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FEDERAL COMMUNICATIONS COMMISSION

Registration number: 556682

Report No.: SZEMO070200191RFF(I)

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FCC ID : SIP-0907-B

TEST REPORT

Application No.: SZEMO070200191RF(SGS SZ NO.: SZTYR070200252/EL)

Applicant: MEGAGAIN INTERNATIONAL LTD.

Buyer: DISNEY SHOPPING

FCC ID: SIP-0907-B Fundamental Frequency: 49.860MHz

Equipment under Test (EUT):

EUT Name: MCQUEEN & THE KING MINI RC 1:24 SCALE TWIN

Item No.: 0711-DD215(0907-W)

Labelled Age Grading: 6 AND UP

Standards: FCC PART 15, SUBPART C : 2006

Section 15.235

Date of Receipt:06 February 2007Date of Test:08 February 2007Date of Issue:09 February 2007

Test Result : PASS *

Authorized Signature:

Robinson Lo

Laboratory Manager

This report refers to the General Conditions for Inspection and Testing Services, printed overleaf

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. 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. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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.

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



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2 Test Summary

Test	Test Requirement	Stanadard Paragraph	Result
Radiated Emission (30MHz to 1000MHz)	FCC PART 15 :2006	Section 15.235	PASS
Occupied Bandwidth	FCC PART 15 :2006	Section 15.235	PASS

Tx: In this whole report Tx (or tx) means Transmitter.

Rx: In this whole report Rx (or rx) means Receiver.

RF: In this whole report RF means Radiated Frequency.



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4 General Information

4.1 Client Information

Applicant: MEGAGAIN INTERNATIONAL LTD.

Address of Applicant: RM 1908, GREENFIELD TOWER, CONCORDIA PLAZA, 1, SCIENCE

MUSEUM ROAD, T.S.T. EAST. KLN.

4.2 Details of E.U.T.

Product Name: MCQUEEN & THE KING MINI RC 1:24 SCALE TWIN

Item No: 0711-DD215(0907-W)

Power Supply: 9V DC (1*9.0V '6F22' Size Battery) for Tx

Power Cord: N/A-

4.3 Description of Support Units

The EUT was tested as an independent unit: a 49MHz radio transmitter.

4.4 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 8215 5555 Fax: +86 20 8207 5059

4.5 Other Information Requested by the Customer

None.



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5 Test Results

5.1 Test Instruments

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	28-04-2005	27-04-2007
2	EMI Test Receiver	Rohde & Schwarz	ESIB26	100249	22-09-2006	21-09-2007
3	EMI Test software	oftware AUDIX		SEL0050	N/A	N/A
4	Coaxial cable	SGS	N/A	SEL0028	20-05-2006	19-05-2007
5	Coaxial cable	SGS	N/A	SEL0027	20-05-2006	19-05-2007
6	BiConiLog Antenna	ETS-LINDGREN	3142C	00042673	03-03-2006	02-03-2007
7	EMI Test Receiver	Rohde & Schwarz	ESCI	100119	03-03-2006	02-03-2007
8	Loop Antenna Emco		6502	00042963	30-05-2006	29-05-2007

5.2 E.U.T. Operation

Input voltage: 9V DC (1*9.0V '6F22' Size Battery) for the transmitter.

Operating Environment:

Temperature: 24.0 °C Humidity: 48 % RH Atmospheric Pressure: 1015 mbar

EUT Operation:

Test the EUT in transmitting mode.

5.3 Test Procedure & Measurement Data

5.3.1 Radiated Emissions

Test Requirement: FCC Part15 C Section 15.235

Test Method: ANSI C63.4
Test Date: 08 February 2007

Measurement Distance: 3m (Semi-Anechoic Chamber)

Requirements: Carrier frequency will not exceed 80dBuV/m AT 3m.

Out of band emissions shall not exceed: $40.0~dB\mu V/m$ between 30MHz~&~88MHz $43.5~dB\mu V/m$ between 88MHz~&~216MHz $46.0~dB\mu V/m$ between 216MHz~&~960MHz

54.0 dBµV/m above 960MHz

Detector: Peak Scan (120kHz resolution bandwidth)



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Test Procedure: The procedure uesd was ANSI

Standard C63.4-2003. The receive was scanned from 30MHz to 1000MHz.When an emission was found, the table was roated to produce the maximum signal strength. An initial pre-scan was performed for in peak detection mode using the receiver. The EUT was measured for both the Horizontal and Vertical polarities and performed a pre-test three orthogonal planes. The worst case emissions were reported.

An initial pre-scan was performed in the 3m chamber using the spectrum analyser in peak detection mode. The EUT was measured by Bilog antenna with 2 orthogonal polarities and peak emissions from the EUT were detected within 6dB of the class B limit line.

The following measurements were performed on the modified modified EUT on 08 February 2007: Test the EUT in transmitting mode.

Intentional emission

Test Frequency	Peak (dBμV/m)		Limits	Margin (dB)	
(MHz)	Vertical	Horizontal	(dBµV/m)	Vertical	Horizontal
49.860	52.4	30.8	100.0	47.6	69.2

Test Frequency	Average (dBµV/m)		Limits	Margin (dB)		
(MHz)	Vertical	Horizontal	(dBµV/m)	Vertical	Horizontal	
49.860	49.8	29.1	80.0	30.2	50.9	



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Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
98.125	1.18	9.03	27.89	38.97	21.29	43.50	-22.21
147.850	1.32	8.81	27.47	34.13	16.79	43.50	-26.71
198.550	1.40	10.19	27.16	33.40	17.83	43.50	-25.67
341.875	2.04	15.22	27.04	30.59	20.81	46.00	-25.19
473.500	2.50	17.74	27.64	31.09	23.69	46.00	-22.31

Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
105.925	1.22	8.81	27.82	32.20	14.41	43.50	-29.09
155.650	1.33	9.35	27.41	31.70	14.97	43.50	-28.53
238.525	1.62	11.93	26.96	30.06	16.65	46.00	-29.35
276.550	1.80	12.89	26.81	33.57	21.45	46.00	-24.55
393.550	2.18	16.22	27.37	37.89	28.92	46.00	-17.08

Remark

According to 15.35 (b) When average radiated emission measurements are specified in the regulations, including emission measurements below 1000 MHz, there is also a imit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules, e.g., see Section 15.255.

Test Results: The unit does meet the FCC Part 15 C Section 15.235 requirements.



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5.3.2 Occupied Bandwidth

Test Requirement: FCC Part15 C Section 15.235

Test Method: ANSI C63.4

Operation within the band 49.82 – 49.90 MHz

Test Date: 17 February 2006

Requirements: The field strength of any emissions appearing between the band edges

and up to 10 kHz above and below the band edges shall be attenuated at least 26 dB below the level of the unmodulated carrier or to the general limits in Section 15.209, whichever permits the higher emission levels. The field strength of any emissions removed by more than 10 kHz from the band edges shall not exceed the general radiated emission limits in

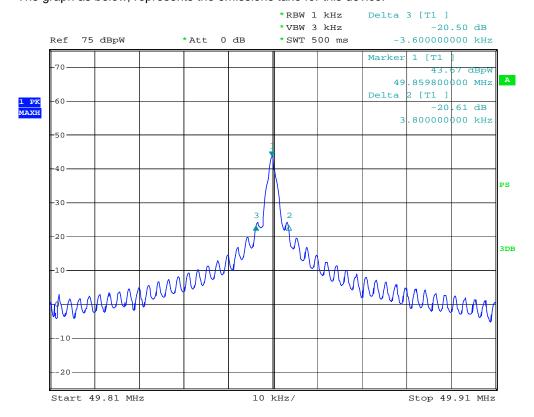
Section 15.209.

Method of measurement: The useful radiated emission from the EUT was detected by the spectrum

analyer with peak detector. The vertical Scale is set to -10dB per division.

The horizontal scale is set to 5KHz per division.

The graph as below, represents the emissions take for this device.



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Date: 9.FEB.2007 09:42:16

The results: The unit does meet the FCC Part 15 C Section 15.235 requirements.