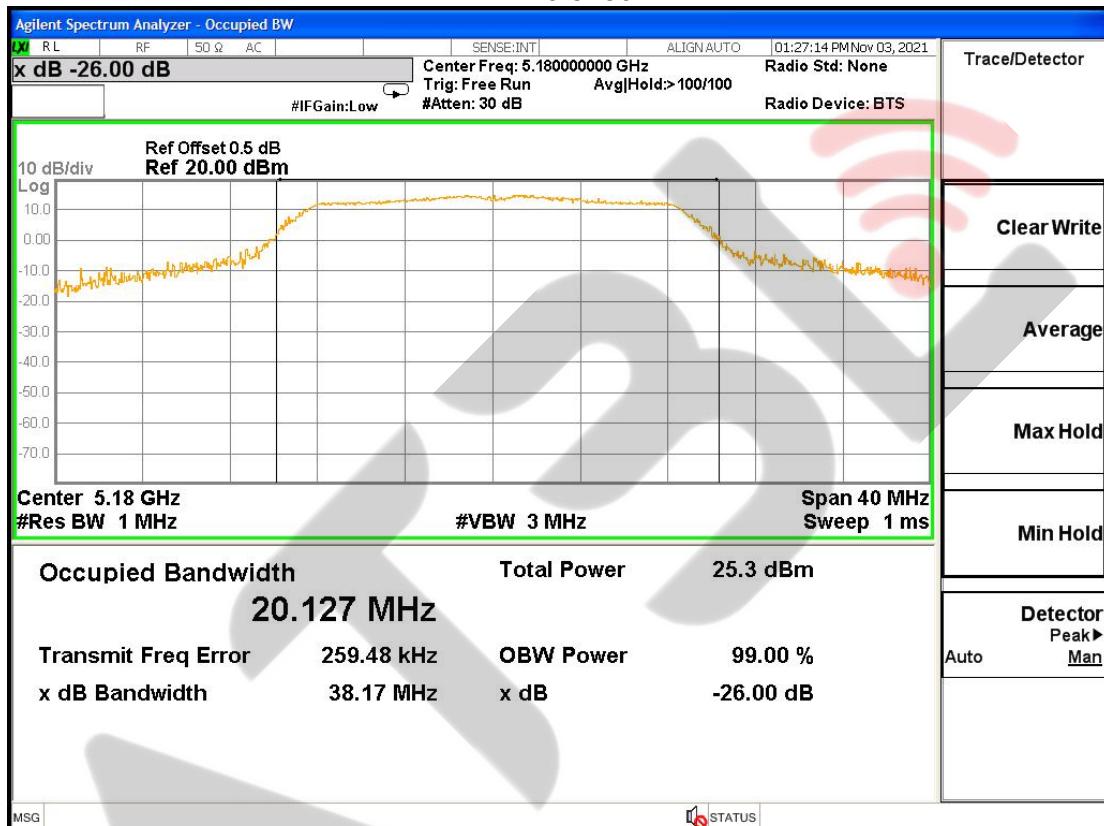


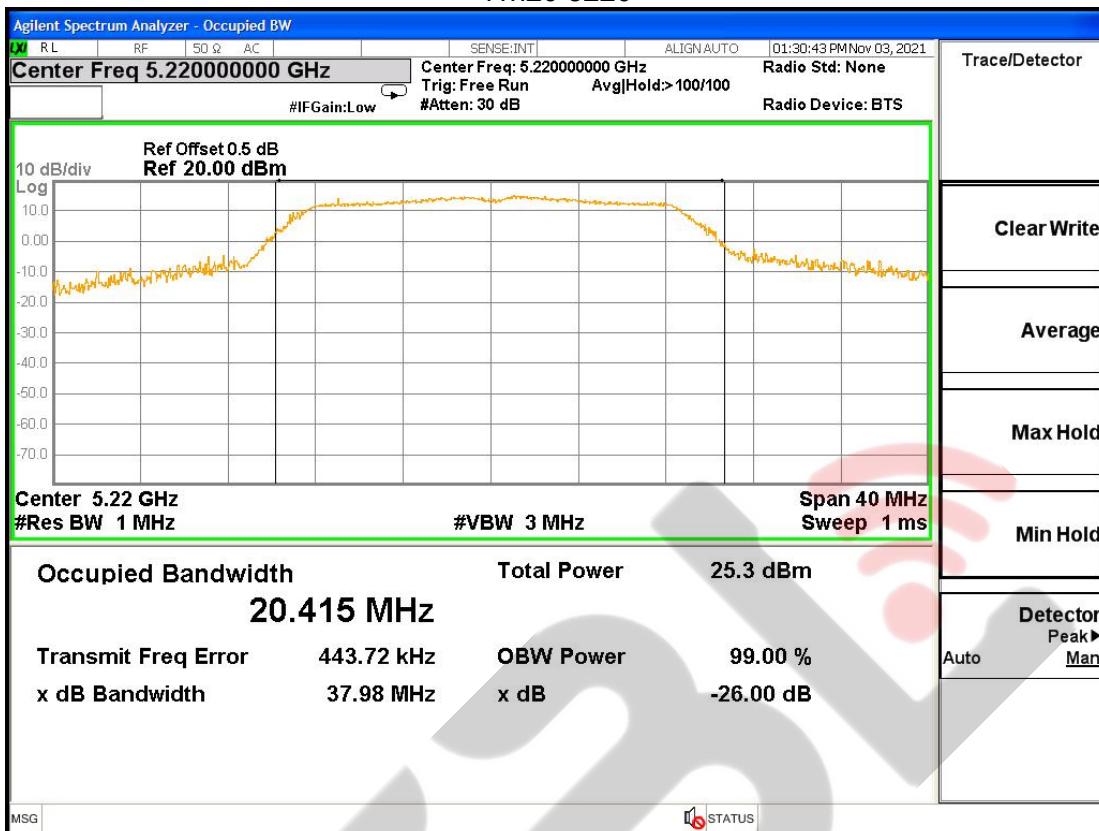
Mode 11n20 For U-NII-1(5150~5250MHz), MCS0

| CH. | Freq. (MHz) | 26dB Bandwidth (MHz) | Results |
|-----|----------------|-------------------------|---------|
| 36 | 5180 | 38.17 | PASS |
| 44 | 5220 | 37.98 | PASS |
| 48 | 5240 | 38.77 | PASS |

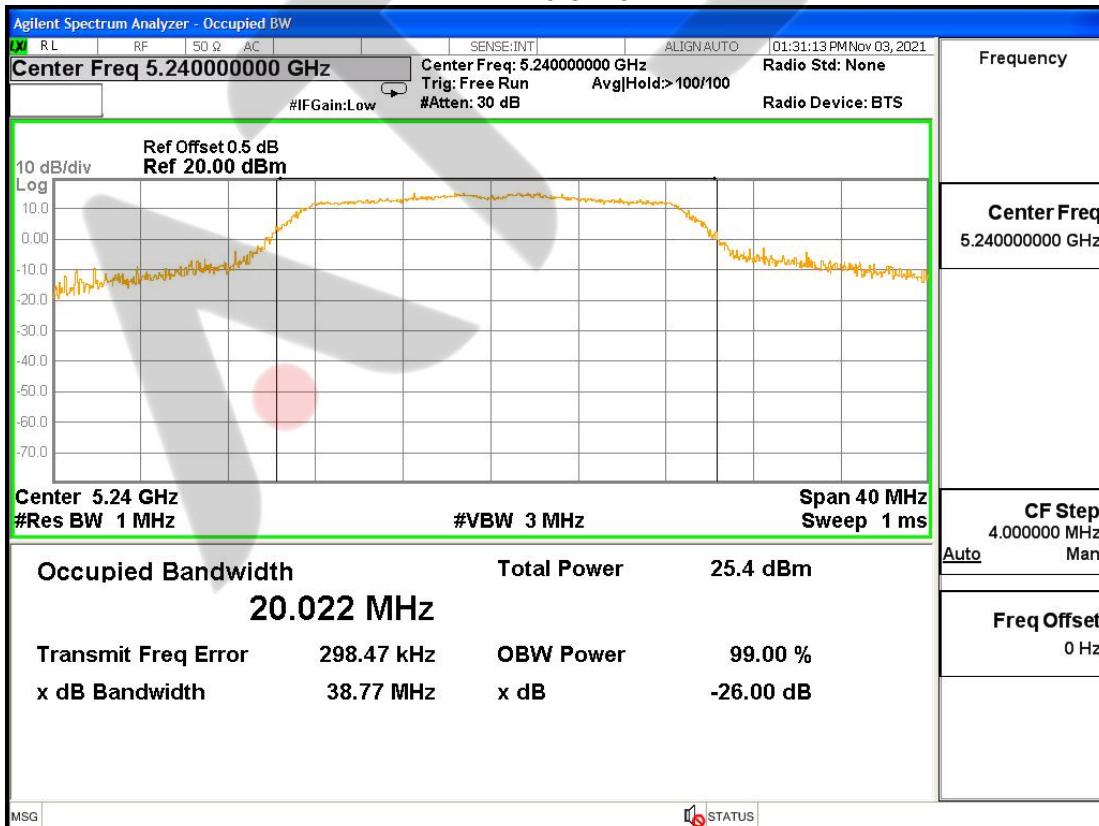
11n20 5180



11n20 5220



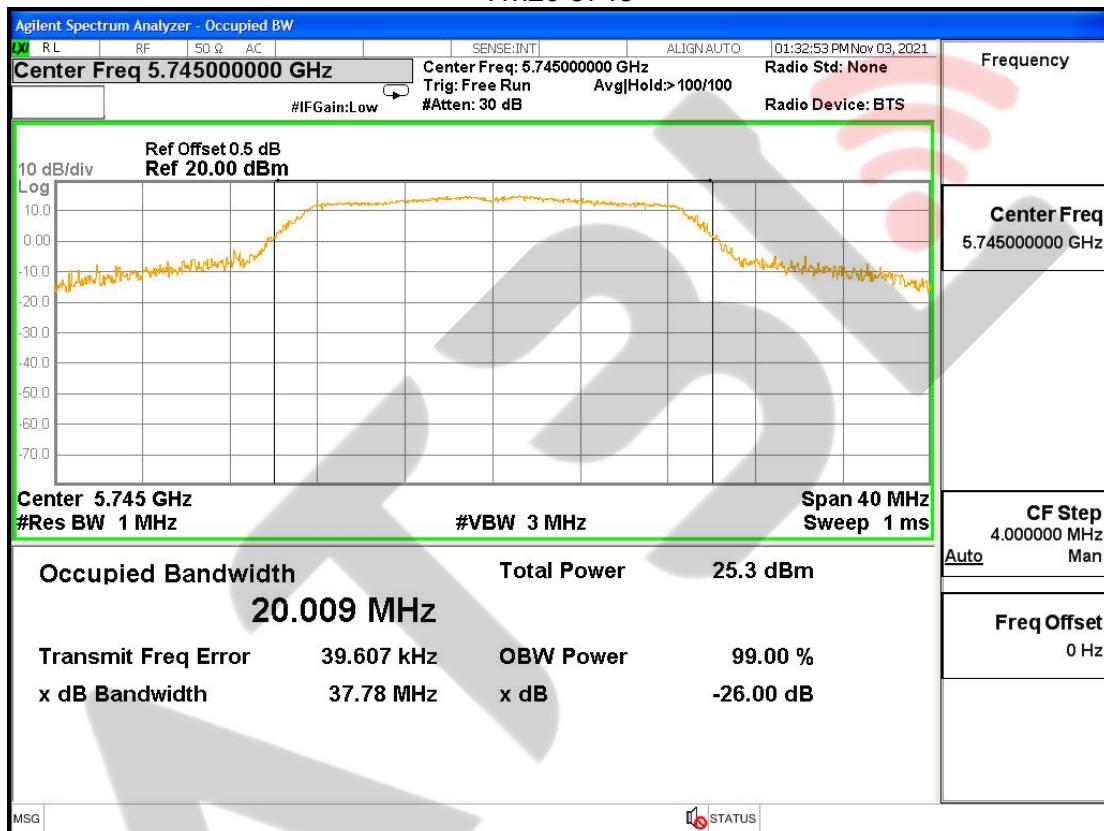
11n20 5240



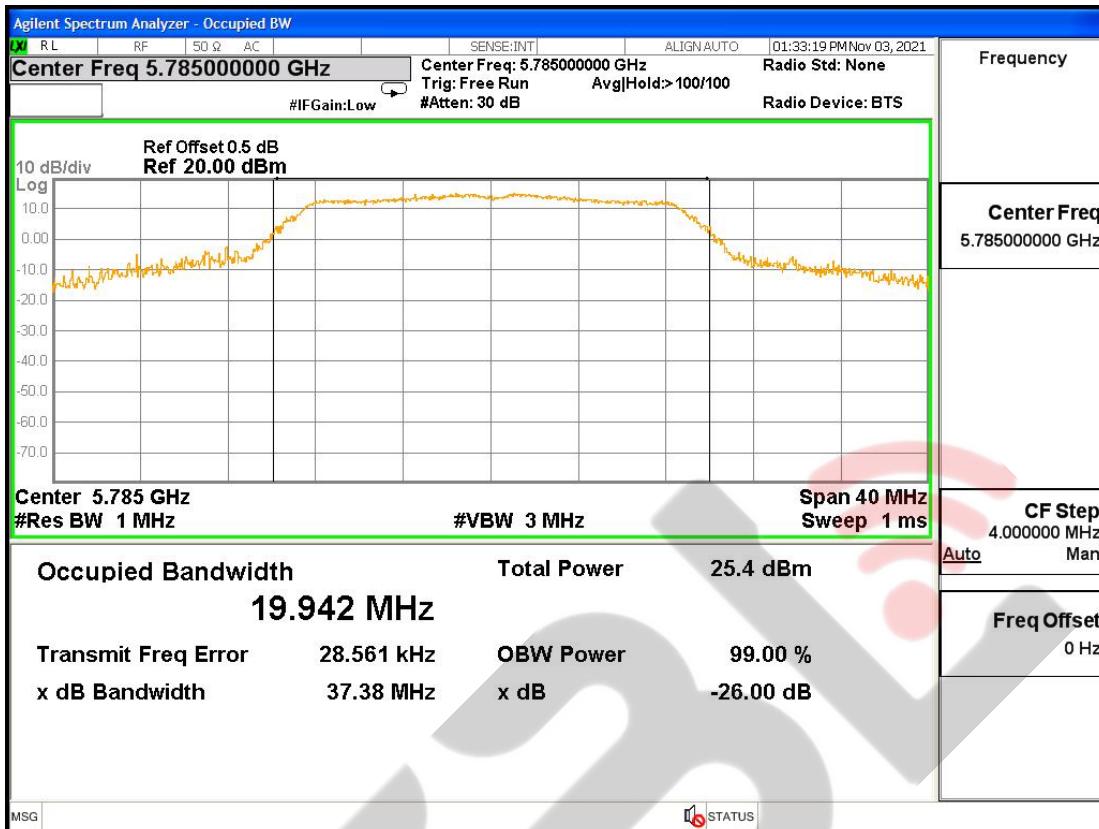
Mode 11n20 For U-NII-3(5725~5850MHz), MCS0

| CH. | Freq. (MHz) | 26dB Bandwidth (MHz) | Results |
|-----|----------------|-------------------------|---------|
| 149 | 5745 | 37.78 | PASS |
| 157 | 5785 | 37.38 | PASS |
| 165 | 5825 | 35.48 | PASS |

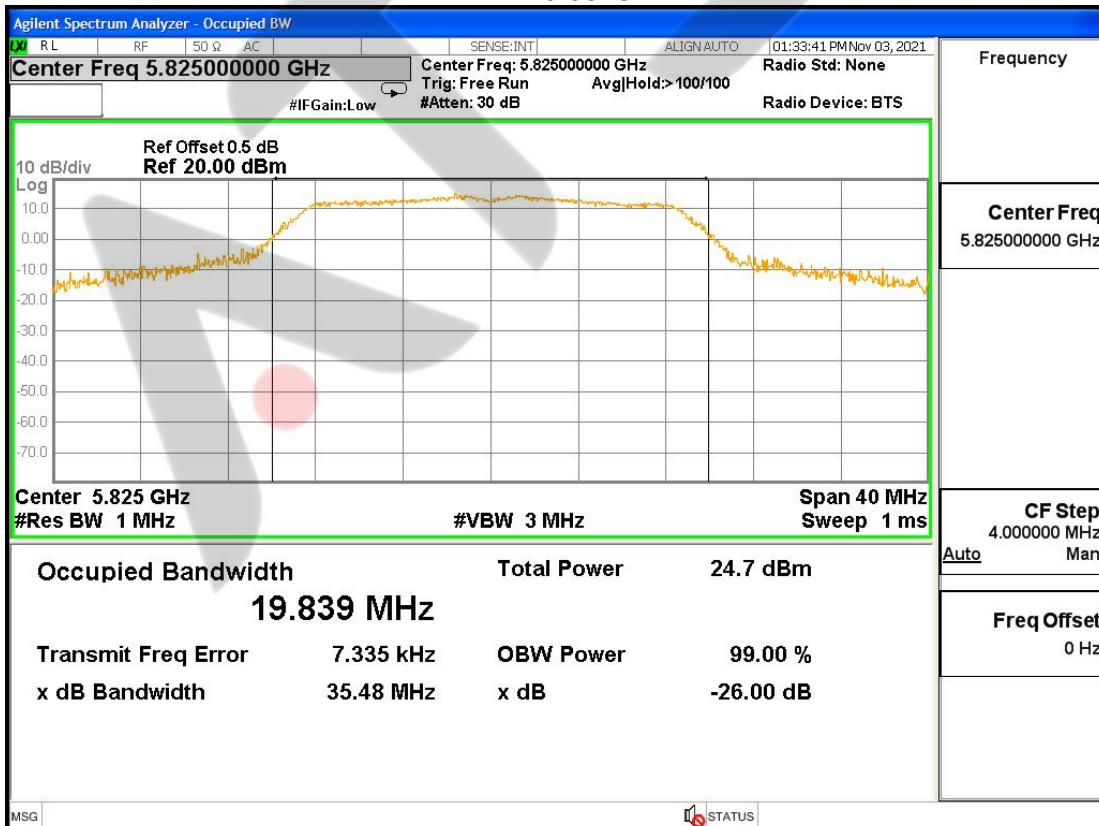
11n20 5745



11n20 5785



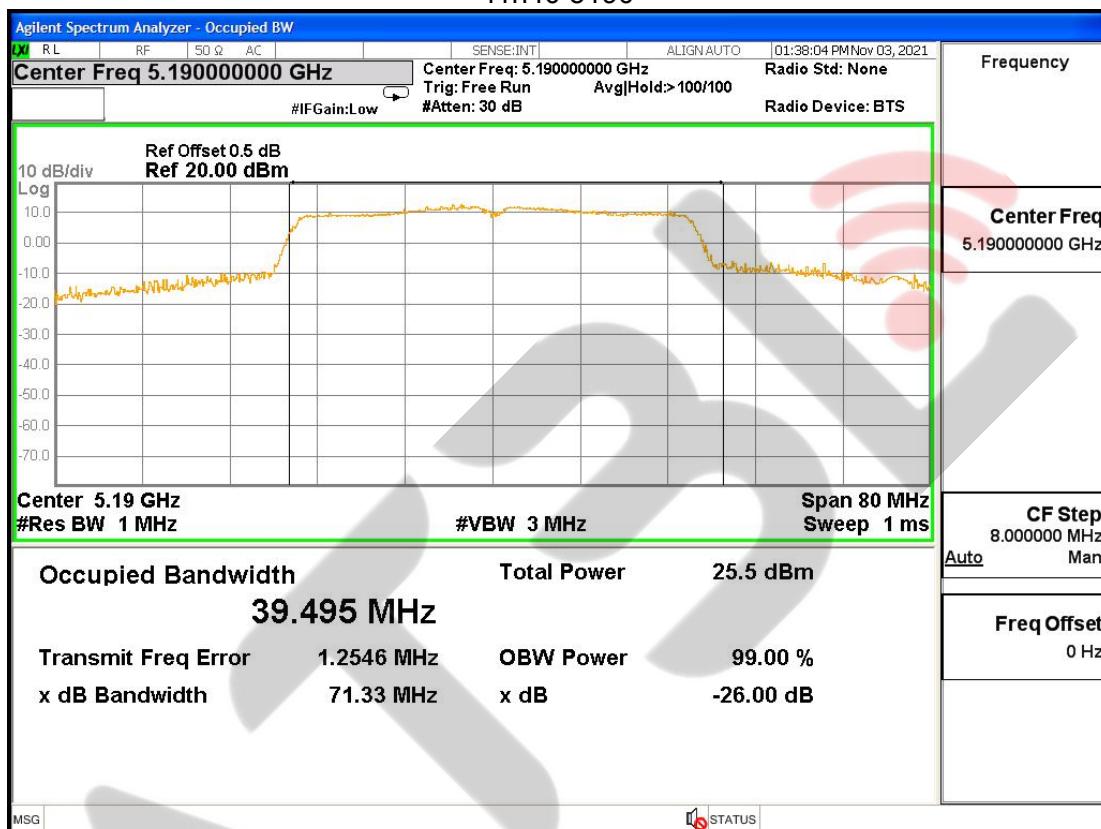
11n20 5825



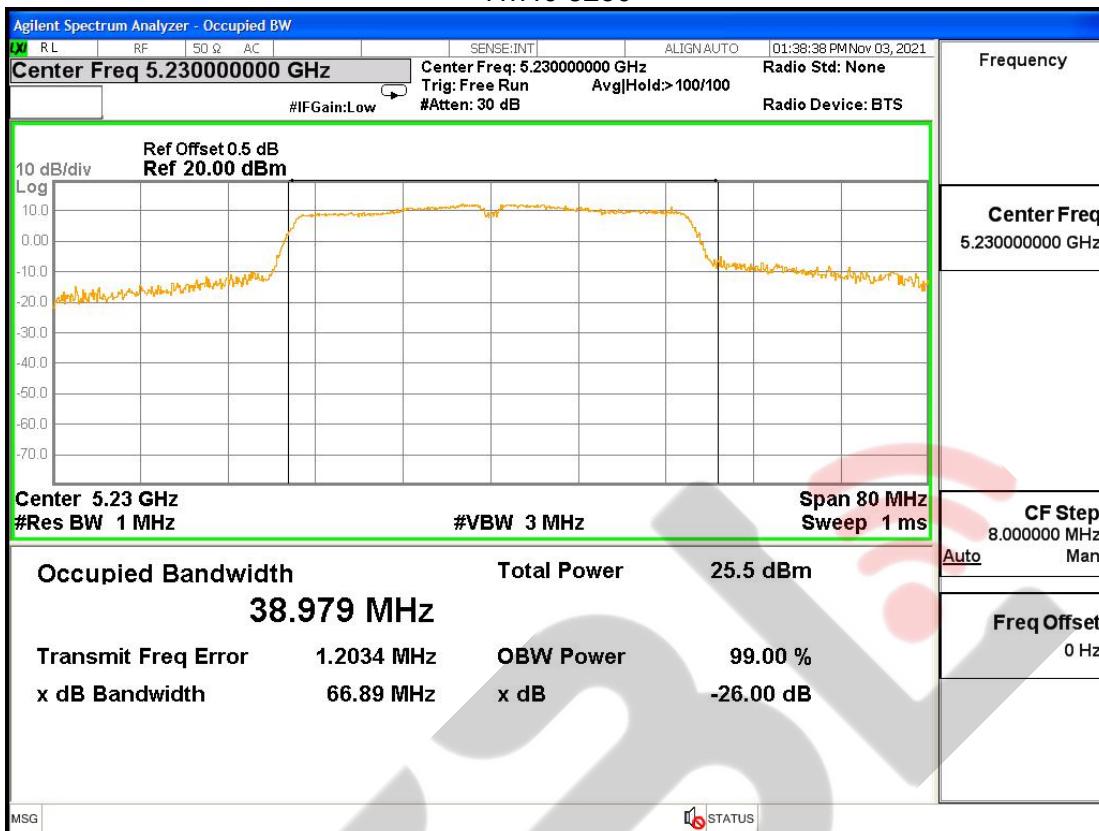
Mode 11n40 For U-NII-1(5150~5250MHz), MCS0

| CH. | Freq. (MHz) | 26dB Bandwidth (MHz) | Results |
|-----|----------------|-------------------------|---------|
| 38 | 5190 | 71.33 | PASS |
| 46 | 5230 | 66.89 | PASS |

11n40 5190



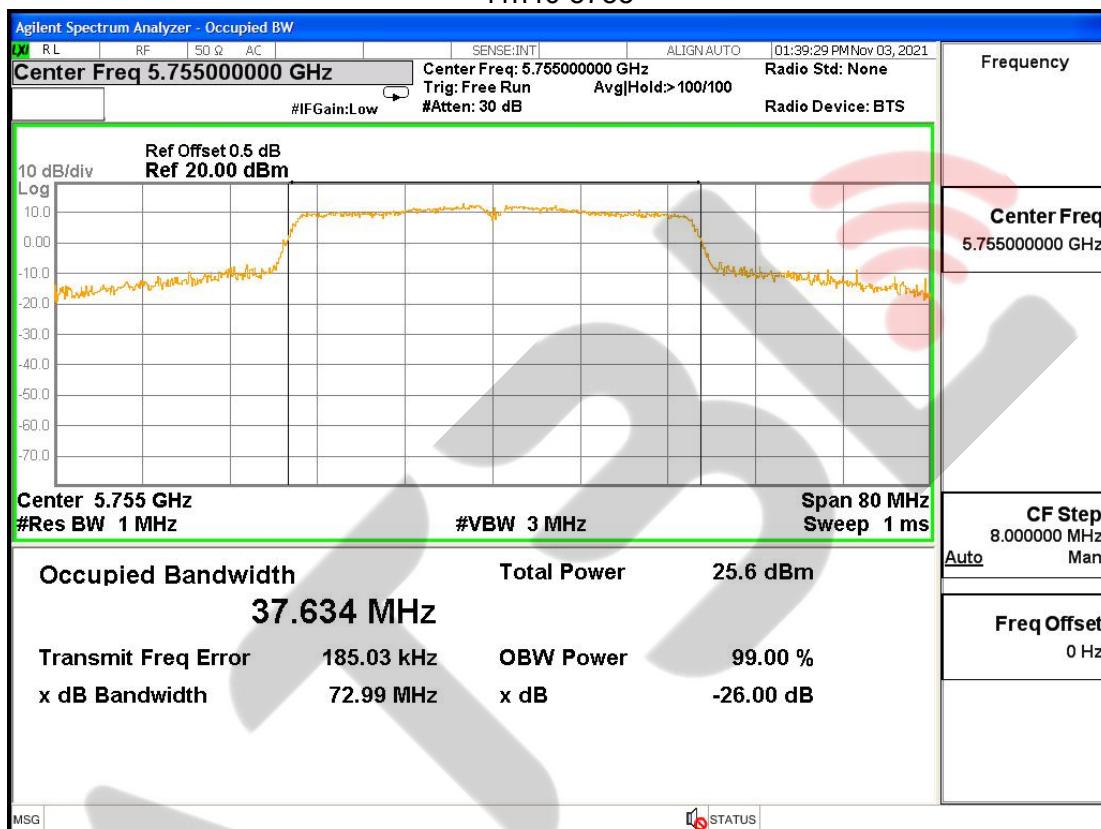
11n40 5230



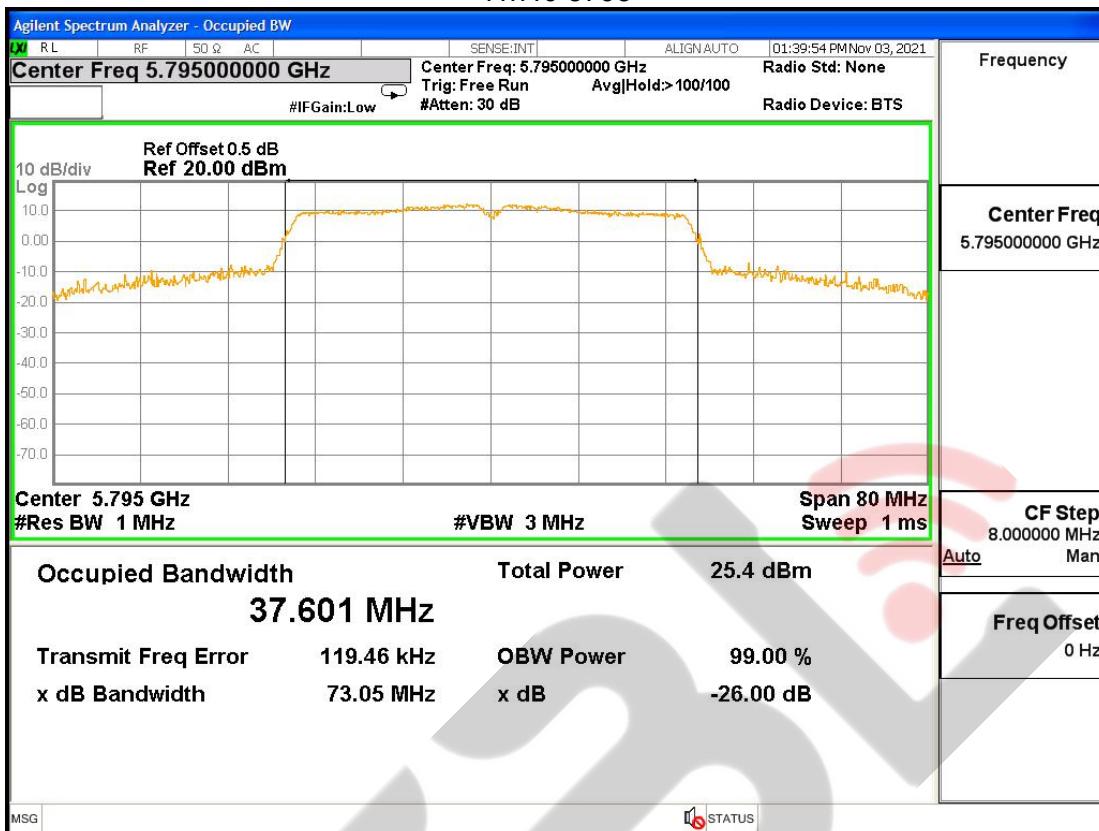
Mode 11n40 For U-NII-3(5725~5850MHz), MCS0

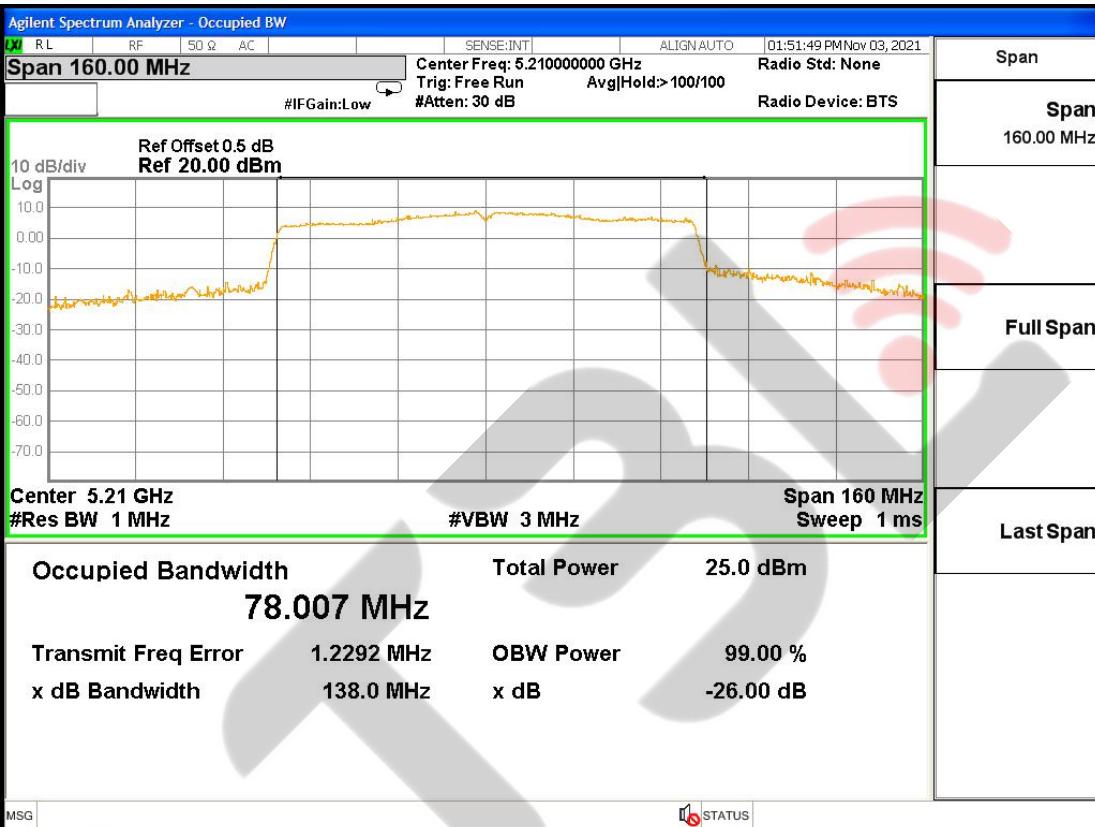
| CH. | Freq. (MHz) | 26dB Bandwidth (MHz) | Results |
|-----|----------------|-------------------------|---------|
| 151 | 5755 | 72.99 | PASS |
| 159 | 5795 | 73.05 | PASS |

11n40 5755



11n40 5795

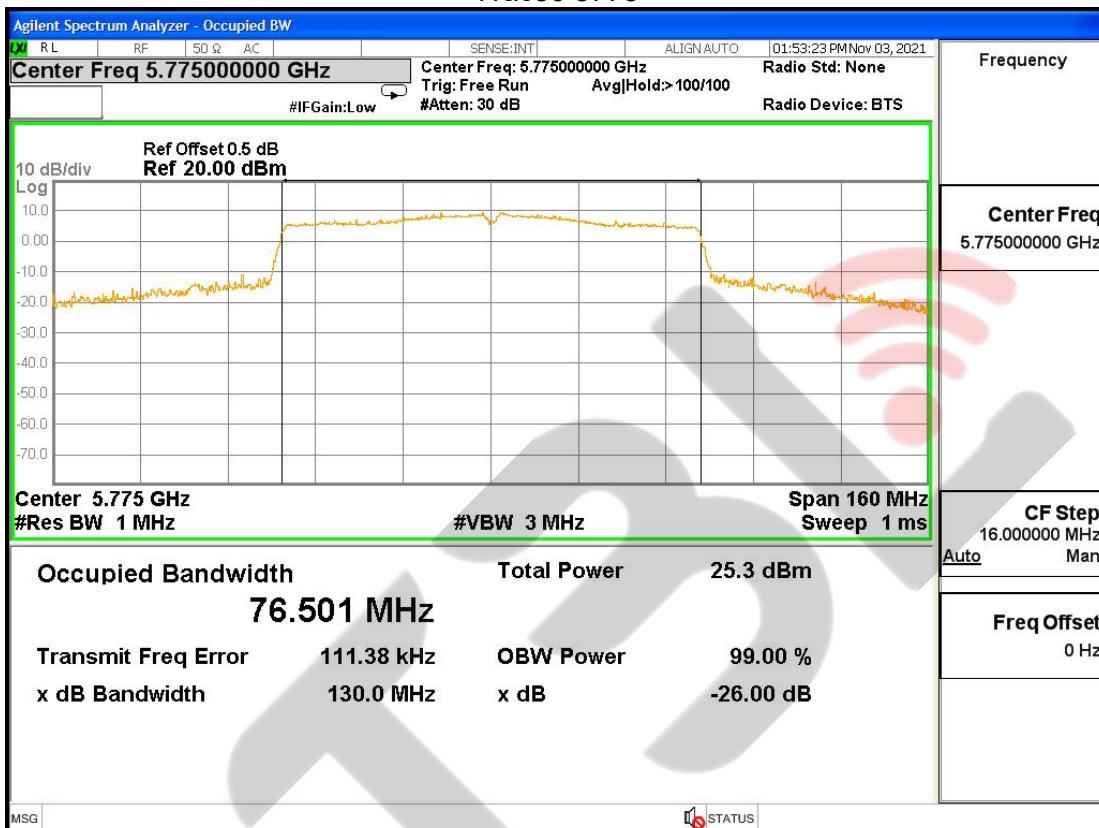


| Mode 11ac80 For U-NII-1(5150~5250MHz), MCS0 | | | |
|---|----------------|-------------------------|---------|
| CH. | Freq. (MHz) | 26dB Bandwidth (MHz) | Results |
| 42 | 5210 | 138 | PASS |
| 11ac80 5210 | | | |
|  | | | |

Mode 11ac80 For U-NII-3(5725~5850MHz), MCS0

| CH. | Freq. (MHz) | 26dB Bandwidth (MHz) | Results |
|-----|----------------|-------------------------|---------|
| 155 | 5775 | 130 | PASS |

11ac80 5775



5.2 OCCUPIED BANDWIDTH (99%) TEST APPLIED PROCEDURES / LIMIT

The following procedure shall be used for measuring (99 %) power bandwidth:

5.2.1 TEST PROCEDURE

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures v02r01. The following procedure shall be used for measuring (99 %) power bandwidth:
 1. Set center frequency to the nominal EUT channel center frequency.
 2. Set span = 1.5 times to 5.0 times the OBW.
 3. Set RBW = 1 % to 5 % of the OBW
 4. Set VBW $\geq 3 \cdot \text{RBW}$
 5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
 6. Use the 99 % power bandwidth function of the instrument (if available).
 7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

5.2.2 DEVIATION FROM STANDARD

No deviation.

5.2.3 TEST SETUP



5.2.4 EUT OPERATION CONDITIONS

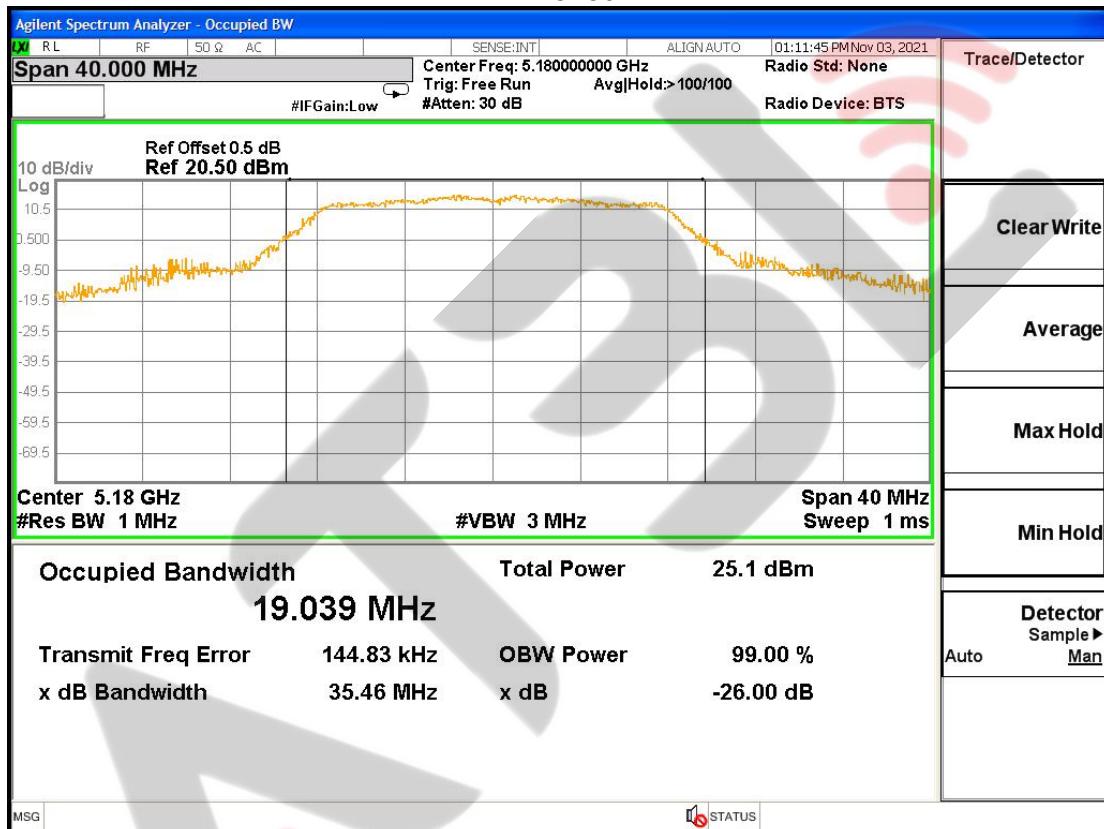
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.2.5 TEST RESULTS

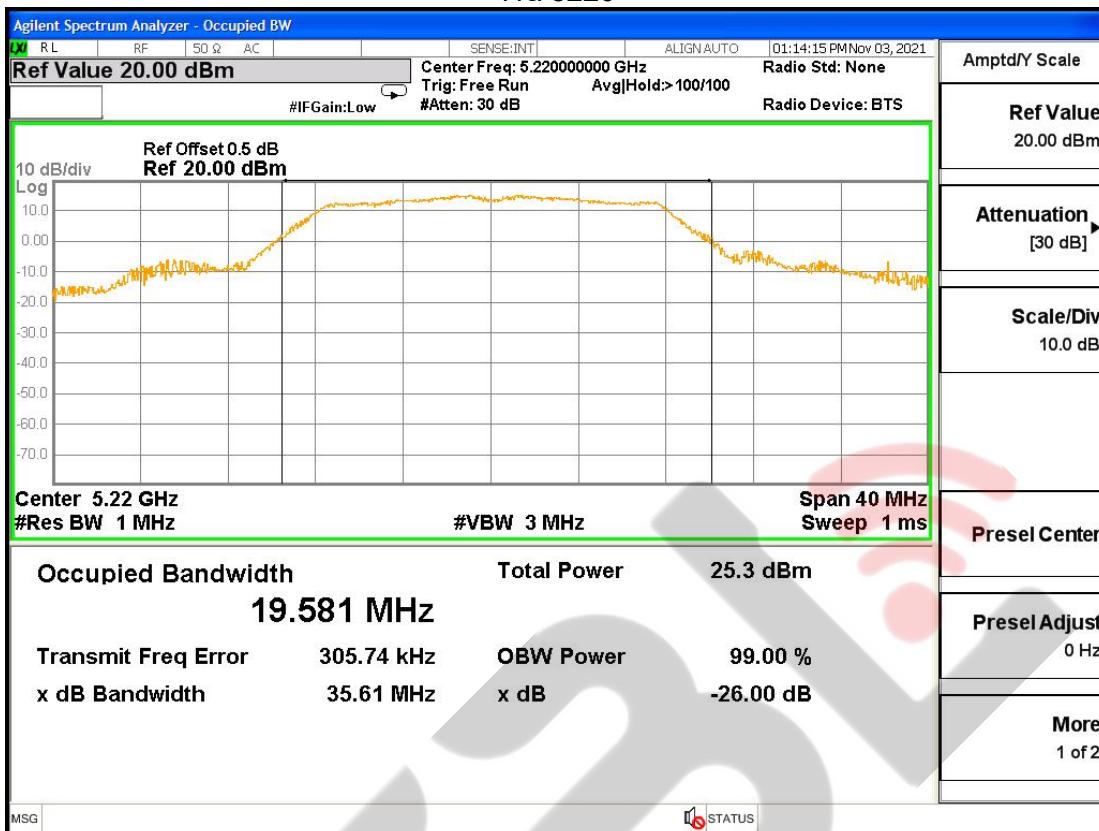
Mode 11a For U-NII-1(5150~5250MHz), 6Mbps

| CH. | Freq. (MHz) | 99% Bandwidth (MHz) | Results |
|-----|----------------|------------------------|---------|
| 36 | 5180 | 19.039 | PASS |
| 44 | 5220 | 19.581 | PASS |
| 48 | 5240 | 19.059 | PASS |

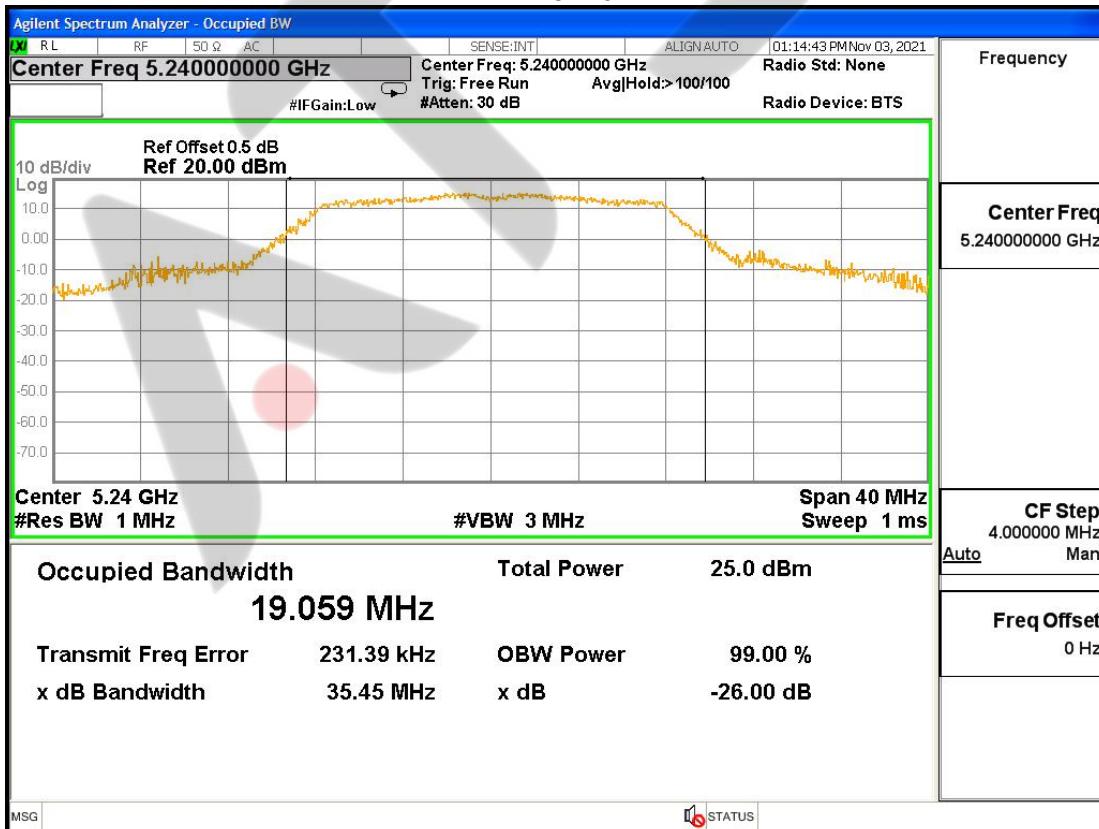
11a 5180



11a 5220



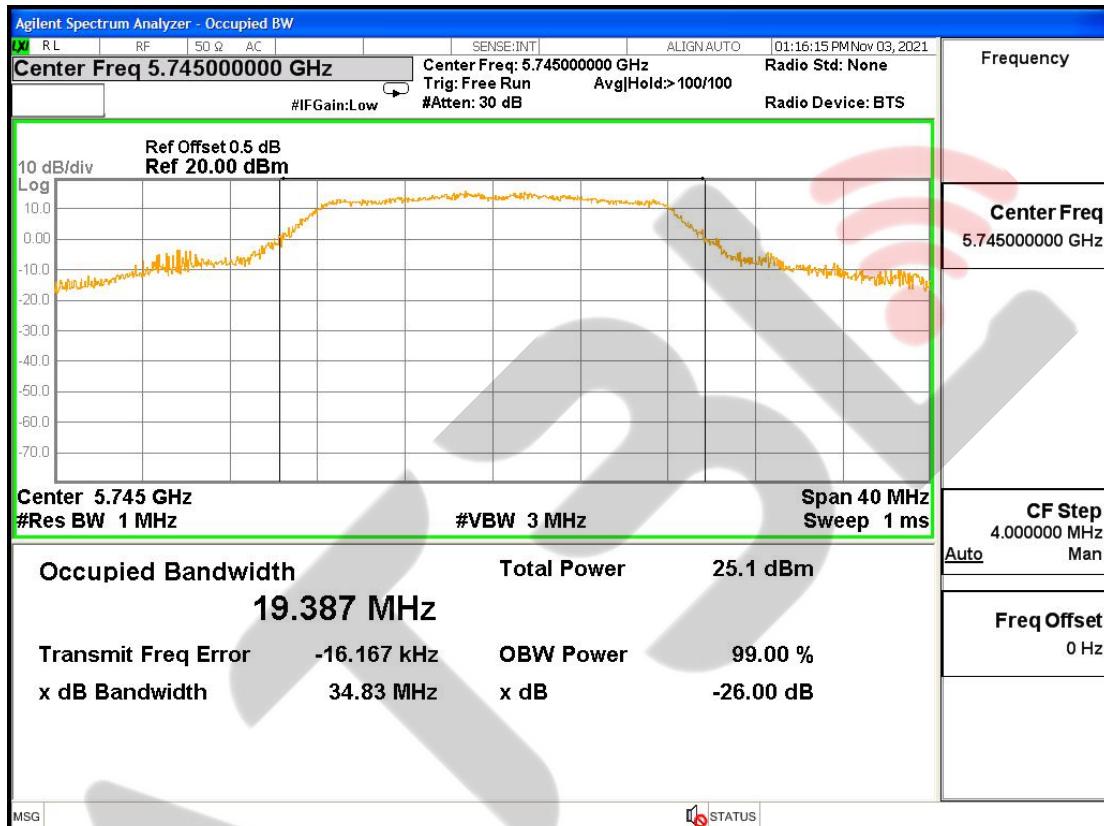
11a 5240



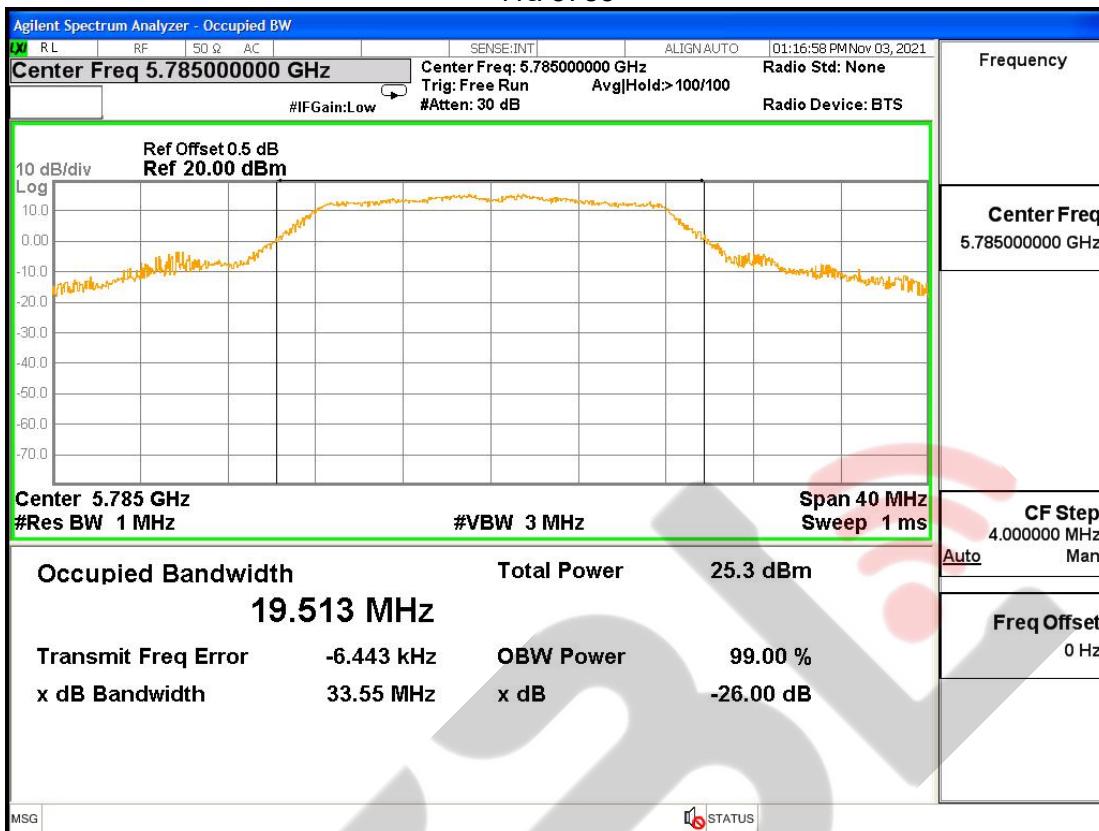
Mode 11a For U-NII-3(5725~5850MHz), 6Mbps

| CH. | Freq. (MHz) | 99% Bandwidth (MHz) | Results |
|-----|----------------|------------------------|---------|
| 149 | 5745 | 19.387 | PASS |
| 157 | 5785 | 19.513 | PASS |
| 165 | 5825 | 19.105 | PASS |

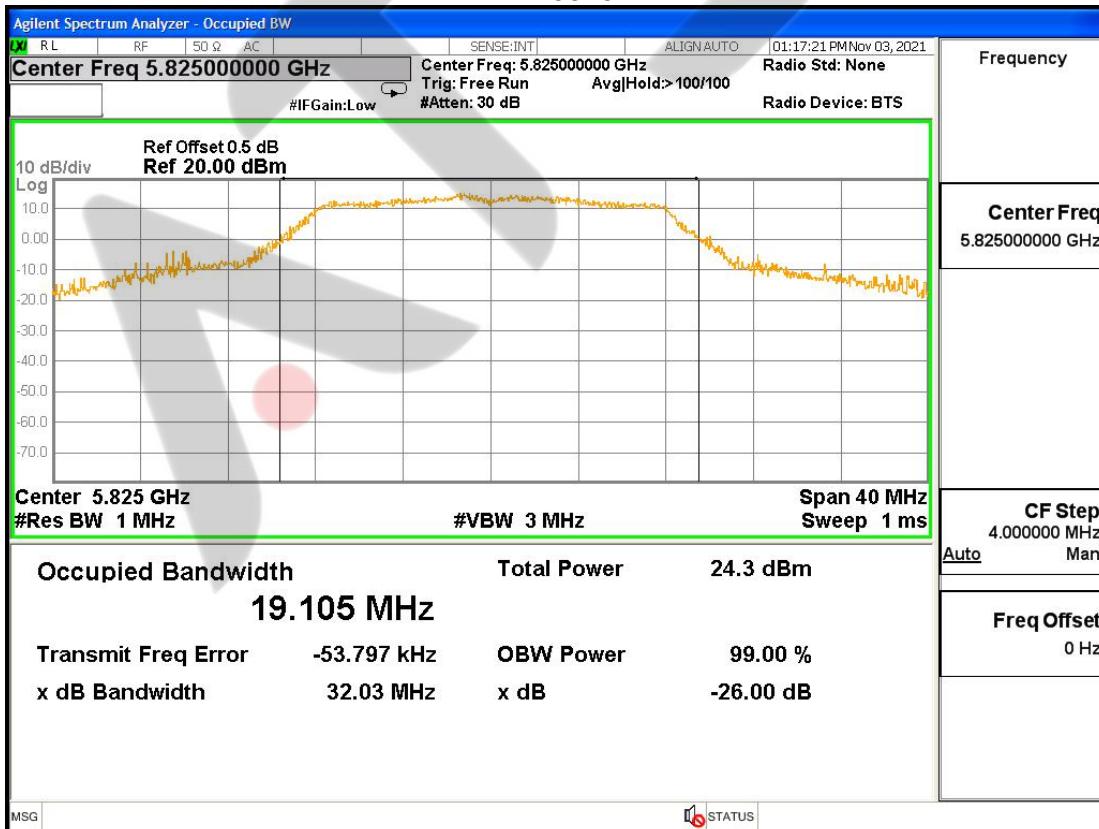
11a 5745



11a 5785



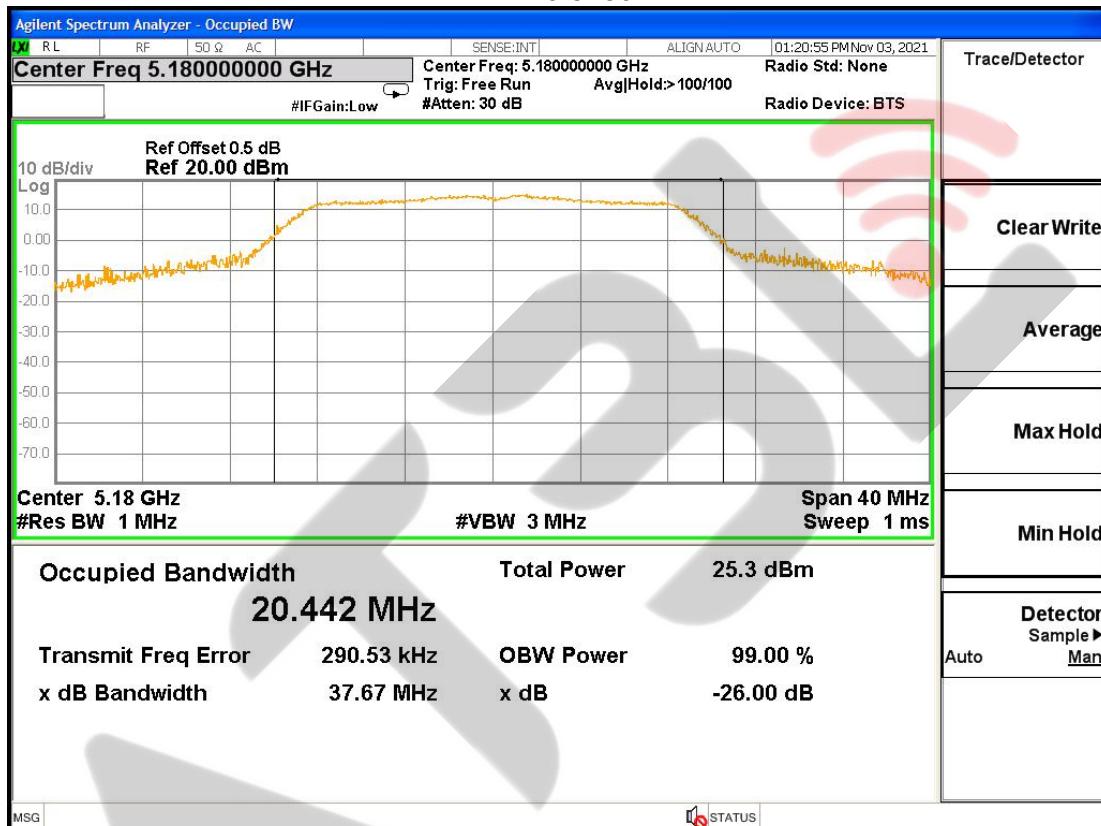
11a 5825



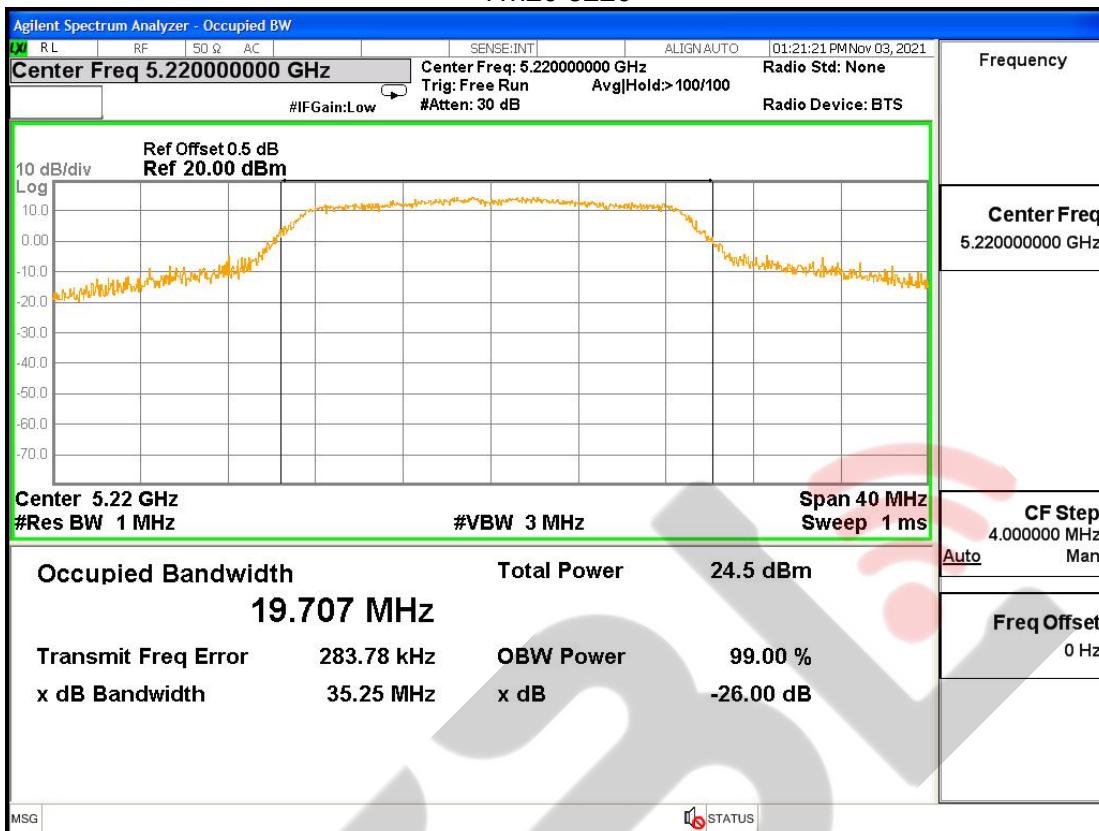
Mode 11n20 For U-NII-1(5150~5250MHz), MCS0

| CH. | Freq. (MHz) | 99% Bandwidth (MHz) | Results |
|-----|----------------|------------------------|---------|
| 36 | 5180 | 20.442 | PASS |
| 44 | 5220 | 19.707 | PASS |
| 48 | 5240 | 19.465 | PASS |

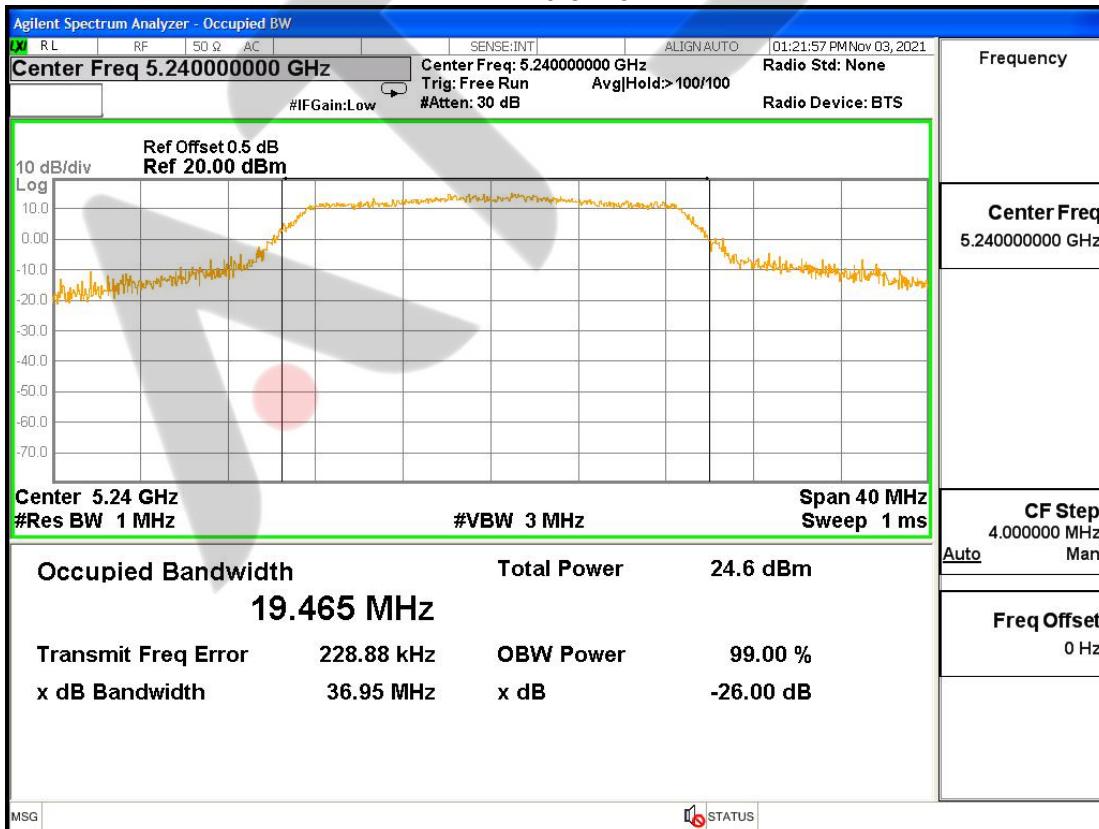
11n20 5180



11n20 5220



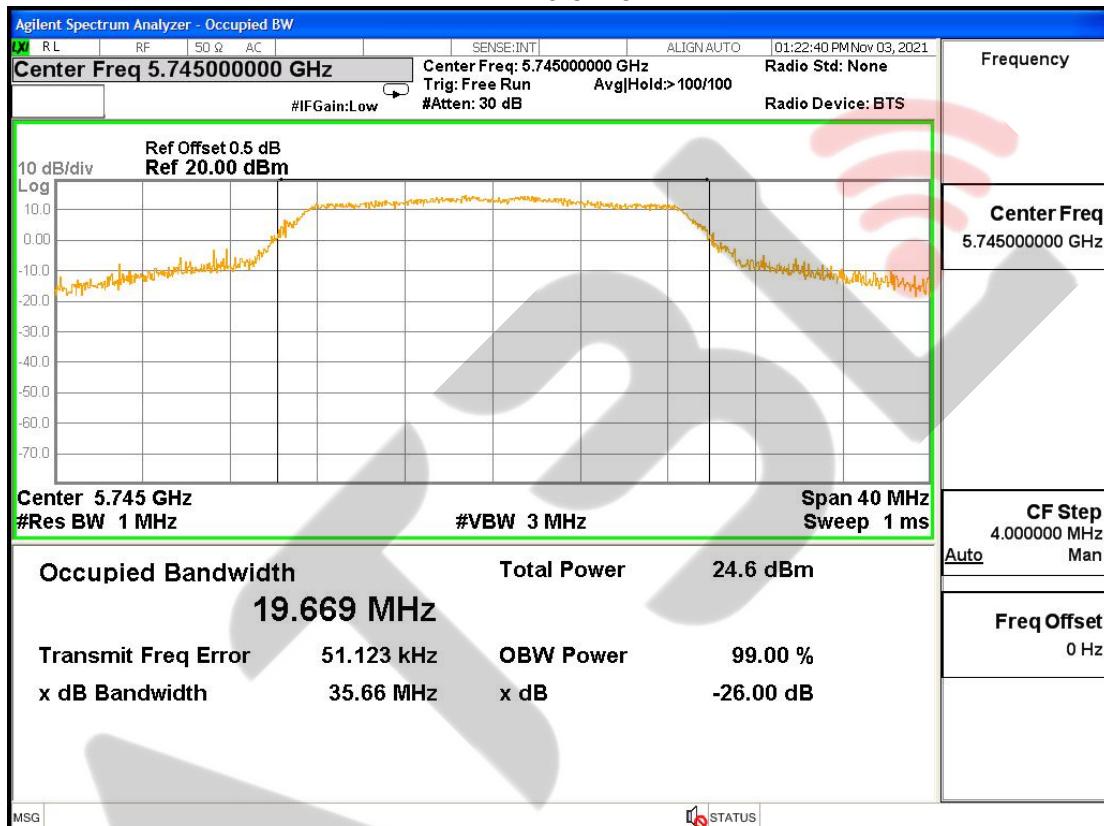
11n20 5240



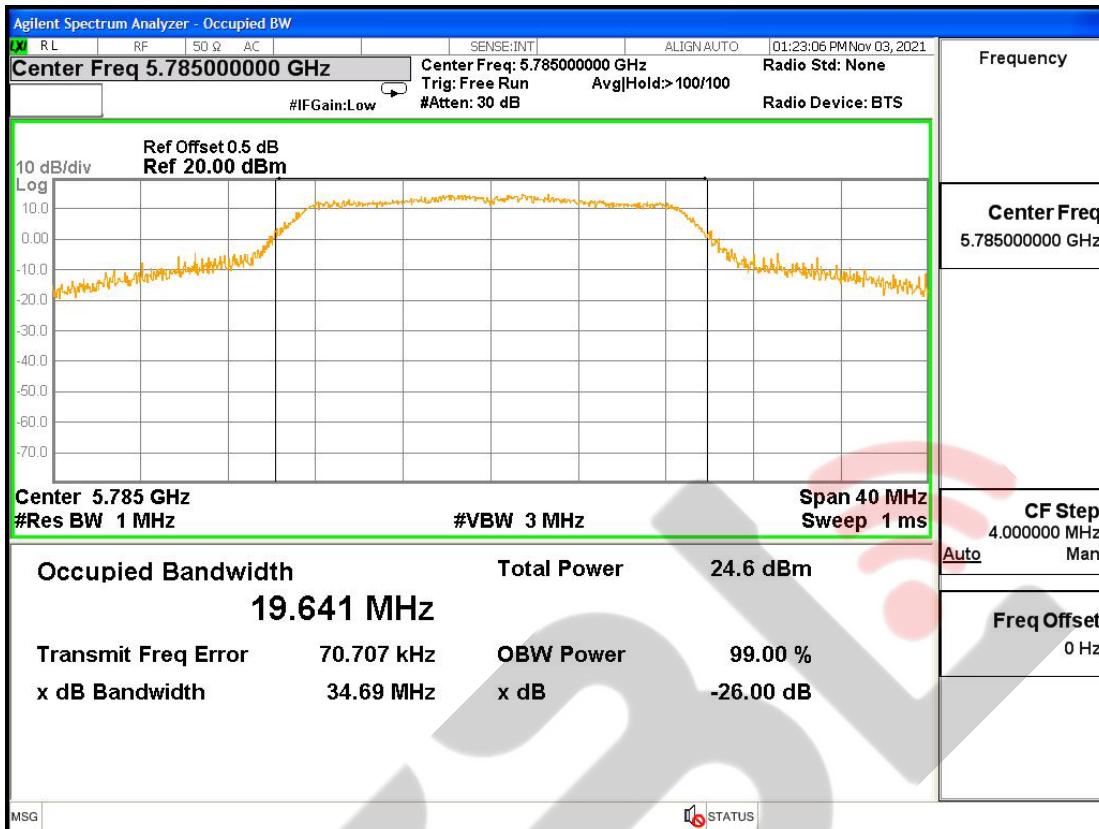
Mode 11n20 For U-NII-3(5725~5850MHz), MCS0

| CH. | Freq. (MHz) | 99% Bandwidth (MHz) | Results |
|-----|----------------|------------------------|---------|
| 149 | 5745 | 19.669 | PASS |
| 157 | 5785 | 19.641 | PASS |
| 165 | 5825 | 19.598 | PASS |

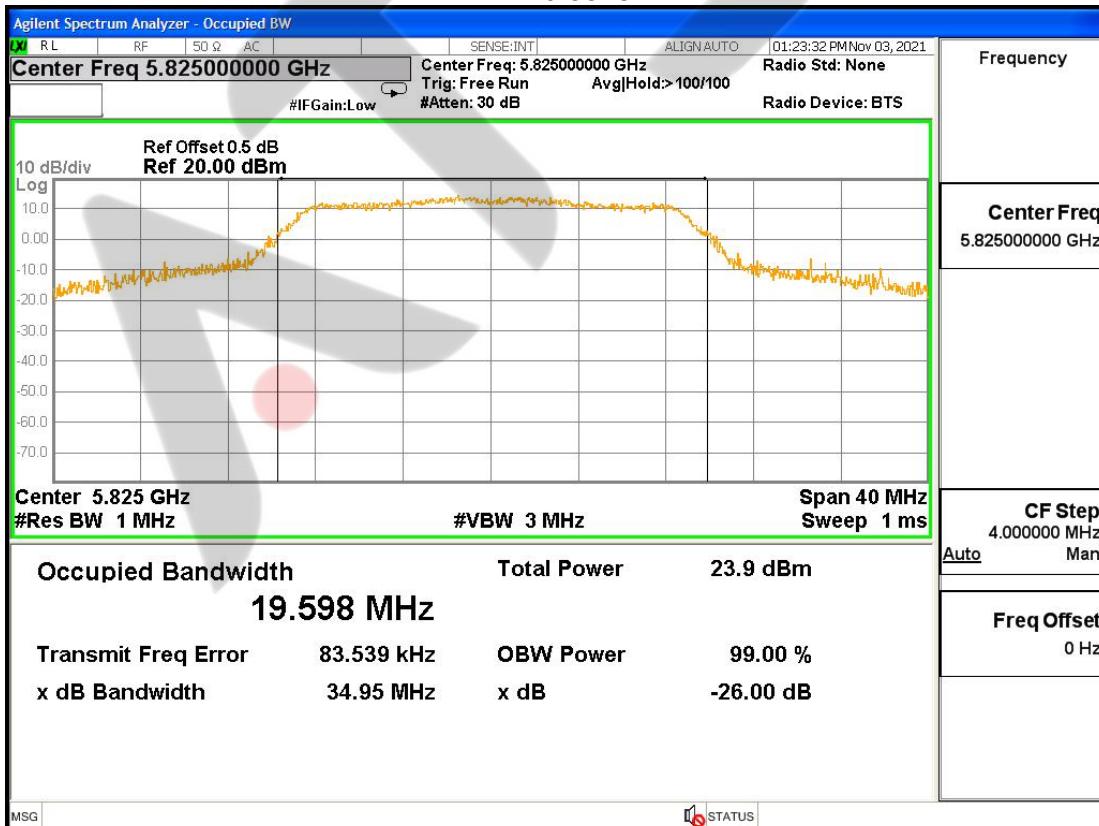
11n20 5745



11n20 5785



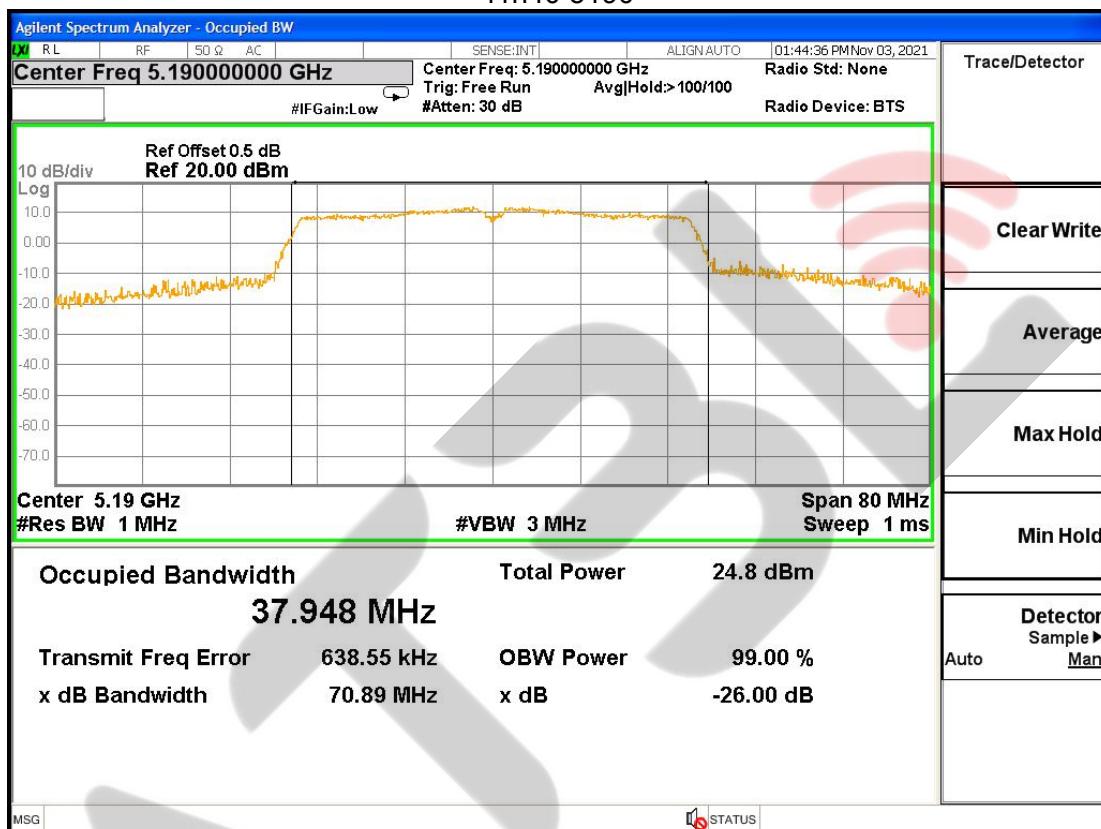
11n20 5825



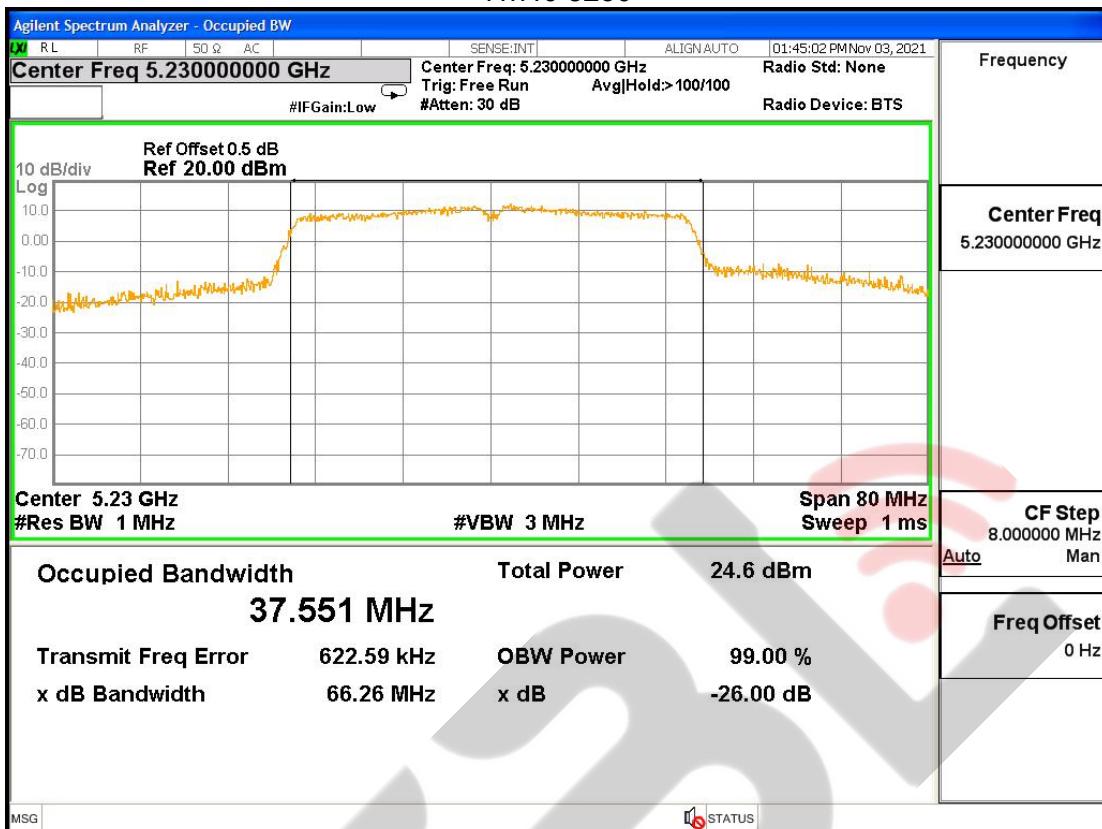
Mode 11n40 For U-NII-1(5150~5250MHz), MCS0

| CH. | Freq. (MHz) | 99% Bandwidth (MHz) | Results |
|-----|----------------|------------------------|---------|
| 38 | 5190 | 37.948 | PASS |
| 46 | 5230 | 37.551 | PASS |

11n40 5190



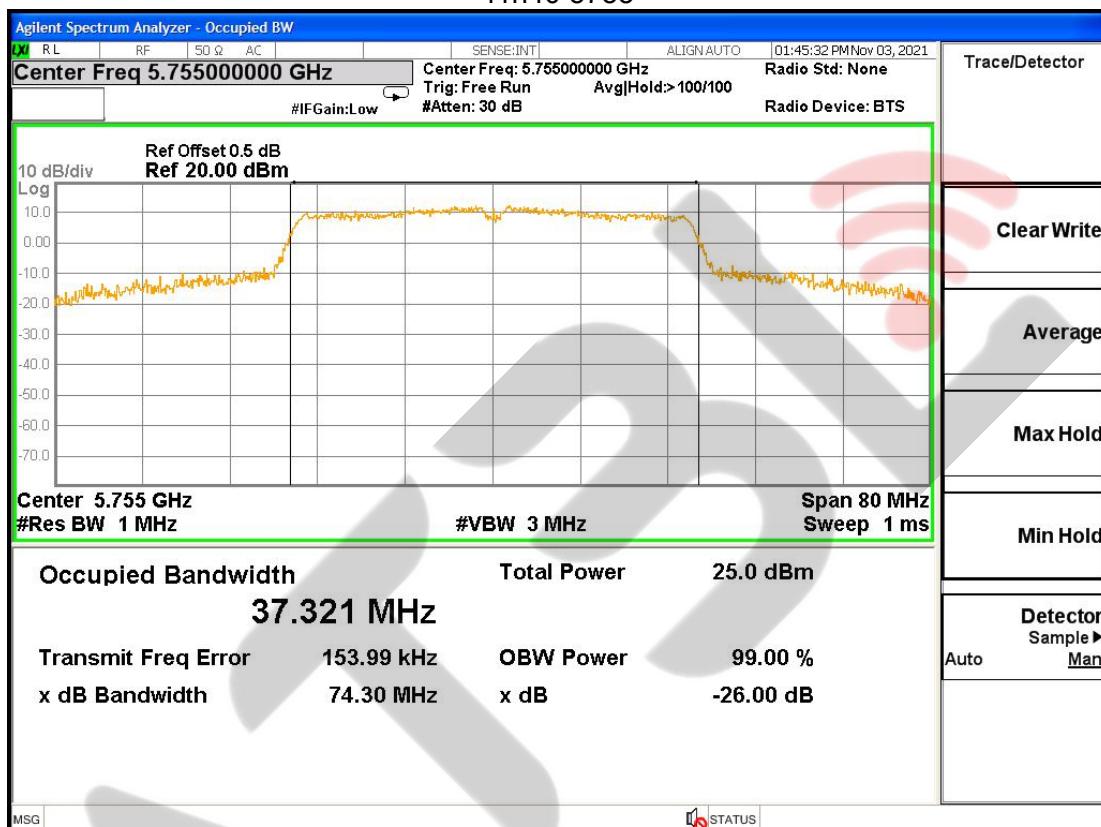
11n40 5230



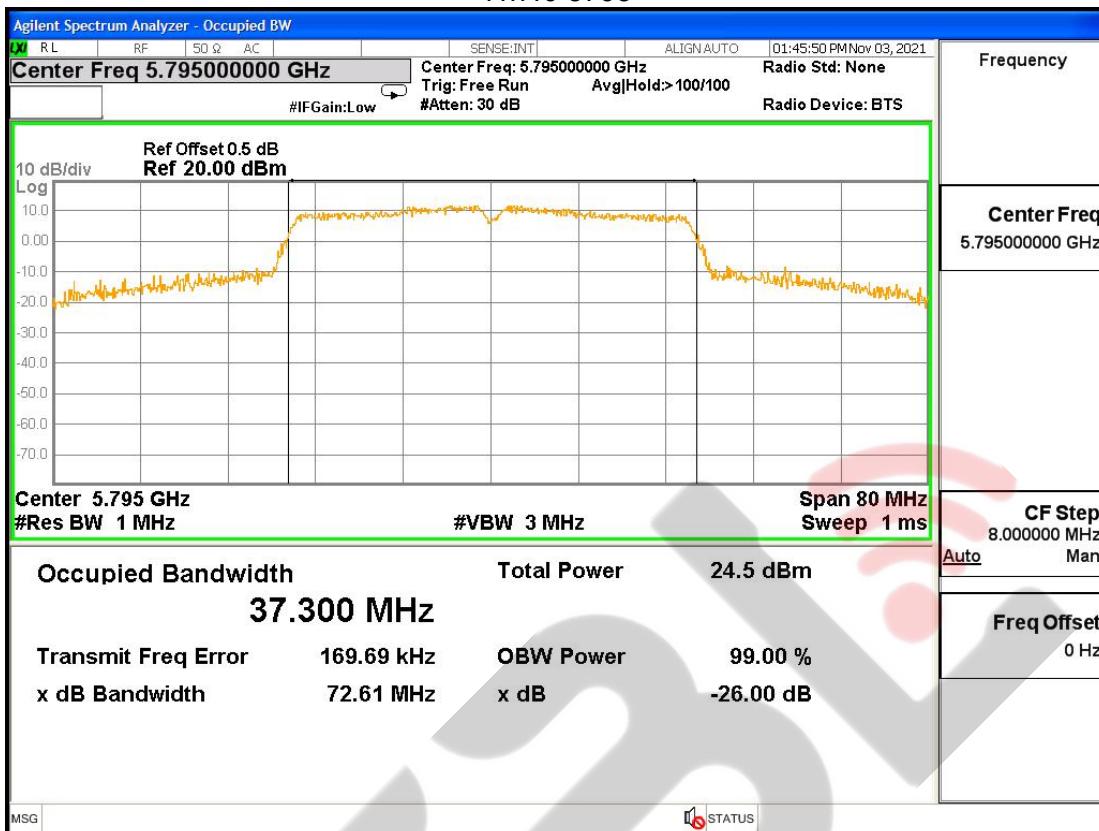
Mode 11n40 For U-NII-3(5725~5850MHz), MCS0

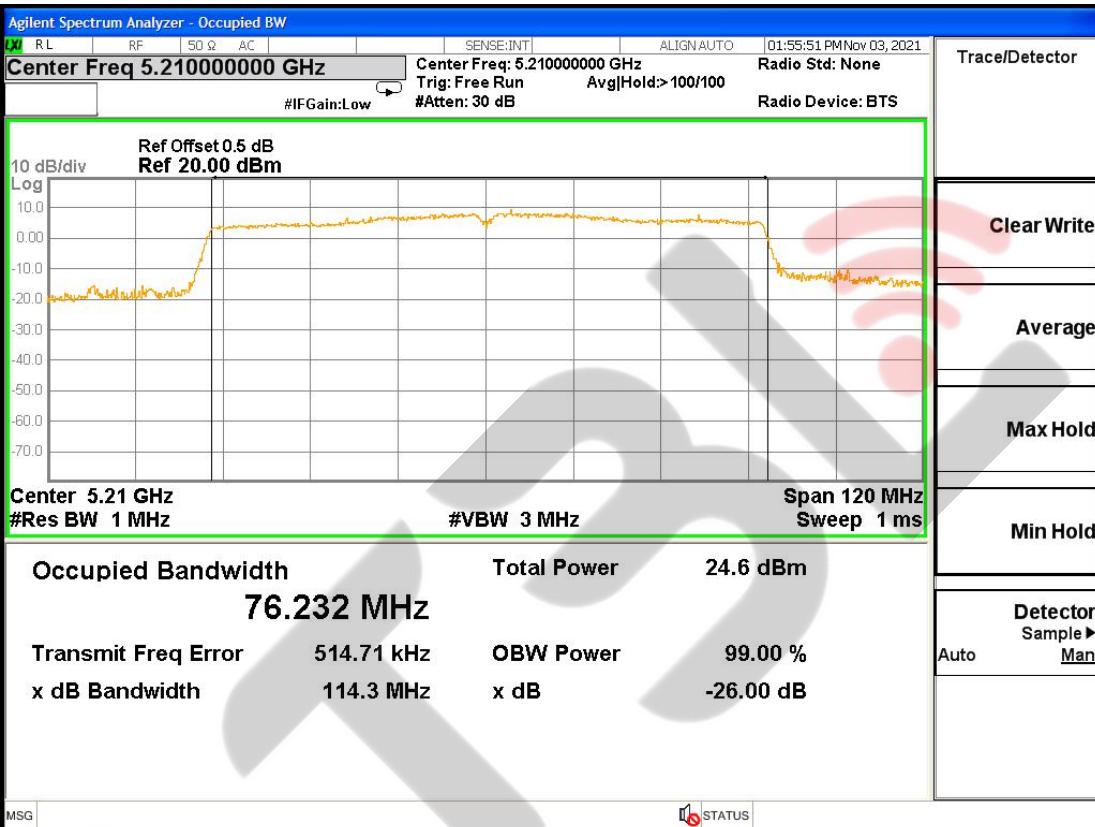
| CH. | Freq. (MHz) | 99% Bandwidth (MHz) | Results |
|-----|----------------|------------------------|---------|
| 151 | 5755 | 37.321 | PASS |
| 159 | 5795 | 37.300 | PASS |

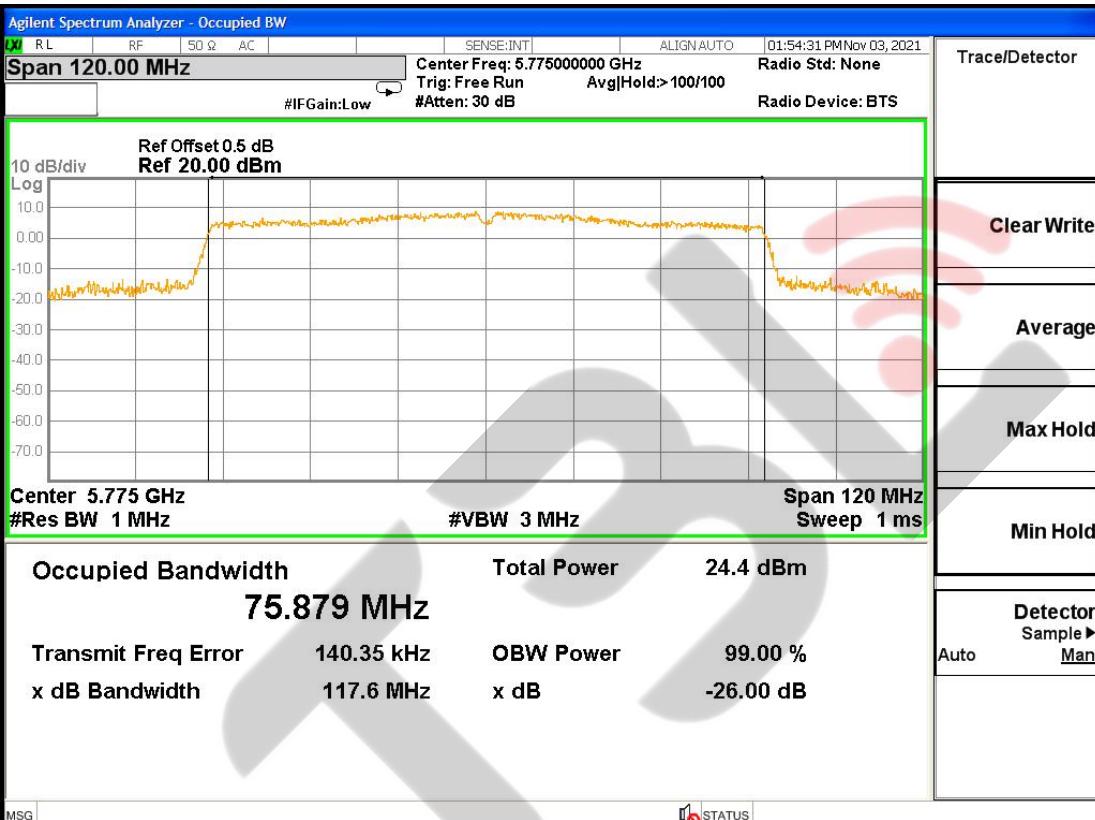
11n40 5755



11n40 5795



| Mode 11ac80 For U-NII-1(5150~5250MHz), MCS0 | | | |
|--|----------------|------------------------|---------|
| CH. | Freq. (MHz) | 99% Bandwidth (MHz) | Results |
| 42 | 5210 | 76.232 | PASS |
| 11ac80 5210 | | | |
|  <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 5.210000000 GHz</p> <p>Ref Offset 0.5 dB Ref 20.00 dBm</p> <p>10 dB/div Log</p> <p>Center 5.21 GHz #Res BW 1 MHz</p> <p>#VBW 3 MHz Span 120 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 76.232 MHz</p> <p>Transmit Freq Error 514.71 kHz</p> <p>x dB Bandwidth 114.3 MHz</p> <p>Total Power 24.6 dBm</p> <p>OBW Power 99.00 %</p> <p>x dB -26.00 dB</p> | | | |

| Mode 11ac80 For U-NII-3(5725~5850MHz), MCS0 | | | |
|---|----------------|------------------------|---------|
| CH. | Freq. (MHz) | 99% Bandwidth (MHz) | Results |
| 155 | 5775 | 75.879 | PASS |
| 11ac80 5775 | | | |
|  | | | |

5.3 MINIMUM EMISSION BANDWIDTH(6 DB) PROCEDURES / LIMIT

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

5.3.1 TEST PROCEDURE

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures v02r01.
 - a) Set RBW = 100 kHz.
 - b) Set the video bandwidth (VBW) $\geq 3 \times \text{RBW}$.
 - c) Detector = Peak.
 - d) Trace mode = max hold.
 - e) Sweep = auto couple.
 - f) Allow the trace to stabilize.
 - g) 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.

5.3.2 DEVIATION FROM STANDARD

No deviation.

5.3.3 TEST SETUP



5.3.4 EUT OPERATION CONDITIONS

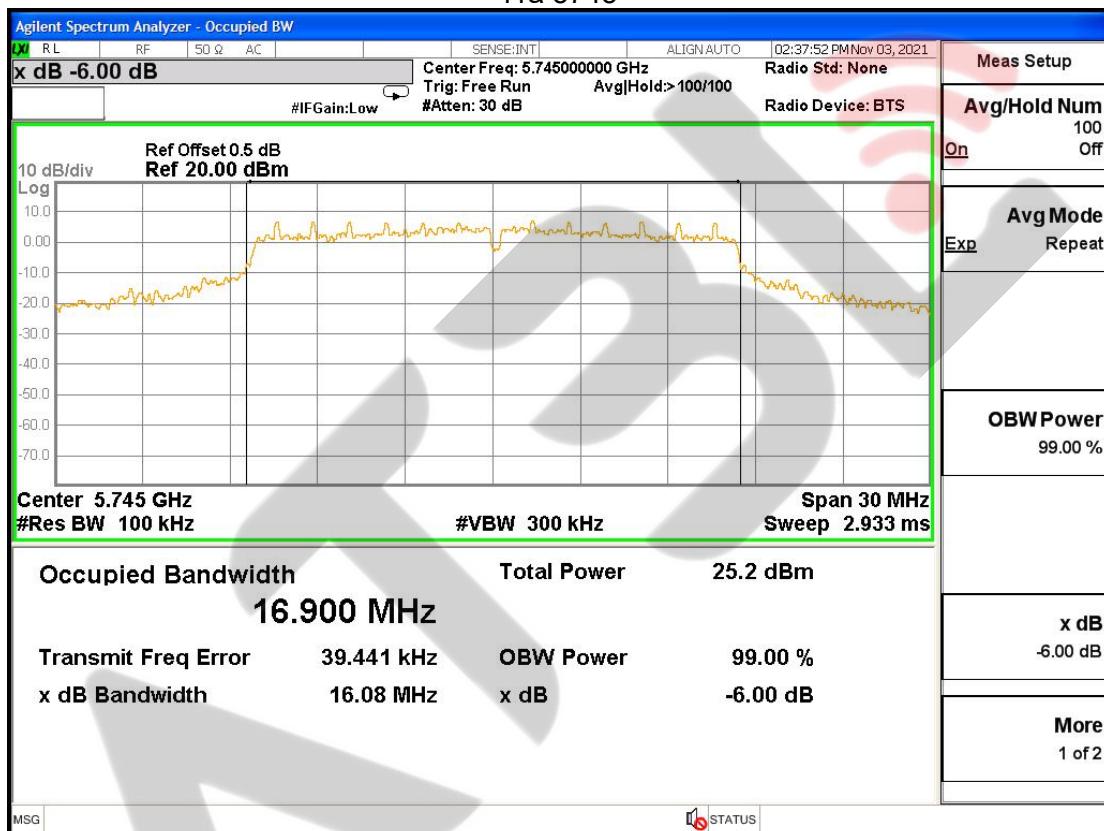
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.3.5 TESTRESULTS

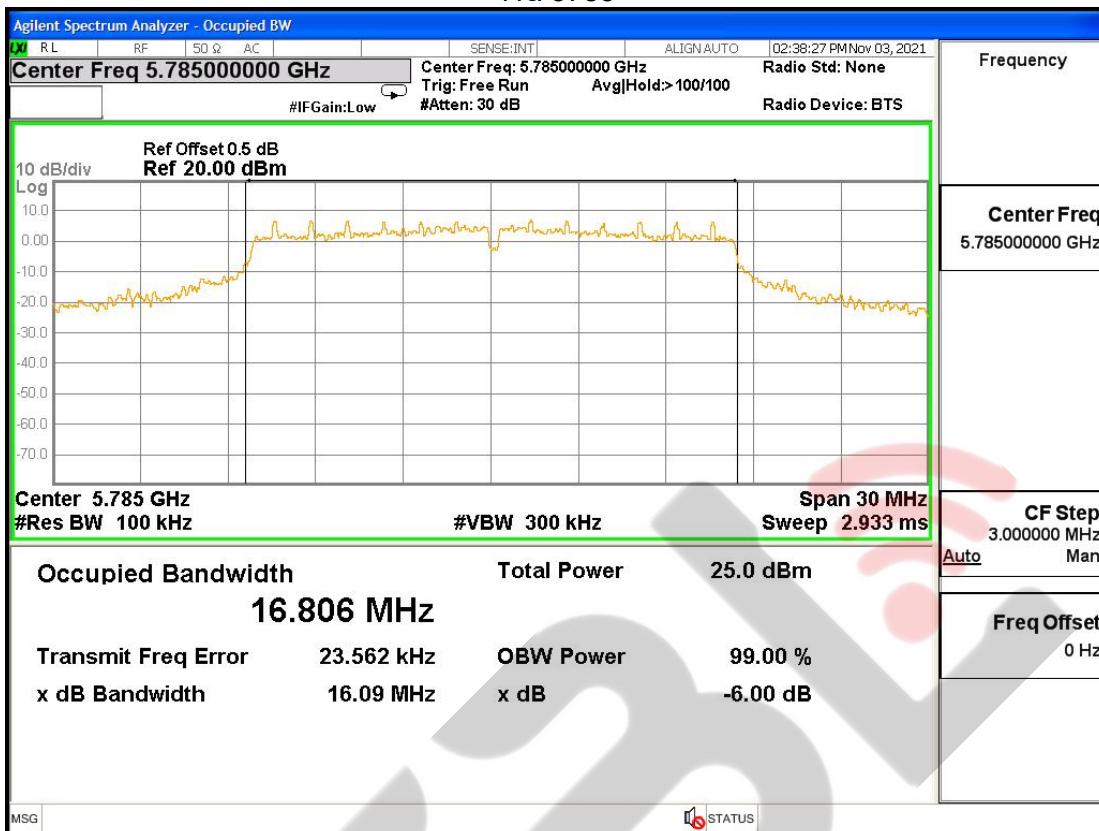
Mode 11a For U-NII-3(5725~5850MHz), 6Mbps

| CH. | Freq. (MHz) | 6dB Bandwidth (MHz) | Results |
|-----|----------------|------------------------|---------|
| 149 | 5745 | 16.08 | PASS |
| 157 | 5785 | 16.09 | PASS |
| 165 | 5825 | 16.09 | PASS |

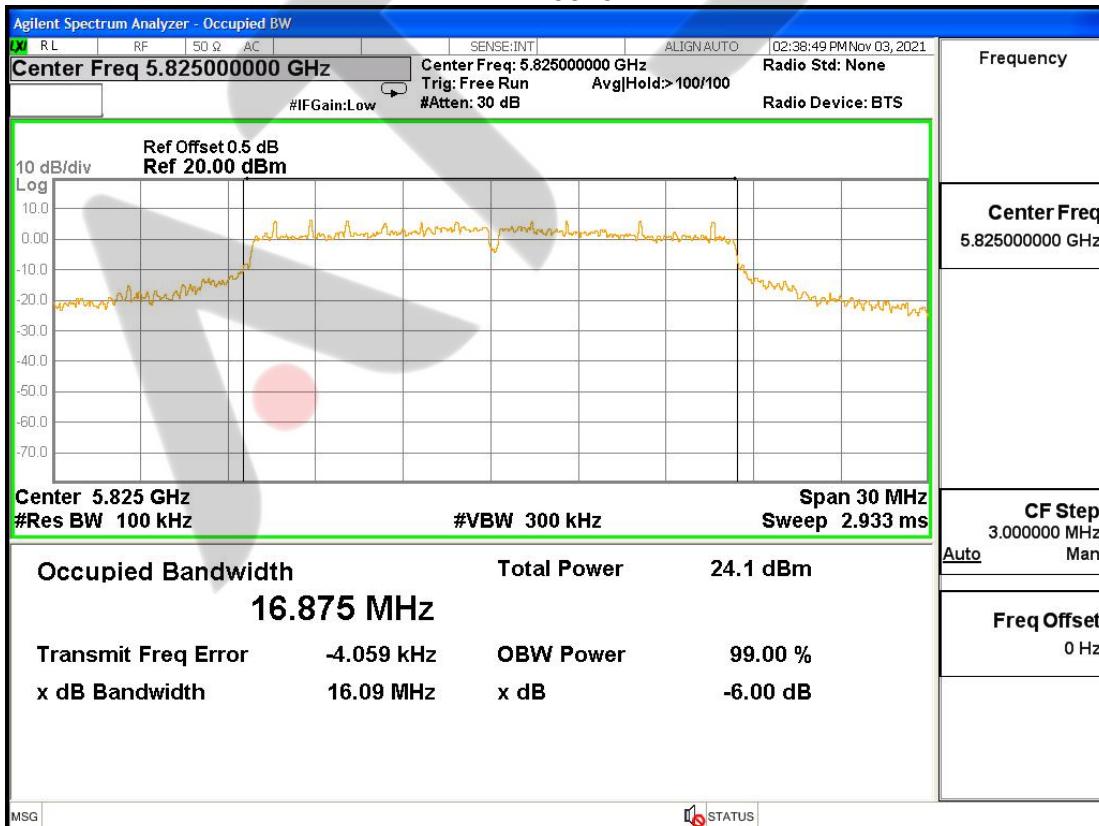
11a 5745



11a 5785



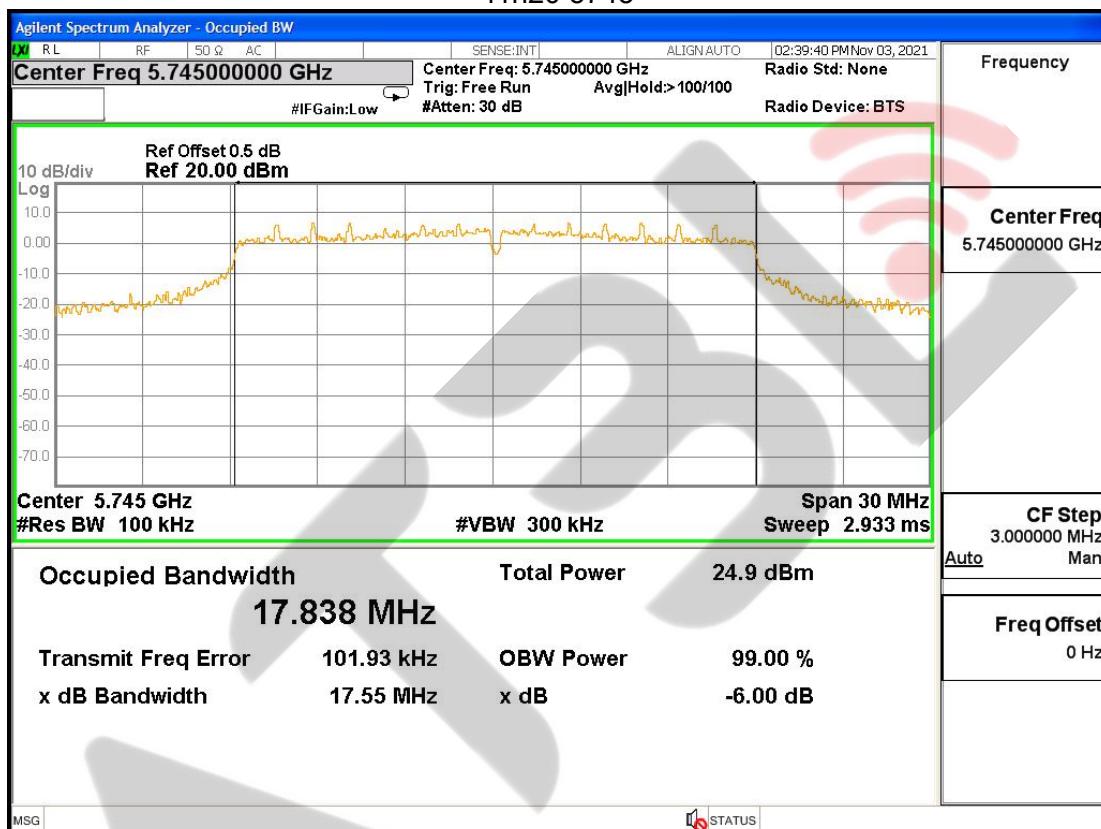
11a 5825



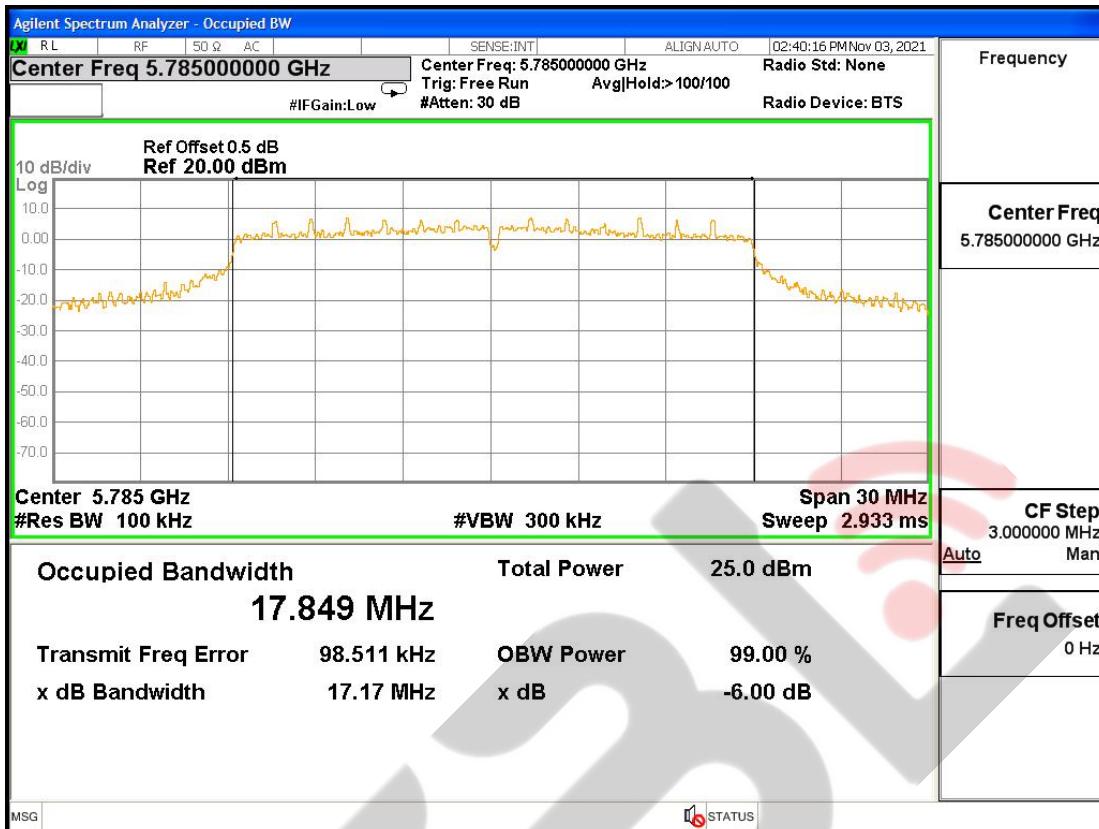
Mode 11n20 For U-NII-3(5725~5850MHz), MCS0

| CH. | Freq. (MHz) | 6dB Bandwidth (MHz) | Results |
|-----|----------------|------------------------|---------|
| 149 | 5745 | 17.838 | PASS |
| 157 | 5785 | 17.849 | PASS |
| 165 | 5825 | 17.821 | PASS |

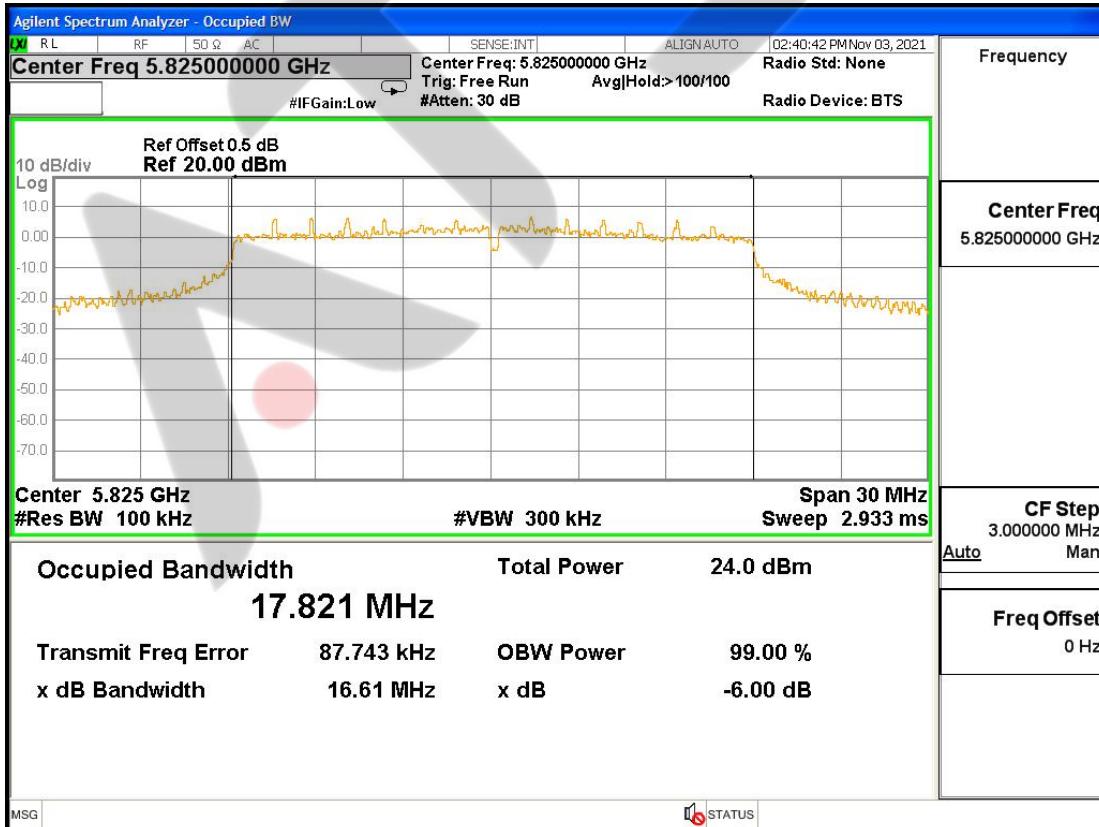
11n20 5745



11n20 5785



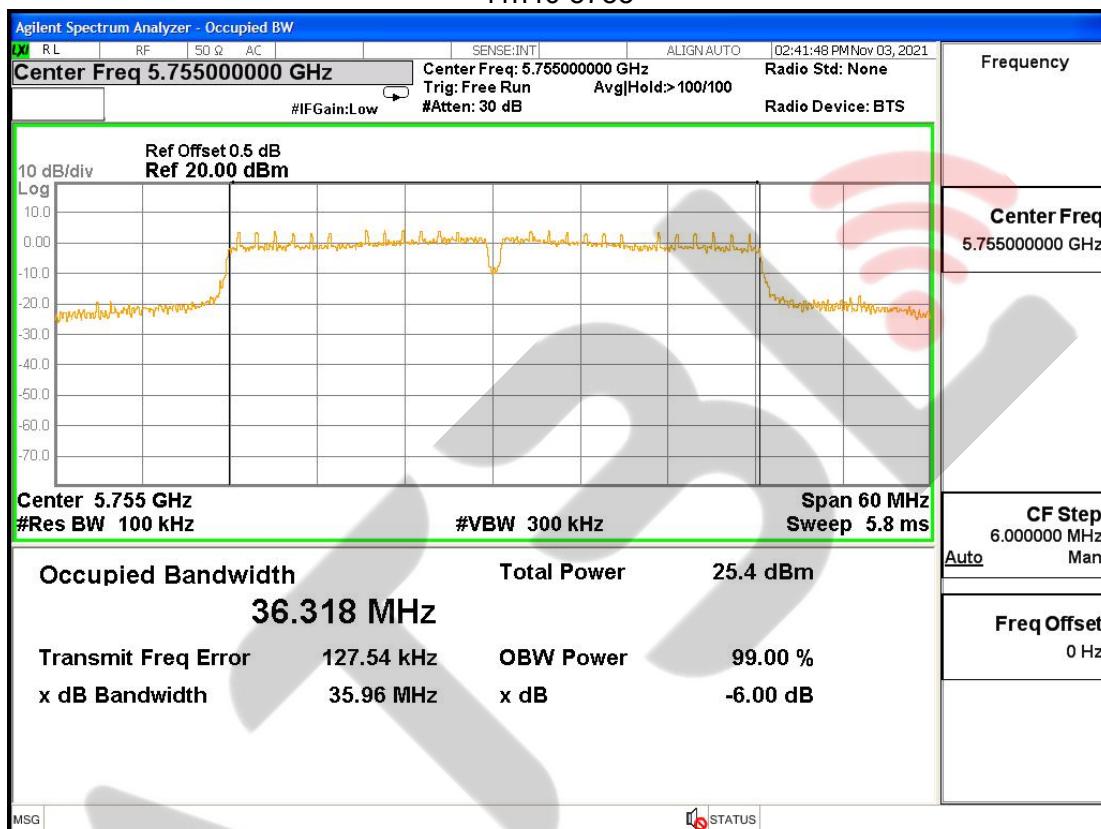
11n20 5825



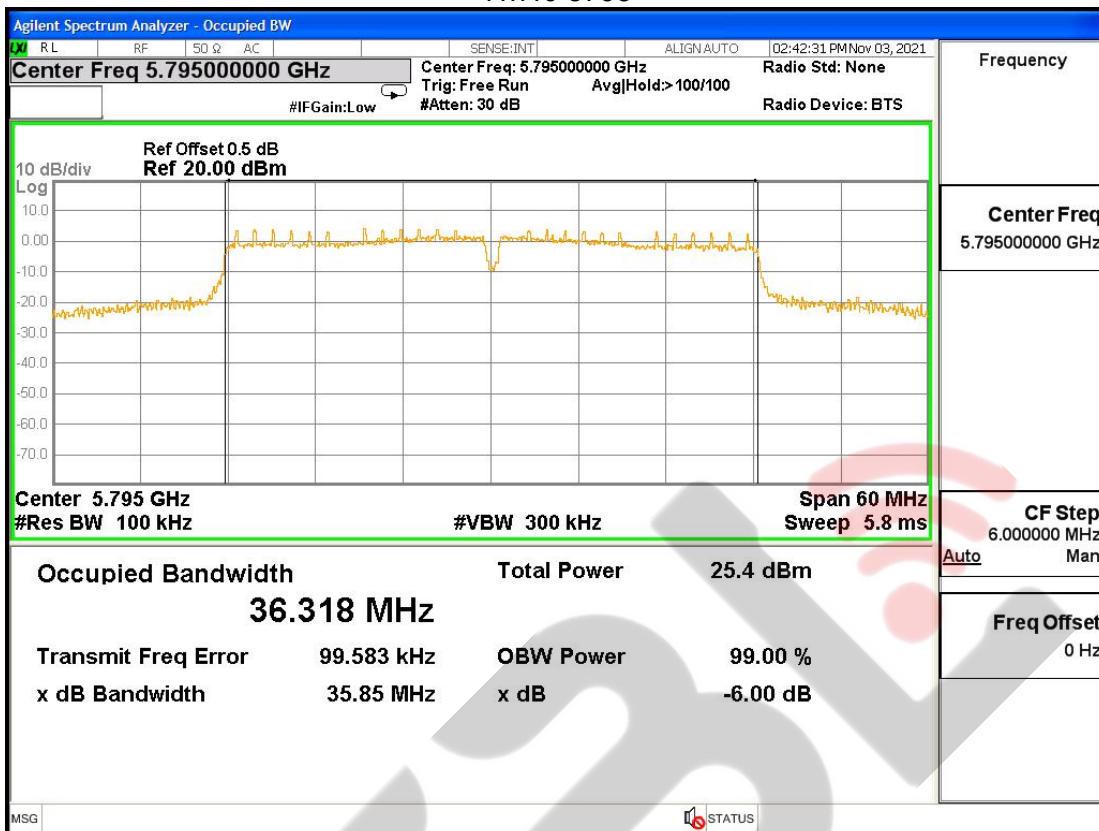
Mode 11n40 For U-NII-3(5725~5850MHz), MCS0

| CH. | Freq. (MHz) | 6dB Bandwidth (MHz) | Results |
|-----|----------------|------------------------|---------|
| 151 | 5755 | 36.318 | PASS |
| 159 | 5795 | 36.318 | PASS |

11n40 5755



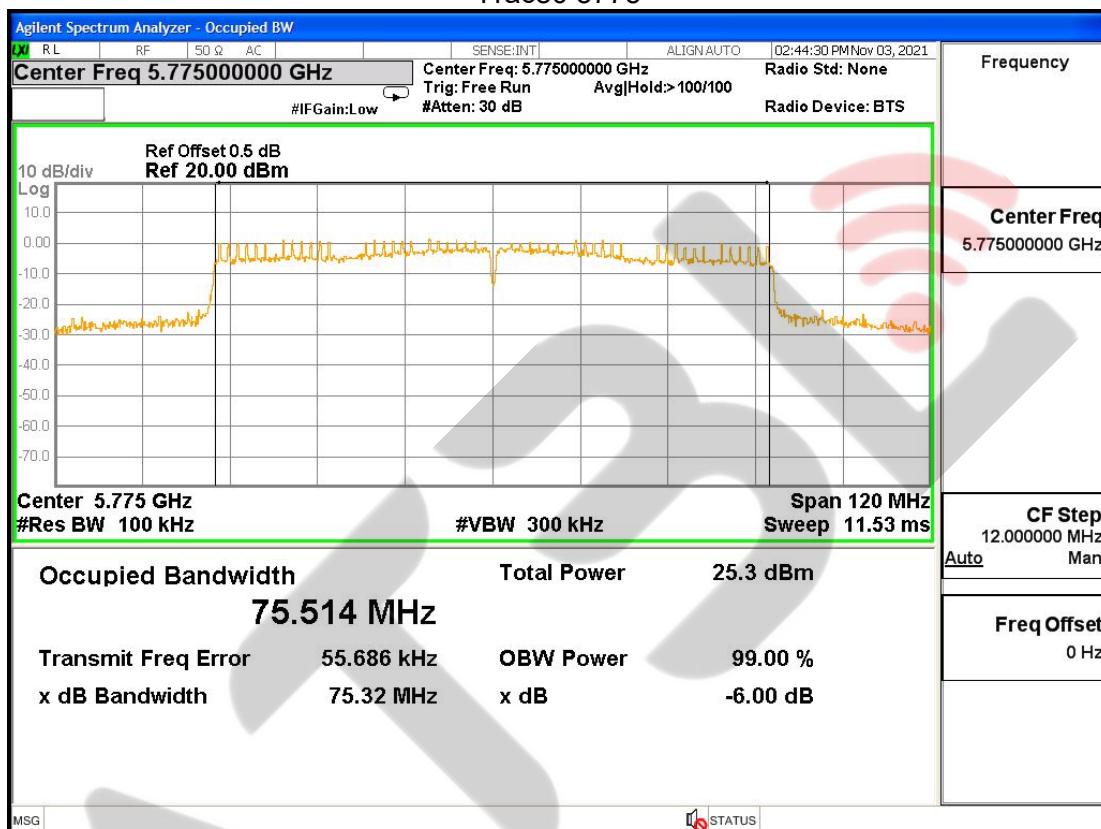
11n40 5795



Mode 11ac80 For U-NII-3(5725~5850MHz), MCS0

| CH. | Freq. (MHz) | 6dB Bandwidth (MHz) | Results |
|-----|----------------|------------------------|---------|
| 155 | 5775 | 75.514 | PASS |

11ac80 5775



6.MAXIMUM CONDUCTED OUTPUT POWER

6.1LIMIT

For mobile and portable 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. 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.

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, If transmitting antennas of directional gain greater than 6 dBi are used.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used.

| FCC Part15 (15.407) , Subpart E | | | | |
|---------------------------------|-------------------|---|------------------------|--------|
| Section | Test Item | Limit | FrequencyRange (MHz) | Result |
| 15.407(a)(1)(iv) | Peak Output Power | 0.25 watt | 5150-5250 | PASS |
| | | The lesser of 250 mW or $11 \text{ dBm} + 10 \log (26 \text{ dB emission bandwidth})$ | 5250-5350 5470-5725 | |
| | | 1 watt | 5725-5825 | |

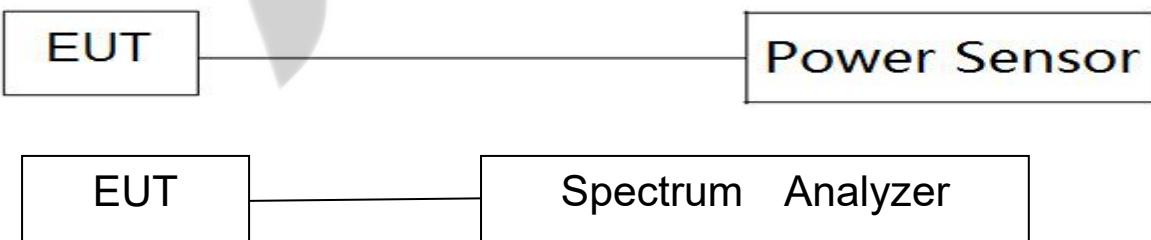
6.2TEST PROCEDURE

The EUT was directly connected to the Power Sensor&PC

6.3DEVIATION FROM STANDARD

No deviation.

6.4TEST SETUP



6.5EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 5 Unless otherwise a special operating condition is specified in the follows during the testing.

6.6 TEST RESULTS

U-NII-1 (5.15-5.25GHz)

| U-NII-1 (5.15-5.25GHz) | | | |
|------------------------|-----------------|----------------|-------------|
| Test Channel | Frequency (MHz) | AV Power (dBm) | LIMIT (dBm) |
| 802.11a | | | |
| 36 | 5180 | 18.04 | 23.98 |
| 40 | 5200 | 17.74 | 23.98 |
| 48 | 5240 | 17.95 | 23.98 |
| 802.11n(HT20) | | | |
| 36 | 5180 | 17.71 | 23.98 |
| 40 | 5200 | 17.61 | 23.98 |
| 48 | 5240 | 17.64 | 23.98 |
| 802.11n(HT40) | | | |
| 38 | 5190 | 17.64 | 23.98 |
| 46 | 5230 | 17.75 | 23.98 |
| 802.11ac(HT20) | | | |
| 36 | 5180 | 17.73 | 23.98 |
| 40 | 5200 | 17.62 | 23.98 |
| 48 | 5240 | 17.79 | 23.98 |
| 802.11ac(HT40) | | | |
| 38 | 5190 | 17.72 | 23.98 |
| 46 | 5230 | 17.84 | 23.98 |
| 802.11ac(HT80) | | | |
| 42 | 5210 | 17.40 | 23.98 |

Note:

1. For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 0.25 W.

| U-NII-3 (5.725-5.85GHz) | | | |
|-------------------------|-----------------|----------------|-------------|
| Test Channel | Frequency (MHz) | AV Power (dBm) | LIMIT (dBm) |
| 802.11a | | | |
| 149 | 5745 | 17.69 | 30 |
| 157 | 5785 | 17.73 | 30 |
| 165 | 5825 | 17.53 | 30 |
| 802.11n(HT20) | | | |
| 149 | 5745 | 17.63 | 30 |
| 157 | 5785 | 17.66 | 30 |
| 165 | 5825 | 17.22 | 30 |
| 802.11n(HT40) | | | |
| 151 | 5755 | 17.86 | 30 |
| 159 | 5795 | 17.73 | 30 |
| 802.11ac(HT20) | | | |
| 149 | 5745 | 17.64 | 30 |
| 157 | 5785 | 17.74 | 30 |
| 165 | 5825 | 17.28 | 30 |
| 802.11ac(HT40) | | | |
| 151 | 5755 | 17.95 | 30 |
| 159 | 5795 | 17.78 | 30 |
| 802.11ac(HT80) | | | |
| 155 | 5775 | 17.38 | 30 |

Note:

1. For the band 5.745-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 1 W.

7.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

7.2 TEST RESULT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission

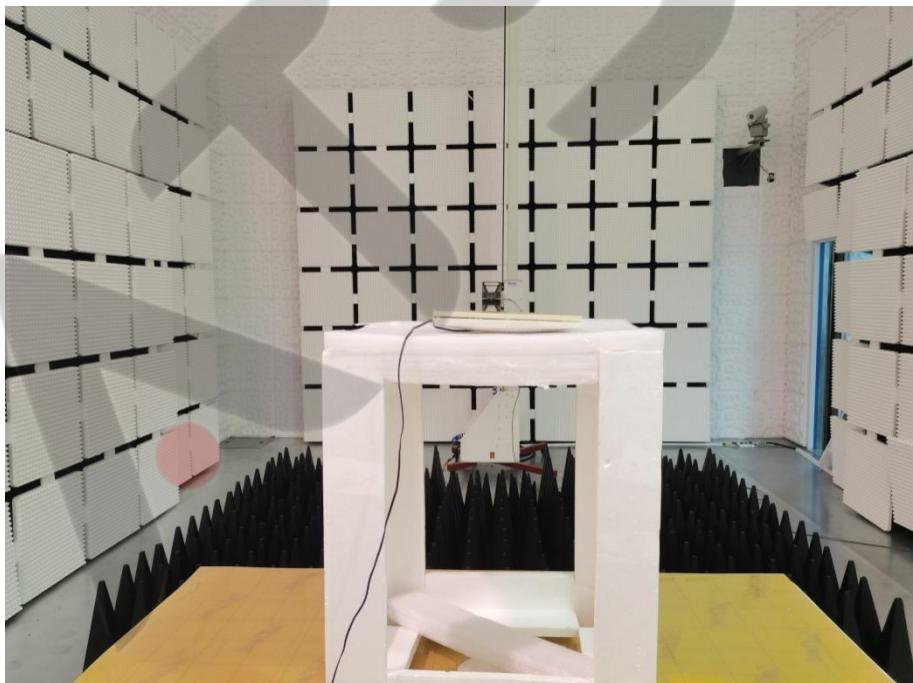
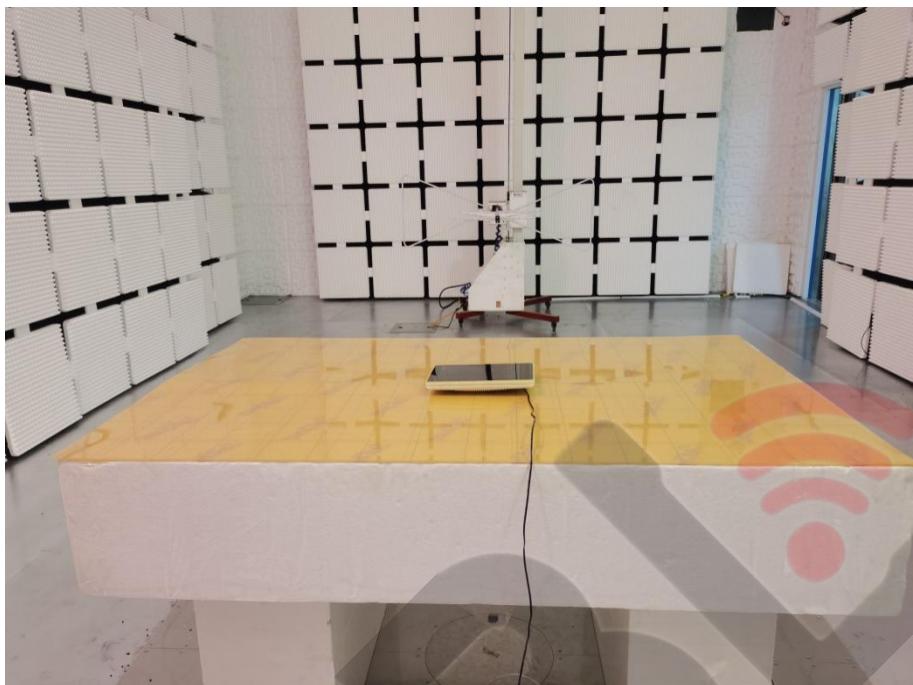
8.1 STANDARD REQUIREMENT

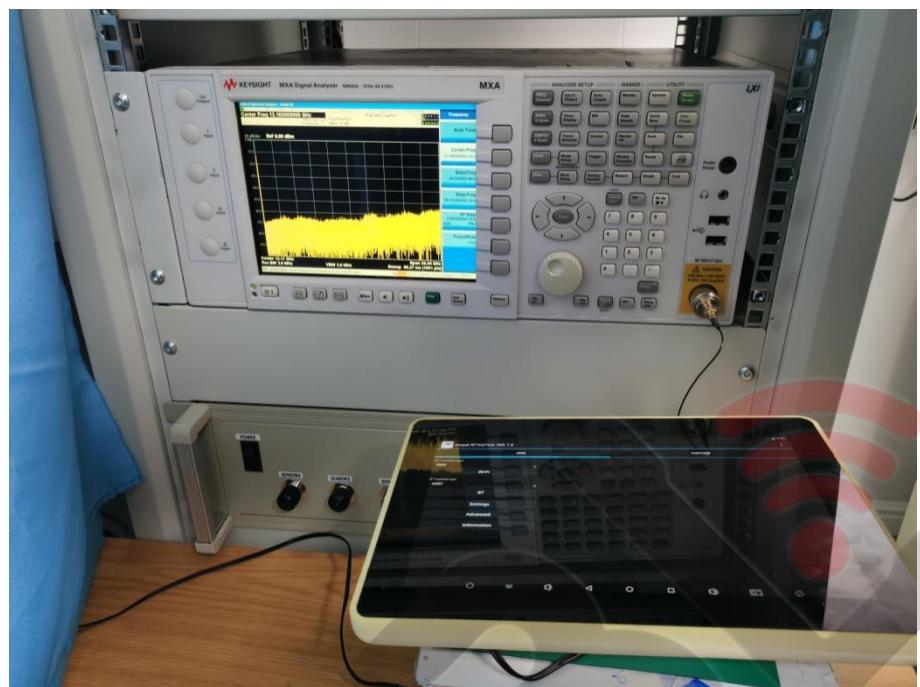
15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

8.2 EUT ANTENNA

The EUT antenna is FPC Antenna. It comply with the standard requirement.



Radiated Measurement Photos

Conducted Measurement Photos

*****END OF THE REPORT*****