

No. 1 Workshop, M-10, Middle Section, Science & Technology

Park, District Shenzhen, China 518057
Telephone: +86 (0) 755 2601 2053
Fax: +86 (0) 755 2671 0594

Email: sgs_internet_operations@sgs.com Report No.: SZEMO09050219801

Registration number: 282399 Page: 1 of 9

FCC ID: VLE15052-PPL-B

TEST REPORT

Application No.: SZEMO090502198TX

Applicant: Asian Express Holdings Ltd

Applicant Address: 4F, -4, No.669, Jingping Rd, Zhonghe City, Taipei County 235, Taiwan

FCC ID: VLE15052-PPL-B

Fundamental Frequency: 27.145MHz

Equipment Under Test (EUT):

Name: Stunt Truck

Model No.: 15052-PPL-B-ASM

Labeled Age Grading: 8+

Standards: FCC PART 15, SUBPART C: 2008

Section 15.227

Date of Receipt: 07 May 2009

Date of Test: 07 to 08 May 2009

Date of Issue: 08 May 2009

Test Result : PASS *

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.

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

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



Report No.: SZEMO09050219801

Page: 2 of 9

2 Test Summary

Test	Test Requirement	Standard Paragraph	Result
Radiated Emission (30MHz to 1000MHz)	FCC PART 15 :2008	Section 15.227	PASS
Occupied Bandwidth	FCC PART 15 :2008	Section 15.215	PASS

.Remark:

Tx: In this whole report Tx (or tx) means Transmitter.

Rx: In this whole report Rx (or rx) means Receiver.



Report No.: SZEMO09050219801

Page: 3 of 9

3 Contents

		Page
1	1 COVER PAGE	1
2	2 TEST SUMMARY	2
3	3 CONTENTS	3
4	4 GENERAL INFORMATION	4
	4.1 Details of E.U.T	4
	4.2 DESCRIPTION OF SUPPORT UNITS	Δ
	4.3 Test Location	4
	4.4 OTHER INFORMATION REQUESTED BY THE CUSTOMER	4
	4.5 TEST FACILITY	5
5		
	5.1 E.U.T. OPERATION	7
	5.2 TEST PROCEDURE & MEASUREMENT DATA	
	5.2.1 Radiated Emissions	
	5.2.2 Occupied Bandwidth	

FCC ID:VLE15052-PPL-B



Report No.: SZEMO09050219801

Page: 4 of 9

4 General Information

4.1 Details of E.U.T.

Name: Stunt Truck

Model No.: 15052-PPL-B-ASM

Power Supply: 9.0V(1*9.0V"6F22"Size Battery)

Power Cord: N/A-

4.2 Description of Support Units

The EUT was tested as an independent unit: a 27MHz radio transmitter.

4.3 Test Location

All tests were performed at:

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, District Shenzhen, China 518057

Telephone: +86 (0) 755 2601 2053 Fax: +86 (0) 755 2671 0594

No tests were sub-contracted.

4.4 Other Information Requested by the Customer

None.



Report No.: SZEMO09050219801

Page: 5 of 9

4.5 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.

ACMA

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.

• 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.

CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

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, 2008. Valid until September 28, 2011.

• 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, June 27, 2008.

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.: 4620C-1.

FCC ID:VLE15052-PPL-B



Report No.: SZEMO09050219801

Page: 6 of 9

5 Test Results

Test Instruments

<u>rest i</u>	est Instruments									
	RE in Chamber									
ltem	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	12-12-2008	11-12-2009				
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	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	12-08-2008	11-08-2009				
8	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	12-08-2008	11-08-2009				
9	Pre-amplifier (1-18GHz)	Rohde & Schwarz	AFS42-00101 800-25-S-42	SEL0081	18-06-2008	17-06-2009				
10	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	SEL0080	18-06-2008	17-06-2009				
11	Band filter	Amindeon	82346	SEL0094	18-06-2008	17-06-2009				
12	Active Loop Antenna Beijing Daze		ZN30900A	SEL0097	15-06-2008	14-06-2009				



Report No.: SZEMO09050219801

Page: 7 of 9

5.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C
Humidity: 52 % RH
Atmospheric Pressure: 1012 mbar

EUT Operation: Test the EUT in transmitting mode.

5.2 Test Procedure & Measurement Data

5.2.1 Radiated Emissions

Test Requirement: FCC Part15 C Section 15.227

Test Method: ANSI C63.4

Measurement 3m (Semi-Anechoic Chamber)

Distance:

Requirements: Carrier Power will not exceed 80dBuV/m at 3m (Average).

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: 9KHz to 30MHz RBW=9KHz VBW=30KHz

30MHz to 1000MHz RBW=100KHz VBW=300KHz

Above 1000MHz RBW=1MHz VBW=3MHz

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 moved from

1m to 4m to find out the maximum 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.

27.145MHz Mode

Test Procedure: For testing performed with the loop antenna, testing was performed in accordance to ANSI C63.4 section 8.2.1. The center of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane.

FCC ID:VLE15052-PPL-B

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



Report No.: SZEMO09050219801

Page: 8 of 9

Intentional emission

Test Frequency	Peak (dBμV/m)		Limits	Marg	in (dB)
(MHz)	Vertical	Horizontal	(dBµV/m)	Vertical	Horizontal
27.145	73.99	62.73	100.00	26.01	37.27

Test Frequency	Average (dBμV/m) Vertical Horizontal		Limits	Marg	in (dB)
(MHz)			(dBµV/m)	Vertical	Horizontal
27.145	69.80	58.50	80.00	10.20	21.50

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)
105.925	1.22	8.81	27.82	55.41	37.62	43.50	-5.88
133.225	1.29	7.84	27.58	55.00	36.55	43.50	-6.95
160.525	1.34	9.59	27.38	53.72	37.27	43.50	-6.23
269.725	1.77	12.70	26.83	53.43	41.07	46.00	-4.93
487.15	2.55	17.80	27.67	49.04	41.72	46.00	-4.28

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)
105.925	1.22	8.81	27.82	54.74	36.95	43.50	-6.55
133.225	1.29	7.84	27.58	52.28	33.83	43.50	-9.67
160.525	1.34	9.59	27.38	54.65	38.20	43.50	-5.30
187.825	1.38	10.06	27.22	54.84	39.06	43.50	-4.44
269.725	1.77	12.70	26.83	55.22	42.86	46.00	-3.14

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 limit 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 15.227 requirements.

FCC ID:VLE15052-PPL-B

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



Report No.: SZEMO09050219801

Page: 9 of 9

5.2.2 Occupied Bandwidth

FCC Part 15 C Section 15.215 (C) **Test Requirement:**

Test Method: ANSI C63.4

Operation within the band 26.960 - 27.280 MHz

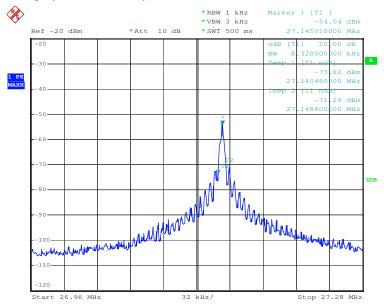
Requirements:

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the 20 dB bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

Method of measurement: The useful radiated emission from the EUT was detected by the spectrum analyser with peak detector. The vertical Scale is set to 10dB

per division. The horizontal scale is set to 32KHz per division.

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



Date: 6.MAY.2009 09:54:18

The results: The unit does meet the FCC Part 15 C Section 15.215 requirements.

FCC ID:VLE15052-PPL-B

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sqs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sqs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."