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FEDERAL COMMUNICATIONS COMMISSION

Registration number: 556682

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FCC ID : VLE15051-PPL-B-2

TEST REPORT

Application No. : SZEMO080703215ET (SGS SZ No.: SZTYR080702810/ EL)

Applicant : Asian Express Holding Ltd.

FCC ID : VLE15051-PPL-B-2

Fundamental Frequency: 49.860MHz

Equipment under Test (EUT):

EUT Name : motive (pro-street racer)

Item No. : 15051-PPL-B-B/ 15051-PPL-B-R

Country of Origin: China Labelled Age Grading: Over 8

Standards : FCC PART 15, SUBPART C: 2007

Section 15.235

Date of Receipt : 16 July 2008

Date of Test : 16 to 31 July 2008

Date of Issue : 31 July 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

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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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 Batteries installed in the EUT during test were fully charged.

The EUT passed the RE test after retest.



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4 General Information

4.1 Client Information

Applicant: Asian Express Holding Ltd.

Address of Applicant: 4F, 4, No.669, Jingping Rd, Zhonghe City, Taipei Country 235, Taiwan R.O.C.

4.2 Details of E.U.T.

Power Supply: 9.0 V DC (1* 9.0V "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.



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5 Test Results

5.1 Test Instruments

	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	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0014	12-08-2007	11-08-2008
6	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	18-06-2008	17-06-2009
7	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0005	12-08-2007	11-08-2008
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

5.2 E.U.T. Operation

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

Operating Environment:

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

EUT Operation:

Test the EUT in transmitting mode.



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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: $40.0~dB\mu V/m$ between 30MHz~&~88MHz $43.5~dB\mu V/m$ between 88MHz~&~216MHz $46.0~dB\mu V/m$ between 216MHz~&~960MHz

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

Detector: Peak Scan (120kHz resolution bandwidth)



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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
- 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.

Intentional emission

T	Test Frequency	Peak (dBμV/m)	Limits	Marg	in (dB)
	(MHz)	Vertical	Horizontal	(dBµV/m)	Vertical	Horizontal
	49.860	62.14	44.25	100.0	37.86	55.75

Test Frequency	Average (dBμV/m)		Limits	Margin (dB)	
(MHz)	Vertical	Horizontal	(dBμV/m)	Vertical	Horizontal
49.860	57.81	40.22	80.0	22.19	39.78



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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)
97.900	1.18	9.02	27.89	44.64	26.95	43.5	-16.55
249.220	1.67	12.27	26.92	36.41	23.43	46.0	-22.57
297.720	1.89	13.81	26.73	35.72	24.69	46.0	-21.31
347.190	2.05	15.34	27.07	37.87	28.19	46.0	-17.81
397.630	2.20	16.27	27.39	36.64	27.72	46.0	-18.28
447.100	2.40	16.84	27.56	39.77	31.45	46.0	-14.55

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)
78.625	1.06	7.61	28.00	40.68	21.35	40.0	-18.65
98.125	1.18	9.03	27.89	54.17	36.49	43.5	-7.01
147.850	1.32	8.81	27.47	40.56	23.22	43.5	-20.28
249.250	1.67	12.27	26.92	43.82	30.84	46.0	-15.16
347.725	2.05	15.37	27.07	44.61	34.96	46.0	-11.04
447.175	2.40	16.84	27.56	45.17	36.85	46.0	-9.15

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 49.81-49.90 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

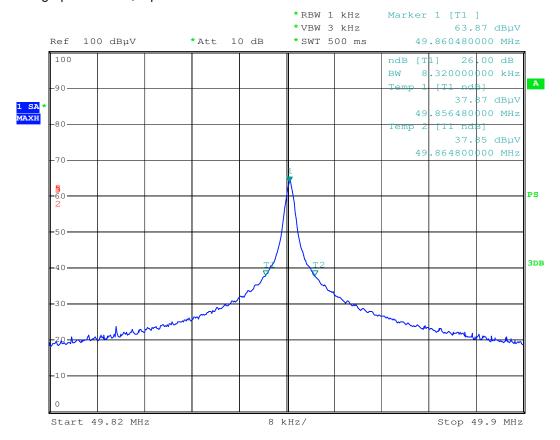
shall lie wholly within the frequency range of 88-108 MHz.

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 10KHz 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.