Page

Report No.: SZEMO080703624ETF

: 1 of 9

No.198 Kezhu Road, Science Town Economic& Technology Development District Guangzhou, China 510663 Telephone: +86 (0) 20 8215 5555 Fax: +86 (0) 20 8207 5059

Email: sgs_internet_operations@sgs.com

FEDERAL COMMUNICATIONS COMMISSION

Registration number: 556682 FCC ID : U7UHS-P3049

TEST REPORT

Application No. : SZEMO080703624ET(SGS HK No.: 2020254EL)

Applicant : Heng Sheng Toys Factory(H.K.) Co., Ltd. **Buyer** :Threesixty Sourcing Hong Kong Ltd.

FCC ID : U7UHS-P3049 Fundamental Frequency : 49.860MHz

Equipment under Test (EUT):

EUT Name : Toy-R/C Robot Car

Item No. :1615088

Colour :red, blue, silver, black

Labelled Age Grading :6+
Country of Origin :China
Country of Destination :USA

Standards : FCC PART 15, SUBPART C : 2007

Section 15.235

Date of Receipt : 28 July 2008

Zangus Cans

Date of Test : 28 July to 08 August 2008

Date of Issue : 08 August 2008

Test Result : PASS

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

Authorized Signature:

Robinson Lo

Laboratory 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. 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.

Report No.: SZEMO080703624ETF

Page : 2 of 9

2 Test Summary

| Test | Test Requirement | Stanadard Paragraph | Result |
|--------------------------------------|-------------------|---------------------|--------|
| Radiated Emission (30MHz to 1000MHz) | FCC PART 15 :2007 | Section 15.235 | PASS * |
| Occupied Bandwidth | FCC PART 15 :2007 | 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.

Remark:

The EUT passed the Radiated Emission test after modification as below:

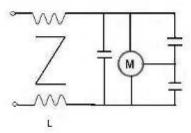
For the TX, add a 27pF capacitance between the two ports of the L3, please see the detail information as follow photo:



Report No.: SZEMO080703624ETF

Page : 3 of 9

For the RX, the circuit of the two motor after modify as follow:



All capacitance is 0.1uF, L is a commond, model no.:TX240502A153, supplier: Rosy Electronics Co. ;please see the detail information as follow photo:



Report No.: SZEMO080703624ETF

Page : 4 of 9

3 **Contents**

| | | Page |
|-------|---|------------------------|
| COV | ER PAGE | 1 |
| TES | T SUMMARY | 2 |
| CON | ITENTS | 4 |
| GEN | IERAL INFORMATION | 5 |
| 4.1 | CLIENT INFORMATION | 5 |
| 4.2 | DETAILS OF E.U.T. | 5 |
| 4.3 | DESCRIPTION OF SUPPORT UNITS | 5 |
| - | TEST LOCATION | 5 |
| 4.5 | OTHER INFORMATION REQUESTED BY THE CUSTOMER | 5 |
| TES | T RESULTS | 6 |
| 5.1 | | |
| 5.2 | E.U.T. OPERATION | 6 |
| 5.3 | TEST PROCEDURE & MEASUREMENT DATA | 6 |
| 5.3.1 | Radiated Emissions | 6-8 |
| 5.3.2 | | |
| | TES CON GEN 4.1 4.2 4.3 4.4 4.5 TES 5.1 5.2 5.3 5.3.1 | TEST SUMMARY CONTENTS |

Report No.: SZEMO080703624ETF

Page : 5 of 9

4 General Information

4.1 Client Information

Applicant: Heng Sheng Toys Factory(H.K.) Co., Ltd.

Address of Applicant: Rm 6, 3/F., Lladro Centre, 72 Hoi Yuen Road, Kwun Tong, Kowloon, Hong

Kong.

4.2 Details of E.U.T.

Power Supply: 9 V DC (9V "6F22" Size Battery) for Tx.

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.

Report No.: SZEMO080703624ETF

Page : 6 of 9

5 Test Results

5.1 Test Instruments

| R8 | R&TTE RE in Chamber | | | | | | | | | |
|------|-----------------------------------|-----------------|-----------|------------------|------------------------|-------------------------|--|--|--|--|
| Item | Test Equipment | Manufacturer | Model No. | Inventory No. | Cal.Date (dd-mm-yy) | Cal.Due date (dd-mm-yy) | | | | |
| 1 | 3m Semi-Anechoic Chamber | ETS-LINDGREN | N/A | SEL0017 | 16-06-2007 | 15-06-2009 | | | | |
| 2 | EMI Test Receiver | Rohde & Schwarz | ESIB26 | SEL0023 | 12-12-2007 | 11-12-2008 | | | | |
| 3 | EMI Test software | AUDIX | E3 | SEL0050 | N/A | N/A | | | | |
| 4 | Coaxial cable | SGS | N/A | SEL0028 | 18-06-2008 | 17-06-2009 | | | | |
| 5 | Coaxial cable | SGS | N/A | SEL0027 | 18-06-2008 | 17-06-2009 | | | | |
| 6 | BiConiLog Antenna (26-3000MHz) | ETS-LINDGREN | 3142C | SEL0014 | 12-08-2007 | 11-08-2008 | | | | |
| 7 | EMI Test Receiver | Rohde & Schwarz | ESCI | SEL0022 | 18-06-2008 | 17-06-2009 | | | | |
| 8 | Active Loop Antenna | Beijing Daze | ZN30900A | SEL0097 | 15-06-2008 | 14-06-2009 | | | | |

5.2 E.U.T. Operation

Input voltage: 9 V DC (9V "6F22" Size Battery) for the transmitter.

Operating Environment:

Temperature: 24.0 °C
Humidity: 50 % RH
Atmospheric Pressure: 1010 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

Measurement Distance: 3m (Semi-Anechoic Chamber)

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

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

54.0 dBμV/m above 960MHz

Detector: Peak Scan (120kHz resolution bandwidth)

FCC ID.: U7UHS-P3049

Report No.: SZEMO080703624ETF

Page : 7 of 9

Test Procedure:

- 1. The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Repeat above procedures until the measurements for all frequencies are complete.
- 7 The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

The following measurements were performed on the modified modified EUT on 10 April 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 | 54.03 | 32 | 100.0 | 45.97 | 68 |

| Test Frequency | Average (| Average (dBμV/m) | | Margin (dB) | |
|----------------|-----------|------------------|----------|-------------|------------|
| (MHz) | Vertical | Horizontal | (dBμV/m) | Vertical | Horizontal |
| 49.860 | 51.1 | 28.85 | 80.0 | 28.9 | 51.15 |

Report No.: SZEMO080703624ETF

Page : 8 of 9

Other emissions

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 | 58.22 | 40.54 | 43.50 | -2.96 |
| 147.850 | 1.32 | 8.81 | 27.47 | 47.26 | 29.92 | 43.50 | -13.58 |
| 198.550 | 1.40 | 10.19 | 27.16 | 54.16 | 38.59 | 43.50 | -4.91 |
| 249.250 | 1.67 | 12.27 | 26.92 | 50.30 | 37.32 | 46.00 | -8.68 |
| 297.025 | 1.88 | 13.76 | 26.73 | 45.09 | 34.00 | 46.00 | -12.00 |
| 546.625 | 2.65 | 18.84 | 27.67 | 44.08 | 37.90 | 46.00 | -8.10 |

Horizontal

| Tionzontal | | | | | | | |
|--------------------|--------------------|-----------------------------|--------------------------|-------------------------|-------------------|------------------------|--------------------|
| 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 | 39.46 | 21.78 | 43.50 | -21.72 |
| 147.850 | 1.32 | 8.81 | 27.47 | 39.93 | 22.59 | 43.50 | -20.91 |
| 198.550 | 1.40 | 10.19 | 27.16 | 49.42 | 33.85 | 43.50 | -9.65 |
| 249.250 | 1.67 | 12.27 | 26.92 | 43.66 | 30.68 | 46.00 | -15.32 |
| 297.025 | 1.88 | 13.76 | 26.73 | 42.34 | 31.25 | 46.00 | -14.75 |
| 347.725 | 2.05 | 15.37 | 27.07 | 37.13 | 27.48 | 46.00 | -18.52 |

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.

Report No.: SZEMO080703624ETF

Page : 9 of 9

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

Requirements: (a) Emissions from the intentional radiator shall be confined within a band

200 kHz wide centered on the operating frequency. The 200 kHz band

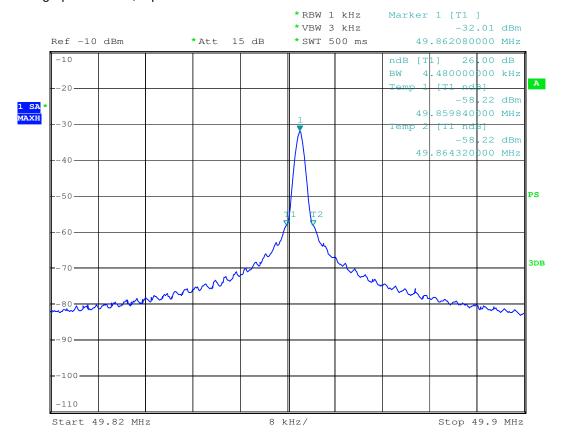
shall lie wholly within the frequency range of 49.82-49.90 MHz.

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 8KHz per division.

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



Date: 28.JUL.2008 17:19:01

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