

FCC TEST REPORT

FCC ID NO. : QE871218RX49

Applicant : **Interactive Toy Concepts Limited**
7th Floor, Eu Yan Sang Tower, 11-15 Chatham Road South, Tsim Sha Tsui,
Hong Kong

Equipment Under Test (EUT) :

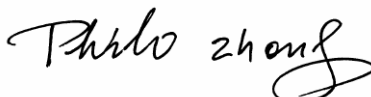
Product Name : RC Helicopter

Model No. : 71218, 60-396, 6018742

Standards : FCC Part 15 SUBPART B

Date of Test : July 7, 2008

Test Engineer : Nunu.Deng

Reviewed By : 

PERPARED BY:

Waltek Services (Shenzhen) Co., Ltd.

1/F, Fukangtai Building, West Baima Rd., Songgang Street, Baoan District, Shenzhen
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2 Test Summary

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

3 Contents

	Page
1 COVER PAGE.....	1
2 TEST SUMMARY.....	2
3 CONTENTS	3
4 GENERAL INFORMATION.....	4
4.1 CLIENT INFORMATION	4
4.2 GENERAL DESCRIPTION OF E.U.T.....	4
4.3 DETAILS OF E.U.T.	4
4.4 DESCRIPTION OF SUPPORT UNITS	4
4.5 TEST FACILITY.....	5
4.6 TEST LOCATION.....	5
5 EQUIPMENT USED DURING TEST	6
5.1 CONDUCTION EMISSIONS, 0.15MHZ TO 30MHZ.....	8
5.1.1 E.U.T. Operation.....	8
5.1.2 Measurement Data	8
5.2 RADIATED EMISSIONS, 30MHZ TO 1GHZ	9
5.2.1 E.U.T. Operation.....	9
5.2.2 EUT Setup	9
5.2.3 Spectrum Analyzer Setup.....	10
5.2.4 Test procedure.....	10
5.2.5 Summary of Test Results	10
5.2.6 Radiated Emissions Test Data	11
5.3 PHOTOGRAPHS - TEST SETUP.....	12
5.3.1 Radiated Emissions Test Setup.....	12
5.3.2 EUT - Front View.....	13
5.3.3 EUT - Back View.....	13
5.3.4 PCB - Front View.....	14
5.3.5 PCB - Back View.....	14
6 FCC ID LABEL.....	15

4 General Information

4.1 Client Information

Applicant:	Interactive Toy Concepts Limited
Address of Applicant:	7th Floor, Eu Yan Sang Tower, 11-15 Chatham Road South, Tsim Sha Tsui, Hong Kong
Manufacturer:	Interactive Toy Concepts Limited
Address of Manufacturer:	7th Floor, Eu Yan Sang Tower, 11-15 Chatham Road South, Tsim Sha Tsui, Hong Kong

4.2 General Description of E.U.T.

Product Name:	RC Helicopter
Model No.:	71218; 60-396; 6018742

4.3 Details of E.U.T.

Power Supply:	RX: 3.7 VDC Battery
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4.4 Description of Support Units

Compliance test was performed test in ON mode .

The customer requested FCC tests for a RC Helicopter.

The standard used was FCC Part 15.107 & Part15.109, SUBPART B, CLASS B

4.5 Test Facility

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

- **FCC – Registration No.: 880581**

Waltek Services(Shenzhen) 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 880581. June 24, 2008.

4.6 Test Location

All Emissions tests were performed at:-

1/F, Fukangtai Building, West Baima Rd., Songgang Street,
Baoan District, Shenzhen 518105, China

5 Equipment Used during Test

Equipment	Brand Name	Model	Related standards	Cal.Intal Months	Last Cal. Date	Serial No
3m Anechoic chamber						
EMC Analyzer	Agilent	E7405A	ISO9001:2000	12	Jan-08	MY4511494 3
Trilog Broadband Antenne 30-3000 MHz	SCHWARZB ECK MESS- ELEKTROM	VULB9163	EN/ISO/IEC 17025 DIN EN ISO9001	12	Jan-08	336
Broad-band Horn Antenna	SCHWARZB ECK MESS- ELEKTROM	BBHA 9120 D	EN/ISO/IEC 17025 DIN EN ISO9001	12	Jan-08	667
Broadband Preamplifier	SCHWARZB ECK MESS- ELEKTROM	BBV 9718	EN/ISO/IEC 17025 DIN EN ISO9001	12	Jan-08	9718-148
10m Coaxial Cable with N-male Connectors	SCHWARZB ECK MESS- ELEKTROM	AK 9515 H	EN/ISO/IEC 17025 DIN EN ISO9001	12	Jan-08	-
10m 50 Ohm Coaxial Cable with N- plug,individual length,usable up to 3(5)GHz, Connectors	SCHWARZB ECK MESS- ELEKTROM	AK 9513	EN/ISO/IEC 17025 DIN EN ISO9001	12	Jan-08	-
Positioning Controller	C&C LAB	CC-C-IF	ISO9001	12	Jan-08	MF7802108
Color Monitor	SUNSPO	SP-14C	ISO9001	12	Jan-08	-
EMI Shielded Room						
Test Receiver	ROHDE&SC HWARZ	ESPI	ISO9001	12	Jan-08	101155
Two-Line V-Network	ROHDE&SC HWARZ	ENV216	ISO9001 EN/ISO/IEC 17025	12	Jan-08	100115
Absorbing Clamp	ROHDE&SC HWARZ	MDS-21	ISO9001 EN/ISO/IEC 17025	12	Jan-08	100205

10m 50 Ohm Coaxial Cable with N- plug, individual length, usable up to 3(5)GHz, Connectors	SCHWARZB ECK MESS- ELEKTROM	AK 9514	EN/ISO/IEC 17025 DIN EN ISO9001	12	Jan-08	-
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5.1 Conduction Emissions, 0.15MHz to 30MHz

Test Requirement:	FCC Part 15.107
Test Method:	ANSI C63.4: 2003
Test Date:	
Frequency Range:	150kHz to 30MHz
Class/Severity:	B
Limit:	66-56 dB μ V/m between 0.15MHz & 0.5MHz 56 dB μ V/m between 0.5MHz & 5MHz 60 dB μ V/m between 5MHz & 30MHz
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth) Quasi-Peak & Average if maximised peak within 6dB of Average Limit

5.1.1 E.U.T. Operation

Operating Environment:

Temperature:	24.0 °C
Humidity:	52 % RH
Atmospheric Pressure:	1012 mbar

EUT Operation :

Compliance test was performed test in ON mode.

The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

5.1.2 Measurement Data

Owing to the DC operation of EUT, this test is not performed.

5.2 Radiated Emissions, 30MHz to 1GHz

Test Requirement:	FCC Part 15.109
Test Method:	ANSI C63.4: 2003
Test Date:	July 7, 2008
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

5.2.1 E.U.T. Operation

Operating Environment:	
Temperature:	24.0 °C
Humidity:	52 % RH
Atmospheric Pressure:	1012 mbar

EUT Operation :

Compliance test was performed test in ON mode.

5.2.2 EUT Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4: 2003, The specification used in this report was the FCC Part 15.109 Class B limits.

5.2.3 Spectrum Analyzer Setup

According to FCC Part 15.109 Class B Rules, the system was tested to 1000 MHz.

Start Frequency	30 MHz
Stop Frequency	1000 MHz
Sweep Speed	Auto
IF Bandwidth	1 MHz
Video Bandwidth	1 MHz
Quasi-Peak Adapter Bandwidth	120 kHz
Quasi-Peak Adapter Mode.....	Normal
Resolution Bandwidth	1MHz

5.2.4 Test procedure

For the radiated emissions test, since the EUT does have not a power source, there was no connection to AC outlets.

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT is compliant with all installation combinations.

All data was recorded in the peak and average detection mode.

The EUT was under normal mode during the final qualification test and the configuration was used to represent the worst case results.

ANSI STANDARD C63.4-2003 12.1.1.1 SUPERREGENERATIVE RECEIVER: A signal 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.

5.2.5 Summary of Test Results

According to the data in section 5.2.6, the EUT complied with the FCC Part 15.109 Class B standards.

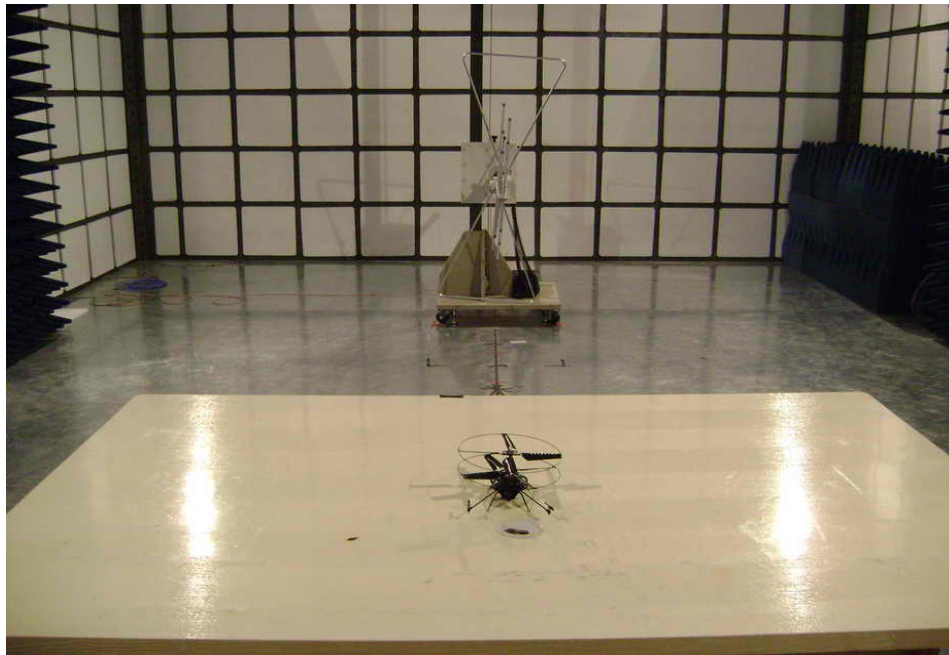
The test results: PASS.

5.2.6 Radiated Emissions Test Data

Frequency (MHz)	Antenna Polarization	Emission Level (dBuV/m)	FCC 15 Subpart B Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Turntable Angle (°)
406.7	Horizontal	41.96	46.0	4.04	1.2	150
433.3	Horizontal	41.25	46.0	4.75	1.5	60
478.6	Horizontal	42.78	46.0	3.22	1.8	200
431.8	Vertical	40.38	46.0	5.62	1.5	60
453.6	Vertical	41.48	46.0	4.52	1.5	90
483.7	Vertical	35.91	46.0	10.09	1.5	120

5.3 Photographs - Test Setup

5.3.1 Radiated Emissions Test Setup



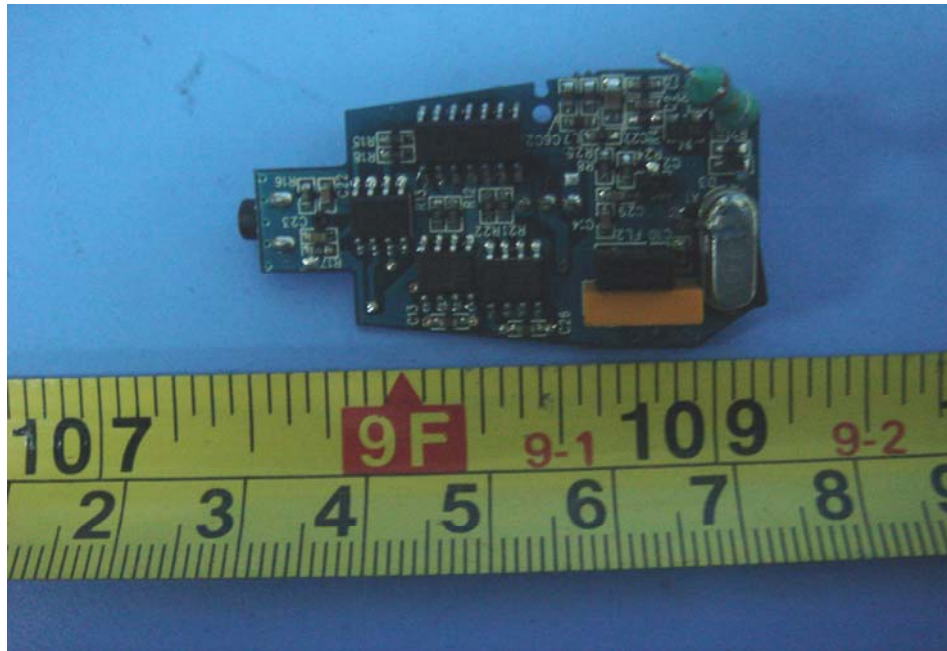
5.3.2 EUT - Front View



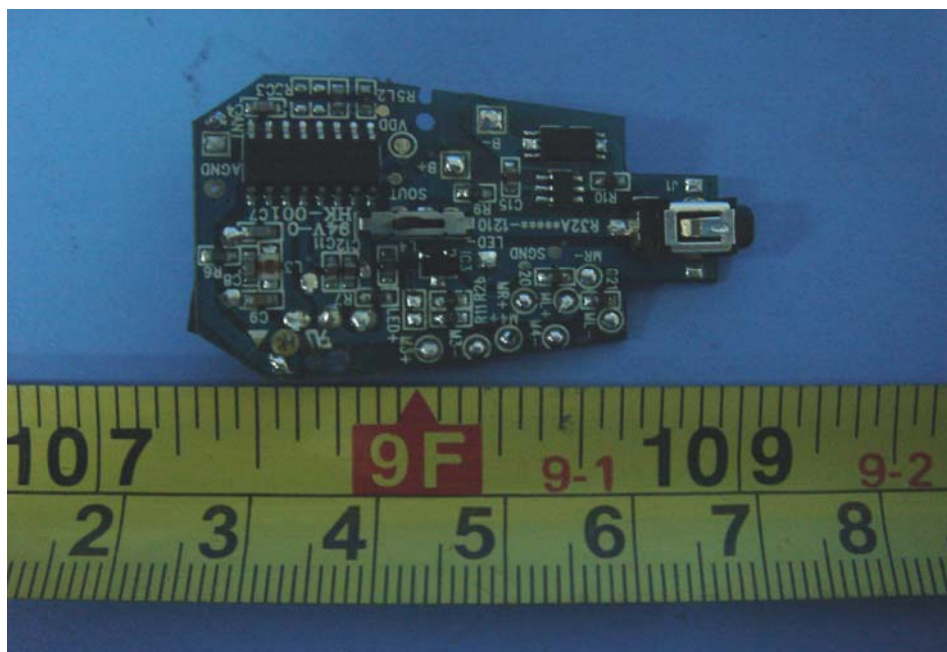
5.3.3 EUT - Back View



5.3.4 PCB - Front View



5.3.5 PCB - Back View



6 FCC ID Label

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1)this device may not cause harmful interference,and (2) this device must accept any interference received, including interference that may cause undesired operation.

The Label must not be a stick-on paper. The Label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Proposed Label Location on EUT
EUT View/ proposed FCC Label Location

