



## FCC TEST REPORT

**FCC ID: 2BGPD-ZMLH-T5**

On Behalf of

Shenzhen Zhimei Lihe Industrial Development Co., Ltd.

AI Intelligent scalp analyzer (T5)

Model No.: ZMLH-T5

Prepared for : Shenzhen Zhimei Lihe Industrial Development Co., Ltd.  
Floor 5,Building C, Hengshunyuan Industrial Park, 6th  
Address : Road,Building1,Loucun Community,Xinhu Street, Guangming  
District, Shenzhen

Prepared By : Shenzhen PSI Testing Co., Ltd.  
1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West  
Address : Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong,  
China

Report Number : psi2506161-C01-R02  
Date of Receipt : June 18, 2025  
Date of Test : June 18, 2025- June 29, 2025  
Date of Report : June 30, 2025  
Version Number : V0

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## TEST REPORT DECLARATION

Applicant : Shenzhen Zhimei Lihe Industrial Development Co., Ltd.  
Address : Floor 5,Building C, Hengshunyuan Industrial Park, 6th Road,Building1,Loucun  
Community,Xinhu Street, Guangming District, Shenzhen  
Manufacturer : Shenzhen Zhimei Lihe Industrial Development Co., Ltd.  
Address : Floor 5,Building C, Hengshunyuan Industrial Park, 6th Road,Building1,Loucun  
Community,Xinhu Street, Guangming District, Shenzhen  
EUT Description : AI Intelligent scalp analyzer (T5)  
(A) Model No. : ZMLH-T5  
(B) Trademark : N/A

Measurement Standard Used:

**FCC Rules and Regulations Part 15 Subpart E**

**ANSI C63.4:2014, ANSI C63.10:2013**

**Test Result: PASS**

The device described above is tested by Shenzhen PSI Testing Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart E limits both conducted and radiated emissions. The test results are contained in this test report and Shenzhen PSI Testing Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen PSI Testing Co., Ltd.

Tested by (name + signature).....:

Jensen Wang

Test Engineer

*Jensen Wang*

Approved by (name + signature).....:

Simple Guan

Project Manager

*Simple Guan*

Date of issue.....:

June 30, 2025

**Revision History**

| Revision | Issue Date    | Revisions              | Revised By  |
|----------|---------------|------------------------|-------------|
| V0       | June 30, 2025 | Initial released Issue | Jensen Wang |



## 1 Test Summary

| Test Item                        | Section in CFR 47                                                               | Result |
|----------------------------------|---------------------------------------------------------------------------------|--------|
| Antenna requirement              | Section 15.203 Section 7.1.4<br>RSS-Gen Issue 5                                 | PASS   |
| AC Power Line Conducted Emission | Section 15.207 Section 7.2.4<br>RSS-GEN(8.8), ANSI C63.10                       | PASS   |
| Occupied bandwidth               | Section 15.407 (e)                                                              | PASS   |
| Maximum Conducted Output Power   | Section 15.407(a), RSS-247 5.4(2)                                               | PASS   |
| Power Spectral Density           | Section 15.407(a), RSS-247 5.2(2)                                               | PASS   |
| Undesirable Emission             | Section 15.407(b), RSS-247 5.5                                                  | PASS   |
| Radiated Emission                | Section 15.407(b)&15.209 Section 5.5<br>RSS-Gen(8.9), RSS-247(5.5), ANSI C63.10 | PASS   |
| Band Edge                        | 15.205, RSS-247 Issue 2, ANSI C63.10                                            | PASS   |
| Frequency Stability              | 15.407(f), RSS-GEN(6.11)                                                        | PASS   |

Remark:

1. Pass: The EUT complies with the essential requirements in the standard.
2. Frequency Stability: The manufacturer stated in the user's manual.
3. The conclusion of this test report is judged by actual test data without considering measurement uncertainty.
4. Measurement-method usage KDB 789033 D02 General UNII Test Procedures New Rules v02r01

### 1.1 Measurement Uncertainty

| Item                                                                      | Uncertainty         |
|---------------------------------------------------------------------------|---------------------|
| Uncertainty for Power Line Conducted Emissions Test                       | 2.17dB              |
| Uncertainty for Radiation Emission test in 3m chamber<br>(below 30MHz)    | 3.5dB               |
| Uncertainty for Radiation Emission test in 3m chamber<br>(30MHz to 1GHz)  | 2.74dB(Polarize: V) |
|                                                                           | 2.76dB(Polarize: H) |
| Uncertainty for Radiation Emission test in 3m chamber<br>(1GHz to 18GHz)  | 4.29dB(Polarize: V) |
|                                                                           | 4.82dB(Polarize: H) |
| Uncertainty for Radiation Emission test in 3m chamber<br>(18GHz to 40GHz) | 4.31dB(Polarize: V) |
|                                                                           | 4.30dB(Polarize: H) |
| Uncertainty for radio frequency                                           | 48.24KHz            |
| Uncertainty for conducted RF Power                                        | 0.41dB              |
| Uncertainty for Power Spectral Density                                    | 0.39 dB             |
| Occupied-Bandwidth                                                        | 968Hz               |
| Conducted-Spurious Emission                                               | 1.26dB              |

## 2 General Information

### 2.1 General Description of EUT

EUT Name : AI Intelligent scalp analyzer (T5)  
Model : ZMLH-T5  
Diff : N/A  
Test Voltage : AC 120V/60Hz

Radio Technology : 5G WIFI

Operation frequency : 802.11a/802.11ac20/802.11n(HT20): 5745-5825MHz  
802.11ac40/802.11n(HT40): 5755-5795MHz  
802.11ac80: 5775MHz  
Channel separation : 20MHz for 802.11a/802.11ac20/802.11n(HT20)  
40MHz for 802.11ac40/802.11n(HT40)  
80MHz for 802.11ac80  
Modulation technology: : IEEE 802.11n: OFDM (64QAM,16QAM,QPSK,BPSK)  
IEEE 802.11a: OFDM (64QAM,16QAM,QPSK,BPSK)  
IEEE 802.11ac: OFDM (64QAM,16QAM, 256QAM,QPSK,BPSK)  
Antenna Type : Internal antenna , Maximum Gain is 3.03dBi.

PMN : N/A  
HVIN : N/A

Software version : N/A  
Hardware version : N/A  
FVIN

Note : Antenna information is provided by applicant.  
Testing lab is not responsible for the accuracy of the information.

## 2.2 Test mode

Transmitting mode      Keep the EUT in transmitting with modulation.  
EUT was test with 99% duty cycle at its maximum power control level.

Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

## 2.3 Test Facility

Shenzhen PSI Testing Co., Ltd.

1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

September 13, 2023 File on Federal Communication Commission

Registration Number: 916281

September 21, 2023 Certificated by IC

Registration Number: 31123

CAB identifier: CN0158

## 2.4 Description of Support Units

Accessories 1 : N/A

Manufacturer : N/A

Model : N/A

Rating : N/A

## 2.5 Deviation from Standards

None.

## 2.6 Abnormalities from Standard Conditions

None.

## 2.7 Other Information Requested by the Customer

None.

## 2.8 Additional instructions

Software (Used for test) from client

| Channel | Power level |
|---------|-------------|
| Lowest  | Default     |
| Middle  | Default     |
| Highest | Default     |

## 2.9 Test Conditions

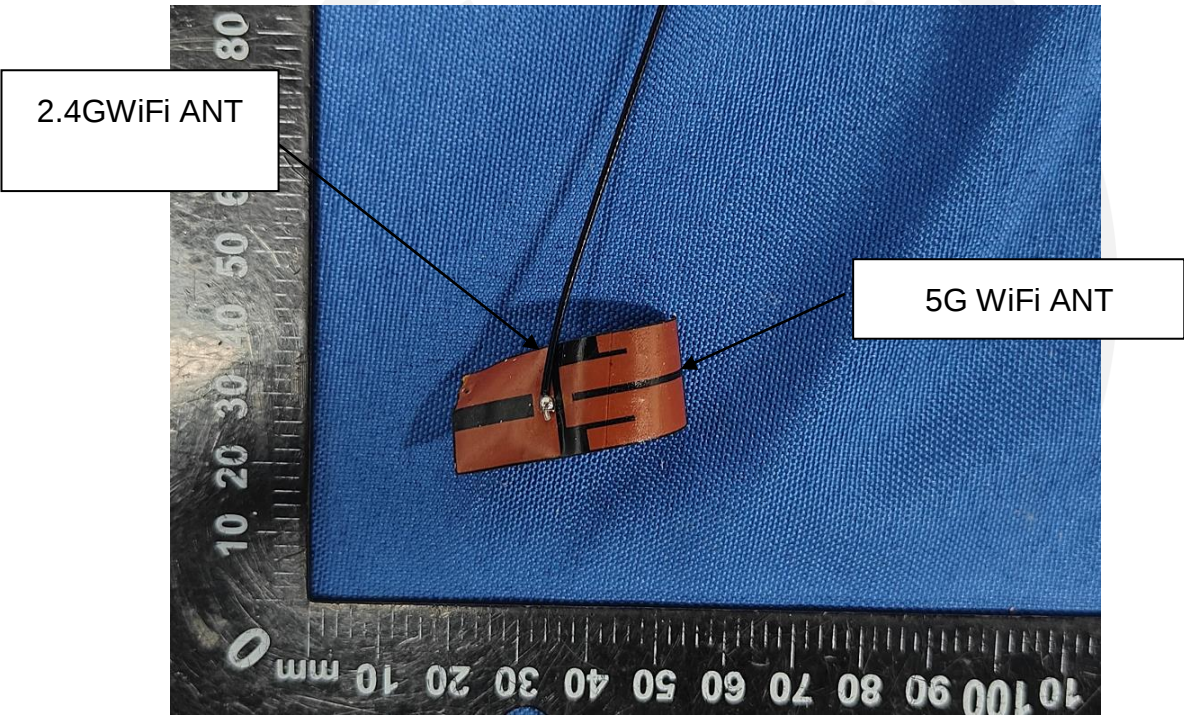
| Items              | Required  | Actual |
|--------------------|-----------|--------|
| Temperature range: | 15-35°C   | 26°C   |
| Humidity range:    | 25-75%    | 54%    |
| Pressure range:    | 86-106kPa | 101kPa |

### 3 Test Instruments list

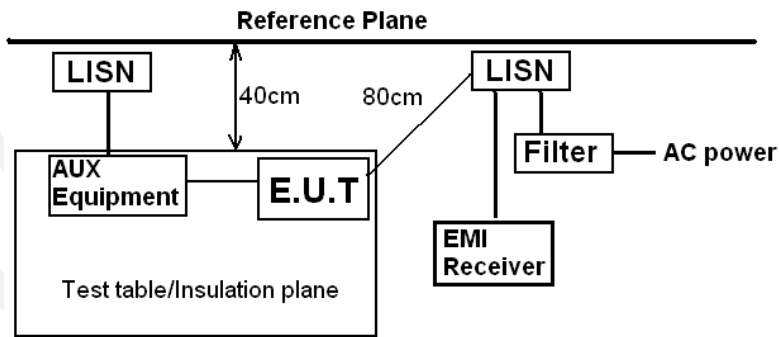
| Item                          | Equipment                 | Manufacturer  | Model No.         | Serial No.               | Firmware Version | Last Cal.  | Cal. Interval |
|-------------------------------|---------------------------|---------------|-------------------|--------------------------|------------------|------------|---------------|
| 1.                            | 9*6*6 anechoic chamber    | SKET          | 9*6*6             | N/A                      | /                | 2022.12.20 | 3 Year        |
| 2.                            | Test Receiver             | Rohde&Schwarz | ESCI 7            | 101032/003               | 4.42 SP3         | 2024.12.18 | 1 Year        |
| 3.                            | L.I.S.N.#1                | Rohde&Schwarz | ENV216            | 102282                   | /                | 2024.12.18 | 1 Year        |
| 4.                            | L.I.S.N.#2                | RFT           | NNB111            | 13835825                 | /                | 2024.12.18 | 1 Year        |
| 5.                            | Loop Antenna              | Schwarz beck  | FMZB 1519B        | 00128                    | /                | 2025.01.02 | 2 Year        |
| 6.                            | Bilog Antenna             | Schwarz beck  | VULB 9168         | 01448                    | /                | 2025.01.02 | 2 Year        |
| 7.                            | Spectrum Analyzer         | Rohde&Schwarz | FSV-40N           | 101648                   | 3.70             | 2024.12.18 | 1 Year        |
| 8.                            | Horn Antenna              | Schwarz beck  | BBHA 9120 D       | 02706                    | /                | 2025.01.02 | 2 Year        |
| 9.                            | Amplifier                 | SKET          | LAPA_01G1 8G-45dB | SK20220329 01            | /                | 2024.12.18 | 1 Year        |
| 10.                           | Horn Antenna              | Schwarz beck  | BBHA 9170         | 00946                    | /                | 2024.12.31 | 2 Year        |
| 11.                           | Amplifier                 | SKET          | LNPA_0118 G-45    | SK20200108 01            | /                | 2024.12.18 | 1 Year        |
| 12.                           | RF Power Probe            | Rohde&Schwarz | NRP-Z11           | 1138.3004.02 -1111533-Fz | /                | 2024.12.18 | 1 Year        |
| 13.                           | RF Sensor Unit            | Tachoy        | TR1029-2          | 20220428P0 08            | /                | 2024.12.18 | 1 Year        |
| 14.                           | Spectrum Analyzer         | Agilent       | N9020A            | MY51281067               | A.14.03          | 2024.12.18 | 1 Year        |
| 15.                           | Temp. & Humid Chamber     | Auchno        | 9606              | /                        | /                | 2024.12.18 | 1 Year        |
| 16.                           | Regulated DC Power Supply | Xinouhua      | ADC120V10 A       | 20221125163 8            | /                | 2024.12.18 | 1 Year        |
| For Test Software Information |                           |               |                   |                          |                  |            |               |
| Item                          | Software Name             | Manufacturer  |                   |                          | Version          |            |               |
| RE                            | EZ EMC                    | Farad         |                   |                          | PSI-3A1          |            |               |
| CE                            | EZ EMC                    | Farad         |                   |                          | PSI-3A1          |            |               |
| RF                            | RTS                       | TACHOY        |                   |                          | V1.0.0           |            |               |

## 4 Test results and Measurement Data

### 4.1 Antenna requirement:

| Standard requirement:                                                                                                                                                                                                                                                                                                                                                                                                                                                                | FCC Part15 C Section 15.203, RSS-GEN(6.8) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| <p>15.203 requirement:</p> <p>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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p> |                                           |
| E.U.T Antenna:                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                           |
| <p>Internal antenna, Maximum Gain is 3.03dBi, for 5745-5825MHz</p>                                                                                                                                                                                                                                                                                                                                |                                           |

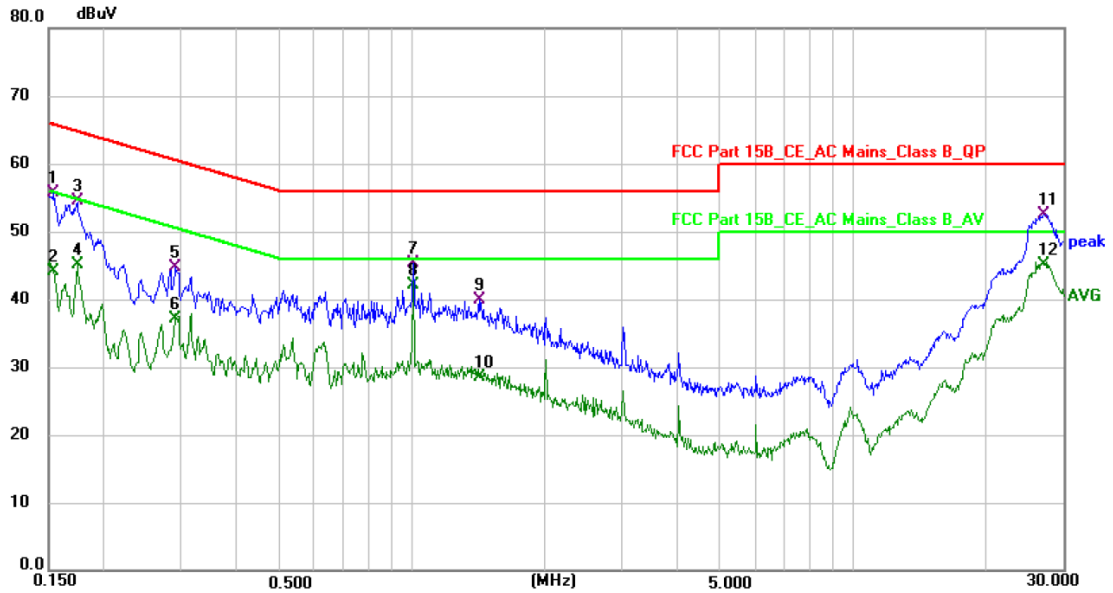
## 4.2 Conducted Emissions

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |           |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------|
| Test Requirement:                                | FCC Part15 C Section 15.207, RSS-Gen §8.8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |           |
| Test Method:                                     | ANSI C63.10:2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |           |
| Test Frequency Range:                            | 150KHz to 30MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |           |
| Class / Severity:                                | Class B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |           |
| Receiver setup:                                  | RBW=9KHz, VBW=30KHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |           |
| Limit:                                           | Frequency range (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Limit (dBuV) |           |
|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Quasi-peak   | Average   |
|                                                  | 0.15-0.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 66 to 56*    | 56 to 46* |
|                                                  | 0.5-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 56           | 46        |
|                                                  | 5-30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 60           | 50        |
| * Decreases with the logarithm of the frequency. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |           |
| Test procedure                                   | The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement. |              |           |
| Test setup:                                      |  <p>Remark:<br/>E.U.T: Equipment Under Test<br/>LISN: Line Impedance Stabilization Network<br/>Test table height=0.8m</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |           |
| Test Instruments:                                | Refer to section 3.0 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |           |
| Test mode:                                       | Refer to section 2.2 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |           |
| Test results:                                    | Pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |           |

### Measurement Data

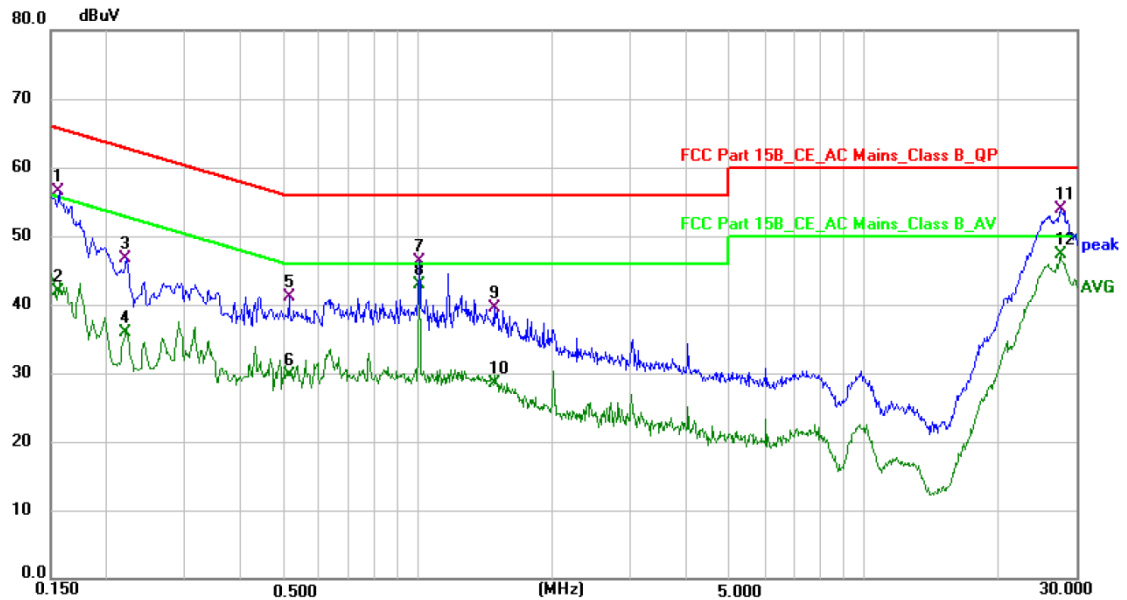
An initial pre-scan was performed on the line and neutral lines with peak detector. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

## Line:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector |
|-----|-----------------|----------------|-------------|--------------|--------------|-------------|----------|
| 1   | 0.1539          | 45.76          | 9.94        | 55.70        | 65.79        | -10.09      | QP       |
| 2   | 0.1539          | 34.12          | 9.94        | 44.06        | 55.79        | -11.73      | AVG      |
| 3   | 0.1740          | 44.54          | 9.94        | 54.48        | 64.77        | -10.29      | QP       |
| 4   | 0.1740          | 35.15          | 9.94        | 45.09        | 54.77        | -9.68       | AVG      |
| 5   | 0.2900          | 34.69          | 9.99        | 44.68        | 60.52        | -15.84      | QP       |
| 6   | 0.2900          | 27.04          | 9.99        | 37.03        | 50.52        | -13.49      | AVG      |
| 7   | 1.0060          | 35.81          | 9.41        | 45.22        | 56.00        | -10.78      | QP       |
| 8 * | 1.0060          | 32.69          | 9.41        | 42.10        | 46.00        | -3.90       | AVG      |
| 9   | 1.4220          | 30.50          | 9.40        | 39.90        | 56.00        | -16.10      | QP       |
| 10  | 1.4220          | 19.08          | 9.40        | 28.48        | 46.00        | -17.52      | AVG      |
| 11  | 27.1180         | 42.14          | 10.43       | 52.57        | 60.00        | -7.43       | QP       |
| 12  | 27.1180         | 34.76          | 10.43       | 45.19        | 50.00        | -4.81       | AVG      |

Note: \*:Maximum data x:Over limit !:over margin Level = Reading + Factor Margin = Level - Limit

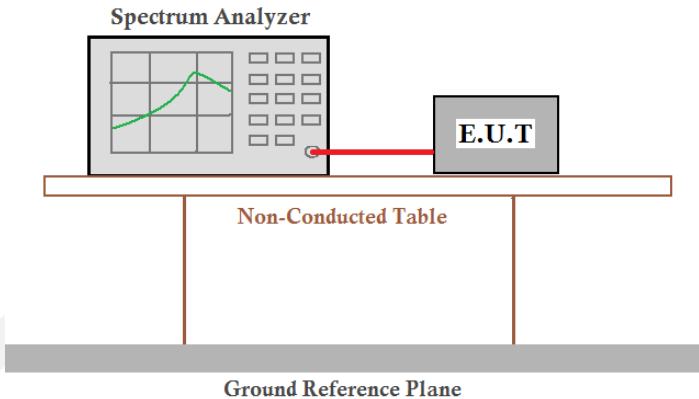
**Neutral:**

| No.  | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector |
|------|-----------------|----------------|-------------|--------------|--------------|-------------|----------|
| 1    | 0.1564          | 46.60          | 9.81        | 56.41        | 65.65        | -9.24       | QP       |
| 2    | 0.1564          | 32.18          | 9.81        | 41.99        | 55.65        | -13.66      | AVG      |
| 3    | 0.2220          | 36.62          | 9.99        | 46.61        | 62.74        | -16.13      | QP       |
| 4    | 0.2220          | 25.91          | 9.99        | 35.90        | 52.74        | -16.84      | AVG      |
| 5    | 0.5140          | 31.27          | 9.78        | 41.05        | 56.00        | -14.95      | QP       |
| 6    | 0.5140          | 20.00          | 9.78        | 29.78        | 46.00        | -16.22      | AVG      |
| 7    | 1.0060          | 36.72          | 9.51        | 46.23        | 56.00        | -9.77       | QP       |
| 8    | 1.0060          | 33.48          | 9.51        | 42.99        | 46.00        | -3.01       | AVG      |
| 9    | 1.4860          | 30.07          | 9.39        | 39.46        | 56.00        | -16.54      | QP       |
| 10   | 1.4860          | 19.03          | 9.39        | 28.42        | 46.00        | -17.58      | AVG      |
| 11   | 27.5980         | 43.54          | 10.45       | 53.99        | 60.00        | -6.01       | QP       |
| 12 * | 27.5980         | 36.88          | 10.45       | 47.33        | 50.00        | -2.67       | AVG      |

Note: \*:Maximum data x:Over limit !:over margin Level = Reading + Factor Margin = Level - Limit

All modes and channels have been tested and only the A 5725MHz mode with the worst data is listed.

### 4.3 Emission Bandwidth and 99% Occupied Bandwidth

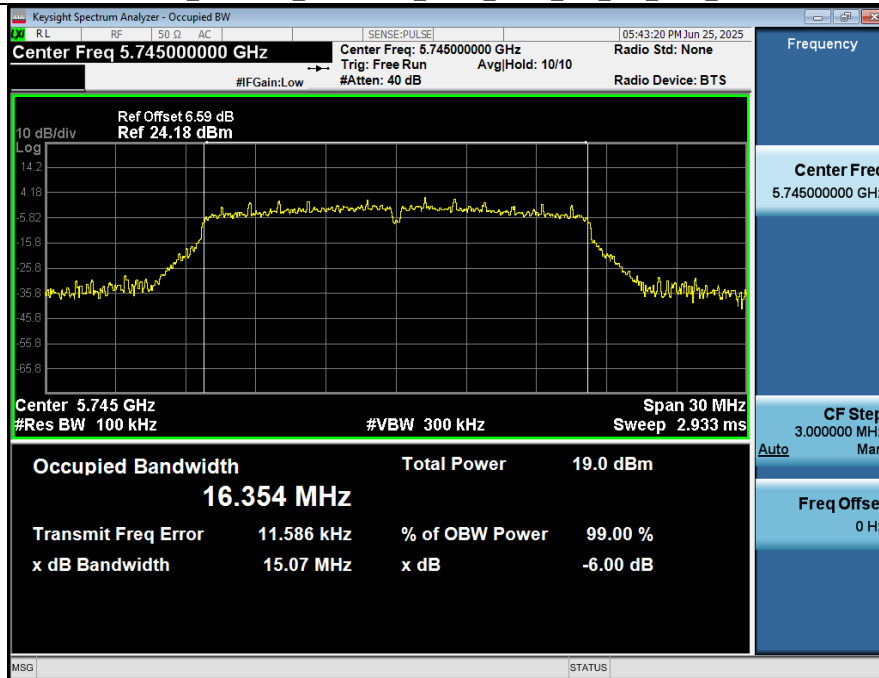
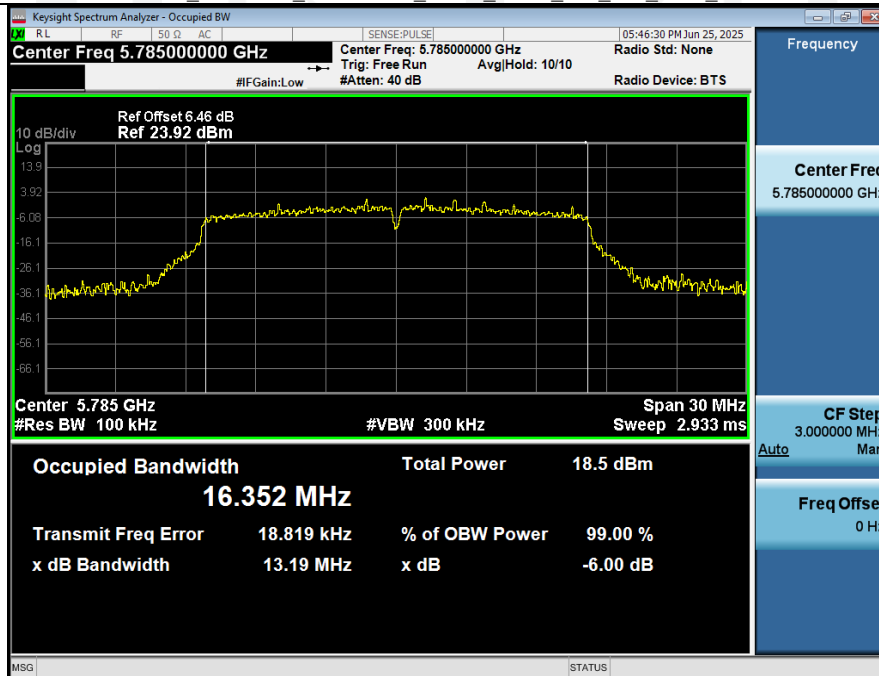
|                   |                                                                                                                                                                                                                                                                                                                    |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 E Section 15.407, RSS-Gen §6.7; RSS-247 §6.2                                                                                                                                                                                                                                                            |
| Test Method:      | KDB 789033 D02 General UNII Test Procedures New Rules v02r01                                                                                                                                                                                                                                                       |
| Limit:            | N/A                                                                                                                                                                                                                                                                                                                |
| Test setup:       |  <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a cable. The E.U.T. is placed on a Non-Conducted Table, which is supported by a Ground Reference Plane.</p> |
| Test procedure:   | According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01.                                                                                                                                                                                                                                         |
| Test Instruments: | Refer to section 3.0 for details                                                                                                                                                                                                                                                                                   |
| Test mode:        | Refer to section 2.2 for details                                                                                                                                                                                                                                                                                   |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                               |

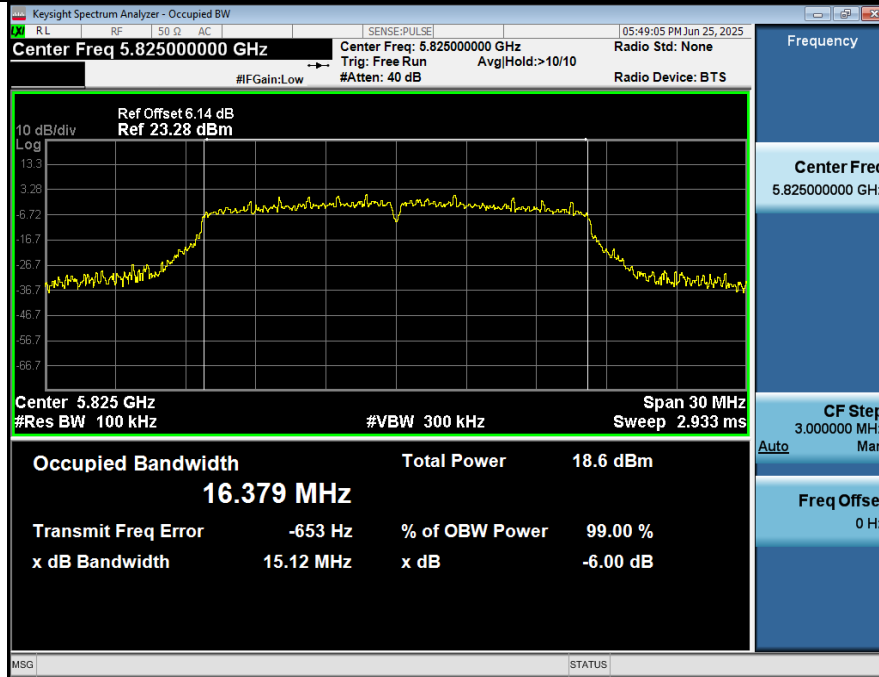
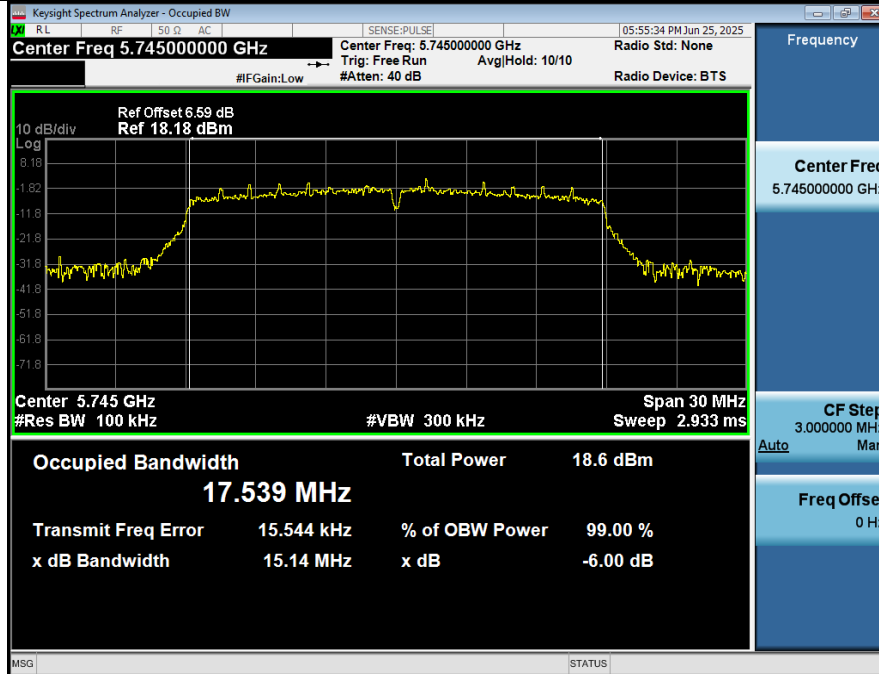
Note: Note: Both antennas have been tested and only the worst data of antenna 1 is shown.

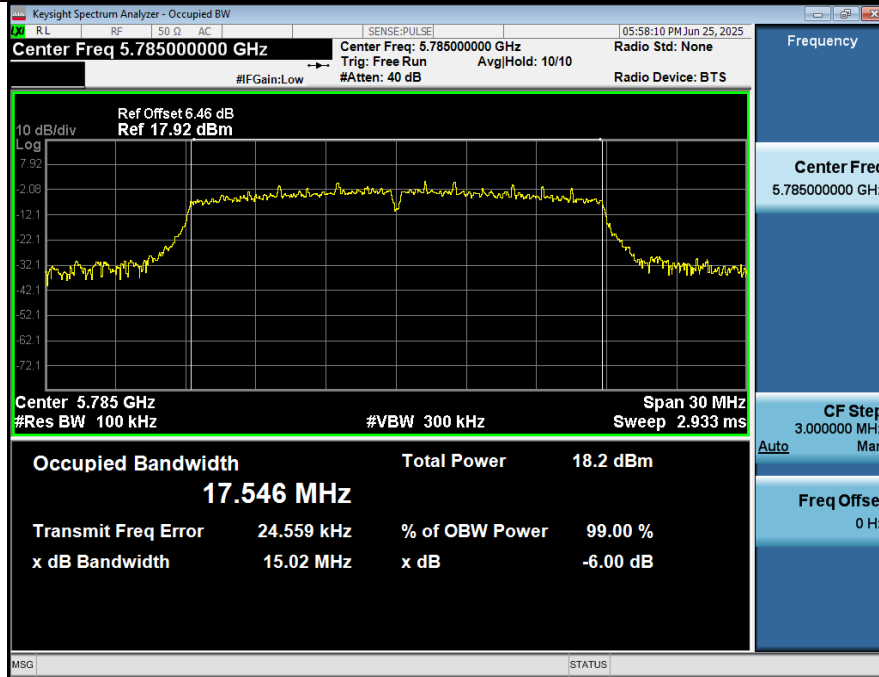
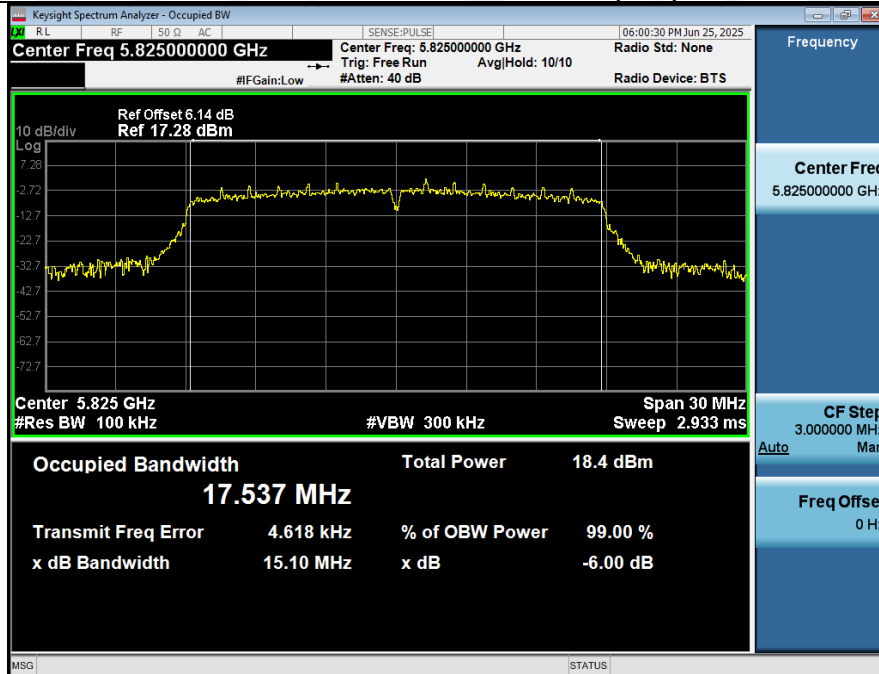
#### Measurement Data:

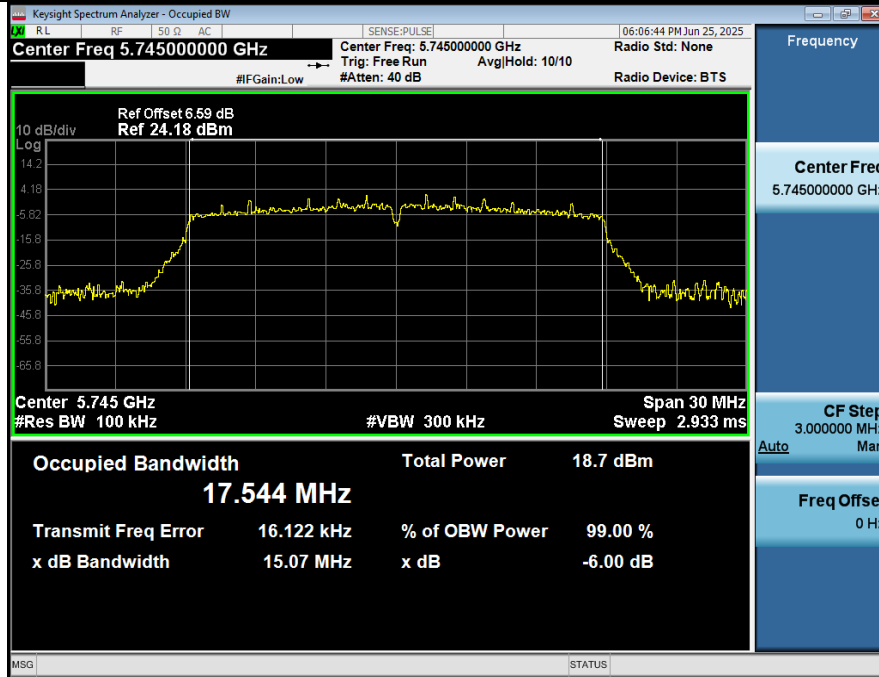
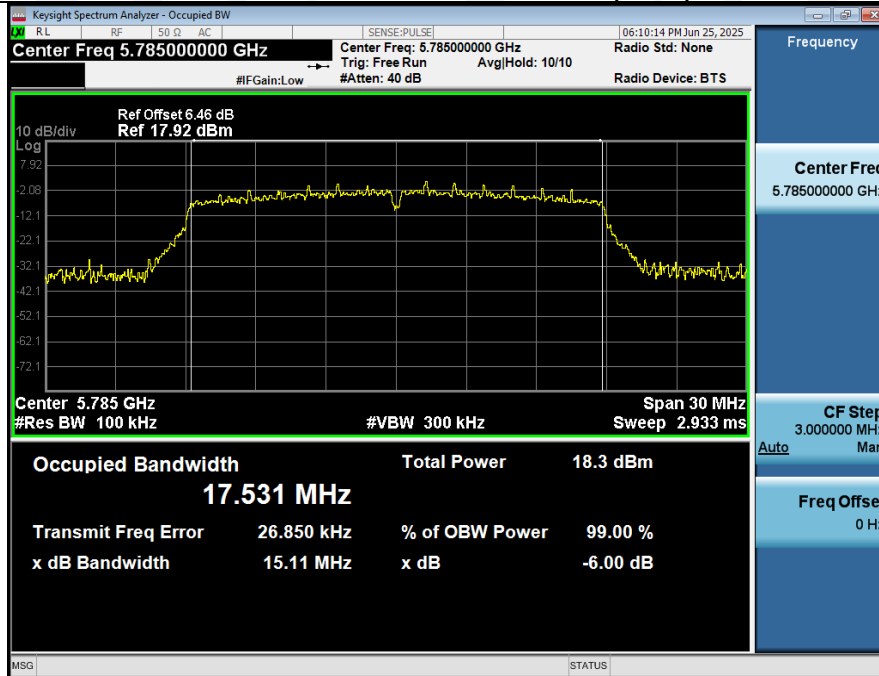
##### Band 4 (5725-5850 MHz):

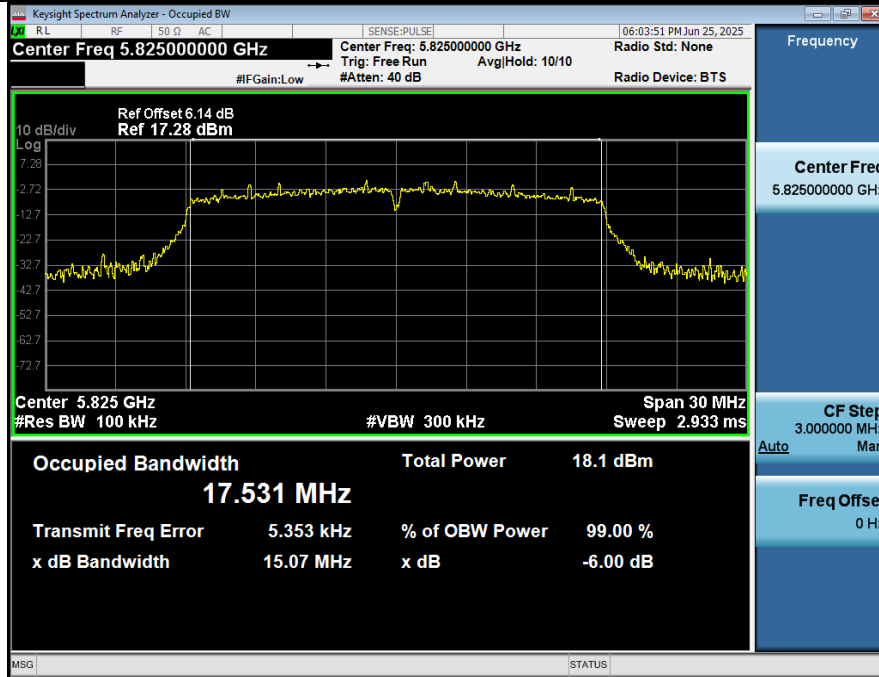
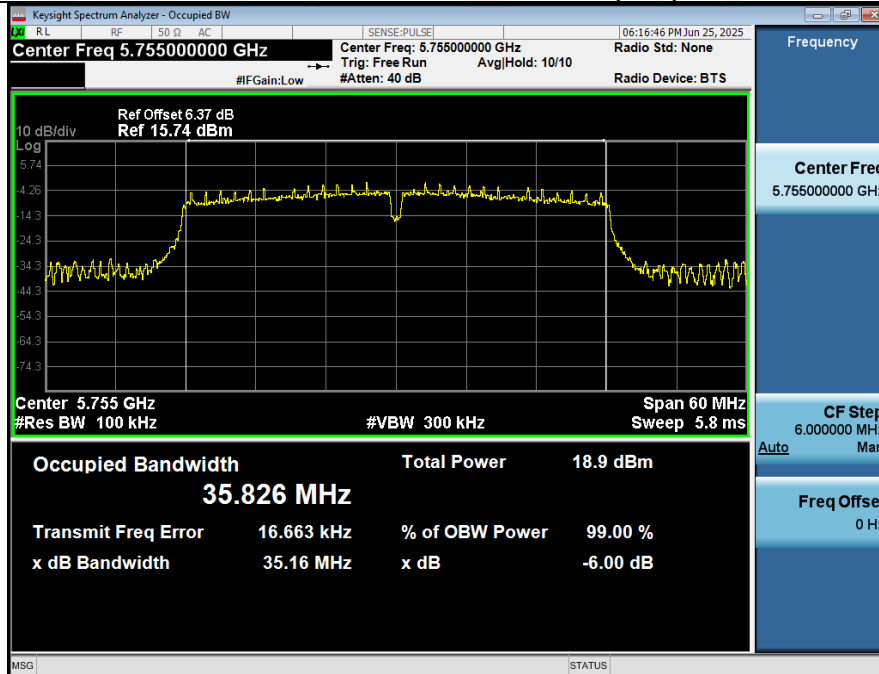
| Condition | Antenna | Mode            | Frequency(MHz) | 6dB_Emission_Bandwidth(MHz) | Limit(MHz) | Result |
|-----------|---------|-----------------|----------------|-----------------------------|------------|--------|
| NVNT      | ANT1    | 802.11a         | 5745.00        | 15.071                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11a         | 5785.00        | 13.190                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11a         | 5825.00        | 15.116                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5745.00        | 15.139                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5785.00        | 15.025                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5825.00        | 15.100                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5745.00        | 15.070                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5785.00        | 15.115                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5825.00        | 15.071                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5755.00        | 35.157                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5795.00        | 33.919                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5755.00        | 35.156                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5795.00        | 35.158                      | 0.500      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | 5775.00        | 75.267                      | 0.500      | Pass   |

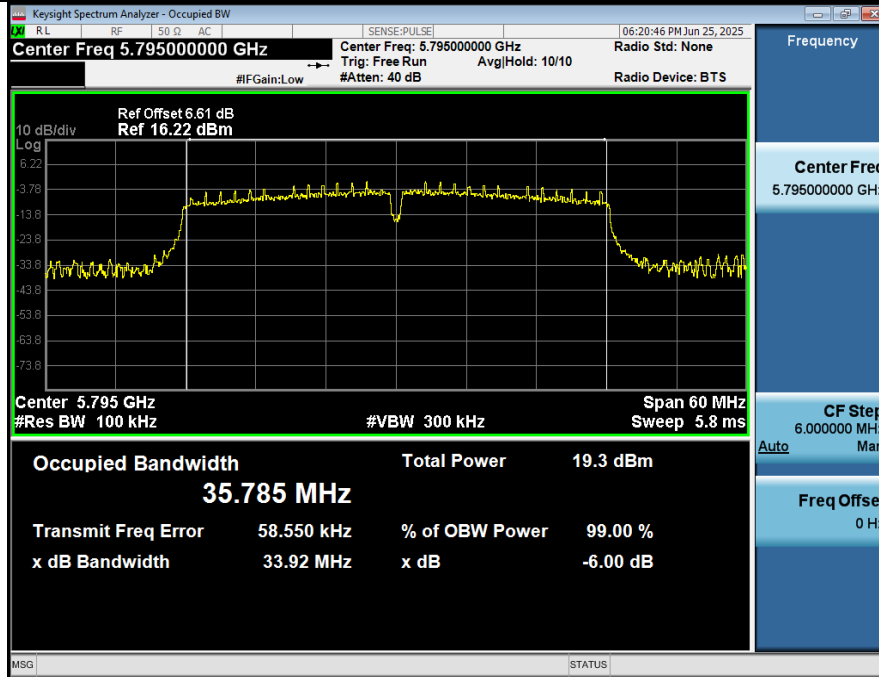
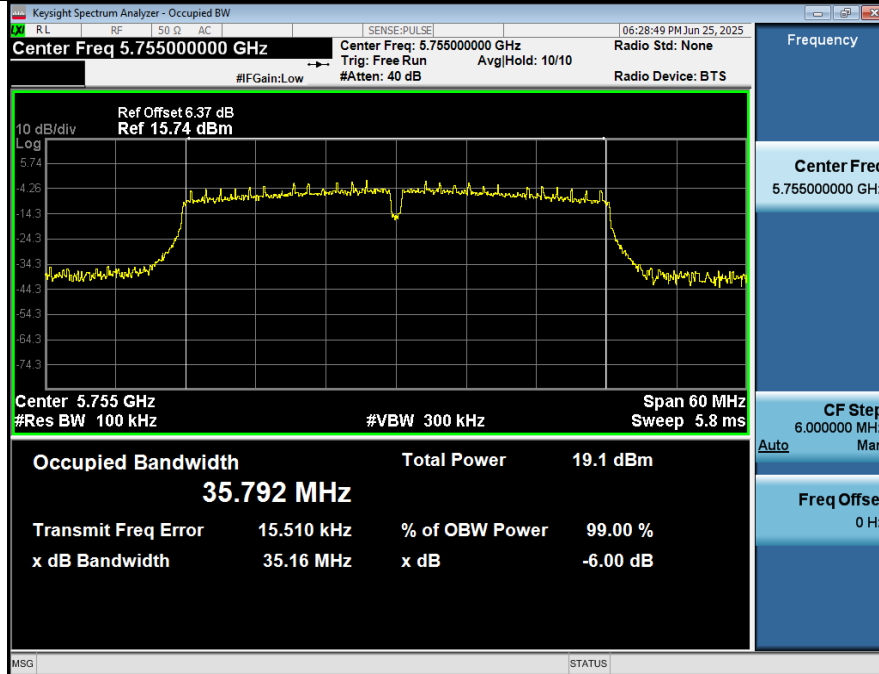
**-6dB Emission Bandwidth\_NVNT\_ANT1\_802\_11a\_5745\_20M****-6dB Emission Bandwidth\_NVNT\_ANT1\_802\_11a\_5785\_20M**

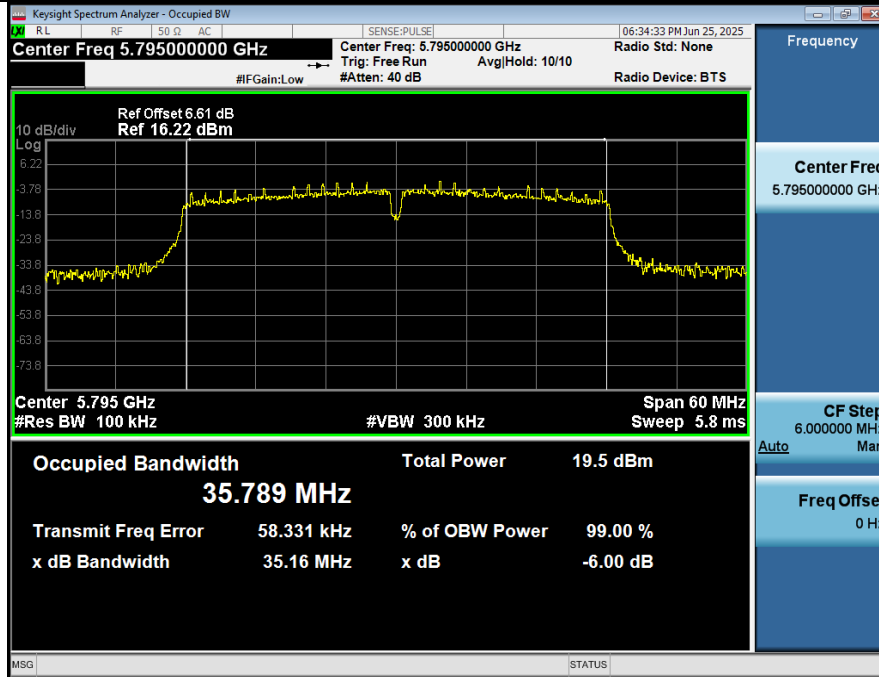
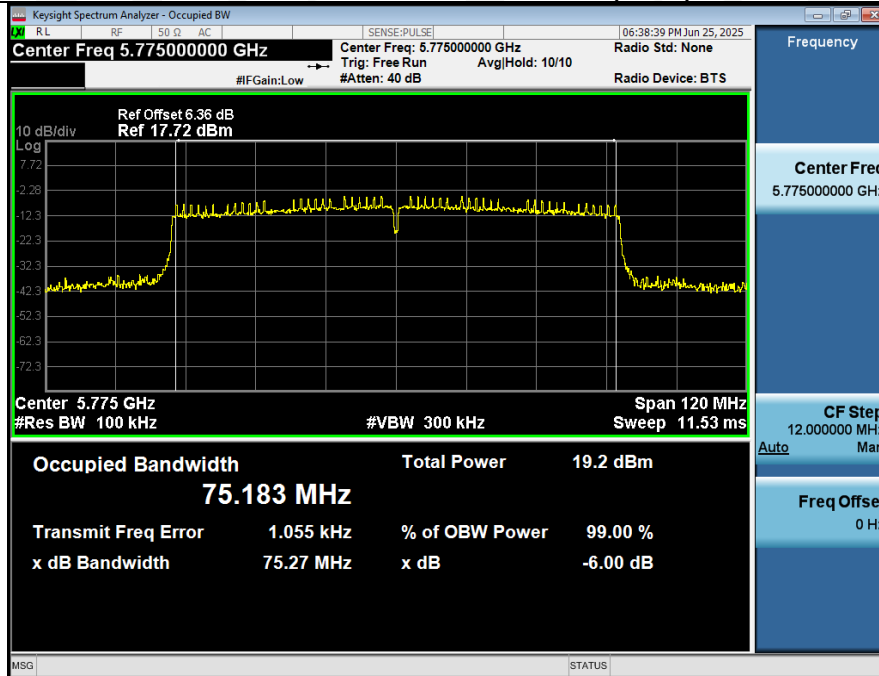
**-6dB Emission Bandwidth\_NVNT\_ANT1\_802\_11a\_5825\_20M****-6dB Emission Bandwidth\_NVNT\_ANT1\_802\_11n(HT20)\_5745\_20M**

**-6dB Emission Bandwidth NVNT\_ANT1\_802\_11n(HT20)\_5785\_20M****-6dB Emission Bandwidth NVNT\_ANT1\_802\_11n(HT20)\_5825\_20M**

**-6dB Emission Bandwidth\_NVNT\_ANT1\_802\_11ac(VHT20)\_5745\_20M****-6dB Emission Bandwidth\_NVNT\_ANT1\_802\_11ac(VHT20)\_5785\_20M**

**-6dB Emission Bandwidth NVNT\_ANT1\_802\_11ac(VHT20)\_5825\_20M****-6dB Emission Bandwidth NVNT\_ANT1\_802\_11n(HT40)\_5755\_40M**

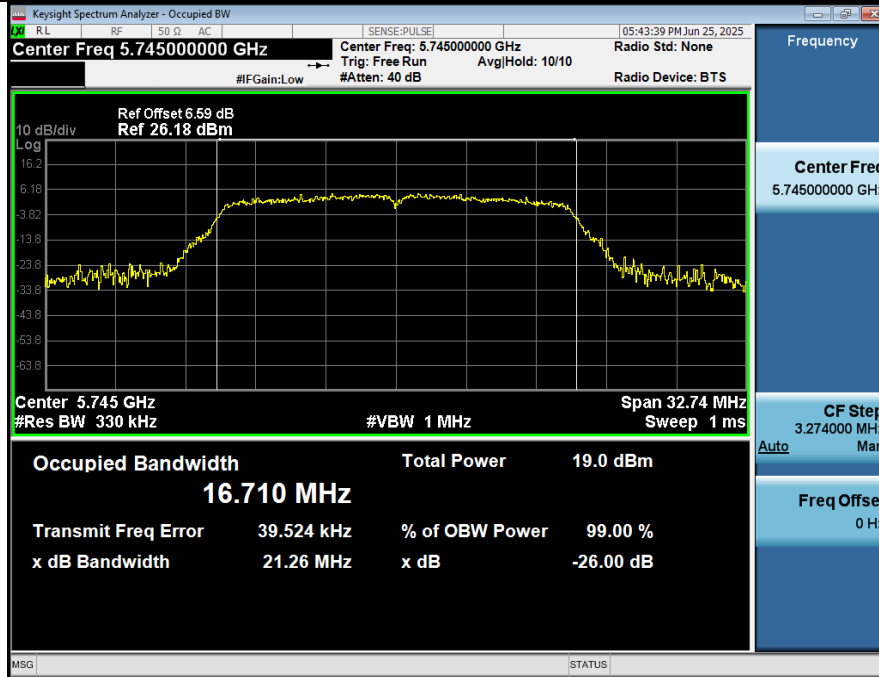
**-6dB Emission Bandwidth\_NVNT\_ANT1\_802\_11n(HT40)\_5795\_40M****-6dB Emission Bandwidth\_NVNT\_ANT1\_802\_11ac(VHT40)\_5755\_40M**

**-6dB Emission Bandwidth\_NVNT\_ANT1\_802\_11ac(VHT40)\_5795\_40M****-6dB Emission Bandwidth\_NVNT\_ANT1\_802\_11ac(VHT80)\_5775\_80M**

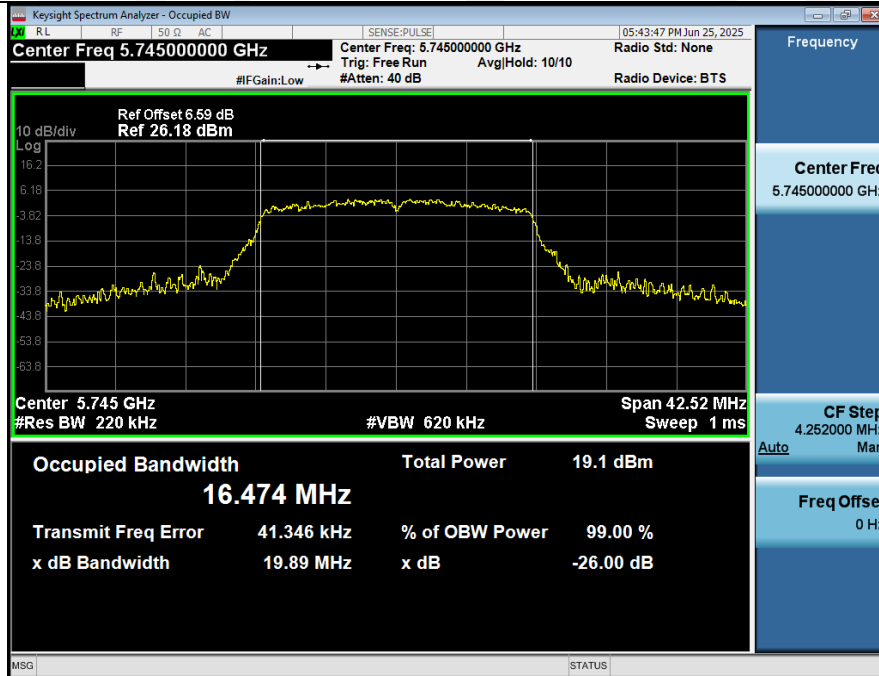
| Condition | Antenna | Modulation      | Frequency(MHz) | 26dB Emission Bandwidth(MHz) | Occupied Bandwidth(MHz) |
|-----------|---------|-----------------|----------------|------------------------------|-------------------------|
| NVNT      | ANT1    | 802.11a         | 5745.00        | 19.89                        | 16.71                   |
| NVNT      | ANT1    | 802.11a         | 5785.00        | 19.87                        | 16.75                   |
| NVNT      | ANT1    | 802.11a         | 5825.00        | 21.48                        | 16.76                   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5745.00        | 21.06                        | 17.79                   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5785.00        | 24.01                        | 17.83                   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5825.00        | 24.00                        | 17.79                   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5745.00        | 20.22                        | 17.71                   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5785.00        | 22.86                        | 17.79                   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5825.00        | 20.28                        | 17.76                   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5755.00        | 66.73                        | 36.29                   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5795.00        | 65.32                        | 36.45                   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5755.00        | 40.16                        | 36.25                   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5795.00        | 40.53                        | 36.21                   |
| NVNT      | ANT1    | 802.11ac(VHT80) | 5775.00        | 99.33                        | 75.45                   |



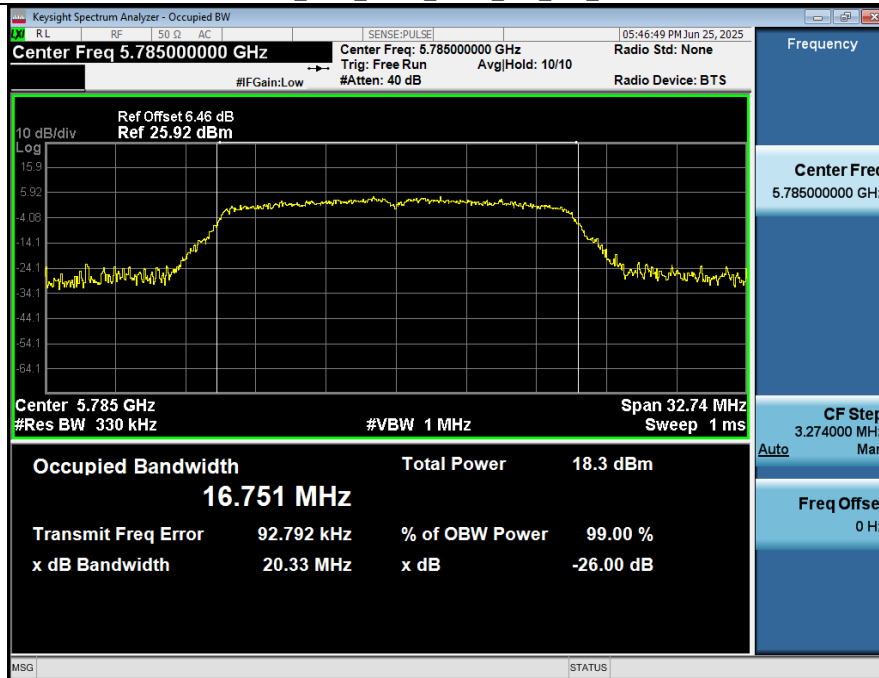
## 99%\_OCB\_NVNT\_ANT1\_802\_11a\_5745



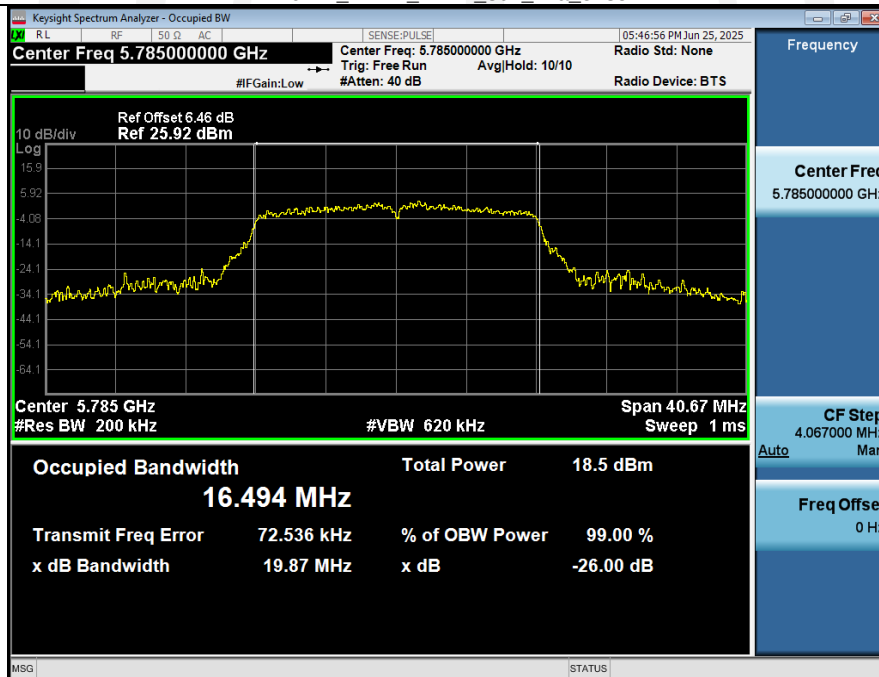
## -26BW\_NVNT\_ANT1\_802\_11a\_5745



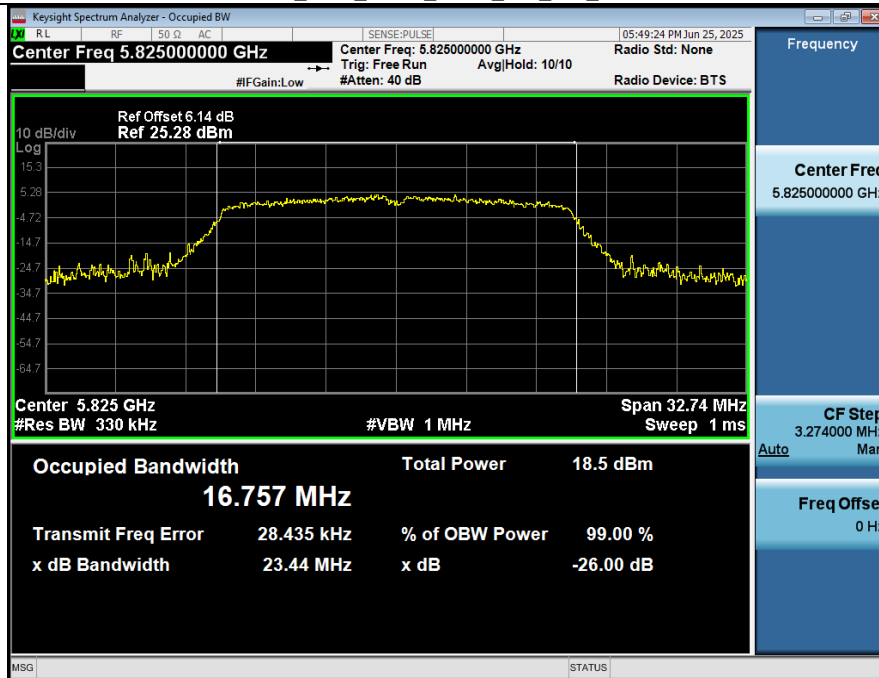
## 99%\_OCB\_NVNT\_ANT1\_802\_11a\_5785



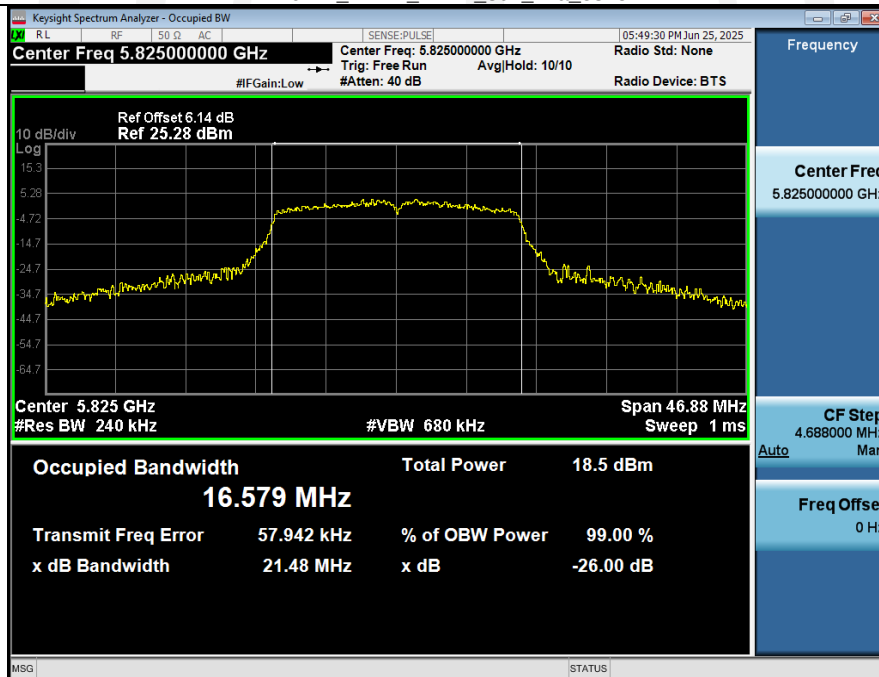
## -26BW\_NVNT\_ANT1\_802\_11a\_5785



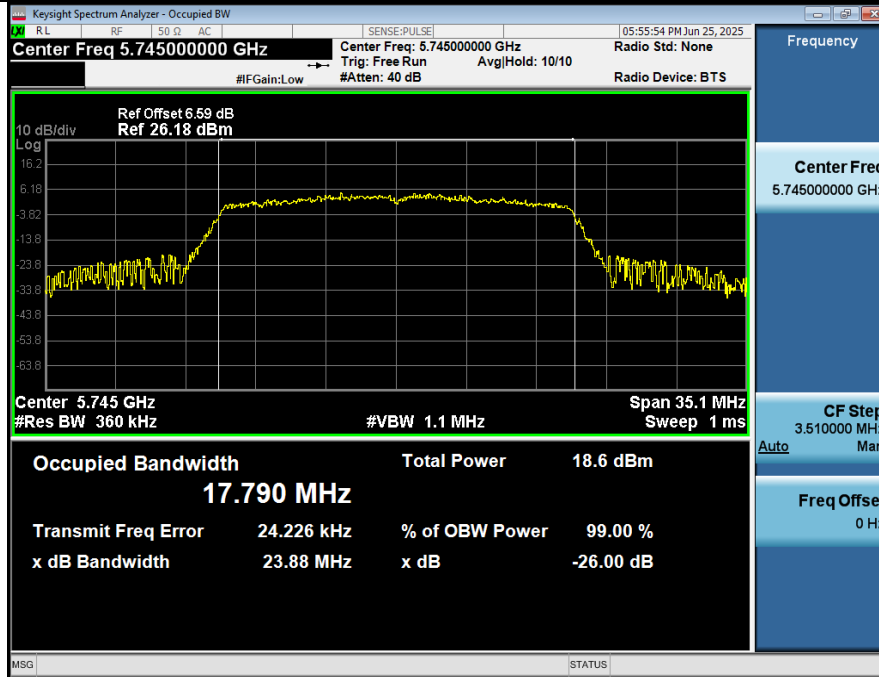
## 99%\_OCB\_NVNT\_ANT1\_802\_11a\_5825



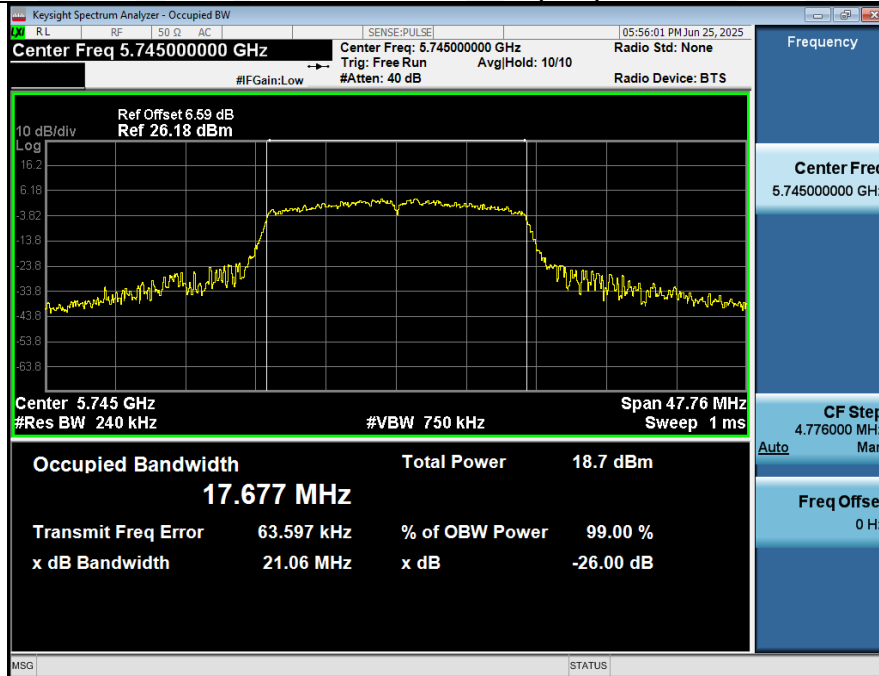
## -26BW\_NVNT\_ANT1\_802\_11a\_5825



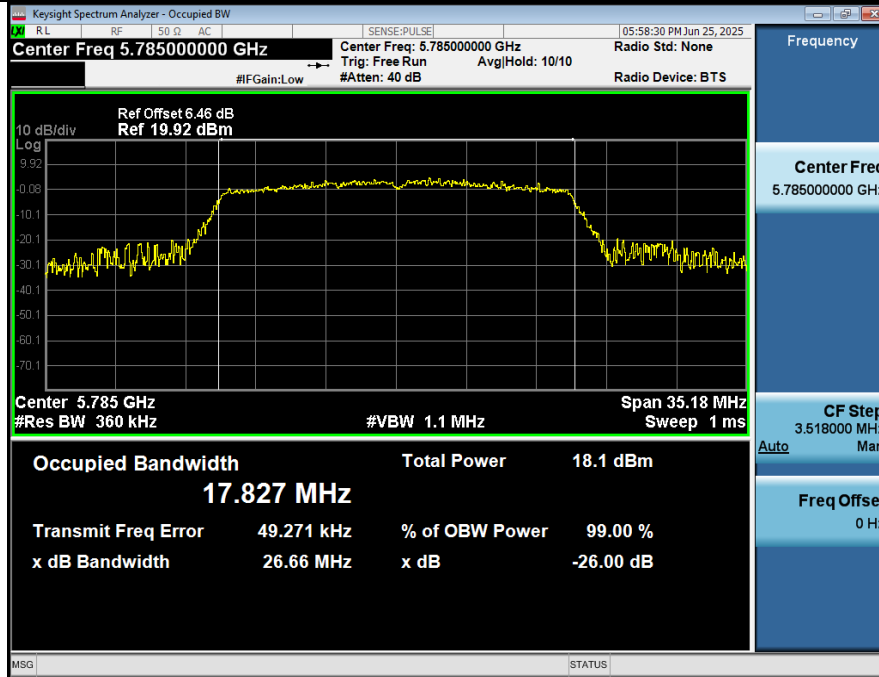
## 99%\_OCB\_NVNT\_ANT1\_802\_11n(HT20)\_5745



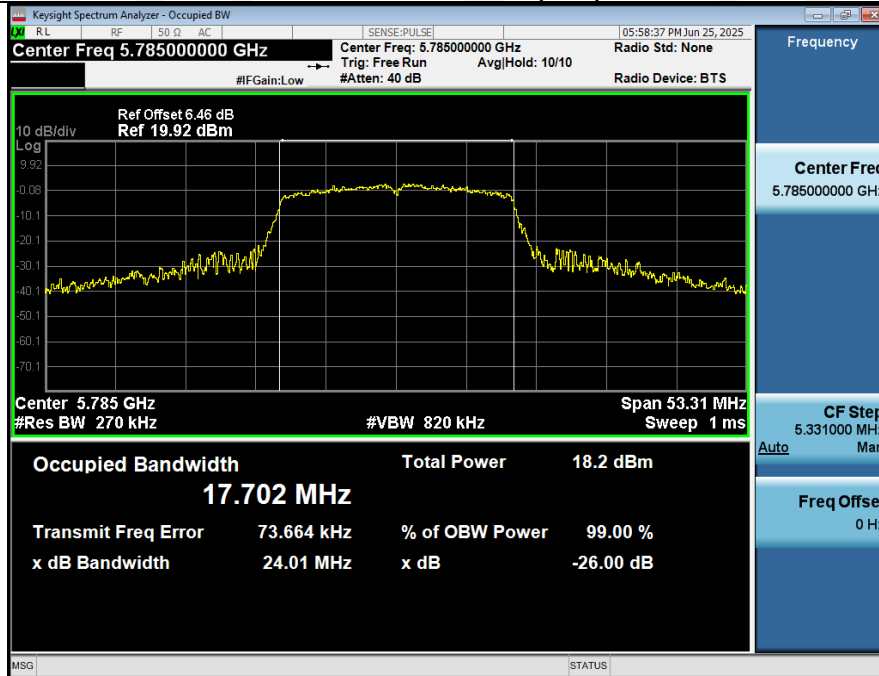
## -26BW\_NVNT\_ANT1\_802\_11n(HT20)\_5745



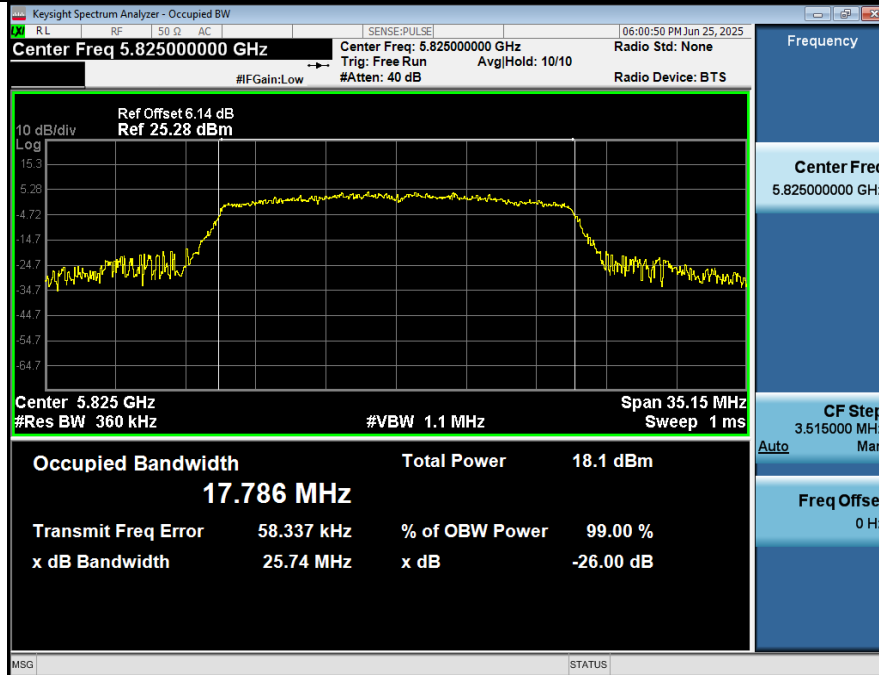
## 99%\_OCB\_NVNT\_ANT1\_802\_11n(HT20)\_5785



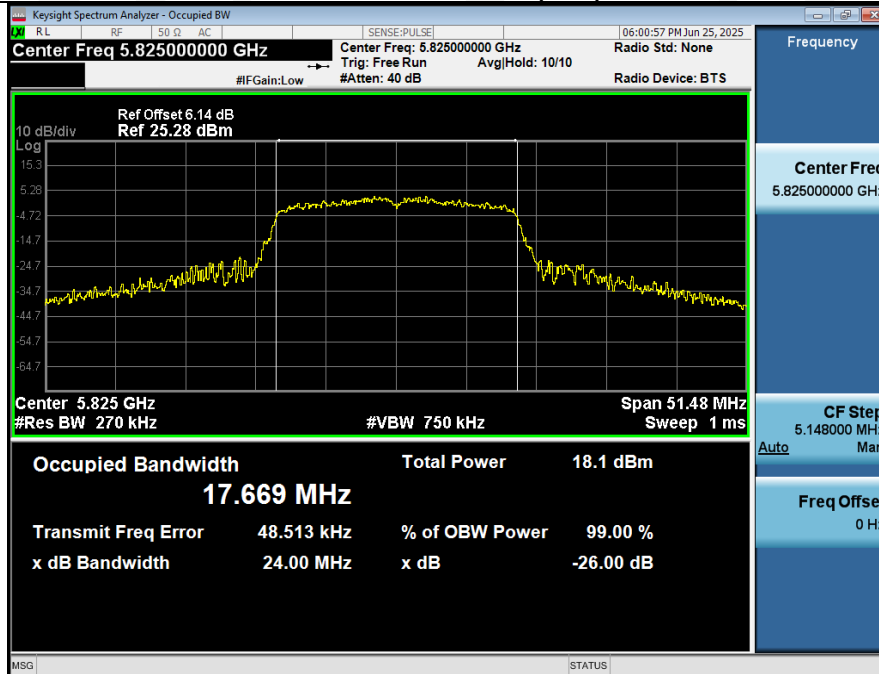
## -26BW\_NVNT\_ANT1\_802\_11n(HT20)\_5785



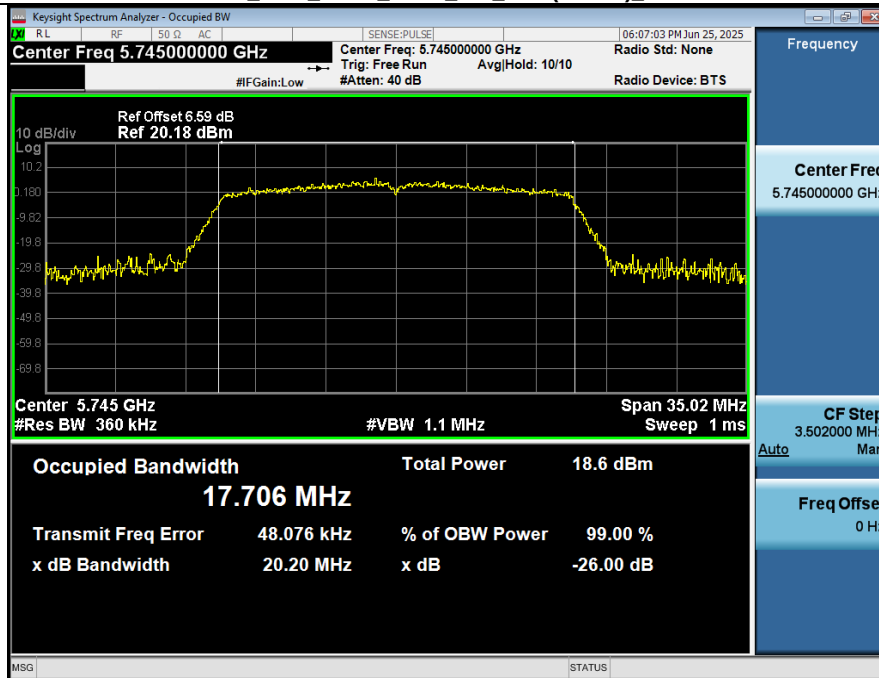
## 99%\_OCB\_NVNT\_ANT1\_802\_11n(HT20)\_5825



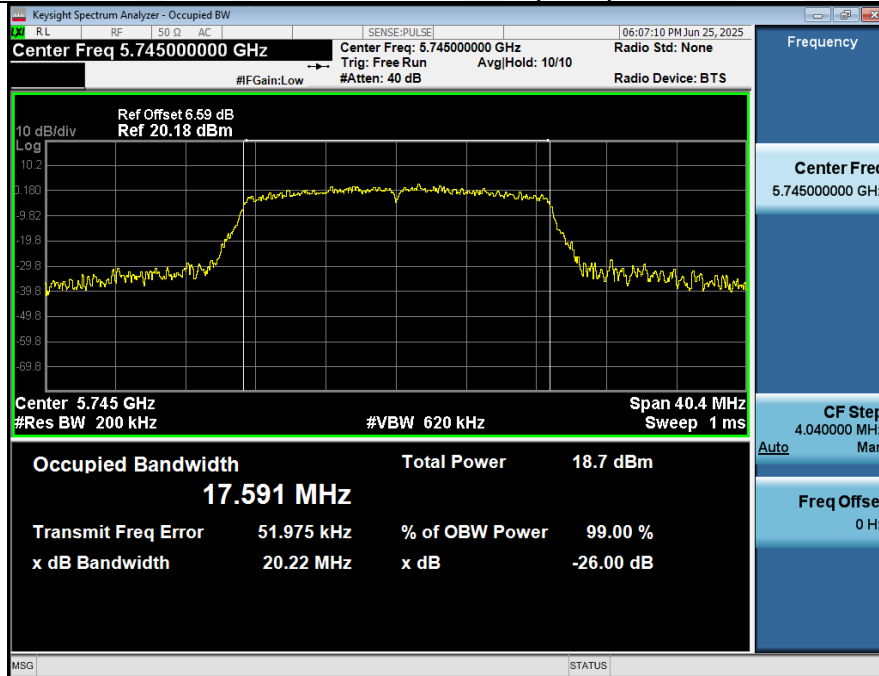
## -26BW\_NVNT\_ANT1\_802\_11n(HT20)\_5825



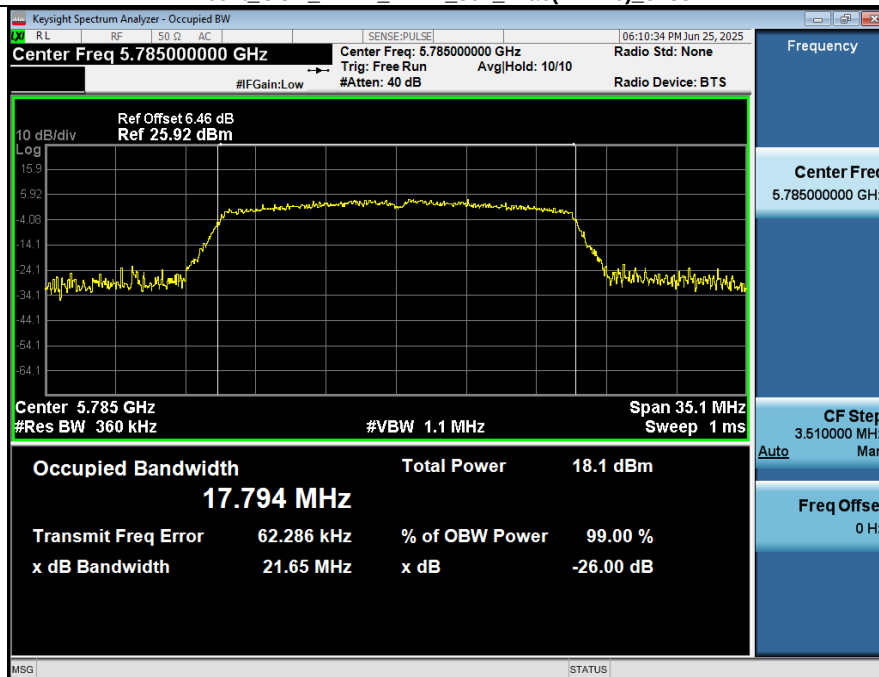
## 99%\_OCB\_NVNT\_ANT1\_802\_11ac(VHT20)\_5745



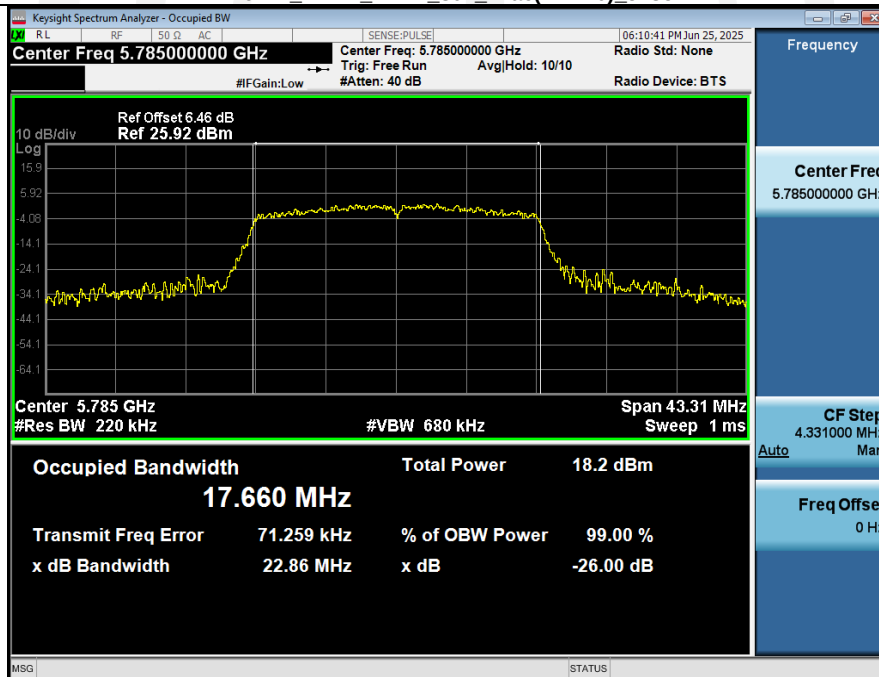
## -26BW\_NVNT\_ANT1\_802\_11ac(VHT20)\_5745



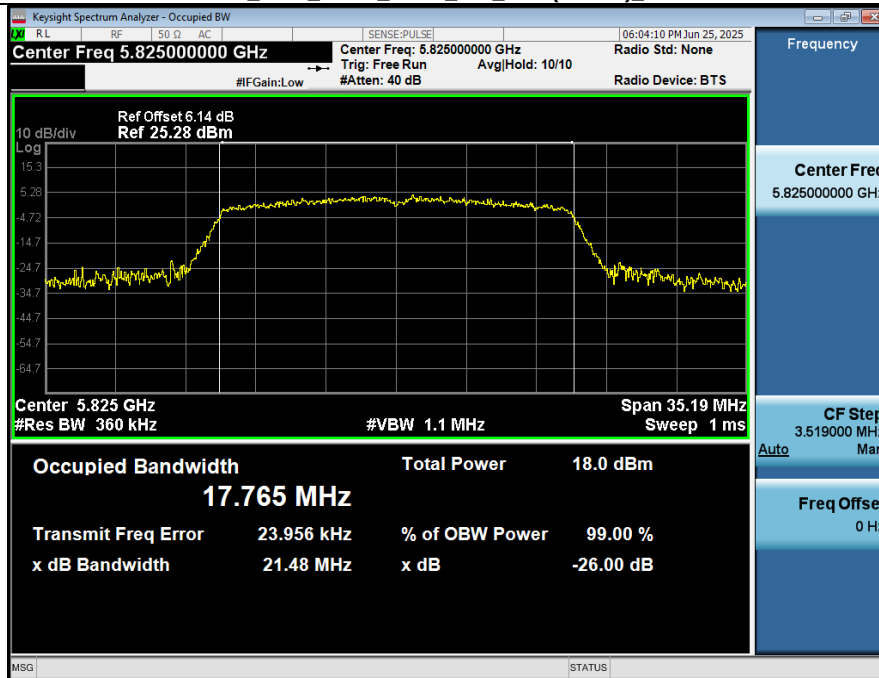
## 99%\_OCB\_NVNT\_ANT1\_802\_11ac(VHT20)\_5785



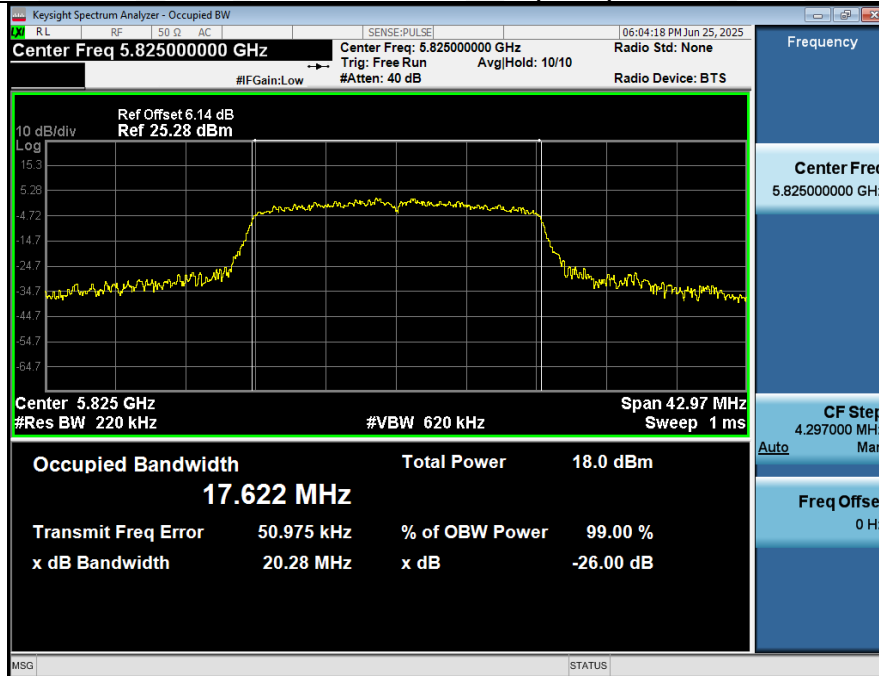
## -26BW\_NVNT\_ANT1\_802\_11ac(VHT20)\_5785



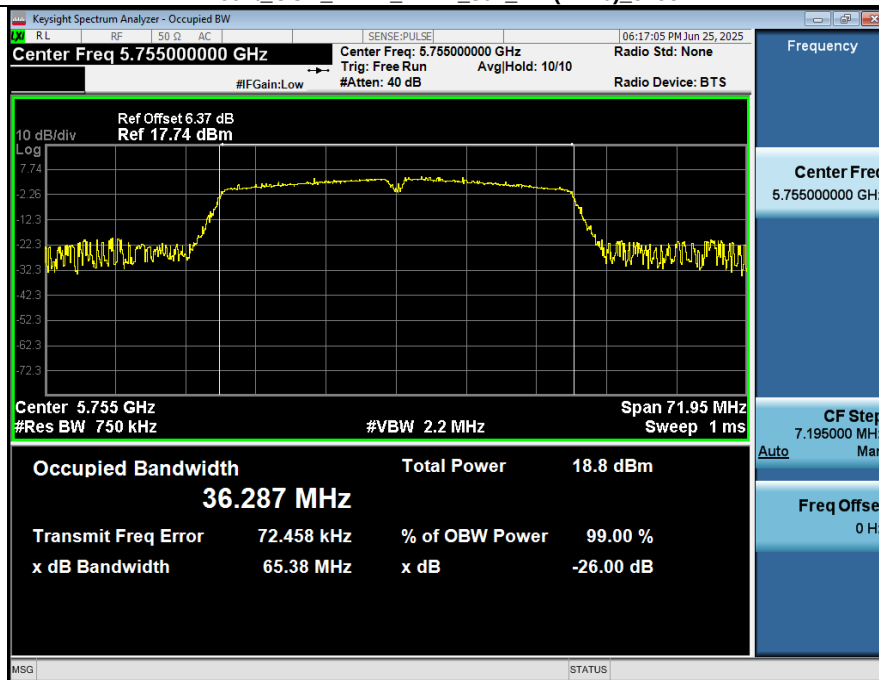
## 99%\_OCB\_NVNT\_ANT1\_802\_11ac(VHT20)\_5825



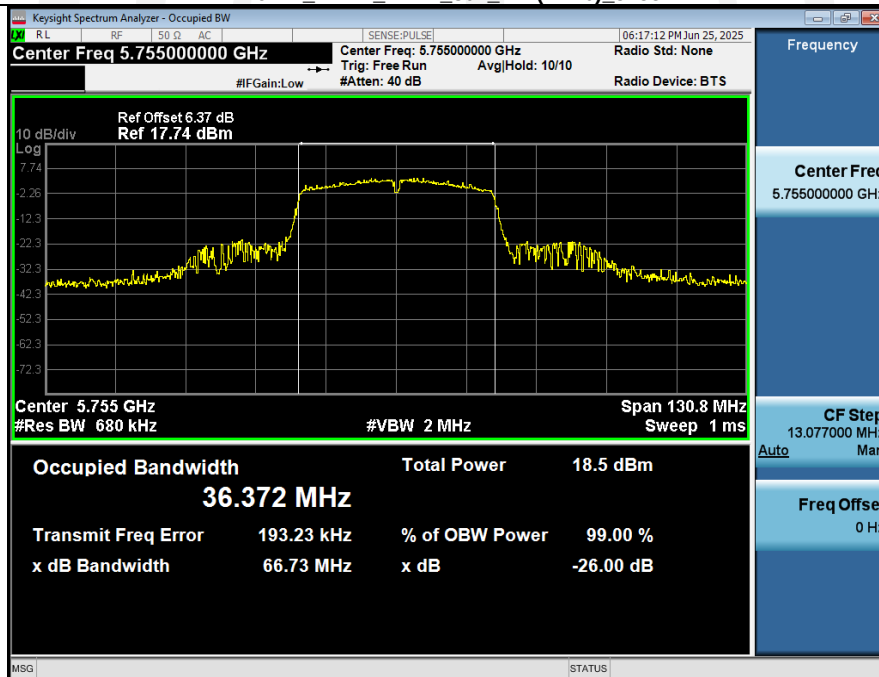
## -26BW\_NVNT\_ANT1\_802\_11ac(VHT20)\_5825



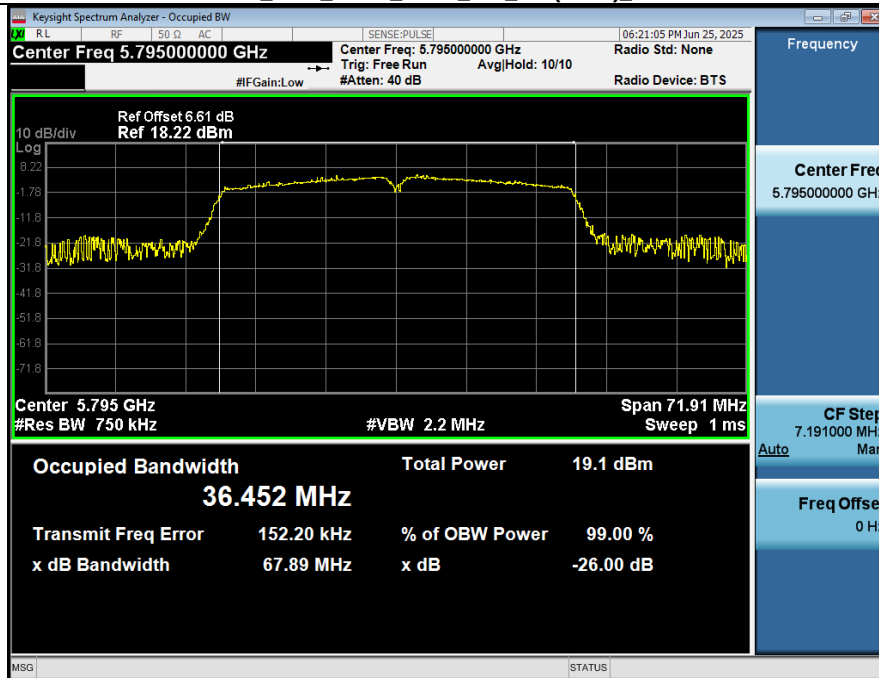
## 99%\_OCB\_NVNT\_ANT1\_802\_11n(HT40)\_5755



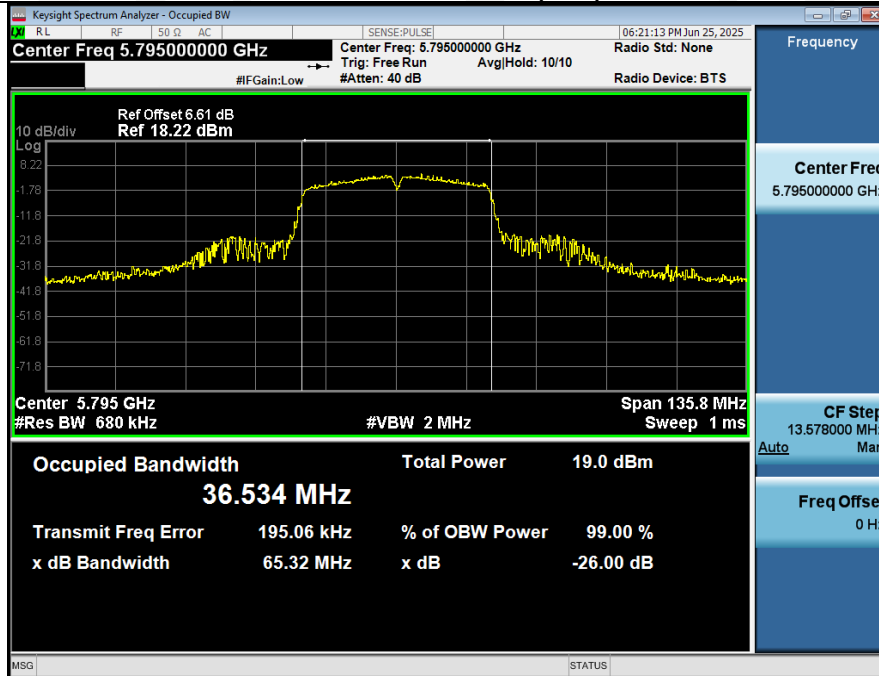
## -26BW\_NVNT\_ANT1\_802\_11n(HT40)\_5755



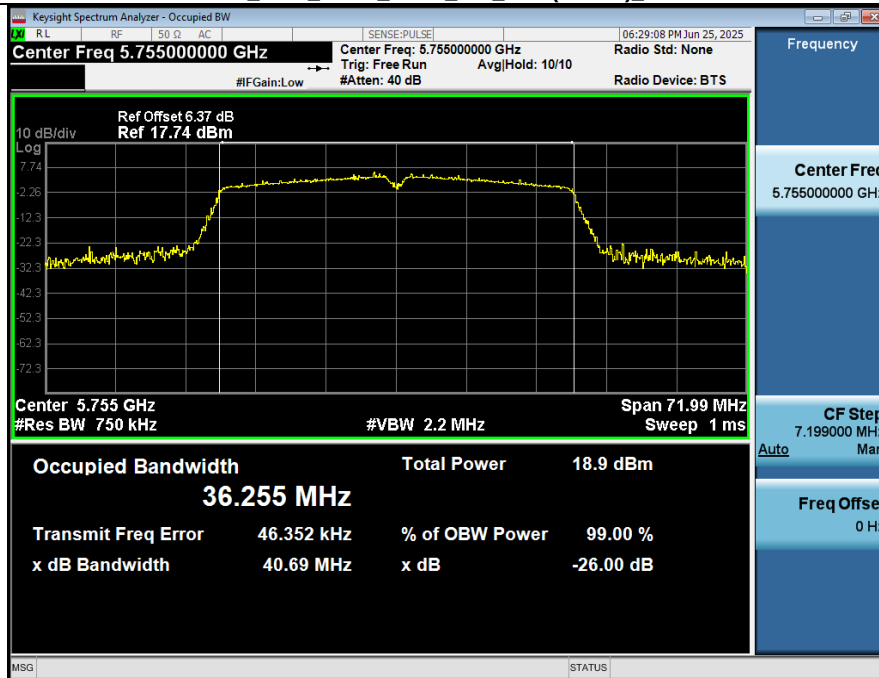
## 99%\_OCB\_NVNT\_ANT1\_802\_11n(HT40)\_5795



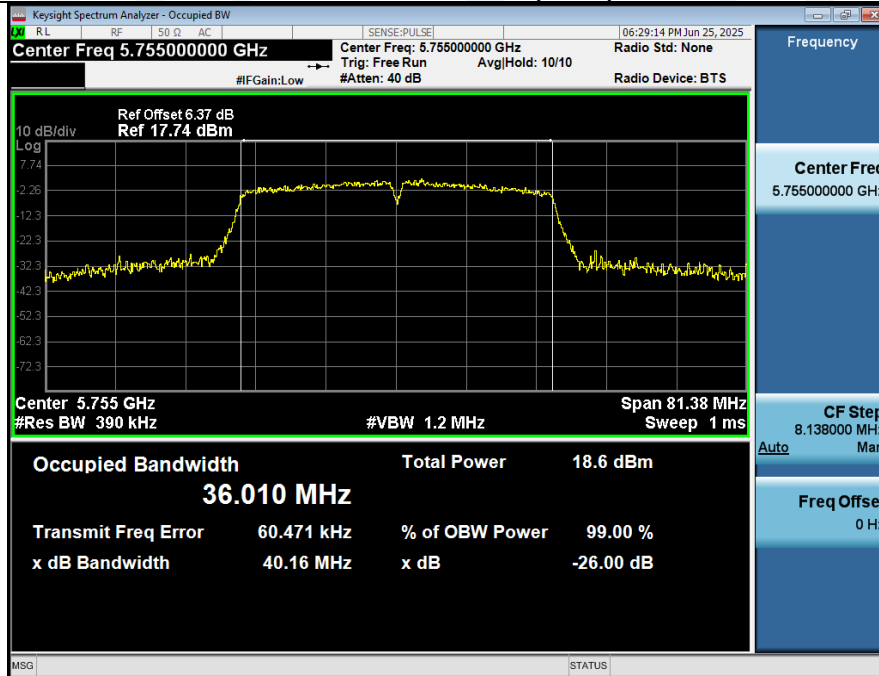
## -26BW\_NVNT\_ANT1\_802\_11n(HT40)\_5795



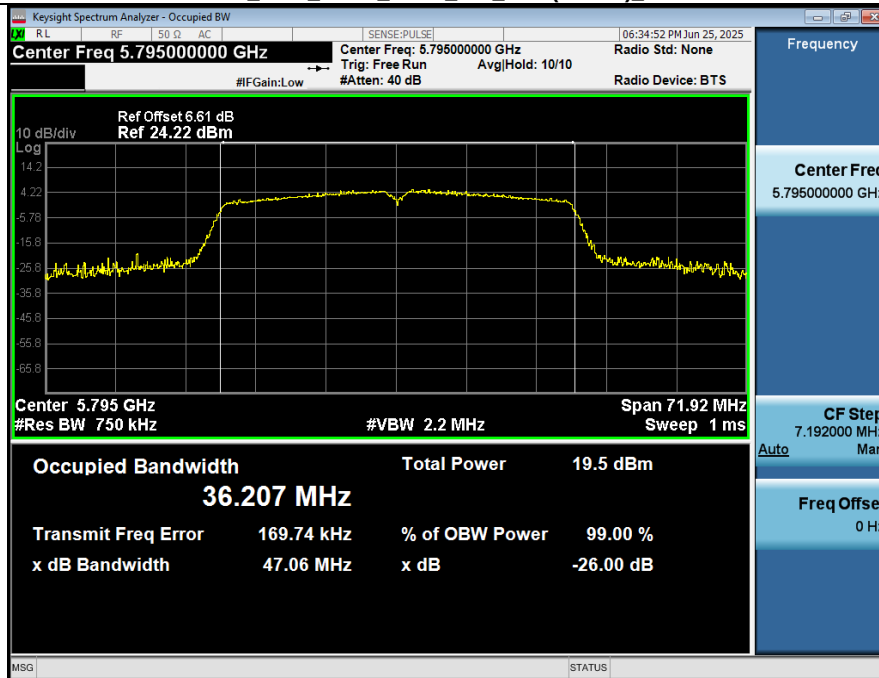
## 99%\_OCB\_NVNT\_ANT1\_802\_11ac(VHT40)\_5755



## -26BW\_NVNT\_ANT1\_802\_11ac(VHT40)\_5755



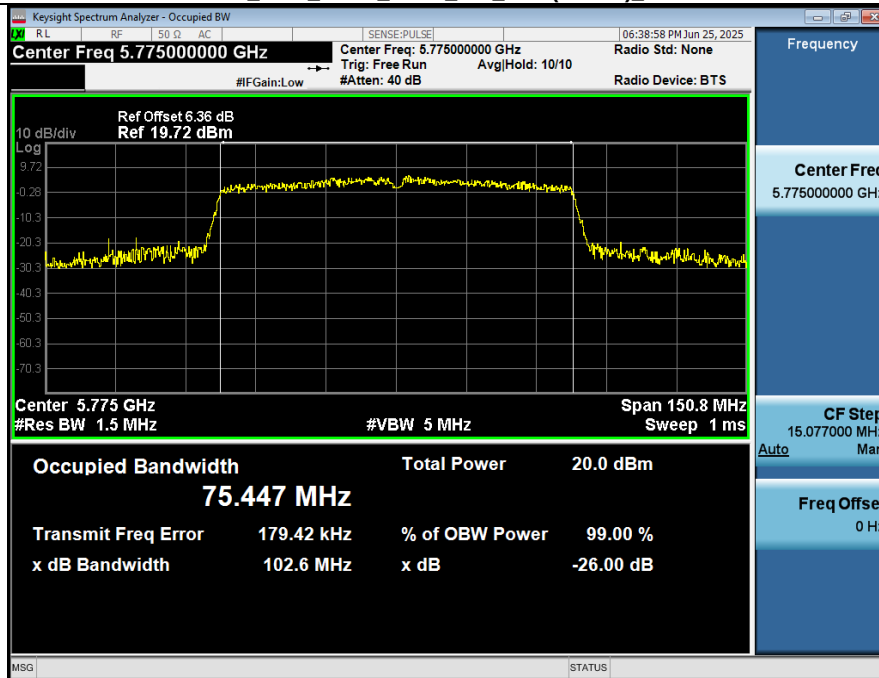
## 99%\_OCB\_NVNT\_ANT1\_802\_11ac(VHT40)\_5795



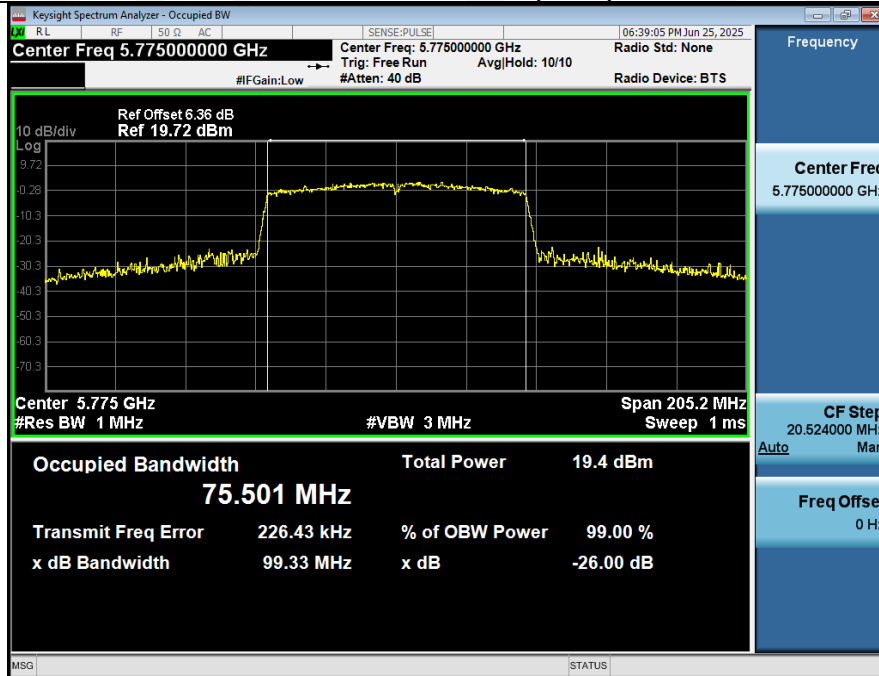
## -26BW\_NVNT\_ANT1\_802\_11ac(VHT40)\_5795



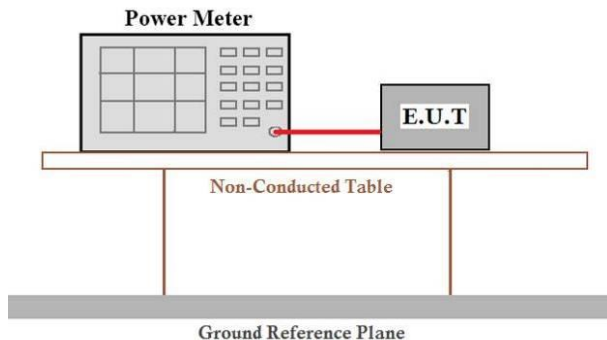
## 99%\_OCB\_NVNT\_ANT1\_802\_11ac(VHT80)\_5775



## -26BW\_NVNT\_ANT1\_802\_11ac(VHT80)\_5775



#### 4.4 Maximum Conducted Output Power

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 E Section 15.407, RSS-247 §6.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Test Method:      | KDB 789033 D02 General UNII Test Procedures New Rules v02r01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Limit:            | <p>For the band 5.15-5.25GHz, 5.25-5.35GHz, 5.47-5.725GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 250mW.</p> <p>For the band 5.725-5.85GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 1W.</p> <p>IC:</p> <p>For the 5.15–5.25 GHz band,<br/>For other devices, the maximum e.i.r.p. shall not exceed 200 mW or <math>10 + 10 \log_{10} B</math>, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.</p> <p>For the 5.25–5.35 GHz band,<br/>Other than devices installed in vehicles, the maximum conducted output power shall not exceed 250 mW or <math>11 + 10 \log_{10} B</math>, dBm, whichever power is less.</p> <p>The maximum e.i.r.p. shall not exceed 1.0 W or <math>17 + 10 \log_{10} B</math>, dBm, whichever is less. B is the 99% emission bandwidth in megahertz.</p> <p>For the 5.47–5.6 GHz and 5.65–5.725 GHz band, the maximum conducted output power shall not exceed 250 mW or <math>11 + 10 \log_{10} B</math>, dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W or <math>17 + 10 \log_{10} B</math>, dBm, whichever is less. B is the 99% emission bandwidth in megahertz.</p> <p>For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.</p> <p>For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.</p> <p>If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.</p> |
| Test setup:       |  <p>The diagram illustrates the test setup. A Power Meter is connected via a red cable to an E.U.T. (Equipment Under Test). Both are placed on a Non-Conducted Table. Below the table is a Ground Reference Plane.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Test procedure:   | <p><b>Measurement using an RF average power meter</b></p> <p>(i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | <p>conditions listed below are satisfied</p> <p>a) The EUT is configured to transmit continuously or to transmit with a constant duty cycle.</p> <p>b) At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.</p> <p>c) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.</p> <p>(ii) If the transmitter does not transmit continuously, measure the duty cycle, <math>x</math>, of the transmitter output signal as described in section B).</p> <p>(iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.</p> <p>(iv) Adjust the measurement in dBm by adding <math>10 \log(1/x)</math> where <math>x</math> is the duty cycle (e.g., <math>10 \log(1/0.25)</math> if the duty cycle is 25 percent).</p> |
| Test Instruments: | Refer to section 3.0 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Test mode:        | Refer to section 2.2 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

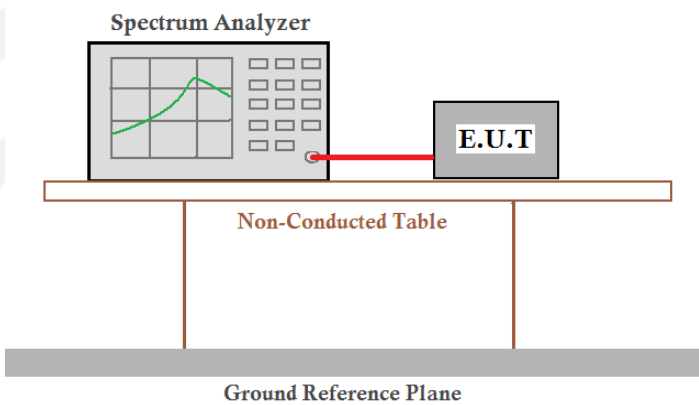
**Measurement Data****Band 4 (5725 – 5850 MHz) SISO:**

| Condition | Antenna | Modulation      | Frequency (MHz) | Conducted Power(dBm) | Duty factor(dB) | Total Power(dBm) | limit(dBm) | Result |
|-----------|---------|-----------------|-----------------|----------------------|-----------------|------------------|------------|--------|
| NVNT      | ANT1    | 802.11a         | 5745.00         | 12.56                | 0.12            | 12.68            | 30         | Pass   |
| NVNT      | ANT1    | 802.11a         | 5785.00         | 11.83                | 0.12            | 11.95            | 30         | Pass   |
| NVNT      | ANT1    | 802.11a         | 5825.00         | 11.92                | 0.12            | 12.04            | 30         | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5745.00         | 11.93                | 0.13            | 12.06            | 30         | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5785.00         | 11.47                | 0.13            | 11.60            | 30         | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5825.00         | 11.53                | 0.13            | 11.66            | 30         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5745.00         | 11.96                | 0.00            | 11.96            | 30         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5785.00         | 11.54                | 0.13            | 11.67            | 30         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5825.00         | 11.48                | 0.13            | 11.61            | 30         | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5755.00         | 11.65                | 0.26            | 11.91            | 30         | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5795.00         | 12.00                | 0.26            | 12.26            | 30         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5755.00         | 11.79                | 0.13            | 11.92            | 30         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5795.00         | 12.33                | 0.26            | 12.59            | 30         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | 5775.00         | 11.20                | 0.51            | 11.71            | 30         | Pass   |

| Condition | Antenna | Modulation      | Frequency (MHz) | Duty cycle(%) | Duty_factor |
|-----------|---------|-----------------|-----------------|---------------|-------------|
| NVNT      | ANT1    | 802.11a         | 5745.00         | 97.18         | 0.12        |
| NVNT      | ANT1    | 802.11a         | 5785.00         | 97.18         | 0.12        |
| NVNT      | ANT1    | 802.11a         | 5825.00         | 97.18         | 0.12        |
| NVNT      | ANT1    | 802.11n(HT20)   | 5745.00         | 97.01         | 0.13        |
| NVNT      | ANT1    | 802.11n(HT20)   | 5785.00         | 97.01         | 0.13        |
| NVNT      | ANT1    | 802.11n(HT20)   | 5825.00         | 97.01         | 0.13        |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5745.00         | 98.52         | 0.00        |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5785.00         | 97.01         | 0.13        |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5825.00         | 97.01         | 0.13        |
| NVNT      | ANT1    | 802.11n(HT40)   | 5755.00         | 94.12         | 0.26        |
| NVNT      | ANT1    | 802.11n(HT40)   | 5795.00         | 94.12         | 0.26        |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5755.00         | 97.10         | 0.13        |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5795.00         | 94.12         | 0.26        |
| NVNT      | ANT1    | 802.11ac(VHT80) | 5775.00         | 88.89         | 0.51        |

Note: The measure-and-sum technique shall be used for measuring in-band transmit power of a device. Total power is the sum of the conducted power levels measured at the various output ports.

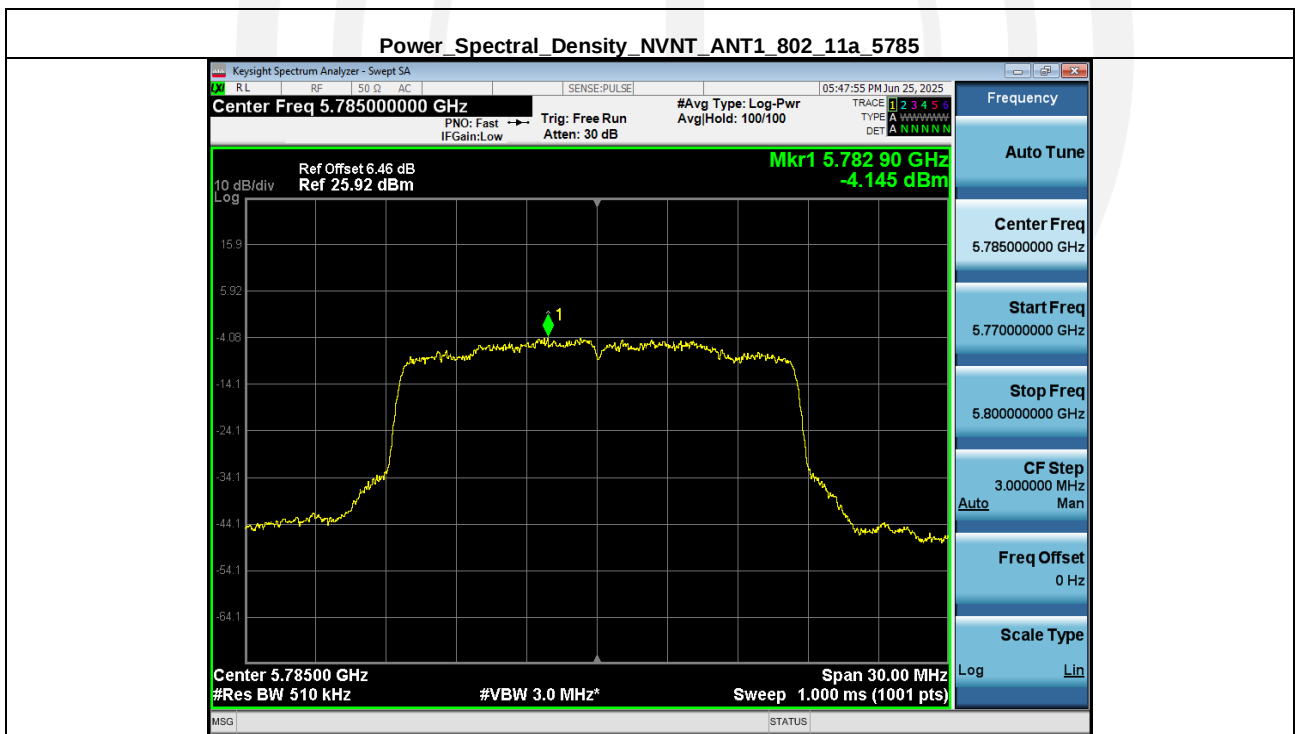
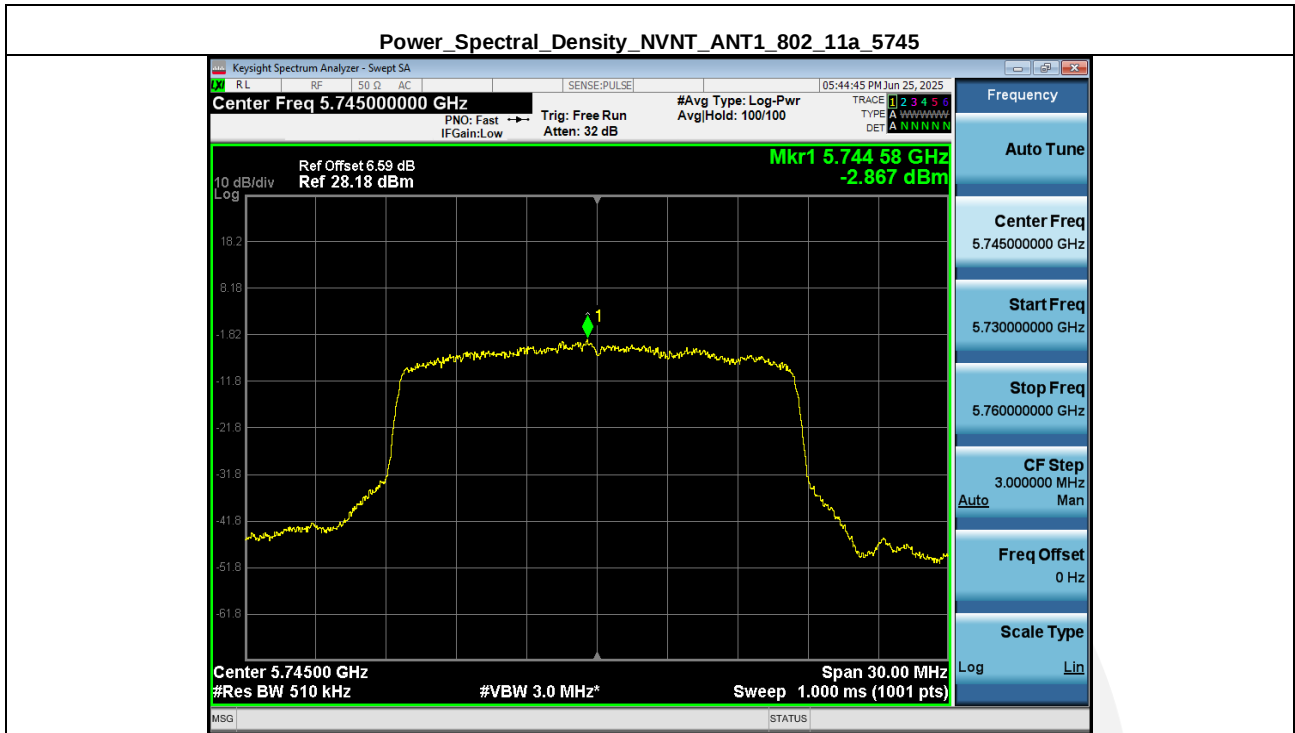
#### 4.5 Power Spectral Density

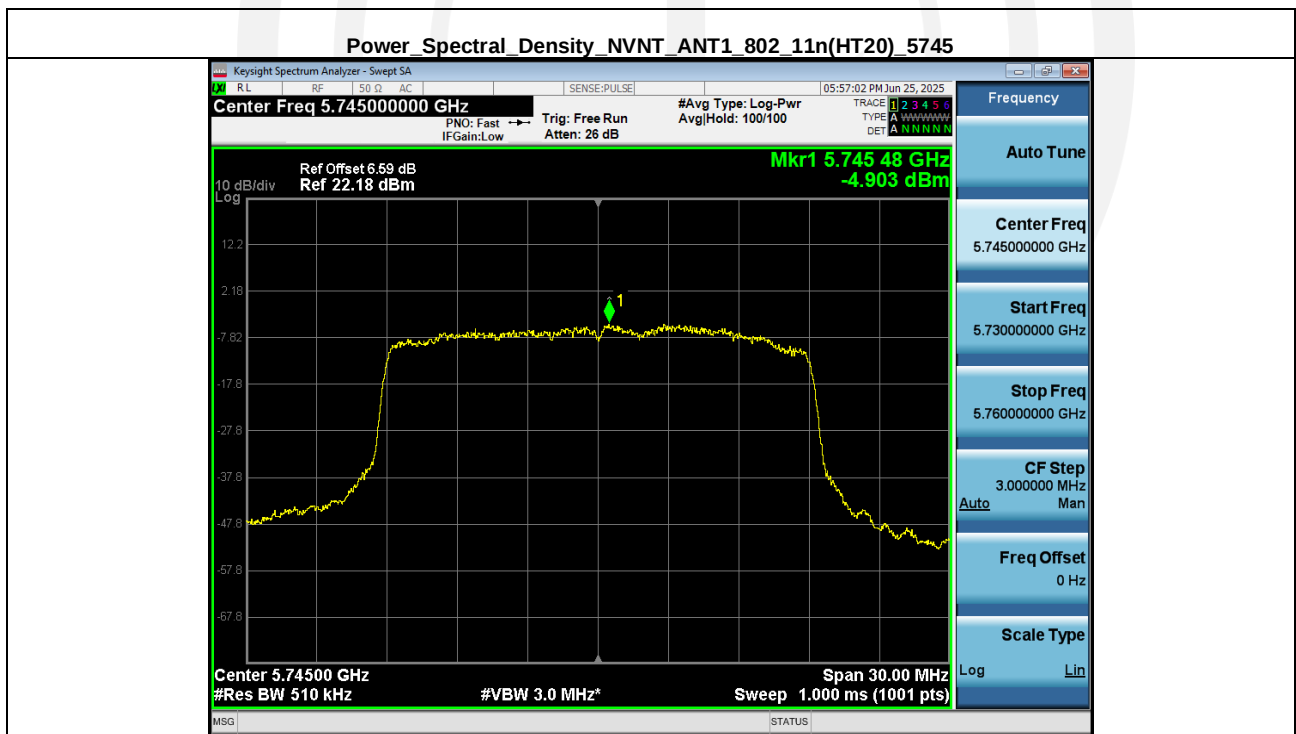
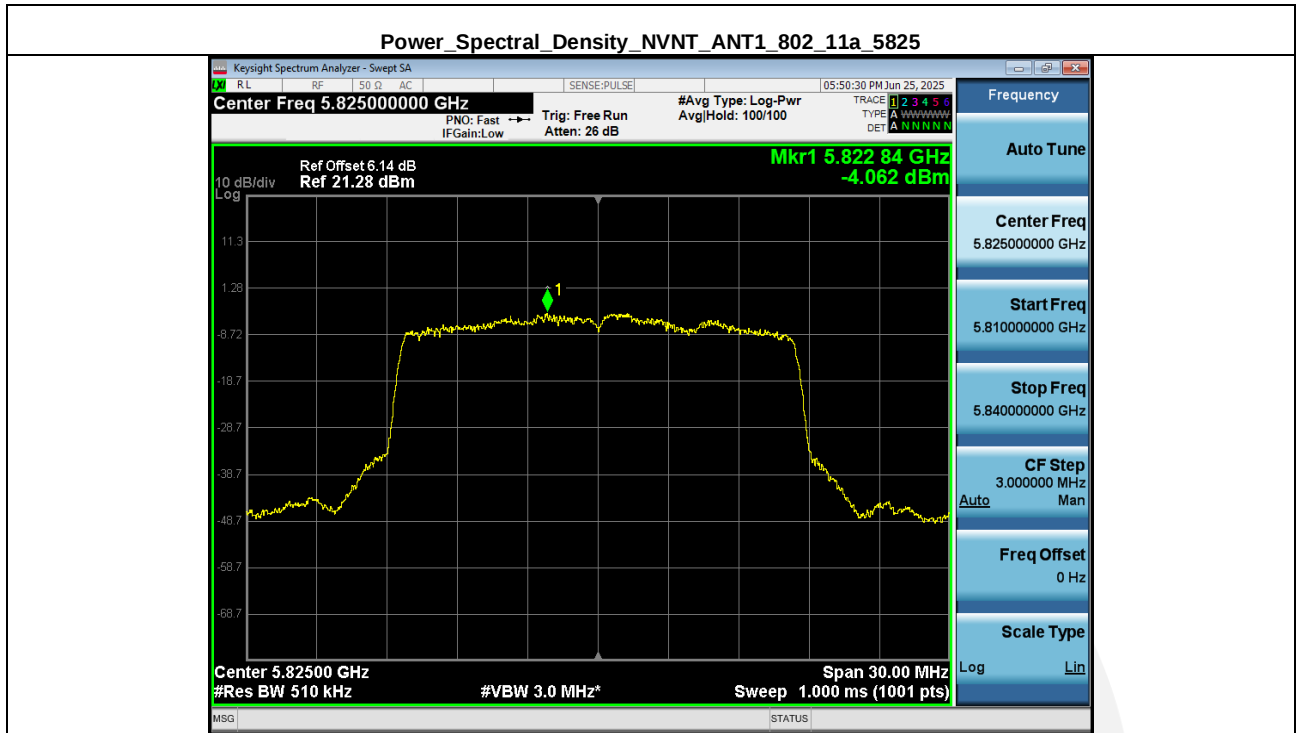
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 E Section 15.407, RSS-247 §6.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Test Method:      | KDB 789033 D02 General UNII Test Procedures New Rules v02r01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Limit:            | <p>FCC: 1. <math>\leq 11.00 \text{ dBm/MHz}</math> for 5150MHz-5250MHz, 5250-5350MHz and 5470-5725 MHz</p> <p>2. <math>\leq 30.00 \text{ dBm/500KHz}</math> for 5725MHz-5850MHz</p> <p>IC: 1. For the 5.15-5.25 GHz, The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.</p> <p>2. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Test setup:       |  <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Test procedure:   | <ol style="list-style-type: none"> <li>1) Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, "Compute power..."</li> <li>2) Use the peak search function on the instrument to find the peak of the spectrum.</li> <li>3) Make the following adjustments to the peak value of the spectrum, if applicable: <ol style="list-style-type: none"> <li>a) If Method SA-2 or SA-2 Alternative was used, add <math>10 \log(1/x)</math>, where x is the duty cycle, to the peak of the spectrum.</li> <li>b) If Method SA-3 Alternative was used and the linear mode was used in step E)2)g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.</li> </ol> </li> <li>4) The result is the PSD.</li> </ol> |
| Test Instruments: | Refer to section 3.0 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Test mode:        | Refer to section 2.2 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

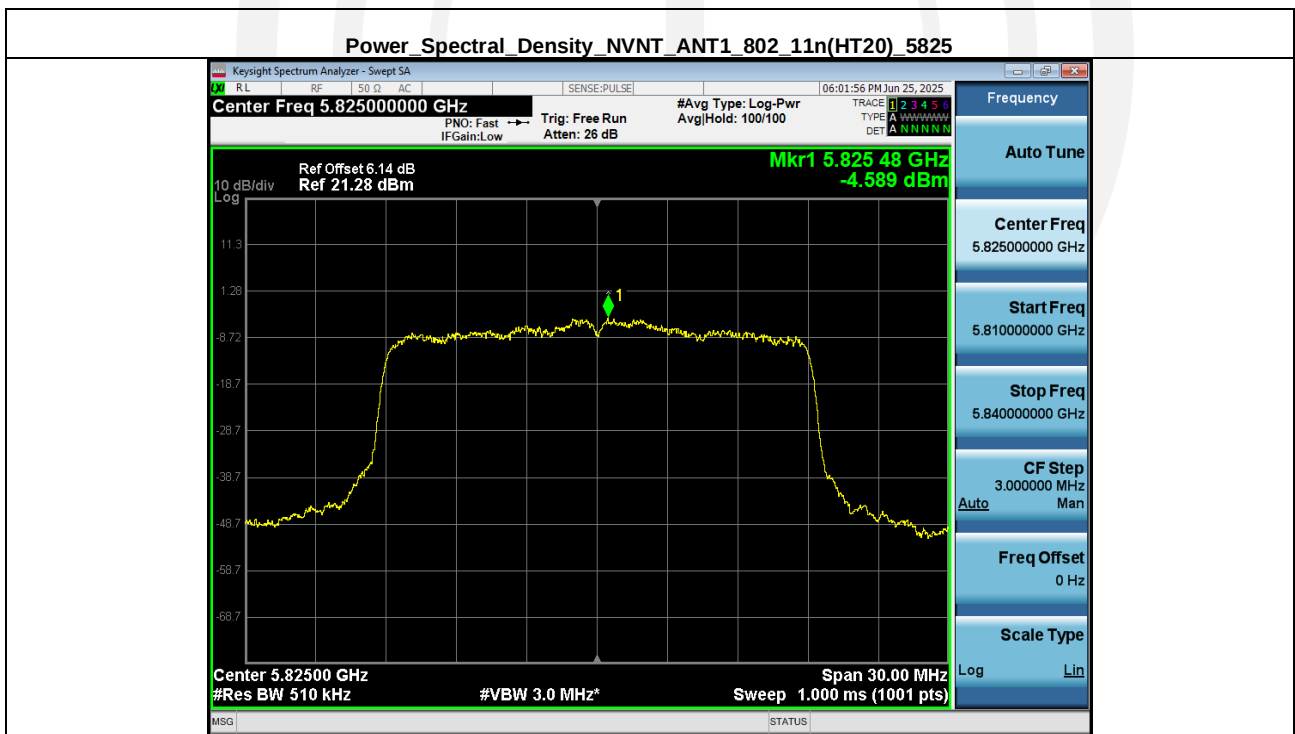
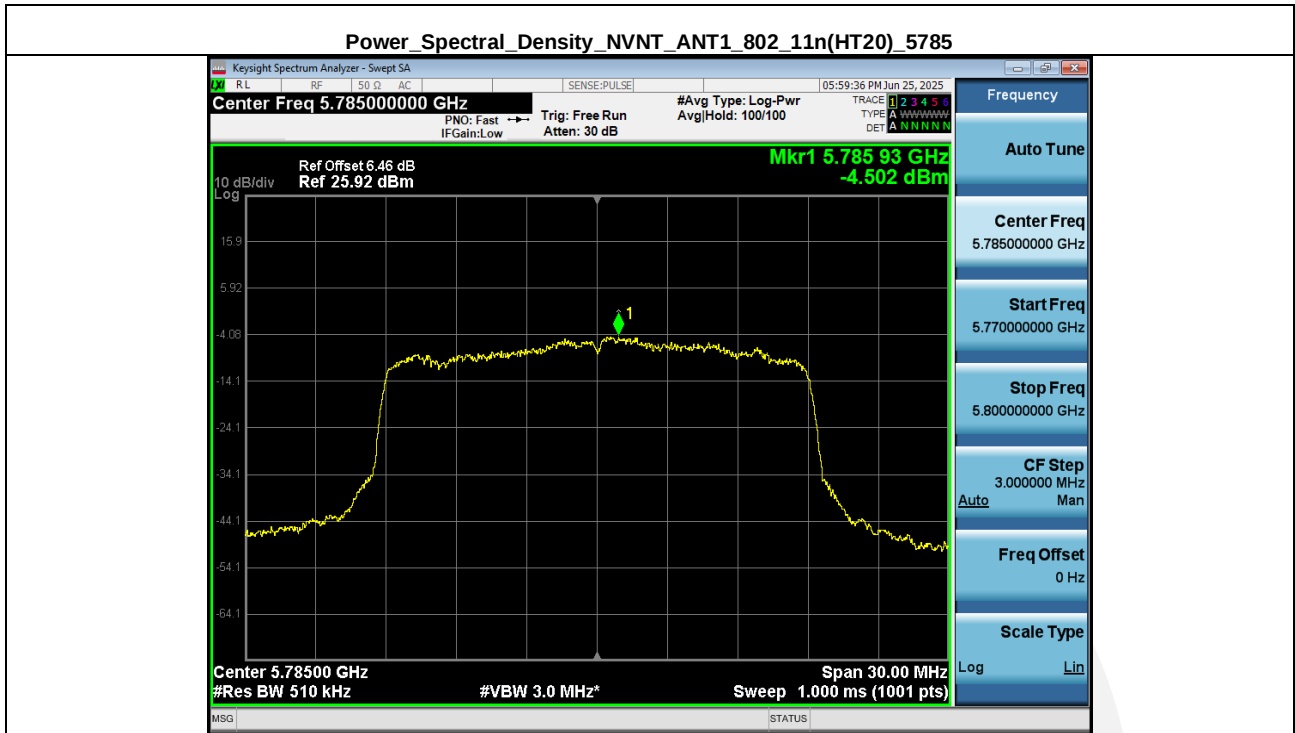
**Measurement Data****Band 4 (5725 – 5850 MHz) SISO:**

| Condition | Antenna | Modulation      | Frequency (MHz) | PSD_SA (dBm/RBW) | Duty factor(dB) | RB factor(dB) | PSD (dBm/500kHz) | Limit (dBm/500kHz) | Result |
|-----------|---------|-----------------|-----------------|------------------|-----------------|---------------|------------------|--------------------|--------|
| NVNT      | ANT1    | 802.11a         | 5745.00         | -2.87            | 0.12            | -0            | -2.83            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11a         | 5785.00         | -4.14            | 0.12            | -0            | -4.11            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11a         | 5825.00         | -4.06            | 0.12            | -0            | -4.03            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5745.00         | -4.90            | 0.13            | -0            | -4.86            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5785.00         | -4.50            | 0.13            | -0            | -4.46            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5825.00         | -4.59            | 0.13            | -0            | -4.55            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5745.00         | -3.92            | 0.00            | -0            | -4.01            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5785.00         | -4.86            | 0.13            | -0            | -4.82            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5825.00         | -4.82            | 0.13            | -0            | -4.78            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5755.00         | -9.14            | 0.26            | -0            | -8.97            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5795.00         | -7.48            | 0.26            | -0            | -7.31            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5755.00         | -8.86            | 0.13            | -0            | -8.81            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5795.00         | -7.95            | 0.26            | -0            | -7.78            | 30                 | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | 5775.00         | -13.74           | 0.51            | -0            | -13.32           | 30                 | Pass   |

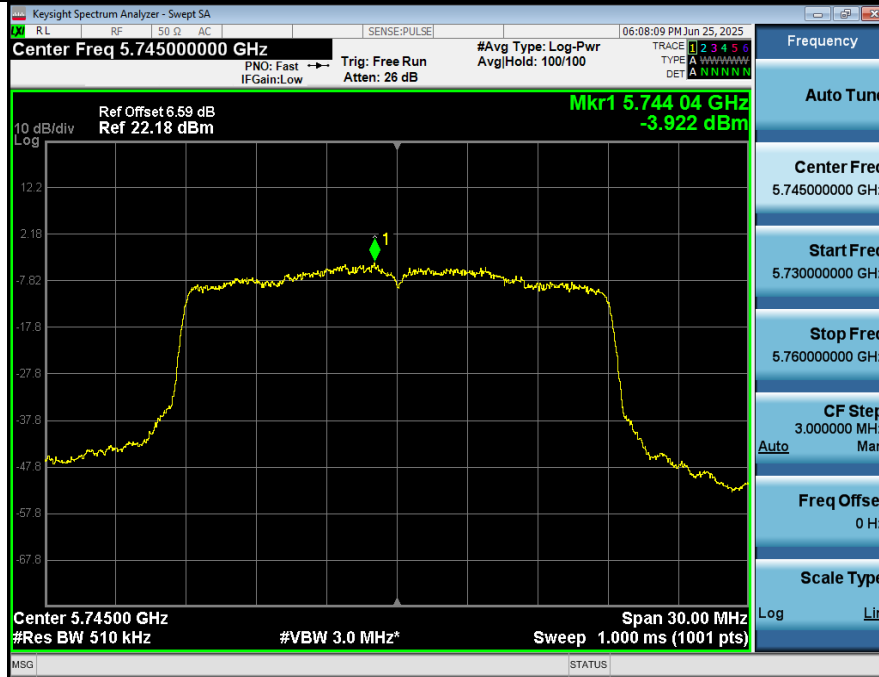




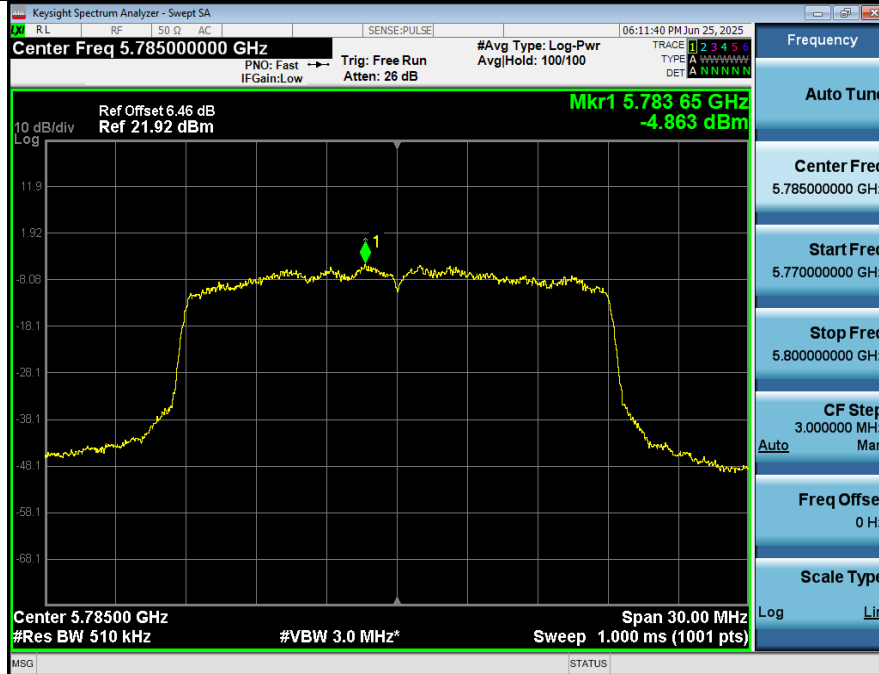


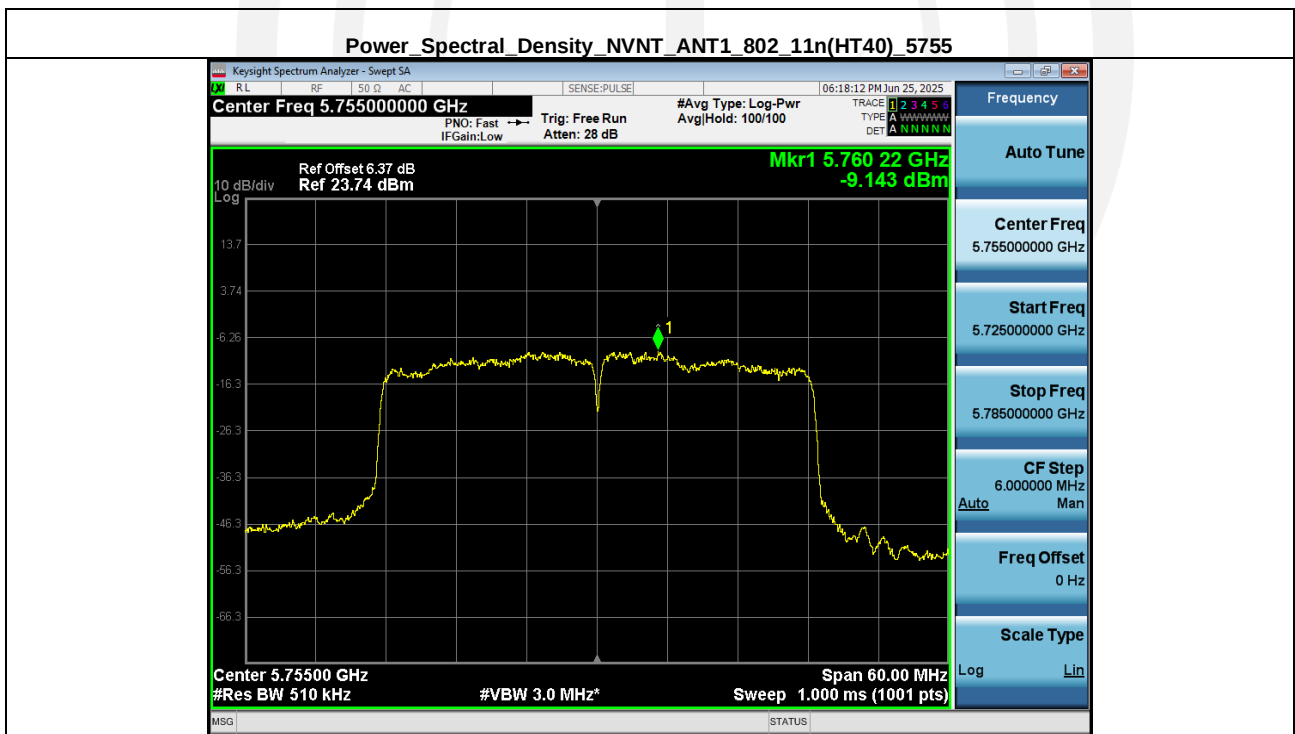
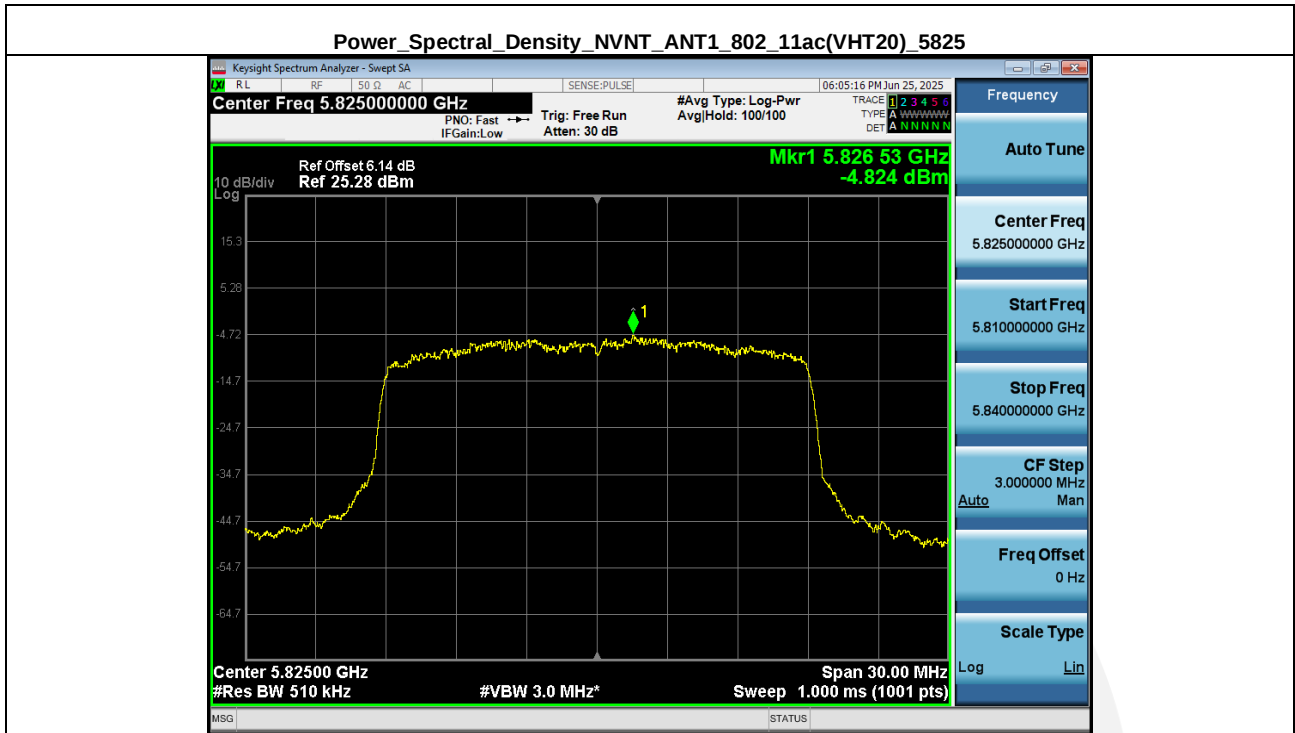


Power Spectral Density\_NVNT\_ANT1\_802\_11ac(VHT20)\_5745

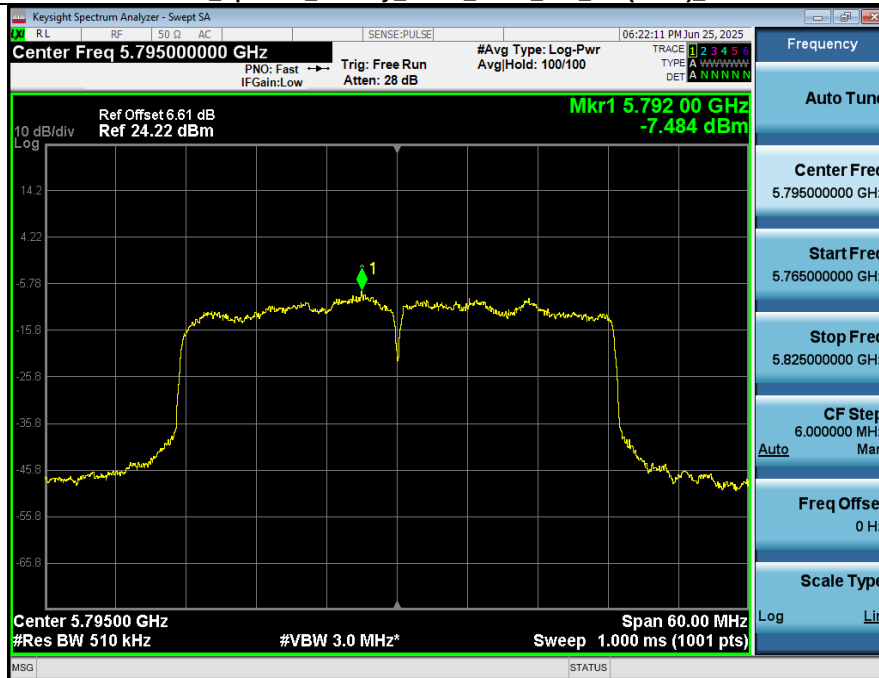


Power Spectral Density\_NVNT\_ANT1\_802\_11ac(VHT20)\_5785

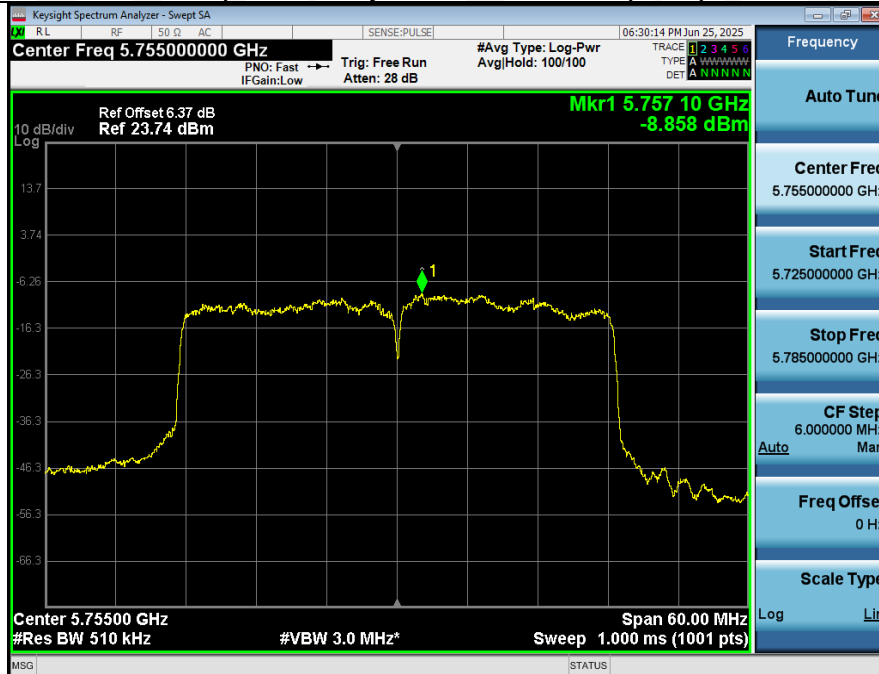


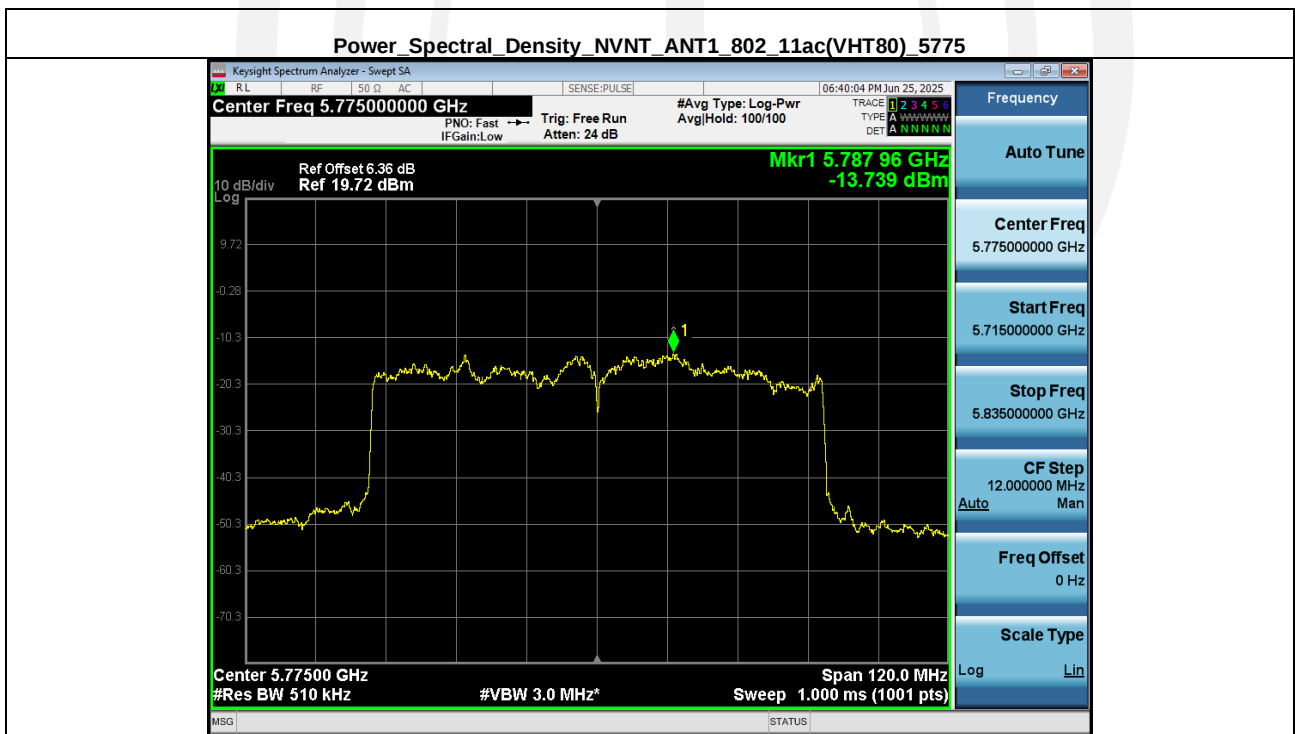
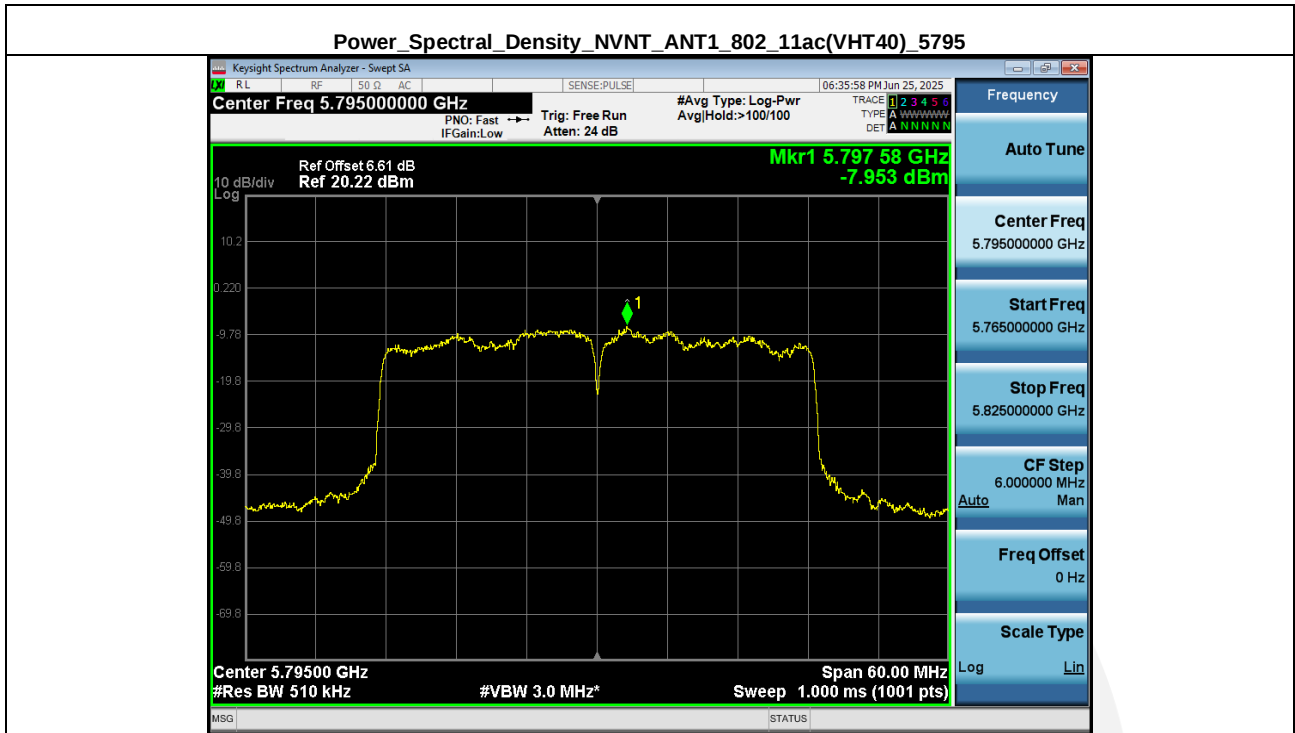


Power Spectral Density\_NVNT\_ANT1\_802\_11n(HT40)\_5795



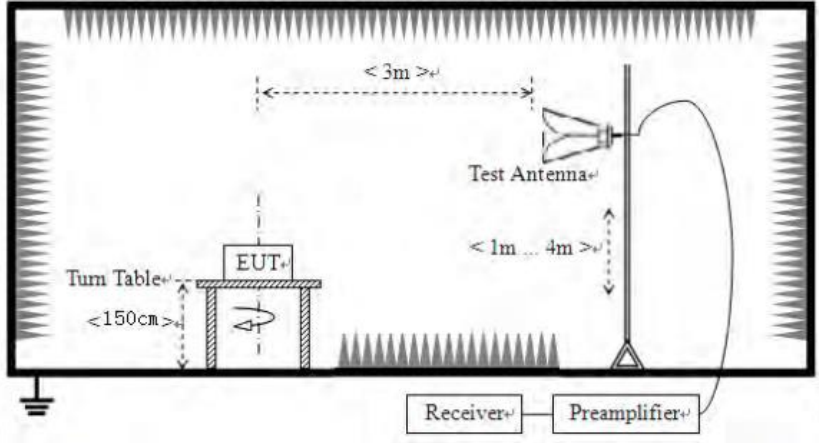
Power Spectral Density\_NVNT\_ANT1\_802\_11ac(VHT40)\_5755





#### 4.6 Band Edge

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                  |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------|------------------|--|-----------|--------------------|--------|-------------|--------|------------------|--------------|--------|------------------|------------------|------------|------------------|-------------|------|------------------|------------|------|---------------|---------------|------------|
| Test Requirement: | FCC Part15 E Section 15.407 and 15.205, RSS-Gen §8.9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Test Method:      | ANSI C63.10:2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Test site:        | Measurement Distance: 3m (Semi-Anechoic Chamber)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Receiver setup:   | <table><tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr><tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr><tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr><tr><td>AV</td><td>1MHz</td><td>3MHz</td><td>Average Value</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |        |                  |  | Frequency | Detector           | RBW    | VBW         | Remark | 30MHz-1GHz       | Quasi-peak   | 100KHz | 300KHz           | Quasi-peak Value | Above 1GHz | Peak             | 1MHz        | 3MHz | Peak Value       | AV         | 1MHz | 3MHz          | Average Value |            |
| Frequency         | Detector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | RBW              | VBW    | Remark           |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| 30MHz-1GHz        | Quasi-peak                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 100KHz           | 300KHz | Quasi-peak Value |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Above 1GHz        | Peak                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1MHz             | 3MHz   | Peak Value       |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
|                   | AV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1MHz             | 3MHz   | Average Value    |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Limit:            | <table><tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr><tr><td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr><tr><td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr><tr><td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr><tr><td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr><tr><td rowspan="2">Above 1GHz</td><td>54.0</td><td>Average Value</td></tr><tr><td>68.2</td><td>Peak Value</td></tr></table> <p>Undesirable emission limits:</p> <p>(1) For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.</p> <p>(2) For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band.</p> <p>(3) For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.</p> <p>(4) For transmitters operating in the 5.725-5.85 GHz band:<br/>All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</p> |                  |        |                  |  | Frequency | Limit (dBuV/m @3m) | Remark | 30MHz-88MHz | 40.0   | Quasi-peak Value | 88MHz-216MHz | 43.5   | Quasi-peak Value | 216MHz-960MHz    | 46.0       | Quasi-peak Value | 960MHz-1GHz | 54.0 | Quasi-peak Value | Above 1GHz | 54.0 | Average Value | 68.2          | Peak Value |
| Frequency         | Limit (dBuV/m @3m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Remark           |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| 30MHz-88MHz       | 40.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Quasi-peak Value |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| 88MHz-216MHz      | 43.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Quasi-peak Value |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| 216MHz-960MHz     | 46.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Quasi-peak Value |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| 960MHz-1GHz       | 54.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Quasi-peak Value |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Above 1GHz        | 54.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Average Value    |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
|                   | 68.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Peak Value       |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Test Procedure:   | <p>a. The EUT was placed on the top of a rotating table 1.5 m above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</p> <p>b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</p> <p>c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</p> <p>d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</p> <p>e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</p> <p>f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |

|                   |                                                                                                                                                                                                            |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. |
| Test setup:       | <p>Above 1GHz</p>                                                                                                        |
| Test Instruments: | Refer to section 3.0 for details                                                                                                                                                                           |
| Test mode:        | Refer to section 2.2 for details                                                                                                                                                                           |
| Test results:     | Pass                                                                                                                                                                                                       |

## Remark:

According to KDB 789033 D02 v02r01 section G) 1) (d), for For measurements above 1000 MHz @ 3m distance, the limit of field strength is computed as follows:

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2,$$

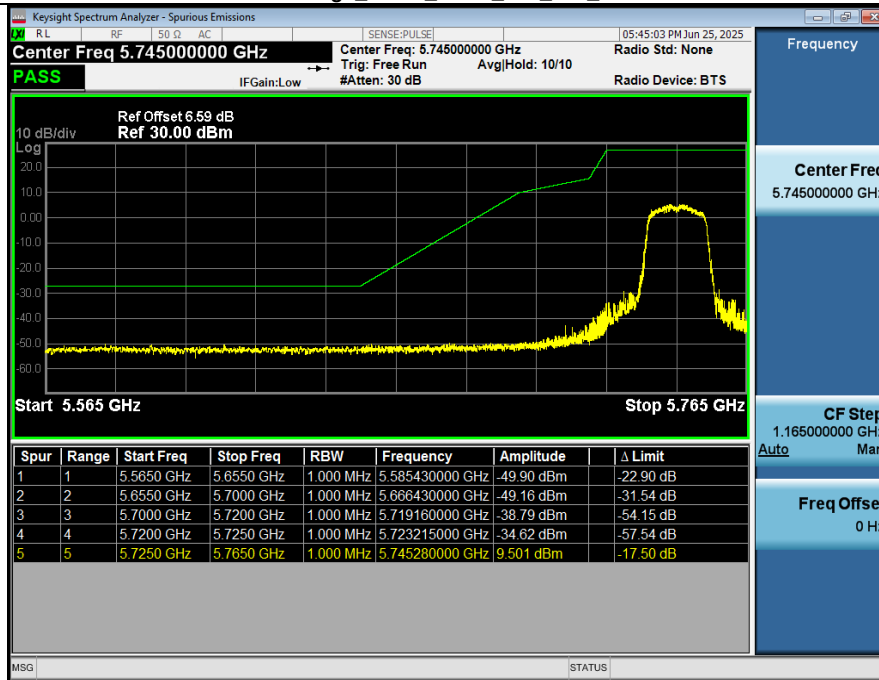
For example, if EIRP = -27dBm

$$E[\text{dBuV/m}] = -27 + 95.2 = 68.2\text{dBuV/m}.$$

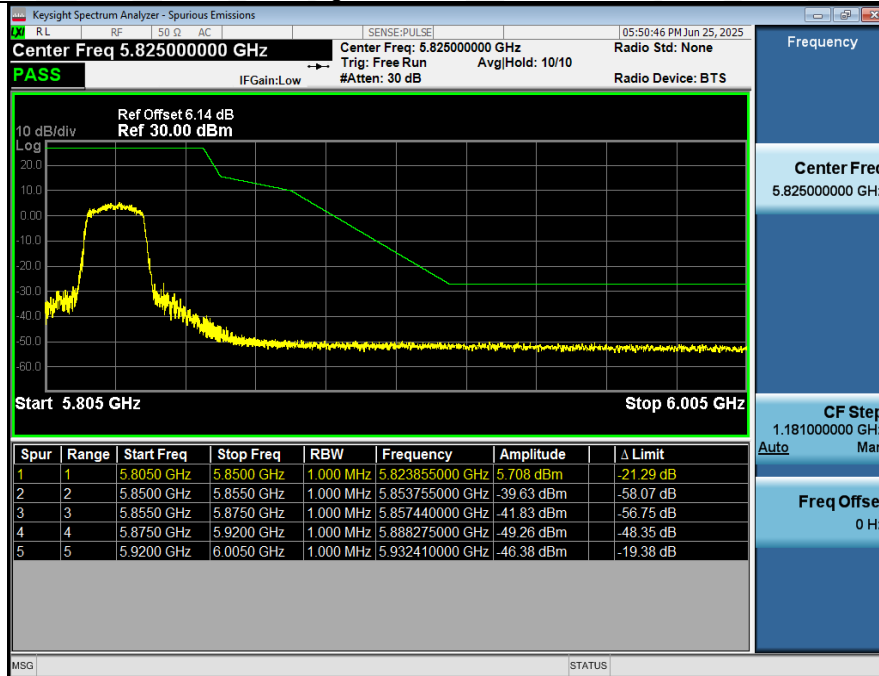
**Measurement Data:****Band4**

| Condition | Antenna | Modulation      | TX_Frequency (MHz) | Frequency Area(MHz) | Frequency(MHz) | Amplitude(dBm) | Limit(dBm) | Result |
|-----------|---------|-----------------|--------------------|---------------------|----------------|----------------|------------|--------|
| NVNT      | ANT1    | 802.11a         | LCH                | 5565-5655           | 5585.430       | -49.90         | -27.00     | Pass   |
| NVNT      | ANT1    | 802.11a         | LCH                | 5655-5700           | 5666.430       | -49.16         | -17.60     | Pass   |
| NVNT      | ANT1    | 802.11a         | LCH                | 5700-5720           | 5719.160       | -38.79         | 15.36      | Pass   |
| NVNT      | ANT1    | 802.11a         | LCH                | 5720-5725           | 5723.215       | -34.62         | 22.93      | Pass   |
| NVNT      | ANT1    | 802.11a         | HCH                | 5850-5855           | 5853.755       | -39.63         | 18.44      | Pass   |
| NVNT      | ANT1    | 802.11a         | HCH                | 5855-5875           | 5857.440       | -41.83         | 14.92      | Pass   |
| NVNT      | ANT1    | 802.11a         | HCH                | 5875-5920           | 5888.275       | -49.26         | -0.91      | Pass   |
| NVNT      | ANT1    | 802.11a         | HCH                | 5920-6005           | 5932.410       | -46.38         | -27.00     | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | LCH                | 5565-5655           | 5632.860       | -49.61         | -27.00     | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | LCH                | 5655-5700           | 5672.325       | -49.89         | -12.76     | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | LCH                | 5700-5720           | 5715.160       | -40.58         | 14.24      | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | LCH                | 5720-5725           | 5724.320       | -34.51         | 25.45      | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | HCH                | 5850-5855           | 5854.545       | -40.67         | 16.64      | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | HCH                | 5855-5875           | 5856.280       | -42.13         | 15.24      | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | HCH                | 5875-5920           | 5914.375       | -49.15         | -22.38     | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | HCH                | 5920-6005           | 5927.055       | -44.55         | -27.00     | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | LCH                | 5565-5655           | 5654.730       | -50.07         | -27.00     | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | LCH                | 5655-5700           | 5661.615       | -49.49         | -21.56     | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | LCH                | 5700-5720           | 5713.000       | -42.62         | 13.64      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | LCH                | 5720-5725           | 5722.620       | -37.11         | 21.57      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | HCH                | 5850-5855           | 5852.560       | -40.99         | 21.16      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | HCH                | 5855-5875           | 5855.280       | -41.39         | 15.52      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | HCH                | 5875-5920           | 5913.520       | -49.50         | -21.67     | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | HCH                | 5920-6005           | 5988.935       | -46.60         | -27.00     | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | LCH                | 5595-5655           | 5653.740       | -50.08         | -27.00     | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | LCH                | 5655-5700           | 5690.910       | -45.81         | 2.53       | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | LCH                | 5700-5720           | 5718.120       | -31.13         | 15.07      | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | LCH                | 5720-5725           | 5721.245       | -29.60         | 18.44      | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | HCH                | 5850-5855           | 5853.680       | -41.54         | 18.61      | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | HCH                | 5855-5875           | 5855.300       | -43.59         | 15.52      | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | HCH                | 5875-5920           | 5909.740       | -49.14         | -18.56     | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | HCH                | 5920-5955           | 5933.440       | -44.26         | -27.00     | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | LCH                | 5595-5655           | 5624.040       | -49.96         | -27.00     | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | LCH                | 5655-5700           | 5692.440       | -47.16         | 3.78       | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | LCH                | 5700-5720           | 5716.400       | -36.01         | 14.59      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | LCH                | 5720-5725           | 5720.490       | -34.21         | 16.72      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | HCH                | 5850-5855           | 5854.695       | -42.74         | 16.30      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | HCH                | 5855-5875           | 5860.520       | -45.33         | 14.05      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | HCH                | 5875-5920           | 5892.865       | -48.83         | -4.69      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | HCH                | 5920-5955           | 5931.235       | -44.26         | -27.00     | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | MCH                | 5650-5655           | 5651.395       | -46.55         | -27.00     | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | MCH                | 5655-5700           | 5683.485       | -39.50         | -3.58      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | MCH                | 5700-5720           | 5714.900       | -35.34         | 14.17      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | MCH                | 5720-5725           | 5720.295       | -32.63         | 16.27      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | MCH                | 5850-5855           | 5854.920       | -38.43         | 15.78      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | MCH                | 5855-5875           | 5869.120       | -38.44         | 11.65      | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | MCH                | 5875-5920           | 5880.310       | -43.65         | 5.63       | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | MCH                | 5920-5925           | 5924.375       | -44.81         | -27.00     | Pass   |

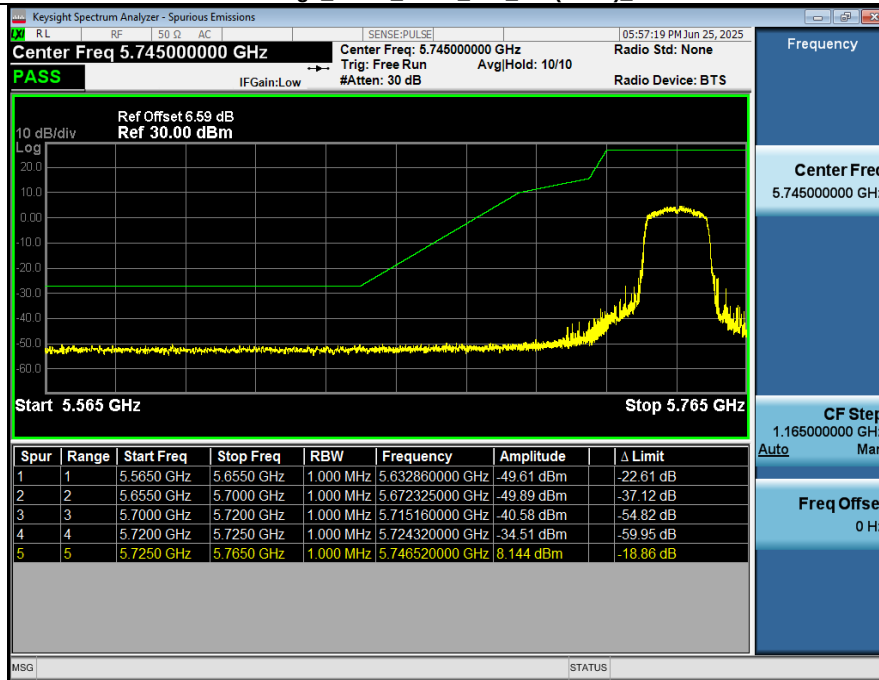
## Bandedge\_NVNT\_ANT1\_802\_11a\_5745



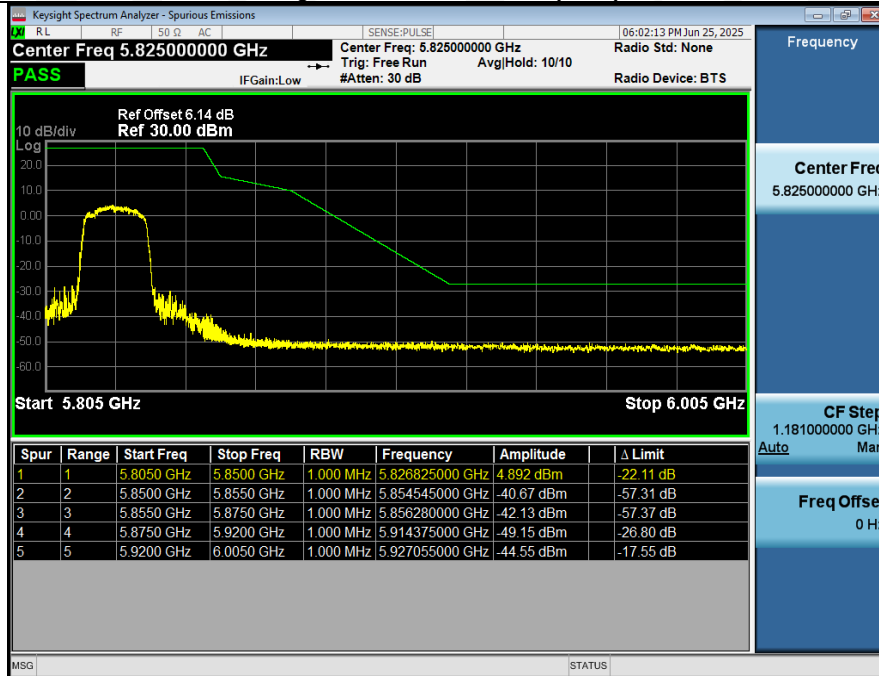
## Bandedge\_NVNT\_ANT1\_802\_11a\_5825



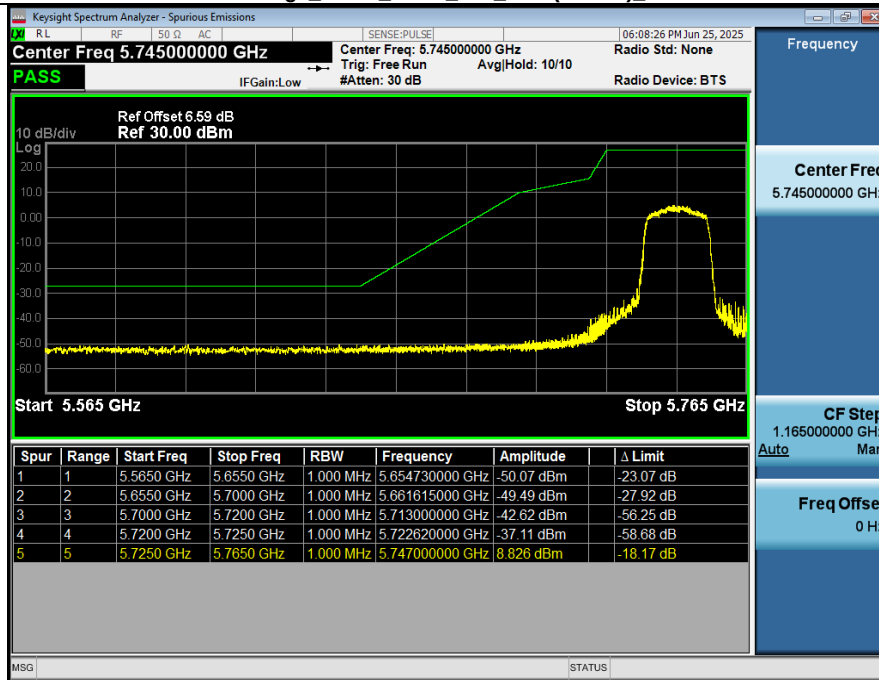
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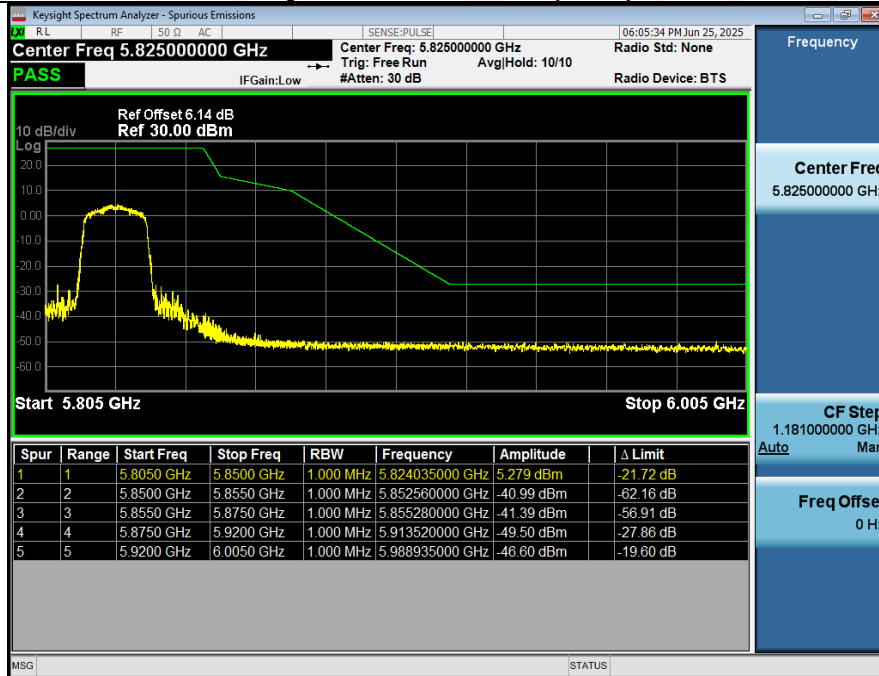
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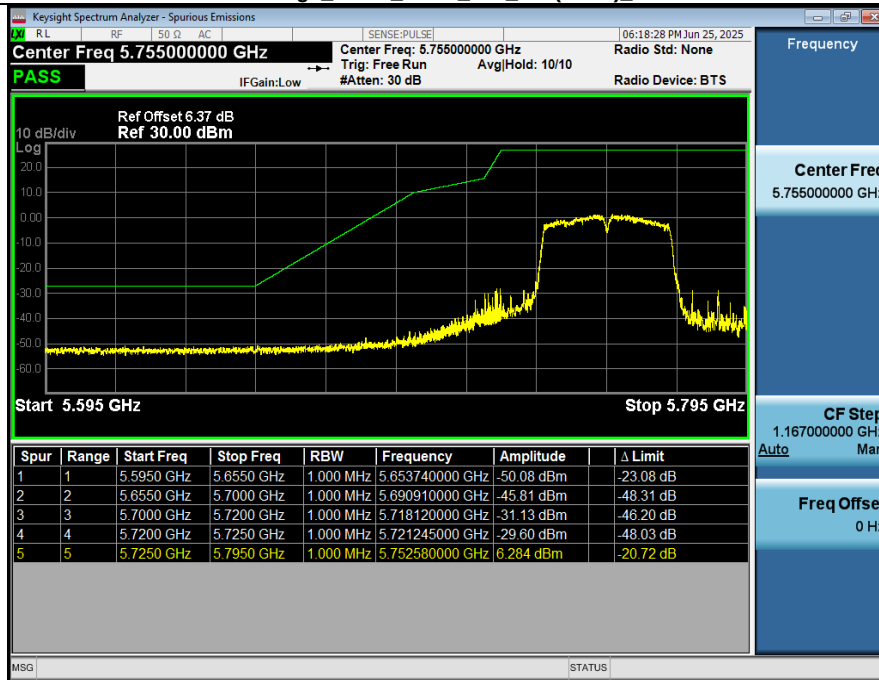
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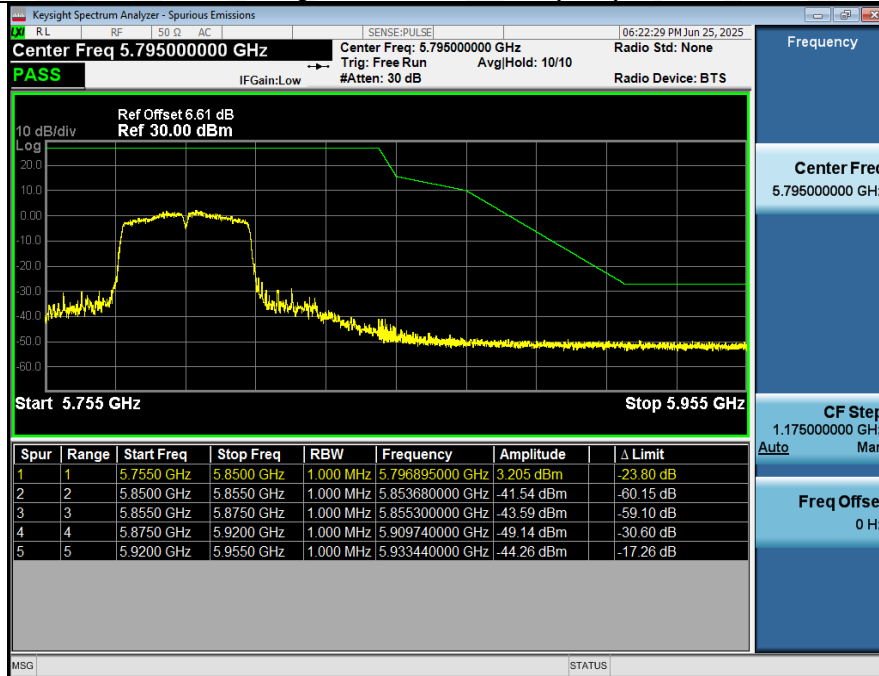
## Bandedge\_NVNT\_ANT1\_802\_11ac(VHT20)\_5825



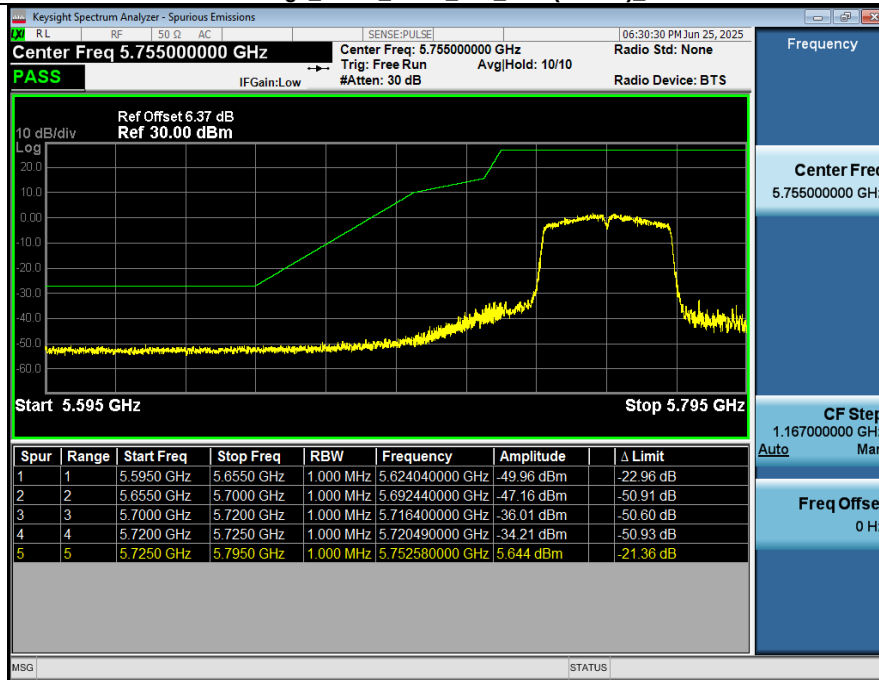
## Bandedge\_NVNT\_ANT1\_802\_11n(HT40)\_5755



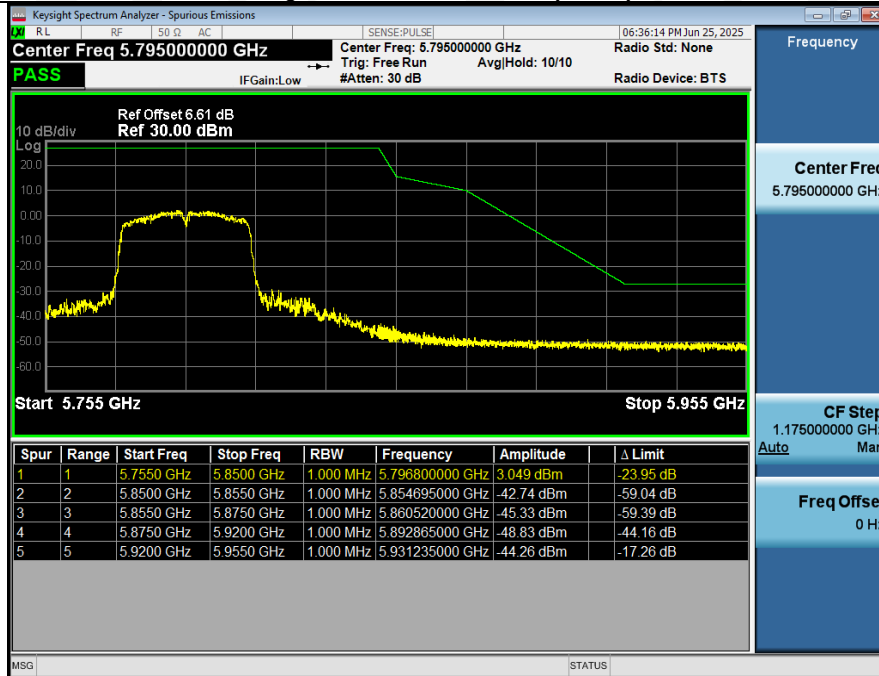
## Bandedge\_NVNT\_ANT1\_802\_11n(HT40)\_5795



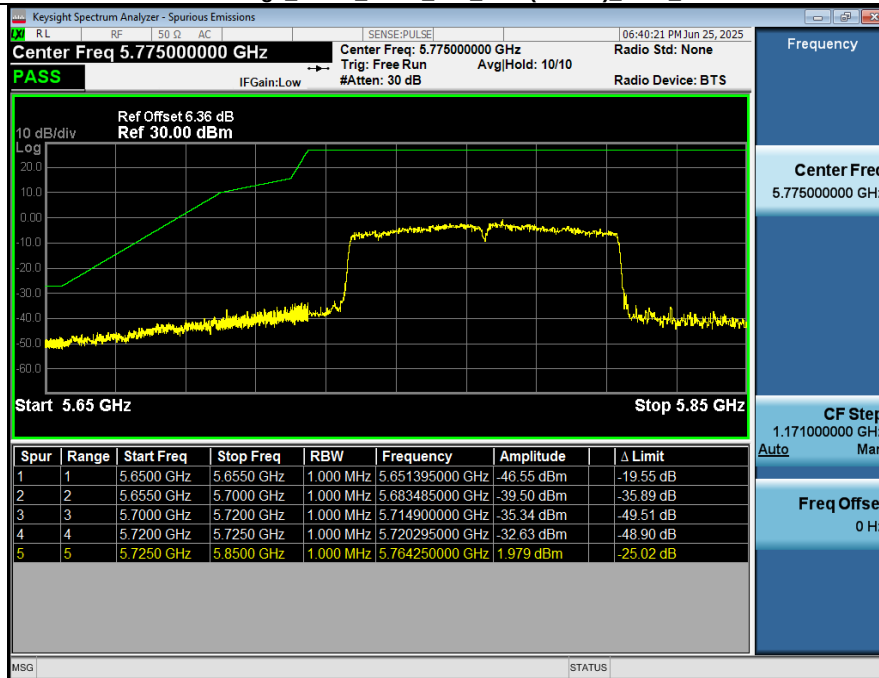
## Bandedge\_NVNT\_ANT1\_802\_11ac(VHT40)\_5755



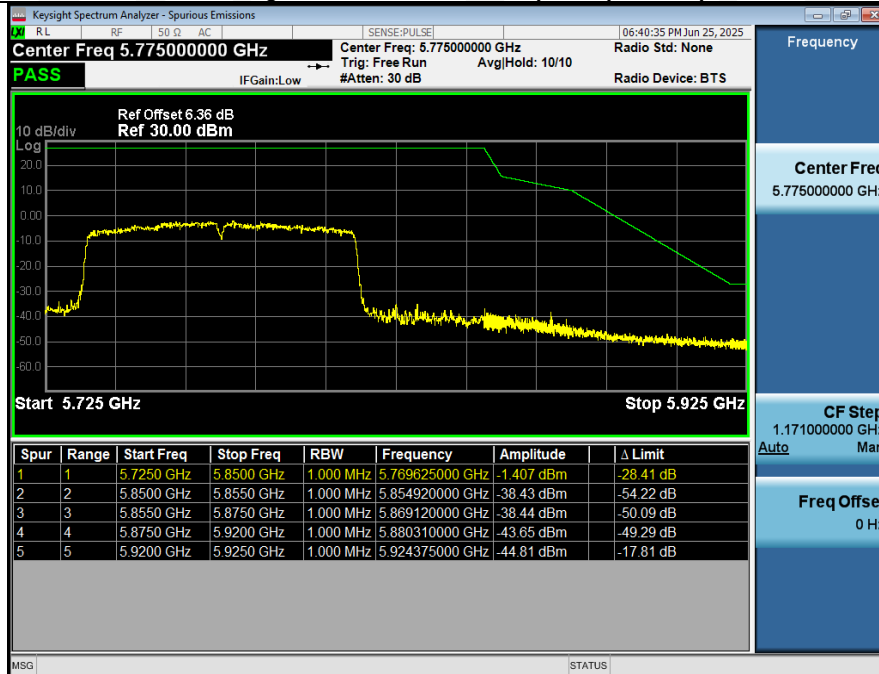
## Bandedge\_NVNT\_ANT1\_802\_11ac(VHT40)\_5795



## Bandedge\_NVNT\_ANT1\_802\_11ac(VHT80)\_5775\_low

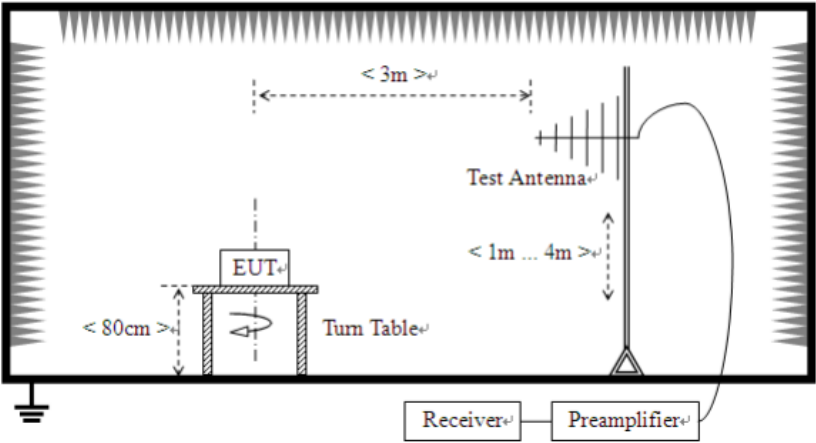


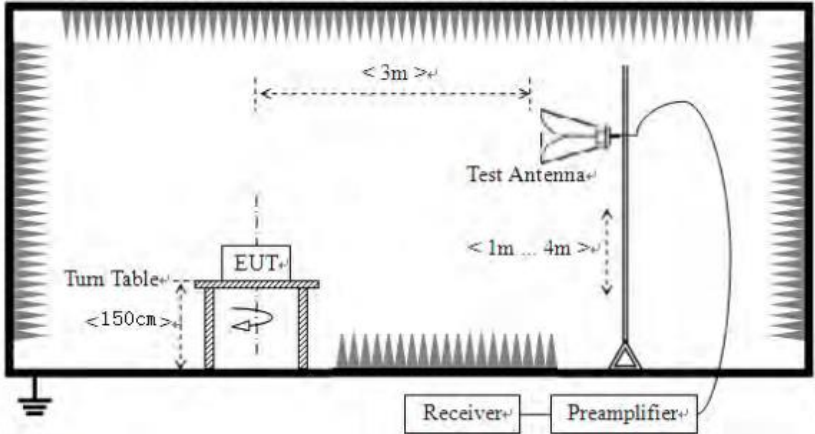
## Bandedge\_NVNT\_ANT1\_802\_11ac(VHT80)\_5775\_up



#### 4.7 Radiated Emission

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |                    |        |                  |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|--------|------------------|
| Test Requirement:     | FCC Part15 C Section 15.209 and 15.205, RSS-Gen §8.9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |                    |        |                  |
| Test Method:          | ANSI C63.10:2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |                    |        |                  |
| Test Frequency Range: | 30MHz to 40GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |                    |        |                  |
| Test site:            | Measurement Distance: 3m (Semi-Anechoic Chamber)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |                    |        |                  |
| Receiver setup:       | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Detector   | RBW                | VBW    | Value            |
|                       | 30MHz-1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Quasi-peak | 100KHz             | 300KHz | Quasi-peak Value |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Peak       | 1MHz               | 3MHz   | Peak Value       |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | AV         | 1MHz               | 3MHz   | Average Value    |
| Limit:                | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            | Limit (dBuV/m @3m) |        | Remark           |
|                       | 30MHz-88MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            | 40.0               |        | Quasi-peak Value |
|                       | 88MHz-216MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            | 43.5               |        | Quasi-peak Value |
|                       | 216MHz-960MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            | 46.0               |        | Quasi-peak Value |
|                       | 960MHz-1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            | 54.0               |        | Quasi-peak Value |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            | 74.0               |        | Peak Value       |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            | 54.0               |        | Average Value    |
| Test Procedure:       | <p>Substitution method was performed to determine the actual ERP emission levels of the EUT.</p> <p>The following test procedure as below:</p> <p>1&gt;.Below 1GHz test procedure:</p> <ol style="list-style-type: none"><li>1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li><li>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.</li><li>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li><li>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.</li><li>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li><li>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</li></ol> <p>2&gt;.Above 1GHz test procedure:</p> <ol style="list-style-type: none"><li>1. On the test site as test setup graph above,the EUT shall be placed at the 1.5m support on the turntable and in the position closest to normal use as declared by the provider.</li><li>2. The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter.The output of the test antenna shall be connected to the measuring receiver.</li><li>3. The transmitter shall be switched on, if possible, without modulation and the measuring receiver shall be tuned to the frequency of the</li></ol> |            |                    |        |                  |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             | <p>transmitter under test.</p> <ol style="list-style-type: none"> <li>The test antenna shall be raised and lowered from 1m to 4m until a maximum signal level is detected by the measuring receiver. Then the turntable should be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.</li> <li>Repeat step 4 for test frequency with the test antenna polarized horizontally.</li> <li>Remove the transmitter and replace it with a substitution antenna</li> <li>Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a nonradiating cable. With the antennas at both ends vertically polarized, and with the signal generator tuned to a particular test frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output.</li> <li>Repeat step 7 with both antennas horizontally polarized for each test frequency.</li> <li>Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps 7 and 8 by the power loss in the cable between the generator and the antenna, and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna by the following formula:<br/> <math display="block">\text{EIRP(dBm)} = \text{Pg(dBm)} - \text{cable loss (dB)} + \text{antenna gain (dBi)}</math>           where:<br/>           Pg is the generator output power into the substitution antenna.</li> </ol> |
| Test setup: | <p>Below 1GHz</p>  <p>Above 1GHz</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

|                   |                                                                                    |
|-------------------|------------------------------------------------------------------------------------|
|                   |  |
| Test Instruments: | Refer to section 3.0 for details                                                   |
| Test mode:        | Refer to section 2.2 for details                                                   |
| Test results:     | Pass                                                                               |

**Measurement Data:****Below 1GHz**

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamplifier Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------------|----------------|---------------------|-----------------|--------------|
| 33.34           | 48.36             | 11.26                 | 0.60            | 30.09                    | 30.13          | 40                  | -9.87           | Vertical     |
| 54.67           | 41.14             | 12.42                 | 1.30            | 30.45                    | 24.41          | 40                  | -15.59          | Vertical     |
| 120.80          | 46.44             | 9.48                  | 1.44            | 29.65                    | 27.71          | 43.5                | -15.79          | Vertical     |
| 172.22          | 43.56             | 8.83                  | 2.03            | 29.64                    | 24.78          | 43.5                | -18.72          | Vertical     |
| 441.17          | 36.73             | 16.45                 | 3.21            | 29.57                    | 26.82          | 46                  | -19.18          | Vertical     |
| 860.87          | 32.72             | 22.01                 | 4.87            | 29.32                    | 30.27          | 46                  | -15.73          | Vertical     |
| 64.26           | 36.35             | 9.09                  | 1.26            | 30.25                    | 16.45          | 40                  | -23.55          | Horizontal   |
| 99.57           | 34.00             | 11.81                 | 1.27            | 29.78                    | 17.30          | 43.5                | -26.20          | Horizontal   |
| 269.72          | 45.07             | 12.87                 | 2.56            | 30.13                    | 30.37          | 46                  | -15.63          | Horizontal   |
| 351.41          | 36.70             | 14.53                 | 2.65            | 29.76                    | 24.13          | 46                  | -21.87          | Horizontal   |
| 627.49          | 35.76             | 19.78                 | 4.18            | 29.62                    | 30.10          | 46                  | -15.90          | Horizontal   |
| 955.58          | 40.68             | 22.57                 | 5.09            | 29.13                    | 39.21          | 46                  | -6.79           | Horizontal   |

**Above 1GHz:****802.11a 5745MHz**

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.40        | 50.55             | 11.36                 | 14.74           | 32.76              | 43.89          | 68.2                | -24.31          | Vertical     |
| 15540.40        | 51.21             | 12.41                 | 18.01           | 34.50              | 47.13          | 74                  | -26.87          | Vertical     |
| 10360.27        | 52.93             | 9.47                  | 14.78           | 33.03              | 44.15          | 68.2                | -24.05          | Horizontal   |
| 15540.08        | 53.68             | 8.74                  | 18.05           | 34.85              | 45.62          | 74                  | -28.38          | Horizontal   |

**802.11a 5785MHz**

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.45        | 50.54             | 11.42                 | 14.67           | 33.07              | 43.55          | 68.2                | -24.65          | Vertical     |
| 15540.54        | 51.61             | 12.11                 | 17.69           | 34.69              | 46.71          | 74                  | -27.29          | Vertical     |
| 10360.62        | 52.24             | 9.66                  | 14.66           | 32.77              | 43.78          | 68.2                | -24.42          | Horizontal   |
| 15540.21        | 53.18             | 8.60                  | 17.72           | 34.53              | 44.97          | 74                  | -29.03          | Horizontal   |

**802.11a 5825MHz**

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.13        | 50.22             | 11.38                 | 14.87           | 33.10              | 43.36          | 68.2                | -24.84          | Vertical     |
| 15540.57        | 51.27             | 12.07                 | 18.13           | 34.60              | 46.87          | 74                  | -27.13          | Vertical     |
| 10360.16        | 52.28             | 9.43                  | 15.06           | 33.13              | 43.64          | 68.2                | -24.56          | Horizontal   |
| 15540.57        | 53.44             | 8.85                  | 17.98           | 34.52              | 45.75          | 74                  | -28.25          | Horizontal   |

**802.11n(HT20) 5745MHz**

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.32        | 50.61             | 11.45                 | 14.75           | 33.15              | 43.67          | 68.2                | -24.53          | Vertical     |
| 15540.59        | 51.71             | 12.40                 | 17.92           | 34.62              | 47.41          | 74                  | -26.59          | Vertical     |
| 10360.70        | 52.22             | 9.84                  | 14.64           | 33.02              | 43.67          | 68.2                | -24.53          | Horizontal   |
| 15540.50        | 53.83             | 8.56                  | 17.81           | 34.72              | 45.48          | 74                  | -28.52          | Horizontal   |

**802.11n(HT20) 5785MHz**

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.46        | 50.91             | 11.73                 | 14.80           | 32.89              | 44.56          | 68.2                | -23.64          | Vertical     |
| 15540.64        | 51.75             | 12.00                 | 17.92           | 34.85              | 46.82          | 74                  | -27.18          | Vertical     |
| 10360.26        | 52.48             | 9.60                  | 15.02           | 32.83              | 44.27          | 68.2                | -23.93          | Horizontal   |
| 15540.91        | 53.28             | 8.84                  | 18.16           | 34.71              | 45.57          | 74                  | -28.43          | Horizontal   |

## 802.11n(HT20) 5825MHz

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.46        | 50.88             | 11.43                 | 14.89           | 32.90              | 44.30          | 68.2                | -23.90          | Vertical     |
| 15540.04        | 51.47             | 11.94                 | 17.79           | 34.57              | 46.63          | 74                  | -27.37          | Vertical     |
| 10360.27        | 52.13             | 9.85                  | 14.98           | 32.81              | 44.14          | 68.2                | -24.06          | Horizontal   |
| 15540.12        | 53.52             | 8.83                  | 18.05           | 34.87              | 45.53          | 74                  | -28.47          | Horizontal   |

## 802.11ac(HT20) 5745MHz

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.07        | 50.69             | 11.72                 | 14.71           | 32.92              | 44.20          | 68.2                | -24.00          | Vertical     |
| 15540.57        | 51.96             | 12.43                 | 17.87           | 34.87              | 47.39          | 74                  | -26.61          | Vertical     |
| 10360.19        | 52.41             | 9.87                  | 14.80           | 32.94              | 44.15          | 68.2                | -24.05          | Horizontal   |
| 15540.81        | 53.53             | 8.79                  | 18.15           | 34.64              | 45.83          | 74                  | -28.17          | Horizontal   |

## 802.11ac(HT20) 5785MHz

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.35        | 50.88             | 11.26                 | 14.80           | 33.14              | 43.81          | 68.2                | -24.39          | Vertical     |
| 15540.06        | 52.00             | 11.90                 | 18.10           | 34.79              | 47.21          | 74                  | -26.79          | Vertical     |
| 10360.36        | 52.94             | 9.79                  | 15.02           | 33.01              | 44.74          | 68.2                | -23.46          | Horizontal   |
| 15540.95        | 53.17             | 8.56                  | 17.98           | 34.92              | 44.79          | 74                  | -29.21          | Horizontal   |

## 802.11ac(HT20) 5825MHz

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.74        | 50.22             | 11.55                 | 14.97           | 33.08              | 43.66          | 68.2                | -24.54          | Vertical     |
| 15540.16        | 51.00             | 12.18                 | 17.69           | 34.82              | 46.05          | 74                  | -27.95          | Vertical     |
| 10360.12        | 52.43             | 9.80                  | 15.00           | 32.83              | 44.41          | 68.2                | -23.79          | Horizontal   |
| 15540.70        | 53.59             | 8.74                  | 17.76           | 34.94              | 45.16          | 74                  | -28.84          | Horizontal   |

## 802.11n(HT40) 5755MHz

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.40        | 50.35             | 11.44                 | 14.84           | 32.93              | 43.71          | 68.2                | -24.49          | Vertical     |
| 15540.99        | 51.08             | 12.08                 | 17.77           | 34.82              | 46.11          | 74                  | -27.89          | Vertical     |
| 10360.25        | 52.86             | 9.49                  | 14.95           | 32.78              | 44.51          | 68.2                | -23.69          | Horizontal   |
| 15540.96        | 53.18             | 8.74                  | 17.80           | 34.57              | 45.14          | 74                  | -28.86          | Horizontal   |

## 802.11n(HT40) 5795MHz

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.33        | 50.46             | 11.45                 | 14.66           | 32.73              | 43.84          | 68.2                | -24.36          | Vertical     |
| 15540.40        | 51.71             | 12.11                 | 18.12           | 34.90              | 47.05          | 74                  | -26.95          | Vertical     |
| 10360.52        | 52.71             | 9.77                  | 14.78           | 32.83              | 44.42          | 68.2                | -23.78          | Horizontal   |
| 15540.94        | 53.06             | 8.61                  | 18.08           | 34.61              | 45.14          | 74                  | -28.86          | Horizontal   |

## 802.11ac(HT40) 5755MHz

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.06        | 50.54             | 11.24                 | 14.70           | 33.03              | 43.44          | 68.2                | -24.76          | Vertical     |
| 15540.39        | 51.45             | 12.37                 | 18.06           | 34.46              | 47.43          | 74                  | -26.57          | Vertical     |
| 10360.28        | 52.53             | 9.82                  | 15.06           | 32.80              | 44.62          | 68.2                | -23.58          | Horizontal   |
| 15540.90        | 53.27             | 8.99                  | 17.96           | 34.59              | 45.62          | 74                  | -28.38          | Horizontal   |

## 802.11ac(HT40) 5795MHz

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.90        | 50.39             | 11.62                 | 14.85           | 32.95              | 43.90          | 68.2                | -24.30          | Vertical     |
| 15540.76        | 51.54             | 12.12                 | 17.77           | 34.72              | 46.71          | 74                  | -27.29          | Vertical     |
| 10360.55        | 52.76             | 9.82                  | 14.81           | 32.99              | 44.40          | 68.2                | -23.80          | Horizontal   |
| 15540.75        | 53.56             | 8.77                  | 17.70           | 34.71              | 45.33          | 74                  | -28.67          | Horizontal   |

## 802.11ac(HT80) 5775MHz

| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
|-----------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-----------------|--------------|
| 10360.29        | 50.61             | 11.57                 | 15.06           | 33.01              | 44.23          | 68.2                | -23.97          | Vertical     |
| 15540.96        | 51.26             | 12.20                 | 17.81           | 34.54              | 46.73          | 74                  | -27.27          | Vertical     |
| 10360.08        | 52.38             | 9.85                  | 15.04           | 32.78              | 44.49          | 68.2                | -23.71          | Horizontal   |
| 15540.13        | 53.53             | 8.88                  | 17.86           | 34.94              | 45.33          | 74                  | -28.67          | Horizontal   |

Note:

1. Level = Read Level + Antenna Factor+ Cable loss- Preamp Factor.
2. The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
4. This Report only show the test plots of the worst case (U-NII-3).

#### 4.8 Frequency stability

|               |                                                                                                                                                                                                                              |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Standard | 15.407(f), RSS-Gen §6.11                                                                                                                                                                                                     |
| Test limit    | Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual. |
| Test results: | Pass                                                                                                                                                                                                                         |

##### Measurement Data:

| Mode                   | Voltage (V) | FHL (5745MHz) | Deviation (KHz) | FHH (5825MHz) | Deviation (KHz) |
|------------------------|-------------|---------------|-----------------|---------------|-----------------|
| Band 4 (5725-5850 MHz) | DC 10.8V    | 5744.999      | 1               | 5824.997      | 3               |
|                        | DC 12.0V    | 5744.995      | 5               | 5824.996      | 4               |
|                        | DC 13.2V    | 5744.994      | 6               | 5824.994      | 6               |

| Mode                   | Temperature (°C) | FHL (5745MHz) | Deviation (KHz) | FHH (5825MHz) | Deviation (KHz) |
|------------------------|------------------|---------------|-----------------|---------------|-----------------|
| Band 4 (5725-5850 MHz) | -10°C            | 5744.991      | 9               | 5824.996      | 4               |
|                        | 0°C              | 5744.992      | 8               | 5824.996      | 4               |
|                        | +10°C            | 5744.997      | 3               | 5824.997      | 3               |
|                        | +20°C            | 5744.993      | 7               | 5824.992      | 8               |
|                        | +30°C            | 5744.991      | 9               | 5824.997      | 3               |
|                        | +40°C            | 5744.995      | 5               | 5824.991      | 9               |
|                        | +50°C            | 5744.998      | 2               | 5824.998      | 2               |

## 5 Photos Of Test Setup

Reference to the **appendix I Test Setup Photo** for details.

## 6 Photos Of EUT

Reference to the **appendix II external photos** and **appendix III internal photos** for details.

-----END OF REPORT-----

