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FCC TEST REPORT(DOC)

Application No.: SHEMO060900006IT

Applicant: ImCoSys Ltd.

Equipment Under Test (EUT):

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

EUT Name:	Smart Phone
Model No.:	I-SM1
Marketing Name:	Imcosys
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:	6 September 2006
Date of Test:	8 September 2006 to 29 October 2006
Date of Issue:	30 October 2006

Test Result :	**PASS**

Authorized Signature:

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

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

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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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3 Contents

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4 General Information

4.1 Client Information

Applicant:	ImCoSys Ltd.
Address of Applicant:	ImCoSys AG Bundesstrasse 5 CH-6300 Zug

4.2 General Description of E.U.T.

EUT Name:	Smart Phone
Model No.:	I-SM1
Marketing Name:	Imcosys
GSM Frequency Bands	GSM850/PCS1900

4.3 Details of E.U.T.

Power Supply	Input: AC 100~240V 50/60Hz; 0.2A
	Output: 5V, 1A
	Trade name : DVE
	Model number: DSA-5P-05 FUS
Power Cord	2m
Headset	Trade name: Imcosys
	Model number: ISM1HS
USB data cable	Trade name : Imcosys
	Model number: ISM1U
USB-RS232 data cable:	Trade name: Imcosys
	Model number: ISM1UR
Battery	Trade name: Imcosys
	Model number: ISM1B

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 smart Phone.

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

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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

The test of 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

4.6 Deviation from Standards

None.

4.7 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, 2006.

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, Dcember 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 Test in Chamber **CFR 47 part 15: 2005**

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Date
1	HORN ANTENNA	R&S	HF 906	100023	2006.07.24	2007.07.23
2	BROADBAND ANTENNA	R&S	HL 562	100019	2006.10.10	2007.10.09
3	EMI TEST RECEIVER	R&S	ESI 26	838786/011	2006.08.13	2007.08.13
4	UNIVERSAL RADIO COMMUNICATION TESTER	R&S	CMU 200	SHEM04-1	2006.09.01	2007.08.31

Conducted Emission **CFR 47 part 15: 2005**

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Date
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	Cal. 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:	8 September 2006 to 29 October 2006
Frequency Range:	30MHz to 1GHz
Measurement Distance:	3m for ANSI C63.4 and 10m for CISPR 22
Class:	N/A
Detector:	Peak for pre-scan (120kHz resolution bandwidth)

6.1.1 E.U.T. Operation

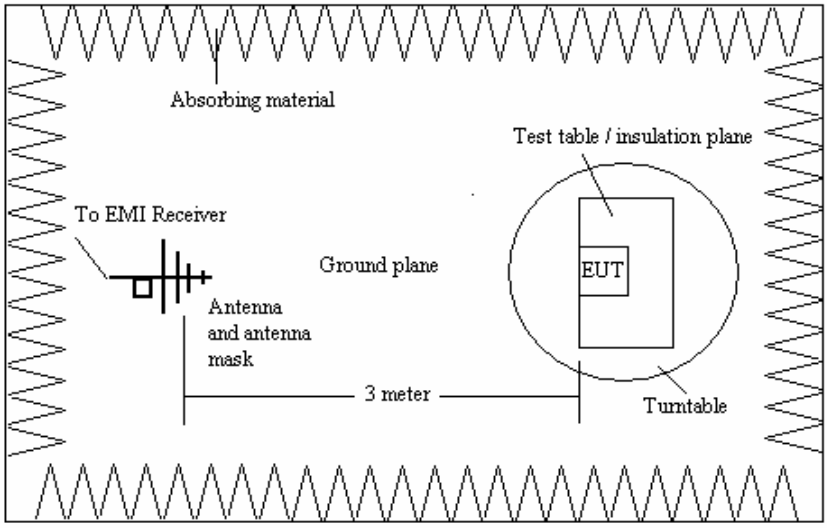
Operating Environment:

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

EUT Operation: Test EUT was tested with all the functions enabled

We just choose the worst case in this report.

6.1.2 Test setup:



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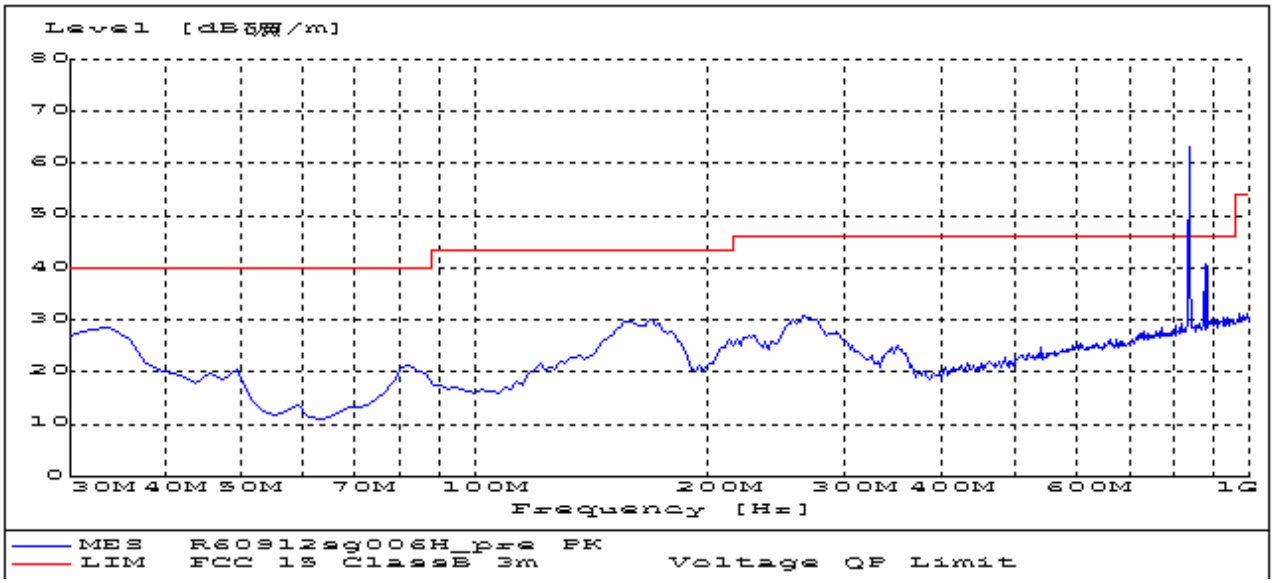
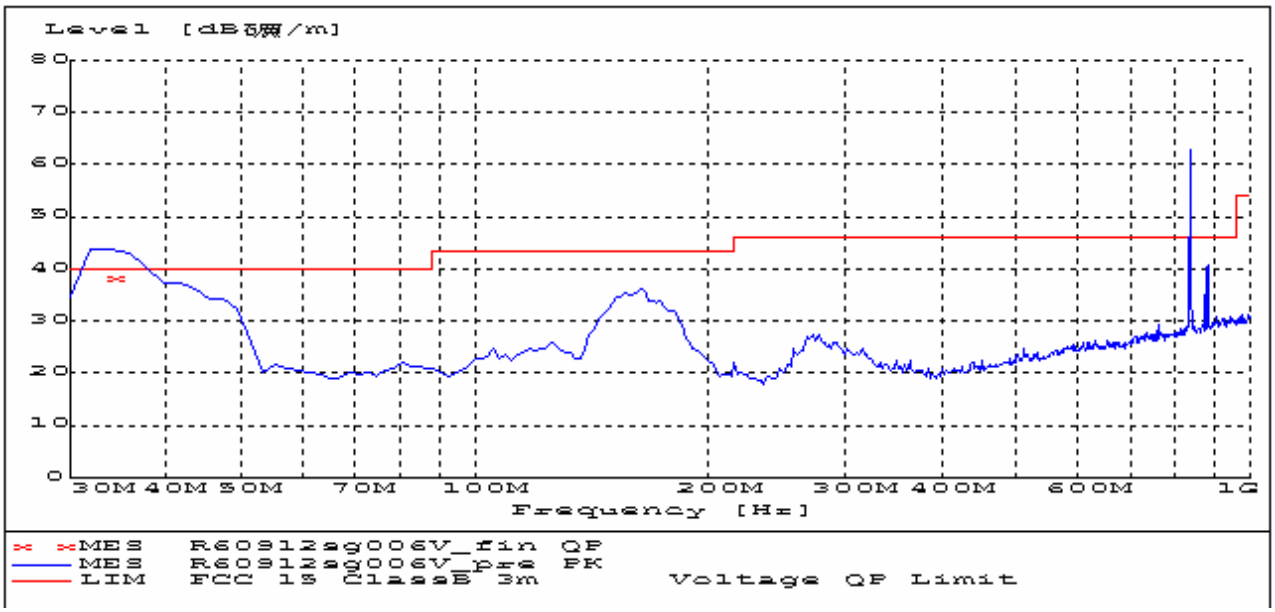
6.1.3 Test Result:

GSM 850 communicating with the charger and earphone

Horizontal:



Vertical



Frequency	Level	Height	Azimuth	Polarisation
MHz	dBµV/m	cm	deg	
34.208417	38.11	100.0	270.00	VERTICAL

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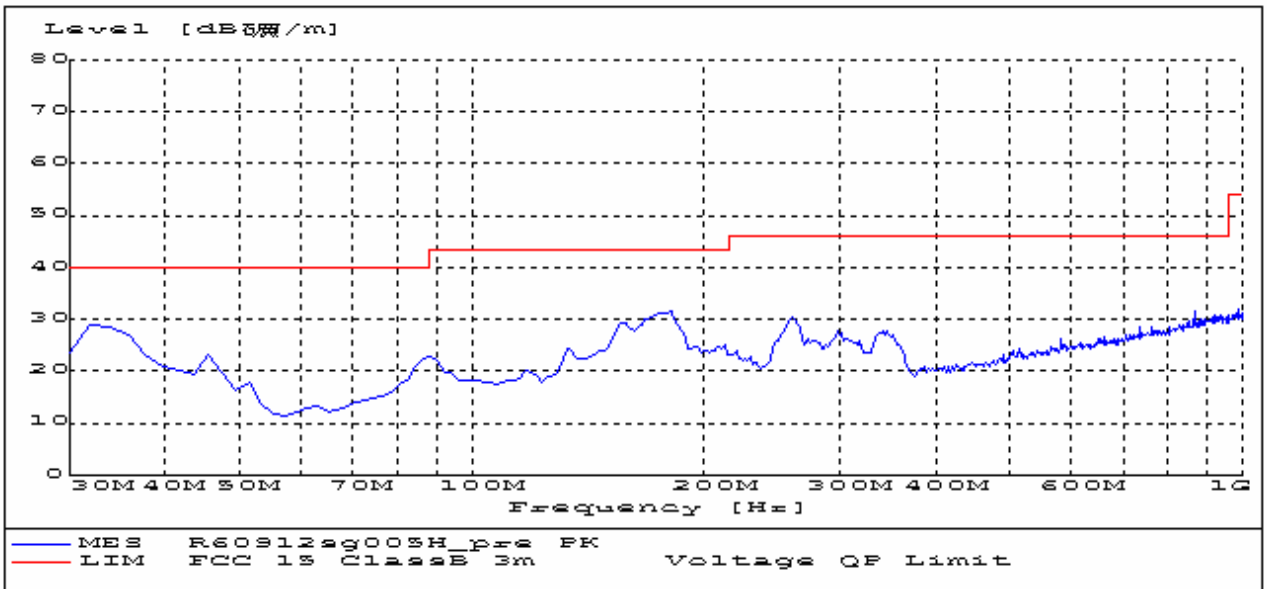
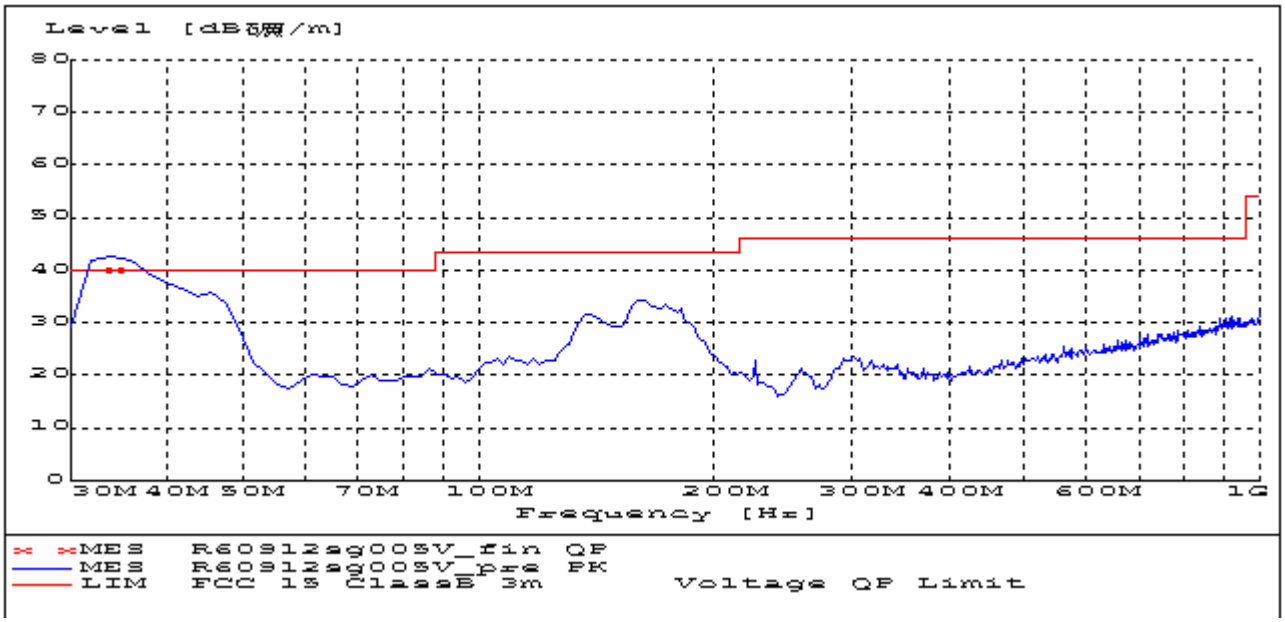
PCS1900 communicating with the charger and earphone
Horizontal:



Vertical



Frequency	Level	Height	Azimuth	Polarisation
MHz	dBµV/m	cm	deg	
34.088176	39.94	100.0	270.00	VERTICAL

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6.2 Conducted Emissions, 150kHz to 30MHz

Test Requirement:	CFR 47 part 15
Test Method:	ANSI C63.4
Test Date:	24 April 2006
Frequency Range:	150kHz to 30MHz
Class:	N/A
Limit:	66 dBμV - 56 dBμVbetween 150kHz & 500kHz Quasi-peak
	56 dBμV between 0.5MHz & 5MHz Quasi-peak
	60 dBμV 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: Test EUT was tested with all the functions enabled

We just choose the worst case in this report

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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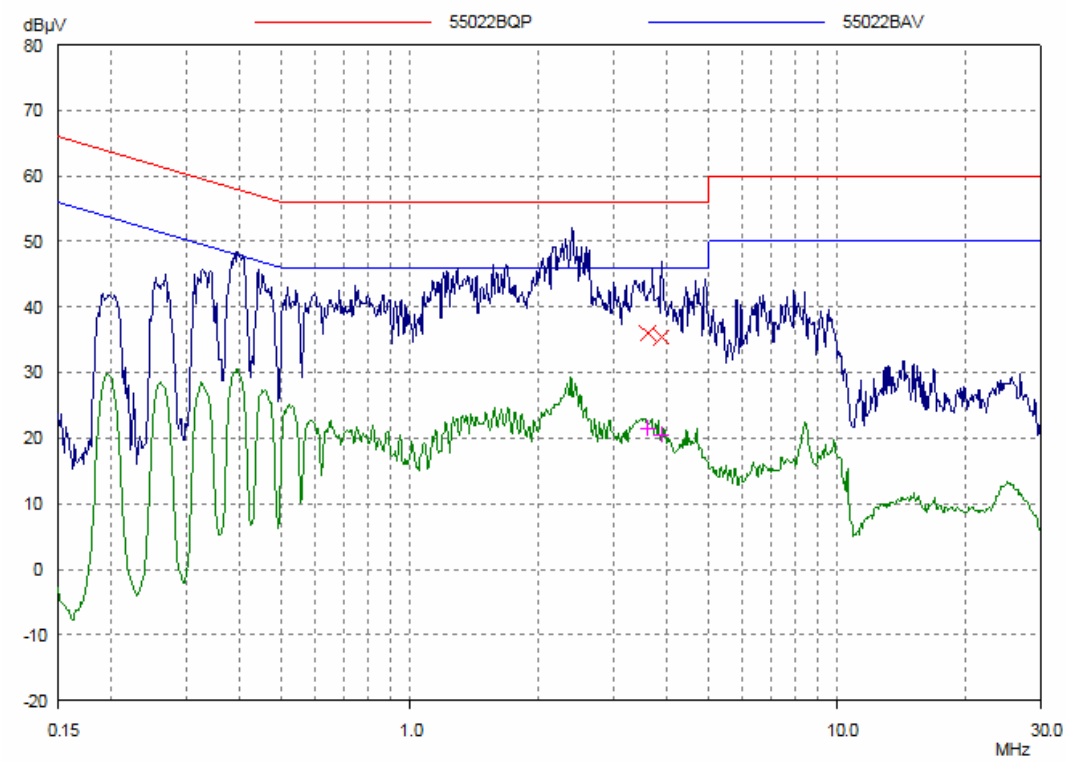
GSM 850 dedicated, charging with adaptor:
L Line:



Final Measurement Results

Frequency MHz	QP Level dBµV	QP Limit dBµV	QP Delta dB
3.60448	35.92	56.00	20.08
3.87247	35.41	56.00	20.59

Frequency MHz	AV Level dBµV	AV Limit dBµV	AV Delta dB
3.60448	21.55	46.00	24.45
3.87247	20.46	46.00	25.54

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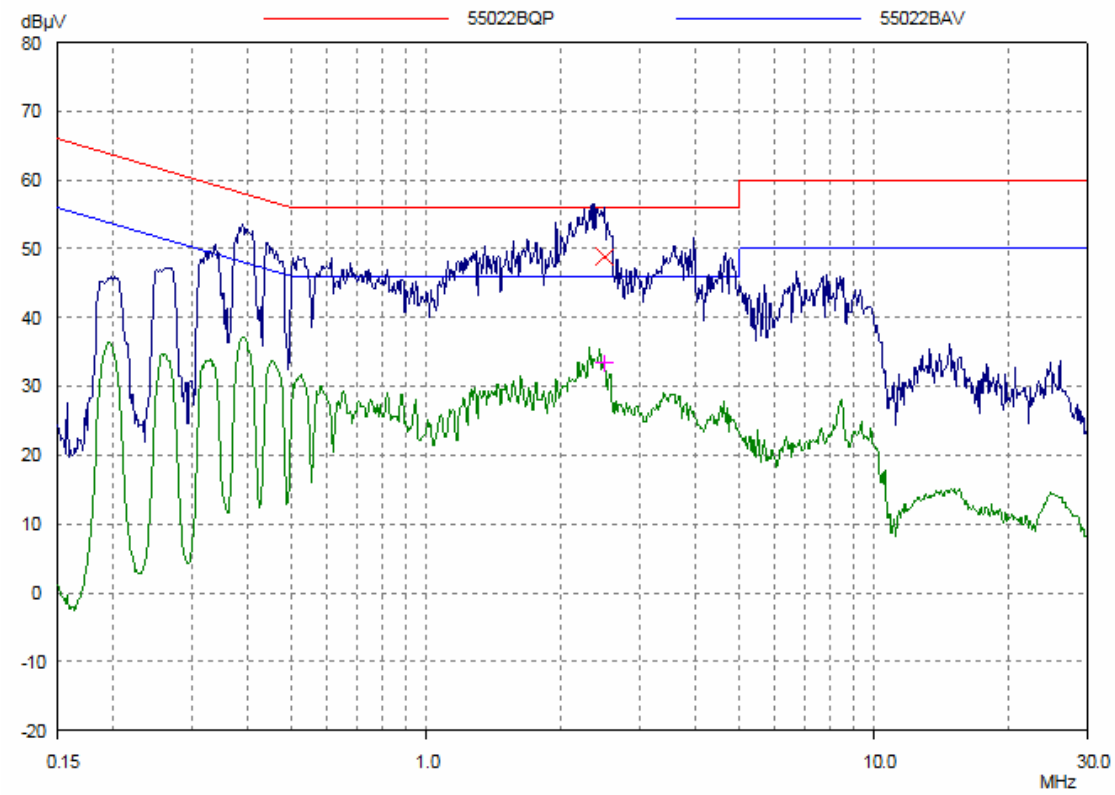
N Line:



Final Measurement Results

Frequency MHz	QP Level dBµV	QP Limit dBµV	QP Delta dB
2.49838	48.78	56.00	7.22

Frequency MHz	AV Level dBµV	AV Limit dBµV	AV Delta dB
2.49838	33.35	46.00	12.65

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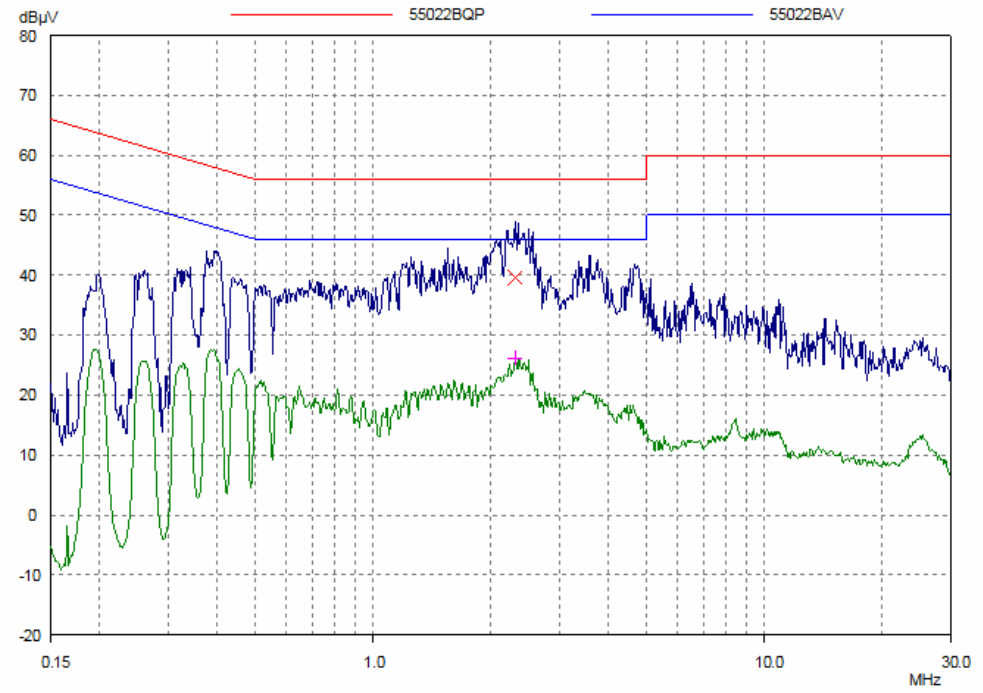
PCS 1900 dedicated, charging with adaptor:
L Line:



Final Measurement Results

Frequency MHz	QP Level dBµV	QP Limit dBµV	QP Delta dB
2.30703	39.53	56.00	16.47

Frequency MHz	AV Level dBµV	AV Limit dBµV	AV Delta dB
2.30703	26.05	46.00	19.95

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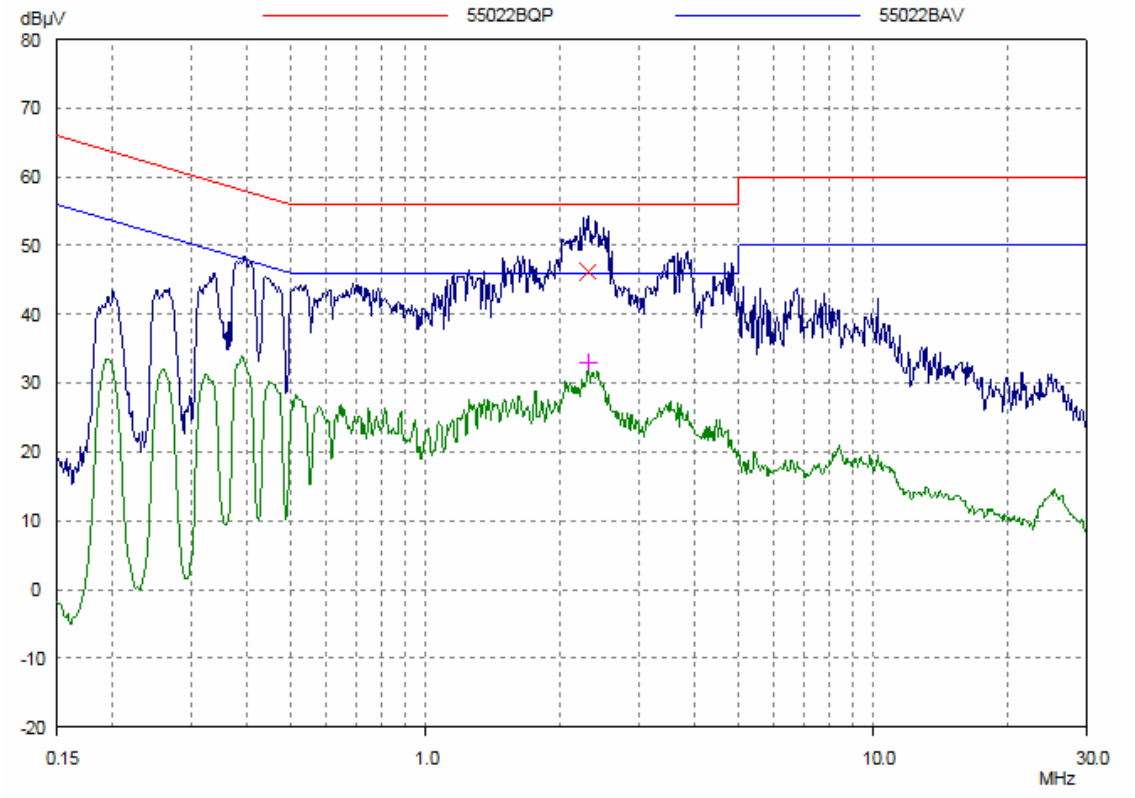
N Line:



Final Measurement Results

Frequency MHz	QP Level dBµV	QP Limit dBµV	QP Delta dB
2.30703	46.20	56.00	9.80

Frequency MHz	AV Level dBµV	AV Limit dBµV	AV Delta dB
2.30703	32.86	46.00	13.14

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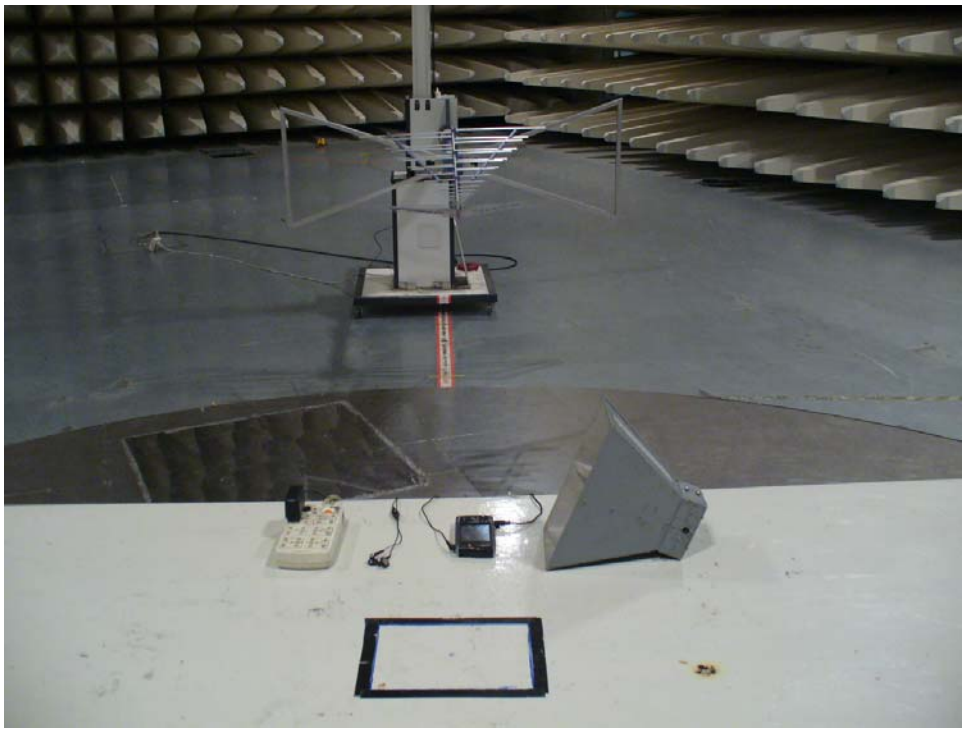
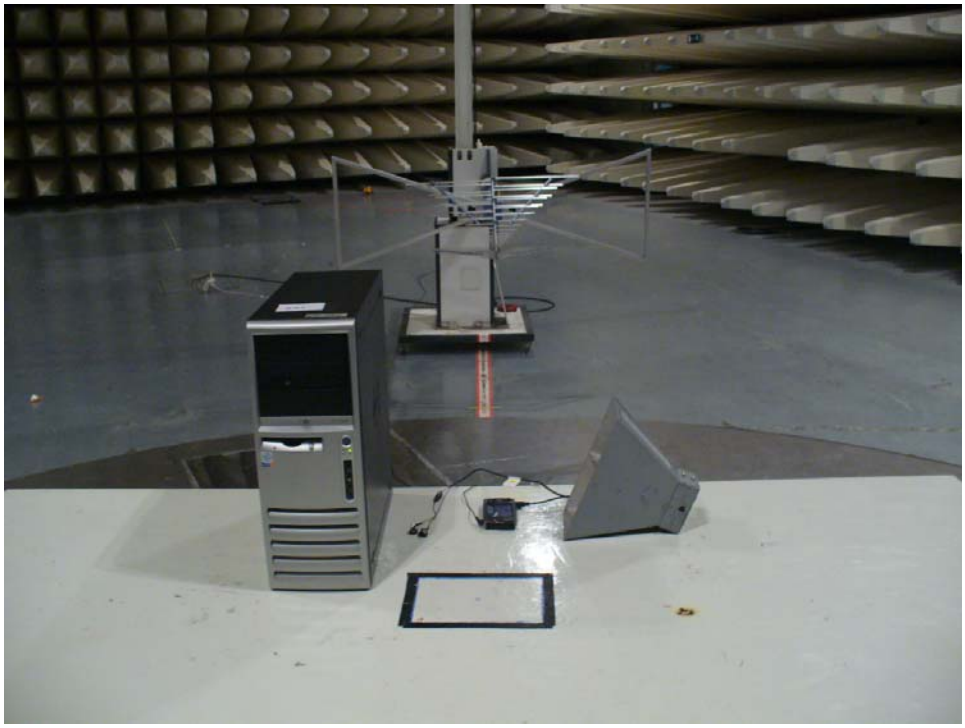
7 Photographs

7.1 Radiated Emission Test Setup





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7.2 Conducted Emission Test Setup

7.3 EUT Constructional Details

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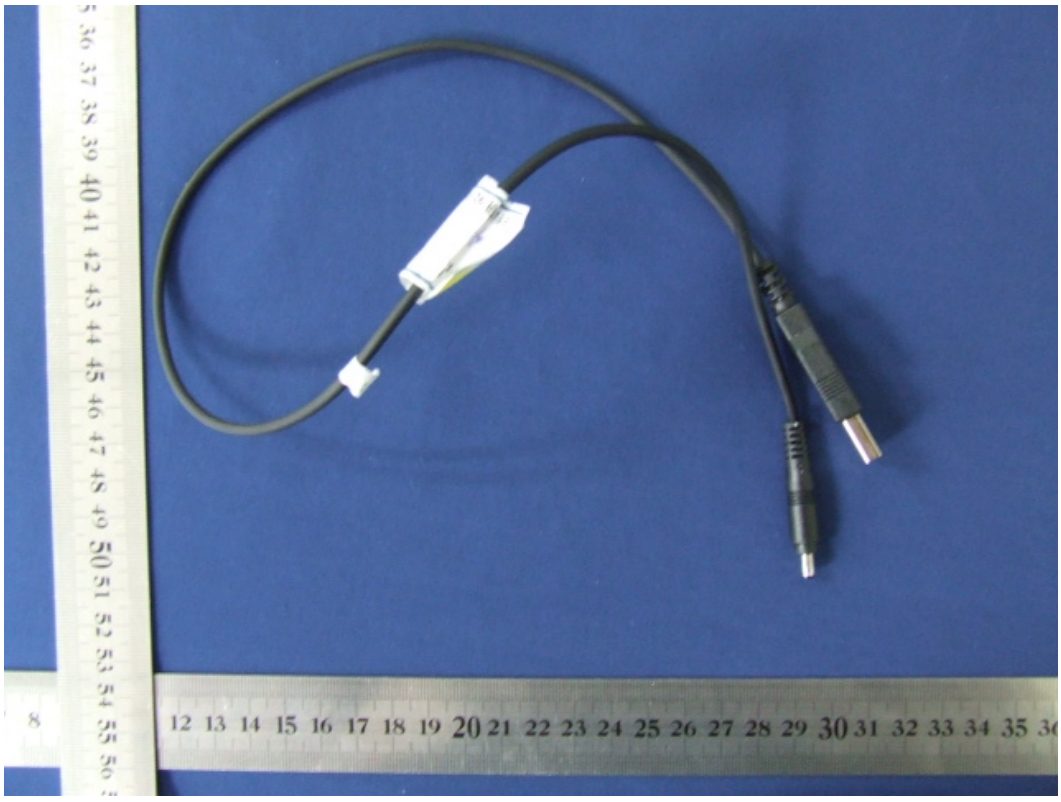

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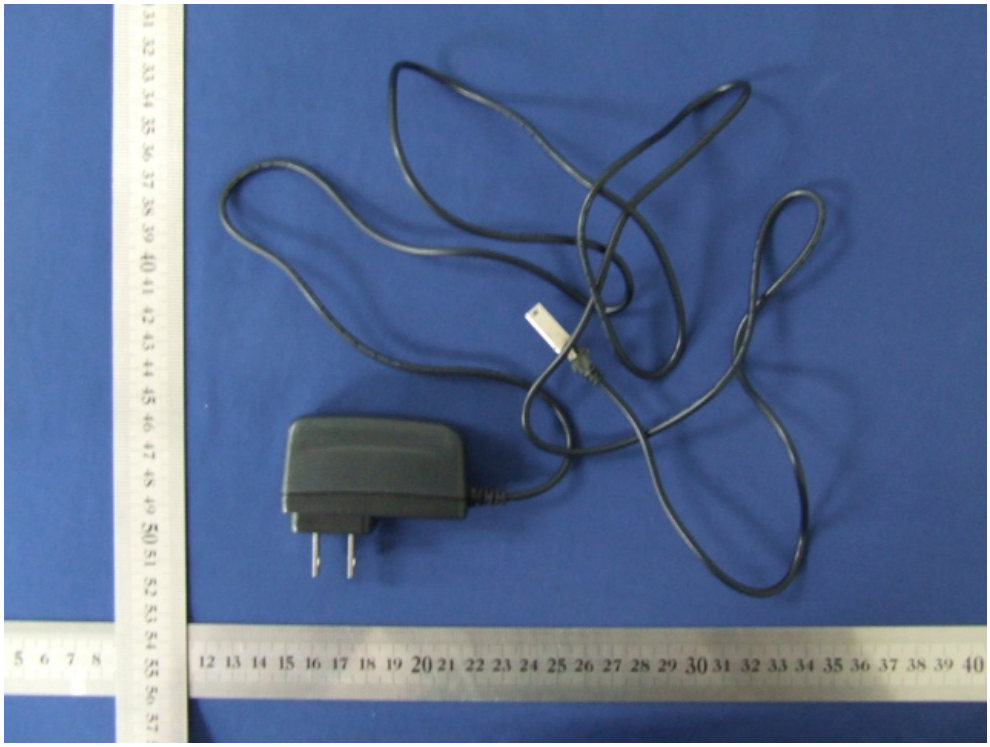
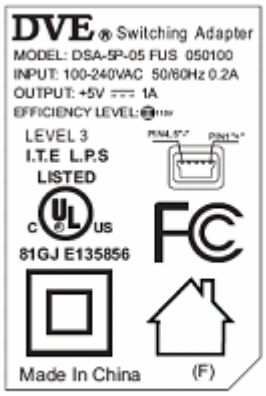


Picture of the US adapter lable



4:1

THE END OF REPORT