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sgs\_internet\_operations@sgs.com Email: FCC ID: U2F30040802R4

# **FCC Test Report**

**Application No.:** SZEMO080603019TX RIDEMAKERZ LLC. Applicant:

**Equipment Under Test (EUT):** 

**EUT Name:** RC car Item No.: 3004

FCC ID: U2F30040802R4

Standards: FCC PART15 SUBPART B:2007

Date of Receipt: 08 September 2008 Date of Test: 08 to 09 September 2008

Date of Issue: 09 September 2008

PASS\* Test Result:

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

Authorized Signature:

Robinson Lo Laboratory Manager

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#### **Test Summary** 2

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission (30MHz to 1GHz)	FCC PART 15, SUBPART B: 2007	ANSI C63.4:2003	Class B	PASS

#### Remark:

New batteries were installed in the EUT during all tests.

The three channels of the EUT has the same carried frequency 49.860MHz, with only different of the modulation signal code.



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#### 4 General Information

#### 4.1 Client Information

Applicant: RIDEMAKERZ LLC.

Address of Applicant: 1930 INNERBELT BUSINESS CENTER DR. ST. LOUIS, MISSOURI 63114.

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

Power Supply: 6.0V DC (4\* 1.5 " AA" Size Batteries) for Rx.

#### 4.3 Description of Support Units

The EUT has been tested as an independent unit.

#### 4.4 Standards Applicable for Testing

The customer requested FCC tests for a receiver for a 49MHz transmitter.

The standard used was FCC PART 15, SUBPART B, CLASS B (2007)

#### 4.5 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

No tests were sub-contracted.

#### 4.6 Deviation from Standards

None.

#### 4.7 Abnormalities from Standard Conditions

None.



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#### **Equipments Used during Test** 5

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		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	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0014	12-08-2008	11-08-2009		
6	6 Pre-amplifier Agilent (0.1-1300MHz) Technologies		8447D	SEL0053	18-06-2008	17-06-2009		
7	7 Double-ridged horn (1-18GHz) ETS-LIND		3117	SEL0005	12-08-2008	11-08-2009		
8	Pre-amplifier (1-18GHz) Rohde & Schwarz		AFS42-00101 800-25-S-42	SEL0081	18-06-2008	17-06-2009		
9	Band filter	Amindeon	82346	SEL0094	18-06-2008	17-06-2009		
10	Active Loop Antenna Beijing Daze		ZN30900A	SEL0097	15-06-2008	14-06-2009		



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### 6 Test Results

#### 6.1 Radiated Emissions, 30MHz to 1GHz

Test Requirement: FCC Part15 B
Test Method: ANSI C63.4
Frequency Range: 30MHz to 1GHz

Measurement Distance: 3m Class: Class B

Limit:  $40.0 \text{ dB}\mu\text{V/m}$  between 30MHz & 88MHz

 $43.5~dB\mu V/m$  between 88MHz~&~216MHz  $46.0~dB\mu V/m$  between 216MHz~&~960MHz

 $54.0 \text{ dB}\mu\text{V/m}$  above 960MHz

Detector: Peak for pre-scan (120kHz resolution bandwidth)

Quasi-Peak if maximised peak within 6dB of limit

#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 23.0 °C Humidity: 52 % RH Atmospheric Pressure: 1015 mbar

EUT Operation: Test the EUT in On Mode.

#### 6.1.2 Measurement Data

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.



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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)
213.33	1.48	10.89	27.08	48.47	33.76	43.50	-9.74
308.39	1.93	14.20	26.79	47.49	36.83	46.00	-9.17
378.23	2.14	16.03	27.27	45.78	36.68	46.00	-9.32
487.84	2.56	17.80	27.68	44.23	36.91	46.00	-9.09
548.95	2.65	18.87	27.66	42.81	36.67	46.00	-9.33

#### 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)
168.71	1.35	9.51	27.33	47.46	30.99	43.50	-12.51
231.76	1.58	11.73	27.00	52.61	38.92	46.00	-7.08
277.35	1.80	12.89	26.80	54.08	41.97	46.00	-4.03
479.11	2.52	17.80	27.65	43.81	36.48	46.00	-9.52
543.13	2.65	18.81	27.67	40.26	34.05	46.00	-11.95