ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 24 SUBPART E REQUIREMENT

OF

Product Name:	**Triband 900/1800/1900 handset**
Brand Name:	**SAGEM**
Model Name:	**E2006L**
Market Name:	**N/A**
FCC ID:	**M9HE2006L**
Report No.:	**EH/2006/40006-01**
Issue Date:	**May. 15, 2006**
Rule Part:	**2 & 24E**
Prepared for	**Sagem Communication** **2, rue du Petit Albi, 95800 Cergy Saint-Christophe, France**
Prepared by	**SGS Taiwan Ltd.** **No. 134, Wu Kung Rd., Wuku Industrial Zone, Taipei County, Taiwan.**

VERIFICATION OF COMPLIANCE

Applicant:	Sagem Communication 2, rue du Petit Albi, 95800 Cergy Saint-Christophe, France
Equipment Under Test:	Triband 900/1800/1900 handset
FCC ID Number:	M9HE2006L
Brand Name:	SAGEM
Market Name:	N/A
Model No.:	E2006L
Model Difference:	N/A
File Number:	EH/2006/40006-01
Date of test:	Apr. 29, 2006 ~ May. 12, 2006
Date of EUT Received:	Apr. 28, 2006

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 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***	May. 15, 2006
	Sky Wang		
Prepared By:	Cathy Kuo	***Date***	May. 15, 2006
	Cathy Kuo		
Approved By	Vincent Su	***Date***	May. 15, 2006
	Vincent Su		

Version

Version No.	Date
00	May. 15, 2006

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1. GENERAL INFORMATION

1.1 Product Description

Product	Triband 900/1800/1900 handset	
Model Name	E2006L	
Model Difference:	N/A	
Trade Name	Sagem	
Rated Power Supply	3.7V DC by rechargeable battery or 5VDC by AC/DC power adapter	
	Adaptor	Trade Name: SAGEM Supplier: Astec Model Name: DCH3-050US / 18 919 495-9

GSM:

Frequency Range and Power	GSM 900, TX: 880MHz – 915MHz	33 dBm
	GSM 1800, TX:1710MHz-1785MHz	30 dBm
	GSM 1900, TX: 1850MHz –1910MHz	30 dBm
Type of Emission	300KGXW	
Software Version	L,K02	
Hardware Version	V01X	
IMEI	359243000000219 359243000000326	

1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: filing to comply with Section 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, 2.1057 and issue 3 of RSS-133.

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: 2003 and CISPR 22/EN 55022 requirements. Site No. 1(3 &10 meters) Registration Number: 94644, Both OATS and Anechoic chamber (3 meters) was accredited by CNLA(0513).

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 Configuration of Tested System

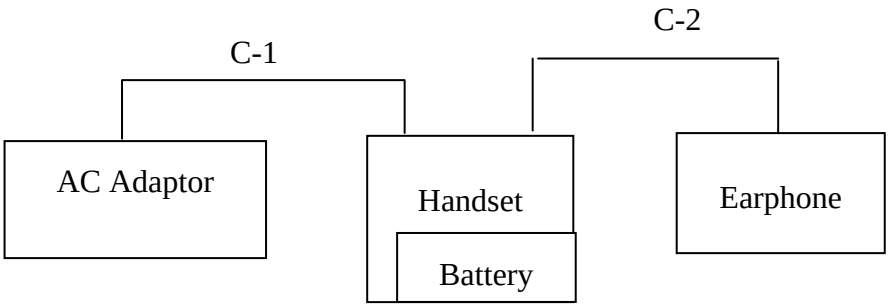
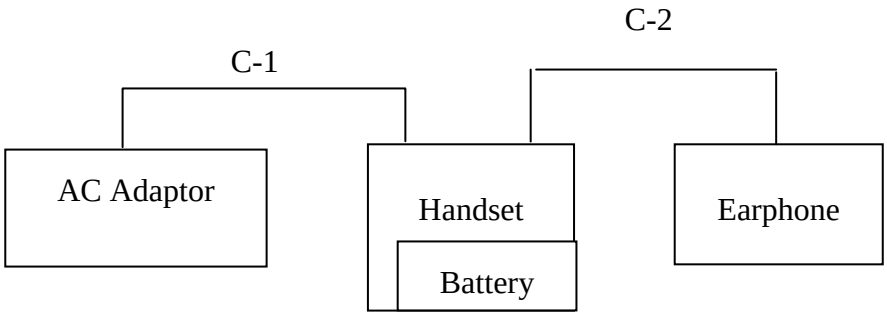


Fig. 2-2 Configuration of AC Power Line Conducted Emission



Remote Side(on the corner)

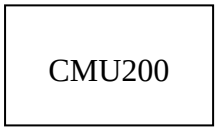


Table 2-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/ Type No.	FCC ID	Series No.	Data Cable	Power Cord
1	Earphone, C2	Sagem	N/A	N/A	18916164-5	1.2m Shielded	N/A
2.	Battery	Sagem	N/A	N/A	28 707 385-1	N/A	N/A
3	AC Adaptor, C1	Sagem	DCH3-050US	N/A	18 919 521-1	1.5m, Un-Shielded	Un-shielded

Table 2-2 Support Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/ Type No.	FCC ID	Series No.	Data Cable	Power Cord
1.	Communica-tion Tester	R&S	CMU200	N/A	102189	N/A	N/A

3. SUMMARY OF TEST RESULTS

FCC/IC Rules	Description Of Test	Result
§2.1046	RF Power Output	Compliant
§2.1046 §24.232(a)	EIRP measurement	Compliant
§2.1049	99% Occupied Bandwidth	No Limit
§2.1051 §24.238(a)	Out of Band Emissions at Antenna Terminals	Compliant
§2.1053 §24.238(a)	Field Strength of Spurious Radia-tion(TX)	Compliant
§2.1055, §24.235	Frequency Stability vs. Temperature	Compliant
§2.1055, §24.235	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 six modes. The worst-case H mode for channel Low, Mid and High at GSM mode was reported for spurious emission.

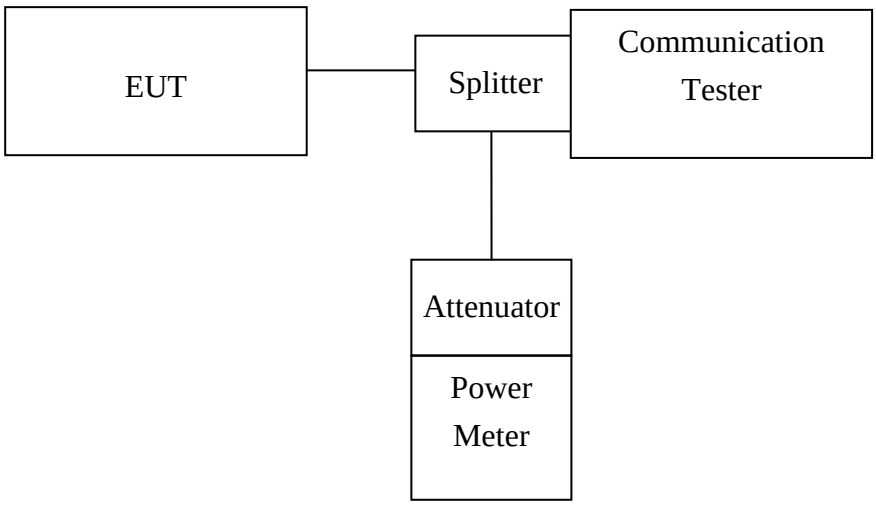
5. RF POWER OUTPUT MEASUREMENT

5.1 Standard Applicable

According to FCC §2.1046.

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	03/29/2006	03/28/2007
Spectrum Analyzer	Agilent	E7405A	US41160416	06/28/2005	06/29/2006
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006
Communication Test	R&S	SMU200	N/A	N/A	N/A
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	10/14/2005	10/13/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circult	BW-S10W5	N/A	09/23/2005	09/22/2006
Attenuator	Mini-Circult	BW-S6W5	N/A	09/23/2005	09/22/2006
Splitter	Agilent	11636B	51728	09/23/2005	09/22/2006
AC Power Supply	APW-105N	887592	All Power	12/15/2005	12/14/2006

5.5 Measurement Result

Frequency (MHz)	**CH**	**Power Meter Reading (dBm)**	**Offset (dB)**	**Power (dBm)**
1850.20	512	12.65	17.50	30.15
1880.00	661	12.9	17.50	30.40
1909.80	810	12.76	17.50	30.26

6. ERP, EIRP MEASUREMENT

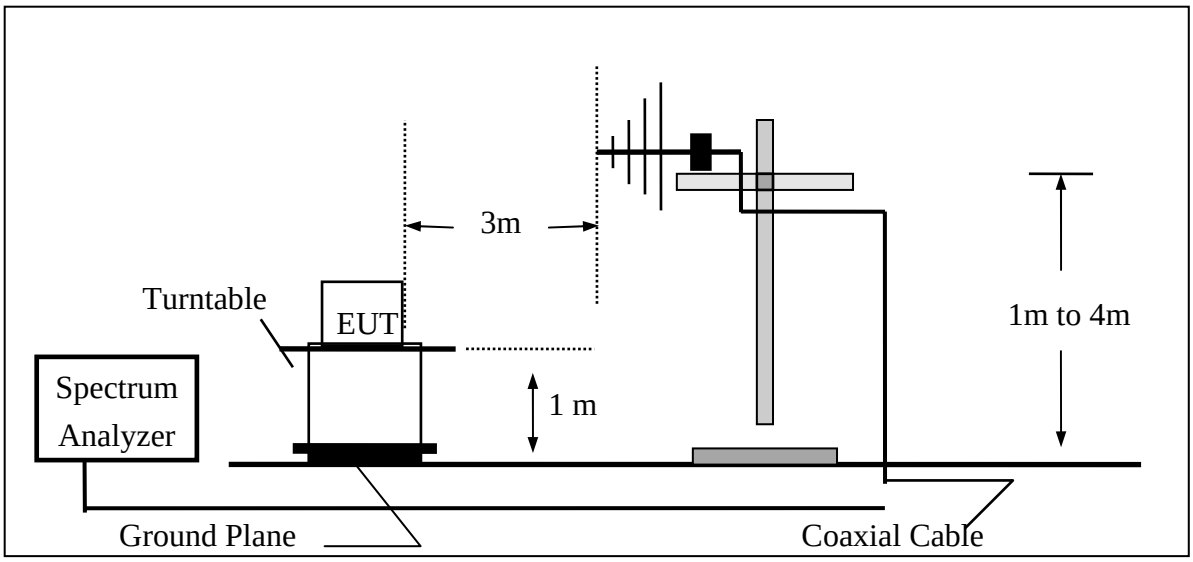
6.1 Standard Applicable

According to FCC §2.1046

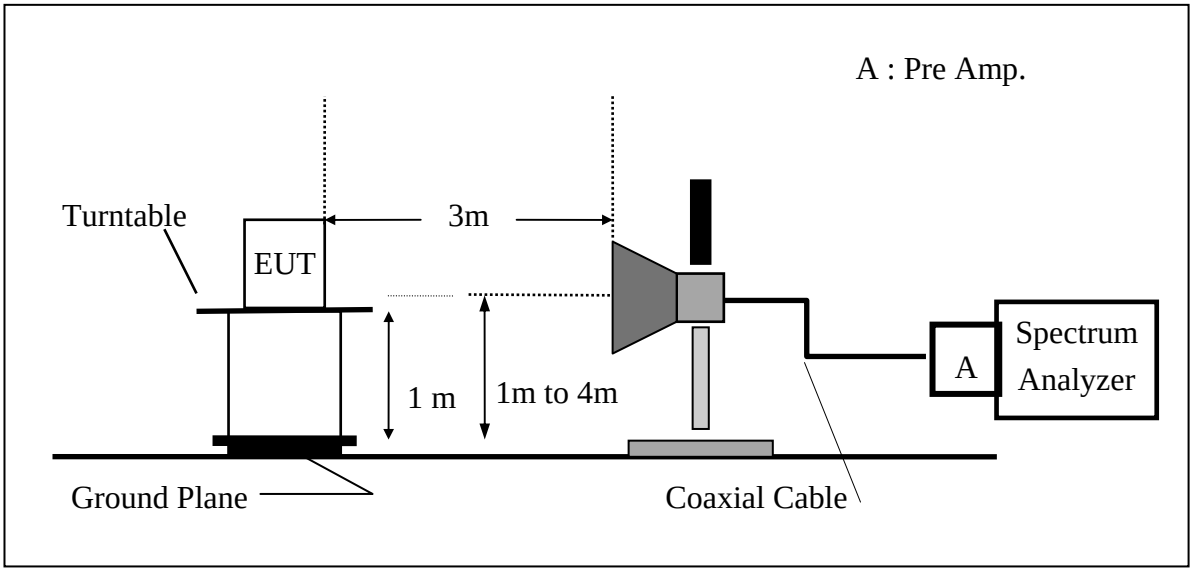
FCC 24.232(b) Mobile station are limited to 2W EIRP.

6.2 Test SET-UP (Block Diagram of Configuration)

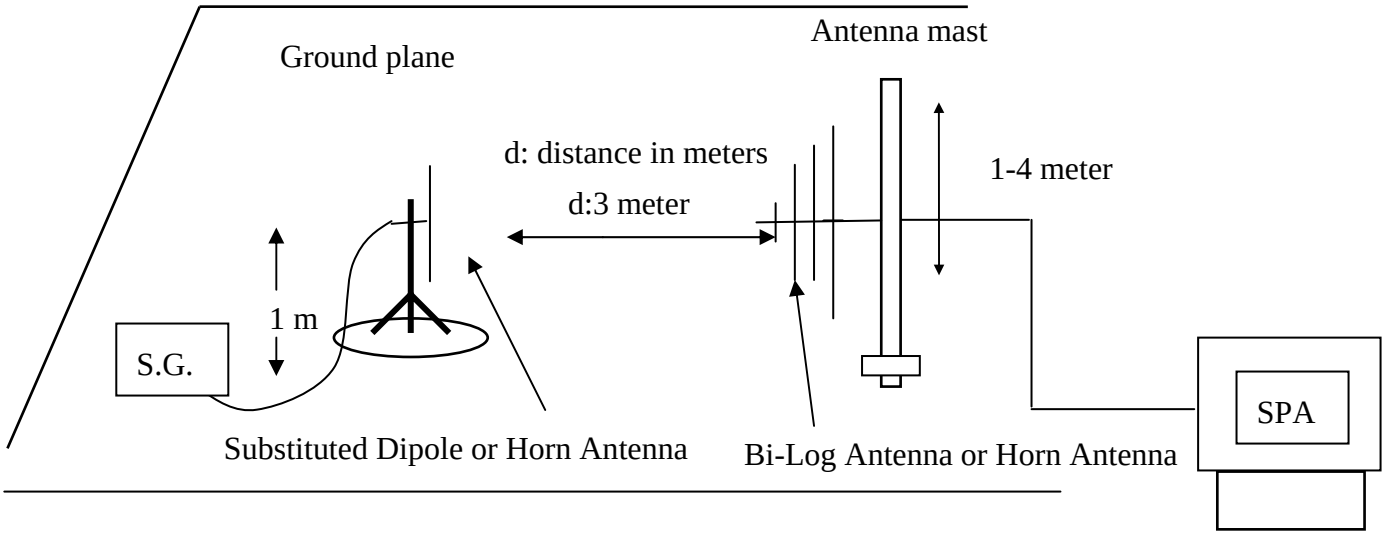
(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(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 of the EUT, the resolution bandwidth was set to 1MHz and the average bandwidth was set to 1MHz. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna. The reading was recorded and the field strength (E in dBuV/m) was calculated.

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:

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	Agilent	E4446A	MY43360126	03/29/2006	03/28/2007
Spectrum Analyzer	Agilent	7405A	US41160416	06/28/2005	06/29/2006
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006
Communication Test	R&S	SMU200	N/A	N/A	N/A
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	02/26/2006	02/25/2007
Signal Generator	R&S	SMR40	100210	02/09/2006	02/10/2007
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
Attenuator	Mini-Circult	BW-S10W5	N/A	09/23/2005	09/22/2006
Dipole Antenna	Schwarzbeck	VHAP	908/909	06/10/2004	06/11/2006
Dipole Antenna	Schwarzbeck	UHAP	891/892	06/10/2004	06/11/2006
Horn antenna	Schwarzbeck	BBHA 9120D	N/A	08/16/2004	08/15/2006

6.5 Measurement Result

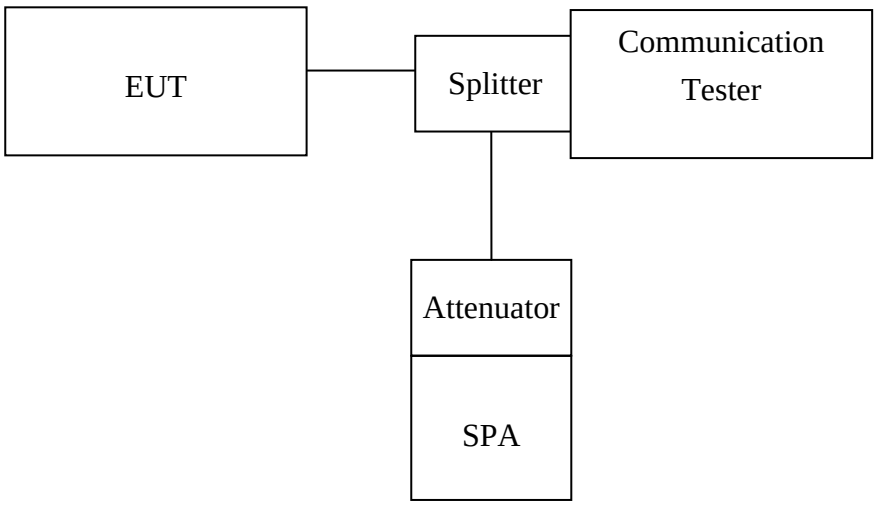
EUT Mode	Frequency (MHz)	CH	EUT Pol.	Antenna Pol.	SPA Reading (dBuV)	S.G. Output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)
PCS 1900	1850.20	512	H	V	125.86	18.90	9.90	5.41	23.39	33.00
				H	129.64	22.75	9.90	5.41	27.24	33.00
			E1	V	128.65	21.69	9.90	5.41	26.18	33.00
				H	129.46	22.57	9.90	5.41	27.06	33.00
			E2	V	126.29	19.33	9.90	5.41	23.82	33.00
				H	129.07	22.18	9.90	5.84	26.24	33.00
	1880.00	661	H	V	127.59	20.64	9.99	5.46	25.17	33.00
				H	130.38	23.51	9.99	5.46	28.04	33.00
			E1	V	129.12	22.17	9.99	5.46	26.70	33.00
				H	129.45	22.58	9.99	5.46	27.11	33.00
			E2	V	125.89	18.94	9.99	5.46	23.47	33.00
				H	129.22	22.35	9.99	5.46	26.88	33.00
	1909.80	810	H	V	126.18	19.24	10.08	5.51	23.81	33.00
				H	129.98	23.13	10.08	5.51	27.69	33.00
			E1	V	128.43	21.49	10.08	5.51	26.06	33.00
				H	126.91	20.06	10.08	5.51	24.62	33.00
			E2	V	125.02	18.08	10.08	5.51	22.65	33.00
				H	126.70	19.85	10.08	5.51	24.41	33.00

7. 99% 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 (10KHz) was set to about 1% of emission BW, VBW= 30KHz, -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	03/29/2006	03/28/2007
Spectrum Analyzer	Agilent	E7405A	US41160416	06/28/2005	06/29/2006
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006
Communication Test	R&S	SMU200	N/A	N/A	N/A
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	10/14/2005	10/13/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circult	BW-S10W5	N/A	09/23/2005	09/22/2006
Attenuator	Mini-Circult	BW-S6W5	N/A	09/23/2005	09/22/2006
Splitter	Agilent	11636B	51728	09/23/2005	09/22/2006
AC Power Supply	APW-105N	887592	All Power	12/15/2005	12/14/2006

7.5 Measurement Result:

EUT Mode	Frequency (MHz)	CH	99% Bandwidth (MHz)
PCS 1900	1850.20	512	0.2470
	1880.00	661	0.2528
	1909.80	810	0.2519

Figure 7-1: PCS Channel Low

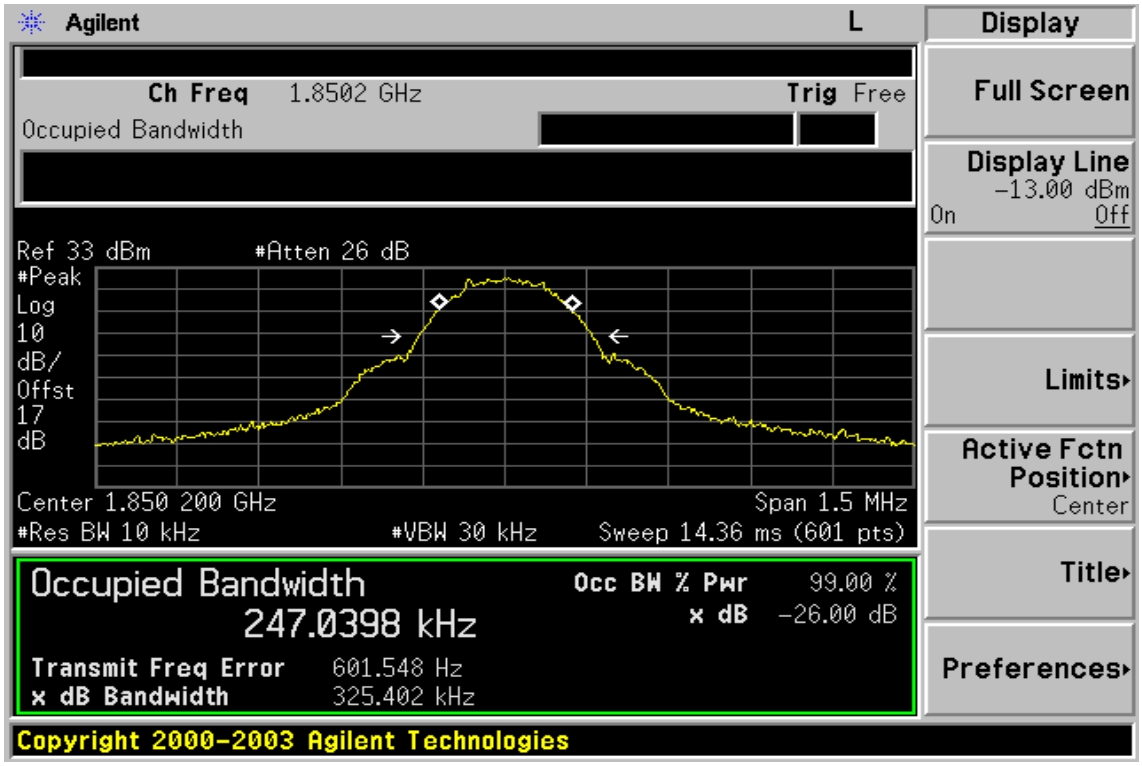


Figure 7-2 PCS Channel Mid

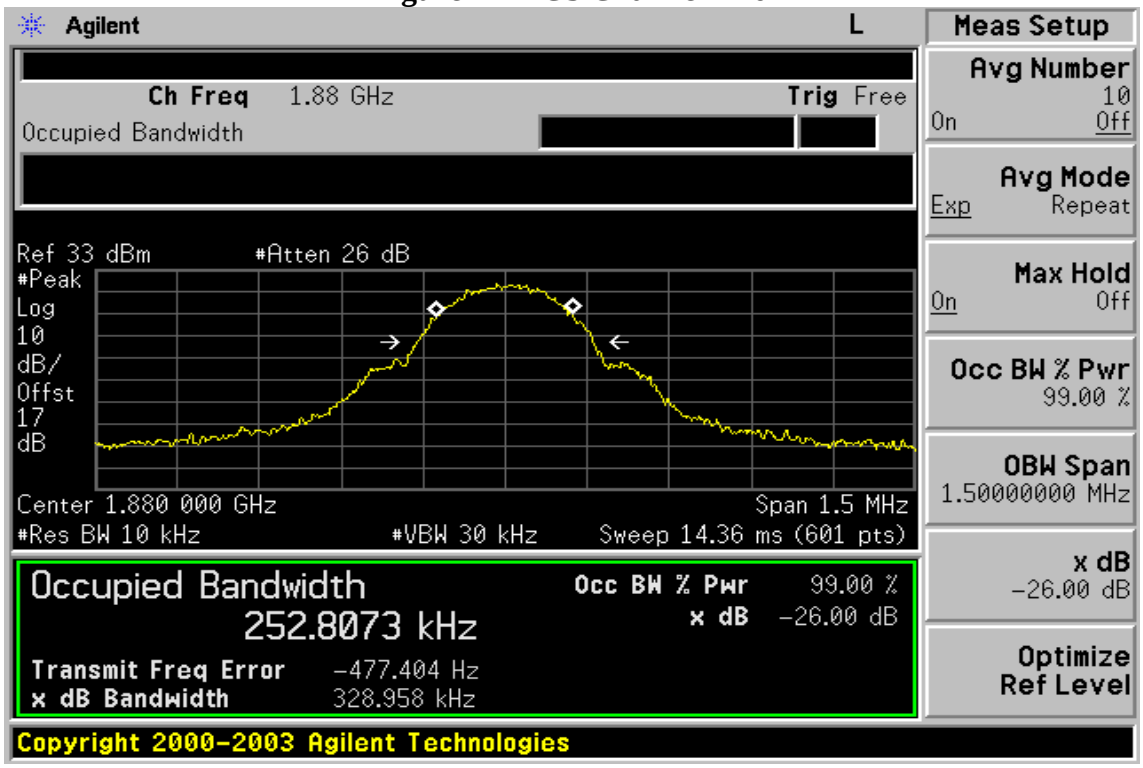
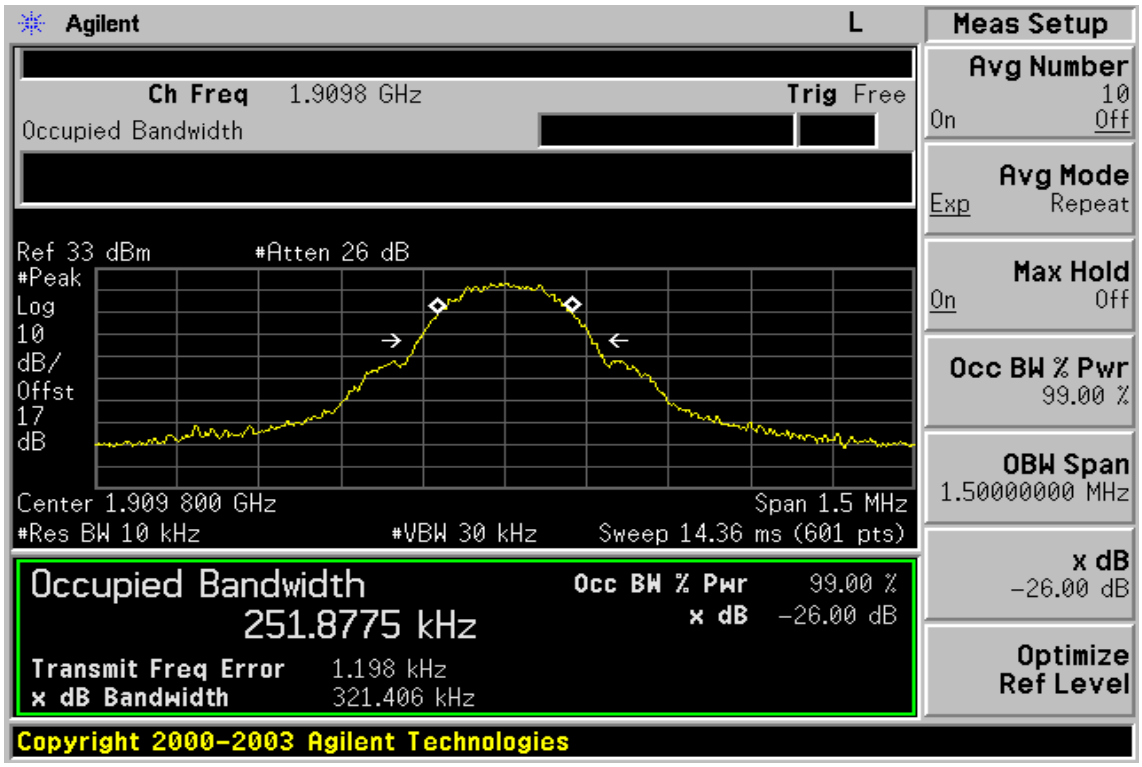


Figure 7-3: PCS Channel High



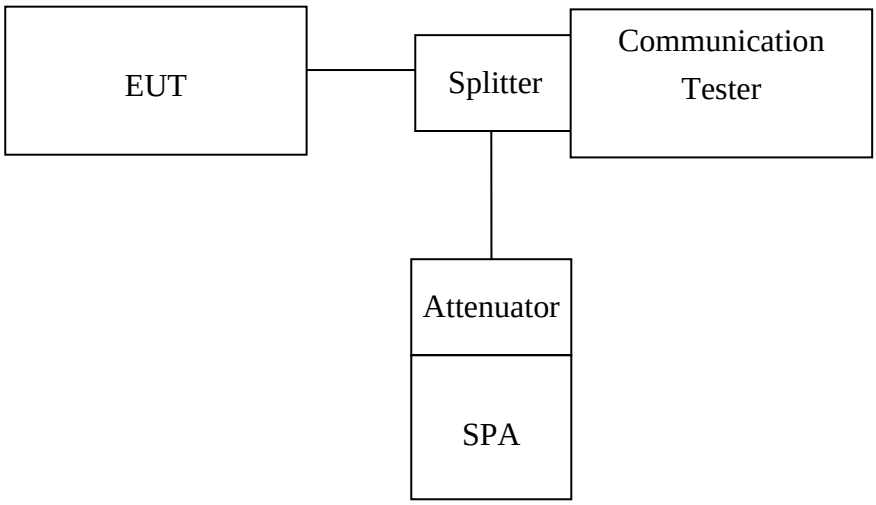
8. OUT OF BAND EMISSION AT ANTENNA TERMINALS(TX)

8.1 Standard Applicable

According to FCC §2.1051.

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

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	03/29/2006	03/28/2007
Spectrum Analyzer	Agilent	E7405A	US41160416	06/28/2005	06/29/2006
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006
Communication Test	R&S	SMU200	N/A	N/A	N/A
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	10/14/2005	10/13/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circult	BW-S10W5	N/A	09/23/2005	09/22/2006
Attenuator	Mini-Circult	BW-S6W5	N/A	09/23/2005	09/22/2006
Splitter	Agilent	11636B	51728	09/23/2005	09/22/2006
AC Power Supply	APW-105N	887592	All Power	12/15/2005	12/14/2006

8.5 Measurement Result

Figure 8-1: Out of Band emission at antenna terminals– PCS Channel Low

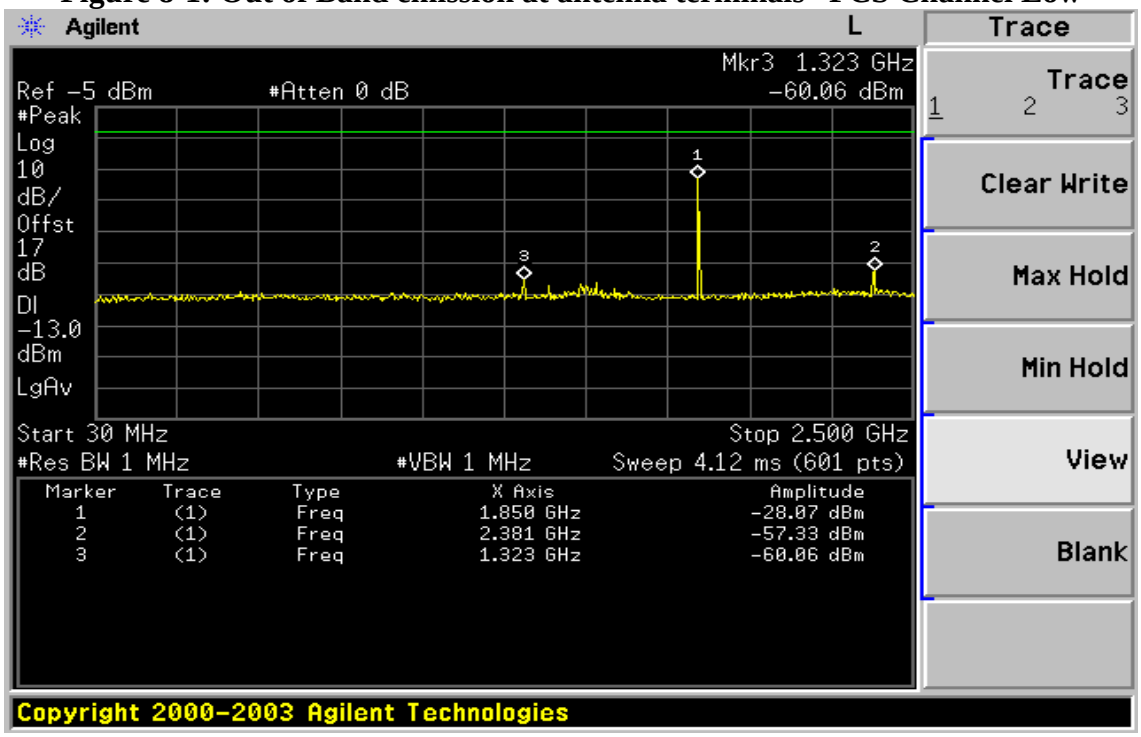


Figure 8-2: Out of Band emission at antenna terminals–PCS Channel Low

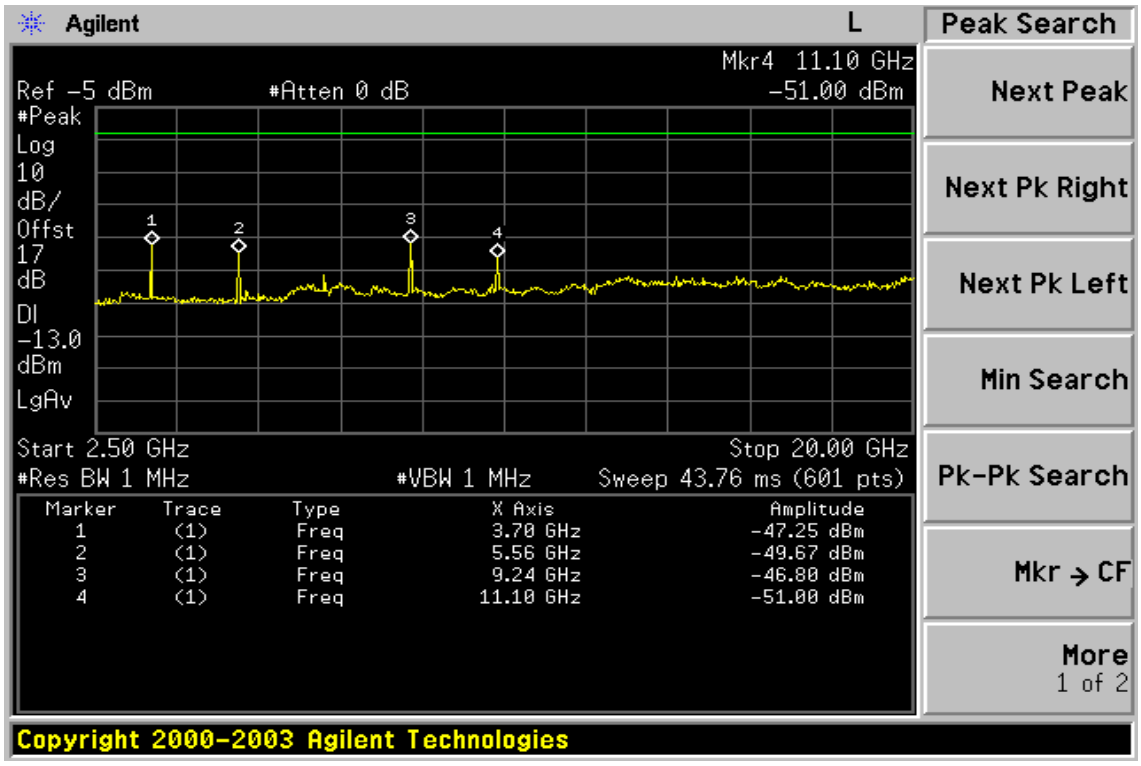


Figure 8-3: Out of Band emission at antenna terminals –PCS Channel Mid

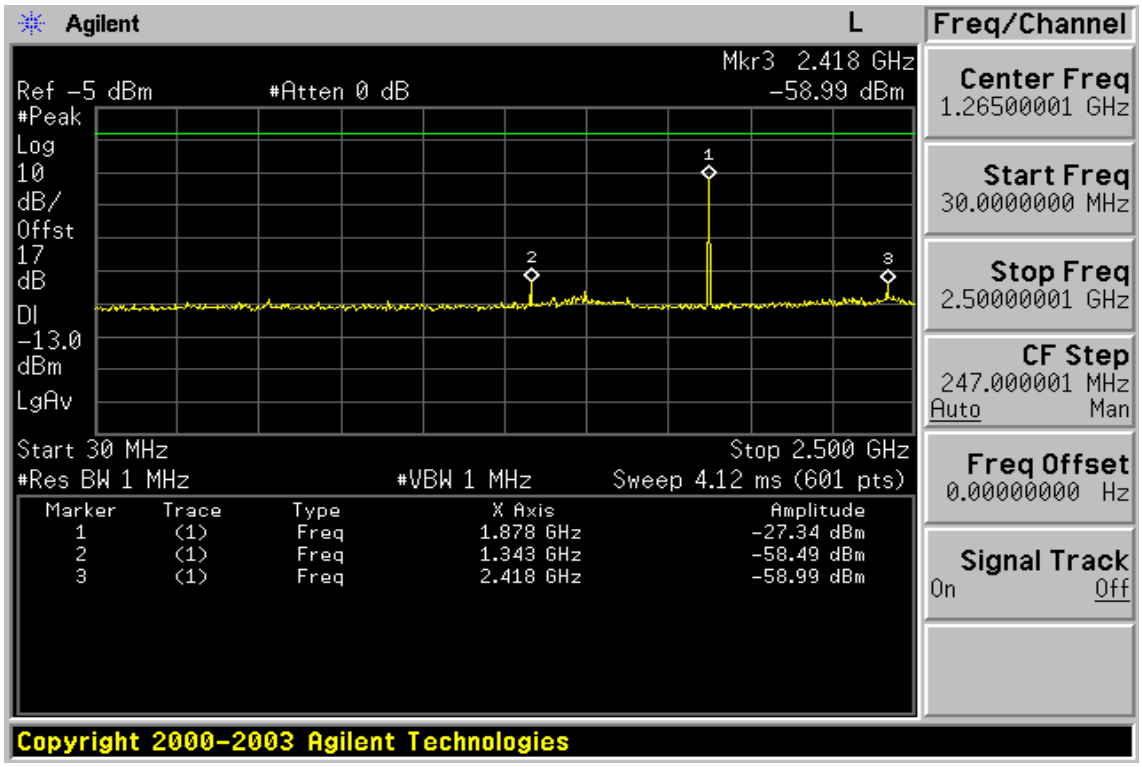


Figure 8-4: Out of Band emission at antenna terminals –PCS Channel Mid

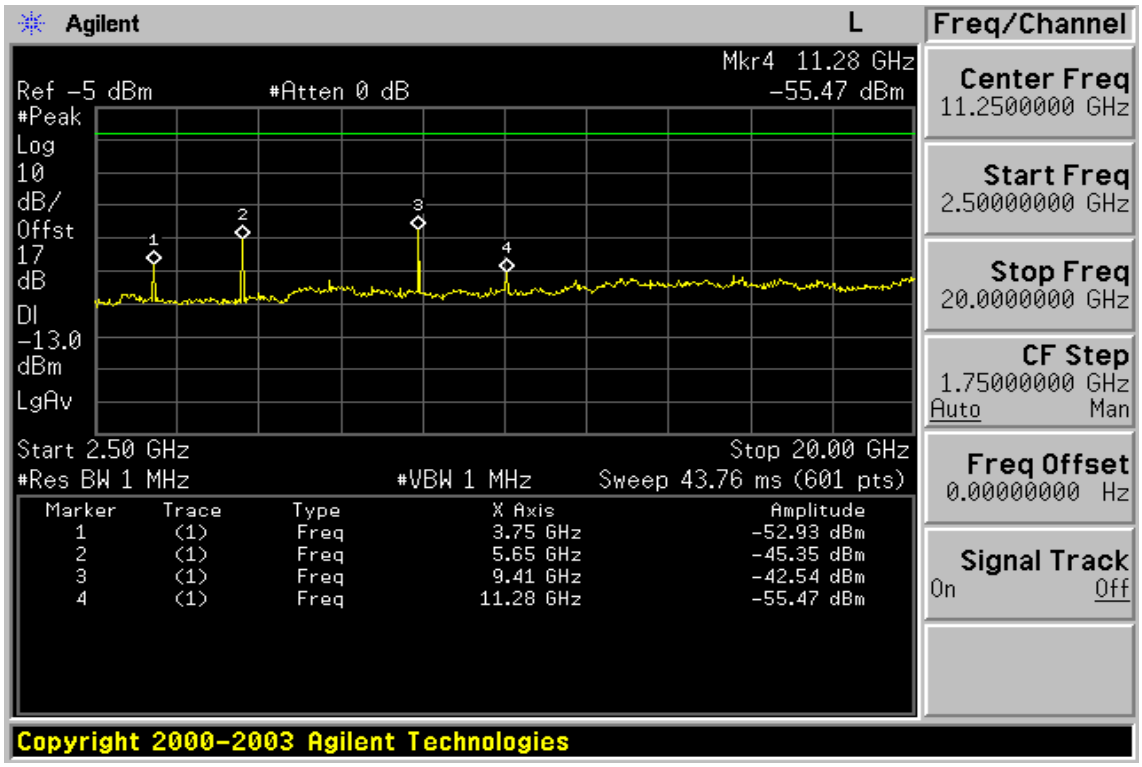


Figure 8-5: Out of Band emission at antenna terminals–PCS Channel High

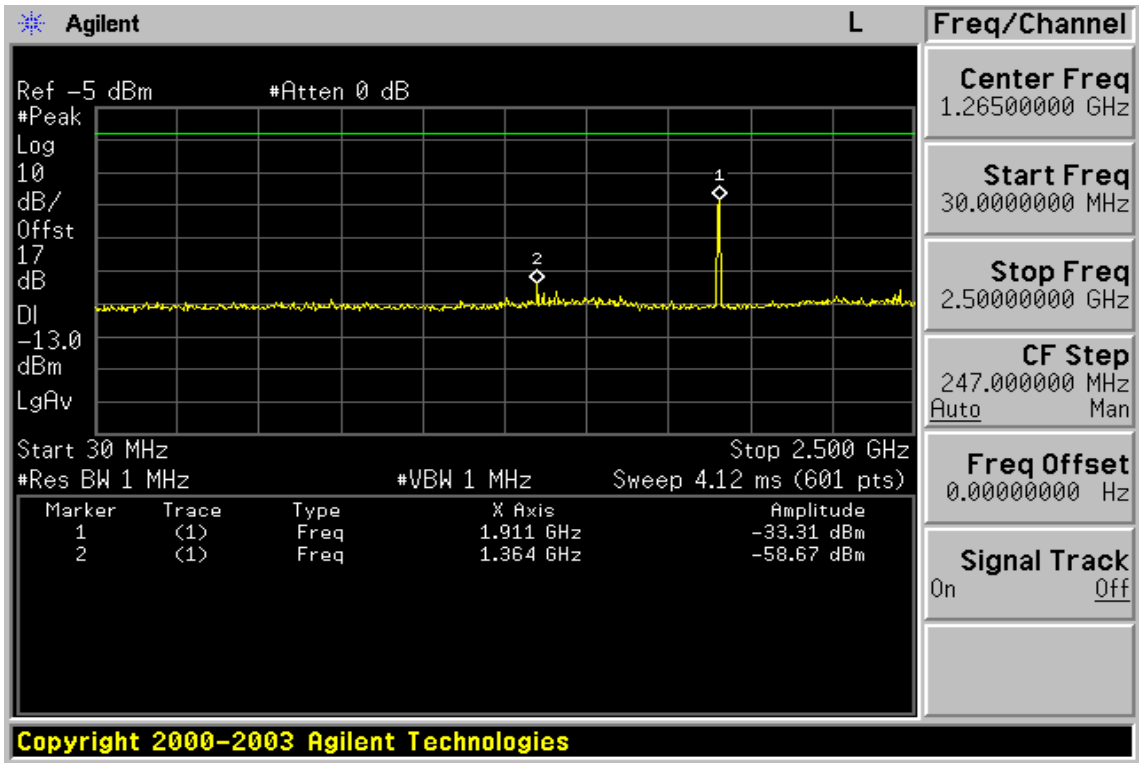


Figure 8-6: Out of Band emission at antenna terminals– PCS Channel High

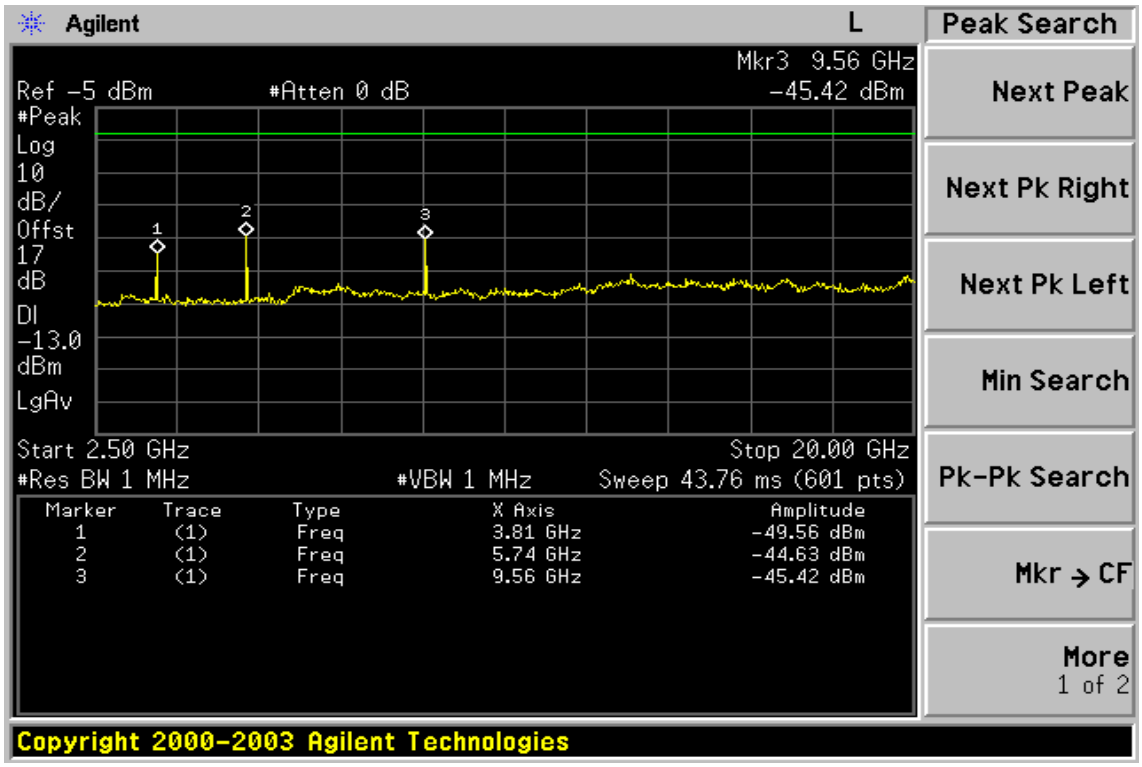


Figure 8-7: Band edge emission at antenna terminals – PCS CH 512

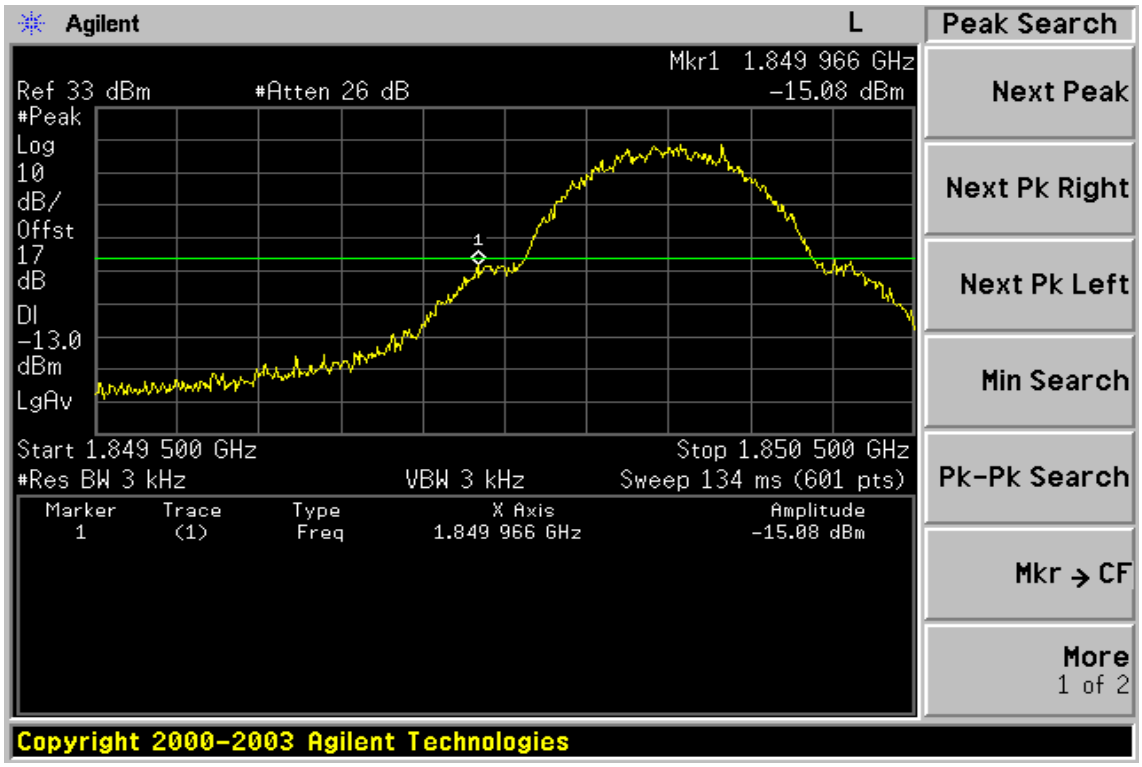
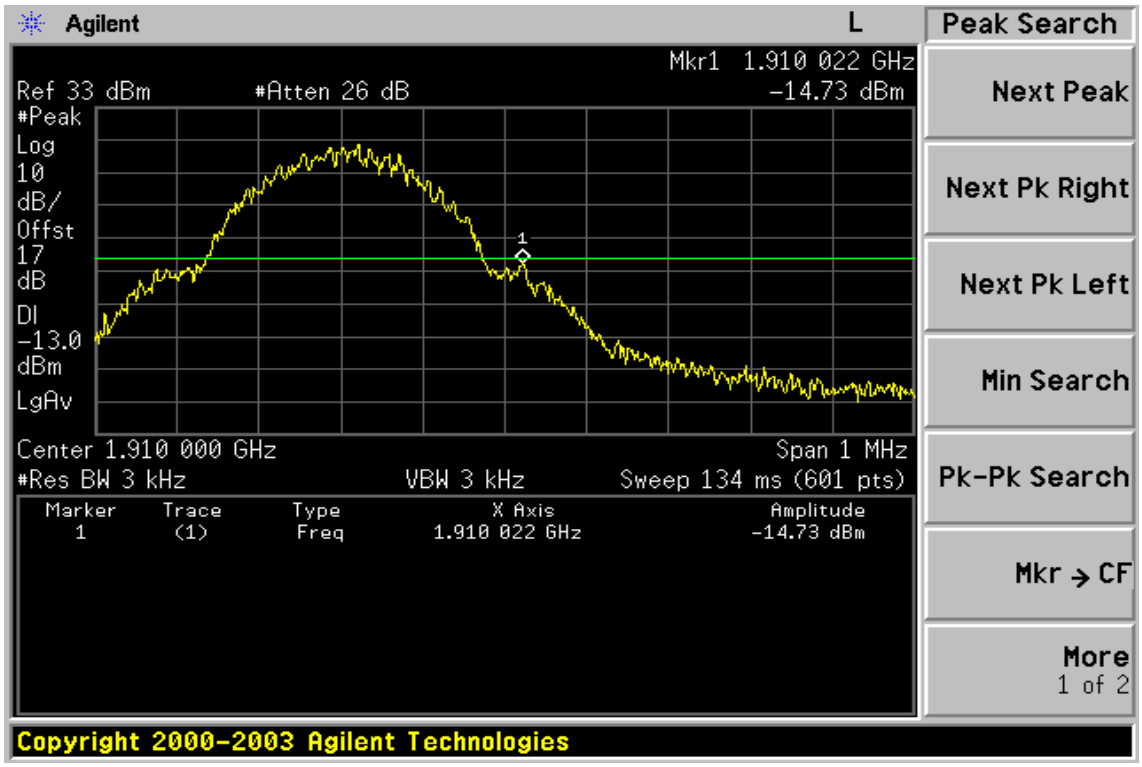


Figure 8-8: Band edge emission at antenna terminals – PCS CH 810



9. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT(TX)

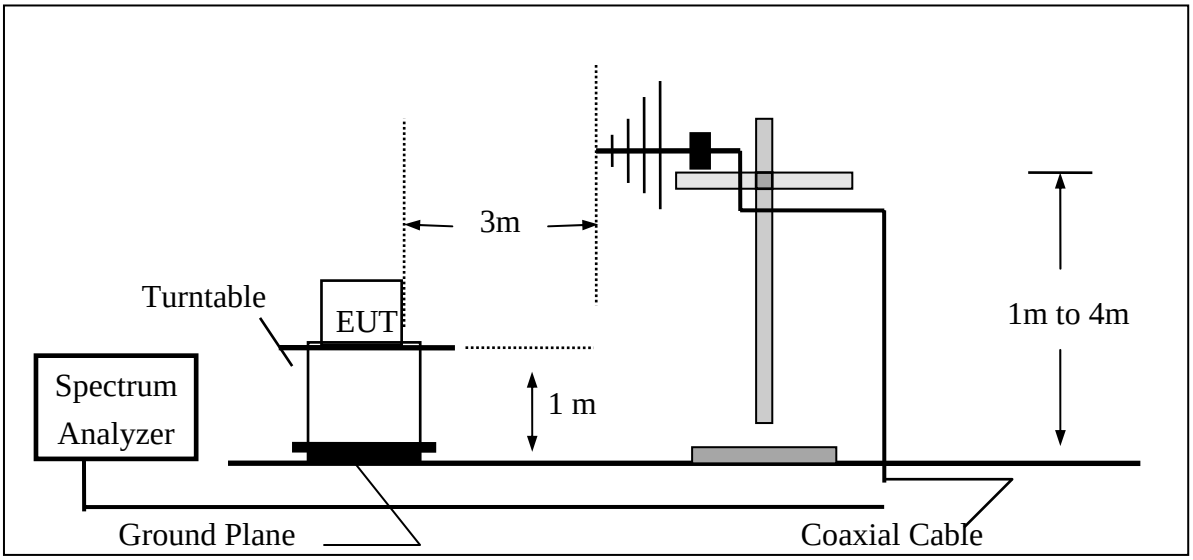
9.1 Standard Applicable

According to FCC §2.1053,

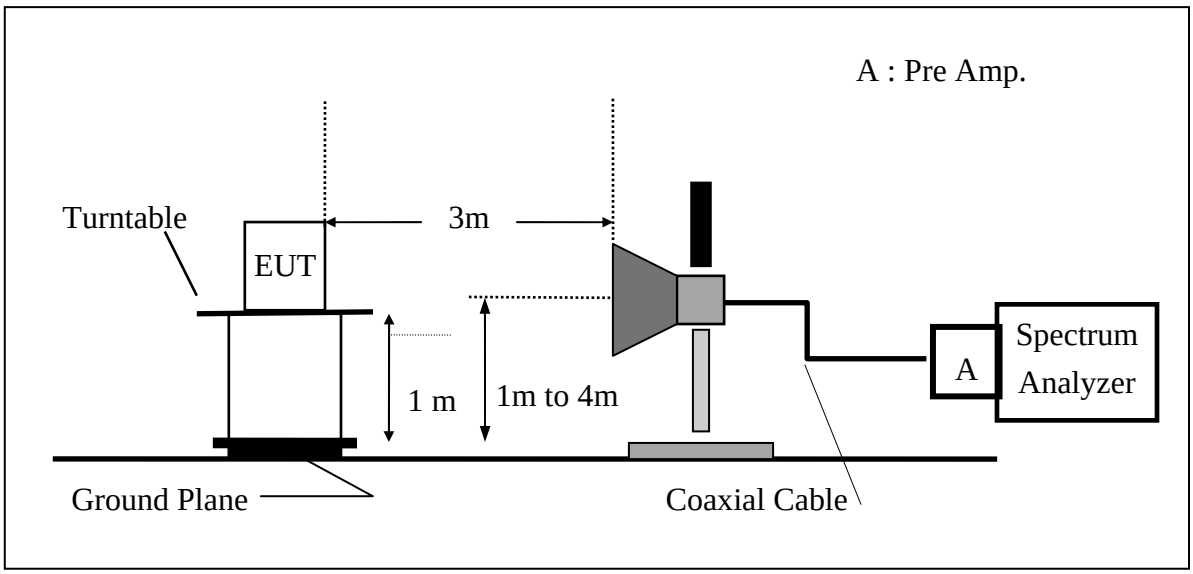
FCC §24.238(a), the magnitude of each spurious and harmonic emission that can be detected when the equipment is operated under the conditions specified in the instruction manual and/ or alignment procedure, shall not be less than 43 + 10 log (mean output power in watts) dBc below the mean power output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

9.2 EUT Setup (Block Diagram of Configuration)

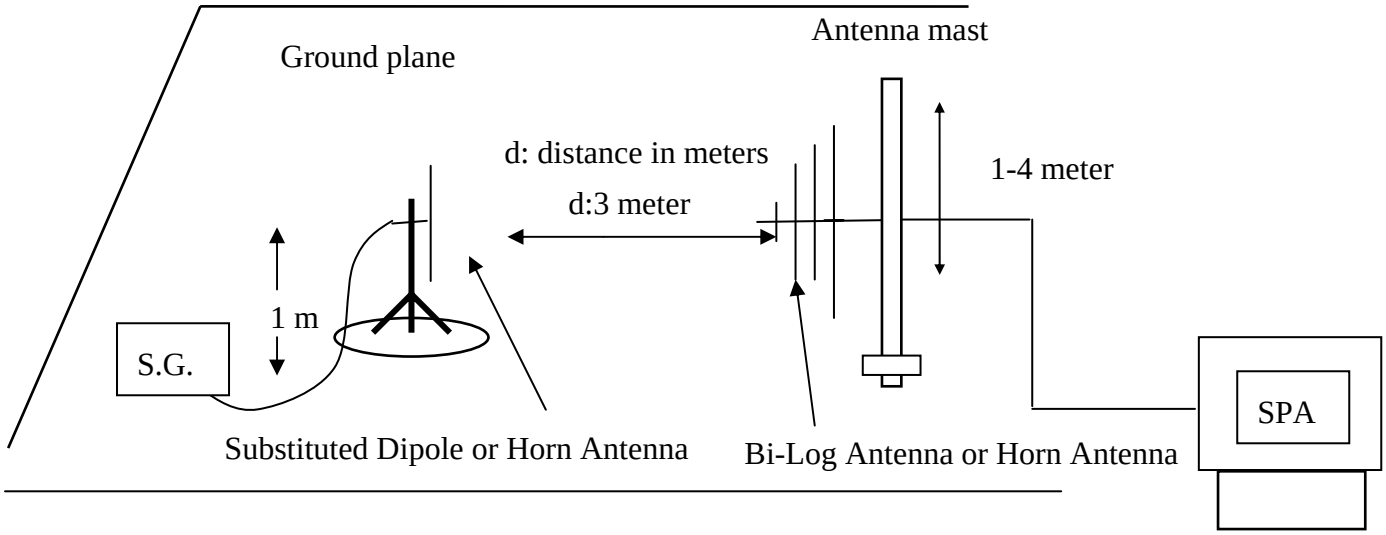
(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(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.

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	Agilent	E4446A	MY43360126	03/29/2006	03/28/2007
Spectrum Analyzer	Agilent	7405A	US41160416	06/28/2005	06/29/2006
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006
Communication Test	R&S	SMU200	N/A	N/A	N/A
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	02/26/2006	02/25/2007
Signal Generator	R&S	SMR40	100210	02/09/2006	02/10/2007
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	11/17/2005	11/16/2006
Attenuator	Mini-Circult	BW-S10W5	N/A	09/23/2005	09/22/2006
Dipole Antenna	Schwarzbeck	VHAP	908/909	06/10/2004	06/11/2006
Dipole Antenna	Schwarzbeck	UHAP	891/892	06/10/2004	06/11/2006
Horn antenna	Schwarzbeck	BBHA 9120D	N/A	08/16/2004	08/15/2006

9.5 Measurement Result

Refer to attach tabular data sheets.

Radiated Spurious Emission Measurement Result

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

Test Date : May. 03, 2006
Test By: : Sky
Pol: : Ver

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)
1850.00	80.37	V	-26.59	9.90	5.41	-22.10	-13.00	-9.10
3700.40	38.93	V	-62.65	12.61	7.73	-57.77	-13.00	-44.77
5550.60	54.68	V	-40.53	13.23	9.68	-36.99	-13.00	-23.99
7400.80	--	V	--	--	--	--	-13.00	--
9251.00	--	V	--	--	--	--	-13.00	--
11101.20	--	V	--	--	--	--	-13.00	--
12951.40	--	V	--	--	--	--	-13.00	--
14801.60	--	V	--	--	--	--	-13.00	--
16651.80	--	V	--	--	--	--	-13.00	--
18502.00	--	V	--	--	--	--	-13.00	--

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 (dBd/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result

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

Test Date : May. 03, 2006
Test By: : Sky
Pol : Hor

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)
1850.00	84.39	H	-22.50	9.90	5.41	-18.01	-13.00	-5.01
3700.40	42.56	H	-58.80	12.61	7.73	-53.92	-13.00	-40.92
5550.60	49.37	H	-45.76	13.23	9.68	-42.21	-13.00	-29.21
7400.80	--	H	--	--	--	--	-13.00	--
9251.00	--	H	--	--	--	--	-13.00	--
11101.20	--	H	--	--	--	--	-13.00	--
12951.40	--	H	--	--	--	--	-13.00	--
14801.60	--	H	--	--	--	--	-13.00	--
16651.80	--	H	--	--	--	--	-13.00	--
18502.00	--	H	--	--	--	--	-13.00	--

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 (dBd/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result

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

Test Date : May. 03, 2006
Test By: : Sky
Pol : Ver

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)
3760.00	40.76	V	-60.54	12.60	7.82	-55.76	-13.00	-42.76
5640.00	47.27	V	-47.69	13.36	9.73	-44.06	-13.00	-31.06
7520.00	--	V	--	--	--	--	-13.00	--
9400.00	--	V	--	--	--	--	-13.00	--
11280.00	--	V	--	--	--	--	-13.00	--
13160.00	--	V	--	--	--	--	-13.00	--
15040.00	--	V	--	--	--	--	-13.00	--
16920.00	--	V	--	--	--	--	-13.00	--
18800.00	--	V	--	--	--	--	-13.00	--

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 (dBd/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result

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

Test Date : May. 03, 2006
Test By: : Sky
Pol : Hor

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)
5640.00	45.09	H	-49.80	13.36	9.73	-46.17	-13.00	-33.17
7520.00	--	H	--	--	--	--	-13.00	--
9400.00	--	H	--	--	--	--	-13.00	--
11280.00	--	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 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 (dBd/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result

Operation Mode : TX CH High H Mode
Fundamental Frequency : 1909.8 MHz
Temperature : 25℃
Humidity : 65%

Test Date : May. 03, 2006
Test By: : Sky
Pol : Ver

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)
1910.00	79.79	V	-27.15	10.08	5.51	-22.58	-13.00	-9.58
3805.00	38.58	V	-62.52	12.60	7.89	-57.81	-13.00	-44.81
5717.50	50.03	V	-44.71	13.48	9.77	-41.00	-13.00	-28.00
5972.40	--	V	--	--	--	--	-13.00	--
7963.20	--	V	--	--	--	--	-13.00	--
9549.00	--	V	--	--	--	--	-13.00	--
11458.80	--	V	--	--	--	--	-13.00	--
13368.60	--	V	--	--	--	--	-13.00	--
15278.40	--	V	--	--	--	--	-13.00	--
17188.20	--	V	--	--	--	--	-13.00	--
19098.00	--	V	--	--	--	--	-13.00	--

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 (dBd/dBi) – Cable loss (dB)

Radiated Spurious Emission Measurement Result

Operation Mode : TX CH High H Mode
Fundamental Frequency : 1909.8 MHz
Temperature : 25℃
Humidity : 65%

Test Date : May. 03, 2006
Test By: : Sky
Pol : Hor

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)
1910.00	87.84	H	-19.01	10.08	5.51	-14.45	-13.00	-1.45
5717.50	47.36	H	-47.33	13.48	9.77	-43.62	-13.00	-30.62
5972.40	--	H	--	--	--	--	-13.00	--
7963.20	--	H	--	--	--	--	-13.00	--
9549.00	--	H	--	--	--	--	-13.00	--
11458.80	--	H	--	--	--	--	-13.00	--
13368.60	--	H	--	--	--	--	-13.00	--
15278.40	--	H	--	--	--	--	-13.00	--
17188.20	--	H	--	--	--	--	-13.00	--
19098.00	--	H	--	--	--	--	-13.00	--

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 (dBd/dBi) – Cable loss (dB)

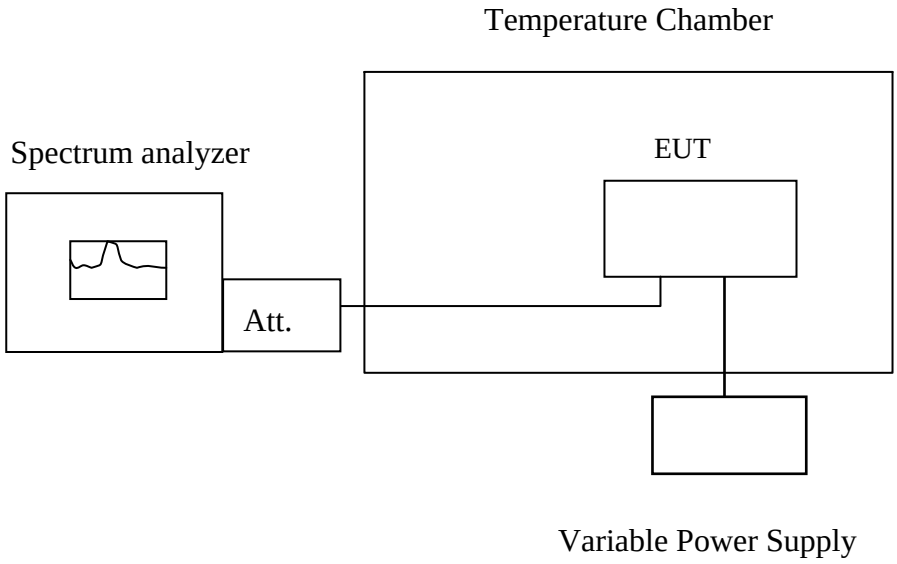
10. FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

10.1 Standard Applicable

According to FCC §2.1055, FCC §24.235.

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^{o}C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to –30^{o}C. After the temperature stabilized for approximately 30 minutes re-corded the frequency. Repeat step measure with 10^{o}C increased per stage until the highest temperature of +50^{o}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	03/29/2006	03/28/2007
Spectrum Analyzer	Agilent	E7405A	US41160416	06/28/2005	06/29/2006
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006
Communication Test	R&S	SMU200	N/A	N/A	N/A
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	10/14/2005	10/13/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circult	BW-S10W5	N/A	09/23/2005	09/22/2006
Attenuator	Mini-Circult	BW-S6W5	N/A	09/23/2005	09/22/2006
Splitter	Agilent	11636B	51728	09/23/2005	09/22/2006
AC Power Supply	APW-105N	887592	All Power	12/15/2005	12/14/2006

10.5 Measurement Result

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	1879.99800	900.00	4700
3.7	-20	1879.99820	700.00	4700
3.7	-10	1879.99740	1500.00	4700
3.7	0	1879.99800	900.00	4700
3.7	10	1879.99860	300.00	4700
3.7	20	1879.99890	0.00	4700
3.7	30	1880.00120	-2300.00	4700
3.7	40	1880.00170	-2800.00	4700
3.7	50	1880.00220	-3300.00	4700

Note: The battery is rated 3.7V dc.

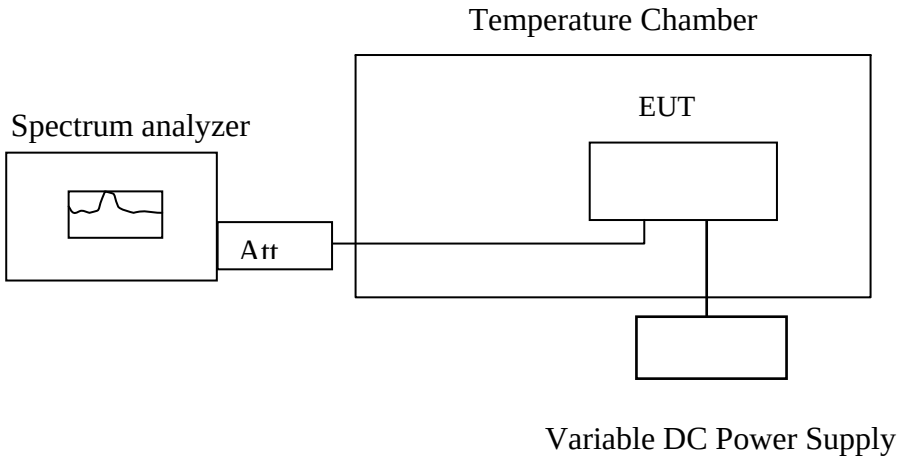
11. FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT

11.1 Standard Applicable

According to FCC §2.1055, FCC §24.235,

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	03/29/2006	03/28/2007
Spectrum Analyzer	Agilent	E7405A	US41160416	06/28/2005	06/29/2006
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006
Communication Test	R&S	SMU200	N/A	N/A	N/A
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	10/14/2005	10/13/2006
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	N/A	N/A
Attenuator	Mini-Circult	BW-S10W5	N/A	09/23/2005	09/22/2006
Attenuator	Mini-Circult	BW-S6W5	N/A	09/23/2005	09/22/2006
Splitter	Agilent	11636B	51728	09/23/2005	09/22/2006
AC Power Supply	APW-105N	887592	All Power	12/15/2005	12/14/2006

11.5 Measurement Result

Reference Frequency: PCS Mid Channel 1880 MHz @ 25℃				
Limit: +/- 2.5 ppm = 4700 Hz				
Power Supply Vdc	Environment Temperature (℃)	Frequency (MHz)	Delta (Hz)	Limit (Hz)
3.7	25	1879.999	0.00	4700
3.145	25	1879.9982	800.00	4700
4.255	25	1880.0002	-1200.00	4700
3.071(Endpoint)	25	1879.99800	1000.00	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 C63.4-2003.
2. The EUT was plug-in DC power adaptor 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:

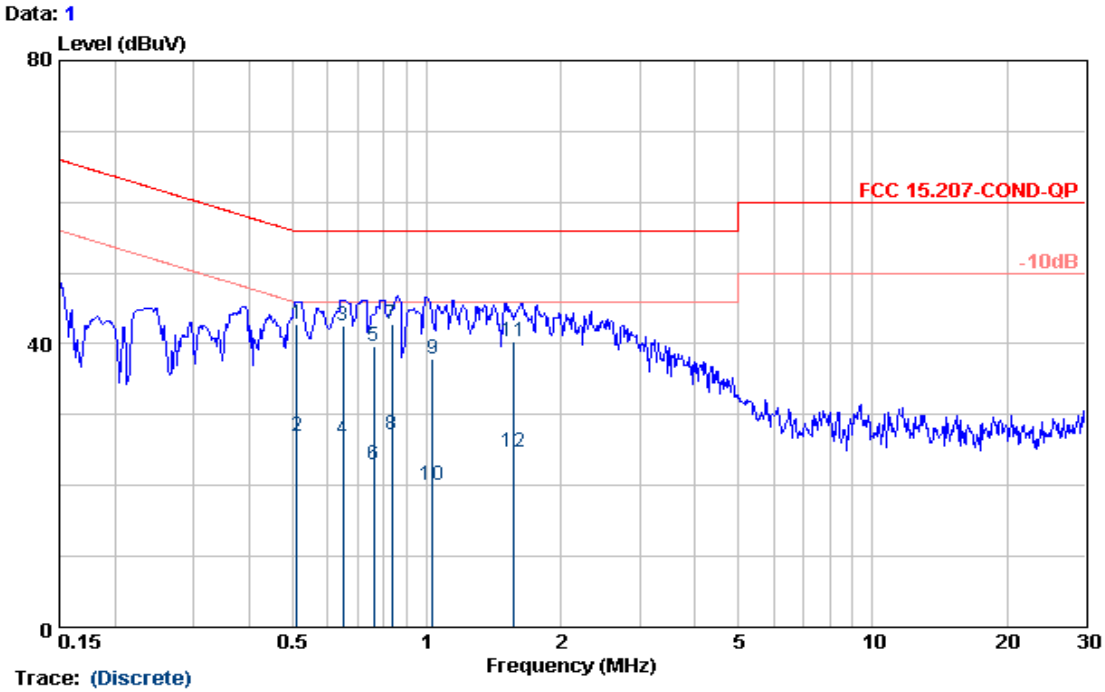
Conducted Emission Test Site					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
EMC Analyzer	HP	8594EM	3624A00203	09/02/2005	09/03/2006
EMI Test Receiver	R&S	ESCS30	828985/004	06/09/2005	06/10/2006
Transient Limiter	HP	11947A	3107A02062	09/02/2005	09/03/2006
LISN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

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	: Normal Operating	Test Date	May. 04, 2006
Fundamental Frequency	: N/A	Test By	Willis
Temperature	: 25℃	Pol	Line/Neutral
Humidity	: 65%	Adaptor Model	DCH3-050US
Test Voltage	:120Vac	Supplier:	Astec

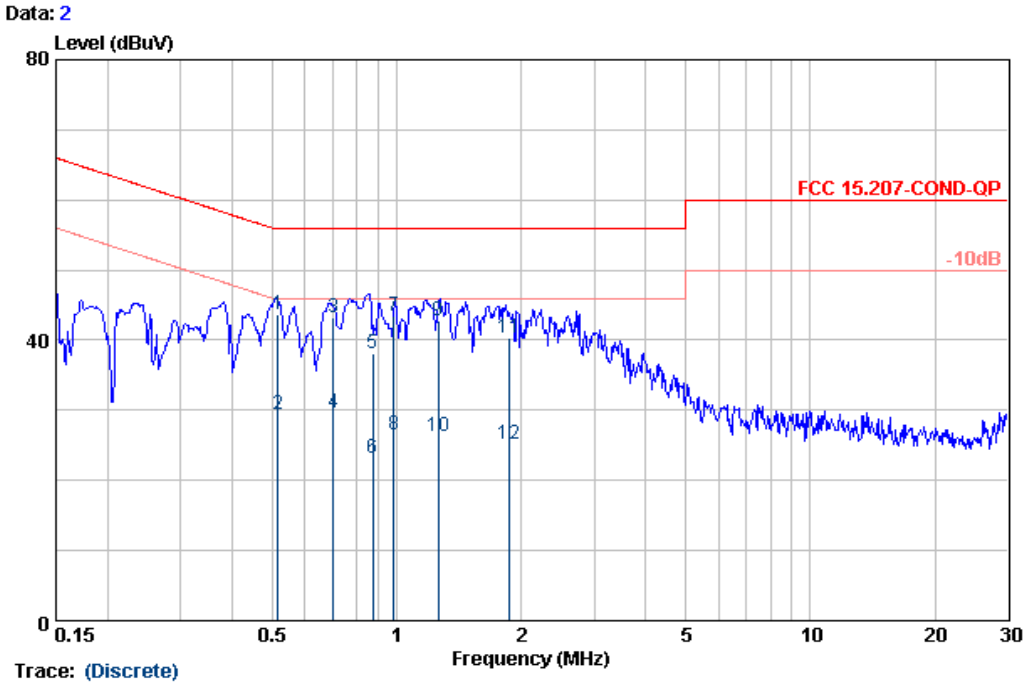


Site	: RF Site
Condition	: FCC 15.207-COND-QP NNB-2/16Z(99012) LINE
Project No.	: EI/2006/40004
Applicant	: SAGEM
EUT Description	: Triband 900/1800/1900 headset
EUT Model	: E2006//ADAPTER MODEL:DCH3-050US
Test Mode	: GSM1900 LINK
Temp./Humid.	: 25/65
Operator	: WILLIS

	Freq	Pol/Phase	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz		dBuV	dB	dBuV	dBuV	dB	
1	0.51	LINE	42.48	0.20	42.68	56.00	-13.32	QP
2	0.51	LINE	26.81	0.20	27.01	56.00	-28.99	AVERAGE
3	0.65	LINE	42.27	0.21	42.48	56.00	-13.52	QP
4	0.65	LINE	26.36	0.21	26.57	56.00	-29.43	AVERAGE
5	0.76	LINE	39.43	0.21	39.64	56.00	-16.36	QP
6	0.76	LINE	22.77	0.21	22.98	56.00	-33.02	AVERAGE
7	0.83	LINE	42.60	0.21	42.81	56.00	-13.19	QP
8	0.83	LINE	26.88	0.21	27.09	56.00	-28.91	AVERAGE
9	1.03	LINE	37.73	0.21	37.94	56.00	-18.06	QP
10	1.03	LINE	19.93	0.21	20.14	56.00	-35.86	AVERAGE
11	1.57	LINE	40.23	0.21	40.44	56.00	-15.56	QP
12	1.57	LINE	24.44	0.21	24.65	56.00	-31.35	AVERAGE

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode	: Normal Operating	Test Date	May. 04, 2006
Fundamental Frequency	: N/A	Test By	Willis
Temperature	: 25℃	Pol	Line/Neutral
Humidity	: 65%	Adaptor Model	DCH3-050US
Test Voltage	:120Vac	Supplier:	Astec

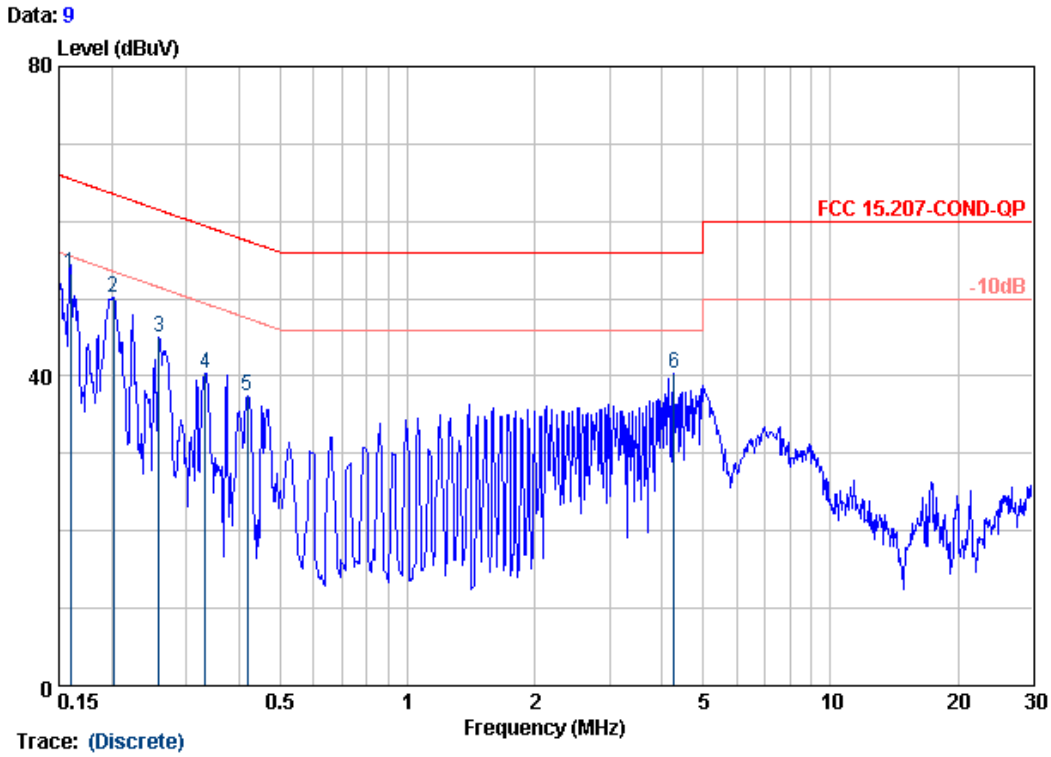


Site : RF Site
Condition : FCC 15.207-COND-QP NNB-2/16Z(99012) NEUTRAL
Project No. : EI/2006/40004
Applicant : SAGEM
EUT Description : Triband 900/1800/1900 headset
EUT Model : E2006//ADAPTER MODEL:DCH3-050US
Test Mode : GSM1900 LINK
Temp./Humid. : 25/65
Operator : WILLIS

	Freq	Pol/Phase	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz		dBuV	dB	dBuV	dBuV	dB	
1	0.52	NEUTRAL	43.42	0.20	43.62	56.00	-12.38	QP
2	0.52	NEUTRAL	29.16	0.20	29.36	56.00	-26.64	AVERAGE
3	0.70	NEUTRAL	43.13	0.21	43.34	56.00	-12.66	QP
4	0.70	NEUTRAL	29.35	0.21	29.56	56.00	-26.44	AVERAGE
5	0.88	NEUTRAL	37.90	0.21	38.11	56.00	-17.89	QP
6	0.88	NEUTRAL	22.89	0.21	23.10	56.00	-32.90	AVERAGE
7	0.98	NEUTRAL	43.34	0.21	43.55	56.00	-12.45	QP
8	0.98	NEUTRAL	26.41	0.21	26.62	56.00	-29.38	AVERAGE
9	1.26	NEUTRAL	42.50	0.21	42.71	56.00	-13.29	QP
10	1.26	NEUTRAL	26.09	0.21	26.30	56.00	-29.70	AVERAGE
11	1.86	NEUTRAL	40.16	0.22	40.38	56.00	-15.62	QP
12	1.86	NEUTRAL	24.92	0.22	25.14	56.00	-30.86	AVERAGE

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode	: Data Link	Test Date	May. 04, 2006
Fundamental Frequency	: N/A	Test By	Willis
Temperature	: 25℃	Pol	Line
Humidity	: 65%	Adaptor Model	DCH3-050US
Test Voltage	:120Vac	Supplier:	Astec

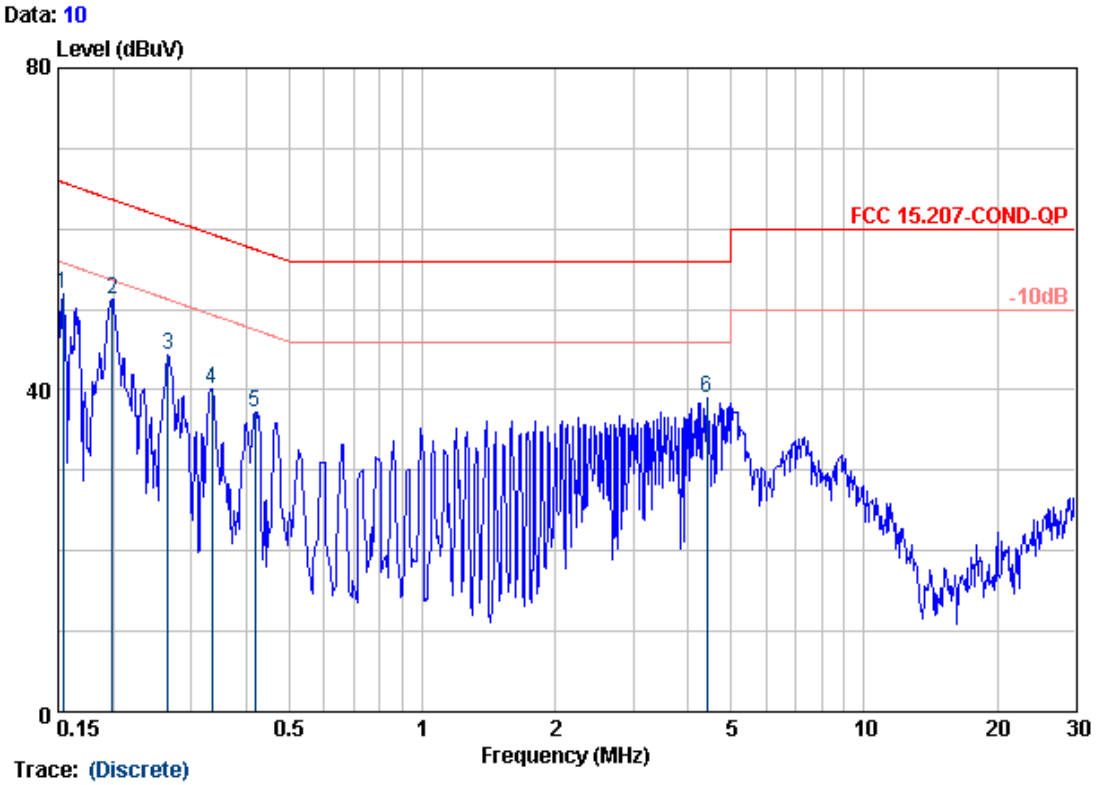


Site	: RF Site
Condition	: FCC 15.207-COND-QP NNB-2/16Z(99012) LINE
Project No.	: EI/2006/40004
Applicant	: SAGEM
EUT Description	: Triband 900/1800/1900 headset
EUT Model	: E2006
Test Mode	: GSM1900 LINK // DATA LINK
Temp./Humid.	: 25/65
Operator	: WILLIS

	Freq	Pol/Phase	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz		dBuV	dB	dBuV	dBuV	dB	
1	0.16	LINE	53.09	0.20	53.29	65.47	-12.18	Peak
2	0.20	LINE	49.97	0.20	50.17	63.54	-13.37	Peak
3	0.26	LINE	44.76	0.20	44.96	61.47	-16.51	Peak
4	0.33	LINE	40.12	0.20	40.32	59.40	-19.08	Peak
5	0.42	LINE	37.20	0.20	37.40	57.46	-20.06	Peak
6	4.27	LINE	40.10	0.34	40.44	56.00	-15.56	Peak

AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode	: Data Link	Test Date	May. 04, 2006
Fundamental Frequency	: N/A	Test By	Willis
Temperature	: 25℃	Pol	Neutral
Humidity	: 65%	Adaptor Model	DCH3-050US
Test Voltage	:120Vac	Supplier:	Astec



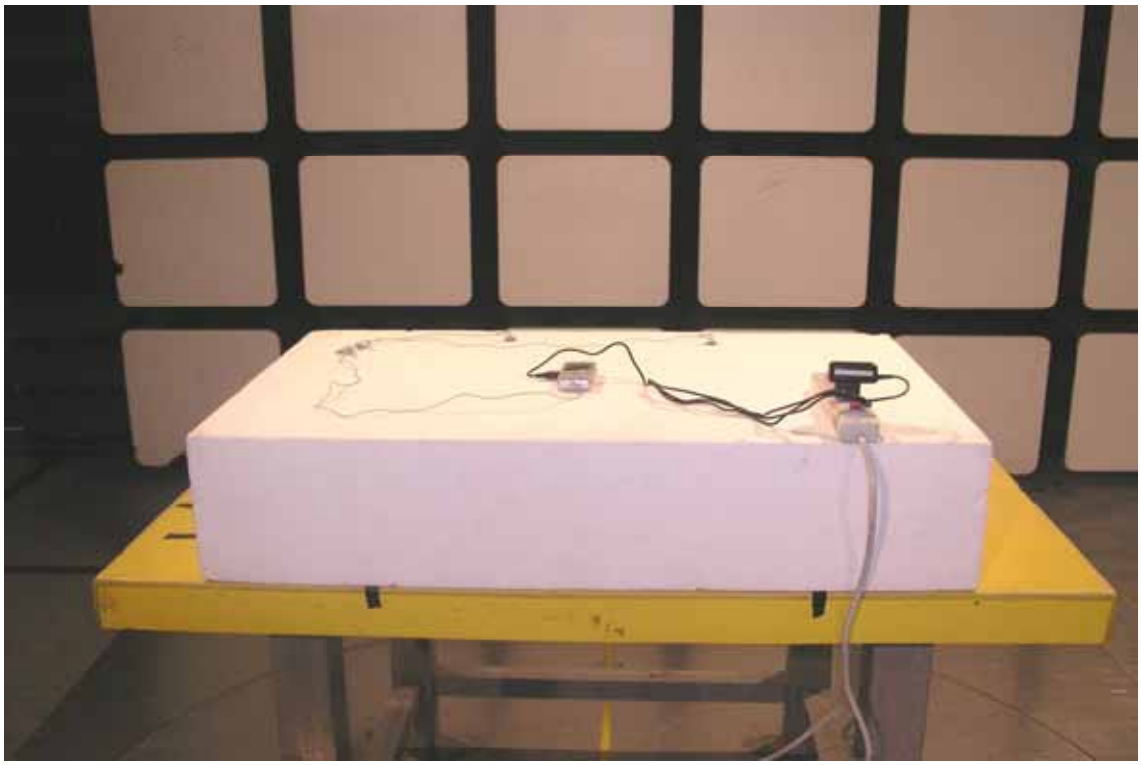
Site	: RF Site
Condition	: FCC 15.207-COND-QP NNB-2/16Z(99012) NEUTRAL
Project No.	: EI/2006/40004
Applicant	: SAGEM
EUT Description	: Triband 900/1800/1900 headset
EUT Model	: E2006
Test Mode	: GSM1900 LINK // DATA LINK
Temp./Humid.	: 25/65
Operator	: WILLIS

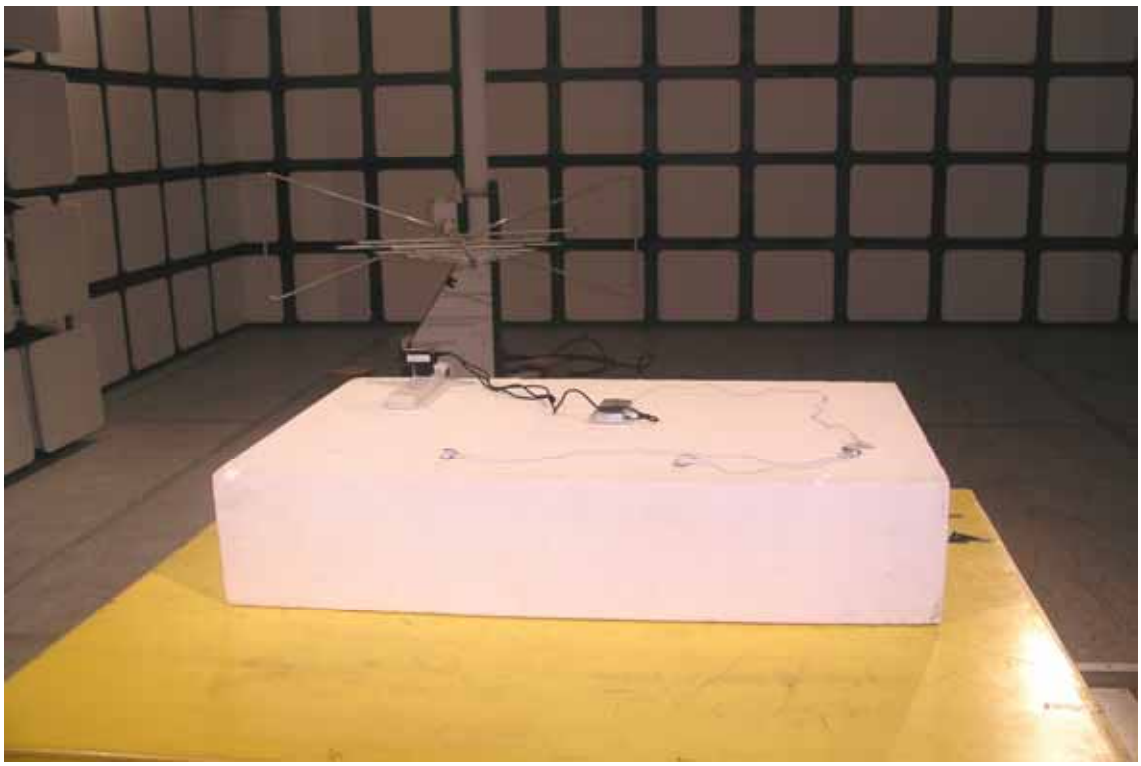
	Freq	Pol/Phase	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz		dBuV	dB	dBuV	dBuV	dB	
1	0.15	NEUTRAL	51.67	0.20	51.87	65.78	-13.91	Peak
2	0.20	NEUTRAL	50.99	0.20	51.19	63.67	-12.48	Peak
3	0.27	NEUTRAL	44.07	0.20	44.27	61.25	-16.98	Peak
4	0.33	NEUTRAL	39.98	0.20	40.18	59.35	-19.17	Peak
5	0.42	NEUTRAL	37.10	0.20	37.30	57.46	-20.16	Peak
6	4.41	NEUTRAL	38.59	0.35	38.94	56.00	-17.06	Peak

APPENDIX 1

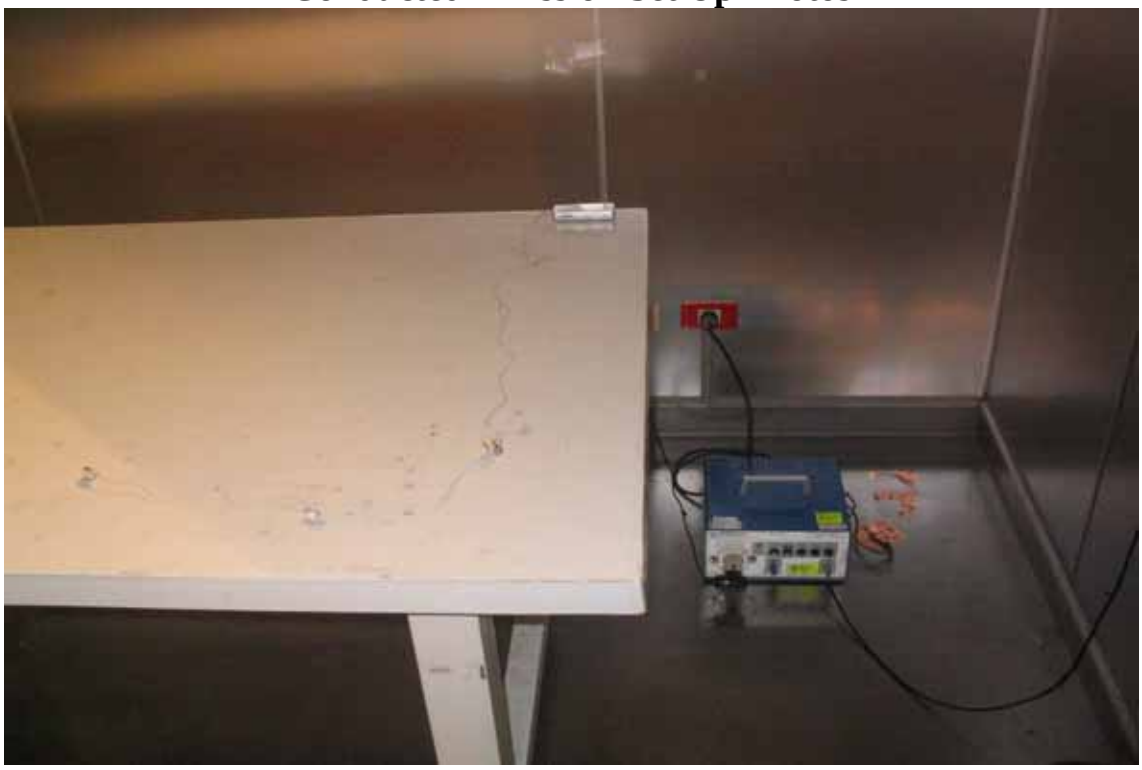
PHOTOGRAPHS OF SET UP

Radiated Emission Set up Photos





Conducted Emission Set Up Photos



APPENDIX 2

PHOTOGRAPHS OF EUT

All View of EUT

Adaptor- SN Number: 189195229

Earphone (18916164-5)

Battery (287073851)

Front View of EUT

Back View of EUT

Right View of EUT

Left View of EUT

Top View of EUT

Bottom View of EUT

Open View of EUT – 1

Open View of EUT – 2

Open View of EUT – 3

Open View of EUT – 4

Internal of EUT-1

Internal of EUT-2

Internal of EUT-3

Internal of EUT-4