FCC – Test Report

Date: 2011-08-16

No. 55627-2

LABORATORY - REPORT

APPLICANT: EB BRANDS (HK)

ADDRESS: Unit 705 & 706, Enterprise Square, Phase 1
Tower III, 9 Sheung Yuet Road
Kowloon Bay, Kowloon
Hong Kong

DATE OF SAMPLE RECEIVED: 2011-07-04

DATE OF TESTING: 2011-07-27 to 2011-08-04

DESCRIPTION OF SAMPLE:

Product:	Atom Racers
Model number:	6379
Product class:	Low Power Communication Device - Receiver
FCC ID number:	XRB6379RE49RX
Rating:	DC 1.2V (Rechargeable battery)

CONDITION OF TEST SAMPLE: The received sample was under good condition.

INVESTIGATIONS REQUESTED: Measurements to the relevant clauses of F.C.C. Rules and Regulations Part 15 Subpart B - Unintentional Radiators.

RESULTS: See the attached sheets.

CONCLUSIONS: From the measurement data obtained, the tested sample was considered to have COMPLIED with the requirements for the relevant clauses of Federal Communications Commission Rules as specified above.

INTERNATIONAL ELECTRICAL CERTIFICATION CENTRE LTD. 國際電器認証中心有限公司

Stephen C.N. Wong
Technical Manager

FCC – Test Report

Date: 2011-08-16

No. 55627-2

TABLE OF CONTENTS

FCC – Test Report

Date: 2011-08-16

No. 55627-2

Test Location

International Electrical Certification Centre Ltd.
Units 602-605, 31 Lok Yip Road, On Lok Tsuen, Fanling, N.T., Hong Kong
Tel : +852 23052570
Fax : +852 27564480
Email : info@iecc.com.hk

Summary of Test Results

Radiated Emission:

Test result: O.K.
Test data: See attached data sheet

Conducted Emission:

Test result: Not Applicable
Test data: Not Applicable

FCC – Test Report

Date: 2011-08-16

No. 55627-2

TEST EQUIPMENT LIST

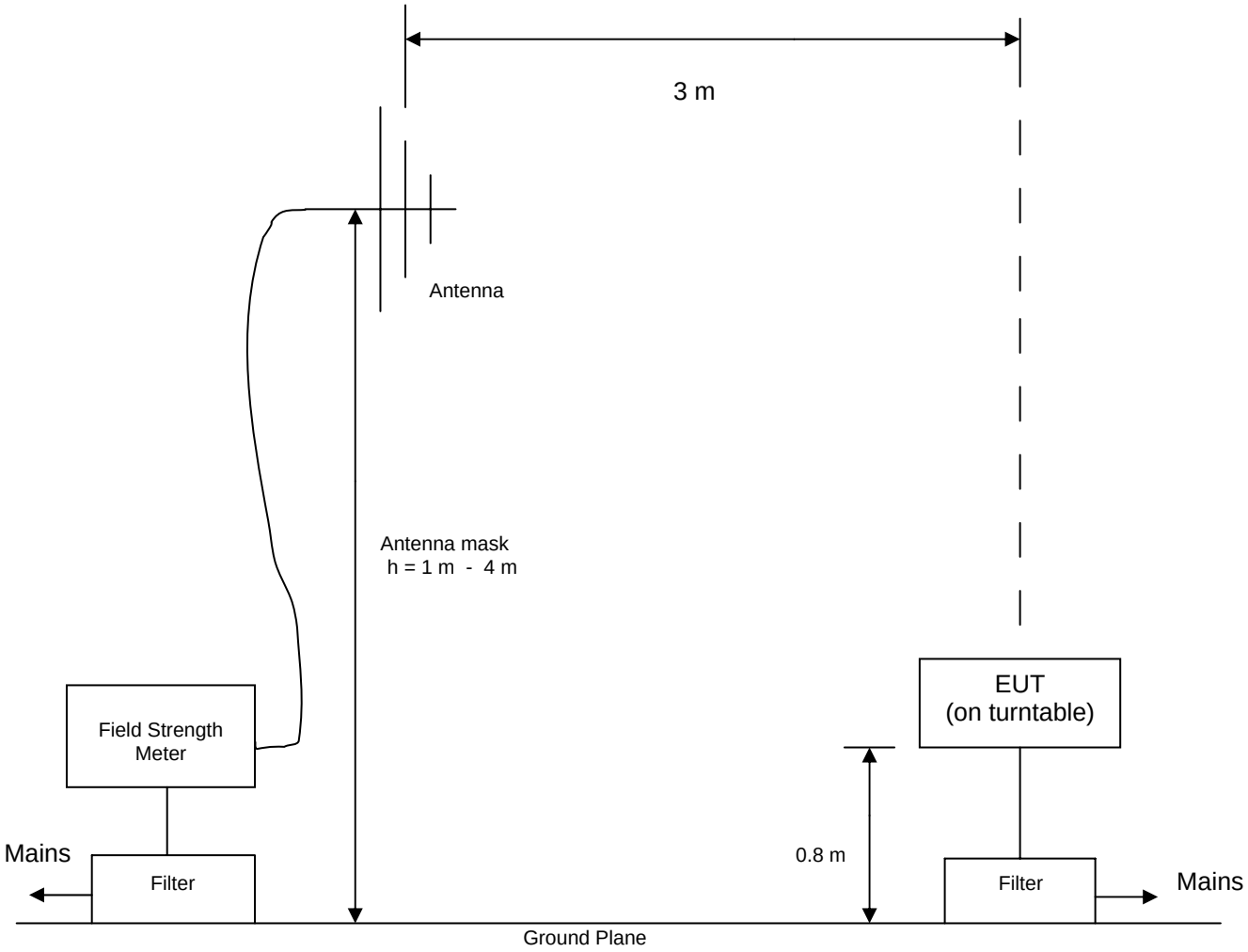
Equipment	Manufacturer	Model	Serial No.	Last Calibration Date	Next Calibration Date
Test Receiver	Rohde & Schwarz	ESCS 30	100388	11/11/2010	10/11/2011
Antenna	Schaffner	CBL6111C	2791	30/09/2010	29/09/2012
Antenna Mast System	Schwarzbeck	AM9104	--	--	--
Turntable with Controller	Drehtisch	DT312	--	--	--
Spectrum Analyzer with Q. Peak	Advantest	R3132	140101852	09/08/2011	08/08/2012

FCC – Test Report

No. 55627-2

Date: 2011-08-16

Radiated Emission Test Setup (3 m diatance) (> 30MHz)

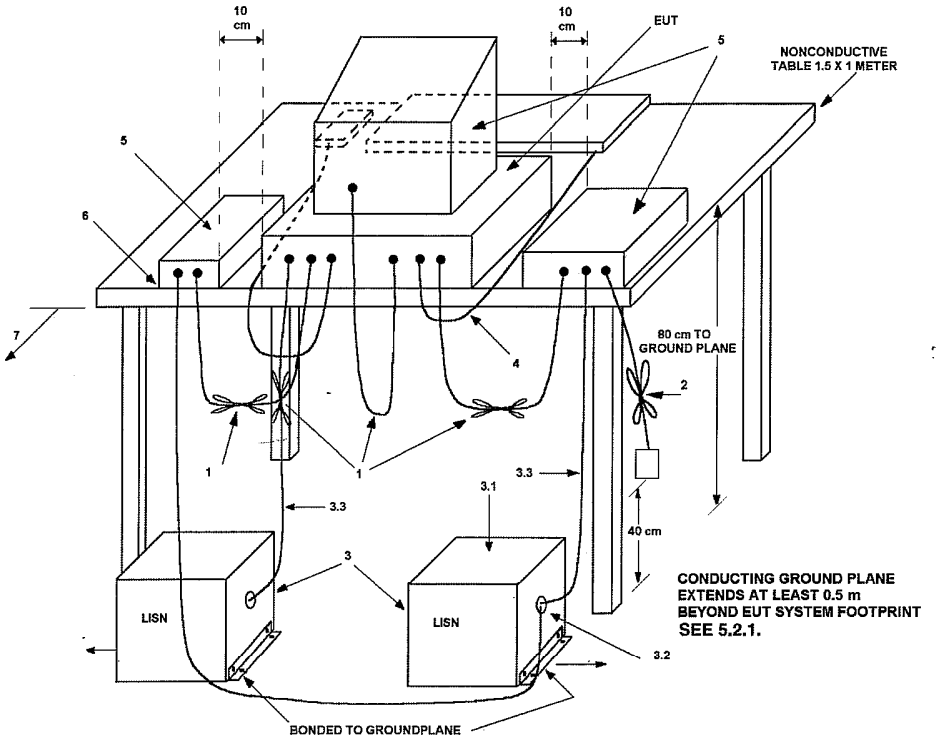


FCC – Test Report

Date: 2011-08-16

No. 55627-2

Conducted Emission Test Setup



LEGEND:

1) Interconnecting cables that hang closer than 40 cm to the groundplane shall be folded back and forth in the center forming a bundle 30 to 40 cm long (see 6.1.4 and 11.2.4).
2) I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m (see 6.1.4).
3) EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω. LISN can be placed on top of, or immediately beneath, reference groundplane (see 5.2.3 and 7.2.1).
   3.1) All other equipment powered from additional LISN(s).
   3.2) Multiple outlet strip can be used for multiple power cords of non-EUT equipment.
   3.3) LISN at least 80 cm from nearest part of EUT chassis.
4) Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use (See 6.2.1.3 and 11.2.4).
5) Non-EUT components of EUT system being tested (see also Figure 13).
6) Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop (see 6.2.1.1 and 6.2.1.2).
7) Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the groundplane (see 5.2.2 for options).

FCC – Test Report

Date: 2011-08-16

No. 55627-2

Test Procedure

Radiated Emission :

The EUT was tested according to ANSI 63.4-2003 for the requirements of FCC Part 15 Subpart B Section 15.109.

During the test, the sample was placed on a turn table and operated with fully charged battery. The table is 0.8 meter above the reference ground plane on the Open Aera Test Site and can rotate 360 degrees to determine the position of the maximum emission level. A broad-band antenna for the frequency range 30 - 1000 MHz, connected with 10 meters coaxial cable to the test receiver was used for measurement. The antenna is capable of measuring both horizontal and vertical polarizations. The antenna was raised from 1 to 4 meters to find out the maximum emission level from the EUT.

An initial pre-scan was performed to find out the maximum emission level of the sample placed at 3 orthogonal planes. Final measurement (30 MHz –1000 MHz) was then performed to record the data for the emissions under worst-case condition for combination of the antenna orientation / height and turn table position.

Note : The Open Aera Test Site located at IECC was placed on file with the FCC Pursuant to Section 2.948 of the FCC Rules (FCC Registration No. : 97774).

Conducted Emission :

Not Applicable

FCC – Test Report

Date: 2011-08-16

No. 55627-2

Test Results

Radiated Emission :

Test Requirement:	FCC Part 15 Subpart B Section 15.109
Test Method:	ANSI C63.4 : 2003
Deviations from Standard Test Method:	Nil
Frequency Range:	30MHz – 1000MHz
Measurement Distance:	3 m
Detector:	Quasi-Peak

Refer to page 9 for measurement data.

Conducted Emission :

Not Applicable

FCC – Test Report

Date: 2011-08-16

No. 55627-2

Interference Radiation

Measurement of Radiated Emissions
Acc: FCC Part 15 Subpart B (15.109)

IECC Ref:	55627-2
Model:	6379
Applicant:	EB BRANDS (HK)
Sample No.:	1
Set under test:	Atom Racers
Connected sets:	-
Operating mode:	Operate (forward)

Test Equipment
Receiver: Rohde & Schwarz ESCS 30
Antenna: Schaffner CBL6111C

Frequency (MHz)	Horz. Reading dB(μV)	Vert. Reading dB(μV)	Corr. Factor (dB)	Horiz. Test Result dB(μV/m)	Vert. Test Result dB(μV/m)	Limit dB(μV/m)
30	< 16	< 16	20.5	< 36.5	< 36.5	40.0
50	< 16	< 16	9.3	< 25.3	< 25.3	43.5
100	< 16	< 16	12.0	< 28.0	< 28.0	46.0
200	< 16	< 16	10.9	< 26.9	< 26.9	46.0
300	< 16	< 16	15.8	< 31.8	< 31.8	46.0
500	< 16	< 16	20.6	< 36.6	< 36.6	54.0
700	< 16	< 16	23.8	< 39.8	< 39.8	46.0
1000	< 16	< 16	28.0	< 44.0	< 44.0	54.0

Note : 1. Unless otherwise indicated, the recorded readings are in quasi-peak values.
2. The above results were the worst case results with the sample positioned in all 3 axis during the test. No significant emission was measured during the test.

Operator : KT

FCC – Test Report

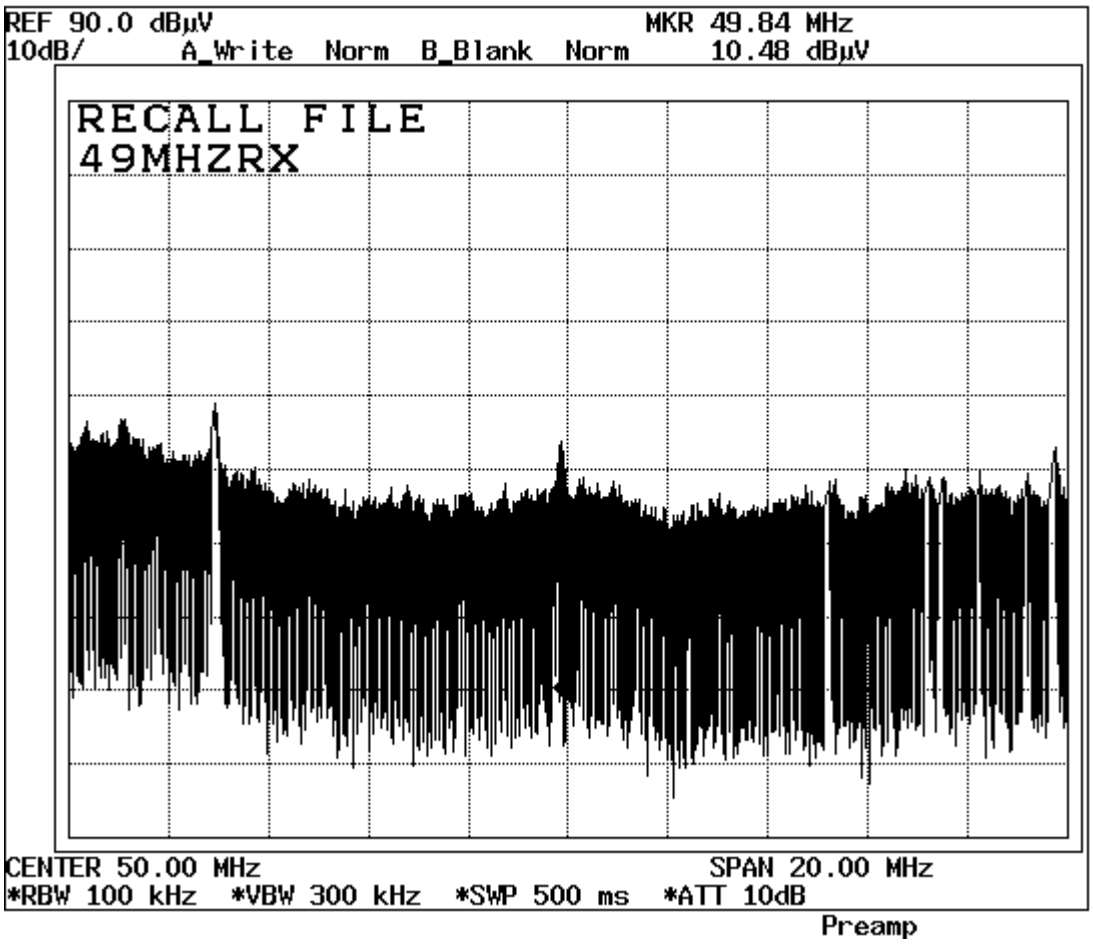
Date: 2011-08-16

No. 55627-2

Cohere Plot at fundamental frequency

Superregenerative Receiver : According to ANSI C63.4-2003 clause 12.1.1.1, a singal generator was set to the unit under test operating frequency. An un-modulated continuous wave (CW) signal was radiated at the super-regenerative receiver operating frequency to cohere the characteristic broadband emissions from the receiver.

Sample location: Less than 0.5m from the measuring antenna
Applied signal: - 60dBm (non-modulated, 49.86 MHz)
Remark: Self-cohere



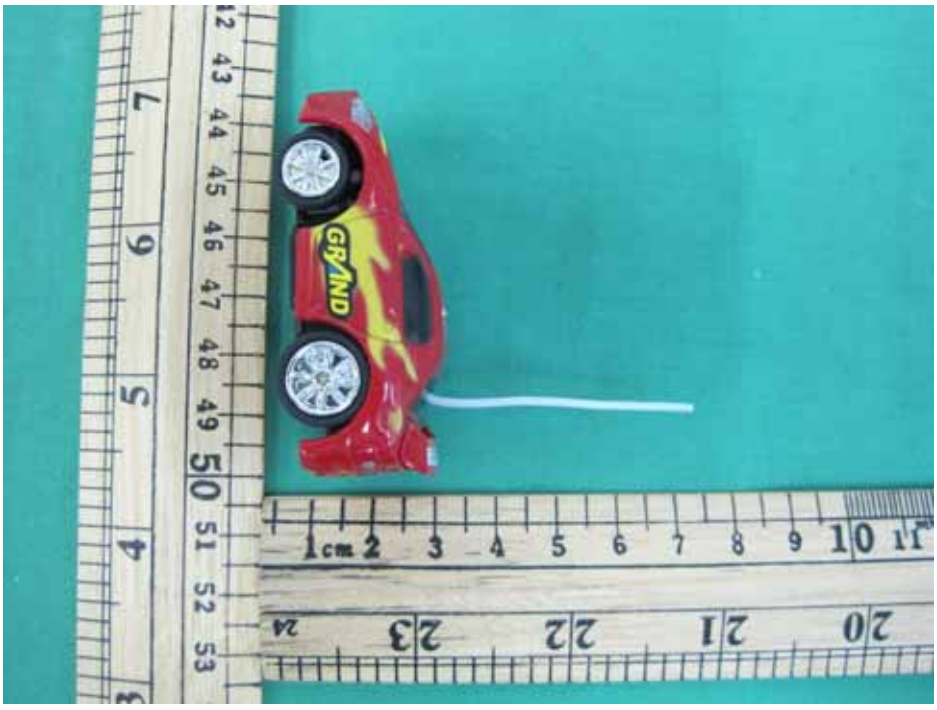
All emissions observed complies with FCC limits.

FCC – Test Report

No. 55627-2

Date: 2011-08-16

Photo of Sample



FCC – Test Report

Date: 2011-08-16

No. 55627-2

- END -