

# FCC TEST REPORT

## FCC ID: 2A3EA-ST65R

**Report Number**..... : ZKT-211012L5389-03

**Date of Test**..... Sep. 22, 2021 – Oct. 19, 2021

**Date of issue** ..... : Oct. 19, 2021

**Total number of pages** ..... 145

**Test Result** ..... : PASS

**Testing Laboratory**..... : **Shenzhen ZKT Technology Co., Ltd.**

**Address** ..... : 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China

**Applicant's name** ..... : DongGuan Ikinor technology Co.,Ltd

**Address** ..... : Room 452, No.1 HengCheng Road ChangAn Town, DongGuan City, Guangdong province.

**Manufacturer's name** ..... : DongGuan Ikinor technology Co.,Ltd

**Address** ..... : Room 452, No.1 HengCheng Road ChangAn Town, DongGuan City, Guangdong province.

**Test specification:**

**Standard** ..... : FCC CFR Title 47 Part 15 Subpart C Section 15.247  
ANSI C63.10:2013

KDB558074 D0115.247 Meas Guidance v 05r02

**Test procedure**..... : /

**Non-standard test method** ..... : N/A

**Test Report Form No.** ..... : TRF-EL-110\_V0

**Test Report Form(s) Originator** .... : ZKT Testing

**Master TRF** ..... : Dated: 2020-01-06

This device described above has been tested by ZKT, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

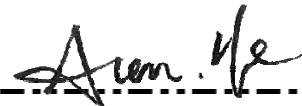
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**Product name**..... : Interactive Flat Panel

**Trademark** ..... : Ikinor

**Model/Type reference** ..... : ST65R, ST55R, ST75R, ST86R, ST98R, ST110R, FG55, FG65, FG75, FG86, FG98, FG110, IK55R, IK65R, IK75R, IK86R, IK98R, IK110R, FB75, FB85, FB86, PR55, PR65, PR75, PR86, PR98, PR110, IK55C, IK65C, IK75C, IK86C, IK98C, IK110C, IB75, IB85, IB86

**Ratings**..... : AC 120V 50/60Hz

**Testing procedure and testing location:****Testing Laboratory.....: Shenzhen ZKT Technology Co., Ltd.****Address.....: 1/F, No. 101, Building B, No. 6, Tangwei Community  
Industrial Avenue, Fuhai Street, Bao'an District,  
Shenzhen, China**  
-----**Tested by (name + signature).....: Alen He**  
-----**Reviewer (name + signature).....: Joe Liu**  
-----**Approved (name + signature).....: Lake Xie**  
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**1. VERSION**

| Report No.         | Version | Description             | Approved      |
|--------------------|---------|-------------------------|---------------|
| ZKT-211012L5389-03 | Rev.01  | Initial issue of report | Oct. 19, 2021 |
|                    |         |                         |               |
|                    |         |                         |               |

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

| FCC Part15 (15.247) , Subpart C |                                  |        |        |
|---------------------------------|----------------------------------|--------|--------|
| Standard Section                | Test Item                        | Result | Remark |
| FCC part 15.203/15.247 (c)      | Antenna requirement              | PASS   |        |
| FCC part 15.207                 | AC Power Line Conducted Emission | PASS   |        |
| FCC part 15.247 (b)(3)          | Conducted Peak Output Power      | PASS   |        |
| FCC part 15.247 (a)(2)          | Channel Bandwidth& 99% OCB       | PASS   |        |
| FCC part 15.247 (e)             | Power Spectral Density           | PASS   |        |
| FCC part 15.247(d)              | Band Edge                        | PASS   |        |
| FCC part 15.205/15.209          | Spurious Emission                | PASS   |        |

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

## 2.1 TEST FACILITY

Shenzhen ZKT Technology Co., Ltd.

Add. : 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China

FCC Test Firm Registration Number: 692225

Designation Number: CN1299

IC Registered No.: 27033

## 2.2 MEASUREMENT UNCERTAINTY

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

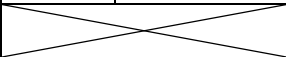
| No. | Item                         | Uncertainty               |
|-----|------------------------------|---------------------------|
| 1   | Conducted Emission Test      | $\pm 1.38\text{dB}$       |
| 2   | RF power conducted           | $\pm 0.16\text{dB}$       |
| 3   | Spurious emissions conducted | $\pm 0.21\text{dB}$       |
| 4   | All emissions radiated(<1G)  | $\pm 4.68\text{dB}$       |
| 5   | All emissions radiated(>1G)  | $\pm 4.89\text{dB}$       |
| 6   | Temperature                  | $\pm 0.5^{\circ}\text{C}$ |
| 7   | Humidity                     | $\pm 2\%$                 |

**3. GENERAL INFORMATION****3.1 GENERAL DESCRIPTION OF EUT**

|                        |                                                                                                                                                                                                                                       |                                        |               |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------|
| Product Name:          | Interactive Flat Panel                                                                                                                                                                                                                |                                        |               |
| Model No.:             | ST65R                                                                                                                                                                                                                                 |                                        |               |
| Model Different.:      | Product size and appearance color are different                                                                                                                                                                                       |                                        |               |
| Serial No.:            | ST55R, ST75R, ST86R, ST98R, ST110R, FG55, FG65, FG75, FG86, FG98, FG110, IK55R, IK65R, IK75R, IK86R, IK98R, IK110R, FB75, FB85, FB86, PR55, PR65, PR75, PR86, PR98, PR110, IK55C, IK65C, IK75C, IK86C, IK98C, IK110C, IB75, IB85 IB86 |                                        |               |
| Hardware Version:      | V1.0                                                                                                                                                                                                                                  |                                        |               |
| Software Version:      | V1.0                                                                                                                                                                                                                                  |                                        |               |
| Sample(s) Status:      | Engineer sample                                                                                                                                                                                                                       |                                        |               |
| Channel numbers:       | 802.11b/802.11g /802.11n(HT20):11<br>802.11n(HT40):7                                                                                                                                                                                  |                                        |               |
| Channel separation:    | 5MHz                                                                                                                                                                                                                                  |                                        |               |
| Modulation technology: | 802.11b: Direct Sequence Spread Spectrum(DSSS)<br>802.11g/802.11n(H20)/802.11 n(HT40):<br>Orthogonal Frequency Division Multiplexing(OFDM)                                                                                            |                                        |               |
| Antenna Type:          | Glue stick antenna                                                                                                                                                                                                                    |                                        |               |
| Antenna gain:          | module A                                                                                                                                                                                                                              | WIFI ANT1: 5dBi;<br>WIFI ANT2:: 5dBi ; | MIMO: 8.01dBi |
|                        |                                                                                                                                                                                                                                       | BT ANT: 5dBi;                          |               |
|                        | module B                                                                                                                                                                                                                              | WIFI ANT1: 5dBi;<br>WIFI ANT2:: 5dBi ; | MIMO: 8.01dBi |
| Power supply:          | AC 120V 50/60Hz                                                                                                                                                                                                                       |                                        |               |
| POWER ADAPTER:         | /                                                                                                                                                                                                                                     |                                        |               |

NOTE: The product has two wifi modules that support 2.4GWIFI. In order to distinguish the test data and results, they will be divided into module A and module B

**module A and module B**

| Operation Frequency each of channel |           |         |           |         |           |                                                                                       |           |
|-------------------------------------|-----------|---------|-----------|---------|-----------|---------------------------------------------------------------------------------------|-----------|
| Channel                             | Frequency | Channel | Frequency | Channel | Frequency | Channel                                                                               | Frequency |
| 1                                   | 2412MHz   | 4       | 2427MHz   | 7       | 2442MHz   | 10                                                                                    | 2457MHz   |
| 2                                   | 2417MHz   | 5       | 2432MHz   | 8       | 2447MHz   | 11                                                                                    | 2462MHz   |
| 3                                   | 2422MHz   | 6       | 2437MHz   | 9       | 2452MHz   |  |           |

Note:

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

| Test channel | Frequency (MHz) |
|--------------|-----------------|
|--------------|-----------------|



|                 |                               |
|-----------------|-------------------------------|
|                 | 802.11b/802.11g/802.11n(HT20) |
| Lowest channel  | 2412MHz                       |
| Middle channel  | 2437MHz                       |
| Highest channel | 2462MHz                       |

| Test channel    | Frequency (MHz) |
|-----------------|-----------------|
|                 | 802.11n(HT40)   |
| Lowest channel  | 2422MHz         |
| Middle channel  | 2437MHz         |
| Highest channel | 2452MHz         |

Worst Case Configuration

| Description               | module A –MIMO<br>(802.11N-HT20 low channel) | module B –MIMO<br>(802.11N-HT20 low channel) |
|---------------------------|----------------------------------------------|----------------------------------------------|
| Antenna                   | MIMO                                         | MIMO                                         |
| Channel                   | 1                                            | 1                                            |
| Operating Frequency (MHz) | 2412                                         | 2412                                         |
| Data Rate (Mbps)          | 6.5Mbps                                      | 6.5Mbps                                      |

### 3.2 DESCRIPTION OF TEST MODES

|                                                                                                                                                                                                                                                            |                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Transmitting mode                                                                                                                                                                                                                                          | Keep the EUT in continuously transmitting mode |
| Remark: During the test, the duty cycle >98%, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data. |                                                |

|                                                                                                                                                                                                              |         |         |               |               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|---------------|---------------|
| We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows: |         |         |               |               |
| Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.                                                                                                         |         |         |               |               |
| Mode                                                                                                                                                                                                         | 802.11b | 802.11g | 802.11n(HT20) | 802.11n(HT40) |
| Data rate                                                                                                                                                                                                    | 1Mbps   | 6Mbps   | 6.5Mbps       | MCS0          |

|                   |                   |
|-------------------|-------------------|
| Test Software     | Realtek Test Tool |
| Power level setup | <20dBm            |

### 3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Emission



Radiated Emission



## Conducted Spurious

AC Line

EUT

## 3.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Item | Equipment | Mfr/Brand | Model/Type No. | Series No. | Note |
|------|-----------|-----------|----------------|------------|------|
|      |           |           |                |            |      |
|      |           |           |                |            |      |
|      |           |           |                |            |      |

| Item | Shielded Type | Ferrite Core | Length | Note |
|------|---------------|--------------|--------|------|
|      |               |              |        |      |
|      |               |              |        |      |
|      |               |              |        |      |

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

## 3.5EQUIPMENTS LIST FOR ALL TEST ITEMS

| Item | Equipment                        | Manufacturer   | Type No.        | Serial No. | Last calibration | Calibrated until |
|------|----------------------------------|----------------|-----------------|------------|------------------|------------------|
| 1    | Spectrum Analyzer (9kHz-26.5GHz) | KEYSIGHT       | 9020A           | MY45109572 | Sep. 21, 2021    | Sep. 20, 2022    |
| 2    | Spectrum Analyzer (1GHz-40GHz)   | Agilent        | E4446A          | 100363     | Sep. 21, 2021    | Sep. 20, 2022    |
| 3    | Test Receiver (9kHz-7GHz)        | R&S            | ESCI7           | 101169     | Sep. 21, 2021    | Sep. 20, 2022    |
| 4    | Bilog Antenna (30MHz-1400MHz)    | Schwarzbeck    | VULB9168        | 00877      | Sep. 21, 2021    | Sep. 20, 2022    |
| 5    | Horn Antenna (1GHz-18GHz)        | SCHWARZBEC K   | BBHA9120D       | 1541       | Sep. 21, 2021    | Sep. 20, 2022    |
| 6    | Horn Antenna (18GHz-40GHz)       | A.H. System    | SAS-574         | 588        | Sep. 21, 2021    | Sep. 20, 2022    |
| 7    | Amplifier (30-1000MHz)           | EM Electronics | EM330 Amplifier | N/A        | Sep. 21, 2021    | Sep. 20, 2022    |
| 8    | Amplifier (1GHz-40GHz)           | QUANJUDA       | DLE-161         | 097        | Sep. 21, 2021    | Sep. 20, 2022    |
| 9    | Loop Antenna (9kHz-30MHz)        | SCHWARZBEC K   | FMZB1519B       | 014        | Sep. 21, 2021    | Sep. 20, 2022    |
| 10   | RF cables1 (9kHz-30MHz)          | N/A            | 9kHz-30MHz      | N/A        | Sep. 21, 2021    | Sep. 20, 2022    |
| 11   | RF cables2 (30MHz-1GHz)          | N/A            | 30MHz-1GHz      | N/A        | Sep. 21, 2021    | Sep. 20, 2022    |
| 12   | RF cables3                       | N/A            | 1GHz-40GHz      | N/A        | Sep. 21, 2021    | Sep. 20, 2022    |

|    |                      |         |           |            |               |               |
|----|----------------------|---------|-----------|------------|---------------|---------------|
|    | (1GHz-40GHz)         |         |           |            |               |               |
| 13 | CMW500 Test          | R&S     | CMW500    | 106504     | Sep. 21, 2021 | Sep. 20, 2022 |
| 14 | ESG Signal Generator | Agilent | E4421B    | GB40051203 | Sep. 21, 2021 | Sep. 20, 2022 |
| 15 | Signal Generator     | Agilent | N5182A    | MY47420215 | Sep. 21, 2021 | Sep. 20, 2022 |
| 16 | D.C. Power Supply    | LongWei | TPR-6405D | \          | \             | \             |
| 17 | Software             | Frad    | EZ-EMC    | FA-03A2 RE | \             | \             |

## Radiation Test equipment

## Conduction Test equipment

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No.  | Last calibration | Calibrated until |
|------|-------------------|--------------|----------|-------------|------------------|------------------|
| 1    | LISN              | R&S          | ENV216   | 101471      | Sep. 21, 2021    | Sep. 20, 2022    |
| 2    | LISN              | CYBERTEK     | EM5040A  | E1850400149 | Sep. 21, 2021    | Sep. 20, 2022    |
| 3    | Test Cable        | N/A          | C01      | N/A         | Sep. 21, 2021    | Sep. 20, 2022    |
| 4    | Test Cable        | N/A          | C02      | N/A         | Sep. 21, 2021    | Sep. 20, 2022    |
| 5    | EMI Test Receiver | R&S          | ESRP3    | 101946      | Sep. 21, 2021    | Sep. 20, 2022    |
| 6    | Absorbing Clamp   | DZ           | ZN23201  | N/A         | Sep. 21, 2021    | Sep. 20, 2022    |

#### 4. EMC EMISSION TEST

##### 4.1 CONDUCTED EMISSION MEASUREMENT

|                       |                                      |
|-----------------------|--------------------------------------|
| Test Requirement:     | FCC Part15 C Section 15.207          |
| Test Method:          | ANSI C63.10:2013                     |
| Test Frequency Range: | 150KHz to 30MHz                      |
| Receiver setup:       | RBW=9KHz, VBW=30KHz, Sweep time=auto |

##### 4.1.1 POWER LINE CONDUCTED EMISSION LIMITS

| FREQUENCY (MHz) | Limit (dBuV) |           | Standard |
|-----------------|--------------|-----------|----------|
|                 | Quasi-peak   | Average   |          |
| 0.15 -0.5       | 66 - 56 *    | 56 - 46 * | FCC      |
| 0.50 -5.0       | 56.00        | 46.00     | FCC      |
| 5.0 -30.0       | 60.00        | 50.00     | FCC      |

Note:

(1) \*Decreases with the logarithm of the frequency.

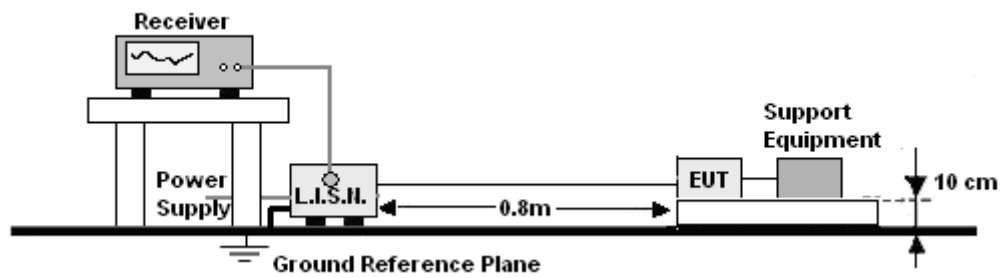
##### 4.1.2 TEST PROCEDURE

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system; a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10:2013.
2. Support equipment, if needed, was placed as per ANSI C63.10:2013
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10:2013.
4. The adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
5. All support equipments received AC power from a second LISN, if any.
6. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.e.
8. For the actual test configuration, please refer to the related Item –EUT Test Photos.

##### 4.1.3 DEVIATION FROM TEST STANDARD

No deviation

#### 4.1.4 TEST SETUP



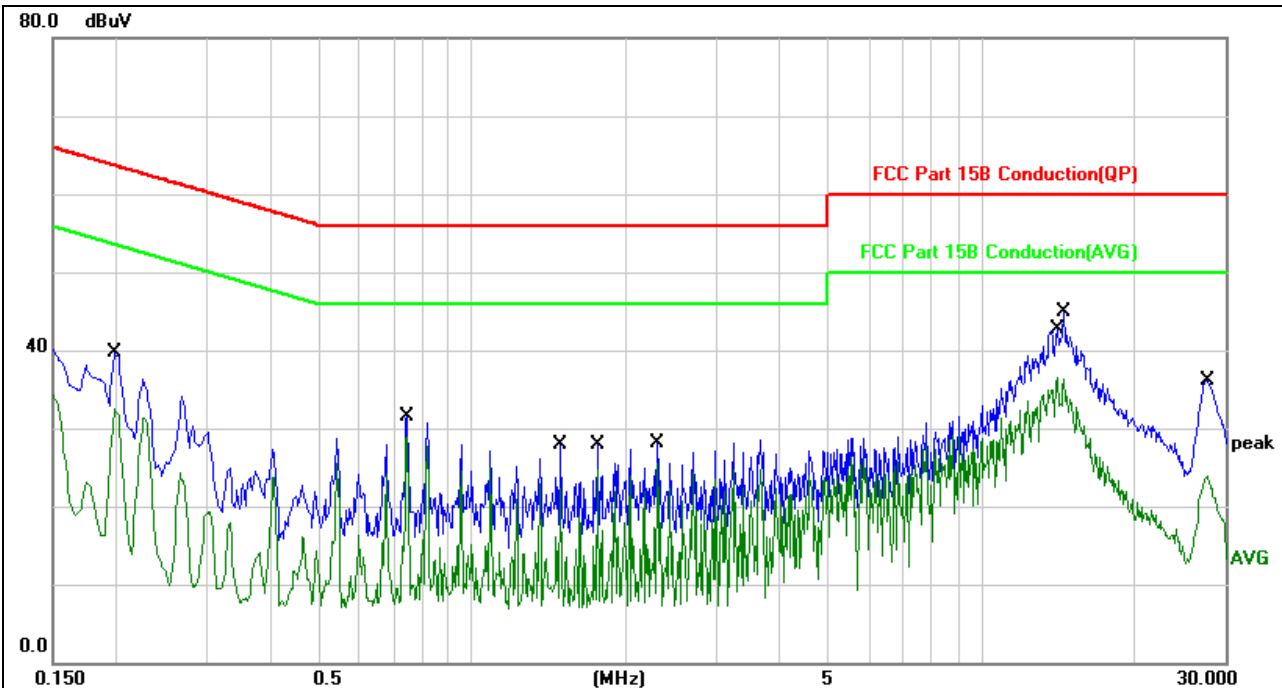
#### 4.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

We pretest AC 120V and AC 240V, the worst voltage was AC 120V and the data recording in the report.

## 4.1.6 TEST RESULT

|                |              |                    |     |
|----------------|--------------|--------------------|-----|
| Temperature :  | 26°C         | Relative Humidity: | 54% |
| Pressure :     | 101kPa       | Phase              | L   |
| Test Voltage : | AC 120V/60Hz |                    |     |

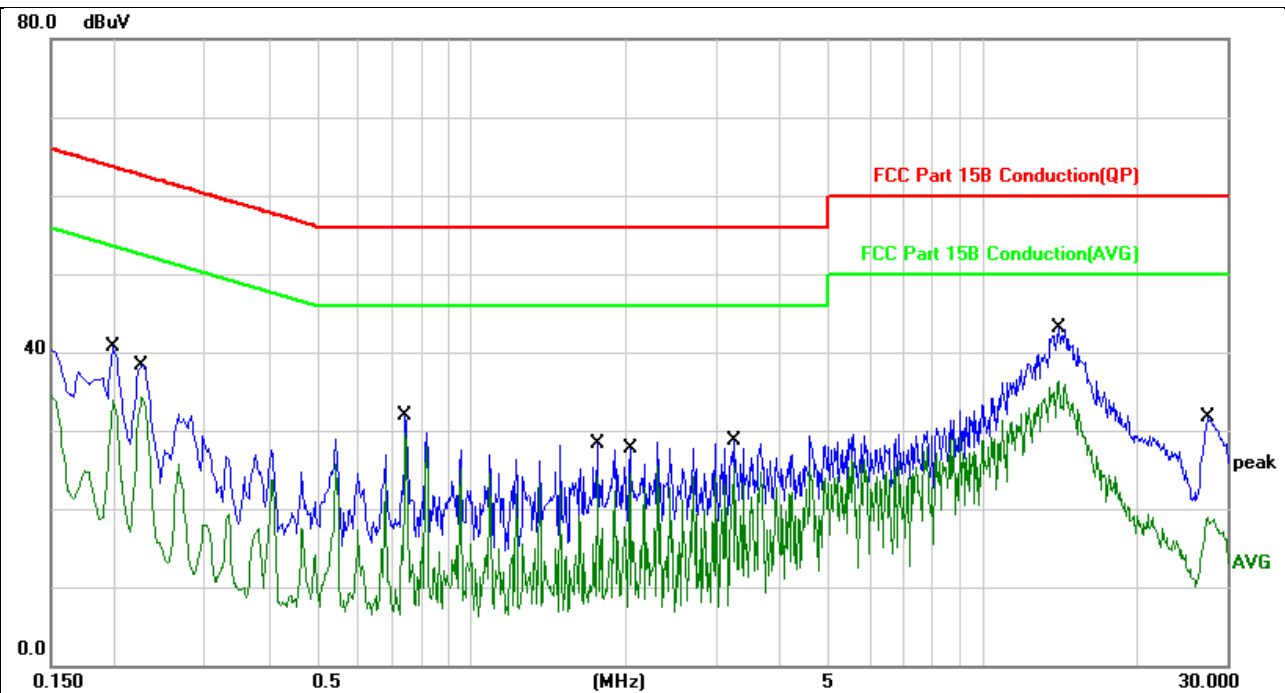


| No. Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector | Comment |
|---------|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1       | 0.1980       | 39.82                    | -0.13                   | 39.69                    | 63.69         | -24.00     | QP       |         |
| 2       | 0.1980       | 32.72                    | -0.13                   | 32.59                    | 53.69         | -21.10     | AVG      |         |
| 3       | 0.7460       | 31.47                    | -0.06                   | 31.41                    | 56.00         | -24.59     | QP       |         |
| 4       | 0.7460       | 28.96                    | -0.06                   | 28.90                    | 46.00         | -17.10     | AVG      |         |
| 5       | 1.4900       | 28.09                    | -0.19                   | 27.90                    | 56.00         | -28.10     | QP       |         |
| 6       | 1.7620       | 24.86                    | -0.21                   | 24.65                    | 46.00         | -21.35     | AVG      |         |
| 7       | 2.3060       | 28.45                    | -0.25                   | 28.20                    | 56.00         | -27.80     | QP       |         |
| 8       | 2.3060       | 25.80                    | -0.25                   | 25.55                    | 46.00         | -20.45     | AVG      |         |
| 9 *     | 14.0860      | 36.62                    | -0.19                   | 36.43                    | 50.00         | -13.57     | AVG      |         |
| 10      | 14.4940      | 45.06                    | -0.21                   | 44.85                    | 60.00         | -15.15     | QP       |         |
| 11      | 27.6900      | 36.56                    | -0.38                   | 36.18                    | 60.00         | -23.82     | QP       |         |
| 12      | 27.6900      | 24.32                    | -0.38                   | 23.94                    | 50.00         | -26.06     | AVG      |         |

## Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Measurement Level = Reading level + Correct Factor

|                |              |                    |     |
|----------------|--------------|--------------------|-----|
| Temperature :  | 26°C         | Relative Humidity: | 54% |
| Pressure :     | 101kPa       | Phase :            | N   |
| Test Voltage : | AC 120V/60Hz |                    |     |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1   |     | 0.1980       | 40.81                    | -0.13                   | 40.68                    | 63.69         | -23.01     | QP       |         |
| 2   |     | 0.2260       | 34.42                    | -0.12                   | 34.30                    | 52.59         | -18.29     | AVG      |         |
| 3   |     | 0.7420       | 31.92                    | -0.06                   | 31.86                    | 56.00         | -24.14     | QP       |         |
| 4   |     | 0.7420       | 29.68                    | -0.06                   | 29.62                    | 46.00         | -16.38     | AVG      |         |
| 5   |     | 1.7620       | 28.48                    | -0.21                   | 28.27                    | 56.00         | -27.73     | QP       |         |
| 6   |     | 2.0340       | 24.82                    | -0.23                   | 24.59                    | 46.00         | -21.41     | AVG      |         |
| 7   |     | 3.2540       | 28.97                    | -0.19                   | 28.78                    | 56.00         | -27.22     | QP       |         |
| 8   |     | 3.2540       | 25.44                    | -0.19                   | 25.25                    | 46.00         | -20.75     | AVG      |         |
| 9   |     | 14.0860      | 43.28                    | -0.19                   | 43.09                    | 60.00         | -16.91     | QP       |         |
| 10  | *   | 14.0860      | 36.45                    | -0.19                   | 36.26                    | 50.00         | -13.74     | AVG      |         |
| 11  |     | 27.5420      | 32.01                    | -0.38                   | 31.63                    | 60.00         | -28.37     | QP       |         |
| 12  |     | 27.5420      | 19.26                    | -0.38                   | 18.88                    | 50.00         | -31.12     | AVG      |         |

## Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Measurement Level = Reading level + Correct Factor

## 4.2 RADIATED EMISSION MEASUREMENT

|                       |                             |            |        |        |            |
|-----------------------|-----------------------------|------------|--------|--------|------------|
| Test Requirement:     | FCC Part15 C Section 15.209 |            |        |        |            |
| Test Method:          | ANSI C63.10:2013            |            |        |        |            |
| Test Frequency Range: | 9kHz to 25GHz               |            |        |        |            |
| Test site:            | Measurement Distance: 3m    |            |        |        |            |
| Receiver setup:       | Frequency                   | Detector   | RBW    | VBW    | Value      |
|                       | 9KHz-150KHz                 | Quasi-peak | 200Hz  | 600Hz  | Quasi-peak |
|                       | 150KHz-30MHz                | Quasi-peak | 9KHz   | 30KHz  | Quasi-peak |
|                       | 30MHz-1GHz                  | Quasi-peak | 100KHz | 300KHz | Quasi-peak |
|                       | Above 1GHz                  | Peak       | 1MHz   | 3MHz   | Peak       |
|                       |                             | Peak       | 1MHz   | 10Hz   | Average    |

## 4.2.1 RADIATED EMISSION LIMITS

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

## LIMITS OF RADIATED EMISSION MEASUREMENT

| FREQUENCY (MHz) | Limit (dBuV/m) (at 3M) |         |
|-----------------|------------------------|---------|
|                 | PEAK                   | AVERAGE |
| Above 1000      | 74                     | 54      |

## Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

## 4.2.2 TEST PROCEDURE

Below 1GHz test procedure as below:

- a. The EUT was placed on the top of a rotating table 0.1 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of variable-height antenna tower.



- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

- g. Different from above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change from table 0.8 metre to 1.5 metre (Above 18GHz the distance is 1 meter and table is 1.5 metre).
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel

Note:

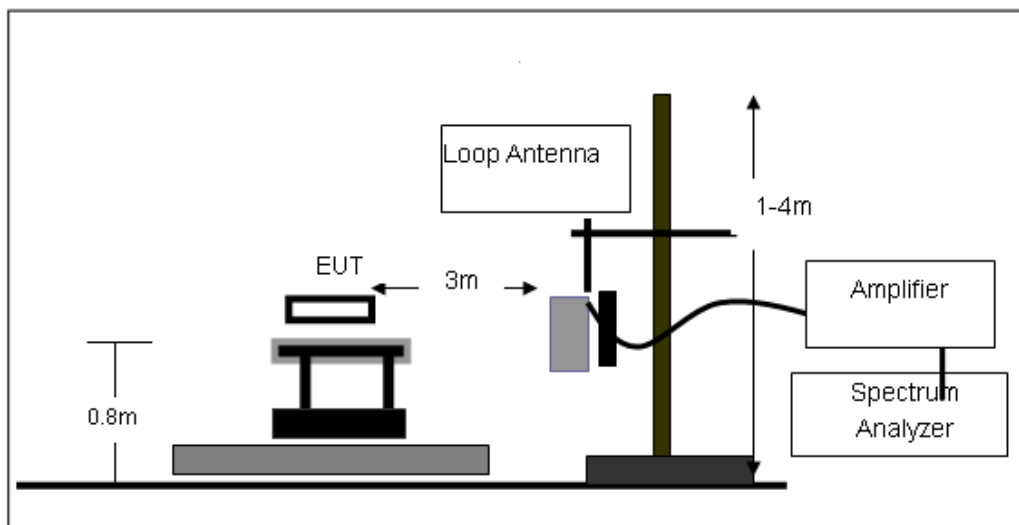
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

#### 4.2.3 DEVIATION FROM TEST STANDARD

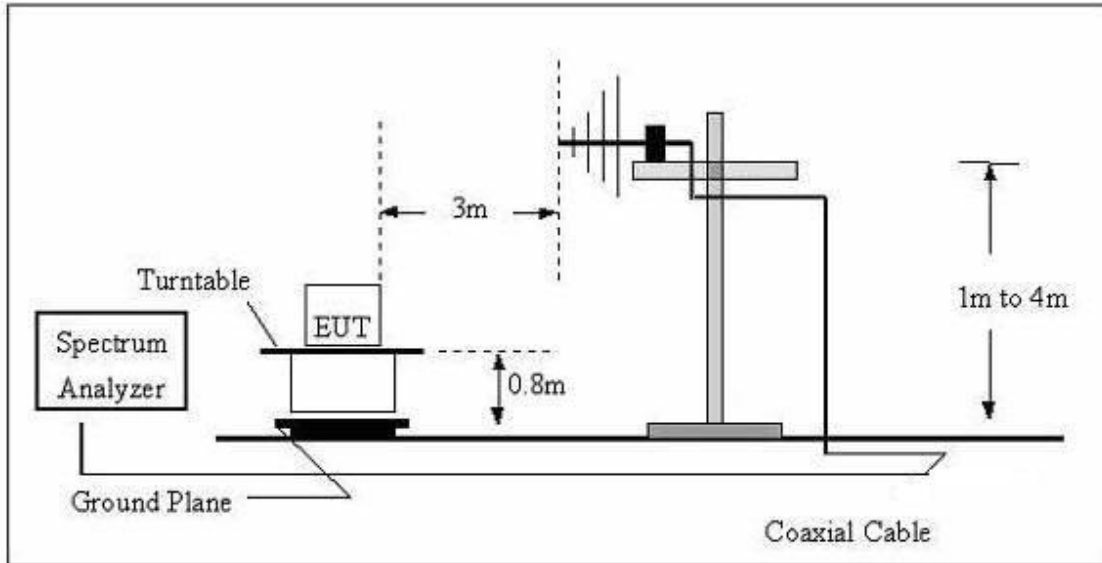
No deviation

#### 4.2.4 TEST SETUP

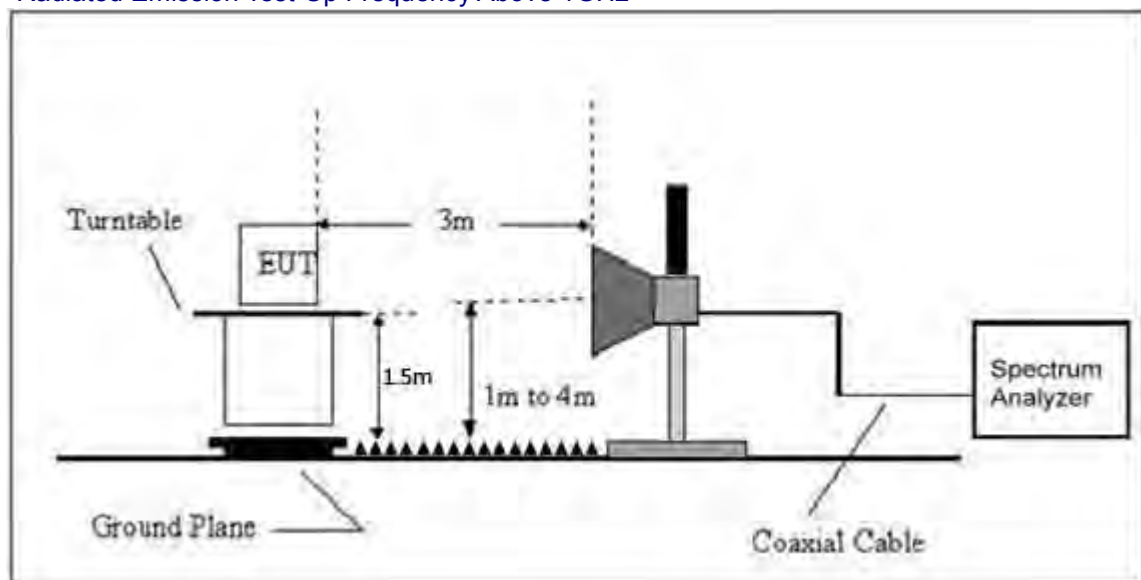
##### (A) Radiated Emission Test-Up Frequency Below 30MHz



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



## (C) Radiated Emission Test-Up Frequency Above 1GHz



## 4.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

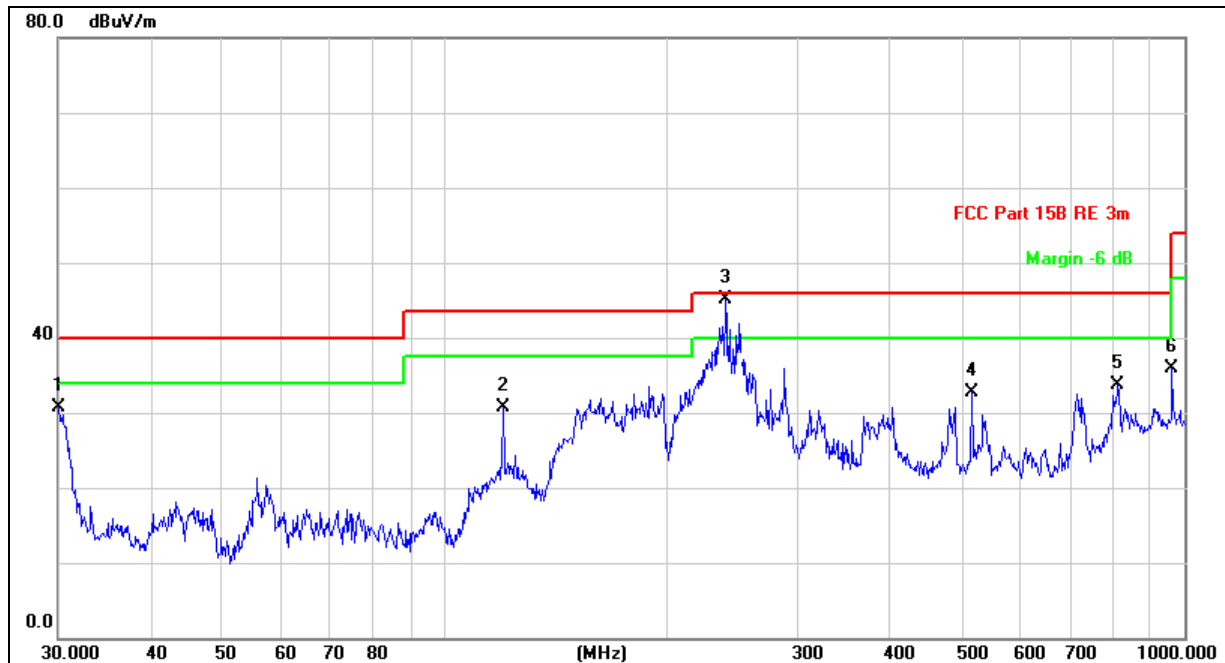
#### 4.2.6 TEST RESULTS

Between 9KHz – 30MHz

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

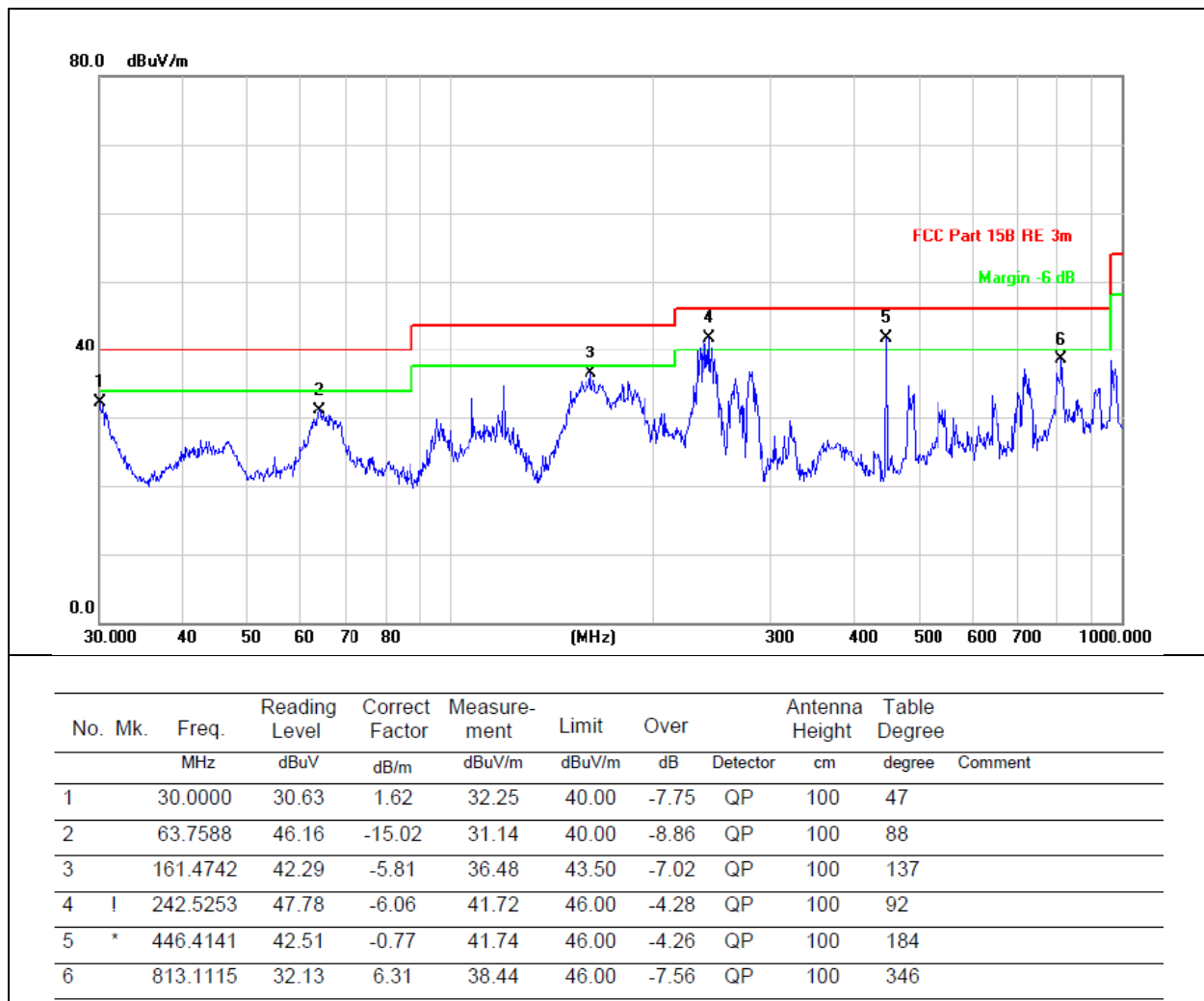
Between 30MHz – 1GHz

|               |              |                    |            |
|---------------|--------------|--------------------|------------|
| Temperature:  | 26°C         | Relative Humidity: | 54%        |
| Pressure:     | 101 kPa      | Polarization:      | Horizontal |
| Test Voltage: | AC 120V/60Hz |                    |            |



| No. | Mk. | Freq.    | Reading | Correct | Measure- | Limit  | Over   | Antenna  | Table  |         |
|-----|-----|----------|---------|---------|----------|--------|--------|----------|--------|---------|
|     |     | MHz      | Level   | Factor  | ment     |        |        | Height   | Degree | Comment |
|     |     |          | dBuV    | dB/m    | dBuV/m   | dBuV/m | dB     | Detector | cm     | degree  |
| 1   |     | 30.1054  | 29.18   | 1.43    | 30.61    | 40.00  | -9.39  | QP       | 100    | 30      |
| 2   |     | 119.8556 | 37.31   | -6.52   | 30.79    | 43.50  | -12.71 | QP       | 100    | 84      |
| 3   |     | 239.9874 | 51.00   | -6.06   | 44.94    | 46.00  | -1.06  | QP       | 100    | 183     |
| 4   |     | 523.1422 | 34.93   | 0.11    | 35.04    | 46.00  | -10.96 | QP       | 100    | 209     |
| 5   |     | 813.1124 | 28.06   | 6.31    | 34.37    | 46.00  | -11.63 | QP       | 100    | 184     |
| 6   |     | 962.1623 | 29.25   | 6.74    | 35.99    | 54.00  | -18.01 | QP       | 100    | 232     |

|               |              |                    |          |
|---------------|--------------|--------------------|----------|
| Temperature:  | 26°C         | Relative Humidity: | 54%      |
| Pressure:     | 101kPa       | Polarization:      | Vertical |
| Test Voltage: | AC 120V/60Hz |                    |          |



## Remarks:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.
3. The test data shows only the worst case-module A –MIMO (802.11N-HT20 low channel) & moduleB –MIMO (802.11N-HT20 low channel)

1GHz~25GHz

## Module A-802.11b-ANT1

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2412MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4824      | 52.72            | 30.55             | 5.77          | 24.66             | 52.60             | 74           | -21.40 | PK                   |
| V                   | 4824      | 40.26            | 30.55             | 5.77          | 24.66             | 40.14             | 54           | -13.86 | AV                   |
| V                   | 7236      | 53.05            | 30.33             | 6.32          | 24.55             | 53.59             | 74           | -20.41 | PK                   |
| V                   | 7236      | 39.58            | 30.33             | 6.32          | 24.55             | 40.12             | 54           | -13.88 | AV                   |
| V                   | 9648      | 51.58            | 30.85             | 7.45          | 24.69             | 52.87             | 74           | -21.13 | PK                   |
| V                   | 9648      | 38.26            | 30.85             | 7.45          | 24.69             | 39.55             | 54           | -14.45 | AV                   |
| H                   | 4824      | 55.52            | 30.55             | 5.77          | 24.66             | 55.40             | 74           | -18.60 | PK                   |
| H                   | 4824      | 41.65            | 30.55             | 5.77          | 24.66             | 41.53             | 54           | -12.47 | AV                   |
| H                   | 7236      | 53.48            | 30.33             | 6.32          | 24.55             | 54.02             | 74           | -19.98 | PK                   |
| H                   | 7236      | 41.52            | 30.33             | 6.32          | 24.55             | 42.06             | 54           | -11.94 | AV                   |
| H                   | 9648      | 52.99            | 30.85             | 7.45          | 24.69             | 54.28             | 74           | -19.72 | PK                   |
| H                   | 9648      | 36.85            | 30.85             | 7.45          | 24.69             | 38.14             | 54           | -15.86 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 53.92            | 30.55             | 5.77          | 24.66             | 53.80             | 74           | -20.20 | PK                   |
| V                      | 4874      | 40.13            | 30.55             | 5.77          | 24.66             | 40.01             | 54           | -13.99 | AV                   |
| V                      | 7311      | 52.56            | 30.33             | 6.32          | 24.55             | 53.10             | 74           | -20.90 | PK                   |
| V                      | 7311      | 40.86            | 30.33             | 6.32          | 24.55             | 41.40             | 54           | -12.60 | AV                   |
| V                      | 9748      | 50.93            | 30.85             | 7.45          | 24.69             | 52.22             | 74           | -21.78 | PK                   |
| V                      | 9748      | 37.57            | 30.85             | 7.45          | 24.69             | 38.86             | 54           | -15.14 | AV                   |
| H                      | 4874      | 52.22            | 30.55             | 5.77          | 24.66             | 52.10             | 74           | -21.90 | PK                   |
| H                      | 4874      | 40.84            | 30.55             | 5.77          | 24.66             | 40.72             | 54           | -13.28 | AV                   |
| H                      | 7311      | 52.22            | 30.33             | 6.32          | 24.55             | 52.76             | 74           | -21.24 | PK                   |
| H                      | 7311      | 41.36            | 30.33             | 6.32          | 24.55             | 41.90             | 54           | -12.10 | AV                   |
| H                      | 9748      | 52.79            | 30.85             | 7.45          | 24.69             | 54.08             | 74           | -19.92 | PK                   |
| H                      | 9748      | 36.10            | 30.85             | 7.45          | 24.69             | 37.39             | 54           | -16.61 | AV                   |

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampli<br>fier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2462MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4924      | 54.49            | 30.55             | 5.77          | 24.66             | 54.37             | 74           | -19.63 | PK                   |
| V                    | 4924      | 40.53            | 30.55             | 5.77          | 24.66             | 40.41             | 54           | -13.59 | AV                   |
| V                    | 7386      | 51.84            | 30.33             | 6.32          | 24.55             | 52.38             | 74           | -21.62 | PK                   |
| V                    | 7386      | 41.66            | 30.33             | 6.32          | 24.55             | 42.20             | 54           | -11.80 | AV                   |
| V                    | 9848      | 51.01            | 30.85             | 7.45          | 24.69             | 52.30             | 74           | -21.70 | PK                   |
| V                    | 9848      | 40.73            | 30.85             | 7.45          | 24.69             | 42.02             | 54           | -11.98 | AV                   |
| H                    | 4924      | 53.45            | 30.55             | 5.77          | 24.66             | 53.33             | 74           | -20.67 | PK                   |
| H                    | 4924      | 41.43            | 30.55             | 5.77          | 24.66             | 41.31             | 54           | -12.69 | AV                   |
| H                    | 7386      | 53.52            | 30.33             | 6.32          | 24.55             | 54.06             | 74           | -19.94 | PK                   |
| H                    | 7386      | 41.61            | 30.33             | 6.32          | 24.55             | 42.15             | 54           | -11.85 | AV                   |
| H                    | 9848      | 53.57            | 30.85             | 7.45          | 24.69             | 54.86             | 74           | -19.14 | PK                   |
| H                    | 9848      | 37.66            | 30.85             | 7.45          | 24.69             | 38.95             | 54           | -15.05 | AV                   |

## Module A-802.11g-ANT1

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2412MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4824      | 52.09            | 30.55             | 5.77          | 24.66             | 51.97             | 74           | -22.03 | PK                   |
| V                   | 4824      | 41.10            | 30.55             | 5.77          | 24.66             | 40.98             | 54           | -13.02 | AV                   |
| V                   | 7236      | 53.23            | 30.33             | 6.32          | 24.55             | 53.77             | 74           | -20.23 | PK                   |
| V                   | 7236      | 39.15            | 30.33             | 6.32          | 24.55             | 39.69             | 54           | -14.31 | AV                   |
| V                   | 9648      | 51.30            | 30.85             | 7.45          | 24.69             | 52.59             | 74           | -21.41 | PK                   |
| V                   | 9648      | 37.27            | 30.85             | 7.45          | 24.69             | 38.56             | 54           | -15.44 | AV                   |
| H                   | 4824      | 55.24            | 30.55             | 5.77          | 24.66             | 55.12             | 74           | -18.88 | PK                   |
| H                   | 4824      | 40.16            | 30.55             | 5.77          | 24.66             | 40.04             | 54           | -13.96 | AV                   |
| H                   | 7236      | 53.19            | 30.33             | 6.32          | 24.55             | 53.73             | 74           | -20.27 | PK                   |
| H                   | 7236      | 39.17            | 30.33             | 6.32          | 24.55             | 39.71             | 54           | -14.29 | AV                   |
| H                   | 9648      | 52.77            | 30.85             | 7.45          | 24.69             | 54.06             | 74           | -19.94 | PK                   |
| H                   | 9648      | 37.43            | 30.85             | 7.45          | 24.69             | 38.72             | 54           | -15.28 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-amp<br>lifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 55.36            | 30.55             | 5.77          | 24.66             | 55.24             | 74           | -18.76 | PK                   |
| V                      | 4874      | 41.11            | 30.55             | 5.77          | 24.66             | 40.99             | 54           | -13.01 | AV                   |
| V                      | 7311      | 53.54            | 30.33             | 6.32          | 24.55             | 54.08             | 74           | -19.92 | PK                   |
| V                      | 7311      | 39.46            | 30.33             | 6.32          | 24.55             | 40.00             | 54           | -14.00 | AV                   |
| V                      | 9748      | 52.52            | 30.85             | 7.45          | 24.69             | 53.81             | 74           | -20.19 | PK                   |
| V                      | 9748      | 37.66            | 30.85             | 7.45          | 24.69             | 38.95             | 54           | -15.05 | AV                   |
| H                      | 4874      | 52.89            | 30.55             | 5.77          | 24.66             | 52.77             | 74           | -21.23 | PK                   |
| H                      | 4874      | 42.18            | 30.55             | 5.77          | 24.66             | 42.06             | 54           | -11.94 | AV                   |
| H                      | 7311      | 53.53            | 30.33             | 6.32          | 24.55             | 54.07             | 74           | -19.93 | PK                   |
| H                      | 7311      | 40.90            | 30.33             | 6.32          | 24.55             | 41.44             | 54           | -12.56 | AV                   |
| H                      | 9748      | 53.43            | 30.85             | 7.45          | 24.69             | 54.72             | 74           | -19.28 | PK                   |
| H                      | 9748      | 36.29            | 30.85             | 7.45          | 24.69             | 37.58             | 54           | -16.42 | AV                   |

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-amplifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits   | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|---------------|---------------|-------------------|-------------------|----------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)          | (dB)          | (dB)              | (dBuV/m)          | (dBuV/m) | (dB)   |                      |
| High Channel:2462MHz |           |                  |               |               |                   |                   |          |        |                      |
| V                    | 4924      | 54.59            | 30.55         | 5.77          | 24.66             | 54.47             | 74       | -19.53 | PK                   |
| V                    | 4924      | 41.53            | 30.55         | 5.77          | 24.66             | 41.41             | 54       | -12.59 | AV                   |
| V                    | 7386      | 52.56            | 30.33         | 6.32          | 24.55             | 53.10             | 74       | -20.90 | PK                   |
| V                    | 7386      | 40.66            | 30.33         | 6.32          | 24.55             | 41.20             | 54       | -12.80 | AV                   |
| V                    | 9848      | 51.07            | 30.85         | 7.45          | 24.69             | 52.36             | 74       | -21.64 | PK                   |
| V                    | 9848      | 40.56            | 30.85         | 7.45          | 24.69             | 41.85             | 54       | -12.15 | AV                   |
| H                    | 4924      | 54.44            | 30.55         | 5.77          | 24.66             | 54.32             | 74       | -19.68 | PK                   |
| H                    | 4924      | 41.76            | 30.55         | 5.77          | 24.66             | 41.64             | 54       | -12.36 | AV                   |
| H                    | 7386      | 52.47            | 30.33         | 6.32          | 24.55             | 53.01             | 74       | -20.99 | PK                   |
| H                    | 7386      | 41.69            | 30.33         | 6.32          | 24.55             | 42.23             | 54       | -11.77 | AV                   |
| H                    | 9848      | 51.70            | 30.85         | 7.45          | 24.69             | 52.99             | 74       | -21.01 | PK                   |
| H                    | 9848      | 37.59            | 30.85         | 7.45          | 24.69             | 38.88             | 54       | -15.12 | AV                   |

## Module A-802.11n20-ANT1

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2412MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4824      | 53.19            | 30.55             | 5.77          | 24.66             | 53.07             | 74           | -20.93 | PK                   |
| V                   | 4824      | 42.65            | 30.55             | 5.77          | 24.66             | 42.53             | 54           | -11.47 | AV                   |
| V                   | 7236      | 53.05            | 30.33             | 6.32          | 24.55             | 53.59             | 74           | -20.41 | PK                   |
| V                   | 7236      | 39.74            | 30.33             | 6.32          | 24.55             | 40.28             | 54           | -13.72 | AV                   |
| V                   | 9648      | 52.29            | 30.85             | 7.45          | 24.69             | 53.58             | 74           | -20.42 | PK                   |
| V                   | 9648      | 40.43            | 30.85             | 7.45          | 24.69             | 41.72             | 54           | -12.28 | AV                   |
| H                   | 4824      | 54.73            | 30.55             | 5.77          | 24.66             | 54.61             | 74           | -19.39 | PK                   |
| H                   | 4824      | 40.35            | 30.55             | 5.77          | 24.66             | 40.23             | 54           | -13.77 | AV                   |
| H                   | 7236      | 52.42            | 30.33             | 6.32          | 24.55             | 52.96             | 74           | -21.04 | PK                   |
| H                   | 7236      | 40.75            | 30.33             | 6.32          | 24.55             | 41.29             | 54           | -12.71 | AV                   |
| H                   | 9648      | 52.73            | 30.85             | 7.45          | 24.69             | 54.02             | 74           | -19.98 | PK                   |
| H                   | 9648      | 37.66            | 30.85             | 7.45          | 24.69             | 38.95             | 54           | -15.05 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 54.78            | 30.55             | 5.77          | 24.66             | 54.66             | 74           | -19.34 | PK                   |
| V                      | 4874      | 42.69            | 30.55             | 5.77          | 24.66             | 42.57             | 54           | -11.43 | AV                   |
| V                      | 7311      | 52.54            | 30.33             | 6.32          | 24.55             | 53.08             | 74           | -20.92 | PK                   |
| V                      | 7311      | 39.80            | 30.33             | 6.32          | 24.55             | 40.34             | 54           | -13.66 | AV                   |
| V                      | 9748      | 51.08            | 30.85             | 7.45          | 24.69             | 52.37             | 74           | -21.63 | PK                   |
| V                      | 9748      | 39.80            | 30.85             | 7.45          | 24.69             | 41.09             | 54           | -12.91 | AV                   |
| H                      | 4874      | 53.64            | 30.55             | 5.77          | 24.66             | 53.52             | 74           | -20.48 | PK                   |
| H                      | 4874      | 40.82            | 30.55             | 5.77          | 24.66             | 40.70             | 54           | -13.30 | AV                   |
| H                      | 7311      | 53.02            | 30.33             | 6.32          | 24.55             | 53.56             | 74           | -20.44 | PK                   |
| H                      | 7311      | 40.64            | 30.33             | 6.32          | 24.55             | 41.18             | 54           | -12.82 | AV                   |
| H                      | 9748      | 52.75            | 30.85             | 7.45          | 24.69             | 54.04             | 74           | -19.96 | PK                   |
| H                      | 9748      | 38.45            | 30.85             | 7.45          | 24.69             | 39.74             | 54           | -14.26 | AV                   |

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2462MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4924      | 52.62            | 30.55             | 5.77          | 24.66             | 52.50             | 74           | -21.50 | PK                   |
| V                    | 4924      | 41.62            | 30.55             | 5.77          | 24.66             | 41.50             | 54           | -12.50 | AV                   |
| V                    | 7386      | 53.38            | 30.33             | 6.32          | 24.55             | 53.92             | 74           | -20.08 | PK                   |
| V                    | 7386      | 40.31            | 30.33             | 6.32          | 24.55             | 40.85             | 54           | -13.15 | AV                   |
| V                    | 9848      | 51.44            | 30.85             | 7.45          | 24.69             | 52.73             | 74           | -21.27 | PK                   |
| V                    | 9848      | 38.22            | 30.85             | 7.45          | 24.69             | 39.51             | 54           | -14.49 | AV                   |
| H                    | 4924      | 52.74            | 30.55             | 5.77          | 24.66             | 52.62             | 74           | -21.38 | PK                   |
| H                    | 4924      | 40.93            | 30.55             | 5.77          | 24.66             | 40.81             | 54           | -13.19 | AV                   |
| H                    | 7386      | 52.24            | 30.33             | 6.32          | 24.55             | 52.78             | 74           | -21.22 | PK                   |
| H                    | 7386      | 39.33            | 30.33             | 6.32          | 24.55             | 39.87             | 54           | -14.13 | AV                   |
| H                    | 9848      | 52.62            | 30.85             | 7.45          | 24.69             | 53.91             | 74           | -20.09 | PK                   |
| H                    | 9848      | 38.84            | 30.85             | 7.45          | 24.69             | 40.13             | 54           | -13.87 | AV                   |



## Module A-802.11n40-ANT1

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2422MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4844      | 54.88            | 30.55             | 5.77          | 24.66             | 54.76             | 74           | -19.24 | PK                   |
| V                   | 4844      | 39.82            | 30.55             | 5.77          | 24.66             | 39.70             | 54           | -14.30 | AV                   |
| V                   | 7266      | 52.18            | 30.33             | 6.32          | 24.55             | 52.72             | 74           | -21.28 | PK                   |
| V                   | 7266      | 39.48            | 30.33             | 6.32          | 24.55             | 40.02             | 54           | -13.98 | AV                   |
| V                   | 9688      | 52.30            | 30.85             | 7.45          | 24.69             | 53.59             | 74           | -20.41 | PK                   |
| V                   | 9688      | 39.37            | 30.85             | 7.45          | 24.69             | 40.66             | 54           | -13.34 | AV                   |
| H                   | 4844      | 54.78            | 30.55             | 5.77          | 24.66             | 54.66             | 74           | -19.34 | PK                   |
| H                   | 4844      | 41.55            | 30.55             | 5.77          | 24.66             | 41.43             | 54           | -12.57 | AV                   |
| H                   | 7266      | 51.94            | 30.33             | 6.32          | 24.55             | 52.48             | 74           | -21.52 | PK                   |
| H                   | 7266      | 40.58            | 30.33             | 6.32          | 24.55             | 41.12             | 54           | -12.88 | AV                   |
| H                   | 9688      | 52.46            | 30.85             | 7.45          | 24.69             | 53.75             | 74           | -20.25 | PK                   |
| H                   | 9688      | 38.23            | 30.85             | 7.45          | 24.69             | 39.52             | 54           | -14.48 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 51.82            | 30.55             | 5.77          | 24.66             | 51.70             | 74           | -22.30 | PK                   |
| V                      | 4874      | 40.78            | 30.55             | 5.77          | 24.66             | 40.66             | 54           | -13.34 | AV                   |
| V                      | 7311      | 53.71            | 30.33             | 6.32          | 24.55             | 54.25             | 74           | -19.75 | PK                   |
| V                      | 7311      | 40.55            | 30.33             | 6.32          | 24.55             | 41.09             | 54           | -12.91 | AV                   |
| V                      | 9748      | 52.24            | 30.85             | 7.45          | 24.69             | 53.53             | 74           | -20.47 | PK                   |
| V                      | 9748      | 37.19            | 30.85             | 7.45          | 24.69             | 38.48             | 54           | -15.52 | AV                   |
| H                      | 4874      | 52.84            | 30.55             | 5.77          | 24.66             | 52.72             | 74           | -21.28 | PK                   |
| H                      | 4874      | 42.21            | 30.55             | 5.77          | 24.66             | 42.09             | 54           | -11.91 | AV                   |
| H                      | 7311      | 52.02            | 30.33             | 6.32          | 24.55             | 52.56             | 74           | -21.44 | PK                   |
| H                      | 7311      | 41.73            | 30.33             | 6.32          | 24.55             | 42.27             | 54           | -11.73 | AV                   |
| H                      | 9748      | 52.93            | 30.85             | 7.45          | 24.69             | 54.22             | 74           | -19.78 | PK                   |
| H                      | 9748      | 40.36            | 30.85             | 7.45          | 24.69             | 41.65             | 54           | -12.35 | AV                   |

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2452MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4904      | 52.75            | 30.55             | 5.77          | 24.66             | 52.63             | 74           | -21.37 | PK                   |
| V                    | 4904      | 41.20            | 30.55             | 5.77          | 24.66             | 41.08             | 54           | -12.92 | AV                   |
| V                    | 7356      | 53.29            | 30.33             | 6.32          | 24.55             | 53.83             | 74           | -20.17 | PK                   |
| V                    | 7356      | 40.82            | 30.33             | 6.32          | 24.55             | 41.36             | 54           | -12.64 | AV                   |
| V                    | 9808      | 53.29            | 30.85             | 7.45          | 24.69             | 54.58             | 74           | -19.42 | PK                   |
| V                    | 9808      | 39.55            | 30.85             | 7.45          | 24.69             | 40.84             | 54           | -13.16 | AV                   |
| H                    | 4904      | 54.53            | 30.55             | 5.77          | 24.66             | 54.41             | 74           | -19.59 | PK                   |
| H                    | 4904      | 41.30            | 30.55             | 5.77          | 24.66             | 41.18             | 54           | -12.82 | AV                   |
| H                    | 7356      | 52.76            | 30.33             | 6.32          | 24.55             | 53.30             | 74           | -20.70 | PK                   |

|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| H | 7356 | 40.45 | 30.33 | 6.32 | 24.55 | 40.99 | 54 | -13.01 | AV |
| H | 9808 | 53.67 | 30.85 | 7.45 | 24.69 | 54.96 | 74 | -19.04 | PK |
| H | 9808 | 39.58 | 30.85 | 7.45 | 24.69 | 40.87 | 54 | -13.13 | AV |

## Module A-802.11b-ANT2

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2412MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4824      | 55.14            | 30.55             | 5.77          | 24.66             | 55.02             | 74           | -18.98 | PK                   |
| V                   | 4824      | 40.07            | 30.55             | 5.77          | 24.66             | 39.95             | 54           | -14.05 | AV                   |
| V                   | 7236      | 53.33            | 30.33             | 6.32          | 24.55             | 53.87             | 74           | -20.13 | PK                   |
| V                   | 7236      | 40.92            | 30.33             | 6.32          | 24.55             | 41.46             | 54           | -12.54 | AV                   |
| V                   | 9648      | 51.42            | 30.85             | 7.45          | 24.69             | 52.71             | 74           | -21.29 | PK                   |
| V                   | 9648      | 38.48            | 30.85             | 7.45          | 24.69             | 39.77             | 54           | -14.23 | AV                   |
| H                   | 4824      | 52.78            | 30.55             | 5.77          | 24.66             | 52.66             | 74           | -21.34 | PK                   |
| H                   | 4824      | 41.87            | 30.55             | 5.77          | 24.66             | 41.75             | 54           | -12.25 | AV                   |
| H                   | 7236      | 51.85            | 30.33             | 6.32          | 24.55             | 52.39             | 74           | -21.61 | PK                   |
| H                   | 7236      | 39.58            | 30.33             | 6.32          | 24.55             | 40.12             | 54           | -13.88 | AV                   |
| H                   | 9648      | 51.47            | 30.85             | 7.45          | 24.69             | 52.76             | 74           | -21.24 | PK                   |
| H                   | 9648      | 39.62            | 30.85             | 7.45          | 24.69             | 40.91             | 54           | -13.09 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 52.82            | 30.55             | 5.77          | 24.66             | 52.70             | 74           | -21.30 | PK                   |
| V                      | 4874      | 39.92            | 30.55             | 5.77          | 24.66             | 39.80             | 54           | -14.20 | AV                   |
| V                      | 7311      | 52.03            | 30.33             | 6.32          | 24.55             | 52.57             | 74           | -21.43 | PK                   |
| V                      | 7311      | 39.75            | 30.33             | 6.32          | 24.55             | 40.29             | 54           | -13.71 | AV                   |
| V                      | 9748      | 53.09            | 30.85             | 7.45          | 24.69             | 54.38             | 74           | -19.62 | PK                   |
| V                      | 9748      | 36.21            | 30.85             | 7.45          | 24.69             | 37.50             | 54           | -16.50 | AV                   |
| H                      | 4874      | 54.96            | 30.55             | 5.77          | 24.66             | 54.84             | 74           | -19.16 | PK                   |
| H                      | 4874      | 41.13            | 30.55             | 5.77          | 24.66             | 41.01             | 54           | -12.99 | AV                   |
| H                      | 7311      | 53.72            | 30.33             | 6.32          | 24.55             | 54.26             | 74           | -19.74 | PK                   |
| H                      | 7311      | 39.31            | 30.33             | 6.32          | 24.55             | 39.85             | 54           | -14.15 | AV                   |
| H                      | 9748      | 52.95            | 30.85             | 7.45          | 24.69             | 54.24             | 74           | -19.76 | PK                   |
| H                      | 9748      | 39.71            | 30.85             | 7.45          | 24.69             | 41.00             | 54           | -13.00 | AV                   |

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2462MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4924      | 54.11            | 30.55             | 5.77          | 24.66             | 53.99             | 74           | -20.01 | PK                   |
| V                    | 4924      | 41.93            | 30.55             | 5.77          | 24.66             | 41.81             | 54           | -12.19 | AV                   |
| V                    | 7386      | 52.82            | 30.33             | 6.32          | 24.55             | 53.36             | 74           | -20.64 | PK                   |
| V                    | 7386      | 41.46            | 30.33             | 6.32          | 24.55             | 42.00             | 54           | -12.00 | AV                   |
| V                    | 9848      | 53.06            | 30.85             | 7.45          | 24.69             | 54.35             | 74           | -19.65 | PK                   |
| V                    | 9848      | 36.72            | 30.85             | 7.45          | 24.69             | 38.01             | 54           | -15.99 | AV                   |
| H                    | 4924      | 54.04            | 30.55             | 5.77          | 24.66             | 53.92             | 74           | -20.08 | PK                   |
| H                    | 4924      | 41.84            | 30.55             | 5.77          | 24.66             | 41.72             | 54           | -12.28 | AV                   |

|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| H | 7386 | 52.04 | 30.33 | 6.32 | 24.55 | 52.58 | 74 | -21.42 | PK |
| H | 7386 | 39.83 | 30.33 | 6.32 | 24.55 | 40.37 | 54 | -13.63 | AV |
| H | 9848 | 51.84 | 30.85 | 7.45 | 24.69 | 53.13 | 74 | -20.87 | PK |
| H | 9848 | 40.40 | 30.85 | 7.45 | 24.69 | 41.69 | 54 | -12.31 | AV |

## Module A-802.11g-ANT2

| Polar<br>(H/V)      | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-ampl<br>ifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/<br>m) | Margin<br>(dB) | Detect<br>or<br>Type |
|---------------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|
| Low Channel:2412MHz |                    |                            |                           |                       |                           |                               |                        |                |                      |
| V                   | 4824               | 54.83                      | 30.55                     | 5.77                  | 24.66                     | 54.71                         | 74                     | -19.29         | PK                   |
| V                   | 4824               | 41.38                      | 30.55                     | 5.77                  | 24.66                     | 41.26                         | 54                     | -12.74         | AV                   |
| V                   | 7236               | 53.05                      | 30.33                     | 6.32                  | 24.55                     | 53.59                         | 74                     | -20.41         | PK                   |
| V                   | 7236               | 38.86                      | 30.33                     | 6.32                  | 24.55                     | 39.40                         | 54                     | -14.60         | AV                   |
| V                   | 9648               | 52.43                      | 30.85                     | 7.45                  | 24.69                     | 53.72                         | 74                     | -20.28         | PK                   |
| V                   | 9648               | 36.63                      | 30.85                     | 7.45                  | 24.69                     | 37.92                         | 54                     | -16.08         | AV                   |
| H                   | 4824               | 52.93                      | 30.55                     | 5.77                  | 24.66                     | 52.81                         | 74                     | -21.19         | PK                   |
| H                   | 4824               | 40.57                      | 30.55                     | 5.77                  | 24.66                     | 40.45                         | 54                     | -13.55         | AV                   |
| H                   | 7236               | 52.14                      | 30.33                     | 6.32                  | 24.55                     | 52.68                         | 74                     | -21.32         | PK                   |
| H                   | 7236               | 41.60                      | 30.33                     | 6.32                  | 24.55                     | 42.14                         | 54                     | -11.86         | AV                   |
| H                   | 9648               | 50.87                      | 30.85                     | 7.45                  | 24.69                     | 52.16                         | 74                     | -21.84         | PK                   |
| H                   | 9648               | 39.58                      | 30.85                     | 7.45                  | 24.69                     | 40.87                         | 54                     | -13.13         | AV                   |

| Polar<br>(H/V)         | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-ampl<br>ifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/<br>m) | Margin<br>(dB) | Detect<br>or<br>Type |
|------------------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|
| Middle Channel:2437MHz |                    |                            |                           |                       |                           |                               |                        |                |                      |
| V                      | 4874               | 53.41                      | 30.55                     | 5.77                  | 24.66                     | 53.29                         | 74                     | -20.71         | PK                   |
| V                      | 4874               | 42.33                      | 30.55                     | 5.77                  | 24.66                     | 42.21                         | 54                     | -11.79         | AV                   |
| V                      | 7311               | 53.59                      | 30.33                     | 6.32                  | 24.55                     | 54.13                         | 74                     | -19.87         | PK                   |
| V                      | 7311               | 39.20                      | 30.33                     | 6.32                  | 24.55                     | 39.74                         | 54                     | -14.26         | AV                   |
| V                      | 9748               | 51.86                      | 30.85                     | 7.45                  | 24.69                     | 53.15                         | 74                     | -20.85         | PK                   |
| V                      | 9748               | 36.98                      | 30.85                     | 7.45                  | 24.69                     | 38.27                         | 54                     | -15.73         | AV                   |
| H                      | 4874               | 52.22                      | 30.55                     | 5.77                  | 24.66                     | 52.10                         | 74                     | -21.90         | PK                   |
| H                      | 4874               | 41.78                      | 30.55                     | 5.77                  | 24.66                     | 41.66                         | 54                     | -12.34         | AV                   |
| H                      | 7311               | 52.83                      | 30.33                     | 6.32                  | 24.55                     | 53.37                         | 74                     | -20.63         | PK                   |
| H                      | 7311               | 39.33                      | 30.33                     | 6.32                  | 24.55                     | 39.87                         | 54                     | -14.13         | AV                   |
| H                      | 9748               | 51.12                      | 30.85                     | 7.45                  | 24.69                     | 52.41                         | 74                     | -21.59         | PK                   |
| H                      | 9748               | 37.86                      | 30.85                     | 7.45                  | 24.69                     | 39.15                         | 54                     | -14.85         | AV                   |

| Polar<br>(H/V)       | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-ampl<br>ifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/<br>m) | Margin<br>(dB) | Detect<br>or<br>Type |
|----------------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|
| High Channel:2462MHz |                    |                            |                           |                       |                           |                               |                        |                |                      |
| V                    | 4924               | 55.65                      | 30.55                     | 5.77                  | 24.66                     | 55.53                         | 74                     | -18.47         | PK                   |
| V                    | 4924               | 41.39                      | 30.55                     | 5.77                  | 24.66                     | 41.27                         | 54                     | -12.73         | AV                   |
| V                    | 7386               | 52.20                      | 30.33                     | 6.32                  | 24.55                     | 52.74                         | 74                     | -21.26         | PK                   |
| V                    | 7386               | 39.30                      | 30.33                     | 6.32                  | 24.55                     | 39.84                         | 54                     | -14.16         | AV                   |
| V                    | 9848               | 53.01                      | 30.85                     | 7.45                  | 24.69                     | 54.30                         | 74                     | -19.70         | PK                   |
| V                    | 9848               | 36.51                      | 30.85                     | 7.45                  | 24.69                     | 37.80                         | 54                     | -16.20         | AV                   |
| H                    | 4924               | 53.00                      | 30.55                     | 5.77                  | 24.66                     | 52.88                         | 74                     | -21.12         | PK                   |

|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| H | 4924 | 40.26 | 30.55 | 5.77 | 24.66 | 40.14 | 54 | -13.86 | AV |
| H | 7386 | 53.70 | 30.33 | 6.32 | 24.55 | 54.24 | 74 | -19.76 | PK |
| H | 7386 | 40.71 | 30.33 | 6.32 | 24.55 | 41.25 | 54 | -12.75 | AV |
| H | 9848 | 50.79 | 30.85 | 7.45 | 24.69 | 52.08 | 74 | -21.92 | PK |
| H | 9848 | 37.80 | 30.85 | 7.45 | 24.69 | 39.09 | 54 | -14.91 | AV |

## Module A-802.11n-ANT2

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2412MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4824      | 54.34            | 30.55             | 5.77          | 24.66             | 54.22             | 74           | -19.78 | PK                   |
| V                   | 4824      | 41.34            | 30.55             | 5.77          | 24.66             | 41.22             | 54           | -12.78 | AV                   |
| V                   | 7236      | 52.05            | 30.33             | 6.32          | 24.55             | 52.59             | 74           | -21.41 | PK                   |
| V                   | 7236      | 40.42            | 30.33             | 6.32          | 24.55             | 40.96             | 54           | -13.04 | AV                   |
| V                   | 9648      | 50.94            | 30.85             | 7.45          | 24.69             | 52.23             | 74           | -21.77 | PK                   |
| V                   | 9648      | 37.98            | 30.85             | 7.45          | 24.69             | 39.27             | 54           | -14.73 | AV                   |
| H                   | 4824      | 53.37            | 30.55             | 5.77          | 24.66             | 53.25             | 74           | -20.75 | PK                   |
| H                   | 4824      | 42.34            | 30.55             | 5.77          | 24.66             | 42.22             | 54           | -11.78 | AV                   |
| H                   | 7236      | 52.21            | 30.33             | 6.32          | 24.55             | 52.75             | 74           | -21.25 | PK                   |
| H                   | 7236      | 40.71            | 30.33             | 6.32          | 24.55             | 41.25             | 54           | -12.75 | AV                   |
| H                   | 9648      | 52.86            | 30.85             | 7.45          | 24.69             | 54.15             | 74           | -19.85 | PK                   |
| H                   | 9648      | 37.95            | 30.85             | 7.45          | 24.69             | 39.24             | 54           | -14.76 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 53.97            | 30.55             | 5.77          | 24.66             | 53.85             | 74           | -20.15 | PK                   |
| V                      | 4874      | 41.43            | 30.55             | 5.77          | 24.66             | 41.31             | 54           | -12.69 | AV                   |
| V                      | 7311      | 52.07            | 30.33             | 6.32          | 24.55             | 52.61             | 74           | -21.39 | PK                   |
| V                      | 7311      | 40.48            | 30.33             | 6.32          | 24.55             | 41.02             | 54           | -12.98 | AV                   |
| V                      | 9748      | 52.38            | 30.85             | 7.45          | 24.69             | 53.67             | 74           | -20.33 | PK                   |
| V                      | 9748      | 35.93            | 30.85             | 7.45          | 24.69             | 37.22             | 54           | -16.78 | AV                   |
| H                      | 4874      | 51.93            | 30.55             | 5.77          | 24.66             | 51.81             | 74           | -22.19 | PK                   |
| H                      | 4874      | 41.21            | 30.55             | 5.77          | 24.66             | 41.09             | 54           | -12.91 | AV                   |
| H                      | 7311      | 53.16            | 30.33             | 6.32          | 24.55             | 53.70             | 74           | -20.30 | PK                   |
| H                      | 7311      | 41.66            | 30.33             | 6.32          | 24.55             | 42.20             | 54           | -11.80 | AV                   |
| H                      | 9748      | 52.24            | 30.85             | 7.45          | 24.69             | 53.53             | 74           | -20.47 | PK                   |
| H                      | 9748      | 37.66            | 30.85             | 7.45          | 24.69             | 38.95             | 54           | -15.05 | AV                   |

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2462MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4924      | 55.09            | 30.55             | 5.77          | 24.66             | 54.97             | 74           | -19.03 | PK                   |
| V                    | 4924      | 41.00            | 30.55             | 5.77          | 24.66             | 40.88             | 54           | -13.12 | AV                   |
| V                    | 7386      | 52.27            | 30.33             | 6.32          | 24.55             | 52.81             | 74           | -21.19 | PK                   |
| V                    | 7386      | 39.71            | 30.33             | 6.32          | 24.55             | 40.25             | 54           | -13.75 | AV                   |
| V                    | 9848      | 53.16            | 30.85             | 7.45          | 24.69             | 54.45             | 74           | -19.55 | PK                   |
| V                    | 9848      | 40.44            | 30.85             | 7.45          | 24.69             | 41.73             | 54           | -12.27 | AV                   |

|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| H | 4924 | 55.37 | 30.55 | 5.77 | 24.66 | 55.25 | 74 | -18.75 | PK |
| H | 4924 | 40.46 | 30.55 | 5.77 | 24.66 | 40.34 | 54 | -13.66 | AV |
| H | 7386 | 53.14 | 30.33 | 6.32 | 24.55 | 53.68 | 74 | -20.32 | PK |
| H | 7386 | 40.36 | 30.33 | 6.32 | 24.55 | 40.90 | 54 | -13.10 | AV |
| H | 9848 | 51.83 | 30.85 | 7.45 | 24.69 | 53.12 | 74 | -20.88 | PK |
| H | 9848 | 38.91 | 30.85 | 7.45 | 24.69 | 40.20 | 54 | -13.80 | AV |

## Module A-802.11n40-ANT2

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2422MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4844      | 54.58            | 30.55             | 5.77          | 24.66             | 54.46             | 74           | -19.54 | PK                   |
| V                   | 4844      | 40.89            | 30.55             | 5.77          | 24.66             | 40.77             | 54           | -13.23 | AV                   |
| V                   | 7266      | 53.28            | 30.33             | 6.32          | 24.55             | 53.82             | 74           | -20.18 | PK                   |
| V                   | 7266      | 40.20            | 30.33             | 6.32          | 24.55             | 40.74             | 54           | -13.26 | AV                   |
| V                   | 9688      | 51.39            | 30.85             | 7.45          | 24.69             | 52.68             | 74           | -21.32 | PK                   |
| V                   | 9688      | 36.37            | 30.85             | 7.45          | 24.69             | 37.66             | 54           | -16.34 | AV                   |
| H                   | 4844      | 55.49            | 30.55             | 5.77          | 24.66             | 55.37             | 74           | -18.63 | PK                   |
| H                   | 4844      | 40.54            | 30.55             | 5.77          | 24.66             | 40.42             | 54           | -13.58 | AV                   |
| H                   | 7266      | 52.40            | 30.33             | 6.32          | 24.55             | 52.94             | 74           | -21.06 | PK                   |
| H                   | 7266      | 40.45            | 30.33             | 6.32          | 24.55             | 40.99             | 54           | -13.01 | AV                   |
| H                   | 9688      | 51.61            | 30.85             | 7.45          | 24.69             | 52.90             | 74           | -21.10 | PK                   |
| H                   | 9688      | 38.47            | 30.85             | 7.45          | 24.69             | 39.76             | 54           | -14.24 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 52.49            | 30.55             | 5.77          | 24.66             | 52.37             | 74           | -21.63 | PK                   |
| V                      | 4874      | 41.82            | 30.55             | 5.77          | 24.66             | 41.70             | 54           | -12.30 | AV                   |
| V                      | 7311      | 52.23            | 30.33             | 6.32          | 24.55             | 52.77             | 74           | -21.23 | PK                   |
| V                      | 7311      | 39.63            | 30.33             | 6.32          | 24.55             | 40.17             | 54           | -13.83 | AV                   |
| V                      | 9748      | 51.21            | 30.85             | 7.45          | 24.69             | 52.50             | 74           | -21.50 | PK                   |
| V                      | 9748      | 36.69            | 30.85             | 7.45          | 24.69             | 37.98             | 54           | -16.02 | AV                   |
| H                      | 4874      | 52.02            | 30.55             | 5.77          | 24.66             | 51.90             | 74           | -22.10 | PK                   |
| H                      | 4874      | 40.59            | 30.55             | 5.77          | 24.66             | 40.47             | 54           | -13.53 | AV                   |
| H                      | 7311      | 52.09            | 30.33             | 6.32          | 24.55             | 52.63             | 74           | -21.37 | PK                   |
| H                      | 7311      | 41.47            | 30.33             | 6.32          | 24.55             | 42.01             | 54           | -11.99 | AV                   |
| H                      | 9748      | 52.65            | 30.85             | 7.45          | 24.69             | 53.94             | 74           | -20.06 | PK                   |
| H                      | 9748      | 36.31            | 30.85             | 7.45          | 24.69             | 37.60             | 54           | -16.40 | AV                   |

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2452MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4904      | 54.79            | 30.55             | 5.77          | 24.66             | 54.67             | 74           | -19.33 | PK                   |
| V                    | 4904      | 42.36            | 30.55             | 5.77          | 24.66             | 42.24             | 54           | -11.76 | AV                   |
| V                    | 7356      | 52.90            | 30.33             | 6.32          | 24.55             | 53.44             | 74           | -20.56 | PK                   |
| V                    | 7356      | 41.75            | 30.33             | 6.32          | 24.55             | 42.29             | 54           | -11.71 | AV                   |
| V                    | 9808      | 52.04            | 30.85             | 7.45          | 24.69             | 53.33             | 74           | -20.67 | PK                   |
| V                    | 9808      | 39.12            | 30.85             | 7.45          | 24.69             | 40.41             | 54           | -13.59 | AV                   |

|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| H | 4904 | 53.18 | 30.55 | 5.77 | 24.66 | 53.06 | 74 | -20.94 | PK |
| H | 4904 | 42.65 | 30.55 | 5.77 | 24.66 | 42.53 | 54 | -11.47 | AV |
| H | 7356 | 51.95 | 30.33 | 6.32 | 24.55 | 52.49 | 74 | -21.51 | PK |
| H | 7356 | 40.30 | 30.33 | 6.32 | 24.55 | 40.84 | 54 | -13.16 | AV |
| H | 9808 | 52.82 | 30.85 | 7.45 | 24.69 | 54.11 | 74 | -19.89 | PK |
| H | 9808 | 37.82 | 30.85 | 7.45 | 24.69 | 39.11 | 54 | -14.89 | AV |

## Module A-MIMO-802.11n

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2412MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4824      | 55.04            | 30.55             | 5.77          | 24.66             | 54.92             | 74           | -19.08 | PK                   |
| V                   | 4824      | 41.47            | 30.55             | 5.77          | 24.66             | 41.35             | 54           | -12.65 | AV                   |
| V                   | 7236      | 53.33            | 30.33             | 6.32          | 24.55             | 53.87             | 74           | -20.13 | PK                   |
| V                   | 7236      | 39.26            | 30.33             | 6.32          | 24.55             | 39.80             | 54           | -14.20 | AV                   |
| V                   | 9648      | 51.47            | 30.85             | 7.45          | 24.69             | 52.76             | 74           | -21.24 | PK                   |
| V                   | 9648      | 36.39            | 30.85             | 7.45          | 24.69             | 37.68             | 54           | -16.32 | AV                   |
| H                   | 4824      | 54.76            | 30.55             | 5.77          | 24.66             | 54.64             | 74           | -19.36 | PK                   |
| H                   | 4824      | 41.48            | 30.55             | 5.77          | 24.66             | 41.36             | 54           | -12.64 | AV                   |
| H                   | 7236      | 53.58            | 30.33             | 6.32          | 24.55             | 54.12             | 74           | -19.88 | PK                   |
| H                   | 7236      | 40.54            | 30.33             | 6.32          | 24.55             | 41.08             | 54           | -12.92 | AV                   |
| H                   | 9648      | 53.10            | 30.85             | 7.45          | 24.69             | 54.39             | 74           | -19.61 | PK                   |
| H                   | 9648      | 35.94            | 30.85             | 7.45          | 24.69             | 37.23             | 54           | -16.77 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 51.92            | 30.55             | 5.77          | 24.66             | 51.80             | 74           | -22.20 | PK                   |
| V                      | 4874      | 40.33            | 30.55             | 5.77          | 24.66             | 40.21             | 54           | -13.79 | AV                   |
| V                      | 7311      | 53.14            | 30.33             | 6.32          | 24.55             | 53.68             | 74           | -20.32 | PK                   |
| V                      | 7311      | 40.67            | 30.33             | 6.32          | 24.55             | 41.21             | 54           | -12.79 | AV                   |
| V                      | 9748      | 51.19            | 30.85             | 7.45          | 24.69             | 52.48             | 74           | -21.52 | PK                   |
| V                      | 9748      | 36.75            | 30.85             | 7.45          | 24.69             | 38.04             | 54           | -15.96 | AV                   |
| H                      | 4874      | 54.99            | 30.55             | 5.77          | 24.66             | 54.87             | 74           | -19.13 | PK                   |
| H                      | 4874      | 41.54            | 30.55             | 5.77          | 24.66             | 41.42             | 54           | -12.58 | AV                   |
| H                      | 7311      | 52.72            | 30.33             | 6.32          | 24.55             | 53.26             | 74           | -20.74 | PK                   |
| H                      | 7311      | 41.39            | 30.33             | 6.32          | 24.55             | 41.93             | 54           | -12.07 | AV                   |
| H                      | 9748      | 51.19            | 30.85             | 7.45          | 24.69             | 52.48             | 74           | -21.52 | PK                   |
| H                      | 9748      | 38.91            | 30.85             | 7.45          | 24.69             | 40.20             | 54           | -13.80 | AV                   |

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampli<br>fier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2462MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4924      | 54.37            | 30.55             | 5.77          | 24.66             | 54.25             | 74           | -19.75 | PK                   |
| V                    | 4924      | 40.50            | 30.55             | 5.77          | 24.66             | 40.38             | 54           | -13.62 | AV                   |
| V                    | 7386      | 51.93            | 30.33             | 6.32          | 24.55             | 52.47             | 74           | -21.53 | PK                   |
| V                    | 7386      | 41.46            | 30.33             | 6.32          | 24.55             | 42.00             | 54           | -12.00 | AV                   |
| V                    | 9848      | 51.58            | 30.85             | 7.45          | 24.69             | 52.87             | 74           | -21.13 | PK                   |



|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| V | 9848 | 36.58 | 30.85 | 7.45 | 24.69 | 37.87 | 54 | -16.13 | AV |
| H | 4924 | 53.95 | 30.55 | 5.77 | 24.66 | 53.83 | 74 | -20.17 | PK |
| H | 4924 | 41.71 | 30.55 | 5.77 | 24.66 | 41.59 | 54 | -12.41 | AV |
| H | 7386 | 53.52 | 30.33 | 6.32 | 24.55 | 54.06 | 74 | -19.94 | PK |
| H | 7386 | 41.26 | 30.33 | 6.32 | 24.55 | 41.80 | 54 | -12.20 | AV |
| H | 9848 | 51.01 | 30.85 | 7.45 | 24.69 | 52.30 | 74 | -21.70 | PK |
| H | 9848 | 36.72 | 30.85 | 7.45 | 24.69 | 38.01 | 54 | -15.99 | AV |

## Module A-MIMO-802.11n40

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2422MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4844      | 51.94            | 30.55             | 5.77          | 24.66             | 51.82             | 74           | -22.18 | PK                   |
| V                   | 4844      | 40.37            | 30.55             | 5.77          | 24.66             | 40.25             | 54           | -13.75 | AV                   |
| V                   | 7266      | 51.99            | 30.33             | 6.32          | 24.55             | 52.53             | 74           | -21.47 | PK                   |
| V                   | 7266      | 39.70            | 30.33             | 6.32          | 24.55             | 40.24             | 54           | -13.76 | AV                   |
| V                   | 9688      | 53.45            | 30.85             | 7.45          | 24.69             | 54.74             | 74           | -19.26 | PK                   |
| V                   | 9688      | 39.16            | 30.85             | 7.45          | 24.69             | 40.45             | 54           | -13.55 | AV                   |
| H                   | 4844      | 54.37            | 30.55             | 5.77          | 24.66             | 54.25             | 74           | -19.75 | PK                   |
| H                   | 4844      | 40.60            | 30.55             | 5.77          | 24.66             | 40.48             | 54           | -13.52 | AV                   |
| H                   | 7266      | 52.31            | 30.33             | 6.32          | 24.55             | 52.85             | 74           | -21.15 | PK                   |
| H                   | 7266      | 38.88            | 30.33             | 6.32          | 24.55             | 39.42             | 54           | -14.58 | AV                   |
| H                   | 9688      | 52.60            | 30.85             | 7.45          | 24.69             | 53.89             | 74           | -20.11 | PK                   |
| H                   | 9688      | 36.05            | 30.85             | 7.45          | 24.69             | 37.34             | 54           | -16.66 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 52.47            | 30.55             | 5.77          | 24.66             | 52.35             | 74           | -21.65 | PK                   |
| V                      | 4874      | 41.05            | 30.55             | 5.77          | 24.66             | 40.93             | 54           | -13.07 | AV                   |
| V                      | 7311      | 52.13            | 30.33             | 6.32          | 24.55             | 52.67             | 74           | -21.33 | PK                   |
| V                      | 7311      | 41.73            | 30.33             | 6.32          | 24.55             | 42.27             | 54           | -11.73 | AV                   |
| V                      | 9748      | 52.82            | 30.85             | 7.45          | 24.69             | 54.11             | 74           | -19.89 | PK                   |
| V                      | 9748      | 37.84            | 30.85             | 7.45          | 24.69             | 39.13             | 54           | -14.87 | AV                   |
| H                      | 4874      | 54.54            | 30.55             | 5.77          | 24.66             | 54.42             | 74           | -19.58 | PK                   |
| H                      | 4874      | 40.77            | 30.55             | 5.77          | 24.66             | 40.65             | 54           | -13.35 | AV                   |
| H                      | 7311      | 53.70            | 30.33             | 6.32          | 24.55             | 54.24             | 74           | -19.76 | PK                   |
| H                      | 7311      | 41.74            | 30.33             | 6.32          | 24.55             | 42.28             | 54           | -11.72 | AV                   |
| H                      | 9748      | 52.70            | 30.85             | 7.45          | 24.69             | 53.99             | 74           | -20.01 | PK                   |
| H                      | 9748      | 39.04            | 30.85             | 7.45          | 24.69             | 40.33             | 54           | -13.67 | AV                   |

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampli<br>fier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2452MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4904      | 52.38            | 30.55             | 5.77          | 24.66             | 52.26             | 74           | -21.74 | PK                   |
| V                    | 4904      | 41.66            | 30.55             | 5.77          | 24.66             | 41.54             | 54           | -12.46 | AV                   |
| V                    | 7356      | 53.14            | 30.33             | 6.32          | 24.55             | 53.68             | 74           | -20.32 | PK                   |
| V                    | 7356      | 38.93            | 30.33             | 6.32          | 24.55             | 39.47             | 54           | -14.53 | AV                   |

|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| V | 9808 | 51.82 | 30.85 | 7.45 | 24.69 | 53.11 | 74 | -20.89 | PK |
| V | 9808 | 38.96 | 30.85 | 7.45 | 24.69 | 40.25 | 54 | -13.75 | AV |
| H | 4904 | 54.60 | 30.55 | 5.77 | 24.66 | 54.48 | 74 | -19.52 | PK |
| H | 4904 | 41.52 | 30.55 | 5.77 | 24.66 | 41.40 | 54 | -12.60 | AV |
| H | 7356 | 52.01 | 30.33 | 6.32 | 24.55 | 52.55 | 74 | -21.45 | PK |
| H | 7356 | 38.94 | 30.33 | 6.32 | 24.55 | 39.48 | 54 | -14.52 | AV |
| H | 9808 | 53.43 | 30.85 | 7.45 | 24.69 | 54.72 | 74 | -19.28 | PK |
| H | 9808 | 39.86 | 30.85 | 7.45 | 24.69 | 41.15 | 54 | -12.85 | AV |

## Module B -802.11b-ANT1

| Polar<br>(H/V)      | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-ampl<br>ifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/<br>m) | Margin<br>(dB) | Detect<br>or<br>Type |
|---------------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|
| Low Channel:2412MHz |                    |                            |                           |                       |                           |                               |                        |                |                      |
| V                   | 4824               | 54.23                      | 30.55                     | 5.77                  | 24.66                     | 54.11                         | 74                     | -19.89         | PK                   |
| V                   | 4824               | 41.20                      | 30.55                     | 5.77                  | 24.66                     | 41.08                         | 54                     | -12.92         | AV                   |
| V                   | 7236               | 52.33                      | 30.33                     | 6.32                  | 24.55                     | 52.87                         | 74                     | -21.13         | PK                   |
| V                   | 7236               | 40.23                      | 30.33                     | 6.32                  | 24.55                     | 40.77                         | 54                     | -13.23         | AV                   |
| V                   | 9648               | 50.86                      | 30.85                     | 7.45                  | 24.69                     | 52.15                         | 74                     | -21.85         | PK                   |
| V                   | 9648               | 39.66                      | 30.85                     | 7.45                  | 24.69                     | 40.95                         | 54                     | -13.05         | AV                   |
| H                   | 4824               | 53.08                      | 30.55                     | 5.77                  | 24.66                     | 52.96                         | 74                     | -21.04         | PK                   |
| H                   | 4824               | 40.12                      | 30.55                     | 5.77                  | 24.66                     | 40.00                         | 54                     | -14.00         | AV                   |
| H                   | 7236               | 51.79                      | 30.33                     | 6.32                  | 24.55                     | 52.33                         | 74                     | -21.67         | PK                   |
| H                   | 7236               | 41.37                      | 30.33                     | 6.32                  | 24.55                     | 41.91                         | 54                     | -12.09         | AV                   |
| H                   | 9648               | 51.61                      | 30.85                     | 7.45                  | 24.69                     | 52.90                         | 74                     | -21.10         | PK                   |
| H                   | 9648               | 40.38                      | 30.85                     | 7.45                  | 24.69                     | 41.67                         | 54                     | -12.33         | AV                   |

| Polar<br>(H/V)         | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-ampl<br>ifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/<br>m) | Margin<br>(dB) | Detect<br>or<br>Type |
|------------------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|
| Middle Channel:2437MHz |                    |                            |                           |                       |                           |                               |                        |                |                      |
| V                      | 4874               | 52.32                      | 30.55                     | 5.77                  | 24.66                     | 52.20                         | 74                     | -21.80         | PK                   |
| V                      | 4874               | 40.74                      | 30.55                     | 5.77                  | 24.66                     | 40.62                         | 54                     | -13.38         | AV                   |
| V                      | 7311               | 53.05                      | 30.33                     | 6.32                  | 24.55                     | 53.59                         | 74                     | -20.41         | PK                   |
| V                      | 7311               | 40.82                      | 30.33                     | 6.32                  | 24.55                     | 41.36                         | 54                     | -12.64         | AV                   |
| V                      | 9748               | 51.69                      | 30.85                     | 7.45                  | 24.69                     | 52.98                         | 74                     | -21.02         | PK                   |
| V                      | 9748               | 38.37                      | 30.85                     | 7.45                  | 24.69                     | 39.66                         | 54                     | -14.34         | AV                   |
| H                      | 4874               | 54.90                      | 30.55                     | 5.77                  | 24.66                     | 54.78                         | 74                     | -19.22         | PK                   |
| H                      | 4874               | 41.56                      | 30.55                     | 5.77                  | 24.66                     | 41.44                         | 54                     | -12.56         | AV                   |
| H                      | 7311               | 52.40                      | 30.33                     | 6.32                  | 24.55                     | 52.94                         | 74                     | -21.06         | PK                   |
| H                      | 7311               | 39.67                      | 30.33                     | 6.32                  | 24.55                     | 40.21                         | 54                     | -13.79         | AV                   |
| H                      | 9748               | 52.01                      | 30.85                     | 7.45                  | 24.69                     | 53.30                         | 74                     | -20.70         | PK                   |
| H                      | 9748               | 36.99                      | 30.85                     | 7.45                  | 24.69                     | 38.28                         | 54                     | -15.72         | AV                   |

| Polar<br>(H/V)       | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-ampli<br>fier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/<br>m) | Margin<br>(dB) | Detect<br>or<br>Type |
|----------------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|
| High Channel:2462MHz |                    |                            |                           |                       |                           |                               |                        |                |                      |
| V                    | 4924               | 53.45                      | 30.55                     | 5.77                  | 24.66                     | 53.33                         | 74                     | -20.67         | PK                   |
| V                    | 4924               | 40.17                      | 30.55                     | 5.77                  | 24.66                     | 40.05                         | 54                     | -13.95         | AV                   |



|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| V | 7386 | 52.09 | 30.33 | 6.32 | 24.55 | 52.63 | 74 | -21.37 | PK |
| V | 7386 | 40.50 | 30.33 | 6.32 | 24.55 | 41.04 | 54 | -12.96 | AV |
| V | 9848 | 53.35 | 30.85 | 7.45 | 24.69 | 54.64 | 74 | -19.36 | PK |
| V | 9848 | 38.70 | 30.85 | 7.45 | 24.69 | 39.99 | 54 | -14.01 | AV |
| H | 4924 | 54.35 | 30.55 | 5.77 | 24.66 | 54.23 | 74 | -19.77 | PK |
| H | 4924 | 41.07 | 30.55 | 5.77 | 24.66 | 40.95 | 54 | -13.05 | AV |
| H | 7386 | 52.83 | 30.33 | 6.32 | 24.55 | 53.37 | 74 | -20.63 | PK |
| H | 7386 | 41.64 | 30.33 | 6.32 | 24.55 | 42.18 | 54 | -11.82 | AV |
| H | 9848 | 53.53 | 30.85 | 7.45 | 24.69 | 54.82 | 74 | -19.18 | PK |
| H | 9848 | 38.92 | 30.85 | 7.45 | 24.69 | 40.21 | 54 | -13.79 | AV |

## Module B -802.11g-ANT1

| Polar<br>(H/V)      | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-amplifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Detect<br>or<br>Type |
|---------------------|--------------------|----------------------------|-----------------------|-----------------------|---------------------------|-------------------------------|--------------------|----------------|----------------------|
| Low Channel:2412MHz |                    |                            |                       |                       |                           |                               |                    |                |                      |
| V                   | 4824               | 51.78                      | 30.55                 | 5.77                  | 24.66                     | 51.66                         | 74                 | -22.34         | PK                   |
| V                   | 4824               | 41.77                      | 30.55                 | 5.77                  | 24.66                     | 41.65                         | 54                 | -12.35         | AV                   |
| V                   | 7236               | 53.55                      | 30.33                 | 6.32                  | 24.55                     | 54.09                         | 74                 | -19.91         | PK                   |
| V                   | 7236               | 41.13                      | 30.33                 | 6.32                  | 24.55                     | 41.67                         | 54                 | -12.33         | AV                   |
| V                   | 9648               | 52.33                      | 30.85                 | 7.45                  | 24.69                     | 53.62                         | 74                 | -20.38         | PK                   |
| V                   | 9648               | 40.08                      | 30.85                 | 7.45                  | 24.69                     | 41.37                         | 54                 | -12.63         | AV                   |
| H                   | 4824               | 51.93                      | 30.55                 | 5.77                  | 24.66                     | 51.81                         | 74                 | -22.19         | PK                   |
| H                   | 4824               | 40.71                      | 30.55                 | 5.77                  | 24.66                     | 40.59                         | 54                 | -13.41         | AV                   |
| H                   | 7236               | 53.49                      | 30.33                 | 6.32                  | 24.55                     | 54.03                         | 74                 | -19.97         | PK                   |
| H                   | 7236               | 39.72                      | 30.33                 | 6.32                  | 24.55                     | 40.26                         | 54                 | -13.74         | AV                   |
| H                   | 9648               | 52.55                      | 30.85                 | 7.45                  | 24.69                     | 53.84                         | 74                 | -20.16         | PK                   |
| H                   | 9648               | 35.78                      | 30.85                 | 7.45                  | 24.69                     | 37.07                         | 54                 | -16.93         | AV                   |

| Polar<br>(H/V)         | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-amplifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Detect<br>or<br>Type |
|------------------------|--------------------|----------------------------|-----------------------|-----------------------|---------------------------|-------------------------------|--------------------|----------------|----------------------|
| Middle Channel:2437MHz |                    |                            |                       |                       |                           |                               |                    |                |                      |
| V                      | 4874               | 52.54                      | 30.55                 | 5.77                  | 24.66                     | 52.42                         | 74                 | -21.58         | PK                   |
| V                      | 4874               | 40.44                      | 30.55                 | 5.77                  | 24.66                     | 40.32                         | 54                 | -13.68         | AV                   |
| V                      | 7311               | 51.88                      | 30.33                 | 6.32                  | 24.55                     | 52.42                         | 74                 | -21.58         | PK                   |
| V                      | 7311               | 39.93                      | 30.33                 | 6.32                  | 24.55                     | 40.47                         | 54                 | -13.53         | AV                   |
| V                      | 9748               | 52.73                      | 30.85                 | 7.45                  | 24.69                     | 54.02                         | 74                 | -19.98         | PK                   |
| V                      | 9748               | 39.44                      | 30.85                 | 7.45                  | 24.69                     | 40.73                         | 54                 | -13.27         | AV                   |
| H                      | 4874               | 54.87                      | 30.55                 | 5.77                  | 24.66                     | 54.75                         | 74                 | -19.25         | PK                   |
| H                      | 4874               | 41.05                      | 30.55                 | 5.77                  | 24.66                     | 40.93                         | 54                 | -13.07         | AV                   |
| H                      | 7311               | 51.88                      | 30.33                 | 6.32                  | 24.55                     | 52.42                         | 74                 | -21.58         | PK                   |
| H                      | 7311               | 41.10                      | 30.33                 | 6.32                  | 24.55                     | 41.64                         | 54                 | -12.36         | AV                   |
| H                      | 9748               | 52.42                      | 30.85                 | 7.45                  | 24.69                     | 53.71                         | 74                 | -20.29         | PK                   |
| H                      | 9748               | 38.45                      | 30.85                 | 7.45                  | 24.69                     | 39.74                         | 54                 | -14.26         | AV                   |

| Polar<br>(H/V)       | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-amplifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Detect<br>or<br>Type |
|----------------------|--------------------|----------------------------|-----------------------|-----------------------|---------------------------|-------------------------------|--------------------|----------------|----------------------|
| High Channel:2462MHz |                    |                            |                       |                       |                           |                               |                    |                |                      |
| V                    | 4924               | 53.67                      | 30.55                 | 5.77                  | 24.66                     | 53.55                         | 74                 | -20.45         | PK                   |
| V                    | 4924               | 40.26                      | 30.55                 | 5.77                  | 24.66                     | 40.14                         | 54                 | -13.86         | AV                   |
| V                    | 7386               | 52.19                      | 30.33                 | 6.32                  | 24.55                     | 52.73                         | 74                 | -21.27         | PK                   |

|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| V | 7386 | 41.02 | 30.33 | 6.32 | 24.55 | 41.56 | 54 | -12.44 | AV |
| V | 9848 | 52.95 | 30.85 | 7.45 | 24.69 | 54.24 | 74 | -19.76 | PK |
| V | 9848 | 39.41 | 30.85 | 7.45 | 24.69 | 40.70 | 54 | -13.30 | AV |
| H | 4924 | 53.74 | 30.55 | 5.77 | 24.66 | 53.62 | 74 | -20.38 | PK |
| H | 4924 | 42.47 | 30.55 | 5.77 | 24.66 | 42.35 | 54 | -11.65 | AV |
| H | 7386 | 53.03 | 30.33 | 6.32 | 24.55 | 53.57 | 74 | -20.43 | PK |
| H | 7386 | 38.84 | 30.33 | 6.32 | 24.55 | 39.38 | 54 | -14.62 | AV |
| H | 9848 | 50.87 | 30.85 | 7.45 | 24.69 | 52.16 | 74 | -21.84 | PK |
| H | 9848 | 37.96 | 30.85 | 7.45 | 24.69 | 39.25 | 54 | -14.75 | AV |

## Module B -802.11n20-ANT1

| Polar<br>(H/V)      | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-ampl<br>ifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/<br>m) | Margin<br>(dB) | Detect<br>or<br>Type |
|---------------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|
| Low Channel:2412MHz |                    |                            |                           |                       |                           |                               |                        |                |                      |
| V                   | 4824               | 53.03                      | 30.55                     | 5.77                  | 24.66                     | 52.91                         | 74                     | -21.09         | PK                   |
| V                   | 4824               | 40.93                      | 30.55                     | 5.77                  | 24.66                     | 40.81                         | 54                     | -13.19         | AV                   |
| V                   | 7236               | 51.88                      | 30.33                     | 6.32                  | 24.55                     | 52.42                         | 74                     | -21.58         | PK                   |
| V                   | 7236               | 38.92                      | 30.33                     | 6.32                  | 24.55                     | 39.46                         | 54                     | -14.54         | AV                   |
| V                   | 9648               | 53.73                      | 30.85                     | 7.45                  | 24.69                     | 55.02                         | 74                     | -18.98         | PK                   |
| V                   | 9648               | 39.59                      | 30.85                     | 7.45                  | 24.69                     | 40.88                         | 54                     | -13.12         | AV                   |
| H                   | 4824               | 53.04                      | 30.55                     | 5.77                  | 24.66                     | 52.92                         | 74                     | -21.08         | PK                   |
| H                   | 4824               | 40.90                      | 30.55                     | 5.77                  | 24.66                     | 40.78                         | 54                     | -13.22         | AV                   |
| H                   | 7236               | 53.39                      | 30.33                     | 6.32                  | 24.55                     | 53.93                         | 74                     | -20.07         | PK                   |
| H                   | 7236               | 40.46                      | 30.33                     | 6.32                  | 24.55                     | 41.00                         | 54                     | -13.00         | AV                   |
| H                   | 9648               | 53.04                      | 30.85                     | 7.45                  | 24.69                     | 54.33                         | 74                     | -19.67         | PK                   |
| H                   | 9648               | 36.00                      | 30.85                     | 7.45                  | 24.69                     | 37.29                         | 54                     | -16.71         | AV                   |

| Polar<br>(H/V)         | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-ampl<br>ifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/<br>m) | Margin<br>(dB) | Detect<br>or<br>Type |
|------------------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|
| Middle Channel:2437MHz |                    |                            |                           |                       |                           |                               |                        |                |                      |
| V                      | 4874               | 53.61                      | 30.55                     | 5.77                  | 24.66                     | 53.49                         | 74                     | -20.51         | PK                   |
| V                      | 4874               | 41.91                      | 30.55                     | 5.77                  | 24.66                     | 41.79                         | 54                     | -12.21         | AV                   |
| V                      | 7311               | 52.44                      | 30.33                     | 6.32                  | 24.55                     | 52.98                         | 74                     | -21.02         | PK                   |
| V                      | 7311               | 38.77                      | 30.33                     | 6.32                  | 24.55                     | 39.31                         | 54                     | -14.69         | AV                   |
| V                      | 9748               | 51.35                      | 30.85                     | 7.45                  | 24.69                     | 52.64                         | 74                     | -21.36         | PK                   |
| V                      | 9748               | 38.89                      | 30.85                     | 7.45                  | 24.69                     | 40.18                         | 54                     | -13.82         | AV                   |
| H                      | 4874               | 54.36                      | 30.55                     | 5.77                  | 24.66                     | 54.24                         | 74                     | -19.76         | PK                   |
| H                      | 4874               | 40.61                      | 30.55                     | 5.77                  | 24.66                     | 40.49                         | 54                     | -13.51         | AV                   |
| H                      | 7311               | 52.13                      | 30.33                     | 6.32                  | 24.55                     | 52.67                         | 74                     | -21.33         | PK                   |
| H                      | 7311               | 40.53                      | 30.33                     | 6.32                  | 24.55                     | 41.07                         | 54                     | -12.93         | AV                   |
| H                      | 9748               | 52.72                      | 30.85                     | 7.45                  | 24.69                     | 54.01                         | 74                     | -19.99         | PK                   |
| H                      | 9748               | 37.08                      | 30.85                     | 7.45                  | 24.69                     | 38.37                         | 54                     | -15.63         | AV                   |

| Polar<br>(H/V)       | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-ampl<br>ifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/<br>m) | Margin<br>(dB) | Detect<br>or<br>Type |
|----------------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|
| High Channel:2462MHz |                    |                            |                           |                       |                           |                               |                        |                |                      |
| V                    | 4924               | 53.84                      | 30.55                     | 5.77                  | 24.66                     | 53.72                         | 74                     | -20.28         | PK                   |

|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| V | 4924 | 40.44 | 30.55 | 5.77 | 24.66 | 40.32 | 54 | -13.68 | AV |
| V | 7386 | 52.03 | 30.33 | 6.32 | 24.55 | 52.57 | 74 | -21.43 | PK |
| V | 7386 | 41.23 | 30.33 | 6.32 | 24.55 | 41.77 | 54 | -12.23 | AV |
| V | 9848 | 53.04 | 30.85 | 7.45 | 24.69 | 54.33 | 74 | -19.67 | PK |
| V | 9848 | 37.88 | 30.85 | 7.45 | 24.69 | 39.17 | 54 | -14.83 | AV |
| H | 4924 | 52.59 | 30.55 | 5.77 | 24.66 | 52.47 | 74 | -21.53 | PK |
| H | 4924 | 41.01 | 30.55 | 5.77 | 24.66 | 40.89 | 54 | -13.11 | AV |
| H | 7386 | 52.59 | 30.33 | 6.32 | 24.55 | 53.13 | 74 | -20.87 | PK |
| H | 7386 | 39.91 | 30.33 | 6.32 | 24.55 | 40.45 | 54 | -13.55 | AV |
| H | 9848 | 50.78 | 30.85 | 7.45 | 24.69 | 52.07 | 74 | -21.93 | PK |
| H | 9848 | 39.99 | 30.85 | 7.45 | 24.69 | 41.28 | 54 | -12.72 | AV |

## Module B -802.11n40-ANT1

| Polar<br>(H/V)      | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-ampl<br>ifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/<br>m) | Margin<br>(dB) | Detect<br>or<br>Type |
|---------------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|
| Low Channel:2422MHz |                    |                            |                           |                       |                           |                               |                        |                |                      |
| V                   | 4844               | 51.97                      | 30.55                     | 5.77                  | 24.66                     | 51.85                         | 74                     | -22.15         | PK                   |
| V                   | 4844               | 41.98                      | 30.55                     | 5.77                  | 24.66                     | 41.86                         | 54                     | -12.14         | AV                   |
| V                   | 7266               | 52.18                      | 30.33                     | 6.32                  | 24.55                     | 52.72                         | 74                     | -21.28         | PK                   |
| V                   | 7266               | 39.07                      | 30.33                     | 6.32                  | 24.55                     | 39.61                         | 54                     | -14.39         | AV                   |
| V                   | 9688               | 52.29                      | 30.85                     | 7.45                  | 24.69                     | 53.58                         | 74                     | -20.42         | PK                   |
| V                   | 9688               | 36.16                      | 30.85                     | 7.45                  | 24.69                     | 37.45                         | 54                     | -16.55         | AV                   |
| H                   | 4844               | 54.78                      | 30.55                     | 5.77                  | 24.66                     | 54.66                         | 74                     | -19.34         | PK                   |
| H                   | 4844               | 39.93                      | 30.55                     | 5.77                  | 24.66                     | 39.81                         | 54                     | -14.19         | AV                   |
| H                   | 7266               | 53.09                      | 30.33                     | 6.32                  | 24.55                     | 53.63                         | 74                     | -20.37         | PK                   |
| H                   | 7266               | 40.29                      | 30.33                     | 6.32                  | 24.55                     | 40.83                         | 54                     | -13.17         | AV                   |
| H                   | 9688               | 52.32                      | 30.85                     | 7.45                  | 24.69                     | 53.61                         | 74                     | -20.39         | PK                   |
| H                   | 9688               | 36.21                      | 30.85                     | 7.45                  | 24.69                     | 37.50                         | 54                     | -16.50         | AV                   |

| Polar<br>(H/V)         | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-ampl<br>ifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/<br>m) | Margin<br>(dB) | Detect<br>or<br>Type |
|------------------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|
| Middle Channel:2437MHz |                    |                            |                           |                       |                           |                               |                        |                |                      |
| V                      | 4874               | 51.80                      | 30.55                     | 5.77                  | 24.66                     | 51.68                         | 74                     | -22.32         | PK                   |
| V                      | 4874               | 40.92                      | 30.55                     | 5.77                  | 24.66                     | 40.80                         | 54                     | -13.20         | AV                   |
| V                      | 7311               | 53.10                      | 30.33                     | 6.32                  | 24.55                     | 53.64                         | 74                     | -20.36         | PK                   |
| V                      | 7311               | 40.95                      | 30.33                     | 6.32                  | 24.55                     | 41.49                         | 54                     | -12.51         | AV                   |
| V                      | 9748               | 52.24                      | 30.85                     | 7.45                  | 24.69                     | 53.53                         | 74                     | -20.47         | PK                   |
| V                      | 9748               | 37.56                      | 30.85                     | 7.45                  | 24.69                     | 38.85                         | 54                     | -15.15         | AV                   |
| H                      | 4874               | 54.01                      | 30.55                     | 5.77                  | 24.66                     | 53.89                         | 74                     | -20.11         | PK                   |
| H                      | 4874               | 40.39                      | 30.55                     | 5.77                  | 24.66                     | 40.27                         | 54                     | -13.73         | AV                   |
| H                      | 7311               | 52.21                      | 30.33                     | 6.32                  | 24.55                     | 52.75                         | 74                     | -21.25         | PK                   |
| H                      | 7311               | 39.22                      | 30.33                     | 6.32                  | 24.55                     | 39.76                         | 54                     | -14.24         | AV                   |
| H                      | 9748               | 51.17                      | 30.85                     | 7.45                  | 24.69                     | 52.46                         | 74                     | -21.54         | PK                   |
| H                      | 9748               | 37.96                      | 30.85                     | 7.45                  | 24.69                     | 39.25                         | 54                     | -14.75         | AV                   |

| Polar<br>(H/V) | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-ampl<br>ifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/<br>m) | Margin<br>(dB) | Detect<br>or<br>Type |
|----------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|
|----------------|--------------------|----------------------------|---------------------------|-----------------------|---------------------------|-------------------------------|------------------------|----------------|----------------------|

|                      |      |       |       |      |       |       |    |        |    |
|----------------------|------|-------|-------|------|-------|-------|----|--------|----|
|                      |      |       |       |      |       |       | m) |        |    |
| High Channel:2452MHz |      |       |       |      |       |       |    |        |    |
| V                    | 4904 | 55.60 | 30.55 | 5.77 | 24.66 | 55.48 | 74 | -18.52 | PK |
| V                    | 4904 | 40.29 | 30.55 | 5.77 | 24.66 | 40.17 | 54 | -13.83 | AV |
| V                    | 7356 | 52.66 | 30.33 | 6.32 | 24.55 | 53.20 | 74 | -20.80 | PK |
| V                    | 7356 | 38.97 | 30.33 | 6.32 | 24.55 | 39.51 | 54 | -14.49 | AV |
| V                    | 9808 | 51.87 | 30.85 | 7.45 | 24.69 | 53.16 | 74 | -20.84 | PK |
| V                    | 9808 | 36.16 | 30.85 | 7.45 | 24.69 | 37.45 | 54 | -16.55 | AV |
| H                    | 4904 | 53.96 | 30.55 | 5.77 | 24.66 | 53.84 | 74 | -20.16 | PK |
| H                    | 4904 | 40.82 | 30.55 | 5.77 | 24.66 | 40.70 | 54 | -13.30 | AV |
| H                    | 7356 | 53.24 | 30.33 | 6.32 | 24.55 | 53.78 | 74 | -20.22 | PK |
| H                    | 7356 | 38.97 | 30.33 | 6.32 | 24.55 | 39.51 | 54 | -14.49 | AV |
| H                    | 9808 | 51.63 | 30.85 | 7.45 | 24.69 | 52.92 | 74 | -21.08 | PK |
| H                    | 9808 | 38.39 | 30.85 | 7.45 | 24.69 | 39.68 | 54 | -14.32 | AV |

## Module B -802.11b-ANT2

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2412MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4824      | 55.05            | 30.55             | 5.77          | 24.66             | 54.93             | 74           | -19.07 | PK                   |
| V                   | 4824      | 40.32            | 30.55             | 5.77          | 24.66             | 40.20             | 54           | -13.80 | AV                   |
| V                   | 7236      | 52.51            | 30.33             | 6.32          | 24.55             | 53.05             | 74           | -20.95 | PK                   |
| V                   | 7236      | 41.75            | 30.33             | 6.32          | 24.55             | 42.29             | 54           | -11.71 | AV                   |
| V                   | 9648      | 53.08            | 30.85             | 7.45          | 24.69             | 54.37             | 74           | -19.63 | PK                   |
| V                   | 9648      | 36.26            | 30.85             | 7.45          | 24.69             | 37.55             | 54           | -16.45 | AV                   |
| H                   | 4824      | 55.02            | 30.55             | 5.77          | 24.66             | 54.90             | 74           | -19.10 | PK                   |
| H                   | 4824      | 39.90            | 30.55             | 5.77          | 24.66             | 39.78             | 54           | -14.22 | AV                   |
| H                   | 7236      | 52.78            | 30.33             | 6.32          | 24.55             | 53.32             | 74           | -20.68 | PK                   |
| H                   | 7236      | 39.86            | 30.33             | 6.32          | 24.55             | 40.40             | 54           | -13.60 | AV                   |
| H                   | 9648      | 51.00            | 30.85             | 7.45          | 24.69             | 52.29             | 74           | -21.71 | PK                   |
| H                   | 9648      | 37.48            | 30.85             | 7.45          | 24.69             | 38.77             | 54           | -15.23 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 51.90            | 30.55             | 5.77          | 24.66             | 51.78             | 74           | -22.22 | PK                   |
| V                      | 4874      | 41.28            | 30.55             | 5.77          | 24.66             | 41.16             | 54           | -12.84 | AV                   |
| V                      | 7311      | 52.74            | 30.33             | 6.32          | 24.55             | 53.28             | 74           | -20.72 | PK                   |
| V                      | 7311      | 39.39            | 30.33             | 6.32          | 24.55             | 39.93             | 54           | -14.07 | AV                   |
| V                      | 9748      | 51.09            | 30.85             | 7.45          | 24.69             | 52.38             | 74           | -21.62 | PK                   |
| V                      | 9748      | 38.64            | 30.85             | 7.45          | 24.69             | 39.93             | 54           | -14.07 | AV                   |
| H                      | 4874      | 52.37            | 30.55             | 5.77          | 24.66             | 52.25             | 74           | -21.75 | PK                   |
| H                      | 4874      | 41.87            | 30.55             | 5.77          | 24.66             | 41.75             | 54           | -12.25 | AV                   |
| H                      | 7311      | 53.69            | 30.33             | 6.32          | 24.55             | 54.23             | 74           | -19.77 | PK                   |
| H                      | 7311      | 39.25            | 30.33             | 6.32          | 24.55             | 39.79             | 54           | -14.21 | AV                   |
| H                      | 9748      | 52.67            | 30.85             | 7.45          | 24.69             | 53.96             | 74           | -20.04 | PK                   |
| H                      | 9748      | 39.92            | 30.85             | 7.45          | 24.69             | 41.21             | 54           | -12.79 | AV                   |

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2462MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4924      | 55.62            | 30.55             | 5.77          | 24.66             | 55.50             | 74           | -18.50 | PK                   |
| V                    | 4924      | 41.85            | 30.55             | 5.77          | 24.66             | 41.73             | 54           | -12.27 | AV                   |
| V                    | 7386      | 53.14            | 30.33             | 6.32          | 24.55             | 53.68             | 74           | -20.32 | PK                   |
| V                    | 7386      | 39.41            | 30.33             | 6.32          | 24.55             | 39.95             | 54           | -14.05 | AV                   |
| V                    | 9848      | 53.46            | 30.85             | 7.45          | 24.69             | 54.75             | 74           | -19.25 | PK                   |
| V                    | 9848      | 40.34            | 30.85             | 7.45          | 24.69             | 41.63             | 54           | -12.37 | AV                   |
| H                    | 4924      | 54.11            | 30.55             | 5.77          | 24.66             | 53.99             | 74           | -20.01 | PK                   |
| H                    | 4924      | 41.99            | 30.55             | 5.77          | 24.66             | 41.87             | 54           | -12.13 | AV                   |
| H                    | 7386      | 51.94            | 30.33             | 6.32          | 24.55             | 52.48             | 74           | -21.52 | PK                   |
| H                    | 7386      | 39.92            | 30.33             | 6.32          | 24.55             | 40.46             | 54           | -13.54 | AV                   |
| H                    | 9848      | 52.77            | 30.85             | 7.45          | 24.69             | 54.06             | 74           | -19.94 | PK                   |
| H                    | 9848      | 37.95            | 30.85             | 7.45          | 24.69             | 39.24             | 54           | -14.76 | AV                   |

## Module B -802.11g-ANT2

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2412MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4824      | 54.99            | 30.55             | 5.77          | 24.66             | 54.87             | 74           | -19.13 | PK                   |
| V                   | 4824      | 42.43            | 30.55             | 5.77          | 24.66             | 42.31             | 54           | -11.69 | AV                   |
| V                   | 7236      | 51.79            | 30.33             | 6.32          | 24.55             | 52.33             | 74           | -21.67 | PK                   |
| V                   | 7236      | 40.73            | 30.33             | 6.32          | 24.55             | 41.27             | 54           | -12.73 | AV                   |
| V                   | 9648      | 52.45            | 30.85             | 7.45          | 24.69             | 53.74             | 74           | -20.26 | PK                   |
| V                   | 9648      | 39.65            | 30.85             | 7.45          | 24.69             | 40.94             | 54           | -13.06 | AV                   |
| H                   | 4824      | 52.21            | 30.55             | 5.77          | 24.66             | 52.09             | 74           | -21.91 | PK                   |
| H                   | 4824      | 40.90            | 30.55             | 5.77          | 24.66             | 40.78             | 54           | -13.22 | AV                   |
| H                   | 7236      | 52.75            | 30.33             | 6.32          | 24.55             | 53.29             | 74           | -20.71 | PK                   |
| H                   | 7236      | 41.06            | 30.33             | 6.32          | 24.55             | 41.60             | 54           | -12.40 | AV                   |
| H                   | 9648      | 53.53            | 30.85             | 7.45          | 24.69             | 54.82             | 74           | -19.18 | PK                   |
| H                   | 9648      | 39.25            | 30.85             | 7.45          | 24.69             | 40.54             | 54           | -13.46 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 53.52            | 30.55             | 5.77          | 24.66             | 53.40             | 74           | -20.60 | PK                   |
| V                      | 4874      | 41.34            | 30.55             | 5.77          | 24.66             | 41.22             | 54           | -12.78 | AV                   |
| V                      | 7311      | 52.20            | 30.33             | 6.32          | 24.55             | 52.74             | 74           | -21.26 | PK                   |
| V                      | 7311      | 40.93            | 30.33             | 6.32          | 24.55             | 41.47             | 54           | -12.53 | AV                   |
| V                      | 9748      | 52.20            | 30.85             | 7.45          | 24.69             | 53.49             | 74           | -20.51 | PK                   |
| V                      | 9748      | 36.28            | 30.85             | 7.45          | 24.69             | 37.57             | 54           | -16.43 | AV                   |
| H                      | 4874      | 52.19            | 30.55             | 5.77          | 24.66             | 52.07             | 74           | -21.93 | PK                   |
| H                      | 4874      | 41.88            | 30.55             | 5.77          | 24.66             | 41.76             | 54           | -12.24 | AV                   |
| H                      | 7311      | 51.76            | 30.33             | 6.32          | 24.55             | 52.30             | 74           | -21.70 | PK                   |
| H                      | 7311      | 40.18            | 30.33             | 6.32          | 24.55             | 40.72             | 54           | -13.28 | AV                   |
| H                      | 9748      | 52.05            | 30.85             | 7.45          | 24.69             | 53.34             | 74           | -20.66 | PK                   |
| H                      | 9748      | 37.92            | 30.85             | 7.45          | 24.69             | 39.21             | 54           | -14.79 | AV                   |

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2462MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4924      | 51.83            | 30.55             | 5.77          | 24.66             | 51.71             | 74           | -22.29 | PK                   |
| V                    | 4924      | 40.57            | 30.55             | 5.77          | 24.66             | 40.45             | 54           | -13.55 | AV                   |
| V                    | 7386      | 53.67            | 30.33             | 6.32          | 24.55             | 54.21             | 74           | -19.79 | PK                   |
| V                    | 7386      | 41.11            | 30.33             | 6.32          | 24.55             | 41.65             | 54           | -12.35 | AV                   |
| V                    | 9848      | 51.37            | 30.85             | 7.45          | 24.69             | 52.66             | 74           | -21.34 | PK                   |
| V                    | 9848      | 38.85            | 30.85             | 7.45          | 24.69             | 40.14             | 54           | -13.86 | AV                   |
| H                    | 4924      | 54.25            | 30.55             | 5.77          | 24.66             | 54.13             | 74           | -19.87 | PK                   |
| H                    | 4924      | 40.92            | 30.55             | 5.77          | 24.66             | 40.80             | 54           | -13.20 | AV                   |
| H                    | 7386      | 51.93            | 30.33             | 6.32          | 24.55             | 52.47             | 74           | -21.53 | PK                   |
| H                    | 7386      | 39.60            | 30.33             | 6.32          | 24.55             | 40.14             | 54           | -13.86 | AV                   |
| H                    | 9848      | 52.81            | 30.85             | 7.45          | 24.69             | 54.10             | 74           | -19.90 | PK                   |
| H                    | 9848      | 35.97            | 30.85             | 7.45          | 24.69             | 37.26             | 54           | -16.74 | AV                   |

## Module B -802.11n-ANT2

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2412MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4824      | 55.67            | 30.55             | 5.77          | 24.66             | 55.55             | 74           | -18.45 | PK                   |
| V                   | 4824      | 41.24            | 30.55             | 5.77          | 24.66             | 41.12             | 54           | -12.88 | AV                   |
| V                   | 7236      | 52.08            | 30.33             | 6.32          | 24.55             | 52.62             | 74           | -21.38 | PK                   |
| V                   | 7236      | 40.83            | 30.33             | 6.32          | 24.55             | 41.37             | 54           | -12.63 | AV                   |
| V                   | 9648      | 51.06            | 30.85             | 7.45          | 24.69             | 52.35             | 74           | -21.65 | PK                   |
| V                   | 9648      | 37.48            | 30.85             | 7.45          | 24.69             | 38.77             | 54           | -15.23 | AV                   |
| H                   | 4824      | 55.75            | 30.55             | 5.77          | 24.66             | 55.63             | 74           | -18.37 | PK                   |
| H                   | 4824      | 39.95            | 30.55             | 5.77          | 24.66             | 39.83             | 54           | -14.17 | AV                   |
| H                   | 7236      | 52.89            | 30.33             | 6.32          | 24.55             | 53.43             | 74           | -20.57 | PK                   |
| H                   | 7236      | 41.01            | 30.33             | 6.32          | 24.55             | 41.55             | 54           | -12.45 | AV                   |
| H                   | 9648      | 51.69            | 30.85             | 7.45          | 24.69             | 52.98             | 74           | -21.02 | PK                   |
| H                   | 9648      | 36.05            | 30.85             | 7.45          | 24.69             | 37.34             | 54           | -16.66 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 54.07            | 30.55             | 5.77          | 24.66             | 53.95             | 74           | -20.05 | PK                   |
| V                      | 4874      | 42.57            | 30.55             | 5.77          | 24.66             | 42.45             | 54           | -11.55 | AV                   |
| V                      | 7311      | 53.71            | 30.33             | 6.32          | 24.55             | 54.25             | 74           | -19.75 | PK                   |
| V                      | 7311      | 39.81            | 30.33             | 6.32          | 24.55             | 40.35             | 54           | -13.65 | AV                   |
| V                      | 9748      | 51.71            | 30.85             | 7.45          | 24.69             | 53.00             | 74           | -21.00 | PK                   |
| V                      | 9748      | 40.70            | 30.85             | 7.45          | 24.69             | 41.99             | 54           | -12.01 | AV                   |
| H                      | 4874      | 54.20            | 30.55             | 5.77          | 24.66             | 54.08             | 74           | -19.92 | PK                   |
| H                      | 4874      | 40.87            | 30.55             | 5.77          | 24.66             | 40.75             | 54           | -13.25 | AV                   |
| H                      | 7311      | 53.20            | 30.33             | 6.32          | 24.55             | 53.74             | 74           | -20.26 | PK                   |
| H                      | 7311      | 39.71            | 30.33             | 6.32          | 24.55             | 40.25             | 54           | -13.75 | AV                   |
| H                      | 9748      | 53.60            | 30.85             | 7.45          | 24.69             | 54.89             | 74           | -19.11 | PK                   |



|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| H | 9748 | 39.09 | 30.85 | 7.45 | 24.69 | 40.38 | 54 | -13.62 | AV |
|---|------|-------|-------|------|-------|-------|----|--------|----|

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2462MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4924      | 53.72            | 30.55             | 5.77          | 24.66             | 53.60             | 74           | -20.40 | PK                   |
| V                    | 4924      | 41.73            | 30.55             | 5.77          | 24.66             | 41.61             | 54           | -12.39 | AV                   |
| V                    | 7386      | 51.89            | 30.33             | 6.32          | 24.55             | 52.43             | 74           | -21.57 | PK                   |
| V                    | 7386      | 41.05            | 30.33             | 6.32          | 24.55             | 41.59             | 54           | -12.41 | AV                   |
| V                    | 9848      | 51.51            | 30.85             | 7.45          | 24.69             | 52.80             | 74           | -21.20 | PK                   |
| V                    | 9848      | 39.29            | 30.85             | 7.45          | 24.69             | 40.58             | 54           | -13.42 | AV                   |
| H                    | 4924      | 52.86            | 30.55             | 5.77          | 24.66             | 52.74             | 74           | -21.26 | PK                   |
| H                    | 4924      | 41.86            | 30.55             | 5.77          | 24.66             | 41.74             | 54           | -12.26 | AV                   |
| H                    | 7386      | 53.73            | 30.33             | 6.32          | 24.55             | 54.27             | 74           | -19.73 | PK                   |
| H                    | 7386      | 39.56            | 30.33             | 6.32          | 24.55             | 40.10             | 54           | -13.90 | AV                   |
| H                    | 9848      | 51.15            | 30.85             | 7.45          | 24.69             | 52.44             | 74           | -21.56 | PK                   |
| H                    | 9848      | 35.78            | 30.85             | 7.45          | 24.69             | 37.07             | 54           | -16.93 | AV                   |

## Module B -802.11n40-ANT2

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2422MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4844      | 52.14            | 30.55             | 5.77          | 24.66             | 52.02             | 74           | -21.98 | PK                   |
| V                   | 4844      | 41.66            | 30.55             | 5.77          | 24.66             | 41.54             | 54           | -12.46 | AV                   |
| V                   | 7266      | 52.56            | 30.33             | 6.32          | 24.55             | 53.10             | 74           | -20.90 | PK                   |
| V                   | 7266      | 39.31            | 30.33             | 6.32          | 24.55             | 39.85             | 54           | -14.15 | AV                   |
| V                   | 9688      | 53.11            | 30.85             | 7.45          | 24.69             | 54.40             | 74           | -19.60 | PK                   |
| V                   | 9688      | 36.74            | 30.85             | 7.45          | 24.69             | 38.03             | 54           | -15.97 | AV                   |
| H                   | 4844      | 51.98            | 30.55             | 5.77          | 24.66             | 51.86             | 74           | -22.14 | PK                   |
| H                   | 4844      | 40.79            | 30.55             | 5.77          | 24.66             | 40.67             | 54           | -13.33 | AV                   |
| H                   | 7266      | 53.63            | 30.33             | 6.32          | 24.55             | 54.17             | 74           | -19.83 | PK                   |
| H                   | 7266      | 39.59            | 30.33             | 6.32          | 24.55             | 40.13             | 54           | -13.87 | AV                   |
| H                   | 9688      | 52.14            | 30.85             | 7.45          | 24.69             | 53.43             | 74           | -20.57 | PK                   |
| H                   | 9688      | 38.25            | 30.85             | 7.45          | 24.69             | 39.54             | 54           | -14.46 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 53.72            | 30.55             | 5.77          | 24.66             | 53.60             | 74           | -20.40 | PK                   |
| V                      | 4874      | 40.30            | 30.55             | 5.77          | 24.66             | 40.18             | 54           | -13.82 | AV                   |
| V                      | 7311      | 52.59            | 30.33             | 6.32          | 24.55             | 53.13             | 74           | -20.87 | PK                   |
| V                      | 7311      | 41.63            | 30.33             | 6.32          | 24.55             | 42.17             | 54           | -11.83 | AV                   |
| V                      | 9748      | 52.76            | 30.85             | 7.45          | 24.69             | 54.05             | 74           | -19.95 | PK                   |
| V                      | 9748      | 36.84            | 30.85             | 7.45          | 24.69             | 38.13             | 54           | -15.87 | AV                   |
| H                      | 4874      | 55.63            | 30.55             | 5.77          | 24.66             | 55.51             | 74           | -18.49 | PK                   |
| H                      | 4874      | 42.32            | 30.55             | 5.77          | 24.66             | 42.20             | 54           | -11.80 | AV                   |
| H                      | 7311      | 53.51            | 30.33             | 6.32          | 24.55             | 54.05             | 74           | -19.95 | PK                   |
| H                      | 7311      | 39.23            | 30.33             | 6.32          | 24.55             | 39.77             | 54           | -14.23 | AV                   |
| H                      | 9748      | 51.01            | 30.85             | 7.45          | 24.69             | 52.30             | 74           | -21.70 | PK                   |

|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| H | 9748 | 35.97 | 30.85 | 7.45 | 24.69 | 37.26 | 54 | -16.74 | AV |
|---|------|-------|-------|------|-------|-------|----|--------|----|

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2452MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4904      | 52.46            | 30.55             | 5.77          | 24.66             | 52.34             | 74           | -21.66 | PK                   |
| V                    | 4904      | 41.27            | 30.55             | 5.77          | 24.66             | 41.15             | 54           | -12.85 | AV                   |
| V                    | 7356      | 51.86            | 30.33             | 6.32          | 24.55             | 52.40             | 74           | -21.60 | PK                   |
| V                    | 7356      | 39.90            | 30.33             | 6.32          | 24.55             | 40.44             | 54           | -13.56 | AV                   |
| V                    | 9808      | 51.04            | 30.85             | 7.45          | 24.69             | 52.33             | 74           | -21.67 | PK                   |
| V                    | 9808      | 40.22            | 30.85             | 7.45          | 24.69             | 41.51             | 54           | -12.49 | AV                   |
| H                    | 4904      | 52.09            | 30.55             | 5.77          | 24.66             | 51.97             | 74           | -22.03 | PK                   |
| H                    | 4904      | 39.91            | 30.55             | 5.77          | 24.66             | 39.79             | 54           | -14.21 | AV                   |
| H                    | 7356      | 52.12            | 30.33             | 6.32          | 24.55             | 52.66             | 74           | -21.34 | PK                   |
| H                    | 7356      | 39.12            | 30.33             | 6.32          | 24.55             | 39.66             | 54           | -14.34 | AV                   |
| H                    | 9808      | 52.61            | 30.85             | 7.45          | 24.69             | 53.90             | 74           | -20.10 | PK                   |
| H                    | 9808      | 40.04            | 30.85             | 7.45          | 24.69             | 41.33             | 54           | -12.67 | AV                   |

## Module B-MIMO-802.11n

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2412MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4824      | 54.23            | 30.55             | 5.77          | 24.66             | 54.11             | 74           | -19.89 | PK                   |
| V                   | 4824      | 41.16            | 30.55             | 5.77          | 24.66             | 41.04             | 54           | -12.96 | AV                   |
| V                   | 7236      | 52.96            | 30.33             | 6.32          | 24.55             | 53.50             | 74           | -20.50 | PK                   |
| V                   | 7236      | 40.44            | 30.33             | 6.32          | 24.55             | 40.98             | 54           | -13.02 | AV                   |
| V                   | 9648      | 52.71            | 30.85             | 7.45          | 24.69             | 54.00             | 74           | -20.00 | PK                   |
| V                   | 9648      | 36.26            | 30.85             | 7.45          | 24.69             | 37.55             | 54           | -16.45 | AV                   |
| H                   | 4824      | 51.98            | 30.55             | 5.77          | 24.66             | 51.86             | 74           | -22.14 | PK                   |
| H                   | 4824      | 40.79            | 30.55             | 5.77          | 24.66             | 40.67             | 54           | -13.33 | AV                   |
| H                   | 7236      | 52.50            | 30.33             | 6.32          | 24.55             | 53.04             | 74           | -20.96 | PK                   |
| H                   | 7236      | 39.14            | 30.33             | 6.32          | 24.55             | 39.68             | 54           | -14.32 | AV                   |
| H                   | 9648      | 52.71            | 30.85             | 7.45          | 24.69             | 54.00             | 74           | -20.00 | PK                   |
| H                   | 9648      | 35.97            | 30.85             | 7.45          | 24.69             | 37.26             | 54           | -16.74 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 52.07            | 30.55             | 5.77          | 24.66             | 51.95             | 74           | -22.05 | PK                   |
| V                      | 4874      | 41.11            | 30.55             | 5.77          | 24.66             | 40.99             | 54           | -13.01 | AV                   |
| V                      | 7311      | 52.32            | 30.33             | 6.32          | 24.55             | 52.86             | 74           | -21.14 | PK                   |
| V                      | 7311      | 39.64            | 30.33             | 6.32          | 24.55             | 40.18             | 54           | -13.82 | AV                   |
| V                      | 9748      | 51.76            | 30.85             | 7.45          | 24.69             | 53.05             | 74           | -20.95 | PK                   |
| V                      | 9748      | 37.78            | 30.85             | 7.45          | 24.69             | 39.07             | 54           | -14.93 | AV                   |
| H                      | 4874      | 55.11            | 30.55             | 5.77          | 24.66             | 54.99             | 74           | -19.01 | PK                   |
| H                      | 4874      | 40.25            | 30.55             | 5.77          | 24.66             | 40.13             | 54           | -13.87 | AV                   |
| H                      | 7311      | 52.64            | 30.33             | 6.32          | 24.55             | 53.18             | 74           | -20.82 | PK                   |
| H                      | 7311      | 41.49            | 30.33             | 6.32          | 24.55             | 42.03             | 54           | -11.97 | AV                   |
| H                      | 9748      | 52.04            | 30.85             | 7.45          | 24.69             | 53.33             | 74           | -20.67 | PK                   |



|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| H | 9748 | 40.21 | 30.85 | 7.45 | 24.69 | 41.50 | 54 | -12.50 | AV |
|---|------|-------|-------|------|-------|-------|----|--------|----|

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampli<br>fier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2462MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4924      | 53.22            | 30.55             | 5.77          | 24.66             | 53.10             | 74           | -20.90 | PK                   |
| V                    | 4924      | 40.43            | 30.55             | 5.77          | 24.66             | 40.31             | 54           | -13.69 | AV                   |
| V                    | 7386      | 52.95            | 30.33             | 6.32          | 24.55             | 53.49             | 74           | -20.51 | PK                   |
| V                    | 7386      | 39.24            | 30.33             | 6.32          | 24.55             | 39.78             | 54           | -14.22 | AV                   |
| V                    | 9848      | 51.79            | 30.85             | 7.45          | 24.69             | 53.08             | 74           | -20.92 | PK                   |
| V                    | 9848      | 36.88            | 30.85             | 7.45          | 24.69             | 38.17             | 54           | -15.83 | AV                   |
| H                    | 4924      | 55.33            | 30.55             | 5.77          | 24.66             | 55.21             | 74           | -18.79 | PK                   |
| H                    | 4924      | 39.93            | 30.55             | 5.77          | 24.66             | 39.81             | 54           | -14.19 | AV                   |
| H                    | 7386      | 52.39            | 30.33             | 6.32          | 24.55             | 52.93             | 74           | -21.07 | PK                   |
| H                    | 7386      | 40.22            | 30.33             | 6.32          | 24.55             | 40.76             | 54           | -13.24 | AV                   |
| H                    | 9848      | 51.96            | 30.85             | 7.45          | 24.69             | 53.25             | 74           | -20.75 | PK                   |
| H                    | 9848      | 40.46            | 30.85             | 7.45          | 24.69             | 41.75             | 54           | -12.25 | AV                   |

## Module B-MIMO-802.11n40

| Polar<br>(H/V)      | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|---------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                     | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Low Channel:2422MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                   | 4844      | 52.22            | 30.55             | 5.77          | 24.66             | 52.10             | 74           | -21.90 | PK                   |
| V                   | 4844      | 41.64            | 30.55             | 5.77          | 24.66             | 41.52             | 54           | -12.48 | AV                   |
| V                   | 7266      | 53.11            | 30.33             | 6.32          | 24.55             | 53.65             | 74           | -20.35 | PK                   |
| V                   | 7266      | 39.29            | 30.33             | 6.32          | 24.55             | 39.83             | 54           | -14.17 | AV                   |
| V                   | 9688      | 51.43            | 30.85             | 7.45          | 24.69             | 52.72             | 74           | -21.28 | PK                   |
| V                   | 9688      | 37.20            | 30.85             | 7.45          | 24.69             | 38.49             | 54           | -15.51 | AV                   |
| H                   | 4844      | 54.52            | 30.55             | 5.77          | 24.66             | 54.40             | 74           | -19.60 | PK                   |
| H                   | 4844      | 40.51            | 30.55             | 5.77          | 24.66             | 40.39             | 54           | -13.61 | AV                   |
| H                   | 7266      | 51.84            | 30.33             | 6.32          | 24.55             | 52.38             | 74           | -21.62 | PK                   |
| H                   | 7266      | 38.96            | 30.33             | 6.32          | 24.55             | 39.50             | 54           | -14.50 | AV                   |
| H                   | 9688      | 51.91            | 30.85             | 7.45          | 24.69             | 53.20             | 74           | -20.80 | PK                   |
| H                   | 9688      | 37.21            | 30.85             | 7.45          | 24.69             | 38.50             | 54           | -15.50 | AV                   |

| Polar<br>(H/V)         | Frequency | Meter<br>Reading | Pre-ampl<br>ifier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|------------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                        | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| Middle Channel:2437MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                      | 4874      | 52.03            | 30.55             | 5.77          | 24.66             | 51.91             | 74           | -22.09 | PK                   |
| V                      | 4874      | 42.37            | 30.55             | 5.77          | 24.66             | 42.25             | 54           | -11.75 | AV                   |
| V                      | 7311      | 52.68            | 30.33             | 6.32          | 24.55             | 53.22             | 74           | -20.78 | PK                   |
| V                      | 7311      | 40.48            | 30.33             | 6.32          | 24.55             | 41.02             | 54           | -12.98 | AV                   |
| V                      | 9748      | 50.98            | 30.85             | 7.45          | 24.69             | 52.27             | 74           | -21.73 | PK                   |
| V                      | 9748      | 40.05            | 30.85             | 7.45          | 24.69             | 41.34             | 54           | -12.66 | AV                   |
| H                      | 4874      | 52.03            | 30.55             | 5.77          | 24.66             | 51.91             | 74           | -22.09 | PK                   |
| H                      | 4874      | 40.65            | 30.55             | 5.77          | 24.66             | 40.53             | 54           | -13.47 | AV                   |
| H                      | 7311      | 52.40            | 30.33             | 6.32          | 24.55             | 52.94             | 74           | -21.06 | PK                   |
| H                      | 7311      | 38.83            | 30.33             | 6.32          | 24.55             | 39.37             | 54           | -14.63 | AV                   |

|   |      |       |       |      |       |       |    |        |    |
|---|------|-------|-------|------|-------|-------|----|--------|----|
| H | 9748 | 52.38 | 30.85 | 7.45 | 24.69 | 53.67 | 74 | -20.33 | PK |
| H | 9748 | 38.40 | 30.85 | 7.45 | 24.69 | 39.69 | 54 | -14.31 | AV |

| Polar<br>(H/V)       | Frequency | Meter<br>Reading | Pre-ampli<br>fier | Cable<br>Loss | Antenna<br>Factor | Emission<br>Level | Limits       | Margin | Detect<br>or<br>Type |
|----------------------|-----------|------------------|-------------------|---------------|-------------------|-------------------|--------------|--------|----------------------|
|                      | (MHz)     | (dBuV)           | (dB)              | (dB)          | (dB)              | (dBuV/m)          | (dBuV/<br>m) | (dB)   |                      |
| High Channel:2452MHz |           |                  |                   |               |                   |                   |              |        |                      |
| V                    | 4904      | 54.67            | 30.55             | 5.77          | 24.66             | 54.55             | 74           | -19.45 | PK                   |
| V                    | 4904      | 40.75            | 30.55             | 5.77          | 24.66             | 40.63             | 54           | -13.37 | AV                   |
| V                    | 7356      | 53.53            | 30.33             | 6.32          | 24.55             | 54.07             | 74           | -19.93 | PK                   |
| V                    | 7356      | 40.32            | 30.33             | 6.32          | 24.55             | 40.86             | 54           | -13.14 | AV                   |
| V                    | 9808      | 53.72            | 30.85             | 7.45          | 24.69             | 55.01             | 74           | -18.99 | PK                   |
| V                    | 9808      | 39.98            | 30.85             | 7.45          | 24.69             | 41.27             | 54           | -12.73 | AV                   |
| H                    | 4904      | 54.57            | 30.55             | 5.77          | 24.66             | 54.45             | 74           | -19.55 | PK                   |
| H                    | 4904      | 42.27            | 30.55             | 5.77          | 24.66             | 42.15             | 54           | -11.85 | AV                   |
| H                    | 7356      | 52.36            | 30.33             | 6.32          | 24.55             | 52.90             | 74           | -21.10 | PK                   |
| H                    | 7356      | 39.75            | 30.33             | 6.32          | 24.55             | 40.29             | 54           | -13.71 | AV                   |
| H                    | 9808      | 51.25            | 30.85             | 7.45          | 24.69             | 52.54             | 74           | -21.46 | PK                   |
| H                    | 9808      | 36.31            | 30.85             | 7.45          | 24.69             | 37.60             | 54           | -16.40 | AV                   |

## 5. RADIATED BAND EMISSION MEASUREMENT

### 5.1 TEST REQUIREMENT:

|                       |                                                                                                    |          |      |      |         |
|-----------------------|----------------------------------------------------------------------------------------------------|----------|------|------|---------|
| Test Requirement:     | FCC Part 15 C Section 15.209 and 15.205                                                            |          |      |      |         |
| Test Method:          | ANSI C63.10: 2013                                                                                  |          |      |      |         |
| Test Frequency Range: | All of the restrict bands were tested, only the worst band's (2310MHz to 2500MHz) data was showed. |          |      |      |         |
| Test site:            | Measurement Distance: 3m                                                                           |          |      |      |         |
| Receiver setup:       | Frequency                                                                                          | Detector | RBW  | VBW  | Value   |
|                       | Above                                                                                              | Peak     | 1MHz | 3MHz | Peak    |
|                       | 1GHz                                                                                               | Average  | 1MHz | 3MHz | Average |

### LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

| FREQUENCY (MHz) | Class B (dBuV/m) (at 3M) |         |
|-----------------|--------------------------|---------|
|                 | PEAK                     | AVERAGE |
| Above 1000      | 74                       | 54      |

#### Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m) = 20log Emission level (uV/m).

### 5.2 TEST PROCEDURE

Above 1GHz test procedure as below:

- a. 1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the Highest channel

#### Note:

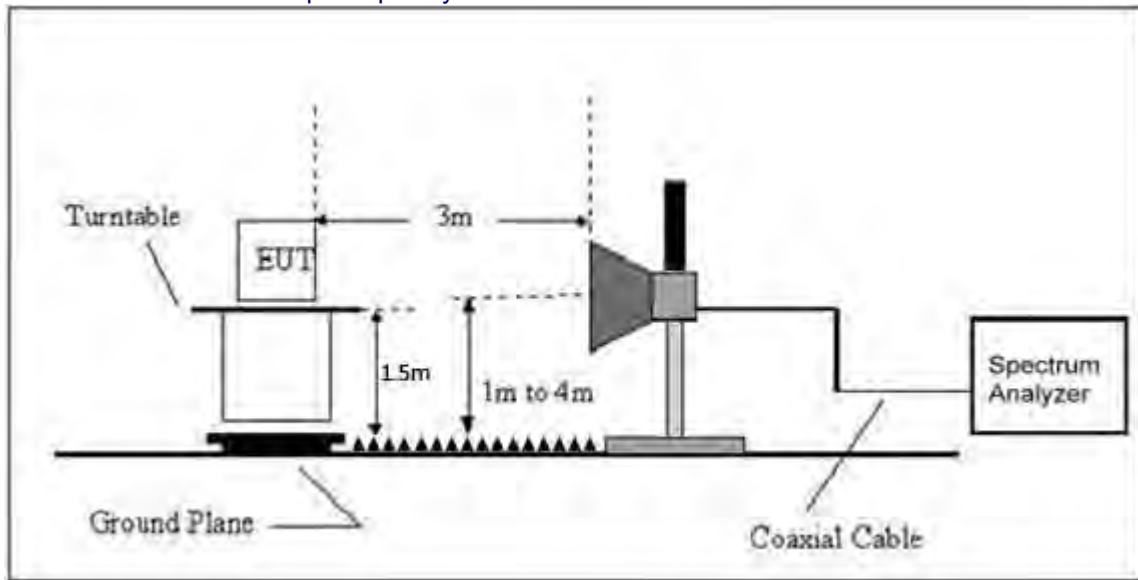
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

### 5.3 DEVIATION FROM TEST STANDARD

No deviation

## 5.4 TEST SETUP

### Radiated Emission Test-Up Frequency Above 1GHz



## 5.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

## 5.6 TEST RESULT

## Module A - ANT1

|           | Polar<br>(H/V)       | Frequenc<br>y<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-<br>amplifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB/m) | Emission<br>level<br>(dBuV/m) | Limit<br>(dBuV<br>/m) | Detec<br>tor<br>Type | Result |
|-----------|----------------------|------------------------|----------------------------|---------------------------|-----------------------|-----------------------------|-------------------------------|-----------------------|----------------------|--------|
| 802.11b   | Low Channel 2412MHz  |                        |                            |                           |                       |                             |                               |                       |                      |        |
|           | H                    | 2390.00                | 61.88                      | 30.22                     | 4.85                  | 23.98                       | 60.49                         | 74                    | PK                   | PASS   |
|           | H                    | 2390.00                | 48.45                      | 30.22                     | 4.85                  | 23.98                       | 47.06                         | 54                    | AV                   | PASS   |
|           | H                    | 2400.00                | 65.36                      | 30.22                     | 4.85                  | 23.98                       | 63.97                         | 74                    | PK                   | PASS   |
|           | H                    | 2400.00                | 45.94                      | 30.22                     | 4.85                  | 23.98                       | 44.55                         | 54                    | AV                   | PASS   |
|           | V                    | 2390.00                | 63.89                      | 30.22                     | 4.85                  | 23.98                       | 62.50                         | 74                    | PK                   | PASS   |
|           | V                    | 2390.00                | 46.51                      | 30.22                     | 4.85                  | 23.98                       | 45.12                         | 54                    | AV                   | PASS   |
|           | V                    | 2400.00                | 60.78                      | 30.22                     | 4.85                  | 23.98                       | 59.39                         | 74                    | PK                   | PASS   |
|           | V                    | 2400.00                | 46.41                      | 30.22                     | 4.85                  | 23.98                       | 45.02                         | 54                    | AV                   | PASS   |
|           | High Channel 2462MHz |                        |                            |                           |                       |                             |                               |                       |                      |        |
|           | H                    | 2483.50                | 59.46                      | 30.22                     | 4.85                  | 23.98                       | 58.07                         | 74                    | PK                   | PASS   |
|           | H                    | 2485.50                | 47.81                      | 30.22                     | 4.85                  | 23.98                       | 46.42                         | 54                    | AV                   | PASS   |
|           | H                    | 2483.50                | 64.02                      | 30.22                     | 4.85                  | 23.98                       | 62.63                         | 74                    | PK                   | PASS   |
|           | H                    | 2485.50                | 42.87                      | 30.22                     | 4.85                  | 23.98                       | 41.48                         | 54                    | AV                   | PASS   |
|           | V                    | 2483.50                | 62.31                      | 30.22                     | 4.85                  | 23.98                       | 60.92                         | 74                    | PK                   | PASS   |
|           | V                    | 2485.50                | 45.11                      | 30.22                     | 4.85                  | 23.98                       | 43.72                         | 54                    | AV                   | PASS   |
|           | V                    | 2483.50                | 64.23                      | 30.22                     | 4.85                  | 23.98                       | 62.84                         | 74                    | PK                   | PASS   |
|           | V                    | 2485.50                | 49.56                      | 30.22                     | 4.85                  | 23.98                       | 48.17                         | 54                    | AV                   | PASS   |
| 802.11g   | Low Channel 2412MHz  |                        |                            |                           |                       |                             |                               |                       |                      |        |
|           | H                    | 2390.00                | 64.57                      | 30.22                     | 4.85                  | 23.98                       | 63.18                         | 74                    | PK                   | PASS   |
|           | H                    | 2390.00                | 48.22                      | 30.22                     | 4.85                  | 23.98                       | 46.83                         | 54                    | AV                   | PASS   |
|           | H                    | 2400.00                | 65.66                      | 30.22                     | 4.85                  | 23.98                       | 64.27                         | 74                    | PK                   | PASS   |
|           | H                    | 2400.00                | 48.50                      | 30.22                     | 4.85                  | 23.98                       | 47.11                         | 54                    | AV                   | PASS   |
|           | V                    | 2390.00                | 64.71                      | 30.22                     | 4.85                  | 23.98                       | 63.32                         | 74                    | PK                   | PASS   |
|           | V                    | 2390.00                | 46.49                      | 30.22                     | 4.85                  | 23.98                       | 45.10                         | 54                    | AV                   | PASS   |
|           | V                    | 2400.00                | 59.01                      | 30.22                     | 4.85                  | 23.98                       | 57.62                         | 74                    | PK                   | PASS   |
|           | V                    | 2400.00                | 47.32                      | 30.22                     | 4.85                  | 23.98                       | 45.93                         | 54                    | AV                   | PASS   |
|           | High Channel 2462MHz |                        |                            |                           |                       |                             |                               |                       |                      |        |
|           | H                    | 2483.50                | 61.88                      | 30.22                     | 4.85                  | 23.98                       | 60.49                         | 74                    | PK                   | PASS   |
|           | H                    | 2485.50                | 48.53                      | 30.22                     | 4.85                  | 23.98                       | 47.14                         | 54                    | AV                   | PASS   |
|           | H                    | 2483.50                | 66.57                      | 30.22                     | 4.85                  | 23.98                       | 65.18                         | 74                    | PK                   | PASS   |
|           | H                    | 2485.50                | 44.58                      | 30.22                     | 4.85                  | 23.98                       | 43.19                         | 54                    | AV                   | PASS   |
|           | V                    | 2483.50                | 64.84                      | 30.22                     | 4.85                  | 23.98                       | 63.45                         | 74                    | PK                   | PASS   |
|           | V                    | 2485.50                | 48.28                      | 30.22                     | 4.85                  | 23.98                       | 46.89                         | 54                    | AV                   | PASS   |
|           | V                    | 2483.50                | 66.28                      | 30.22                     | 4.85                  | 23.98                       | 64.89                         | 74                    | PK                   | PASS   |
|           | V                    | 2485.50                | 44.68                      | 30.22                     | 4.85                  | 23.98                       | 43.29                         | 54                    | AV                   | PASS   |
| 802.11n20 | Low Channel 2412MHz  |                        |                            |                           |                       |                             |                               |                       |                      |        |
|           | H                    | 2390.00                | 64.32                      | 30.22                     | 4.85                  | 23.98                       | 62.93                         | 74                    | PK                   | PASS   |
|           | H                    | 2390.00                | 48.34                      | 30.22                     | 4.85                  | 23.98                       | 46.95                         | 54                    | AV                   | PASS   |
|           | H                    | 2400.00                | 64.48                      | 30.22                     | 4.85                  | 23.98                       | 63.09                         | 74                    | PK                   | PASS   |
|           | H                    | 2400.00                | 46.16                      | 30.22                     | 4.85                  | 23.98                       | 44.77                         | 54                    | AV                   | PASS   |
|           | V                    | 2390.00                | 65.90                      | 30.22                     | 4.85                  | 23.98                       | 64.51                         | 74                    | PK                   | PASS   |
|           | V                    | 2390.00                | 48.44                      | 30.22                     | 4.85                  | 23.98                       | 47.05                         | 54                    | AV                   | PASS   |
|           | V                    | 2400.00                | 61.49                      | 30.22                     | 4.85                  | 23.98                       | 60.10                         | 74                    | PK                   | PASS   |
|           | V                    | 2400.00                | 48.43                      | 30.22                     | 4.85                  | 23.98                       | 47.04                         | 54                    | AV                   | PASS   |
|           | High Channel 2462MHz |                        |                            |                           |                       |                             |                               |                       |                      |        |
|           | H                    | 2483.50                | 59.49                      | 30.22                     | 4.85                  | 23.98                       | 58.10                         | 74                    | PK                   | PASS   |
|           | H                    | 2485.50                | 46.57                      | 30.22                     | 4.85                  | 23.98                       | 45.18                         | 54                    | AV                   | PASS   |
|           | H                    | 2483.50                | 59.86                      | 30.22                     | 4.85                  | 23.98                       | 58.47                         | 74                    | PK                   | PASS   |
|           | H                    | 2485.50                | 48.19                      | 30.22                     | 4.85                  | 23.98                       | 46.80                         | 54                    | AV                   | PASS   |

|  |   |         |       |       |      |       |       |    |    |      |
|--|---|---------|-------|-------|------|-------|-------|----|----|------|
|  | V | 2483.50 | 60.23 | 30.22 | 4.85 | 23.98 | 58.84 | 74 | PK | PASS |
|  | V | 2485.50 | 45.82 | 30.22 | 4.85 | 23.98 | 44.43 | 54 | AV | PASS |
|  | V | 2483.50 | 65.99 | 30.22 | 4.85 | 23.98 | 64.60 | 74 | PK | PASS |
|  | V | 2485.50 | 49.48 | 30.22 | 4.85 | 23.98 | 48.09 | 54 | AV | PASS |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

|           |                      |         |       |       |      |       |       |    |    |      |
|-----------|----------------------|---------|-------|-------|------|-------|-------|----|----|------|
| 802.11n40 | Low Channel 2422MHz  |         |       |       |      |       |       |    |    |      |
|           | H                    | 2390.00 | 64.02 | 30.22 | 4.85 | 23.98 | 62.63 | 74 | PK | PASS |
|           | H                    | 2390.00 | 48.58 | 30.22 | 4.85 | 23.98 | 47.19 | 54 | AV | PASS |
|           | H                    | 2400.00 | 63.20 | 30.22 | 4.85 | 23.98 | 61.81 | 74 | PK | PASS |
|           | H                    | 2400.00 | 46.84 | 30.22 | 4.85 | 23.98 | 45.45 | 54 | AV | PASS |
|           | V                    | 2390.00 | 64.08 | 30.22 | 4.85 | 23.98 | 62.69 | 74 | PK | PASS |
|           | V                    | 2390.00 | 47.27 | 30.22 | 4.85 | 23.98 | 45.88 | 54 | AV | PASS |
|           | V                    | 2400.00 | 62.00 | 30.22 | 4.85 | 23.98 | 60.61 | 74 | PK | PASS |
|           | V                    | 2400.00 | 45.81 | 30.22 | 4.85 | 23.98 | 44.42 | 54 | AV | PASS |
|           | High Channel 2452MHz |         |       |       |      |       |       |    |    |      |
|           | H                    | 2483.50 | 58.86 | 30.22 | 4.85 | 23.98 | 57.47 | 74 | PK | PASS |
|           | H                    | 2485.50 | 43.29 | 30.22 | 4.85 | 23.98 | 41.90 | 54 | AV | PASS |
|           | H                    | 2483.50 | 65.99 | 30.22 | 4.85 | 23.98 | 64.60 | 74 | PK | PASS |
|           | H                    | 2485.50 | 49.38 | 30.22 | 4.85 | 23.98 | 47.99 | 54 | AV | PASS |
|           | V                    | 2483.50 | 62.29 | 30.22 | 4.85 | 23.98 | 60.90 | 74 | PK | PASS |
|           | V                    | 2485.50 | 49.00 | 30.22 | 4.85 | 23.98 | 47.61 | 54 | AV | PASS |
|           | V                    | 2483.50 | 60.85 | 30.22 | 4.85 | 23.98 | 59.46 | 74 | PK | PASS |
|           | V                    | 2485.50 | 46.79 | 30.22 | 4.85 | 23.98 | 45.40 | 54 | AV | PASS |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

## Module A – ANT2

|         | Polar (H/V)          | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission level (dBuV/m) | Limit (dBuV /m) | Detector Type | Result |
|---------|----------------------|-----------------|----------------------|--------------------|-----------------|-----------------------|-------------------------|-----------------|---------------|--------|
| 802.11b | Low Channel 2412MHz  |                 |                      |                    |                 |                       |                         |                 |               |        |
|         | H                    | 2390.00         | 62.39                | 30.22              | 4.85            | 23.98                 | 61.00                   | 74              | PK            | PASS   |
|         | H                    | 2390.00         | 47.34                | 30.22              | 4.85            | 23.98                 | 45.95                   | 54              | AV            | PASS   |
|         | H                    | 2400.00         | 65.20                | 30.22              | 4.85            | 23.98                 | 63.81                   | 74              | PK            | PASS   |
|         | H                    | 2400.00         | 47.80                | 30.22              | 4.85            | 23.98                 | 46.41                   | 54              | AV            | PASS   |
|         | V                    | 2390.00         | 65.28                | 30.22              | 4.85            | 23.98                 | 63.89                   | 74              | PK            | PASS   |
|         | V                    | 2390.00         | 46.92                | 30.22              | 4.85            | 23.98                 | 45.53                   | 54              | AV            | PASS   |
|         | V                    | 2400.00         | 61.77                | 30.22              | 4.85            | 23.98                 | 60.38                   | 74              | PK            | PASS   |
|         | V                    | 2400.00         | 47.85                | 30.22              | 4.85            | 23.98                 | 46.46                   | 54              | AV            | PASS   |
|         | High Channel 2462MHz |                 |                      |                    |                 |                       |                         |                 |               |        |
|         | H                    | 2483.50         | 60.40                | 30.22              | 4.85            | 23.98                 | 59.01                   | 74              | PK            | PASS   |
|         | H                    | 2485.50         | 44.58                | 30.22              | 4.85            | 23.98                 | 43.19                   | 54              | AV            | PASS   |
|         | H                    | 2483.50         | 63.66                | 30.22              | 4.85            | 23.98                 | 62.27                   | 74              | PK            | PASS   |
|         | H                    | 2485.50         | 46.01                | 30.22              | 4.85            | 23.98                 | 44.62                   | 54              | AV            | PASS   |
|         | V                    | 2483.50         | 62.07                | 30.22              | 4.85            | 23.98                 | 60.68                   | 74              | PK            | PASS   |
|         | V                    | 2485.50         | 49.23                | 30.22              | 4.85            | 23.98                 | 47.84                   | 54              | AV            | PASS   |
|         | V                    | 2483.50         | 64.22                | 30.22              | 4.85            | 23.98                 | 62.83                   | 74              | PK            | PASS   |
|         | V                    | 2485.50         | 46.23                | 30.22              | 4.85            | 23.98                 | 44.84                   | 54              | AV            | PASS   |

|         |                     |         |       |       |      |       |       |    |    |      |
|---------|---------------------|---------|-------|-------|------|-------|-------|----|----|------|
| 802.11g | Low Channel 2412MHz |         |       |       |      |       |       |    |    |      |
|         | H                   | 2390.00 | 62.10 | 30.22 | 4.85 | 23.98 | 60.71 | 74 | PK | PASS |
|         | H                   | 2390.00 | 48.38 | 30.22 | 4.85 | 23.98 | 46.99 | 54 | AV | PASS |

|  |                      |         |       |       |      |       |       |    |    |      |
|--|----------------------|---------|-------|-------|------|-------|-------|----|----|------|
|  | H                    | 2400.00 | 64.86 | 30.22 | 4.85 | 23.98 | 63.47 | 74 | PK | PASS |
|  | H                    | 2400.00 | 46.59 | 30.22 | 4.85 | 23.98 | 45.20 | 54 | AV | PASS |
|  | V                    | 2390.00 | 67.37 | 30.22 | 4.85 | 23.98 | 65.98 | 74 | PK | PASS |
|  | V                    | 2390.00 | 49.25 | 30.22 | 4.85 | 23.98 | 47.86 | 54 | AV | PASS |
|  | V                    | 2400.00 | 62.69 | 30.22 | 4.85 | 23.98 | 61.30 | 74 | PK | PASS |
|  | V                    | 2400.00 | 45.99 | 30.22 | 4.85 | 23.98 | 44.60 | 54 | AV | PASS |
|  | High Channel 2462MHz |         |       |       |      |       |       |    |    |      |
|  | H                    | 2483.50 | 60.95 | 30.22 | 4.85 | 23.98 | 59.56 | 74 | PK | PASS |
|  | H                    | 2485.50 | 46.59 | 30.22 | 4.85 | 23.98 | 45.20 | 54 | AV | PASS |
|  | H                    | 2483.50 | 60.37 | 30.22 | 4.85 | 23.98 | 58.98 | 74 | PK | PASS |
|  | H                    | 2485.50 | 43.42 | 30.22 | 4.85 | 23.98 | 42.03 | 54 | AV | PASS |
|  | V                    | 2483.50 | 59.67 | 30.22 | 4.85 | 23.98 | 58.28 | 74 | PK | PASS |
|  | V                    | 2485.50 | 43.73 | 30.22 | 4.85 | 23.98 | 42.34 | 54 | AV | PASS |
|  | V                    | 2483.50 | 63.79 | 30.22 | 4.85 | 23.98 | 62.40 | 74 | PK | PASS |
|  | V                    | 2485.50 | 43.99 | 30.22 | 4.85 | 23.98 | 42.60 | 54 | AV | PASS |

|           |                      |         |       |       |      |       |       |    |    |      |
|-----------|----------------------|---------|-------|-------|------|-------|-------|----|----|------|
| 802.11n20 | Low Channel 2412MHz  |         |       |       |      |       |       |    |    |      |
|           | H                    | 2390.00 | 61.81 | 30.22 | 4.85 | 23.98 | 60.42 | 74 | PK | PASS |
|           | H                    | 2390.00 | 48.14 | 30.22 | 4.85 | 23.98 | 46.75 | 54 | AV | PASS |
|           | H                    | 2400.00 | 62.91 | 30.22 | 4.85 | 23.98 | 61.52 | 74 | PK | PASS |
|           | H                    | 2400.00 | 46.29 | 30.22 | 4.85 | 23.98 | 44.90 | 54 | AV | PASS |
|           | V                    | 2390.00 | 67.73 | 30.22 | 4.85 | 23.98 | 66.34 | 74 | PK | PASS |
|           | V                    | 2390.00 | 47.33 | 30.22 | 4.85 | 23.98 | 45.94 | 54 | AV | PASS |
|           | V                    | 2400.00 | 60.53 | 30.22 | 4.85 | 23.98 | 59.14 | 74 | PK | PASS |
|           | V                    | 2400.00 | 46.08 | 30.22 | 4.85 | 23.98 | 44.69 | 54 | AV | PASS |
|           | High Channel 2462MHz |         |       |       |      |       |       |    |    |      |
|           | H                    | 2483.50 | 60.16 | 30.22 | 4.85 | 23.98 | 58.77 | 74 | PK | PASS |
|           | H                    | 2485.50 | 45.08 | 30.22 | 4.85 | 23.98 | 43.69 | 54 | AV | PASS |
|           | H                    | 2483.50 | 61.89 | 30.22 | 4.85 | 23.98 | 60.50 | 74 | PK | PASS |
|           | H                    | 2485.50 | 45.34 | 30.22 | 4.85 | 23.98 | 43.95 | 54 | AV | PASS |
|           | V                    | 2483.50 | 63.56 | 30.22 | 4.85 | 23.98 | 62.17 | 74 | PK | PASS |
|           | V                    | 2485.50 | 43.14 | 30.22 | 4.85 | 23.98 | 41.75 | 54 | AV | PASS |
|           | V                    | 2483.50 | 63.67 | 30.22 | 4.85 | 23.98 | 62.28 | 74 | PK | PASS |
|           | V                    | 2485.50 | 45.67 | 30.22 | 4.85 | 23.98 | 44.28 | 54 | AV | PASS |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

|           |                      |         |       |       |      |       |       |    |    |      |
|-----------|----------------------|---------|-------|-------|------|-------|-------|----|----|------|
| 802.11n40 | Low Channel 2422MHz  |         |       |       |      |       |       |    |    |      |
|           | H                    | 2390.00 | 64.51 | 30.22 | 4.85 | 23.98 | 63.12 | 74 | PK | PASS |
|           | H                    | 2390.00 | 46.21 | 30.22 | 4.85 | 23.98 | 44.82 | 54 | AV | PASS |
|           | H                    | 2400.00 | 63.53 | 30.22 | 4.85 | 23.98 | 62.14 | 74 | PK | PASS |
|           | H                    | 2400.00 | 46.25 | 30.22 | 4.85 | 23.98 | 44.86 | 54 | AV | PASS |
|           | V                    | 2390.00 | 65.17 | 30.22 | 4.85 | 23.98 | 63.78 | 74 | PK | PASS |
|           | V                    | 2390.00 | 47.08 | 30.22 | 4.85 | 23.98 | 45.69 | 54 | AV | PASS |
|           | V                    | 2400.00 | 59.72 | 30.22 | 4.85 | 23.98 | 58.33 | 74 | PK | PASS |
|           | V                    | 2400.00 | 47.01 | 30.22 | 4.85 | 23.98 | 45.62 | 54 | AV | PASS |
|           | High Channel 2452MHz |         |       |       |      |       |       |    |    |      |
|           | H                    | 2483.50 | 59.30 | 30.22 | 4.85 | 23.98 | 57.91 | 74 | PK | PASS |
|           | H                    | 2485.50 | 45.49 | 30.22 | 4.85 | 23.98 | 44.10 | 54 | AV | PASS |
|           | H                    | 2483.50 | 64.34 | 30.22 | 4.85 | 23.98 | 62.95 | 74 | PK | PASS |
|           | H                    | 2485.50 | 45.43 | 30.22 | 4.85 | 23.98 | 44.04 | 54 | AV | PASS |
|           | V                    | 2483.50 | 59.18 | 30.22 | 4.85 | 23.98 | 57.79 | 74 | PK | PASS |
|           | V                    | 2485.50 | 44.24 | 30.22 | 4.85 | 23.98 | 42.85 | 54 | AV | PASS |
|           | V                    | 2483.50 | 62.76 | 30.22 | 4.85 | 23.98 | 61.37 | 74 | PK | PASS |
|           | V                    | 2485.50 | 44.88 | 30.22 | 4.85 | 23.98 | 43.49 | 54 | AV | PASS |

**Remark:**



$$1. \text{ Emission Level} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Pre-amplifier, Margin} = \text{Emission Level} - \text{Limit}$$

## Module A-MIMO

|           |                      |         |       |       |       |       |       |    |      |      |
|-----------|----------------------|---------|-------|-------|-------|-------|-------|----|------|------|
| 802.11n20 | Low Channel 2412MHz  |         |       |       |       |       |       |    |      |      |
|           | H                    | 2390.00 | 63.84 | 30.22 | 4.85  | 23.98 | 62.45 | 74 | PK   | PASS |
|           | H                    | 2390.00 | 47.81 | 30.22 | 4.85  | 23.98 | 46.42 | 54 | AV   | PASS |
|           | H                    | 2400.00 | 63.36 | 30.22 | 4.85  | 23.98 | 61.97 | 74 | PK   | PASS |
|           | H                    | 2400.00 | 47.43 | 30.22 | 4.85  | 23.98 | 46.04 | 54 | AV   | PASS |
|           | V                    | 2390.00 | 66.61 | 30.22 | 4.85  | 23.98 | 65.22 | 74 | PK   | PASS |
|           | V                    | 2390.00 | 48.48 | 30.22 | 4.85  | 23.98 | 47.09 | 54 | AV   | PASS |
|           | V                    | 2400.00 | 60.94 | 30.22 | 4.85  | 23.98 | 59.55 | 74 | PK   | PASS |
|           | V                    | 2400.00 | 46.73 | 30.22 | 4.85  | 23.98 | 45.34 | 54 | AV   | PASS |
|           | High Channel 2462MHz |         |       |       |       |       |       |    |      |      |
|           | H                    | 2483.50 | 60.78 | 30.22 | 4.85  | 23.98 | 59.39 | 74 | PK   | PASS |
|           | H                    | 2485.50 | 47.43 | 30.22 | 4.85  | 23.98 | 46.04 | 54 | AV   | PASS |
|           | H                    | 2483.50 | 60.08 | 30.22 | 4.85  | 23.98 | 58.69 | 74 | PK   | PASS |
|           | H                    | 2485.50 | 47.43 | 30.22 | 4.85  | 23.98 | 46.04 | 54 | AV   | PASS |
|           | V                    | 2483.50 | 59.53 | 30.22 | 4.85  | 23.98 | 58.14 | 74 | PK   | PASS |
|           | V                    | 2485.50 | 43.89 | 30.22 | 4.85  | 23.98 | 42.50 | 54 | AV   | PASS |
| V         | 2483.50              | 59.62   | 30.22 | 4.85  | 23.98 | 58.23 | 74    | PK | PASS |      |
| V         | 2485.50              | 46.12   | 30.22 | 4.85  | 23.98 | 44.73 | 54    | AV | PASS |      |

**Remark:**

$$1. \text{ Emission Level} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Pre-amplifier, Margin} = \text{Emission Level} - \text{Limit}$$

|           |                      |         |       |       |       |       |       |    |      |      |
|-----------|----------------------|---------|-------|-------|-------|-------|-------|----|------|------|
| 802.11n40 | Low Channel 2422MHz  |         |       |       |       |       |       |    |      |      |
|           | H                    | 2390.00 | 64.20 | 30.22 | 4.85  | 23.98 | 62.81 | 74 | PK   | PASS |
|           | H                    | 2390.00 | 47.68 | 30.22 | 4.85  | 23.98 | 46.29 | 54 | AV   | PASS |
|           | H                    | 2400.00 | 64.53 | 30.22 | 4.85  | 23.98 | 63.14 | 74 | PK   | PASS |
|           | H                    | 2400.00 | 46.45 | 30.22 | 4.85  | 23.98 | 45.06 | 54 | AV   | PASS |
|           | V                    | 2390.00 | 64.01 | 30.22 | 4.85  | 23.98 | 62.62 | 74 | PK   | PASS |
|           | V                    | 2390.00 | 48.04 | 30.22 | 4.85  | 23.98 | 46.65 | 54 | AV   | PASS |
|           | V                    | 2400.00 | 58.77 | 30.22 | 4.85  | 23.98 | 57.38 | 74 | PK   | PASS |
|           | V                    | 2400.00 | 48.59 | 30.22 | 4.85  | 23.98 | 47.20 | 54 | AV   | PASS |
|           | High Channel 2452MHz |         |       |       |       |       |       |    |      |      |
|           | H                    | 2483.50 | 58.79 | 30.22 | 4.85  | 23.98 | 57.40 | 74 | PK   | PASS |
|           | H                    | 2485.50 | 48.58 | 30.22 | 4.85  | 23.98 | 47.19 | 54 | AV   | PASS |
|           | H                    | 2483.50 | 60.09 | 30.22 | 4.85  | 23.98 | 58.70 | 74 | PK   | PASS |
|           | H                    | 2485.50 | 48.45 | 30.22 | 4.85  | 23.98 | 47.06 | 54 | AV   | PASS |
|           | V                    | 2483.50 | 63.41 | 30.22 | 4.85  | 23.98 | 62.02 | 74 | PK   | PASS |
|           | V                    | 2485.50 | 43.68 | 30.22 | 4.85  | 23.98 | 42.29 | 54 | AV   | PASS |
| V         | 2483.50              | 60.12   | 30.22 | 4.85  | 23.98 | 58.73 | 74    | PK | PASS |      |
| V         | 2485.50              | 42.80   | 30.22 | 4.85  | 23.98 | 41.41 | 54    | AV | PASS |      |

**Remark:**

$$1. \text{ Emission Level} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Pre-amplifier, Margin} = \text{Emission Level} - \text{Limit}$$



## Module B – ANT1

|           | Polar<br>(H/V)       | Frequenc<br>y<br>(MHz) | Meter<br>Reading<br>(dBuV) | Pre-<br>amplifier<br>(dB) | Cable<br>Loss<br>(dB) | Antenna<br>Factor<br>(dB/m) | Emission<br>level<br>(dBuV/m) | Limit<br>(dBuV<br>/m) | Detec<br>tor<br>Type | Result |
|-----------|----------------------|------------------------|----------------------------|---------------------------|-----------------------|-----------------------------|-------------------------------|-----------------------|----------------------|--------|
| 802.11b   | Low Channel 2412MHz  |                        |                            |                           |                       |                             |                               |                       |                      |        |
|           | H                    | 2390.00                | 62.84                      | 30.22                     | 4.85                  | 23.98                       | 61.45                         | 74                    | PK                   | PASS   |
|           | H                    | 2390.00                | 46.73                      | 30.22                     | 4.85                  | 23.98                       | 45.34                         | 54                    | AV                   | PASS   |
|           | H                    | 2400.00                | 65.45                      | 30.22                     | 4.85                  | 23.98                       | 64.06                         | 74                    | PK                   | PASS   |
|           | H                    | 2400.00                | 48.66                      | 30.22                     | 4.85                  | 23.98                       | 47.27                         | 54                    | AV                   | PASS   |
|           | V                    | 2390.00                | 64.19                      | 30.22                     | 4.85                  | 23.98                       | 62.80                         | 74                    | PK                   | PASS   |
|           | V                    | 2390.00                | 46.51                      | 30.22                     | 4.85                  | 23.98                       | 45.12                         | 54                    | AV                   | PASS   |
|           | V                    | 2400.00                | 59.46                      | 30.22                     | 4.85                  | 23.98                       | 58.07                         | 74                    | PK                   | PASS   |
|           | V                    | 2400.00                | 46.30                      | 30.22                     | 4.85                  | 23.98                       | 44.91                         | 54                    | AV                   | PASS   |
|           | High Channel 2462MHz |                        |                            |                           |                       |                             |                               |                       |                      |        |
|           | H                    | 2483.50                | 62.67                      | 30.22                     | 4.85                  | 23.98                       | 61.28                         | 74                    | PK                   | PASS   |
|           | H                    | 2485.50                | 47.42                      | 30.22                     | 4.85                  | 23.98                       | 46.03                         | 54                    | AV                   | PASS   |
|           | H                    | 2483.50                | 60.46                      | 30.22                     | 4.85                  | 23.98                       | 59.07                         | 74                    | PK                   | PASS   |
|           | H                    | 2485.50                | 45.31                      | 30.22                     | 4.85                  | 23.98                       | 43.92                         | 54                    | AV                   | PASS   |
|           | V                    | 2483.50                | 66.25                      | 30.22                     | 4.85                  | 23.98                       | 64.86                         | 74                    | PK                   | PASS   |
|           | V                    | 2485.50                | 43.26                      | 30.22                     | 4.85                  | 23.98                       | 41.87                         | 54                    | AV                   | PASS   |
|           | V                    | 2483.50                | 60.21                      | 30.22                     | 4.85                  | 23.98                       | 58.82                         | 74                    | PK                   | PASS   |
|           | V                    | 2485.50                | 46.58                      | 30.22                     | 4.85                  | 23.98                       | 45.19                         | 54                    | AV                   | PASS   |
| 802.11g   | Low Channel 2412MHz  |                        |                            |                           |                       |                             |                               |                       |                      |        |
|           | H                    | 2390.00                | 62.59                      | 30.22                     | 4.85                  | 23.98                       | 61.20                         | 74                    | PK                   | PASS   |
|           | H                    | 2390.00                | 45.78                      | 30.22                     | 4.85                  | 23.98                       | 44.39                         | 54                    | AV                   | PASS   |
|           | H                    | 2400.00                | 64.34                      | 30.22                     | 4.85                  | 23.98                       | 62.95                         | 74                    | PK                   | PASS   |
|           | H                    | 2400.00                | 46.26                      | 30.22                     | 4.85                  | 23.98                       | 44.87                         | 54                    | AV                   | PASS   |
|           | V                    | 2390.00                | 65.15                      | 30.22                     | 4.85                  | 23.98                       | 63.76                         | 74                    | PK                   | PASS   |
|           | V                    | 2390.00                | 48.74                      | 30.22                     | 4.85                  | 23.98                       | 47.35                         | 54                    | AV                   | PASS   |
|           | V                    | 2400.00                | 59.62                      | 30.22                     | 4.85                  | 23.98                       | 58.23                         | 74                    | PK                   | PASS   |
|           | V                    | 2400.00                | 46.73                      | 30.22                     | 4.85                  | 23.98                       | 45.34                         | 54                    | AV                   | PASS   |
|           | High Channel 2462MHz |                        |                            |                           |                       |                             |                               |                       |                      |        |
|           | H                    | 2483.50                | 59.53                      | 30.22                     | 4.85                  | 23.98                       | 58.14                         | 74                    | PK                   | PASS   |
|           | H                    | 2485.50                | 47.02                      | 30.22                     | 4.85                  | 23.98                       | 45.63                         | 54                    | AV                   | PASS   |
|           | H                    | 2483.50                | 60.04                      | 30.22                     | 4.85                  | 23.98                       | 58.65                         | 74                    | PK                   | PASS   |
|           | H                    | 2485.50                | 47.38                      | 30.22                     | 4.85                  | 23.98                       | 45.99                         | 54                    | AV                   | PASS   |
|           | V                    | 2483.50                | 65.88                      | 30.22                     | 4.85                  | 23.98                       | 64.49                         | 74                    | PK                   | PASS   |
|           | V                    | 2485.50                | 45.55                      | 30.22                     | 4.85                  | 23.98                       | 44.16                         | 54                    | AV                   | PASS   |
|           | V                    | 2483.50                | 60.72                      | 30.22                     | 4.85                  | 23.98                       | 59.33                         | 74                    | PK                   | PASS   |
|           | V                    | 2485.50                | 46.74                      | 30.22                     | 4.85                  | 23.98                       | 45.35                         | 54                    | AV                   | PASS   |
| 802.11n20 | Low Channel 2412MHz  |                        |                            |                           |                       |                             |                               |                       |                      |        |
|           | H                    | 2390.00                | 65.46                      | 30.22                     | 4.85                  | 23.98                       | 64.07                         | 74                    | PK                   | PASS   |
|           | H                    | 2390.00                | 48.74                      | 30.22                     | 4.85                  | 23.98                       | 47.35                         | 54                    | AV                   | PASS   |
|           | H                    | 2400.00                | 64.46                      | 30.22                     | 4.85                  | 23.98                       | 63.07                         | 74                    | PK                   | PASS   |
|           | H                    | 2400.00                | 46.17                      | 30.22                     | 4.85                  | 23.98                       | 44.78                         | 54                    | AV                   | PASS   |
|           | V                    | 2390.00                | 64.32                      | 30.22                     | 4.85                  | 23.98                       | 62.93                         | 74                    | PK                   | PASS   |
|           | V                    | 2390.00                | 48.05                      | 30.22                     | 4.85                  | 23.98                       | 46.66                         | 54                    | AV                   | PASS   |
|           | V                    | 2400.00                | 60.48                      | 30.22                     | 4.85                  | 23.98                       | 59.09                         | 74                    | PK                   | PASS   |
|           | V                    | 2400.00                | 47.17                      | 30.22                     | 4.85                  | 23.98                       | 45.78                         | 54                    | AV                   | PASS   |
|           | High Channel 2462MHz |                        |                            |                           |                       |                             |                               |                       |                      |        |
|           | H                    | 2483.50                | 62.51                      | 30.22                     | 4.85                  | 23.98                       | 61.12                         | 74                    | PK                   | PASS   |
|           | H                    | 2485.50                | 44.71                      | 30.22                     | 4.85                  | 23.98                       | 43.32                         | 54                    | AV                   | PASS   |
|           | H                    | 2483.50                | 64.84                      | 30.22                     | 4.85                  | 23.98                       | 63.45                         | 74                    | PK                   | PASS   |
|           | H                    | 2485.50                | 46.61                      | 30.22                     | 4.85                  | 23.98                       | 45.22                         | 54                    | AV                   | PASS   |
|           | V                    | 2483.50                | 62.43                      | 30.22                     | 4.85                  | 23.98                       | 61.04                         | 74                    | PK                   | PASS   |

|  |   |         |       |       |      |       |       |    |    |      |
|--|---|---------|-------|-------|------|-------|-------|----|----|------|
|  | V | 2485.50 | 45.45 | 30.22 | 4.85 | 23.98 | 44.06 | 54 | AV | PASS |
|  | V | 2483.50 | 59.16 | 30.22 | 4.85 | 23.98 | 57.77 | 74 | PK | PASS |
|  | V | 2485.50 | 48.99 | 30.22 | 4.85 | 23.98 | 47.60 | 54 | AV | PASS |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

|           |                      |         |       |       |      |       |       |    |    |      |
|-----------|----------------------|---------|-------|-------|------|-------|-------|----|----|------|
| 802.11n40 | Low Channel 2422MHz  |         |       |       |      |       |       |    |    |      |
|           | H                    | 2390.00 | 63.46 | 30.22 | 4.85 | 23.98 | 62.07 | 74 | PK | PASS |
|           | H                    | 2390.00 | 47.31 | 30.22 | 4.85 | 23.98 | 45.92 | 54 | AV | PASS |
|           | H                    | 2400.00 | 64.62 | 30.22 | 4.85 | 23.98 | 63.23 | 74 | PK | PASS |
|           | H                    | 2400.00 | 48.34 | 30.22 | 4.85 | 23.98 | 46.95 | 54 | AV | PASS |
|           | V                    | 2390.00 | 64.54 | 30.22 | 4.85 | 23.98 | 63.15 | 74 | PK | PASS |
|           | V                    | 2390.00 | 46.79 | 30.22 | 4.85 | 23.98 | 45.40 | 54 | AV | PASS |
|           | V                    | 2400.00 | 61.19 | 30.22 | 4.85 | 23.98 | 59.80 | 74 | PK | PASS |
|           | V                    | 2400.00 | 46.66 | 30.22 | 4.85 | 23.98 | 45.27 | 54 | AV | PASS |
|           | High Channel 2452MHz |         |       |       |      |       |       |    |    |      |
|           | H                    | 2483.50 | 61.40 | 30.22 | 4.85 | 23.98 | 60.01 | 74 | PK | PASS |
|           | H                    | 2485.50 | 49.25 | 30.22 | 4.85 | 23.98 | 47.86 | 54 | AV | PASS |
|           | H                    | 2483.50 | 61.39 | 30.22 | 4.85 | 23.98 | 60.00 | 74 | PK | PASS |
|           | H                    | 2485.50 | 46.67 | 30.22 | 4.85 | 23.98 | 45.28 | 54 | AV | PASS |
|           | V                    | 2483.50 | 65.45 | 30.22 | 4.85 | 23.98 | 64.06 | 74 | PK | PASS |
|           | V                    | 2485.50 | 45.31 | 30.22 | 4.85 | 23.98 | 43.92 | 54 | AV | PASS |
|           | V                    | 2483.50 | 58.99 | 30.22 | 4.85 | 23.98 | 57.60 | 74 | PK | PASS |
|           | V                    | 2485.50 | 45.39 | 30.22 | 4.85 | 23.98 | 44.00 | 54 | AV | PASS |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

## Module B – ANT2

|         | Polar (H/V)          | Frequency (MHz) | Meter Reading (dBuV) | Pre-amplifier (dB) | Cable Loss (dB) | Antenna Factor (dB/m) | Emission level (dBuV/m) | Limit (dBuV /m) | Detector Type | Result |
|---------|----------------------|-----------------|----------------------|--------------------|-----------------|-----------------------|-------------------------|-----------------|---------------|--------|
| 802.11b | Low Channel 2412MHz  |                 |                      |                    |                 |                       |                         |                 |               |        |
|         | H                    | 2390.00         | 62.84                | 30.22              | 4.85            | 23.98                 | 61.45                   | 74              | PK            | PASS   |
|         | H                    | 2390.00         | 46.73                | 30.22              | 4.85            | 23.98                 | 45.34                   | 54              | AV            | PASS   |
|         | H                    | 2400.00         | 65.45                | 30.22              | 4.85            | 23.98                 | 64.06                   | 74              | PK            | PASS   |
|         | H                    | 2400.00         | 48.66                | 30.22              | 4.85            | 23.98                 | 47.27                   | 54              | AV            | PASS   |
|         | V                    | 2390.00         | 64.19                | 30.22              | 4.85            | 23.98                 | 62.80                   | 74              | PK            | PASS   |
|         | V                    | 2390.00         | 46.51                | 30.22              | 4.85            | 23.98                 | 45.12                   | 54              | AV            | PASS   |
|         | V                    | 2400.00         | 59.46                | 30.22              | 4.85            | 23.98                 | 58.07                   | 74              | PK            | PASS   |
|         | V                    | 2400.00         | 46.30                | 30.22              | 4.85            | 23.98                 | 44.91                   | 54              | AV            | PASS   |
|         | High Channel 2462MHz |                 |                      |                    |                 |                       |                         |                 |               |        |
|         | H                    | 2483.50         | 62.67                | 30.22              | 4.85            | 23.98                 | 61.28                   | 74              | PK            | PASS   |
|         | H                    | 2485.50         | 47.42                | 30.22              | 4.85            | 23.98                 | 46.03                   | 54              | AV            | PASS   |
|         | H                    | 2483.50         | 60.46                | 30.22              | 4.85            | 23.98                 | 59.07                   | 74              | PK            | PASS   |
|         | H                    | 2485.50         | 45.31                | 30.22              | 4.85            | 23.98                 | 43.92                   | 54              | AV            | PASS   |
|         | V                    | 2483.50         | 66.25                | 30.22              | 4.85            | 23.98                 | 64.86                   | 74              | PK            | PASS   |
|         | V                    | 2485.50         | 43.26                | 30.22              | 4.85            | 23.98                 | 41.87                   | 54              | AV            | PASS   |
|         | V                    | 2483.50         | 60.21                | 30.22              | 4.85            | 23.98                 | 58.82                   | 74              | PK            | PASS   |
|         | V                    | 2485.50         | 46.58                | 30.22              | 4.85            | 23.98                 | 45.19                   | 54              | AV            | PASS   |
| 802.11g | Low Channel 2412MHz  |                 |                      |                    |                 |                       |                         |                 |               |        |
|         | H                    | 2390.00         | 62.59                | 30.22              | 4.85            | 23.98                 | 61.20                   | 74              | PK            | PASS   |
|         | H                    | 2390.00         | 45.78                | 30.22              | 4.85            | 23.98                 | 44.39                   | 54              | AV            | PASS   |
|         | H                    | 2400.00         | 64.34                | 30.22              | 4.85            | 23.98                 | 62.95                   | 74              | PK            | PASS   |
|         | H                    | 2400.00         | 46.26                | 30.22              | 4.85            | 23.98                 | 44.87                   | 54              | AV            | PASS   |

|  |                      |         |       |       |      |       |       |    |    |      |
|--|----------------------|---------|-------|-------|------|-------|-------|----|----|------|
|  | V                    | 2390.00 | 65.15 | 30.22 | 4.85 | 23.98 | 63.76 | 74 | PK | PASS |
|  | V                    | 2390.00 | 48.74 | 30.22 | 4.85 | 23.98 | 47.35 | 54 | AV | PASS |
|  | V                    | 2400.00 | 59.62 | 30.22 | 4.85 | 23.98 | 58.23 | 74 | PK | PASS |
|  | V                    | 2400.00 | 46.73 | 30.22 | 4.85 | 23.98 | 45.34 | 54 | AV | PASS |
|  | High Channel 2462MHz |         |       |       |      |       |       |    |    |      |
|  | H                    | 2483.50 | 59.53 | 30.22 | 4.85 | 23.98 | 58.14 | 74 | PK | PASS |
|  | H                    | 2485.50 | 47.02 | 30.22 | 4.85 | 23.98 | 45.63 | 54 | AV | PASS |
|  | H                    | 2483.50 | 60.04 | 30.22 | 4.85 | 23.98 | 58.65 | 74 | PK | PASS |
|  | H                    | 2485.50 | 47.38 | 30.22 | 4.85 | 23.98 | 45.99 | 54 | AV | PASS |
|  | V                    | 2483.50 | 65.88 | 30.22 | 4.85 | 23.98 | 64.49 | 74 | PK | PASS |
|  | V                    | 2485.50 | 45.55 | 30.22 | 4.85 | 23.98 | 44.16 | 54 | AV | PASS |
|  | V                    | 2483.50 | 60.72 | 30.22 | 4.85 | 23.98 | 59.33 | 74 | PK | PASS |
|  | V                    | 2485.50 | 46.74 | 30.22 | 4.85 | 23.98 | 45.35 | 54 | AV | PASS |

|           |                      |         |       |       |      |       |       |    |    |      |
|-----------|----------------------|---------|-------|-------|------|-------|-------|----|----|------|
| 802.11n20 | Low Channel 2412MHz  |         |       |       |      |       |       |    |    |      |
|           | H                    | 2390.00 | 65.46 | 30.22 | 4.85 | 23.98 | 64.07 | 74 | PK | PASS |
|           | H                    | 2390.00 | 48.74 | 30.22 | 4.85 | 23.98 | 47.35 | 54 | AV | PASS |
|           | H                    | 2400.00 | 64.46 | 30.22 | 4.85 | 23.98 | 63.07 | 74 | PK | PASS |
|           | H                    | 2400.00 | 46.17 | 30.22 | 4.85 | 23.98 | 44.78 | 54 | AV | PASS |
|           | V                    | 2390.00 | 64.32 | 30.22 | 4.85 | 23.98 | 62.93 | 74 | PK | PASS |
|           | V                    | 2390.00 | 48.05 | 30.22 | 4.85 | 23.98 | 46.66 | 54 | AV | PASS |
|           | V                    | 2400.00 | 60.48 | 30.22 | 4.85 | 23.98 | 59.09 | 74 | PK | PASS |
|           | V                    | 2400.00 | 47.17 | 30.22 | 4.85 | 23.98 | 45.78 | 54 | AV | PASS |
|           | High Channel 2462MHz |         |       |       |      |       |       |    |    |      |
|           | H                    | 2483.50 | 62.51 | 30.22 | 4.85 | 23.98 | 61.12 | 74 | PK | PASS |
|           | H                    | 2485.50 | 44.71 | 30.22 | 4.85 | 23.98 | 43.32 | 54 | AV | PASS |
|           | H                    | 2483.50 | 64.84 | 30.22 | 4.85 | 23.98 | 63.45 | 74 | PK | PASS |
|           | H                    | 2485.50 | 46.61 | 30.22 | 4.85 | 23.98 | 45.22 | 54 | AV | PASS |
|           | V                    | 2483.50 | 62.43 | 30.22 | 4.85 | 23.98 | 61.04 | 74 | PK | PASS |
|           | V                    | 2485.50 | 45.45 | 30.22 | 4.85 | 23.98 | 44.06 | 54 | AV | PASS |
|           | V                    | 2483.50 | 59.16 | 30.22 | 4.85 | 23.98 | 57.77 | 74 | PK | PASS |
|           | V                    | 2485.50 | 48.99 | 30.22 | 4.85 | 23.98 | 47.60 | 54 | AV | PASS |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

|           |                      |         |       |       |      |       |       |    |    |      |
|-----------|----------------------|---------|-------|-------|------|-------|-------|----|----|------|
| 802.11n40 | Low Channel 2422MHz  |         |       |       |      |       |       |    |    |      |
|           | H                    | 2390.00 | 63.46 | 30.22 | 4.85 | 23.98 | 62.07 | 74 | PK | PASS |
|           | H                    | 2390.00 | 47.31 | 30.22 | 4.85 | 23.98 | 45.92 | 54 | AV | PASS |
|           | H                    | 2400.00 | 64.62 | 30.22 | 4.85 | 23.98 | 63.23 | 74 | PK | PASS |
|           | H                    | 2400.00 | 48.34 | 30.22 | 4.85 | 23.98 | 46.95 | 54 | AV | PASS |
|           | V                    | 2390.00 | 64.54 | 30.22 | 4.85 | 23.98 | 63.15 | 74 | PK | PASS |
|           | V                    | 2390.00 | 46.79 | 30.22 | 4.85 | 23.98 | 45.40 | 54 | AV | PASS |
|           | V                    | 2400.00 | 61.19 | 30.22 | 4.85 | 23.98 | 59.80 | 74 | PK | PASS |
|           | V                    | 2400.00 | 46.66 | 30.22 | 4.85 | 23.98 | 45.27 | 54 | AV | PASS |
|           | High Channel 2452MHz |         |       |       |      |       |       |    |    |      |
|           | H                    | 2483.50 | 61.40 | 30.22 | 4.85 | 23.98 | 60.01 | 74 | PK | PASS |
|           | H                    | 2485.50 | 49.25 | 30.22 | 4.85 | 23.98 | 47.86 | 54 | AV | PASS |
|           | H                    | 2483.50 | 61.39 | 30.22 | 4.85 | 23.98 | 60.00 | 74 | PK | PASS |
|           | H                    | 2485.50 | 46.67 | 30.22 | 4.85 | 23.98 | 45.28 | 54 | AV | PASS |
|           | V                    | 2483.50 | 65.45 | 30.22 | 4.85 | 23.98 | 64.06 | 74 | PK | PASS |
|           | V                    | 2485.50 | 45.31 | 30.22 | 4.85 | 23.98 | 43.92 | 54 | AV | PASS |
|           | V                    | 2483.50 | 58.99 | 30.22 | 4.85 | 23.98 | 57.60 | 74 | PK | PASS |
|           | V                    | 2485.50 | 45.39 | 30.22 | 4.85 | 23.98 | 44.00 | 54 | AV | PASS |

**Remark:**

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

## Module A-MIMO

|                                                                                                                 |                      |         |       |       |       |       |       |    |      |      |
|-----------------------------------------------------------------------------------------------------------------|----------------------|---------|-------|-------|-------|-------|-------|----|------|------|
| 802.11n20                                                                                                       | Low Channel 2412MHz  |         |       |       |       |       |       |    |      |      |
|                                                                                                                 | H                    | 2390.00 | 63.63 | 30.22 | 4.85  | 23.98 | 62.24 | 74 | PK   | PASS |
|                                                                                                                 | H                    | 2390.00 | 46.04 | 30.22 | 4.85  | 23.98 | 44.65 | 54 | AV   | PASS |
|                                                                                                                 | H                    | 2400.00 | 63.27 | 30.22 | 4.85  | 23.98 | 61.88 | 74 | PK   | PASS |
|                                                                                                                 | H                    | 2400.00 | 47.86 | 30.22 | 4.85  | 23.98 | 46.47 | 54 | AV   | PASS |
|                                                                                                                 | V                    | 2390.00 | 65.89 | 30.22 | 4.85  | 23.98 | 64.50 | 74 | PK   | PASS |
|                                                                                                                 | V                    | 2390.00 | 46.49 | 30.22 | 4.85  | 23.98 | 45.10 | 54 | AV   | PASS |
|                                                                                                                 | V                    | 2400.00 | 61.22 | 30.22 | 4.85  | 23.98 | 59.83 | 74 | PK   | PASS |
|                                                                                                                 | V                    | 2400.00 | 48.03 | 30.22 | 4.85  | 23.98 | 46.64 | 54 | AV   | PASS |
|                                                                                                                 | High Channel 2462MHz |         |       |       |       |       |       |    |      |      |
|                                                                                                                 | H                    | 2483.50 | 62.20 | 30.22 | 4.85  | 23.98 | 60.81 | 74 | PK   | PASS |
|                                                                                                                 | H                    | 2485.50 | 47.43 | 30.22 | 4.85  | 23.98 | 46.04 | 54 | AV   | PASS |
|                                                                                                                 | H                    | 2483.50 | 63.55 | 30.22 | 4.85  | 23.98 | 62.16 | 74 | PK   | PASS |
|                                                                                                                 | H                    | 2485.50 | 49.62 | 30.22 | 4.85  | 23.98 | 48.23 | 54 | AV   | PASS |
|                                                                                                                 | V                    | 2483.50 | 63.88 | 30.22 | 4.85  | 23.98 | 62.49 | 74 | PK   | PASS |
|                                                                                                                 | V                    | 2485.50 | 43.51 | 30.22 | 4.85  | 23.98 | 42.12 | 54 | AV   | PASS |
|                                                                                                                 | V                    | 2483.50 | 63.94 | 30.22 | 4.85  | 23.98 | 62.55 | 74 | PK   | PASS |
| V                                                                                                               | 2485.50              | 45.45   | 30.22 | 4.85  | 23.98 | 44.06 | 54    | AV | PASS |      |
| Remark:                                                                                                         |                      |         |       |       |       |       |       |    |      |      |
| 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit |                      |         |       |       |       |       |       |    |      |      |

|                                                                                                                 |                      |         |       |       |       |       |       |    |      |      |
|-----------------------------------------------------------------------------------------------------------------|----------------------|---------|-------|-------|-------|-------|-------|----|------|------|
| 802.11n40                                                                                                       | Low Channel 2422MHz  |         |       |       |       |       |       |    |      |      |
|                                                                                                                 | H                    | 2390.00 | 65.13 | 30.22 | 4.85  | 23.98 | 63.74 | 74 | PK   | PASS |
|                                                                                                                 | H                    | 2390.00 | 46.09 | 30.22 | 4.85  | 23.98 | 44.70 | 54 | AV   | PASS |
|                                                                                                                 | H                    | 2400.00 | 65.46 | 30.22 | 4.85  | 23.98 | 64.07 | 74 | PK   | PASS |
|                                                                                                                 | H                    | 2400.00 | 46.00 | 30.22 | 4.85  | 23.98 | 44.61 | 54 | AV   | PASS |
|                                                                                                                 | V                    | 2390.00 | 67.66 | 30.22 | 4.85  | 23.98 | 66.27 | 74 | PK   | PASS |
|                                                                                                                 | V                    | 2390.00 | 45.94 | 30.22 | 4.85  | 23.98 | 44.55 | 54 | AV   | PASS |
|                                                                                                                 | V                    | 2400.00 | 62.31 | 30.22 | 4.85  | 23.98 | 60.92 | 74 | PK   | PASS |
|                                                                                                                 | V                    | 2400.00 | 46.04 | 30.22 | 4.85  | 23.98 | 44.65 | 54 | AV   | PASS |
|                                                                                                                 | High Channel 2452MHz |         |       |       |       |       |       |    |      |      |
|                                                                                                                 | H                    | 2483.50 | 59.93 | 30.22 | 4.85  | 23.98 | 58.54 | 74 | PK   | PASS |
|                                                                                                                 | H                    | 2485.50 | 44.58 | 30.22 | 4.85  | 23.98 | 43.19 | 54 | AV   | PASS |
|                                                                                                                 | H                    | 2483.50 | 64.12 | 30.22 | 4.85  | 23.98 | 62.73 | 74 | PK   | PASS |
|                                                                                                                 | H                    | 2485.50 | 47.16 | 30.22 | 4.85  | 23.98 | 45.77 | 54 | AV   | PASS |
|                                                                                                                 | V                    | 2483.50 | 66.39 | 30.22 | 4.85  | 23.98 | 65.00 | 74 | PK   | PASS |
|                                                                                                                 | V                    | 2485.50 | 46.29 | 30.22 | 4.85  | 23.98 | 44.90 | 54 | AV   | PASS |
| V                                                                                                               | 2483.50              | 64.55   | 30.22 | 4.85  | 23.98 | 63.16 | 74    | PK | PASS |      |
| V                                                                                                               | 2485.50              | 45.26   | 30.22 | 4.85  | 23.98 | 43.87 | 54    | AV | PASS |      |
| Remark:                                                                                                         |                      |         |       |       |       |       |       |    |      |      |
| 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit |                      |         |       |       |       |       |       |    |      |      |

**6.POWER SPECTRAL DENSITY TEST**

|                   |                                           |
|-------------------|-------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (e)           |
| Test Method:      | KDB558074 D0115.247 Meas Guidance v 05r02 |

**6.1 APPLIED PROCEDURES / LIMIT**

| FCC Part15 (15.247) , Subpart C |                        |           |                       |        |
|---------------------------------|------------------------|-----------|-----------------------|--------|
| Section                         | Test Item              | Limit     | Frequency Range (MHz) | Result |
| 15.247                          | Power Spectral Density | 8dBm/3kHz | 2400-2483.5           | PASS   |

**6.2 TEST PROCEDURE**

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to:  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .
4. Set the VBW  $\geq 3 \times \text{RBW}$ .
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

**6.3 DEVIATION FROM STANDARD**

No deviation.

**6.4 TEST SETUP****6.5 EUT OPERATION CONDITIONS**

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

## 6.6 TEST RESULT

|               |        |                     |        |
|---------------|--------|---------------------|--------|
| Temperature : | 26°C   | Relative Humidity : | 54%    |
| Pressure :    | 101kPa | Test Voltage :      | AC120V |

| Module A      |              |                                      |         |        |              |        |
|---------------|--------------|--------------------------------------|---------|--------|--------------|--------|
| Test mode     | Test channel | Power Spectral Density<br>(dBm/3kHz) |         |        | Limit:       | Result |
|               |              | ANT1                                 | ANT2    | SUM    |              |        |
| 802.11b       | Lowest       | -6.607                               | -6.546  | /      | 8dBm/3kHz    | PASS   |
|               | Middle       | -8.341                               | -4.471  | /      |              |        |
|               | Highest      | -5.317                               | -8.942  | /      |              |        |
| 802.11g       | Lowest       | -11.203                              | -9.679  | /      | 8dBm/3kHz    | PASS   |
|               | Middle       | -5.105                               | -9.419  | /      |              |        |
|               | Highest      | -10.025                              | -9.449  | /      |              |        |
| 802.11n(HT20) | Lowest       | -11.308                              | -9.518  | -7.31  | 5.99dBm/3kHz | PASS   |
|               | Middle       | -10.32                               | -14.519 | -8.92  |              |        |
|               | Highest      | -11.321                              | -10.181 | -7.70  |              |        |
| 802.11n(HT40) | Lowest       | -15.817                              | -16.39  | -13.08 | 5.99dBm/3kHz | PASS   |
|               | Middle       | -15.431                              | -15.00  | -12.20 |              |        |
|               | Highest      | -14.698                              | -14.866 | -11.77 |              |        |

Remark:

1. Measured peak power spectrum density at difference data rate for each mode and recorded worst case for each mode.
2. Test results including cable loss;
3. Please refer to following plots;
4. The PSD limits of IEEE 802.11n HT20 and IEEE 802.11 n HT40 for MIMO with CDD technology should be reduce  $10 \cdot \log(2) = 3.010 \text{ dB}$  according to KDB662911D01;
5. For MIMO with CCD technology device, The Directional Gain= Gain of individual transmit antennas (dBi) + Array gain;  
 Array gain =  $10 \log (N_{\text{ant}})$ , where  $N_{\text{ant}}$  is the number of transmit antennas.





Middle channel



Middle channel



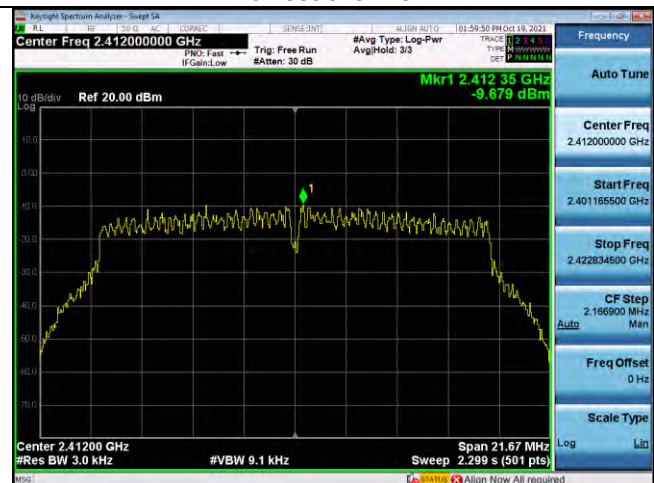
Highest channel



Highest channel

ANT1  
802.11g  
Lowest channelANT2  
802.11g

Lowest channel

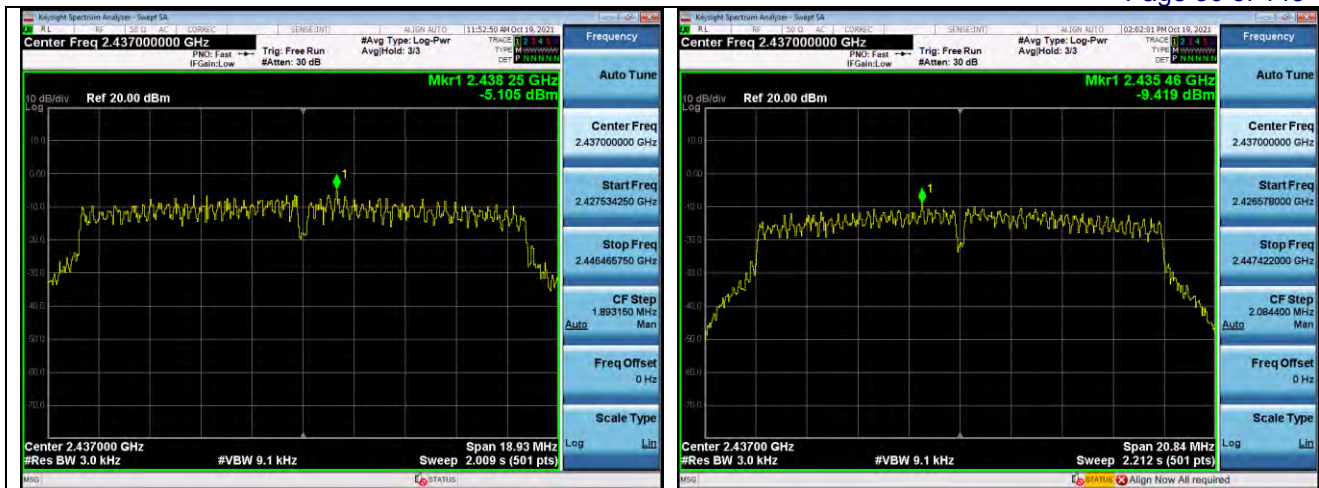


Middle channel



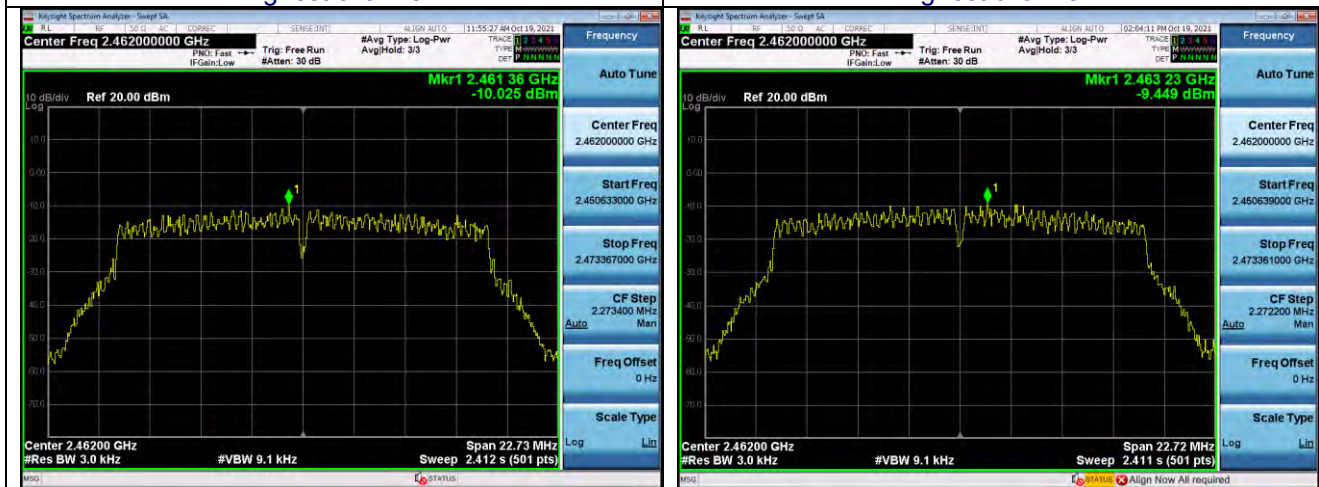
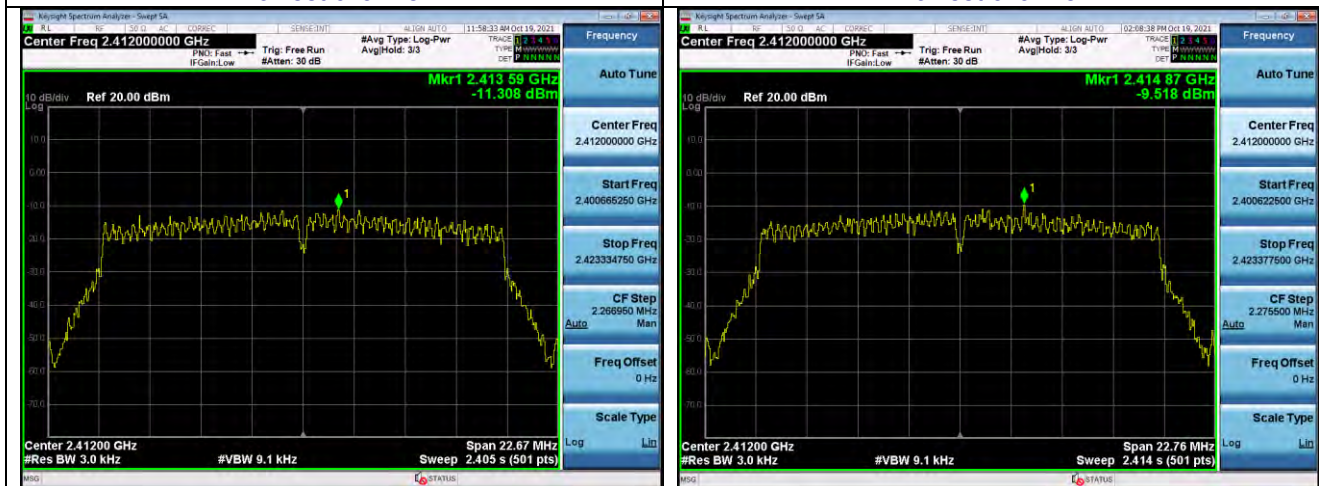
Middle channel





Highest channel

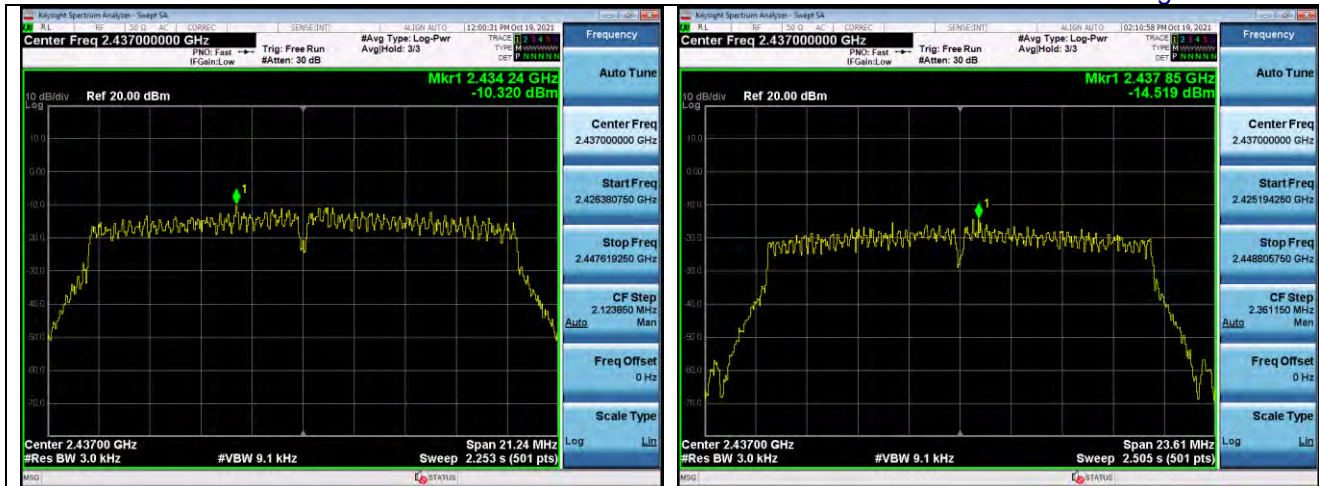
Highest channel

ANT1  
802.11n(HT20)  
Lowest channelANT2  
802.11n(HT20)  
Lowest channel

Middle channel

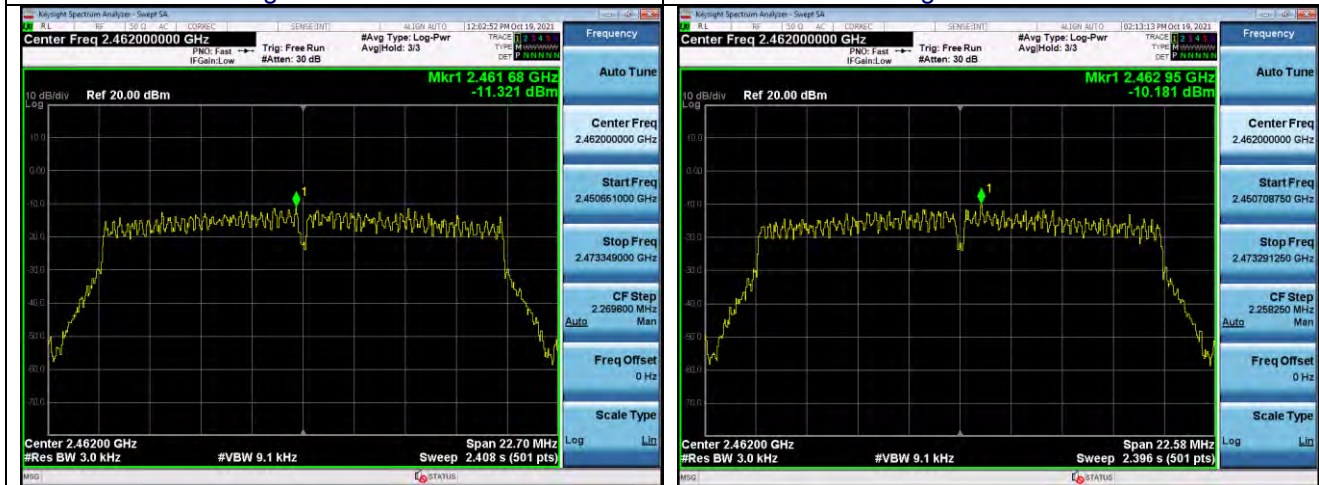
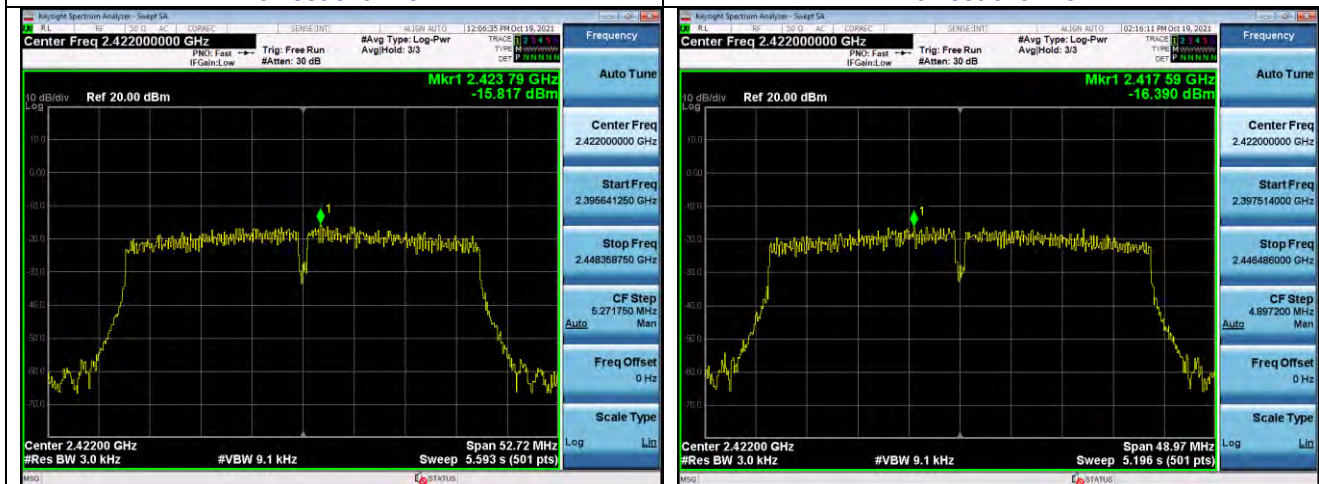
Middle channel





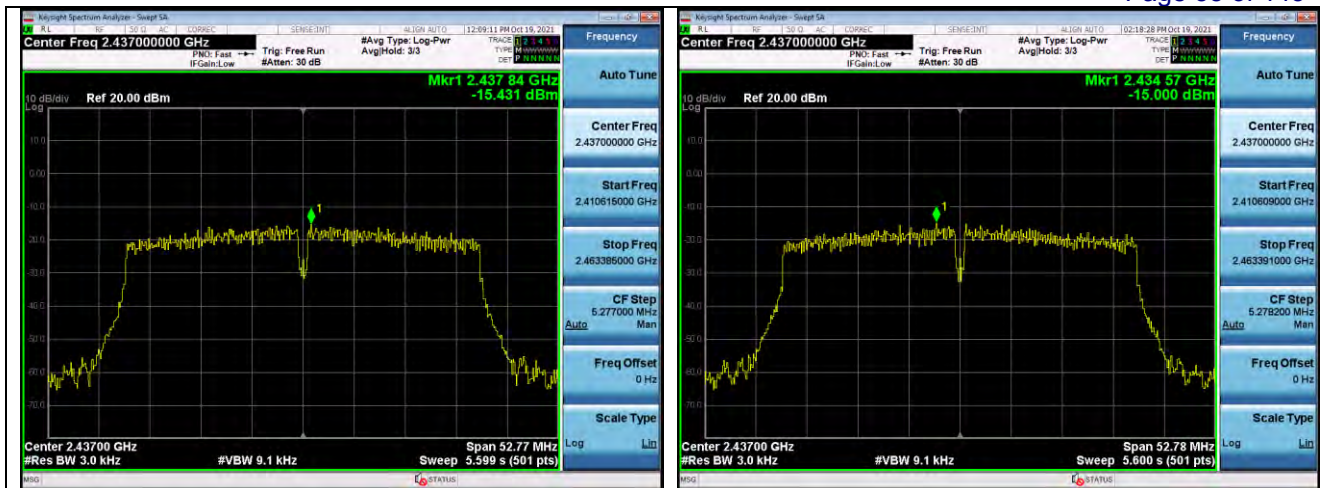
Highest channel

Highest channel

ANT1  
802.11n(HT40)  
Lowest channelANT2  
802.11n(HT40)  
Lowest channel

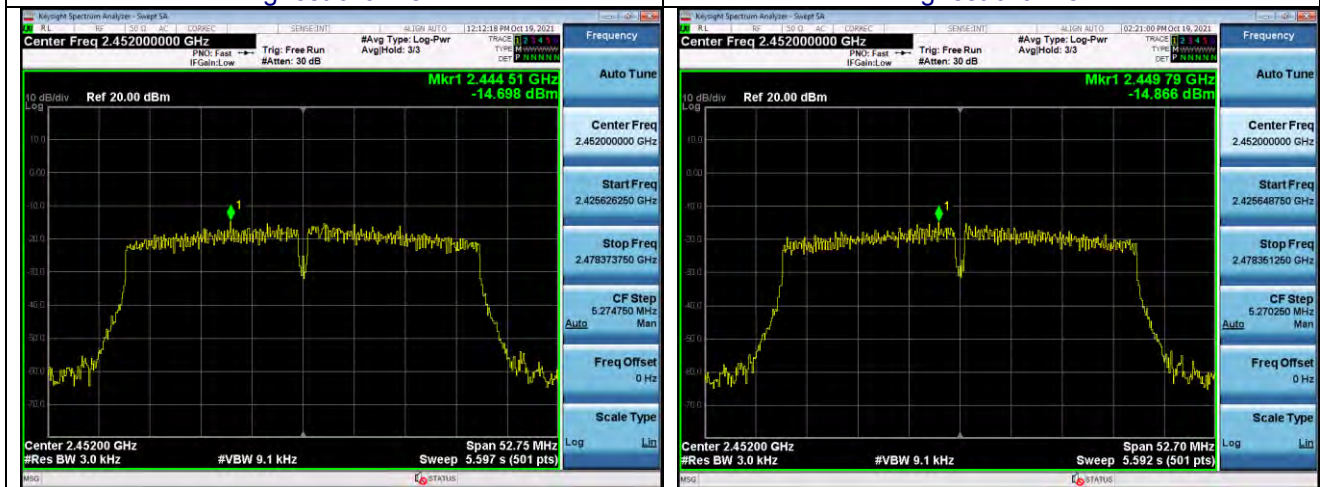
Middle channel

Middle channel



Highest channel

Highest channel

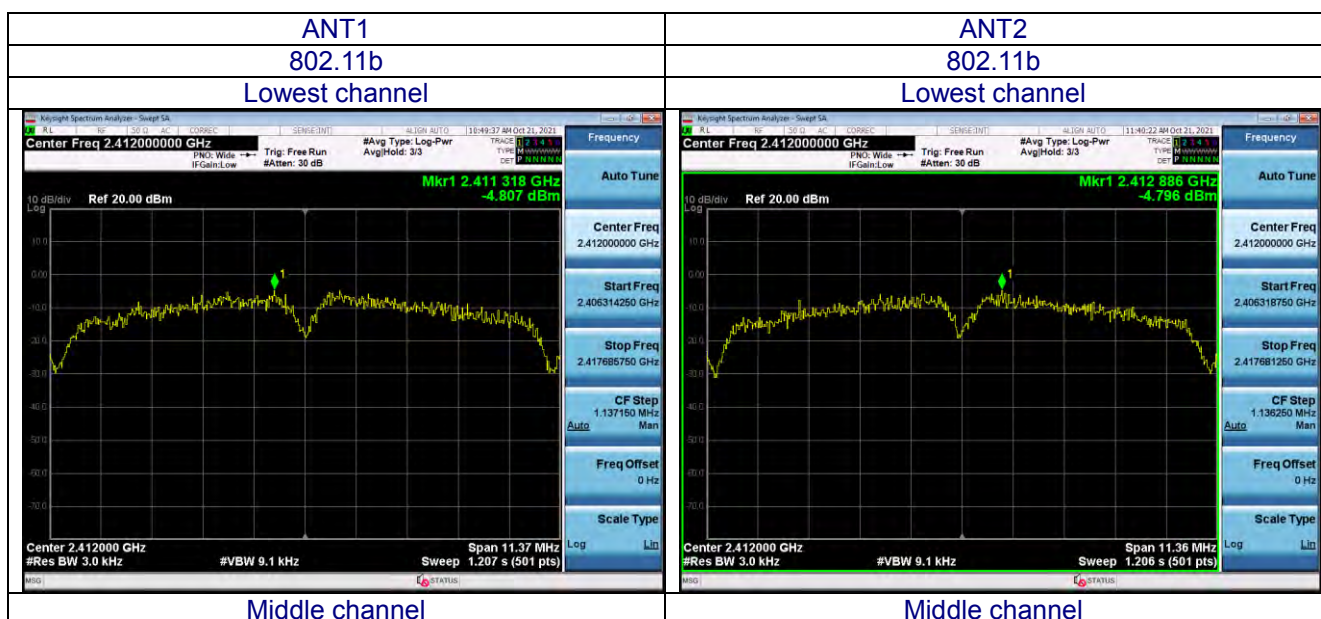


## Module B

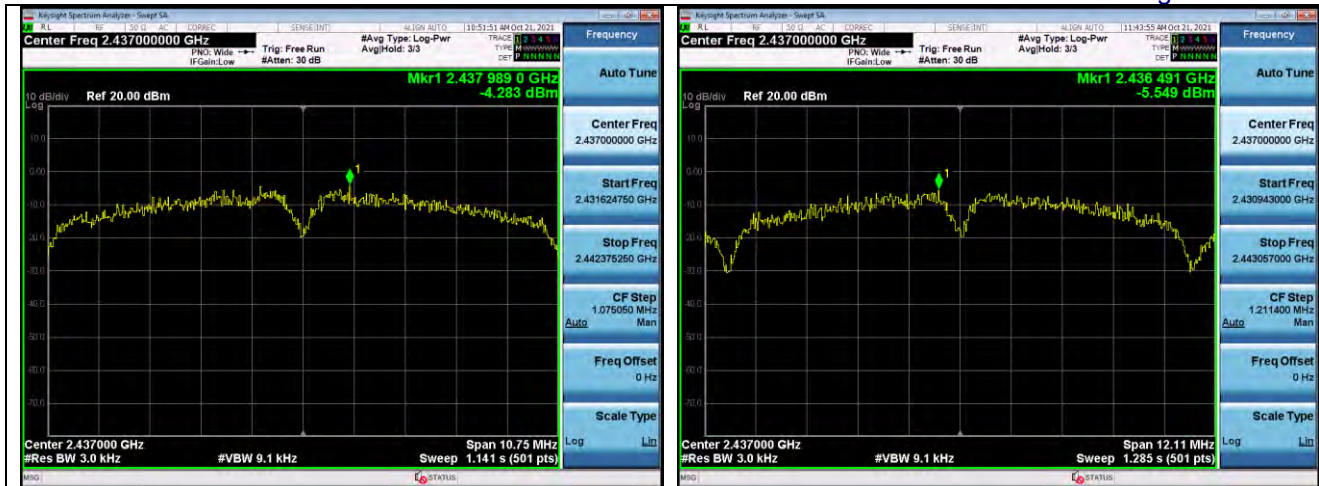
| Test mode     | Test channel | Power Spectral Density<br>(dBm/3kHz) |         |        | Limit:       | Result |
|---------------|--------------|--------------------------------------|---------|--------|--------------|--------|
|               |              | ANT1                                 | ANT2    | SUM    |              |        |
| 802.11b       | Lowest       | -4.807                               | -4.796  | /      | 8dBm/3kHz    | PASS   |
|               | Middle       | -4.283                               | -5.549  | /      |              |        |
|               | Highest      | -4.289                               | -5.26   | /      |              |        |
| 802.11g       | Lowest       | -10.102                              | -8.088  | /      | 8dBm/3kHz    | PASS   |
|               | Middle       | -8.387                               | -8.981  | /      |              |        |
|               | Highest      | -9.032                               | -9.397  | /      |              |        |
| 802.11n(HT20) | Lowest       | -9.408                               | -10.229 | -6.79  | 5.99dBm/3kHz | PASS   |
|               | Middle       | -9.951                               | -9.764  | -6.85  |              |        |
|               | Highest      | -10.026                              | -9.584  | -6.79  |              |        |
| 802.11n(HT40) | Lowest       | -13.891                              | -13.668 | -10.77 | 5.99dBm/3kHz | PASS   |
|               | Middle       | -12.712                              | -12.065 | -9.37  |              |        |
|               | Highest      | -12.518                              | -13.17  | -9.82  |              |        |

## Remark:

1. Measured peak power spectrum density at difference data rate for each mode and recorded worst case for each mode.
2. Test results including cable loss;
3. Please refer to following plots;
4. The PSD limits of IEEE 802.11n HT20 and IEEE 802.11 n HT40 for MIMO with CDD technology should be reduce  $10 \cdot \log(2) = 3.010 \text{ dB}$  according to KDB662911D01;
5. For MIMO with CCD technology device, The Directional Gain= Gain of individual transmit antennas (dBi) + Array gain;  
 $\text{Array gain} = 10 \log (N_{\text{ant}})$ , where  $N_{\text{ant}}$  is the number of transmit antennas.

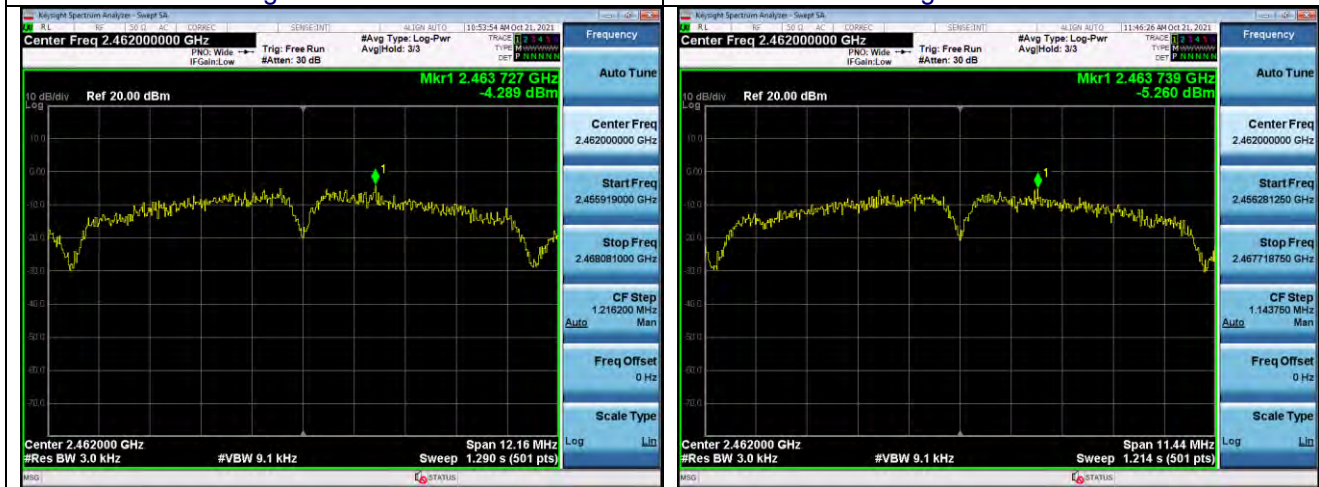
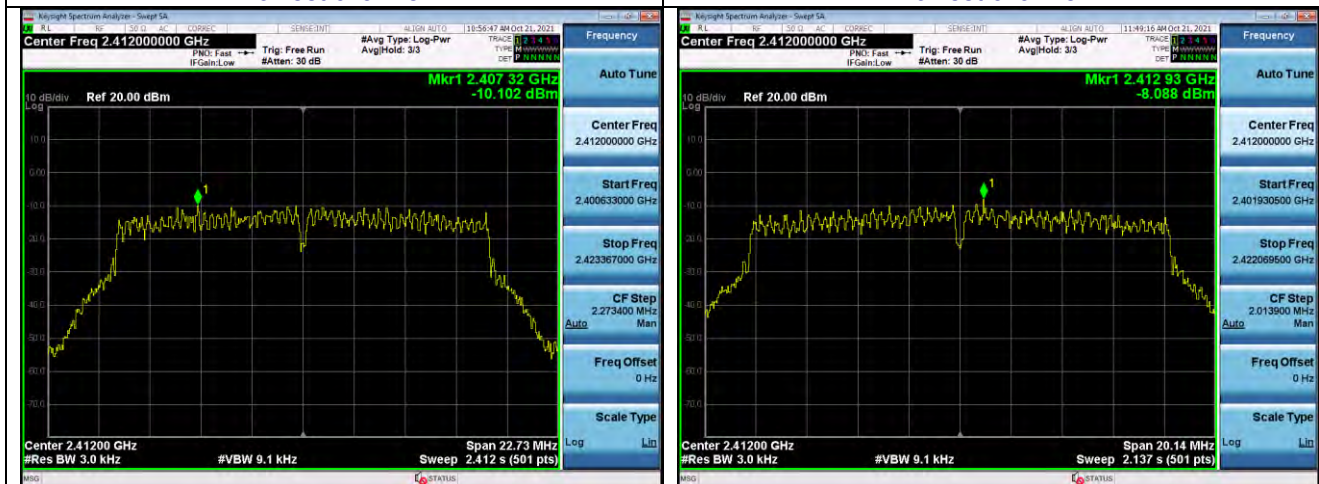






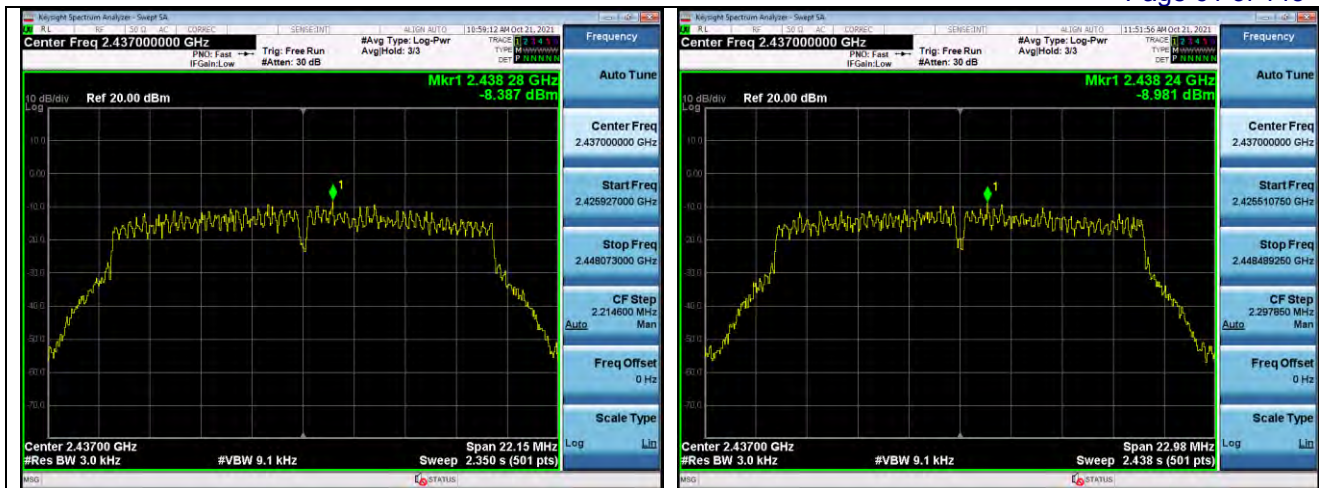
Highest channel

Highest channel

ANT1  
802.11g  
Lowest channelANT2  
802.11g  
Lowest channel

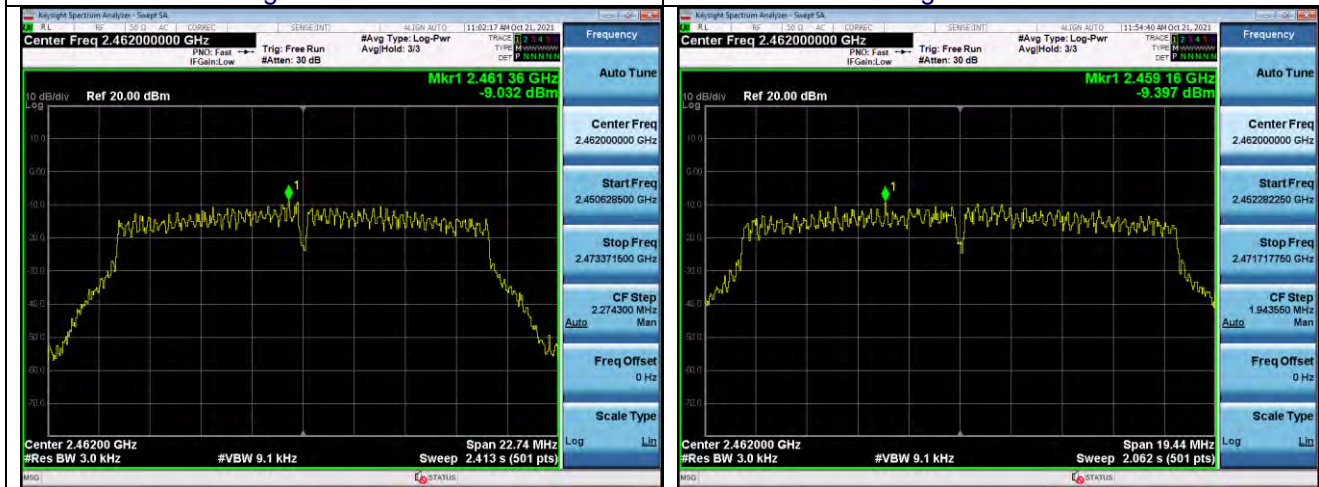
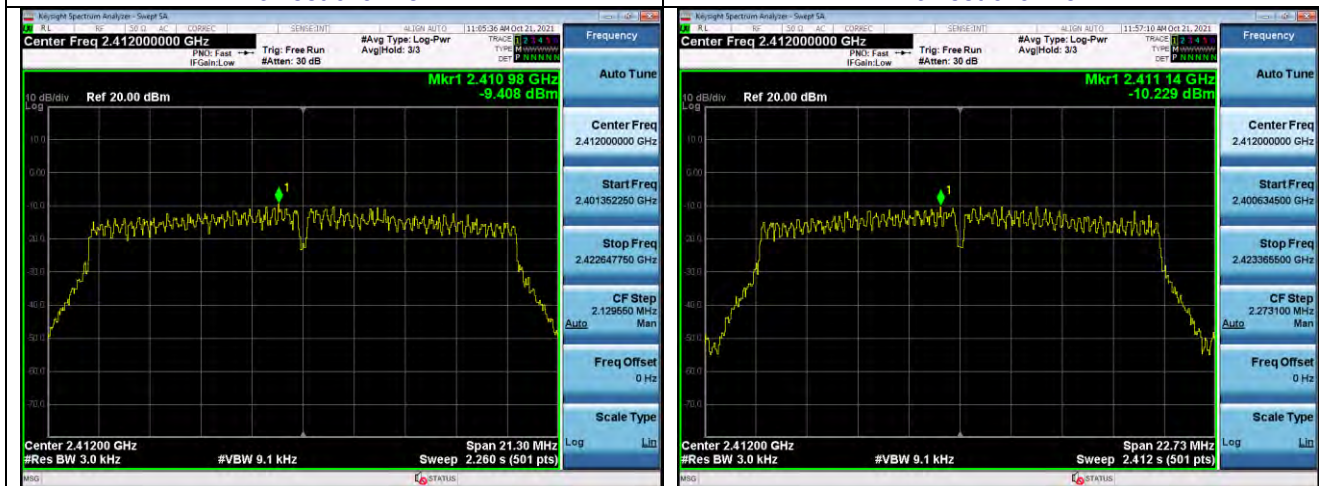
Middle channel

Middle channel



Highest channel

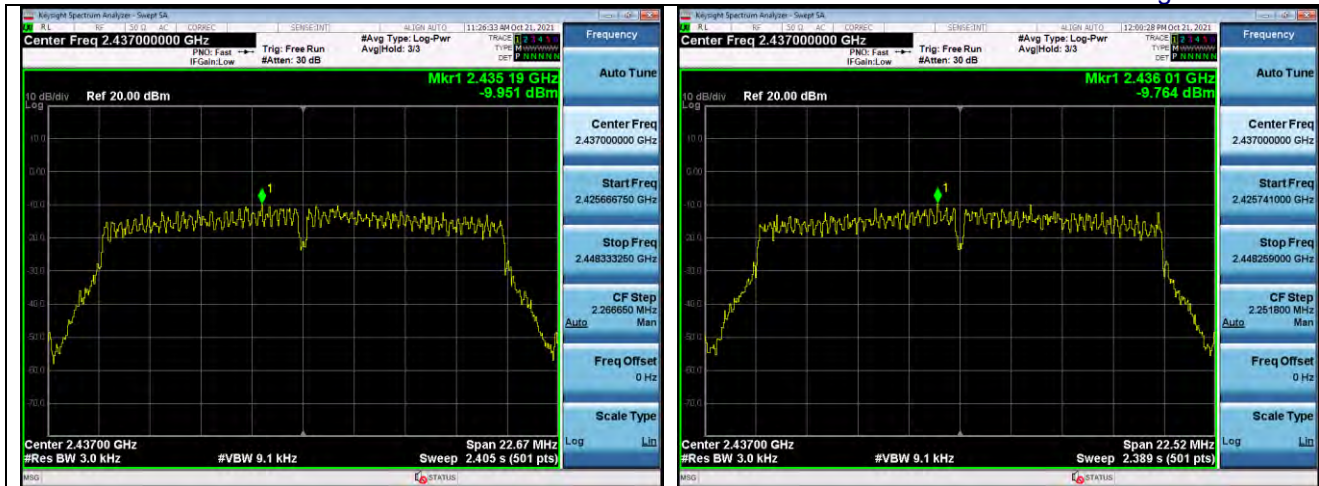
Highest channel

ANT1  
802.11n(HT20)  
Lowest channelANT2  
802.11n(HT20)  
Lowest channel

Middle channel

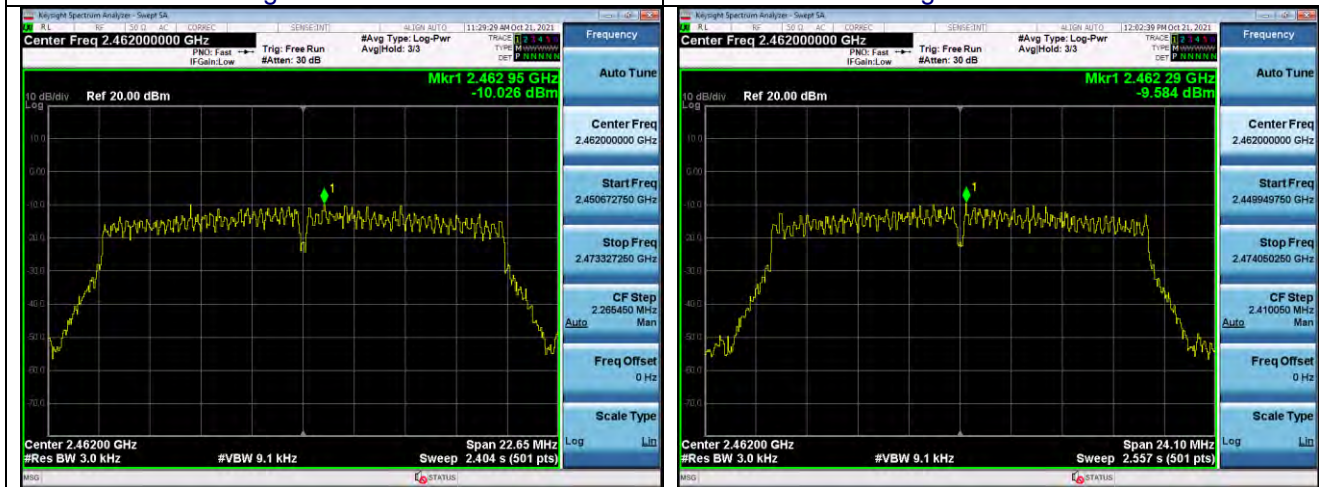
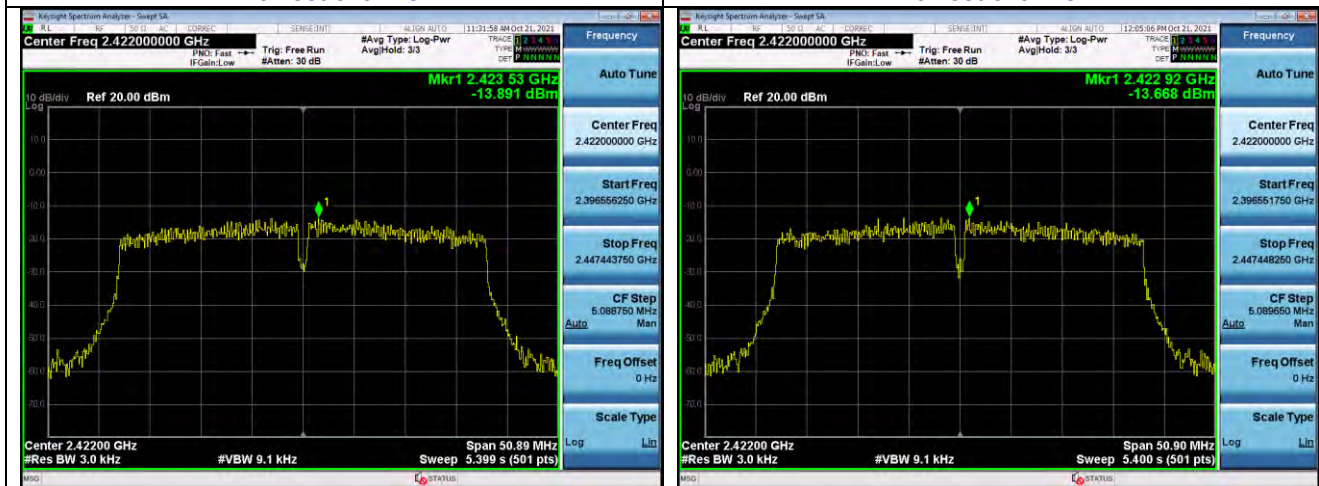
Middle channel





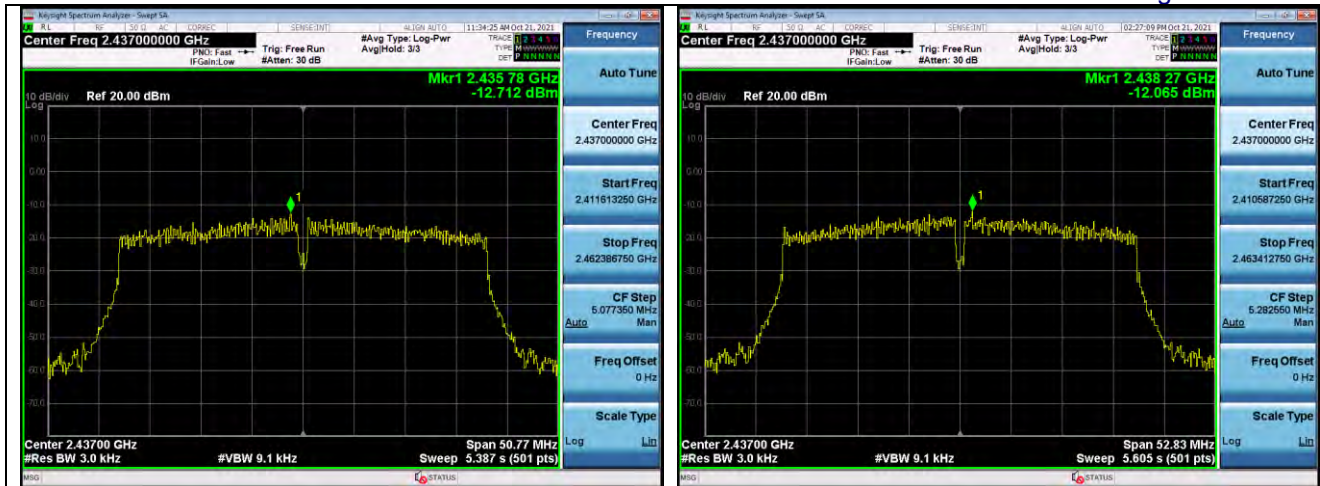
Highest channel

Highest channel

ANT1  
802.11n(HT40)  
Lowest channelANT2  
802.11n(HT40)  
Lowest channel

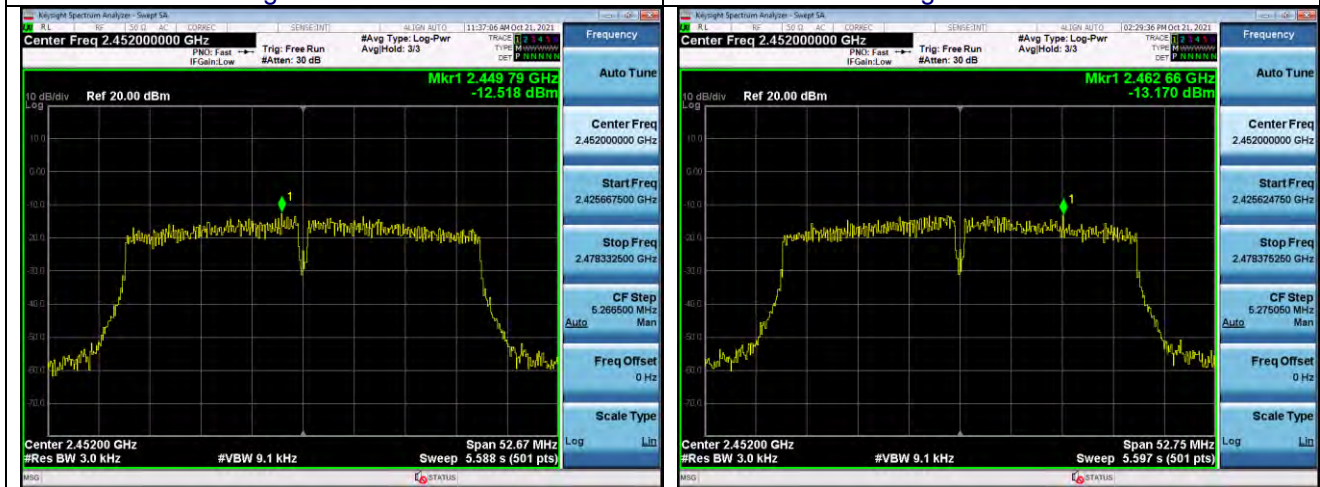
Middle channel

Middle channel



Highest channel

Highest channel





## 7. CHANNEL BANDWIDTH

|                   |                                          |
|-------------------|------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (a)(2)       |
| Test Method:      | KDB558074 D0115.247 Meas Guidance v05r02 |

### 7.1 APPLIED PROCEDURES / LIMIT

| FCC Part15 (15.247) , Subpart C |           |                                         |                       |        |
|---------------------------------|-----------|-----------------------------------------|-----------------------|--------|
| Section                         | Test Item | Limit                                   | Frequency Range (MHz) | Result |
| 15.247(a)(2)                    | Bandwidth | $\geq 500\text{KHz}$<br>(6dB bandwidth) | 2400-2483.5           | PASS   |

### 7.2 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW)  $\geq 3 \times \text{RBW}$ .
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### 7.3 DEVIATION FROM STANDARD

No deviation.

### 7.4 TEST SETUP



### 7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

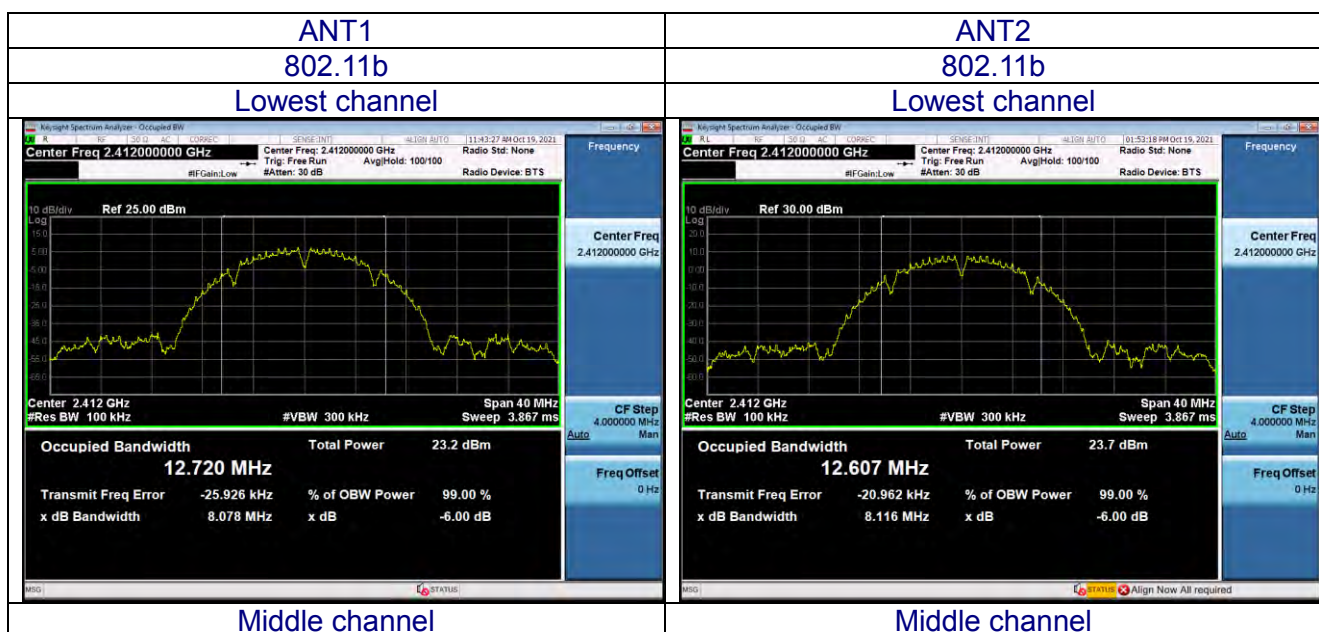
## 7.6 TEST RESULT

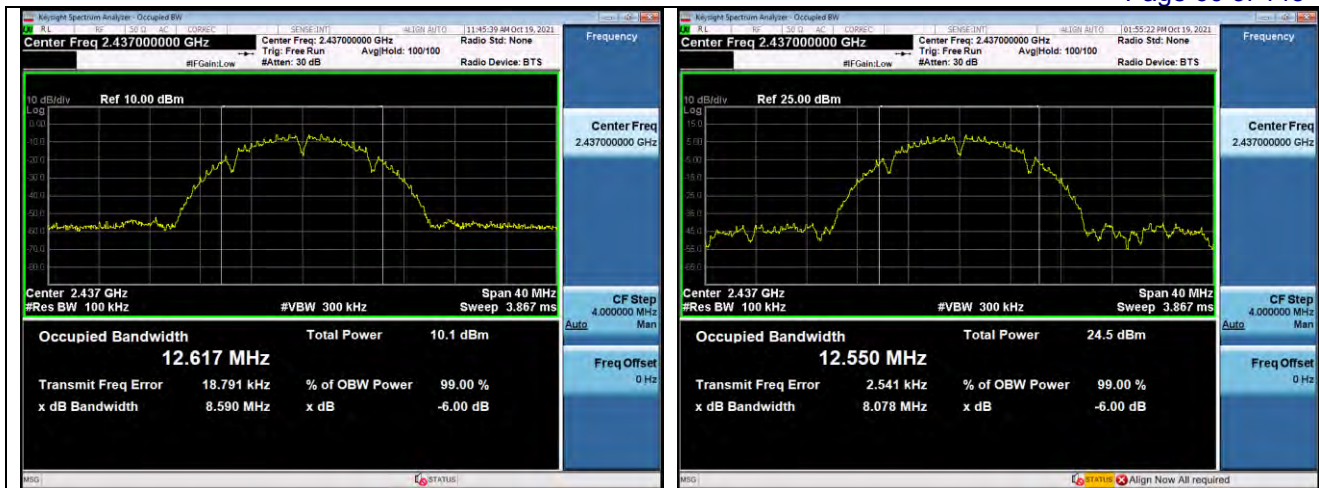
|               |         |                     |       |
|---------------|---------|---------------------|-------|
| Temperature : | 26°C    | Relative Humidity : | 54%   |
| Pressure :    | 101kPa  | Test Voltage :      | AC120 |
| Test Mode :   | TX Mode |                     |       |

## Module A

| Test mode     | Test channel | 6dB Emission Bandwidth (MHz) |       | Limit:  | Test Result: |
|---------------|--------------|------------------------------|-------|---------|--------------|
|               |              | ANT1                         | ANT2  |         |              |
| 802.11b       | Lowest       | 8.078                        | 8.116 | >500kHz | PASS         |
|               | Middle       | 8.59                         | 8.078 |         |              |
|               | Highest      | 7.641                        | 7.612 |         |              |
| 802.11g       | Lowest       | 14.42                        | 14.45 | >500kHz | PASS         |
|               | Middle       | 12.62                        | 13.90 |         |              |
|               | Highest      | 15.16                        | 15.15 |         |              |
| 802.11n(HT20) | Lowest       | 15.11                        | 15.17 | >500kHz | PASS         |
|               | Middle       | 14.16                        | 15.74 |         |              |
|               | Highest      | 15.13                        | 15.06 |         |              |
| 802.11n(HT40) | Lowest       | 35.15                        | 32.65 | >500kHz | PASS         |
|               | Middle       | 35.18                        | 35.19 |         |              |
|               | Highest      | 35.17                        | 35.14 |         |              |

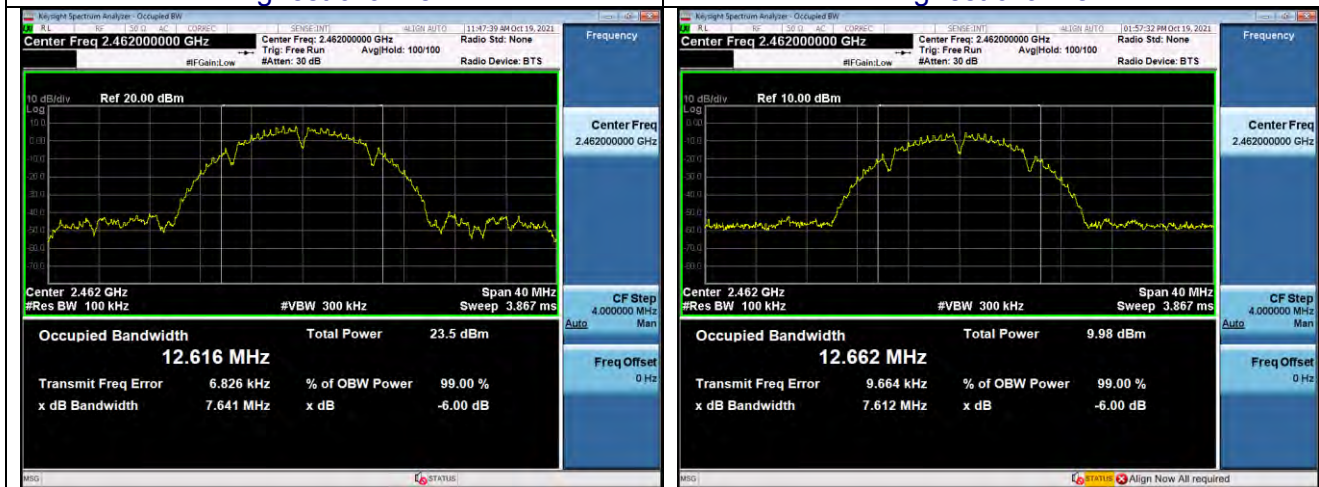
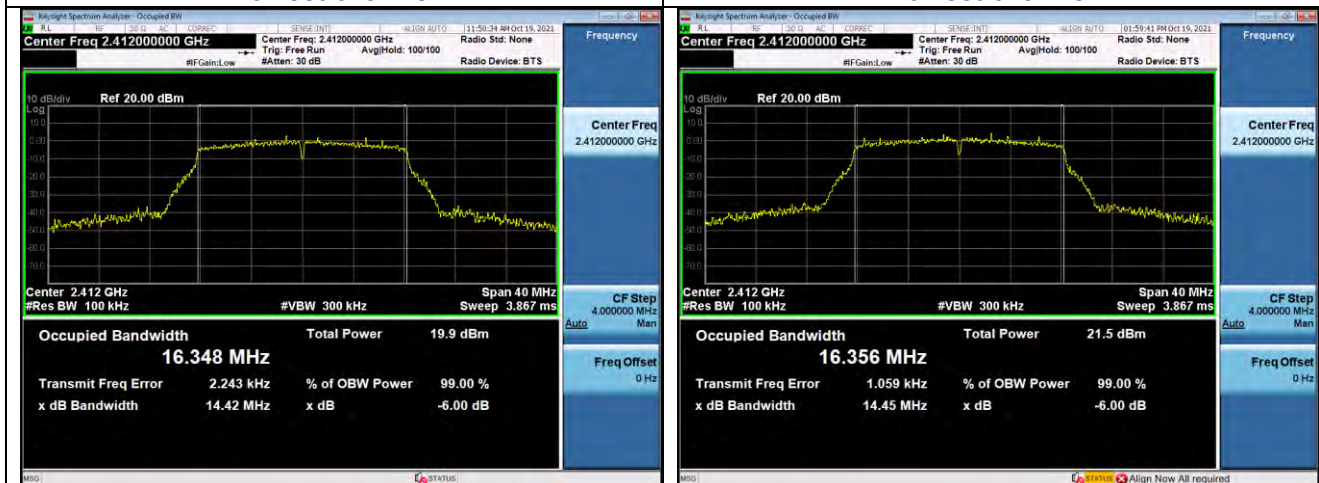
Test plot as follows:





Highest channel

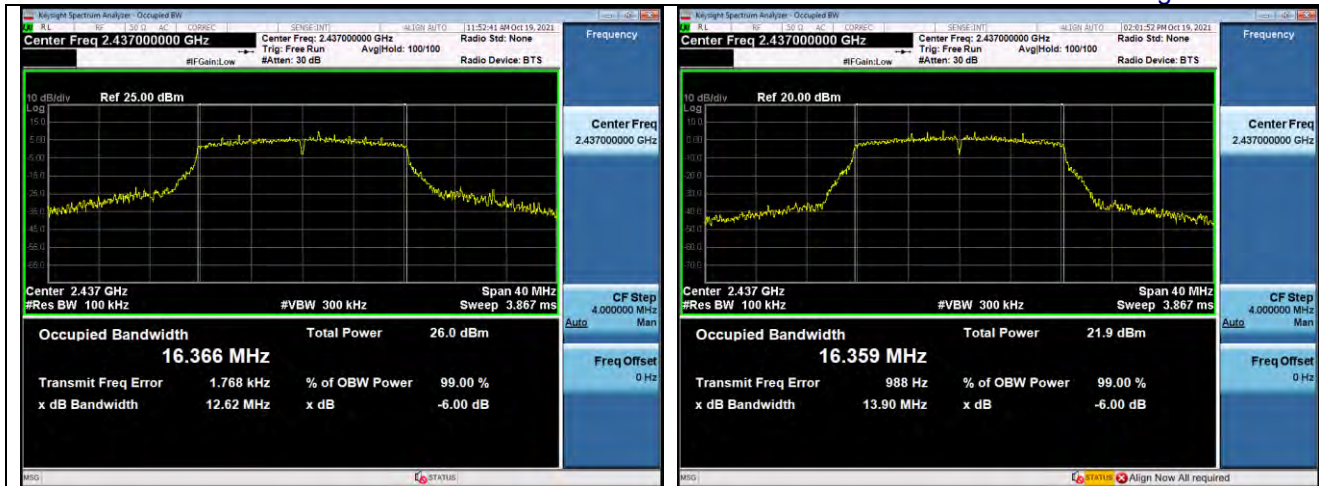
Highest channel

ANT1  
802.11g  
Lowest channelANT2  
802.11g  
Lowest channel

Middle channel

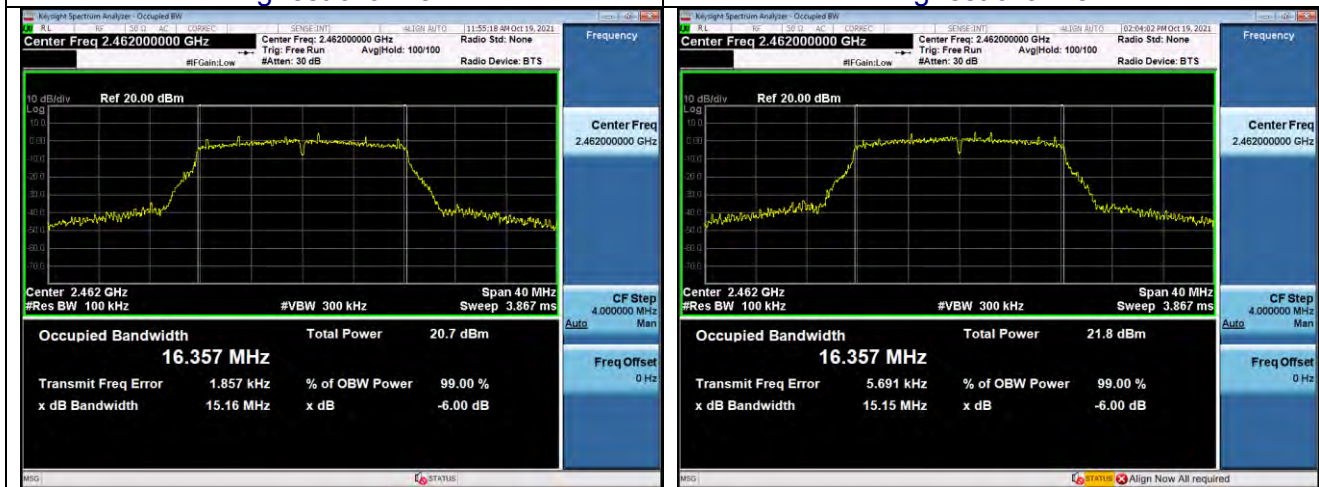
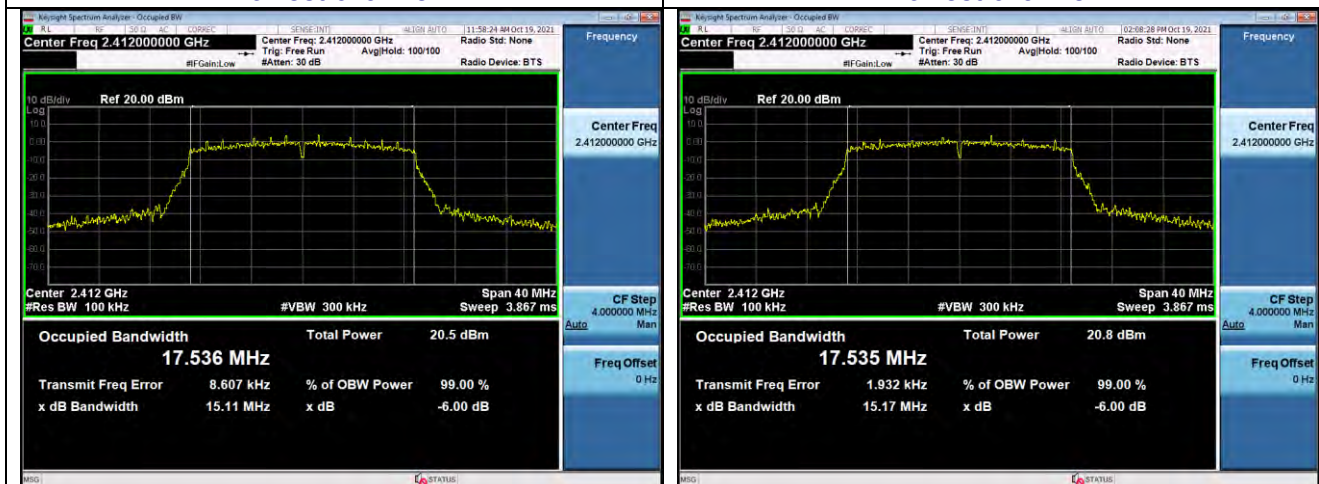
Middle channel





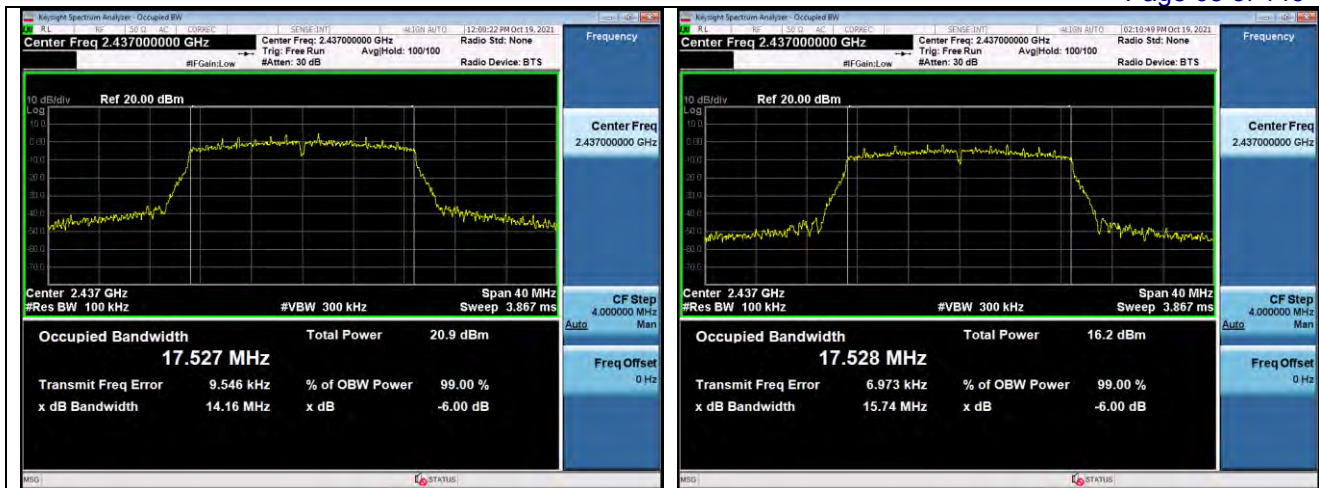
Highest channel

Highest channel

ANT1  
802.11n(HT20)  
Lowest channelANT2  
802.11n(HT20)  
Lowest channel

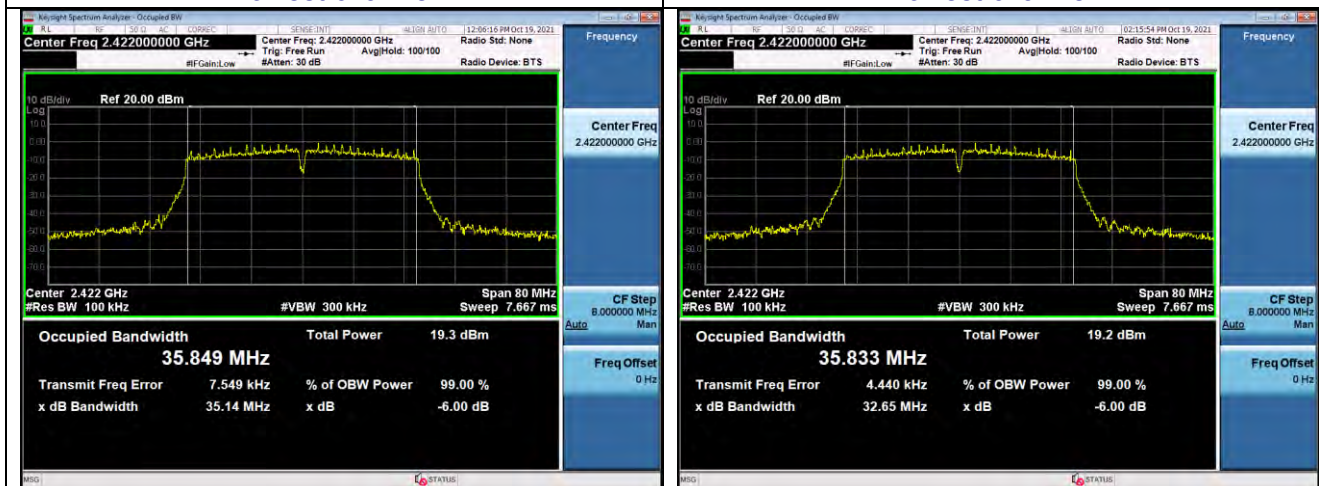
Middle channel

Middle channel



Highest channel

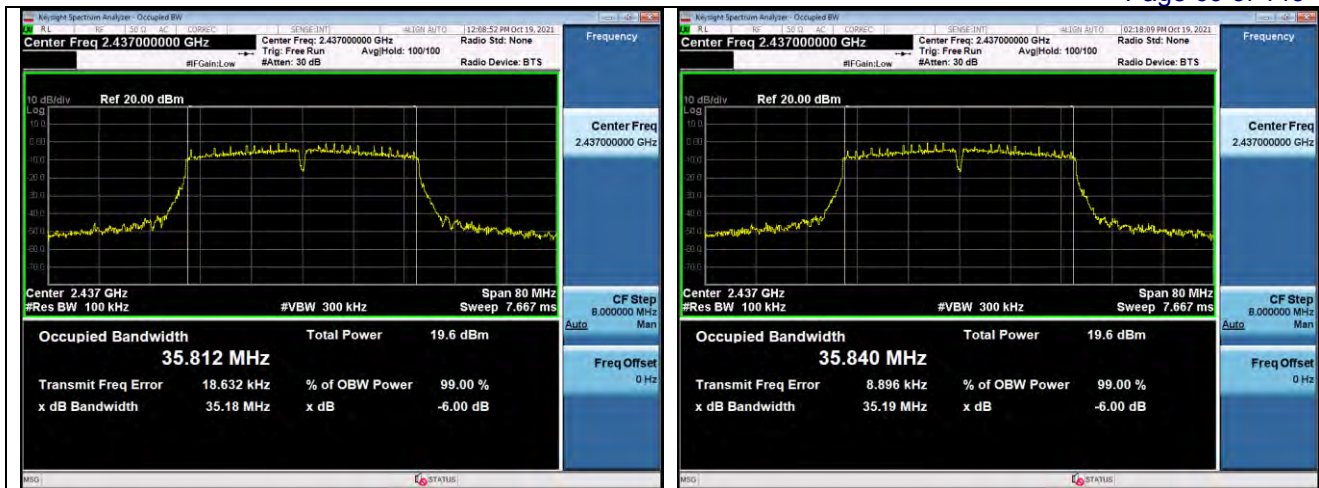
Highest channel

ANT1  
802.11n(HT40)  
Lowest channelANT2  
802.11n(HT40)  
Lowest channel

Middle channel

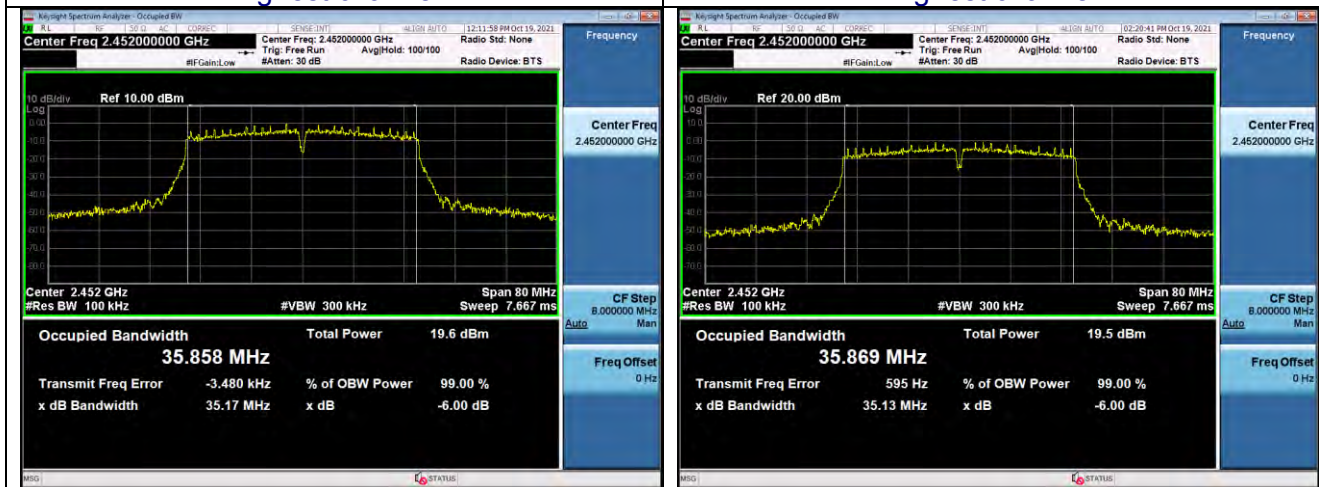
Middle channel





Highest channel

Highest channel

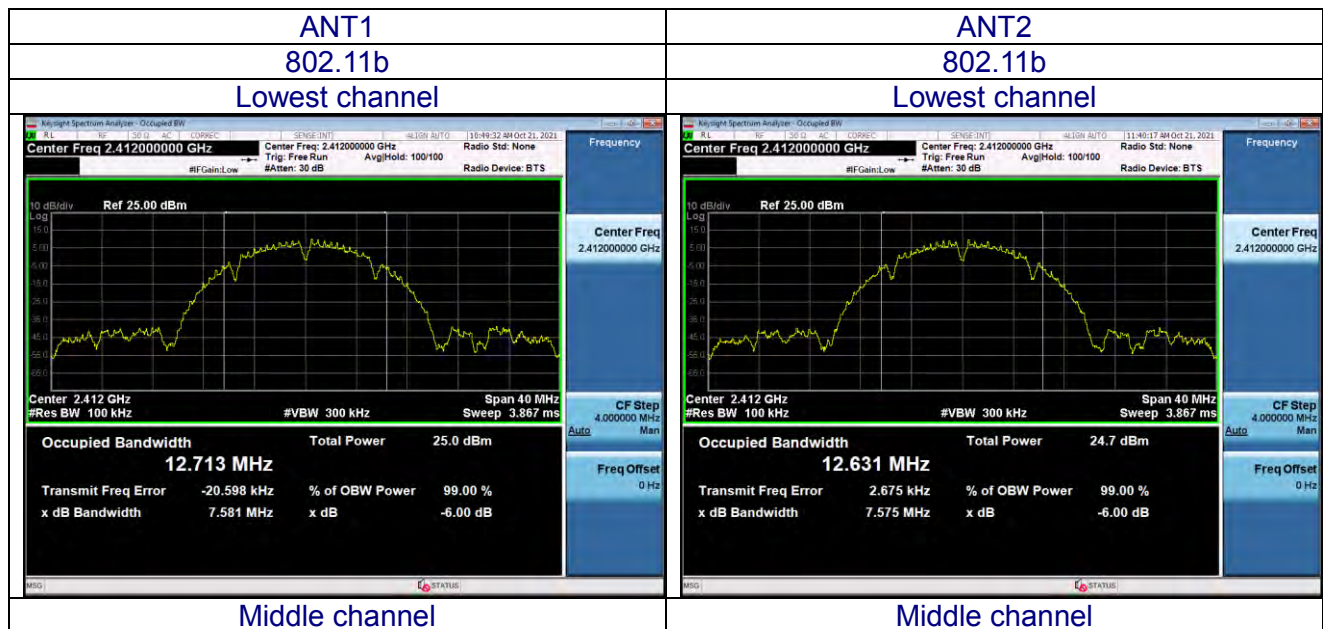




## Module B

| Test mode     | Test channel | 6dB Emission Bandwidth (MHz) |       | Limit:  | Test Result: |
|---------------|--------------|------------------------------|-------|---------|--------------|
|               |              | ANT1                         | ANT2  |         |              |
| 802.11b       | Lowest       | 7.581                        | 7.575 | >500kHz | PASS         |
|               | Middle       | 7.167                        | 8.076 |         |              |
|               | Highest      | 8.108                        | 7.625 |         |              |
| 802.11g       | Lowest       | 15.16                        | 13.43 | >500kHz | PASS         |
|               | Middle       | 14.76                        | 15.32 |         |              |
|               | Highest      | 15.16                        | 12.96 |         |              |
| 802.11n(HT20) | Lowest       | 14.20                        | 15.15 | >500kHz | PASS         |
|               | Middle       | 15.11                        | 15.01 |         |              |
|               | Highest      | 15.10                        | 16.07 |         |              |
| 802.11n(HT40) | Lowest       | 33.93                        | 33.93 | >500kHz | PASS         |
|               | Middle       | 33.85                        | 35.22 |         |              |
|               | Highest      | 35.11                        | 35.17 |         |              |

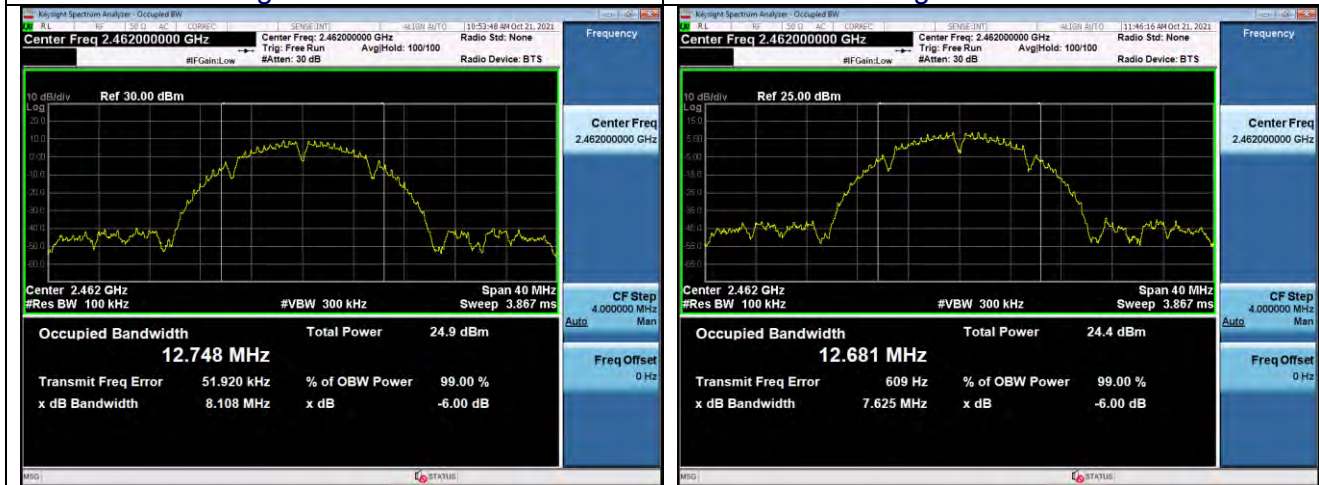
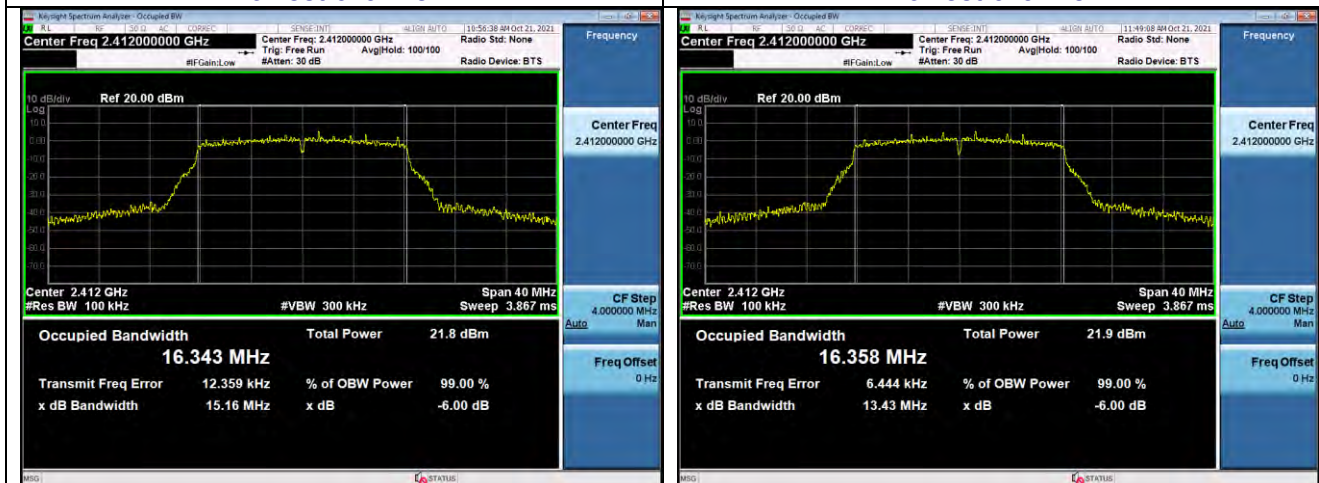
Test plot as follows:





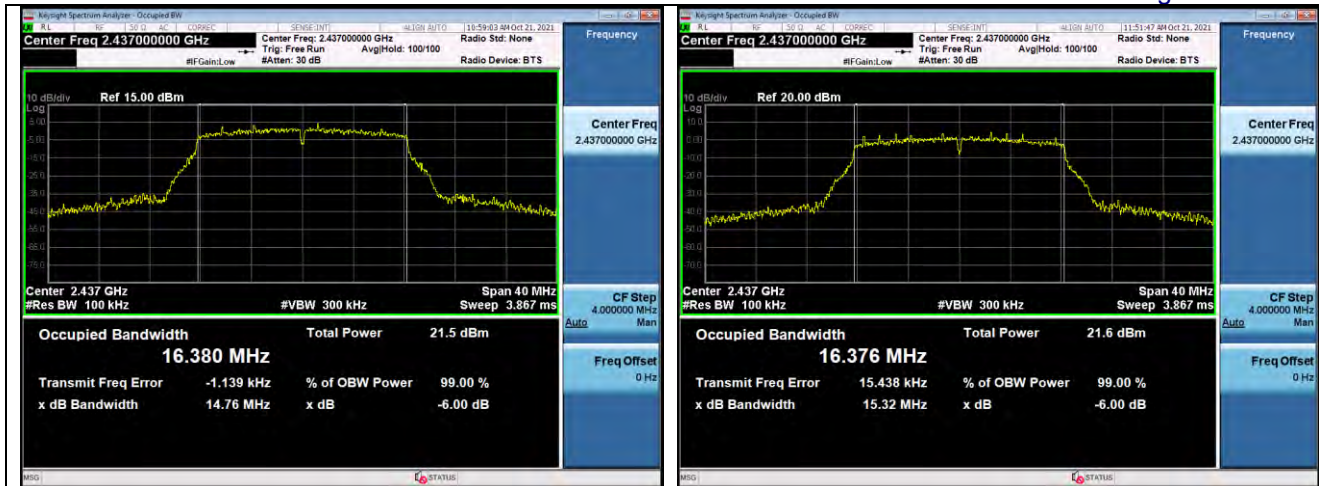
Highest channel

Highest channel

ANT1  
802.11g  
Lowest channelANT2  
802.11g  
Lowest channel

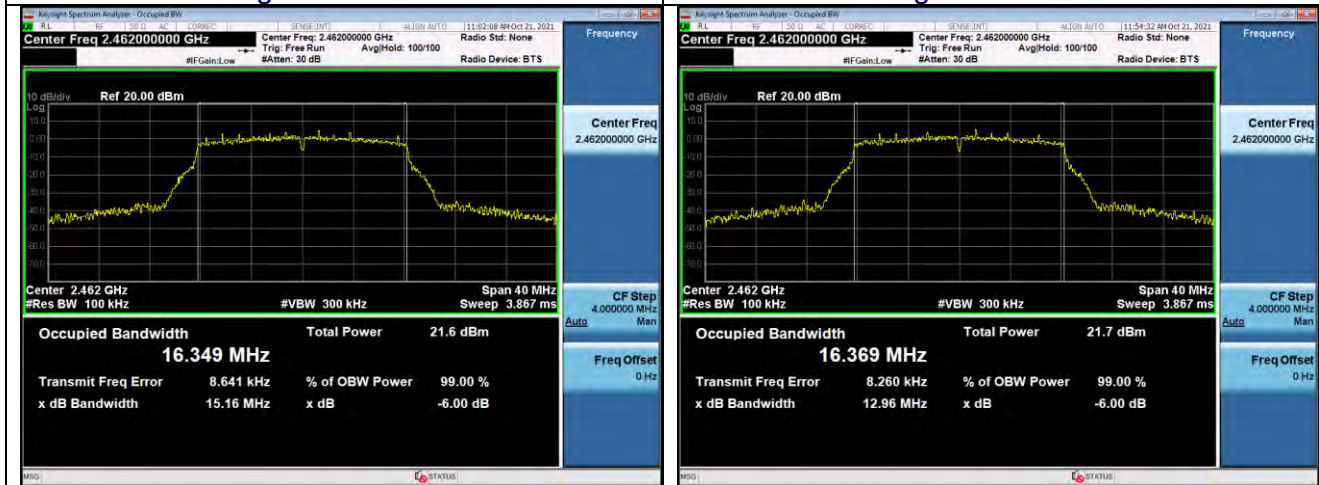
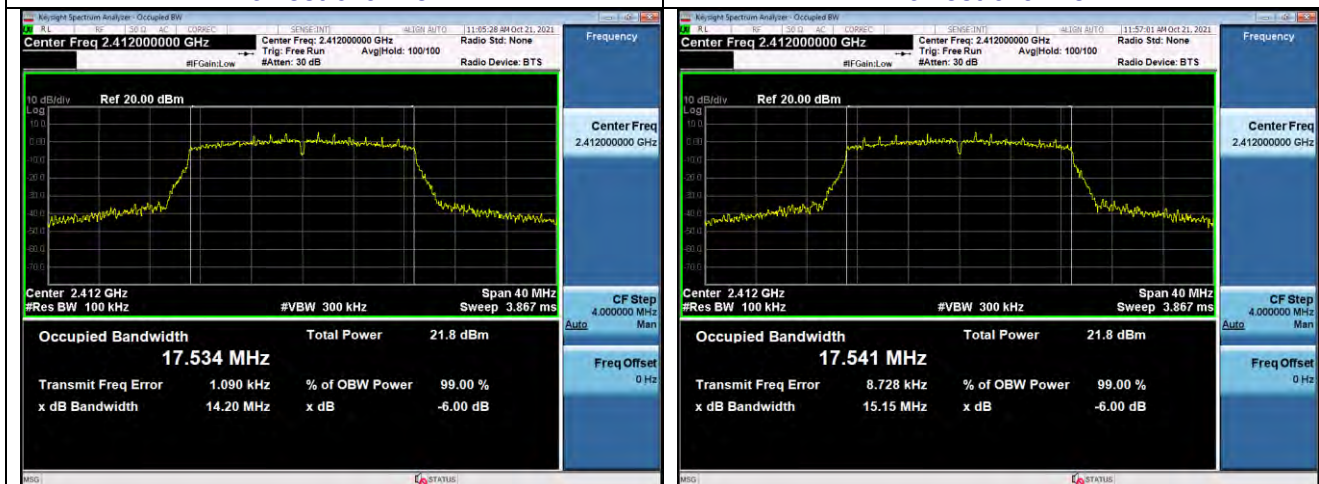
Middle channel

Middle channel



Highest channel

Highest channel

ANT1  
802.11n(HT20)  
Lowest channelANT2  
802.11n(HT20)  
Lowest channel

Middle channel

Middle channel