



Waltek Services (Shenzhen) Co., Ltd
12B, West Tower, Aidi Building, No.5003, Binhe Road, Futian
District, Shenzhen, Guangdong, China

TEST REPORT

FCC ID: YCR-AR-1002

Report No.: WT11062791EEF

Applicant: China Industries Ltd. t/a Wow! Stuff.

**Address: Creative Industries Centre, Wolverhampton Science Park,
Wolverhampton, WV10 9TG, UK**

The following samples were submitted and identified by/on behalf of the client as:

Sample Description:	Shark & Clown Fish
Style/model No.:	AR-1001 & AR-1002
Operation Frequency:	49.860MHz
FCC ID:	YCR-AR-1002
Sample Receiving Date:	June 13, 2011
Test Period:	June 14, 2011 to June 15, 2011

Test Requested:	In accordance with the FCC Part 15 Subpart C, Section 15.235:2008
Test Method:	ANSI C63.4: 2003
Test Conclusion:	Based on the performed tests on the submitted samples, the results comply with the FCC Part 15 Subpart C requirements.

***** For Further Details, Please Refer to the Following Page(s) *****

Signed for and on behalf of
Waltek Services (Shenzhen) Co., Ltd

Philo zhong
EMC Laboratory Manager

This Test Report is issued by the Company subject to its General Conditions of Service Printed overleaf or available on request and accessible at <http://www.waltek.com.cn>. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. This Test report cannot be reproduced, except in full, without prior written permission of the Company
Test Location: 1/F, Fukangtai Building, West Baima Rd., Songgang Street, Baoan District, Shenzhen 518105, China.
Web: www.waltek.com.cn Email: info@waltek.com.cn Tel: 0086-755-83551033 Fax: 0086-755-83552400



2 Contents

2	CONTENTS	2
3	TEST SUMMARY.....	3
4	GENERAL INFORMATION.....	4
4.1	CLIENT INFORMATION.....	4
4.2	GENERAL DESCRIPTION OF E.U.T.	4
4.3	E.U.T. ENVIRONMENT AND TEST MODES	4
4.4	TEST LOCATION.....	5
4.5	OTHER INFORMATION REQUESTED BY THE CUSTOMER	5
4.6	TEST FACILITY	5
5	EQUIPMENT USED DURING TEST.....	6
6	TEST RESULT & MEASUREMENT DATA.....	7
6.1	RADIATED EMISSION	7
6.1.1	Intentional emission.....	8
6.1.2	Other emissions (QP)	8
6.2	OCCUPIED BAND EDGE.....	9
7	PHOTOGRAPHS - TEST SETUP	10
8	PHOTOGRAPHS - EUT	11
8.1	EUT-FRONT VIEW	11
8.2	EUT-BACK VIEW	11
8.3	EUT-OPEN VIEW	12
8.4	PCB-FRONT VIEW	12
8.5	PCB-BACK VIEW	13
9	FCC ID LABEL	14



Waltek Services (Shenzhen) Co., Ltd
12B, West Tower, Aidi Building, No.5003, Binhe Road, Futian
District, Shenzhen, Guangdong, China

FCC ID: YCR-AR-1002

Report No.: WT11062791EEF

3 Test Summary

Test Item	Section in CFR 47	Result
Radiated Emission (30MHz to 1GHz)	Section 15.235:2008	Passed
Occupied Band edge	Section 15.235:2008	Passed

Remark: Passed: The EUT complies with the essential requirements in the standard.

Failed: The EUT does not comply with the essential requirements in the standard.

This Test Report is issued by the Company subject to its General Conditions of Service Printed overleaf or available on request and accessible at <http://www.waltek.com.cn>. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. This Test report cannot be reproduced, except in full, without prior written permission of the Company
Test Location: 1/F, Fukangtai Building, West Baima Rd., Songgang Street, Baoan District, Shenzhen 518105, China.
Web: www.waltek.com.cn Email: info@waltek.com.cn Tel: 0086-755-83551033 Fax: 0086-755-83552400



Waltek Services (Shenzhen) Co., Ltd
12B, West Tower, Aidi Building, No.5003, Binhe Road, Futian
District, Shenzhen, Guangdong, China

FCC ID: YCR-AR-1002

Report No.: WT11062791EEF

4 General Information

4.1 Client Information

Applicant:	China Industries Ltd. t/a Wow! Stuff.
Address of Applicant:	Creative Industries Centre, Wolverhampton Science Park, Wolverhampton, WV10 9TG, UK
Manufacturer:	EDU-SCIENCE(HK) LTD
Address of Manufacturer:	Suite 701, Wing on plaza, 62 Mody Road, Tsim Sha Tsui East, Kowloon, Hong Kong

4.2 General Description of E.U.T.

Product Name:	Shark & Clown Fish
Trade Name:	N/A
Style/model No.:	AR-1001 & AR-1002
Operation Frequency:	49.860MHz
Labeled Age Grading:	14+
Power Supply:	DC 9.0V
Power Cord:	N/A
Remark:	The EUT may have difference colours.

4.3 E.U.T. Environment and test modes

Operating Environment:	
Temperature:	25.5 °C
Humidity:	51 % RH
Atmospheric Pressure:	1016 mbar
Test mode:	Continuously Transmit
Transmitting mode:	Keep the EUT in transmitting mode

This Test Report is issued by the Company subject to its General Conditions of Service Printed overleaf or available on request and accessible at <http://www.waltek.com.cn>. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. This Test report cannot be reproduced, except in full, without prior written permission of the Company
Test Location: 1/F, Fukangtai Building, West Baima Rd., Songgang Street, Baoan District, Shenzhen 518105, China.
Web: www.waltek.com.cn Email: info@waltek.com.cn Tel: 0086-755-83551033 Fax: 0086-755-83552400



Waltek Services (Shenzhen) Co., Ltd
12B, West Tower, Aidi Building, No.5003, Binhe Road, Futian
District, Shenzhen, Guangdong, China

FCC ID: YCR-AR-1002

Report No.: WT11062791EEF

4.4 Test Location

All Emission tests were performed at:
Waltek Services(Shenzhen) Co., Ltd. at 1/F, Fukangtai Building, West Baima Rd., Songgang
Street, Baoan District, Shenzhen 518105, China.

4.5 Other Information Requested by the Customer

None.

4.6 Test Facility

The test facility has a test site registered with the following organizations:

- **IC – Registration No.: IC7760A**

Waltek Services(Shenzhen) Co., Ltd. has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration No.: IC7760A, August 3, 2010.

- **FCC – Registration No.: 880581**

Waltek Services(Shenzhen) Co., Ltd. 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 880581, May 26, 2011.



Waltek Services (Shenzhen) Co., Ltd
12B, West Tower, Aidi Building, No.5003, Binhe Road, Futian
District, Shenzhen, Guangdong, China

FCC ID: YCR-AR-1002

Report No.: WT11062791EEF

5 Equipment Used during Test

Equipment Name	Manufacturer Model	Equipment No.	Internal No	Specification	Cal. Date	Due Date	Cert. No.	Uncertainty
EMC Analyzer	Agilent/ E7405A	MY45114943	W2008001	9k-26.5GHz	Aug.03, 2010	Aug.02, 2011	WWS20 081596	±1dB
Trilog Broadband Antenne	SCHWARZBECK MESS-ELEKTROM/ VULB9163	336	W2008002	30-3000 MHz	Aug.03, 2010	Aug.02, 2011	-	±1dB
Broad-band Horn Antenna	SCHWARZBECK MESS-ELEKTROM/ BBHA9120D	667	W2008003	1-18GHz	Aug.03, 2010	Aug.02, 2011	-	f < 10 GHz : ±1dB 10GHz < f < 18 GHz : ±1.5dB
Broadband Preamplifier	SCHWARZBECK MESS-ELEKTROM/ BBV 9718	9718-148	W2008004	0.5-18GHz	Aug.03, 2010	Aug.02, 2011	-	±1.2dB
10m Coaxial Cable with N-male Connectors	SCHWARZBECK MESS-ELEKTROM/ AK 9515 H	-	-	-	Aug.03, 2010	Aug.02, 2011	-	-
10m 50 Ohm Coaxial Cable with N-plug, individual length	SCHWARZBECK MESS-ELEKTROM/ AK 9513	-	-	-	Aug.03, 2010	Aug.02, 2011	-	-
Positioning Controller	C&C LAB/ CC-C-IF	-	-	-	N/A	N/A	-	-
Color Monitor	SUNSPPO/ SP-14C	-	-	-	N/A	N/A	-	-

This Test Report is issued by the Company subject to its General Conditions of Service Printed overleaf or available on request and accessible at <http://www.waltek.com.cn>. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. This Test report cannot be reproduced, except in full, without prior written permission of the Company
Test Location: 1/F, Fukangtai Building, West Baima Rd., Songgang Street, Baoan District, Shenzhen 518105, China.
Web: www.waltek.com.cn Email: info@waltek.com.cn Tel: 0086-755-83551033 Fax: 0086-755-83552400



6 Test Result & Measurement Data	
6.1 Radiated Emission	
Test Requirement:	FCC Part15 C Section 15.235
Test Method:	ANSI C63.4: 2003
Measurement Distance:	3m (Semi-Anechoic Chamber)
Requirements:	Carrier Power will not exceed 80dBuV/m at 3m (Average).
	Out of band emissions shall not exceed:
	40.0 dBuV/m between 30MHz & 88MHz
	43.5 dBuV/m between 88MHz & 216MHz
	46.0 dBuV/m between 216MHz & 960MHz
	54.0 dBuV/m between 960MHz & 1000MHz
Detector:	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.
Test Result:	The unit does meet the FCC Part 15 C Section 15.235 requirements.
49.860MHz Mode	
Test Procedure: For testing performed with the loop antenna, testing was performed in accordance to ANSI C63.4: 2003, 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.	



6.1.1 Intentional emission

Test Frequency (MHz)	Peak (dB μ V/m)		Limits (dB μ V/m)	Margin (dB)	
	Vertical	Horizontal		Vertical	Horizontal
49.860	83.26	67.17	100.00	-16.74	-32.83

Test Frequency (MHz)	Average (dB μ V/m)		Limits (dB μ V/m)	Margin (dB)	
	Vertical	Horizontal		Vertical	Horizontal
49.860	76.85	61.54	80.00	-3.15	-18.46

6.1.2 Other emissions (QP)

Vertical

No.	Frequency (MHz)	Reading (dB μ V/m)	Correct Factor(dB)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	245.2606	26.62	15.06	41.68	46.00	-4.32	QP
2	297.5459	22.91	16.92	39.83	46.00	-6.17	QP
3	349.0000	23.22	20.13	43.35	46.00	-2.65	QP
4	392.7375	22.76	20.66	43.42	46.00	-2.58	QP

Horizontal

No.	Frequency (MHz)	Reading (dB μ V/m)	Correct Factor(dB)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	249.3000	25.23	15.58	40.81	46.00	-5.19	QP
2	297.5459	21.15	16.92	38.07	46.00	-7.93	QP
3	349.0000	21.60	20.17	41.77	46.00	-4.23	QP
4	392.7375	18.65	20.66	39.31	46.00	-6.69	QP

Remark:

- (1).when the margin more than 10dB, the data would not show in the test report.
- (2).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.



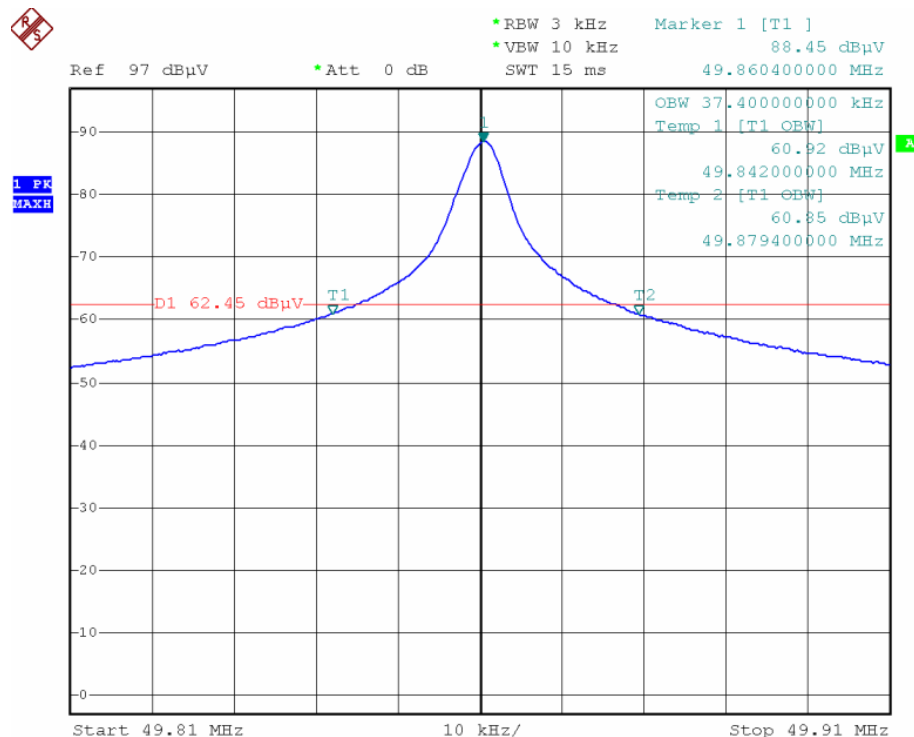
Waltek Services (Shenzhen) Co., Ltd
12B, West Tower, Aidi Building, No.5003, Binhe Road, Futian
District, Shenzhen, Guangdong, China

FCC ID: YCR-AR-1002

Report No.: WT11062791EEF

6.2 Occupied Band edge	
Test Requirement:	FCC Part 15 C Section 15.235
Test Method:	ANSI C63.4: 2003
Frequency range:	Operation within the band 49.82 – 49.90 MHz
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 un-modulated 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 fundamental signal from the EUT was measured by the spectrum analyzer with peak detector.
Test Result:	The unit does meet the FCC Part 15 C Section 15.235 requirements.

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



This Test Report is issued by the Company subject to its General Conditions of Service Printed overleaf or available on request and accessible at <http://www.waltek.com.cn>. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. This Test report cannot be reproduced, except in full, without prior written permission of the Company

Test Location: 1/F, Fukangtai Building, West Baima Rd., Songgang Street, Baoan District, Shenzhen 518105, China.

Web: www.waltek.com.cn Email: info@waltek.com.cn Tel: 0086-755-83551033 Fax: 0086-755-83552400

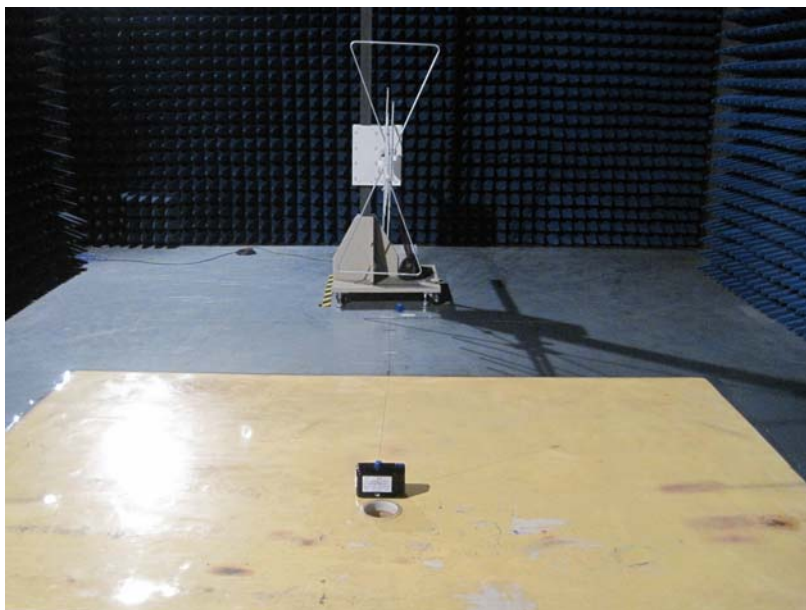


Waltek Services (Shenzhen) Co., Ltd
12B, West Tower, Aidi Building, No.5003, Binhe Road, Futian
District, Shenzhen, Guangdong, China

FCC ID: YCR-AR-1002

Report No.: WT11062791EEF

7 Photographs - Test Setup



This Test Report is issued by the Company subject to its General Conditions of Service Printed overleaf or available on request and accessible at <http://www.waltek.com.cn>. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. This Test report cannot be reproduced, except in full, without prior written permission of the Company
Test Location: 1/F, Fukangtai Building, West Baima Rd., Songgang Street, Baoan District, Shenzhen 518105, China.
Web: www.waltek.com.cn Email: info@waltek.com.cn Tel: 0086-755-83551033 Fax: 0086-755-83552400



Waltek Services (Shenzhen) Co., Ltd
12B, West Tower, Aidi Building, No.5003, Binhe Road, Futian
District, Shenzhen, Guangdong, China

FCC ID: YCR-AR-1002

Report No.: WT11062791EEF

8 Photographs - EUT

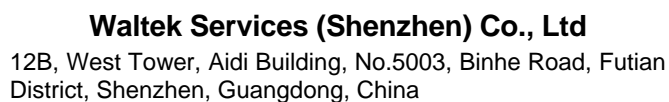
8.1 EUT-Front View



8.2 EUT-Back View



This Test Report is issued by the Company subject to its General Conditions of Service Printed overleaf or available on request and accessible at <http://www.waltek.com.cn>. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. This Test report cannot be reproduced, except in full, without prior written permission of the Company
Test Location: 1/F, Fukangtai Building, West Baima Rd., Songgang Street, Baoan District, Shenzhen 518105, China.
Web: www.waltek.com.cn Email: info@waltek.com.cn Tel: 0086-755-83551033 Fax: 0086-755-83552400



Report No.: WT11062791EEF

Figure 1 shows the internal components of a mobile phone. On the left, the main circuit board is visible, featuring a microcontroller, memory chips, and various passive components. A blue antenna is attached to the top. On the right, the battery compartment is shown, containing two large, yellow, rectangular battery cells. A ruler is placed at the bottom for scale, indicating the size of the components.

Page 12 of 14

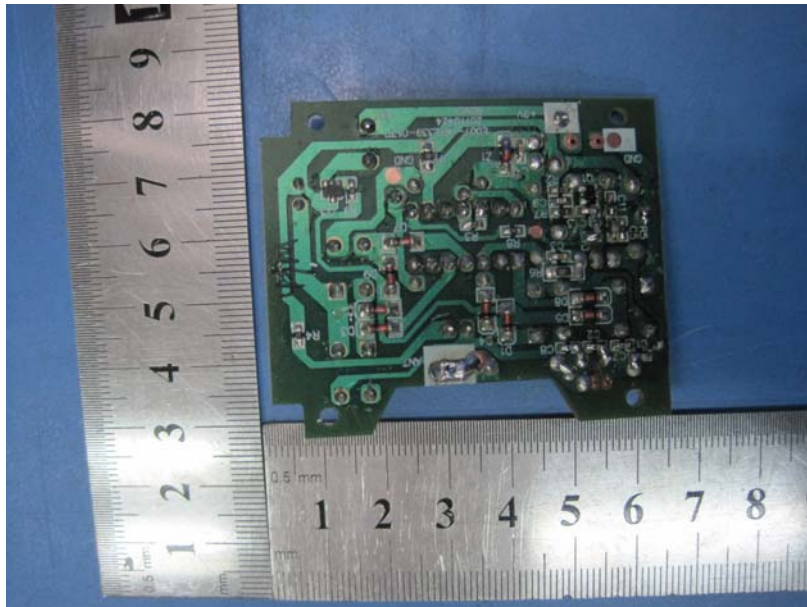


Waltek Services (Shenzhen) Co., Ltd
12B, West Tower, Aidi Building, No.5003, Binhe Road, Futian
District, Shenzhen, Guangdong, China

FCC ID: YCR-AR-1002

Report No.: WT11062791EEF

8.5 PCB-Back View



This Test Report is issued by the Company subject to its General Conditions of Service Printed overleaf or available on request and accessible at <http://www.waltek.com.cn>. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. This Test report cannot be reproduced, except in full, without prior written permission of the Company
Test Location: 1/F, Fukangtai Building, West Baima Rd., Songgang Street, Baoan District, Shenzhen 518105, China.
Web: www.waltek.com.cn Email: info@waltek.com.cn Tel: 0086-755-83551033 Fax: 0086-755-83552400



Waltek Services (Shenzhen) Co., Ltd
12B, West Tower, Aidi Building, No.5003, Binhe Road, Futian
District, Shenzhen, Guangdong, China

FCC ID: YCR-AR-1002

Report No.: WT11062791EEF

9 FCC ID Label

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The Label must not be a stick-on paper. The Label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Proposed Label Location on EUT
EUT Top View/ proposed FCC Label Location



=== End of Test Report ===