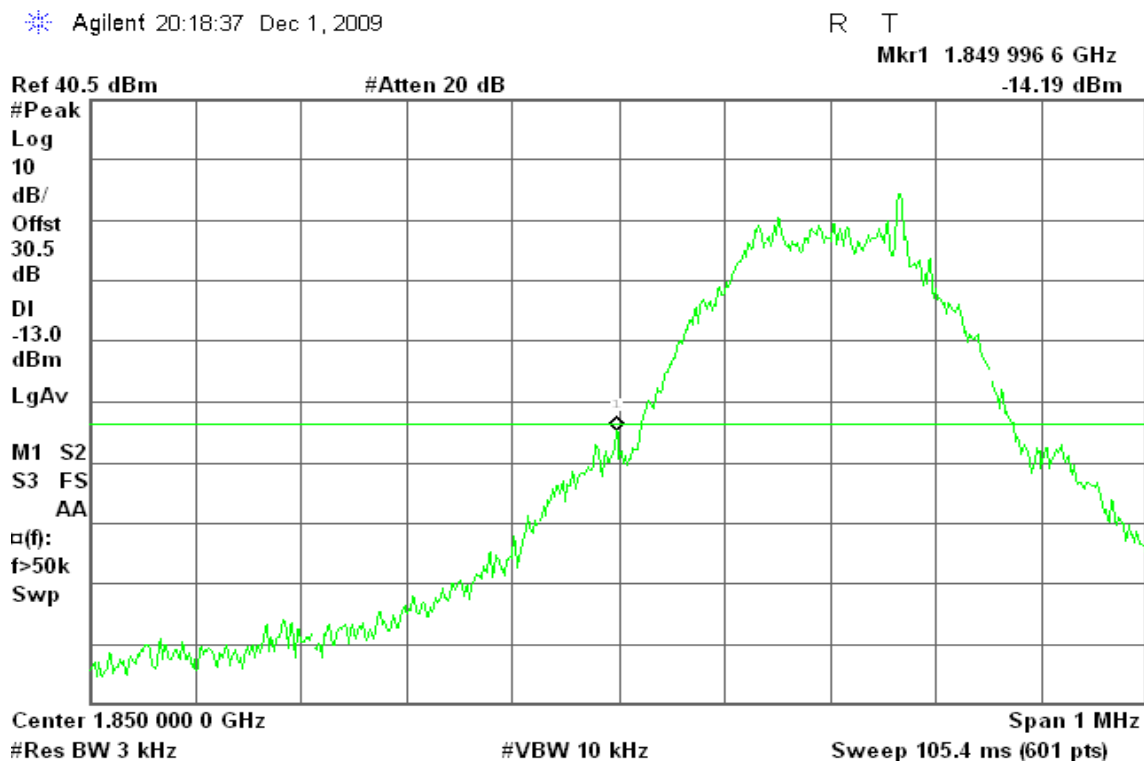
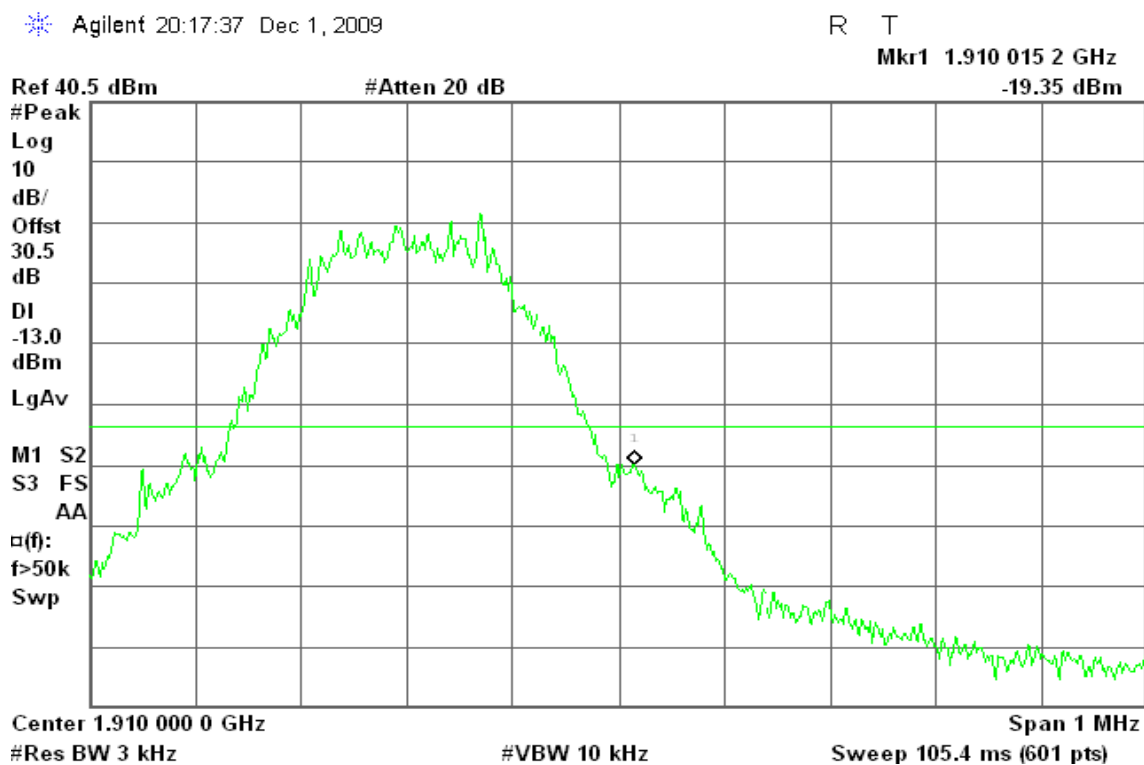


Figure 10-2: Band Edge emissions – GPRS CH High





EDGE 850

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

Agilent 21:00:30 Dec 1, 2009

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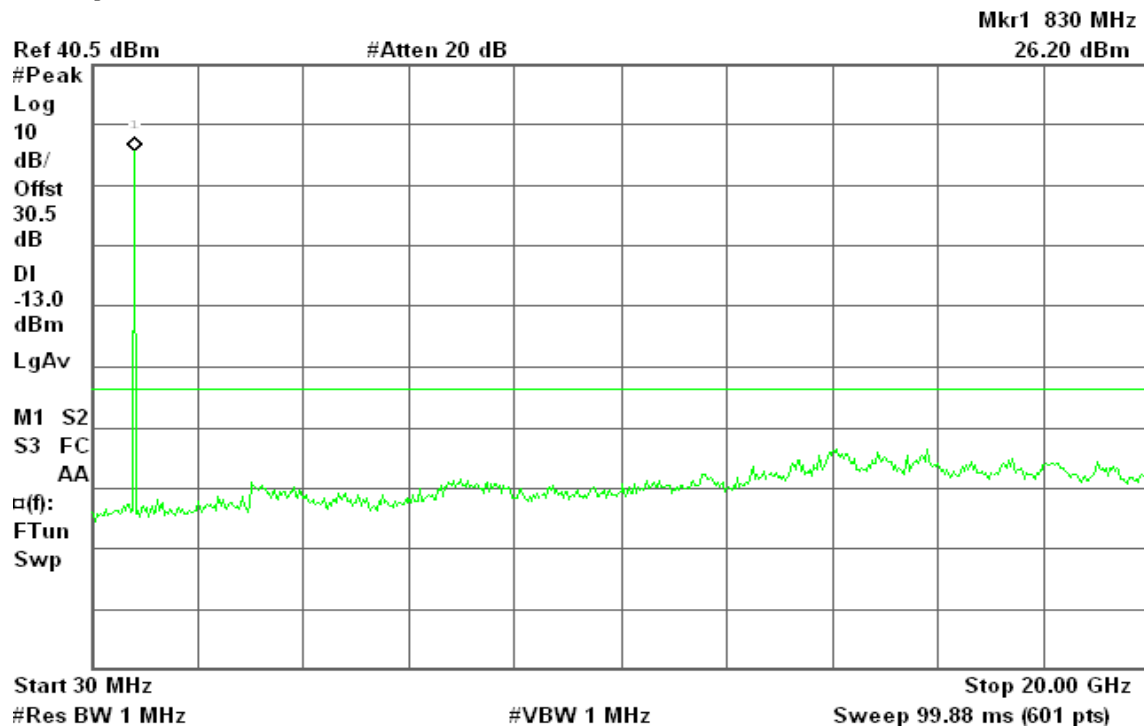


Figure 11-2: Out of Band emission at antenna terminals –EDGE CH Mid

Agilent 21:00:14 Dec 1, 2009

R T

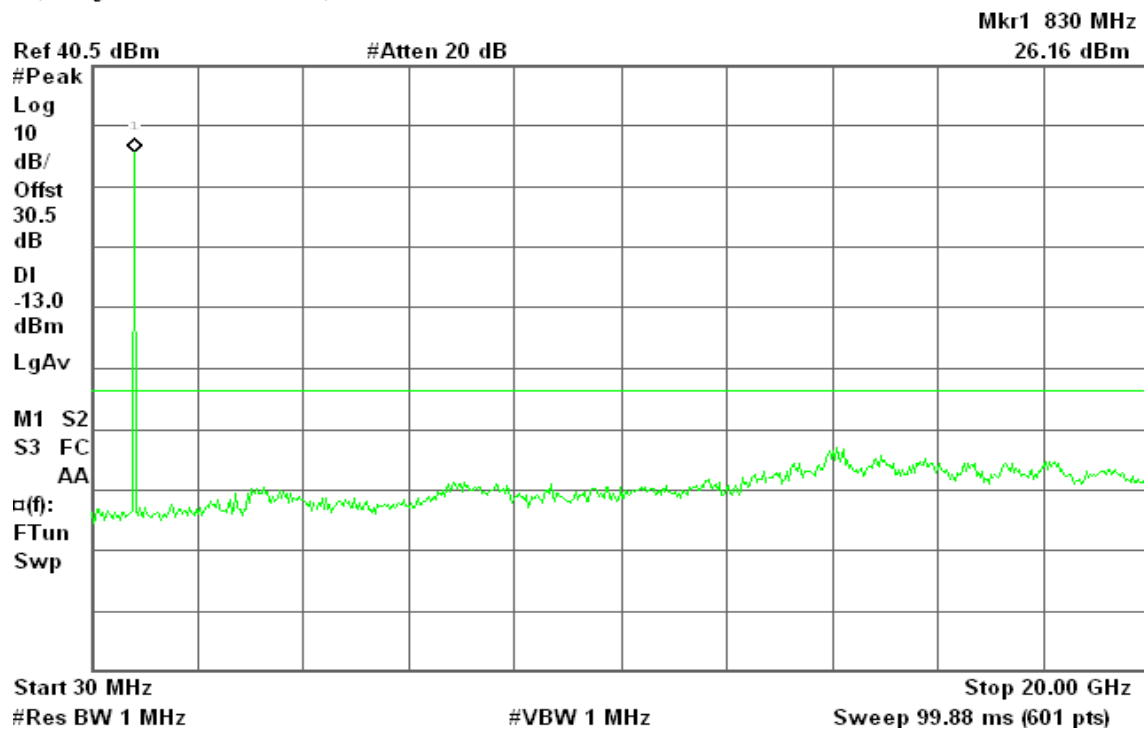
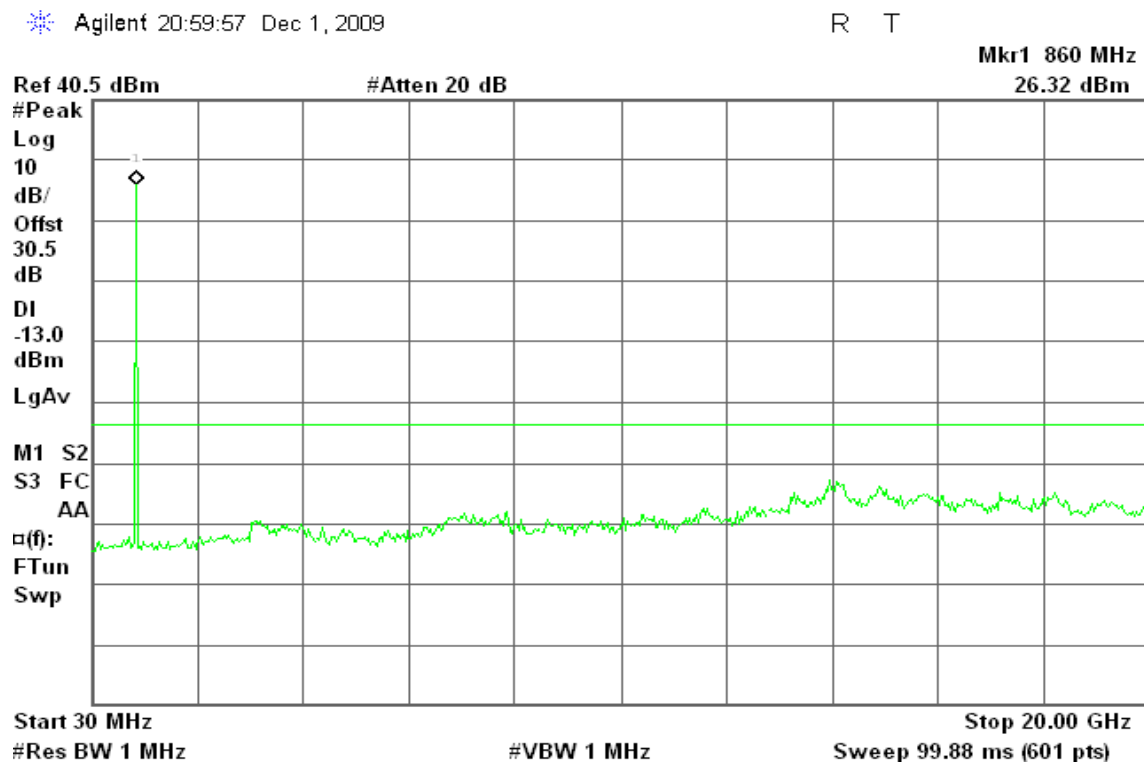




Figure 11-3: Out of Band emission at antenna terminals –EDGE CH High



EDGE 1900

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

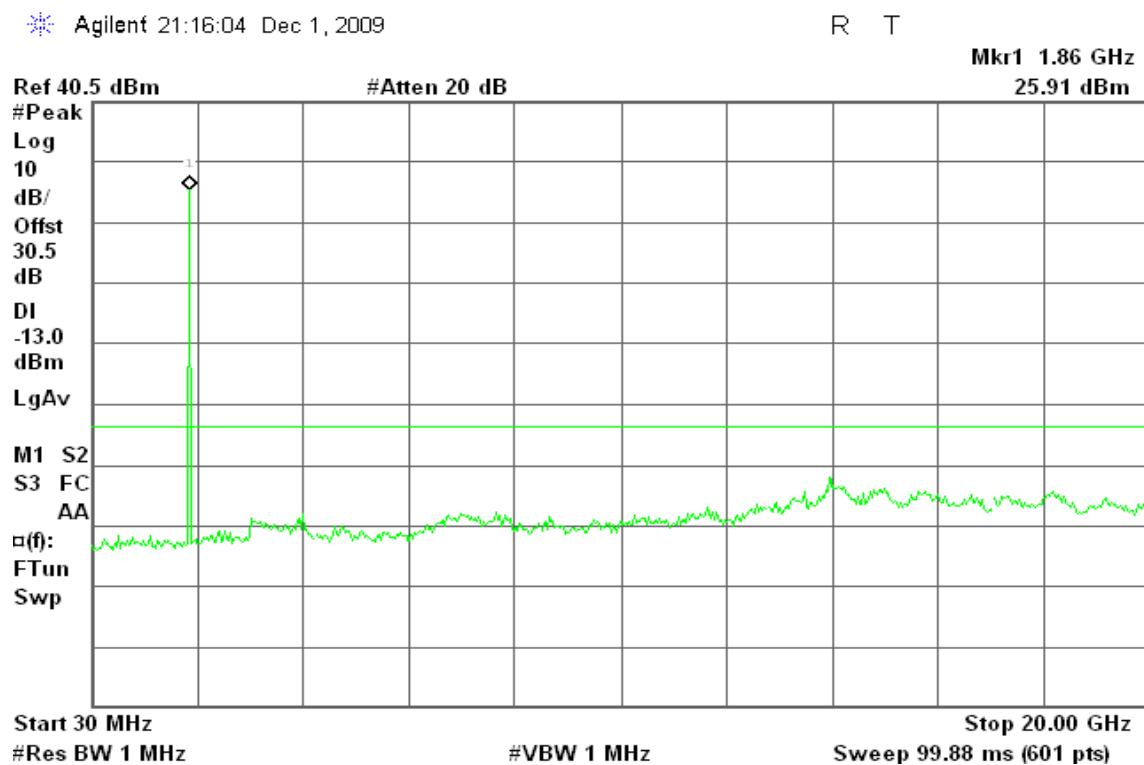




Figure 11-5: Out of Band emission at antenna terminals –EDGE CH Mid

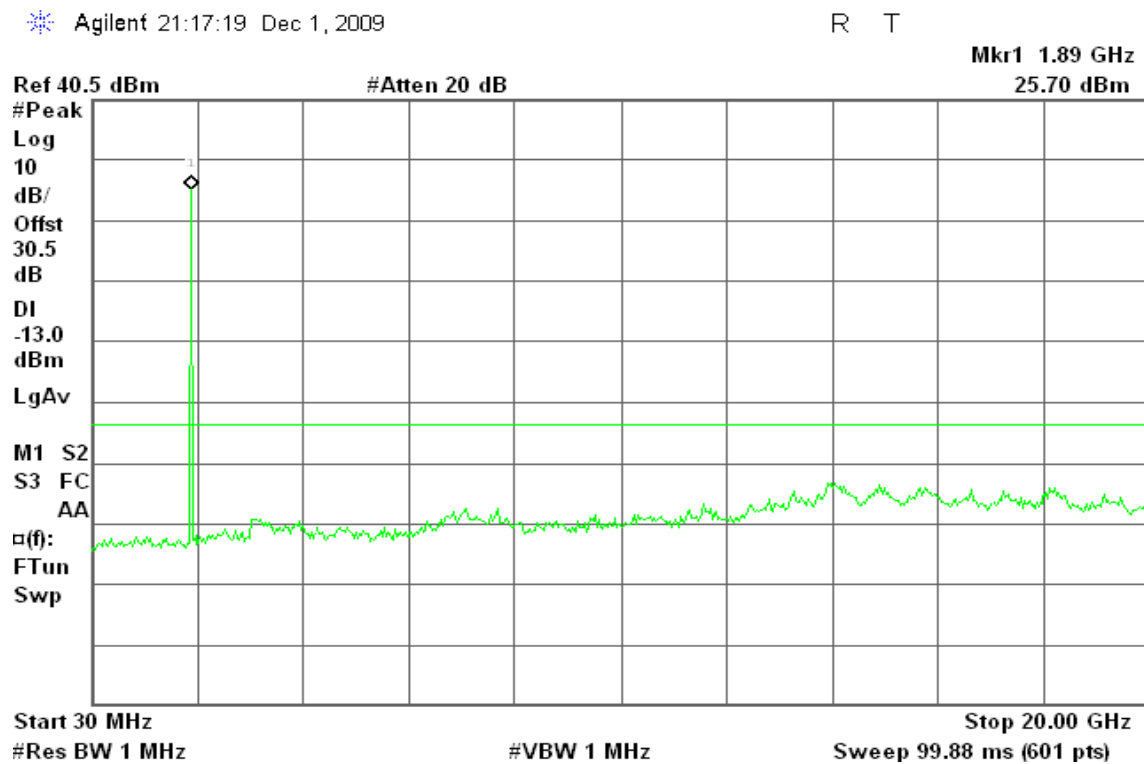
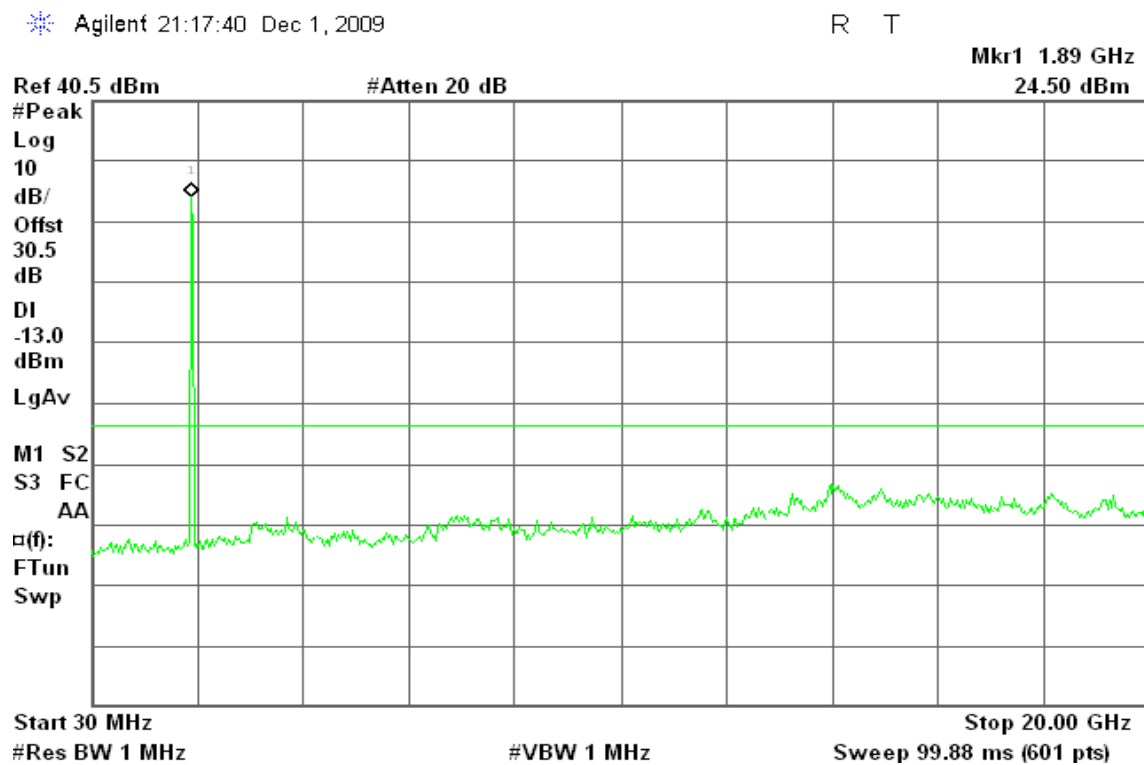


Figure 11-6: Out of Band emission at antenna terminals –EDGE CH High





EDGE 850

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

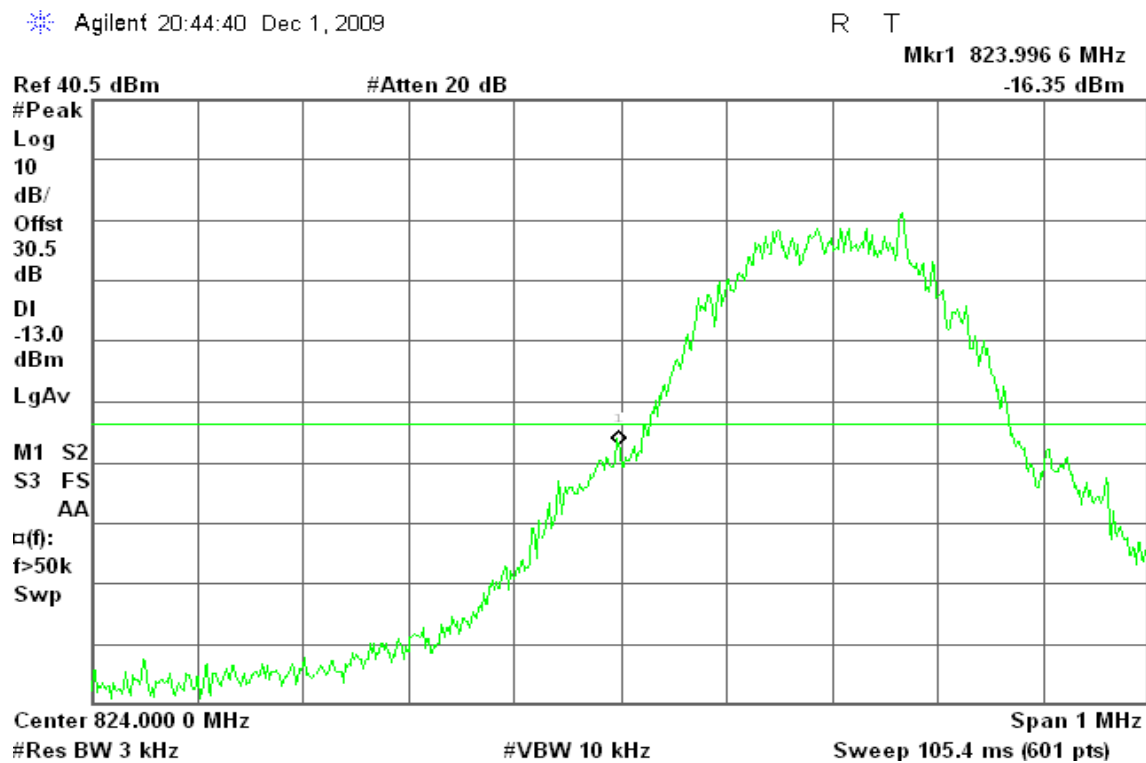
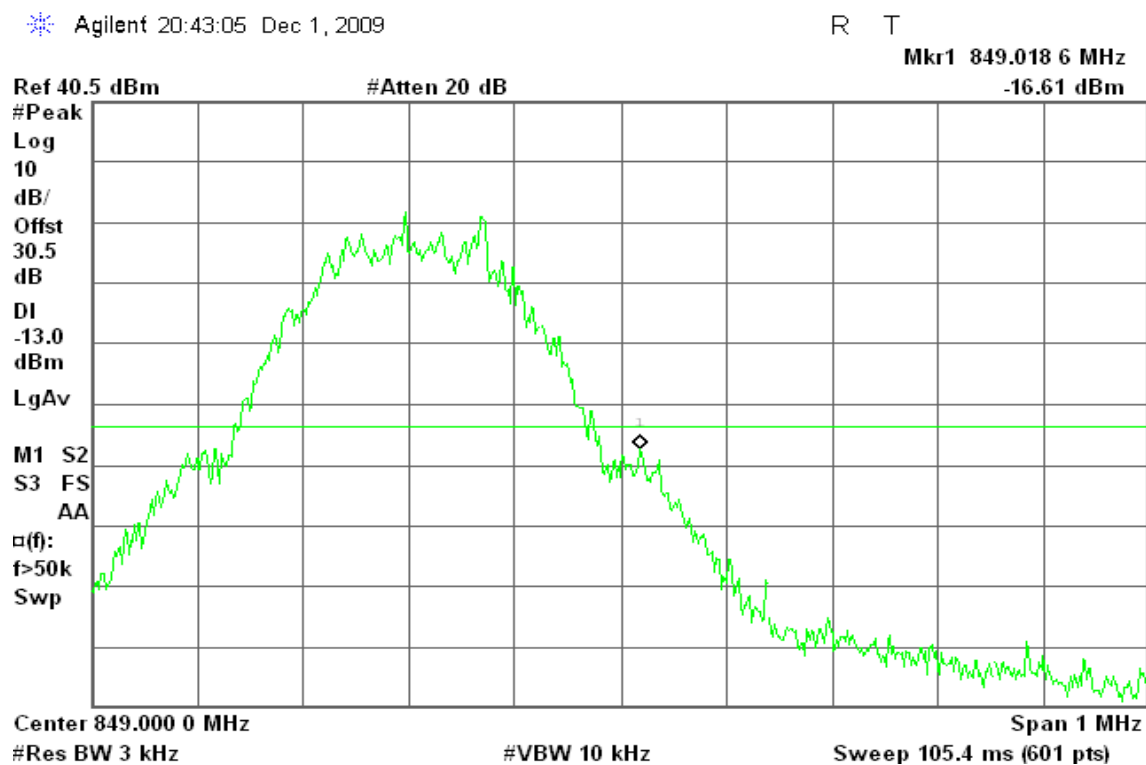


Figure 12-2: Band Edge emissions – EDGE CH High





EDGE 1900

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

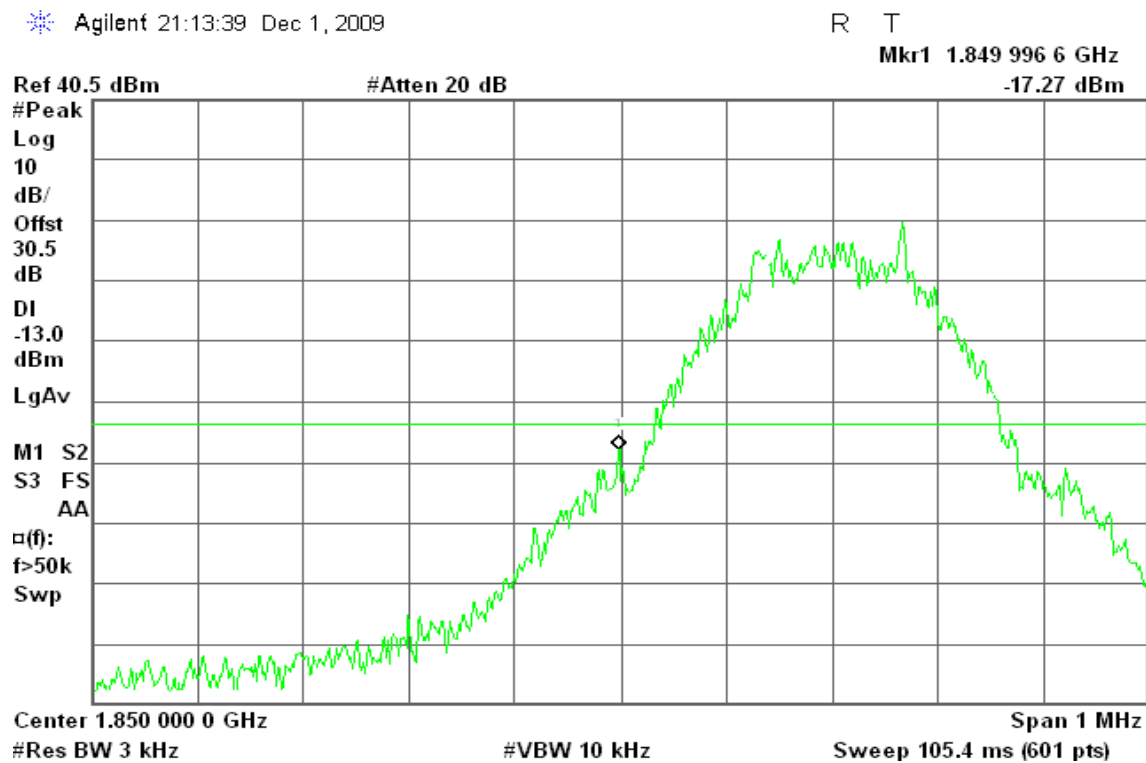
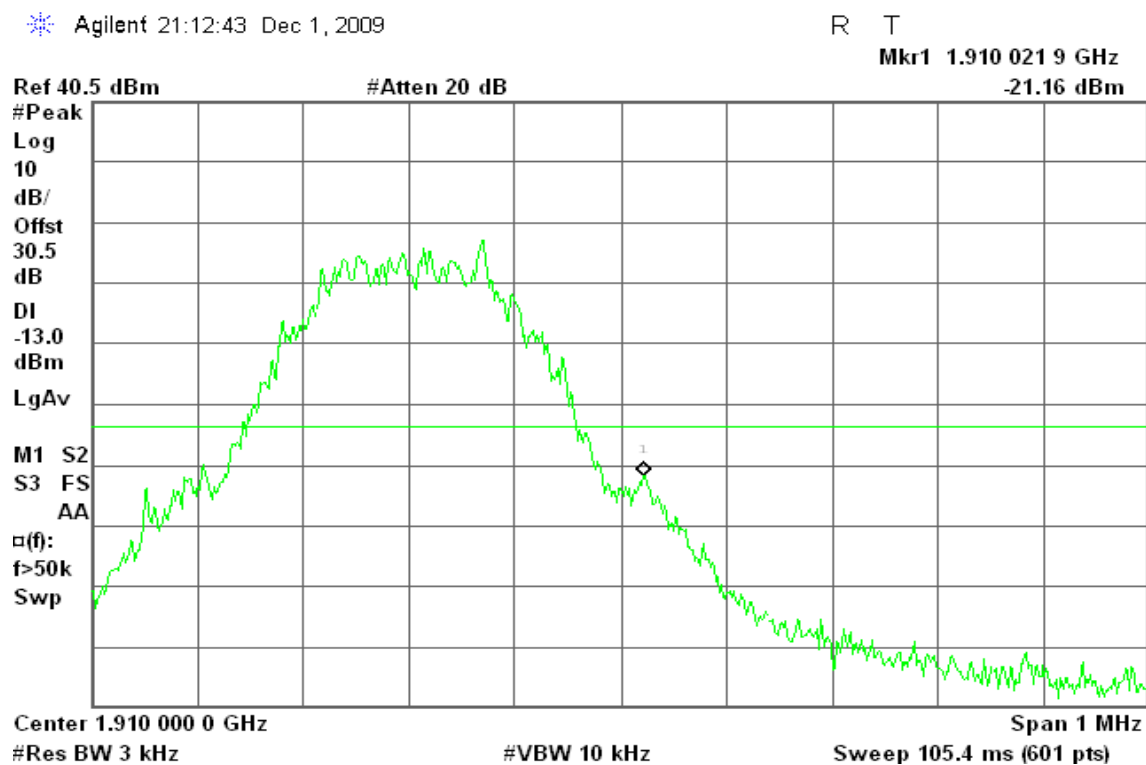


Figure 12-4: Band Edge emissions – EDGE CH High



**WCDMA Band II**

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

Agilent 22:35:39 Dec 7, 2009

R T

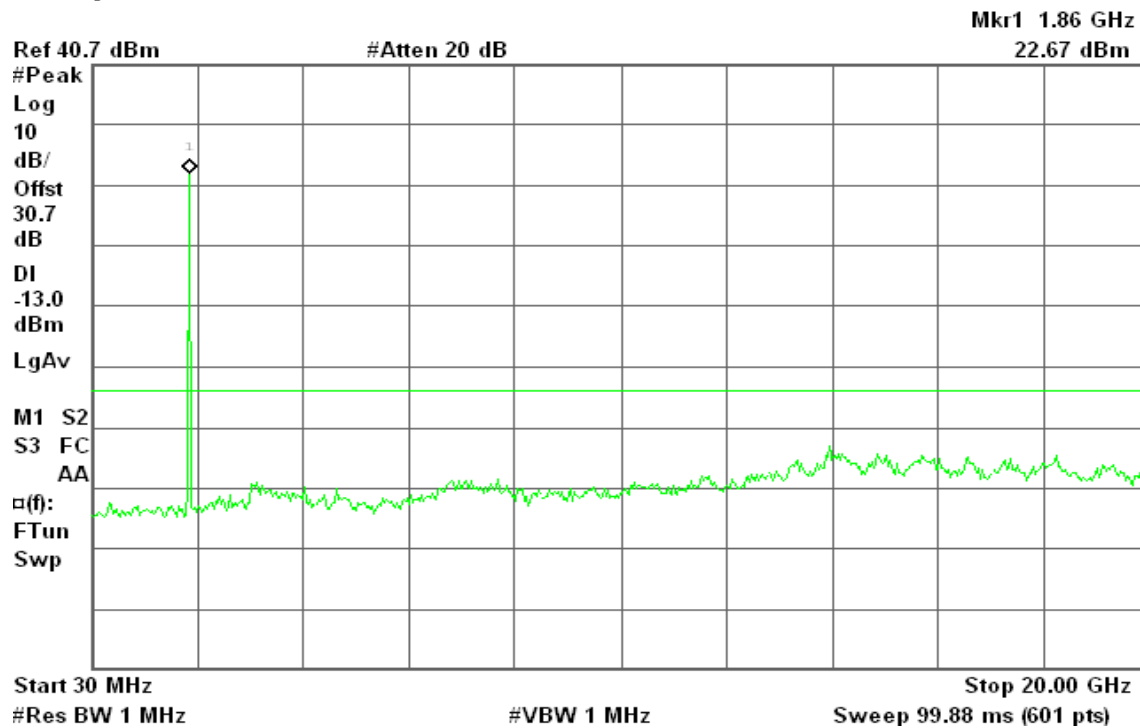


Figure 13-2: Out of Band emission at antenna terminals – WCDMA CH Mid

Agilent 22:35:15 Dec 7, 2009

R T

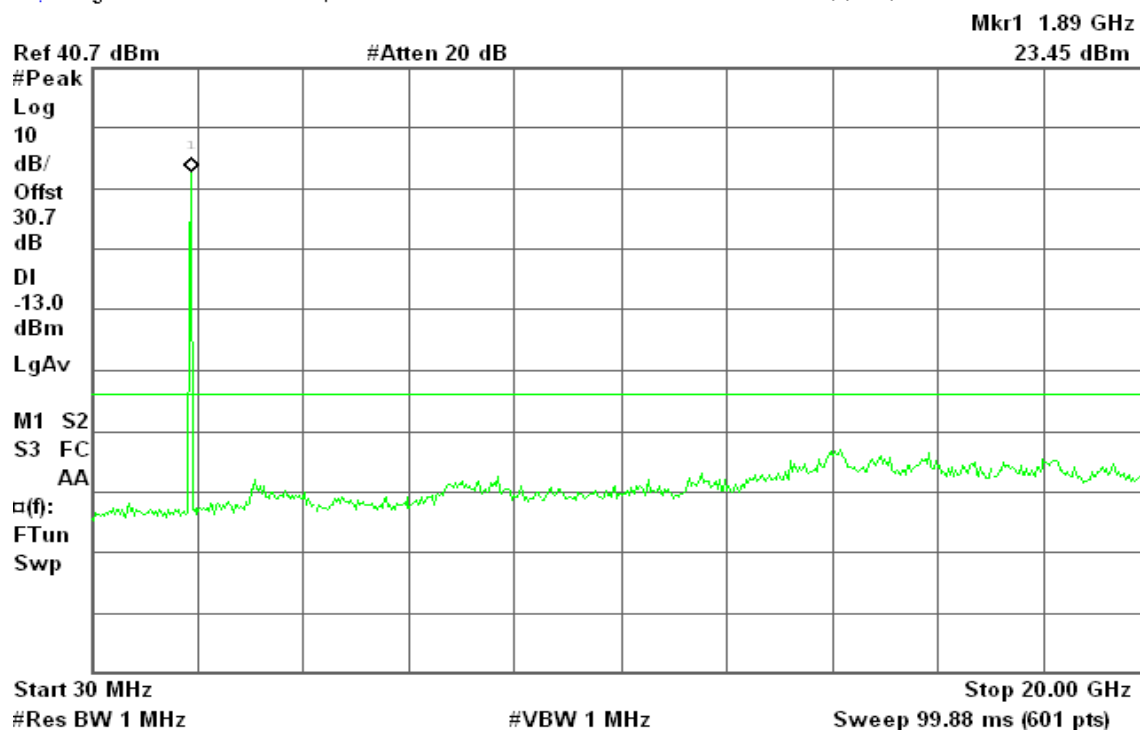
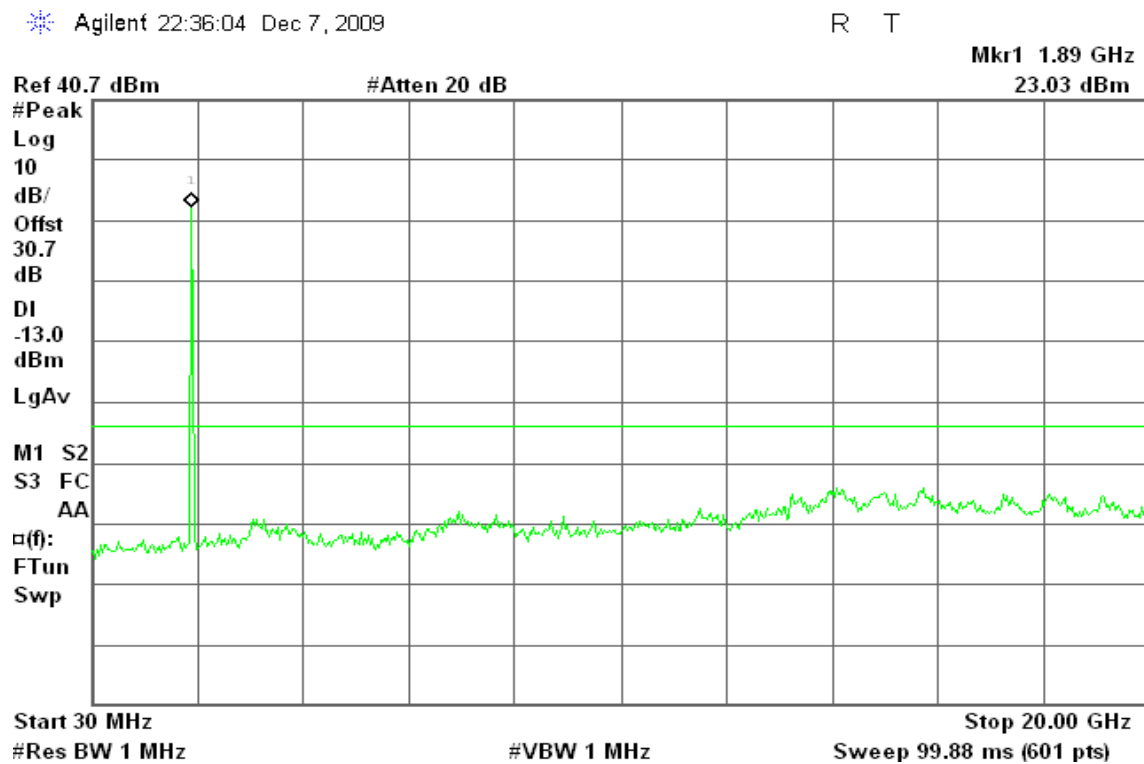




Figure 13-3: Out of Band emission at antenna terminals – WCDMA CH High



WCDMA Band V

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

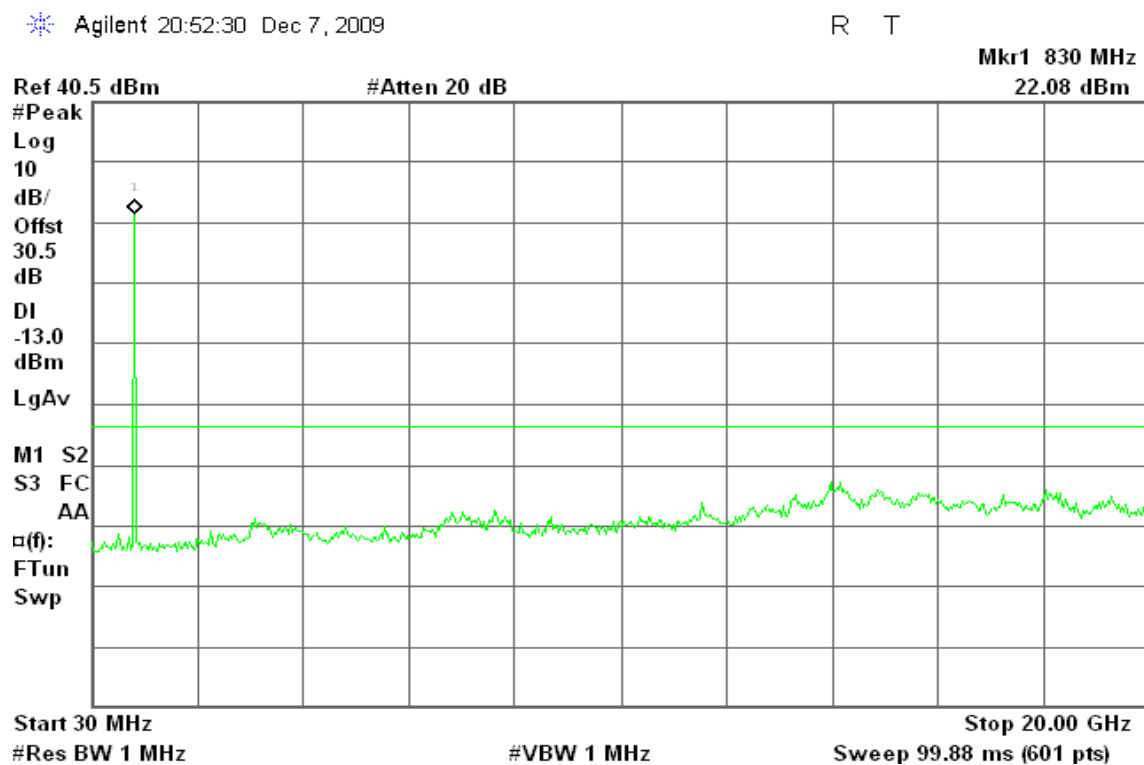




Figure 13-5: Out of Band emission at antenna terminals – WCDMA CH Mid

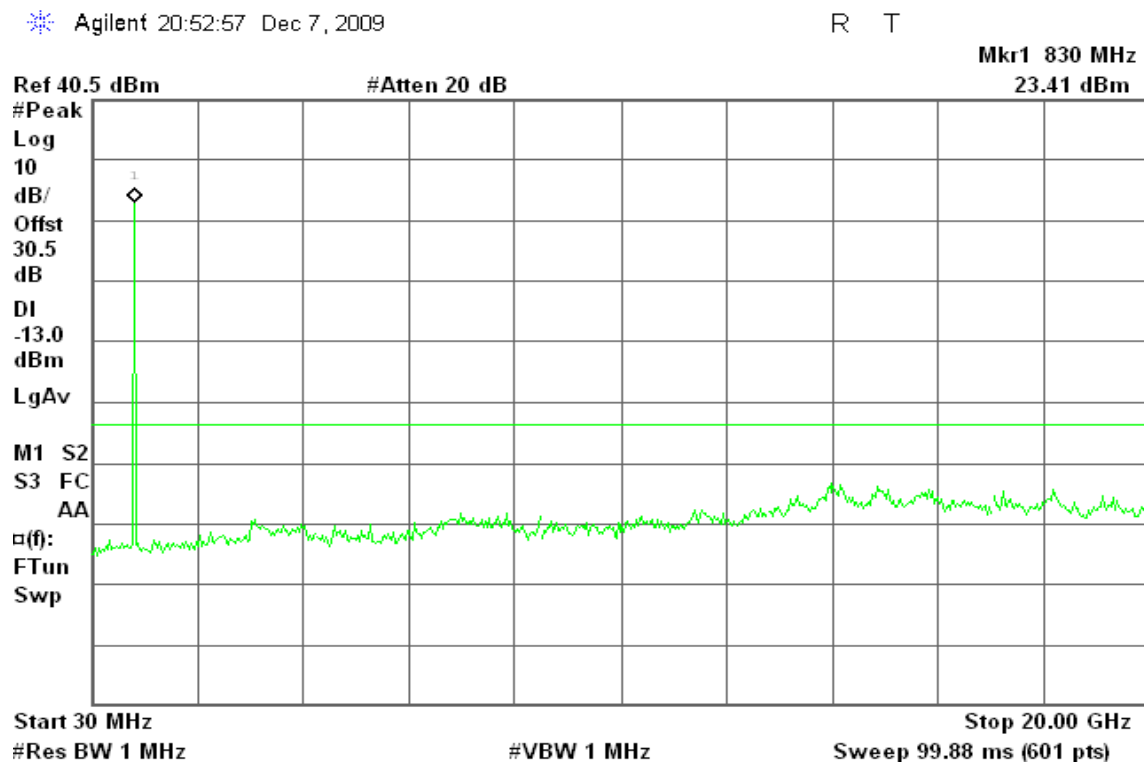
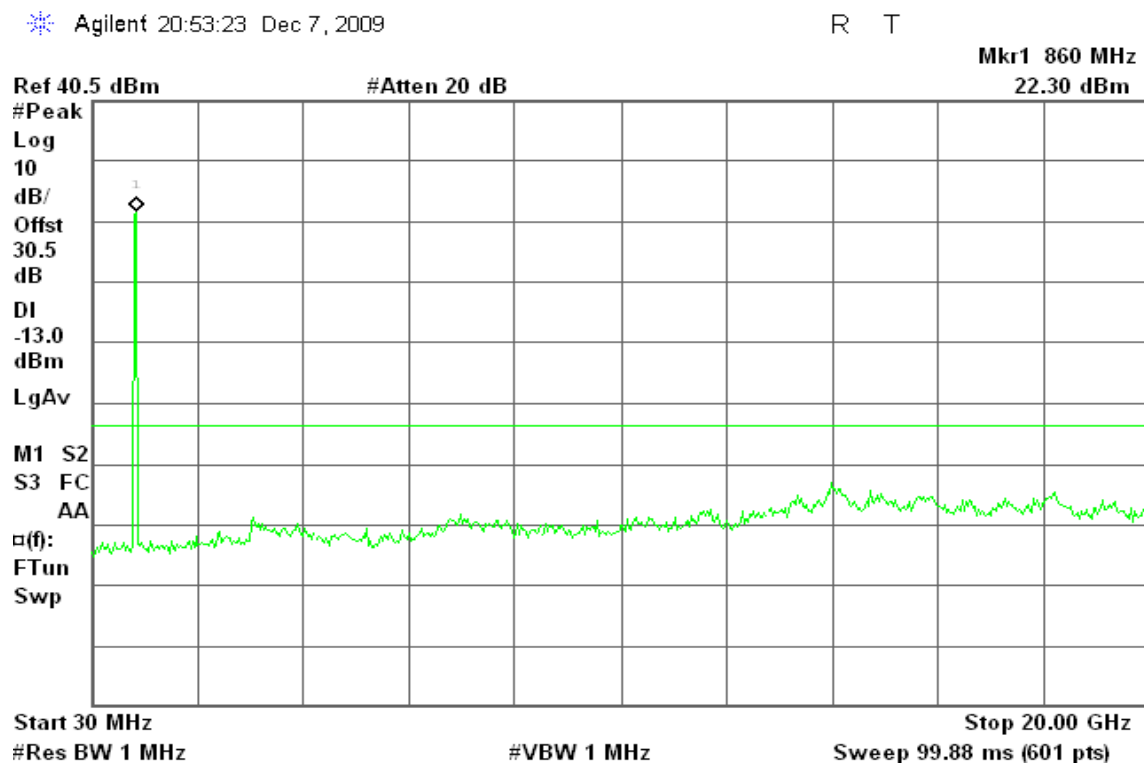


Figure 13-6: Out of Band emission at antenna terminals – WCDMA CH High





WCDMA Band II

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

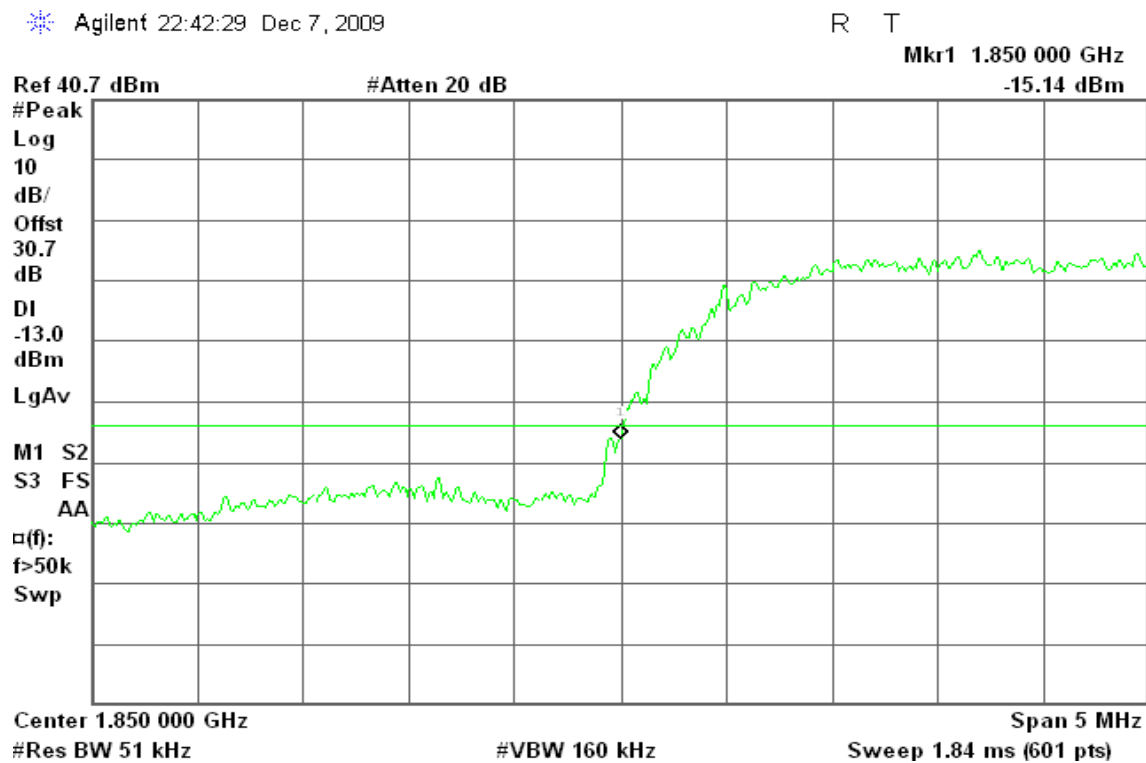
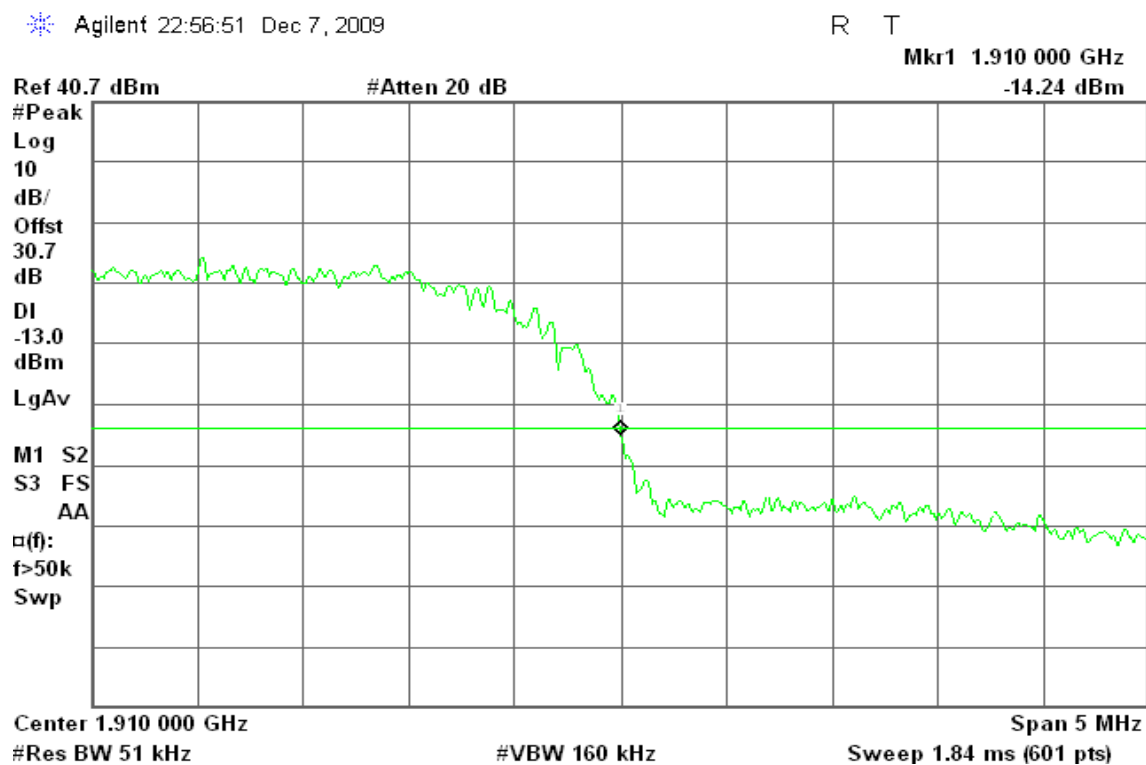


Figure 14-2: Band Edge emissions –WCDMA CH High





WCDMA Band V

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

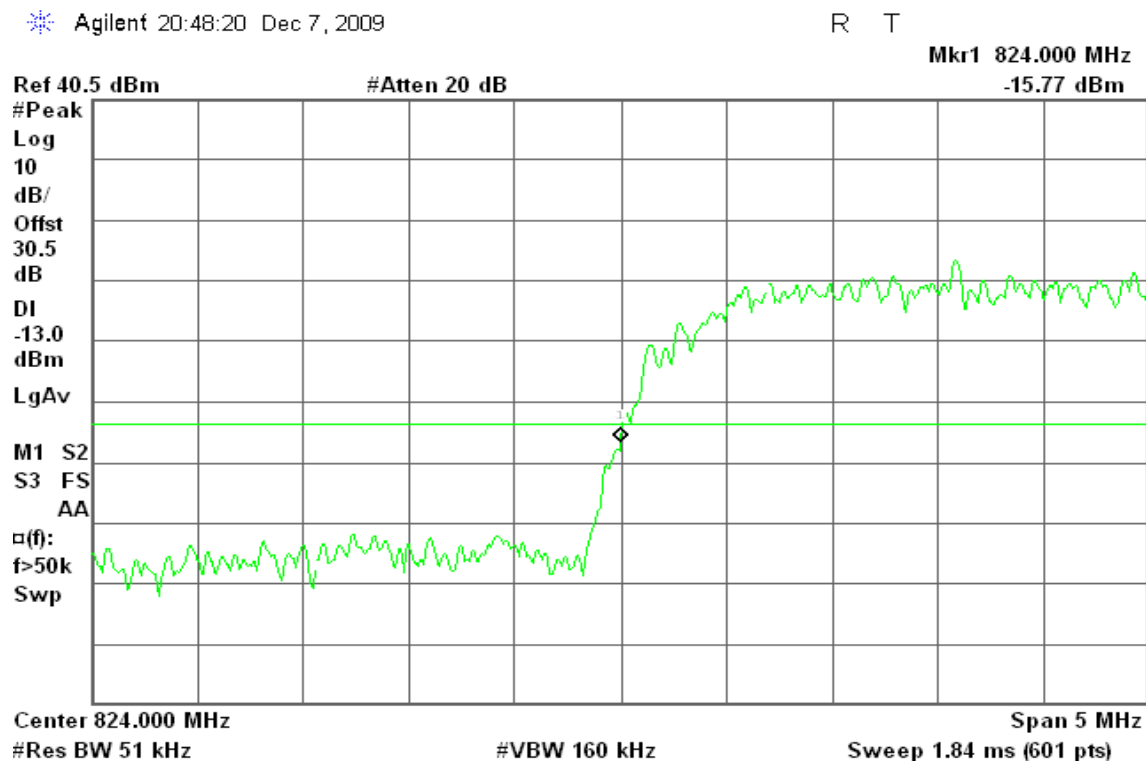
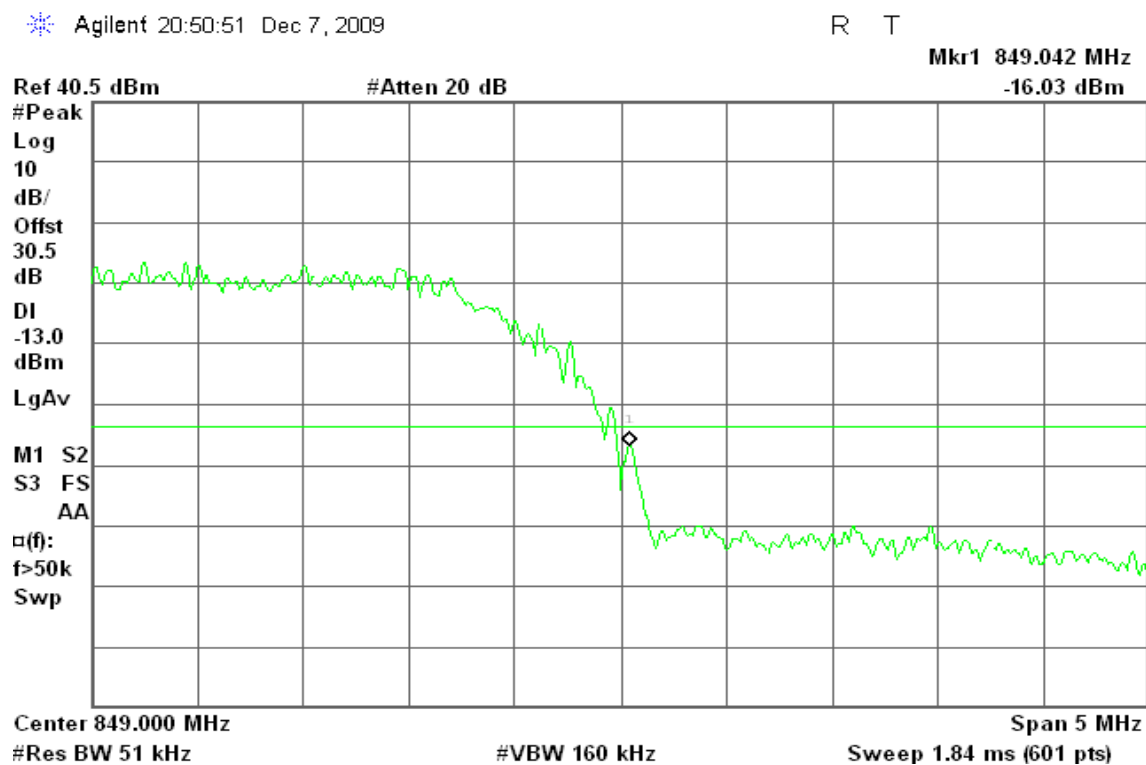


Figure 14-4: Band Edge emissions –WCDMA CH High



**WCDMA / HSDPA Band II**

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

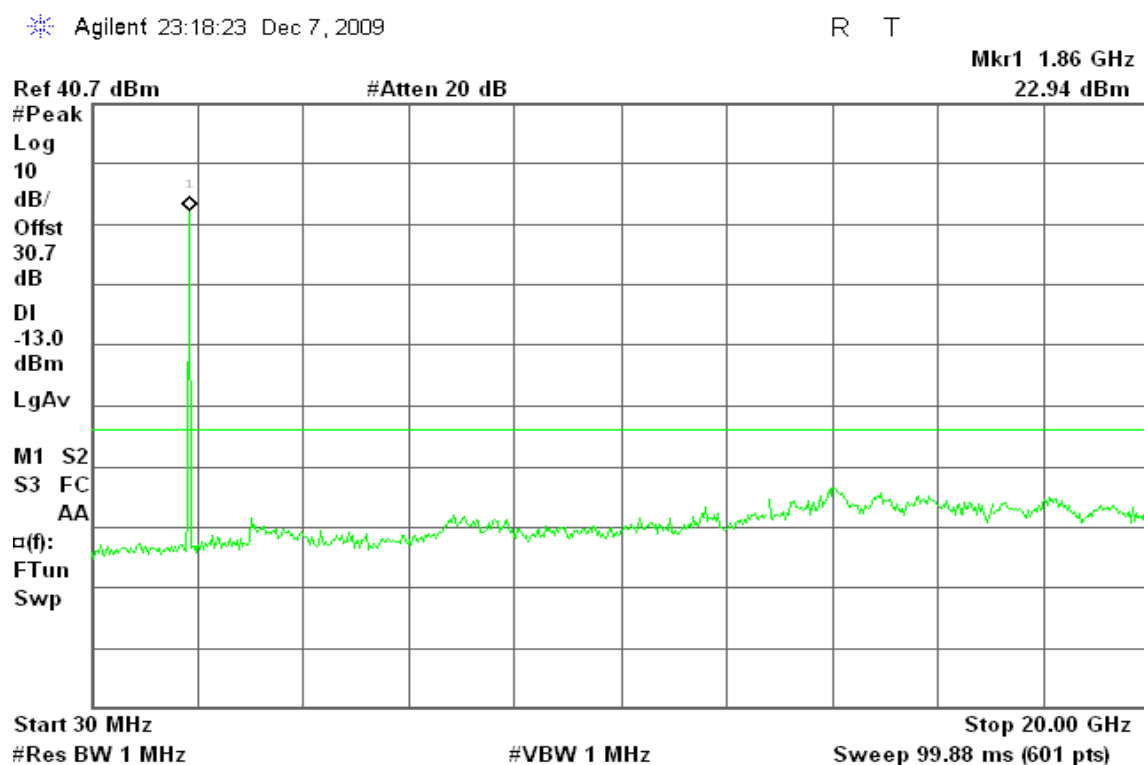


Figure 15-2: Out of Band emission at antenna terminals –HSDPA CH Mid

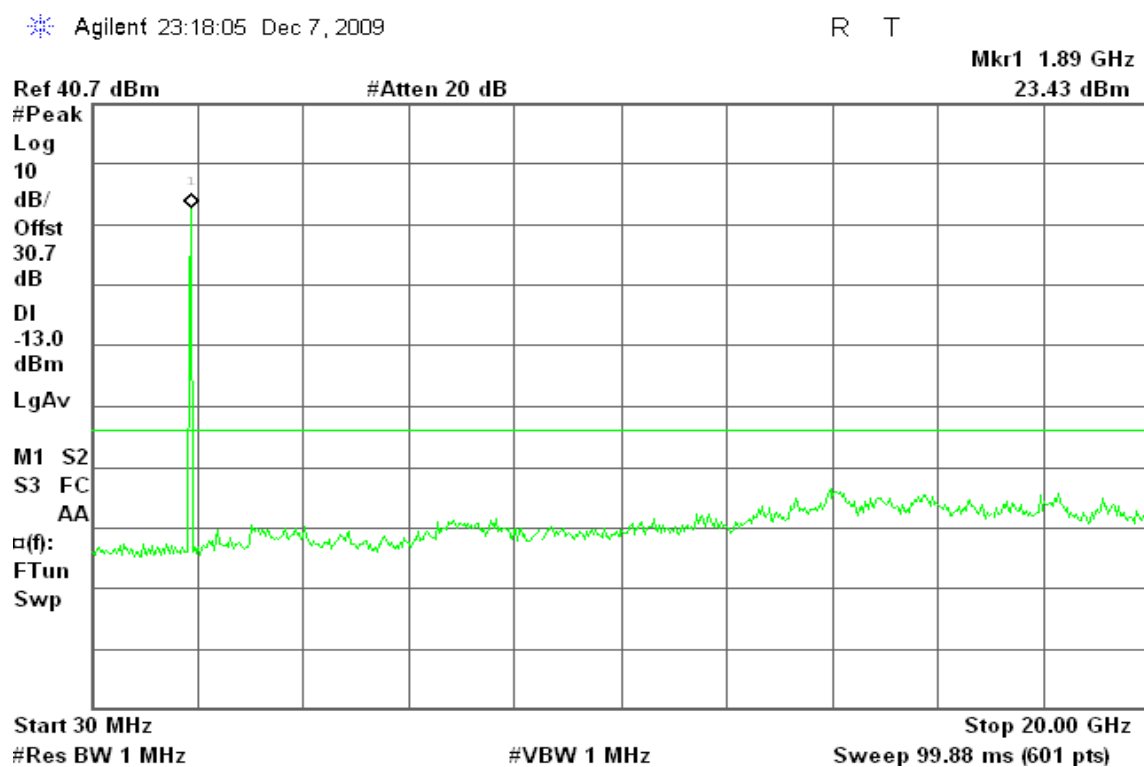
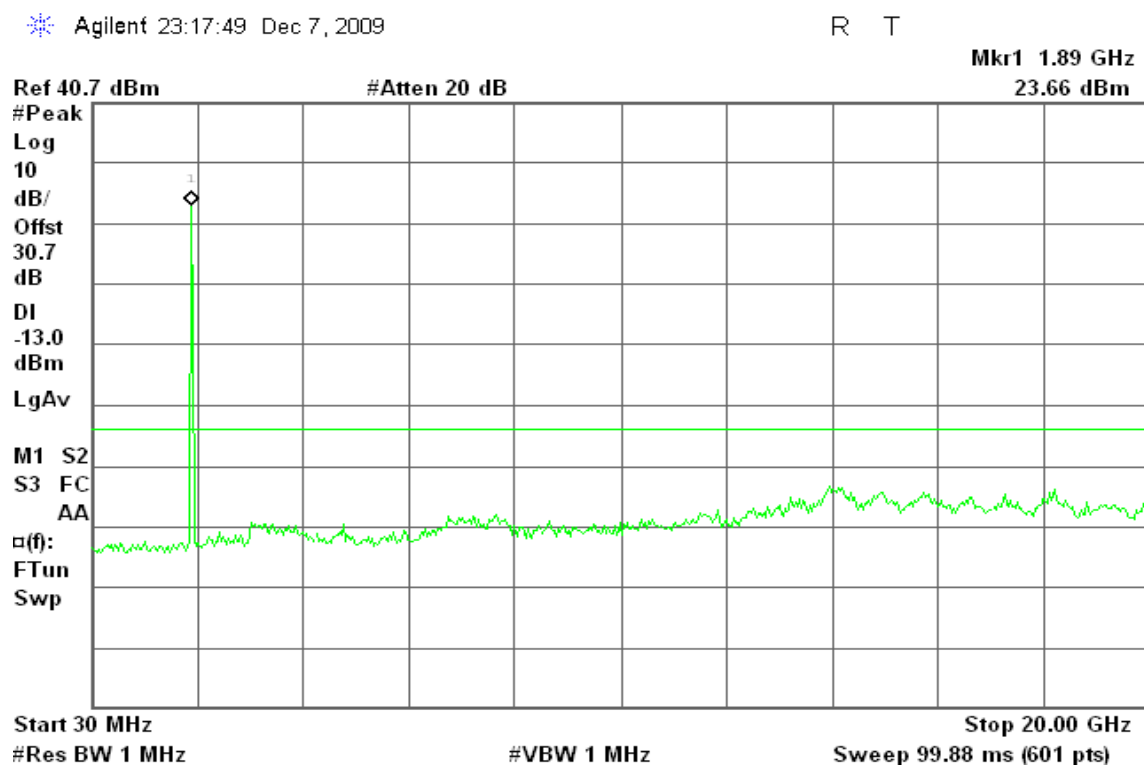




Figure 15-3: Out of Band emission at antenna terminals –HSDPA CH High



WCDMA / HSDPA Band V

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

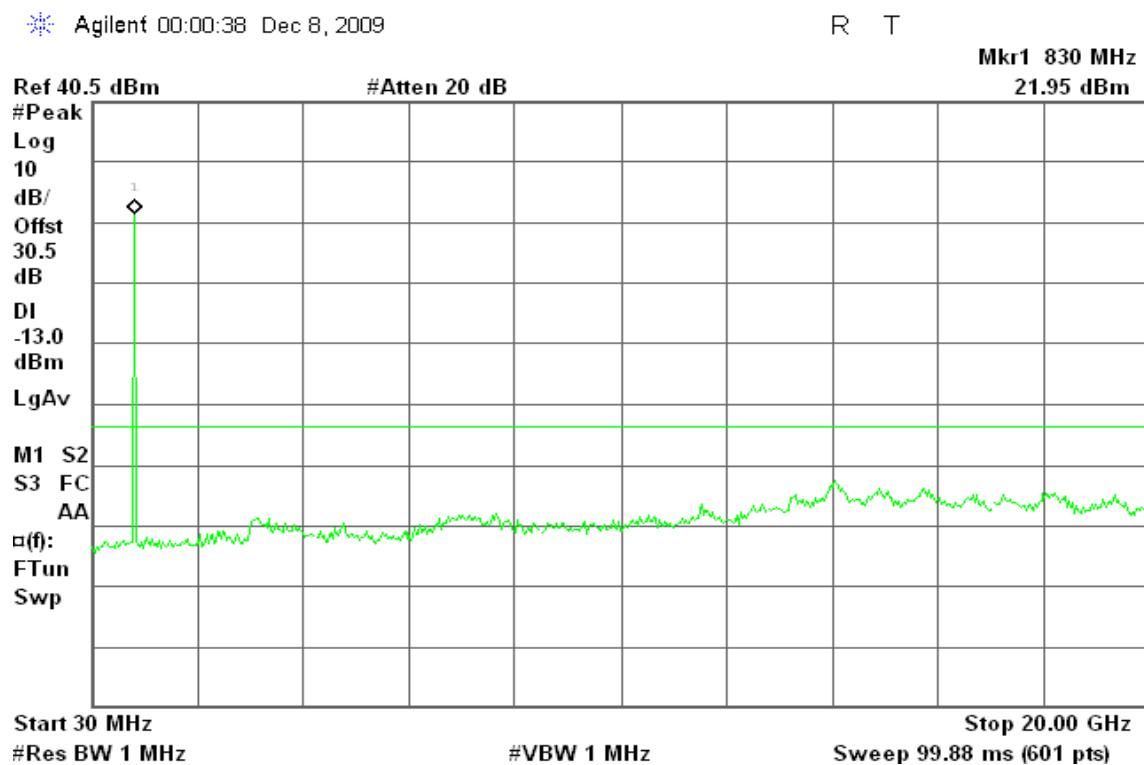




Figure 15-5: Out of Band emission at antenna terminals –HSDPA CH Mid

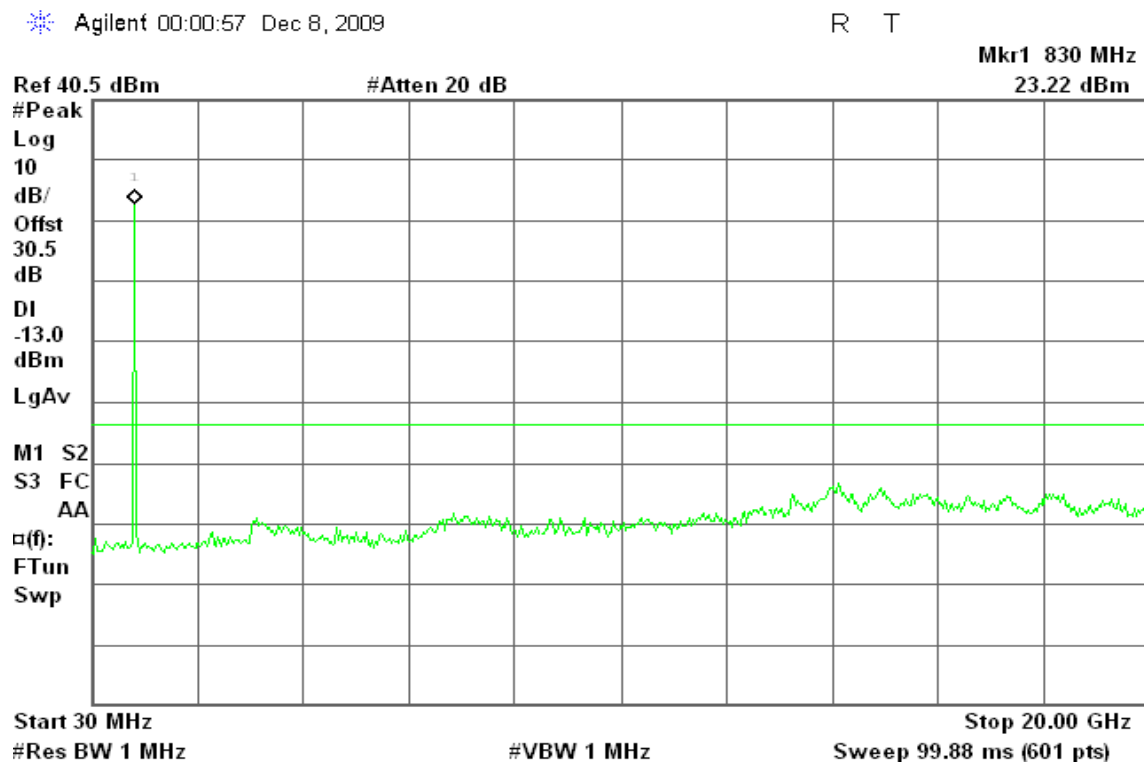
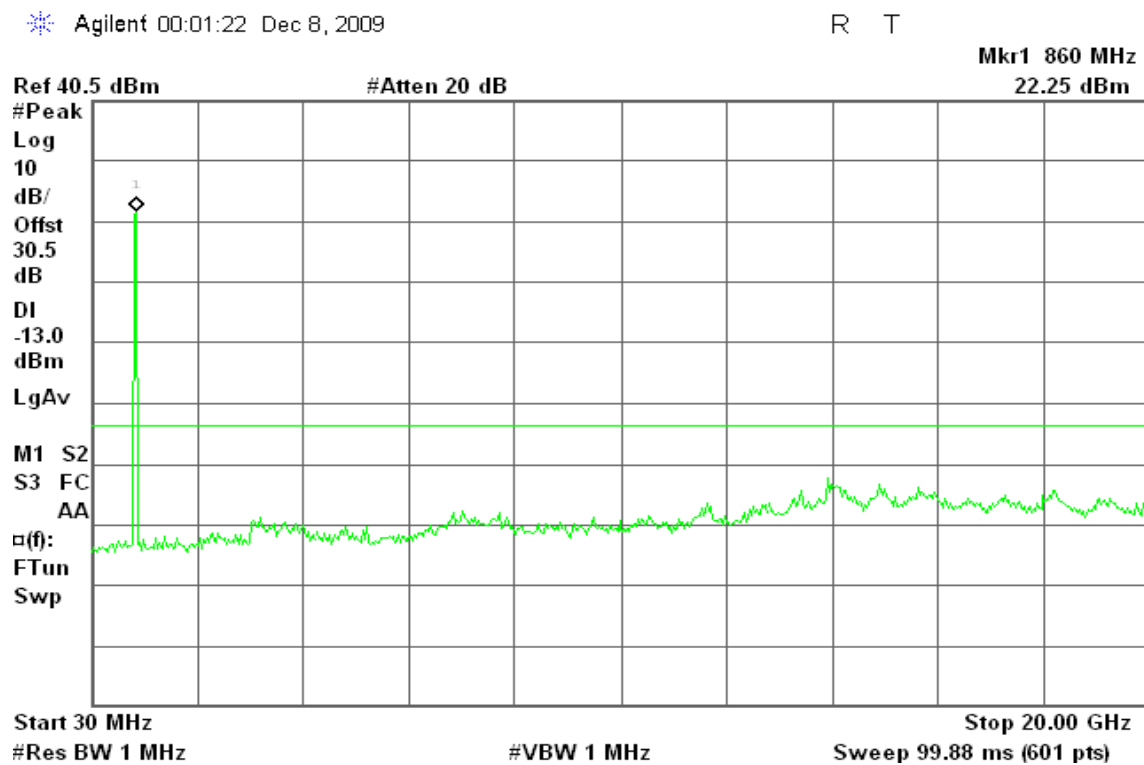


Figure 15-6: Out of Band emission at antenna terminals –HSDPA CH High





WCDMA / HSDPA Band II

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

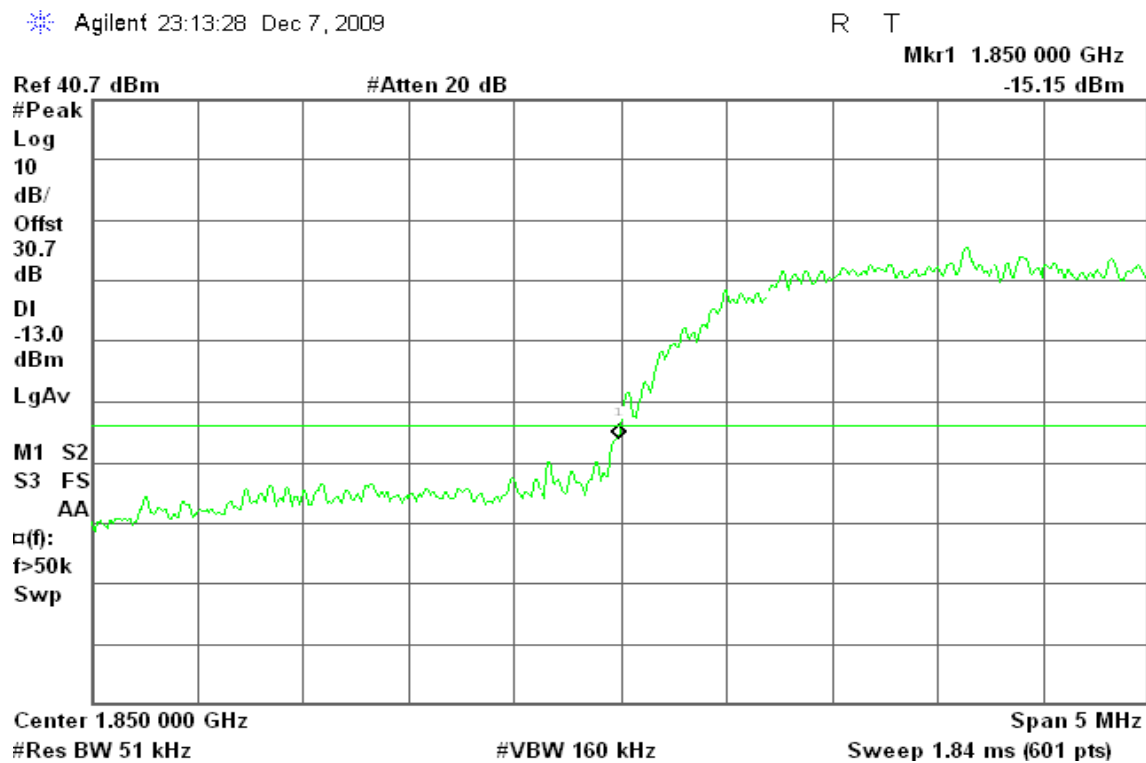
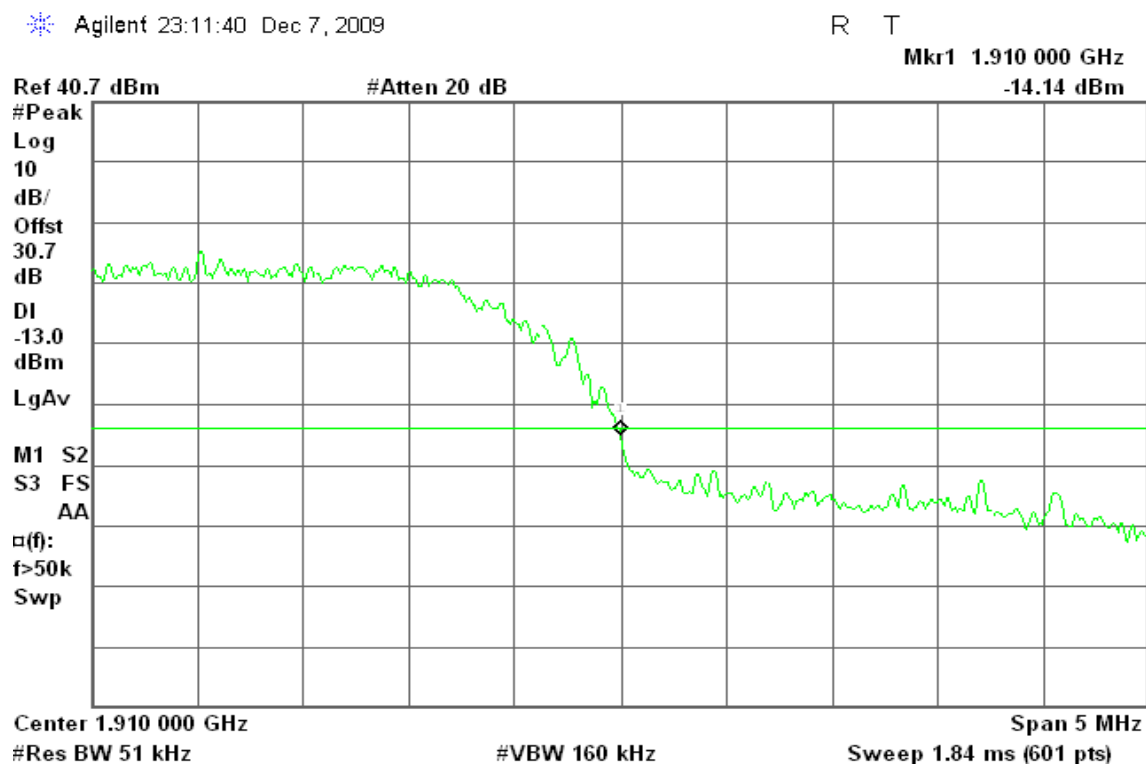


Figure 16-2: Band Edge emissions –HSDPA CH High





WCDMA / HSDPA Band V

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

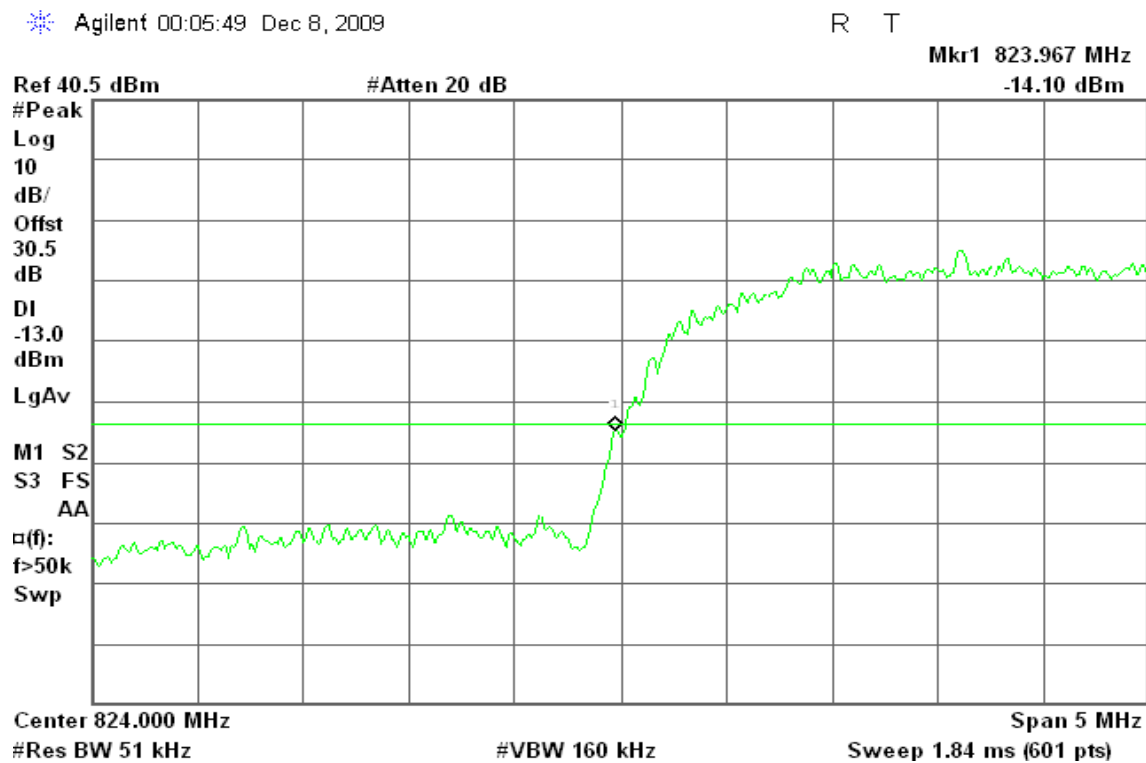
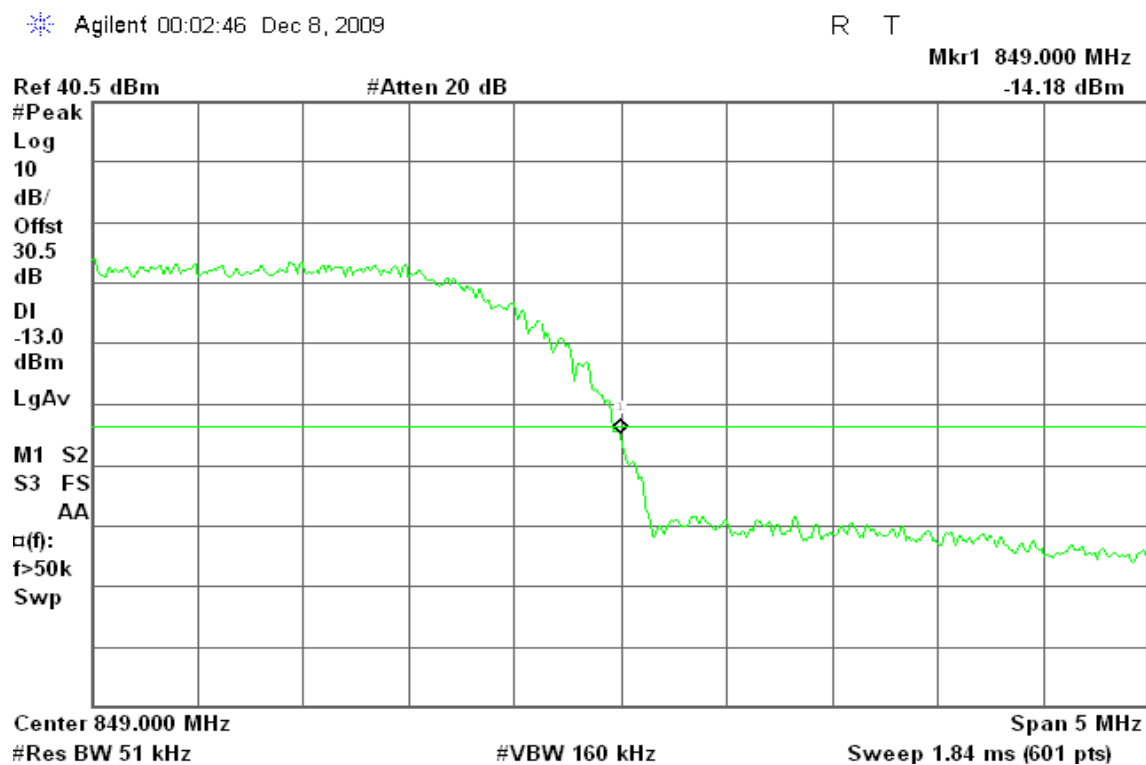


Figure 16-4: Band Edge emissions –HSDPA CH High



**WCDMA / HSUPA Band II**

Figure 17-1: Out of Band emission at antenna terminals –HSUPA CH Low

Agilent 23:28:03 Dec 7, 2009

R T

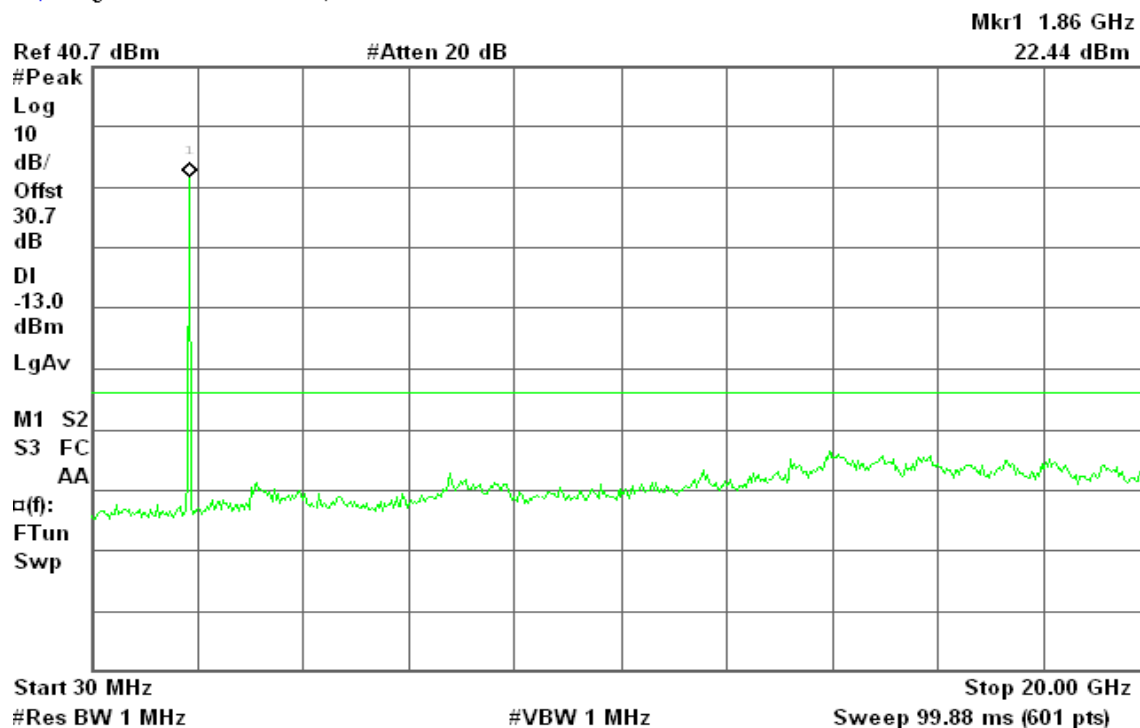


Figure 17-2: Out of Band emission at antenna terminals –HSUPA CH Mid

Agilent 23:27:39 Dec 7, 2009

R T

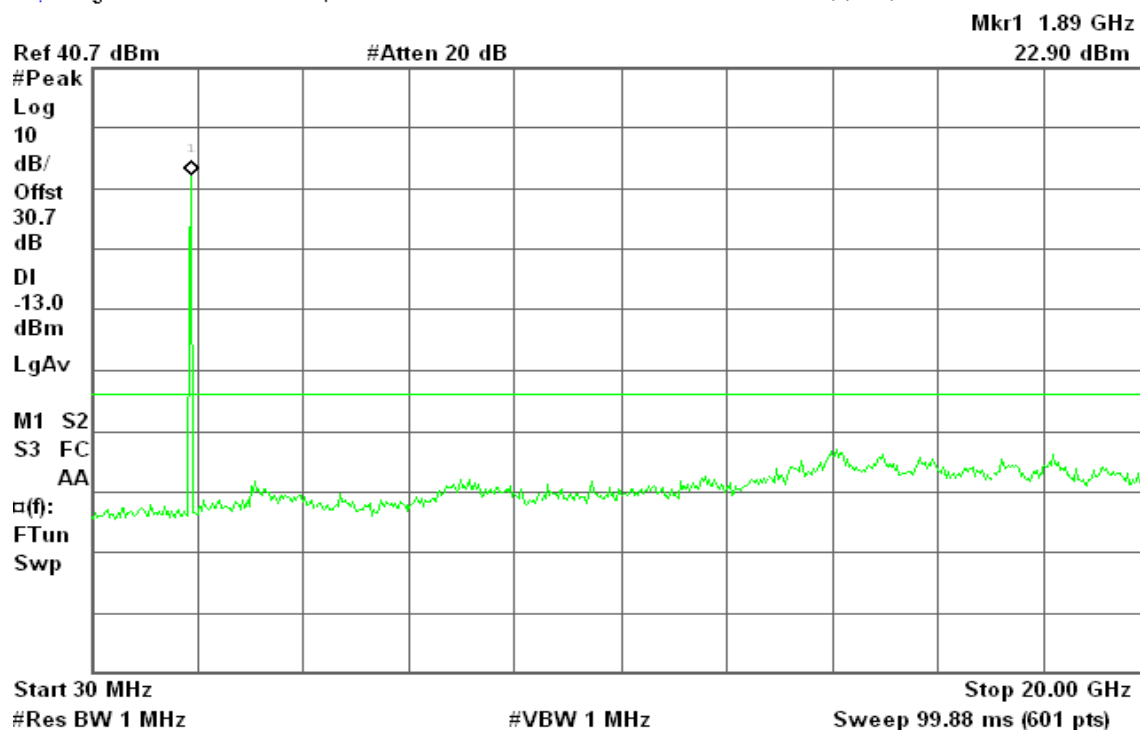




Figure 17-3: Out of Band emission at antenna terminals –HSUPA CH High

Agilent 23:27:12 Dec 7, 2009

R T

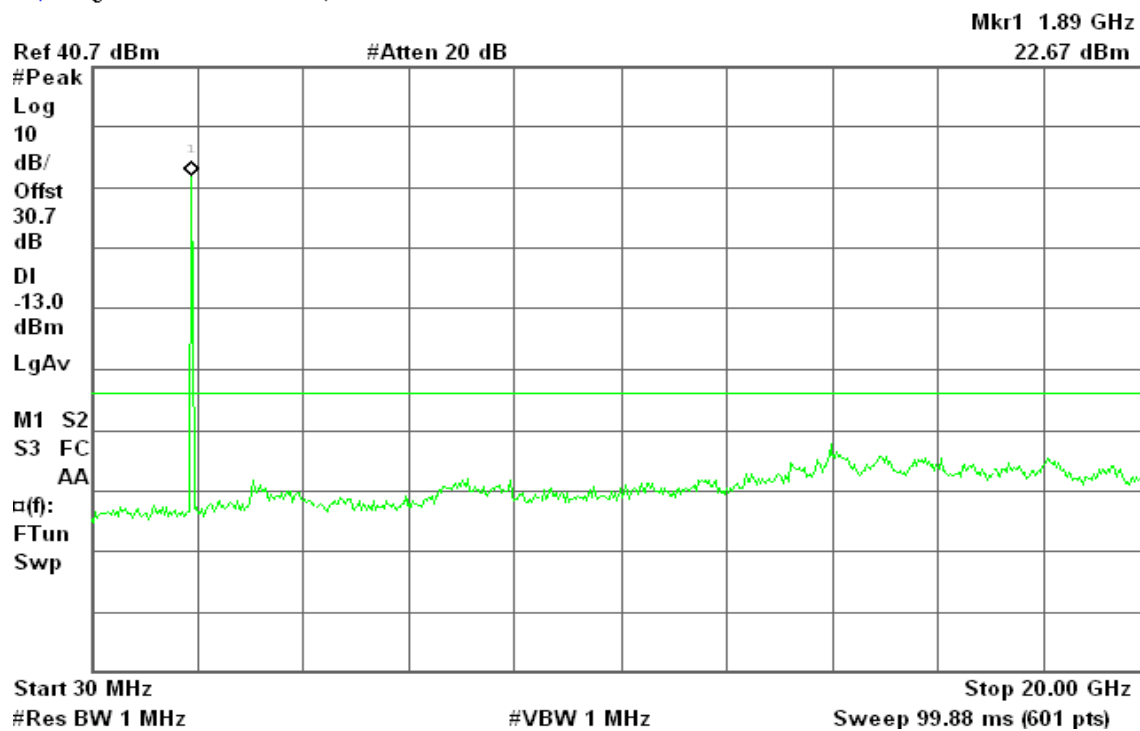
**WCDMA / HSUPA Band V**

Figure 17-4: Out of Band emission at antenna terminals –HSUPA CH Low

Agilent 23:48:57 Dec 7, 2009

R T

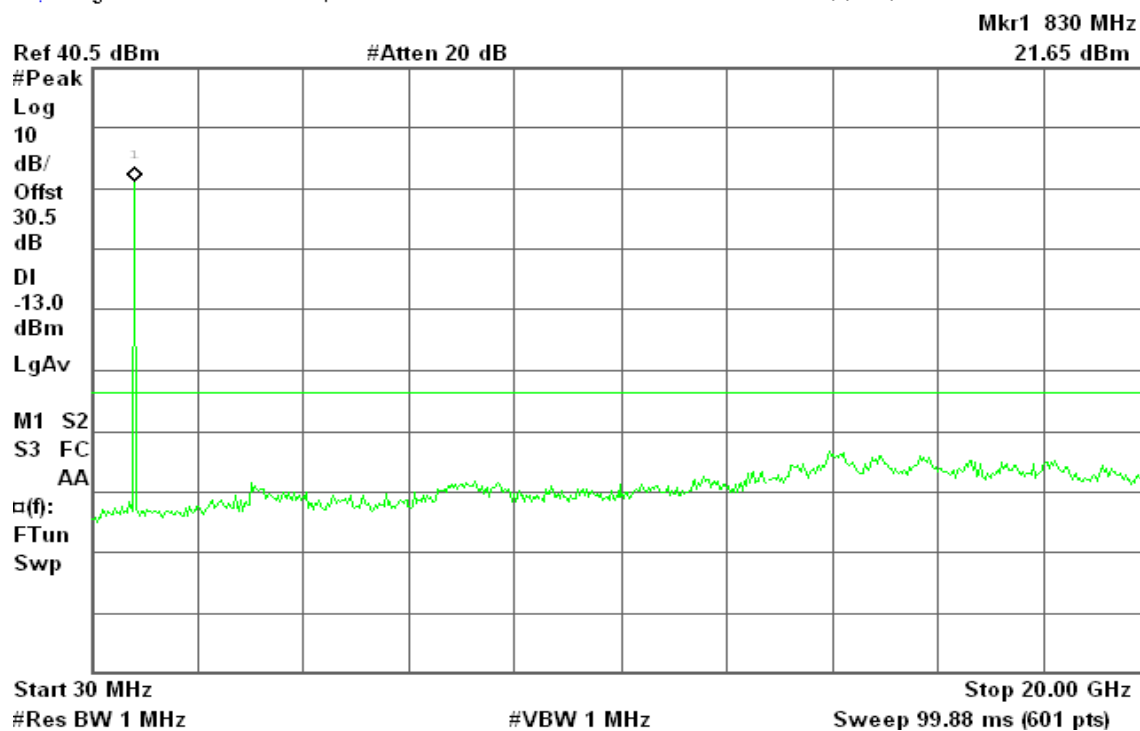




Figure 17-5: Out of Band emission at antenna terminals –HSUPA CH Mid

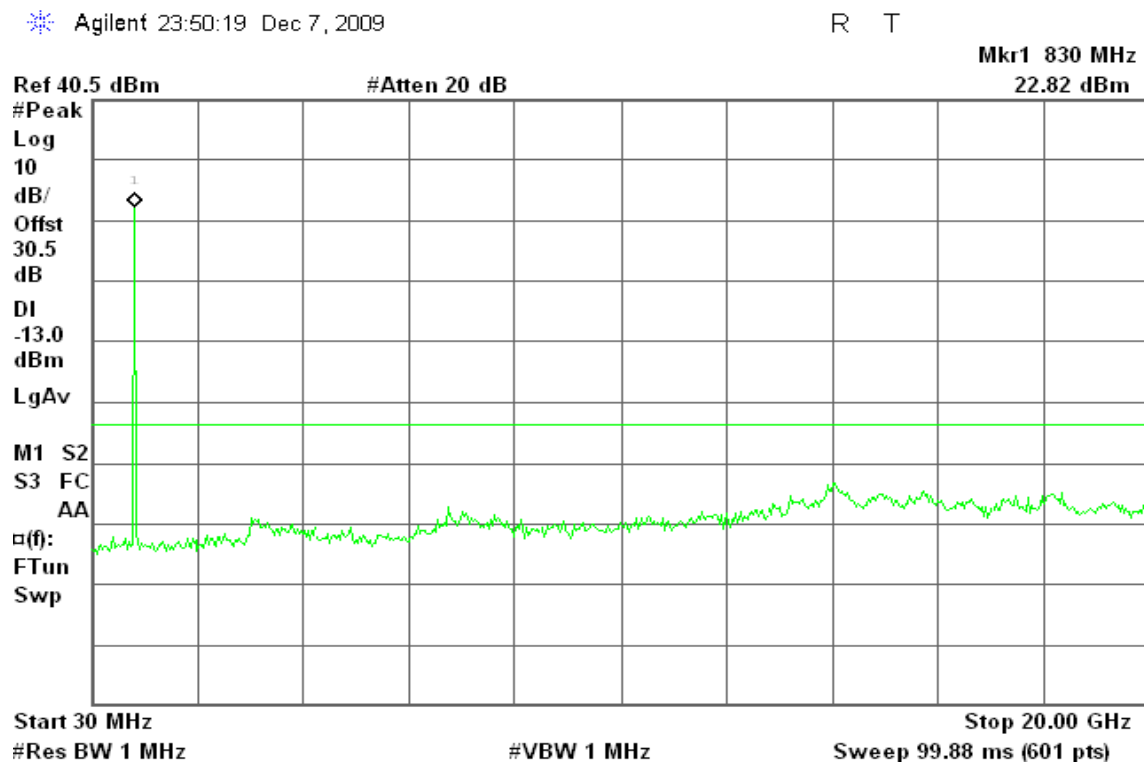
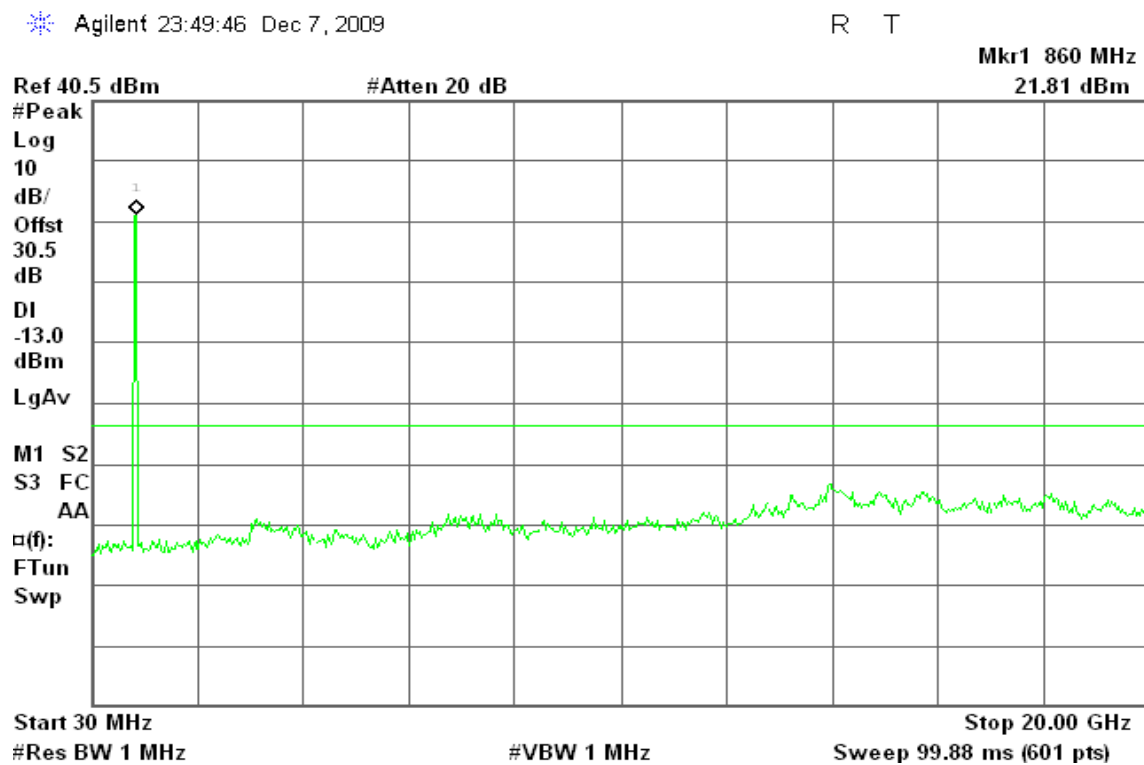


Figure 17-6: Out of Band emission at antenna terminals –HSUPA CH High





WCDMA / HSUPA Band II

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

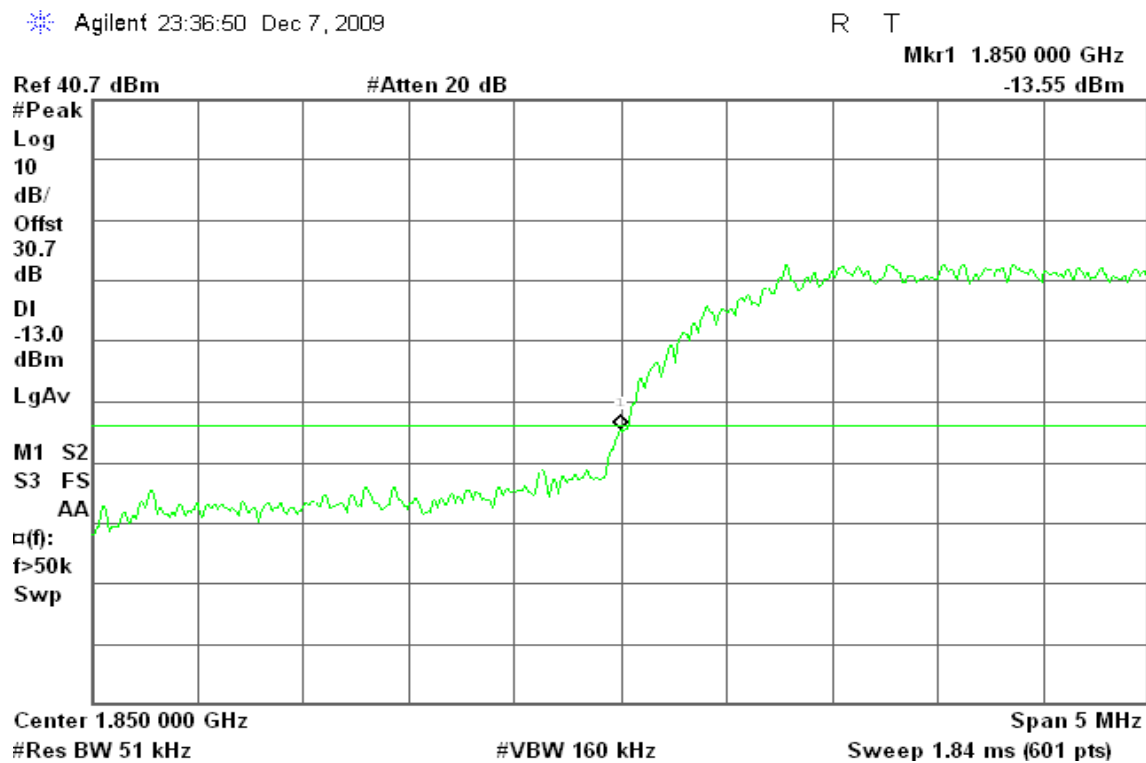
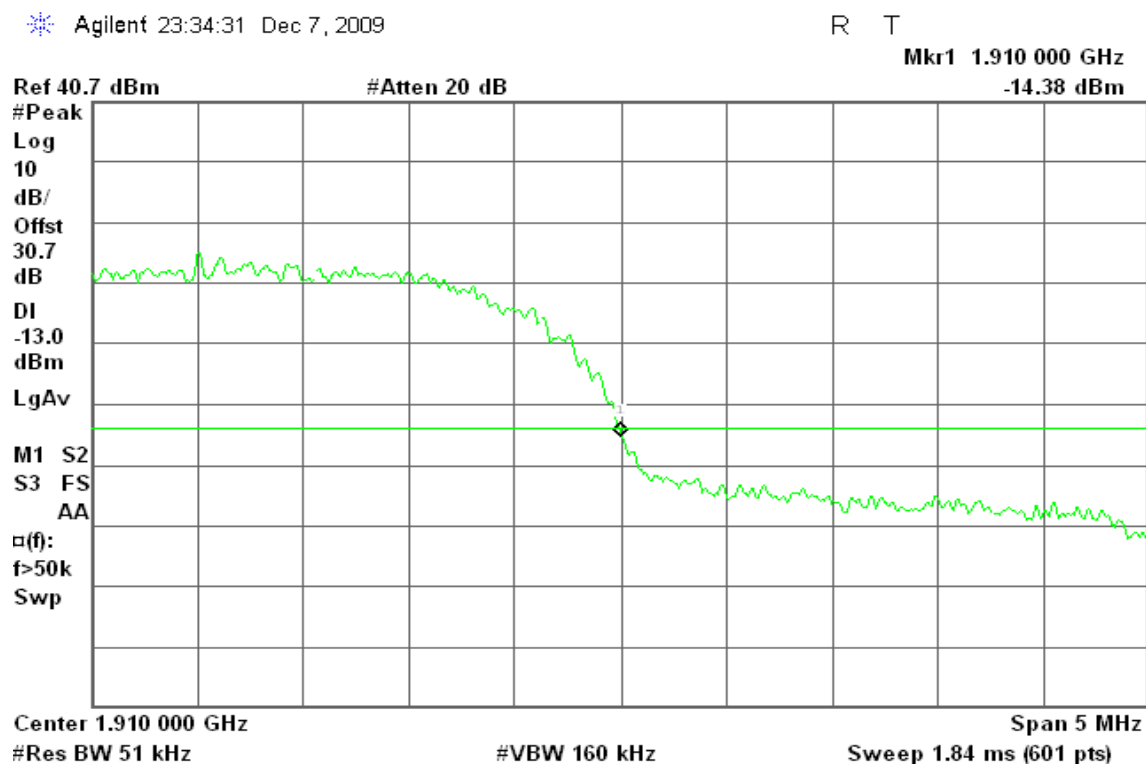


Figure 18-2: Band Edge emissions –HSUPA CH High





WCDMA / HSUPA Band V

Figure 18-3: Band Edge emissions –HSUPA CH Low

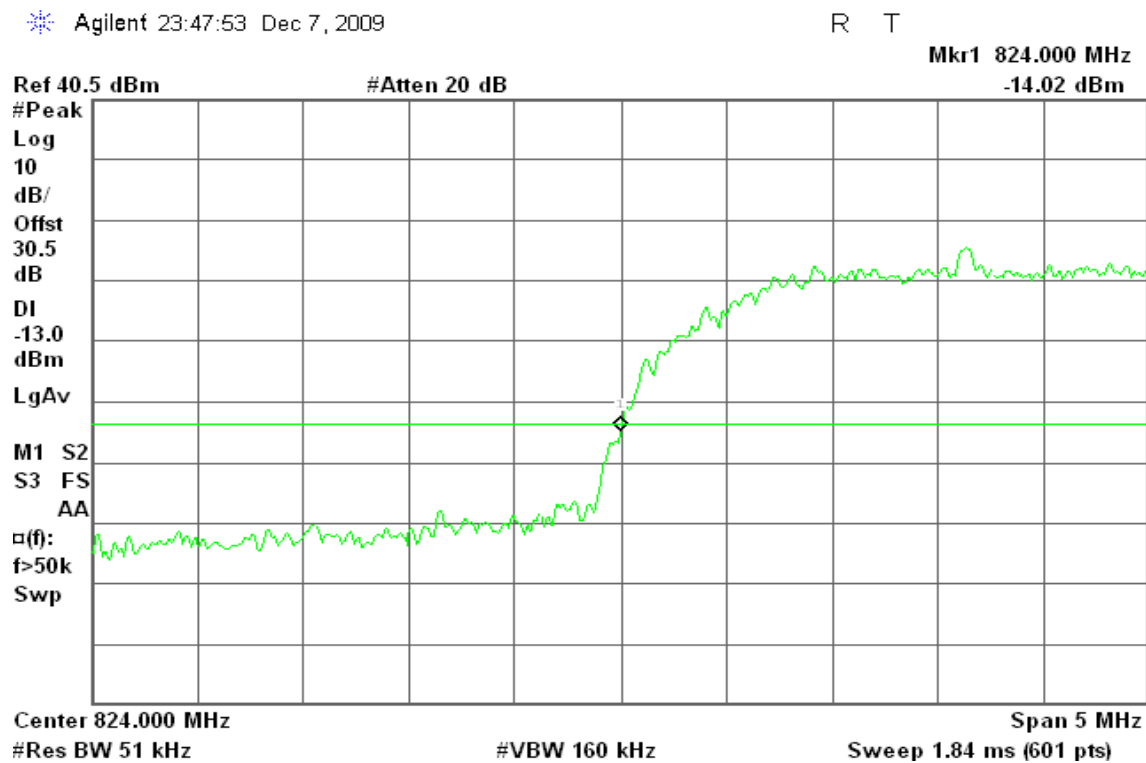
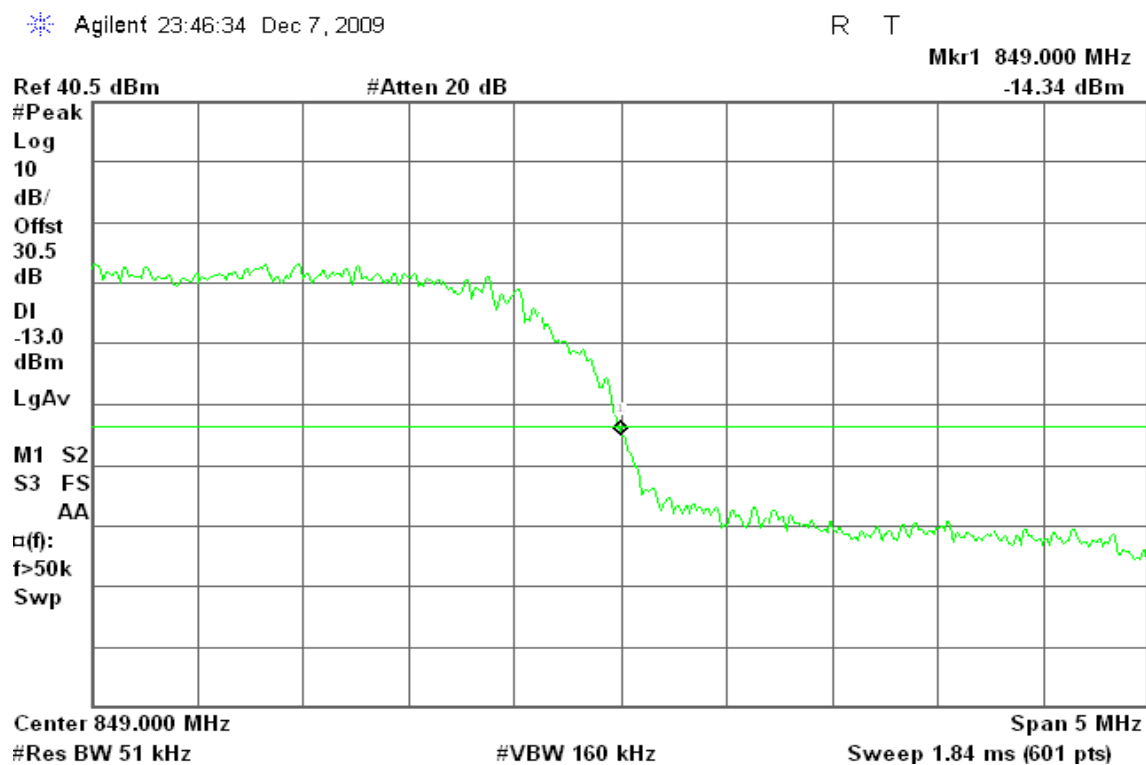


Figure 18-4: Band Edge emissions –HSUPA CH High



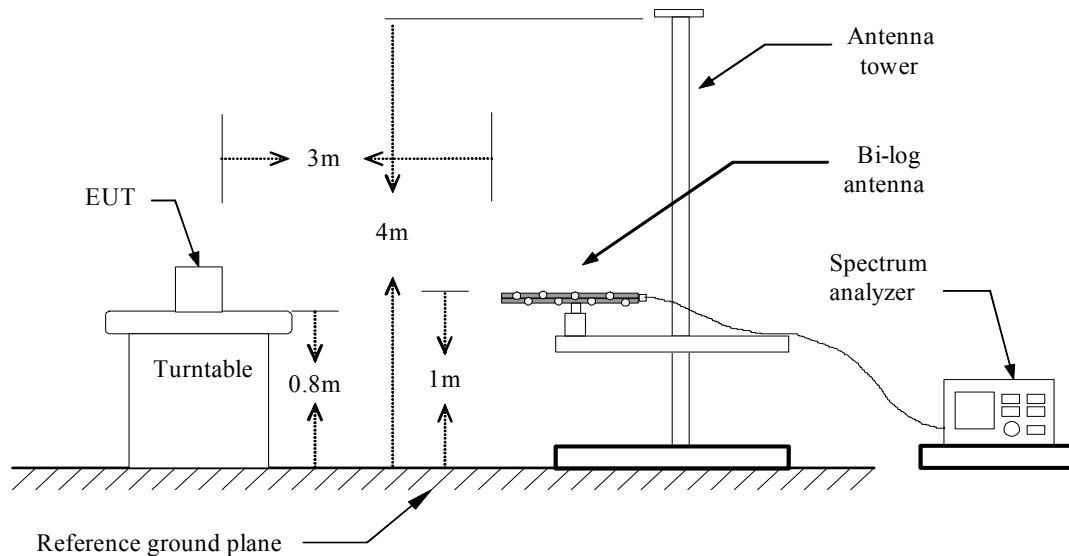
7.6 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

LIMIT

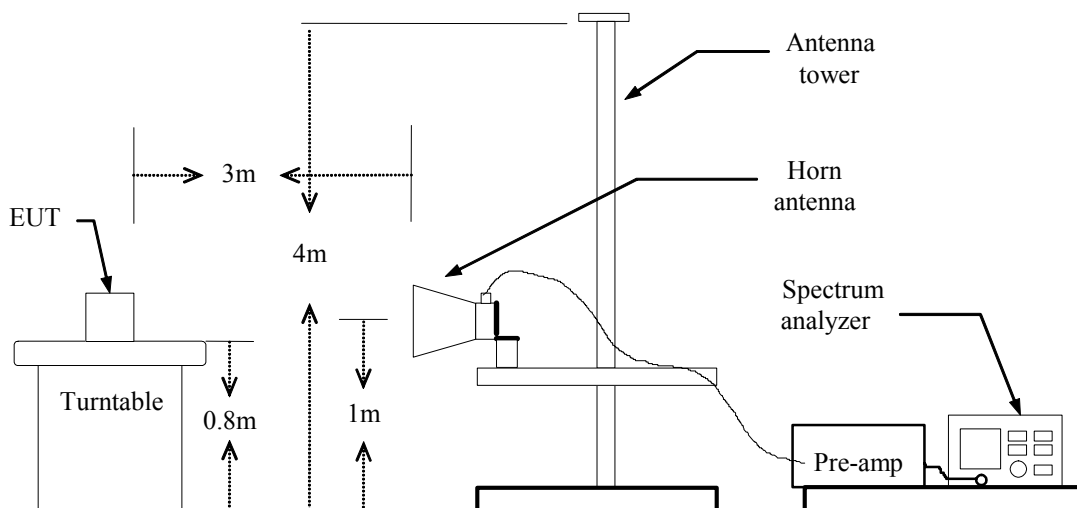
According to FCC §2.1053

Test Configuration

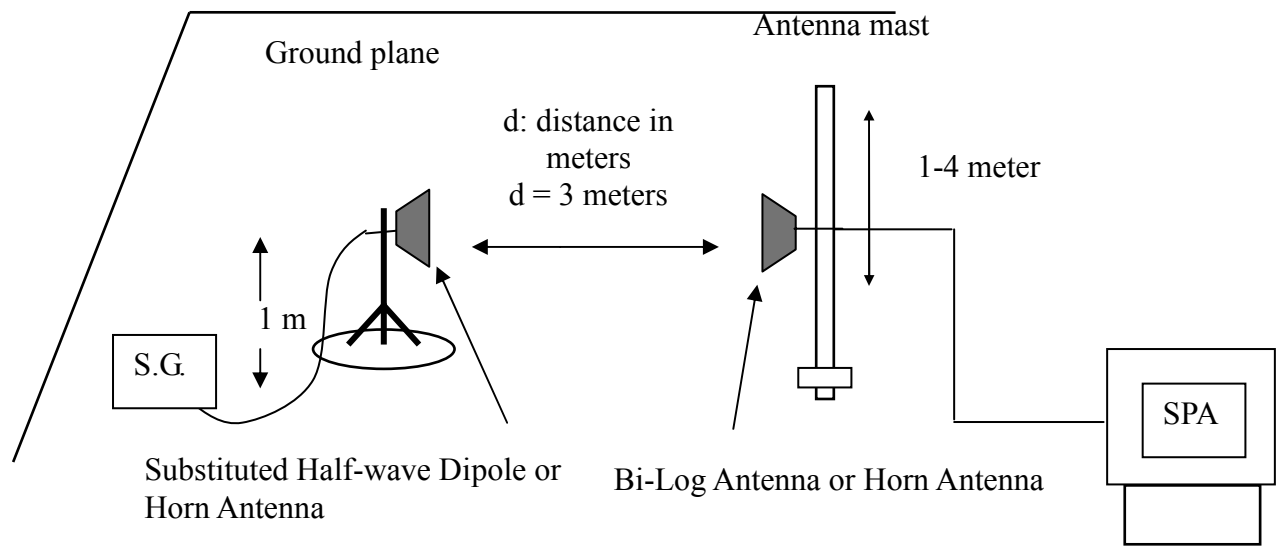
Below 1 GHz



Above 1 GHz



Substituted Method Test Set-up



TEST PROCEDURE

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

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

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

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

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

TEST RESULTS

Refer to the attached tabular data sheets.

**Radiated Spurious Emission Measurement Result / Below 1GHz****Operation Mode:** GPRS 850 / TX / CH 128**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-53.50	-11.80	-65.30	-13.00	-52.30
358.83	V	-49.59	-12.75	-62.34	-13.00	-49.34
408.30	V	-54.39	-10.85	-65.24	-13.00	-52.24
502.39	V	-49.05	-8.34	-57.39	-13.00	-44.39
576.11	V	-53.82	-7.88	-61.70	-13.00	-48.70
647.89	V	-55.06	-6.41	-61.47	-13.00	-48.47
99.84	H	-46.84	-17.49	-64.33	-13.00	-51.33
216.24	H	-55.18	-14.02	-69.21	-13.00	-56.21
359.80	H	-52.76	-12.69	-65.44	-13.00	-52.44
408.30	H	-56.24	-10.59	-66.82	-13.00	-53.82
504.33	H	-53.87	-8.24	-62.11	-13.00	-49.11
646.92	H	-59.02	-6.40	-65.41	-13.00	-52.41

Remark:

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

**Operation Mode:** GPRS 850 / TX / CH 190**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
130.88	V	-47.02	-12.34	-59.35	-13.00	-46.35
288.02	V	-53.85	-11.80	-65.65	-13.00	-52.65
358.83	V	-47.82	-12.75	-60.57	-13.00	-47.57
503.36	V	-48.02	-8.32	-56.35	-13.00	-43.35
576.11	V	-55.77	-7.88	-63.65	-13.00	-50.65
647.89	V	-54.83	-6.41	-61.24	-13.00	-48.24
30.97	H	-47.03	-17.76	-64.79	-13.00	-51.79
130.88	H	-50.98	-13.66	-64.65	-13.00	-51.65
359.80	H	-54.04	-12.69	-66.73	-13.00	-53.73
502.39	H	-53.70	-8.25	-61.95	-13.00	-48.95
576.11	H	-58.64	-7.58	-66.22	-13.00	-53.22
647.89	H	-60.06	-6.40	-66.46	-13.00	-53.46

Remark:

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

**Operation Mode:** GPRS 850 / TX / CH 251**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-54.00	-11.80	-65.80	-13.00	-52.80
359.80	V	-47.50	-12.71	-60.21	-13.00	-47.21
430.61	V	-56.34	-10.19	-66.53	-13.00	-53.53
502.39	V	-48.77	-8.34	-57.11	-13.00	-44.11
576.11	V	-54.91	-7.88	-62.80	-13.00	-49.80
645.95	V	-54.62	-6.38	-61.00	-13.00	-48.00
215.27	H	-53.13	-14.01	-67.14	-13.00	-54.14
288.02	H	-56.36	-12.87	-69.23	-13.00	-56.23
358.83	H	-53.76	-12.73	-66.49	-13.00	-53.49
503.36	H	-52.55	-8.24	-60.79	-13.00	-47.79
576.11	H	-58.25	-7.58	-65.83	-13.00	-52.83
644.98	H	-59.72	-6.38	-66.10	-13.00	-53.10

Remark:

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

**Operation Mode:** GPRS 1900 / TX / CH 512**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-53.51	-11.80	-65.31	-13.00	-52.31
359.80	V	-48.48	-12.71	-61.19	-13.00	-48.19
430.61	V	-55.23	-10.19	-65.42	-13.00	-52.42
503.36	V	-49.38	-8.32	-57.70	-13.00	-44.70
574.17	V	-54.41	-7.89	-62.30	-13.00	-49.30
647.89	V	-55.05	-6.41	-61.47	-13.00	-48.47
287.05	H	-55.05	-12.86	-67.91	-13.00	-54.91
358.83	H	-53.77	-12.73	-66.49	-13.00	-53.49
430.61	H	-59.02	-10.12	-69.14	-13.00	-56.14
502.39	H	-54.57	-8.25	-62.82	-13.00	-49.82
575.14	H	-59.57	-7.58	-67.16	-13.00	-54.16
644.98	H	-59.16	-6.38	-65.54	-13.00	-52.54

Remark:

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

**Operation Mode:** GPRS 1900 / TX / CH 661**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
287.05	V	-52.80	-11.83	-64.62	-13.00	-51.62
359.80	V	-49.93	-12.71	-62.64	-13.00	-49.64
430.61	V	-55.63	-10.19	-65.82	-13.00	-52.82
503.36	V	-49.76	-8.32	-58.08	-13.00	-45.08
576.11	V	-55.20	-7.88	-63.08	-13.00	-50.08
647.89	V	-53.63	-6.41	-60.04	-13.00	-47.04
206.54	H	-55.20	-13.41	-68.61	-13.00	-55.61
288.02	H	-54.45	-12.87	-67.32	-13.00	-54.32
358.83	H	-54.15	-12.73	-66.88	-13.00	-53.88
502.39	H	-54.49	-8.25	-62.74	-13.00	-49.74
574.17	H	-58.98	-7.59	-66.57	-13.00	-53.57
647.89	H	-60.73	-6.40	-67.14	-13.00	-54.14

Remark:

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

**Operation Mode:** GPRS 1900 / TX / CH 810**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
287.05	V	-52.81	-11.83	-64.64	-13.00	-51.64
359.80	V	-48.71	-12.71	-61.42	-13.00	-48.42
430.61	V	-55.47	-10.19	-65.66	-13.00	-52.66
503.36	V	-48.69	-8.32	-57.01	-13.00	-44.01
576.11	V	-54.18	-7.88	-62.07	-13.00	-49.07
647.89	V	-54.41	-6.41	-60.82	-13.00	-47.82
205.57	H	-55.34	-13.28	-68.62	-13.00	-55.62
359.80	H	-51.87	-12.69	-64.56	-13.00	-51.56
430.61	H	-59.51	-10.12	-69.62	-13.00	-56.62
502.39	H	-54.14	-8.25	-62.39	-13.00	-49.39
574.17	H	-58.27	-7.59	-65.86	-13.00	-52.86
646.92	H	-59.24	-6.40	-65.64	-13.00	-52.64

Remark:

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

**Operation Mode:** EDGE 850 / TX / CH 128**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
287.05	V	-52.99	-11.83	-64.82	-13.00	-51.82
358.83	V	-48.84	-12.75	-61.59	-13.00	-48.59
407.33	V	-55.09	-10.89	-65.98	-13.00	-52.98
502.39	V	-49.28	-8.34	-57.62	-13.00	-44.62
576.11	V	-56.18	-7.88	-64.06	-13.00	-51.06
647.89	V	-54.68	-6.41	-61.09	-13.00	-48.09
31.94	H	-41.35	-16.92	-58.27	-13.00	-45.27
288.02	H	-55.44	-12.87	-68.31	-13.00	-55.31
358.83	H	-52.62	-12.73	-65.35	-13.00	-52.35
503.36	H	-53.22	-8.24	-61.47	-13.00	-48.47
576.11	H	-59.59	-7.58	-67.17	-13.00	-54.17
644.98	H	-60.63	-6.38	-67.01	-13.00	-54.01

Remark:

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

**Operation Mode:** EDGE 850 / TX / CH 190**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
130.88	V	-50.92	-12.34	-63.25	-13.00	-50.25
216.24	V	-51.22	-15.47	-66.68	-13.00	-53.68
358.83	V	-47.74	-12.75	-60.49	-13.00	-47.49
502.39	V	-49.87	-8.34	-58.21	-13.00	-45.21
646.92	V	-54.60	-6.39	-61.00	-13.00	-48.00
967.99	V	-60.70	-3.03	-63.74	-13.00	-50.74
216.24	H	-53.50	-14.02	-67.52	-13.00	-54.52
287.05	H	-54.63	-12.86	-67.49	-13.00	-54.49
358.83	H	-52.34	-12.73	-65.07	-13.00	-52.07
502.39	H	-53.01	-8.25	-61.26	-13.00	-48.26
576.11	H	-58.96	-7.58	-66.54	-13.00	-53.54
647.89	H	-60.43	-6.40	-66.83	-13.00	-53.83

Remark:

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

**Operation Mode:** EDGE 850 / TX / CH 251**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
287.05	V	-54.38	-11.83	-66.21	-13.00	-53.21
359.80	V	-47.74	-12.71	-60.45	-13.00	-47.45
430.61	V	-54.65	-10.19	-64.83	-13.00	-51.83
502.39	V	-49.10	-8.34	-57.43	-13.00	-44.43
574.17	V	-54.40	-7.89	-62.29	-13.00	-49.29
644.98	V	-53.42	-6.36	-59.78	-13.00	-46.78
211.39	H	-54.01	-13.93	-67.93	-13.00	-54.93
287.05	H	-55.79	-12.86	-68.65	-13.00	-55.65
358.83	H	-51.63	-12.73	-64.36	-13.00	-51.36
503.36	H	-52.82	-8.24	-61.06	-13.00	-48.06
576.11	H	-58.89	-7.58	-66.47	-13.00	-53.47
647.89	H	-59.20	-6.40	-65.61	-13.00	-52.61

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:** EDGE 1900 / TX / CH 512**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Jerry Lin**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-53.96	-11.80	-65.76	-13.00	-52.76
359.80	V	-48.97	-12.71	-61.68	-13.00	-48.68
430.61	V	-54.76	-10.19	-64.95	-13.00	-51.95
502.39	V	-49.70	-8.34	-58.04	-13.00	-45.04
576.11	V	-53.90	-7.88	-61.78	-13.00	-48.78
645.95	V	-55.03	-6.38	-61.41	-13.00	-48.41
287.05	H	-55.15	-12.86	-68.01	-13.00	-55.01
358.83	H	-53.68	-12.73	-66.41	-13.00	-53.41
431.58	H	-59.05	-10.12	-69.17	-13.00	-56.17
502.39	H	-54.99	-8.25	-63.24	-13.00	-50.24
575.14	H	-58.31	-7.58	-65.89	-13.00	-52.89
645.95	H	-58.20	-6.39	-64.58	-13.00	-51.58

Remark:

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

**Operation Mode:** EDGE 1900 / TX / CH 661**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-52.84	-11.80	-64.64	-13.00	-51.64
359.80	V	-48.09	-12.71	-60.79	-13.00	-47.79
430.61	V	-56.04	-10.19	-66.23	-13.00	-53.23
503.36	V	-50.07	-8.32	-58.39	-13.00	-45.39
576.11	V	-55.66	-7.88	-63.54	-13.00	-50.54
647.89	V	-52.92	-6.41	-59.33	-13.00	-46.33
206.54	H	-54.32	-13.41	-67.73	-13.00	-54.73
359.80	H	-53.62	-12.69	-66.31	-13.00	-53.31
431.58	H	-59.17	-10.12	-69.29	-13.00	-56.29
502.39	H	-53.25	-8.25	-61.49	-13.00	-48.49
574.17	H	-58.69	-7.59	-66.28	-13.00	-53.28
647.89	H	-59.41	-6.40	-65.81	-13.00	-52.81

Remark:

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

**Operation Mode:** EDGE 1900 / TX / CH 810**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
216.24	V	-49.93	-15.47	-65.40	-13.00	-52.40
288.02	V	-53.87	-11.80	-65.67	-13.00	-52.67
358.83	V	-47.79	-12.75	-60.54	-13.00	-47.54
502.39	V	-50.10	-8.34	-58.44	-13.00	-45.44
576.11	V	-54.15	-7.88	-62.04	-13.00	-49.04
645.95	V	-55.52	-6.38	-61.90	-13.00	-48.90
215.27	H	-53.85	-14.01	-67.86	-13.00	-54.86
287.05	H	-55.33	-12.86	-68.19	-13.00	-55.19
359.80	H	-52.50	-12.69	-65.19	-13.00	-52.19
503.36	H	-54.24	-8.24	-62.48	-13.00	-49.48
574.17	H	-58.62	-7.59	-66.21	-13.00	-53.21
645.95	H	-60.00	-6.39	-66.39	-13.00	-53.39

Remark:

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

**Operation Mode:** WCDMA Band II / TX / CH 9262**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-53.95	-11.80	-65.74	-13.00	-52.74
359.80	V	-49.51	-12.71	-62.22	-13.00	-49.22
431.58	V	-56.34	-10.17	-66.51	-13.00	-53.51
503.36	V	-49.47	-8.32	-57.79	-13.00	-44.79
575.14	V	-57.65	-7.89	-65.53	-13.00	-52.53
647.89	V	-55.28	-6.41	-61.69	-13.00	-48.69
287.05	H	-55.40	-12.86	-68.26	-13.00	-55.26
358.83	H	-53.44	-12.73	-66.16	-13.00	-53.16
430.61	H	-58.55	-10.12	-68.67	-13.00	-55.67
504.33	H	-52.67	-8.24	-60.91	-13.00	-47.91
575.14	H	-60.66	-7.58	-68.24	-13.00	-55.24
645.95	H	-60.13	-6.39	-66.51	-13.00	-53.51

Remark:

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

**Operation Mode:** WCDMA Band II / TX / CH 9400**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-53.05	-11.80	-64.85	-13.00	-51.85
358.83	V	-49.93	-12.75	-62.68	-13.00	-49.68
430.61	V	-56.19	-10.19	-66.37	-13.00	-53.37
503.36	V	-50.60	-8.32	-58.92	-13.00	-45.92
576.11	V	-55.90	-7.88	-63.79	-13.00	-50.79
647.89	V	-56.44	-6.41	-62.85	-13.00	-49.85
288.02	H	-54.26	-12.87	-67.13	-13.00	-54.13
359.80	H	-53.52	-12.69	-66.21	-13.00	-53.21
430.61	H	-58.65	-10.12	-68.77	-13.00	-55.77
502.39	H	-53.26	-8.25	-61.51	-13.00	-48.51
576.11	H	-60.01	-7.58	-67.59	-13.00	-54.59
647.89	H	-59.18	-6.40	-65.59	-13.00	-52.59

Remark:

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

**Operation Mode:** WCDMA Band II / TX / CH 9538**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-52.86	-11.80	-64.66	-13.00	-51.66
359.80	V	-50.32	-12.71	-63.02	-13.00	-50.02
430.61	V	-56.52	-10.19	-66.71	-13.00	-53.71
503.36	V	-50.16	-8.32	-58.49	-13.00	-45.49
574.17	V	-56.44	-7.89	-64.33	-13.00	-51.33
647.89	V	-55.90	-6.41	-62.31	-13.00	-49.31
287.05	H	-54.73	-12.86	-67.59	-13.00	-54.59
359.80	H	-54.03	-12.69	-66.72	-13.00	-53.72
431.58	H	-59.21	-10.12	-69.33	-13.00	-56.33
502.39	H	-53.80	-8.25	-62.05	-13.00	-49.05
574.17	H	-60.77	-7.59	-68.36	-13.00	-55.36
647.89	H	-59.78	-6.40	-66.19	-13.00	-53.19

Remark:

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

**Operation Mode:** WCDMA Band V / TX / CH 4132**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
216.24	V	-53.44	-15.47	-68.90	-13.00	-55.90
288.02	V	-53.39	-11.80	-65.19	-13.00	-52.19
358.83	V	-54.12	-12.75	-66.87	-13.00	-53.87
502.39	V	-56.94	-8.34	-65.27	-13.00	-52.27
576.11	V	-60.45	-7.88	-68.34	-13.00	-55.34
646.92	V	-60.09	-6.39	-66.48	-13.00	-53.48
288.02	H	-56.85	-12.87	-69.73	-13.00	-56.73
359.80	H	-56.07	-12.69	-68.76	-13.00	-55.76
430.61	H	-60.12	-10.12	-70.24	-13.00	-57.24
502.39	H	-54.66	-8.25	-62.91	-13.00	-49.91
575.14	H	-63.53	-7.58	-71.11	-13.00	-58.11
647.89	H	-59.13	-6.40	-65.54	-13.00	-52.54

Remark:

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

**Operation Mode:** WCDMA Band V / TX / CH 4182**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
132.82	V	-53.18	-12.50	-65.68	-13.00	-52.68
216.24	V	-51.50	-15.47	-66.97	-13.00	-53.97
287.05	V	-54.42	-11.83	-66.25	-13.00	-53.25
359.80	V	-53.78	-12.71	-66.49	-13.00	-53.49
503.36	V	-56.53	-8.32	-64.86	-13.00	-51.86
647.89	V	-60.85	-6.41	-67.26	-13.00	-54.26
127.97	H	-53.90	-13.62	-67.52	-13.00	-54.52
288.02	H	-53.77	-12.87	-66.65	-13.00	-53.65
359.80	H	-56.59	-12.69	-69.27	-13.00	-56.27
503.36	H	-55.57	-8.24	-63.81	-13.00	-50.81
575.14	H	-60.93	-7.58	-68.51	-13.00	-55.51
647.89	H	-60.62	-6.40	-67.03	-13.00	-54.03

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 Band V / TX / CH 4233**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-51.02	-11.80	-62.82	-13.00	-49.82
358.83	V	-51.71	-12.75	-64.46	-13.00	-51.46
430.61	V	-56.39	-10.19	-66.58	-13.00	-53.58
503.36	V	-52.21	-8.32	-60.53	-13.00	-47.53
576.11	V	-58.21	-7.88	-66.09	-13.00	-53.09
647.89	V	-58.65	-6.41	-65.06	-13.00	-52.06
287.05	H	-51.04	-12.86	-63.91	-13.00	-50.91
331.67	H	-47.49	-13.53	-61.02	-13.00	-48.02
358.83	H	-50.10	-12.73	-62.83	-13.00	-49.83
503.36	H	-49.91	-8.24	-58.16	-13.00	-45.16
600.36	H	-55.41	-7.28	-62.69	-13.00	-49.69
647.89	H	-55.44	-6.40	-61.85	-13.00	-48.85

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions 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**Temperature:** 25°C**Humidity:** 50 % RH**Test Date:** November 29, 2009**Tested by:** Mark Yang**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-52.68	-11.80	-64.48	-13.00	-51.48
359.80	V	-48.36	-12.71	-61.06	-13.00	-48.06
431.58	V	-57.73	-10.17	-67.91	-13.00	-54.91
502.39	V	-49.93	-8.34	-58.26	-13.00	-45.26
575.14	V	-56.76	-7.89	-64.64	-13.00	-51.64
647.89	V	-54.62	-6.41	-61.04	-13.00	-48.04
287.05	H	-54.34	-12.86	-67.20	-13.00	-54.20
358.83	H	-53.89	-12.73	-66.62	-13.00	-53.62
431.58	H	-59.83	-10.12	-69.95	-13.00	-56.95
503.36	H	-52.95	-8.24	-61.19	-13.00	-48.19
576.11	H	-59.05	-7.58	-66.63	-13.00	-53.63
647.89	H	-60.35	-6.40	-66.76	-13.00	-53.76

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions 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**Temperature:** 25°C**Humidity:** 50 % RH**Test Date:** November 29, 2009**Tested by:** Mark Yang**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-53.00	-11.80	-64.80	-13.00	-51.80
358.83	V	-49.48	-12.75	-62.23	-13.00	-49.23
430.61	V	-57.17	-10.19	-67.36	-13.00	-54.36
502.39	V	-50.31	-8.34	-58.65	-13.00	-45.65
576.11	V	-56.17	-7.88	-64.06	-13.00	-51.06
647.89	V	-55.43	-6.41	-61.84	-13.00	-48.84
287.05	H	-55.21	-12.86	-68.07	-13.00	-55.07
358.83	H	-54.74	-12.73	-67.47	-13.00	-54.47
430.61	H	-57.87	-10.12	-67.99	-13.00	-54.99
503.36	H	-51.95	-8.24	-60.19	-13.00	-47.19
576.11	H	-58.84	-7.58	-66.42	-13.00	-53.42
647.89	H	-60.23	-6.40	-66.63	-13.00	-53.63

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 9538**Temperature:** 25°C**Humidity:** 50 % RH**Test Date:** November 29, 2009**Tested by:** Mark Yang**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-52.59	-11.80	-64.39	-13.00	-51.39
358.83	V	-51.02	-12.75	-63.77	-13.00	-50.77
430.61	V	-57.14	-10.19	-67.33	-13.00	-54.33
503.36	V	-50.46	-8.32	-58.79	-13.00	-45.79
573.20	V	-55.72	-7.89	-63.61	-13.00	-50.61
645.95	V	-55.54	-6.38	-61.92	-13.00	-48.92
215.27	H	-57.34	-14.01	-71.34	-13.00	-58.34
288.02	H	-54.27	-12.87	-67.14	-13.00	-54.14
359.80	H	-54.23	-12.69	-66.92	-13.00	-53.92
503.36	H	-53.48	-8.24	-61.72	-13.00	-48.72
576.11	H	-58.78	-7.58	-66.36	-13.00	-53.36
645.95	H	-60.02	-6.39	-66.41	-13.00	-53.41

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 V / TX / CH 4132**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
215.27	V	-54.28	-15.52	-69.80	-13.00	-56.80
288.02	V	-53.07	-11.80	-64.87	-13.00	-51.87
359.80	V	-53.86	-12.71	-66.57	-13.00	-53.57
503.36	V	-56.47	-8.32	-64.79	-13.00	-51.79
574.17	V	-61.22	-7.89	-69.11	-13.00	-56.11
647.89	V	-61.17	-6.41	-67.58	-13.00	-54.58
31.94	H	-45.26	-16.92	-62.17	-13.00	-49.17
287.05	H	-56.09	-12.86	-68.95	-13.00	-55.95
358.83	H	-56.86	-12.73	-69.59	-13.00	-56.59
503.36	H	-55.54	-8.24	-63.78	-13.00	-50.78
574.17	H	-62.18	-7.59	-69.77	-13.00	-56.77
644.98	H	-60.99	-6.38	-67.37	-13.00	-54.37

Remark:

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

**Operation Mode:** WCDMA / HSDPA Band V / TX / CH 4182**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
127.97	V	-53.98	-12.41	-66.39	-13.00	-53.39
216.24	V	-53.36	-15.47	-68.82	-13.00	-55.82
287.05	V	-54.75	-11.83	-66.58	-13.00	-53.58
359.80	V	-54.22	-12.71	-66.93	-13.00	-53.93
503.36	V	-57.45	-8.32	-65.77	-13.00	-52.77
576.11	V	-59.79	-7.88	-67.67	-13.00	-54.67
32.91	H	-53.03	-16.07	-69.11	-13.00	-56.11
132.82	H	-56.75	-13.74	-70.49	-13.00	-57.49
215.27	H	-57.31	-14.01	-71.32	-13.00	-58.32
288.02	H	-55.36	-12.87	-68.23	-13.00	-55.23
502.39	H	-56.35	-8.25	-64.60	-13.00	-51.60
647.89	H	-60.99	-6.40	-67.39	-13.00	-54.39

Remark:

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

**Operation Mode:** WCDMA / HSDPA Band V / TX / CH 4233**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
287.05	V	-54.78	-11.83	-66.61	-13.00	-53.61
358.83	V	-53.23	-12.75	-65.99	-13.00	-52.99
431.58	V	-59.56	-10.17	-69.73	-13.00	-56.73
503.36	V	-54.09	-8.32	-62.41	-13.00	-49.41
576.11	V	-59.76	-7.88	-67.65	-13.00	-54.65
647.89	V	-59.53	-6.41	-65.94	-13.00	-52.94
31.94	H	-45.94	-16.92	-62.86	-13.00	-49.86
287.05	H	-55.66	-12.86	-68.53	-13.00	-55.53
359.80	H	-55.77	-12.69	-68.46	-13.00	-55.46
502.39	H	-54.52	-8.25	-62.77	-13.00	-49.77
574.17	H	-60.23	-7.59	-67.82	-13.00	-54.82
646.92	H	-60.62	-6.40	-67.01	-13.00	-54.01

Remark:

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

**Operation Mode:** WCDMA / HSUPA Band II /
TX / CH 9262**Temperature:** 25°C**Humidity:** 50 % RH**Test Date:** November 29, 2009**Tested by:** Mark Yang**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
126.03	V	-60.24	-12.56	-72.80	-13.00	-59.80
216.24	V	-52.78	-15.47	-68.25	-13.00	-55.25
358.83	V	-50.53	-12.75	-63.28	-13.00	-50.28
502.39	V	-50.77	-8.34	-59.11	-13.00	-46.11
576.11	V	-55.14	-7.88	-63.02	-13.00	-50.02
647.89	V	-56.58	-6.41	-62.99	-13.00	-49.99
288.02	H	-56.37	-12.87	-69.24	-13.00	-56.24
359.80	H	-54.33	-12.69	-67.02	-13.00	-54.02
430.61	H	-58.46	-10.12	-68.58	-13.00	-55.58
502.39	H	-54.17	-8.25	-62.42	-13.00	-49.42
575.14	H	-60.17	-7.58	-67.76	-13.00	-54.76
646.92	H	-60.46	-6.40	-66.85	-13.00	-53.85

Remark:

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

**Operation Mode:** WCDMA / HSUPA Band II /
TX / CH 9400**Temperature:** 25°C**Humidity:** 50 % RH**Test Date:** November 29, 2009**Tested by:** Mark Yang**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
287.05	V	-53.25	-11.83	-65.08	-13.00	-52.08
359.80	V	-50.57	-12.71	-63.28	-13.00	-50.28
430.61	V	-56.29	-10.19	-66.48	-13.00	-53.48
503.36	V	-49.94	-8.32	-58.27	-13.00	-45.27
573.20	V	-55.51	-7.89	-63.40	-13.00	-50.40
647.89	V	-54.56	-6.41	-60.97	-13.00	-47.97
287.05	H	-56.24	-12.86	-69.10	-13.00	-56.10
358.83	H	-53.98	-12.73	-66.70	-13.00	-53.70
431.58	H	-58.50	-10.12	-68.62	-13.00	-55.62
503.36	H	-53.63	-8.24	-61.87	-13.00	-48.87
574.17	H	-60.04	-7.59	-67.63	-13.00	-54.63
647.89	H	-59.35	-6.40	-65.75	-13.00	-52.75

Remark:

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

**Operation Mode:** WCDMA / HSUPA Band II /
TX / CH 9538**Temperature:** 25°C**Humidity:** 50 % RH**Test Date:** November 29, 2009**Tested by:** Mark Yang**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
288.02	V	-52.60	-11.80	-64.40	-13.00	-51.40
359.80	V	-49.16	-12.71	-61.86	-13.00	-48.86
430.61	V	-56.78	-10.19	-66.97	-13.00	-53.97
503.36	V	-50.50	-8.32	-58.82	-13.00	-45.82
574.17	V	-55.67	-7.89	-63.56	-13.00	-50.56
646.92	V	-55.07	-6.39	-61.46	-13.00	-48.46
287.05	H	-53.80	-12.86	-66.67	-13.00	-53.67
359.80	H	-55.93	-12.69	-68.62	-13.00	-55.62
430.61	H	-59.90	-10.12	-70.02	-13.00	-57.02
503.36	H	-52.52	-8.24	-60.77	-13.00	-47.77
576.11	H	-60.46	-7.58	-68.04	-13.00	-55.04
644.98	H	-59.44	-6.38	-65.82	-13.00	-52.82

Remark:

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

**Operation Mode:** WCDMA / HSUPA Band V / TX / CH 4132**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
107.60	V	-54.05	-15.96	-70.01	-13.00	-57.01
287.05	V	-55.41	-11.83	-67.23	-13.00	-54.23
359.80	V	-51.87	-12.71	-64.57	-13.00	-51.57
430.61	V	-59.80	-10.19	-69.99	-13.00	-56.99
503.36	V	-57.08	-8.32	-65.40	-13.00	-52.40
645.95	V	-62.27	-6.38	-68.65	-13.00	-55.65
287.05	H	-57.66	-12.86	-70.52	-13.00	-57.52
359.80	H	-58.21	-12.69	-70.90	-13.00	-57.90
431.58	H	-61.64	-10.12	-71.76	-13.00	-58.76
503.36	H	-56.76	-8.24	-65.00	-13.00	-52.00
576.11	H	-63.01	-7.58	-70.59	-13.00	-57.59
647.89	H	-61.80	-6.40	-68.20	-13.00	-55.20

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:** WCDMA / HSUPA Band V / TX / CH 4182**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
127.97	V	-54.60	-12.41	-67.01	-13.00	-54.01
216.24	V	-56.22	-15.47	-71.68	-13.00	-58.68
288.02	V	-57.47	-11.80	-69.27	-13.00	-56.27
359.80	V	-55.18	-12.71	-67.89	-13.00	-54.89
430.61	V	-61.15	-10.19	-71.34	-13.00	-58.34
503.36	V	-58.06	-8.32	-66.38	-13.00	-53.38
288.02	H	-57.46	-12.87	-70.33	-13.00	-57.33
359.80	H	-58.56	-12.69	-71.25	-13.00	-58.25
431.58	H	-60.37	-10.12	-70.49	-13.00	-57.49
503.36	H	-56.24	-8.24	-64.49	-13.00	-51.49
574.17	H	-62.10	-7.59	-69.69	-13.00	-56.69
645.95	H	-63.18	-6.39	-69.56	-13.00	-56.56

Remark:

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

**Operation Mode:** WCDMA / HSUPA Band V / TX / CH 4233**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
287.05	V	-55.61	-11.83	-67.44	-13.00	-54.44
358.83	V	-54.13	-12.75	-66.88	-13.00	-53.88
430.61	V	-59.21	-10.19	-69.40	-13.00	-56.40
503.36	V	-54.77	-8.32	-63.09	-13.00	-50.09
576.11	V	-59.15	-7.88	-67.03	-13.00	-54.03
644.98	V	-59.88	-6.36	-66.24	-13.00	-53.24
31.94	H	-42.62	-16.92	-59.54	-13.00	-46.54
287.05	H	-56.08	-12.86	-68.94	-13.00	-55.94
358.83	H	-55.13	-12.73	-67.86	-13.00	-54.86
503.36	H	-55.02	-8.24	-63.27	-13.00	-50.27
575.14	H	-61.52	-7.58	-69.11	-13.00	-56.11
645.95	H	-61.70	-6.39	-68.09	-13.00	-55.09

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.

**Above 1GHz****Operation Mode:** GPRS 850 / TX / CH 128**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1504.00	V	-54.88	0.39	-54.49	-13.00	-41.49
1651.00	V	-49.96	0.69	-49.27	-13.00	-36.27
1931.00	V	-56.10	1.27	-54.83	-13.00	-41.83
2470.00	V	-50.68	3.49	-47.20	-13.00	-34.20
N/A						
1511.00	H	-58.80	0.50	-58.29	-13.00	-45.29
1651.00	H	-52.34	0.80	-51.54	-13.00	-38.54
2470.00	H	-51.74	3.78	-47.96	-13.00	-34.96
N/A						

Remark:

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

**Operation Mode:** GPRS 850 / TX / CH 190**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1511.00	V	-55.56	0.40	-55.16	-13.00	-42.16
1672.00	V	-44.23	0.73	-43.50	-13.00	-30.50
1931.00	V	-56.34	1.27	-55.08	-13.00	-42.08
2512.00	V	-47.00	3.66	-43.34	-13.00	-30.34
N/A						
1511.00	H	-56.29	0.50	-55.79	-13.00	-42.79
1672.00	H	-49.96	0.84	-49.11	-13.00	-36.11
2512.00	H	-46.92	3.96	-42.96	-13.00	-29.96
N/A						

Remark:

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

**Operation Mode:** GPRS 850 / TX / CH 251**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1434.00	V	-59.90	0.30	-59.60	-13.00	-46.60
1511.00	V	-56.27	0.50	-55.77	-13.00	-42.77
1700.00	V	-52.10	0.90	-51.20	-13.00	-38.20
2547.00	V	-48.40	4.06	-44.33	-13.00	-31.33
N/A						
1434.00	H	-58.50	0.17	-58.33	-13.00	-45.33
1511.00	H	-55.71	0.40	-55.30	-13.00	-42.30
1700.00	H	-49.21	0.79	-48.42	-13.00	-35.42
1931.00	H	-56.34	1.27	-55.08	-13.00	-42.08
2547.00	H	-44.25	3.77	-40.49	-13.00	-27.49
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:** GPRS 1900 / TX / CH 512**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3702.00	V	-58.95	6.46	-52.49	-13.00	-39.49
5550.00	V	-59.36	9.92	-49.44	-13.00	-36.44
N/A						
3702.00	H	-59.91	7.85	-52.07	-13.00	-39.07
5550.00	H	-56.70	10.26	-46.44	-13.00	-33.44
N/A						

Remark:

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

**Operation Mode:** GPRS 1900 / TX / CH 661**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3758.00	V	-49.61	6.63	-42.98	-13.00	-29.98
5641.00	V	-50.22	9.94	-40.28	-13.00	-27.28
N/A						
3758.00	H	-50.00	8.12	-41.87	-13.00	-28.87
5641.00	H	-52.88	10.28	-42.60	-13.00	-29.60
N/A						

Remark:

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

**Operation Mode:** GPRS 1900 / TX / CH 810**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3821.00	V	-56.08	6.83	-49.25	-13.00	-36.25
5732.00	V	-53.95	9.96	-43.98	-13.00	-30.98
N/A						
3821.00	H	-55.10	8.44	-46.66	-13.00	-33.66
5732.00	H	-59.44	10.31	-49.13	-13.00	-36.13
7034.00	H	-60.55	14.23	-46.32	-13.00	-33.32
N/A						

Remark:

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

**Operation Mode:** EDGE 850 / TX / CH 128**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1511.00	V	-53.42	0.40	-53.01	-13.00	-40.01
1651.00	V	-57.82	0.69	-57.13	-13.00	-44.13
1931.00	V	-56.17	1.27	-54.90	-13.00	-41.90
2470.00	V	-60.83	3.49	-57.34	-13.00	-44.34
N/A						
1504.00	H	-56.61	0.49	-56.12	-13.00	-43.12
N/A						

Remark:

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

**Operation Mode:** EDGE 850 / TX / CH 190**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1511.00	V	-55.40	0.40	-55.00	-13.00	-42.00
1672.00	V	-54.68	0.73	-53.95	-13.00	-40.95
1931.00	V	-55.71	1.27	-54.44	-13.00	-41.44
2512.00	V	-58.42	3.66	-54.77	-13.00	-41.77
N/A						
1511.00	H	-56.09	0.50	-55.58	-13.00	-42.58
1672.00	H	-57.76	0.84	-56.91	-13.00	-43.91
2512.00	H	-60.28	3.96	-56.32	-13.00	-43.32
N/A						

Remark:

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

**Operation Mode:** EDGE 850 / TX / CH 251**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1511.00	V	-55.60	0.40	-55.19	-13.00	-42.19
1700.00	V	-56.15	0.79	-55.36	-13.00	-42.36
1931.00	V	-55.69	1.27	-54.42	-13.00	-41.42
2547.00	V	-54.18	3.77	-50.41	-13.00	-37.41
2701.00	V	-60.23	4.24	-55.99	-13.00	-42.99
N/A						
1434.00	H	-58.69	0.30	-58.39	-13.00	-45.39
1504.00	H	-57.79	0.49	-57.30	-13.00	-44.30
1700.00	H	-59.68	0.90	-58.77	-13.00	-45.77
2547.00	H	-57.80	4.06	-53.73	-13.00	-40.73
3450.00	H	-61.46	6.70	-54.76	-13.00	-41.76
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:** EDGE 1900 / TX / CH 512**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3926.00	V	-61.35	7.15	-54.19	-13.00	-41.19
N/A						
3100.00	H	-61.13	5.73	-55.40	-13.00	-42.40
N/A						

Remark:

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

**Operation Mode:** EDGE 1900 / TX / CH 661**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3758.00	V	-53.81	6.63	-47.18	-13.00	-34.18
5641.00	V	-56.11	9.94	-46.17	-13.00	-33.17
N/A						
3758.00	H	-53.09	8.12	-44.96	-13.00	-31.96
5641.00	H	-59.10	10.28	-48.82	-13.00	-35.82
N/A						

Remark:

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

**Operation Mode:** EDGE 1900 / TX / CH 810**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3821.00	V	-57.00	6.83	-50.17	-13.00	-37.17
5732.00	V	-57.40	9.96	-47.43	-13.00	-34.43
N/A						
3821.00	H	-55.99	8.44	-47.55	-13.00	-34.55
5732.00	H	-59.66	10.31	-49.35	-13.00	-36.35
N/A						

Remark:

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

**Operation Mode:** WCDMA Band II / TX / CH 9262**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
7391.00	V	-61.46	15.09	-46.37	-13.00	-33.37
N/A						
2883.00	H	-61.41	5.09	-56.32	-13.00	-43.32
N/A						

Remark:

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

**Operation Mode:** WCDMA Band II / TX / CH 9400**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3758.00	V	-58.27	6.63	-51.64	-13.00	-38.64
5641.00	V	-60.14	9.94	-50.20	-13.00	-37.20
N/A						
3758.00	H	-56.59	8.12	-48.47	-13.00	-35.47
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:** WCDMA Band II / TX / CH 9538**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3814.00	V	-60.77	6.81	-53.96	-13.00	-40.96
5718.00	V	-59.71	9.96	-49.75	-13.00	-36.75
N/A						
3814.00	H	-58.73	8.40	-50.32	-13.00	-37.32
N/A						

Remark:

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

**Operation Mode:** WCDMA Band V / TX / CH 4132**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1511.00	V	-55.57	0.40	-55.16	-13.00	-42.16
1658.00	V	-59.09	0.71	-58.39	-13.00	-45.39
2001.00	V	-60.12	1.41	-58.70	-13.00	-45.70
N/A						
1511.00	H	-53.87	0.50	-53.37	-13.00	-40.37
2484.00	H	-59.91	3.84	-56.06	-13.00	-43.06
N/A						

Remark:

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

**Operation Mode:** WCDMA Band V / TX / CH 4182**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1511.00	V	-54.92	0.40	-54.52	-13.00	-41.52
1672.00	V	-57.90	0.73	-57.17	-13.00	-44.17
2001.00	V	-56.99	1.41	-55.58	-13.00	-42.58
3940.00	V	-62.49	7.20	-55.30	-13.00	-42.30
N/A						
1511.00	H	-55.26	0.50	-54.76	-13.00	-41.76
1672.00	H	-57.56	0.84	-56.72	-13.00	-43.72
2190.00	H	-61.22	2.44	-58.77	-13.00	-45.77
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 4233**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1511.00	V	-55.07	0.40	-54.67	-13.00	-41.67
1693.00	V	-58.66	0.78	-57.89	-13.00	-44.89
1994.00	V	-60.47	1.40	-59.08	-13.00	-46.08
2540.00	V	-59.50	3.74	-55.76	-13.00	-42.76
N/A						
1504.00	H	-53.26	0.49	-52.77	-13.00	-39.77
1693.00	H	-59.71	0.89	-58.82	-13.00	-45.82
1798.00	H	-61.17	1.11	-60.05	-13.00	-47.05
N/A						

Remark:

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

**Operation Mode:** WCDMA / HSDPA Band II / TX / CH 9262**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3737.00	V	-62.45	6.57	-55.88	-13.00	-42.88
N/A						
2939.00	H	-61.71	5.26	-56.44	-13.00	-43.44
N/A						

Remark:

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

**Operation Mode:** WCDMA / HSDPA Band II / TX / CH 9400**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3758.00	V	-56.69	6.63	-50.05	-13.00	-37.05
5634.00	V	-57.83	9.94	-47.89	-13.00	-34.89
N/A						
3765.00	H	-56.06	8.16	-47.90	-13.00	-34.90
5634.00	H	-60.03	10.28	-49.75	-13.00	-36.75
N/A						

Remark:

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

**Operation Mode:** WCDMA / HSDPA Band II / TX / CH 9538**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3324.00	V	-60.87	5.60	-55.27	-13.00	-42.27
3814.00	V	-59.95	6.81	-53.15	-13.00	-40.15
5718.00	V	-61.16	9.96	-51.20	-13.00	-38.20
N/A						
3814.00	H	-58.54	8.40	-50.14	-13.00	-37.14
4409.00	H	-63.67	9.52	-54.15	-13.00	-41.15
5718.00	H	-58.99	10.31	-48.68	-13.00	-35.68
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 / HSDPA Band V / TX / CH 4132**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1511.00	V	-54.95	0.40	-54.55	-13.00	-41.55
1651.00	V	-58.86	0.69	-58.17	-13.00	-45.17
1994.00	V	-59.84	1.40	-58.44	-13.00	-45.44
N/A						
1511.00	H	-56.26	0.50	-55.76	-13.00	-42.76
1658.00	H	-59.65	0.81	-58.83	-13.00	-45.83
N/A						

Remark:

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

**Operation Mode:** WCDMA / HSDPA Band V / TX / CH 4182**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1441.00	V	-58.00	0.19	-57.81	-13.00	-44.81
1511.00	V	-55.00	0.40	-54.60	-13.00	-41.60
1672.00	V	-58.30	0.73	-57.57	-13.00	-44.57
2988.00	V	-61.58	5.13	-56.45	-13.00	-43.45
N/A						
1511.00	H	-56.38	0.50	-55.88	-13.00	-42.88
1672.00	H	-58.06	0.84	-57.21	-13.00	-44.21
N/A						

Remark:

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

**Operation Mode:** WCDMA / HSDPA Band V / TX / CH 4233**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1511.00	V	-55.46	0.40	-55.06	-13.00	-42.06
2540.00	V	-59.19	3.74	-55.44	-13.00	-42.44
N/A						
1511.00	H	-54.42	0.50	-53.92	-13.00	-40.92
N/A						

Remark:

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

**Operation Mode:** WCDMA / HSUPA Band II / TX / CH 9262**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
2778.00	V	-60.81	4.48	-56.33	-13.00	-43.33
N/A						
3303.00	H	-61.69	6.29	-55.39	-13.00	-42.39
N/A						

Remark:

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

**Operation Mode:** WCDMA / HSUPA Band II / TX / CH 9400**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3765.00	V	-54.63	6.66	-47.97	-13.00	-34.97
5641.00	V	-58.09	9.94	-48.15	-13.00	-35.15
N/A						
3765.00	H	-54.22	8.16	-46.06	-13.00	-33.06
5641.00	H	-58.83	10.28	-48.55	-13.00	-35.55
N/A						

Remark:

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

**Operation Mode:** WCDMA / HSUPA Band II / TX / CH 9538**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
3814.00	V	-58.27	6.81	-51.46	-13.00	-38.46
5718.00	V	-58.07	9.96	-48.11	-13.00	-35.11
N/A						
3814.00	H	-57.36	8.40	-48.96	-13.00	-35.96
N/A						

Remark:

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

**Operation Mode:** WCDMA / HSUPA Band V / TX / CH 4132**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1511.00	V	-52.70	0.40	-52.30	-13.00	-39.30
1658.00	V	-58.34	0.71	-57.63	-13.00	-44.63
N/A						
1511.00	H	-54.33	0.50	-53.83	-13.00	-40.83
N/A						

Remark:

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

**Operation Mode:** WCDMA / HSUPA Band V / TX / CH 4182**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1511.00	V	-55.29	0.40	-54.89	-13.00	-41.89
1672.00	V	-58.89	0.73	-58.15	-13.00	-45.15
2001.00	V	-59.47	1.41	-58.06	-13.00	-45.06
N/A						
1504.00	H	-55.86	0.49	-55.37	-13.00	-42.37
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:** WCDMA / HSUPA Band V / TX / CH 4233**Test Date:** November 29, 2009**Temperature:** 25°C**Tested by:** Mark Yang**Humidity:** 50 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Antenna Polarization (V/H)	Reading (dBm)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)
1504.00	V	-54.56	0.39	-54.17	-13.00	-41.17
1693.00	V	-58.59	0.78	-57.81	-13.00	-44.81
2540.00	V	-59.51	3.74	-55.77	-13.00	-42.77
N/A						
1504.00	H	-54.52	0.49	-54.04	-13.00	-41.04
N/A						

Remark:

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

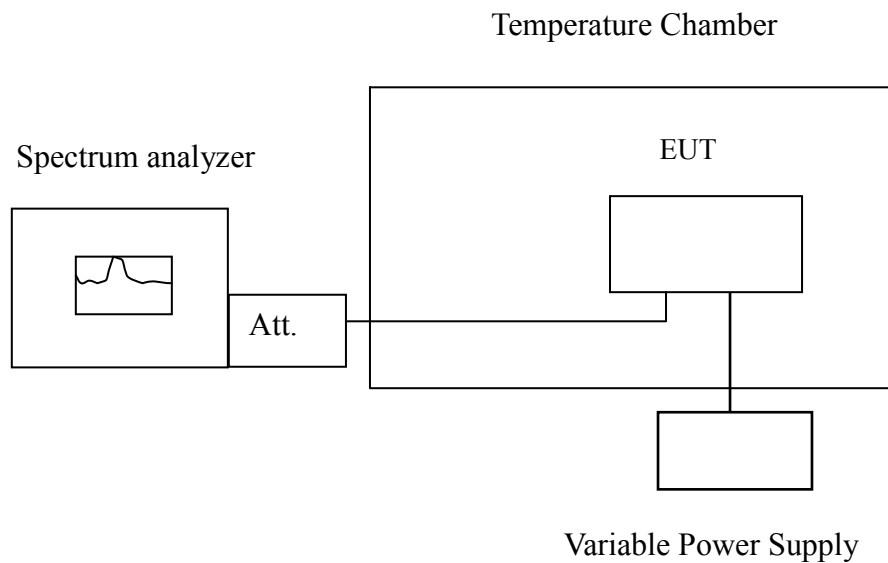
7.7 FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

LIMIT

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

Frequency Tolerance: 2.5 ppm

Test Configuration



Remark: Measurement setup for testing on Antenna connector



TEST PROCEDURE

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

TEST RESULTS

No non-compliance noted.



Reference Frequency: GPRS Mid Channel 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
120	50	836600004	24	2090
	40	836600008	28	
	30	836600005	25	
	20	836599980	0	
	10	836600010	30	
	0	836600009	29	
	-10	836600020	40	
	-20	836600010	30	
	-30	836600024	44	

Reference Frequency: GPRS Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
120	50	1880000044	1	4700
	40	1880000052	9	
	30	1880000040	-3	
	20	1880000043	0	
	10	1880000036	-7	
	0	1880000045	2	
	-10	1879999967	-76	
	-20	1880000021	-22	
	-30	1880000050	7	



Reference Frequency: EDGE Mid Channel 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
120	50	836600025	2	2090
	40	836599974	-49	
	30	836599971	-52	
	20	836600023	0	
	10	836599975	-48	
	0	836599987	-36	
	-10	836599972	-51	
	-20	836600010	-13	
	-30	836600025	2	

Reference Frequency: EDGE Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
120	50	1879999950	-108	4700
	40	1879999952	-106	
	30	1879999957	-101	
	20	1880000058	0	
	10	1879999968	-90	
	0	1879999960	-98	
	-10	1879999958	-100	
	-20	1879999962	-96	
	-30	1879999966	-92	



Reference Frequency: WCDMA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
120	50	836399985	6	2090
	40	836399989	10	
	30	836400012	33	
	20	836399979	0	
	10	836399991	12	
	0	836400008	29	
	-10	836399990	11	
	-20	836400009	30	
	-30	836400013	34	

Reference Frequency: WCDMA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
120	50	1880000058	38	4700
	40	1880000066	46	
	30	1879999960	-60	
	20	1880000020	0	
	10	1879999963	-57	
	0	1879999996	-24	
	-10	1880000024	4	
	-20	1880000021	1	
	-30	1880000018	-2	



Reference Frequency: WCDMA / HSDPA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
120	50	836399991	-11	2090
	40	836399990	-12	
	30	836400009	7	
	20	836400002	0	
	10	836399996	-6	
	0	836399991	-11	
	-10	836400006	4	
	-20	836399995	-7	
	-30	836400011	9	

Reference Frequency: WCDMA / HSDPA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
120	50	1879999999	13	4700
	40	1880000006	20	
	30	1880000020	34	
	20	1879999986	0	
	10	1879999971	-15	
	0	1879999976	-10	
	-10	1879999980	-6	
	-20	1879999995	9	
	-30	1880000011	25	



Reference Frequency: WCDMA / HSUPA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
120	50	836400018	43	2090
	40	836400026	51	
	30	836400018	43	
	20	836399975	0	
	10	836400002	27	
	0	836400008	33	
	-10	836400001	26	
	-20	836399994	19	
	-30	836400022	47	

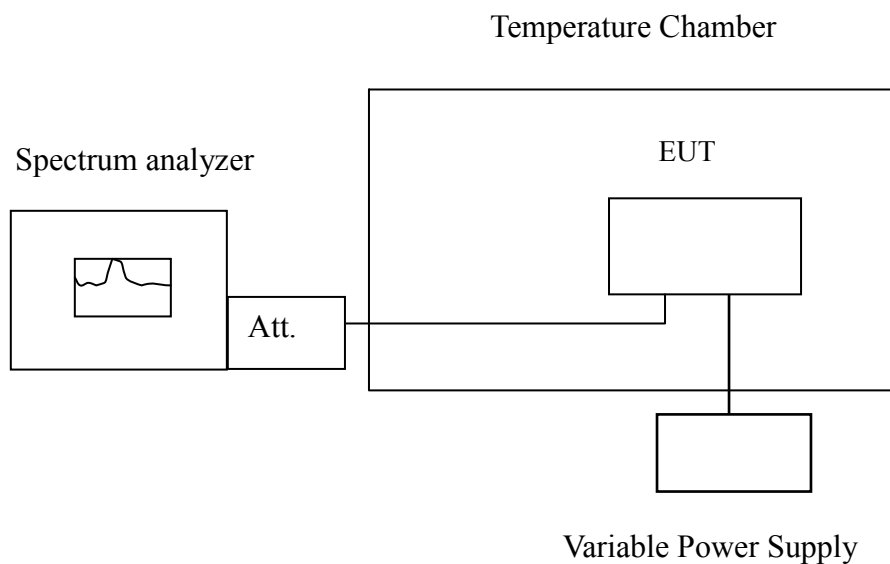
Reference Frequency: WCDMA / HSUPA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
120	50	1879999975	-15	4700
	40	1879999979	-11	
	30	1879999985	-5	
	20	1879999990	0	
	10	1880000030	40	
	0	1880000021	31	
	-10	1880000014	24	
	-20	1880000018	28	
	-30	1880000035	45	

7.8 FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT

LIMIT

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

Test Configuration



Remark: Measurement setup for testing on Antenna connector.



TEST PROCEDURE

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

Reduce the input voltage to specify extreme voltage variation ($\pm 10\%$) and endpoint, record the maximum frequency change.

TEST RESULTS

No non-compliance noted.

Reference Frequency: GPRS Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
132	20	836599977	-3	2090
120		836599980	0	
108		836599982	2	
98END		836599573	-407	

Reference Frequency: GPRS Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
132	20	1880000044	1	4700
120		1880000043	0	
108		1880000050	7	
98END		1879999840	-203	



Reference Frequency: EDGE Mid Channel 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
132	20	836600025	2	2090
120		836600023	0	
108		836600021	-2	
98END		836599880	-143	

Reference Frequency: EDGE Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
132	20	1880000067	9	4700
120		1880000058	0	
108		1880000045	-13	
98END		1879999715	-343	



Reference Frequency: WCDMA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
132	20	836400011	-67	2090
120		836399979	0	
108		836399987	-2	
98END		836399989	58	

Reference Frequency: WCDMA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
132	20	1879999953	32	4700
120		1880000020	0	
108		1880000018	8	
98END		1880000078	10	



Reference Frequency: WCDMA / HSDPA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
132	20	836399999	-3	2090
120		836400002	0	
108		836400009	7	
98END		836399951	-51	

Reference Frequency: WCDMA / HSDPA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
132	20	1879999989	3	4700
120		1879999986	0	
108		1879999979	-7	
98END		1879999930	-56	



Reference Frequency: WCDMA / HSUPA Band V Mid Channel 836.4 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
132	20	836400008	33	2090
120		836399975	0	
108		836399983	8	
98END		836399958	-17	

Reference Frequency: WCDMA / HSUPA Band II Mid Channel 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
132	20	1879999997	7	4700
120		1879999990	0	
108		1880000012	22	
98END		1879999942	-48	



7.9 POWERLINE CONDUCTED EMISSIONS

LIMIT

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

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

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

Test Configuration

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

TEST PROCEDURE

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



TEST RESULTS

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

Operation Mode: Normal Link **Test Date:** December 7, 2009
Temperature: 22°C **Tested by:** Nan Tsai
Humidity: 45% RH

Freq. (MHz)	QP Reading (dBuV)	AV Reading (dBuV)	Corr. factor (dB)	QP Result (dBuV)	AV Result (dBuV)	QP Limit (dBuV)	AV Limit (dBuV)	QP Margin (dB)	AV Margin (dB)	Note
0.1634	38.09	15.05	0.12	38.21	15.17	65.29	55.29	-27.08	-40.12	L1
3.1691	39.72	27.77	0.06	39.78	27.83	56.00	46.00	-16.22	-18.17	L1
3.6333	38.60	25.15	0.06	38.66	25.21	56.00	46.00	-17.34	-20.79	L1
12.2442	47.50	39.49	0.21	47.71	39.70	60.00	50.00	-12.29	-10.30	L1
12.9719	53.27	46.39	0.24	53.51	46.63	60.00	50.00	-6.49	-3.37	L1
19.4318	37.38	30.54	0.41	37.79	30.95	60.00	50.00	-22.21	-19.05	L1
0.1780	41.38	23.44	0.12	41.50	23.56	64.58	54.58	-23.08	-31.02	L2
3.3754	36.17	23.50	0.08	36.25	23.58	56.00	46.00	-19.75	-22.42	L2
3.8642	40.30	29.89	0.09	40.39	29.98	56.00	46.00	-15.61	-16.02	L2
12.2795	50.51	41.66	0.17	50.68	41.83	60.00	50.00	-9.32	-8.17	L2
13.1365	47.29	38.35	0.19	47.48	38.54	60.00	50.00	-12.52	-11.46	L2
19.4296	35.80	29.09	0.17	35.97	29.26	60.00	50.00	-24.03	-20.74	L2

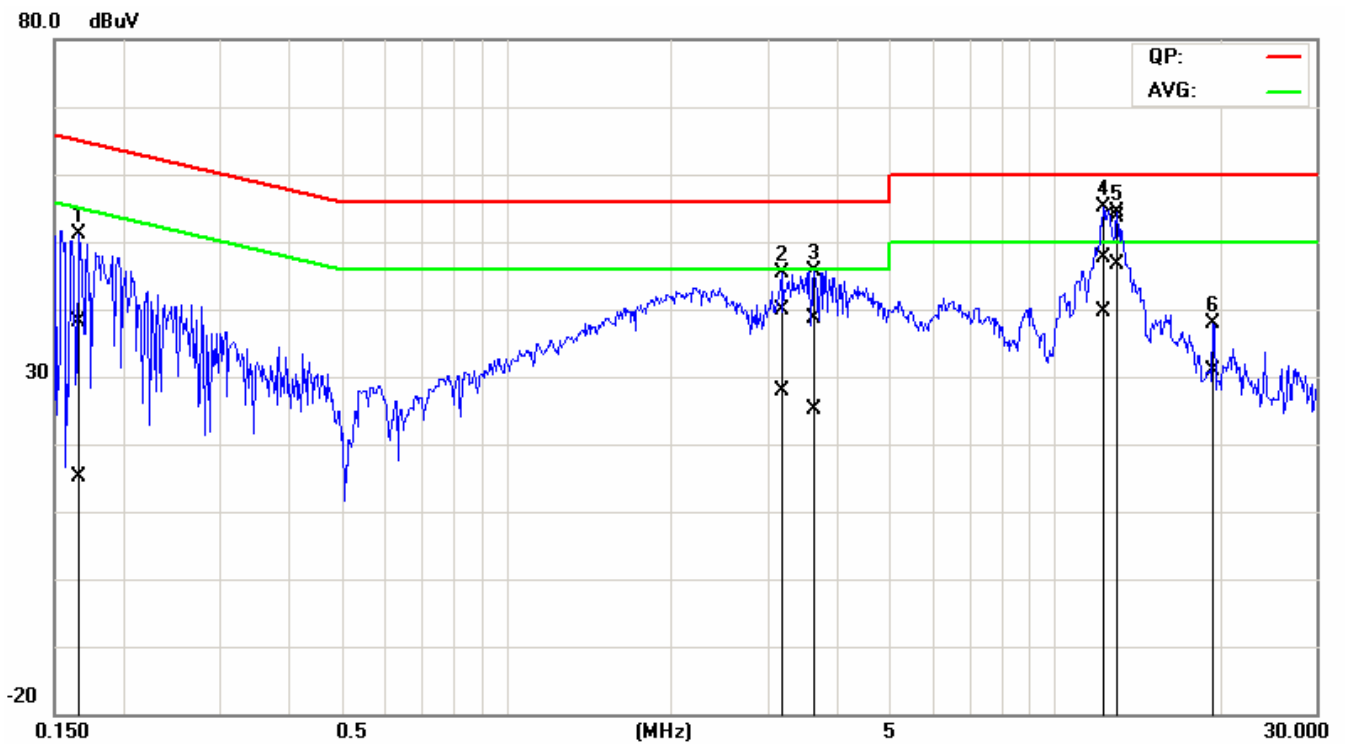
Remark:

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.

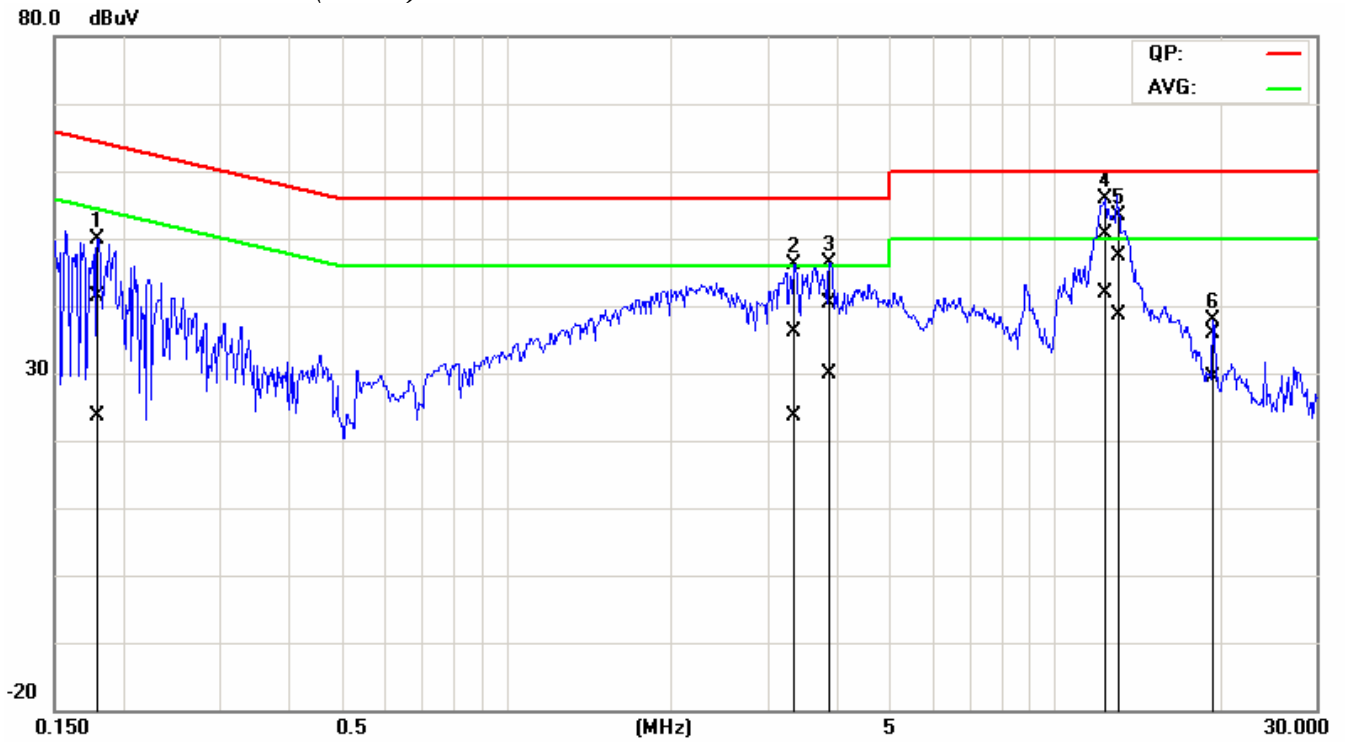


Test Plots

Conducted emissions (Line 1)



Conducted emissions (Line 2)





APPENDIX I RADIO FREQUENCY EXPOSURE

LIMIT

EUT Specification

EUT	Notebook PC System
Frequency band (Operating)	☐ WLAN: 2.412GHz ~ 2.462GHz ☐ WLAN: 5.18GHz ~ 5.32GHz / 5.50GHz ~ 5.70GHz ☐ WLAN: 5.745GHz ~ 5.825GHz ☒ Others: 850MHz: 824 ~ 849 MHz
Device category	☒ Portable (<20cm separation) ☐ Mobile (>20cm separation) ☐ Others
Exposure classification	☒ Occupational/Controlled exposure ($S = 5\text{mW/cm}^2$) ☐ General Population/Uncontrolled exposure ($S=1\text{mW/cm}^2$)
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Max. output power	ERP: 27.52 dBm (564.93mW)
Antenna gain (Max)	-1.28 dBi (Numeric gain: 0.74)
Evaluation applied	☐ MPE Evaluation ☒ SAR Evaluation* ☐ N/A

Remark:

- The maximum output power is 27.52dBm (564.93mW) at 836.36MHz (with 0.74 numeric antenna gain.)*
- DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.*
- For mobile or fixed location transmitters, no SAR consideration applied. The maximum power density is 1.0 mW/cm^2 even if the calculation indicates that the power density would be larger.*

TEST RESULTS

Not applicable, Please refers to the SAR test report.

**EUT Specification**

EUT	Notebook PC System
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 ($S = 5\text{mW/cm}^2$) ☐ General Population/Uncontrolled exposure ($S=1\text{mW/cm}^2$)
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Max. output power	ERP: 19.47 dBm (88.51mW)
Antenna gain (Max)	-0.92 dBi (Numeric gain: 0.81)
Evaluation applied	☐ MPE Evaluation ☒ SAR Evaluation* ☐ N/A
Remark: <i>1. The maximum output power is <u>19.47dBm (88.51mW)</u> at <u>827.12MHz</u> (with <u>0.81 numeric antenna gain.</u>)</i> <i>2. DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.</i> <i>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.</i>	

TEST RESULTS

Not applicable, Please refers to the SAR test report.