

**SGS-CSTC Standards  
Technical Services Co., Ltd.**

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Report No.: SHEMO0070100003IT  
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## ***FCC TEST REPORT(DOC)***

**Application No.:** SHEMO070100003IT  
**Applicant:** HEDY HOLDING CO., LTD

**Equipment Under Test (EUT):**

**NOTE:** The following sample(s) submitted was/were identified on behalf of the client as

**EUT Name:** GSM Mobile Phone  
**Model No.:** M881  
**Marketing Name:** A2  
**Item No.:** Not supplied by client  
**Serial No.:** Not supplied by client  
**Standards:** CFR 47 part 2: 2004,  
CFR 47 Part 15: 2005,  
ANSI C63.4: 2003

**Date of Receipt:** 9 January 2007  
**Date of Test:** 10 January 2007 to 17 January 2007  
**Date of Issue:** 19 January 2007

<b>Test Result :</b>	<b>PASS</b>
----------------------	-------------

Authorized Signature:



Tino Pan  
E&E Section Head  
SGS-CSTC Co., Ltd.



Jacky Cao  
E&E Project Engineer  
SGS-CSTC Co., Ltd

This report refers to the General Conditions for Inspection and Testing Services, printed overleaf  
This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the SGS PRODUCT CERTIFICATION MARK.. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.  
This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.  
All test results in this report can be traceable to National or International Standards.

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## 2 Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission 30MHz-1000MHz	CFR 47 Part 15	ANSI C63.4: 2003	Class B	PASS
Conducted Emission 150KHz-30MHz	CFR 47 Part 15	ANSI C63.4: 2003	Class B	PASS

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## 4 General Information

### 4.1 Client Information

Applicant: HEDY HOLDING CO., LTD  
Address of Applicant: NO. 63 PUNAN ROAD, HUANGPU DISTRICT, GUANGZHOU

### 4.2 General Description of E.U.T.

EUT Name: GSM Mobile Phone  
Model No.: M881  
Marketing Name: A2  
Serial No.: N/A  
Test GSM Frequency Bands PCS1900

### 4.3 Details of E.U.T.

Power Supply: AC to DC charger  
Input :100-240 Vac, 50/60 Hz, 0.15 A,  
Output: 5.2 VDC, 700mA)  
Power Cord: 2.0m  
Battery DC 3.7V / 660mAh  
Type: BS078-6BC  
Data cable Length: 1m  
Diameter: 3mm  
Color: black  
Headset: Type:HSE769LC-2P  
Micro-SD Card 512M Manufacturers: Sandisk

### 4.4 Description of Support Units

Name / Function	Model No	Remark
N/A	N/A	N/A

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### 4.5 Standards Applicable for Testing

The customer requested EMC tests for GSM Mobile Phone

The standards used was CFR 47 part 2: 2004 and CFR 47 part 15: 2005:

**Table 1 : Tests Carried Out Under CFR 47 Part 15: 2005 :**

Standard		Status
FCC Part 15 Subpart B: 2005	Radiated Emission	√
FCC Part 15 Subpart B: 2005	Conducted Emission	√

× Indicates that the test is not applicable

√ Indicates that the test is applicable

### 4.6 Test Location

Radiated Emission was performed at:

SIMT EMC Laboratory, 1/F, Building No.1, Agriculture Machinery Materials Company  
No.716 Yi shan Road, Shanghai, P.R.China.

Tel: +86 21 64701390 Fax: +86 21 64514252

Conducted Emission was performed at SGS E&E EMC lab

SGS-CSTC EMC Laboratory, No.889 Yishan Road, Shanghai, P.R.China

Tel:+86 21 61402666 Fax: +86 21 54500954

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### **4.7 Deviation from Standards**

None.

### **4.8 Abnormalities from Standard Conditions**

None.

### **4.9 Monitoring of EUT for All Immunity Test**

N/A

### **4.10 Test Confident level**

Test Confident level is recognized, certified, or accredited by the following organizations:

#### **NVLAP – Lab Code: 200632-0**

SIMT EMC Laboratory is recognized under the National Voluntary Laboratory Accreditation Program (NVLAP/NIST).  
NVLAP Code: 200632-0. Effective through December 31, 2004.

#### **VCCI**

The 10m Semi-anechoic chamber and Shielded Room of SIMT have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: 1153.

Date of Registration: May 29, 2004. Valid until May 18, 2007

#### **CNAL – LAB Code: L0134**

SIMT EMC Laboratory has been assessed and in compliance with CNAL/AC01:2002 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:1999 General Requirements) for the Competence of Testing Laboratories.

#### **FCC – Registration No.: 142171**

SIMT EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 142171, December 9, 2002.

With the above and NVLAP, SIMT is an authorized test laboratory for the DoC process.

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## 5 Equipments Used during Test

Radiated emission						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
1	HORN ANTENNA	R&S	HF 906	100023	2006-06-17	2007-06-16
2	BROADBAND ANTENNA	R&S	HL 562	100019	2006-06-17	2007-06-16
3	EMI TEST RECEIVER	R&S	ESI 26	838786/011	2006-03-06	2007-03-05
4	UNIVERSAL RADIO COMMUNICATION TESTER	R&S	CMU 200	100536	2006-01-25	2007-01-24

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
1	EMI test receiver	Rohde & Schwarz	ESCS30	100086	2006-6-29	2007-6-28
2	Line impedance stabilization network	ETS	3816/2	00034161	2006-6-29	2007-6-28

### General Equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due date
1	Temperature, Humidity & Barometer	Oregon Scientific	BA-888	EMC0001 to EMC0004	2006-07-25	2007-07-24
2	DMM	Fluke	73	70681569 or 70671122	2006-07-23	2007-07-22

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## 6 Emission Test Results

### 6.1 Radiated Emissions, 30MHz to 1GHz

Test Requirement:	CFR 47 Part 15
Test Method:	ANSI C63.4, CISPR 22
Test Date:	12 January 2007
Frequency Range:	30MHz to 1GHz
Measurement Distance:	3m for ANSI C63.4
Class:	N/A
Detector:	Peak for pre-scan (120kHz resolution bandwidth)

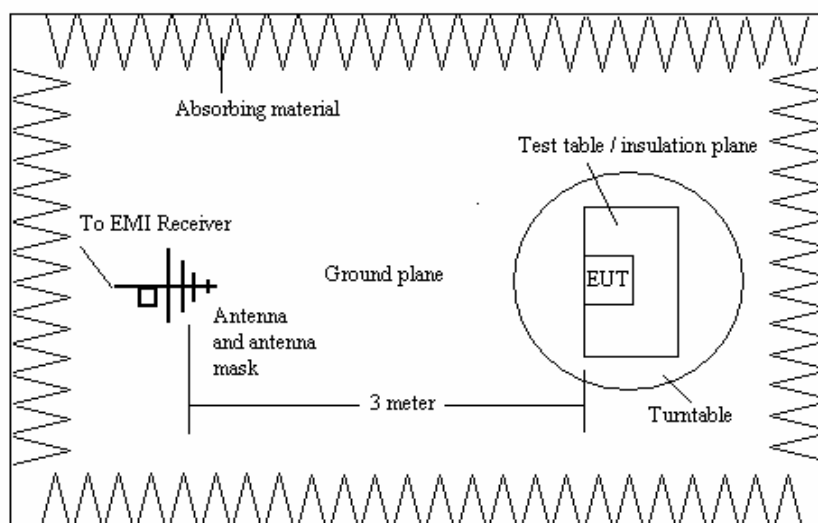
#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.0 °C Humidity: 55 % RH Atmospheric Pressure: 1004 mbar

EUT Operation: EUT allocated channel mode PCS 1900 with charger

#### 6.1.2 Test setup:





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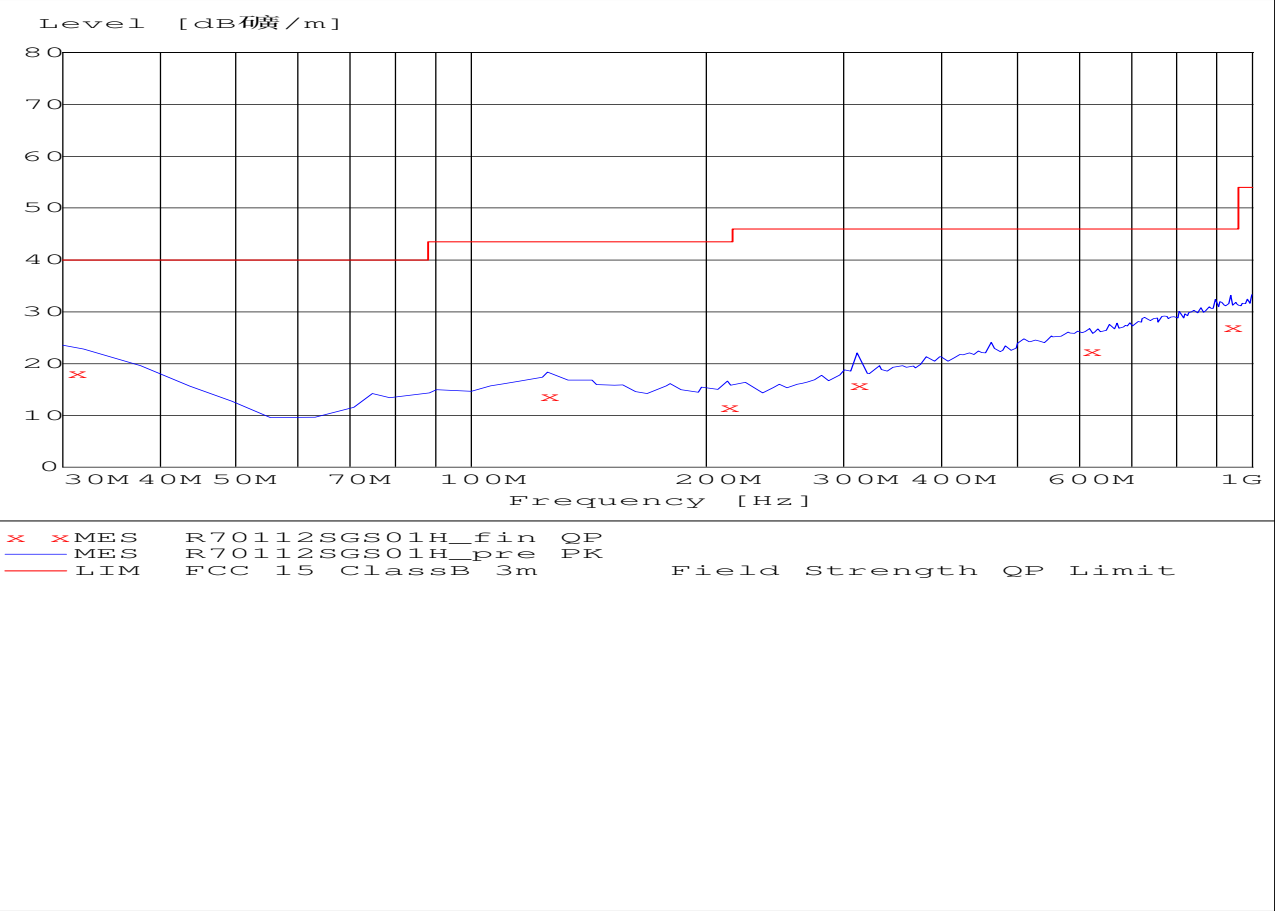
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6.1.3 Test Result:

GSM1900 dedicated: (test with the adapter of power supply)

Horizontal:



Frequency	Level	Height	Azimuth	Polarisation	Limit	Margin
MHz	dBμV/m	cm	deg		dBμV/m	dB
31.180027	18.03	100.0	180.00	HORIZONTAL	40.00	21.97
125.250501	13.68	300.0	0.00	HORIZONTAL	43.50	29.82
212.725451	11.56	100.0	0.00	HORIZONTAL	43.50	31.94
311.863727	15.67	300.0	180.00	HORIZONTAL	46.00	30.33
618.997996	22.20	200.0	270.00	HORIZONTAL	46.00	23.80
937.795591	26.89	100.0	0.00	HORIZONTAL	46.00	19.11

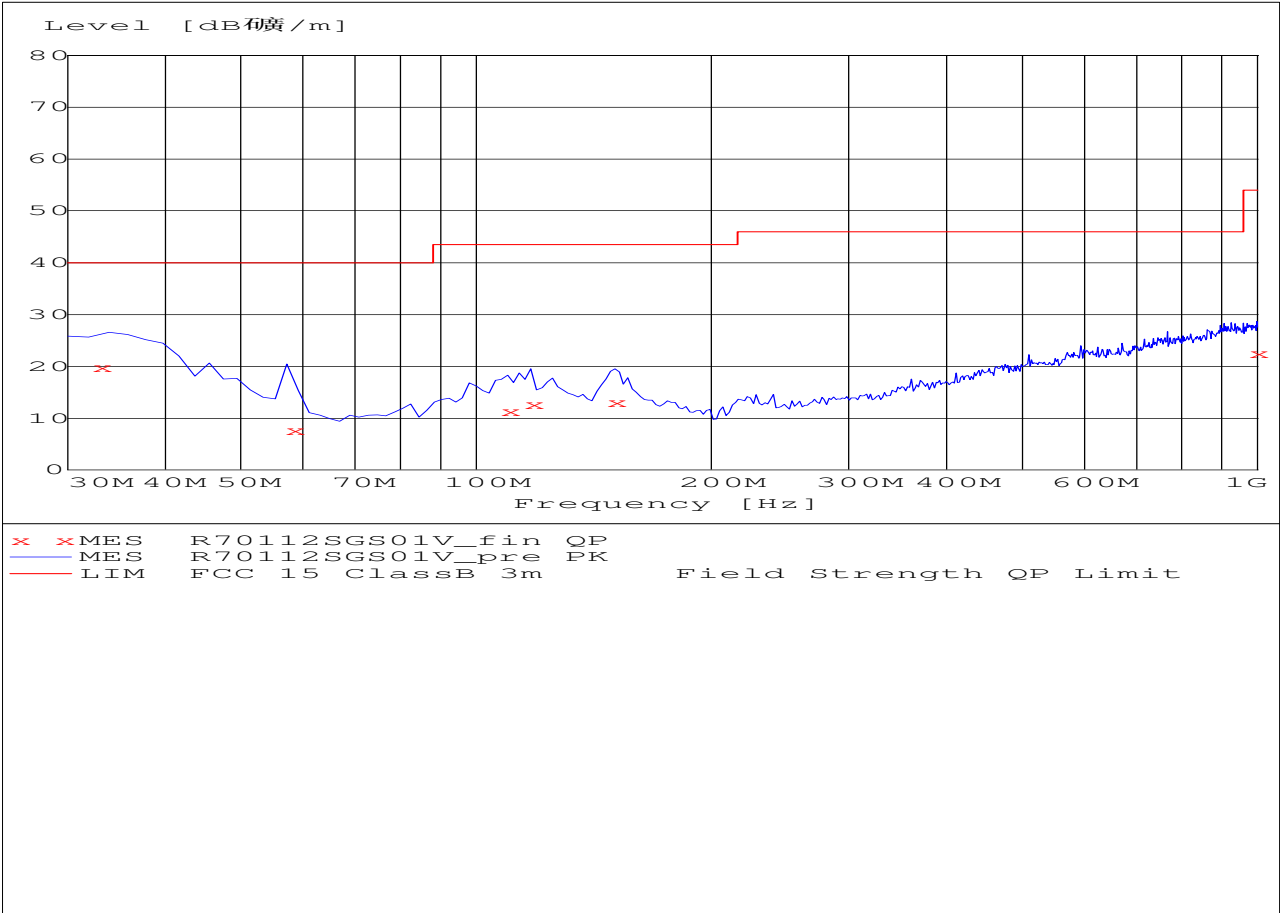
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Vertical:



Frequency	Level	Height	Azimuth	Polarisation	Limit	Margin
MHz	dBμV/m	cm	deg		dBμV/m	dB
33.024809	19.74	100.0	270.00	VERTICAL	40.00	20.26
58.296593	7.49	200.0	180.00	VERTICAL	40.00	32.51
109.849699	11.22	100.0	0.00	VERTICAL	43.50	32.28
117.795591	12.50	100.0	270.00	VERTICAL	43.50	31.00
150.430862	13.01	100.0	0.00	VERTICAL	43.50	30.49
997.795591	22.53	100.0	90.00	VERTICAL	54.00	31.47

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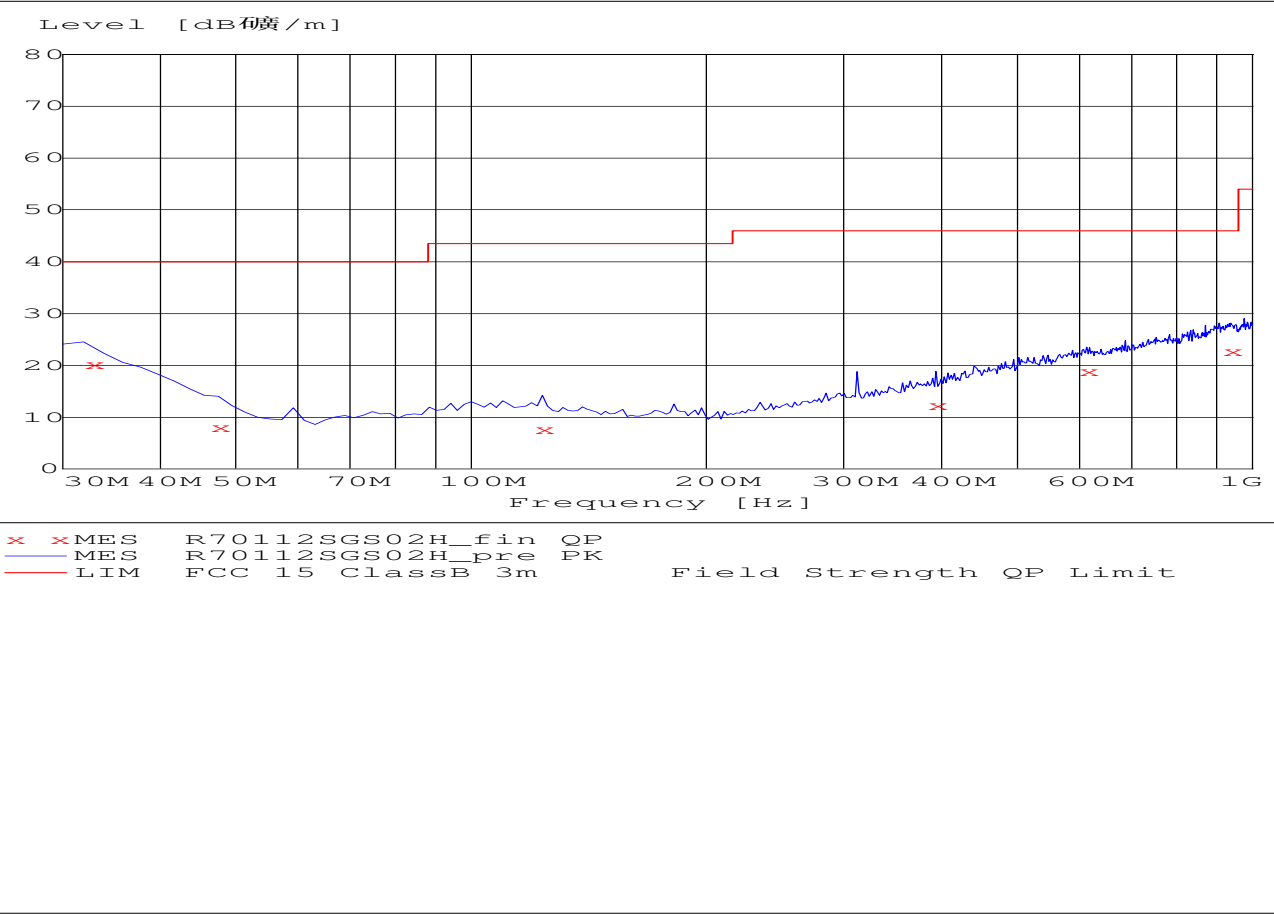
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GSM1900 dedicated: (test with the USB connect to the PC)

Horizontal:



Frequency	Level	Height	Azimuth	Polarisation	Limit	Margin
MHz	dBμV/m	cm	deg		dBμV/m	dB
32.755336	20.04	200.0	180.00	HORIZONTAL	40.00	19.96
47.494990	8.07	300.0	90.00	HORIZONTAL	40.00	31.93
123.306613	7.53	300.0	180.00	HORIZONTAL	43.50	35.97
393.507014	12.28	400.0	180.00	HORIZONTAL	46.00	33.72
613.166333	18.68	300.0	90.00	HORIZONTAL	46.00	27.32
937.795591	22.67	200.0	270.00	HORIZONTAL	46.00	23.33

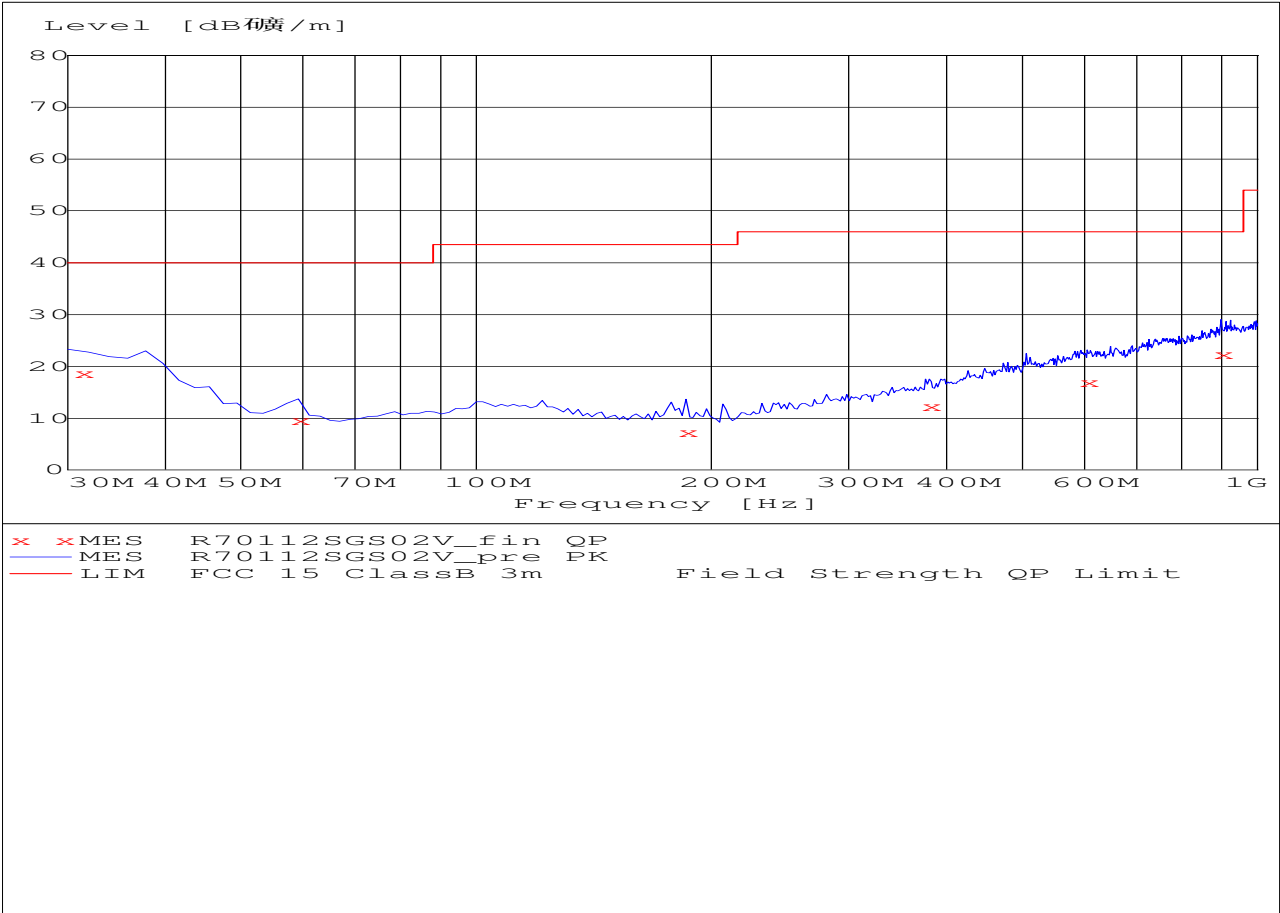
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Vertical:



Frequency	Level	Height	Azimuth	Polarisation	Limit	Margin
MHz	dBμV/m	cm	deg		dBμV/m	dB
31.304561	18.52	200.0	0.00	VERTICAL	40.00	21.48
59.158317	9.46	100.0	0.00	VERTICAL	40.00	30.54
185.511022	7.26	200.0	180.00	VERTICAL	43.50	36.24
379.899800	12.11	300.0	90.00	VERTICAL	46.00	33.89
605.390782	16.90	300.0	180.00	VERTICAL	46.00	29.10
898.917836	22.17	200.0	90.00	VERTICAL	46.00	23.83

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### 6.2 Conducted Emissions, 150kHz to 30MHz

Test Requirement:	CFR 47 part 15
Test Method:	ANSI C63.4
Test Date:	17 January 2007
Frequency Range:	150kHz to 30MHz
Class:	N/A
Limit:	66 dB $\mu$ V - 56 dB $\mu$ V between 150kHz & 500kHz Quasi-peak 56 dB $\mu$ V between 0.5MHz & 5MHz Quasi-peak 60 dB $\mu$ V between 5MHz & 30MHz Quasi-peak

#### 6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0°C Humidity: 58% RH Atmospheric Pressure:

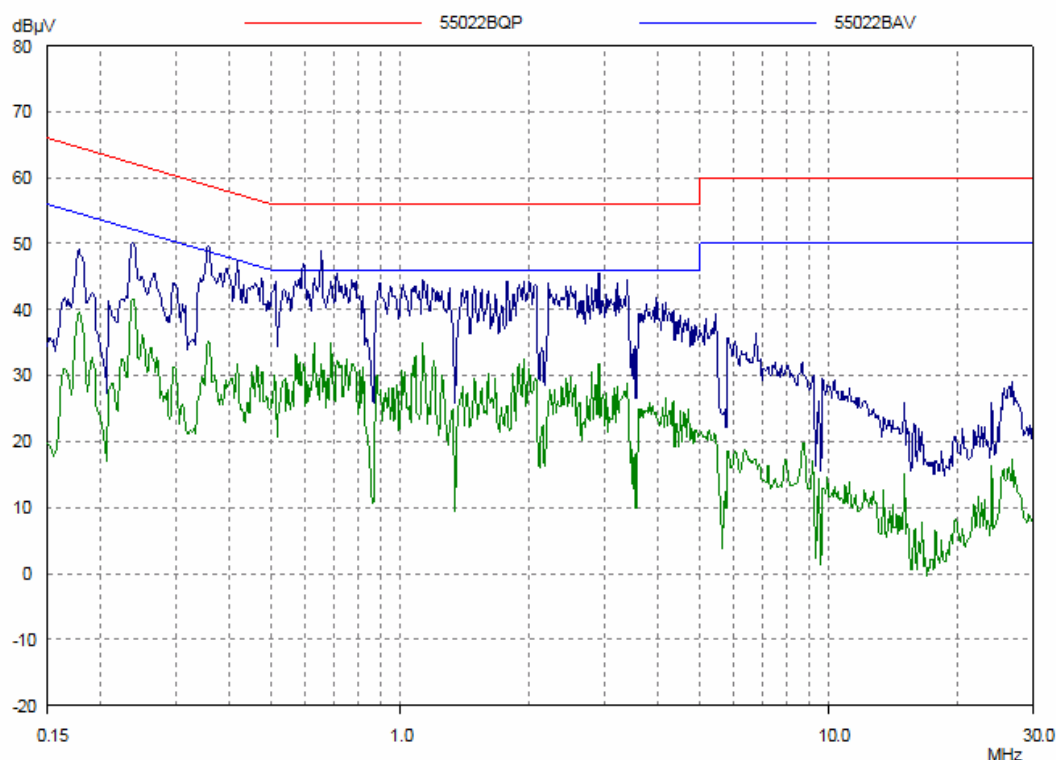
EUT Operation: EUT allocated channel mode PCS 1900 with charger

#### 6.2.2 Test Result and Partial Measurement Data

**Pass**

PCS1900 dedicated, charging with adaptor:

L line:



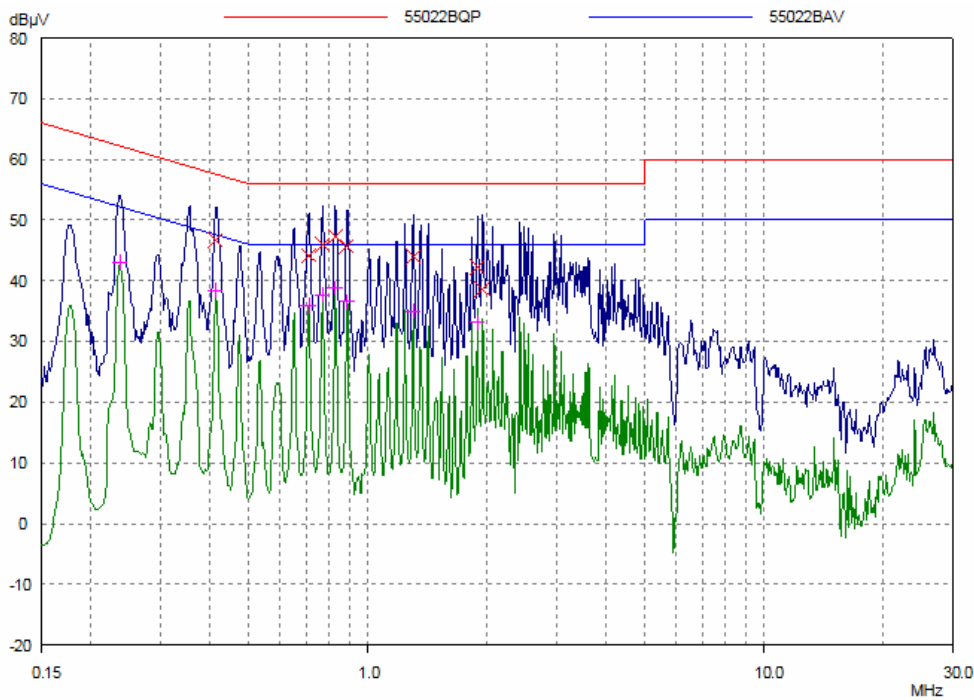
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N line:



Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB
0.41264	46.76	57.59	10.83
0.7094	44.15	56.00	11.85
0.76824	45.97	56.00	10.03
0.82536	47.32	56.00	8.68
0.88672	45.66	56.00	10.34
1.29985	43.95	56.00	12.05
1.89034	42.16	56.00	13.84
1.95156	38.61	56.00	17.39

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB
0.23623	43.09	52.23	9.14
0.41264	38.32	47.59	9.27
0.7094	35.88	46.00	10.12
0.76824	37.62	46.00	8.38
0.82536	38.77	46.00	7.23
0.88672	36.49	46.00	9.51
1.29985	34.92	46.00	11.08
1.89034	33.02	46.00	12.98

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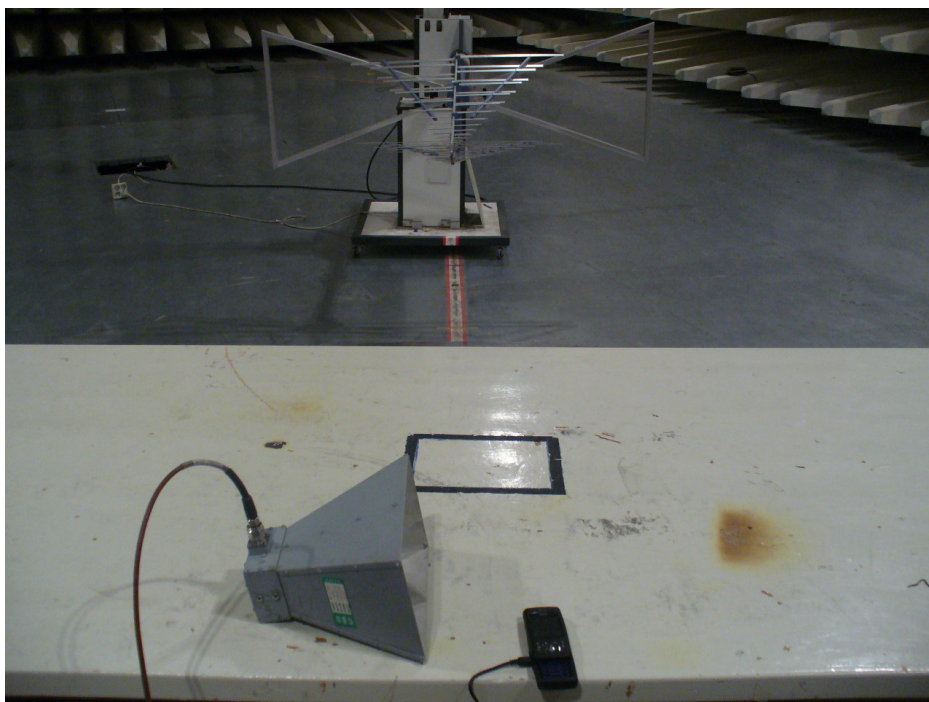
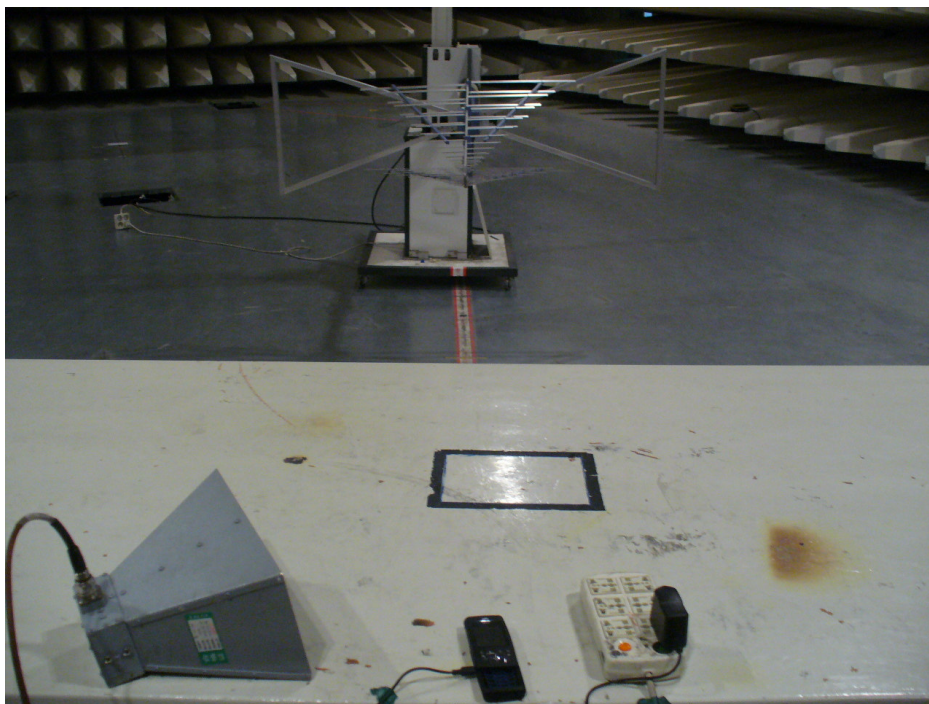
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## 7 Photographs

### 7.1 Radiated Emission Test Setup





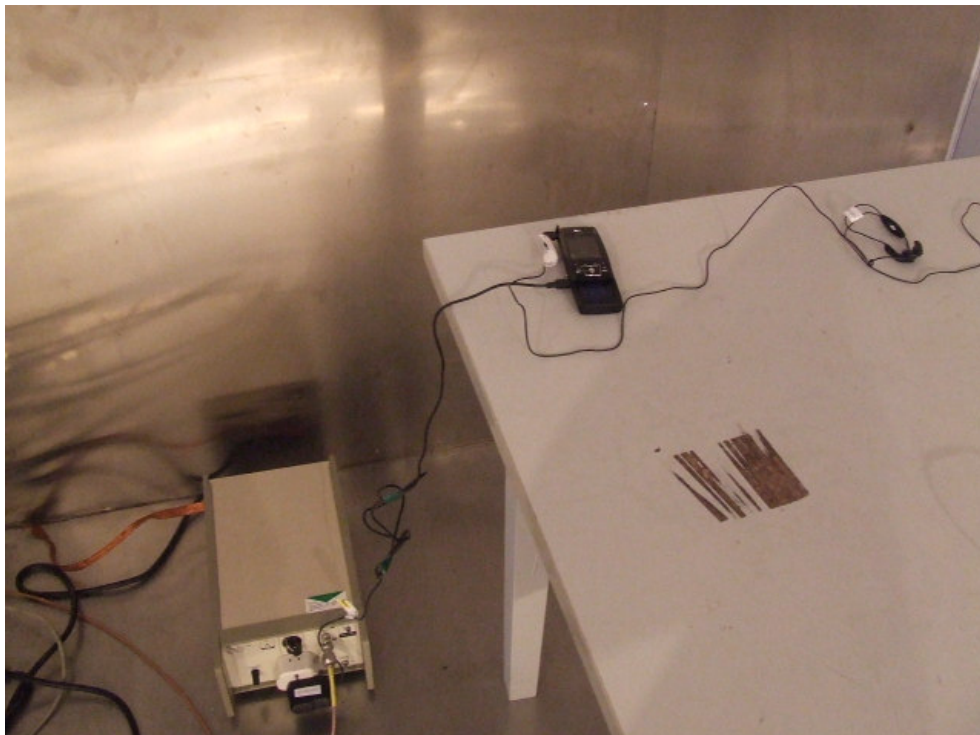
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## 7.2 Conducted emission



## 7.3 EUT Constructional Details





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