

## FCC 47 CFR PART 15 SUBPART E

Applicant : Intel Corporation

Product Type : Cloud Rest

Trade Name : Intel

Model Number : Aero Platform

Test Specification : FCC 47 CFR PART 15 SUBPART E  
ANSI C63.10:2013

Receive Date : Jul. 19, 2016

Test Period : Jul. 24 ~ Jul. 29, 2016

Issue Date : Jul. 29, 2016

### Issue by

A Test Lab Techno Corp.  
No. 140-1, Changan Street, Bade District,  
Taoyuan City 33465, Taiwan (R.O.C)  
Tel : +86-3-2710188 / Fax : +86-3-2710190



Taiwan Accreditation Foundation accreditation number: 1330

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### **Revision History**

| Rev. | Issue Date    | Revisions     | Revised By |
|------|---------------|---------------|------------|
| 00   | Jul. 29, 2016 | Initial Issue | Snow Wang  |
|      |               |               |            |
|      |               |               |            |
|      |               |               |            |

## Verification of Compliance

Issued Date: Jul. 29, 2016

Applicant : Intel Corporation  
Product Type : Cloud Rest  
Trade Name : Intel  
Model Number : Aero Platform  
FCC ID : 2AB8ZAERO  
EUT Rated Voltage : DC 12V, 2A  
Test Voltage : 120 Vac / 60 Hz  
Applicable Standard : FCC 47 CFR PART 15 SUBPART E  
ANSI C63.10:2013  
Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.

No. 140-1, Changan Street, Bade District,  
Taoyuan City 33465, Taiwan (R.O.C)

Tel : +86-3-2710188 / Fax : +86-3-2710190

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<http://www.atl-lab.com.tw/e-index.htm>



A Test Lab Techno Corp. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by A Test Lab Techno Corp. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By : Jack Chang  
(Manager) (Jack Chang)

Reviewed By : Eric Ou Yang  
(Testing Engineer) (Eric Ou Yang)

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## 1 General Information

### 1.1. Summary of Test Result

| Standard                     | Item                           | Result    | Remark |
|------------------------------|--------------------------------|-----------|--------|
| FCC                          |                                |           |        |
| 15.407(b)(6)<br>15.207       | AC Power Conducted Emission    | PASS      | ---    |
| 15.407(b)<br>15.205 / 15.209 | Transmitter Radiated Emissions | PASS      | ---    |
| 15.407(a)                    | Maximum Conducted Output Power | PASS      | ---    |
| 15.407(a)                    | 26dB RF Bandwidth              | Reference | ---    |
| 15.407(e)                    | 6dB RF Bandwidth               | PASS      | ----   |
| 15.407(a)                    | Peak Power Spectral Density    | PASS      | ---    |
| 15.407(g)                    | Frequency Stability            | PASS      | ---    |
| 15.407(a)<br>15.203          | Antenna Requirement            | PASS      | ---    |

The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

### 1.2. Measurement Uncertainty

| Test Item              | Frequency Range     | Uncertainty                                                 |
|------------------------|---------------------|-------------------------------------------------------------|
| Conducted Emission     | 9kHz ~ 150KHz       | 2.7 dB                                                      |
|                        | 150kHz ~ 30MHz      | 2.8 dB                                                      |
| Radiated Emission      | 9kHz ~ 30MHz        | 1.457 dB                                                    |
|                        | 30MHz ~ 1000MHz     | 6.300 dB                                                    |
|                        | 1000MHz ~ 18000MHz  | 5.474 dB                                                    |
|                        | 18000MHz ~ 26500MHz | 5.630 dB                                                    |
|                        | 26500MHz ~ 40000MHz | 5.054 dB                                                    |
| Conducted Output Power |                     | +0.27 dB / -0.28 dB                                         |
| RF Bandwidth           |                     | 4.96%                                                       |
| Power Spectral Density |                     | +0.71 dB / -0.77 dB                                         |
| Frequency Stability    |                     | + 2.212 x 10 <sup>-7</sup> % / - 2.170 x 10 <sup>-7</sup> % |
| Duty Cycle             |                     | 1.06%                                                       |
| Time Occupancy         |                     | 1.40%                                                       |



## 2 EUT Description

|                                   |                                                                                                                               |                |                       |                    |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------|--------------------|
| Applicant                         | Intel Corporation<br>2200 Mission College Blvd, Santa Clara, California, United States 95054                                  |                |                       |                    |
| Manufacturer                      | Thunder Software Technology Co., Ltd<br>4F, Taixiang Building, 1A Longxiang Rd., Haidian District, Beijing 100191, P.R. China |                |                       |                    |
| Product Type                      | Cloud Rest                                                                                                                    |                |                       |                    |
| Trade Name                        | Intel                                                                                                                         |                |                       |                    |
| Model No.                         | Aero Platform                                                                                                                 |                |                       |                    |
| FCC ID                            | 2AB8ZAERO                                                                                                                     |                |                       |                    |
| Operate Frequency                 | Frequency Band                                                                                                                |                | Frequency Range (MHz) | Number of Channels |
|                                   | IEEE 802.11a                                                                                                                  | U-NII Band I   | 5180 – 5240           | 4                  |
|                                   |                                                                                                                               | U-NII Band III | 5745 – 5825           | 5                  |
|                                   | IEEE 802.11n 20 MHz                                                                                                           | U-NII Band I   | 5180 – 5240           | 4                  |
|                                   |                                                                                                                               | U-NII Band III | 5745 – 5825           | 5                  |
|                                   | IEEE 802.11n 40 MHz                                                                                                           | U-NII Band I   | 5190 – 5230           | 2                  |
|                                   |                                                                                                                               | U-NII Band III | 5755 – 5795           | 2                  |
|                                   | IEEE 802.11ac 80 MHz                                                                                                          | U-NII Band I   | 5210                  | 1                  |
|                                   |                                                                                                                               | U-NII Band III | 5775                  | 1                  |
| Modulation Type                   | OFDM                                                                                                                          |                |                       |                    |
| Equipment Type                    | Client devices                                                                                                                |                |                       |                    |
| Antenna information               | Type                                                                                                                          |                | Max. Gain (dBi)       |                    |
|                                   | FPC antenna                                                                                                                   |                | U-NII Band I          | 4.76               |
|                                   |                                                                                                                               |                | U-NII Band III        | 4.64               |
| Antenna Delivery                  | See section 3.1                                                                                                               |                |                       |                    |
| Frequency stability specification | ± 20 ppm                                                                                                                      |                |                       |                    |

| Frequency Band       |                | RF Output Power (W) |
|----------------------|----------------|---------------------|
| IEEE 802.11a         | U-NII Band I   | 0.043               |
|                      | U-NII Band III | 0.087               |
| IEEE 802.11n 20 MHz  | U-NII Band I   | 0.017               |
|                      | U-NII Band III | 0.154               |
| IEEE 802.11n 40 MHz  | U-NII Band I   | 0.022               |
|                      | U-NII Band III | 0.101               |
| IEEE 802.11ac 80 MHz | U-NII Band I   | 0.022               |
|                      | U-NII Band III | 0.034               |

### 3 Test Methodology

#### 3.1. Mode of Operation

Decision of Test ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

| Test Mode                             |
|---------------------------------------|
| Mode 1: Normal Operation Mode         |
| Mode 2: IEEE 802.11a Link Mode        |
| Mode 3: IEEE 802.11n 20MHz Link Mode  |
| Mode 4: IEEE 802.11n 40MHz Link Mode  |
| Mode 5: IEEE 802.11ac 80MHz Link Mode |

Software used to control the EUT for staying in continuous transmitting mode was programmed.

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode only.

By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "X axis" position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

| Equipment Type                     |     |
|------------------------------------|-----|
| Outdoor access point               | --- |
| Indoor access point                | --- |
| Fixed point-to-point access points | --- |
| Client devices                     | V   |

| Test Mode | ANT-0 | ANT-1 | ANT-0+1 |
|-----------|-------|-------|---------|
| Mode 2    | V     | V     | ---     |
| Mode 3    | V     | V     | V       |
| Mode 4    | V     | V     | V       |
| Mode 5    | V     | V     | V       |

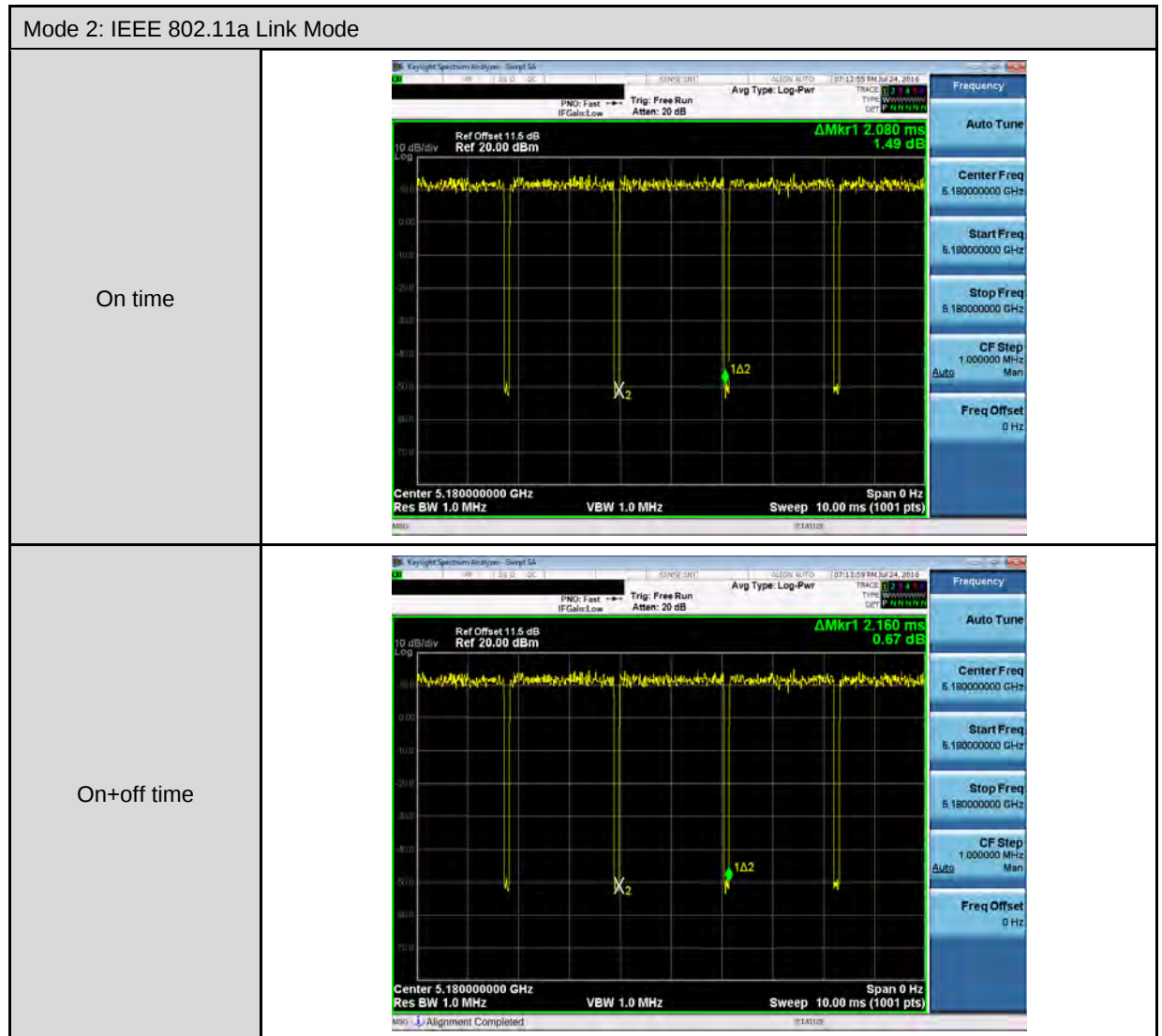
| Test Mode | Band           | Data Rate | Test Channel        |
|-----------|----------------|-----------|---------------------|
| Mode 2    | U-NII Band I   | 6M        | 36, 40, 44, 48      |
|           | U-NII Band III |           | 149,153,157,161,165 |
| Mode 3    | U-NII Band I   | 13M       | 36, 40, 44, 48      |
|           | U-NII Band III |           | 149,153,157,161,165 |
| Mode 4    | U-NII Band I   | 27M       | 38, 46              |
|           | U-NII Band III |           | 151,159             |
| Mode 5    | U-NII Band I   | 58.6M     | 42                  |
|           | U-NII Band III |           | 155                 |



## Duty cycle

| Test Mode                             | Frequency (MHz) | on time (ms) | on+off time (ms) | Duty cycle | Duty Factor (dB) | 1/T Minimum VBW (kHz) |
|---------------------------------------|-----------------|--------------|------------------|------------|------------------|-----------------------|
| Mode 2: IEEE 802.11a Link Mode        | 5180.0          | 2.080        | 2.160            | 0.963      | 0.164            | 0.481                 |
| Mode 3: IEEE 802.11n 20MHz Link Mode  | 5180.0          | 1.000        | 1.165            | 0.858      | 0.663            | 1.000                 |
| Mode 4: IEEE 802.11n 40MHz Link Mode  | 5190.0          | 0.507        | 0.594            | 0.854      | 0.688            | 1.972                 |
| Mode 5: IEEE 802.11ac 80MHz Link Mode | 5210.0          | 0.264        | 0.306            | 0.863      | 0.641            | 3.788                 |

## Duty Cycle Graphs



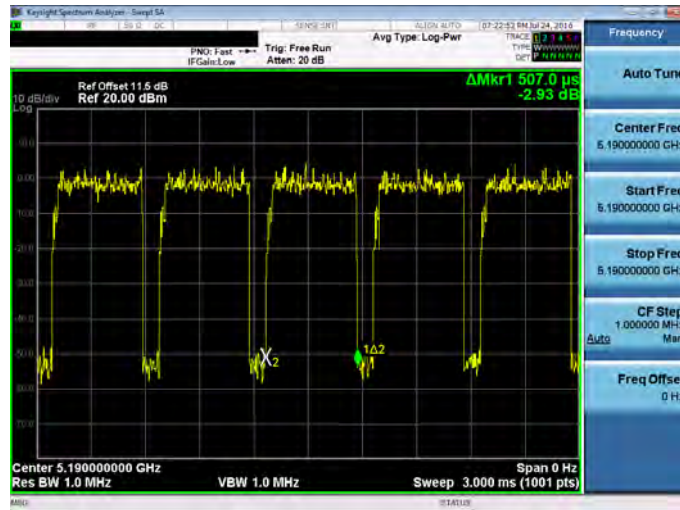


| Mode 3: IEEE 802.11n 20MHz Link Mode |  |
|--------------------------------------|--|
| On time                              |  |
| On+off time                          |  |

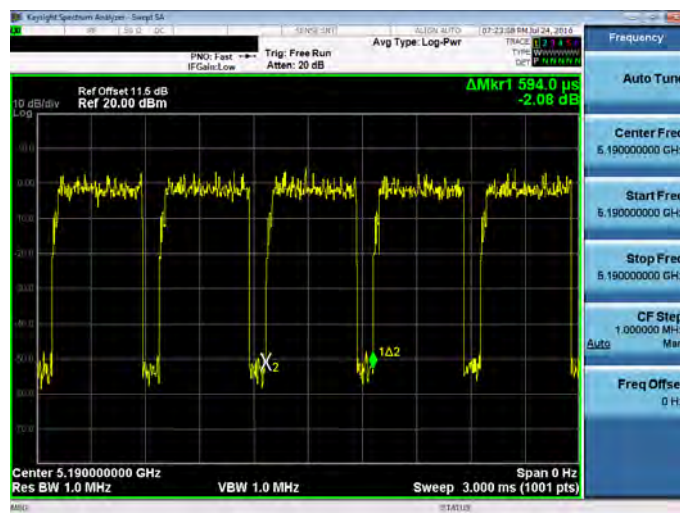


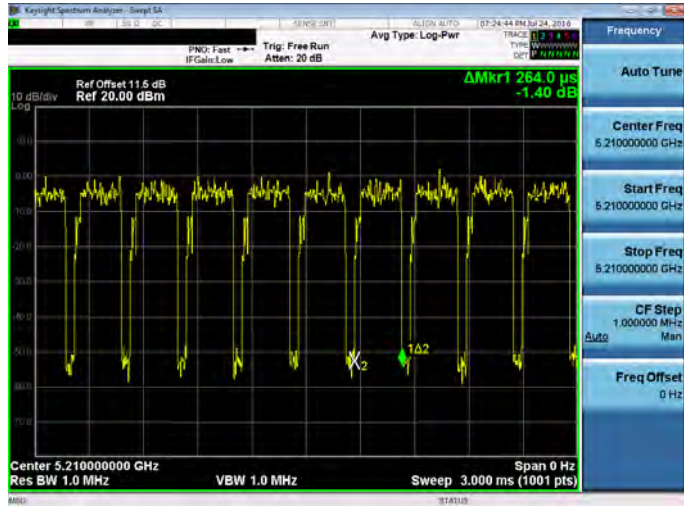
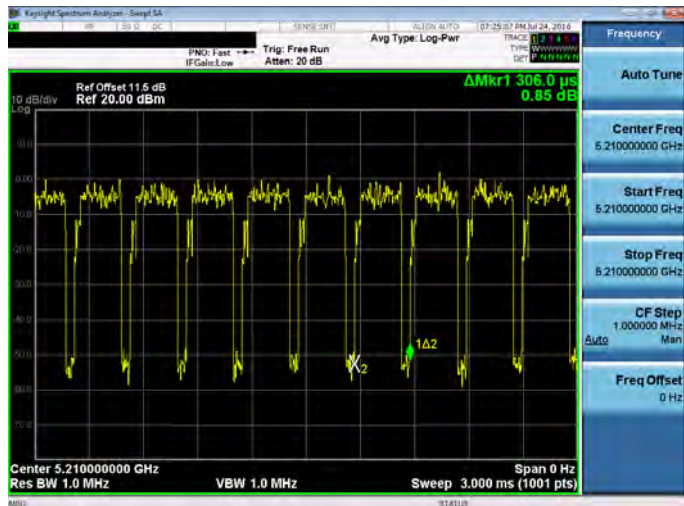
## Mode 4: IEEE 802.11n 40MHz Link Mode

On time



On+off time



| Mode 5: IEEE 802.11ac 80MHz Link Mode |                                                                                     |
|---------------------------------------|-------------------------------------------------------------------------------------|
| On time                               |   |
| On+off time                           |  |

### 3.2. EUT Exercise Software

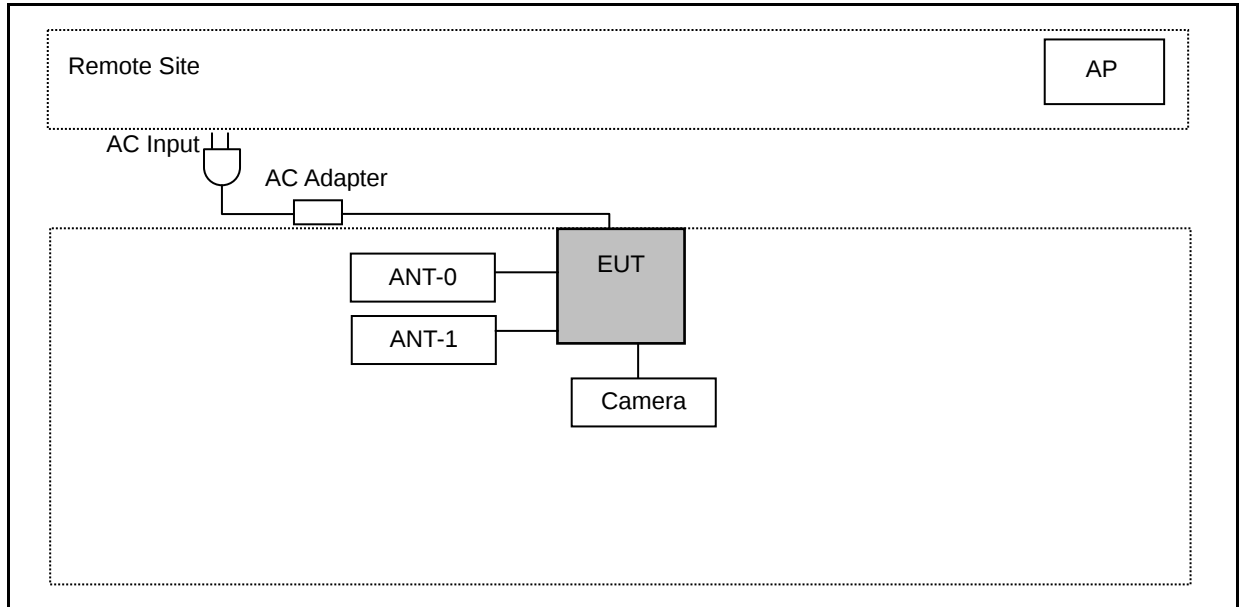
The EUT is operated in the engineering mode to fix the TX frequency for the purposes of measurement. According to its specifications, the EUT must comply with the requirements of Section 15.407 under the FCC Rules Part 15 Subpart E.

|    |                                     |
|----|-------------------------------------|
| 1. | Setup the EUT shown on 3.3.         |
| 2. | Turn on the power of all equipment. |
| 3. | EUT run test program.               |

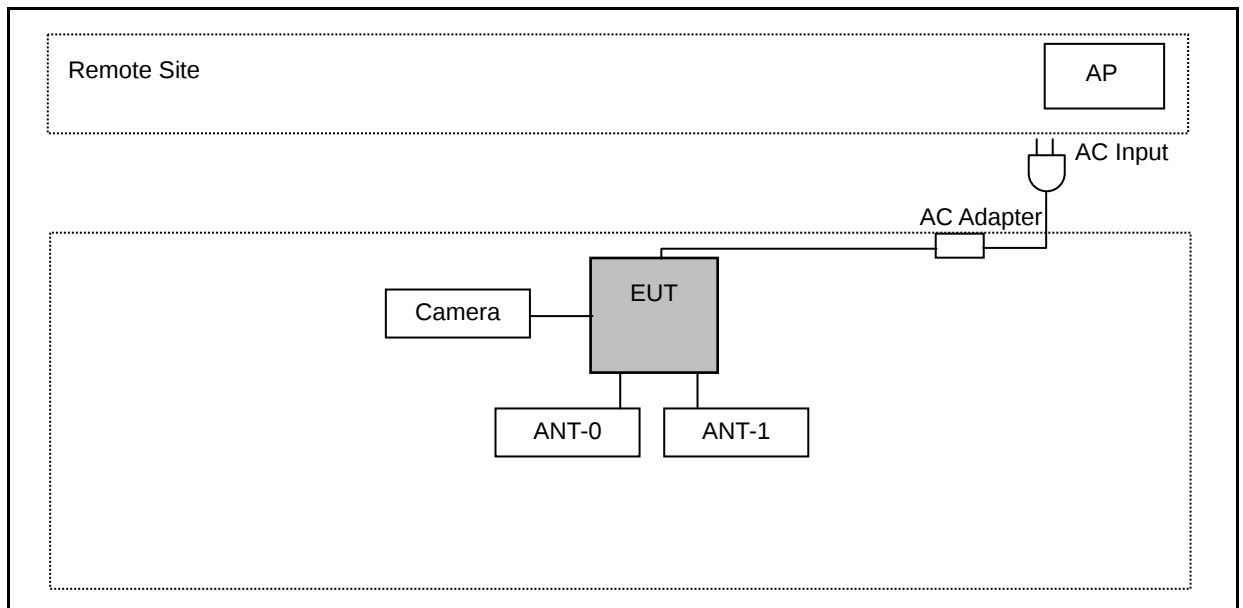
| Measurement Software |                          |
|----------------------|--------------------------|
| 1                    | EZ-EMC Ver. ATL-03A1-1   |
| 2                    | EZ-EMC Ver ATL-ITC-3A1-1 |

### 3.3. Configuration of Test System Details

#### Conducted Emissions



#### Radiated Emissions



### 3.4. Test Site Environment

| Items                      | Required (IEC 60068-1) | Actual |
|----------------------------|------------------------|--------|
| Temperature (°C)           | 15-35                  | 26     |
| Humidity (%RH)             | 25-75                  | 60     |
| Barometric pressure (mbar) | 860-1060               | 950    |

## 4 Test Results

### 4.1. AC Power Conducted Emission Measurement

#### ■ Limit

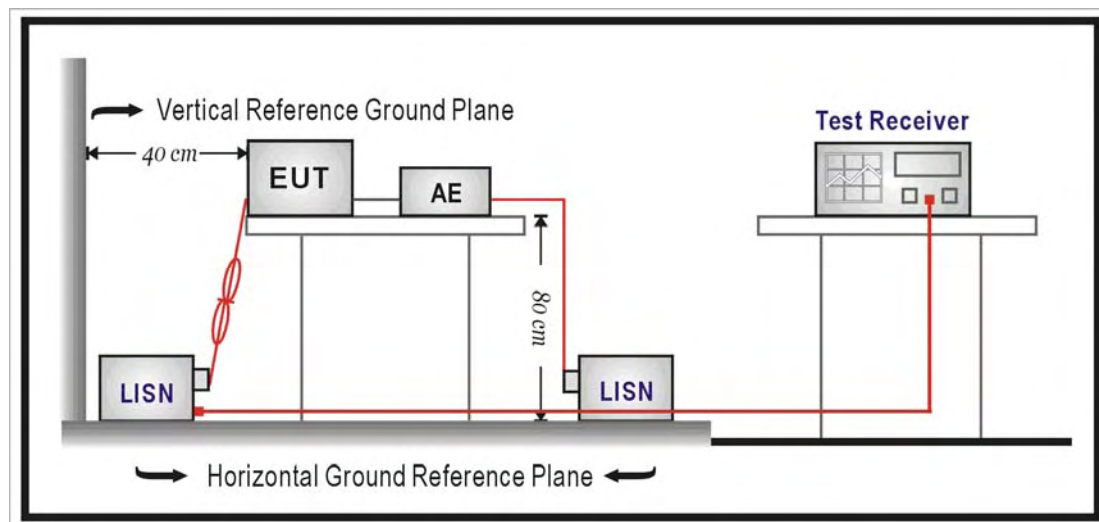
| Frequency (MHz) | Quasi-peak | Average  |
|-----------------|------------|----------|
| 0.15 - 0.5      | 66 to 56   | 56 to 46 |
| 0.50 - 5.0      | 56         | 46       |
| 5.0 - 30.0      | 60         | 50       |

#### ■ Test Instruments

| Describe      | Manufacturer | Model Number   | Serial Number | Cal. Date  | Remark |
|---------------|--------------|----------------|---------------|------------|--------|
| Test Receiver | R&S          | ESCI           | 100367        | 05/31/2016 | 1 year |
| LISN          | R&S          | ENV216         | 101040        | 03/15/2016 | 1 year |
| LISN          | R&S          | ENV216         | 101041        | 03/07/2016 | 1 year |
| RF Cable      | Woken        | 00100D1380194M | TE-02-02      | 05/31/2016 | 1 year |
| Test Site     | ATL          | TE02           | TE02          | N.C.R.     | -----  |

Note: N.C.R. = No Calibration Request.

#### ■ Test Setup



## 4.2. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a  $50\Omega//50\mu\text{H}$  coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a  $50\Omega//50\mu\text{H}$  coupling impedance with 50ohm termination.

Tabletop device shall be placed on a non-conducting platform, of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The wall of screened room shall be located 40cm to the rear of the EUT. Other surfaces of tabletop or floor standing EUT shall be at least 80cm from any other ground conducting surface including one or more LISNs. For floor-standing device shall be placed under the EUT with a 12mm insulating material.

Conducted emissions were investigated over the frequency range from 0.15 MHz to 30 MHz using a resolution bandwidth of 9 kHz. The equipment under test (EUT) shall be meet the limits in section 4.1, as applicable, including the average limit and the quasi-peak limit when using respectively, an average detector and quasi-peak detector measured in accordance with the methods described of related standard. When all of peak value were complied with quasi-peak and average limit from 150kHz to 30MHz then quasi-peak and average measurement was unnecessary.

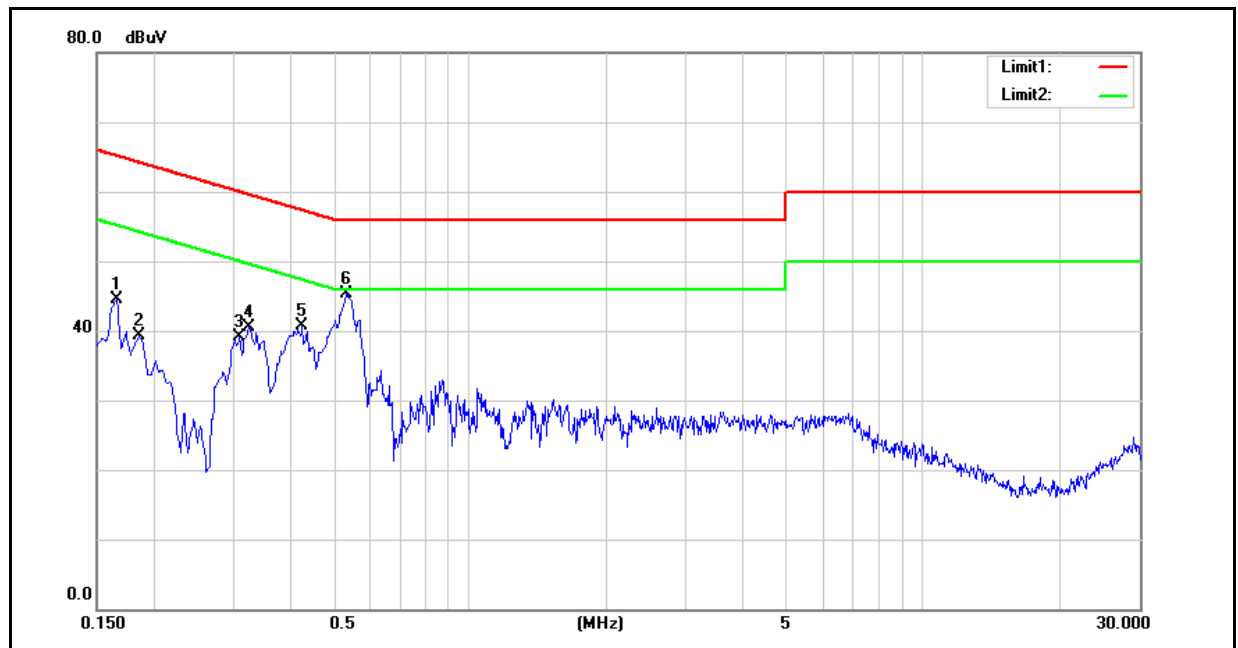
The AMN shall be placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane for AMNs mounted on top of the ground reference plane. This distance is between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment shall be at least 0,8 m from the AMN. If the mains power cable is longer than 1m then the cable shall be folded back and forth at the centre of the lead to form a bundle no longer than 0.4m. All of interconnecting cables that hang closer than 40cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long. All of EUT and AE shall be separate place more than 0.1m. All 50  $\Omega$  ports of the LISN shall be resistively terminated into 50  $\Omega$  loads when not connected to the measuring instrument.

If the reading of the measuring receiver shows fluctuations close to the limit, the reading shall be observed for at least 15 s at each measurement frequency; the higher reading shall be recorded with the exception of any brief isolated high reading which shall be ignored.



# Test Result

|               |                    |                      |              |
|---------------|--------------------|----------------------|--------------|
| Standard:     | FCC Part 15E       | Line:                | L1           |
| Test item:    | Conducted Emission | Power:               | AC 120V/60Hz |
| Model Number: | Aero Platform      | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Test Mode:    | Mode 1             | Date:                | 07/26/2016   |
|               |                    | Test By:             | Eric Ou Yang |
| Description:  |                    |                      |              |



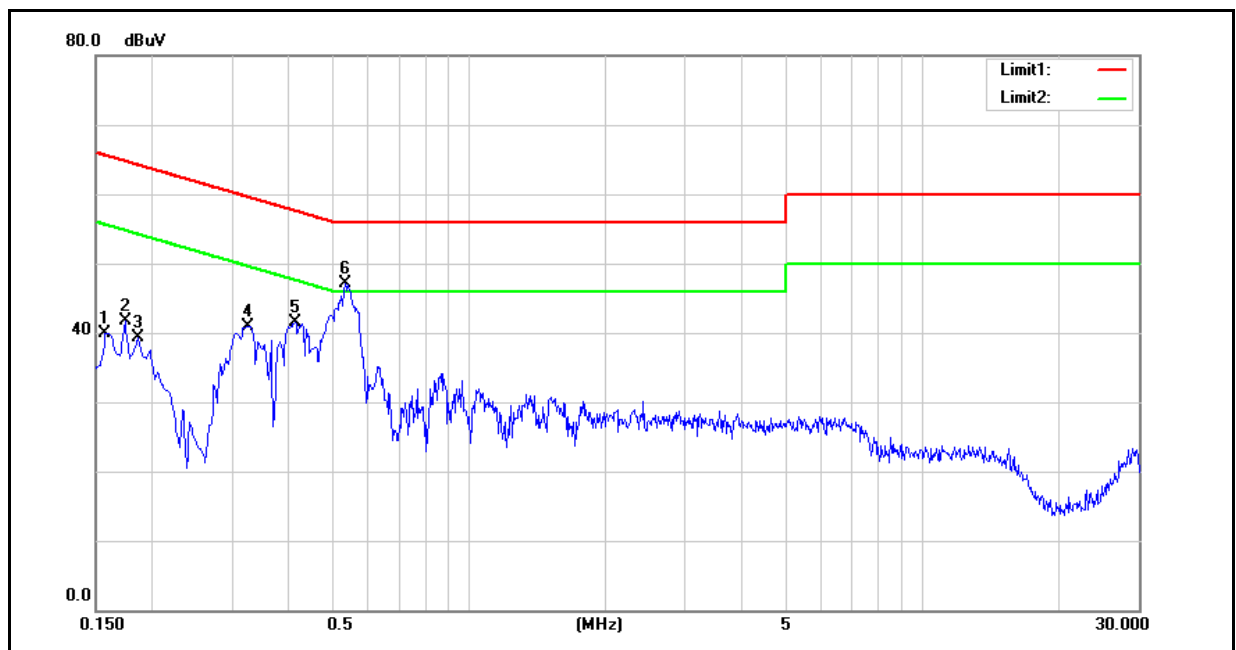
| No. | Frequency<br>(MHz) | QP<br>reading<br>(dBuV) | AVG<br>reading<br>(dBuV) | Correction<br>factor<br>(dB) | QP<br>result<br>(dBuV) | AVG<br>result<br>(dBuV) | QP<br>limit<br>(dBuV) | AVG<br>limit<br>(dBuV) | QP<br>margin<br>(dB) | AVG<br>margin<br>(dB) | Remark |
|-----|--------------------|-------------------------|--------------------------|------------------------------|------------------------|-------------------------|-----------------------|------------------------|----------------------|-----------------------|--------|
| 1   | 0.1660             | 28.08                   | 16.46                    | 9.60                         | 37.68                  | 26.06                   | 65.16                 | 55.16                  | -27.48               | -29.10                | Pass   |
| 2   | 0.1860             | 28.41                   | 21.08                    | 9.59                         | 38.00                  | 30.67                   | 64.21                 | 54.21                  | -26.21               | -23.54                | Pass   |
| 3   | 0.3100             | 28.57                   | 19.63                    | 9.60                         | 38.17                  | 29.23                   | 59.97                 | 49.97                  | -21.80               | -20.74                | Pass   |
| 4   | 0.3260             | 29.41                   | 22.68                    | 9.60                         | 39.01                  | 32.28                   | 59.55                 | 49.55                  | -20.54               | -17.27                | Pass   |
| 5   | 0.4260             | 29.83                   | 22.64                    | 9.60                         | 39.43                  | 32.24                   | 57.33                 | 47.33                  | -17.90               | -15.09                | Pass   |
| 6   | 0.5340             | 34.68                   | 27.91                    | 9.61                         | 44.29                  | 37.52                   | 56.00                 | 46.00                  | -11.71               | -8.48                 | Pass   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|               |                    |                      |              |
|---------------|--------------------|----------------------|--------------|
| Standard:     | FCC Part 15E       | Line:                | N            |
| Test item:    | Conducted Emission | Power:               | AC 120V/60Hz |
| Model Number: | Aero Platform      | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Test Mode:    | Mode 1             | Date:                | 07/26/2016   |
|               |                    | Test By:             | Eric Ou Yang |
| Description:  |                    |                      |              |



| No. | Frequency<br>(MHz) | QP<br>reading<br>(dBuV) | AVG<br>reading<br>(dBuV) | Correction<br>factor<br>(dB) | QP<br>result<br>(dBuV) | AVG<br>result<br>(dBuV) | QP<br>limit<br>(dBuV) | AVG<br>limit<br>(dBuV) | QP<br>margin<br>(dB) | AVG<br>margin<br>(dB) | Remark |
|-----|--------------------|-------------------------|--------------------------|------------------------------|------------------------|-------------------------|-----------------------|------------------------|----------------------|-----------------------|--------|
| 1   | 0.1580             | 29.10                   | 20.56                    | 9.59                         | 38.69                  | 30.15                   | 65.57                 | 55.57                  | -26.88               | -25.42                | Pass   |
| 2   | 0.1740             | 26.19                   | 16.70                    | 9.59                         | 35.78                  | 26.29                   | 64.77                 | 54.77                  | -28.99               | -28.48                | Pass   |
| 3   | 0.1860             | 26.79                   | 19.49                    | 9.58                         | 36.37                  | 29.07                   | 64.21                 | 54.21                  | -27.84               | -25.14                | Pass   |
| 4   | 0.3260             | 30.09                   | 23.88                    | 9.59                         | 39.68                  | 33.47                   | 59.55                 | 49.55                  | -19.87               | -16.08                | Pass   |
| 5   | 0.4140             | 30.94                   | 22.43                    | 9.59                         | 40.53                  | 32.02                   | 57.57                 | 47.57                  | -17.04               | -15.55                | Pass   |
| 6   | 0.5340             | 36.21                   | 29.32                    | 9.60                         | 45.81                  | 38.92                   | 56.00                 | 46.00                  | -10.19               | -7.08                 | Pass   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

### 4.3. Transmitter Radiated Emissions Measurement

#### ■ Limit

(1)Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(a)For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(d)For transmitters operating in the 5.725-5.85 GHz band:

(i)All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(2)Limits of Radiated Emission Measurement

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

| Frequency Range (MHz) | Field Strength (microvolts/meter) | Measurement Distance (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               | 10                                | 3                             |
| 88 ~ 216              | 150                               | 3                             |
| 216 ~ 960             | 200                               | 3                             |
| Above 960             | 500                               | 3                             |

Note: 1. The lower limit shall apply at the transition frequencies.  
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).  
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

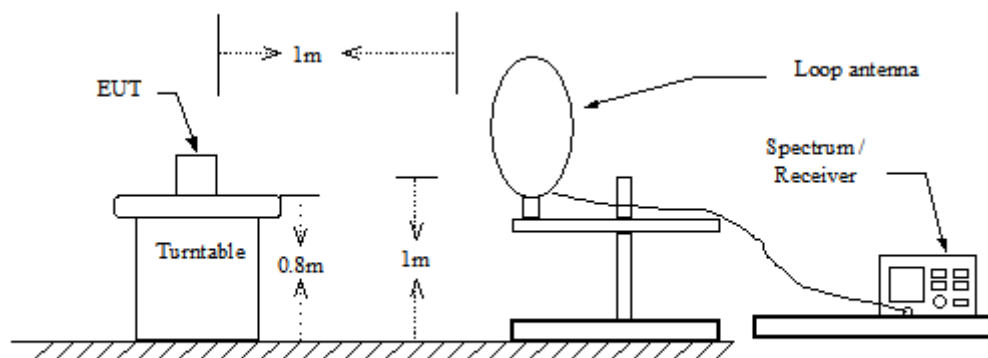
# Test Instruments

| 3 Meter Chamber            |                                |                         |               |            |        |
|----------------------------|--------------------------------|-------------------------|---------------|------------|--------|
| Equipment                  | Manufacturer                   | Model Number            | Serial Number | Cal. Date  | Remark |
| RF Pre-selector            | Agilent                        | N9039A                  | MY46520256    | 01/08/2016 | 1 year |
| Spectrum Analyzer          | Agilent                        | E4446A                  | MY46180578    | 01/08/2016 | 1 year |
| Pre Amplifier              | Agilent                        | 8449B                   | 3008A02237    | 10/07/2015 | 1 year |
| Pre Amplifier              | Agilent                        | 8447D                   | 2944A11119    | 01/11/2016 | 1 year |
| Broadband Antenna          | Schwarzbeck                    | VULB9168                | 416           | 09/25/2015 | 1 year |
| Horn Antenna<br>(1~18GHz)  | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA9120D               | 9120D-550     | 06/06/2016 | 1 year |
| Horn Antenna<br>(18~40GHz) | ETS                            | 3116                    | 86467         | 09/01/2015 | 1 year |
| Loop Antenna               | COM-POWER<br>CORPORATION       | AL-130                  | 121014        | 02/01/2016 | 1 year |
| Microwave Cable            | EMCI                           | EMC102-KM-KM-<br>14000  | 151001        | 10/15/2015 | 1 year |
| Microwave Cable            | EMCI                           | EMC-104-SM-SM-<br>14000 | 140202        | 10/15/2015 | 1 year |
| Microwave Cable            | EMCI                           | EMC104-SM-SM-<br>600    | 140301        | 10/15/2015 | 1 year |
| Test Site                  | ATL                            | TE01                    | 888001        | 08/27/2015 | 1 year |

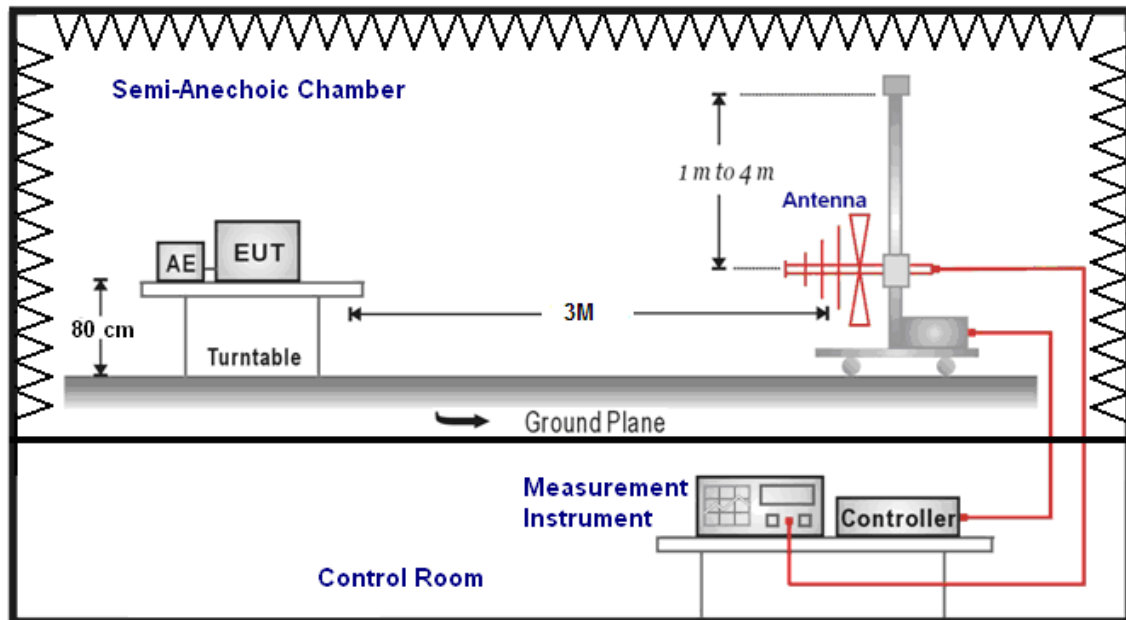
Note: N.C.R. = No Calibration Request.

# Setup

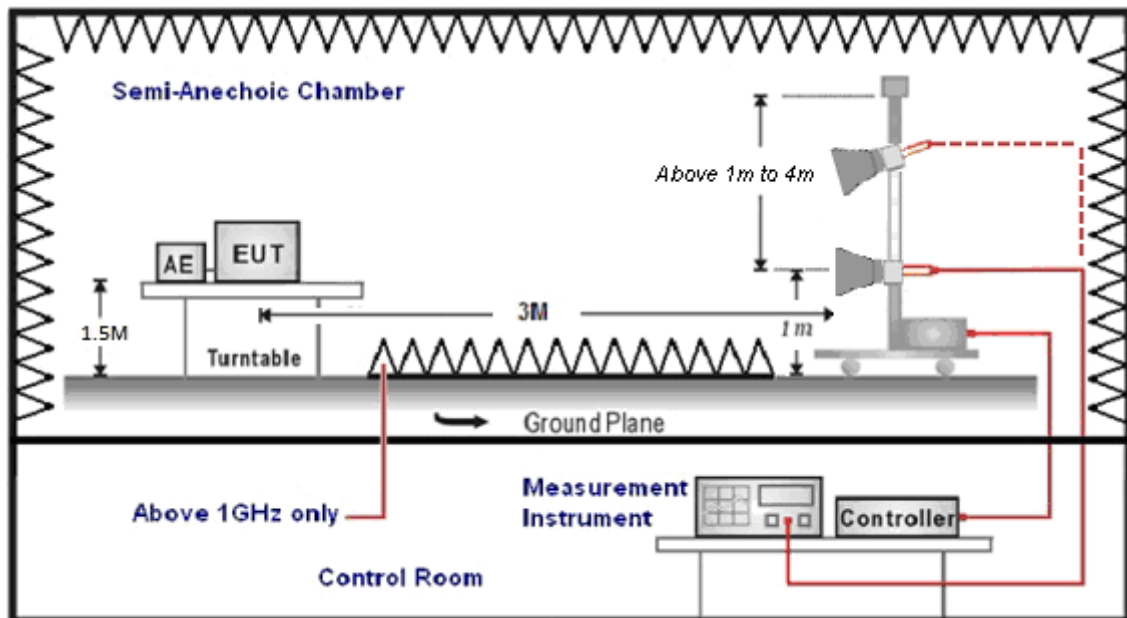
9kHz ~ 30MHz



30MHz ~ 1GHz



Above 1GHz



## ■ Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 or 1.5 meters height (below 1GHz use 0.8m turntable / above 1GHz use 1.5m turntable), top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 9 kHz to 40 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For restricted measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 3 MHz for peak measurements and 10 Hz for average measurements when Duty cycle > 0.98 / 1/T for average measurements when Duty cycle < 0.98.

For out of band measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 3 MHz for peak measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on three orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Trilog-Broadband Antenna at 3 Meter and the ETS-Lindgren Double-Ridged Waveguide Horn antenna Schwarzbeck Mess-Elektronik Broadband Horn Antenna was used in frequencies 1 – 40 GHz at a distance of 3 meter. The antenna at an angle toward the source of the emission. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts per meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro volts per meter (dBuV/m).

The actual field intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

$$(1) \text{ Amplitude (dBuV/m) = FI (dBuV) + AF (dBuV) + CL (dBuV) - Gain (dB)}$$

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

$$(2) \text{ Actual Amplitude (dBuV/m) = Amplitude (dBuV) - Dis(dB)}$$

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency : Transmitter Output < +30dBm

(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

### Measuring Instruments and setting

The following table is the setting of spectrum analyzer and receiver.

| Spectrum Parameter                       | Setting                                          |
|------------------------------------------|--------------------------------------------------|
| Attenuation                              | Auto                                             |
| Start Frequency                          | 1000MHz                                          |
| Stop Frequency                           | 40GHz                                            |
| RBW/VBW(Emission in restricted band)     | 1MHz / 3MHz for Peak<br>1MHz / (1/T) for Average |
| RBW/VBW(Emission in non-restricted band) | 1MHz / 3MHz for Peak                             |



## ■ Test Result

Below 1GHz

| Standard:          |                   | FCC Part 15E             |                    | Test Distance:      |                | 3m           |                     |
|--------------------|-------------------|--------------------------|--------------------|---------------------|----------------|--------------|---------------------|
| Test item:         |                   | Radiated Emission        |                    | Power:              |                | AC 120V/60Hz |                     |
| Model Number:      |                   | Aero Platform            |                    | Temp.(℃)/Hum.(%RH): |                | 26(℃)/60%RH  |                     |
| Test Mode:         |                   | Mode 1                   |                    | Date:               |                | 07/24/2016   |                     |
| Description:       |                   |                          |                    | Test By:            |                | Eric Ou Yang |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)   | Margin<br>(dB) | Remark       | Ant.Polar.<br>H / V |
| 201.5000           | 41.46             | -7.79                    | 33.67              | 43.50               | -9.83          | QP           | H                   |
| 331.0000           | 29.93             | -2.94                    | 26.99              | 46.00               | -19.01         | QP           | H                   |
| 453.0000           | 31.41             | -0.12                    | 31.29              | 46.00               | -14.71         | QP           | H                   |
| 587.0000           | 30.33             | 2.53                     | 32.86              | 46.00               | -13.14         | QP           | H                   |
| 711.0000           | 27.12             | 4.95                     | 32.07              | 46.00               | -13.93         | QP           | H                   |
| 939.5000           | 26.97             | 9.43                     | 36.40              | 46.00               | -9.60          | QP           | H                   |
| 188.0000           | 40.38             | -7.14                    | 33.24              | 43.50               | -10.26         | QP           | V                   |
| 290.0000           | 31.68             | -3.71                    | 27.97              | 46.00               | -18.03         | QP           | V                   |
| 352.5000           | 32.28             | -2.63                    | 29.65              | 46.00               | -16.35         | QP           | V                   |
| 452.5000           | 31.56             | -0.13                    | 31.43              | 46.00               | -14.57         | QP           | V                   |
| 621.0000           | 29.47             | 3.33                     | 32.80              | 46.00               | -13.20         | QP           | V                   |
| 870.0000           | 25.80             | 7.97                     | 33.77              | 46.00               | -12.23         | QP           | V                   |

Note: 1. No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

2. Result = Correction factor + Reading

3. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



## Above 1GHz

|                    |                   |                          |                      |                   |                |        |                     |
|--------------------|-------------------|--------------------------|----------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:       | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:               | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH      |                |        |                     |
| Test Mode:         | Mode 2            |                          | Date:                | 07/24/2016        |                |        |                     |
| Frequency:         | 5180MHz           |                          | Test By:             | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                      |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 10360.000          | 44.27             | 5.21                     | 49.48                | 68.20             | -18.72         | peak   | H                   |
| 10360.000          | 45.57             | 5.21                     | 50.78                | 68.20             | -17.42         | peak   | V                   |

|                    |                   |                          |                    |                   |                |        |                     |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      | Test Distance:           | 3m                 |                   |                |        |                     |
| Test item:         | Radiated Emission | Power:                   | AC 120V/60Hz       |                   |                |        |                     |
| Model Number:      | Aero Platform     | Temp.(°C)/Hum.(%RH):     | 26(°C)/60%RH       |                   |                |        |                     |
| Test Mode:         | Mode 2            | Date:                    | 07/24/2016         |                   |                |        |                     |
| Frequency:         | 5200MHz           | Test By:                 | Eric Ou Yang       |                   |                |        |                     |
| Description:       |                   |                          |                    |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 10400.000          | 43.47             | 5.33                     | 48.80              | 68.20             | -19.40         | peak   | H                   |
| 10400.000          | 43.94             | 5.33                     | 49.27              | 68.20             | -18.93         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|                    |                   |                          |                      |                   |                |        |                     |
|--------------------|-------------------|--------------------------|----------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:       | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:               | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH      |                |        |                     |
| Test Mode:         | Mode 2            |                          | Date:                | 07/24/2016        |                |        |                     |
| Frequency:         | 5240MHz           |                          | Test By:             | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                      |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 10480.000          | 43.91             | 5.55                     | 49.46                | 68.20             | -18.74         | peak   | H                   |
| 10480.000          | 43.76             | 5.55                     | 49.31                | 68.20             | -18.89         | peak   | V                   |

|                    |                   |                          |                     |                   |                |        |                     |
|--------------------|-------------------|--------------------------|---------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:      | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:              | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(℃)/Hum.(%RH): | 26(℃)/60%RH       |                |        |                     |
| Test Mode:         | Mode 2            |                          | Date:               | 07/24/2016        |                |        |                     |
| Frequency:         | 5745MHz           |                          | Test By:            | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                     |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)  | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 11490.000          | 43.95             | 6.44                     | 50.39               | 74.00             | -23.61         | peak   | H                   |
| 11490.000          | 43.96             | 6.44                     | 50.40               | 74.00             | -23.60         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|                    |                   |                          |                      |                   |                |        |                     |
|--------------------|-------------------|--------------------------|----------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:       | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:               | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH      |                |        |                     |
| Test Mode:         | Mode 2            |                          | Date:                | 07/24/2016        |                |        |                     |
| Frequency:         | 5785MHz           |                          | Test By:             | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                      |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 11570.000          | 45.05             | 6.63                     | 51.68                | 74.00             | -22.32         | peak   | H                   |
| 11570.000          | 43.98             | 6.63                     | 50.61                | 74.00             | -23.39         | peak   | V                   |

|                    |                   |                          |                      |                   |                |        |                     |
|--------------------|-------------------|--------------------------|----------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:       | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:               | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH      |                |        |                     |
| Test Mode:         | Mode 2            |                          | Date:                | 07/24/2016        |                |        |                     |
| Frequency:         | 5825MHz           |                          | Test By:             | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                      |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 11650.000          | 45.01             | 6.85                     | 51.86                | 74.00             | -22.14         | peak   | H                   |
| 11650.000          | 44.88             | 6.85                     | 51.73                | 74.00             | -22.27         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|                    |                   |                          |                      |                   |                |        |                     |
|--------------------|-------------------|--------------------------|----------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:       | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:               | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH      |                |        |                     |
| Test Mode:         | Mode 3            |                          | Date:                | 07/24/2016        |                |        |                     |
| Frequency:         | 5180MHz           |                          | Test By:             | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                      |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 10360.000          | 45.20             | 5.21                     | 50.41                | 68.20             | -17.79         | peak   | H                   |
| 10360.000          | 44.77             | 5.21                     | 49.98                | 68.20             | -18.22         | peak   | V                   |

|                    |                   |                          |                      |                   |                |        |                     |
|--------------------|-------------------|--------------------------|----------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:       | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:               | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH      |                |        |                     |
| Test Mode:         | Mode 3            |                          | Date:                | 07/24/2016        |                |        |                     |
| Frequency:         | 5200MHz           |                          | Test By:             | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                      |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 10400.000          | 42.75             | 5.33                     | 48.08                | 68.20             | -20.12         | peak   | H                   |
| 10400.000          | 43.54             | 5.33                     | 48.87                | 68.20             | -19.33         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|                    |                   |                          |                    |                      |                |              |                     |
|--------------------|-------------------|--------------------------|--------------------|----------------------|----------------|--------------|---------------------|
| Standard:          |                   | FCC Part 15E             |                    | Test Distance:       |                | 3m           |                     |
| Test item:         |                   | Radiated Emission        |                    | Power:               |                | AC 120V/60Hz |                     |
| Model Number:      |                   | Aero Platform            |                    | Temp.(°C)/Hum.(%RH): |                | 26(°C)/60%RH |                     |
| Test Mode:         |                   | Mode 3                   |                    | Date:                |                | 07/24/2016   |                     |
| Frequency:         |                   | 5240MHz                  |                    | Test By:             |                | Eric Ou Yang |                     |
| Description:       |                   |                          |                    |                      |                |              |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)    | Margin<br>(dB) | Remark       | Ant.Polar.<br>H / V |
| 10480.000          | 43.47             | 5.55                     | 49.02              | 68.20                | -19.18         | peak         | H                   |
| 10480.000          | 45.32             | 5.55                     | 50.87              | 68.20                | -17.33         | peak         | V                   |

|                    |                   |                          |                     |                   |                |        |                     |
|--------------------|-------------------|--------------------------|---------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:      | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:              | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(℃)/Hum.(%RH): | 26(℃)/60%RH       |                |        |                     |
| Test Mode:         | Mode 3            |                          | Date:               | 07/24/2016        |                |        |                     |
| Frequency:         | 5745MHz           |                          | Test By:            | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                     |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)  | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 11490.000          | 43.59             | 6.44                     | 50.03               | 74.00             | -23.97         | peak   | H                   |
| 11490.000          | 45.41             | 6.44                     | 51.85               | 74.00             | -22.15         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|                    |                   |                          |                    |                      |                |              |                     |
|--------------------|-------------------|--------------------------|--------------------|----------------------|----------------|--------------|---------------------|
| Standard:          |                   | FCC Part 15E             |                    | Test Distance:       |                | 3m           |                     |
| Test item:         |                   | Radiated Emission        |                    | Power:               |                | AC 120V/60Hz |                     |
| Model Number:      |                   | Aero Platform            |                    | Temp.(°C)/Hum.(%RH): |                | 26(°C)/60%RH |                     |
| Test Mode:         |                   | Mode 3                   |                    | Date:                |                | 07/24/2016   |                     |
| Frequency:         |                   | 5785MHz                  |                    | Test By:             |                | Eric Ou Yang |                     |
| Description:       |                   |                          |                    |                      |                |              |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)    | Margin<br>(dB) | Remark       | Ant.Polar.<br>H / V |
| 11570.000          | 44.14             | 6.63                     | 50.77              | 74.00                | -23.23         | peak         | H                   |
| 11570.000          | 44.53             | 6.63                     | 51.16              | 74.00                | -22.84         | peak         | V                   |

|                    |                   |                          |                      |                   |                |        |                     |
|--------------------|-------------------|--------------------------|----------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:       | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:               | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH      |                |        |                     |
| Test Mode:         | Mode 3            |                          | Date:                | 07/24/2016        |                |        |                     |
| Frequency:         | 5825MHz           |                          | Test By:             | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                      |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 11650.000          | 44.02             | 6.85                     | 50.87                | 74.00             | -23.13         | peak   | H                   |
| 11650.000          | 43.93             | 6.85                     | 50.78                | 74.00             | -23.22         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|                    |                   |                          |                      |                   |                |        |                     |
|--------------------|-------------------|--------------------------|----------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:       | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:               | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH      |                |        |                     |
| Test Mode:         | Mode 4            |                          | Date:                | 07/24/2016        |                |        |                     |
| Frequency:         | 5190MHz           |                          | Test By:             | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                      |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 10380.000          | 44.70             | 5.27                     | 49.97                | 68.20             | -18.23         | peak   | H                   |
| 10380.000          | 43.88             | 5.27                     | 49.15                | 68.20             | -19.05         | peak   | V                   |

|                    |                   |                          |                      |                   |                |        |                     |
|--------------------|-------------------|--------------------------|----------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:       | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:               | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH      |                |        |                     |
| Test Mode:         | Mode 4            |                          | Date:                | 07/24/2016        |                |        |                     |
| Frequency:         | 5230MHz           |                          | Test By:             | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                      |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 10460.000          | 44.32             | 5.50                     | 49.82                | 68.20             | -18.38         | peak   | H                   |
| 10460.000          | 44.54             | 5.50                     | 50.04                | 68.20             | -18.16         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|                    |                   |                          |                      |                   |                |        |                     |
|--------------------|-------------------|--------------------------|----------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:       | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:               | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH      |                |        |                     |
| Test Mode:         | Mode 4            |                          | Date:                | 07/24/2016        |                |        |                     |
| Frequency:         | 5755MHz           |                          | Test By:             | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                      |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 11510.000          | 44.49             | 6.47                     | 50.96                | 74.00             | -23.04         | peak   | H                   |
| 11510.000          | 44.76             | 6.47                     | 51.23                | 74.00             | -22.77         | peak   | V                   |

|                    |                   |                          |                      |                   |                |        |                     |
|--------------------|-------------------|--------------------------|----------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:       | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:               | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH      |                |        |                     |
| Test Mode:         | Mode 4            |                          | Date:                | 07/24/2016        |                |        |                     |
| Frequency:         | 5795MHz           |                          | Test By:             | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                      |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 11590.000          | 43.95             | 6.69                     | 50.64                | 74.00             | -23.36         | peak   | H                   |
| 11590.000          | 43.81             | 6.69                     | 50.50                | 74.00             | -23.50         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|                    |                   |                          |                      |                   |                |        |                     |
|--------------------|-------------------|--------------------------|----------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:       | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:               | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH      |                |        |                     |
| Test Mode:         | Mode 5            |                          | Date:                | 07/24/2016        |                |        |                     |
| Frequency:         | 5210MHz           |                          | Test By:             | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                      |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 10420.000          | 42.69             | 5.37                     | 48.06                | 68.20             | -20.14         | peak   | H                   |
| 10420.000          | 43.82             | 5.37                     | 49.19                | 68.20             | -19.01         | peak   | V                   |

|                    |                   |                          |                     |                   |                |        |                     |
|--------------------|-------------------|--------------------------|---------------------|-------------------|----------------|--------|---------------------|
| Standard:          | FCC Part 15E      |                          | Test Distance:      | 3m                |                |        |                     |
| Test item:         | Radiated Emission |                          | Power:              | AC 120V/60Hz      |                |        |                     |
| Model Number:      | Aero Platform     |                          | Temp.(℃)/Hum.(%RH): | 26(℃)/60%RH       |                |        |                     |
| Test Mode:         | Mode 5            |                          | Date:               | 07/24/2016        |                |        |                     |
| Frequency:         | 5775MHz           |                          | Test By:            | Eric Ou Yang      |                |        |                     |
| Description:       |                   |                          |                     |                   |                |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m)  | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 11550.000          | 45.38             | 6.58                     | 51.96               | 74.00             | -22.04         | peak   | H                   |
| 11550.000          | 43.85             | 6.58                     | 50.43               | 74.00             | -23.57         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

**Band Edge**

| Standard:          |                   | FCC Part 15E             |                    |                   | Test Distance:       |        | 3m                  |  |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------------|--------|---------------------|--|
| Test item:         |                   | Radiated Emission        |                    |                   | Power:               |        | AC 120V/60Hz        |  |
| Model Number:      |                   | Aero Platform            |                    |                   | Temp.(°C)/Hum.(%RH): |        | 26(°C)/60%RH        |  |
| Test Mode:         |                   | Mode 2                   |                    |                   | Date:                |        | 07/24/2016          |  |
| Frequency:         |                   | 5180 MHz                 |                    |                   | Test By:             |        | Eric Ou Yang        |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)       | Remark | Ant.Polar.<br>H / V |  |
| 5148.200           | 54.48             | 8.29                     | 62.77              | 74.00             | -11.23               | peak   | H                   |  |
| 5148.200           | 42.02             | 8.29                     | 50.31              | 54.00             | -3.69                | AVG    | H                   |  |
| 5150.000           | 53.19             | 8.29                     | 61.48              | 74.00             | -12.52               | peak   | H                   |  |
| 5150.000           | 43.76             | 8.29                     | 52.05              | 54.00             | -1.95                | AVG    | H                   |  |
|                    |                   |                          |                    |                   |                      |        |                     |  |
| 5146.800           | 54.55             | 8.28                     | 62.83              | 74.00             | -11.17               | peak   | V                   |  |
| 5146.800           | 41.49             | 8.28                     | 49.77              | 54.00             | -4.23                | AVG    | V                   |  |
| 5150.000           | 54.52             | 8.29                     | 62.81              | 74.00             | -11.19               | peak   | V                   |  |
| 5150.000           | 43.66             | 8.29                     | 51.95              | 54.00             | -2.05                | AVG    | V                   |  |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



| Standard:          |                   | FCC Part 15E             |                    |                   | Test Distance:       |        | 3m                  |  |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------------|--------|---------------------|--|
| Test item:         |                   | Radiated Emission        |                    |                   | Power:               |        | AC 120V/60Hz        |  |
| Model Number:      |                   | Aero Platform            |                    |                   | Temp.(°C)/Hum.(%RH): |        | 26(°C)/60%RH        |  |
| Test Mode:         |                   | Mode 2                   |                    |                   | Date:                |        | 07/24/2016          |  |
| Frequency:         |                   | 5200 MHz                 |                    |                   | Test By:             |        | Eric Ou Yang        |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)       | Remark | Ant.Polar.<br>H / V |  |
| 5146.080           | 51.95             | 8.28                     | 60.23              | 74.00             | -13.77               | peak   | H                   |  |
| 5146.080           | 35.69             | 8.28                     | 43.97              | 54.00             | -10.03               | AVG    | H                   |  |
| 5150.000           | 54.39             | 8.29                     | 62.68              | 74.00             | -11.32               | peak   | H                   |  |
| 5150.000           | 42.62             | 8.29                     | 50.91              | 54.00             | -3.09                | AVG    | H                   |  |
| 5350.000           | 47.59             | 8.50                     | 56.09              | 74.00             | -17.91               | peak   | H                   |  |
| 5350.000           | 35.55             | 8.50                     | 44.05              | 54.00             | -9.95                | AVG    | H                   |  |
| 5397.600           | 49.13             | 8.55                     | 57.68              | 74.00             | -16.32               | peak   | H                   |  |
| 5397.600           | 35.59             | 8.55                     | 44.14              | 54.00             | -9.86                | AVG    | H                   |  |
| 4613.280           | 51.75             | 6.77                     | 58.52              | 74.00             | -15.48               | peak   | V                   |  |
| 4613.280           | 37.37             | 6.77                     | 44.14              | 54.00             | -9.86                | AVG    | V                   |  |
| 5150.000           | 47.87             | 8.29                     | 56.16              | 74.00             | -17.84               | peak   | V                   |  |
| 5150.000           | 41.46             | 8.29                     | 49.75              | 54.00             | -4.25                | AVG    | V                   |  |
| 5350.000           | 46.95             | 8.50                     | 55.45              | 74.00             | -18.55               | peak   | V                   |  |
| 5350.000           | 35.58             | 8.50                     | 44.08              | 54.00             | -9.92                | AVG    | V                   |  |
| 5409.120           | 49.90             | 8.57                     | 58.47              | 74.00             | -15.53               | peak   | V                   |  |
| 5409.120           | 35.62             | 8.57                     | 44.19              | 54.00             | -9.81                | AVG    | V                   |  |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



| Standard:          |                   | FCC Part 15E             |                    |                   | Test Distance:       |        | 3m                  |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------------|--------|---------------------|
| Test item:         |                   | Radiated Emission        |                    |                   | Power:               |        | AC 120V/60Hz        |
| Model Number:      |                   | Aero Platform            |                    |                   | Temp.(°C)/Hum.(%RH): |        | 26(°C)/60%RH        |
| Test Mode:         |                   | Mode 2                   |                    |                   | Date:                |        | 07/24/2016          |
| Frequency:         |                   | 5240 MHz                 |                    |                   | Test By:             |        | Eric Ou Yang        |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)       | Remark | Ant.Polar.<br>H / V |
| 4565.280           | 50.91             | 6.59                     | 57.50              | 74.00             | -16.50               | peak   | H                   |
| 4565.280           | 37.54             | 6.59                     | 44.13              | 54.00             | -9.87                | AVG    | H                   |
| 5150.000           | 45.04             | 8.29                     | 53.33              | 74.00             | -20.67               | peak   | H                   |
| 5150.000           | 35.81             | 8.29                     | 44.10              | 54.00             | -9.90                | AVG    | H                   |
| 5350.000           | 46.45             | 8.50                     | 54.95              | 74.00             | -19.05               | peak   | H                   |
| 5350.000           | 35.47             | 8.50                     | 43.97              | 54.00             | -10.03               | AVG    | H                   |
| 5354.400           | 49.32             | 8.51                     | 57.83              | 74.00             | -16.17               | peak   | H                   |
| 5354.400           | 35.54             | 8.51                     | 44.05              | 54.00             | -9.95                | AVG    | H                   |
| 4748.640           | 50.33             | 7.24                     | 57.57              | 74.00             | -16.43               | peak   | V                   |
| 4748.640           | 36.94             | 7.24                     | 44.18              | 54.00             | -9.82                | AVG    | V                   |
| 5150.000           | 47.65             | 8.29                     | 55.94              | 74.00             | -18.06               | peak   | V                   |
| 5150.000           | 35.96             | 8.29                     | 44.25              | 54.00             | -9.75                | AVG    | V                   |
| 5350.000           | 48.81             | 8.50                     | 57.31              | 74.00             | -16.69               | peak   | V                   |
| 5350.000           | 35.71             | 8.50                     | 44.21              | 54.00             | -9.79                | AVG    | V                   |
| 5388.000           | 49.09             | 8.54                     | 57.63              | 74.00             | -16.37               | peak   | V                   |
| 5388.000           | 35.63             | 8.54                     | 44.17              | 54.00             | -9.83                | AVG    | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



| Standard:          |                   | FCC Part 15E             |                    |                   | Test Distance:       |        | 3m                  |  |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------------|--------|---------------------|--|
| Test item:         |                   | Radiated Emission        |                    |                   | Power:               |        | AC 120V/60Hz        |  |
| Model Number:      |                   | Aero Platform            |                    |                   | Temp.(°C)/Hum.(%RH): |        | 26(°C)/60%RH        |  |
| Test Mode:         |                   | Mode 2                   |                    |                   | Date:                |        | 07/24/2016          |  |
| Frequency:         |                   | 5745 MHz                 |                    |                   | Test By:             |        | Eric Ou Yang        |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)       | Remark | Ant.Polar.<br>H / V |  |
| 5650.000           | 48.36             | 9.01                     | 57.37              | 68.20             | -10.83               | peak   | H                   |  |
| 5700.000           | 48.19             | 9.13                     | 57.32              | 105.20            | -47.88               | peak   | H                   |  |
| 5720.000           | 57.25             | 9.17                     | 66.42              | 110.80            | -44.38               | peak   | H                   |  |
| 5725.000           | 65.75             | 9.19                     | 74.94              | 122.20            | -47.26               | peak   | H                   |  |
|                    |                   |                          |                    |                   |                      |        |                     |  |
| 5650.000           | 47.46             | 9.01                     | 56.47              | 68.20             | -11.73               | peak   | V                   |  |
| 5700.000           | 48.24             | 9.13                     | 57.37              | 105.20            | -47.83               | peak   | V                   |  |
| 5720.000           | 58.66             | 9.17                     | 67.83              | 110.80            | -42.97               | peak   | V                   |  |
| 5725.000           | 64.37             | 9.19                     | 73.56              | 122.20            | -48.64               | peak   | V                   |  |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



| Standard:          |                   | FCC Part 15E             |                    |                   | Test Distance:       |        | 3m                  |  |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------------|--------|---------------------|--|
| Test item:         |                   | Radiated Emission        |                    |                   | Power:               |        | AC 120V/60Hz        |  |
| Model Number:      |                   | Aero Platform            |                    |                   | Temp.(°C)/Hum.(%RH): |        | 26(°C)/60%RH        |  |
| Test Mode:         |                   | Mode 2                   |                    |                   | Date:                |        | 07/24/2016          |  |
| Frequency:         |                   | 5785 MHz                 |                    |                   | Test By:             |        | Eric Ou Yang        |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)       | Remark | Ant.Polar.<br>H / V |  |
| 5650.000           | 47.63             | 9.01                     | 56.64              | 68.20             | -11.56               | peak   | H                   |  |
| 5700.000           | 50.89             | 9.13                     | 60.02              | 105.20            | -45.18               | peak   | H                   |  |
| 5720.000           | 53.38             | 9.17                     | 62.55              | 110.80            | -48.25               | peak   | H                   |  |
| 5725.000           | 53.62             | 9.19                     | 62.81              | 122.20            | -59.39               | peak   | H                   |  |
| 5850.000           | 49.05             | 9.46                     | 58.51              | 122.20            | -63.69               | peak   | H                   |  |
| 5855.000           | 49.64             | 9.48                     | 59.12              | 110.80            | -51.68               | peak   | H                   |  |
| 5875.000           | 46.21             | 9.53                     | 55.74              | 105.20            | -49.46               | peak   | H                   |  |
| 5925.000           | 45.99             | 9.65                     | 55.64              | 68.20             | -12.56               | peak   | H                   |  |
| 5650.000           | 46.00             | 9.01                     | 55.01              | 68.20             | -13.19               | peak   | V                   |  |
| 5700.000           | 46.80             | 9.13                     | 55.93              | 105.20            | -49.27               | peak   | V                   |  |
| 5720.000           | 46.78             | 9.17                     | 55.95              | 110.80            | -54.85               | peak   | V                   |  |
| 5725.000           | 49.58             | 9.19                     | 58.77              | 122.20            | -63.43               | peak   | V                   |  |
| 5850.000           | 47.49             | 9.46                     | 56.95              | 122.20            | -65.25               | peak   | V                   |  |
| 5855.000           | 46.58             | 9.48                     | 56.06              | 110.80            | -54.74               | peak   | V                   |  |
| 5875.000           | 45.60             | 9.53                     | 55.13              | 105.20            | -50.07               | peak   | V                   |  |
| 5925.000           | 46.74             | 9.65                     | 56.39              | 68.20             | -11.81               | peak   | V                   |  |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|               |                   |                      |              |
|---------------|-------------------|----------------------|--------------|
| Standard:     | FCC Part 15E      | Test Distance:       | 3m           |
| Test item:    | Radiated Emission | Power:               | AC 120V/60Hz |
| Model Number: | Aero Platform     | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Test Mode:    | Mode 2            | Date:                | 07/24/2016   |
| Frequency:    | 5825 MHz          | Test By:             | Eric Ou Yang |

| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------|--------|---------------------|
| 5850.000           | 61.07             | 9.46                     | 70.53              | 122.20            | -51.67         | peak   | H                   |
| 5855.000           | 55.55             | 9.48                     | 65.03              | 110.80            | -45.77         | peak   | H                   |
| 5875.000           | 47.22             | 9.53                     | 56.75              | 105.20            | -48.45         | peak   | H                   |
| 5925.000           | 47.59             | 9.65                     | 57.24              | 68.20             | -10.96         | peak   | H                   |
| 5850.000           | 51.70             | 9.46                     | 61.16              | 122.20            | -61.04         | peak   | V                   |
| 5855.000           | 49.92             | 9.48                     | 59.40              | 110.80            | -51.40         | peak   | V                   |
| 5875.000           | 45.27             | 9.53                     | 54.80              | 105.20            | -50.40         | peak   | V                   |
| 5925.000           | 46.58             | 9.65                     | 56.23              | 68.20             | -11.97         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|               |         |                   |          |          |                      |        |              |  |
|---------------|---------|-------------------|----------|----------|----------------------|--------|--------------|--|
| Standard:     |         | FCC Part 15E      |          |          | Test Distance:       |        | 3m           |  |
| Test item:    |         | Radiated Emission |          |          | Power:               |        | AC 120V/60Hz |  |
| Model Number: |         | Aero Platform     |          |          | Temp.(°C)/Hum.(%RH): |        | 26(°C)/60%RH |  |
| Test Mode:    |         | Mode 3            |          |          | Date:                |        | 07/24/2016   |  |
| Frequency:    |         | 5180 MHz          |          |          | Test By:             |        | Eric Ou Yang |  |
| Frequency     | Reading | Correct Factor    | Result   | Limit    | Margin               | Remark | Ant.Polar.   |  |
| (MHz)         | (dBuV)  | (dB/m)            | (dBuV/m) | (dBuV/m) | (dB)                 |        | H / V        |  |
| 5127.900      | 51.99   | 8.27              | 60.26    | 74.00    | -13.74               | peak   | H            |  |
| 5127.900      | 40.33   | 8.27              | 48.60    | 54.00    | -5.40                | AVG    | H            |  |
| 5150.000      | 50.88   | 8.29              | 59.17    | 74.00    | -14.83               | peak   | H            |  |
| 5150.000      | 42.78   | 8.29              | 51.07    | 54.00    | -2.93                | AVG    | H            |  |
|               |         |                   |          |          |                      |        |              |  |
| 5143.300      | 49.21   | 8.28              | 57.49    | 74.00    | -16.51               | peak   | V            |  |
| 5143.300      | 36.96   | 8.28              | 45.24    | 54.00    | -8.76                | AVG    | V            |  |
| 5150.000      | 49.59   | 8.29              | 57.88    | 74.00    | -16.12               | peak   | V            |  |
| 5150.000      | 41.23   | 8.29              | 49.52    | 54.00    | -4.48                | AVG    | V            |  |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



| Standard:          |                   | FCC Part 15E             |                    |                   | Test Distance:       |        | 3m                  |  |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------------|--------|---------------------|--|
| Test item:         |                   | Radiated Emission        |                    |                   | Power:               |        | AC 120V/60Hz        |  |
| Model Number:      |                   | Aero Platform            |                    |                   | Temp.(°C)/Hum.(%RH): |        | 26(°C)/60%RH        |  |
| Test Mode:         |                   | Mode 3                   |                    |                   | Date:                |        | 07/24/2016          |  |
| Frequency:         |                   | 5200 MHz                 |                    |                   | Test By:             |        | Eric Ou Yang        |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)       | Remark | Ant.Polar.<br>H / V |  |
| 4738.080           | 50.86             | 7.20                     | 58.06              | 74.00             | -15.94               | peak   | H                   |  |
| 4738.080           | 37.21             | 7.20                     | 44.41              | 54.00             | -9.59                | AVG    | H                   |  |
| 5150.000           | 48.56             | 8.29                     | 56.85              | 74.00             | -17.15               | peak   | H                   |  |
| 5150.000           | 40.70             | 8.29                     | 48.99              | 54.00             | -5.01                | AVG    | H                   |  |
| 5350.000           | 48.05             | 8.50                     | 56.55              | 74.00             | -17.45               | peak   | H                   |  |
| 5350.000           | 37.55             | 8.50                     | 46.05              | 54.00             | -7.95                | AVG    | H                   |  |
| 5401.440           | 49.85             | 8.56                     | 58.41              | 74.00             | -15.59               | peak   | H                   |  |
| 5401.440           | 36.79             | 8.56                     | 45.35              | 54.00             | -8.65                | AVG    | H                   |  |
| 5092.320           | 48.79             | 8.22                     | 57.01              | 74.00             | -16.99               | peak   | V                   |  |
| 5092.320           | 37.02             | 8.22                     | 45.24              | 54.00             | -8.76                | AVG    | V                   |  |
| 5150.000           | 46.71             | 8.29                     | 55.00              | 74.00             | -19.00               | peak   | V                   |  |
| 5150.000           | 36.02             | 8.29                     | 44.31              | 54.00             | -9.69                | AVG    | V                   |  |
| 5350.000           | 47.05             | 8.50                     | 55.55              | 74.00             | -18.45               | peak   | V                   |  |
| 5350.000           | 35.75             | 8.50                     | 44.25              | 54.00             | -9.75                | AVG    | V                   |  |
| 5430.240           | 48.48             | 8.59                     | 57.07              | 74.00             | -16.93               | peak   | V                   |  |
| 5430.240           | 36.52             | 8.59                     | 45.11              | 54.00             | -8.89                | AVG    | V                   |  |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



| Standard:          |                   | FCC Part 15E             |                    |                   | Test Distance:       |        | 3m                  |  |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------------|--------|---------------------|--|
| Test item:         |                   | Radiated Emission        |                    |                   | Power:               |        | AC 120V/60Hz        |  |
| Model Number:      |                   | Aero Platform            |                    |                   | Temp.(°C)/Hum.(%RH): |        | 26(°C)/60%RH        |  |
| Test Mode:         |                   | Mode 3                   |                    |                   | Date:                |        | 07/24/2016          |  |
| Frequency:         |                   | 5240 MHz                 |                    |                   | Test By:             |        | Eric Ou Yang        |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)       | Remark | Ant.Polar.<br>H / V |  |
| 4728.480           | 49.87             | 7.17                     | 57.04              | 74.00             | -16.96               | peak   | H                   |  |
| 4728.480           | 37.84             | 7.17                     | 45.01              | 54.00             | -8.99                | AVG    | H                   |  |
| 5150.000           | 46.40             | 8.29                     | 54.69              | 74.00             | -19.31               | peak   | H                   |  |
| 5150.000           | 38.03             | 8.29                     | 46.32              | 54.00             | -7.68                | AVG    | H                   |  |
| 5350.000           | 47.62             | 8.50                     | 56.12              | 74.00             | -17.88               | peak   | H                   |  |
| 5350.000           | 37.68             | 8.50                     | 46.18              | 54.00             | -7.82                | AVG    | H                   |  |
| 5358.240           | 47.99             | 8.51                     | 56.50              | 74.00             | -17.50               | peak   | H                   |  |
| 5358.240           | 37.48             | 8.51                     | 45.99              | 54.00             | -8.01                | AVG    | H                   |  |
|                    |                   |                          |                    |                   |                      |        |                     |  |
| 4732.320           | 50.74             | 7.18                     | 57.92              | 74.00             | -16.08               | peak   | V                   |  |
| 4732.320           | 37.71             | 7.18                     | 44.89              | 54.00             | -9.11                | AVG    | V                   |  |
| 5150.000           | 46.10             | 8.29                     | 54.39              | 74.00             | -19.61               | peak   | V                   |  |
| 5150.000           | 37.32             | 8.29                     | 45.61              | 54.00             | -8.39                | AVG    | V                   |  |
| 5350.000           | 47.77             | 8.50                     | 56.27              | 74.00             | -17.73               | peak   | V                   |  |
| 5350.000           | 37.64             | 8.50                     | 46.14              | 54.00             | -7.86                | AVG    | V                   |  |
| 5390.880           | 49.98             | 8.54                     | 58.52              | 74.00             | -15.48               | peak   | V                   |  |
| 5390.880           | 37.40             | 8.54                     | 45.94              | 54.00             | -8.06                | AVG    | V                   |  |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|               |                   |                      |              |
|---------------|-------------------|----------------------|--------------|
| Standard:     | FCC Part 15E      | Test Distance:       | 3m           |
| Test item:    | Radiated Emission | Power:               | AC 120V/60Hz |
| Model Number: | Aero Platform     | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Test Mode:    | Mode 3            | Date:                | 07/24/2016   |
| Frequency:    | 5745 MHz          | Test By:             | Eric Ou Yang |

| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------|--------|---------------------|
| 5650.000           | 48.35             | 9.01                     | 57.36              | 68.20             | -10.84         | peak   | H                   |
| 5700.000           | 51.77             | 9.13                     | 60.90              | 105.20            | -44.30         | peak   | H                   |
| 5720.000           | 59.35             | 9.17                     | 68.52              | 110.80            | -42.28         | peak   | H                   |
| 5725.000           | 64.28             | 9.19                     | 73.47              | 122.20            | -48.73         | peak   | H                   |
| 5650.000           | 46.86             | 9.01                     | 55.87              | 68.20             | -12.33         | peak   | V                   |
| 5700.000           | 47.92             | 9.13                     | 57.05              | 105.20            | -48.15         | peak   | V                   |
| 5720.000           | 59.57             | 9.17                     | 68.74              | 110.80            | -42.06         | peak   | V                   |
| 5725.000           | 66.29             | 9.19                     | 75.48              | 122.20            | -46.72         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|               |                   |                      |              |
|---------------|-------------------|----------------------|--------------|
| Standard:     | FCC Part 15E      | Test Distance:       | 3m           |
| Test item:    | Radiated Emission | Power:               | AC 120V/60Hz |
| Model Number: | Aero Platform     | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Test Mode:    | Mode 3            | Date:                | 07/24/2016   |
| Frequency:    | 5785 MHz          | Test By:             | Eric Ou Yang |

| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------|--------|---------------------|
| 5650.000           | 46.92             | 9.01                     | 55.93              | 68.20             | -12.27         | peak   | H                   |
| 5700.000           | 49.45             | 9.13                     | 58.58              | 105.20            | -46.62         | peak   | H                   |
| 5720.000           | 50.31             | 9.17                     | 59.48              | 110.80            | -51.32         | peak   | H                   |
| 5725.000           | 51.17             | 9.19                     | 60.36              | 122.20            | -61.84         | peak   | H                   |
| 5850.000           | 48.79             | 9.46                     | 58.25              | 122.20            | -63.95         | peak   | H                   |
| 5855.000           | 47.25             | 9.48                     | 56.73              | 110.80            | -54.07         | peak   | H                   |
| 5875.000           | 46.84             | 9.53                     | 56.37              | 105.20            | -48.83         | peak   | H                   |
| 5925.000           | 46.61             | 9.65                     | 56.26              | 68.20             | -11.94         | peak   | H                   |
| 5650.000           | 46.34             | 9.01                     | 55.35              | 68.20             | -12.85         | peak   | V                   |
| 5700.000           | 46.82             | 9.13                     | 55.95              | 105.20            | -49.25         | peak   | V                   |
| 5720.000           | 47.99             | 9.17                     | 57.16              | 110.80            | -53.64         | peak   | V                   |
| 5725.000           | 48.94             | 9.19                     | 58.13              | 122.20            | -64.07         | peak   | V                   |
| 5850.000           | 46.66             | 9.46                     | 56.12              | 122.20            | -66.08         | peak   | V                   |
| 5855.000           | 45.85             | 9.48                     | 55.33              | 110.80            | -55.47         | peak   | V                   |
| 5875.000           | 46.81             | 9.53                     | 56.34              | 105.20            | -48.86         | peak   | V                   |
| 5925.000           | 47.17             | 9.65                     | 56.82              | 68.20             | -11.38         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



| Standard:          | FCC Part 15E      |                          |                    | Test Distance:       | 3m             |        |                     |
|--------------------|-------------------|--------------------------|--------------------|----------------------|----------------|--------|---------------------|
| Test item:         | Radiated Emission |                          |                    | Power:               | AC 120V/60Hz   |        |                     |
| Model Number:      | Aero Platform     |                          |                    | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH   |        |                     |
| Test Mode:         | Mode 3            |                          |                    | Date:                | 07/24/2016     |        |                     |
| Frequency:         | 5825 MHz          |                          |                    | Test By:             | Eric Ou Yang   |        |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)    | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
| 5850.000           | 61.49             | 9.46                     | 70.95              | 122.20               | -51.25         | peak   | H                   |
| 5855.000           | 57.07             | 9.48                     | 66.55              | 110.80               | -44.25         | peak   | H                   |
| 5875.000           | 48.52             | 9.53                     | 58.05              | 105.20               | -47.15         | peak   | H                   |
| 5925.000           | 46.90             | 9.65                     | 56.55              | 68.20                | -11.65         | peak   | H                   |
| 5850.000           | 60.47             | 9.46                     | 69.93              | 122.20               | -52.27         | peak   | V                   |
| 5855.000           | 54.40             | 9.48                     | 63.88              | 110.80               | -46.92         | peak   | V                   |
| 5875.000           | 48.11             | 9.53                     | 57.64              | 105.20               | -47.56         | peak   | V                   |
| 5925.000           | 46.05             | 9.65                     | 55.70              | 68.20                | -12.50         | peak   | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



|               |                   |                      |              |
|---------------|-------------------|----------------------|--------------|
| Standard:     | FCC Part 15E      | Test Distance:       | 3m           |
| Test item:    | Radiated Emission | Power:               | AC 120V/60Hz |
| Model Number: | Aero Platform     | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Test Mode:    | Mode 4            | Date:                | 07/24/2016   |
| Frequency:    | 5190 MHz          | Test By:             | Eric Ou Yang |

| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark | Ant.Polar.<br>H / V |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------|--------|---------------------|
| 5146.100           | 51.81             | 8.28                     | 60.09              | 74.00             | -13.91         | peak   | H                   |
| 5146.100           | 43.33             | 8.28                     | 51.61              | 54.00             | -2.39          | AVG    | H                   |
| 5150.000           | 50.52             | 8.29                     | 58.81              | 74.00             | -15.19         | peak   | H                   |
| 5150.000           | 44.03             | 8.29                     | 52.32              | 54.00             | -1.68          | AVG    | H                   |
| 5144.000           | 50.45             | 8.28                     | 58.73              | 74.00             | -15.27         | peak   | V                   |
| 5144.000           | 41.36             | 8.28                     | 49.64              | 54.00             | -4.36          | AVG    | V                   |
| 5150.000           | 50.79             | 8.29                     | 59.08              | 74.00             | -14.92         | peak   | V                   |
| 5150.000           | 42.61             | 8.29                     | 50.90              | 54.00             | -3.10          | AVG    | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



| Standard:          |                   | FCC Part 15E             |                    |                   | Test Distance:       |        | 3m                  |  |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------------|--------|---------------------|--|
| Test item:         |                   | Radiated Emission        |                    |                   | Power:               |        | AC 120V/60Hz        |  |
| Model Number:      |                   | Aero Platform            |                    |                   | Temp.(°C)/Hum.(%RH): |        | 26(°C)/60%RH        |  |
| Test Mode:         |                   | Mode 4                   |                    |                   | Date:                |        | 07/24/2016          |  |
| Frequency:         |                   | 5230 MHz                 |                    |                   | Test By:             |        | Eric Ou Yang        |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)       | Remark | Ant.Polar.<br>H / V |  |
| 5127.840           | 50.00             | 8.27                     | 58.27              | 74.00             | -15.73               | peak   | H                   |  |
| 5127.840           | 39.15             | 8.27                     | 47.42              | 54.00             | -6.58                | AVG    | H                   |  |
| 5150.000           | 48.97             | 8.29                     | 57.26              | 74.00             | -16.74               | peak   | H                   |  |
| 5150.000           | 42.11             | 8.29                     | 50.40              | 54.00             | -3.60                | AVG    | H                   |  |
| 5350.000           | 47.16             | 8.50                     | 55.66              | 74.00             | -18.34               | peak   | H                   |  |
| 5350.000           | 38.24             | 8.50                     | 46.74              | 54.00             | -7.26                | AVG    | H                   |  |
| 5420.640           | 48.54             | 8.58                     | 57.12              | 74.00             | -16.88               | peak   | H                   |  |
| 5420.640           | 37.42             | 8.58                     | 46.00              | 54.00             | -8.00                | AVG    | H                   |  |
|                    |                   |                          |                    |                   |                      |        |                     |  |
| 5014.560           | 48.51             | 8.14                     | 56.65              | 74.00             | -17.35               | peak   | V                   |  |
| 5014.560           | 37.63             | 8.14                     | 45.77              | 54.00             | -8.23                | AVG    | V                   |  |
| 5150.000           | 48.63             | 8.29                     | 56.92              | 74.00             | -17.08               | peak   | V                   |  |
| 5150.000           | 40.01             | 8.29                     | 48.30              | 54.00             | -5.70                | AVG    | V                   |  |
| 5350.000           | 48.16             | 8.50                     | 56.66              | 74.00             | -17.34               | peak   | V                   |  |
| 5350.000           | 37.97             | 8.50                     | 46.47              | 54.00             | -7.53                | AVG    | V                   |  |
| 5377.440           | 48.21             | 8.54                     | 56.75              | 74.00             | -17.25               | peak   | V                   |  |
| 5377.440           | 37.82             | 8.54                     | 46.36              | 54.00             | -7.64                | AVG    | V                   |  |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



| Standard:          |                   | FCC Part 15E             |                    |                   | Test Distance:       |        | 3m                  |  |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------------|--------|---------------------|--|
| Test item:         |                   | Radiated Emission        |                    |                   | Power:               |        | AC 120V/60Hz        |  |
| Model Number:      |                   | Aero Platform            |                    |                   | Temp.(°C)/Hum.(%RH): |        | 26(°C)/60%RH        |  |
| Test Mode:         |                   | Mode 4                   |                    |                   | Date:                |        | 07/24/2016          |  |
| Frequency:         |                   | 5755 MHz                 |                    |                   | Test By:             |        | Eric Ou Yang        |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)       | Remark | Ant.Polar.<br>H / V |  |
| 5650.000           | 48.25             | 9.01                     | 57.26              | 68.20             | -10.94               | peak   | H                   |  |
| 5700.000           | 52.09             | 9.13                     | 61.22              | 105.20            | -43.98               | peak   | H                   |  |
| 5720.000           | 58.08             | 9.17                     | 67.25              | 110.80            | -43.55               | peak   | H                   |  |
| 5725.000           | 58.20             | 9.19                     | 67.39              | 122.20            | -54.81               | peak   | H                   |  |
|                    |                   |                          |                    |                   |                      |        |                     |  |
| 5650.000           | 46.97             | 9.01                     | 55.98              | 68.20             | -12.22               | peak   | V                   |  |
| 5700.000           | 49.10             | 9.13                     | 58.23              | 105.20            | -46.97               | peak   | V                   |  |
| 5720.000           | 57.31             | 9.17                     | 66.48              | 110.80            | -44.32               | peak   | V                   |  |
| 5725.000           | 54.72             | 9.19                     | 63.91              | 122.20            | -58.29               | peak   | V                   |  |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



| Standard:          |                   | FCC Part 15E             |                    |                   | Test Distance:       |        | 3m                  |  |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------------|--------|---------------------|--|
| Test item:         |                   | Radiated Emission        |                    |                   | Power:               |        | AC 120V/60Hz        |  |
| Model Number:      |                   | Aero Platform            |                    |                   | Temp.(°C)/Hum.(%RH): |        | 26(°C)/60%RH        |  |
| Test Mode:         |                   | Mode 4                   |                    |                   | Date:                |        | 07/24/2016          |  |
| Frequency:         |                   | 5795 MHz                 |                    |                   | Test By:             |        | Eric Ou Yang        |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)       | Remark | Ant.Polar.<br>H / V |  |
| 5850.000           | 56.68             | 9.46                     | 66.14              | 122.20            | -56.06               | peak   | H                   |  |
| 5855.000           | 54.18             | 9.48                     | 63.66              | 110.80            | -47.14               | peak   | H                   |  |
| 5875.000           | 49.92             | 9.53                     | 59.45              | 105.20            | -45.75               | peak   | H                   |  |
| 5925.000           | 46.52             | 9.65                     | 56.17              | 68.20             | -12.03               | peak   | H                   |  |
|                    |                   |                          |                    |                   |                      |        |                     |  |
| 5850.000           | 47.27             | 9.46                     | 56.73              | 122.20            | -65.47               | peak   | V                   |  |
| 5855.000           | 47.67             | 9.48                     | 57.15              | 110.80            | -53.65               | peak   | V                   |  |
| 5875.000           | 46.07             | 9.53                     | 55.60              | 105.20            | -49.60               | peak   | V                   |  |
| 5925.000           | 46.78             | 9.65                     | 56.43              | 68.20             | -11.77               | peak   | V                   |  |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



| Standard:          |                   | FCC Part 15E             |                    | Test Distance:       |                | 3m           |                     |
|--------------------|-------------------|--------------------------|--------------------|----------------------|----------------|--------------|---------------------|
| Test item:         |                   | Radiated Emission        |                    | Power:               |                | AC 120V/60Hz |                     |
| Model Number:      |                   | Aero Platform            |                    | Temp.(°C)/Hum.(%RH): |                | 26(°C)/60%RH |                     |
| Test Mode:         |                   | Mode 5                   |                    | Date:                |                | 07/24/2016   |                     |
| Frequency:         |                   | 5210 MHz                 |                    | Test By:             |                | Eric Ou Yang |                     |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)    | Margin<br>(dB) | Remark       | Ant.Polar.<br>H / V |
| 5131.680           | 53.06             | 8.27                     | 61.33              | 74.00                | -12.67         | peak         | H                   |
| 5131.680           | 42.97             | 8.27                     | 51.24              | 54.00                | -2.76          | AVG          | H                   |
| 5150.000           | 51.58             | 8.29                     | 59.87              | 74.00                | -14.13         | peak         | H                   |
| 5150.000           | 43.09             | 8.29                     | 51.38              | 54.00                | -2.62          | AVG          | H                   |
| 5350.000           | 47.66             | 8.50                     | 56.16              | 74.00                | -17.84         | peak         | H                   |
| 5350.000           | 39.00             | 8.50                     | 47.50              | 54.00                | -6.50          | AVG          | H                   |
| 5403.360           | 48.48             | 8.56                     | 57.04              | 74.00                | -16.96         | peak         | H                   |
| 5403.360           | 39.24             | 8.56                     | 47.80              | 54.00                | -6.20          | AVG          | H                   |
| 5131.680           | 54.18             | 8.27                     | 62.45              | 74.00                | -11.55         | peak         | V                   |
| 5131.680           | 43.76             | 8.27                     | 52.03              | 54.00                | -1.97          | AVG          | V                   |
| 5150.000           | 52.76             | 8.29                     | 61.05              | 74.00                | -12.95         | peak         | V                   |
| 5150.000           | 43.86             | 8.29                     | 52.15              | 54.00                | -1.85          | AVG          | V                   |
| 5350.000           | 46.78             | 8.50                     | 55.28              | 74.00                | -18.72         | peak         | V                   |
| 5350.000           | 39.42             | 8.50                     | 47.92              | 54.00                | -6.08          | AVG          | V                   |
| 5363.040           | 48.41             | 8.52                     | 56.93              | 74.00                | -17.07         | peak         | V                   |
| 5363.040           | 38.82             | 8.52                     | 47.34              | 54.00                | -6.66          | AVG          | V                   |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.



| Standard:          |                   | FCC Part 15E             |                    |                   | Test Distance:       |        | 3m                  |  |
|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------------|--------|---------------------|--|
| Test item:         |                   | Radiated Emission        |                    |                   | Power:               |        | AC 120V/60Hz        |  |
| Model Number:      |                   | Aero Platform            |                    |                   | Temp.(°C)/Hum.(%RH): |        | 26(°C)/60%RH        |  |
| Test Mode:         |                   | Mode 5                   |                    |                   | Date:                |        | 07/24/2016          |  |
| Frequency:         |                   | 5775 MHz                 |                    |                   | Test By:             |        | Eric Ou Yang        |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)       | Remark | Ant.Polar.<br>H / V |  |
| 5650.000           | 49.25             | 9.01                     | 58.26              | 68.20             | -9.94                | peak   | H                   |  |
| 5700.000           | 53.50             | 9.13                     | 62.63              | 105.20            | -42.57               | peak   | H                   |  |
| 5720.000           | 59.39             | 9.17                     | 68.56              | 110.80            | -42.24               | peak   | H                   |  |
| 5725.000           | 58.29             | 9.19                     | 67.48              | 122.20            | -54.72               | peak   | H                   |  |
| 5850.000           | 58.81             | 9.46                     | 68.27              | 122.20            | -53.93               | peak   | H                   |  |
| 5855.000           | 51.55             | 9.48                     | 61.03              | 110.80            | -49.77               | peak   | H                   |  |
| 5875.000           | 49.56             | 9.53                     | 59.09              | 105.20            | -46.11               | peak   | H                   |  |
| 5925.000           | 45.96             | 9.65                     | 55.61              | 68.20             | -12.59               | peak   | H                   |  |
|                    |                   |                          |                    |                   |                      |        |                     |  |
| 5650.000           | 47.56             | 9.01                     | 56.57              | 68.20             | -11.63               | peak   | V                   |  |
| 5700.000           | 52.99             | 9.13                     | 62.12              | 105.20            | -43.08               | peak   | V                   |  |
| 5720.000           | 54.42             | 9.17                     | 63.59              | 110.80            | -47.21               | peak   | V                   |  |
| 5725.000           | 56.33             | 9.19                     | 65.52              | 122.20            | -56.68               | peak   | V                   |  |
| 5850.000           | 57.70             | 9.46                     | 67.16              | 122.20            | -55.04               | peak   | V                   |  |
| 5855.000           | 49.86             | 9.48                     | 59.34              | 110.80            | -51.46               | peak   | V                   |  |
| 5875.000           | 47.16             | 9.53                     | 56.69              | 105.20            | -48.51               | peak   | V                   |  |
| 5925.000           | 46.25             | 9.65                     | 55.90              | 68.20             | -12.30               | peak   | V                   |  |

Note: 1. Result = Correction factor + Reading

2. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

#### 4.4. Maximum Conducted Output Power and Transmit power control Measurement

##### ■ Limit

| Frequency Range (MHz) | FCC Maximum Conducted Output Power Limit |
|-----------------------|------------------------------------------|
| 5.150 ~ 5.250 GHz     | The lesser of 250mW (24dBm)              |
| 5.725 ~ 5.850 GHz     | The lesser of 1W (30dBm)                 |

And According to 15.407 (a), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

According FCC KDB 662911 D01 v02r01 – for power measurements on IEEE802.11 devices,

Directional gain =  $10 \cdot \log\left\{\frac{10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_n/10}}{NANT}\right\}$  dBi

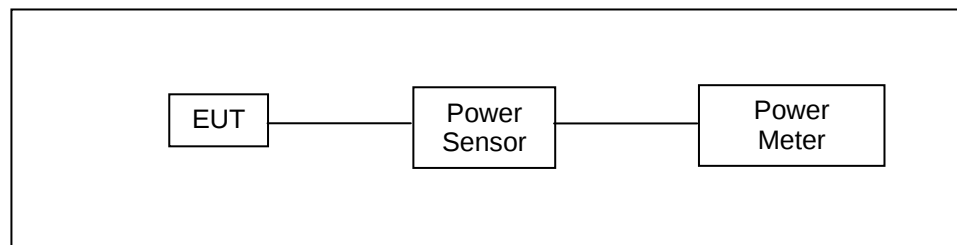
\* CDD mode : Directional Gain =  $10 \cdot \log\left\{\frac{10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_n/10}}{NANT}\right\}$   
= 4.76 dBi < 6dBi (5.150 ~ 5.250 GHz)

\* CDD mode : Directional Gain =  $10 \cdot \log\left\{\frac{10^{G_1/10} + 10^{G_2/10} + \dots + 10^{G_n/10}}{NANT}\right\}$   
= 4.64 dBi < 6dBi (5.725 ~ 5.850 GHz)

\* CDD mode power limit shall be reduced = 24 dBm (5.150 ~ 5.250 GHz)

\* CDD mode power limit shall be reduced = 30 dBm (5.725 ~ 5.850 GHz)

##### ■ Test Setup



##### ■ Test Instruments

| Equipment    | Manufacturer | Model Number | Serial Number | Cal. Date  | Remark |
|--------------|--------------|--------------|---------------|------------|--------|
| Power Sensor | Anritsu      | MA2411B      | 1126022       | 08/24/2015 | 1 year |
| Power Meter  | Anritsu      | ML2495A      | 1135009       | 08/24/2015 | 1 year |
| Test Site    | ATL          | TE05         | TE05          | N.C.R.     | -----  |

Note: N.C.R. = No Calibration Request.



■ **Test Procedure**

The test is performed in accordance with KDB789033: D02 General UNII Test Procedures New Rules v01r02, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices

Section (E) Maximum Conducted Output Power

3. Measurement using a Power Meter (PM)

b) Method PM-G (Measurement using a gated RF average power meter)



# Test Result

| Model Number       |              | Aero Platform                  |              |       |       |                    |
|--------------------|--------------|--------------------------------|--------------|-------|-------|--------------------|
| Test Item          |              | Maximum Conducted Output Power |              |       |       |                    |
| Test Mode          |              | Mode 2: IEEE 802.11a Link Mode |              |       |       |                    |
| Date of Test       |              | 07/24/2016                     |              |       |       |                    |
| Frequency<br>(MHz) | Data<br>Rate | ANT-0                          |              | ANT-1 |       | FCC Limit<br>(dBm) |
|                    |              | Max. Outup Power               |              |       |       |                    |
|                    |              | (dBm)                          | (W)          | (dBm) | (W)   |                    |
| 5180               | 6M           | 15.92                          | 0.039        | 15.72 | 0.037 | ≤ 24               |
| 5200               |              | 16.06                          | 0.040        | 15.86 | 0.039 |                    |
| 5220               |              | <b>16.31</b>                   | <b>0.043</b> | 16.13 | 0.041 |                    |
| 5240               |              | 16.01                          | 0.040        | 15.84 | 0.038 |                    |
| 5745               |              | 16.96                          | 0.050        | 16.72 | 0.047 | ≤ 30               |
| 5765               |              | 19.24                          | 0.084        | 19.01 | 0.080 |                    |
| 5785               |              | <b>19.40</b>                   | <b>0.087</b> | 19.17 | 0.083 |                    |
| 5805               |              | 19.16                          | 0.082        | 18.95 | 0.079 |                    |
| 5825               |              | 18.29                          | 0.067        | 17.93 | 0.062 |                    |
| 5180               | 54M          | 15.87                          | 0.039        | 15.65 | 0.037 | ≤ 24               |
| 5200               |              | 16.03                          | 0.040        | 15.96 | 0.039 |                    |
| 5220               |              | 16.26                          | 0.042        | 15.86 | 0.039 |                    |
| 5240               |              | 15.99                          | 0.040        | 15.74 | 0.037 |                    |
| 5745               |              | 16.92                          | 0.049        | 16.76 | 0.047 | ≤ 30               |
| 5765               |              | 19.20                          | 0.083        | 18.96 | 0.079 |                    |
| 5785               |              | 19.34                          | 0.086        | 19.13 | 0.082 |                    |
| 5805               |              | 19.12                          | 0.082        | 19.05 | 0.080 |                    |
| 5825               |              | 18.26                          | 0.067        | 17.92 | 0.062 |                    |



| Model Number       |              | Aero Platform                        |       |       |       |                    |
|--------------------|--------------|--------------------------------------|-------|-------|-------|--------------------|
| Test Item          |              | Maximum Conducted Output Power       |       |       |       |                    |
| Test Mode          |              | Mode 3: IEEE 802.11n 20MHz Link Mode |       |       |       |                    |
| Date of Test       |              | 07/24/2016                           |       |       |       |                    |
| Frequency<br>(MHz) | Data<br>Rate | ANT-0                                |       | ANT-1 |       | FCC Limit<br>(dBm) |
|                    |              | Max. Outup Power                     |       |       |       |                    |
|                    |              | (dBm)                                | (W)   | (dBm) | (W)   |                    |
| 5180               | 13M          | 9.40                                 | 0.009 | 9.13  | 0.008 | ≤ 24               |
| 5200               |              | 9.45                                 | 0.009 | 9.26  | 0.008 |                    |
| 5220               |              | 9.53                                 | 0.009 | 9.29  | 0.008 |                    |
| 5240               |              | 9.55                                 | 0.009 | 9.28  | 0.008 |                    |
| 5745               |              | 15.81                                | 0.038 | 15.51 | 0.036 | ≤ 30               |
| 5765               |              | 18.75                                | 0.075 | 18.61 | 0.073 |                    |
| 5785               |              | 18.95                                | 0.079 | 18.76 | 0.075 |                    |
| 5805               |              | 18.79                                | 0.076 | 18.70 | 0.074 |                    |
| 5825               | 17.00        | 0.050                                | 16.91 | 0.049 |       |                    |
| 5180               | 130M         | 9.35                                 | 0.009 | 9.10  | 0.008 | ≤ 24               |
| 5200               |              | 9.40                                 | 0.009 | 9.22  | 0.008 |                    |
| 5220               |              | 9.51                                 | 0.009 | 9.27  | 0.008 |                    |
| 5240               |              | 9.53                                 | 0.009 | 9.24  | 0.008 |                    |
| 5745               |              | 15.77                                | 0.038 | 15.48 | 0.035 | ≤ 30               |
| 5765               |              | 18.70                                | 0.074 | 18.60 | 0.072 |                    |
| 5785               |              | 18.93                                | 0.078 | 18.72 | 0.074 |                    |
| 5805               |              | 18.78                                | 0.076 | 18.65 | 0.073 |                    |
| 5825               | 16.96        | 0.050                                | 16.89 | 0.049 |       |                    |



|                    |              |                                      |              |                    |
|--------------------|--------------|--------------------------------------|--------------|--------------------|
| Model Number       |              | Aero Platform                        |              |                    |
| Test Item          |              | Maximum Conducted Output Power       |              |                    |
| Test Mode          |              | Mode 3: IEEE 802.11n 20MHz Link Mode |              |                    |
| Date of Test       |              | 07/24/2016                           |              |                    |
| Frequency<br>(MHz) | Data<br>Rate | ANT-0+1                              |              | FCC Limit<br>(dBm) |
|                    |              | Max. Outup Power                     |              |                    |
|                    |              | (dBm)                                | (W)          |                    |
| 5180               | 13M          | 12.28                                | 0.017        | ≤ 24               |
| 5200               |              | 12.37                                | 0.017        |                    |
| 5220               |              | 12.42                                | 0.017        |                    |
| 5240               |              | <b>12.43</b>                         | <b>0.017</b> |                    |
| 5745               |              | 18.67                                | 0.074        | ≤ 30               |
| 5765               |              | 21.69                                | 0.148        |                    |
| 5785               |              | <b>21.87</b>                         | <b>0.154</b> |                    |
| 5805               |              | 21.76                                | 0.150        |                    |
| 5825               | 130M         | 19.97                                | 0.099        | ≤ 24               |
| 5180               |              | 12.24                                | 0.017        |                    |
| 5200               |              | 12.32                                | 0.017        |                    |
| 5220               |              | 12.40                                | 0.017        |                    |
| 5240               |              | 12.40                                | 0.017        | ≤ 30               |
| 5745               |              | 18.64                                | 0.073        |                    |
| 5765               |              | 21.66                                | 0.147        |                    |
| 5785               |              | 21.84                                | 0.153        |                    |
| 5805               | 21.73        | 0.149                                | ≤ 30         |                    |
| 5825               | 19.94        | 0.099                                |              |                    |



| Model Number       |              | Aero Platform                        |       |       |       |                    |
|--------------------|--------------|--------------------------------------|-------|-------|-------|--------------------|
| Test Item          |              | Maximum Conducted Output Power       |       |       |       |                    |
| Test Mode          |              | Mode 4: IEEE 802.11n 40MHz Link Mode |       |       |       |                    |
| Date of Test       |              | 07/24/2016                           |       |       |       |                    |
| Frequency<br>(MHz) | Data<br>Rate | ANT-0                                |       | ANT-1 |       | FCC Limit<br>(dBm) |
|                    |              | Max. Outup Power                     |       |       |       |                    |
|                    |              | (dBm)                                | (W)   | (dBm) | (W)   |                    |
| 5190               | 27M          | 10.36                                | 0.011 | 10.29 | 0.011 | ≤ 24               |
| 5230               |              | 10.22                                | 0.011 | 10.17 | 0.010 |                    |
| 5755               |              | 14.94                                | 0.031 | 14.90 | 0.031 | ≤ 30               |
| 5795               |              | 17.07                                | 0.051 | 17.02 | 0.050 |                    |
| 5190               | 270M         | 10.32                                | 0.011 | 10.28 | 0.011 | ≤ 24               |
| 5230               |              | 10.18                                | 0.010 | 10.15 | 0.010 |                    |
| 5755               |              | 14.89                                | 0.031 | 14.88 | 0.031 | ≤ 30               |
| 5795               |              | 17.05                                | 0.051 | 17.01 | 0.050 |                    |

|                    |              |                                      |       |                    |
|--------------------|--------------|--------------------------------------|-------|--------------------|
| Model Number       |              | Aero Platform                        |       |                    |
| Test Item          |              | Maximum Conducted Output Power       |       |                    |
| Test Mode          |              | Mode 4: IEEE 802.11n 40MHz Link Mode |       |                    |
| Date of Test       |              | 07/24/2016                           |       |                    |
| Frequency<br>(MHz) | Data<br>Rate | ANT-0+1                              |       | FCC Limit<br>(dBm) |
|                    |              | Max. Outup Power                     |       |                    |
|                    |              | (dBm)                                | (W)   |                    |
| 5190               | 27M          | 13.34                                | 0.022 | ≤ 24               |
| 5230               |              | 13.21                                | 0.021 |                    |
| 5755               |              | 17.93                                | 0.062 | ≤ 30               |
| 5795               |              | 20.06                                | 0.101 |                    |
| 5190               | 270M         | 13.31                                | 0.021 | ≤ 24               |
| 5230               |              | 13.18                                | 0.021 |                    |
| 5755               |              | 17.90                                | 0.062 | ≤ 30               |
| 5795               |              | 20.04                                | 0.101 |                    |



| Model Number       |              | Aero Platform                         |       |       |       |                    |
|--------------------|--------------|---------------------------------------|-------|-------|-------|--------------------|
| Test Item          |              | Maximum Conducted Output Power        |       |       |       |                    |
| Test Mode          |              | Mode 5: IEEE 802.11ac 80MHz Link Mode |       |       |       |                    |
| Date of Test       |              | 07/24/2016                            |       |       |       |                    |
| Frequency<br>(MHz) | Data<br>Rate | ANT-0                                 |       | ANT-1 |       | FCC Limit<br>(dBm) |
|                    |              | Max. Outup Power                      |       |       |       |                    |
|                    |              | (dBm)                                 | (W)   | (dBm) | (W)   |                    |
| 5210               | 58.6M        | 10.49                                 | 0.011 | 10.15 | 0.010 | ≤ 24               |
| 5775               |              | 12.50                                 | 0.018 | 12.08 | 0.016 | ≤ 30               |
| 5210               | 780M         | 10.43                                 | 0.011 | 10.14 | 0.010 | ≤ 24               |
| 5775               |              | 12.44                                 | 0.018 | 12.05 | 0.016 | ≤ 30               |

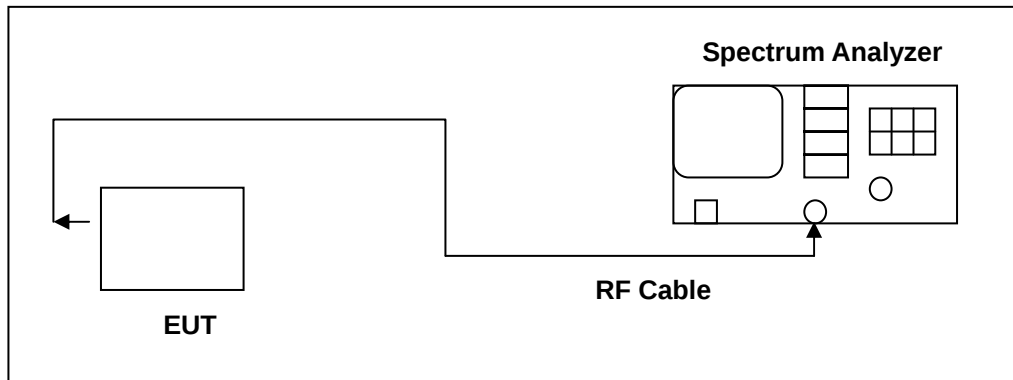
|                    |              |                                       |       |                    |
|--------------------|--------------|---------------------------------------|-------|--------------------|
| Model Number       |              | Aero Platform                         |       |                    |
| Test Item          |              | Maximum Conducted Output Power        |       |                    |
| Test Mode          |              | Mode 5: IEEE 802.11ac 80MHz Link Mode |       |                    |
| Date of Test       |              | 07/24/2016                            |       |                    |
| Frequency<br>(MHz) | Data<br>Rate | ANT-0+1                               |       | FCC Limit<br>(dBm) |
|                    |              | Max. Outup Power                      |       |                    |
|                    |              | (dBm)                                 | (W)   |                    |
| 5210               | 58.6M        | 13.33                                 | 0.022 | ≤ 24               |
| 5775               |              | 15.31                                 | 0.034 | ≤ 30               |
| 5210               | 780M         | 13.30                                 | 0.021 | ≤ 24               |
| 5775               |              | 15.26                                 | 0.034 | ≤ 30               |

#### 4.5. 26dB RF Bandwidth & 99 % Occupied Bandwidth Measurement

##### ■ Limit

N/A

##### ■ Test Setup



##### ■ Test Instruments

| Equipment         | Manufacturer | Model Number | Serial Number | Cal. Date  | Remark |
|-------------------|--------------|--------------|---------------|------------|--------|
| Spectrum Analyzer | Agilent      | E4445A       | MY45300744    | 12/15/2015 | 1 year |
| Test Site         | ATL          | TE05         | TE05          | N.C.R.     | -----  |

Note: N.C.R. = No Calibration Request.

##### ■ Test Procedure

The test is performed in accordance with KDB789033: D02 General UNII Test Procedures New Rules v01r02, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.

| Spectrum Parameter | Setting                                    |
|--------------------|--------------------------------------------|
| Attenuation        | Auto                                       |
| Span Frequency     | >26dB Bandwidth                            |
| RBW                | Approximately 1% of the emission bandwidth |
| VBW                | VBW > RBW                                  |
| Detector           | Peak                                       |
| Trace              | Max Hold                                   |
| Sweep Time         | Auto                                       |



## ■ Test Result

|                 |                                                         |                         |
|-----------------|---------------------------------------------------------|-------------------------|
| Model Number    | Aero Platform                                           |                         |
| Test Item       | 26dB RF Bandwidth & 99 % Occupied Bandwidth Measurement |                         |
| Test Mode       | Mode 2: IEEE 802.11a Link Mode                          |                         |
| Date of Test    | 07/28/2016                                              |                         |
| Frequency (MHz) | ANT-0                                                   |                         |
|                 | 26dB Bandwidth (MHz)                                    | 99 % Occupied Bandwidth |
| 5180            | 23.660                                                  | 16.676                  |
| 5200            | 23.550                                                  | 16.672                  |
| 5240            | 22.860                                                  | 16.618                  |

|                 |                                                         |                         |                      |                         |
|-----------------|---------------------------------------------------------|-------------------------|----------------------|-------------------------|
| Model Number    | Aero Platform                                           |                         |                      |                         |
| Test Item       | 26dB RF Bandwidth & 99 % Occupied Bandwidth Measurement |                         |                      |                         |
| Test Mode       | Mode 3: IEEE 802.11n 20MHz Link Mode                    |                         |                      |                         |
| Date of Test    | 07/28/2016                                              |                         |                      |                         |
| Frequency (MHz) | ANT-0                                                   |                         | ANT-1                |                         |
|                 | 26dB Bandwidth (MHz)                                    | 99 % Occupied Bandwidth | 26dB Bandwidth (MHz) | 99 % Occupied Bandwidth |
| 5180            | 23.940                                                  | 17.804                  | 23.140               | 17.670                  |
| 5200            | 23.710                                                  | 17.742                  | 23.930               | 17.675                  |
| 5240            | 23.810                                                  | 17.782                  | 23.810               | 17.667                  |

|                 |                                                         |                         |                      |                         |
|-----------------|---------------------------------------------------------|-------------------------|----------------------|-------------------------|
| Model Number    | Aero Platform                                           |                         |                      |                         |
| Test Item       | 26dB RF Bandwidth & 99 % Occupied Bandwidth Measurement |                         |                      |                         |
| Test Mode       | Mode 4: IEEE 802.11n 40MHz Link Mode                    |                         |                      |                         |
| Date of Test    | 07/28/2016                                              |                         |                      |                         |
| Frequency (MHz) | ANT-0                                                   |                         | ANT-1                |                         |
|                 | 26dB Bandwidth (MHz)                                    | 99 % Occupied Bandwidth | 26dB Bandwidth (MHz) | 99 % Occupied Bandwidth |
| 5190            | 45.220                                                  | 36.322                  | 45.320               | 36.249                  |
| 5230            | 45.560                                                  | 36.327                  | 43.990               | 36.233                  |

Note: The 99% occupied bandwidth not crossed 5250MHz.



|                    |                                                         |                            |                         |                            |
|--------------------|---------------------------------------------------------|----------------------------|-------------------------|----------------------------|
| Model Number       | Aero Platform                                           |                            |                         |                            |
| Test Item          | 26dB RF Bandwidth & 99 % Occupied Bandwidth Measurement |                            |                         |                            |
| Test Mode          | Mode 5: IEEE 802.11ac 80MHz Link Mode                   |                            |                         |                            |
| Date of Test       | 07/28/2016                                              |                            |                         |                            |
| Frequency<br>(MHz) | ANT-0                                                   |                            | ANT-1                   |                            |
|                    | 26dB Bandwidth<br>(MHz)                                 | 99 % Occupied<br>Bandwidth | 26dB Bandwidth<br>(MHz) | 99 % Occupied<br>Bandwidth |
| 5210               | 84.590                                                  | 74.904                     | 84.510                  | 74.817                     |

Note: The 99% occupied bandwidth not crossed 5250MHz.

## Test Graphs

| Mode 2: IEEE 802.11a Link Mode_ ANT-0 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5180 MHz                              |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.18000000 GHz<br/>Trig: Free Run<br/>AveHld: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.18 GHz<br/>#Res BW 300 kHz<br/>#VBW 1 MHz<br/>Span 25 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth<br/><b>16.676 MHz</b></p> <p>Total Power 20.3 dBm</p> <p>Transmit Freq Error -32.501 kHz<br/>OBW Power 99.00 %<br/>x dB Bandwidth 23.66 MHz<br/>x dB -26.00 dB</p> <p>Frequency<br/>Center Freq 5.18000000 GHz<br/>CF Step 2.500000 MHz<br/>Freq Offset 0 Hz</p> <p>Alignment Completed</p>   |
| 5200 MHz                              |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.20000000 GHz<br/>Trig: Free Run<br/>AveHld: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.2 GHz<br/>#Res BW 300 kHz<br/>#VBW 1 MHz<br/>Span 25 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth<br/><b>16.672 MHz</b></p> <p>Total Power 20.3 dBm</p> <p>Transmit Freq Error -24.893 kHz<br/>OBW Power 99.00 %<br/>x dB Bandwidth 23.55 MHz<br/>x dB -26.00 dB</p> <p>Frequency<br/>Center Freq 5.20000000 GHz<br/>CF Step 2.500000 MHz<br/>Freq Offset 0 Hz</p> <p>Alignment Completed</p>   |
| 5240 MHz                              |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.24000000 GHz<br/>Trig: Free Run<br/>AveHld: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.24 GHz<br/>#Res BW 300 kHz<br/>#VBW 1 MHz<br/>Span 25 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth<br/><b>16.618 MHz</b></p> <p>Total Power 20.0 dBm</p> <p>Transmit Freq Error -40.281 kHz<br/>OBW Power 99.00 %<br/>x dB Bandwidth 22.86 MHz<br/>x dB -26.00 dB</p> <p>Frequency<br/>Center Freq 5.24000000 GHz<br/>CF Step 2.500000 MHz<br/>Freq Offset 0 Hz</p> <p>Alignment Completed</p> |



## Mode 3: IEEE 802.11n 20MHz Link Mode\_ ANT-0

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5180 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.18000000 GHz<br/>Trig: Free Run<br/>Ave/Hold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.18 GHz<br/>#Res BW 300 kHz<br/>#VBW 1 MHz<br/>Span 25 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth<br/><b>17.804 MHz</b></p> <p>Total Power 20.5 dBm</p> <p>Transmit Freq Error -23.336 kHz<br/>OBW Power 99.00 %<br/>x dB Bandwidth 23.94 MHz<br/>x dB -26.00 dB</p>   |
| 5200 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.20000000 GHz<br/>Trig: Free Run<br/>Ave/Hold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.2 GHz<br/>#Res BW 300 kHz<br/>#VBW 1 MHz<br/>Span 25 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth<br/><b>17.742 MHz</b></p> <p>Total Power 19.9 dBm</p> <p>Transmit Freq Error -17.115 kHz<br/>OBW Power 99.00 %<br/>x dB Bandwidth 23.71 MHz<br/>x dB -26.00 dB</p>   |
| 5240 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.24000000 GHz<br/>Trig: Free Run<br/>Ave/Hold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.24 GHz<br/>#Res BW 300 kHz<br/>#VBW 1 MHz<br/>Span 25 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth<br/><b>17.782 MHz</b></p> <p>Total Power 20.2 dBm</p> <p>Transmit Freq Error -31.553 kHz<br/>OBW Power 99.00 %<br/>x dB Bandwidth 23.81 MHz<br/>x dB -26.00 dB</p> |

## Mode 4: IEEE 802.11n 40MHz Link Mode\_ ANT-0

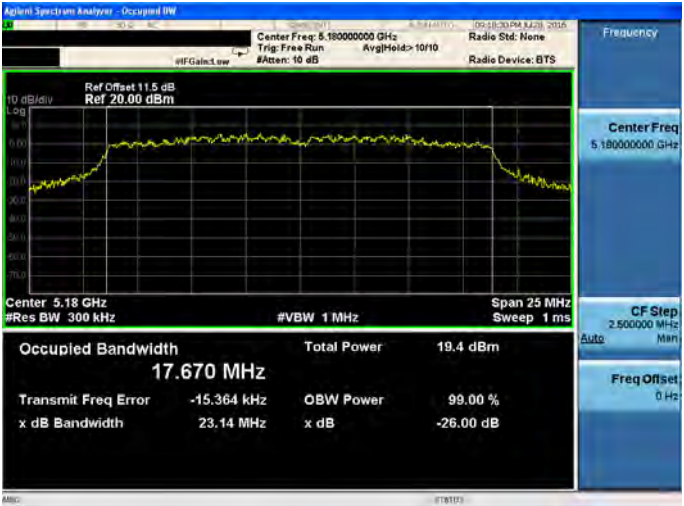
|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5190 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.19000000 GHz<br/>Trig: Free Run<br/>AvalHold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.19 GHz<br/>#Res BW 1 MHz<br/>#VBW 3 MHz<br/>Span 50 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth 36.322 MHz<br/>Total Power 21.1 dBm<br/>Transmit Freq Error -14.734 kHz<br/>OBW Power 99.00 %<br/>x dB Bandwidth 45.22 MHz<br/>x dB -26.00 dB</p> <p>Frequency<br/>Center Freq 5.19000000 GHz<br/>CF Step 5.000000 MHz<br/>Auto Man<br/>Freq Offset 0 Hz</p>  |
| 5230 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.23000000 GHz<br/>Trig: Free Run<br/>AvalHold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.23 GHz<br/>#Res BW 1 MHz<br/>#VBW 3 MHz<br/>Span 50 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth 36.327 MHz<br/>Total Power 21.7 dBm<br/>Transmit Freq Error -30.330 kHz<br/>OBW Power 99.00 %<br/>x dB Bandwidth 45.56 MHz<br/>x dB -26.00 dB</p> <p>Frequency<br/>Center Freq 5.23000000 GHz<br/>CF Step 5.000000 MHz<br/>Auto Man<br/>Freq Offset 0 Hz</p> |

## Mode 5: IEEE 802.11ac 80MHz Link Mode\_ ANT-0

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5210 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.21000000 GHz<br/>Trig: Free Run<br/>AvalHold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.21 GHz<br/>#Res BW 1 MHz<br/>#VBW 3 MHz<br/>Span 90 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth 74.904 MHz<br/>Total Power 21.2 dBm<br/>Transmit Freq Error -19.019 kHz<br/>OBW Power 99.00 %<br/>x dB Bandwidth 84.59 MHz<br/>x dB -26.00 dB</p> <p>Frequency<br/>Center Freq 5.21000000 GHz<br/>CF Step 9.000000 MHz<br/>Auto Man<br/>Freq Offset 0 Hz</p> |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



## Mode 3: IEEE 802.11n 20MHz Link Mode\_ ANT-1

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5180 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.18000000 GHz<br/>Trig: Free Run<br/>AvalHold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.18 GHz<br/>#Res BW 300 kHz<br/>#VBW 1 MHz<br/>Span 25 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth<br/><b>17.670 MHz</b></p> <p>Total Power 19.4 dBm</p> <p>Transmit Freq Error -15.364 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 23.14 MHz</p> <p>x dB -26.00 dB</p>   |
| 5200 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.20000000 GHz<br/>Trig: Free Run<br/>AvalHold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.2 GHz<br/>#Res BW 300 kHz<br/>#VBW 1 MHz<br/>Span 25 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth<br/><b>17.675 MHz</b></p> <p>Total Power 20.1 dBm</p> <p>Transmit Freq Error -19.209 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 23.93 MHz</p> <p>x dB -26.00 dB</p>   |
| 5240 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.24000000 GHz<br/>Trig: Free Run<br/>AvalHold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.24 GHz<br/>#Res BW 300 kHz<br/>#VBW 1 MHz<br/>Span 25 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth<br/><b>17.667 MHz</b></p> <p>Total Power 20.5 dBm</p> <p>Transmit Freq Error -22.875 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 23.81 MHz</p> <p>x dB -26.00 dB</p> |

## Mode 4: IEEE 802.11n 40MHz Link Mode\_ ANT-1

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5190 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.19000000 GHz<br/>Trig: Free Run<br/>Ave/Hold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.19 GHz<br/>#Res BW 1 MHz<br/>#VBW 3 MHz<br/>Span 50 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth 36.249 MHz<br/>Total Power 21.3 dBm<br/>Transmit Freq Error -28.449 kHz<br/>OBW Power 99.00 %<br/>x dB Bandwidth 45.32 MHz<br/>x dB -26.00 dB</p> <p>Frequency<br/>Center Freq 5.19000000 GHz<br/>CF Step 5.000000 MHz<br/>Auto Man<br/>Freq Offset 0 Hz</p>  |
| 5230 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.23000000 GHz<br/>Trig: Free Run<br/>Ave/Hold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.23 GHz<br/>#Res BW 1 MHz<br/>#VBW 3 MHz<br/>Span 50 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth 36.233 MHz<br/>Total Power 21.6 dBm<br/>Transmit Freq Error -74.040 kHz<br/>OBW Power 99.00 %<br/>x dB Bandwidth 43.99 MHz<br/>x dB -26.00 dB</p> <p>Frequency<br/>Center Freq 5.23000000 GHz<br/>CF Step 5.000000 MHz<br/>Auto Man<br/>Freq Offset 0 Hz</p> |

## Mode 5: IEEE 802.11ac 80MHz Link Mode\_ ANT-1

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5210 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.21000000 GHz<br/>Trig: Free Run<br/>Ave/Hold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 20.00 dBm</p> <p>Center 5.21 GHz<br/>#Res BW 1 MHz<br/>#VBW 3 MHz<br/>Span 90 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth 74.817 MHz<br/>Total Power 21.4 dBm<br/>Transmit Freq Error -46.728 kHz<br/>OBW Power 99.00 %<br/>x dB Bandwidth 84.51 MHz<br/>x dB -26.00 dB</p> <p>Frequency<br/>Center Freq 5.21000000 GHz<br/>CF Step 9.000000 MHz<br/>Auto Man<br/>Freq Offset 0 Hz</p> |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

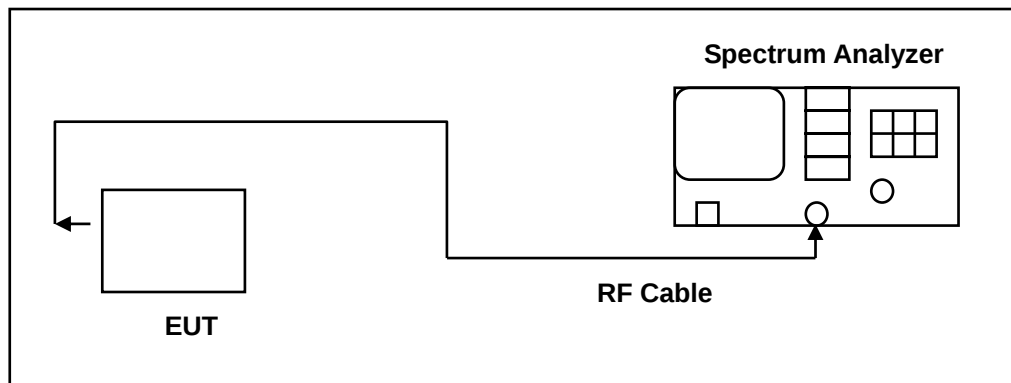
## 4.6. 6dB RF Bandwidth Measurement

### ■ Limit

#### 6dB RF Bandwidth

Systems using digital modulation techniques may operate in the 5725~5850MHz bands. The minimum 6 dB band-width shall be at least 500 kHz.

### ■ Test Setup



### ■ Test Instruments

| Equipment         | Manufacturer | Model Number | Serial Number | Cal. Date  | Cal. Period |
|-------------------|--------------|--------------|---------------|------------|-------------|
| Spectrum Analyzer | Agilent      | E4445A       | MY45300744    | 12/15/2015 | 1 year      |
| Test Site         | ATL          | TE05         | TE05          | N.C.R.     | -----       |

Note: N.C.R. = No Calibration Request.

### ■ Test Procedure

#### 6dB RF Bandwidth

The EUT tested to UNII test procedure of KDB789033 D02 for compliance to FCC 47CFR 15.407 requirements. The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RES BW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A peak output reading was taken, a DISPLAY line was drawn 6 dB lower than peak level. The 6 dB bandwidth was determined from where the channel output spectrum intersected the display line. The test was performed at 3 channels.



## ■ Test Result

| Model Number       | Aero Platform                  |                |
|--------------------|--------------------------------|----------------|
| Test Item          | 6dB RF Bandwidth               |                |
| Test Mode          | Mode 2: IEEE 802.11a Link Mode |                |
| Date of Test       | 07/25/2016                     |                |
| Frequency<br>(MHz) | 6dB Bandwidth<br>(kHz)         | Limit<br>(kHz) |
|                    | ANT-0                          |                |
| 5745               | 16180                          | > 500          |
| 5785               | 16080                          | > 500          |
| 5825               | 15880                          | > 500          |

| Model Number       | Aero Platform                        |       |                |
|--------------------|--------------------------------------|-------|----------------|
| Test Item          | 6dB RF Bandwidth                     |       |                |
| Test Mode          | Mode 3: IEEE 802.11n 20MHz Link Mode |       |                |
| Date of Test       | 03/19/2016                           |       |                |
| Frequency<br>(MHz) | 6dB Bandwidth<br>(kHz)               |       | Limit<br>(kHz) |
|                    | ANT-0                                | ANT-1 |                |
| 5745               | 17390                                | 17530 | > 500          |
| 5785               | 17500                                | 17570 | > 500          |
| 5825               | 17400                                | 17370 | > 500          |

| Model Number       | Aero Platform                        |       |                |
|--------------------|--------------------------------------|-------|----------------|
| Test Item          | 6dB RF Bandwidth                     |       |                |
| Test Mode          | Mode 4: IEEE 802.11n 40MHz Link Mode |       |                |
| Date of Test       | 03/19/2016                           |       |                |
| Frequency<br>(MHz) | 6dB Bandwidth<br>(kHz)               |       | Limit<br>(kHz) |
|                    | ANT-0                                | ANT-1 |                |
| 5755               | 35860                                | 35600 | > 500          |
| 5795               | 35810                                | 35490 | > 500          |



| Model Number       | Aero Platform                         |       |                |
|--------------------|---------------------------------------|-------|----------------|
| Test Item          | 6dB RF Bandwidth                      |       |                |
| Test Mode          | Mode 5: IEEE 802.11ac 80MHz Link Mode |       |                |
| Date of Test       | 03/19/2016                            |       |                |
| Frequency<br>(MHz) | 6dB Bandwidth<br>(kHz)                |       | Limit<br>(kHz) |
|                    | ANT-0                                 | ANT-1 |                |
| 5775               | 74960                                 | 74900 | > 500          |



## ■ Test Graphs

Mode 2: IEEE 802.11a Link Mode\_ ANT-0

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5745 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.745000000 GHz<br/>Trig: Free Run<br/>Ave/Hold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 30.00 dBm</p> <p>Center 5.745 GHz<br/>#Res BW 300 kHz<br/>#VBW 1 MHz<br/>Span 25 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth<br/><b>16.857 MHz</b></p> <p>Total Power<br/>23.6 dBm</p> <p>Transmit Freq Error<br/>-29.215 kHz</p> <p>OBW Power<br/>99.00 %</p> <p>x dB Bandwidth<br/>16.18 MHz</p> <p>x dB<br/>-6.00 dB</p> <p>Frequency<br/>Center Freq<br/>5.745000000 GHz</p> <p>CF Step<br/>2.500000 MHz<br/>Man</p> <p>Freq Offset<br/>0 Hz</p>   |
| 5785 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.785000000 GHz<br/>Trig: Free Run<br/>Ave/Hold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 30.00 dBm</p> <p>Center 5.785 GHz<br/>#Res BW 300 kHz<br/>#VBW 1 MHz<br/>Span 25 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth<br/><b>19.228 MHz</b></p> <p>Total Power<br/>25.8 dBm</p> <p>Transmit Freq Error<br/>32.036 kHz</p> <p>OBW Power<br/>99.00 %</p> <p>x dB Bandwidth<br/>16.08 MHz</p> <p>x dB<br/>-6.00 dB</p> <p>Frequency<br/>Center Freq<br/>5.785000000 GHz</p> <p>CF Step<br/>2.500000 MHz<br/>Man</p> <p>Freq Offset<br/>0 Hz</p>   |
| 5825 MHz |  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq: 5.825000000 GHz<br/>Trig: Free Run<br/>Ave/Hold: 10/10<br/>Radio Std: None<br/>Radio Device: BTS</p> <p>Ref Offset 11.5 dB<br/>Ref 30.00 dBm</p> <p>Center 5.825 GHz<br/>#Res BW 300 kHz<br/>#VBW 1 MHz<br/>Span 25 MHz<br/>Sweep 1 ms</p> <p>Occupied Bandwidth<br/><b>17.789 MHz</b></p> <p>Total Power<br/>25.1 dBm</p> <p>Transmit Freq Error<br/>-14.657 kHz</p> <p>OBW Power<br/>99.00 %</p> <p>x dB Bandwidth<br/>15.88 MHz</p> <p>x dB<br/>-6.00 dB</p> <p>Frequency<br/>Center Freq<br/>5.825000000 GHz</p> <p>CF Step<br/>2.500000 MHz<br/>Man</p> <p>Freq Offset<br/>0 Hz</p> |



## Mode 3: IEEE 802.11n 20MHz Link Mode\_ANT-0

|          |                                                                                                      |
|----------|------------------------------------------------------------------------------------------------------|
| 5745 MHz |  <p>5745 MHz</p>   |
| 5785 MHz |  <p>5785 MHz</p>  |
| 5825 MHz |  <p>5825 MHz</p> |

## Mode 4: IEEE 802.11n 40MHz Link Mode\_ANT-0

|          |                                                                                                                                                                                                                                                                                                                                                                   |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5755 MHz |  <p>Center Freq: 5.755 GHz<br/>#Res BW: 1 MHz<br/>#VBW: 3 MHz<br/>Span: 50 MHz<br/>Sweep: 1 ms</p> <p>Occupied Bandwidth: 36.294 MHz<br/>Total Power: 22.5 dBm<br/>Transmit Freq Error: -2.252 kHz<br/>OBW Power: 99.00 %<br/>x dB Bandwidth: 35.86 MHz<br/>x dB: -6.00 dB</p>  |
| 5795 MHz |  <p>Center Freq: 5.795 GHz<br/>#Res BW: 1 MHz<br/>#VBW: 3 MHz<br/>Span: 50 MHz<br/>Sweep: 1 ms</p> <p>Occupied Bandwidth: 36.453 MHz<br/>Total Power: 25.2 dBm<br/>Transmit Freq Error: 22.737 kHz<br/>OBW Power: 99.00 %<br/>x dB Bandwidth: 35.81 MHz<br/>x dB: -6.00 dB</p> |

## Mode 5: IEEE 802.11ac 80MHz Link Mode\_ANT-0

|          |                                                                                                                                                                                                                                                                                                                                                                    |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5775 MHz |  <p>Center Freq: 5.775 GHz<br/>#Res BW: 1 MHz<br/>#VBW: 3 MHz<br/>Span: 90 MHz<br/>Sweep: 1 ms</p> <p>Occupied Bandwidth: 74.929 MHz<br/>Total Power: 20.6 dBm<br/>Transmit Freq Error: 40.698 kHz<br/>OBW Power: 99.00 %<br/>x dB Bandwidth: 74.96 MHz<br/>x dB: -6.00 dB</p> |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



## Mode 3: IEEE 802.11n 20MHz Link Mode\_ANT-1

|          |  |
|----------|--|
| 5745 MHz |  |
| 5785 MHz |  |
| 5825 MHz |  |



## Mode 4: IEEE 802.11n 40MHz Link Mode\_ANT-1

|          |                                                                                                                                                                                                                                                                                                                                                                    |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5755 MHz |  <p>Center Freq: 5.755 GHz<br/>#Res BW: 1 MHz<br/>#VBW: 3 MHz<br/>Span: 50 MHz<br/>Sweep: 1 ms</p> <p>Occupied Bandwidth: 36.275 MHz<br/>Total Power: 23.1 dBm<br/>Transmit Freq Error: -33.402 kHz<br/>OBW Power: 99.00 %<br/>x dB Bandwidth: 35.60 MHz<br/>x dB: -6.00 dB</p>  |
| 5795 MHz |  <p>Center Freq: 5.795 GHz<br/>#Res BW: 1 MHz<br/>#VBW: 3 MHz<br/>Span: 50 MHz<br/>Sweep: 1 ms</p> <p>Occupied Bandwidth: 36.358 MHz<br/>Total Power: 25.4 dBm<br/>Transmit Freq Error: -31.923 kHz<br/>OBW Power: 99.00 %<br/>x dB Bandwidth: 35.49 MHz<br/>x dB: -6.00 dB</p> |

## Mode 5: IEEE 802.11ac 80MHz Link Mode\_ANT-1

|          |                                                                                                                                                                                                                                                                                                                                                                   |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5775 MHz |  <p>Center Freq: 5.775 GHz<br/>#Res BW: 1 MHz<br/>#VBW: 3 MHz<br/>Span: 90 MHz<br/>Sweep: 1 ms</p> <p>Occupied Bandwidth: 74.910 MHz<br/>Total Power: 20.7 dBm<br/>Transmit Freq Error: 8.007 kHz<br/>OBW Power: 99.00 %<br/>x dB Bandwidth: 74.90 MHz<br/>x dB: -6.00 dB</p> |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 4.7. Peak Power Spectral Density Measurement

### ■ Limit

Conducted power spectral density

| Frequency Range (MHz) | FCC Limit     |
|-----------------------|---------------|
| 5.150 ~ 5.250 GHz     | 11 dBm/MHz    |
| 5.725 ~ 5.850 GHz     | 30 dBm/500KHz |

And According to 15.407 (a), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

According FCC KDB 662911 D01 v02r01 – for Power Spectral Density Measurement on IEEE802.11 devices,

Directional gain =  $10 \cdot \log\{[10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20}]^2 / NANT\}$

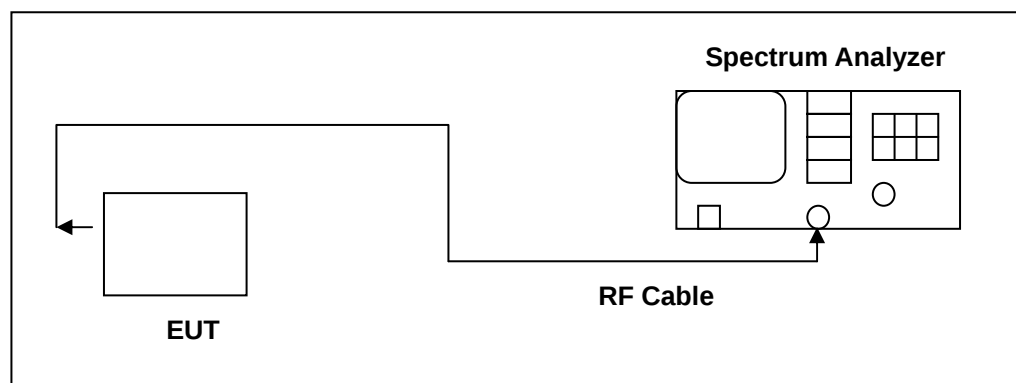
\* CDD mode : Directional Gain =  $10 \cdot \log\{[10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20}]^2 / NANT\}$   
= 7.77 dBi > 6dBi (5.150 ~ 5.250 GHz)

\* CDD mode : Directional Gain =  $10 \cdot \log\{[10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20}]^2 / NANT\}$   
= 7.65 dBi > 6dBi (5.725 ~ 5.850 GHz)

\* CDD mode power limit shall be reduced = 11 - 1.77 = 9.23 dBm/MHz (5.150 ~ 5.250 GHz)

\* CDD mode power limit shall be reduced = 30 – 1.65 = 28.35 dBm/ 500KHz (5.725 ~ 5.850 GHz)

### ■ Test Setup



### ■ Test Instruments

| Equipment         | Manufacturer | Model Number | Serial Number | Cal. Date  | Remark |
|-------------------|--------------|--------------|---------------|------------|--------|
| Spectrum Analyzer | Agilent      | E4445A       | MY45300744    | 12/15/2015 | 1 year |
| Test Site         | ATL          | TE05         | TE05          | N.C.R.     | -----  |

Note: N.C.R. = No Calibration Request.

**■ Test Procedure**

The test is performed in accordance with KDB789033: D02 General UNII Test Procedures New Rules v01r02, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.

| Spectrum Parameter                                                                                                                       | Setting                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| Attenuation                                                                                                                              | Auto                                                         |
| Span Frequency                                                                                                                           | Encompass the entire emissions bandwidth (EBW) of the signal |
| RBW                                                                                                                                      | 1 MHz<br>(5725 ~ 5850MHz use 100 kHz)                        |
| VBW                                                                                                                                      | 3 MHz<br>(5725 ~ 5850MHz use 300 kHz)                        |
| Detector                                                                                                                                 | RMS                                                          |
| Trace                                                                                                                                    | AVERAGE                                                      |
| Sweep Time                                                                                                                               | Auto                                                         |
| Trace Average                                                                                                                            | 100 times                                                    |
| Note: If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/100\text{kHz})$ to the measured result. |                                                              |



## ■ Test Result

|                 |                                  |                  |                      |                 |
|-----------------|----------------------------------|------------------|----------------------|-----------------|
| Model Number    | Aero Platform                    |                  |                      |                 |
| Test Item       | Conducted power spectral density |                  |                      |                 |
| Test Mode       | Mode 2: IEEE 802.11a link mode   |                  |                      |                 |
| Date of Test    | 07/29/2016                       |                  |                      |                 |
| Frequency (MHz) | ANT-0                            |                  |                      |                 |
|                 | Measurement (dBm/MHz)            | Duty Factor (dB) | Calculated (dBm/MHz) | Limit (dBm/MHz) |
| 5180            | 4.751                            | 0.164            | 4.915                | < 11            |
| 5200            | 4.836                            | 0.164            | 5.000                |                 |
| 5240            | 4.610                            | 0.164            | 4.774                |                 |

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) = measured result + duty factor.

|                 |                                  |                  |                         |                    |
|-----------------|----------------------------------|------------------|-------------------------|--------------------|
| Model Number    | Aero Platform                    |                  |                         |                    |
| Test Item       | Conducted power spectral density |                  |                         |                    |
| Test Mode       | Mode 2: IEEE 802.11a link mode   |                  |                         |                    |
| Date of Test    | 07/25/2016                       |                  |                         |                    |
| Frequency (MHz) | ANT-0                            |                  |                         |                    |
|                 | Measurement (dBm/100KHz)         | Duty Factor (dB) | Calculated (dBm/500KHz) | Limit (dBm/500KHz) |
| 5745            | -2.73                            | 0.164            | 4.42                    | < 30               |
| 5785            | -0.76                            | 0.164            | 6.39                    |                    |
| 5825            | -1.82                            | 0.164            | 5.34                    |                    |

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10\*Log(500k/100k)



|                 |                                       |                  |                      |                 |
|-----------------|---------------------------------------|------------------|----------------------|-----------------|
| Model Number    | Aero Platform                         |                  |                      |                 |
| Test Item       | Conducted power spectral density      |                  |                      |                 |
| Test Mode       | Mode 3: IEEE 802.11ac 20MHz link mode |                  |                      |                 |
| Date of Test    | 07/29/2016                            |                  |                      |                 |
| Frequency (MHz) | ANT-0                                 |                  |                      |                 |
|                 | Measurement (dBm/MHz)                 | Duty Factor (dB) | Calculated (dBm/MHz) | Limit (dBm/MHz) |
| 5180            | -2.252                                | 0.663            | -1.589               | < 11            |
| 5200            | -2.462                                | 0.663            | -1.799               |                 |
| 5240            | -2.998                                | 0.663            | -2.335               |                 |
| Frequency (MHz) | ANT-1                                 |                  |                      |                 |
|                 | Measurement (dBm/MHz)                 | Duty Factor (dB) | Calculated (dBm/MHz) | Limit (dBm/MHz) |
| 5180            | -2.086                                | 0.663            | -1.423               | < 11            |
| 5200            | -2.638                                | 0.663            | -1.975               |                 |
| 5240            | -2.813                                | 0.663            | -2.150               |                 |
| Frequency (MHz) | ANT-0+1                               |                  |                      |                 |
|                 | Calculated (dBm/MHz)                  |                  |                      | Limit (dBm/MHz) |
| 5180            | 1.505                                 |                  |                      | < 9.23          |
| 5200            | 1.124                                 |                  |                      |                 |
| 5240            | 0.769                                 |                  |                      |                 |

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) = measured result + duty factor.



|                 |                                       |                  |                         |                    |
|-----------------|---------------------------------------|------------------|-------------------------|--------------------|
| Model Number    | Aero Platform                         |                  |                         |                    |
| Test Item       | Conducted power spectral density      |                  |                         |                    |
| Test Mode       | Mode 3: IEEE 802.11ac 20MHz link mode |                  |                         |                    |
| Date of Test    | 07/25/2016                            |                  |                         |                    |
| Frequency (MHz) | ANT-0                                 |                  |                         |                    |
|                 | Measurement (dBm/100KHz)              | Duty Factor (dB) | Calculated (dBm/500KHz) | Limit (dBm/500KHz) |
| 5745            | -4.18                                 | 0.663            | 3.47                    | < 30               |
| 5785            | -0.97                                 | 0.663            | 6.68                    |                    |
| 5825            | -2.80                                 | 0.663            | 4.85                    |                    |
| Frequency (MHz) | ANT-1                                 |                  |                         |                    |
|                 | Measurement (dBm/100KHz)              | Duty Factor (dB) | Calculated (dBm/500KHz) | Limit (dBm/500KHz) |
| 5745            | -4.48                                 | 0.663            | 3.17                    | < 30               |
| 5785            | -1.41                                 | 0.663            | 6.24                    |                    |
| 5825            | -3.33                                 | 0.663            | 4.32                    |                    |
| Frequency (MHz) | ANT-0+1                               |                  |                         | Limit (dBm/500KHz) |
|                 | Calculated (dBm/500KHz)               |                  |                         |                    |
| 5745            | 6.33                                  |                  |                         | < 28.35            |
| 5785            | 9.48                                  |                  |                         |                    |
| 5825            | 7.61                                  |                  |                         |                    |

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10\*Log(500k/100k)



|                 |                                       |                  |                      |                 |
|-----------------|---------------------------------------|------------------|----------------------|-----------------|
| Model Number    | Aero Platform                         |                  |                      |                 |
| Test Item       | Conducted power spectral density      |                  |                      |                 |
| Test Mode       | Mode 4: IEEE 802.11ac 40MHz link mode |                  |                      |                 |
| Date of Test    | 07/29/2016                            |                  |                      |                 |
| Frequency (MHz) | ANT-0                                 |                  |                      |                 |
|                 | Measurement (dBm/MHz)                 | Duty Factor (dB) | Calculated (dBm/MHz) | Limit (dBm/MHz) |
| 5190            | -4.327                                | 0.688            | -3.639               | < 11            |
| 5230            | -4.338                                | 0.688            | -3.650               |                 |
| Frequency (MHz) | ANT-1                                 |                  |                      |                 |
|                 | Measurement (dBm/MHz)                 | Duty Factor (dB) | Calculated (dBm/MHz) | Limit (dBm/MHz) |
| 5190            | -5.324                                | 0.688            | -4.636               | < 11            |
| 5230            | -4.787                                | 0.688            | -4.099               |                 |
| Frequency (MHz) | ANT-0+1                               |                  |                      |                 |
|                 | Calculated (dBm/MHz)                  |                  |                      | Limit (dBm/MHz) |
| 5190            | -1.099                                |                  |                      | < 9.23          |
| 5230            | -0.859                                |                  |                      |                 |

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) = measured result + duty factor.



|                 |                                       |                  |                         |                    |
|-----------------|---------------------------------------|------------------|-------------------------|--------------------|
| Model Number    | Aero Platform                         |                  |                         |                    |
| Test Item       | Conducted power spectral density      |                  |                         |                    |
| Test Mode       | Mode 4: IEEE 802.11ac 40MHz link mode |                  |                         |                    |
| Date of Test    | 07/25/2016                            |                  |                         |                    |
| Frequency (MHz) | ANT-0                                 |                  |                         |                    |
|                 | Measurement (dBm/100KHz)              | Duty Factor (dB) | Calculated (dBm/500KHz) | Limit (dBm/500KHz) |
| 5755            | -7.80                                 | 0.688            | -0.13                   | < 30               |
| 5795            | -5.74                                 | 0.688            | 1.94                    |                    |
| Frequency (MHz) | ANT-1                                 |                  |                         |                    |
|                 | Measurement (dBm/100KHz)              | Duty Factor (dB) | Calculated (dBm/500KHz) | Limit (dBm/500KHz) |
| 5755            | -8.00                                 | 0.688            | -0.32                   | < 30               |
| 5795            | -5.87                                 | 0.688            | 1.81                    |                    |
| Frequency (MHz) | ANT-0+1                               |                  |                         | Limit (dBm/500KHz) |
|                 | Calculated (dBm/500KHz)               |                  |                         |                    |
| 5755            | 2.79                                  |                  |                         | < 28.35            |
| 5795            | 4.88                                  |                  |                         |                    |

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = 10\*Log(500k/100k)



|                 |                                       |                  |                      |                 |
|-----------------|---------------------------------------|------------------|----------------------|-----------------|
| Model Number    | Aero Platform                         |                  |                      |                 |
| Test Item       | Conducted power spectral density      |                  |                      |                 |
| Test Mode       | Mode 5: IEEE 802.11ac 80MHz link mode |                  |                      |                 |
| Date of Test    | 07/29/2016                            |                  |                      |                 |
| Frequency (MHz) | ANT-0                                 |                  |                      |                 |
|                 | Measurement (dBm/MHz)                 | Duty Factor (dB) | Calculated (dBm/MHz) | Limit (dBm/MHz) |
| 5210            | -7.268                                | 0.641            | -6.627               | < 11            |
| Frequency (MHz) | ANT-1                                 |                  |                      |                 |
|                 | Measurement (dBm/MHz)                 | Duty Factor (dB) | Calculated (dBm/MHz) | Limit (dBm/MHz) |
| 5210            | -8.227                                | 0.641            | -7.586               | < 11            |
| Frequency (MHz) | ANT-0+1                               |                  |                      |                 |
|                 | Calculated (dBm/MHz)                  |                  |                      | Limit (dBm/MHz) |
| 5210            | -4.070                                |                  |                      | < 9.23          |

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) = measured result + duty factor.



|                 |                                       |                  |                         |                 |
|-----------------|---------------------------------------|------------------|-------------------------|-----------------|
| Model Number    | Aero Platform                         |                  |                         |                 |
| Test Item       | Conducted power spectral density      |                  |                         |                 |
| Test Mode       | Mode 5: IEEE 802.11ac 80MHz link mode |                  |                         |                 |
| Date of Test    | 07/25/2016                            |                  |                         |                 |
| Frequency (MHz) | ANT-0                                 |                  |                         |                 |
|                 | Measurement (dBm/100KHz)              | Duty Factor (dB) | Calculated (dBm/500KHz) | Limit (dBm/MHz) |
| 5775            | -12.66                                | 0.641            | -5.03                   | < 30            |
| Frequency (MHz) | ANT-1                                 |                  |                         |                 |
|                 | Measurement (dBm/100KHz)              | Duty Factor (dB) | Calculated (dBm/500KHz) | Limit (dBm/MHz) |
| 5775            | -12.99                                | 0.641            | -5.36                   | < 30            |
| Frequency (MHz) | ANT-0+1                               |                  |                         |                 |
|                 | Calculated (dBm/500KHz)               |                  |                         | Limit (dBm/MHz) |
| 5775            | -2.18                                 |                  |                         | < 28.35         |

Note: Method SA-2, Power density = measured result +  $10\log(1/\text{duty cycle})$  + Conversion ratio = measured result + duty factor.

Conversion ratio =  $10*\log(500k/100k)$



## ■ Test Graphs

|                                       |                                                                                      |
|---------------------------------------|--------------------------------------------------------------------------------------|
| Mode 2: IEEE 802.11a Link Mode_ ANT-0 |                                                                                      |
| 5180 MHz                              |    |
| 5200 MHz                              |   |
| 5240 MHz                              |  |



## Mode 2: IEEE 802.11a Link Mode\_ ANT-0

|          |                                                                                      |
|----------|--------------------------------------------------------------------------------------|
| 5745 MHz |    |
| 5785 MHz |   |
| 5825 MHz |  |

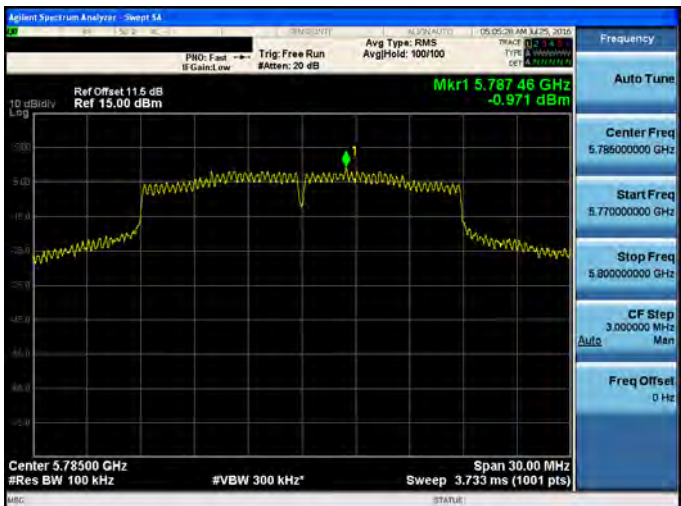
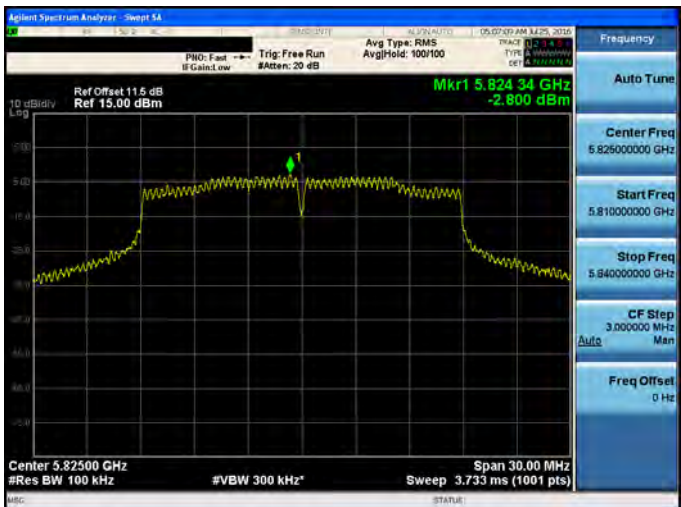


## Mode 3: IEEE 802.11n 20MHz Link Mode \_ ANT-0

|          |                                                                                      |
|----------|--------------------------------------------------------------------------------------|
| 5180 MHz |    |
| 5200 MHz |   |
| 5240 MHz |  |

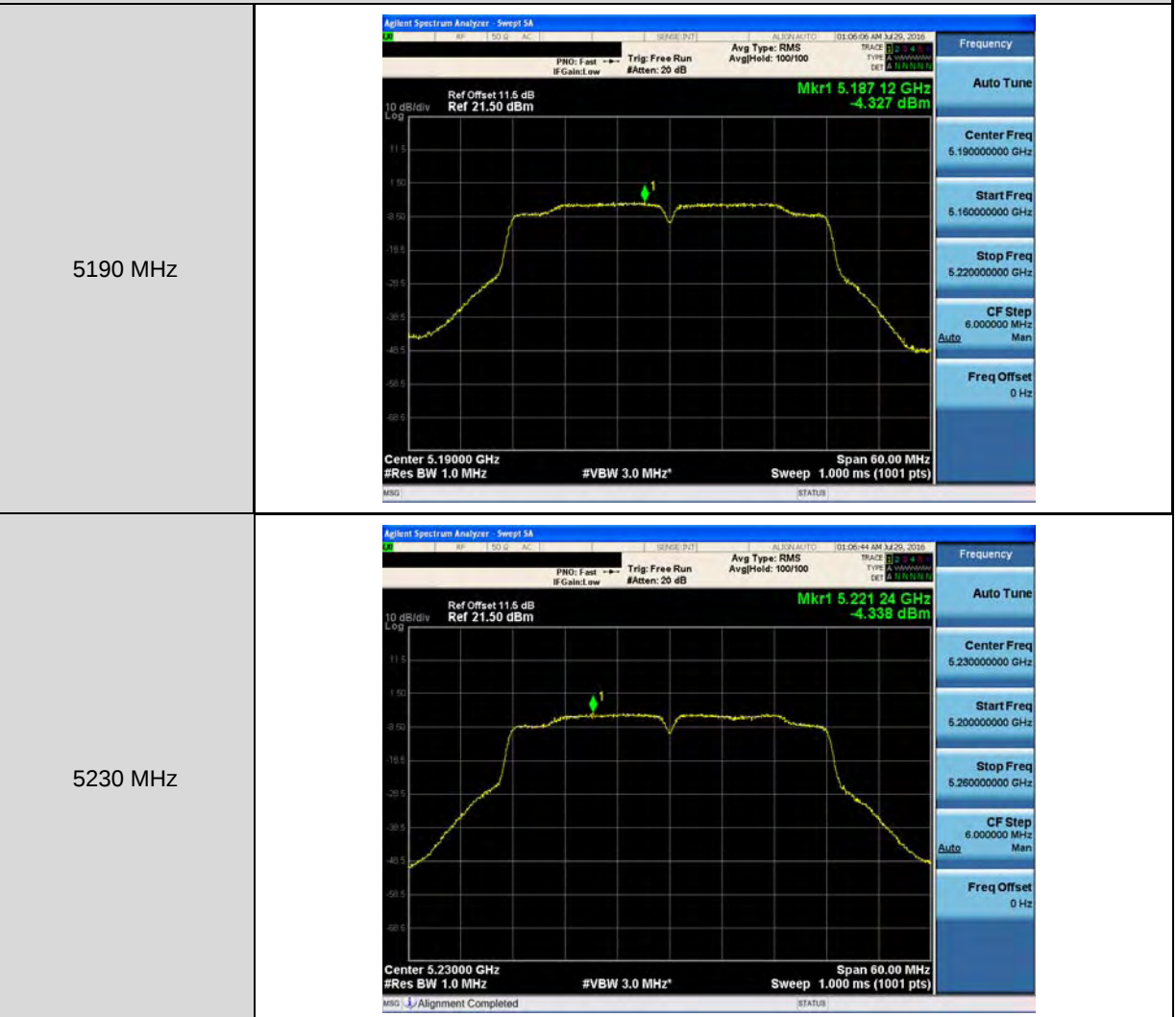


## Mode 3: IEEE 802.11n 20MHz Link Mode \_ANT-0

|          |                                                                                      |
|----------|--------------------------------------------------------------------------------------|
| 5745 MHz |    |
| 5785 MHz |   |
| 5825 MHz |  |

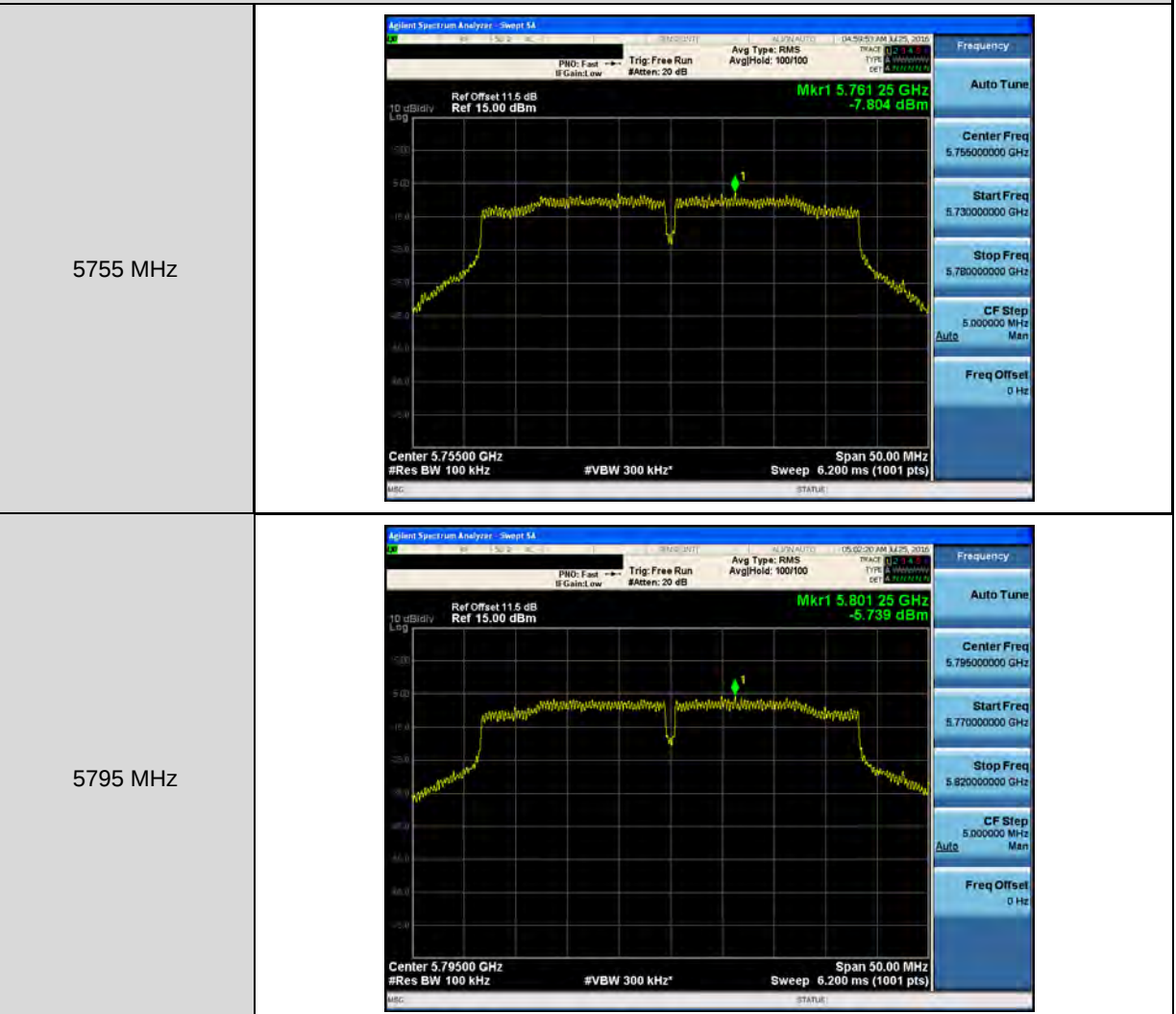


## Mode 4: IEEE 802.11n 40MHz Link Mode\_ ANT-0





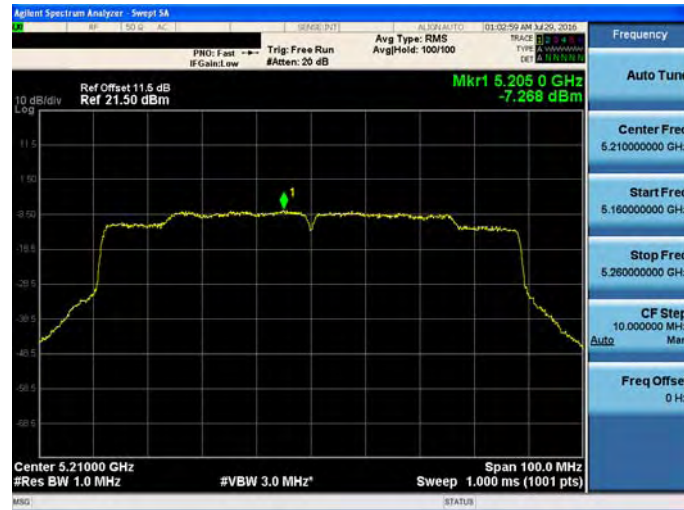
Mode 4: IEEE 802.11n 40MHz Link Mode\_ ANT-0





## Mode 5: IEEE 802.11ac 80MHz Link Mode \_ ANT-0

5210 MHz



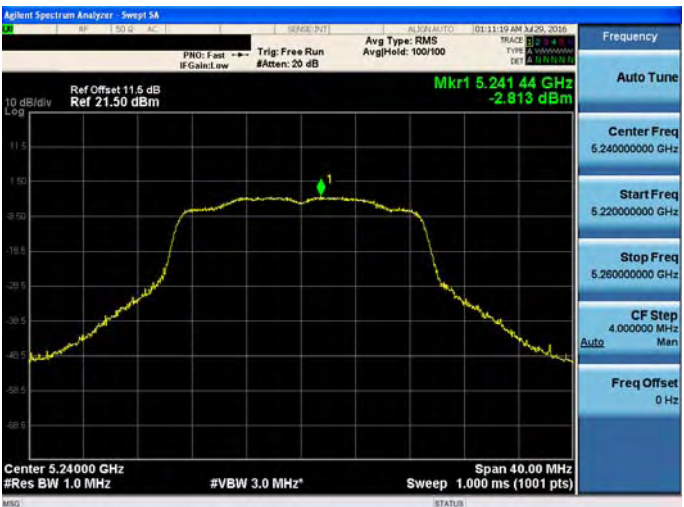
## Mode 5: IEEE 802.11ac 80MHz Link Mode \_ ANT-0

5775 MHz





## Mode 3: IEEE 802.11n 20MHz Link Mode \_ ANT-1

|          |                                                                                      |
|----------|--------------------------------------------------------------------------------------|
| 5180 MHz |    |
| 5200 MHz |   |
| 5240 MHz |  |

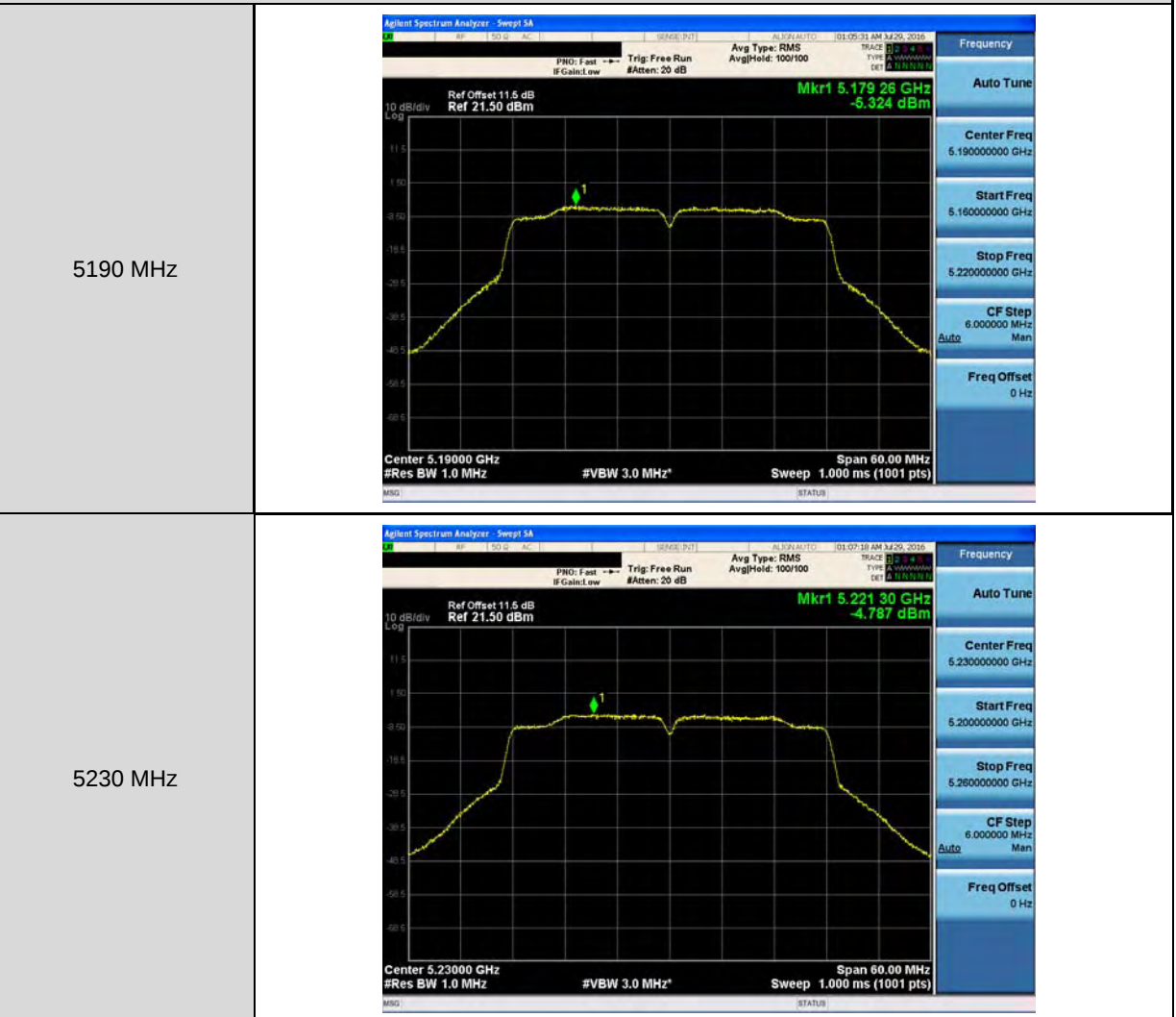


## Mode 3: IEEE 802.11n 20MHz Link Mode \_ ANT-1

|          |                                                                                      |
|----------|--------------------------------------------------------------------------------------|
| 5745 MHz |    |
| 5785 MHz |   |
| 5825 MHz |  |



## Mode 4: IEEE 802.11n 40MHz Link Mode\_ ANT-1





## Mode 4: IEEE 802.11n 40MHz Link Mode\_ ANT-1

|          |                                                                                     |
|----------|-------------------------------------------------------------------------------------|
| 5755 MHz |   |
| 5795 MHz |  |



## Mode 5: IEEE 802.11ac 80MHz Link Mode \_ ANT-1

5210 MHz



## Mode 5: IEEE 802.11ac 80MHz Link Mode \_ ANT-1

5775 MHz

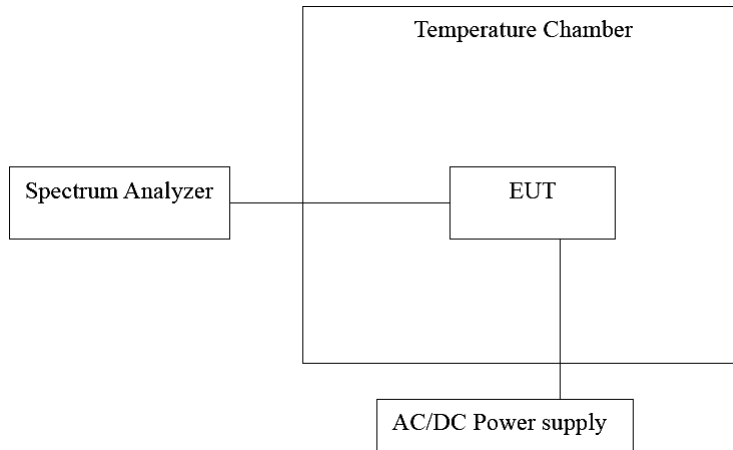


## 4.8. Frequency Stability Measurement

### ■ Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

### ■ Test Setup



### ■ Test Instruments

| Equipment                      | Manufacturer | Model Number | Serial Number | Cal. Date  | Remark |
|--------------------------------|--------------|--------------|---------------|------------|--------|
| Spectrum Analyzer              | Agilent      | E4408B       | MY45107753    | 07/27/2015 | 1 year |
| Temperature & Humidity Chamber | TAICHY       | MHU-225LA    | 980729        | 04/18/2016 | 1 year |
| Test Site                      | ATL          | TE05         | TE05          | N.C.R.     | -----  |

Note: N.C.R. = No Calibration Request.

### ■ Test Procedure

1. The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage.
2. Turn the EUT on and couple its output to a spectrum analyzer.
3. Turn the EUT off and set the chamber to the highest temperature specified.
4. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize.
5. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
6. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.



## ■ Test Result

## Temperature Variations

| Model Number | Aero Platform       |               |                      |                  |                 |                    |
|--------------|---------------------|---------------|----------------------|------------------|-----------------|--------------------|
| Test Item    | Frequency Stability |               |                      |                  |                 |                    |
| Date of Test | 07/24/2016          |               |                      |                  |                 |                    |
| Frequency    | Temp. (°C)          | Voltage (Vac) | Measured Freq. (MHz) | Delta Freq. (Hz) | Tolerance (ppm) | Result (Pass/Fail) |
| 5200 MHz     | 0                   | 120           | 5199.9637            | -36300           | -6.981          | Pass               |
|              | 10                  |               | 5199.9609            | -39100           | -7.519          | Pass               |
|              | 20                  |               | 5199.9494            | -50600           | -9.731          | Pass               |
|              | 30                  |               | 5199.9314            | -68600           | -13.192         | Pass               |
|              | 45                  |               | 5199.9308            | -69200           | -13.308         | Pass               |
| 5785 MHz     | 0                   | 120           | 5784.9614            | -38600           | -6.672          | Pass               |
|              | 10                  |               | 5784.9548            | -45200           | -7.813          | Pass               |
|              | 20                  |               | 5784.9418            | -58200           | -10.061         | Pass               |
|              | 30                  |               | 5784.9317            | -68300           | -11.806         | Pass               |
|              | 45                  |               | 5784.9228            | -77200           | -13.345         | Pass               |

## Voltage Variations

| Model Number | Aero Platform       |               |                      |                  |                 |                    |
|--------------|---------------------|---------------|----------------------|------------------|-----------------|--------------------|
| Test Item    | Frequency Stability |               |                      |                  |                 |                    |
| Date of Test | 07/24/2016          |               |                      |                  |                 |                    |
| Frequency    | Temp. (°C)          | Voltage (Vac) | Measured Freq. (MHz) | Delta Freq. (Hz) | Tolerance (ppm) | Result (Pass/Fail) |
| 5200 MHz     | 20                  | 138.00        | 5199.9609            | -39100           | -7.519          | Pass               |
|              |                     | 120.00        | 5199.9612            | -38800           | -7.462          | Pass               |
|              |                     | 102.00        | 5199.9605            | -39500           | -7.596          | Pass               |
| 5785 MHz     | 20                  | 138.00        | 5784.9607            | -39300           | -6.793          | Pass               |
|              |                     | 120.00        | 5784.9678            | -32200           | -5.566          | Pass               |
|              |                     | 102.00        | 5784.969             | -31000           | -5.359          | Pass               |

Note: The manufacturer's frequency stability specification is better than 20ppm.

## 4.9. Antenna Requirement

### ■ Limit

For intentional device, according to 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And According to 15.407 (a), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### ■ Antenna Connector Construction

See section 2 – antenna information.

### ■ Directional Gain Calculated

#### For Maximum Conducted Output Power

Directional Gain =  $10 \cdot \log\{[10^{(G1/10)} + 10^{(G2/10)} + \dots + 10^{(Gn/10)}] / NANT\}$  dBi

| Operate Freq. Band  |                | Directional Gain (dBi) |
|---------------------|----------------|------------------------|
| IEEE 802.11a        | U-NII Band I   | 4.76                   |
|                     | U-NII Band III | 4.64                   |
| IEEE 802.11an 20MHz | U-NII Band I   | 4.76                   |
|                     | U-NII Band III | 4.64                   |
| IEEE 802.11an 40MHz | U-NII Band I   | 4.76                   |
|                     | U-NII Band III | 4.64                   |
| IEEE 802.11ac 80MHz | U-NII Band I   | 4.76                   |
|                     | U-NII Band III | 4.64                   |

#### For Peak Power Spectral Density

Directional Gain =  $10 \cdot \log\{[10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / NANT\}$

| Operate Freq. Band  |                | Directional Gain (dBi) |
|---------------------|----------------|------------------------|
| IEEE 802.11a        | U-NII Band I   | 7.77                   |
|                     | U-NII Band III | 7.65                   |
| IEEE 802.11an 20MHz | U-NII Band I   | 7.77                   |
|                     | U-NII Band III | 7.65                   |
| IEEE 802.11an 40MHz | U-NII Band I   | 7.77                   |
|                     | U-NII Band III | 7.65                   |
| IEEE 802.11ac 80MHz | U-NII Band I   | 7.77                   |
|                     | U-NII Band III | 7.65                   |