ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

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

OF

Product Name:	**GSM 850/1900 mobile phone**
Brand Name:	**Alcatel**
Model Name:	**VLE5**
Market Name:	**OT-E161a**
FCC ID:	**RAD023**
Report No.:	**ER/2005/B0018**
Issue Date:	**Dec. 07 2005**
FCC Rule Part:	**2 & 24E& 22H**
Prepared for	**TCL & Alcatel Mobile Phones** **30/F, Times Square, 500 Zhangyang Rd., Shanghai 200122, P.R. China**
Prepared by	**SGS Taiwan Ltd.** **No. 134, Wu Kung Rd., Wuku Industrial Zone, Taipei County, Taiwan.**

VERIFICATION OF COMPLIANCE

Applicant:	TCL & Alcatel Mobile Phones
	30/F, Times Square, 500 Zhangyang Rd., Shanghai 200122, P.R. China
Equipment Under Test:	GSM 850/1900 mobile phone
FCC ID Number:	RAD023
Brand Name:	Alcatel
Model No.:	VLE5
Market Name:	OT-E161a
Model Difference:	N/A
File Number:	ER/2005/B0018
Date of test:	Nov. 30, 2005 ~ Dec. 06, 2005
Date of EUT Received:	Nov. 30, 2005

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. 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-603-1-1998 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:	Sky Wang	***Date***	Dec. 07, 2005
	Sky Wang		
Prepared By:	Gigi Yeh	***Date***	Dec. 07, 2005
	Gigi Yeh		
Approved By	Vincent Su	***Date***	Dec. 07, 2005
	Vincent Su		

Version

Version No.	Date
00	Dec. 07, 2005

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1. GENERAL INFORMATION

1.1 Product Description

Product	GSM 850/1900 mobile phone	
Model Name	VLE5	
Market Name	OT-E161a	
Model Difference:	N/A	
Trade Name	Alcatel	
Frequency Range and Power	TX: 824.2 MHz – 848.8 MHz	33 dBm
	TX: 1850.2MHz –1909.8MHz	30 dBm
Type of Emission	300KGXW	
Power Supply	Four 5V DC by AC/DC Adapters model number: 3DS09371AGAA,(supplier: Astec and Leader Electronics) model number: 3DS09371AAAA (supplier: Astec and Leader Electronics) One 5Vdc Car Charge Model number:3DS07848AAAA (supplier: Primax)	

1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **RAD023** filing to comply with Section Part 22 subpart H and Part 24 subpart E of the FCC CFR 47 Rules.

1.3 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.

1.4 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located on the address of SGS Taiwan Ltd. No. 134, Wu Kung Rd., Wuku Industrial Zone, Taipei Country, Taiwan. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 1993 and CISPR 22/EN 55022 requirements. Site No. 1(3 &10 meters) Registration Number: 94644, Anechoic chamber (3 meters) was accredited by CNLA(0513) and NVLAP (200704-0).

1.5 Special Accessories

Not available for this EUT intended for grant.

1.6 Equipment Modifications

Not available for this EUT intended for grant.

2. SYSTEM TEST CONFIGURATION

2.1 EUT Configuration

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

2.2 EUT Exercise

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

2.3 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.

2.4 Configuration of Tested System

Fig. 2-1 ConFig. 2-1 Configuration of Tested System

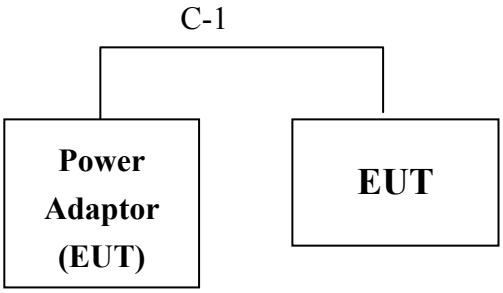


Table 2-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/ Type No.	FCC ID	Series No.	Data Cable	Power Cord
1.	N/A						

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 and band with rated data rate are 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 and GPRS with all power adaptors . The worst-case H mode for GSM 850 band and E1 mode for GSM 1900 band with power adaptor model number: 3DS09371AGAA for channel Low, Mid and High at GSM/PCS mode was reported.

5. RF POWER OUTPUT MEASUREMENT

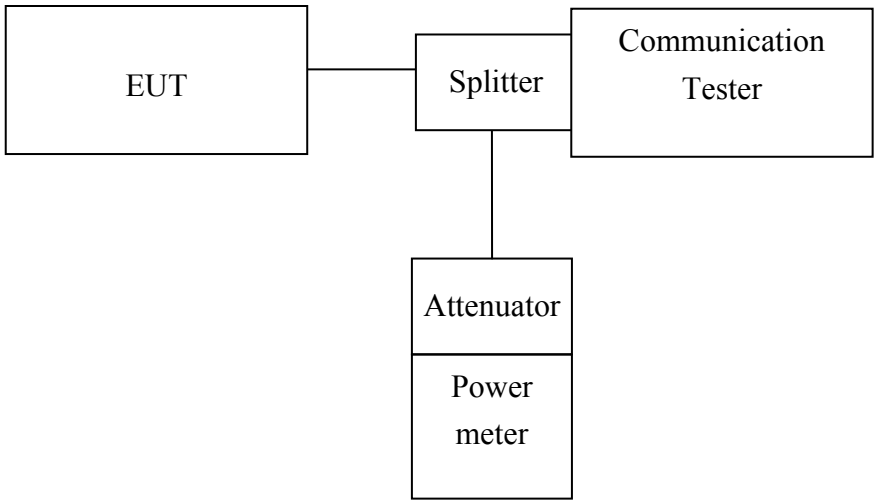
5.1 Standard Applicable

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.

5.2 Test Set-up:



Note: *Measurement setup for testing on Antenna connector*

5.3 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.

5.4 Measurement Equipment Used:

Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Spectrum Analyzer	Agilent	E4446A	MY43360126	03/29/2005	03/28/2006
Spectrum Analyzer	Agilent	7405A	US41160416	06/28/2005	06/29/2006

Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006
Power Sensor	Anritsu	MA2490A	31431	06/28/2005	06/29/2006
Power Meter	Anritsu	ML2487A	6K00002070	06/28/2005	06/29/2006
Temperature Chamber	TERCHY	MHG-120LF	911009	11/11/2005	11/12/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circult	BW-S10W5	N/A	10/07/2005	10/06/2006
Attenuator	Mini-Circult	BW-S6W5	N/A	10/07/2005	10/06/2006
Splitter	Mini-Circult	ZFSC-2-10G	N/A	10/07/2005	10/06/2006
Signal Generator	R&S	SMR40	100210	11/09/2005	11/10/2006
Diode Detector	Agilent	8471E	MY4224	N/A	N/A
AC Power Supply	APW-105N	887592	All Power	N/A	N/A

5.5 Measurement Result

EUT Mode	Frequency (MHz)	CH	Power meter Reading (dBm)	Path Loss (dB)	Peak Power (dBm)
GSM 850	824.20	128	6.27	26.42	32.69
	836.60	190	6.37	26.42	32.79
	848.80	251	6.44	26.42	32.86

EUT Mode	Frequency (MHz)	CH	Power Meter Reading (dBm)	Path Loss (dB)	Peak Power (dBm)
PCS 1900	1850.20	512	3.19	26.62	29.81
	1880.00	661	3.3	26.62	29.92
	1909.80	810	3.32	26.62	29.94

6. ERP, EIRP MEASUREMENT

6.1 Standard Applicable

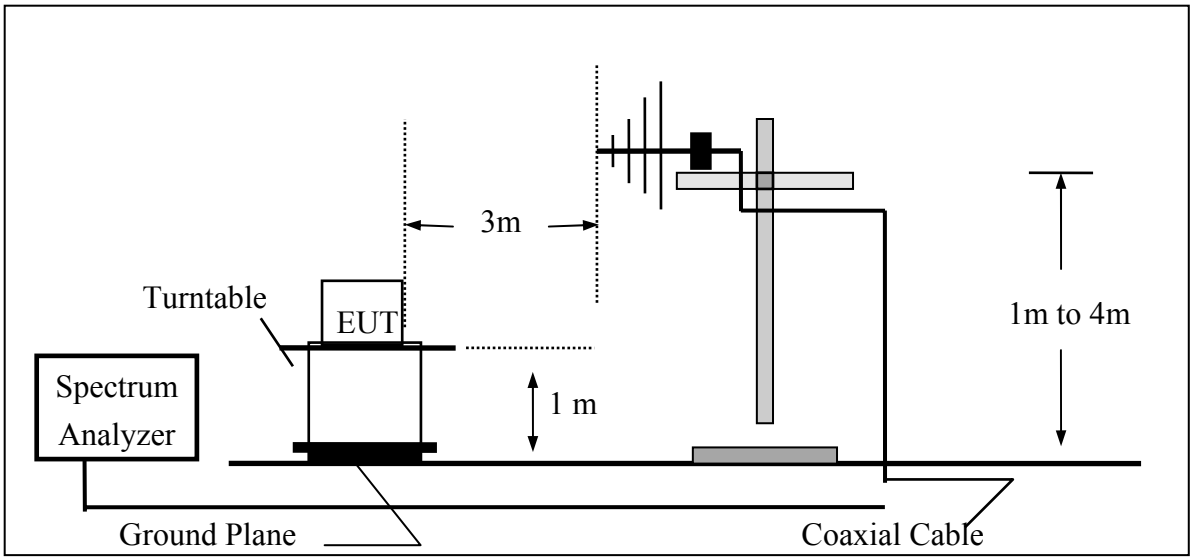
According to FCC §2.1046

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

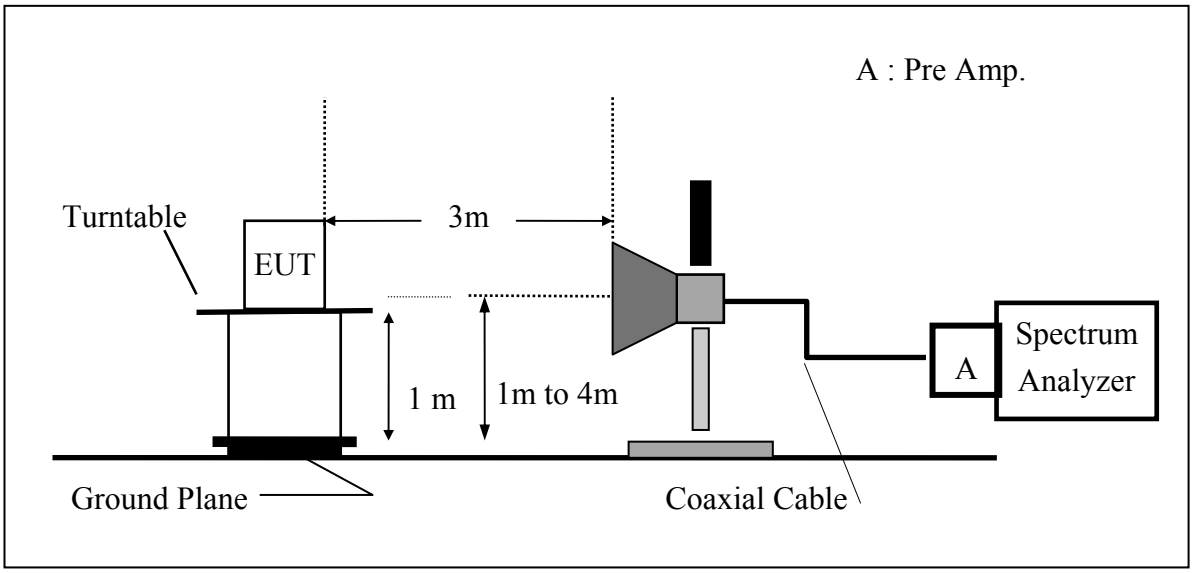
FCC 24.232(b) Mobile station are limited to 2W EIRP.

6.2 Test SET-UP (Block Diagram of Configuration)

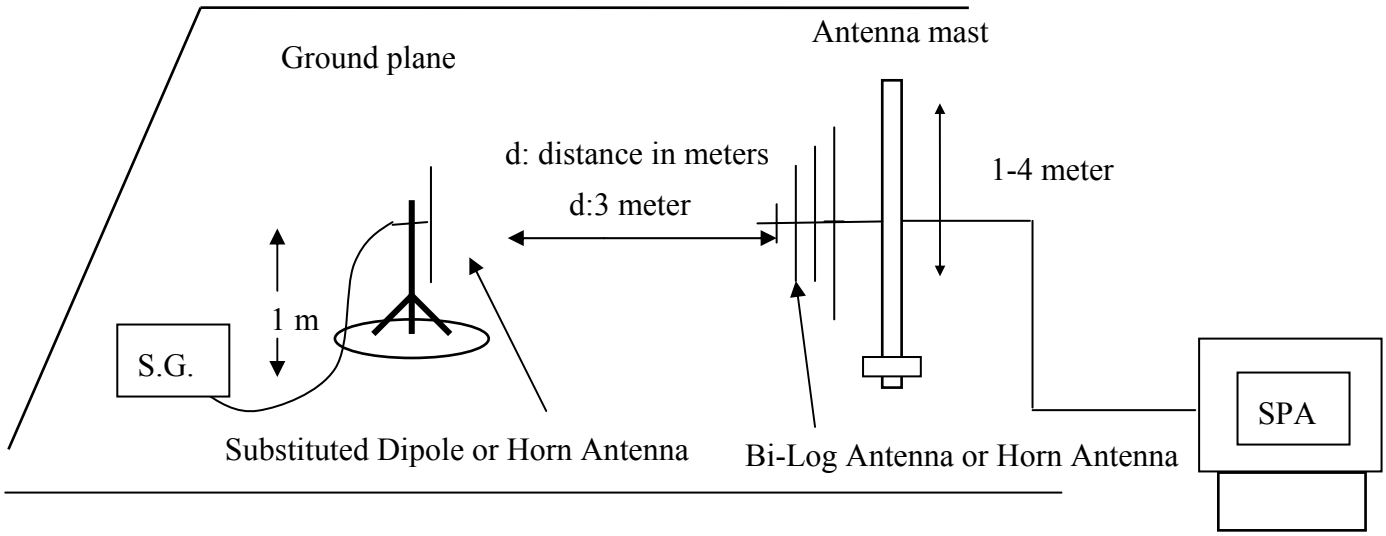
(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



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



(C) Substituted Method Test Set-UP



6.3 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 –848.80.8MHz 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)

6.4 Measurement Equipment Used:

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	R&S	FSP 40	100034	05/27/2005	05/26/2006
Spectrum Analyzer	Agilent	E7405A	US41160416	08/27/2005	08/26/2005
Bilog Antenna	SCHWAZBECK	VULB9163	152	06/03/2005	06/02/2006
Horn antenna	Schwarzbeck	BBHA 9120D	309/320	08/16/2005	08/15/2006
Pre-Amplifier	HP	8447D	2944A09469	07/19/2005	07/18/2006
Pre-Amplifier	HP	8494B	3008A00578	02/26/2005	02/25/2006
Signal Generator	R&S	SMR40	100210	02/09/2005	02/10/2006
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	10/09/2005	10/08/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-3M	3m	10/09/2005	10/08/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-0.5M	0.5m	10/09/2005	10/08/2006
Site NSA	SGS	966 chamber	N/A	11/17/2005	11/16/2006
Site NSA	SGS	10m Open-Site	N/A	10/02/2005	10/01/2006
Attenuator	Mini-Circult	BW-S10W5	N/A	10/07/2005	10/06/2006
Temperature Chamber	TERCHY	MHG-120LF	911009	10/14/2005	10/13/2006
Dipole Antenna	Schwarzbeck	VHAP	908/909	06/10/2005	06/11/2006
Dipole Antenna	Schwarzbeck	UHAP	891/892	06/10/2005	06/11/2006
Horn antenna	Schwarzbeck	BBHA 9120D	N/A	08/16/2005	08/15/2006

6.5 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	122.94	35.62	-7.87	3.64	24.10	38.45
				H	127.95	40.29	-7.87	3.64	28.77	38.45
			E1	V	122.55	35.81	-7.88	3.75	24.18	38.45
				H	126.99	39.97	-7.88	3.75	28.34	38.45
			E2	V	126.31	38.99	-7.87	3.64	27.47	38.45
				H	122.40	26.77	-7.87	5.84	13.06	38.45
	836.60	190	H	V	121.37	34.34	-7.88	3.70	22.77	38.45
				H	127.77	40.44	-7.88	3.70	28.86	38.45
			E1	V	122.30	35.27	-7.88	3.70	23.70	38.45
				H	126.14	38.81	-7.88	3.70	27.23	38.45
			E2	V	127.25	40.22	-7.88	3.70	28.65	38.45
				H	121.96	34.62	-7.88	3.70	23.05	38.45
	848.80	251	H	V	121.14	34.40	-7.88	3.75	22.78	38.45
				H	129.36	42.34	-7.88	3.75	30.71	38.45
			E1	V	122.56	35.24	-7.87	3.64	23.72	38.45
				H	126.24	38.59	-7.87	3.64	27.07	38.45
			E2	V	128.54	41.80	-7.88	3.75	30.17	38.45
				H	122.85	35.83	-7.88	3.75	24.20	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

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	127.71	20.75	9.90	5.41	25.24	33.00
				H	130.89	24.00	9.90	5.41	28.49	33.00
			E1	V	127.41	20.45	9.90	5.41	24.94	33.00
				H	131.88	24.99	9.90	5.41	29.48	33.00
			E2	V	130.62	23.66	9.90	5.41	28.15	33.00
				H	129.32	22.43	9.90	5.84	26.49	33.00
	1880.00	661	H	V	125.32	18.37	9.99	5.46	22.90	33.00
				H	130.23	23.36	9.99	5.46	27.89	33.00
			E1	V	126.20	19.25	9.99	5.46	23.78	33.00
				H	131.22	24.35	9.99	5.46	28.88	33.00
			E2	V	129.89	22.94	9.99	5.46	27.47	33.00
				H	127.99	21.12	9.99	5.46	25.65	33.00
	1909.80	810	H	V	123.38	16.44	10.08	5.51	21.01	33.00
				H	128.37	21.52	10.08	5.51	26.08	33.00
			E1	V	123.97	17.03	10.08	5.51	21.60	33.00
				H	129.77	22.92	10.08	5.51	27.48	33.00
			E2	V	128.00	21.06	10.08	5.51	25.63	33.00
				H	124.31	17.46	10.08	5.51	22.02	33.00

Remark：

(1) The RBW,VBW of SPA for frequency

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

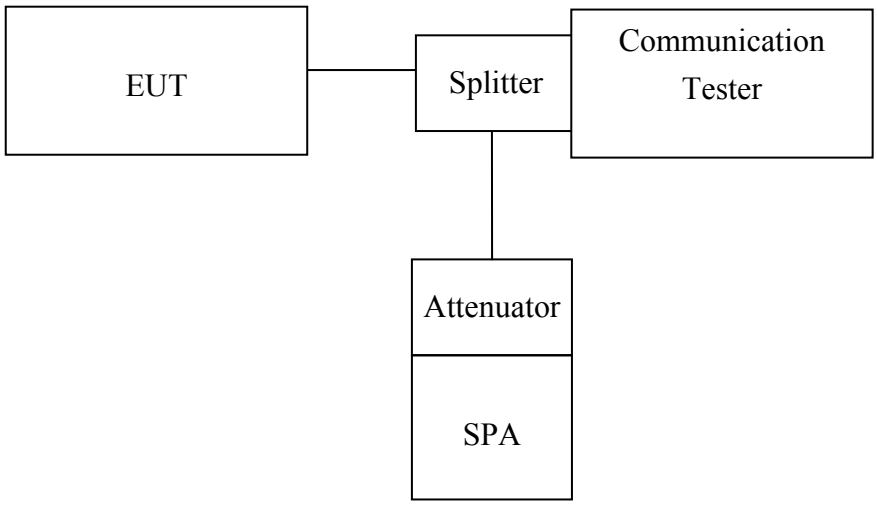
Above 1GHz was RBW= 1MHz , VBW= 3MHz

7. OCCUPIED BANDWIDTH MEASUREMENT

7.1 Standard Applicable

According to §FCC 2.1049.

7.2 Test Set-up:



Note: *Measurement setup for testing on Antenna connector*

7.3 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.

7.4 Measurement Equipment Used:

Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Spectrum Analyzer	Agilent	E4446A	MY43360126	03/29/2005	03/28/2006
Spectrum Analyzer	Agilent	7405A	US41160416	06/28/2005	06/29/2006
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006

Power Sensor	Anritsu	MA2490A	31431	06/28/2005	06/29/2006
Power Meter	Anritsu	ML2487A	6K00002070	06/28/2005	06/29/2006
Temperature Chamber	TERCHY	MHG-120LF	911009	11/11/2005	11/12/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circult	BW-S10W5	N/A	10/07/2005	10/06/2006
Attenuator	Mini-Circult	BW-S6W5	N/A	10/07/2005	10/06/2006
Splitter	Mini-Circult	ZFSC-2-10G	N/A	10/07/2005	10/06/2006
Signal Generator	R&S	SMR40	100210	11/09/2005	11/10/2006
Diode Detector	Agilent	8471E	MY4224	N/A	N/A
AC Power Supply	APW-105N	887592	All Power	N/A	N/A

7.5 Measurement Result:.

EUT Mode	Frequency (MHz)	CH	99%Bandwidth (MHz)
GSM 850	824.20	128	0.2395
	836.60	190	0.2393
	848.80	251	0.2449

EUT Mode	Frequency (MHz)	CH	99%Bandwidth (MHz)
PCS 1900	1850.20	512	0.2418
	1880.00	661	0.2385
	1909.80	810	0.2420

Figure 7-1: GSM Channel Low

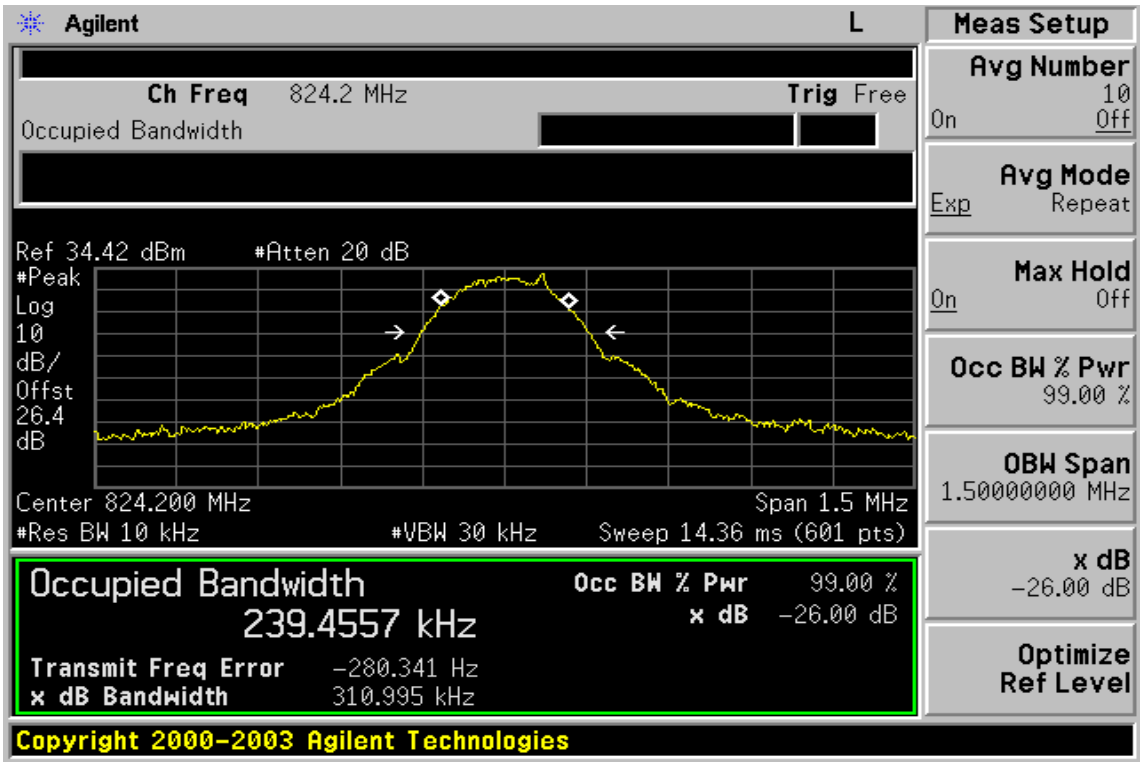


Figure 7-2 GSM Channel Mid

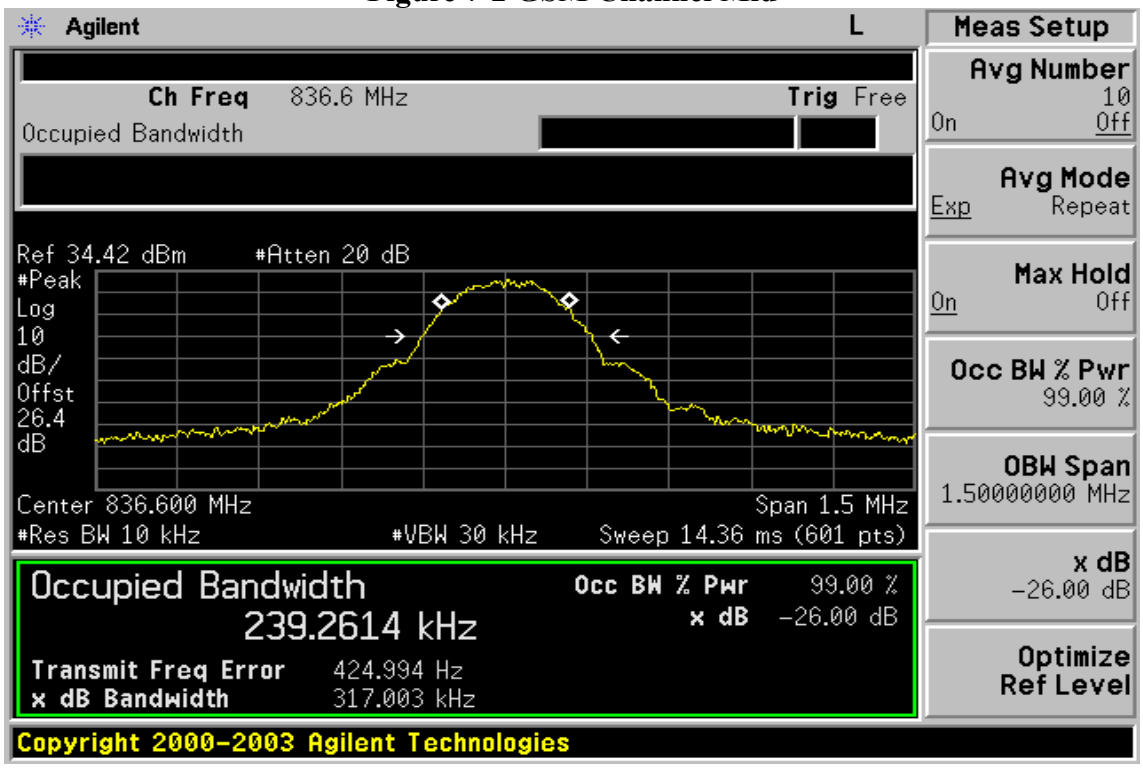


Figure 7-3: GSM Channel High

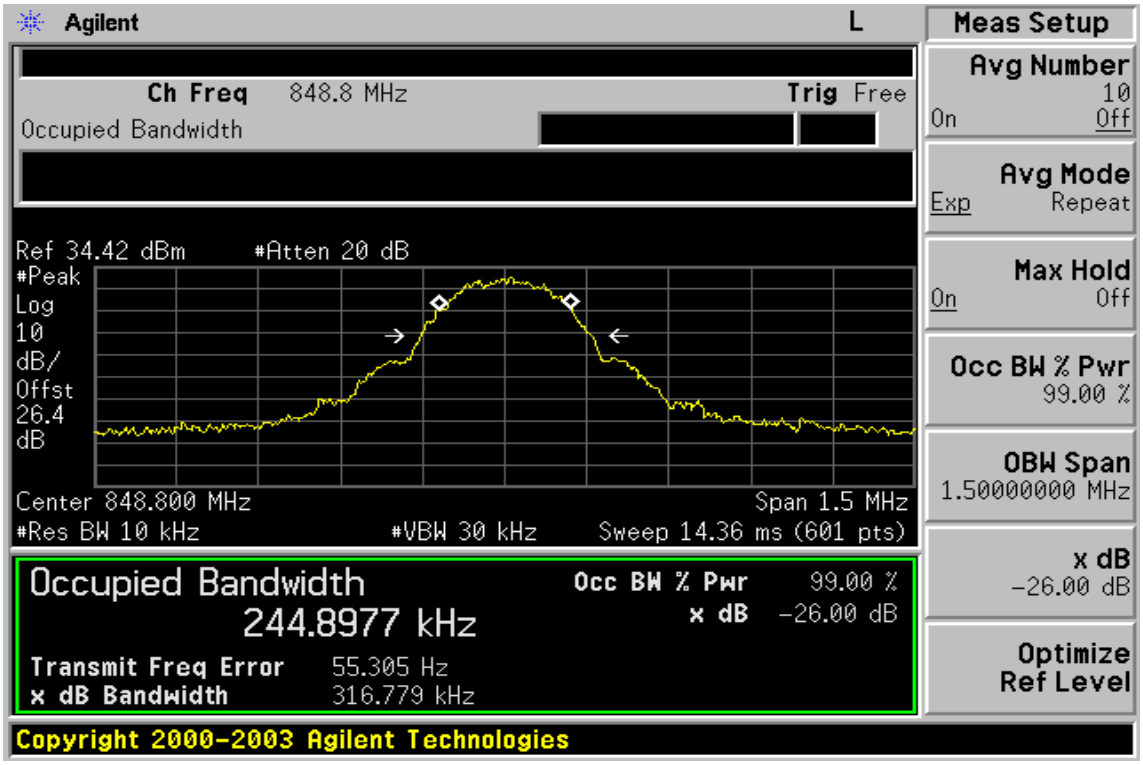


Figure 7-4: PCS Channel Low

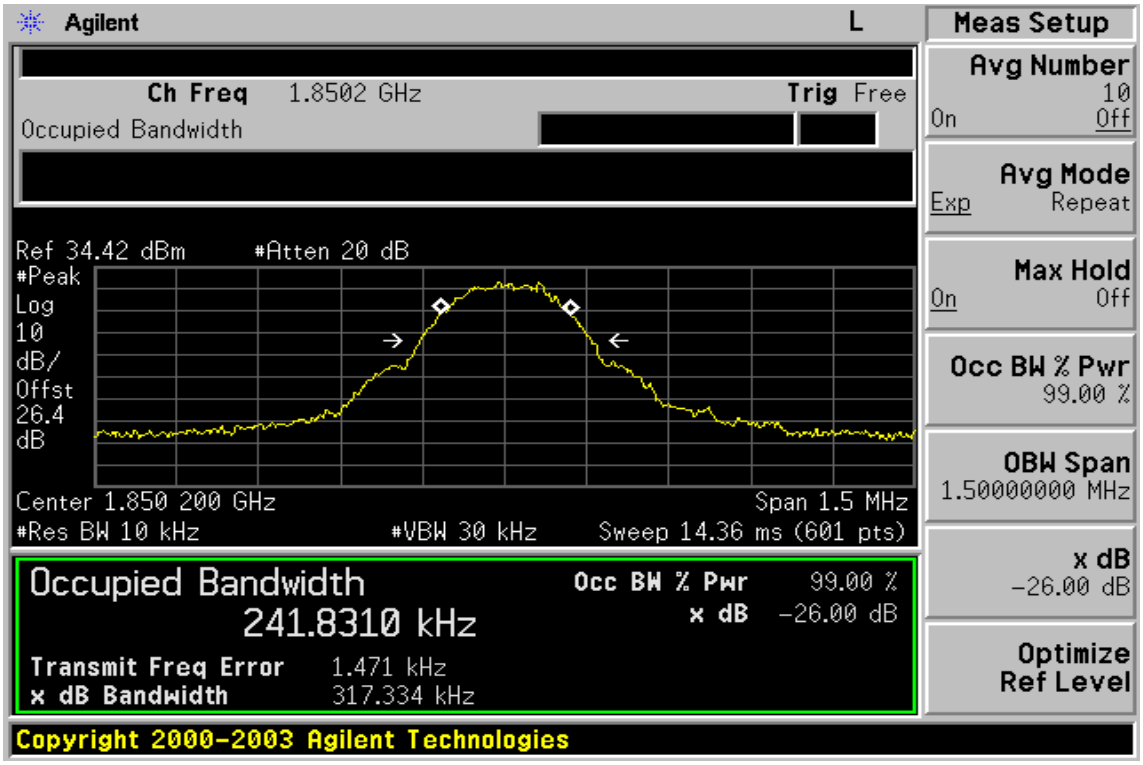


Figure 7-5 PCS Channel Mid

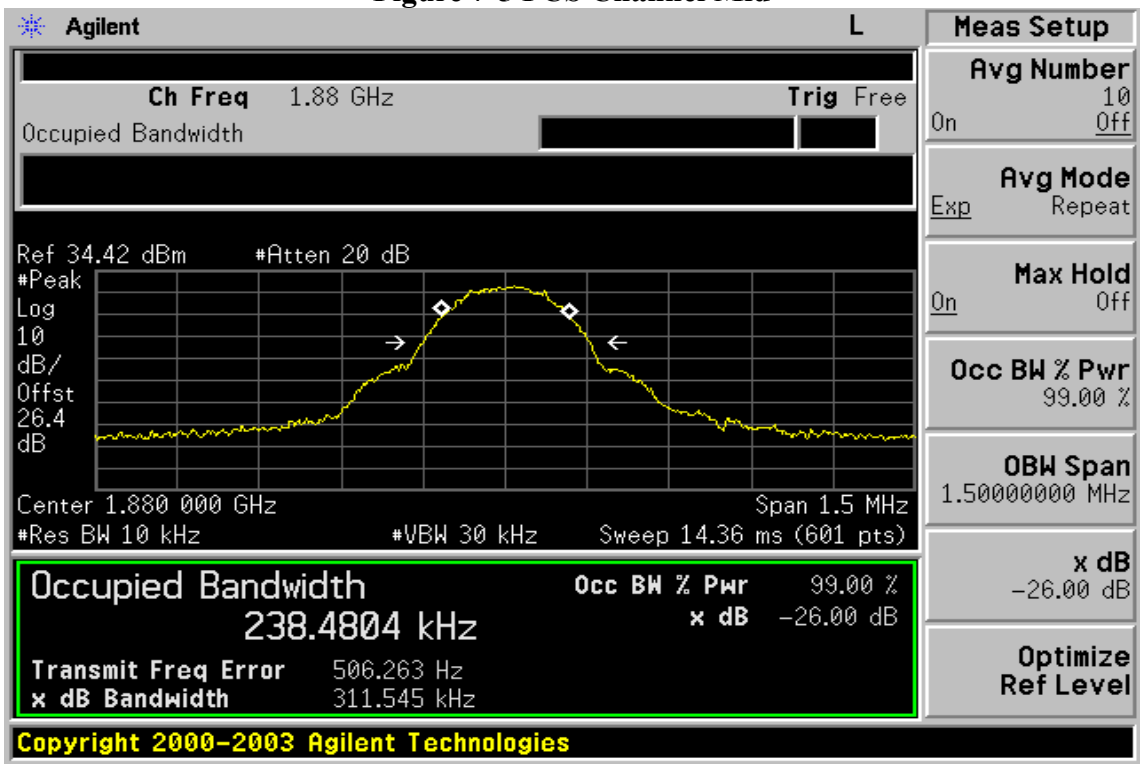
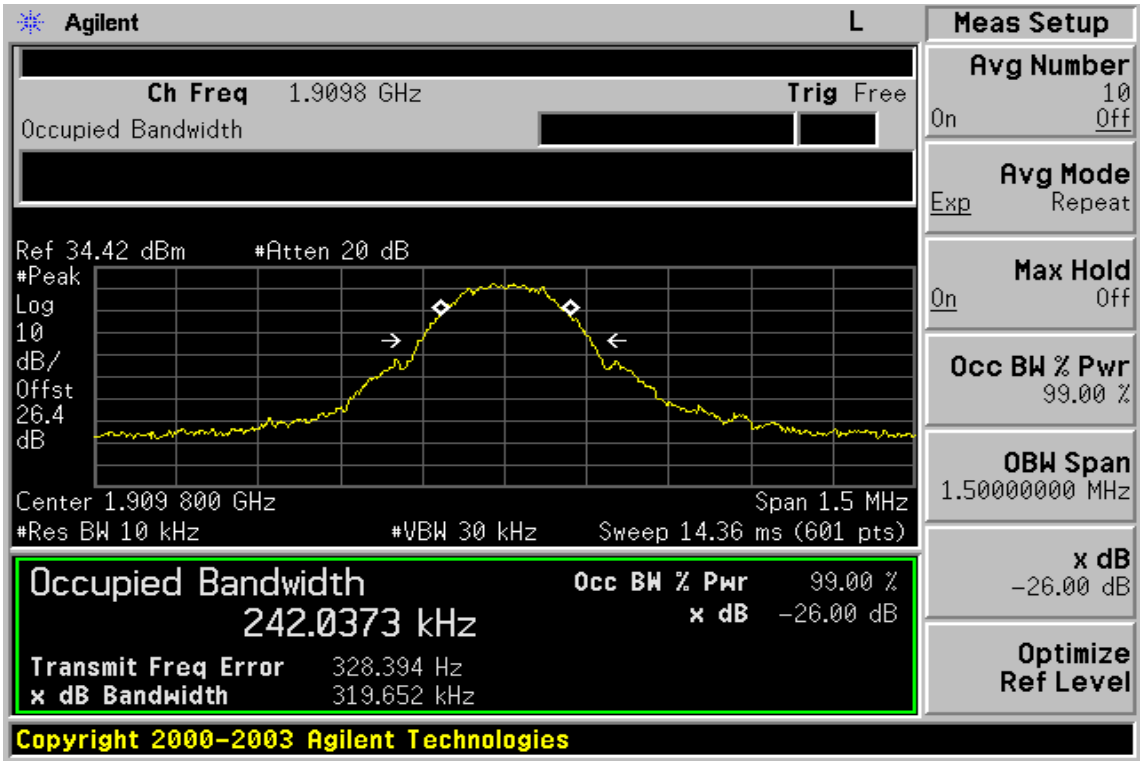


Figure 7-6: PCS Channel High



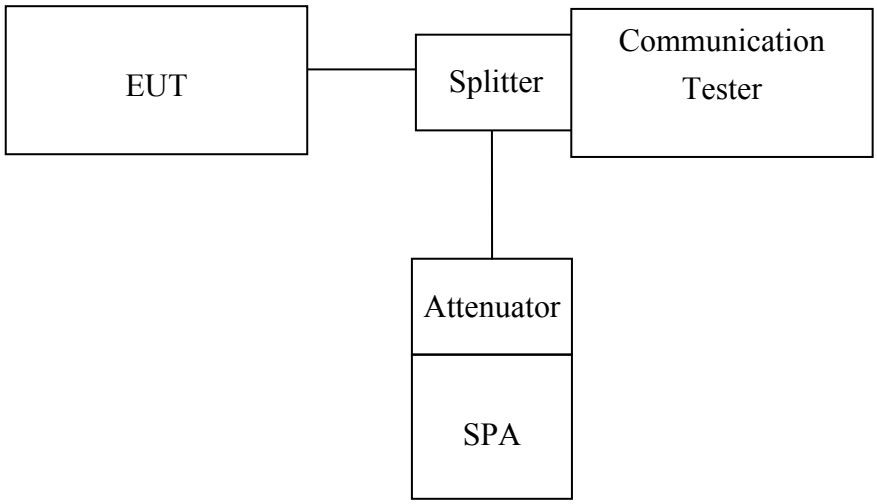
8. OUT OF BAND EMISSION AT ANTENNA TERMINALS

8.1 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)

8.2 Test SET-UP



Note: *Measurement setup for testing on Antenna connector*

8.3 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

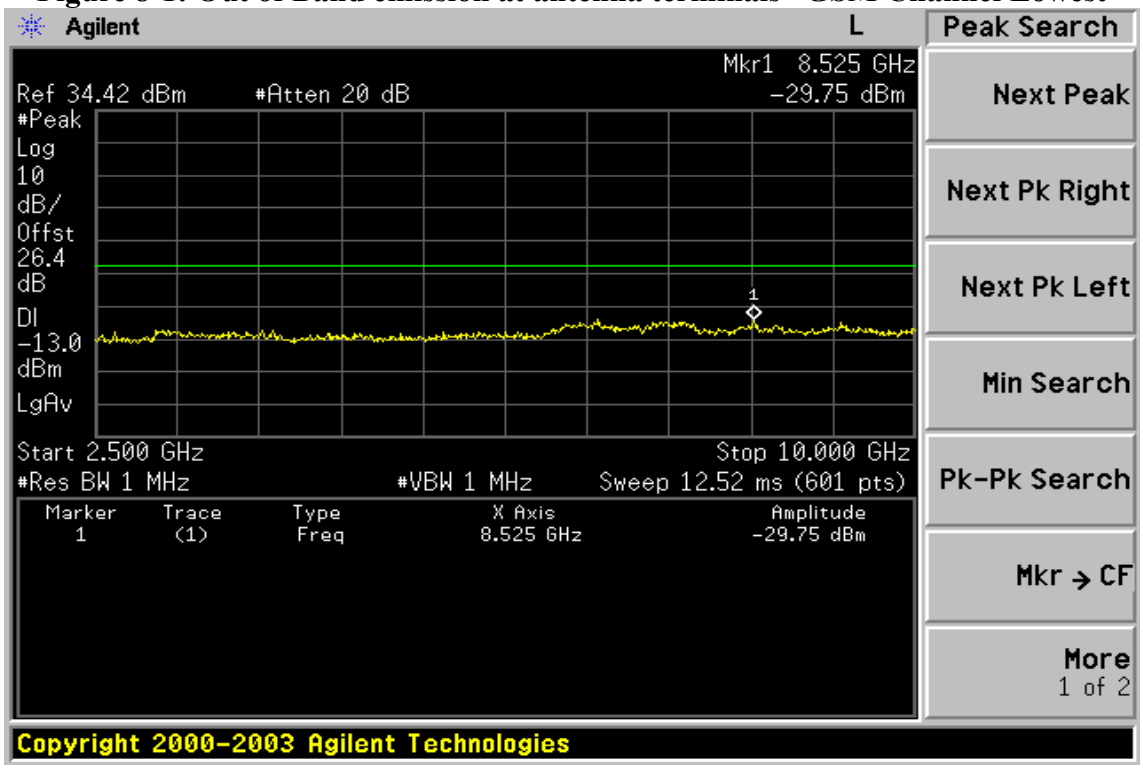
Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions. Limit, -13dBm.

8.4 Measurement Equipment Used:

Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Spectrum Analyzer	Agilent	E4446A	MY43360126	03/29/2005	03/28/2006
Spectrum Analyzer	Agilent	7405A	US41160416	06/28/2005	06/29/2006
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006
Power Sensor	Anritsu	MA2490A	31431	06/28/2005	06/29/2006
Power Meter	Anritsu	ML2487A	6K00002070	06/28/2005	06/29/2006
Temperature Chamber	TERCHY	MHG-120LF	911009	11/11/2005	11/12/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circult	BW-S10W5	N/A	10/07/2005	10/06/2006
Attenuator	Mini-Circult	BW-S6W5	N/A	10/07/2005	10/06/2006
Splitter	Mini-Circult	ZFSC-2-10G	N/A	10/07/2005	10/06/2006
Signal Generator	R&S	SMR40	100210	11/09/2005	11/10/2006
Diode Detector	Agilent	8471E	MY4224	N/A	N/A
AC Power Supply	APW-105N	887592	All Power	N/A	N/A

8.5 Measurement Result

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



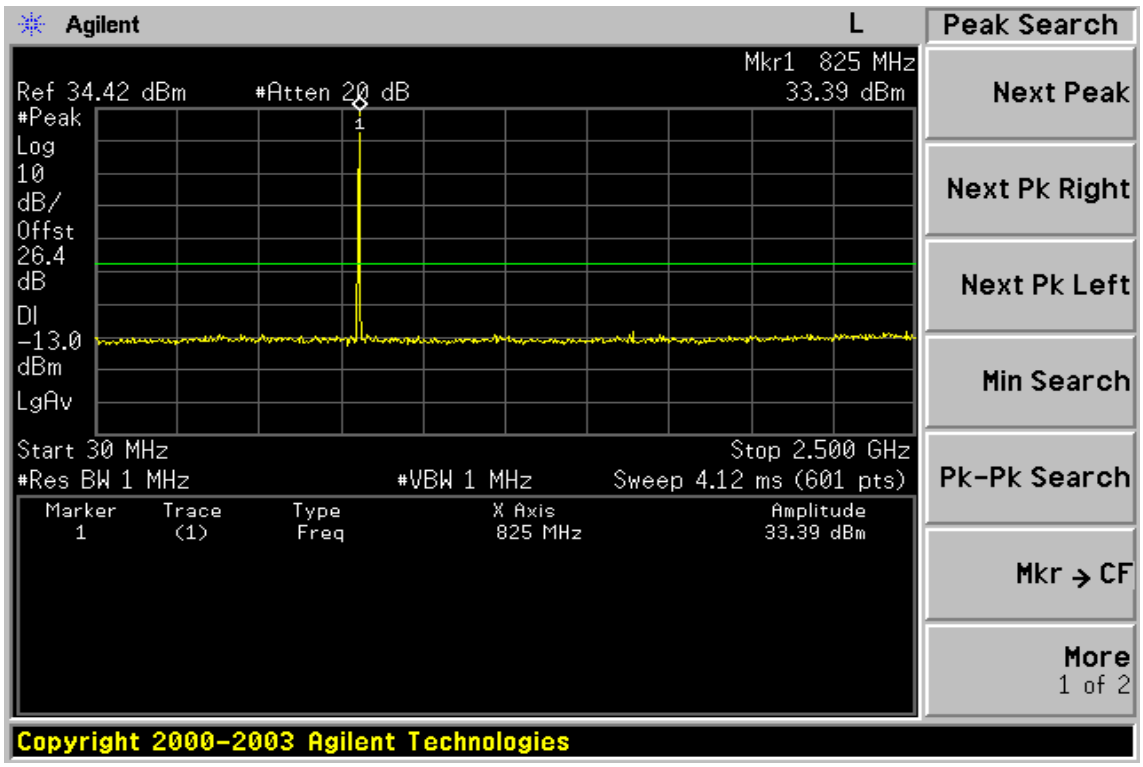
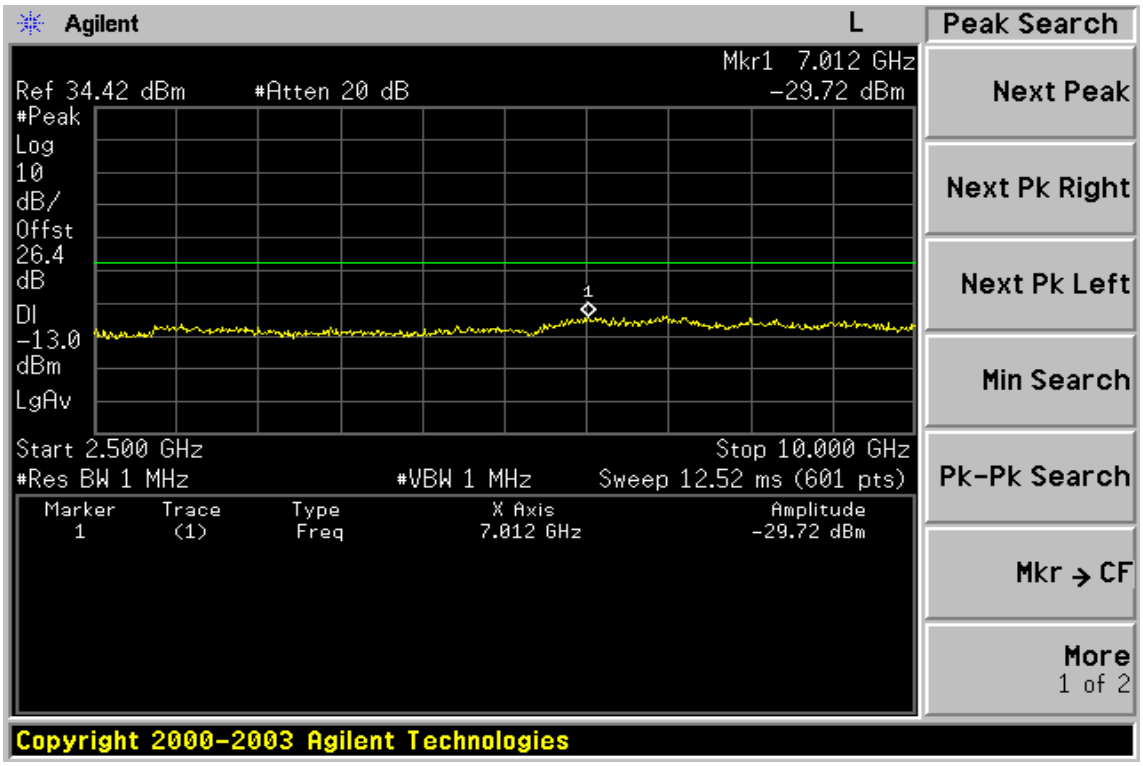


Figure 8-2: Out of Band emission at antenna terminals –GSM Channel Mid



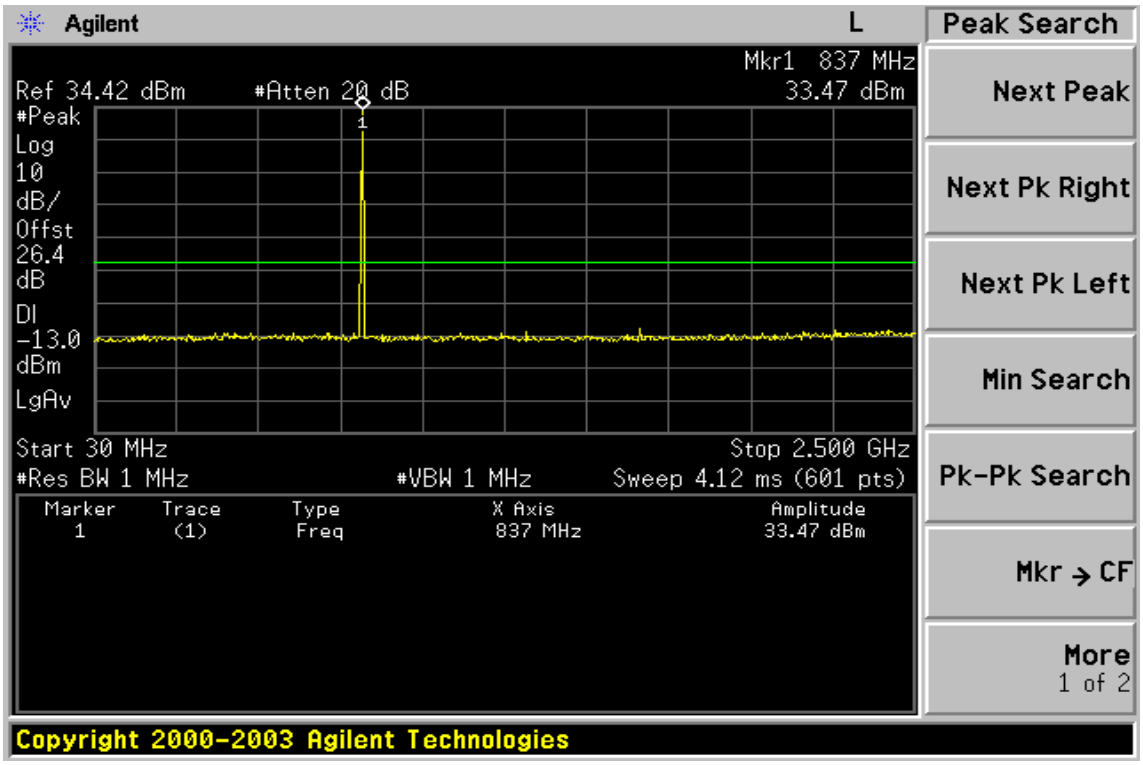
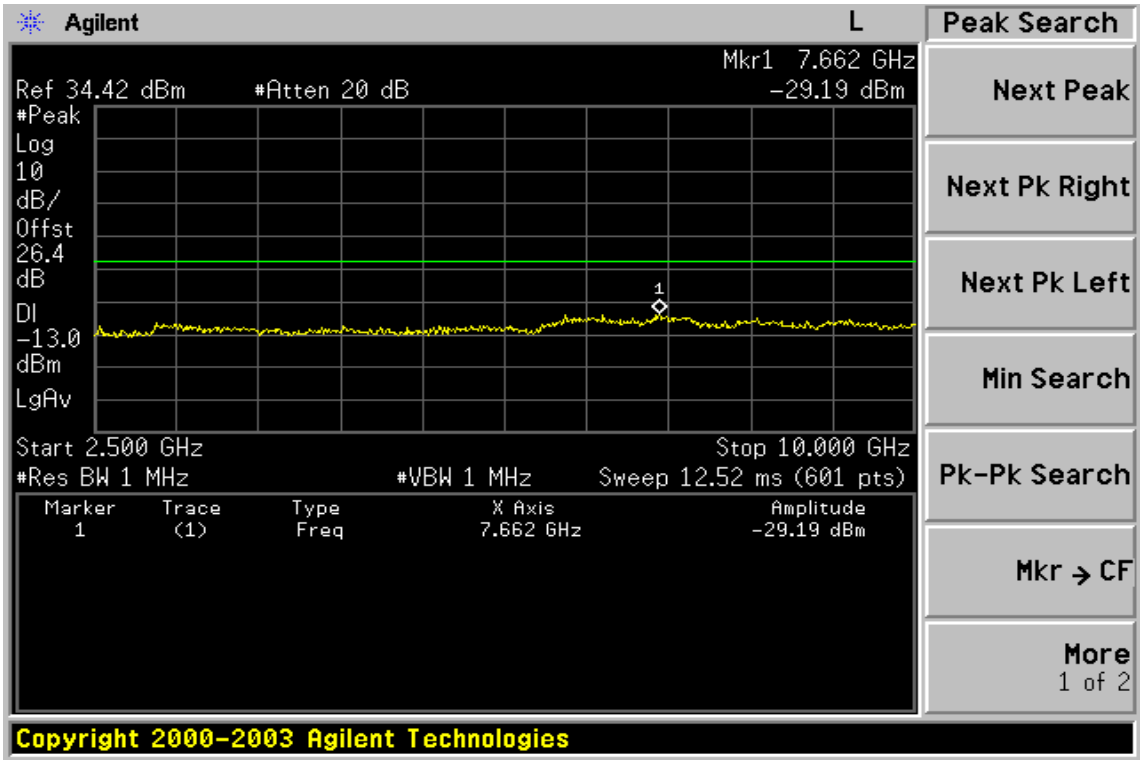


Figure 8-3: Out of Band emission at antenna terminals–GSM Channel Highest



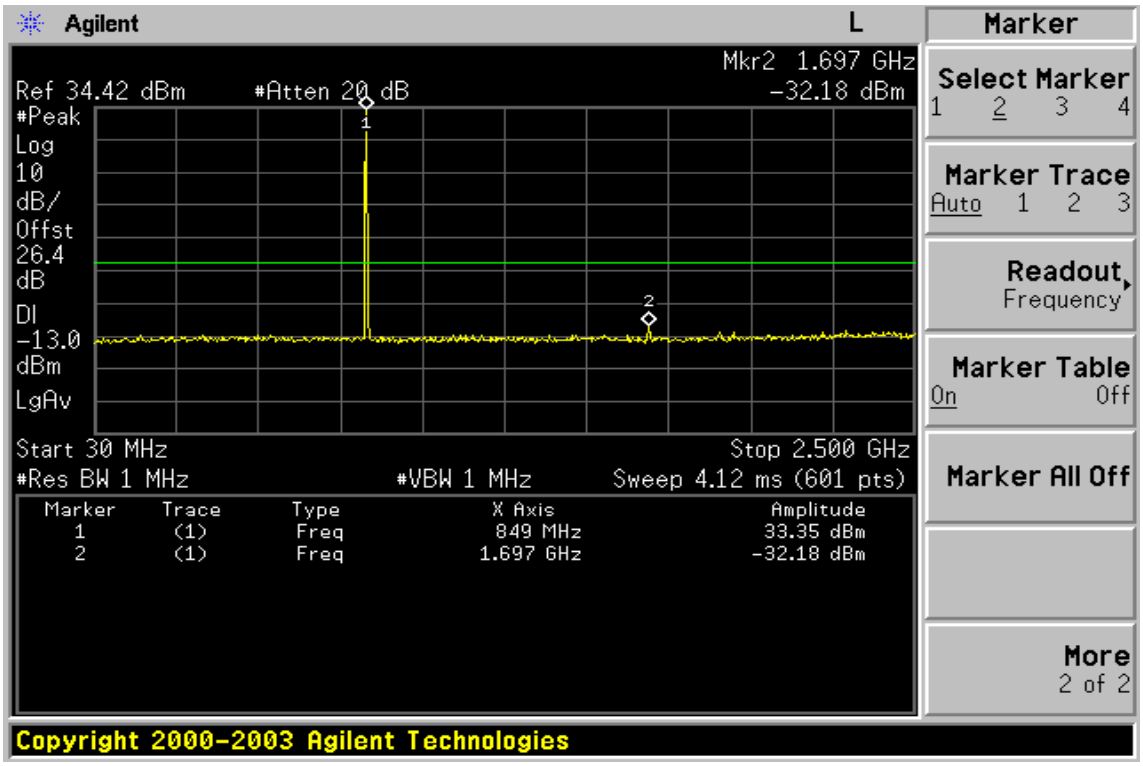


Figure 8-4: Bad edge emission at antenna terminals – GSM Channel Lowest

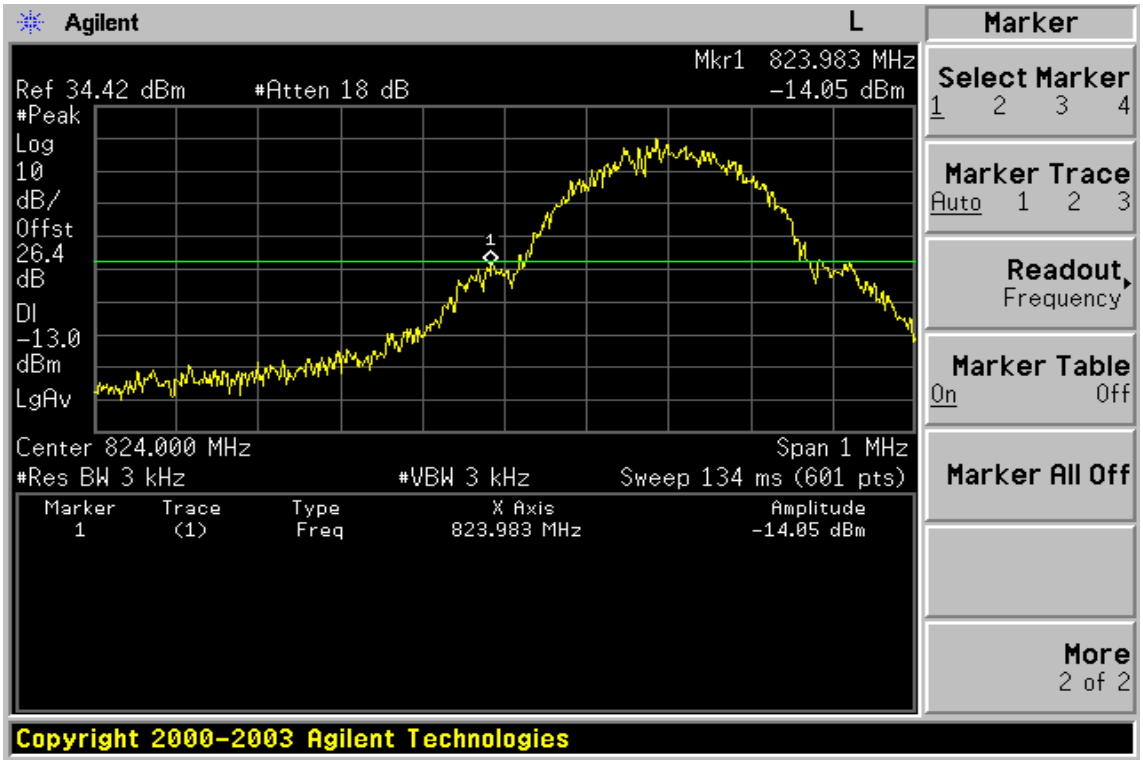


Figure 8-5: Band edge emission at antenna terminals – GSM Channel Highest

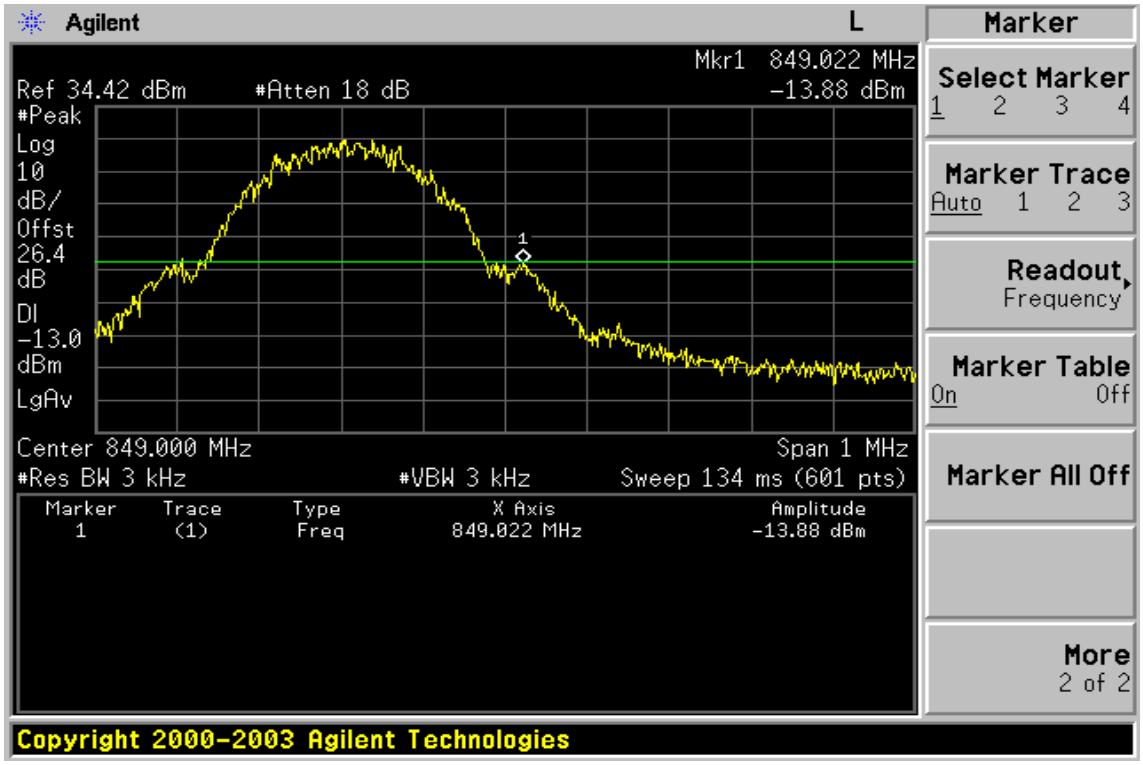
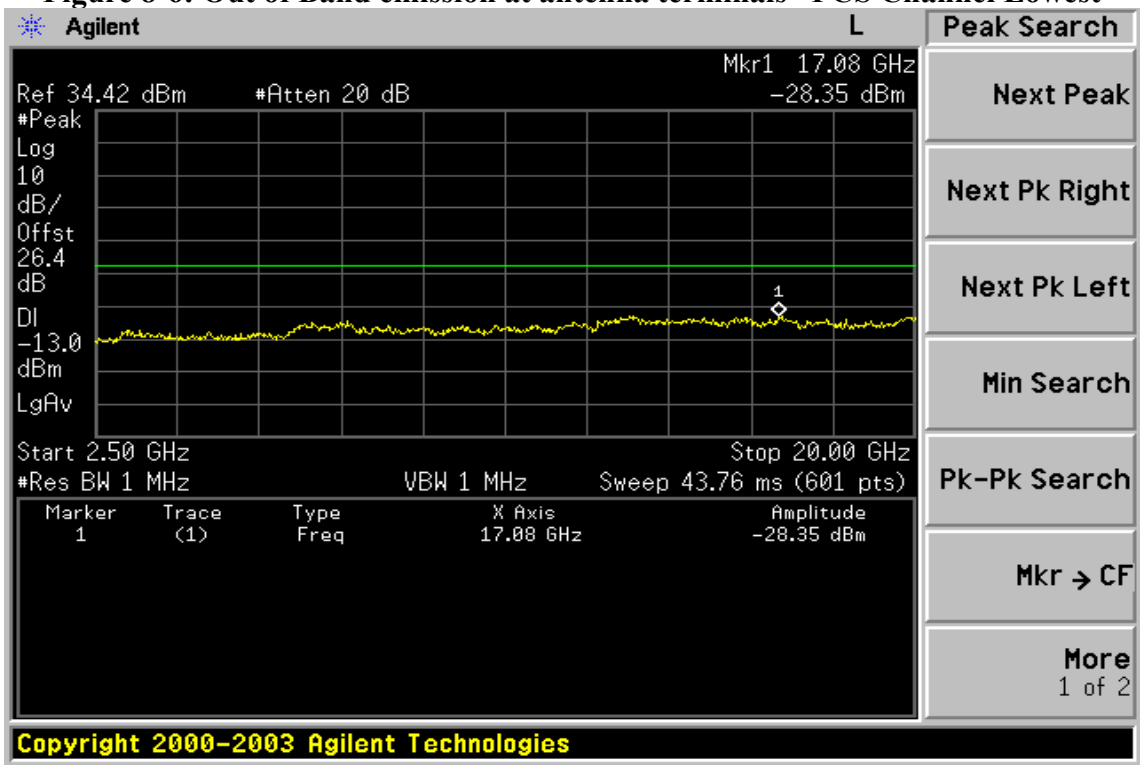


Figure 8-6: Out of Band emission at antenna terminals– PCS Channel Lowest



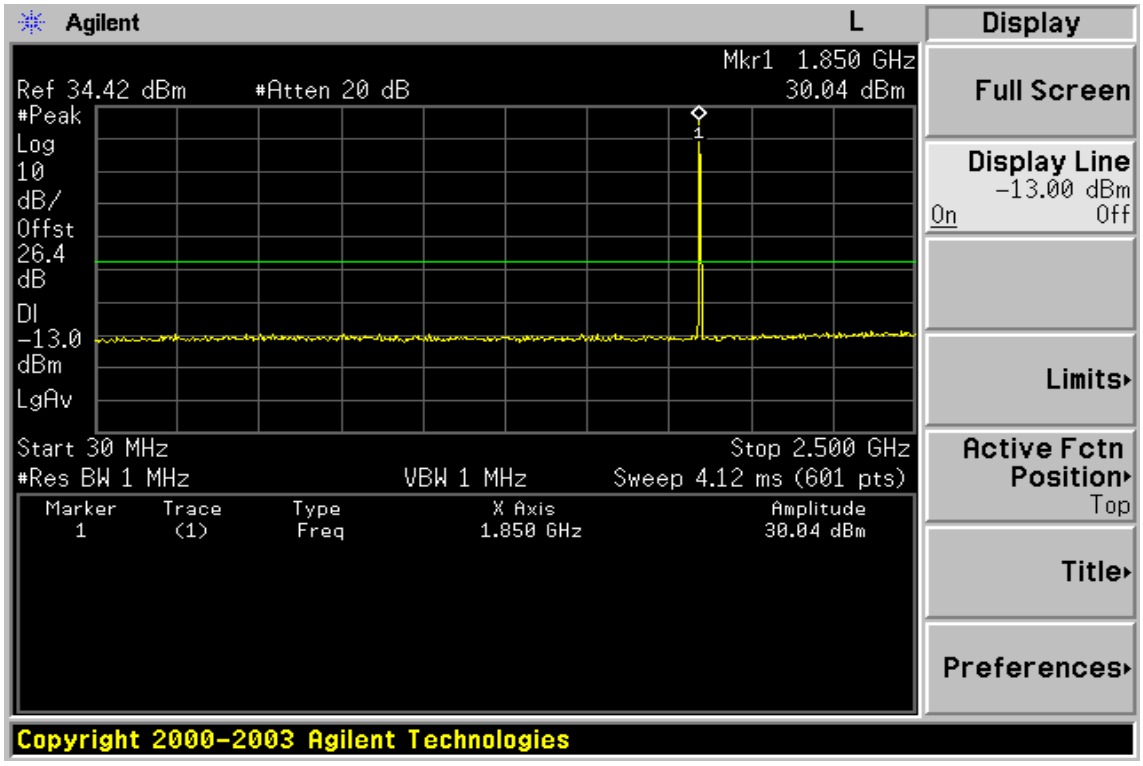
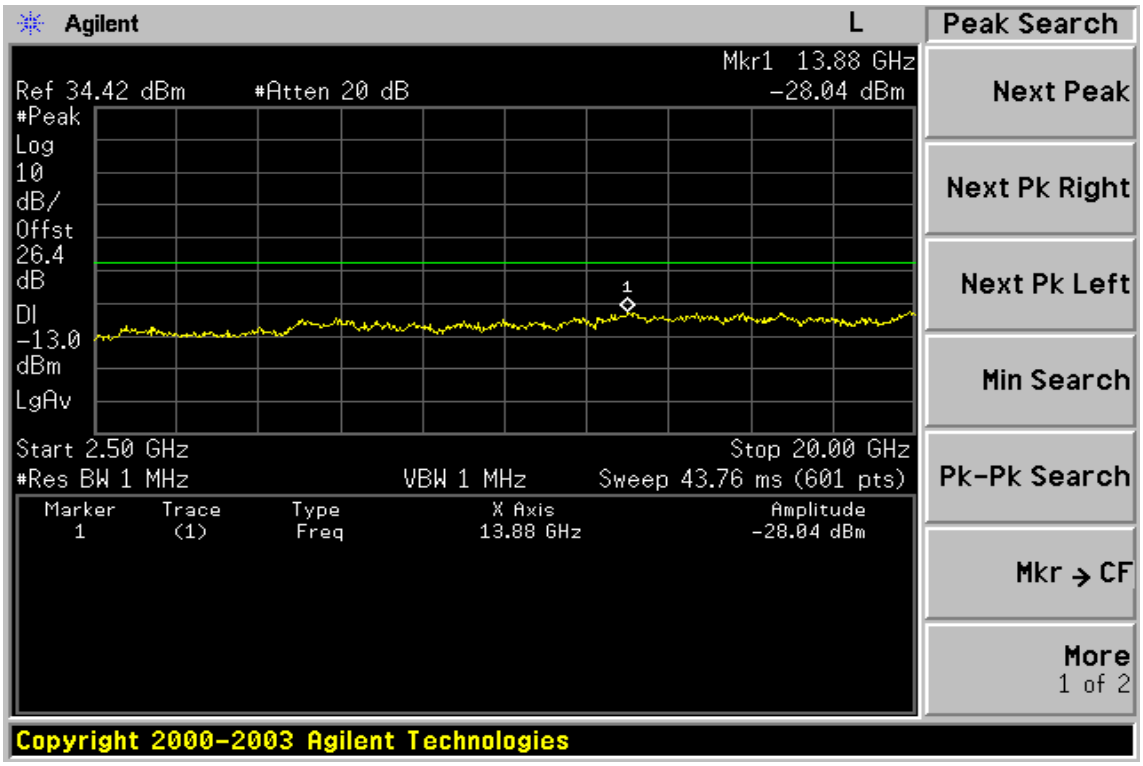


Figure 8-7: Out of Band emission at antenna terminals –PCS Channel Mid



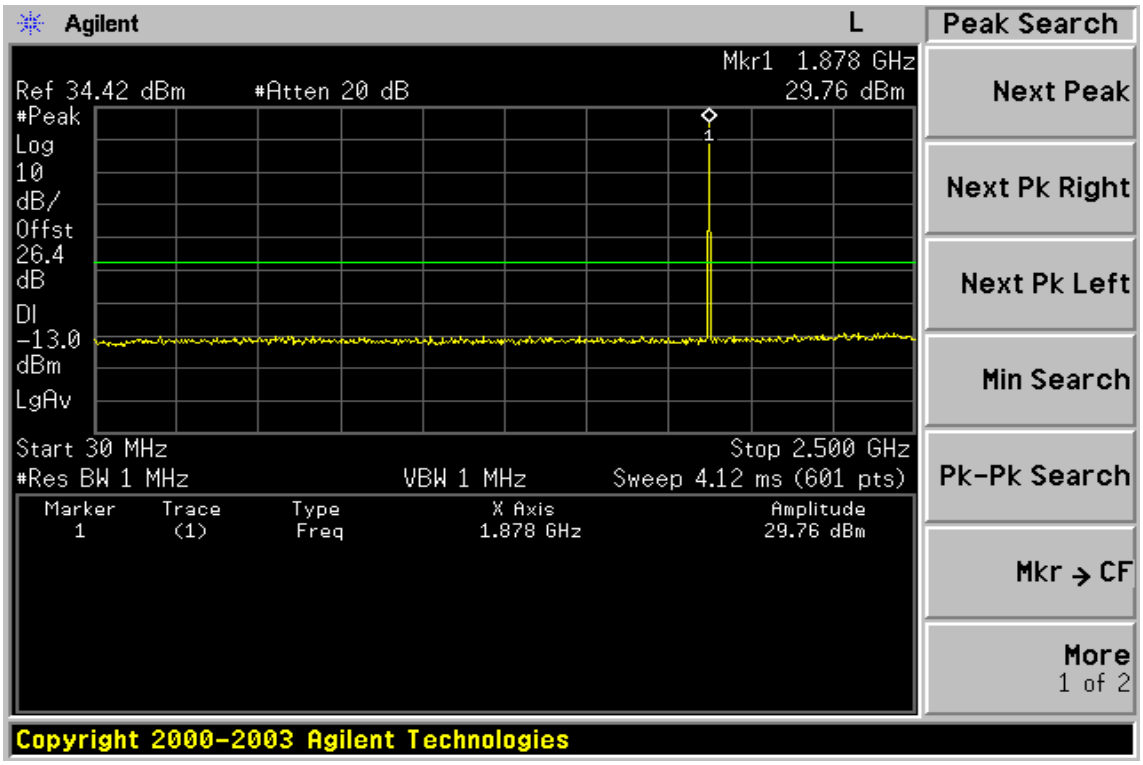
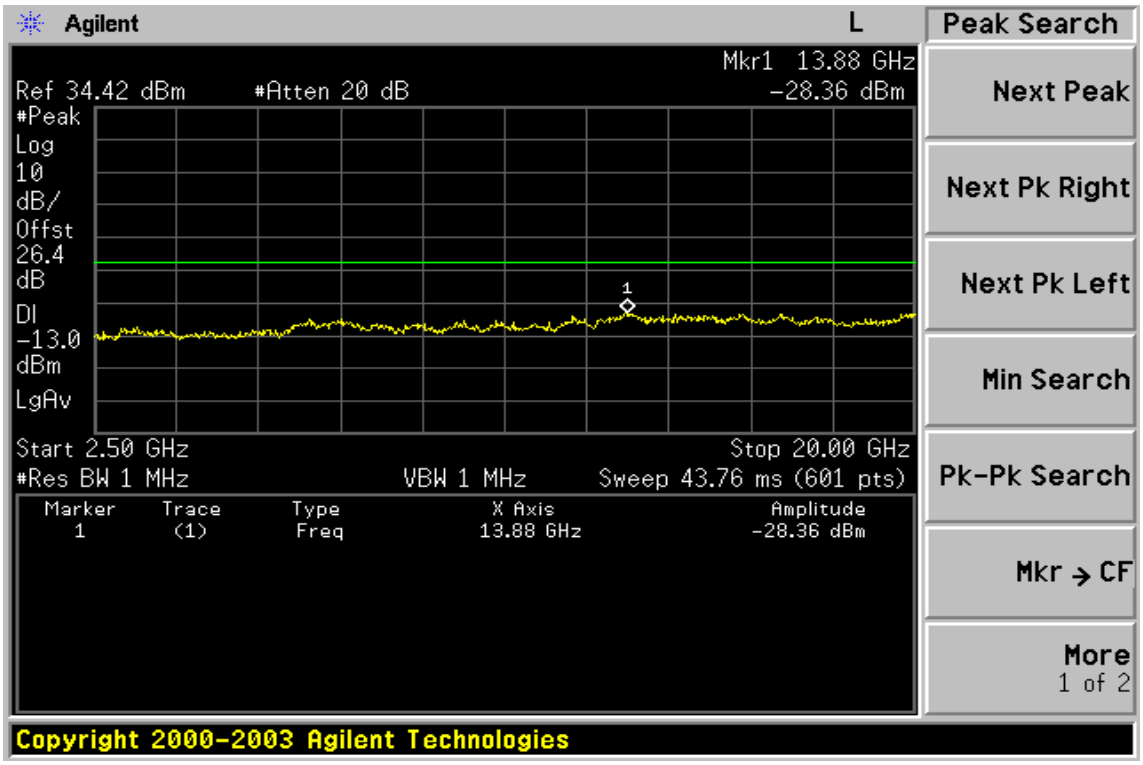


Figure 8-8: Out of Band emission at antenna terminals–PCS Channel Highest



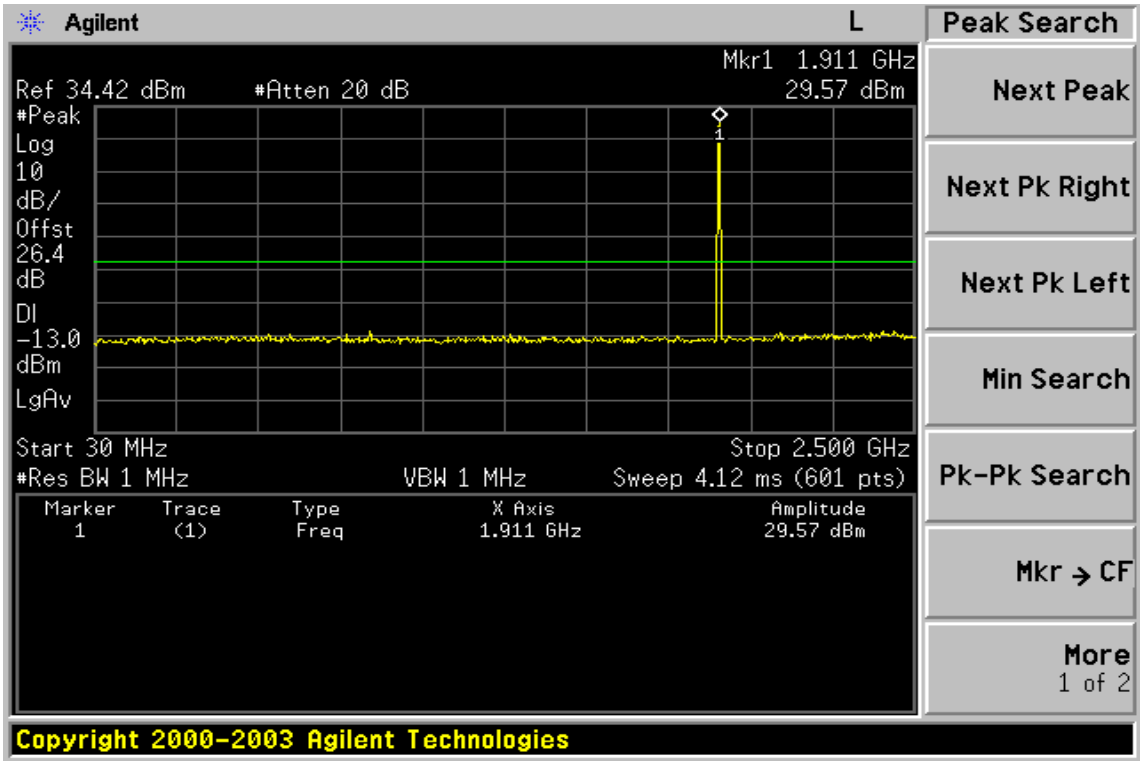


Figure 8-9: Bad edge emission at antenna terminals – PCS Channel Lowest

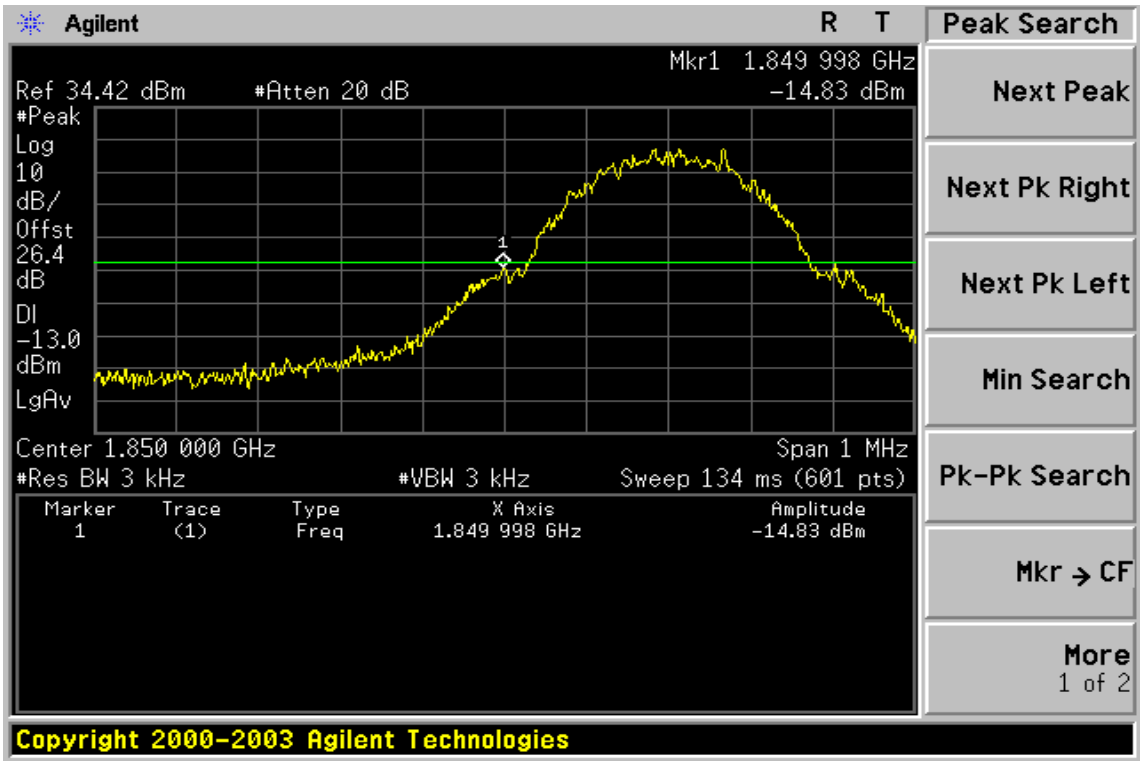
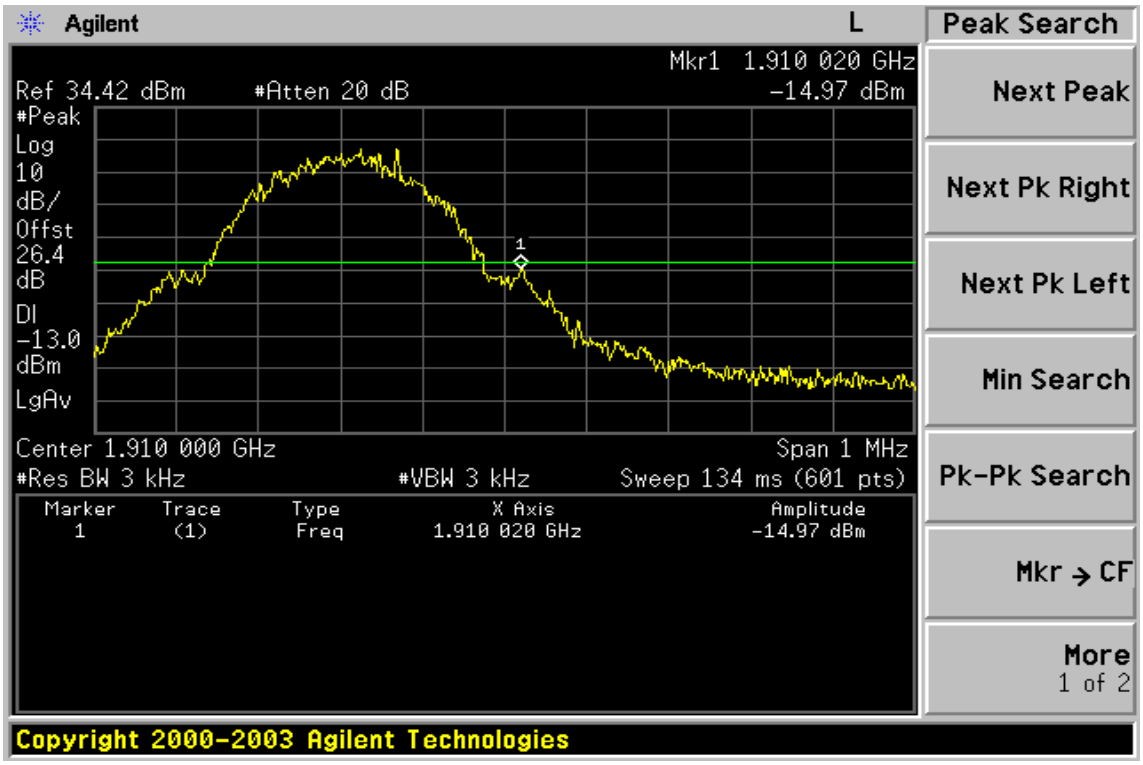


Figure 8-10: Band edge emission at antenna terminals – PCS Channel Highest



9. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

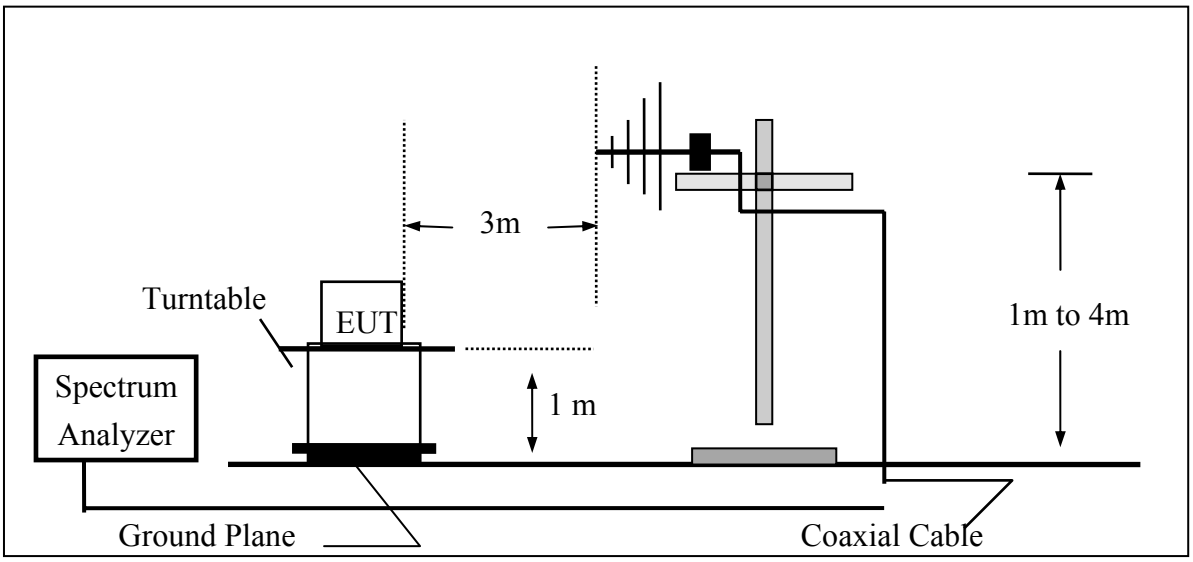
9.1 Standard Applicable

According to FCC §2.1053,

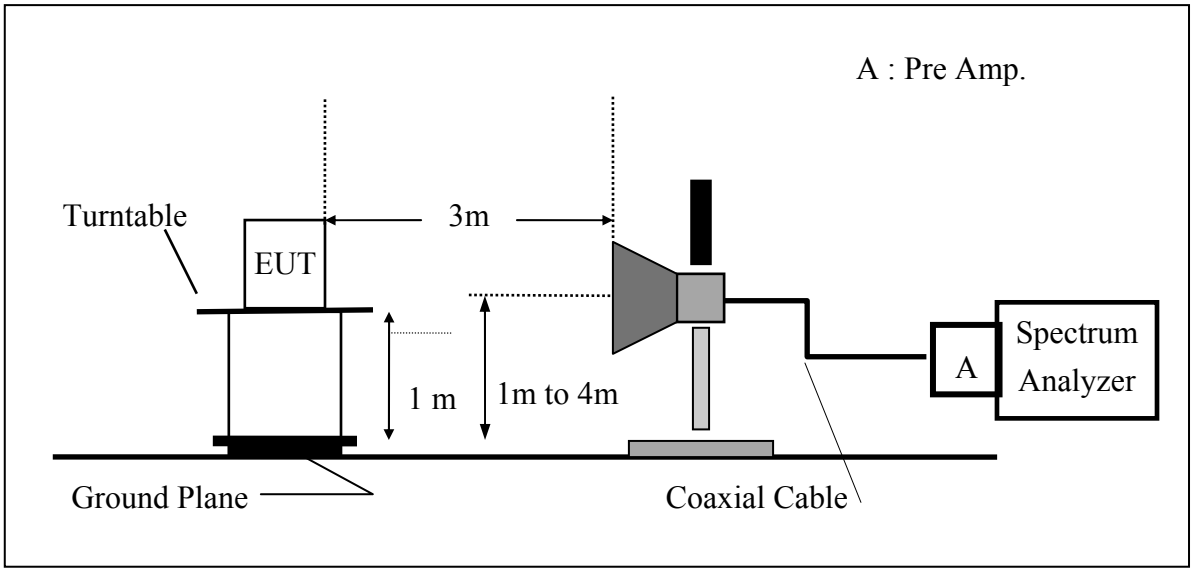
FCC §22.917(a),§24.238(a), the magnitude of each spurious and harmonic emission that can be detected when the equipment is operated under the conditions specified in the instruction manual and/ or alignment procedure, shall not be less than 43 + 10 log (mean output power in watts) dBc below the mean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

9.2 EUT Setup (Block Diagram of Configuration)

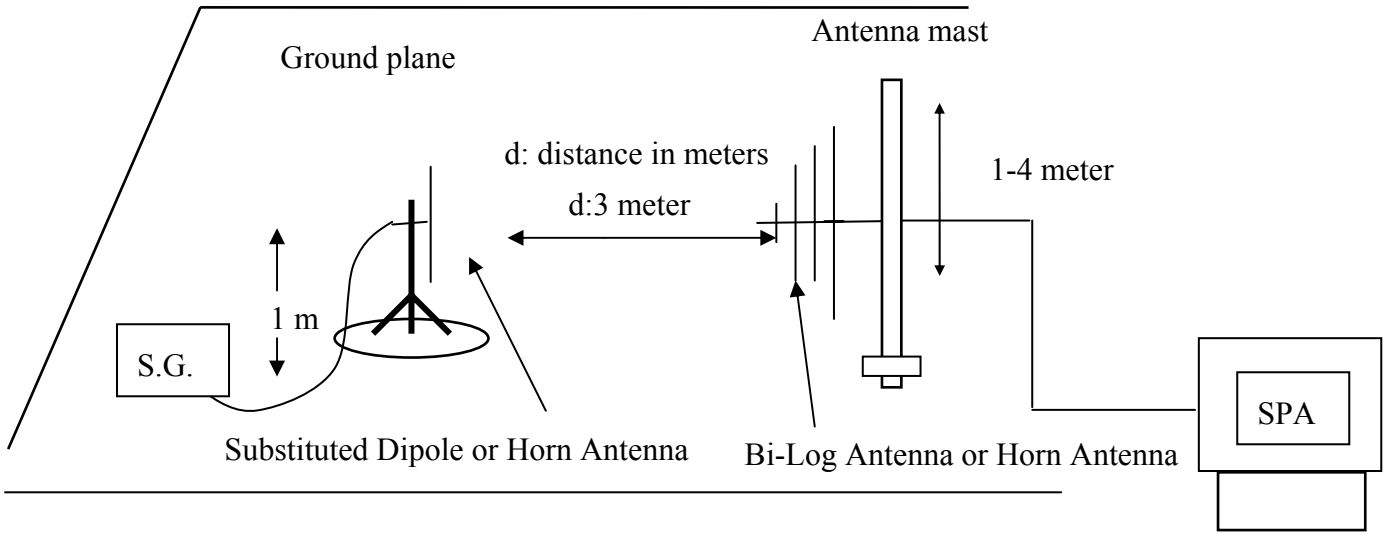
(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



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



(C) Substituted Method Test Set-UP



9.3 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)

9.4 Measurement Equipment Used:

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	R&S	FSP 40	100034	05/27/2005	05/26/2006
Spectrum Analyzer	Agilent	E7405A	US41160416	08/27/2005	08/26/2005
Bilog Antenna	SCHWAZBECK	VULB9163	152	06/03/2005	06/02/2006
Horn antenna	Schwarzbeck	BBHA 9120D	309/320	08/16/2005	08/15/2006
Pre-Amplifier	HP	8447D	2944A09469	07/19/2005	07/18/2006
Pre-Amplifier	HP	8494B	3008A00578	02/26/2005	02/25/2006
Signal Generator	R&S	SMR40	100210	02/09/2005	02/10/2006
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	10/09/2005	10/08/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-3M	3m	10/09/2005	10/08/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-0.5M	0.5m	10/09/2005	10/08/2006
Site NSA	SGS	966 chamber	N/A	11/17/2005	11/16/2006
Site NSA	SGS	10m Open-Site	N/A	10/02/2005	10/01/2006
Attenuator	Mini-Circult	BW-S10W5	N/A	10/07/2005	10/06/2006
Temperature Chamber	TERCHY	MHG-120LF	911009	10/14/2005	10/13/2006
Dipole Antenna	Schwarzbeck	VHAP	908/909	06/10/2005	06/11/2006
Dipole Antenna	Schwarzbeck	UHAP	891/892	06/10/2005	06/11/2006
Horn antenna	Schwarzbeck	BBHA 9120D	N/A	08/16/2005	08/15/2006

9.5 Measurement Result

Refer to attach tabular data sheets.

Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Mode	: TX CH Low H Mode	Test Date:	Dec.05, 2005
Fundamental Frequency	: 824.20 MHz	Test By:	Sky
Temperature	: 25℃	Pol:	Ver / Hor
Humidity	: 65%	Adaptor Model:	3DS09371AGAA
		Supplier:	Leader

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)
31.94	44.20	V	-59.94	-6.43	0.70	-67.07	-13.00	-54.07
823.98	79.67	V	-7.66	-7.87	3.64	-19.18	-13.00	-7.18
1652.50	54.82	V	-52.22	9.30	5.06	-47.98	-13.00	-34.98
4945.62	38.97	V	-57.60	12.65	9.19	-54.14	-13.00	-42.14
5769.89	45.87	V	-48.72	13.55	9.80	-44.96	-13.00	-31.96
6594.16	---	V	---	---	---	---	-13.00	---
7418.43	---	V	---	---	---	---	-13.00	---
8242.70	---	V	---	---	---	---	-13.00	---
51.34	38.15	H	-69.50	-0.58	0.91	-70.99	-13.00	-57.99
823.98	80.83	H	-6.83	-7.87	3.64	-18.35	-13.00	-5.35
1652.50	47.15	H	-59.86	9.30	5.06	-55.62	-13.00	-42.62
5769.89	40.34	H	-54.21	13.55	9.80	-50.45	-13.00	-37.45
6594.16	---	H	---	---	---	---	-13.00	---
7418.43	---	H	---	---	---	---	-13.00	---
8242.70	---	H	---	---	---	---	-13.00	---

Remark：

1 The emission behaviour 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 (dBd/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Mode : TX CH Mid H Mode
Fundamental Frequency : 836.60 MHz
Temperature : 25℃
Humidity : 65%

Test Date: Dec.05, 2005
Test By: Sky
Pol: Ver / Hor
Adaptor Model: 3DS09371AGAA
Supplier: Leader

Freq.	SPA. Reading	Ant.Pol.	S.G Output	Antenna Gain	Cable Loss	ERP/ EIRP	Limit	Safe Margin
(MHz)	(dBuV)	H/V	(dBm)	(dB/dBi)	(dB)	(dBm)	(dBm)	(dBm)
31.94	43.92	V	-60.22	-6.43	0.70	-67.35	-13.00	-54.35
1667.50	56.24	V	-50.79	9.35	5.09	-46.54	-13.00	-33.54
2515.00	43.01	V	-60.85	10.10	6.35	-57.11	-13.00	-44.11
4180.00	40.37	V	-59.20	12.62	8.39	-54.97	-13.00	-41.97
5019.12	40.32	V	-55.98	12.67	9.26	-52.57	-13.00	-39.57
5855.64	---	V	---	---	---	---	-13.00	---
6692.16	---	V	---	---	---	---	-13.00	---
7528.68	---	V	---	---	---	---	-13.00	---
8365.20	---	V	---	---	---	---	-13.00	---
32.91	44.59	H	-60.41	-5.98	0.71	-67.10	-13.00	-54.10
1667.50	59.39	H	-47.61	9.35	5.09	-43.35	-13.00	-30.35
2515.00	48.43	H	-55.43	10.10	6.35	-51.68	-13.00	-38.68
4180.00	41.37	H	-58.06	12.62	8.39	-53.83	-13.00	-40.83
5019.12	37.48	H	-58.77	12.67	9.26	-55.36	-13.00	-42.36
5855.64	---	H	---	---	---	---	-13.00	---
6692.16	---	H	---	---	---	---	-13.00	---
7528.68	---	H	---	---	---	---	-13.00	---
8365.20	---	H	---	---	---	---	-13.00	---

Remark：

1 The emission behaviour 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 (dBd/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Mode	: TX CH High H Mode	Test Date:	Dec.05, 2005
Fundamental Frequency	: 848.80 MHz	Test By:	Sky
Temperature	: 25℃	Pol:	Ver / Hor
Humidity	: 65%	Adaptor Model:	3DS09371AGAA
		Supplier:	Leader

Freq.	SPA. Reading	Ant.Pol.	S.G Output	Antenna Gain	Cable Loss	ERP/ EIRP	Limit	Safe Margin
(MHz)	(dBuV)	H/V	(dBm)	(dB/dBi)	(dB)	(dBm)	(dBm)	(dBm)
31.94	47.11	V	-57.03	-6.43	0.70	-64.16	-13.00	-51.16
849.00	82.65	V	-4.08	-7.88	3.75	-15.71	-13.00	-2.71
1690.00	57.31	V	-49.71	9.41	5.13	-45.43	-13.00	-32.43
2552.50	49.43	V	-54.34	10.21	6.41	-50.54	-13.00	-37.54
4240.00	43.40	V	-55.96	12.63	8.46	-51.79	-13.00	-38.79
5080.00	41.60	V	-54.58	12.73	9.31	-51.16	-13.00	-38.16
5942.09	37.74	V	-56.36	13.81	9.89	-52.44	-13.00	-39.44
6790.96	---	V	---	---	---	---	-13.00	---
7639.83	---	V	---	---	---	---	-13.00	---
8488.70	---	V	---	---	---	---	-13.00	---
56.19	37.14	H	-72.50	-0.51	0.93	-73.94	-13.00	-60.94
849.02	83.06	H	-3.96	-7.88	3.75	-15.58	-13.00	-2.58
1690.00	60.00	H	-46.99	9.41	5.13	-42.70	-13.00	-29.70
2552.50	45.29	H	-58.47	10.21	6.41	-54.67	-13.00	-41.67
4240.00	42.64	H	-56.57	12.63	8.46	-52.39	-13.00	-39.39
5080.00	38.16	H	-57.97	12.73	9.31	-54.54	-13.00	-41.54
5942.09	---	H	---	---	---	---	-13.00	---
6790.96	---	H	---	---	---	---	-13.00	---
7639.83	---	H	---	---	---	---	-13.00	---
8488.70	---	H	---	---	---	---	-13.00	---

Remark：

1 The emission behaviour 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 (dBd/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result: PCS 1900 Mode

Operation Mode : TX CH Low E1 Mode
Fundamental Frequency : 1850.20MHz
Temperature : 25℃
Humidity : 65%

Test Date Dec.05, 2005
Test By: Sky
Pol: Ver / Hor
Adaptor Model: 3DS09371AGAA
Supplier: Leader

Freq.	SPA. Reading	Ant.Pol.	S.G Output	Antenna Gain	Cable Loss	ERP/ EIRP	Limit	Safe Margin
(MHz)	(dBuV)	H/V	(dBm)	(dB/dBi)	(dB)	(dBm)	(dBm)	(dBm)
56.19	42.43	V	-67.23	-0.51	0.93	-68.67	-13.00	-55.67
1850.00	83.61	V	-23.35	9.90	5.41	-18.86	-13.00	-5.86
1840.00	68.73	V	-38.23	9.87	5.39	-33.76	-13.00	-20.76
3692.50	47.25	V	-54.36	12.61	7.71	-49.47	-13.00	-36.47
5550.60	53.46	V	-41.75	13.23	9.68	-38.21	-13.00	-25.21
12951.40	---	V	---	---	---	---	-13.00	---
14801.60	---	V	---	---	---	---	-13.00	---
16651.80	---	V	---	---	---	---	-13.00	---
18502.00	---	V	---	---	---	---	-13.00	---
51.34	42.25	H	-65.40	-0.58	0.91	-66.89	-13.00	-53.89
1849.99	84.43	H	-22.46	9.90	5.41	-17.97	-13.00	-4.97
1840.00	72.41	H	-34.49	9.87	5.39	-30.01	-13.00	-17.01
3692.50	52.13	H	-49.26	12.61	7.71	-44.37	-13.00	-31.37
5550.60	55.14	H	-39.99	13.23	9.68	-36.44	-13.00	-23.44
12951.40	---	H	---	---	---	---	-13.00	---
14801.60	---	H	---	---	---	---	-13.00	---
16651.80	---	H	---	---	---	---	-13.00	---
18502.00	---	H	---	---	---	---	-13.00	---

Remark：

1 The emission behaviour 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 (dBd/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result : PCS 1900 Mode

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

Test Date Dec.05, 2005
Test By Sky
Pol Ver / Hor
Adaptor Model: 3DS09371AGAA
Supplier: Leader

Freq.	SPA. Reading	Ant.Pol.	S.G Output	Antenna Gain	Cable Loss	ERP/ EIRP	Limit	Safe Margin
(MHz)	(dBuV)	H/V	(dBm)	(dB/dBi)	(dB)	(dBm)	(dBm)	(dBm)
58.13	43.41	V	-67.09	-0.49	0.94	-68.51	-13.00	-55.51
1877.50	68.08	V	-38.87	9.98	5.45	-34.34	-13.00	-21.34
3752.50	48.76	V	-52.58	12.60	7.81	-47.78	-13.00	-34.78
5640.00	52.69	V	-42.27	13.36	9.73	-38.64	-13.00	-25.64
7520.00	---	V	---	---	---	---	-13.00	---
9400.00	---	V	---	---	---	---	-13.00	---
13160.00	---	V	---	---	---	---	-13.00	---
15040.00	---	V	---	---	---	---	-13.00	---
16920.00	---	V	---	---	---	---	-13.00	---
18800.00	---	V	---	---	---	---	-13.00	---
58.13	40.74	H	-69.69	-0.49	0.94	-71.12	-13.00	-58.12
1877.50	73.67	H	-33.20	9.98	5.45	-28.68	-13.00	-15.68
3752.50	51.53	H	-49.61	12.60	7.81	-44.81	-13.00	-31.81
5642.50	55.50	H	-39.38	13.36	9.73	-35.75	-13.00	-22.75
7520.00	---	H	---	---	---	---	-13.00	---
9400.00	---	H	---	---	---	---	-13.00	---
13160.00	---	H	---	---	---	---	-13.00	---
15040.00	---	H	---	---	---	---	-13.00	---
16920.00	---	H	---	---	---	---	-13.00	---
18800.00	---	H	---	---	---	---	-13.00	---

Remark：

1 The emission behaviour 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 (dBd/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result : PCS 1900 Mode

Operation Mode	: TX CH High E1 Mode	Test Date	Dec.05, 2005
Fundamental Frequency	: 1909.8 MHz	Test By	Sky
Temperature	: 25℃	Pol	Ver / Hor
Humidity	: 65%	Adaptor Model:	3DS09371AGAA
		Supplier:	Leader

Freq.	SPA. Reading	Ant.Pol.	S.G Output	Antenna Gain	Cable Loss	ERP/ EIRP	Limit	Safe Margin
(MHz)	(dBuV)	H/V	(dBm)	(dB/dBi)	(dB)	(dBm)	(dBm)	(dBm)
53.28	42.40	V	-66.01	-0.55	0.92	-67.48	-13.00	-54.48
1910.02	79.92	V	-27.02	10.08	5.51	-22.45	-13.00	-9.45
1915.00	61.56	V	-45.37	10.09	5.52	-40.80	-13.00	-27.80
3805.00	57.16	V	-43.94	12.60	7.89	-39.23	-13.00	-26.23
5717.50	38.01	V	-56.73	13.48	9.77	-53.02	-13.00	-40.02
7639.20	---	V	---	---	---	---	-13.00	---
9549.00	---	V	---	---	---	---	-13.00	---
13368.60	---	V	---	---	---	---	-13.00	---
15278.40	---	V	---	---	---	---	-13.00	---
17188.20	---	V	---	---	---	---	-13.00	---
19098.00	---	V	---	---	---	---	-13.00	---
58.13	39.96	H	-70.47	-0.49	0.94	-71.90	-13.00	-58.90
1910.02	83.39	H	-23.46	10.08	5.51	-18.90	-13.00	-5.90
1915.00	67.28	H	-39.57	10.09	5.52	-35.00	-13.00	-22.00
3805.00	57.76	H	-43.16	12.60	7.89	-38.45	-13.00	-25.45
5729.40	47.58	H	-47.07	13.49	9.78	-43.36	-13.00	-30.36
13368.60	---	H	---	---	---	---	-13.00	---
15278.40	---	H	---	---	---	---	-13.00	---
17188.20	---	H	---	---	---	---	-13.00	---
19098.00	---	H	---	---	---	---	-13.00	---

Remark：

1 The emission behaviour 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 (dBd/dBi) – Cable loss (dB)

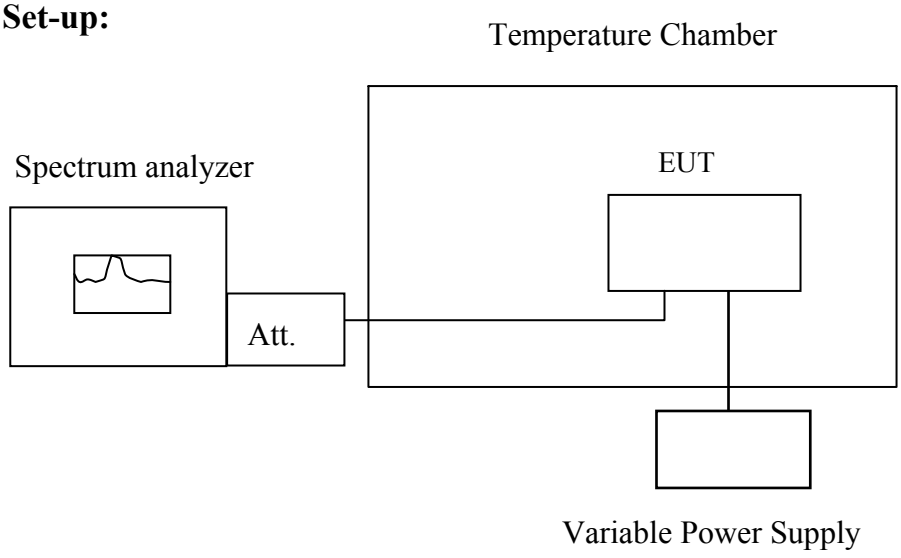
10. FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

10.1 Standard Applicable

According to FCC §2.1055(a)(1)(b).

Frequency Tolerance: 2.5 ppm

10.2 Test Set-up:



Note : Measurement setup for testing on Antenna connector

10.3 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 re-corded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

10.4 Measurement Equipment Used:

Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Spectrum Analyzer	Agilent	E4446A	MY43360126	03/29/2005	03/28/2006
Spectrum Analyzer	Agilent	7405A	US41160416	06/28/2005	06/29/2006
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006
Power Sensor	Anritsu	MA2490A	31431	06/28/2005	06/29/2006
Power Meter	Anritsu	ML2487A	6K00002070	06/28/2005	06/29/2006
Temperature Chamber	TERCHY	MHG-120LF	911009	11/11/2005	11/12/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circult	BW-S10W5	N/A	10/07/2005	10/06/2006
Attenuator	Mini-Circult	BW-S6W5	N/A	10/07/2005	10/06/2006
Splitter	Mini-Circult	ZFSC-2-10G	N/A	10/07/2005	10/06/2006
Signal Generator	R&S	SMR40	100210	11/09/2005	11/10/2006
Diode Detector	Agilent	8471E	MY4224	N/A	N/A
AC Power Supply	APW-105N	887592	All Power	N/A	N/A

10.5 Measurement Result

Reference Frequency: GSM Mid Channel 836.6 MHz @ 25℃				
Limit: +/- 2.5 ppm = 2091 Hz				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature (℃)	(MHz)		
3.7	-30	836.599912	83.00	2091
3.7	-20	836.599936	59.00	2091
3.7	-10	836.59995	45.00	2091
3.7	0	836.59996	35.00	2091
3.7	10	836.59998	13.00	2091
3.7	20	836.60000	0.00	2091
3.7	30	836.60002	-22.00	2091
3.7	40	836.60000	-9.00	2091
3.7	50	836.60002	-26.00	2091

Reference Frequency: PCS Mid Channel 1880 MHz @ 25℃				
Limit: +/- 2.5 ppm = 4700 Hz				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature (℃)	(MHz)		
3.7	-30	1879.999823	141.00	4700
3.7	-20	1879.999852	112.00	4700
3.7	-10	1879.99991	57.00	4700
3.7	0	1879.99991	57.00	4700
3.7	10	1879.99994	20.00	4700
3.7	20	1879.99996	0.00	4700
3.7	30	1880.00000	-31.00	4700
3.7	40	1880.00002	-55.00	4700
3.7	50	1880.00005	-86.00	4700

Note: The battery is rated 3.7V dc.

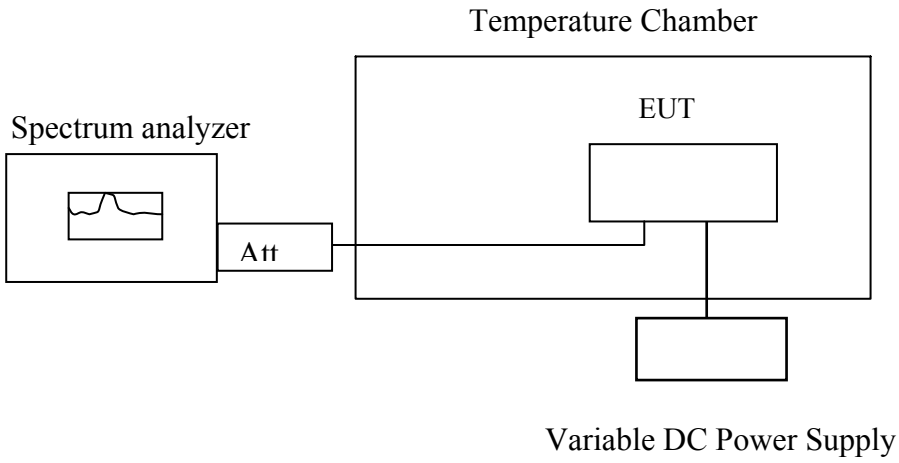
11. FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT

11.1 Standard Applicable

According to FCC §2.1055(d)(1)(2)

Frequency Tolerance: 2.5 ppm

11.2 Test Set-up:



Note: *Measurement setup for testing on Antenna connector*

11.3 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.

11.4 Measurement Equipment Used:

Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Spectrum Analyzer	Agilent	E4446A	MY43360126	03/29/2005	03/28/2006
Spectrum Analyzer	Agilent	7405A	US41160416	06/28/2005	06/29/2006
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006
Power Sensor	Anritsu	MA2490A	31431	06/28/2005	06/29/2006
Power Meter	Anritsu	ML2487A	6K00002070	06/28/2005	06/29/2006
Temperature Chamber	TERCHY	MHG-120LF	911009	11/11/2005	11/12/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circult	BW-S10W5	N/A	10/07/2005	10/06/2006
Attenuator	Mini-Circult	BW-S6W5	N/A	10/07/2005	10/06/2006
Splitter	Mini-Circult	ZFSC-2-10G	N/A	10/07/2005	10/06/2006
Signal Generator	R&S	SMR40	100210	11/09/2005	11/10/2006
Diode Detector	Agilent	8471E	MY4224	N/A	N/A
AC Power Supply	APW-105N	887592	All Power	N/A	N/A

11.5 Measurement Result

Reference Frequency: GSM Mid Channel 836.6 MHz @ 25℃				
Limit: +/- 2.5 ppm = 2091 Hz				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature (℃)	(MHz)		
3.70	25.00	836.599994	0.00	2091.00
3.18	25.00	836.599974	20.00	2091.00
4.26	25.00	836.60001	-16.00	2091.00
3.17 (End Point)	25.00	836.59997	20.00	2091.00

Reference Frequency: PCS Mid Channel 1880 MHz @ 25℃				
Limit: +/- 2.5 ppm = 4700 Hz				
Power Supply	Environment	Frequency	Delta (Hz)	Limit (Hz)
Vdc	Temperature (℃)	(MHz)		
3.7	25	1879.999976	0.00	4700
3.25	25	1879.99993	46.00	4700
4.255	25	1879.999955	21.00	4700
3.24 (Endpoint)	25	1879.99993	46.00	4700

Note: The battery is rated 3.7V dc.

12. AC POWER LINE CONDUCTED EMISSION TEST

12.1 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.		

12.2 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.

12.3 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.

12.4 Measurement Equipment Used:

Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
EMC Analyzer	HP	8594EM	3624A00203	09/02/2005	09/03/2006
EMI Test Receiver	R&S	ESCS30	828985/004	06/09/2005	06/10/2006
Transient Limiter	HP	11947A	3107A02062	09/02/2005	09/03/2006
LISN	Rolf-Heine	NNB-2/16Z	99012	12/31/2004	12/30/2005
LISN	Rolf-Heine	NNB-2/16Z	99013	12/24/2004	12/23/2005
Coaxial Cables	N/A	No. 3, 4	N/A	12/24/2004	12/23/2005

12.5 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	: GSM850 Normal Operating	Test Date	Dec.05, 2005
Fundamental Frequency	: N/A	Test By	Sky
Temperature	: 23℃	Pol	Line/Neutral
Humidity	: 57%	Adaptor Model	3DS09371AGAA
Test Voltage	:120Vac	Serial number	Astec

FREQ MHz	Q.P. Raw dBuV	AVG Raw dBuV	Q.P. Limit dBuV	AVG Limit dBuV	Q.P. Margin dB	AVG Margin dB	NOTE
0.370	48.06	43.76	58.50	48.50	-10.44	-4.74	L1
2.680	44.99	43.20	56.00	46.00	-11.01	-2.80	L1
3.260	42.63	38.47	56.00	46.00	-13.37	-7.53	L1
3.960	40.42	---	56.00	46.00	-15.58	---	L1
4.620	44.29	40.37	56.00	46.00	-11.71	-5.63	L1
5.360	45.11	---	60.00	50.00	-14.89	---	L1
2.900	45.69	42.35	56.00	46.00	-10.31	-3.65	L2
3.480	44.57	42.01	56.00	46.00	-11.43	-3.99	L2
4.060	40.78	34.65	56.00	46.00	-15.22	-11.35	L2
4.680	42.04	---	56.00	46.00	-13.96	---	L2
5.000	48.67	44.21	56.00	46.00	-7.33	-1.79	L2
5.600	45.46	---	60.00	50.00	-14.54	---	L2

Remark：

(1) Measuring frequencies from 0.15 MHz to 30MHz。

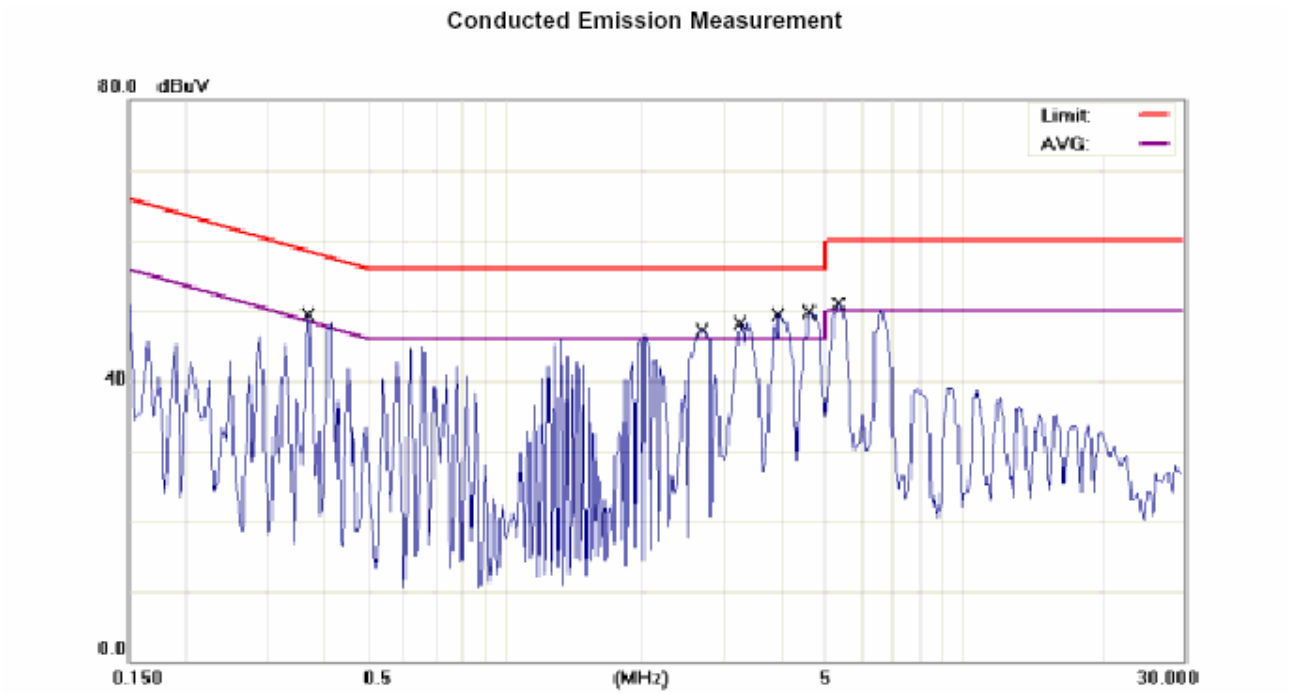
(2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Qusia-Peak detector and Average detector.

(3) "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.

(4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;

(5) L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

Conducted Emission Test Plot (3DS09371AGAA Supplier: Astec)



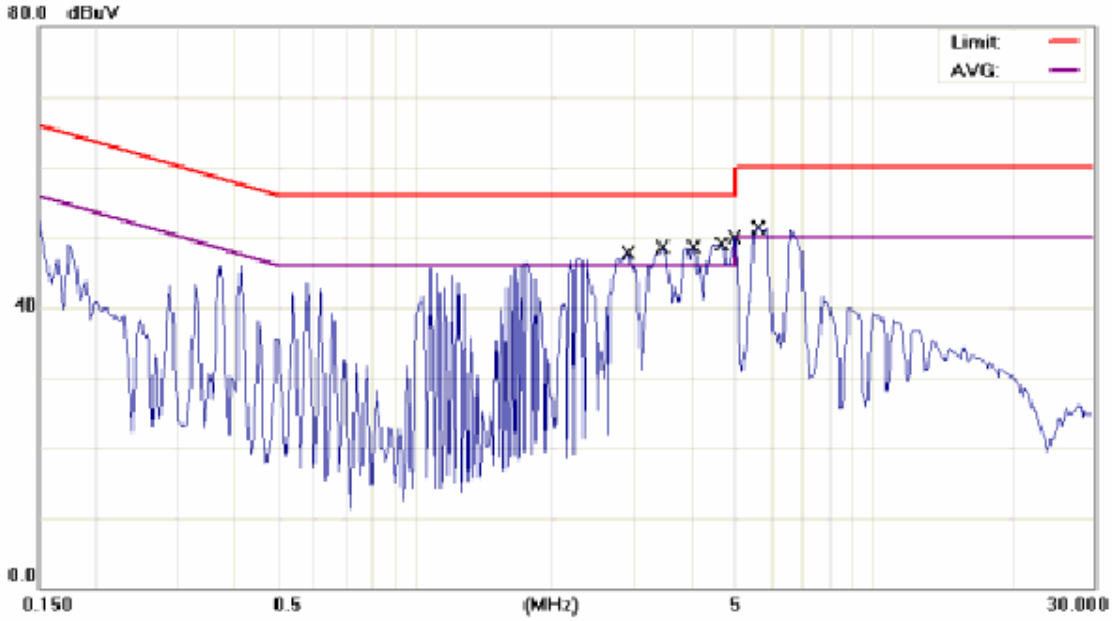
Site SGS CONDUCTED #1
Limit: CISPR22 Class B Conduction(QP)
EUT: mobile phone
M/N: OT-E161a
Note: GSM850 LINK with 3DS09371AGAA Adapter

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

Temperature: 23 ℃
Humidity: 57 %
Air Pressure: hpa

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3700	47.45	0.61	48.06	58.50	-10.44	QP	
2		0.3700	43.15	0.61	43.76	48.50	-4.74	AVG	
3		2.6800	44.32	0.67	44.99	56.00	-11.01	QP	
4	*	2.6800	42.53	0.67	43.20	46.00	-2.80	AVG	
5		3.2600	41.94	0.69	42.63	56.00	-13.37	QP	
6		3.2600	37.78	0.69	38.47	46.00	-7.53	AVG	
7		3.9600	39.71	0.71	40.42	56.00	-15.58	QP	
8		3.9600	30.04	0.71	30.75	46.00	-15.25	AVG	
9		4.6200	43.56	0.73	44.29	56.00	-11.71	QP	
10		4.6200	39.64	0.73	40.37	46.00	-5.63	AVG	
11		5.3600	44.35	0.76	45.11	60.00	-14.89	QP	
12		5.3600	40.19	0.76	40.95	50.00	-9.05	AVG	

Conducted Emission Measurement



Site SGS CONDUCTED #1 | Phase: N | Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) | Power: AC 120V/60Hz | Humidity: 57 %
EUT: mobile phone | Distance: | Air Pressure: hpa
M/N: OT-E161a
Note: GSM850 LINK with 3DS09371AGAA Adapter

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		2.9000	45.01	0.68	45.69	56.00	-10.31	QP	
2		2.9000	41.67	0.68	42.35	46.00	-3.65	AVG	
3		3.4800	43.88	0.69	44.57	56.00	-11.43	QP	
4		3.4800	41.32	0.69	42.01	46.00	-3.99	AVG	
5		4.0600	40.07	0.71	40.78	56.00	-15.22	QP	
6		4.0600	33.94	0.71	34.65	46.00	-11.35	AVG	
7		4.6800	41.31	0.73	42.04	56.00	-13.96	QP	
8		4.6800	38.33	0.73	39.06	46.00	-6.94	AVG	
9		5.0000	47.92	0.75	48.67	56.00	-7.33	QP	
10	*	5.0000	43.46	0.75	44.21	46.00	-1.79	AVG	
11		5.6000	44.69	0.77	45.46	60.00	-14.54	QP	
12		5.6000	39.49	0.77	40.26	50.00	-9.74	AVG	

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode	: GSM1900 Normal Operating	Test Date	Dec.05, 2005
Fundamental Frequency	: N/A	Test By	Sky
Temperature	: 23℃	Pol	Line/Neutral
Humidity	: 57%	Adaptor Model	3DS09371AGAA
Test Voltage	:120Vac	Supplier	Astec

FREQ MHz	Q.P. Raw dBuV	AVG Raw dBuV	Q.P. Limit dBuV	AVG Limit dBuV	Q.P. Margin dB	AVG Margin dB	NOTE
0.330	45.67	43.74	59.45	49.45	-13.78	-5.71	L1
0.370	48.52	44.27	58.50	48.50	-9.98	-4.23	L1
2.880	45.39	43.22	56.00	46.00	-10.61	-2.78	L1
3.700	46.79	42.90	56.00	46.00	-9.21	-3.10	L1
4.400	48.01	40.93	56.00	46.00	-7.99	-5.07	L1
5.840	49.81	41.27	60.00	50.00	-10.19	-8.73	L1
0.210	42.11	---	63.21	53.21	-21.10	---	L2
0.265	44.02	---	61.27	51.27	-17.25	---	L2
0.300	38.54	---	60.24	50.24	-21.70	---	L2
3.660	47.59	43.40	56.00	46.00	-8.41	-2.60	L2
4.360	48.15	41.00	56.00	46.00	-7.85	-5.00	L2
5.760	49.10	45.59	60.00	50.00	-10.90	-4.41	L2

Remark：

(1) Measuring frequencies from 0.15 MHz to 30MHz。

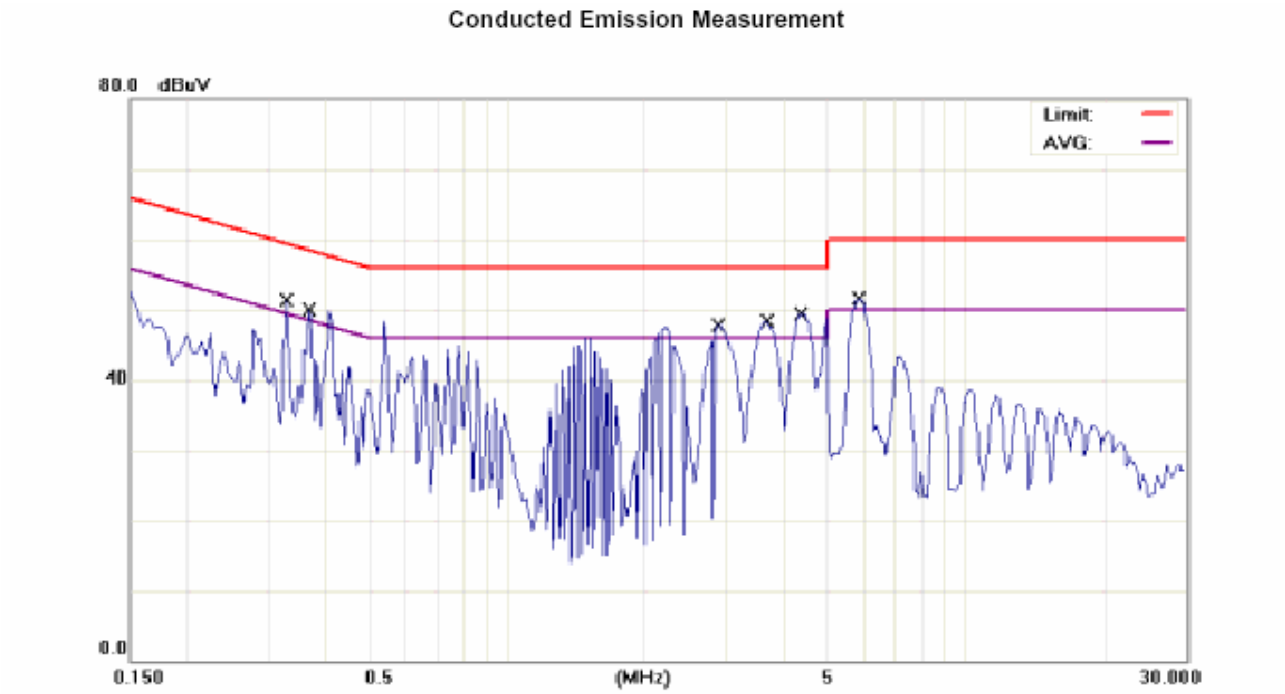
(2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Qusia-Peak detector and Average detector.

(3) "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.

(4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;

(5) L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

Conducted Emission Test Plot (3DS09371 AGAA Supplier: Astec)



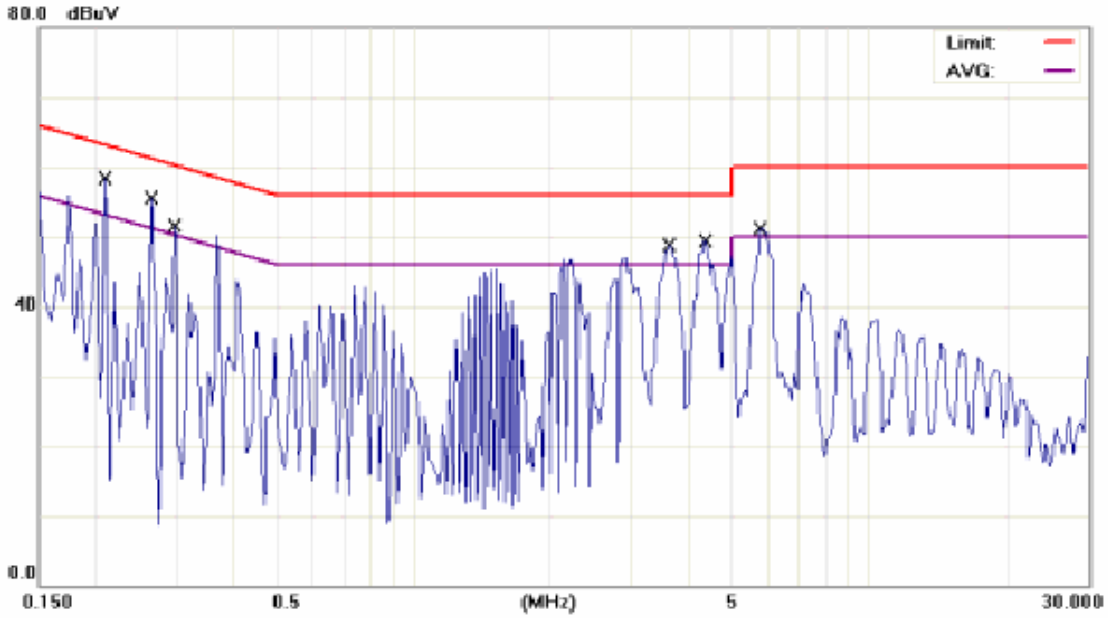
Site SGS CONDUCTED #1
Limit: CISPR22 Class B Conduction(QP)
EUT: mobile phone
M/N: OT-E161a
Note: GSM1900 LINK with 3DS09371AGAA Adapter

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

Temperature: 23 ℃
Humidity: 57 %
Air Pressure: hpa

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3300	45.07	0.60	45.67	59.45	-13.78	QP	
2		0.3300	43.14	0.60	43.74	49.45	-5.71	AVG	
3		0.3700	47.91	0.61	48.52	58.50	-9.98	QP	
4		0.3700	43.66	0.61	44.27	48.50	-4.23	AVG	
5		2.8800	44.71	0.68	45.39	56.00	-10.61	QP	
6	*	2.8800	42.54	0.68	43.22	46.00	-2.78	AVG	
7		3.7000	46.09	0.70	46.79	56.00	-9.21	QP	
8		3.7000	42.20	0.70	42.90	46.00	-3.10	AVG	
9		4.4000	47.29	0.72	48.01	56.00	-7.99	QP	
10		4.4000	40.21	0.72	40.93	46.00	-5.07	AVG	
11		5.8400	49.02	0.79	49.81	60.00	-10.19	QP	
12		5.8400	40.48	0.79	41.27	50.00	-8.73	AVG	

Conducted Emission Measurement



Site SGS CONDUCTED #1 | Phase: N | Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) | Power: AC 120V/60Hz | Humidity: 57 %
EUT: mobile phone | Distance: | Air Pressure: hpa
M/N: OT-E161a
Note: GSM1900 LINK with 3DS09371AGAA Adapter

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2100	41.51	0.60	42.11	63.21	-21.10	QP	
2		0.2100	36.61	0.60	37.21	53.21	-16.00	AVG	
3		0.2650	43.42	0.60	44.02	61.27	-17.25	QP	
4		0.2650	39.47	0.60	40.07	51.27	-11.20	AVG	
5		0.3000	37.94	0.60	38.54	60.24	-21.70	QP	
6		0.3000	33.65	0.60	34.25	50.24	-15.99	AVG	
7		3.6600	46.89	0.70	47.59	56.00	-8.41	QP	
8	*	3.6600	42.70	0.70	43.40	46.00	-2.60	AVG	
9		4.3600	47.43	0.72	48.15	56.00	-7.85	QP	
10		4.3600	40.28	0.72	41.00	46.00	-5.00	AVG	
11		5.7600	48.32	0.78	49.10	60.00	-10.90	QP	
12		5.7600	44.81	0.78	45.59	50.00	-4.41	AVG	

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode	: GSM850 Normal Operating	Test Date	Dec.05, 2005
Fundamental Frequency	: N/A	Test By	Sky
Temperature	: 23℃	Pol	Line/Neutral
Humidity	: 57%	Adaptor Model	3DS09371AGAA
Test Voltage	:120Vac	Supplier	Leader

FREQ MHz	Q.P. Raw dBuV	AVG Raw dBuV	Q.P. Limit dBuV	AVG Limit dBuV	Q.P. Margin dB	AVG Margin dB	NOTE
0.370	49.73	44.39	58.50	48.50	-8.77	-4.11	L1
0.410	48.76	45.01	57.65	47.65	-8.89	-2.64	L1
2.180	46.01	42.93	56.00	46.00	-9.99	-3.07	L1
3.620	47.44	44.84	56.00	46.00	-8.56	-1.16	L1
4.360	48.22	44.48	56.00	46.00	-7.78	-1.52	L1
5.800	49.87	46.86	60.00	50.00	-10.13	-3.14	L1
1.520	44.62	40.72	56.00	46.00	-11.38	-5.28	L2
2.180	45.91	42.18	56.00	46.00	-10.09	-3.82	L2
2.920	45.79	42.88	56.00	46.00	-10.21	-3.12	L2
3.660	47.51	42.92	56.00	46.00	-8.49	-3.08	L2
4.400	47.91	44.33	56.00	46.00	-8.09	-1.67	L2
5.800	49.81	44.42	60.00	50.00	-10.19	-5.58	L2

Remark：

(1) Measuring frequencies from 0.15 MHz to 30MHz。

(2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Qusia-Peak detector and Average detector.

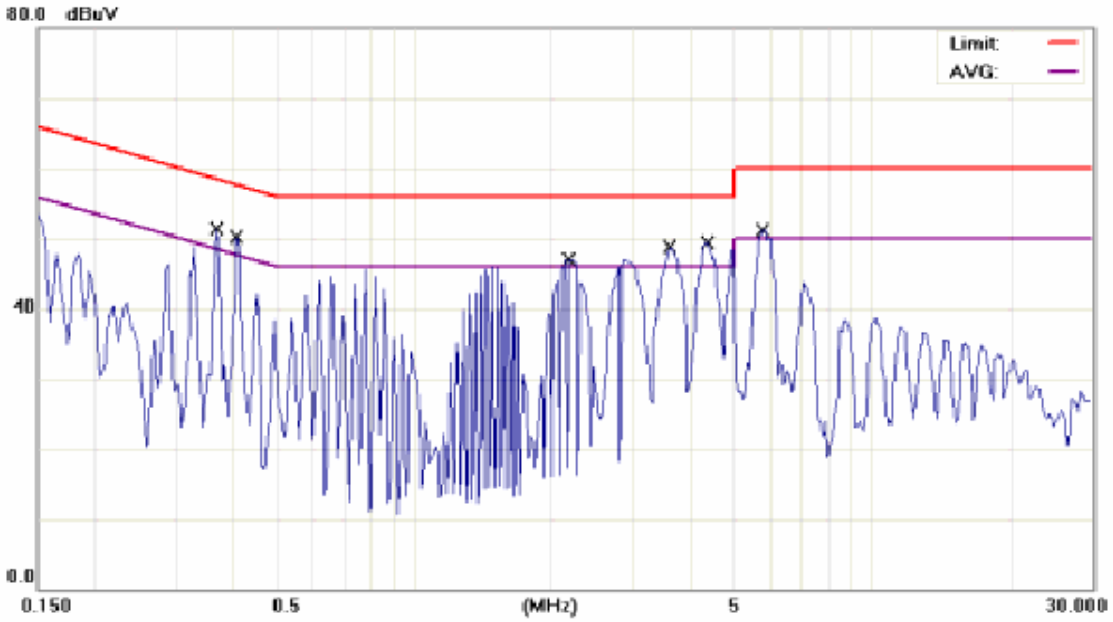
(3) "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.

(4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;

(5) L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

Conducted Emission Test Plot (3DS09371AGAA Supplier: Leader)

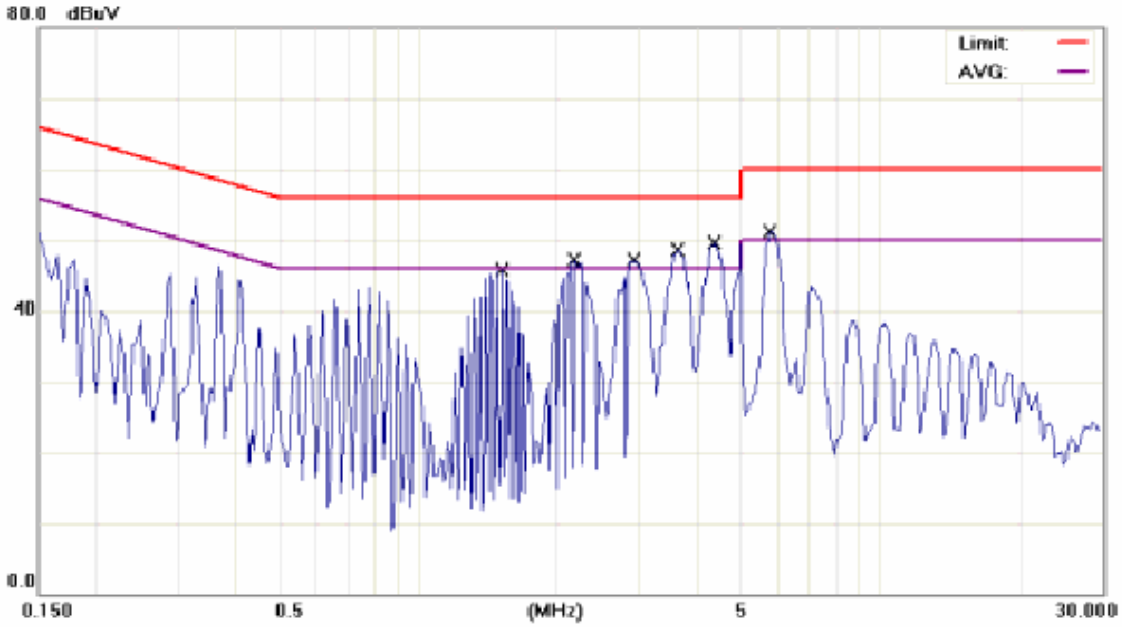
Conducted Emission Measurement



Site SGS CONDUCTED #1 | Phase: L1 | Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) | Power: AC 120V/60Hz | Humidity: 57 %
EUT: mobile phone | Distance: | Air Pressure: hpa
M/N: OT-E161a
Note: GSM850 LINK with 3DS09371AGAA (LEADER) Adapter

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3700	49.12	0.61	49.73	58.50	-8.77	QP	
2		0.3700	43.78	0.61	44.39	48.50	-4.11	AVG	
3		0.4100	48.15	0.61	48.76	57.65	-8.89	QP	
4		0.4100	44.40	0.61	45.01	47.65	-2.64	AVG	
5		2.1800	45.35	0.66	46.01	56.00	-9.99	QP	
6		2.1800	42.27	0.66	42.93	46.00	-3.07	AVG	
7		3.6200	46.74	0.70	47.44	56.00	-8.56	QP	
8	*	3.6200	44.14	0.70	44.84	46.00	-1.16	AVG	
9		4.3600	47.50	0.72	48.22	56.00	-7.78	QP	
10		4.3600	43.76	0.72	44.48	46.00	-1.52	AVG	
11		5.8000	49.09	0.78	49.87	60.00	-10.13	QP	
12		5.8000	46.08	0.78	46.86	50.00	-3.14	AVG	

Conducted Emission Measurement



Site SGS CONDUCTED #1 | Phase: N | Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) | Power: AC 120V/60Hz | Humidity: 57 %
EUT: mobile phone | Distance: | Air Pressure: hpa
M/N: OT-E161a
Note: GSM850 LINK with 3DS09371AGAA (LEADER) Adapter

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		1.5200	43.98	0.64	44.62	56.00	-11.38	QP	
2		1.5200	40.08	0.64	40.72	46.00	-5.28	AVG	
3		2.1800	45.25	0.66	45.91	56.00	-10.09	QP	
4		2.1800	41.52	0.66	42.18	46.00	-3.82	AVG	
5		2.9200	45.11	0.68	45.79	56.00	-10.21	QP	
6		2.9200	42.20	0.68	42.88	46.00	-3.12	AVG	
7		3.6600	46.81	0.70	47.51	56.00	-8.49	QP	
8		3.6600	42.22	0.70	42.92	46.00	-3.08	AVG	
9		4.4000	47.19	0.72	47.91	56.00	-8.09	QP	
10	*	4.4000	43.61	0.72	44.33	46.00	-1.67	AVG	
11		5.8000	49.03	0.78	49.81	60.00	-10.19	QP	
12		5.8000	43.64	0.78	44.42	50.00	-5.58	AVG	

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode	: GSM1900 Normal Operating	Test Date	Dec.05, 2005
Fundamental Frequency	: N/A	Test By	Sky
Temperature	: 25℃	Pol	Line/Neutral
Humidity	: 57%	Adaptor Model	3DS09371AGAA
Test Voltage	:120Vac	Supplier	Leader

FREQ MHz	Q.P. Raw dBuV	AVG Raw dBuV	Q.P. Limit dBuV	AVG Limit dBuV	Q.P. Margin dB	AVG Margin dB	NOTE
0.370	49.67	44.68	58.50	48.50	-8.83	-3.82	L1
2.180	46.01	42.33	56.00	46.00	-9.99	-3.67	L1
2.920	45.83	43.36	56.00	46.00	-10.17	-2.64	L1
3.620	47.42	42.35	56.00	46.00	-8.58	-3.65	L1
4.360	48.18	41.00	56.00	46.00	-7.82	-5.00	L1
5.800	49.87	48.27	60.00	50.00	-10.13	-1.73	L1
0.365	41.32	35.25	58.61	48.61	-17.29	-13.36	L2
2.220	45.65	43.66	56.00	46.00	-10.35	-2.34	L2
2.920	45.73	44.35	56.00	46.00	-10.27	-1.65	L2
3.660	47.32	42.49	56.00	46.00	-8.68	-3.51	L2
4.360	48.11	42.65	56.00	46.00	-7.89	-3.35	L2
5.800	48.17	47.42	60.00	50.00	-11.83	-2.58	L2

Remark：

(1) Measuring frequencies from 0.15 MHz to 30MHz。

(2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Qusia-Peak detector and Average detector.

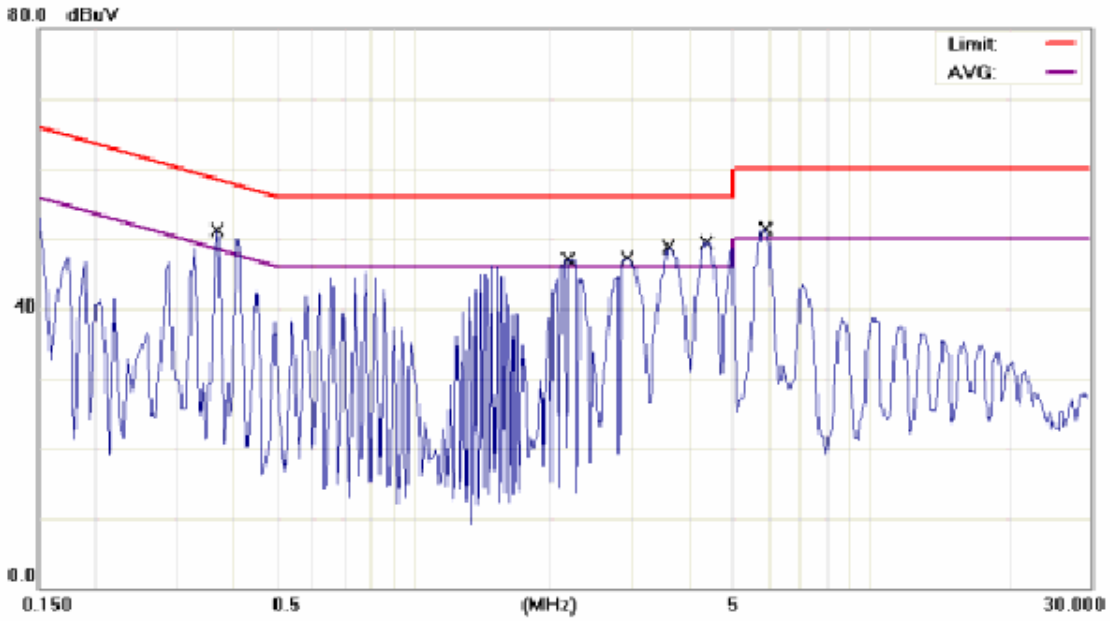
(3) "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.

(4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;

(5) L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

Conducted Emission Test Plot (3DS09371AGAA Supplier: Leader)

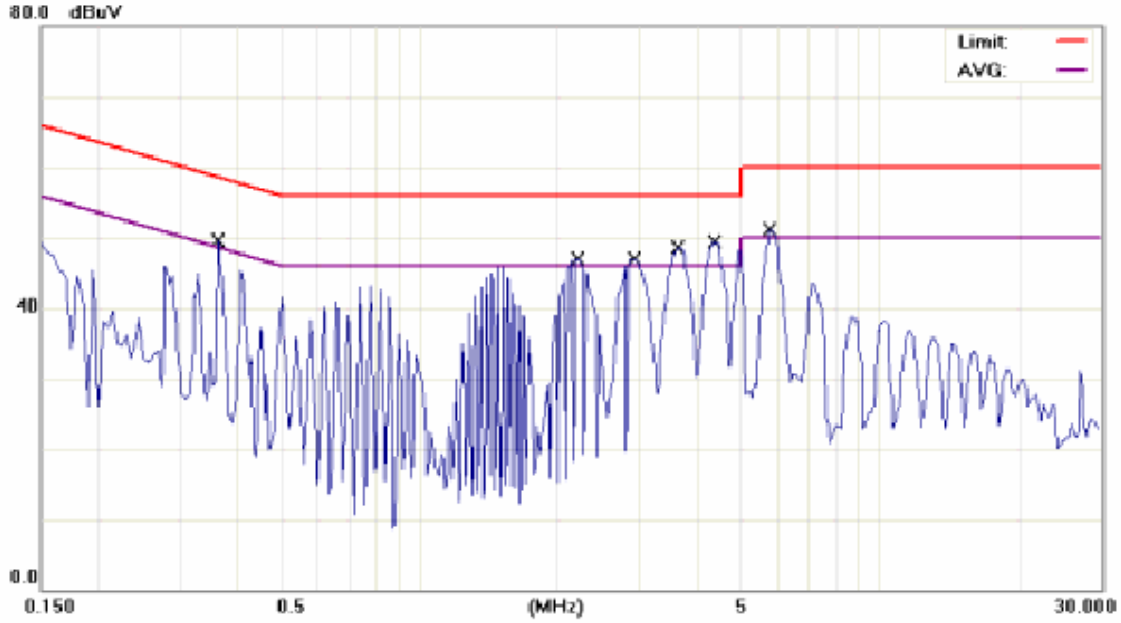
Conducted Emission Measurement



Site SGS CONDUCTED #1 | Phase: L1 | Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) | Power: AC 120V/60Hz | Humidity: 57 %
EUT: mobile phone | Distance: | Air Pressure: hpa
M/N: OT-E161a
Note: GSM1900 LINK with 3DS09371AGAA (LEADER) Adapter

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3700	49.06	0.61	49.67	58.50	-8.83	QP	
2		0.3700	44.07	0.61	44.68	48.50	-3.82	AVG	
3		2.1800	45.35	0.66	46.01	56.00	-9.99	QP	
4		2.1800	41.67	0.66	42.33	46.00	-3.67	AVG	
5		2.9200	45.15	0.68	45.83	56.00	-10.17	QP	
6		2.9200	42.68	0.68	43.36	46.00	-2.64	AVG	
7		3.6200	46.72	0.70	47.42	56.00	-8.58	QP	
8		3.6200	41.65	0.70	42.35	46.00	-3.65	AVG	
9		4.3600	47.46	0.72	48.18	56.00	-7.82	QP	
10		4.3600	40.28	0.72	41.00	46.00	-5.00	AVG	
11		5.8000	49.09	0.78	49.87	60.00	-10.13	QP	
12	*	5.8000	47.49	0.78	48.27	50.00	-1.73	AVG	

Conducted Emission Measurement



Site SGS CONDUCTED #1 | Phase: N | Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) | Power: AC 120V/60Hz | Humidity: 57 %
EUT: mobile phone | Distance: | Air Pressure: hpa
M/N: OT-E161a
Note: GSM1900 LINK with 3DS09371AGAA (LEADER) Adapter

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3650	40.71	0.61	41.32	58.61	-17.29	QP	
2		0.3650	34.64	0.61	35.25	48.61	-13.36	AVG	
3		2.2200	44.99	0.66	45.65	56.00	-10.35	QP	
4		2.2200	43.00	0.66	43.66	46.00	-2.34	AVG	
5		2.9200	45.05	0.68	45.73	56.00	-10.27	QP	
6	*	2.9200	43.67	0.68	44.35	46.00	-1.65	AVG	
7		3.6600	46.62	0.70	47.32	56.00	-8.68	QP	
8		3.6600	41.79	0.70	42.49	46.00	-3.51	AVG	
9		4.3600	47.39	0.72	48.11	56.00	-7.89	QP	
10		4.3600	41.93	0.72	42.65	46.00	-3.35	AVG	
11		5.8000	47.39	0.78	48.17	60.00	-11.83	QP	
12		5.8000	46.64	0.78	47.42	50.00	-2.58	AVG	

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode	: GSM850 Normal Operating	Test Date	Dec.05, 2005
Fundamental Frequency	: N/A	Test By	Sky
Temperature	: 23℃	Pol	Line/Neutral
Humidity	: 57%	Adaptor Model	3DS09371AAAA
Test Voltage	:220Vac	Supplier	Leader

FREQ MHz	Q.P. Raw dBuV	AVG Raw dBuV	Q.P. Limit dBuV	AVG Limit dBuV	Q.P. Margin dB	AVG Margin dB	NOTE
0.165	52.85	---	65.21	55.21	-12.36	---	L1
0.210	46.20	---	63.21	53.21	-17.01	---	L1
0.270	43.02	---	61.12	51.12	-18.10	---	L1
2.040	48.73	41.39	56.00	46.00	-7.27	-4.61	L1
2.980	45.88	41.73	56.00	46.00	-10.12	-4.27	L1
4.120	48.91	42.85	56.00	46.00	-7.09	-3.15	L1
0.190	50.12	---	64.04	54.04	-13.92	---	L2
0.205	47.12	---	63.41	53.41	-16.29	---	L2
1.180	47.75	41.88	56.00	46.00	-8.25	-4.12	L2
2.160	47.50	41.19	56.00	46.00	-8.50	-4.81	L2
3.380	48.39	43.27	56.00	46.00	-7.61	-2.73	L2
4.120	46.69	43.90	56.00	46.00	-9.31	-2.10	L2

Remark：

(1) Measuring frequencies from 0.15 MHz to 30MHz。

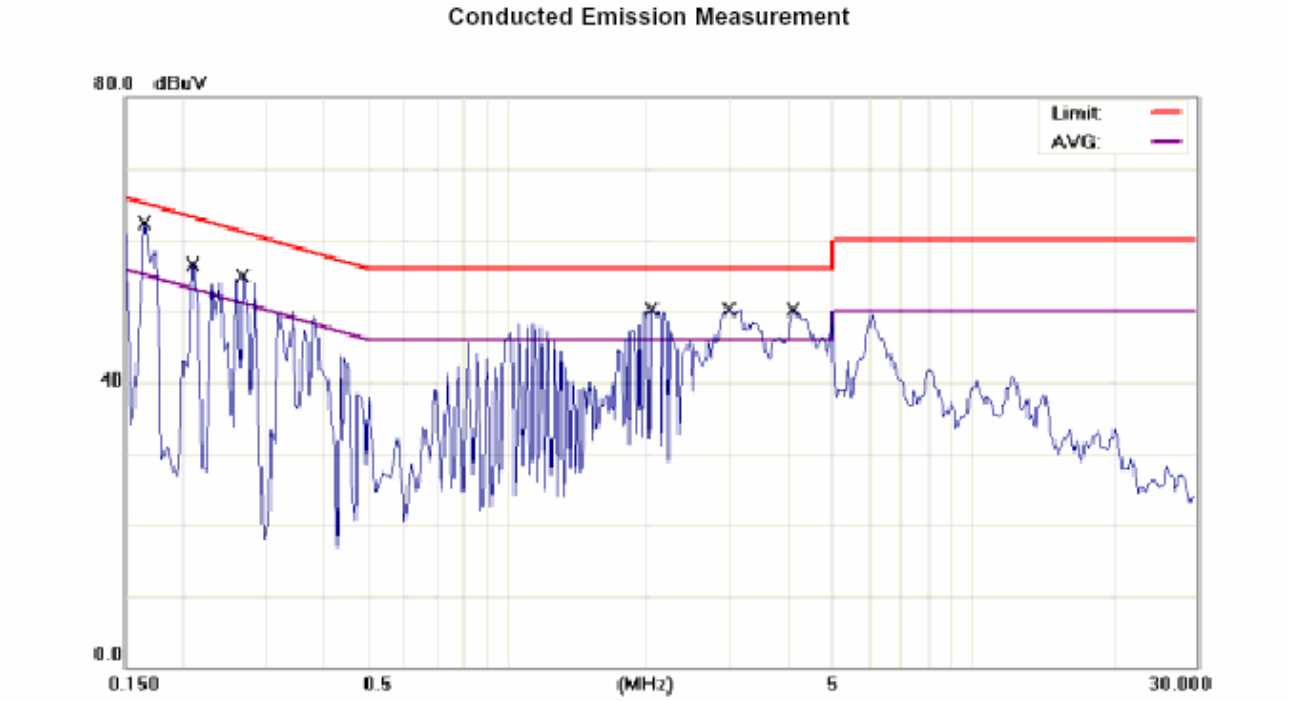
(2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Qusia-Peak detector and Average detector.

(3) "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.

(4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;

(5) L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

Conducted Emission Test Plot (3DS09371AAAA Supplier: Leader)



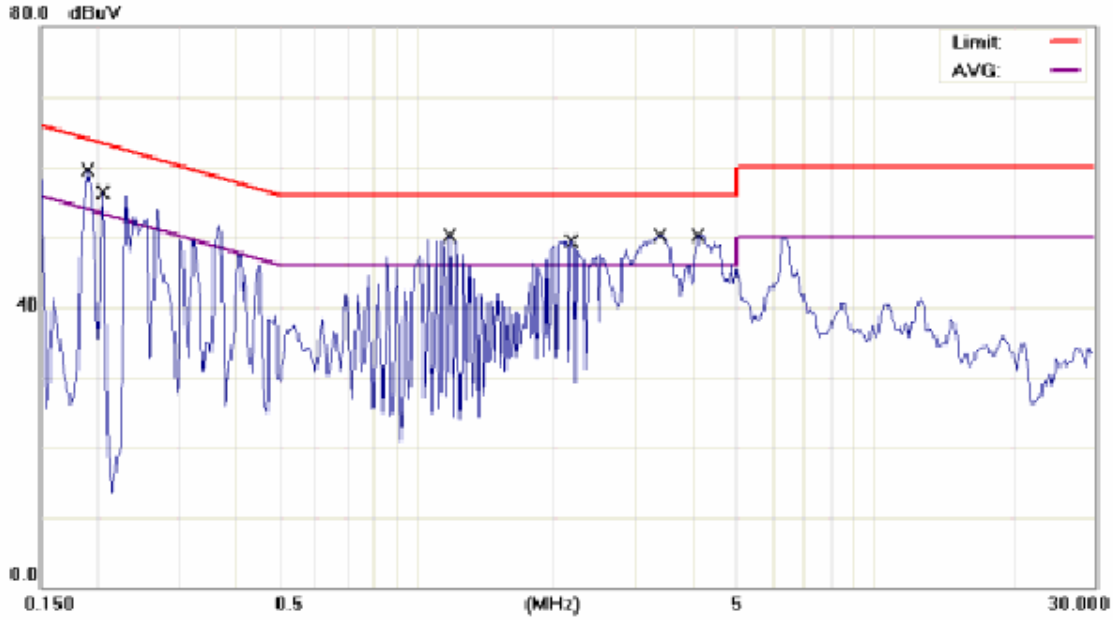
Site SGS CONDUCTED #1
Limit: CISPR22 Class B Conduction(QP)
EUT: mobile phone
M/N: OT-E161a
Note: GSM850 LINK with 3DS09371AAAA Adapter

Phase: L1
Power: AC 230V/50Hz
Distance:

Temperature: 23 ℃
Humidity: 57 %
Air Pressure: hpa

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1650	52.25	0.60	52.85	65.21	-12.36	QP	
2		0.1650	40.93	0.60	41.53	55.21	-13.68	AVG	
3		0.2100	45.60	0.60	46.20	63.21	-17.01	QP	
4		0.2100	28.72	0.60	29.32	53.21	-23.89	AVG	
5		0.2700	42.42	0.60	43.02	61.12	-18.10	QP	
6		0.2700	30.89	0.60	31.49	51.12	-19.63	AVG	
7		2.0400	48.08	0.65	48.73	56.00	-7.27	QP	
8		2.0400	40.74	0.65	41.39	46.00	-4.61	AVG	
9		2.9800	45.20	0.68	45.88	56.00	-10.12	QP	
10		2.9800	41.05	0.68	41.73	46.00	-4.27	AVG	
11		4.1200	48.20	0.71	48.91	56.00	-7.09	QP	
12	*	4.1200	42.14	0.71	42.85	46.00	-3.15	AVG	

Conducted Emission Measurement



Site SGS CONDUCTED #1 | Phase: N | Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) | Power: AC 230V/50Hz | Humidity: 57 %
EUT: mobile phone | Distance: | Air Pressure: hpa
M/N: OT-E161a
Note: GSM850 LINK with 3DS09371AAAA Adapter

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1900	49.52	0.60	50.12	64.04	-13.92	QP	
2		0.1900	30.42	0.60	31.02	54.04	-23.02	AVG	
3		0.2050	46.52	0.60	47.12	63.41	-16.29	QP	
4		0.2050	32.95	0.60	33.55	53.41	-19.86	AVG	
5		1.1800	47.12	0.63	47.75	56.00	-8.25	QP	
6		1.1800	41.25	0.63	41.88	46.00	-4.12	AVG	
7		2.1600	46.85	0.65	47.50	56.00	-8.50	QP	
8		2.1600	40.54	0.65	41.19	46.00	-4.81	AVG	
9		3.3800	47.70	0.69	48.39	56.00	-7.61	QP	
10		3.3800	42.58	0.69	43.27	46.00	-2.73	AVG	
11		4.1200	45.98	0.71	46.69	56.00	-9.31	QP	
12	*	4.1200	43.19	0.71	43.90	46.00	-2.10	AVG	

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode	: GSM1900 Normal Operating	Test Date	Dec.05, 2005
Fundamental Frequency	: N/A	Test By	Sky
Temperature	: 23℃	Pol	Line/Neutral
Humidity	: 57%	Adaptor Model	3DS09371AAAA
Test Voltage	:220Vac	Supplier	Leader

FREQ MHz	Q.P. Raw dBuV	AVG Raw dBuV	Q.P. Limit dBuV	AVG Limit dBuV	Q.P. Margin dB	AVG Margin dB	NOTE
0.195	50.26	---	63.82	53.82	-13.56	---	L1
0.255	44.19	---	61.59	51.59	-17.40	---	L1
2.000	48.87	44.99	56.00	46.00	-7.13	-1.01	L1
2.660	40.56	---	56.00	46.00	-15.44	---	L1
3.840	48.63	41.47	56.00	46.00	-7.37	-4.53	L1
4.740	45.49	41.69	56.00	46.00	-10.51	-4.31	L1
0.200	47.89	---	63.61	53.61	-15.72	---	L2
0.700	52.21	43.49	56.00	46.00	-3.79	-2.51	L2
1.980	41.25	---	56.00	46.00	-14.75	---	L2
3.340	46.43	40.61	56.00	46.00	-9.57	-5.39	L2
3.840	41.19	---	56.00	46.00	-14.81	---	L2
5.160	39.59	---	60.00	50.00	-20.41	---	L2

Remark：

(1) Measuring frequencies from 0.15 MHz to 30MHz。

(2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Qusia-Peak detector and Average detector.

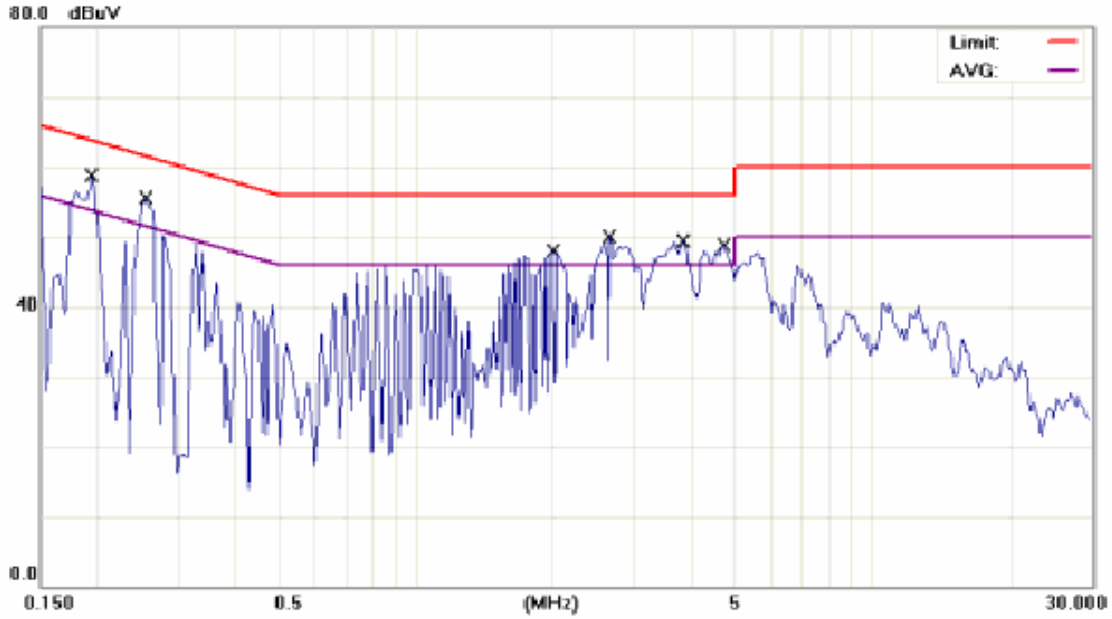
(3) "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.

(4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;

(5) L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

Conducted Emission Test Plot (3DS09371AAAA Supplier: Leader)

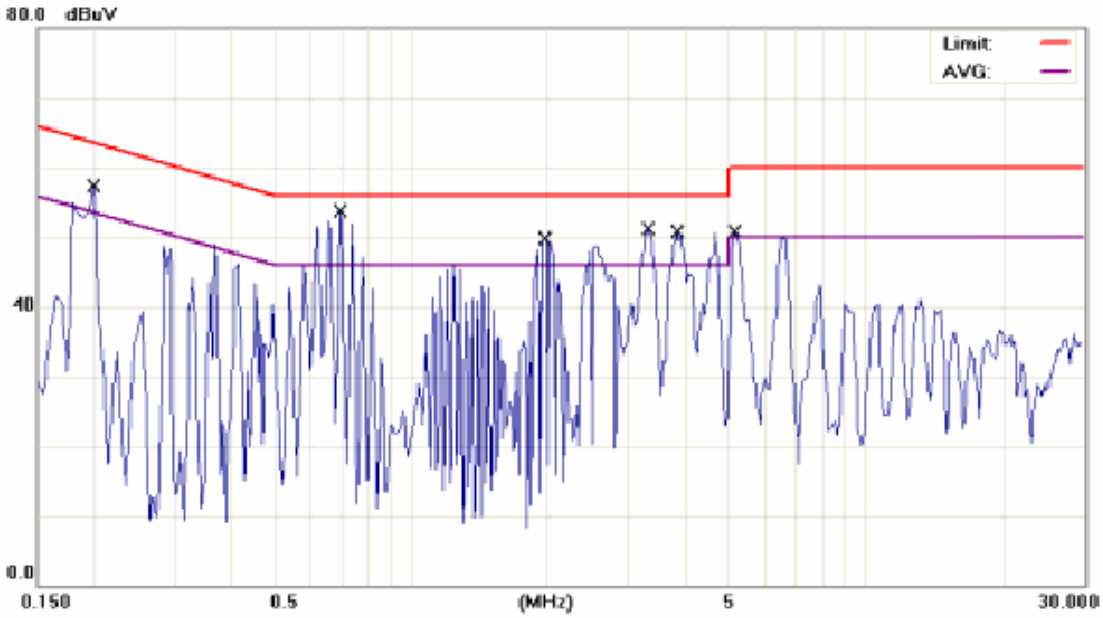
Conducted Emission Measurement



Site SGS CONDUCTED #1	Phase: L1	Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP)	Power: AC 230V/50Hz	Humidity: 57 %
EUT: mobile phone	Distance:	Air Pressure: hpa
M/N: OT-E161a		
Note: GSM1900 LINK with 3DS09371AAAA Adapter		

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1950	49.66	0.60	50.26	63.82	-13.56	QP	
2		0.1950	30.79	0.60	31.39	53.82	-22.43	AVG	
3		0.2550	43.59	0.60	44.19	61.59	-17.40	QP	
4		0.2550	37.33	0.60	37.93	51.59	-13.66	AVG	
5		2.0000	48.22	0.65	48.87	56.00	-7.13	QP	
6	*	2.0000	44.34	0.65	44.99	46.00	-1.01	AVG	
7		2.6600	39.89	0.67	40.56	56.00	-15.44	QP	
8		2.6600	34.63	0.67	35.30	46.00	-10.70	AVG	
9		3.8400	47.92	0.71	48.63	56.00	-7.37	QP	
10		3.8400	40.76	0.71	41.47	46.00	-4.53	AVG	
11		4.7400	44.75	0.74	45.49	56.00	-10.51	QP	
12		4.7400	40.95	0.74	41.69	46.00	-4.31	AVG	

Conducted Emission Measurement



Site SGS CONDUCTED #1 | Phase: N | Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) | Power: AC 230V/50Hz | Humidity: 57 %
EUT: mobile phone | Distance: | Air Pressure: hpa
M/N: OT-E161a
Note: GSM1900 LINK with 3DS09371AAAA Adapter

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2000	47.29	0.60	47.89	63.61	-15.72	QP	
2		0.2000	26.18	0.60	26.78	53.61	-26.83	AVG	
3		0.7000	51.60	0.61	52.21	56.00	-3.79	QP	
4	*	0.7000	42.88	0.61	43.49	46.00	-2.51	AVG	
5		1.9800	40.60	0.65	41.25	56.00	-14.75	QP	
6		1.9800	37.74	0.65	38.39	46.00	-7.61	AVG	
7		3.3400	45.74	0.69	46.43	56.00	-9.57	QP	
8		3.3400	39.92	0.69	40.61	46.00	-5.39	AVG	
9		3.8400	40.48	0.71	41.19	56.00	-14.81	QP	
10		3.8400	31.26	0.71	31.97	46.00	-14.03	AVG	
11		5.1600	38.84	0.75	39.59	60.00	-20.41	QP	
12		5.1600	29.10	0.75	29.85	50.00	-20.15	AVG	

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode	: GSM850 Normal Operating	Test Date	Dec.05, 2005
Fundamental Frequency	: N/A	Test By	Sky
Temperature	: 23℃	Pol	Line/Neutral
Humidity	: 57%	Adaptor Model	3DS09371AAAA
Test Voltage	:220Vac	Supplier	Astec

FREQ MHz	Q.P. Raw dBuV	AVG Raw dBuV	Q.P. Limit dBuV	AVG Limit dBuV	Q.P. Margin dB	AVG Margin dB	NOTE
0.405	48.22	40.73	57.75	47.75	-9.53	-7.02	L1
0.640	47.85	41.11	56.00	46.00	-8.15	-4.89	L1
2.100	46.45	41.85	56.00	46.00	-9.55	-4.15	L1
2.540	47.85	43.32	56.00	46.00	-8.15	-2.68	L1
2.860	43.93	42.41	56.00	46.00	-12.07	-3.59	L1
4.760	46.33	44.75	56.00	46.00	-9.67	-1.25	L1
1.780	39.25	---	56.00	46.00	-16.75	---	L2
2.100	45.37	41.06	56.00	46.00	-10.63	-4.94	L2
2.540	47.83	43.25	56.00	46.00	-8.17	-2.75	L2
2.940	45.36	43.74	56.00	46.00	-10.64	-2.26	L2
4.440	43.77	43.45	56.00	46.00	-12.23	-2.55	L2
4.840	46.16	40.93	56.00	46.00	-9.84	-5.07	L2

Remark：

(1) Measuring frequencies from 0.15 MHz to 30MHz。

(2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Qusia-Peak detector and Average detector.

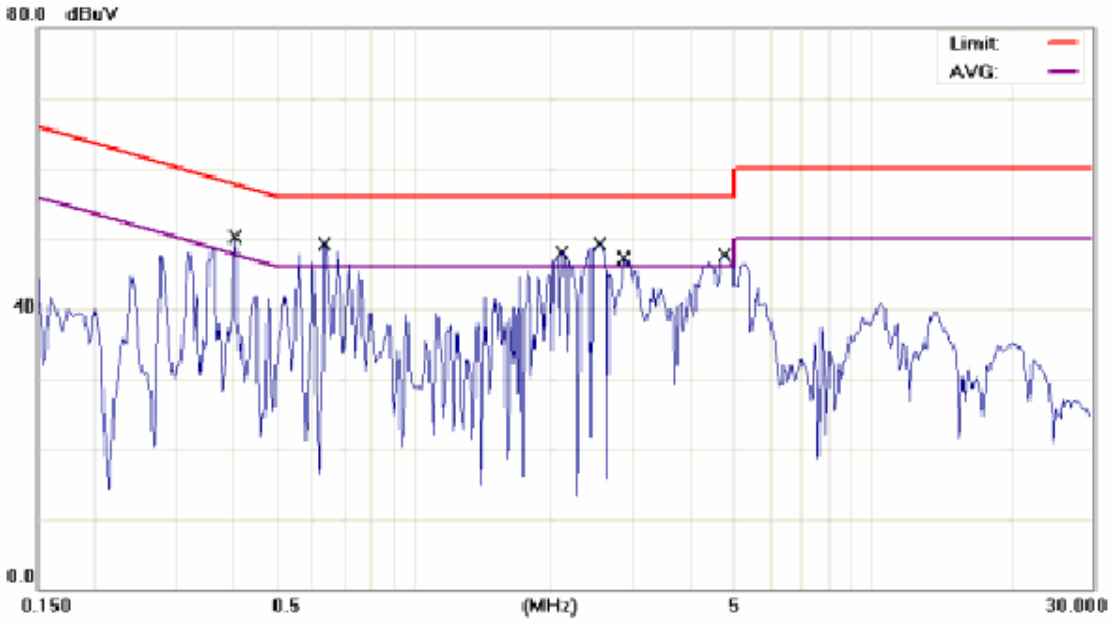
(3) "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.

(4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;

(5) L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

Conducted Emission Test Plot (3DS09371AAAA Supplier: Astec)

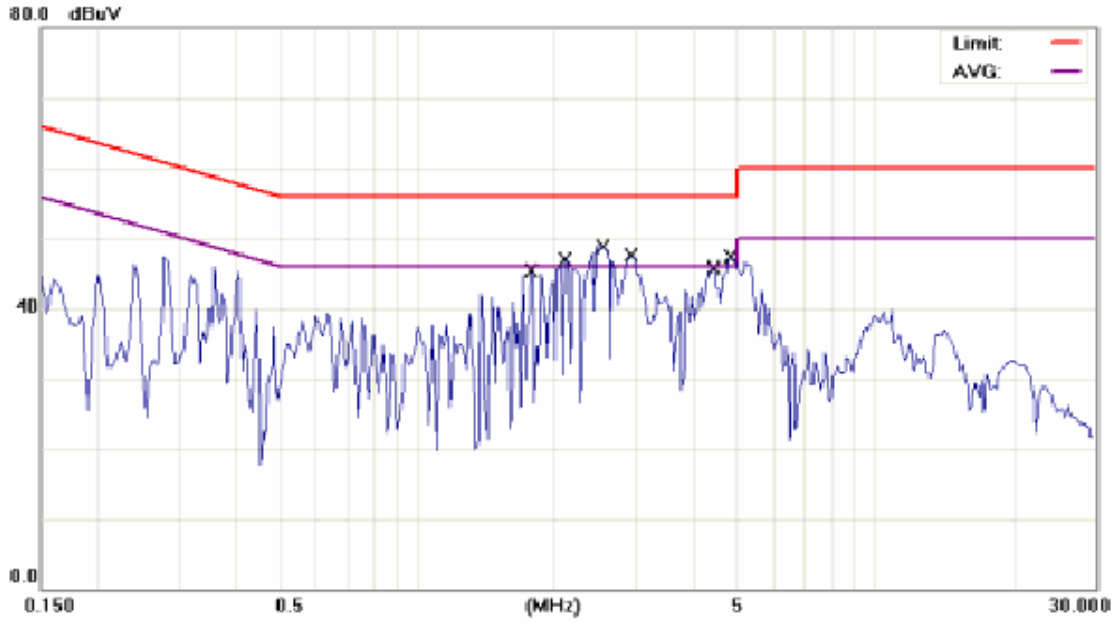
Conducted Emission Measurement



Site SGS CONDUCTED #1 | Phase: L1 | Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) | Power: AC 230V/50Hz | Humidity: 57 %
EUT: mobile phone | Distance: | Air Pressure: hpa
M/N: OT-E161a
Note: GSM850 LINK with 3DS09371AAAA(Astec) Adapter

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.4050	47.61	0.61	48.22	57.75	-9.53	QP	
2		0.4050	40.12	0.61	40.73	47.75	-7.02	AVG	
3		0.6400	47.24	0.61	47.85	56.00	-8.15	QP	
4		0.6400	40.50	0.61	41.11	46.00	-4.89	AVG	
5		2.1000	45.80	0.65	46.45	56.00	-9.55	QP	
6		2.1000	41.20	0.65	41.85	46.00	-4.15	AVG	
7		2.5400	47.18	0.67	47.85	56.00	-8.15	QP	
8		2.5400	42.65	0.67	43.32	46.00	-2.68	AVG	
9		2.8600	43.25	0.68	43.93	56.00	-12.07	QP	
10		2.8600	41.73	0.68	42.41	46.00	-3.59	AVG	
11		4.7600	45.59	0.74	46.33	56.00	-9.67	QP	
12	*	4.7600	44.01	0.74	44.75	46.00	-1.25	AVG	

Conducted Emission Measurement



Site SGS CONDUCTED #1 | Phase: N | Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) | Power: AC 230V/50Hz | Humidity: 57 %
EUT: mobile phone | Distance: | Air Pressure: hpa
M/N: OT-E161a
Note: GSM850 LINK with 3DS09371AAAA(Astec) Adapter

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		1.7800	38.71	0.64	39.35	56.00	-16.65	QP	
2		1.7800	31.24	0.64	31.88	46.00	-14.12	AVG	
3		2.1000	44.72	0.65	45.37	56.00	-10.63	QP	
4		2.1000	40.41	0.65	41.06	46.00	-4.94	AVG	
5		2.5400	47.16	0.67	47.83	56.00	-8.17	QP	
6		2.5400	42.58	0.67	43.25	46.00	-2.75	AVG	
7		2.9400	44.68	0.68	45.36	56.00	-10.64	QP	
8	*	2.9400	43.06	0.68	43.74	46.00	-2.26	AVG	
9		4.4400	43.04	0.73	43.77	56.00	-12.23	QP	
10		4.4400	42.72	0.73	43.45	46.00	-2.55	AVG	
11		4.8400	45.42	0.74	46.16	56.00	-9.84	QP	
12		4.8400	40.19	0.74	40.93	46.00	-5.07	AVG	

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode	: GSM1900 Normal Operating	Test Date	Dec.05, 2005
Fundamental Frequency	: N/A	Test By	Sky
Temperature	: 25℃	Pol	Line/Neutral
Humidity	: 57%	Adaptor Model	3DS09371AAAA
Test Voltage	:220Vac	Supplier	Astec

FREQ MHz	Q.P. Raw dBuV	AVG Raw dBuV	Q.P. Limit dBuV	AVG Limit dBuV	Q.P. Margin dB	AVG Margin dB	NOTE
0.405	48.18	41.29	57.75	47.75	-9.57	-6.46	L1
0.680	46.52	41.87	56.00	46.00	-9.48	-4.13	L1
2.140	46.84	41.62	56.00	46.00	-9.16	-4.38	L1
2.500	48.70	41.74	56.00	46.00	-7.30	-4.26	L1
2.860	44.56	41.01	56.00	46.00	-11.44	-4.99	L1
4.720	46.11	42.00	56.00	46.00	-9.89	-4.00	L1
1.620	45.39	38.51	56.00	46.00	-10.61	-7.49	L2
3.000	41.20	---	56.00	46.00	-14.80	---	L2
0.380	48.92	33.22	58.28	48.28	-9.36	-15.06	L2
3.400	45.44	38.61	56.00	46.00	-10.56	-7.39	L2
4.300	41.83	---	56.00	46.00	-14.17	---	L2
4.860	40.24	---	56.00	46.00	-15.76	---	L2

Remark：

(1) Measuring frequencies from 0.15 MHz to 30MHz。

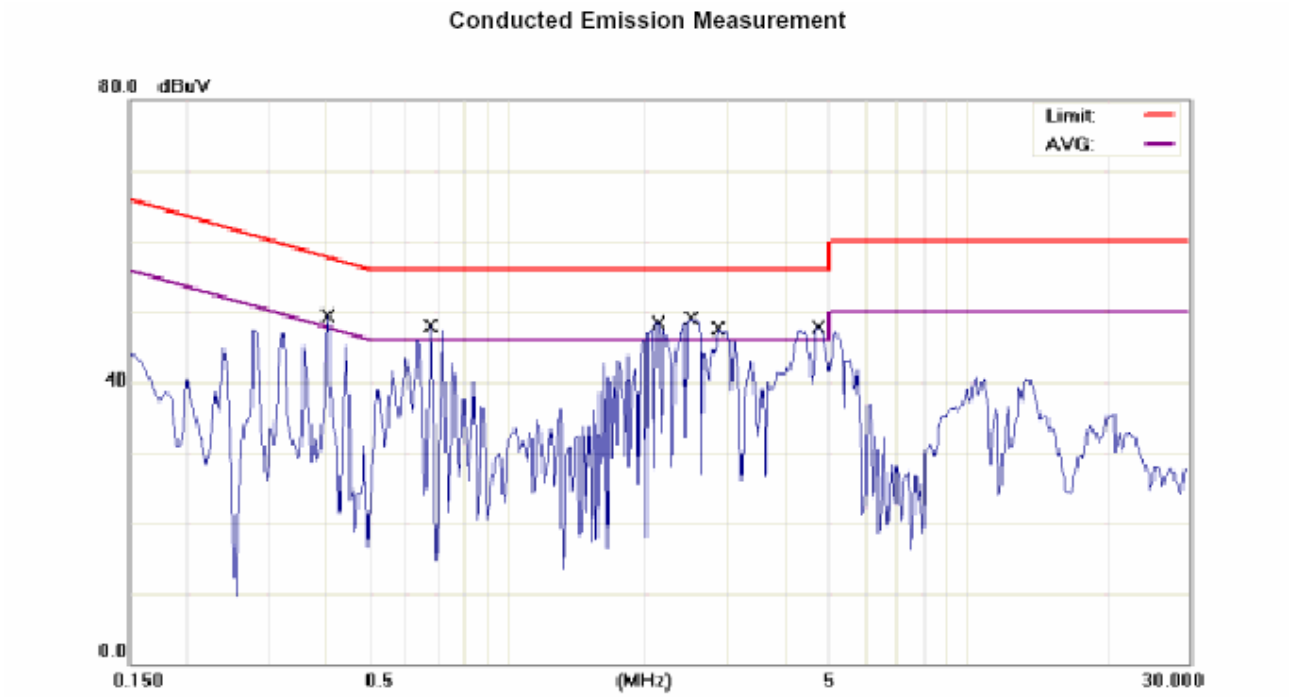
(2) The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Qusia-Peak detector and Average detector.

(3) "---" denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.

(4) The IF bandwidth of SPA between 0.15MHz to 30MHz was 10KHz;
The IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9KHz;

(5) L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

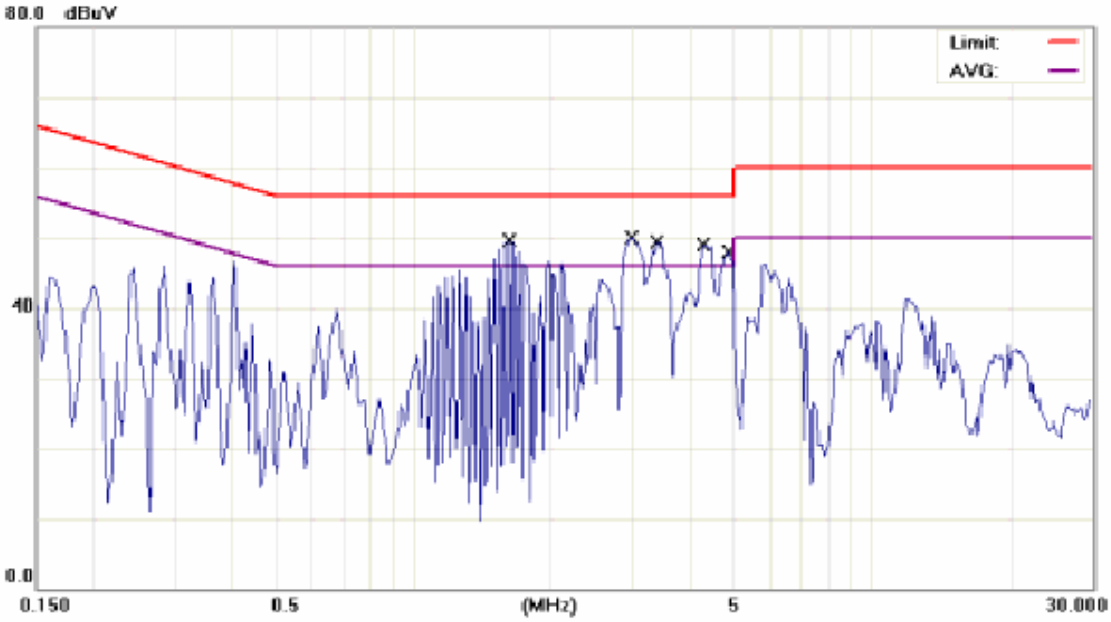
Conducted Emission Test Plot (3DS09371AAAA Supplier: Astec)



Site SGS CONDUCTED #1 | Phase: L1 | Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) | Power: AC 230V/50Hz | Humidity: 57 %
EUT: mobile phone | Distance: | Air Pressure: hpa
M/N: OT-E161a
Note: GSM1900 LINK with 3DS09371AAAA(Astec) Adapter

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.4050	47.57	0.61	48.18	57.75	-9.57	QP	
2		0.4050	40.68	0.61	41.29	47.75	-6.46	AVG	
3		0.6800	45.91	0.61	46.52	56.00	-9.48	QP	
4		0.6800	41.26	0.61	41.87	46.00	-4.13	AVG	
5		2.1400	46.19	0.65	46.84	56.00	-9.16	QP	
6		2.1400	40.97	0.65	41.62	46.00	-4.38	AVG	
7		2.5000	48.04	0.66	48.70	56.00	-7.30	QP	
8		2.5000	41.08	0.66	41.74	46.00	-4.26	AVG	
9		2.8600	43.88	0.68	44.56	56.00	-11.44	QP	
10		2.8600	40.33	0.68	41.01	46.00	-4.99	AVG	
11		4.7200	45.37	0.74	46.11	56.00	-9.89	QP	
12	*	4.7200	41.26	0.74	42.00	46.00	-4.00	AVG	

Conducted Emission Measurement



Site SGS CONDUCTED #1 | Phase: N | Temperature: 23 ℃
Limit: CISPR22 Class B Conduction(QP) | Power: AC 230V/50Hz | Humidity: 57 %
EUT: mobile phone | Distance: | Air Pressure: hpa
M/N: OT-E161a
Note: GSM1900 LINK with 3DS09371AAAA(Astec) Adapter

No.	Mk.	Freq.	Reading Level	Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		1.6200	44.75	0.64	45.39	56.00	-10.61	QP	
2		1.6200	37.87	0.64	38.51	46.00	-7.49	AVG	
3		3.0000	40.52	0.68	41.20	56.00	-14.80	QP	
4		3.0000	34.73	0.68	35.41	46.00	-10.59	AVG	
5	*	3.3800	48.23	0.69	48.92	56.00	-7.08	QP	
6		3.3800	32.53	0.69	33.22	46.00	-12.78	AVG	
7		3.4000	44.75	0.69	45.44	56.00	-10.56	QP	
8		3.4000	37.92	0.69	38.61	46.00	-7.39	AVG	
9		4.3000	41.11	0.72	41.83	56.00	-14.17	QP	
10		4.3000	32.74	0.72	33.46	46.00	-12.54	AVG	
11		4.8600	39.50	0.74	40.24	56.00	-15.76	QP	
12		4.8600	32.53	0.74	33.27	46.00	-12.73	AVG	