

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

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FCC TEST REPORT(DOC)

Application No.: SHEMO051000476IT
Applicant: YA HSIN INDUSTRIAL CO., LTD.
Equipment Under Test (EUT):

NOTE: The following samples submitted were identified on behalf of the client as

EUT Name: GSM Mobile Phone
Model No.: T400
Trade name TMobile
Serial No.: Not supplied by client
Standards: CFR 47 part 2: 2004,
CFR 47 Part 15: 2005,
ANSI C63.4: 2003

Date of Receipt: 12 October 2005
Date of Test: 12 October 2005 to 1 November 2005
Date of Issue: 2 November 2005

Test Result :	PASS
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Authorized Signature:



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



Chester Zhao
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: YA HSIN INDUSTRIAL CO., LTD.
Address of Applicant: NO.268 XIN HU 3rd ROAD. NEIHU DISTRICT. 11490, TAIPEI, TAIWAN.

4.2 General Description of E.U.T.

EUT Name: GSM Mobile Phone
Brand Name: Not supplied by client
Serial No.: Not supplied by client
GSM Frequency Bands: PCS1900

4.3 Details of E.U.T.

Power Supply : AC to DC charger(Model Number: SP05500600-U Input: AC 100V-240V, 0.3A 50/60Hz Output:DC 5.5V, 0.6A)
Power Cord : 1.8 m

4.4 Description of Support Units

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

4.5 Standards Applicable for Testing

The customer requested EMC tests for a 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

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4.6 Test Location

All tests were 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

4.6 Deviation from Standards

None.

4.7 Abnormalities from Standard Conditions

None.

4.8 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

RE in SAC						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due date
1	HORN ANTENNA	R&S	HF 906	100023	2005-06-17	2006-06-16
2	BROADBAND ANTENNA	R&S	HL 562	100019	2005-06-17	2006-06-16
3	EMI TEST RECEIVER	R&S	ESI 26	838786/011	2005-03-06	2006-03-05
4	UNIVERSAL RADIO COMMUNICATION TESTER	R&S	CMU 200	100536	2005-01-25	2006-01-24
Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal.Due date
1	EMI TEST RECEIVER	R&S	ESCS 30	100086	2005.06.29	2006.06.28
2	LINE IMPEDANCE STABILIZATION NETWORK	ETS	3816/2	00034161	2005.06.29	2006.06.28
General Equipment						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal.Due date
1	Barometer	Chang chun qi xiang	DYM3	0124	2005-06-06	2007-06-05
2	DMM	UNI-T	UT 222	45402866	2005-01-25	2006-01-24
3	Temperature, Humidity	Zhi cheng	ZC1-2	/	2005-07-06	2006-07-05
4	Barometer	Shanghai fengyun qixiang	DYM3	04011724	2005-01-26	2007-01-25
5	temperature& humidity recorder	ShangHai weather meter work	ZJ 1-2B	408067	2005-9-10	2006-09-09
6	True RMS Multimeter	FLUKE	175	84320600	2004-9-29	2005-09-28

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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
Test Date:	1 November 2005
Frequency Range:	30MHz to 1GHz
Measurement Distance:	3m
Class:	N/A
Detector:	Peak for pre-scan (120kHz resolution bandwidth)

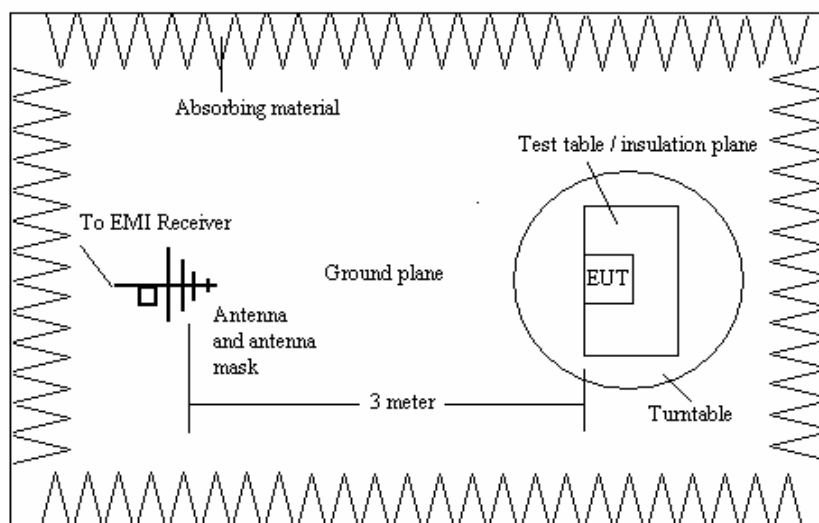
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 20.0 °C Humidity: 42 % RH Atmospheric Pressure: 1004 mbar

EUT Operation: EUT allocated channel mode Charging and PCS 1900 with headset..

6.1.2 Test setup:



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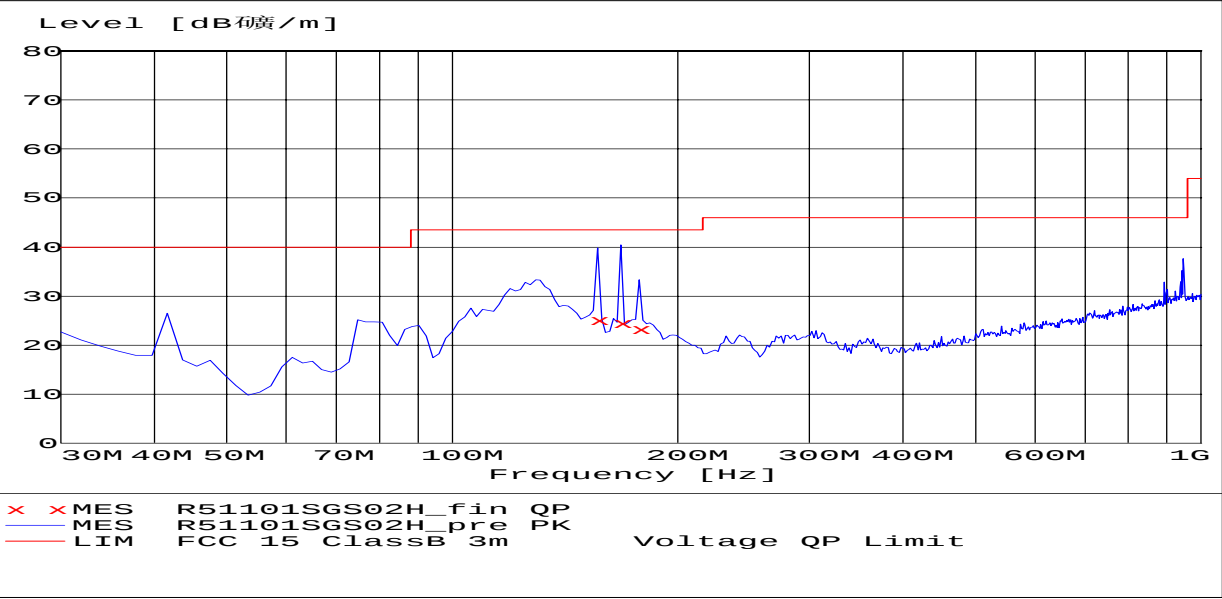
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6.1.3 Test Result:

PCS 1900 connected:

Horizontal: (FCC Limit: 30MHz-1000MHz)



Frequency (MHz)	Antenna Polarization	Receiver QP Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Turntable Angle (°)
30	Horizontal	*	40	*	-	-
45	Horizontal	*	40	*	-	-
88	Horizontal	*	43.5	*	-	-
150	Horizontal	*	43.5	*	-	-
216	Horizontal	*	46	*	-	-
560	Horizontal	*	46	*	-	-
960	Horizontal	*	54	*	-	-
1000	Horizontal	*	54	*		

1. All readings are Peak values.
2. “*” means the emission level is 6 dB below the relevant limit.

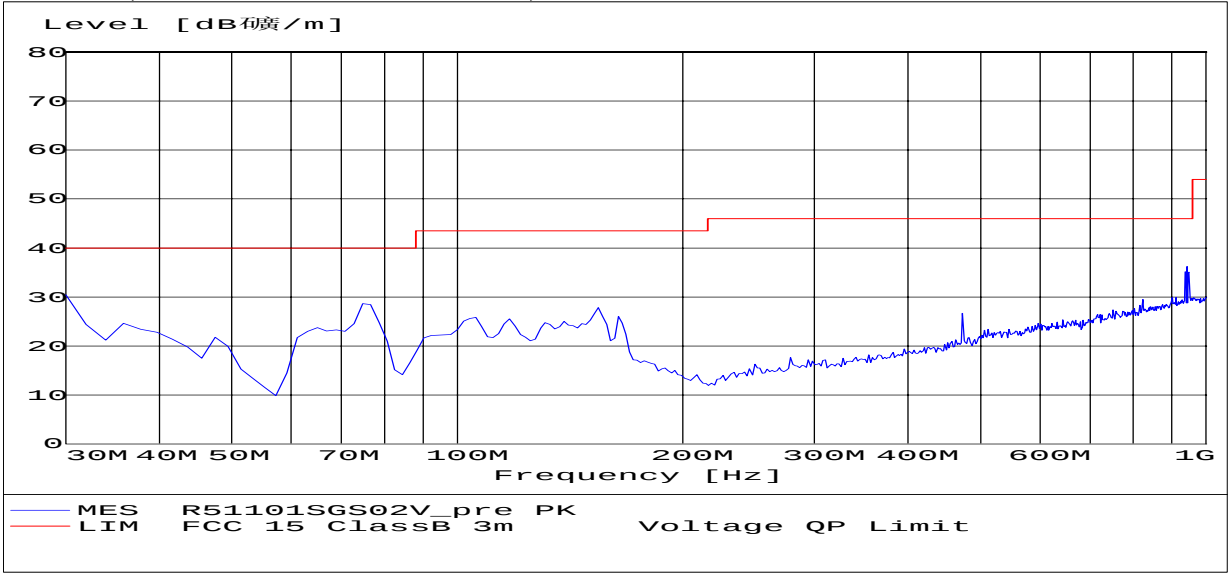
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Vertical: (FCC Limit: 30MHz-1000MHz)



Frequency (MHz)	Antenna Polarization	Receiver QP Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Turntable Angle (°)
30	Vertical	*	40	*	-	-
45	Vertical	*	40	*	-	-
88	Vertical	*	43.5	*	-	-
150	Vertical	*	43.5	*	-	-
216	Vertical	*	46	*	-	-
560	Vertical	*	46	*	-	-
960	Vertical	*	54	*	-	-
1000	Vertical	*	54	*		

1. All readings are Peak values.
2. “*” means the emission level is 6 dB below the relevant limit.

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6.2 Conducted Emissions on AC

Test Requirement:	CFR 47 part 15
Test Method:	ANSI C63.4
Test Date:	31 October 2005
Frequency Range:	150kHz to 30MHz
Class:	N/A
Limit:	66 dB μ V - 56 dB μ V between 150kHz & 500kHz Quasi-peak 56 dB μ V between 0.5MHz & 5MHz Quasi-peak 60 dB μ V between 5MHz & 30MHz Quasi-peak

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 20.0°C Humidity: 42% RH Atmospheric Pressure: 1004 mbar
EUT Operation: Test EUT is the in the allocated channel mode Charging and PCS 1900
with headset.

6.2.2 Test Result and Partial Measurement Data

Pass

An initial pre-scan was performed in the Shielding room using the receiver in peak detection mode. The EUT was measured for 2 orthogonal polarities and peak emissions from the EUT were detected within 6dB of the class B limit line.

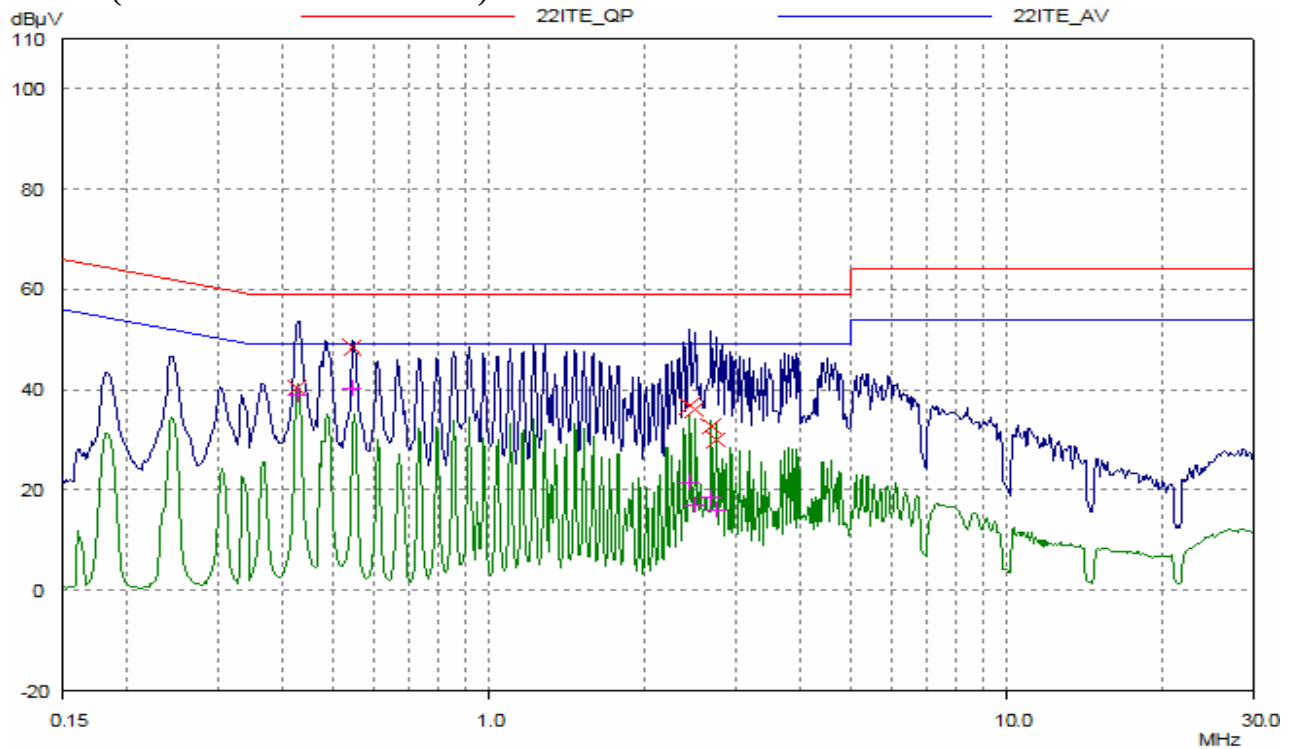
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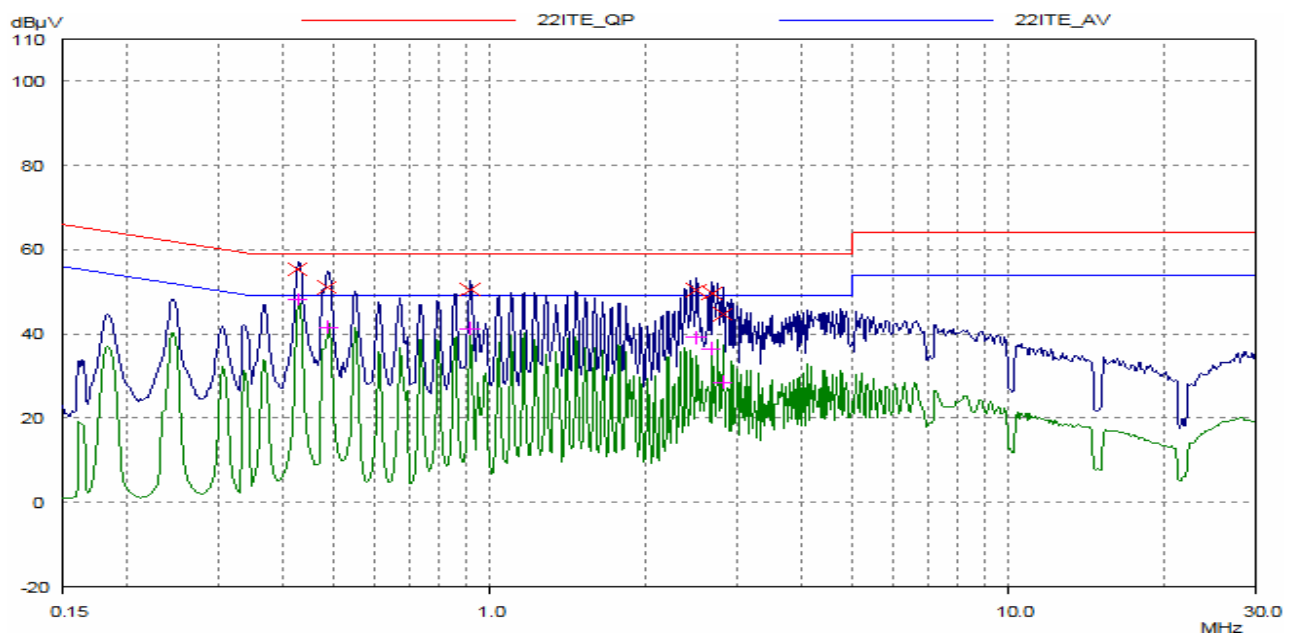
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The following quasi-peak measurements were performed on the EUT on 31 October 2005
L Line: (FCC limit: 150kHz-30MHz)



N Line: (FCC limit: 150kHz-30MHz)



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Frequency (MHz)	Receiver QP Level (dBuV)	Limit (dBuV)	Margin (dB)	Receiver AV Level (dBuV)	Limit (dBuV)	Margin (dB)
0.15	*	66	*	*	56	*
0.24	*	63.43	*	*	53.44	*
0.543	*	56	*	*	46	*
1.40	*	56	*	*	46	*
3.50	*	56	*	*	46	*
5.00	*	56	*	*	46	*
10.00	*	60	*	*	50	*
22.00	*	60	*	*	50	*
30.00	*	60	*	*	50	*

“*” means the emission level is 6dB lower than the relevant limit.

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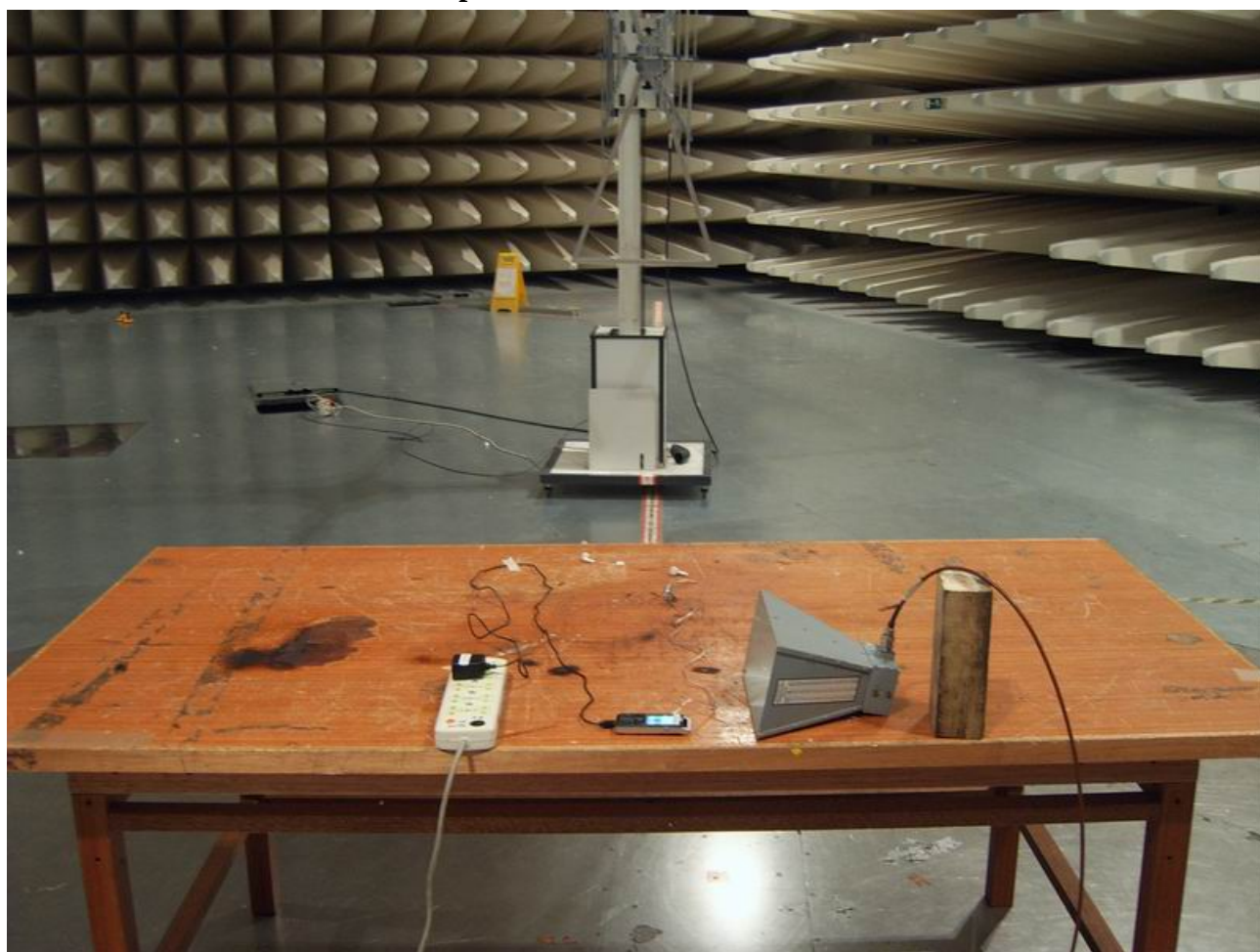
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7 Photographs

7.1 Radiated Emission Test Setup



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7.2 Conducted Emission Test Setup



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7.3 EUT Constructional Details



THE END OF REPORT