FCC PART 15.249

# EMI MEASUREMENT AND TEST REPORT

For

Blueone Technology Co., Ltd.

Room 418, 4/F. 404 Bldg. Shangbu Industry Zone, Futian, Shenzhen China

## FCC ID:YBVW28

Apr. 19, 2010

| This Report Concerns: Original Report | Equipment Type： Bluetooth marketing device |
|---|---|
| Test Engineer: | Eric Li |
| Report No.: | BST10040200119R-3 |
| Receive EUT Date/Test Date: | Apr.12,2010/ Apr.12-Apr.19,2010 |
| Reviewed By: | Christina |
| Prepared By: | **Shenzhen BST Technology Co.,Ltd.**<br>3F,Weames Technology Building,<br>No. 10 Kefa Road, Science Park,<br>Nanshan District,Shenzhen,Guangdong,China<br>Tel: 0755-26747751～3<br>Fax: 0755-26747751～3 ext.826 |

**Note:** The test report is specially limited to the above company and this particular sample only. It may not be duplicated without prior written consent of Shenzhen BST Technology Co.,Ltd. This report must not be used by the client to claim product certification,approval,or endorsement by NVLAP, NIST or any agency of the US Government.

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# 1. GENERAL INFORMATION

## 1.1. Report information

1.1.1.This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that BST approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that BST in any way guarantees the later performance of the product/equipment.

1.1.2.The sample/s mentioned in this report is/are supplied by Applicant, BST therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through BST, unless the applicant has authorized BST in writing to do so.

Test Facility -
The test site used to collect the data is located on the address of
Shenzhen Academy of Metrology & Quality Inspection
(FCC Registered Test Site Number: 274801) on
Bldg. Metrology & Quality Inspection, Longzhu Road, Nanshan,
Shenzhen, Guangdong, China
The Test Site is constructed and calibrated to meet the FCC requirements.

## 1.2. Objective

This type approval report is prepared on behalf of Blueone Technology Co., Ltd. Address: Room 418, 4/F. 404 Bldg. Shangbu Industry Zone, Futian, Shenzhen China in accordance with Part 15.249 the Federal Communication Commissions rules.
The objective is to determine compliance with FCC rules for Conducted Test, Field Strength of Fundamental, band edge and Radiated Test.

## 1.3. Measurement Uncertainty

Available upon request.

# 2. PRODUCT DESCRIPTION

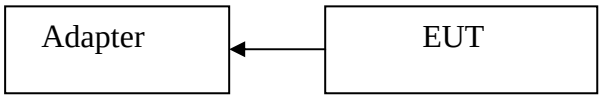
## 2.1. EUT Description

| | | |
|---|---|---|
| Description | : | Bluetooth marketing device |
| Applicant | : | Blueone Technology Co., Ltd.<br>Room 418, 4/F. 404 Bldg. Shangbu Industry Zone,<br>Futian, Shenzhen China |
| Model Number | : | W28, U14, U28, N14, N28, W14, G14, G28, R14, P14 |

**Additonal Information**

| | | |
|---|---|---|
| Frequency | : | 2402MHz~2480MHz |
| Number of Channels | : | - |
| Power Supply | : | AC 230V By Adapter |
| Maximum Range | : | N/A |
| Transmitter Antenna | : | The antenna used in this product is directional with SMA Plug reverse connector. The antenna is permanently attached. Refer to the product photo. |
| Gain of Antenna | : | 0dBi |

## 2.2. Block Diagram of EUT Configuration




## 2.3. Support Equipment List

N/A

## 2.4. Test Conditions

Temperature: 23~25℃
Relative Humidity: 55~63 %

## 3. FCC ID LABEL

**FCC ID:YBVW28**

**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.**

**Label Location on EUT**

**EUT Top View/ FCC ID Label Location**

# 4. TEST RESULTS SUMMARY

**FCC 15 Subpart C,Paragraph 15.249**

| Test Standards | Test Items | Test Results |
|---|---|---|
| FCC Part 15,Paragraph 15.203 | Antenna Requirement | Pass |
| FCC Part 15,Paragraph 15.207 | Conducted Test | Pass |
| FCC Part 15 Subpart C, Paragraph 15.249(a) and 15.249(b) | Field Strength of Fundamental | Pass |
| FCC Part 15,Paragraph 15.209 | Radiated Test | Pass |
| FCC Part 15 Subpart C, Paragraph 15.249(d) | Measured Band Edges | Pass |

Remark: “N/A” means “Not applicable.”

**Modifications**

No modification was made.

**Accreditation scope to the new version of ANSI C63.4-2009:**

This standard specifies U.S. consensus standard methods, instrumentation, and facilities for measurement of radio-frequency (RF) signals and noise emitted from electrical and electronic devices in the frequency range 9 kHz to 40 GHz. It does not include generic nor product-specific emission limits. Where possible,the specifications herein are harmonized with other national and international standards used for similar purposes.

Uses of the word shall in this standard indicate a mandatory requirement that must be met to satisfy this standard. The word should is used to indicate that a requirement is recommended but not mandatory.Tolerances on dimensions and distances are based on good engineering practice where not specified. The word may is used to indicate a recommendation that is at the discretion of the user. In addition, notes in this document are informative and are not part of the requirements. In this standard, the text takes precedence over the figures because the text is complete and the figures are illustrative of a typical application of the text. Notes are used in the text for emphasis or to offer informative suggestions about the technical content of the standard, and these notes provide additional information to assist the reader with a particular passage but do not include mandatory requirements. Footnotes in text are included only for information,clarification, and/or aid applicable to the use of the standard, but mandatory requirements are not included in text footnotes.

Measurement methods are included for radiated and line-conducted emissions that can be generated by a variety of devices, as described in 1.2. Definitions are provided for terms and phrases contained in the text,in which the words do not represent obvious or common usage. Measurement instrumentation, facilities,and test sites are specified and characterized, including open-area test sites (OATS) and RF absorber-lined,metal chambers used for radiated emission measurement. Transverse electromagnetic (TEM) wave devices used for radiated

emission measurement are treated in normative Annex F. The requirements of Annex F,when such tests are performed, shall take precedence in this standard. In most cases, measurement instrumentation and calibration requirements are only generally characterized in deference to standards dedicated to these subjects, which should be used in conjunction with this standard. The requirements for operation of test samples during measurements are presented for devices in general, as well as for specific types of devices that are frequently measured. Specific requirements for emission test data recording and reporting are presented with reference to general requirements contained in documents dedicated to standard laboratory practices, which should be used in conjunction with this standard. The main text is augmented by a series of annexes that provide details for certain measurement methods and facilities.Annex A provides an index of main text clauses to be used when testing particular equipment under test(EUT) types.

# 5. TEST EQUIPMENT USED

| Equipment/Facilities | Manufacturer | Model # | Serial no. | Date of Cal. | Cal. Interval |
|---|---|---|---|---|---|
| Cable | Resenberger | N/A | NO.1 | Mar 10，2010 | 1 Year |
| Cable | SCHWARZBECK | N/A | NO.2 | Mar 10，2010 | 1 Year |
| Cable | SCHWARZBECK | N/A | NO.3 | Mar 10，2010 | 1 Year |
| LISN | Rohde＆Schwarz | ESH3-Z5 | 100305 | Mar 10，2010 | 1 Year |
| 50Ω Coaxial Switch | ANRITSU CORP | MP59B | 6200283933 | Mar 10, 2010 | 1 Year |
| EMI Test Receiver | Rohde＆Schwarz | ESP13 | 100180 | Oct.18,2009 | 1 Year |
| Spectrum Analyzer | Rohde＆Schwarz | FSP40 | 100273 | Sep.10,2009 | 1 Year |
| 3m Semi-Anechoic Chamber | Albatross Projects | 9m×6m×6m | N/A | Feb.20,2010 | 1 Year |
| Signal Generator | FLUKE | PM5418＋Y/C | LO747012 | Feb.20,2010 | 1 Year |
| Signal Generator | FLUKE | PM5418TX | LO738007 | Feb.20,2010 | 1 Year |
| Loop Antenna | SCHWARZBECK | FMZB1516 | 113 | Jan.30,2010 | 1 Year |
| Trilog-Super Broadband Antenna | SCHWARZBECK | VULB9161 | 9161-4079 | Sep.22,2009 | 1 Year |
| Broad-Band Horn Antenna | SCHWARZBECK | BBHA9120D | 9120D-564 | Sep.22,2009 | 1 Year |
| Ultra Broadband Antenna | Rohde＆Schwarz | HL-562 | 100110 | June.15,2009 | 1 Year |
| AMN | Rohde＆Schwarz | ESH3-Z5 | 100196 | Oct.11,2009 | 1 Year |
| AMN | Rohde＆Schwarz | ESH3-Z5 | 100197 | Oct.11,2009 | 1 Year |
| Pulse Limiter | Rohde＆Schwarz | ESH3-Z2 | N/A | N/A | N/A |
| Power Meter | Rohde＆Schwarz | NRVD | 100041 | Feb.20,2010 | 1 Year |
| EMI Test Receiver | Rohde＆Schwarz | ESCS30 | 100003 | Feb.20,2010 | 1 Year |
| Coaxial Cable with N-connectors | SCHWARZBECK | AK9515H | 95549 | Sep.22,2009 | 1 Year |
| Radio Communication Test Set | Rohde＆Schwarz | CMS 54 | 846621/024 | Feb.20,2010 | 1 Year |
| Modulation Analyzer | Hewlett-Packard | 8901B | 2303A00362 | Feb.20,2010 | 1 Year |
| Absorbing clamp | Rohde＆Schwarz | MDS-21 | N/A | Oct.29,2009 | 1 Year |

# 6. §15.203 - ANTENNA REQUIREMENT

## 6.1. Standard Applicable

According to § 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 use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR , if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

## 6.2. Antenna Connector Construction

The antenna used in this product is directional with SMA Plug reverse connector. The connector is unique.The antenna is permanently attached. Refer to the product photo.

# 7. CONDUCTED POWER LINE TEST

## 7.1. Test Equipment

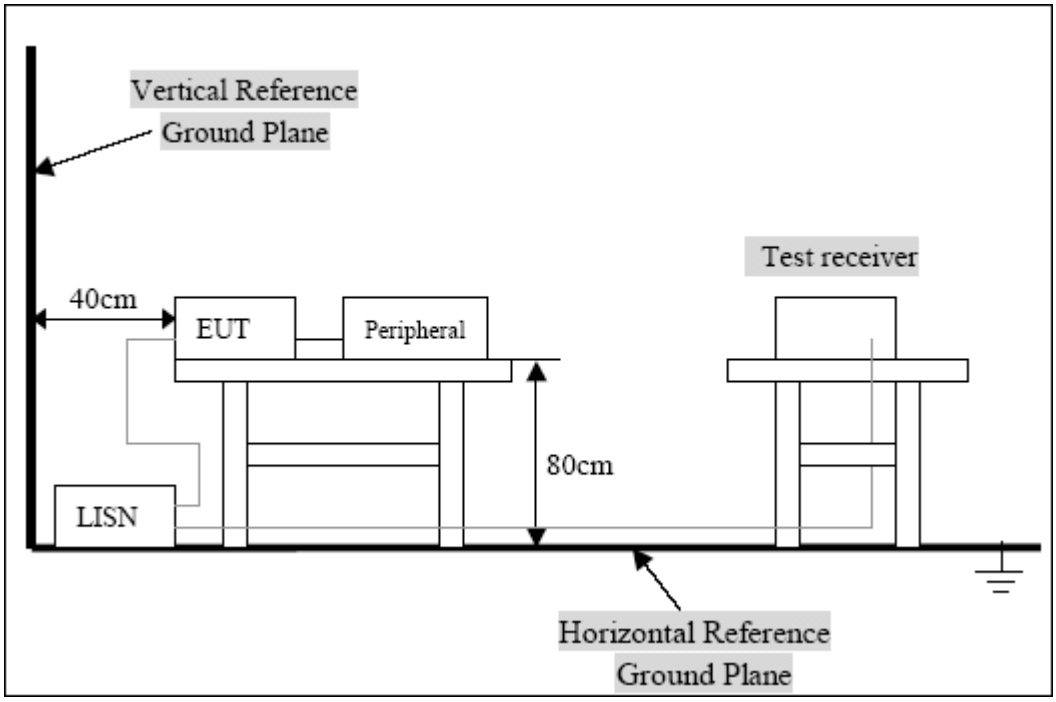
Please refer to section 4 this report.

## 7.2. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.).This provides a 50ohm/50uh coupling inpedance for the measuring equipment.The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uh coupling inpedance with 50ohm termination.

Both sides of A.C. Line are check for maximum conducted interference.In order to find the maximum emission,the relative positions of equipment and al of the interface cables must be changed according to ASIN C63.4:2009 on conducted measurement .Conducted emissions were invested over the frequency range from 0.15MHz to 30MH z using a receiver bandwidth of 9Khz.

## 7.3. Test Setup




For the actual test configuration,Please refer to the related items-Photos of testing

## 7.4. Configurating of the EUT

The EUT was configured according to ASIN C63.4:4-2009. Enable the signal transmitted from the external antenna from EUT to receiver. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

Note:

Below 1GHZ, the channel low, middle, high were pre-tested, The channel low, worst case one, was chosen for conducted and radiated emission test.

Above 1GHZ,the channel low ,middle, high were tested individually.

A.EUT

| Device | Manufacturer | Model # | FCC ID |
|---|---|---|---|
| Bluetooth marketing device | Blueone Technology Co., Ltd. | W28, U14, U28, N14, N28, W14, G14, G28, R14, P14 | YBVW28 |

B.Internal Devices

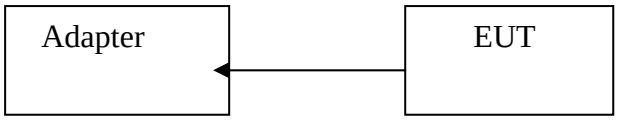
| Device | Manufacturer | Model # | FCC ID |
|---|---|---|---|
| N/A | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

C.Peripherals

| Device | Manufacturer | Model # Serial # | FCC ID/ Doc | Cable |
|---|---|---|---|---|
| N/A | | | | |
| | | | | |
| | | | | |
| | | | | |

### 7.5. EUT Operating Condition

Operating condition is according to ANSI C63.4-2009.
Setup the EUT and simulators as shown on follow.
Enable RF signal and confirm EUT active.
Modulate output capacity of EUT up to specification.




### 7.6. Conducted Power line Emission Limits

| FCC Part 15 Paragraph 15.207 (dBuV) | | |
|---|---|---|
| Frequency Range (MHZ) | Class A QP/AV | Class B QP/AV |
| 0.15-0.5 | 79/66 | 65-56/56-46 |
| 0.5-5.0 | 73/60 | 56-46 |
| 5.0-3.0 | 73/60 | 60-50 |

**Note:** In the above table, the tighter limit applies at the band edges.

## 7.7. Conducted Power Line Test Result

Test Facility -
The test site used to collect the data is located on the address of
Shenzhen Academy of Metrology & Quality Inspection
(FCC Registered Test Site Number: 274801) on
Bldg. Metrology & Quality Inspection, Longzhu Road, Nanshan,
Shenzhen, Guangdong, China
The Test Site is constructed and calibrated to meet the FCC requirements.

Test Engineer:

Eric Li 

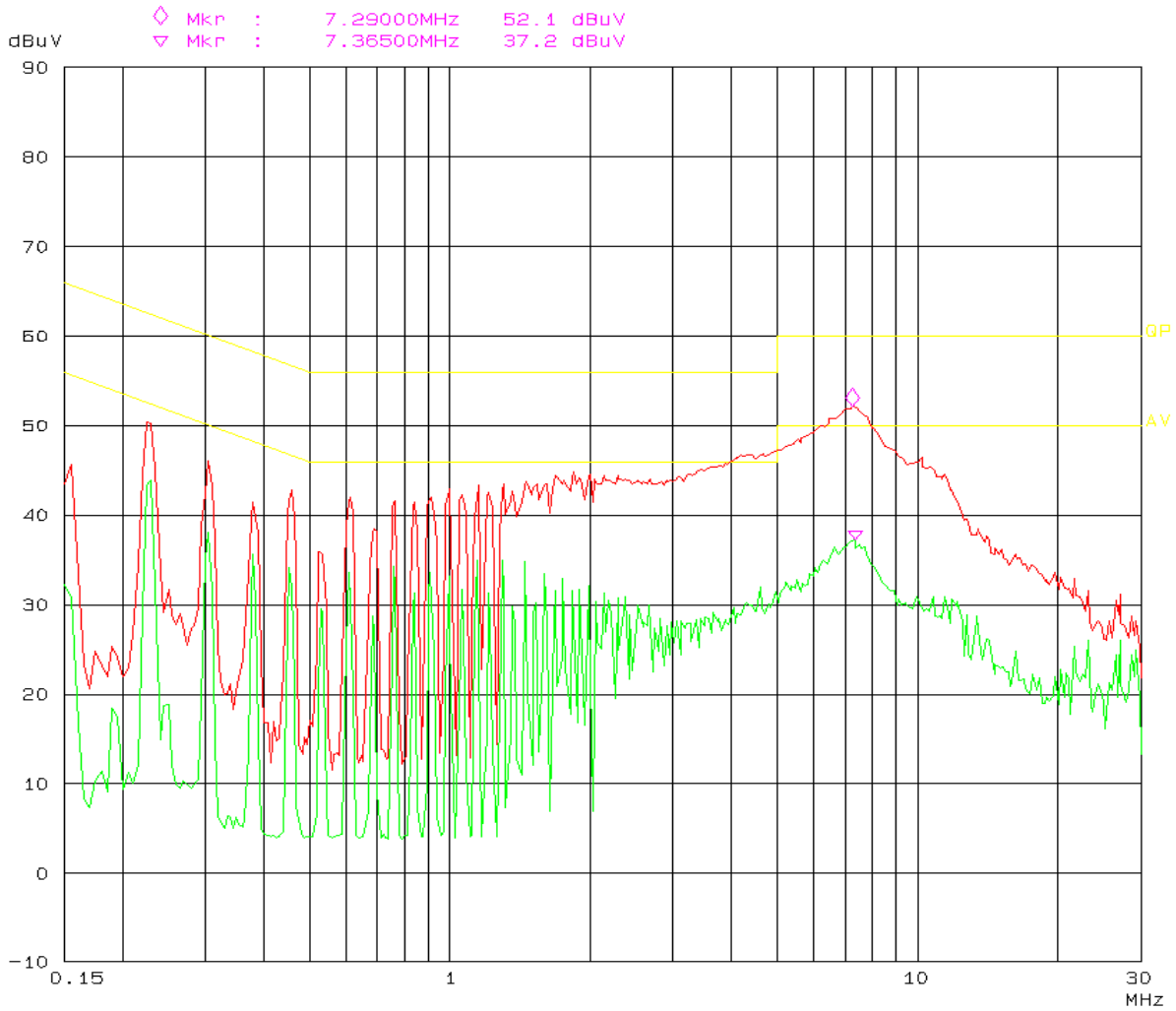
Applicant:Blueone Technology Co., Ltd.
Room 418, 4/F. 404 Bldg. Shangbu Industry Zone, Futian, Shenzhen China

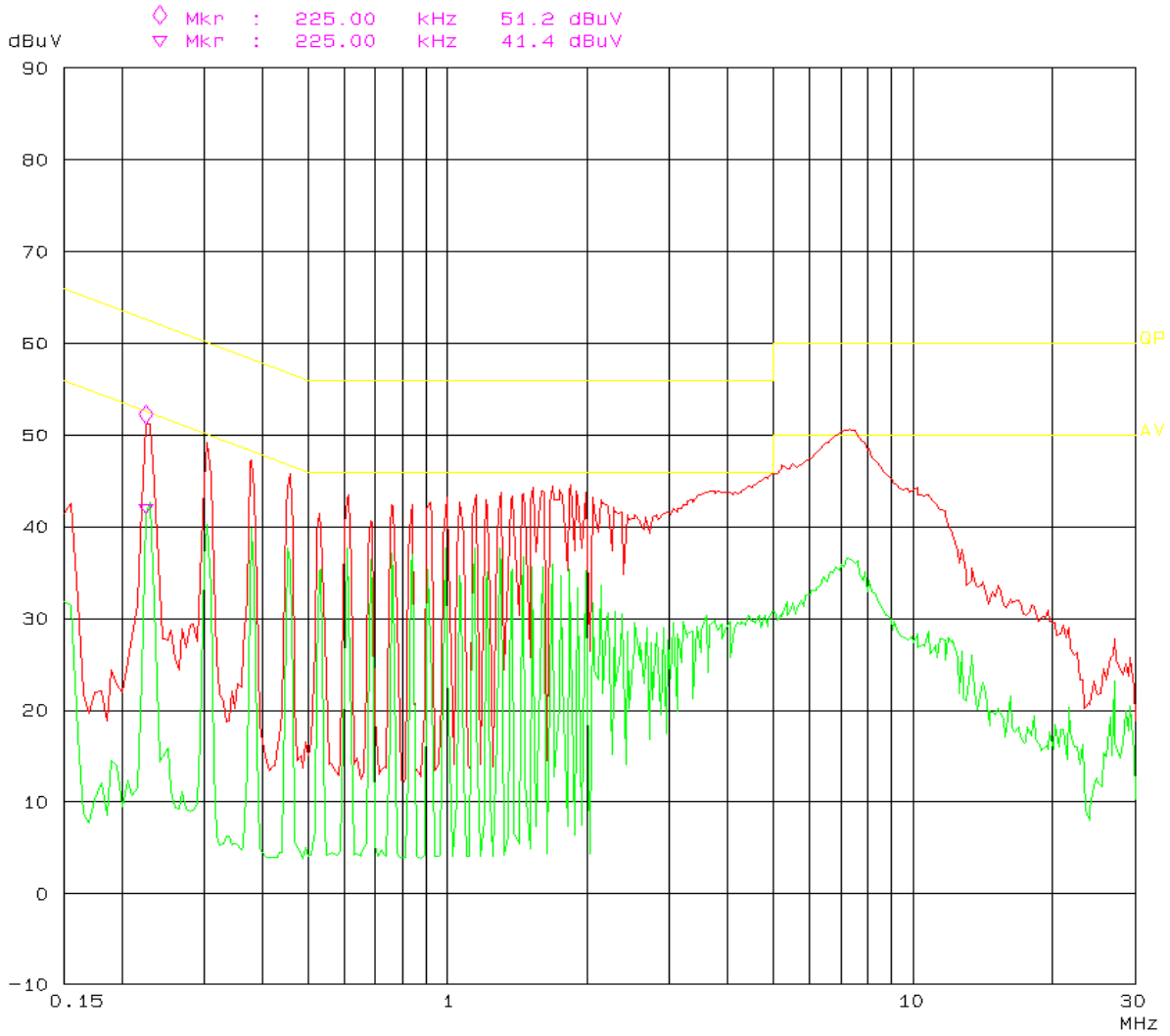
| Line Conducted Emissions | | | | FCC Part 15.207 | |
|---|---|---|---|---|---|
| **Frequency (MHz)** | **Amplitude (dBμV)** | **Detector (QP/AV)** | **Conductor (Line/Neutral)** | **Limit (dBμV)** | **Margin (dB)** |
| 7.2900 | 52.10 | QP | Line | 60.00 | 7.90 |
| 0.6150 | 37.70 | AV | Neutral | 46.00 | 8.30 |
| 0.2300 | 44.00 | AV | Line | 52.45 | 8.45 |
| 0.3800 | 39.80 | AV | Neutral | 48.28 | 8.48 |
| 0.4550 | 37.70 | AV | Neutral | 46.78 | 9.08 |
| 7.2700 | 50.50 | QP | Neutral | 60.00 | 9.50 |
| 0.3050 | 40.30 | AV | Neutral | 50.11 | 9.81 |
| 0.4600 | 45.90 | QP | Neutral | 56.69 | 10.79 |
| 0.3050 | 49.30 | QP | Neutral | 60.11 | 10.81 |
| 0.3800 | 47.20 | QP | Neutral | 58.28 | 11.08 |
| 1.1450 | 34.90 | AV | Line | 46.00 | 11.10 |
| 1.4450 | 34.80 | AV | Line | 46.00 | 11.20 |
| 0.2250 | 51.20 | QP | Neutral | 62.63 | 11.43 |
| 0.2250 | 41.40 | AV | Neutral | 52.63 | 11.23 |
| 0.3050 | 38.10 | AV | Line | 50.11 | 12.01 |
| 0.2300 | 50.30 | QP | Line | 62.45 | 12.15 |
| 1.4550 | 43.80 | QP | Line | 56.00 | 12.20 |
| 0.6150 | 33.70 | AV | Line | 46.00 | 12.30 |
| 0.6150 | 43.40 | QP | Neutral | 56.00 | 12.60 |
| 1.1500 | 43.20 | QP | Line | 56.00 | 12.80 |
| 7.3650 | 37.20 | AV | Line | 50.00 | 12.80 |
| 7.2050 | 36.60 | AV | Neutral | 50.00 | 13.40 |
| 0.6150 | 42.00 | QP | Line | 56.00 | 14.00 |
| 0.3050 | 46.10 | QP | Line | 60.11 | 14.01 |

## 7.8. Plot(s) of Test Data

Applicant:Blueone Technology Co., Ltd.
Room 418, 4/F. 404 Bldg. Shangbu Industry Zone, Futian, Shenzhen China

Plot(s) of Test Data is presented hereinafter as reference.




Mkr : 225.00 kHz 51.2 dBuV
Mkr : 225.00 kHz 41.4 dBuV
dBuV
90
80
70
60
50
40
30
20
10
0
-10
0.15
1
10
30
MHz
QP
AV

# 8. RADIATED EMISSION TEST

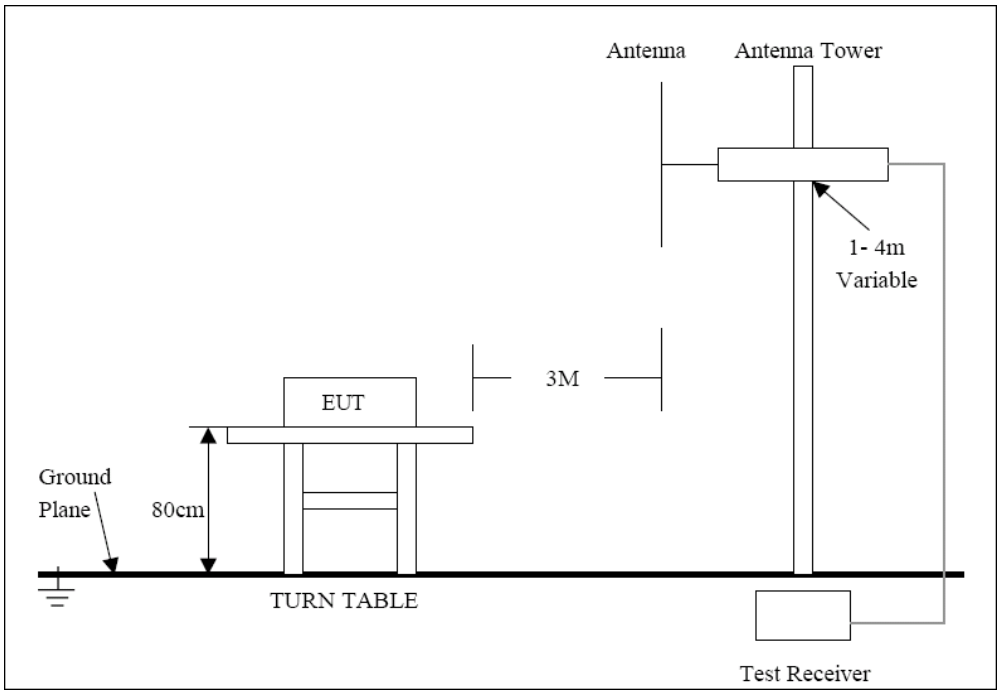
## 8.1. Test Equipment

Please refer to section 4 this report.

## 8.2. Test Procedure

1. The EUT was tested according C63.4-2009.The radiated test was performed at FCC Registration laboratory .
2. The EUT,peripherals were put on the turntable which table size od 1m×1.5m,table high 0.8m.All set up is according tl ANSI C63.4-2009.
3. The frequency spectrum from 30MHZ to 1 GHZ was investigated.All readings from 30MHZ to 1 GHZ are quasi-peak values with a resolution bandwidth of 120 KHZ. All readings are above 1GHZ ,prak values with a resolution bandwidth of 1 MHZ.Measurements were made at 3 merers.
4. The antenna high is varied from 1m to 4m high to find the maximum emission for each frequency.
5. Maximizing procedure was performed on the six(6)highest emissions to ensure EUT compliance is with all installation combinations.All data was recorded in the peak detection mode.Quasi-peak readings was performed only when an emission was found to be marginal (within -4 Db of specification limit),and are distinguished with a “QP”in the data table.
6. The antenna polarization:Vertical polarization and Horizontal polarization.

## 8.3. Radiated Test Setup




For the accrual test configuration,pleas refer to the related items-photos of Testing.

**8.4. Confihuration of the EUT**

Same as section 5.4 of this report

**8.5. EUT Operating Condition**

Same as section 5.5 of this report.

**8.6. Radiated Emission Limit**

All emission from a digital device,including any network of conductors and apparatus connected thereto,shall not exceed the level of field strength specified below :

A. FCC Part 15 Subpart C Paragraph 15.249(a) Limit

| Frequency (MHZ) | Distance (m) | Field Strength (dBuV/m) |
|---|---|---|
| 30-88 | 3 | 40.0 |
| 88-*216 | 3 | 43.5 |
| 216-960 | 3 | 46.0 |
| ABOVE 960 | 3 | 54.0 |

Note: (1) RF Voltage (dBuV)=20 log Voltage(uV)
(2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
(3) The emission limit in this paragraph os based on measurement instrumentation employing an average detector.Measurement using instrumentation with a peak

| Fundamental Frequency (MHZ) | Field as trength of Fundamental(3m) | | | Field as trength of Harmonics(3m) | | |
|---|---|---|---|---|---|---|
| | mV/m | dBuV/m | | uV/m | dBuV/m | |
| 902~928 | 50 | 94(Average) | 114(Peak) | 500 | 54(Average) | 74(Peak) |
| 2400~2483.5 | 50 | 94(Average) | 114(Peak) | 500 | 54(Average) | 74(Peak) |

detector function,corresponding to 20dB above the maximum permitted average limit.

B.Frequencies in restricted band are complied to limit on Paragraph 15.209.

Note: (1) RF Voltage (dBuV)=20 log Voltage(uV)
(2) In the Above Table,the tighter limit applies at the band edges.
(3) Distaqnce refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

## 8.7. Radiated Emission Test Result

Test Facility -
The test site used to collect the data is located on the address of
Shenzhen Academy of Metrology & Quality Inspection
(FCC Registered Test Site Number: 274801) on
Bldg. Metrology & Quality Inspection, Longzhu Road, Nanshan,
Shenzhen, Guangdong, China
The Test Site is constructed and calibrated to meet the FCC requirements.

Test Engineer:

Eric Li 

Applicant:Blueone Technology Co., Ltd.
Room 418, 4/F. 404 Bldg. Shangbu Industry Zone, Futian, Shenzhen China
A.Fundamental Radiated Emission Data

| | | | |
|---|---|---|---|
| Product: | Bluetooth marketing device | Test mode: | CH Low～CH High |
| Test Item: | Fundamental Radiated Emission Data | Temperature: | 25℃ |
| Test Voltage: | AC 230V By Adapter | Humidity: | 56%RH |
| Test Result: | PASS | | |

CH Low

| Freq. (MHz) | Emission(dBuV/m) Peak Detector/ AV | HORIZ/ VERT | Limits(dBuV/m) Peak/AVERAGE | Margin (Db) |
|---|---|---|---|---|
| 2402.00 | 90.1/ 72.0 | HORIZ | 114/94 | 23.9/22.0 |
| 2402.00 | 93.1 / 74.7 | VERT | 114/94 | 20.9/19.3 |

CH Middle

| Freq. (MHz) | Emission(dBuV/m) Peak Detector/ AV | HORIZ/ VERT | Limits(dBuV/m) Peak/AVERAGE | Margin (Db) |
|---|---|---|---|---|
| 2441.00 | 90.3/71.7 | HORIZ | 114/94 | 23.7/22.3 |
| 2441.00 | 92.2/73.0 | VERT | 114/94 | 21.8/21.0 |

CH High

| Freq. (MHz) | Emission(dBuV/m) Peak Detector/ AV | HORIZ/ VERT | Limits(dBuV/m) Peak/AVERAGE | Margin (Db) |
|---|---|---|---|---|
| 2480.0 | 90.8/74.1 | HORIZ | 114/94 | 23.2/19.9 |
| 2480.0 | 93.0/75.7 | VERT | 114/94 | 21.0/18.3 |

B.Harmonics Radiated Emission Data

| | | | |
|---|---|---|---|
| Product: | Bluetooth marketing device | Test mode: | CH Low～CH High |
| Test Item: | Radiated Emission Data | Temperature: | 25℃ |
| Test Voltage: | AC 230V By Adapter | Humidity: | 56%RH |
| Test Result: | PASS | | |

Applicant:Blueone Technology Co., Ltd.
Room 418, 4/F. 404 Bldg. Shangbu Industry Zone, Futian, Shenzhen China

CH Low

| Freq. (MHz) | Emission(dBuV/m) Peak Detector | HORIZ/ VERT | Limits(dBuV/m) Peak/AVERAGE | Margin (Db) |
|---|---|---|---|---|
| 4804.12 | - | H/V | 74.0/54.0 | - |
| 7206.18 | - | H/V | 74.0/54.0 | - |
| 9608.24 | - | H/V | 74.0/54.0 | - |
| 12010.3 | - | H/V | 74.0/54.0 | - |
| 14412.36 | - | H/V | 74.0/54.0 | - |
| 16814.42 | - | H/V | 74.0/54.0 | - |
| 19216.48 | - | H/V | 74.0/54.0 | - |
| 21618.54 | - | H/V | 74.0/54.0 | - |
| 24020.6 | - | H/V | 74.0/54.0 | - |

CH Midde

| Freq. (MHz) | Emission(dBuV/m) Peak Detector | HORIZ/ VERT | Limits(dBuV/m) Peak/ACERAGE | Margin (Db) |
|---|---|---|---|---|
| 4882.18 | - | H/V | 74.0/54.0 | - |
| 7323.27 | - | H/V | 74.0/54.0 | - |
| 9764.36 | - | H/V | 74.0/54.0 | - |
| 12205.45 | - | H/V | 74.0/54.0 | - |
| 14646.54 | - | H/V | 74.0/54.0 | - |
| 17087.63 | - | H/V | 74.0/54.0 | - |
| 19528.72 | - | H/V | 74.0/54.0 | - |
| 21969.81 | - | H/V | 74.0/54.0 | - |
| 24410.9 | - | H/V | 74.0/54.0 | - |

CH High

| Freq. (MHz) | Emission(dBuV/m) Peak Detector | HORIZ/ VERT | Limits(dBuV/m) Peak/ACERAGE | Margin (Db) |
|---|---|---|---|---|
| 4960.26 | - | H/V | 74.0/54.0 | - |
| 7440.39 | - | H/V | 74.0/54.0 | - |
| 9920.52 | - | H/V | 74.0/54.0 | - |
| 12400.65 | - | H/V | 74.0/54.0 | - |
| 14880.78 | - | H/V | 74.0/54.0 | - |
| 17360.91 | - | H/V | 74.0/54.0 | - |
| 19841.04 | - | H/V | 74.0/54.0 | - |
| 22321.17 | - | H/V | 74.0/54.0 | - |
| 24801.3 | - | H/V | 74.0/54.0 | - |

Note: - means the emission is too low at least 20dB to the limit.

C. General Radiated Emission Data

| | | | |
|---|---|---|---|
| Product: | Bluetooth marketing device | Test mode: | - |
| Test Item: | Radiated Emission Data | Temperature: | 25℃ |
| Test Voltage: | AC 230V By Adapter | Humidity: | 56%RH |
| Test Result: | PASS | | |

Applicant:Blueone Technology Co., Ltd.
Room 418, 4/F. 404 Bldg. Shangbu Industry Zone, Futian, Shenzhen China

| Freq. (MHz) | Emission(dBuV/m) Peak Detector | HORIZ/ VERT | Limits(dBuV/m) Peak/ACERAGE | Margin (Db) |
|---|---|---|---|---|
| 116.7 | 28.0 | HORIZ | 43.5 | 15.5 |
| 116.7 | 30.2 | VERT | 43.5 | 13.3 |
| 193.2 | 25.5 | HORIZ | 43.5 | 18.0 |
| 193.2 | 27.9 | VERT | 43.5 | 15.6 |
| 376.8 | 29.4 | HORIZ | 46 | 16.6 |
| 376.8 | 32.1 | VERT | 46 | 13.9 |

# 9. BAND EDGE

## 9.1. Test Equipment

Please refer to Section 4 this report.

## 9.2. Test Procedure

1. The EUT was tested according C63.4-2009.The radiated test was performed at FCC Registration laboratory .
2. The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100 kHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.
3. As the radiation test ,set the Lowest and Highest Transmitting Channel,observed the outside band of 2400MHz to 2438.5MHz,than mark the higher-level emission for comparing with the FCC rules.

## 9.3. Configuration of The EUT

Same as section 5.4 of this report

## 9.4. EUT Operating Condition

Same as section 5.5 of this report

## 9.5. Band Edge FCC 15.249(d) Limit

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 desired power,based on either an RF conducted or a radited 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 specitfied in Section 15.209(a) (see Section 15.205(c)).

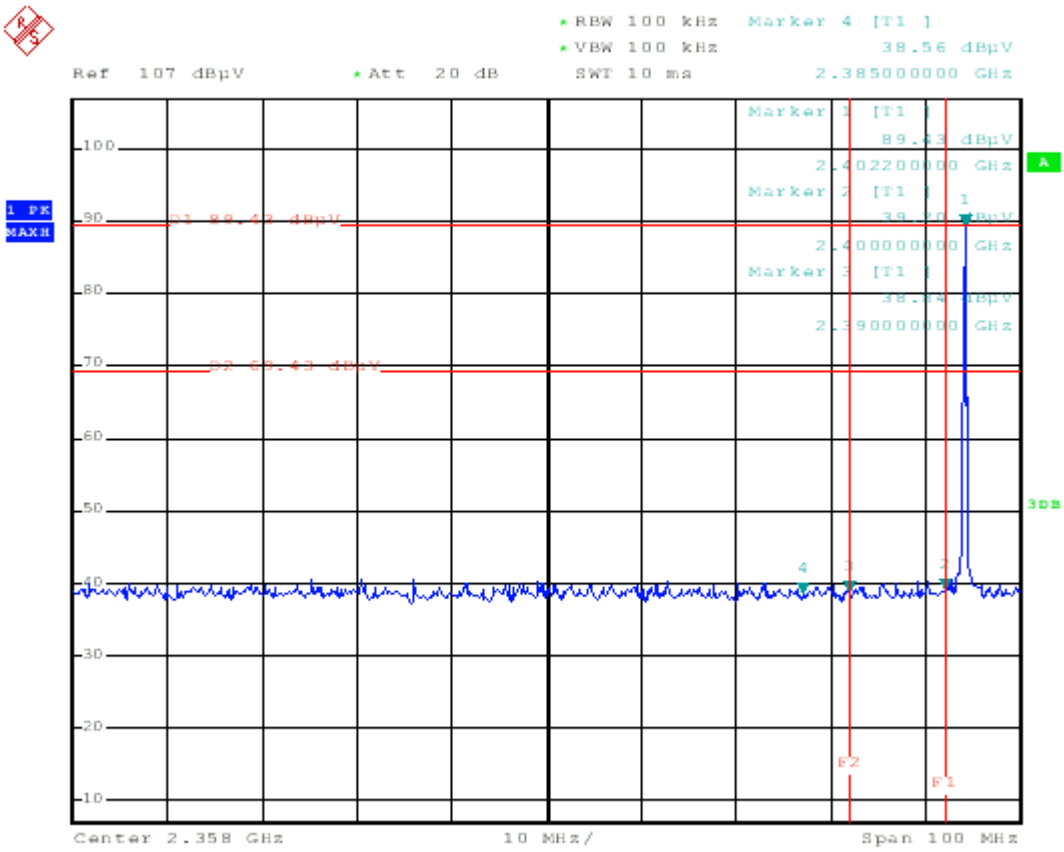
## 9.6. Band Edge Test Result

| | | | |
|---|---|---|---|
| Product: | Bluetooth marketing device | Test mode: | CH Low,CH High |
| Test Item: | - | Temperature: | 25℃ |
| Test Voltage: | AC 230V By Adapter | Humidity: | 56%RH |
| Test Result: | PASS | | |

Test Facility -
The test site used to collect the data is located on the address of
Shenzhen Academy of Metrology & Quality Inspection
(FCC Registered Test Site Number: 274801) on
Bldg. Metrology & Quality Inspection, Longzhu Road, Nanshan,
Shenzhen, Guangdong, China
The Test Site is constructed and calibrated to meet the FCC requirements.
Test Engineer:

Eric Li

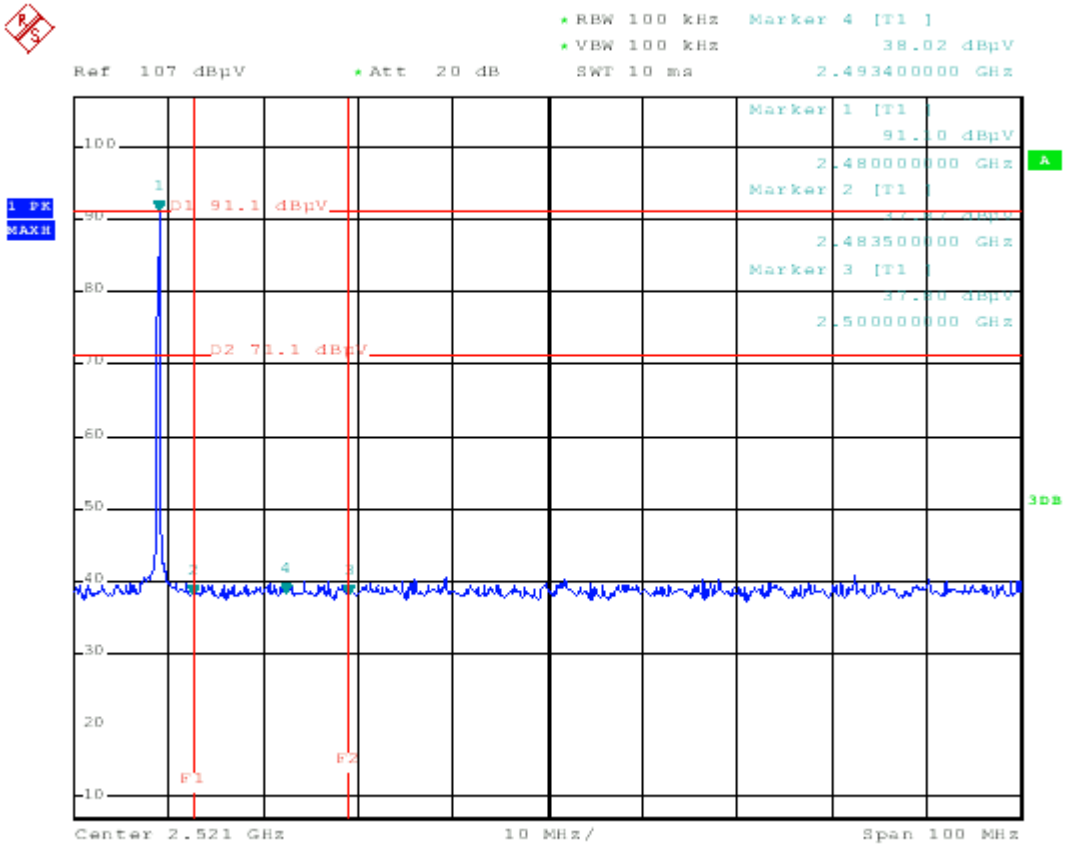
Applicant:Blueone Technology Co., Ltd.
Room 418, 4/F. 404 Bldg. Shangbu Industry Zone, Futian, Shenzhen China




Emission in the Restricted Bands

| Frequency [MHz] | dBc [dB] | **AV** [dBµV/m] | Polarity (H/V) | AV limit [dBµV/m] |
|---|---|---|---|---|
| 2310 | - | **33.8** | V | 54 |
| 2385 | - | **34.9** | V | 54 |
| 2390 | - | **35.0** | V | 54 |

The above field strength levels were measured in Vertical polarity which is the worst case.




Emission in the Restricted Bands

| Frequency [MHz] | dBc [dB] | **AV** [dBµV/m] | Polarity (H/V) | AV limit [dBµV/m] |
|---|---|---|---|---|
| 2483.5 | - | **32.40** | V | 54 |
| 2493.4 | - | **34.41** | V | 54 |
| 2500 | - | **33.42** | V | 54 |

The above field strength levels were measured in Vertical polarity which is the worst case.