

GTS Global United Technology Services Co., Ltd.

Report No.: GTS201807000089F01

# FCC Report (Bluetooth)

| Applicant:                          | Ningbo Weifeng Intelligent Technology Co., Ltd.                          |
|-------------------------------------|--|
| Address of Applicant:               | NO.1230 south cihai road,luotuo<br>street,zhenhai,Ningbo,Zhejiang, China |
| Manufacturer/Factory:               | Ningbo Weifeng Intelligent Technology Co., Ltd.                          |
| Address of<br>Manufacturer/Factory: | NO.1230 south cihai road,luotuo<br>street,zhenhai,Ningbo,Zhejiang, China |
| Equipment Under Test (E             | EUT)   |
| Product Name:                       | 3-Axis Stabilizer  |
| Model No.:                          | WI310  |
| FCC ID:                             | 2AQQY-WI310  |
| Applicable standards:               | FCC CFR Title 47 Part 15 Subpart C Section 15.247                        |
| Date of sample receipt:             | July 16, 2018  |
| Date of Test:                       | July 17-25, 2018   |
| Date of report issued:              | July 25, 2018  |
| Test Result :                       | PASS *   |

\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Robinson Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.



## 2 Version

| Version No. | Date          | Description |
|-------------|---------------|-------------|
| 00          | July 25, 2018 | Original    |
|             |               |             |
|             |               |             |
|             |               |             |
|             |               |             |

Prepared By:

handlu

Date:

July 25, 2018

Project Engineer

Check By:

N

Date:

July 25, 2018

Reviewer



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## 4 Test Summary

| Test Item                        | Section in CFR 47 | Result |
|----------------------------------|-------------------|--------|
| Antenna requirement              | 15.203/15.247 (c) | Pass   |
| AC Power Line Conducted Emission | 15.207            | Pass   |
| Conducted Output Power           | 15.247 (b)(3)     | Pass   |
| Channel Bandwidth                | 15.247 (a)(2)     | Pass   |
| Power Spectral Density           | 15.247 (e)        | Pass   |
| Band Edge                        | 15.247(d)         | Pass   |
| Spurious Emission                | 15.205/15.209     | Pass   |

Pass: The EUT complies with the essential requirements in the standard.

Remark: Test according to ANSI C63.10:2013.

#### **Measurement Uncertainty**

| Test Item                           | Frequency Range                      | Measurement Uncertainty           | Notes |
|-------------------------------------|--------------------------------------|-----------------------------------|-------|
| Radiated Emission                   | 9kHz ~ 30MHz ± 4.34dB                |                                   | (1)   |
| Radiated Emission                   | 30MHz ~ 1000MHz                      | ± 4.24dB                          | (1)   |
| Radiated Emission                   | 1GHz ~ 26.5GHz                       | ± 4.68dB                          | (1)   |
| AC Power Line Conducted<br>Emission | 0.15MHz ~ 30MHz                      | ± 3.45dB                          | (1)   |
| Note (1): The measurement unce      | ertainty is for coverage factor of k | =2 and a level of confidence of 9 | 95%.  |



## 5 General Information

## 5.1 General Description of EUT

| Product Name:        | 3-Axis Stabilizer                   |  |
|----------------------|-------------------------------------|--|
| Model No.:           | WI310                               |  |
| Serial No.:          | WI310201807220001                   |  |
| Test sample(s) ID:   | GTS201807000089-1                   |  |
| Sample(s) Status     | Engineer sample                     |  |
| Operation Frequency: | 2402MHz~2480MHz                     |  |
| Channel Numbers:     | 40                                  |  |
| Channel Separation:  | 2MHz                                |  |
| Modulation Type:     | GFSK                                |  |
| Antenna Type:        | Internal Antenna                    |  |
| Antenna Gain:        | 0dBi(declare by applicant)          |  |
| Power Supply:        | Rechargeable battery: DC7.4V        |  |
|                      | Charging Voltage/current: 5V/1500mA |  |
|                      | Power Output: 5V/2000mA             |  |



| Operation Frequency each of channel |           |         |           |         |           |         |           |  |
|-------------------------------------|-----------|---------|-----------|---------|-----------|---------|-----------|--|
| Channel                             | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |  |
| 1                                   | 2402MHz   | 11      | 2422MHz   | 21      | 2442MHz   | 31      | 2462MHz   |  |
| 2                                   | 2404MHz   | 12      | 2424MHz   | 22      | 2444MHz   | 32      | 2464MHz   |  |
|                                     |           | ·       |           | •       |           | · .     |           |  |
| 9                                   | 2418MHz   | 19      | 2438MHz   | 29      | 2458MHz   | 39      | 2478MHz   |  |
| 10                                  | 2420MHz   | 20      | 2440MHz   | 30      | 2460MHz   | 40      | 2480MHz   |  |

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

| Channel             | Frequency |
|---------------------|-----------|
| The lowest channel  | 2402MHz   |
| The middle channel  | 2440MHz   |
| The Highest channel | 2480MHz   |



### 5.2 Test mode

| Transmitting mode | Keep the EUT in continuously transmitting mode |
|-------------------|--|
|-------------------|--|

Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

### 5.3 Description of Support Units

#### None.

#### 5.4 Test Facility

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

#### • FCC — Registration No.: 381383

Global United Technology Services Co., Ltd., Shenzhen 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 files. Registration 381383, January 08, 2018.

#### • Industry Canada (IC) — Registration No.: 9079A-2

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-2, August 15, 2016.

#### 5.5 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd. Address: No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Tel: 0755-27798480 Fax: 0755-27798960



## 6 Test Instruments list

| Rad  | Radiated Emission:                     |                                |                             |                  |                        |                            |  |  |
|------|--|--------------------------------|-----------------------------|------------------|------------------------|----------------------------|--|--|
| ltem | Test Equipment                         | Manufacturer                   | Model No.                   | Inventory<br>No. | Cal.Date<br>(mm-dd-yy) | Cal.Due date<br>(mm-dd-yy) |  |  |
| 1    | 3m Semi- Anechoic<br>Chamber           | ZhongYu Electron               | 9.2(L)*6.2(W)* 6.4(H)       | GTS250           | July. 03 2015          | July. 02 2020              |  |  |
| 2    | Control Room                           | ZhongYu Electron               | 6.2(L)*2.5(W)* 2.4(H)       | GTS251           | N/A                    | N/A                        |  |  |
| 3    | EMI Test Receiver                      | Rohde & Schwarz                | ESU26                       | GTS203           | June. 27 2018          | June. 26 2019              |  |  |
| 4    | BiConiLog Antenna                      | SCHWARZBECK<br>MESS-ELEKTRONIK | VULB9163                    | GTS214           | June. 27 2018          | June. 26 2019              |  |  |
| 5    | Double -ridged<br>waveguide horn       | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA 9120 D                 | GTS208           | June. 27 2018          | June. 26 2019              |  |  |
| 6    | Horn Antenna                           | ETS-LINDGREN                   | 3160                        | GTS217           | June. 27 2018          | June. 26 2019              |  |  |
| 7    | EMI Test Software                      | AUDIX                          | E3                          | N/A              | N/A                    | N/A                        |  |  |
| 8    | Coaxial Cable                          | GTS                            | N/A                         | GTS213           | June. 27 2018          | June. 26 2019              |  |  |
| 9    | Coaxial Cable                          | GTS                            | N/A                         | GTS211           | June. 27 2018          | June. 26 2019              |  |  |
| 10   | Coaxial cable                          | GTS                            | N/A                         | GTS210           | June. 27 2018          | June. 26 2019              |  |  |
| 11   | Coaxial Cable                          | GTS                            | N/A                         | GTS212           | June. 27 2018          | June. 26 2019              |  |  |
| 12   | Amplifier(100kHz-3GHz)                 | HP                             | 8347A                       | GTS204           | June. 27 2018          | June. 26 2019              |  |  |
| 13   | Amplifier(2GHz-20GHz)                  | HP                             | 84722A                      | GTS206           | June. 27 2018          | June. 26 2019              |  |  |
| 14   | Amplifier (18-26GHz)                   | Rohde & Schwarz                | AFS33-18002<br>650-30-8P-44 | GTS218           | June. 27 2018          | June. 26 2019              |  |  |
| 15   | Band filter                            | Amindeon                       | 82346                       | GTS219           | June. 27 2018          | June. 26 2019              |  |  |
| 16   | Power Meter                            | Anritsu                        | ML2495A                     | GTS540           | June. 27 2018          | June. 26 2019              |  |  |
| 17   | Power Sensor                           | Anritsu                        | MA2411B                     | GTS541           | June. 27 2018          | June. 26 2019              |  |  |
| 18   | Wideband Radio<br>Communication Tester | Rohde & Schwarz                | CMW500                      | GTS575           | June. 27 2018          | June. 26 2019              |  |  |
| 19   | Splitter                               | Agilent                        | 11636B                      | GTS237           | June. 27 2018          | June. 26 2019              |  |  |
| 20   | Loop Antenna                           | ZHINAN                         | ZN30900A                    | GTS534           | June. 27 2018          | June. 26 2019              |  |  |



| Conduct | Conducted Emission          |                             |                      |                  |                        |                            |  |
|---------|-----------------------------|-----------------------------|----------------------|------------------|------------------------|----------------------------|--|
| Item    | Test Equipment              | Manufacturer                | Model No.            | Inventory<br>No. | Cal.Date<br>(mm-dd-yy) | Cal.Due date<br>(mm-dd-yy) |  |
| 1       | Shielding Room              | ZhongYu Electron            | 7.3(L)x3.1(W)x2.9(H) | GTS252           | May.16 2014            | May.15 2019                |  |
| 2       | EMI Test Receiver           | R&S                         | ESCI 7               | GTS552           | June. 27 2018          | June. 26 2019              |  |
| 3       | Coaxial Switch              | ANRITSU CORP                | MP59B                | GTS225           | June. 27 2018          | June. 26 2019              |  |
| 4       | Artificial Mains<br>Network | SCHWARZBECK<br>MESS         | NSLK8127             | GTS226           | June. 27 2018          | June. 26 2019              |  |
| 5       | Coaxial Cable               | GTS                         | N/A                  | GTS227           | June. 27 2018          | June. 26 2019              |  |
| 6       | EMI Test Software           | AUDIX                       | E3                   | N/A              | N/A                    | N/A                        |  |
| 7       | Thermo meter                | KTJ                         | TA328                | GTS233           | June. 27 2018          | June. 26 2019              |  |
| 8       | Absorbing clamp             | Elektronik-<br>Feinmechanik | MDS21                | GTS229           | June. 27 2018          | June. 26 2019              |  |

| Cond | Conducted:   |              |                  |            |                        |                            |  |  |
|------|--|--------------|------------------|------------|------------------------|----------------------------|--|--|
| ltem | Test Equipment                                       | Manufacturer | Model No.        | Serial No. | Cal.Date<br>(mm-dd-yy) | Cal.Due date<br>(mm-dd-yy) |  |  |
| 1    | MXA Signal Analyzer                                  | Agilent      | N9020A           | GTS566     | June. 27 2018          | June. 26 2019              |  |  |
| 2    | EMI Test Receiver                                    | R&S          | ESCI 7           | GTS552     | June. 27 2018          | June. 26 2019              |  |  |
| 3    | Spectrum Analyzer                                    | Agilent      | E4440A           | GTS533     | June. 27 2018          | June. 26 2019              |  |  |
| 4    | MXG vector Signal<br>Generator                       | Agilent      | N5182A           | GTS567     | June. 27 2018          | June. 26 2019              |  |  |
| 5    | ESG Analog Signal<br>Generator                       | Agilent      | E4428C           | GTS568     | June. 27 2018          | June. 26 2019              |  |  |
| 6    | USB RF Power Sensor                                  | DARE         | RPR3006W         | GTS569     | June. 27 2018          | June. 26 2019              |  |  |
| 7    | RF Switch Box  | Shongyi      | RFSW3003328      | GTS571     | June. 27 2018          | June. 26 2019              |  |  |
| 8    | EMI Test Receiver                                    | R&S          | ESCI 7           | GTS552     | June. 27 2018          | June. 26 2019              |  |  |
| 9    | Programmable Constant<br>Temp & Humi<br>Test Chamber | WEWON        | WHTH-150L-40-880 | GTS572     | June. 27 2018          | June. 26 2019              |  |  |

| Gene | General used equipment:            |              |           |               |                        |                            |  |  |
|------|------------------------------------|--------------|-----------|---------------|------------------------|----------------------------|--|--|
| ltem | Test Equipment                     | Manufacturer | Model No. | Inventory No. | Cal.Date<br>(mm-dd-yy) | Cal.Due date<br>(mm-dd-yy) |  |  |
| 1    | Humidity/ Temperature<br>Indicator | KTJ          | TA328     | GTS243        | June. 27 2018          | June. 26 2019              |  |  |
| 2    | Barometer                          | ChangChun    | DYM3      | GTS255        | June. 27 2018          | June. 26 2019              |  |  |



## 7 Test results and Measurement Data

### 7.1 Antenna requirement

|  | Antenna requirement   |  |  |  |  |
|--|---|--|--|--|--|
|  | Standard requirement:   | FCC Part15 C Section 15.203 /247(c)  |  |  |  |
|  | 15.203 requirement:   |  |  |  |  |
|  | 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 ar antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electric connector is prohibited. |  |  |  |  |
|  | 15.247(c) (1)(i) requiremen   | ht:  |  |  |  |
|  | operations may employ tran  | 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point smitting antennas with directional gain greater than 6dBi provided the power of the intentional radiator is reduced by 1 dB for every 3 dB that the na exceeds 6dBi. |  |  |  |
|  | E.U.T Antenna:  |  |  |  |  |
| The antenna is internal antenna, the best case gain of the antenna is 0dBi |   |  |  |  |  |
|  |   |  |  |  |  |



### 7.2 Conducted Emissions

| Test Requirement:     | FCC Part15 C Section 15.207   |                     |           |  |
|-----------------------|---|---------------------|-----------|--|
| Test Method:          | ANSI C63.10:2013  |                     |           |  |
| Test Frequency Range: | 150KHz to 30MHz   |                     |           |  |
| Class / Severity:     | Class B   |                     |           |  |
| Receiver setup:       | RBW=9KHz, VBW=30KHz, Sv   | weep time=auto      |           |  |
| Limit:                | Limit (dBuV)  |                     |           |  |
|                       | Frequency range (MHz)   | Quasi-peak          | Average   |  |
|                       | 0.15-0.5  | 66 to 56*           | 56 to 46* |  |
|                       | 0.5-5   | 56                  | 46        |  |
|                       | 5-30  | 60                  | 50        |  |
|                       | * Decreases with the logarithm  | n of the frequency. |           |  |
| Test setup:           | Reference Plane   |                     |           |  |
|                       | AUX       Filter       AC power         Equipment       E.U.T       Filter       AC power         Test table/Insulation plane       EMI       Receiver         Remark:       E.U.T. Equipment Under Test       LISN: Line Impedence Stabilization Network         Test table height=0.8m       Bm   |                     |           |  |
| Test procedure:       | 1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.   |                     |           |  |
|                       | <ol> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.</li> </ol> |                     |           |  |
|                       |   |                     |           |  |
| Test Instruments:     | Refer to section 6.0 for details  |                     |           |  |
| Test mode:            | Refer to section 5.2 for details  |                     |           |  |
| Test results:         | Pass  |                     |           |  |



#### Measurement data

0.99

1.37

1.37

1.80

1.80

12.37

22.58

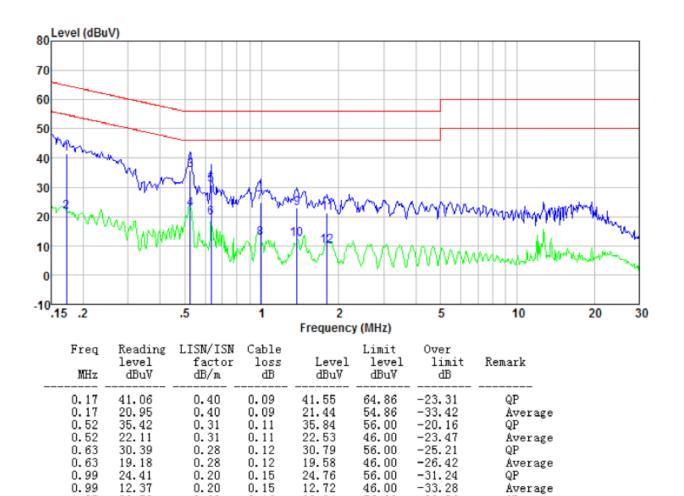
11.73

20.69

9.68

#### Report No.: GTS201807000089F01

| Mode:           | Transmitting mode | Test by: | Jason |  |
|-----------------|-------------------|----------|-------|--|
| Temp./Hum.(%H): | 26℃/56%RH         | Probe:   | Line  |  |



12.72

22.94

12.09

21.06

10.05

0.15

0.16

0.16

0.17

0.17

0.20

0.20

0.20

0.20

-33.28

-33.06

-33.91

-34.94

-35.95

Average

Average

Average

QP

QP

46.00

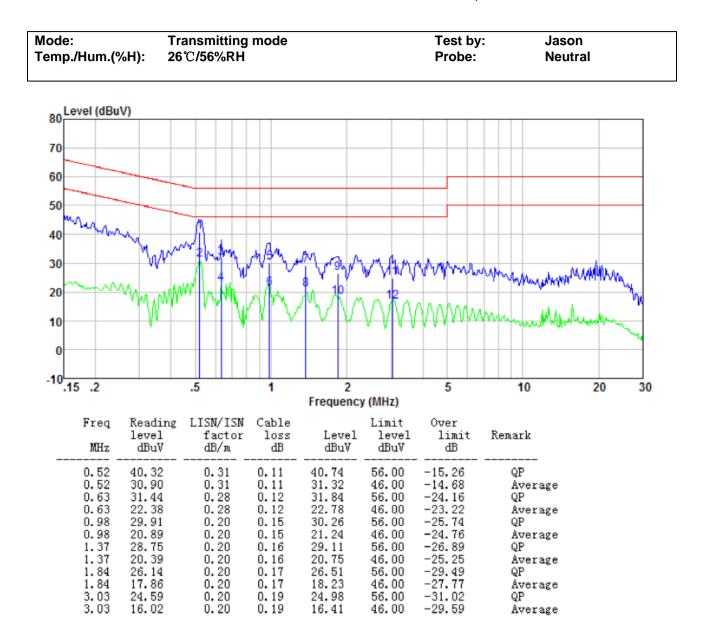
56.00

46.00

56.00

46.00





Notes:

- 1. An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level =Receiver Read level + LISN Factor + Cable Loss
- 4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.



### 7.3 Conducted Output Power

| Test Requirement: | FCC Part15 C Section 15.247 (b)(3)  |  |
|-------------------|---|--|
| Test Method:      | ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V04                    |  |
| Limit:            | 30dBm   |  |
| Test setup:       | Spectrum Analyzer<br>E.U.T<br>Non-Conducted Table<br>Ground Reference Plane |  |
| Test Instruments: | Refer to section 6.0 for details  |  |
| Test mode:        | Refer to section 5.2 for details  |  |
| Test results:     | Pass  |  |

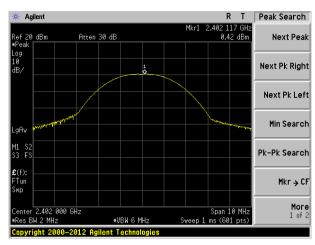
#### **Measurement Data**

| Test channel | Peak Output Power (dBm) | Limit(dBm) | Result |
|--------------|-------------------------|------------|--------|
| Lowest       | 0.42                    |            |        |
| Middle       | 0.80                    | 30.00      | Pass   |
| Highest      | 0.56                    |            |        |

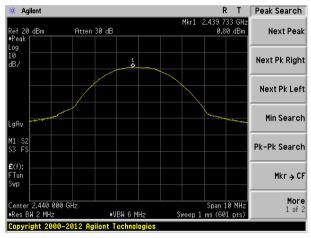


#### Test plot as follows:

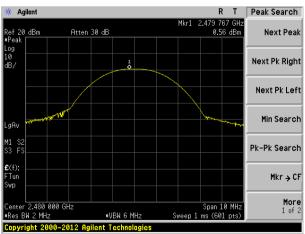
#### Report No.: GTS201807000089F01



Lowest channel



Middle channel



Highest channel



### 7.4 Channel Bandwidth

| Test Requirement: | FCC Part15 C Section 15.247 (a)(2)  |  |  |
|-------------------|---|--|--|
| Test Method:      | ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V04                    |  |  |
| Limit:            | >500KHz   |  |  |
| Test setup:       | Spectrum Analyzer<br>E.U.T<br>Non-Conducted Table<br>Ground Reference Plane |  |  |
| Test Instruments: | Refer to section 6.0 for details  |  |  |
| Test mode:        | Refer to section 5.2 for details  |  |  |
| Test results:     | Pass  |  |  |

#### **Measurement Data**

| Test channel | Channel Bandwidth (MHz) | Limit(KHz) | Result |
|--------------|-------------------------|------------|--------|
| Lowest       | 0.696                   |            |        |
| Middle       | 0.697                   | >500       | Pass   |
| Highest      | 0.704                   |            |        |



#### Test plot as follows:

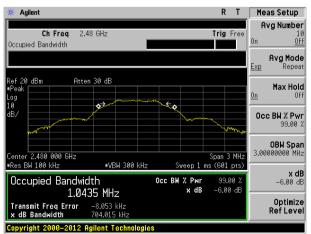
### Report No.: GTS201807000089F01

| * Agilent  |                                   | RT         | Meas Setup                        |
|--|-----------------------------------|------------|-----------------------------------|
| Ch Freq 2.402 GHz<br>Occupied Bandwidth                                    |                                   | Trig Free  | Avg Number<br>10<br>On <u>Of</u>  |
|  |                                   |            | Avg Mode<br>Exp Repea             |
| Ref 20 dBm Atten 30 dB<br>*Peak  |                                   |            | Max Hold<br>On Of                 |
| 10<br>dB/  | ÷ \$                              |            | Occ BW % Pwi<br>99.00 2           |
| Center 2.402 000 GHz   |                                   | Span 3 MHz | <b>OBW Spar</b><br>3.00000000 MH; |
| •Res BW 100 kHz •VBW 300 kH<br>Occupied Bandwidth<br>1.0449 MHz            | Z Sweep 1<br>Occ BW % Pwr<br>x dB |            | <b>x di</b><br>-6.00 di           |
| 1.0449 MMZ<br>Transmit Freq Error –4.232 kHz<br>× dB Bandwidth 695.672 kHz |                                   |            | Optimize<br>RefLeve               |
| Copyright 2000-2012 Agilent Technolog                                      | lies                              |            |                                   |

Lowest channel

| 🔆 Agilent  | RT                   | Meas Setup           |
|--|----------------------|----------------------|
|  | Tuin C               | Avg Number           |
| Ch Freq 2.44 GHz<br>Occupied Bandwidth   | Trig Free            | 10<br>On <u>Off</u>  |
|  |                      | Avg Mode             |
|  |                      | Exp Repeat           |
| Ref 20 dBm Atten 30 dB   |                      |                      |
| #Peak  |                      | Max Hold<br>On Off   |
| Log<br>10 <b>9</b>   | £                    |                      |
| dB/  |                      | Occ BW % Pwr         |
| and a second |                      | 99.00 %              |
|  |                      | OBW Span             |
| Center 2.440 000 GHz   | Span 3 MHz           | 3.00000000 MHz       |
| •Res BW 100 kHz •VBW 300 kHz   | Sweep 1 ms (601 pts) | x dB                 |
| Occupied Bandwidth   | Occ BW % Pwr 99.00 % | -6.00 dB             |
| 1.0448 MHz   | <b>x dB</b> -6.00 dB |                      |
| Transmit Freq Error -6.898 kHz   |                      | Optimize<br>RefLevel |
| x dB Bandwidth 697.069 kHz   |                      |                      |
| Copyright 2000–2012 Agilent Technologie  | S                    |                      |

Middle channel



Highest channel



### 7.5 Power Spectral Density

| Test Requirement: | FCC Part15 C Section 15.247 (e)   |  |
|-------------------|---|--|
| Test Method:      | ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V04                    |  |
| Limit:            | 8dBm/3kHz   |  |
| Test setup:       | Spectrum Analyzer<br>E.U.T<br>Non-Conducted Table<br>Ground Reference Plane |  |
| Test Instruments: | Refer to section 6.0 for details  |  |
| Test mode:        | Refer to section 5.2 for details  |  |
| Test results:     | Pass  |  |

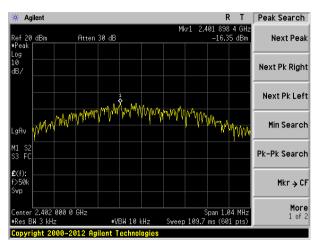
#### **Measurement Data**

| Test channel | Power Spectral Density<br>(dBm/3kHz) | Limit(dBm/3kHz) | Result |
|--------------|--------------------------------------|-----------------|--------|
| Lowest       | -16.35                               |                 |        |
| Middle       | -13.97                               | 8.00            | Pass   |
| Highest      | -15.98                               |                 |        |

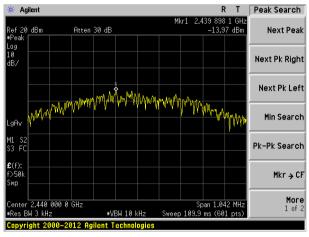


#### Test plot as follows:

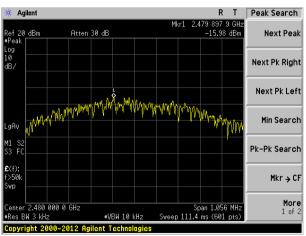
#### Report No.: GTS201807000089F01



Lowest channel



Middle channel



Highest channel

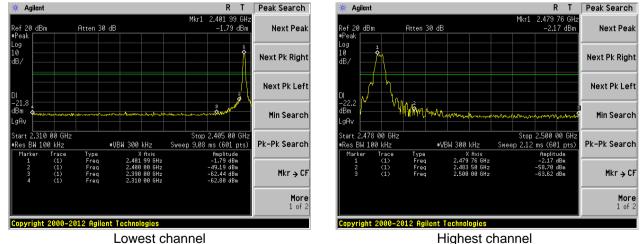


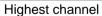
### 7.6 Band edges

### 7.6.1 Conducted Emission Method

| Test Requirement: | FCC Part15 C Section 15.247 (d)   |  |  |  |  |
|-------------------|---|--|--|--|--|
| Test Method:      | ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V04  |  |  |  |  |
| Limit:            | In any 100 kHz 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 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |  |  |  |  |
| Test setup:       | Spectrum Analyzer<br>E.U.T<br>Non-Conducted Table<br>Ground Reference Plane   |  |  |  |  |
| Test Instruments: | Refer to section 6.0 for details  |  |  |  |  |
| Test mode:        | Refer to section 5.2 for details  |  |  |  |  |
| Test results:     | Pass  |  |  |  |  |

#### Test plot as follows:







### 7.6.2 Radiated Emission Method

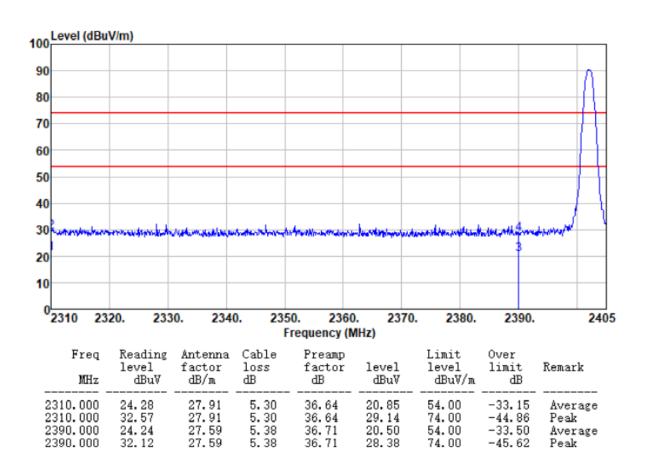
| Test Requirement:               | FCC Part15 C S  | Section 15.209   | and 15.205   |   |   |  |
|---------------------------------|---|--|--|---|---|--|
| Test Method:                    | ANSI C63.10:2013  |  |  |   |   |  |
| Test Frequency Range:           |   |  | e tested, only   | the worst ba  | nd's (2310MHz to  |  |
|                                 | 2500MHz) data   |  |  |   |   |  |
| Test site:                      | Measurement D   |  |  |   |   |  |
| Receiver setup:                 | Frequency   | Detector   | RBW  | VBW   | Value   |  |
|                                 | Above 1GHz  | Peak   | 1MHz   | 3MHz  | Peak  |  |
|                                 |   | RMS  | 1MHz   | 3MHz  | Average   |  |
| Limit:                          | Freque  | ncy  | Limit (dBuV/   | 'm @3m)   | Value   |  |
|                                 | Above 1   | GH7  | 54.0   | 0   | Average   |  |
| Test setup:                     | 7,00701   | OTIZ   | 74.0   | 0   | Peak  |  |
|                                 | Tum Table<br><150cm>  |  |  | Antenna-<br>4m >0   |   |  |
| Test Procedure:                 | <ul> <li>determine the</li> <li>2. The EUT was<br/>antenna, whi<br/>tower.</li> <li>3. The antenna<br/>ground to de<br/>horizontal an<br/>measuremer</li> <li>4. For each sus<br/>and then the</li> </ul> | t a 3 meter ca<br>e position of the<br>s set 3 meters<br>ch was mount<br>height is varie<br>termine the m<br>d vertical pola<br>it.<br>pected emiss<br>antenna was<br>table was turn<br>n reading. | mber. The tak<br>he highest rac<br>s away from the<br>ted on the top<br>ed from one m<br>aximum value<br>arizations of the<br>ion, the EUT<br>tuned to heigh<br>hed from 0 dec<br>was set to Pea | ble was rotate<br>liation.<br>The interference<br>of a variable<br>neter to four r<br>of the field s<br>e antenna ar<br>was arranged<br>hts from 1 me<br>grees to 360<br>k Detect Fun | ed 360 degrees to<br>re-receiving<br>-height antenna<br>meters above the<br>strength. Both<br>e set to make the<br>d to its worst case<br>eter to 4 meters<br>degrees to find |  |
|                                 | Specified Ba<br>6. If the emission<br>limit specified<br>the EUT wou<br>10dB margin<br>average met<br>7. The radiation<br>And found th  | d, then testing<br>Id be reported<br>would be re-t<br>nod as specifi<br>measuremer<br>e X axis posit   | EUT in peak<br>could be stop<br>d. Otherwise the<br>ested one by<br>ed and then runts are perform<br>ioning which in   | mode was 10<br>oped and the<br>ne emissions<br>one using pe<br>eported in a c<br>ned in X, Y, 2<br>t is worse cas   | OdB lower than the<br>peak values of<br>that did not have<br>ak, quasi-peak or<br>data sheet.<br>Z axis positioning.<br>se, only the test                                     |  |
| Test Instruments:               | Specified Ba<br>6. If the emission<br>limit specified<br>the EUT woud<br>10dB margin<br>average meth<br>7. The radiation<br>And found th<br>worst case m  | In level of the<br>d, then testing<br>ld be reported<br>would be re-t<br>nod as specifi<br>measuremer<br>e X axis posit  | EUT in peak<br>could be stop<br>d. Otherwise th<br>ested one by<br>ed and then re-<br>tis are perform<br>ioning which in<br>ed in the repo   | mode was 10<br>oped and the<br>ne emissions<br>one using pe<br>eported in a c<br>ned in X, Y, 2<br>t is worse cas   | peak values of<br>that did not have<br>ak, quasi-peak or<br>data sheet.<br>Z axis positioning.  |  |
| Test Instruments:<br>Test mode: | Specified Ba<br>6. If the emission<br>limit specified<br>the EUT wou<br>10dB margin<br>average met<br>7. The radiation<br>And found th  | In level of the<br>d, then testing<br>ld be reported<br>would be re-t<br>nod as specifi<br>measuremen<br>e X axis posit<br>node is record<br>6.0 for details                                       | EUT in peak<br>could be stop<br>d. Otherwise th<br>ested one by<br>ed and then ro<br>this are perform<br>ioning which in<br>ed in the reports  | mode was 10<br>oped and the<br>ne emissions<br>one using pe<br>eported in a c<br>ned in X, Y, 2<br>t is worse cas   | peak values of<br>that did not have<br>ak, quasi-peak or<br>data sheet.<br>Z axis positioning.  |  |



Measurement data:

Remark: The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.

| Mode:           | Transmitting mode | Test Frequency : | 2402MHz    |  |
|-----------------|-------------------|------------------|------------|--|
| Temp./Hum.(%H): | 26℃/56%RH         | Polarziation:    | Horizontal |  |

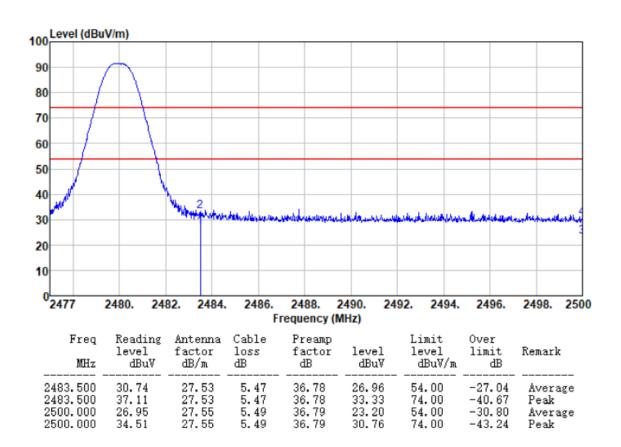




| ode:            |                                 | Tran                                | smitting r                           | node          |  | Test Fre   | equency :                         | 2                            | 2402MHz        |
|-----------------|---------------------------------|-------------------------------------|--------------------------------------|---------------|--|--|-----------------------------------|------------------------------|----------------|
| Temp./Hum.(%H): |                                 | ): <b>26</b> ℃                      | 26℃/56%RH                            |               |  | Polarzia   | ١                                 | Vertical                     |                |
|                 |                                 |                                     |                                      |               |  |  |                                   |                              |                |
| ما              | evel (dBu)                      | V/m)                                |                                      |               |  |  |                                   |                              |                |
| 100             | TCI (UDU                        | vally                               |                                      |               |  |  |                                   |                              |                |
| 90              |                                 |                                     |                                      |               |  |  |                                   |                              |                |
| 80              |                                 |                                     |                                      |               |  |  |                                   |                              | n              |
| 70              |                                 |                                     |                                      |               |  |  |                                   |                              |                |
|                 |                                 |                                     |                                      |               |  |  |                                   |                              |                |
| 60              |                                 |                                     |                                      |               |  |  |                                   |                              |                |
| 50              |                                 |                                     |                                      |               |  |  |                                   |                              |                |
| 40              |                                 |                                     |                                      |               |  |  |                                   |                              |                |
| 30              | moher                           | No while where the                  | where the second second second       | man and an    | west-house-stample                       | www.www.witelatelatelatelatelatelatelatelatelatela | 1 Herenaute                       | an water                     | www.wat        |
| 20              |                                 |                                     |                                      |               |  |  |                                   | 3                            |                |
|                 |                                 |                                     |                                      |               |  |  |                                   |                              |                |
| 40              |                                 |                                     |                                      |               |  |  |                                   |                              |                |
| 10              |                                 |                                     |                                      |               |  |  |                                   |                              |                |
|                 | 310 23                          | 20. 233                             | 0. 2340                              |               |  |  | 2380.                             | 2390.                        | 2405           |
|                 |                                 |                                     |                                      | I             | Frequency (I                             |  |                                   |                              | 2405           |
|                 | 3 <b>10 23</b> 2<br>Freq<br>MHz | 20. 233<br>Reading<br>level<br>dBuV | 0. 2340<br>Antenna<br>factor<br>dB/m |               |  |  | 2380.<br>Limit<br>level<br>dBuV/m | 2390.<br>Over<br>limit<br>dB | 2405<br>Remark |
| 023             | Freq                            | Reading<br>level                    | Antenna<br>factor                    | Cable<br>loss | F <b>requency (I</b><br>Preamp<br>factor | MH <b>z)</b><br>level                              | Limit<br>level                    | Over<br>limit                |                |

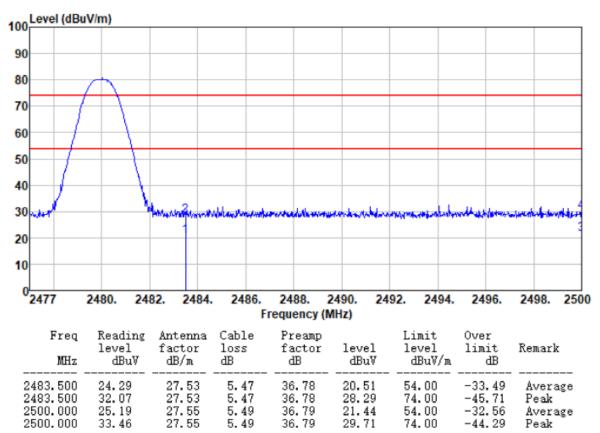


| Mode:           | Transmitting mode | Test Frequency : | 2480MHz    |
|-----------------|-------------------|------------------|------------|
| Temp./Hum.(%H): | 26°C/56%RH        | Polarziation:    | Horizontal |





| Mode:           | Transmitting mode | Test Frequency : | 2480MHz  |
|-----------------|-------------------|------------------|----------|
| Temp./Hum.(%H): | 26℃/56%RH         | Polarziation:    | Vertical |



#### Remark:

2. The emission levels of other frequencies are very lower than the limit and not show in test report.

<sup>1.</sup> Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor



### 7.7 Spurious Emission

### 7.7.1 Conducted Emission Method

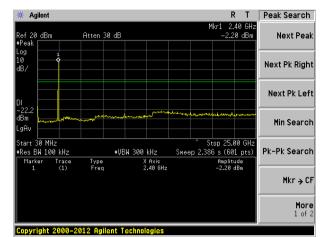
| Test Requirement: | FCC Part15 C Section 15.247 (d)   |  |  |  |  |
|-------------------|---|--|--|--|--|
| Test Method:      | ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V04  |  |  |  |  |
| Limit:            | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |  |  |  |  |
| Test setup:       | Spectrum Analyzer<br>E.U.T<br>Non-Conducted Table<br>Ground Reference Plane   |  |  |  |  |
| Test Instruments: | Refer to section 6.0 for details  |  |  |  |  |
| Test mode:        | Refer to section 5.2 for details  |  |  |  |  |
| Test results:     | Pass  |  |  |  |  |



### Test plot as follows:

Lowest channel

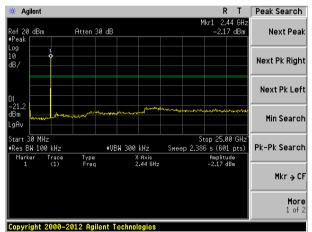
### Report No.: GTS201807000089F01



30MHz~25GHz

### Middle channel

Highest channel



30MHz~25GHz

#### Peak Search 🔆 Agilent RT 2.49 GH Atten 30 dB 38 dBm Next Peak Next Pk Right Next Pk Left Min Search Stop 25.00 GHz Sweep 2.386 s (601 pts) Start 30 MHz^ Res BW 100 kHz Pk-Pk Search ∎VBW 300 kHz X Axis 2.49 GHz Trace (1) Type Freq Marker Amplitude -2.38 dBm Mkr → CF More 1 of 2 Copyright 2000-2012 Agilent Technologies

#### 30MHz~25GHz

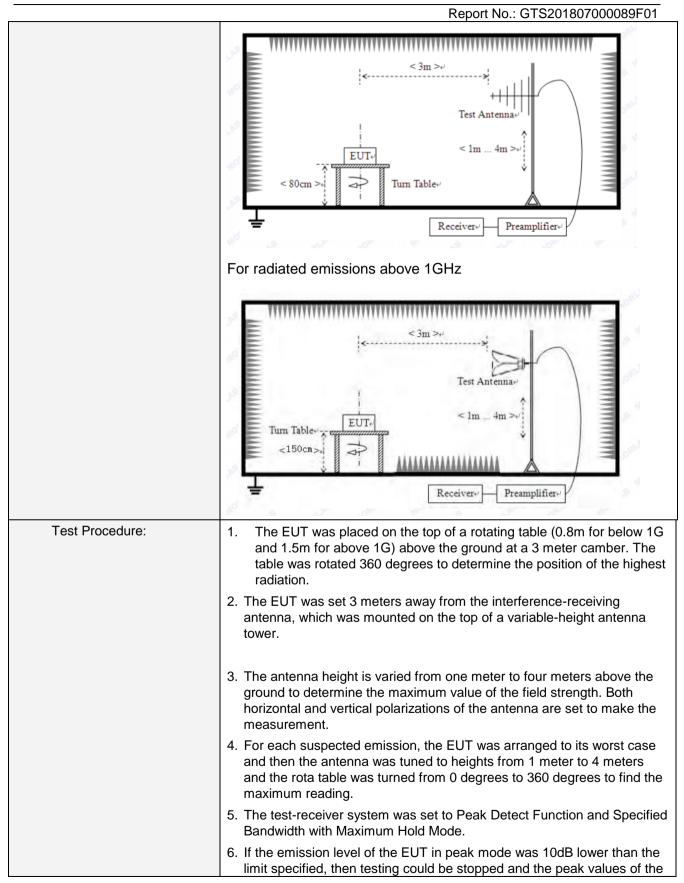
Global United Technology Services Co., Ltd. No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



### 7.7.2 Radiated Emission Method

| Test Requirement:     | FCC Part15 C Section 15.209                             |                  |           |   |      |       |                         |  |  |
|-----------------------|---|------------------|-----------|---|------|-------|-------------------------|--|--|
| Test Method:          | ANSI C63.10:2013  | ANSI C63.10:2013 |           |   |      |       |                         |  |  |
| Test Frequency Range: | 9kHz to 25GHz   | 9kHz to 25GHz    |           |   |      |       |                         |  |  |
| Test site:            | Measurement Distar                                      | nce: 3           | 3m        |   |      |       |                         |  |  |
| Receiver setup:       |   |                  |           |   |      |       |                         |  |  |
|                       | FrequencyDetectorRBWVBW30MHz-1GHzQuasi-peak120KHz300KHz |                  |           |   |      |       | Value                   |  |  |
|                       | 30MHz-1GHz  | · · · ·          |           |   |      |       | Iz Quasi-peak           |  |  |
|                       | Above 1GHz  | Above 10Hz Pea   |           |   | Hz   | 3MHz  | z Peak                  |  |  |
|                       | Above TOTIZ   |                  | Peak      | 1M                                      | Hz   | 10Hz  | Average                 |  |  |
| Limit:                | Frequency   |                  | Limit (u\ | //m)                                    | V    | /alue | Measurement<br>Distance |  |  |
|                       | 0.009MHz-0.490M   | IHz              | 2400/F(k  | (Hz)                                    | PK/  | AV/QP | 300m                    |  |  |
|                       | 0.490MHz-1.705M   | IHz              | 24000/F(  | KHz)                                    |      | QP    | 30m                     |  |  |
|                       | 1.705MHz-30MH   | lz               | 30        | 30                                      |      | QP    | 30m                     |  |  |
|                       | 30MHz-88MHz   |                  | 100       |   | QP   |       |                         |  |  |
|                       | 88MHz-216MHz  | <u>Z</u>         | 150       |   |      | QP    |                         |  |  |
|                       | 216MHz-960MH  | Z                | 200       |   |      | QP    | 3m                      |  |  |
|                       | 960MHz-1GHz   |                  | 500       |   |      | QP    | om                      |  |  |
|                       | Above 1GHz  |                  | 500       | 3                                       |      | -     |                         |  |  |
|                       |   |                  | 5000      |   | Peak |       |                         |  |  |
| Test setup:           | For radiated emiss                                      |                  | < 3m      | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | ¥    | Z     |                         |  |  |
|                       | For radiated emiss                                      | sions            | from 30N  | IHz to                                  | 1GH  | Z     | _                       |  |  |





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|                   | Report No.: GTS201807000089F01  |
|-------------------|---|
|                   | EUT would be reported. Otherwise the emissions that did not have 10dB |
|                   | margin would be re-tested one by one using peak, quasi-peak or        |
|                   | average method as specified and then reported in a data sheet.        |
| Test Instruments: | Refer to section 6.0 for details                                      |
| Test mode:        | Refer to section 5.2 for details                                      |
| Test results:     | Pass  |

#### Measurement data:

Remark:

Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

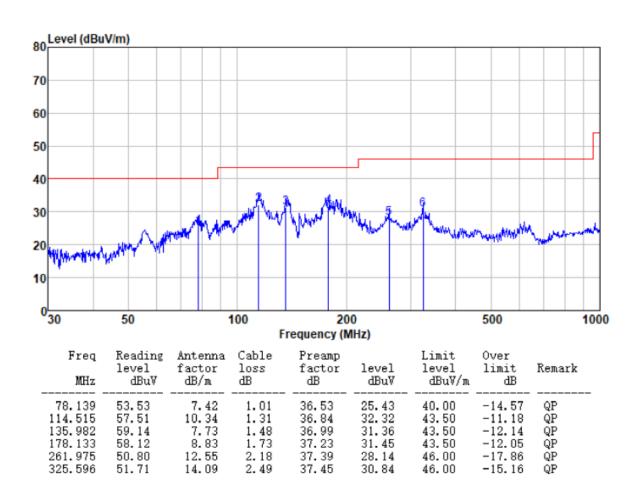
#### ■ 9kHz~30MHz

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.



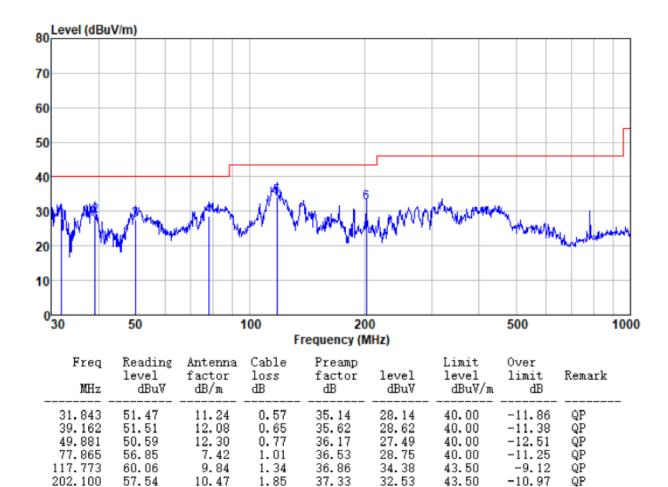
#### Below 1GHz

| Mode:           | Transmitting mode | Test by:      | Jason      |
|-----------------|-------------------|---------------|------------|
| Temp./Hum.(%H): | 26℃/56%RH         | Polarziation: | Horizontal |





| Mode:           | Transmitting mode | Test by:      | Jason    |
|-----------------|-------------------|---------------|----------|
| Temp./Hum.(%H): | 26℃/56%RH         | Polarziation: | Vertical |





#### Above 1GHz

### Report No.: GTS201807000089F01

|                    | GHZ                     |                             |                       |                          |                   |                        |                       |              |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------|-------------------|------------------------|-----------------------|--------------|
| Test channel       | :                       |                             |                       | Lowe                     | est               |                        |                       |              |
| Peak value:        |                         | l .                         | I                     | I                        | 1                 |                        | I                     |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Preamp<br>Factor<br>(dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
| 4804.00            | 36.88                   | 31.78                       | 8.60                  | 32.09                    | 45.17             | 74.00                  | -28.83                | Vertical     |
| 7206.00            | 31.55                   | 36.15                       | 11.65                 | 32.00                    | 47.35             | 74.00                  | -26.65                | Vertical     |
| 9608.00            | 31.22                   | 37.95                       | 14.14                 | 31.62                    | 51.69             | 74.00                  | -22.31                | Vertical     |
| 12010.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 14412.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |
| 4804.00            | 41.08                   | 31.78                       | 8.60                  | 32.09                    | 49.37             | 74.00                  | -24.63                | Horizontal   |
| 7206.00            | 33.27                   | 36.15                       | 11.65                 | 32.00                    | 49.07             | 74.00                  | -24.93                | Horizontal   |
| 9608.00            | 30.60                   | 37.95                       | 14.14                 | 31.62                    | 51.07             | 74.00                  | -22.93                | Horizontal   |
| 12010.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| 14412.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |
| Average value      | ue:                     |                             |                       | •                        |                   |                        |                       |              |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Preamp<br>Factor<br>(dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |
| 4804.00            | 25.77                   | 31.78                       | 8.60                  | 32.09                    | 34.06             | 54.00                  | -19.94                | Vertical     |
| 7206.00            | 20.28                   | 36.15                       | 11.65                 | 32.00                    | 36.08             | 54.00                  | -17.92                | Vertical     |
| 9608.00            | 19.39                   | 37.95                       | 14.14                 | 31.62                    | 39.86             | 54.00                  | -14.14                | Vertical     |
| 12010.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 14412.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |
| 4804.00            | 29.96                   | 31.78                       | 8.60                  | 32.09                    | 38.25             | 54.00                  | -15.75                | Horizontal   |
| 7206.00            | 22.43                   | 36.15                       | 11.65                 | 32.00                    | 38.23             | 54.00                  | -15.77                | Horizontal   |
| 9608.00            | 19.08                   | 37.95                       | 14.14                 | 31.62                    | 39.55             | 54.00                  | -14.45                | Horizontal   |
| 12010.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |
| 14412.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

2. "\*", means this data is the too weak instrument of signal is unable to test.



| Test channel: Middle |                         |                             |                       |                          |                   |                        |                       |              |  |  |  |
|----------------------|-------------------------|-----------------------------|-----------------------|--------------------------|-------------------|------------------------|-----------------------|--------------|--|--|--|
| Peak value:          |                         |                             |                       |                          |                   |                        |                       |              |  |  |  |
| Frequency<br>(MHz)   | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Preamp<br>Factor<br>(dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |  |  |  |
| 4880.00              | 36.76                   | 31.85                       | 8.67                  | 32.12                    | 45.16             | 74.00                  | -28.84                | Vertical     |  |  |  |
| 7320.00              | 31.47                   | 36.37                       | 11.72                 | 31.89                    | 47.67             | 74.00                  | -26.33                | Vertical     |  |  |  |
| 9760.00              | 31.15                   | 38.35                       | 14.25                 | 31.62                    | 52.13             | 74.00                  | -21.87                | Vertical     |  |  |  |
| 12200.00             | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |  |  |  |
| 14640.00             | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |  |  |  |
| 4880.00              | 40.94                   | 31.85                       | 8.67                  | 32.12                    | 49.34             | 74.00                  | -24.66                | Horizontal   |  |  |  |
| 7320.00              | 33.18                   | 36.37                       | 11.72                 | 31.89                    | 49.38             | 74.00                  | -24.62                | Horizontal   |  |  |  |
| 9760.00              | 30.52                   | 38.35                       | 14.25                 | 31.62                    | 51.50             | 74.00                  | -22.50                | Horizontal   |  |  |  |
| 12200.00             | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |  |  |  |
| 14640.00             | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |  |  |  |
| Average val          | Average value:          |                             |                       |                          |                   |                        |                       |              |  |  |  |
| Frequency<br>(MHz)   | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Preamp<br>Factor<br>(dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |  |  |  |
| 4880.00              | 25.69                   | 31.85                       | 8.67                  | 32.12                    | 34.09             | 54.00                  | -19.91                | Vertical     |  |  |  |
| 7320.00              | 20.23                   | 36.37                       | 11.72                 | 31.89                    | 36.43             | 54.00                  | -17.57                | Vertical     |  |  |  |
| 9760.00              | 19.34                   | 38.35                       | 14.25                 | 31.62                    | 40.32             | 54.00                  | -13.68                | Vertical     |  |  |  |
| 12200.00             | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |  |  |  |
| 14640.00             | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |  |  |  |
| 4880.00              | 29.86                   | 31.85                       | 8.67                  | 32.12                    | 38.26             | 54.00                  | -15.74                | Horizontal   |  |  |  |
| 7320.00              | 22.36                   | 36.37                       | 11.72                 | 31.89                    | 38.56             | 54.00                  | -15.44                | Horizontal   |  |  |  |
| 9760.00              | 19.02                   | 38.35                       | 14.25                 | 31.62                    | 40.00             | 54.00                  | -14.00                | Horizontal   |  |  |  |
| 12200.00             | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |  |  |  |
| 14640.00             | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |  |  |  |

Remark:

Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
 "\*", means this data is the too weak instrument of signal is unable to test.



| Test channel       | est channel: Highest    |                             |                       |                          |                   |                        |                       |              |  |  |  |
|--------------------|-------------------------|-----------------------------|-----------------------|--------------------------|-------------------|------------------------|-----------------------|--------------|--|--|--|
| Peak value:        |                         |                             |                       |                          |                   |                        |                       |              |  |  |  |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Preamp<br>Factor<br>(dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |  |  |  |
| 4960.00            | 36.23                   | 31.93                       | 8.73                  | 32.16                    | 44.73             | 74.00                  | -29.27                | Vertical     |  |  |  |
| 7440.00            | 31.12                   | 36.59                       | 11.79                 | 31.78                    | 47.72             | 74.00                  | -26.28                | Vertical     |  |  |  |
| 9920.00            | 30.84                   | 38.81                       | 14.38                 | 31.88                    | 52.15             | 74.00                  | -21.85                | Vertical     |  |  |  |
| 12400.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |  |  |  |
| 14880.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Vertical     |  |  |  |
| 4960.00            | 40.30                   | 31.93                       | 8.73                  | 32.16                    | 48.80             | 74.00                  | -25.20                | Horizontal   |  |  |  |
| 7440.00            | 32.78                   | 36.59                       | 11.79                 | 31.78                    | 49.38             | 74.00                  | -24.62                | Horizontal   |  |  |  |
| 9920.00            | 30.16                   | 38.81                       | 14.38                 | 31.88                    | 51.47             | 74.00                  | -22.53                | Horizontal   |  |  |  |
| 12400.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |  |  |  |
| 14880.00           | *                       |                             |                       |                          |                   | 74.00                  |                       | Horizontal   |  |  |  |
| Average valu       | Average value:          |                             |                       |                          |                   |                        |                       |              |  |  |  |
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Preamp<br>Factor<br>(dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | polarization |  |  |  |
| 4960.00            | 25.30                   | 31.93                       | 8.73                  | 32.16                    | 33.80             | 54.00                  | -20.20                | Vertical     |  |  |  |
| 7440.00            | 19.96                   | 36.59                       | 11.79                 | 31.78                    | 36.56             | 54.00                  | -17.44                | Vertical     |  |  |  |
| 9920.00            | 19.10                   | 38.81                       | 14.38                 | 31.88                    | 40.41             | 54.00                  | -13.59                | Vertical     |  |  |  |
| 12400.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |  |  |  |
| 14880.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Vertical     |  |  |  |
| 4960.00            | 29.42                   | 31.93                       | 8.73                  | 32.16                    | 37.92             | 54.00                  | -16.08                | Horizontal   |  |  |  |
| 7440.00            | 22.07                   | 36.59                       | 11.79                 | 31.78                    | 38.67             | 54.00                  | -15.33                | Horizontal   |  |  |  |
| 9920.00            | 18.75                   | 38.81                       | 14.38                 | 31.88                    | 40.06             | 54.00                  | -13.94                | Horizontal   |  |  |  |
| 12400.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |  |  |  |
| 14880.00           | *                       |                             |                       |                          |                   | 54.00                  |                       | Horizontal   |  |  |  |

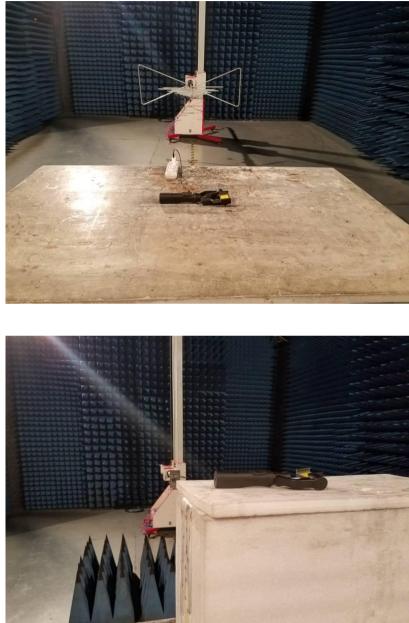
Remark:

Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
 "\*", means this data is the too weak instrument of signal is unable to test.



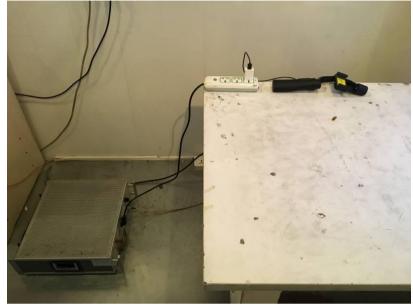
## 8 Test Setup Photo

Radiated Emission





Conducted Emission



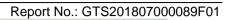


## 9 EUT Constructional Details





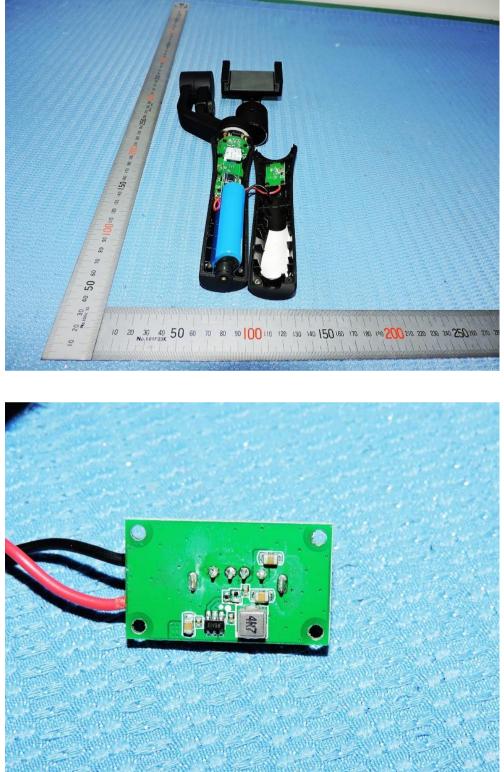
Global United Technology Services Co., Ltd. No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



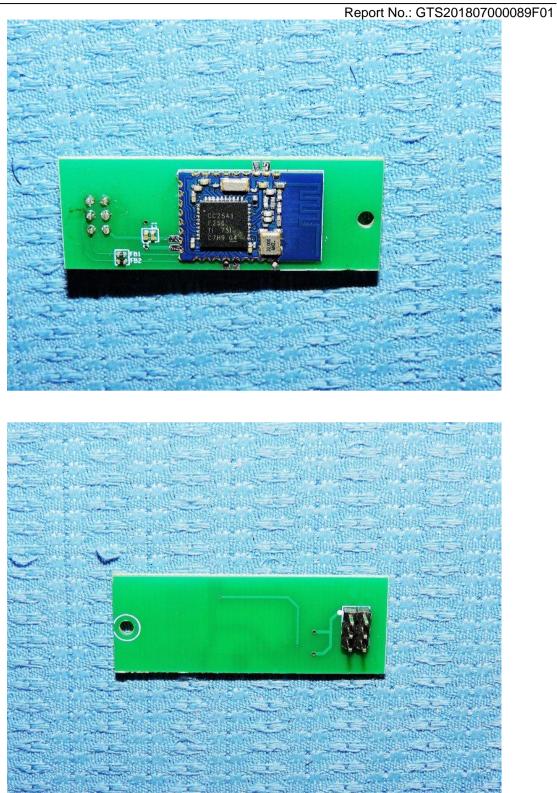




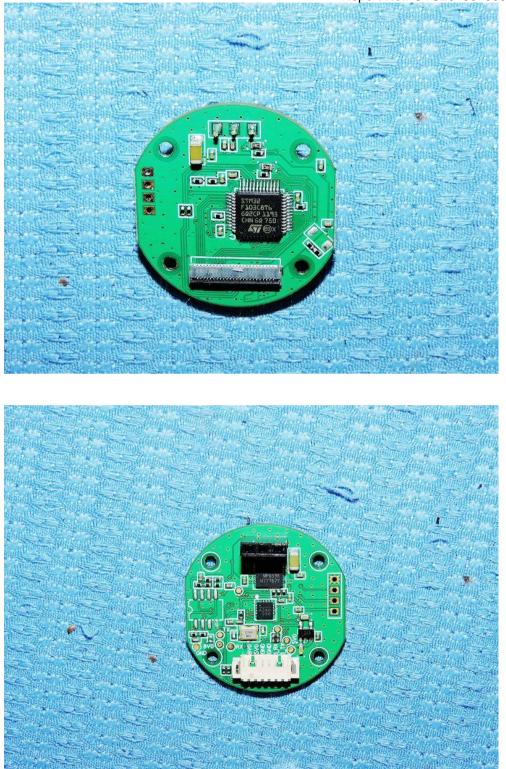




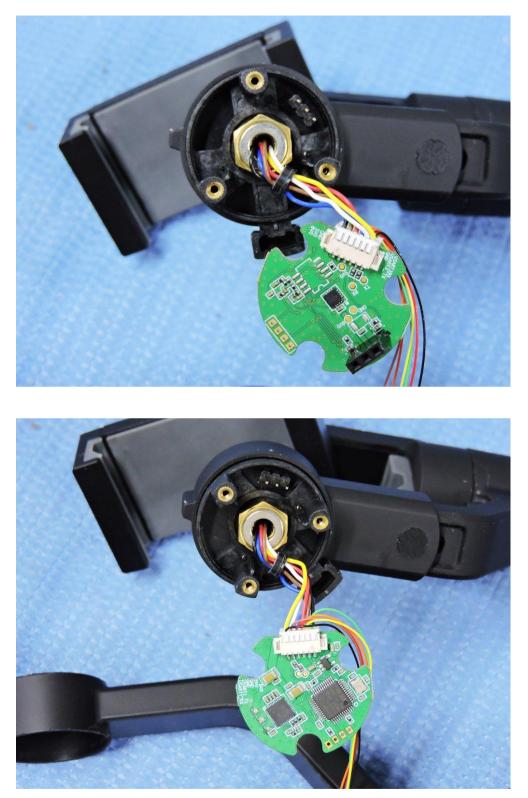




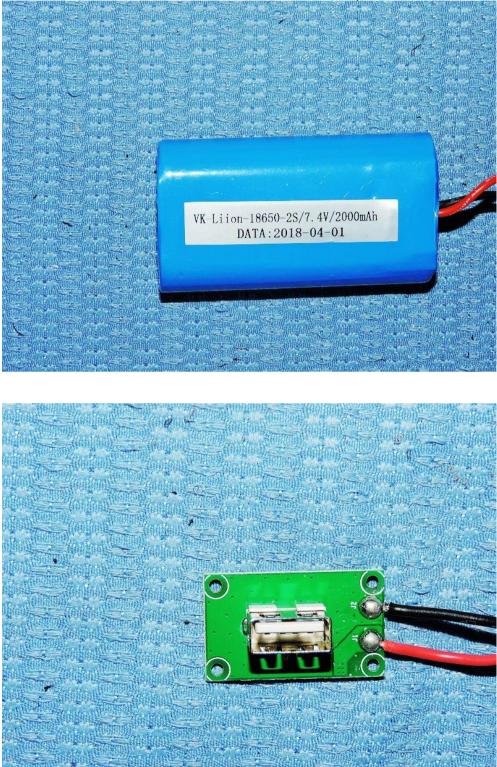












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