

Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC145750 Page: 1 of 49

# FCC Radio Test Report FCC ID: 2AGBU-NY10

## **Original Grant**

| Report No.    |        | TB-FCC145750                         |
|---------------|--------|--------------------------------------|
| Applicant     |        | MOONSMIMI(Beijing)Co., Ltd           |
| Equipment Und | der Te | st (EUT)                             |
| EUT Name      |        | The smart bra                        |
| Model No.     | 3.     | NY-1.0                               |
| Series No.    | :0     | N/A                                  |
| Brand Name    | :      | MOONSMIMI                            |
| Receipt Date  | -0     | 2015-10-20                           |
| Test Date     | 132    | 2015-10-21 to 2015-11-18             |
| Issue Date    |        | 2015-11-19                           |
| Standards     | 100    | FCC Part 15, Subpart C (15.247:2015) |
| Test Method   | :      | ANSI C63.10: 2013                    |
| Conclusions   | 81     | PASS                                 |
|               |        |                                      |

In the configuration tested, the EUT complied with the standards specified above, The EUT technically complies with the FCC and IC requirements

Test/Witness Engineer

Approved& Authorized

INAN SK fogstoi.

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. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0



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# 1. General Information about EUT

### **1.1 Client Information**

| Applicant    | . : | MOONSMIMI(Beijing)Co., Ltd                                   |
|--------------|-----|--|
| Address      | :   | 17th Floor, Hailong Building, Haidian District, Beijing, PRC |
| Manufacturer | -   | MOONSMIMI(Beijing)Co., Ltd                                   |
| Address      |     | 17th Floor, Hailong Building, Haidian District, Beijing, PRC |

## 1.2 General Description of EUT (Equipment Under Test)

| EUT Name                  | : | The smart bra                                       |  |  |
|---------------------------|---|---|--|--|
| Models No.                | : | NY-1.0<br>N/A                                       |  |  |
| Model<br>Difference       | - |   |  |  |
| MADE                      |   | Operation Frequency:<br>Bluetooth(BLE):2402~2480MHz |  |  |
| Developed                 | 5 | Number of Channel:                                  | Bluetooth(BLE): 40 channels see Note 3 |  |
| Product<br>Description    |   | RF Output Power:                                    | 0.093 dBm                              |  |
| (TOP)                     |   | Antenna Gain:                                       | 0 dBi Integral Antenna                 |  |
|                           |   | Modulation Type:                                    | GFSK                                   |  |
| CONBL -                   |   | Bit Rate of Transmitter:                            | 1Mbps(GFSK)                            |  |
| Power Supply              | : | DC Voltage supplied from<br>DC power by Li-ion Batt | m Host System by USB cable.<br>ery.    |  |
| Power Rating              | : | DC 5.0V by USB cable.<br>DC 3.7V Li-ion Battery.    |  |  |
| Connecting<br>I/O Port(S) | : | Please refer to the User                            | 's Manual                              |  |

### Note:

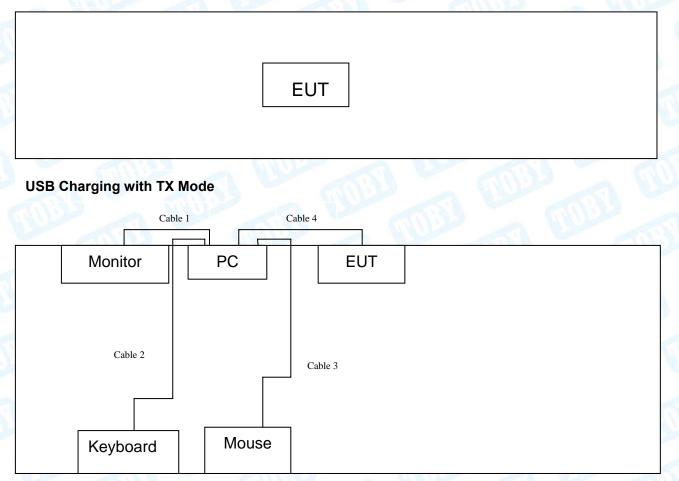
- (1) This Test Report is FCC Part 15.247 for Bluetooth BLE, the test procedure follows the FCC KDB 558074 D01 DTS Meas Guidance v03r03.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (3) Antenna information provided by the applicant.

### (4) Channel List:

|         | BLE Channel List   |         |                    |         |                    |  |
|---------|--------------------|---------|--------------------|---------|--------------------|--|
| Channel | Frequency<br>(MHz) | Channel | Frequency<br>(MHz) | Channel | Frequency<br>(MHz) |  |
| 00      | 2402               | 14      | 2430               | 28      | 2458               |  |
| 01      | 2404               | 15      | 2432               | 29      | 2460               |  |
| 02      | 2406               | 16      | 2434               | 30      | 2462               |  |
| 03      | 2408               | 17      | 2436               | 31      | 2464               |  |
| 04      | 2410               | 18      | 2438               | 32      | 2466               |  |
| 05      | 2412               | 19      | 2440               | 33      | 2468               |  |
| 06      | 2414               | 20      | 2442               | 34      | 2470               |  |
| 07      | 2416               | 21      | 2444               | 35      | 2472               |  |
| 08      | 2418               | 22      | 2446               | 36      | 2474               |  |
| 09      | 2420               | 23      | 2448               | 37      | 2476               |  |
| 10      | 2422               | 24      | 2450               | 38      | 2478               |  |
| 11      | 2424               | 25      | 2452               | 39      | 2480               |  |
| 12      | 2426               | 26      | 2454               |         |                    |  |
| 13      | 2428               | 27      | 2456               |         | N.S.               |  |

## 1.3 Block Diagram Showing the Configuration of System Tested

TX Mode



## 1.4 Description of Support Units

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|             | E             | Equipment Inform | nation       |                           |
|-------------|---------------|------------------|--------------|---------------------------|
| Name        | Model         | FCC ID/DOC       | Manufacturer | Used "√"                  |
| LCD Monitor | E170Sc        | DOC              | DELL         | $\checkmark$              |
| PC          | OPTIPLEX380   | DOC              | DELL         | ~                         |
| Keyboard    | L100          | DOC              | DELL         | ~                         |
| Mouse       | M-UARDEL7     | DOC              | DELL         | $\checkmark$              |
|             |               | Cable Informa    | tion         |                           |
| Number      | Shielded Type | Ferrite Core     | Length       | Note                      |
| Cable 1     | YES           | YES              | 1.5M         |                           |
| Cable 2     | YES           | YES              | 1.5M         |                           |
| Cable 3     | YES           | NO               | 1.5M         | W A V                     |
| Cable 4     | NO            | NO               | 0.8M         | Provided by the applicant |

### 1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

|   | For Conducted Test |                           |  |  |
|---|--------------------|---------------------------|--|--|
| 5 | Final Test Mode    | Description               |  |  |
| 1 | Mode 1             | USB Charging With TX Mode |  |  |

| For Radiated Test |                            |  |
|-------------------|----------------------------|--|
| Final Test Mode   | Description                |  |
| Mode 2            | USB Charging With TX Mode  |  |
| Mode 3            | TX Mode (Channel 00/20/39) |  |

#### Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.10 standards, the measurements are performed at the highest,



middle, lowest available channels, and the worst case data rate as follows: Bluetooth BLE Mode: GFSK Modulation Transmitting mode.

- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a mobile unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

### 1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of RF setting.

| Test Software Version | auer  | N/A   |       |
|-----------------------|-------|-------|-------|
| Channel               | CH 00 | CH 20 | СН 39 |
| BLE Mode              | DEF   | DEF   | DEF   |

### 1.7 Measurement Uncertainty

The reported uncertainty of measurement y  $\pm$  U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

| Test Item          | Parameters        | Expanded Uncertainty (U <sub>Lab</sub> ) |
|--------------------|-------------------|--|
| U A V              | Level Accuracy:   |  |
| Conducted Emission | 9kHz~150kHz       | ±3.42 dB                                 |
|                    | 150kHz to 30MHz   | ±3.42 dB                                 |
| Radiated Emission  | Level Accuracy:   | . 1 CO dD                                |
| Radiated Emission  | 9kHz to 30 MHz    | ±4.60 dB                                 |
| Dedicted Emission  | Level Accuracy:   | . 1 10 dD                                |
| Radiated Emission  | 30MHz to 1000 MHz | ±4.40 dB                                 |
| Radiated Emission  | Level Accuracy:   | 1 20 dP                                  |
| Radiated Emission  | Above 1000MHz     | ±4.20 dB                                 |



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### 1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

#### CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

#### FCC List No.: (811562)

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 811562.

#### IC Registration No.: (11950A-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.

May 22, 2014 certificated by TUV Rheinland(China) Co., Ltd. with TUV certificate No.: UA 50282953 0001 and report No.: 17026822 002. The certificate is valid until the next scheduled audit or up to 18 months, at the discretion of TUV Rhineland.

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# 2. Test Summary

| Standa       | rd Section         | Tast Hann                                 | ludement | Remark |
|--------------|--------------------|---|----------|--------|
| FCC          | IC                 | Test Item                                 | Judgment |        |
| 15.203       | 1                  | Antenna Requirement                       | PASS     | N/A    |
| 15.207       | RSS-GEN 7.2.4      | Conducted Emission                        | PASS     | N/A    |
| 15.205       | RSS-GEN 7.2.2      | Restricted Bands                          | PASS     | N/A    |
| 15.247(a)(2) | RSS 247<br>5.2 (1) | 6dB Bandwidth                             | PASS     | N/A    |
| 15.247(b)    | RSS 247<br>5.4 (4) | Peak Output Power                         | PASS     | N/A    |
| 15.247(e)    | RSS 247<br>5.2 (2) | Power Spectral Density                    | PASS     | N/A    |
| 15.247(d)    | RSS 247<br>5.5     | Transmitter Radiated Spurious<br>Emission | PASS     | N/A    |

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# 3. Test Equipment

## **Conducted Emission Test**

| Equipment            | Manufacturer                           | Model No.   | Serial No. | Last Cal.     | Cal. Due<br>Date |
|----------------------|--|-------------|------------|---------------|------------------|
| EMI Test<br>Receiver | Rohde & Schwarz                        | ESCI        | 100321     | Aug. 07, 2015 | Aug. 06, 2016    |
| RF Switching<br>Unit | Compliance<br>Direction Systems<br>Inc | RSU-A4      | 34403      | Aug. 07, 2015 | Aug. 06, 2016    |
| AMN                  | SCHWARZBECK                            | NNBL 8226-2 | 8226-2/164 | Aug. 07, 2015 | Aug. 06, 2016    |
| LISN                 | Rohde & Schwarz                        | ENV216      | 101131     | Aug. 07, 2015 | Aug. 06, 2016    |

## **Radiation Emission Test**

| Equipment                 | Manufacturer    | Model No. | Serial No. | Last Cal.     | Cal. Due<br>Date |  |
|---------------------------|-----------------|-----------|------------|---------------|------------------|--|
| Spectrum<br>Analyzer      | Agilent         | E4407B    | MY45106456 | Aug. 29, 2015 | Aug. 28, 2016    |  |
| EMI Test<br>Receiver      | Rohde & Schwarz | ESCI      | 100010/007 | Aug. 07, 2015 | Aug. 06, 2016    |  |
| Bilog Antenna             | ETS-LINDGREN    | 3142E     | 00117537   | Mar. 28, 2015 | Mar. 27, 2016    |  |
| Bilog Antenna             | ETS-LINDGREN    | 3142E     | 00117542   | Mar. 28, 2015 | Mar. 27, 2016    |  |
| Horn Antenna              | ETS-LINDGREN    | 3117      | 00143207   | Mar. 28, 2015 | Mar. 27, 2016    |  |
| Horn Antenna              | ETS-LINDGREN    | 3117      | 00143209   | Mar. 28, 2015 | Mar. 27, 2016    |  |
| Pre-amplifier             | Sonoma          | 310N      | 185903     | Mar. 28, 2015 | Mar. 27, 2016    |  |
| Pre-amplifier             | HP              | 8447B     | 3008A00849 | Mar. 28, 2015 | Mar. 27, 2016    |  |
| Cable                     | HUBER+SUHNER    | 100       | SUCOFLEX   | Mar. 28, 2015 | Mar. 27, 2016    |  |
| Positioning<br>Controller | ETS-LINDGREN    | 2090      | N/A        | N/A           | N/A              |  |



# 4. Conducted Emission Test

- 4.1 Test Standard and Limit
  - 4.1.1Test Standard FCC Part 15.207
  - 4.1.2 Test Limit

| Eroquonov     | Maximum RF Line Voltage (dBµV) |               |  |  |  |
|---------------|--------------------------------|---------------|--|--|--|
| Frequency     | Quasi-peak Level               | Average Level |  |  |  |
| 150kHz~500kHz | 66 ~ 56 *                      | 56 ~ 46 *     |  |  |  |
| 500kHz~5MHz   | 56                             | 46            |  |  |  |
| 5MHz~30MHz    | 60                             | 50            |  |  |  |

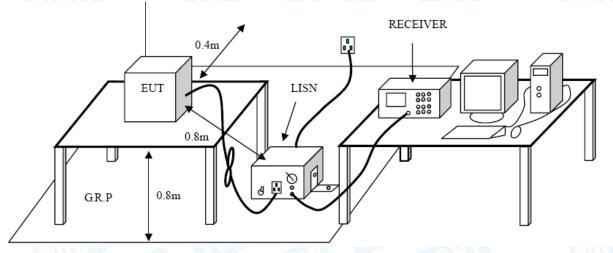
Notes:

(1) \*Decreasing linearly with logarithm of the frequency.

(2) The lower limit shall apply at the transition frequencies.

(3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2 Test Setup



### 4.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.



I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

4.4 EUT Operating Mode

Please refer to the description of test mode.

### 4.5 Test Data

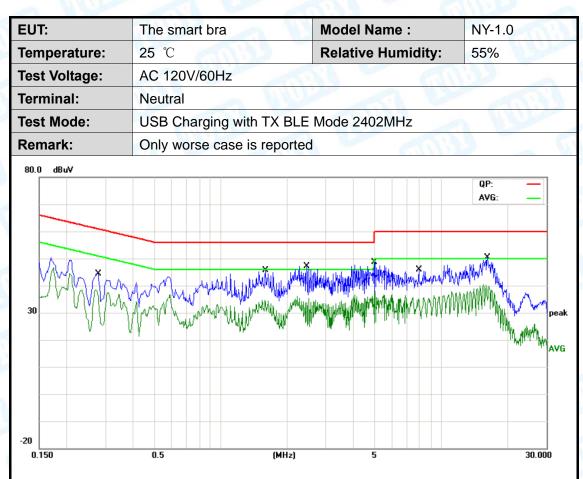
Test data please refer the following pages.





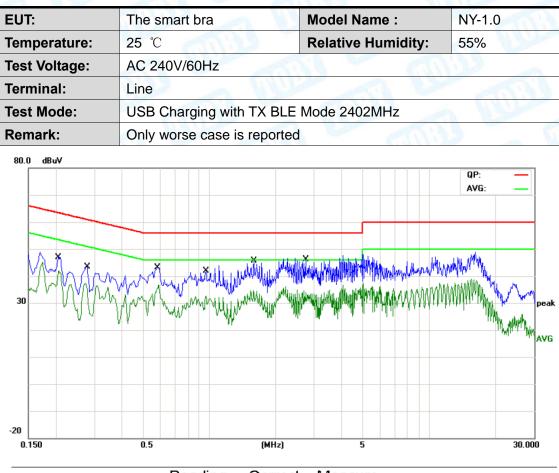
| No. Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | O∨er   |          |
|---------|---------|------------------|-------------------|------------------|-------|--------|----------|
|         | MHz     | dBu∨             | dB                | dBuV             | dBu V | dB     | Detector |
| 1       | 1.1100  | 31.51            | 10.06             | 41.57            | 56.00 | -14.43 | QP       |
| 2       | 1.1100  | 22.35            | 10.06             | 32.41            | 46.00 | -13.59 | AVG      |
| 3       | 2.2659  | 31.83            | 10.05             | 41.88            | 56.00 | -14.12 | QP       |
| 4       | 2.2659  | 25.34            | 10.05             | 35.39            | 46.00 | -10.61 | AVG      |
| 5       | 3.9060  | 32.82            | 10.00             | 42.82            | 56.00 | -13.18 | QP       |
| 6       | 3.9060  | 23.64            | 10.00             | 33.64            | 46.00 | -12.36 | AVG      |
| 7       | 4.9660  | 35.69            | 9.96              | 45.65            | 56.00 | -10.35 | QP       |
| 8 *     | 4.9660  | 27.39            | 9.96              | 37.35            | 46.00 | -8.65  | AVG      |
| 9       | 10.7020 | 33.00            | 10.17             | 43.17            | 60.00 | -16.83 | QP       |
| 10      | 10.7020 | 25.75            | 10.17             | 35.92            | 50.00 | -14.08 | AVG      |
| 11      | 16.1540 | 34.34            | 10.24             | 44.58            | 60.00 | -15.42 | QP       |
| 12      | 16.1540 | 24.29            | 10.24             | 34.53            | 50.00 | -15.47 | AVG      |
|         |         |                  |                   |                  |       |        |          |





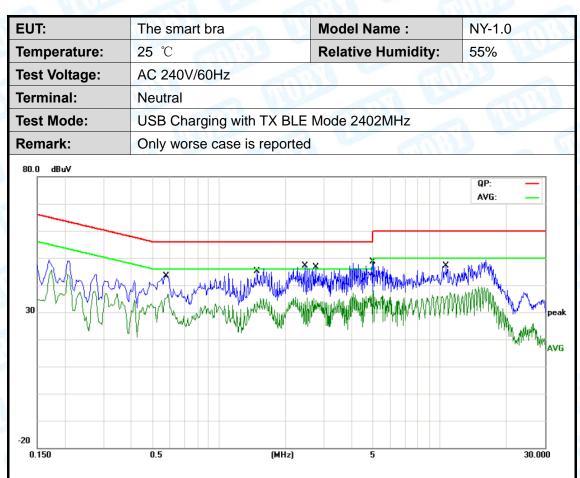
| No. Mk. | Freq.   | Reading<br>Le∨el | Correct<br>Factor | Measure-<br>ment | Limit | O∨er   |          |
|---------|---------|------------------|-------------------|------------------|-------|--------|----------|
|         | MHz     | dBu∨             | dB                | dBuV             | dBu∨  | dB     | Detector |
| 1       | 0.2779  | 32.60            | 10.02             | 42.62            | 60.88 | -18.26 | QP       |
| 2       | 0.2779  | 25.18            | 10.02             | 35.20            | 50.88 | -15.68 | AVG      |
| 3       | 1.5940  | 30.14            | 10.06             | 40.20            | 56.00 | -15.80 | QP       |
| 4       | 1.5940  | 23.93            | 10.06             | 33.99            | 46.00 | -12.01 | AVG      |
| 5       | 2.4580  | 33.91            | 10.04             | 43.95            | 56.00 | -12.05 | QP       |
| 6       | 2.4580  | 23.38            | 10.04             | 33.42            | 46.00 | -12.58 | AVG      |
| 7       | 4.9659  | 36.18            | 9.96              | 46.14            | 56.00 | -9.86  | QP       |
| 8 *     | 4.9659  | 27.92            | 9.96              | 37.88            | 46.00 | -8.12  | AVG      |
| 9       | 7.9059  | 31.30            | 10.09             | 41.39            | 60.00 | -18.61 | QP       |
| 10      | 7.9059  | 25.50            | 10.09             | 35.59            | 50.00 | -14.41 | AVG      |
| 11      | 16.1539 | 34.52            | 10.24             | 44.76            | 60.00 | -15.24 | QP       |
| 12      | 16.1539 | 24.31            | 10.24             | 34.55            | 50.00 | -15.45 | AVG      |
|         |         |                  |                   |                  |       |        |          |





| No. | Mk. | Freq.  | Reading<br>Le∨el | Correct<br>Factor | Measure-<br>ment | Limit | O∨er   |          |
|-----|-----|--------|------------------|-------------------|------------------|-------|--------|----------|
|     |     | MHz    | dBu V            | dB                | dBu∨             | dBu∨  | dB     | Detector |
| 1   |     | 0.2060 | 38.06            | 10.02             | 48.08            | 63.36 | -15.28 | QP       |
| 2   | *   | 0.2060 | 35.10            | 10.02             | 45.12            | 53.36 | -8.24  | AVG      |
| 3   |     | 0.2779 | 32.61            | 10.02             | 42.63            | 60.88 | -18.25 | QP       |
| 4   |     | 0.2779 | 25.14            | 10.02             | 35.16            | 50.88 | -15.72 | AVG      |
| 5   |     | 0.5820 | 32.70            | 10.06             | 42.76            | 56.00 | -13.24 | QP       |
| 6   |     | 0.5820 | 26.20            | 10.06             | 36.26            | 46.00 | -9.74  | AVG      |
| 7   |     | 0.9660 | 30.11            | 10.07             | 40.18            | 56.00 | -15.82 | QP       |
| 8   |     | 0.9660 | 23.99            | 10.07             | 34.06            | 46.00 | -11.94 | AVG      |
| 9   |     | 1.5940 | 31.70            | 10.06             | 41.76            | 56.00 | -14.24 | QP       |
| 10  |     | 1.5940 | 25.13            | 10.06             | 35.19            | 46.00 | -10.81 | AVG      |
| 11  |     | 2.7500 | 34.81            | 10.04             | 44.85            | 56.00 | -11.15 | QP       |
| 12  |     | 2.7500 | 25.96            | 10.04             | 36.00            | 46.00 | -10.00 | AVG      |





| No. Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | O∨er   |          |
|---------|---------|------------------|-------------------|------------------|-------|--------|----------|
|         | MHz     | dBu∨             | dB                | dBu∨             | dBu∨  | dB     | Detector |
| 1       | 0.5780  | 32.88            | 10.06             | 42.94            | 56.00 | -13.06 | QP       |
| 2       | 0.5780  | 25.66            | 10.06             | 35.72            | 46.00 | -10.28 | AVG      |
| 3       | 1.4940  | 31.32            | 10.06             | 41.38            | 56.00 | -14.62 | QP       |
| 4       | 1.4940  | 24.01            | 10.06             | 34.07            | 46.00 | -11.93 | AVG      |
| 5       | 2.4580  | 34.62            | 10.04             | 44.66            | 56.00 | -11.34 | QP       |
| 6       | 2.4580  | 24.03            | 10.04             | 34.07            | 46.00 | -11.93 | AVG      |
| 7       | 2.7500  | 33.30            | 10.04             | 43.34            | 56.00 | -12.66 | QP       |
| 8       | 2.7500  | 24.77            | 10.04             | 34.81            | 46.00 | -11.19 | AVG      |
| 9       | 4.9660  | 37.76            | 9.96              | 47.72            | 56.00 | -8.28  | QP       |
| 10 *    | 4.9660  | 29.35            | 9.96              | 39.31            | 46.00 | -6.69  | AVG      |
| 11      | 10.7020 | 35.20            | 10.17             | 45.37            | 60.00 | -14.63 | QP       |
| 12      | 10.7020 | 27.35            | 10.17             | 37.52            | 50.00 | -12.48 | AVG      |
|         |         |                  |                   |                  |       |        |          |



# 5. Radiated Emission Test

- 5.1 Test Standard and Limit
  - 5.1.1 Test Standard
  - FCC Part 15.209
  - 5.1.2 Test Limit

#### Radiated Emission Limits (9kHz~1000MHz)

| Frequency<br>(MHz | Field Strength<br>(microvolt/meter) | Measurement Distance<br>(meters) |
|-------------------|-------------------------------------|----------------------------------|
| 0.009~0.490       | 2400/F(KHz)                         | 300                              |
| 0.490~1.705       | 24000/F(KHz)                        | 30                               |
| 1.705~30.0        | 30                                  | 30                               |
| 30~88             | 100                                 | 3                                |
| 88~216            | 150                                 | 3                                |
| 216~960           | 200                                 | 3                                |
| Above 960         | 500                                 | 3                                |

### Radiated Emission Limit (Above 1000MHz)

| Frequency  | Class A (dBuV | /m)(at 3 M) | Class B (dBuV/m)(at 3 M) |         |  |
|------------|---------------|-------------|--------------------------|---------|--|
| (MHz)      | Peak          | Average     | Peak                     | Average |  |
| Above 1000 | 80            | 60          | 74                       | 54      |  |

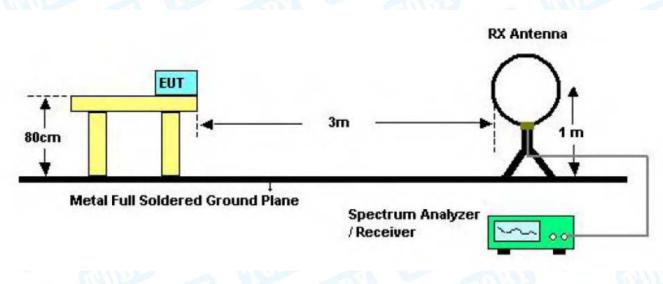
#### Note:

(1) The tighter limit applies at the band edges.

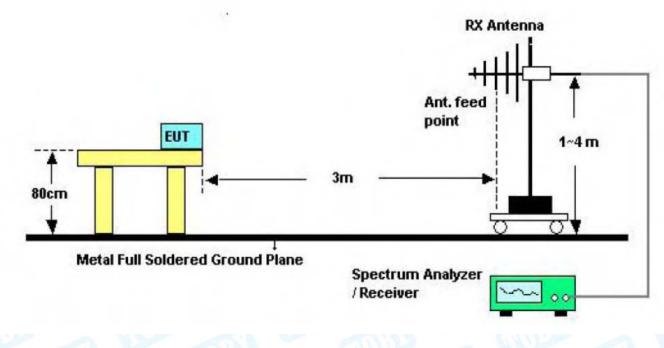
(2) Emission Level(dBuV/m)=20log Emission Level(uV/m)



5.2 Test Setup

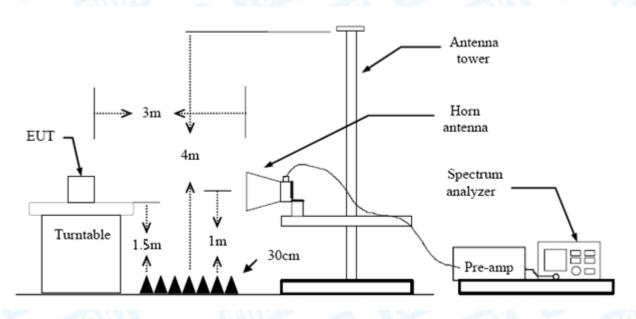


Below 30MHz Test Setup



Below 1000MHz Test Setup





Above 1GHz Test Setup

### 5.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.



### 5.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

### 5.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=1 kHz with Peak Detector for Average Values.

Test data please refer the following pages.



|               |                      |                       |                  |             |                             | -        |
|---------------|----------------------|-----------------------|------------------|-------------|-----------------------------|----------|
| EUT:          | The smart bra        |                       | Model:           |             | NY-1.0                      |          |
| Temperature:  | <b>25</b> ℃          | 50                    | Relative H       | umidity:    | 55%                         | 1        |
| Test Voltage: | DC 5V                | and in                |                  | 1100        | 6.0                         |          |
| Ant. Pol.     | Horizontal           |                       |                  |             | 100                         |          |
| Test Mode:    | BLE TX 2402 M        | lode                  | <b>MUD</b> S     |             |                             |          |
| Remark:       | Only worse cas       | e is reported         |                  | COD)        |                             |          |
| 30            |                      | 3<br>Mr. J. J. Market | shuldulalalalala | (RF)FCC 150 | C 3M Radiation<br>Margin -6 |          |
| 30.000 40 50  | 60 70 80             | (MHz)                 | 300              | 400 500     | 600 700                     | 1000.000 |
| No. Mk. Fr    | Reading<br>eq. Level | Correct<br>Factor     | Measure-<br>ment | Limit       | O∨er                        |          |
| M             | Hz dBuV              | dB/m                  | dBuV/m           | dBuV/m      | dB                          | Detector |
| 1 35.8        | 746 37.06            | -17.60                | 19.46            | 40.00       | -20.54                      | peak     |
| 2 71.8        | 320 43.20            | -23.56                | 19.64            | 40.00       | -20.36                      | peak     |
| 3 191.7       | 7450 47.35           | -20.81                | 26.54            | 43.50       | -16.96                      | peak     |
| 4 336.0       | 0352 42.02           | -15.46                | 26.56            | 46.00       | -19.44                      | peak     |
| 5 383.9       | 9318 43.49           | -13.87                | 29.62            | 46.00       | -16.38                      | peak     |
| 6 * 528.2     | 2458 40.24           | -10.14                | 30.10            | 46.00       | -15.90                      | peak     |



| EUT:   | The smart bra              |                     | Model:               | NY-                               | 1.0  |
|--|----------------------------|---------------------|----------------------|-----------------------------------|--|
| Temperature:   | <b>25</b> ℃                |                     | Relative Humic       | lity: 55%                         | 6  |
| Test Voltage:  | DC 5V                      |                     |                      | anis)                             |  |
| Ant. Pol.  | Vertical                   |                     |                      |                                   | SRL.   |
| Test Mode:   | BLE TX 2402                | Mode                | MUDD                 |                                   | and the second s |
| Remark:  | Only worse ca              | se is reported      |                      | 133                               |  |
| 80.0 dBu¥/m  |                            |                     |                      |                                   |  |
| 30 1 2 3 1 2 |                            | 5 6<br>X X          | (RF                  | FCC 15C 3M Radiation<br>Margin -6 |  |
| 30.000 40 50   | 60 70 80                   | (MHz)               | 300 400              | 500 600 700                       | 1000.000   |
| No. Mk. F  | Readin<br>req. Level       | g Correct<br>Factor | Measure-<br>ment Lim | it O∨er                           |  |
| N  | 1Hz dBu∨                   | dB/m                | dBuV/m dBu           | V/m dB                            | Detector   |
| 1 31.  | 5095 42.78                 | -14.89              | 27.89 40.            | 00 -12.11                         | peak   |
| 2 * 35.0   | 6240 47.47                 | -17.45              | 30.02 40.            | 00 -9.98                          | peak   |
| 3 49.0   | 0145 52.88                 | -23.97              | 28.91 40.            | 00 -11.09                         | peak   |
|  | 8320 48.14                 | -23.56              | 24.58 40.            |                                   |  |
|  |                            | 20.00               | 2                    |                                   | poun   |
|  | 8295 45.55                 | -21.67              | 23.88 43             | 50 -19.62                         | neak   |
| 5 143.   | .8295 45.55<br>.7450 47.06 | -21.67<br>-20.81    | 23.88 43<br>26.25 43 |                                   | peak<br>peak   |



| EUT:               | The sma            | art bra                | <u>a 19</u>                     | Model:               |             | NY-1.0           | 1        |
|--------------------|--------------------|------------------------|---------------------------------|----------------------|-------------|------------------|----------|
| Temperature:       | <b>25</b> ℃        | Call                   |                                 | Relative H           | umidity:    | 55%              |          |
| Test Voltage:      | DC 5V              | A CONTRACT             | -                               |                      | nn)         | 32               |          |
| Ant. Pol.          | Horizon            | tal                    | M.G.                            |                      |             | -                |          |
| Test Mode:         | BLE TX             | 2442 Mo                | de                              | MILES                |             |                  | Nec -    |
| Remark:            | Only wo            | orse case              | is reported                     |                      | COD)        |                  | ~ \      |
| 80.0 dBuV/m        |                    |                        |                                 |                      |             |                  |          |
|                    |                    |                        |                                 |                      |             |                  |          |
|                    |                    |                        |                                 |                      |             |                  |          |
|                    |                    |                        |                                 |                      | (RF)FCC 150 | 3M Radiation     |          |
|                    |                    |                        |                                 |                      |             | Margin -6        | ae [     |
|                    |                    |                        |                                 |                      |             |                  |          |
|                    |                    | J                      |                                 |                      | 6           |                  |          |
| 30                 |                    |                        | 4                               | 5<br>X               | ×           |                  |          |
| 1<br>X 2           |                    | 3                      | *                               |                      |             | with the patient | mathl    |
| MAM X              | 1                  |                        | بال ماس                         | and when the the the | ha Arana an |                  |          |
| · ~ W \.           | My www. Awald Mary | What have a strengther | M (million with the service his | Mar Color and A      |             |                  |          |
|                    |                    |                        |                                 |                      |             |                  |          |
|                    |                    |                        |                                 |                      |             |                  |          |
| 20<br>30.000 40 50 | 60 70 80           |                        | (MHz)                           | 300                  | 400 500     | 600 700          | 1000.000 |
|                    |                    | ) a a din a            | Correct                         | Managera             |             |                  |          |
| No. Mk. F          |                    | teading<br>Level       | Correct<br>Factor               | Measure-<br>ment     | Limit       | O∨er             |          |
|                    | 1Hz                | dBuV                   |                                 | dBuV/m               | dBuV/m      | dB               | Detecto  |
|                    |                    |                        | dB/m                            |                      |             |                  |          |
| 1 35.0             | 6240               | 35.21                  | -17.45                          | 17.76                | 40.00       | -22.24           | peal     |
| 2 48.8             | 8429               | 39.10                  | -23.91                          | 15.19                | 40.00       | -24.81           | peal     |
| 3 119.             | .8556              | 38.91                  | -22.50                          | 16.41                | 43.50       | -27.09           | peal     |
| 4 191.             | .7450              | 44.28                  | -20.81                          | 23.47                | 43.50       | -20.03           | peal     |
| 5 336.             | .0352              | 40.05                  | -15.46                          | 24.59                | 46.00       | -21.41           | peal     |
| 6 * 292            | 004.0              | 40.00                  | 40.07                           |                      | 40.00       | 17.01            |          |
| 6 * 383.           | .9318              | 42.26                  | -13.87                          | 28.39                | 46.00       | -17.61           | peal     |



| EUT:                              | The smart bra  |                                    | Model:   |                                   | NY-1.0                       |                     |
|-----------------------------------|--|------------------------------------|--|-----------------------------------|------------------------------|---------------------|
|                                   | 25 ℃   |                                    |  |                                   | 55%                          |                     |
| Temperature:                      |  |                                    | Relative Hu  | lmany:                            | 55%                          |                     |
| Test Voltage:                     | DC 5V  | Carlin State                       |  | III III                           |                              | -                   |
| Ant. Pol.                         | Vertical   |                                    |  |                                   | 64                           |                     |
| Test Mode:                        | BLE TX 2442 Mc                                       |                                    | MUP  | -                                 |                              |                     |
| Remark:                           | Only worse case                                      | is reported                        |  | an bi                             |                              | ~ \                 |
| 80.0 dBu∀/m                       |  |                                    |  |                                   |                              |                     |
|                                   |  |                                    |  | (RF)FCC 15C                       | 3M Radiation<br>Margin -6 dl | B [                 |
|                                   | 3<br>A<br>Mar Mar Mar Mar Mar Mar Mar Mar Mar Mar    | in Julianthe walker                | 5 6<br>X X   | Northermost of the                | n dalayad manari             |                     |
|                                   | × •  | (MHz)                              | 5 6<br>× •••••••••••••••••••••••••••••••••••                 | 400 500                           | 600 700                      | 1000.000            |
| -20<br>30.000 40 50               | ur Mun Morris  | (MHz)                              | ngh Adding and an and an |                                   |                              |                     |
| -20<br>30.000 40 50<br>No. Mk. Fr | 60 70 80<br>Reading                                  | (MHz)<br>Correct                   | 300<br>Measure-  | 400 500                           | 600 700                      |                     |
| -20<br>30.000 40 50<br>No. Mk. Fr | 60 70 80<br>Reading<br>req. Level<br>Hz dBu∨         | (MHz)<br>Correct<br>Factor         | 300<br>Measure-<br>ment                                      | 400 500<br>Limit                  | 600 700<br>O∨er              | 1000.000<br>Detecto |
| -20<br>30.000 40 50<br>No. Mk. Fr | 60 70 80<br>Reading<br>Level<br>Hz dBu∨<br>750 46.32 | (MH2)<br>Correct<br>Factor<br>dB/m | 300<br>Measure-<br>ment<br>dBuV/m                            | 400 <b>500</b><br>Limit<br>dBu√/m | 600 700<br>Over<br>dB        | 1000.000            |

|   |   | •        |       |        |        |        |        |          |
|---|---|----------|-------|--------|--------|--------|--------|----------|
|   |   | MHz      | dBuV  | dB/m   | dBuV/m | dBuV/m | dB     | Detector |
| 1 | * | 35.3750  | 46.32 | -17.29 | 29.03  | 40.00  | -10.97 | peak     |
| 2 |   | 39.7146  | 45.15 | -19.98 | 25.17  | 40.00  | -14.83 | peak     |
| 3 |   | 71.8320  | 47.82 | -23.56 | 24.26  | 40.00  | -15.74 | peak     |
| 4 |   | 119.8556 | 41.79 | -22.50 | 19.29  | 43.50  | -24.21 | peak     |
| 5 |   | 239.9874 | 38.36 | -18.59 | 19.77  | 46.00  | -26.23 | peak     |
| 6 |   | 312.1794 | 38.69 | -16.63 | 22.06  | 46.00  | -23.94 | peak     |
|   |   |          |       |        |        |        |        |          |



|               | -            |                          | -           | 1.1.1  |                |  | -         |
|---------------|--------------|--------------------------|-------------|--|----------------|--|-----------|
| EUT:          | The sm       | art bra                  | a 13        | Model:   |                | NY-1.0   |           |
| Temperature:  | <b>25</b> ℃  | (and)                    |             | Relative I   | lumidity:      | 55%  | 1 Second  |
| Test Voltage: | DC 5V        | 120                      | -           |  | nn.            | 66   | -         |
| Ant. Pol.     | Horizor      | ntal                     | M.O.        |  |                | -  | RU        |
| Test Mode:    | BLE TX       | ( 2 <mark>480 M</mark> o | de          | MUD  |                |  |           |
| Remark:       | Only w       | orse case                | is reported |  | Can B          |  |           |
| 80.0 dBuV/m   |              |                          |             |  |                |  |           |
|               |              |                          |             |  |                |  |           |
|               |              |                          |             |  |                |  |           |
|               |              |                          |             |  | (RF)FCC 15C    | 3M Radiation   |           |
|               |              |                          |             |  |                | Margin -6  |           |
|               |              |                          |             |  |                |  |           |
| 30            |              |                          | 3           | 4  | 5<br>× 6       |  |           |
| 1             |              |                          | ×           | ×  | × Î Ă          |  | whe stall |
| m Å m Å       | 1            |                          |             |  | Mr. M. Marland | and the second s |           |
|               | . Mund March | mahourduportubile        | whilewood   | whether and the state of the st |                |  |           |
| jev?          | where we     |                          |             |  |                |  |           |
|               |              |                          |             |  |                |  |           |
| -20           |              |                          |             |  |                |  |           |
| 30.000 40 50  | 60 70 8      | 0                        | (MHz)       | 300  | 400 500        | 600 700  | 1000.000  |
|               | F            | Reading                  | Correct     | Measure-   |                |  |           |
| No. Mk. Fre   | ∋q.          | Level                    | Factor      | ment   | Limit          | O∨er   |           |
| MH            | łz           | dBu∨                     | dB/m        | dBuV/m   | dBuV/m         | dB   | Detector  |
| 1 35.87       | 746          | 36.66                    | -17.60      | 19.06  | 40.00          | -20.94   | peak      |
| 2 48.84       | 429          | 39.61                    | -23.91      | 15.70  | 40.00          | -24.30   | peak      |
| 3 191.7       | 450          | 46.94                    | -20.81      | 26.13  | 43.50          | -17.37   | peak      |
| 4 336.0       | 352          | 41.61                    | -15.46      | 26.15  | 46.00          | -19.85   | peak      |
| 5 * 383.9     | 318          | 43.05                    | -13.87      | 29.18  | 46.00          | -16.82   | peak      |
| 6 480.5       | 276          | 37.45                    | -11.62      | 25.83  | 46.00          | -20.17   | peak      |
|               |              |                          |             |  |                |  |           |



| EUT:   | The smart bra   |  | Model:  |  | NY-1.0                                   |                                  |
|--|---|--|---|--|--|----------------------------------|
| Temperature:                                     | <b>25</b> ℃   | BU T   | Relative H  | lumidity:                                  | 55%                                      |                                  |
| Test Voltage:                                    | DC 5V   |  |   | Im   |  |                                  |
| Ant. Pol.  | Vertical  |  |   |  | A  | RU                               |
| Test Mode:                                       | BLE TX 2480   | Mode   | mile  | 2  |  | 9                                |
| Remark:  | Only worse ca   | se is reported   |   | and  |  |                                  |
| 80.0 dBuV/m                                      |   | 5<br>M<br>M<br>M<br>M<br>M<br>M<br>M<br>M<br>M<br>M<br>M<br>M<br>M<br>M<br>M<br>M<br>M<br>M<br>M | 6<br>X  | (RF)FCC 150                                | C 3M Radiation<br>Margin -6              |                                  |
| 20<br>30.000 40 50                               | 60 70 80  | (MHz)  |   | 100 500                                    | ) 600 700                                |                                  |
| 55.000 40 30                                     | 60 70 80  | (MILE)   | 300   | 400 500                                    | 000 100                                  | 1000.000                         |
|  | Readin<br>eq. Level   |  | Measure-<br>ment                                      | Limit                                      | Over                                     | 1000.000                         |
|  | Readin<br>eq. Le∨el   | g Correct  | Measure-  |  |  | 1000.000<br>Detector             |
| No. Mk. Fr                                       | Readin<br>eq. Level<br>⊣z dBuV  | g Correct<br>Factor  | Measure-<br>ment                                      | Limit                                      | O∨er                                     |                                  |
| No. Mk. Fr                                       | Readin     eq.   Level     Hz   dBuV     202   40.99  | g Correct<br>Factor  | Measure-<br>ment<br>dBuV/m                            | <b>Limit</b><br>dBuV/m                     | <b>O∨er</b><br>dB                        | Detector                         |
| No. Mk. Fr                                       | Readin     eq.   Level     dBu∨   202   40.99     541   46.66                               | g Correct<br>Factor<br>dB/m<br>-14.96<br>-17.83  | Measure-<br>ment<br>dBu∀/m<br>26.03                   | Limit<br>dBuV/m<br>40.00                   | Over<br>dB<br>-13.97                     | Detector<br><b>peak</b>          |
| No. Mk. Fr<br>Mi<br>1 31.6<br>2 36.2             | Readin     eq.   Level     dBu∨   202   40.99     541   46.66   865   53.60                 | g Correct<br>Factor<br>dB/m<br>-14.96<br>-17.83<br>-24.05  | Measurement   dBuV/m   26.03   28.83                  | Limit<br>dBuV/m<br>40.00<br>40.00          | Over<br>dB<br>-13.97<br>-11.17           | Detector<br>peak<br>peak<br>peak |
| No. Mk. Fr<br>Mi<br>1 31.6<br>2 36.2<br>3 * 49.1 | Readin     eq.   Level     dBuV   202   40.99     541   46.66   865   53.60     320   46.75 | g Correct<br>Factor<br>dB/m<br>-14.96<br>-17.83<br>-24.05<br>-23.56                              | Measure-<br>ment<br>dBuV/m<br>26.03<br>28.83<br>29.55 | Limit<br>dBuV/m<br>40.00<br>40.00<br>40.00 | Over<br>dB<br>-13.97<br>-11.17<br>-10.45 | Detector<br>peak<br>peak         |



| EUT         | :        |        | The sm      | hart bra                  |          | Model:        |                    | NY-1.0        |  |  |
|-------------|----------|--------|-------------|---------------------------|----------|---------------|--------------------|---------------|--|--|
| Tem         | perature | :      | <b>25</b> ℃ | Call                      | 20       | Relative I    | Humidity:          | 55%           |  |  |
| Test        | Voltage  | 1      | DC 5V       | 1970                      | -        | TOBY TOBY     |                    |               |  |  |
| Ant.        | Pol.     |        | Horizoi     | ntal                      |          |               |                    |               |  |  |
| <b>Fest</b> | Mode:    |        | BLE M       | ode TX 24                 | 402 MHz  | 600           |                    |               |  |  |
| Rem         | nark:    |        |             | ort for the<br>bed limit. | emission | which more th | an 10 dB below the |               |  |  |
| 100.0       | dBu¥/m   |        |             |                           |          |               |                    |               |  |  |
|             |          |        |             |                           |          |               |                    |               |  |  |
|             |          |        |             |                           |          |               |                    |               |  |  |
|             |          |        |             |                           |          |               | (RF) FCC PAI       | RT 15C (PEAK) |  |  |
|             |          |        |             |                           |          |               |                    |               |  |  |
|             |          | 2<br>X |             |                           |          |               | (RF) FCC P/        | ART 15C (AVG) |  |  |
| 50          |          | 1<br>X |             |                           |          |               |                    |               |  |  |
|             |          | Ŷ      |             |                           |          |               |                    |               |  |  |
|             |          |        |             |                           |          |               |                    |               |  |  |
|             |          |        |             |                           |          |               |                    |               |  |  |
|             |          |        |             |                           |          |               |                    |               |  |  |
| 0.0         |          |        |             |                           |          |               |                    |               |  |  |

| No | . Mk | . Freq.  | Reading<br>Level |       | Measure-<br>ment | Limit  | Over   |          |
|----|------|----------|------------------|-------|------------------|--------|--------|----------|
|    |      | MHz      | dBu∨             | dB/m  | dBuV/m           | dBuV/m | dB     | Detector |
| 1  | *    | 4804.462 | 33.47            | 13.44 | 46.91            | 54.00  | -7.09  | AVG      |
| 2  |      | 4804.485 | 45.01            | 13.44 | 58.45            | 74.00  | -15.55 | peak     |



| EUT:  |           | The smart bra                          | Model:                        | NY-1.0           |
|-------|-----------|--|-------------------------------|------------------|
| Temp  | perature: | <b>25</b> ℃                            | Relative Humidity             | : 55%            |
| Test  | Voltage:  | DC 5V                                  | 0                             |                  |
| Ant.  | Pol.      | Vertical                               |                               | TOR!             |
| Test  | Mode:     | BLE Mode TX 2402                       | 2 MHz                         | 2 14             |
| Rema  | ark:      | No report for the er prescribed limit. | nission which more than 10 dB | below the        |
| 100.0 | dBuV/m    |  |                               |                  |
|       |           |  |                               |                  |
|       |           |  |                               |                  |
|       |           |  | (RF) FCC                      | PART 15C (PEAK)  |
|       |           |  |                               |                  |
|       | 2<br>X    |  | (BE) FC                       | C PART 15C (AVG) |
| 50    | 1         |  |                               |                  |
|       | ×         |  |                               |                  |
|       |           |  |                               |                  |
|       |           |  |                               |                  |
|       |           |  |                               |                  |
|       |           |  |                               |                  |
| 0.0   |           |  |                               |                  |

| No | o. Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | O∨er   |          |
|----|-------|----------|------------------|-------------------|------------------|--------|--------|----------|
|    |       | MHz      | dBu∨             | dB/m              | dBuV/m           | dBuV/m | dB     | Detector |
| 1  | *     | 4804.027 | 33.45            | 13.44             | 46.89            | 54.00  | -7.11  | AVG      |
| 2  |       | 4804.255 | 44.24            | 13.44             | 57.68            | 74.00  | -16.32 | peak     |



| EU1  | Γ:             |        | The sma               | rt bra   |            | Model:        |              | NY-1.0       |  |  |  |
|------|----------------|--------|-----------------------|----------|------------|---------------|--------------|--------------|--|--|--|
| Terr | perature:      |        | <b>25</b> ℃           | Call!    |            | Relative      | Humidity:    | 55%          |  |  |  |
| ſes  | t Voltage:     |        | DC 5V                 | 1000     | -          | 80            | 1100         |              |  |  |  |
| ۱nt  | . Pol.         |        | Horizont              | al       | M.A        |               |              |              |  |  |  |
| es   | t Mode:        |        | BLE Mod               | de TX 24 | 42 MHz     | MID           |              |              |  |  |  |
| Ren  | n <b>ark</b> : |        | No repor<br>prescribe |          | emission v | which more th | an 10 dB be  | low the      |  |  |  |
| 00.0 | dBuV/m         |        |                       |          |            |               |              |              |  |  |  |
|      |                |        |                       |          |            |               |              |              |  |  |  |
|      |                |        |                       |          |            |               |              |              |  |  |  |
|      |                |        |                       |          |            |               | (RF) FCC PAR | T 15C (PEAK) |  |  |  |
|      |                |        |                       |          |            |               |              |              |  |  |  |
|      |                | 1<br>X |                       |          |            |               | (BF) FCC PA  | RT 15C (AVG) |  |  |  |
| 50   |                | 2<br>X |                       |          |            |               |              |              |  |  |  |
|      |                | ^      |                       |          |            |               |              |              |  |  |  |
|      |                |        |                       |          |            |               |              |              |  |  |  |
|      |                |        |                       |          |            |               |              |              |  |  |  |
|      |                |        |                       |          |            |               |              |              |  |  |  |
|      |                |        |                       |          |            |               |              |              |  |  |  |
| 0.0  |                |        |                       |          |            |               |              |              |  |  |  |

| No | . Mk | . Freq.  | Reading<br>Le∨el |       | Measure-<br>ment | Limit  | O∨er   |          |
|----|------|----------|------------------|-------|------------------|--------|--------|----------|
|    |      | MHz      | dBu∨             | dB/m  | dBuV/m           | dBuV/m | dB     | Detector |
| 1  |      | 4883.537 | 44.06            | 13.92 | 57.98            | 74.00  | -16.02 | peak     |
| 2  | *    | 4884.255 | 33.95            | 13.92 | 47.87            | 54.00  | -6.13  | AVG      |



| EUT         | :         |        | The small           | art bra  |          | Model      | :               | NY-1.0        |  |  |
|-------------|-----------|--------|---------------------|----------|----------|------------|-----------------|---------------|--|--|
| Гem         | perature: |        | <b>25</b> ℃         | Call     | 3.5      | Relativ    | ve Humidity:    | 55%           |  |  |
| <b>Fest</b> | Voltage:  |        | DC 5V               | 100      | -        | 20 -       | (In)            |               |  |  |
| Ant.        | Pol.      |        | Vertical            |          | 110      |            |                 |               |  |  |
| ſest        | Mode:     |        | BLE Mo              | de TX 24 | 442 MHz  | 1100       |                 |               |  |  |
| Rem         | nark:     |        | No repo<br>prescrib |          | emission | which more | e than 10 dB be | elow the      |  |  |
| 100.0       | dBuV/m    |        |                     |          |          |            |                 |               |  |  |
|             |           |        |                     |          |          |            |                 |               |  |  |
|             |           |        |                     |          |          |            |                 |               |  |  |
|             |           |        |                     |          |          |            | (RF) FCC PA     | RT 15C (PEAK) |  |  |
|             |           |        |                     |          |          |            |                 |               |  |  |
|             |           | 2<br>X |                     |          |          |            | (BF) FCC P/     | ART 15C (AVG) |  |  |
| 50          |           | 1<br>X |                     |          |          |            |                 |               |  |  |
|             |           | ·· ·   |                     |          |          |            |                 |               |  |  |
|             |           |        |                     |          |          |            |                 |               |  |  |
|             |           |        |                     |          |          |            |                 |               |  |  |
|             |           |        |                     |          |          |            |                 |               |  |  |
| 0.0         |           |        |                     |          |          |            |                 |               |  |  |

| No. Mk. |   | . Freq.  | Reading<br>Level |       | Measure-<br>ment | Limit  | O∨er   |          |
|---------|---|----------|------------------|-------|------------------|--------|--------|----------|
|         |   | MHz      | dBu∨             | dB/m  | dBuV/m           | dBuV/m | dB     | Detector |
| 1       | * | 4884.086 | 34.10            | 13.92 | 48.02            | 54.00  | -5.98  | AVG      |
| 2       |   | 4884.448 | 45.12            | 13.92 | 59.04            | 74.00  | -14.96 | peak     |



| EUT  | :        |        | The sn      | hart bra |          | Mode  | l:            | NY-1.0        |
|--|----------|--------|-------------|----------|----------|-------|---------------|---------------|
| Temperature:   |          |        | <b>25</b> ℃ | 600      |          | Relat | ive Humidity: | 55%           |
| Test   | Voltage: |        | DC 5V       | A.       | -        | 12    | 10            | 192           |
| Ant.   | Pol.     |        | Horizo      | ntal     |          |       | 20            | -             |
| <b>Fest</b>  | Mode:    |        | BLE M       | ode TX 2 | 2480 MHz |       | Les -         |               |
| Remark: No report for the emission which more than 10 dB bel prescribed limit. |          |        |             |          | elow the |       |               |               |
| 100.0  | dBuV/m   |        |             |          |          |       |               |               |
|  |          |        |             |          |          |       |               |               |
|  |          |        |             |          |          |       |               |               |
|  |          |        |             |          |          |       | (RF) FCC PA   | RT 15C (PEAK) |
|  |          |        |             |          |          |       |               |               |
|  |          | 2<br>X |             |          |          |       | (RF) FCC F    | ART 15C (AVG) |
| 50   |          | 1<br>X |             |          |          |       |               |               |
|  |          |        |             |          |          |       |               |               |
|  |          |        |             |          |          |       |               |               |
|  |          |        |             |          |          |       |               |               |
|  |          |        |             |          |          |       |               |               |
| 0.0  |          |        |             |          |          |       |               |               |

| No. Mk. |   | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | O∨er   |          |
|---------|---|----------|------------------|-------------------|------------------|--------|--------|----------|
|         |   | MHz      | dBuV             | dB/m              | dBuV/m           | dBuV/m | dB     | Detector |
| 1       | * | 4960.187 | 33.93            | 14.36             | 48.29            | 54.00  | -5.71  | AVG      |
| 2       |   | 4960.297 | 44.31            | 14.36             | 58.67            | 74.00  | -15.33 | peak     |



| EUT:           |           | The smart bra  | Model:                      |                 | NY-1.0        |  |  |  |  |
|----------------|-----------|--|-----------------------------|-----------------|---------------|--|--|--|--|
| <b>Fempera</b> | ture:     | <b>25</b> ℃  | Relative                    | Humidity:       | 55%           |  |  |  |  |
| Fest Volt      | age:      | DC 5V  |                             | (Ing)           | 29            |  |  |  |  |
| Ant. Pol.      |           | Vertical   |                             |                 |               |  |  |  |  |
| Test Mod       | le:       | BLE Mode TX 2  | 2480 MHz                    |                 | 110           |  |  |  |  |
| Remark:        |           | No report for the emission which more than 10 dB below the prescribed limit. |                             |                 |               |  |  |  |  |
| 100.0 dBu¥     | 7m        |  |                             |                 |               |  |  |  |  |
|                |           |  |                             |                 |               |  |  |  |  |
|                |           |  |                             |                 |               |  |  |  |  |
|                |           |  |                             | (RF) FCC PA     | RT 15C (PEAK) |  |  |  |  |
|                |           |  |                             |                 |               |  |  |  |  |
|                | 2<br>X    |  |                             |                 |               |  |  |  |  |
| 50             | 1         |  |                             | (RF) FCC P.     | ART 15C (AVG) |  |  |  |  |
| 50             | ×         |  |                             |                 |               |  |  |  |  |
|                |           |  |                             |                 |               |  |  |  |  |
|                |           |  |                             |                 |               |  |  |  |  |
|                |           |  |                             |                 |               |  |  |  |  |
|                |           |  |                             |                 |               |  |  |  |  |
| 0.0            |           |  |                             |                 |               |  |  |  |  |
| 1000.000       | 2550.00 0 | 5100.00 8650.00 <b>1</b>   | 1200.00 13750.00 16300.00 1 | 8850.00 21400.0 | 0 26500.00 MH |  |  |  |  |

| No. Mk. |   | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |
|---------|---|----------|------------------|-------------------|------------------|--------|--------|----------|
|         |   | MHz      | dBu∨             | dB/m              | dBuV/m           | dBuV/m | dB     | Detector |
| 1       | * | 4959.520 | 33.96            | 14.36             | 48.32            | 54.00  | -5.68  | AVG      |
| 2       |   | 4959.878 | 44.67            | 14.36             | 59.03            | 74.00  | -14.97 | peak     |

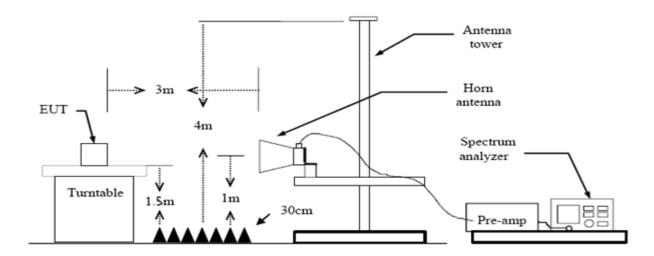


# 6. Restricted Bands Requirement

- 6.1 Test Standard and Limit
  - 6.1.1 Test Standard
    - FCC Part 15.209 FCC Part 15.205
  - 6.1.2 Test Limit

| Restricted Frequency | Class B (dBuV/m)(at 3 M) |         |  |  |  |
|----------------------|--------------------------|---------|--|--|--|
| Band<br>(MHz)        | Peak                     | Average |  |  |  |
| 2310 ~2390           | 74                       | 54      |  |  |  |
| 2483.5 ~2500         | 74                       | 54      |  |  |  |

### 6.2 Test Setup



### 6.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked



and then Quasi Peak detector mode re-measured.

- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 KHz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.
- 6.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

6.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=1kHz with Peak Detector for Average Values.

Test data please refer the following pages.



## (1) Radiation Test

3

4

\*

Х

|              |                     | -      |                      |             |               |                   |               |              |            |
|--------------|---------------------|--------|----------------------|-------------|---------------|-------------------|---------------|--------------|------------|
| EUT:         |                     |        | The s                | smart bra   |               | Model:            |               | NY-1.0       |            |
| Temperature: |                     |        | <b>25</b> ℃          |             |               | Relative Hu       | Humidity: 55% |              |            |
| Test         | Test Voltage: DC 5V |        |                      |             |               |                   | C.S.          |              | 21         |
| Ant.         | Pol.                |        | Horizontal           |             |               |                   |               |              |            |
| Test         | Mode:               |        | BLE Mode TX 2402 MHz |             |               |                   |               |              | 5          |
| Rem          | ark:                |        | N/A                  |             | AUDE          |                   | 3900          |              | 20 2       |
| 100.0        | dBu¥/m              |        |                      |             |               |                   |               |              |            |
| Γ            |                     |        |                      |             |               |                   | 4             |              |            |
| -            |                     |        |                      |             |               |                   | Ň             |              |            |
| -            |                     |        |                      |             |               |                   | (BF) FCC PA   | RT 15C (PEAK | a –        |
|              |                     |        |                      |             |               |                   |               |              |            |
|              |                     |        |                      |             |               |                   |               |              |            |
| 50           |                     |        |                      |             |               |                   | (RF) FCC P    | ART 15C (AVG | 0          |
| 50           |                     |        |                      |             |               | 1                 | 1             |              |            |
| -            |                     |        |                      |             |               | ×                 |               |              |            |
|              |                     |        |                      | ·····       |               | 2                 |               |              |            |
|              |                     |        |                      |             |               |                   |               |              |            |
|              |                     |        |                      |             |               |                   |               |              |            |
| 0.0          |                     |        |                      |             |               |                   |               |              |            |
| 232          | 20.000 2330         | ).00 2 | 340.00               | 2350.00 236 | 50.00 2370.00 | 2380.00 2390.0    | 0 2400.00     | ) 2          | 420.00 MHz |
|              |                     |        |                      |             |               |                   |               |              |            |
|              |                     |        |                      | Reading     | Correct       | Measure-          |               |              |            |
| N            | lo. Mk.             | Fr     | eq.                  | Level       | Factor        | ment <sup>I</sup> | Limit         | O∨er         |            |
|              |                     | М      | Hz                   | dBu∨        | dB/m          | dBuV/m            | dBuV/m        | dB           | Detector   |
| 1            |                     | 2390   | .000                 | 39.86       | 0.77          | 40.63             | 74.00         | -33.37       | peak       |
| 2            |                     | 2390   | .000                 | 27.21       | 0.77          | 27.98             | 54.00         | -26.02       | AVG        |

Emission Level= Read Level+ Correct Factor

87.77

93.06

0.82

0.82

88.59

93.88

**Fundamental Frequency** 

**Fundamental Frequency** 

2402.100

2402.200

AVG

peak



| EUT:          | The smart bra                          | Model:      | NY-1.0                   |
|---------------|--|-------------|--------------------------|
| Temperature:  | <b>25</b> ℃                            | Relative Hu | midity: 55%              |
| Fest Voltage: | DC 5V                                  |             | 6000                     |
| Ant. Pol.     | Vertical                               |             |                          |
| Test Mode:    | BLE Mode TX 24                         | l02 MHz     |                          |
| Remark:       | N/A                                    |             |                          |
| 100.0 dBu¥/m  |  |             |                          |
|               |  |             | 3<br>X                   |
|               |  |             | 4<br>X                   |
|               |  |             | (RF) FCC PART 15C (PEAK) |
|               |  |             |                          |
|               |  |             |                          |
|               |  |             | (RF) FOC PART 15C (AVG)  |
| 50            |  |             |                          |
|               |  | 1<br>*      |                          |
|               |  | 2           |                          |
|               | ************************************** | A           |                          |
|               |  |             |                          |
|               |  |             |                          |
| 0.0           |  |             |                          |

| No | . Mk | . Freq.  | Reading<br>Le∨el | Correct<br>Factor | Measure-<br>ment | Limit                 | O∨er   |          |
|----|------|----------|------------------|-------------------|------------------|-----------------------|--------|----------|
|    |      | MHz      | dBu∨             | dB/m              | dBuV/m           | dBuV/m                | dB     | Detector |
| 1  |      | 2390.000 | 38.73            | 0.77              | 39.50            | 74.00                 | -34.50 | peak     |
| 2  |      | 2390.000 | 27.27            | 0.77              | 28.04            | 54.00                 | -25.96 | AVG      |
| 3  | Х    | 2402.100 | 92.55            | 0.82              | 93.37            | Fundamental Frequency |        | peak     |
| 4  | *    | 2402.100 | 85.76            | 0.82              | 86.58            | Fundamental Frequency |        | AVG      |



| EUT:             | The smart bra             | Model:                          | NY-1.0        |
|------------------|---------------------------|---------------------------------|---------------|
| emperature:      | <b>25</b> ℃               | Relative Humidity:              | 55%           |
| fest Voltage:    | DC 5V                     |                                 | 39            |
| Ant. Pol.        | Horizontal                |                                 |               |
| fest Mode:       | BLE Mode TX 2480 MH       | Iz MID                          | ALL L         |
| Remark:          | N/A                       |                                 |               |
| 100.0 dBuV/m     |                           |                                 |               |
|                  | 1                         |                                 |               |
|                  | ×                         |                                 |               |
|                  |                           |                                 | RT 15C (PEAK) |
|                  |                           |                                 | TI TOL (PEAK) |
|                  |                           |                                 |               |
|                  | 3                         | (RF) FCC P/                     | ART 15C (AVG) |
| 50               |                           |                                 |               |
|                  |                           |                                 |               |
|                  |                           |                                 |               |
| ······           |                           |                                 |               |
|                  |                           |                                 |               |
|                  |                           |                                 |               |
| 0.0              |                           |                                 |               |
| 2460.000 2470.00 | 2480.00 2490.00 2500.00 2 | 2510.00 2520.00 2530.00 2540.00 | 2560.00 MH    |

| No | . Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit         | O∨er     |          |
|----|------|----------|------------------|-------------------|------------------|---------------|----------|----------|
|    |      | MHz      | dBu∨             | dB/m              | dBuV/m           | dBuV/m        | dB       | Detector |
| 1  | Х    | 2480.000 | 90.08            | 1.15              | 91.23            | Fundamental F | requency | peak     |
| 2  | *    | 2480.000 | 85.13            | 1.15              | 86.28            | Fundamental F | requency | AVG      |
| 3  |      | 2483.500 | 53.50            | 1.17              | 54.67            | 74.00         | -19.33   | peak     |
| 4  |      | 2483.500 | 47.81            | 1.17              | 48.98            | 54.00         | -5.02    | AVG      |

#### Emission Level= Read Level+ Correct Factor



| UT:    |            | The      | smart bra            |               | Model:      |               | NY-        | 1.0       |
|--------|------------|----------|----------------------|---------------|-------------|---------------|------------|-----------|
| empe   | rature:    | 25       | °C                   |               | Relative    | Humidity:     | 55%        |           |
| est V  | oltage:    | DC       | 5V                   |               | 81          | (Da)          | 33         |           |
| nt. P  | ol.        | Vert     | ical                 | UIP .         |             |               | -          | 621       |
| est M  | ode:       | BLE      | BLE Mode TX 2480 MHz |               |             |               |            | W.        |
| lemar  | k:         | N/A      | 1 Store              | 1             |             | 2013          | 51         |           |
| 00.0 d | BuV/m      |          |                      |               |             |               |            |           |
|        |            | 2        |                      |               |             |               |            |           |
|        |            |          |                      |               |             |               |            |           |
|        |            |          |                      |               |             |               |            |           |
| -      |            | <u> </u> |                      |               |             | (RF) FCC PA   | rt 15C (Pe | AKJ       |
|        |            |          |                      |               |             |               |            |           |
|        |            | 3        |                      |               |             | (RF) FCC P    | ART 15C (A | VG)       |
| 50     |            |          |                      |               |             |               |            |           |
|        |            |          | \                    |               |             |               |            |           |
|        |            |          |                      |               |             |               |            |           |
|        |            |          | harmon               |               |             |               | ······     |           |
|        |            |          |                      |               |             |               |            |           |
|        |            |          |                      |               |             |               |            |           |
| 0.0    |            |          |                      |               |             |               |            |           |
| 2460.0 | 00 2470.00 | 2480.00  | 2490.00 25           | 00.00 2510.00 | 2520.00 253 | 30.00 2540.00 | )          | 2560.00 M |
|        |            |          |                      |               |             |               |            |           |
|        |            |          | Reading              | Correct       | Measure-    |               |            |           |
| No.    | Mk.        | Freq.    | Level                | Factor        | ment        | Limit         | O∨er       |           |
|        |            | MHz      | dBuV                 | dB/m          | dBuV/m      | dBuV/m        | dB         | Detecto   |

|   |   |          |       | GE/TH |       |                       |      |
|---|---|----------|-------|-------|-------|-----------------------|------|
| 1 | * | 2480.000 | 84.19 | 1.15  | 85.34 | Fundamental Frequency | AVG  |
| 2 | Х | 2480.200 | 88.99 | 1.15  | 90.14 | Fundamental Frequency | peak |
| 3 |   | 2483.500 | 53.81 | 1.17  | 54.98 | 74.00 -19.02          | peak |
| 4 |   | 2483.500 | 47.40 | 1.17  | 48.57 | 54.00 -5.43           | AVG  |
|   |   |          |       |       |       |                       |      |

### Emission Level= Read Level+ Correct Factor



## (2) Conducted Test

| Peak<br>Log<br>10<br>dB/<br>offst<br>3<br>dB<br>DI<br>-20.2<br>dBm<br>DI<br>-20.2<br>dBm  | 325 GHz<br>)7 dBm  |
|---|--------------------|
| st Mode: BLE Mode TX 2402MHz / BLE Mode TX 2480MHz   smark: The EUT is programed in continuously transmitting mode   Agilent Mkr4 2.368   Ref 10 dBm #Atten 25 dB   Peak -55.07   10 0   0 0 0   0 0 0   0 0 0   0 0 0   0 0 0   0 0 0   0 0 0   0 0 0 <td>325 GHz<br/>)7 dBm</td>  | 325 GHz<br>)7 dBm  |
| Agilent<br>Mkr4 2.368<br>Ref 10 dBm #Atten 25 dB -55.0<br>Peak<br>Log<br>10<br>dB/<br>Offst<br>3 dB<br>Di<br>-20.19 dBm<br>Center 2.366 GHz<br>Kef 10 kHz<br>Kef 10   | 325 GHz<br>)7 dBm  |
| Agilent<br>Mkr4 2.368<br>Ref 10 dBm #Atten 25 dB -55.07<br>Peak<br>Log<br>10<br>dB/<br>Offst<br>3<br>B<br>Display Line<br>-20.19 dBm<br>DI<br>-20.2<br>dBm<br>Center 2.366 GHz<br>#Res BW 100 kHz<br>#VBW 300 kHz<br>Syan 1<br>Syan | 325 GHz<br>)7 dBm  |
| Mkr4 2.368<br>Ref 10 dBm #Atten 25 dB -55.07<br>Peak<br>Log<br>10<br>dB/<br>Offst<br>3<br>dB<br>Di<br>-20.19 dBm<br>-20.19 dBm<br>Center 2.366 GHz<br>#Res BW 100 kHz<br>#VBW 300 kHz<br>Span 1<br>Sweep 10.36 ms (40<br>Marker Trace Type X Axis Amplitude   | 07 dBm<br>100 MHz  |
| Mkr4 2.368<br>Ref 10 dBm #Atten 25 dB -55.07<br>Peak<br>Log<br>10<br>dB/<br>Offst<br>3<br>dB<br>Di<br>-20.19 dBm<br>-20.19 dBm<br>Center 2.366 GHz<br>#Res BW 100 kHz<br>#VBW 300 kHz<br>Span 1<br>Sweep 10.36 ms (40<br>Marker Trace Type X Axis Amplitude   | 07 dBm<br>100 MHz  |
| Peak<br>Log<br>10<br>dB/<br>Offst<br>3<br>dB<br>DI<br>-20.19 dBm<br>-20.19 dBm<br>-20.2<br>dBm<br>Center 2.366 GHz<br>#Res BW 100 kHz<br>#Res BW 100 kHz<br>Marker Trace Type X Axis Amplitude  | 100 MHz            |
| Log<br>10<br>dB/<br>Offst<br>3<br>dB<br>Di<br>-20.19 dBm<br>-20.19 dBm<br>-20.29 dBm<br>-20.2 dBm<br>Center 2.366 GHz<br>#Res BW 100 kHz<br>#VBW 300 kHz<br>Sweep 10.36 ms (40<br>Marker Trace Type X Axis Amplitude  |                    |
| dB/<br>Offst<br>3<br>dB<br>DI<br>-20.19 dBm<br>-20.2<br>dBm<br>Center 2.366 GHz<br>#Res BW 100 kHz<br>#Res BW 100 kHz<br>Marker Trace Type X Axis Amplitude   |                    |
| offst<br>3<br>dB<br>DI<br>-20.19 dBm<br>-20.2<br>dBm<br>Center 2.366 GHz<br>#Res BW 100 kHz<br>#Res BW 100 kHz<br>Marker Trace Type X Axis Amplitude  |                    |
| DI<br>-20.2<br>dBm<br>Center 2.366 GHz<br>#Res BW 100 kHz<br>Marker Trace Type X Axis Amplitude   |                    |
| DI<br>-20.2<br>dBm<br>Center 2.366 GHz<br>#Res BW 100 kHz<br>Marker Trace Type X Axis Amplitude   |                    |
| dBm<br>Center 2.366 GHz<br>#Res BW 100 kHz<br>Marker Trace Type X Axis Amplitude  |                    |
| Center 2.366 GHz Span 1<br>#Res BW 100 kHz #VBW 300 kHz Sweep 10.36 ms (40<br>Marker Trace Type X Axis Amplitude  |                    |
| #Res BW 100 kHz   #VBW 300 kHz   Sweep 10.36 ms (40     Marker   Trace   Type   X Axis   Amplitude  |                    |
| #Res BW 100 kHz   #VBW 300 kHz   Sweep 10.36 ms (40     Marker   Trace   Type   X Axis   Amplitude  |                    |
|   | 01 pts)            |
|   |                    |
| 2 (1) Freq 2.39000 GHz -56.33 dBm   |                    |
| 3   (1)   Freq   2.40000 GHz   -53.82 dBm     4   (1)   Freq   2.36825 GHz   -55.07 dBm   |                    |
|   |                    |
| Agilent   |                    |
| Mkr1 2.479<br>Ref 10 dBm #Atten 25 dB -0.62   | 975 GHz<br>29 dBm  |
| Peak 1  |                    |
| Log<br>10   |                    |
| dB/   |                    |
| offst Display Line  |                    |
| <sup>3</sup> <sub>ав</sub> -20.63 dВm   |                    |
|   |                    |
| -20.6<br>dBm  |                    |
|   |                    |
|   |                    |
| Contor 2 511 GHz Span 1   |                    |
| Center 2.511 GHz Span 1<br>#Res BW 100 kHz #VBW 300 kHz Sweep 10.36 ms (40  | 100 MHz<br>01 pts) |
| #Res BW 100 kHz   #VBW 300 kHz   Sweep 10.36 ms (40     Marker   Trace   Type   X Axis   Amplitude  |                    |
| #Res BW 100 kHz   #VBW 300 kHz   Sweep 10.36 ms (40     Marker   Trace   Type   X Axis   Amplitude     1   (1)   Freq   2.47975 GHz   -0.629 dBm     2   (1)   Freq   2.48350 GHz   -56.44 dBm  |                    |
| #Res BW 100 kHz   #VBW 300 kHz   Sweep 10.36 ms (40     Marker   Trace   Type   X Axis   Amplitude     1   (1)   Freq   2.47975 GHz   -0.629 dBm     2   (1)   Freq   2.48350 GHz   -56.44 dBm  |                    |
| #Res BW 100 kHz   #VBW 300 kHz   Sweep 10.36 ms (40     Marker   Trace   Type   X Axis   Amplitude     1   (1)   Freq   2.47975 GHz   -0.629 dBm  |                    |
| #Res BW 100 kHz   #VBW 300 kHz   Sweep 10.36 ms (40     Marker   Trace   Type   X Axis   Amplitude     1   (1)   Freq   2.47975 GHz   -0.629 dBm     2   (1)   Freq   2.48350 GHz   -56.44 dBm  |                    |

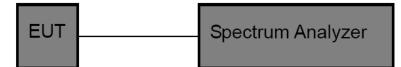


# 7. Bandwidth Test

- 7.1 Test Standard and Limit
  - 7.1.1 Test Standard
    - FCC Part 15.247 (a)(2)
  - 7.1.2 Test Limit

| FCC       | FCC Part 15 Subpart C(15.247)/RSS-247 |                      |  |  |  |  |
|-----------|---------------------------------------|----------------------|--|--|--|--|
| Test Item | Limit                                 | Frequency Range(MHz) |  |  |  |  |
| Bandwidth | >=500 KHz<br>(6dB bandwidth)          | 2400~2483.5          |  |  |  |  |

7.2 Test Setup



## 7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.
- (3)Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:100 kHz, and Video Bandwidth:300 kHz, Detector: Peak, Sweep Time set auto.

## 7.4 EUT Operating Condition

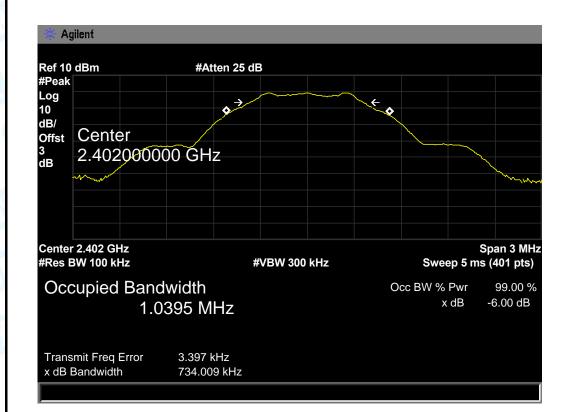
The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.



## 7.5 Test Data

| EUT:              | The smart bra |               | Model:             | NY-1.0 |  |  |  |  |
|-------------------|---------------|---------------|--------------------|--------|--|--|--|--|
| Temperature:      | <b>25 ℃</b>   |               | Relative Humidity: | 55%    |  |  |  |  |
| Test Voltage:     | DC            | 5V            | TUP                |        |  |  |  |  |
| Test Mode:        | BLE TX Mode   |               |                    |        |  |  |  |  |
| Channel frequency |               | 6dB Bandwidth | 99% Bandwidth      | Limit  |  |  |  |  |
| (MHz)             |               | (kHz)         | (kHz)              | (kHz)  |  |  |  |  |
| 2402              | 2 734.009     |               | 1039.50            |        |  |  |  |  |
| 2442              |               | 733.457       | 1037.20            | >=500  |  |  |  |  |
| 2480              |               | 735.953       | 1045.60            |        |  |  |  |  |
|                   | BLE Mode      |               |                    |        |  |  |  |  |
|                   |               |               |                    |        |  |  |  |  |

2402 MHz









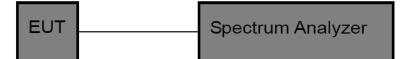


# 8. Peak Output Power Test

- 8.1 Test Standard and Limit
  - 8.1.1 Test Standard
    - FCC Part 15.247 (b)
  - 8.1.2 Test Limit

| FCC Part 15 Subpart C(15.247)/RSS-247 |                  |                     |  |  |  |
|---------------------------------------|------------------|---------------------|--|--|--|
| Test Item                             | Limit            | Frequency Range(MHz |  |  |  |
| Peak Output Power                     | 1 Watt or 30 dBm | 2400~2483.5         |  |  |  |

### 8.2 Test Setup



### 8.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement is according to section 9.1.1 of KDB 558074 D01 DTS Meas Guidance v03r03.

- (1) Set the RBW≥DTS Bandwidth
- (2) Set VBW≥3\*RBW
- (3) Set Span≥3\*RBW
- (4) Sweep time=auto
- (5) Detector= peak
- (6) Trace mode= maxhold.
- (7) Allow trace to fully stabilize, and then use peak marker function to determine the peak amplitude level.

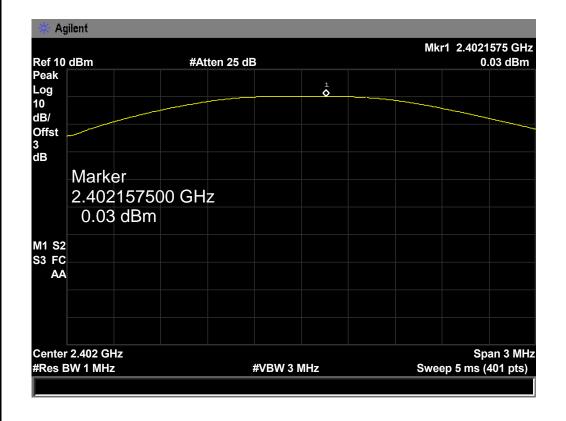
### 8.4 EUT Operating Condition

The EUT was set to continuously transmitting in the max power during the test.

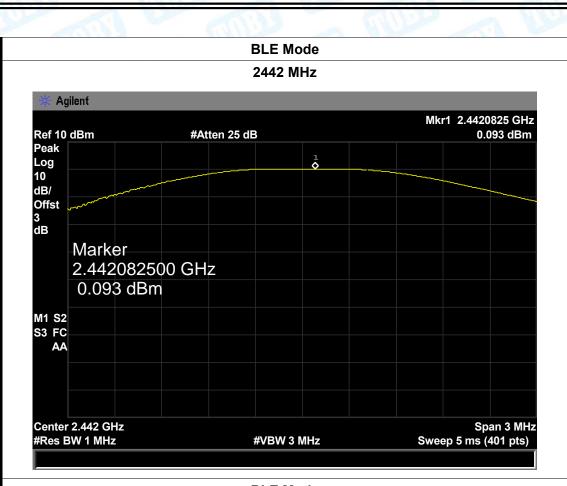


## 8.5 Test Data

| EUT:                    | The smar    | t bra         | Model:             | NY-1.0    |
|-------------------------|-------------|---------------|--------------------|-----------|
| Temperature:            | <b>25</b> ℃ |               | Relative Humidity: | 55%       |
| Test Voltage:           | DC 5V       | ein ein       | MUL                |           |
| Test Mode:              | BLE TX M    | lode          | any.               |           |
| Channel frequency (MHz) |             | Test Result ( | dBm) Lii           | nit (dBm) |
| 2402                    |             | 0.030         |                    |           |
| 2442                    |             | 0.093         |                    | 30        |
| 2480                    |             | -0.419        |                    |           |
|                         |             | BLE Mod       | e                  |           |
|                         |             | 2402 MH       | Z                  |           |







# BLE Mode

2480 MHz

|                 |             | _          | Mkr1 2.4  | 4801125 GH           |  |  |
|-----------------|-------------|------------|-----------|----------------------|--|--|
| Ref 10 dBm      | #Atten 25 c | B          |           | -0.419 dBm           |  |  |
| Peak            |             | 1          |           |                      |  |  |
| -og<br> 0       |             |            |           |                      |  |  |
| IB/             | ~~~~~       |            |           |                      |  |  |
| Offst           |             |            |           |                      |  |  |
| 3 1             |             |            |           |                      |  |  |
| B               |             |            |           |                      |  |  |
| Marker          |             |            |           |                      |  |  |
| 2.480112        | 500 GHz     |            |           |                      |  |  |
| -0.419 dB       |             |            |           |                      |  |  |
| -0.419 00       |             |            |           |                      |  |  |
| M1 S2           |             |            |           |                      |  |  |
| S3 FC           |             |            |           |                      |  |  |
| AA              |             |            |           |                      |  |  |
|                 |             |            |           |                      |  |  |
|                 |             |            |           |                      |  |  |
|                 |             |            |           |                      |  |  |
|                 |             |            |           |                      |  |  |
| Center 2.48 GHz |             |            |           | Span 3 MH            |  |  |
| #Res BW 1 MHz   |             | #VBW 3 MHz | Sweep 5 r | Sweep 5 ms (401 pts) |  |  |

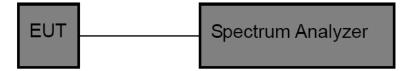


# 9. Power Spectral Density Test

- 9.1 Test Standard and Limit
  - 9.1.1 Test Standard
    - FCC Part 15.247 (e)
  - 9.1.2 Test Limit

| FCC Part 15 Subpart C(15.247) |                    |                      |  |  |  |
|-------------------------------|--------------------|----------------------|--|--|--|
| Test Item                     | Limit              | Frequency Range(MHz) |  |  |  |
| Power Spectral Density        | 8dBm(in any 3 kHz) | 2400~2483.5          |  |  |  |

### 9.2 Test Setup



### 9.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v03r03.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyser center frequency to DTS channel center frequenyc.
- (3) Set the span to 1.5 times the DTS bandwidth.
- (4) Set the RBW to: 3 kHz
- (5) Set the VBW to: 10 kHz
- (6) Detector: peak
- (7) Sweep time: auto
- (8) Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

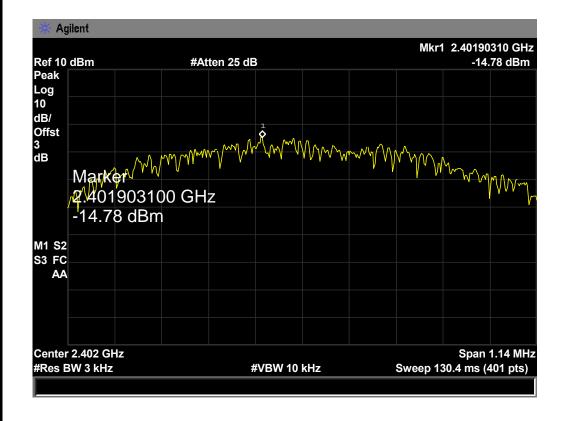
### 9.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Midle and high channel for the test.

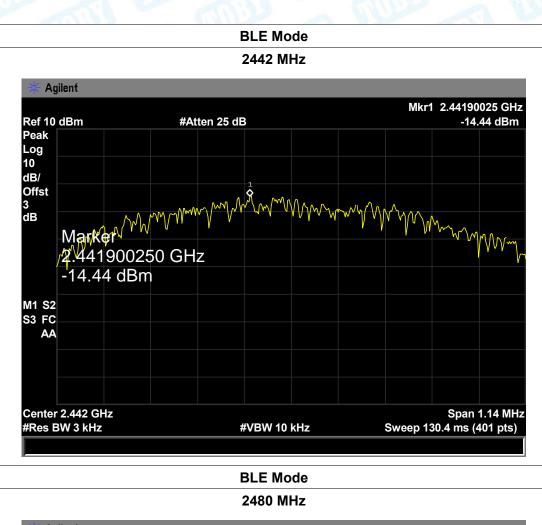


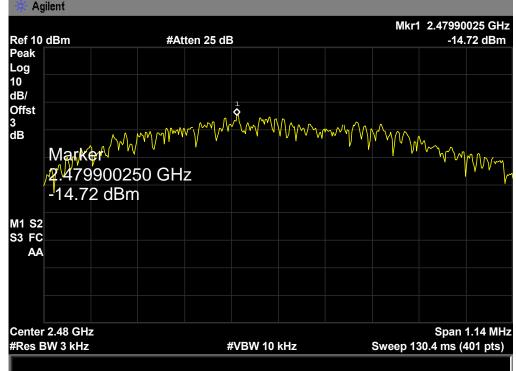
## 8.5 Test Data

| EUT:              | The smar | The smart bra |                    |  | NY-1.0 |
|-------------------|----------|---------------|--------------------|--|--------|
| Temperature:25 °C |          |               | Relative Humidity: |  | 55%    |
| Test Voltage:     | DC 5V    |               | 2                  |  | 0133   |
| Test Mode:        | BLE TX N | lode          | - ONU              |  |        |
| Channel Frequency |          | Power Density |                    |  | Limit  |
| (MHz)             |          | (3 kHz/dBm)   |                    |  | (dBm)  |
| 2402              | 2402     |               | -14.78             |  |        |
| 2442              |          | -14.44        |                    |  | 8      |
| 2480              |          | -14.72        |                    |  |        |
|                   |          | BLE           | E Mode             |  |        |
|                   |          | 240           | 02 MHz             |  |        |
|                   |          |               |                    |  |        |











# 10. Antenna Requirement

### 10.1 Standard Requirement

#### 10.1.1 Standard

FCC Part 15.203

#### 10.1.2 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 an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

#### 10.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is 0 dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

#### 10.3 Result

The EUT antenna is a Integral Antenna. It complies with the standard requirement.

| Antenna Type |                                   |
|--------------|-----------------------------------|
| 2            | Permanent attached antenna        |
|              | □ Unique connector antenna        |
| (TEI)        | Professional installation antenna |
|              |                                   |