

# RF TEST REPORT

**FCC ID: 2AOHHTURBOXC7230C**

According to

**47 CFR FCC Part 15, Subpart C(Section 15.247)**

**ANSI C63.10:2013**

Product description : Smart Module  
Model No. : C7230C  
Trade Mark : TurboX  
Product No. : POC230731014-S001  
Applicant : Thundercomm Technology Co., Ltd  
No. 107, Middle Datagu Road, Xiantao Street, Yubei District,  
Chongqing, China, 401122  
Receipt date : 2023.08.02  
Test date : 2023.08.03~2023.08.16  
Issued Date : 2023.08.31

| Prepared By:       | Checked By:      | Approved By:    |  |
|--------------------|------------------|-----------------|---------------------------------------------------------------------------------------|
| Jason huang        | Tim zhang        | Misue Su        |                                                                                       |
| <i>Jason huang</i> | <i>Tim zhang</i> | <i>Misue Su</i> |                                                                                       |

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## REPORT ISSUED HISTORY

| Report No.         | Issue Date | Description                                                                                                                                                                                                                                                                                               |
|--------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RF230731014-01-001 | 2023.08.31 | Replaced the antenna, CPU, model, and IC of the product compared to the original report (SZ22110114W03).. See below for details. After the evaluation, we retested the AC power line for conduction and radiation emission, 6dB bandwidth, power, PSD. Other test data is subject to the original report. |
|                    |            |                                                                                                                                                                                                                                                                                                           |

### Content of change:

1. The new antenna is changed, and the antenna gain is different. 2.4G and Bluetooth are the gain becomes larger, and 5G is the gain becomes smaller
2. QCS8250 replaced by QCS7230, both CPUs have the same PIN, which is pin-for-pin with the original CPU, and the RF performance is basically the same.
3. Modify the product name, model and FCC ID, original FCC ID: 2AOHHTURBOXC865C Change to 2AOHHTURBOXC7230C

## 1. General Information

### 1.1 Applicant

**Thundercomm Technology Co., Ltd**

No. 107, Middle Datagu Road, Xiantao Street, Yubei District, Chongqing, China, 401122

### 1.2 Manufacturer

**Thundercomm Technology Co., Ltd**

No. 107, Middle Datagu Road, Xiantao Street, Yubei District, Chongqing, China, 401122

### 1.3 Basic Description of Equipment Under Test

| Items                                                 | Description                                                                                                                                                                                            |                                |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| Equipment Name                                        | Smart Module                                                                                                                                                                                           |                                |
| Model No.                                             | C7230C                                                                                                                                                                                                 |                                |
| Trade Mark                                            | TurboX                                                                                                                                                                                                 |                                |
| EUT Stage                                             | ○ Product Unit                                                                                                                                                                                         | ● Final-Sample                 |
| Operating Band and Conducted Output Power (Max power) | 2400MHz ~ 2483.5MHz                                                                                                                                                                                    | ●IEEE 802.11ax20RU52: 24.69dBm |
| Product Type                                          | IEEE 802.11b: WLAN<br>IEEE 802.11g: WLAN<br>IEEE 802.11n: WLAN (2TX)<br>IEEE 802.11ax: WLAN (2TX)                                                                                                      |                                |
| Nominal Bandwidth                                     | 20MHz / 40MHz                                                                                                                                                                                          |                                |
| Modulation                                            | IEEE 802.11b: DSSS (DBPSK / DQPSK / CCK)<br>IEEE 802.11g: OFDM (BPSK / QPSK / 16QAM / 64QAM)<br>IEEE 802.11n: OFDM (BPSK / QPSK / 16QAM / 64QAM)<br>IEEE 802.11ax: OFDMA (BPSK / QPSK / 16QAM / 64QAM) |                                |
| Data Rate (Mbps)                                      | IEEE 802.11b mode: DSSS (1M/2M/5.5M/11M)<br>IEEE 802.11g mode: OFDM (6M/9M/12M/18M/24M/36M/48M/54M)<br>IEEE 802.11n mode: MCS0~MCS7<br>IEEE 802.11ax mode: MCS0~MCS11                                  |                                |
| Antenna gain                                          | Ant1: 3.35dBi, Ant2: 3.35dBi                                                                                                                                                                           |                                |
| Antenna type                                          | PIFA antenna                                                                                                                                                                                           |                                |

Eleven channels are provided for 802.11b, 802.11g, 802.11n (20MHz), 802.11ax (20MHz):

| Frequency Band       | Channel No. | Frequency | Channel No. | Frequency |
|----------------------|-------------|-----------|-------------|-----------|
| 2400MHz ~ 2483.5 MHz | 01          | 2412MHz   | 07          | 2442MHz   |
|                      | 02          | 2417MHz   | 08          | 2447MHz   |
|                      | 03          | 2422MHz   | 09          | 2452MHz   |
|                      | 04          | 2427MHz   | 10          | 2457MHz   |
|                      | 05          | 2432MHz   | 11          | 2462MHz   |
|                      | 06          | 2437MHz   | /           | /         |

Seven channels are provided for 802.11n (40MHz), 802.11ax (40MHz):

| Frequency Band       | Channel No. | Frequency | Channel No. | Frequency |
|----------------------|-------------|-----------|-------------|-----------|
| 2400MHz ~ 2483.5 MHz | 03          | 2422MHz   | 07          | 2442MHz   |
|                      | 04          | 2427MHz   | 08          | 2447MHz   |
|                      | 05          | 2432MHz   | 09          | 2452MHz   |
|                      | 06          | 2437MHz   | /           | /         |

## 1.4 Transmit Operating Mode

| Transmit Operating Mode          |                                                        |                |                                  |     |                                  | Transmit Multiple Antennas       |                       |                       |     |                       |     |
|----------------------------------|--------------------------------------------------------|----------------|----------------------------------|-----|----------------------------------|----------------------------------|-----------------------|-----------------------|-----|-----------------------|-----|
| <input checked="" type="radio"/> | Operating mode 1 (single antenna)                      |                |                                  |     |                                  | <input checked="" type="radio"/> | 1TX                   |                       |     |                       |     |
| <input checked="" type="radio"/> | Operating mode 2 (multiple antenna, no beam forming)   |                |                                  |     |                                  | <input checked="" type="radio"/> | 2TX                   | <input type="radio"/> | 3TX | <input type="radio"/> | 4TX |
| <input type="radio"/>            | Operating mode 3 (multiple antenna, with beam forming) |                |                                  |     |                                  | <input type="radio"/>            | 2TX                   | <input type="radio"/> | 3TX | <input type="radio"/> | 4TX |
| <input checked="" type="radio"/> | 802.11b                                                | Operating mode | <input checked="" type="radio"/> | 1TX | <input type="radio"/>            | 2TX                              | <input type="radio"/> | 3TX                   |     |                       |     |
| <input checked="" type="radio"/> | 802.11g                                                | Operating mode | <input checked="" type="radio"/> | 1TX | <input type="radio"/>            | 2TX                              | <input type="radio"/> | 3TX                   |     |                       |     |
| <input checked="" type="radio"/> | 802.11n(20MHz)                                         | Operating mode | <input type="radio"/>            | 1TX | <input checked="" type="radio"/> | 2TX                              | <input type="radio"/> | 3TX                   |     |                       |     |
| <input checked="" type="radio"/> | 802.11n(40MHz)                                         | Operating mode | <input type="radio"/>            | 1TX | <input checked="" type="radio"/> | 2TX                              | <input type="radio"/> | 3TX                   |     |                       |     |
| <input checked="" type="radio"/> | 802.11ax(20MHz)                                        | Operating mode | <input type="radio"/>            | 1TX | <input checked="" type="radio"/> | 2TX                              | <input type="radio"/> | 3TX                   |     |                       |     |
| <input checked="" type="radio"/> | 802.11ax(40MHz)                                        | Operating mode | <input type="radio"/>            | 1TX | <input checked="" type="radio"/> | 2TX                              | <input type="radio"/> | 3TX                   |     |                       |     |

## 2. Summary of Test Results

### 2.1 Summary of Test Items

| 47 CFR FCC Part 15, Subpart C (Section 15.247)                                                                                                                                                                                                 |                          |            |                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------|-----------------------------------|
| Test item                                                                                                                                                                                                                                      | FCC Clause               | Results    | Remarks                           |
| AC Power Conducted Emission                                                                                                                                                                                                                    | 15.207                   | Pass       | Meet the requirement of the limit |
| Radiated Emission and Band Edge Measurement                                                                                                                                                                                                    | 15.205/15.209 /15.247(d) | Pass       | Meet the requirement of the limit |
| Spurious Emission at Antenna Port                                                                                                                                                                                                              | 15.247(d)                | Pass       | Note:3                            |
| 6dB Bandwidth                                                                                                                                                                                                                                  | 15.247(a)(2)             | Pass       | Meet the requirement of the limit |
| Maximum Conducted Power                                                                                                                                                                                                                        | 15.247(b)                | Pass       | Meet the requirement of the limit |
| Power Spectral Density                                                                                                                                                                                                                         | 15.247(e)                | Pass       | Meet the requirement of the limit |
| Antenna Requirements                                                                                                                                                                                                                           | 15.203                   | Compliance | Note:1                            |
| <p>Note:</p> <p>1.The EUT has 2 internal antennas arrangement which was permanently attached.</p> <p>2.“N/A”denotes test is not applicable in this test report.</p> <p>3. For test item: Spurious Emission at Antenna Port (SZ22110114W03)</p> |                          |            |                                   |

### 2.2 Application of Standard

47 CFR FCC Part 15, Subpart C (Section 15.247)

KDB 558074 D01 15.247 Meas Guidance v05r02

KDB 662911 D01 Multiple Transmitter Output v02r01

ANSI C63.10:2013

## 2.3 Test Instruments

| Radiated Emissions    |                                         |                              |                 |                |                           |                               |
|-----------------------|-----------------------------------------|------------------------------|-----------------|----------------|---------------------------|-------------------------------|
| No.                   | Equipment                               | Manufacturer                 | Type No.        | Serial No.     | Cal. date<br>(yyyy/mm/dd) | Cal. Due date<br>(yyyy/mm/dd) |
| 1                     | Test receiver                           | Rohde&Schwarz                | ESU             | 100184         | 2023/5/3                  | 2024/5/2                      |
| 2                     | Horn Antenna                            | Schwarzbeck                  | BBHA<br>9120 D  | 9120D-127<br>3 | 2023/4/23                 | 2024/4/22                     |
| 3                     | Low frequency<br>amplifier              | Unknown                      | LNA<br>0920N    | 2014           | 2023/5/3                  | 2024/5/2                      |
| 4                     | High frequency<br>amplifier             | Schwarzbeck                  | BBV 9718        | 284            | 2023/5/3                  | 2024/5/2                      |
| 5                     | Loop Antenna                            | Schwarzbeck                  | FMZB151<br>9B   | 00029          | 2022/7/4                  | 2025/7/3                      |
| 6                     | Log periodic<br>antenna                 | Schwarzbeck                  | VULB<br>9168    | 1151           | 2023/4/23                 | 2024/4/22                     |
| 7                     | Horn Antenna                            | Schwarzbeck                  | BBHA<br>9120 D  | 9120D-127<br>3 | 2022/5/5                  | 2025/5/4                      |
| 8                     | Horn Antenna                            | Schwarzbeck                  | BBHA<br>9170    | 9170#685       | 2022/7/4                  | 2025/7/3                      |
| 9                     | Temp&Humidity<br>Recorder               | Meideshi                     | JR900           | /              | 2023/5/3                  | 2024/5/2                      |
| 10                    | RF cable(966<br>chamber)9kHz-<br>1GHz   | Unknown                      | Unknown         | Unknown        | 2023/5/3                  | 2024/5/2                      |
| 11                    | RF cable(966<br>chamber)1GHz<br>-18GHz  | Unknown                      | Unknown         | Unknown        | 2023/5/3                  | 2024/5/2                      |
| 12                    | RF cable(966<br>chamber)18GH<br>z-40GHz | Unknown                      | Unknown         | Unknown        | 2023/5/3                  | 2024/5/2                      |
| 13                    | Test software                           | Farad Technology<br>Co., Ltd | EZ-EMC          | /              | /                         | /                             |
| Conducted Emission    |                                         |                              |                 |                |                           |                               |
| 1                     | Test receiver                           | Rohde&Schwarz                | ESCI            | 100718         | 2023/5/3                  | 2024/5/2                      |
| 2                     | LISN                                    | Rohde&Schwarz                | ENV216          | 100075         | 2023/5/3                  | 2024/5/2                      |
| 3                     | Pulse limiter                           | Rohde&Schwarz                | ESH3-Z2         | 102299         | 2023/5/3                  | 2024/5/2                      |
| 4                     | RF cable<br>(9kHz-30MHz)                | Unknown                      | Unknown         | Unknown        | 2023/5/3                  | 2024/5/2                      |
| 5                     | Test software                           | Farad Technology<br>Co., Ltd | EZ-EMC          | /              | /                         | /                             |
| RF Conducted Emission |                                         |                              |                 |                |                           |                               |
| 1                     | MXA Signal<br>Analyzer                  | Keysight                     | N9021B          | MY600801<br>69 | 2023/4/23                 | 2024/4/22                     |
| 2                     | RF Control Unit                         | dsusoft                      | JS0806-2        | 21G80604<br>49 | 2023/4/23                 | 2024/4/22                     |
| 3                     | power supply<br>unit                    | dsusoft                      | JS0806-4<br>ADC | N/A            | 2023/4/23                 | 2024/4/22                     |
| 4                     | VXG Signal<br>Generator                 | Keysight                     | M9384B          | MY612707<br>87 | 2023/4/23                 | 2024/4/22                     |
| 5                     | EXG Analog<br>Signal<br>Generator       | Keysight                     | N5173B          | MY591012<br>82 | 2023/4/23                 | 2024/4/22                     |
| 6                     | Test software                           | dsusoft                      | JS1120-3        | /              | /                         | /                             |

## 2.4 Test Mode

| Frequency Range : 2400~2483.5 MHz           |                           |           |          |         |
|---------------------------------------------|---------------------------|-----------|----------|---------|
| Test Items                                  | Mode                      | Data Rate | Channel  | Antenna |
| AC Power Conducted Emission                 | Simultaneous transmitting | -         | -        | -       |
| Radiated Emission and Band Edge Measurement | 802.11b                   | 1Mbps     | 01/06/11 | 1&2     |
|                                             | 802.11g                   | 6Mbps     | 01/06/11 | 1&2     |
|                                             | 802.11n(20MHz)            | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11n(40MHz)            | MCS0      | 03/06/09 | 1&2     |
|                                             | 802.11ax(20MHz)           | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11ax RU26 (20MHz)     | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11ax RU 52 (20MHz)    | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11ax RU 106 (20MHz)   | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11ax(40MHz)           | MCS0      | 03/06/09 | 1&2     |
| 6dB Bandwidth                               | 802.11b                   | 1Mbps     | 01/06/11 | 1&2     |
|                                             | 802.11g                   | 6Mbps     | 01/06/11 | 1&2     |
|                                             | 802.11n(20MHz)            | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11n(40MHz)            | MCS0      | 03/06/09 | 1&2     |
|                                             | 802.11ax(20MHz)           | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11ax RU26 (20MHz)     | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11ax RU 52 (20MHz)    | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11ax RU 106 (20MHz)   | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11ax(40MHz)           | MCS0      | 03/06/09 | 1&2     |
| Maximum Conducted Power                     | 802.11b                   | 1Mbps     | 01/06/11 | 1&2     |
|                                             | 802.11g                   | 6Mbps     | 01/06/11 | 1&2     |
|                                             | 802.11n(20MHz)            | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11n(40MHz)            | MCS0      | 03/06/09 | 1&2     |
|                                             | 802.11ax(20MHz)           | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11ax RU26 (20MHz)     | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11ax RU 52 (20MHz)    | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11ax RU 106 (20MHz)   | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11ax(40MHz)           | MCS0      | 03/06/09 | 1&2     |
| Power Spectral Density                      | 802.11b                   | 1Mbps     | 01/06/11 | 1&2     |
|                                             | 802.11g                   | 6Mbps     | 01/06/11 | 1&2     |
|                                             | 802.11n(20MHz)            | MCS0      | 01/06/11 | 1&2     |
|                                             | 802.11n(40MHz)            | MCS0      | 03/06/09 | 1&2     |

|  |                         |      |          |     |
|--|-------------------------|------|----------|-----|
|  | 802.11ax(20MHz)         | MCS0 | 01/06/11 | 1&2 |
|  | 802.11ax RU26 (20MHz)   | MCS0 | 01/06/11 | 1&2 |
|  | 802.11ax RU 52 (20MHz)  | MCS0 | 01/06/11 | 1&2 |
|  | 802.11ax RU 106 (20MHz) | MCS0 | 01/06/11 | 1&2 |
|  | 802.11ax(40MHz)         | MCS0 | 03/06/09 | 1&2 |

## 2.5 Test Condition

| Applicable to                               | Environmental conditions | Input Power  | Tested by   |
|---------------------------------------------|--------------------------|--------------|-------------|
| AC Power Conducted Emission                 | 24.3°C, 51% RH           | AC 120V/60Hz | Albert Fan  |
| Radiated Emission and Band Edge Measurement | 24.2°C, 55% RH           | AC 120V/60Hz | Albert Fan  |
| 6dB Bandwidth                               | 24.2°C, 52% RH           | AC 120V/60Hz | Jason Huang |
| Maximum Conducted Power                     | 24.2°C, 52% RH           | AC 120V/60Hz | Jason Huang |
| Power Spectral Density                      | 24.2°C, 52% RH           | AC 120V/60Hz | Jason Huang |

Note: Adapter supply voltage AC 120V/60Hz.

The applicant declare the operating environment of EUT as below:

Normal conditions: AC 120V/60Hz, 0~60°C

## 2.6 Duty Cycle of Test Signal

If duty cycle is  $\geq 98\%$ , duty factor is not required.

If duty cycle is  $< 98\%$ , duty factor shall be considered.

All the duty factor of other test mode have been considered.

Test Result: Please refer to the SZ22110114W03.

## 2.7 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

| Uncertainty                            |                  |
|----------------------------------------|------------------|
| Parameter                              | Uncertainty      |
| Occupied Channel Bandwidth             | $\pm 143.88$ kHz |
| Power Spectral Density                 | $\pm 0.743$ dB   |
| Conducted Spurious Emission            | $\pm 1.328$ dB   |
| RF power conducted                     | $\pm 0.384$ dB   |
| Conducted emission(9kHz~30MHz) AC main | $\pm 2.72$ dB    |
| Radiated emission(9kHz~30MHz)          | $\pm 2.66$ dB    |
| Radiated emission (30MHz~1GHz)         | $\pm 4.62$ dB    |
| Radiated emission (1GHz~18GHz)         | $\pm 4.86$ dB    |
| Radiated emission (18GHz~40GHz)        | $\pm 3.80$ dB    |

## 2.8 Test Location

|                           |                                                                                                                                                                  |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Company:                  | Shenzhen Haiyun Standard Technical CO., Ltd.                                                                                                                     |
| Address:                  | Room 110, 111, 112, 113, 115, 116, Block B, Jinyuan Business Building, No. 302, Xixiang Avenue, Labor Community, Xixiang Street, Baoan District, Shenzhen, China |
| CNAS Registration Number: | CNAS L18252                                                                                                                                                      |
| CAB identifier            | CN0145                                                                                                                                                           |
| A2LA Certificate Number   | 6823.01                                                                                                                                                          |
| Telephone:                | 0755-26024411                                                                                                                                                    |

## 2.9 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



## 2.10 Description of Support Units

| Support Equipment |           |                         |            |                                                                                                                                                                                                                 |
|-------------------|-----------|-------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No.               | Equipment | Brand Name              | Model Name | Remarks                                                                                                                                                                                                         |
| 1                 | mini PC   | /                       | S10        | DC:12V/4A                                                                                                                                                                                                       |
| 2                 | Adapter   | CHANNEL WELL TECHNOLOGY | S1C045DC   | INPUT: 100-240V~ 50/60Hz 1.5A<br>OUTPUT:5.0V $\overline{\text{---}}$ 3.0A15.0W;<br>9.0V $\overline{\text{---}}$ 3.0A27W;<br>15.0V $\overline{\text{---}}$ 3.0A45.0W;<br>20V $\overline{\text{---}}$ 2.25A 45.0W |

## 2.11 Deviation from Standards

None

### 3. Test Procedure And Results

#### 3.1 AC Power Line Conducted Emission

##### 3.1.1 Limit

| Frequency       | Maximum RF Line Voltage          |                               |
|-----------------|----------------------------------|-------------------------------|
|                 | Quasi-Peak Level<br>dB( $\mu$ V) | Average Level<br>dB( $\mu$ V) |
| 150kHz ~ 500kHz | 66 ~ 56*                         | 56 ~ 46*                      |
| 500kHz ~ 5MHz   | 56                               | 46                            |
| 5MHz ~ 30MHz    | 60                               | 50                            |

Notes: 1. \* Decreasing linearly with logarithm of frequency.

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

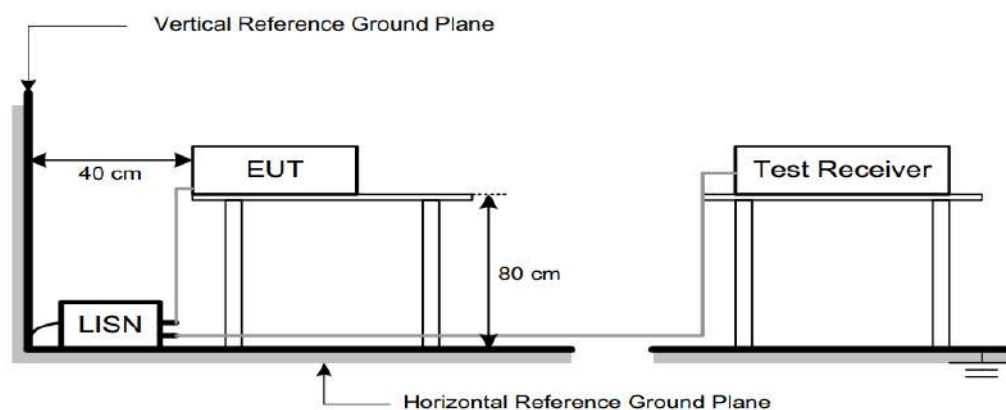
##### 3.1.2 Test Procedure

| Test Method                                              |                                                  |
|----------------------------------------------------------|--------------------------------------------------|
| <input checked="" type="radio"/> Conducted Measurement   | <input type="radio"/> Radiated Measurement       |
| Test Channels                                            |                                                  |
| <input type="radio"/> Lowest, Middle and Highest Channel | <input type="radio"/> Lowest and Highest Channel |
| Environmental conditions                                 |                                                  |
| <input checked="" type="radio"/> Normal                  | <input type="radio"/> Normal and Extreme         |

Note: ● : Test    ○ : No Test

- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

##### 3.1.3 Test Setup



### 3.1.4 Test Result

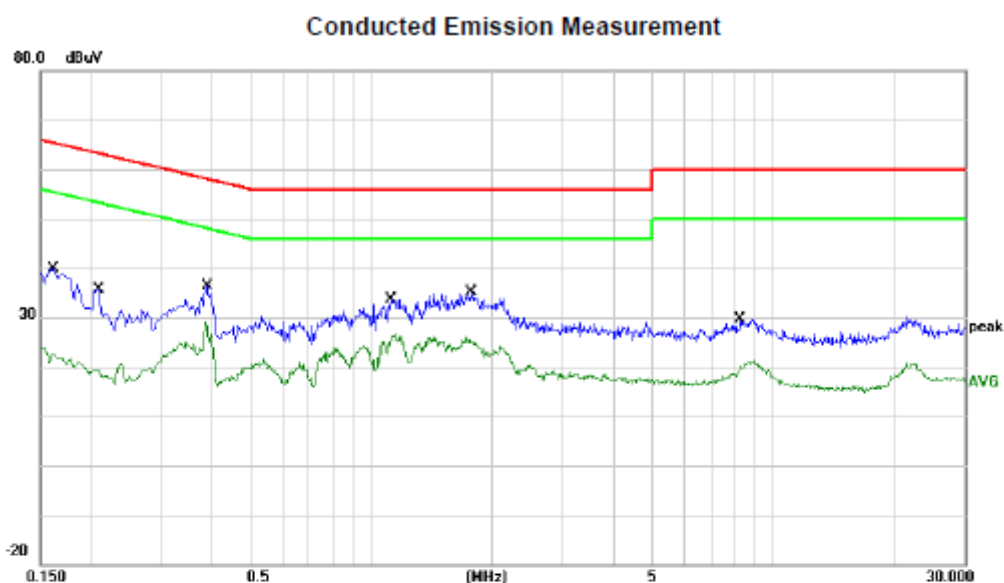
#### Note:

1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor, the value was added to Original Receiver Reading by the software automatically.
2. Measurement = Reading + Correct Factor.
3. Over = Measurement – Limit

We only recorded the data of the worst mode. Please see the following:

|              |                                                      |
|--------------|------------------------------------------------------|
| 150kHz~30MHz | Worst Case Operating Mode: AX20 RU52 MIMO Channel 11 |
|--------------|------------------------------------------------------|

Line



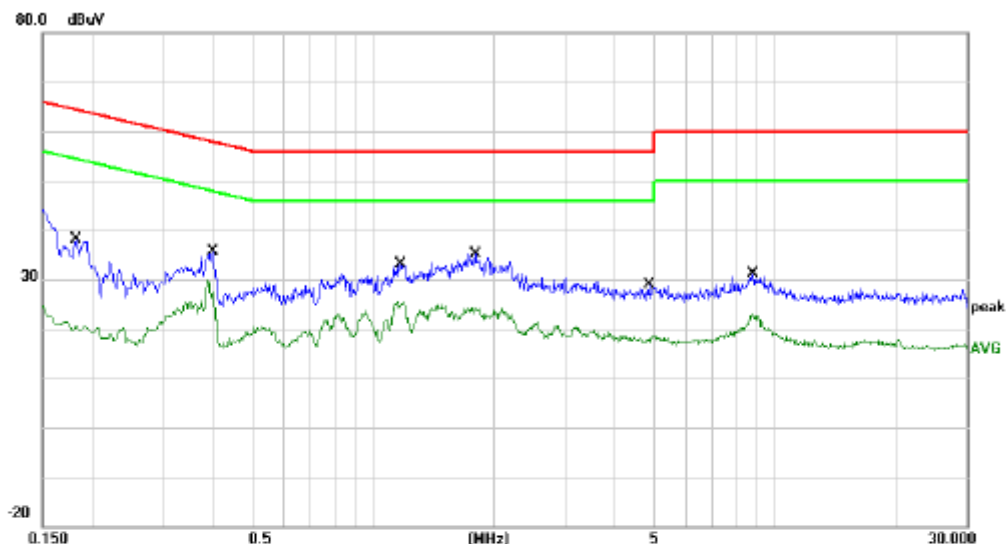
| No. | Mk. | Freq.  | Reading Level | Correct Factor | Measurement | Limit | Over   | Detector | Comment |
|-----|-----|--------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz    | dBuV          | dB             | dBuV        | dBuV  | dB     |          |         |
| 1   |     | 0.1620 | 13.35         | 19.88          | 33.23       | 65.36 | -32.13 | QP       |         |
| 2   |     | 0.1620 | 1.11          | 19.88          | 20.99       | 55.36 | -34.37 | AVG      |         |
| 3   |     | 0.2100 | 5.94          | 19.88          | 25.82       | 63.21 | -37.39 | QP       |         |
| 4   |     | 0.2100 | -1.57         | 19.88          | 18.31       | 53.21 | -34.90 | AVG      |         |
| 5   |     | 0.3900 | 12.18         | 19.88          | 32.06       | 58.06 | -26.00 | QP       |         |
| 6   | *   | 0.3900 | 7.61          | 19.88          | 27.49       | 48.06 | -20.57 | AVG      |         |
| 7   |     | 1.1220 | 8.10          | 19.89          | 27.99       | 56.00 | -28.01 | QP       |         |
| 8   |     | 1.1220 | 3.99          | 19.89          | 23.88       | 46.00 | -22.12 | AVG      |         |
| 9   |     | 1.7740 | 9.27          | 19.90          | 29.17       | 56.00 | -26.83 | QP       |         |
| 10  |     | 1.7740 | 4.72          | 19.90          | 24.62       | 46.00 | -21.38 | AVG      |         |
| 11  |     | 8.2940 | 3.00          | 19.94          | 22.94       | 60.00 | -37.06 | QP       |         |
| 12  |     | 8.2940 | -1.47         | 19.94          | 18.47       | 50.00 | -31.53 | AVG      |         |

150kHz~30MHz

Worst Case Operating Mode: AX20 RU52 MIMO Channel 11

Neutral

### Conducted Emission Measurement



| No. | Mk. | Freq.  | Reading Level | Correct Factor | Measurement | Limit | Over   |          |         |
|-----|-----|--------|---------------|----------------|-------------|-------|--------|----------|---------|
|     |     | MHz    | dBuV          | dB             | dBuV        | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.1820 | 9.76          | 19.88          | 29.64       | 64.39 | -34.75 | QP       |         |
| 2   |     | 0.1820 | 0.10          | 19.88          | 19.98       | 54.39 | -34.41 | AVG      |         |
| 3   |     | 0.3980 | 12.43         | 19.88          | 32.31       | 57.90 | -25.59 | QP       |         |
| 4   | *   | 0.3980 | 8.83          | 19.88          | 28.71       | 47.90 | -19.19 | AVG      |         |
| 5   |     | 1.1700 | 7.87          | 19.89          | 27.76       | 56.00 | -28.24 | QP       |         |
| 6   |     | 1.1700 | 4.85          | 19.89          | 24.74       | 46.00 | -21.26 | AVG      |         |
| 7   |     | 1.7940 | 8.72          | 19.90          | 28.62       | 56.00 | -27.38 | QP       |         |
| 8   |     | 1.7940 | 3.48          | 19.90          | 23.38       | 46.00 | -22.62 | AVG      |         |
| 9   |     | 4.8500 | 2.02          | 19.92          | 21.94       | 56.00 | -34.06 | QP       |         |
| 10  |     | 4.8500 | -2.82         | 19.92          | 17.10       | 46.00 | -28.90 | AVG      |         |
| 11  |     | 8.8300 | 5.81          | 19.95          | 25.76       | 60.00 | -34.24 | QP       |         |
| 12  |     | 8.8300 | 1.61          | 19.95          | 21.56       | 50.00 | -28.44 | AVG      |         |

## 3.2 Radiated Emission and Band Edge

### 3.2.1 Limit

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

| Frequency<br>(MHz) | Distance<br>Meters(m) | Field Strength Limit                                                                              |                                   |
|--------------------|-----------------------|---------------------------------------------------------------------------------------------------|-----------------------------------|
|                    |                       | $\mu\text{V}/\text{m}$                                                                            | $\text{dB}(\mu\text{V})/\text{m}$ |
| 0.009 – 0.49       | 300                   | 2400/F(kHz)                                                                                       | -                                 |
| 0.490 – 1.705      | 30                    | 24000/F(kHz)                                                                                      | -                                 |
| 1.705 – 30         | 30                    | 30                                                                                                | -                                 |
| 30~88              | 3                     | 100                                                                                               | 40.0                              |
| 88~216             | 3                     | 150                                                                                               | 43.5                              |
| 216~960            | 3                     | 200                                                                                               | 46.0                              |
| 960~1000           | 3                     | 500                                                                                               | 54.0                              |
| Above 1000         | 3                     | 74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak)<br>54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average) |                                   |

Note: (1) Emission level  $\text{dB}\mu\text{V} = 20 \log$  Emission level  $\mu\text{V}/\text{m}$

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

### 3.2.2 Test Procedure

| Test Method                                                                   |                                                       |
|-------------------------------------------------------------------------------|-------------------------------------------------------|
| <input type="radio"/> Conducted Measurement                                   | <input checked="" type="radio"/> Radiated Measurement |
| Test Channels                                                                 |                                                       |
| <input checked="" type="radio"/> Lowest, Middle and Highest Channel           | <input type="radio"/> Lowest and Highest Channel      |
| Environmental conditions                                                      |                                                       |
| <input checked="" type="radio"/> Normal                                       | <input type="radio"/> Normal and Extreme              |
| Note: <input checked="" type="radio"/> : Test <input type="radio"/> : No Test |                                                       |

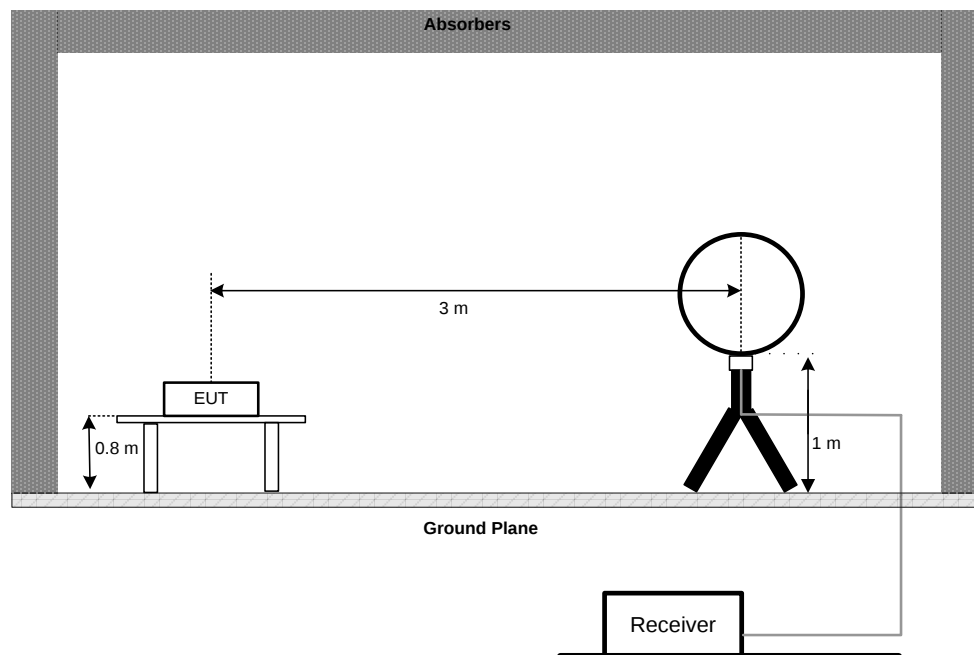
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- The measuring distance of 3 m or 1.5m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of

the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

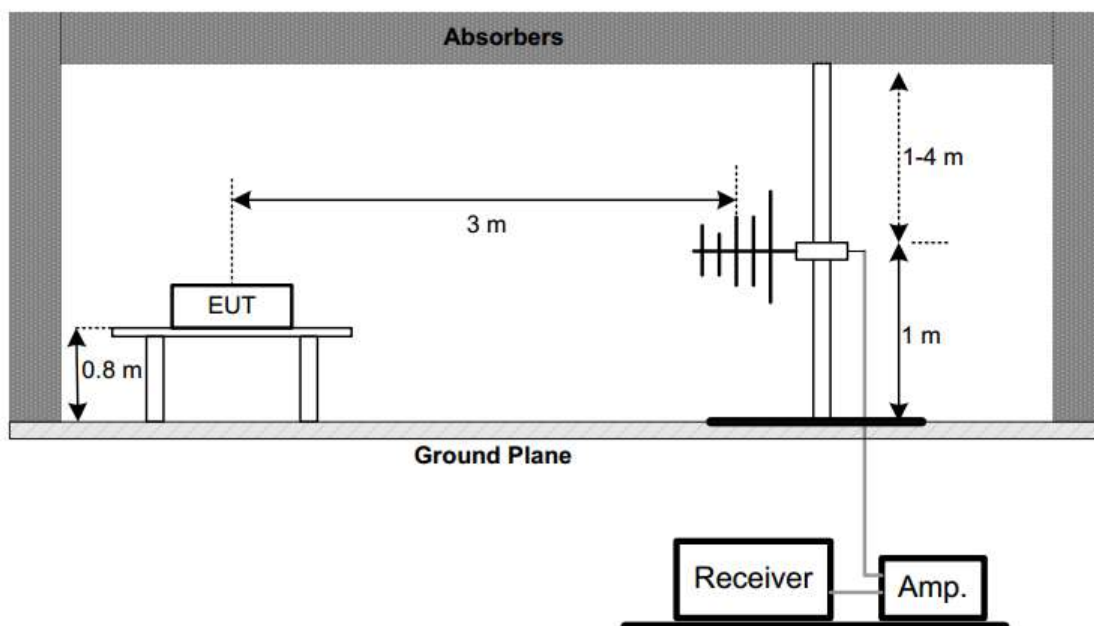
- d) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e) The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
- f) The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g) All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1 GHz)
- h) All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1 GHz)
- i) For the actual test configuration, please refer to the related Item -EUT Test Photos.

### 3.2.3 Test Setup

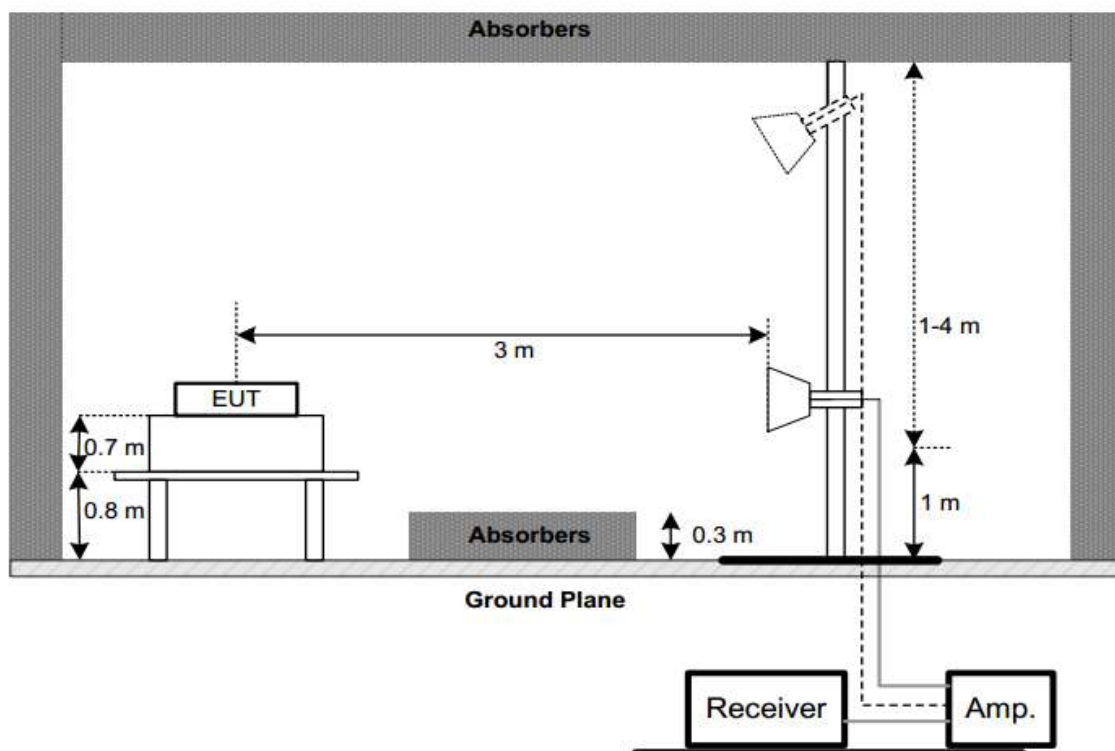
#### (A) Radiated Emission Test Set-Up Frequency Below 30 MHz



(B) Radiated Emission Test Set-Up Frequency 30 MHz-1000 MHz



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



### 3.2.4 Test Result

#### 1) Radiated emission: 9kHz-30MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not recorded in this report.

#### 2) Radiated emission: 30MHz-1G

##### Note:

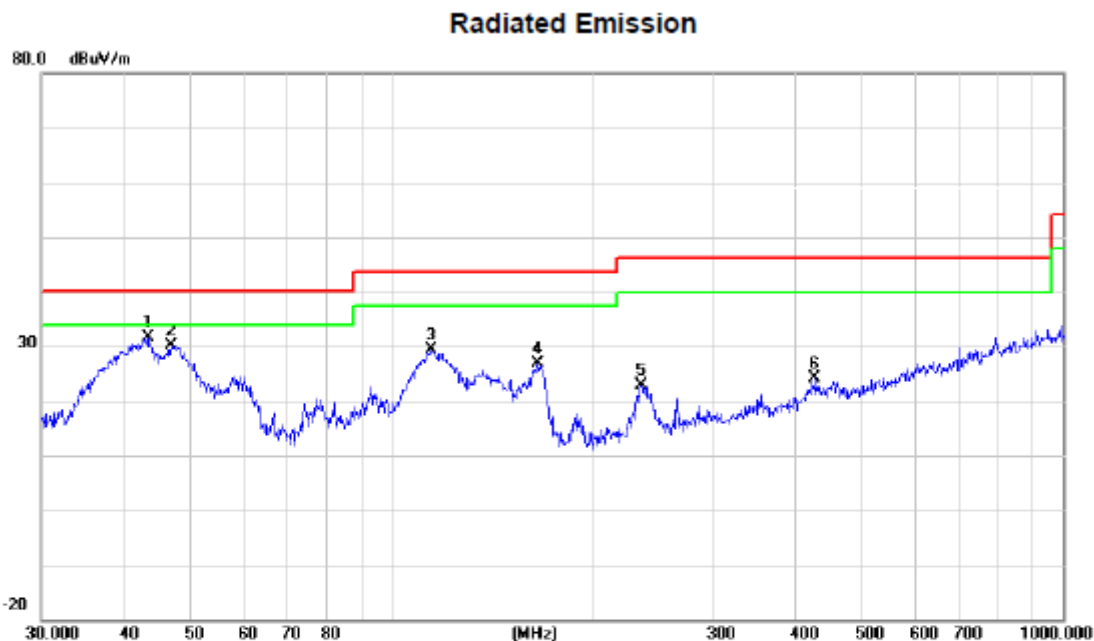
1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit

We only recorded the data of the worst mode. Please see the following:

Below 1G (30MHz~1GHz)

Worst Case Operating Mode: AX20 RU52 MIMO Channel 11

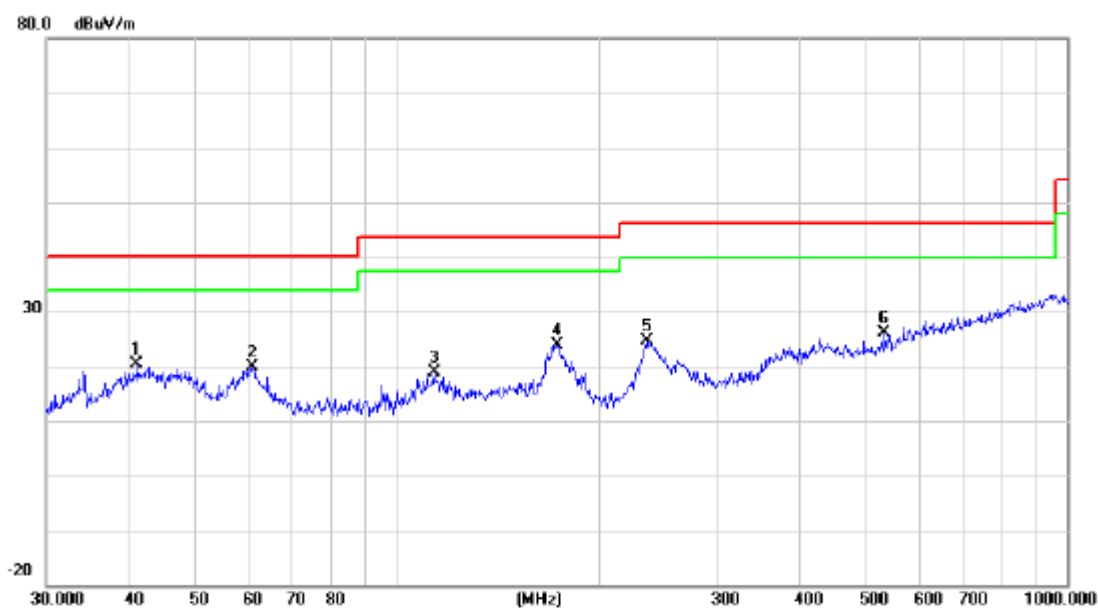
VERTICAL



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   | *   | 43.2016  | 42.36         | -10.72         | 31.64       | 40.00  | -8.36  | peak           |              |
| 2   |     | 46.8302  | 41.01         | -10.87         | 30.14       | 40.00  | -9.86  | peak           |              |
| 3   |     | 114.5146 | 40.94         | -11.61         | 29.33       | 43.50  | -14.17 | peak           |              |
| 4   |     | 164.9074 | 36.42         | -9.65          | 26.77       | 43.50  | -16.73 | peak           |              |
| 5   |     | 234.9910 | 32.92         | -10.06         | 22.86       | 46.00  | -23.14 | peak           |              |
| 6   |     | 426.5210 | 29.39         | -5.16          | 24.23       | 46.00  | -21.77 | peak           |              |

# HORIZONTAL

## Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 40.9880  | 30.93         | -10.63         | 20.30       | 40.00  | -19.70 | peak           |              |         |
| 2   |     | 60.9174  | 31.98         | -12.21         | 19.77       | 40.00  | -20.23 | peak           |              |         |
| 3   |     | 113.7142 | 30.58         | -11.72         | 18.86       | 43.50  | -24.64 | peak           |              |         |
| 4 * |     | 173.2050 | 34.17         | -10.29         | 23.88       | 43.50  | -19.62 | peak           |              |         |
| 5   |     | 236.6447 | 34.53         | -9.98          | 24.55       | 46.00  | -21.45 | peak           |              |         |
| 6   |     | 533.8320 | 28.75         | -2.50          | 26.25       | 46.00  | -19.75 | peak           |              |         |

### 3) Radiated emission: Above 1G

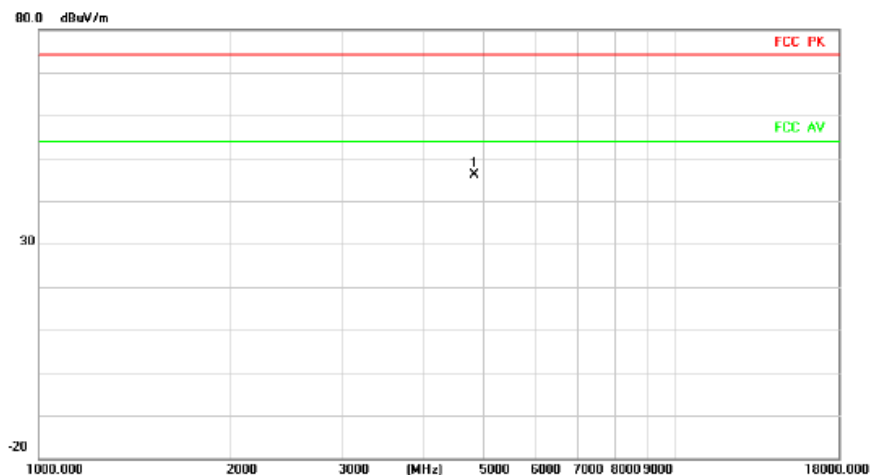
#### Note:

1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit

|                       |               |                |       |
|-----------------------|---------------|----------------|-------|
| Above 1G (1GHz~18GHz) | Test mode:11B | Test Channel:1 | ANT 1 |
|-----------------------|---------------|----------------|-------|

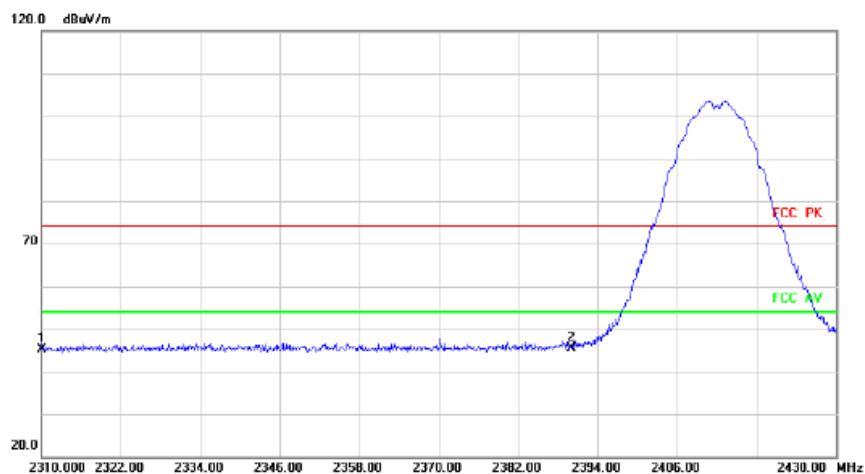
#### VERTICAL

##### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 48.01         | -1.88          | 46.13       | 74.00  | -27.87 | peak           |              |         |

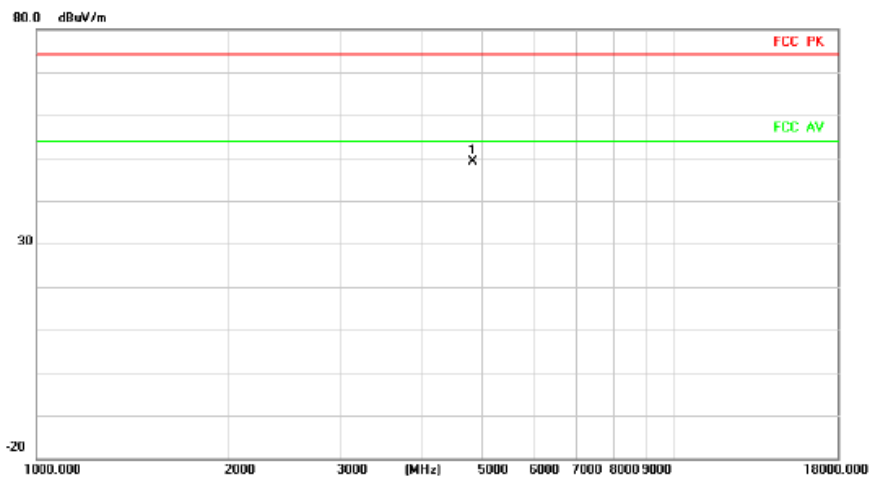
##### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 44.91         | 0.19           | 45.10       | 74.00  | -28.90 | peak           |              |         |
| 2   | *   | 2390.000 | 44.94         | 0.41           | 45.35       | 74.00  | -28.65 | peak           |              |         |

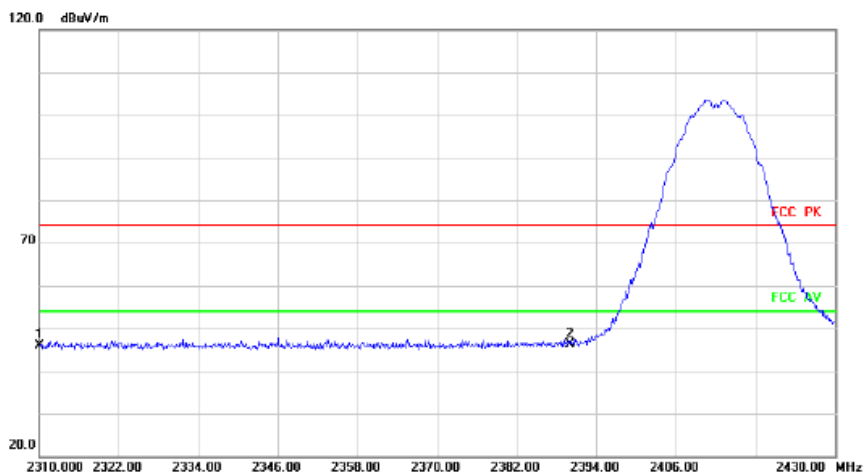
#### HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 51.12         | -1.88          | 49.24       | 74.00  | -24.76 | peak           |              |         |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 45.71         | 0.19           | 45.90       | 74.00  | -28.10 | peak           |              |         |
| 2   | *   | 2390.000 | 45.77         | 0.41           | 46.18       | 74.00  | -27.82 | peak           |              |         |

|                       |               |                |       |
|-----------------------|---------------|----------------|-------|
| Above 1G (1GHz~18GHz) | Test mode:11B | Test Channel:1 | ANT 2 |
|-----------------------|---------------|----------------|-------|

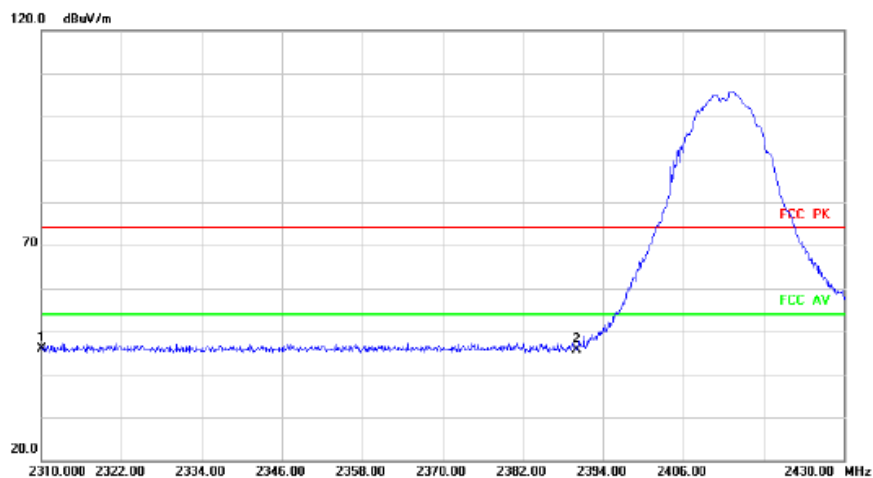
### VERTICAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 48.68         | -1.88          | 46.80       | 74.00  | -27.20 | peak           |              |         |

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 2310.000 | 35.69         | 10.19          | 45.88       | 74.00  | -28.12 | peak           |              |         |
| 2   |     | 2390.000 | 35.34         | 10.41          | 45.75       | 74.00  | -28.25 | peak           |              |         |

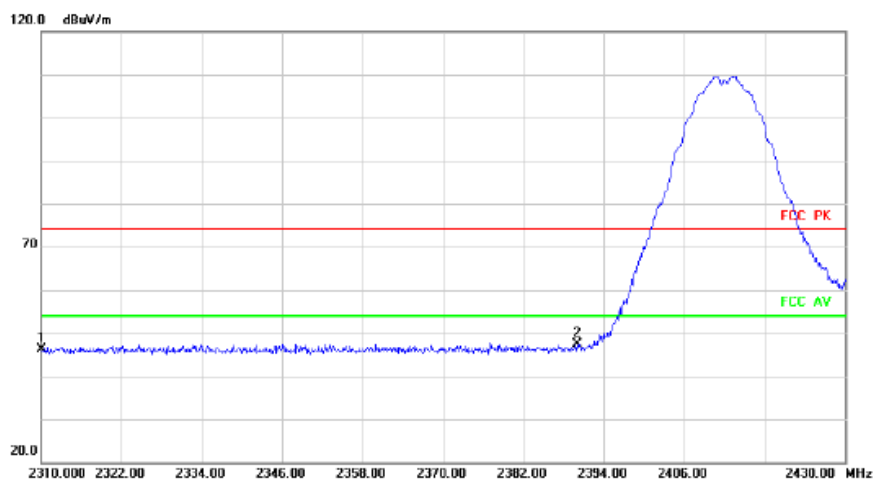
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 51.44         | -1.88          | 49.56       | 74.00  | -24.44 | peak           |              |         |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 35.97         | 10.19          | 46.16       | 74.00  | -27.84 | peak           |              |         |
| 2   | *   | 2390.000 | 36.92         | 10.41          | 47.33       | 74.00  | -26.67 | peak           |              |         |

|                       |                |                 |       |
|-----------------------|----------------|-----------------|-------|
| Above 1G (1GHz~18GHz) | Test mode: 11B | Test Channel: 6 | ANT 1 |
|-----------------------|----------------|-----------------|-------|

### VERTICAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4874.000 | 47.70         | -1.59          | 46.11       | 74.00  | -27.89 | peak           |              |         |

### HORIZONTAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4874.000 | 51.58         | -1.59          | 49.99       | 74.00  | -24.01 | peak           |              |         |

|                       |                |                 |       |
|-----------------------|----------------|-----------------|-------|
| Above 1G (1GHz~18GHz) | Test mode: 11B | Test Channel: 6 | ANT 2 |
|-----------------------|----------------|-----------------|-------|

### VERTICAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 1   | *   | 4874.000 | 47.00         | -1.59          | 45.41       | 74.00  | -28.59 | peak           |              |        |

### HORIZONTAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 1   | *   | 4874.000 | 50.38         | -1.59          | 48.79       | 74.00  | -25.21 | peak           |              |        |

|                       |                |                 |       |
|-----------------------|----------------|-----------------|-------|
| Above 1G (1GHz~18GHz) | Test mode: 11B | Test Channel:11 | ANT 1 |
|-----------------------|----------------|-----------------|-------|

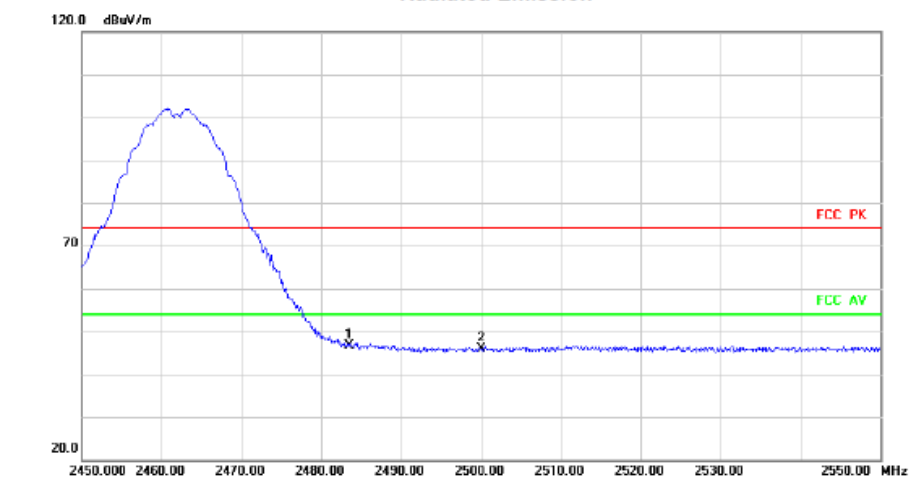
VERTICAL

Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 4924.000 | 49.00         | -1.29          | 47.71       | 74.00  | -26.29 | peak           |              | Comment |

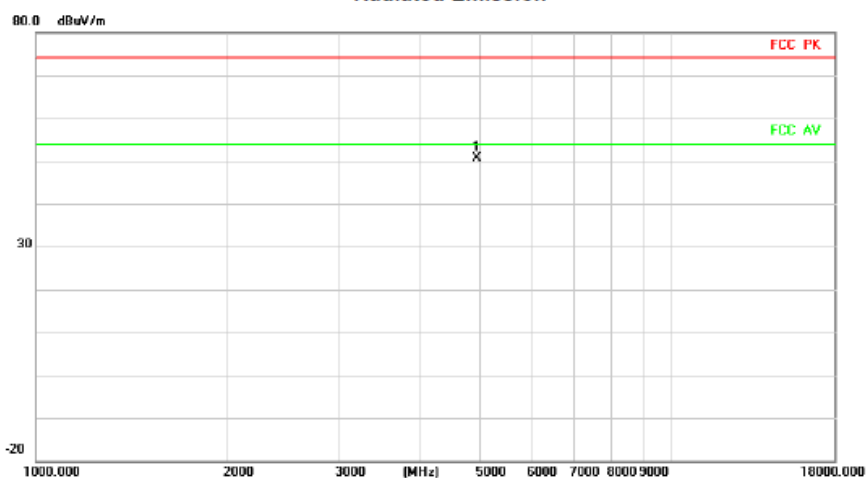
Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 2483.500 | 45.48         | 1.09           | 46.57       | 74.00  | -27.43 | peak           |              | Comment |
| 2   |     | 2500.000 | 44.73         | 1.22           | 45.95       | 74.00  | -28.05 | peak           |              | Comment |

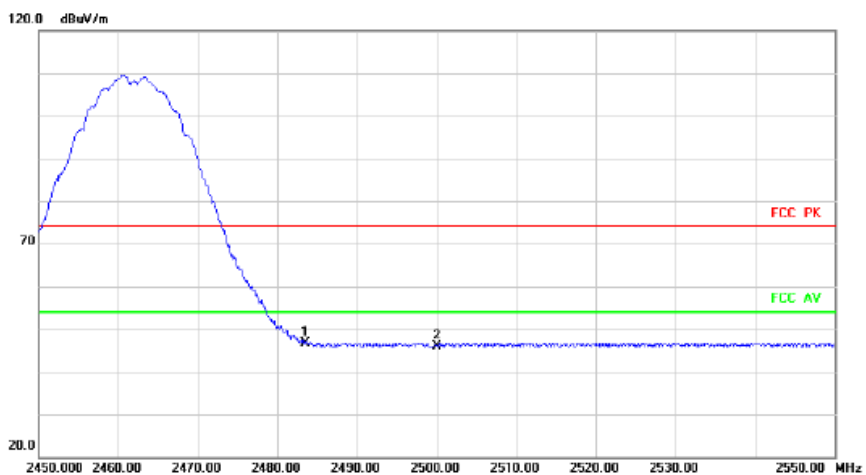
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 1   | *   | 4924.000 | 52.02         | -1.29          | 50.73       | 74.00  | -23.27 | peak           |              |        |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 1   | *   | 2483.500 | 45.62         | 1.09           | 46.71       | 74.00  | -27.29 | peak           |              |        |
| 2   |     | 2500.000 | 44.71         | 1.22           | 45.93       | 74.00  | -28.07 | peak           |              |        |

|                       |                |                 |       |
|-----------------------|----------------|-----------------|-------|
| Above 1G (1GHz~18GHz) | Test mode: 11B | Test Channel:11 | ANT 2 |
|-----------------------|----------------|-----------------|-------|

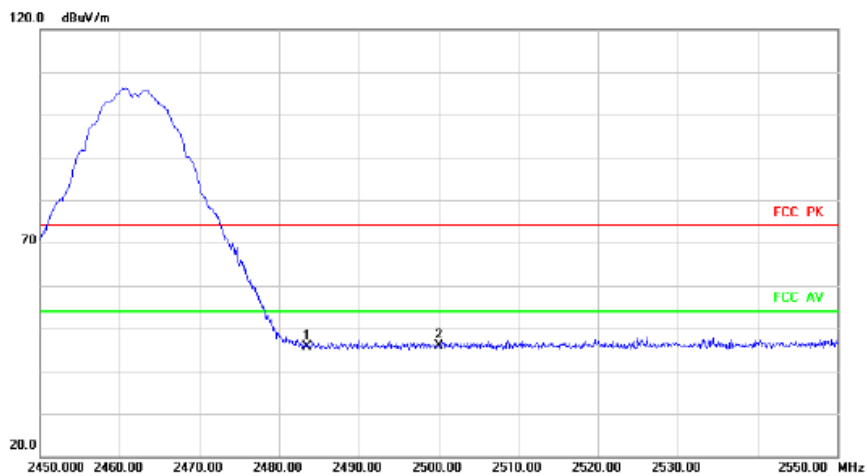
VERTICAL

Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4924.000 | 46.83         | -1.29          | 45.54       | 74.00  | -28.46 | peak           |              |         |

Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2483.500 | 34.54         | 11.09          | 45.63       | 74.00  | -28.37 | peak           |              |         |
| 2   | *   | 2500.000 | 34.58         | 11.22          | 45.80       | 74.00  | -28.20 | peak           |              |         |

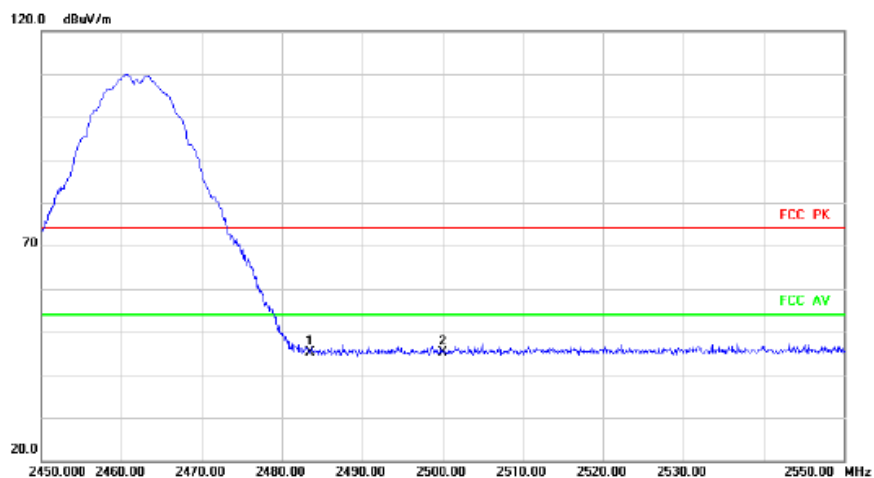
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4924.000 | 49.98         | -1.29          | 48.69       | 74.00  | -25.31 | peak           |              |         |

### Radiated Emission

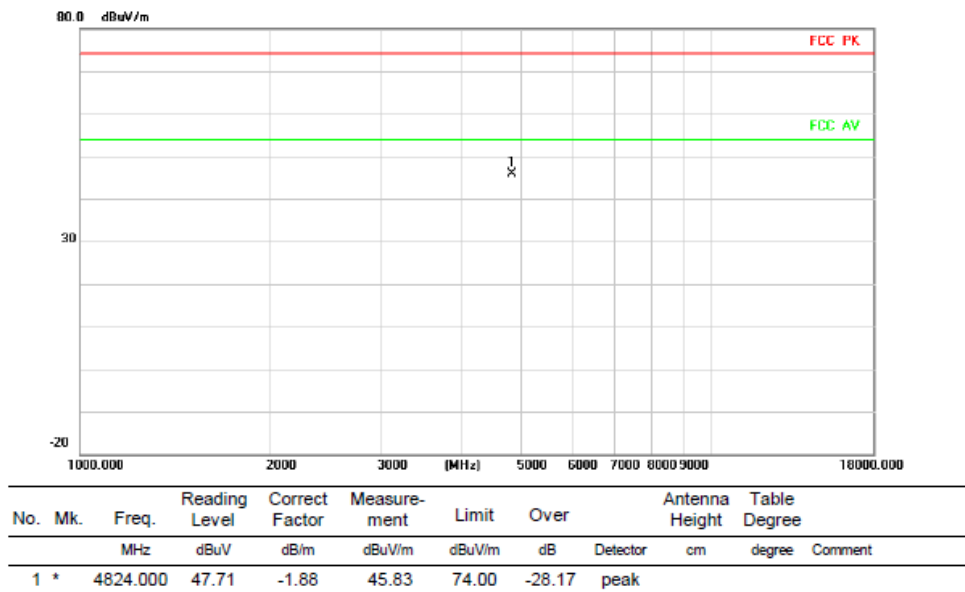


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 2483.500 | 34.11         | 11.09          | 45.20       | 74.00  | -28.80 | peak           |              |         |
| 2   |     | 2500.000 | 33.95         | 11.22          | 45.17       | 74.00  | -28.83 | peak           |              |         |

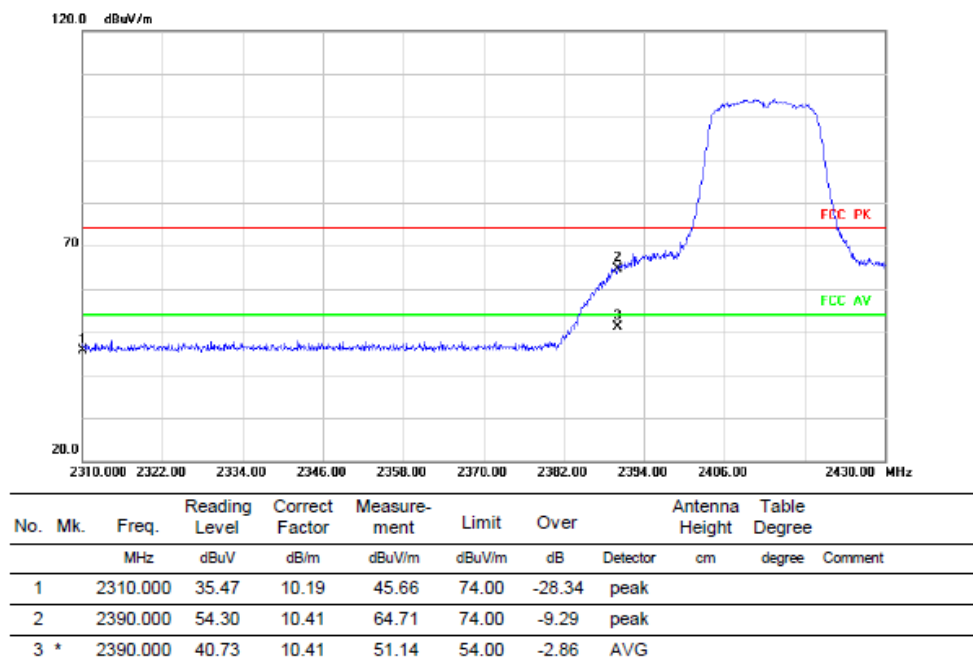
|                       |               |                |      |
|-----------------------|---------------|----------------|------|
| Above 1G (1GHz~18GHz) | Test mode:11G | Test Channel:1 | ANT0 |
|-----------------------|---------------|----------------|------|

### VERTICAL

#### Radiated Emission



#### Radiated Emission



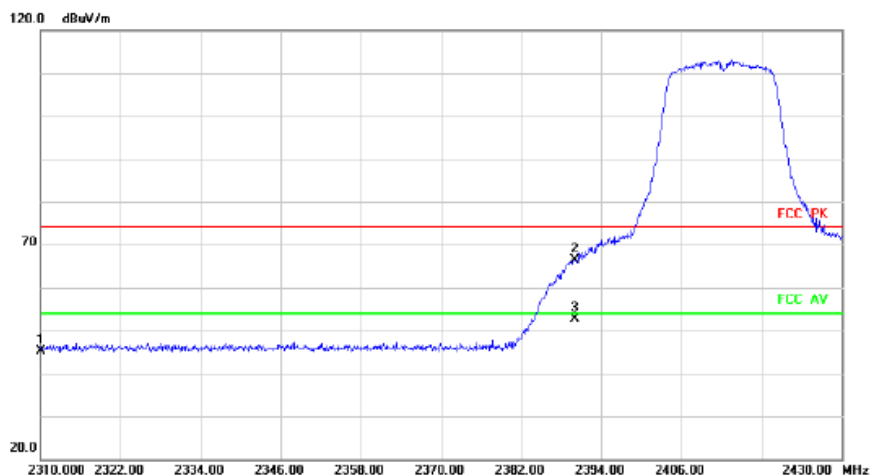
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   | *   | 4824.000 | 50.62         | -1.88          | 48.74       | 74.00  | -25.26 | peak           |              |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   |     | 2310.000 | 34.97         | 10.19          | 45.16       | 74.00  | -28.84 | peak           |              |
| 2   |     | 2390.000 | 55.86         | 10.41          | 66.27       | 74.00  | -7.73  | peak           |              |
| 3   | *   | 2390.000 | 42.27         | 10.41          | 52.68       | 54.00  | -1.32  | AVG            |              |

|                       |               |                |      |
|-----------------------|---------------|----------------|------|
| Above 1G (1GHz~18GHz) | Test mode:11G | Test Channel:1 | ANT1 |
|-----------------------|---------------|----------------|------|

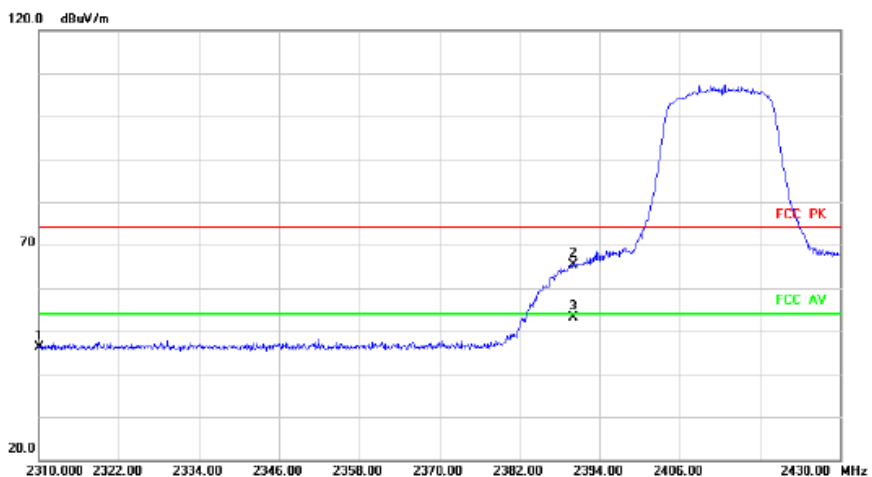
### VERTICAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 50.62         | -1.88          | 48.74       | 74.00  | -25.26 | peak           |              |         |

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 35.90         | 10.19          | 46.09       | 74.00  | -27.91 | peak           |              |         |
| 2   |     | 2390.000 | 55.01         | 10.41          | 65.42       | 74.00  | -8.58  | peak           |              |         |
| 3   | *   | 2390.000 | 42.63         | 10.41          | 53.04       | 54.00  | -0.96  | AVG            |              |         |

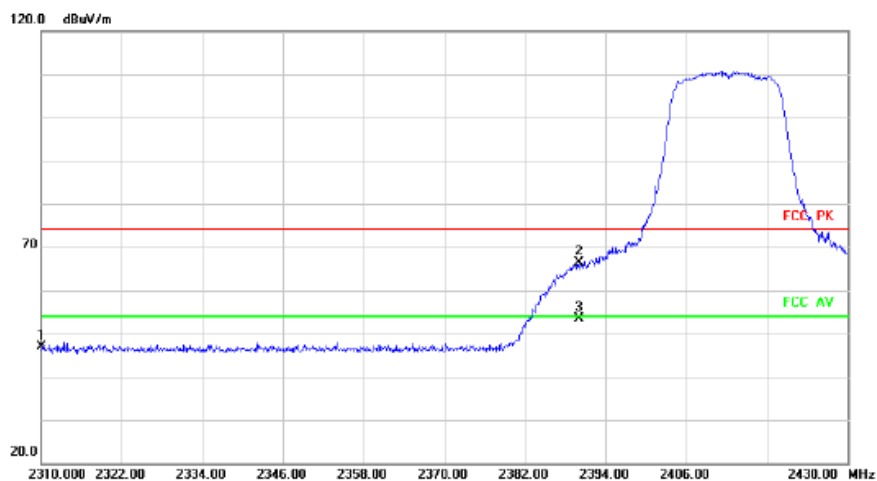
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 50.86         | -1.68          | 48.98       | 74.00  | -25.02 | peak           |              |         |

### Radiated Emission

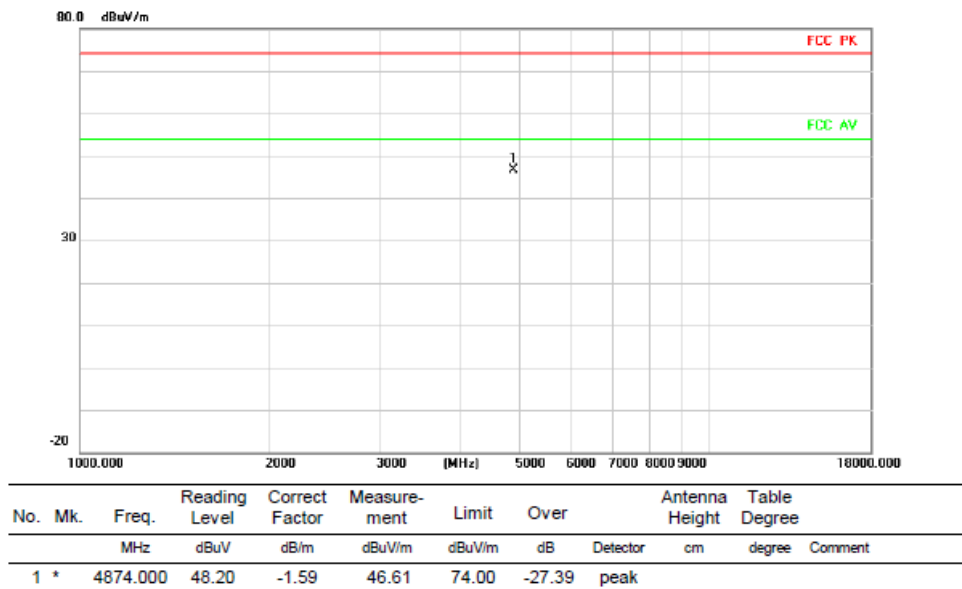


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 36.72         | 10.19          | 46.91       | 74.00  | -27.09 | peak           |              |         |
| 2   |     | 2390.000 | 56.02         | 10.41          | 66.43       | 74.00  | -7.57  | peak           |              |         |
| 3   | *   | 2390.000 | 42.87         | 10.41          | 53.28       | 54.00  | -0.72  | AVG            |              |         |

|                       |                |                 |       |
|-----------------------|----------------|-----------------|-------|
| Above 1G (1GHz~18GHz) | Test mode: 11G | Test Channel: 6 | ANT 1 |
|-----------------------|----------------|-----------------|-------|

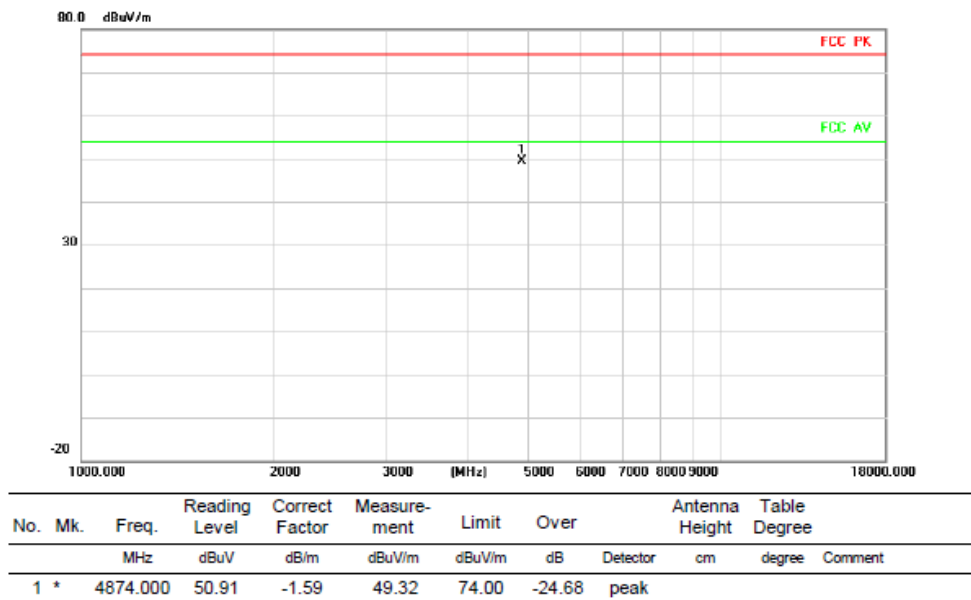
### VERTICAL

#### Radiated Emission



### HORIZONTAL

#### Radiated Emission



|                       |                |                 |       |
|-----------------------|----------------|-----------------|-------|
| Above 1G (1GHz~18GHz) | Test mode: 11G | Test Channel: 6 | ANT 2 |
|-----------------------|----------------|-----------------|-------|

### VERTICAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4874.000 | 47.42         | -1.59          | 45.83       | 74.00  | -28.17 | peak           |              |         |

### HORIZONTAL

#### Radiated Emission

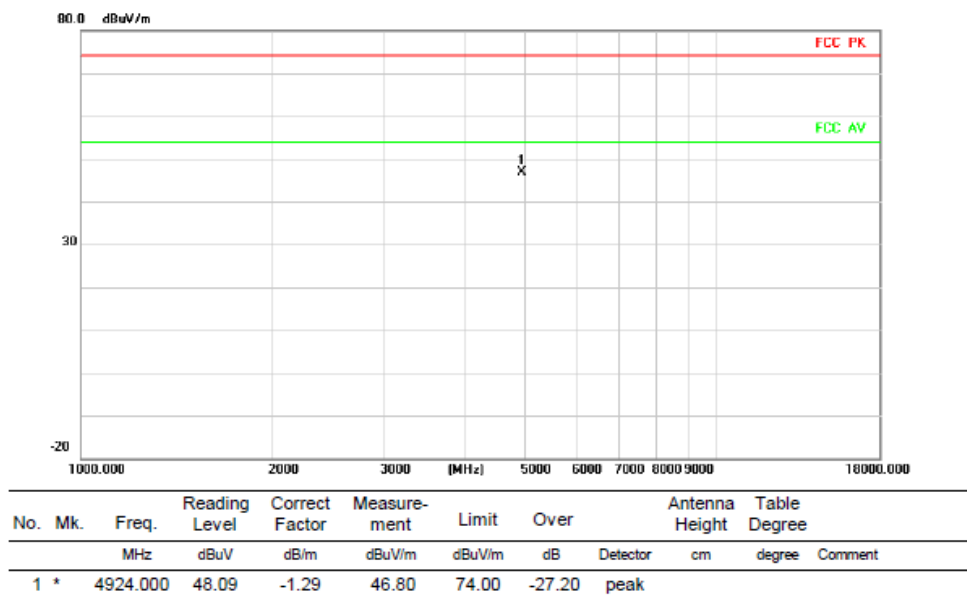


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4874.000 | 50.54         | -1.59          | 48.95       | 74.00  | -25.05 | peak           |              |         |

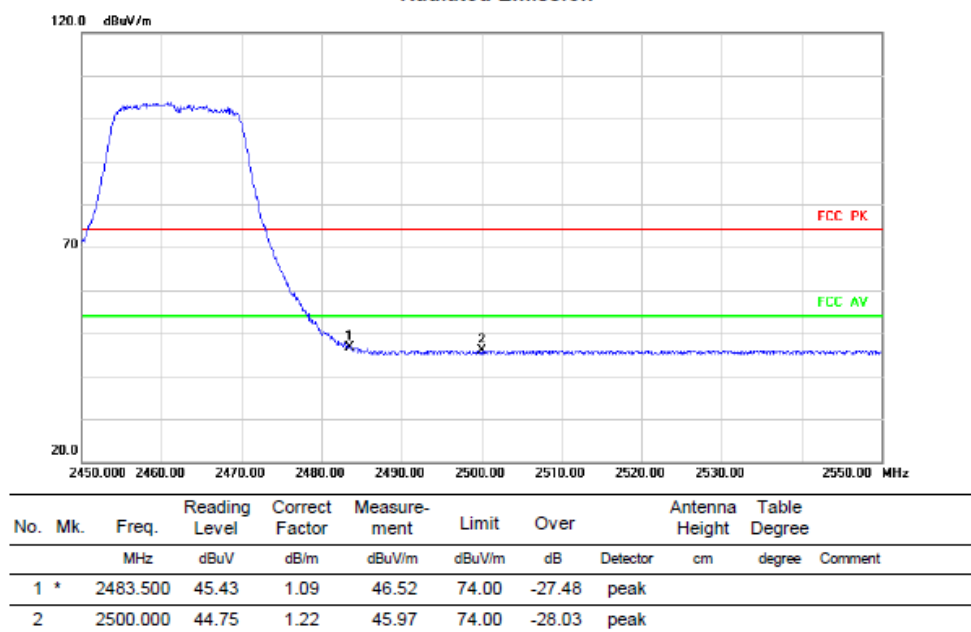
|                       |                |                 |       |
|-----------------------|----------------|-----------------|-------|
| Above 1G (1GHz~18GHz) | Test mode: 11G | Test Channel:11 | ANT 1 |
|-----------------------|----------------|-----------------|-------|

### VERTICAL

#### Radiated Emission

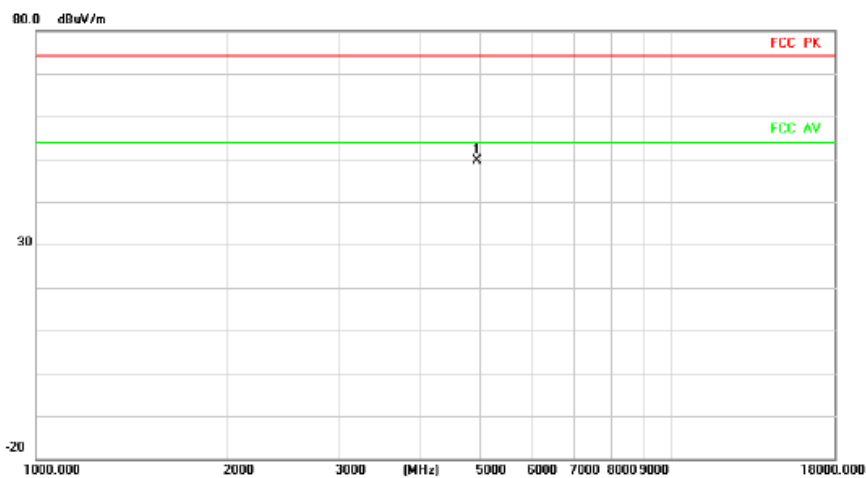


#### Radiated Emission



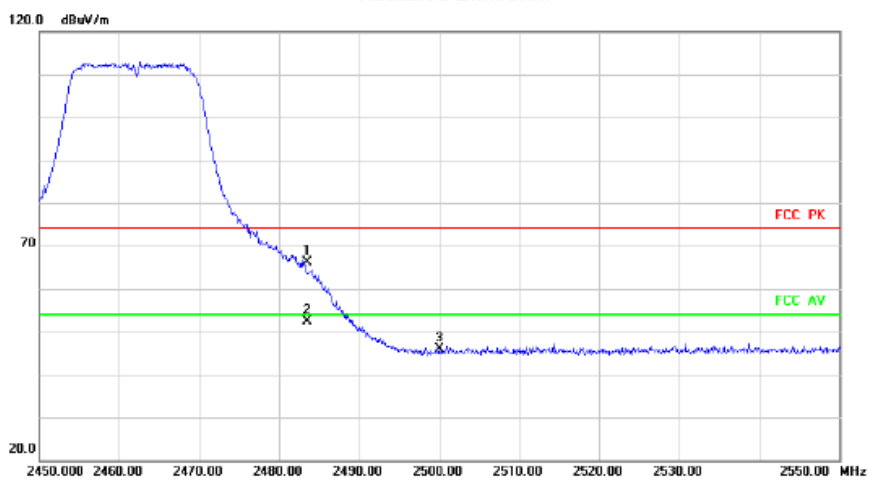
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   | *   | 4924.000 | 50.82         | -1.29          | 49.53       | 74.00  | -24.47 | peak           |              |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   |     | 2483.500 | 55.13         | 11.09          | 66.22       | 74.00  | -7.78  | peak           |              |
| 2   | *   | 2483.500 | 41.35         | 11.09          | 52.44       | 54.00  | -1.56  | AVG            |              |
| 3   |     | 2500.000 | 34.62         | 11.22          | 45.84       | 74.00  | -28.16 | peak           |              |

|                       |                |                 |       |
|-----------------------|----------------|-----------------|-------|
| Above 1G (1GHz~18GHz) | Test mode: 11G | Test Channel:11 | ANT 2 |
|-----------------------|----------------|-----------------|-------|

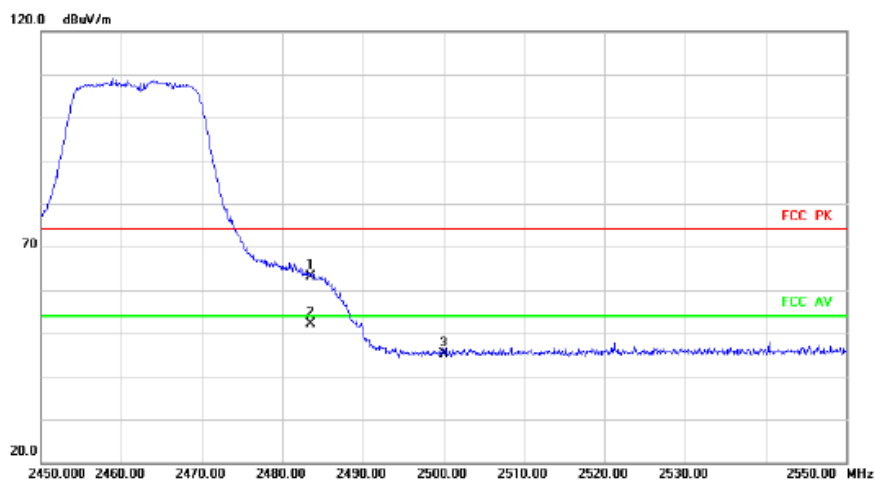
### VERTICAL

#### Radiated Emission



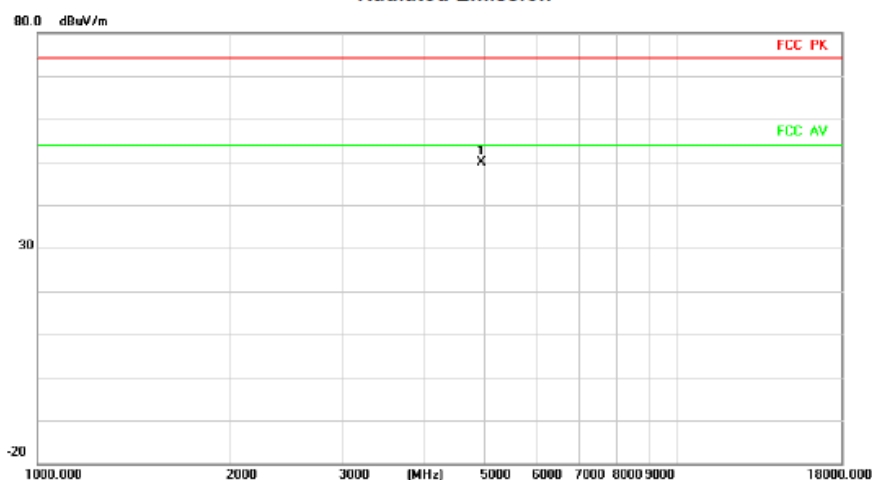
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 4924.000 | 47.44         | -1.29          | 46.15       | 74.00  | -27.85 | peak           |              | Comment |

#### Radiated Emission



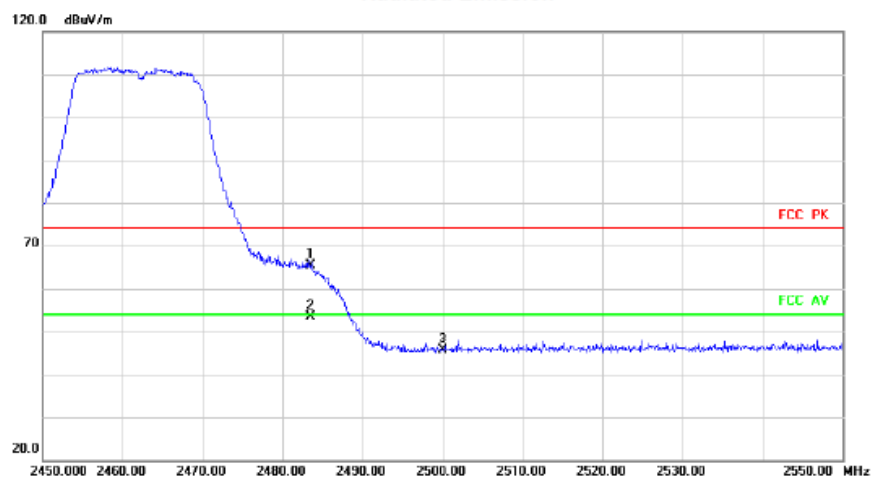
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 1   |     | 2483.500 | 52.16         | 11.09          | 63.25       | 74.00  | -10.75 | peak           |              |        |
| 2   | *   | 2483.500 | 41.04         | 11.09          | 52.13       | 54.00  | -1.87  | AVG            |              |        |
| 3   |     | 2500.000 | 33.98         | 11.22          | 45.20       | 74.00  | -28.80 | peak           |              |        |

## HORIZONTAL Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4924.000 | 51.09         | -1.29          | 49.80       | 74.00  | -24.20 | peak           |              |         |

## Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2483.500 | 54.35         | 11.09          | 65.44       | 74.00  | -8.56  | peak           |              |         |
| 2   | *   | 2483.500 | 42.33         | 11.09          | 53.42       | 54.00  | -0.58  | AVG            |              |         |
| 3   |     | 2500.000 | 34.49         | 11.22          | 45.71       | 74.00  | -28.29 | peak           |              |         |

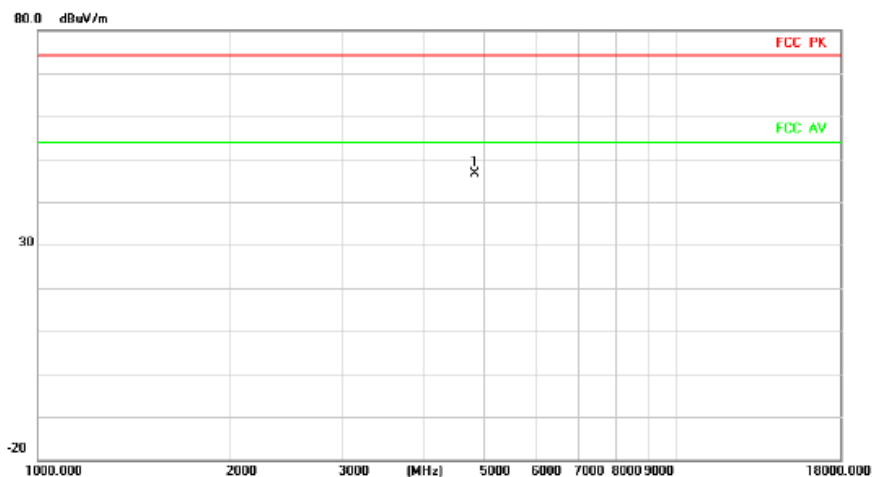
Above 1G (1GHz~18GHz)

Test mode: 11N20MIMO

Test Channel:1

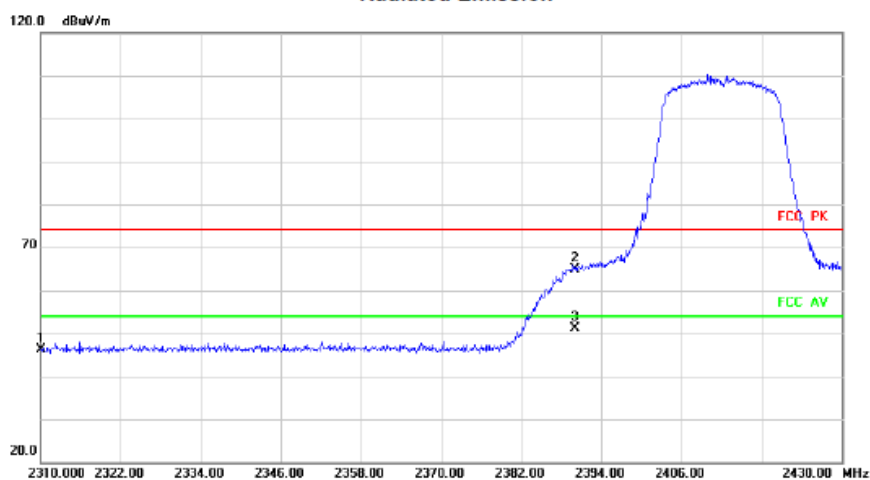
VERTICAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 4824.000 | 48.62         | -1.88          | 46.74       | 74.00  | -27.26 | peak           |              | Comment |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   |     | 2310.000 | 35.92         | 10.19          | 46.11       | 74.00  | -27.89 | peak           |              | Comment |
| 2   |     | 2390.000 | 54.36         | 10.41          | 64.77       | 74.00  | -9.23  | peak           |              |         |
| 3   | *   | 2390.000 | 40.82         | 10.41          | 51.23       | 54.00  | -2.77  | AVG            |              |         |

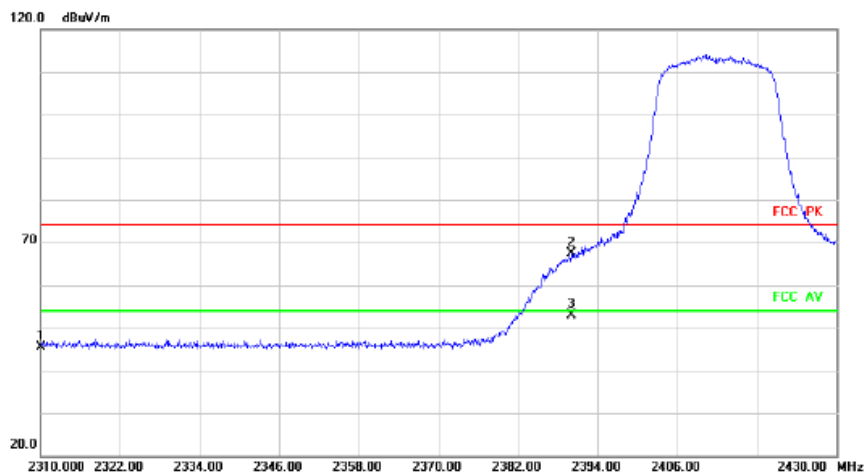
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 51.02         | -1.88          | 49.14       | 74.00  | -24.86 | peak           |              |         |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 35.21         | 10.19          | 45.40       | 74.00  | -28.60 | peak           |              |         |
| 2   |     | 2390.000 | 56.88         | 10.41          | 67.29       | 74.00  | -6.71  | peak           |              |         |
| 3   | *   | 2390.000 | 42.56         | 10.41          | 52.97       | 54.00  | -1.03  | AVG            |              |         |

Above 1G (1GHz~18GHz)

Test mode: 11N20MIMO

Test Channel: 6

### VERTICAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4874.000 | 47.48         | -1.59          | 45.89       | 74.00  | -28.11 | peak           |              |         |

### HORIZONTAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4874.000 | 49.88         | -1.59          | 48.29       | 74.00  | -25.71 | peak           |              |         |

Above 1G (1GHz~18GHz)

Test mode: 11N20MIMO

Test Channel:11

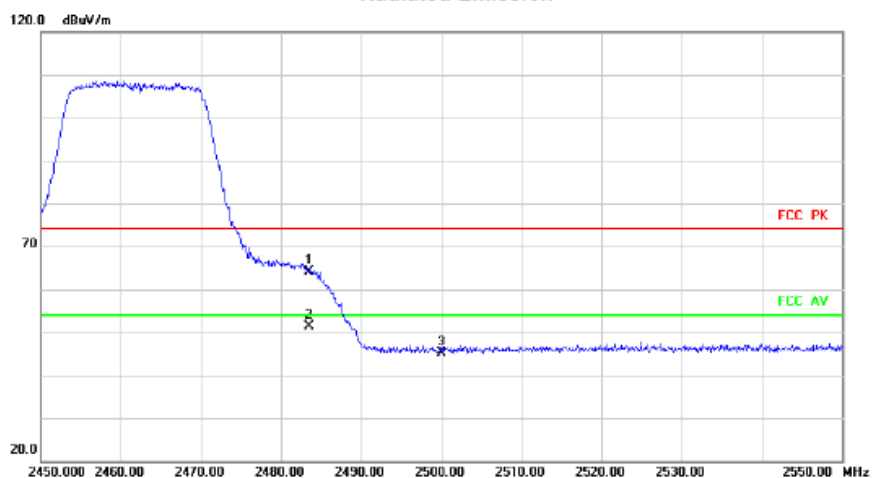
VERTICAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 4924.000 | 46.56         | -1.29          | 45.27       | 74.00  | -28.73 | peak           |              | Comment |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 1   |     | 2483.500 | 53.15         | 11.09          | 64.24       | 74.00  | -9.76  | peak           |              |        |
| 2   | *   | 2483.500 | 40.34         | 11.09          | 51.43       | 54.00  | -2.57  | AVG            |              |        |
| 3   |     | 2500.000 | 33.96         | 11.22          | 45.18       | 74.00  | -28.82 | peak           |              |        |

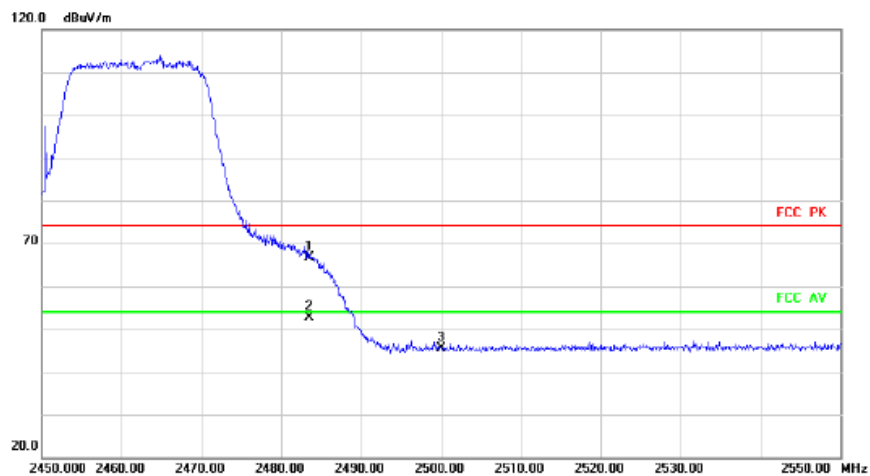
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   | *   | 4924.000 | 49.49         | -1.29          | 48.20       | 74.00  | -25.80 | peak           |              |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   |     | 2483.500 | 55.51         | 11.09          | 66.60       | 74.00  | -7.40  | peak           |              |
| 2   | *   | 2483.500 | 41.59         | 11.09          | 52.68       | 54.00  | -1.32  | AVG            |              |
| 3   |     | 2500.000 | 34.07         | 11.22          | 45.29       | 74.00  | -28.71 | peak           |              |

Above 1G (1GHz~18GHz)

Test mode: 11N40MIMO

Test Channel:3

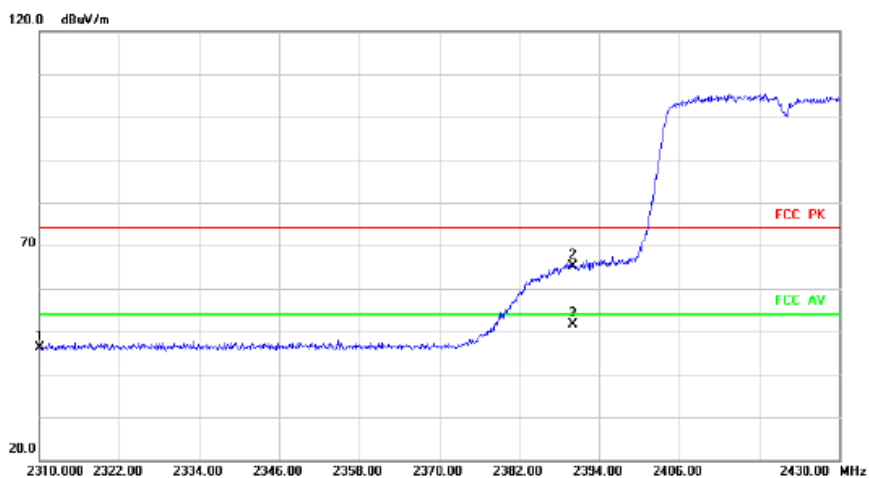
VERTICAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4844.000 | 47.49         | -1.77          | 45.72       | 74.00  | -28.28 | peak           |              |         |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 35.99         | 10.19          | 46.18       | 74.00  | -27.82 | peak           |              |         |
| 2   |     | 2390.000 | 54.67         | 10.41          | 65.08       | 74.00  | -8.92  | peak           |              |         |
| 3   | *   | 2390.000 | 41.34         | 10.41          | 51.75       | 54.00  | -2.25  | AVG            |              |         |

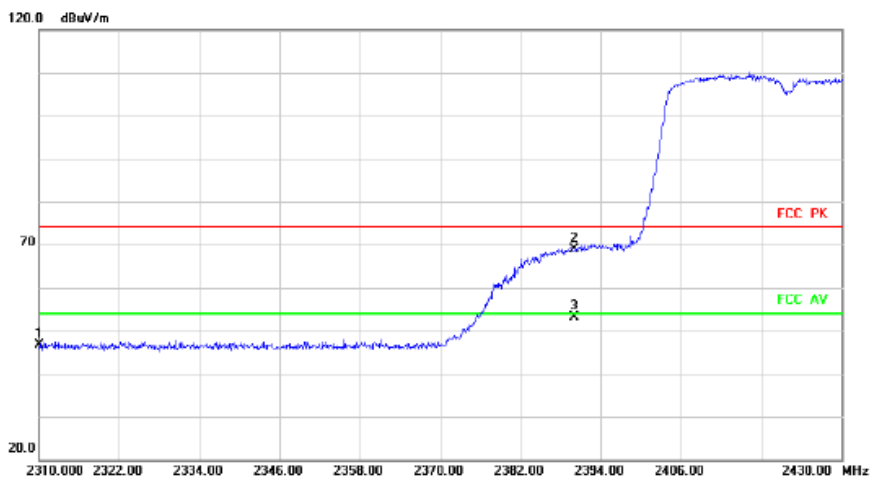
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4844.000 | 50.39         | -1.77          | 48.62       | 74.00  | -25.38 | peak           |              |         |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 36.47         | 10.19          | 46.66       | 74.00  | -27.34 | peak           |              |         |
| 2   |     | 2390.000 | 58.59         | 10.41          | 69.00       | 74.00  | -5.00  | peak           |              |         |
| 3   | *   | 2390.000 | 42.74         | 10.41          | 53.15       | 54.00  | -0.85  | AVG            |              |         |

Above 1G (1GHz~18GHz)

Test mode: 11N40MIMO

Test Channel: 6

### VERTICAL

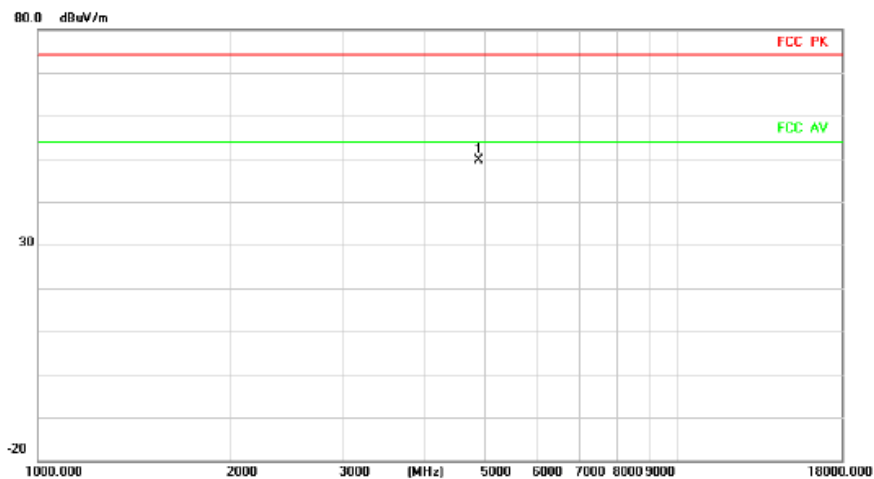
#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 4874.000 | 47.72         | -1.59          | 46.13       | 74.00  | -27.87 | peak           |              | Comment |

### HORIZONTAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 4874.000 | 51.29         | -1.59          | 49.70       | 74.00  | -24.30 | peak           |              | Comment |

Above 1G (1GHz~18GHz)

Test mode: 11N40MIMO

Test Channel:9

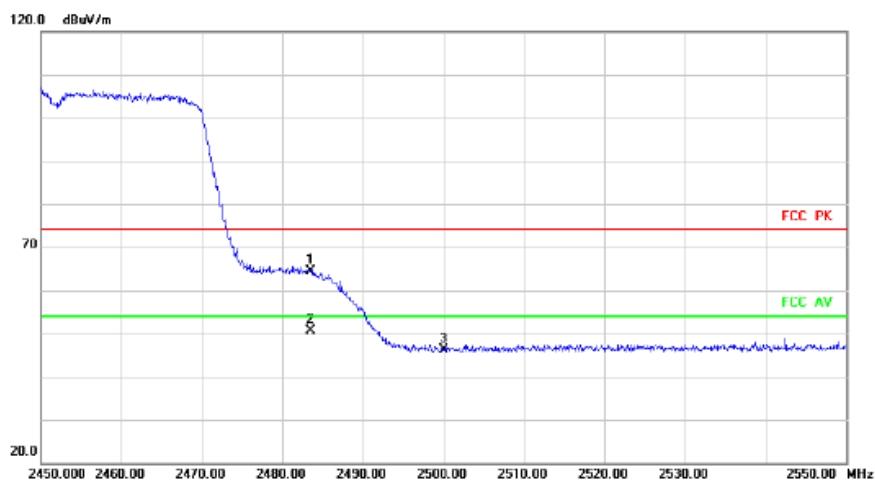
VERTICAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 4904.000 | 48.06         | -1.41          | 46.65       | 74.00  | -27.35 | peak           |              | Comment |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 1   |     | 2483.500 | 53.38         | 11.09          | 64.47       | 74.00  | -9.53  | peak           |              |        |
| 2   | *   | 2483.500 | 39.64         | 11.09          | 50.73       | 54.00  | -3.27  | AVG            |              |        |
| 3   |     | 2500.000 | 35.03         | 11.22          | 46.25       | 74.00  | -27.75 | peak           |              |        |

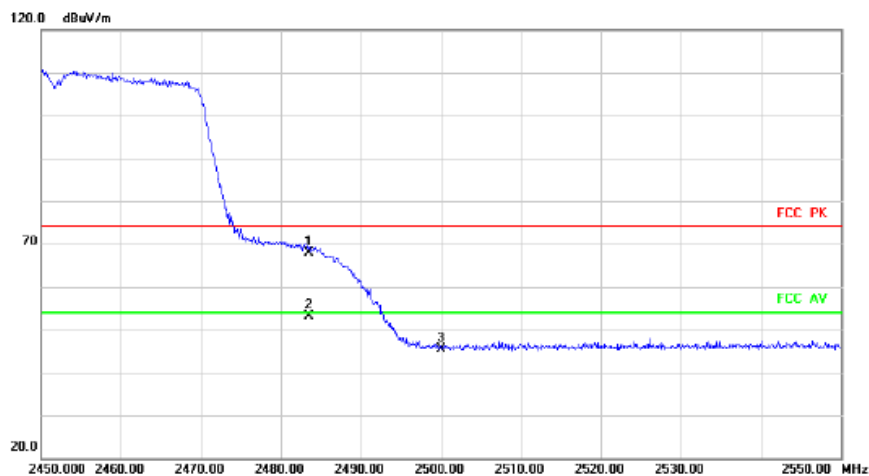
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dBm            | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 1   | *   | 4904.000 | 51.36         | -1.41          | 49.95       | 74.00  | -24.05 | peak           |              |        |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dBm            | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 1   |     | 2483.500 | 56.88         | 11.09          | 67.97       | 74.00  | -6.03  | peak           |              |        |
| 2   | *   | 2483.500 | 42.15         | 11.09          | 53.24       | 54.00  | -0.76  | AVG            |              |        |
| 3   |     | 2500.000 | 34.23         | 11.22          | 45.45       | 74.00  | -28.55 | peak           |              |        |

Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO

Test Channel:1

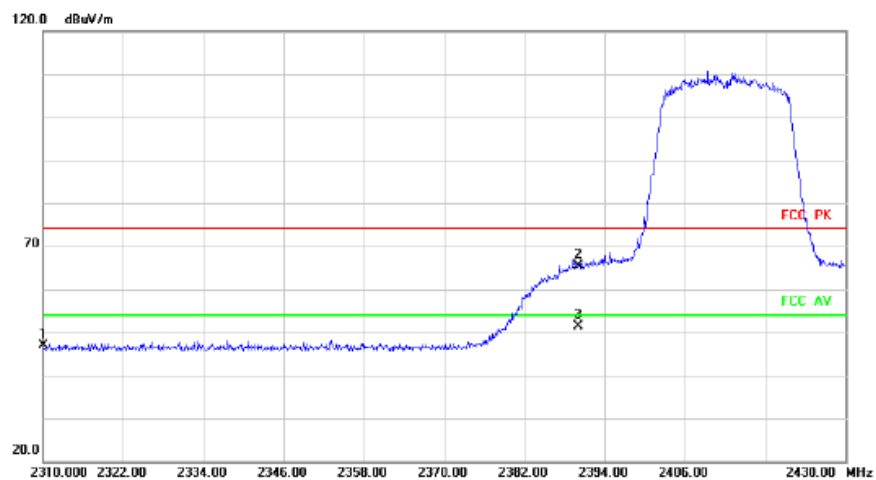
VERTICAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 47.89         | -1.88          | 46.01       | 74.00  | -27.99 | peak           |              |         |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 36.68         | 10.19          | 46.87       | 74.00  | -27.13 | peak           |              |         |
| 2   |     | 2390.000 | 54.85         | 10.41          | 65.26       | 74.00  | -8.74  | peak           |              |         |
| 3   | *   | 2390.000 | 40.86         | 10.41          | 51.27       | 54.00  | -2.73  | AVG            |              |         |

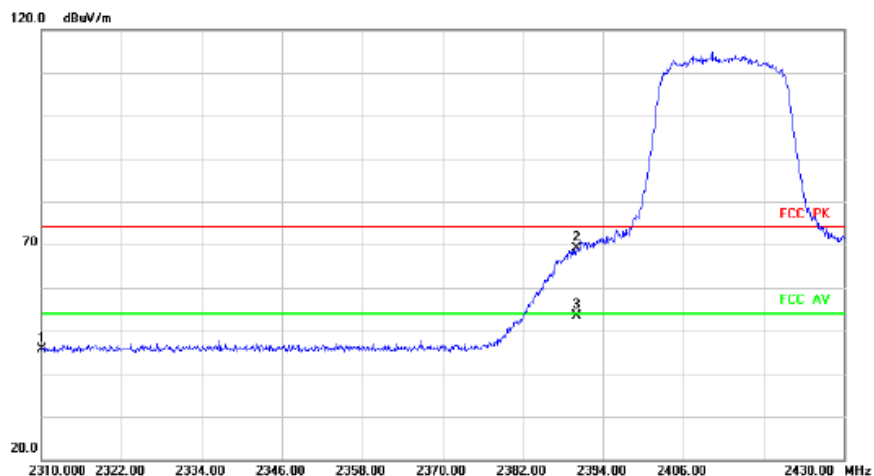
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 51.82         | -1.88          | 49.94       | 74.00  | -24.06 | peak           |              |         |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 35.55         | 10.19          | 45.74       | 74.00  | -28.26 | peak           |              |         |
| 2   |     | 2390.000 | 58.70         | 10.41          | 69.11       | 74.00  | -4.89  | peak           |              |         |
| 3   | *   | 2390.000 | 42.93         | 10.41          | 53.34       | 54.00  | -0.66  | AVG            |              |         |

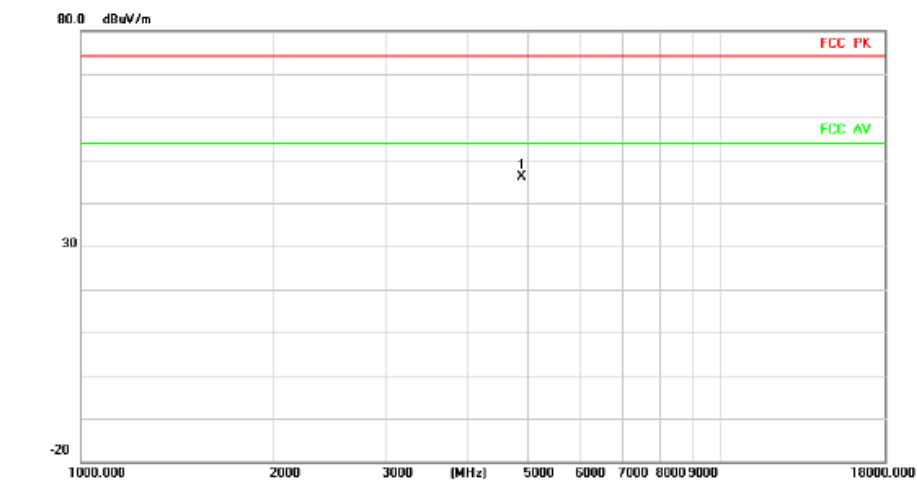
Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO

Test Channel: 6

### VERTICAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   | *   | 4874.000 | 47.70         | -1.59          | 46.11       | 74.00  | -27.89 | peak           |              |

### HORIZONTAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   | *   | 4874.000 | 51.52         | -1.59          | 49.93       | 74.00  | -24.07 | peak           |              |

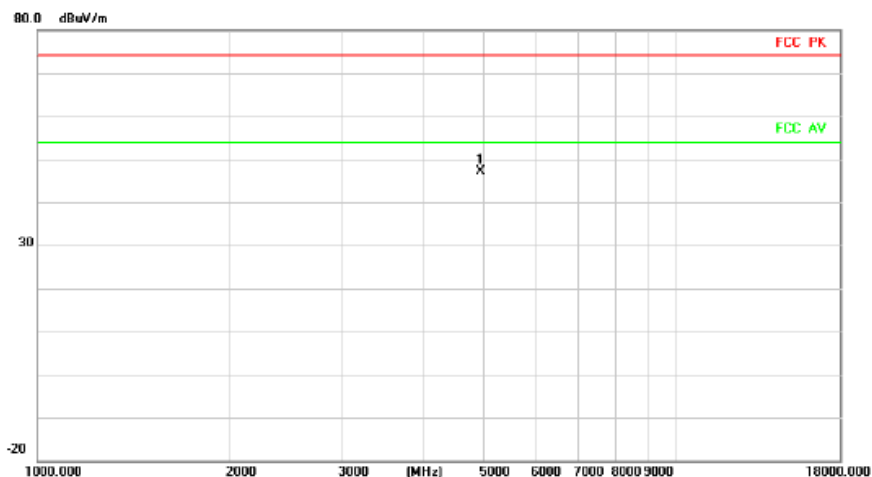
Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO

Test Channel:11

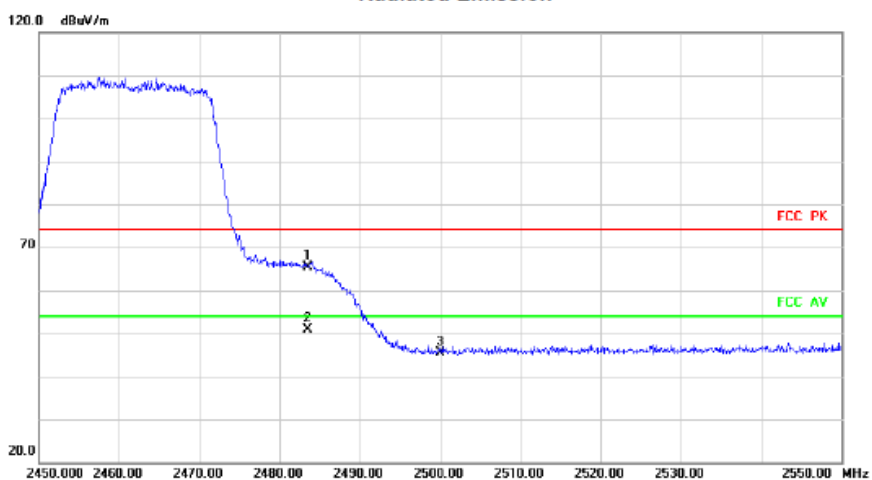
VERTICAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4924.000 | 48.34         | -1.29          | 47.05       | 74.00  | -26.95 | peak           |              |         |

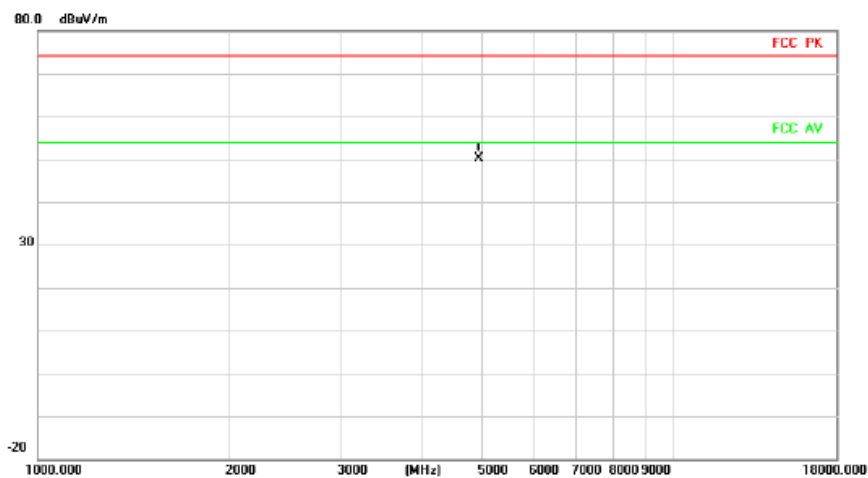
### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2483.500 | 54.18         | 11.09          | 65.27       | 74.00  | -8.73  | peak           |              |         |
| 2   | *   | 2483.500 | 39.84         | 11.09          | 50.93       | 54.00  | -3.07  | AVG            |              |         |
| 3   |     | 2500.000 | 34.20         | 11.22          | 45.42       | 74.00  | -28.58 | peak           |              |         |

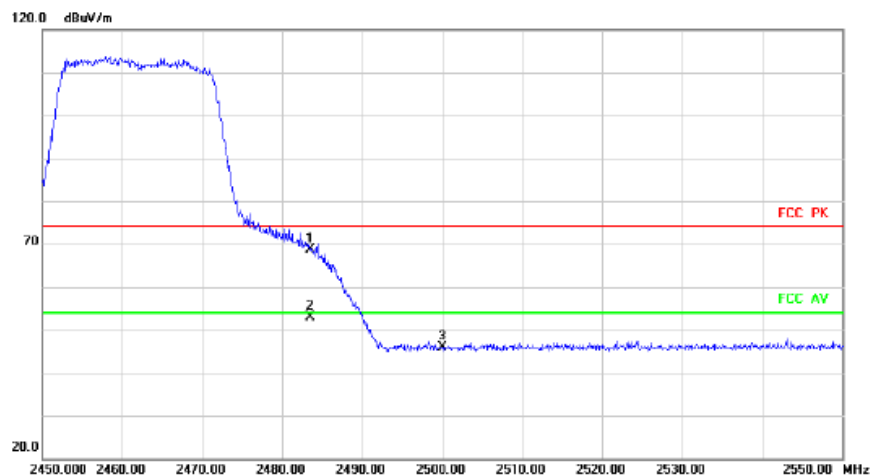
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   | *   | 4924.000 | 51.30         | -1.29          | 50.01       | 74.00  | -23.99 | peak           |              |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   |     | 2483.500 | 57.63         | 11.09          | 68.72       | 74.00  | -5.28  | peak           |              |
| 2   | *   | 2483.500 | 41.77         | 11.09          | 52.86       | 54.00  | -1.14  | AVG            |              |
| 3   |     | 2500.000 | 34.67         | 11.22          | 45.89       | 74.00  | -28.11 | peak           |              |

Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO RU26

Test Channel:1

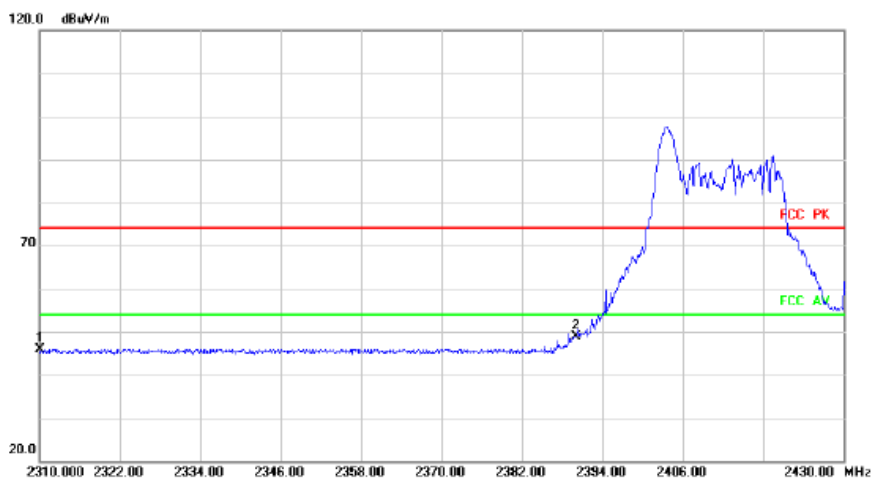
VERTICAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 51.26         | -1.88          | 49.38       | 74.00  | -24.62 | peak           |              |         |

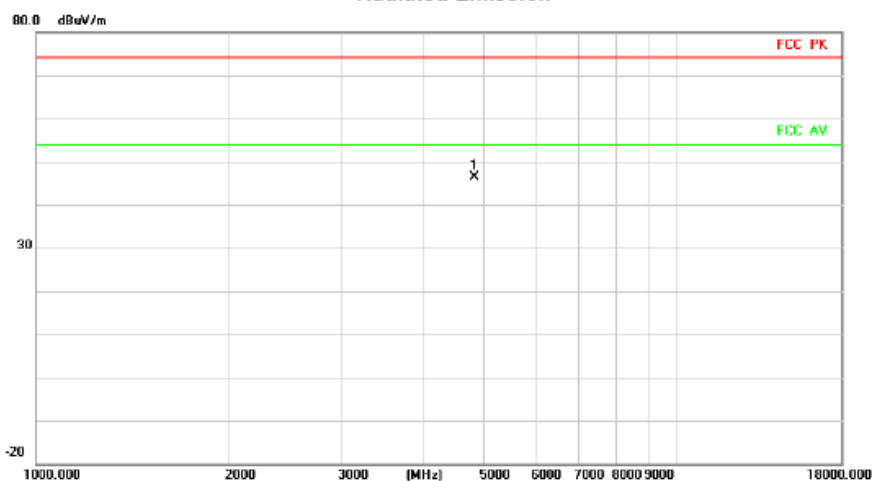
### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 45.70         | 0.19           | 45.89       | 74.00  | -28.11 | peak           |              |         |
| 2   | *   | 2390.000 | 48.59         | 0.41           | 49.00       | 74.00  | -25.00 | peak           |              |         |

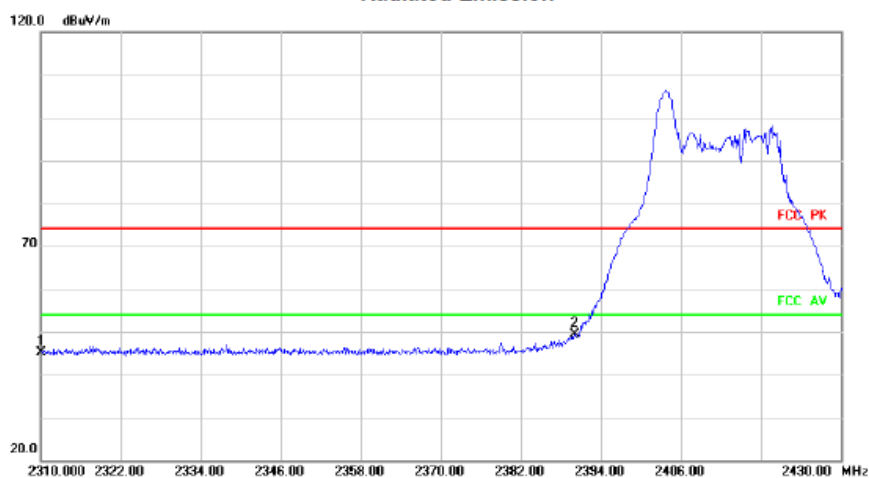
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 48.31         | -1.88          | 46.43       | 74.00  | -27.57 | peak           |              |         |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 44.94         | 0.19           | 45.13       | 74.00  | -28.87 | peak           |              |         |
| 2   | *   | 2390.000 | 49.05         | 0.41           | 49.46       | 74.00  | -24.54 | peak           |              |         |

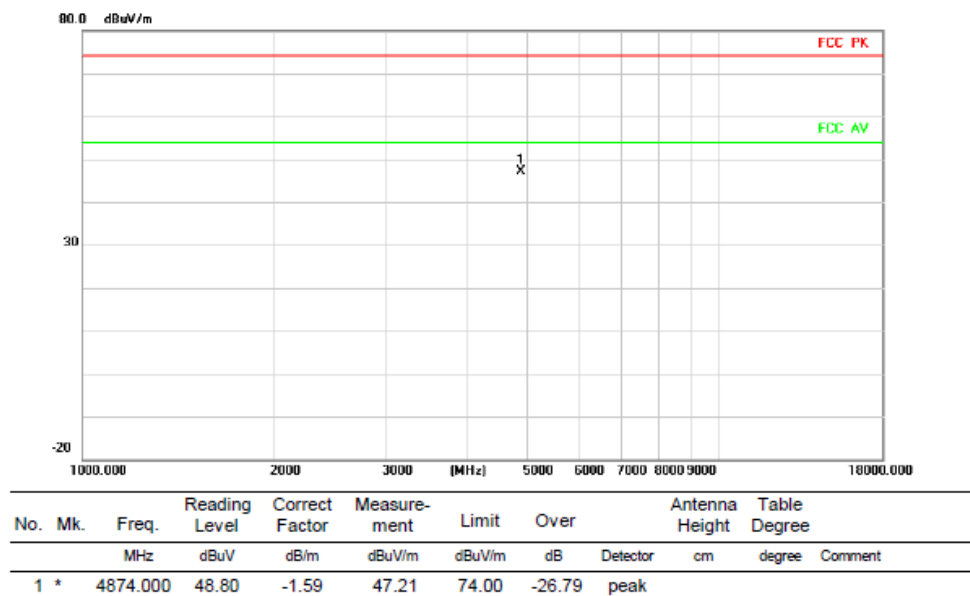
Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO RU26

Test Channel:6

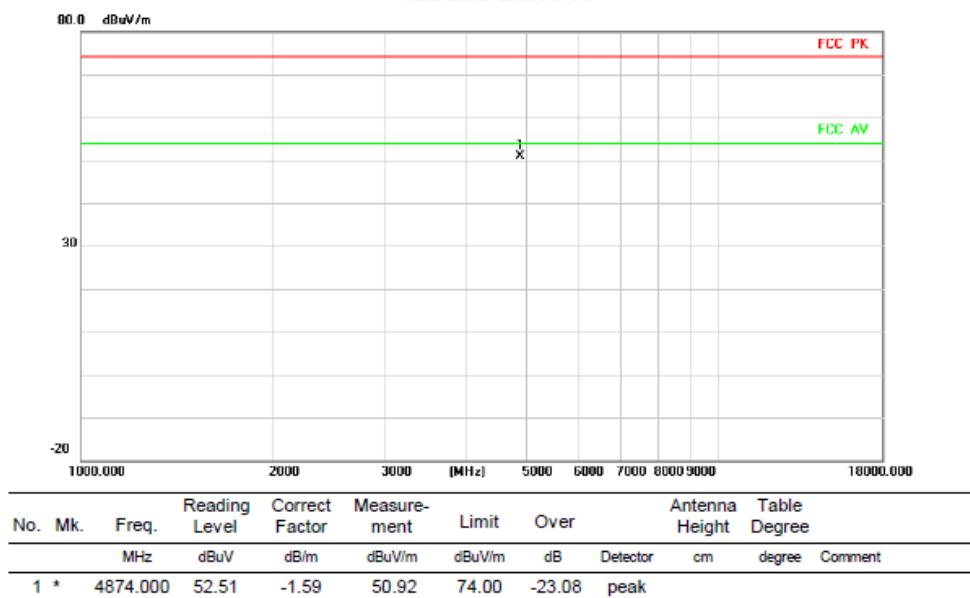
### VERTICAL

#### Radiated Emission



### HORIZONTAL

#### Radiated Emission



Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO RU26

Test Channel:11

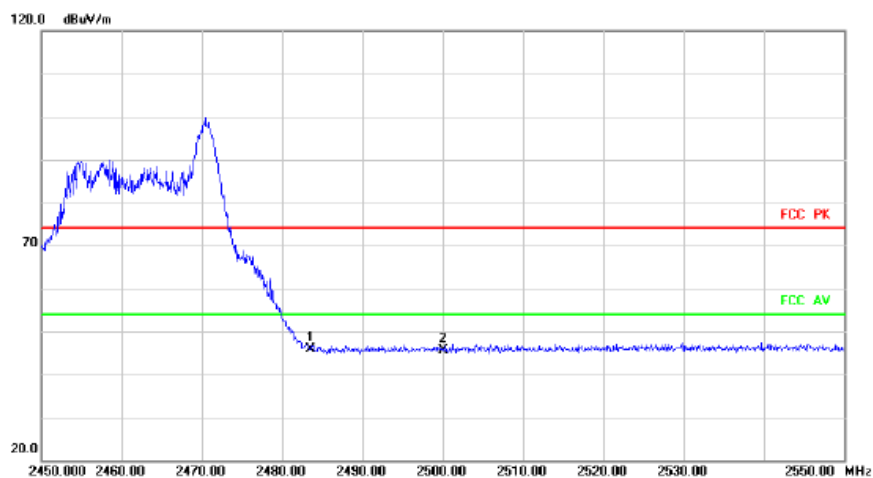
VERTICAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 4924.000 | 47.29         | -1.29          | 46.00       | 74.00  | -28.00 | peak           |              | Comment |

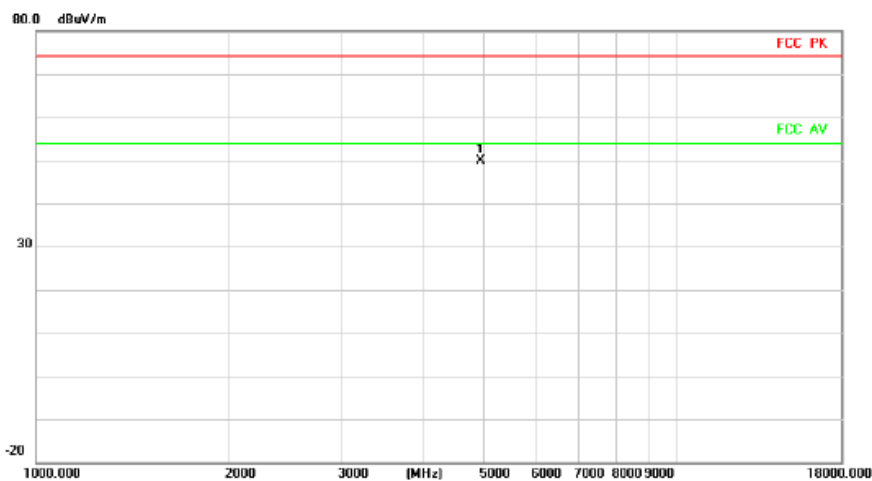
### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 2483.500 | 44.88         | 1.09           | 45.97       | 74.00  | -28.03 | peak           |              | Comment |
| 2   |     | 2500.000 | 44.31         | 1.22           | 45.53       | 74.00  | -28.47 | peak           |              | Comment |

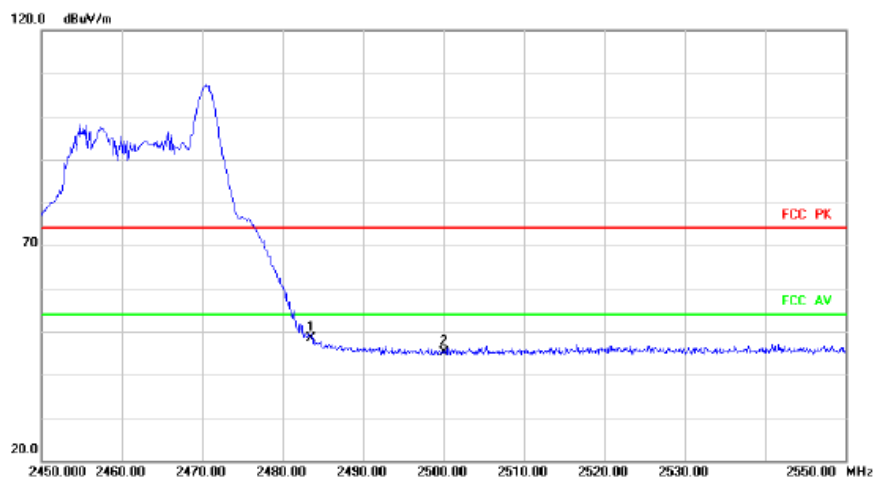
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4924.000 | 51.15         | -1.29          | 49.86       | 74.00  | -24.14 | peak           |              |         |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 2483.500 | 47.22         | 1.09           | 48.31       | 74.00  | -25.69 | peak           |              |         |
| 2   |     | 2500.000 | 43.96         | 1.22           | 45.18       | 74.00  | -28.82 | peak           |              |         |

Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO RU52

Test Channel:1

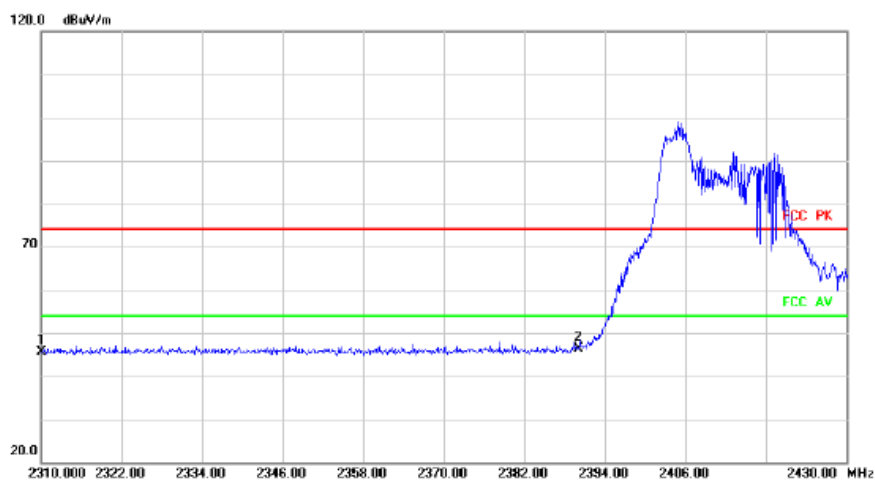
### VERTICAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 47.97         | -1.88          | 46.09       | 74.00  | -27.91 | peak           |              |         |

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 45.55         | 0.19           | 45.74       | 74.00  | -28.26 | peak           |              |         |
| 2   | *   | 2390.000 | 45.99         | 0.41           | 46.40       | 74.00  | -27.60 | peak           |              |         |

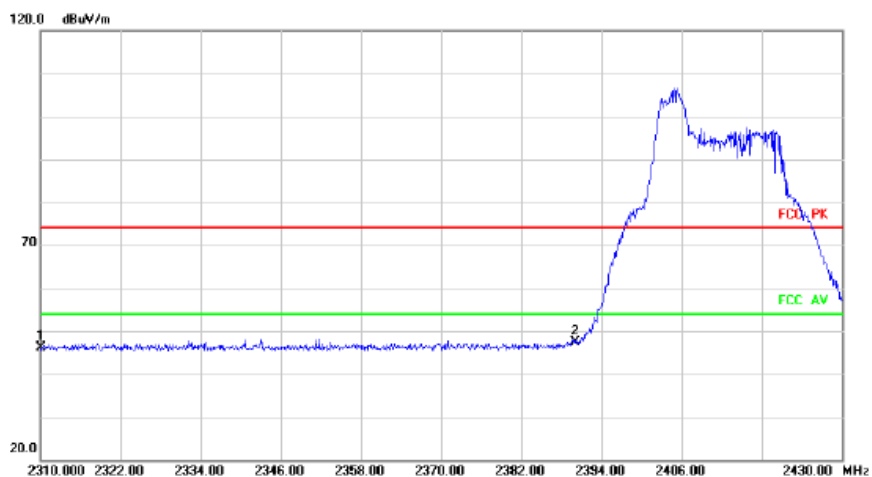
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4824.000 | 50.98         | -1.88          | 49.10       | 74.00  | -24.90 | peak           |              |         |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2310.000 | 45.93         | 0.19           | 46.12       | 74.00  | -27.88 | peak           |              |         |
| 2   | *   | 2390.000 | 46.99         | 0.41           | 47.40       | 74.00  | -26.60 | peak           |              |         |

Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO RU52

Test Channel:6

### VERTICAL

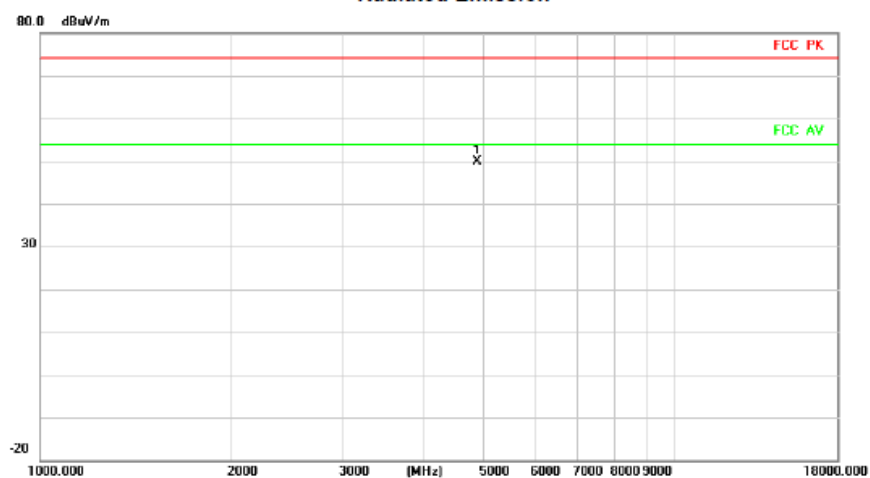
#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4874.000 | 47.83         | -1.59          | 46.24       | 74.00  | -27.76 | peak           |              |         |

### HORIZONTAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4874.000 | 51.49         | -1.59          | 49.90       | 74.00  | -24.10 | peak           |              |         |

Above 1G (1GHz~18GHz)

Test mode: 11AX20MIMO RU52

Test Channel:11

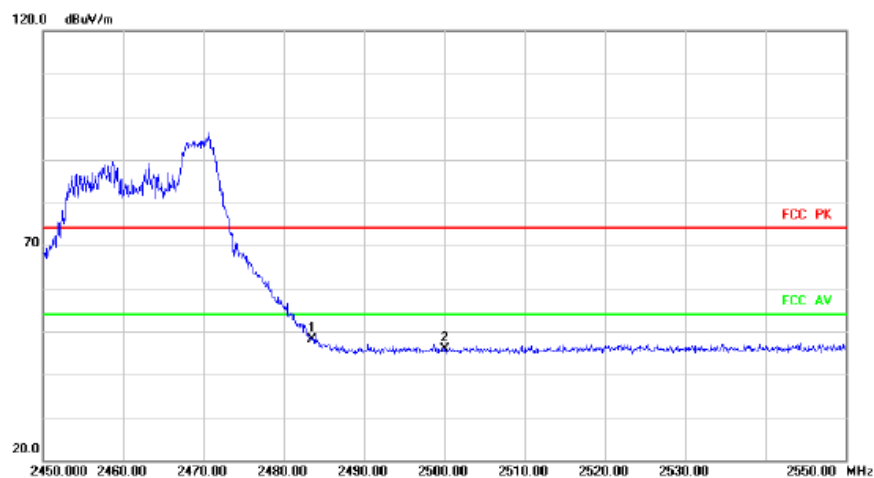
VERTICAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4924.000 | 49.15         | -1.29          | 47.86       | 74.00  | -26.14 | peak           |              |         |

### Radiated Emission



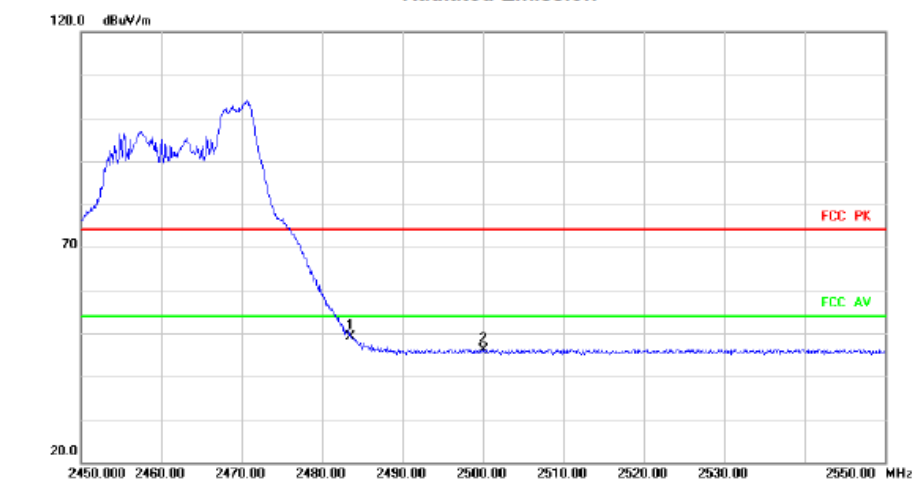
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 2483.500 | 46.96         | 1.09           | 48.05       | 74.00  | -25.95 | peak           |              |         |
| 2   |     | 2500.000 | 44.60         | 1.22           | 45.82       | 74.00  | -28.18 | peak           |              |         |

## HORIZONTAL Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   | *   | 4924.000 | 51.45         | -1.29          | 50.16       | 74.00  | -23.84 | peak           |              |

## Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   | *   | 2483.500 | 47.94         | 1.09           | 49.03       | 74.00  | -24.97 | peak           |              |
| 2   |     | 2500.000 | 44.82         | 1.22           | 46.04       | 74.00  | -27.96 | peak           |              |

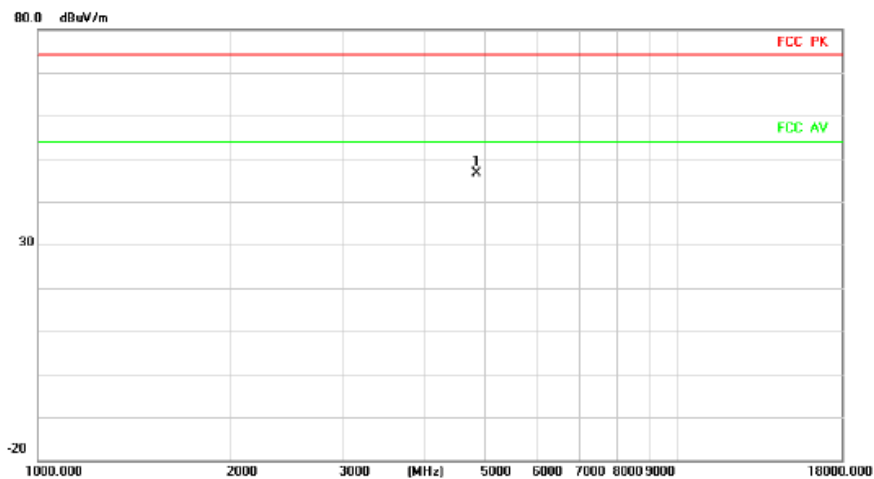
Above 1G (1GHz~18GHz)

Test mode: 11AX40MIMO

Test Channel:3

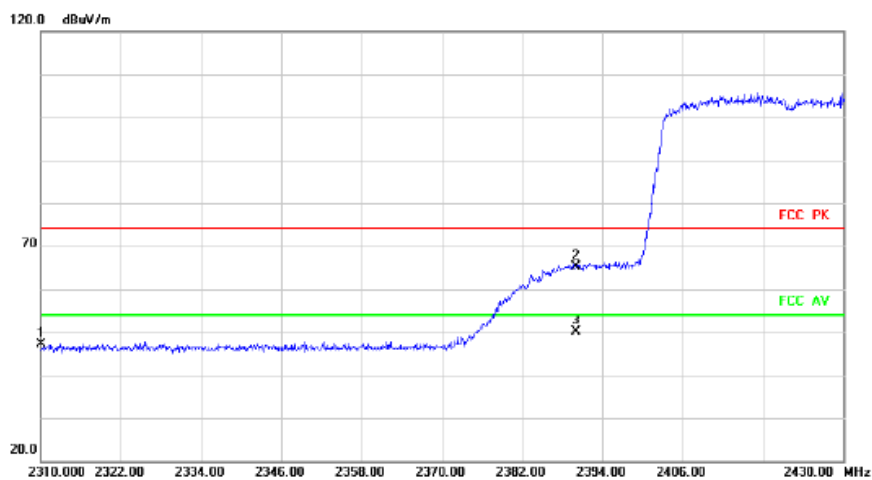
VERTICAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dBm            | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 1   | *   | 4844.000 | 48.44         | -1.77          | 46.67       | 74.00  | -27.33 | peak           |              |        |

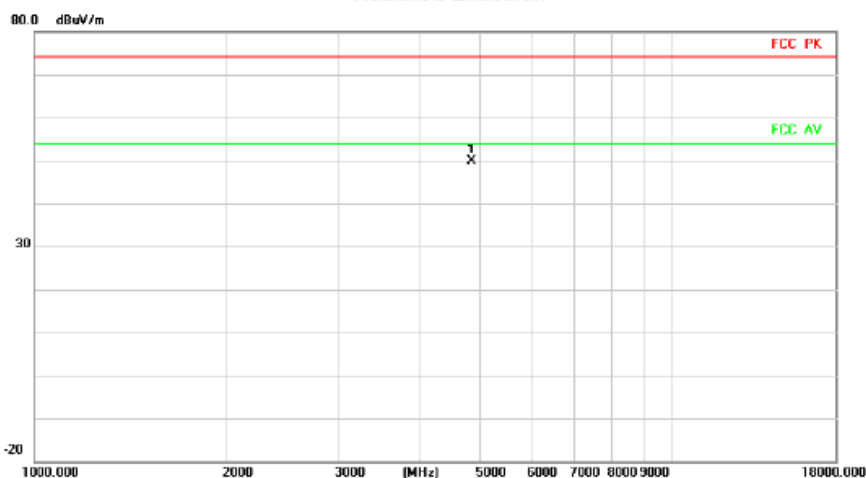
### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |        |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|--------|
|     |     | MHz      | dBuV          | dBm            | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree |
| 1   |     | 2310.000 | 36.89         | 10.19          | 47.08       | 74.00  | -26.92 | peak           |              |        |
| 2   |     | 2390.000 | 54.75         | 10.41          | 65.16       | 74.00  | -8.84  | peak           |              |        |
| 3   | *   | 2390.000 | 39.80         | 10.41          | 50.21       | 54.00  | -3.79  | AVG            |              |        |

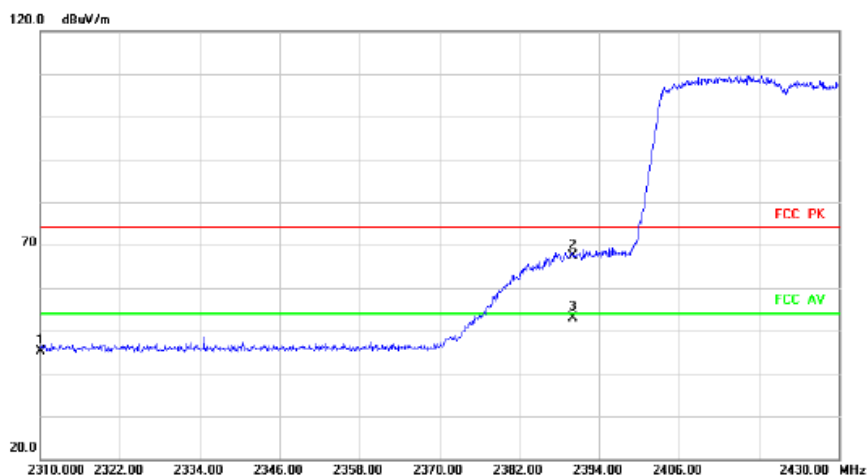
## HORIZONTAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   | *   | 4844.000 | 51.70         | -1.77          | 49.93       | 74.00  | -24.07 | peak           |              |

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       |
| 1   |     | 2310.000 | 35.06         | 10.19          | 45.25       | 74.00  | -28.75 | peak           |              |
| 2   |     | 2390.000 | 57.01         | 10.41          | 67.42       | 74.00  | -6.58  | peak           |              |
| 3   | *   | 2390.000 | 42.39         | 10.41          | 52.80       | 54.00  | -1.20  | AVG            |              |

Above 1G (1GHz~18GHz)

Test mode: 11AX40MIMO

Test Channel: 6

### VERTICAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 4874.000 | 48.90         | -1.59          | 47.31       | 74.00  | -26.69 | peak           |              | Comment |

### HORIZONTAL

#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 4874.000 | 51.61         | -1.59          | 50.02       | 74.00  | -23.98 | peak           |              | Comment |

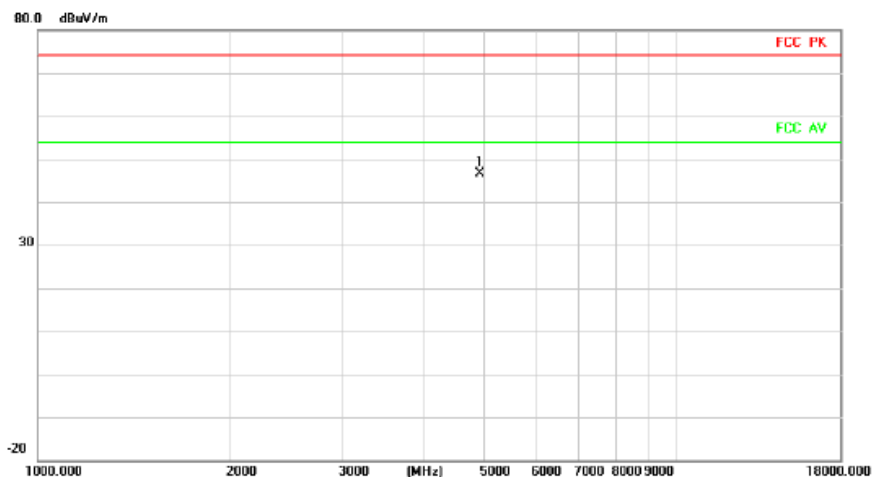
Above 1G (1GHz~18GHz)

Test mode: 11N40MIMO

Test Channel:9

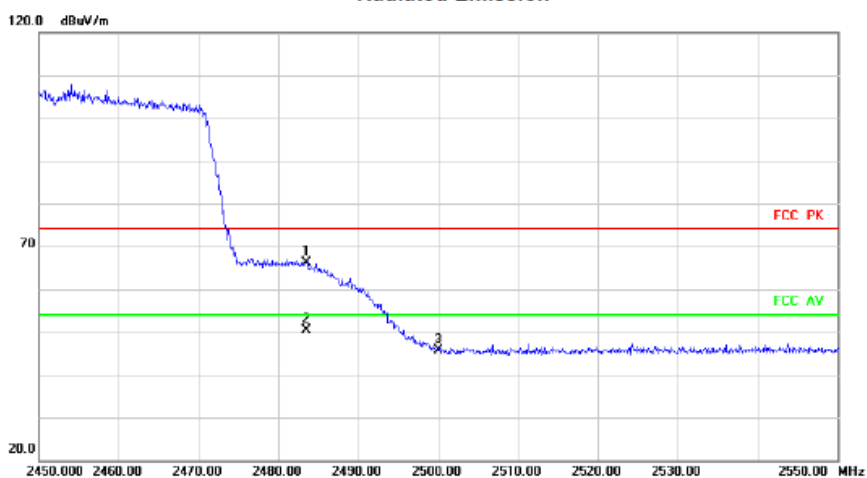
VERTICAL

### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   | *   | 4904.000 | 48.07         | -1.41          | 46.66       | 74.00  | -27.34 | peak           |              | Comment |

### Radiated Emission



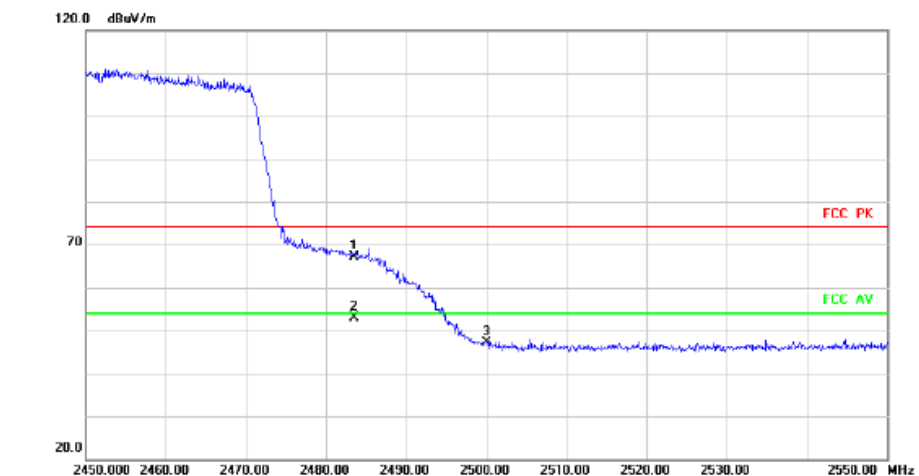
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | Detector       | cm           | degree  |
| 1   |     | 2483.500 | 55.02         | 11.09          | 66.11       | 74.00  | -7.89  | peak           |              | Comment |
| 2   | *   | 2483.500 | 39.24         | 11.09          | 50.33       | 54.00  | -3.67  | AVG            |              |         |
| 3   |     | 2500.000 | 34.45         | 11.22          | 45.67       | 74.00  | -28.33 | peak           |              |         |

## HORIZONTAL Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   | *   | 4904.000 | 51.68         | -1.41          | 50.27       | 74.00  | -23.73 | peak           |              |         |

## Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBuV          | dB/m           | dBuV/m      | dBuV/m | dB     | cm             | degree       | Comment |
| 1   |     | 2483.500 | 55.97         | 11.09          | 67.06       | 74.00  | -6.94  | peak           |              |         |
| 2   | *   | 2483.500 | 41.69         | 11.09          | 52.78       | 54.00  | -1.22  | AVG            |              |         |
| 3   |     | 2500.000 | 35.85         | 11.22          | 47.07       | 74.00  | -26.93 | peak           |              |         |

The high frequency, which started from 18GHz to 25GHz, was pre-scanned and the result which was 20dB lower than the limit line was not recorded in this report.

### 3.3 6dB Bandwidth

#### 3.4.1 Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

#### 3.4.2 Test Procedure

| Test Method                                                                   |                                                  |
|-------------------------------------------------------------------------------|--------------------------------------------------|
| <input checked="" type="radio"/> Conducted Measurement                        | <input type="radio"/> Radiated Measurement       |
| Test Channels                                                                 |                                                  |
| <input checked="" type="radio"/> Lowest, Middle and Highest Channel           | <input type="radio"/> Lowest and Highest Channel |
| Environmental conditions                                                      |                                                  |
| <input checked="" type="radio"/> Normal                                       | <input type="radio"/> Normal and Extreme         |
| Note: <input checked="" type="radio"/> : Test <input type="radio"/> : No Test |                                                  |

a) The EUT was connected to the tonscond test system, and the spectrum analyser is set as follow:

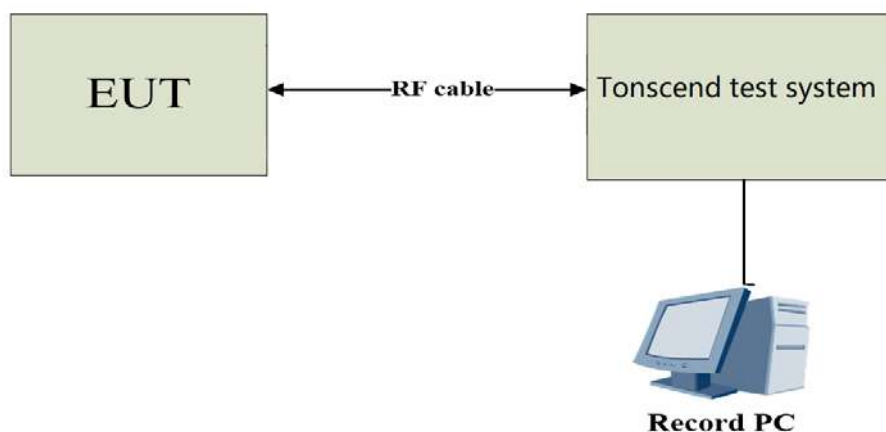
|                  |                                                |
|------------------|------------------------------------------------|
| Centre Frequency | The centre frequency of the channel under test |
| RBW              | 100kHz                                         |
| VBW              | 300kHz                                         |
| Frequency span   | 2x Nominal Channel Bandwidth                   |
| Detector Mode    | Peak                                           |
| Trace Mode       | Max Hold                                       |
| Sweep Time       | Auto Couple                                    |

b) Wait for the trace to stabilize then find the peak value of the trace and place the analyser marker on this peak.

c) Use the -6dB bandwidth function of the spectrum analyser to measure the 6dB Bandwidth of the EUT. This value shall be recorded.

d) Make sure that the power envelope is sufficiently above the noise floor of the analyser to avoid the noise signals left and right from the power envelope being taken into account by this measurement.

#### 3.4.3 Test Setup



### 3.4.4 Test Result

#### DTS Bandwidth

| TestMode           | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|--------------------|---------|----------------|--------------|----------|----------|------------|---------|
| 11B                | Ant1    | 2412           | 7.600        | 2408.440 | 2416.040 | 0.5        | PASS    |
|                    | Ant2    | 2412           | 8.080        | 2407.960 | 2416.040 | 0.5        | PASS    |
|                    | Ant1    | 2437           | 7.080        | 2433.480 | 2440.560 | 0.5        | PASS    |
|                    | Ant2    | 2437           | 7.080        | 2433.480 | 2440.560 | 0.5        | PASS    |
|                    | Ant1    | 2462           | 8.040        | 2458.000 | 2466.040 | 0.5        | PASS    |
|                    | Ant2    | 2462           | 8.560        | 2457.480 | 2466.040 | 0.5        | PASS    |
| 11G                | Ant1    | 2412           | 16.280       | 2403.880 | 2420.160 | 0.5        | PASS    |
|                    | Ant2    | 2412           | 16.320       | 2403.840 | 2420.160 | 0.5        | PASS    |
|                    | Ant1    | 2437           | 16.360       | 2428.840 | 2445.200 | 0.5        | PASS    |
|                    | Ant2    | 2437           | 16.320       | 2428.840 | 2445.160 | 0.5        | PASS    |
|                    | Ant1    | 2462           | 15.720       | 2453.880 | 2469.600 | 0.5        | PASS    |
|                    | Ant2    | 2462           | 15.680       | 2453.840 | 2469.520 | 0.5        | PASS    |
| 11N20MIMO          | Ant1    | 2412           | 17.280       | 2403.480 | 2420.760 | 0.5        | PASS    |
|                    | Ant2    | 2412           | 17.200       | 2403.600 | 2420.800 | 0.5        | PASS    |
|                    | Ant1    | 2437           | 17.560       | 2428.240 | 2445.800 | 0.5        | PASS    |
|                    | Ant2    | 2437           | 16.960       | 2428.840 | 2445.800 | 0.5        | PASS    |
|                    | Ant1    | 2462           | 17.600       | 2453.200 | 2470.800 | 0.5        | PASS    |
|                    | Ant2    | 2462           | 17.160       | 2453.240 | 2470.400 | 0.5        | PASS    |
| 11N40MIMO          | Ant1    | 2422           | 35.680       | 2404.240 | 2439.920 | 0.5        | PASS    |
|                    | Ant2    | 2422           | 35.040       | 2404.480 | 2439.520 | 0.5        | PASS    |
|                    | Ant1    | 2437           | 36.080       | 2418.840 | 2454.920 | 0.5        | PASS    |
|                    | Ant2    | 2437           | 36.320       | 2418.840 | 2455.160 | 0.5        | PASS    |
|                    | Ant1    | 2452           | 36.080       | 2433.840 | 2469.920 | 0.5        | PASS    |
|                    | Ant2    | 2452           | 33.200       | 2434.480 | 2467.680 | 0.5        | PASS    |
| 11AX20MIMO         | Ant1    | 2412           | 18.840       | 2402.640 | 2421.480 | 0.5        | PASS    |
|                    | Ant2    | 2412           | 18.240       | 2402.680 | 2420.920 | 0.5        | PASS    |
|                    | Ant1    | 2437           | 17.400       | 2428.160 | 2445.560 | 0.5        | PASS    |
|                    | Ant2    | 2437           | 19.040       | 2427.520 | 2446.560 | 0.5        | PASS    |
|                    | Ant1    | 2462           | 18.240       | 2453.040 | 2471.280 | 0.5        | PASS    |
|                    | Ant2    | 2462           | 17.040       | 2452.920 | 2469.960 | 0.5        | PASS    |
| 11AX20<br>RU26MIMO | Ant1    | 2412           | 2.080        | 2402.520 | 2404.600 | 0.5        | PASS    |
|                    | Ant2    | 2412           | 2.120        | 2402.480 | 2404.600 | 0.5        | PASS    |
|                    | Ant1    | 2437           | 2.120        | 2427.480 | 2429.600 | 0.5        | PASS    |
|                    | Ant2    | 2437           | 2.080        | 2427.520 | 2429.600 | 0.5        | PASS    |
|                    | Ant1    | 2462           | 2.080        | 2452.480 | 2454.560 | 0.5        | PASS    |
|                    | Ant2    | 2462           | 2.120        | 2452.480 | 2454.600 | 0.5        | PASS    |

|                     |      |      |        |          |          |     |      |
|---------------------|------|------|--------|----------|----------|-----|------|
| 11AX20<br>RU52MIMO  | Ant1 | 2412 | 17.080 | 2402.480 | 2419.560 | 0.5 | PASS |
|                     | Ant2 | 2412 | 17.040 | 2402.520 | 2419.560 | 0.5 | PASS |
|                     | Ant1 | 2437 | 17.080 | 2427.480 | 2444.560 | 0.5 | PASS |
|                     | Ant2 | 2437 | 17.680 | 2427.480 | 2445.160 | 0.5 | PASS |
|                     | Ant1 | 2462 | 17.040 | 2452.520 | 2469.560 | 0.5 | PASS |
|                     | Ant2 | 2462 | 17.040 | 2452.480 | 2469.520 | 0.5 | PASS |
| 11AX20<br>RU106MIMO | Ant1 | 2412 | 18.080 | 2402.480 | 2420.560 | 0.5 | PASS |
|                     | Ant2 | 2412 | 17.680 | 2402.480 | 2420.160 | 0.5 | PASS |
|                     | Ant1 | 2437 | 18.040 | 2427.480 | 2445.520 | 0.5 | PASS |
|                     | Ant2 | 2437 | 18.040 | 2427.480 | 2445.520 | 0.5 | PASS |
|                     | Ant1 | 2462 | 17.080 | 2452.480 | 2469.560 | 0.5 | PASS |
|                     | Ant2 | 2462 | 17.080 | 2452.480 | 2469.560 | 0.5 | PASS |
| 11AX40MIMO          | Ant1 | 2422 | 38.000 | 2403.040 | 2441.040 | 0.5 | PASS |
|                     | Ant2 | 2422 | 37.040 | 2403.680 | 2440.720 | 0.5 | PASS |
|                     | Ant1 | 2437 | 37.040 | 2418.280 | 2455.320 | 0.5 | PASS |
|                     | Ant2 | 2437 | 37.840 | 2418.040 | 2455.880 | 0.5 | PASS |
|                     | Ant1 | 2452 | 37.280 | 2433.200 | 2470.480 | 0.5 | PASS |
|                     | Ant2 | 2452 | 35.680 | 2433.920 | 2469.600 | 0.5 | PASS |

#### Occupied Channel Bandwidth

Please refer to the SZ22110114W03.

11B\_Ant1\_2412



11B\_Ant2\_2412



11B\_Ant1\_2437



11B\_Ant2\_2437



11B\_Ant1\_2462



11B\_Ant2\_2462



### 11G\_Ant1\_2412



### 11G\_Ant2\_2412



11G Ant1 2437



11G Ant2 2437



11G\_Ant1\_2462



11G\_Ant2\_2462



### 11N20MIMO\_Ant1\_2412



### 11N20MIMO\_Ant2\_2412



### 11N20MIMO\_Ant1\_2437



### 11N20MIMO\_Ant2\_2437



### 11N20MIMO\_Ant1\_2462



### 11N20MIMO\_Ant2\_2462



### 11N40MIMO\_Ant1\_2422



### 11N40MIMO\_Ant2\_2422



11N40MIMO\_Ant1\_2437



11N40MIMO\_Ant2\_2437



### 11N40MIMO\_Ant1\_2452



### 11N40MIMO\_Ant2\_2452



11AX20MIMO\_Ant1\_2412



11AX20MIMO\_Ant2\_2412



11AX20MIMO\_Ant1\_2437



11AX20MIMO\_Ant2\_2437



11AX20MIMO\_Ant1\_2462



11AX20MIMO\_Ant2\_2462



### 11AX20MIMO\_Ant1\_2412\_26Tone\_RU0



### 11AX20MIMO\_Ant2\_2412\_26Tone\_RU0



### 11AX20MIMO\_Ant1\_2437\_26Tone\_RU0



### 11AX20MIMO\_Ant2\_2437\_26Tone\_RU0



### 11AX20MIMO\_Ant1\_2462\_26Tone\_RU0



### 11AX20MIMO\_Ant2\_2462\_26Tone\_RU0



### 11AX20MIMO\_Ant1\_2412\_52Tone\_RU37



### 11AX20MIMO\_Ant2\_2412\_52Tone\_RU37



### 11AX20MIMO\_Ant1\_2437\_52Tone\_RU37



### 11AX20MIMO\_Ant2\_2437\_52Tone\_RU37



### 11AX20MIMO\_Ant1\_2462\_52Tone\_RU37



### 11AX20MIMO\_Ant2\_2462\_52Tone\_RU37



### 11AX20MIMO\_Ant1\_2412\_106Tone\_RU53



### 11AX20MIMO\_Ant2\_2412\_106Tone\_RU53



11AX20MIMO\_Ant1\_2437\_106Tone\_RU53



11AX20MIMO\_Ant2\_2437\_106Tone\_RU53



### 11AX20MIMO\_Ant1\_2462\_106Tone\_RU53



### 11AX20MIMO\_Ant2\_2462\_106Tone\_RU53



### 11AX40MIMO\_Ant1\_2422



### 11AX40MIMO\_Ant2\_2422



11AX40MIMO\_Ant1\_2437



11AX40MIMO\_Ant2\_2437



11AX40MIMO\_Ant1\_2452



11AX40MIMO\_Ant2\_2452



### 3.4 Maximum conducted output power

#### 3.5.1 Limit

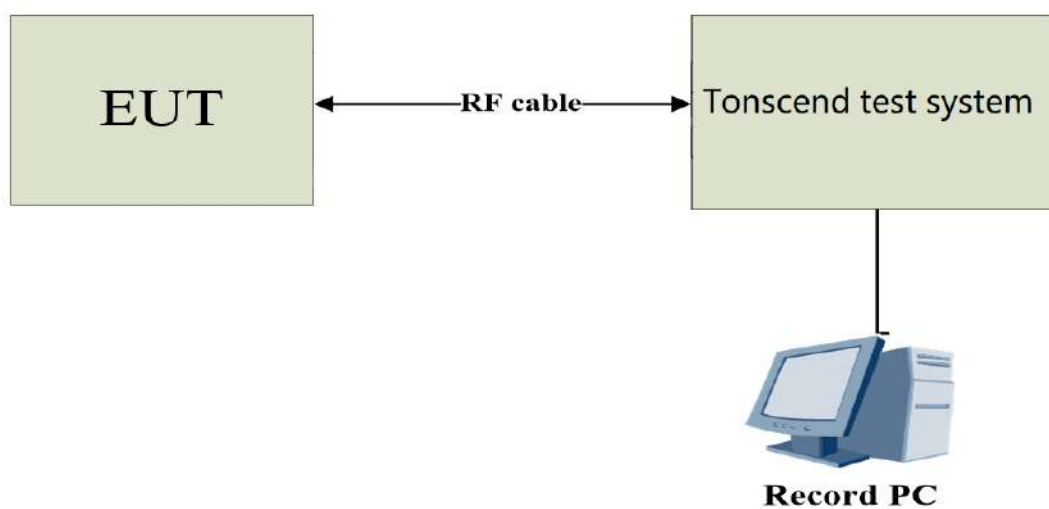
For systems using digital modulation in the 2400~2483.5MHz, The Maximum output Power shall not exceed 1W(30dBm)

#### 3.5.2 Test Procedure

| Test Method                                                         |                                                  |
|---------------------------------------------------------------------|--------------------------------------------------|
| <input checked="" type="radio"/> Conducted Measurement              | <input type="radio"/> Radiated Measurement       |
| Test Channels                                                       |                                                  |
| <input checked="" type="radio"/> Lowest, Middle and Highest Channel | <input type="radio"/> Lowest and Highest Channel |
| Environmental conditions                                            |                                                  |
| <input checked="" type="radio"/> Normal                             | <input type="radio"/> Normal and Extreme         |
| Note: ● : Test    ○ : No Test                                       |                                                  |

- The EUT was directly connected to the tonskend test system and antenna output port as show in the block diagram below.
- The maximum conducted output power was performed in accordance with method 11.9.1.3 (for peak power) of ANSI C63.10-2013 and FCC KDB 662911 D01 v02r01 Multiple Transmitter Output.

#### 3.5.3 Test Setup



### 3.5.4 Table of Parameters of Text Software Setting

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

| Test Software Version   | QRCT-V4.0 |      |      |
|-------------------------|-----------|------|------|
| Frequency (MHz)         | 2412      | 2437 | 2462 |
| IEEE 802.11b            | 16        | 16   | 16   |
| IEEE 802.11g            | 16        | 16   | 16   |
| IEEE 802.11n(20)        | 13        | 13   | 13   |
| IEEE 802.11ax(20)       | 12        | 12   | 12   |
| IEEE 802.11ax RU26(20)  | 12        | 12   | 12   |
| IEEE 802.11ax RU52(20)  | 12        | 12   | 12   |
| IEEE 802.11ax RU106(20) | 12        | 12   | 12   |
| Frequency (MHz)         | 2422      | 2437 | 2452 |
| IEEE 802.11n(40)        | 12        | 12   | 12   |
| IEEE 802.11ax(40)       | 12        | 12   | 12   |

### 3.5.5 The Result

| Test Mode  | Antenna | Frequency[MHz] | Maximum conducted output Power [dBm] | Limit [dBm] | Verdict |
|------------|---------|----------------|--------------------------------------|-------------|---------|
| 11B        | Ant1    | 2412           | 19.13                                | ≤30         | PASS    |
|            | Ant2    | 2412           | 17.71                                | ≤30         | PASS    |
|            | Ant1    | 2437           | 18.62                                | ≤30         | PASS    |
|            | Ant2    | 2437           | 16.87                                | ≤30         | PASS    |
|            | Ant1    | 2462           | 18.29                                | ≤30         | PASS    |
|            | Ant2    | 2462           | 17.26                                | ≤30         | PASS    |
| 11G        | Ant1    | 2412           | 23.44                                | ≤30         | PASS    |
|            | Ant2    | 2412           | 21.94                                | ≤30         | PASS    |
|            | Ant1    | 2437           | 23.09                                | ≤30         | PASS    |
|            | Ant2    | 2437           | 21.37                                | ≤30         | PASS    |
|            | Ant1    | 2462           | 23.02                                | ≤30         | PASS    |
|            | Ant2    | 2462           | 21.55                                | ≤30         | PASS    |
| 11N20MIMO  | Ant1    | 2412           | 20.31                                | ≤29.64      | PASS    |
|            | Ant2    | 2412           | 19.21                                | ≤29.64      | PASS    |
|            | total   | 2412           | 22.81                                | ≤29.64      | PASS    |
|            | Ant1    | 2437           | 20.15                                | ≤29.64      | PASS    |
|            | Ant2    | 2437           | 18.37                                | ≤29.64      | PASS    |
|            | total   | 2437           | 22.36                                | ≤29.64      | PASS    |
|            | Ant1    | 2462           | 20.01                                | ≤29.64      | PASS    |
|            | Ant2    | 2462           | 18.94                                | ≤29.64      | PASS    |
|            | total   | 2462           | 22.52                                | ≤29.64      | PASS    |
| 11N40MIMO  | Ant1    | 2422           | 19.44                                | ≤29.64      | PASS    |
|            | Ant2    | 2422           | 17.96                                | ≤29.64      | PASS    |
|            | total   | 2422           | 21.77                                | ≤29.64      | PASS    |
|            | Ant1    | 2437           | 19.53                                | ≤29.64      | PASS    |
|            | Ant2    | 2437           | 18.35                                | ≤29.64      | PASS    |
|            | total   | 2437           | 21.99                                | ≤29.64      | PASS    |
|            | Ant1    | 2452           | 19.88                                | ≤29.64      | PASS    |
|            | Ant2    | 2452           | 17.93                                | ≤29.64      | PASS    |
|            | total   | 2452           | 22.02                                | ≤29.64      | PASS    |
| 11AX20MIMO | Ant1    | 2412           | 19.97                                | ≤29.64      | PASS    |
|            | Ant2    | 2412           | 18.42                                | ≤29.64      | PASS    |
|            | total   | 2412           | 22.27                                | ≤29.64      | PASS    |
|            | Ant1    | 2437           | 19.61                                | ≤29.64      | PASS    |

|                      |       |      |       |              |      |
|----------------------|-------|------|-------|--------------|------|
|                      | Ant2  | 2437 | 17.89 | $\leq 29.64$ | PASS |
|                      | total | 2437 | 21.84 | $\leq 29.64$ | PASS |
|                      | Ant1  | 2462 | 19.68 | $\leq 29.64$ | PASS |
|                      | Ant2  | 2462 | 18.15 | $\leq 29.64$ | PASS |
|                      | total | 2462 | 21.99 | $\leq 29.64$ | PASS |
| 11AX20 RU26<br>MIMO  | Ant1  | 2412 | 19.61 | $\leq 29.64$ | PASS |
|                      | Ant2  | 2412 | 18.67 | $\leq 29.64$ | PASS |
|                      | total | 2412 | 22.40 | $\leq 29.64$ | PASS |
|                      | Ant1  | 2437 | 19.62 | $\leq 29.64$ | PASS |
|                      | Ant2  | 2437 | 18.78 | $\leq 29.64$ | PASS |
|                      | total | 2437 | 22.69 | $\leq 29.64$ | PASS |
|                      | Ant1  | 2462 | 19.96 | $\leq 29.64$ | PASS |
|                      | Ant2  | 2462 | 19.68 | $\leq 29.64$ | PASS |
|                      | total | 2462 | 22.83 | $\leq 29.64$ | PASS |
| 11AX20 RU52<br>MIMO  | Ant1  | 2412 | 21.17 | $\leq 29.64$ | PASS |
|                      | Ant2  | 2412 | 20.48 | $\leq 29.64$ | PASS |
|                      | total | 2412 | 24.43 | $\leq 29.64$ | PASS |
|                      | Ant1  | 2437 | 21.69 | $\leq 29.64$ | PASS |
|                      | Ant2  | 2437 | 20.73 | $\leq 29.64$ | PASS |
|                      | total | 2437 | 24.25 | $\leq 29.64$ | PASS |
|                      | Ant1  | 2462 | 21.69 | $\leq 29.64$ | PASS |
|                      | Ant2  | 2462 | 21.67 | $\leq 29.64$ | PASS |
|                      | total | 2462 | 24.69 | $\leq 29.64$ | PASS |
| 11AX20<br>RU106 MIMO | Ant1  | 2412 | 21.48 | $\leq 29.64$ | PASS |
|                      | Ant2  | 2412 | 20.62 | $\leq 29.64$ | PASS |
|                      | total | 2412 | 24.08 | $\leq 29.64$ | PASS |
|                      | Ant1  | 2437 | 22.26 | $\leq 29.64$ | PASS |
|                      | Ant2  | 2437 | 20.60 | $\leq 29.64$ | PASS |
|                      | total | 2437 | 24.52 | $\leq 29.64$ | PASS |
|                      | Ant1  | 2462 | 21.36 | $\leq 29.64$ | PASS |
|                      | Ant2  | 2462 | 21.03 | $\leq 29.64$ | PASS |
|                      | total | 2462 | 24.21 | $\leq 29.64$ | PASS |
| 11AX40MIMO           | Ant1  | 2422 | 19.95 | $\leq 29.64$ | PASS |
|                      | Ant2  | 2422 | 18.22 | $\leq 29.64$ | PASS |
|                      | total | 2422 | 22.18 | $\leq 29.64$ | PASS |
|                      | Ant1  | 2437 | 19.83 | $\leq 29.64$ | PASS |
|                      | Ant2  | 2437 | 18.73 | $\leq 29.64$ | PASS |
|                      | total | 2437 | 22.33 | $\leq 29.64$ | PASS |

|  |       |      |       |              |      |
|--|-------|------|-------|--------------|------|
|  | Ant1  | 2452 | 20.46 | $\leq 29.64$ | PASS |
|  | Ant2  | 2452 | 18.25 | $\leq 29.64$ | PASS |
|  | total | 2452 | 22.50 | $\leq 29.64$ | PASS |

For MIMO mode

| Frequency[MHz]                                                                                                                                                                                                                                                                                                                                                                                                        | ANT 1 Antenna<br>Gain (dBi) | ANT 2 Antenna<br>Gain (dBi) | Correlated chains<br>directional gain (dBi) | Conducted Power Limit<br>(dBm) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------|---------------------------------------------|--------------------------------|
| 2412-2462                                                                                                                                                                                                                                                                                                                                                                                                             | 3.35                        | 3.35                        | 6.36                                        | 29.64                          |
| <p>Basic methodology with <math>N_{ANT}</math> transmit antennas, each with the same directional gain <math>G_{ANT}</math> dBi, being driven by <math>N_{ANT}</math> transmitter outputs of equal power. Directional gain is to be computed as follows:</p> <p>If <i>any</i> transmit signals are <i>correlated</i> with each other,</p> <p>Directional gain = <math>G_{ANT} + 10 \log(N_{ANT})</math> dBi = 6.36</p> |                             |                             |                                             |                                |

### 3.5 Power Spectral Density

#### 3.6.1 Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmitting.

#### 3.6.2 Test Procedure

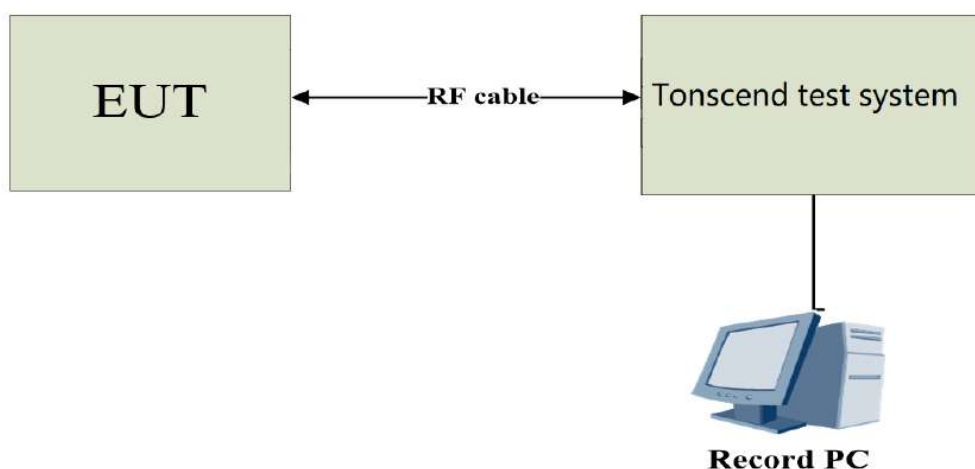
| Test Method                                                                   |                                                  |
|-------------------------------------------------------------------------------|--------------------------------------------------|
| <input checked="" type="radio"/> Conducted Measurement                        | <input type="radio"/> Radiated Measurement       |
| Test Channels                                                                 |                                                  |
| <input checked="" type="radio"/> Lowest, Middle and Highest Channel           | <input type="radio"/> Lowest and Highest Channel |
| Environmental conditions                                                      |                                                  |
| <input checked="" type="radio"/> Normal                                       | <input type="radio"/> Normal and Extreme         |
| Note: <input checked="" type="radio"/> : Test <input type="radio"/> : No Test |                                                  |

a) The EUT was directly connected to the tonscond test system and antenna output port as show in the block diagram below.

b) Spectrum analyser settings as following:

| Spectrum Parameters | Setting                     |
|---------------------|-----------------------------|
| Span Frequency      | 1.5 times the DTS bandwidth |
| RBW                 | 3 kHz                       |
| VBW                 | 10 kHz                      |
| Detector            | Peak                        |
| Trace               | Max Hold                    |
| Sweep Time          | Auto                        |

#### 3.6.3 Test Setup



### 3.6.4 The Result

| Test Mode  | Antenna | Frequency[MHz] | Result[dBm/3kHz] | Limit[dBm/3kHz] | Verdict |
|------------|---------|----------------|------------------|-----------------|---------|
| 11B        | Ant1    | 2412           | -6.39            | ≤8              | PASS    |
|            | Ant2    | 2412           | -7.9             | ≤8              | PASS    |
|            | Ant1    | 2437           | -7.26            | ≤8              | PASS    |
|            | Ant2    | 2437           | -9.06            | ≤8              | PASS    |
|            | Ant1    | 2462           | -7.56            | ≤8              | PASS    |
|            | Ant2    | 2462           | -8.64            | ≤8              | PASS    |
| 11G        | Ant1    | 2412           | -8.98            | ≤8              | PASS    |
|            | Ant2    | 2412           | -10.07           | ≤8              | PASS    |
|            | Ant1    | 2437           | -7.92            | ≤8              | PASS    |
|            | Ant2    | 2437           | -11.55           | ≤8              | PASS    |
|            | Ant1    | 2462           | -9.45            | ≤8              | PASS    |
|            | Ant2    | 2462           | -10.48           | ≤8              | PASS    |
| 11N20MIMO  | Ant1    | 2412           | -11.97           | ≤7.64           | PASS    |
|            | Ant2    | 2412           | -12.51           | ≤7.64           | PASS    |
|            | total   | 2412           | -9.22            | ≤7.64           | PASS    |
|            | Ant1    | 2437           | -12.1            | ≤7.64           | PASS    |
|            | Ant2    | 2437           | -13.38           | ≤7.64           | PASS    |
|            | total   | 2437           | -9.68            | ≤7.64           | PASS    |
|            | Ant1    | 2462           | -12.32           | ≤7.64           | PASS    |
|            | Ant2    | 2462           | -13.73           | ≤7.64           | PASS    |
|            | total   | 2462           | -9.96            | ≤7.64           | PASS    |
| 11N40MIMO  | Ant1    | 2422           | -15.14           | ≤7.64           | PASS    |
|            | Ant2    | 2422           | -16.99           | ≤7.64           | PASS    |
|            | total   | 2422           | -12.96           | ≤7.64           | PASS    |
|            | Ant1    | 2437           | -14.91           | ≤7.64           | PASS    |
|            | Ant2    | 2437           | -17.39           | ≤7.64           | PASS    |
|            | total   | 2437           | -12.97           | ≤7.64           | PASS    |
|            | Ant1    | 2452           | -14.77           | ≤7.64           | PASS    |
|            | Ant2    | 2452           | -16.1            | ≤7.64           | PASS    |
|            | total   | 2452           | -12.37           | ≤7.64           | PASS    |
| 11AX20MIMO | Ant1    | 2412           | -12.92           | ≤7.64           | PASS    |
|            | Ant2    | 2412           | -14.81           | ≤7.64           | PASS    |
|            | total   | 2412           | -10.75           | ≤7.64           | PASS    |
|            | Ant1    | 2437           | -12.9            | ≤7.64           | PASS    |
|            | Ant2    | 2437           | -15.32           | ≤7.64           | PASS    |
|            | total   | 2437           | -10.93           | ≤7.64           | PASS    |
|            | Ant1    | 2462           | -13.14           | ≤7.64           | PASS    |
|            | Ant2    | 2462           | -15.19           | ≤7.64           | PASS    |

|                     |       |      |        |             |      |
|---------------------|-------|------|--------|-------------|------|
|                     | total | 2462 | -11.03 | $\leq 7.64$ | PASS |
| 11AX20<br>RU26MIMO  | Ant1  | 2412 | -4.73  | $\leq 7.64$ | PASS |
|                     | Ant2  | 2412 | -6.96  | $\leq 7.64$ | PASS |
|                     | total | 2412 | -2.80  | $\leq 7.64$ | PASS |
|                     | Ant1  | 2437 | -5.53  | $\leq 7.64$ | PASS |
|                     | Ant2  | 2437 | -7.59  | $\leq 7.64$ | PASS |
|                     | total | 2437 | -3.41  | $\leq 7.64$ | PASS |
|                     | Ant1  | 2462 | -4.64  | $\leq 7.64$ | PASS |
|                     | Ant2  | 2462 | -5.43  | $\leq 7.64$ | PASS |
|                     | total | 2462 | -2.01  | $\leq 7.64$ | PASS |
| 11AX20<br>RU52MIMO  | Ant1  | 2412 | -7.35  | $\leq 7.64$ | PASS |
|                     | Ant2  | 2412 | -9.44  | $\leq 7.64$ | PASS |
|                     | total | 2412 | -5.25  | $\leq 7.64$ | PASS |
|                     | Ant1  | 2437 | -7.29  | $\leq 7.64$ | PASS |
|                     | Ant2  | 2437 | -9.58  | $\leq 7.64$ | PASS |
|                     | total | 2437 | -5.28  | $\leq 7.64$ | PASS |
|                     | Ant1  | 2462 | -6.96  | $\leq 7.64$ | PASS |
|                     | Ant2  | 2462 | -7.75  | $\leq 7.64$ | PASS |
|                     | total | 2462 | -4.33  | $\leq 7.64$ | PASS |
| 11AX20<br>RU106MIMO | Ant1  | 2412 | -9.66  | $\leq 7.64$ | PASS |
|                     | Ant2  | 2412 | -11.76 | $\leq 7.64$ | PASS |
|                     | total | 2412 | -7.57  | $\leq 7.64$ | PASS |
|                     | Ant1  | 2437 | -10.32 | $\leq 7.64$ | PASS |
|                     | Ant2  | 2437 | -12.72 | $\leq 7.64$ | PASS |
|                     | total | 2437 | -8.35  | $\leq 7.64$ | PASS |
|                     | Ant1  | 2462 | -10.01 | $\leq 7.64$ | PASS |
|                     | Ant2  | 2462 | -10.51 | $\leq 7.64$ | PASS |
|                     | total | 2462 | -7.24  | $\leq 7.64$ | PASS |
| 11AX40MIMO          | Ant1  | 2422 | -15.22 | $\leq 7.64$ | PASS |
|                     | Ant2  | 2422 | -17.33 | $\leq 7.64$ | PASS |
|                     | total | 2422 | -13.14 | $\leq 7.64$ | PASS |
|                     | Ant1  | 2437 | -15.78 | $\leq 7.64$ | PASS |
|                     | Ant2  | 2437 | -17.06 | $\leq 7.64$ | PASS |
|                     | total | 2437 | -13.36 | $\leq 7.64$ | PASS |
|                     | Ant1  | 2452 | -14.7  | $\leq 7.64$ | PASS |
|                     | Ant2  | 2452 | -16.25 | $\leq 7.64$ | PASS |
|                     | total | 2452 | -12.40 | $\leq 7.64$ | PASS |

For MIMO mode

| Frequency[MHz]                                                                                                                                                                                                                                                                                                    | ANT 1 Antenna<br>Gain (dBi) | ANT 2 Antenna<br>Gain (dBi) | Correlated chains<br>directional gain (dBi) | Max. PSD Limit (dBm) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------|---------------------------------------------|----------------------|
| 2412-2462                                                                                                                                                                                                                                                                                                         | 3.35                        | 3.35                        | 6.36                                        | 7.64                 |
| Basic methodology with $N_{\text{ANT}}$ transmit antennas, each with the same directional gain $G_{\text{ANT}}$ dBi, being driven by $N_{\text{ANT}}$ transmitter outputs of equal power. Directional gain is to be computed as follows:<br>If <i>any</i> transmit signals are <i>correlated</i> with each other, |                             |                             |                                             |                      |
| Directional gain = $G_{\text{ANT}} + 10 \log(N_{\text{ANT}})$ dBi = 6.36                                                                                                                                                                                                                                          |                             |                             |                                             |                      |

11B\_Ant1\_2412



11B\_Ant2\_2412



11B\_Ant1\_2437



11B\_Ant2\_2437



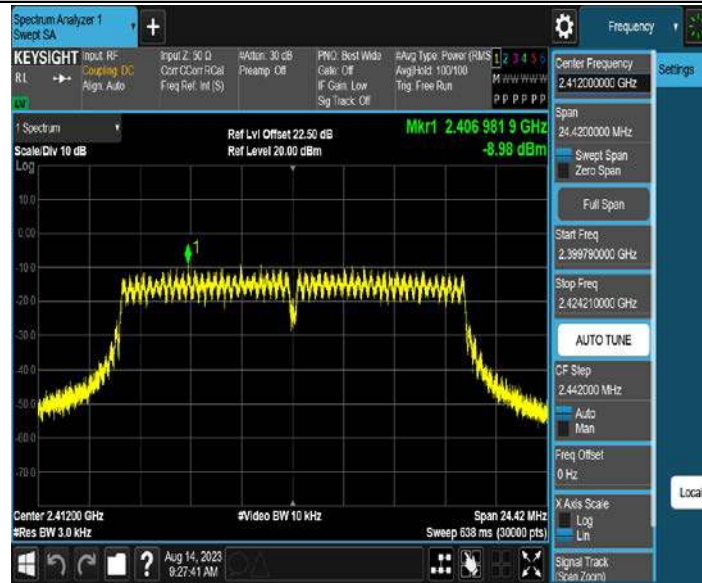
11B\_Ant1\_2462



11B\_Ant2\_2462



11G\_Ant1\_2412



11G\_Ant2\_2412



11G\_Ant1\_2437



11G\_Ant2\_2437



11G\_Ant1\_2462



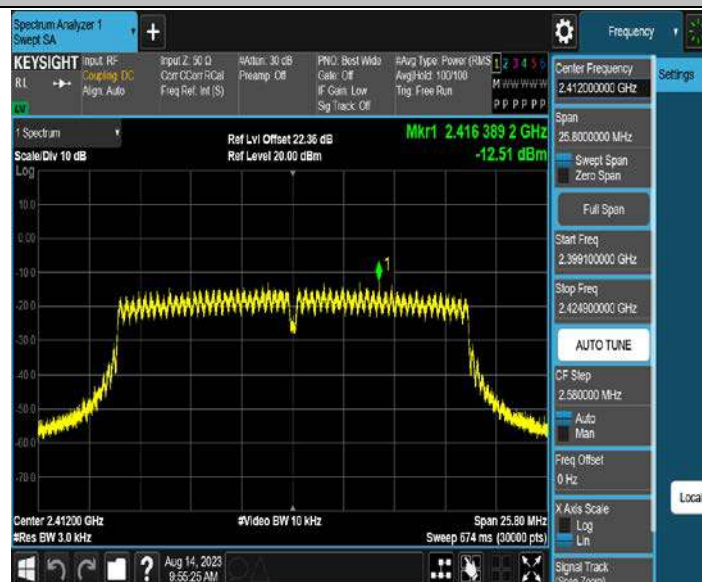
11G\_Ant2\_2462



11N20MIMO\_Ant1\_2412



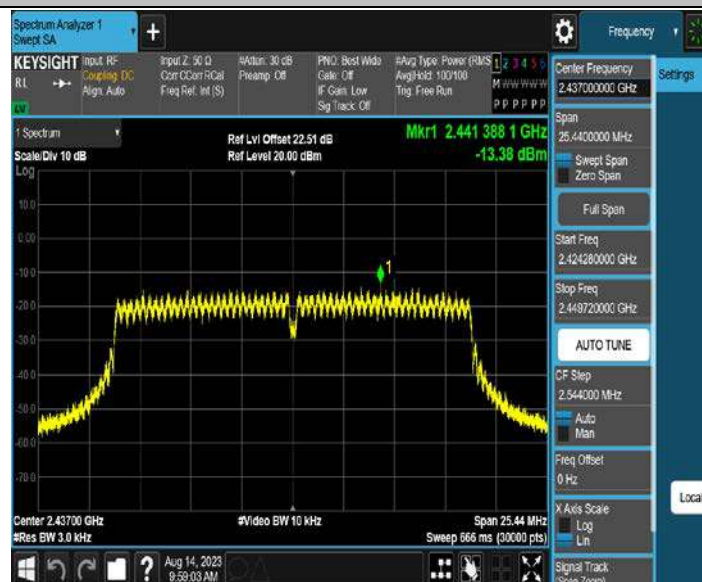
11N20MIMO\_Ant2\_2412



11N20MIMO\_Ant1\_2437



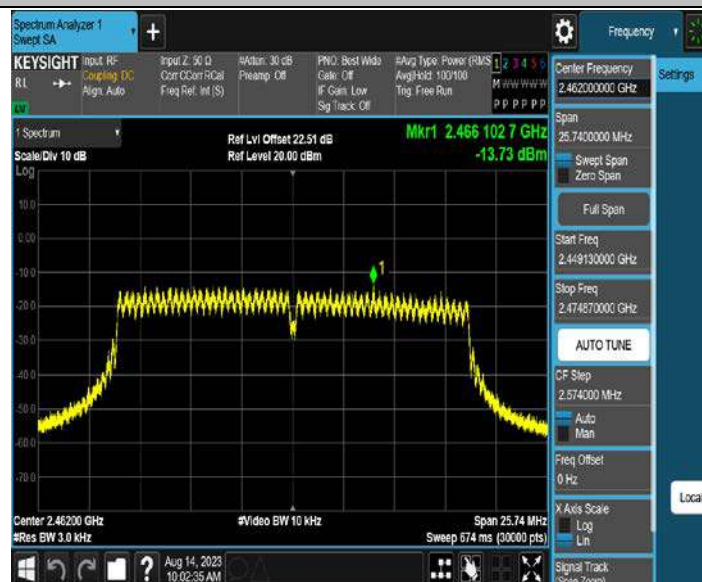
11N20MIMO\_Ant2\_2437



11N20MIMO\_Ant1\_2462



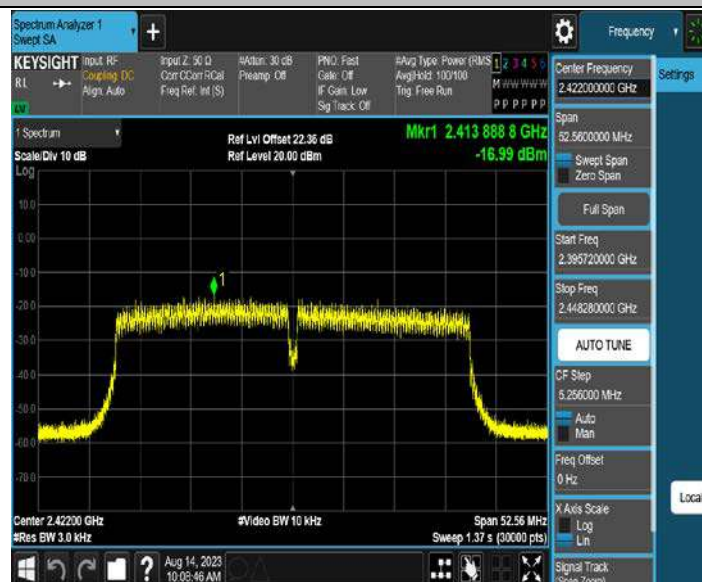
11N20MIMO\_Ant2\_2462



11N40MIMO\_Ant1\_2422



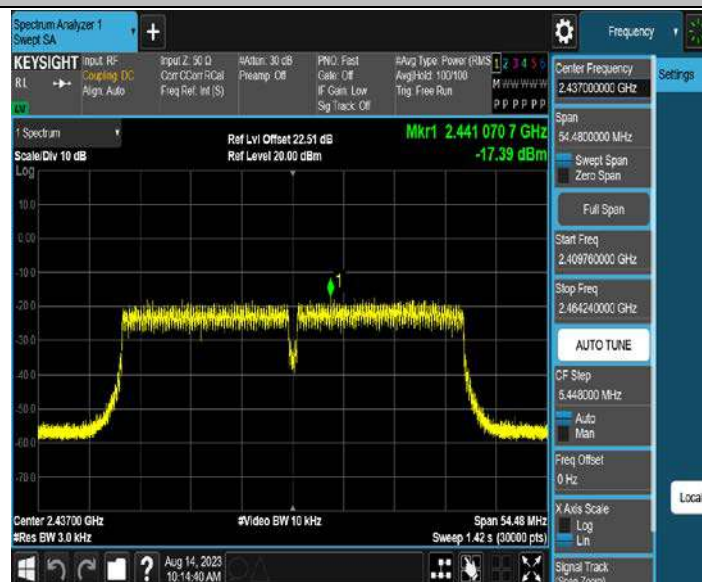
11N40MIMO\_Ant2\_2422



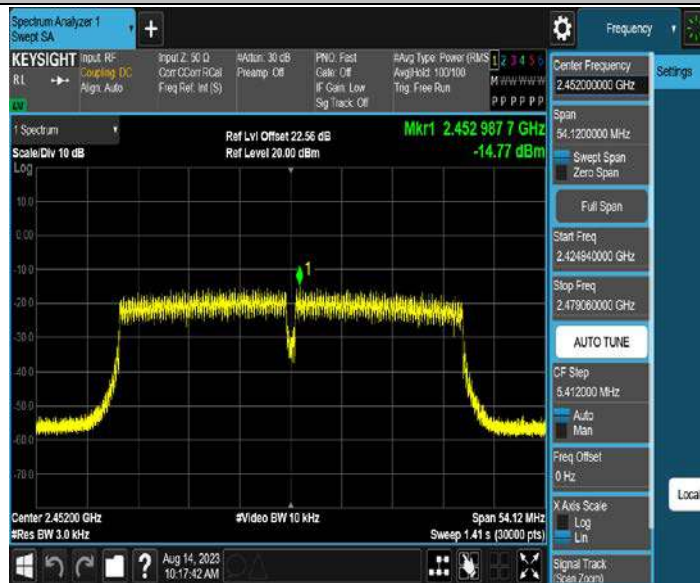
11N40MIMO\_Ant1\_2437



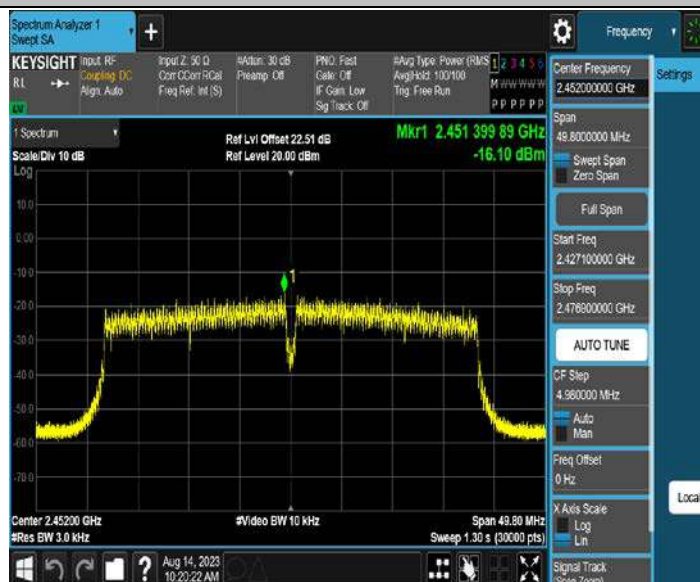
11N40MIMO\_Ant2\_2437



11N40MIMO\_Ant1\_2452



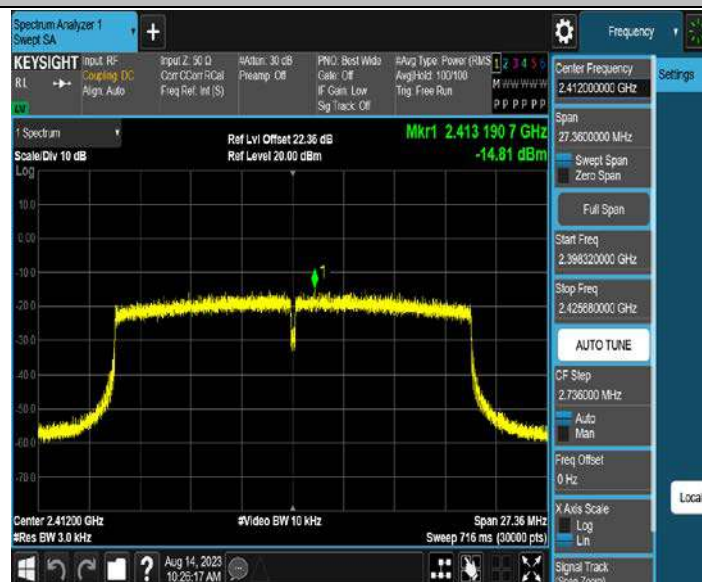
11N40MIMO\_Ant2\_2452



11AX20MIMO\_Ant1\_2412



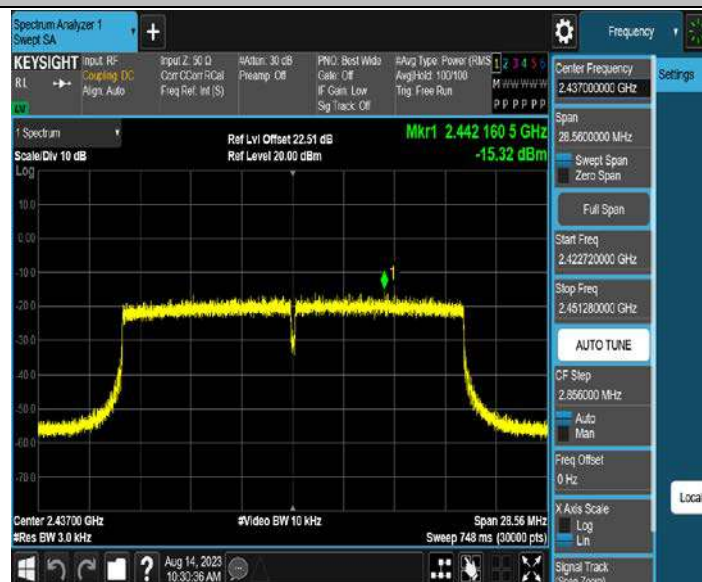
11AX20MIMO\_Ant2\_2412



11AX20MIMO\_Ant1\_2437



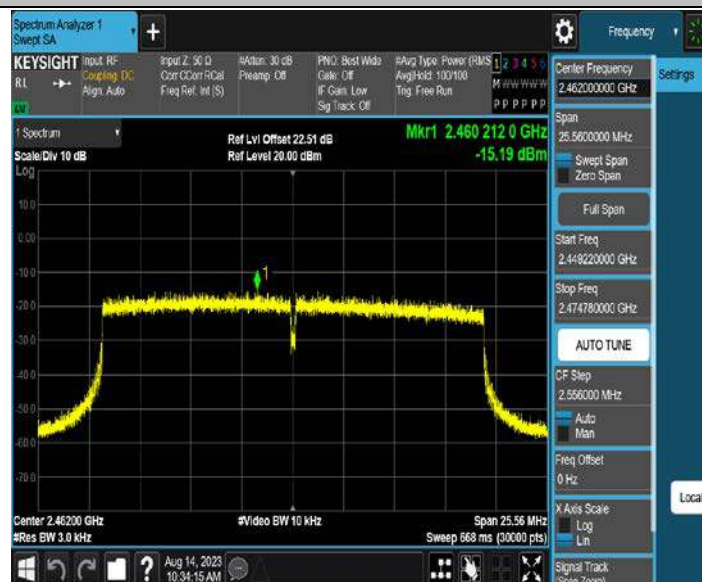
11AX20MIMO\_Ant2\_2437



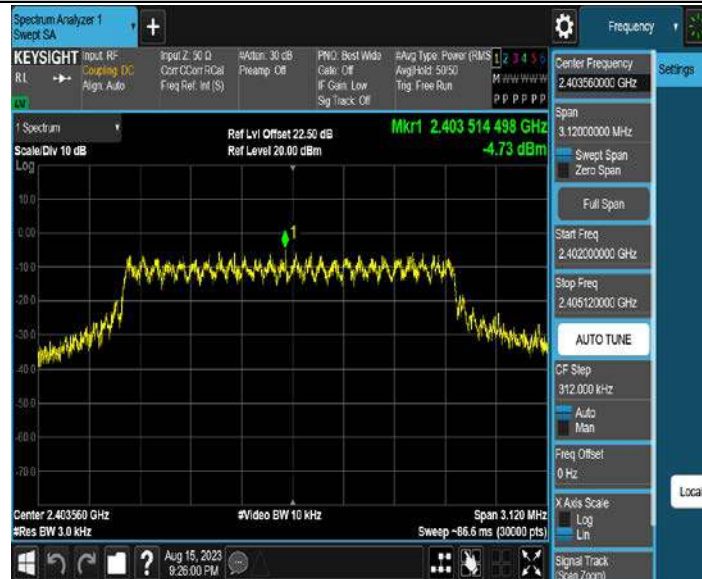
11AX20MIMO\_Ant1\_2462



11AX20MIMO\_Ant2\_2462



### 11AX20MIMO\_Ant1\_2412\_26Tone\_RU0



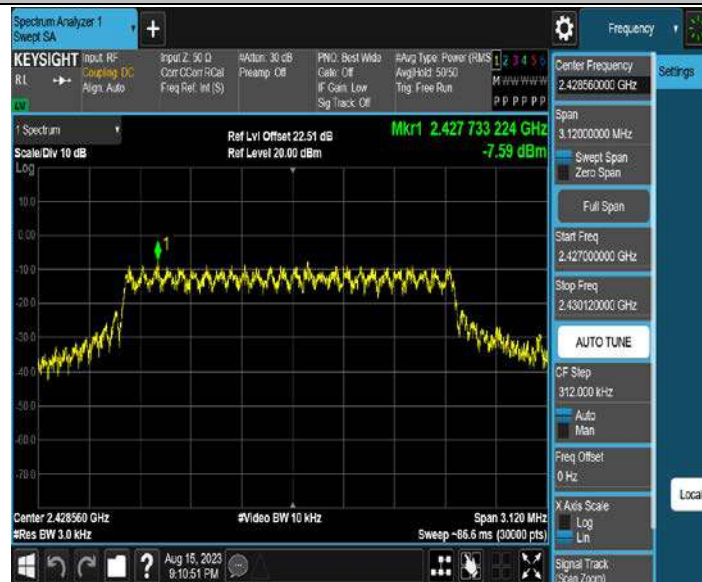
### 11AX20MIMO\_Ant2\_2412\_26Tone\_RU0



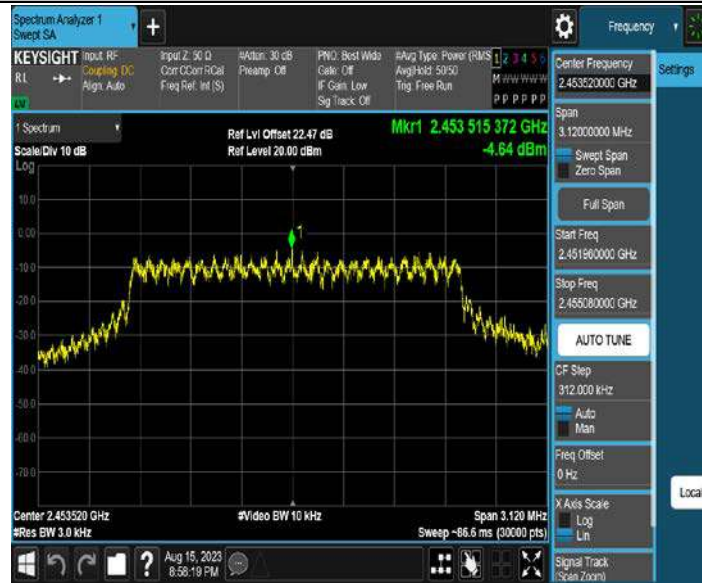
### 11AX20MIMO\_Ant1\_2437\_26Tone\_RU0



### 11AX20MIMO\_Ant2\_2437\_26Tone\_RU0



### 11AX20MIMO\_Ant1\_2462\_26Tone\_RU0



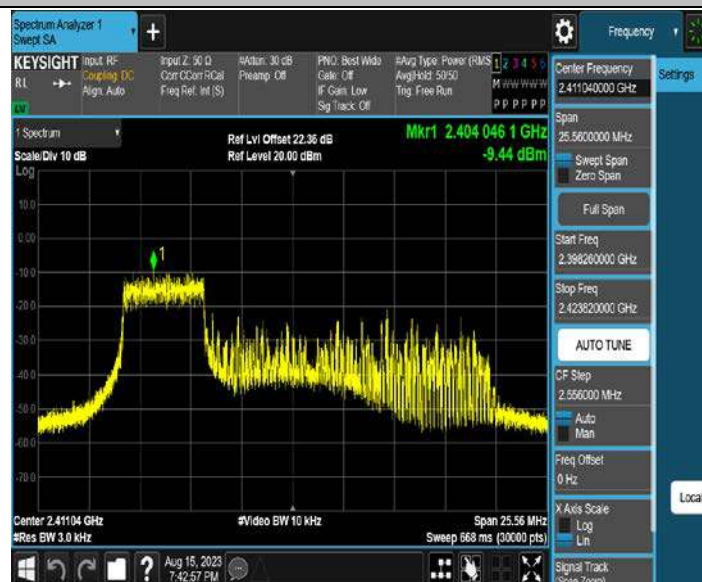
### 11AX20MIMO\_Ant2\_2462\_26Tone\_RU0



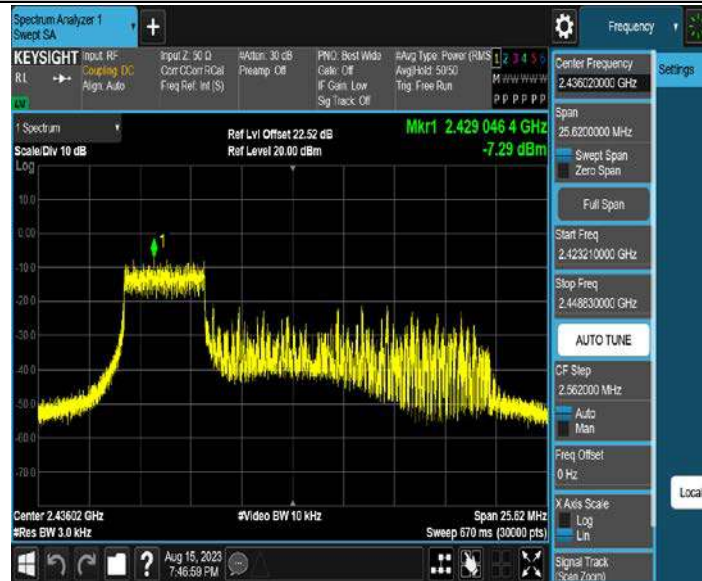
11AX20MIMO\_Ant1\_2412\_52Tone\_RU37



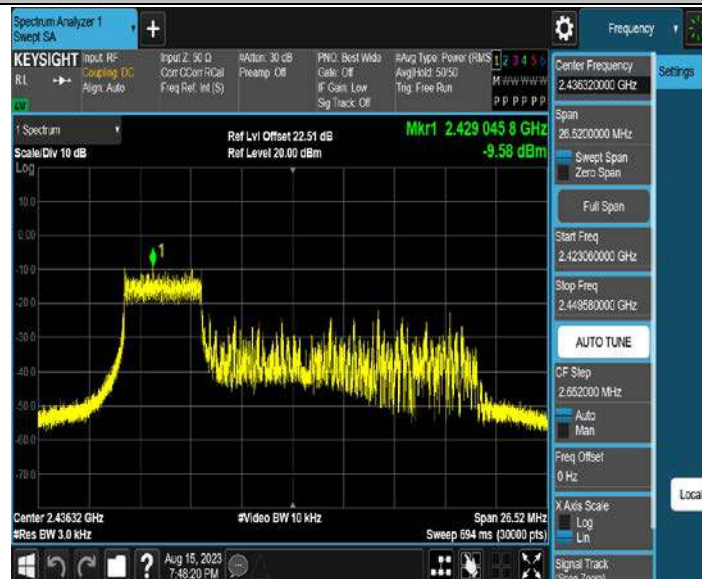
11AX20MIMO\_Ant2\_2412\_52Tone\_RU37



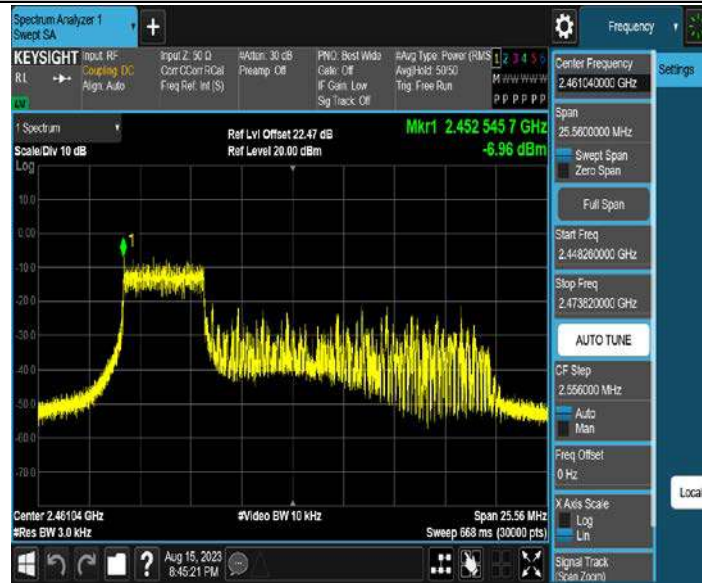
11AX20MIMO\_Ant1\_2437\_52Tone\_RU37



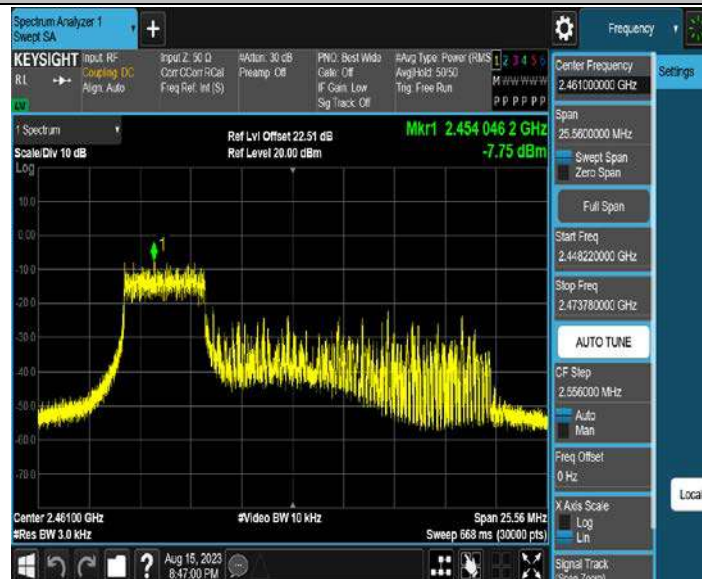
11AX20MIMO\_Ant2\_2437\_52Tone\_RU37



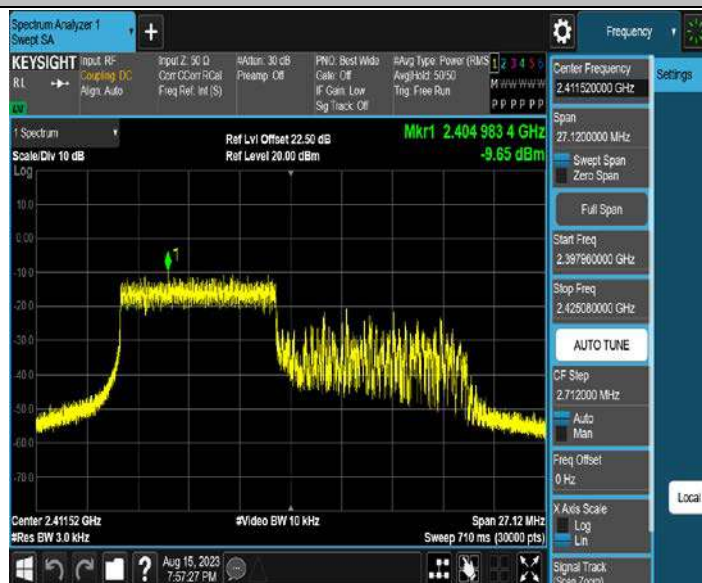
11AX20MIMO\_Ant1\_2462\_52Tone\_RU37



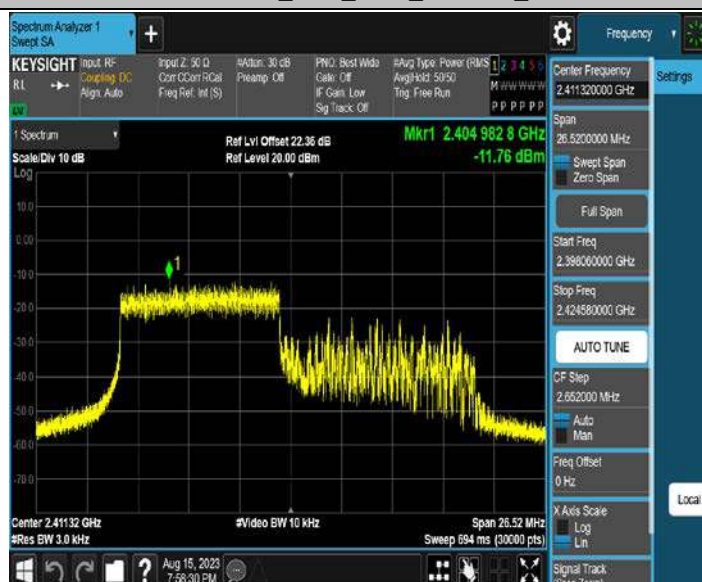
11AX20MIMO\_Ant2\_2462\_52Tone\_RU37



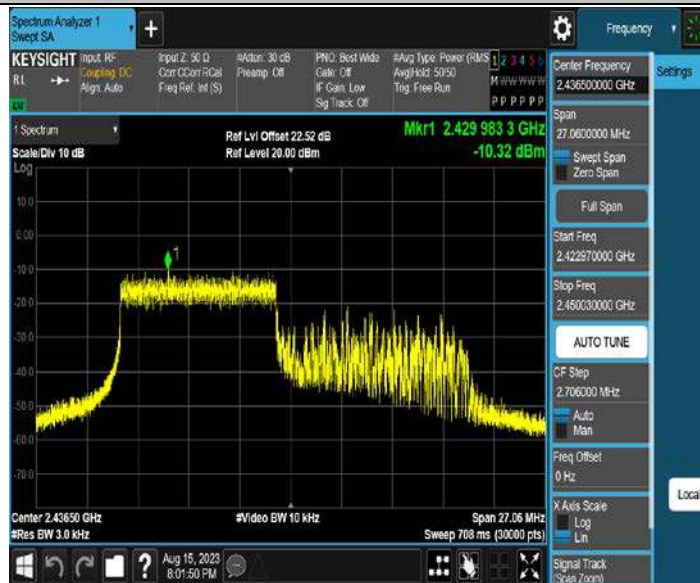
11AX20MIMO\_Ant1\_2412\_106Tone\_RU53



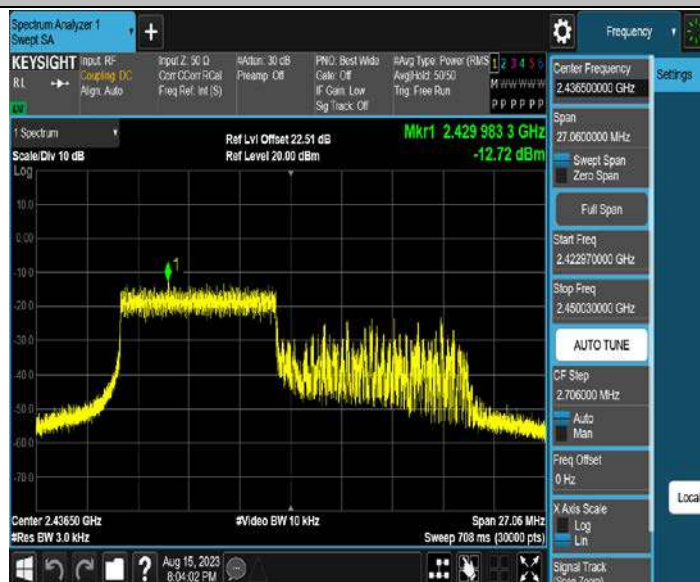
11AX20MIMO\_Ant2\_2412\_106Tone\_RU53



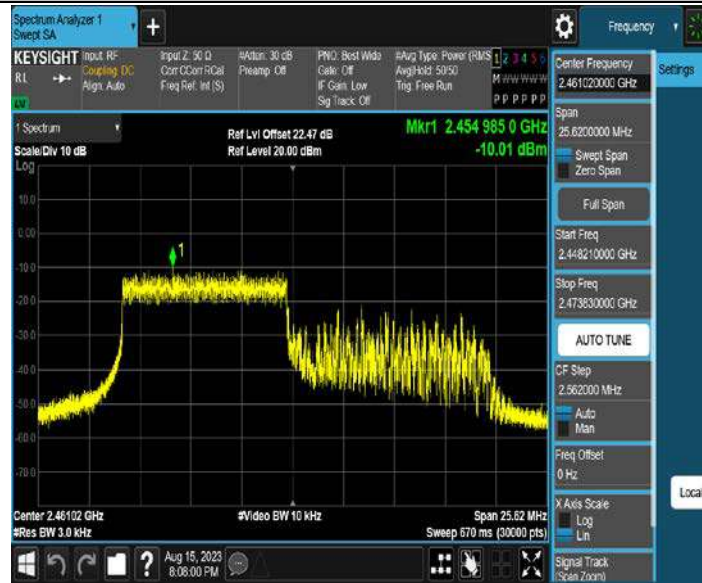
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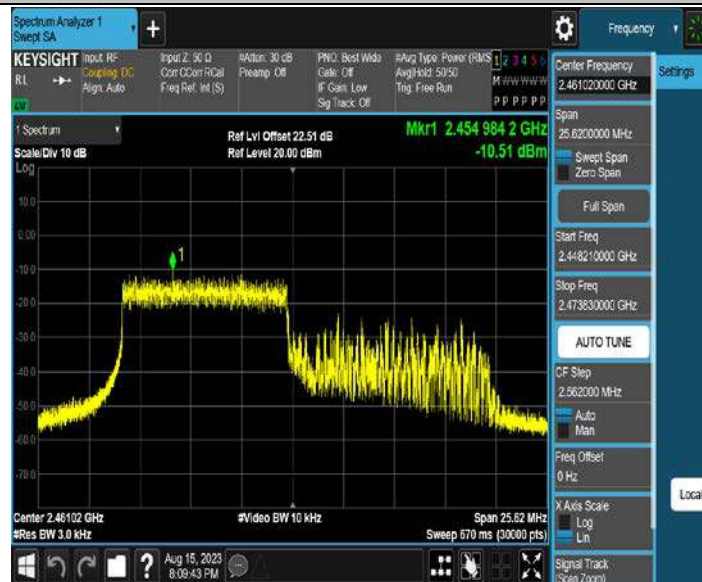
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11AX20MIMO\_Ant1\_2462\_106Tone\_RU53



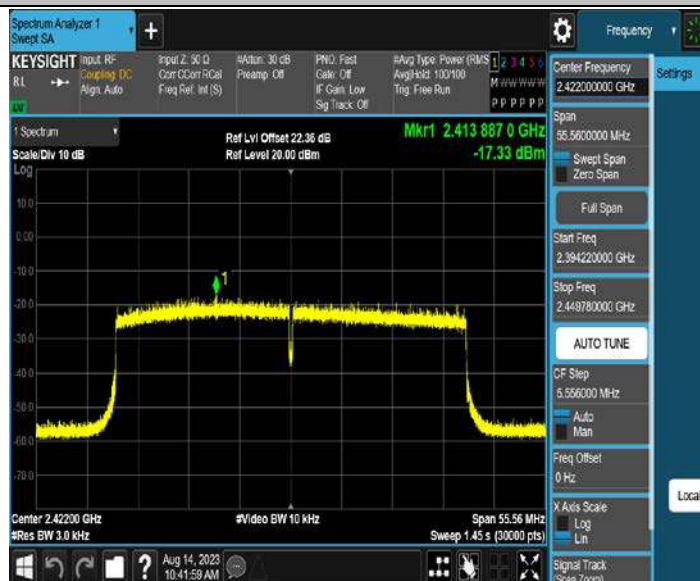
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11AX40MIMO\_Ant1\_2422



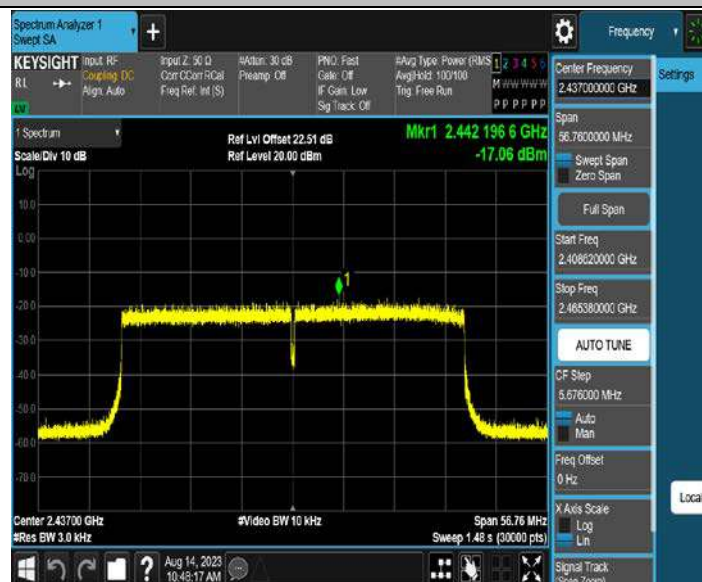
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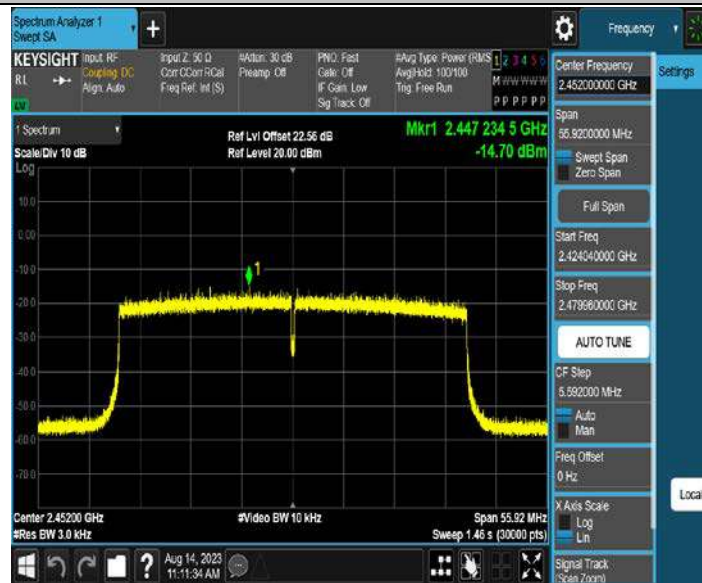
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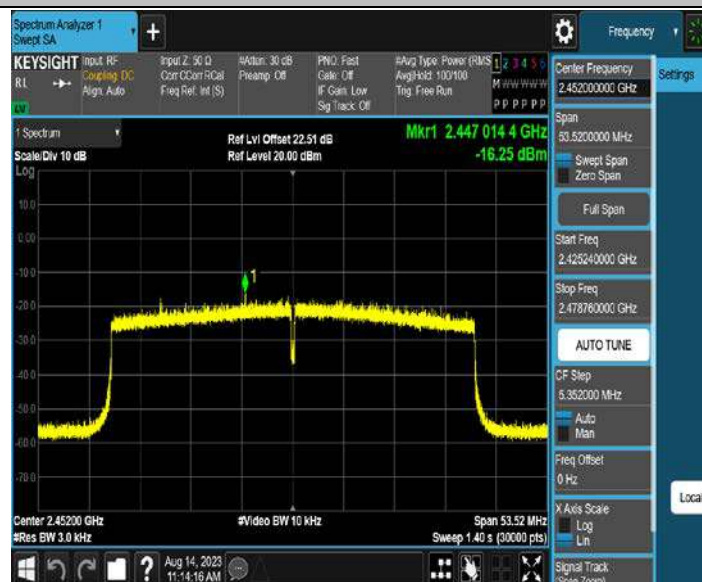
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11AX40MIMO\_Ant1\_2452



11AX40MIMO\_Ant2\_2452



End of Test Report