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FEDERAL COMMUNICATIONS COMMISSION

Registration number: 556682

Report No.: SZEMO060400673RFF(I)

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FCC ID : T9E-WD3006-49

# TEST REPORT

Application No.: SZEMO060400673RF(SGS SZ NO.: SZTYR060400736/EL)

Applicant: Experience Enterprises

Manufacturer: Woddon Industrial Limited

FCC ID: T9E-WD3006-49 Fundamental Frequency: 49.860MHz

**Equipment under Test (EUT):** 

EUT Name: Remote Control Cars

Item No.: WD3006A/ WD3006B/ WD3006C/ WD3006D\*

Labelled Age Grading: for ages over 3

Country of Origin: China Country of Destination: USA

Please refer to section 2 of this report which indicates which model was actually

tested and which were electrically identical.

Standards: FCC PART 15, SUBPART C: 2006 Section 15.235

Date of Receipt: 10 May 2006

Date of Test: 12 to 17 May 2006

Date of Issue: 17 May 2006

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.

<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



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# 2 Test Summary

Test	Test Requirement Stana		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.

Item No.: WD3006A/ WD3006B/ WD3006C/ WD3006D

Only the item in the pictures of this report was tested, since the electrical circuit design, layout, component used and internal wiring were identical for the above items.



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# 4 General Information

#### 4.1 Client Information

Applicant: Experience Enterprises

Address of Applicant: 156 North Jefferson, Chicago, IL, 60661, USA

#### 4.2 Details of E.U.T.

Product Name: Remote Control Cars

Item No: WD3006A/ WD3006B/ WD3006C/ WD3006D Power Supply: 9.0V DC (1\*9.0V '6F22' Size Battery) for Tx

7.2V DC (Ni-cd Rechargeable Battery) for Rx.

Power Cord: N/A-

Please refer to section 2 of this report which indicates which model was

actually tested and which were electrically identical.

## 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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### 4.6 Test Facility

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

#### NVLAP – Lab Code: 200611-0

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is recognized under the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0. Effective through December 31, 2004.

#### ACA

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our NVLAP accreditation.

#### VCCI

The 3m Semi-anechoic chamber and Shielded Room (7.5m x 4.0m x 3.0m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2197 and C-2383 respectively.

Date of Registration: September 29, 2005. Valid until September 28, 2008.

## SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

#### CNAL – LAB Code: L0141

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAL/AC01:2002 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:1999 General Requirements) for the Competence of Testing Laboratories.

## • FCC – Registration No.: 556682

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen 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 556682, Aug. 04, 2005

#### Industry Canada (IC)

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 6002.



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#### 5 Test Results

## 5.1 Test Instruments

RE in Chamber						
Item	Test Equipment	Manufacturer	Serial No.	Cal.Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)	
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	SEL0017	28-04-2005	27-04-2007	
2	EMI Test Receiver	Rohde & Schwarz	100249	22-09-2005	21-09-2006	
3	EMI Test software	AUDIX	E3	N/A	N/A	
4	Coaxial cable	SGS	SEL0028	30-05-2005	29-05-2006	
5	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	00042673	03-03-2006	02-03-2007	
6	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	2944A10861	26-08-2005	25-08-2006	
7	Double-ridged horn (1-18GHz)	ETS-LINDGREN	00035926	30-12-2004	29-12-2006	
8	Pre-amplifier (1-18GHz)	Rohde & Schwarz	1091457	29-07-2005	28-07-2007	

1	Loop Antenna	ETS-LINDGREN	00042963	14-01-2006	13-01-2007
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## 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: 45% RH Atmospheric Pressure: 1007 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: 15 May 2006

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 used was ANSI

Standard C63.4-2003. The receive was scanned from 30MHz to 1000MHz.When an emission was found, the table was rotated 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. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by Bilog antenna with 2 orthogonal polarities

#### Intentional emission

Test Frequency	Peak (dBμV/m)		Limits	Margin (dB)	
(MHz)	Vertical	Horizontal	(dBµV/m)	Vertical	Horizontal
49.860	71.89	56.47	100.0	28.11	43.53

T	est Frequency	Average (dBµV/m)		Limits	Margin (dB)	
	(MHz)	Vertical	Horizontal	(dBµV/m)	Vertical	Horizontal
	49.860	65.30	51.26	80.0	14.70	28.74

#### Other emissions

#### 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)
98.876	1.19	9.05	27.89	27.87	10.22	43.50	-33.28
141.553	1.30	8.21	27.51	29.87	11.87	43.50	-31.63
224.002	1.54	11.46	27.03	26.77	12.74	46.00	-33.26
413.150	2.26	16.35	27.45	27.17	18.33	46.00	-27.67
696.390	2.89	21.58	27.29	27.59	24.77	46.00	-21.23

### Vertical.

Frequency	Cable	Antenna	Preamp	Read	Lovel	Limit	0ver
	Loss	Factor	Factor	Level	Level (dBuV/m)	Line	Limit
(MHz)	(dB)	(dB/m)	(dB)	(dBuV)	(ubuv/III)	(dBuV/m)	(dB)
86.425	1.10	8.36	27.97	38.46	19.95	40.0	-20.05
98.125	1.18	9.02	27.89	40.93	23.24	43.5	-20.26
198.550	1.40	10.18	27.16	40.51	24.93	46.0	-21.07
249.250	1.67	12.30	26.92	48.86	35.91	46.0	-10.09

#### 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 15CSection 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 May 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

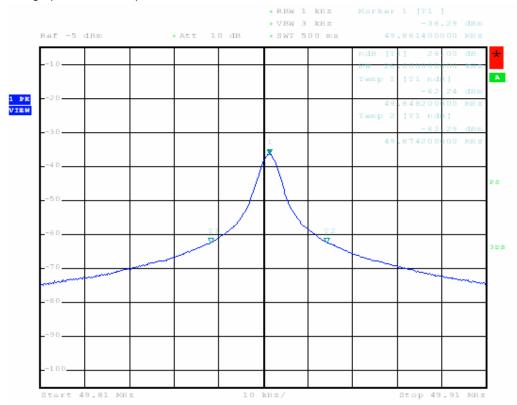
15.209.

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.



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