ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 22 SUBPART H and PART 24 SUBPART E

OF

Product Name:	**Pocket PC Phone**
Brand Name:	**N/A**
Model Name:	**NEON300**
FCC ID:	**NM8NEON300**
Report No.:	**ER/2008/30024**
Issue Date:	**Mar. 26, 2008**
FCC Rule Part:	**2 , 22H & 24E**
Prepared for:	**High Tech Computer Corp.** **1F, No.6-3, Baoqiang Rd, Xindian City, Taipei, Taiwan.**
Prepared by:	**SGS Taiwan Ltd.** **Electronics & Communication Laboratory** **No. 134, Wu Kung Rd., Wuku Industrial Zone, Taipei County, Taiwan.**

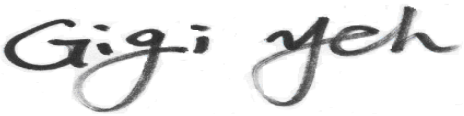
VERIFICATION OF COMPLIANCE

Applicant:	High Tech Computer Corp. 1F, No.6-3, Baoqiang Rd, Xindian City, Taipei, Taiwan.
Product Name:	Pocket PC Phone
FCC ID Number:	NM8NEON300
Brand Name:	N/A
Model No.:	NEON300
Model Difference:	N/A
File Number:	ER/2008/30023
Date of test:	Mar. 20, 2008 ~ Mar. 25, 2008
Date of EUT Received:	Mar. 19, 2008

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Electronics & Communication Laboratory 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-B-2002 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 FCC PART 24 subpart E.

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

Test By:		***Date***	Mar. 26, 2008
	Bondi Liu / Engineer		
Prepared By:		***Date***	Mar. 26, 2008
	Gigi Yeh / Clerk		
Approved By		***Date***	Mar. 26, 2008
	Vincent Su / Manager		

Version

Version No.	Date
00	Mar. 26, 2008

Table of Contents

1. GENERAL INFORMATION

General:

Product Name:	Pocket PC Phone	
Brand Name:	N/A	
Model Name:	NEON300	
Model Difference:	N/A	
Simple Hands-Free (SHF):	1 provide, model: HS S200	
Data Cable (USB):	1 cable, model: 60-4251-100	
Cigar Lighter Adaptor (CLA):	N/A	
Power Supply:	3.7 Vdc re-chargeable battery or 5Vdc from AC/DC power Adaptor	
	Battery:	Model: NEON161 Supplier: SIMPLO
	Adapter:	Model: PSA105R-050Q, Supplier: PHIHONG

GSM and WCDMA:

Cellular Phone Standards:	GSM/GPRS/EGPRS 850, 1900 and WCDMA Band II and V	
Frequency Range and Power:	GSM 850: 824MHz –849MHz	33 dBm
	GSM 1900: 1850MHz –1910MHz	30 dBm
	WCDMA Band II: 1850MHz – 1910MHz	24 dBm
	WCDMA/HSDPA Band V: 824 MHz– 849MHz	24 dBm
Hardware Version:	N/A	
Software Version:	N/A	
IMEI:	357513010115914	
Antenna Gain:	GSM: 0 dBi, EGSM band: 0 dBi ,DCS band: 1 dBi ,PCS: 1 dBi WCDMA 850: 0dBi, WCDMA 1900: 1dBi	

WCDMA bands have APC function, the step size is 1dB and minimum power level is-59dBm.

Bluetooth:

Frequency Range:	2402 – 2480MHz
Channel number:	79 channels
Transmit Power:	-0.33 dBm (Peak)
Modulation type:	Frequency Hopping Spread Spectrum (GFSK) (FHSS) (4/πQPSK) (8QPSK)
Frequency Range:	2.402GHz – 2.480GHz
Dwell Time:	<= 0.4s
Operating Mode:	Point-to-Point
Antenna Designation:	PIFA Antenna 1dBi

The EUT is compliance with Bluetooth 2.0 + EDR Standard.

This test report applies for GSM/GPRS/EDGE 850, GSM/GPRS/EDGE 1900, WCDMA/HSDPA Band II and V.

Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for **FCC ID: NM8NEON300** filing to comply with Section Part 22 subpart H and Part 24 subpart E of the FCC CFR 47 Rules.

Test Methodology

Both conducted and radiated testing were performed according to the procedures document on chapter 13 of ANSI C63.4 (2003) and FCC CFR 47.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055 and 2.1057.

The Procedure of KDB941225 (SAR Measurement Procedures for 3G devices, WCDMA/HSDPA) was used for EUT and Base station setting.

Test Facility

The measurement facilities used to collect the 3m Radiated Emission and AC power line conducted data are located on the address of SGS Taiwan Ltd. Electronics & Communication Laboratory No. 134, Wu Kung Rd., Wuku Industrial Zone, Taipei Country, Taiwan which are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 2003. FCC Registration Number are: 990257 and 236194, Canada Registration Number: 4620A-1

The 10 m Open Area Test Sites located on the address of SGS Taiwan Ltd. Electronics & Communication Laboratory No. 29, Pau-Tou-Tsuo Valley Chia-Pau Tsuen, Linkou Hsiang, Taipei county, which is constructed and calibrated to meet the CISPR 22/EN 55022 requirements. SGS Site No. 1(3 &10 meters) and FCC Registration Number: 94644.

Special Accessories

Not available for this EUT intended for grant.

Equipment Modifications

Not available for this EUT intended for grant.

2. SYSTEM TEST CONFIGURATION

EUT Configuration

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

EUT Exercise

The EUT (Transmitter) was operated in the engineering mode to fix the Tx frequency which was for the purpose of the measurements.

Test Procedure

2.3.1 Conducted Emissions

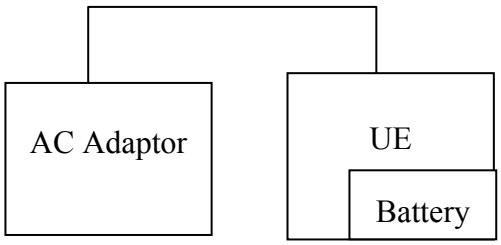
The EUT is placed on a turn table which is 0.8 m above ground plane. According to the requirements in Section 7 and 13 of ANSI C63.4-2003.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and Average detector mode.

2.3.2 Radiated Emissions

The EUT is placed on a turn table which is 1.0 m above ground plane. The turn table 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 max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes according to the requirements in Section 8 and 13 of ANSI C63.4-2003.

Configuration of Tested System

Fig. 2-1 Configuration of Tested System (Fixed Channel)



Remote Side (on the corner)

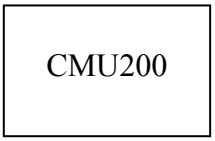


Table 2-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1.	Universal Radio Communication Tester	R&S	CMU200	102189	shielded	Un-shielded

3. SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§2.1046(a) §22.913(a) §24.232(a)	RF Power Output	Compliant
§2.1046(a) §22.913(a) §24.232(a)	ERP/ EIRP measurement	Compliant
§2.1049(h)	99% Occupied Bandwidth	Compliant
§2.1051 §22.917(a) §24.238(a)	Out of Band Emissions at Antenna Terminals and Band Edge	Compliant
§2.1053 §22.917(a) §24.238(a)	Field Strength of Spurious Radiation	Compliant
§2.1055(a)(1)(b)	Frequency Stability vs. Temperature	Compliant
§2.1055(d)(1)(2)	Frequency Stability vs. Voltage	Compliant
§15.107;§15.207	AC Power Line Conducted Emission	Compliant

4. DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition.

EUT staying in continuous transmitting mode. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing.

The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for both GSM/WCDMA with all power adaptors, earphone and Data cable. The output power of 850 and 1900 MHz of EDGE modes have 3 dB lower than GSM mode's. Therefore the worst-case of E2 position for GSM 850 band, E2 position for GSM 1900 band, E2 position for WCDMA band V, E1 position for WCDMA band II, were reported

5. RF POWER OUTPUT MEASUREMENT

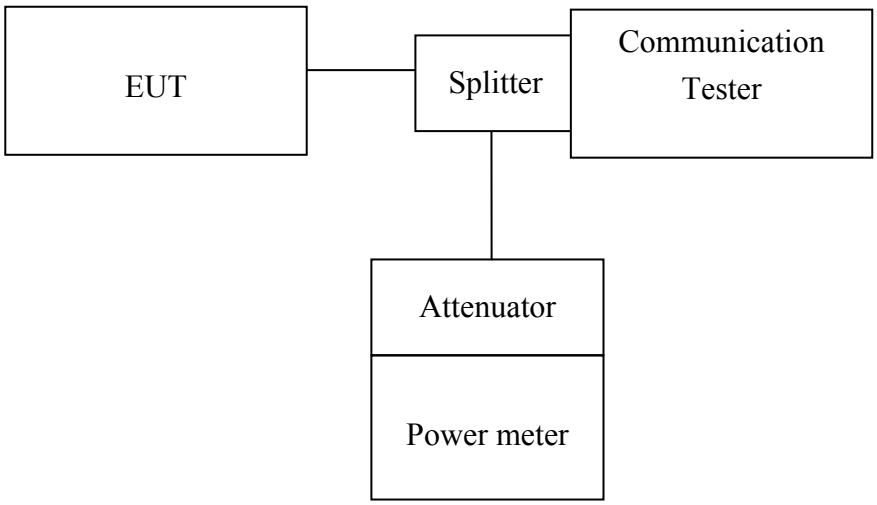
Standard Applicable

According to FCC §2.1046.

FCC 22.913(a) Mobile station are limited to 7W.

FCC 24.232(b) Mobile station are limited to 2W.

Test Set-up:



Note: *Measurement setup for testing on Antenna connector*

Measurement 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. The Procedure of KDB941225 (SAR Measurement Procedures for 3G devices, WCDMA/HSDPA) was used for EUT and Base station setting.

Measurement Equipment Used:

Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Spectrum Analyzer	Agilent	E4446A	MY43360126	04/27/2007	04/27/2008
Spectrum Analyzer	Agilent	E7405A	US41160416	07/04/2007	07/03/2008
Spectrum Analyzer	R&S	FSP 40	100034	01/05/2008	01/04/2009
Communication Test	R&S	SMU200	N/A	N/A	N/A
Power Sensor	Anritsu	MA2490A	31431	07/07/2007	07/06/2008
Power Meter	Anritsu	ML2487A	6K00002070	07/07/2007	07/06/2008
Temperature Chamber	TERCHY	MHG-120LF	911009	04/26/2007	04/25/2008
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circuit	BW-S10W5	N/A	07/05/2007	07/04/2008
Attenuator	Mini-Circuit	BW-S6W5	N/A	07/05/2007	07/04/2008
Splitter	Agilent	11636B	51728	07/05/2007	07/04/2008
DC Power Supply	Agilent	6038A	2929A-07548	06/27/2007	06/26/2008

Measurement Result

EUT Mode	Frequency (MHz)	CH	Power meter Reading (dBm)	Path Loss (dB)	Peak Power (dBm)
GSM 850	824.20	128	32.7	0.00	32.70
	836.60	190	32.6	0.00	32.60
	848.80	251	32.7	0.00	32.70

** Offset 6.5dB*

EUT Mode	Frequency (MHz)	CH	Power Meter Reading (dBm)	Path Loss (dB)	Peak Power (dBm)
PCS 1900	1850.20	512	29.6	0.00	29.60
	1880.00	661	29.7	0.00	29.70
	1909.80	810	29.6	0.00	29.60

** Offset 6.5dB*

EUT Mode	Frequency (MHz)	CH	Power meter Reading (dBm)	Path Loss (dB)	Peak Power (dBm)
WCDMA V	826.40	4132	22.86	0.00	22.86
	836.00	4180	22.76	0.00	22.76
	846.60	4233	22.93	0.00	22.93

** Offset 0.5dB*

EUT Mode	Frequency (MHz)	CH	Power Meter Reading (dBm)	Path Loss (dB)	Peak Power (dBm)
WCDMA II	1852.40	9262	22.08	0.00	22.08
	1880.00	9400	22.38	0.00	22.38
	1907.60	9538	22.71	0.00	22.71

** Offset 0.5dB*

EUT Mode EGPRS	Frequency (MHz)	CH	Power meter Reading (dBm)	Path Loss (dB)	Peak Power (dBm)
EDGE 850	824.20	128	25.93	0.00	26.70
	836.60	190	26.04	0.00	26.80
	848.80	251	26.12	0.00	26.60

** Offset 0.5dB*

EUT Mode EGPRS	Frequency (MHz)	CH	Power Meter Reading (dBm)	Path Loss (dB)	Peak Power (dBm)
EDGE 1900	1850.20	512	24.01	0.00	25.10
	1880.00	661	24.25	0.00	25.60
	1909.80	810	24.06	0.00	25.30

** Offset 0.5dB*

6. ERP, EIRP MEASUREMENT

Standard Applicable

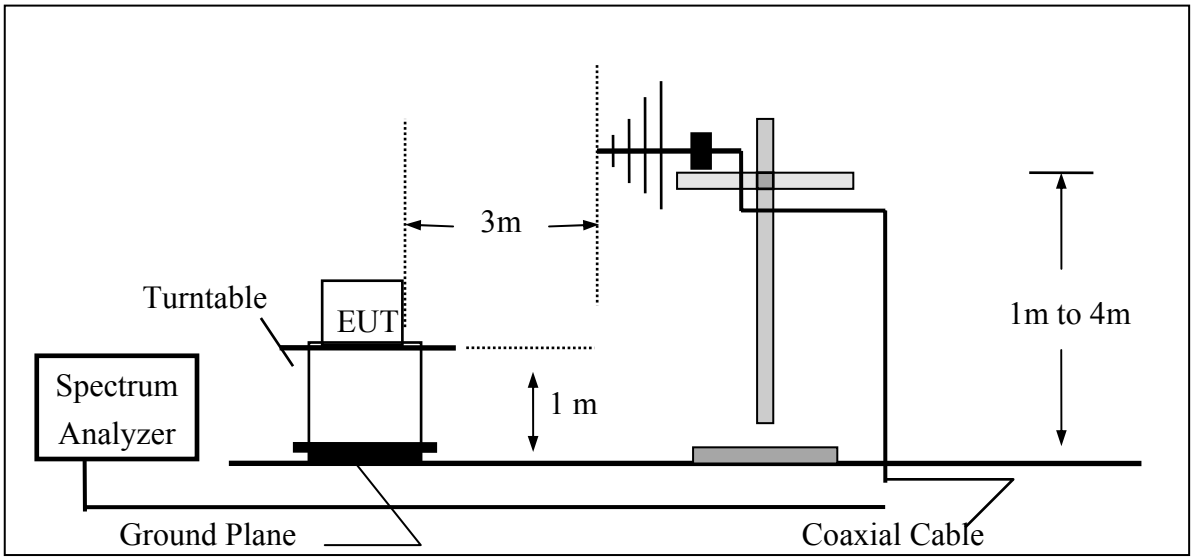
According to FCC §2.1046

FCC 22.913(a) Mobile station are limited to 7W ERP.

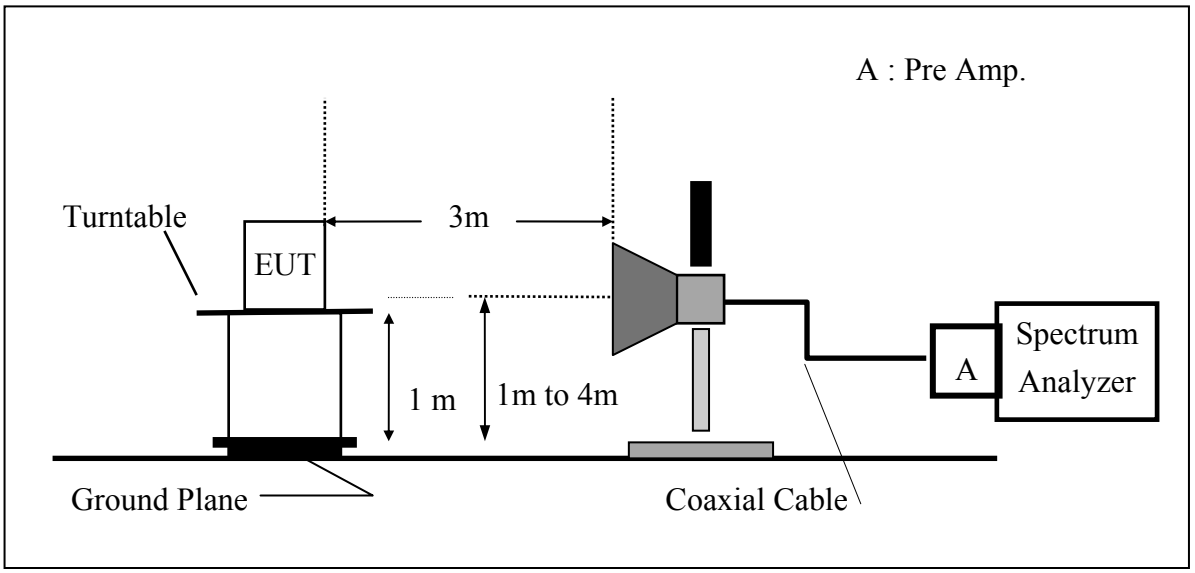
FCC 24.232(b) Mobile station are limited to 2W EIRP.

Test SET-UP (Block Diagram of Configuration)

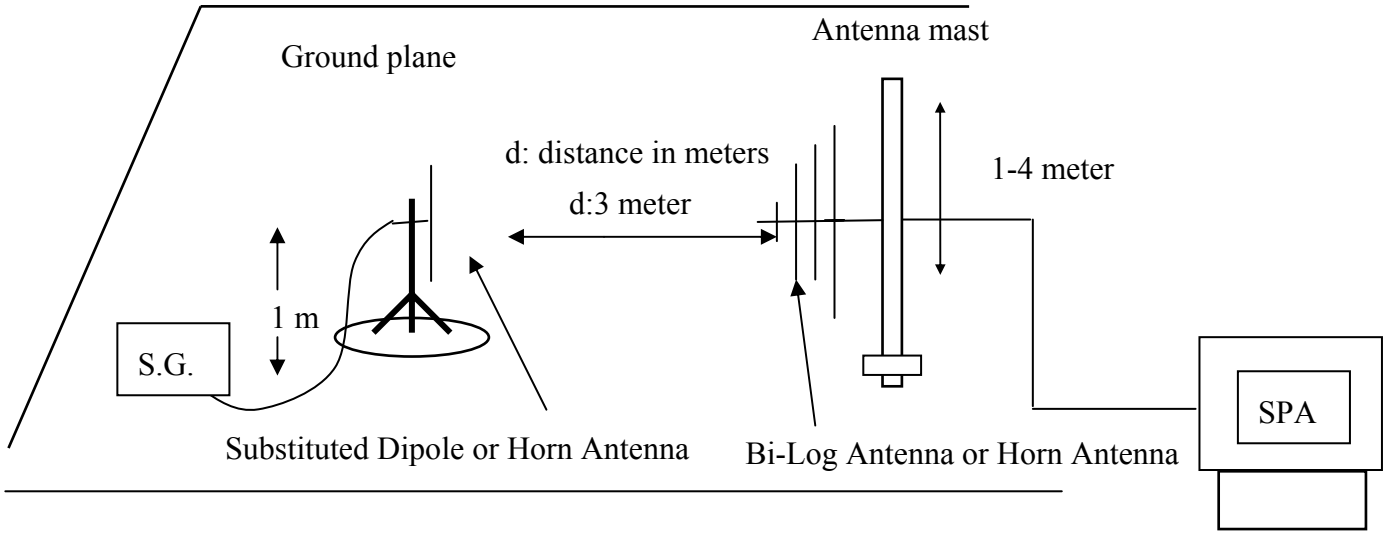
(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(B) Radiated Emission Test Set-UP Frequency Over 1 GHz



(C) Substituted Method Test Set-UP



Measurement Procedure

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

During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated.

ERP in frequency band 824.2 –848.8MHz were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated as follows:

EIRP in frequency band 1850.2 –1909.8MHz were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows:

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

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

The Procedure of KDB941225 (SAR Measurement Procedures for 3G devices, WCDMA/HSDPA) was used for EUT and Base station setting.

Measurement Equipment Used:

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	Agilent	E4446A	MY43360126	04/27/2007	04/26/2008
Spectrum Analyzer	Agilent	E7405A	US41160416	07/04/2007	07/03/2008
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2007	11/10/2008
Communication Test	R&S	SMU200	N/A	N/A	N/A
Bi-log Antenna	SCHWAZBECK	VULB9160	3224	11/14/2007	11/13/2008
Horn antenna	SCHWAZBECK	BBHA 9120D	309/320	08/16/2007	08/15/2008
Pre-Amplifier	HP	8447D	2944A09469	07/19/2007	07/18/2008
Pre-Amplifier	HP	8494B	3008A00578	02/26/2008	02/25/2009
Signal Generator	R&S	SMR40	100210	02/09/2008	02/10/2009
Turn Table	HD	DT420	N/A	N.C.R	N.C.R
Antenna Tower	HD	MA240-N	240/657	N.C.R	N.C.R
Controller	HD	HD100	N/A	N.C.R	N.C.R
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-10M	10m	10/09/2007	10/08/2008
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-3M	3m	10/09/2007	10/08/2008
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-0.5M	0.5m	10/09/2007	10/08/2008
Site NSA	SGS	966 chamber	N/A	11/17/2007	11/16/2008
Attenuator	Mini-Circult	BW-S10W5	N/A	09/23/2007	09/22/2008
Dipole Antenna	SCHWAZBECK	VHAP	908/909	06/09/2007	06/10/2008
Dipole Antenna	SCHWAZBECK	UHAP	891/892	06/09/2007	06/10/2008
Horn antenna	SCHWAZBECK	BBHA 9120D	N/A	08/16/2007	08/15/2008

Measurement Result

EUT Mode	Frequency (MHz)	CH	EUT Pol.	Antenna Pol.	SPA Reading (dBuV)	S.G. Output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	ERP (dBm)	Limit (dBm)
GSM 850	824.20	128	H	V	126.93	39.61	-7.87	3.64	28.09	38.45
				H	129.00	41.34	-7.87	3.64	29.83	38.45
			E1	V	127.65	40.33	-7.87	3.64	28.81	38.45
				H	130.02	42.36	-7.87	3.64	30.85	38.45
			E2	V	126.85	39.53	-7.87	3.64	28.01	38.45
				H	129.83	42.17	-7.87	3.64	30.66	38.45
	836.60	190	H	V	130.90	43.87	-7.88	3.70	32.30	38.45
				H	120.94	33.60	-7.88	3.70	22.03	38.45
			E1	V	131.03	44.00	-7.88	3.70	32.43	38.45
				H	121.11	33.77	-7.88	3.70	22.20	38.45
			E2	V	130.86	43.83	-7.88	3.70	32.26	38.45
				H	121.52	34.18	-7.88	3.70	22.61	38.45
	848.80	251	H	V	123.98	37.24	-7.88	3.75	25.61	38.45
				H	130.81	43.79	-7.88	3.75	32.16	38.45
			E1	V	124.87	38.13	-7.88	3.75	26.50	38.45
				H	130.75	43.73	-7.88	3.75	32.10	38.45
			E2	V	124.60	37.86	-7.88	3.75	26.23	38.45
				H	130.24	43.22	-7.88	3.75	31.59	38.45

Remark：

(1) The RBW,VBW of SPA for frequency

Below 1GHz was RBW=100 KHz, VBW=300KHz,

Above 1GHz was RBW= 1MHz , VBW= 3MHz

Measurement Result

EUT Mode	Frequency (MHz)	CH	EUT Pol.	Antenna Pol.	SPA Reading (dBuV)	S.G. Output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)
PCS 1900	1850.20	512	H	V	122.10	15.14	9.90	5.41	19.63	33.00
				H	129.22	22.33	9.90	5.41	26.82	33.00
			E1	V	121.91	14.95	9.90	5.41	19.44	33.00
				H	129.21	22.32	9.90	5.41	26.81	33.00
			E2	V	122.40	15.44	9.90	5.41	19.93	33.00
				H	130.22	23.33	9.90	5.84	27.39	33.00
	1880.00	661	H	V	127.59	20.64	9.99	5.46	25.17	33.00
				H	130.12	23.25	9.99	5.46	27.78	33.00
			E1	V	127.90	20.95	9.99	5.46	25.48	33.00
				H	130.51	23.64	9.99	5.46	28.17	33.00
			E2	V	128.05	21.10	9.99	5.46	25.63	33.00
				H	130.81	23.94	9.99	5.46	28.47	33.00
	1909.80	810	H	V	129.49	22.55	10.08	5.51	27.12	33.00
				H	123.00	16.15	10.08	5.51	20.71	33.00
			E1	V	129.55	22.61	10.08	5.51	27.18	33.00
				H	122.76	15.91	10.08	5.51	20.47	33.00
			E2	V	130.44	23.50	10.08	5.51	28.07	33.00
				H	123.66	16.81	10.08	5.51	21.37	33.00

Remark：

(1) The RBW,VBW of SPA for frequency

Below 1GHz was RBW=100 KHz, VBW=300KHz,

Above 1GHz was RBW= 1MHz , VBW= 3MHz

Measurement Result

EUT Mode	Frequency (MHz)	CH	EUT Pol.	Antenna Pol.	SPA Reading (dBuV)	S.G. Output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	ERP (dBm)	Limit (dBm)
WCDMA Band V	826.40	128	H	V	112.18	25.82	-7.88	3.63	14.31	38.45
				H	115.42	29.16	-7.88	3.63	17.66	38.45
			E1	V	112.60	26.24	-7.88	3.63	14.73	38.45
				H	116.09	29.83	-7.88	3.63	18.33	38.45
			E2	V	112.29	25.93	-7.88	3.63	14.42	38.45
				H	116.51	30.25	-7.88	3.63	18.75	38.45
	836.00	190	H	V	113.66	27.40	-7.88	3.65	15.87	38.45
				H	109.80	23.57	-7.88	3.65	12.04	38.45
			E1	V	115.66	29.40	-7.88	3.65	17.87	38.45
				H	110.29	24.06	-7.88	3.65	12.53	38.45
			E2	V	115.85	29.59	-7.88	3.65	18.06	38.45
				H	110.26	24.03	-7.88	3.65	12.50	38.45
	846.60	251	H	V	111.66	25.51	-7.88	3.67	13.96	38.45
				H	114.92	28.72	-7.88	3.67	17.17	38.45
			E1	V	111.95	25.79	-7.88	3.67	14.24	38.45
				H	116.34	30.14	-7.88	3.67	18.59	38.45
			E2	V	112.42	26.27	-7.88	3.67	14.72	38.45
				H	114.64	28.44	-7.88	3.67	16.89	38.45

Remark：

(1) The RBW,VBW of SPA for frequency

Below 1GHz was RBW=100 KHz, VBW=300KHz,

Above 1GHz was RBW= 1MHz , VBW= 3MHz

Measurement Result

EUT Mode	Frequency (MHz)	CH	EUT Pol.	Antenna Pol.	SPA Reading (dBuV)	S.G. Output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)
WCDMA Band II	1852.40	9262	H	V	114.96	10.58	9.90	5.56	14.91	33.00
				H	123.10	18.92	9.90	5.56	23.26	33.00
			E1	V	120.59	16.21	9.90	5.56	20.54	33.00
				H	123.52	19.34	9.90	5.56	23.68	33.00
			E2	V	123.41	19.03	9.90	5.56	23.36	33.00
				H	117.89	13.71	9.90	5.84	17.77	33.00
	1880.00	9400	H	V	113.74	9.38	9.99	5.61	13.76	33.00
				H	122.10	17.96	9.99	5.61	22.33	33.00
			E1	V	119.44	15.05	9.90	5.56	19.39	33.00
				H	123.15	19.01	9.99	5.61	23.38	33.00
			E2	V	123.20	18.84	9.99	5.61	23.22	33.00
				H	116.89	12.75	9.99	5.61	17.12	33.00
	1907.60	9538	H	V	114.23	9.90	10.07	5.66	14.31	33.00
				H	122.48	18.37	10.07	5.66	22.78	33.00
			E1	V	119.16	14.83	10.07	5.66	19.24	33.00
				H	122.31	18.20	10.07	5.66	22.61	33.00
			E2	V	122.38	18.05	10.07	5.66	22.46	33.00
				H	116.57	12.46	10.07	5.66	16.87	33.00

Remark：

(1) The RBW,VBW of SPA for frequency

Below 1GHz was RBW=100 KHz, VBW=300KHz,

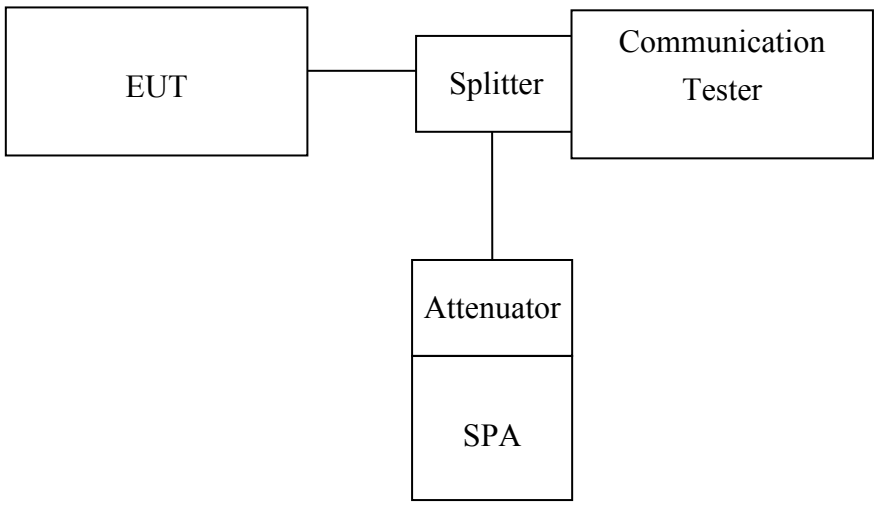
Above 1GHz was RBW= 1MHz , VBW= 3MHz

7. 99% OCCUPIED BANDWIDTH MEASUREMENT

Standard Applicable

According to §FCC 2.1049.

Test Set-up:



Note: *Measurement setup for testing on Antenna connector*

Measurement Procedure

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW (10/30KHz) was set to about 1% of emission BW, VBW= 3 times RBW(30/100KHz), -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.

Measurement Equipment Used:

Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Spectrum Analyzer	Agilent	E4446A	MY43360126	04/27/2007	04/27/2008
Spectrum Analyzer	Agilent	E7405A	US41160416	07/04/2007	07/03/2008
Spectrum Analyzer	R&S	FSP 40	100034	01/05/2008	01/04/2009
Communication Test	R&S	SMU200	N/A	N/A	N/A
Power Sensor	Anritsu	MA2490A	31431	07/07/2007	07/06/2008
Power Meter	Anritsu	ML2487A	6K00002070	07/07/2007	07/06/2008
Temperature Chamber	TERCHY	MHG-120LF	911009	04/26/2007	04/25/2008
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circuit	BW-S10W5	N/A	07/05/2007	07/04/2008
Attenuator	Mini-Circuit	BW-S6W5	N/A	07/05/2007	07/04/2008
Splitter	Agilent	11636B	51728	07/05/2007	07/04/2008
DC Power Supply	Agilent	6038A	2929A-07548	06/27/2007	06/26/2008

Measurement Result:.

EUT Mode	Frequency (MHz)	CH	99% Bandwidth (MHz)
GSM 850	824.20	128	0.3170
	836.60	190	0.3201
	848.80	251	0.3190

EUT Mode	Frequency (MHz)	CH	99% Bandwidth (MHz)
PCS 1900	1850.20	512	0.3205
	1880.00	661	0.3214
	1909.80	810	0.3250

EUT Mode	Frequency (MHz)	CH	99% Bandwidth (MHz)
WCDMA V	826.40	4132	4.6420
	836.00	4180	4.6890
	846.60	4233	4.6340

EUT Mode	Frequency (MHz)	CH	99% Bandwidth (MHz)
WCDMA II	1852.40	9262	4.7100
	1880.00	9400	4.6360
	1907.60	9538	4.6460

EUT Mode	Frequency (MHz)	CH	99% Bandwidth (MHz)
EDGE 850	824.20	128	0.2471
	836.60	190	0.2431
	848.80	251	0.2451

EUT Mode	Frequency (MHz)	CH	99% Bandwidth (MHz)
EDGE 1900	1852.20	512	0.2426
	1880.00	661	0.2443
	1909.80	810	0.2439

Figure 7-1: GSM Channel Low

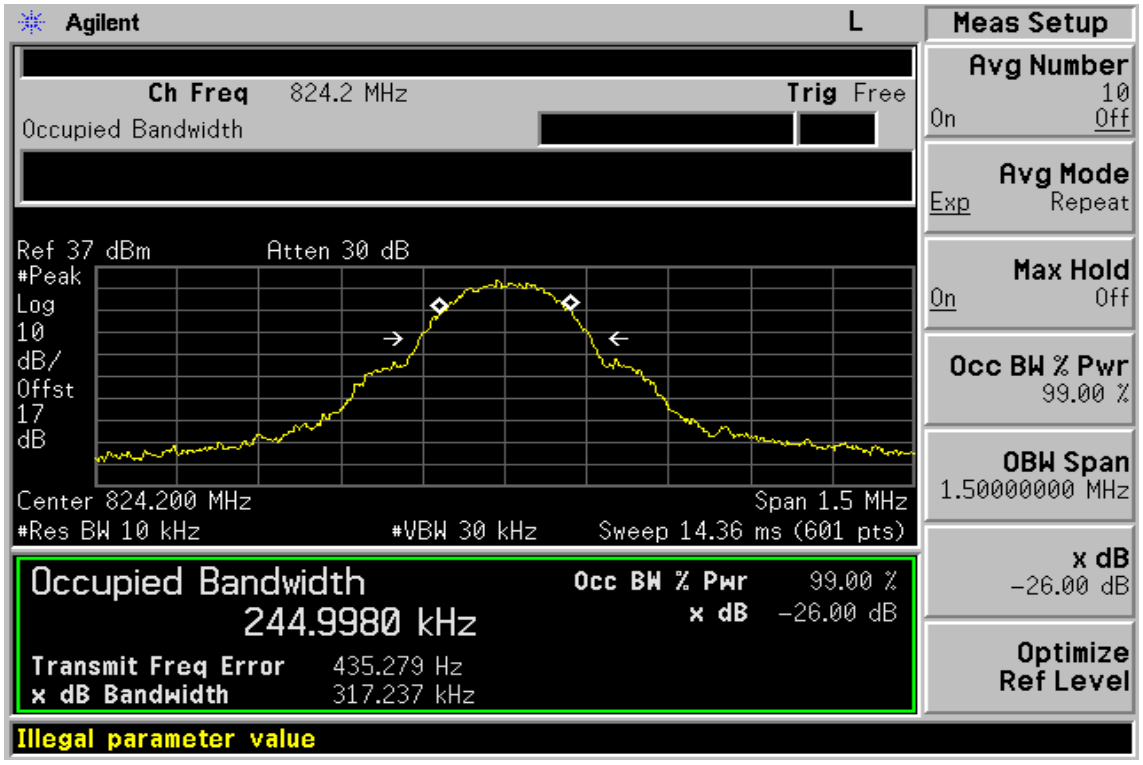


Figure 7-2 GSM Channel Mid

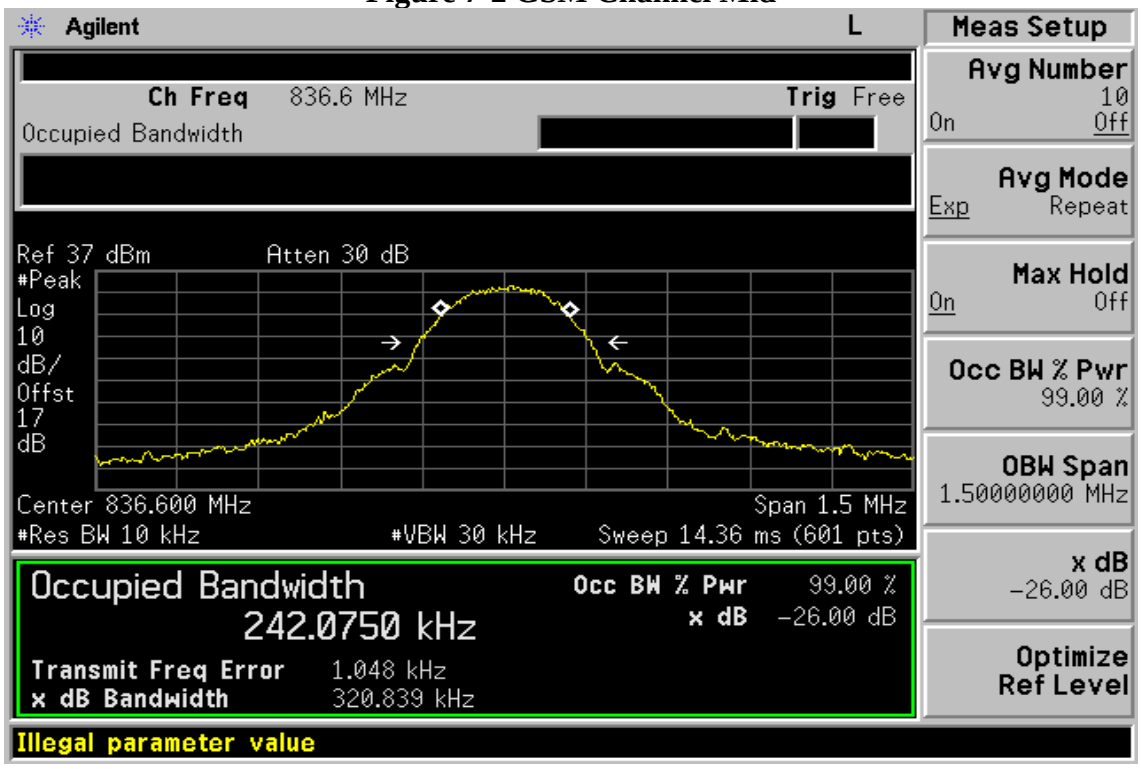


Figure 7-3: GSM Channel High

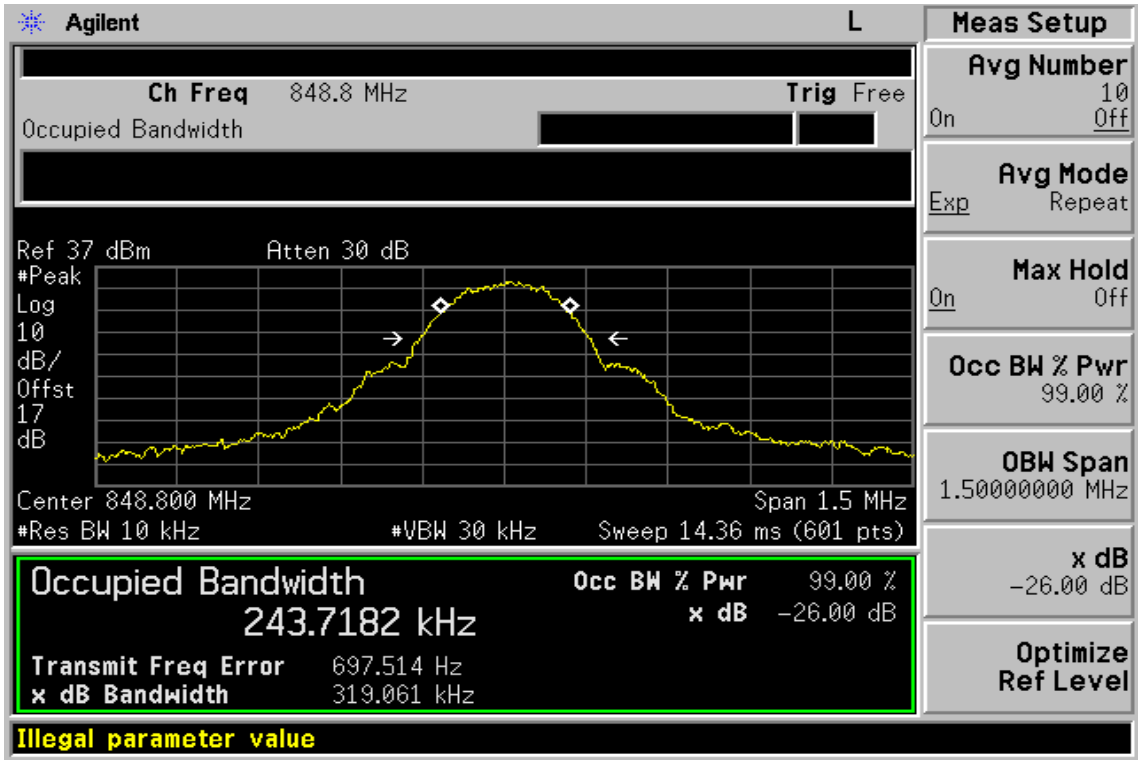


Figure 7-4: PCS Channel Low

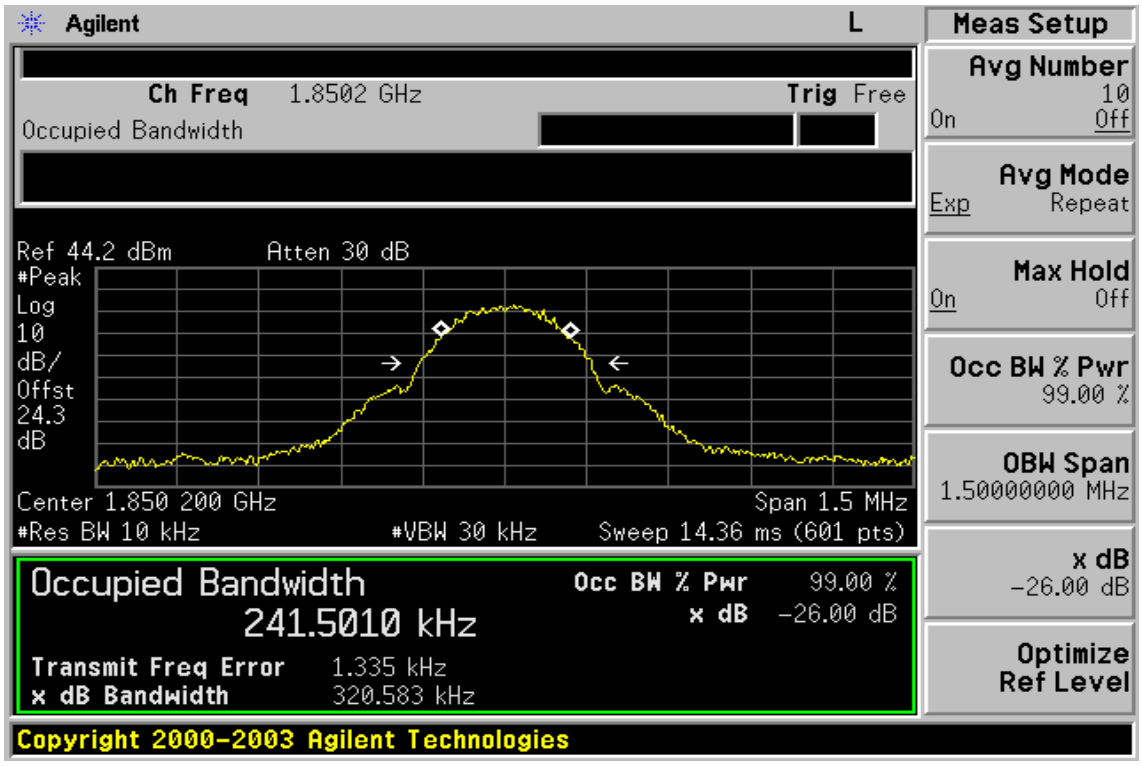


Figure 7-5 PCS Channel Mid

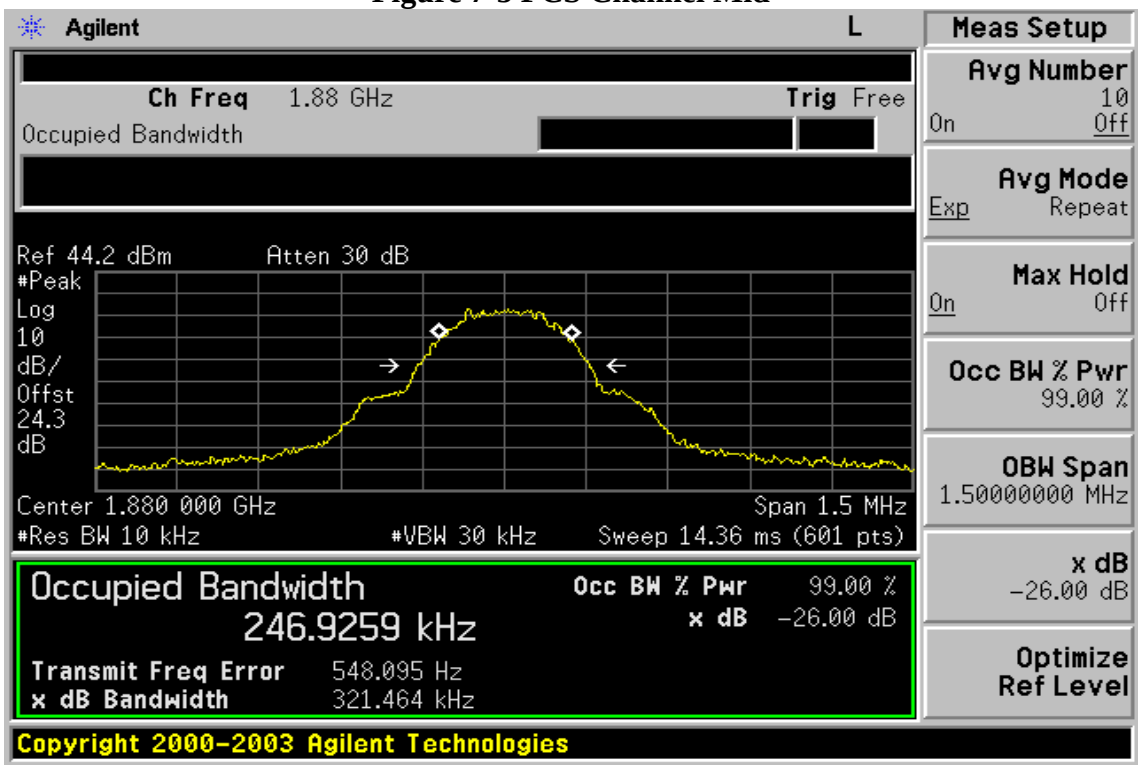


Figure 7-6: PCS Channel High

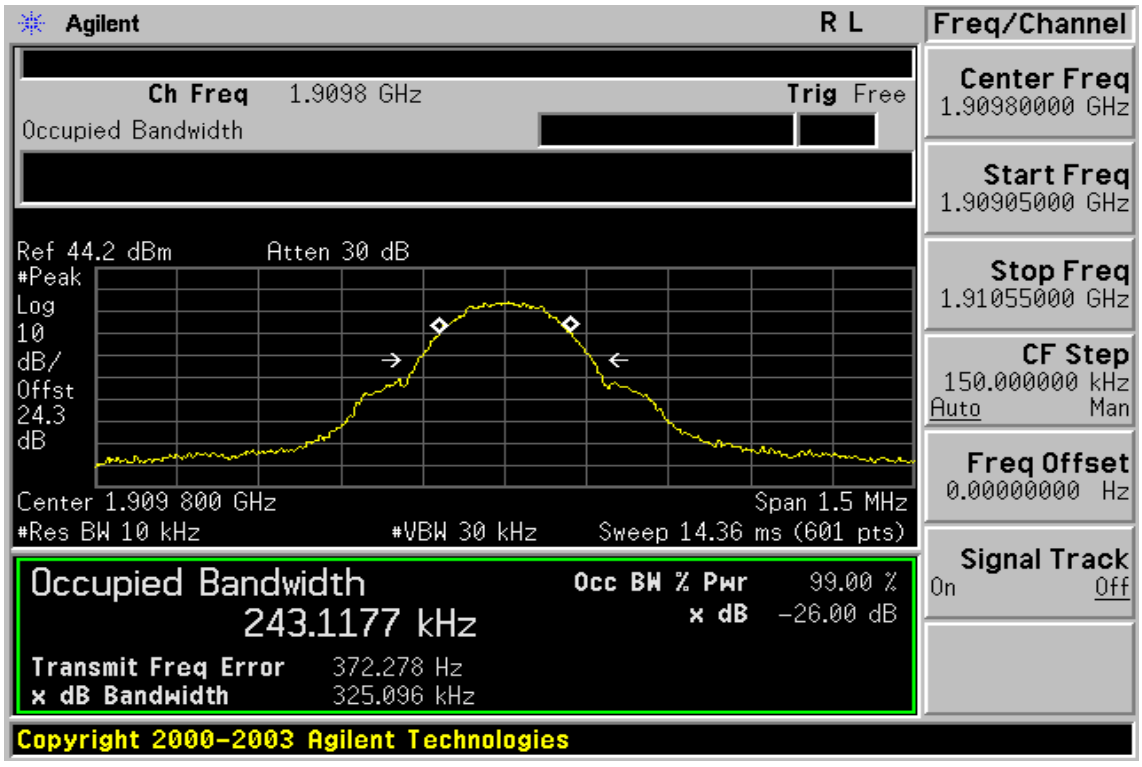


Figure 7-7: EDGE 850 Channel Low

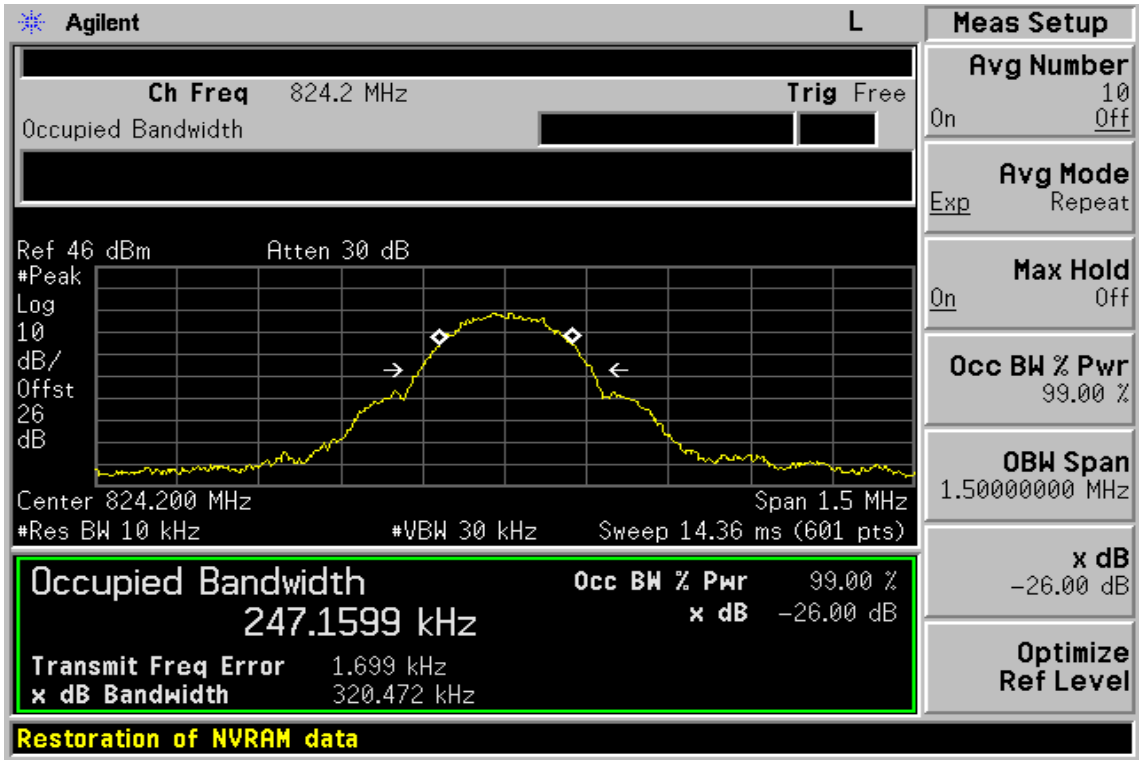


Figure 7-8 EDGE 850 Channel Mid

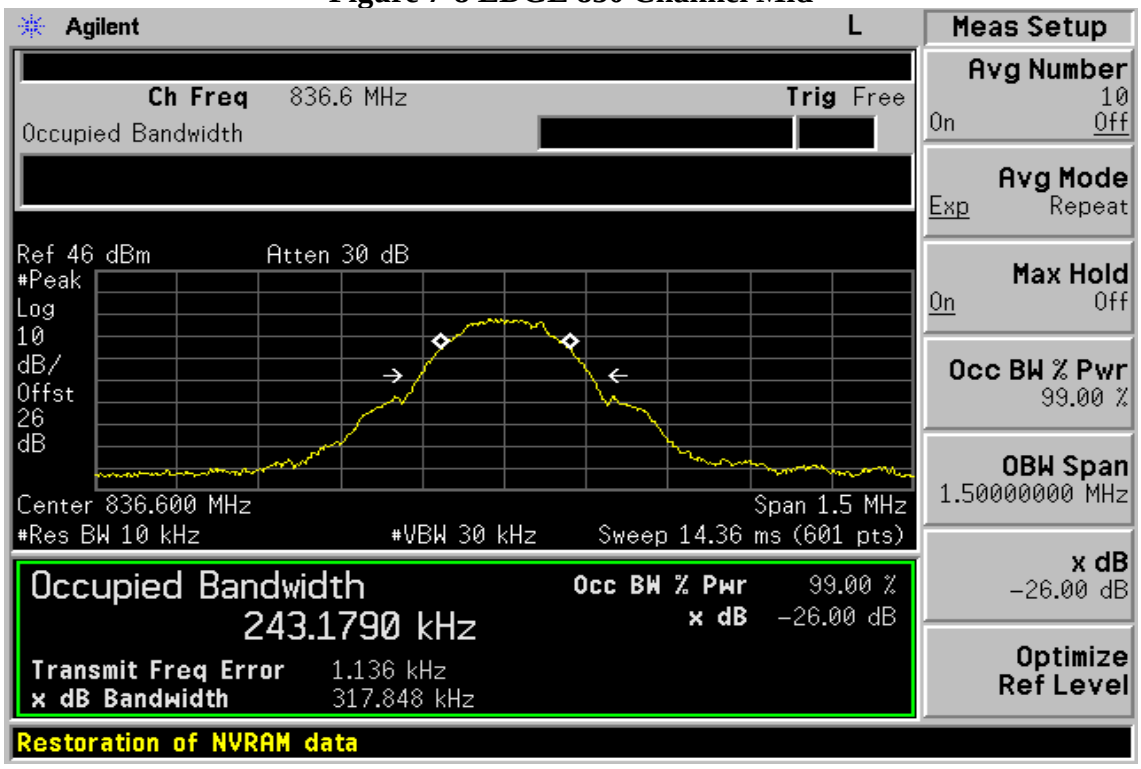


Figure 7-9: EDGE 850 Channel High

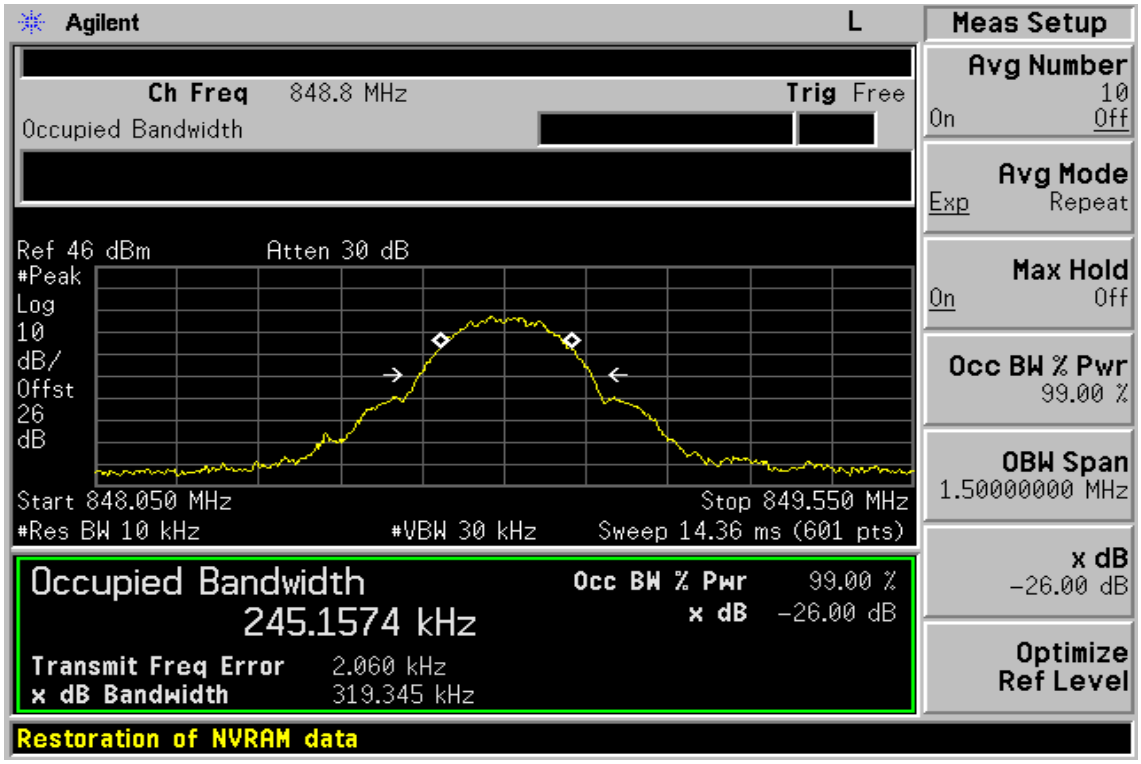


Figure 7-10: EDGE 1900 Channel Low

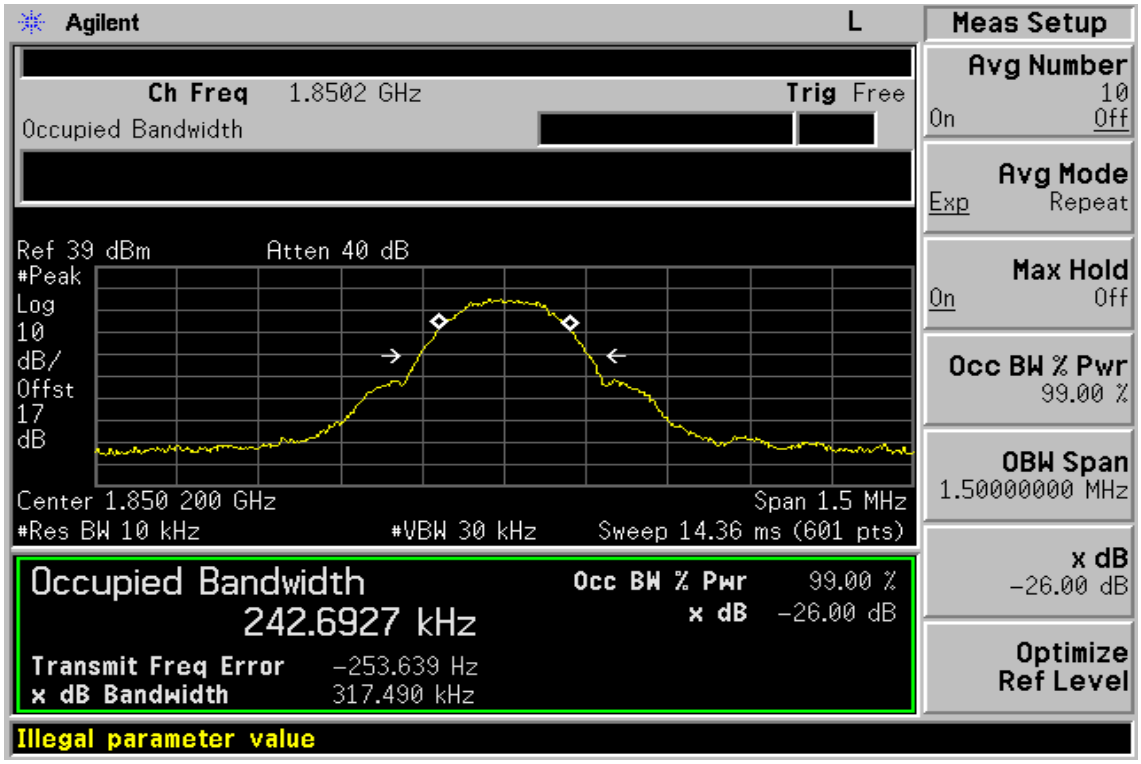


Figure 7-11 EDGE 1900 Channel Mid

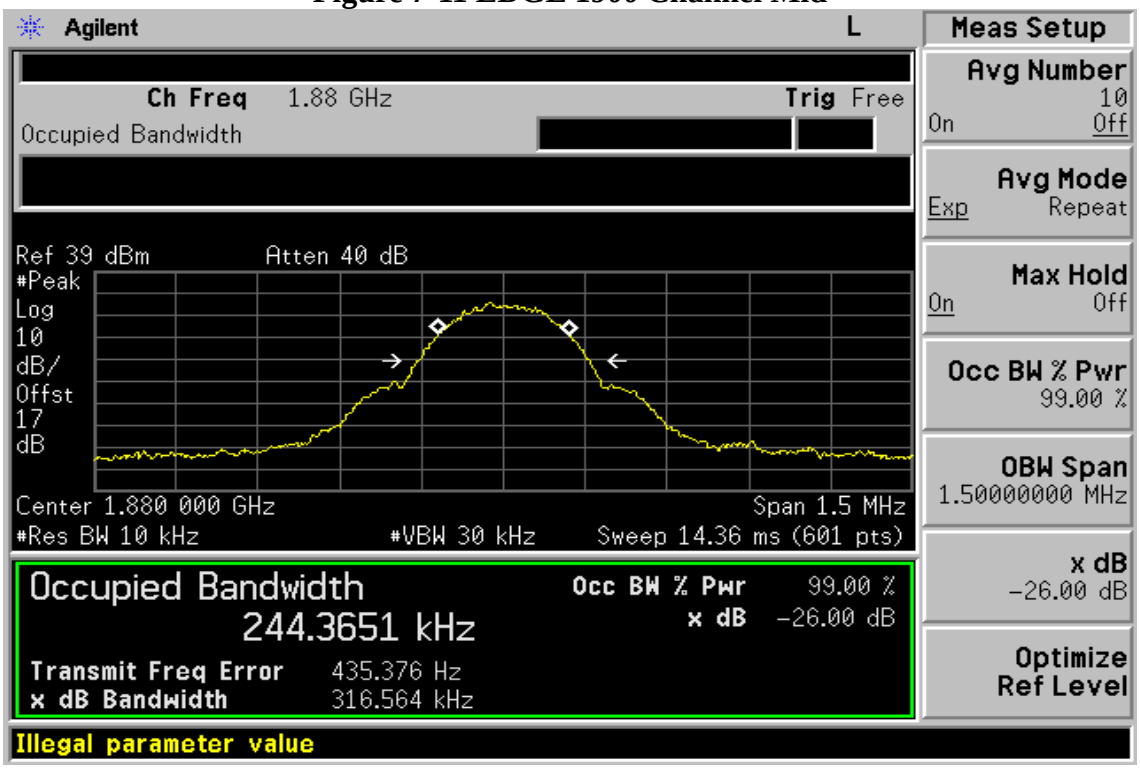


Figure 7-12: EDGE 1900 Channel High

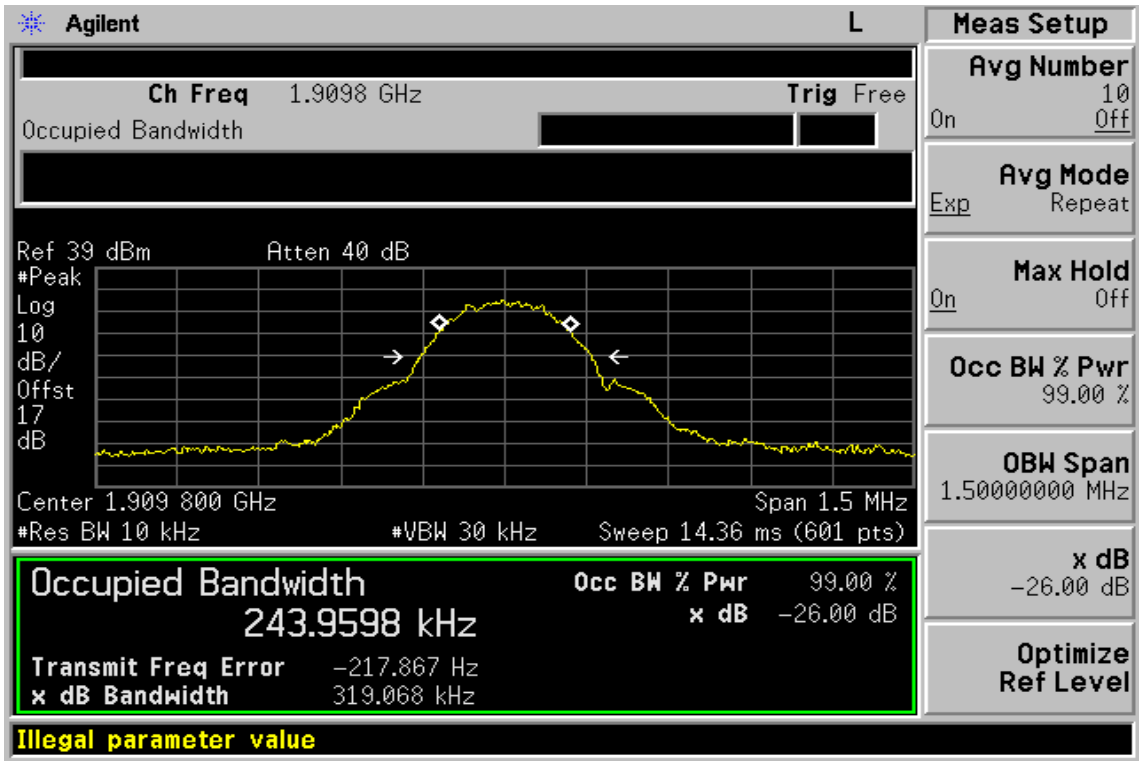


Figure 7-13: WCDMA II Channel Low

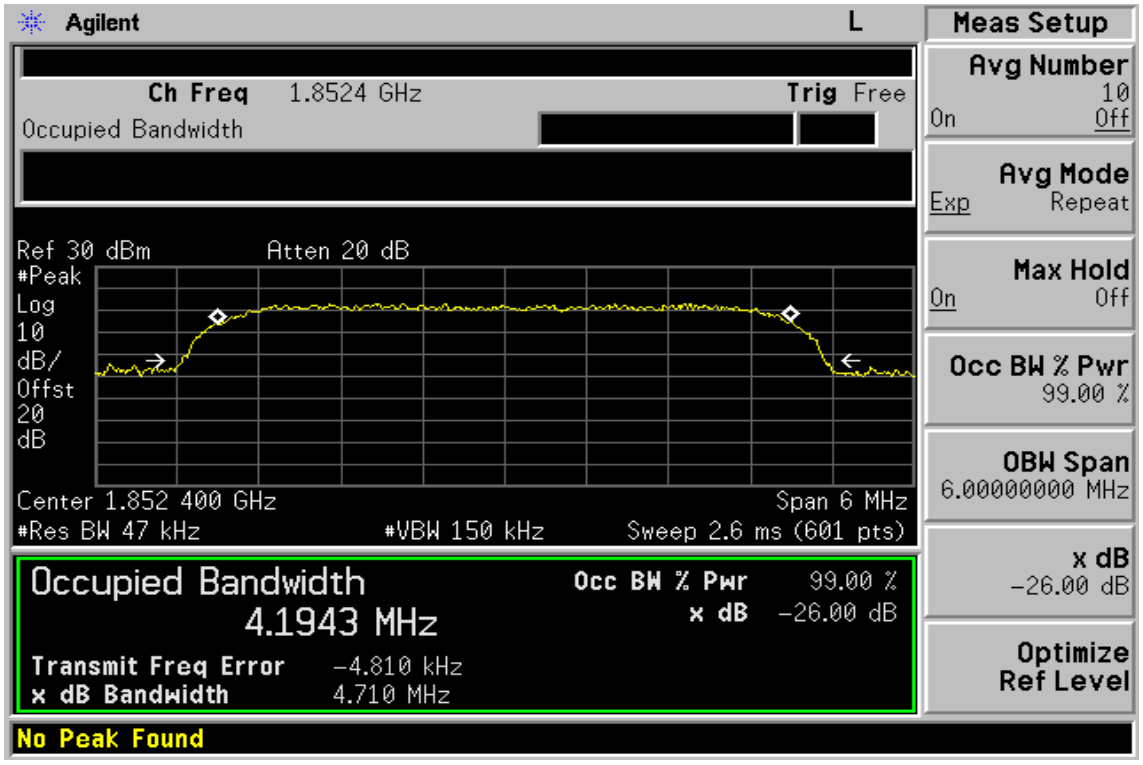


Figure 7-14: WCDMA II Channel Mid

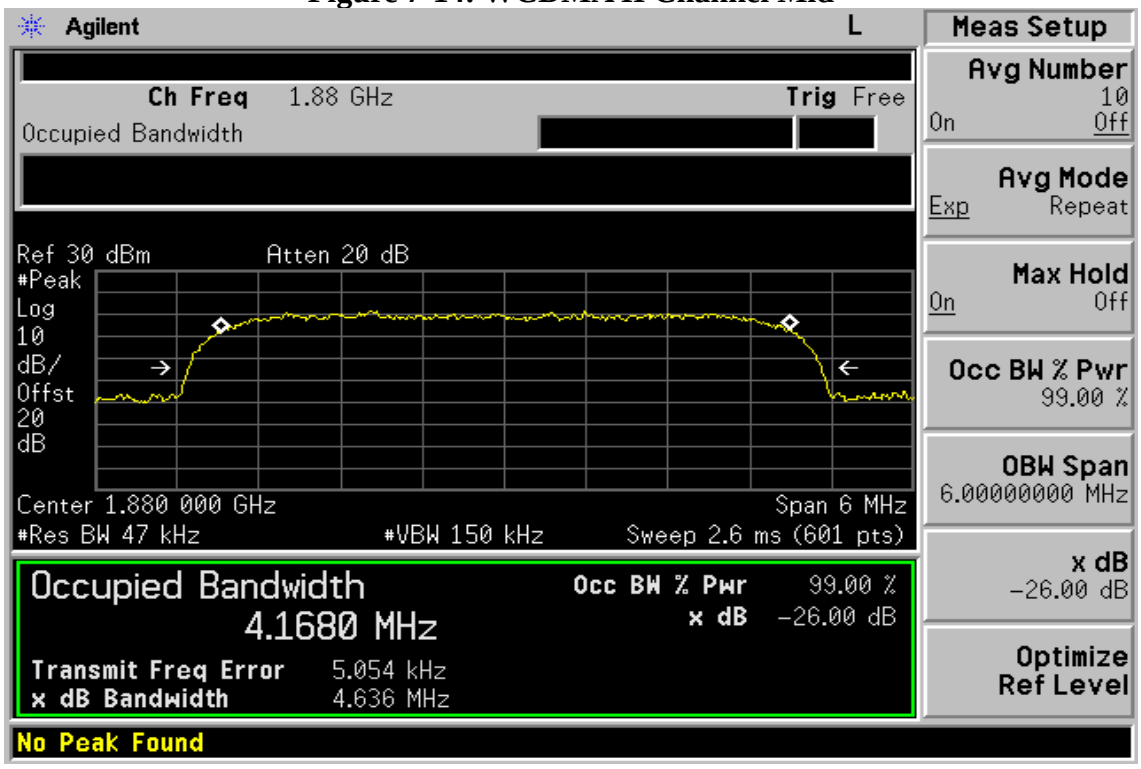


Figure 7-15: WCDMA II Channel High

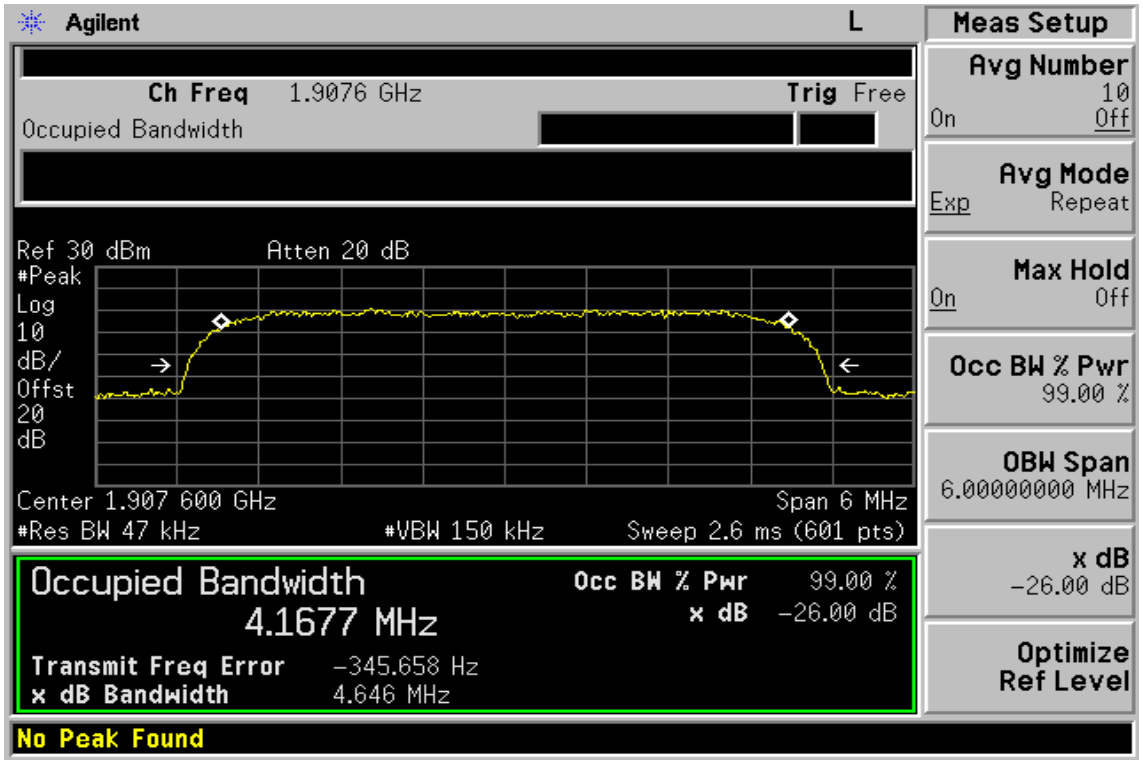


Figure 7-16: WCDMA V Channel Low

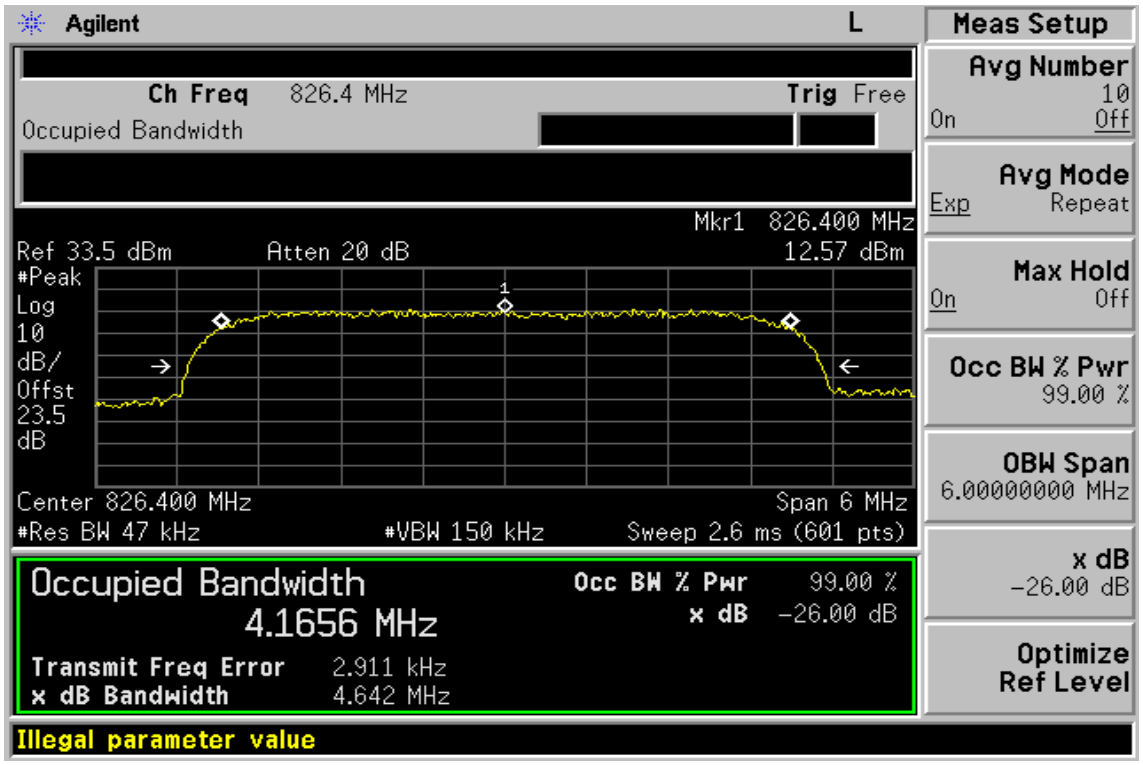


Figure 7-17: WCDMA V Channel Mid

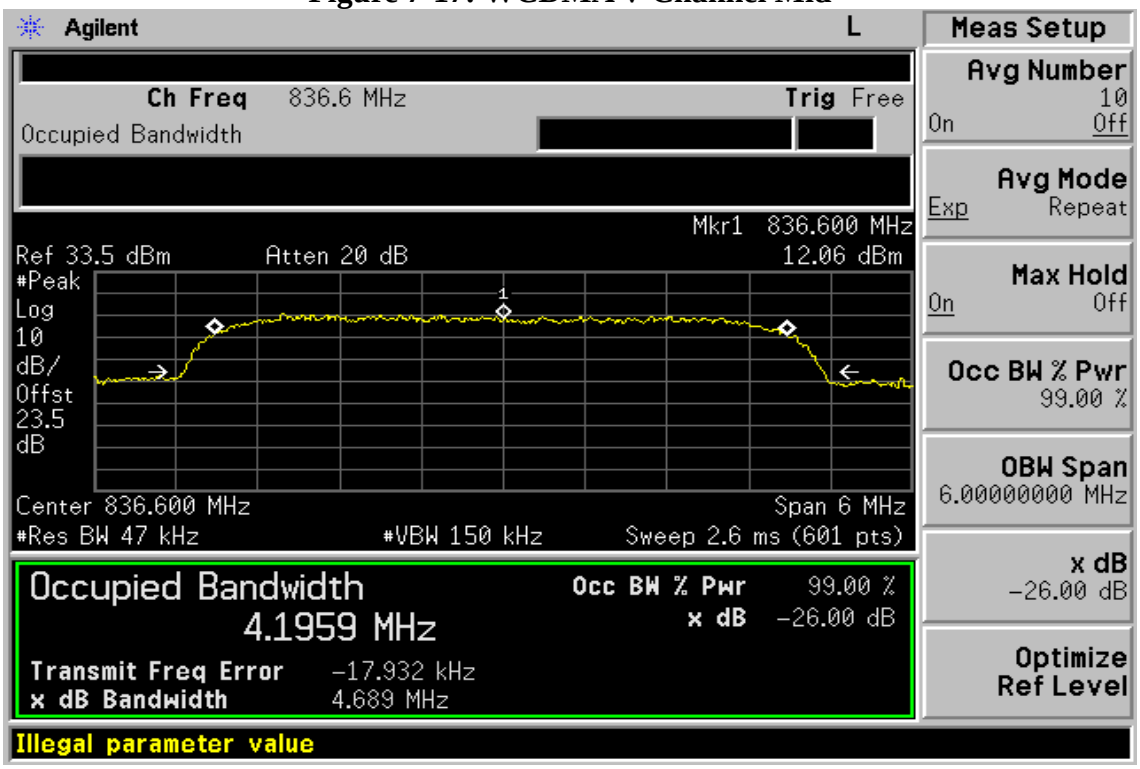
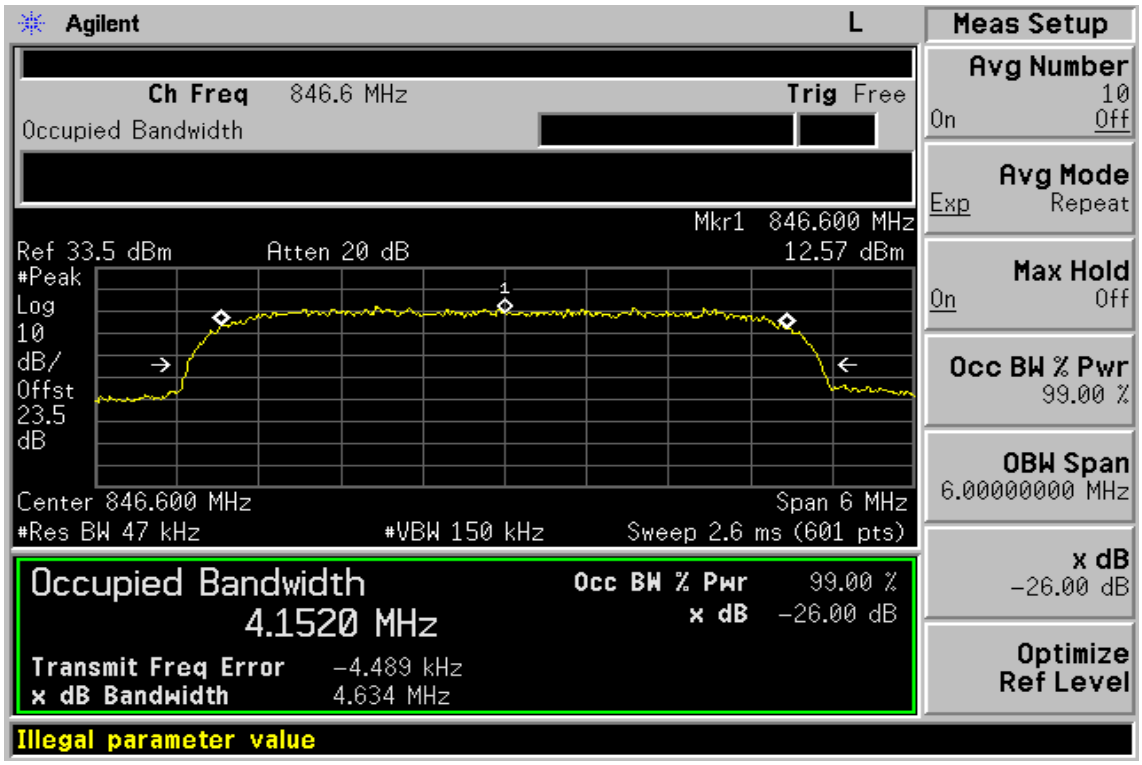


Figure 7-18: WCDMA V Channel High



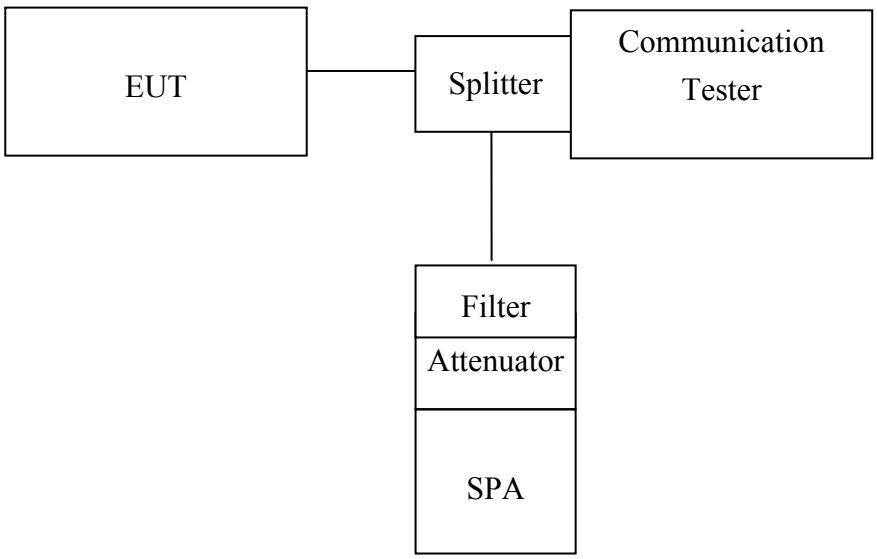
8. OUT OF BAND EMISSION AT ANTENNA TERMINALS

Standard Applicable

According to FCC §2.1051.

FCC §22.917(a),§24.238(a), the magnitude of each spurious and harmonic emission that can be detected when the equipment is operated under the conditions specified in the instruction manual and/ or alignment procedure, shall not be less than 43 + 10 log (mean output power in watts) dBc below the mean power output outside a license's frequency block (-13dBm)

Test SET-UP



Note: *Measurement setup for testing on Antenna connector*

Measurement 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

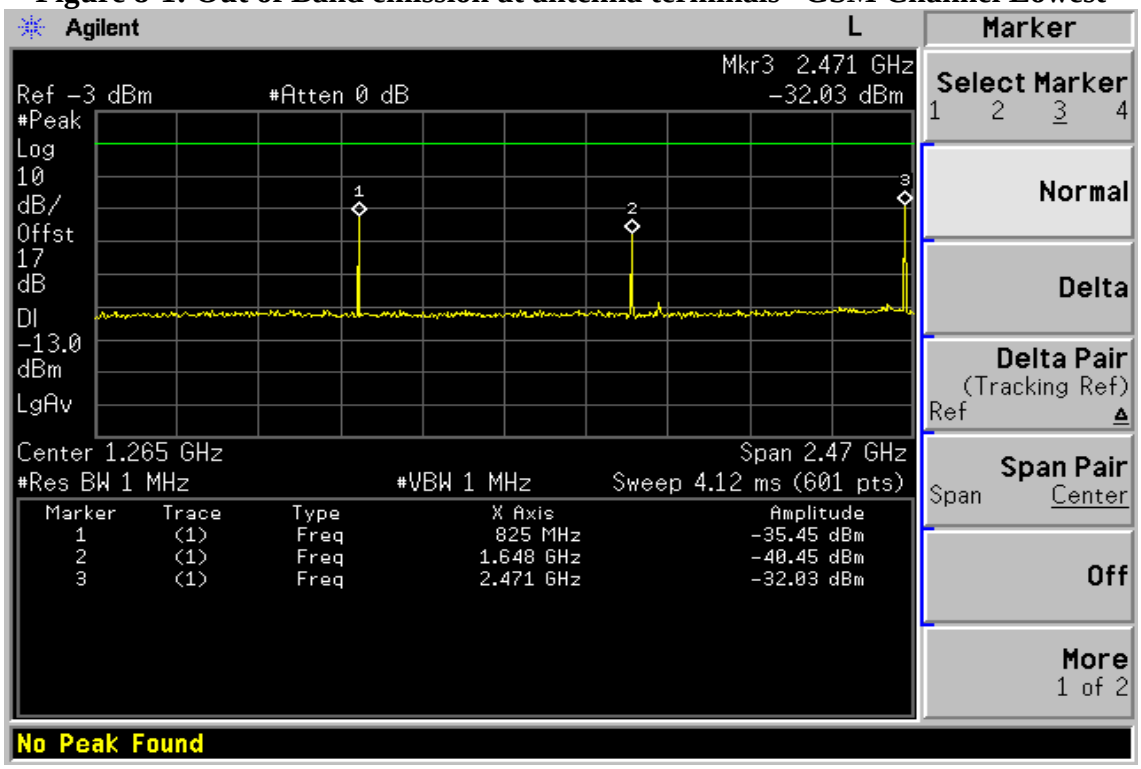
Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions. Limit, -13dBm.

Measurement Equipment Used:

Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Spectrum Analyzer	Agilent	E4446A	MY43360126	04/27/2007	04/27/2008
Spectrum Analyzer	Agilent	E7405A	US41160416	07/04/2007	07/03/2008
Spectrum Analyzer	R&S	FSP 40	100034	01/05/2008	01/04/2009
Communication Test	R&S	SMU200	N/A	N/A	N/A
Power Sensor	Anritsu	MA2490A	31431	07/07/2007	07/06/2008
Power Meter	Anritsu	ML2487A	6K00002070	07/07/2007	07/06/2008
Temperature Chamber	TERCHY	MHG-120LF	911009	04/26/2007	04/25/2008
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circuit	BW-S10W5	N/A	07/05/2007	07/04/2008
Attenuator	Mini-Circuit	BW-S6W5	N/A	07/05/2007	07/04/2008
Splitter	Agilent	11636B	51728	07/05/2007	07/04/2008
DC Power Supply	Agilent	6038A	2929A-07548	06/27/2007	06/26/2008

Measurement Result

Figure 8-1: Out of Band emission at antenna terminals– GSM Channel Lowest



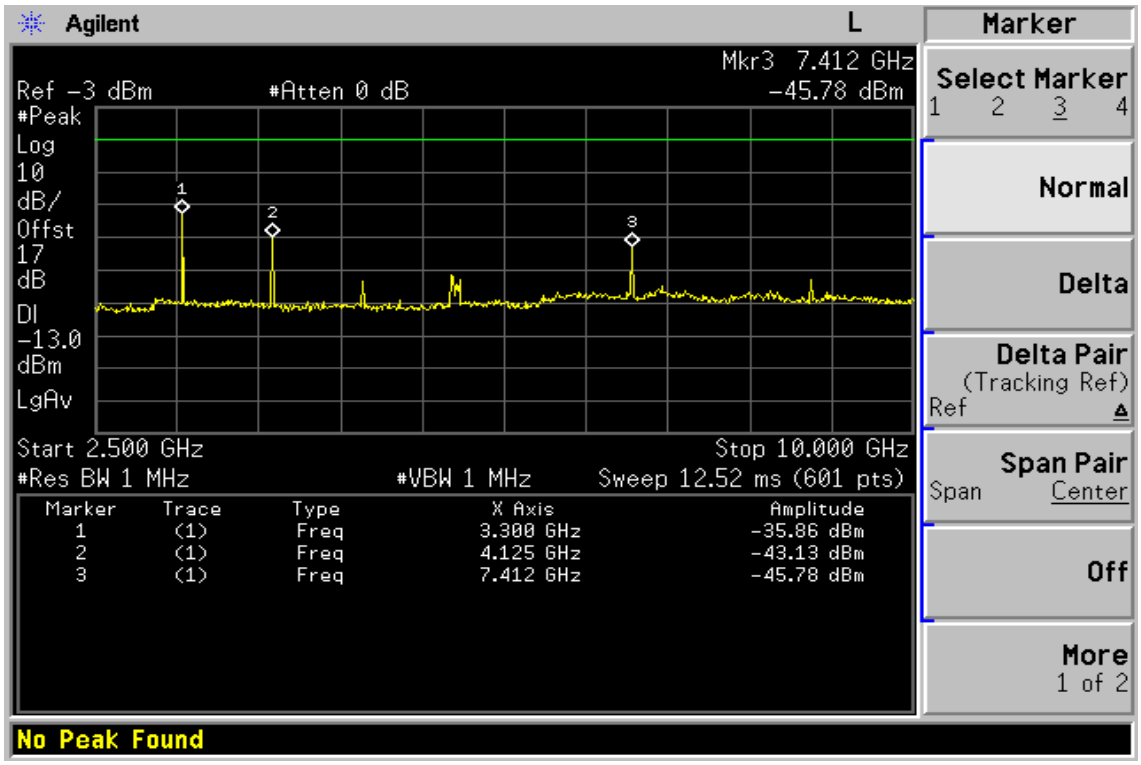
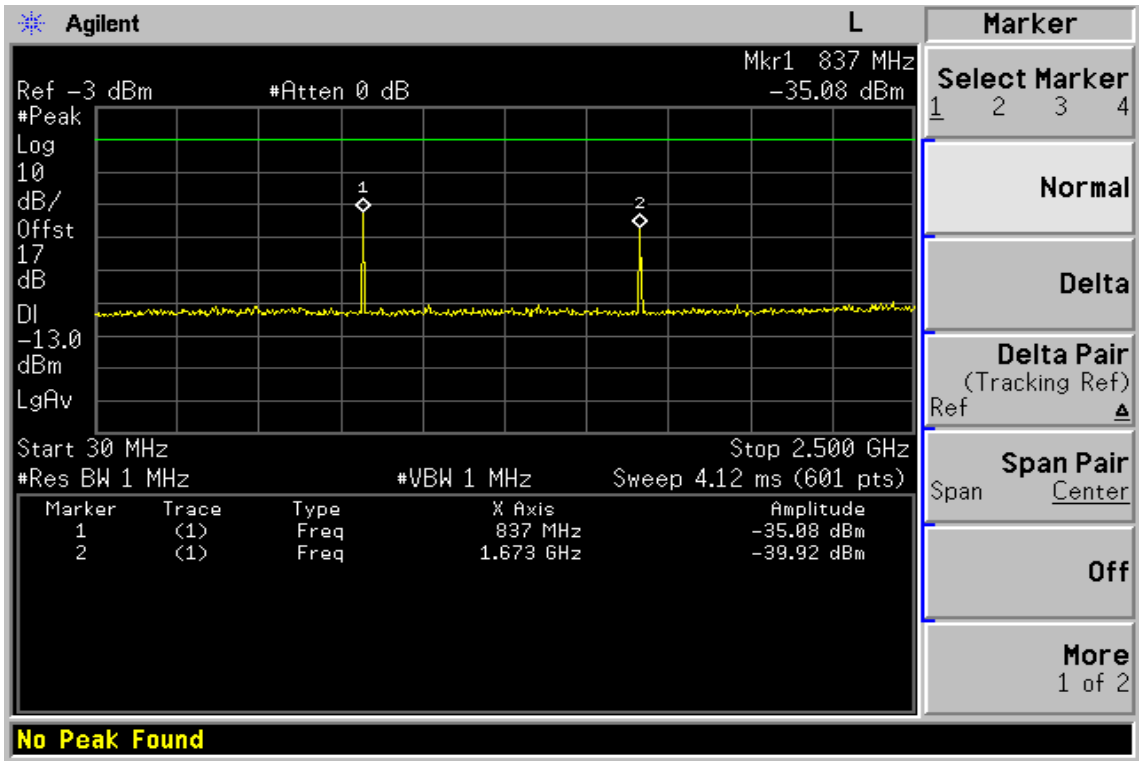


Figure 8-2: Out of Band emission at antenna terminals –GSM Channel Mid



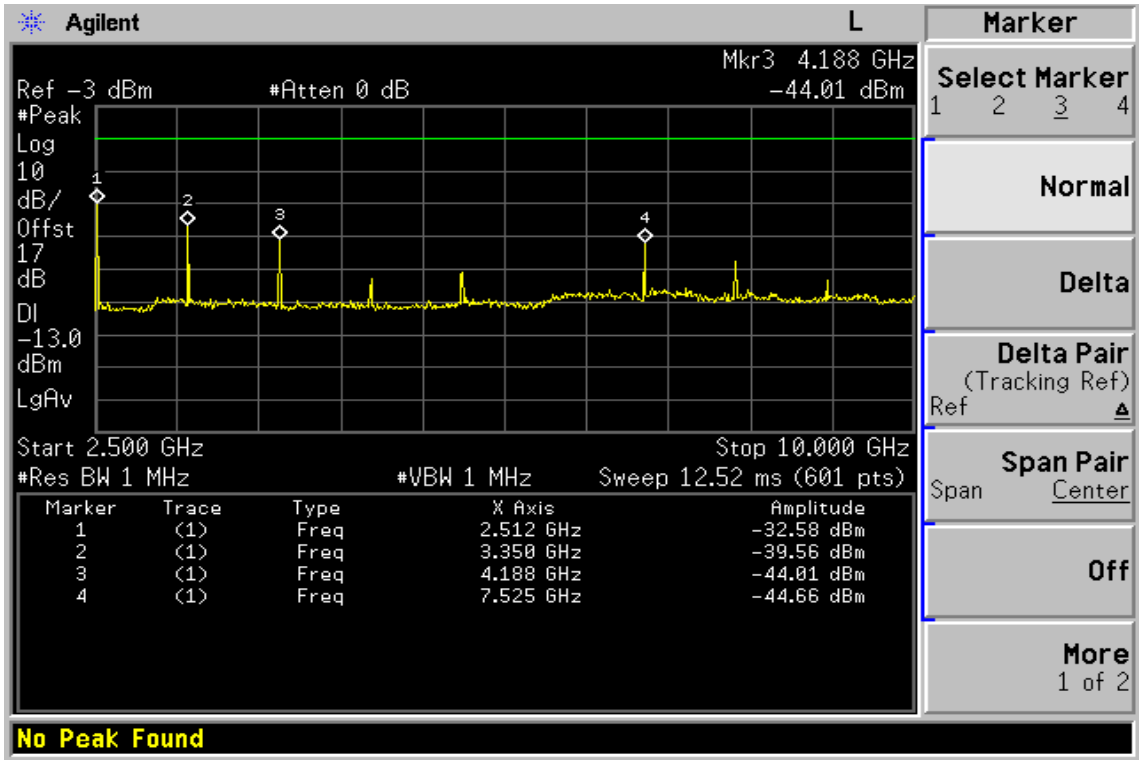
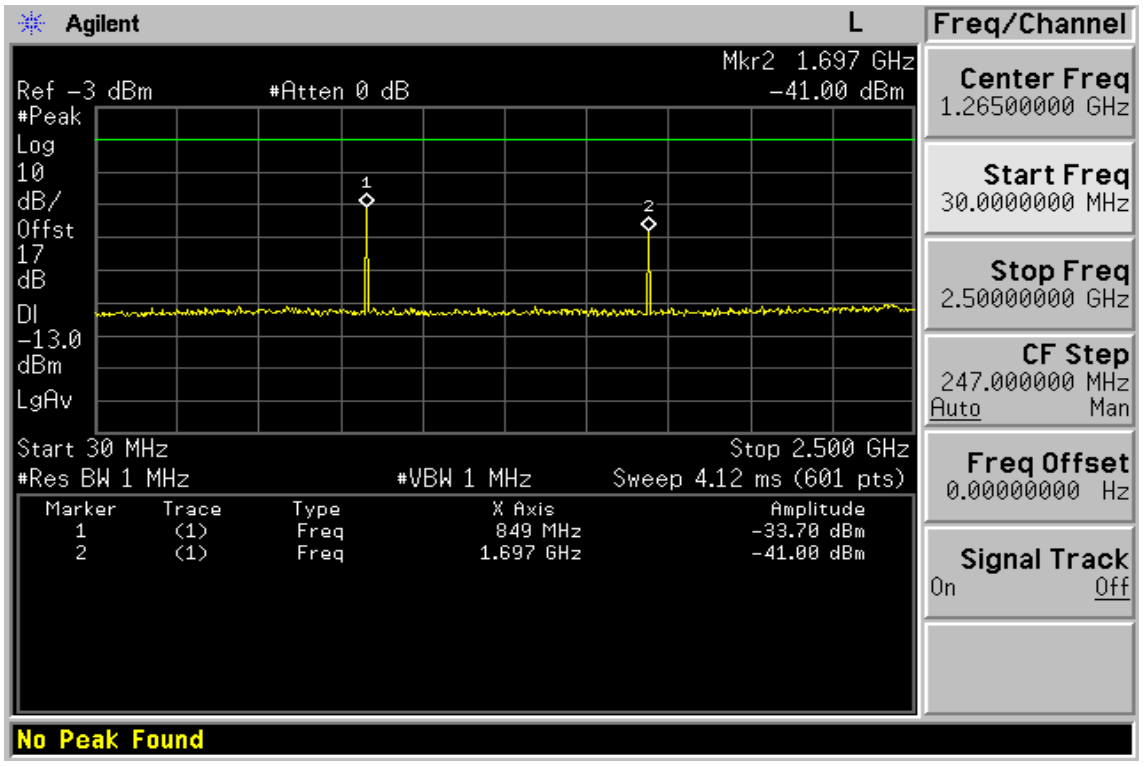


Figure 8-3: Out of Band emission at antenna terminals–GSM Channel Highest



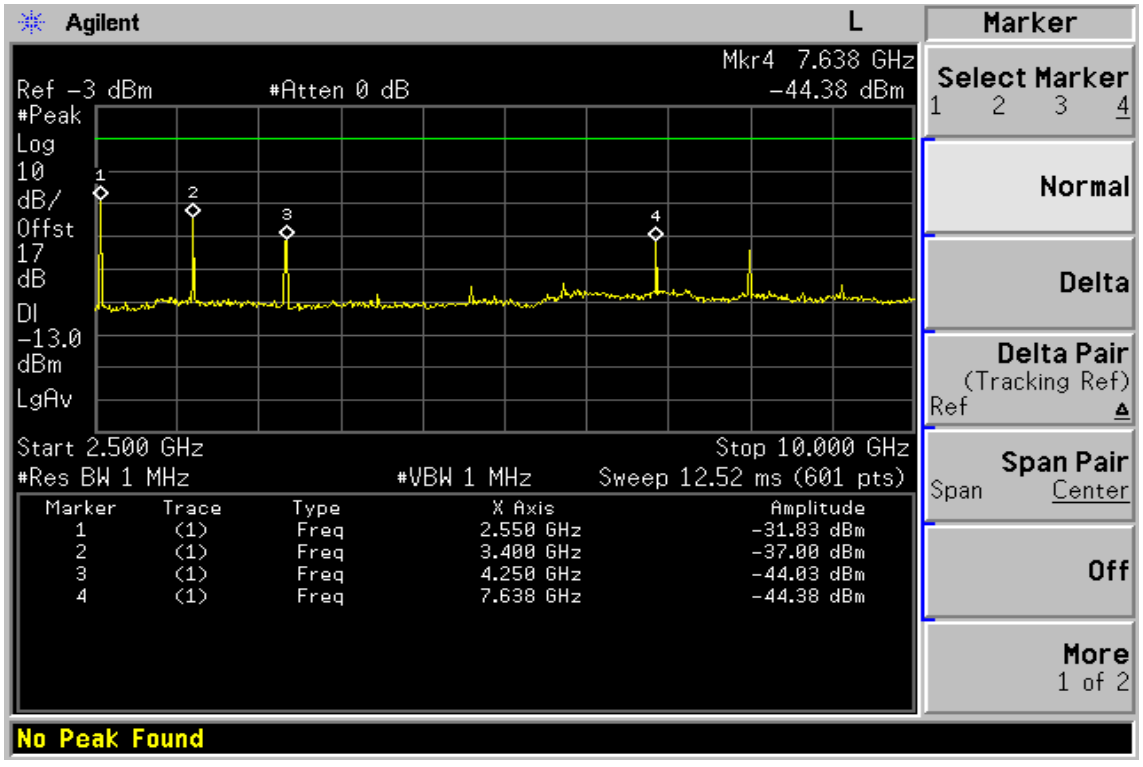


Figure 8-4: Band edge emission at antenna terminals – GSM Channel Lowest

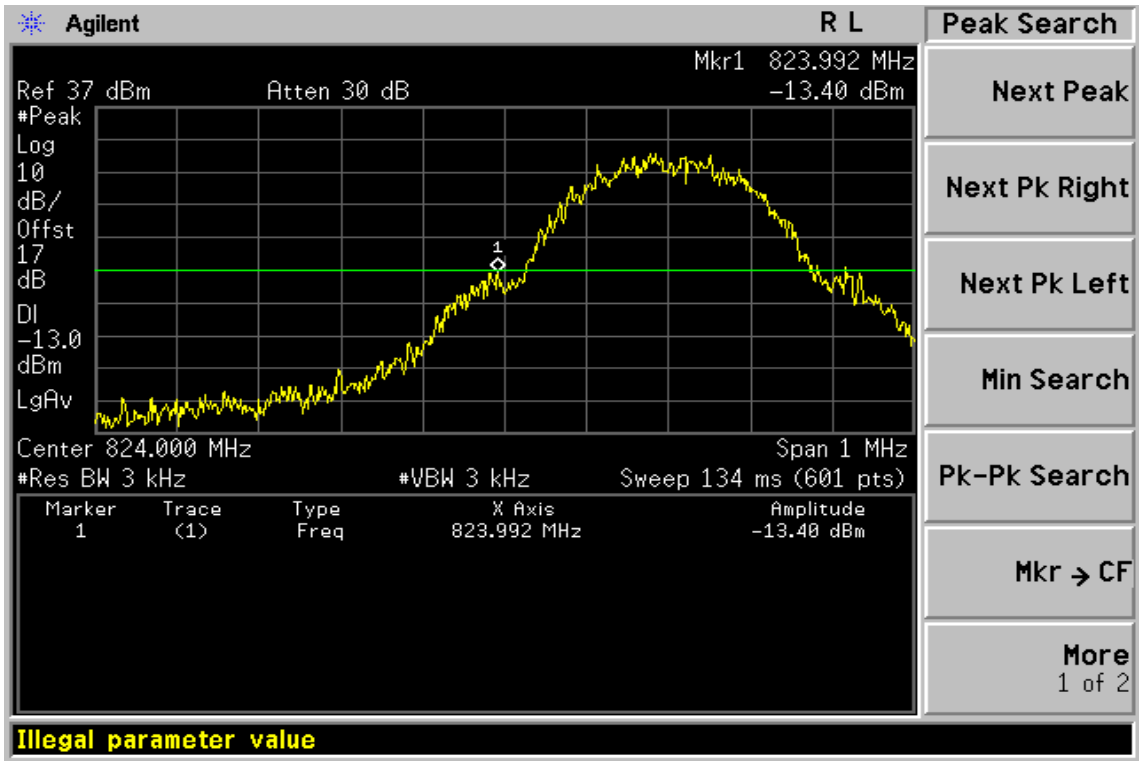


Figure 8-5: Band edge emission at antenna terminals – GSM Channel Highest

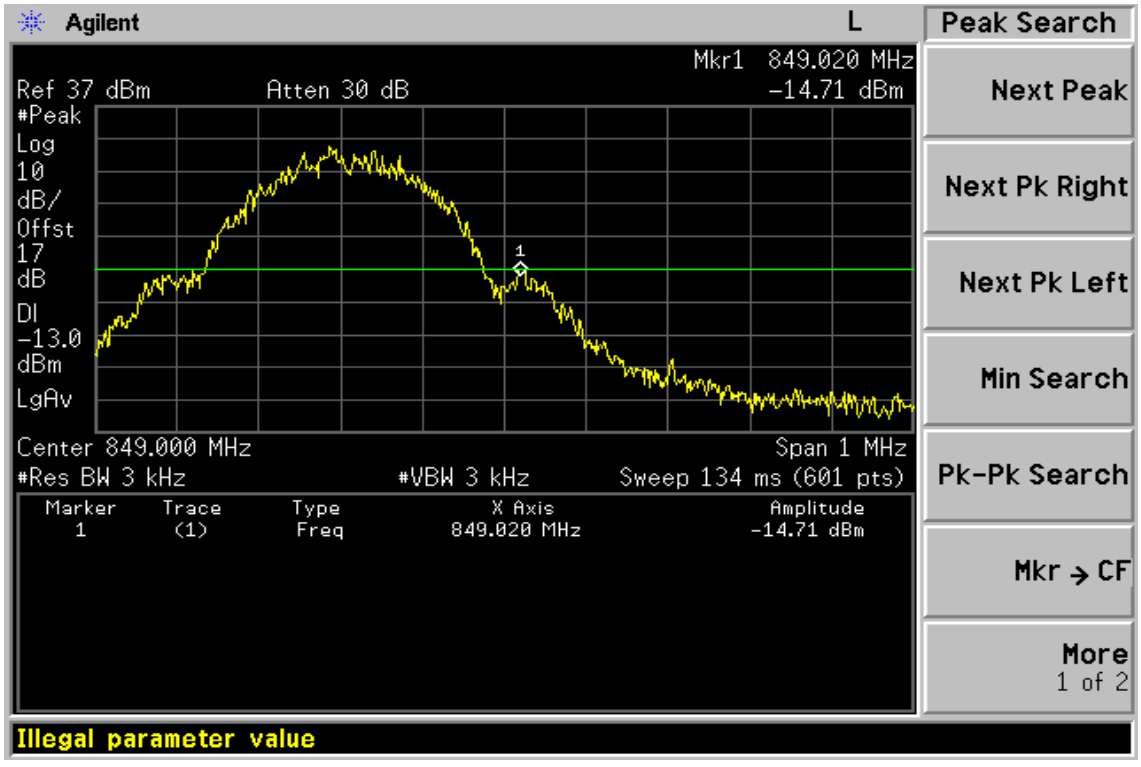
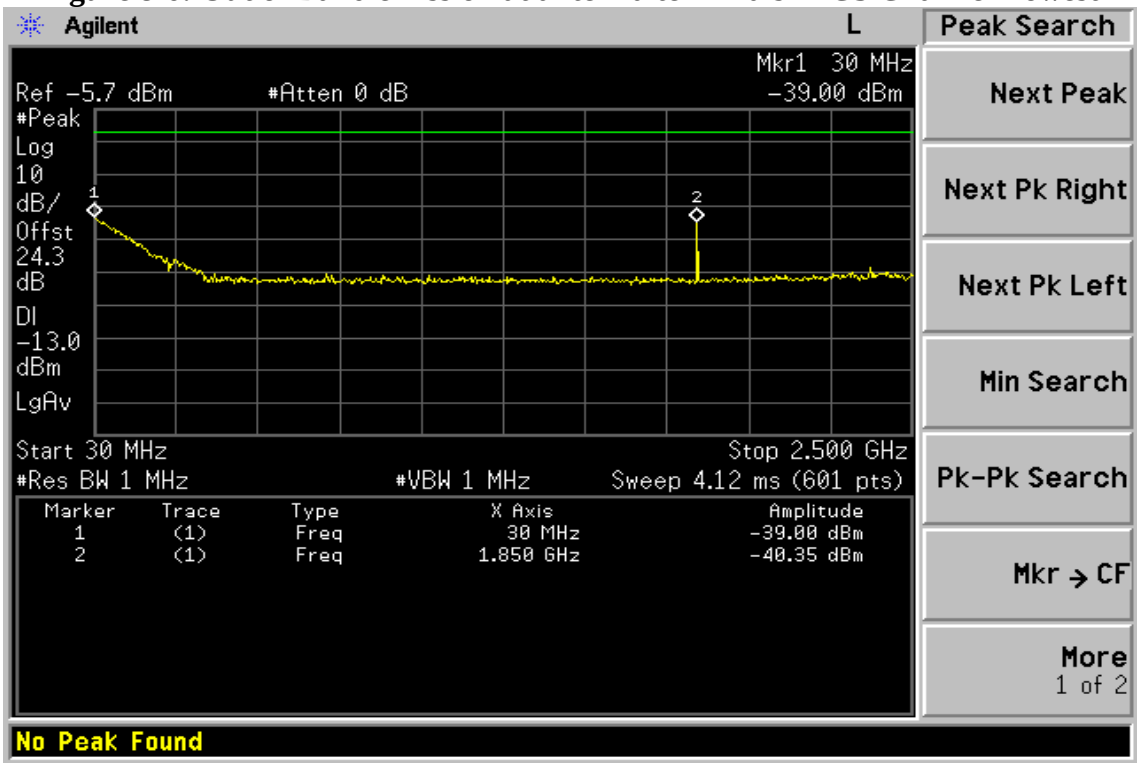


Figure 8-6: Out of Band emission at antenna terminals– PCS Channel Lowest



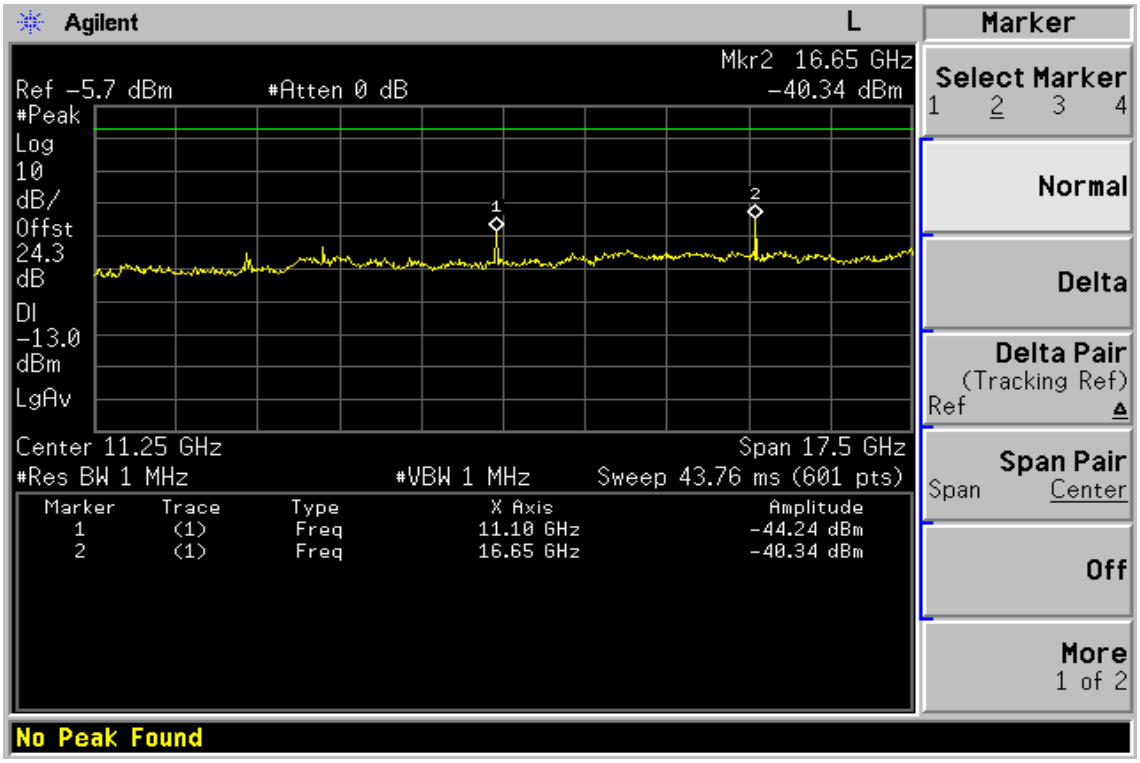
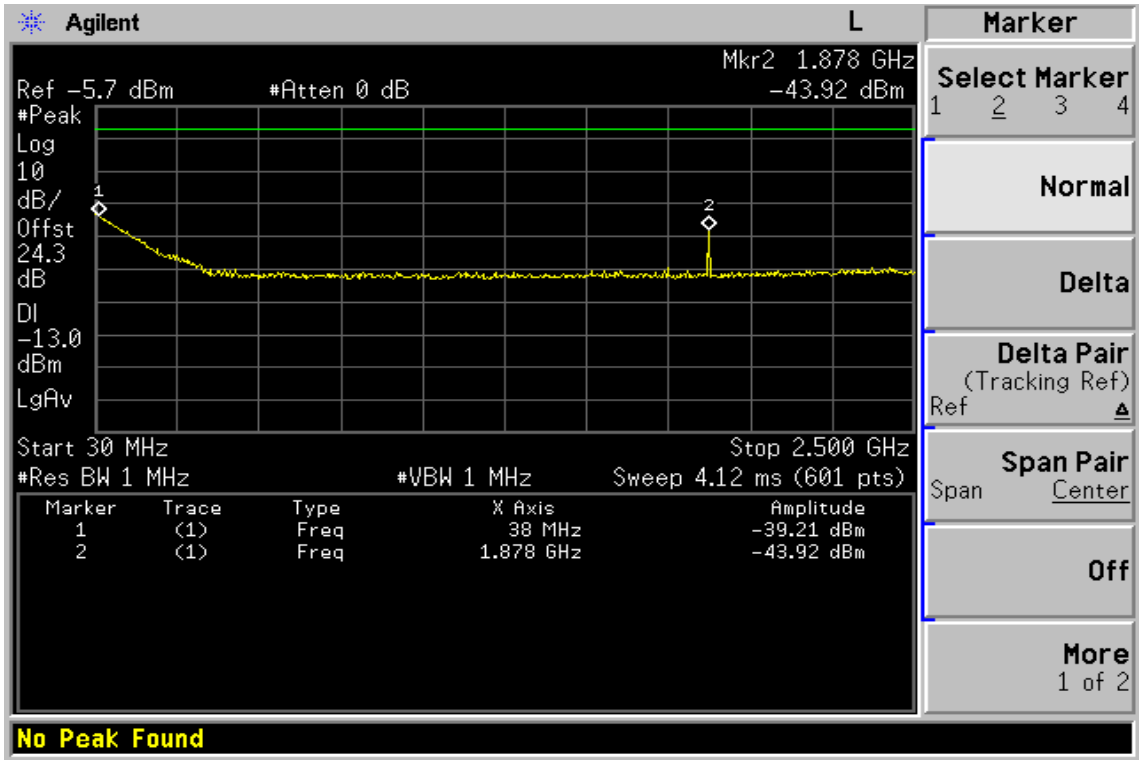


Figure 8-7: Out of Band emission at antenna terminals –PCS Channel Mid



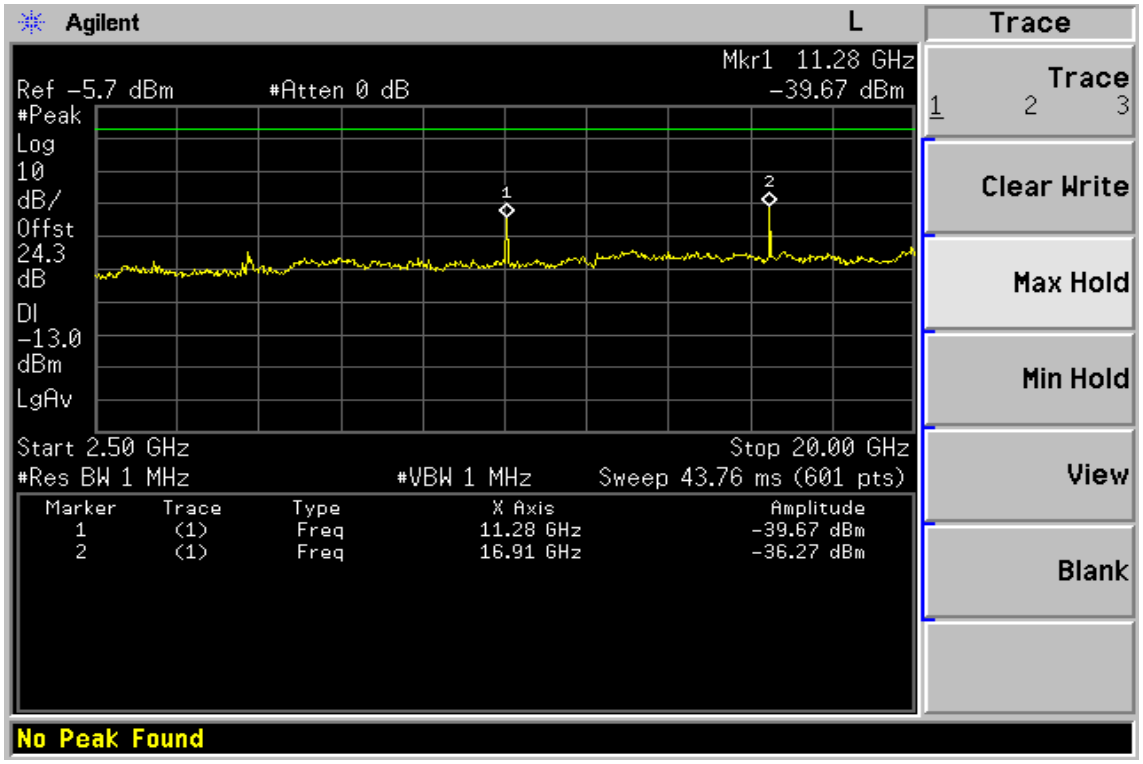
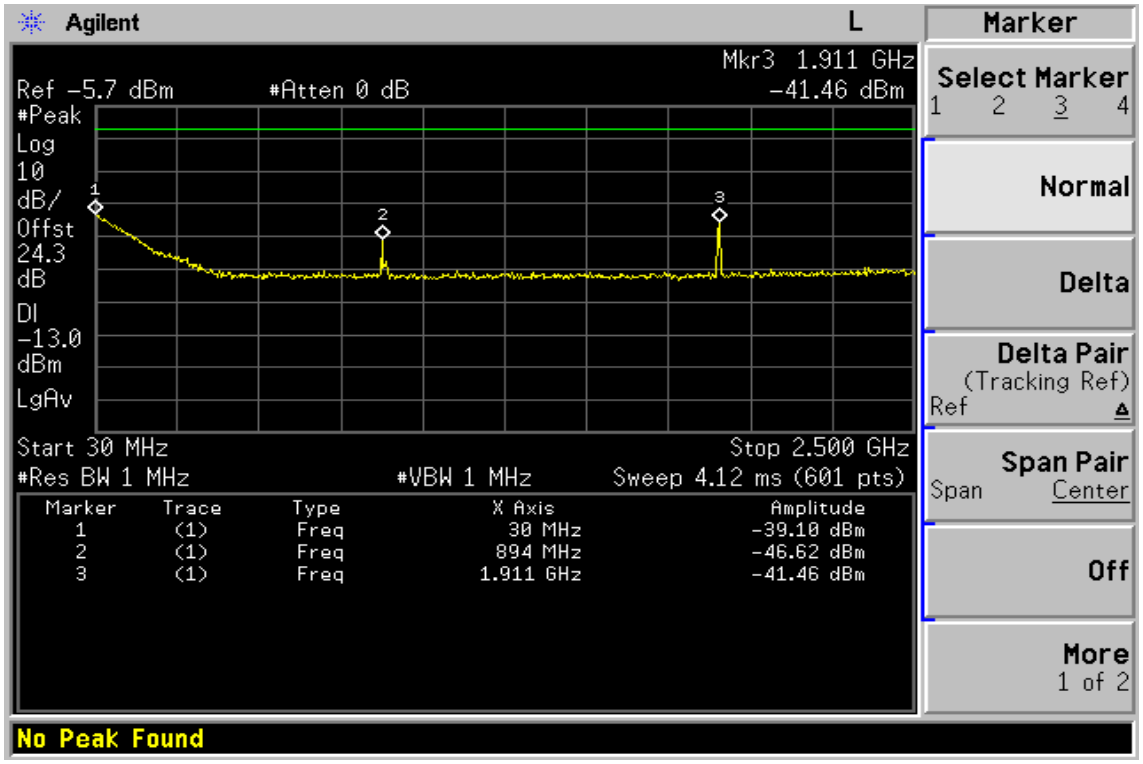


Figure 8-8: Out of Band emission at antenna terminals–PCS Channel Highest



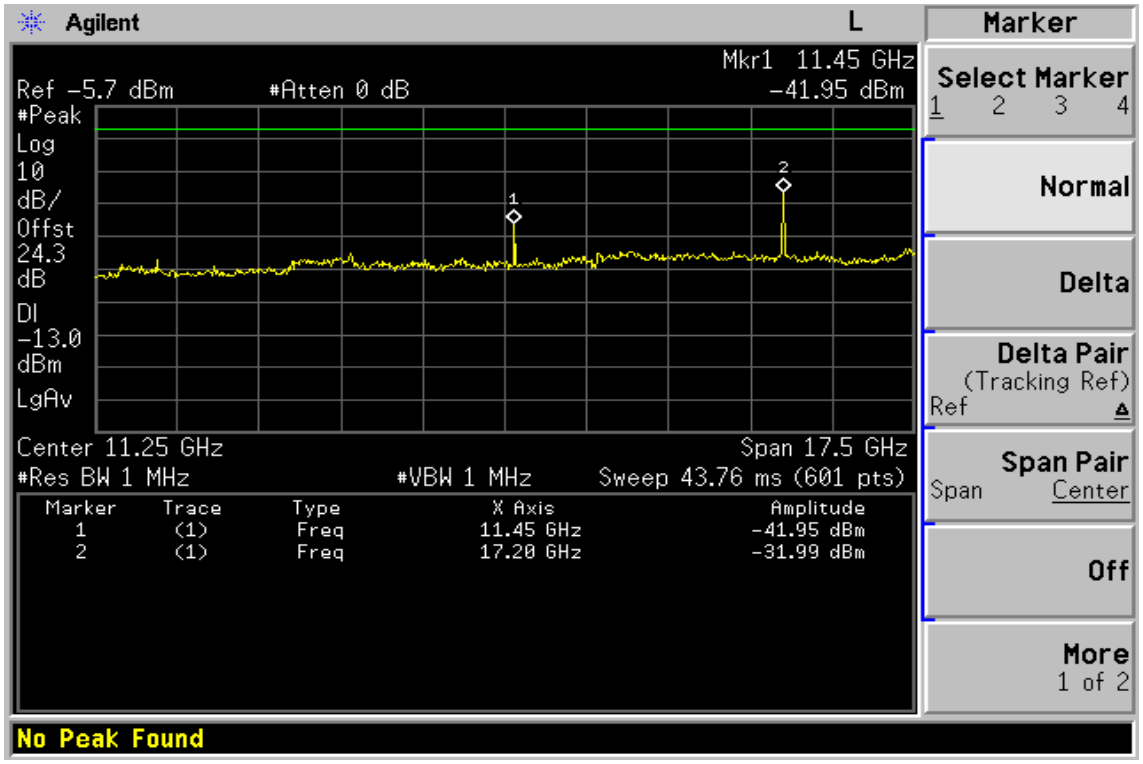


Figure 8-9: Bad edge emission at antenna terminals – PCS Channel Lowest

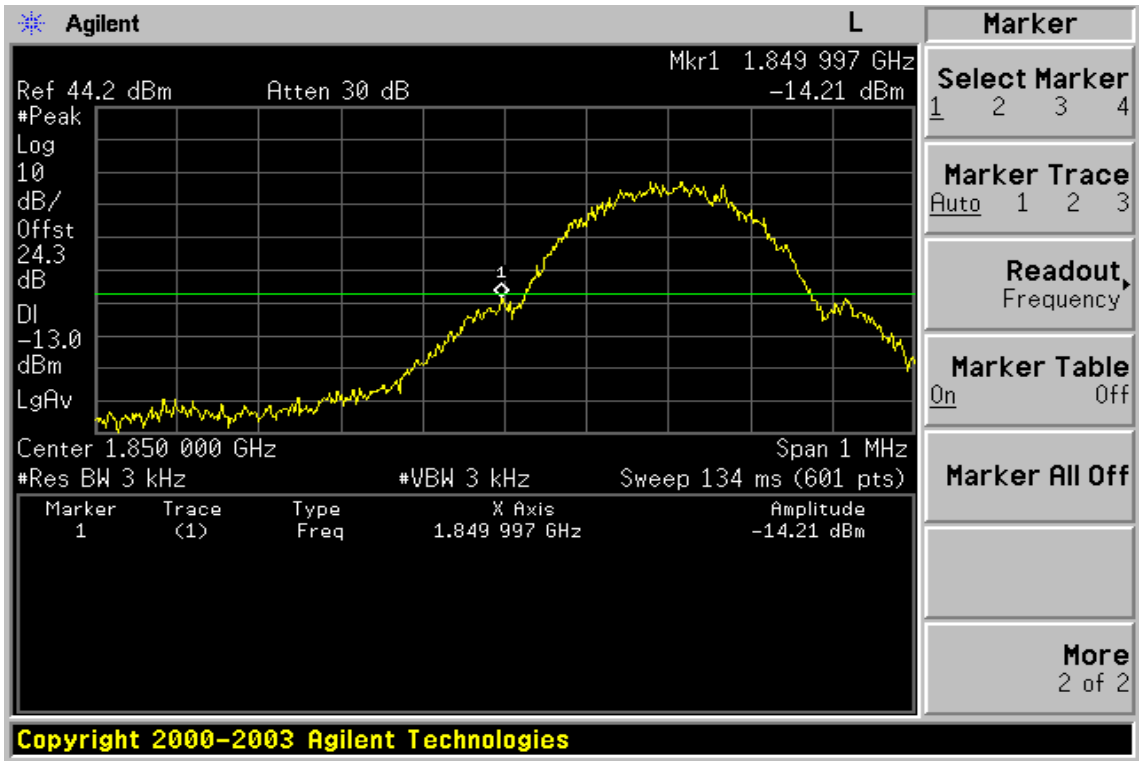


Figure 8-10: Band edge emission at antenna terminals – PCS Channel Highest

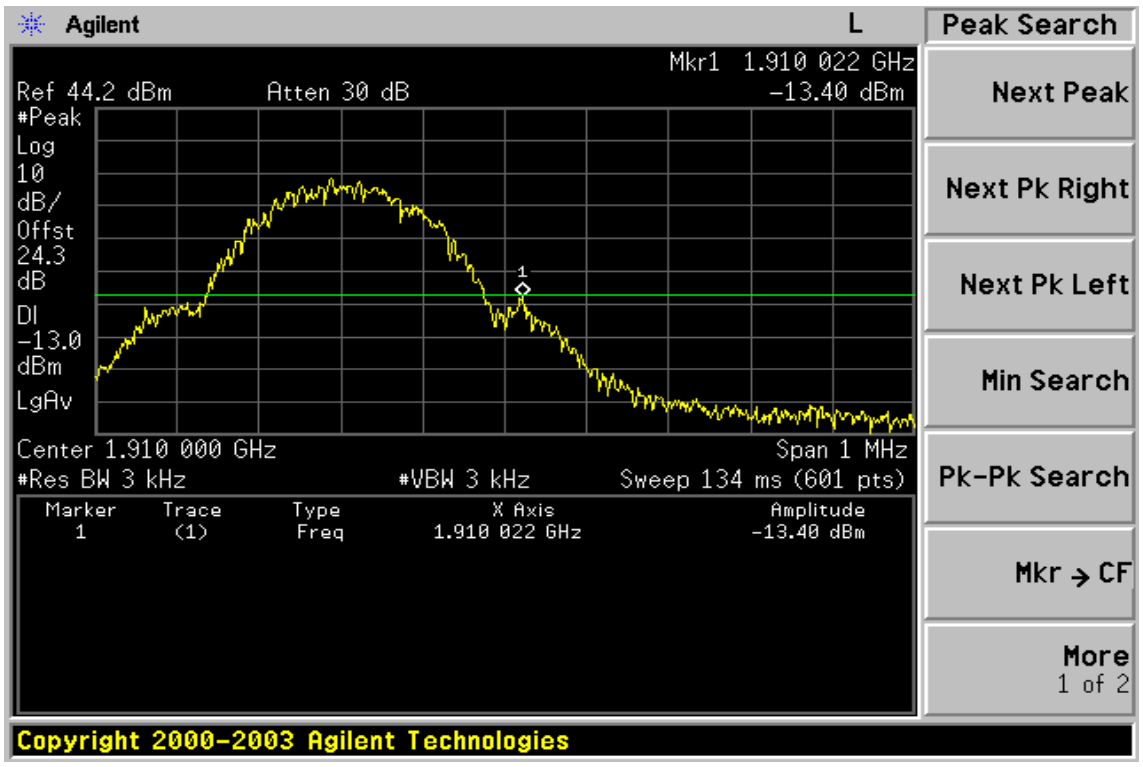
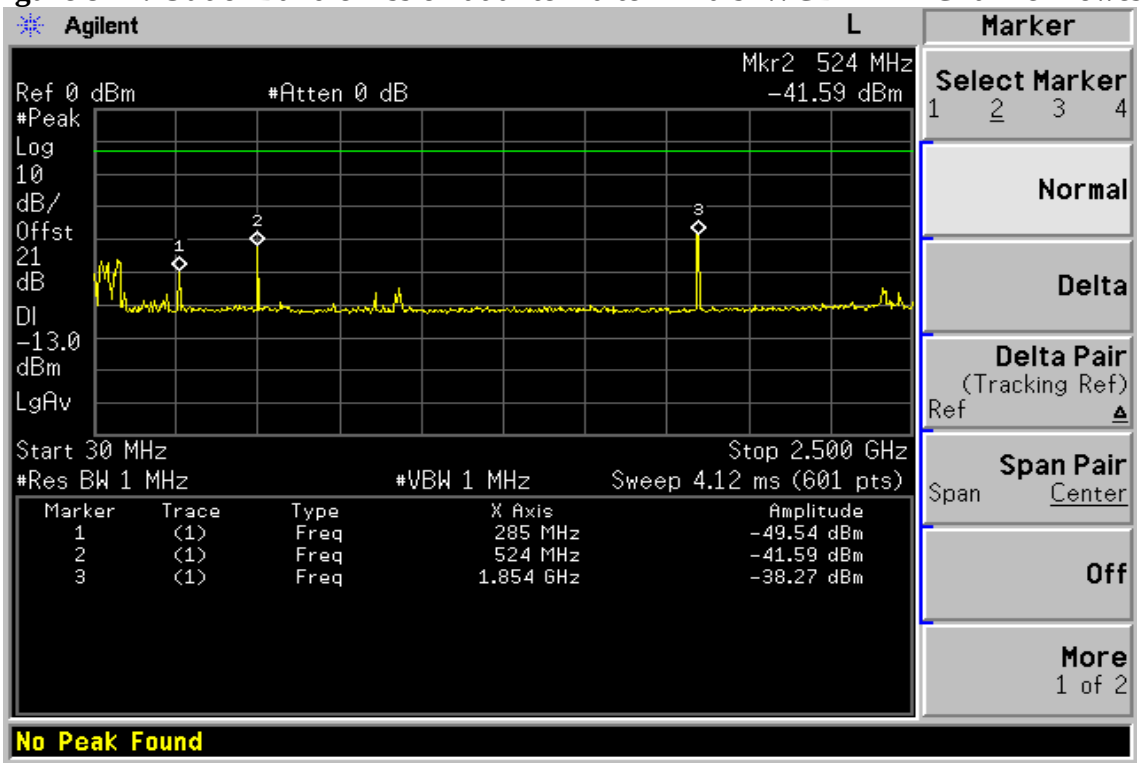


Figure 8-11: Out of Band emission at antenna terminals–WCDMA II Channel Lowest



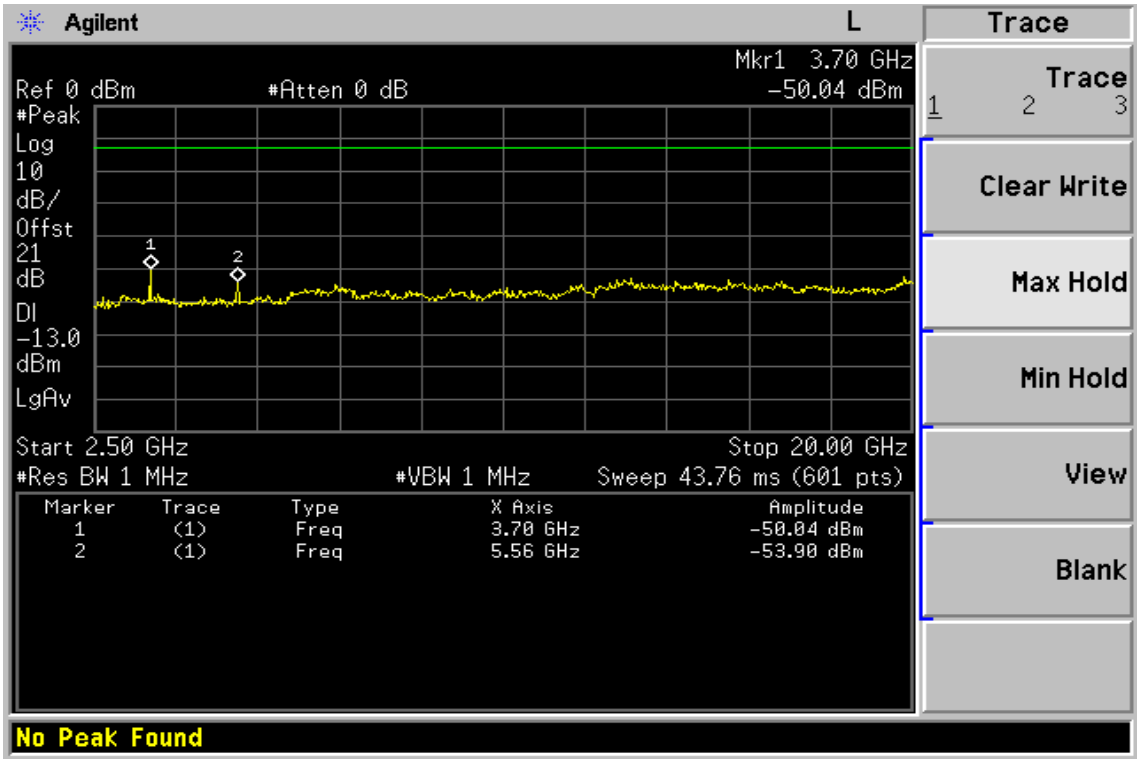
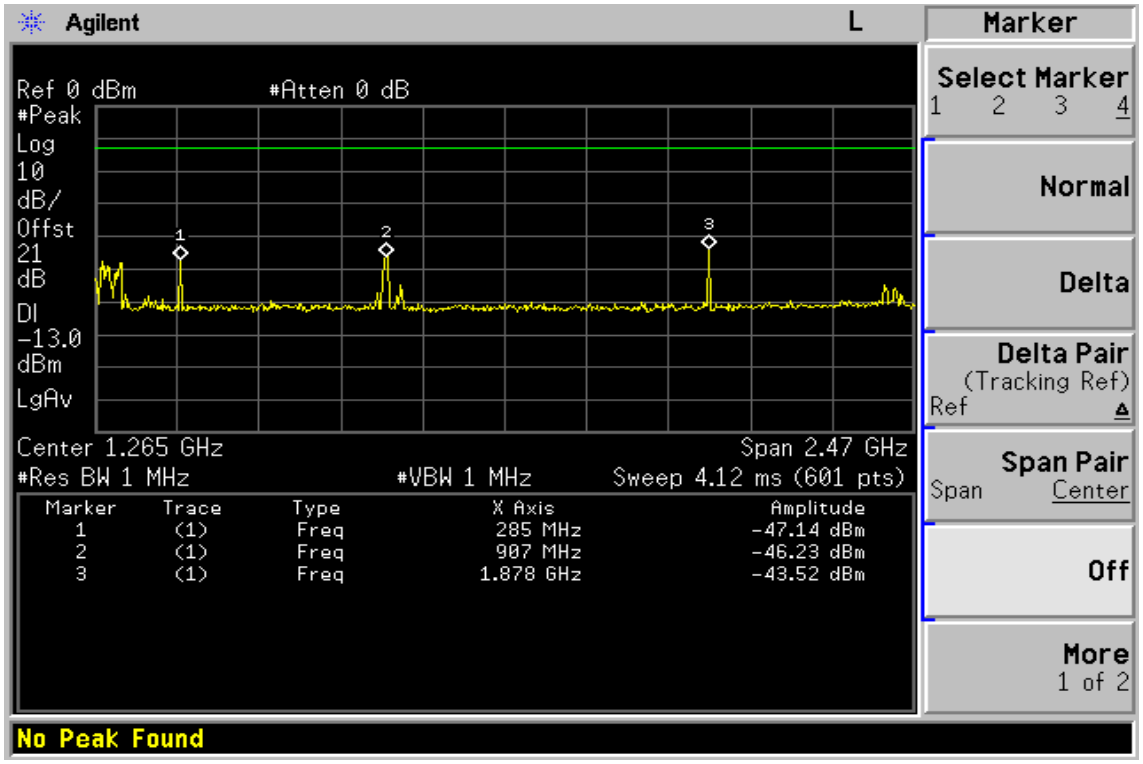


Figure 8-12: Out of Band emission at antenna terminals –WCDMA II Channel Mid



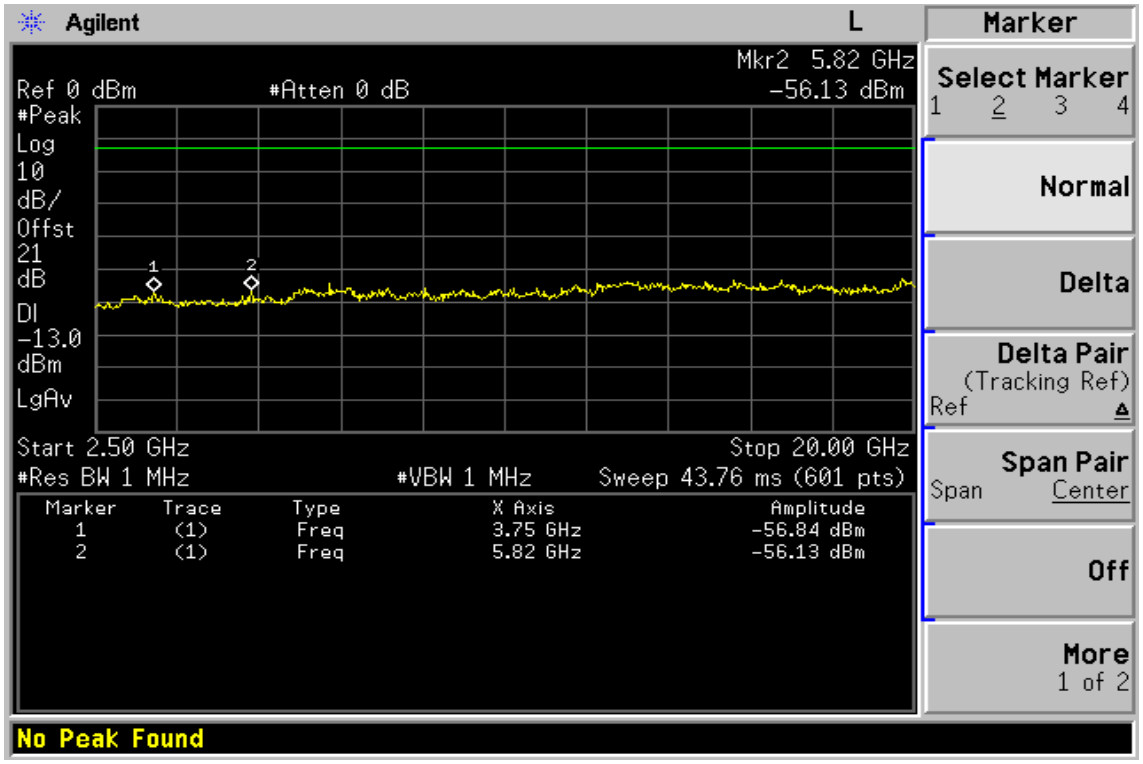
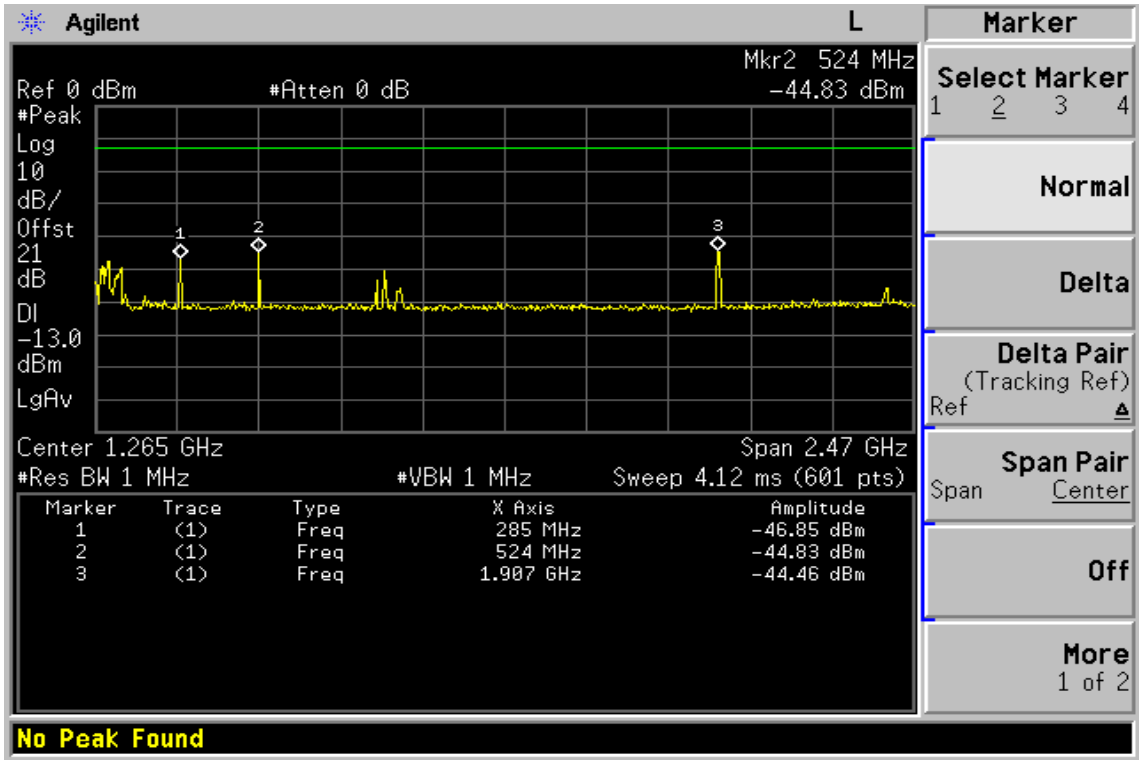


Figure 8-13: Out of Band emission at antenna terminals–WCDMA II Channel Highest



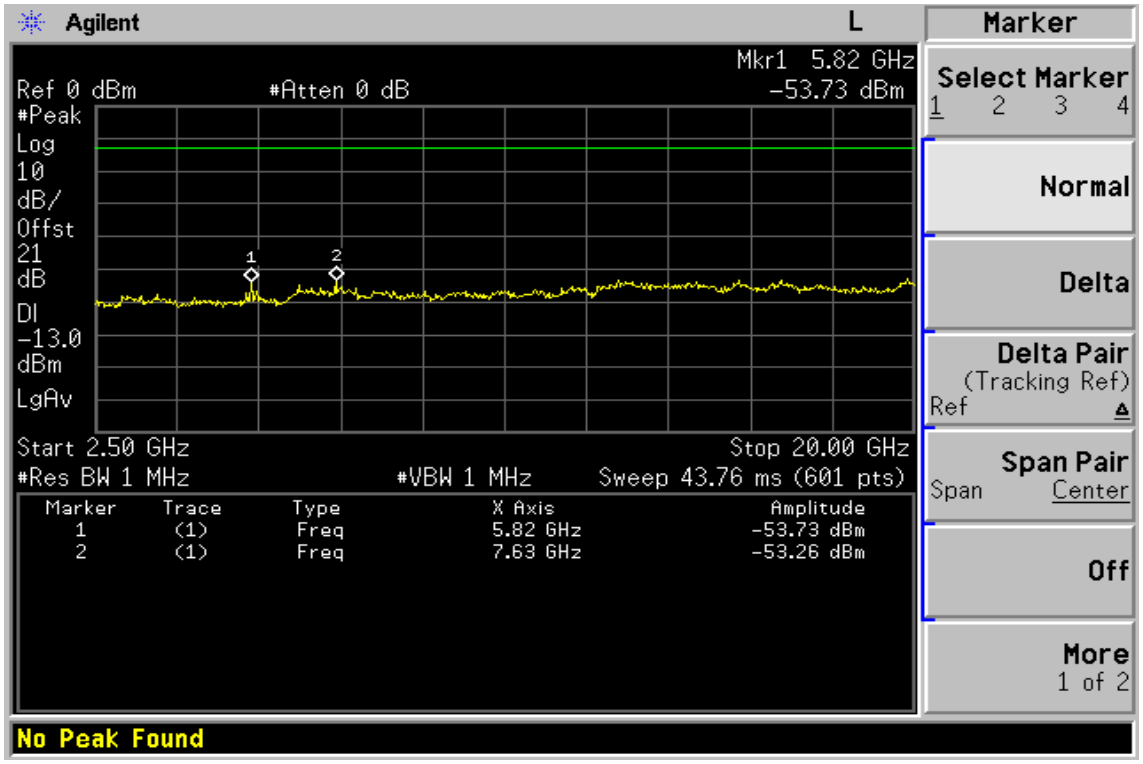


Figure 8-14: Bad edge emission at antenna terminals –WCDMA II Channel Lowest

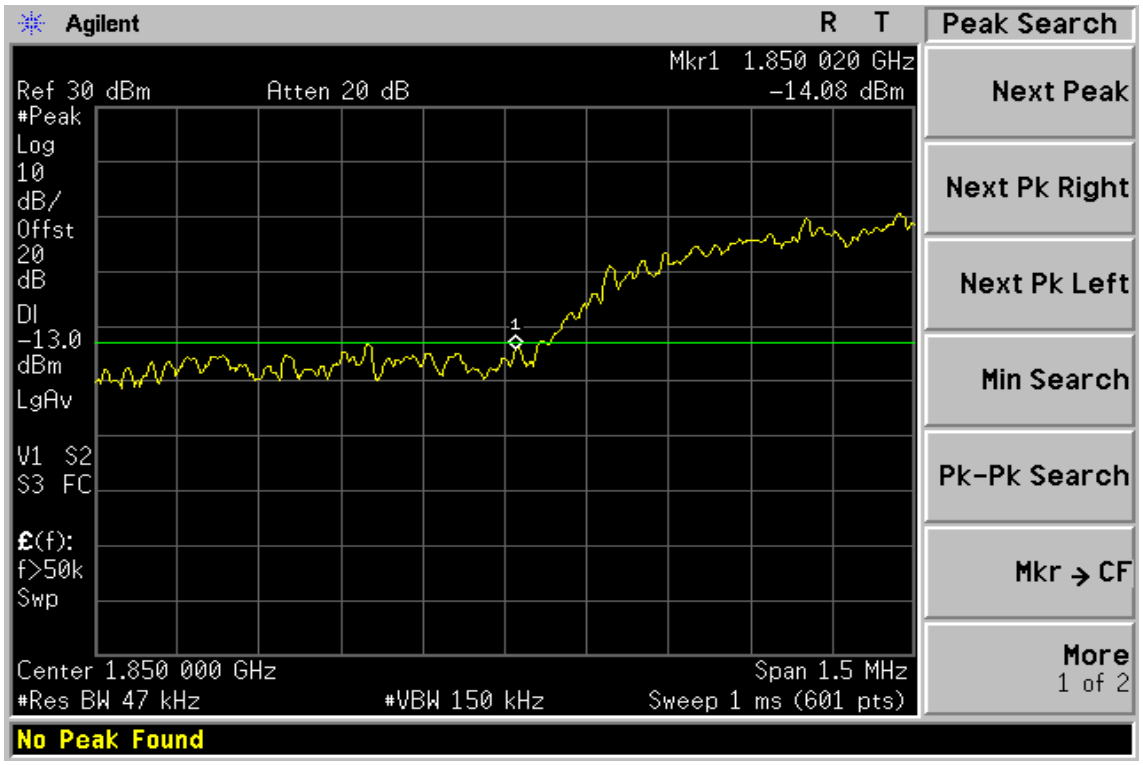


Figure 8-15: Band edge emission at antenna terminals –WCDMA II Channel Highest

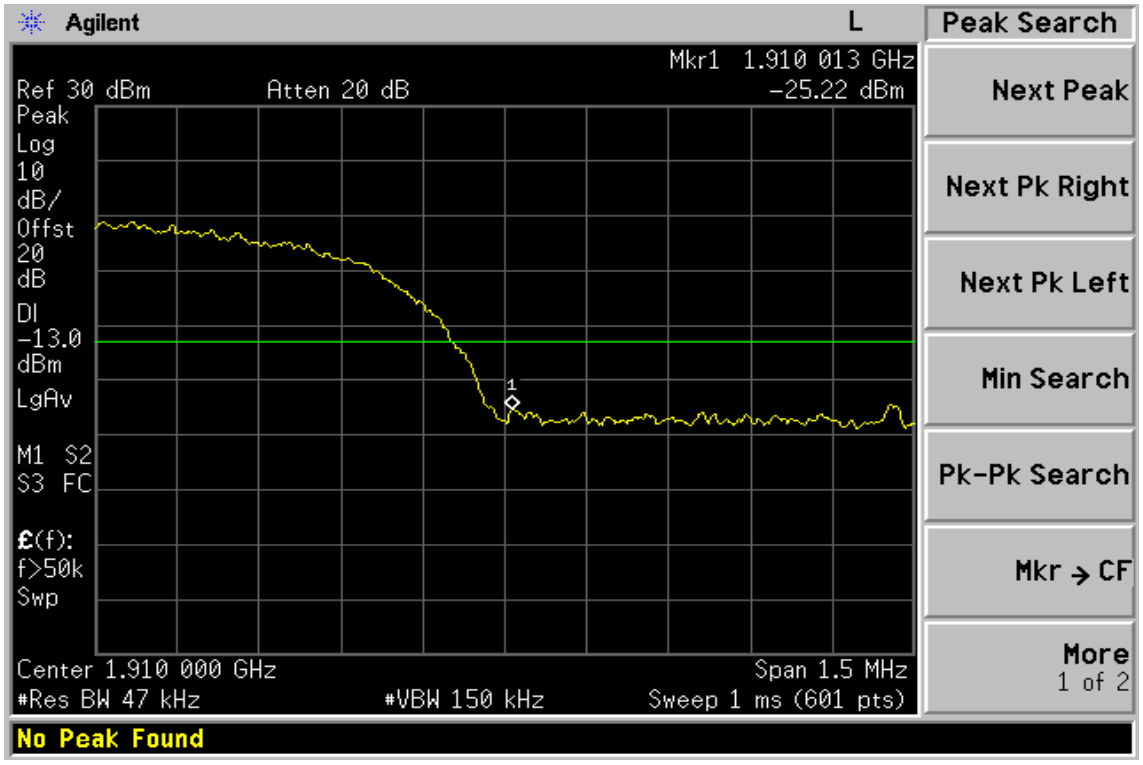
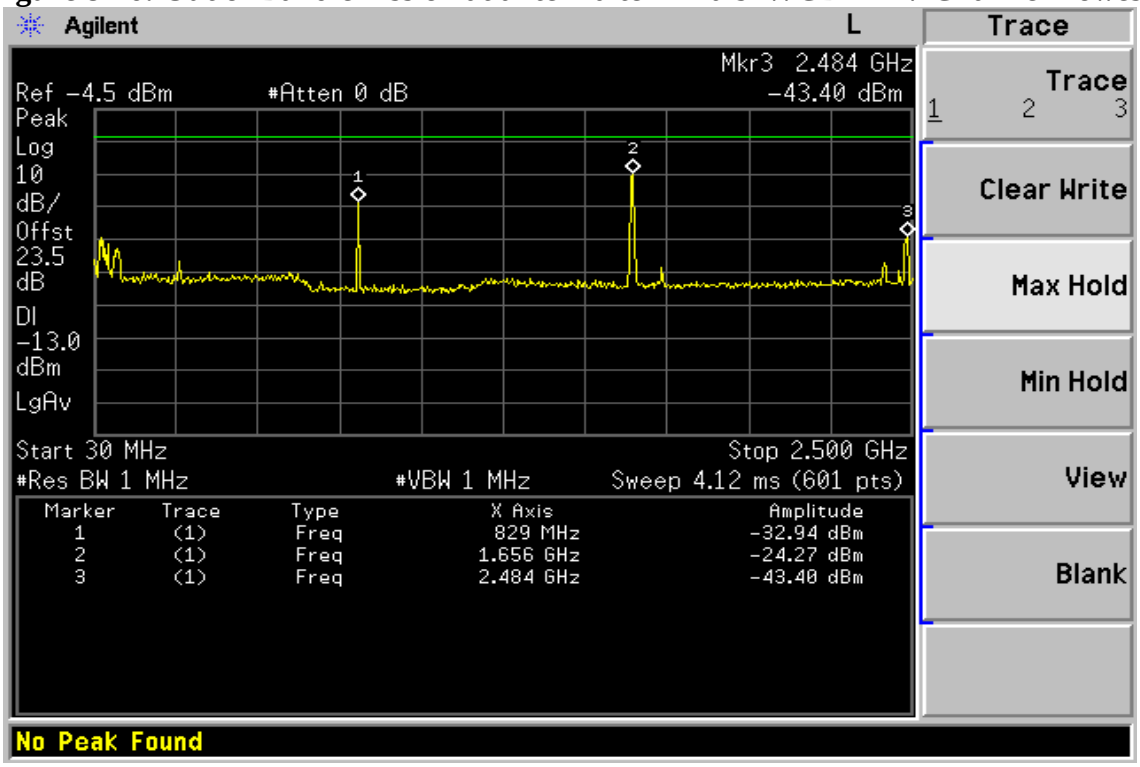


Figure 8-16: Out of Band emission at antenna terminals–WCDMA V Channel Lowest



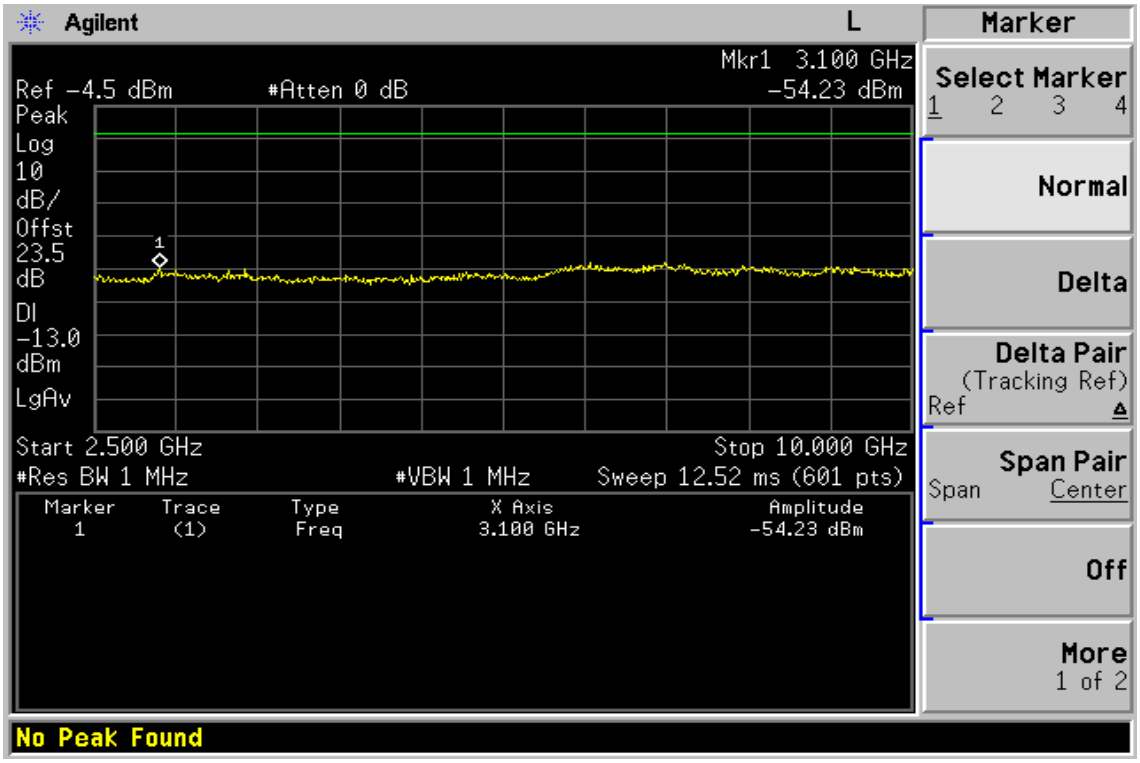
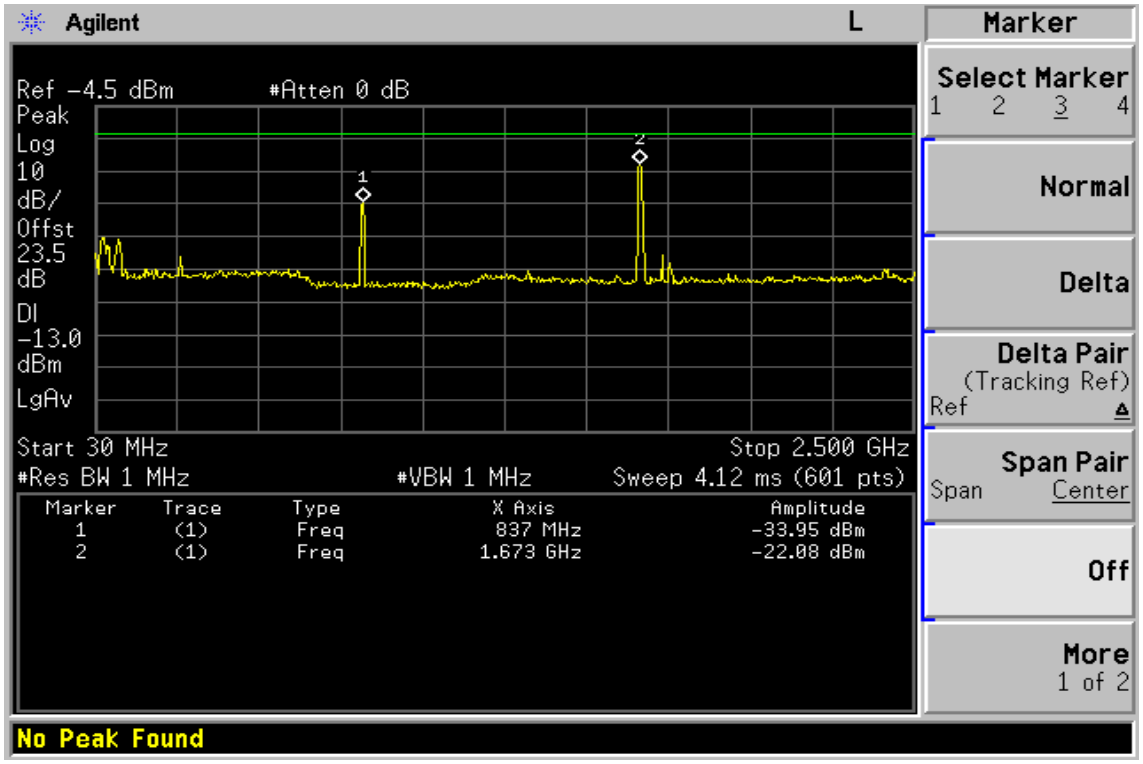


Figure 8-17: Out of Band emission at antenna terminals –WCDMA V Channel Mid



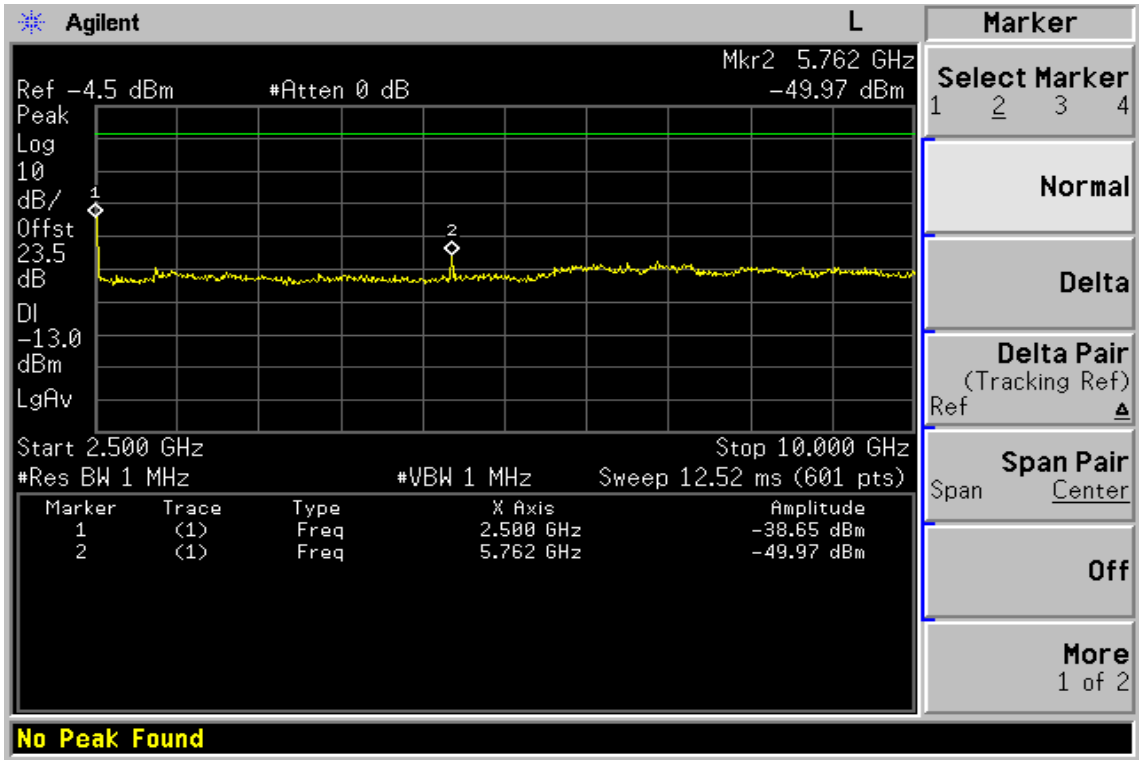
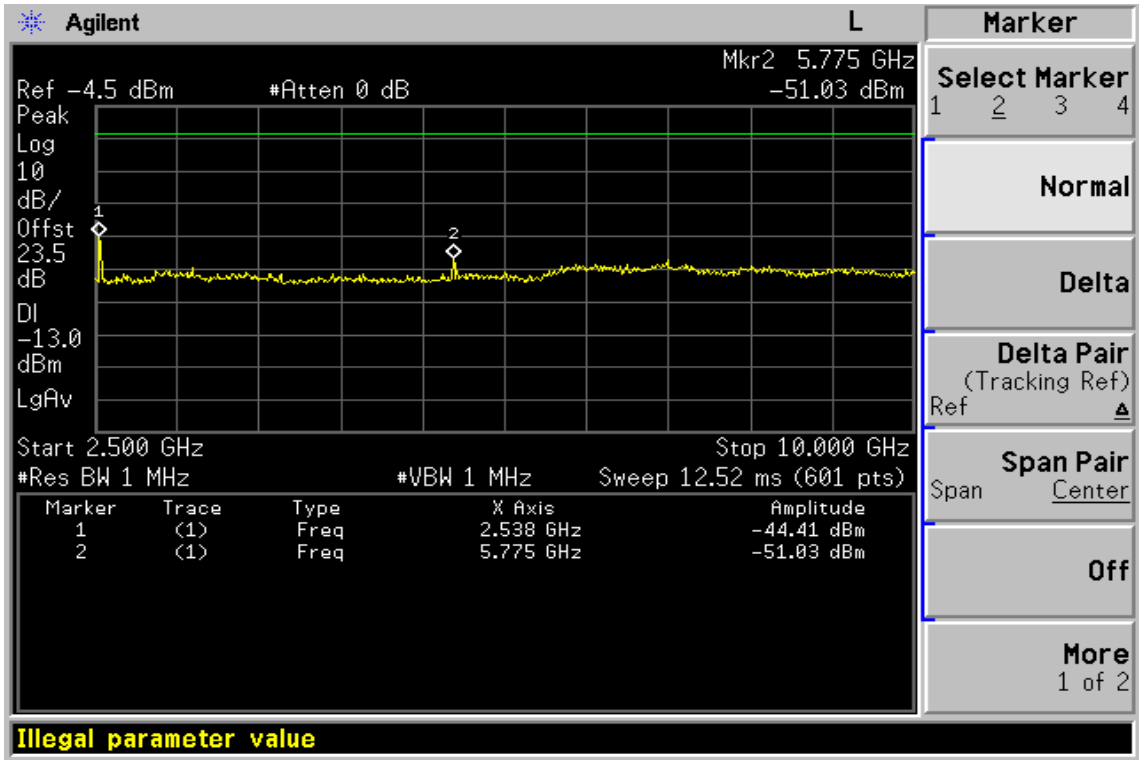


Figure 8-18: Out of Band emission at antenna terminals–WCDMA V Channel Highest



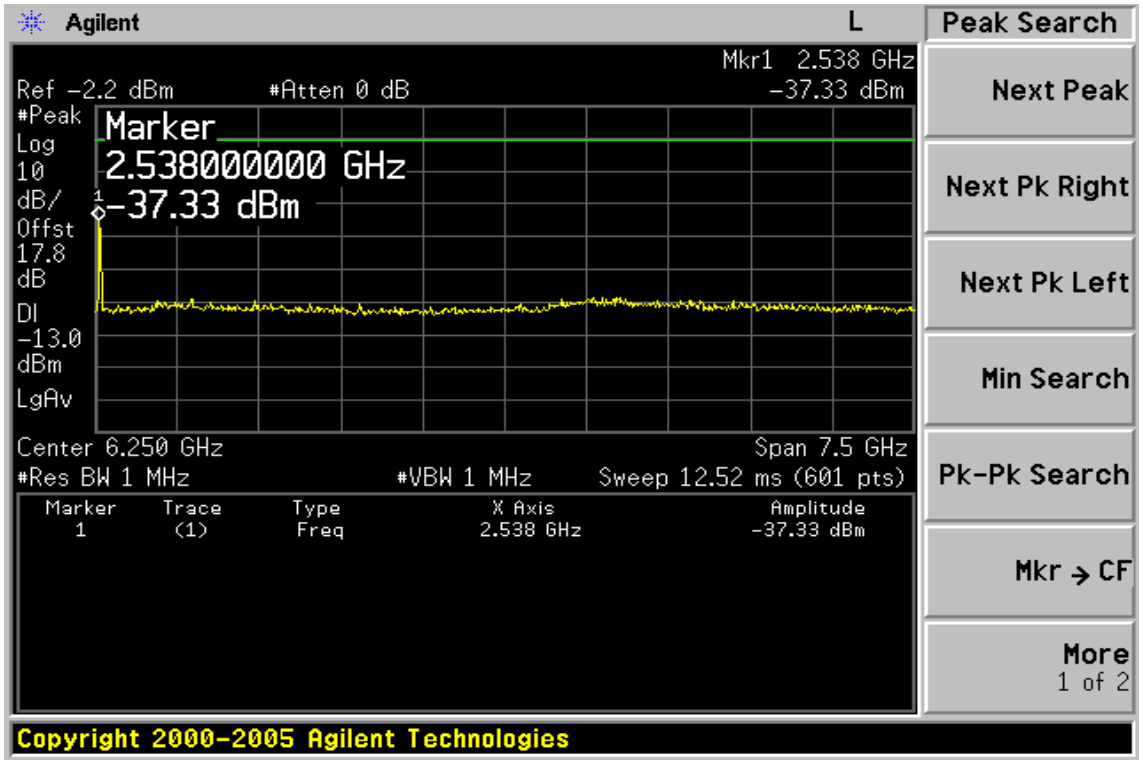


Figure 8-19: Bad edge emission at antenna terminals –WCDMA V Channel Lowest

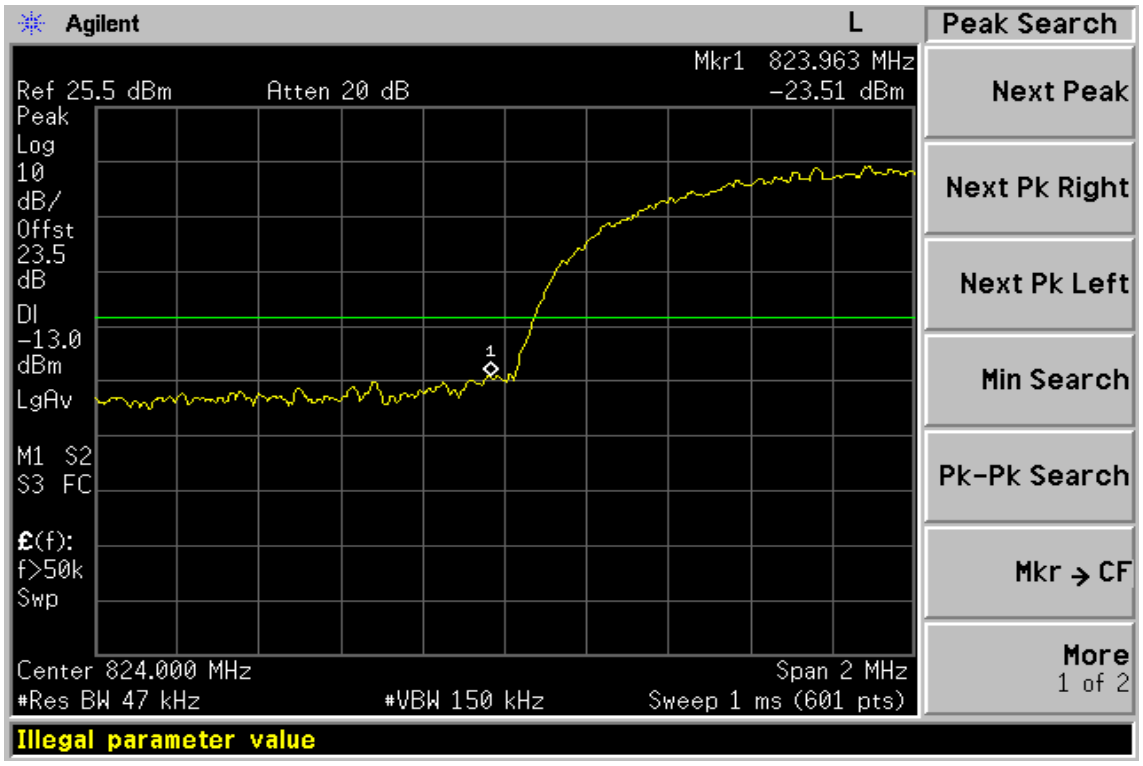
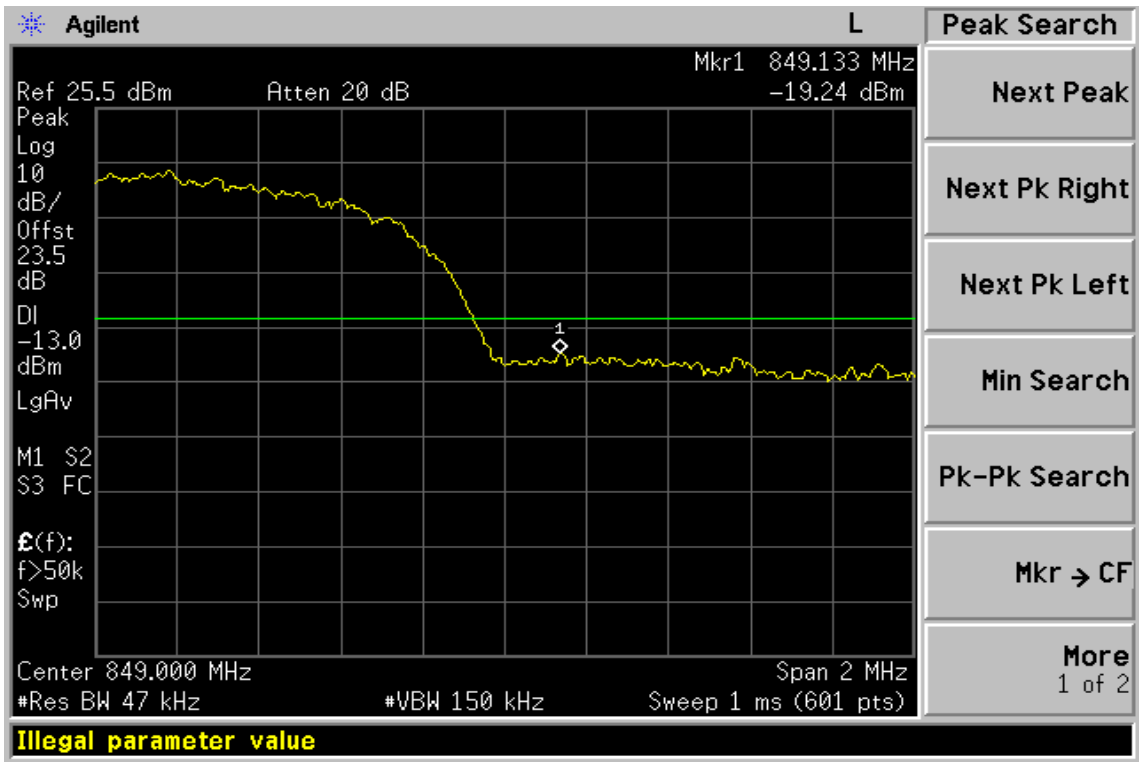


Figure 8-20: Band edge emission at antenna terminals –WCDMA V Channel Highest



9. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

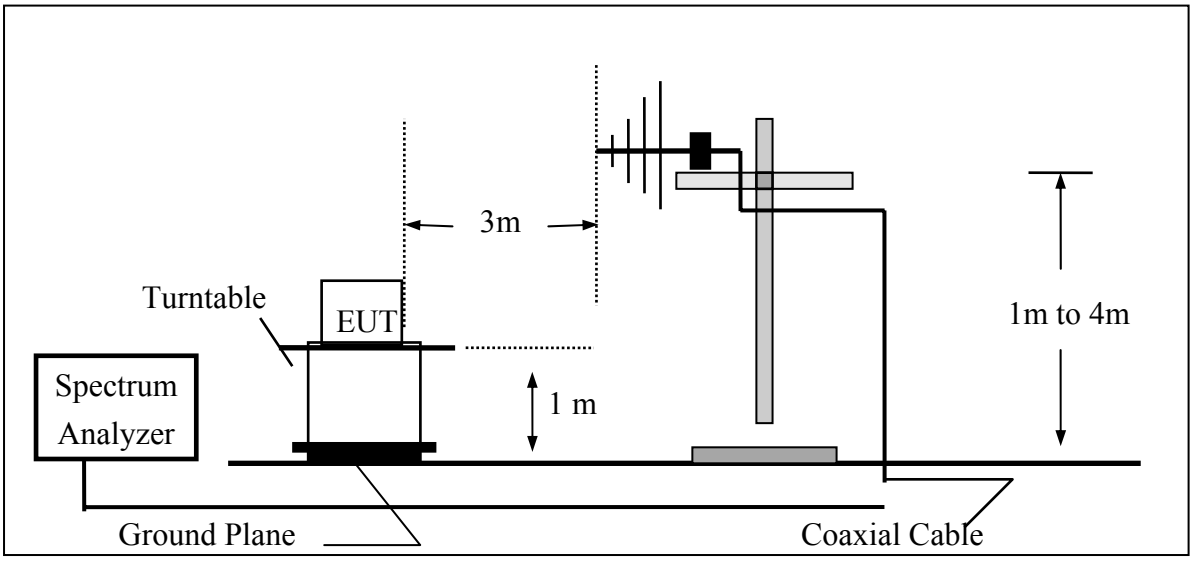
Standard Applicable

According to FCC §2.1053,

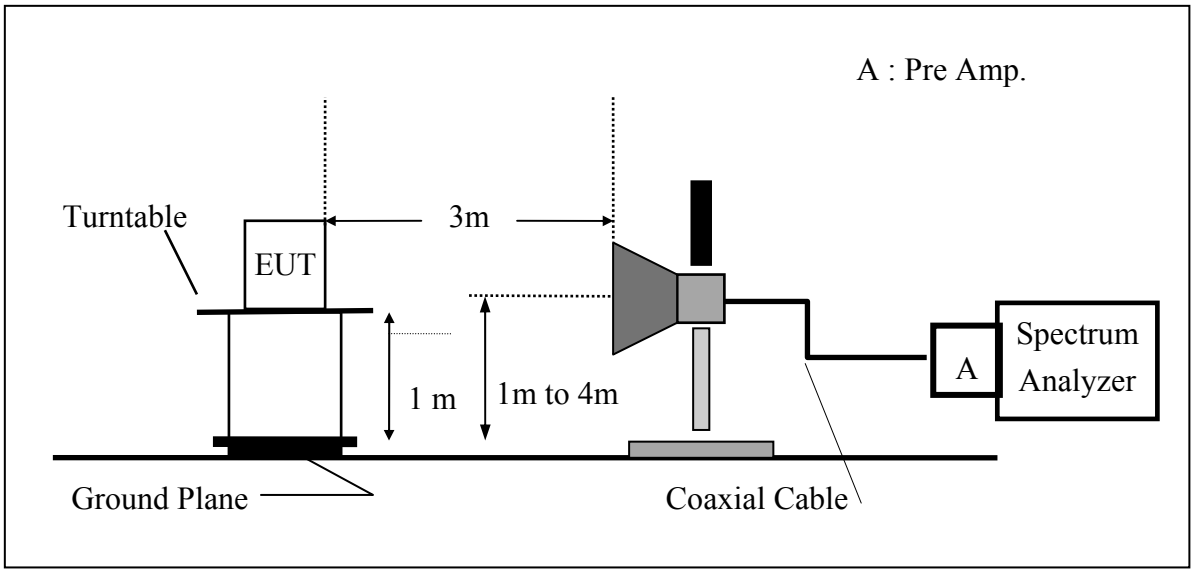
FCC §22.917(a),§24.238(a), the magnitude of each spurious and harmonic emission that can be detected when the equipment is operated under the conditions specified in the instruction manual and/ or alignment procedure, shall not be less than 43 + 10 log (mean output power in watts) dBc below the mean power output outside a license's frequency block (-13dBm)

EUT Setup (Block Diagram of Configuration)

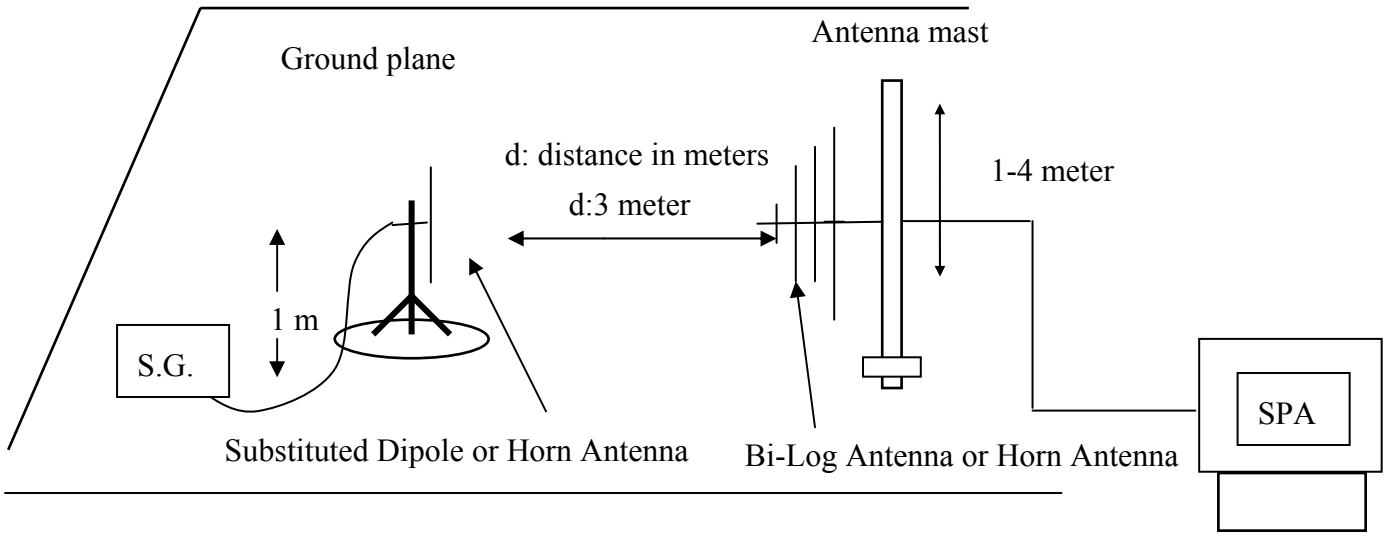
(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(B) Radiated Emission Test Set-UP Frequency Over 1 GHz



(C) Substituted Method Test Set-UP



Measurement Procedure

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

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

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

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

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

Measurement Equipment Used:

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	Agilent	E4446A	MY43360126	04/27/2007	04/26/2008
Spectrum Analyzer	Agilent	E7405A	US41160416	07/04/2007	07/03/2008
Communication Test	R&S	SMU200	N/A	N/A	N/A
Bi-log Antenna	SCHWAZBECK	VULB9160	3224	11/14/2008	11/13/2008
Horn antenna	SCHWAZBECK	BBHA 9120D	309/320	08/16/2007	08/15/2008
Pre-Amplifier	HP	8447D	2944A09469	07/19/2007	07/18/2008
Pre-Amplifier	HP	8494B	3008A00578	02/26/2008	02/25/2009
Signal Generator	R&S	SMR40	100210	02/09/2008	02/10/2009
Turn Table	HD	DT420	N/A	N.C.R	N.C.R
Antenna Tower	HD	MA240-N	240/657	N.C.R	N.C.R
Controller	HD	HD100	N/A	N.C.R	N.C.R
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-10M	10m	10/09/2007	10/08/2008
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-3M	3m	10/09/2007	10/08/2008
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-0.5M	0.5m	10/09/2007	10/08/2008
Site NSA	SGS	966 chamber	N/A	11/17/2007	11/16/2008
Attenuator	Mini-Circult	BW-S10W5	N/A	09/23/2007	09/22/2008
Dipole Antenna	SCHWAZBECK	VHAP	908/909	06/09/2007	06/10/2008
Dipole Antenna	SCHWAZBECK	UHAP	891/892	06/09/2007	06/10/2008
Horn antenna	SCHWAZBECK	BBHA 9120D	N/A	08/16/2007	08/15/2008

Measurement Result

Refer to attach tabular data sheets.

Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Mode	: TX CH Low E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 824.20 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Ver
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Output (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
51.34	42.85	V	-64.73	-0.58	0.91	-66.21	-13.00	-53.21
101.78	42.84	V	-60.64	-7.76	1.23	-69.63	-13.00	-56.63
140.58	35.99	V	-62.77	-7.79	1.42	-71.98	-13.00	-58.98
177.44	33.78	V	-66.29	-7.82	1.52	-75.64	-13.00	-62.64
290.93	31.84	V	-67.94	-7.91	1.99	-77.84	-13.00	-64.84
824.00	83.62	V	-3.71	-7.87	3.64	-15.23	-13.00	-2.23
1648.40	56.34	V	-50.70	9.29	5.06	-46.47	-13.00	-33.47
2463.00	57.72	V	-46.40	10.08	6.28	-42.61	-13.00	-29.61
2472.60	---	V		10.08	6.30		-13.00	
3296.80	---	V		12.17	7.26		-13.00	
4108.00	49.01	V	-50.81	12.61	8.32	-46.52	-13.00	-33.52
4121.00	---	V		12.61	8.33		-13.00	
4945.20	---	V		12.65	9.19		-13.00	
5769.40	---	V		13.55	9.80		-13.00	
6593.60	---	V		12.05	10.61		-13.00	
7417.80	---	V		11.49	11.28		-13.00	
8242.00	---	V		11.48	12.26		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Mode	: TX CH Low E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 824.20 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Hor
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
101.78	45.98	H	-57.06	-7.76	1.23	-66.04	-13.00	-53.04
140.58	36.68	H	-62.77	-7.79	1.42	-71.98	-13.00	-58.98
140.58	34.01	H	-65.44	-7.79	1.42	-74.65	-13.00	-61.65
177.44	34.01	H	-66.34	-7.82	1.52	-75.68	-13.00	-62.68
426.73	31.99	H	-63.85	-7.68	2.49	-74.02	-13.00	-61.02
824.00	76.01	H	-11.65	-7.87	3.64	-23.17	-13.00	-10.17
1648.40	---	H		9.29	5.06		-13.00	
2463.00	59.10	H	-45.01	10.08	6.28	-41.22	-13.00	-28.22
2472.60	---	H		10.08	6.30		-13.00	
3296.80	---	H		12.17	7.26		-13.00	
4108.00	56.24	H	-43.46	12.61	8.32	-39.16	-13.00	-26.16
4121.00	---	H		12.61	8.33		-13.00	
4945.20	---	H		12.65	9.19		-13.00	
5769.40	---	H		13.55	9.80		-13.00	
6593.60	---	H		12.05	10.61		-13.00	
7417.80	---	H		11.49	11.28		-13.00	
8242.00	---	H		11.48	12.26		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Mode	: TX CH Mid E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 836.60 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Ver
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
101.78	42.15	V	-61.33	-7.76	1.23	-70.32	-13.00	-57.32
140.58	35.27	V	-63.49	-7.79	1.42	-72.70	-13.00	-59.70
177.44	33.67	V	-66.40	-7.82	1.52	-75.75	-13.00	-62.75
276.38	33.52	V	-66.59	-7.91	1.99	-76.48	-13.00	-63.48
366.59	33.04	V	-64.28	-7.65	2.46	-74.38	-13.00	-61.38
1673.20	---	V		9.36	5.10		-13.00	
2498.00	53.75	V	-50.16	10.06	6.33	-46.43	-13.00	-33.43
2509.80	---	V		10.09	6.35		-13.00	
3346.40	---	V		12.28	7.29		-13.00	
4178.00	44.05	V	-55.53	12.62	8.39	-51.30	-13.00	-38.30
4183.00	---	V		12.62	8.40		-13.00	
5019.60	---	V		12.67	9.26		-13.00	
5856.20	---	V		13.68	9.85		-13.00	
6692.80	---	V		11.95	10.74		-13.00	
7529.40	---	V		11.45	11.35		-13.00	
8366.00	---	V		11.59	12.43		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belongs to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Mode	: TX CH Mid E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 836.60 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Hor
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
65.89	37.64	H	-74.21	-0.83	0.98	-76.02	-13.00	-63.02
101.78	45.06	H	-57.98	-7.76	1.23	-66.96	-13.00	-53.96
140.58	36.45	H	-63.00	-7.79	1.42	-72.21	-13.00	-59.21
177.44	33.57	H	-66.78	-7.82	1.52	-76.12	-13.00	-63.12
502.39	31.71	H	-62.10	-7.72	2.73	-72.55	-13.00	-59.55
1673.20	---	H		9.36	5.10		-13.00	
2498.00	57.23	H	-46.68	10.06	6.33	-42.95	-13.00	-29.95
2509.80	---	H		10.09	6.35		-13.00	
3346.40	---	H		12.28	7.29		-13.00	
4183.00	---	H		12.62	8.40		-13.00	
5019.60	45.63	H	-50.62	12.67	9.26	-47.21	-13.00	-34.21
5856.20	---	H		13.68	9.85		-13.00	
6692.80	---	H		11.95	10.74		-13.00	
7529.40	---	H		11.45	11.35		-13.00	
8366.00	---	H		11.59	12.43		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Mode	: TX CH High E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 848.80 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Ver
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
75.59	38.49	V	-73.03	-1.85	1.05	-75.94	-13.00	-62.94
101.78	42.10	V	-61.38	-7.76	1.23	-70.37	-13.00	-57.37
145.43	34.09	V	-64.08	-7.80	1.44	-73.32	-13.00	-60.32
177.44	33.52	V	-66.55	-7.82	1.52	-75.90	-13.00	-62.90
649.83	32.02	V	-58.41	-7.81	3.00	-69.22	-13.00	-56.22
850.00	79.82	V	-6.89	-7.88	3.75	-18.52	-13.00	-5.52
1697.60	---	V		9.44	5.14		-13.00	
2533.00	52.35	V	-51.47	10.16	6.38	-47.69	-13.00	-34.69
2546.40	---	V		10.20	6.40		-13.00	
3395.20	---	V		12.38	7.33		-13.00	
4244.00	---	V		12.63	8.46		-13.00	
5088.00	38.96	V	-57.21	12.74	9.31	-53.78	-13.00	-40.78
5092.80	---	V		12.74	9.32		-13.00	
5941.60	---	V		13.81	9.89		-13.00	
6790.40	---	V		11.86	10.87		-13.00	
7639.20	---	V		11.40	11.48		-13.00	
8488.00	---	V		11.70	12.59		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Mode	: TX CH High E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 848.80 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Hor
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
65.89	37.46	H	-74.39	-0.83	0.98	-76.20	-13.00	-63.20
101.78	44.64	H	-58.40	-7.76	1.23	-67.38	-13.00	-54.38
138.64	36.24	H	-63.39	-7.79	1.41	-72.59	-13.00	-59.59
201.69	32.91	H	-68.86	-7.84	1.58	-78.28	-13.00	-65.28
252.13	33.71	H	-67.14	-7.89	1.99	-77.01	-13.00	-64.01
850.00	75.32	H	-11.67	-7.88	3.75	-23.30	-13.00	-10.30
1697.60	---	H		9.44	5.14		-13.00	
2533.00	52.35	H	-51.46	10.16	6.38	-47.69	-13.00	-34.69
2546.40	---	H		10.20	6.40		-13.00	
3395.20	---	H		12.38	7.33		-13.00	
4244.00	---	H		12.63	8.46		-13.00	
5088.00	38.96	H	-57.15	12.74	9.31	-53.72	-13.00	-40.72
5092.80	---	H		12.74	9.32		-13.00	
5941.60	---	H		13.81	9.89		-13.00	
6790.40	---	H		11.86	10.87		-13.00	
7639.20	---	H		11.40	11.48		-13.00	
8488.00	---	H		11.70	12.59		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: PCS 1900 Mode

Operation Mode	: TX CH Low E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 1850.20MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Ver
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Output (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
96.93	43.11	V	-60.80	-7.76	1.20	-69.76	-13.00	-56.76
143.49	35.73	V	-62.67	-7.79	1.43	-71.90	-13.00	-58.90
177.44	34.08	V	-65.99	-7.82	1.52	-75.34	-13.00	-62.34
252.13	31.73	V	-68.92	-7.89	1.99	-78.80	-13.00	-65.80
809.88	31.73	V	-55.93	-7.87	3.58	-67.39	-13.00	-54.39
1850.00	76.77	V	-30.19	9.90	5.41	-25.70	-13.00	-12.70
3688.00	41.11	V	-60.53	12.61	7.71	-55.63	-13.00	-42.63
3700.40	---	V		12.61	7.73		-13.00	
5543.00	47.08	V	-48.15	13.21	9.68	-44.61	-13.00	-31.61
5550.60	---	V		13.23	9.68		-13.00	
7400.80	---	V		11.50	11.28		-13.00	
9251.00	---	V		11.92	13.10		-13.00	
11101.20	---	V		11.66	14.33		-13.00	
12951.40	---	V		13.63	15.98		-13.00	
14801.60	---	V		12.76	17.27		-13.00	
16651.80	---	V		15.92	19.04		-13.00	
18502.00	---	V		18.75	21.21		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: PCS 1900 Mode

Operation Mode	: TX CH Low E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 1850.20MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Hor
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Output (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
143.49	35.73	H	-63.45	-7.79	1.43	-72.68	-13.00	-59.68
177.44	34.42	H	-65.93	-7.82	1.52	-75.27	-13.00	-62.27
269.59	33.27	H	-67.12	-7.90	1.99	-77.01	-13.00	-64.01
518.88	31.87	H	-61.40	-7.74	2.73	-71.87	-13.00	-58.87
628.49	31.95	H	-58.94	-7.80	2.97	-69.72	-13.00	-56.72
1850.00	81.15	H	-25.74	9.90	5.41	-21.25	-13.00	-8.25
3688.00	44.56	H	-56.85	12.61	7.71	-51.95	-13.00	-38.95
3700.40	---	H		12.61	7.73		-13.00	
5543.00	41.26	H	-53.89	13.21	9.68	-50.35	-13.00	-37.35
5550.60	---	H		13.23	9.68		-13.00	
7400.80	---	H		11.50	11.28		-13.00	
9251.00	---	H		11.92	13.10		-13.00	
11101.20	---	H		11.66	14.33		-13.00	
12951.40	---	H		13.63	15.98		-13.00	
14801.60	---	H		12.76	17.27		-13.00	
16651.80	---	H		15.92	19.04		-13.00	
18502.00	---	H		18.75	21.21		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: PCS 1900 Mode

Operation Mode	: TX CH Mid E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 1880MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Ver
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
150.28	34.26	V	-63.38	-7.80	1.47	-72.64	-13.00	-59.64
177.44	33.20	V	-66.87	-7.82	1.52	-76.22	-13.00	-63.22
250.19	31.96	V	-68.74	-7.89	1.99	-78.61	-13.00	-65.61
426.73	31.17	V	-64.12	-7.68	2.49	-74.29	-13.00	-61.29
596.48	32.30	V	-58.37	-7.79	2.93	-69.09	-13.00	-56.09
3760.00	43.49	V	-57.81	12.60	7.82	-53.03	-13.00	-40.03
5640.00	---	V		13.36	9.73		-13.00	
5634.00	45.72	V	-49.25	13.35	9.73	-45.63	-13.00	-32.63
7520.00	---	V		11.45	11.33		-13.00	
9400.00	---	V		11.93	13.15		-13.00	
11280.00	---	V		11.92	14.56		-13.00	
13160.00	---	V		13.33	16.11		-13.00	
15040.00	---	V		13.76	17.57		-13.00	
16920.00	---	V		15.27	19.66		-13.00	
18800.00	---	V		18.68	21.34		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: PCS 1900 Mode

Operation Mode	: TX CH Mid E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 1880MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Hor
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
126.03	37.80	H	-62.99	-7.78	1.35	-72.12	-13.00	-59.12
140.58	36.10	H	-63.35	-7.79	1.42	-72.56	-13.00	-59.56
177.44	33.60	H	-66.75	-7.82	1.52	-76.09	-13.00	-63.09
276.38	32.99	H	-67.23	-7.91	1.99	-77.12	-13.00	-64.12
594.54	32.22	H	-59.49	-7.79	2.92	-70.20	-13.00	-57.20
3760.00	43.09	H	-58.02	12.60	7.82	-53.23	-13.00	-40.23
5634.00	44.02	H	-50.89	13.35	9.73	-47.26	-13.00	-34.26
5640.00	---	H		13.36	9.73		-13.00	
7520.00	---	H		11.45	11.33		-13.00	
9400.00	---	H		11.93	13.15		-13.00	
11280.00	---	H		11.92	14.56		-13.00	
13160.00	---	H		13.33	16.11		-13.00	
15040.00	---	H		13.76	17.57		-13.00	
16920.00	---	H		15.27	19.66		-13.00	
18800.00	---	H		18.68	21.34		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: PCS 1900 Mode

Operation Mode	: TX CH High E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 1909.8 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Ver
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
140.58	35.88	V	-62.88	-7.79	1.42	-72.09	-13.00	-59.09
158.04	35.85	V	-62.48	-7.81	1.48	-71.77	-13.00	-58.77
174.53	34.36	V	-65.45	-7.82	1.51	-74.79	-13.00	-61.79
252.13	31.76	V	-68.89	-7.89	1.99	-78.77	-13.00	-65.77
436.43	32.42	V	-62.59	-7.69	2.52	-72.80	-13.00	-59.80
1910.00	80.63	V	-26.31	10.08	5.51	-21.74	-13.00	-8.74
3814.00	42.74	V	-58.32	12.60	7.91	-53.62	-13.00	-40.62
3981.60	---	V		12.60	8.17		-13.00	
5718.00	46.29	V	-48.45	13.48	9.77	-44.74	-13.00	-31.74
5972.40	---	V		13.86	9.91		-13.00	
7963.20	---	V		11.27	11.88		-13.00	
9954.00	---	V		12.08	13.43		-13.00	
11944.80	---	V		13.08	15.21		-13.00	
13935.60	---	V		11.82	16.86		-13.00	
15926.40	---	V		17.08	18.33		-13.00	
17917.20	---	V		9.63	20.12		-13.00	
19908.00	---	V		18.88	20.85		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: PCS 1900 Mode

Operation Mode	: TX CH High E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 1909.8 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Hor
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
140.58	37.14	H	-62.31	-7.79	1.42	-71.52	-13.00	-58.52
177.44	33.97	H	-66.38	-7.82	1.52	-75.72	-13.00	-62.72
201.69	32.16	H	-69.61	-7.84	1.58	-79.03	-13.00	-66.03
252.13	31.83	H	-69.02	-7.89	1.99	-78.89	-13.00	-65.89
417.03	33.07	H	-62.95	-7.67	2.46	-73.09	-13.00	-60.09
1910.00	83.29	H	-23.56	10.08	5.51	-19.00	-13.00	-6.00
3968.00	39.61	H	-60.62	12.60	8.15	-56.17	-13.00	-43.17
3981.60	---	H		12.60	8.17		-13.00	
5718.00	42.11	H	-52.57	13.48	9.77	-48.87	-13.00	-35.87
5972.40	---	H		13.86	9.91		-13.00	
7963.20	---	H		11.27	11.88		-13.00	
9954.00	---	H		12.08	13.43		-13.00	
11944.80	---	H		13.08	15.21		-13.00	
13935.60	---	H		11.82	16.86		-13.00	
15926.40	---	H		17.08	18.33		-13.00	
17917.20	---	H		9.63	20.12		-13.00	
19908.00	---	H		18.88	20.85		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: WCDMA V Mode

Operation Mode	: TX CH Low E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 826.4 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Ver
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
101.78	41.27	V	-60.49	-7.76	1.37	-69.61	-13.00	-56.61
143.49	34.90	V	-62.99	-7.79	1.56	-72.35	-13.00	-59.35
177.44	34.32	V	-65.43	-7.82	1.66	-74.91	-13.00	-61.91
279.29	31.57	V	-67.36	-7.91	2.10	-77.36	-13.00	-64.36
489.78	31.82	V	-62.28	-7.72	2.77	-72.76	-13.00	-59.76
824.00	57.13	V	-29.25	-7.88	3.63	-40.75	-13.00	-27.75
1652.80	---	V		9.30	5.23		-13.00	
2479.20	---	V		10.07	6.54		-13.00	
3305.60	40.87	V	-58.00	12.19	7.73	-53.54	-13.00	-40.54
4132.00	---	V		12.62	8.87		-13.00	
4958.40	---	V		12.65	9.75		-13.00	
5784.80	---	V		13.58	10.55		-13.00	
6611.20	---	V		12.03	11.31		-13.00	
7437.60	---	V		11.48	12.12		-13.00	
8264.00	---	V		11.50	12.73		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: WCDMA V Mode

Operation Mode	: TX CH Low E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 826.4 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Hor
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
92.08	40.27	H	-63.32	-7.75	1.29	-72.36	-13.00	-59.36
104.69	38.32	H	-64.19	-7.76	1.38	-73.33	-13.00	-60.33
140.58	35.07	H	-63.69	-7.79	1.55	-73.02	-13.00	-60.02
177.44	34.42	H	-65.48	-7.82	1.66	-74.96	-13.00	-61.96
426.73	32.57	H	-62.50	-7.68	2.59	-72.77	-13.00	-59.77
824.00	60.41	H	-25.86	-7.88	3.63	-37.36	-13.00	-24.36
1652.80	---	H		9.30	5.23		-13.00	
2479.20	---	H		10.07	6.54		-13.00	
2484.00	46.87	H	-53.96	10.07	6.55	-50.44	-13.00	-37.44
3305.60	---	H		12.19	7.73		-13.00	
4132.00	---	H		12.62	8.87		-13.00	
4958.40	---	H		12.65	9.75		-13.00	
5784.80	---	H		13.58	10.55		-13.00	
6611.20	---	H		12.03	11.31		-13.00	
7437.60	---	H		11.48	12.12		-13.00	
8264.00	---	H		11.50	12.73		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: WCDMA V Mode

Operation Mode	: TX CH Mid E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 836.60 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Ver
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
72.68	40.71	V	-70.96	-1.45	1.18	-73.58	-13.00	-60.58
92.08	40.79	V	-62.14	-7.75	1.29	-71.18	-13.00	-58.18
104.69	38.42	V	-63.07	-7.76	1.38	-72.21	-13.00	-59.21
143.49	34.02	V	-63.87	-7.79	1.56	-73.23	-13.00	-60.23
177.44	35.69	V	-64.06	-7.82	1.66	-73.54	-13.00	-60.54
1658.00	35.69	V	-68.89	9.32	5.24	-64.81	-13.00	-51.81
1672.00	58.99	V	-45.57	9.36	5.27	-41.48	-13.00	-28.48
2508.00	---	V		10.08	6.58		-13.00	
3338.00	40.59	V	-58.27	12.26	7.78	-53.79	-13.00	-40.79
3344.00	---	V		12.27	7.79		-13.00	
4180.00	---	V		12.62	8.93		-13.00	
5016.00	---	V		12.67	9.81		-13.00	
5852.00	---	V		13.68	10.62		-13.00	
6688.00	---	V		11.96	11.39		-13.00	
7524.00	---	V		11.45	12.20		-13.00	
8360.00	---	V		11.58	12.81		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belongs to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: WCDMA V Mode

Operation Mode	: TX CH Mid E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 836.60 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Hor
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
72.68	37.54	H	-74.79	-1.45	1.18	-77.41	-13.00	-64.41
92.08	41.53	H	-62.06	-7.75	1.29	-71.10	-13.00	-58.10
104.69	38.10	H	-64.41	-7.76	1.38	-73.55	-13.00	-60.55
140.58	34.13	H	-64.63	-7.79	1.55	-73.96	-13.00	-60.96
177.44	34.56	H	-65.34	-7.82	1.66	-74.82	-13.00	-61.82
1672.00	---	H		9.36	5.27		-13.00	
2498.00	47.85	H	-52.89	10.06	6.57	-49.40	-13.00	-36.40
2508.00	---	H		10.08	6.58		-13.00	
3344.00	---	H		12.27	7.79		-13.00	
4180.00	---	H		12.62	8.93		-13.00	
5016.00	---	H		12.67	9.81		-13.00	
5852.00	---	H		13.68	10.62		-13.00	
6688.00	---	H		11.96	11.39		-13.00	
7524.00	---	H		11.45	12.20		-13.00	
8360.00	---	H		11.58	12.81		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: WCDMA V Mode

Operation Mode	: TX CH High E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 846.6 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Ver
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
101.78	40.70	V	-61.06	-7.76	1.37	-70.18	-13.00	-57.18
140.58	35.27	V	-62.89	-7.79	1.55	-72.23	-13.00	-59.23
177.44	34.39	V	-65.36	-7.82	1.66	-74.84	-13.00	-61.84
252.13	32.40	V	-67.42	-7.89	2.00	-77.31	-13.00	-64.31
426.73	32.09	V	-62.57	-7.68	2.59	-72.84	-13.00	-59.84
850.00	55.71	V	-30.40	-7.88	3.68	-41.96	-13.00	-28.96
1693.20	60.81	V	-43.73	9.42	5.30	-39.61	-13.00	-26.61
2539.80	---	V		10.18	6.62		-13.00	
3373.00	40.57	V	-58.29	12.33	7.83	-53.78	-13.00	-40.78
3386.40	---	V		12.36	7.85		-13.00	
4233.00	---	V		12.63	8.99		-13.00	
5079.60	---	V		12.73	9.87		-13.00	
5926.20	---	V		13.79	10.69		-13.00	
6772.80	---	V		11.87	11.47		-13.00	
7619.40	---	V		11.41	12.26		-13.00	
8466.00	---	V		11.68	12.89		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: WCDMA V Mode

Operation Mode	: TX CH High E2 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 846.6 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Hor
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
65.89	36.41	H	-75.44	-0.83	1.12	-77.39	-13.00	-64.39
92.08	39.54	H	-64.05	-7.75	1.29	-73.09	-13.00	-60.09
140.58	34.37	H	-64.39	-7.79	1.55	-73.72	-13.00	-60.72
177.44	34.21	H	-65.69	-7.82	1.66	-75.17	-13.00	-62.17
332.64	31.75	H	-65.61	-7.74	2.29	-75.64	-13.00	-62.64
850.00	62.53	H	-23.66	-7.88	3.68	-35.22	-13.00	-22.22
1693.20	69.13	H	-35.22	9.42	5.30	-31.10	-13.00	-18.10
2533.00	44.45	H	-56.19	10.16	6.61	-52.64	-13.00	-39.64
2539.80	---	H		10.18	6.62		-13.00	
3386.40	---	H		12.36	7.85		-13.00	
4233.00	---	H		12.63	8.99		-13.00	
5079.60	---	H		12.73	9.87		-13.00	
5926.20	---	H		13.79	10.69		-13.00	
6772.80	---	H		11.87	11.47		-13.00	
7619.40	---	H		11.41	12.26		-13.00	
8466.00	---	H		11.68	12.89		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: WCDMA II Mode

Operation Mode : TX CH Low E1 Mode
Fundamental Frequency : 1852.4MHz
Temperature : 25℃
Humidity : 65%

Test Date: Mar. 21, 2008
Test By: Bondi
Pol: Ver

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
143.49	37.53	V	-60.36	-7.79	1.56	-69.72	-13.00	-56.72
177.44	33.77	V	-65.98	-7.82	1.66	-75.46	-13.00	-62.46
252.13	32.22	V	-67.60	-7.89	2.00	-77.49	-13.00	-64.49
426.73	31.47	V	-63.19	-7.68	2.59	-73.46	-13.00	-60.46
643.04	32.72	V	-56.29	-7.81	3.14	-67.24	-13.00	-54.24
1850.00	57.12	V	-47.27	9.90	5.56	-42.93	-13.00	-29.93
3704.80	---	V		12.61	8.31		-13.00	
3709.00	38.34	V	-59.55	12.61	8.32	-55.26	-13.00	-42.26
5557.20	---	V		13.24	10.33		-13.00	
7409.60	---	V		11.49	12.09		-13.00	
9262.00	---	V		11.92	13.51		-13.00	
11114.40	---	V		11.68	15.12		-13.00	
12966.80	---	V		13.62	16.61		-13.00	
14819.20	---	V		12.83	17.96		-13.00	
16671.60	---	V		15.87	19.15		-13.00	
18524.00	---	V		18.74	10.86		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: WCDMA II Mode

Operation Mode : TX CH Low E1 Mode
Fundamental Frequency : 1852.4MHz
Temperature : 25℃
Humidity : 65%

Test Date: Mar. 21, 2008
Test By: Bondi
Pol: Hor

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
99.84	41.81	H	-61.20	-7.76	1.36	-70.32	-13.00	-57.32
126.03	35.96	H	-64.32	-7.78	1.48	-73.58	-13.00	-60.58
177.44	33.97	H	-65.93	-7.82	1.66	-75.41	-13.00	-62.41
203.63	32.72	H	-68.75	-7.84	1.73	-78.33	-13.00	-65.33
463.59	31.56	H	-62.21	-7.71	2.70	-72.61	-13.00	-59.61
1850.00	63.07	H	-41.11	9.90	5.56	-36.77	-13.00	-23.77
3704.80	---	H		12.61	8.31		-13.00	
3863.00	38.96	H	-58.35	12.60	8.53	-54.28	-13.00	-41.28
5557.20	---	H		13.24	10.33		-13.00	
7409.60	---	H		11.49	12.09		-13.00	
9262.00	---	H		11.92	13.51		-13.00	
11114.40	---	H		11.68	15.12		-13.00	
12966.80	---	H		13.62	16.61		-13.00	
14819.20	---	H		12.83	17.96		-13.00	
16671.60	---	H		15.87	19.15		-13.00	
18524.00	---	H		18.74	10.86		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: WCDMA II Mode

Operation Mode	: TX CH Mid E1 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 1880MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Ver
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
126.03	34.13	V	-65.38	-7.78	1.48	-74.64	-13.00	-61.64
140.58	35.09	V	-63.07	-7.79	1.55	-72.41	-13.00	-59.41
218.18	31.83	V	-69.26	-7.86	1.81	-78.93	-13.00	-65.93
412.18	31.55	V	-63.57	-7.67	2.55	-73.78	-13.00	-60.78
518.88	31.74	V	-61.78	-7.74	2.86	-72.37	-13.00	-59.37
1868.00	57.78	V	-46.59	9.95	5.59	-42.23	-13.00	-29.23
3760.00	36.42	V	-61.24	12.60	8.39	-57.02	-13.00	-44.02
5640.00	---	V		13.36	10.41		-13.00	
7520.00	---	V		11.45	12.19		-13.00	
9400.00	---	V		11.93	13.61		-13.00	
11280.00	---	V		11.92	15.27		-13.00	
13160.00	---	V		13.33	16.71		-13.00	
15040.00	---	V		13.76	18.15		-13.00	
16920.00	---	V		15.27	19.32		-13.00	
18800.00	---	V		18.68	16.58		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: WCDMA II Mode

Operation Mode : TX CH Mid E1 Mode
Fundamental Frequency : 1880MHz
Temperature : 25℃
Humidity : 65%

Test Date: Mar. 21, 2008
Test By: Bondi
Pol: Hor

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
135.73	36.50	H	-62.76	-7.79	1.52	-72.08	-13.00	-59.08
177.44	34.28	H	-65.62	-7.82	1.66	-75.10	-13.00	-62.10
198.78	32.57	H	-68.99	-7.84	1.71	-78.53	-13.00	-65.53
276.38	31.98	H	-66.42	-7.91	2.08	-76.41	-13.00	-63.41
383.08	32.63	H	-64.06	-7.65	2.46	-74.17	-13.00	-61.17
1868.00	56.98	H	-47.18	9.95	5.59	-42.82	-13.00	-29.82
3760.00	---	H		12.60	8.39		-13.00	
3919.00	38.19	H	-58.87	12.60	8.61	-54.87	-13.00	-41.87
5640.00	---	H		13.36	10.41		-13.00	
7520.00	---	H		11.45	12.19		-13.00	
9400.00	---	H		11.93	13.61		-13.00	
11280.00	---	H		11.92	15.27		-13.00	
13160.00	---	H		13.33	16.71		-13.00	
15040.00	---	H		13.76	18.15		-13.00	
16920.00	---	H		15.27	19.32		-13.00	
18800.00	---	H		18.68	16.58		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: WCDMA II Mode

Operation Mode : TX CH High E1 Mode
Fundamental Frequency : 1907.6 MHz
Temperature : 25℃
Humidity : 65%

Test Date: Mar. 21, 2008
Test By: Bondi
Pol: Ver

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
101.78	39.74	V	-62.02	-7.76	1.37	-71.14	-13.00	-58.14
143.49	36.84	V	-61.05	-7.79	1.56	-70.41	-13.00	-57.41
342.34	31.93	V	-65.79	-7.68	2.33	-75.81	-13.00	-62.81
419.94	31.76	V	-63.11	-7.68	2.57	-73.36	-13.00	-60.36
681.84	32.37	V	-56.88	-7.84	3.24	-67.97	-13.00	-54.97
1903.00	53.15	V	-51.19	10.06	5.65	-46.78	-13.00	-33.78
1910.00	62.82	V	-41.51	10.08	5.66	-37.09	-13.00	-24.09
3815.20	47.21	V	-50.20	12.60	8.46	-46.06	-13.00	-33.06
3968.00	37.01	V	-59.71	12.60	8.68	-55.79	-13.00	-42.79
5722.80	---	V		13.48	10.49		-13.00	
7630.40	---	V		11.41	12.27		-13.00	
9538.00	---	V		11.95	13.73		-13.00	
11445.60	---	V		12.15	15.42		-13.00	
13353.20	---	V		13.00	16.81		-13.00	
15260.80	---	V		14.91	18.28		-13.00	
17168.40	---	V		14.53	19.50		-13.00	
19076.00	---	V		18.65	20.76		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: WCDMA II Mode

Operation Mode	: TX CH High E1 Mode	Test Date:	Mar. 21, 2008
Fundamental Frequency	: 1907.6 MHz	Test By:	Bondi
Temperature	: 25℃	Pol:	Hor
Humidity	: 65%		

Freq. (MHz)	SPA. Reading (dBuV)	Ant.Pol. H/V	S.G Out-put (dBm)	Antenna Gain (dB/dBi)	Cable Loss (dB)	ERP/ EIRP (dBm)	Limit (dBm)	Safe Margin (dBm)
101.78	39.46	H	-63.35	-7.76	1.37	-72.48	-13.00	-59.48
135.73	37.36	H	-61.90	-7.79	1.52	-71.22	-13.00	-58.22
201.69	32.51	H	-69.06	-7.84	1.72	-78.62	-13.00	-65.62
276.38	32.17	H	-66.23	-7.91	2.08	-76.22	-13.00	-63.22
415.09	31.82	H	-63.84	-7.67	2.56	-74.07	-13.00	-61.07
1903.00	54.16	H	-49.96	10.06	5.65	-45.55	-13.00	-32.55
1910.00	63.30	H	-40.81	10.08	5.66	-36.39	-13.00	-23.39
3815.20	---	H		12.60	8.46		-13.00	
3968.00	39.12	H	-57.71	12.60	8.68	-53.79	-13.00	-40.79
5722.80	---	H		13.48	10.49		-13.00	
7630.40	---	H		11.41	12.27		-13.00	
9538.00	---	H		11.95	13.73		-13.00	
11445.60	---	H		12.15	15.42		-13.00	
13353.20	---	H		13.00	16.81		-13.00	
15260.80	---	H		14.91	18.28		-13.00	
17168.40	---	H		14.53	19.50		-13.00	
19076.00	---	H		18.65	20.76		-13.00	

Measurement uncertainty	30MHz - 80MHz: 5.04dB
	80MHz -1000MHz: 3.76dB
	1GHz - 13GHz: 4.45dB

Remark：

1 The emission behaviors belong to narrowband spurious emission.

2 Remark"---" means that the emission level is too low to be measured

3 The result basic equation calculation is as follows:

4 ERP/EIRP (dBm) = SG Setting(dBm) + Antenna Gain (dB/dBi) – Cable loss (dB)

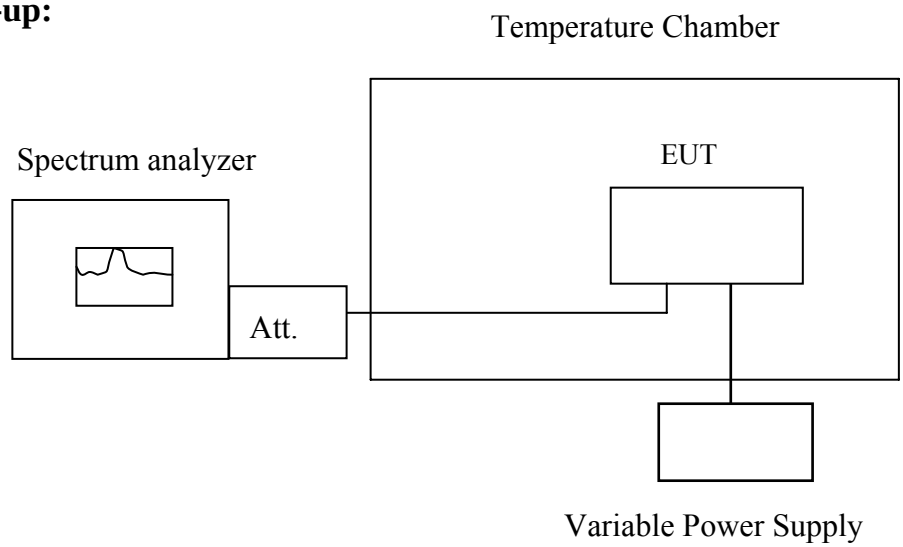
10. FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

Standard Applicable

According to FCC §2.1055(a)(1)(b).

Frequency Tolerance: 2.5 ppm

: Test Set-up:



Note : Measurement setup for testing on Antenna connector

Measurement 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 25°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.

Measurement Equipment Used:

Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Spectrum Analyzer	Agilent	E4446A	MY43360126	04/27/2007	04/27/2008
Spectrum Analyzer	Agilent	E7405A	US41160416	07/04/2007	07/03/2008
Spectrum Analyzer	R&S	FSP 40	100034	01/05/2008	01/04/2009
Communication Test	R&S	SMU200	N/A	N/A	N/A
Power Sensor	Anritsu	MA2490A	31431	07/07/2007	07/06/2008
Power Meter	Anritsu	ML2487A	6K00002070	07/07/2007	07/06/2008
Temperature Chamber	TERCHY	MHG-120LF	911009	04/26/2007	04/25/2008
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circuit	BW-S10W5	N/A	07/05/2007	07/04/2008
Attenuator	Mini-Circuit	BW-S6W5	N/A	07/05/2007	07/04/2008
Splitter	Agilent	11636B	51728	07/05/2007	07/04/2008
DC Power Supply	Agilent	6038A	2929A-07548	06/27/2007	06/26/2008

Measurement Result

Reference Frequency: GSM Mid Channel 836.6 MHz @ 25℃				
Limit: +/- 0.1 ppm = 83.6 Hz				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature (℃)	(MHz)		
3.7	-30	836.600007	-6.00	2091
3.7	-20	836.600010	-9.00	2091
3.7	-10	836.600004	-3.00	2091
3.7	0	836.599999	2.00	2091
3.7	10	836.600003	-2.00	2091
3.7	20	836.600001	0.00	2091
3.7	30	836.600000	1.00	2091
3.7	40	836.599996	5.00	2091
3.7	50	836.599997	4.00	2091

Reference Frequency: PCS Mid Channel 1880 MHz @ 25℃				
Limit: +/- 0.04 ppm = 75.2 Hz				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature (℃)	(MHz)		
3.7	-30	1879.999981	-2.00	4700
3.7	-20	1879.999989	-10.00	4700
3.7	-10	1879.999948	31.00	4700
3.7	0	1879.999952	27.00	4700
3.7	10	1879.999981	-2.00	4700
3.7	20	1879.999979	0.00	4700
3.7	30	1879.999965	14.00	4700
3.7	40	1879.999962	17.00	4700
3.7	50	1879.999956	23.00	4700

Note: The battery is rated 3.7V dc.

Reference Frequency: WCDMA V Mid Channel 836.6 MHz @ 25℃				
Limit: +/- 0.1 ppm = 83.6 Hz				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature (℃)	(MHz)		
3.7	-30	836.600004	-8.00	2091
3.7	-20	836.600006	-10.00	2091
3.7	-10	836.599999	-3.00	2091
3.7	0	836.600002	-6.00	2091
3.7	10	836.599998	-2.00	2091
3.7	20	836.599996	0.00	2091
3.7	30	836.599997	-1.00	2091
3.7	40	836.599998	-2.00	2091
3.7	50	836.599995	1.00	2091

Reference Frequency: WCDMA II Mid Channel 1880 MHz @ 25℃				
Limit: +/- 0.04 ppm = 75.2 Hz				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature (℃)	(MHz)		
3.7	-30	1880.000006	-12.00	4700
3.7	-20	1880.000002	-8.00	4700
3.7	-10	1880.000004	-10.00	4700
3.7	0	1880.000003	-9.00	4700
3.7	10	1879.999999	-5.00	4700
3.7	20	1879.999994	0.00	4700
3.7	30	1879.999998	-4.00	4700
3.7	40	1879.999997	-3.00	4700
3.7	50	1879.999995	-1.00	4700

Note: The battery is rated 3.7V dc.

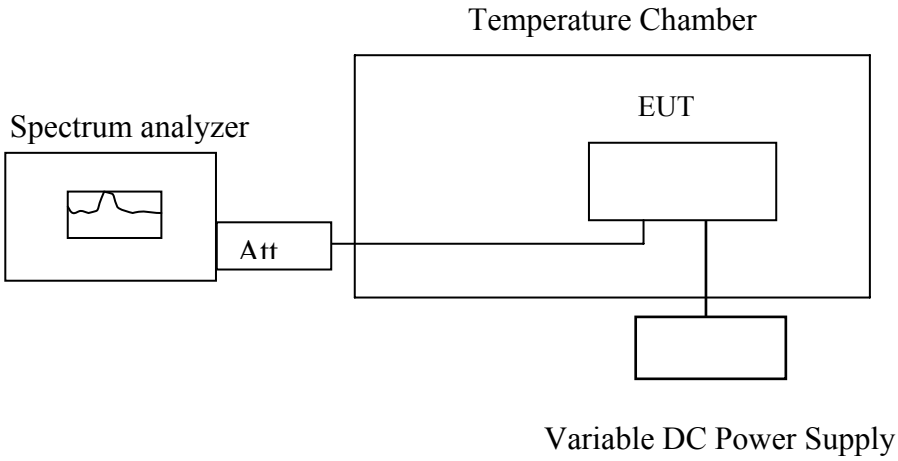
11. FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT

Standard Applicable

According to FCC §2.1055(d)(1)(2)

Frequency Tolerance: 2.5 ppm

Test Set-up:



Note: *Measurement setup for testing on Antenna connector*

Measurement Procedure

Set chamber temperature to 25℃. 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 specified extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.

Measurement Equipment Used:

Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Spectrum Analyzer	Agilent	E4446A	MY43360126	04/27/2007	04/27/2008
Spectrum Analyzer	Agilent	E7405A	US41160416	07/04/2007	07/03/2008
Spectrum Analyzer	R&S	FSP 40	100034	01/05/2008	01/04/2009
Communication Test	R&S	SMU200	N/A	N/A	N/A
Power Sensor	Anritsu	MA2490A	31431	07/07/2007	07/06/2008
Power Meter	Anritsu	ML2487A	6K00002070	07/07/2007	07/06/2008
Temperature Chamber	TERCHY	MHG-120LF	911009	04/26/2007	04/25/2008
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circuit	BW-S10W5	N/A	07/05/2007	07/04/2008
Attenuator	Mini-Circuit	BW-S6W5	N/A	07/05/2007	07/04/2008
Splitter	Agilent	11636B	51728	07/05/2007	07/04/2008
DC Power Supply	Agilent	6038A	2929A-07548	06/27/2007	06/26/2008

Measurement Result

Reference Frequency: GSM Mid Channel 836.6 MHz @ 25℃				
Limit: +/- 0.1 ppm = 83.6 Hz				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature (℃)	(MHz)		
4.26	25.00	836.599994	0.00	83.6
3.70	25.00	836.600001	-7.00	83.6
2.9 (End Point)	25.00	836.599963	31.00	83.6

Reference Frequency: PCS Mid Channel 1880 MHz @ 25℃				
Limit: +/- 0.04 ppm = 75.2 Hz				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature (℃)	(MHz)		
4.255	25	1879.999988	0.00	75.2
3.7	25	1879.999979	9.00	75.2
2.9 (Endpoint)	25	1879.999941	47.00	75.2

Note: The battery is rated 3.7V dc.

Reference Frequency: WCDMA V Mid Channel 836.6 MHz @ 25℃				
Limit: +/- 0.1 ppm = 83.6 Hz				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature (℃)	(MHz)		
4.26	25.00	836.599995	0.00	83.6
3.70	25.00	836.599996	-1.00	83.6
3.10	25.00	836.599998	-3.00	83.6
2.9 (End Point)	25.00	836.599996	1.00	83.6

Reference Frequency: WCDMA II Mid Channel 1880 MHz @ 25℃				
Limit: +/- 0.04 ppm = 75.2 Hz				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature (℃)	(MHz)		
4.255	25	1879.999997	0.00	75.2
3.7	25	1879.999996	1.00	75.2
3.1	25	1879.999998	-1.00	75.2
2.9 (Endpoint)	25	1879.999997	0.00	75.2

Note: The battery is rated 3.7V dc.

12. AC POWER LINE CONDUCTED EMISSION TEST

Standard Applicable

According to §15.207. The emission value for frequency within 150KHz to 30MHz shall not exceed criteria of below chart.

Frequency range MHz	Limits dB(uV)	
	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
Note 1.The lower limit shall apply at the transition frequencies 2.The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.		

EUT Setup

1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI C63.4-2001.
2. The EUT was plug-in DC power adaptort and was placed on the center of the back edge on the test table. The peripherals like earphone was placed on the side of the EUT. The rear of the EUT and peripherals were placed flushed with the rear of the tabletop.
3. The Power adaptor was connected with 110Vac/60Hz power source.

Measurement 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.

Measurement Equipment Used:

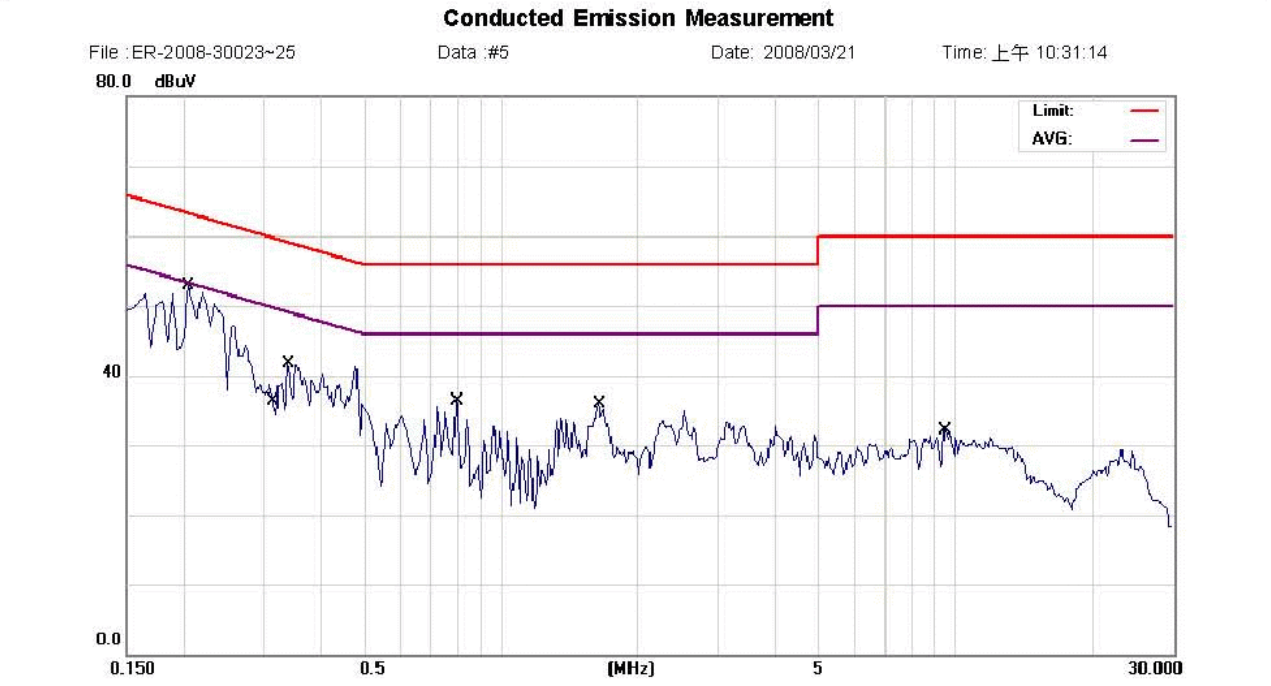
Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
EMC Analyzer	HP	8594EM	3624A00203	09/02/2007	09/03/2008
EMI Test Receiver	R&S	ESCS30	828985/004	06/09/2007	06/10/2008
Transient Limiter	HP	11947A	3107A02062	09/02/2007	09/03/2008
LISN	Rolf-Heine	NNB-2/16Z	99012	01/10/2008	01/09/2009
LISN	Rolf-Heine	NNB-2/16Z	99013	01/10/2008	01/09/2009
Coaxial Cables	N/A	No. 3, 4	N/A	12/01/2007	11/30/2008

Measurement Result

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.

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	GSM 850 LINK + AC Adapter			Test Date:	Mar. 21, 2008
Temperature:	23 ℃	Humidity:	59 %	Test By:	Bondi



Site SGS CONDUCTED #1
Limit: CISPR22 Class B Conduction(QP)
EUT: Mobile Phone
M/N: NEON 300
Note: GSM 850 LINK Charger mode

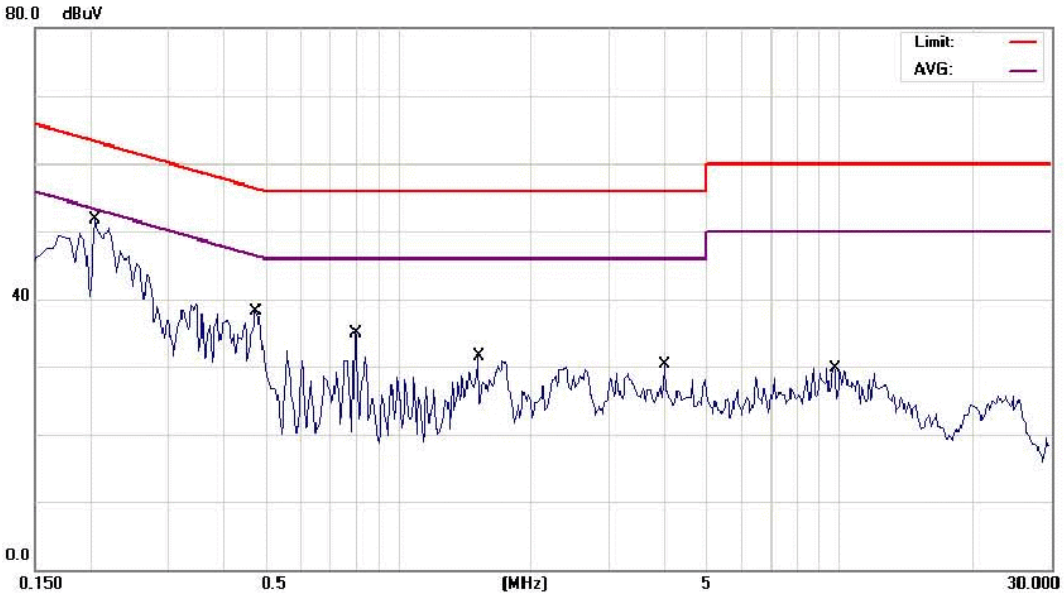
Phase: L1
Power: AC 120V/60Hz
Distance:

Temperature: 23 ℃
Humidity: 59 %
Air Pressure: hpa

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2050	52.93	0.02	52.95	63.41	-10.46	QP	
2		0.3183	35.15	0.02	35.17	59.75	-24.58	QP	
3		0.3400	41.75	0.02	41.77	59.20	-17.43	QP	
4		0.8000	36.26	0.01	36.27	56.00	-19.73	QP	
5		1.6400	35.94	0.03	35.97	56.00	-20.03	QP	
6		9.5000	31.86	0.23	32.09	60.00	-27.91	QP	

Conducted Emission Measurement

File :ER-2008-30023~25 Data :#6 Date: 2008/03/21 Time: 上午 10:34:16

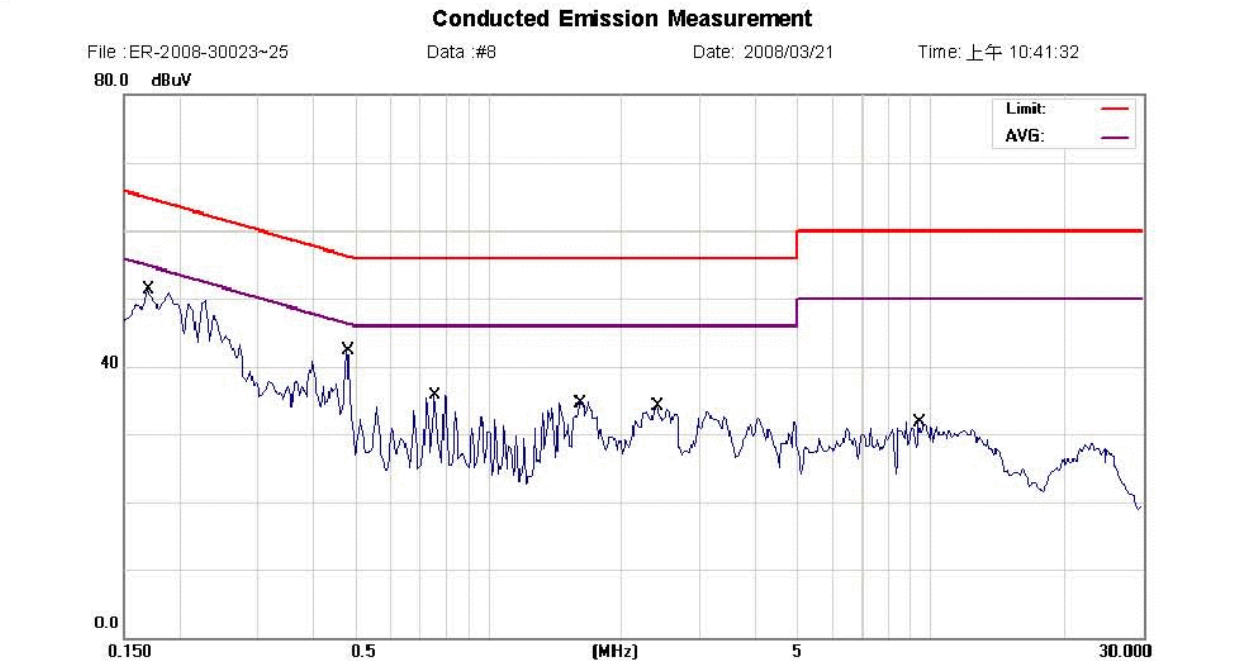


Site SGS CONDUCTED #1 Phase: N Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 59 %
EUT: Mobile Phone Distance: Air Pressure: hpa
M/N: NEON 300
Note: GSM 850 LINK Charger mode

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2050	51.59	0.02	51.61	63.41	-11.80	QP	
2		0.4750	38.17	0.02	38.19	56.43	-18.24	QP	
3		0.8000	34.90	0.01	34.91	56.00	-21.09	QP	
4		1.5200	31.44	0.03	31.47	56.00	-24.53	QP	
5		4.0250	30.22	0.07	30.29	56.00	-25.71	QP	
6		9.7400	29.57	0.23	29.80	60.00	-30.20	QP	

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	GSM 1900LINK + AC Adapter			Test Date:	Mar. 21, 2008
Temperature:	23 ℃	Humidity:	59 %	Test By:	Jazz



Site SGS CONDUCTED #1
Limit: CISPR22 Class B Conduction(QP)
EUT: Mobile Phone
M/N: NEON 300
Note: GSM 1900 LINK Charger mode

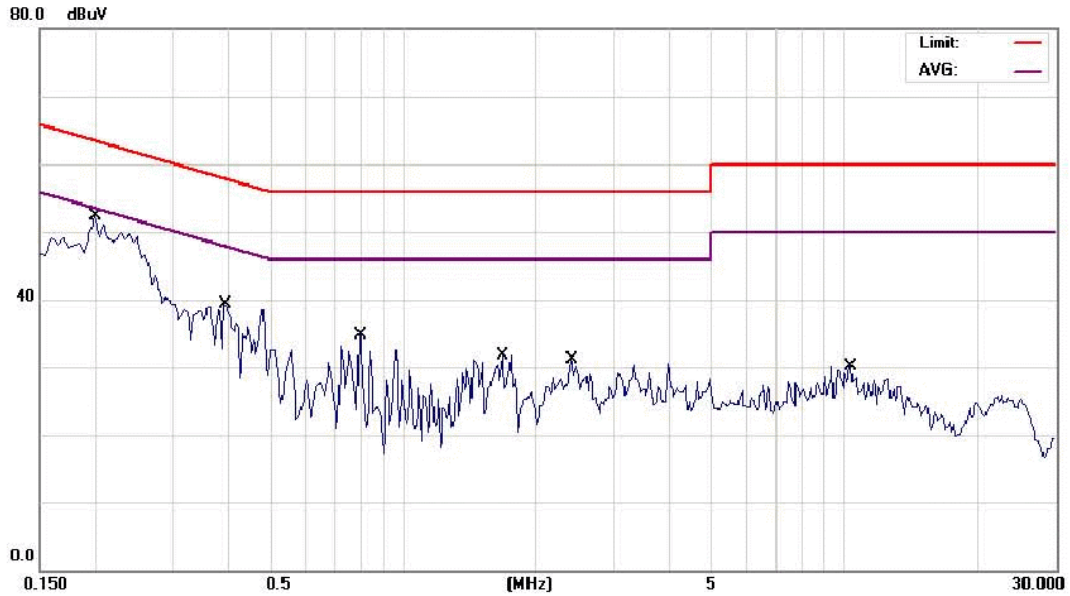
Phase: L1
Power: AC 120V/60Hz
Distance:

Temperature: 23 ℃
Humidity: 59 %
Air Pressure: hpa

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1700	50.55	0.72	51.27	64.96	-13.69	QP	
2		0.4800	42.22	0.02	42.24	56.34	-14.10	QP	
3		0.7550	35.79	0.01	35.80	56.00	-20.20	QP	
4		1.6100	34.57	0.03	34.60	56.00	-21.40	QP	
5		2.4050	33.97	0.05	34.02	56.00	-21.98	QP	
6		9.4200	31.47	0.22	31.69	60.00	-28.31	QP	

Conducted Emission Measurement

File :ER-2008-30023~25 Data :#7 Date: 2008/03/21 Time: 上午 10:38:49

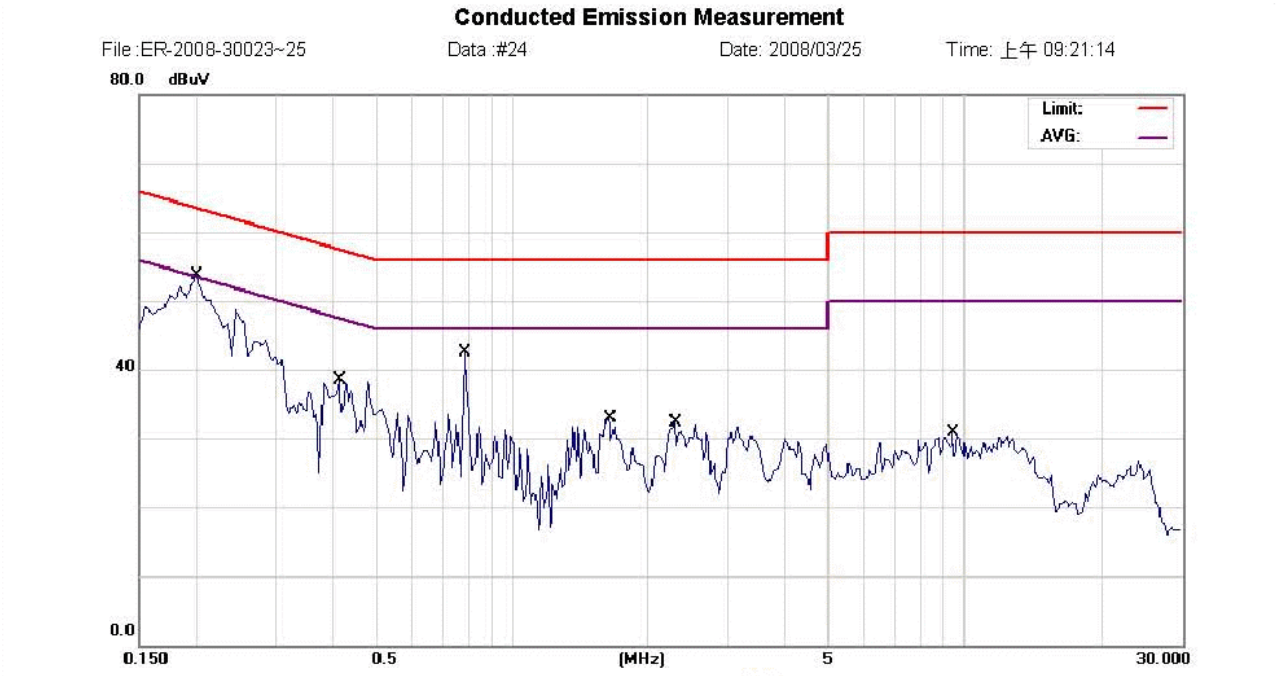


Site SGS CONDUCTED #1 Phase: N Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 59 %
EUT: Mobile Phone Distance: Air Pressure: hpa
M/N: NEON 300
Note: GSM 1900 LINK Charger mode

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2000	52.21	0.02	52.23	63.61	-11.38	QP	
2		0.3950	39.25	0.02	39.27	57.96	-18.69	QP	
3		0.8000	34.75	0.01	34.76	56.00	-21.24	QP	
4		1.6850	31.72	0.03	31.75	56.00	-24.25	QP	
5		2.4050	31.11	0.05	31.16	56.00	-24.84	QP	
6		10.3400	29.91	0.24	30.15	60.00	-29.85	QP	

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	WCDMA II Link + AC Adapter			Test Date:	Mar. 25, 2008
Temperature:	23 ℃	Humidity:	59 %	Test By:	Bondi



Site SGS CONDUCTED #1
Limit: CISPR22 Class B Conduction(QP)
EUT: Mobile Phone
M/N: NEON 300
Note: WCDMA B2 LINK Charger mode

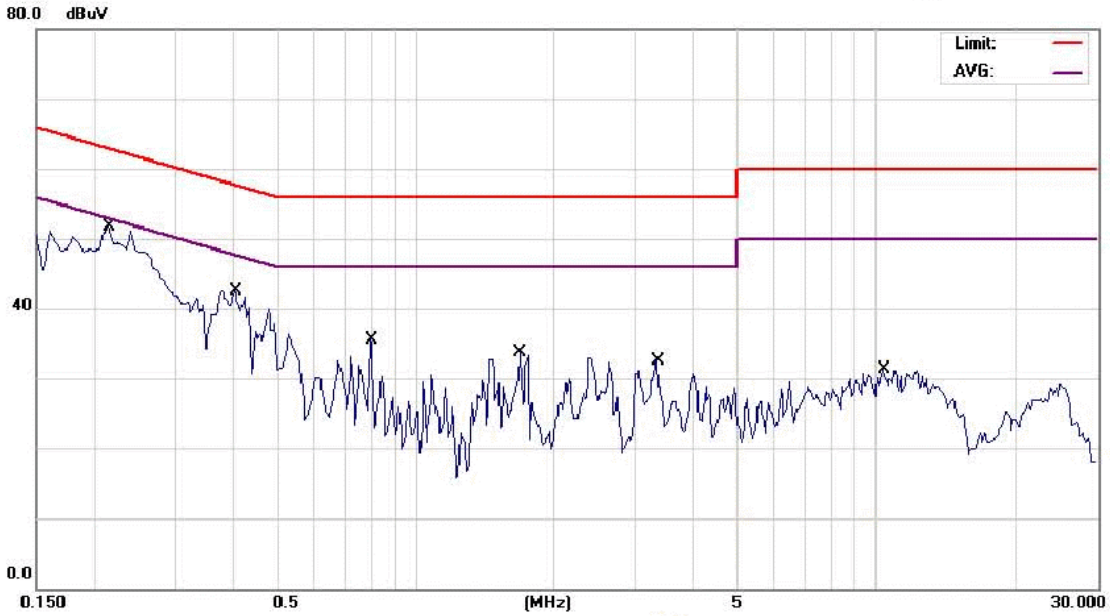
Phase: L1
Power: AC 120V/60Hz
Distance:

Temperature: 23 ℃
Humidity: 59 %
Air Pressure: hpa

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2000	53.68	0.02	53.70	63.61	-9.91	QP	
2		0.2000	29.00	0.02	29.02	53.61	-24.59	AVG	
3		0.4150	38.43	0.02	38.45	57.55	-19.10	QP	
4		0.7850	42.46	0.01	42.47	56.00	-13.53	QP	
5		0.7850	26.00	0.01	26.01	46.00	-19.99	AVG	
6		1.6400	32.89	0.03	32.92	56.00	-23.08	QP	
7		2.2850	32.25	0.04	32.29	56.00	-23.71	QP	
8		9.4200	30.72	0.22	30.94	60.00	-29.06	QP	

Conducted Emission Measurement

File :ER-2008-30023~25 Data :#23 Date: 2008/03/25 Time: 上午 09:17:26



Site SGS CONDUCTED #1
Limit: CISPR22 Class B Conduction(QP)
EUT: Mobile Phone
M/N: NEON 300
Note: WCDMA B2 LINK Charger mode

Phase: N
Power: AC 120V/60Hz
Distance:

Temperature: 23 ℃
Humidity: 59 %
Air Pressure: hpa

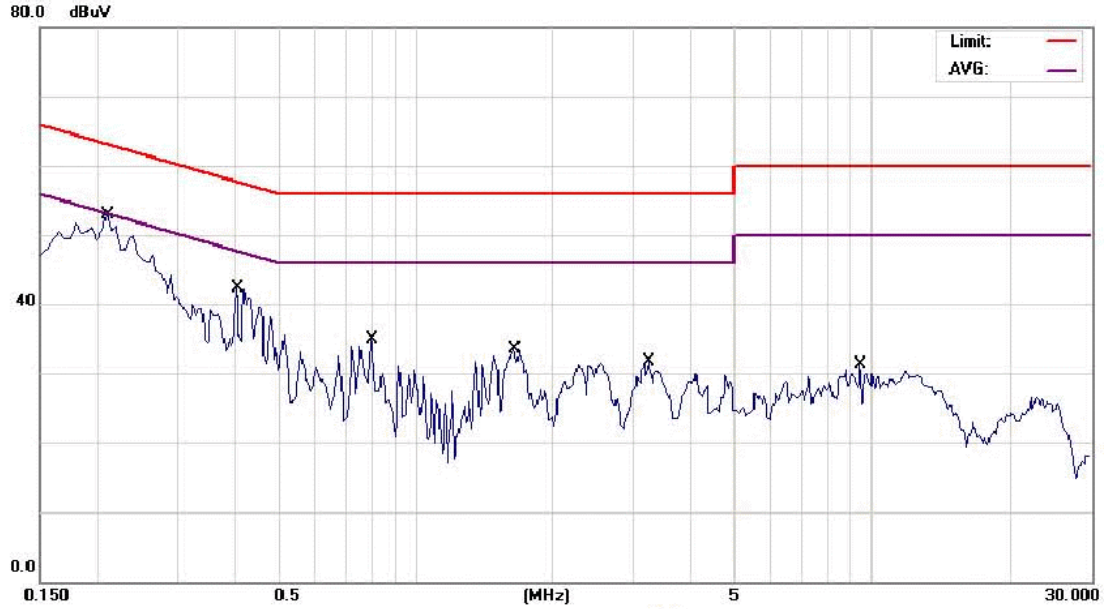
No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2150	51.59	0.02	51.61	63.01	-11.40	QP	
2		0.2150	14.00	0.02	14.02	53.01	-38.99	AVG	
3		0.4050	42.49	0.02	42.51	57.75	-15.24	QP	
4		0.4050	13.00	0.02	13.02	47.75	-34.73	AVG	
5		0.8000	35.51	0.01	35.52	56.00	-20.48	QP	
6		1.6850	33.67	0.03	33.70	56.00	-22.30	QP	
7		3.3500	32.39	0.06	32.45	56.00	-23.55	QP	
8		10.3800	30.97	0.24	31.21	60.00	-28.79	QP	

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	WCDMA V Link + AC Adapter			Test Date:	Mar. 25, 2008
Temperature:	23 ℃	Humidity:	59 %	Test By:	Bondi

Conducted Emission Measurement

File :ER-2008-30023~25 Data :#28 Date: 2008/03/25 Time: 上午 09:38:09



Site SGS CONDUCTED #1
Limit: CISPR22 Class B Conduction(QP)
EUT: Mobile Phone
M/N: NEON 300
Note: WCDMA B5 LINK Charger mode

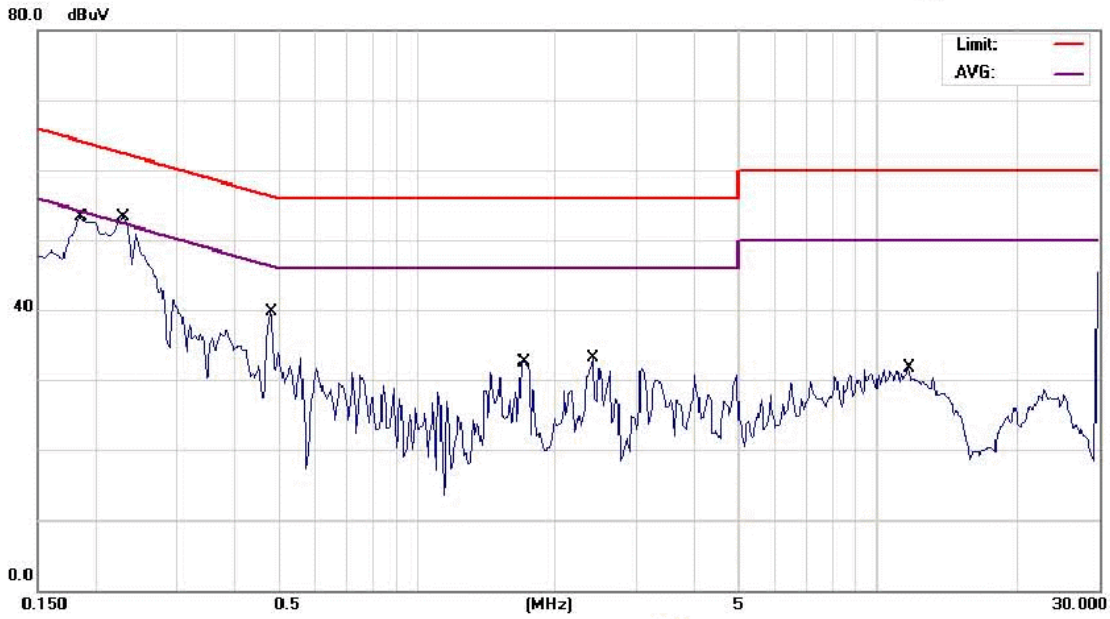
Phase: L1
Power: AC 120V/60Hz
Distance:

Temperature: 23 ℃
Humidity: 59 %
Air Pressure: hpa

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2100	52.98	0.02	53.00	63.21	-10.21	QP	
2		0.2100	31.00	0.02	31.02	53.21	-22.19	AVG	
3		0.4050	42.27	0.02	42.29	57.75	-15.46	QP	
4		0.4050	24.00	0.02	24.02	47.75	-23.73	AVG	
5		0.8000	34.83	0.01	34.84	56.00	-21.16	QP	
6		1.6400	33.44	0.03	33.47	56.00	-22.53	QP	
7		3.2450	31.55	0.06	31.61	56.00	-24.39	QP	
8		9.4200	31.17	0.22	31.39	60.00	-28.61	QP	

Conducted Emission Measurement

File :ER-2008-30023~25 Data :#27 Date: 2008/03/25 Time: 上午 09:34:09



Site SGS CONDUCTED #1 Phase: N Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 59 %
EUT: Mobile Phone Distance: Air Pressure: hpa
M/N: NEON 300
Note: WCDMA B5 LINK Charger mode

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1850	53.34	0.01	53.35	64.26	-10.91	QP	
2		0.1850	24.00	0.01	24.01	54.26	-30.25	AVG	
3	*	0.2300	53.31	0.02	53.33	62.45	-9.12	QP	
4		0.2300	21.00	0.02	21.02	52.45	-31.43	AVG	
5		0.4800	39.73	0.02	39.75	56.34	-16.59	QP	
6		1.7000	32.46	0.03	32.49	56.00	-23.51	QP	
7		2.4200	32.96	0.05	33.01	56.00	-22.99	QP	
8		11.7000	31.50	0.25	31.75	60.00	-28.25	QP	