Prüfbericht - Nr.: *Test Report No.*	**02421350 001**	Seite *Page*	1	von *of*	19

Auftraggeber: *Client:*	**Sling Media, Inc.** 901, Mariners Island Blvd. Suite 300, San Mateo CA 94404 USA
Gegenstand der Prüfung: *Test item:*	**Multimedia equipment**

Bezeichnung: *Identification:*	**SB150-110**	**Serien-Nr.:** *Serial No.*	**proto type FCC1**
Wareneingangs-Nr.: *Receipt No.:*	**1403002766**	**Eingangsdatum:** *Date of receipt:*	**26th April 2006**

Prüfort: *Testing location:*	**Refer to section 2.1**
Prüfgrundlage: *Test specification:*	**FCC Title 47, Part 15, Subpart B 2005(class B)** **The test procedures are followed as give in the standard ANSI C63.4 2003, EIA/TIA 603 and MP-5.**
Prüfergebnis: *Test Result*	**Der vorstehend beschriebene Prüfgegenstand wurde geprüft und entspricht oben genannter Prüfgrundlage.** The a. m. test item passed.

Prüflaboratorium / *Testing Laboratory:* ***TÜV Rheinland (India) Pvt., ltd***

zusammengestellt/ compiled by:B.S. Ravi ndra Kumar

8th September 2006
Datum *Date* **Unterschrif** *Signature*

kontrolliert/ Reviewed by: G. Kalyan Varma

11th September 2006
Datum *Date* **Unterschrift** *Signature*

Sonstiges / *Other Aspects:*

remarks

Abkürzungen:				Abbreviations:			
	ok / P	=	entspricht Prüfgrundlage		ok / P	=	passed
	fail / F	=	entspricht nicht Prüfgrundlage		fail / F	=	failed
	n.a. / N	=	nicht anwendbar		n.a. / N	=	not applicable

TEST SUMMARY

5.1.1 MAINS TERMINAL CONTINUOUS DISTURBANCE VOLTAGE

RESULT: *PASS*

5.2.1 RADIATED EMISSION (RE)

RESULT: *PASS*

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1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report.

1.2 FCC Cross-reference Table

The results of emission measurements and product related information contained in this test report and the attached materials relate to the contents of the FCC standard report in the following way:

FCC § / heading	
1.1 Product Description	Refer user manual attachment
1.2 Related Submittals	----
1.3 Tested System Details	Refer user manual attachment
1.4 Test Methodology	see 5.1, 5.2
1.5 Test Facility	see 2.1
2.1 FCC ID Label	Refer label attachment
2.2 Location of Label on EUT	Refer label location attachment
3.1 Justification	See 4.1
3.2 EUT Exercise Software	See 4.3
3.3 Special Accessories	See 4.4,
3.4 Equipment Modifications	---
3.5 Configuration of Tested System	See 4.2
4.1 Block Diagram	Refer block diagram attachment

2. Test Sites

2.1 Test Facilities

This test site is FCC listed site for measurement of radio interference.

Location 1:
SAMEER – Centre for electromagnetics
2nd cross Road, CIT campus,
Taramani – Chennai – 600113

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

kind of equipment	manufacturer	type	S/N	calibrated until
EMI Receiver	R&S	ESCS-30	100063	21/08/06
Bilog antenna	ETS	3142B	00026416	19/06/07
Horn Antenna	R&S	HF906	100108	24/05/07
EMI Receiver	R&S	ESI 26	100070	03/10/06
LISN	R&S	ESH2-Z5	893606/023	10/07/07

3. General Product Information

3.1 Product Function and Intended Use

Refer to the user's manual

3.2 Ratings and System Details

System input voltage: 6V DC
System Input current: 2.4A max
System Protection class: III
AC adaptor input voltage: AC 100-240V
AC adaptor Frequency: 50/60Hz
AC adaptor Input current: 1 A Max
AC adaptor Protection class: II

EUT is supplied along with AC adaptor make: Sunny Computer Technology Europe; Model: SYS1298-1506-W2E

3.3 Independent Operation Modes

The basic operation modes are:
A. RF cable input mode
B. S Video input
C. Compsite video input
D. Idle mode.

It was observed from the prescans that the maximum emissions were observed in RF cable input mode. Hence entire testing was carried out in mode A i.e, RF cable input mode. All tests were carried out at 120V AC/ 60Hz.

The requirements of section 15.111 and section 15.117 and 15.118 of FCC part 15 are considered by the manufactuer and not part of this report. Manufacturer followed the verification procedure for the requirements of TV broadcast receiver.

3.4 Noise Generating and Noise Suppressing Parts

Refer to the technical documentation and schematics

3.5 Submitted Documents

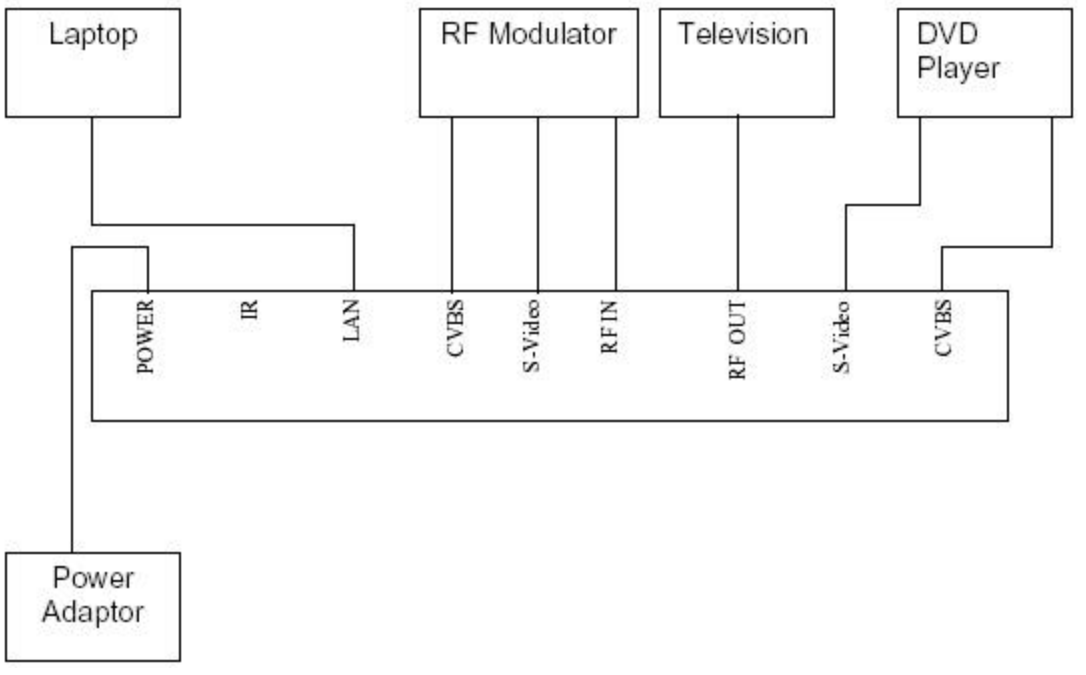
Technical Construction File

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Physical Configuration for Testing



4.3 Test Operation and Test Software

slingplayer software Ver0.27 used during testing

4.4 Special Accessories and Auxiliary Equipment

Special accessory supplied along with EUT

Item	Make/trade mark	Model	Serial number	Compliance details
AC/DC adaptor	Sunny Computer Technology Europe	SYS1298-1506-W2E	R06070414	FCC complied

Auxiliary equipment used for testing

Item	Make/trade mark	Model	Serial number	Compliance details
VCR	Samsung	SV-5000W	61AX501899D/XAA	FCC complied
Television	Philips	15PT2303/69R	BZ000420556517	FCC complied
Laptop	HP	Pavilion Dv1000	CNF4463DW8	FCC complied
DVD Player	Sony	DVPNS50P	--	FCC complied

4.5 Countermeasures to achieve EMC Compliance

The test sample, which has been tested contained the noise suppression parts as described in the schematics. No additional measures were employed to achieve compliance.

5. Test Results EMISSION

5.1 Emission in the Frequency Range up to 30 MHz

5.1.1 Mains Terminal Continuous Disturbance Voltage

RESULT: **PASS**

Date of testing:	July 24, 2006
Test procedure:	FCC Title 47, Part 15, Subpart B
Frequency range:	0.15 - 30MHz
Equipment classification:	class B
Kind of test site:	shielded room
Bandwidth	9KHz
Ambient temperature	25°C
Humidity	50% RH

Disturbances other than those mentioned are small or not detectable. The measurement was done in peak detection mode. As the Peak plot is less than Average limits thus Quaispeak measurement was not carried out. The below mentioned table for conducted emission displays the value for Peak and Average.
The following spectral diagrams display the measurement of unweighted peak values.

Figure 1: Spectral Diagrams, Conducted Emission, (0.15 - 30) MHz, Phase

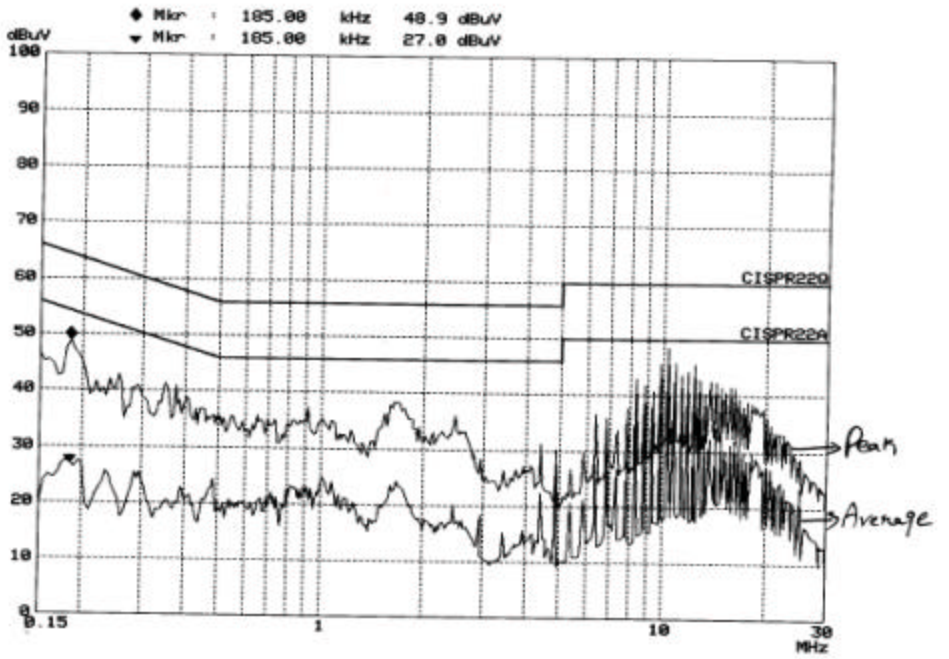


Figure 2: Spectral Diagrams, Conducted Emission, (0.15 - 30) MHz, Neutral

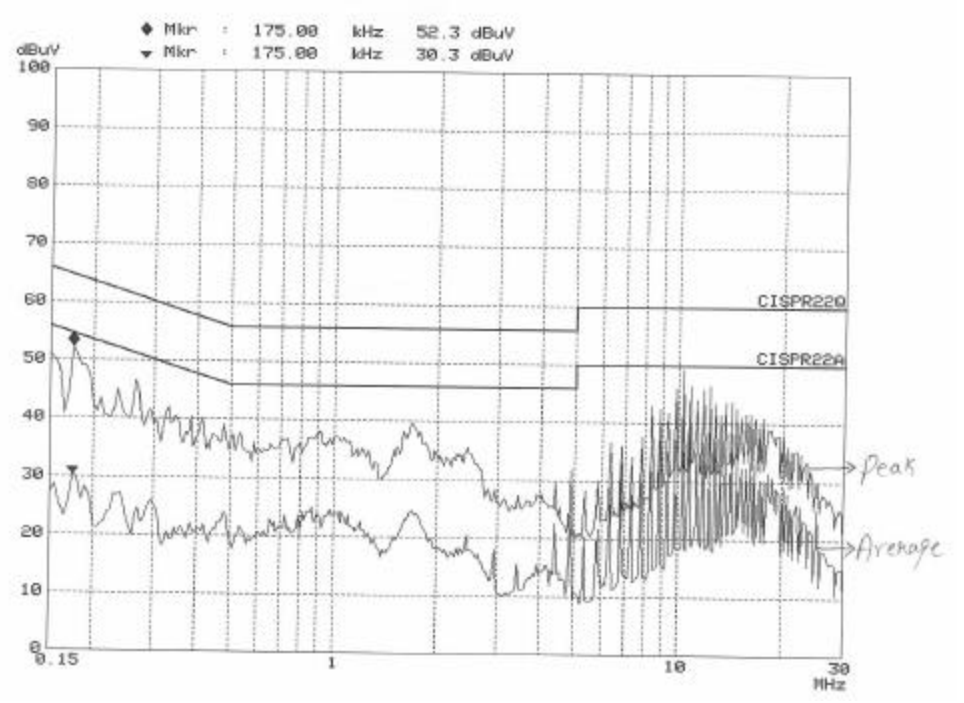


Table 2: Conducted Emission (0.15 - 30) MHz, Peak and Average Data

Frequency [MHz]	Measured Peak [dB(µV)]	Measured Average [dB(µV)]	QuasiPeak Limit [dB(µV)]	Average Limit [dB(µV)]
0.185	48.90	27.00	65.00	55.00
0.355	41.40	21.80	58.00	48.00
1.70	38.20	25.00	56.00	46.00
9.90	46.30	33.70	60.00	50.00
10.20	48.00	35.10	60.00	50.00
11.50	46.50	34.30	60.00	50.00

5.2 Emission in the Frequency Range above 30 MHz

5.2.1 Radiated Emission (RE)

RESULT: **PASS**

Date of testing:	August 28, 2006
Test procedure:	FCC Title 47, Part 15, Subpart B
Frequency range:	30MHz - 3GHz
Equipment classification:	class B
Measurement distance:	3m
Kind of test site:	semi anechoic chamber
Bandwidth	120KHz
Ambient temperature/Humidity	28°C / 55% (anechoic chamber)

Disturbances other than those mentioned are small or not detectable.

Note: The EMI test receiver (make R&S model ESI 26) was used for measuring radiated emission from the EUT in the semi anechoic chamber. Transducer table settings are available to enter the cable loss & antenna factor in the receiver to get the field strength (dBµV/m) values from the display. So manul calculation is not necessary.

For example:
E (dBµV/m) = V(dBµV) +AF…….Eq.1
Where
E (dBµV/m) = Field strength
V (dBµV) = receiver two terminal voltage
AF = Antenna factor + cable loss

Radiated emission from the EUT was measured in anchoic chamber at 3 meter distance for both horizontal and vertical polarization and antenna height was varied to maximize the emission. The manipulation of interconnecting cables was done to identify maximum emissions in the frequency range of 30MHz – 3000MHz from the EUT. Antenna height was varied upto 4 meters to maximize the emission. The manipulation of interconnecting cables was done to identify maximum emissions. The photograph shows the maximum emission condition. Measurements were carried out in Peak detection mode for the frequency range 30 – 1000MHz and for selected frequencies, Quasi peak detection mode used. Above 1000MHz, Average Detector was used. Maximum operating frequency was 600MHz hence tested upto 3GHz.

Figure 3: Spectral Diagram, Radiated Emission 30MHz - 1000MHz, Vertical polarization

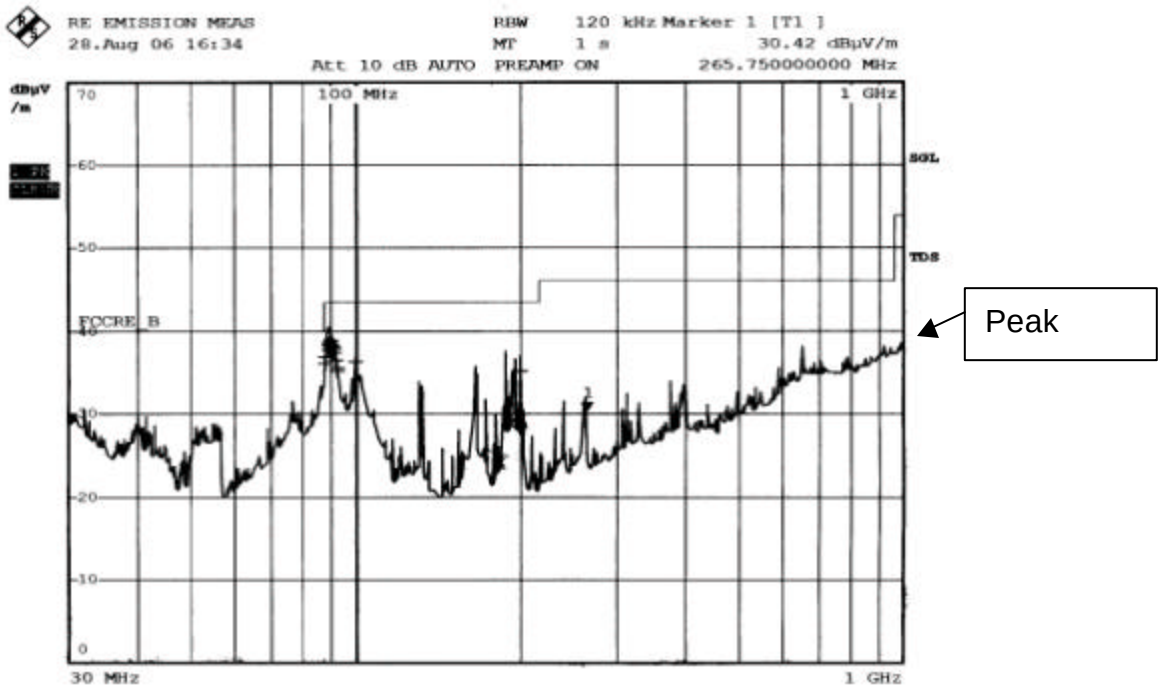


Figure 4: Spectral Diagram, Radiated Emission 1000MHz - 3000MHz, Vertical polarization

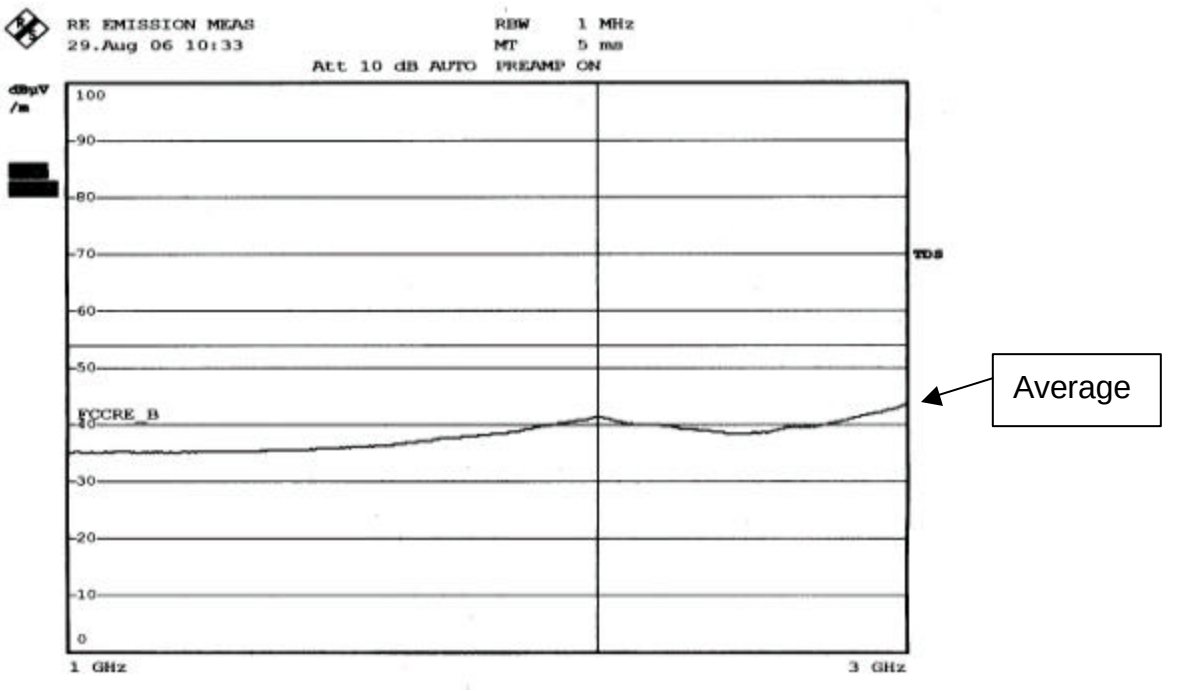


Figure 5: Spectral Diagram, Radiated Emission 30MHz - 1000MHz, Horizontal polarization

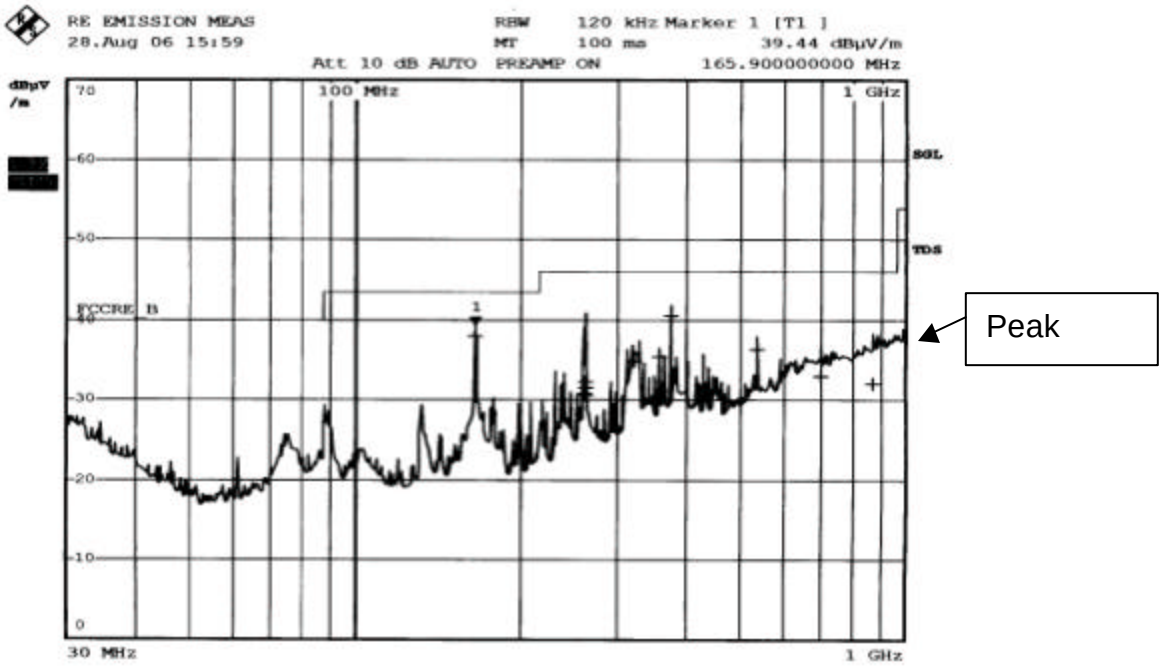


Figure 6: Spectral Diagram, Radiated Emission 1000MHz - 3000MHz, Horizontal polarization

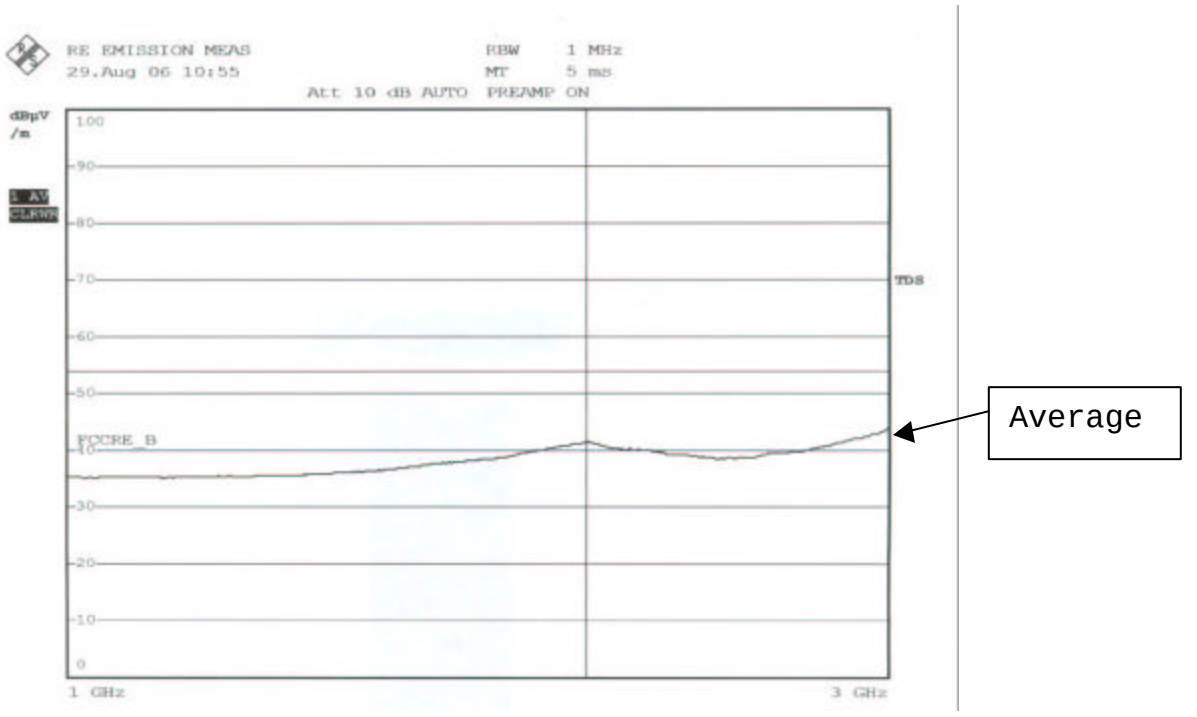


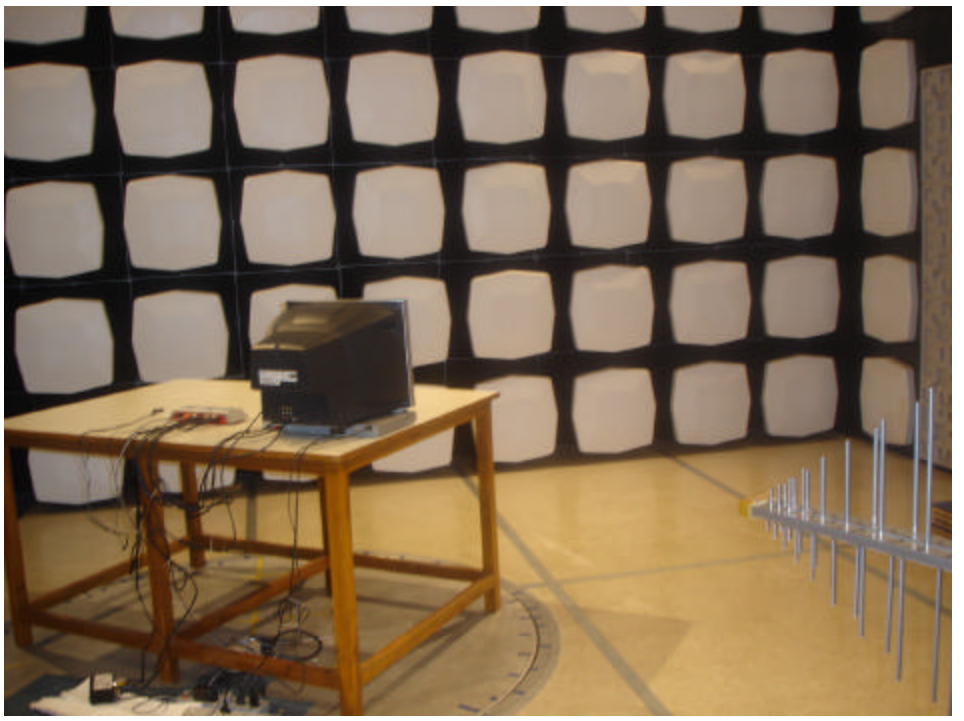
Table 3: Radiated Emission 30 – 3000MHz, Vertical and Horizontal Antenna Orientations,

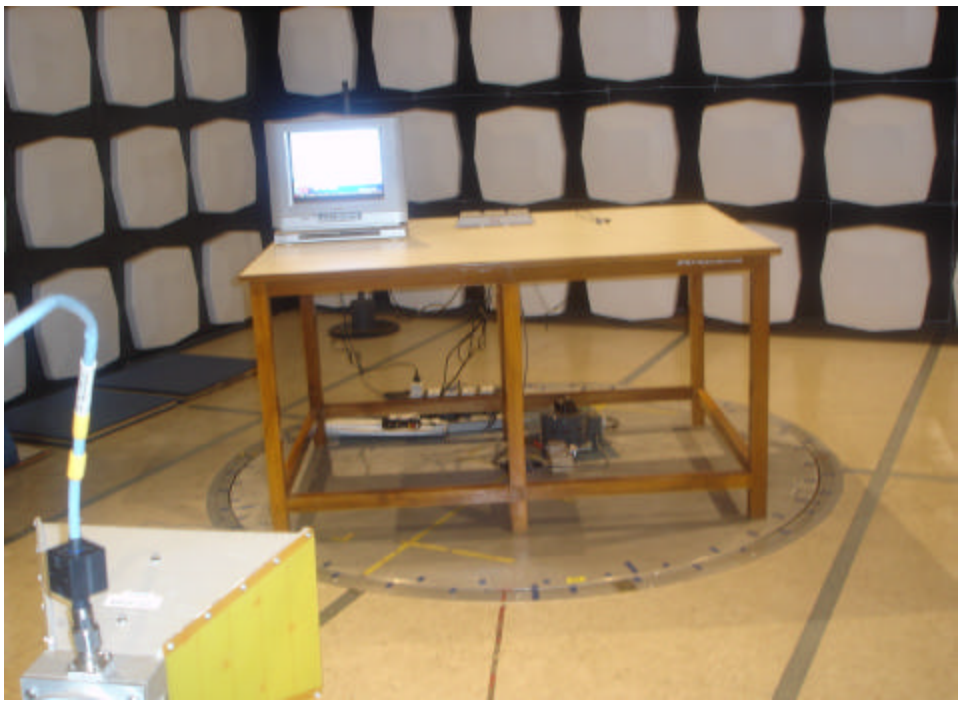
Freq (MHz)	Polarization	Antenna Height (Meters)	Table position (degrees)	Antenna factor (dBµV)	Cable loss (dBm)	E field value (dBµV/m)	Spec Limit (dBµV/m)
89.70	Vertical	1.1	225	8.70	0.75	39.00	43.00
200.00	Vertical	1.0	225	10.10	1.00	38.05	43.00
166.55	Vertical	1.0	135	9.40	1.07	39.45	43.00
85.55	Vertical	1.0	90	8.70	0.73	37.01	43.00
91.15	Vertical	1.1	225	8.70	0.75	37.88	46.00
664.15	Vertical	1.0	135	21.30	1.98	33.09	46.00
378.00	Horizontal	1.1	180	16.20	1.55	40.56	46.00
165.95	Horizontal	1.6	180	9.40	1.07	36.50	43.00
540.00	Horizontal	1.0	180	18.50	1.95	36.36	46.00
360.00	Horizontal	1.0	45	15.50	1.45	35.40	46.00
324.00	Horizontal	1.0	45	14.70	1.41	34.87	46.00
220.00	Horizontal	1.1	180	11.40	1.14	31.33	46.00

Photographs of the Test Set-Up

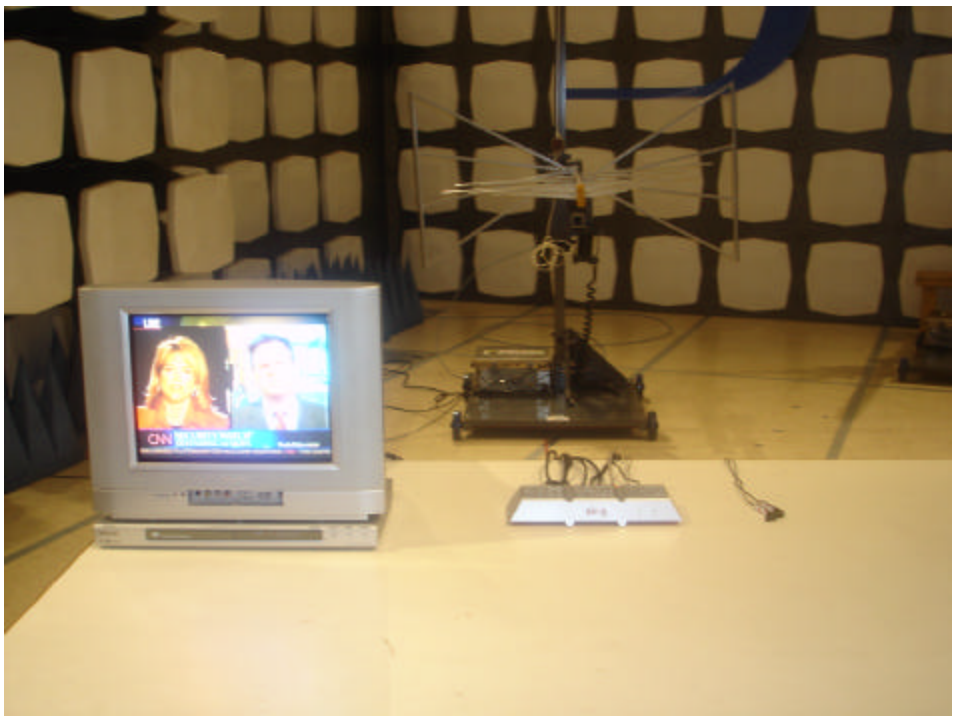
Photograph 1: Set-up for Conducted Emission on AC Mains

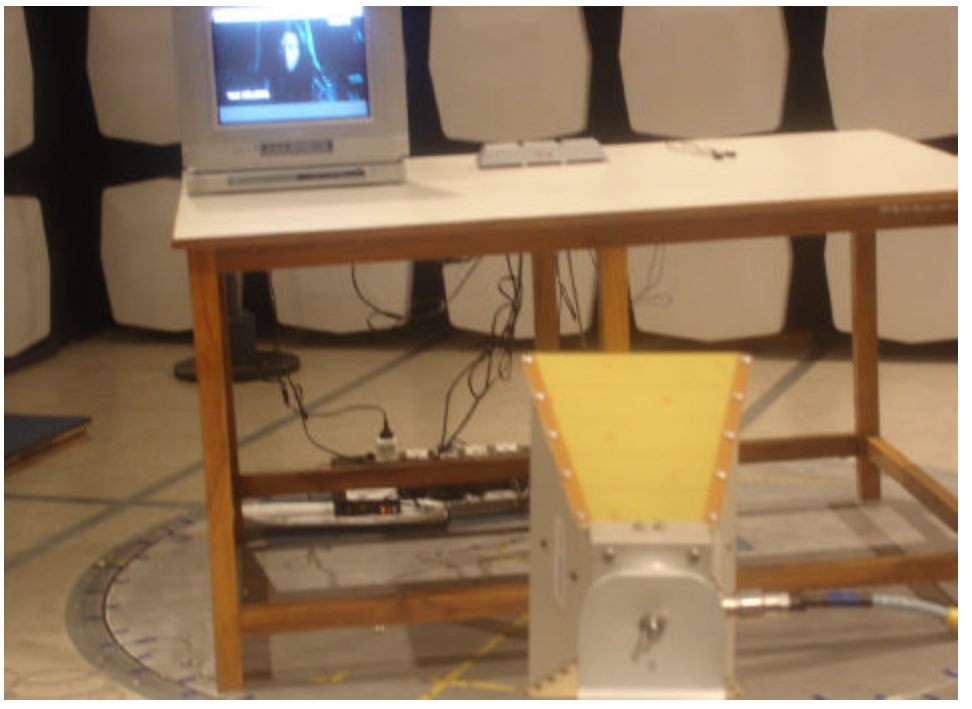
Photograph 2: Set-up for Radiated Emission in Vertical Orientation





Photograph 3: Set-up for Radiated Emission in Horizontal Orientation





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End of test report