# RF TEST REPORT

**Report No.:** SET2021-01242

**Product Name:** Mobile Data Terminal

**FCC ID:** 2AC6AC90

**Model No. :** C90

**Applicant:** Shenzhen Chainway Information Technology Co.,Ltd.

**Address:** 9F Building2,Daqian Industrial Park,District 67, XingDong Community,Xin'an street,Bao'an District,Shenzhen,Guangdong,China

**Dates of Testing:** 12/20/2020 — 01/29/2021

**Issued by:** CCIC Southern Testing Co., Ltd.

**Lab Location:** Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China.

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# Test Report

**Product Name ..... :** Mobile Data Terminal

**Brand Name ..... :** CHAINWAY

**Trade Name ..... :** CHAINWAY

**Applicant ..... :** Shenzhen Chainway Information Technology Co.,Ltd.

**Applicant Address ..... :** 9F Building2,Daqian Industrial Park,District 67, XingDong Community,Xin'an street,Bao'an District,Shenzhen, Guangdong,China

**Manufacturer ..... :** Shenzhen Chainway Information Technology Co.,Ltd.

**Manufacturer Address ..... :** 9F Building2,Daqian Industrial Park,District 67, XingDong Community,Xin'an street,Bao'an District,Shenzhen, Guangdong,China

**Test Standards ..... :** 47 CFR Part 15 Subpart E 15.407

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

**Tested by ..... :** Vincent 2021.02.01

Vincent, Test Engineer

**Reviewed by ..... :** Chris You 2021.02.01

Chris You, Senior Engineer

**Approved by ..... :** Shuangwen Zhang 2021.02.01

Shuangwen Zhang, Manager

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| Change History | | |
|---|---|---|
| Issue | Date | Reason for change |
| 1.0 | 2021.02.01 | First edition |
| | | |
| | | |

# 1. General Information

## 1.1. EUT Description

| | |
|---|---|
| EUT Type | Mobile Data Terminal |
| EUT supports Radios application | WLAN5.0GHz 802.11a/n (HT20/40)/ac(VHT20/40/80) |
| Product Type | Indoor |
| Modulation Type | CCK, DQPSK, DBPSK for DSSS<br>256QAM, 64QAM,16QAM, QPSK, BPSK for OFDM<br>256QAM for OFDM in 11ac mode only |
| Transfer Rate | 802.11a: 54/48/36/24/18/12/9/6 Mbps<br>802.11n : up to 135 Mbps<br>802.11ac: up to V9 |
| Frequency Range | Band UNII-1: 5150 ~ 5250MHz<br>Band UNII-2a: 5250 ~ 5350MHz<br>Band UNII-3: 5725 ~ 5850MHz |
| Channel Bandwidth | 802.11a: 20MHz, 802.11n: 20MHz/40MHz<br>802.11ac: 20MHz/40MHz/80MHz |
| Channel Number | 5150 MHz ~ 5250MHz/5725 MHz ~ 5850MHz:4/5 for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 2 for 802.11n (HT40), 802.11ac(VHT40), 1 for 802.11ac (VHT80) |
| Antenna Type | Internal |
| Antenna Gain | -0.83dBi |
| Output Power (Max.) | Band UNII-1: 13.35dBm<br>Band UNII-2a: 12.41dBm<br>Band UNII-3: 12.47dBm |

## 1.2. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart E for the EUT FCC Certification:

| No. | Identity | Document Title |
|---|---|---|
| 1 | 47 CFR Part 15 Subpart E § 15.407 | Radio Frequency Devices |
| 2 | 789033 D02 General UNII Test Procedures New Rules v02r01 | Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E |
| 3 | ANSI C63.10-2013 | American National Standard for Testing Unlicensed Wireless Devices |

Test detailed items/section required by FCC rules, and results are as below:

| No. | FCC Rule | Description | Result |
|---|---|---|---|
| 1 | 15.203 | Antenna Requirement | PASS |
| 2 | 15.407(a) | Maximum Conducted Output Power | PASS |
| 3 | 15.407(a) | Emission Bandwidth(26 dB Bandwidth) | PASS |
| | 15.407(e) | Emission Bandwidth(6 dB Bandwidth) | PASS |
| | - | Emission Bandwidth(99%) | PASS |
| 4 | 15.407(a) | Power spectral density (PSD) | PASS |
| 5 | 15.207 | AC Power Line Conducted Emission | PASS |
| 6 | 15.209 15.407(b) | Radiated Band Edges and Spurious Emission | PASS |
| 7 | 15.407(g) | Frequency Stability | PASS |

## 1.3. Channel List

**Operated band in 5150 MHz ~ 5250MHz**

4 channels are provided for 802.11a, 802.11n-HT20, and 802.11ac-VHT20

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 36 | 5180 MHz | 44 | 5220 MHz |
| 40 | 5200 MHz | 48 | 5240 MHz |

2 channels are provided for 802.11n-HT40 and 802.11ac-VHT40

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 38 | 5190 MHz | 46 | 5230 MHz |

1 channel are provided for 802.11ac-VHT80

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 42 | 5210 MHz | / | / |

**Operated band in 5250 MHz ~ 5350MHz**

4 channels are provided for 802.11a, 802.11n-HT20, and 802.11ac-VHT20

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 52 | 5260 MHz | 60 | 5300 MHz |
| 56 | 5280 MHz | 64 | 5320 MHz |

2 channels are provided for 802.11n-HT40 and 802.11ac-VHT40

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 54 | 5270 MHz | 62 | 5310 MHz |

1 channel are provided for 802.11ac-VHT80

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 58 | 5290 MHz | / | / |

**Operated band in 5725 MHz ~ 5850MHz**

5 channels are provided for 802.11a, 802.11n-HT20 and 802.11ac-VHT20

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 149 | 5745 MHz | 161 | 5805 MHz |
| 153 | 5765 MHz | 165 | 5825 MHz |
| 157 | 5785 MHz | / | / |

2 channels are provided for 802.11n-HT40 and 802.11ac-VHT40

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 151 | 5755 MHz | 159 | 5795 MHz |

1 channel are provided for 802.11ac-VHT80

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 155 | 5775 MHz | / | / |

## 1.4. Test environment and mode

| **Operating Environment** | |
|---|---|
| Temperature | 24℃ |
| Humidity | 57 % RH |
| Atmospheric Pressure | 1010 mbar |
| **Test mode:** | |
| Continuously transmitting mode | Keeps the EUT in 100% duty cycle transmitting with modulation in SISO, duty cycle factor is not required. |

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

| For Frequency band 5150 ~ 5250 MHz | | | |
|---|---|---|---|
| Mode | Modulation scheme / bandwidth | | |
| | 5180 MHz | 5220 MHz | 5240 MHz |
| 802.11a | 6 Mbps | 6 Mbps | 6 Mbps |
| 802.11n/ac – HT20 | MCS 0 | MCS 0 | MCS 0 |
| Frequency | 5190 MHz | 5230 MHz | |
| 802.11n/ac – HT40 | MCS 0 | MCS 0 | |
| Frequency | 5210 MHz | | |
| 802.11ac – VHT80 | MCS 0 | | |

| For Frequency band 5250 ~ 5350 MHz | | | |
|---|---|---|---|
| Mode | Modulation scheme / bandwidth | | |
| | 5260 MHz | 5300 MHz | 5320 MHz |
| 802.11a | 6 Mbps | 6 Mbps | 6 Mbps |
| 802.11n/ac – HT20 | MCS 0 | MCS 0 | MCS 0 |
| Frequency | 5270 MHz | 5310 MHz | |
| 802.11n/ac – HT40 | MCS 0 | MCS 0 | |
| Frequency | 5290 MHz | | |
| 802.11ac – VHT80 | MCS 0 | | |

| For Frequency band 5725 ~ 5850 MHz | | | |
|---|---|---|---|
| Mode | Modulation scheme / bandwidth | | |
| | 5745 MHz | 5785 MHz | 5825 MHz |
| 802.11a | 6 Mbps | 6 Mbps | 6 Mbps |
| 802.11n/ac – HT20 | MCS 0 | MCS 0 | MCS 0 |
| Frequency | 5755 MHz | | 5795 MHz |
| 802.11n/ac – HT40 | MCS 0 | | MCS 0 |
| Frequency | 5775 MHz | | |
| 802.11ac – VHT80 | MCS 0 | | |

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

| Pretest Test Mode | Description |
|---|---|
| Mode 1 | TX A Mode / CH36, CH44, CH48 (UNII-1) |
| Mode 2 | TX N20 Mode / CH36, CH44, CH48 (UNII-1) |
| Mode 3 | TX N40 Mode / CH38, CH46 (UNII-1) |
| Mode 4 | TX AC20 Mode / CH36, CH44, CH48 (UNII-1) |
| Mode 5 | TX AC40 Mode / CH38, CH46 (UNII-1) |
| Mode 6 | TX AC80 Mode / CH42 (UNII-1) |
| Mode 7 | TX A Mode / CH52, CH60, CH64 (UNII-2A) |
| Mode 8 | TX N20 Mode / CH52, CH60, CH64 (UNII-2A) |
| Mode 9 | TX N40 Mode / CH54, CH62 (UNII-2A) |
| Mode 10 | TX AC20 Mode / CH52, CH60, CH64 (UNII-2A) |
| Mode 11 | TX AC40 Mode / CH54, CH62 (UNII-2A) |
| Mode 12 | TX AC80 Mode / CH58 (UNII-2A) |
| Mode 13 | TX A Mode / CH149, CH157, CH165 (UNII-3) |
| Mode 14 | TX N20 Mode / CH149, CH157, CH165 (UNII-3) |
| Mode 15 | TX N40 Mode / CH151, CH159 (UNII-3) |
| Mode 16 | TX AC20 Mode / CH149, CH157, CH165 (UNII-3) |
| Mode 17 | TX AC40 Mode / CH151, CH159 (UNII-3) |
| Mode 18 | TX AC80 Mode / CH155 (UNII-3) |
| Mode 19 | TX Mode |

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

| For Conducted Test | |
|---|---|
| Final Test Mode | Description |
| Mode 20 | TX Mode |

| For Radiated Test | |
|---|---|
| Final Test Mode | Description |
| Mode 1 | TX A Mode / CH36, CH44, CH48 (UNII-1) |
| Mode 2 | TX N20 Mode / CH36, CH44, CH48 (UNII-1) |
| Mode 3 | TX N40 Mode / CH38, CH46 (UNII-1) |
| Mode 4 | TX AC20 Mode / CH36, CH44, CH48 (UNII-1) |
| Mode 5 | TX AC40 Mode / CH38, CH46 (UNII-1) |
| Mode 6 | TX AC80 Mode / CH42 (UNII-1) |
| Mode 7 | TX A Mode / CH52, CH60, CH64 (UNII-2A) |
| Mode 8 | TX N20 Mode / CH52, CH60, CH64 (UNII-2A) |
| Mode 9 | TX N40 Mode / CH54, CH62 (UNII-2A) |
| Mode 10 | TX AC20 Mode / CH52, CH60, CH64 (UNII-2A) |
| Mode 11 | TX AC40 Mode / CH54, CH62 (UNII-2A) |
| Mode 12 | TX AC80 Mode / CH58 (UNII-2A) |
| Mode 13 | TX A Mode / CH149, CH157, CH165 (UNII-3) |
| Mode 14 | TX N20 Mode / CH149, CH157, CH165 (UNII-3) |
| Mode 15 | TX N40 Mode / CH151, CH159 (UNII-3) |
| Mode 16 | TX AC20 Mode / CH149, CH157, CH165 (UNII-3) |
| Mode 17 | TX AC40 Mode / CH151, CH159 (UNII-3) |
| Mode 18 | TX AC80 Mode / CH155 (UNII-3) |

## 1.5. EUT Operation Test setup

The RF test items，utility “FTMC_bridge_forURC_v0.39” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

## 1.6. Power level setup in software

| Power level setup in software for 5G wifi | | | |
|---|---|---|---|
| UNII-1 | | | |
| Frequency（MHz） | 5180 | 5220 | 5240 |
| A mode | 13 | 13 | 13 |
| Frequency（MHz） | 5180 | 5220 | 5240 |
| N20 mode | 13 | 13 | 13 |
| Frequency（MHz） | 5190 | 5230 | \ |
| N40 mode | 13 | 13 | \ |
| Frequency（MHz） | 5180 | 5220 | 5240 |
| AC20 mode | 13 | 13 | 13 |
| Frequency（MHz） | 5190 | 5230 | \ |
| AC40 mode | 13 | 13 | \ |
| Frequency（MHz） | 5210 | \ | \ |
| AC80 mode | 13 | \ | \ |
| Power level setup in software for 5G wifi | | | |
| UNII-2A | | | |
| Frequency（MHz） | 5260 | 5300 | 5320 |
| A mode | 13 | 13 | 13 |
| Frequency（MHz） | 5260 | 5300 | 5320 |
| N20 mode | 13 | 13 | 13 |
| Frequency（MHz） | 5270 | 5310 | \ |
| N40 mode | 13 | 13 | \ |
| Frequency（MHz） | 5260 | 5300 | 5320 |
| AC20 mode | 13 | 13 | 13 |
| Frequency（MHz） | 5270 | 5310 | \ |
| AC40 mode | 13 | 13 | \ |
| Frequency（MHz） | 5290 | \ | \ |
| AC80 mode | 13 | \ | \ |

| Power level setup in software for 5G wifi | | | |
|---|---|---|---|
| UNII-3 | | | |
| Frequency（MHz） | 5745 | 5785 | 5825 |
| A mode | 15 | 15 | 15 |
| Frequency（MHz） | 5745 | 5785 | 5825 |
| N20 mode | 15 | 15 | 15 |
| Frequency（MHz） | 5755 | 5795 | \ |
| N40 mode | 14 | 14 | \ |
| Frequency（MHz） | 5745 | 5785 | 5825 |
| AC20 mode | 15 | 15 | 15 |
| Frequency（MHz） | 5755 | 5795 | \ |
| AC40 mode | 14 | 14 | \ |
| Frequency（MHz） | 5775 | \ | \ |
| AC80 mode | 14 | | |

## 1.7. Laboratory Facilities

**CNAS-Lab Code: L1659**

CCIC-SET is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

**FCC-Registration No.: CN1283**

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a re port filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until June 30th,2021 .

**ISED Registration: 11185A-1**

**CAB identifier: CN0064**

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engi neering Bureau of Industry Canada for the performance of radiated measurements with Registrati on No. 11185A-1 on Aug. 04, 2016, valid time is until June 30th, 2021

**A2LA Code: 5721.01**

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

# 2. 47 CFR Part 15E Requirements

## 2.1. Antenna requirement

### 2.1.1. Applicable Standard

According to FCC 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

And according to FCC 47 CFR Section 15.407(E), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### 2.1.2. Antenna Information

| | |
|---|---|
| Antenna Type | Internal |
| Antenna Gain | -0.83dBi |

### 2.1.3. Result: comply

The EUT has a permanently and irreplaceable attached antenna. Please refer to the EUT internal photos.

## 2.2. Output Power

### 2.2.1. Limit of Output Power

**FCC 15.407(a)**

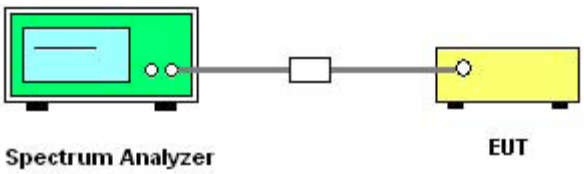
The maximum conducted output power should not exceed:

| Band | EUT Category | Limit |
|---|---|---|
| U-NII-1 | ☐Outdoor Access Point | 1 Watt (30 dBm) (Max. e.i.r.p ≤ 125mW(21dBm) at any elevation angle above 30 degrees as measured from the horizon) |
| | ☐Fixed point-to-point Access device | 1 Watt (30 dBm) |
| | ☐Indoor Access Point | 1 Watt (30 dBm) |
| | ☒Mobile and portable client device | 250mW (24 dBm) |
| U-NII-2A | ☒ | 250mW (24 dBm) or 11dBm+10logB* Whichever is less. |
| U-NII-2C | ☐ | 250mW (24 dBm) or 11dBm+10logB* Whichever is less. |
| U-NII-3 | ☒ | 1 Watt (30 dBm) |
| Note: B* is the 26 dB emission bandwidth in MHz. | | |

### 2.2.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.2.3. Test Setup




### 2.2.4. Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02 Method SA-1

2. The RF output of EUT was connected to spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

3. Set to the maximum power setting and enable the EUT transmit continuously.

4. Set RBW=1MHz, VBW=3MHz, Sweep time=Auto, Detector=average (RMS), Compute power by integrating the spectrum across the 99%OBW.
5. Measure the conducted output power and record the results in the test report.

### 2.2.5. Test Result

Please refer to APPENDIX A for detail

## 2.3. Emission Bandwidth

### 2.3.1. Limit of Bandwidth

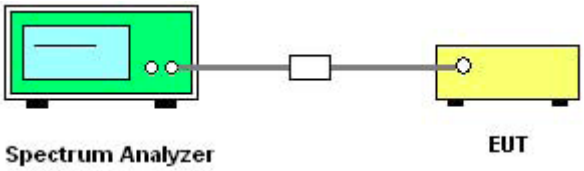
There is no limit bandwidth for bandU-NII-1, U-NII-2A and U-NII-2C.

The minimum of 6dB bandwidth measurement is 0.5 MHz for U-NII-3.

### 2.3.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.3.3. Test Setup




### 2.3.4. Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02.

2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

3. Set to the maximum power setting and enable the EUT transmit continuously.

4. For 26dB bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = approximately 1%EBW, VBW≥3RBW , Detector = Peak, Trace mode = max hold
Span ＞26 dB bandwidth and Sweep time = auto

5. Use the spectrum analyzer N dB down function to find the 26dB bandwidth.

6. For 6 Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) =100kHz VBW = 300 kHz, Detector = Peak, Trace mode = max hold

7. Use the spectrum analyzer N dB down and 99%OBW function to find the 6dB and 99% bandwidth

8. Measure and record the worst results in the test report.

### 2.3.5. Test Results Bandwidth

Please refer to APPENDIX A for detail

## 2.4. Power spectral density (PSD)

### 2.4.1. Limit of Power Spectral Density

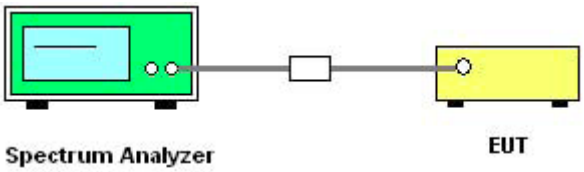
FCC 15.407(a)
The maximum power spectral density should not exceed:

| Band | EUT Category | Limit |
|---|---|---|
| U-NII-1 | ☐Access Point (Master device) | 17 dBm/MHz |
| | ☐Fixed point-to-point Access device | |
| | ☒Mobile and portable client device | 11 dBm/MHz |
| U-NII-2A | ☒ | 11 dBm/MHz |
| U-NII-2C | ☒ | 11 dBm/MHz |
| U-NII-3 | ☒ | 30dBm/500kHz |

### 2.4.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.4.3. Test Setup




### 2.4.4. Test Procedures

1. Place the EUT on the table and set it in transmitting mode.

2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02.

3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.

4. **For U-NII-1, U-NII-2A Band:**

Using method SA-1

Set RBW=1MHz, VBW=3MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto, detector = sample, traces 100 sweeps of averaging mode.

**For U-NII-3 Band:**

Set RBW=500 kHz, VBW≥ 3RBW, where span is enough to capture the entire bandwidth, Sweep time = Auto, detector = sample, traces 100 sweeps of averaging mode.

5.Use peak search function on the instrument to find the peak of the spectrum and record its value

6. Repeat above procedures until all default test channel (low, middle, and high) was complete.

### 2.4.5. Test Results of Power spectral density

Please refer to APPENDIX A for detail

## 2.5. Frequency Stability

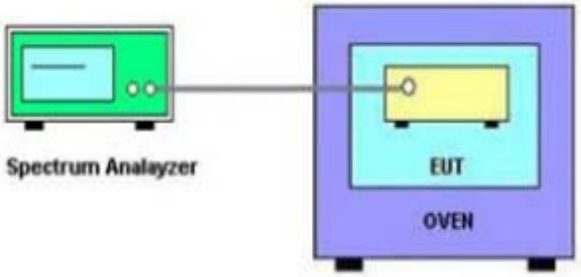
### 2.5.1. Limit

| FCC 15.407(b) Frequency Stability | |
|---|---|
| Frequency Band(MHz) | Limit |
| 5150~5250 | Specified in the user's manual |
| 5250~5350 | |
| 5470~5725 | |
| 5725~5850 | |

### 2.5.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.5.3. Test Setup




### 2.5.4. Test Procedures

1. The EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

2. Set to the maximum power setting and enable the EUT transmit continuously.

3. The EUT is installed in an environment test chamber with external power source.

4. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.

5. A sufficient stabilization period at each temperatures in used prior to each frequency measurement.

6. The test shall be performed under -10 to 55 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.

7. Measure and record the worst results in the test report.

### 2.5.5. Test Results of Frequency Stability

Please refer to APPENDIX A for detail

## 2.6. Radiated Band Edge and Spurious Emission

### 2.6.1. Limit of Radiated Band Edges and Spurious Emission

Radiated emission 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 (MHz) | Field Strength (μV/m) | Measurement Distance (m) |
|---|---|---|
| 0.009 - 0.490 | 2400/F(kHz) | 300 |
| 0.490 - 1.705 | 24000/F(kHz) | 30 |
| 1.705 - 30.0 | 30 | 30 |
| 30 - 88 | 100 | 3 |
| 88 - 216 | 150 | 3 |
| 216 - 960 | 200 | 3 |
| Above 960 | 500 | 3 |

NOTE:

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

**Limits of unwanted emission out of the restricted bands**

| Applicable To | Limit | |
|---|---|---|
| 789033 D02 General UNII Test Procedures New Rules v01 | Field Strength at 3m | |
| | PK:74(dBμV/m) | AV:54 (dBμV/m) |

| Frequency Band (MHz) | Frequency (MHz) | EIRP Limit (dBm) | Equivalent Field Strength (3m) (dBμV/m) |
|---|---|---|---|
| 5150 - 5250 | Outside of the 5.15~5.35 GHz | -27 | 68.2 |
| 5250 - 5350 | Outside of the 5.15~5.35 GHz | | |
| 5470 -5725 | Outside of the 5.47~5.725 GHz | | |

| FCC 15.407 | | | |
|---|---|---|---|
| Frequency Band (MHz) | Frequency (MHz) | EIRP Limit (dBm) | Equivalent Field Strength (3m) (dBμV/m) |
| 5725 - 5850 | ＜5650 | -27 | 68.2 |
| | 5650~5700 | -27~10 | 68.2~105.2 |
| | 5700~5720 | 10~15.6 | 105.2~110.8 |
| | 5720~5725 | 15.6~27 | 110.8~122.2 |
| | 5850~5855 | 27~15.6 | 122.2~110.8 |
| | 5855~5875 | 15.6~10 | 110.8~105.2 |
| | 5875~5925 | 10~-27 | 105.2~68.2 |
| | ＞5925 | -27 | 68.2 |

Note: 1. The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

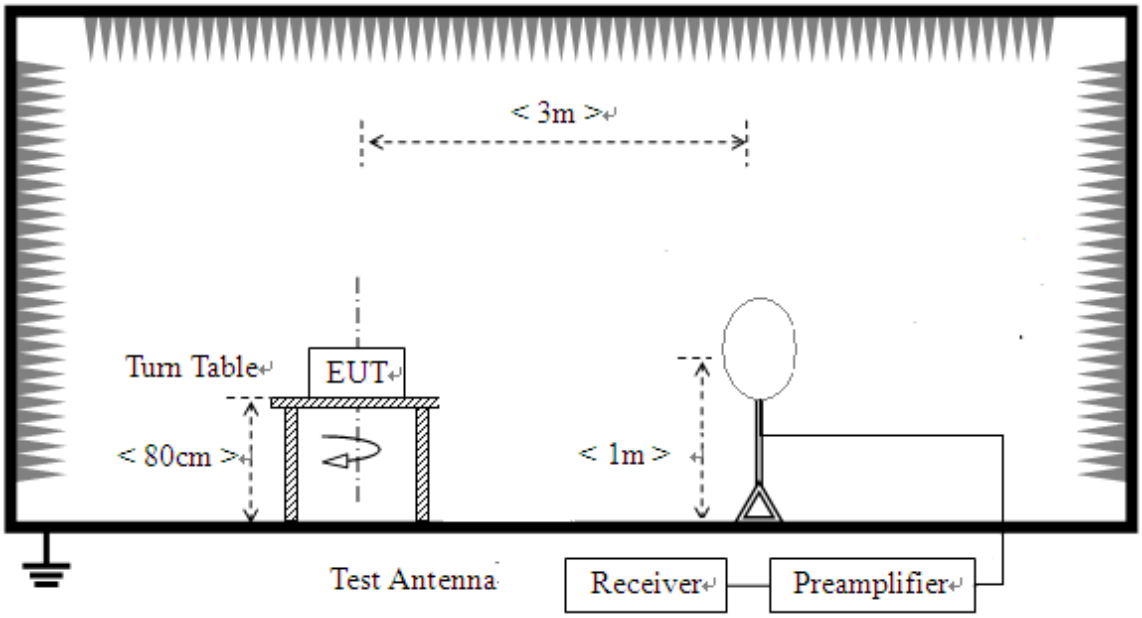
$$E = \frac{1000000\sqrt{30P}}{3} \quad \mu V/m, \text{ where P is the eirp (Watts).}$$

### 2.6.2. Measuring Instruments

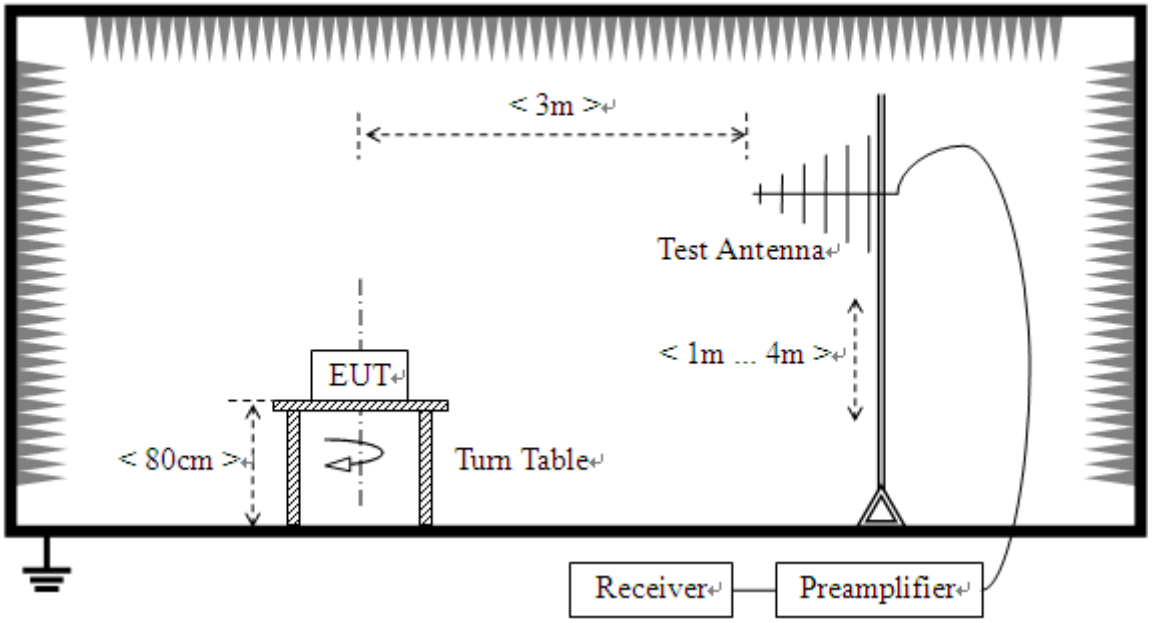
The measuring equipment is listed in the section 3 of this test report.

### 2.6.3. Test Setup

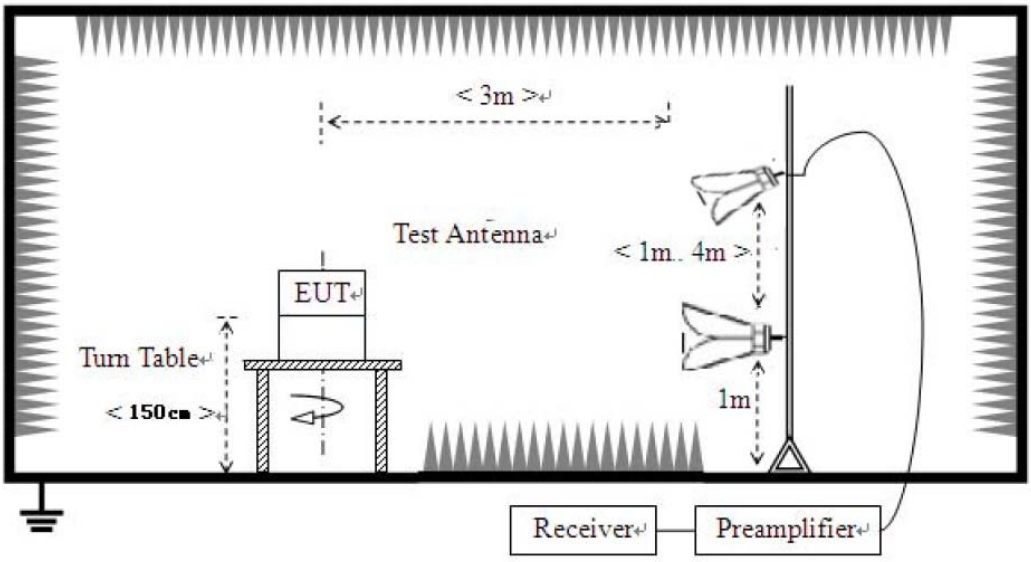
**For radiated emissions from 9 KHz to 30 MHz**




**For radiated emissions from 30MHz to 1GHz**



**For radiated emissions above 1GHz**




## 2.6.4. Test Procedures

1. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
6. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

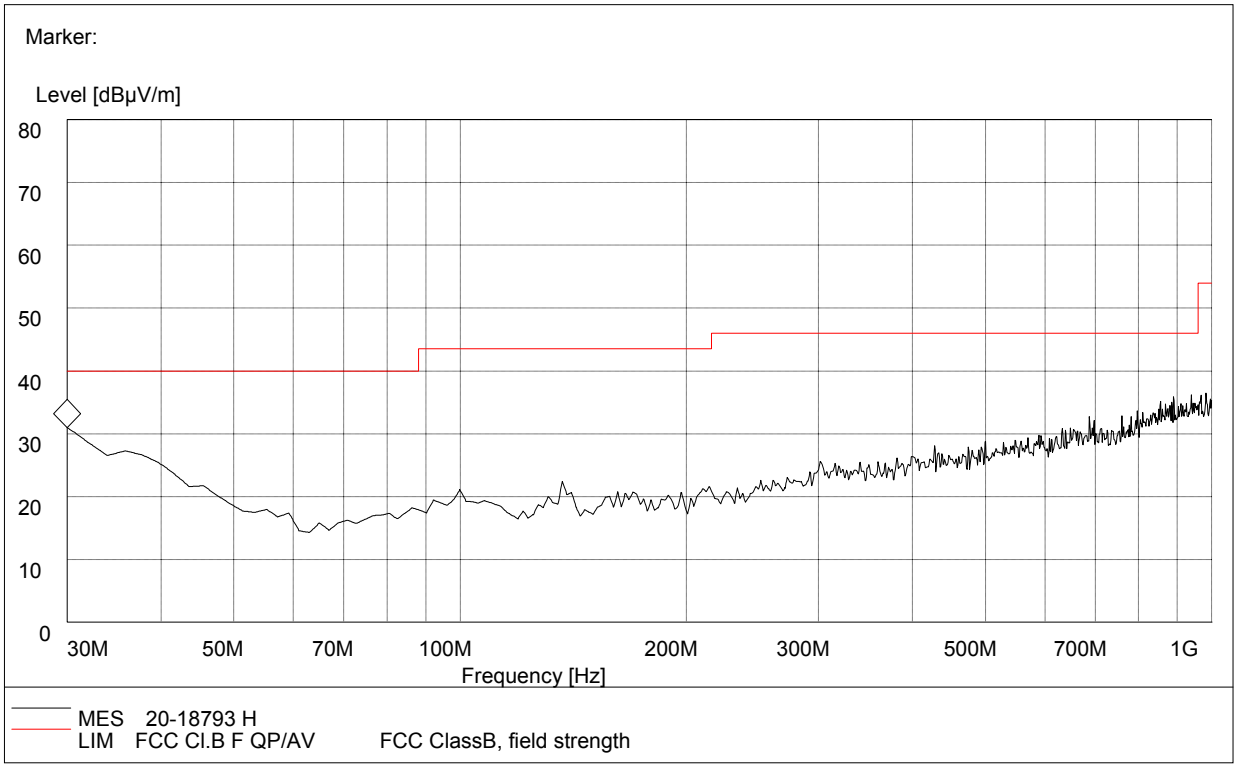
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (10 log(1/duty cycle)).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
5. Only provide worst-Case mode data provide here, 802.11a (20MHz) 5700MHz for Below 1GHz .

### 2.6.5. Test Results of Radiated Band Edge and Spurious Emission

**For 9 KHz to 30MHz**

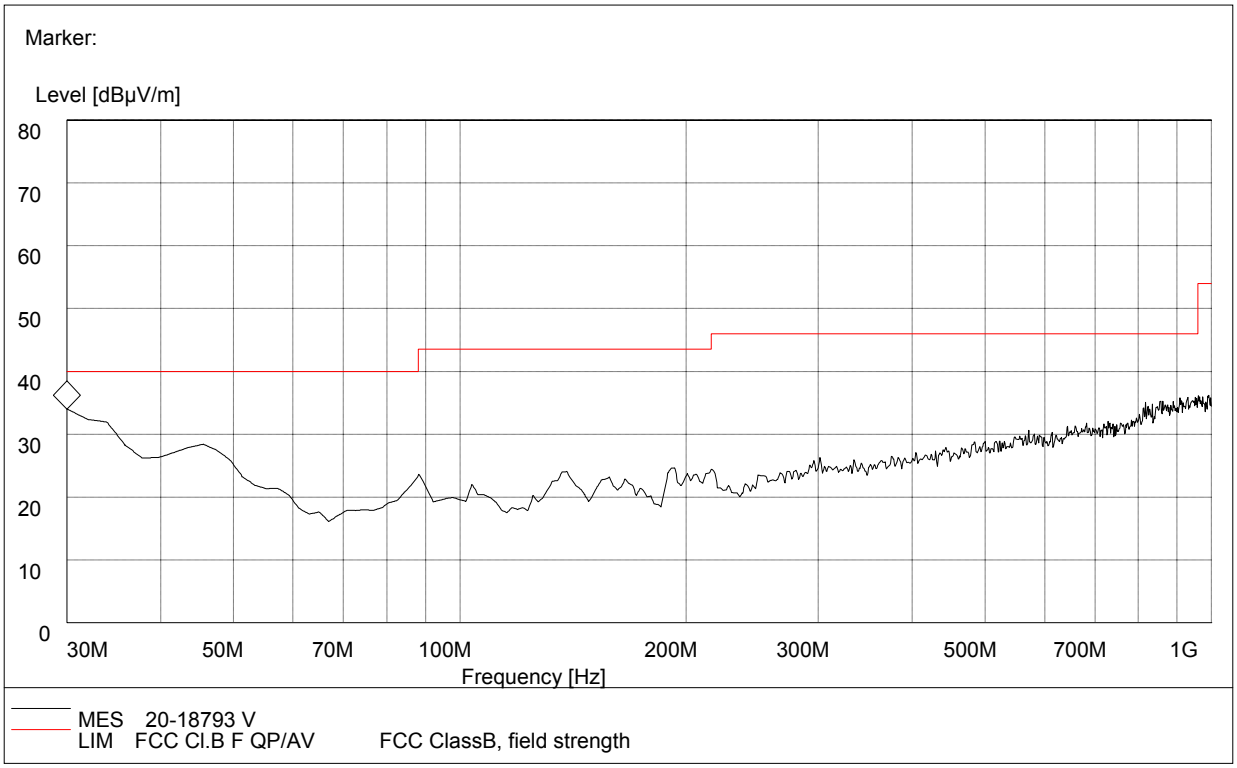
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

**For 30MHz to 1000 MHz**




30MHz to 1GHz, Antenna Horizontal

| Frequency (MHz) | QuasiPeak (dBµV/m) | Bandwidth (kHz) | Corr. Factor (dB/m) | Antenna height (cm) | Limit (dBµV/m) | Margin | Antenna | Verdict |
|---|---|---|---|---|---|---|---|---|
| 30.000000 | 31.00 | 120.000 | 17.90 | 100.0 | 40.0 | 9 | Horizontal | Pass |
| 33.480000 | 27.11 | 120.000 | 17.90 | 100.0 | 40.0 | 12.89 | Horizontal | Pass |
| 41.420000 | 26.32 | 120.000 | 10.20 | 100.0 | 40.0 | 13.68 | Horizontal | Pass |
| 150.330000 | 23.74 | 120.000 | 12.90 | 100.0 | 43.5 | 19.76 | Horizontal | Pass |
| 168.450000 | 22.18 | 120.000 | 24.80 | 100.0 | 43.5 | 21.32 | Horizontal | Pass |
| 884.050000 | 35.25 | 120.000 | 24.80 | 100.0 | 46.0 | 10.75 | Horizontal | Pass |




30MHz to 1GHz, Antenna Vertical

| Frequency (MHz) | QuasiPeak (dB µ V/m) | Bandwidth (kHz) | Corr. Factor (dBµV/m) | Antenna height (cm) | Limit (dB µ V/m) | Margin | Antenna | Verdict |
|---|---|---|---|---|---|---|---|---|
| 30.000000 | 30.25 | 120.000 | 17.90 | 100.0 | 40.0 | 9.75 | Vertical | Pass |
| 31.150000 | 30.33 | 120.000 | 17.90 | 100.0 | 40.0 | 9.67 | Vertical | Pass |
| 45.450000 | 27.42 | 120.000 | 10.20 | 100.0 | 40.0 | 12.58 | Vertical | Pass |
| 144.320000 | 23.33 | 120.000 | 12.90 | 100.0 | 43.5 | 20.17 | Vertical | Pass |
| 192.120000 | 24.25 | 120.000 | 24.80 | 100.0 | 43.5 | 19.25 | Vertical | Pass |
| 902.350000 | 35.17 | 120.000 | 24.80 | 100.0 | 46.0 | 10.83 | Vertical | Pass |

**For 1GHz to 40 GHz**

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11a_5180MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 56.32 | PK | 68.20 | -11.88 | 1.80 | 300 | 48.82 | 7.50 |
| 2 | 5150.00 | 46.07 | AV | 54.00 | -7.93 | 1.80 | 300 | 38.57 | 7.50 |
| 3 | 10360.00 | 51.24 | PK | 68.20 | -16.96 | 2.00 | 330 | 31.44 | 19.80 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11a_5180MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 51.18 | PK | 68.20 | -17.02 | 1.00 | 180 | 43.68 | 7.50 |
| 2 | 5150.00 | 49.57 | AV | 54.00 | -4.43 | 1.00 | 180 | 42.07 | 7.50 |
| 3 | 10360.00 | 51.99 | PK | 68.20 | -16.21 | 2.00 | 320 | 32.19 | 19.80 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11a_5220MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 10400.00 | 56.64 | PK | 68.20 | -11.56 | 1.60 | 360 | 36.74 | 19.90 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11a_5220MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 10400.00 | 55.34 | PK | 68.20 | -12.86 | 1.80 | 350 | 35.44 | 19.90 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11a_5240MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 49.87 | PK | 68.20 | -18.33 | 1.50 | 350 | 41.87 | 8.00 |
| 2 | 5350.00 | 39.52 | AV | 54.00 | -14.48 | 1.50 | 350 | 31.52 | 8.00 |
| 3 | 10480.00 | 56.38 | PK | 68.20 | -11.82 | 1.80 | 240 | 36.48 | 19.90 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11a_5240MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 50.49 | PK | 68.20 | -17.71 | 1.80 | 320 | 42.49 | 8.00 |
| 2 | 5350.00 | 40.35 | AV | 54.00 | -13.65 | 1.80 | 320 | 32.35 | 8.00 |
| 3 | 10480.00 | 52.27 | PK | 68.20 | -15.93 | 1.80 | 220 | 32.37 | 19.90 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11a_5260MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 48.95 | PK | 68.20 | -19.25 | 1.60 | 320 | 41.45 | 7.50 |
| 2 | 5150.00 | 40.60 | AV | 54.00 | -13.40 | 1.60 | 320 | 33.10 | 7.50 |
| 3 | 10520.00 | 51.47 | PK | 68.20 | -16.73 | 1.50 | 240 | 31.47 | 20.00 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11a_5260MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 50.36 | PK | 68.20 | -17.84 | 2.00 | 260 | 42.86 | 7.50 |
| 2 | 5150.00 | 42.21 | AV | 54.00 | -11.79 | 2.00 | 260 | 34.71 | 7.50 |
| 3 | 10520.00 | 54.17 | PK | 68.20 | -14.03 | 1.80 | 200 | 34.17 | 20.00 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11a_5300MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 10600.00 | 52.34 | PK | 68.20 | -15.86 | 2.00 | 180 | 32.34 | 20.00 |
| 2 | 10600.00 | 43.29 | AV | 54.00 | -10.71 | 2.00 | 180 | 23.29 | 20.00 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11a_5300MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 10600.00 | 51.47 | PK | 68.20 | -16.73 | 1.50 | 320 | 31.47 | 20.00 |
| 2 | 10600.00 | 42.82 | AV | 54.00 | -11.18 | 1.50 | 320 | 22.82 | 20.00 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11a_5320MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 40.25 | PK | 68.20 | -27.95 | 1.50 | 320 | 32.25 | 8.00 |
| 2 | 5350.00 | 31.50 | AV | 54.00 | -22.5 | 1.50 | 320 | 23.50 | 8.00 |
| 3 | 10640.00 | 51.36 | PK | 68.20 | -16.84 | 1.50 | 260 | 31.26 | 20.10 |
| 4 | 10640.00 | 41.95 | AV | 54.00 | -12.05 | 1.50 | 260 | 21.85 | 20.10 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11a_5320MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 41.25 | PK | 68.20 | -26.95 | 1.40 | 180 | 33.25 | 8.00 |
| 2 | 5350.00 | 31.90 | AV | 54.00 | -22.1 | 1.40 | 180 | 23.90 | 8.00 |
| 3 | 10640.00 | 53.21 | PK | 68.20 | -14.99 | 1.60 | 240 | 33.11 | 20.10 |
| 4 | 10640.00 | 44.07 | AV | 54.00 | -9.93 | 1.60 | 240 | 23.97 | 20.10 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11a_5745MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5725.00 | 52.98 | PK | 68.20 | -15.22 | 2.00 | 320 | 43.33 | 9.65 |
| 2 | 11490.00 | 54.18 | PK | 68.20 | -14.02 | 2.00 | 200 | 32.48 | 21.70 |
| 3 | 11490.00 | 44.25 | AV | 54.00 | -9.75 | 2.00 | 200 | 22.55 | 21.70 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11a_5745MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5725.00 | 53.31 | PK | 68.20 | -14.89 | 2.00 | 220 | 43.66 | 9.65 |
| 2 | 11490.00 | 54.71 | PK | 68.20 | -13.49 | 2.00 | 190 | 33.01 | 21.70 |
| 3 | 11490.00 | 45.17 | AV | 54.00 | -8.83 | 2.00 | 190 | 23.47 | 21.70 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11a_5785MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 11570.00 | 51.68 | PK | 68.20 | -16.52 | 1.60 | 320 | 29.98 | 21.70 |
| 2 | 11570.00 | 42.00 | AV | 54.00 | -12 | 1.60 | 320 | 20.30 | 21.70 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11a_5785MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 11570.00 | 52.79 | PK | 68.20 | -15.41 | 1.60 | 170 | 31.09 | 21.70 |
| 2 | 11570.00 | 44.21 | AV | 54.00 | -9.79 | 1.60 | 170 | 22.51 | 21.70 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11a_5825MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5850.00 | 54.69 | PK | 68.20 | -13.51 | 1.60 | 320 | 44.91 | 9.78 |
| 2 | 11650.00 | 55.14 | PK | 68.20 | -13.06 | 2.00 | 310 | 33.24 | 21.90 |
| 3 | 11650.00 | 45.79 | AV | 54.00 | -8.21 | 2.00 | 310 | 23.89 | 21.90 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11a_5825MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5850.00 | 58.94 | PK | 68.20 | -9.26 | 1.60 | 180 | 49.16 | 9.78 |
| 2 | 11650.00 | 52.65 | PK | 68.20 | -15.55 | 1.50 | 250 | 30.75 | 21.90 |
| 3 | 11650.00 | 43.11 | AV | 54.00 | -10.89 | 1.50 | 250 | 21.21 | 21.90 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n20_5180MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 48.95 | PK | 68.20 | -19.25 | 1.60 | 260 | 41.45 | 7.50 |
| 2 | 5150.00 | 38.65 | AV | 54.00 | -15.35 | 1.60 | 260 | 31.15 | 7.50 |
| 3 | 10360.00 | 52.36 | PK | 68.20 | -15.84 | 1.80 | 260 | 32.56 | 19.80 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n20_5180MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 49.85 | PK | 68.20 | -18.35 | 1.50 | 240 | 42.35 | 7.50 |
| 2 | 5150.00 | 50.47 | AV | 54.00 | -3.53 | 1.50 | 240 | 42.97 | 7.50 |
| 3 | 10360.00 | 51.11 | PK | 68.20 | -17.09 | 1.80 | 280 | 31.31 | 19.80 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n20_5220MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 10400.00 | 54.47 | PK | 68.20 | -13.73 | 1.70 | 240 | 34.57 | 19.90 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n20_5220MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 10400.00 | 52.48 | PK | 68.20 | -15.72 | 1.20 | 180 | 32.58 | 19.90 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n20_5240MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 50.14 | PK | 68.20 | -18.06 | 1.50 | 350 | 42.14 | 8.00 |
| 2 | 5350.00 | 39.79 | AV | 54.00 | -14.21 | 1.50 | 350 | 31.79 | 8.00 |
| 3 | 10480.00 | 55.48 | PK | 68.20 | -12.72 | 1.80 | 240 | 35.58 | 19.90 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n20_5240MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 52.64 | PK | 68.20 | -15.56 | 2.00 | 350 | 44.64 | 8.00 |
| 2 | 5350.00 | 42.50 | AV | 54.00 | -11.5 | 2.00 | 350 | 34.50 | 8.00 |
| 3 | 10480.00 | 53.29 | PK | 68.20 | -14.91 | 1.80 | 320 | 33.39 | 19.90 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n20_5260MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 47.95 | PK | 68.20 | -20.25 | 1.60 | 320 | 40.45 | 7.50 |
| 2 | 5150.00 | 39.60 | AV | 54.00 | -14.40 | 1.60 | 320 | 32.10 | 7.50 |
| 3 | 10520.00 | 52.14 | PK | 68.20 | -16.06 | 1.50 | 240 | 32.14 | 20.00 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n20_5260MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 49.65 | PK | 68.20 | -18.55 | 2.00 | 260 | 42.15 | 7.50 |
| 2 | 5150.00 | 41.50 | AV | 54.00 | -12.50 | 2.00 | 260 | 34.00 | 7.50 |
| 3 | 10520.00 | 53.25 | PK | 68.20 | -14.95 | 1.80 | 200 | 33.25 | 20.00 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n20_5300MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 10600.00 | 51.28 | PK | 68.20 | -16.92 | 1.60 | 320 | 31.28 | 20.00 |
| 2 | 10600.00 | 42.23 | AV | 54.00 | -11.77 | 1.60 | 320 | 22.23 | 20.00 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n20_5300MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 10600.00 | 52.25 | PK | 68.20 | -15.95 | 1.20 | 240 | 32.25 | 20.00 |
| 2 | 10600.00 | 43.60 | AV | 54.00 | -10.4 | 1.20 | 240 | 23.60 | 20.00 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n20_5320MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 48.95 | PK | 68.20 | -19.25 | 2.00 | 180 | 40.95 | 8.00 |
| 2 | 5350.00 | 40.20 | AV | 54.00 | -13.8 | 2.00 | 180 | 32.20 | 8.00 |
| 3 | 10640.00 | 52.24 | PK | 68.20 | -15.96 | 2.00 | 260 | 32.14 | 20.10 |
| 4 | 10640.00 | 41.95 | AV | 54.00 | -12.05 | 2.00 | 260 | 21.85 | 20.10 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n20_5320MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 41.98 | PK | 68.20 | -26.22 | 2.00 | 120 | 33.98 | 8.00 |
| 2 | 5350.00 | 32.63 | AV | 54.00 | -21.37 | 2.00 | 120 | 24.63 | 8.00 |
| 3 | 10640.00 | 52.88 | PK | 68.20 | -15.32 | 1.70 | 120 | 32.78 | 20.10 |
| 4 | 10640.00 | 43.74 | AV | 54.00 | -10.26 | 1.70 | 120 | 23.64 | 20.10 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n20_5745MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5725.00 | 53.26 | PK | 68.20 | -14.94 | 1.80 | 280 | 43.61 | 9.65 |
| 2 | 11490.00 | 51.24 | PK | 68.20 | -16.96 | 1.70 | 240 | 29.54 | 21.70 |
| 3 | 11490.00 | 44.25 | AV | 54.00 | -9.75 | 1.70 | 240 | 22.55 | 21.70 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n20_5745MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5725.00 | 52.14 | PK | 68.20 | -16.06 | 1.50 | 220 | 42.49 | 9.65 |
| 2 | 11490.00 | 51.02 | PK | 68.20 | -17.18 | 1.60 | 280 | 29.32 | 21.70 |
| 3 | 11490.00 | 41.48 | AV | 54.00 | -12.52 | 1.60 | 280 | 19.78 | 21.70 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n20_5785MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 11570.00 | 50.78 | PK | 68.20 | -17.42 | 2.00 | 160 | 29.08 | 21.70 |
| 2 | 11570.00 | 41.10 | AV | 54.00 | -12.9 | 2.00 | 160 | 19.40 | 21.70 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n20_5785MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 11570.00 | 54.78 | PK | 68.20 | -13.42 | 2.00 | 124 | 33.08 | 21.70 |
| 2 | 11570.00 | 46.20 | AV | 54.00 | -7.8 | 2.00 | 124 | 24.50 | 21.70 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n20_5825MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5850.00 | 55.24 | PK | 68.20 | -12.96 | 1.70 | 300 | 45.46 | 9.78 |
| 2 | 11650.00 | 55.14 | PK | 68.20 | -13.06 | 1.70 | 300 | 33.24 | 21.90 |
| 3 | 11650.00 | 45.79 | AV | 54.00 | -8.21 | 1.70 | 300 | 23.89 | 21.90 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n20_5825MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5850.00 | 53.24 | PK | 68.20 | -14.96 | 1.40 | 180 | 43.46 | 9.78 |
| 2 | 11650.00 | 51.87 | PK | 68.20 | -16.33 | 2.00 | 0 | 29.97 | 21.90 |
| 3 | 11650.00 | 42.33 | AV | 54.00 | -11.67 | 2.00 | 0 | 20.43 | 21.90 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n40_5190MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 54.25 | PK | 68.20 | -13.95 | 1.50 | 66.00 | 46.75 | 7.50 |
| 2 | 5150.00 | 43.47 | AV | 54.00 | -10.53 | 1.50 | 66.00 | 35.97 | 7.50 |
| 3 | 10380.00 | 58.36 | PK | 68.20 | -9.84 | 2.00 | 180.00 | 38.56 | 19.80 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n40_5190MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 55.74 | PK | 68.20 | -12.46 | 1.80 | 330.00 | 48.24 | 7.50 |
| 2 | 5150.00 | 45.76 | AV | 54.00 | -8.24 | 1.80 | 330.00 | 38.26 | 7.50 |
| 3 | 10380.00 | 59.38 | PK | 68.20 | -8.82 | 1.80 | 320.00 | 39.58 | 19.80 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n40_5230MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 57.74 | PK | 68.20 | -10.46 | 1.80 | 220.00 | 49.74 | 8.00 |
| 2 | 5350.00 | 47.39 | AV | 54.00 | -6.61 | 1.80 | 220.00 | 39.39 | 8.00 |
| 3 | 10460.00 | 56.98 | PK | 68.20 | -11.22 | 2.00 | 310.00 | 37.08 | 19.90 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n40_5230MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 58.24 | PK | 68.20 | -9.96 | 1.80 | 320.00 | 50.24 | 8.00 |
| 2 | 5350.00 | 48.10 | AV | 54.00 | -5.9 | 1.80 | 320.00 | 40.10 | 8.00 |
| 3 | 10460.00 | 54.98 | PK | 68.20 | -21.54 | 1.80 | 320.00 | 35.08 | 19.90 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n40_5270MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 44.85 | PK | 68.20 | -23.35 | 1.20 | 260.00 | 37.35 | 7.50 |
| 2 | 5150.00 | 36.50 | AV | 54.00 | -17.5 | 1.20 | 260.00 | 29.00 | 7.50 |
| 3 | 10540.00 | 51.34 | PK | 68.20 | -16.86 | 1.60 | 320.00 | 31.34 | 20.00 |
| 4 | 10540.00 | 43.20 | AV | 54.00 | -10.8 | 1.60 | 320.00 | 23.20 | 20.00 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n40_5270MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 46.52 | PK | 68.20 | -21.68 | 1.40 | 320.00 | 39.02 | 7.50 |
| 2 | 5150.00 | 36.37 | AV | 54.00 | -17.63 | 1.40 | 320.00 | 28.87 | 7.50 |
| 3 | 10540.00 | 51.34 | PK | 68.20 | -16.86 | 2.00 | 180.00 | 31.34 | 20.00 |
| 4 | 10540.00 | 40.98 | AV | 54.00 | -13.02 | 2.00 | 180.00 | 20.98 | 20.00 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n40_5310MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 42.58 | PK | 68.20 | -25.62 | 1.00 | 200.00 | 34.58 | 8.00 |
| 2 | 5350.00 | 31.83 | AV | 54.00 | -22.17 | 1.00 | 200.00 | 23.83 | 8.00 |
| 3 | 10640.00 | 51.48 | PK | 68.20 | -16.72 | 2.50 | 120.00 | 31.38 | 20.10 |
| 4 | 10640.00 | 43.34 | AV | 54.00 | -10.66 | 2.50 | 120.00 | 23.24 | 20.10 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n40_5310MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 46.35 | PK | 68.20 | -21.85 | 2.00 | 100.00 | 38.35 | 8.00 |
| 2 | 5350.00 | 37.00 | AV | 54.00 | -17 | 2.00 | 100.00 | 29.00 | 8.00 |
| 3 | 10620.00 | 51.22 | PK | 68.20 | -16.98 | 1.90 | 360.00 | 31.12 | 20.10 |
| 4 | 10620.00 | 42.08 | AV | 54.00 | -11.92 | 1.90 | 360.00 | 21.98 | 20.10 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11n40_5795MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emission Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5850.00 | 42.21 | PK | 68.20 | -25.99 | 1.50 | 200.00 | 32.43 | 9.78 |
| 2 | 11590.00 | 53.32 | PK | 68.20 | -14.88 | 1.80 | 360.00 | 31.52 | 21.80 |
| 3 | 11590.00 | 42.64 | AV | 54.00 | -11.36 | 1.80 | 360.00 | 20.84 | 21.80 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11n40_5795MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emission Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5850.00 | 42.56 | PK | 68.20 | -25.64 | 1.50 | 120.00 | 32.78 | 9.78 |
| 2 | 11590.00 | 53.36 | PK | 68.20 | -14.84 | 1.80 | 360.00 | 31.56 | 21.80 |
| 3 | 11590.00 | 42.78 | AV | 54.00 | -11.22 | 1.80 | 360.00 | 20.98 | 21.80 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac20_5180MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 47.95 | PK | 68.20 | -20.25 | 1.70 | 320 | 40.45 | 7.50 |
| 2 | 5150.00 | 37.65 | AV | 54.00 | -16.35 | 1.70 | 320 | 30.15 | 7.50 |
| 3 | 10360.00 | 52.24 | PK | 68.20 | -15.96 | 1.80 | 260 | 32.44 | 19.80 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac20_5180MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 48.95 | PK | 68.20 | -19.25 | 1.60 | 287 | 41.45 | 7.50 |
| 2 | 5150.00 | 38.71 | AV | 54.00 | -15.29 | 1.60 | 287 | 31.21 | 7.50 |
| 3 | 10360.00 | 52.35 | PK | 68.20 | -15.85 | 1.50 | 280 | 32.55 | 19.80 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac20_5220MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 10400.00 | 53.26 | PK | 68.20 | -14.94 | 1.60 | 350 | 33.36 | 19.90 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac20_5220MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 10400.00 | 54.87 | PK | 68.20 | -13.33 | 1.60 | 180 | 34.97 | 19.90 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac20_5240MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 51.48 | PK | 68.20 | -16.72 | 1.70 | 350 | 43.48 | 8.00 |
| 2 | 5350.00 | 41.13 | AV | 54.00 | -12.87 | 1.70 | 350 | 33.13 | 8.00 |
| 3 | 10480.00 | 53.68 | PK | 68.20 | -14.52 | 1.80 | 240 | 33.78 | 19.90 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac20_5240MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 51.74 | PK | 68.20 | -16.46 | 1.60 | 350 | 43.74 | 8.00 |
| 2 | 5350.00 | 41.60 | AV | 54.00 | -12.4 | 1.60 | 350 | 33.60 | 8.00 |
| 3 | 10480.00 | 53.29 | PK | 68.20 | -14.91 | 1.80 | 320 | 33.39 | 19.90 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac20_5260MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 49.68 | PK | 68.20 | -18.52 | 1.60 | 350 | 42.18 | 7.50 |
| 2 | 5150.00 | 41.33 | AV | 54.00 | -12.67 | 1.60 | 350 | 33.83 | 7.50 |
| 3 | 10520.00 | 51.49 | PK | 68.20 | -16.71 | 1.50 | 240 | 31.49 | 20.00 |
| 4 | 10520.00 | 43.35 | AV | 54.00 | -10.65 | 1.50 | 240 | 23.35 | 20.00 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac20_5260MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 50.27 | PK | 68.20 | -17.93 | 1.70 | 260 | 42.77 | 7.50 |
| 2 | 5150.00 | 42.12 | AV | 54.00 | -11.88 | 1.70 | 260 | 34.62 | 7.50 |
| 3 | 10520.00 | 51.47 | PK | 68.20 | -16.73 | 1.80 | 200 | 31.47 | 20.00 |
| 4 | 10520.00 | 43.11 | AV | 54.00 | -10.89 | 1.80 | 200 | 23.11 | 20.00 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac20_5300MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 10600.00 | 52.36 | PK | 68.20 | -15.84 | 1.60 | 320 | 32.36 | 20.00 |
| 2 | 10600.00 | 43.31 | AV | 54.00 | -10.69 | 1.60 | 320 | 23.31 | 20.00 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac20_5300MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 10600.00 | 53.18 | PK | 68.20 | -15.02 | 1.20 | 240 | 33.18 | 20.00 |
| 2 | 10600.00 | 44.53 | AV | 54.00 | -9.47 | 1.20 | 240 | 24.53 | 20.00 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac20_5320MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 49.85 | PK | 68.20 | -18.35 | 2.00 | 180 | 41.85 | 8.00 |
| 2 | 5350.00 | 41.10 | AV | 54.00 | -12.9 | 2.00 | 180 | 33.10 | 8.00 |
| 3 | 10640.00 | 51.47 | PK | 68.20 | -16.73 | 2.00 | 260 | 31.37 | 20.10 |
| 4 | 10640.00 | 41.12 | AV | 54.00 | -12.88 | 2.00 | 260 | 21.02 | 20.10 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac20_5320MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 42.25 | PK | 68.20 | -25.95 | 1.70 | 220 | 34.25 | 8.00 |
| 2 | 5350.00 | 32.90 | AV | 54.00 | -21.1 | 1.70 | 220 | 24.90 | 8.00 |
| 3 | 10640.00 | 51.98 | PK | 68.20 | -16.22 | 1.70 | 120 | 31.88 | 20.10 |
| 4 | 10640.00 | 42.84 | AV | 54.00 | -11.16 | 1.70 | 120 | 22.74 | 20.10 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac20_5745MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5725.00 | 54.95 | PK | 68.20 | -13.25 | 1.80 | 280 | 45.30 | 9.65 |
| 2 | 11490.00 | 51.47 | PK | 68.20 | -16.73 | 1.70 | 240 | 29.77 | 21.70 |
| 3 | 11490.00 | 41.36 | AV | 54.00 | -12.64 | 1.70 | 240 | 19.66 | 21.70 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac20_5745MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5725.00 | 53.26 | PK | 68.20 | -14.94 | 1.50 | 220 | 43.61 | 9.65 |
| 2 | 11490.00 | 52.47 | PK | 68.20 | -15.73 | 1.60 | 280 | 30.77 | 21.70 |
| 3 | 11490.00 | 42.93 | AV | 54.00 | -11.07 | 1.60 | 280 | 21.23 | 21.70 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac20_5785MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 11570.00 | 52.22 | PK | 68.20 | -15.98 | 1.80 | 220 | 30.52 | 21.70 |
| 2 | 11570.00 | 42.54 | AV | 54.00 | -11.46 | 1.80 | 220 | 20.84 | 21.70 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac20_5785MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 11570.00 | 53.24 | PK | 68.20 | -14.96 | 1.60 | 150 | 31.54 | 21.70 |
| 2 | 11570.00 | 44.66 | AV | 54.00 | -9.34 | 1.60 | 150 | 22.96 | 21.70 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac20_5825MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5850.00 | 54.18 | PK | 68.20 | -14.02 | 1.60 | 300 | 44.40 | 9.78 |
| 2 | 11650.00 | 52.14 | PK | 68.20 | -16.06 | 1.80 | 280 | 30.24 | 21.90 |
| 3 | 11650.00 | 42.79 | AV | 54.00 | -11.21 | 1.80 | 280 | 20.89 | 21.90 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac20_5825MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5850.00 | 52.18 | PK | 68.20 | -16.02 | 1.50 | 180 | 42.40 | 9.78 |
| 2 | 11650.00 | 53.39 | PK | 68.20 | -14.81 | 1.50 | 180 | 31.49 | 21.90 |
| 3 | 11650.00 | 43.85 | AV | 54.00 | -10.15 | 1.50 | 180 | 21.95 | 21.90 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac40_5190MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 43.25 | PK | 68.20 | -24.95 | 1.00 | 100.00 | 35.75 | 7.50 |
| 2 | 5150.00 | 32.47 | AV | 54.00 | -21.53 | 1.00 | 100.00 | 24.97 | 7.50 |
| 3 | 10380.00 | 52.14 | PK | 68.20 | -16.06 | 1.60 | 120.00 | 32.34 | 19.80 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac40_5190MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 41.36 | PK | 68.20 | -26.84 | 2.00 | 360.00 | 33.86 | 7.50 |
| 2 | 5150.00 | 31.38 | AV | 54.00 | -22.62 | 2.00 | 360.00 | 23.88 | 7.50 |
| 3 | 10380.00 | 53.65 | PK | 68.20 | -14.55 | 1.80 | 250.00 | 33.85 | 19.80 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac40_5230MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 43.36 | PK | 68.20 | -24.84 | 1.00 | 200.00 | 35.36 | 8.00 |
| 2 | 5350.00 | 33.01 | AV | 54.00 | -20.99 | 1.00 | 200.00 | 25.01 | 8.00 |
| 3 | 10460.00 | 52.36 | PK | 68.2 | -15.84 | 2.00 | 180.00 | 32.46 | 19.90 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac40_5230MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 44.15 | PK | 68.20 | -24.05 | 2.00 | 100.00 | 36.15 | 8.00 |
| 2 | 5350.00 | 34.01 | AV | 54.00 | -19.99 | 2.00 | 100.00 | 26.01 | 8.00 |
| 3 | 10460.00 | 51.06 | PK | 68.2 | -17.14 | 1.50 | 360.00 | 31.16 | 19.90 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac40_5270MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 43.65 | PK | 68.20 | -24.55 | 1.50 | 150.00 | 36.15 | 7.50 |
| 2 | 5150.00 | 35.30 | AV | 54.00 | -18.7 | 1.50 | 150.00 | 27.80 | 7.50 |
| 3 | 10540.00 | 51.36 | PK | 68.20 | -16.84 | 1.60 | 200.00 | 31.36 | 20.00 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac40_5270MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 43.26 | PK | 68.20 | -24.94 | 1.60 | 260.00 | 35.76 | 7.50 |
| 2 | 5150.00 | 33.11 | AV | 54.00 | -20.89 | 1.60 | 260.00 | 25.61 | 7.50 |
| 3 | 10540.00 | 50.36 | PK | 68.20 | -17.84 | 2.00 | 180.00 | 30.36 | 20.00 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac40_5310MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 41.26 | PK | 68.20 | -26.94 | 1.00 | 200.00 | 33.26 | 8.00 |
| 2 | 5350.00 | 30.51 | AV | 54.00 | -23.49 | 1.00 | 200.00 | 22.51 | 8.00 |
| 3 | 10640.00 | 50.15 | PK | 68.20 | -18.05 | 2.50 | 120.00 | 30.05 | 20.10 |
| 4 | 10640.00 | 42.01 | AV | 54.00 | -11.99 | 2.50 | 120.00 | 21.91 | 20.10 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac40_5310MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 44.39 | PK | 68.20 | -23.81 | 2.00 | 100.00 | 36.39 | 8.00 |
| 2 | 5350.00 | 35.04 | AV | 54.00 | -18.96 | 2.00 | 100.00 | 27.04 | 8.00 |
| 3 | 10620.00 | 50.25 | PK | 68.20 | -17.95 | 1.90 | 360.00 | 30.15 | 20.10 |
| 4 | 10620.00 | 41.11 | AV | 54.00 | -12.89 | 1.90 | 360.00 | 21.01 | 20.10 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac40_5755MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5725.00 | 43.36 | PK | 68.2 | -24.84 | 1.80 | 180.00 | 33.71 | 9.65 |
| 2 | 11510.00 | 50.15 | PK | 68.20 | -18.05 | 2.00 | 120.00 | 28.45 | 21.70 |
| 3 | 11510.00 | 39.63 | AV | 54.00 | -14.37 | 2.00 | 120.00 | 17.93 | 21.70 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac40_5755MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5725.00 | 43.62 | PK | 68.2 | -24.58 | 1.20 | 200.00 | 33.97 | 9.65 |
| 2 | 11510.00 | 52.29 | PK | 68.20 | -15.91 | 2.00 | 180.00 | 30.59 | 21.70 |
| 3 | 11510.00 | 41.75 | AV | 54.00 | -12.25 | 2.00 | 180.00 | 20.05 | 21.70 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac40_5795MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5850.00 | 42.25 | PK | 68.20 | -25.95 | 1.40 | 100.00 | 32.47 | 9.78 |
| 2 | 11590.00 | 52.36 | PK | 68.20 | -15.84 | 1.60 | 0.00 | 30.56 | 21.80 |
| 3 | 11590.00 | 41.68 | AV | 54.00 | -12.32 | 1.60 | 0.00 | 19.88 | 21.80 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac40_5795MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5850.00 | 44.15 | PK | 68.20 | -24.05 | 1.20 | 360.00 | 34.37 | 9.78 |
| 2 | 11590.00 | 56.25 | PK | 68.20 | -11.95 | 2.00 | 120.00 | 34.45 | 21.80 |
| 3 | 11590.00 | 45.67 | AV | 54.00 | -8.33 | 2.00 | 120.00 | 23.87 | 21.80 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac-VHT80_5210MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 54.87 | PK | 68.20 | -13.33 | 1.50 | 320.00 | 47.37 | 7.50 |
| 2 | 5150.00 | 44.21 | AV | 54.00 | -9.79 | 1.50 | 320.00 | 36.71 | 7.50 |
| 3 | 10420.00 | 55.68 | PK | 68.20 | -12.52 | 1.50 | 320.00 | 35.78 | 19.90 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac-VHT80_5210MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5150.00 | 55.34 | PK | 68.20 | -12.86 | 1.60 | 320.00 | 47.84 | 7.50 |
| 2 | 5150.00 | 45.36 | AV | 54.00 | -8.64 | 1.60 | 320.00 | 37.86 | 7.50 |
| 3 | 10420.00 | 56.35 | PK | 68.20 | -11.85 | 1.60 | 320.00 | 36.45 | 19.90 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac-VHT80_5290MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 54.53 | PK | 68.20 | -13.67 | 2.00 | 120.00 | 46.53 | 8.00 |
| 2 | 5350.00 | 44.18 | AV | 54.00 | -9.82 | 2.00 | 120.00 | 36.18 | 8.00 |
| 3 | 10580.00 | 56.32 | PK | 68.20 | -11.88 | 2.00 | 330.00 | 36.32 | 20.00 |
| 4 | 10580.00 | 46.20 | AV | 54.00 | -7.80 | 2.00 | 330.00 | 26.20 | 20.00 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac-VHT80_5290MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5350.00 | 56.84 | PK | 68.20 | -11.36 | 1.50 | 160.00 | 48.84 | 8.00 |
| 2 | 5350.00 | 46.70 | AV | 54.00 | -7.30 | 1.50 | 160.00 | 38.70 | 8.00 |
| 3 | 10580.00 | 55.00 | PK | 68.20 | -21.54 | 1.60 | 220.00 | 35.00 | 20.00 |
| 4 | 10580.00 | 44.65 | AV | 54.00 | -11.60 | 1.60 | 220.00 | 24.65 | 20.00 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M（802.11ac-VHT80_5775MHz） | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5460.00 | 49.96 | PK | 68.20 | -18.24 | 1.50 | 270.00 | 40.18 | 9.78 |
| 2 | 5460.00 | 42.22 | AV | 54.00 | -11.78 | 1.50 | 270.00 | 32.44 | 9.78 |
| 3 | 11550.00 | 52.37 | PK | 68.20 | -15.83 | 1.80 | 190.00 | 30.57 | 21.80 |
| 4 | 11550.00 | 44.63 | AV | 54.00 | -9.37 | 1.80 | 190.00 | 22.83 | 21.80 |
| **ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M（802.11ac-VHT80_5775MHz）** | | | | | | | | | |
| No. | Frequency (MHz) | Emssion Level (dBuV/m) | | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV/m) | Correction Factor (dB/m) |
| 1 | 5460.00 | 52.39 | PK | 68.20 | -15.81 | 1.70 | 300.00 | 42.61 | 9.78 |
| 2 | 5460.00 | 43.74 | AV | 54.00 | -10.26 | 1.70 | 300.00 | 33.96 | 9.78 |
| 3 | 11550.00 | 51.04 | PK | 68.20 | -17.16 | 1.50 | 280.00 | 29.24 | 21.80 |
| 4 | 11550.00 | 43.46 | AV | 54.00 | -10.54 | 1.50 | 280.00 | 21.66 | 21.80 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

## 2.7. Conducted Emission

### 2.7.1. Limit of Conducted Emission

FCC 15.207,

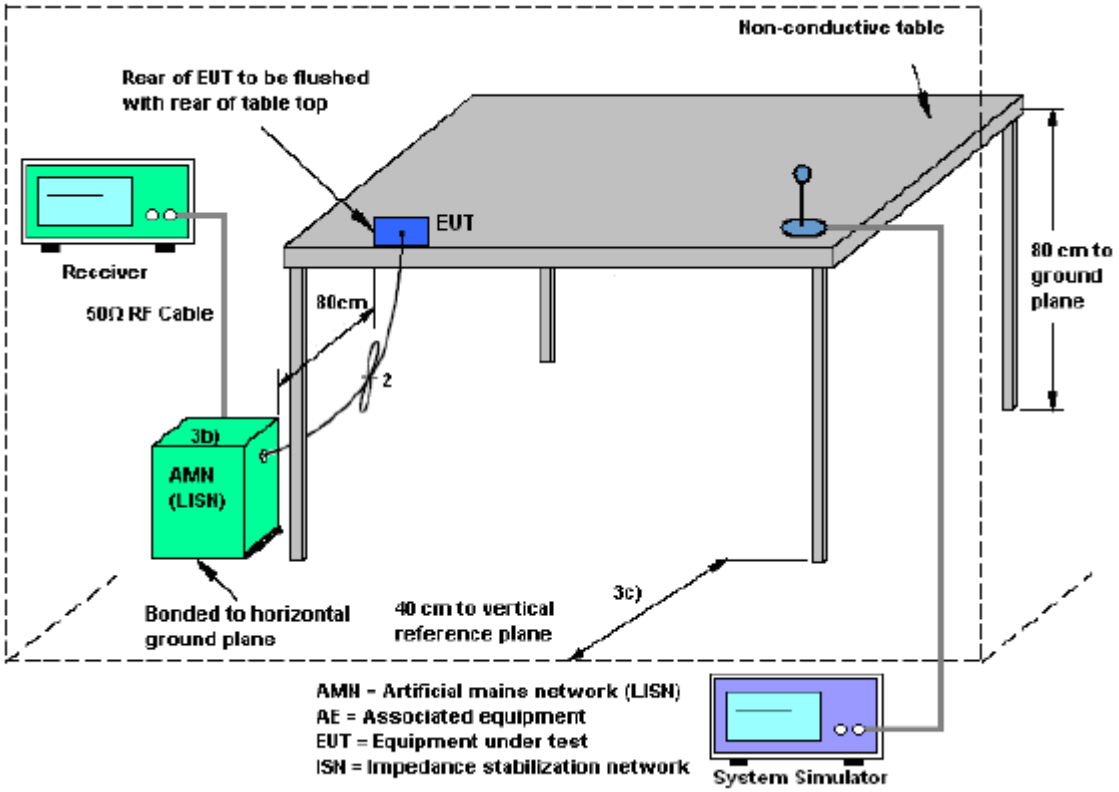
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

| Frequency range (MHz) | Conducted Limit (dBμV) | |
|---|---|---|
| | Quai-peak | Average |
| 0.15 - 0.50 | 66 to 56 | 56 to 46 |
| 0.50 - 5 | 56 | 46 |
| 5 - 30 | 60 | 50 |

### 2.7.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.7.3. Test Setup

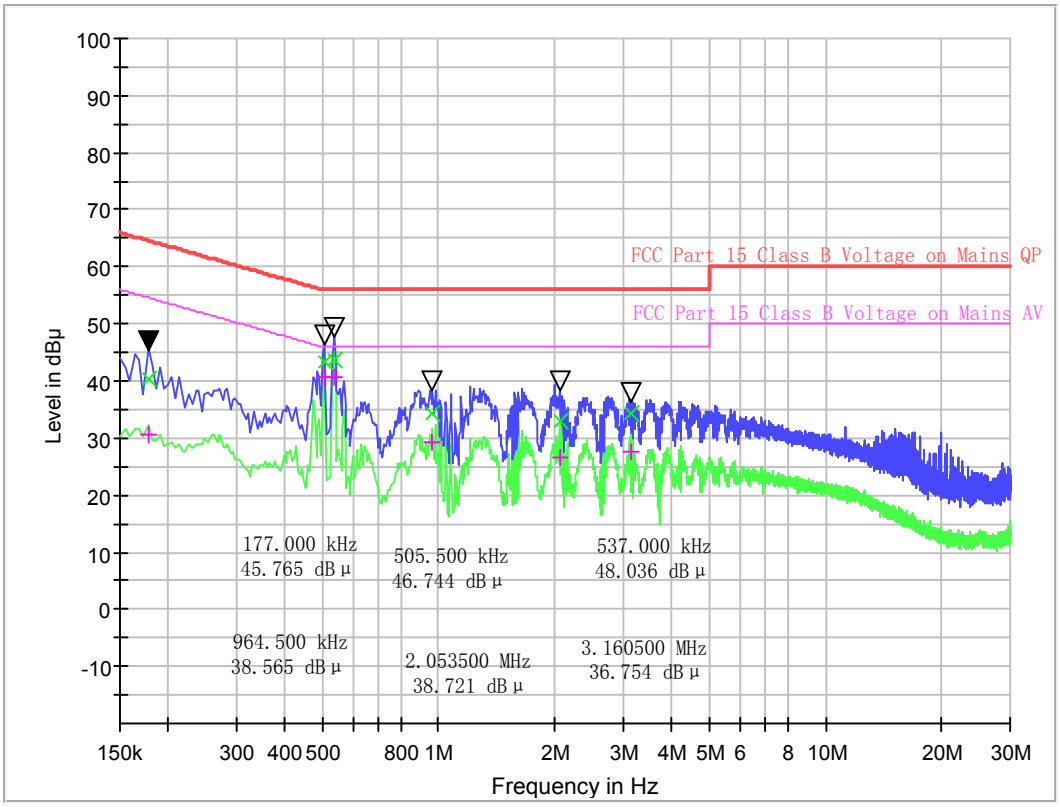


### 2.7.4. Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

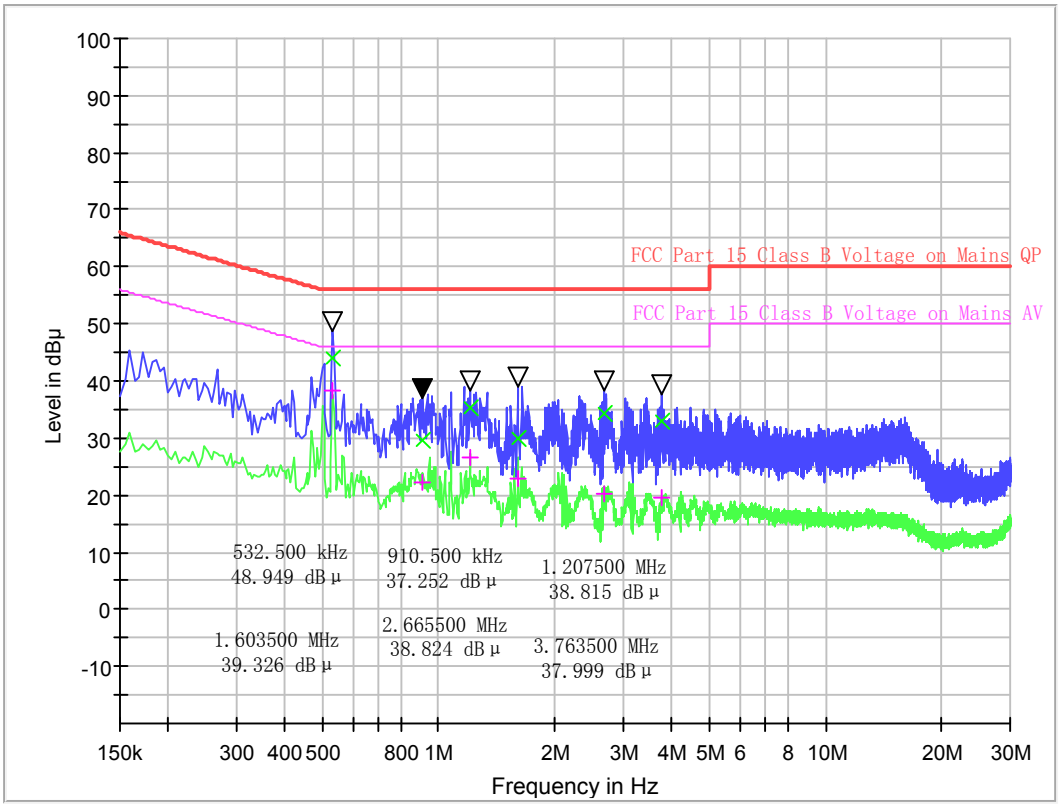
### 2.7.5. Test Results of Conducted Emission

The EUT configuration of the emission tests is 5G WLAN Link + USB Cable (Charging from Adapter)




(Plot A: L Phase)

| Frequency (MHz) | QuasiPeak (dB µ V) | CAverage (dB µ V) | Cabel Loss (dB) | Corr. (dB) | Margin - QPK | Limit - QPK | Margin - AV | Limit - AV (dB µ V) |
|---|---|---|---|---|---|---|---|---|
| 0.177000 | 40.46 | 30.54 | 0.1 | 10.1 | 24.17 | 64.6 | 24.09 | 54.6 |
| 0.505500 | 43.35 | 40.72 | 0.1 | 10.1 | 12.65 | 56.0 | 5.28 | 46.0 |
| 0.537000 | 43.61 | 40.82 | 0.6 | 10.6 | 12.39 | 56.0 | 5.18 | 46.0 |
| 0.964500 | 34.38 | 29.35 | 0.6 | 10.6 | 21.62 | 56.0 | 16.65 | 46.0 |
| 2.053500 | 32.81 | 26.50 | 0.6 | 10.6 | 23.19 | 56.0 | 19.50 | 46.0 |
| 3.160500 | 34.16 | 27.54 | 0.7 | 10.7 | 21.84 | 56.0 | 18.46 | 46.0 |




(Plot A: NPhase)

| Frequency (MHz) | QuasiPeak (dB μ V) | CAverage (dB μ V) | Cabel Loss (dB) | Corr. (dB) | Margin - QPK | Limit - QPK | Margin - AV | Limit - AV (dB μ V) |
|---|---|---|---|---|---|---|---|---|
| 0.532500 | 43.95 | 38.28 | 0.1 | 10.1 | 12.05 | 56.0 | 7.72 | 46.0 |
| 0.910500 | 29.58 | 22.07 | 0.1 | 10.1 | 26.42 | 56.0 | 23.93 | 46.0 |
| 1.207500 | 35.41 | 26.65 | 0.6 | 10.6 | 20.59 | 56.0 | 19.35 | 46.0 |
| 1.603500 | 29.94 | 22.89 | 0.6 | 10.6 | 26.06 | 56.0 | 23.11 | 46.0 |
| 2.665500 | 34.17 | 20.08 | 0.6 | 10.6 | 21.83 | 56.0 | 25.92 | 46.0 |
| 3.763500 | 32.84 | 19.72 | 0.7 | 10.7 | 23.16 | 56.0 | 26.28 | 46.0 |

**Test result:PASS**

Note: Correction factor=Cabel loss+ attenuation factor
attenuation factor=10dB

# 3. List of measuring equipment

| Item | Test Equipment | Manufacturer | Model No. | Serial No. | Cal Date | Due Date |
|---|---|---|---|---|---|---|
| 1 | EMI TEST RECEIVER | R&S | ESU8 | A0805559 | 2020.04.03 | 2021.04.02 |
| 2 | Power Meter | R&S | NRP-Z31 | 102872 | 2020.05.18 | 2021.05.17 |
| 3 | TURNTABLE | ETS | 2088 | 2149 | N/A | N/A |
| 4 | ANTENNA MAST | ETS | 2075 | 2346 | N/A | N/A |
| 5 | EMI TEST Software | R&S | ESK1 | N/A | N/A | N/A |
| 6 | Horn antenna (18GHz~26.5GHz) | AR | AT4003A | 325306 | 2020.09.16 | 2022.09.15 |
| 7 | Amplifier 30M~1GHz | MILMEGA | 80RF1000-10004 | A140101634 | 2020.03.24 | 2021.03.23 |
| 8 | Amplifier 1G~18GHz | MILMEGA | AS0104R-800/400 | A160302517 | 2020.03.24 | 2021.03.23 |
| 9 | High pass filter | Compliance Direction systems | BSU-6 | 34202 | 2020.11.10 | 2021.11.09 |
| 10 | Horn Antenna | R&S | HF906 | A0304225 | 2019.04.17 | 2022.04.16 |
| 11 | Horn Antenna | R&S | ESIB7 | A0501375 | 2020.06.24 | 2021.06.23 |
| 12 | ULTRA-BROADBAND ANTENNA | SCHWARZBECK | VULB9160 | A0805560 | 2019.05.24 | 2022.05.23 |
| 13 | Passive Loop Antenna | R&S | HFH2-Z2 | 100047 | 2019.04.26 | 2022.04.25 |
| 14 | Temperature chamber | XSM | DNF810C | A0501375 | 2020.05.26 | 2021.05.25 |
| 15 | Spectrum Analyzer | KEYSIGHT | N9030A | A160702554 | 2020.05.18 | 2021.05.17 |
| 16 | Power Supply | R&S | ESIB26 | A0304218 | 2020.04.29 | 2021.04.28 |
| 17 | LISN | R&S | ESH2-Z5 | A0304221 | 2020.04.03 | 2021.04.02 |

# 4. Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence . The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Emission Measurement (150KHz~30MHz)

| | |
|---|---|
| Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y)) | 2.8dB |

Uncertainty of Radiated Emission Measurement (30MHz~1GHz)

| | |
|---|---|
| Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y)) | 5.0dB |

Uncertainty of Radiated Emission Measurement (1GHz~18GHz)

| | |
|---|---|
| Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y)) | 5.1dB |

Uncertainty of Radiated Emission Measurement (18GHz~40GHz)

| | |
|---|---|
| Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y)) | 5.1dB |

# Appendix A

## Output power

## Test results

### Test results of band U-NII-1 (5150 ~ 5250 MHz)

| U-NII-1 AVGSA Output Power | | | | | |
|---|---|---|---|---|---|
| Mode | Test Frequency (MHz) | Max Power (dBm) | FCC Limit (dBm) | IC Limit (dBm) | Result |
| 802.11n (20MHz) | 5180 | 12.21 | 24 | / | Pass |
| 802.11n (20MHz) | 5220 | 12.11 | | | Pass |
| 802.11n (20MHz) | 5240 | 12.84 | | | Pass |
| 802.11n (40MHz) | 5190 | 11.78 | | | Pass |
| 802.11n (40MHz) | 5230 | 12.73 | | | Pass |
| 802.11ac (20MHz) | 5180 | 12.20 | | | Pass |
| 802.11ac (20MHz) | 5220 | 12.04 | | | Pass |
| 802.11ac (20MHz) | 5240 | 11.39 | | | Pass |
| 802.11ac (40MHz) | 5190 | 12.20 | | | Pass |
| 802.11ac (40MHz) | 5230 | 12.52 | | | Pass |
| 802.11ac (80MHz) | 5210 | 12.34 | | | Pass |
| 802.11a (20MHz) | 5180 | 12.12 | | | Pass |
| 802.11a (20MHz) | 5220 | 13.35 | | | Pass |
| 802.11a (20MHz) | 5240 | 11.98 | | | Pass |

**Test results of band U-NII-2A (5250 ~ 5350 MHz)**

| U-NII-2a AVGSA Output Power | | | | |
|---|---|---|---|---|
| Mode | Test Frequency (MHz) | Max Power (dBm) | FCC Limit (dBm) | Result |
| 802.11n (20MHz) | 5260 | 11.74 | 23.13 | Pass |
| 802.11n (20MHz) | 5300 | 11.84 | 23.16 | Pass |
| 802.11n (20MHz) | 5320 | 10.24 | 22.98 | Pass |
| 802.11n (40MHz) | 5270 | 11.54 | 24.00 | Pass |
| 802.11n (40MHz) | 5310 | 11.18 | 24.00 | Pass |
| 802.11ac (20MHz) | 5260 | 11.70 | 23.07 | Pass |
| 802.11ac (20MHz) | 5300 | 11.15 | 23.04 | Pass |
| 802.11ac (20MHz) | 5320 | 11.54 | 23.00 | Pass |
| 802.11ac (40MHz) | 5270 | 11.14 | 24.00 | Pass |
| 802.11ac (40MHz) | 5310 | 11.12 | 24.00 | Pass |
| 802.11ac (80MHz) | 5290 | 11.56 | 24.00 | Pass |
| 802.11a (20MHz) | 5260 | 12.30 | 22.92 | Pass |
| 802.11a (20MHz) | 5300 | 12.41 | 22.91 | Pass |
| 802.11a (20MHz) | 5320 | 12.10 | 22.97 | Pass |

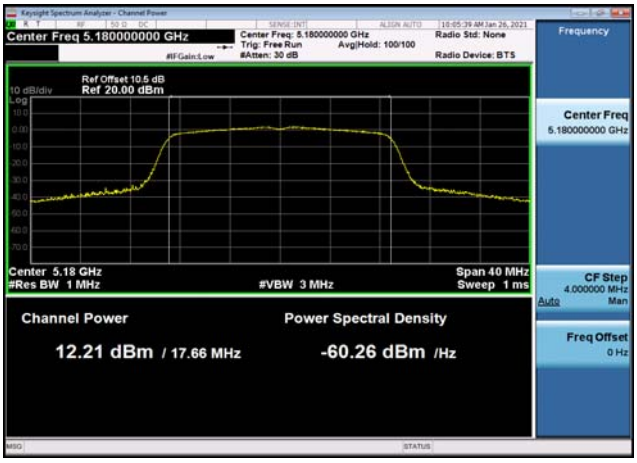
Note:The FCC Limit is 250mW (24 dBm) or 11dBm+10logB*Whichever is less.

**Conducted Power Test results of band U-NII-3 (5725 ~ 5850 MHz)**

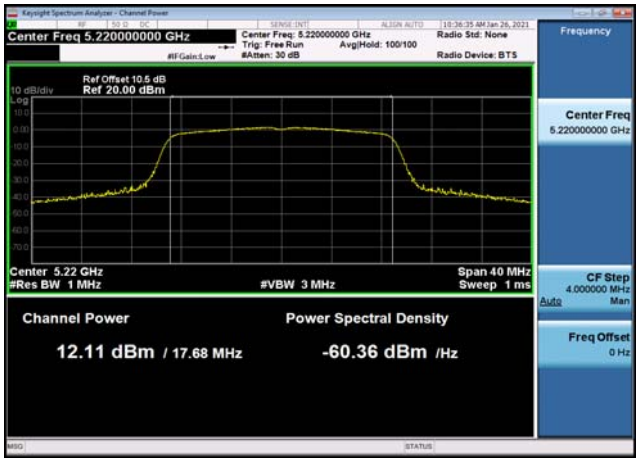
| U-NII-3 AVGSA Output Power | | | | |
|---|---|---|---|---|
| Mode | Test Frequency (MHz) | Max Power (dBm) | FCC Limit (dBm) | Result |
| 802.11n (20MHz) | 5745 | 11.80 | 30 | Pass |
| 802.11n (20MHz) | 5785 | 11.82 | | Pass |
| 802.11n (20MHz) | 5825 | 12.16 | | Pass |
| 802.11n (40MHz) | 5755 | 11.38 | | Pass |
| 802.11n (40MHz) | 5795 | 11.68 | | Pass |
| 802.11ac (20MHz) | 5745 | 12.06 | | Pass |
| 802.11ac (20MHz) | 5785 | 11.65 | | Pass |
| 802.11ac (20MHz) | 5825 | 12.47 | | Pass |
| 802.11ac (40MHz) | 5755 | 11.88 | | Pass |
| 802.11ac (40MHz) | 5795 | 12.10 | | Pass |
| 802.11ac (80MHz) | 5775 | 11.91 | | Pass |
| 802.11a (20MHz) | 5745 | 12.14 | | Pass |
| 802.11a (20MHz) | 5785 | 11.21 | | Pass |
| 802.11a (20MHz) | 5825 | 12.29 | | Pass |

# Test plots

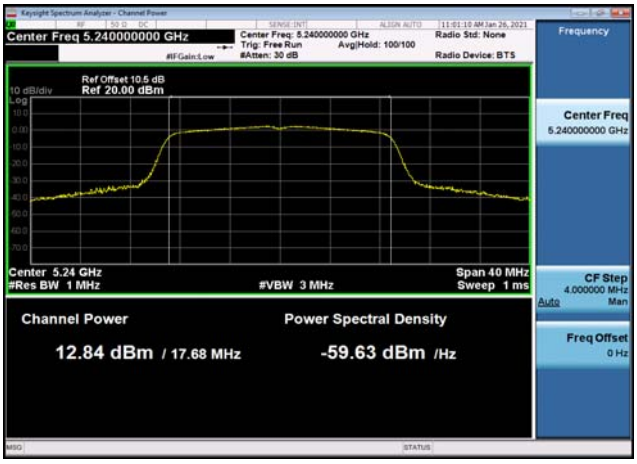
U-NII-1 Output Power-802.11n(20MHz) ,5180MHz,Ant1



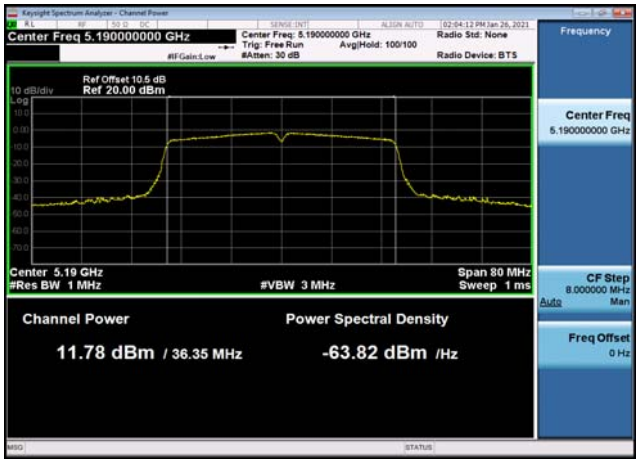

U-NII-1 Output Power-802.11n(20MHz) ,5220MHz,Ant1



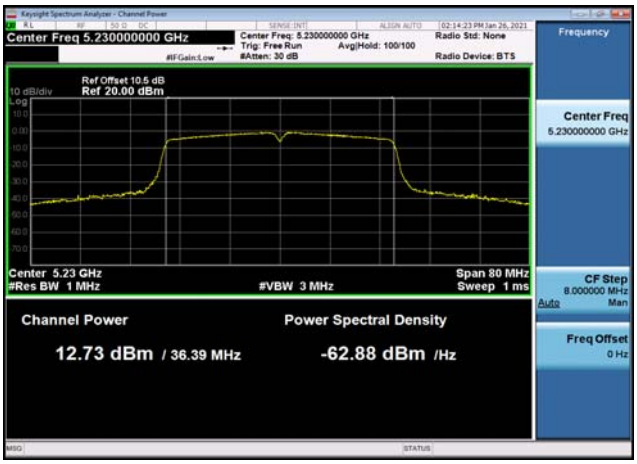

U-NII-1 Output Power-802.11n(20MHz) ,5240MHz,Ant1



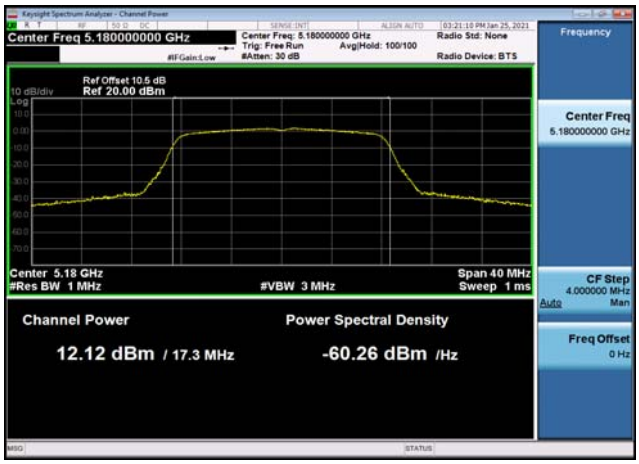

U-NII-1 Output Power-802.11n(40MHz) ,5190MHz,Ant1



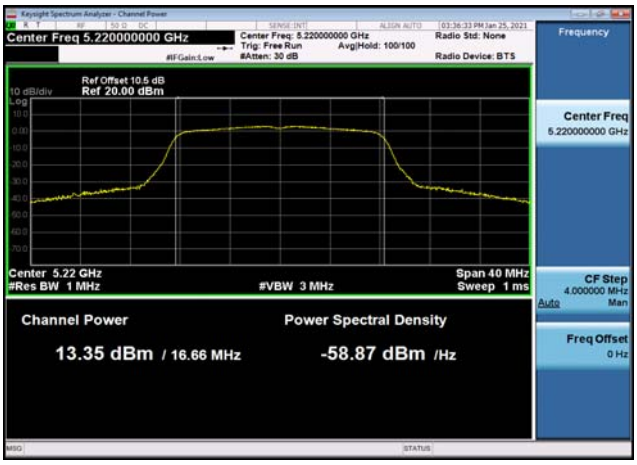

U-NII-1 Output Power-802.11n(40MHz) ,5230MHz,Ant1



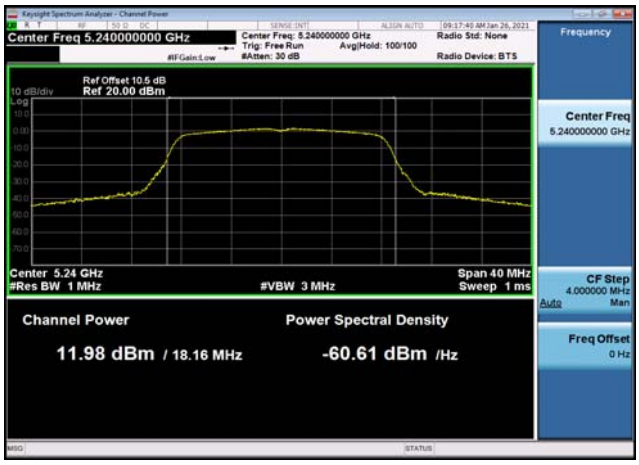

U-NII-1 Output Power-802.11a(20MHz) ,5180MHz,Ant1



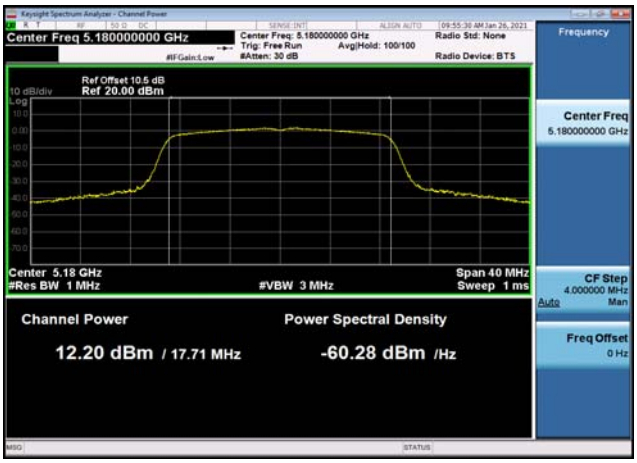
U-NII-1 Output Power-802.11a(20MHz) ,5220MHz,Ant1



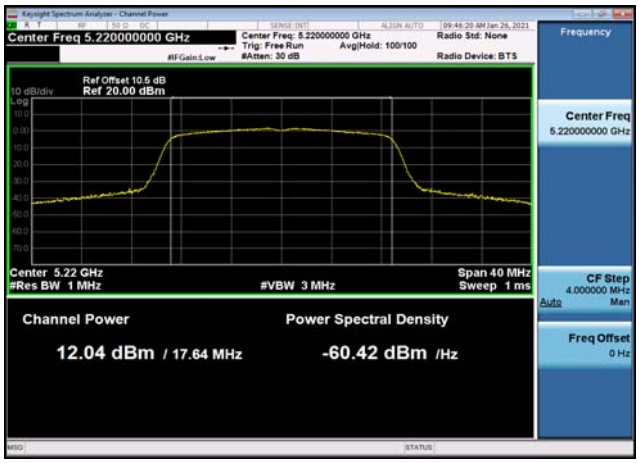

U-NII-1 Output Power-802.11a(20MHz) ,5240MHz,Ant1



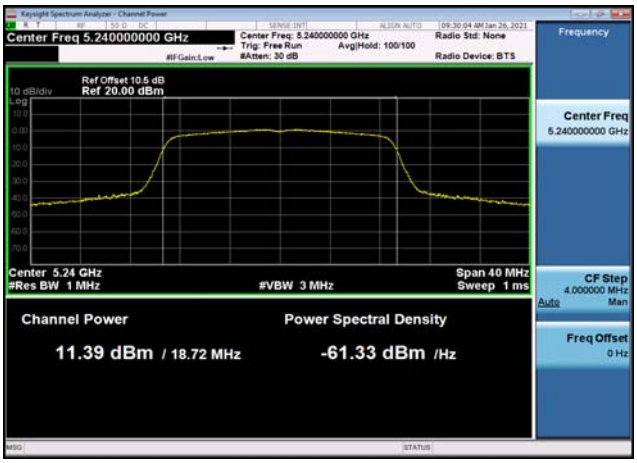

U-NII-1 Output Power-802.11ac(20MHz) ,5180MHz,Ant1



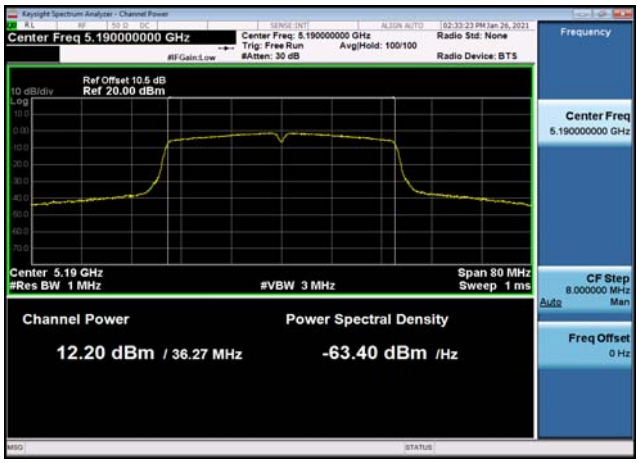

U-NII-1 Output Power-802.11ac(20MHz) ,5220MHz,Ant1



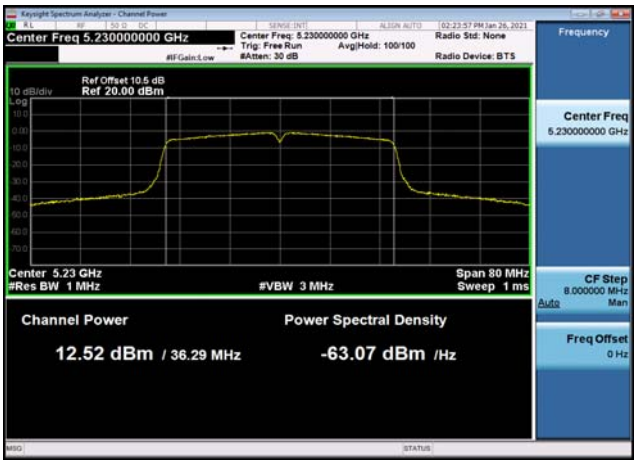

U-NII-1 Output Power-802.11ac(20MHz) ,5240MHz,Ant1



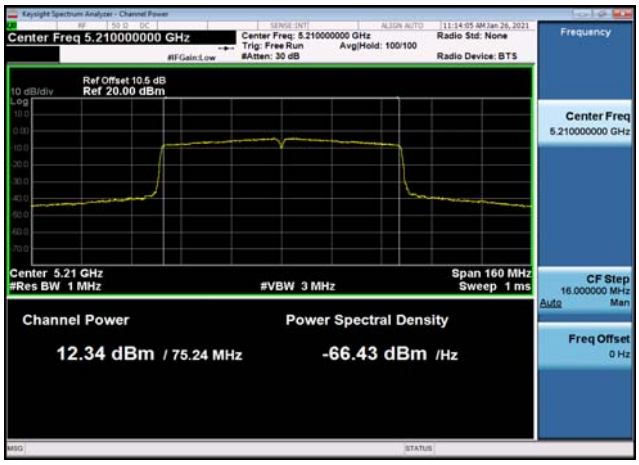

U-NII-1 Output Power-802.11ac(40MHz) ,5190MHz,Ant1



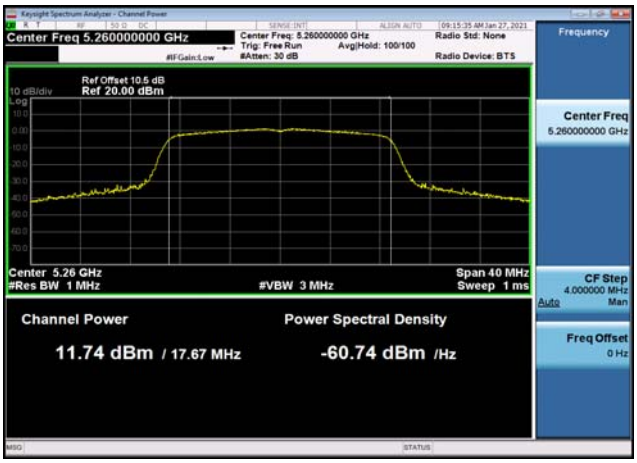
U-NII-1 Output Power-802.11ac(40MHz) ,5230MHz,Ant1



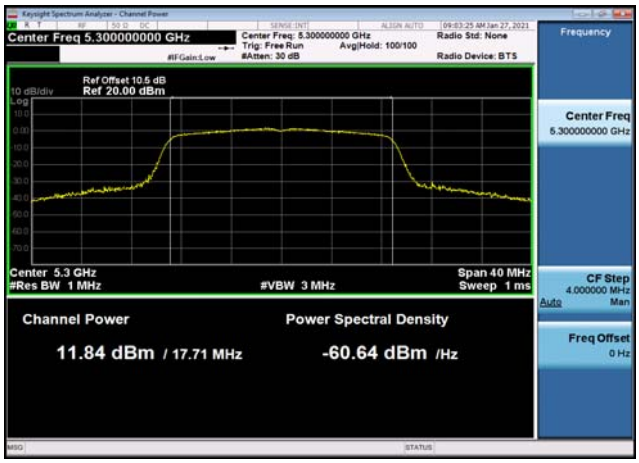

U-NII-1 Output Power-802.11ac(80MHz) ,5210MHz,Ant1



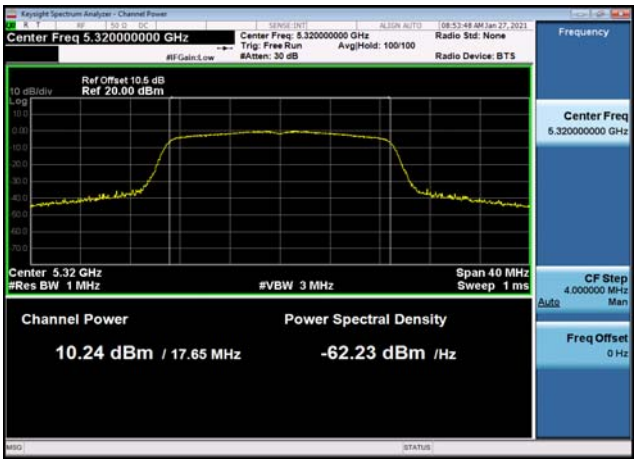

U-NII-2a Output Power-802.11n(20MHz) ,5260MHz,Ant1



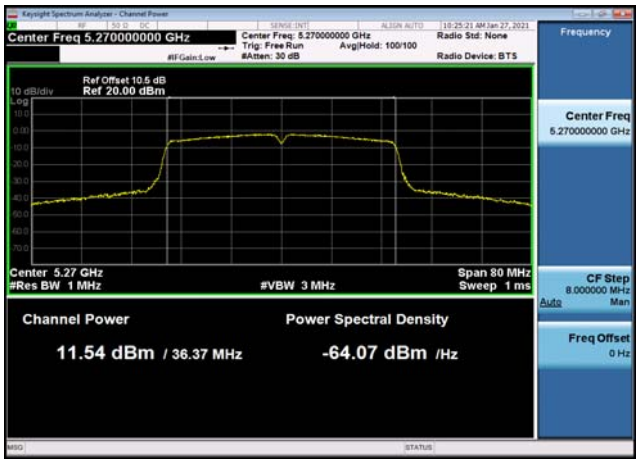

U-NII-2a Output Power-802.11n(20MHz) ,5300MHz,Ant1




U-NII-2a Output Power-802.11n(20MHz) ,5320MHz,Ant1

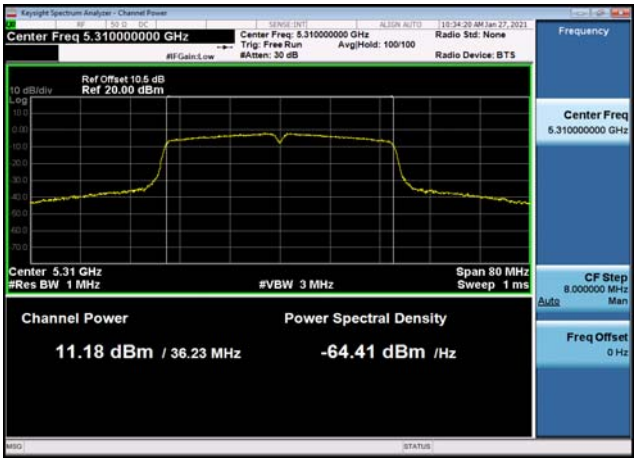



U-NII-2a Output Power-802.11n(40MHz) ,5270MHz,Ant1

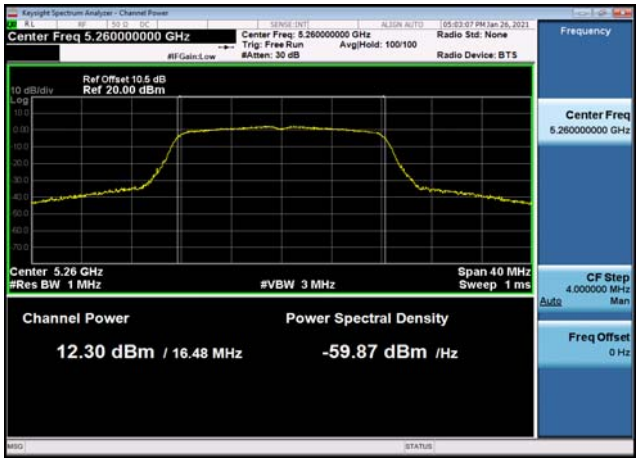



U-NII-2a Output Power-802.11n(40MHz) ,5310MHz,Ant1

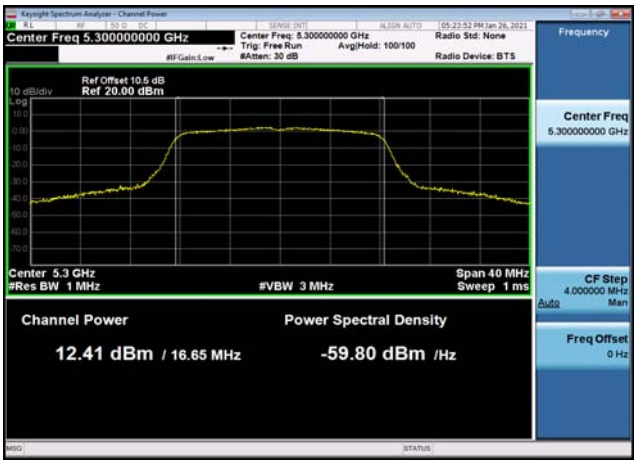
U-NII-2a Output Power-802.11a(20MHz) ,5260MHz,Ant1



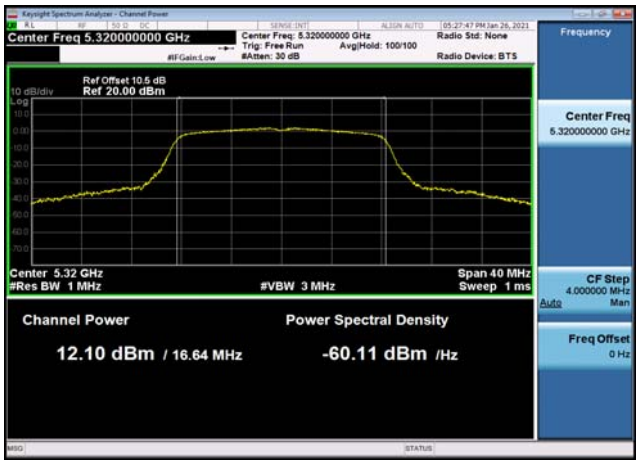

U-NII-2a Output Power-802.11a(20MHz) ,5300MHz,Ant1




U-NII-2a Output Power-802.11a(20MHz) ,5320MHz,Ant1

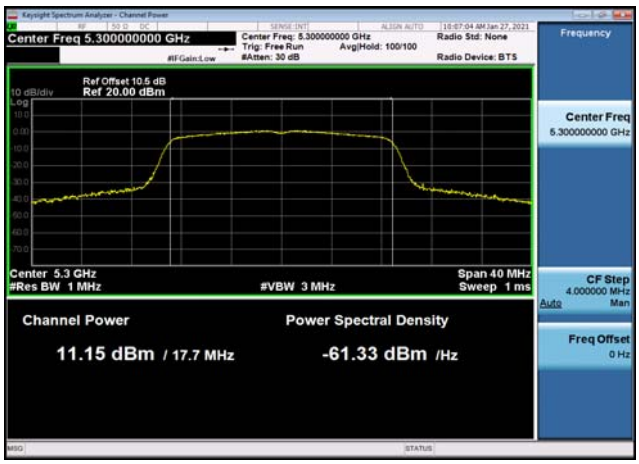



U-NII-2a Output Power-802.11ac(20MHz) ,5260MHz,Ant1

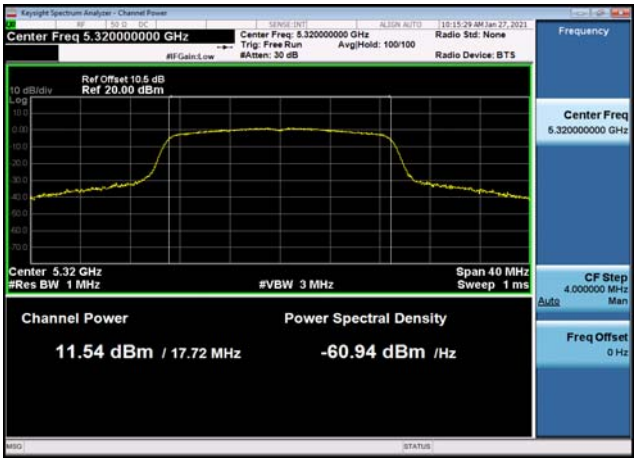



U-NII-2a Output Power-802.11ac(20MHz) ,5300MHz,Ant1

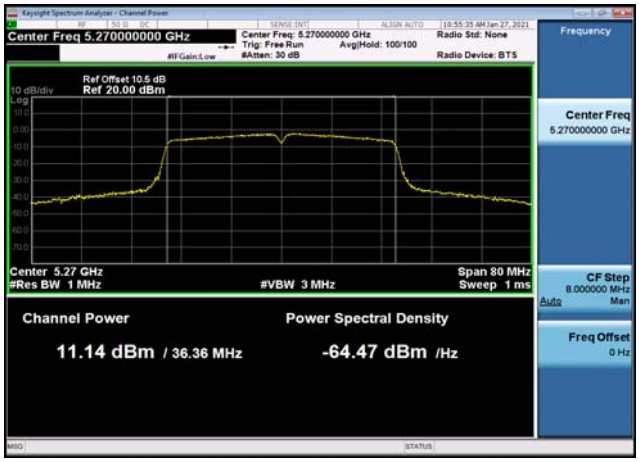
U-NII-2a Output Power-802.11ac(20MHz) ,5320MHz,Ant1



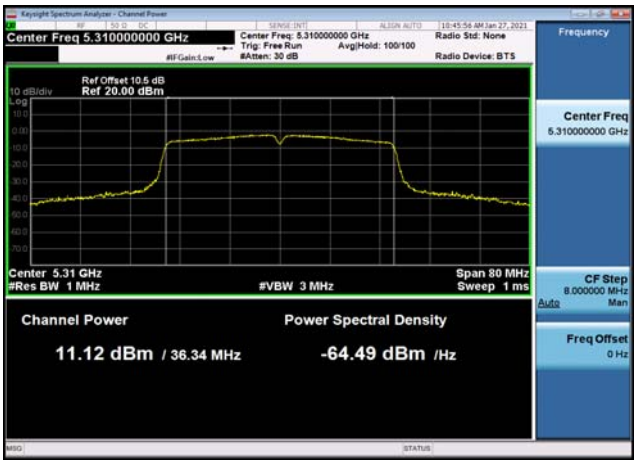

U-NII-2a Output Power-802.11ac(40MHz) ,5270MHz,Ant1



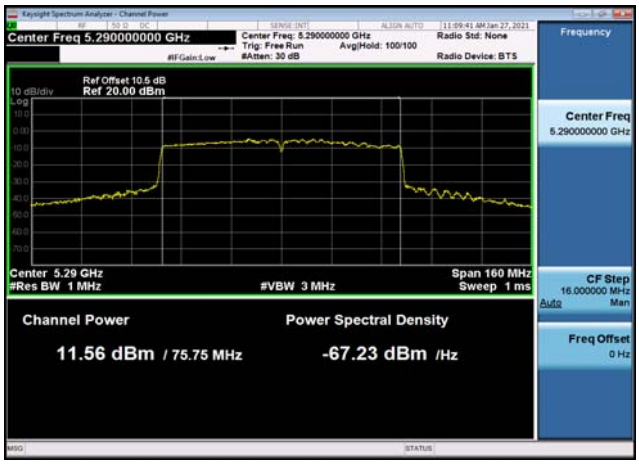

U-NII-2a Output Power-802.11ac(40MHz) ,5310MHz,Ant1



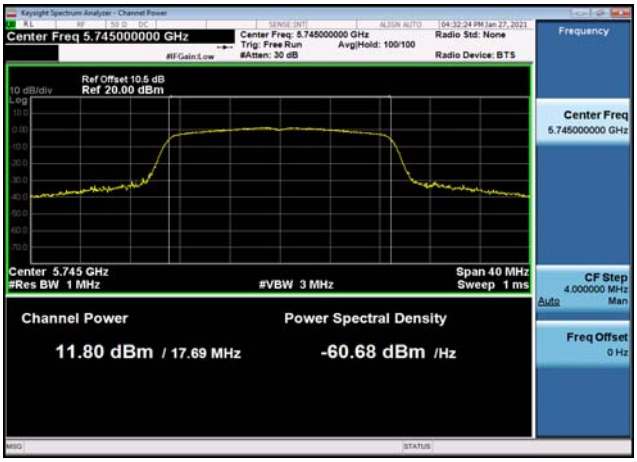

U-NII-2a Output Power-802.11ac(80MHz) ,5290MHz,Ant1



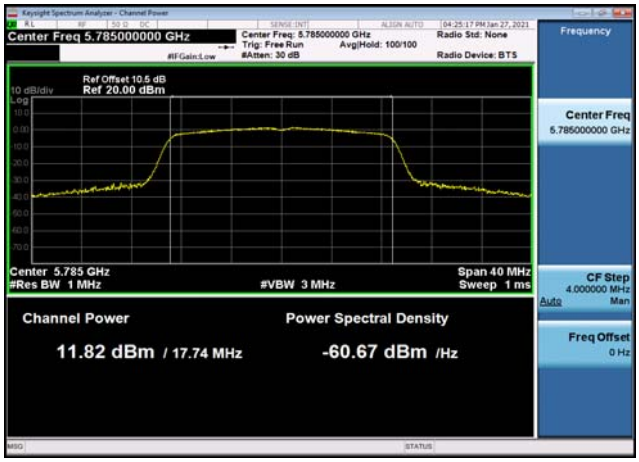

U-NII-3 Output Power-802.11n(20MHz) ,5745MHz,Ant1



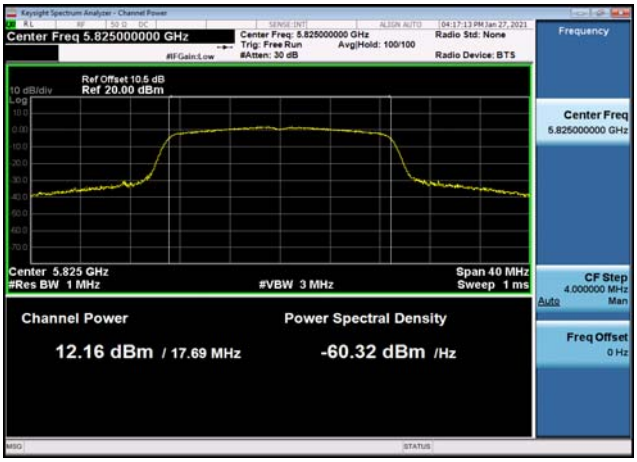

U-NII-3 Output Power-802.11n(20MHz) ,5785MHz,Ant1



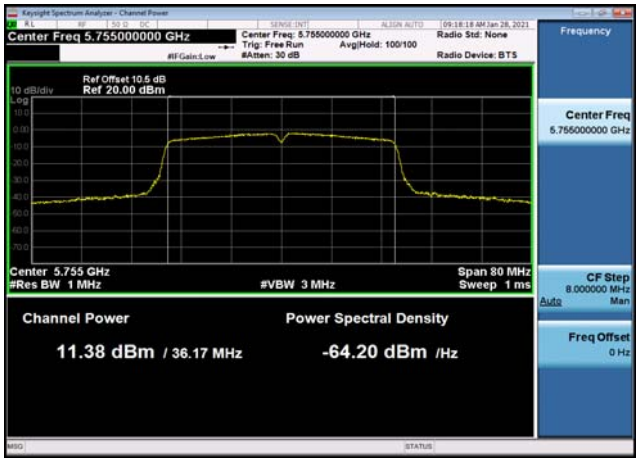

U-NII-3 Output Power-802.11n(20MHz) ,5825MHz,Ant1



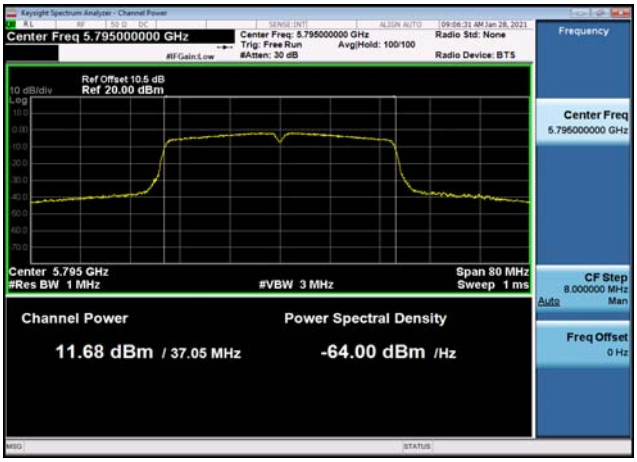

U-NII-3 Output Power-802.11n(40MHz) ,5755MHz,Ant1



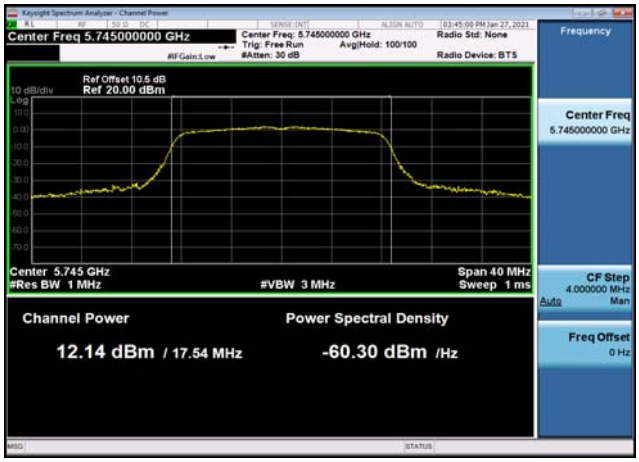

U-NII-3 Output Power-802.11n(40MHz) ,5795MHz,Ant1



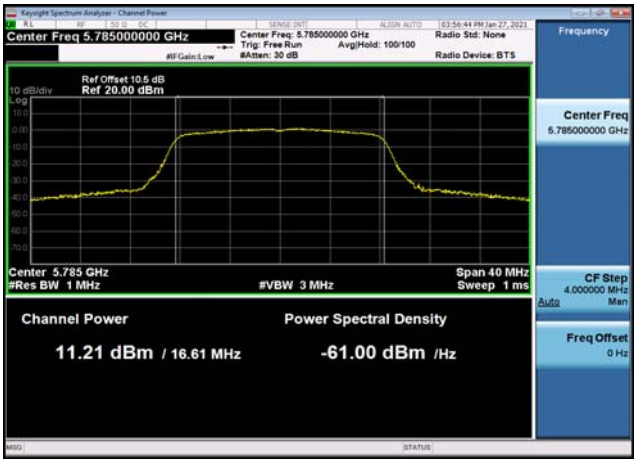

U-NII-3 Output Power-802.11a(20MHz) ,5745MHz,Ant1



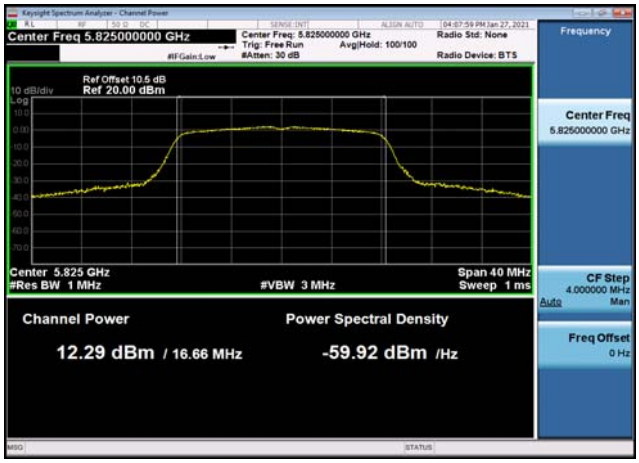

U-NII-3 Output Power-802.11a(20MHz) ,5785MHz,Ant1



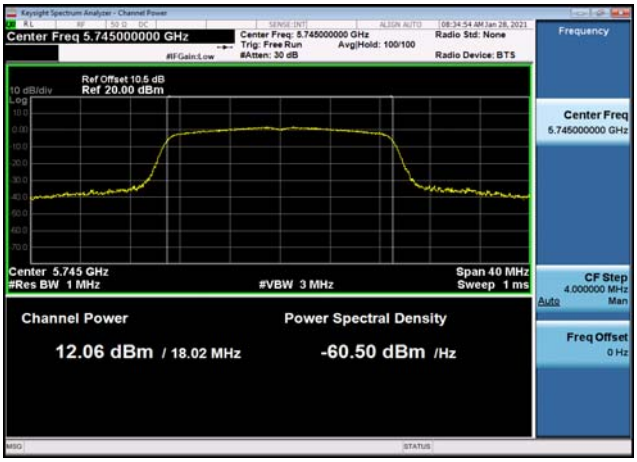

U-NII-3 Output Power-802.11a(20MHz) ,5825MHz,Ant1



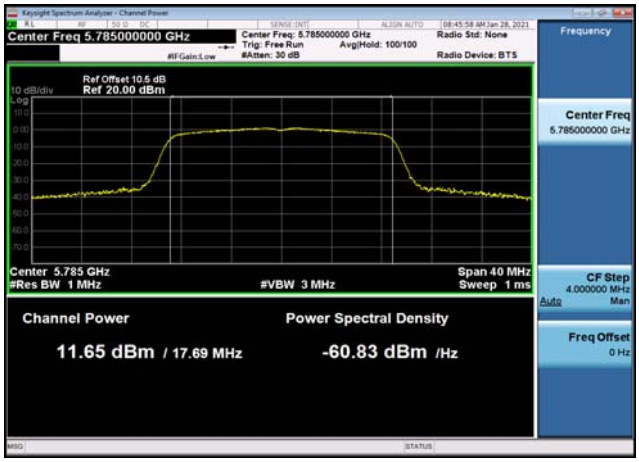

U-NII-3 Output Power-802.11ac(20MHz) ,5745MHz,Ant1



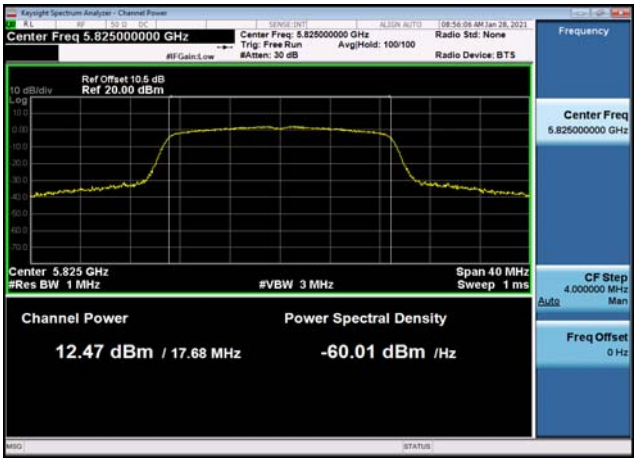

U-NII-3 Output Power-802.11ac(20MHz) ,5785MHz,Ant1



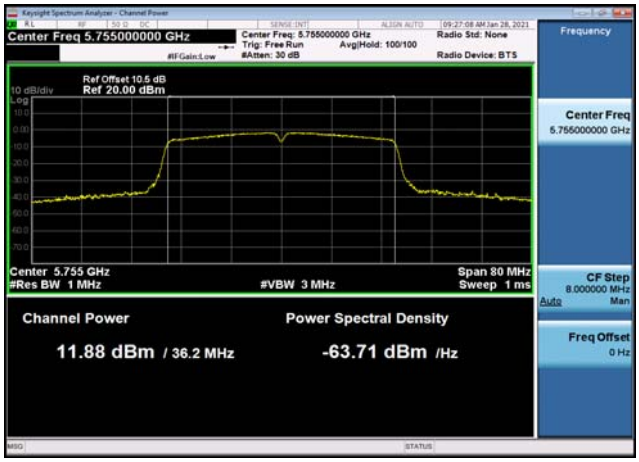

U-NII-3 Output Power-802.11ac(20MHz) ,5825MHz,Ant1



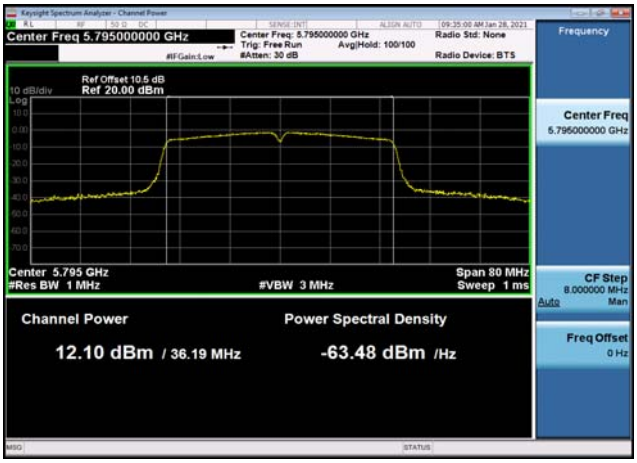

U-NII-3 Output Power-802.11ac(40MHz) ,5755MHz,Ant1

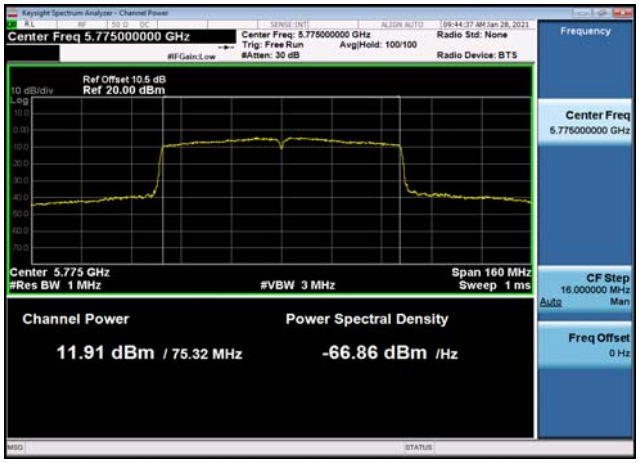



U-NII-3 Output Power-802.11ac(40MHz) ,5795MHz,Ant1




U-NII-3 Output Power-802.11ac(80MHz) ,5775MHz,Ant1



# AVGSA Power Spectral Density

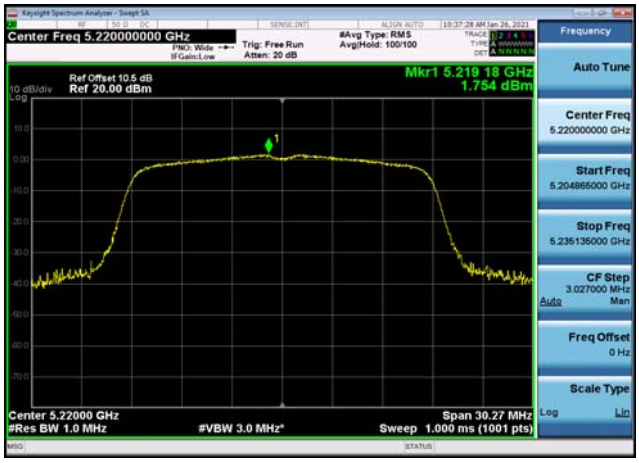
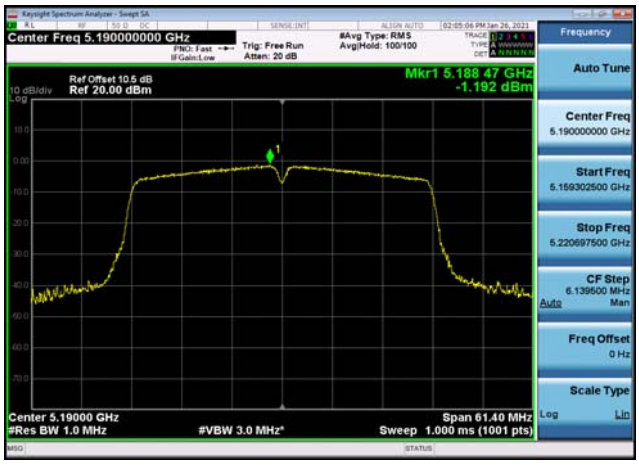
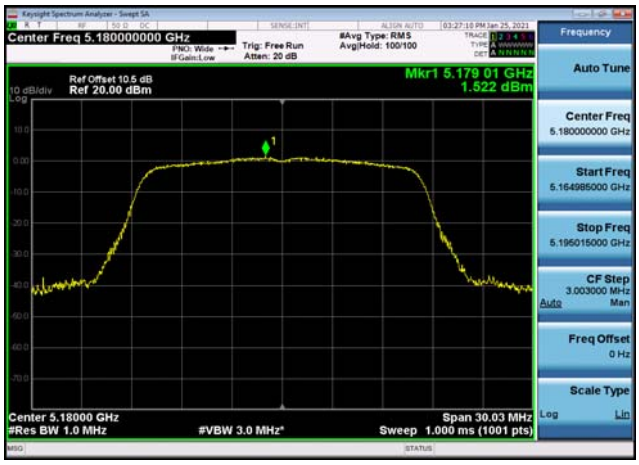
## Test Result and Data

| U-NII-1 AVGSA Power Spectral Density | | | | |
|---|---|---|---|---|
| Mode | Test Frequency (MHz) | PSD (dBm/1MHz) | Limit (dBm/1MHz) | Result |
| 802.11n (20MHz) | 5180 | 1.793 | 11 | Pass |
| 802.11n (20MHz) | 5220 | 1.754 | 11 | Pass |
| 802.11n (20MHz) | 5240 | 2.488 | 11 | Pass |
| 802.11n (40MHz) | 5190 | -1.192 | 11 | Pass |
| 802.11n (40MHz) | 5230 | -0.311 | 11 | Pass |
| 802.11ac (20MHz) | 5180 | 1.597 | 11 | Pass |
| 802.11ac (20MHz) | 5220 | 1.692 | 11 | Pass |
| 802.11ac (20MHz) | 5240 | 0.768 | 11 | Pass |
| 802.11ac (40MHz) | 5190 | -0.923 | 11 | Pass |
| 802.11ac (40MHz) | 5230 | -0.686 | 11 | Pass |
| 802.11ac (80MHz) | 5210 | -4.176 | 11 | Pass |
| 802.11a (20MHz) | 5180 | 1.522 | 11 | Pass |
| 802.11a (20MHz) | 5220 | 2.832 | 11 | Pass |
| 802.11a (20MHz) | 5240 | 1.357 | 11 | Pass |

| U-NII-2a AVGSA Power Spectral Density | | | | |
|---|---|---|---|---|
| Mode | Test Frequency (MHz) | PSD (dBm/1MHz) | Limit (dBm/1MHz) | Result |
| 802.11n (20MHz) | 5260 | 1.072 | 11 | Pass |
| 802.11n (20MHz) | 5300 | 0.786 | 11 | Pass |
| 802.11n (20MHz) | 5320 | 0.728 | 11 | Pass |
| 802.11n (40MHz) | 5270 | -2.335 | 11 | Pass |
| 802.11n (40MHz) | 5310 | -2.991 | 11 | Pass |
| 802.11ac (20MHz) | 5260 | 0.821 | 11 | Pass |
| 802.11ac (20MHz) | 5300 | 0.575 | 11 | Pass |
| 802.11ac (20MHz) | 5320 | 0.459 | 11 | Pass |
| 802.11ac (40MHz) | 5270 | -3.003 | 11 | Pass |
| 802.11ac (40MHz) | 5310 | -3.158 | 11 | Pass |
| 802.11ac (80MHz) | 5290 | -6.014 | 11 | Pass |
| 802.11a (20MHz) | 5260 | 0.652 | 11 | Pass |
| 802.11a (20MHz) | 5300 | 0.444 | 11 | Pass |
| 802.11a (20MHz) | 5320 | 0.537 | 11 | Pass |

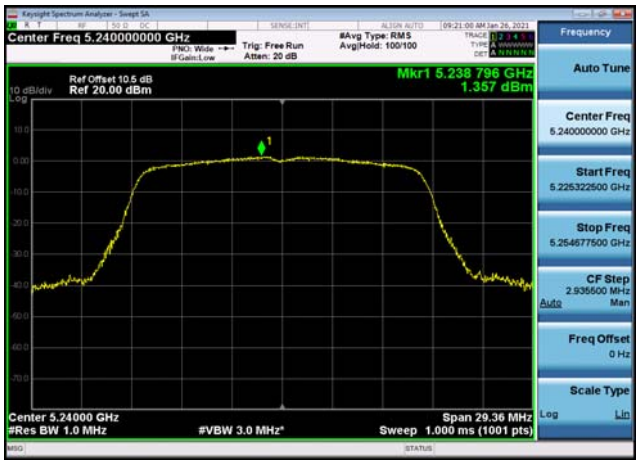
| U-NII-3 AVGSA Power Spectral Density | | | | |
|---|---|---|---|---|
| Mode | Test Frequency (MHz) | PSD (dBm/510KHz) | Limit (dBm/500KHz) | Result |
| 802.11n (20MHz) | 5745 | -1.403 | 30 | Pass |
| 802.11n (20MHz) | 5785 | -1.193 | 30 | Pass |
| 802.11n (20MHz) | 5825 | -0.730 | 30 | Pass |
| 802.11n (40MHz) | 5755 | -4.322 | 30 | Pass |
| 802.11n (40MHz) | 5795 | -3.912 | 30 | Pass |
| 802.11ac (20MHz) | 5745 | -2.036 | 30 | Pass |
| 802.11ac (20MHz) | 5785 | -1.238 | 30 | Pass |
| 802.11ac (20MHz) | 5825 | -0.511 | 30 | Pass |
| 802.11ac (40MHz) | 5755 | -3.940 | 30 | Pass |
| 802.11ac (40MHz) | 5795 | -3.503 | 30 | Pass |
| 802.11ac (80MHz) | 5775 | -6.862 | 30 | Pass |
| 802.11a (20MHz) | 5745 | -1.440 | 30 | Pass |
| 802.11a (20MHz) | 5785 | -1.709 | 30 | Pass |
| 802.11a (20MHz) | 5825 | -0.573 | 30 | Pass |

# Test Plots

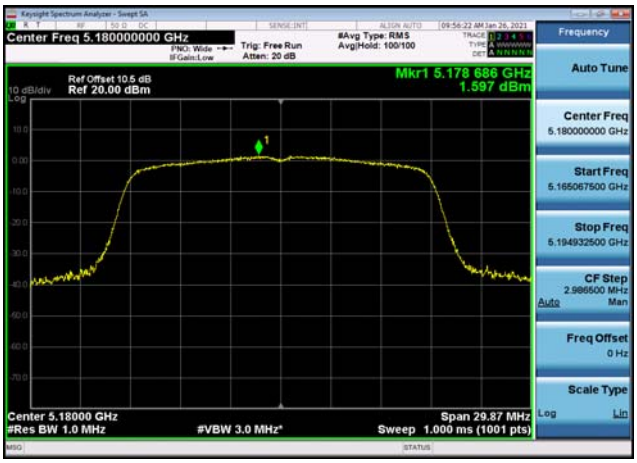
| U-NII-1 Power spectral density-802.11 n(20MHz),5180MHz,Ant1 | U-NII-1 Power spectral density-802.11 n(20MHz),5220MHz,Ant1 |
|---|---|
| |   |
| U-NII-1 Power spectral density-802.11 n(20MHz),5240MHz,Ant1 | U-NII-1 Power spectral density-802.11 n(40MHz),5190MHz,Ant1 |
| |   |
| U-NII-1 Power spectral density-802.11 n(40MHz),5230MHz,Ant1 | U-NII-1 Power spectral density-802.11 a(20MHz),5180MHz,Ant1 |
| |   |

U-NII-1 Power spectral density-802.11 a(20MHz),5220MHz,Ant1

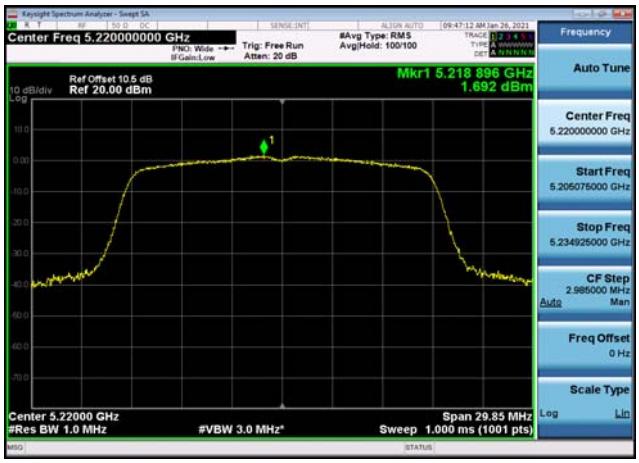
U-NII-1 Power spectral density-802.11 a(20MHz),5240MHz,Ant1



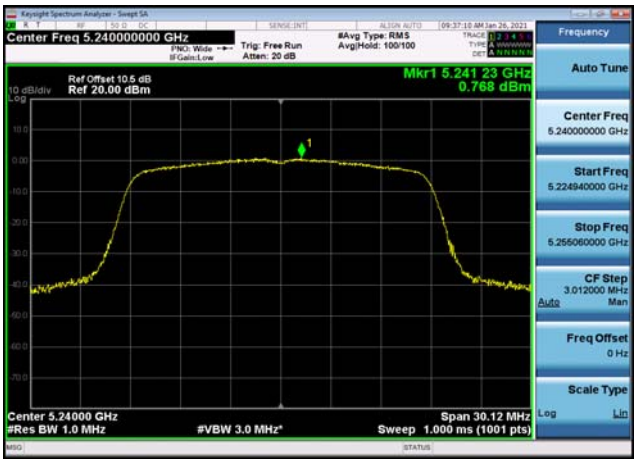

U-NII-1 Power spectral density-802.11 ac(20MHz),5180MHz,Ant1



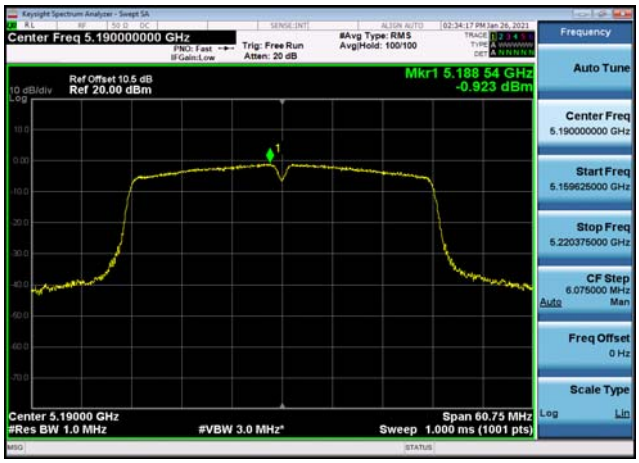

U-NII-1 Power spectral density-802.11 ac(20MHz),5220MHz,Ant1



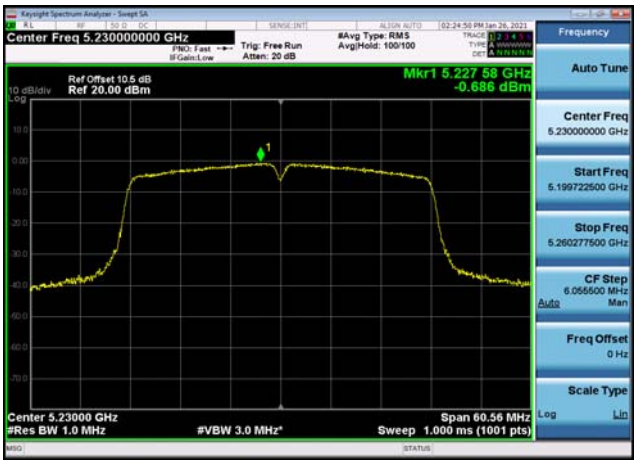

U-NII-1 Power spectral density-802.11 ac(20MHz),5240MHz,Ant1




U-NII-1 Power spectral density-802.11 ac(40MHz),5190MHz,Ant1

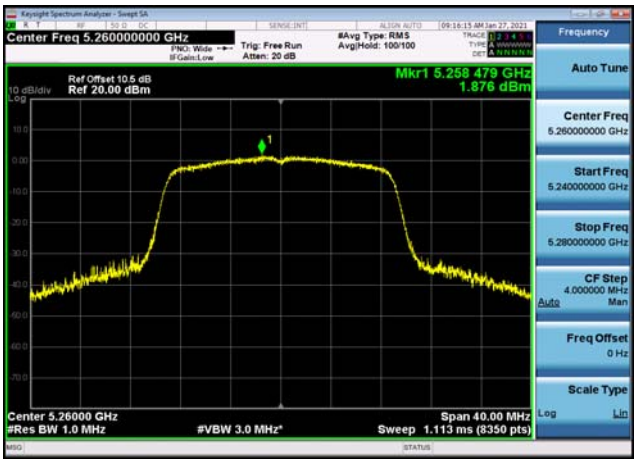


U-NII-1 Power spectral density-802.11 ac(40MHz),5230MHz,Ant1

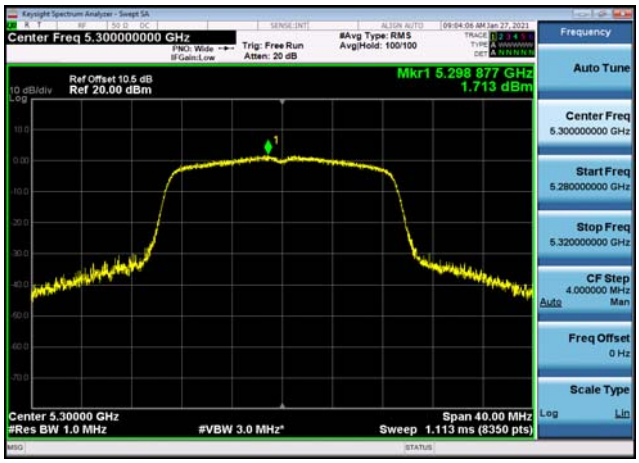



U-NII-1 Power spectral density-802.11 ac(80MHz),5210MHz,Ant1

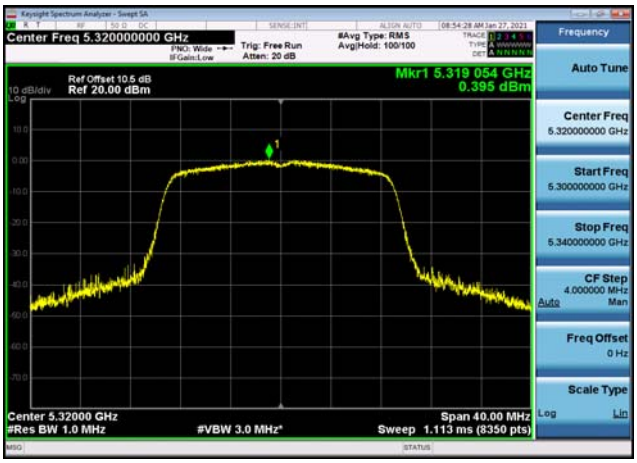
U-NII-2a Power spectral density-802.11n(20MHz),5260MHz,Ant1



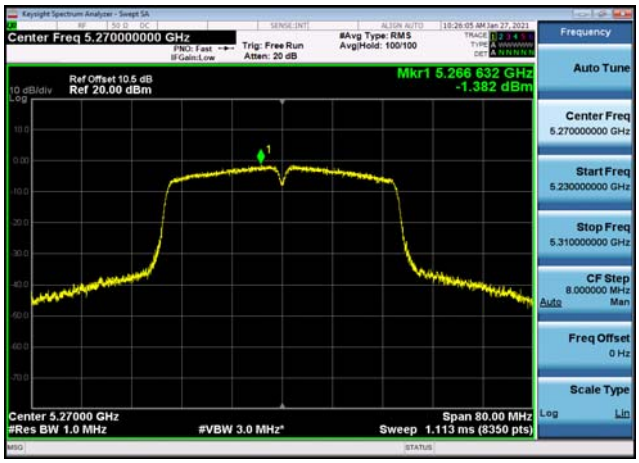

U-NII-2a Power spectral density-802.11n(20MHz),5300MHz,Ant1



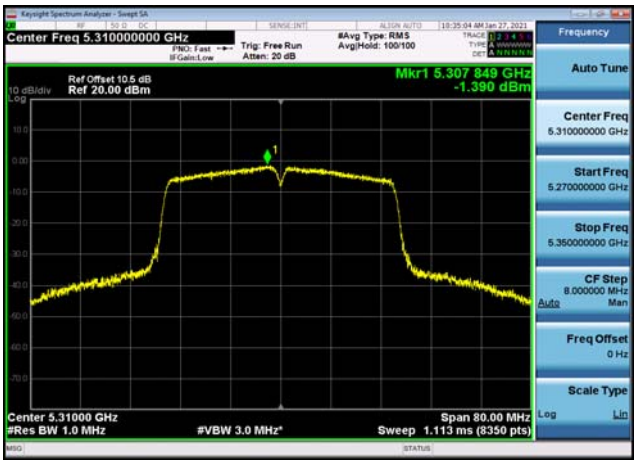

U-NII-2a Power spectral density-802.11n(20MHz),5320MHz,Ant1



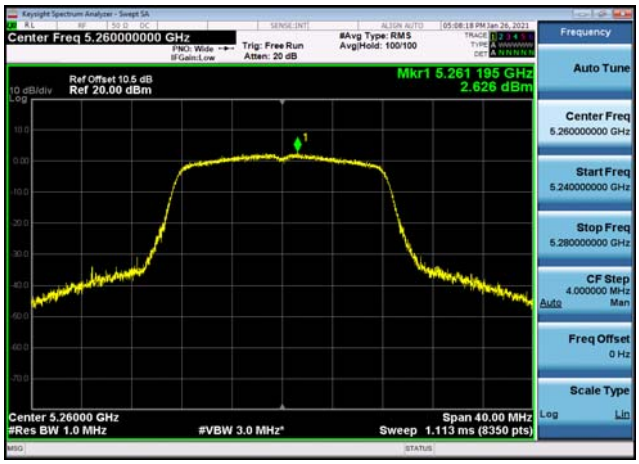

U-NII-2a Power spectral density-802.11n(40MHz),5270MHz,Ant1



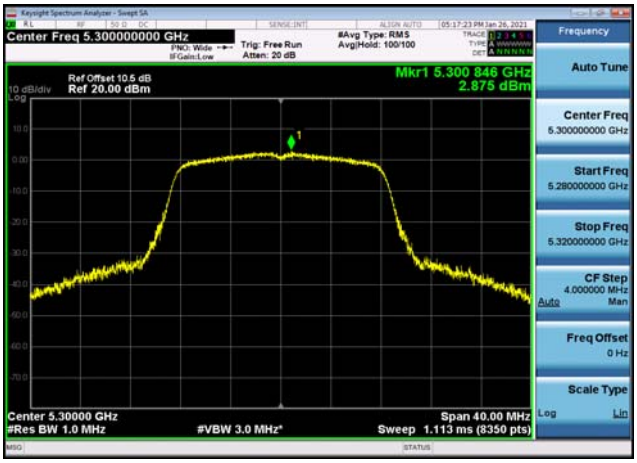
U-NII-2a Power spectral density-802.1 1n(40MHz),5310MHz,Ant1



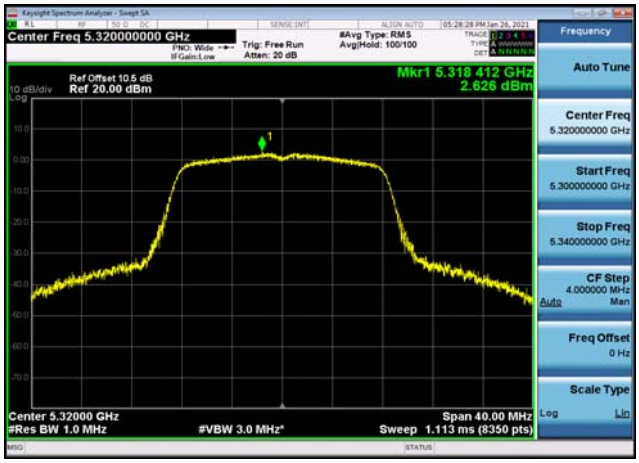

U-NII-2a Power spectral density-802.1 1a(20MHz),5260MHz,Ant1



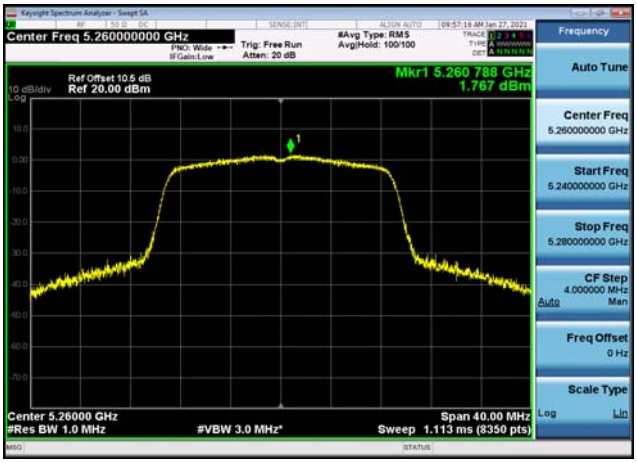

U-NII-2a Power spectral density-802.1 1a(20MHz),5300MHz,Ant1



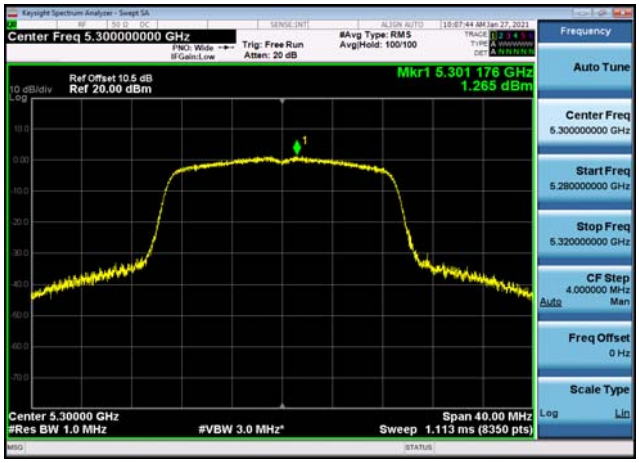

U-NII-2a Power spectral density-802.1 1a(20MHz),5320MHz,Ant1



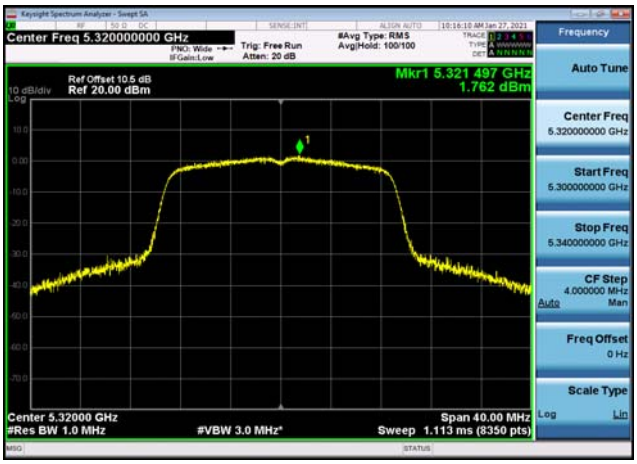

U-NII-2a Power spectral density-802.1 1ac(20MHz),5260MHz,Ant1



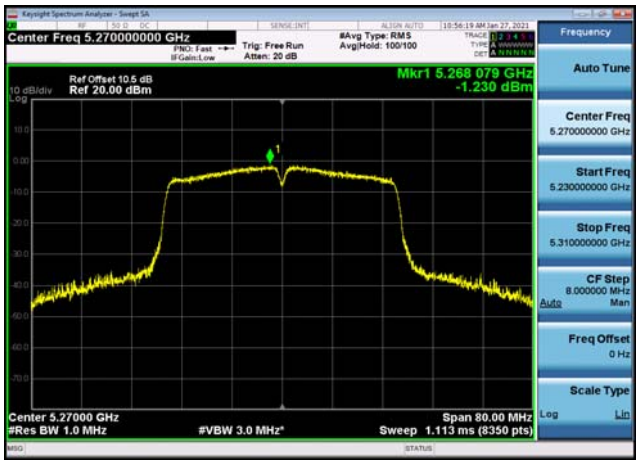

U-NII-2a Power spectral density-802.1 1ac(20MHz),5300MHz,Ant1



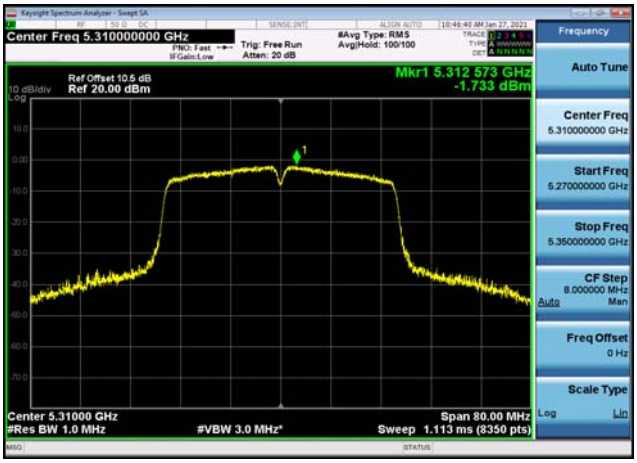
U-NII-2a Power spectral density-802.11ac(20MHz),5320MHz,Ant1



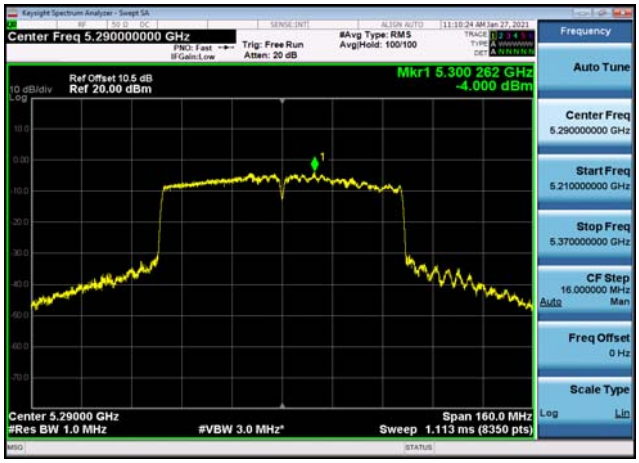

U-NII-2a Power spectral density-802.11ac(40MHz),5270MHz,Ant1



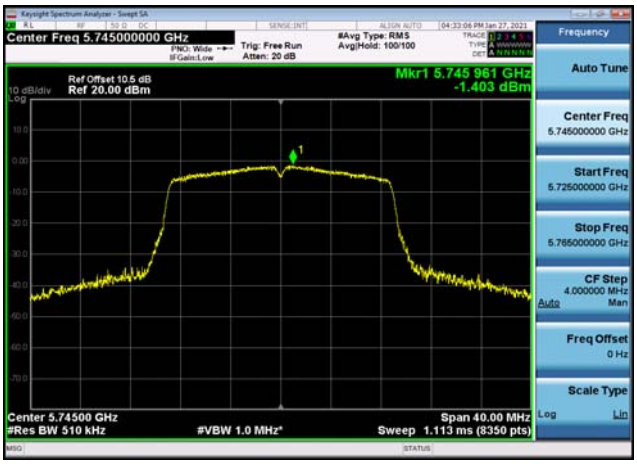

U-NII-2a Power spectral density-802.11ac(40MHz),5310MHz,Ant1



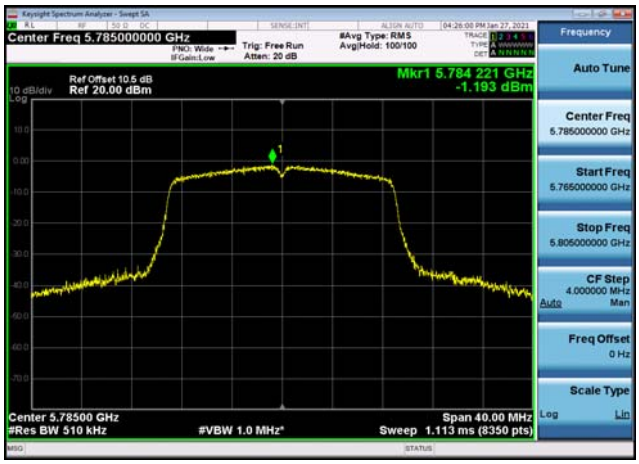

U-NII-2a Power spectral density-802.11ac(80MHz),5290MHz,Ant1



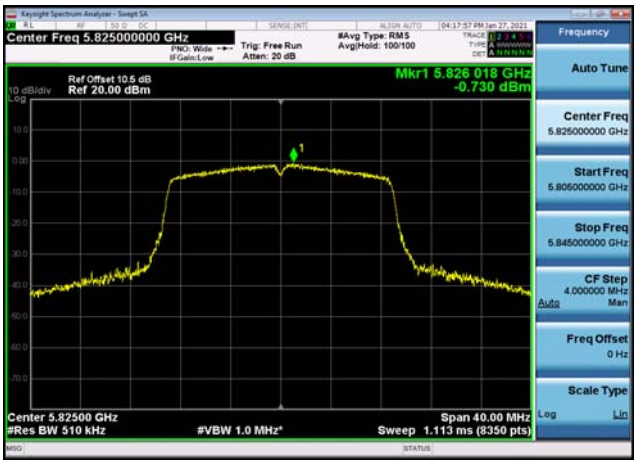

U-NII-3 Power spectral density-802.11n(20MHz),5745MHz,Ant1



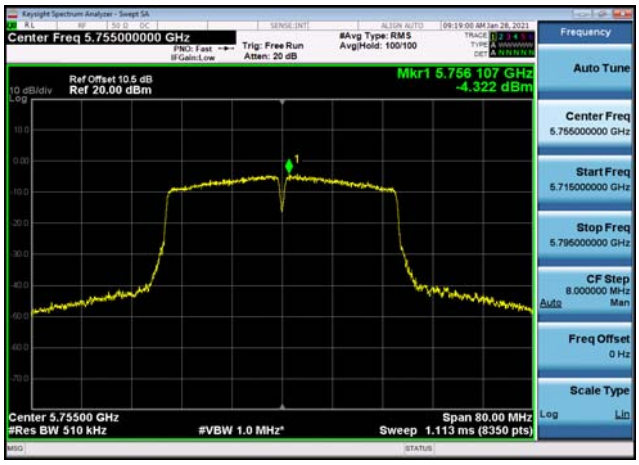

U-NII-3 Power spectral density-802.11n(20MHz),5785MHz,Ant1



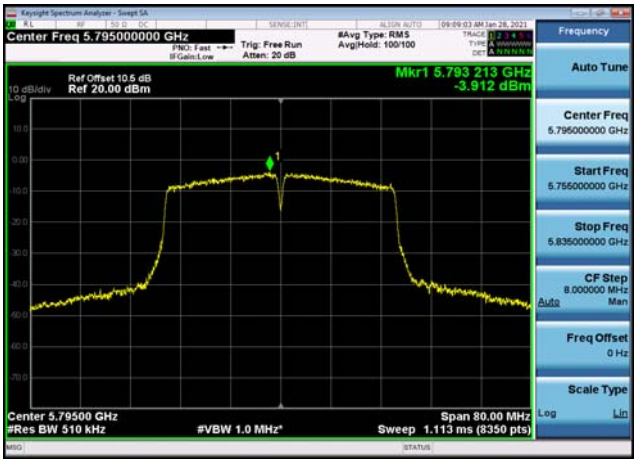
U-NII-3 Power spectral density-802.11 n(20MHz),5825MHz,Ant1



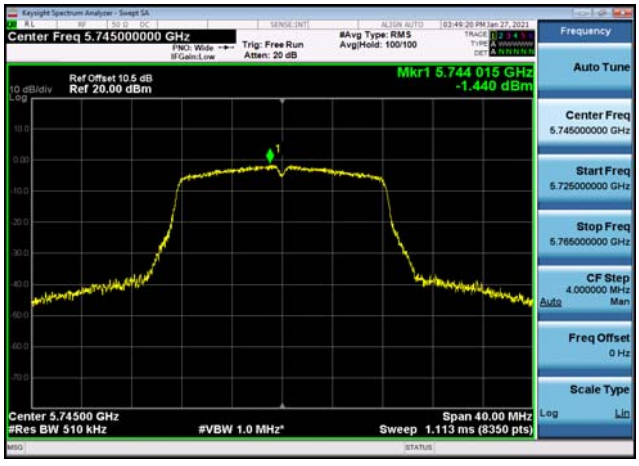

U-NII-3 Power spectral density-802.11 n(40MHz),5755MHz,Ant1



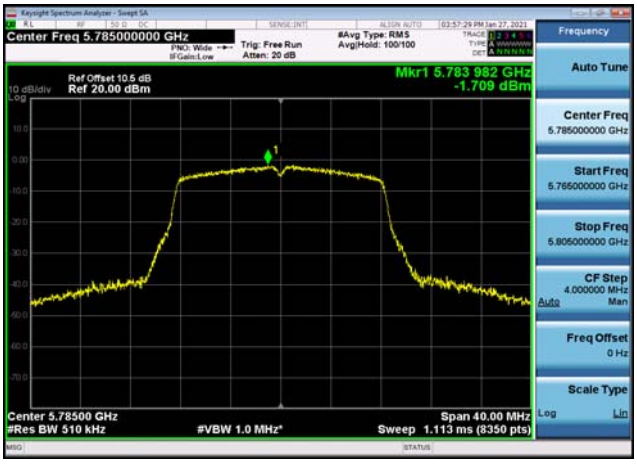

U-NII-3 Power spectral density-802.11 n(40MHz),5795MHz,Ant1



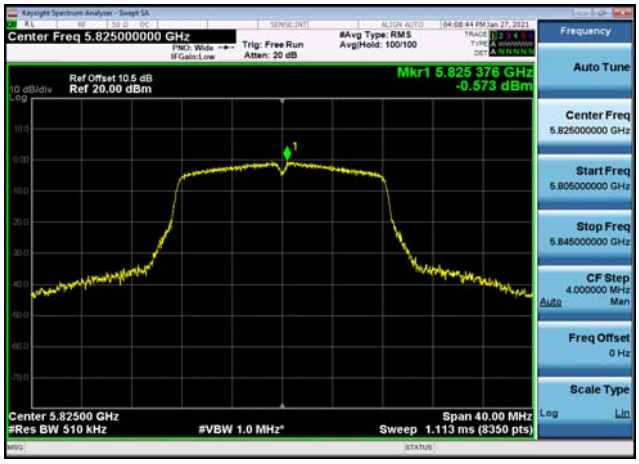

U-NII-3 Power spectral density-802.11 a(20MHz),5745MHz,Ant1



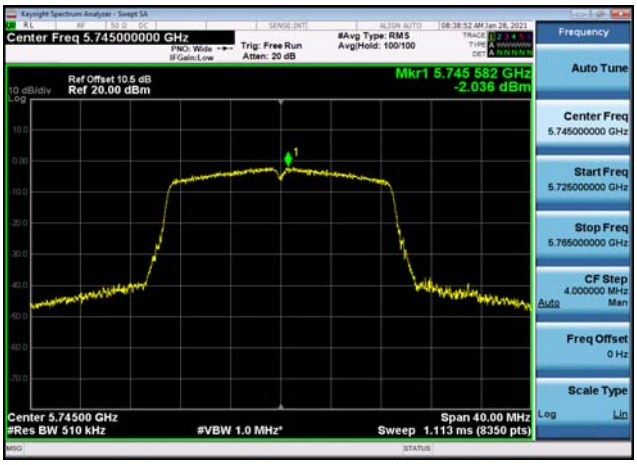

U-NII-3 Power spectral density-802.11 a(20MHz),5785MHz,Ant1



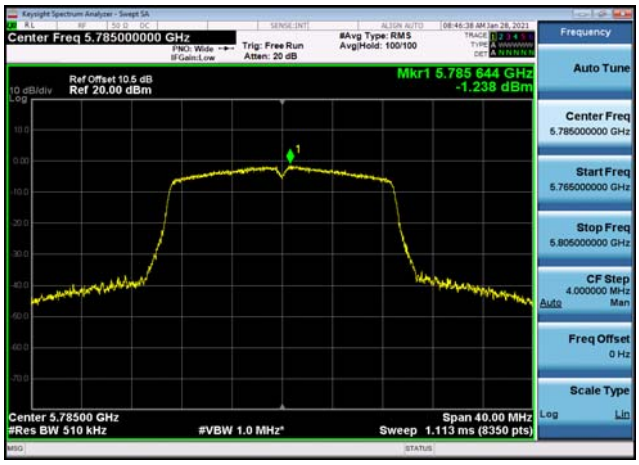

U-NII-3 Power spectral density-802.11 a(20MHz),5825MHz,Ant1



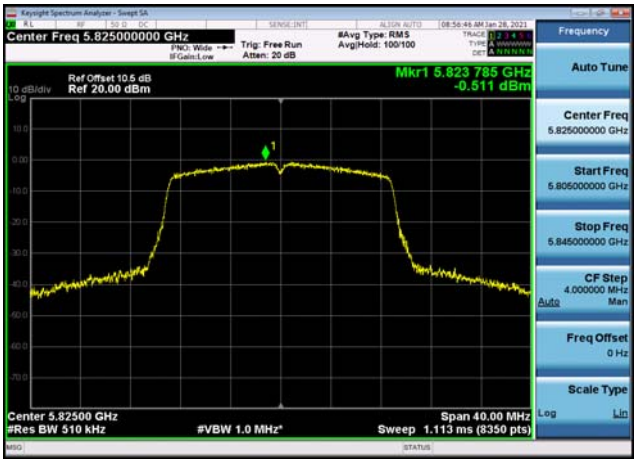
U-NII-3 Power spectral density-802.11 ac(20MHz),5745MHz,Ant1



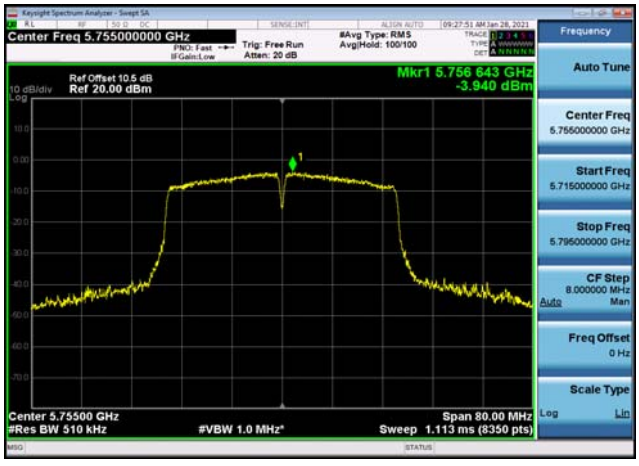

U-NII-3 Power spectral density-802.11 ac(20MHz),5785MHz,Ant1



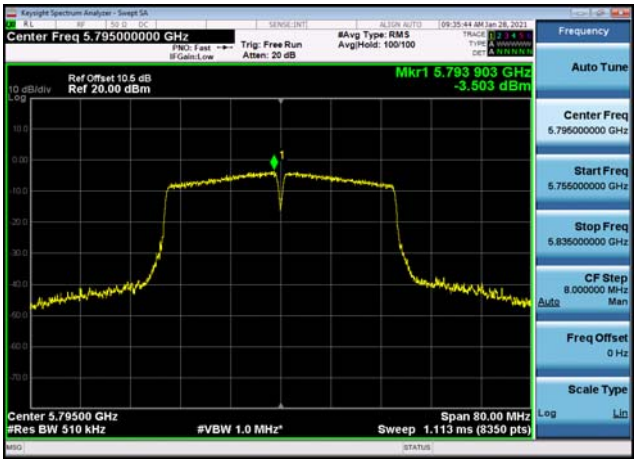

U-NII-3 Power spectral density-802.11 ac(20MHz),5825MHz,Ant1



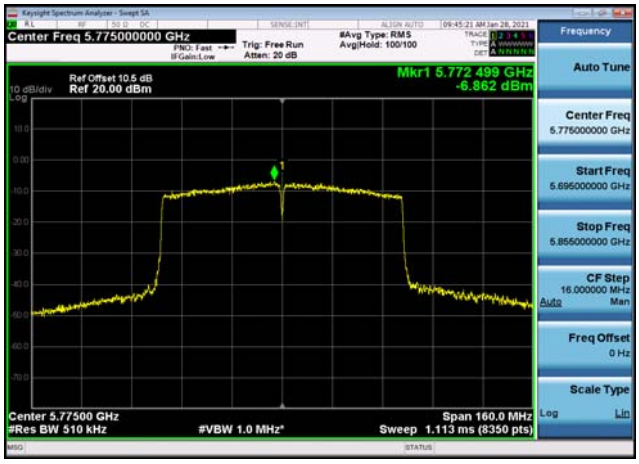

U-NII-3 Power spectral density-802.11 ac(40MHz),5755MHz,Ant1




U-NII-3 Power spectral density-802.11 ac(40MHz),5795MHz,Ant1




U-NII-3 Power spectral density-802.11 ac(80MHz),5775MHz,Ant1



# 26dB Down Bandwidth

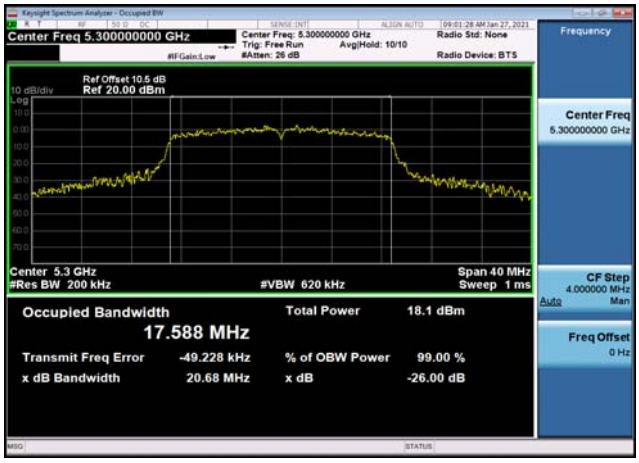
## Test Result and Data

| U-NII-2a Occupied 26dB Bandwidth | | | |
|---|---|---|---|
| Mode | Test Frequency (MHz) | Occupied Bandwidth (MHz) | Result |
| 802.11n (20MHz) | 5260 | 20.54 | Pass |
| 802.11n (20MHz) | 5300 | 20.68 | Pass |
| 802.11n (20MHz) | 5320 | 19.88 | Pass |
| 802.11n (40MHz) | 5270 | 39.80 | Pass |
| 802.11n (40MHz) | 5310 | 40.18 | Pass |
| 802.11ac (20MHz) | 5260 | 20.26 | Pass |
| 802.11ac (20MHz) | 5300 | 20.13 | Pass |
| 802.11ac (20MHz) | 5320 | 19.95 | Pass |
| 802.11ac (40MHz) | 5270 | 40.42 | Pass |
| 802.11ac (40MHz) | 5310 | 41.87 | Pass |
| 802.11ac (80MHz) | 5290 | 110.21 | Pass |
| 802.11a (20MHz) | 5260 | 19.60 | Pass |
| 802.11a (20MHz) | 5300 | 19.56 | Pass |
| 802.11a (20MHz) | 5320 | 19.82 | Pass |

# Test Plots

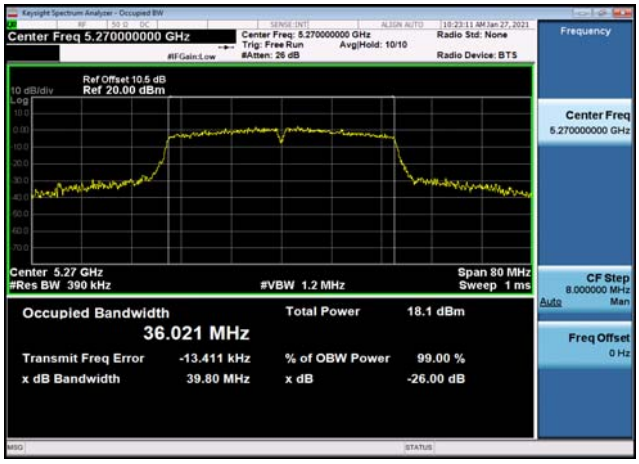
U-NII-2a 26dB Bandwidth-802.11n(20MHz ),5260MHz,Ant1

U-NII-2a 26dB Bandwidth-802.11n(20MHz ),5300MHz,Ant1



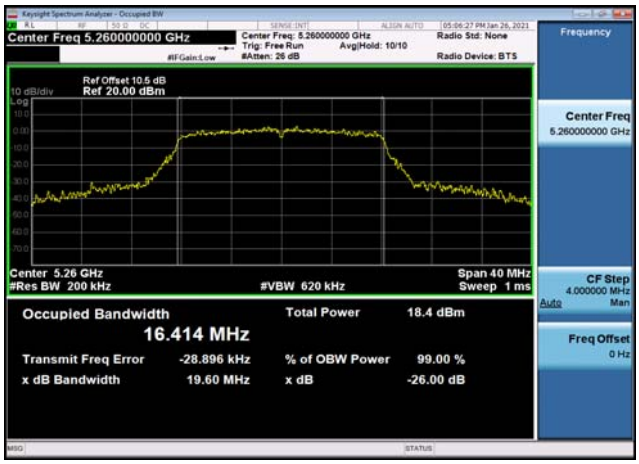

U-NII-2a 26dB Bandwidth-802.11n(20MHz ),5320MHz,Ant1

U-NII-2a 26dB Bandwidth-802.11n(40MHz ),5270MHz,Ant1

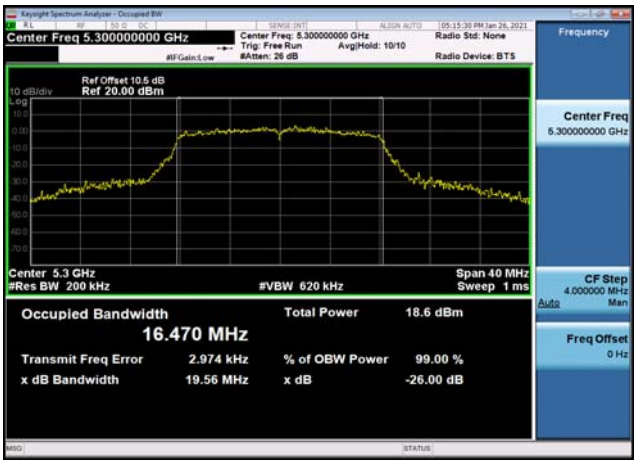



U-NII-2a 26dB Bandwidth-802.11n(40MHz ),5310MHz,Ant1

U-NII-2a 26dB Bandwidth-802.11a(20MHz ),5260MHz,Ant1

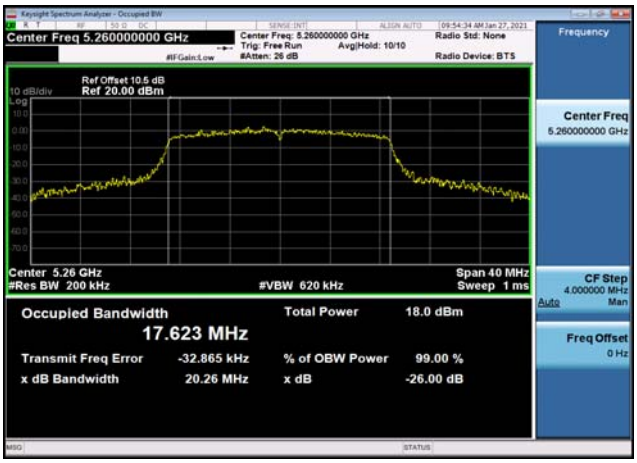


U-NII-2a 26dB Bandwidth-802.11a(20MHz ),5300MHz,Ant1



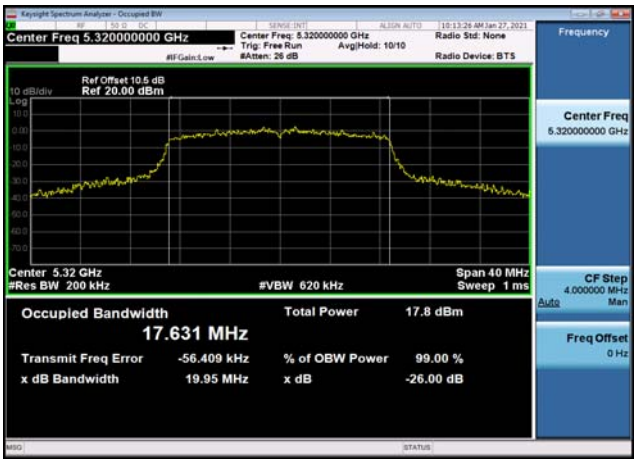

U-NII-2a 26dB Bandwidth-802.11a(20MHz ),5320MHz,Ant1

U-NII-2a 26dB Bandwidth-802.11ac(20MHz),5260MHz,Ant1

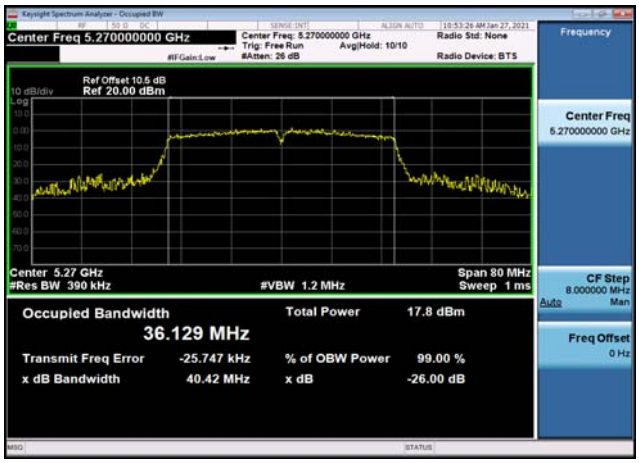



U-NII-2a 26dB Bandwidth-802.11ac(20MHz),5300MHz,Ant1

U-NII-2a 26dB Bandwidth-802.11ac(20MHz),5320MHz,Ant1




U-NII-2a 26dB Bandwidth-802.11ac(40MHz),5270MHz,Ant1



| U-NII-2a 26dB Bandwidth-802.11ac(40MHz),5310MHz,Ant1 | U-NII-2a 26dB Bandwidth-802.11ac(80MHz),5290MHz,Ant1 |
|---|---|
| | |

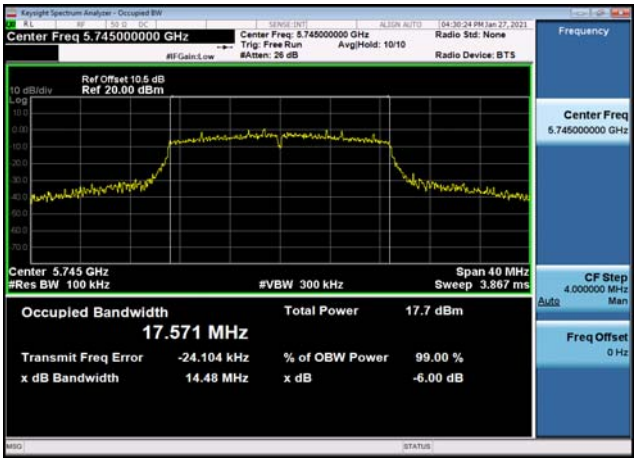
# 6dB Down Bandwidth

## Test Result and Data

| U-NII-3 Occupied 6dB Bandwidth | | | | |
|---|---|---|---|---|
| Mode | Test Frequency (MHz) | Occupied Bandwidth (MHz) | Min Limit (KHz) | Result |
| 802.11n (20MHz) | 5745 | 14.48 | 500 | Pass |
| 802.11n (20MHz) | 5785 | 14.75 | 500 | Pass |
| 802.11n (20MHz) | 5825 | 14.19 | 500 | Pass |
| 802.11n (40MHz) | 5755 | 35.18 | 500 | Pass |
| 802.11n (40MHz) | 5795 | 33.92 | 500 | Pass |
| 802.11ac (20MHz) | 5745 | 14.05 | 500 | Pass |
| 802.11ac (20MHz) | 5785 | 14.04 | 500 | Pass |
| 802.11ac (20MHz) | 5825 | 15.34 | 500 | Pass |
| 802.11ac (40MHz) | 5755 | 35.13 | 500 | Pass |
| 802.11ac (40MHz) | 5795 | 33.88 | 500 | Pass |
| 802.11ac (80MHz) | 5775 | 75.13 | 500 | Pass |
| 802.11a (20MHz) | 5745 | 15.70 | 500 | Pass |
| 802.11a (20MHz) | 5785 | 16.06 | 500 | Pass |
| 802.11a (20MHz) | 5825 | 14.77 | 500 | Pass |

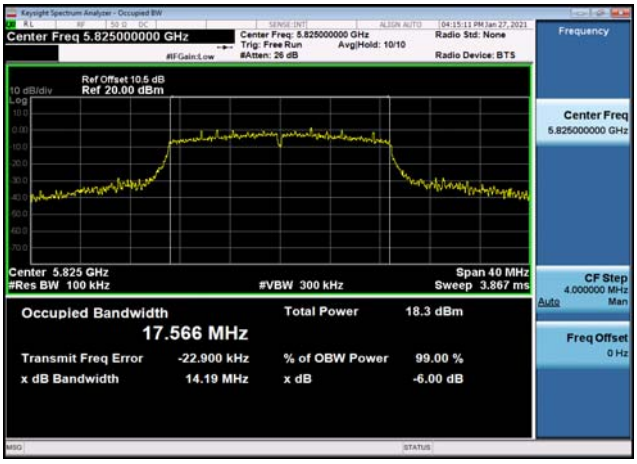
# Test Plots

U-NII-3 6dB Bandwidth-802.11n(20MHz) ,5745MHz,Ant1




U-NII-3 6dB Bandwidth-802.11n(20MHz) ,5785MHz,Ant1

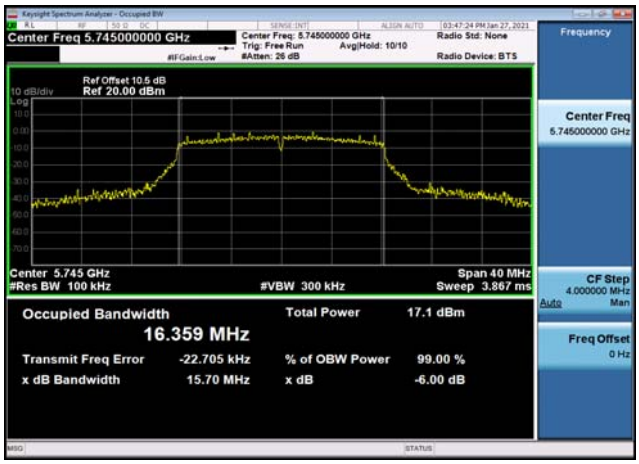
U-NII-3 6dB Bandwidth-802.11n(20MHz) ,5825MHz,Ant1



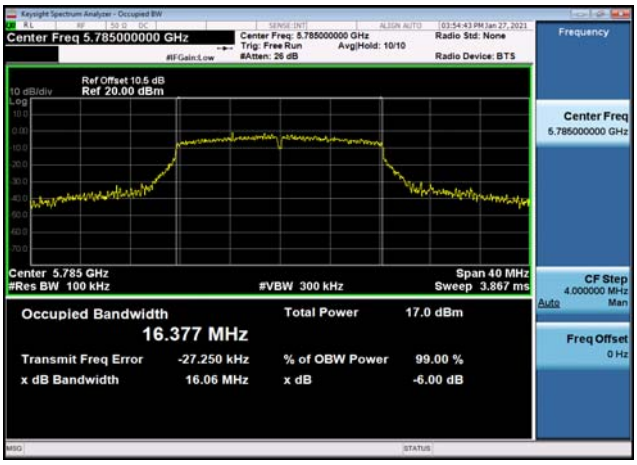

U-NII-3 6dB Bandwidth-802.11n(40MHz) ,5755MHz,Ant1

U-NII-3 6dB Bandwidth-802.11n(40MHz) ,5795MHz,Ant1

U-NII-3 6dB Bandwidth-802.11a(20MHz) ,5745MHz,Ant1



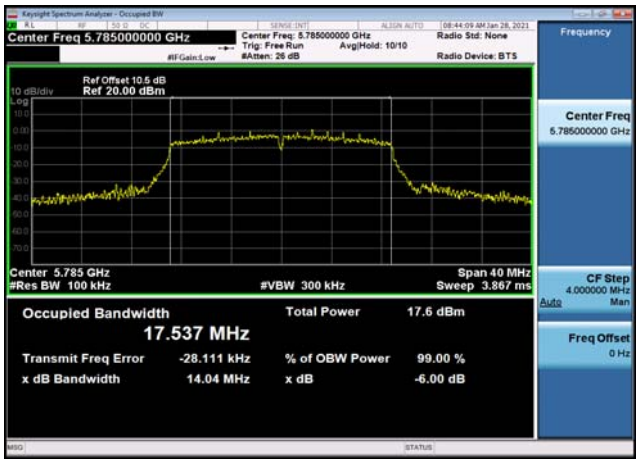
U-NII-3 6dB Bandwidth-802.11a(20MHz) ,5785MHz,Ant1



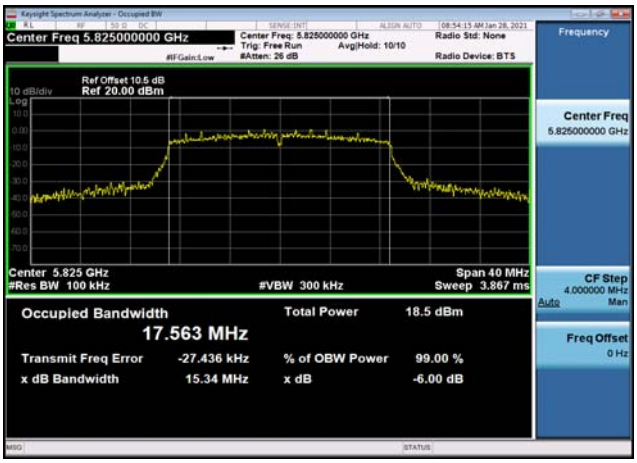

U-NII-3 6dB Bandwidth-802.11a(20MHz) ,5825MHz,Ant1

U-NII-3 6dB Bandwidth-802.11ac(20MHz) ,5745MHz,Ant1

U-NII-3 6dB Bandwidth-802.11ac(20MHz) ,5785MHz,Ant1




U-NII-3 6dB Bandwidth-802.11ac(20MHz) ,5825MHz,Ant1




U-NII-3 6dB Bandwidth-802.11ac(40MHz) ,5755MHz,Ant1

| U-NII-3 6dB Bandwidth-802.11ac(40MHz) ,5795MHz,Ant1 | U-NII-3 6dB Bandwidth-802.11ac(80MHz) ,5775MHz,Ant1 |
|---|---|
| | |

# 99% Occupied Bandwidth

## Test Result and Data

| U-NII-1 99% Occupied Bandwidth | | | |
|---|---|---|---|
| Mode | Test Frequency (MHz) | Occupied Bandwidth (MHz) | Result |
| 802.11n (20MHz) | 5180 | 17.656 | Pass |
| 802.11n (20MHz) | 5220 | 17.685 | Pass |
| 802.11n (20MHz) | 5240 | 17.675 | Pass |
| 802.11n (40MHz) | 5190 | 36.348 | Pass |
| 802.11n (40MHz) | 5230 | 36.391 | Pass |
| 802.11ac (20MHz) | 5180 | 17.709 | Pass |
| 802.11ac (20MHz) | 5220 | 17.643 | Pass |
| 802.11ac (20MHz) | 5240 | 17.664 | Pass |
| 802.11ac (40MHz) | 5190 | 36.273 | Pass |
| 802.11ac (40MHz) | 5230 | 36.288 | Pass |
| 802.11ac (80MHz) | 5210 | 75.237 | Pass |
| 802.11a (20MHz) | 5180 | 16.565 | Pass |
| 802.11a (20MHz) | 5220 | 16.662 | Pass |
| 802.11a (20MHz) | 5240 | 16.612 | Pass |

| U-NII-2a 99% Occupied Bandwidth | | | |
|---|---|---|---|
| Mode | Test Frequency (MHz) | Occupied Bandwidth (MHz) | Result |
| 802.11n (20MHz) | 5260 | 17.671 | Pass |
| 802.11n (20MHz) | 5300 | 17.707 | Pass |
| 802.11n (20MHz) | 5320 | 17.652 | Pass |
| 802.11n (40MHz) | 5270 | 36.370 | Pass |
| 802.11n (40MHz) | 5310 | 36.230 | Pass |
| 802.11ac (20MHz) | 5260 | 17.709 | Pass |
| 802.11ac (20MHz) | 5300 | 17.702 | Pass |
| 802.11ac (20MHz) | 5320 | 17.717 | Pass |
| 802.11ac (40MHz) | 5270 | 36.360 | Pass |
| 802.11ac (40MHz) | 5310 | 36.338 | Pass |
| 802.11ac (80MHz) | 5290 | 75.751 | Pass |
| 802.11a (20MHz) | 5260 | 16.634 | Pass |
| 802.11a (20MHz) | 5300 | 16.649 | Pass |
| 802.11a (20MHz) | 5320 | 16.637 | Pass |

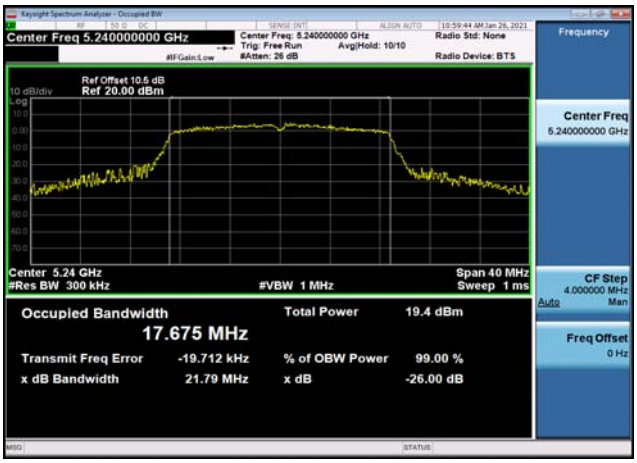
| U-NII-3 99% Occupied Bandwidth | | | | |
|---|---|---|---|---|
| Mode | Test Frequency (MHz) | Occupied Bandwidth (MHz) | Min Limit (KHz) | Result |
| 802.11n (20MHz) | 5745 | 17.694 | 500 | Pass |
| 802.11n (20MHz) | 5785 | 17.741 | 500 | Pass |
| 802.11n (20MHz) | 5825 | 17.692 | 500 | Pass |
| 802.11n (40MHz) | 5755 | 36.174 | 500 | Pass |
| 802.11n (40MHz) | 5795 | 36.172 | 500 | Pass |
| 802.11ac (20MHz) | 5745 | 17.634 | 500 | Pass |
| 802.11ac (20MHz) | 5785 | 17.691 | 500 | Pass |
| 802.11ac (20MHz) | 5825 | 17.682 | 500 | Pass |
| 802.11ac (40MHz) | 5755 | 36.204 | 500 | Pass |
| 802.11ac (40MHz) | 5795 | 36.186 | 500 | Pass |
| 802.11ac (80MHz) | 5775 | 75.319 | 500 | Pass |
| 802.11a (20MHz) | 5745 | 16.588 | 500 | Pass |
| 802.11a (20MHz) | 5785 | 16.611 | 500 | Pass |
| 802.11a (20MHz) | 5825 | 16.664 | 500 | Pass |

## Test Plots

U-NII-1 99% Bandwidth-802.11n(20MHz) ,5180MHz,Ant1

U-NII-1 99% Bandwidth-802.11n(20MHz) ,5220MHz,Ant1

U-NII-1 99% Bandwidth-802.11n(20MHz) ,5240MHz,Ant1




U-NII-1 99% Bandwidth-802.11n(40MHz) ,5190MHz,Ant1

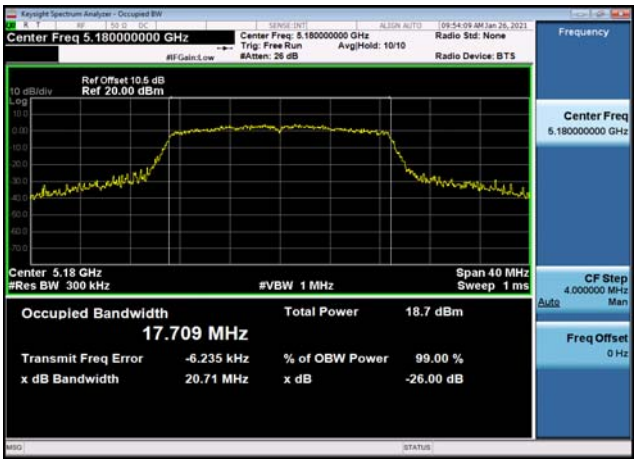
U-NII-1 99% Bandwidth-802.11n(40MHz) ,5230MHz,Ant1

U-NII-1 99% Bandwidth-802.11a(20MHz) ,5180MHz,Ant1

U-NII-1 99% Bandwidth-802.11a(20MHz) ,5220MHz,Ant1

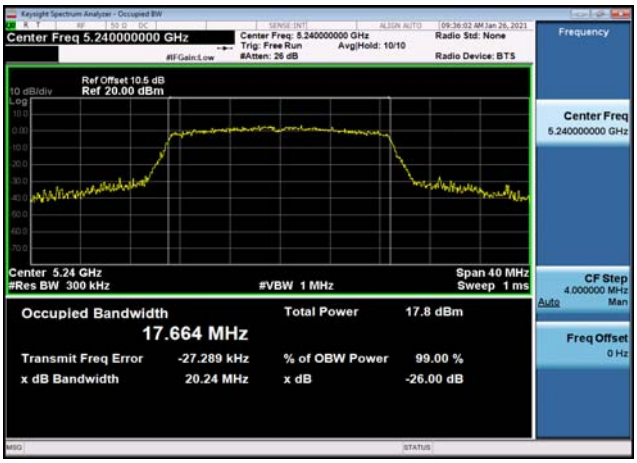
U-NII-1 99% Bandwidth-802.11a(20MHz) ,5240MHz,Ant1

U-NII-1 99% Bandwidth-802.11ac(20MHz) ,5180MHz,Ant1




U-NII-1 99% Bandwidth-802.11ac(20MHz) ,5220MHz,Ant1

U-NII-1 99% Bandwidth-802.11ac(20MHz) ,5240MHz,Ant1




U-NII-1 99% Bandwidth-802.11ac(40MHz) ,5190MHz,Ant1

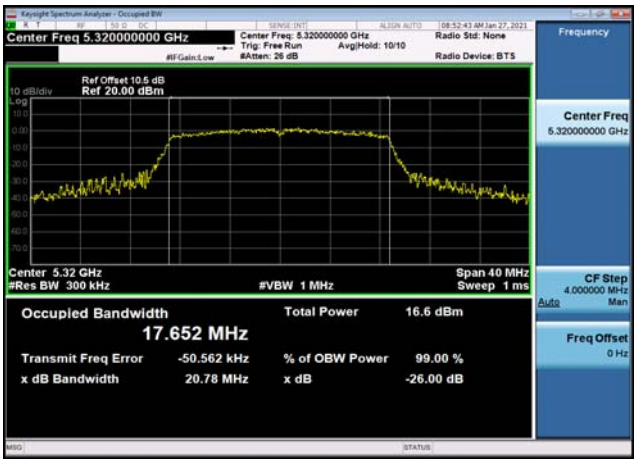
U-NII-1 99% Bandwidth-802.11ac(40MHz) ,5230MHz,Ant1

U-NII-1 99% Bandwidth-802.11ac(80MHz) ,5210MHz,Ant1

U-NII-2a 99% Bandwidth-802.11n(20MHz) ,5260MHz,Ant1

U-NII-2a 99% Bandwidth-802.11n(20MHz) ,5300MHz,Ant1

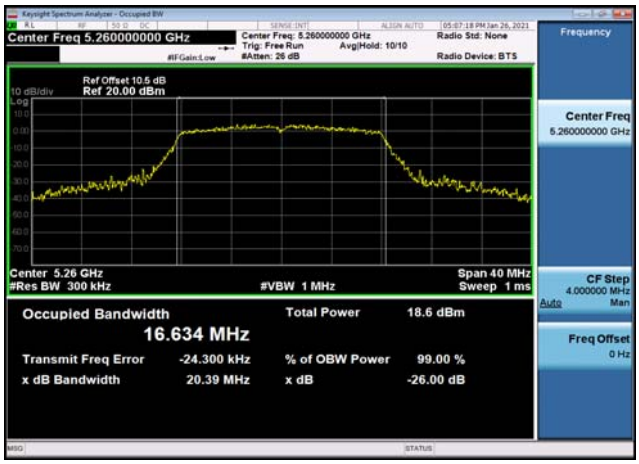
U-NII-2a 99% Bandwidth-802.11n(20MHz) ,5320MHz,Ant1




U-NII-2a 99% Bandwidth-802.11n(40MHz) ,5270MHz,Ant1

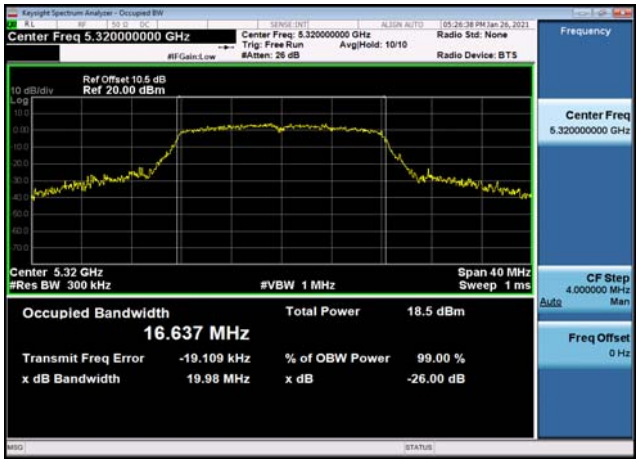
U-NII-2a 99% Bandwidth-802.11n(40MHz) ,5310MHz,Ant1

U-NII-2a 99% Bandwidth-802.11a(20MHz) ,5260MHz,Ant1

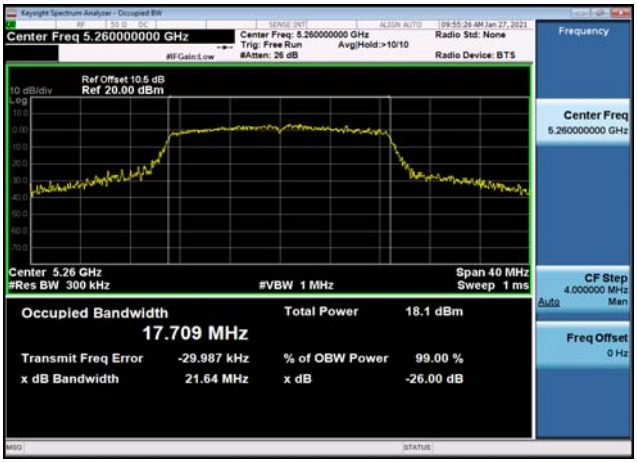



U-NII-2a 99% Bandwidth-802.11a(20MHz) ,5300MHz,Ant1

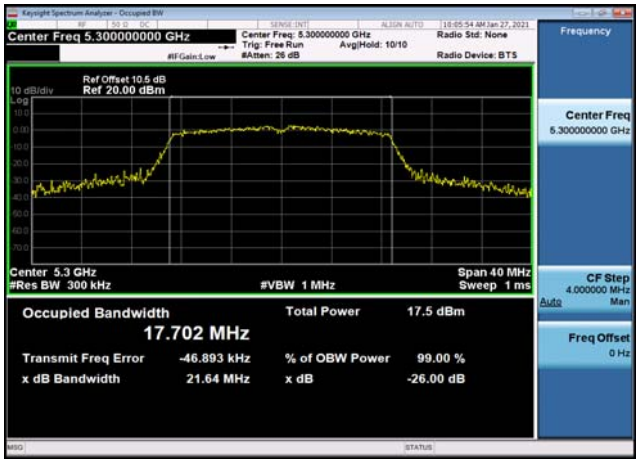
U-NII-2a 99% Bandwidth-802.11a(20MHz) ,5320MHz,Ant1




U-NII-2a 99% Bandwidth-802.11ac(20MHz ),5260MHz,Ant1




U-NII-2a 99% Bandwidth-802.11ac(20MHz ),5300MHz,Ant1

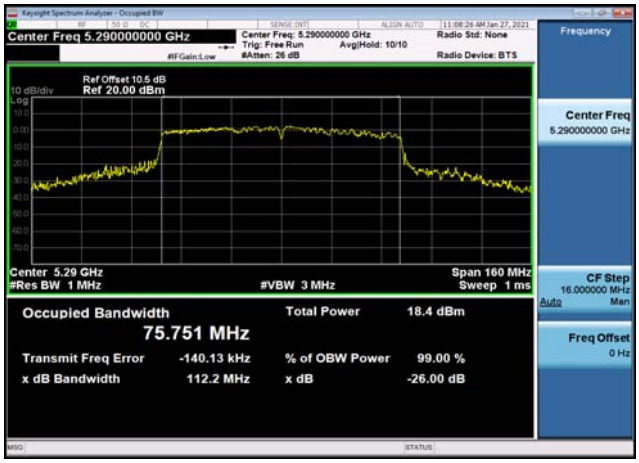


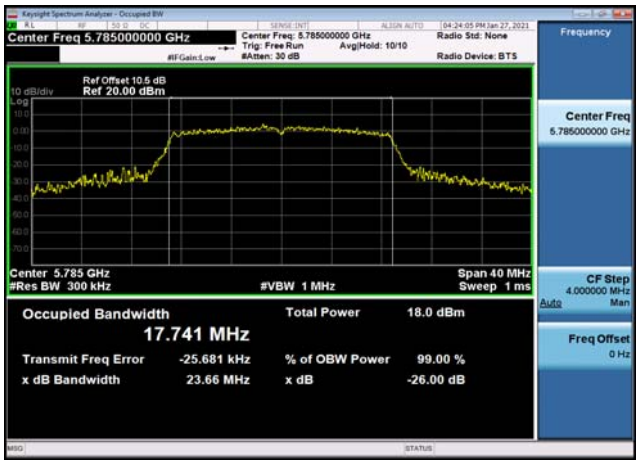
U-NII-2a 99% Bandwidth-802.11ac(20MHz ),5320MHz,Ant1

U-NII-2a 99% Bandwidth-802.11ac(40MHz ),5270MHz,Ant1

U-NII-2a 99% Bandwidth-802.11ac(40MHz ),5310MHz,Ant1

U-NII-2a 99% Bandwidth-802.11ac(80MHz ),5290MHz,Ant1




U-NII-3 99% Bandwidth-802.11n(20MHz) ,5745MHz,Ant1

U-NII-3 99% Bandwidth-802.11n(20MHz) ,5785MHz,Ant1