

## FCC TEST REPORT

for

### FREESTYLE, ROCKSTAR, MUSIC VIBE

Model No. : OB092-01

FCC ID : XG5OB092-01

Operating Frequency : 2403-2418.5 MHz

Applicant : ZHUHAI WINGPOW EROTIC & NOVELTY MANUFACTURING CO., LTD.  
NO. 35 FIRST ROAD, ZHUHAI BAIJAO NEW TECHNOLOGICAL & INDUSTRIAL PARK, ZHUHAI, CHINA

Regulation : ***FCC Part 15.249 Subpart C***

Prepared by : AOV Testing Technology Co., Ltd  
AOV Building, Xueyuan Road East, University City, Shenzhen  
(Tanglang Village, Xili Town, Nanshan District), China

Test Date : June 20-28, 2009

Date of Report : June 29, 2009

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## TEST REPORT DECLARATION

Applicant : ZHUHAI WINGPOW EROTIC & NOVELTY  
MANUFACTURING CO., LTD.  
Manufacturer : ZHUHAI WINGPOW EROTIC & NOVELTY  
MANUFACTURING CO., LTD.  
EUT Description : FREESTYLE, ROCKSTAR, MUSIC VIBE

**Test Procedure Used:**

**FCC Part 15.249 Subpart C**

The E. U. T. listed below has been completed RFI testing by Shenzhen AOV Testing Technology Co., Ltd at the test site of Bontek Compliance Testing Laboratory Ltd. and the Interference emissions can pass **FCC CLASS B** limitations.

The test configurations and the facility comply with the radiated and AC line conducted test site criteria in **ANSI C63.4-2003**.

Date of Test: \_\_\_\_\_ June 20-28, 2009



Prepared by: \_\_\_\_\_ Project Engineer



Reviewer : \_\_\_\_\_ Project Manager

## 1. GENERAL INFORMATION

### 1.1 General Information

Description : FREESTYLE, ROCKSTAR, MUSIC VIBE

Number of Channels : 32 (From 2403MHz with 0.5MHz step)

Model No. : OB092-01

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NO. 35 FIRST ROAD, ZHUHAI BAIJAO NEW TECHNOLOGICAL & INDUSTRIAL PARK, ZHUHAI, CHINA

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### 1.2 Test Facility

Test Firm : Bontek Compliance Testing Laboratory Ltd.  
Certified by FCC, Registration No.: 338263

Address : FL.1, Building H-3, Hua Qiao Cheng East Industrial Area  
Qiaocheng East Road, Nanshan, Shenzhen, P.R.China

Tel : 86-755-86337020

Fax : 86-755-86337028

### 1.3 Test Instrument Used

No.	Equipment	Manufacturer	Model No.	S/N	Calculator date
1.	EMI Test Receiver	R&S	ESCI	100687	2009-2-22
2.	EMI Test Receiver	R&S	FSU	BCT-019	2009-2-22
3.	Amplifier	HP	8447D	1937A02492	2009-2-22
4.	TRILOG Broadband Test-Antenna	SCHWARZBECK	VULB9163	9163-324	2009-2-22
5.	Horn Antenna	SCHWARZBECK	BBHA9120A	B08000991-00 01	2009-2-27
6.	High Field Biconical Antenna	ELECTRO-METRICS	EM-6913	166	2009-2-22
7.	Log Periodic Antenna	ELECTRO-METRICS	EM-6950	811	2009-2-22
8.	Remote Active Vertical Antenna	ELECTRO-METRICS	EM-6892	304	2009-2-22
9.	Teo Line Single Phase Module	SCHWARZBECK	NSLK8128	D-69250	2009-3-31
10.	Positioning Controller	C&C	CC-C-1F	MF7802113	2009-2-22
11.	Triple-Loop Antenna	EVERFINE	LLA-2	607004	2009-2-27
12.	10dB attenuator	SCHWARZBECK	MTAIMP-136	R65.90.0001#0 6	2009-2-22

## 2. RADIATION INTERFERENCE

### 2.1. Rules Part No.

15.249

### 2.2. Limits

The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)
902 - 928 MHz	50	500
<b>2400 - 2483.5 MHz</b>	<b>50 (94)</b>	<b>500 (54)</b>
5725 - 5875 MHz	50	500
24.0 - 24.25 GHz	250	2500

The field strength of any emissions radiated on any frequency outside of the fundamental band shall not exceed the general radiated emission limits in Section 15.209.

Frequency of (MHz)	Emission Field Strength (microvolts/meter)
30 - 88	100 (40)
88 - 216	150 (43.5)
216 - 960	200 (46.0)
Above 960	500 (54.0)

### 2.3. Test Procedure

#### ANSI STANDARD C63.4-2003 10.1.7 MEASUREMENT PROCEDURES:

The EUT is placed on a turned table that is 0.8 meter above the ground. The turned table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna that is mounted on the antenna tower. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (log periodical antenna and horn antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on test.

The resolution bandwidth was 100 kHz and the video bandwidth was 300 kHz.

The spectrum was scanned from 30 MHz to 10th harmonic of the fundamental.

1kHz audio signal was used during test, product will be transmitting continuous, Input level the max volume of player, nearly 10mV(r.m.s).

## 2.4. Test Result

**PASS**

### Low Channel: 2403MHz

Field Strength of Fundamental:

Horizontal:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
2403.1200	77.50	71.30	94.00	22.70

Vertical:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
2403.1200	80.81	72.60	94.00	21.40

Field Strength of Spurious Emission:

Horizontal:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
47.4600	24.70	---	40.00	15.30
55.2200	23.60	---	40.00	16.40
101.7800	25.20	---	43.50	18.30
212.3600	23.90	---	43.50	19.60
553.8000	30.70	---	46.00	15.30
875.8400	35.60	---	46.00	10.40
1765.2400	36.50	---	54.00	17.50

Vertical:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
45.5200	24.30	---	40.00	15.70
55.2200	22.80	---	40.00	17.20
99.8400	24.50	---	43.50	19.00
280.2600	26.90	---	46.00	19.10
547.9800	30.60	---	46.00	15.40
945.6800	35.40	---	46.00	10.60
4806.4400	37.80	---	54.00	16.20

**Middle Channel: 2410MHz****Field Strength of Fundamental:**

Horizontal:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
2410.3800	78.60	69.70	94.00	24.30

Vertical:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
2410.2600	81.36	72.50	94.00	21.50

**Field Strength of Spurious Emission:**

Horizontal:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
47.4600	24.10	---	40.00	15.90
55.2200	23.30	---	40.00	16.70
101.7800	24.70	---	43.50	18.80
299.6600	26.30	---	46.00	19.70
544.1000	30.10	---	46.00	15.90
868.0800	35.20	---	46.00	10.80
4821.3300	38.20	---	54.00	15.80

Vertical:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
51.3400	24.10	---	40.00	15.90
55.2200	22.00	---	40.00	18.00
99.8400	24.10	---	43.50	19.40
208.4800	24.40	---	43.50	19.10
553.8000	30.00	---	46.00	16.00
924.3400	35.40	---	46.00	10.60
4820.3200	39.50	---	54.00	14.50

**High Channel: 2418.5MHz****Field Strength of Fundamental:**

Horizontal:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
2418.5300	81.35	78.60	94.00	15.40

Vertical:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
2418.5300	88.62	80.32	94.00	13.68

**Field Strength of Spurious Emission:**

Horizontal:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
47.4600	25.90	---	40.00	14.10
95.9600	24.40	---	43.50	19.10
99.8400	24.20	---	43.50	19.30
227.8800	23.00	---	46.00	23.00
551.8600	30.90	---	46.00	15.10
974.7800	36.70	---	54.00	17.30
4837.3600	38.10	---	54.00	15.90

Vertical:

Frequency (MHz)	PK (dBuV/m)	Read Level (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
53.2800	24.10	---	40.00	15.90
95.9600	23.90	---	43.50	19.60
109.5400	25.20	---	43.50	18.30
227.8800	23.70	---	46.00	22.30
530.5200	30.10	---	46.00	15.90
978.6600	36.90	---	54.00	17.10
4838.0200	39.20	---	54.00	14.80

### **3. BAND EDGE**

#### **3.1.Rules Part No.**

15.249

#### **3.2.Limits**

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 50dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

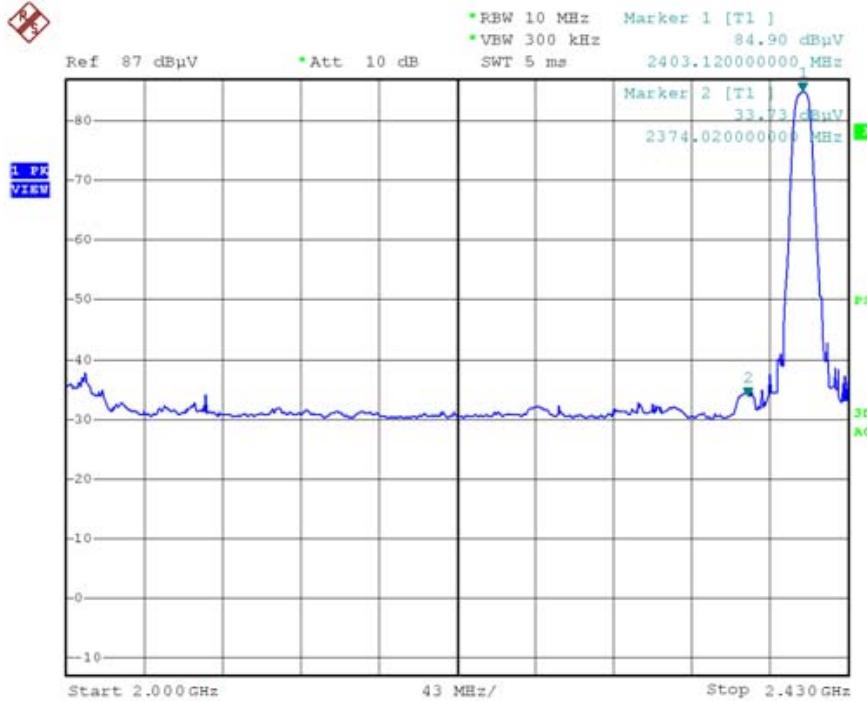
#### **3.3.Test Procedure**

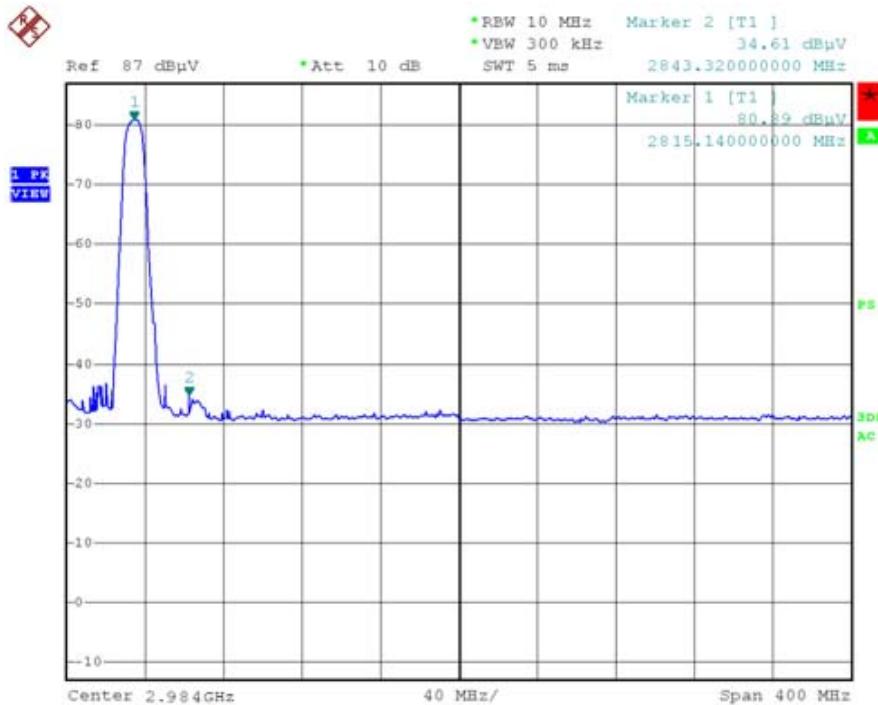
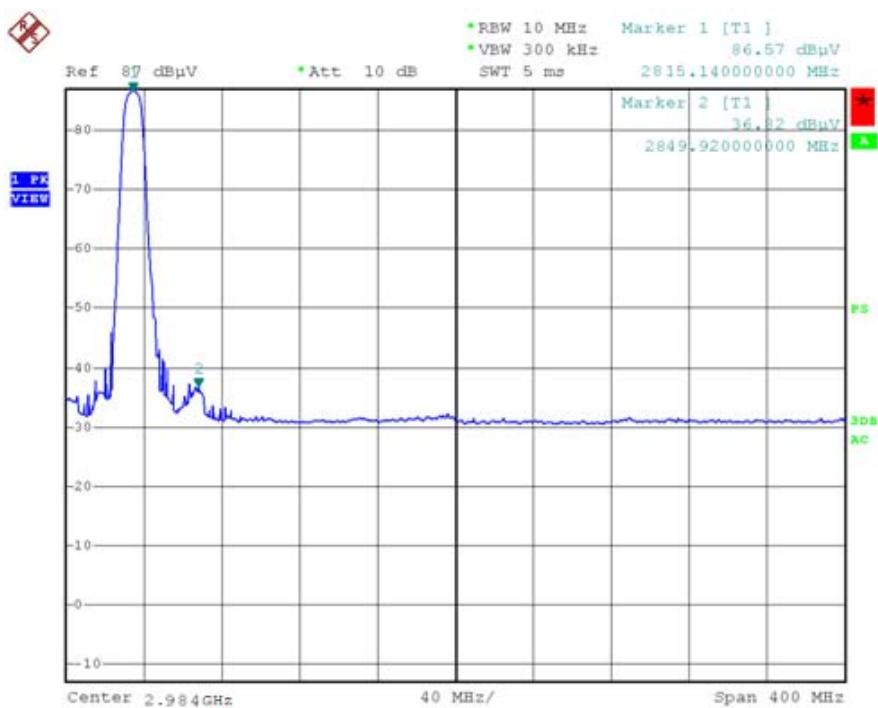
Record the respond of frequency waveform when the EUT was working by a spectrum analyzer or EMI Receiver. Low and high channel were tested.

1kHz audio signal was used during test, product will be transmitting continuous, Input level the max volume of player, nearly 10mV(r.m.s).

#### **3.4.Test Result**

**PASS**

**Low Channel: 2403MHz****Horizontal:****Vertical**

**High Channel: 2418.5MHz****Horizontal:****Vertical**

## 4. ANTENNA REQUIREMENT

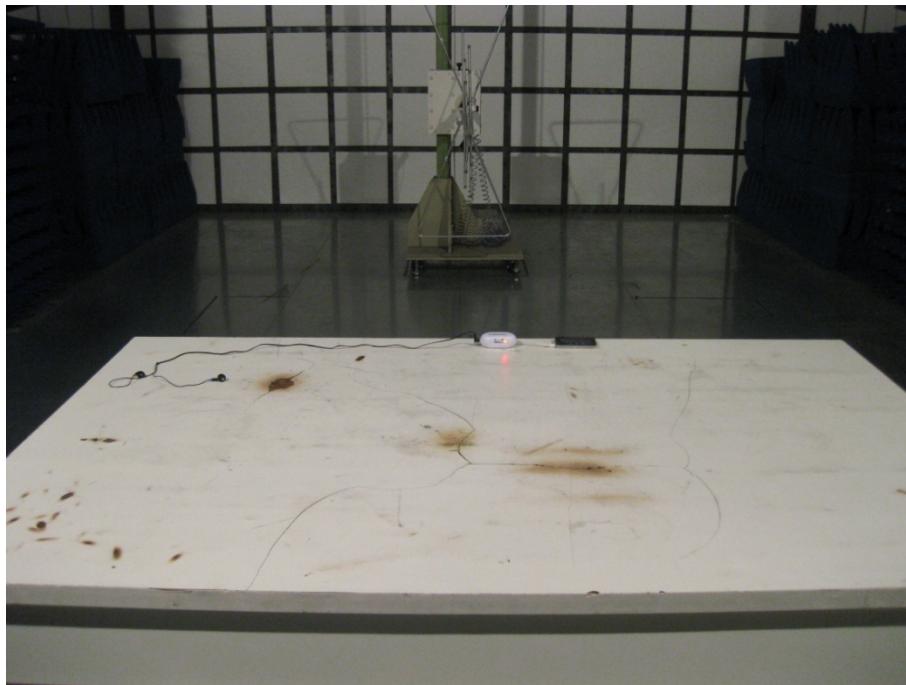
According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

The EUT has no antenna connector for printed antenna. Therefore the EUT complies with Section 15.203 of the FCC rules.

## 5. PHOTOGRAPH OF TEST

### Radiated Emission test

(Below 1GHz)



(Above 1GHz)

