

## RF Exposure Report

### FCC Per 47 CFR 2.1093(b)

Report Reference No.....: A1207086022-RM

FCC ID.....: OYS-JR-01H

Compiled by

( position+printed name+signature)...: File administrators Tony Li

Supervised by

( position+printed name+signature)...: Technique principal Robin Fang

Approved by

( position+printed name+signature)...: Manager James Wu

Date of issue.....: Sep 07, 2012

Representative Laboratory Name : Shenzhen CTL Electron Technology Co., Ltd.

Address.....: Room 405, The 3# of 4th Building, Zhuguang No.2 Industrial District, Xili Town, Nanshan, Shenzhen, China

Testing Laboratory Name .....: Bontek Compliance Testing Laboratory Ltd

Address.....: 1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East Road, Nanshan, Shenzhen, China

Applicant's name.....: Zealous Audio

Address.....: 10708 Lora Street, Temple City, Ca 91780

#### Test specification:

Standard .....: FCC Per 47 CFR 2.1093(b)

TRF Originator.....: Shenzhen CTL Electron Technology Co., Ltd.

Master TRF.....: Dated 2012-06

#### Shenzhen CTL Electron Technology Co., Ltd. All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen CTL Electron Technology Co., Ltd. is acknowledged as copyright owner and source of the material. Shenzhen CTL Electron Technology Co., Ltd. takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

Test item description .....: HeadPhone

Trade Mark .....: /

Model/Type reference.....: JR-01

Listed Models .....: /

Ratings.....: DC 3.7 V

Modulation .....: FHSS

Operation Frequency .....: From 2402MHz to 2480MHz

Result : Positive

## RF Exposure Report

<b>Test Report No. :</b> <b>A1207086022-RM</b>	Sep 07, 2012 Date of issue
--	-------------------------------

Equipment under Test                      :              HeadPhone

Model /Type                                        :              JR-01

Listed Models                                        :              /

**Applicant**    :              **Zealous Audio**

Address    :              10708 Lora Street, Temple City, Ca 91780

**Manufacturer**    :              **Zealous Audio**

Address    :              10708 Lora Street, Temple City, Ca 91780

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

## Contents

<b><u>1.</u></b>	<b><u>SUMMARY .....</u></b>	<b><u>4</u></b>
1.1.	EUT configuration	4
1.2.	Power supply system utilised	4
1.3.	Description of the test mode	4
1.4.	NOTE	4
<b><u>2.</u></b>	<b><u>TEST ENVIRONMENT.....</u></b>	<b><u>6</u></b>
2.1.	Address of the test laboratory	6
2.2.	Environmental conditions	6
2.3.	Statement of the measurement uncertainty	6
<b><u>3.</u></b>	<b><u>METHOD OF MEASUREMENT .....</u></b>	<b><u>6</u></b>
3.1.	Applicable Standard	6
3.2.	Limit	7
3.3.	RF Exposure	7
<b><u>4.</u></b>	<b><u>CONCLUSION .....</u></b>	<b><u>7</u></b>

## 1. SUMMARY

### 1.1. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

● - supplied by the manufacturer

○ - supplied by the lab

○	Power Cable	Length (m) :	/
		Shield :	/
		Detachable :	/
○	Multimeter	Manufacturer :	/
		Model No. :	/

### 1.2. Power supply system utilised

Power supply voltage	:	○ 120V / 60 Hz	○ 115V / 60Hz
		○ 12 V DC	○ 24 V DC
		● Other (specified in blank below)	

DC 3.7V from battery

### 1.3. Description of the test mode

The EUT has been tested under typical operating condition. There are EDR (Enhanced Data Rate) and BDR (Basic Data Rate) mode. The Applicant provides Bluetooth tools software to control the EUT for staying in continual transmitting and receiving mode for testing. There are 79 channels of EUT, and the test carried out at the lowest channel, middle channel and highest channel .

Frequency Range:	2402-2480MHz
Channel number:	79 channels
Modulation type:	Frequency Hopping Spread Spectrum
Antenna:	PCB Antenna

### 1.4. NOTE

1. The EUT is a Bluetooth product, The functions of the EUT listed as below:

	Test Standards	Reference Report
Bluetooth	FCC Part 15 Subpart C (Section15.247)	A1207086022-RW
MPE	OET 65 C	A1207086022-RM

2. The frequency bands used in this EUT are listed as follows:

Frequency Band(MHz)	2400-2483.5	5150-5350	5470-5725	5725-5850
Bluetooth	√	—	—	—

3. The EUT provides one completed transmitter and receiver.

Modulation Mode	TX Function
Bluetooth	1TX

## **2. TEST ENVIRONMENT**

### **2.1. Address of the test laboratory**

Bontek Compliance Testing Laboratory Ltd  
1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East Road, Nanshan, Shenzhen, China

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 (2003) and CISPR Publication 22.

### **2.2. Environmental conditions**

During the measurement the environmental conditions were within the listed ranges:

Temperature:	<u>15-35 ° C</u>
Humidity:	<u>30-60 %</u>
Atmospheric pressure:	<u>950-1050mbar</u>

### **2.3. Statement of the measurement uncertainty**

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2" and is documented in the Bontek Compliance Testing Laboratory Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

<b>Test Items</b>	<b>Measurement Uncertainty</b>	<b>Notes</b>
Transmitter power conducted	0.57 dB	(1)
Transmitter power Radiated	2.20 dB	(1)

- (1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=1.96$ .

## **3. Method of measurement**

### **3.1. Applicable Standard**

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1093 RF exposure is calculated.

### 3.2. Limit

Exposure category	<u>low threshold</u>	<u>high threshold</u>
general population	$(60/f_{\text{GHz}}) \text{ mW}, d < 2.5 \text{ cm}$ $(120/f_{\text{GHz}}) \text{ mW}, d \geq 2.5 \text{ cm}$	$(900/f_{\text{GHz}}) \text{ mW}, d < 20 \text{ cm}$
occupational	$(375/f_{\text{GHz}}) \text{ mW}, d < 2.5 \text{ cm}$ $(900/f_{\text{GHz}}) \text{ mW}, d \geq 2.5 \text{ cm}$	$(2250/f_{\text{GHz}}) \text{ mW}, d < 20 \text{ cm}$

F=frequency in GHz

### 3.3. RF Exposure

#### TEST RESULTS

The max peak output power is 4.96 dBm . The antenna gain is 1.50 dBi. EIRP=6.46 dBm=4.43mW< 60/2.48=24mW, so the SAR is not required.

### 4. Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the general population RF Exposure.

.....**End of Report**.....