

## RF TEST REPORT

|                   |                             |
|-------------------|-----------------------------|
| <b>Applicant</b>  | Smawave Technology Co. ,Ltd |
| <b>FCC ID</b>     | 2AU8HSRG821                 |
| <b>Product</b>    | Ruggedized Router           |
| <b>Brand</b>      | Smawave                     |
| <b>Model</b>      | SRG821                      |
| <b>Report No.</b> | R2409A1327-R5               |
| <b>Issue Date</b> | November 28, 2024           |

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15E (2023)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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## Summary of measurement results

| Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Test Case              | Clause in FCC rules | Verdict |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|---------|
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Average output power   | 15.407(a)           | PASS    |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Occupied bandwidth     | 15.407(e)           | PASS    |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Frequency stability    | 15.407(g)           | PASS    |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Power spectral density | 15.407(a)           | PASS    |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Unwanted Emissions     | 15.407(b)           | PASS    |
| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Conducted Emissions    | 15.207              | PASS    |
| Date of Testing: September 16, 2024 ~ October 31, 2024                                                                                                                                                                                                                                                                                                                                                                                                                     |                        |                     |         |
| Date of Sample Received: September 12, 2024                                                                                                                                                                                                                                                                                                                                                                                                                                |                        |                     |         |
| <p>Note: PASS: The EUT complies with the essential requirements in the standard.</p> <p>FAIL: The EUT does not comply with the essential requirements in the standard.</p> <p>All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.</p> |                        |                     |         |

## 1. Test Laboratory

### 1.1. Notes of the test report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

### 1.2. Test facility

#### **FCC (Designation number: CN1179, Test Firm Registration Number: 446626)**

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

#### **A2LA (Certificate Number: 3857.01)**

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

### 1.3. Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.  
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## 2. General Description of Equipment under Test

### 2.1. Applicant and Manufacturer Information

|                             |                                                                           |
|-----------------------------|---------------------------------------------------------------------------|
| <b>Applicant</b>            | Smawave Technology Co. ,Ltd.                                              |
| <b>Applicant address</b>    | 2/F, Building 8, 1001 North Qinzhou Road, Xuhui District, Shanghai, China |
| <b>Manufacturer</b>         | Smawave Technology Co. ,Ltd.                                              |
| <b>Manufacturer address</b> | 2/F, Building 8, 1001 North Qinzhou Road, Xuhui District, Shanghai, China |

### 2.2. General information

| EUT Description              |                                                                                                                        |         |          |          |         |
|------------------------------|------------------------------------------------------------------------------------------------------------------------|---------|----------|----------|---------|
| Model                        | SRG821                                                                                                                 |         |          |          |         |
| Lab internal SN              | R2409A1327/S01                                                                                                         |         |          |          |         |
| Hardware Version             | V1.0                                                                                                                   |         |          |          |         |
| Software Version             | SQX5040_V1.1.4                                                                                                         |         |          |          |         |
| Power Supply                 | AC adapter                                                                                                             |         |          |          |         |
| Antenna Type                 | External Antenna                                                                                                       |         |          |          |         |
| Antenna Connector            | A permanently attached antenna (meet with the standard FCC Part 15.203 requirement)                                    |         |          |          |         |
| Antenna Gain                 | Band                                                                                                                   | U-NII-1 | U-NII-2A | U-NII-2C | U-NII-3 |
|                              | Antenna 1                                                                                                              | 4.95    | 4.89     | 4.94     | 5.28    |
|                              | Antenna 2                                                                                                              | 4.95    | 4.89     | 4.94     | 5.28    |
| Directional Gain             | MIMO Mode for Power                                                                                                    | 4.95    | 4.89     | 4.94     | 5.28    |
|                              | MIMO Mode for PSD                                                                                                      | 7.96    | 7.90     | 7.95     | 8.29    |
|                              | Beamforming Mode for Power                                                                                             | 7.96    | 7.90     | 7.95     | 8.29    |
|                              | Beamforming Mode for PSD                                                                                               | 7.96    | 7.90     | 7.95     | 8.29    |
| Operating Frequency Range(s) | U-NII-1: 5150MHz-5250MHz<br>U-NII-2A: 5250MHz -5350MHz<br>U-NII-2C: 5470MHz-5725MHz<br>U-NII-3: 5725MHz -5850MHz       |         |          |          |         |
| Modulation Type              | 802.11a: OFDM<br>802.11n (HT20/HT40): OFDM<br>802.11ac (VHT20/VHT40/VHT80): OFDM<br>802.11ax (HE20/ HE40/ HE80): OFDMA |         |          |          |         |
| Max. Output Power            | 27.13 dBm                                                                                                              |         |          |          |         |
| Operating temperature range  | -40 ° C to 70 ° C                                                                                                      |         |          |          |         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Operating voltage range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 9 VDC to 36 VDC                                                             |
| Testing temperature range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | -30 ° C to 50° C                                                            |
| Testing voltage range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 9 VDC - 24 VDC - 36 VDC                                                     |
| State voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 24 VDC                                                                      |
| <b>EUT Accessory</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                             |
| Adapter 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Manufacturer: SHENZHEN TOPOW ELECTRONICS CO., LTD<br>Model: TPA309-29240-US |
| Adapter 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Manufacturer: Dongguan Sunun Power Co., Ltd<br>Model: SA361V-240150U        |
| <p>Note:</p> <ol style="list-style-type: none"> <li>1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant.</li> <li>2. This device support automatically discontinue transmission, while the device is not transmitting any information, the device can automatically discontinue transmission and become standby mode for power saving. The device can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.</li> <li>3. (a) Manufacturers implements security features in any digitally modulated devices capable of operating in any of the U-NII bands, so that third parties are not able to reprogram the device to operate outside the parameters for which the device was certified. The software prevents the user from operating the transmitter with operating frequencies, output power, modulation types or other radio frequency parameters outside those that were approved for the device. Manufacturers uses means including, but not limited to the use of a private network that allows only authenticated users to download software, electronic signatures in software or coding in hardware that is decoded by software to verify that new software can be legally loaded into a device to meet these requirements and must describe the methods in their application for equipment authorization.</li> <li>(b) Manufacturers take steps to ensure that DFS functionality cannot be disabled by the operator of the U-NII device.</li> </ol> |                                                                             |

### 3. Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**Test standards:**

**FCC CFR47 Part 15E (2023)** Unlicensed National Information Infrastructure Devices

**ANSI C63.10-2013**

**Reference standard:**

**KDB 789033 D02 General UNII Test Procedures New Rules v02r01**

**KDB 662911 D01 Multiple Transmitter Output v02r01**

## 4. Test Configuration

### Test Mode

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The radiated emission was measured in the following position: EUT stand-up position (vertical), lie-down position (horizontal). The worst emission was found in lie-down position (H axis) and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate. Preliminary tests have been done on all the configuration for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates are shown as following table.

| Mode           | Data Rate |           |        |
|----------------|-----------|-----------|--------|
|                | Antenna 1 | Antenna 2 | MIMO   |
| 802.11a        | 6 Mbps    | 6 Mbps    | 6 Mbps |
| 802.11n HT20   | MCS0      | MCS0      | MCS8   |
| 802.11n HT40   | MCS0      | MCS0      | MCS8   |
| 802.11ac VHT20 | MCS0      | MCS0      | MCS0   |
| 802.11ac VHT40 | MCS0      | MCS0      | MCS0   |
| 802.11ac VHT80 | MCS0      | MCS0      | MCS0   |
| 802.11ax HE20  | MCS0      | MCS0      | MCS0   |
| 802.11ax HE40  | MCS0      | MCS0      | MCS0   |
| 802.11ax HE80  | MCS0      | MCS0      | MCS0   |

The worst case Antenna mode for each of the following tests for Wi-Fi:

| Test Cases                     | Antenna 1 | Antenna 2 | MIMO | Beamforming |
|--------------------------------|-----------|-----------|------|-------------|
| Average conducted output power | O         | O         | O    | O           |
| Occupied bandwidth             | --        | --        | --   | O           |
| Frequency stability            | --        | --        | --   | O           |
| Power Spectral Density         | O         | O         | O    | O           |
| Unwanted Emissions             | --        | --        | O    | --          |
| Conducted Emissions            | --        | --        | O    | --          |
| Note: "O": test all bands      |           |           |      |             |

According to RF Output power results in chapter 5.2, MIMO was selected as the worst antenna.



# Wireless Technology and Frequency Range

| Wireless Technology |          | Bandwidth | Channel | Frequency |
|---------------------|----------|-----------|---------|-----------|
| Wi-Fi               | U-NII-1  | 20 MHz    | 36      | 5180MHz   |
|                     |          |           | 40      | 5200MHz   |
|                     |          |           | 44      | 5220MHz   |
|                     |          |           | 48      | 5240MHz   |
|                     |          | 40 MHz    | 38      | 5190MHz   |
|                     |          |           | 46      | 5230MHz   |
|                     |          | 80 MHz    | 42      | 5210MHz   |
|                     | U-NII-2A | 20 MHz    | 52      | 5260MHz   |
|                     |          |           | 56      | 5280MHz   |
|                     |          |           | 60      | 5300MHz   |
|                     |          |           | 64      | 5320MHz   |
|                     |          | 40 MHz    | 54      | 5270MHz   |
|                     |          |           | 62      | 5310MHz   |
|                     |          | 80 MHz    | 58      | 5290MHz   |
|                     | U-NII-2C | 20 MHz    | 100     | 5500MHz   |
|                     |          |           | 104     | 5520MHz   |
|                     |          |           | 108     | 5540MHz   |
|                     |          |           | 112     | 5560MHz   |
|                     |          |           | 116     | 5580MHz   |
|                     |          |           | 120     | 5600MHz   |
|                     |          |           | 124     | 5620MHz   |
|                     |          |           | 128     | 5640MHz   |
|                     |          |           | 132     | 5660MHz   |
|                     |          |           | 136     | 5680MHz   |
|                     |          |           | 140     | 5700MHz   |
|                     |          |           | 144     | 5720MHz   |
|                     |          | 40 MHz    | 102     | 5510MHz   |
|                     |          |           | 110     | 5550MHz   |
|                     |          |           | 118     | 5590MHz   |
|                     |          |           | 126     | 5630MHz   |
|                     |          |           | 134     | 5670MHz   |
|                     |          |           | 142     | 5710MHz   |
|                     |          | 80 MHz    | 106     | 5530MHz   |
|                     |          |           | 122     | 5610MHz   |
|                     |          |           | 138     | 5690MHz   |
|                     | U-NII-3  | 20 MHz    | 149     | 5745MHz   |
|                     |          |           | 153     | 5765MHz   |
|                     |          |           | 157     | 5785MHz   |

|                                                                                                         |  |                                                                                                            |     |         |
|---------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|-----|---------|
| Test Report                                                                                             |  | Report No. R2400A024 R3                                                                                    |     |         |
|                                                                                                         |  |                                                                                                            | 161 | 5805MHz |
|                                                                                                         |  |                                                                                                            | 165 | 5825MHz |
|                                                                                                         |  | 40 MHz                                                                                                     | 151 | 5755MHz |
|                                                                                                         |  |                                                                                                            | 159 | 5795MHz |
|                                                                                                         |  | 80 MHz                                                                                                     | 155 | 5775MHz |
|                                                                                                         |  | Does this device support TPC Function? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |     |         |
| Does this device support TDWR Band? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |  |                                                                                                            |     |         |

## 5. Test Case Results

### 5.1. Occupied Bandwidth

#### Ambient condition

| Temperature | Relative humidity | Pressure         |
|-------------|-------------------|------------------|
| 15°C ~ 35°C | 20% ~ 80%         | 86 kPa ~ 106 kPa |

#### Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

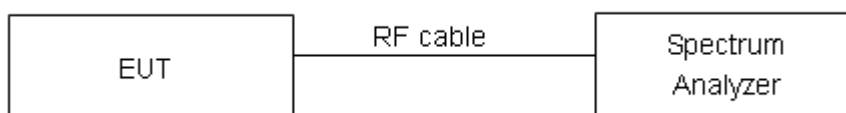
For U-NII-1/U-NII-2A/U-NII-2C, set RBW  $\approx$  1% OCB kHz, VBW  $\geq$  3  $\times$  RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in the fundamental emission.

For U-NII-3, Set RBW = 100 kHz, VBW  $\geq$  3  $\times$  RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

Use the 99 % power bandwidth function of the instrument

#### Test Setup



#### Limits

For U-NII-1/U-NII-2A/U-NII-2C

No specific occupied bandwidth requirements in Part 15.407.

For U-NII-3

Rule FCC Part §15.407(e)

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

#### Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 2$ ,  $U = 936$  Hz.

**Test Results:**
**U-NII-1**

| Mode            | Frequency<br>(MHz) | 99% OBW<br>(MHz) | -26 dB Bandwidth<br>(MHz) | Verdict |
|-----------------|--------------------|------------------|---------------------------|---------|
| 802.11a         | 5180               | 16.454           | 20.377                    | Pass    |
| 802.11a         | 5200               | 16.461           | 19.669                    | Pass    |
| 802.11a         | 5240               | 16.458           | 19.753                    | Pass    |
| 802.11ac(VHT20) | 5180               | 17.634           | 21.121                    | Pass    |
| 802.11ac(VHT20) | 5200               | 17.631           | 20.832                    | Pass    |
| 802.11ac(VHT20) | 5240               | 17.657           | 21.154                    | Pass    |
| 802.11ac(VHT40) | 5190               | 36.154           | 40.706                    | Pass    |
| 802.11ac(VHT40) | 5230               | 36.118           | 40.468                    | Pass    |
| 802.11ac(VHT80) | 5210               | 75.436           | 81.656                    | Pass    |
| 802.11ax(HE20)  | 5180               | 18.964           | 21.542                    | Pass    |
| 802.11ax(HE20)  | 5200               | 18.931           | 21.377                    | Pass    |
| 802.11ax(HE20)  | 5240               | 18.942           | 21.400                    | Pass    |
| 802.11ax(HE40)  | 5190               | 37.794           | 40.774                    | Pass    |
| 802.11ax(HE40)  | 5230               | 37.745           | 41.186                    | Pass    |
| 802.11ax(HE80)  | 5210               | 77.107           | 82.025                    | Pass    |
| 802.11n(HT20)   | 5180               | 17.644           | 20.969                    | Pass    |
| 802.11n(HT20)   | 5200               | 17.645           | 21.195                    | Pass    |
| 802.11n(HT20)   | 5240               | 17.670           | 21.382                    | Pass    |
| 802.11n(HT40)   | 5190               | 36.158           | 40.728                    | Pass    |
| 802.11n(HT40)   | 5230               | 36.104           | 40.606                    | Pass    |

## U-NII-2A

| Mode            | Frequency<br>(MHz) | 99% OBW<br>(MHz) | -26 dB Bandwidth<br>(MHz) | Verdict |
|-----------------|--------------------|------------------|---------------------------|---------|
| 802.11a         | 5260               | 16.459           | 20.342                    | Pass    |
| 802.11a         | 5300               | 16.459           | 20.106                    | Pass    |
| 802.11a         | 5320               | 16.454           | 20.230                    | Pass    |
| 802.11ac(VHT20) | 5260               | 17.631           | 21.150                    | Pass    |
| 802.11ac(VHT20) | 5300               | 17.648           | 21.244                    | Pass    |
| 802.11ac(VHT20) | 5320               | 17.629           | 21.015                    | Pass    |
| 802.11ac(VHT40) | 5270               | 36.095           | 40.358                    | Pass    |
| 802.11ac(VHT40) | 5310               | 36.075           | 40.516                    | Pass    |
| 802.11ac(VHT80) | 5290               | 75.505           | 81.776                    | Pass    |
| 802.11ax(HE20)  | 5260               | 18.986           | 21.695                    | Pass    |
| 802.11ax(HE20)  | 5300               | 18.966           | 21.065                    | Pass    |
| 802.11ax(HE20)  | 5320               | 18.935           | 21.308                    | Pass    |
| 802.11ax(HE40)  | 5270               | 37.717           | 41.057                    | Pass    |
| 802.11ax(HE40)  | 5310               | 37.733           | 41.138                    | Pass    |
| 802.11ax(HE80)  | 5290               | 76.992           | 82.051                    | Pass    |
| 802.11n(HT20)   | 5260               | 17.632           | 21.259                    | Pass    |
| 802.11n(HT20)   | 5300               | 17.647           | 21.770                    | Pass    |
| 802.11n(HT20)   | 5320               | 17.636           | 21.281                    | Pass    |
| 802.11n(HT40)   | 5270               | 36.124           | 40.882                    | Pass    |
| 802.11n(HT40)   | 5310               | 36.119           | 40.482                    | Pass    |

# U-NII-2C

| Mode            | Frequency (MHz) | 99% OBW (MHz) | -26 dB Bandwidth (MHz) | Verdict |
|-----------------|-----------------|---------------|------------------------|---------|
| 802.11a         | 5500            | 16.450        | 20.047                 | Pass    |
| 802.11a         | 5600            | 16.477        | 20.660                 | Pass    |
| 802.11a         | 5700            | 16.450        | 20.061                 | Pass    |
| 802.11a         | 5720            | 16.480        | 20.053                 | Pass    |
| 802.11ac(VHT20) | 5500            | 17.654        | 21.479                 | Pass    |
| 802.11ac(VHT20) | 5600            | 17.632        | 21.404                 | Pass    |
| 802.11ac(VHT20) | 5700            | 17.660        | 21.607                 | Pass    |
| 802.11ac(VHT20) | 5720            | 17.635        | 21.230                 | Pass    |
| 802.11ac(VHT40) | 5510            | 36.127        | 40.732                 | Pass    |
| 802.11ac(VHT40) | 5590            | 36.151        | 40.733                 | Pass    |
| 802.11ac(VHT40) | 5670            | 36.195        | 40.869                 | Pass    |
| 802.11ac(VHT40) | 5710            | 36.092        | 40.844                 | Pass    |
| 802.11ac(VHT80) | 5610            | 75.463        | 81.547                 | Pass    |
| 802.11ac(VHT80) | 5690            | 75.537        | 82.110                 | Pass    |
| 802.11ax(HE20)  | 5500            | 18.938        | 21.341                 | Pass    |
| 802.11ax(HE20)  | 5600            | 18.939        | 21.022                 | Pass    |
| 802.11ax(HE20)  | 5700            | 18.909        | 21.206                 | Pass    |
| 802.11ax(HE20)  | 5720            | 18.972        | 20.893                 | Pass    |
| 802.11ax(HE40)  | 5510            | 37.751        | 41.406                 | Pass    |
| 802.11ax(HE40)  | 5590            | 37.706        | 40.413                 | Pass    |
| 802.11ax(HE40)  | 5670            | 37.803        | 41.106                 | Pass    |
| 802.11ax(HE40)  | 5710            | 37.769        | 40.792                 | Pass    |
| 802.11ax(HE80)  | 5610            | 77.211        | 82.238                 | Pass    |
| 802.11ax(HE80)  | 5690            | 77.199        | 82.813                 | Pass    |
| 802.11n(HT20)   | 5500            | 17.674        | 20.961                 | Pass    |
| 802.11n(HT20)   | 5600            | 17.640        | 20.940                 | Pass    |
| 802.11n(HT20)   | 5700            | 17.649        | 20.609                 | Pass    |
| 802.11n(HT20)   | 5720            | 17.652        | 20.969                 | Pass    |
| 802.11n(HT40)   | 5510            | 36.176        | 40.886                 | Pass    |
| 802.11n(HT40)   | 5590            | 36.169        | 41.002                 | Pass    |
| 802.11n(HT40)   | 5670            | 36.154        | 41.092                 | Pass    |
| 802.11n(HT40)   | 5710            | 36.117        | 40.667                 | Pass    |

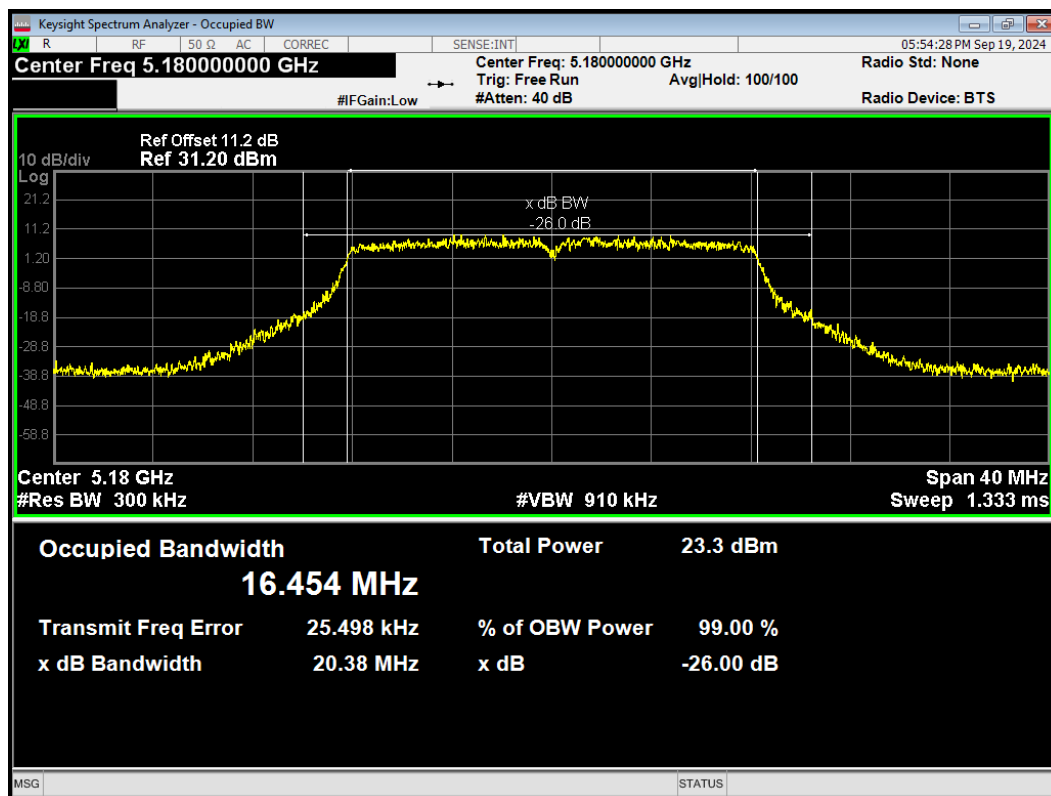
### U-NII-3

| Mode            | Frequency<br>(MHz) | 99% OBW<br>(MHz) | -6 dB Bandwidth<br>(MHz) | Verdict |
|-----------------|--------------------|------------------|--------------------------|---------|
| 802.11a         | 5720               | 16.471           | 16.288                   | Pass    |
| 802.11a         | 5745               | 16.485           | 16.320                   | Pass    |
| 802.11a         | 5785               | 16.504           | 16.305                   | Pass    |
| 802.11a         | 5825               | 16.464           | 15.943                   | Pass    |
| 802.11ac(VHT20) | 5720               | 17.624           | 16.891                   | Pass    |
| 802.11ac(VHT20) | 5745               | 17.645           | 17.577                   | Pass    |
| 802.11ac(VHT20) | 5785               | 17.655           | 15.678                   | Pass    |
| 802.11ac(VHT20) | 5825               | 17.720           | 16.956                   | Pass    |
| 802.11ac(VHT40) | 5710               | 36.120           | 36.263                   | Pass    |
| 802.11ac(VHT40) | 5755               | 36.162           | 36.048                   | Pass    |
| 802.11ac(VHT40) | 5795               | 36.192           | 35.289                   | Pass    |
| 802.11ac(VHT80) | 5690               | 75.600           | 74.908                   | Pass    |
| 802.11ac(VHT80) | 5775               | 75.620           | 74.089                   | Pass    |
| 802.11ax(HE20)  | 5720               | 18.920           | 16.370                   | Pass    |
| 802.11ax(HE20)  | 5745               | 18.931           | 18.024                   | Pass    |
| 802.11ax(HE20)  | 5785               | 19.010           | 16.938                   | Pass    |
| 802.11ax(HE20)  | 5825               | 19.001           | 17.808                   | Pass    |
| 802.11ax(HE40)  | 5710               | 37.734           | 36.764                   | Pass    |
| 802.11ax(HE40)  | 5755               | 37.839           | 36.786                   | Pass    |
| 802.11ax(HE40)  | 5795               | 37.823           | 36.298                   | Pass    |
| 802.11ax(HE80)  | 5690               | 77.265           | 76.617                   | Pass    |
| 802.11ax(HE80)  | 5775               | 77.313           | 74.848                   | Pass    |
| 802.11n(HT20)   | 5720               | 17.644           | 16.792                   | Pass    |
| 802.11n(HT20)   | 5745               | 17.657           | 17.366                   | Pass    |
| 802.11n(HT20)   | 5785               | 17.629           | 17.552                   | Pass    |
| 802.11n(HT20)   | 5825               | 17.721           | 17.541                   | Pass    |
| 802.11n(HT40)   | 5710               | 36.121           | 35.202                   | Pass    |
| 802.11n(HT40)   | 5755               | 36.148           | 36.349                   | Pass    |
| 802.11n(HT40)   | 5795               | 36.150           | 36.352                   | Pass    |

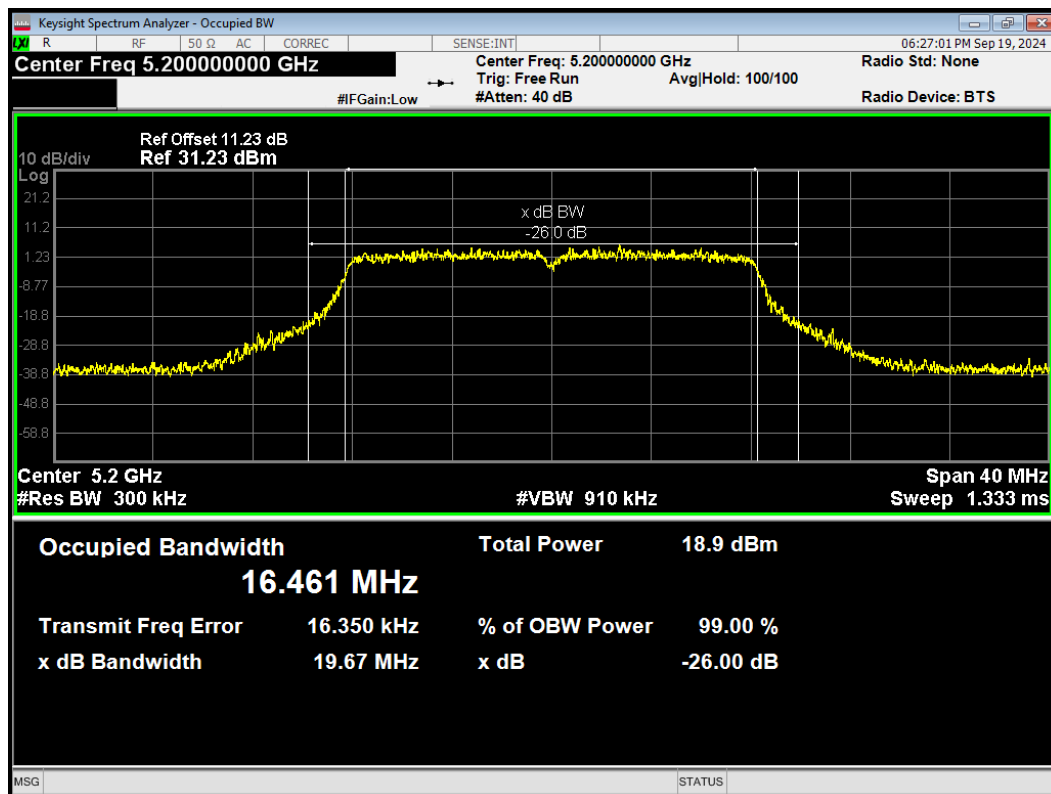
99% bandwidth

U-NII-1

OBW 802.11a 5180MHz

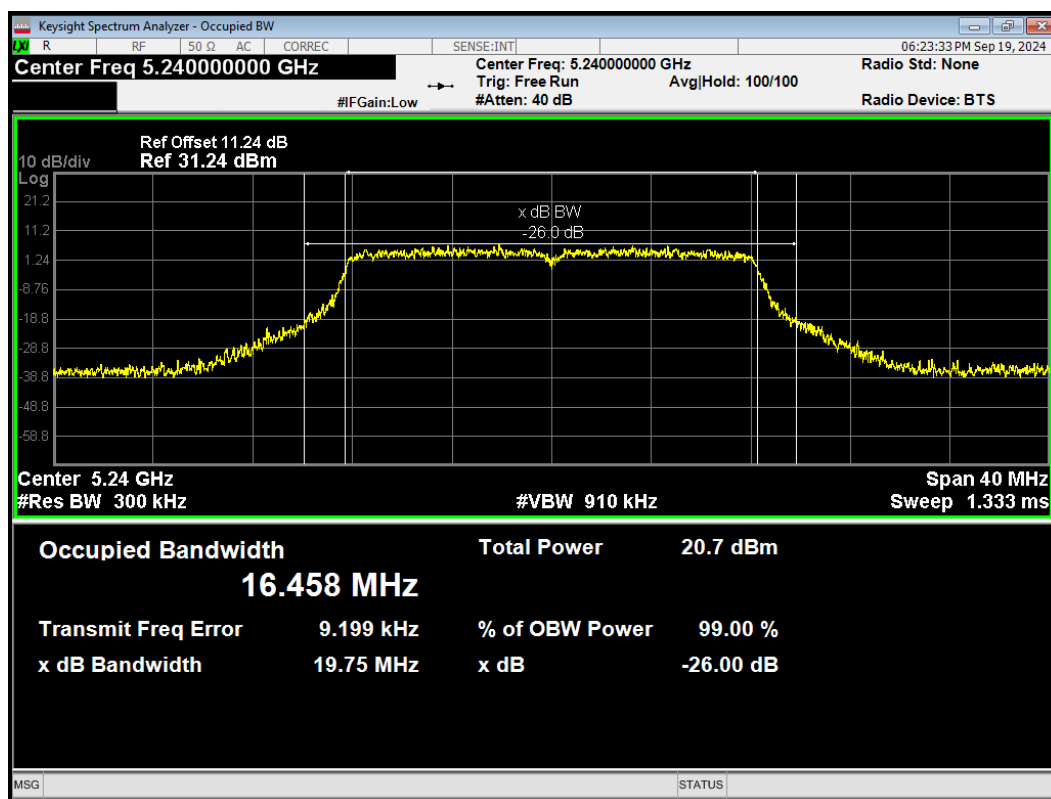


OBW 802.11a 5200MHz

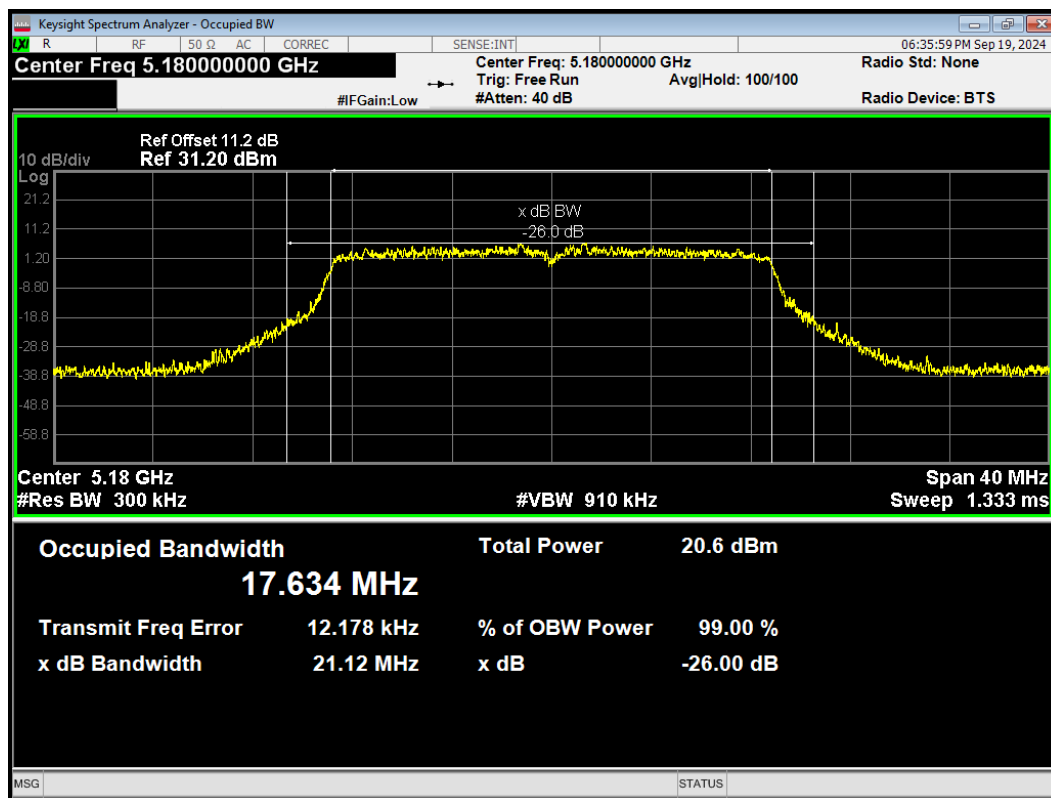




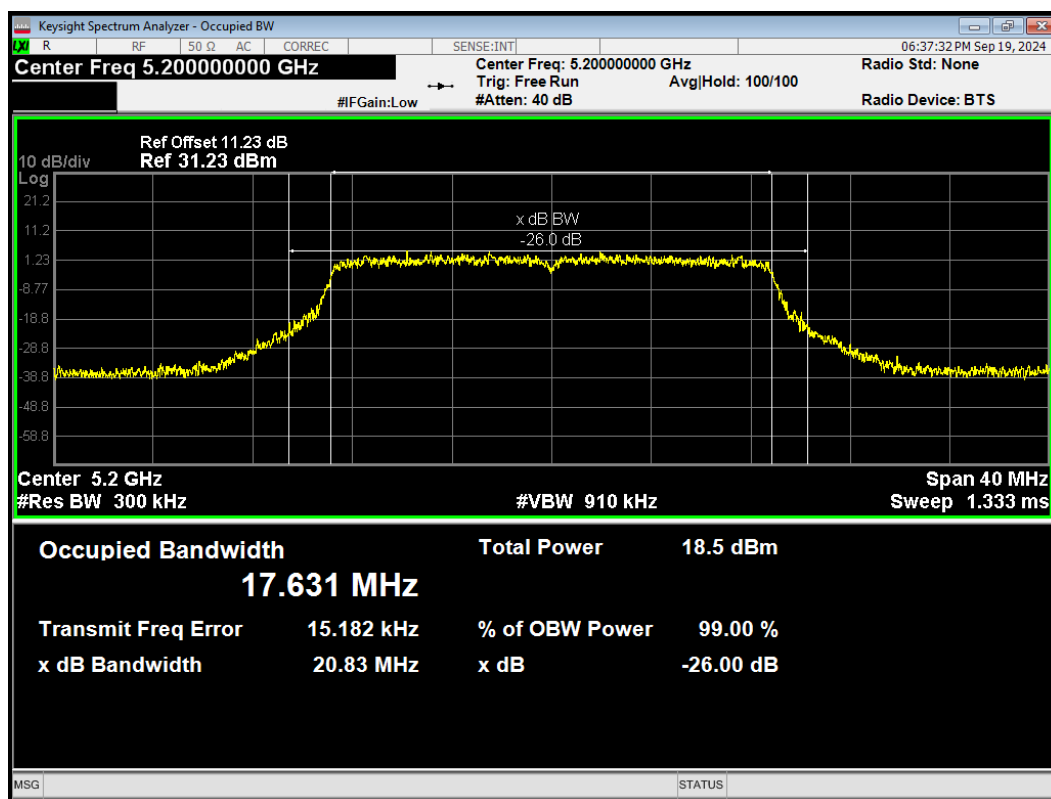
OBW 802.11a 5240MHz



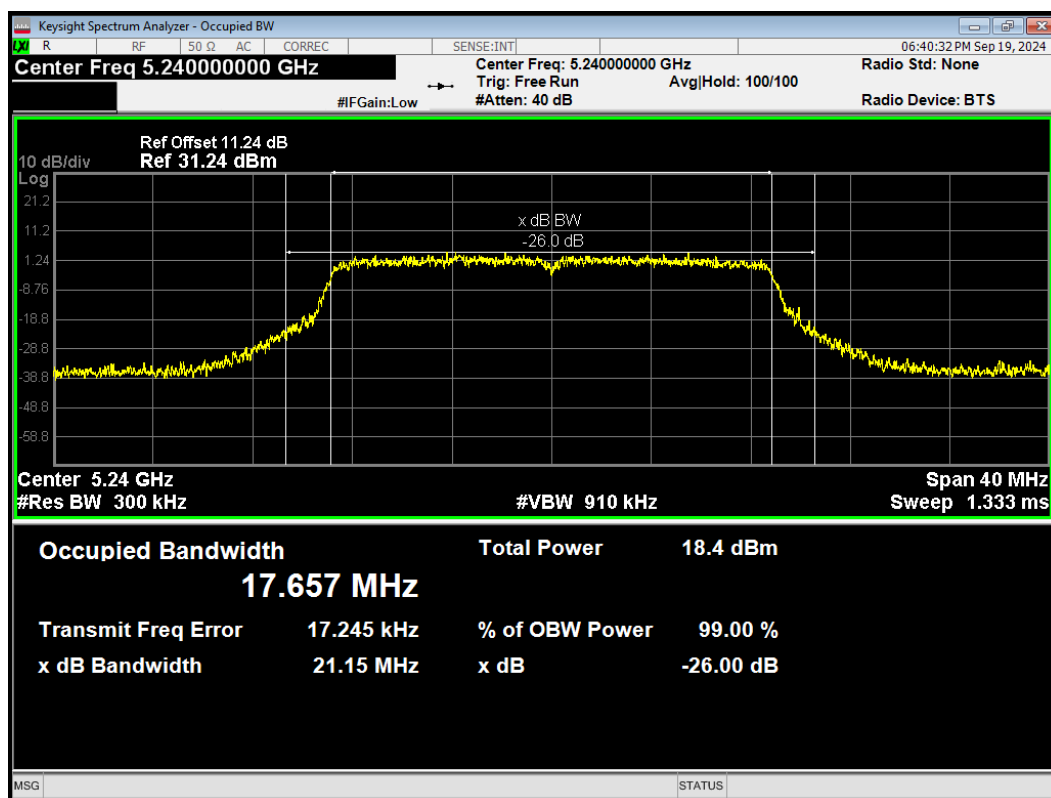
OBW 802.11ac(VHT20) 5180MHz



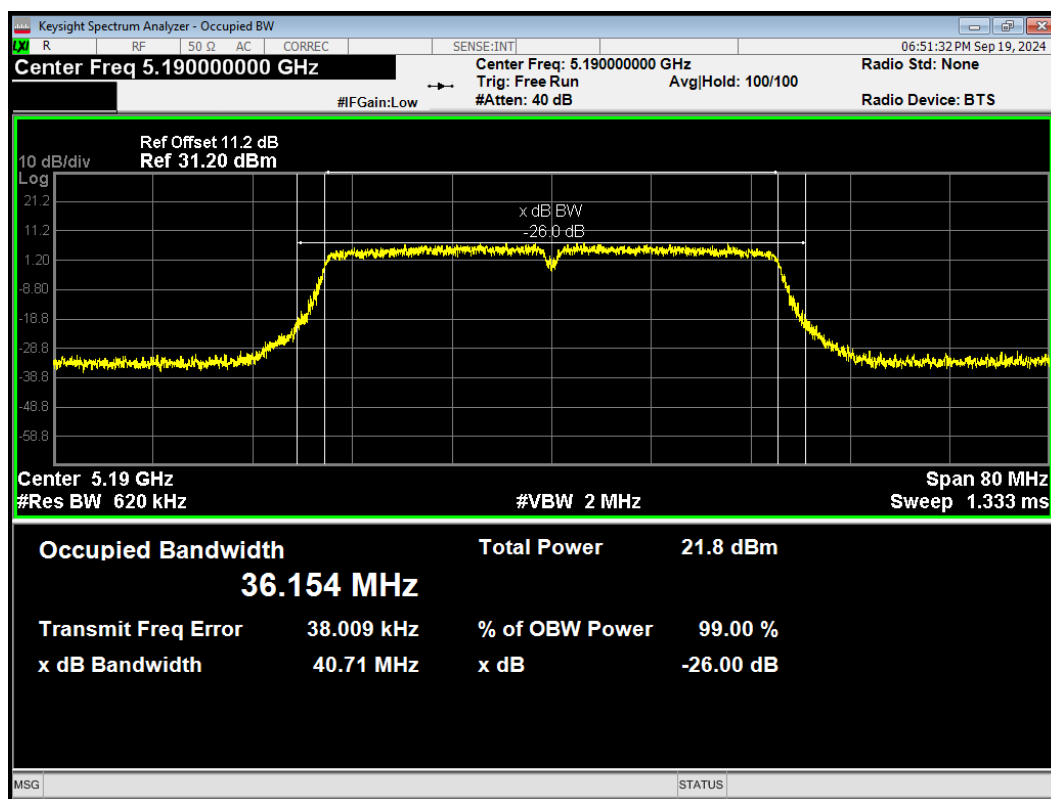
OBW 802.11ac(VHT20) 5200MHz



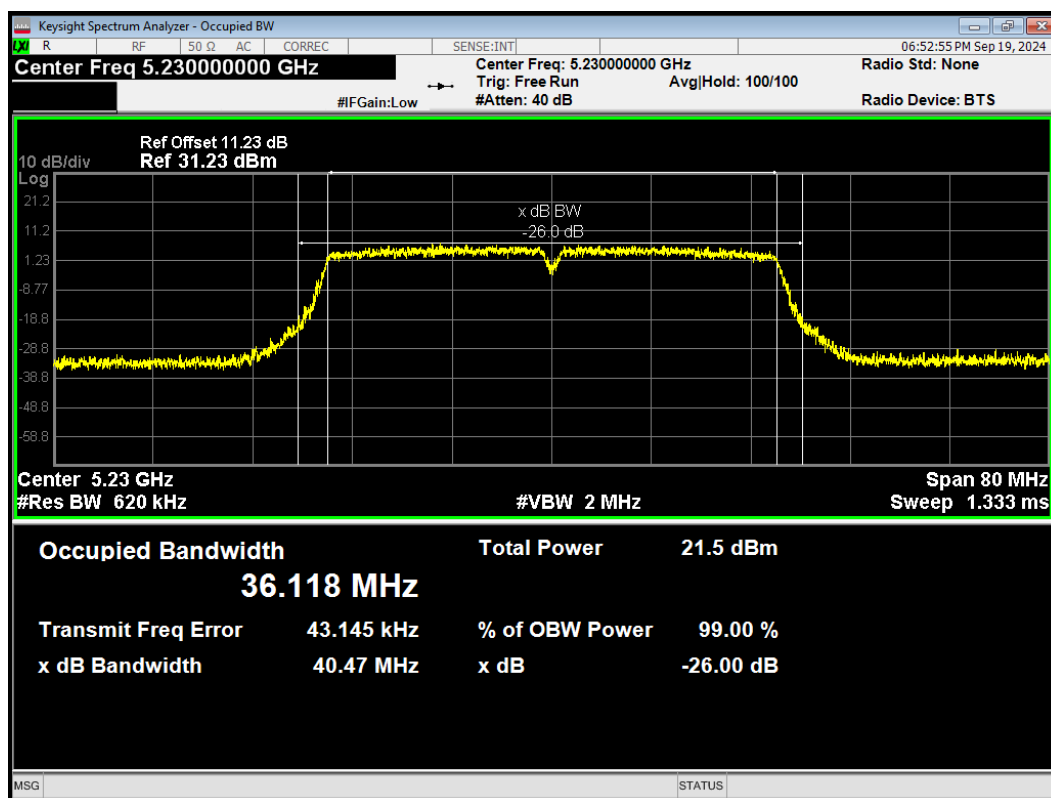
OBW 802.11ac(VHT20) 5240MHz



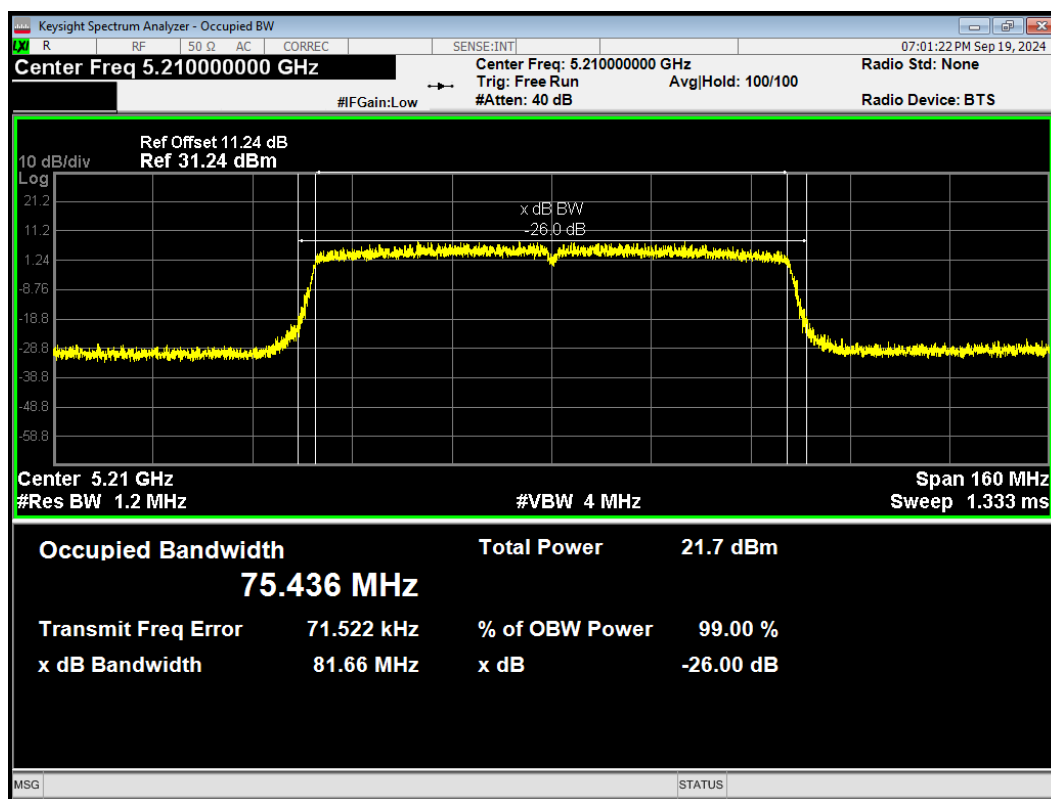
OBW 802.11ac(VHT40) 5190MHz



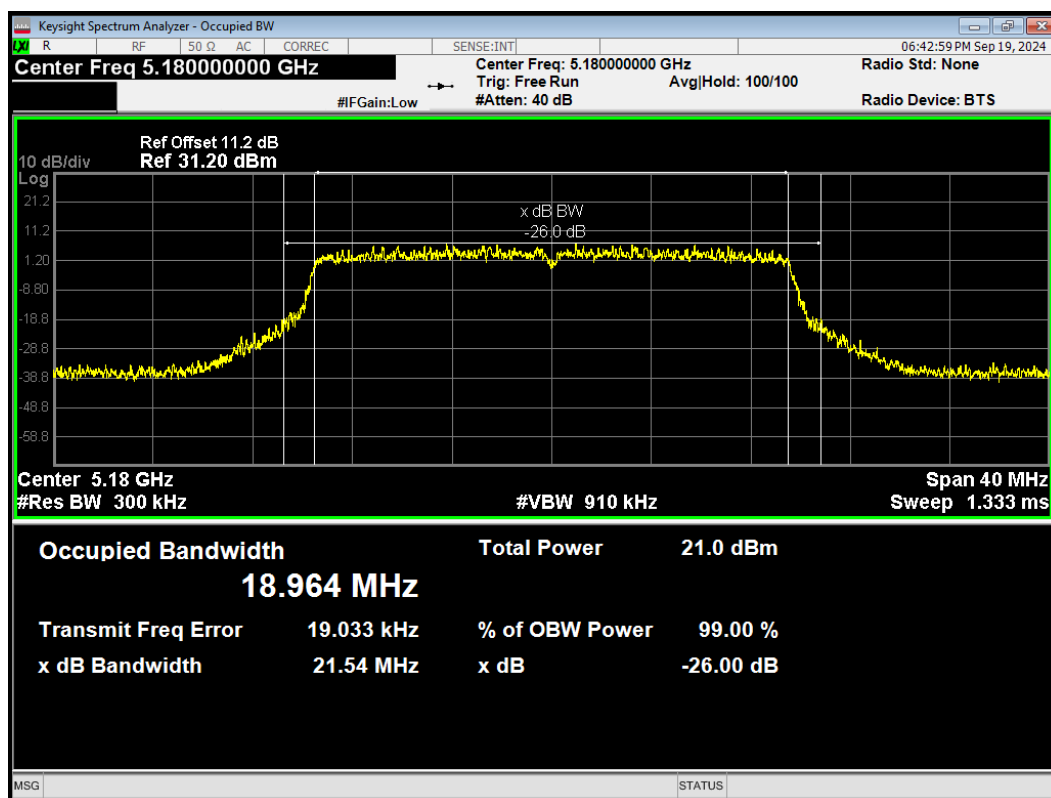
OBW 802.11ac(VHT40) 5230MHz



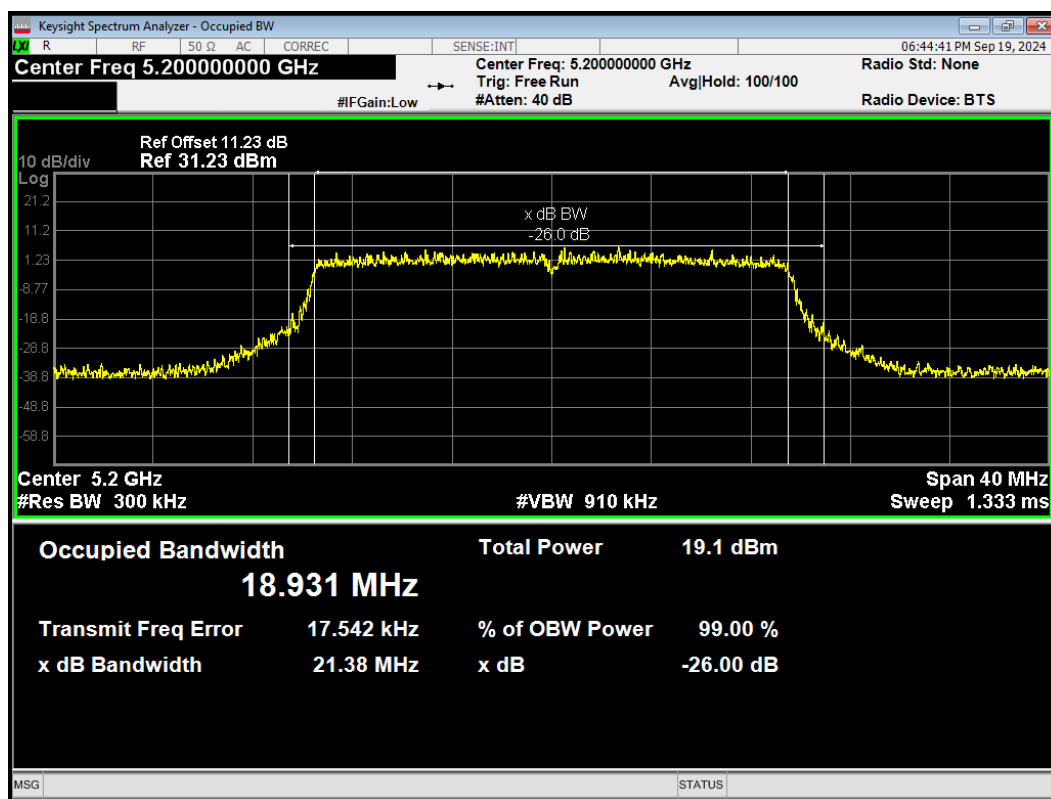
OBW 802.11ac(VHT80) 5210MHz



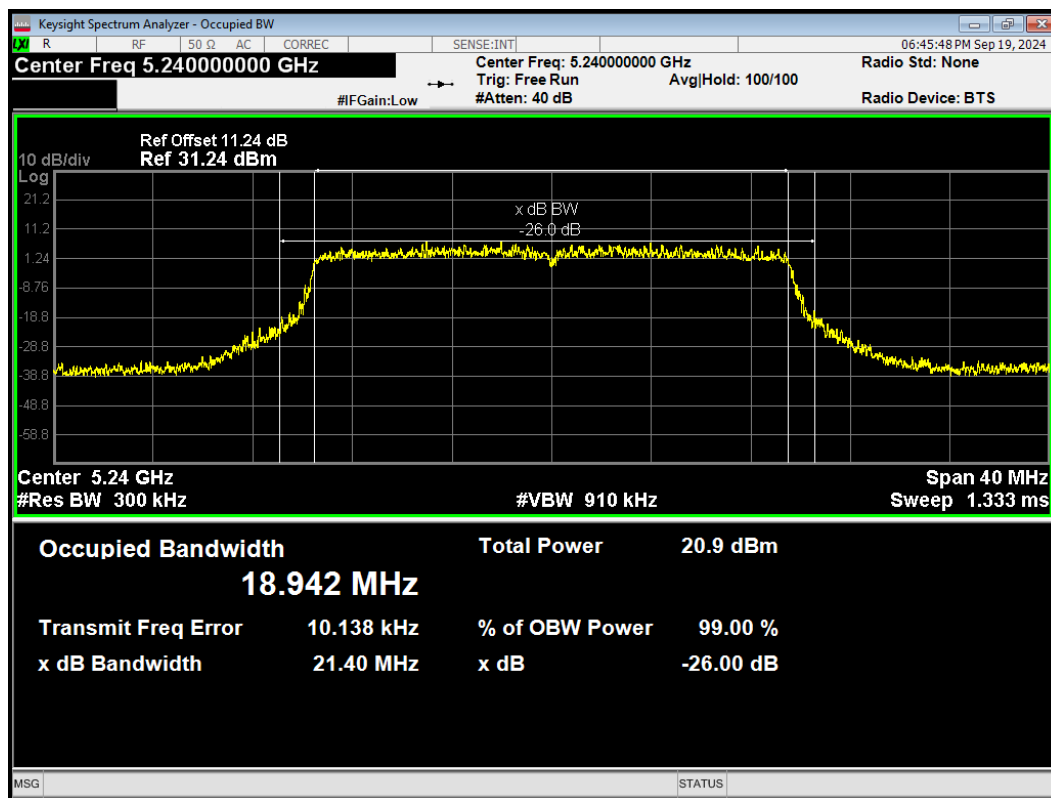
OBW 802.11ax(HE20) 5180MHz



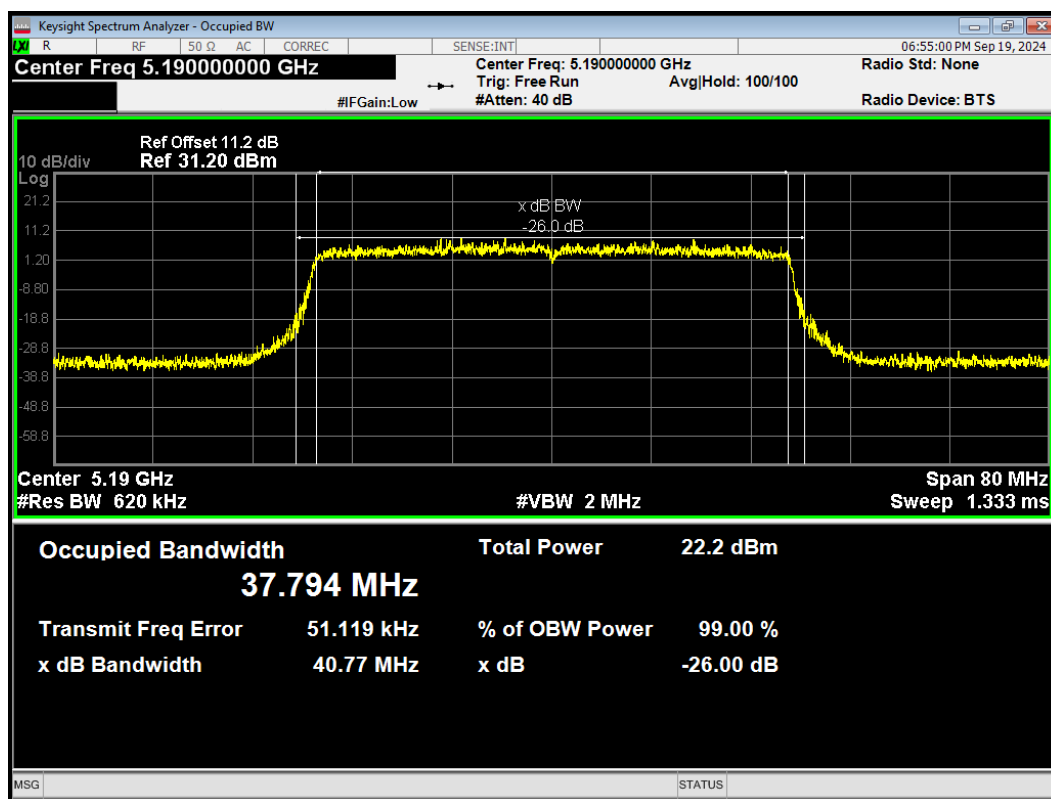
OBW 802.11ax(HE20) 5200MHz



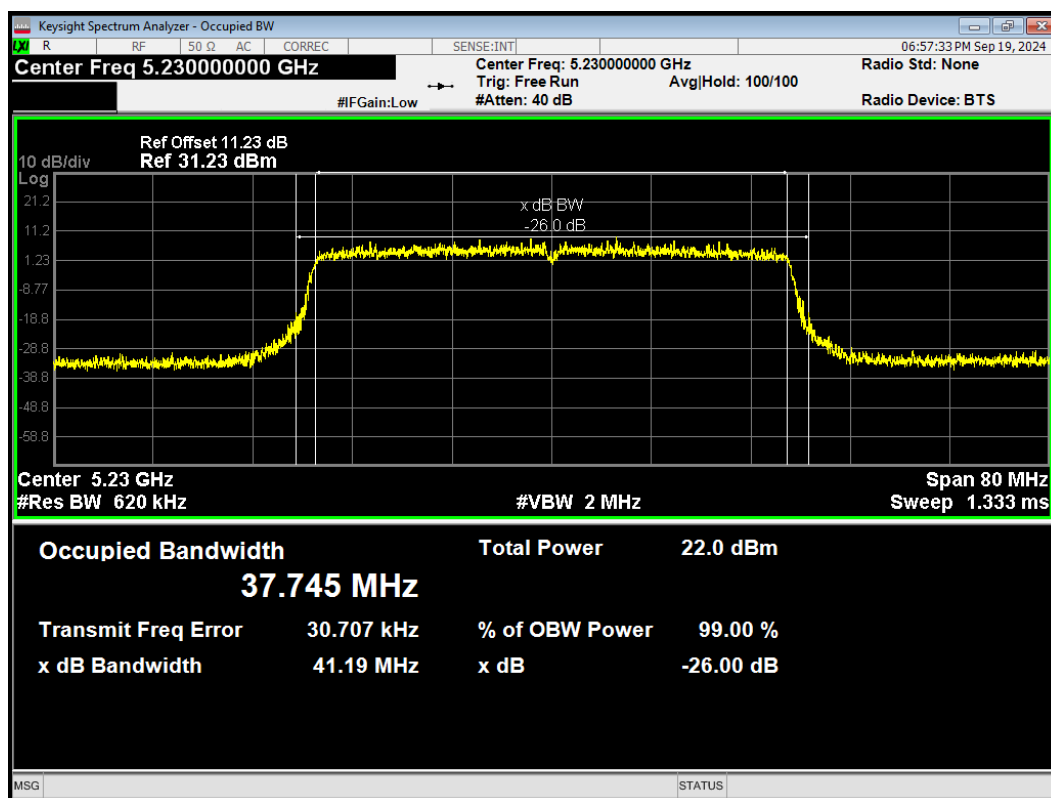
OBW 802.11ax(HE20) 5240MHz



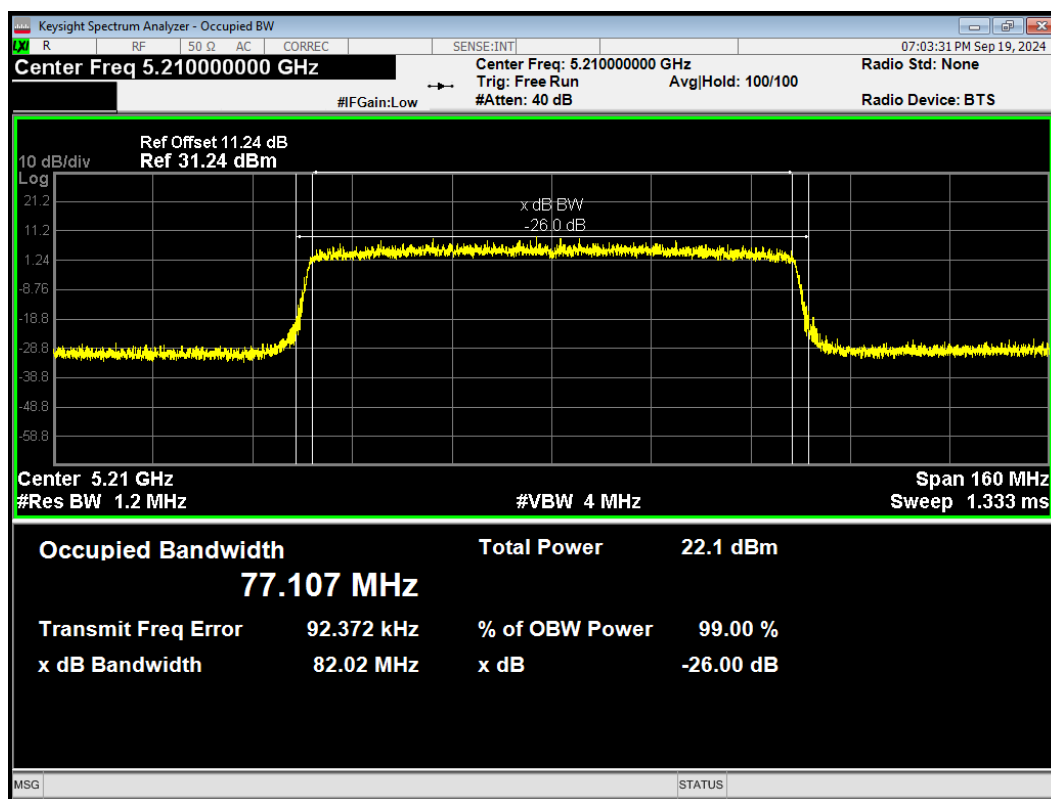
## OBW 802.11ax(HE40) 5190MHz



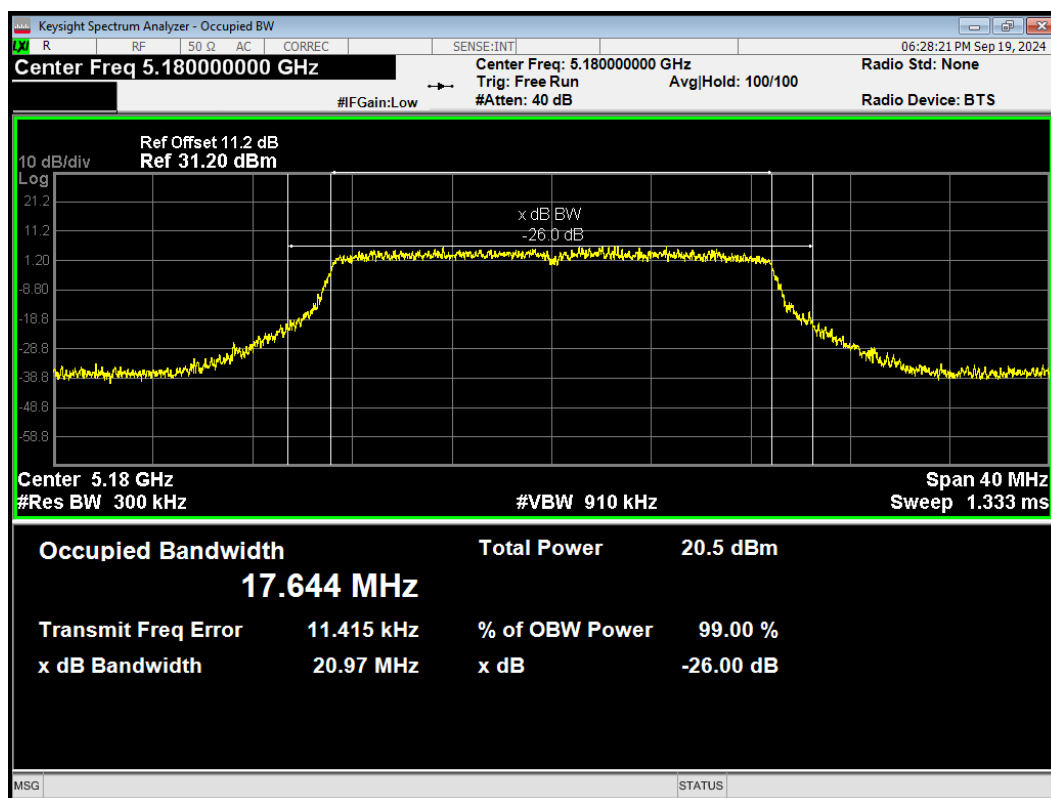
## OBW 802.11ax(HE40) 5230MHz



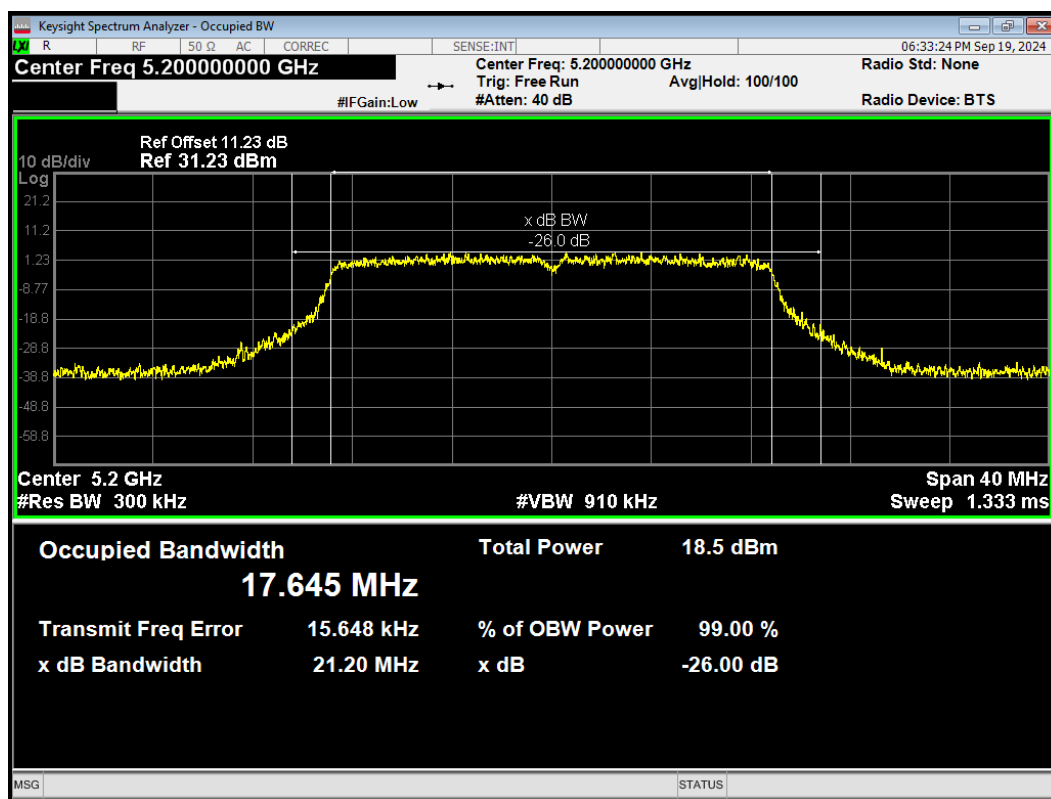
OBW 802.11ax(HE80) 5210MHz



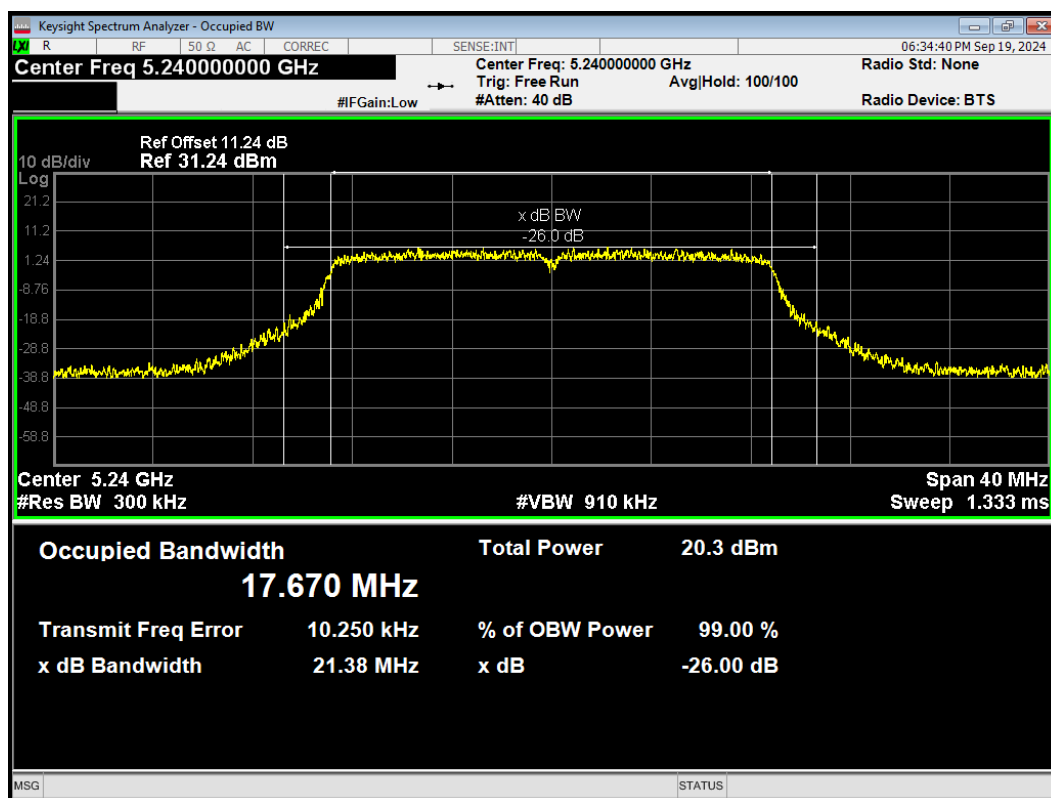
OBW 802.11n(HT20) 5180MHz



OBW 802.11n(HT20) 5200MHz

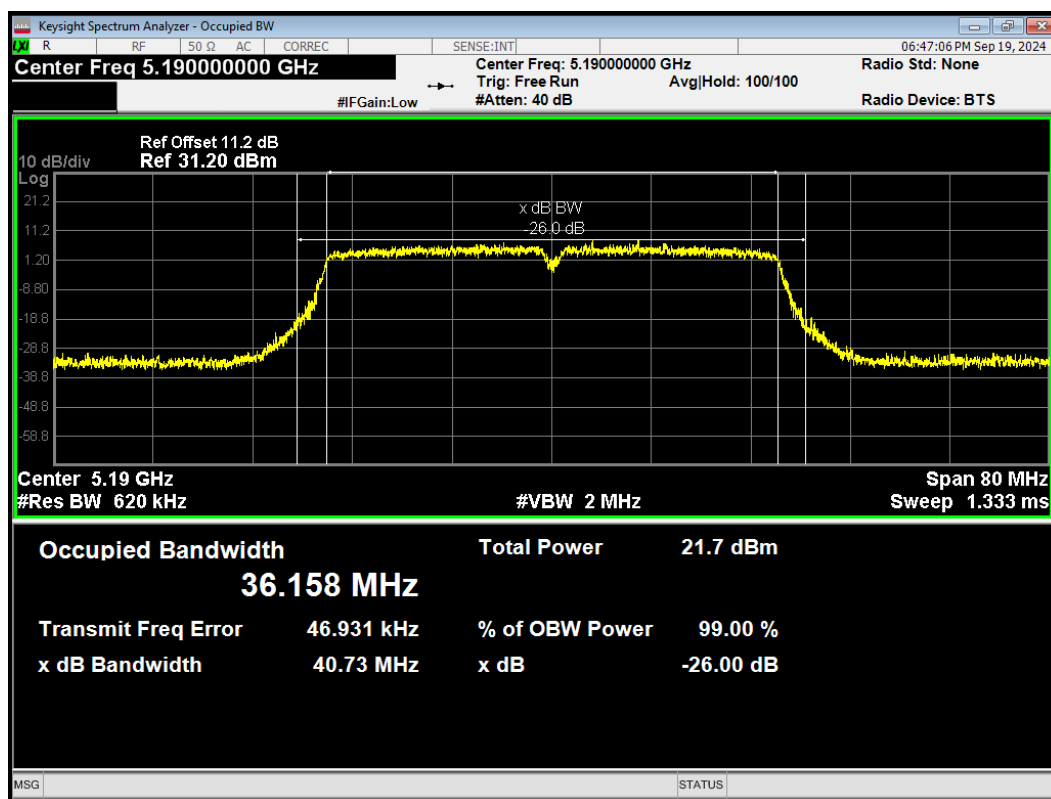


OBW 802.11n(HT20) 5240MHz

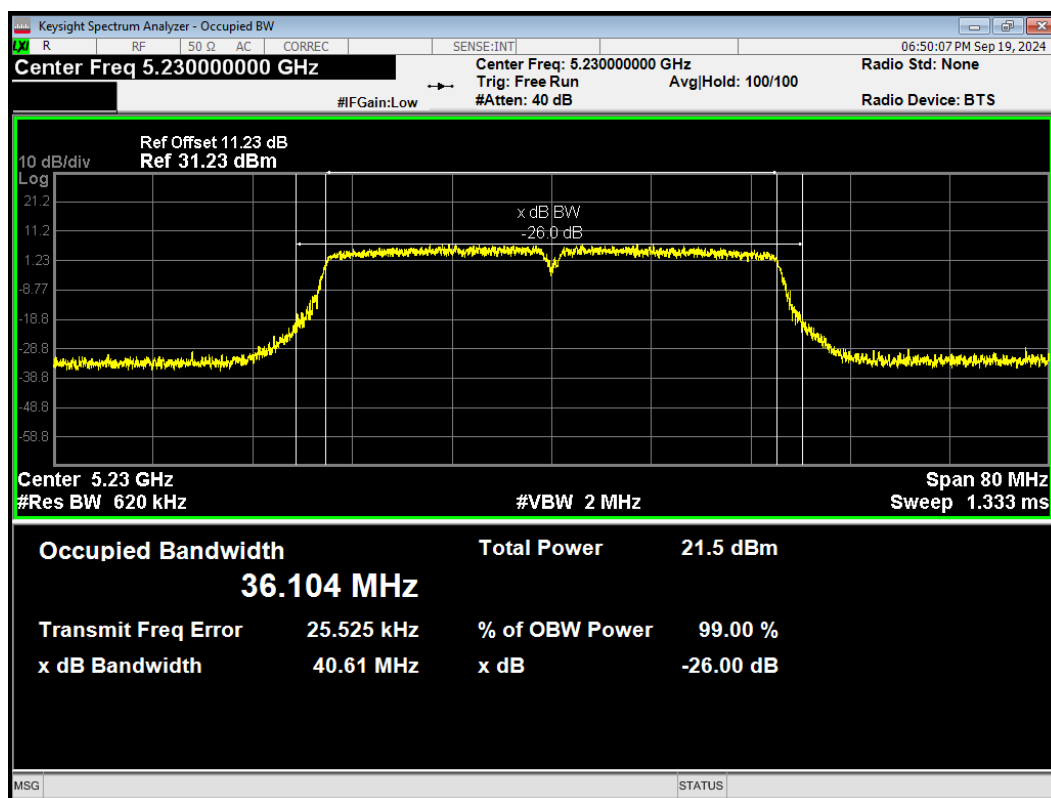




OBW 802.11n(HT40) 5190MHz

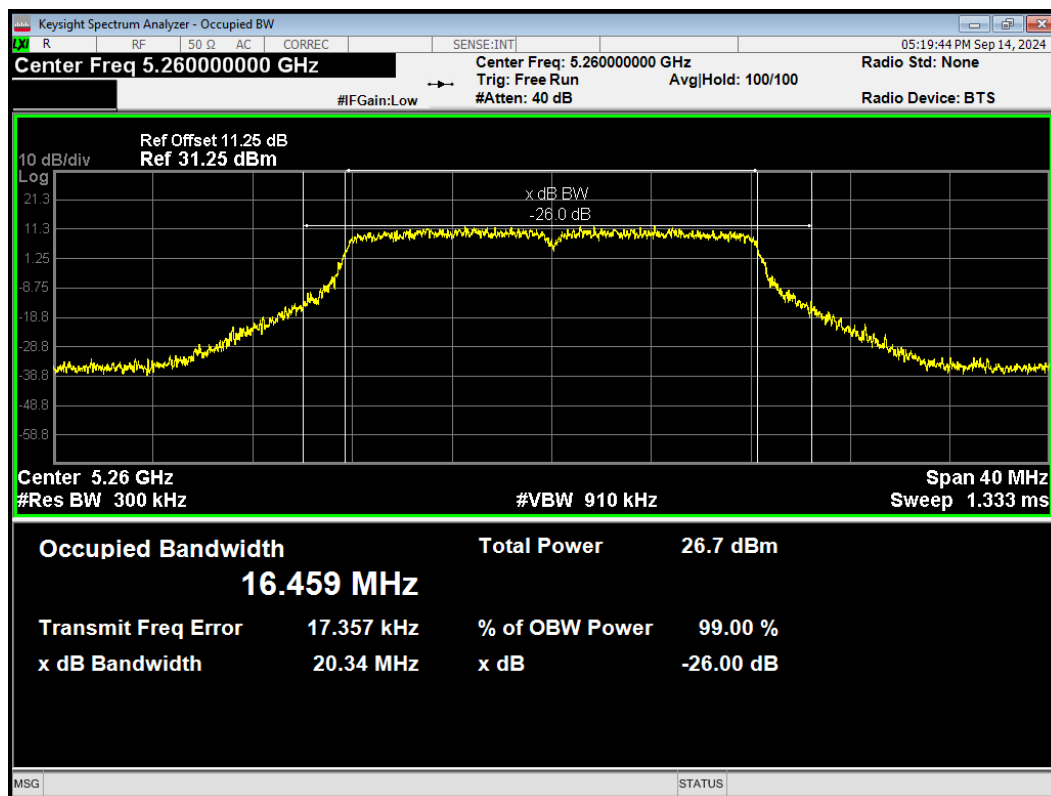


OBW 802.11n(HT40) 5230MHz

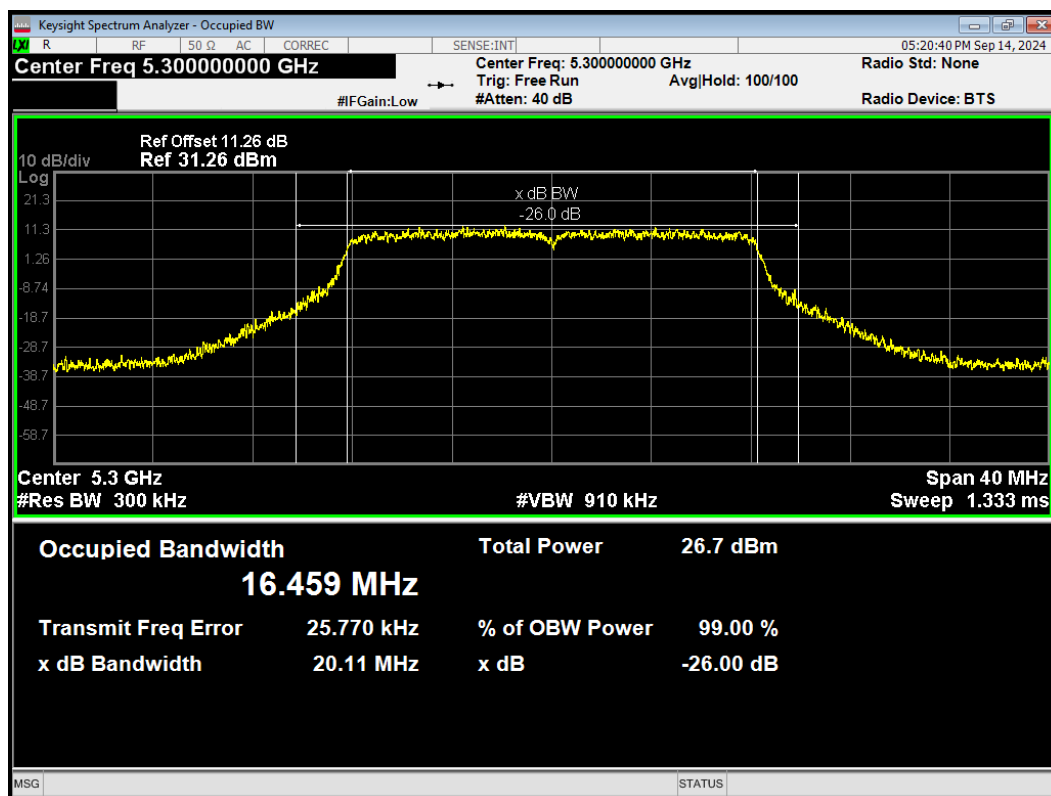


U-NII-2A

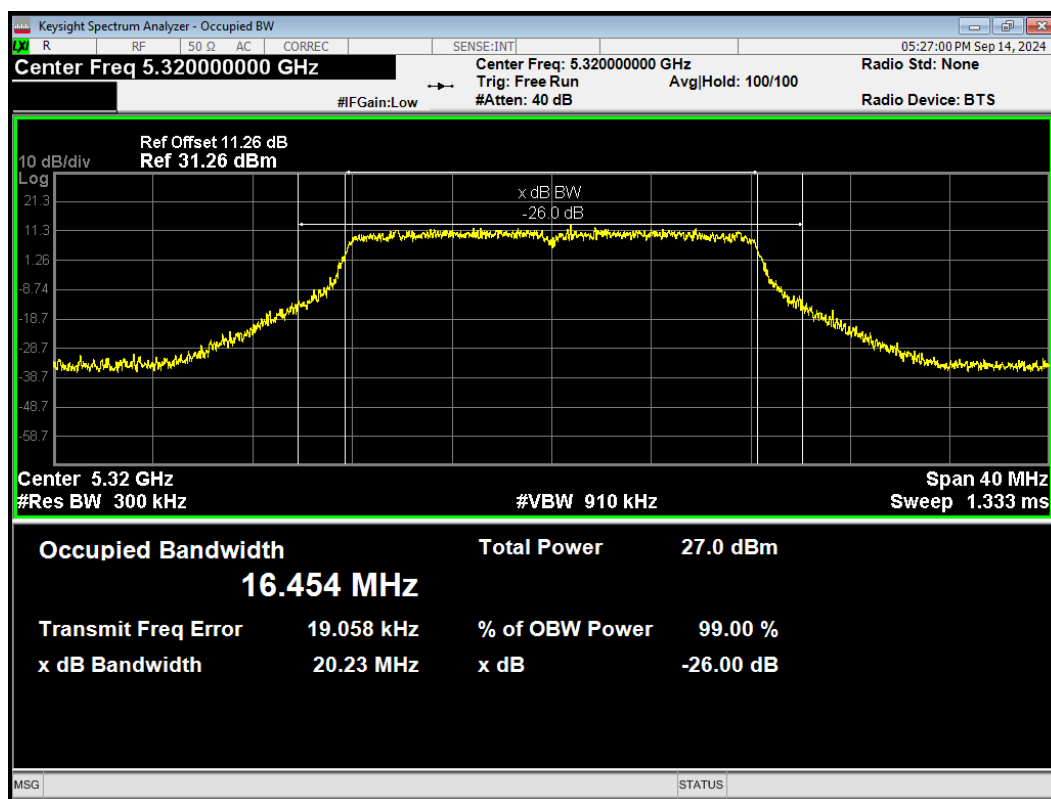
OBW 802.11a 5260MHz



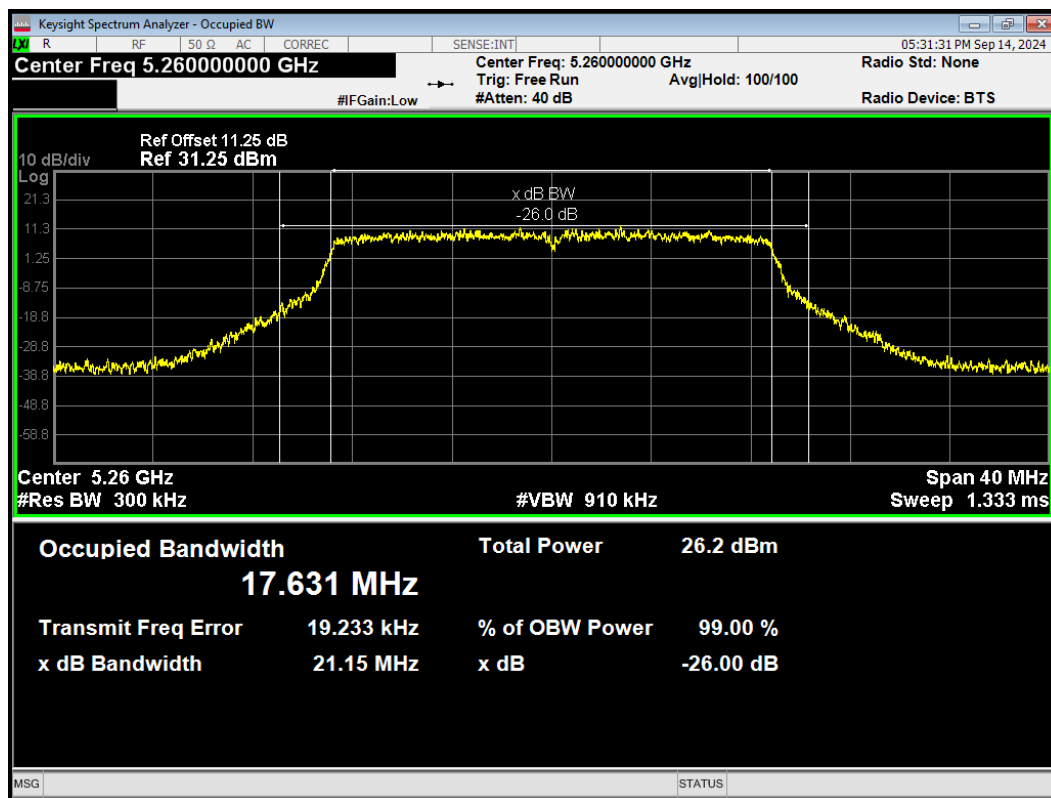
OBW 802.11a 5300MHz



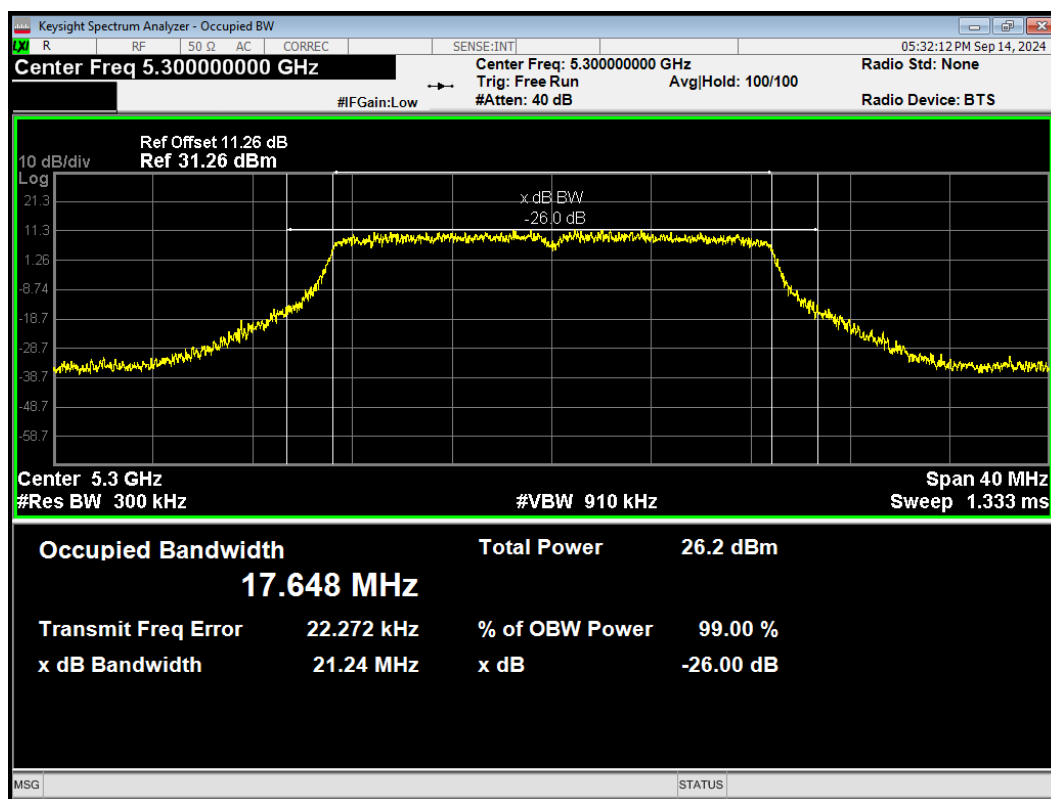
OBW 802.11a 5320MHz



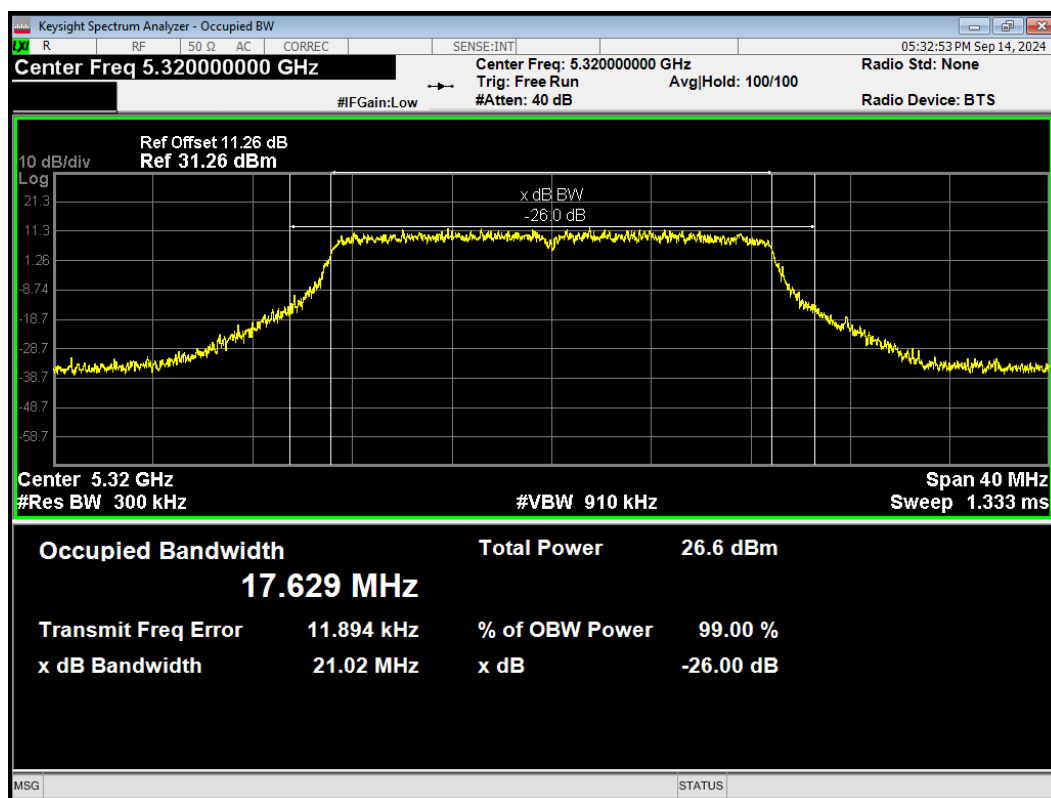
OBW 802.11ac(VHT20) 5260MHz



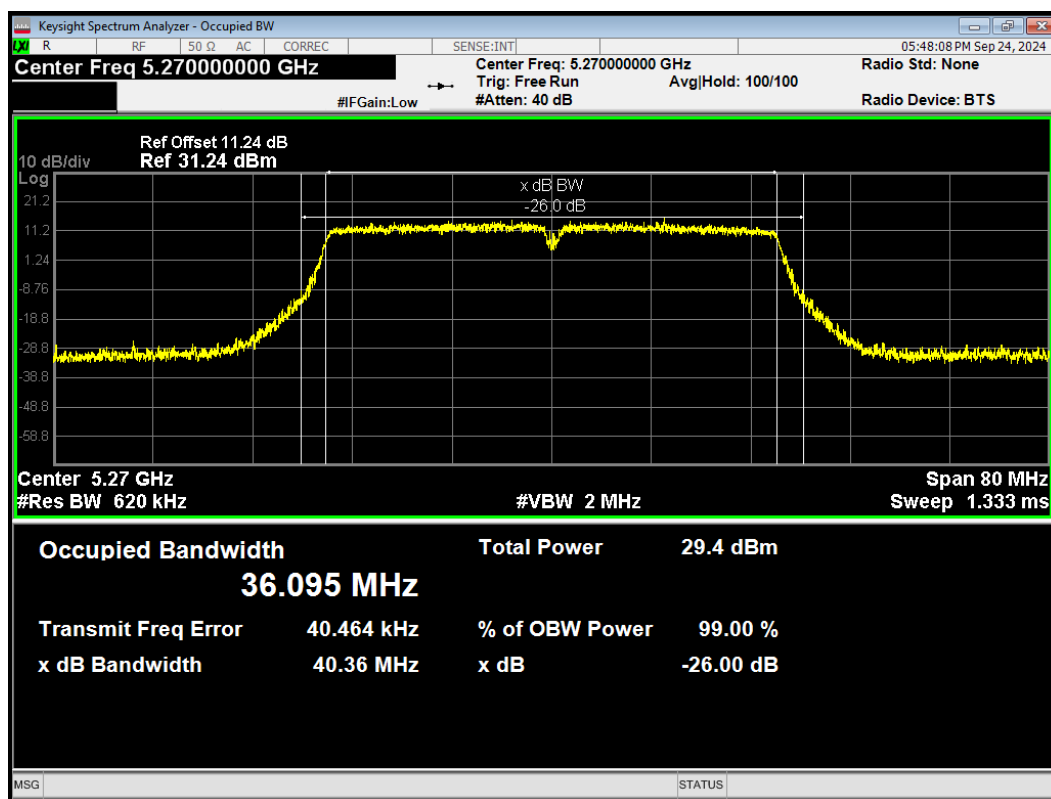
OBW 802.11ac(VHT20) 5300MHz



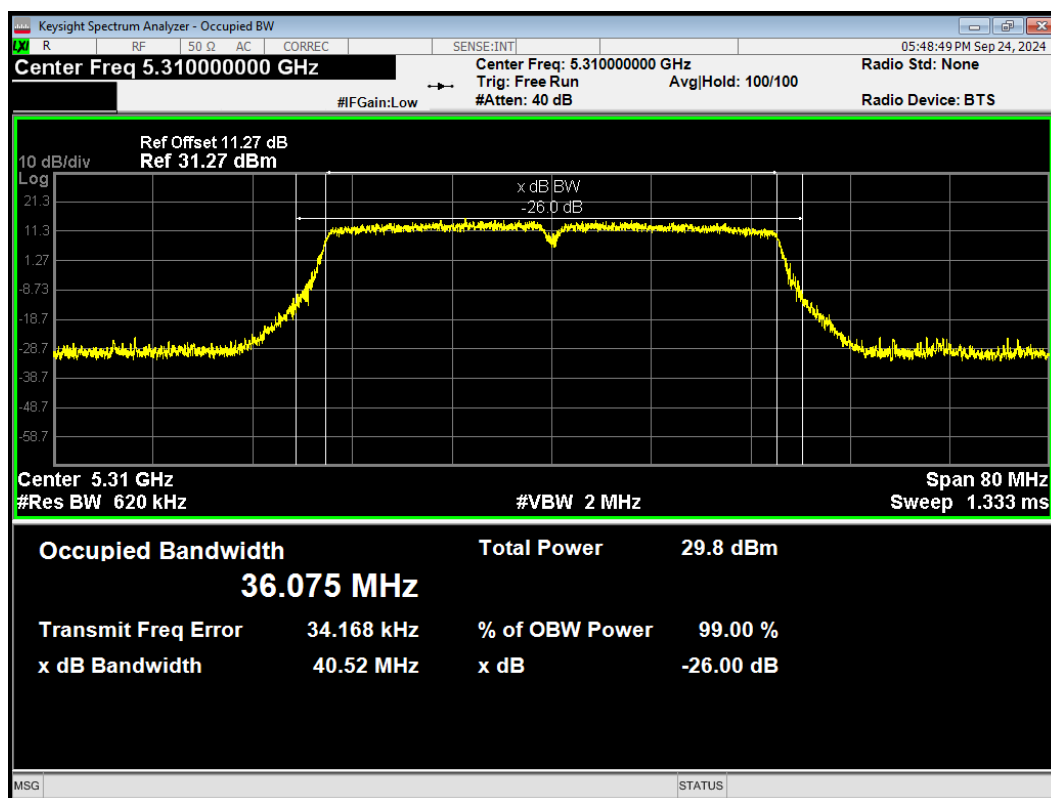
OBW 802.11ac(VHT20) 5320MHz



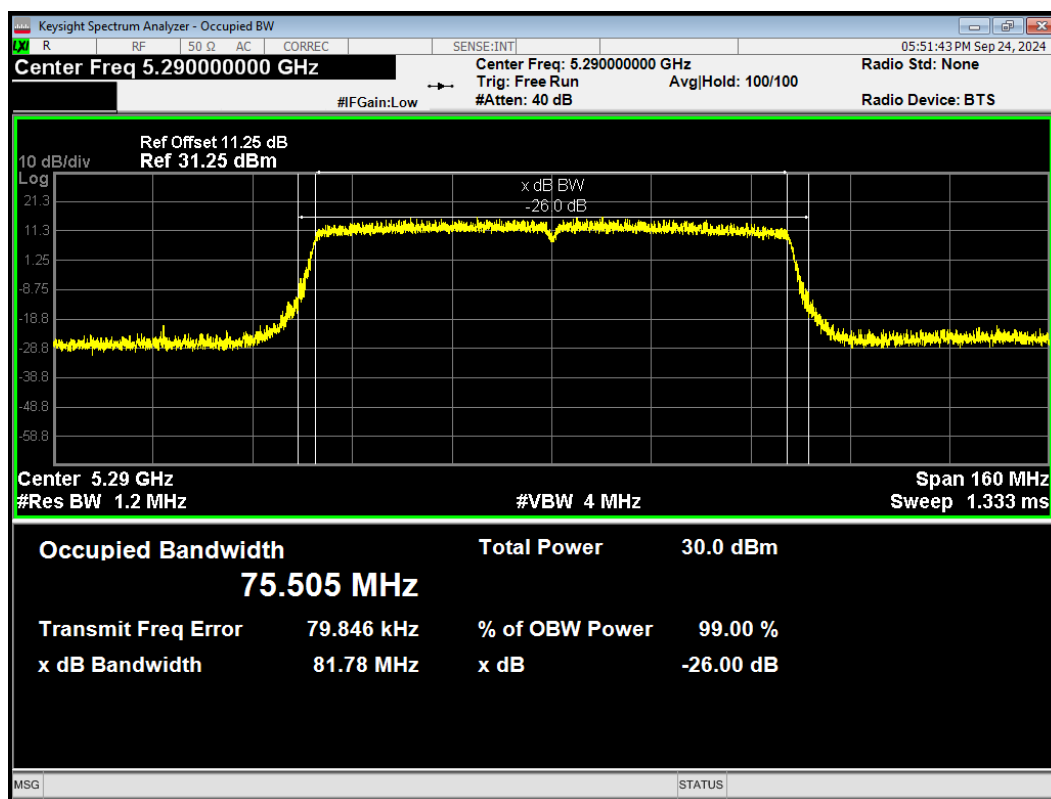
OBW 802.11ac(VHT40) 5270MHz



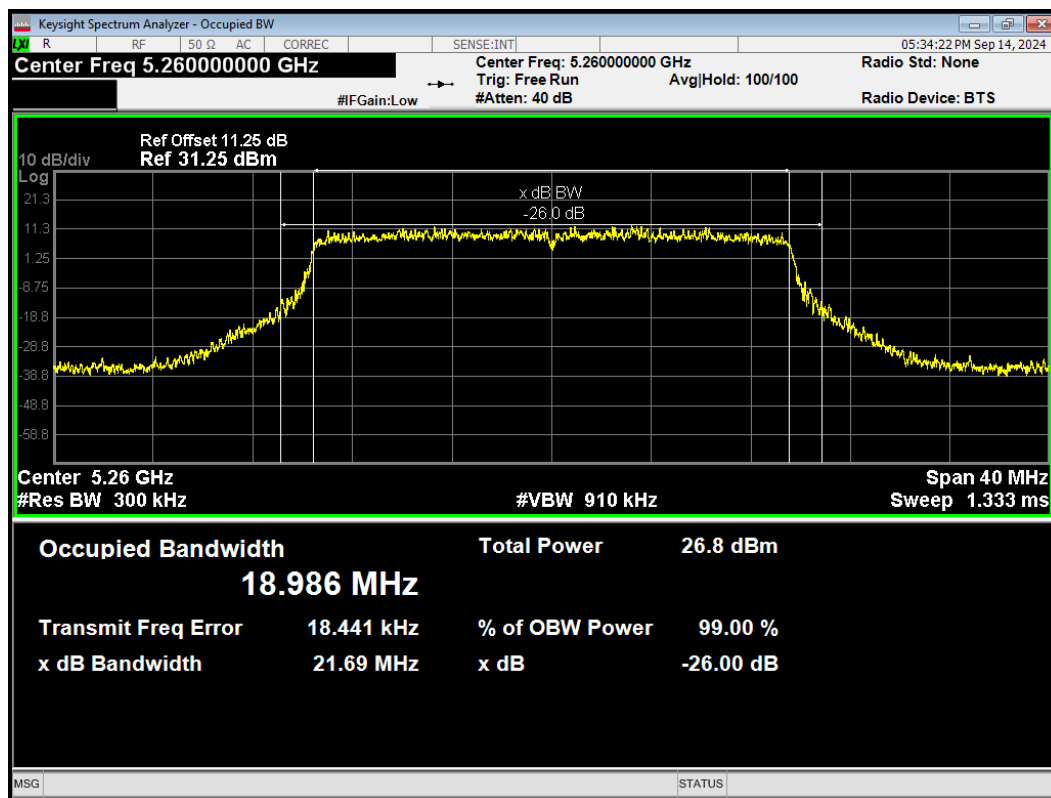
OBW 802.11ac(VHT40) 5310MHz



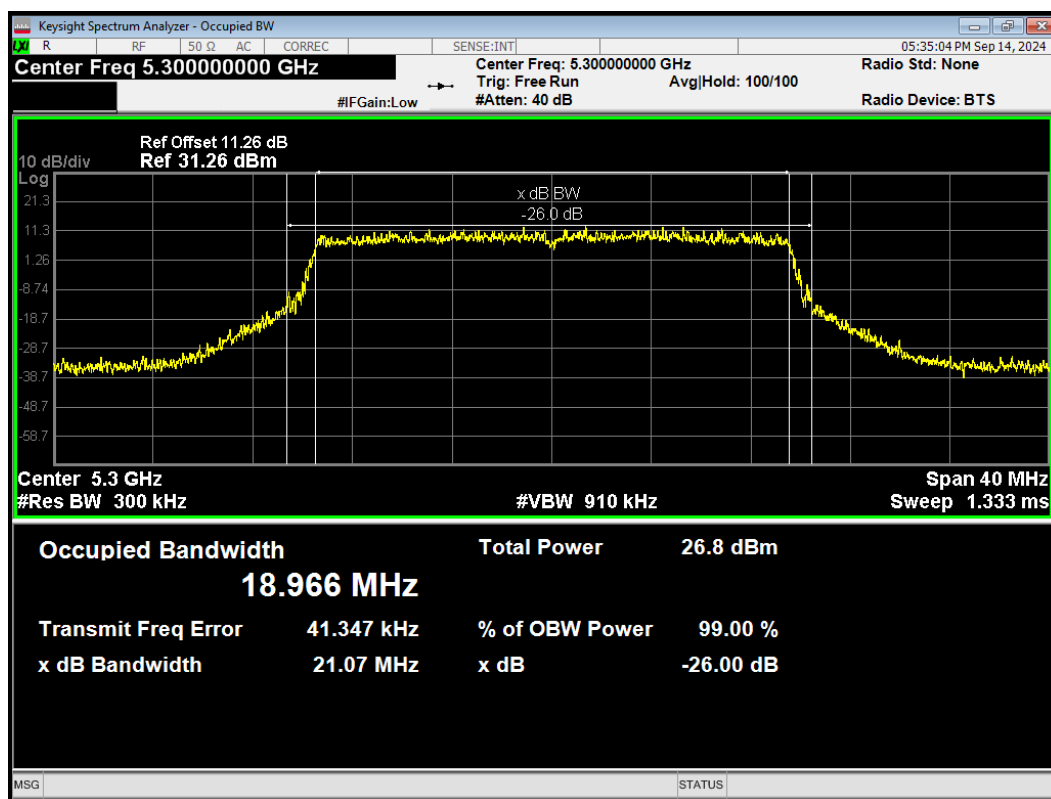
OBW 802.11ac(VHT80) 5290MHz



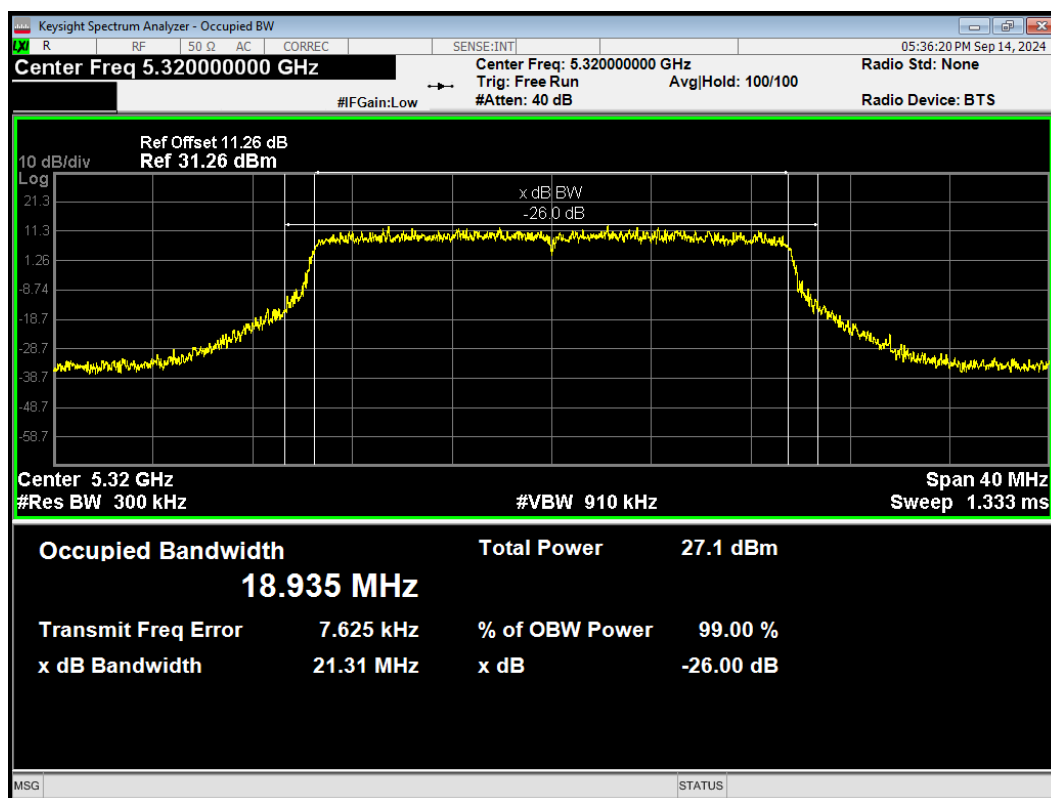
OBW 802.11ax(HE20) 5260MHz



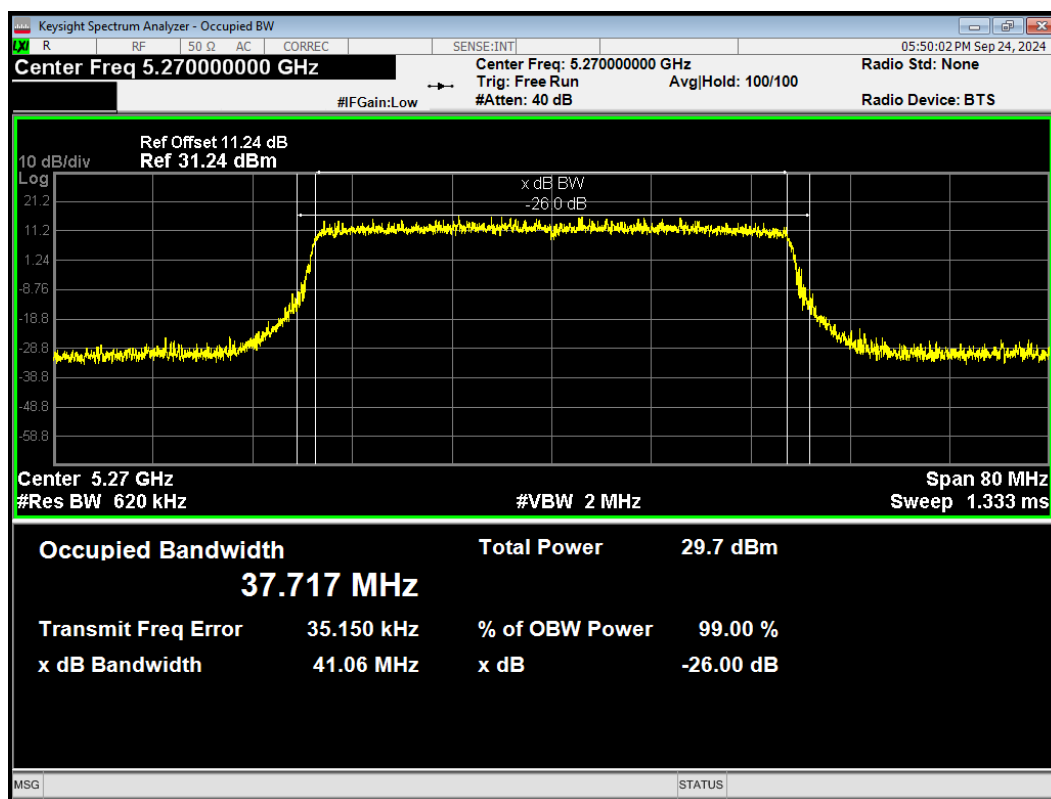
OBW 802.11ax(HE20) 5300MHz



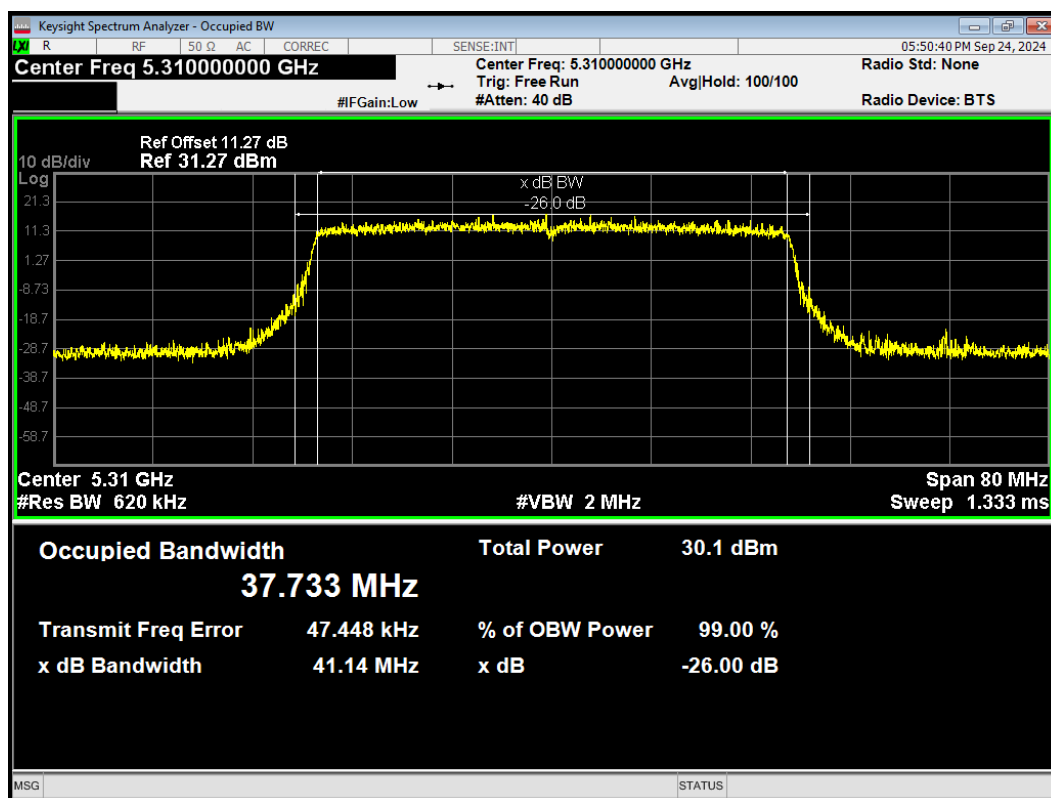
OBW 802.11ax(HE20) 5320MHz



OBW 802.11ax(HE40) 5270MHz

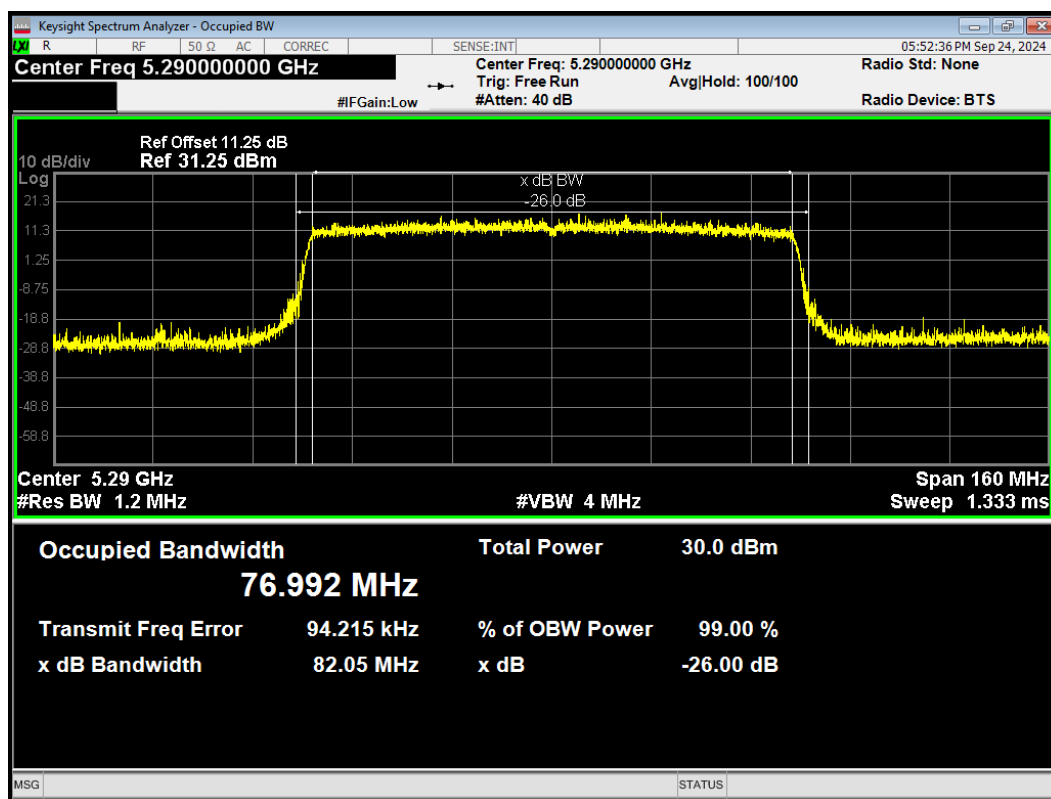


OBW 802.11ax(HE40) 5310MHz

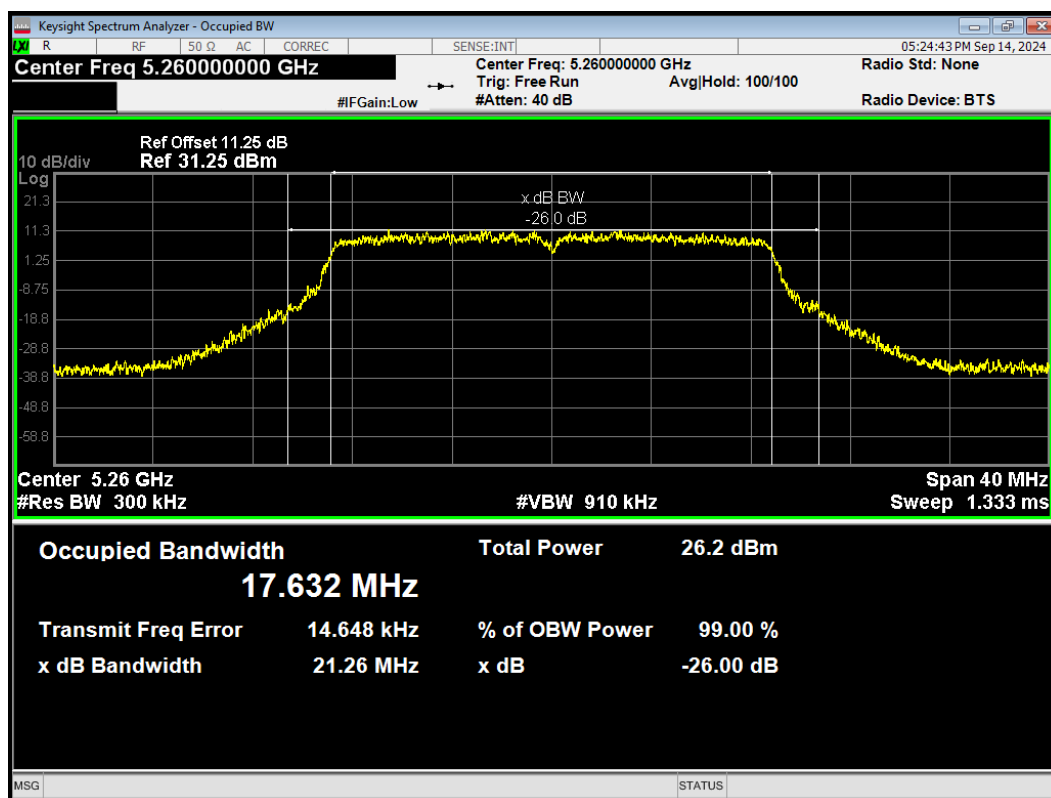




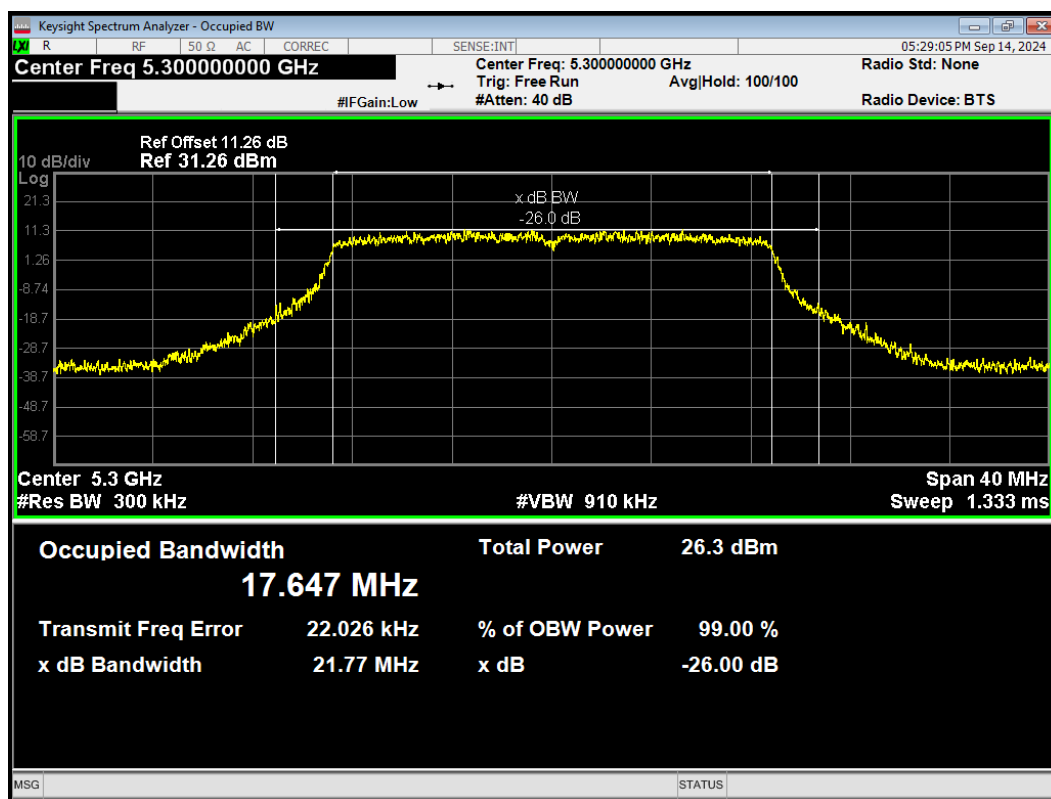
OBW 802.11ax(HE80) 5290MHz



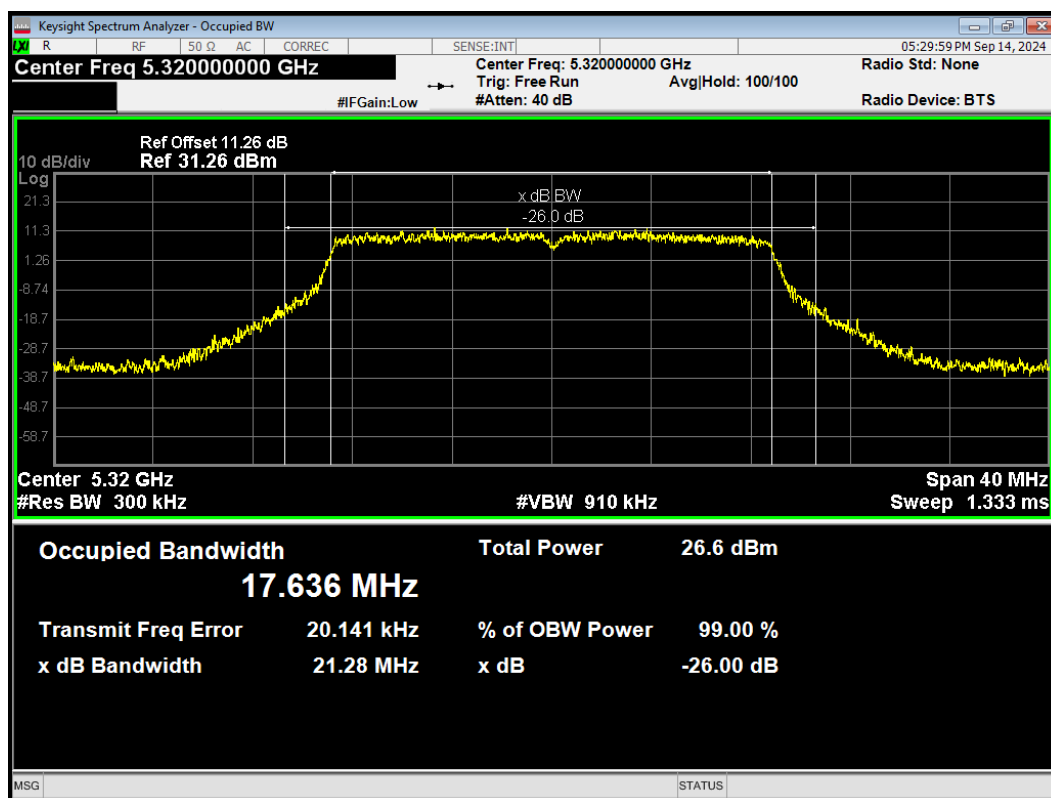
OBW 802.11n(HT20) 5260MHz



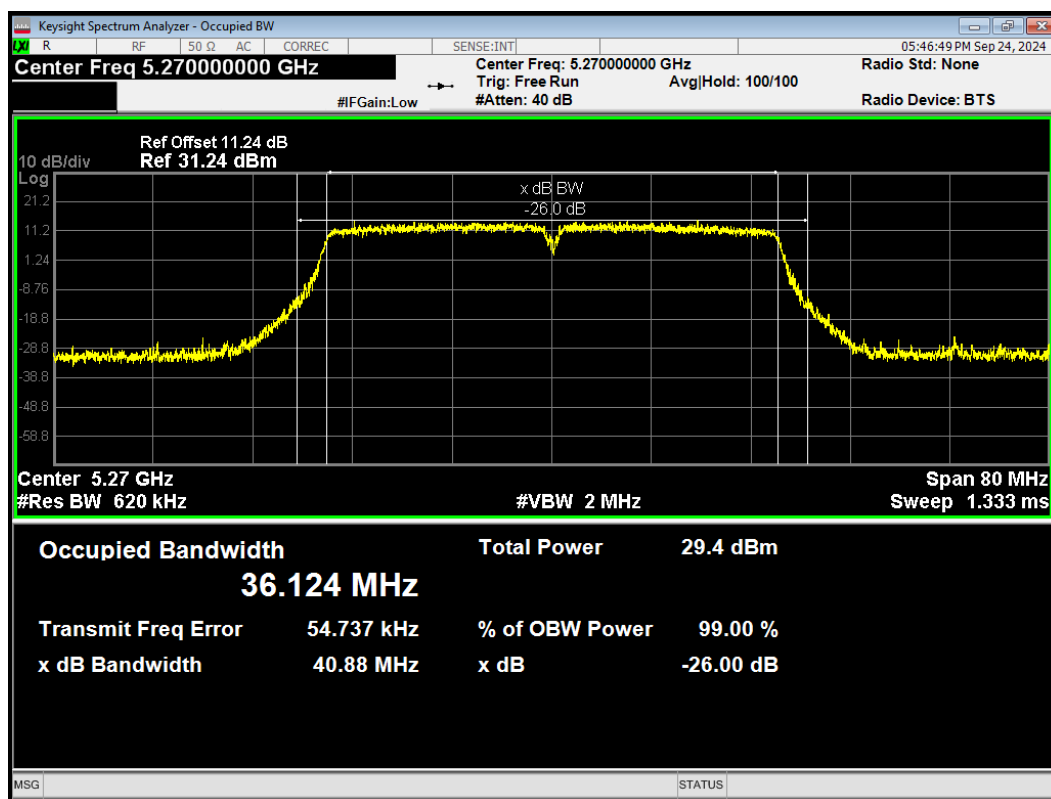
OBW 802.11n(HT20) 5300MHz



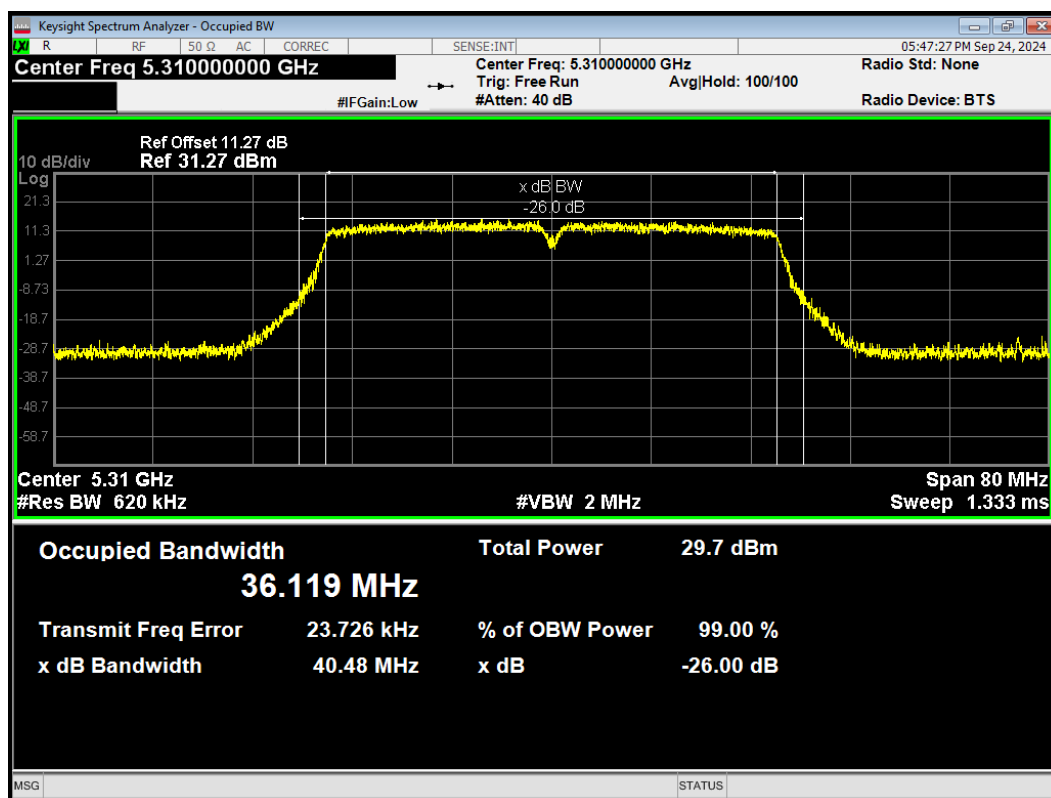
OBW 802.11n(HT20) 5320MHz



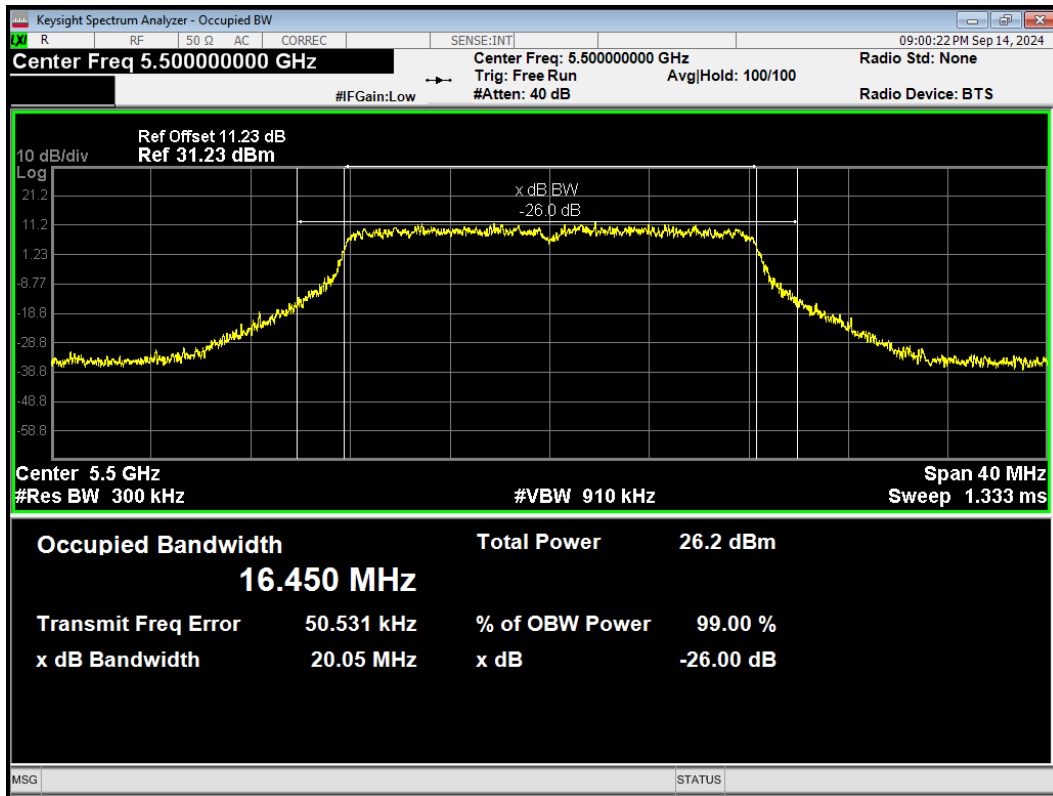
OBW 802.11n(HT40) 5270MHz



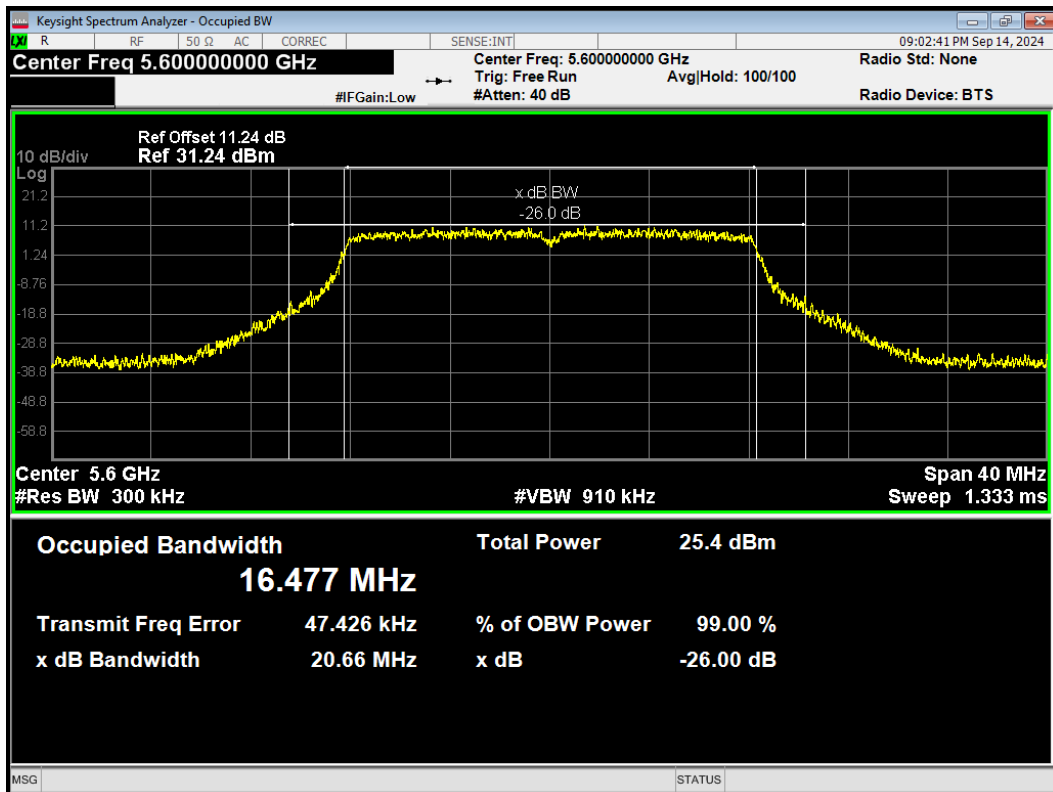
OBW 802.11n(HT40) 5310MHz



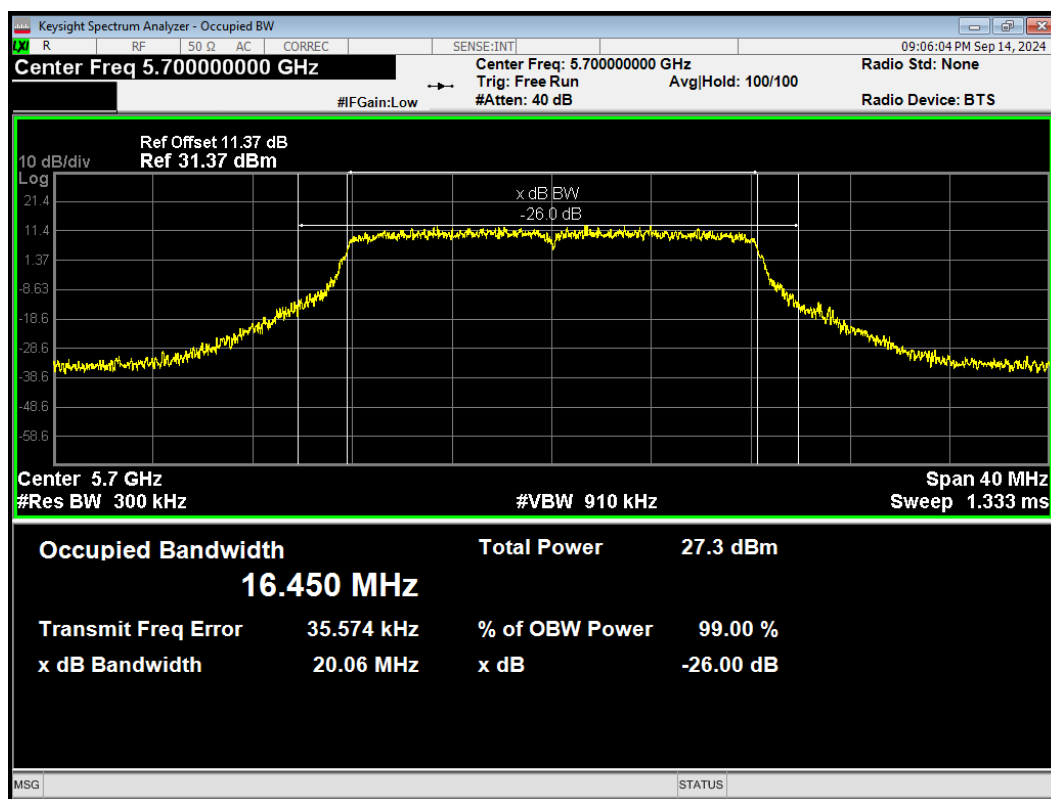
OBW 802.11a 5500MHz



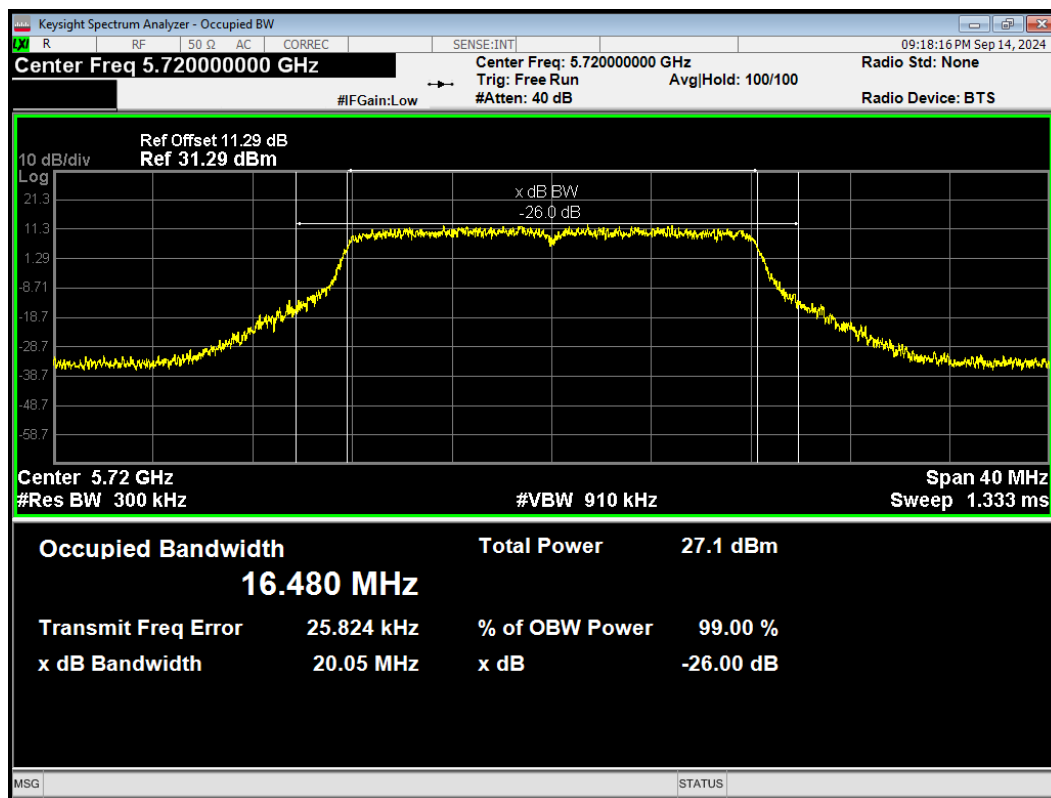
OBW 802.11a 5600MHz



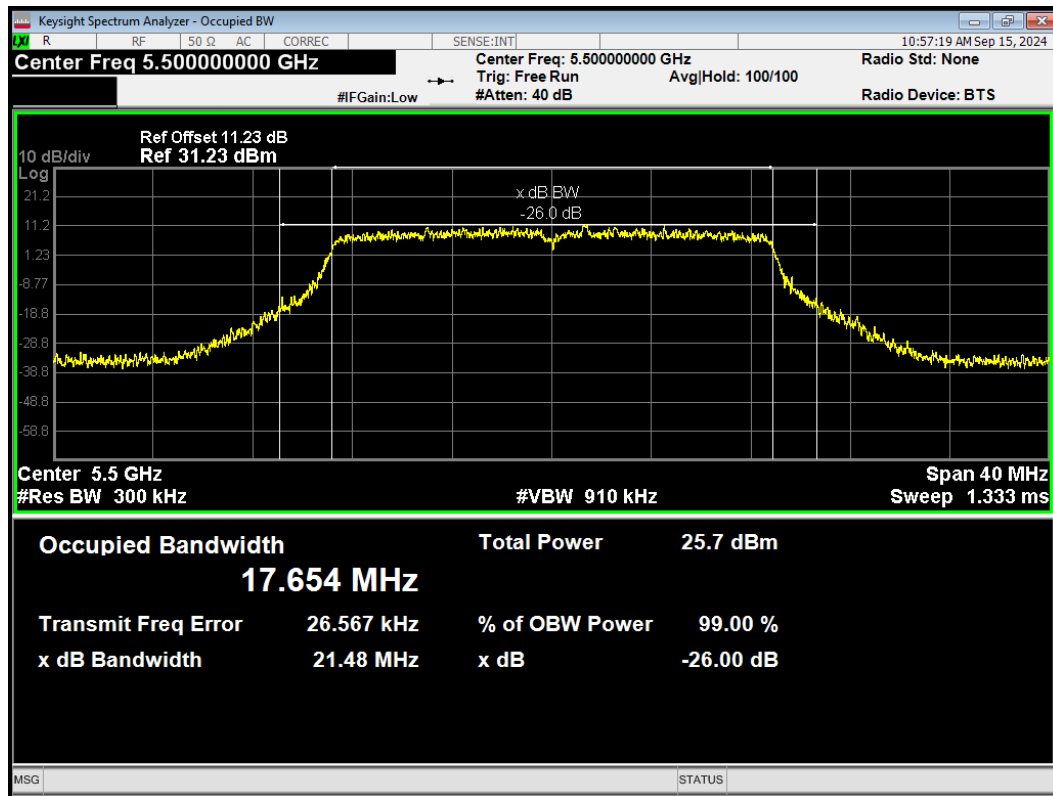
OBW 802.11a 5700MHz



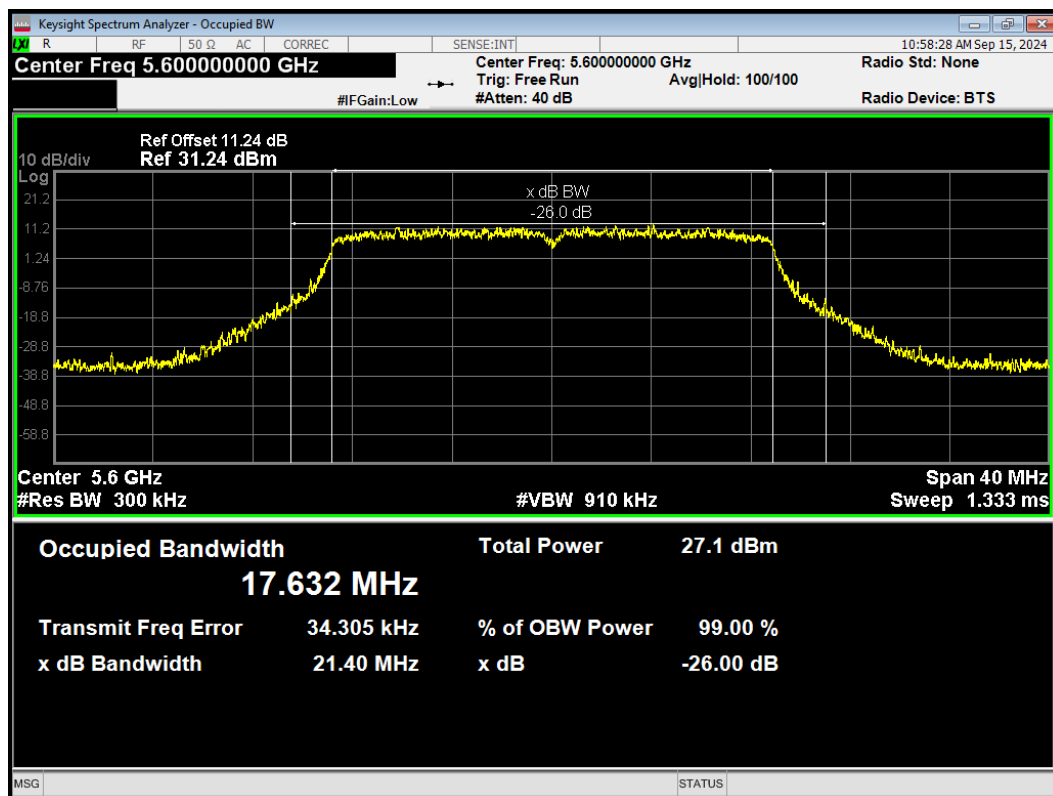
OBW 802.11a 5720MHz



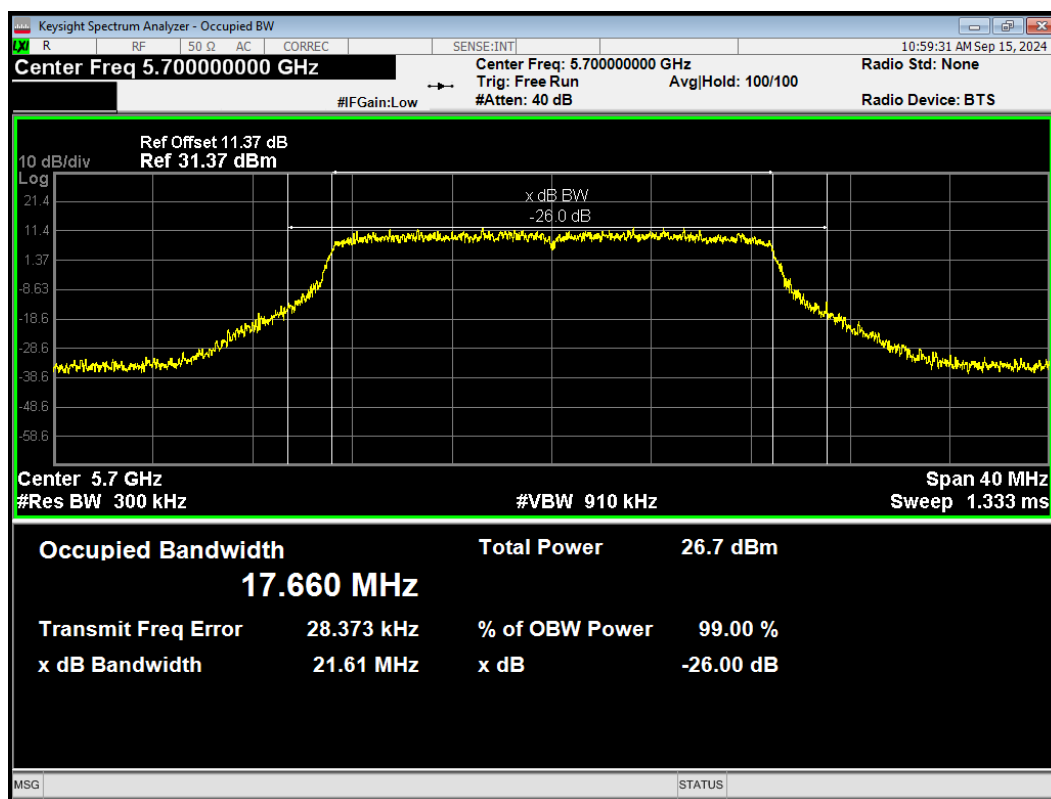
OBW 802.11ac(VHT20) 5500MHz



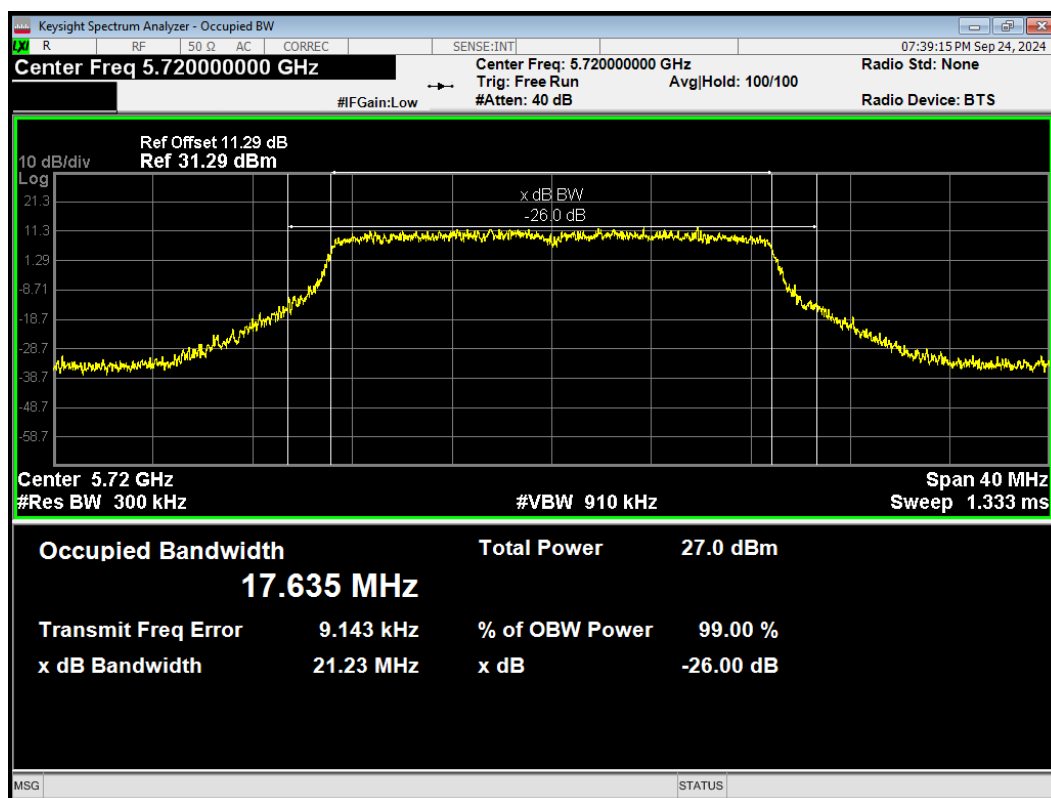
OBW 802.11ac(VHT20) 5600MHz



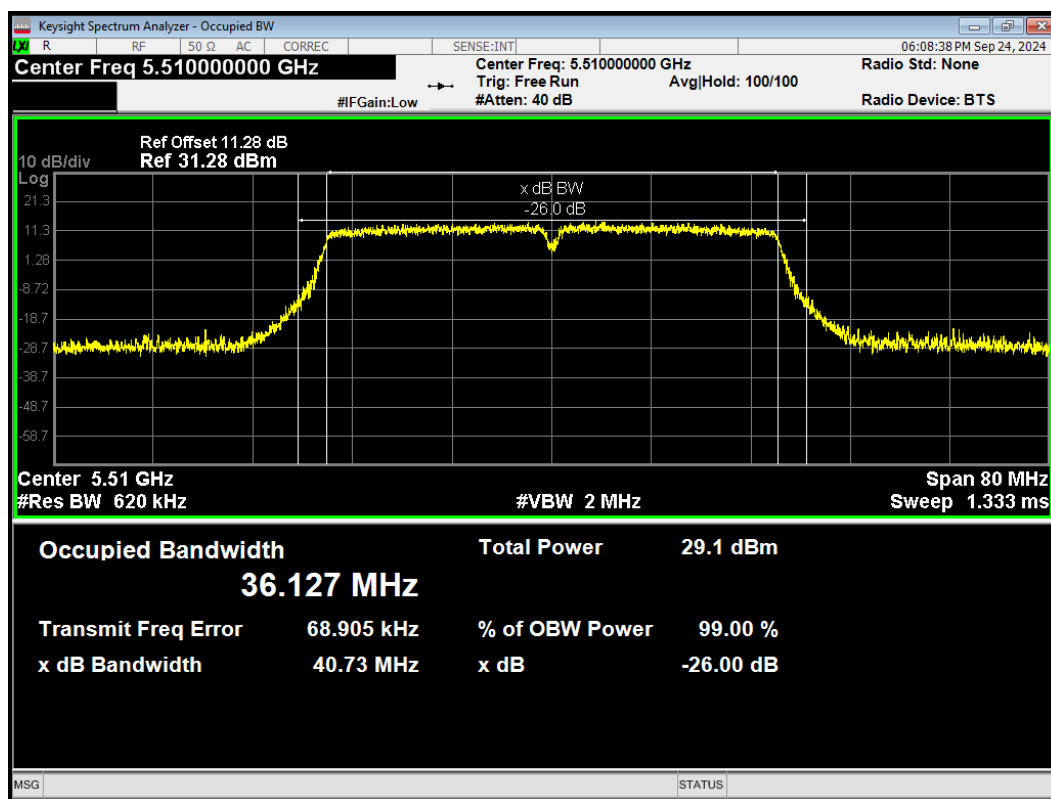
OBW 802.11ac(VHT20) 5700MHz



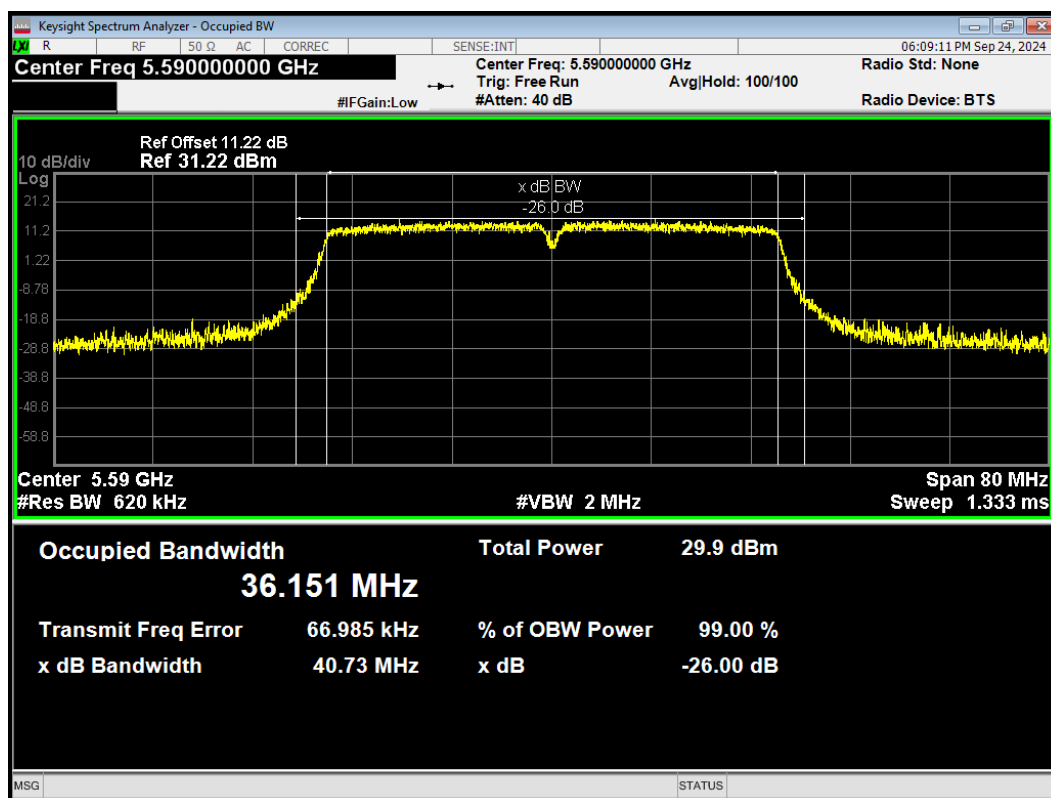
OBW 802.11ac(VHT20) 5720MHz



OBW 802.11ac(VHT40) 5510MHz

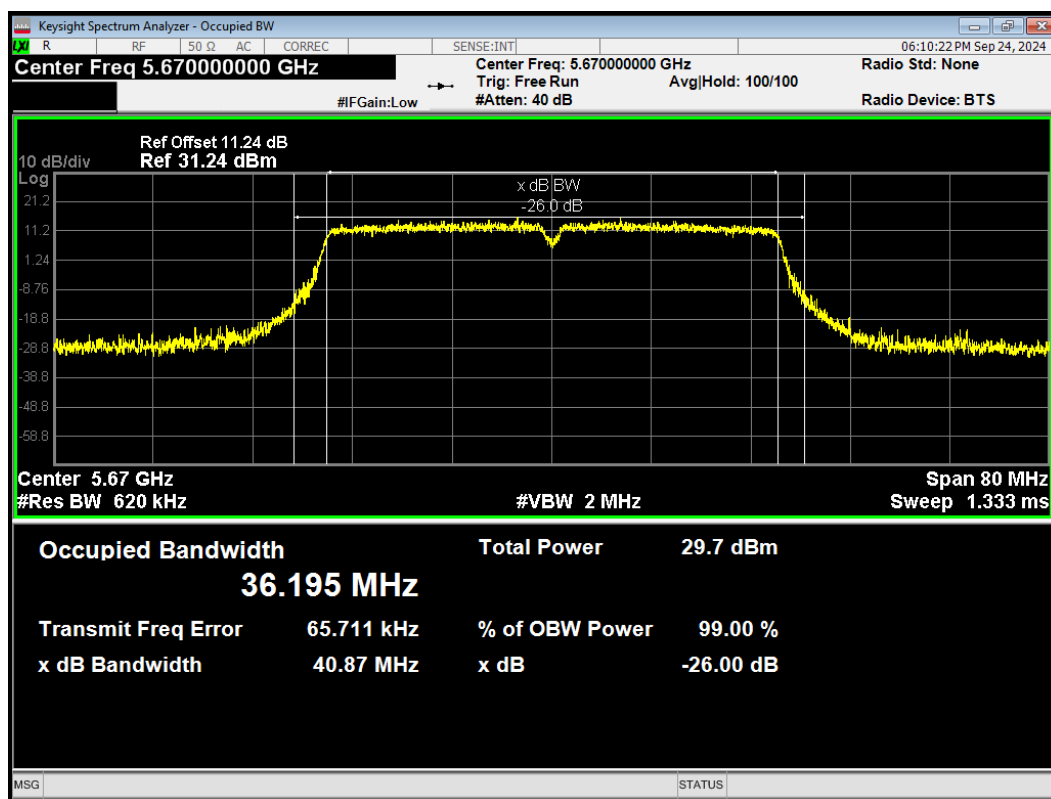


OBW 802.11ac(VHT40) 5590MHz

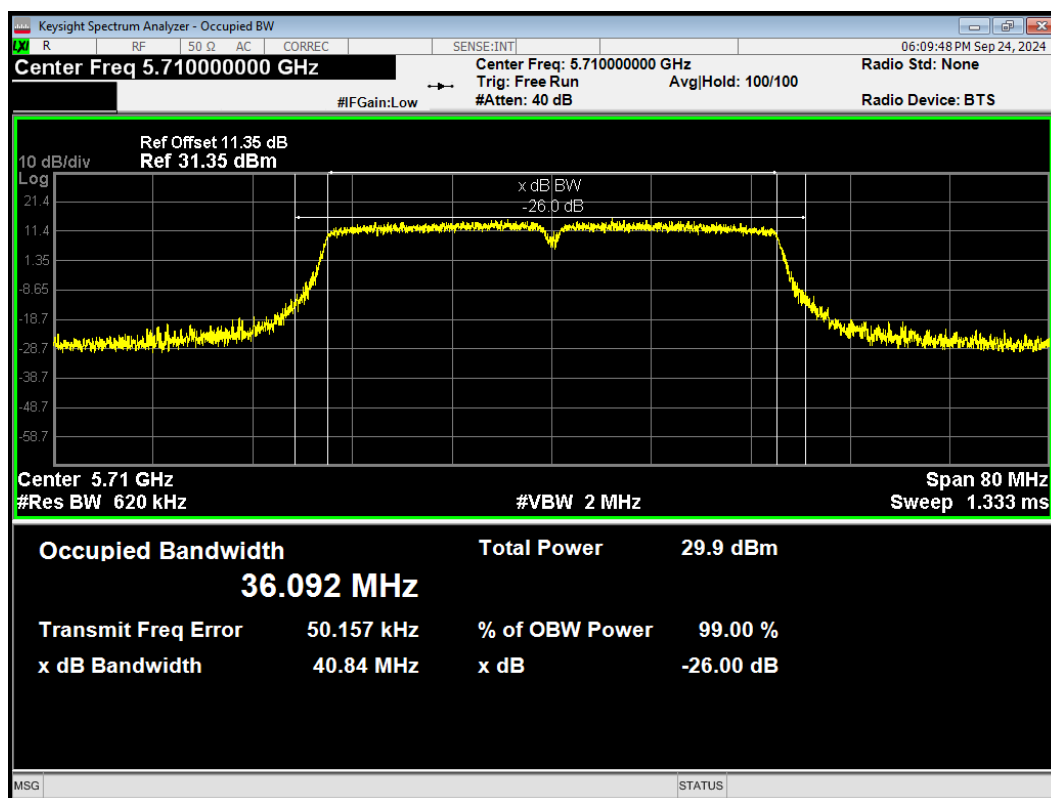




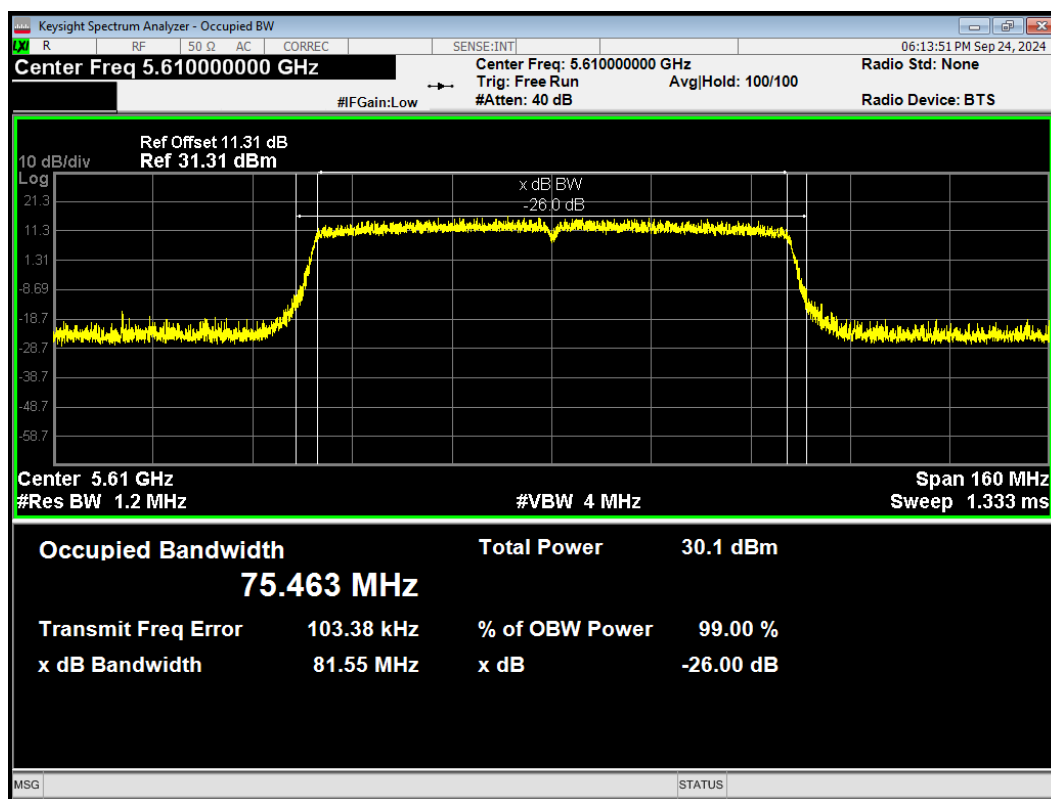
OBW 802.11ac(VHT40) 5670MHz



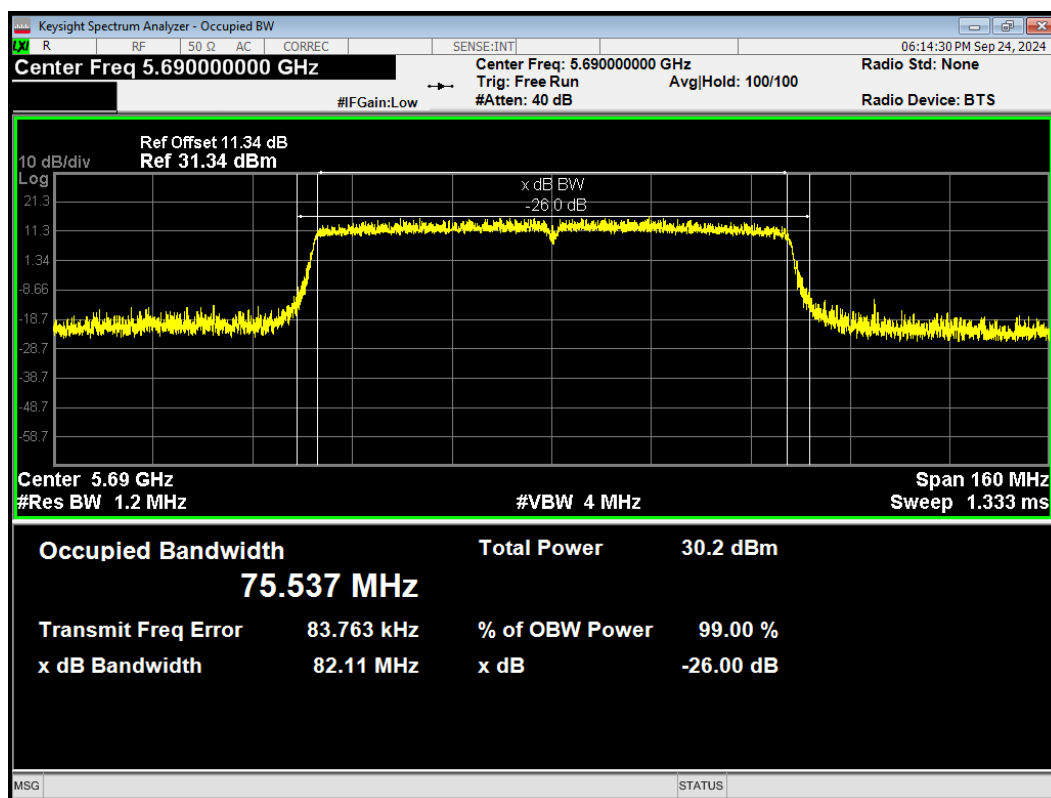
OBW 802.11ac(VHT40) 5710MHz



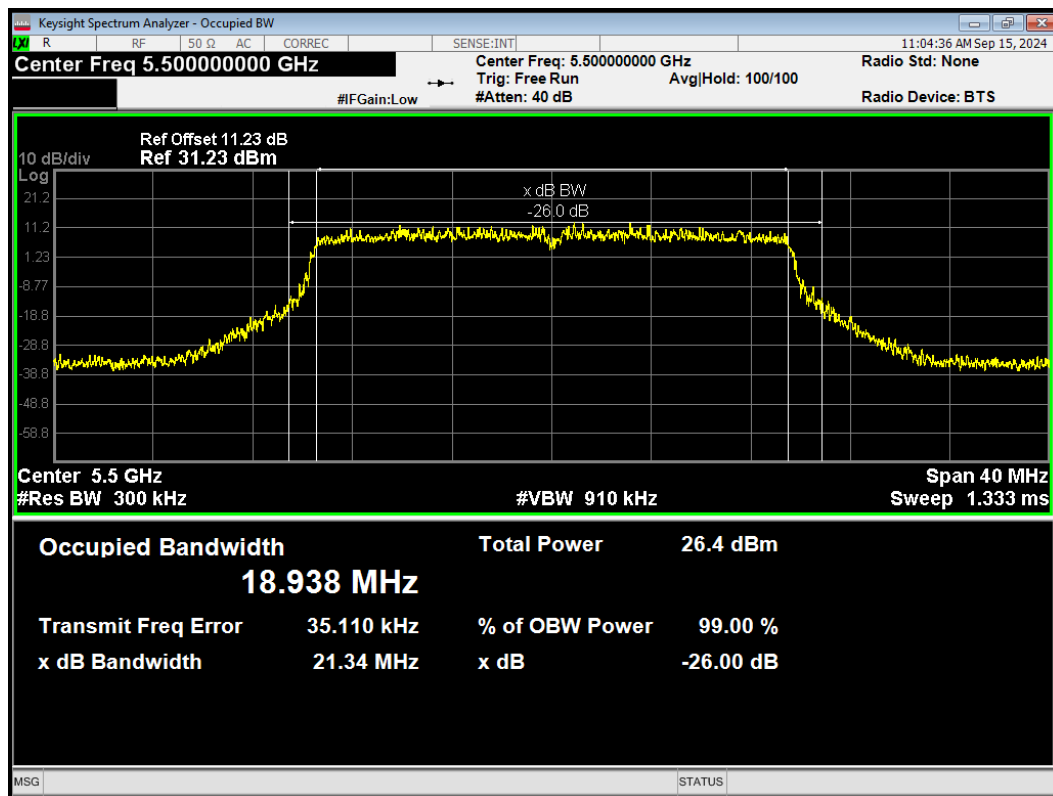
## OBW 802.11ac(VHT80) 5610MHz



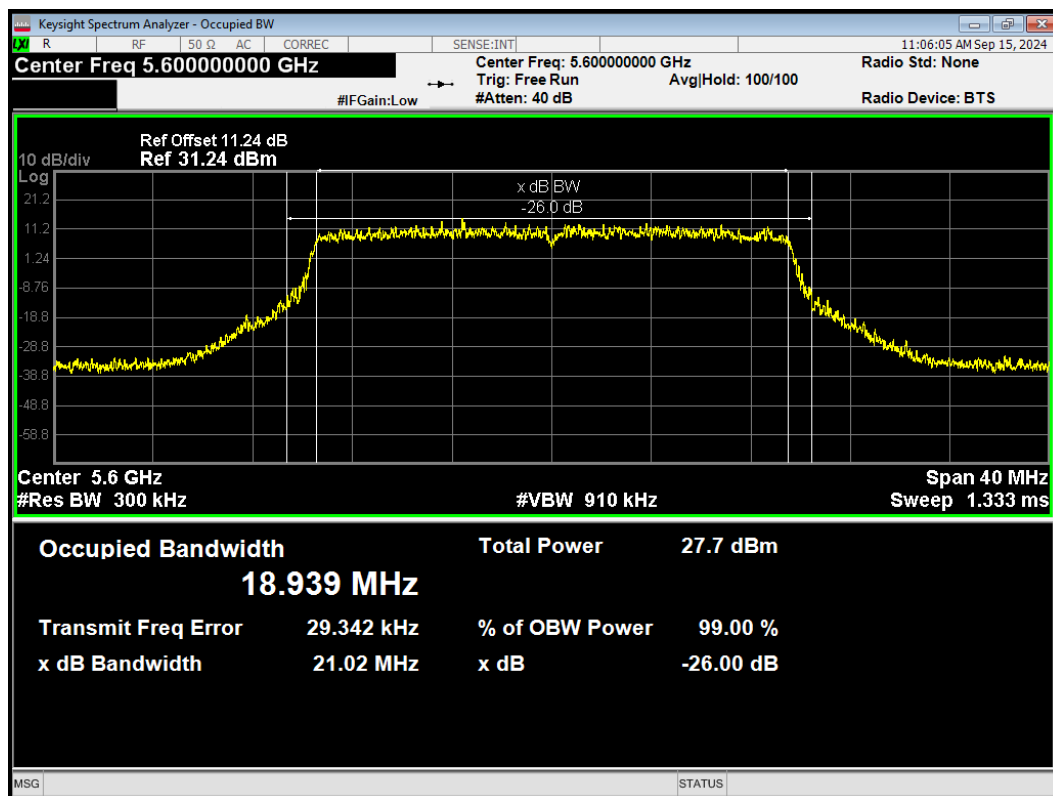
## OBW 802.11ac(VHT80) 5690MHz



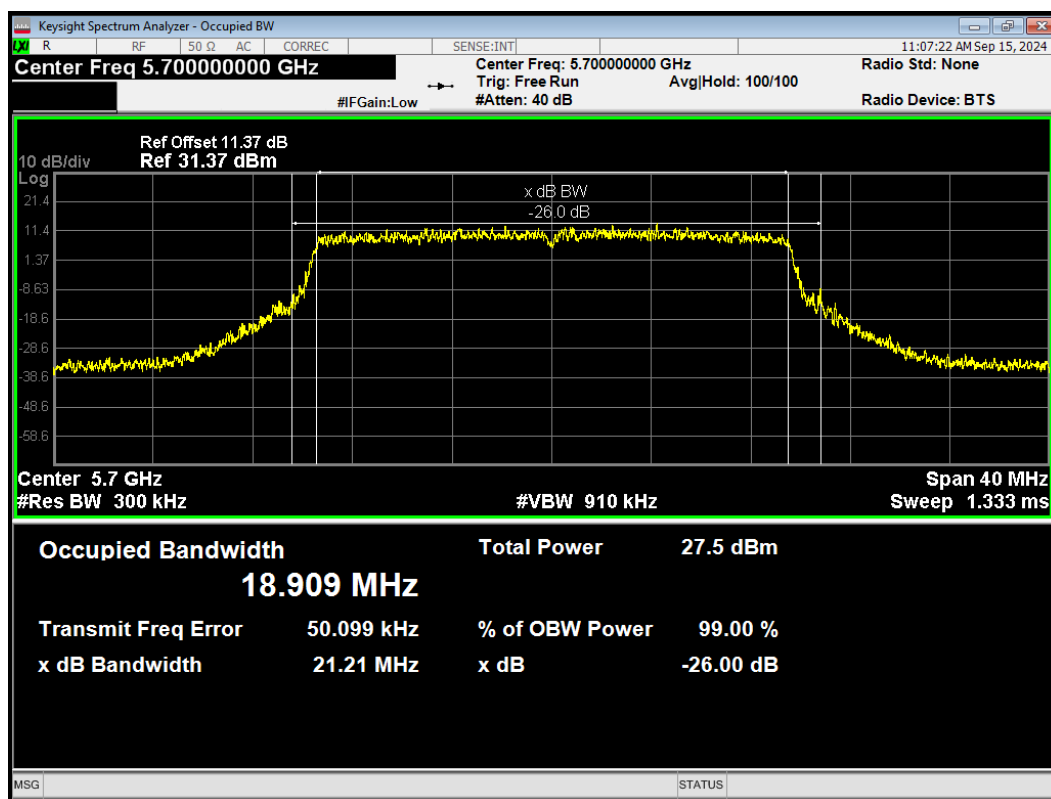
OBW 802.11ax(HE20) 5500MHz



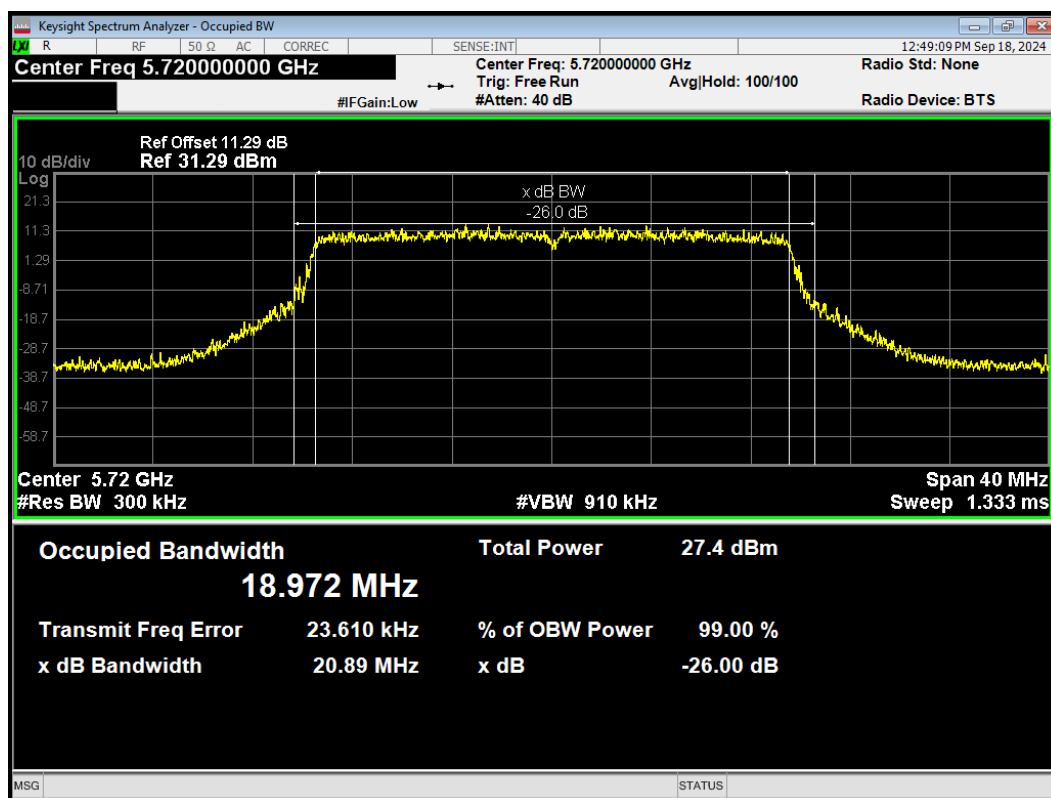
OBW 802.11ax(HE20) 5600MHz



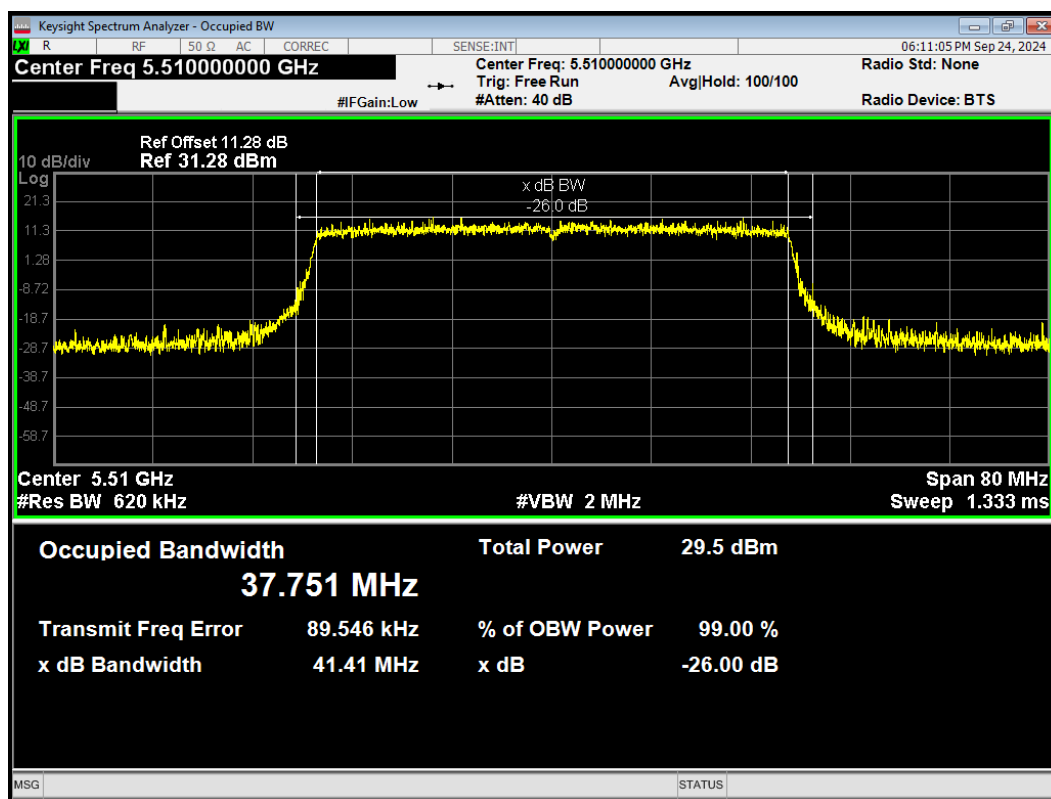
OBW 802.11ax(HE20) 5700MHz



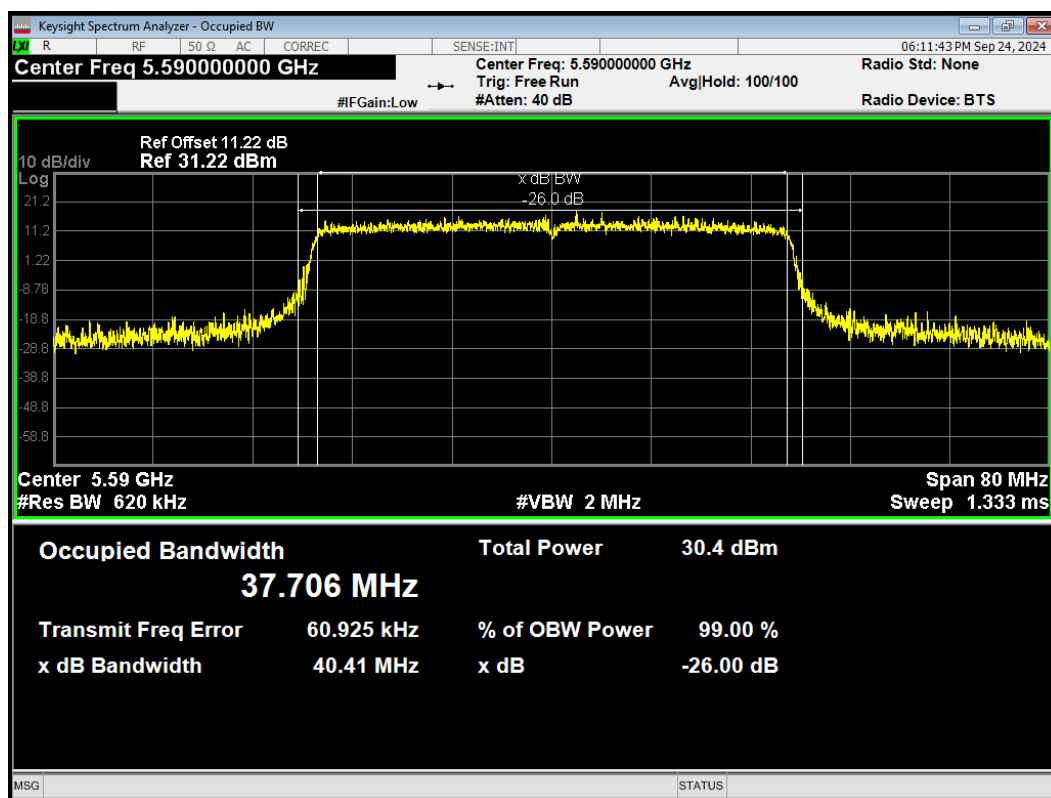
OBW 802.11ax(HE20) 5720MHz



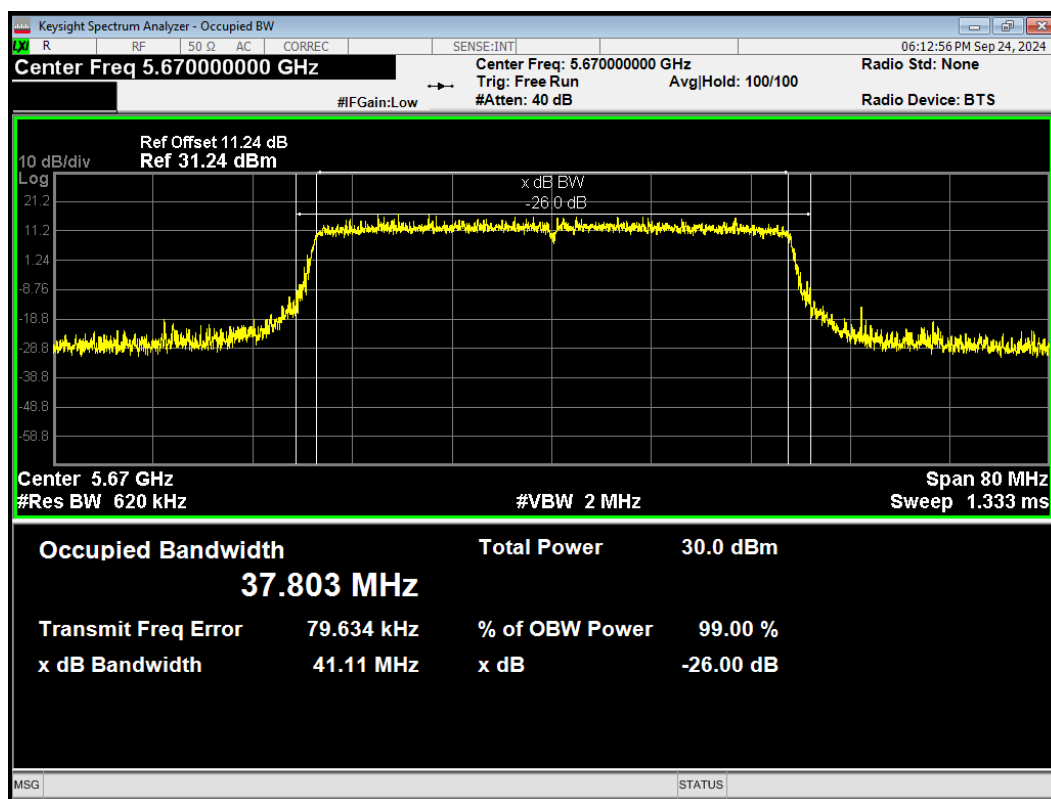
OBW 802.11ax(HE40) 5510MHz



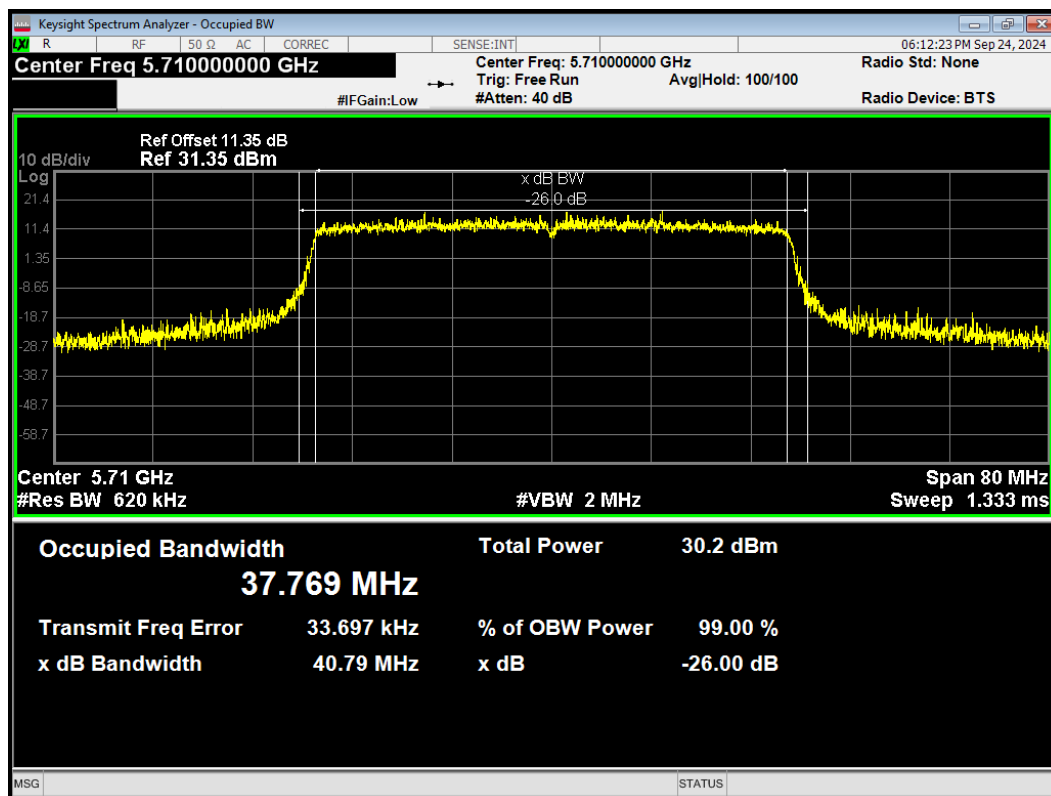
OBW 802.11ax(HE40) 5590MHz



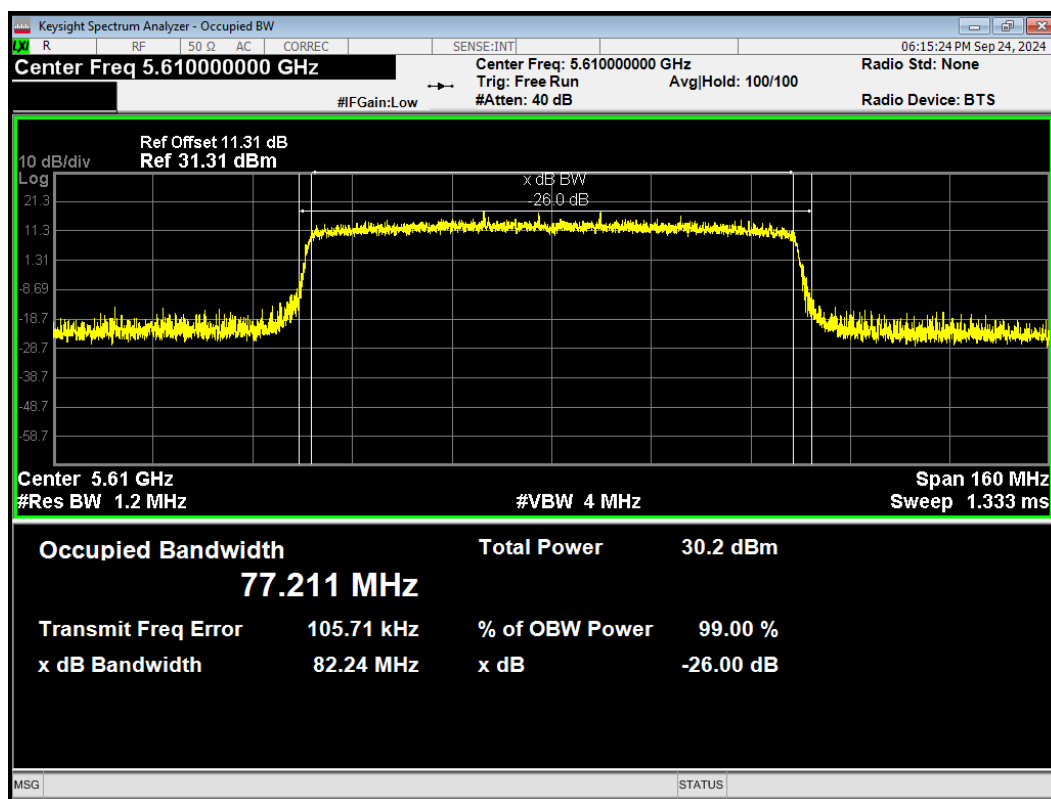
## OBW 802.11ax(HE40) 5670MHz



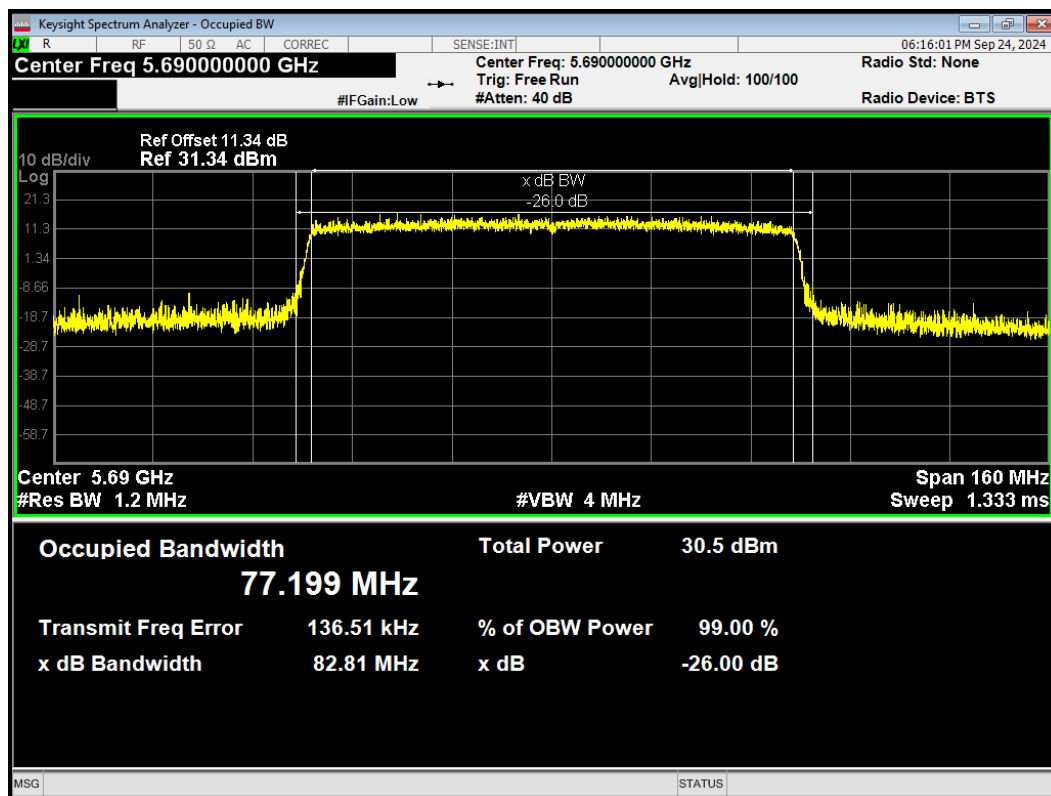
## OBW 802.11ax(HE40) 5710MHz



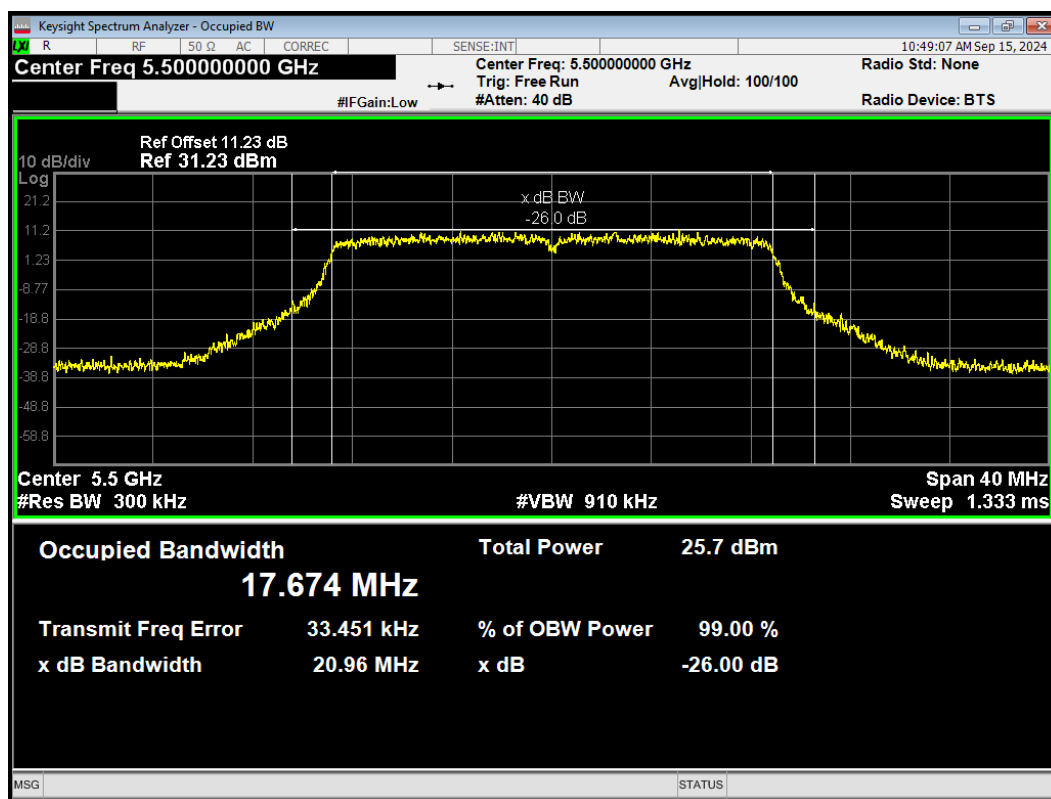
## OBW 802.11ax(HE80) 5610MHz



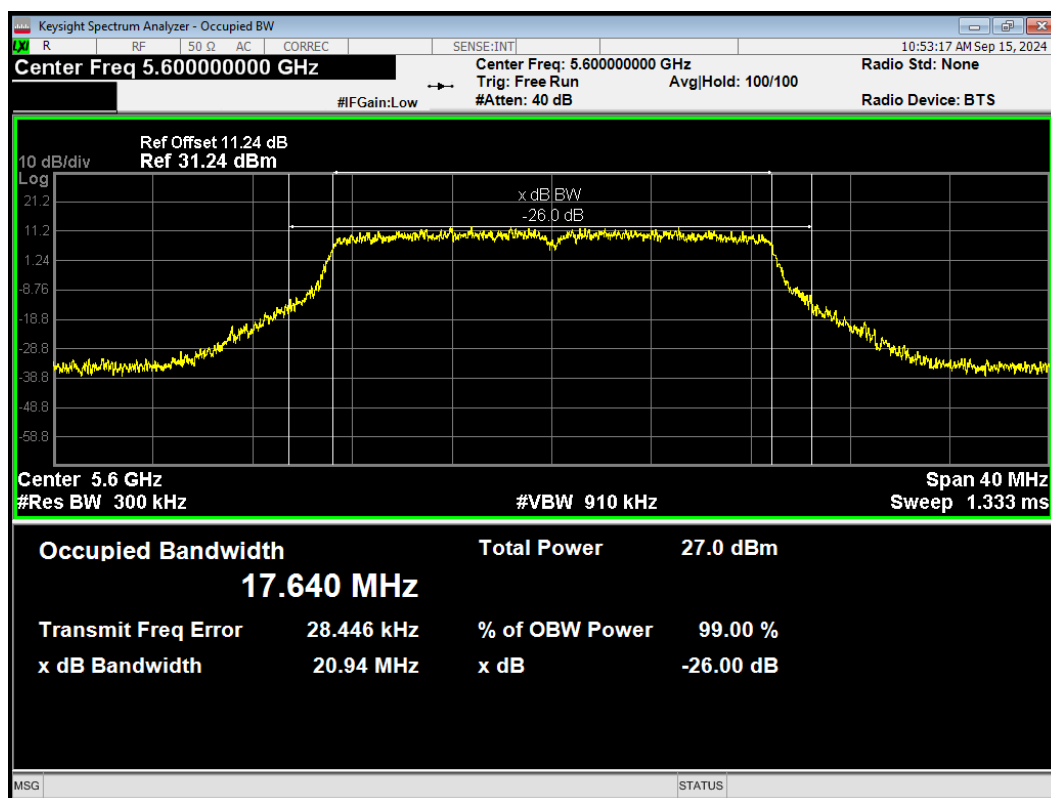
## OBW 802.11ax(HE80) 5690MHz



OBW 802.11n(HT20) 5500MHz

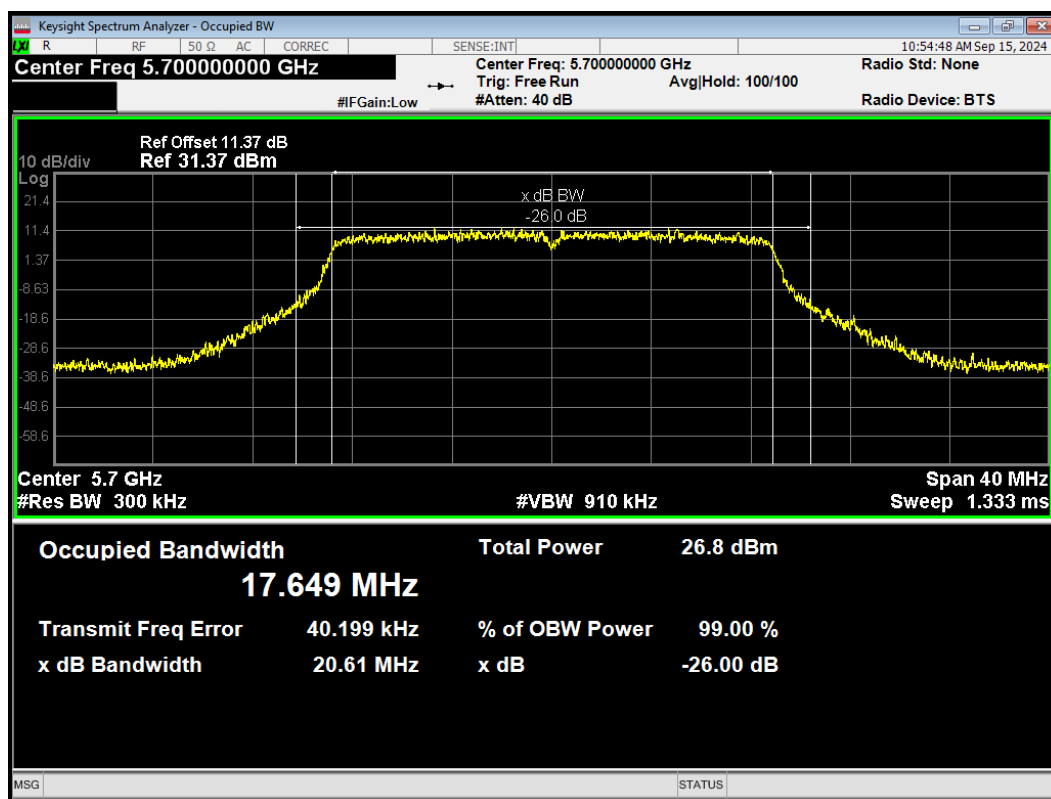


OBW 802.11n(HT20) 5600MHz

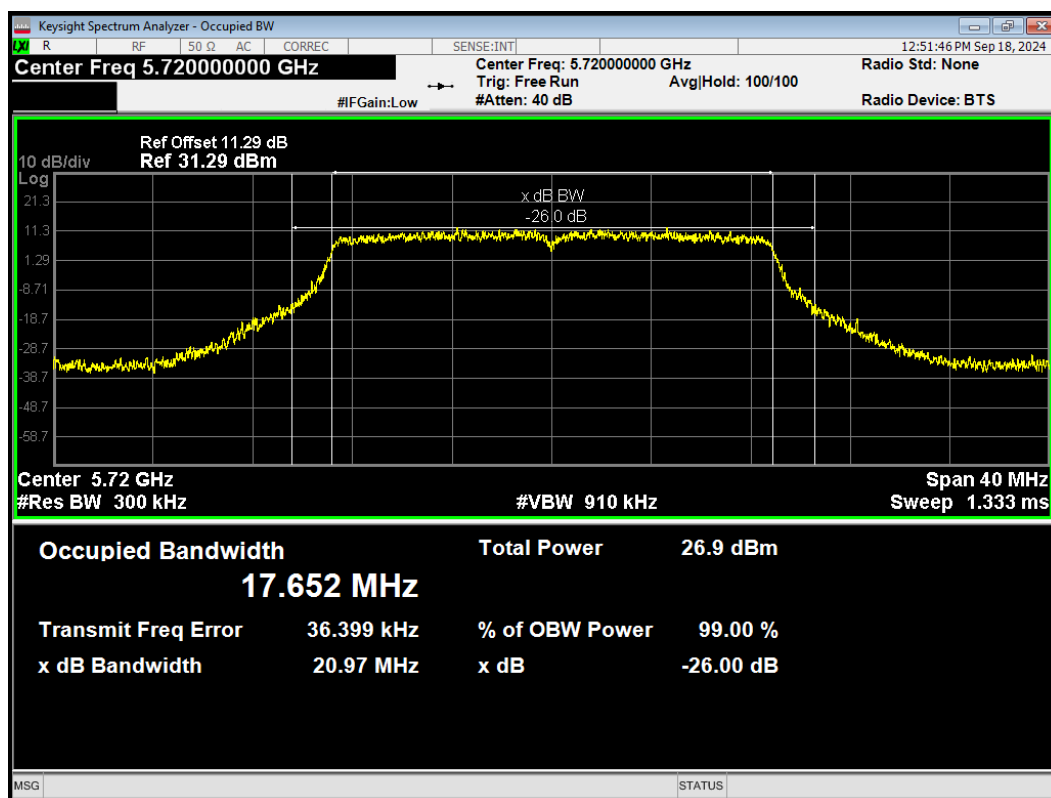




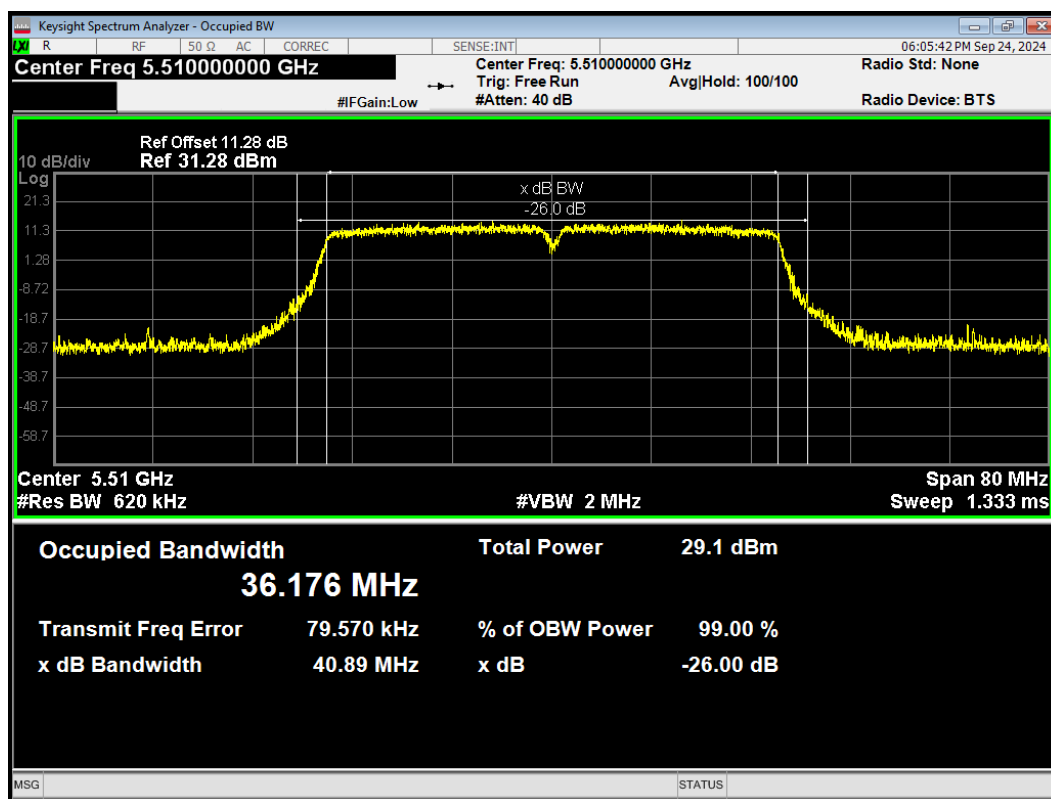
OBW 802.11n(HT20) 5700MHz



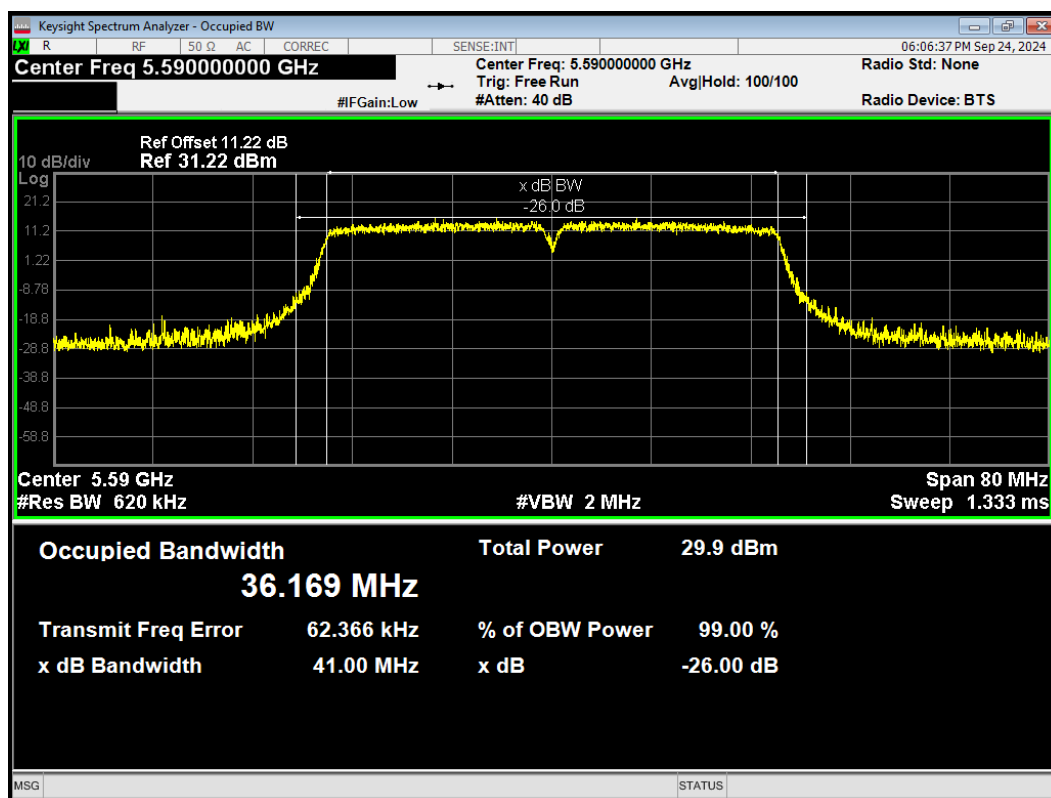
OBW 802.11n(HT20) 5720MHz



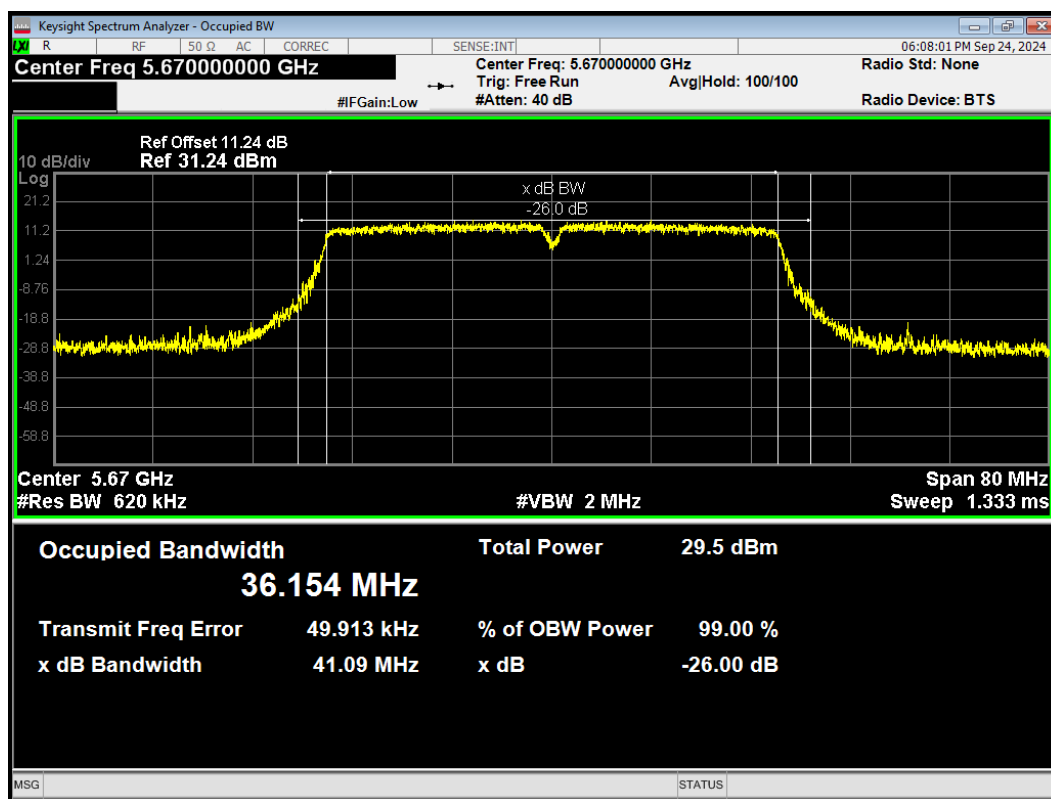
OBW 802.11n(HT40) 5510MHz



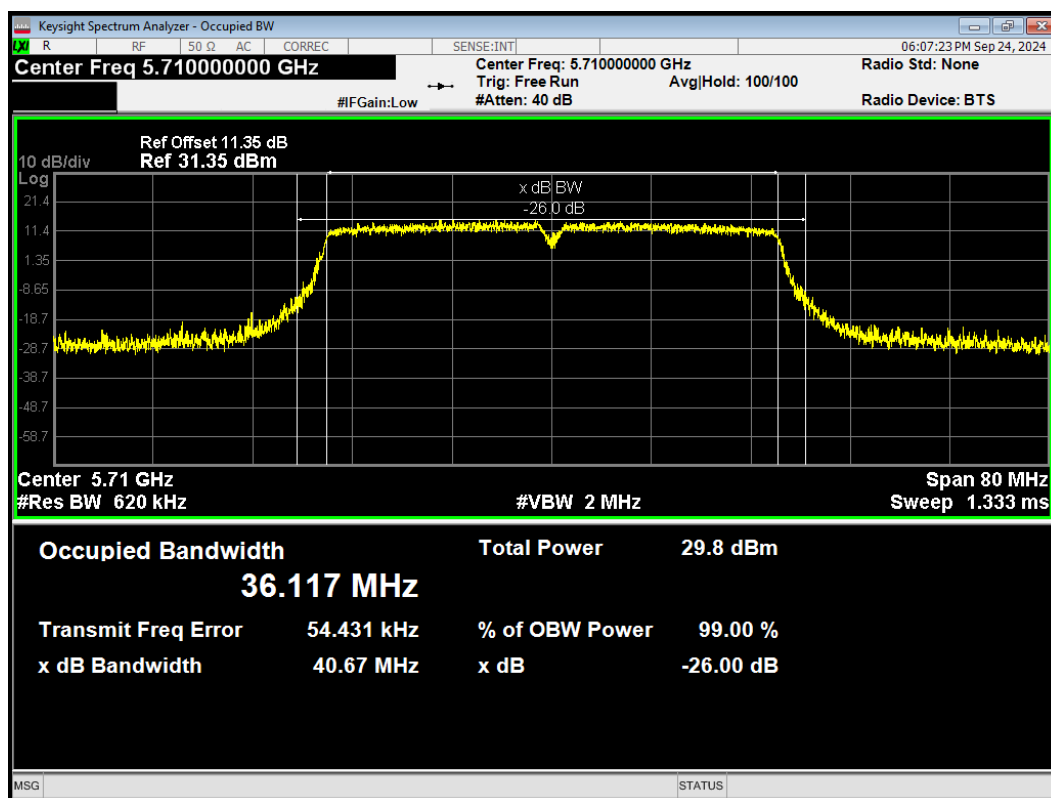
OBW 802.11n(HT40) 5590MHz



OBW 802.11n(HT40) 5670MHz



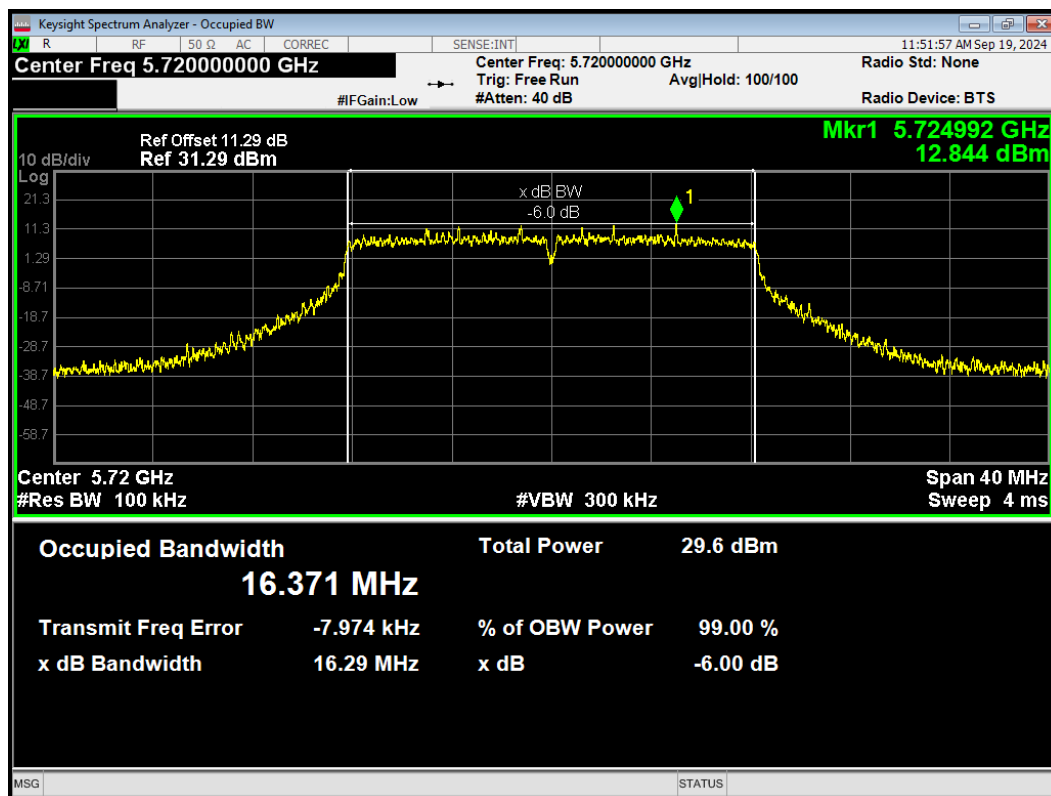
OBW 802.11n(HT40) 5710MHz



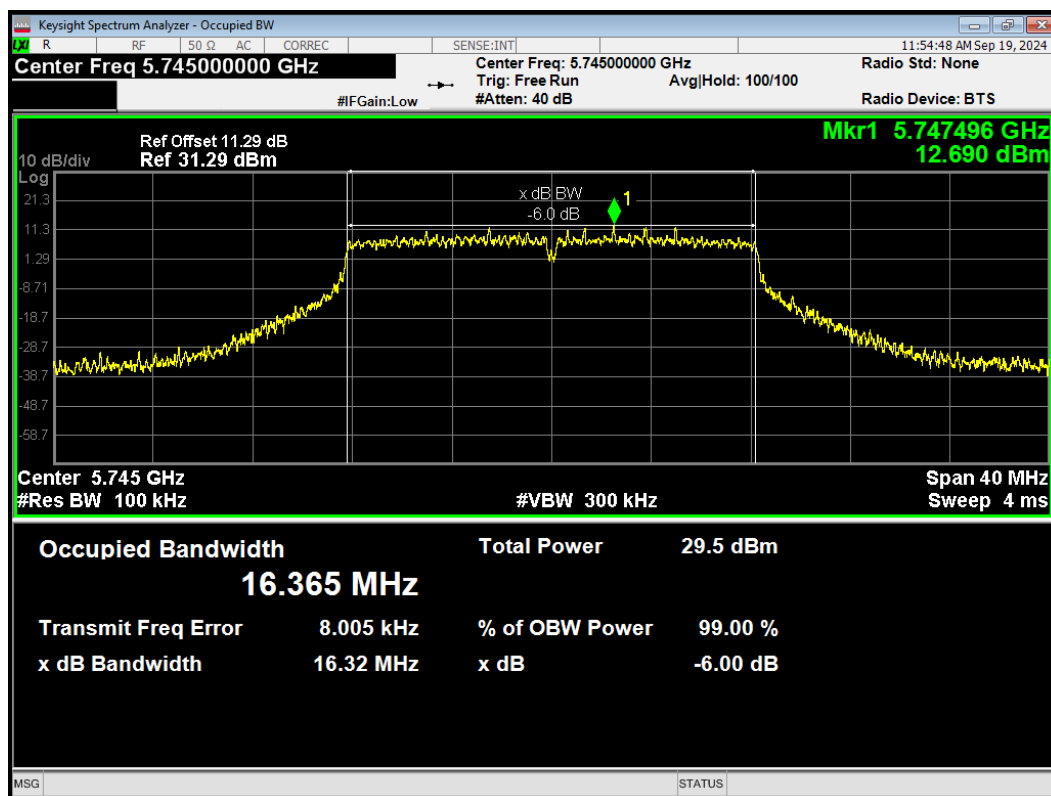
Minimum 6 dB bandwidth

U-NII-3

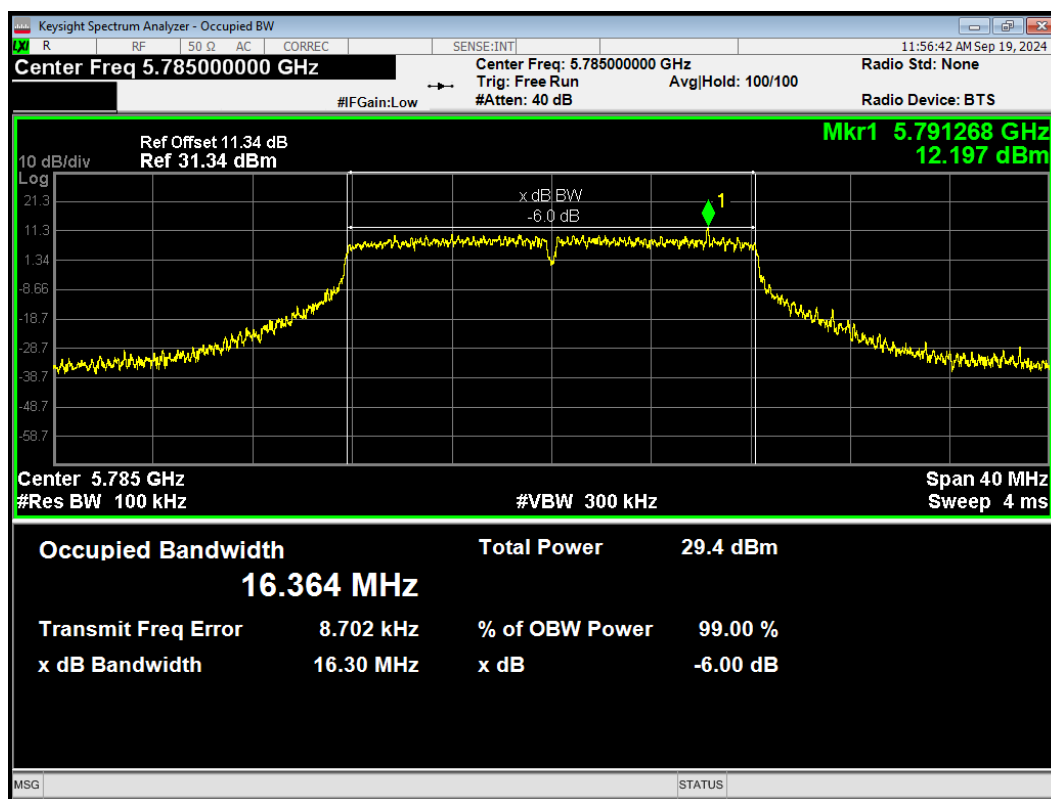
-6dB Bandwidth 802.11a 5720MHz



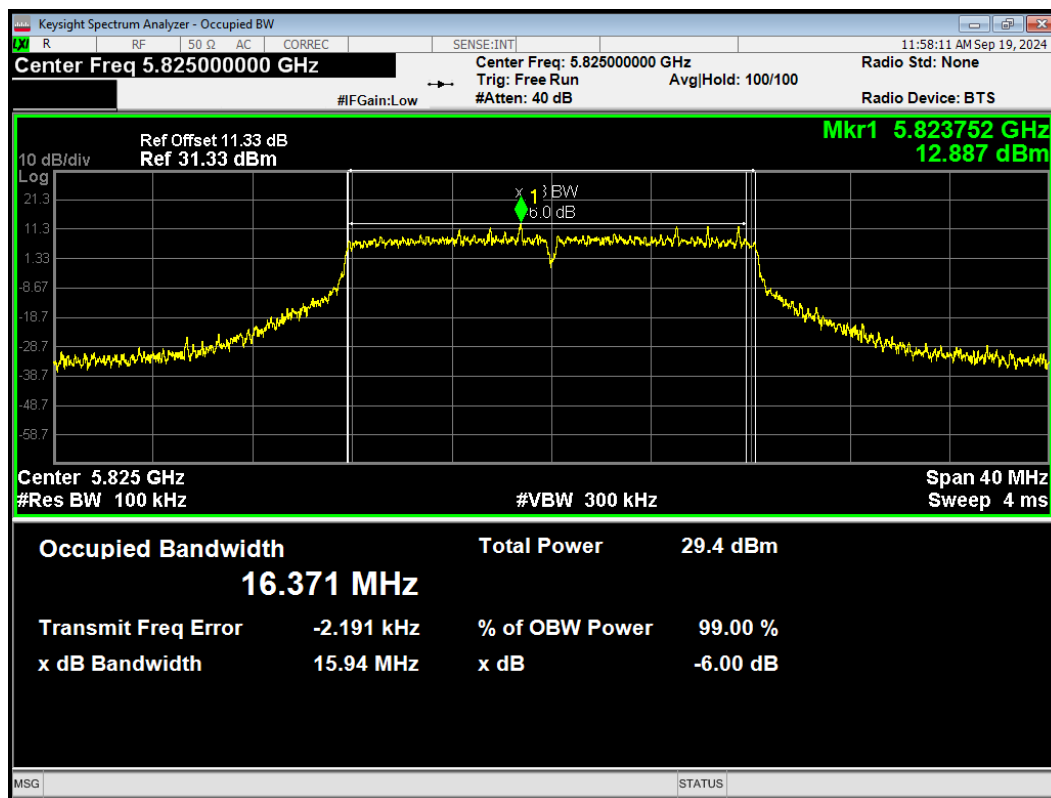
-6dB Bandwidth 802.11a 5745MHz



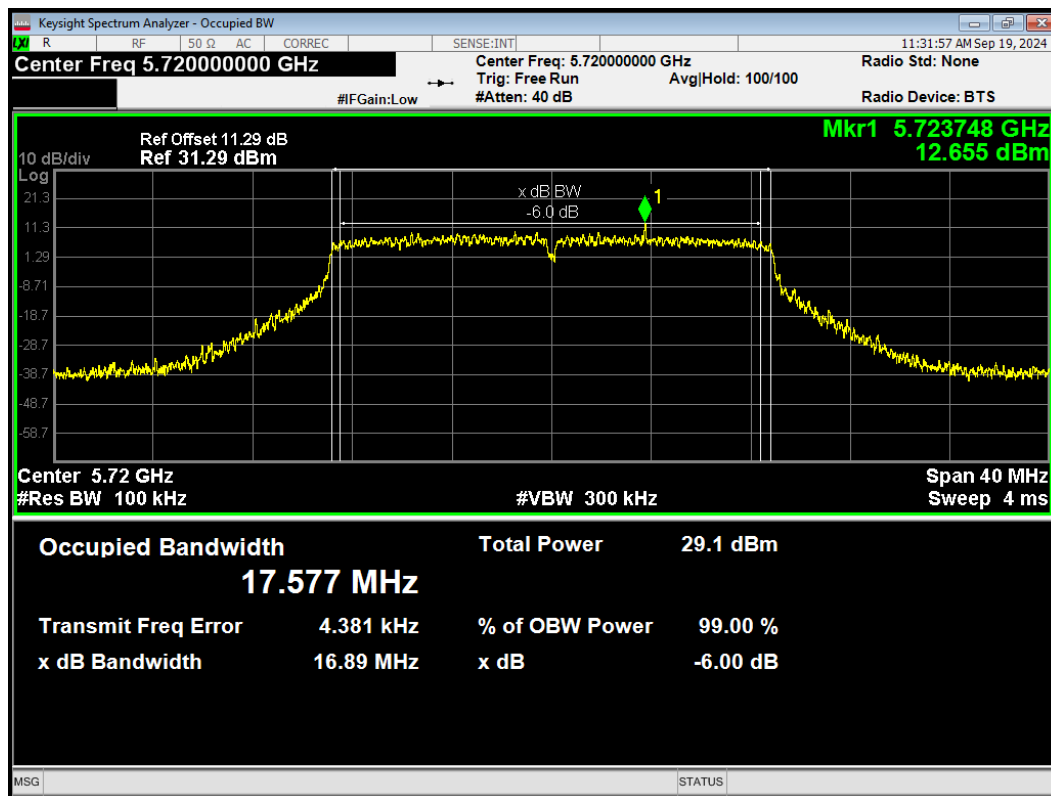
-6dB Bandwidth 802.11a 5785MHz



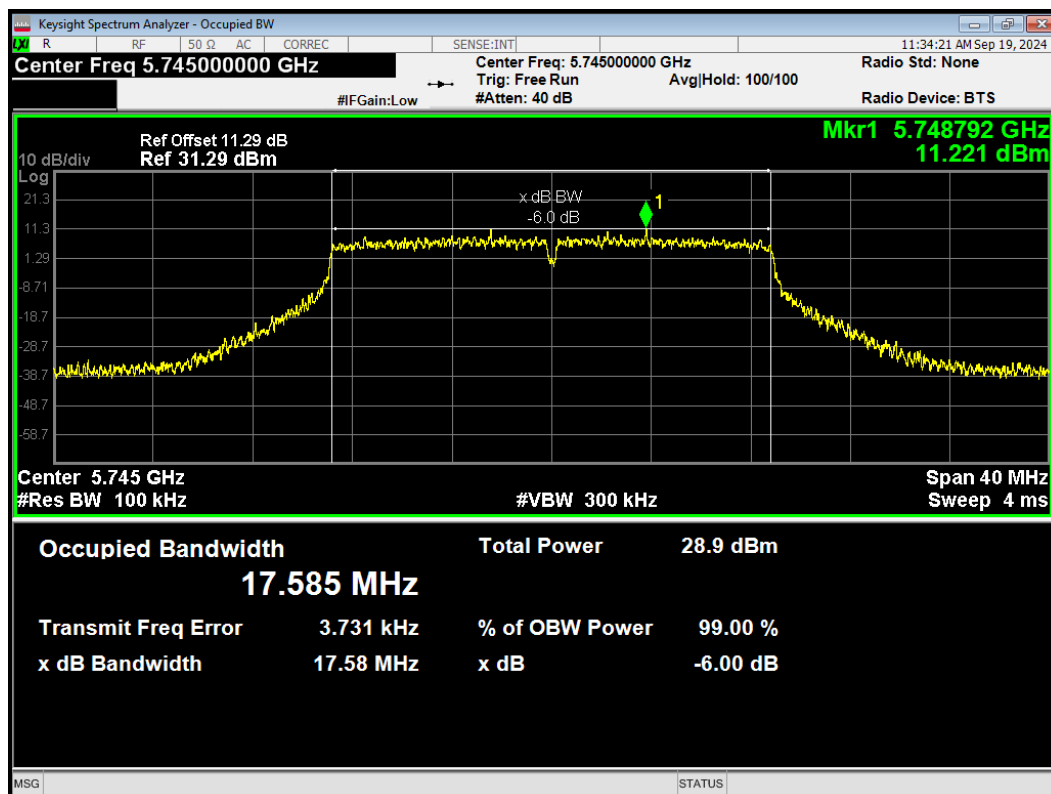
-6dB Bandwidth 802.11a 5825MHz



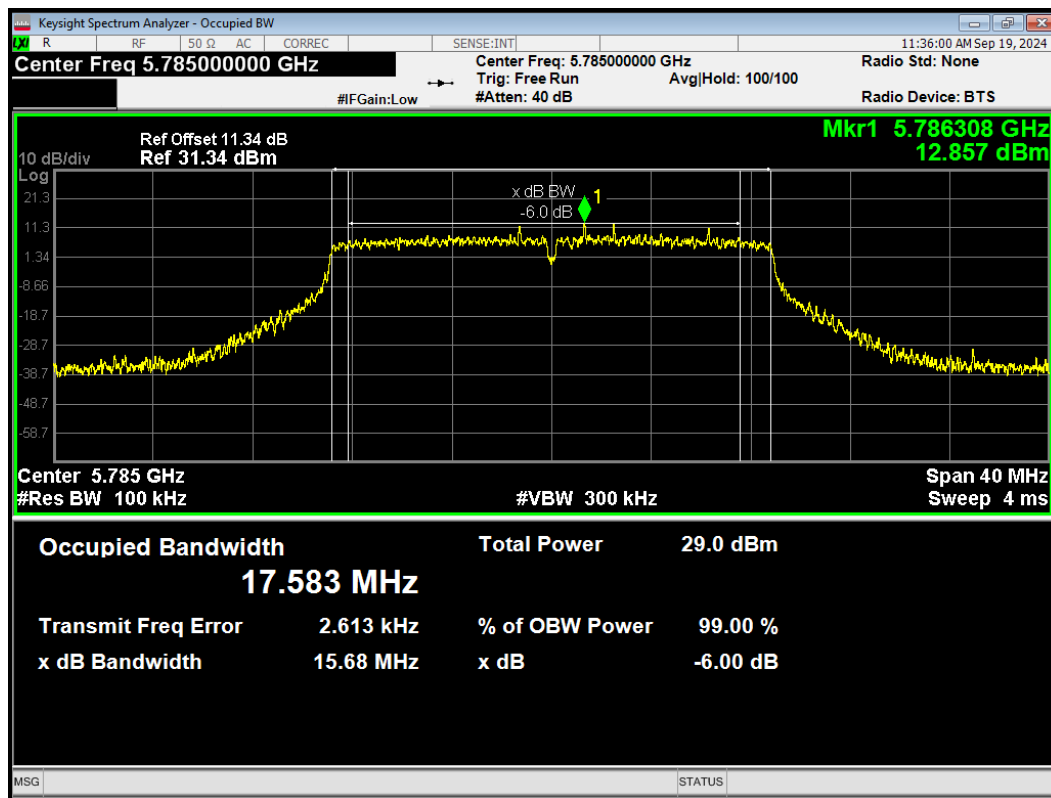
-6dB Bandwidth 802.11ac(VHT20) 5720MHz



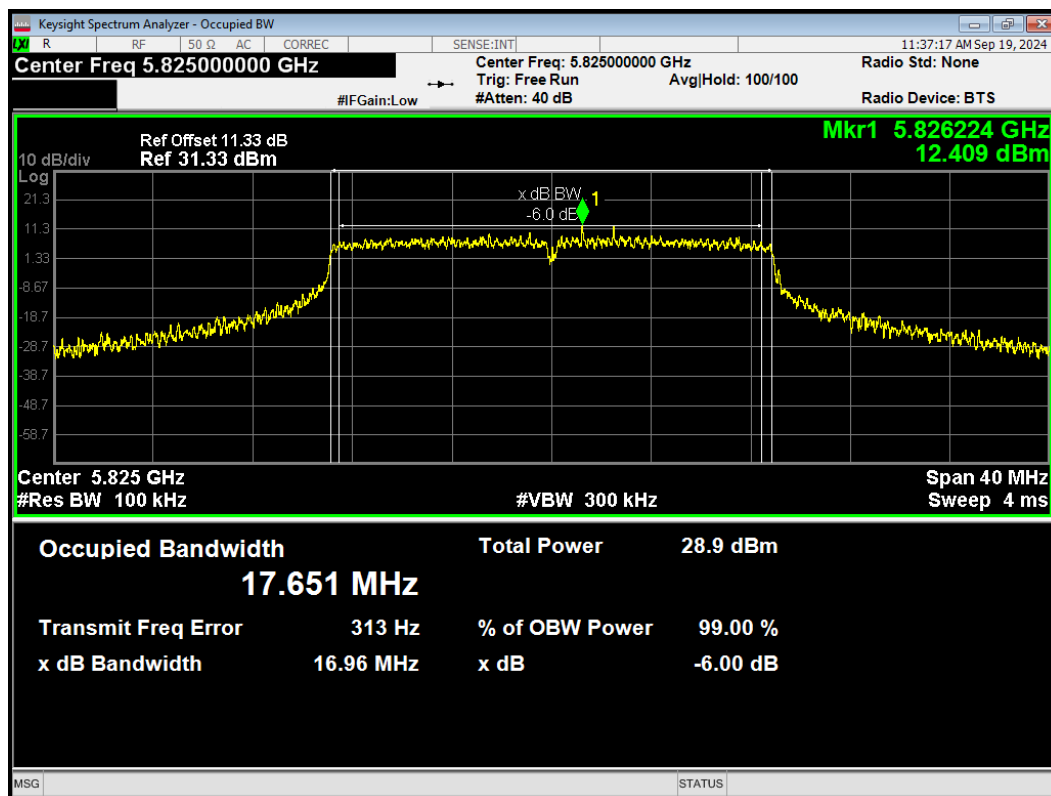
-6dB Bandwidth 802.11ac(VHT20) 5745MHz



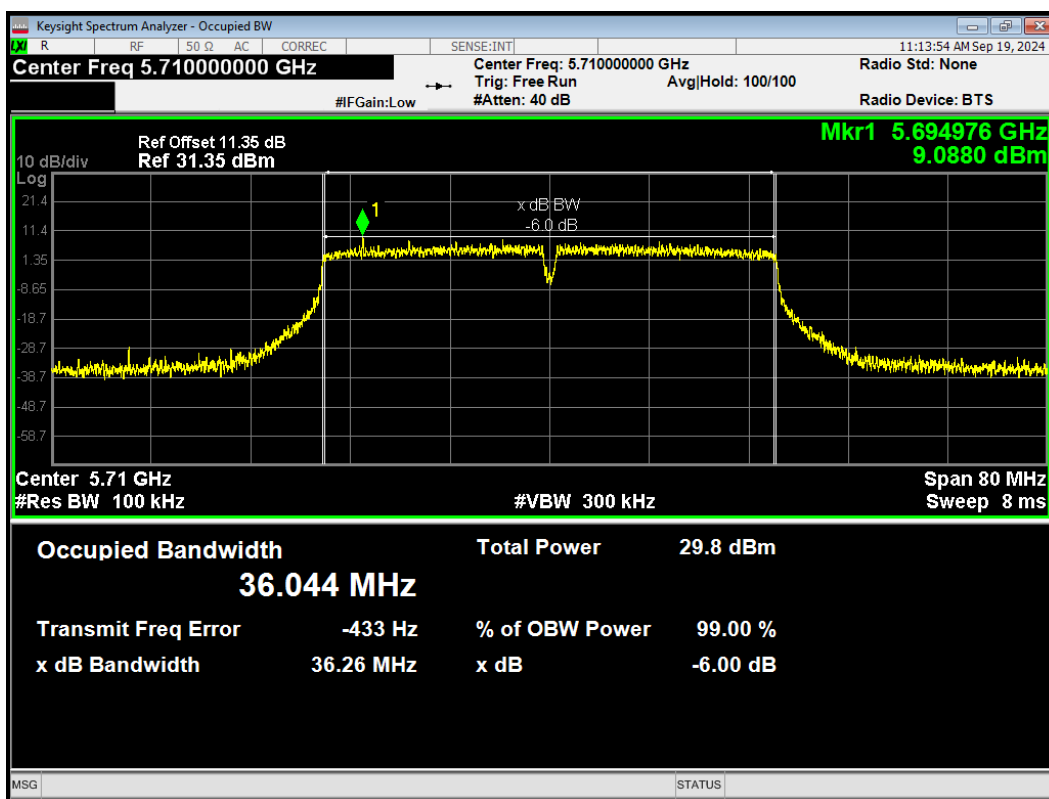
-6dB Bandwidth 802.11ac(VHT20) 5785MHz



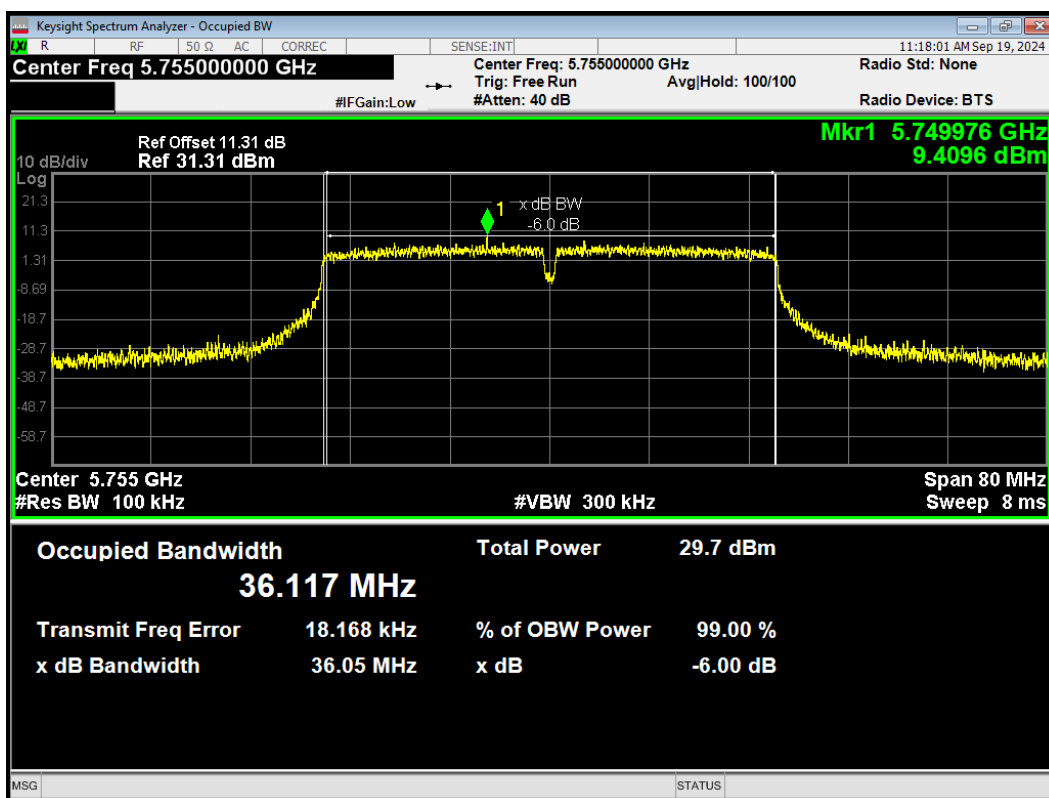
-6dB Bandwidth 802.11ac(VHT20) 5825MHz



-6dB Bandwidth 802.11ac(VHT40) 5710MHz

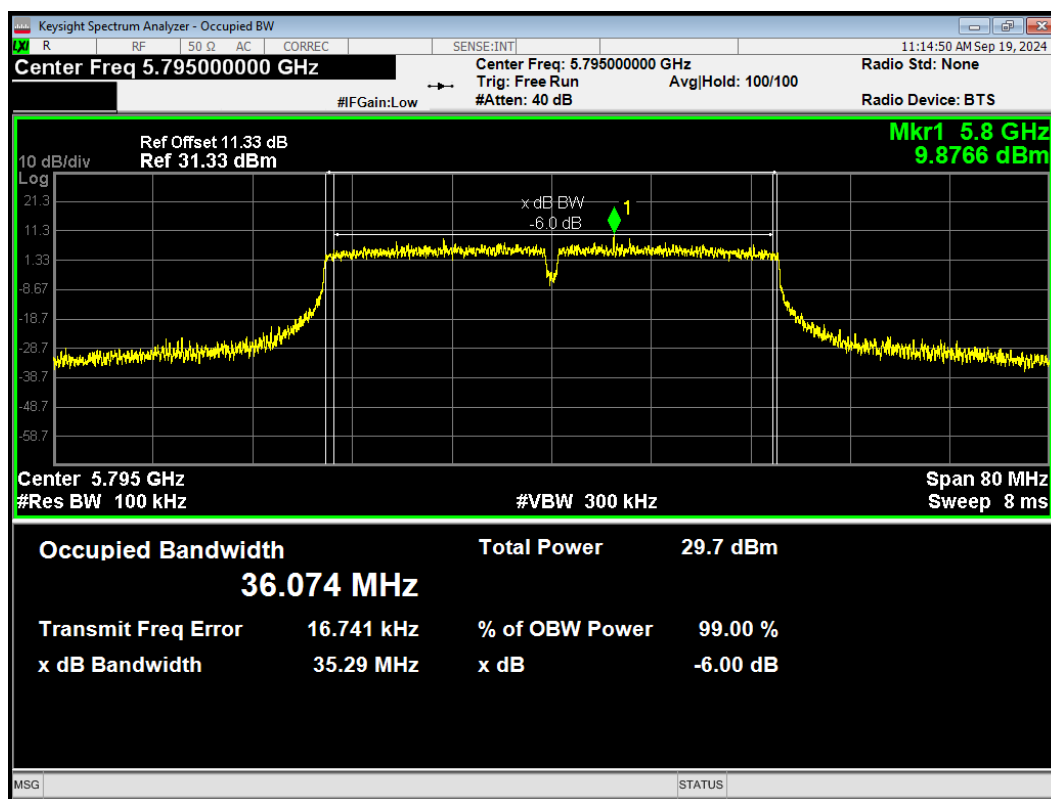


-6dB Bandwidth 802.11ac(VHT40) 5755MHz

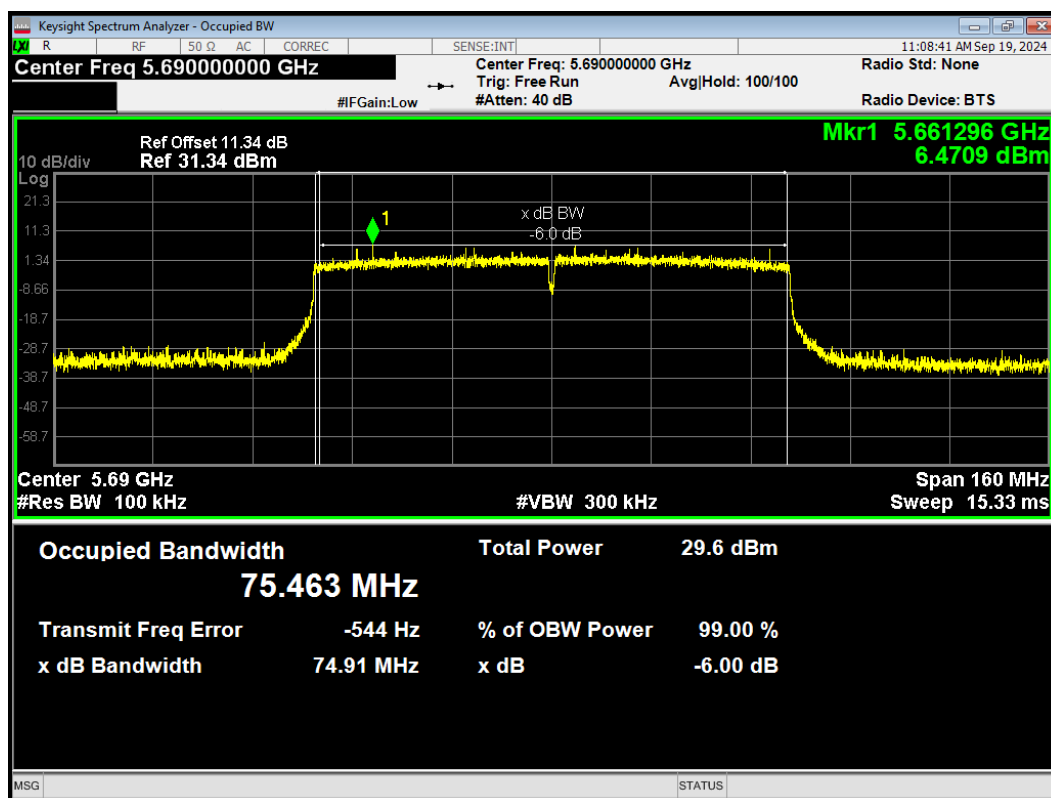




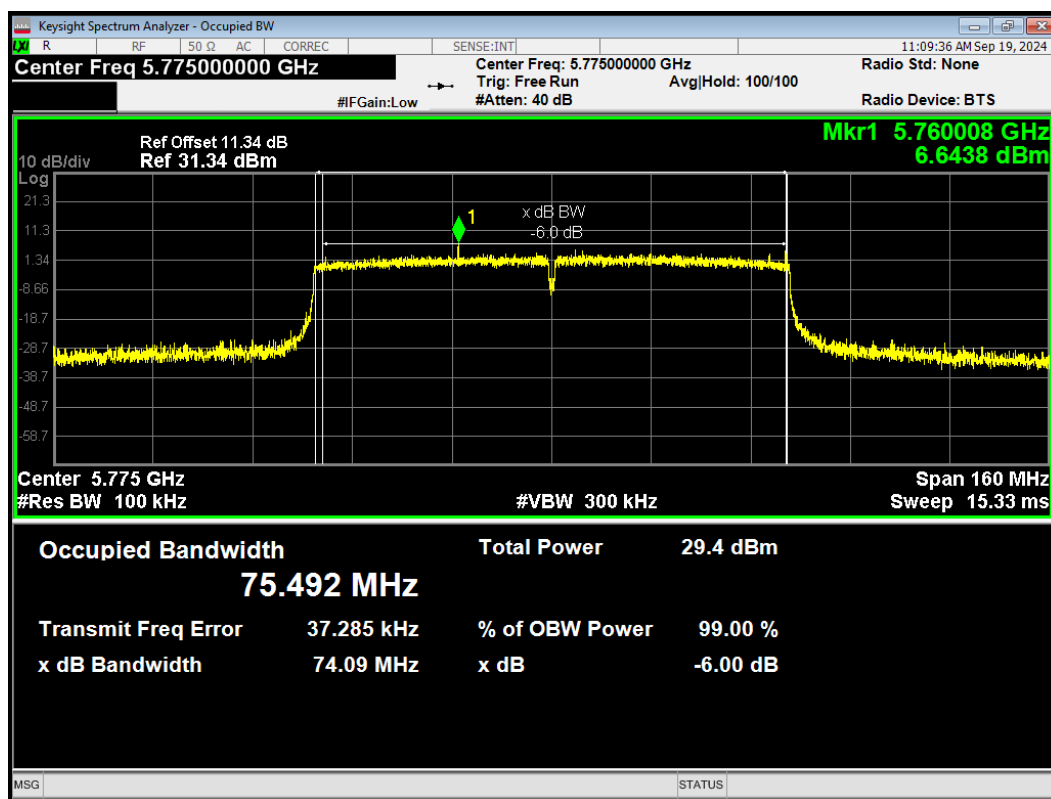
-6dB Bandwidth 802.11ac(VHT40) 5795MHz



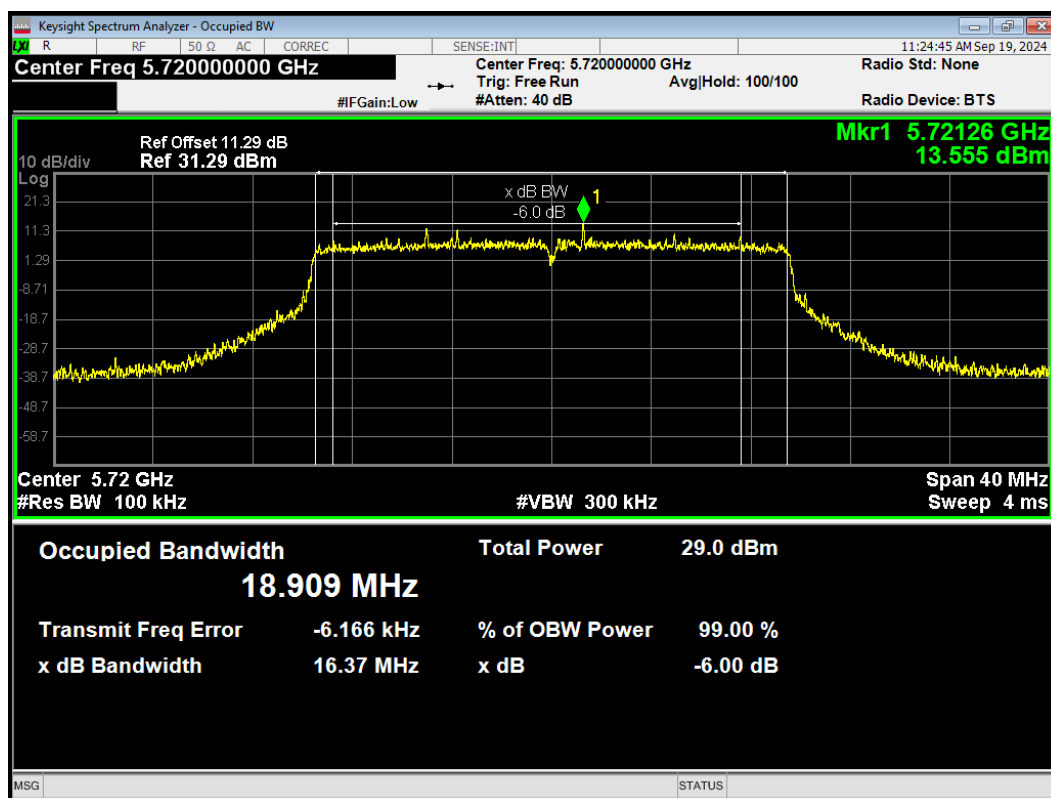
-6dB Bandwidth 802.11ac(VHT80) 5690MHz



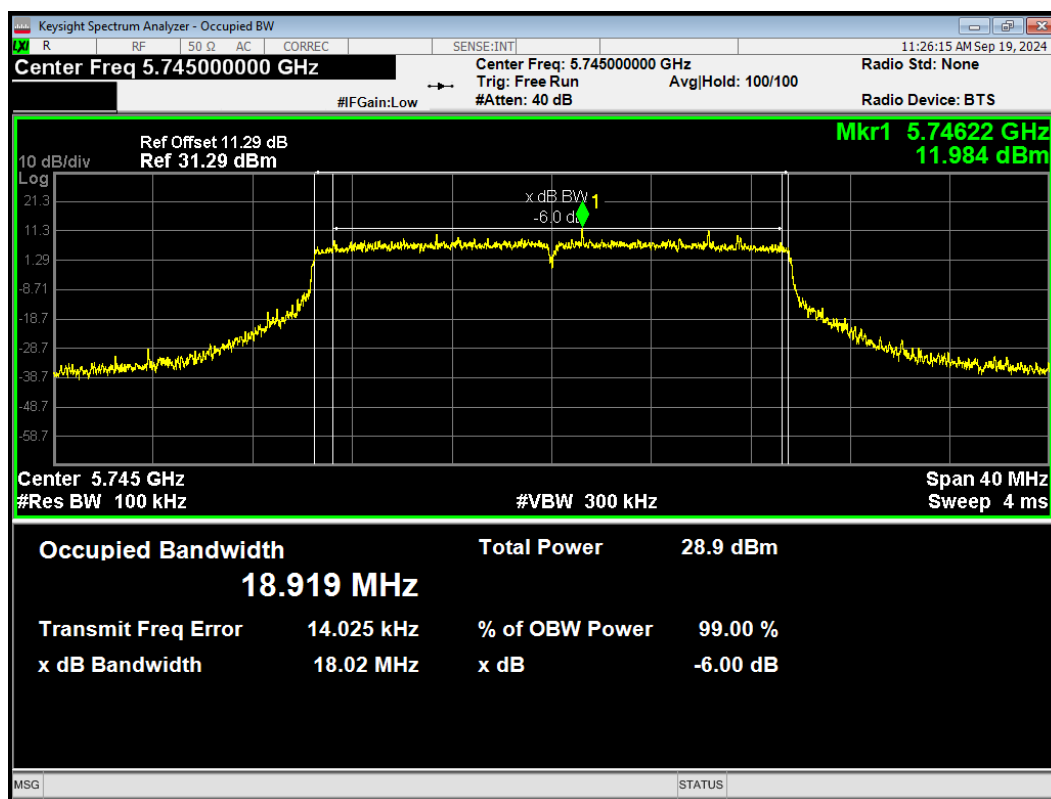
-6dB Bandwidth 802.11ac(VHT80) 5775MHz



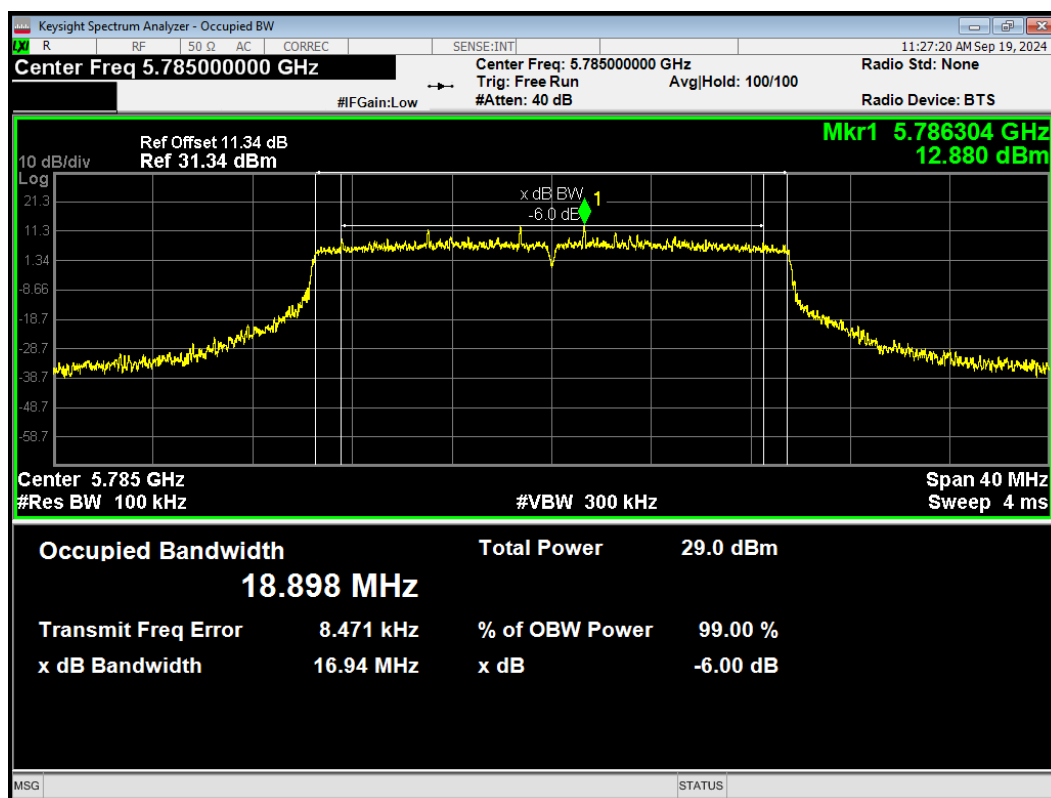
-6dB Bandwidth 802.11ax(HE20) 5720MHz



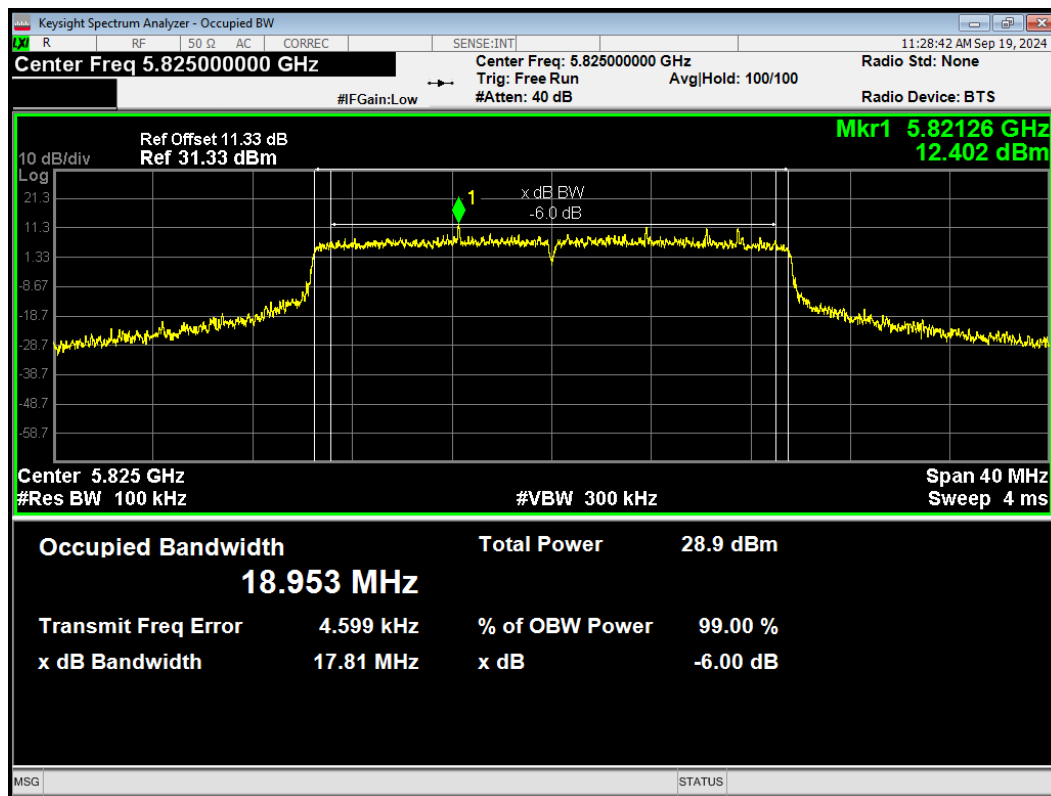
-6dB Bandwidth 802.11ax(HE20) 5745MHz



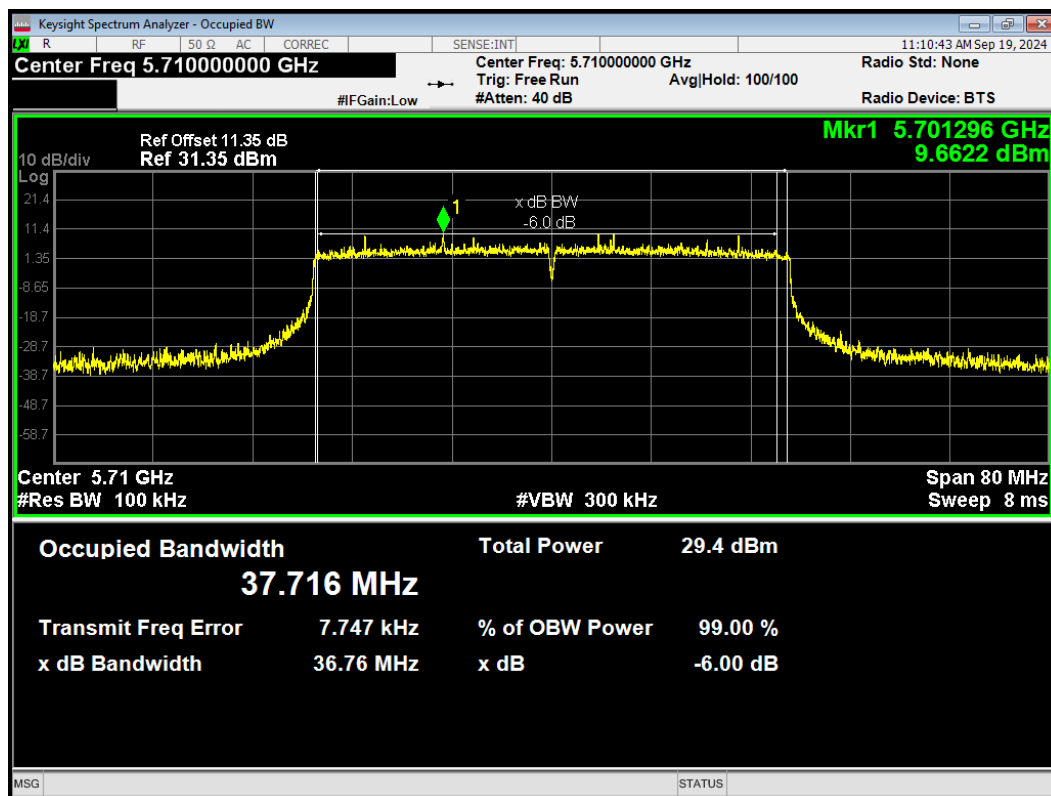
-6dB Bandwidth 802.11ax(HE20) 5785MHz



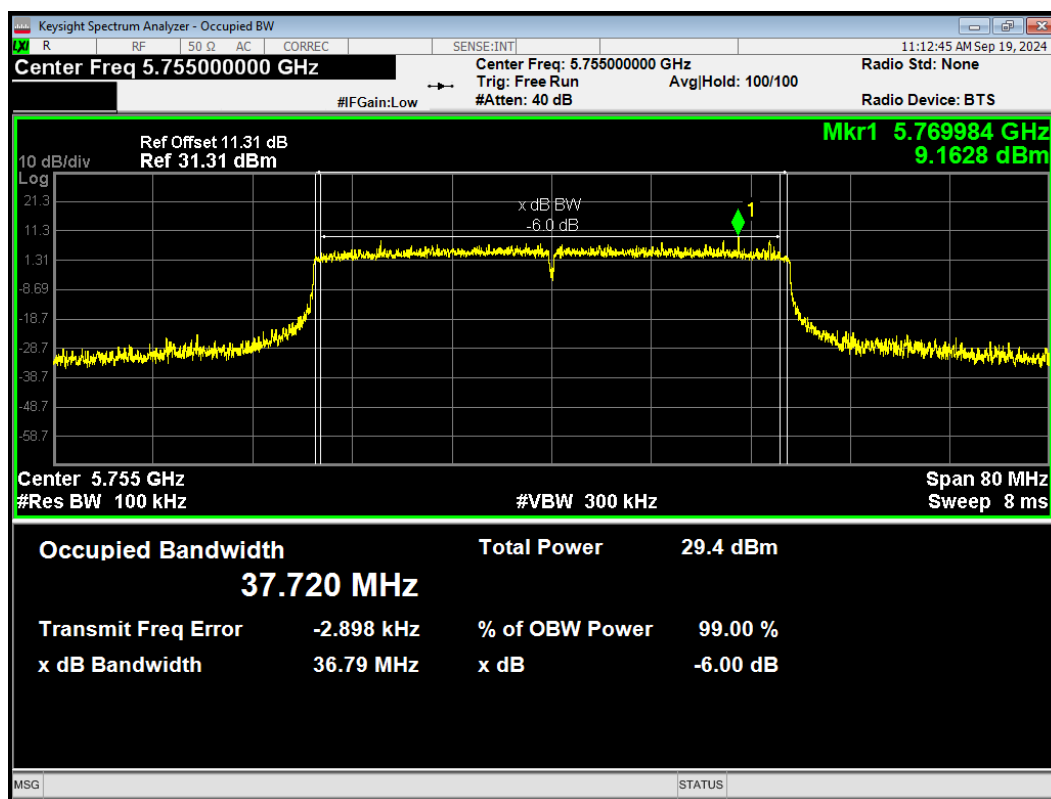
-6dB Bandwidth 802.11ax(HE20) 5825MHz



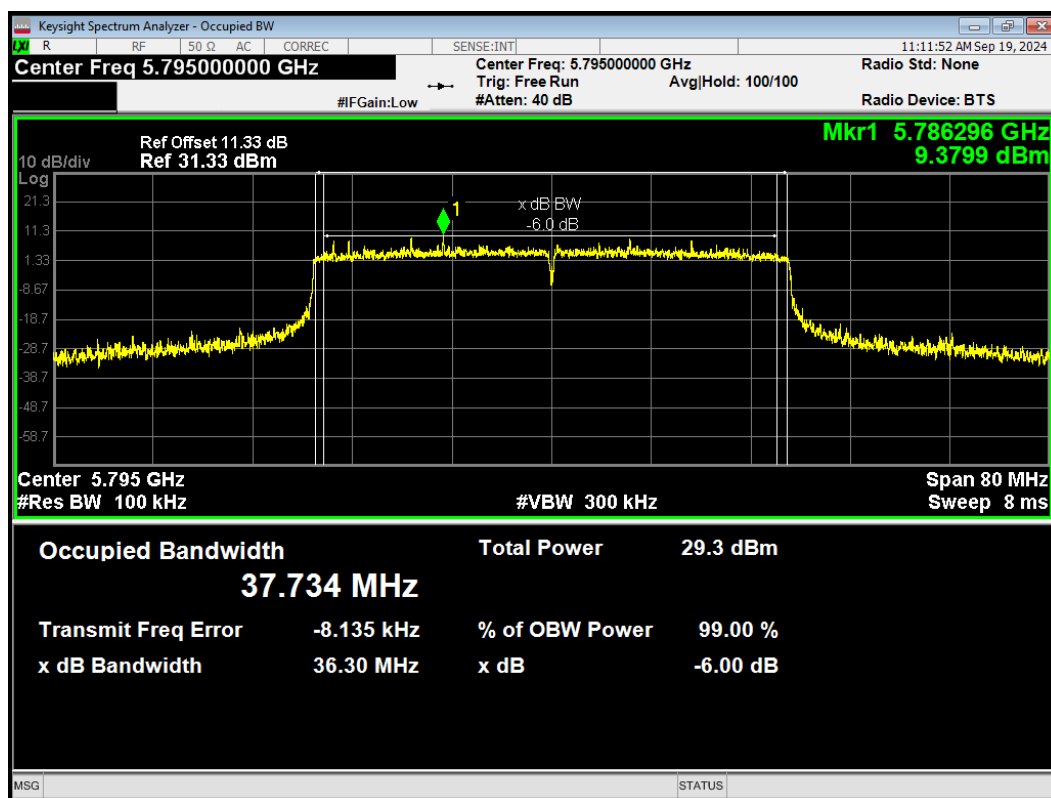
-6dB Bandwidth 802.11ax(HE40) 5710MHz



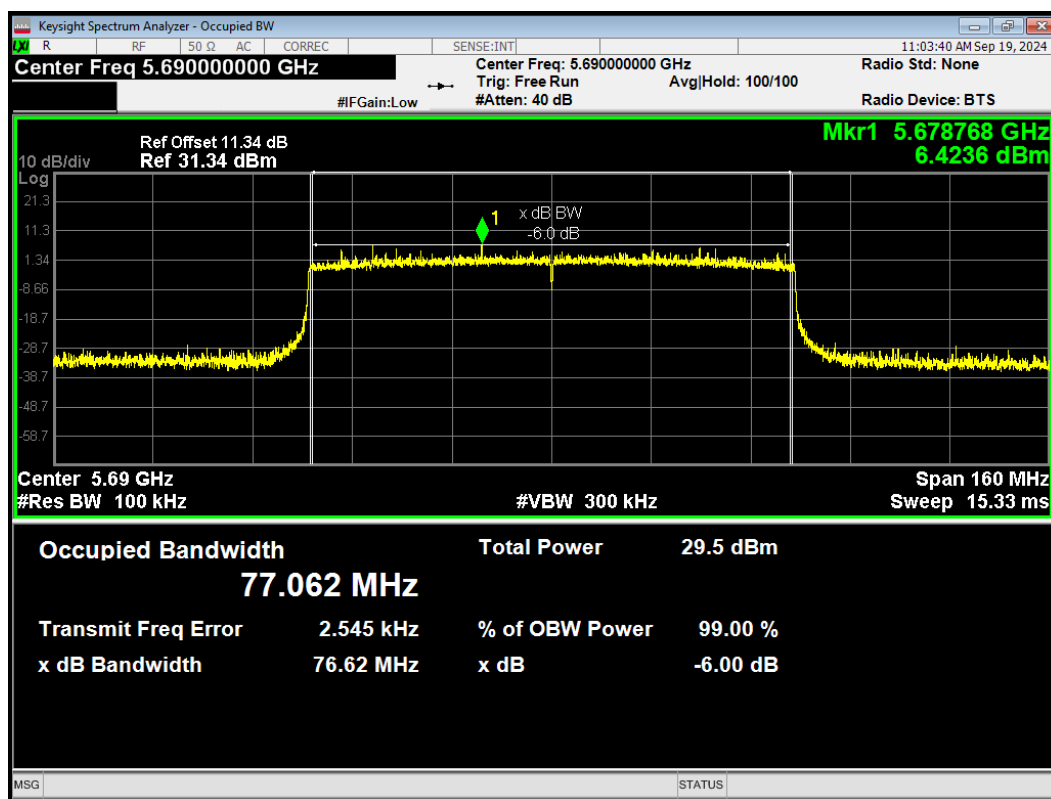
-6dB Bandwidth 802.11ax(HE40) 5755MHz



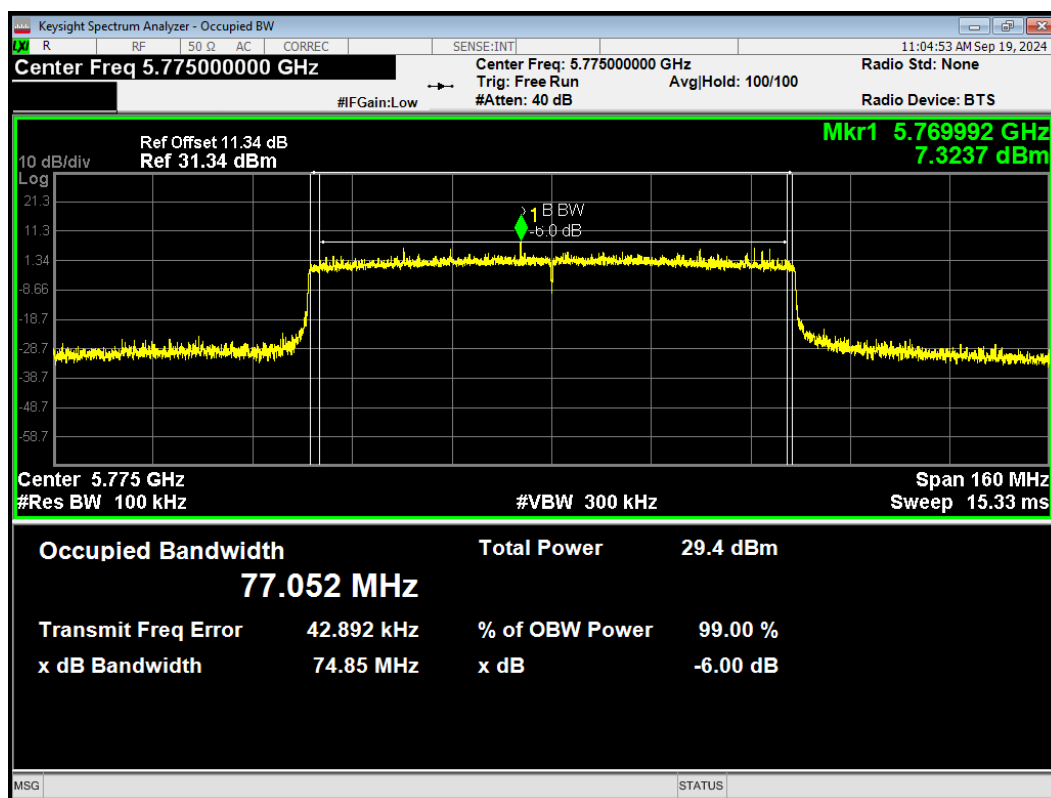
-6dB Bandwidth 802.11ax(HE40) 5795MHz



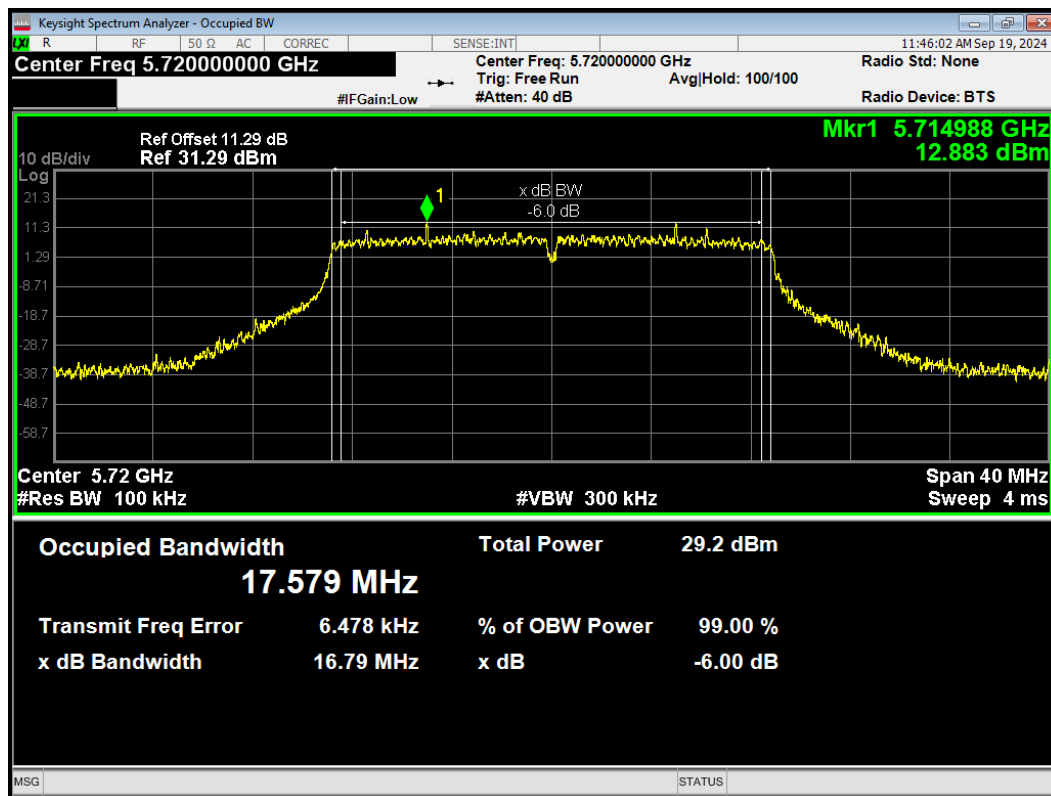
-6dB Bandwidth 802.11ax(HE80) 5690MHz



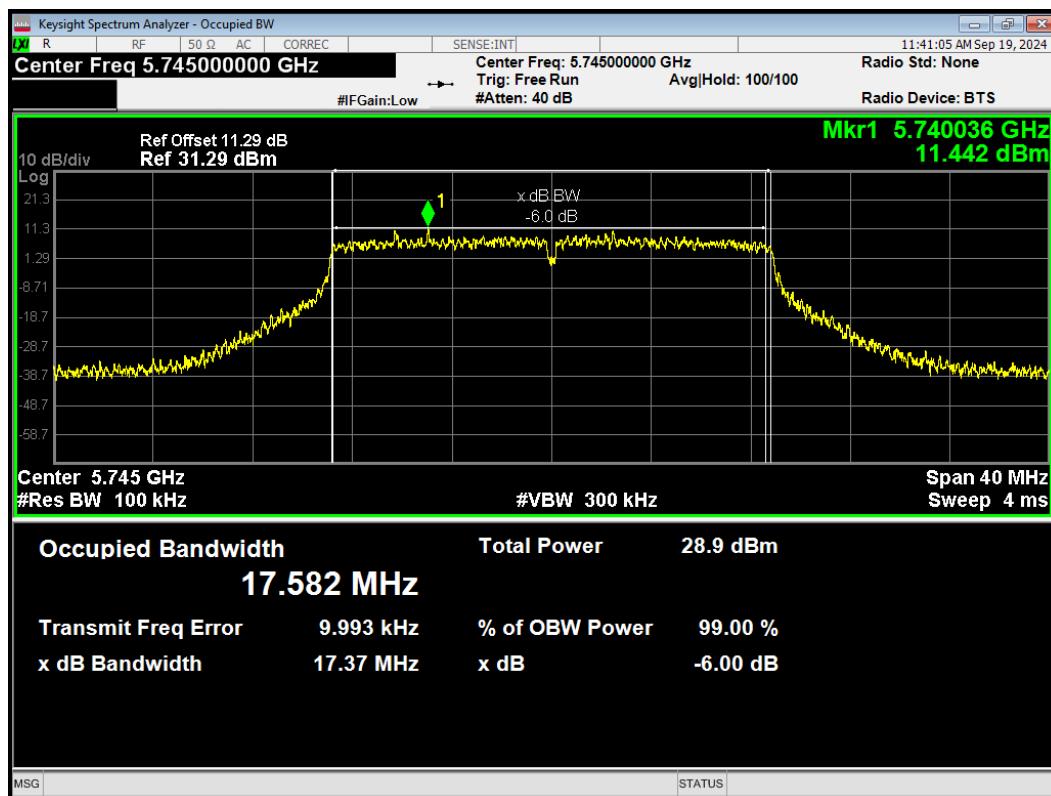
-6dB Bandwidth 802.11ax(HE80) 5775MHz



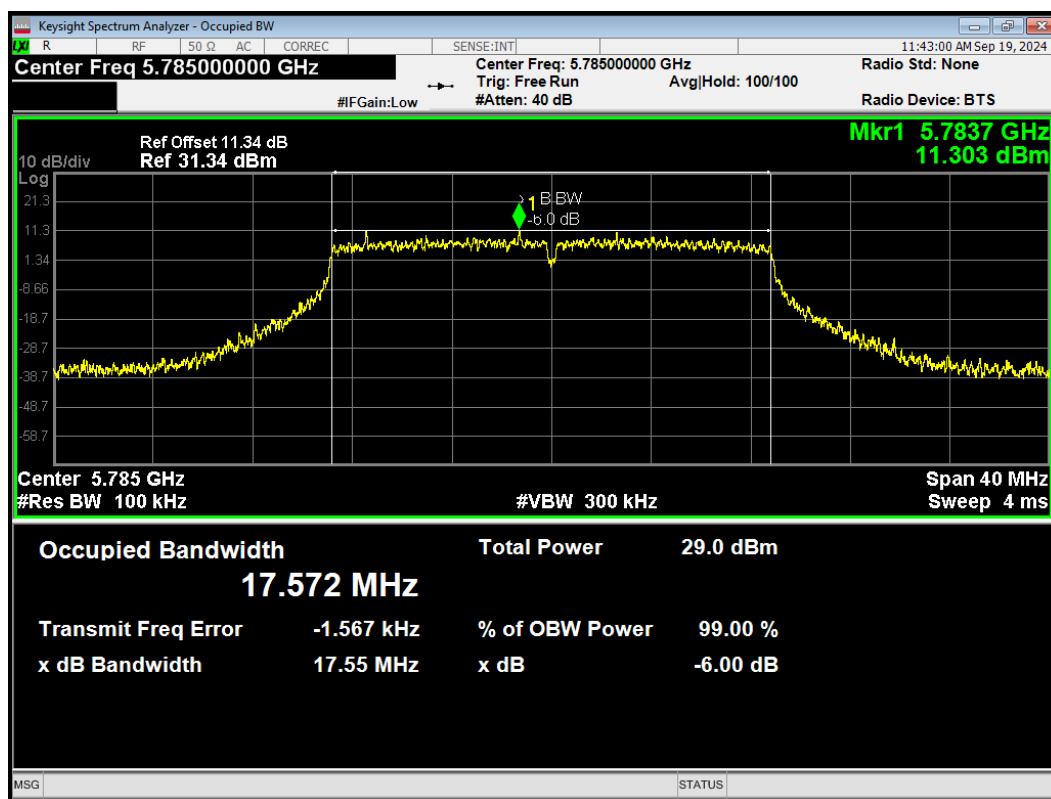
-6dB Bandwidth 802.11n(HT20) 5720MHz



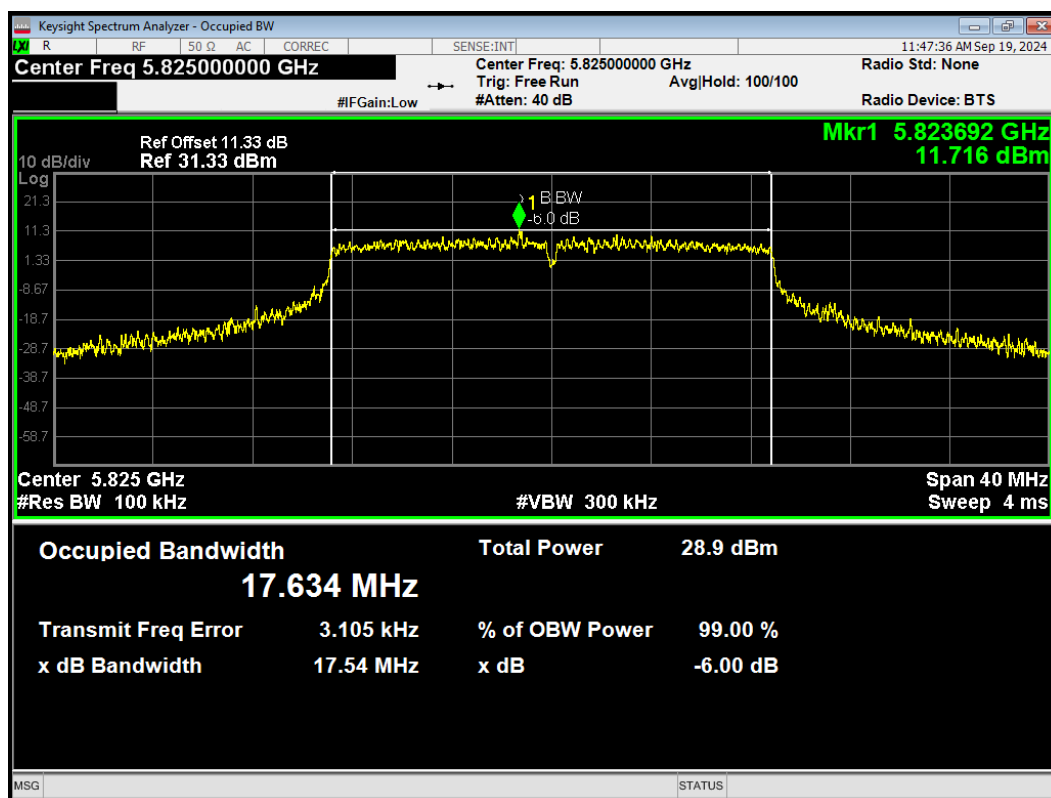
-6dB Bandwidth 802.11n(HT20) 5745MHz



-6dB Bandwidth 802.11n(HT20) 5785MHz

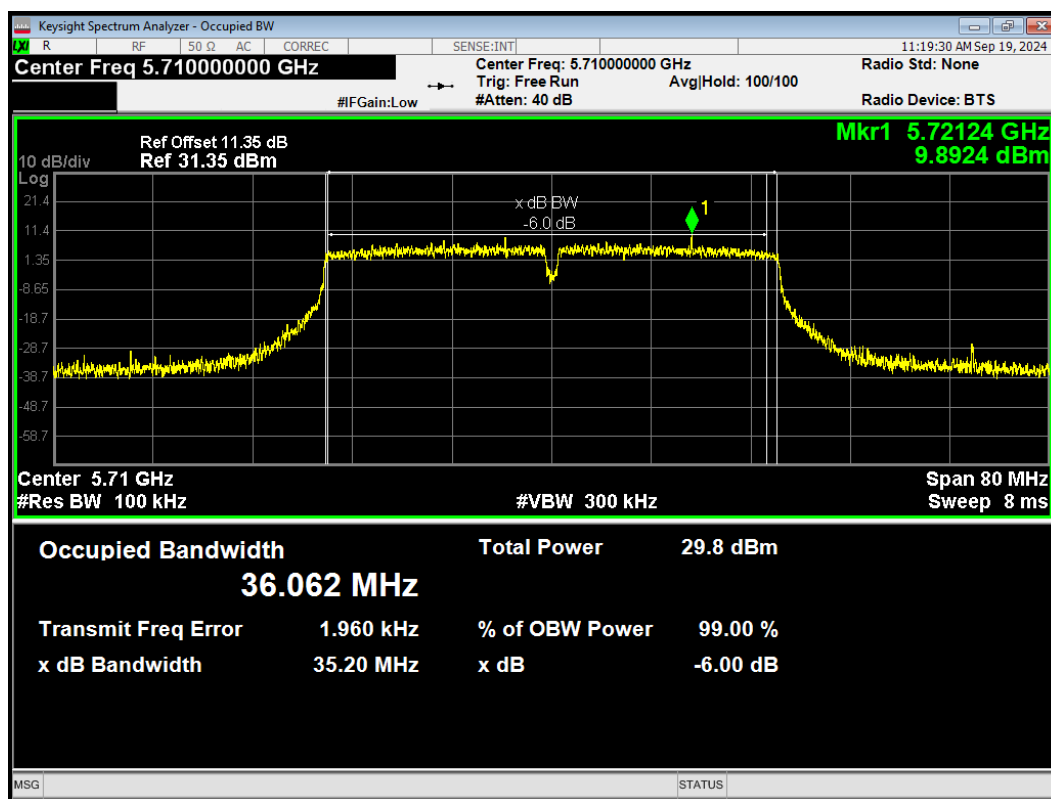


-6dB Bandwidth 802.11n(HT20) 5825MHz

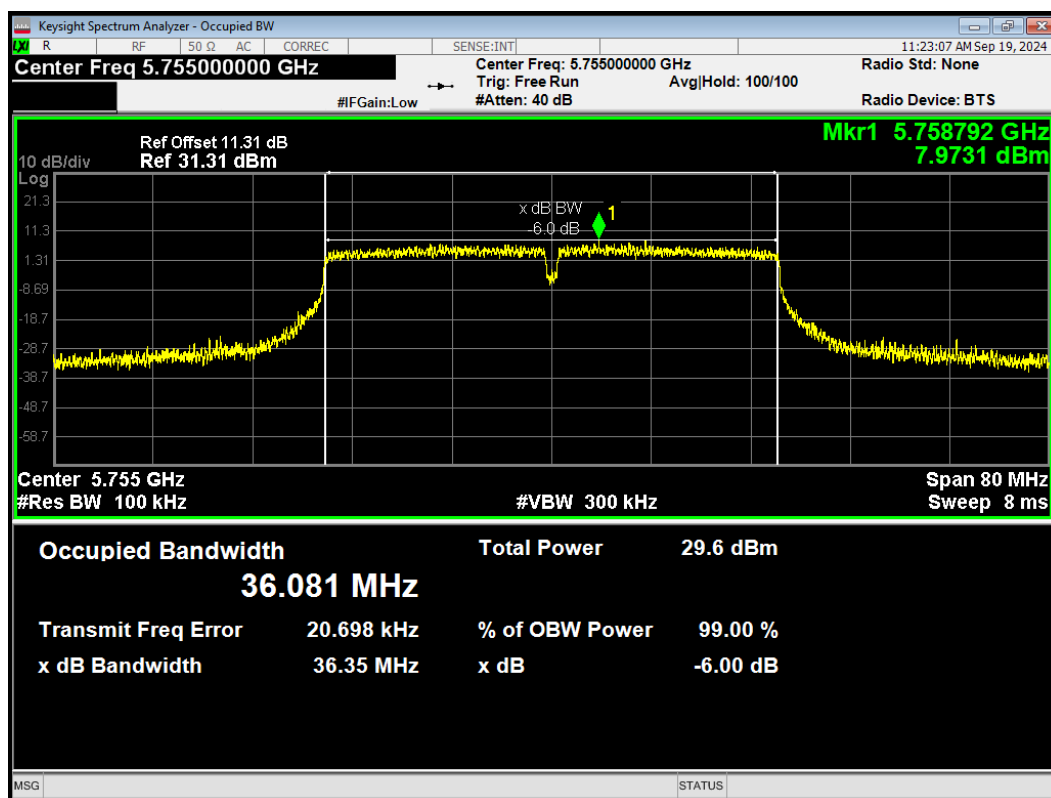




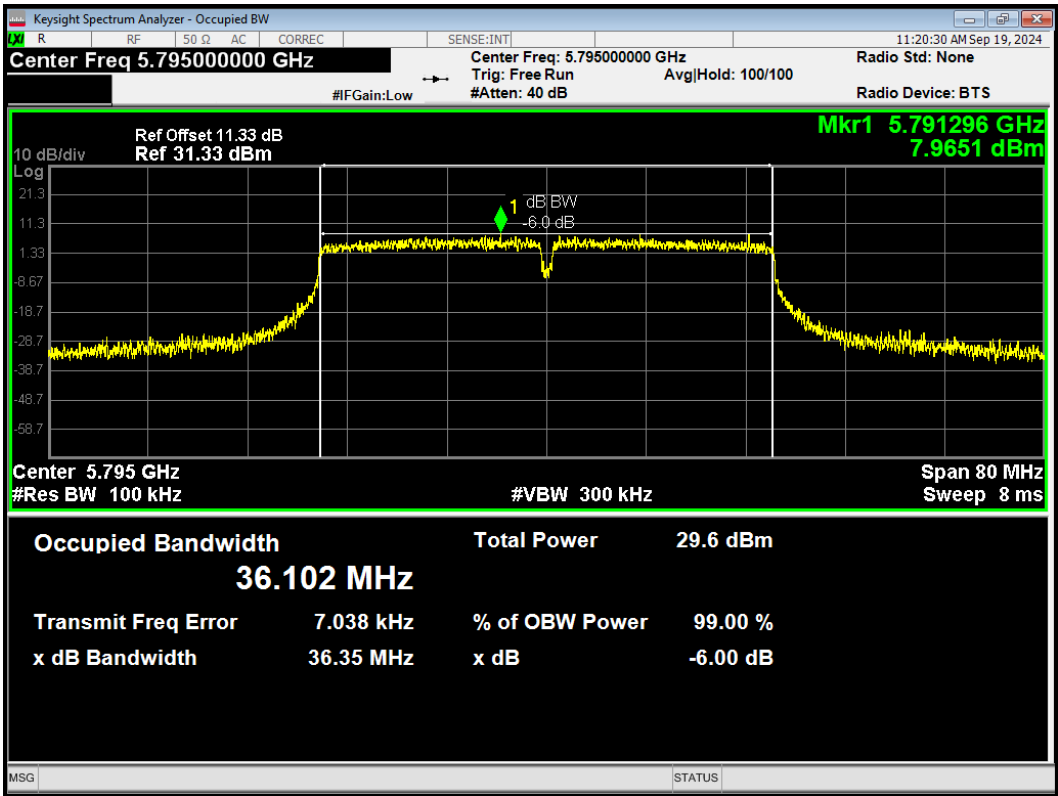
-6dB Bandwidth 802.11n(HT40) 5710MHz



-6dB Bandwidth 802.11n(HT40) 5755MHz



-6dB Bandwidth 802.11n(HT40) 5795MHz



## 5.2. Average Power Output

### Ambient condition

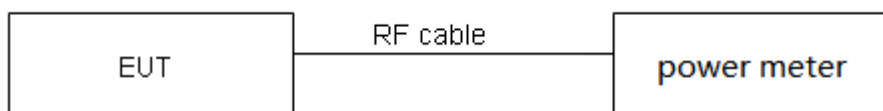
| Temperature | Relative humidity | Pressure         |
|-------------|-------------------|------------------|
| 15°C ~ 35°C | 20% ~ 80%         | 86 kPa ~ 106 kPa |

### Methods of Measurement

During the process of the testing, The EUT was connected to the average power meter through an external attenuator and a known loss cable. The EUT is max power transmission with proper modulation. We use Maximum average Conducted Output Power Level Method in KDB789033 for this test

The conducted Power is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically.

### Test Setup



### Limits

Rule FCC Part 15.407(a)(1) / FCC Part 15.407(a) (2) / FCC Part 15.407(a) (3)

(1) For the band 5.15-5.25 GHz.

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23

dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### **Measurement Uncertainty**

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 2$ ,  $U = 0.44 \text{ dB}$ .

## Test Results

| Mode                                                                           | Duty cycle | Duty cycle correction Factor (dB) |
|--------------------------------------------------------------------------------|------------|-----------------------------------|
| 802.11a                                                                        | 96.25%     | 0.17                              |
| 802.11n HT20                                                                   | 79.92%     | 0.97                              |
| 802.11n HT40                                                                   | 80.00%     | 0.00                              |
| 802.11ac VHT20                                                                 | 79.89%     | 0.97                              |
| 802.11ac VHT40                                                                 | 79.71%     | 0.98                              |
| 802.11ac VHT80                                                                 | 79.41%     | 1.00                              |
| 802.11ax HE20                                                                  | 80.07%     | 0.00                              |
| 802.11ax HE40                                                                  | 80.00%     | 0.00                              |
| 802.11ax HE80                                                                  | 80.06%     | 0.00                              |
| Note: when Duty cycle $\geq 0.98$ , Duty cycle correction Factor not required. |            |                                   |

## U-NII-1

| Network Standards | Channel/<br>Frequency<br>(MHz) | Power Index       |                   |      |             |
|-------------------|--------------------------------|-------------------|-------------------|------|-------------|
|                   |                                | SISO<br>Antenna 1 | SISO<br>Antenna 2 | MIMO | Beamforming |
| 802.11a           | 36/5180                        | 14                | 12                | 8    | 8           |
|                   | 40/5200                        | 12                | 12                | 8    | 8           |
|                   | 48/5240                        | 14                | 12                | 8    | 8           |
| 802.11n HT20      | 36/5180                        | 14                | 12                | 9    | 9           |
|                   | 40/5200                        | 12                | 12                | 9    | 9           |
|                   | 48/5240                        | 14                | 12                | 9    | 9           |
| 802.11n HT40      | 38/5190                        | 16                | 14                | 11   | 11          |
|                   | 46/5230                        | 16                | 14                | 11   | 11          |
| 802.11ac VHT20    | 36/5180                        | 14                | 12                | 9    | 9           |
|                   | 40/5200                        | 12                | 12                | 9    | 9           |
|                   | 48/5240                        | 14                | 12                | 9    | 9           |
| 802.11ac VHT40    | 38/5190                        | 16                | 14                | 11   | 11          |
|                   | 46/5230                        | 16                | 14                | 11   | 11          |
| 802.11ac VHT80    | 42/5210                        | 17                | 14                | 14   | 12          |
| 802.11ax HE20     | 36/5180                        | 14                | 12                | 9    | 9           |
|                   | 40/5200                        | 12                | 12                | 9    | 9           |
|                   | 48/5240                        | 14                | 12                | 9    | 9           |
| 802.11ax HE40     | 38/5190                        | 15                | 14                | 11   | 11          |
|                   | 46/5230                        | 16                | 14                | 11   | 11          |
| 802.11ax HE80     | 42/5210                        | 17                | 14                | 14   | 12          |

## U-NII-2A

| Network Standards | Channel/<br>Frequency<br>(MHz) | Power Index       |                   |      |             |
|-------------------|--------------------------------|-------------------|-------------------|------|-------------|
|                   |                                | SISO<br>Antenna 1 | SISO<br>Antenna 2 | MIMO | Beamforming |
| 802.11a           | 52/5260                        | 18                | 18                | 15   | 15          |
|                   | 60/5300                        | 18                | 18                | 15   | 15          |
|                   | 64/5320                        | 18                | 18                | 15   | 15          |
| 802.11n T20       | 52/5260                        | 18                | 18                | 15   | 15          |
|                   | 60/5300                        | 18                | 18                | 15   | 15          |
|                   | 64/5320                        | 18                | 18                | 15   | 15          |
| 802.11n HT40      | 54/5270                        | 20                | 20                | 18   | 18          |
|                   | 62/5310                        | 15                | 15                | 18   | 18          |
| 802.11ac VHT20    | 52/5260                        | 22                | 18                | 16   | 16          |
|                   | 60/5300                        | 22                | 18                | 16   | 16          |
|                   | 64/5320                        | 22                | 18                | 16   | 16          |
| 802.11ac VHT40    | 54/5270                        | 24                | 20                | 18   | 18          |
|                   | 62/5310                        | 24                | 20                | 18   | 18          |
| 802.11ac VHT80    | 58/5290                        | 16                | 16                | 16   | 16          |
| 802.11ax HE20     | 52/5260                        | 18                | 18                | 16   | 16          |
|                   | 60/5300                        | 18                | 18                | 16   | 16          |
|                   | 64/5320                        | 18                | 18                | 16   | 16          |
| 802.11ax HE40     | 54/5270                        | 20                | 20                | 19   | 19          |
|                   | 62/5310                        | 15                | 15                | 15   | 15          |
| 802.11ax HE80     | 58/5290                        | 17                | 17                | 17   | 17          |

## U-NII-2C

| Network Standards | Channel/<br>Frequency<br>(MHz) | Power Index       |                   |      |             |
|-------------------|--------------------------------|-------------------|-------------------|------|-------------|
|                   |                                | SISO<br>Antenna 1 | SISO<br>Antenna 2 | MIMO | Beamforming |
| 802.11a           | 100/5500                       | 20                | 20                | 18   | 18          |
|                   | 120/5600                       | 20                | 20                | 17   | 17          |
|                   | 140/5700                       | 20                | 18                | 16   | 16          |
|                   | 144/5720                       | 20                | 18                | 16   | 16          |
| 802.11n HT20      | 100/5500                       | 20                | 20                | 18   | 18          |
|                   | 120/5600                       | 20                | 20                | 17   | 17          |
|                   | 140/5700                       | 18                | 18                | 17   | 17          |
|                   | 144/5720                       | 20                | 20                | 17   | 17          |
| 802.11n HT40      | 102/5510                       | 17                | 17                | 17   | 17          |
|                   | 118/5590                       | 20                | 20                | 20   | 20          |
|                   | 134/5670                       | 18                | 18                | 18   | 18          |
|                   | 142/5710                       | 22                | 22                | 19   | 19          |
| 802.11ac VHT20    | 100/5500                       | 20                | 20                | 18   | 18          |
|                   | 120/5600                       | 20                | 20                | 17   | 17          |

|                |          |    |    |    |    |
|----------------|----------|----|----|----|----|
|                | 140/5700 | 20 | 20 | 17 | 17 |
|                | 144/5720 | 20 | 20 | 17 | 17 |
| 802.11ac VHT40 | 102/5510 | 22 | 22 | 20 | 20 |
|                | 118/5590 | 22 | 22 | 20 | 20 |
|                | 134/5670 | 22 | 22 | 19 | 19 |
|                | 142/5710 | 22 | 22 | 19 | 19 |
| 802.11ac VHT80 | 122/5610 | 14 | 14 | 14 | 14 |
|                | 138/5690 | 19 | 19 | 19 | 19 |
| 802.11ax HE20  | 100/5500 | 20 | 20 | 18 | 18 |
|                | 120/5600 | 20 | 20 | 17 | 17 |
|                | 140/5700 | 20 | 20 | 17 | 17 |
|                | 144/5720 | 20 | 20 | 17 | 17 |
| 802.11ax HE40  | 102/5510 | 16 | 16 | 16 | 16 |
|                | 118/5590 | 22 | 22 | 20 | 20 |
|                | 134/5670 | 22 | 22 | 20 | 20 |
|                | 142/5710 | 22 | 22 | 19 | 19 |
| 802.11ax HE80  | 122/5610 | 20 | 20 | 20 | 20 |
|                | 138/5690 | 22 | 22 | 21 | 21 |

### U-NII-3

| Network Standards | Channel/<br>Frequency<br>(MHz) | Power Index       |                   |      |             |
|-------------------|--------------------------------|-------------------|-------------------|------|-------------|
|                   |                                | SISO<br>Antenna 1 | SISO<br>Antenna 2 | MIMO | Beamforming |
| 802.11a           | 144/5720                       | 20                | 20                | 20   | 20          |
|                   | 149/5745                       | 24                | 24                | 24   | 24          |
|                   | 157/5785                       | 24                | 24                | 24   | 24          |
|                   | 165/5825                       | 22                | 22                | 22   | 22          |
| 802.11n HT20      | 144/5720                       | 22                | 22                | 22   | 22          |
|                   | 149/5745                       | 22                | 22                | 22   | 22          |
|                   | 157/5785                       | 24                | 24                | 24   | 24          |
|                   | 165/5825                       | 24                | 24                | 24   | 24          |
| 802.11n HT40      | 142/5720                       | 22                | 22                | 22   | 22          |
|                   | 151/5755                       | 19                | 19                | 19   | 19          |
|                   | 159/5795                       | 20                | 20                | 20   | 20          |
| 802.11ac VHT20    | 144/5720                       | 24                | 24                | 24   | 24          |
|                   | 149/5745                       | 24                | 24                | 24   | 24          |
|                   | 157/5785                       | 24                | 24                | 24   | 24          |
|                   | 165/5825                       | 24                | 24                | 24   | 24          |
| 802.11ac VHT40    | 142/5710                       | 24                | 24                | 24   | 24          |
|                   | 151/5755                       | 24                | 24                | 24   | 24          |
|                   | 159/5795                       | 24                | 24                | 24   | 24          |
| 802.11ac VHT80    | 138/5690                       | 19                | 19                | 19   | 19          |
|                   | 155/5775                       | 18                | 18                | 18   | 18          |
| 802.11ax HE20     | 144/5720                       | 24                | 24                | 24   | 24          |

|               |          |    |    |    |    |
|---------------|----------|----|----|----|----|
|               | 149/5745 | 24 | 24 | 24 | 24 |
|               | 157/5785 | 24 | 24 | 24 | 24 |
|               | 165/5825 | 24 | 24 | 24 | 24 |
| 802.11ax HE40 | 142/5710 | 24 | 24 | 24 | 24 |
|               | 151/5755 | 22 | 22 | 22 | 22 |
|               | 159/5795 | 22 | 22 | 22 | 22 |
| 802.11ax HE80 | 138/5690 | 23 | 23 | 23 | 23 |
|               | 155/5775 | 21 | 21 | 21 | 21 |



| Test Mode |                | Channel/<br>Frequency<br>(MHz) | B=26 dB<br>bandwidth<br>(MHz) | Limit<br>11 dBm + 10 log B<br>(dBm) | Final Limit<br>(dBm) |
|-----------|----------------|--------------------------------|-------------------------------|-------------------------------------|----------------------|
| U-NII-2A  | 802.11a        | 52/5260                        | 20.342                        | 24.08 > 24                          | 24.00                |
|           |                | 60/5300                        | 20.106                        | 24.03 > 24                          | 24.00                |
|           |                | 64/5320                        | 20.230                        | 24.06 > 24                          | 24.00                |
|           | 802.11n HT20   | 52/5260                        | 21.259                        | 24.28 > 24                          | 24.00                |
|           |                | 60/5300                        | 21.770                        | 24.38 > 24                          | 24.00                |
|           |                | 64/5320                        | 21.281                        | 24.28 > 24                          | 24.00                |
|           | 802.11n HT40   | 54/5270                        | 40.882                        | 27.12 > 24                          | 24.00                |
|           |                | 62/5310                        | 40.482                        | 27.07 > 24                          | 24.00                |
|           | 802.11ac VHT20 | 52/5260                        | 21.150                        | 24.25 > 24                          | 24.00                |
|           |                | 60/5300                        | 21.244                        | 24.27 > 24                          | 24.00                |
|           |                | 64/5320                        | 21.015                        | 24.23 > 24                          | 24.00                |
|           | 802.11ac VHT40 | 54/5270                        | 40.358                        | 27.06 > 24                          | 24.00                |
|           |                | 62/5310                        | 40.516                        | 27.08 > 24                          | 24.00                |
|           | 802.11ac VHT80 | 58/5290                        | 81.776                        | 30.13 > 24                          | 24.00                |
|           | 802.11ax HE20  | 52/5260                        | 21.695                        | 24.36 > 24                          | 24.00                |
|           |                | 60/5300                        | 21.065                        | 24.24 > 24                          | 24.00                |
|           |                | 64/5320                        | 21.308                        | 24.29 > 24                          | 24.00                |
|           | 802.11ax HE40  | 54/5270                        | 41.057                        | 27.13 > 24                          | 24.00                |
|           |                | 62/5310                        | 41.138                        | 27.14 > 24                          | 24.00                |
|           | 802.11ax HE80  | 58/5290                        | 82.051                        | 30.14 > 24                          | 24.00                |
| U-NII-2C  | 802.11a        | 100/5500                       | 20.001                        | 24.01 > 24                          | 24.00                |
|           |                | 120/5600                       | 20.660                        | 24.15 > 24                          | 24.00                |
|           |                | 140/5700                       | 20.480                        | 24.11 > 24                          | 24.00                |
|           |                | 144/5720                       | 19.871                        | 23.98 < 24                          | 23.98                |
|           | 802.11n HT20   | 100/5500                       | 21.342                        | 24.29 > 24                          | 24.00                |
|           |                | 120/5600                       | 20.940                        | 24.21 > 24                          | 24.00                |
|           |                | 140/5700                       | 21.563                        | 24.34 > 24                          | 24.00                |
|           |                | 144/5720                       | 21.059                        | 24.23 > 24                          | 24.00                |
|           | 802.11n HT40   | 102/5510                       | 40.687                        | 27.09 > 24                          | 24.00                |
|           |                | 118/5590                       | 41.002                        | 27.13 > 24                          | 24.00                |
|           |                | 134/5670                       | 40.627                        | 27.09 > 24                          | 24.00                |
|           |                | 142/5710                       | 40.542                        | 27.08 > 24                          | 24.00                |
|           | 802.11ac VHT20 | 100/5500                       | 20.905                        | 24.20 > 24                          | 24.00                |
|           |                | 120/5600                       | 21.404                        | 24.30 > 24                          | 24.00                |
|           |                | 140/5700                       | 21.267                        | 24.28 > 24                          | 24.00                |
|           |                | 144/5720                       | 21.082                        | 24.24 > 24                          | 24.00                |

| RF Test Report    |                | Report Ref: RF-100-1021-00 |            |            |       |
|-------------------|----------------|----------------------------|------------|------------|-------|
|                   | 802.11ac VHT40 | 102/5510                   | 40.429     | 27.07 > 24 | 24.00 |
|                   |                | 118/5590                   | 40.733     | 27.10 > 24 | 24.00 |
|                   |                | 134/5670                   | 40.642     | 27.09 > 24 | 24.00 |
|                   |                | 142/5710                   | 40.912     | 27.12 > 24 | 24.00 |
|                   | 802.11ac VHT80 | 122/5610                   | 81.547     | 30.11 > 24 | 24.00 |
|                   |                | 138/5690                   | 83.260     | 30.20 > 24 | 24.00 |
|                   | 802.11ax HE20  | 100/5500                   | 21.720     | 24.37 > 24 | 24.00 |
|                   |                | 120/5600                   | 21.022     | 24.23 > 24 | 24.00 |
|                   |                | 140/5700                   | 21.440     | 24.31 > 24 | 24.00 |
|                   |                | 144/5720                   | 21.020     | 24.23 > 24 | 24.00 |
|                   | 802.11ax HE40  | 102/5510                   | 40.727     | 27.10 > 24 | 24.00 |
|                   |                | 118/5590                   | 40.413     | 27.07 > 24 | 24.00 |
|                   |                | 134/5670                   | 41.381     | 27.17 > 24 | 24.00 |
|                   |                | 142/5710                   | 40.908     | 27.12 > 24 | 24.00 |
| 802.11ax HE80     | 122/5610       | 82.238                     | 30.15 > 24 | 24.00      |       |
|                   | 138/5690       | 83.028                     | 30.19 > 24 | 24.00      |       |
| Note: 250mW=24dBm |                |                            |            |            |       |

**SISO Antenna 1**
**U-NII-1**

| Test Mode                                                                                   | Channel/<br>Frequency<br>(MHz) | Average Power<br>Measured<br>(dBm) | Average Power<br>with duty factor<br>(dBm) | Limit<br>(dBm) | Conclusion |
|---------------------------------------------------------------------------------------------|--------------------------------|------------------------------------|--------------------------------------------|----------------|------------|
| 802.11a                                                                                     | 36/5180                        | 14.86                              | 15.03                                      | 24.00          | PASS       |
|                                                                                             | 40/5200                        | 12.82                              | 12.99                                      | 24.00          | PASS       |
|                                                                                             | 48/5240                        | 14.70                              | 14.87                                      | 24.00          | PASS       |
| 802.11n HT20                                                                                | 36/5180                        | 13.47                              | 14.44                                      | 24.00          | PASS       |
|                                                                                             | 40/5200                        | 12.00                              | 12.97                                      | 24.00          | PASS       |
|                                                                                             | 48/5240                        | 13.65                              | 14.62                                      | 24.00          | PASS       |
| 802.11n HT40                                                                                | 38/5190                        | 14.74                              | 14.74                                      | 24.00          | PASS       |
|                                                                                             | 46/5230                        | 14.57                              | 14.57                                      | 24.00          | PASS       |
| 802.11ac VHT20                                                                              | 36/5180                        | 13.86                              | 14.83                                      | 24.00          | PASS       |
|                                                                                             | 40/5200                        | 11.69                              | 12.66                                      | 24.00          | PASS       |
|                                                                                             | 48/5240                        | 11.69                              | 12.66                                      | 24.00          | PASS       |
| 802.11ac VHT40                                                                              | 38/5190                        | 14.78                              | 15.76                                      | 24.00          | PASS       |
|                                                                                             | 46/5230                        | 14.46                              | 15.44                                      | 24.00          | PASS       |
| 802.11ac VHT80                                                                              | 42/5210                        | 16.31                              | 17.31                                      | 24.00          | PASS       |
| 802.11ax HE20                                                                               | 36/5180                        | 13.86                              | 13.86                                      | 24.00          | PASS       |
|                                                                                             | 40/5200                        | 11.67                              | 11.67                                      | 24.00          | PASS       |
|                                                                                             | 48/5240                        | 13.54                              | 13.54                                      | 24.00          | PASS       |
| 802.11ax HE40                                                                               | 38/5190                        | 14.38                              | 14.38                                      | 24.00          | PASS       |
|                                                                                             | 46/5230                        | 13.96                              | 13.96                                      | 24.00          | PASS       |
| 802.11ax HE80                                                                               | 42/5210                        | 15.90                              | 15.90                                      | 24.00          | PASS       |
| Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor |                                |                                    |                                            |                |            |

**U-NII-2A**

| Test Mode                                                                                   | Channel/<br>Frequency<br>(MHz) | Average Power<br>Measured<br>(dBm) | Average Power<br>with duty factor<br>(dBm) | Limit<br>(dBm) | Conclusion |
|---------------------------------------------------------------------------------------------|--------------------------------|------------------------------------|--------------------------------------------|----------------|------------|
| 802.11a                                                                                     | 52/5260                        | 15.37                              | 15.54                                      | 24.00          | PASS       |
|                                                                                             | 60/5300                        | 15.61                              | 15.78                                      | 24.00          | PASS       |
|                                                                                             | 64/5320                        | 15.72                              | 15.89                                      | 24.00          | PASS       |
| 802.11n HT20                                                                                | 52/5260                        | 14.27                              | 15.24                                      | 24.00          | PASS       |
|                                                                                             | 60/5300                        | 14.59                              | 15.56                                      | 24.00          | PASS       |
|                                                                                             | 64/5320                        | 14.66                              | 15.63                                      | 24.00          | PASS       |
| 802.11n HT40                                                                                | 54/5270                        | 17.05                              | 17.05                                      | 24.00          | PASS       |
|                                                                                             | 62/5310                        | 12.67                              | 12.67                                      | 24.00          | PASS       |
| 802.11ac VHT20                                                                              | 52/5260                        | 19.31                              | 20.28                                      | 24.00          | PASS       |
|                                                                                             | 60/5300                        | 19.75                              | 20.72                                      | 24.00          | PASS       |
|                                                                                             | 64/5320                        | 19.84                              | 20.81                                      | 24.00          | PASS       |
| 802.11ac VHT40                                                                              | 54/5270                        | 22.30                              | 23.28                                      | 24.00          | PASS       |
|                                                                                             | 62/5310                        | 23.01                              | 23.99                                      | 24.00          | PASS       |
| 802.11ac VHT80                                                                              | 58/5290                        | 12.85                              | 13.85                                      | 24.00          | PASS       |
| 802.11ax HE20                                                                               | 52/5260                        | 14.14                              | 14.14                                      | 24.00          | PASS       |
|                                                                                             | 60/5300                        | 14.34                              | 14.34                                      | 24.00          | PASS       |
|                                                                                             | 64/5320                        | 14.56                              | 14.56                                      | 24.00          | PASS       |
| 802.11ax HE40                                                                               | 54/5270                        | 16.69                              | 16.69                                      | 24.00          | PASS       |
|                                                                                             | 62/5310                        | 12.02                              | 12.02                                      | 24.00          | PASS       |
| 802.11ax HE80                                                                               | 58/5290                        | 13.66                              | 13.66                                      | 24.00          | PASS       |
| Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor |                                |                                    |                                            |                |            |

## U-NII-2C

| Test Mode                                                                                   | Channel/<br>Frequency<br>(MHz) | Average Power<br>Measured<br>(dBm) | Average Power<br>with duty factor<br>(dBm) | Limit<br>(dBm) | Conclusion |
|---------------------------------------------------------------------------------------------|--------------------------------|------------------------------------|--------------------------------------------|----------------|------------|
| 802.11a                                                                                     | 100/5500                       | 20.34                              | 20.51                                      | 24.00          | PASS       |
|                                                                                             | 120/5600                       | 19.49                              | 19.66                                      | 24.00          | PASS       |
|                                                                                             | 140/5700                       | 19.46                              | 19.63                                      | 24.00          | PASS       |
|                                                                                             | 144/5720                       | 18.55                              | 18.72                                      | 23.98          | PASS       |
| 802.11n HT20                                                                                | 100/5500                       | 19.23                              | 20.20                                      | 24.00          | PASS       |
|                                                                                             | 120/5600                       | 20.36                              | 21.33                                      | 24.00          | PASS       |
|                                                                                             | 140/5700                       | 15.87                              | 16.84                                      | 24.00          | PASS       |
|                                                                                             | 144/5720                       | 19.51                              | 20.48                                      | 24.00          | PASS       |
| 802.11n HT40                                                                                | 102/5510                       | 14.86                              | 14.86                                      | 24.00          | PASS       |
|                                                                                             | 118/5590                       | 18.57                              | 18.57                                      | 24.00          | PASS       |
|                                                                                             | 134/5670                       | 16.39                              | 16.39                                      | 24.00          | PASS       |
|                                                                                             | 142/5710                       | 20.49                              | 20.49                                      | 24.00          | PASS       |
| 802.11ac VHT20                                                                              | 100/5500                       | 19.25                              | 20.22                                      | 24.00          | PASS       |
|                                                                                             | 120/5600                       | 20.38                              | 21.35                                      | 24.00          | PASS       |
|                                                                                             | 140/5700                       | 20.55                              | 21.52                                      | 24.00          | PASS       |
|                                                                                             | 144/5720                       | 19.01                              | 19.98                                      | 24.00          | PASS       |
| 802.11ac VHT40                                                                              | 102/5510                       | 20.41                              | 21.39                                      | 24.00          | PASS       |
|                                                                                             | 118/5590                       | 20.97                              | 21.95                                      | 24.00          | PASS       |
|                                                                                             | 134/5670                       | 20.86                              | 21.84                                      | 24.00          | PASS       |
|                                                                                             | 142/5710                       | 20.59                              | 21.57                                      | 24.00          | PASS       |
| 802.11ac VHT80                                                                              | 122/5610                       | 12.19                              | 13.19                                      | 24.00          | PASS       |
|                                                                                             | 138/5690                       | 16.83                              | 17.83                                      | 24.00          | PASS       |
| 802.11ax HE20                                                                               | 100/5500                       | 19.05                              | 19.05                                      | 24.00          | PASS       |
|                                                                                             | 120/5600                       | 20.11                              | 20.11                                      | 24.00          | PASS       |
|                                                                                             | 140/5700                       | 20.22                              | 20.22                                      | 24.00          | PASS       |
|                                                                                             | 144/5720                       | 18.99                              | 18.99                                      | 24.00          | PASS       |
| 802.11ax HE40                                                                               | 102/5510                       | 13.11                              | 13.11                                      | 24.00          | PASS       |
|                                                                                             | 118/5590                       | 20.52                              | 20.52                                      | 24.00          | PASS       |
|                                                                                             | 134/5670                       | 20.20                              | 20.20                                      | 24.00          | PASS       |
|                                                                                             | 142/5710                       | 20.01                              | 20.01                                      | 24.00          | PASS       |
| 802.11ax HE80                                                                               | 122/5610                       | 18.00                              | 18.00                                      | 24.00          | PASS       |
|                                                                                             | 138/5690                       | 20.16                              | 20.16                                      | 24.00          | PASS       |
| Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor |                                |                                    |                                            |                |            |

**U-NII-3**

| Test Mode                                                                                   | Channel/<br>Frequency<br>(MHz) | Average Power<br>Measured<br>(dBm) | Average Power<br>with duty factor<br>(dBm) | Limit<br>(dBm) | Conclusion |
|---------------------------------------------------------------------------------------------|--------------------------------|------------------------------------|--------------------------------------------|----------------|------------|
| 802.11a                                                                                     | 144/5720                       | 11.60                              | 11.77                                      | 30.00          | PASS       |
|                                                                                             | 149/5745                       | 23.08                              | 23.25                                      | 30.00          | PASS       |
|                                                                                             | 157/5785                       | 23.17                              | 23.34                                      | 30.00          | PASS       |
|                                                                                             | 165/5825                       | 20.72                              | 20.89                                      | 30.00          | PASS       |
| 802.11n HT20                                                                                | 144/5720                       | 12.85                              | 13.82                                      | 30.00          | PASS       |
|                                                                                             | 149/5745                       | 19.54                              | 20.51                                      | 30.00          | PASS       |
|                                                                                             | 157/5785                       | 21.59                              | 22.56                                      | 30.00          | PASS       |
|                                                                                             | 165/5825                       | 21.92                              | 22.89                                      | 30.00          | PASS       |
| 802.11n HT40                                                                                | 142/5720                       | 9.31                               | 9.31                                       | 30.00          | PASS       |
|                                                                                             | 151/5755                       | 17.31                              | 17.31                                      | 30.00          | PASS       |
|                                                                                             | 159/5795                       | 17.86                              | 17.86                                      | 30.00          | PASS       |
| 802.11ac VHT20                                                                              | 144/5720                       | 15.19                              | 16.16                                      | 30.00          | PASS       |
|                                                                                             | 149/5745                       | 21.77                              | 22.74                                      | 30.00          | PASS       |
|                                                                                             | 157/5785                       | 22.07                              | 23.04                                      | 30.00          | PASS       |
|                                                                                             | 165/5825                       | 21.89                              | 22.86                                      | 30.00          | PASS       |
| 802.11ac VHT40                                                                              | 142/5710                       | 11.41                              | 12.39                                      | 30.00          | PASS       |
|                                                                                             | 151/5755                       | 22.71                              | 23.69                                      | 30.00          | PASS       |
|                                                                                             | 159/5795                       | 22.70                              | 23.68                                      | 30.00          | PASS       |
| 802.11ac VHT80                                                                              | 138/5690                       | 2.39                               | 3.39                                       | 30.00          | PASS       |
|                                                                                             | 155/5775                       | 16.23                              | 17.23                                      | 30.00          | PASS       |
| 802.11ax HE20                                                                               | 144/5720                       | 14.66                              | 14.66                                      | 30.00          | PASS       |
|                                                                                             | 149/5745                       | 21.85                              | 21.85                                      | 30.00          | PASS       |
|                                                                                             | 157/5785                       | 22.13                              | 22.13                                      | 30.00          | PASS       |
|                                                                                             | 165/5825                       | 21.48                              | 21.48                                      | 30.00          | PASS       |
| 802.11ax HE40                                                                               | 142/5710                       | 12.07                              | 12.07                                      | 30.00          | PASS       |
|                                                                                             | 151/5755                       | 20.00                              | 20.00                                      | 30.00          | PASS       |
|                                                                                             | 159/5795                       | 19.84                              | 19.84                                      | 30.00          | PASS       |
| 802.11ax HE80                                                                               | 138/5690                       | 6.99                               | 6.99                                       | 30.00          | PASS       |
|                                                                                             | 155/5775                       | 19.02                              | 19.02                                      | 30.00          | PASS       |
| Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor |                                |                                    |                                            |                |            |

**SISO Antenna 2**
**U-NII-1**

| Test Mode                                                                                   | Channel/<br>Frequency<br>(MHz) | Average Power<br>Measured<br>(dBm) | Average Power<br>with duty factor<br>(dBm) | Limit<br>(dBm) | Conclusion |
|---------------------------------------------------------------------------------------------|--------------------------------|------------------------------------|--------------------------------------------|----------------|------------|
| 802.11a                                                                                     | 36/5180                        | 13.77                              | 13.94                                      | 24.00          | PASS       |
|                                                                                             | 40/5200                        | 13.90                              | 14.07                                      | 24.00          | PASS       |
|                                                                                             | 48/5240                        | 13.88                              | 14.05                                      | 24.00          | PASS       |
| 802.11n HT20                                                                                | 36/5180                        | 12.19                              | 13.16                                      | 24.00          | PASS       |
|                                                                                             | 40/5200                        | 12.97                              | 13.94                                      | 24.00          | PASS       |
|                                                                                             | 48/5240                        | 12.64                              | 13.61                                      | 24.00          | PASS       |
| 802.11n HT40                                                                                | 38/5190                        | 15.40                              | 15.40                                      | 24.00          | PASS       |
|                                                                                             | 46/5230                        | 15.73                              | 15.73                                      | 24.00          | PASS       |
| 802.11ac VHT20                                                                              | 36/5180                        | 12.46                              | 13.43                                      | 24.00          | PASS       |
|                                                                                             | 40/5200                        | 12.73                              | 13.70                                      | 24.00          | PASS       |
|                                                                                             | 48/5240                        | 12.92                              | 13.89                                      | 24.00          | PASS       |
| 802.11ac VHT40                                                                              | 38/5190                        | 16.28                              | 17.26                                      | 24.00          | PASS       |
|                                                                                             | 46/5230                        | 15.97                              | 16.95                                      | 24.00          | PASS       |
| 802.11ac VHT80                                                                              | 42/5210                        | 16.42                              | 17.42                                      | 24.00          | PASS       |
| 802.11ax HE20                                                                               | 36/5180                        | 12.32                              | 12.32                                      | 24.00          | PASS       |
|                                                                                             | 40/5200                        | 12.55                              | 12.55                                      | 24.00          | PASS       |
|                                                                                             | 48/5240                        | 12.74                              | 12.74                                      | 24.00          | PASS       |
| 802.11ax HE40                                                                               | 38/5190                        | 15.55                              | 15.55                                      | 24.00          | PASS       |
|                                                                                             | 46/5230                        | 15.87                              | 15.87                                      | 24.00          | PASS       |
| 802.11ax HE80                                                                               | 42/5210                        | 15.68                              | 15.68                                      | 24.00          | PASS       |
| Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor |                                |                                    |                                            |                |            |

**U-NII-2A**

| Test Mode                                                                                   | Channel/<br>Frequency<br>(MHz) | Average Power<br>Measured<br>(dBm) | Average Power<br>with duty factor<br>(dBm) | Limit<br>(dBm) | Conclusion |
|---------------------------------------------------------------------------------------------|--------------------------------|------------------------------------|--------------------------------------------|----------------|------------|
| 802.11a                                                                                     | 52/5260                        | 19.28                              | 19.45                                      | 24.00          | PASS       |
|                                                                                             | 60/5300                        | 19.96                              | 20.13                                      | 24.00          | PASS       |
|                                                                                             | 64/5320                        | 19.94                              | 20.11                                      | 24.00          | PASS       |
| 802.11n HT20                                                                                | 52/5260                        | 19.03                              | 20.00                                      | 24.00          | PASS       |
|                                                                                             | 60/5300                        | 19.11                              | 20.08                                      | 24.00          | PASS       |
|                                                                                             | 64/5320                        | 18.44                              | 19.41                                      | 24.00          | PASS       |
| 802.11n HT40                                                                                | 54/5270                        | 21.72                              | 21.72                                      | 24.00          | PASS       |
|                                                                                             | 62/5310                        | 17.19                              | 17.19                                      | 24.00          | PASS       |
| 802.11ac VHT20                                                                              | 52/5260                        | 19.22                              | 20.19                                      | 24.00          | PASS       |
|                                                                                             | 60/5300                        | 19.08                              | 20.05                                      | 24.00          | PASS       |
|                                                                                             | 64/5320                        | 18.47                              | 19.44                                      | 24.00          | PASS       |
| 802.11ac VHT40                                                                              | 54/5270                        | 21.75                              | 22.73                                      | 24.00          | PASS       |
|                                                                                             | 62/5310                        | 21.31                              | 22.29                                      | 24.00          | PASS       |
| 802.11ac VHT80                                                                              | 58/5290                        | 16.64                              | 17.64                                      | 24.00          | PASS       |
| 802.11ax HE20                                                                               | 52/5260                        | 19.18                              | 19.18                                      | 24.00          | PASS       |
|                                                                                             | 60/5300                        | 18.97                              | 18.97                                      | 24.00          | PASS       |
|                                                                                             | 64/5320                        | 18.76                              | 18.76                                      | 24.00          | PASS       |
| 802.11ax HE40                                                                               | 54/5270                        | 21.32                              | 21.32                                      | 24.00          | PASS       |
|                                                                                             | 62/5310                        | 16.74                              | 16.74                                      | 24.00          | PASS       |
| 802.11ax HE80                                                                               | 58/5290                        | 17.46                              | 17.46                                      | 24.00          | PASS       |
| Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor |                                |                                    |                                            |                |            |