

# ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

# UN-INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART B REQUIREMENT

OF

Product Name: GSM 850/1900 mobile phone

**Brand Name:** Sagem

Model Name: A2005sa

Market Name: my100B or my100L

**Report No.:** ER/2005/C0035-01

**Issue Date:** Feb. 08, 2006

FCC Rule Part: Part 15B

Prepared for SAGEM Communication

2,rue du Petit Albi BP28250

95801 CERGY PONTOISE Cedex

Prepared by SGS Taiwan Ltd.

No. 134, Wu Kung Rd., Wuku Industrial Zone,

Taipei County, Taiwan.

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# VERIFICATION OF COMPLIANCE

**SAGEM Communication Applicant:** 

2,rue du Petit Albi BP28250

95801 CERGY PONTOISE Cedex

**Product Description:** GSM 850/1900 mobile phone

**Brand Name:** Sagem

**Model No.:** A2005sa

**Market Name:** my100B or my100L

**Model Difference:** N/A

File Number: EM/2005/C0035-01

Date of test: Dec. 15, 2005 ~ Feb. 07, 2006

**Date of EUT Receive:** Dec. 15, 2005 and Jan. 27, 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 ANSI C63.4 (2003) 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 Rules Part 15B.

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

Test By:	Sky Wang	Date	Feb. 08, 2006	
Prepared By:	Sky Wang Cathy Kus	Date	Feb. 08, 2006	
Approved By:	Cathy Kuo Timent Su	Date	Feb. 08, 2006	
	Vincent Su	_		



# Version

Version No.	Date
00	Dec. 27, 2005
01	Feb. 08, 2006



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# 1. GENERAL INFORMATION

# 1.1 Product Description

Product	GSM 850/1900 mobile phone				
Model Name	A2005sa				
Market Name	my100B or my100L				
Model Difference:	N/A				
Trade Name	Sagem				
Frequency Range and	TX: 824.2 MHz – 848.8 MHz 33 dBm				
Power	TX: 1850.2MHz –1909.8MHz 30 dBm				
Type of Emission	300KGXW				
	3.7 Vdc re-chargeable battery or 5Vdc by AC/DC power adapter				
Power Supply	Eight 5V DC by AC/DC Adapters, Input :100-240Vac, 0.3A, 50/60Hz, Output: 5Vdc, 0.4A  1.SAGEM, powersupply1 with 18 867 925-5; 2.SAGEM, powersupply2 with 18 865 855-8; 3.SAGEM, powersupply3 with 18 865 853-7; 4.SAGEM, powersupply4 with 18 864 404-6; 5.SAGEM, powersupply5 with 18 869 2000; 6.SAGEM, powersupply6 with 18 910 715-4; 7.SAGEM, powersupply7 with 18 910 719-6; 8.SAGEM, powersupply8 with 18 910 718-8 One Car Charger Input :12-24Vdc, 0.4A, Output: 6.5Vdc, 0.5A 1.SAGEM, cigar light adapter with 18 871 842-4				

# 1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC Part15 Subpart B is authorized under a DoC procedure.



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# 1.3 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 (2003). Radiated testing was performed at an antenna to EUT distance 3 meters.

### 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.



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# 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 was operated in the normal continuous tramsmitting.

### 2.3 Test Procedure

### 2.3.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 7 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 a placed on as turn table which is 0.8 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 of ANSI C63.4-2003.



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## 2.4 Limitation

### **(1) Conducted Emission**

According to section 15.107(a) Conducted Emission Limits is as following.

Frequency range	Class B Limits dB (uV)				
MHz	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

# (2) Radiated Emission

According to section 15.109(a) Radiated Emission Class B Limits is as following:

Frequency (MHz)	Field strength µV/m	Distance (m)	Field strength at 3m dBµV/m
30-88	100	3	40
88-216	150	3	43.5
216-960	200	3	46
Above 960	500	3	54

Remark: 1. Emission level in dBuV/m=20 log (uV/m)

2. Measurement was performed at an antenna to the closed point of EUT distance of 3 meters.

<sup>1.</sup> The lower limit shall apply at the transition frequencies

<sup>2.</sup> The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.



# 2.5 Configuration of Tested System

Fig. 2-1 Configuration of Tested System

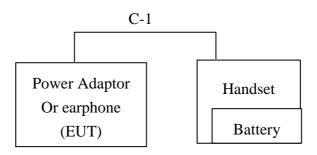
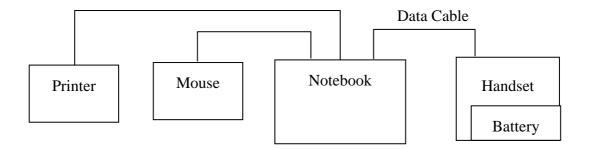


Fig. 2-2 Configuration of Tested System



**Table 2-1 Equipment Used in Tested System** 

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Data Cable	<b>Power Cord</b>
1.	Notebook	TOHSHIBA	PSA10L-3V1JDP	N/A	1.2m, shielding	1.8m, un-shiending
	Printer	HP	DJ640C	TH12QE110Y	1.8m, shielding	1.8m,
2.						un-shiending
3.	Mouse	НР	P8131-D	K023302209	1.8m, shielding	N/A



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# 3. Summary of Test Results

FCC Rules	<b>Description Of Test</b>	Result
§15.107	Conducted Emission Class B	Compliant
§15.109	Radiated Emission Class B	Compliant

# 4. Description of test modes

The EUT is stay in normal operating mode.



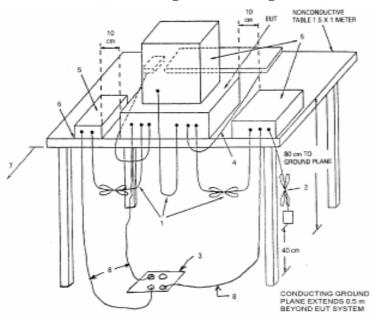
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# 5. Conducted Emissions Test

### **5.1** 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.

# **5.2** Test SET-UP (Block Diagram of Configuration)



### LEGEND:

- 1) Interconnecting cables that hang closer than 40 cm to the groundplane shall be folded back and forth in the center, forming a bundle 30 to 40 cm long (see 6.1.4 and 11.2.4).
- 2) I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated if required using the correct terminating impedance. The total length shall not exceed 1 m (see 6.1.4).
- 3) If LISNs are kept in the test setup for radiated emissions, it is preferred that they be installed under the groundplane with the receptacle flush with the groundplane (see 6.1.4).
- 4) Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use (see 6.2.1.3 and 11.2.4).
- Non-EUT components of EUT system being tested (see also Figure 13).
- Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop (see 6.2.1.1 and 6.2.1.2).
- No vertical conducting plane used (see 5.2.2).
- 8) Power cords drape to the floor and are routed over to receptacle (see 6.1.4).

### Figure 11a-Test arrangement for radiated emissions tabletop equipment



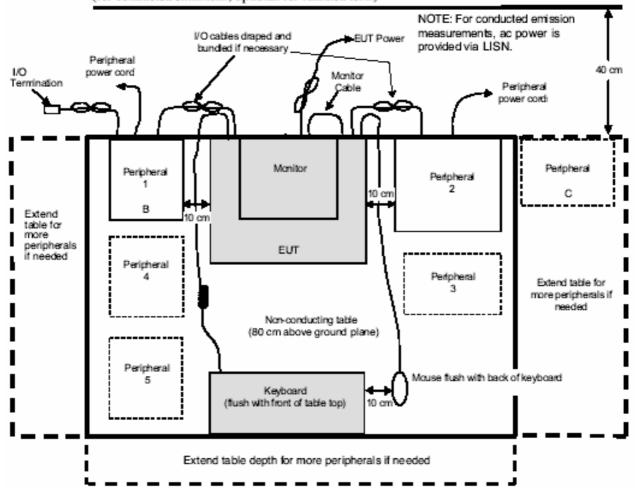
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Vertical conducting plane (for conducted emissions; optional for radiated tests)



# **5.3** Measurement Equipment Used:

Conducted Emission Test Site								
EQUIPMENT MFR		MODEL	SERIAL	LAST	CAL DUE.			
TYPE		NUMBER	NUMBER	CAL.				
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	12/26/2005	12/25/2006			
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			



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# **5.4** Measurement Result:

# AC POWER LINE CONDUCTED EMISSION TEST DATA

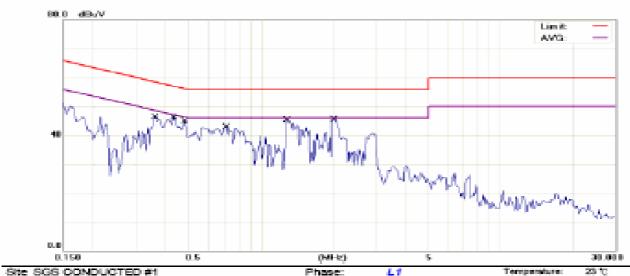
Operation Mode Test Date :Dec.20, 2005 : GSM 850

Fundamental Frequency: N/A Test By :Sky Temperature Pol :Line : 23°C

Humidity : 57% Adaptor Model :powersupply1

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Limit: CISPR22 Class B Conduction(QP) EUT: GSM850/1900 mobile phone

Power:

AC 120MB0Hz

Humidity:

Air Pressure:

M/N: A2005sa

Note: GSM850 LINK (Adapter: powersupply1 with 18 887 925-5)

No.	MK.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
- 1		0.3650	42.04	0.61	42.65	58.61	-15.96	QP		
2		0.3650	32.76	0.61	33.37	48.61	-15.24	AVG		
3		0.4350	42.36	0.61	42.97	57.16	-14.19	QP		
4		0.4350	33.37	0.61	33.98	47.16	-13.18	AVG		
5		0.4850	40.55	0.61	41.16	56,25	-15.09	QP		
6		0.4850	30.21	0.61	30.82	45.25	-15.43	AVG		
7		0.7100	42.55	0.61	43.16	56.00	-12,84	QP		
8:	•	0.7100	35.99	0.61	36,60	45.00	-9.40	AMG		
9		1.2700	22.34	0.63	22.97	56.00	-33.03	QP		
10		1.2700	31.80	0.63	32.43	45.00	-13.57	AVG		
11		2.0050	45.91	0.65	46.56	55.00	-9,44	QP.		
12		2.0050	34.06	0.65	34.71	45.00	-11.29	AVG		



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

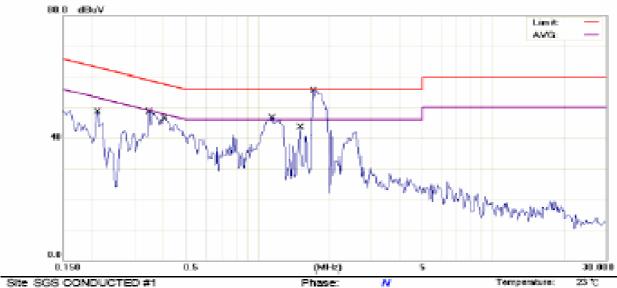
Test Date Operation Mode : GSM 850 :Dec.20, 2005

Fundamental Frequency: N/A Test By :Skv Temperature : 23℃ Pol :Neutral

Humidity Adaptor Model :powersupply1 : 57%

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Limit: CISPR22 Class 8 Conduction(QP)

ACHSOWSONE Power:

Humidity:

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM850 LINK (Adapter: powersupply1 with 18 887 925-5)

No. Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over			
	MHz	dDuV	dB	dBuV	dBuV	dB	Detector	Comment	
1	0.2100	46.5B	0.60	47.18	63.21	-16.03	QP		
2	0.2100	35.05	0.60	35,65	53.21	-17.56	AVG		
3	0.3500	48.18	0.60	48.78	58.96	-10.18	QP		
4	0.3500	36.71	0.60	37.31	48.96	-11.65	AVG		
5	0.4050	40.36	0.61	40.97	57.75	-16.78	QP		
6	0.4050	30.68	0.61	31.29	47.75	-16.46	AVG		
7	1.1450	45.38	0.62	46.00	56.00	-10.00	QP.		
8	1.1450	31.02	0.62	31.54	46.00	-14.36	AVG		
9	1.5050	43.23	0.64	43.87	56.00	-12.13	QP		
10	1.5050	28.48	0.64	29.12	46.00	-16,88	AVG		
11 "	1.7150	50.49	0.64	51.13	56.00	-4.87	OP:		
12	1.7150	39.57	0.64	40.21	46.00	-5.79	AVG		



Hamble

All Principles

# AC POWER LINE CONDUCTED EMISSION TEST DATA

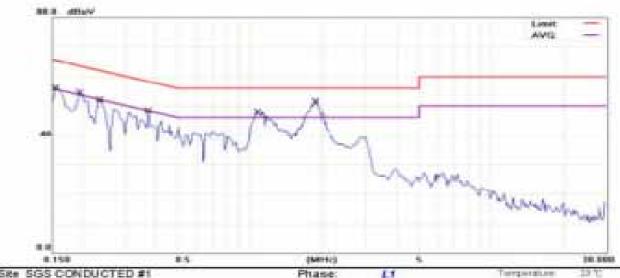
Operation Mode Test Date :Dec.20, 2005 : GSM1900

Fundamental Frequency: N/A Test By :Sky Temperature : 23℃ Pol :Line

Humidity : 57% Adaptor Model :powersupply1

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Power:

Distance:

ACTOWNINE

See SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005na

Note: GSM1900 LINK (Adapter powersupply1 with 18 867 925-5)

No.	Mk.	Freq	Reading Level	Factor	Measure- ment	Limit	Over	
		6814	18567	- 45	4507	attick!	- 4	Delemi Datrees
-1		0.1550	49.43	0.60	50.03	65.73	-15.70	QP .
2		0.1550	30.15	0.60	30.75	55.73	-24.96	AVG
3		0.1950	48.27	0.60	48.87	63.82	-14.95	QP
4		0.1950	29.70	0.60	30.30	53.82	-23.52	AVG
5		0.2350	45.7E	0.60	46.38	62.27	-15.89	QP .
- 6		0.2350	31.97	0.60	32,57	52:27	-19.70	AVG
7		0.3750	38.48	0.61	39.10	58.39	-19.29	QP .
. 8		0.3750	22.58	0.61	23.10	48.39	-25.20	AVG.
-0		1.0800	41.78	0.62	42.40	56.00	-13.60	QF
10	1	1.0800	25.75	0.62	26.37	46.00	-19.63	AVG
31		1.8800	44.60	0.65	45.25	56.00	-10.75	QP
12		1.8800	26.80	0.65	27.45	46.00	-18.55	AVG



# AC POWER LINE CONDUCTED EMISSION TEST DATA

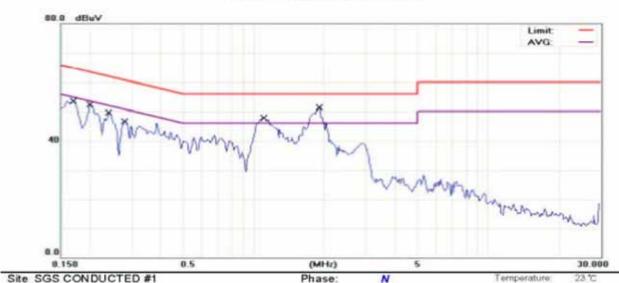
Operation Mode : GSM1900 Test Date :Dec.20, 2005

Fundamental Frequency: N/A Test By :Sky Temperature Pol :Neutral

Humidity : 57% Adaptor Model :powersupply1

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Power:

Distance:

Limit: CISPR22 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM1900 LINK (Adapter: powersupply1 with 18 867 925-5)

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1700	46.93	0.60	47.53	64.96	-17.43	QP	
2		0.1700	31.22	0.60	31.82	54.96	-23.14	AVG	
3		0.2000	48.39	0.60	48.99	63.61	-14.62	QP	
4		0.2000	28.66	0.60	29.26	53.61	-24.35	AVG	
5		0.2400	45.76	0.60	46.36	62.10	-15.74	QP	
6		0.2400	34.70	0.60	35.30	52.10	-16.80	AVG	
7		0.2800	43.10	0.60	43.70	60.82	-17.12	QP	
8		0.2800	27.39	0.60	27.99	50.82	-22.83	AVG	
9		1.1100	43.71	0.62	44.33	56.00	-11.67	QP	
10		1.1100	27.46	0.62	28.08	46.00	-17.92	AVG	
11	*	1.9050	44.55	0.65	45.20	56.00	-10.80	QP	
12		1.9050	26.52	0.65	27.17	46.00	-18.83	AVG	

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

AC 120V/60Hz

Humidity

Air Pressure:

hpa



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

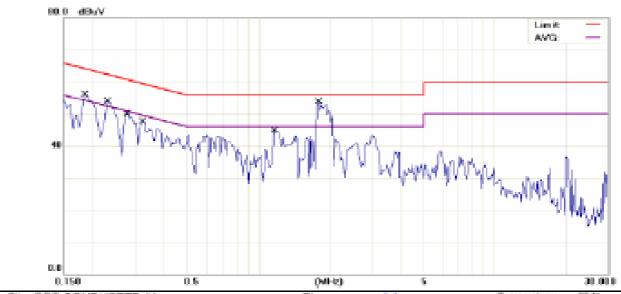
Operation Mode : GSM850 **Test Date** :Dec.20, 2005

Fundamental Frequency: N/A Test By :Sky Temperature : 23°C Pol :Line

Humidity : 57% Adaptor Model :powersupply2

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Site SGS CONDUCTED #1 Phase: Temperatura Limit: CISPR22 Class 8 Conduction(QP) Power: AC 120WIGHE Higgstättyc

EUT: GSM850/1900 mobile phone:

M/N: A2005sa

Note: GSM850 LINK (Adapter: powersupply2 with 18 865 855-8).

No. I	MK.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1850	40.83	0.60	41.43	64.26	-22,83	QP	
2		0.1850	32_37	0.60	32.97	54.25	-21.29	AVG	
3		0.2300	48.36	0.60	48.96	62.45	-13.49	QP	
4		0.2300	30.55	0.60	31.15	52.45	-21.30	AVG	
5		0.2800	45.28	0.60	45.88	60.82	-14.94	QP	
6		0.2900	27_37	0.60	27.97	50.82	-22.85	AVG	
7		0.3250	42.16	0.60	42.76	59.58	-16,82	QP	
8		0.3250	27.73	0.60	28.33	49.58	-21.25	AVG	
9		1.1600	38.79	0.62	39.41	56.00	-16.59	QP	
10		1.1600	22.01	0.62	22.63	46.00	-23.37	AVG	
11		1.7850	45.14	0.64	46.78	56.00	-9.22	QP:	
12		1.7850	29.17	0.64	29.81	46.00	-16.19	AVG	



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

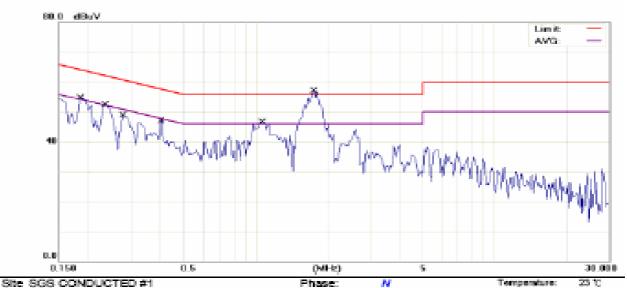
: GSM850 Test Date Operation Mode :Dec.20, 2005

Fundamental Frequency: N/A Test By :Skv :Neutral Temperature : 23℃ Pol

Humidity : 57% :powersupply2 Adaptor Model

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



A0120W80Hz Limit: CISPR22 Class B Conduction(QP) Humidity: Pinsaer EUT: GSM850/1900 mobile phone Air Pressure: hos.

M/N: A2005sa

Note: GSM850 LINK (Adapter: powersupply2 with 18 985 955-8).

No. Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over			
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1	0.1850	45.99	0.60	46.59	64.26	-17.57	QP'		
2	0.1850	35.18	0.60	36.78	54.26	-17.48	AVG		
3	0.2350	48.66	0.60	49.26	62.27	-13.01	QP .		
4	0.2350	31.20	0.60	31.80	52.27	-20.47	AVG		
5	0.2800	44.65	0.60	45.25	60.82	-15.57	QP		
6	0.2800	28.27	0.60	28.87	50.82	-21.95	AVG		
7	0.4050	40.99	0.61	41.60	57.75	-15.15	QP'		
8	0.4050	26.87	0.61	27.48	47.75	-20.27	AVG		
9	1.0650	41.18	0.62	41.80	56.00	-14.20	QP		
10	1.0650	28.46	0.62	29.08	46.00	-16.92	AVG		
11 .	1.7400	50.87	0.64	51.51	56.00	-4.49	QP:		
12	1.7400	38.24	0.64	38.88	46.00	-7.12	AVG		



emperature

Air Pressure

hpa

Humidity

AC POWER LINE CONDUCTED EMISSION TEST DATA

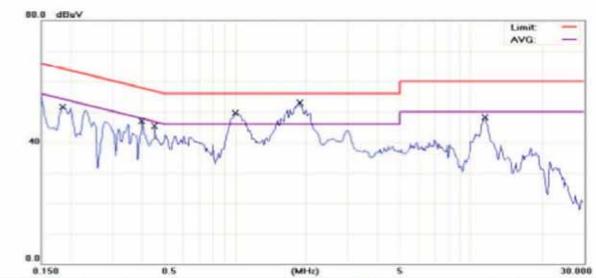
Operation Mode Test Date :Dec.20, 2005 : GSM 1900

Fundamental Frequency: N/A Test By :Sky Temperature Pol :Line : 23℃

Humidity : 57% Adaptor Model :powersupply2

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Phase:

Power:

Distance:

L1

AC 120V/60Hz

Site SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM1900 LINK (Adapter: powersupply2 with 18 865 855-8)

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV.	dBuV	dB	Detector	Comment
1		0.1850	47.39	0.60	47.99	64.26	-16.27	QP	
2		0.1850	28.75	0.60	29.35	54.26	-24.91	AVG	
3		0.4000	39.11	0.61	39.72	57.85	-18.13	QP	
4		0.4000	21.74	0.61	22.35	47.85	-25.50	AVG	
5		0.4550	39.34	0.61	39.95	56.78	-16.83	QP	
6		0.4550	24.93	0.61	25.54	46.78	-21.24	AVG	
7		1.0000	44.65	0.62	45.27	56.00	-10.73	QP	
8		1.0000	26.47	0.62	27.09	46.00	-18.91	AVG	
9	*	1.8700	46.69	0.65	47.34	56.00	-8.66	QP	
10		1.8700	25.46	0.65	26.11	46.00	-19.89	AVG	
11		11.5500	40.36	0.95	41.31	60.00	-18.69	QP	
12	_	11.5500	29.85	0.95	30.80	50.00	-19.20	AVG	



Humidity:

Air Pressure:

hpa

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# AC POWER LINE CONDUCTED EMISSION TEST DATA

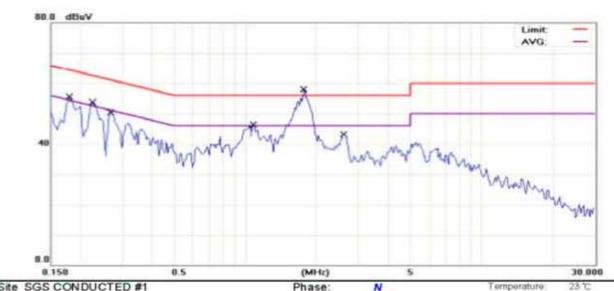
Operation Mode : GSM 1900 Test Date :Dec.20, 2005

Fundamental Frequency: N/A Test By :Sky Temperature : 23℃ Pol :Neutral

Humidity : 57% Adaptor Model :powersupply2

Test Voltage :120Vac Supplier :Sagem

Conducted Emission Measurement



Power:

Distance:

AC 120V/60Hz

Site SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM1900 LINK (Adapter: powersupply2 with 18 865 855-8)

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1800	48.45	0.60	49.05	64.49	-15.44	QP	
2		0.1800	30.07	0.60	30.67	54.49	-23.82	AVG	
3		0.2250	46.35	0.60	46.95	62.63	-15.68	QP	
4		0.2250	27.03	0.60	27.63	52.63	-25.00	AVG	
5		0.2700	42.44	0.60	43.04	61.12	-18.08	QP	
6		0.2700	23.03	0.60	23.63	51.12	-27.49	AVG	
7		1.0800	39.30	0.62	39.92	56.00	-16.08	QP	
8		1,0800	21.86	0.62	22.48	46.00	-23.52	AVG	
9	*	1.7700	50.28	0.64	50.92	56.00	-5.08	QP	
10		1.7700	27.26	0.64	27.90	46.00	-18.10	AVG	
11		2.6200	38.94	0.67	39.61	56.00	-16.39	QP	
12		2.6200	20.34	0.67	21.01	46.00	-24.99	AVG	



Air Pressure:

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# AC POWER LINE CONDUCTED EMISSION TEST DATA

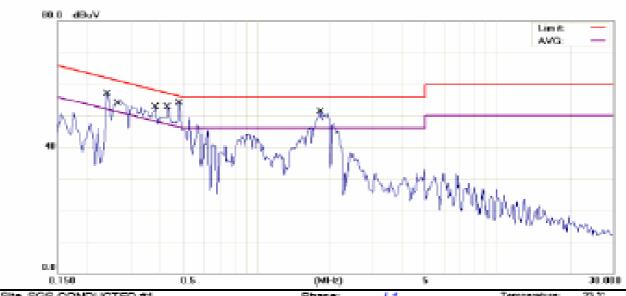
Operation Mode : GSM 850 Test Date :Dec.20, 2005

Fundamental Frequency: N/A Test By :Skv Temperature Pol :Line

Humidity : 57% Adaptor Model :powersupply3

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Site SGS CONDUCTED #1 Phase. Limit: CISPR22 Class B Conduction(QP) AO 120WIGHE Humiditys Power:

EUT: GSM850/1900 mobile phone:

M/N: A2005sa

Note: GSM850 LINK (Adapter: powersupply3 with 18 865 853-7).

No.	MK.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB	dDav	dBuV	dB	Debector	Comment	
1		0.2400	52.69	0.60	53.29	62.10	-8.81	QP		
2		0.2400	24.55	0.60	25.15	52.10	-26.95	AVG		
3		0.2650	50.01	0.60	50.61	61.27	-10.66	QP		
4		0.2650	28.37	0.60	28.97	51.27	-22.30	AVG		
5		0.3850	47.10	0.61	47.71	58.17	-10.46	QP		
Б		0.3850	25.98	0.61	26.59	48,17	-21.58	AVG		
7		0.4300	43.19	0.61	43.80	57.25	-13.45	QP		
8		0.4300	20.34	0.61	20.95	47.25	-26.30	AVG		
9		0.4800	50.21	0.61	50.82	56.34	-5.52	QP		
10		0.4800	24.77	0.61	25.38	46.34	-20.96	AVG		
11	•	1.8250	50.53	0.64	51.17	56.00	-4.83	OP:		
12		1.8250	33.07	0.64	33.71	46.00	-12.29	AVG		



Report No.: EM/2005/C0035-0

Issue Date: Feb. 08, 2006

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# AC POWER LINE CONDUCTED EMISSION TEST DATA

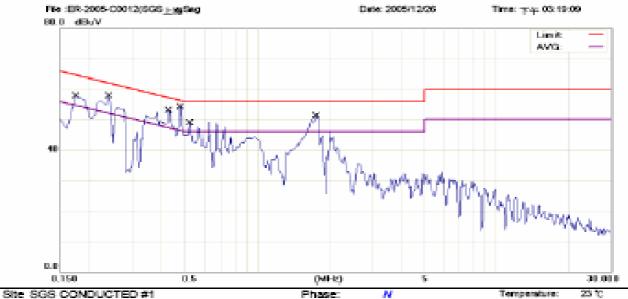
Test Date Operation Mode : GSM 850 :Dec.20, 2005

Fundamental Frequency: N/A Test By :Skv Temperature : 23℃ Pol :Neutral

Humidity Adaptor Model :powersupply3 : 57%

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Limit: CISPR22 Class B Conduction(QP) A0120W80Hz Humidity: Power:

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM850 LINK (Adapter: powersupply3 with 18 885 853-7)

No.	MK.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
- 1		0.1750	52.62	0.60	53.22	64.72	-11.50	QP		
2		0.1750	22.63	0.60	23.23	54.72	-31.49	AVG		
3		0.2400	41.88	0.60	42.48	62.10	-19.62	QP		
4		0.2400	39.61	0.60	40.21	52.10	-11.89	AVG		
5		0.4300	47.52	0.61	48.13	57.25	-9.12	QP.		
6		0.4300	32.57	0.61	33.18	47.25	-14,07	AVG		
7	•	0.4800	46.87	0.61	47.48	56.34	-8.86	QP		
8		0.4800	27.13	0.61	27.74	45.34	-18.60	AVG		
9		0.5250	42.63	0.61	43.24	56.00	-12.76	QP		
10		0.5250	26.21	0.61	26,82	46.00	-19.18	AVG		
11		1.7450	42.80	0.64	43.44	55.00	-12.56	QP		
12		1.7450	25.06	0.64	25.70	46.00	-20.30	AVG		



Humidity:

Air Pressure

hpa

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# AC POWER LINE CONDUCTED EMISSION TEST DATA

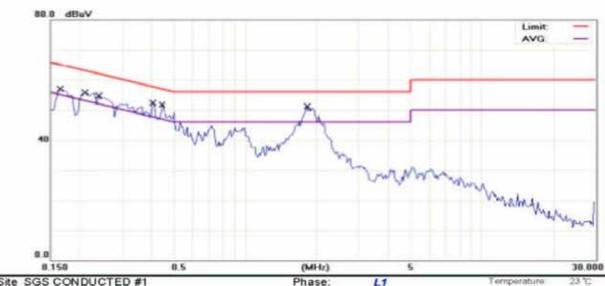
Operation Mode Test Date :Dec.20, 2005 : GSM1900

Fundamental Frequency: N/A Test By :Sky Temperature Pol :Line : 23°C

Humidity : 57% Adaptor Model :powersupply3

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Power:

Distance:

AC 120V/60Hz

Site SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM1900 LINK (Adapter: powersupply3 with 18 865 853-7)

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1650	52.44	0.60	53.04	65.21	-12.17	QP	
2		0.1650	31.71	0.60	32.31	55.21	-22.90	AVG	
3		0.2100	52.21	0.60	52.81	63.21	-10.40	QP	
4		0.2100	31.70	0.60	32.30	53.21	-20.91	AVG	
5		0.2400	44.28	0.60	44.88	62.10	-17.22	QP	
6		0.2400	20.84	0.60	21.44	52.10	-30.66	AVG	
7		0.4050	45.25	0.61	45.86	57.75	-11.89	QP	
8		0.4050	24.70	0.61	25.31	47.75	-22.44	AVG	
9		0.4450	42.82	0.61	43.43	56.97	-13.54	QP	
10		0.4450	24.68	0.61	25.29	46.97	-21.68	AVG	
11		1.8250	42.45	0.64	43.09	56.00	-12.91	QP	
12		1.8250	20.81	0.64	21.45	46.00	-24.55	AVG	



Humidity

Air Pressure

hpa

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# AC POWER LINE CONDUCTED EMISSION TEST DATA

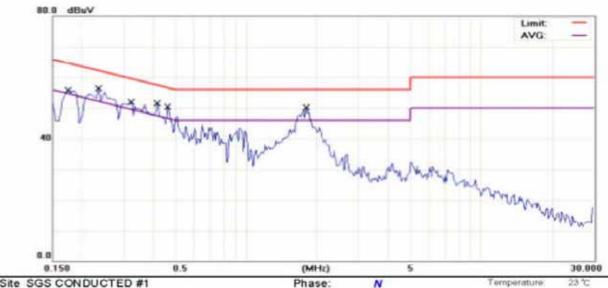
Operation Mode : GSM1900 **Test Date** :Dec.20, 2005

Fundamental Frequency: N/A Test By :Sky Temperature Pol :Neutral : 23℃

Humidity Adaptor Model : 57% :powersupply3

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Power:

Distance:

AC 120V/60Hz

Site SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM1900 LINK (Adapter: powersupply3 with 18 865 853-7)

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBu∀	dBuV	dB	Detector	Comment
1		0.1750	52.38	0.60	52.98	64.72	-11.74	QP	
2		0.1750	34.99	0.60	35.59	54.72	-19.13	AVG	
3		0.2350	51.03	0.60	51.63	62.27	-10.64	QP	
4		0.2350	33.49	0.60	34.09	52.27	-18.18	AVG	
5		0.3250	49.07	0.60	49.67	59.58	-9.91	QP	
6		0.3250	33.14	0.60	33.74	49.58	-15.84	AVG	
7		0.4150	45.82	0.61	46.43	57.55	-11.12	QP	
8		0.4150	28.76	0.61	29.37	47.55	-18.18	AVG	
9		0.4650	45.48	0.61	46.09	56.60	-10.51	QP	
10		0.4650	31.01	0.61	31.62	46.60	-14.98	AVG	
11		1.7950	43.00	0.64	43.64	56.00	-12.36	QP	
12		1.7950	20.06	0.64	20.70	46.00	-25.30	AVG	



# AC POWER LINE CONDUCTED EMISSION TEST DATA

: GSM 850 Test Date :Dec.20, 2005 Operation Mode

Fundamental Frequency: N/A Test By :Sky Pol :Line Temperature : 23°C

Humidity : 57% Adaptor Model :powersupply4

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Heasurement



Power:

Distance:

Limit: CISPR22 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSMB50 LINK (Adapter: powersupply4 with 18 864 404-6).

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHx	4BW	40	dBuV	Wullib	dB	Detector	Consment:
-1		D.1800	48.09	0.60	49.69	64.49	-15.80		
2		0.1800	29.74	0.60	30.34	54.49	-24.15	AVG	
3-		0.9250	40.41	0.62	41.03	56.00	-14.97	QP	
4		0.9250	25.36	0.62	25.98	46.00	-20.02	AVG	
5-		1.2650	40.46	0.63	41.09	56.00	-14.91	QP	
6		1.2650	21.89	0.63	22.52	46.00	-23.48	AVG	
7		1.4500	41.78	0.63	42.41	56.00	-13.59	QP	
B-		1.4500	24.54	0.63	25.17	46.00	-20.83	AVG	
9		1.6100	43.58	D.64	44.22	56.00	-11.78		
10		1.6100	23.68	D.64	24.32	46.00	-21.68	AVG	
11	7	1.8850	50.69	0.65	51.34	56.00	-4.66	QP	
12		1.8850	28.71	D/65	29.36	46.00	-16.64	AVG	

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

AC 120W60Hz



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

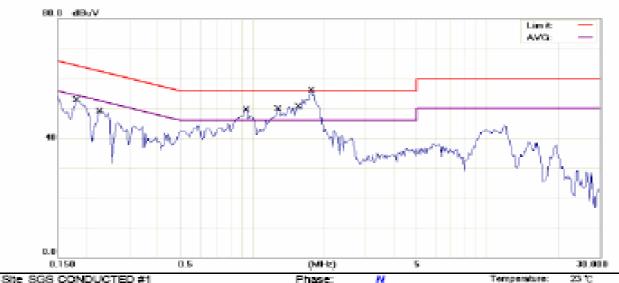
: GSM 850 Test Date Operation Mode :Dec.20, 2005

Fundamental Frequency: N/A Test By :Skv :Neutral Temperature : 23°C Pol

Humidity : 57% Adaptor Model :powersupply4

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Limit: CISPR22 Class B Conduction(QP) AC 120 WORLD Plower: Humidity EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM850 LINK (Adapter: powersupply4 with 18 864 404-6)

No. MK.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over			
	MHz	dBuW	dB	dBuW	dBuV	dB	Detector	Comment	
1	0.1800	47.13	0.60	47.73	64.49	-16.76	QP		
2	0.1800	32.29	0.60	32.89	54.49	-21.60	AWG		
3	0.2250	43.73	0.60	44.33	62.63	-18.30	QP		
4	0.2250	30.20	0.60	30.80	52.63	-21.83	AVG		
5	0.9400	44.35	0.62	44.97	56.00	-11.03	QP		
6	0.9400	26.54	0.62	27.16	45.00	-18.84	AVG		
7	1.2850	42.87	0.63	43.50	56.00	-12.50	QP		
8	1.2850	23.84	0.63	24,47	46.00	-21.53	AVG		
9	1.5600	44.67	0.64	45.31	55.00	-10.69	QP		
10	1.5600	25.46	0.64	25.10	46.00	-19.90	AWG		
11 *	1.7750	49.14	0.64	49.78	55.00	-6.22	OP		
12	1.7750	30.07	0.64	30.71	46.00	-15.29	AVG		



Humidity.

Air Pressure

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# AC POWER LINE CONDUCTED EMISSION TEST DATA

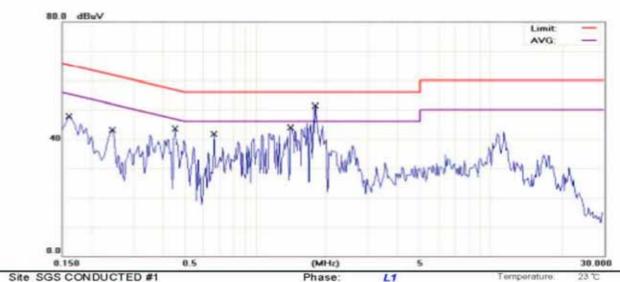
Test Date Operation Mode : GSM 1900 :Dec.20, 2005

Fundamental Frequency: N/A Test By :Sky :Line Temperature : 23°C Pol

Humidity : 57% :powersupply4 Adaptor Model

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Power:

Distance:

AC 120V/60Hz

Site SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM1900 LINK (Adapter: powersupply4 with 18 864 404-6)

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1600	38.09	0.60	38.69	65.46	-26.77	QP	
2		0.1600	25.25	0.60	25.85	55.46	-29.61	AVG	
3		0.2450	34.21	0.60	34.81	61.92	-27.11	QP	
4		0.2450	12.71	0.60	13.31	51.92	-38.61	AVG	
5		0.4550	32.87	0.61	33.48	56.78	-23.30	QP	
6		0.4550	28.14	0.61	28.75	46.78	-18.03	AVG	
7		0.6650	33.28	0.61	33.89	56.00	-22.11	QP	
8	1	0.6650	28.19	0.61	28.80	46.00	-17.20	AVG	
9		1.4100	36.90	0.63	37.53	56.00	-18.47	QP	
10	*	1.4100	28.76	0.63	29.39	46.00	-16.61	AVG	
11		1.7900	34.99	0.64	35.63	56.00	-20.37	QP	
12	į	1.7900	21.52	0.64	22.16	46.00	-23.84	AVG	



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

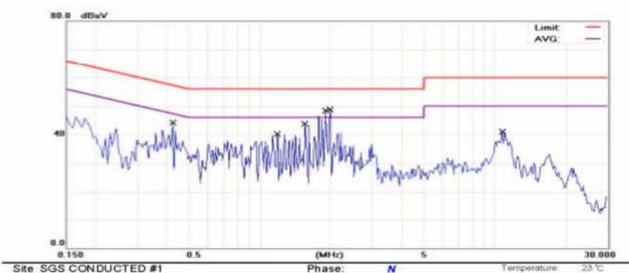
Operation Mode : GSM 1900 Test Date :Dec.20, 2005

Fundamental Frequency: N/A Test By :Sky Temperature :Neutral : 23°C Pol

Humidity : 57% :powersupply4 Adaptor Model

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Power:

Distance:

AC: 1201/60Hz

Humidity

Air Pressure

Site SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM1900 LINK (Adapter: powersupply4 with 18 864 404-6)

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHZ	dBuV	dΒ	dBuV	dBuV	dΒ	Detector	Comment
1		0.4250	32.92	0.61	33.53	57.35	-23.82	QP	
2		0.4250	20.22	0.61	20.83	47.35	-26.52	AVG	
3		1.1900	25.26	0.63	25.89	56.00	-30.11	QP	
4		1.1900	21.82	0.63	22.45	46.00	-23.55	AVG	
5		1.5550	26.98	0.64	27.62	56.00	-28.38	QP	
6		1.5550	19.72	0.64	20.36	46.00	-25.64	AVG	
7	*	1.9050	34.14	0.65	34.79	56.00	-21.21	QP	
8		1.9050	20.15	0.65	20.80	46.00	-25.20	AVG	
9		1.9850	32.56	0.65	33.21	56.00	-22.79	QP	
10		1.9850	21.04	0.65	21.69	46.00	-24.31	AVG	
11		10.8000	27.88	0.96	28.84	60.00	-31.16	QP	
12		10.8000	12.23	0.96	13.19	50.00	-36.81	AVG	



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

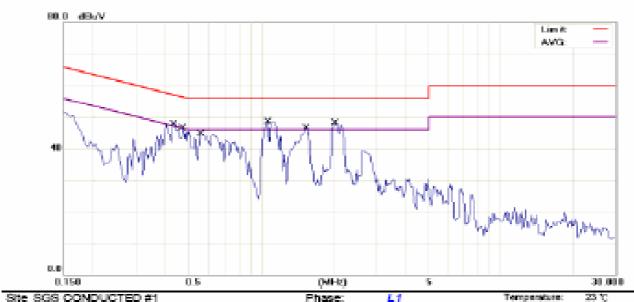
Test Date Operation Mode : GSM 850 :Dec.20, 2005

Fundamental Frequency: N/A Test By :Skv :Line **Temperature** : 23°C Pol

Humidity : 57% :powersupply5 Adaptor Model

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



ACH 120 WEEKLE Limit: CISPR22 Class B Conduction(QP) Plower: Humiditys EUT: GSM850/1900 mobile phone Air Pressure:

M/N: A2005sa

Note: GSM850 LINK (Adapter : powersupply5 with 18 889 2000).

No.	MK.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dDuV	dB	dlluv	dBuV	dB	Detector	Comment
- 1		0.4350	41.58	0.61	42.19	57.16	-14.97	QP'	
2		0.4350	27.69	0.61	28.30	47.16	-18.86	AVG	
3	•	0.4750	45.82	0.61	46.43	55.43	-10:00	QP	
4		0.4750	32.27	0.61	32.88	46.43	-13.55	AVG	
5		0.5650	41.40	0.61	42.01	56.00	-13.99	QP	
6		0.5650	30.75	0.61	31.36	45.00	-14.54	AVG	
7		1.0550	42.57	0.62	43.19	56.00	-12,81	QP	
8		1.0550	28.19	0.62	28.81	45.00	-17.19	AVG	
9		1.5300	41.53	0.64	42.17	56.00	-13.83	QP	
10		1.5300	30.66	0.64	31.30	46.00	-14.70	AVG	
11		2.0150	42.84	0.65	43.49	55.00	-12.51	QP	
12		2.0150	35.23	0.65	35.88	46.00	-10.12	AVG	



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Operation Mode : GSM 850 **Test Date** :Dec.20, 2005

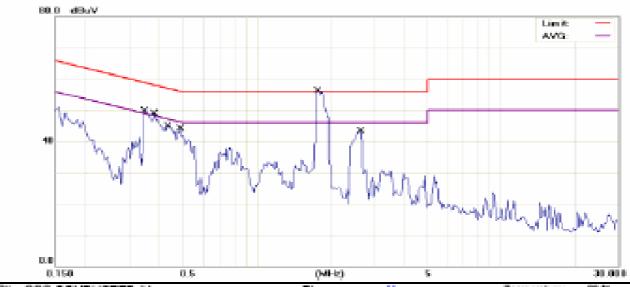
AC POWER LINE CONDUCTED EMISSION TEST DATA

Fundamental Frequency: N/A Test By :Sky Temperature : 23°C Pol :Neutral

Humidity : 57% Adaptor Model :powersupply5

Test Voltage :120Vac Supplier :Sagem

# Conducted Emission Measurement



Site SGS CONDUCTED #1 Phase Limit: CISPR22 Class 8 Conduction(QP) AO 120W50Hz Humiditor Present

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM850 LINK (Adapter : powersupply5 with 18 889 2000)

No.	MK.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1		0.3500	42.04	0.60	42.64	58.96	-16.32	QP		
2		0.3500	28.77	0.60	29.37	48.96	-19.59	AVG		
3		0.3850	41.71	0.61	42.32	58.17	-15.85	QP		
4		0.3850	25.44	0.61	26.05	48.17	-22.12	AVG		
5		0.4350	41.94	0.61	42.55	57.16	-14,51	QP		
6		0.4350	27.50	0.61	28.11	47.16	-19.05	AVG		
7		0.4900	39.84	0.61	40.45	56.17	-15.72	QP		
8:		0.4900	26.87	0.61	27.48	45.17	-18.69	AVG		
9	•	1.7600	48.03	0.64	48.67	56.00	-7.33	QP		
10		1.7600	31.15	0.64	31.79	46.00	-14.21	AVG		
11		2.6600	39.73	0.67	40.40	55.00	-15.60	QP		
12		2.6600	24.57	0.67	25.24	46.00	-20.76	AVG		



Humidity.

Air Pressure

hpa

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# AC POWER LINE CONDUCTED EMISSION TEST DATA

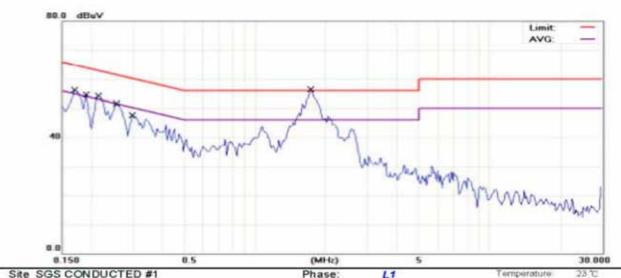
Operation Mode Test Date :Dec.20, 2005 : GSM1900

Fundamental Frequency: N/A Test By :Sky Temperature Pol :Line : 23°C

: 57% Humidity Adaptor Model :powersupply5

Test Voltage :Sagem :120Vac Supplier

### Conducted Emission Measurement



Power:

Distance:

AC 120V/60Hz

Site SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM1900 LINK (Adapter: powersupply5 with 18 869 2000)

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1700	50.75	0.60	51.35	64.96	-13.61	QP	
2		0.1700	31.35	0.60	31.95	54.96	-23.01	AVG	
3		0.1900	45.13	0.60	45.73	64.04	-18.31	QP	
4		0.1900	28.01	0.60	28.61	54.04	-25.43	AVG	
5		0.2150	49.76	0.60	50.36	63.01	-12.65	QP	
6		0.2150	28.49	0.60	29.09	53.01	-23.92	AVG	
7		0.2550	46.14	0.60	46.74	61.59	-14.85	QP	
8		0.2550	28.64	0.60	29.24	51,59	-22.35	AVG	
9		0.3000	43.17	0.60	43.77	60.24	-16.47	QP	
10		0.3000	21.30	0.60	21.90	50.24	-28.34	AVG	
11	*	1.7300	49.03	0.64	49.67	56.00	-6.33	QP	
12		1.7300	28.58	0.64	29.22	46.00	-16.78	AVG	



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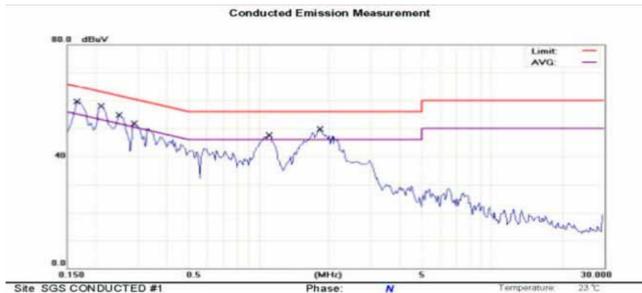
# AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode : GSM1900 **Test Date** :Dec.20, 2005

Fundamental Frequency: N/A Test By :Sky Temperature Pol :Neutral : 23°C

Humidity : 57% Adaptor Model :powersupply5

Test Voltage :120Vac Supplier :Sagem



Power:

Distance:

AC 120V/60Hz

Humidity

Air Pressure

57

hpa

Limit: CISPR22 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM1900 LINK (Adapter: powersupply5 with 18 869 2000)

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHZ	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1650	52.16	0.60	52.76	65.21	-12.45	QP	
2		0.1650	32.16	0.60	32.76	55.21	-22.45	AVG	
3		0.2100	52.55	0.60	53.15	63.21	-10.06	QP	
4		0.2100	29.85	0.60	30.45	53.21	-22.76	AVG	
5	}	0.2500	48.77	0.60	49.37	61.76	-12.39	QP	
6	9	0.2500	35.63	0,60	36.23	51.76	-15.53	AVG	
7		0.2900	41.99	0.60	42.59	60.52	-17.93	QP	
8		0.2900	22.95	0.60	23.55	50.52	-26.97	AVG	
9		1.1050	43.25	0.62	43.87	56.00	-12.13	QP	
10		1.1050	27.79	0.62	28.41	46.00	-17.59	AVG	
11		1.8200	42,39	0.64	43.03	56.00	-12.97	QP	
12		1.8200	23.78	0.64	24.42	46.00	-21.58	AVG	



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

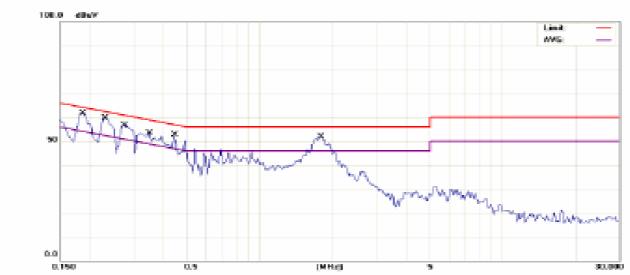
Test Date Operation Mode : GSM 850 :Feb.08, 2006

Fundamental Frequency: N/A Test By :Skv Temperature : 23℃ Pol :Line

Humidity : 57% Adaptor Model :powersupply6

Test Voltage :120Vac Supplier :Sagem

# Conducted Emission Measurement



Site SGS CONDUCTED #1 Phase: Li AC 120W60Hz Limit: CISPR22 Class B Conduction(QP) Power:

Distance:

EUT: GSM850/1900 MOBIL PHONE

M/N: A2005sa

Note: GSM850 LINK (Adapter : powersupply6 with 18 910 715-4)

No. Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
	MHz	dBWV	dB	dBuV	dBuV	dB	Disterctor	Comment
1 .	0.1850	55.85	0.13	56.98	64.26	-7.28	QP	
2	0.1850	37.83	0.13	37_96	54.26	-16.30	AVG	
3	0.2300	54.84	0.13	54.97	62.45	-7.48	QP.	
4	0.2300	38.10	0.13	38.23	52.45	-14.22	AVG	
5	0.2750	51.82	0.13	51.95	60.97	-9.02	QP.	
6	0.2750	33.84	0.13	33.97	50.97	-17.00	AVG	
7	0.3500	49.99	0.14	50.13	58.96	-8.83	QP	
8	0.3500	32.45	0.14	32.59	48.96	-16.37	AVG	
9	0.4450	45.19	0.17	45_36	56.97	-11,61	QP	
10	0.4450	28.86	0.17	29.03	46.97	-17.94	AVG	
11	1.8000	47.47	0.19	47.56	56.00	-8.34	QP	
12	1.8000	29.35	0.19	29.54	46.00	-16.46	AWG	



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

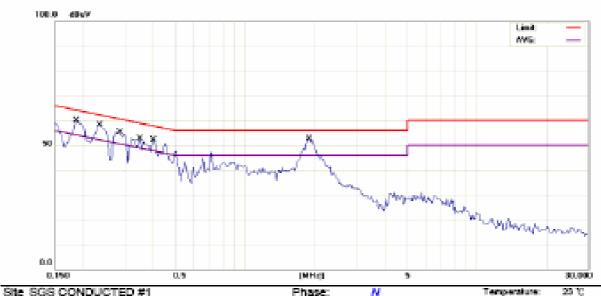
Operation Mode : GSM 850 **Test Date** :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky Temperature : 23°C Pol :Neutral

Humidity : 57% Adaptor Model :powersupply6

Test Voltage :120Vac Supplier :Sagem

# Conducted Emission Measurement



Site SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP) EUT: GSM850/1900 MOBIL PHONE

AC 120W80Hz Power:

Distance:

M/N: A2005sa

Note: GSM850 LINK (Adapter : powersupply6 with 18 910 715-4)

No. M	k. Freq.	Reading Level	Factor	Measure- ment	Limit	Over			
	MHz	dBuV	40	dBuV	dBuV	dB	Detector	Comment	
1	0.1850	55.03	0.13	55.16	64.26	-9.10	QP		
2	0.1850	36.52	0.13	36.65	54.26	-17.61	AVG		
3 "	0.2350	54.23	0.13	54.36	62.27	-7.91	QP		
4	0.2350	38.41	0.13	38.54	52.27	-13.73	AVG		
5	0.2850	50.81	0.13	50.94	60.67	-9.73	QP		
6	0.2850	31.70	0.13	31.83	50.67	-18.84	AVG		
7	0.3500	49.19	0.14	49_33	58.96	-9.63	QP.		
8	0.3500	33.36	0.14	33.50	48.96	-15.46	AVG		
9	0.4000	46.77	0.16	46.93	57.85	-10.92	QP		
10	0.4000	29.95	0.16	30.11	47.85	-17.74	AVG		
11	1.8900	45.01	0.19	46.20	56.00	-9.80	QP		
12	1.8900	26.61	0.19	26.80	46,00	-19.20	AVG		



Humidity:

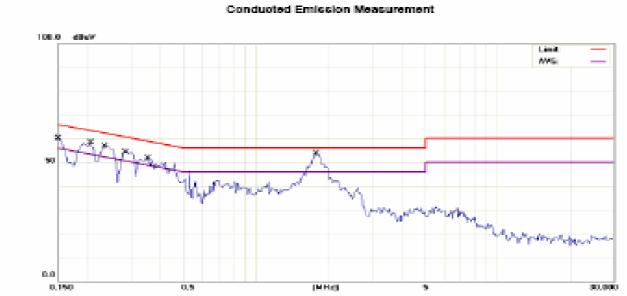
# AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode Test Date :Feb.08, 2006 : GSM1900

Test By Fundamental Frequency: N/A :Sky Temperature Pol :Line : 23℃

Humidity : 57% Adaptor Model :powersupply6

Test Voltage :120Vac Supplier :Sagem



Phase

Power:

Distance:

AC 130W50Hz

Site SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP)

EUT: GSM850/1900 MOBIL PHONE.

M/N: A2005sa

Note: GSM1900 LINK (Adapter : powersupply8 with 18 910 715-4)

No. MK.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
	MHz	dBuV	48	dBuV	dBuV	dB	Distention	Comment
1	0.1500	57.51	0.13	57.64	66.00	-8.35	QP	
2	0.1500	43.79	0.13	43.92	56.00	-12.08	AVG	
3	0.2050	54.29	0.13	54.42	63.41	-8.99	QP	
4	0.2050	38.48	0.13	38.61	53.41	-14.80	AVG	
5	0.2350	52.97	0.13	53.10	62.27	<del>-9</del> .17	QP	
6	0.2350	37.46	0.13	37.59	52.27	-14,58	AVG	
7	0.2850	50.06	0.13	50.19	50.67	-10.48	QP	
8	0.2850	31.15	0.13	31.28	50.67	-19.39	AVG	
9	0.3550	48.50	0.15	48.65	58.84	-10.19	QP	
10	0.3550	34.07	0.15	34.22	48.84	-14.62	AVG	
11 "	1.7750	48.04	0.19	48.23	56.00	-7.77	QP	
12	1.7750	26.99	0.19	27.18	46.00	-18.82	AWG	



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

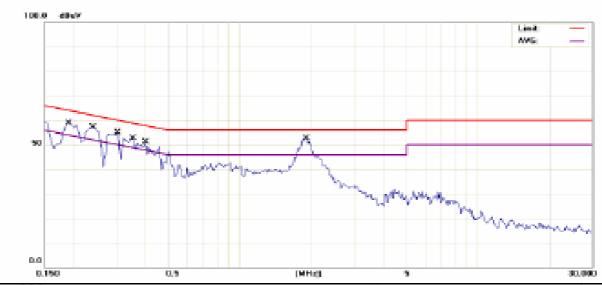
Operation Mode : GSM1900 **Test Date** :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky Temperature Pol :Neutral : 23°C

Humidity : 57% Adaptor Model :powersupply6

Test Voltage :120Vac Supplier :Sagem

### Conducted Emission Measurement



Site SGS CONDUCTED #1 Phase: Limit: CISPR22 Class B Conduction(QP) AC 120W80Hz Humidity: Power: EUT: GSM850/1900 MOBIL PHONE Distance:

M/N: A2005sa

Note: GSM1900 LINK (Adapter : powersupply6 with 18 910 715-4)

No. MK.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over			
	MHz	dBWV	dB	dBuV	dBuV	dB	Distector	Comment	
1	0.1900	55.29	0.13	55.42	64.04	-8.62	QP		
2	0.1900	37.16	0.13	37.29	54.04	-16.75	AVG		
3	0.2400	53.37	0.13	53.50	62.10	-8.60	OP.		
4	0.2400	39.13	0.13	39.26	52.10	-12.84	AVG		
5 '	0.3050	52.00	0.13	52:13	60.11	-7.98	QP		
6	0.3050	34.89	0.13	35.02	50.11	-15.09	AVG		
7	0.3550	49.73	0.15	49.88	58.84	-8.96	QP		
8	0.3550	32.39	0.15	32.54	48.84	-16.30	AVG		
9	0.4000	45.70	0.16	45.86	57.85	-11.99	QP		
10	0.4000	28.92	0.16	29.08	47.85	-18.77	AVG		
11	1.9050	45.66	0.20	45.86	56.00	-10.14	QP.		
12	1.9050	25.50	0.20	25.70	46.00	-20.30	AVG		



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

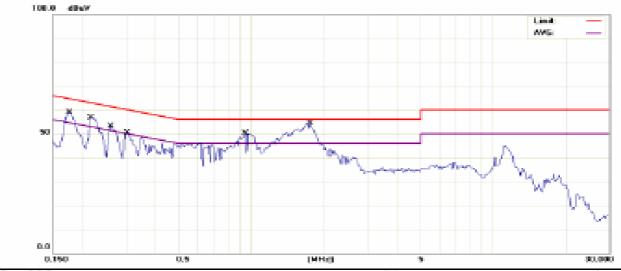
Operation Mode : GSM 850 Test Date :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky Temperature :Line : 23°C Pol

Humidity : 57% Adaptor Model :powersupply7

Test Voltage Supplier :120Vac :Sagem

Conducted Emission Measurement



Site SGS CONDUCTED #1 Phase 4.1 Temperature Limit: CISPR22 Class B Conduction(QP) AC 120W60Hz Humidity:

EUT: GSM850/1900 MOBIL PHONE Distance:

M/N: A2005sa

Note: GSM850 LINK (Adapter : powersupply7 with 18 910 719-8)

No. Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Distector	Comment
1	0.1750	53.56	0.13	53.69	64.72	-11,03	QP	
2	0.1750	35.23	0.13	35_36	54.72	-19.36	AVG	
3	0.2150	48.69	0.13	48.82	63.01	-14.19	QP	
4	0.2150	30.61	0.13	30.74	53.01	-22.27	AVG	
5	0.2500	45.84	0.13	45_97	61.43	-15.46	QP	
6	0.2600	24.06	0.13	24.19	51.43	-27.24	AVG	
7	0.3050	43.98	0.13	44.11	60.11	-16,00	QP	
8	0.3050	23.67	0.13	23.80	50.11	-25.31	AVG	
9	0.9500	46.27	0.15	46.42	56.00	-9.58	QP	
10	0.9500	28.25	0.15	28.40	45.00	-17.60	AVG	
11 "	1.7550	48.68	0.19	48.87	56.00	-7.13	QP	
12	1.7550	28.51	0.19	28.70	45.00	-17.30	AVG	



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

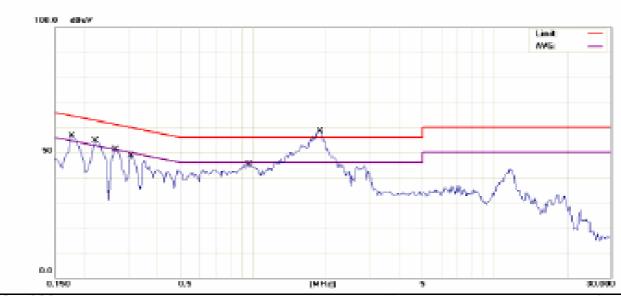
Operation Mode : GSM 850 **Test Date** :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky Temperature : 23°C Pol :Neutral

Humidity : 57% Adaptor Model :powersupply7

Test Voltage :120Vac Supplier :Sagem

#### Conducted Emission Measurement



Site SGS CONDUCTED #1 Phase: AC 120W60Hz Humidity: Limit: CISPR22 Class B Conduction(QP) Power:

EUT: GŚM850/1900 MOBIL PHONE Distance:

M/N: A2005sa

Note: GSM850 LINK (Adapter : powersupply7 with 18 910 719-6)

No. MK.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1750	52.66	0.16	52.82	64.72	-11.90	QP	
2	0.1750	33.07	0.16	33.23	54.72	-21.49	AVG	
3	0.2200	50.82	0.13	50.95	62.82	-11.87	QP.	
4	0.2200	31.07	0.13	31.20	52.82	-21.62	AVG	
5	0.2650	47.38	0.13	47_51	61.27	-13.76	QP	
6	0.2650	21.44	0.13	21.57	51.27	-29.70	AVG	
7	0.3100	44.28	0.13	44.41	59.97	-15.56	QP.	
8	0.3100	23.12	0.13	23.25	49.97	-25.72	AVG	
9	0.9600	42.11	0.15	42.26	56.00	-13.74	QP	
10	0.9600	30.03	0.15	30.18	46,00	-15.82	AVG	
11 '	1.8900	51.02	0.28	51.30	56,00	-4.70	QP.	
12	1.8900	28.06	0.28	28.34	46.00	-17.66	AVG	



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Humsidity:

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# AC POWER LINE CONDUCTED EMISSION TEST DATA

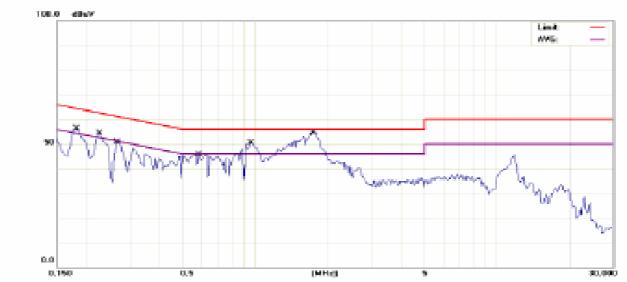
Operation Mode Test Date :Feb.08, 2006 : GSM1900

Fundamental Frequency: N/A Test By :Sky Temperature Pol :Line : 23°C

Humidity : 57% Adaptor Model :powersupply7

Test Voltage :120Vac Supplier :Sagem

Conducted Emission Measurement



Phase

Power:

AC 120W50Hz

Site SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP)

EUT: GŚM850/1900 MOBIL PHONE

M/N: A2005sa

Note: GSM1900 LINK (Adapter : powersupply7 with 18 910 71 9-6)

No. Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
	MPts	dBuV	46	dBuV	dBuV	dB	Detector	Comment
1	0.1800	53.02	0.15	53.17	64.49	-11.32	QP	
2	0.1800	35.13	0.15	35.28	54.49	-18.21	AWG	
3	0.2250	50.96	0.13	51_09	62.63	-11.54	QP	
4	0.2250	34.98	0.13	35.11	52.63	-17.52	AVG	
5	0.2650	45.21	0.13	45.34	61.27	-14.93	QP	
6	0.2650	24.42	0.13	24.55	51.27	-25.72	AVG	
7	0.5800	43.07	0.18	43.25	56.00	-12.75	QP	
8	0.5800	25.34	0.18	25.52	46.00	-20.48	AVG	
9	0.9600	45.33	0.15	45.48	56.00	-9.52	QP	
10	0.9600	27.96	0.15	28.11	46.00	-17.89	AVG	
11 "	1.7400	50.15	0.26	50.41	56.00	-5.59	QP.	
12	1.7400	34.14	0.26	34.40	46,00	-11,60	AVG	



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

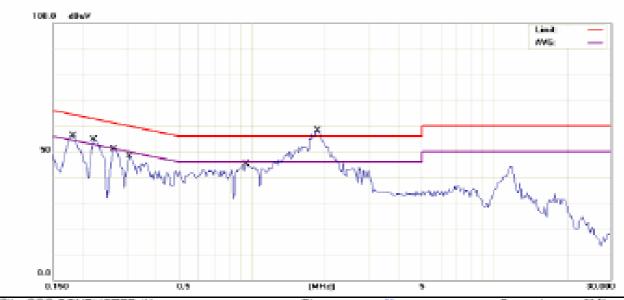
Operation Mode : GSM1900 **Test Date** :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky Temperature : 23°C Pol :Neutral

Humidity : 57% Adaptor Model :powersupply7

Test Voltage :120Vac Supplier :Sagem

## Conducted Emission Measurement



Site SGS CONDUCTED #1 Phase: Limit: CISPR22 Class B Conduction(QP) AC 120W80Hz Power: EUT: @@M850/1900 MOBIL PHONE Distance:

M/N: A2005sa

Note: GSM1900 LINK (Adapter : powersupply7 with 18 910 719-6)

No. Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Distector	Comment
1	0.1800	52.94	0.15	53.09	64.49	-11.40	QP	
2	0.1800	35.16	0.15	35.31	54.49	-19.18	AVG	
3	0.2200	50.76	0.13	50.89	62.82	-11.93	QP.	
4	0.2200	31.26	0.13	31.39	52.82	-21.43	AVG	
5	0.2650	45.92	0.13	47.05	51.27	-14.22	QP	
6	0.2650	26.24	0.13	26.37	51.27	-24.90	AVG	
7	0.3100	43.92	0.13	44.05	59.97	-15.92	QP	
8	0.3100	24.03	0.13	24.16	49.97	-25.81	AVG	
9	0.9500	40.50	0.15	40.65	56.00	-15.35	QP	
10	0.9500	23.36	0.15	23.51	45.00	-22.49	AVG	
11 "	1.8600	51.50	0.28	51.78	56.00	-4.22	QP	
12.	1.8600	28.10	0.28	28.38	46.00	-17.62	AVG	



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

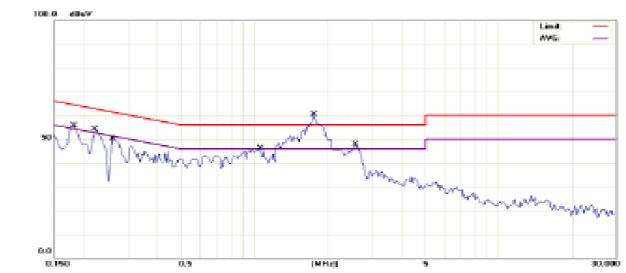
Operation Mode : GSM 850 Test Date :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky Temperature :Line : 23℃ Pol

Humidity : 57% Adaptor Model :powersupply8

Test Voltage :120Vac Supplier :Sagem

#### Conducted Emission Measurement



Site SGS CONDUCTED #1 Phase. Li AC 120W60Hz Limit: CISPR22 Class B Conduction(QP) Power:

EUT: GSM850/1900 MOBIL PHONE

Distance:

M/N: A2005sa

Note: GSM850 LINK (Adapter: powersupply& with 18 910 718-8)

No. Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
	MHz	dBuV	46	dBuV	dBnA.	dB	Distection	Comment
1	0.1800	52.12	0.13	52.25	64.49	-12.24	QP.	
2	0.1800	34.16	0.13	34.29	54.49	-20.20	AVG	
3	0.2200	48.91	0.13	49.04	62.82	-13.78	QP.	
4	0.2200	30.66	0.13	30.79	52.82	-22,03	AVG	
5	0.2600	40.73	0.13	40.86	61.43	-20.57	QP	
6	0.2600	22.03	0.13	22.16	51.43	-29.27	AVG	
7	1.0650	40.43	0.15	40.58	56.00	-15.42	QP.	
8	1.0650	24.19	0.15	24.34	46.00	-21.66	AVG	
9 '	1.7500	54.84	0.19	55.03	56.00	-0.97	QP.	
10	1.7500	35.06	0.19	35.25	46.00	-10.75	AVG	
11	2.5750	41.41	0.24	41.65	56.00	-14.35	QP	
12	2.5750	25.01	0.24	25.25	46.00	-20.75	AVG	



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# AC POWER LINE CONDUCTED EMISSION TEST DATA

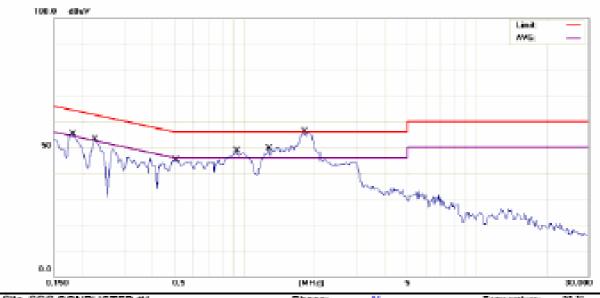
Operation Mode : GSM 850 **Test Date** :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky Temperature : 23°C Pol :Neutral

Humidity : 57% :powersupply8 Adaptor Model

Test Voltage :120Vac Supplier :Sagem

Conducted Emission Measurement



Site SGS CONDUCTED #1 Phase Limit: CISPR22 Class B Conduction(QP) AC 120W80Hz Power:

EUT: GSM850/1900 MOBIL PHONE

M/N: A2005sa

Note: GSM850 LINK (Adapter: powersupply8 with 18 910 718-8)

No. Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
	MHz	dBMV	dB	dBuV	dBuV	dB	Distector	Comment
1	0.1800	51.54	0.15	51.59	64.49	-12.80	QP	
2	0.1800	34.42	0.15	34.57	54.49	-19.92	AVG	
3	0.2250	49.25	0.13	49.38	62.63	-13.25	QP	
4	0.2250	33.68	0.13	33.81	52.63	-18.82	AVG	
5	0.5050	39.13	0.18	39.31	56.00	-16.69	QP.	
Б	0.5050	23.91	0.18	24.09	46,00	-21.91	AVG	
7	0.9300	44.08	0.15	44.23	56.00	-11.77	QP	
8	0.9300	31.01	0.15	31.16	46.00	-14.84	AVG	
9	1.2750	44.53	0.19	44.72	56.00	-11.28	QP	
10	1.2750	29.33	0.19	29.52	46.00	-16.48	AVG	
11 "	1.8150	50.38	0.27	50.65	56.00	-5.35	QP	
12	1.8150	32.95	0.27	33.22	46.00	-12.78	AVG	



# AC POWER LINE CONDUCTED EMISSION TEST DATA

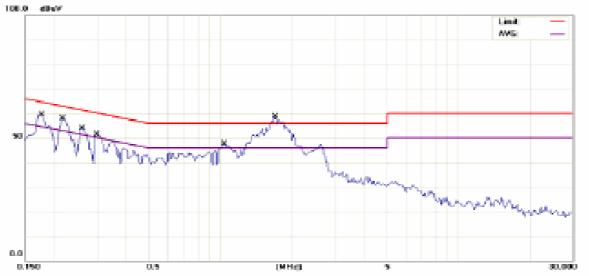
Operation Mode Test Date :Feb.08, 2006 : GSM1900

Fundamental Frequency: N/A Test By :Sky Temperature Pol :Line : 23°C

Humidity :powersupply8 : 57% Adaptor Model

Test Voltage :120Vac Supplier :Sagem

Conducted Emission Measurement



Phase:

Power:

Distance:

AC 120W00Hz

Site SGS CONDUCTED #1

Limit: CISPR22 Class B Conduction(QP)

EUT: G8M850/1900 MOBIL PHONE

M/N: A2005sa

Note: GSM1900 LINK (Adapter : powersupply8 with 18 910 718-8)

No. Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuW	dBuV	dB	Detector	Comment
1	0.1750	53.82	0.13	53.95	64.72	-10.77	QP	
2	0.1750	33.80	0.13	33.93	54.72	-20.79	AVG	
3	0.2150	49.34	0.13	49.47	63.01	-13.54	QP	
4	0.2150	29.59	0.13	29.72	53.01	-23.29	AVG	
5	0.2600	46.06	0.13	45.19	61.43	-15.24	QP.	
6	0.2500	24.90	0.13	25.03	51.43	-25.40	AVG	
7	0.3000	40.54	0.13	40.67	60.24	-19.57	QP.	
8	0.3000	21.81	0.13	21.94	50.24	-28.30	AVG	
9	1.0400	40.18	0.15	40.33	56.00	-15.67	QP	
10	1.0400	24.19	0.15	24.34	46.00	-21.66	AVG	
11 .	1.7050	50.06	0.19	50.25	56.00	-5.75	QP	
12	1.7050	28.00	0.19	28.19	46.00	-17.81	AWG	



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Operation Mode : GSM1900 **Test Date** :Feb.08, 2006

AC POWER LINE CONDUCTED EMISSION TEST DATA

Fundamental Frequency: N/A Test By :Sky Temperature : 23°C Pol :Neutral

Humidity : 57% Adaptor Model :powersupply8

Test Voltage :120Vac Supplier :Sagem

#### Conducted Emission Measurement



Site SGS CONDUCTED #1 Phase Limit: CISPR22 Class B Conduction(QP) ACI 120W000to Humidity: Power: Distance:

EUT: GSM850/1900 MOBIL PHONE M/N: A2005sa

Note: GSM1900 LINK (Adapter : powersupply8 with 18 910 718-8)

No. Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Distention	Comment
1	0.1800	50.69	0.15	50.84	64.49	-13.65	QP	
2	0.1800	33.02	0.15	33.17	54,49	-21.32	AVG	
3	0.2250	48.62	0.13	48.75	62.63	-13.88	QP	
4	0.2250	32.48	0.13	32.61	52.63	-20.02	AVG	
5	0.5100	38.72	0.18	38.90	56.00	-17.10	QP	
6	0.5100	21.78	0.18	21.96	46.00	-24,04	AVG	
7	0.9350	44.16	0.15	44_31	56.00	-11.69	QP	
8	0.9350	27.34	0.15	27.49	46.00	-18.51	AVG	
9	1.4409	41.13	0.22	41.35	56.00	-14.65	QP	
10	1.4409	24.26	0.22	24.48	45.00	-21.52	AVG	
11 '	1.8150	49.90	0.27	50.17	56.00	-5.83	QP	
12	1.8150	33.01	0.27	33.28	45.00	-12.72	AVG	



Humidity

Air Pressure:

68.%

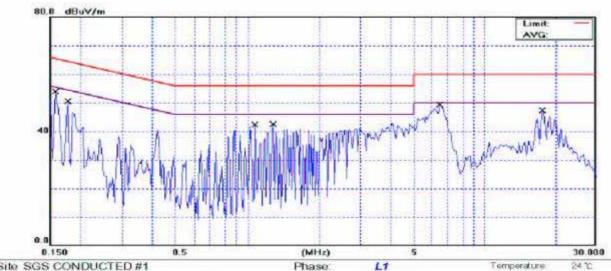
hoa

# AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode Test Date :Dec.20, 2005 : Data cable

Fundamental Frequency: N/A Test By :Sky Temperature Pol :Line : 23°C Humidity : 57% Adaptor Model :N/ATest Voltage :120Vac Supplier :Sagem

#### Conducted Emission Measurement



Power

Distance

AC120V/60HZ

Site SGS CONDUCTED #1

Limit EN55022 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM1900 LINK (data cable)

No.	MK	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
410		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1.		0.1578	57.39	0.20	57.59	65.58	7.99	QP	
2		0.1578	35.65	0.20	35.85	55.58	-19.73	AVG	
3		0.1773	51.22	0.20	51.42	64.61	-13.19	QP	
4		0.1773	34.39	0.20	34.59	54.61	-20.02	AVG	
5		1.0836	43.38	0.20	43.58	56.00	-12.42	QP	
6		1.0836	42.85	0.20	43.05	46.00	-2.95	AVG	
7		1.2828	43.84	0.20	44.04	56.00	-11.96	QP	
8		1.2828	42.03	0.20	42.23	46.00	-3.77	AVG	
9		6.5094	43.82	0.53	44.35	60.00	-15.65	QP	
10		6.5094	43.35	0.53	43.88	50.00	-6.12	AVG	
11		17.5055	46.16	0.70	46.86	60.00	-13.14	QP	
12		17.5055	40.79	0.70	41.49	50.00	-8.51	AVG	



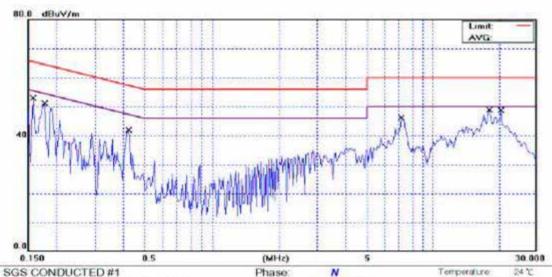
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# AC POWER LINE CONDUCTED EMISSION TEST DATA

: Normal Operating Operation Mode Test Date :Dec.20, 2005

Fundamental Frequency: N/A Test By :Sky Temperature Pol :Neutral : 23℃ Humidity : 57% :Data cable Adaptor Model Test Voltage :120Vac Supplier :Sagem

#### **Conducted Emission Measurement**



Power:

Distance

AC120V/60HZ

Humidity:

Air Pressure:

Site SGS CONDUCTED #1

Limit: EN55022 Class B Conduction(QP)

EUT: GSM850/1900 mobile phone

M/N: A2005sa

Note: GSM1900 LINK (data cable)

No.	MIL	Freq	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV/m	dB	dBulV/m	dBuV/m	dΒ	Detector	Comment
1		0.1578	57.22	0.20	57.42	65.58	-8.16	QP	
2		0.1578	40.47	0.20	40.67	55.58	-14.91	AVG	
3		0.1773	51.02	0.20	51.22	64.61	-13.39	QP	
4		0.1773	36.47	0.20	36.67	54.61	-17.94	AVG	
5		0.4234	40.25	0.20	40.45	57.38	-16.93	QP	
6		0.4234	39.89	0.20	40.09	47.38	-7.29	AVG	
7		7.2008	43.78	0.56	44.34	60.00	-15.66	QP	
8		7.2008	36.53	0.56	37.09	50.00	-12 91	AVG	
9		17.9625	44.98	0.76	45.74	60.00	-14.26	QP	
10		17.9625	36.90	0.76	37.66	50.00	-12.34	AVG	
11		20.2594	40.82	0.81	41.63	60.00	-18.37	QP	
12		20.2594	32.82	0.81	33.63	50.00	-16.37	AVG	



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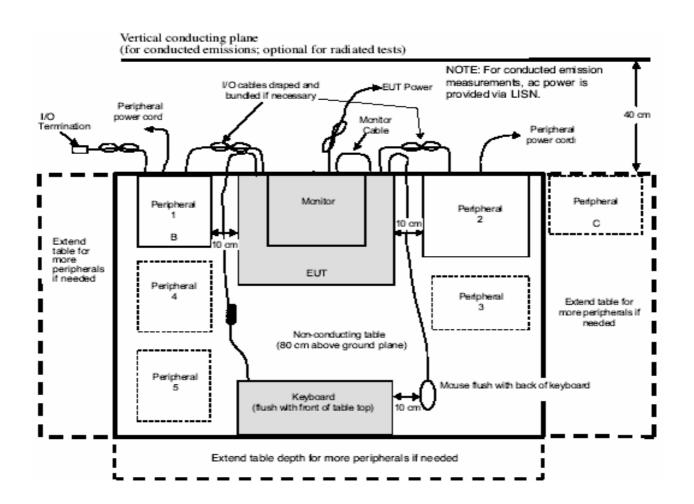


## 6. Radiated Emission Test

#### **6.1** Measurement Procedure

- 1. The EUT was placed on a turn table which is 0.8m above ground plane.
- 2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 4. Repeat above procedures until all frequency measured were complete.

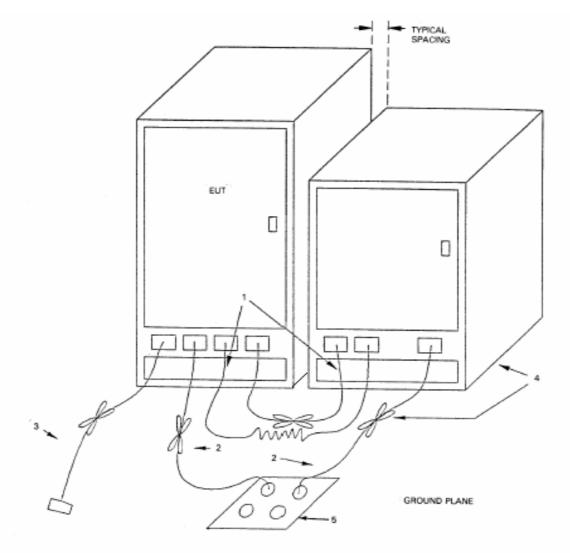
# **6.2** Test SET-UP (Block Diagram of Configuration)



The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

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#### LEGEND:

- 1) Excess I/O cables shall be bundled in center. If bundling is not possible, the cables shall be arranged in serpentine fashion. Bundling not to exceed 40 cm in length (see 6.1.4).
- Excess power cords shall be bundled in the center or shortened to appropriate length (see 7.2.1).
- 3) I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. If bundling is not possible, the cable shall be arranged in a serpentine fashion (see 6.1A).
- 4) EUT and all cables shall be insulated, if required, from the groundplane by up to 12 mm of insulating material (see 6.1.4 and 6.2.2).
- 5) If LISNs are kept in the test setup for radiated emissions, it is preferred that they be installed under the groundplane with the receptacle flush with the ground plane (see 5.2.3 and 8.1).

# Figure 11b—Test arrangement for radiated emissions floor-standing equipment



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# **6.3** Measurement Equipment Used:

EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.
TYPE		NUMBER	NUMBER	CAL.	
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
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	02/26/2005	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

# 6.4 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	



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#### **6.5** Measurement Result

Operation Mode : GSM 850 Test Date :Dec.16, 2005

Fundamental Frequency: N/A Test By :Sky Temperature : 25℃ Pol. :Ver./Hor. Humidity : 65% :powersupply1 Adaptor Model

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
61.04	V	Peak	42.63	-14.82	27.81	40.00	-12.19
75.59	V	Peak	40.29	-17.66	22.63	40.00	-17.37
106.63	V	Peak	37.73	-16.65	21.08	43.50	-22.42
61.04 124.09	H H	Peak Peak	41.45 33.46	-14.82 -15.19	26.63 18.27	40.00 43.50	-13.37 -25.23

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### 6.6 Measurement Result

Operation Mode : GSM 1900 Test Date :Dec.16, 2005

Fundamental Frequency: N/A Test By :Sky

Temperature : 25℃ Pol. :Ver./Hor. Humidity : 65% :powersupply1 Adaptor Model

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
61.04	V	Peak	37.20	-14.82	22.38	40.00	-17.62
104.69	V	Peak	38.02	-16.82	21.20	43.50	-22.30
329.73	V	Peak	36.98	-12.51	24.47	46.00	-21.53
58.13	Н	Peak	35.39	-14.85	20.54	40.00	-19.46
90.14	H	Peak	36.85	-17.89	18.96	43.50	-24.54

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.7** Measurement Result

Operation Mode Test Date : GSM 850 :Dec.16, 2005

Fundamental Frequency: N/A Test By :Sky

Temperature : 25°C Pol. :Ver./Hor.

Humidity : 65% :powersupply2 Adaptor Model

> Supplier :Sagem

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	64.92	V	Peak	38.27	-15.08	23.19	40.00	-16.81
	75.59	V	Peak	40.65	-17.66	22.99	40.00	-17.01
	104.69	V	Peak	37.59	-16.82	20.77	43.50	-22.73
	153.19	V	Peak	34.13	-13.67	20.46	43.50	-23.04
	38.73	Н	Peak	34.65	-14.77	19.88	40.00	-20.12
	65.89	Н	Peak	39.36	-15.35	24.01	40.00	-15.99
	126.03	Н	Peak	37.31	-15.03	22.28	43.50	-21.22

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.8** Measurement Result

Test Date Operation Mode : GSM 1900 :Dec.16, 2005

Fundamental Frequency: N/A Test By :Sky

Temperature : 25°C Pol. :Ver./Hor.

Humidity : 65% :powersupply2 Adaptor Model

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
70.74	V	Peak	42.23	-16.62	25.61	40.00	-14.39
121.18	V	Peak	40.68	-15.42	25.26	43.50	-18.24
65.89	Н	Peak	36.74	-15.35	21.39	40.00	-18.61
85.29	Н	Peak	39.52	-18.52	21.00	40.00	-19.00

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### 6.9 Measurement Result

Operation Mode : GSM 850 Test Date :Dec.16, 2005

Fundamental Frequency: N/A Test By :Sky

Temperature : 25℃ Pol. :Ver./Hor.

Humidity : 65% :powersupply3 Adaptor Model

> Supplier :Sagem

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	61.04	V	Peak	41.36	-14.82	26.54	40.00	-13.46
	75.59	V	Peak	40.38	-17.66	22.72	40.00	-17.28
	159.98	V	Peak	36.22	-14.28	21.94	43.50	-21.56
	61.04	Н	Peak	41.23	-14.82	26.41	40.00	-13.59
	206.54	Н	Peak	35.80	-16.49	19.31	43.50	-24.19
	313.24	Н	Peak	39.46	-13.00	26.46	46.00	-19.54

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.10 Measurement Result**

Operation Mode : GSM 1900 Test Date :Dec.16, 2005

Fundamental Frequency: N/A Test By :Sky

Temperature : 25℃ Pol. :Ver./Hor.

Humidity : 65% :powersupply3 Adaptor Model

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
70.74	V	Peak	42.23	-16.62	25.61	40.00	-14.39
121.18	V	Peak	40.68	-15.42	25.26	43.50	-18.24
65.89	Н	Peak	36.74	-15.35	21.39	40.00	-18.61
85.29	Н	Peak	39.52	-18.52	21.00	40.00	-19.00

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.11 Measurement Result**

Operation Mode : GSM 850 Test Date :Dec.16, 2005

Fundamental Frequency: N/A Test By :Sky Temperature : 25℃ Pol. :Ver./Hor. Humidity : 65% Adaptor Model :powersupply4

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
61.04	V	QP	52.10	-14.82	37.28	40.00	-2.72
92.08	V	Peak	52.42	-17.77	34.65	43.50	-8.85
106.63	V	Peak	37.98	-16.65	21.33	43.50	-22.17
61.04	Н	Peak	52.19	-14.82	37.37	40.00	-2.63
72.68	Н	Peak	50.24	-17.04	33.20	40.00	-6.80
126.03	Н	Peak	36.07	-15.03	21.04	43.50	-22.46

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.12 Measurement Result**

Operation Mode : GSM 1900 Test Date :Dec.16, 2005

Fundamental Frequency: N/A Test By :Sky

Temperature : 25℃ Pol. :Ver./Hor. Humidity : 65% :powersupply4 Adaptor Model

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
58.13	V	Peak	48.97	-14.85	34.12	40.00	-5.88
85.29	V	Peak	55.43	-18.52	36.91	40.00	-3.09
111.48	V	Peak	47.52	-16.25	31.27	43.50	-12.23
153.19	V	Peak	33.33	-13.67	19.66	43.50	-23.84
298.69	V	Peak	32.17	-13.43	18.74	46.00	-27.26
426.73	V	Peak	31.87	-10.12	21.75	46.00	-24.25
60.07	Н	Peak	44.72	-14.76	29.96	40.00	-10.04
75.59	Н	Peak	49.62	-17.66	31.96	40.00	-8.04
92.08	Н	Peak	43.67	-17.77	25.90	43.50	-17.60
109.54	Н	Peak	38.70	-16.42	22.28	43.50	-21.22
159.98	Н	Peak	32.12	-14.28	17.84	43.50	-25.66
329.73	Н	Peak	31.29	-12.51	18.78	46.00	-27.22

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.13 Measurement Result**

Operation Mode : GSM 850 Test Date :Dec.16, 2005

Fundamental Frequency: N/A Test By :Sky

Temperature : 25°C Pol. :Ver./Hor.

Humidity : 65% :powersupply5 Adaptor Model

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
61.04	V	Peak	42.36	-14.82	27.54	40.00	-12.46
75.59	V	Peak	40.78	-17.66	23.12	40.00	-16.88
92.08	V	Peak	39.83	-17.77	22.06	43.50	-21.44
153.19	V	Peak	34.26	-13.67	20.59	43.50	-22.91
61.04	Н	Peak	39.57	-14.82	24.75	40.00	-15.25
75.59	Н	Peak	36.36	-17.66	18.70	40.00	-21.30
143.49	Н	Peak	31.84	-13.68	18.16	43.50	-25.34

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.14 Measurement Result**

Operation Mode : GSM 1900 Test Date :Dec.16, 2005

Fundamental Frequency: N/A Test By :Sky

Temperature : 25°C Pol. :Ver./Hor.

Humidity : 65% :powersupply5 Adaptor Model

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
70.74	V	Peak	42.23	-16.62	25.61	40.00	-14.39
121.18	V	Peak	40.68	-15.42	25.26	43.50	-18.24
65.89	Н	Peak	36.74	-15.35	21.39	40.00	-18.61
85.29	Н	Peak	39.52	-18.52	21.00	40.00	-19.00

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.15 Measurement Result**

Operation Mode :GSM850 Test Date :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky

Temperature : 25°C Pol. :Ver./Hor.

Humidity : 65% Adaptor Model :powersupply6

> Supplier :Sagem

Freq	. Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MH:	z) H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
58.13	3 V	Peak	40.24	-14.85	25.39	40.00	-14.61
75.59	9 V	Peak	39.72	-17.66	22.06	40.00	-17.94
104.6	9 V	Peak	38.62	-16.82	21.80	43.50	-21.70
145.4	3 V	Peak	35.77	-13.58	22.19	43.50	-21.31
58.13	3 H	Peak	37.92	-14.85	23.07	40.00	-16.93
65.89	9 Н	Peak	37.15	-15.35	21.80	40.00	-18.20
106.6	3 H	Peak	39.55	-16.65	22.90	43.50	-20.60
162.8	9 H	Peak	33.87	-14.41	19.46	43.50	-24.04
240.4	9 H	Peak	33.02	-15.55	17.47	46.00	-28.53
478.1	4 H	Peak	33.32	-9.50	23.82	46.00	-22.18

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.16 Measurement Result**

Operation Mode :GSM1900 Test Date :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky

Temperature : 25°C Pol. :Ver./Hor.

Humidity : 65% Adaptor Model :powersupply6

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
 (MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
31.94	V	Peak	39.02	-15.21	23.81	40.00	-16.19
58.13	V	Peak	39.98	-14.85	25.13	40.00	-14.87
75.59	V	Peak	39.13	-17.66	21.47	40.00	-18.53
92.08	V	Peak	38.42	-17.77	20.65	43.50	-22.85
106.63	V	Peak	37.71	-16.65	21.06	43.50	-22.44
182.29	V	Peak	33.98	-15.35	18.63	43.50	-24.87
42.50	7.7	D 1	42.25	1 4 6 4	20.61	40.00	11 20
43.58	Н	Peak	43.25	-14.64	28.61	40.00	-11.39
58.13	H	Peak	47.75	-14.85	32.90	40.00	-7.10
92.08	Н	Peak	38.95	-17.77	21.18	43.50	-22.32
106.63	H	Peak	41.43	-16.65	24.78	43.50	-18.72
133.79	H	Peak	33.38	-14.39	18.99	43.50	-24.51
523.73	Н	Peak	33.25	-8.89	24.36	46.00	-21.64

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.17 Measurement Result**

Operation Mode : GSM 850 Test Date :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky

Temperature : 25°C Pol. :Ver./Hor.

Humidity : 65% Adaptor Model :powersupply7

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
51.34	V	Peak	40.69	-14.83	25.86	40.00	-14.14
61.04	V	Peak	48.33	-14.82	33.51	40.00	-6.49
92.08	V	Peak	41.80	-17.77	24.03	43.50	-19.47
104.69	V	Peak	49.88	-16.82	33.06	43.50	-10.44
153.19	V	Peak	33.76	-13.67	20.09	43.50	-23.41
41.64	Н	Peak	41.10	-14.67	26.43	40.00	-13.57
62.98	Н	Peak	47.74	-14.95	32.79	40.00	-7.21
104.69	Н	Peak	46.22	-16.82	29.40	43.50	-14.10
187.14	Н	Peak	34.90	-15.72	19.18	43.50	-24.32
434.49	Н	Peak	45.75	-14.95	30.80	46.00	-15.20

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.18 Measurement Result**

Operation Mode :GSM1900 Test Date :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky

Temperature : 25°C Pol. :Ver./Hor.

Humidity : 65% Adaptor Model :powersupply7

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
58.13	V	Peak	48.96	-14.85	34.11	40.00	-5.89
92.08	V	Peak	38.37	-17.77	20.60	43.50	-22.90
135.73	V	Peak	32.75	-14.23	18.52	43.50	-24.98
153.19	V	Peak	32.27	-13.67	18.60	43.50	-24.90
182.29	V	Peak	33.04	-15.35	17.69	43.50	-25.81
43.58	Н	Peak	42.75	-14.64	28.11	40.00	-11.89
58.13	Н	Peak	48.60	-14.85	33.75	40.00	-6.25
90.14	Н	Peak	37.47	-17.89	19.58	43.50	-23.92
106.63	Н	Peak	39.26	-16.65	22.61	43.50	-20.89
135.73	H	Peak	33.04	-14.23	18.81	43.50	-24.69

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.19 Measurement Result**

Operation Mode : GSM850 Test Date :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky

Temperature : 25°C Pol. :Ver./Hor.

Humidity : 65% Adaptor Model :powersupply8

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
58.13	V	Peak	44.88	-14.85	30.03	40.00	-9.97
75.59	V	Peak	39.16	-17.66	21.50	40.00	-18.50
92.08	V	Peak	40.37	-17.77	22.60	43.50	-20.90
106.63	V	Peak	36.82	-16.65	20.17	43.50	-23.33
159.98	V	Peak	39.35	-14.28	25.07	43.50	-18.43
41.64	Н	Peak	42.00	-14.67	27.33	40.00	-12.67
58.13	Н	Peak	48.25	-14.85	33.40	40.00	-6.60
106.63	Н	Peak	40.51	-16.65	23.86	43.50	-19.64
121.18	Н	Peak	42.26	-15.42	26.84	43.50	-16.66
150.28	Н	Peak	31.77	-13.40	18.37	43.50	-25.13
366.59	Н	Peak	32.61	-11.51	21.10	46.00	-24.90

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.20 Measurement Result**

Operation Mode :GSM 1900 Test Date :Feb.08, 2006

Fundamental Frequency: N/A Test By :Sky

Temperature : 25℃ Pol. :Ver./Hor.

Humidity : 65% Adaptor Model :powersupply8

> Supplier :Sagem

Fı	eq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(M	(Hz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
58	3.13	V	Peak	43.94	-14.85	29.09	40.00	-10.91
75	5.59	V	Peak	39.20	-17.66	21.54	40.00	-18.46
10	4.69	V	Peak	37.80	-16.82	20.98	43.50	-22.52
15	8.04	V	Peak	33.70	-14.12	19.58	43.50	-23.92
18	2.29	V	Peak	33.44	-15.35	18.09	43.50	-25.41
43	3.58	Н	Peak	42.58	-14.64	27.94	40.00	-12.06
58	3.13	H	Peak	48.05	-14.85	33.20	40.00	-6.80
90	0.14	H	Peak	37.99	-17.89	20.10	43.50	-23.40
10	6.63	H	Peak	39.05	-16.65	22.40	43.50	-21.10
13	3.79	H	Peak	32.48	-14.39	18.09	43.50	-25.41

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.21 Measurement Result**

Operation Mode : Data Cable Test Date :Dec.26, 2005

Fundamental Frequency: N/A Test By :Sky

Temperature : 25℃ Pol. :Ver./Hor. Humidity : 65% Adaptor Model : N/A

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
31.94	V	QP	50.30	-15.21	35.09	40.00	-4.91
58.13	V	Peak	51.87	-14.85	37.02	40.00	-2.98
75.59	V	Peak	53.69	-17.66	36.03	40.00	-3.97
82.38	V	Peak	60.42	-18.49	41.93	40.00	1.93
99.84	V	Peak	48.70	-17.23	31.47	43.50	-12.03
232.73	V	Peak	49.43	-15.76	33.67	46.00	-12.33
99.84	H	Peak	47.37	-17.23	30.14	43.50	-13.36
167.74	Н	Peak	45.96	-14.63	31.33	43.50	-12.17
196.84	Н	Peak	45.39	-16.44	28.95	43.50	-14.55
232.73	Н	Peak	48.16	-15.76	32.40	46.00	-13.60
499.48	Н	Peak	41.60	-9.30	32.30	46.00	-13.70

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.22 Measurement Result**

Operation Mode : Earphone, 850MHz Test Date :Dec.26, 2005

Fundamental Frequency: N/A Test By :Sky

Temperature : 25°C Pol. :Ver./Hor.

Humidity : 65% Adaptor Model :N/A

> Supplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
75.54	V	Peak	40.36	-17.66	22.70	40.00	-17.30
106.63	V	Peak	37.38	-16.65	20.73	43.50	-22.77
153.19	V	Peak	33.73	-13.67	20.06	43.50	-23.44
33.88	Н	Peak	36.07	-15.13	20.94	40.00	-19.06
65.89	Н	Peak	36.67	-15.35	21.32	40.00	-18.68
75.59	Н	Peak	36.62	-17.66	18.96	40.00	-21.04

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.



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#### **6.23 Measurement Result**

Operation Mode : Earphone, 1900MHz Test Date :Dec.26, 2005

Fundamental Frequency: N/A Test By :Sky

Temperature : 25°C Pol. :Ver./Hor.

Humidity : 65% Adaptor Model :N/ASupplier :Sagem

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
 (MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
56.19	V	Peak	38.40	-14.95	23.45	40.00	-16.55
92.08	V	Peak	39.54	-17.77	21.77	43.50	-21.73
101.78	V	Peak	37.85	-17.07	20.78	43.50	-22.72
123.12	V	Peak	37.45	-15.27	22.18	43.50	-21.32
56.19	Н	Peak	35.14	-14.95	20.19	40.00	-19.81
92.08	Н	Peak	38.50	-17.77	20.73	43.50	-22.77

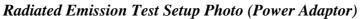
- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak detector mode.
- (3) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA 30MHz to 1GHz was 100KHz.

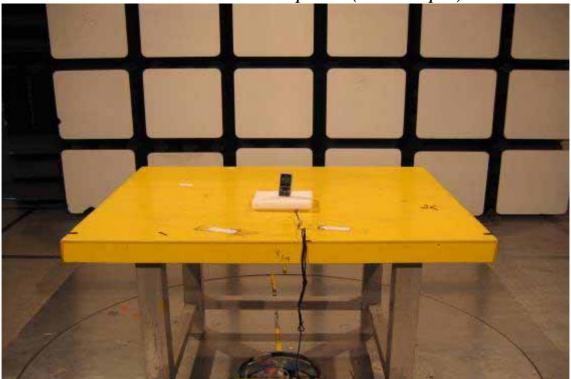


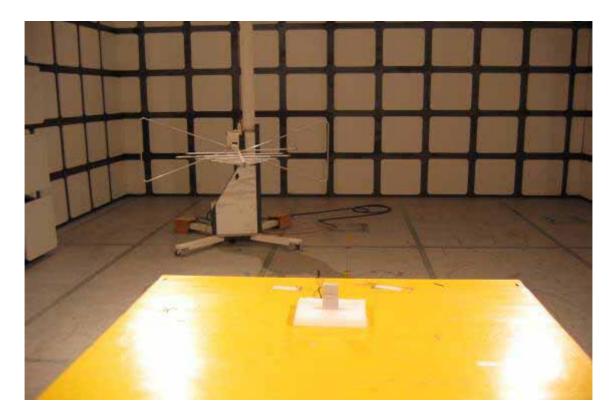
# **APPENDIX 1** PHOTOGRPHS OF SET UP



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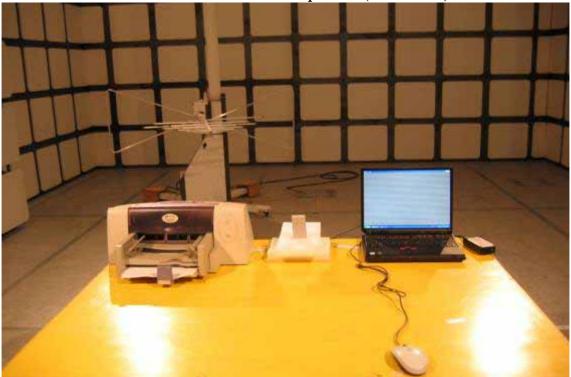


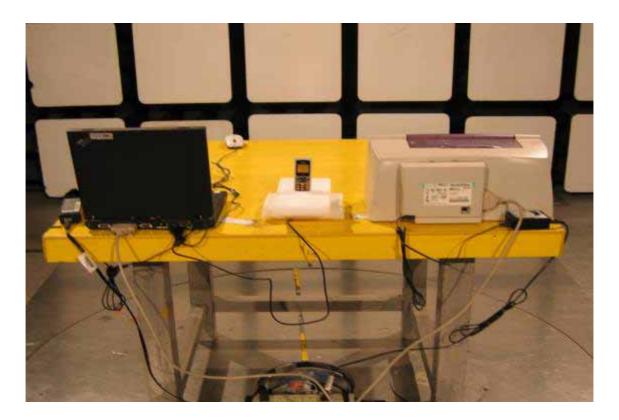




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Radiated Emission Test Setup Photo (Data Cable)

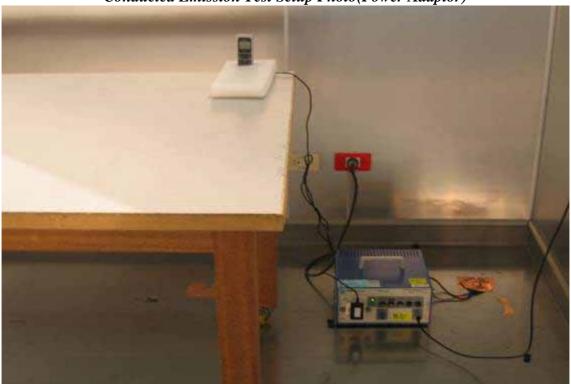






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Conducted Emission Test Setup Photo(Power Adaptor)







# **APPENDIX 2** PHOTOGRPHS OF EUT



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Adapter(powersupply1 with 18 867 925-5)





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Adapter((powersupply2 with 18 865 855-8)



Adapter(powersupply3 with 18 865 853-7)





Adapter(powersupply4 with 18 864 404-6)



Adapter(powersupply5 with 18 869 2000)



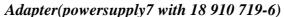


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## Adapter(powersupply6 with 18 910 715-4)









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#### Adapter(powersupply8 with 18 910 718-8)



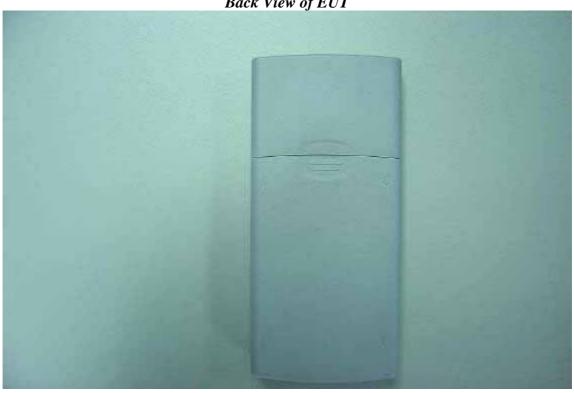
#### Front View of EUT

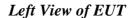




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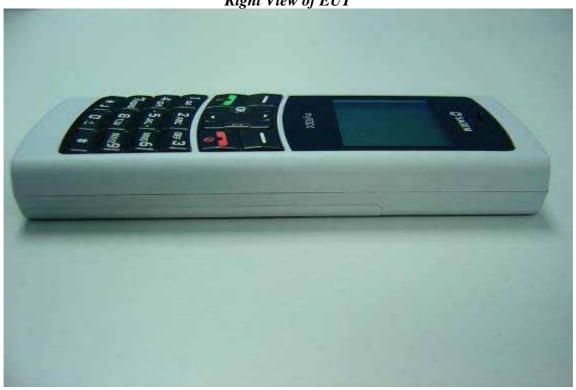








Right View of EUT



Open View of EUT – 1





Open View of EUT - 2



Internal of EUT --- 1





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Internal of EUT --- 3





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# APPENDIX 3 LABELING REQUIREMENTS



#### §15.19 Labeling requirements.

- In addition to the requirements in part 2of this chapter, a device subject to certification, or (a) verification, or verification shall be labeled as follows:
  - Receivers associated with the operation of a licensed radio service, e.g., FM broadcast under part 73 of this chapter, land mobile operation under part 90,etc., shall bear the following statement in a conspicuous location on the device:
    - This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.
  - (2) A stand-alone cable input selector switch, shall bear the following statement in a conspicuous location on the device:
    - This device is verified to comply with the part15of the FCC Rules for use with cable television service.
  - (3) All other devices shall bear the following statement in a conspicuous location on the device:
    - This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) This device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.
  - (4) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified under paragraph (a) of this section is required to be affixed only to the main control unit.
  - When the device is so small or for such use that it is not practicable to place the (5) statement specified under paragraph (a) of this section on it, the information required by this paragraph shall be placed in a prominent location in the instruction manual or pamphlet supplied to the user or, alternatively, shall be placed on the container in which the device is marketed. However, the FCC identifier or the unique identifier, as appropriate, must be displayed on the device.
- Products subject to authorization under a Declaration of Conformity shall be labeled as (b) follows:
  - The label shall be located in a conspicuous location on the device and shall contain (1) the unique identification described in §2.1074of this chapter and the following logo:
    - If the product is authorized based on testing of the product or system; or (i)





If a personal computer is authorized based on assembly using separately (ii) authorized components, in accordance with §15.101(c) (2)or (c)(3), and the resulting product is not separately tested:



- Label text information should be in a size of type large enough to be readily legible, consistent with the dimensions of the equipment and the label. However, the type size for the text is not required to be larger than eight points.
- (3) When the device is so small or for such use that it is not practicable to place the statement specified under paragraph (b)(1) of this section on it, such as for a CPU board or a plug-in circuit board peripheral device, the text associated with the logo may be placed in a prominent location in the instruction manual or pamphlet supplied to the user. However, the unique identification (trade name and model number) and the logo must be displayed on the device.
- The label shall not be a stick-on, paper label. The label on these products shall be permanently affixed to the product and shall be readily visible to the purchaser at the time of purchase, as, described in §2.925(d)of this chapter. "Permanently affixed" means that the label is etched, engraved, stamped, silk screen, indelibly printed, or otherwise permanently marked on a permanently attached part of the equipment or on a nameplate of metal, plastic, or other material fastened to the equipment by welding, riveting, or a permanent adhesive. The label must be designed to last the expected lifetime of the equipment in the environment in which the equipment may be operated and must not be readily detachable.