

1/F., Building No. 1 Building, Agriculture Machinery Materials Co. Wushan Road, Shipai, Tianhe District, Guangzhou, China Telephone: +86 (0) 20 3848 1001 Fax: +86 (0) 20 3848 1006 cn_guangzhou_emc_section@sgs.com

FEDERAL COMMUNICATIONS COMMISSION Laboratory

Divisio

7435 Oakland Mills Road Columiba,MD 21046 May 31,2002



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FCC TEST REPORT

Application No. : 02.06.0608E-1

Applicant : PLANET TOYS WORLDWIDE LTD

FCC ID : QG3200

Equipment under Test (EUT):

Name : Mini RC – Car Asst

Standards : FCC PART 15, SUBPART C : 2000

Date of Receipt : 14 June 2002

Date of Test : 25 June 2002

Date of Issue : 26 June 2002

Test Result : PASS *

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

Authorized Signature:



Jerry Chen EMC Laboratory SGS-CSTC Ltd. This device can be expected to comply with Part 15 of the FCC Rules Operation is subject to the following conditions:

- (1) this device may not cause harmful interference, and
- this device must accept any interference received,including interference that may cause

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 and does not permit the use of the SGS PRODUCT CERTIFICATION MARK.. 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.



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3 General Information

3.1 Client Information

Applicant: PLANET TOYS WORLDWIDE LTD

Address of Applicant: 1107 Chinachem Golden Plaza, 77 Mody Road, TST East,

Kowloon, HK.

Name: Mini RC – Car Asst

3.2 Details of E.U.T.

Power Supply: 4.5V DC (3 x 'AA' Batteries)

Power Cord: N/A-

3.3 Description of Support Units

The EUT was tested as an independent unit.

3.4 Test Location

All tests were performed at:-

SGS-CSTC Standards Technical Services Ltd., Guangzhou Safety & EMC Laboratory, 1/F, Building No. 1, Agriculture Machinery Materials Company Warehouse Ltd., Wushan Road Shipai, Tianhe District, Guangzhou, China. P.C. 510630.

Tel: +86 20 3848 1001 Fax: +86 20 3848 1006

SGS UK Certificate No.: L32

Frederal Communications Commission laboratory division

Registration number: 282399

3.5 Other Information Requested by the Customer

None.



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4 Test Results

4.1 Test Instruments

| Description | Manufacturer | Model No. | Asset No. | Date of Cal. |
|-----------------------------------|-------------------|---|-----------|--------------|
| Temperature, Humidity & Barometer | Oregon Scientific | BA-888 | EMC023 | 26-07-2001 |
| Radiated Emissions CNE | LAPLACE | ERS-A | EMC025 | 27-04-1998 |
| Bioconic Antenna | R & S | HK116 | EMC047 | 14-12-2001 |
| 3M Semi-Anechoic Chamber | Frankonia | $11.5 \times 7.5 \times 6 \mathrm{m}^3$ | EMC1001 | 21-01-2002 |
| 0.8m Test Table | SGS-CSTC | N/A | EMC1003 | N/A |
| EMI Receiver | R & S | ESCS30 | EMC2001 | 13-11-2001 |
| Spectrum Analyser | SCHAFFNER | R3261C+99 | EMC071 | 26-07-2001 |
| Log-Periodic Dipole Antenna | R & S | HL233 | EMC2005 | 17-12-2001 |
| Monitor System | HD-GmbH | N/A | EMC2008 | N/A |
| Antenna Mask | HD-GmbH | AS620M | EMC2010 | N/A |
| Turn-Table | HD-GmbH | DT430 | EMC2014 | N/A |
| Turn_Table & Mask Controller | ADVANTEST | HD-GmbH HD100 | EMC2015 | N/A |
| Coaxial Cable (12m) | R & S | HFU2-Z4 | EMC3001 | 08-03-2002 |
| EMI Test Software | R & S | ES-K1 | EMC5001 | N/A |

4.2 E.U.T. Operation

Input voltage: 4.5 V DC (3 x 'AA' Batteries)

Operating Environment:

Temperature: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1006 mbar

EUT Operation:

Test the EUT in On Mode.



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4.3 Test Procedure & Measurement Data

4.3.1 Radiated Emissions

Test Requirement: FCC Part15 C

Test Method: Based on FCC Part15 C Section 15.235

Test Date: 25 June 2002

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)

Test Procedure: The procedure uesd was ANSI Standard C63.4-1992. 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 the worst case emissions were reported.

The following Peak measurements were performed on the EUT on 25^h June 2002: Test the EUT in On Mode.

| Test | Test Level (dBuV/m) | | Limits | Margin (dB) | |
|--------------------|---------------------|------------|----------|-------------|------------|
| Frequency (MHz) | Vertical | Horizontal | (dBuV/m) | Vertic al | Horizontal |
| 49.860 | 73.9 | 45.4 | 80.0 | 6.1 | 34.6 |
| 99.720 | 29.4 | 20.4 | 43.5 | 14.1 | 23.1 |
| 149.580 | 24.5 | 25.4 | 43.5 | 19.0 | 18.1 |
| 199.440 | 28.4 | 27.3 | 43.5 | 15.1 | 16.2 |
| 249.300 | 28.9 | 23.8 | 46.0 | 17.1 | 22.2 |
| 299.160 | 31.2 | 22.4 | 46.0 | 14.8 | 23.6 |
| 349.020 | 36.0 | 31.0 | 46.0 | 10.0 | 15.0 |
| 398.880 | 34.2 | 30.2 | 46.0 | 11.8 | 15.8 |
| 448.740 | 33.4 | 29.8 | 46.0 | 12.6 | 16.2 |
| 498.600 | 32.4 | 31.0 | 46.0 | 13.6 | 15.0 |

Test Results: The unit does meet the FCC requirements.

SGS

4.3.2 Occupied Bandwidth

Test Requirement: FCC Part15 C

Test Method: Based on FCC Part15 C Section 15.235:

Operation within the band 49.82 – 49.90 MHz

Test Date: 25 June 2002

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

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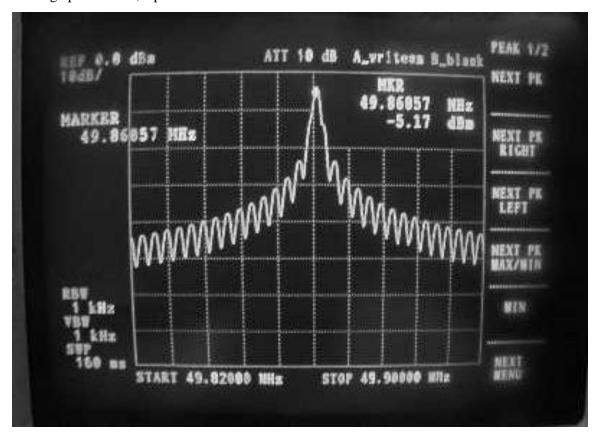
levels.

Method of measurement: A small sample of the transmitter output was fed into the Spectrum

Analyzer and the attached plot was taken. The vertical 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.



The results: The unit does meet the FCC requirements.



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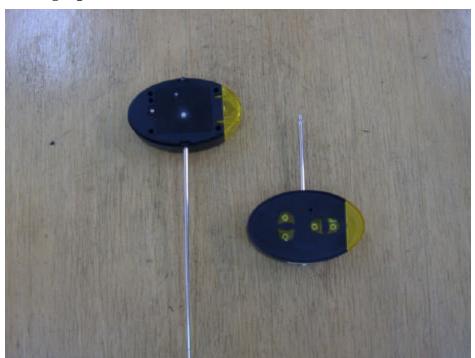
4.4 Photographs - Radiated Emission Test Setup in Chamber



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5 Photographs - EUT Constructional Details







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