

ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

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

OF

Product Name: Personal Tracking System

Brand Name: N/A

Model Name: GT2000

FCC ID: TBQGT-2000

GSM Module ID: PY76220511

Report No.: EH/2006/60001

Issue Date: Jul. 03, 2006

FCC Rule Part: 2 & 24E& 22H

Prepared for Portman Electronics (shenzhen) CO., LTD.
No. 9, Building, Tongfuyu Industrial District,
Shenzhen 518109, China

Prepared by SGS Taiwan Ltd.
No. 134, Wu Kung Rd., Wuku Industrial Zone,
Taipei County, Taiwan.

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VERIFICATION OF COMPLIANCE

Applicant: Portman Electronics (shenzhen) CO., LTD.
No. 9, Building, Tongfuyu Industrial District, Shenzhen 518109, China

Equipment Under Test: Personal Tracking System

FCC ID Number: TBQGT-2000

Brand Name: N/A

Model No.: GT2000

Model Difference: N/A

File Number: EH/2006/60001

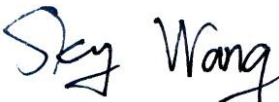


Date of test: Jun. 15, 2006 ~ Jun. 30, 2006

Date of EUT Received: Jun. 14, 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 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:	 <hr/> Sky Wang	Date	Jul. 03, 2006
Prepared By:	 <hr/> Eva Kao	Date	Jul. 03, 2006
Approved By	 <hr/> Vincent Su	Date	Jul. 03, 2006

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Version

Version No.	Date
00	Jul. 03, 2006

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1. GENERAL INFORMATION

1.1 Product Description

Product	Personal Tracking System	
Model Name	GT2000	
Model Difference:	N/A	
Brand Name	N/A	
Frequency Range and Power	GSM 850: 824 MHz – 849 MHz	33 dBm
	GSM 1900: 1850 MHz –1910 MHz	30 dBm
Type of Emission	300KGXW	
Power Supply	3.6 Vdc re-chargeable battery or 5Vdc by AC/DC power adapter, model: A01S050050S	

1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **TBQGT-2000** 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: 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&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&13 of ANSI C63.4-2003.

2.4 Configuration of Tested System

Fig. 2-1 Configuration of Tested System

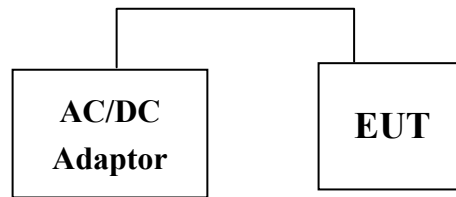


Table 2-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/ Type No.	FCC ID	Series No.
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	N/A
§2.1051 §22.917(a) §24.238(a)	Out of Band Emissions at Antenna Terminals and Band Edge	N/A
§2.1053 §22.917(a) §24.238(a)	Field Strength of Spurious Radiation	Compliant
§2.1055(a)(1)(b)	Frequency Stability vs. Temperature	N/A
§2.1055(d)(1)(2)	Frequency Stability vs. Voltage	N/A
§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 GSM module was approved and the FCC ID number is **PY76220511**. Thus, the output power, ERP/EIRP and Field Strength of Spurious Radiation were tested.

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, earphone and Data cable. The worst-case E2 mode for GSM 850 band and E2 mode for GSM 1900 band channel Low, Mid and High at GSM mode was reported.

5. RF POWER OUTPUT MEASUREMENT

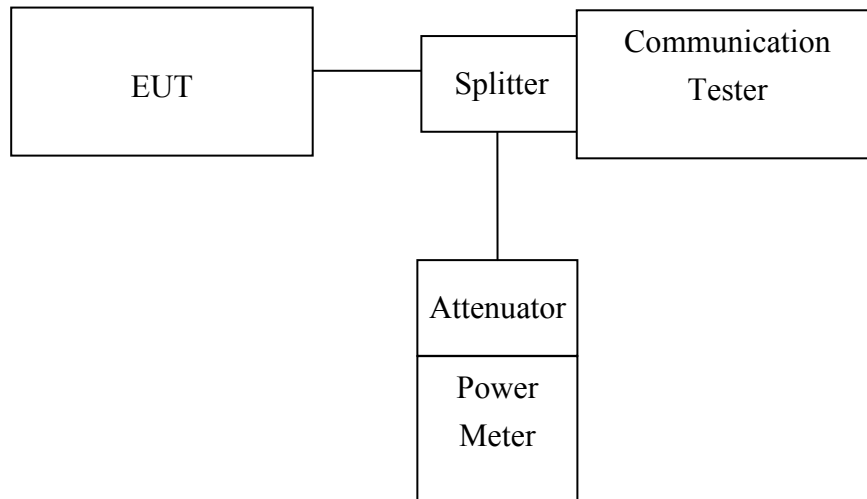
5.1 Standard Applicable

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	03/29/2006	03/28/2007
Spectrum Analyzer	Agilent	E7405A	US41160416	06/28/2006	06/29/2007
Spectrum Analyzer	R&S	FSP 40	100034	11/09/2005	11/10/2006
Communication Test	R&S	CMU200	N/A	N/A	N/A
Power Sensor	Anritsu	MA2490A	31431	06/28/2006	06/29/2007
Power Meter	Anritsu	ML2487A	6K00002070	06/28/2006	06/29/2007
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-Circuit	BW-S10W5	N/A	09/23/2005	09/22/2006
Attenuator	Mini-Circuit	BW-S6W5	N/A	09/23/2005	09/22/2006
Splitter	Agilent	11636B	51728	09/23/2005	09/22/2006
DC Power Supply	TOPWARD	3303A	715844	01/06/2006	01/05/2007

5.5 Measurement Result

EUT Mode	Frequency (MHz)	CH	Power Meter Reading (dBm)	Offset (dB)	Average Power (dBm)
GSM 850	824.20	128	19.22	10.20	29.42
	836.60	190	19.38	10.20	29.58
	848.80	251	19.54	10.20	29.74

EUT Mode	Frequency (MHz)	CH	Power Meter Reading (dBm)	Offset (dB)	Average Power (dBm)
PCS 1900	1850.20	512	22.52	10.20	32.72
	1880.00	661	22.39	10.20	32.59
	1909.80	810	22.21	10.20	32.41

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6. ERP, EIRP MEASUREMENT

6.1 Standard Applicable

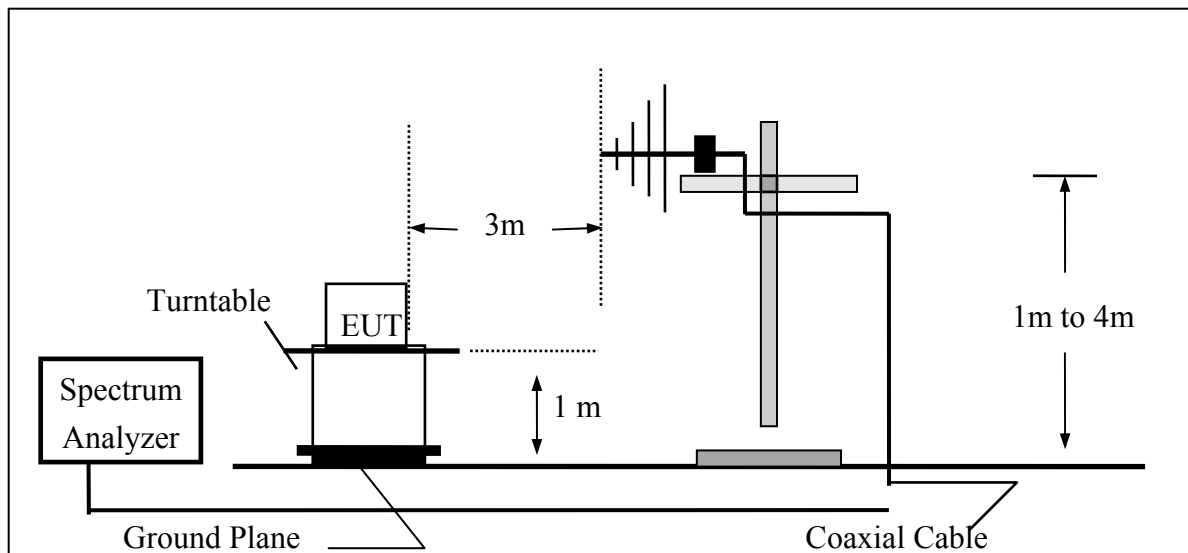
According to FCC §2.1046

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

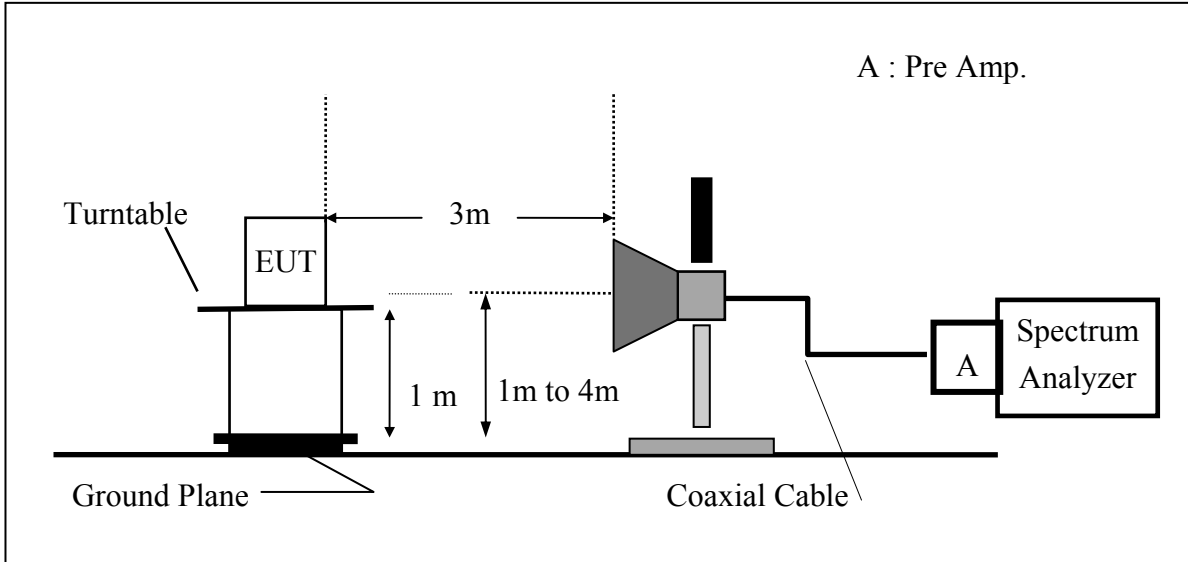
FCC 24.232(b) Mobile station are limited to 2W EIRP.

6.2 Test SET-UP (Block Diagram of Configuration)

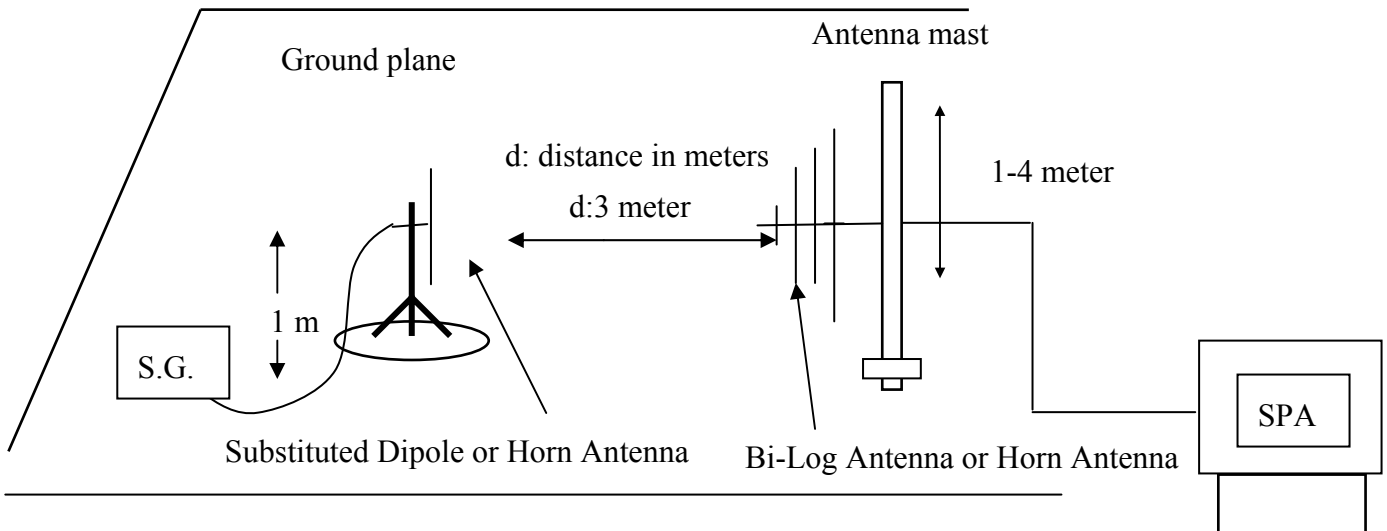
(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



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



(C) Substituted Method Test Set-UP



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6.3 Measurement Procedure

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

During the measurement, the EUT was in 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 a 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 a horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows:

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

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

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	06/28/2006	06/29/2007
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	06/03/2006	06/02/2007
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-Circuit	BW-S10W5	N/A	09/23/2005	09/22/2006
Dipole Antenna	Schwarzbeck	VHAP	908/909	06/10/2006	06/11/2007
Dipole Antenna	Schwarzbeck	UHAP	891/892	06/10/2006	06/11/2007
Horn antenna	Schwarzbeck	BBHA 9120D	N/A	08/16/2004	08/15/2006

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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	110.40	23.08	-7.87	3.64	11.56	38.45
				H	109.00	21.35	-7.87	3.64	9.83	38.45
			E1	V	108.46	21.13	-7.87	3.64	9.62	38.45
				H	110.40	22.75	-7.87	3.64	11.23	38.45
			E2	V	110.91	23.59	-7.87	3.64	12.07	38.45
				H	116.57	26.77	-7.87	5.84	13.06	38.45
	836.60	190	H	V	107.68	20.65	-7.88	3.70	9.08	38.45
				H	107.65	20.32	-7.88	3.70	8.74	38.45
			E1	V	108.19	21.16	-7.88	3.70	9.59	38.45
				H	110.96	23.63	-7.88	3.70	12.05	38.45
			E2	V	111.07	24.04	-7.88	3.70	12.47	38.45
				H	116.47	29.13	-7.88	3.70	17.56	38.45
	848.80	251	H	V	107.64	20.90	-7.88	3.75	9.27	38.45
				H	108.60	21.58	-7.88	3.75	9.95	38.45
			E1	V	108.89	22.15	-7.88	3.75	10.52	38.45
				H	110.42	23.40	-7.88	3.75	11.77	38.45
			E2	V	111.15	24.41	-7.88	3.75	12.78	38.45
				H	116.16	29.14	-7.88	3.75	17.51	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	121.87	14.91	9.90	5.41	19.40	33.00
				H	124.65	17.76	9.90	5.41	22.25	33.00
			E1	V	121.45	14.49	9.90	5.41	18.98	33.00
				H	123.71	16.82	9.90	5.41	21.31	33.00
			E2	V	122.66	15.70	9.90	5.41	20.19	33.00
				H	123.10	16.21	9.90	5.84	20.27	33.00
	1880.00	661	H	V	121.88	14.93	9.99	5.46	19.46	33.00
				H	122.99	16.12	9.99	5.46	20.65	33.00
			E1	V	123.22	16.27	9.99	5.46	20.80	33.00
				H	123.49	16.62	9.99	5.46	21.15	33.00
			E2	V	123.45	16.50	9.99	5.46	21.03	33.00
				H	125.80	18.93	9.99	5.46	23.46	33.00
	1909.80	810	H	V	120.81	13.87	10.08	5.51	18.44	33.00
				H	121.60	14.75	10.08	5.51	19.31	33.00
			E1	V	124.34	17.40	10.08	5.51	21.97	33.00
				H	123.30	16.45	10.08	5.51	21.01	33.00
			E2	V	124.28	17.34	10.08	5.51	21.91	33.00
				H	126.34	19.49	10.08	5.51	24.05	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. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

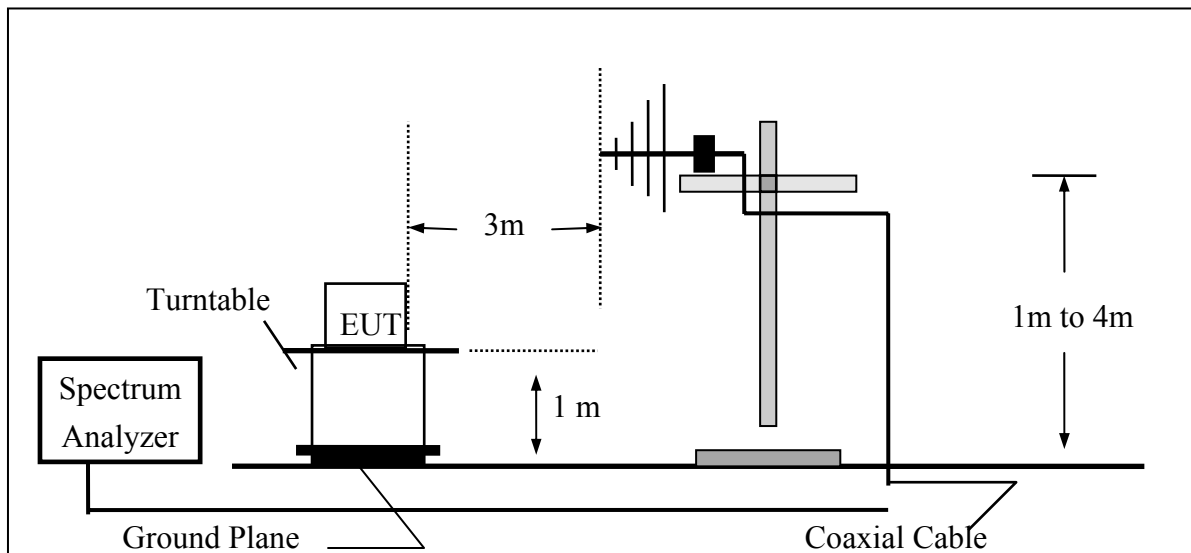
7.1 Standard Applicable

According to FCC §2.1053,

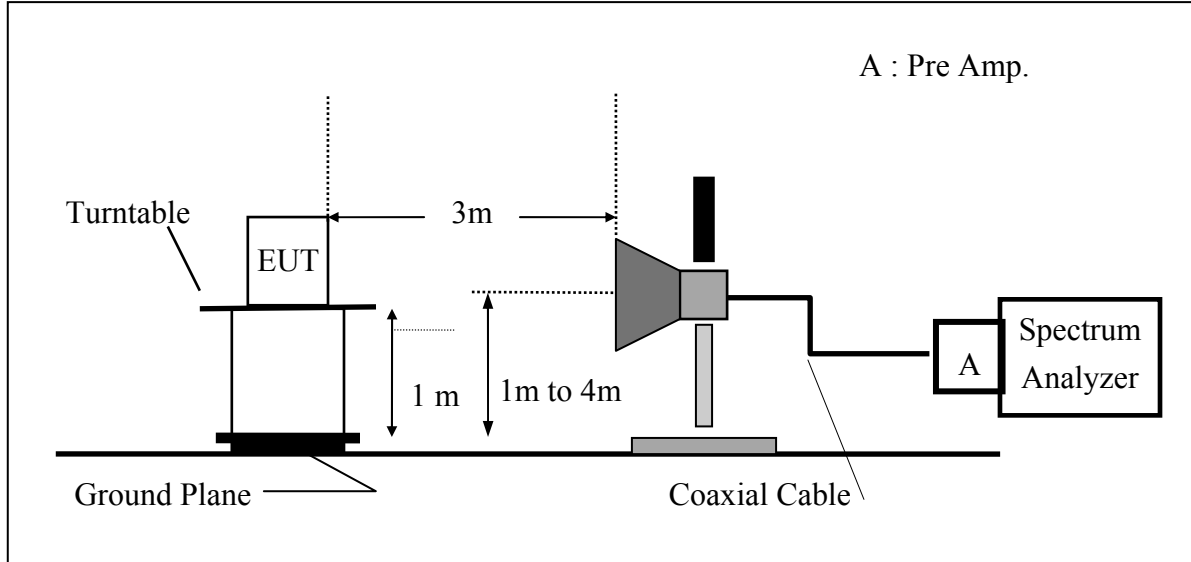
FCC §22.917(a), §24.238(a), the magnitude of each spurious and harmonic emission that can be detected when the equipment is operated under the conditions specified in the instruction manual and/ or alignment procedure, shall not be less than $43 + 10 \log$ (mean output power in watts) dBc below the mean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

7.2 EUT Setup (Block Diagram of Configuration)

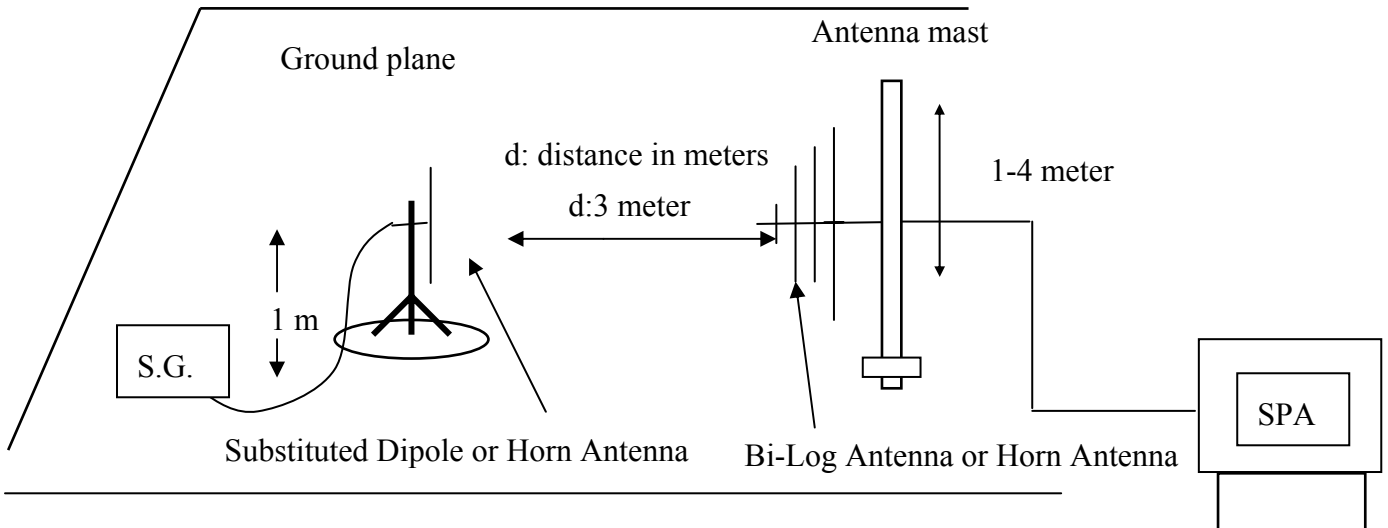
(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



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



(C) Substituted Method Test Set-UP



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7.3 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.

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

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

7.4 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	06/28/2006	06/29/2007
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	06/03/2006	06/02/2007
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-Circuit	BW-S10W5	N/A	09/23/2005	09/22/2006
Dipole Antenna	Schwarzbeck	VHAP	908/909	06/10/2006	06/11/2007
Dipole Antenna	Schwarzbeck	UHAP	891/892	06/10/2006	06/11/2007
Horn antenna	Schwarzbeck	BBHA 9120D	N/A	08/16/2004	08/15/2006

7.5 Measurement Result

Refer to attach tabular data sheets.

Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Mode : TX CH Low E2 PLAN
 Fundamental Frequency : 824.20 MHz
 Temperature : 25°C
 Humidity : 65%

Test Date: Jun. 23, 2005
 Test By: Sky
 Pol: Ver / Hor

Freq.	SPA Reading	Ant.Pol.	S.G Out-put	Antenna Gain	Cable Loss	ERP/EIRP	Limit	Safe Margin
(MHz)	(dBuV)	H/V	(dBm)	(dB/dBi)	(dB)	(dBm)	(dBm)	(dBm)
823.98	63.80	V	-23.53	-7.87	3.64	-35.05	-13.00	-22.05
1648.54	49.10	V	-57.94	9.29	5.06	-53.71	-13.00	-40.71
2472.81	42.19	V	-61.87	10.08	6.30	-58.10	-13.00	-45.10
3297.08	44.41	V	---	---	---	---	-13.00	---
4121.35	48.25	V	---	---	---	---	-13.00	---
4945.62	---	V	---	---	---	---	-13.00	---
5769.89	---	V	---	---	---	---	-13.00	---
6594.16	---	V	---	---	---	---	-13.00	---
7418.43	---	V	---	---	---	---	-13.00	---
8242.70	---	V	---	---	---	---	-13.00	---
33.88	48.57	H	-56.13	-5.52	0.72	-62.37	-13.00	-49.37
823.98	61.88	H	-25.78	-7.87	3.64	-37.30	-13.00	-24.30
1648.54	49.81	H	-57.20	9.29	5.06	-52.97	-13.00	-39.97
2472.81	41.64	H	-62.42	10.08	6.30	-58.64	-13.00	-45.64
3297.08	44.53	H	-57.83	12.17	7.26	-52.92	-13.00	-39.92
4121.35	47.13	H	-52.52	12.61	8.33	-48.23	-13.00	-35.23
4945.62	---	H	---	---	---	---	-13.00	---
5769.89	---	H	---	---	---	---	-13.00	---
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 $ERP/EIRP (dBm) = SG \text{ Setting}(dBm) + Antenna \text{ Gain} (dBd/dBi) - Cable \text{ loss} (dB)$

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Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Mode : TX CH Mid E2 PLAN
 Fundamental Frequency : 836.60 MHz
 Temperature : 25°C
 Humidity : 65%

Test Date: Jun. 23, 2005
 Test By: Sky
 Pol: Ver / 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)
1673.04	51.03	V	-56.00	9.36	5.10	-51.74	-13.00	-38.74
2509.56	54.42	V	-49.46	10.09	6.35	-45.72	-13.00	-32.72
3346.08	48.18	V	-54.38	12.27	7.29	-49.40	-13.00	-36.40
4182.60	47.51	V	-52.05	12.62	8.39	-47.83	-13.00	-34.83
5019.12	---	V	---	---	---	---	-13.00	---
5855.64	---	V	---	---	---	---	-13.00	---
6692.16	---	V	---	---	---	---	-13.00	---
7528.68	---	V	---	---	---	---	-13.00	---
8365.20	---	V	---	---	---	---	-13.00	---
36.79	47.91	H	-55.89	-4.16	0.75	-60.79	-13.00	-47.79
1673.04	47.88	H	-59.12	9.36	5.10	-54.85	-13.00	-41.85
2509.56	46.20	H	-57.68	10.09	6.35	-53.93	-13.00	-40.93
3346.08	46.69	H	-55.63	12.27	7.29	-50.65	-13.00	-37.65
4182.60	52.64	H	-46.78	12.62	8.39	-42.55	-13.00	-29.55
5019.12	37.69	H	-58.56	12.67	9.26	-55.15	-13.00	-42.15
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 $ERP/EIRP (dBm) = SG \text{ Setting}(dBm) + Antenna \text{ Gain} (dBd/dBi) - Cable \text{ loss} (dB)$

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Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Mode : TX CH High E2 PLAN
 Fundamental Frequency : 848.80 MHz
 Temperature : 25°C
 Humidity : 65%

Test Date: Jun. 23, 2005
 Test By: Sky
 Pol: Ver / Hor

Freq.	SPA Reading	Ant.Pol.	S.G Out-put	Antenna Gain	Cable Loss	ERP/EIRP	Limit	Safe Margin
(MHz)	(dBuV)	H/V	(dBm)	(dB/dBi)	(dB)	(dBm)	(dBm)	(dBm)
849.02	63.81	V	-22.92	-7.88	3.75	-34.55	-13.00	-21.55
1697.74	55.87	V	-51.15	9.44	5.14	-46.85	-13.00	-33.85
2546.61	59.79	V	-44.00	10.20	6.40	-40.20	-13.00	-27.20
3395.48	44.67	V	-57.87	12.38	7.33	-52.82	-13.00	-39.82
4244.35	52.55	V	-46.80	12.63	8.46	-42.63	-13.00	-29.63
5093.22	---	V	---	---	---	---	-13.00	---
5942.09	---	V	---	---	---	---	-13.00	---
6790.96	---	V	---	---	---	---	-13.00	---
7639.83	---	V	---	---	---	---	-13.00	---
8488.70	---	V	---	---	---	---	-13.00	---
36.79	48.03	H	-55.77	-4.16	0.75	-60.67	-13.00	-47.67
849.02	61.18	H	-25.84	-7.88	3.75	-37.46	-13.00	-24.46
1697.74	54.03	H	-52.95	9.44	5.14	-48.66	-13.00	-35.66
2546.61	46.50	H	-57.28	10.20	6.40	-53.48	-13.00	-40.48
3395.48	50.10	H	---	---	---	---	-13.00	---
4244.35	55.62	H	---	---	---	---	-13.00	---
5093.22	36.91	H	-59.19	12.74	9.32	-55.76	-13.00	-42.76
5942.09	36.91	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 $ERP/EIRP (dBm) = SG \text{ Setting}(dBm) + Antenna \text{ Gain} (dBd/dBi) - Cable \text{ loss} (dB)$

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Radiated Spurious Emission Measurement Result: PCS 1900 Mode

Operation Mode : TX CH Low E2 PLAN
 Fundamental Frequency : 1850.20MHz
 Temperature : 25°C
 Humidity : 65%

Test Date : Jun. 23, 2005
 Test By: Sky
 Pol: Ver/Hor

Freq.	SPA Reading	Ant.Pol.	S.G Out-put	Antenna Gain	Cable Loss	ERP/EIRP	Limit	Safe Margin
(MHz)	(dBuV)	H/V	(dBm)	(dB/dBi)	(dB)	(dBm)	(dBm)	(dBm)
36.79	47.87	V	-54.86	-4.16	0.75	-59.77	-13.00	-46.77
1846.60	61.70	V	-45.26	9.89	5.40	-40.77	-13.00	-27.77
3700.40	66.89	V	-34.69	12.61	7.73	-29.81	-13.00	-16.81
5550.60	55.81	V	-39.40	13.23	9.68	-35.86	-13.00	-22.86
7400.80	46.06	V	-39.94	11.50	11.28	-39.71	-13.00	-26.71
9251.00	43.29	V	-39.54	11.92	13.10	-40.72	-13.00	-27.72
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	---
33.88	44.51	H	-60.19	-5.52	0.72	-66.43	-13.00	-53.43
1846.60	63.09	H	-43.80	9.89	5.40	-39.32	-13.00	-26.32
3700.40	70.67	H	-30.69	12.61	7.73	-25.81	-13.00	-12.81
5550.60	55.62	H	-39.51	13.23	9.68	-35.96	-13.00	-22.96
7400.80	46.92	H	-39.14	11.50	11.28	-38.92	-13.00	-25.92
9251.00	44.83	H	-37.81	11.92	13.10	-38.99	-13.00	-25.99
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 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 $ERP/EIRP (dBm) = SG \text{ Setting}(dBm) + Antenna \text{ Gain} (dBd/dBi) - Cable \text{ loss} (dB)$

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Radiated Spurious Emission Measurement Result : PCS 1900 Mode

Operation Mode : TX CH Mid E2 PLAN
 Fundamental Frequency : 1880MHz
 Temperature : 25°C
 Humidity : 65%

Test Date Jun. 23, 2005
 Test By Sky
 Pol : Ver/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)
36.79	47.94	V	-54.79	-4.16	0.75	-59.70	-13.00	-46.70
1867.00	63.70	V	-43.25	9.95	5.44	-38.74	-13.00	-25.74
3760.00	71.44	V	-29.86	12.60	7.82	-25.08	-13.00	-12.08
5640.00	61.73	V	-33.23	13.36	9.73	-29.60	-13.00	-16.60
7520.00	45.77	V	-39.84	11.45	11.33	-39.73	-13.00	-26.73
9400.00	44.74	V	-37.78	11.93	13.15	-39.00	-13.00	-26.00
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	---
33.88	47.69	H	-57.01	-5.52	0.72	-63.25	-13.00	-50.25
1867.00	66.52	H	-40.36	9.95	5.44	-35.85	-13.00	-22.85
3760.00	71.82	H	-29.29	12.60	7.82	-24.50	-13.00	-11.50
5640.00	62.11	H	-32.78	13.36	9.73	-29.15	-13.00	-16.15
7520.00	47.20	H	-38.49	11.45	11.33	-38.37	-13.00	-25.37
9400.00	40.69	H	-41.57	11.93	13.15	-42.80	-13.00	-29.80
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 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 $ERP/EIRP (dBm) = SG \text{ Setting}(dBm) + Antenna \text{ Gain} (dBd/dBi) - Cable \text{ loss} (dB)$

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Radiated Spurious Emission Measurement Result: PCS 1900 Mode

Operation Mode	: TX CH High E2 PLAN	Test Date	Jun. 23, 2005
Fundamental Frequency	: 1909.8 MHz	Test By	Sky
Temperature	: 25°C	Pol	Ver/Hor
Humidity	: 65%		

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)
36.79	48.15	V	-54.58	-4.16	0.75	-59.49	-13.00	-46.49
1910.01	79.45	V	-27.40	10.08	5.51	-22.84	-13.00	-9.84
3819.60	64.98	V	-36.05	12.60	7.92	-31.36	-13.00	-18.36
5729.40	59.99	V	-34.71	13.49	9.78	-31.00	-13.00	-18.00
7639.20	42.14	V	-43.03	11.40	11.48	-43.10	-13.00	-30.10
9549.00	42.24	V	-39.93	11.95	13.22	-41.19	-13.00	-28.19
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	---
1910.02	79.14	H	-27.71	10.08	5.51	-23.15	-13.00	-10.15
3819.60	72.11	H	-28.75	12.60	7.92	-24.06	-13.00	-11.06
5729.40	60.05	H	-34.60	13.49	9.78	-30.89	-13.00	-17.89
7639.20	41.16	H	-44.13	11.40	11.48	-44.21	-13.00	-31.21
9549.00	41.03	H	-40.86	11.95	13.22	-42.12	-13.00	-29.12
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 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 $ERP/EIRP (dBm) = SG \text{ Setting}(dBm) + Antenna \text{ Gain} (dBd/dBi) - Cable \text{ loss} (dB)$

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8. AC POWER LINE CONDUCTED EMISSION TEST

8.1 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.

8.2 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 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.

8.3 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.

8.4 Measurement Equipment Used:

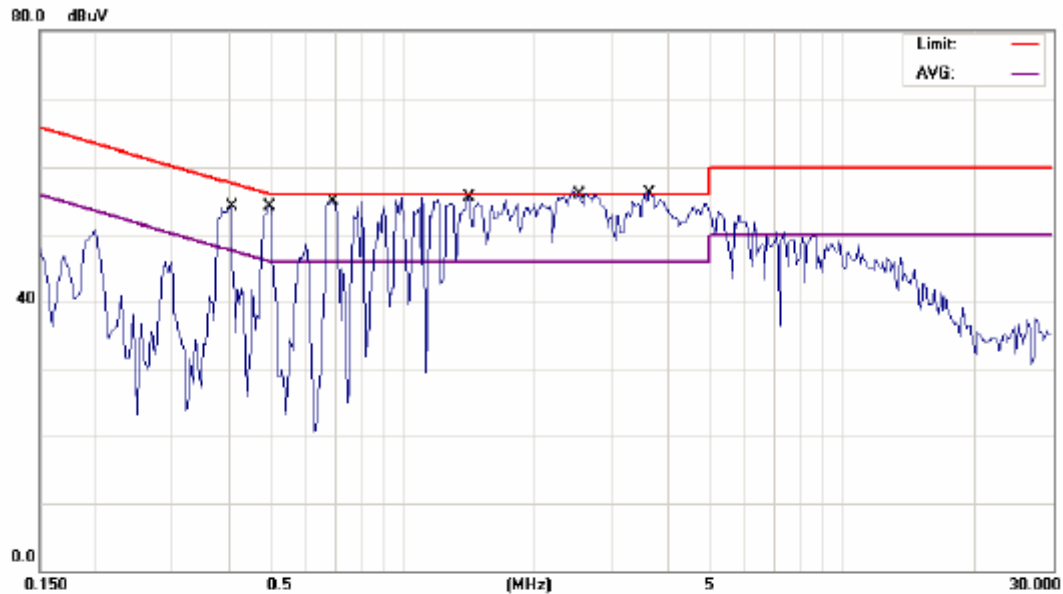
Conducted Emission Test Site					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
EMC Analyzer	HP	8594EM	3624A00203	09/02/2005	09/03/2006
EMI Test Receiver	R&S	ESCS30	828985/004	06/09/2005	06/10/2006
Transient Limiter	HP	11947A	3107A02062	09/02/2005	09/03/2006
LISN	Rolf-Heine	NNB-2/16Z	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

8.5 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

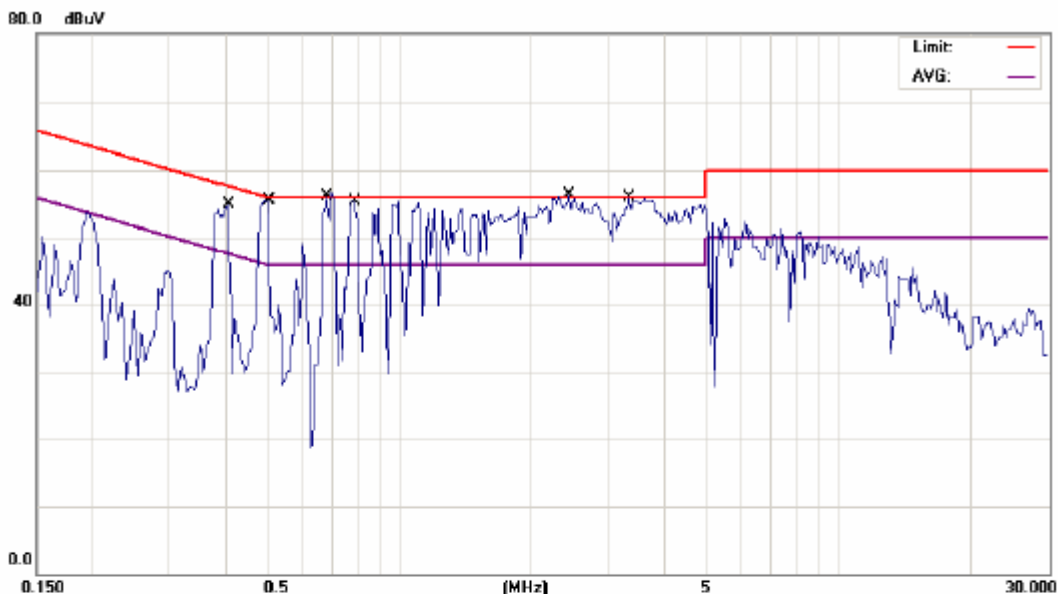
Operation Mode:	GSM850 link Mode	Test Date:	Jun. 26, 2006
Temperature:	25 °C	Humidity:	62 %
		Test By:	Sky



Site SGS CONDUCTED #1	Phase: L1	Temperature: 25 °C
Limit: CISPR22 Class B Conduction(QP)	Power: AC 120V/60Hz	Humidity: 62 %
EUT: Personal Tracking System	Distance:	Air Pressure: hpa
M/N: GT2000		
Note: GSM850 Linking mode, Adapter: SHEN.D.K-0302		

No.	Mk.	Freq. MHz	Reading Level dBμV	Factor dB	Measure- ment dBμV	Limit dBμV	Over dB	Detector	Comment
1		0.4050	40.73	10.68	51.41	57.75	-6.34	QP	
2		0.4050	22.99	10.68	33.67	47.75	-14.08	AVG	
3		0.4905	40.42	10.72	51.14	56.16	-5.02	QP	
4		0.4905	25.33	10.72	36.05	46.16	-10.11	AVG	
5	*	0.6954	41.59	10.61	52.20	56.00	-3.80	QP	
6		0.6954	24.94	10.61	35.55	46.00	-10.45	AVG	
7		1.3831	39.32	10.46	49.78	56.00	-6.22	QP	
8		1.3831	17.65	10.46	28.11	46.00	-17.89	AVG	
9		2.5220	39.78	10.54	50.32	56.00	-5.68	QP	
10		2.5220	20.56	10.54	31.10	46.00	-14.90	AVG	
11		3.6445	40.82	10.62	51.44	56.00	-4.56	QP	
12		3.6445	21.65	10.62	32.27	46.00	-13.73	AVG	

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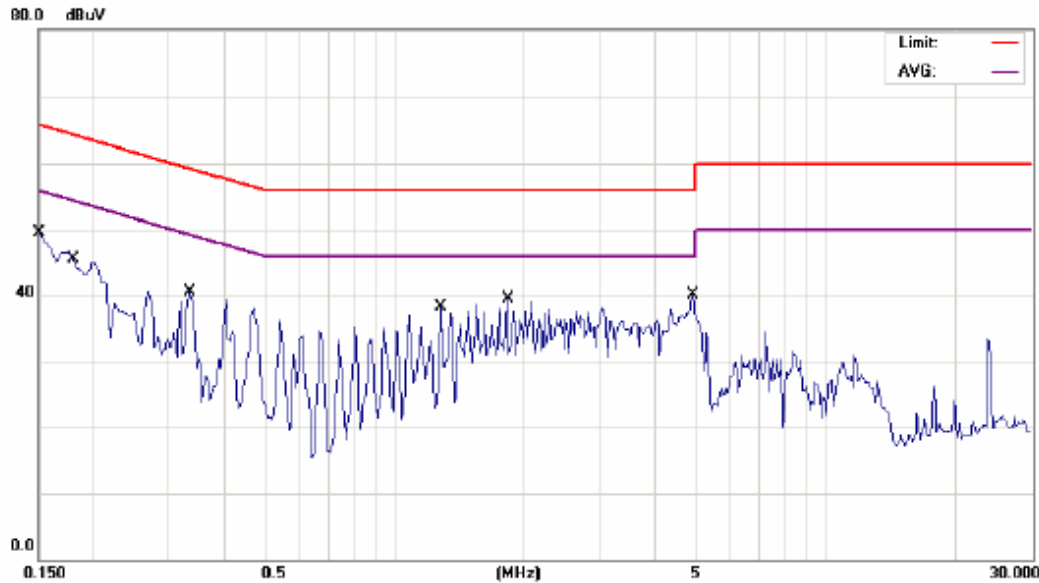
Site SGS CONDUCTED #1 Phase: **N** Temperature: 25 °C
 Limit: CISPR22 Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 62 %
 EUT: Personal Tracking System Distance: Air Pressure: hpa
 M/N: GT2000
 Note: GSM850 Linking mode,Adapter:AO1SO50050C

No.	Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.4035	41.29	10.68	51.97	57.78	-5.81	QP	
2		0.4035	22.97	10.68	33.65	47.78	-14.13	AVG	
3	*	0.4981	42.39	10.72	53.11	56.03	-2.92	QP	
4		0.4981	25.55	10.72	36.27	46.03	-9.76	AVG	
5		0.6778	41.17	10.62	51.79	56.00	-4.21	QP	
6		0.6778	21.88	10.62	32.50	46.00	-13.50	AVG	
7		0.7795	40.68	10.56	51.24	56.00	-4.76	QP	
8		0.7795	20.73	10.56	31.29	46.00	-14.71	AVG	
9		2.4033	40.87	10.54	51.41	56.00	-4.59	QP	
10		2.4033	21.08	10.54	31.62	46.00	-14.38	AVG	
11		3.3403	38.73	10.60	49.33	56.00	-6.67	QP	
12		3.3403	15.07	10.60	25.67	46.00	-20.33	AVG	

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AC POWER LINE CONDUCTED EMISSION TEST DATA

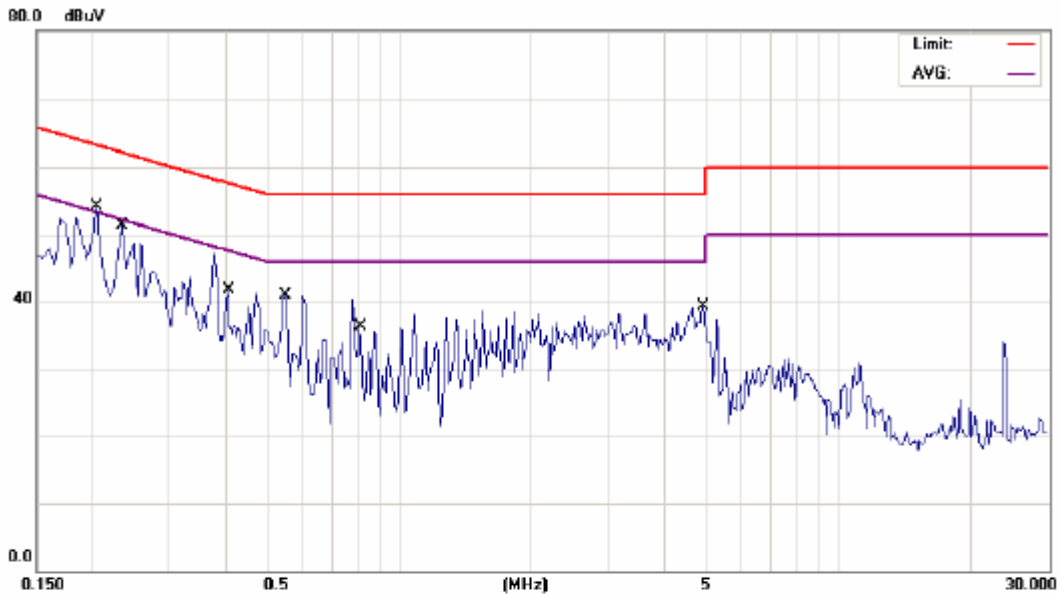
Operation Mode:	GSM850 + Data link Mode	Test Date:	Jun. 26, 2006
Temperature:	25 °C	Humidity:	62 %
		Test By:	Sky



Site SGS CONDUCTED #1	Phase: L1	Temperature: 25 °C
Limit: CISPR22 Class B Conduction(QP)	Power: AC 120V/60Hz	Humidity: 62 %
EUT: Personal Tracking System	Distance:	Air Pressure: hpa
M/N: GT2000		
Note: GSM850 + Data Linking		

No.	Mk.	Freq.	Reading Level	Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1500	31.48	10.52	42.00	66.00	-24.00	QP	
2		0.1500	9.90	10.52	20.42	56.00	-35.58	AVG	
3		0.1816	26.81	10.56	37.37	64.41	-27.04	QP	
4		0.1816	11.73	10.56	22.29	54.41	-32.12	AVG	
5		0.3360	28.62	10.65	39.27	59.30	-20.03	QP	
6		0.3360	22.07	10.65	32.72	49.30	-16.58	AVG	
7		1.2798	26.12	10.45	36.57	56.00	-19.43	QP	
8		1.2798	23.24	10.45	33.69	46.00	-12.31	AVG	
9		1.8200	27.27	10.50	37.77	56.00	-18.23	QP	
10	*	1.8200	24.26	10.50	34.76	46.00	-11.24	AVG	
11		4.9197	25.55	10.67	36.22	56.00	-19.78	QP	
12		4.9197	21.18	10.67	31.85	46.00	-14.15	AVG	

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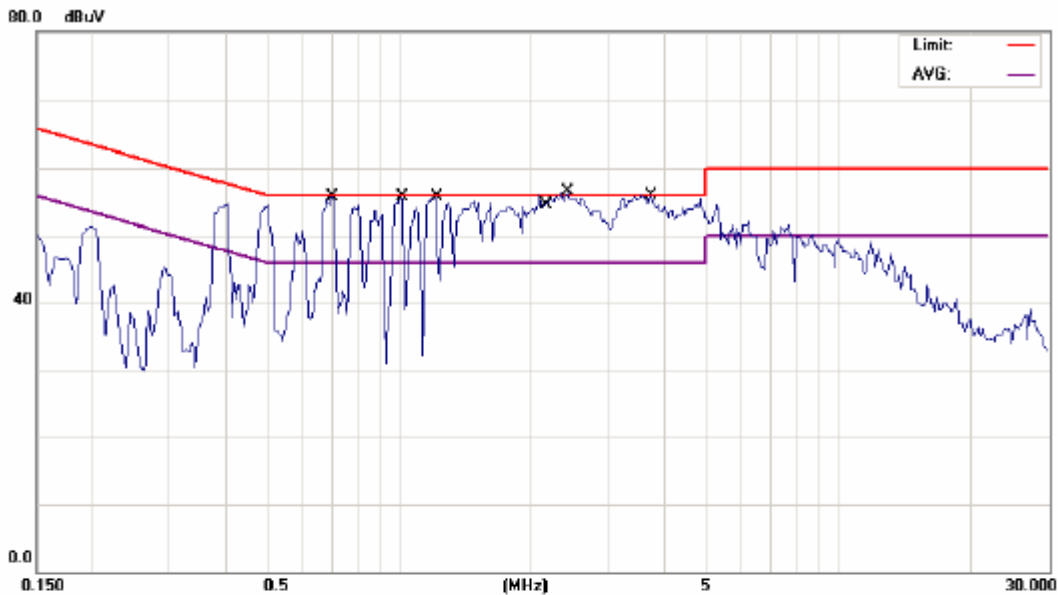
Site: SGS CONDUCTED #1	Phase: N	Temperature: 25 °C
Limit: CISPR22 Class B Conduction(QP)	Power: AC 120V/60Hz	Humidity: 62 %
EUT: Personal Tracking System	Distance:	Air Pressure: hpa
M/N: GT2000		
Note: GSM850 + Data Linking		

No.	Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2030	34.57	10.59	45.16	63.49	-18.33	QP	
2		0.2030	25.94	10.59	36.53	53.49	-16.96	AVG	
3		0.2346	30.35	10.61	40.96	62.29	-21.33	QP	
4		0.2346	15.62	10.61	26.23	52.29	-26.06	AVG	
5		0.4047	30.12	10.68	40.80	57.76	-16.96	QP	
6	*	0.4047	24.55	10.68	35.23	47.76	-12.53	AVG	
7		0.5403	25.57	10.70	36.27	56.00	-19.73	QP	
8		0.5403	20.39	10.70	31.09	46.00	-14.91	AVG	
9		0.8083	24.26	10.54	34.80	56.00	-21.20	QP	
10		0.8083	21.52	10.54	32.06	46.00	-13.94	AVG	
11		4.9177	25.27	10.67	35.94	56.00	-20.06	QP	
12		4.9177	21.23	10.67	31.90	46.00	-14.10	AVG	

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AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	GSM1900 link Mode		Test Date:	Jun. 26, 2006	
Temperature:	25 °C	Humidity:	62 %	Test By:	Sky

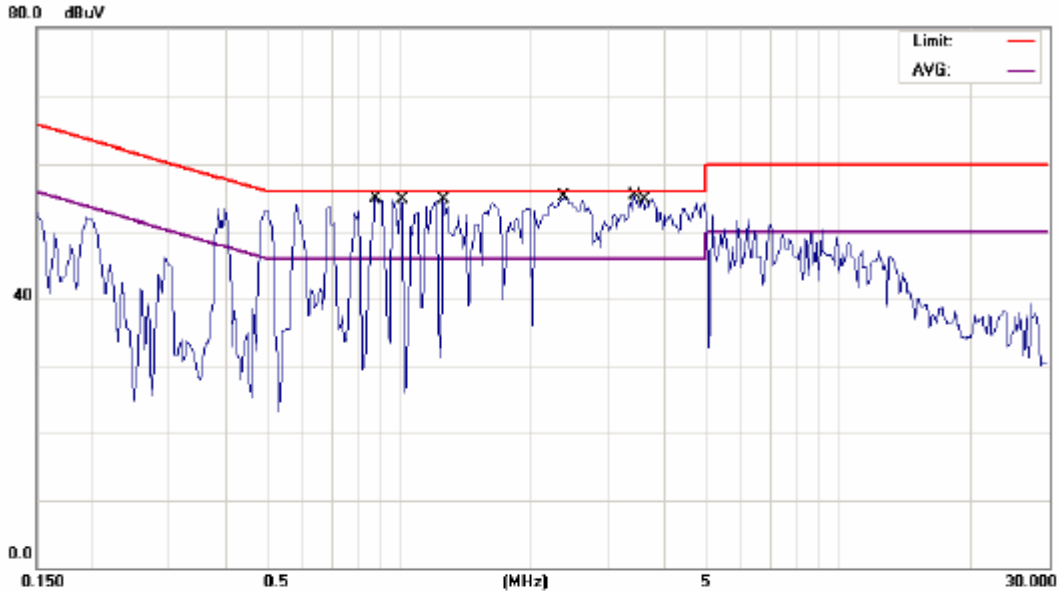


Site: SGS CONDUCTED #1
 Limit: CISPR22 Class B Conduction(QP)
 EUT: Personal Tracking System
 M/N: GT2000
 Note: GSM1900 Linking mode, Adapter: AO1S050050C

Phase: **L1**
 Power: AC 120V/60Hz
 Distance:
 Temperature: 25 °C
 Humidity: 62 %
 Air Pressure: hpa

No. Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measure-ment dBuV	Limit dBuV	Over dB	Detector	Comment
1 *	0.7000	41.11	10.61	51.72	56.00	-4.28	QP	
2	0.7000	23.73	10.61	34.34	46.00	-11.66	AVG	
3	1.0002	40.27	10.43	50.70	56.00	-5.30	QP	
4	1.0002	20.95	10.43	31.38	46.00	-14.62	AVG	
5	1.2050	39.93	10.45	50.38	56.00	-5.62	QP	
6	1.2050	19.43	10.45	29.88	46.00	-16.12	AVG	
7	2.1141	38.24	10.52	48.76	56.00	-7.24	QP	
8	2.1141	19.83	10.52	30.35	46.00	-15.65	AVG	
9	2.3989	39.74	10.54	50.28	56.00	-5.72	QP	
10	2.3989	20.73	10.54	31.27	46.00	-14.73	AVG	
11	3.7068	39.12	10.62	49.74	56.00	-6.26	QP	
12	3.7068	18.64	10.62	29.26	46.00	-16.74	AVG	

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Site: SGSCONDUCTED#1
 Limit: CISPR22 Class B Conduction(QP)
 EUT: Personal Tracking System
 M/N: GT2000
 Note: GSM1900 Linking mode,Adapter:AO1SO50050C

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

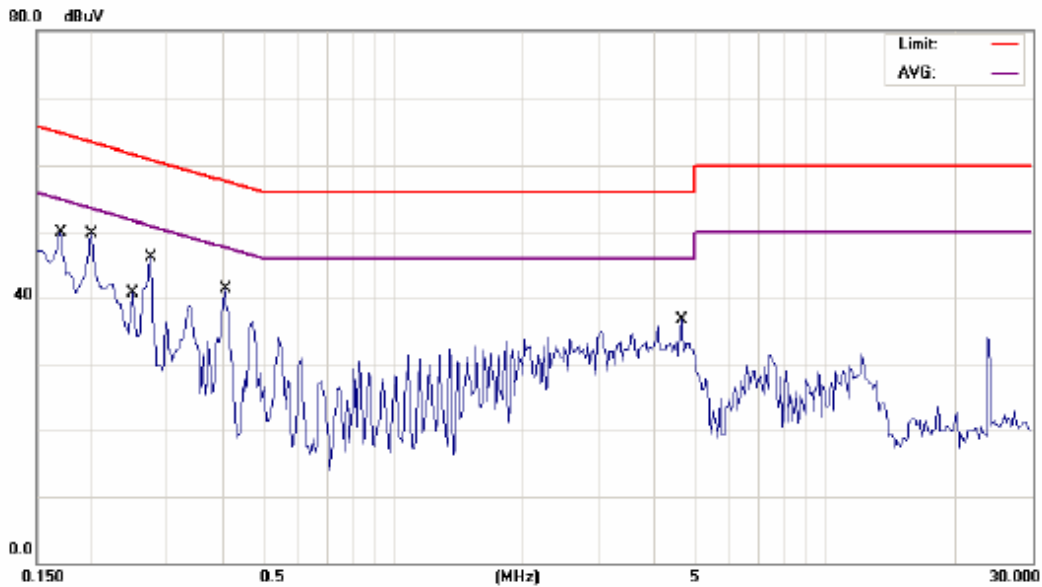
Temperature: 25 °C
 Humidity: 62 %
 Air Pressure: hpa

No.	Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.8810	41.79	10.50	52.29	56.00	-3.71	QP	
2		0.8810	20.30	10.50	30.80	46.00	-15.20	AVG	
3		0.9975	40.31	10.43	50.74	56.00	-5.26	QP	
4		0.9975	18.01	10.43	28.44	46.00	-17.56	AVG	
5		1.2649	40.18	10.45	50.63	56.00	-5.37	QP	
6		1.2649	17.07	10.45	27.52	46.00	-18.48	AVG	
7		2.3311	40.92	10.53	51.45	56.00	-4.55	QP	
8		2.3311	20.44	10.53	30.97	46.00	-15.03	AVG	
9		3.4528	40.55	10.60	51.15	56.00	-4.85	QP	
10		3.4528	16.83	10.60	27.43	46.00	-18.57	AVG	
11		3.5479	39.47	10.61	50.08	56.00	-5.92	QP	
12		3.5479	17.37	10.61	27.98	46.00	-18.02	AVG	

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AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	GSM1900 + Data link Mode		Test Date:	Jun. 26, 2006	
Temperature:	25 °C	Humidity:	62 %	Test By:	Sky



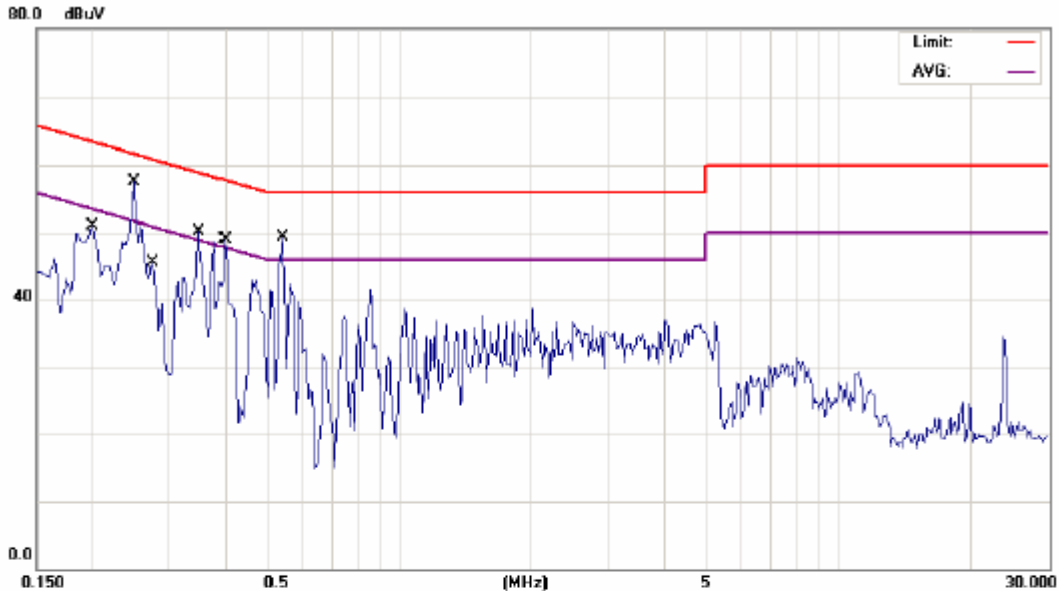
Site: SGS CONDUCTED #1
 Limit: CISPR22 Class B Conduction(QP)
 EUT: Personal Tracking System
 M/N: GT2000
 Note: GSM1900 + Data Linking

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

Temperature: 25 °C
 Humidity: 62 %
 Air Pressure: hpa

No.	Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1702	32.76	10.55	43.31	64.95	-21.64	QP	
2		0.1702	8.55	10.55	19.10	54.95	-35.85	AVG	
3		0.2003	39.26	10.59	49.85	63.60	-13.75	QP	
4		0.2003	25.03	10.59	35.62	53.60	-17.98	AVG	
5		0.2477	32.67	10.61	43.28	61.83	-18.55	QP	
6		0.2477	5.01	10.61	15.62	51.83	-36.21	AVG	
7		0.2750	20.46	10.62	31.08	60.97	-29.89	QP	
8		0.2750	13.68	10.62	24.30	50.97	-26.67	AVG	
9		0.4014	27.56	10.68	38.24	57.82	-19.58	QP	
10	*	0.4014	24.28	10.68	34.96	47.82	-12.86	AVG	
11		4.6439	23.53	10.66	34.19	56.00	-21.81	QP	
12		4.6439	19.43	10.66	30.09	46.00	-15.91	AVG	

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Site: SGS CONDUCTED #1	Phase: N	Temperature: 25 °C
Limit: CISPR22 Class B Conduction(QP)	Power: AC 120V/60Hz	Humidity: 62 %
EUT: Personal Tracking System	Distance:	Air Pressure: hpa
M/N: GT2000		
Note: GSM1900 + Data Linking		

No.	Mk.	Freq. MHz	Reading Level dBuV	Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2011	34.43	10.59	45.02	63.57	-18.55	QP	
2		0.2011	22.20	10.59	32.79	53.57	-20.78	AVG	
3		0.2500	15.53	10.61	26.14	61.76	-35.62	QP	
4		0.2500	2.52	10.61	13.13	51.76	-38.63	AVG	
5		0.2706	27.16	10.62	37.78	61.10	-23.32	QP	
6		0.2706	21.45	10.62	32.07	51.10	-19.03	AVG	
7		0.3500	25.26	10.65	35.91	58.96	-23.05	QP	
8		0.3500	19.10	10.65	29.75	48.96	-19.21	AVG	
9		0.4000	27.23	10.68	37.91	57.85	-19.94	QP	
10	*	0.4000	23.92	10.68	34.60	47.85	-13.25	AVG	
11		0.5404	24.06	10.70	34.76	56.00	-21.24	QP	
12		0.5404	21.25	10.70	31.95	46.00	-14.05	AVG	

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