# FCC TEST REPORT

**Test report**
**On Behalf of**
**Pilotfly GmbH**
**For**
**Follow FOCUS**
**Model No.: PFY-FF-01,PFY-FF-XX**
**(X represents the number from 0 to 9)**

**FCC ID: 2ATHA-FF-01**

| | |
|---|---|
| **Prepared for :** | **Pilotfly GmbH**<br>**Biberkopfstr.9 86163 Augsburg Germany** |
| **Prepared By :** | **Shenzhen HUAK Testing Technology Co., Ltd.**<br>**1F, B2 Building, Junfeng Zhongcheng Zhizao Innovation Park, Fuhai Street, Bao'an District, Shenzhen City, China** |
| **Date of Test:** | **Apr. 29, 2018 ~ May. 09, 2019** |
| **Date of Report:** | **May. 09, 2019** |
| **Report Number:** | **HK1904300958-E** |

# TEST RESULT CERTIFICATION

| | | |
|---|---|---|
| **Applicant's name** | : | Pilotfly GmbH |
| Address | : | Biberkopfstr.9 86163 Augsburg Germany |
| **Manufacture's Name** | : | Pilotfly GmbH |
| Address | : | Biberkopfstr.9 86163 Augsburg Germany |

**Product description**

| | | |
|---|---|---|
| Trade Mark: | | PFY |
| Product name | : | Follow FOCUS |
| Model and/or type reference | : | PFY-FF-01,PFY-FF-XX (X represents the number from 0 to 9) |
| **Standards** | : | FCC Rules and Regulations Part 15 Subpart C Section 15.249<br>ANSI C63.10: 2013 |

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| | | |
|---|---|---|
| **Date of Test** | : | |
| Date (s) of performance of tests | : | **Apr. 29, 2018 ~ May. 09, 2019** |
| Date of Issue | : | **May. 09, 2019** |
| Test Result | : | **Pass** |

Testing Engineer : Gary Qian

(Gary Qian)

Technical Manager : Eden Hu

(Eden Hu)

Authorized Signatory : Jason Zhou

(Jason Zhou)

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# 1. TEST SUMMARY

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| RADIATED EMISSION TEST | COMPLIANT |
| BAND EDGE | COMPLIANT |
| OCCUPIED BANDWIDTH MEASUREMENT | COMPLIANT |
| ANTENNA REQUIREMENT | COMPLIANT |

## 1.2 TEST FACILITY

Test Firm : Shenzhen HUAK Testing Technology Co., Ltd.

Address 1F, B2 Building, Junfeng Zhongcheng Zhizao Innovation Park, Fuhai Street, Bao'an District, Shenzhen City, China

## 1.3 MEASUREMENT UNCERTAINTY

Measurement Uncertainty

| | | |
|---|---|---|
| Conducted Emission Expanded Uncertainty | = | 2.23dB, k=2 |
| Radiated emission expanded uncertainty(9kHz-30MHz) | = | 3.08dB, k=2 |
| Radiated emission expanded uncertainty(30MHz-1000MHz) | = | 4.42dB, k=2 |
| Radiated emission expanded uncertainty(Above 1GHz) | = | 4.06dB, k=2 |

## 2. GENERAL INFORMATION

2.1GENERAL DESCRIPTION OF EUT

| | |
|---|---|
| Equipment | Follow FOCUS |
| Model Name | PFY-FF-01,PFY-FF-XX<br>(X represents the number from 0 to 9) |
| Serial No. | N/A |
| Trade Mark | PFY |
| Model Difference | All models are identical except use different. |
| FCC ID | **2ATHA-FF-01** |
| Antenna Type | FCB Antenna |
| Antenna Gain | 0dBi |
| Operation frequency | 2402-2480MHz |
| Number of Channels | 40CH |
| Modulation Type | GFSK |
| PowerSource | DC3.7V Battery |
| Power Rating | DC3.7V Battery |

2.2 Carrier Frequency of Channels

| Channel List | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Channel** | **Frequency (MHz)** | **Channel** | **Frequency (MHz)** | **Channel** | **Frequency (MHz)** | **Channel** | **Frequency (MHz)** |
| 01 | 2402 | 11 | 2422 | 21 | 2442 | 31 | 2462 |
| 02 | 2404 | 12 | 2424 | 22 | 2444 | 32 | 2464 |
| 03 | 2406 | 13 | 2426 | 23 | 2446 | 33 | 2466 |
| 04 | 2408 | 14 | 2428 | 24 | 2448 | 34 | 2468 |
| 05 | 2410 | 15 | 2430 | 25 | 2450 | 35 | 2470 |
| 06 | 2412 | 16 | 2432 | 26 | 2452 | 36 | 2472 |
| 07 | 2414 | 17 | 2434 | 27 | 2454 | 37 | 2474 |
| 08 | 2416 | 18 | 2436 | 28 | 2456 | 38 | 2476 |
| 09 | 2418 | 19 | 2438 | 29 | 2458 | 39 | 2478 |
| 10 | 2420 | 20 | 2440 | 30 | 2460 | 40 | 2480 |

2.3 Operation of EUT during testing

Operating Mode
The mode is used: **Transmitting mode**
Low Channel: 2402MHz
Middle Channel: 2440MHz
High Channel: 2480MHz

2.4DESCRIPTION OF TEST SETUP

Operation of EUT during Conducted testing:


Operation of EUT during Radiation and Above1GHz Radiation testing:

2.5MEASUREMENT INSTRUMENTS LIST

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|---|---|---|---|---|---|---|
| 1. | L.I.S.N. Artificial Mains Network | R&S | ENV216 | HKE-002 | Dec. 28, 2018 | 1 Year |
| 2. | Receiver | R&S | ESCI 7 | HKE-010 | Dec. 28, 2018 | 1 Year |
| 3. | RF automatic control unit | Tonscend | JS0806-2 | HKE-060 | Dec. 28, 2018 | 1 Year |
| 4. | Spectrum analyzer | R&S | FSP40 | HKE-025 | Dec. 28, 2018 | 1 Year |
| 5. | Spectrum analyzer | Agilent | N9020A | HKE-048 | Dec. 28, 2018 | 1 Year |
| 6. | Preamplifier | Schwarzbeck | BBV 9743 | HKE-006 | Dec. 28, 2018 | 1 Year |
| 7. | EMI Test Receiver | Rohde & Schwarz | ESCI 7 | HKE-010 | Dec. 28, 2018 | 1 Year |
| 8. | Bilog Broadband Antenna | Schwarzbeck | VULB9163 | HKE-012 | Dec. 28, 2018 | 1 Year |
| 9. | Loop Antenna | Schwarzbeck | FMZB 1519 B | HKE-014 | Dec. 28, 2018 | 1 Year |
| 10. | Horn Antenna | Schewarzbeck | 9120D | HKE-013 | Dec. 28, 2018 | 1 Year |
| 11. | Pre-amplifier | EMCI | EMC051845 SE | HKE-015 | Dec. 28, 2018 | 1 Year |
| 12. | Pre-amplifier | Agilent | 83051A | HKE-016 | Dec. 28, 2018 | 1 Year |
| 13. | EMI Test Software EZ-EMC | Tonscend | JS1120-B Version | HKE-083 | Dec. 28, 2018 | N/A |
| 14. | Power Sensor | Agilent | E9300A | HKE-086 | Dec. 28, 2018 | 1 Year |
| 15. | Spectrum analyzer | Agilent | N9020A | HKE-048 | Dec. 28, 2018 | 1 Year |
| 16. | Signal generator | Agilent | N5182A | HKE-029 | Dec. 28, 2018 | 1 Year |
| 17. | Signal Generator | Agilent | 83630A | HKE-028 | Dec. 28, 2018 | 1 Year |
| 18. | Shielded room | Shiel Hong | 4*3*3 | HKE-039 | Dec. 28, 2018 | 3 Year |

# 3. CONDUCTED EMISSIONS TEST

## 3.1 Conducted Power Line Emission Limit

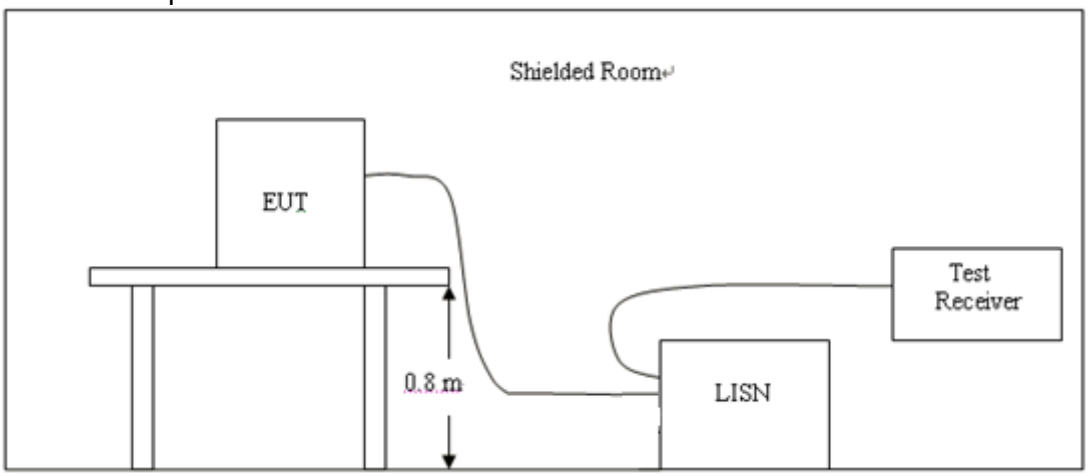
For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following

| Frequency (MHz) | Maximum RF Line Voltage (dBμV) | | | |
|---|---|---|---|---|
| | CLASS A | | CLASS B | |
| | Q.P. | Ave. | Q.P. | Ave. |
| 0.15 - 0.50 | 79 | 66 | 66-56* | 56-46* |
| 0.50 - 5.00 | 73 | 60 | 56 | 46 |
| 5.00 - 30.0 | 73 | 60 | 60 | 50 |

* Decreasing linearly with the logarithm of the frequency

For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

## 3.2 Test Setup




## 3.3 Test Procedure

1, The equipment was set up as per the test configuration to simulate typical actual usage per the user'smanual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed onthe ground plane as per ANSI C63.10.

2, Support equipment, if needed, was placed as per ANSI C63.10.

3, All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.

4,If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received AC120V/60Hzpower through a Line Impedance Stabilization Network (LISN) which supplied power source and wasgrounded to the ground plane.

5, All support equipments received AC power from a second LISN, if any.

6, The EUT test program was started. Emissions were measured on each current carrying line of the EUTusing a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has twomonitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.

7, Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.

## 3.4 Test Result

*****N/A*****

NOTE：RF function is not available when charging.

# 4 RADIATED EMISSION TEST

## 4.1 Radiation Limit

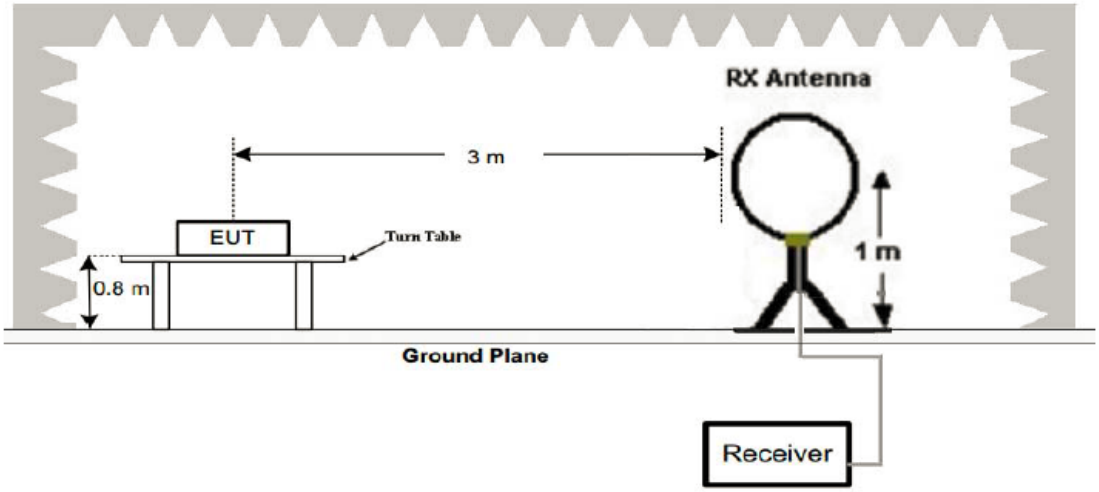
For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength ofradiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the followingvalues：

| Frequency (MHz) | Distance (Meters) | Radiated (dBμV/m) | Radiated (μV/m) |
|---|---|---|---|
| 30-88 | 3 | 40 | 100 |
| 88-216 | 3 | 43.5 | 150 |
| 216-960 | 3 | 46 | 200 |
| Above 960 | 3 | 54 | 500 |

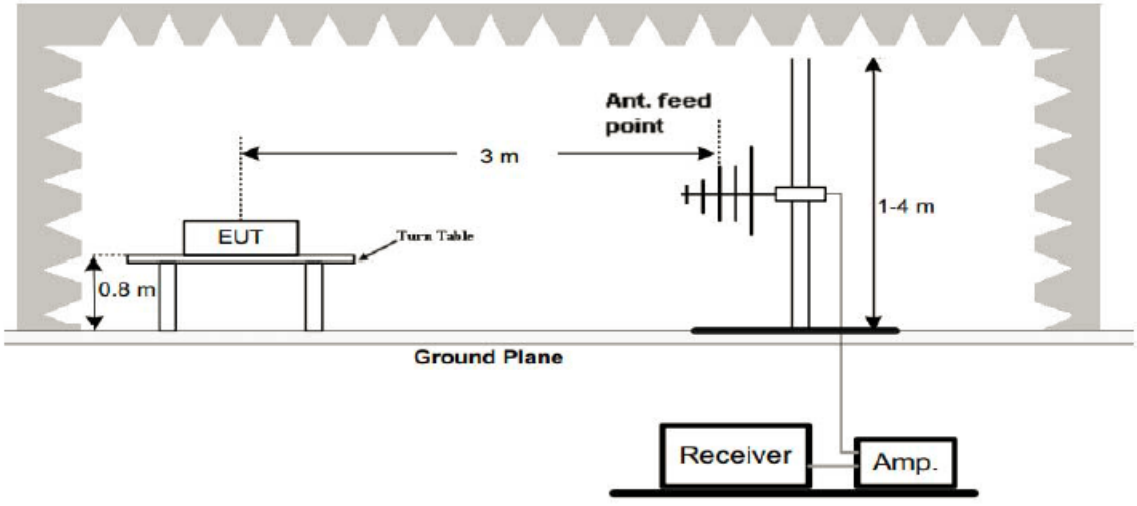
For intentional device, according to § 15.209(a), the general requirement of field strength of radiatedemissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

## 4.2 Test Setup

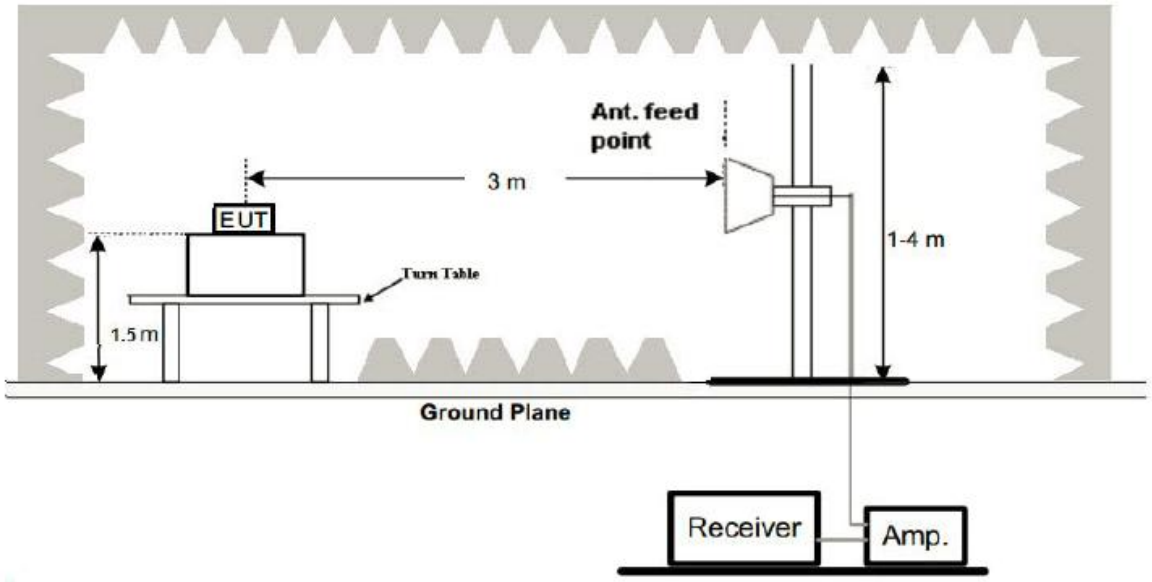
（1）Radiated Emission Test-Up Frequency Below 30MHz




（2）Radiated Emission Test-Up Frequency 30MHz~1GHz



（3）Radiated Emission Test-Up Frequency Above 1GHz




4.3 Test Procedure

1. Below 1GHz measurement the EUT is placed on turntable which is 0.8m above ground plane. And above 1GHz measurement EUT was placed on low permittivity and low tangent turn table which is 1.5m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highestemissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna bothhorizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The test frequency range from 9KHz to25GHz per FCC PART 15.33(a).

Note:
For battery operated equipment, the equipment tests shall be performed using a new battery.

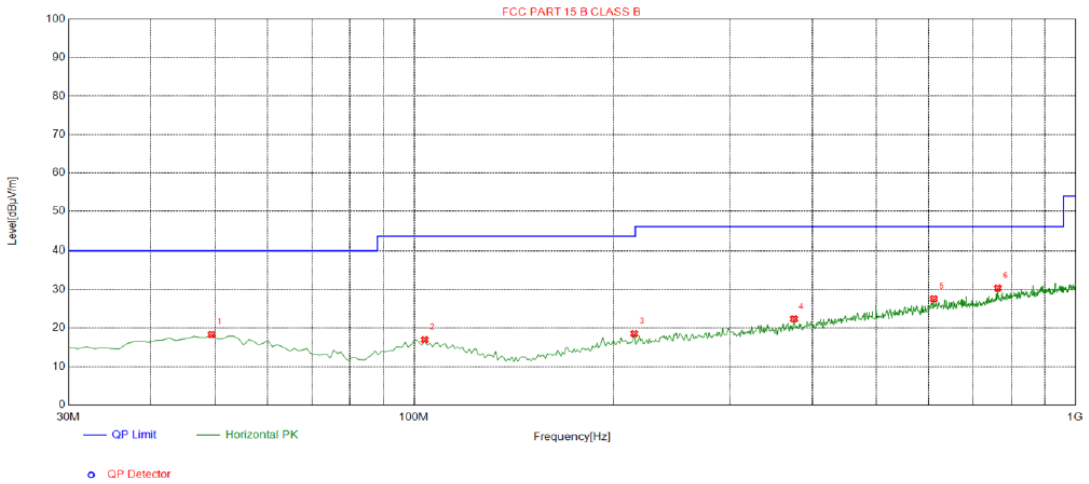
4.4 Test Result

PASS
All the test modes completed for test. The worst case of Radiated Emission is CH 2402; the test data of this mode was reported.

Below 1GHz Test Results:

Antenna polarity: H

**Test Graph**




**Suspected List**

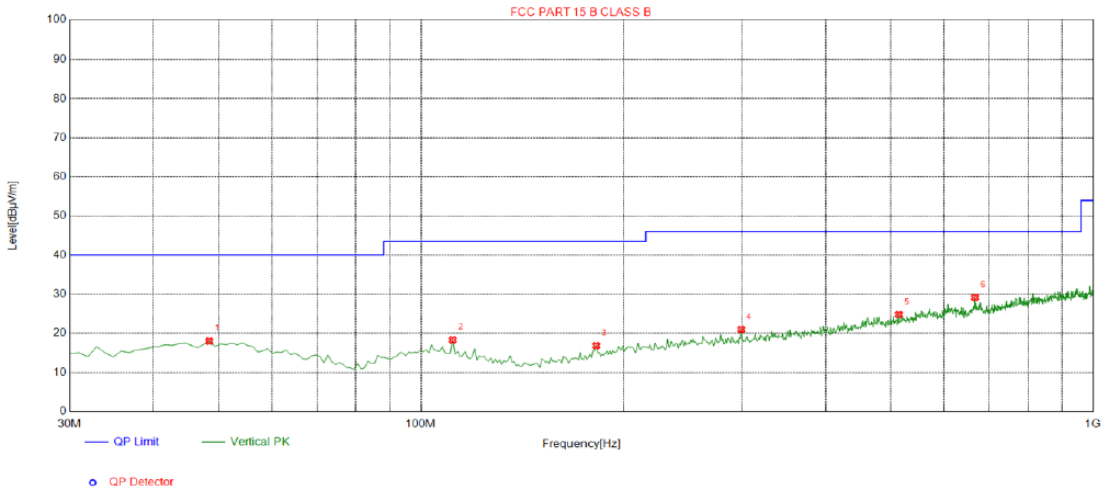
| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 49.4000 | 18.31 | -13.65 | 40.00 | 21.69 | 100 | 133 | Horizontal |
| 2 | 103.720 | 16.94 | -15.41 | 43.50 | 26.56 | 100 | 338 | Horizontal |
| 3 | 215.270 | 18.54 | -14.67 | 43.50 | 24.96 | 100 | 345 | Horizontal |
| 4 | 375.320 | 22.35 | -10.91 | 46.00 | 23.65 | 100 | 42 | Horizontal |
| 5 | 611.030 | 27.60 | -5.56 | 46.00 | 18.40 | 100 | 45 | Horizontal |
| 6 | 763.320 | 30.38 | -3.41 | 46.00 | 15.62 | 100 | 155 | Horizontal |

**Final Data List**

Remark: Transd = Cable lose + Antenna factor - Pre-amplifier; Margin = Limit – Level

Antenna polarity: V

**Test Graph**




**Suspected List**

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 48.4300 | 17.97 | -13.65 | 40.00 | 22.03 | 100 | 69 | Vertical |
| 2 | 111.480 | 18.29 | -15.68 | 43.50 | 25.21 | 100 | 15 | Vertical |
| 3 | 182.290 | 16.82 | -16.66 | 43.50 | 26.68 | 100 | 82 | Vertical |
| 4 | 299.660 | 20.97 | -12.74 | 46.00 | 25.03 | 100 | 21 | Vertical |
| 5 | 514.030 | 24.77 | -7.90 | 46.00 | 21.23 | 100 | 12 | Vertical |
| 6 | 667.290 | 29.15 | -4.73 | 46.00 | 16.85 | 100 | 126 | Vertical |

**Final Data List**

Remark: Transd = Cable lose + Antenna factor - Pre-amplifier; Margin = Limit – Level

Remark：
(1) Measuring frequencies from 9 KHz to the 1 GHz, Radiated emission test from 9KHz to 30MHzwas verified, and no any emission was found except system noise floor.
(2) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
(3) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.

Above 1 GHz Test Results:

CH Low (2402MHz)

Horizontal:

| Frequency (MHz) | Meter Reading (dBμV) | Factor (dB) | Emission Level (dBμV/m) | Limits (dBμV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|
| 2402 | 107.46 | -5.84 | 101.62 | 114 | -12.38 | peak |
| 2402 | 84.15 | -5.84 | 78.31 | 94 | -15.69 | AVG |
| 4804 | 56.27 | -3.64 | 52.63 | 74 | -21.37 | peak |
| 4804 | 43.18 | -3.64 | 39.54 | 54 | -14.46 | AVG |
| 7206 | 55.29 | -0.95 | 54.34 | 74 | -19.66 | peak |
| 7206 | 41.73 | -0.95 | 40.78 | 54 | -13.22 | AVG |
| Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. | | | | | | |

Vertical:

| Frequency (MHz) | Meter Reading (dBμV) | Factor (dB) | Emission Level (dBμV/m) | Limits (dBμV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|
| 2402 | 106.49 | -5.84 | 100.65 | 114 | -13.35 | peak |
| 2402 | 84.36 | -5.84 | 78.52 | 94 | -15.48 | AVG |
| 4804 | 53.17 | -3.64 | 49.53 | 74 | -24.47 | peak |
| 4804 | 43.96 | -3.64 | 40.32 | 54 | -13.68 | AVG |
| 7206 | 54.81 | -0.95 | 53.86 | 74 | -20.14 | peak |
| 7206 | 42.07 | -0.95 | 41.12 | 54 | -12.88 | AVG |
| Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. | | | | | | |

CH Middle (2440MHz)

Horizontal:

| Frequency (MHz) | Meter Reading (dBμV) | Factor (dB) | Emission Level (dBμV/m) | Limits (dBμV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|
| 2440 | 106.38 | -5.71 | 100.67 | 114 | -13.33 | peak |
| 2440 | 82.19 | -5.71 | 76.48 | 94 | -17.52 | AVG |
| 4880 | 56.84 | -3.51 | 53.33 | 74 | -20.67 | peak |
| 4880 | 45.13 | -3.51 | 41.62 | 54 | -12.38 | AVG |
| 7320 | 57.28 | -0.82 | 56.46 | 74 | -17.54 | peak |
| 7320 | 41.06 | -0.82 | 40.24 | 54 | -13.76 | AVG |
| Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. | | | | | | |

Vertical:

| Frequency (MHz) | Meter Reading (dBμV) | Factor (dB) | Emission Level (dBμV/m) | Limits (dBμV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|
| 2440 | 106.85 | -5.71 | 101.14 | 114 | -12.86 | peak |
| 2440 | 85.27 | -5.71 | 79.56 | 94 | -14.44 | AVG |
| 4880 | 57.86 | -3.51 | 54.35 | 74 | -19.65 | peak |
| 4880 | 45.29 | -3.51 | 41.78 | 54 | -12.22 | AVG |
| 7320 | 56.17 | -0.82 | 55.35 | 74 | -18.65 | peak |
| 7320 | 42.66 | -0.82 | 41.84 | 54 | -12.16 | AVG |
| Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. | | | | | | |

CH High (2480MHz)

Horizontal:

| Frequency (MHz) | Meter Reading (dBμV) | Factor (dB) | Emission Level (dBμV/m) | Limits (dBμV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|
| 2480 | 106.34 | -5.65 | 100.69 | 114 | -13.31 | peak |
| 2480 | 84.66 | -5.65 | 79.01 | 94 | -14.99 | AVG |
| 4960 | 59.73 | -3.43 | 56.3 | 74 | -17.7 | peak |
| 4960 | 46.28 | -3.43 | 42.85 | 54 | -11.15 | AVG |
| 7440 | 58.13 | -0.75 | 57.38 | 74 | -16.62 | peak |
| 7440 | 44.07 | -0.75 | 43.32 | 54 | -10.68 | AVG |
| Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. | | | | | | |

Vertical:

| Frequency (MHz) | Meter Reading (dBμV) | Factor (dB) | Emission Level (dBμV/m) | Limits (dBμV/m) | Margin (dB) | Detector Type |
|---|---|---|---|---|---|---|
| 2480 | 108.24 | -5.65 | 102.59 | 114 | -11.41 | peak |
| 2480 | 83.56 | -5.65 | 77.91 | 94 | -16.09 | AVG |
| 4960 | 56.43 | -3.43 | 53 | 74 | -21 | peak |
| 4960 | 45.72 | -3.43 | 42.29 | 54 | -11.71 | AVG |
| 7440 | 55.28 | -0.75 | 54.53 | 74 | -19.47 | peak |
| 7440 | 42.37 | -0.75 | 41.62 | 54 | -12.38 | AVG |
| Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier. | | | | | | |

Remark：
(1) Measuring frequencies from 1 GHz to the 25 GHz。
(2) “F” denotes fundamental frequency; “H” denotes spurious frequency. “E” denotes band edge frequency.
(3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
(4) Data of measurement within this frequency range shown “--- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
(5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.The resolution bandwidth of test receiver/spectrum analyzer is 1MHzand video bandwidth is 3MHz for peak measurement with peak detectorat frequency above 1GHz.The resolution bandwidth of test receiver/spectrum analyzer is 1MHzand video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.
(7)All modes of operation were investigated and the worst-case emissions are reported.

# 5 BAND EDGE

## 5.1 Limits

FCC PART 15.249(d) Emissions radiated outside of the specified frequency bands, except for harmonics,shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emissionlimits in §15.209, whichever is the lesser attenuation.

## 5.2 Test Procedure

The band edge compliance of RF radiated emission should be measured by following the guidance in ANSIC63.10 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT issituated in three orthogonal planes (if appropriate), adjusting the measurement antenna height andpolarization etc. Set RBW to 100KHz and VBM to 300KHz to measure the peak field strength and setRBW to 1MHz and VBW to 10Hz to measure the average radiated field strength.The conducted RF band edge was measured by using a spectrum analyzer. Set span wide enough to capture the highest in-band emission and the emission at the band edge. Set RBW to 100 KHz and VBW to 300 KHz,to measure the conducted peak band edge.

## 5.3 Test Result

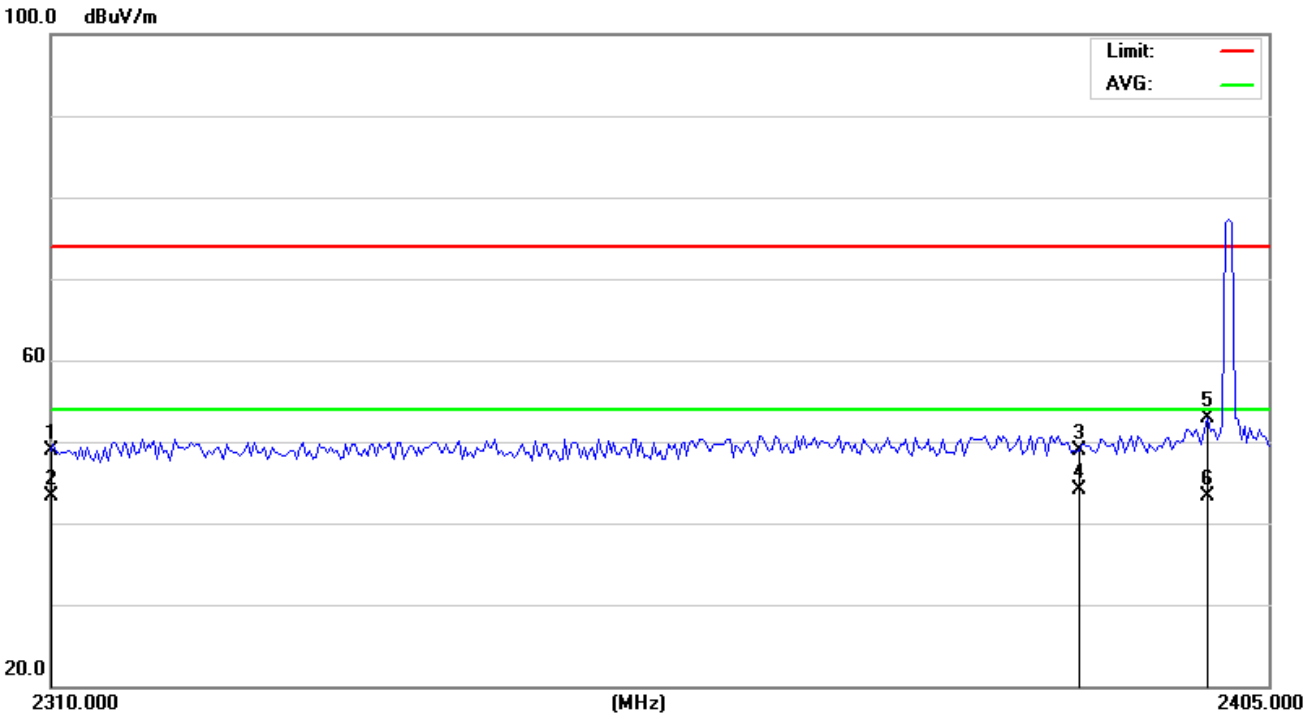
**PASS**

Radiated Band Edge Test:

Operation Mode: TX CH Low (2402MHz)

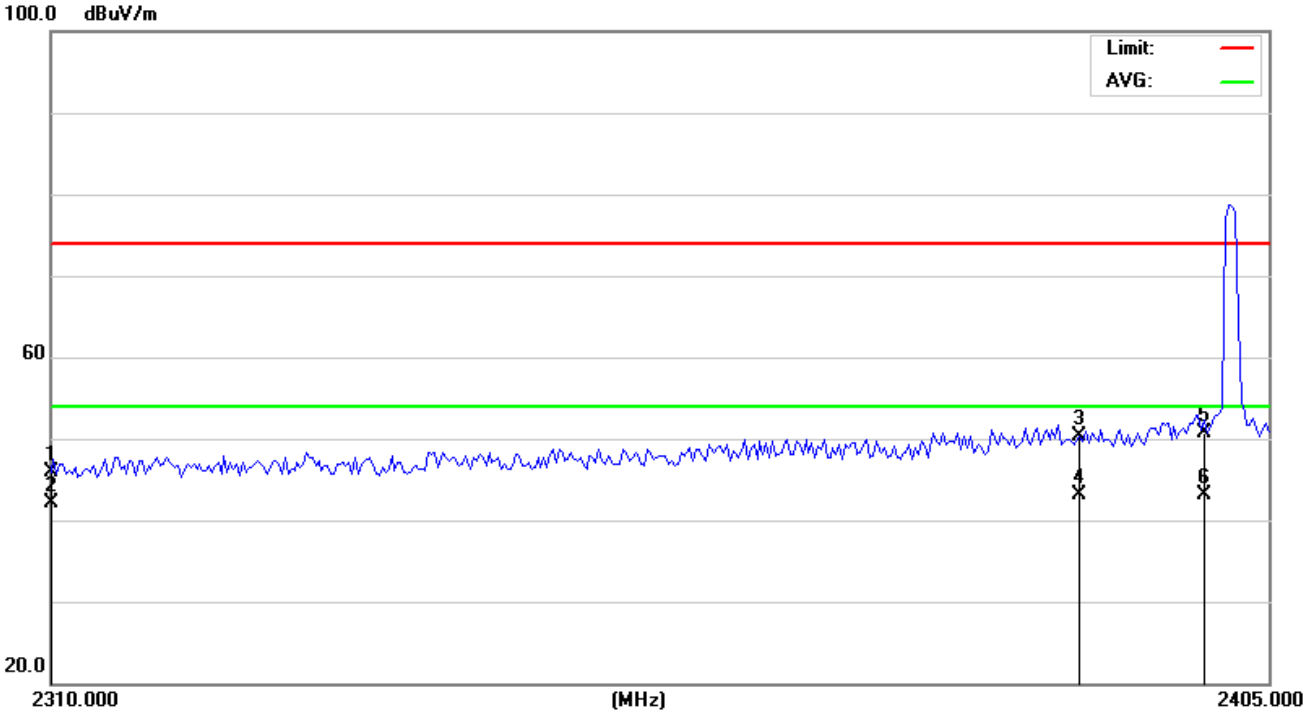
Horizontal (Worst case)

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 2310.000 | 42.64 | 6.36 | 49.00 | 74.00 | -25.00 | QP | | | |
| 2 | | 2310.000 | 36.92 | 6.36 | 43.28 | 54.00 | -10.72 | AVG | | | |
| 3 | | 2390.000 | 42.39 | 6.51 | 48.90 | 74.00 | -25.10 | QP | | | |
| 4 | * | 2390.000 | 37.65 | 6.51 | 44.16 | 54.00 | -9.84 | AVG | | | |
| 5 | | 2400.000 | 46.37 | 6.53 | 52.90 | 74.00 | -21.10 | QP | | | |
| 6 | | 2400.000 | 36.86 | 6.53 | 43.39 | 54.00 | -10.61 | AVG | | | |



Vertical:

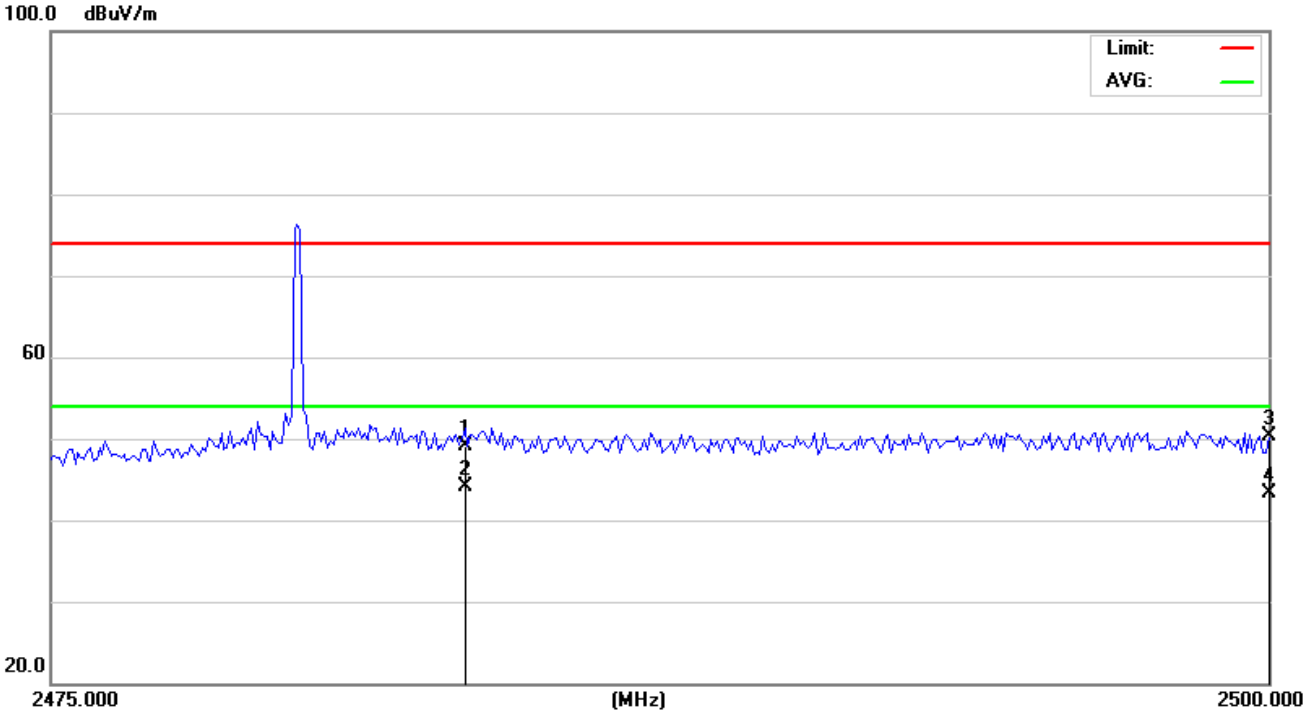
| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 2310.000 | 39.64 | 6.36 | 46.00 | 74.00 | -28.00 | QP | | | |
| 2 | | 2310.000 | 35.77 | 6.36 | 42.13 | 54.00 | -11.87 | AVG | | | |
| 3 | | 2390.000 | 43.79 | 6.51 | 50.30 | 74.00 | -23.70 | QP | | | |
| 4 | | 2390.000 | 36.64 | 6.51 | 43.15 | 54.00 | -10.85 | AVG | | | |
| 5 | | 2400.000 | 44.17 | 6.53 | 50.70 | 74.00 | -23.30 | QP | | | |
| 6 | * | 2400.000 | 36.63 | 6.53 | 43.16 | 54.00 | -10.84 | AVG | | | |



Operation Mode: TX CH High (2480MHz)

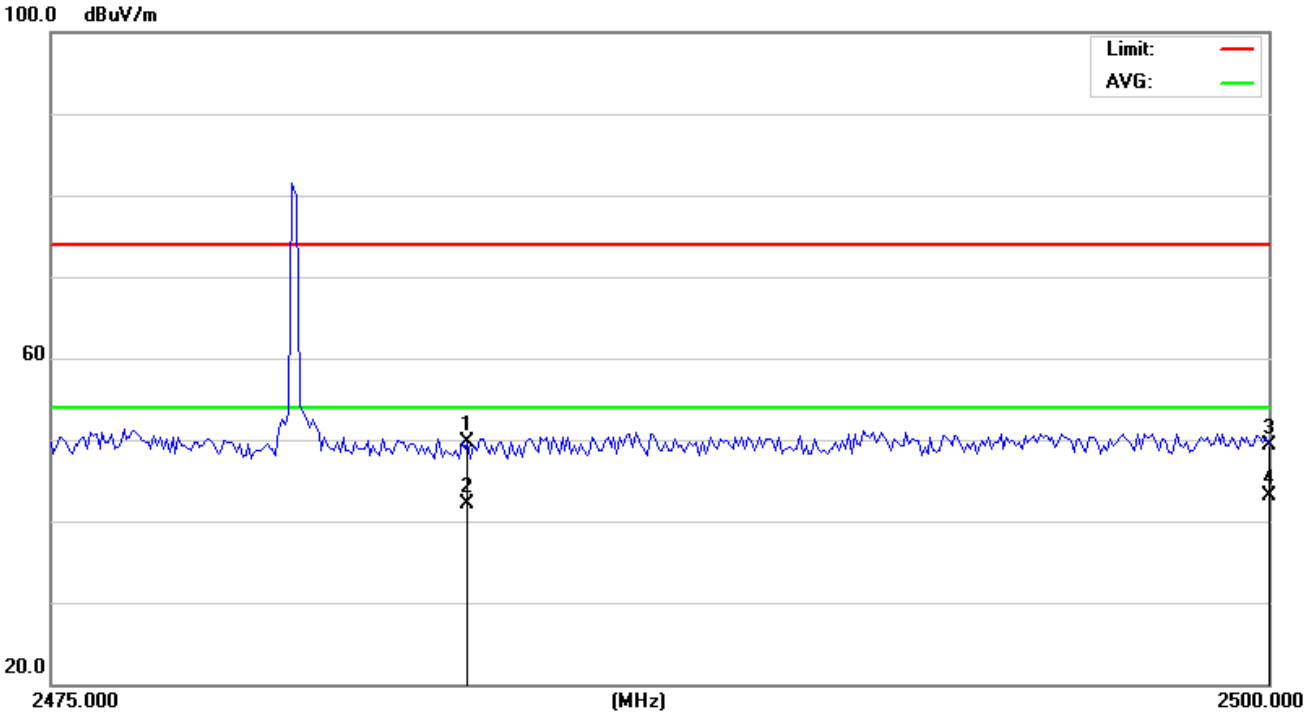
Horizontal (Worst case)

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 2483.500 | 42.60 | 6.50 | 49.10 | 74.00 | -24.90 | QP | | | |
| 2 | * | 2483.500 | 37.62 | 6.50 | 44.12 | 54.00 | -9.88 | AVG | | | |
| 3 | | 2500.000 | 43.91 | 6.49 | 50.40 | 74.00 | -23.60 | QP | | | |
| 4 | | 2500.000 | 36.79 | 6.49 | 43.28 | 54.00 | -10.72 | AVG | | | |



Vertical:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 2483.500 | 43.30 | 6.50 | 49.80 | 74.00 | -24.20 | QP | | | |
| 2 | | 2483.500 | 35.66 | 6.50 | 42.16 | 54.00 | -11.84 | AVG | | | |
| 3 | | 2500.000 | 42.91 | 6.49 | 49.40 | 74.00 | -24.60 | QP | | | |
| 4 | * | 2500.000 | 36.58 | 6.49 | 43.07 | 54.00 | -10.93 | AVG | | | |



# 6 OCCUPIED BANDWIDTH MEASUREMENT

## 6.1 Test Setup

Same asRadiated Emission Measurement

## 6.2 Test Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Set EUT as normal operation.
3. Based on ANSI C63.10 section 6.9.2: RBW= 30KHz. VBW= 100 KHz, Span=4MHz.
4. The useful radiated emission from the EUT was detected by the spectrum analyser with peak detector.

## 6.3 Measurement Equipment Used

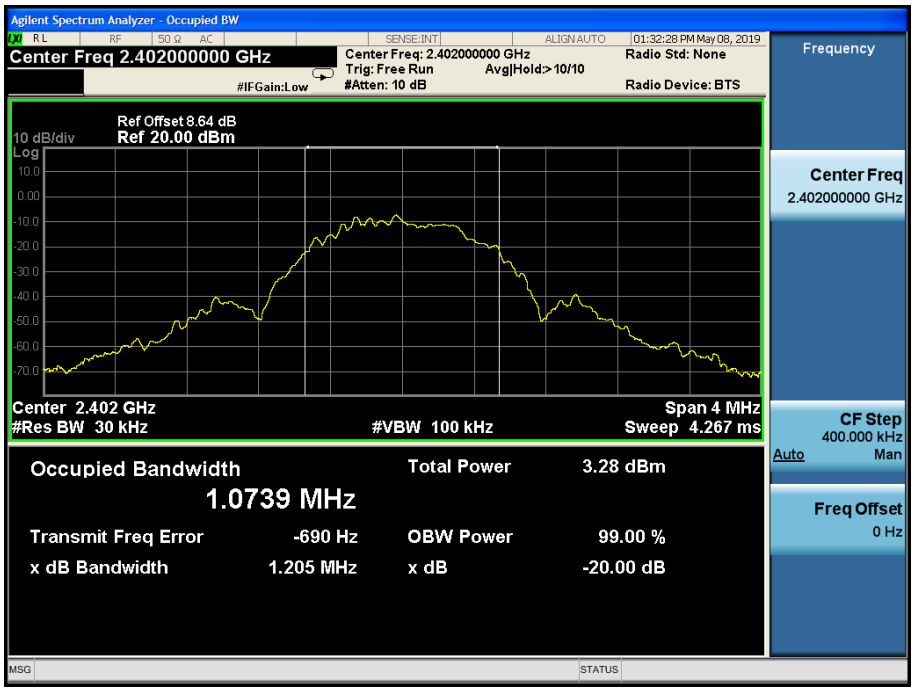
Same asRadiated Emission Measurement

## 6.4 Test Result

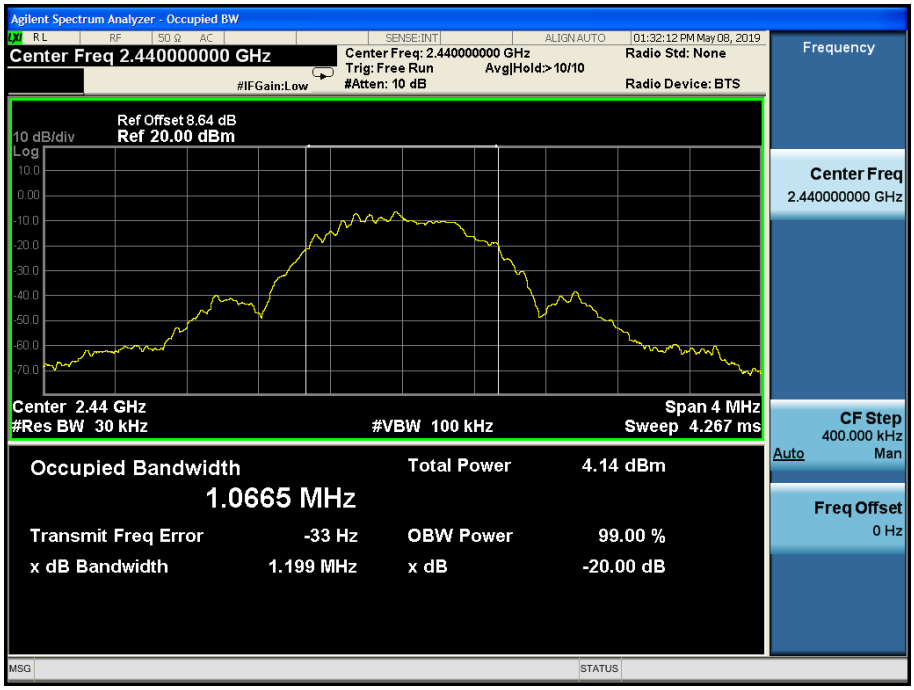
**PASS**

| Frequency | 20dB Bandwidth (MHz) | Result |
|---|---|---|
| 2402 MHz | 1.0739 | **PASS** |
| 2440 MHz | 1.067 | **PASS** |
| 2480 MHz | 1.064 | **PASS** |

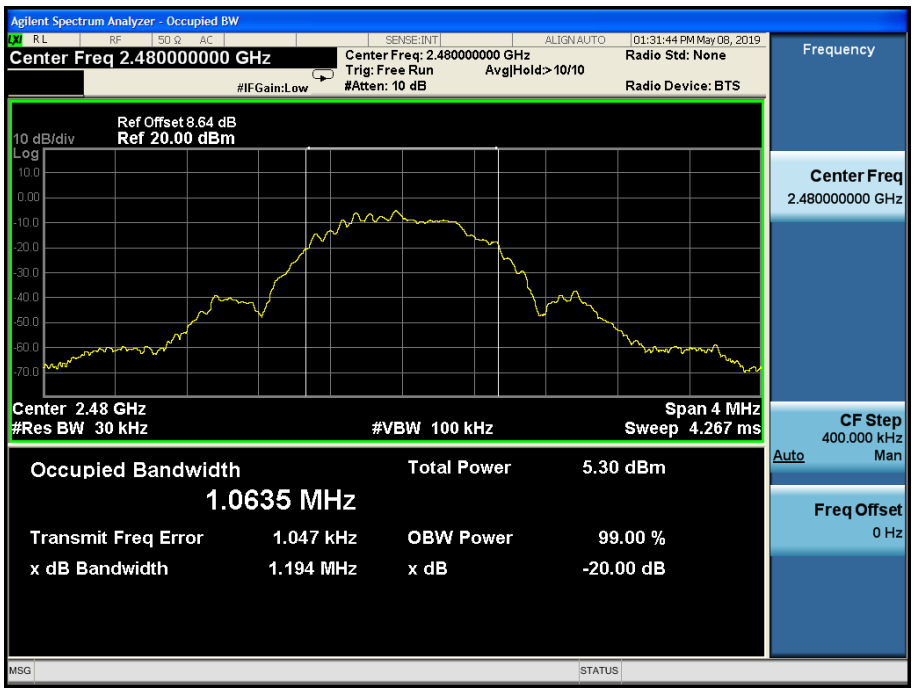
CH: 2402MHz



CH: 2440MHz




CH: 2480MHz



# 7 ANTENNA REQUIREMENT

**Standard Applicable**

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed toensure that no antenna other than that furnished by the responsible party shall be used with the device.And according to FCC 47 CFR Section 15.249, if transmitting antennas of directional gain greater than6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antennaexceeds 6dBi.

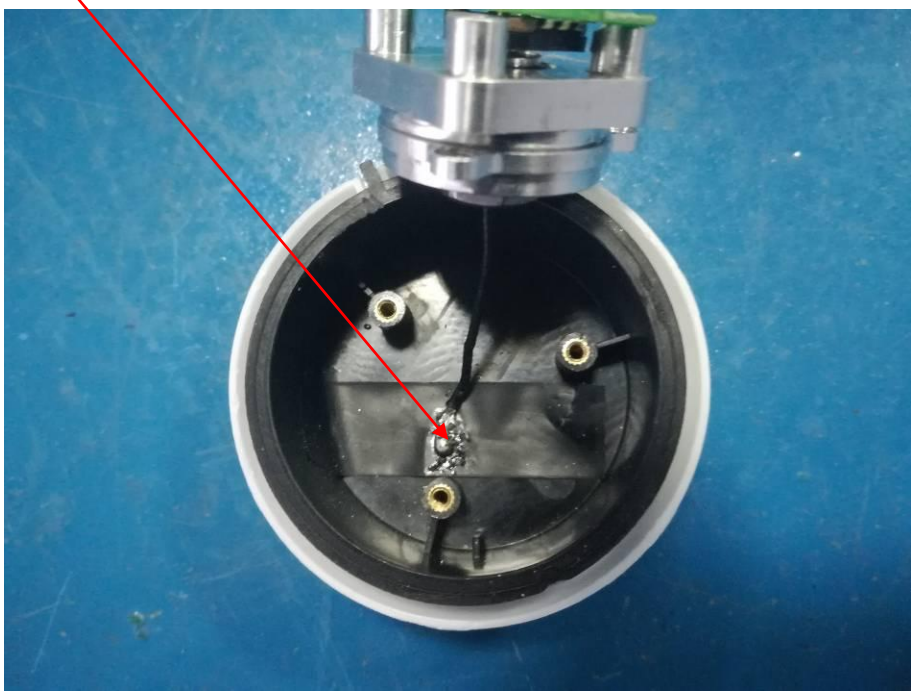
**Refer to statement below for compliance.**

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of astandard antenna jack or electrical connector is prohibited. Further, this requirement does not apply tointentional radiators that must be professionally installed.

**Antenna Connected Construction**

The antenna used in this product is a FPC Antenna, The directional gains of antenna used for transmitting is 0dBi.

ANTENNA



# 8 PHOTOGRAPH OF TEST

Radiated Emission