

## **FCC Report (Bluetooth)**

**Applicant:** Youngs Watch Co., Ltd.

**Address of Applicant:** Units 1-12, 10/F, Hope Sea Industrial Centre, No.26, Lam Hing St., Kowloon Bay, Kowloon, Hong Kong.

**Equipment Under Test (EUT)**

Product Name: Bluetooth Smart Watch Module

Model No.: MD14322A, MD14336A, MD15352A

**FCC ID:** 2AE3L-MD14322

**Applicable standards:** FCC CFR Title 47 Part 15 Subpart C Section 15.247:2014

**Date of sample receipt:** February 25, 2016

**Date of Test:** February 25-29, 2016

**Date of report issued:** February 29, 2016

**Test Result :** PASS \*

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

Authorized Signature:

A circular logo for GTS Global United Technology Services Co., Ltd. is visible. The logo contains the text 'GTS' in the center, 'GLOBAL TESTING' below it, and 'GLOBAL TECHNOLOGY SERVICES' around the top edge. A handwritten signature in black ink is written over the logo.

**Robinson Lo**

**Laboratory Manager**

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the GTS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of GTS or testing done by GTS in connection with, distribution or use of the product described in this report must be approved by GTS in writing.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

## 2 Version

| Version No. | Date              | Description |
|-------------|-------------------|-------------|
| 00          | February 29, 2016 | Original    |
|             |                   |             |
|             |                   |             |
|             |                   |             |
|             |                   |             |

Prepared By:

*Sam. Gao*

Date:

February 29, 2016

Project Engineer

Check By:

*hank. yan*

Date:

February 29, 2016

Reviewer

## 3 Contents

Page

|       |                                         |    |
|-------|-----------------------------------------|----|
| 1     | COVER PAGE .....                        | 1  |
| 2     | VERSION .....                           | 2  |
| 3     | CONTENTS .....                          | 3  |
| 4     | TEST SUMMARY .....                      | 4  |
| 4.1   | MEASUREMENT UNCERTAINTY .....           | 4  |
| 5     | GENERAL INFORMATION .....               | 5  |
| 5.1   | CLIENT INFORMATION .....                | 5  |
| 5.2   | GENERAL DESCRIPTION OF EUT .....        | 5  |
| 5.3   | TEST MODE .....                         | 7  |
| 5.4   | DESCRIPTION OF SUPPORT UNITS .....      | 7  |
| 5.5   | TEST FACILITY .....                     | 7  |
| 5.6   | TEST LOCATION .....                     | 7  |
| 6     | TEST INSTRUMENTS LIST .....             | 8  |
| 7     | TEST RESULTS AND MEASUREMENT DATA ..... | 9  |
| 7.1   | ANTENNA REQUIREMENT .....               | 9  |
| 7.2   | SPURIOUS EMISSION .....                 | 10 |
| 7.2.1 | Radiated Emission Method .....          | 10 |
| 8     | TEST SETUP PHOTO .....                  | 16 |
| 9     | EUT CONSTRUCTIONAL DETAILS .....        | 17 |

## 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            | N/A    |
| Conducted Output Power           | 15.247 (b)(3)     | N/A    |
| Channel Bandwidth                | 15.247 (a)(2)     | N/A    |
| Power Spectral Density           | 15.247 (e)        | N/A    |
| Band Edge                        | 15.247(d)         | N/A    |
| Spurious Emission                | 15.205/15.209     | Pass   |

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

*Remark : Test according to ANSI C63.4:2014*

### 4.1 Measurement Uncertainty

| Test Item                        | Frequency Range | Measurement Uncertainty | Notes |
|----------------------------------|-----------------|-------------------------|-------|
| Radiated Emission                | 9kHz ~ 30MHz    | $\pm 4.34\text{dB}$     | (1)   |
| Radiated Emission                | 30MHz ~ 1000MHz | $\pm 4.24\text{dB}$     | (1)   |
| Radiated Emission                | 1GHz ~ 26.5GHz  | $\pm 4.68\text{dB}$     | (1)   |
| AC Power Line Conducted Emission | 0.15MHz ~ 30MHz | $\pm 3.45\text{dB}$     | (1)   |

Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

## 5 General Information

### 5.1 Client Information

|                                  |                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------|
| Applicant:                       | Youngs Watch Co., Ltd.                                                                              |
| Address of Applicant:            | Units 1-12, 10/F, Hope Sea Industrial Centre, No.26, Lam Hing St., Kowloon Bay, Kowloon, Hong Kong. |
| Manufacturer/Factory:            | Dalas Timepiece (ShenZhen) Co., Ltd.                                                                |
| Address of Manufacturer/Factory: | No.11, YunFeng Rd., QueShan Industrial District, Dalang St., ShenZhen , China                       |

### 5.2 General Description of EUT

|                      |                              |
|----------------------|------------------------------|
| Product Name:        | Bluetooth Smart Watch Module |
| Model No.:           | MD14322A, MD14336A, MD15352A |
| Operation Frequency: | 2402MHz~2480MHz              |
| Channel Numbers:     | 40                           |
| Channel Separation:  | 2MHz                         |
| Modulation Type:     | GFSK                         |
| Antenna Type:        | Integral antenna             |
| Antenna Gain:        | 1.0dBi                       |
| Power Supply:        | DC 3.0V Li-ion Battery       |

| 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   |

### 5.3 Test mode

|                                                           |                                                |
|-----------------------------------------------------------|------------------------------------------------|
| Transmitting mode                                         | Keep the EUT in continuously transmitting mode |
| <i>Remark: During the test, the new battery was used.</i> |                                                |

### 5.4 Description of Support Units

|      |
|------|
| None |
|------|

### 5.5 Test Facility

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The test facility is recognized, certified, or accredited by the following organizations:</p> <ul style="list-style-type: none"><li>● <b>FCC —Registration No.: 600491</b><br/>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 600491, June 28, 2013.</li><li>● <b>Industry Canada (IC) —Registration No.: 9079A-2</b><br/>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, June 26, 2013.</li></ul> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 5.6 Test Location

|                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| All tests were performed at:                                                                                                                                                                                                                            |
| Global United Technology Services Co., Ltd.<br>Address: Room 301-309, 3th Floor, Block A, Huafeng Jinyuan Business Building, No. 300 Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen 518102<br>Tel: 0755-27798480<br>Fax: 0755-27798960 |

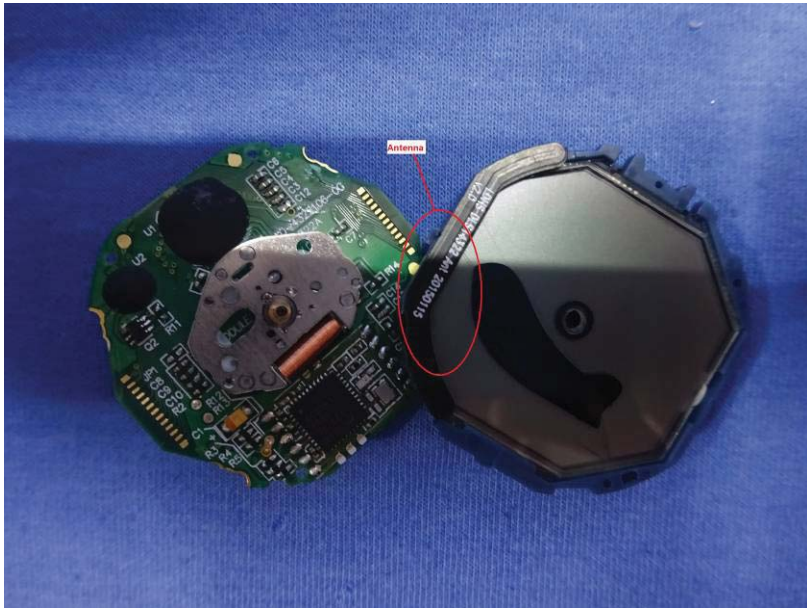
## 6 Test Instruments list

| Radiated Emission: |                               |                                |                             |               |                     |                         |
|--------------------|-------------------------------|--------------------------------|-----------------------------|---------------|---------------------|-------------------------|
| Item               | Test Equipment                | Manufacturer                   | Model No.                   | Inventory No. | Cal.Date (mm-dd-yy) | Cal.Due date (mm-dd-yy) |
| 1                  | 3m Semi- Anechoic Chamber     | ZhongYu Electron               | 9.2(L)*6.2(W)* 6.4(H)       | GTS250        | Mar. 27 2015        | Mar. 26 2016            |
| 2                  | Control Room                  | ZhongYu Electron               | 6.2(L)*2.5(W)* 2.4(H)       | GTS251        | N/A                 | N/A                     |
| 3                  | Spectrum Analyzer             | Agilent                        | E4440A                      | GTS533        | Dec. 03 2015        | Dec.02 2016             |
| 4                  | EMI Test Receiver             | Rohde & Schwarz                | ESU26                       | GTS203        | June 30 2015        | June 29 2016            |
| 5                  | BiConiLog Antenna             | SCHWARZBECK<br>MESS-ELEKTRONIK | VULB9163                    | GTS214        | June 30 2015        | June 29 2016            |
| 6                  | Double -ridged waveguide horn | SCHWARZBECK<br>MESS-ELEKTRONIK | 9120D-829                   | GTS208        | June 26 2015        | June 25 2016            |
| 7                  | Horn Antenna                  | ETS-LINDGREN                   | 3160                        | GTS217        | Mar. 27 2015        | Mar. 27 2015            |
| 8                  | EMI Test Software             | AUDIX                          | E3                          | N/A           | N/A                 | N/A                     |
| 9                  | Coaxial Cable                 | GTS                            | N/A                         | GTS213        | Mar. 27 2015        | Mar. 26 2016            |
| 10                 | Coaxial Cable                 | GTS                            | N/A                         | GTS211        | Mar. 28 2015        | Mar. 27 2016            |
| 11                 | Coaxial cable                 | GTS                            | N/A                         | GTS210        | Mar. 28 2015        | Mar. 27 2016            |
| 12                 | Coaxial Cable                 | GTS                            | N/A                         | GTS212        | Mar. 28 2015        | Mar. 27 2016            |
| 13                 | Amplifier(100kHz-3GHz)        | HP                             | 8347A                       | GTS204        | June 30 2015        | June 29 2016            |
| 14                 | Amplifier(2GHz-20GHz)         | HP                             | 8349B                       | GTS206        | June 30 2015        | June 29 2016            |
| 15                 | Amplifier (18-26GHz)          | Rohde & Schwarz                | AFS33-18002<br>650-30-8P-44 | GTS218        | June 26 2015        | June 25 2016            |
| 16                 | Band filter                   | Amindeon                       | 82346                       | GTS219        | Mar. 28 2015        | Mar. 27 2016            |

| General used equipment: |                |              |           |               |                     |                         |
|-------------------------|----------------|--------------|-----------|---------------|---------------------|-------------------------|
| Item                    | Test Equipment | Manufacturer | Model No. | Inventory No. | Cal.Date (mm-dd-yy) | Cal.Due date (mm-dd-yy) |
| 1                       | Barometer      | ChangChun    | DYM3      | GTS257        | July 07 2015        | July 06 2016            |

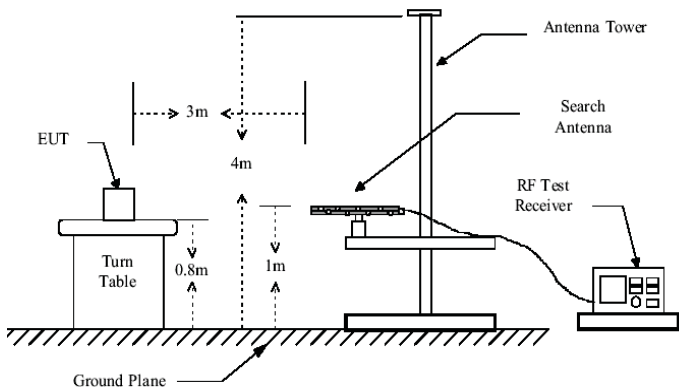
## 7 Test results and Measurement Data

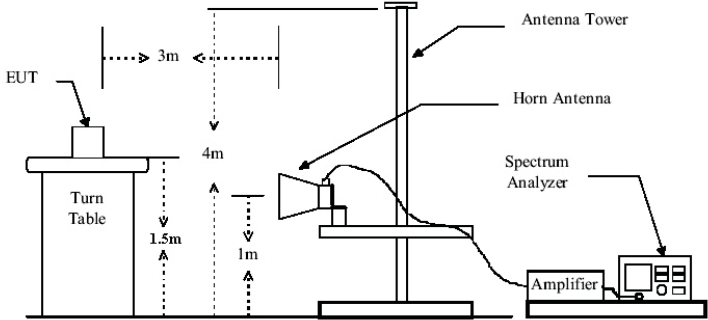
### 7.1 Antenna requirement

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>Standard requirement:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | FCC Part15 C Section 15.203 /247(c) |
| <p><b>15.203 requirement:</b></p> <p>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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p> <p><b>15.247(c) (1)(i) requirement:</b></p> <p>(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.</p> |                                     |
| <b>E.U.T Antenna:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                     |
| <p><i>The antenna is Integral antenna, the best case gain of the antenna is 1dBi</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                     |

## 7.2 Spurious Emission

### 7.2.1 Radiated Emission Method

|                       |                                                                                                 |            |                    |        |            |
|-----------------------|-------------------------------------------------------------------------------------------------|------------|--------------------|--------|------------|
| Test Requirement:     | FCC Part15 C Section 15.209                                                                     |            |                    |        |            |
| Test Method:          | ANSI C63.10:2013                                                                                |            |                    |        |            |
| Test Frequency Range: | 30MHz to 25GHz                                                                                  |            |                    |        |            |
| Test site:            | Measurement Distance: 3m                                                                        |            |                    |        |            |
| Receiver setup:       | Frequency                                                                                       | Detector   | RBW                | VBW    | Value      |
|                       | 30MHz-1GHz                                                                                      | Quasi-peak | 120KHz             | 300KHz | Quasi-peak |
|                       | Above 1GHz                                                                                      | Peak       | 1MHz               | 3MHz   | Peak       |
|                       |                                                                                                 | RMS        | 1MHz               | 3MHz   | Average    |
| Limit:                | Frequency                                                                                       |            | Limit (dBuV/m @3m) |        | Value      |
|                       | 30MHz-88MHz                                                                                     |            | 40.00              |        | Quasi-peak |
|                       | 88MHz-216MHz                                                                                    |            | 43.50              |        | Quasi-peak |
|                       | 216MHz-960MHz                                                                                   |            | 46.00              |        | Quasi-peak |
|                       | 960MHz-1GHz                                                                                     |            | 54.00              |        | Quasi-peak |
|                       | Above 1GHz                                                                                      |            | 54.00              |        | Average    |
|                       |                                                                                                 |            | 74.00              |        | Peak       |
| Test setup:           | Below 1GHz                                                                                      |            |                    |        |            |
|                       | <div></div> |            |                    |        |            |
| Test setup:           | Above 1GHz                                                                                      |            |                    |        |            |
|                       |                                                                                                 |            |                    |        |            |

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p>Test Procedure:</p>   | <ol style="list-style-type: none"> <li>1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the 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.</li> <li>7. The radiation measurements are performed in X, Y, Z axis positioning. And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.</li> </ol> |
| <p>Test Instruments:</p> | <p>Refer to section 6.0 for details</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p>Test mode:</p>        | <p>Refer to section 5.3 for details</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p>Test results:</p>     | <p>Pass</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

**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.

## Measurement Data

### ■ Below 1GHz

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 38.48           | 26.55             | 15.20                 | 0.65            | 30.05              | 12.35          | 40.00               | -27.65          | Vertical     |
| 74.40           | 24.43             | 9.87                  | 0.98            | 29.83              | 5.45           | 40.00               | -34.55          | Vertical     |
| 178.76          | 25.19             | 11.62                 | 1.73            | 29.28              | 9.26           | 43.50               | -34.24          | Vertical     |
| 360.45          | 24.24             | 16.43                 | 2.67            | 29.69              | 13.65          | 46.00               | -32.35          | Vertical     |
| 517.25          | 24.41             | 18.94                 | 3.38            | 29.30              | 17.43          | 46.00               | -28.57          | Vertical     |
| 790.62          | 24.89             | 21.96                 | 4.42            | 29.20              | 22.07          | 46.00               | -23.93          | Vertical     |
| 34.04           | 23.84             | 14.31                 | 0.60            | 30.08              | 8.67           | 40.00               | -31.33          | Horizontal   |
| 61.35           | 23.30             | 14.16                 | 0.87            | 29.91              | 8.42           | 40.00               | -31.58          | Horizontal   |
| 129.47          | 24.56             | 11.03                 | 1.43            | 29.51              | 7.51           | 43.50               | -35.99          | Horizontal   |
| 302.48          | 22.44             | 15.08                 | 2.37            | 29.98              | 9.91           | 46.00               | -36.09          | Horizontal   |
| 640.61          | 23.85             | 20.60                 | 3.87            | 29.26              | 19.06          | 46.00               | -26.94          | Horizontal   |
| 729.36          | 24.18             | 21.19                 | 4.19            | 29.20              | 20.36          | 46.00               | -25.64          | Horizontal   |

## ■ Above 1GHz

|               |        |
|---------------|--------|
| Test channel: | Lowest |
|---------------|--------|

### Peak value:

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 4804.00         | 35.45             | 31.78                 | 8.60            | 32.09              | 43.74          | 74.00               | -30.26          | Vertical     |
| 7206.00         | 30.60             | 36.15                 | 11.65           | 32.00              | 46.40          | 74.00               | -27.60          | Vertical     |
| 9608.00         | 30.37             | 37.95                 | 14.14           | 31.62              | 50.84          | 74.00               | -23.16          | Vertical     |
| 12010.00        | *                 |                       |                 |                    |                | 74.00               |                 | Vertical     |
| 14412.00        | *                 |                       |                 |                    |                | 74.00               |                 | Vertical     |
| 4804.00         | 39.35             | 31.78                 | 8.60            | 32.09              | 47.64          | 74.00               | -26.36          | Horizontal   |
| 7206.00         | 32.19             | 36.15                 | 11.65           | 32.00              | 47.99          | 74.00               | -26.01          | Horizontal   |
| 9608.00         | 29.62             | 37.95                 | 14.14           | 31.62              | 50.09          | 74.00               | -23.91          | Horizontal   |
| 12010.00        | *                 |                       |                 |                    |                | 74.00               |                 | Horizontal   |
| 14412.00        | *                 |                       |                 |                    |                | 74.00               |                 | Horizontal   |

### Average value:

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 4804.00         | 24.61             | 31.78                 | 8.60            | 32.09              | 32.90          | 54.00               | -21.10          | Vertical     |
| 7206.00         | 19.49             | 36.15                 | 11.65           | 32.00              | 35.29          | 54.00               | -18.71          | Vertical     |
| 9608.00         | 18.69             | 37.95                 | 14.14           | 31.62              | 39.16          | 54.00               | -14.84          | Vertical     |
| 12010.00        | *                 |                       |                 |                    |                | 54.00               |                 | Vertical     |
| 14412.00        | *                 |                       |                 |                    |                | 54.00               |                 | Vertical     |
| 4804.00         | 28.64             | 31.78                 | 8.60            | 32.09              | 36.93          | 54.00               | -17.07          | Horizontal   |
| 7206.00         | 21.55             | 36.15                 | 11.65           | 32.00              | 37.35          | 54.00               | -16.65          | Horizontal   |
| 9608.00         | 18.26             | 37.95                 | 14.14           | 31.62              | 38.73          | 54.00               | -15.27          | 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 (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 4882.00         | 35.41             | 31.85                 | 8.67            | 32.12              | 43.81          | 74.00               | -30.19          | Vertical     |
| 7323.00         | 30.58             | 36.37                 | 11.72           | 31.89              | 46.78          | 74.00               | -27.22          | Vertical     |
| 9764.00         | 30.35             | 38.35                 | 14.25           | 31.62              | 51.33          | 74.00               | -22.67          | Vertical     |
| 12205.00        | *                 |                       |                 |                    |                | 74.00               |                 | Vertical     |
| 14646.00        | *                 |                       |                 |                    |                | 74.00               |                 | Vertical     |
| 4882.00         | 39.32             | 31.85                 | 8.67            | 32.12              | 47.72          | 74.00               | -26.28          | Horizontal   |
| 7323.00         | 32.16             | 36.37                 | 11.72           | 31.89              | 48.36          | 74.00               | -25.64          | Horizontal   |
| 9764.00         | 29.60             | 38.35                 | 14.25           | 31.62              | 50.58          | 74.00               | -23.42          | Horizontal   |
| 12205.00        | *                 |                       |                 |                    |                | 74.00               |                 | Horizontal   |
| 14646.00        | *                 |                       |                 |                    |                | 74.00               |                 | Horizontal   |

**Average value:**

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 4882.00         | 24.59             | 31.85                 | 8.67            | 32.12              | 32.99          | 54.00               | -21.01          | Vertical     |
| 7323.00         | 19.48             | 36.37                 | 11.72           | 31.89              | 35.68          | 54.00               | -18.32          | Vertical     |
| 9764.00         | 18.67             | 38.35                 | 14.25           | 31.62              | 39.65          | 54.00               | -14.35          | Vertical     |
| 12205.00        | *                 |                       |                 |                    |                | 54.00               |                 | Vertical     |
| 14646.00        | *                 |                       |                 |                    |                | 54.00               |                 | Vertical     |
| 4882.00         | 28.61             | 31.85                 | 8.67            | 32.12              | 37.01          | 54.00               | -16.99          | Horizontal   |
| 7323.00         | 21.53             | 36.37                 | 11.72           | 31.89              | 37.73          | 54.00               | -16.27          | Horizontal   |
| 9764.00         | 18.25             | 38.35                 | 14.25           | 31.62              | 39.23          | 54.00               | -14.77          | Horizontal   |
| 12205.00        | *                 |                       |                 |                    |                | 54.00               |                 | Horizontal   |
| 14646.00        | *                 |                       |                 |                    |                | 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: | Highest |
|---------------|---------|

**Peak value:**

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 4960.00         | 35.24             | 31.93                 | 8.73            | 32.16              | 43.74          | 74.00               | -30.26          | Vertical     |
| 7440.00         | 30.46             | 36.59                 | 11.79           | 31.78              | 47.06          | 74.00               | -26.94          | Vertical     |
| 9920.00         | 30.25             | 38.81                 | 14.38           | 31.88              | 51.56          | 74.00               | -22.44          | Vertical     |
| 12400.00        | *                 |                       |                 |                    |                | 74.00               |                 | Vertical     |
| 14880.00        | *                 |                       |                 |                    |                | 74.00               |                 | Vertical     |
| 4960.00         | 39.11             | 31.93                 | 8.73            | 32.16              | 47.61          | 74.00               | -26.39          | Horizontal   |
| 7440.00         | 32.03             | 36.59                 | 11.79           | 31.78              | 48.63          | 74.00               | -25.37          | Horizontal   |
| 9920.00         | 29.48             | 38.81                 | 14.38           | 31.88              | 50.79          | 74.00               | -23.21          | Horizontal   |
| 12400.00        | *                 |                       |                 |                    |                | 74.00               |                 | Horizontal   |
| 14880.00        | *                 |                       |                 |                    |                | 74.00               |                 | Horizontal   |

**Average value:**

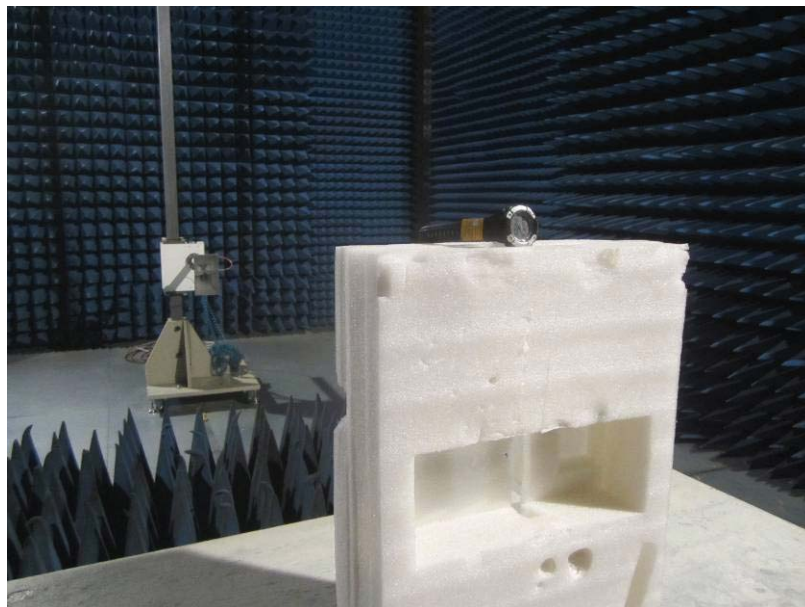
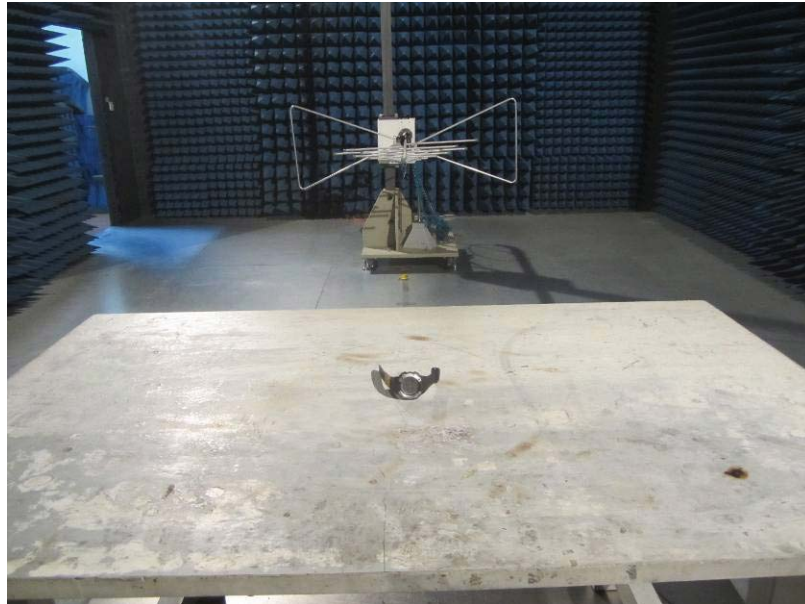
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 4960.00         | 24.47             | 31.93                 | 8.73            | 32.16              | 32.97          | 54.00               | -21.03          | Vertical     |
| 7440.00         | 19.40             | 36.59                 | 11.79           | 31.78              | 36.00          | 54.00               | -18.00          | Vertical     |
| 9920.00         | 18.60             | 38.81                 | 14.38           | 31.88              | 39.91          | 54.00               | -14.09          | Vertical     |
| 12400.00        | *                 |                       |                 |                    |                | 54.00               |                 | Vertical     |
| 14880.00        | *                 |                       |                 |                    |                | 54.00               |                 | Vertical     |
| 4960.00         | 28.47             | 31.93                 | 8.73            | 32.16              | 36.97          | 54.00               | -17.03          | Horizontal   |
| 7440.00         | 21.43             | 36.59                 | 11.79           | 31.78              | 38.03          | 54.00               | -15.97          | Horizontal   |
| 9920.00         | 18.16             | 38.81                 | 14.38           | 31.88              | 39.47          | 54.00               | -14.53          | Horizontal   |
| 12400.00        | *                 |                       |                 |                    |                | 54.00               |                 | Horizontal   |
| 14880.00        | *                 |                       |                 |                    |                | 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.*

## 8 Test Setup Photo

Radiated Emission



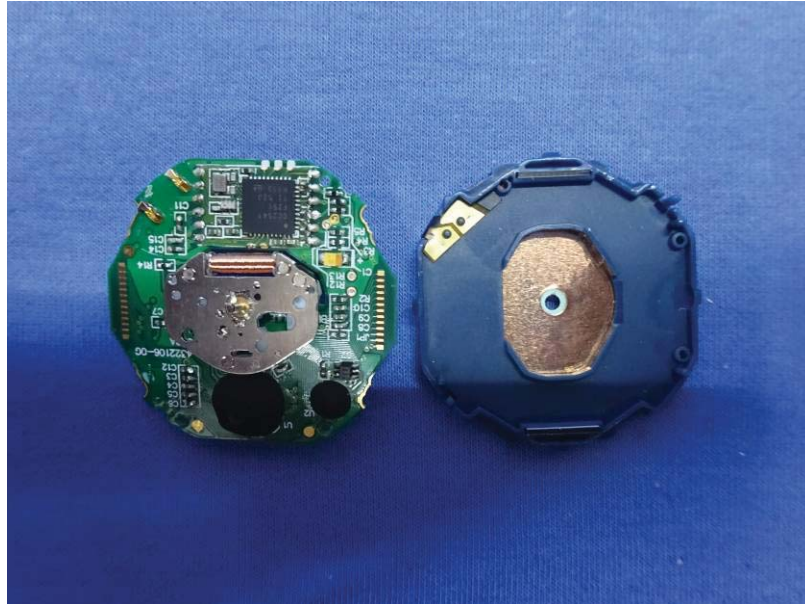
## 9 EUT Constructional Details

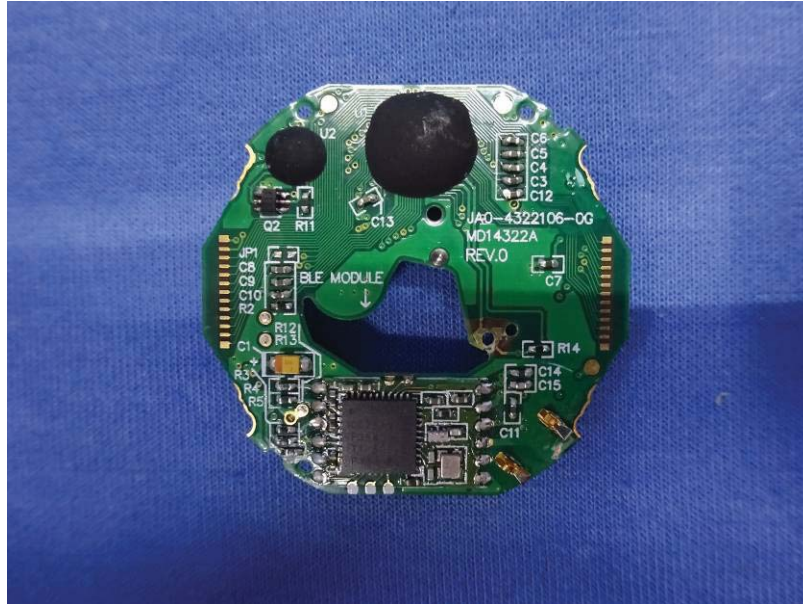












-----End-----