

CENTRE OF TESTING SERVICE INTERNATIONAL

OPERATE ACCORDING TO ISO/IEC 17025

FCC ID/IC TEST REPORT

TEST REPORT NUMBER: CGZ3160322-00213-EFI



CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway, Tianhe District, Guangzhou, China





| TEST REPORT For FCC ID/IC |
|--|
| 47 CFR PART 15 OCT, 2015; RSS-210 Issue 8 |
| Report Reference No CGZ3160322-00213-EFI |
| Date of issue |
| Testing Laboratory NameCENTRE OF TESTING SERVICE CO., LTD. |
| Address |
| Testing location/ procedure Full application of Harmonised standards ■ |
| Partial application of Harmonised standards \square |
| Other standard testing method \square |
| Applicant's name Belly Buds LLC |
| Address 6380 Wilshire Blvd., Suite 1600, Los Angeles, CA, USA |
| Test specification |
| Standard |
| ANSI C63.10:2013 |
| Test Report Form NoCTSEMC-1.0 |
| TRF OriginatorCENTRE OF TESTING SERVICE CO., LTD. |
| Master TRF Dated 2009-01 |
| CENTRE OF TESTING SERVICE CO., LTD. All rights reserved. |
| This publication may be reproduced in whole or in part for non-commercial purposes as long as the CENTRE OF TESTING SERVICE CO., LTD is acknowledged as copyright owner and source of the material. CENTRE OF TESTING SERVICE 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 SoundBub |
| Trade Mark/ |
| Manufacturer Belly Buds LLC |
| Model/Type reference WH-20 |
| Ratings Battery 3.7V, DC 5V for Charging |
| Operating Frequency2402.0MHz ~2480.0MHz |
| ResultPositive |

New Ce

Supervised by:

Approved by:

Kate zhang / Fileadministrators

Compiled by:

Duke yang / Technique principal

Vincent yao / Manager

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn





FCC ID/IC -- TEST REPORT

Test Report No. : CGZ3160322-00213-EFI <u>05 April 2016</u> Date of issue

| Type / Model | WH-20 |
|--------------|---|
| EUT | SoundBub |
| Applicant | Belly Buds LLC |
| Address | 6380 Wilshire Blvd., Suite 1600, Los Angeles, CA, USA |
| Telephone | +1-213.325.2790 |
| Fax | +1-866.500.2627 |
| Contact | Curtis |
| Manufacturer | Belly Buds LLC |
| Address | 6380 Wilshire Blvd., Suite 1600, Los Angeles, CA, USA |
| Telephone | +1-213.325.2790 |
| Fax | +1-866.500.2627 |
| Contact | Curtis |
| | |
| Factory | GuangZhou PanYu Fantasia Creation Toys Co.,Ltd. |
| Address | 1-3F, Block 3, Standard Industrial Park ,Tai Shi Industrial Park, DongYong, Panyu Guangzhou, Guangdong, China |
| Telephone | 1 |
| Fax | 1 |
| Contact | 1 |

Test Result according to the standards on page 1: PASSED

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.

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.



TABLE OF CONTENTS

| <u>Description</u> | Page |
|--|------|
| 1.TEST STANDARDS | 5 |
| 2.SUMMARY | 5 |
| 2.1 GENERAL REMARKS | 5 |
| 2.2 FINAL ASSESSMENT | 5 |
| 3.EQUIPMENT UNDER TEST | 5 |
| 3.1 POWER SUPPLY SYSTEM UTILISED | 5 |
| 3.2 SHORT DESCRIPTION OF THE EQUIPMENT UNDER TEST (EUT) | 5 |
| 3.3 EUT OPERATION MODE | |
| 3.4 EUT CONFIGURATION | |
| 4.TEST ENVIRONMENT | 7 |
| 4.1 Address of the test laboratory | 7 |
| 4.2 Test facility | |
| 4.3 ENVIRONMENTAL CONDITIONS | 7 |
| 4.4 DEFINITIONS OF SYMBOLS USED IN THIS TEST REPORT | |
| 4.5 STATEMENT OF THE MEASUREMENT UNCERTAINTY | 7 |
| 4.6 MEASUREMENT UNCERTAINTY | 8 |
| 5.SUMMARY OF STANDARDS AND RESULTS | 8 |
| 5.1.DESCRIPTION OF STANDARDS AND RESULTS | 8 |
| 6.POWER LINE CONDUCTED EMISSION TEST | 9 |
| 6.1.Test Equipment | 9 |
| 6.2. BLOCK DIAGRAM OF TEST SETUP | 9 |
| 6.3. POWER LINE CONDUCTED EMISSION TEST LIMITS | 9 |
| 6.4.Test Procedure | 9 |
| 6.5. Power Line Conducted Emission Test Results | 9 |
| 7.RADIATED DISTURBANCE (ELECTRIC FIELD) | 12 |
| 7.1.Test Equipment | 12 |
| 7.2.BLOCK DIAGRAM OF TEST SETUP | 12 |
| 7.3.RADIATED EMISSION LIMIT: | 13 |
| 7.4.Test Procedure | |
| 7.5.RADIATED EMISSION TEST RESULTS | 14 |
| 8.BAND EDGE COMPLIANCE TEST | 26 |
| 8.1. Test Equipment | |
| 8.2. Test Information | 26 |
| Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company. | |

CENTRE OF TESTING SERVICE CO., LTD.

FCC ID:2AHSO-WH20 IC:21272-WH20 CENTRE OF TESTING SERVICE





| 8.3. TEST PROCEDURE | 26 |
|-------------------------------------|----|
| 8.4. TEST RESULTS | 26 |
| 9. 99% BANDWIDTH | 31 |
| 9.1 Test procedure | 31 |
| 9.2. TEST EQUIPMENT | 31 |
| 9.3. TEST RESULTS | 31 |
| 10 DEVIATION TO TEST SPECIFICATIONS | 34 |

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.





1.TEST STANDARDS

The tests were performed according to following standards:

- 47 CFR PART 15 OCT, 2015
- RSS-210 Issue 8
- RSS-Gen Issue 4
- ANSI C63.10:2013

2.SUMMARY

2.1 GENERAL REMARKS

| Date of receipt of test sample | 22 March 2016 | |
|--------------------------------|------------------------|--|
| | | |
| Testing commenced on | 22 March~05 April 2016 | |
| | | |
| Testing concluded on | 05 April 2016 | |

2.2 FINAL ASSESSMENT

The FCC/IC requirements pertaining to the technical standards and tested operation modes are

- fulfilled.
- □ **not** fulfilled.

The equipment under test

- fulfils the FCC/IC requirements cited on page 1.
- does not fulfil the FCC/IC requirements cited on page 1.

3.EQUIPMENT UNDER TEST

3.1 Power supply system utilised

Power supply voltage :

Battery 3.7V, DC 5V for Charging by Notebook

3.2 Short description of the Equipment under Test (EUT)

Number of tested samples: 1

Serial number: Prototype

3.3 EUT operation mode

The equipment under test was operated during the measurement under the following conditions:

- ☐ TX- Y position
- ☐ TX- Z position
- TX- X position

Operation mode 1:TX-X Position Low (2402MHz), TX-X Position Middle (2440MHz),

TX-X Position High (2480MHz)

Note:Operation mode 1 TX -X position of EUT is the radiated test worst case; so only these test results be recorded in the test report.

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn





3.4 EUT configuration

3.4.1. Description of configuration (EUT)

| Description : | SoundBub |
|-------------------------|-------------------------|
| Model Number : | WH-20 |
| Operation frequency : | 2402~ 2480 MHz ISM Band |
| Bluetooth Version | V2.1+EDR |
| Modulation Technology : | GFSK Modulation |
| Antenna 1 : | PCB antenna, 0dBi |

3.4.2. Tested Supporting System Details

3.4.2.1. Notebook

| M/N : | F83VF |
|----------------|-------|
| S/N : | N/A |
| Manufacturer : | AUSU |
| Power Cord : | 1 |
| FCC ID : | ID |

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn





4.TEST ENVIRONMENT

4.1 Address of the test laboratory

A101, No.65, Zhuji Highway, Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

4.2 Test facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L3394

CENTRE OF TESTING SERVICE CO., LTD has been assessed and proved to be in compliance with CNAS-CL01: 2006 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories.

IC-Registration No.: 8374A

The 3m Alternate Test Site of CENTRE OF TESTING SERVICE CO., LTD has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 8374A on June 6, 2011.

FCC-Registration No.: 971995

CENTRE OF TESTING SERVICE CO., LTD, 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 No.791995, July 13,2012.

4.3 Environmental conditions

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

| Temperature: | 15~35 ° C |
|-----------------------|------------|
| | |
| Humidity: | 25~75 % |
| | |
| Atmospheric pressure: | 86~106 kPa |

4.4 Definitions of symbols used in this test report

- The black square indicates that the listed condition, standard or equipment is applicable for this report.
- The empty square indicates that the listed condition, standard or equipment is **not** applicable for this report.

4.5 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 CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the CTS 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.

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service

Report No.: CGZ3160322-00213-EFI Page 7 of 34





4.6 Measurement Uncertainty

| Test Item | Frequency Range | Uncertainty | Note |
|-------------------------|-----------------|-------------|------|
| Conduction disturbance | 150kHz~30MHz | ±1.22dB | (1) |
| Power disturbance | 30MHz~300MHz | ±1.38dB | (1) |
| | 30MHz~300MHz | ±3.14dB | (1) |
| Radiation emission (3m) | 300MHz~1000MHz | ±3.18dB | (1) |
| | 1GHz~26.5GHz | ±3.54dB | (1) |

^{(1).} This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

5. Summary of standards and results

5.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

| EMISSION | | | |
|--|---|---------|--|
| Description of Test Item | Standard | Results | |
| Conducted Emission Test | FCC Part 15 § 15.207 RSS-Gen Issue 4§ 7.2.4 ANSI C63.10:2013 | PASSED | |
| Radiated Emission Test | RSS-Gen Issue 4§ 7.2 RSS-210 Issue 8 § A2.9 FCC Part 15 C § 15.249 FCC Part 15 § 209 ANSI C63.10:2013 | PASSED | |
| Receiver Spurious Emissions | RSS-Gen Issue 4§ 4.10 ANSI C63.10:2013 | PASSED | |
| Band Edge Compliance Test | RSS-210 Issue 8 § 1.1 RSS-Gen Issue 4 § 8.10 FCC Part 15 C § 15.249 ANSI C63.10:2013 | PASSED | |
| 99% Bandwidth | RSS-Gen Issue 4 § 6.6 ANSI C63.10:2013 | PASSED | |
| N/A is an abbreviation for Not Applicable. | | | |

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines)

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn



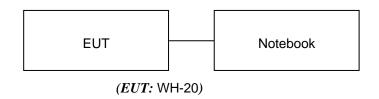


6. Power Line Conducted Emission Test

6.1.Test Equipment

| Conducted Disturbance | | | | | |
|----------------------------------|-------------------|-----------------|-----------|------------|-----------|
| Item Test Equipment Manufacturer | | Manufacturer | Model No. | Serial No. | Last Cal. |
| 1 | EMI Test Receiver | ROHDE & SCHWARZ | ESHS10 | 842884/012 | 2015/10 |
| 2 | Artificial Mains | ROHDE & SCHWARZ | ESH3-Z5 | 832479/025 | 2015/10 |
| 3 | Artificial Mains | ROHDE & SCHWARZ | ESH3-Z5 | 832479/026 | 2015/10 |
| 4 | Pulse Limiter | ROHDE & SCHWARZ | ESHSZ2 | 100301 | 2015/10 |
| 5 | EMI Test Software | ROHDE & SCHWARZ | ESK1 | N/A | 2015/10 |

6.2. Block Diagram of Test Setup



6.3. Power Line Conducted Emission Test Limits

Standard:RSS-Gen:7.2.4,FCC Part 15: 15.207,ANSI C63.10:2013

| | | | Maximum RF Line Voltage | | |
|-----------|--------|----------|-------------------------|---------------|--|
| Frequency | | uencv | Quasi-Peak Level | Average Level | |
| | | , | dB(μV) | dB(μV) | |
| | 150kHz | ~ 500kHz | 66 ~ 56* | 56 ~ 46* | |
| | 500kHz | ~ 5MHz | 56 | 46 | |
| | 5MHz | ~ 30MHz | 60 | 50 | |

Notes: 1. * Decreasing linearly with logarithm of frequency.

6.4.Test Procedure

The Notebook Power connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). This provides a 50 ohm coupling impedance for the EUT. Please refer the block diagram of the test setup and photographs. The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#1). Power on the PC and let it work normally, we use a keyboard test soft ware, let EUT working in test mode, then test it. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC Part 15C on Conducted Emission Test.

6.5. Power Line Conducted Emission Test Results

PASSED

The frequency range from 150KHz~30MHz is investigated. Please see the following pages.

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn

See Reverse For Terms And Conditions of Service

Report No.: CGZ3160322-00213-EFI Page 9 of 34

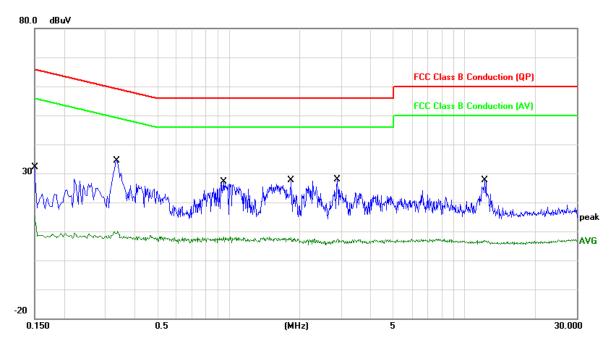
^{2.} The lower limit shall apply at the transition frequencies.





| Test point: | L | Result: | ■ - passed |
|------------------|---------------|---------|------------------------|
| Frequency range: | 0.15MHz~30MHz | | \square - not passed |

| EUT | SoundBub |
|----------------|---|
| Test Condition | Ambient Temperature: 25°C Humidity: 56% |
| Test Date: | 22 March ~ 05 April 2016 |
| Operator | Duke |
| MODEL NO | WH-20 |



| No. | Frequency | Factor | Reading | Level | Limit | Margin | Det. | | | |
|--------|---------------|--|---------|----------|----------|--------|------|--|--|--|
| | (MHz) | (dB) | (dBuV) | (dBuV/m) | (dBuV/m) | (dB) | | | | |
| 1 | 0.1500 | 10.80 | 16.27 | 27.07 | 66.00 | -38.93 | QP | | | |
| 2 | 0.1500 | 10.80 | 2.33 | 13.13 | 56.00 | -42.87 | AVG | | | |
| 3 | 0.3340 | 10.85 | 15.98 | 26.83 | 59.35 | -32.52 | QP | | | |
| 4 | 0.3340 | 10.85 | -1.81 | 9.04 | 49.35 | -40.31 | AVG | | | |
| 5 | 0.9540 | 10.89 | 6.65 | 17.54 | 56.00 | -38.46 | QP | | | |
| 6 | 0.9540 | 10.89 | -3.76 | 7.13 | 46.00 | -38.87 | AVG | | | |
| 7 | 1.8300 | 10.92 | 2.59 | 13.51 | 56.00 | -42.49 | QP | | | |
| 8 | 1.8300 | 10.92 | -4.31 | 6.61 | 46.00 | -39.39 | AVG | | | |
| 9 | 2.8900 | 10.97 | 5.37 | 16.34 | 56.00 | -39.66 | QP | | | |
| 10 | 2.8900 | 10.97 | -4.88 | 6.09 | 46.00 | -39.91 | AVG | | | |
| 11 | 12.2020 | 11.09 | 2.88 | 13.97 | 60.00 | -46.03 | QP | | | |
| 12 | 12.2020 | 11.09 | -5.50 | 5.59 | 50.00 | -44.41 | AVG | | | |
| Remark | Other frequen | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | | |

CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

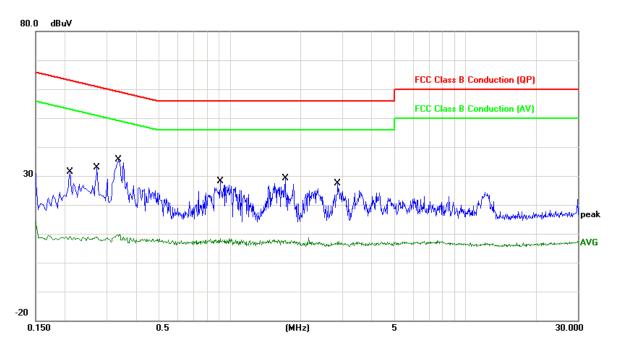
Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn









| No. | Frequency | Factor | Reading | Level | Limit | Margin | Det. |
|---------|---------------|-------------|----------------|----------|----------|--------|------|
| | (MHz) | (dB) | (dBuV) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 0.2100 | 10.82 | 6.02 | 16.84 | 63.21 | -46.37 | QP |
| 2 | 0.2100 | 10.82 | -2.76 | 8.06 | 53.21 | -45.15 | AVG |
| 3 | 0.2740 | 10.84 | 6.53 | 17.37 | 61.00 | -43.63 | QP |
| 4 | 0.2740 | 10.84 | -3.02 | 7.82 | 51.00 | -43.18 | AVG |
| 5 | 0.3380 | 10.85 | 17.19 | 28.04 | 59.25 | -31.21 | QP |
| 6 | 0.3380 | 10.85 | -1.65 | 9.20 | 49.25 | -40.05 | AVG |
| 7 | 0.9100 | 10.89 | 5.67 | 16.56 | 56.00 | -39.44 | QP |
| 8 | 0.9100 | 10.89 | -3.92 | 6.97 | 46.00 | -39.03 | AVG |
| 9 | 1.7180 | 10.92 | 5.01 | 15.93 | 56.00 | -40.07 | QP |
| 10 | 1.7180 | 10.92 | -4.04 | 6.88 | 46.00 | -39.12 | AVG |
| 11 | 2.8700 | 10.96 | 4.84 | 15.80 | 56.00 | -40.20 | QP |
| 12 | 2.8700 | 10.96 | -4.88 | 6.08 | 46.00 | -39.92 | AVG |
| Remark: | Other frequen | icy mini ma | rgin all >6 dB | of Limit | | | |





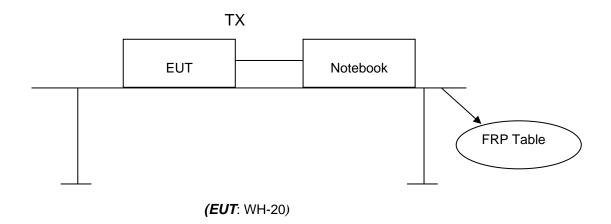
7. Radiated disturbance (electric field)

7.1.Test Equipment

| Radia | Radiated disturbance (electric field) | | | | | | | | |
|-------|---------------------------------------|-----------------|------------|------------|-----------|--|--|--|--|
| Item | Test Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | | | | |
| 1 | EMI Test Receiver | ROHDE & SCHWARZ | ESCI | 100868 | 2015/10 | | | | |
| 2 | Biconical Antenna | ROHDE & SCHWARZ | HK116 | 100221 | 2016/03 | | | | |
| 3 | Log per Antenna | ROHDE & SCHWARZ | HL223 | 100226 | 2016/03 | | | | |
| 4 | Log per Antenna | ROHDE & SCHWARZ | HL050 | 100186 | 2016/03 | | | | |
| 5 | Signal analyzer | ROHDE & SCHWARZ | FSIQ26 | 100311 | 2016/03 | | | | |
| 6 | Loop Antenna | A.R.A | PLA-1030/B | 1030 | 2015/10 | | | | |

7.2.Block Diagram of Test Setup

7.2.1 Block Diagram of connection between EUT and simulators



Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

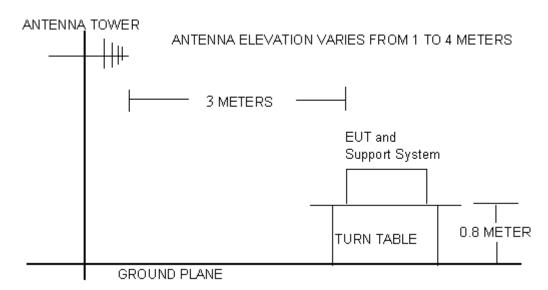
Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn





7.2.2 Anechoic Chamber Setup Diagram



7.3. Radiated Emission Limit:

Standard: FCC 15.249, FCC 15.209; RSS-Gen:7.2; RSS-210 A2.9.

Except as provided in paragraph (a) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

| Fundamental Frequency (MHz) | Field Strength of Fundamental (mV/m) | Field Strength of Harmonics (µV/m) |
|-----------------------------|--------------------------------------|------------------------------------|
| 902-928 | 50 | 500 |
| 2400-2483.5 | 50 | 500 |
| 5725-5875 | 50 | 500 |
| 24000-24250 | 250 | 2500 |

| FRE | FREQUENCY | | DISTANCE | FIELD STREN | GTHS LIMIT |
|-------|------------|-------|----------|----------------------------|------------|
| | MHz | | Meters | μV/m | dB(μV)/m |
| 0.009 | ~ | 0.490 | 300 | 2400/F(kHz) | |
| 0.490 | ~ | 1.705 | 30 | 24000/F(kHz) | |
| 1.705 | ~ | 30 | 30 | 30 | |
| 30 | ~ | 88 | 3 | 100 | 40.0 |
| 88 | ~ | 216 | 3 | 150 | 43.5 |
| 216 | ~ | 960 | 3 | 200 | 46.0 |
| 960 | ~ | 1000 | 3 | 500 | 54.0 |
| ٨١ | Above 1000 | | 3 | Other:74.0 dB(μV)/m (Peak) | |
| At | | | 3 | 54.0 dB(μV)/m (Average) | |

Remark:

- (1) Emission level $dB\mu V = 20 log Emission level <math>\mu V/m$
- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn





7.4.Test Procedure

The EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn 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, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated emission Test.

The frequency range from 30MHz to 1000MHz and above 1GHz. is investigated. Please see the following pages.

All measurements for radiated emissions within the restricted bands were performed using a Quasi-Peak detector with 120kHz RBW below 1GHz and a Peak and Average detector with 2MHz RBW above 1GHz,

All measurements for radiated emissions within the restricted bands were performed using a Quasi-Peak detector with 300kHz VBW below 1GHz and a Peak detector with1MHz VBW above 1GHz, A average detector with 10Hz VBW above 1GHz

Pretest x, y, z position of EUT, final, select the worst case x position test and record the test results in the report.

The test modes (TX Mode) is tested in Anechoic Chamber and all the scanning waveforms are reported on section 7.5

7.5. Radiated Emission Test Results

PASSED.

The frequency range from 9KHz~30MHz,30MHz to 230MHz, 230MHz to 1000MHz and above 1GHz. is investigated. Please see the following pages.

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

FCC ID:2AHSO-WH20 IC:21272-WH20 CENTRE OF TESTING SERVICE





Test Mode: TX –X Position Mode Result: ■ - passed Frequency range: 9KHz~30MHz □ - not passed

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | | |
|------|--|----------------|-------------------|-------------------|-------------------|----------------|------|--|--|
| Rema | Remark: The test result reading value is to low, margin all > 10dB of the limit. | | | | | | | | |

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

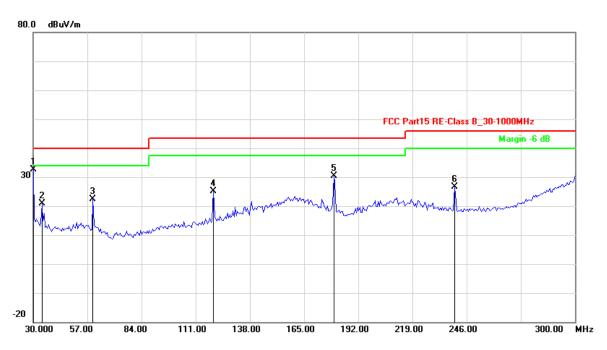
Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn





| EUT | SoundBub |
|----------------|---|
| Test Condition | Ambient Temperature: 25°C Humidity: 56% |
| Test distance | 3 Meter |
| Test Date: | 02 February~17 March 2016 |
| Operator | Duke |
| MODEL NO | WH-20 |

| Channel: | TX –X Position | Result: | ■ - passed |
|------------------|----------------|---------|----------------|
| Test point: | Horizontal | | □ - not passed |
| Frequency range: | 30MHz-1GHz | | |



| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | |
|---------|--|----------------|-------------------|-------------------|-------------------|----------------|------|--|
| 1 | 30.0000 | -16.04 | 48.64 | 32.60 | 40.00 | -7.40 | QP | |
| 2 | 34.3287 | -16.60 | 37.41 | 20.81 | 40.00 | -19.19 | QP | |
| 3 | 59.7595 | -19.66 | 42.08 | 22.42 | 40.00 | -17.58 | QP | |
| 4 | 119.8196 | -16.73 | 41.78 | 25.05 | 43.50 | -18.45 | QP | |
| 5 | 179.8798 | -15.19 | 45.64 | 30.45 | 43.50 | -13.05 | QP | |
| 6 | 239.9399 | -11.56 | 38.10 | 26.54 | 46.00 | -19.46 | QP | |
| Remark: | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | |

CENTRE OF TESTING SERVICE CO., LTD.

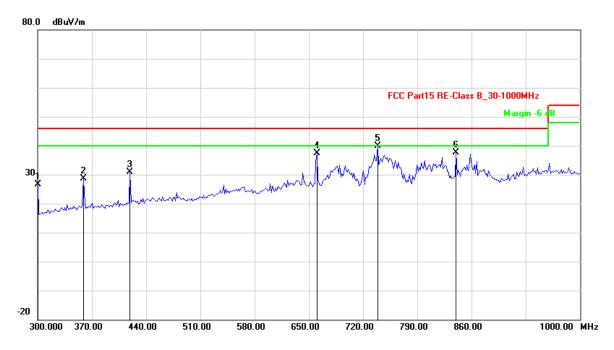
A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn







| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | |
|---------|--|----------------|-------------------|-------------------|-------------------|----------------|------|--|
| 1 | 300.0000 | -13.62 | 40.20 | 26.58 | 46.00 | -19.42 | QP | |
| 2 | 358.9178 | -11.20 | 39.95 | 28.75 | 46.00 | -17.25 | QP | |
| 3 | 419.2385 | -9.72 | 40.55 | 30.83 | 46.00 | -15.17 | QP | |
| 4 | 660.5210 | -3.33 | 40.74 | 37.41 | 46.00 | -8.59 | QP | |
| 5 | 739.0782 | -2.06 | 41.87 | 39.81 | 46.00 | -6.19 | QP | |
| 6 | 840.0802 | -0.88 | 38.50 | 37.62 | 46.00 | -8.38 | QP | |
| Remark: | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | |

FCC ID:2AHSO-WH20 IC:21272-WH20 CENTRE OF TESTING SERVICE





| Channel: | TX –X Position Low CH | Result: | ■ - passed |
|------------------|-----------------------|---------|----------------|
| Test point: | Horizontal | | □ - not passed |
| Frequency range: | 1GHz-26.5GHz | | |

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|-----|--------------------|----------------|-------------------|-------------------|-------------------|----------------|------|
| 1 | 2402.00 | -6.84 | 96.71 | 89.87 | 114.00 | -24.13 | Peak |
| 2 | 2402.00 | -6.84 | 94.04 | 87.20 | 94.00 | -6.80 | AVG |

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | |
|---------|--|----------------|-------------------|-------------------|-------------------|----------------|------|--|
| 1 | 3468.938 | -1.73 | 36.02 | 34.29 | 74.00 | -39.71 | peak | |
| 2 | 3468.938 | -1.73 | 22.06 | 20.33 | 54.00 | -33.67 | AVG | |
| 3 | 5013.627 | 3.33 | 37.72 | 41.05 | 74.00 | -32.95 | peak | |
| 4 | 5013.627 | 3.33 | 23.25 | 26.58 | 54.00 | -27.42 | AVG | |
| Remark: | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | |

| Channel: | TX –X Position Middle CH | Result: | ■ - passed |
|------------------|--------------------------|---------|----------------|
| Test point: | Horizontal | | ☐ - not passed |
| Frequency range: | 1GHz-26.5GHz | | |

| | No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|---|-----|--------------------|----------------|-------------------|-------------------|-------------------|----------------|------|
| Ī | 1 | 2440.00 | -6.62 | 96.65 | 90.03 | 114.00 | -23.97 | Peak |
| Ī | 2 | 2440.00 | -6.62 | 94.41 | 87.79 | 94.00 | -6.21 | AVG |

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | |
|---------|--|----------------|-------------------|-------------------|-------------------|----------------|------|--|
| 1 | 3424.850 | -1.90 | 35.57 | 33.67 | 74.00 | -40.33 | peak | |
| 2 | 3424.850 | -1.90 | 21.14 | 19.24 | 54.00 | -34.76 | AVG | |
| 3 | 5056.112 | 3.45 | 37.83 | 41.28 | 74.00 | -32.72 | peak | |
| 4 | 5056.112 | 3.45 | 23.13 | 26.58 | 54.00 | -27.42 | AVG | |
| Remark: | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | |

| Channel: | TX –X Position High CH | Result: | ■ - passed |
|------------------|------------------------|---------|----------------|
| Test point: | Horizontal | | ☐ - not passed |
| Frequency range: | 1GHz-26.5GHz | | υ μ |

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|-----|--------------------|----------------|-------------------|-------------------|-------------------|----------------|------|
| 1 | 2480.00 | -6.38 | 95.91 | 89.53 | 114.00 | -24.47 | Peak |
| 2 | 2480.00 | -6.38 | 93.66 | 87.28 | 94.00 | -6.72 | AVG |

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | |
|---------|--|----------------|-------------------|-------------------|-------------------|----------------|------|--|
| 1 | 3821.643 | -0.72 | 37.60 | 36.88 | 74.00 | -37.12 | peak | |
| 2 | 3821.643 | -0.72 | 22.88 | 22.16 | 54.00 | -31.84 | AVG | |
| 3 | 6378.757 | 7.33 | 39.44 | 46.77 | 74.00 | -27.23 | peak | |
| 4 | 6378.757 | 7.33 | 24.26 | 31.59 | 54.00 | -22.41 | AVG | |
| Remark: | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | |

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

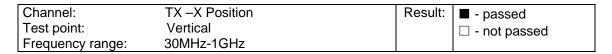
A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

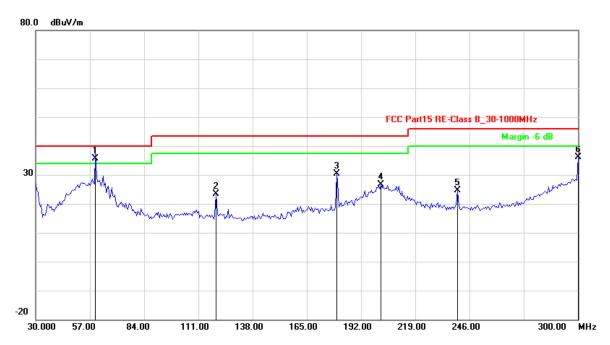
Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn









| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | |
|---------|--|----------------|-------------------|-------------------|-------------------|----------------|------|--|
| 1 | 59.7595 | -19.66 | 55.30 | 35.64 | 40.00 | -4.36 | QP | |
| 2 | 119.8196 | -16.73 | 40.03 | 23.30 | 43.50 | -20.20 | QP | |
| 3 | 179.8798 | -15.19 | 45.59 | 30.40 | 43.50 | -13.10 | QP | |
| 4 | 202.0641 | -11.85 | 38.44 | 26.59 | 43.50 | -16.91 | QP | |
| 5 | 239.9399 | -11.56 | 36.21 | 24.65 | 46.00 | -21.35 | QP | |
| 6 | 300.0000 | -1.42 | 37.64 | 36.22 | 46.00 | -9.78 | QP | |
| Remark: | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | |

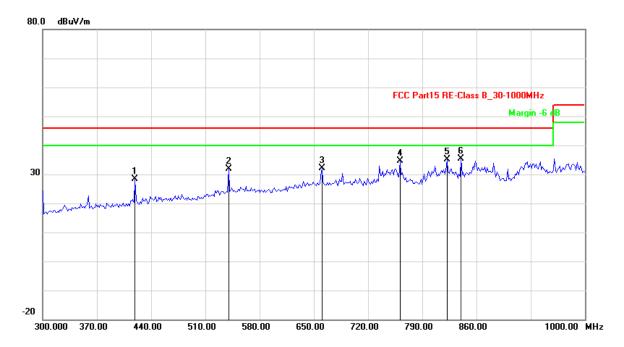
A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn







| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|--|--------------------|----------------|-------------------|-------------------|-------------------|----------------|------|
| 1 | 419.2385 | -9.72 | 38.11 | 28.39 | 46.00 | -17.61 | QP |
| 2 | 539.8798 | -6.17 | 38.08 | 31.91 | 46.00 | -14.09 | QP |
| 3 | 660.5210 | -3.33 | 35.42 | 32.09 | 46.00 | -13.91 | QP |
| 4 | 761.5230 | -1.98 | 36.49 | 34.51 | 46.00 | -11.49 | QP |
| 5 | 821.8437 | -1.97 | 37.07 | 35.10 | 46.00 | -10.90 | QP |
| 6 | 840.0802 | -0.88 | 36.36 | 35.48 | 46.00 | -10.52 | QP |
| Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | |

FCC ID:2AHSO-WH20 IC:21272-WH20 CENTRE OF TESTING SERVICE





| Channel: | TX –X Position Low CH | Result: | ■ - passed |
|------------------|-----------------------|---------|----------------|
| Test point: | Vertical | | □ - not passed |
| Frequency range: | 1GHz-26.5GHz | | |

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|-----|--------------------|----------------|-------------------|-------------------|-------------------|----------------|------|
| 1 | 2402.00 | -6.84 | 94.49 | 87.65 | 114.00 | -26.35 | Peak |
| 2 | 2402.00 | -6.84 | 92.44 | 85.60 | 94.00 | -8.4 | AVG |

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | | | |
|--------|--|----------------|-------------------|-------------------|-------------------|----------------|------|--|--|--|
| 1 | 3446.894 | -1.82 | 36.22 | 34.40 | 74.00 | -39.60 | peak | | | |
| 2 | 3446.894 | -1.82 | 22.27 | 20.45 | 54.00 | -33.55 | AVG | | | |
| 3 | 5761.523 | 5.72 | 37.91 | 43.63 | 74.00 | -30.37 | peak | | | |
| 4 | 5761.523 | 5.72 | 22.97 | 28.69 | 54.00 | -25.31 | AVG | | | |
| Remark | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | | | |

| Channel: | TX –X Position Middle CH | Result: | ■ - passed |
|------------------|--------------------------|---------|----------------|
| Test point: | Vertical | | ☐ - not passed |
| Frequency range: | 1GHz-26.5GHz | | |

| | No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|---|-----|--------------------|----------------|-------------------|-------------------|-------------------|----------------|------|
| Ī | 1 | 2440.00 | -6.62 | 94.01 | 87.39 | 114.00 | -26.61 | Peak |
| Ī | 2 | 2440.00 | -6.62 | 91.83 | 85.21 | 94.00 | -8.79 | AVG |

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | | | |
|---------|--|----------------|-------------------|-------------------|-------------------|----------------|------|--|--|--|
| 1 | 3887.776 | -0.53 | 36.52 | 35.99 | 74.00 | -38.01 | peak | | | |
| 2 | 3887.776 | -0.53 | 20.69 | 20.16 | 54.00 | -33.84 | AVG | | | |
| 3 | 5783.567 | 5.80 | 38.01 | 43.81 | 74.00 | -30.19 | peak | | | |
| 4 | 5783.567 | 5.80 | 23.16 | 28.96 | 54.00 | -25.04 | AVG | | | |
| Remark: | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | | | |

| Channel: | TX –X Position High CH | Result: | ■ - passed |
|------------------|------------------------|---------|----------------|
| Test point: | Vertical | | ☐ - not passed |
| Frequency range: | 1GHz-26.5GHz | | |

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|-----|--------------------|----------------|-------------------|-------------------|-------------------|----------------|------|
| 1 | 2480.00 | -6.38 | 93.89 | 87.51 | 114.00 | -26.49 | Peak |
| 2 | 2480.00 | -6.38 | 91.62 | 85.24 | 94.00 | -8.76 | AVG |

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | | | | | | | | |
|---------|--------------------|----------------|-------------------|-------------------|-------------------|--|------|--|--|--|--|--|--|--|--|
| 1 | 3799.599 | -0.78 | 35.79 | 35.01 | 74.00 | -38.99 | peak | | | | | | | | |
| 2 | 3799.599 | -0.78 | 21.83 | 21.05 | 54.00 | -32.95 | AVG | | | | | | | | |
| 3 | 6268.537 | 7.12 | 39.33 | 46.45 | 74.00 | -27.55 | peak | | | | | | | | |
| 4 | 6268.537 | 7.12 | 24.73 | 31.85 | 54.00 | -22.15 | AVG | | | | | | | | |
| Remark: | : Other frequen | cv mini ma | rgin all >6 dB o | of Limit | | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | | | |

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn

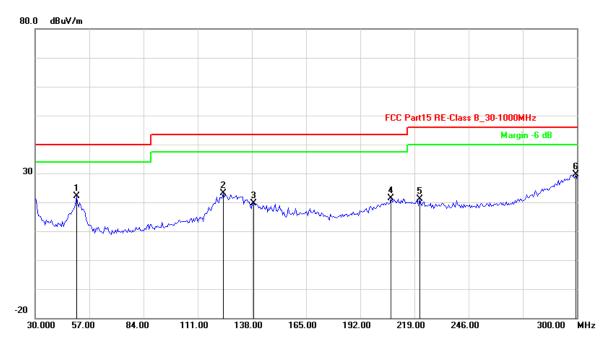
See Reverse For Terms And Conditions of Service

Report No.: CGZ3160322-00213-EFI Page 21 of 34





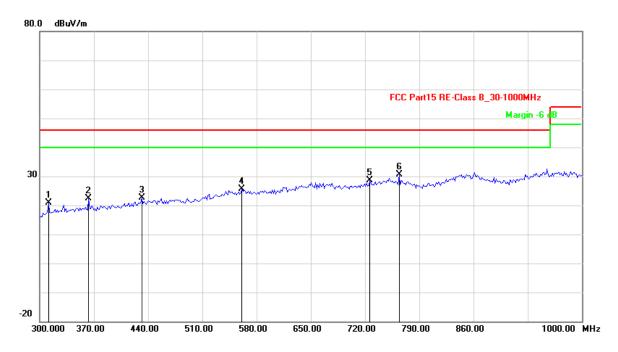




| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | | | |
|---------|--|----------------|-------------------|-------------------|-------------------|----------------|------|--|--|--|
| 1 | 50.5611 | -18.68 | 40.77 | 22.09 | 40.00 | -17.91 | QP | | | |
| 2 | 123.6072 | -16.51 | 39.62 | 23.11 | 43.50 | -20.39 | QP | | | |
| 3 | 138.7575 | -16.06 | 35.74 | 19.68 | 43.50 | -23.82 | QP | | | |
| 4 | 207.4750 | -10.72 | 32.10 | 21.38 | 43.50 | -22.12 | QP | | | |
| 5 | 221.5431 | -11.03 | 32.12 | 21.09 | 46.00 | -24.91 | QP | | | |
| 6 | 299.4589 | -1.56 | 31.24 | 29.68 | 46.00 | -16.32 | QP | | | |
| Remark: | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | | | |







| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | | |
|--------|--|----------------|-------------------|-------------------|-------------------|----------------|------|--|--|
| 1 | 311.2224 | -13.11 | 33.89 | 20.78 | 46.00 | -25.22 | QP | | |
| 2 | 363.1263 | -11.13 | 33.56 | 22.43 | 46.00 | -23.57 | QP | | |
| 3 | 431.8637 | -9.20 | 31.75 | 22.55 | 46.00 | -23.45 | QP | | |
| 4 | 560.9218 | -5.65 | 31.26 | 25.61 | 46.00 | -20.39 | QP | | |
| 5 | 726.4529 | -2.59 | 31.32 | 28.73 | 46.00 | -17.27 | QP | | |
| 6 | 764.3287 | -2.08 | 32.62 | 30.54 | 46.00 | -15.46 | QP | | |
| Remark | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | | |

| Channel: | RX | Result: | ■ - passed |
|------------------|--------------|---------|----------------|
| Test point: | Horizontal | | □ - not passed |
| Frequency range: | 1GHz-26.5GHz | | |

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | | | |
|---------|--|----------------|-------------------|-------------------|-------------------|----------------|------|--|--|--|
| 1 | 1815.631 | -10.45 | 40.50 | 30.05 | 74.00 | -43.95 | peak | | | |
| 2 | 1815.631 | -10.45 | 26.80 | 16.35 | 54.00 | -37.65 | AVG | | | |
| 3 | 5430.862 | 4.54 | 38.23 | 42.77 | 74.00 | -31.23 | peak | | | |
| 4 | 5430.862 | 4.54 | 23.30 | 27.84 | 54.00 | -26.16 | AVG | | | |
| Remark: | Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | | | |

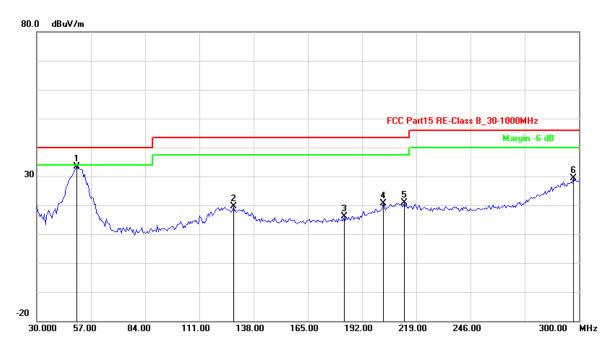
CENTRE OF TESTING SERVICE CO., LTD.





Channel: RX
Test point: Vertical
Frequency range: 30MHz-1GHz

Result: ■ - passed
□ - not passed

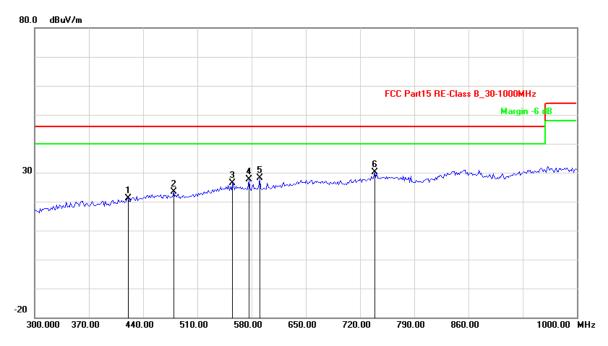


| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|--|--------------------|----------------|-------------------|-------------------|-------------------|----------------|------|
| 1 | 50.0200 | -18.62 | 51.96 | 33.34 | 40.00 | -6.66 | QP |
| 2 | 127.9359 | -16.26 | 35.83 | 19.57 | 43.50 | -23.93 | QP |
| 3 | 183.1263 | -14.93 | 31.03 | 16.10 | 43.50 | -27.40 | QP |
| 4 | 202.6052 | -11.74 | 32.32 | 20.58 | 43.50 | -22.92 | QP |
| 5 | 212.8858 | -10.40 | 31.23 | 20.83 | 43.50 | -22.67 | QP |
| 6 | 297.2946 | -2.14 | 31.45 | 29.31 | 46.00 | -16.69 | QP |
| Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | |

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.







| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|--|--------------------|----------------|-------------------|-------------------|-------------------|----------------|------|
| 1 | 420.6413 | -9.66 | 30.68 | 21.02 | 46.00 | -24.98 | QP |
| 2 | 479.5591 | -8.26 | 31.67 | 23.41 | 46.00 | -22.59 | QP |
| 3 | 555.3106 | -5.67 | 32.01 | 26.34 | 46.00 | -19.66 | QP |
| 4 | 576.3527 | -5.61 | 33.23 | 27.62 | 46.00 | -18.38 | QP |
| 5 | 590.3808 | -5.58 | 33.69 | 28.11 | 46.00 | -17.89 | QP |
| 6 | 739.0782 | -2.06 | 32.08 | 30.02 | 46.00 | -15.98 | QP |
| Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | |

| Channel: | RX | Result: | ■ - passed |
|------------------|--------------|---------|----------------|
| Test point: | Vertical | | ☐ - not passed |
| Frequency range: | 1GHz-26.5GHz | | • |

| No. | Frequency (MHz) | Factor (dB) | Reading (dBuV) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. |
|--|--------------------|----------------|-------------------|-------------------|-------------------|----------------|------|
| 1 | 3843.687 | -0.65 | 36.72 | 36.07 | 74.00 | -37.93 | peak |
| 2 | 3843.687 | -0.65 | 22.00 | 21.35 | 54.00 | -32.65 | AVG |
| 3 | 5541.082 | 4.89 | 38.17 | 43.06 | 74.00 | -30.94 | peak |
| 4 | 5541.082 | 4.89 | 24.06 | 28.95 | 54.00 | -25.05 | AVG |
| Remark: Other frequency mini margin all >6 dB of Limit | | | | | | | |

CENTRE OF TESTING SERVICE CO., LTD.





8. Band Edge Compliance test

8.1. Test Equipment

| Band Edge Compliance test | | | | | | |
|---------------------------|-------------------|-----------------|-----------|------------|-----------|--|
| Item | Test Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | |
| 1 | EMI Test Receiver | ROHDE & SCHWARZ | ESCI | 10868 | 2015/10 | |
| 2 | Log per Antenna | ROHDE & SCHWARZ | HL050 | 100186 | 2016/03 | |
| 3 | Signal analyzer | ROHDE & SCHWARZ | FSIQ26 | 100311 | 2016/03 | |

8.2. Test Information

| EUT | SoundBub |
|----------------|---|
| Test Condition | Ambient Temperature: 25°C Humidity: 56% |
| Test distance | 3 Meter |
| Test Date: | 22 March ~ 05 April 2016 |
| Operator | Duke |
| MODEL NO | WH-20 |

8.3. Test procedure

- 1. The EUT operates at hopping-off test mode. The lowest or highest channels are tested to verify the largest transmission and spurious emissions power at the continuous transmission mode.
- 2. Max hold the trace of the setp 1, and the EUT operates at hopping-on test mode to verify the largest spurious emissions power.
- 3. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
 - (b) AVERAGE: RBW=1MHz; VBW=1KHz(1/on Time) / Sweep=AUTO

8.4. Test Results

PASSED.

The EUT operates at hopping-off test mode. The lowest and highest channels are tested to verify the band edge emissions.

| Toot Made | Channel | Test Result Highest Emission (dBuv/m) | | | |
|---------------|------------------|---|---------|----------|---------|
| Test Mode | Marked Frequency | Horizontal | | Vertical | |
| | | Peak | Average | Peak | Average |
| Low Channel | 2390MHz | 40.37 | 30.79 | 42.69 | 30.65 |
| | 2400MHz | 68.57 | 60.42 | 66.31 | 58.68 |
| Lligh Channal | 2483.5MHz | 51.35 | 47.38 | 49.53 | 45.34 |
| High Channel | 2500MHz | 30.21 | 19.77 | 29.81 | 19.23 |

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines)

Complaint line: +86-20-85533471

E-mail: cts@cts-lab.com.cn

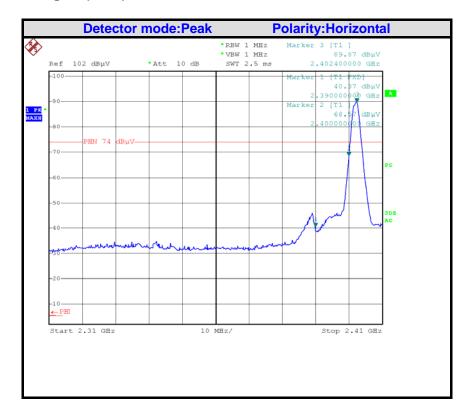
See Reverse For Terms And Conditions of Service

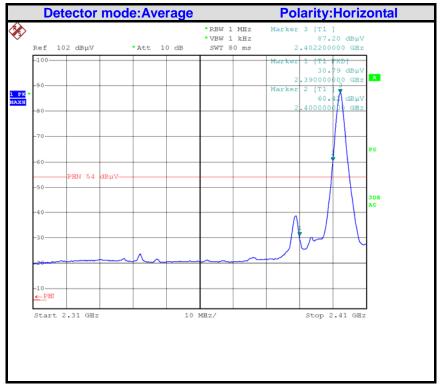
Report No.: CGZ3160322-00213-EFI Page 26 of 34





Band Edges (Low)





Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

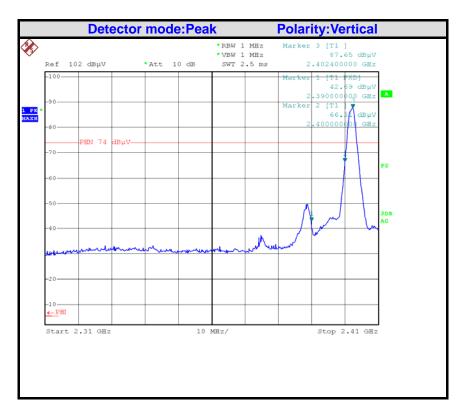
A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

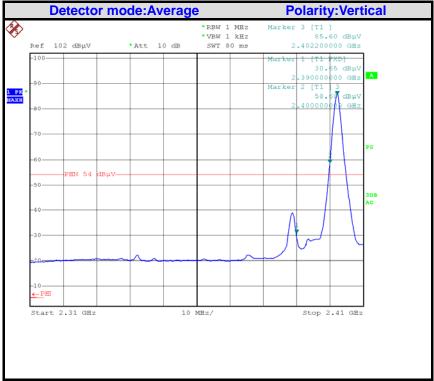
Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn









CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

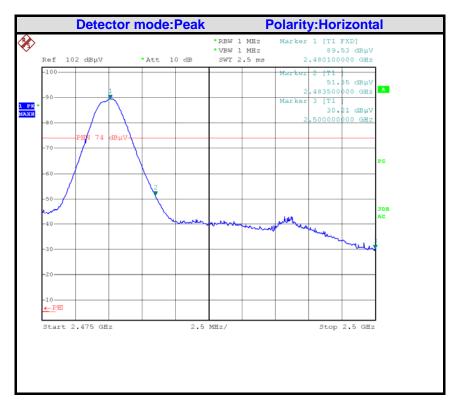
Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

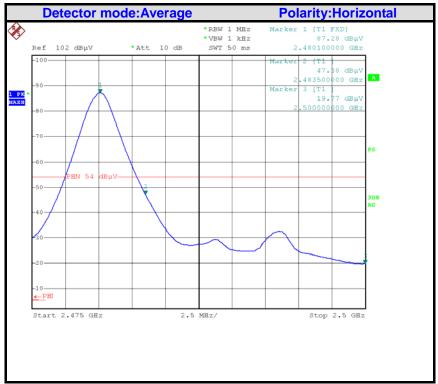
Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn





Band Edges (High)





Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CENTRE OF TESTING SERVICE CO., LTD.

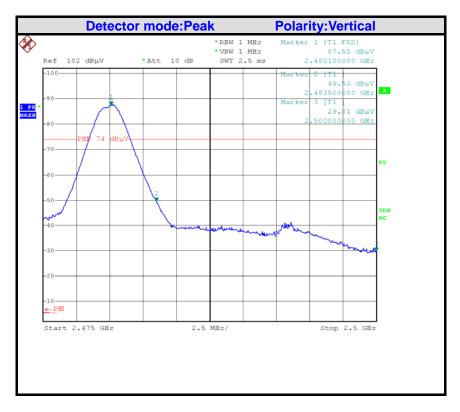
A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

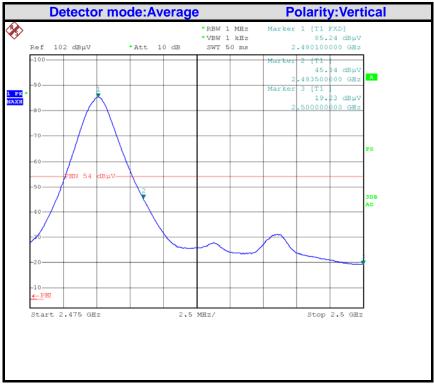
Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn









A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn





9. 99% bandwidth

9.1 Test procedure

According to RSS-210 A1.1.3 and RSS-Gen 4.6.1 The Receiver output is connected to the spectrum analyzer. The resolution bandwidth shall be set to as close to 1% of the selected span as is possible without being below 1%. The video bandwidth shall be set to 3 times the resolution bandwidth. Video averaging is not permitted. Where practical, a sampling detector shall be used given that a peak or peak hold may produce a wider bandwidth than actual. The sweep time is coupled.

9.2. Test Equipment

| Band Edge Compliance test | | | | | | |
|---------------------------|-----------------|-----------------|-----------|------------|-----------|--|
| Item | Test Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | |
| 1 | Log per Antenna | ROHDE & SCHWARZ | HL050 | 100186 | 2016/03 | |
| 2 | Signal analyzer | ROHDE & SCHWARZ | FSIQ26 | 100311 | 2016/03 | |

9.3. Test Results

PASSED.

| Channel | Frequency (MHz) | Bandwidth (MHz) |
|---------|--------------------|--------------------|
| Low | 2402 | 1.060 |
| Middle | 2440 | 1.068 |
| High | 2480 | 1.072 |

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.









CENTRE OF TESTING SERVICE CO., LTD.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China
Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406
Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn











10. Deviation to test specifications

The following identical model(s):

N/A

Belong to the tested device:

Product description: **SoundBub**Model name: **WH-20**

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

A101, No.65, Zhuji Highway,Tianhe District, Guangzhou, China

Tel: +86-20-85543113 (32 lines) Fax: +86-20-38780406

Complaint line: +86-20-85533471 E-mail: cts@cts-lab.com.cn