No.198 Kezhu Road, Science Town Economic& Technology
Development District Guangzhou, China 510663

Telephone: +86 (0) 20 82155555
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Email: sgs_internet_operations@sgs.com

VERIFICATION OF EMC COMPLIANCE

Verification No.:	GLEMR070200302ITEV
Applicant:	ISS MANUFACTURING LTD.
Address of Applicant:	UNIT 604-606, 6/F., PHASE II, CHAI WAN INDUSTRIAL CITY, 70 WING TAI ROAD, CHAI WAN, HONGKONG
Product Description:	USB PHONE
Model No:	STX-5013 / STY-5015

Sufficient samples of the product have been tested and found to be in conformity with

Test Standard:	EN 55022 : 1998+A1:2000+A2:2003 EN 55024 :1998+A1: 2001+A2:2003 EN 61000-3-2:2000 +A2:2005 EN 61000-3-3 : 1995 + A1: 2001

As shown in the

Test Report Number(s): GLEMR070200302ITE

This verification of EMC Compliance has been granted to the applicant based on the results of the tests, performed by laboratory of SGS-CSTC Standards Technical Services Co., Ltd. on the sample of the above-mentioned product in accordance with the provisions of the relevant specific standards and Directive 2004/108/EC as last amended by Directive 93/68/EEC. The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and compliance with all relevant EC Directives. The affixing of the CE marking presumes in addition that the conditions in annexes III and V of the Directive are fulfilled.

Jeff Zhao
Manager

CE

Date: 14 March 2007

SGS-CSTC Standards Technical Services Co., Ltd.

No.198 Kezhu Road, Science Town Economic& Technology Development District Guangzhou, China 510663

Telephone: +86 (0) 20 82155555
Fax: +86 (0) 20 82075059
Email: sgs_internet_operations@sgs.com

TEST REPORT

Application No.:	GLEMR070200302IT
Applicant:	ISS MANUFACTURING LTD.
Equipment Under Test (EUT):	
EUT Name:	USB PHONE
Item No.:	STX-5013 / STY-5015♣
Serial No.:	Not supplied by client
♣	Please refer to section 2 of this report which indicates which item was actually tested and which were electrically identical.
Standards:	EN 55022 : 1998+A1:2000+A2:2003
	EN 55024 :1998+A1: 2001+A2:2003
	EN 61000-3-2:2000 +A2:2005
	EN 61000-3-3 : 1995 + A1: 2001
Date of Receipt:	05 February 2007
Date of Test:	08 February to 12 March 2007
Date of Issue:	14 March 2007
Test Result :	**PASS***

* In the configuration tested, the EUT complied with the standards specified above.

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and compliance with all relevant EC Directives.

Jeff Zhao
March. 07
Jeff Zhao
Manager

CE

2 Test Summary

The EUT has been tested with a USB PHONE.				
Test	**Test Requirement**	**Test Method**	**Class / Severity**	**Result**
Radiated Emission, 30MHz to 1GHz	EN 55022 :1998 + A1:2000+A2:2003	EN 55022 :1998 + A1:2000+A2:2003	Class B	PASS
Conducted Emission (150KHz to 30MHz)	EN 55022 :1998 + A1:2000+A2:2003	EN 55022 :1998 + A1:2000+A2:2003	Class B	PASS
Harmonic Emission on AC, 50Hz	EN 61000-3-2:2000 +A2:2005	EN 61000-3-2:2000 +A2:2005	N/A	N/A
Flicker Emission on AC	EN 61000-3-3 :1995 + A1:2001	EN 61000-3-3 :1995 + A1:2001	N/A	N/A
ESD	EN 55024 :1998 + A1:2001+A2:2003	EN 61000-4-2 :1995 + A1:1998+A2:2001	Contact ±4 kV Air ±8 kV	PASS①
Radiated Immunity, 80MHz to 1 GHz	EN 55024 :1998 + A1:2001+A2:2003	EN 61000-4-3 :2002 + A1:2002	3V/m 80%, 1kHz, AM	PASS
Electrical Fast Transients (EFT) on AC	EN 55024 :1998 + A1:2001+A2:2003	EN 61000-4-4 :1995 + A1:2001+A2:2001	AC ± 1.0kV	PASS ②
Surge Immunity on AC	EN 55024 :1998 + A1:2001+A2:2003	EN 61000-4-5 :1995 + A1:2001	±1kV D.M.† ±2kV C.M. ‡	PASS
Injected Currents on AC, 150kHz to 80MHz	EN 55024 :1998 + A1:2001+A2:2003	EN 61000-4-6 :1996 + A1:2001	3Vrms (emf), 80%, 1kHz Amp. Mod.	PASS
Voltage Dips and Interruptions on AC	EN 55024 :1998 + A1: 2001+A2:2003	EN 61000-4-11 :1994 + A1:2001	0 % U_T* for 0.5per 0 % U_T* for 250per 70 % U_T* for 25per	PASS

* U_T is the nominal supply voltage

† D.M. – Differential Mode

‡ C.M. – Common Mode

N/A: not applicable. Please refer to Section 6.3 & Section 6.4 for further details.

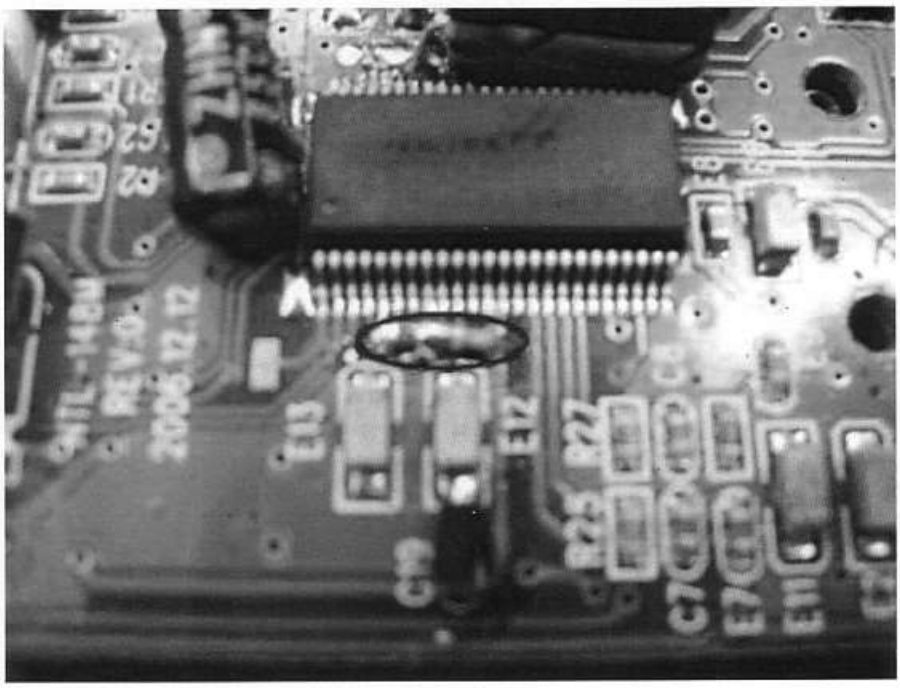
Remark:

♣:Item number: STX-5013 / STY-5015

According to the confirmation from the applicant, all models were electrical circuit design, layout, components used and internal wiring were identical for the above items, only difference being the model STX-5015 with LCD, but model STX-5013 without LCD. Therefore only one item STY-5015 was tested in this report.

①-②: The EUT passed the ESD and EFT tests after modifications as shown as below:

1. Replace the Capacitor C12 with an Electrolytic capacitor which is 4.7μF/10V.
2. Add two Capacitors parallel connected with E13 and C19 as the photos shown:



3. Replace the Capacitor E3 and E5 with new ones which are 100μF/10V.

3 Contents

4 General Information

4.1 Client Information

Applicant: ISS MANUFACTURING LTD.

Address of Applicant: UNIT 604-606, 6/F., PHASE II, CHAI WAN INDUSTRIAL CITY, 70 WING TAI ROAD, CHAI WAN, HONGKONG

4.2 General Description of E.U.T.

EUT Name: USB PHONE

Item No.: STX-5013 / STY-5015

Serial No.: Not supplied by client

4.3 Details of E.U.T.

Power Supply: Supply by PC USB port

Power Cord: 2m unscreened with ferrite USB cable

4.4 Description of Support Units

The EUT has been tested with PC system.

Description	Manufacturer	Model No.	Common
Personal Computer	IBM	P7314A	EMC0035
15" Monitor	DELL	E551C	LO206HIOIA1
Mouse	IBM	MU29J	
Keyboard	IBM	SK-8820	
ROM Programmer	DASI Electronics	EMP-100A	
Printer	Hewlett-Packard	C5884A	DeskJet 670C
NoteBook	IBM	T40	EMC0034
NoteBook	IBM	X22	Just for CE test only

4.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory, No.198 Kezhu Road, Science Town Economic& Technology Development District Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.

4.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **NVLAP – Lab Code: 200611-0**

  SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is recognized under the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

- **ACA**

  SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our NVLAP accreditation.

- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

  Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

- **CNAS L0167**

  SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2006 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

- **FCC – Registration No.: 282399**

  SGS-CSTC Standards Technical Services Co., Ltd., 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 282399, May 31, 2002. With the above and NVLAP's accreditation, SGS-CSTC is an authorized test laboratory for the DoC process.

- **Industry Canada (IC)**

  The 3m/10m Alternate Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620B-1.

  Date of Registration: Jan 15, 2007. Valid until Jan 15, 2009

- **VCCI**

  The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2460 and C-2584 respectively.

  This certificate is valid until September 14.2009

4.7 Deviation from Standards

None.

4.8 Abnormalities from Standard Conditions

The EUT passed the ESD and EFT tests after modifications.

4.9 Monitoring of EUT for All Immunity Test

Visual: Monitored the LCD of the EUT and the display of PC monitor.

Audio: Monitored the sound of the EUT.

5 Equipments Used during Test

	RE in Chamber/OATS					
No:	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
EMC0525	Compact Semi-Anechoic Chamber	ChangZhou ZhongYu	N/A	N/A	06-03-2006	06-03-2007
EMC0522	EMI Test Receiver	Rohde & Schwarz	ESIB26	100249	05-12-2006	05-12-2007
N/A	EMI Test Software	Audix	E3	N/A	N/A	N/A
EMC0514	Coaxial cable	SGS	N/A	N/A	04-12-2006	04-12-2007
EMC0524	Bi-log Type Antenna	Schaffner -Chase	CBL6112B	2966	31-10-2006	31-10-2007
EMC0519	Bilog Type Antenna	Schaffner -Chase	CBL6143	5070	31-07-2006	31-07-2007
EMC0517	Horn Antenna	Rohde & Schwarz	HF906	100095	29-07-2006	29-07-2007
EMC0040	Spectrum Analyzer	Rohde & Schwarz	FSP30	100324	05-12-2006	05-12-2007
EMC0520	0.1-1300 MHz Pre-Amplifier	HP	8447D OPT 010	2944A06252	06-03-2006	06-03-2007
EMC0521	1-26.5 GHz Pre-Amplifier	Agilent	8449B	3008A01649	06-03-2006	06-03-2007
EMC0523	Active Loop Antenna	EMCO	6502	00042963	09-08-2006	09-08-2008
EMC0530	10m Semi- Anechoic Chamber	ETS	N/A	N/A	22-08-2006	22-08-2007

	Conducted Emission					
No:	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
EMC0306	Shielding Room	Zhong Yu	8 x 3 x 3.8 m^3	N/A	N/A	N/A
EMC0102	LISN	Schaffner Chase	MNZ050D/1	1421	05-12-2006	05-12-2007
EMC0506	EMI Test Receiver	Rohde & Schwarz	ESCS30	100085	05-12-2006	05-12-2007
EMC0107	Coaxial Cable	SGS	2m	N/A	25-11-2006	25-11-2007

	ESD					
No:	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
SEL0012	ESD Gun	Keytek	MZ-15/EC	0502182	20-12-2006	20-12-2007
EMC0804	ESD Ground Plane	SGS	3m x 3m	N/A	N/A	N/A

	EFT, Surge, Voltage dips and Interruption					
No:	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
EMC1010	EMC Immunity Test System	Thermo KeyTek	Pro-Plus	0501276	05-12-2006	05-12-2007
EMC1009	Capacitive Coupling Clamp	Thermo KeyTek	Pro-CCL	0501362	05-12-2006	05-12-2007
EMC1005	Digital Oscilloscope	Tektronix	TDS3012	B015508	14-07-2006	14-07-2007

Radiated Immunity						
No:	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
EMC0525	Compact 3m Semi- Anechoic Chamber	Changzhou zhongyu	N/A	N/A	06-03-2006	06-03-2007
EMC0516	Signal Generator	Rohde & Schwarz	SMR20	100416	05-12-2006	05-12-2007
EMC0915	Amplifier 20M-1GHz	EMPOWER	BBS2E4ALP	1007	06-03-2006	06-03-2007
EMC0914	Amplifier 800M-2.5GHz	EMPOWER	BBS3Q5KIN	1006	06-03-2006	06-03-2007
EMC0904	Power Meter	Rohde & Schwarz	NRVS	825770/074	22-07-2006	22-07-2007
EMC0905	Power Sensor	Rohde & Schwarz	NRV-Z5	825802/013	22-07-2006	22-07-2007
EMC0917	Dual Directional Coupler	EMCA	715-10-1.400	070031	06-10-2005	06-10-2007
EMC0907	Electric Field Probe	Wandel & Goltermann	EMC-20	M-0063	26-04-2006	25-04-2007
EMC0908	Oscilloscope Type 485	Tektronix	485	B144408	21-07-2006	21-07-2007
EMC0909	Monitor System	Mitsubish Corp.	M-0552AB	91510185	N/A	N/A
EMC0524	Bi-log Type Antenna	Schaffner -Chase	CBL6112B	2966	31-10-2006	31-10-2007
EMC0916	Microwave Horn Antenna(0.8-5GHz)	Amplifier Research	AT4002A	308071	25-10-2006	25-10-2007

Conducted Immunity						
No:	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
EMC1101	Signal Generator	Rohde & Schwarz	SMY01	825675/016	19-09-2006	18-09-2007
EMC1102	Amplifier 0.15-230MHz	Ophirrf	GRF5048	1003	06-03-2006	06-03-2007
EMC1103	Power Meter	Rohde & Schwarz	NRVS	825770/079	22-07-2006	22-07-2007
EMC0905	Power Sensor	Rohde & Schwarz	NRV-Z5	825802/013	22-07-2006	22-07-2007
EMC1105	Dual Directional coupler	Werlatone Inc.	C1795	6635	24-11-2006	24-11-2007
EMC0908	Oscilloscope Type 485	Tektronix	485	B144408	21-07-2006	21-07-2007
EMC1108	CDN M3	Schaffner Chase	CDN-M3-16	9866	05-12-2006	05-12-2007
EMC1107	CDN M2	Schaffner Chase	CDN-M2-16	9863	05-12-2006	05-12-2007
EMC1120	Immunity S/W Ver 4.31	Schaffner Chase	CIS9942	WHHPKB	N/A	N/A
EMC1116	Current Probe	Schaffner Chase	CIP9136	1155	25-11-2006	25-11-2007
EMC1117	Current Probe	Schaffner Chase	CSP8445	18	25-11-2006	25-11-2007

	General used equipment					
No:	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
EMC0050-EMC0053	Temperature, & Humidity	ZHENGZHOU BO YANG	WSB	N/A	05-12-2006	05-12-2007
EMC0054	Temperature, & Humidity	Shenzhen Tai Kong	THG-1	N/A	04-01-2007	04-01-2008
EMC0006	DMM	Fluke	73	70681569	27-09-2006	27-09-2007
EMC0007	DMM	Fluke	73	70671122	27-09-2006	27-09-2007

6 Emission Test Results

6.1 Radiated Emissions, 30MHz to 1GHz

Test Requirement:	EN 55022
Test Method:	EN 55022
Test Date:	08 February 2007
Frequency Range:	30MHz to 1GHz
Measurement Distance:	3m
Class:	Class B
Detector:	Peak for pre-scan
	Quasi-Peak if maximised peak within 6dB of limit

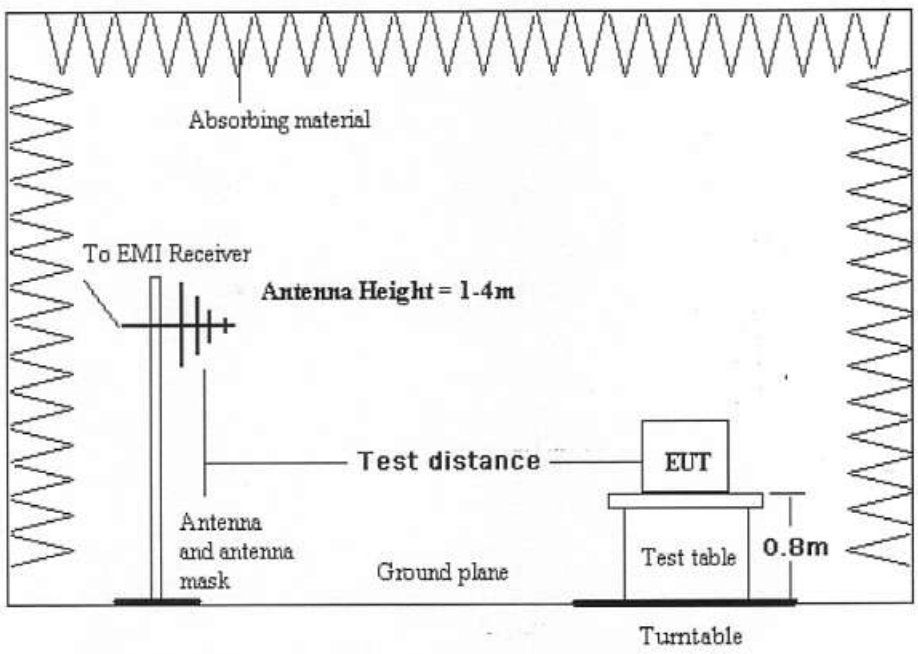
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 47 % RH Atmospheric Pressure: 1008 mbar

EUT Operation: Test the EUT in communication mode, running the software supplied by application.

6.1.2 Test Setup



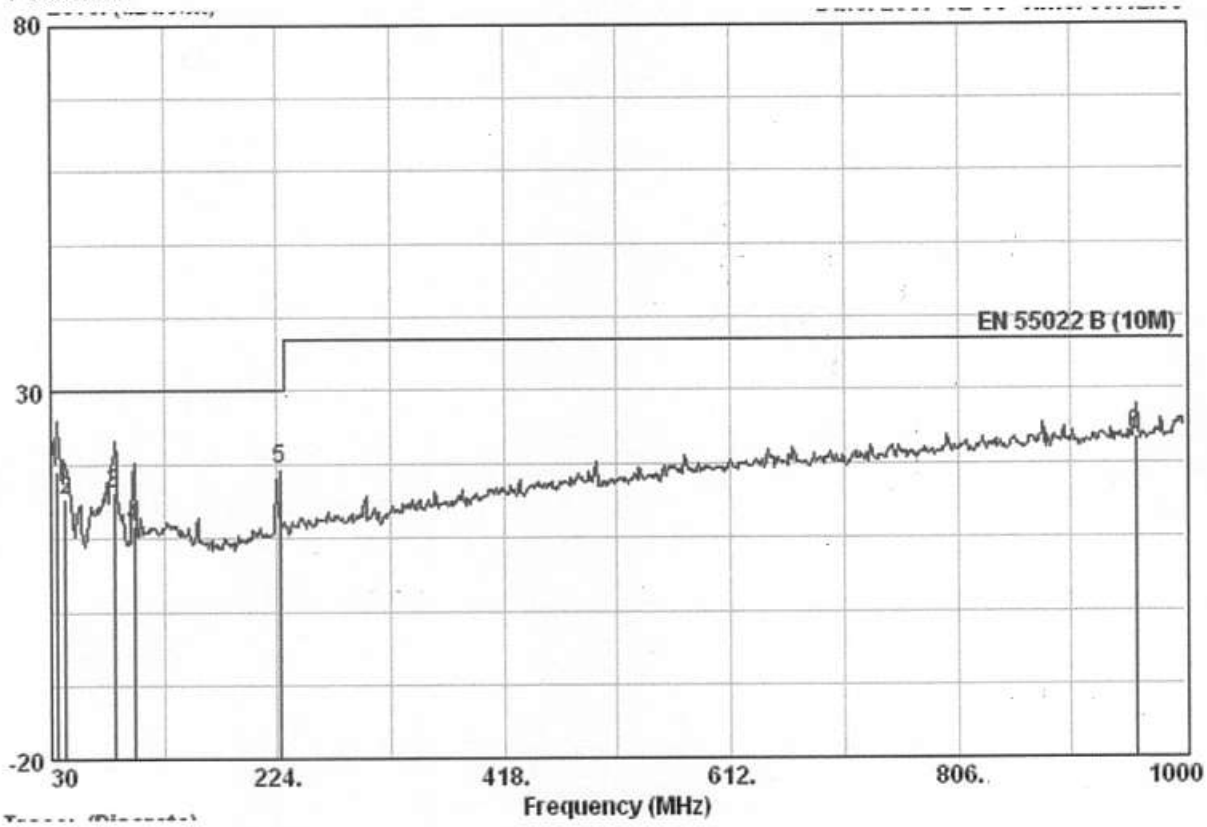
6.1.3 Measurement Data

An initial pre-scan was performed in the 10m chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by Bilog antenna with 2 orthogonal polarities.

The following quasi-peak measurements were performed on the EUT on 08 February 2007:

Vertical:

Peak scan

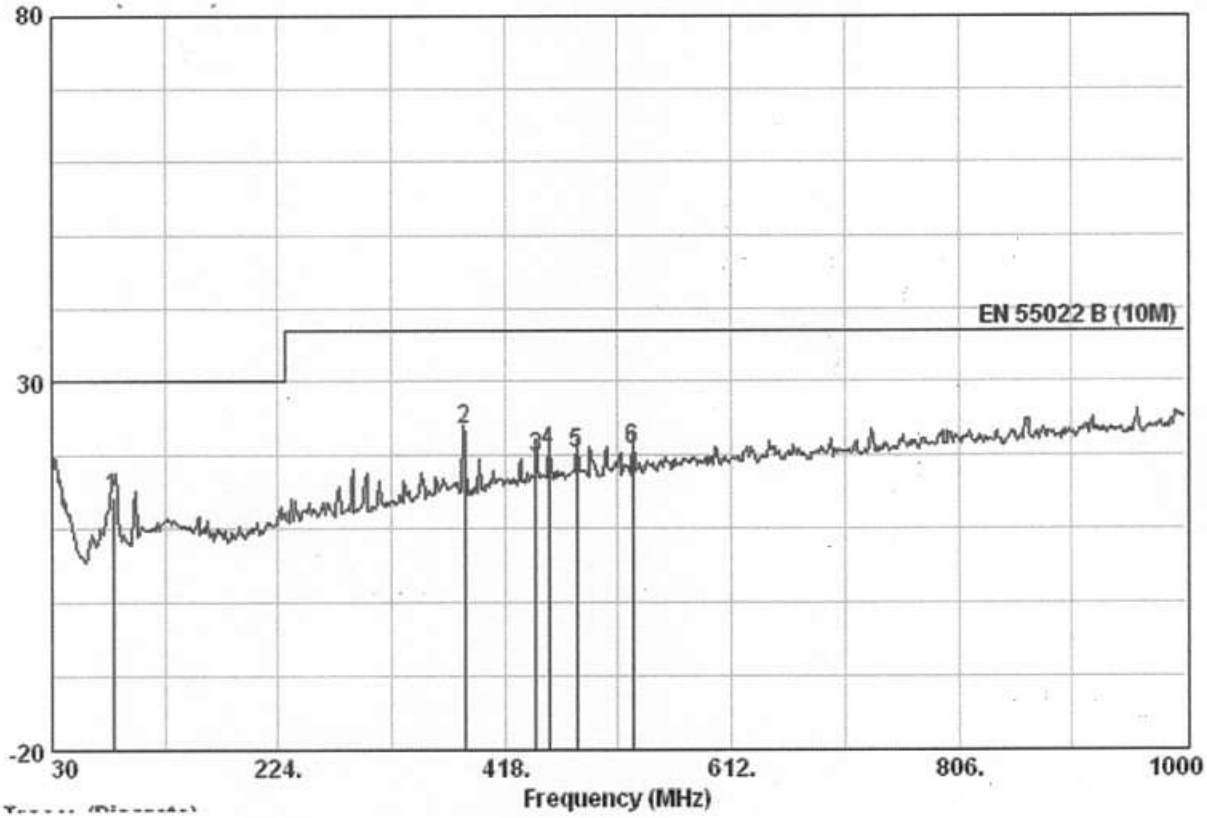


Quasi-peak measurement

	Freq	Level	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Over Limit	Remark
	MHz	dBuV/m	dBuV/m	dBuV	dB/m	dB	dB	dB	
1	34.850	19.19	30.00	28.39	18.10	0.90	28.20	-10.81	QP
2	42.610	15.45	30.00	29.50	13.20	0.90	28.15	-14.55	QP
3	84.320	16.12	30.00	30.77	11.95	1.40	28.00	-13.88	QP
4	101.780	11.70	30.00	30.10	8.00	1.50	27.90	-18.30	QP
5 @	225.940	19.52	30.00	34.35	10.40	2.10	27.34	-10.48	QP
6	958.290	23.47	37.00	26.35	20.10	4.70	27.69	-13.53	QP

Horizontal:

Peak scan



Quasi-peak measurement

	Freq	Level	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Over Limit	Remark
	MHz	dBuV/m	dBuV/m	dBuV	dB/m	dB	dB	dB	
1	82.380	14.25	30.00	29.00	11.95	1.30	28.00	-15.75	QP
2	384.120	23.47	37.00	34.64	13.77	2.90	27.84	-13.53	QP
3	444.190	19.87	37.00	29.77	15.10	3.20	28.20	-17.13	QP
4	455.830	20.69	37.00	30.39	15.35	3.20	28.25	-16.31	QP
5	479.110	20.20	37.00	29.46	15.74	3.30	28.30	-16.80	QP
6	527.610	20.85	37.00	29.62	16.23	3.40	28.40	-16.15	QP

1. Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.

2. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

6.2 Conducted Emissions Mains Terminals, 150kHz to 30MHz

Test Requirement:	EN 55022
Test Method:	EN 55022
Test Date:	08 February 2007
Frequency Range:	150KHz to 30MHz
Class / Severity:	Class B
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth)
	Quasi-Peak if maximised peak within 6dB of Quasi-Peak limit

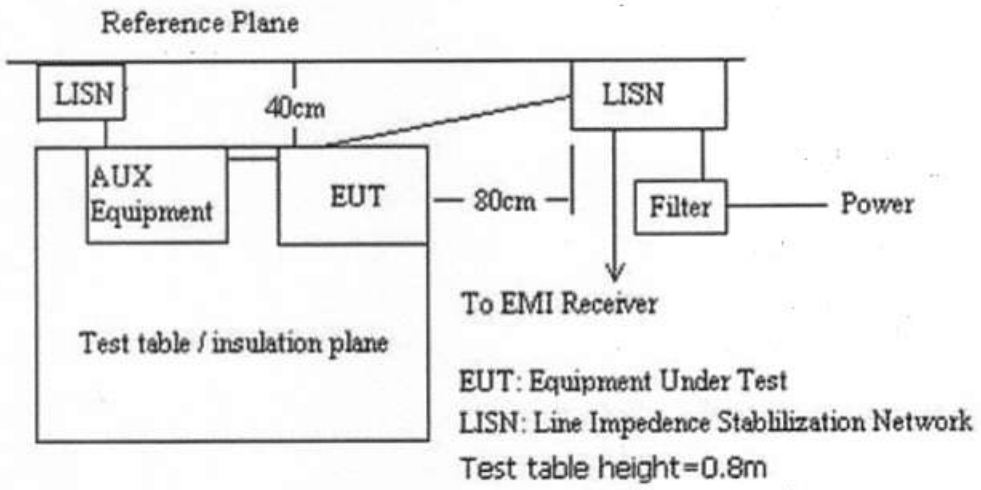
6.2.1E.U.T. Operation

Operating Environment:

Temperature: 21 °C Humidity: 52 % RH Atmospheric Pressure: 1011 mbar

EUT Operation: Test the EUT in communication mode, running the software supply by application.

6.2.2 Plan View of Test Setup



6.2.3Measurement Data

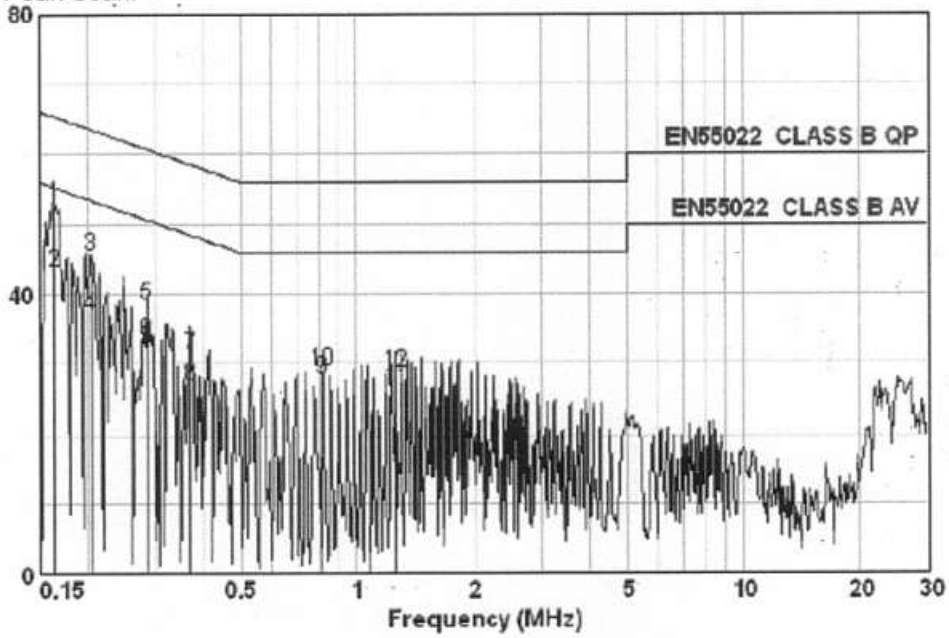
An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

The following Quasi-Peak and Average measurements were performed on the EUT on 08 February 2007:

Live Line:

Peak Scan:

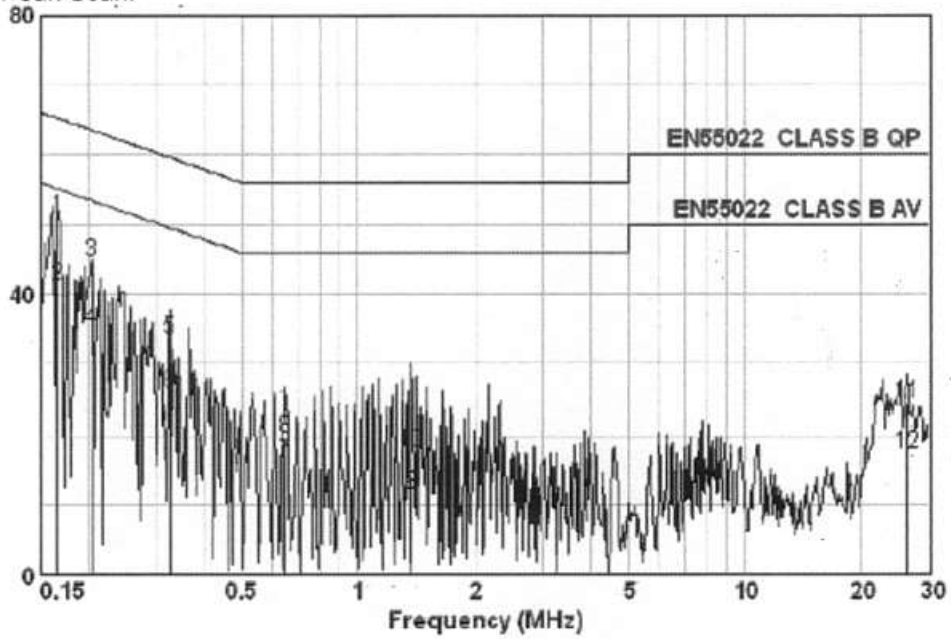


Quasi-peak and Average measurement:

		Freq	Read Level	Cable Loss	LISN Factor	Level	Limit Line	Over Limit	Remark
		MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	*	0.163	52.90	0.00	0.00	52.90	65.30	-12.40	QP
2	*	0.163	43.28	0.00	0.00	43.28	55.30	-12.02	AVERAGE
3		0.204	45.54	0.00	0.00	45.54	63.45	-17.91	QP
4		0.204	36.89	0.00	0.00	36.89	53.45	-16.56	AVERAGE
5		0.285	38.58	0.00	0.00	38.58	60.68	-22.10	QP
6		0.285	33.32	0.00	0.00	33.32	50.68	-17.36	AVERAGE
7		0.369	31.12	0.00	0.00	31.12	58.52	-27.40	QP
8		0.369	26.85	0.00	0.00	26.85	48.52	-21.67	AVERAGE
9		0.817	27.72	0.00	0.00	27.72	46.00	-18.28	AVERAGE
10		0.817	28.98	0.00	0.00	28.98	56.00	-27.02	QP
11		1.269	26.16	0.01	0.00	26.17	46.00	-19.83	AVERAGE
12		1.269	28.60	0.01	0.00	28.61	56.00	-27.39	QP

Neutral Line:

Peak Scan:



Quasi-peak and Average measurement:

	Freq	Read Level	Cable Loss	LISN Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.165	51.18	0.00	0.00	51.18	65.21	-14.03	QP
2	0.165	41.36	0.00	0.00	41.36	55.21	-13.85	AVERAGE
3	0.203	44.74	0.00	0.00	44.74	63.49	-18.75	QP
4	0.203	34.95	0.00	0.00	34.95	53.49	-18.54	AVERAGE
5	0.325	33.50	0.00	0.00	33.50	59.57	-26.07	QP
6	0.325	25.82	0.00	0.00	25.82	49.57	-23.75	AVERAGE
7	0.647	16.27	0.00	0.00	16.27	46.00	-29.73	AVERAGE
8	0.647	19.62	0.00	0.00	19.62	56.00	-36.38	QP
9	1.381	11.66	0.02	0.00	11.68	46.00	-34.32	AVERAGE
10	1.381	17.96	0.02	0.00	17.98	56.00	-38.02	QP
11	26.558	24.04	0.20	0.00	24.24	60.00	-35.76	QP
12	26.558	17.20	0.20	0.00	17.40	50.00	-32.60	AVERAGE

6.3 Harmonics Test Results

Test Requirement:	EN 61000-3-2
Test Method:	N/A: See Remark Below
Frequency Range:	100Hz to 2kHz

There is no need for Harmonics test to be performed on this product (rated power is less than 75W) in accordance with EN 61000-3-2:2000 +A2:2005.

For further details, please refer to Clause 7, Note 1 of EN 61000-3-2 which states:

"For the following categories of equipment limits are not specified in this edition of the standard.

Note 1: Equipment with a rated power of 75W or less, other than lighting equipment."

6.4 Flicker Test Result

Test Requirement:	EN 61000-3-3
Test Method:	N/A: See Remark Below

There is no need for Flicker test to be performed on this product in accordance with EN 61000-3-3:1995 + A1:2001.

For further details, please refer to Clause 6.1 of EN 61000-3-3 which states:

"For voltage changes caused by manual switching, equipment is deemed to comply without further testing if the maximum r.m.s. input current (including inrush current)evaluated over each 10 ms half-period between zero-crossings does not exceed 20 A, and the supply current after inrush is within a variation band of 1,5A.."

7 Immunity Test Results

7.1 Performance Criteria Description in Clause 7 of EN 55024

Criterion A: The equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

Criterion B: After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance.

During the test, degradation of performance is allowed. However, no change of operating state or stored data is allowed to persist after the test.

If the minimum performance level (or the permissible performance loss) is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

Criterion C: Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions.

Functions, and/or information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

7.2 ESD

Test Requirement:	EN 55024	
Test Method:	EN 61000-4-2	
Criterion required:	B	
Test Date:	09 February 2007 (Initial test)	
	12 March 2007 (Test after modifications)	
Discharge Impedance:	330 Ω / 150 pF	
Discharge Voltage:	Air Discharge:	2, 4, 8 kV
	Contact Discharge:	2, 4, 8 kV
	VCP, HCP:	2, 4 kV
Polarity:	Positive & Negative	
Number of Discharge:	Minimum 10 times at each test point	
Discharge Mode:	Single Discharge	
Discharge Period:	1 second minimum	

7.2.1E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 50 % RH Atmospheric Pressure: 1010 mbar

EUT Operation: Test the EUT in communication mode and standby mode, running the software supply by application.

7.2.2 Test Results

Direct Application Test Results

Observations: Test Point:

1. All insulated enclosure & seams.
2. All accessible metal parts of the enclosure.

Direct Application			Test Results	
Discharge Level (kV)	Polarity (+/-)	Test Point	Contact Discharge	Air Discharge
2, 4, 8	+/-	1	N/A	B
2, 4	+/-	2	Note1	N/A

Indirect Application Test Results

Observations: Test Point: 1. All sides.

Indirect Application			Test Results	
Discharge Level (kV)	Polarity (+/-)	Test Point	Horizontal Coupling	Vertical Coupling
2, 4	+/-	1	A	A

Results:

A: No degradation in the performance of the EUT was observed.

B: During test the EUT stopped working temporality, after test it could recover automatically.

N/A: Not Applicable(not required by Standard).

Note1: The contact discharge to the EUT was not possible since the metal pates of the EUT were not accessible.

7.3 Radiated Immunity

Test Requirement: EN 55024
Test Method: EN 61000-4-3
Criterion required: A
Test Date: 12 February 2007
Frequency Range: 80MHz to 1GHz
Antenna Polarization: Horizontal & Vertical
Severity: 3V/m 80%, 1kHz Amplitude Modulated

7.3.1E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1011 mbar

EUT Operation: Test the EUT in communication mode and standby mode, running the software supply by application.

7.3.2Test Results

Frequency	Level	Modulation	EUT Face	Result / Observations
80MHz-1GHz	3V/m	1kHz, 80% Amp. Mod, 1% increment	0°V	A
			0°H	
			90°V	A
			90°H	
			180°V	A
			180°H	
			270°V	A
			270°H	

Remarks:

A: No degradation in the performance of the E.U.T. was observed.

7.4 Electrical Fast Transients (EFT)

Test Requirement:	EN 55022
Test Method:	EN 61000-4-4
Criterion required:	B
Test Date:	09 February 2007 (Initial test)
	08 March 2007 (Test after modifications)
Test Level:	0.5, 1.0kV on AC
Polarity:	Positive & Negative
Repetition Frequency:	5kHz
Burst Duration:	300ms
Test Duration:	2 minute per level & polarity

7.4.1E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 50 % RH Atmospheric Pressure: 1013 mbar

EUT Operation: Test the EUT in communication mode and standby mode, running the software supply by application.

7.4.2Test Results On AC Supply:

Lead under Test	Level (±kV)	Coupling Direct/Clamp	EUT operating mode	Observations (Performance Criterion)
Live	±0.5, 1.0	Direct	Communication mode and standby mode	(B)
Neutral	±0.5, 1.0	Direct	Communication mode and standby mode	(B)
Earth	±0.5, 1.0	Direct	Communication mode and standby mode	(B)
Live + Neutral + Earth	±0.5, 1.0	Direct	Communication mode and standby mode	(B)

B: During test the EUT stopped working temporality, after test it could recover automatically.

7.5 Surge

Test Requirement:	EN 55024
Test Method:	EN 61000-4-5
Criterion required::	B
Test Date:	09 March 2007
Test Level:	±1kV Live to Neutral
Polarity:	Positive & Negative
Generator source impedance:	2Ω
Trigger Mode:	Internal
No. of surges:	5 positive, 5 negative at 0°, 90°, 180°, 270°.

7.5.1E.U.T. Operation

Operating Environment:

Temperature: 20 °C Humidity: 45 % RH Atmospheric Pressure: 1020 mbar

EUT Operation: Test the EUT in communication mode and standby mode, running the software supply by application.

7.5.2Test Results:

Pulse No	Line-Line	Level (kV)	Surge Interval	Phase (deg)	Observation (Performance Criterion)
1–5	L-N	+1	60s	0°	No loss of performance (A)
6–10	L-N	-1	60s	0°	(A)
11–15	L-N	+1	60s	90°	(A)
16–20	L-N	-1	60s	90°	(A)
21–25	L-N	+1	60s	180°	(A)
26–30	L-N	-1	60s	180°	(A)
31–35	L-N	+1	60s	270°	(A)
36–40	L-N	-1	60s	270°	(A)
41–45	L-PE	+2	60s	0°	(A)
46–50	L-PE	-2	60s	0°	(A)
51–55	L-PE	+2	60s	90°	(A)
56–60	L-PE	-2	60s	90°	(A)
61–65	L-PE	+2	60s	180°	(A)
66–70	L-PE	-2	60s	180°	(A)
71–75	L-PE	+2	60s	270°	(A)
76–80	L-PE	-2	60s	270°	(A)
81–85	N-PE	+2	60s	0°	(A)
86–90	N-PE	-2	60s	0°	(A)
91–95	N-PE	+2	60s	90°	(A)
96–100	N-PE	-2	60s	90°	(A)
101–105	N-PE	+2	60s	180°	(A)
106–110	N-PE	-2	60s	180°	(A)
111–115	N-PE	+2	60s	270°	(A)
116–120	N-PE	-2	60s	270°	(A)

7.6 Conducted Immunity 0.15MHz to 80MHz

Test Requirement: EN 55024
Test Method: EN 61000-4-6
Criterion required: A
Test Date: 09 February 2007
Frequency Range: 0.15MHz to 80MHz
Test level: 3V rms on AC Ports (unmodulated emf into 150 Ω)
Modulation: 80%, 1kHz Amplitude Modulation

7.6.1E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 48 % RH Atmospheric Pressure: 1008 mbar

EUT Operation: Test the EUT in communication mode and standby mode, running the software supply by application.

7.6.2Test Results:

Frequency	Line	Test Level	Modulation	Step Size	Dwell Time	Observation (Performance Criterion)
150kHz to 80MHz	3 Wire AC Supply Cable	3Vrms	80%, 1kHz Amp. Mod.	1%	2S	No Loss of Function (A)

7.7 Voltage Dips and Interruptions

Test Requirement: EN 55024

Test Method: EN 61000-4-11

Criterion required: >95%VD,0.5period: B; >95%VD,250periods: C;
30%VD, 25periods: C

Test Date: 09 February 2007

Test Level: 0% of U_T (Supply Voltage) for 0.5 Periods
0% of U_T (Supply Voltage) for 250 Periods
70 % of U_T (Supply Voltage) for 25 Periods

No. of Dips / Interruptions: 3 per Level

7.7.1E.U.T. Operation

Operating Environment:

Temperature: 20 °C Humidity: 45 % RH Atmospheric Pressure: 1020 mbar

EUT Operation: Test the EUT in communication mode and standby mode, running the software supply by application.

7.7.2Test Results:

EUT operating mode	Test Level % U_T	Phase	Duration of dropout in Periods	No of dropout	Time between dropout	Observations (Performance Criterion)
Communication mode and standby mode	0	0°	0.5	3	10s	No Loss of Function (A)
Communication mode and standby mode	0	180°	0.5	3	10s	No Loss of Function (A)
Communication mode and standby mode	0	0°	250	3	10s	(C)
Communication mode and standby mode	70	0°	25	3	10s	No Loss of Function (A)

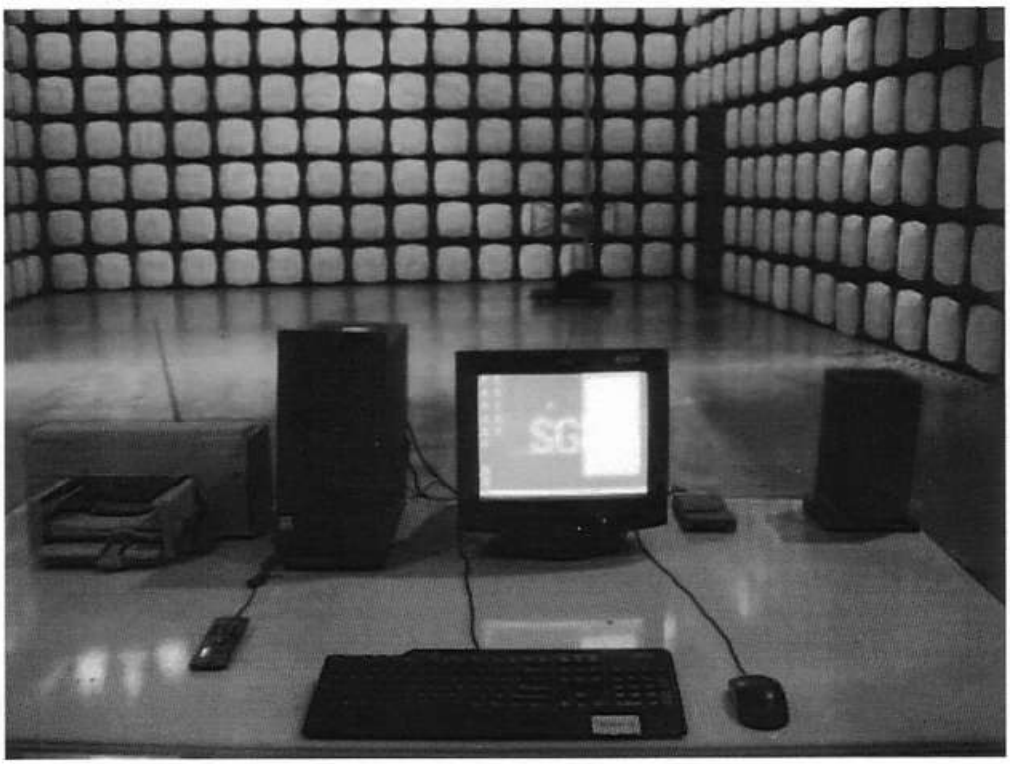
Remark:

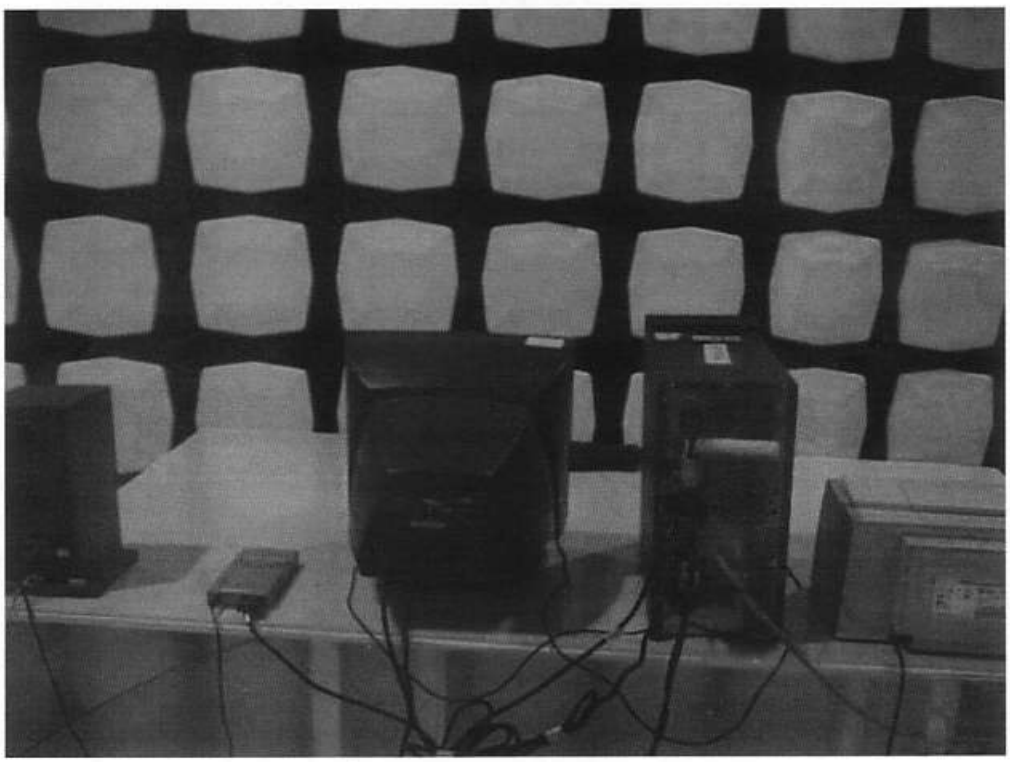
C: During test the EUT stopped working, after test it could recover by operator.

Performance C is within the acceptable criterion for Voltage Dips and Interruption test.

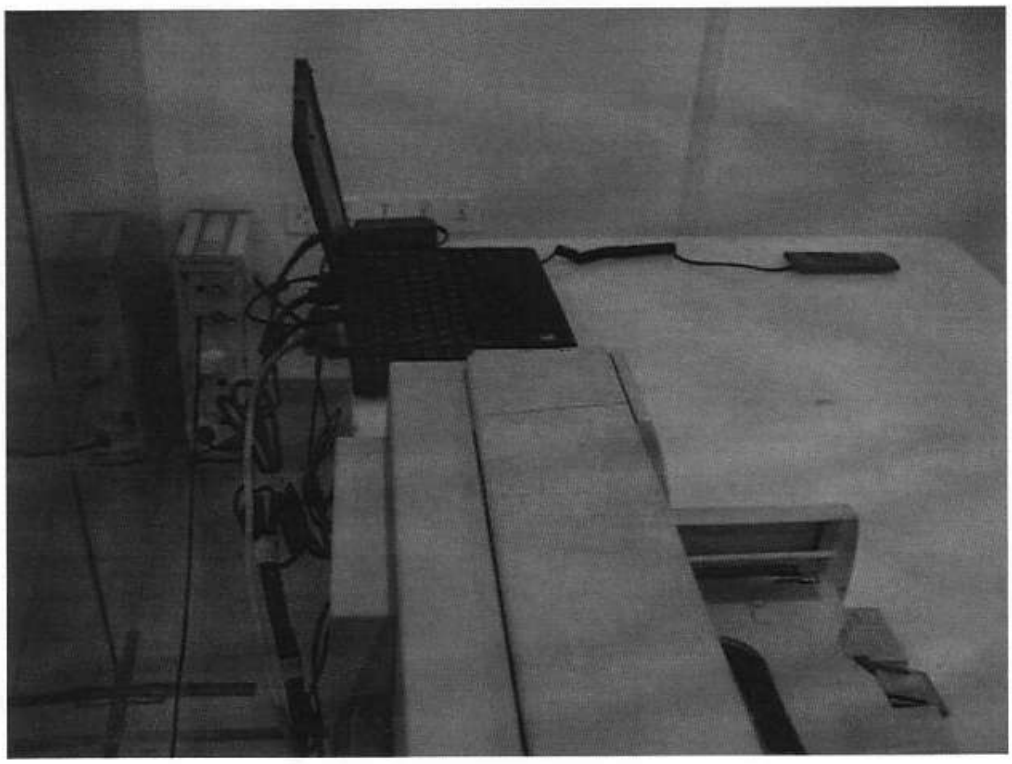
8 Photographs

8.1 Radiated Emission Test Setup in Chamber



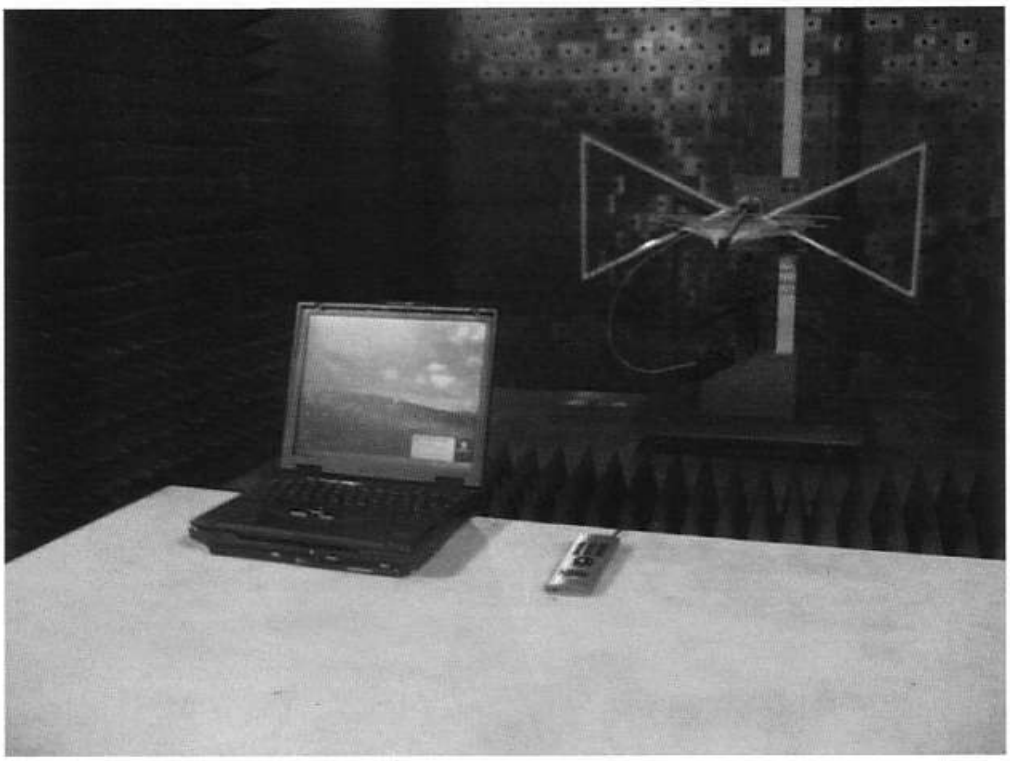


8.2 Conducted Emission Test Setup

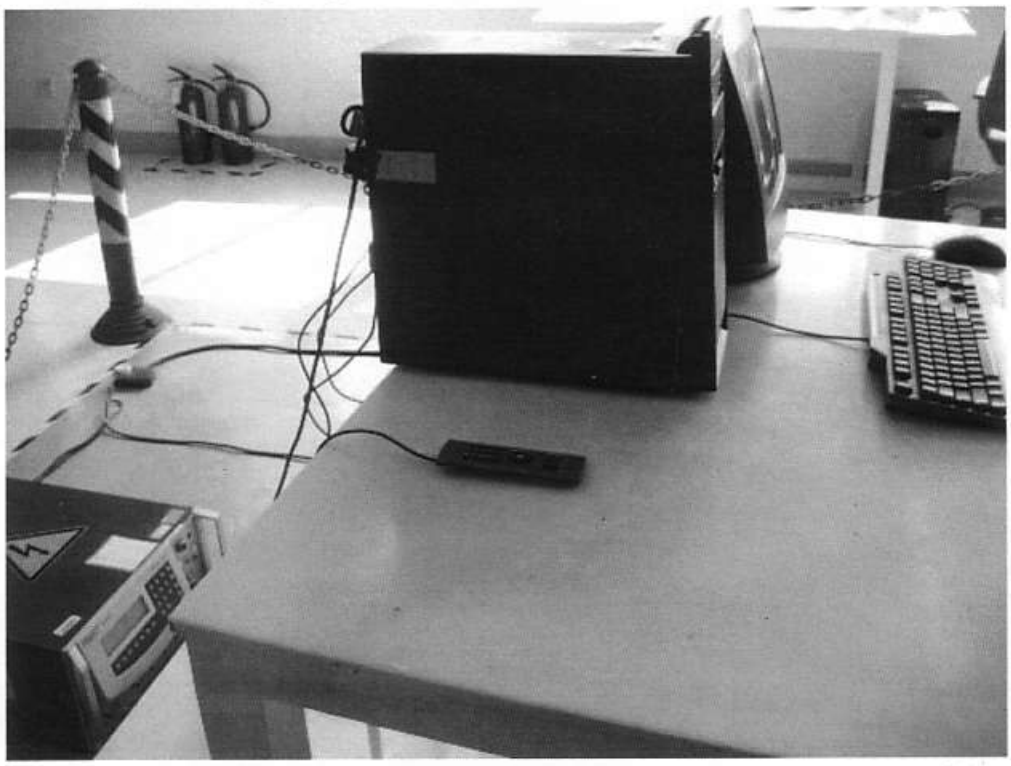


8.3 ESD Test Setup

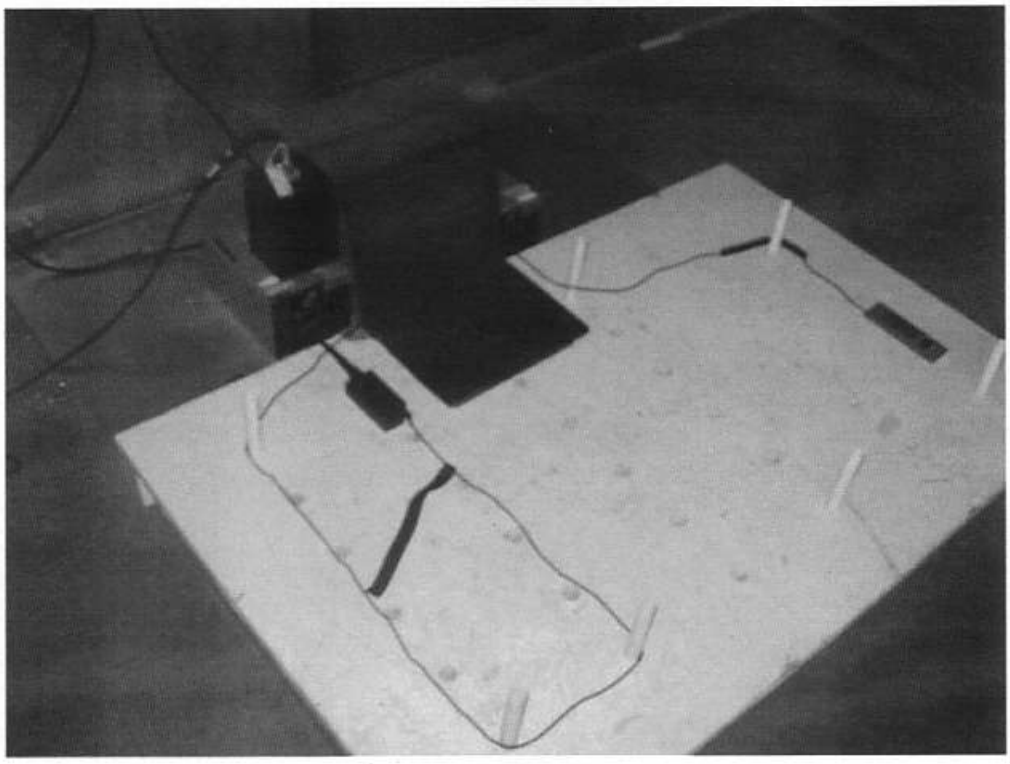
8.4 Radiated Immunity Test Setup



8.5 EFT, Surge,Voltage Dip and Interruption Test Setup



8.6 Conducted Immunity Test Setup



8.7 EUT Constructional Details

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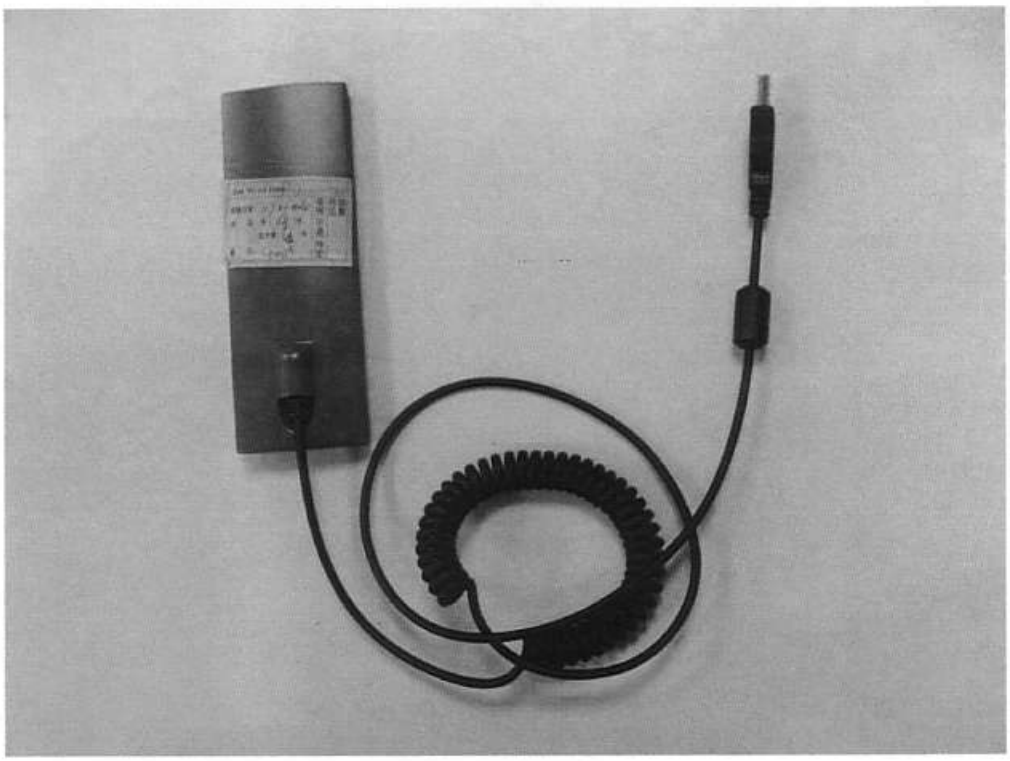

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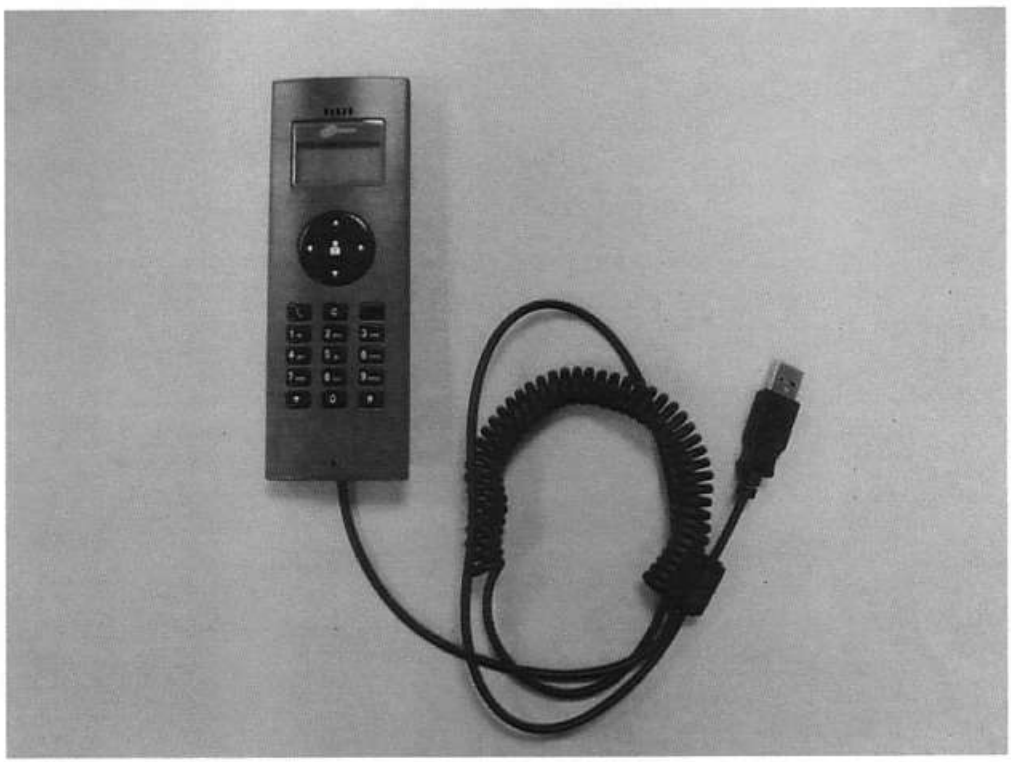

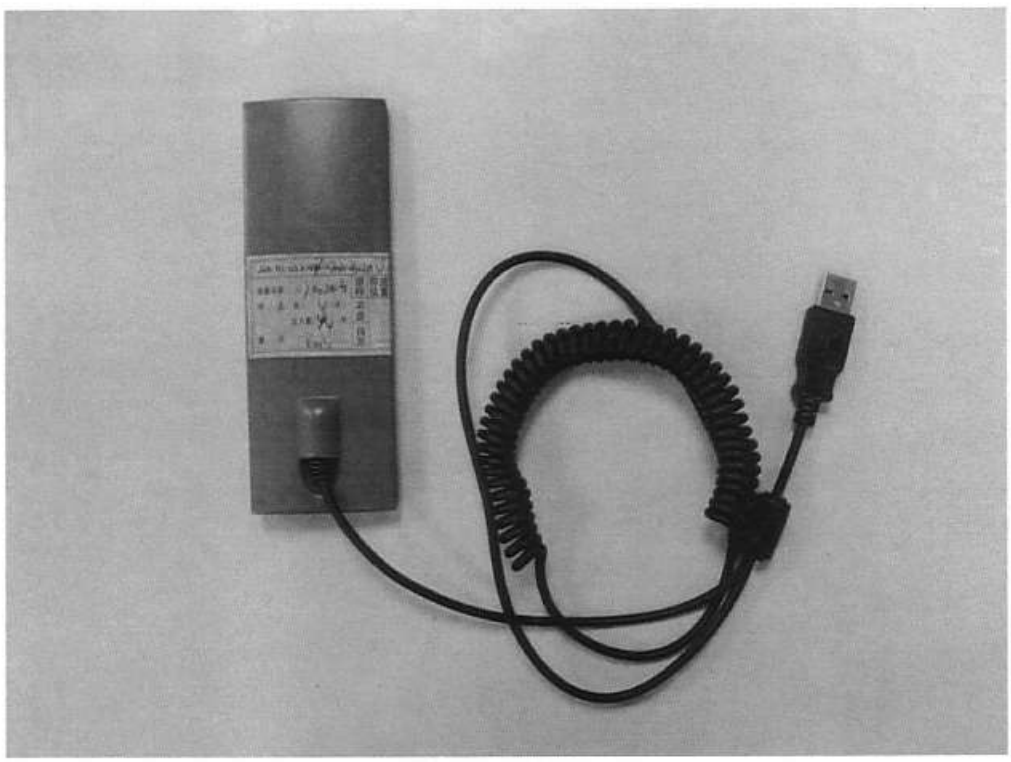

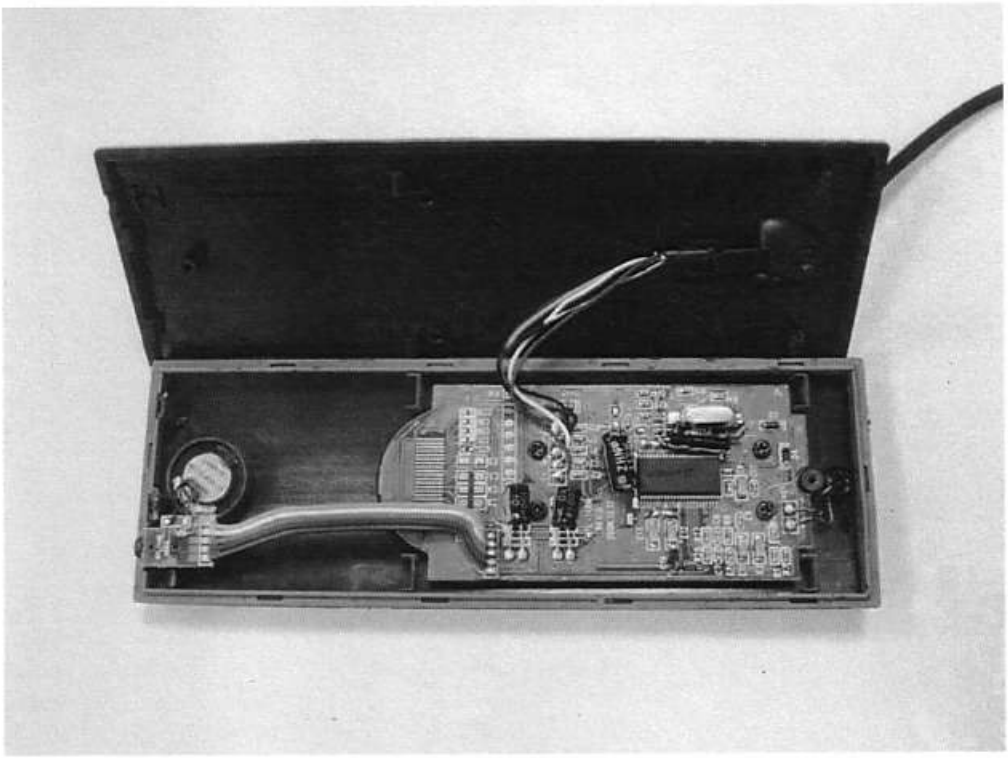

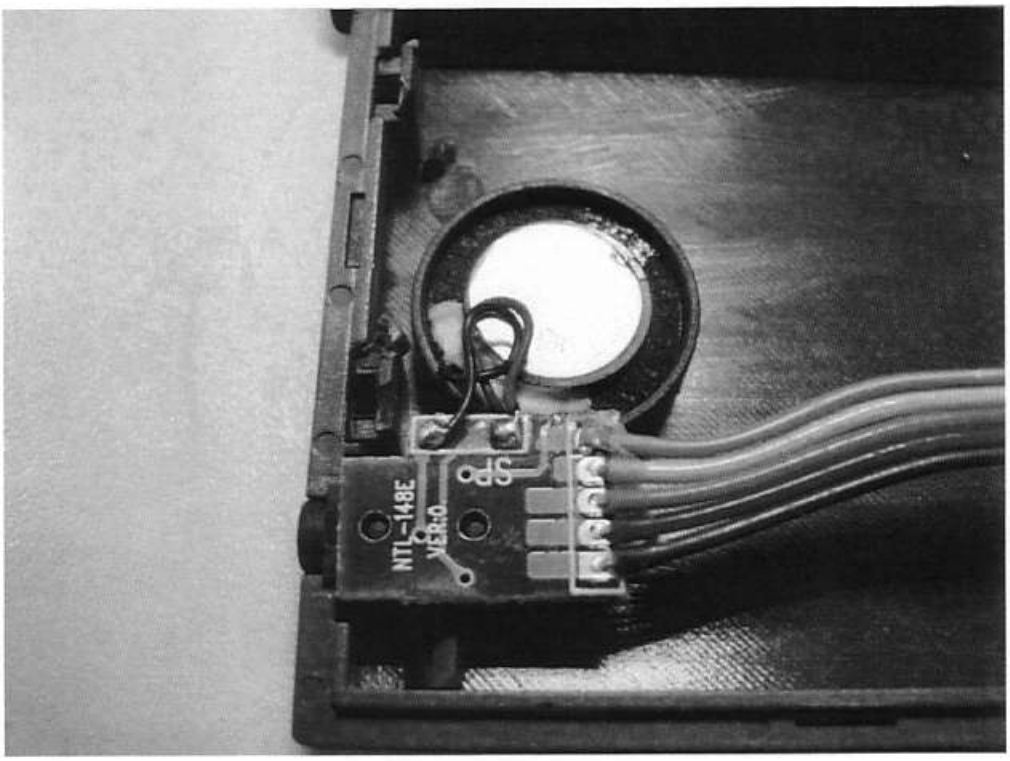
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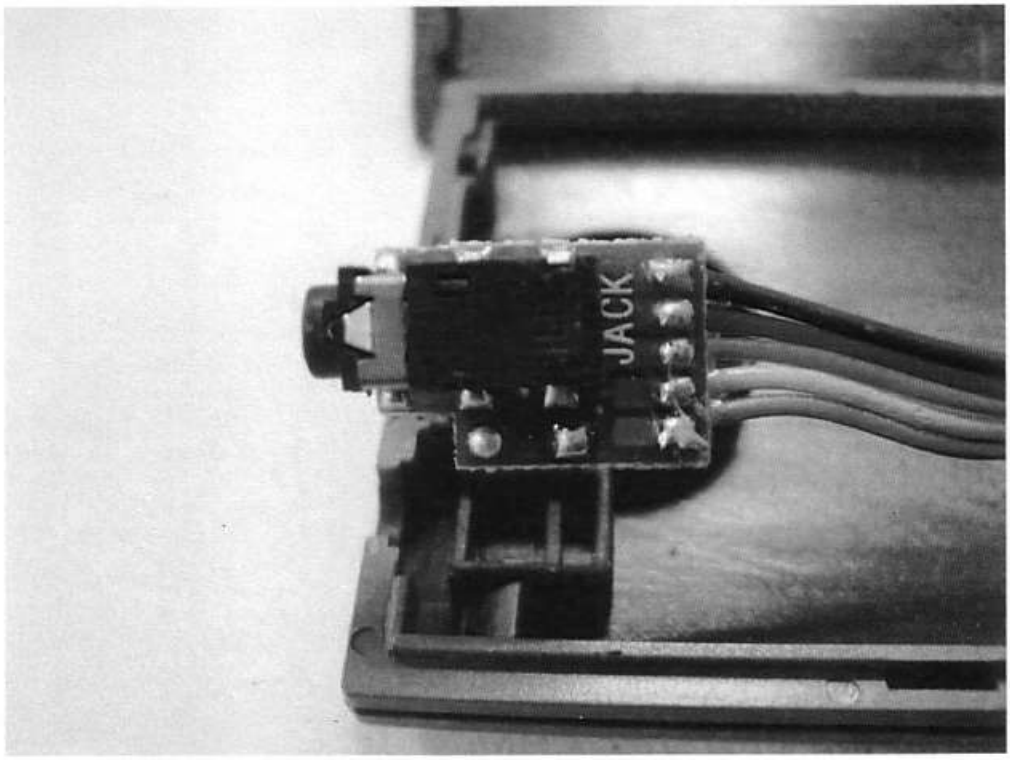
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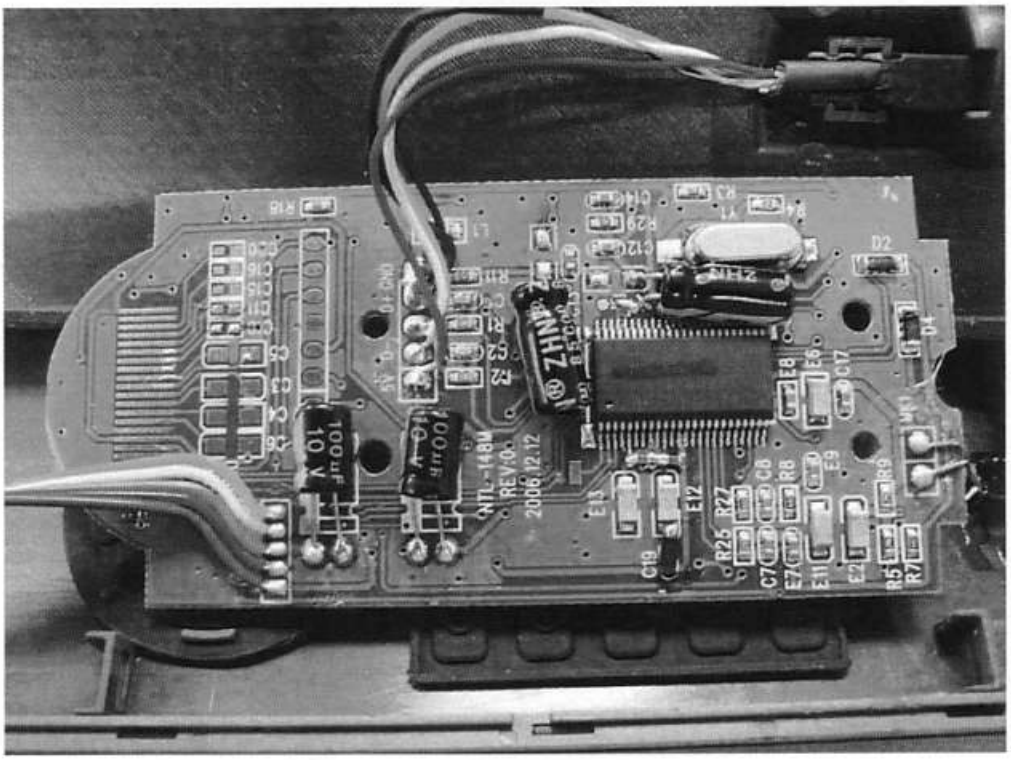
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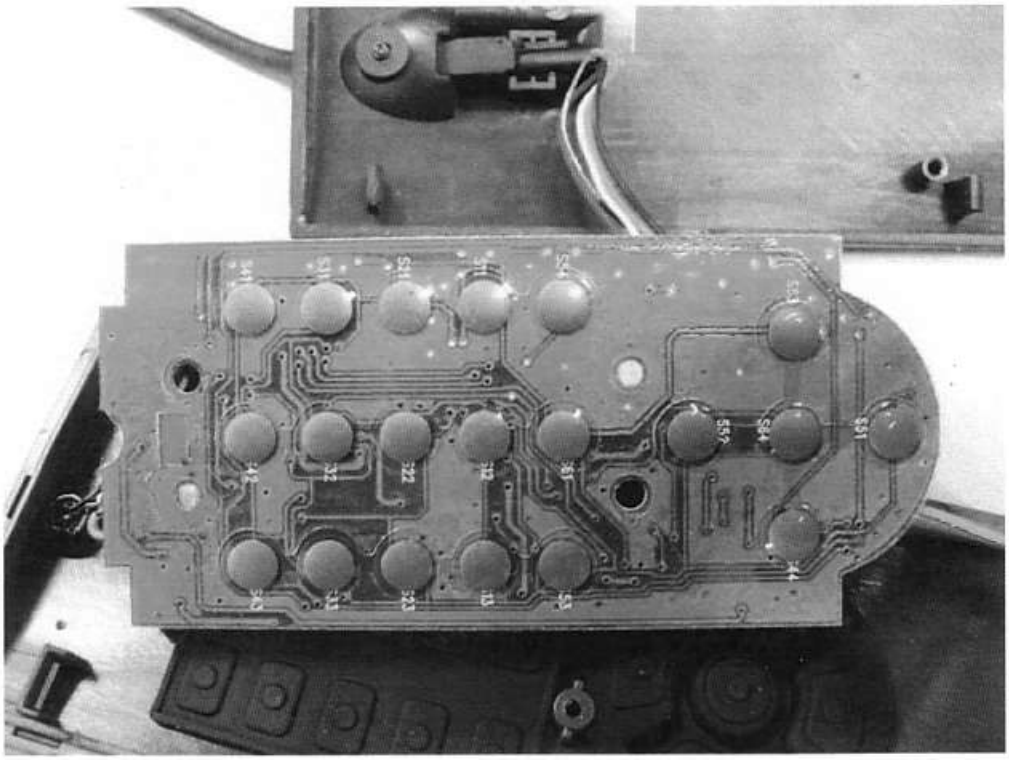

EC Declaration of Conformity

Council Directive 2004/108/EC on Electromagnetic Compatibility

We, ISS MANUFACTURING LTD.
UNIT 604-606, 6/F., PHASE II, CHAI WAN INDUSTRIAL CITY, 70 WING TAI ROAD, CHAI WAN, HONGKONG

Certify that the product described is in conformity with the Directive 2004/108/EC as last amended by Directive 93/68/EEC

Product Name: USB PHONE
Item No: STX-5013 / STY-5015

The product has been assessed by the application of the following standards:

EN 55022 : 1998+A1:2000+A2:2003
EN 55024 :1998+A1: 2001+A2:2003
EN 61000-3-2:2000 +A2:2005
EN 61000-3-3 : 1995 + A1: 2001

Issue date

Company stamp and Signature
of authorized personnel