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FEDERAL COMMUNICATIONS COMMISSION
Registration number: 282399

Report No.: GLEMO09100317402

Page: 1 of 15

FCC ID:XVP13502716783

Test Report

Application No.:	GLEMO091003174RF
Applicant:	JianFengYuan Toys Co., Ltd
Address of Applicant:	LIANNAN ROAD LIANXIA TOWN CHENHAI DISTRICT SHANTOU CITY GUANGDONG PROVINCE, CHINA
Equipment under Test (EUT)	
Name:	R/C Series
Model No.:	23528F, 23538F, 23328BF, 23358BF, 23378BF, 23558BF, 23568A, 23568B, 23611F, 23612F, 23613F, 23615F, 23616F, 23617F, 23618F, 23611BF, 23612BF, 23613BF, 23615BF, 23616BF, 23617BF, 23618BF, 23811A, 23812A, 23813A, 23815A, 23816A, 23817A, 23811B, 23812B, 23813, 23815B, 23816B, 23817B, 23911, 23912, 23913, 23915, 23838M, 23858M, 23588B, 23598B ♣
♣	Please refer to section 3 of this report which indicates which item was actually tested and which were electrically identical.
FCC ID:	XVP13502716783
Function:	Radio toys with 49.860MHz as a carrier.
Standards:	FCC PART 15, SUBPART B: 2008
Date of Issue:	27 October,2009
Test Result :	PASS *

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

Authorized Signature:

Stephen Guo
Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. 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.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.

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2 Version

Version No.	Date	Description
01	26 June 2009	Original

Prepared By:

David Liu

Date

2009-10-26

Project Engineer

Check By:

Gavin Wu

Date

2009-10-26

Reviewer



3 Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission (30MHz to 1GHz)	FCC PART 15, SUBPART B: 2008	ANSI C63.4:2003	Class B	PASS①
Conducted Emission (150 kHz to 30 MHz)	FCC PART 15 SUBPART B:2008	ANSI C63.4:2003	Class B	PASS

Remark:

♣ Item No.: 23528F, 23538F, 23328BF, 23358BF, 23378BF, 23558BF, 23568A, 23568B, 23611F, 23612F, 23613F, 23615F, 23616F, 23617F, 23618F, 23611BF, 23612BF, 23613BF, 23615BF, 23616BF, 23617BF, 23618BF, 23811A, 23812A, 23813A, 23815A, 23816A, 23817A, 23811B, 23812B, 23813, 23815B, 23816B, 23817B, 23911, 23912, 23913, 23915, 23838M, 23858M, 23588B, 23598B

Only the Item 23817A was tested, since the electrical circuit design, PCB layout, components used and internal wiring were identical for the above items, only the appearance, color and item numbers were different according to the conformation from the applicant (manufacturer).

①: The EUT passed the Radiated Emission test after modification.



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5 General Information

5.1 Details of E.U.T.

Power Supply:	4.8V DC rechargeable battery
Adapter information	Model:JN-04250DA Input: AC 110V 60Hz Output: DC 4.8V 250mA
Power Cord:	1.0m unscreened cable

5.2 Description of Support Units

The EUT was tested as an independent unit.

5.3 Standards Applicable for Testing

The standard used was FCC PART 15, SUBPART B, CLASS B (2008)

5.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory,
198 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District,
Guangzhou, China 510663

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

No tests were sub-contracted.

5.5 Deviation from Standards

None.

5.6 Abnormalities from Standard Conditions

The EUT passed the Radiated Emission test after modification.



5.7 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.

- **ACMA**

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 (Lab Code: 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.

- **Industry Canada (Registration No.: 4620B-1)**

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

Date of Registration: February 18, 2009. Valid until February 18, 2011.

- **VCCI (Registration No.: R-2460 and C-2584)**

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.

- **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2005, the Basic Rules, IECEE 01:2006-10 and Rules of procedure IECEE 02:2006-10, and the relevant IECEE CB-Scheme Operational documents.

This certificate was issued Dec.04.2006 and valid until Oct.12.2009.



6 Equipments Used during Test

RE in Chamber						
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	N/A	N/A
EMC0522	EMI Test Receiver	Rohde & Schwarz	ESIB26	100249	28-01-2009	28-01-2010
EMC0056	EMI Test Receiver	Rohde & Schwarz	ESCI	10036	14-07-2008	14-07-2009
N/A	EMI Test Software	Audix	E3	N/A	N/A	N/A
EMC0514	Coaxial cable	SGS	N/A	N/A	04-12-2008	04-12-2009
EMC0524	Bi-log Type Antenna	Schaffner -Chase	CBL6112B	2966	08-10-2008	08-10-2009
EMC0519	Bilog Type Antenna	Schaffner -Chase	CBL6143	5070	08-10-2008	08-10-2009
EMC0517	Horn Antenna	Rohde & Schwarz	HF906	100095	12-08-2008	12-08-2009
EMC0040	Spectrum Analyzer	Rohde & Schwarz	FSP30	100324	05-12-2008	05-12-2009
EMC0520	0.1-1300 MHz Pre-Amplifier	HP	8447D OPT 010	2944A06252	11-03-2009	11-03-2010
EMC0521	1-26.5 GHz Pre-Amplifier	Agilent	8449B	3008A01649	11-03-2009	11-03-2010
EMC0075	310N Amplifier	Sonoma	310N	272683	10-09-2008	10-09-2009
EMC0523	Active Loop Antenna	EMCO	6502	00042963	09-08-2008	09-08-2010
EMC0530	10m Semi- Anechoic Chamber	ETS	N/A	N/A	10-08-2008	10-08-2009

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	14-12-2008	14-12-2009
EMC0118	Two-line v-netwok	Rohde & Schwarz	ENV216	3560.6550.02	28-07-2008	28-07-2009
EMC0506	EMI Test Receiver	Rohde & Schwarz	ESCS30	100085	14-12-2008	14-12-2009
EMC0107	Coaxial Cable	SGS	2m	N/A	26-11-2008	26-11-2009
EMC0106	Voltage Probe	SGS	N/A	N/A	N/A	N/A
EMC0120	8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T8-02	20550	21-02-2009	21-02-2010
EMC0121	4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T4-02	20549	21-02-2009	21-02-2010
EMC0122	2 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T2-02	20548	21-02-2009	21-02-2010

General used equipment						
No:	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
EMC0006	DMM	Fluke	73	70681569	23-12-2008	23-12-2009
EMC0007	DMM	Fluke	73	70671122	23-12-2008	23-12-2009

7 Test Results

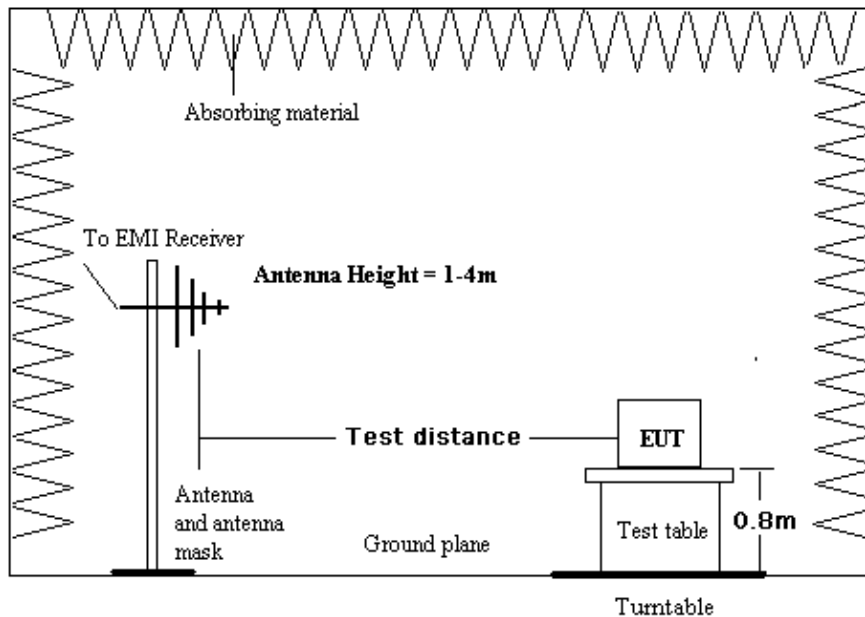
7.1 Radiated Emissions, 30MHz to 1GHz

Test Requirement: FCC Part15 B
 Test Method: ANSI C63.4:2003
 Test Date: 09 October 2009(Initial test)
 10 October 2009(Test after modifications)
 Frequency Range: 30MHz to 1GHz
 Measurement Distance: 3m
 Class: Class B
 Limit:
 40.0 dB μ V/m between 30MHz & 88MHz
 43.5 dB μ V/m between 88MHz & 216MHz
 46.0 dB μ V/m between 216MHz & 960MHz
 54.0 dB μ V/m above 960MHz
 Detector: Peak for pre-scan (120kHz resolution bandwidth)
 Quasi-Peak if maximised peak within 6dB of limit

7.1.1 E.U.T. Operation

Operating Environment:
 Temperature: 25.0 °C Humidity: 55 % RH Atmospheric Pressure: 1005 mbar
 EUT Operation: Test in EUT with motor running mode & charging mode

7.1.2 Test Setup



7.1.3 Measurement Data

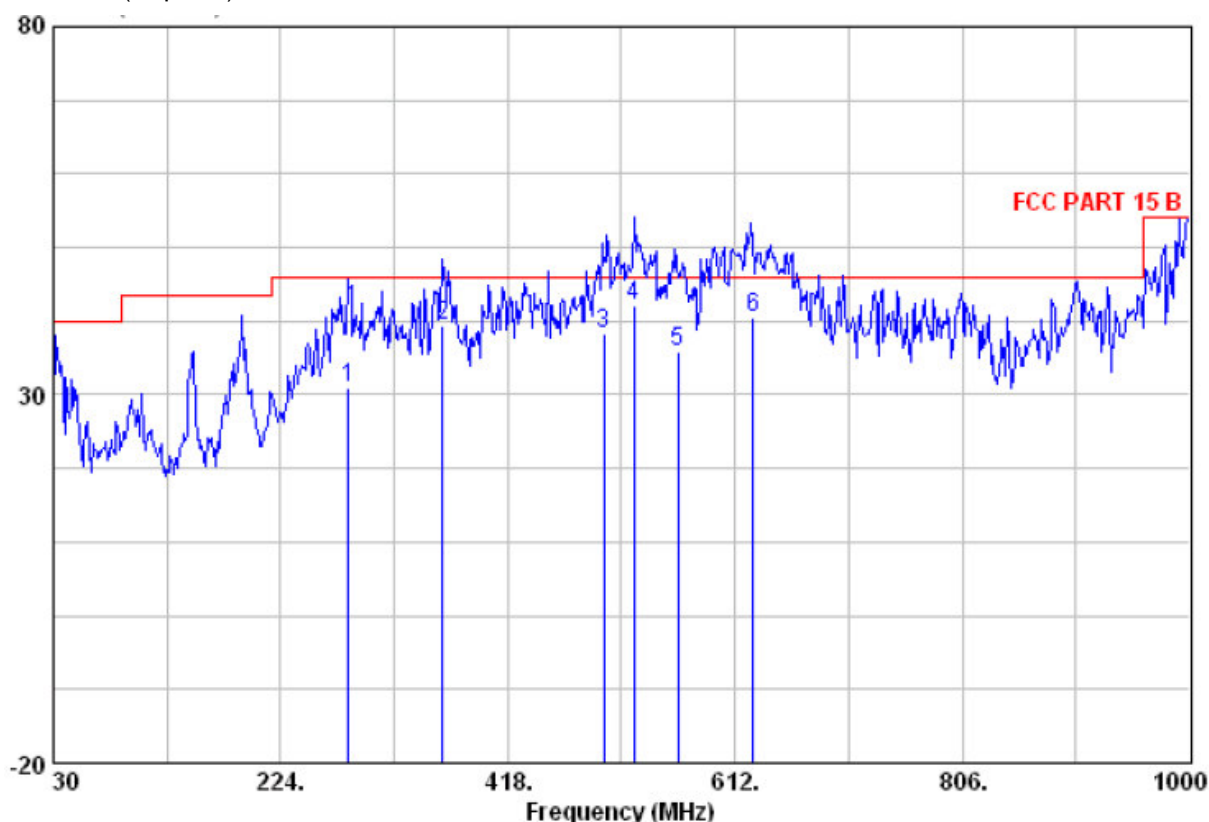
An initial pre-scan was performed in the 3m chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by Bilog antenna with 2 orthogonal polarities

Mode: Motor running mode

Vertical:

Peak scan

Level (dBμV/m)



Quasi-peak measurement:

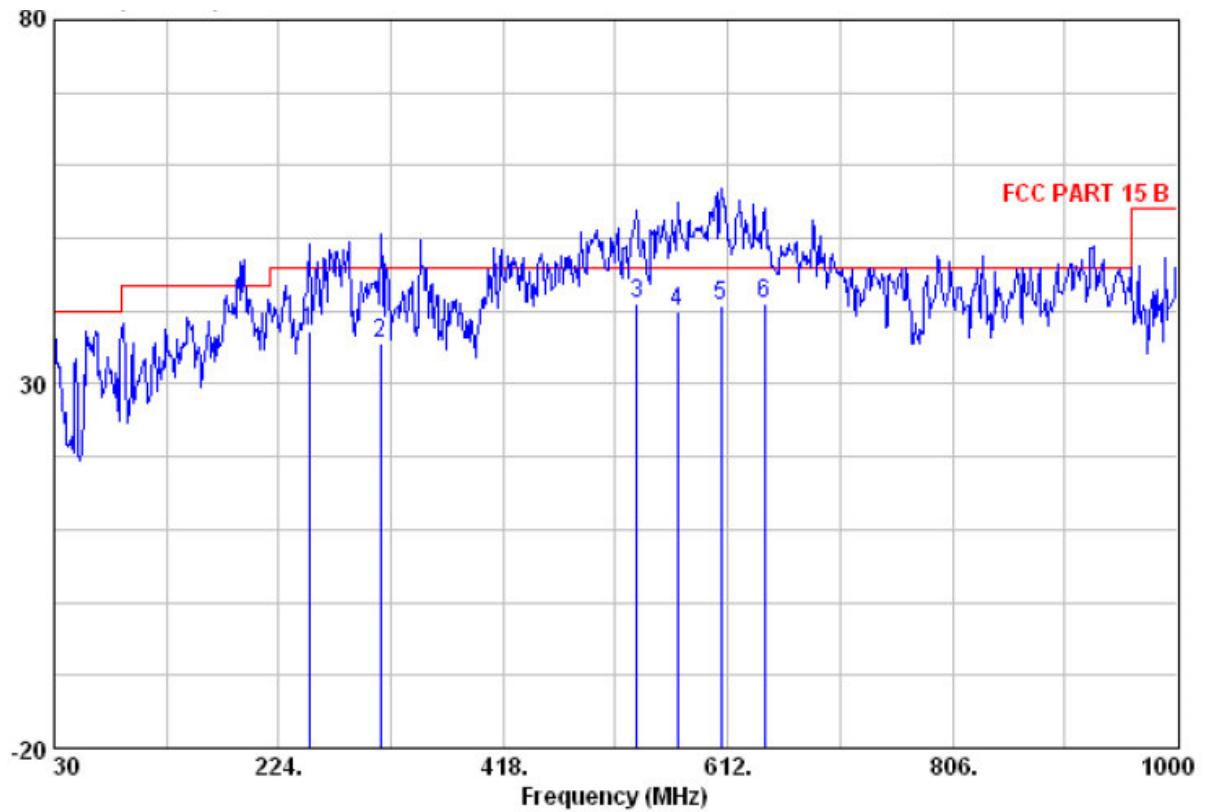
Freq	ReadAntenna	Cable	Preamp	Limit	Over			
MHz	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
282.200	41.22	12.36	1.50	24.00	31.08	46.00	-14.92	QP
362.710	47.72	14.64	1.70	24.63	39.43	46.00	-6.57	QP
500.450	44.73	16.90	2.00	25.40	38.23	46.00	-7.77	QP
525.670	48.28	17.22	2.00	25.44	42.06	46.00	-3.94	QP
563.500	41.15	18.16	2.10	25.44	35.98	46.00	-10.02	QP
627.520	45.05	18.53	2.30	25.40	40.48	46.00	-5.52	QP



Horizontal:

Peak scan

Level (dBμV/m)



Quasi-peak measurement:

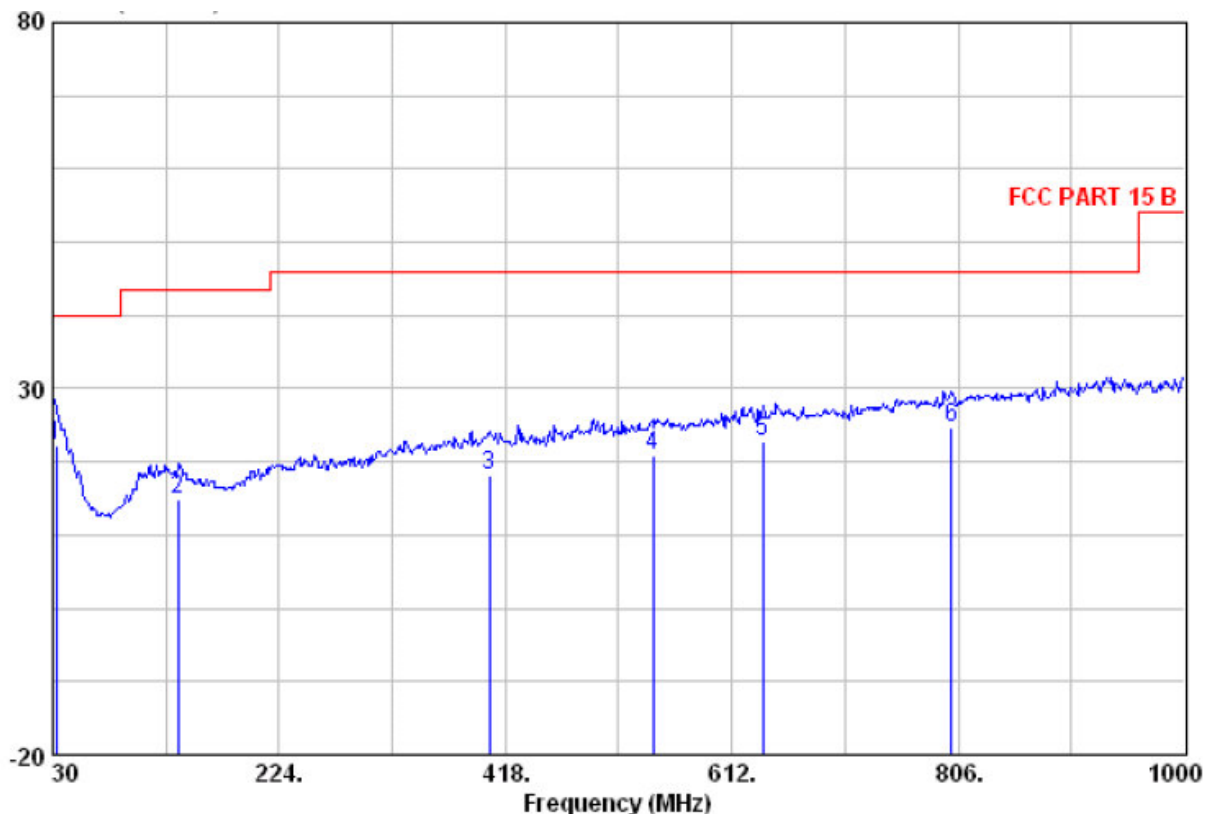
Freq	ReadAntenna	Cable	Preamp		Limit	Over	
MHz	Level	Factor	Loss	Factor	Level	Line	Limit
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
250.190	47.90	12.10	1.40	24.10	37.30	46.00	-8.70 QP
312.270	44.01	14.08	1.60	24.22	35.47	46.00	-10.53 QP
533.430	46.92	17.41	2.00	25.40	40.93	46.00	-5.07 QP
568.350	45.20	18.12	2.10	25.48	39.93	46.00	-6.07 QP
606.180	45.49	18.52	2.20	25.50	40.71	46.00	-5.29 QP
644.010	45.90	18.44	2.20	25.40	41.14	46.00	-4.86 QP

Mode: Charging mode

Vertical:

Peak scan

Level (dBμV/m)



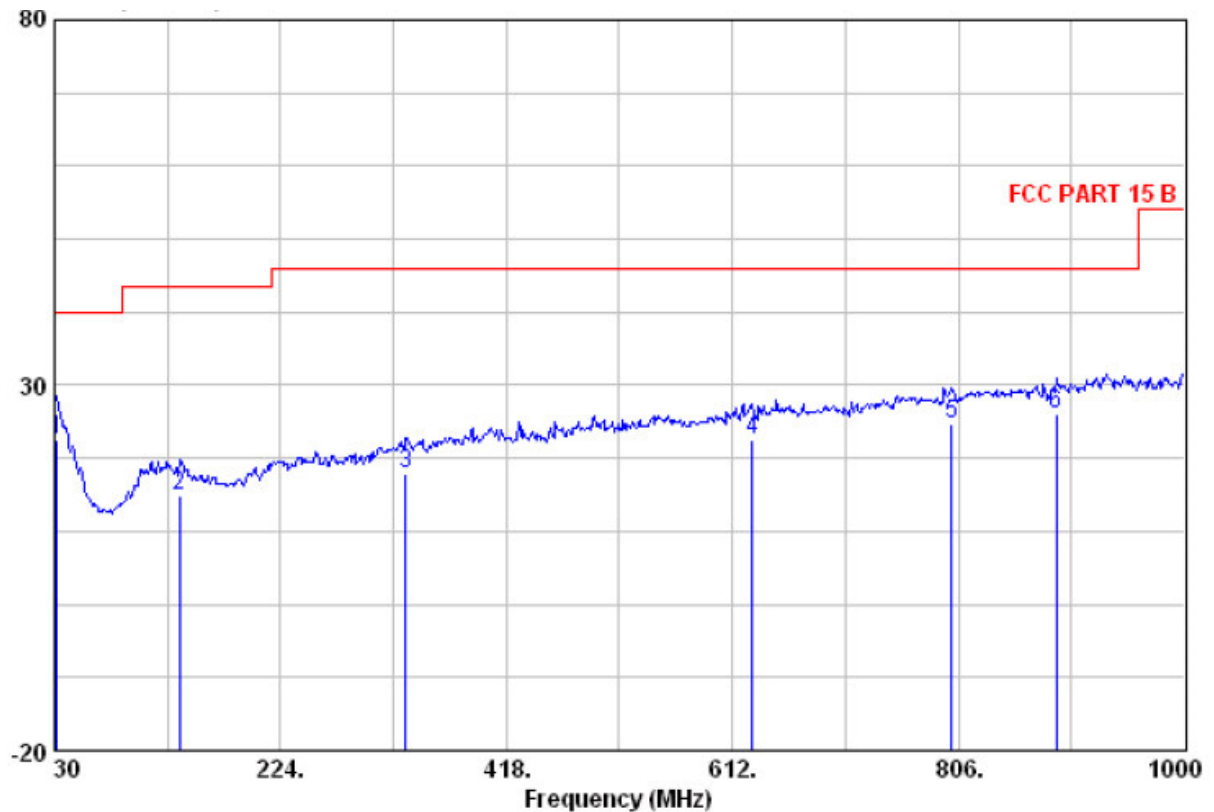
Quasi-peak measurement:

Freq	ReadAntenna	Cable	Preamp		Limit	Over	
MHz	Level	Factor	Loss	Factor	Line	Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
32.910	25.13	21.15	0.50	24.54	22.24	40.00	-17.76 QP
137.670	26.54	11.74	1.00	24.40	14.88	43.50	-28.62 QP
404.420	25.09	16.34	1.80	25.05	18.19	46.00	-27.81 QP
544.100	26.33	17.88	2.10	25.40	20.91	46.00	-25.09 QP
638.190	27.59	18.42	2.20	25.40	22.81	46.00	-23.19 QP
800.180	27.79	19.70	2.50	25.30	24.69	46.00	-21.31 QP

Horizontal:

Peak scan

Level (dBμV/m)



Quasi-peak measurement:

Freq	Read Level	Antenna Factor	Cable Loss	Preamplifier Factor	Level	Limit	Over Limit	Remark
MHz	dBμV	dB/m	dB	dB	dBμV/m	dBμV/m	dB	
31.940	24.64	22.00	0.50	24.56	22.58	40.00	-17.42	QP
137.670	26.54	11.74	1.00	24.40	14.88	43.50	-28.62	QP
331.670	26.55	14.04	1.60	24.32	17.87	46.00	-28.13	QP
629.460	26.99	18.51	2.30	25.40	22.39	46.00	-23.61	QP
800.180	27.79	19.70	2.50	25.30	24.69	46.00	-21.31	QP
890.390	28.17	20.30	2.60	25.10	25.97	46.00	-20.03	QP

7.2 Conducted Emissions Mains Terminals, 150 kHz to 30 MHz

Test Requirement: FCC Part15 B
 Test Method: ANSI C63.4:2003
 Test Date: 10 October 2009
 Frequency Range: 150 kHz to 30 MHz
 Class / Severity: Class B
 Detector: Peak for pre-scan (9 kHz Resolution Bandwidth)
 Quasi-Peak if maximised peak within 6 dB of Quasi-Peak limit

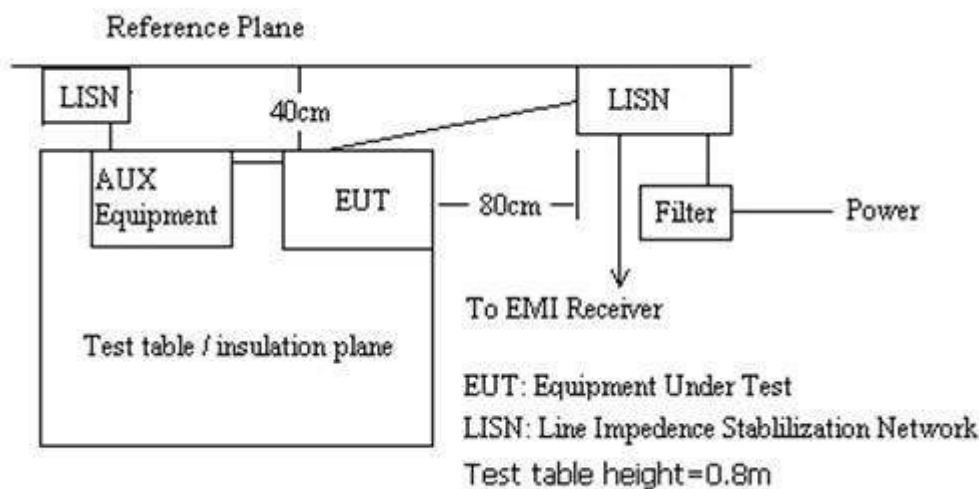
7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 21.0 °C Humidity: 50 % RH Atmospheric Pressure: 1008 mbar

EUT Operation: Test EUT in charging mode

7.2.2 Plan View of Test Setup



7.2.3 Measurement 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.

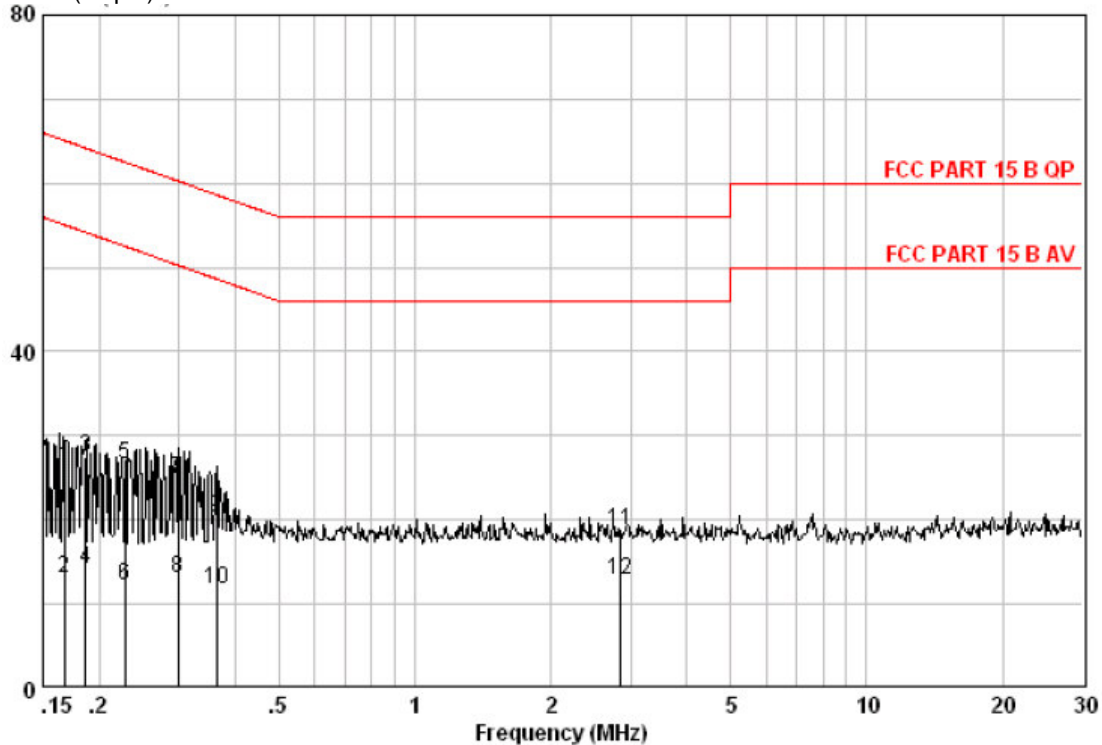
The following Quasi-Peak and Average measurements were performed on the EUT:



Live Line:

Peak Scan:

Level (dBμV)



Quasi-peak and Average measurement:

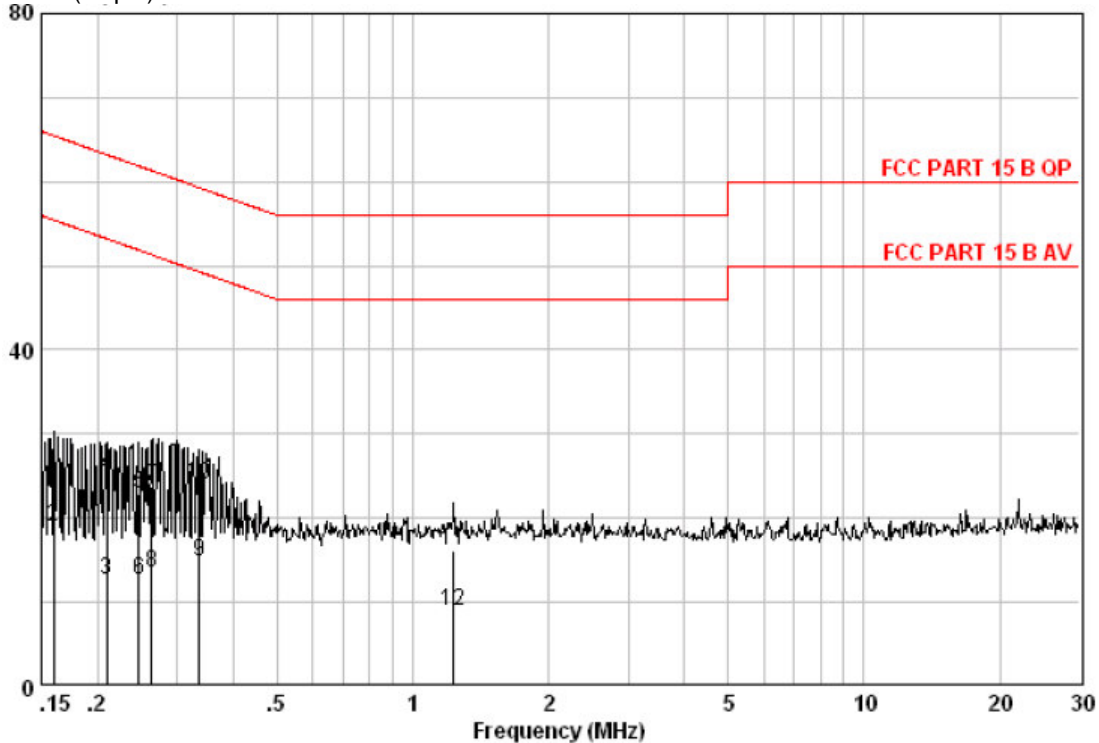
Freq	Read	Cable	LISN	Limit	Over	
MHz	Level	Loss	Factor	Line	Limit	Remark
	dBμV	dB	dB	dBμV	dBμV	dB
0.168	16.48	0.11	9.57	26.16	65.08	-38.92 QP
0.168	3.45	0.11	9.57	13.13	55.08	-41.95 AVERAGE
0.186	17.78	0.12	9.58	27.48	64.20	-36.72 QP
0.186	4.52	0.12	9.58	14.22	54.20	-39.98 AVERAGE
0.228	16.76	0.14	9.58	26.49	62.52	-36.04 QP
0.228	2.45	0.14	9.58	12.18	52.52	-40.35 AVERAGE
0.299	15.20	0.17	9.58	24.96	60.28	-35.32 QP
0.299	3.37	0.17	9.58	13.13	50.28	-37.15 AVERAGE
0.363	10.58	0.19	9.59	20.36	58.65	-38.29 QP
0.363	2.07	0.19	9.59	11.85	48.65	-36.80 AVERAGE
2.854	9.00	0.16	9.62	18.78	56.00	-37.22 QP
2.854	3.00	0.16	9.62	12.78	46.00	-33.22 Average



Neutral Line

Peak Scan:

Level (dBμV)



Quasi-peak and Average measurement:

Freq	Read Level	Cable Loss	LISN Factor	Level	Limit Line	Over Limit	Remark
MHz	dBμV	dB	dB	dBμV	dBμV	dB	
0.160	15.90	0.11	9.56	25.57	65.47	-39.90	QP
0.160	9.37	0.11	9.56	19.04	55.47	-36.43	AVERAGE
0.209	2.89	0.14	9.58	12.61	53.23	-40.62	AVERAGE
0.209	15.32	0.14	9.58	25.04	63.23	-38.19	QP
0.247	13.06	0.15	9.58	22.79	61.86	-39.07	QP
0.247	2.97	0.15	9.58	12.70	51.86	-39.16	AVERAGE
0.263	14.12	0.16	9.58	23.86	61.34	-37.47	QP
0.263	3.75	0.16	9.58	13.49	51.34	-37.84	AVERAGE
0.336	4.99	0.18	9.59	14.76	49.31	-34.55	AVERAGE
0.336	14.10	0.18	9.59	23.87	59.31	-35.44	QP
1.229	6.24	0.27	9.60	16.11	56.00	-39.89	QP
1.229	-1.03	0.27	9.60	8.84	46.00	-37.16	AVERAGE