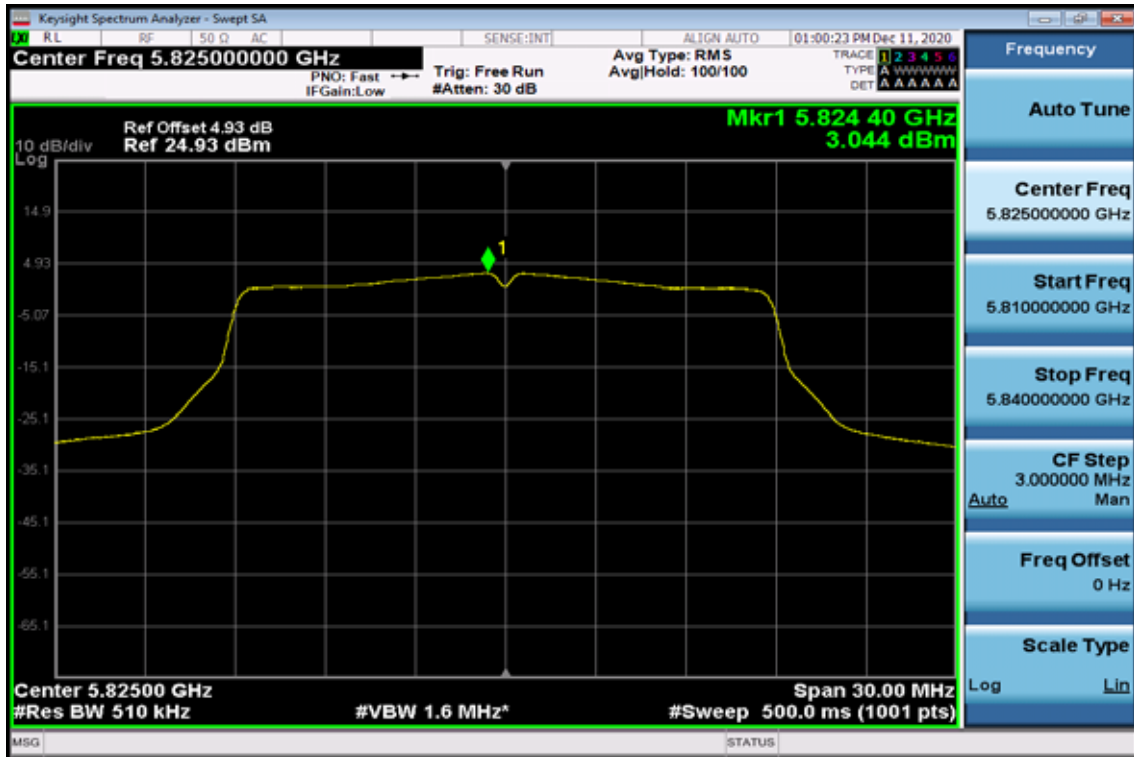


Power Spectral Density Test Plot (CH-High)



802.11n HT40

Power Spectral Density Test Plot (CH-Low)



Power Spectral Density Test Plot (CH-High)



802.11ac VHT40

Power Spectral Density Test Plot (CH-Low)



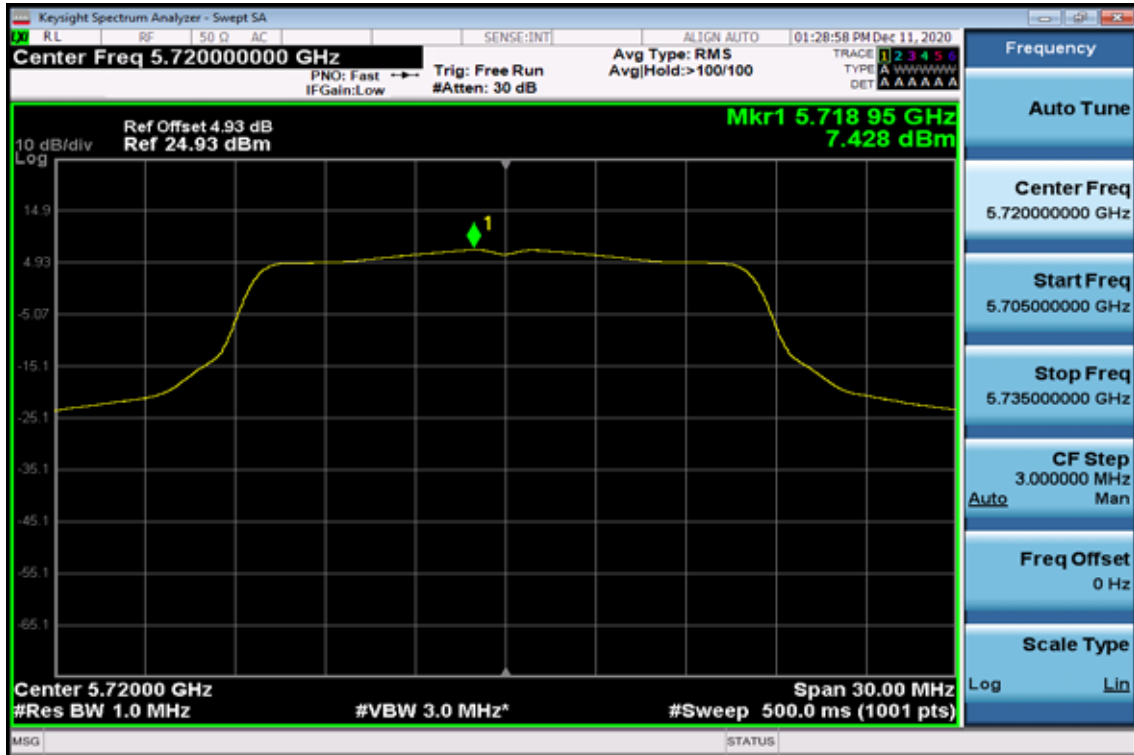
Power Spectral Density Test Plot (CH-High)



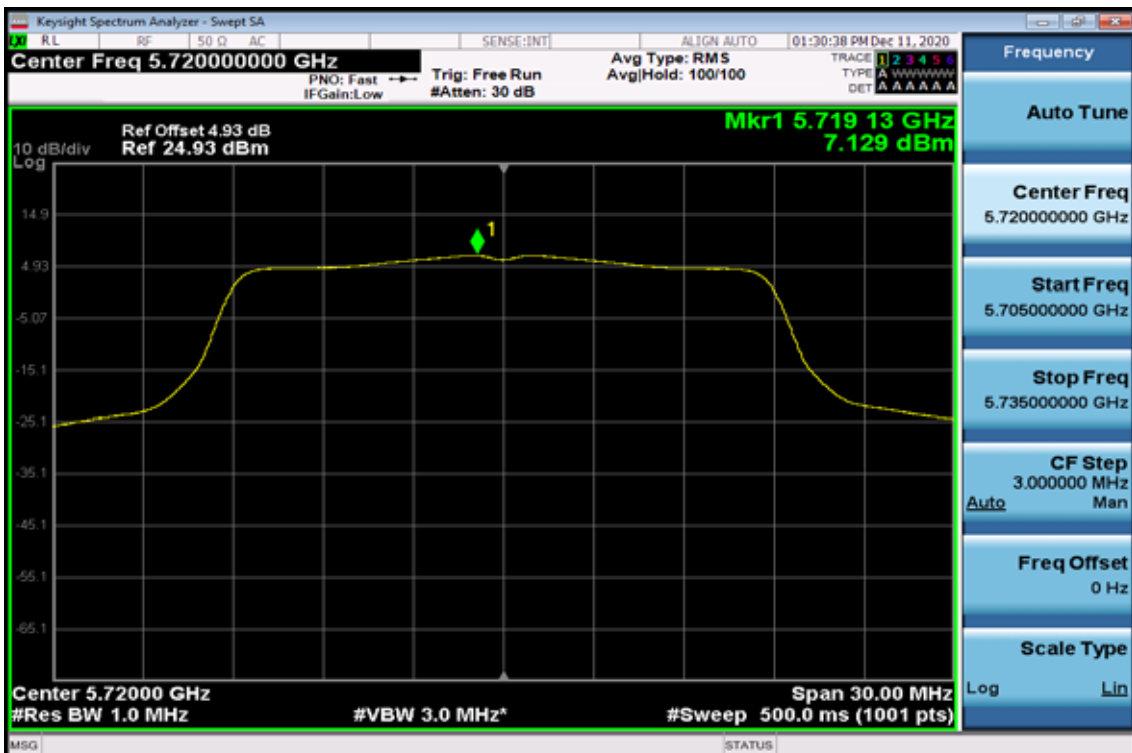
802.11 ac VHT80, Power Spectral Density Test Plot



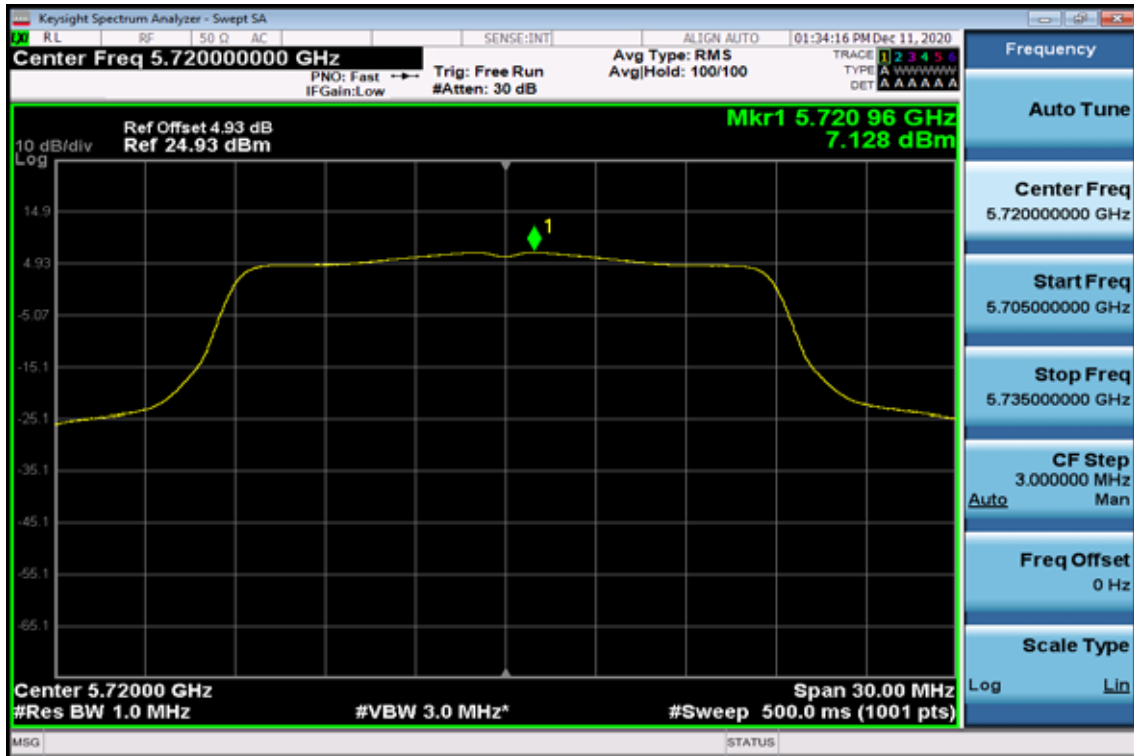
Straddle Channels
Band UNII-2C
802.11a
Power Spectral Density Data Plot



802.11n HT20
Power Spectral Density Test Plot



802.11ac VHT20 Power Spectral Density Test Plot



802.11n HT40 Power Spectral Density Test Plot



802.11ac VHT40 Power Spectral Density Test Plot



802.11 ac VHT80 Power Spectral Density Test Plot



7. 26dB /99% Emission Bandwidth Measurement

7.1. Standard Applicable

According to §15.407(a) for band 1,2,3. No Limit required.

7.2. Measurement Procedure

2. Place the EUT on the table and set it in transmitting mode.
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
4. Set the spectrum analyzer as RBW=300kHz, VBW =1MHz, Span= 50MHz, Sweep=auto
5. Mark the peak frequency and -26dB (upper and lower) frequency.
6. Repeat above procedures until all frequency measured were complete.

Refer to section D of KDB Document: KDB 789033 D02 General UNII Test Procedures New Rules v01r03

7.3. Measurement Equipment Used:

Refer to section 6.3 for details.

7.4. Test Set-up:

Refer to section 6.4 for details.

7.5. Measurement Result

Band	Mode	Frequency (MHz)	26dB Bandwidth (MHz)	99% OBW (MHz)
UNII-1	11a	5180	25.79	17.27
		5200	29.66	17.52
		5240	29.99	17.78
	HT20	5180	27.40	18.26
		5200	28.08	18.29
		5240	28.55	18.29
	HT40	5190	48.92	36.46
		5230	50.00	36.44
	VHT20	5180	27.81	18.19
		5200	27.94	18.30
		5240	29.65	18.28
	VHT40	5190	49.31	36.50
5230		50.00	36.48	
VHT80	5210	97.22	75.62	

Band	Mode	Frequency (MHz)	26dB Bandwidth (MHz)	99% OBW (MHz)	Power Limit (dBm)
UNII-2A	11a	5260	29.02	17.33	23.98
		5300	29.07	17.36	23.98
		5320	29.91	17.39	23.98
	HT20	5260	28.13	18.25	23.98
		5300	28.43	18.27	23.98
		5320	28.85	18.27	23.98
	HT40	5270	49.15	36.46	23.98
		5310	49.87	36.41	23.98
	VHT20	5260	28.68	18.23	23.98
		5300	27.83	18.19	23.98
		5320	28.66	18.25	23.98
	VHT40	5270	49.56	36.46	23.98
		5310	49.78	36.49	23.98
	VHT80	5290	99.88	75.75	23.98

For Band UNII-2A:

Max. Output Power Limit = 250mW or $11+10*\text{Log}(B)$, whichever is less. Where B is 26dB BW in MHz.

Band	Mode	Frequency (MHz)	26dB Bandwidth (MHz)	99% OBW (MHz)	Power Limit (dBm)
UNII-2C	11a	5500	27.37	17.21	23.98
		5580	27.17	17.15	23.98
		5700	24.20	17.10	23.98
	HT20	5500	28.49	18.13	23.98
		5580	28.22	18.17	23.98
		5700	27.02	18.18	23.98
	HT40	5510	49.31	36.46	23.98
		5550	49.01	36.37	23.98
		5670	49.66	36.49	23.98
	VHT20	5500	27.24	18.17	23.98
		5580	27.88	18.18	23.98
		5700	26.77	18.13	23.98
	VHT40	5510	49.27	36.42	23.98
		5550	49.62	36.42	23.98
		5670	47.42	36.42	23.98
VHT80	5530	99.81	75.65	23.98	
	5610	99.99	75.82	23.98	

For Band UNII-2C:
 Max. Output Power Limit = 250mW or $11+10*\text{Log}(B)$, whichever is less. Where B is 26dB BW in MHz.

Straddle channels

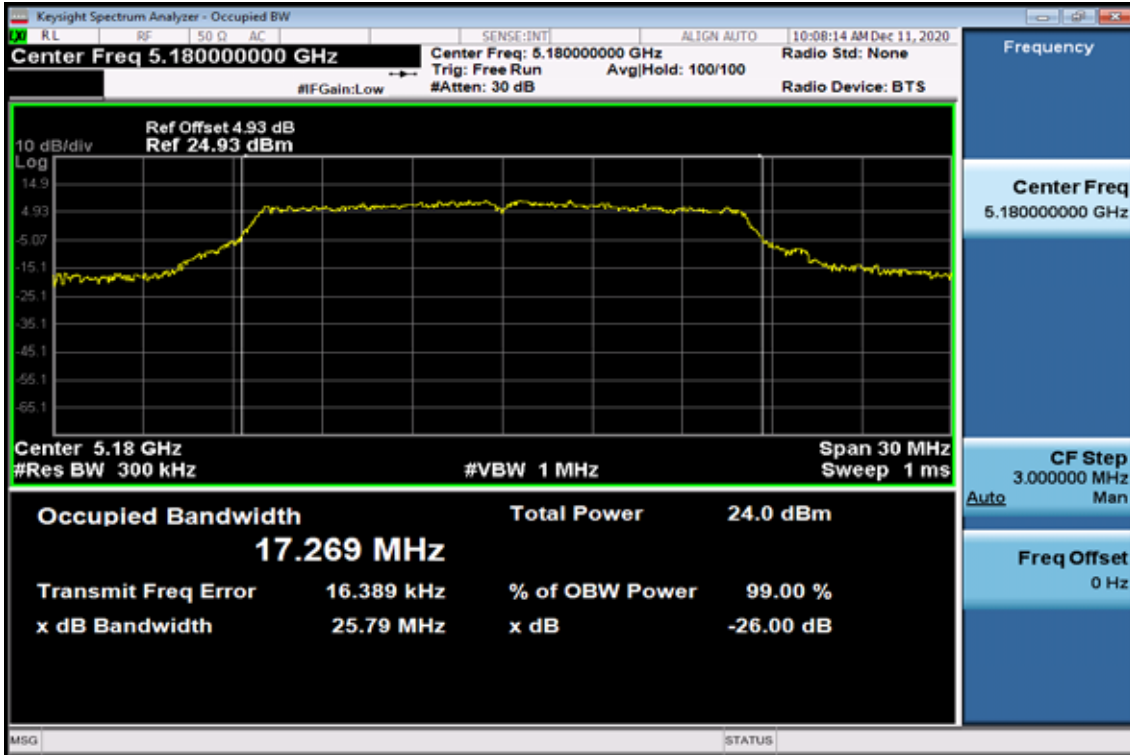
Band	Mode	Frequency (MHz)	26dB Bandwidth (MHz)	99% OBW (MHz)	Power Limit (dBm)
UNII-2C	11a	5720	26.72	17.14	23.98
	HT20	5720	27.16	18.19	23.98
	HT40	5710	49.41	36.39	23.98
	VHT20	5720	27.35	18.14	23.98
	VHT40	5710	49.14	36.39	23.98
	VHT80	5690	94.21	75.57	23.98

For Band UNII-2C:
 Max. Output Power Limit = 250mW or $11+10*\text{Log}(B)$, whichever is less. Where B is 26dB BW in MHz.

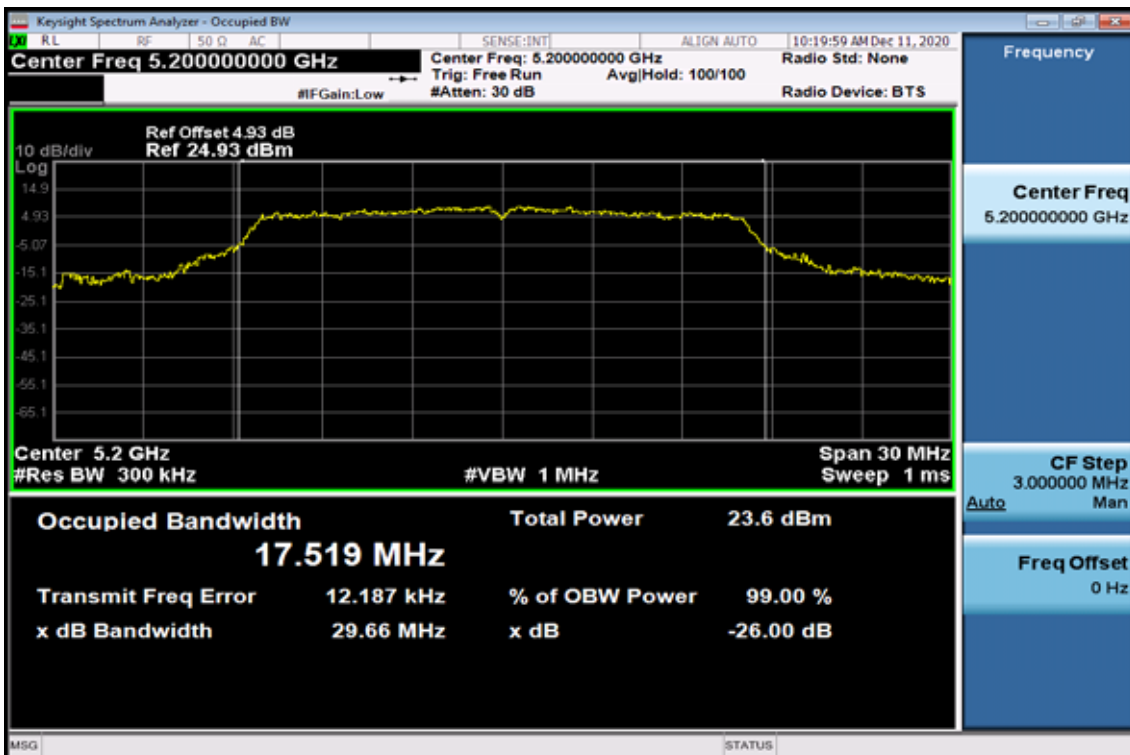
Band UNII-1

802.11a

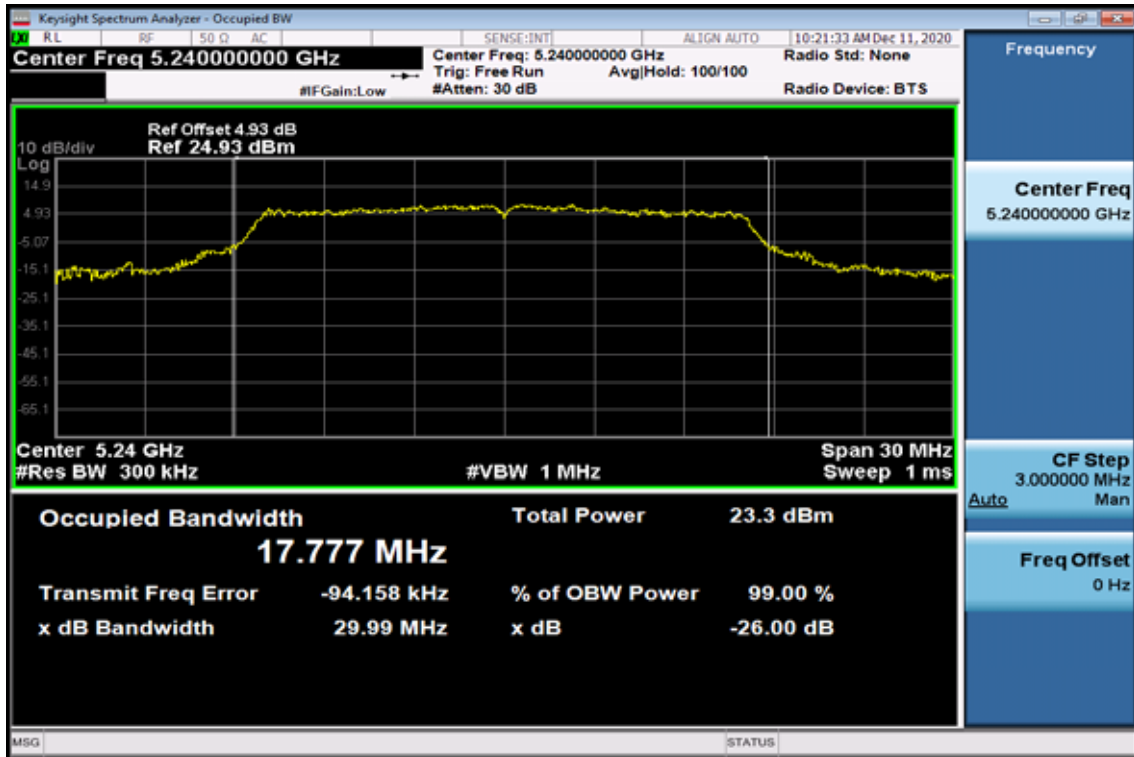
26dB / 99% Band Width Test Data CH-Low



26dB / 99% Band Width Test Data CH-Mid

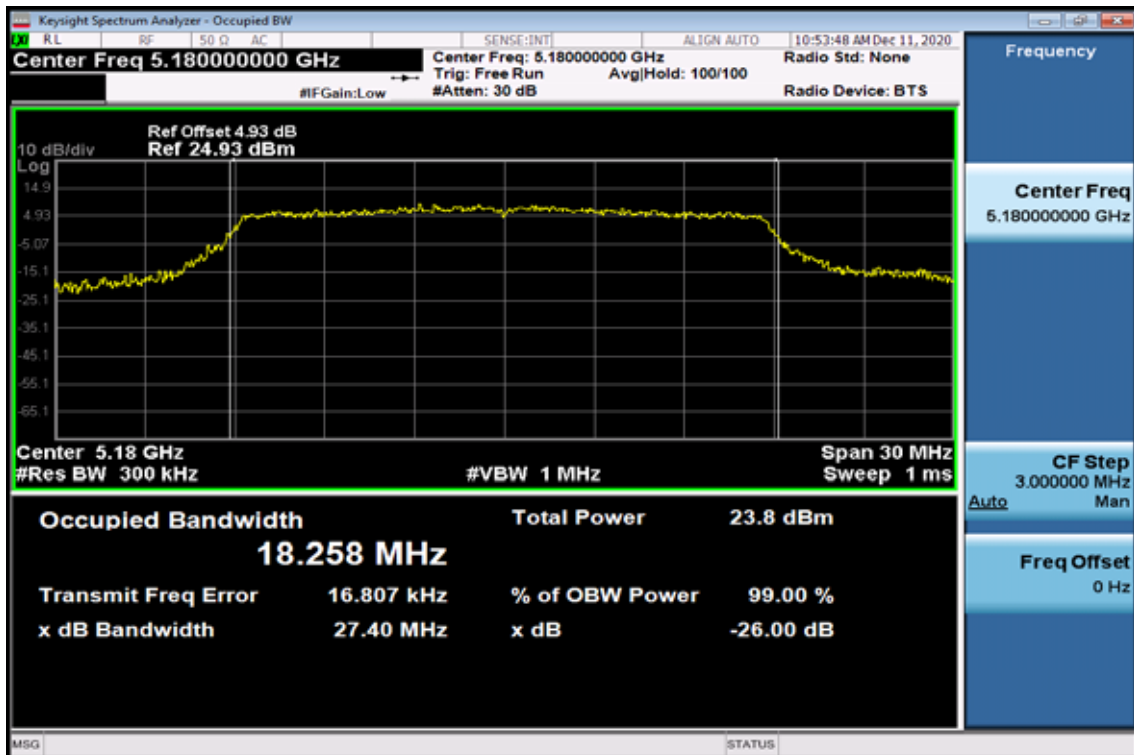


26dB / 99% Band Width Test Data CH-High

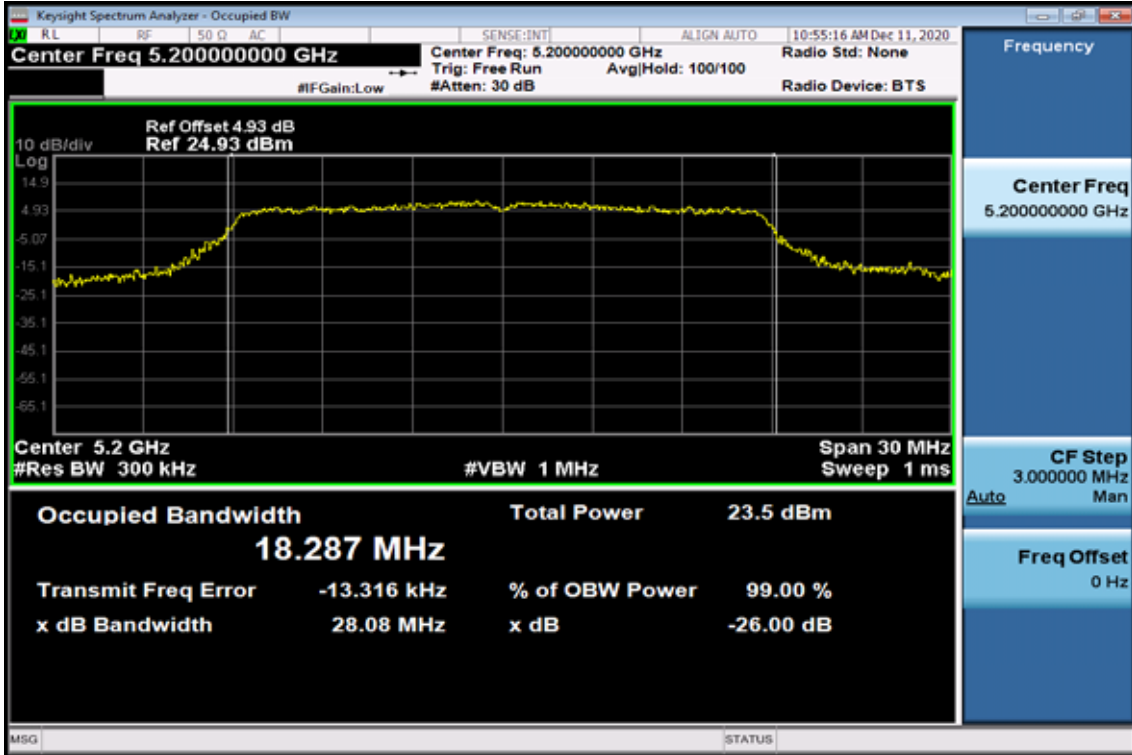


802.11n HT20

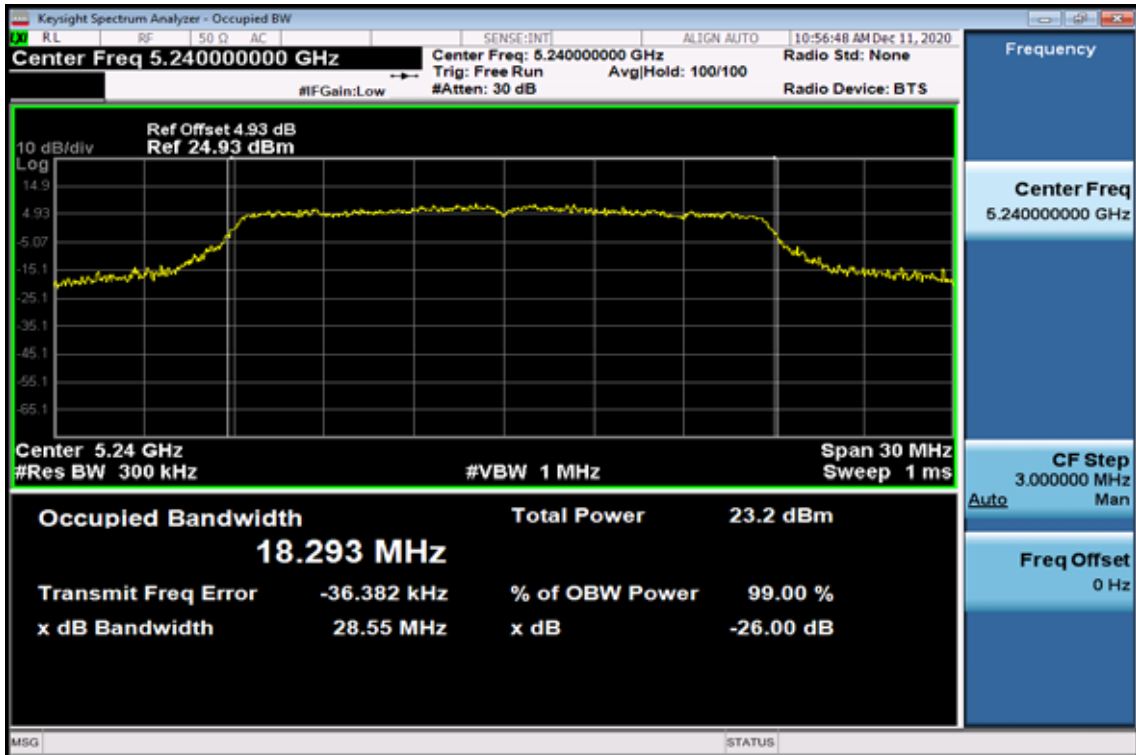
26dB / 99% Band Width Test Data CH-Low



26dB / 99% Band Width Test Data CH-Mid

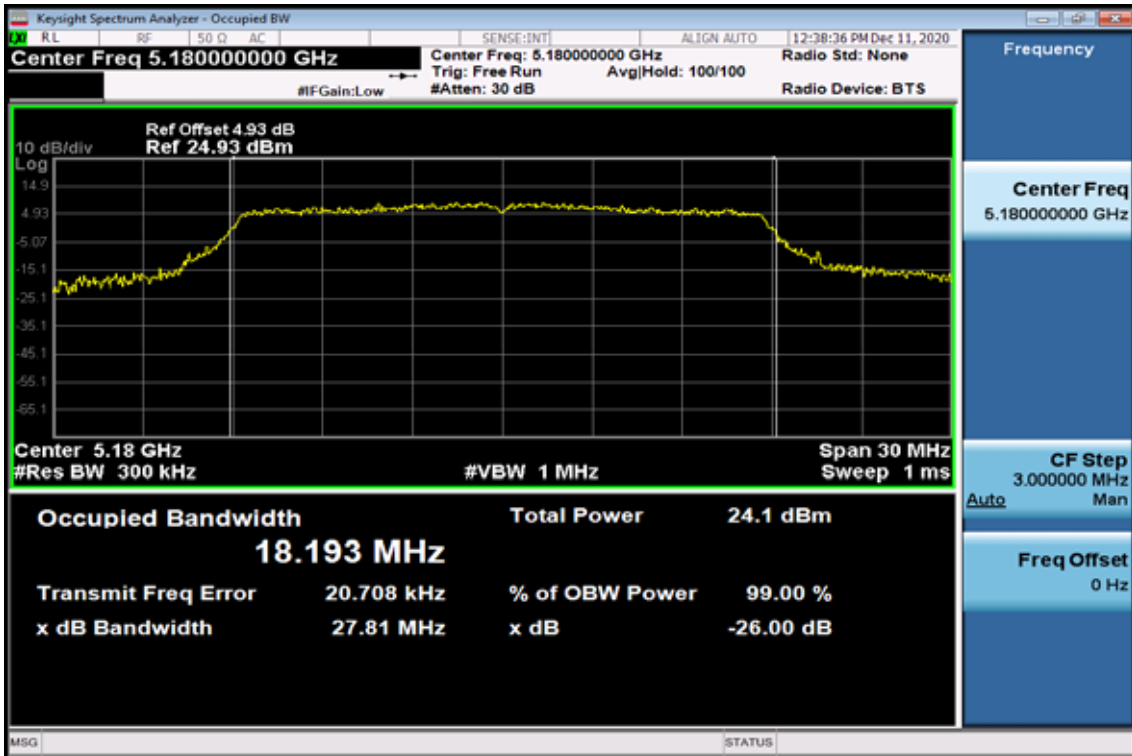


26dB / 99% Band Width Test Data CH-High

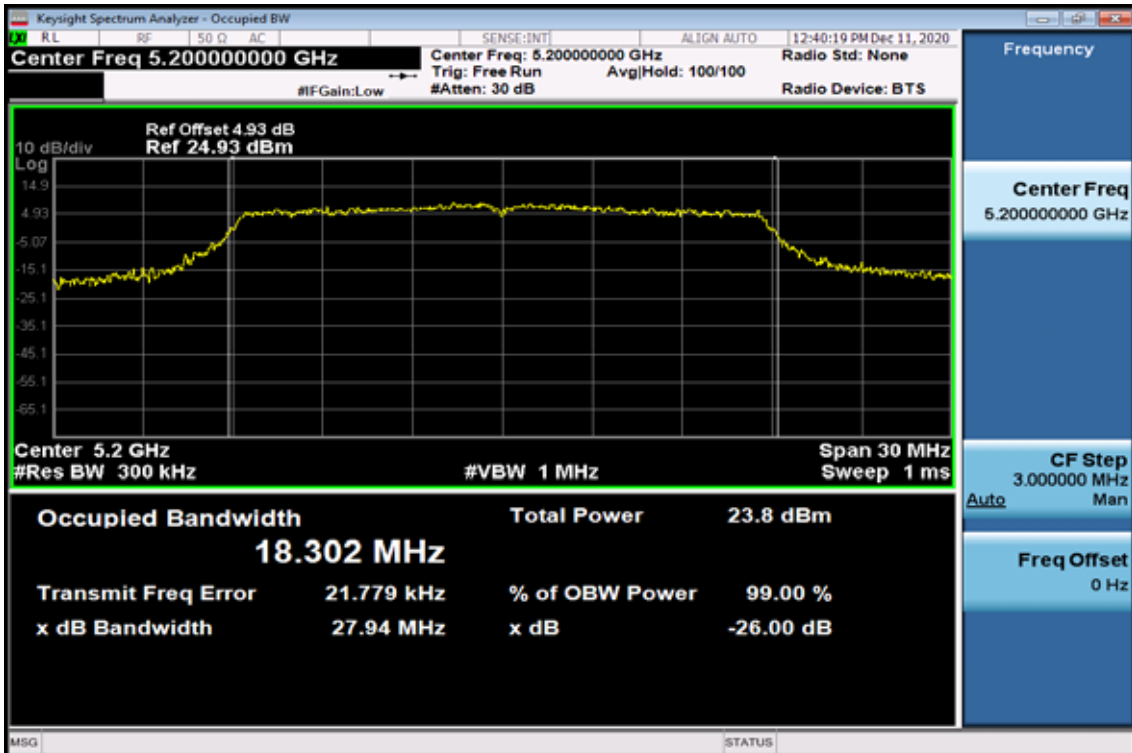


802.11ac VHT20

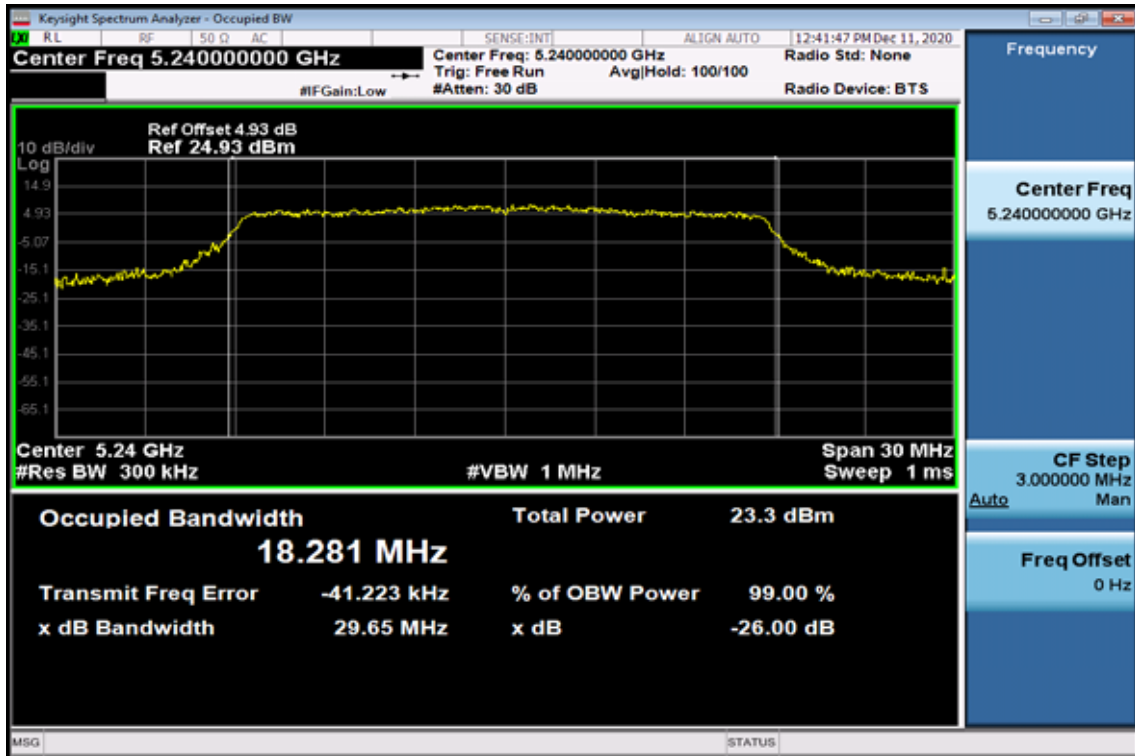
26dB / 99% Band Width Test Data CH-Low



26dB / 99% Band Width Test Data CH-Mid

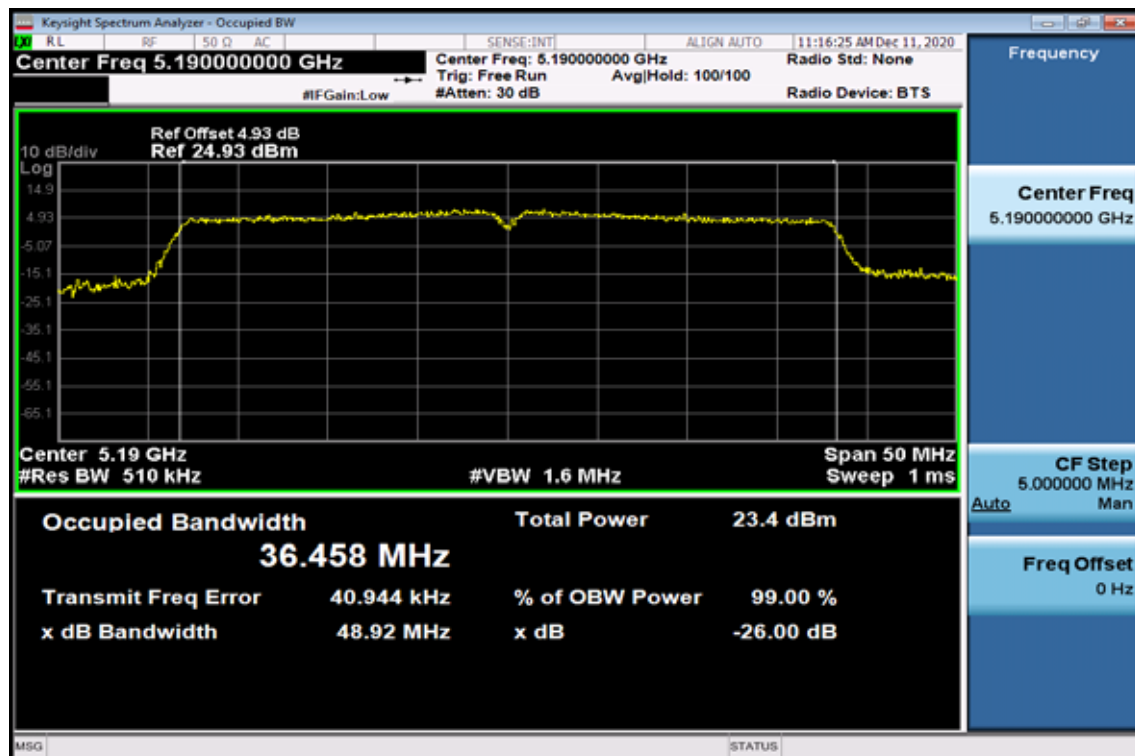


26dB / 99% Band Width Test Data CH-High

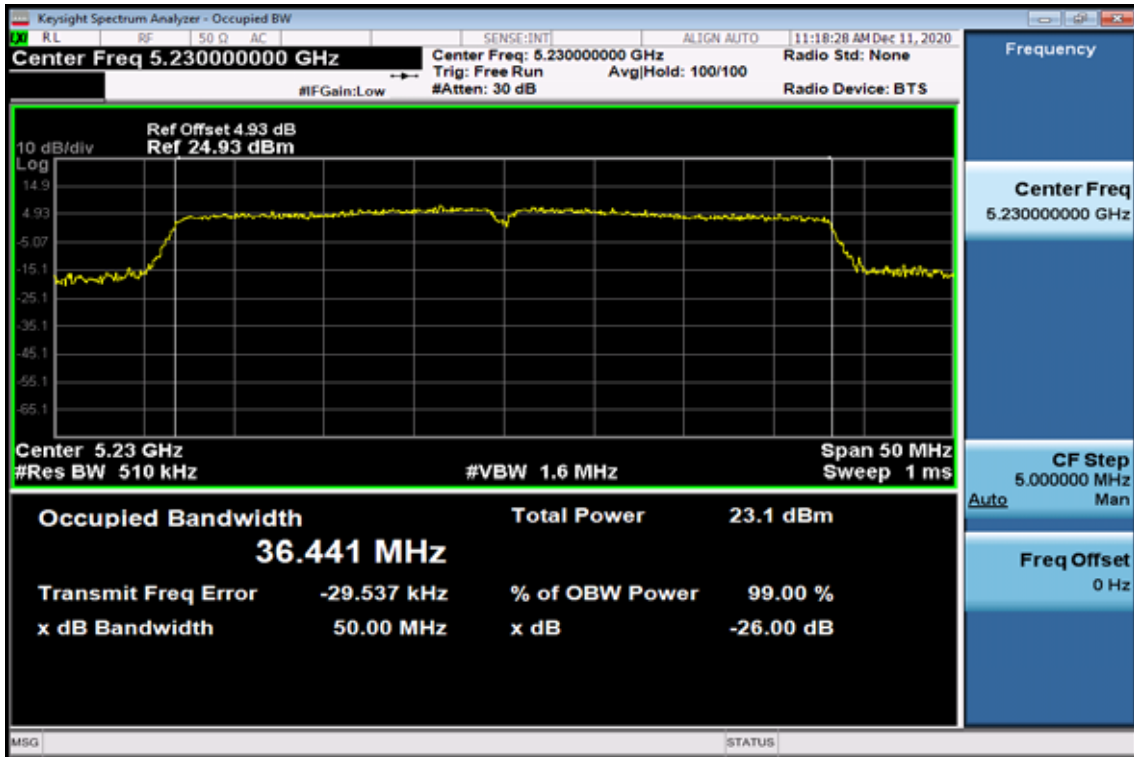


802.11n HT40

26dB / 99% Band Width Test Data CH-Low

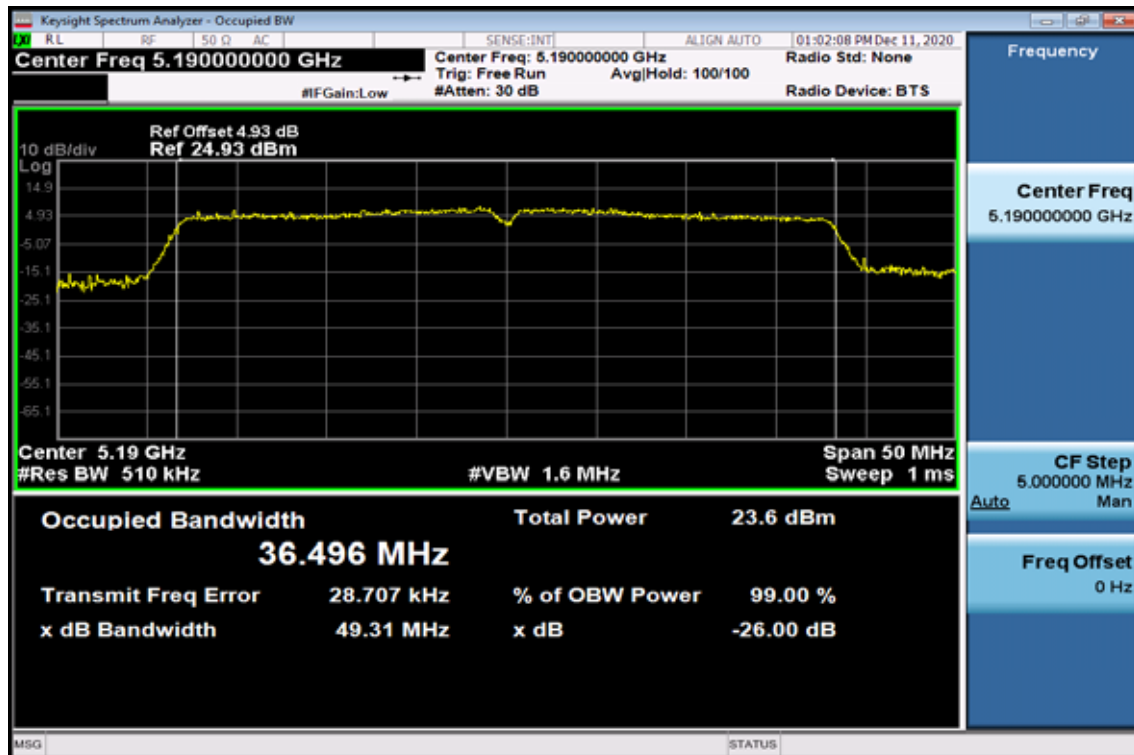


26dB / 99% Band Width Test Data CH-High

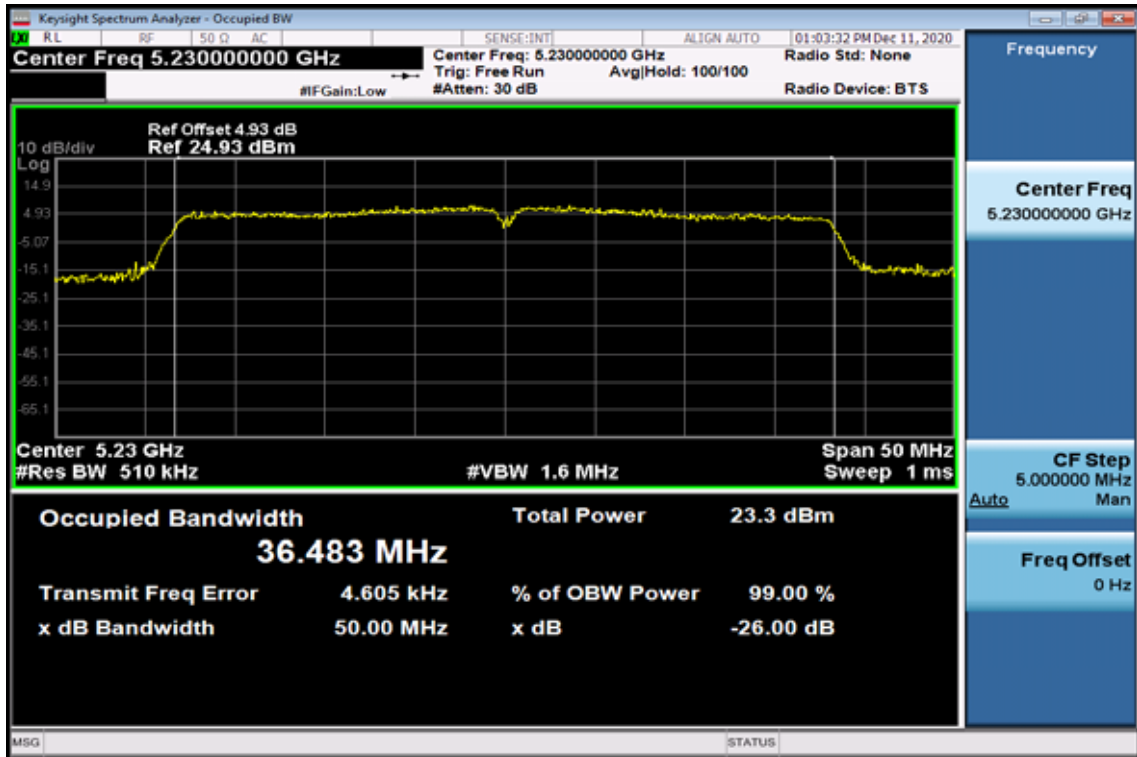


802.11ac VHT40

26dB / 99% Band Width Test Data CH-Low

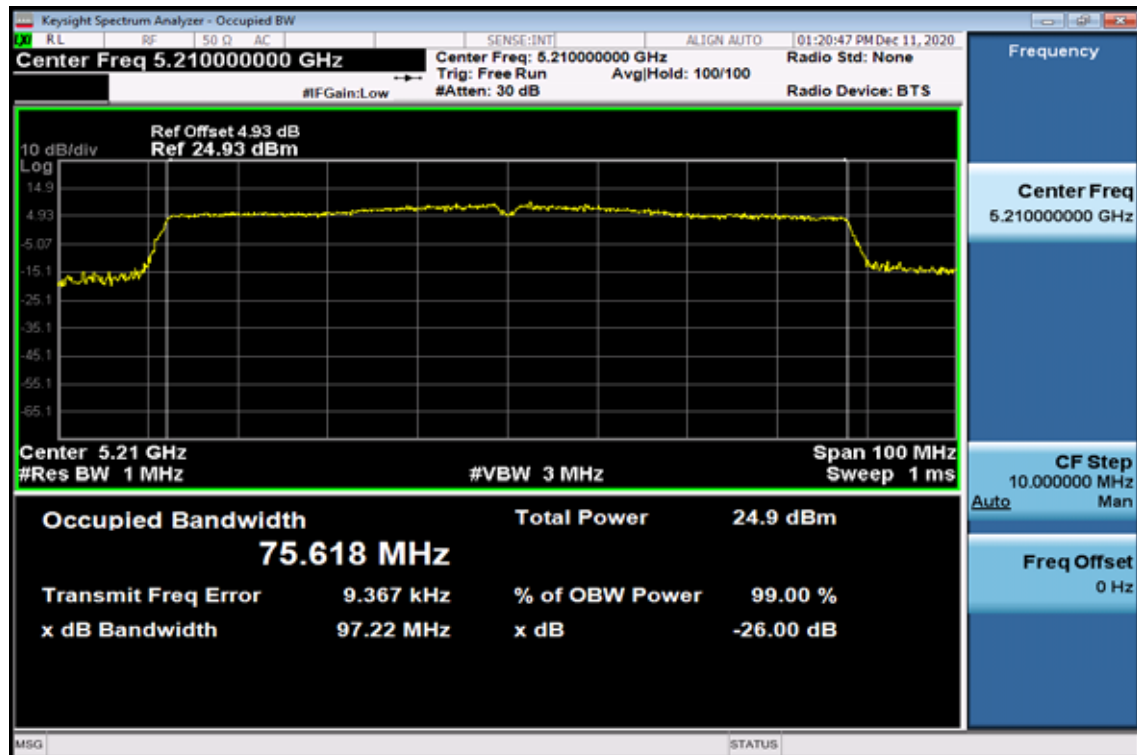


26dB / 99% Band Width Test Data CH-High



802.11 ac VHT80

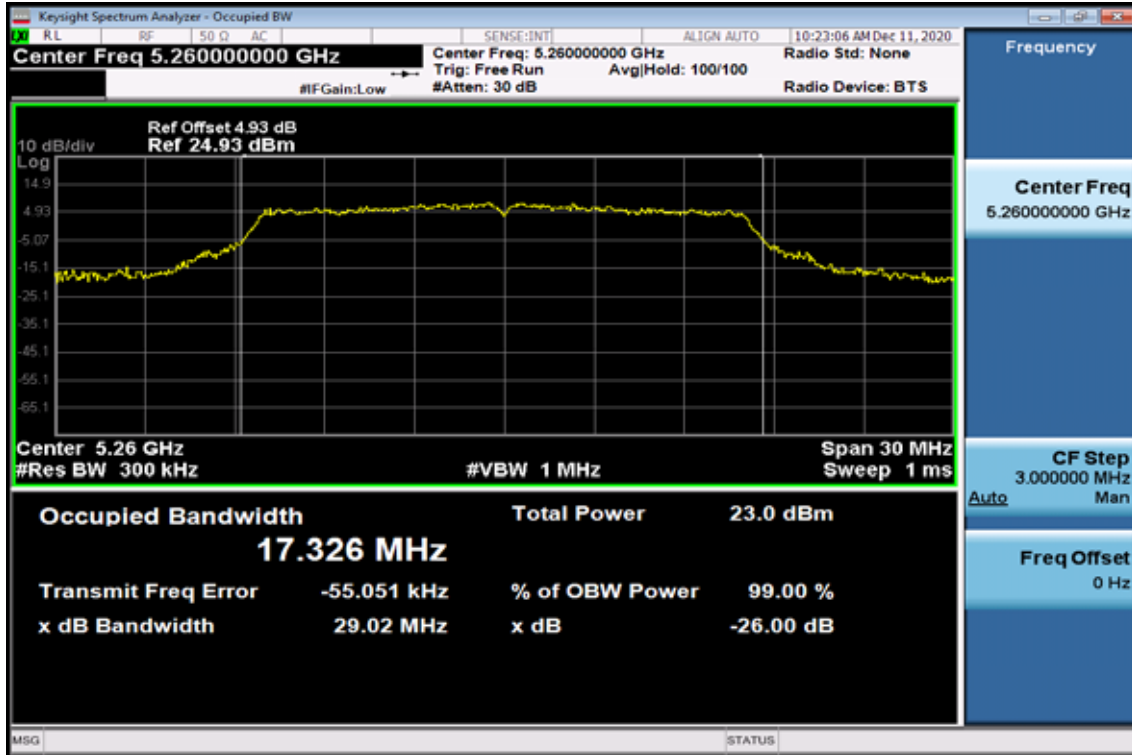
26dB / 99% Band Width Test Data



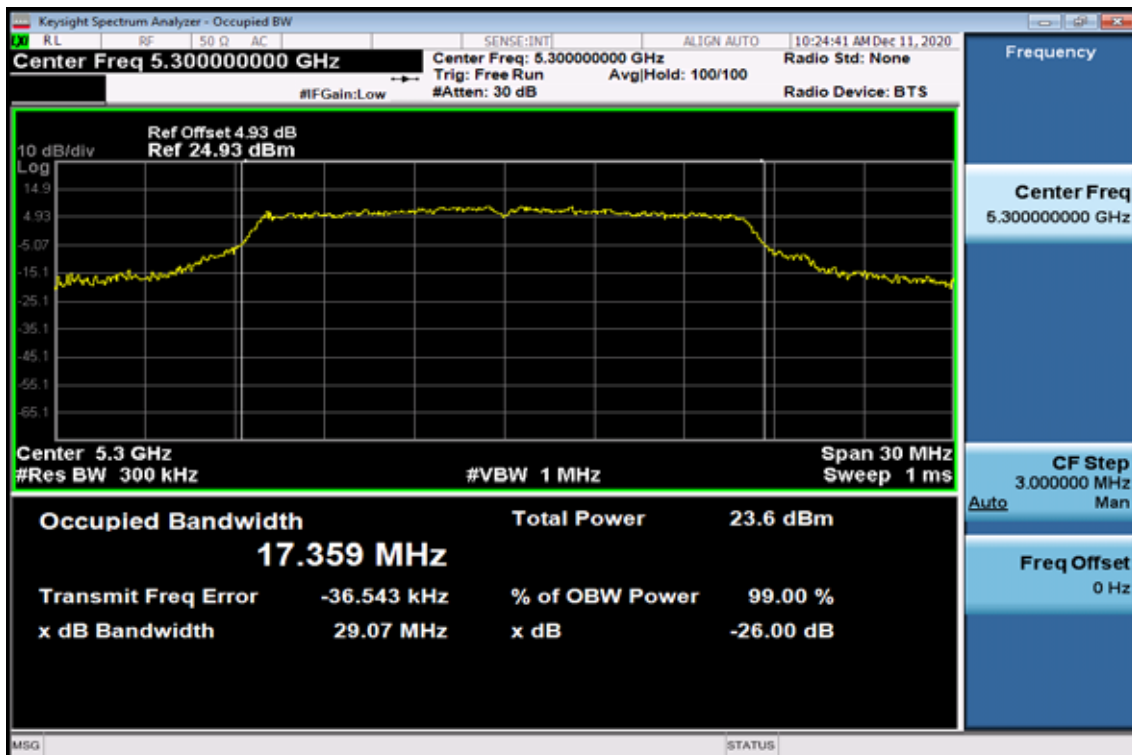
Band UNII-2A

802.11a

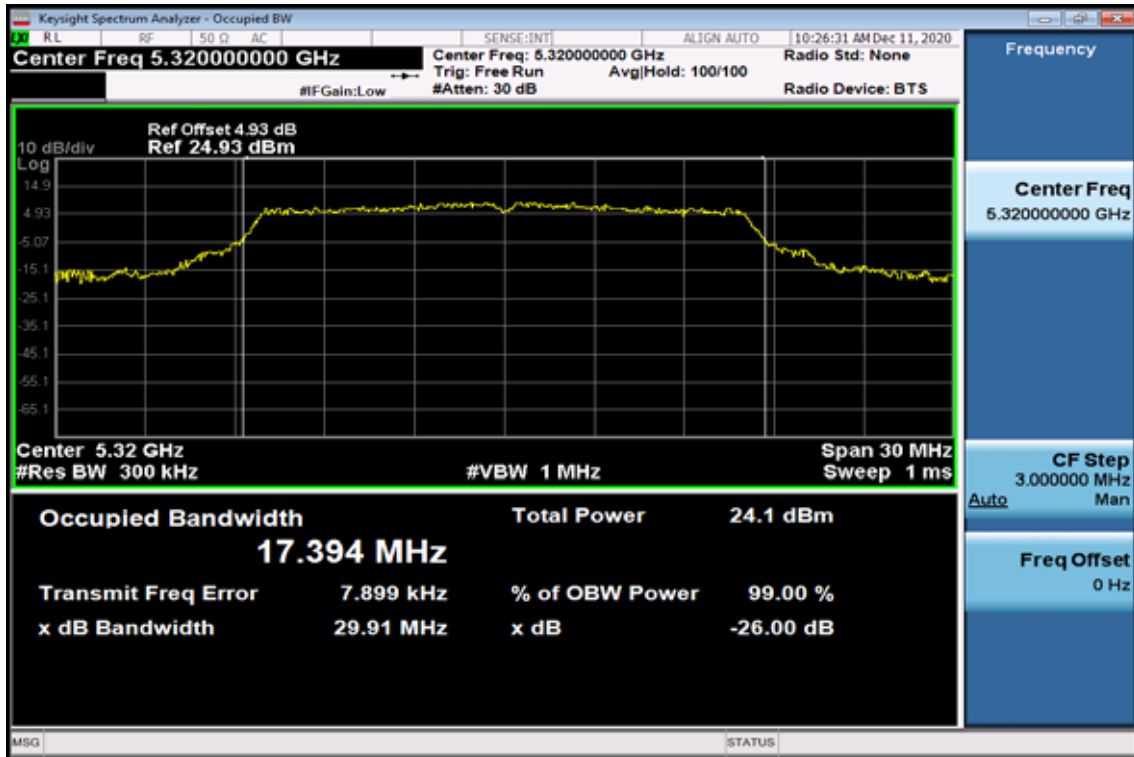
26dB / 99% Band Width Test Data CH-Low



26dB / 99% Band Width Test Data CH-Mid

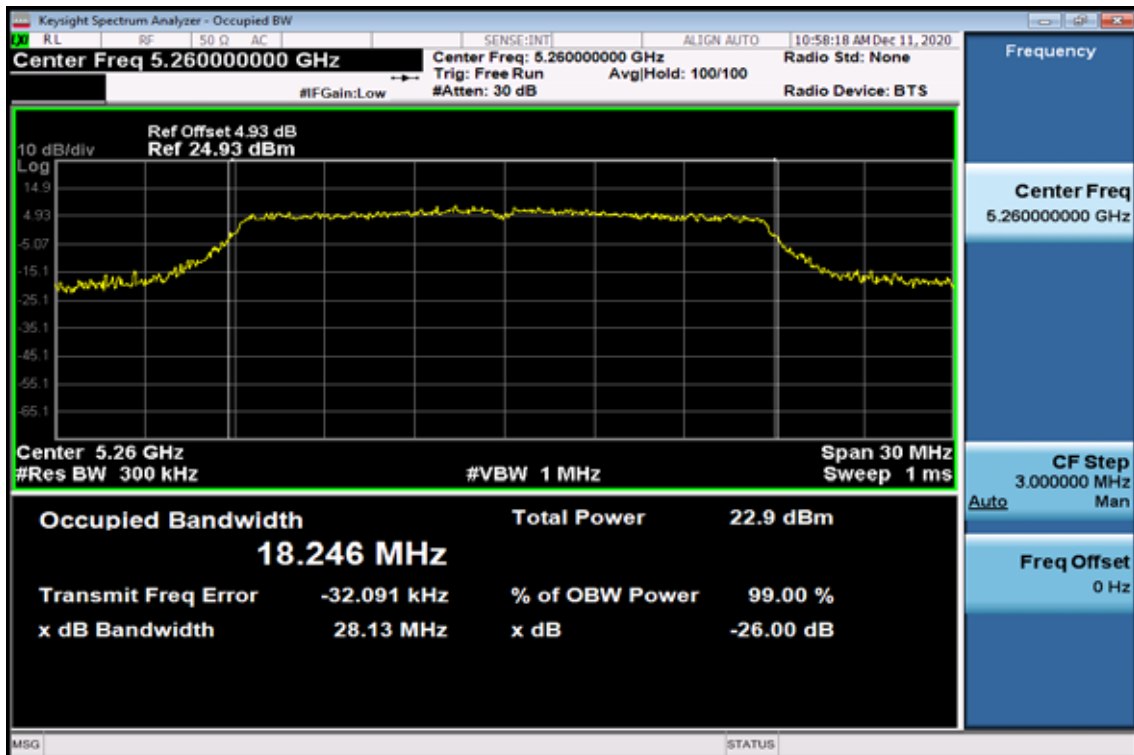


26dB / 99% Band Width Test Data CH-High

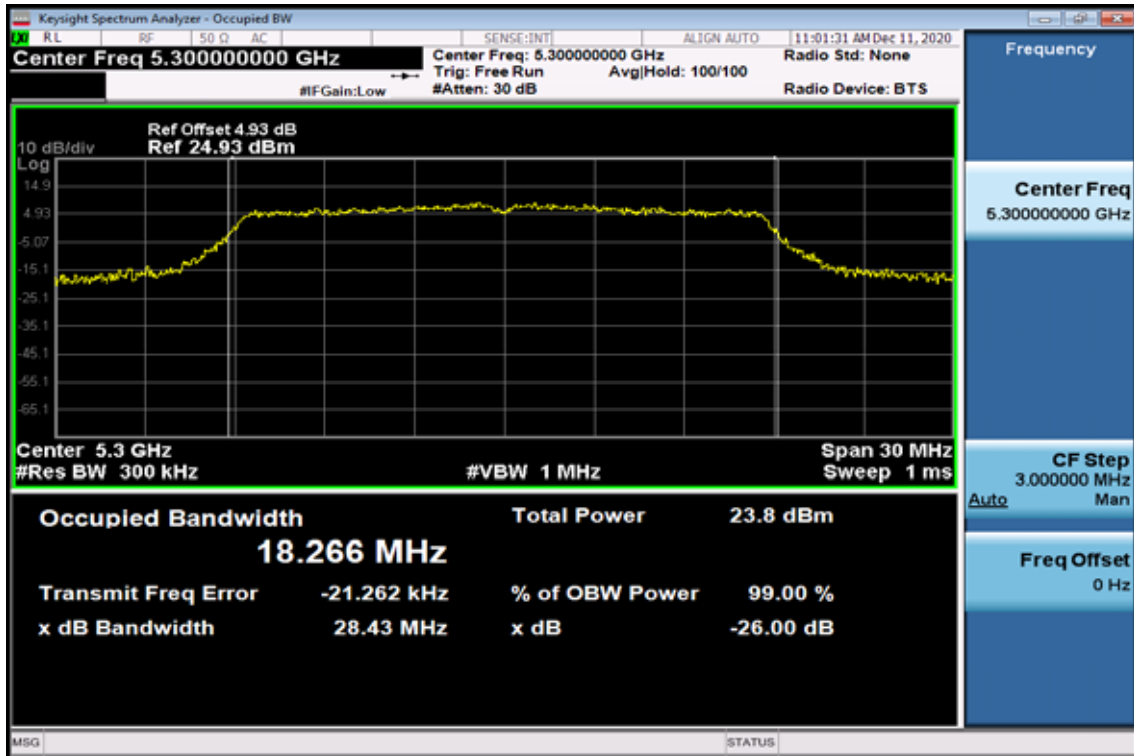


802.11n HT20

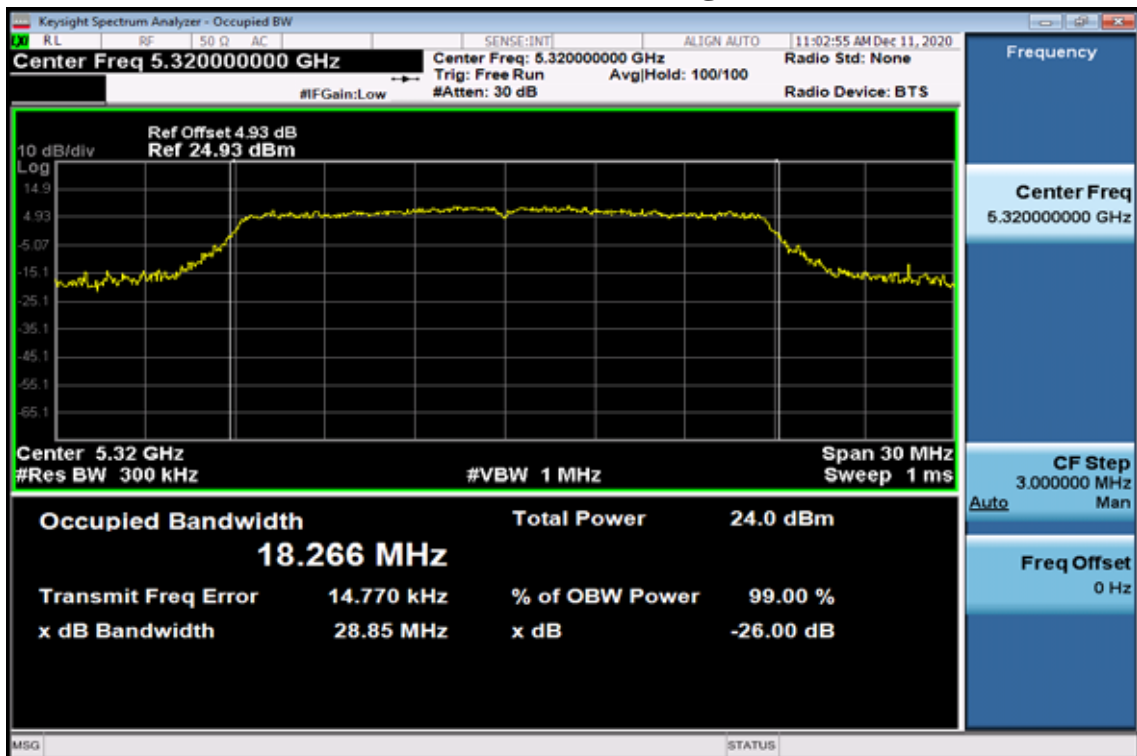
26dB / 99% Band Width Test Data CH-Low



26dB / 99% Band Width Test Data CH-Mid

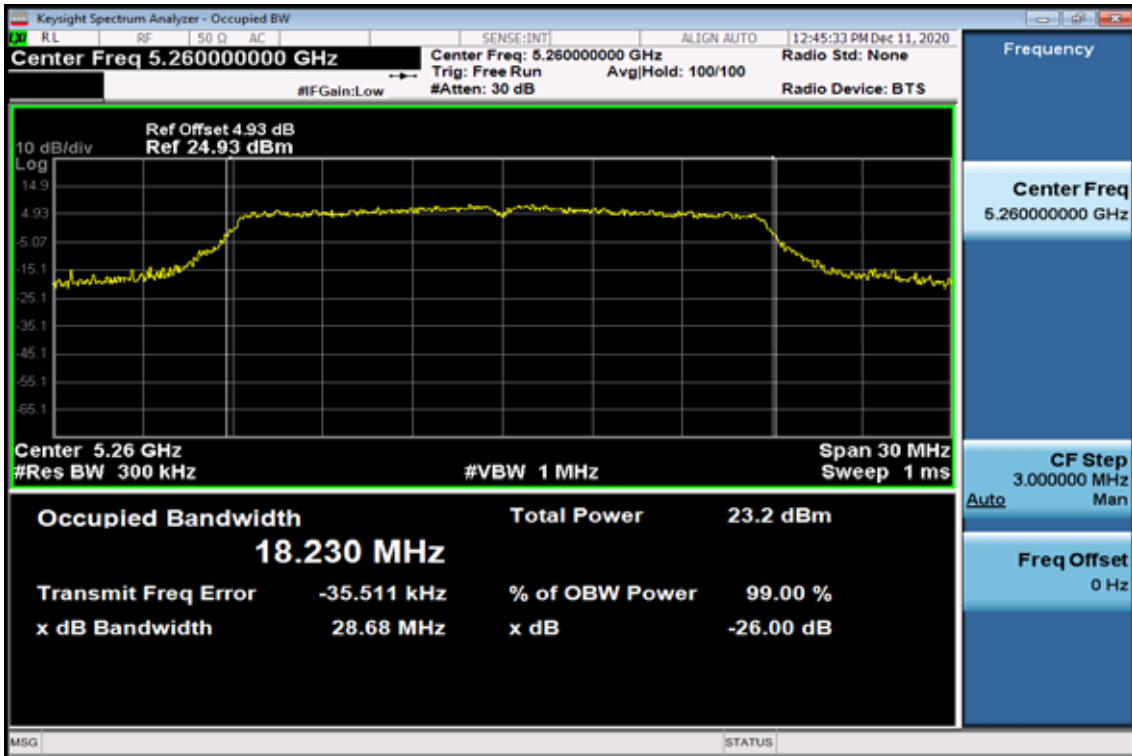


26dB / 99% Band Width Test Data CH-High

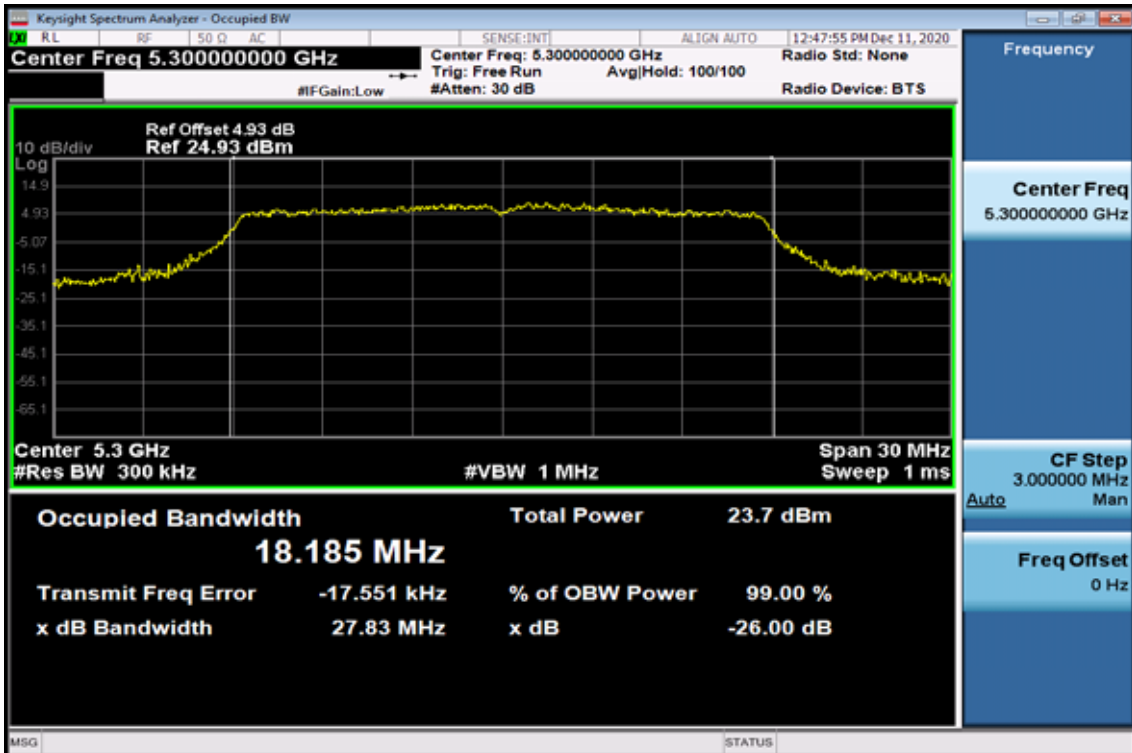


802.11ac VHT20

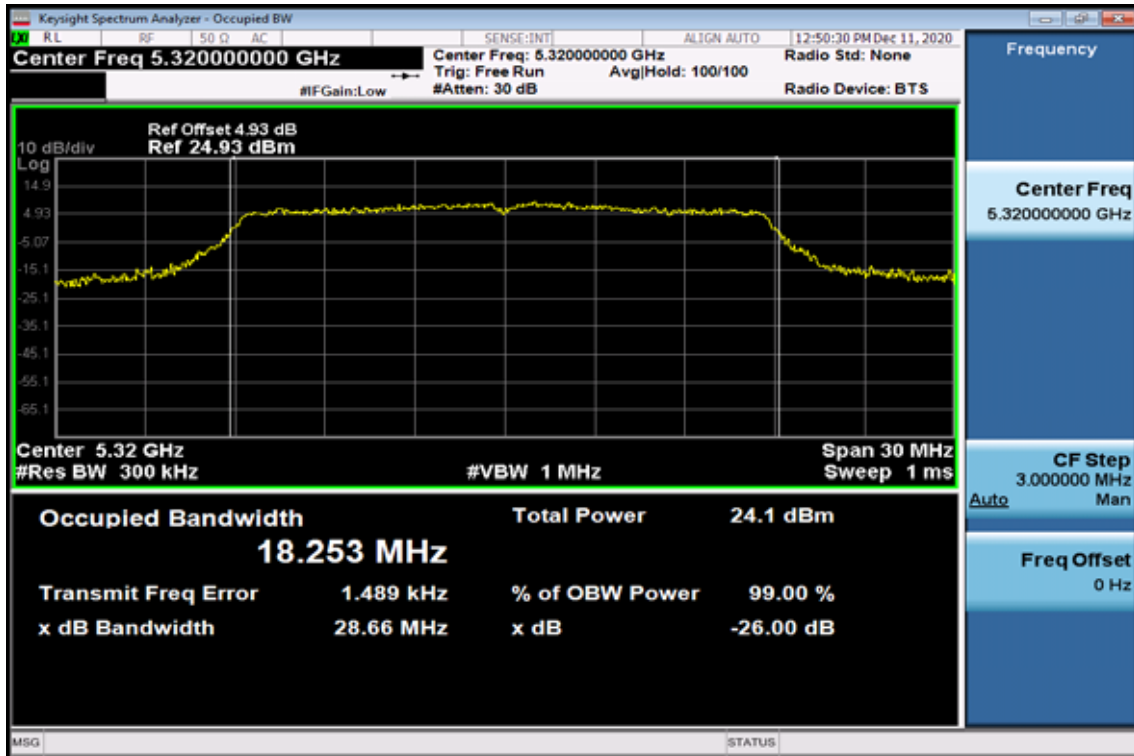
26dB / 99% Band Width Test Data CH-Low



26dB / 99% Band Width Test Data CH-Mid

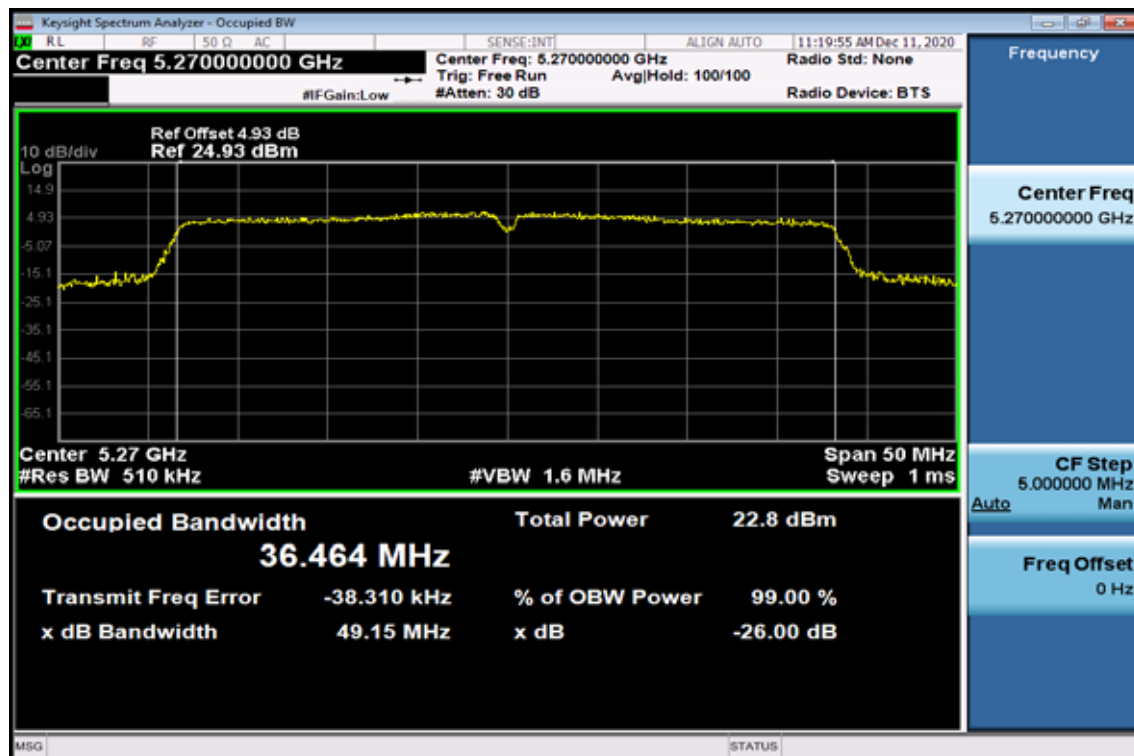


26dB / 99% Band Width Test Data CH-High

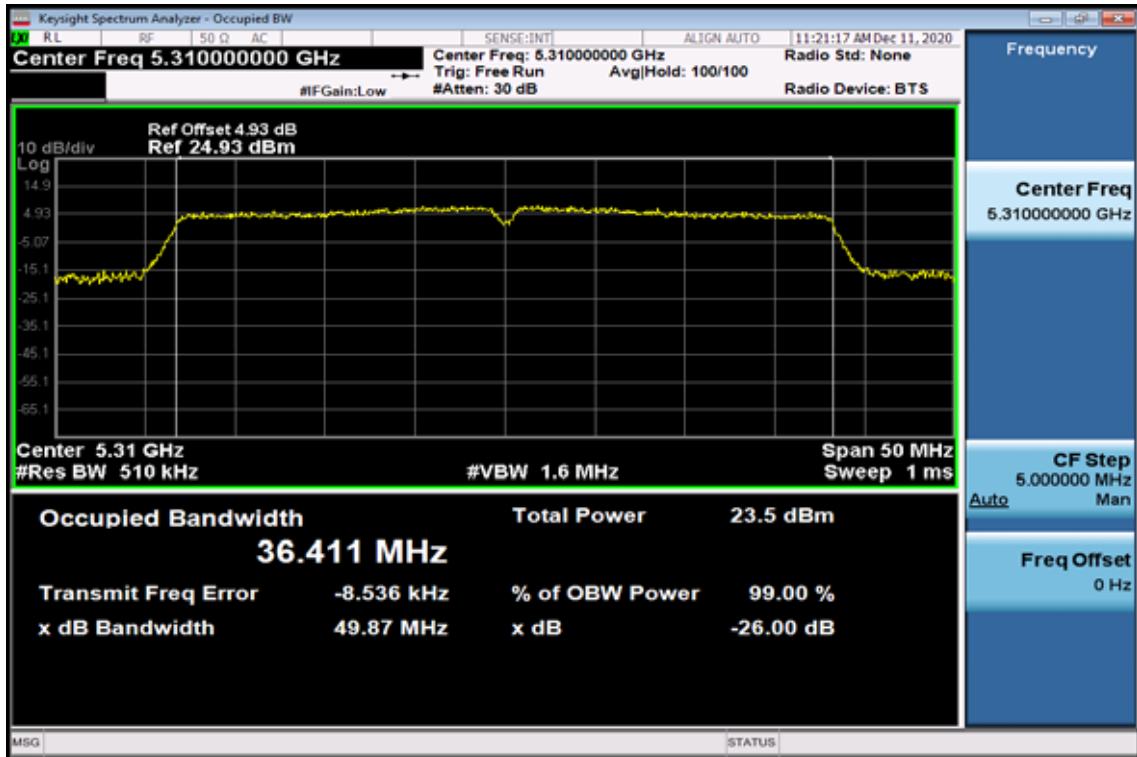


802.11n HT40

26dB / 99% Band Width Test Data CH-Low

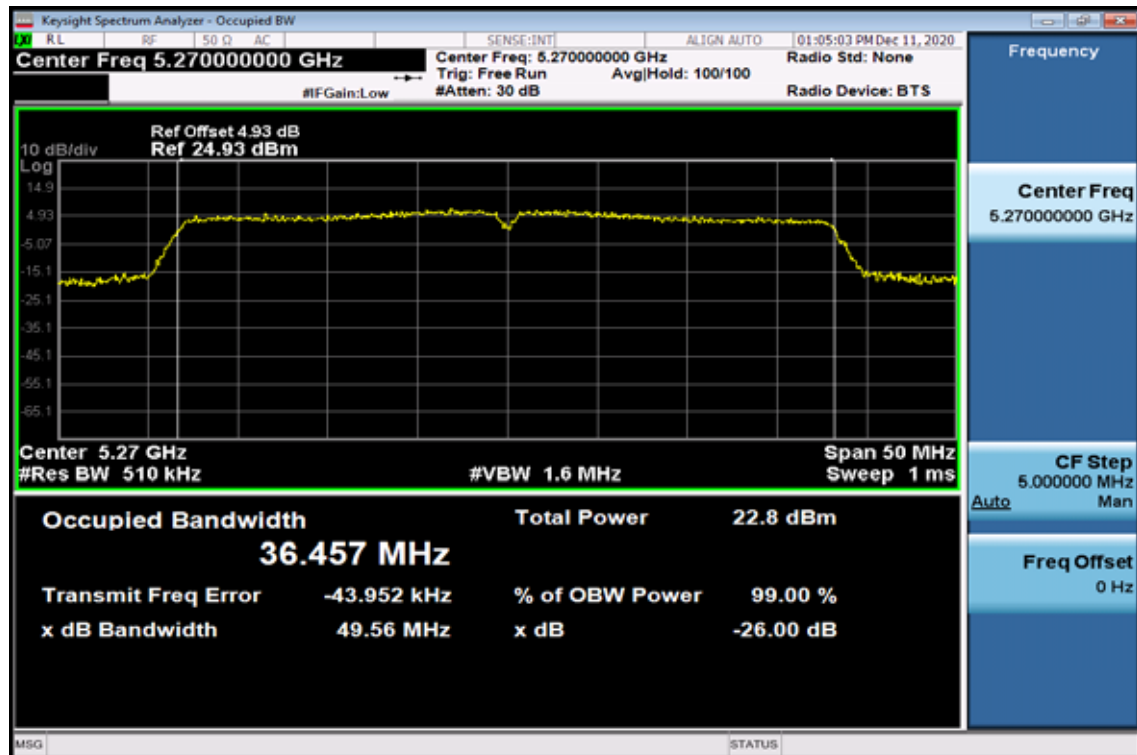


26dB / 99% Band Width Test Data CH-High

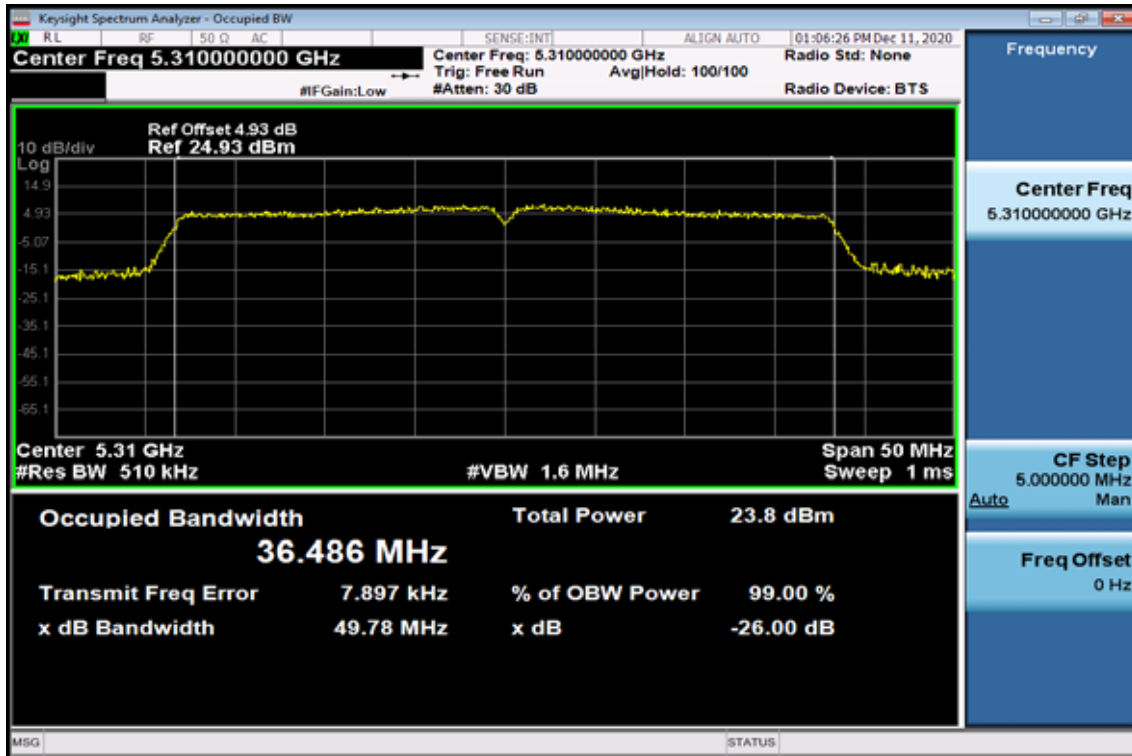


802.11ac VHT40

26dB / 99% Band Width Test Data CH-Low

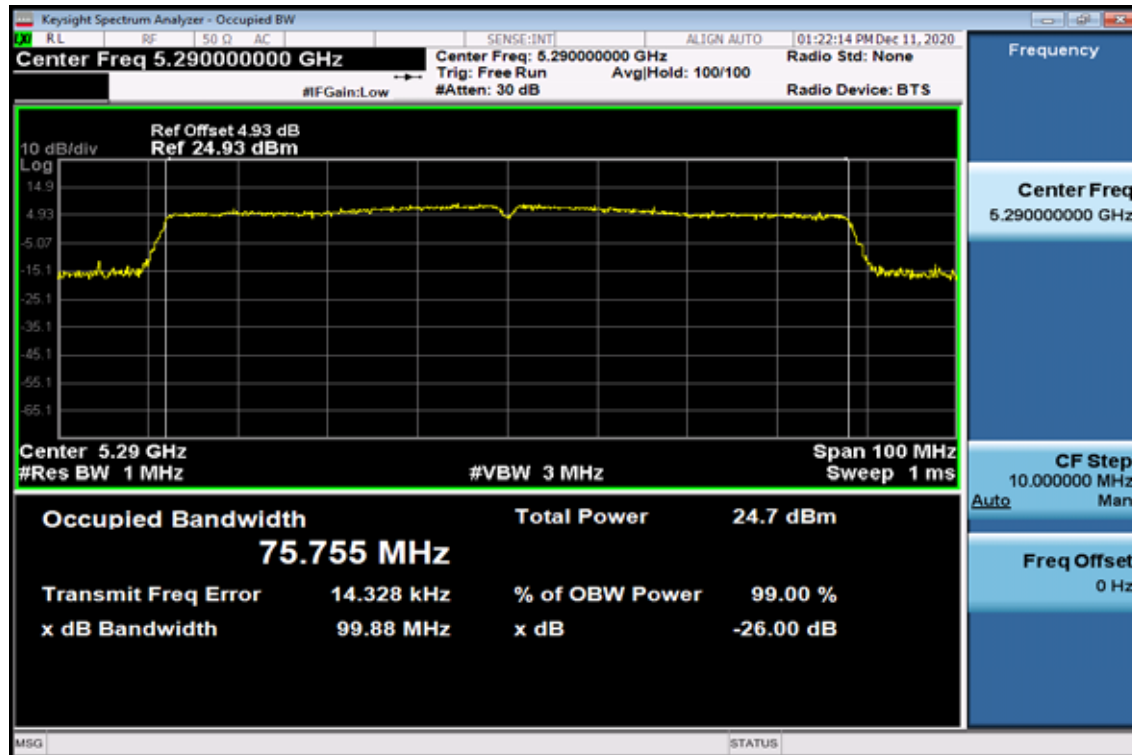


26dB / 99% Band Width Test Data CH-High



802.11 ac VHT80

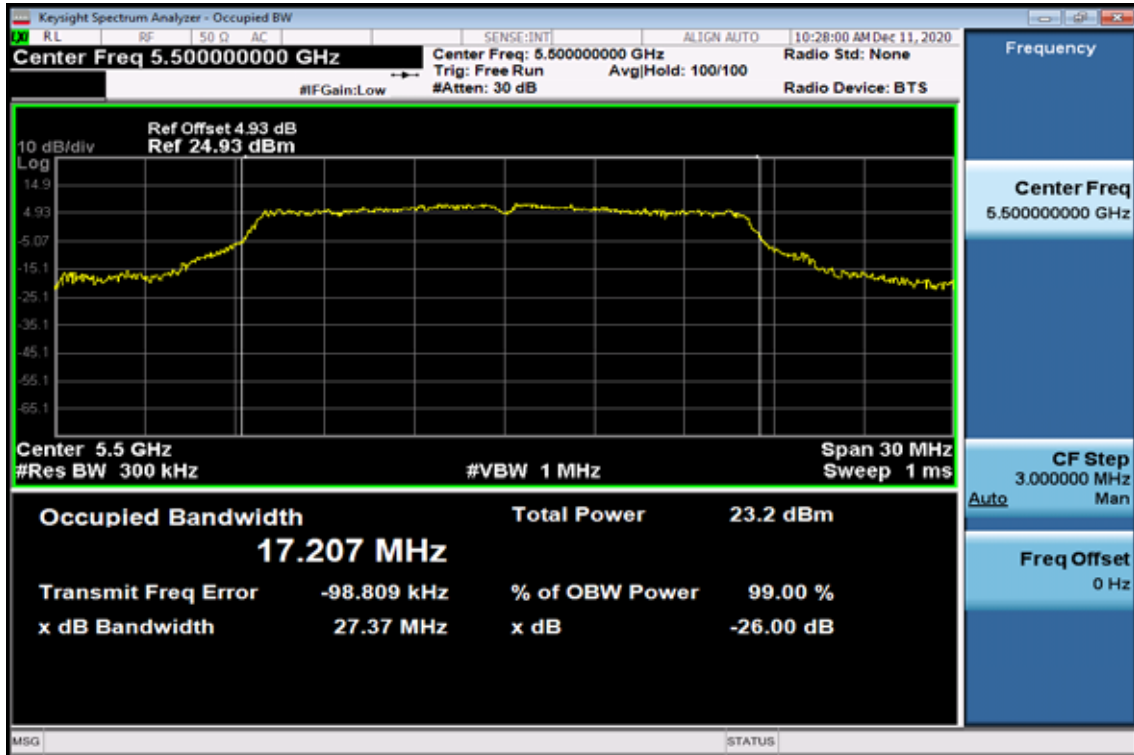
26dB / 99% Band Width Test Data



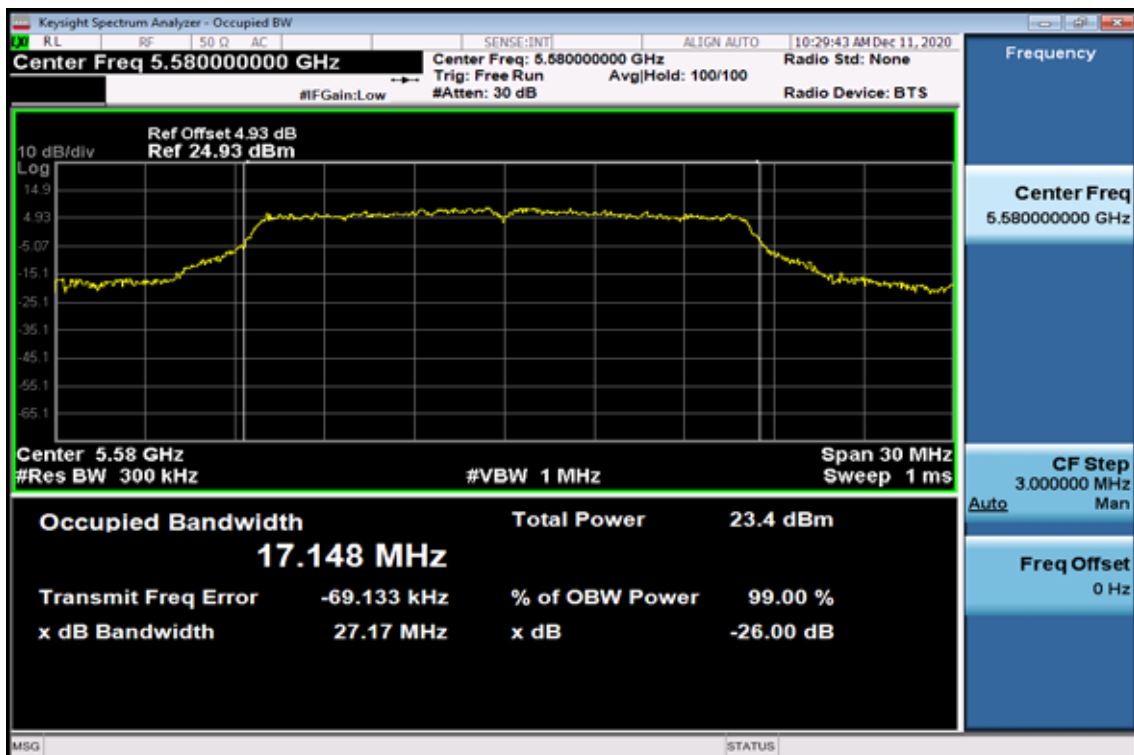
Band UNII-2C

802.11a

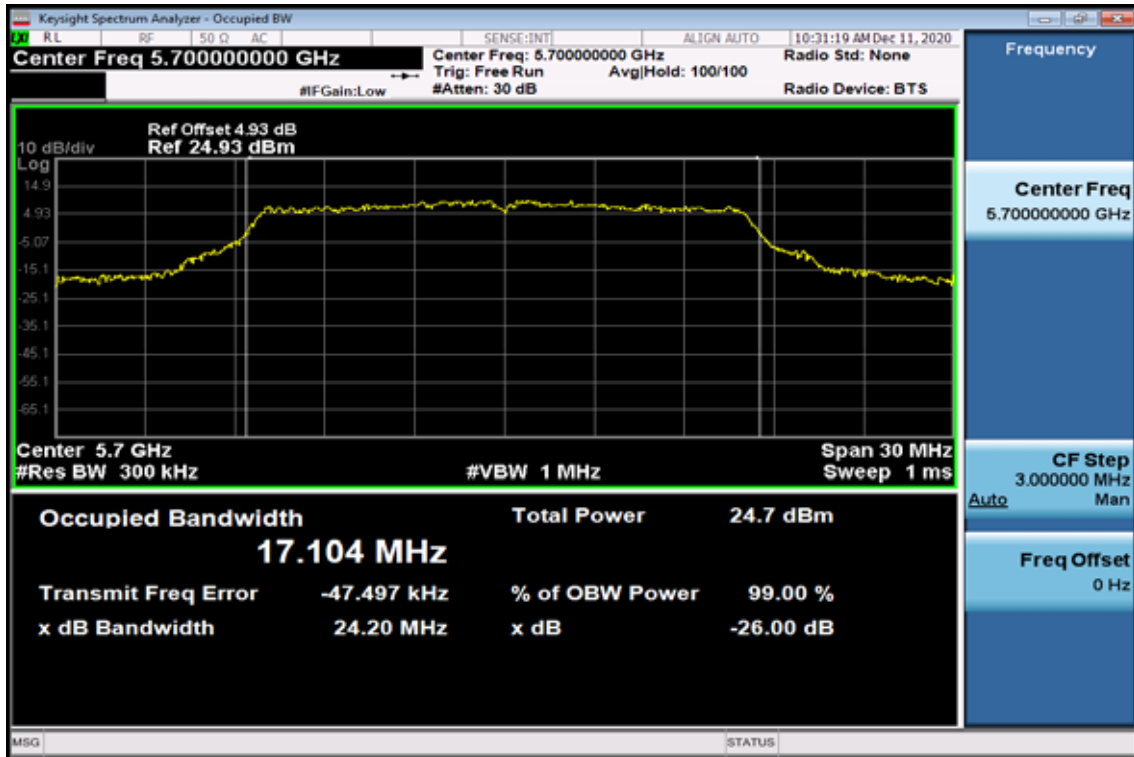
26dB / 99% Band Width Test Data CH-Low



26dB / 99% Band Width Test Data CH-Mid

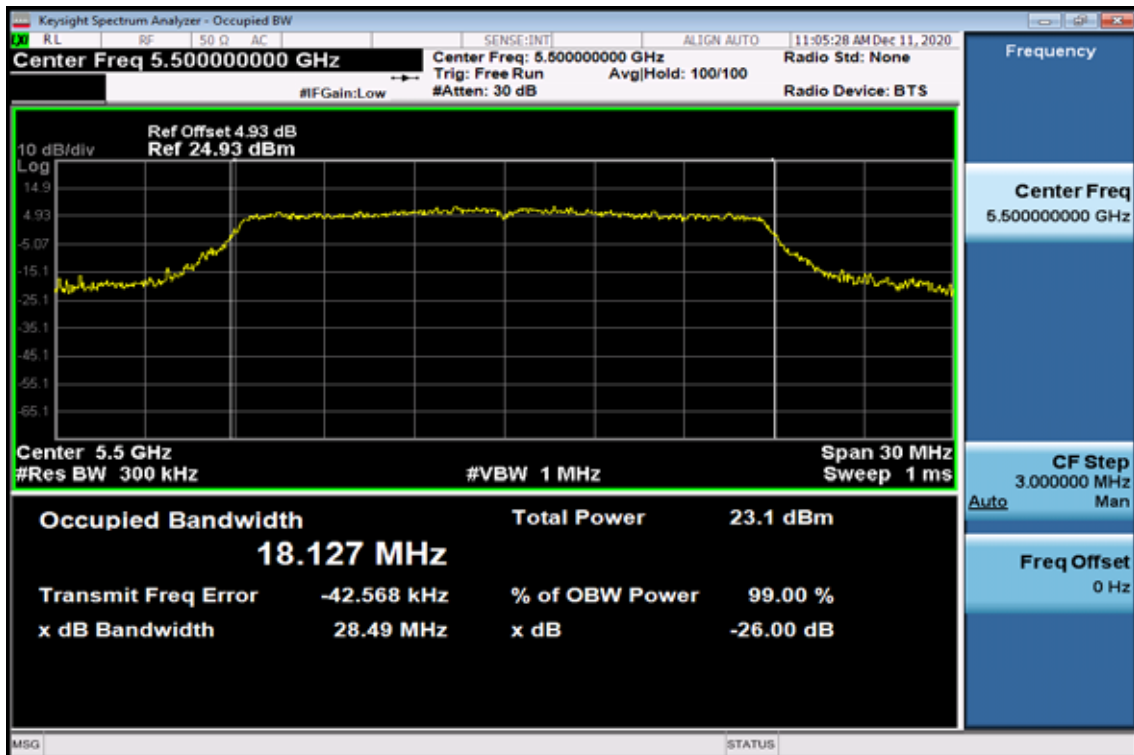


26dB / 99% Band Width Test Data CH-High

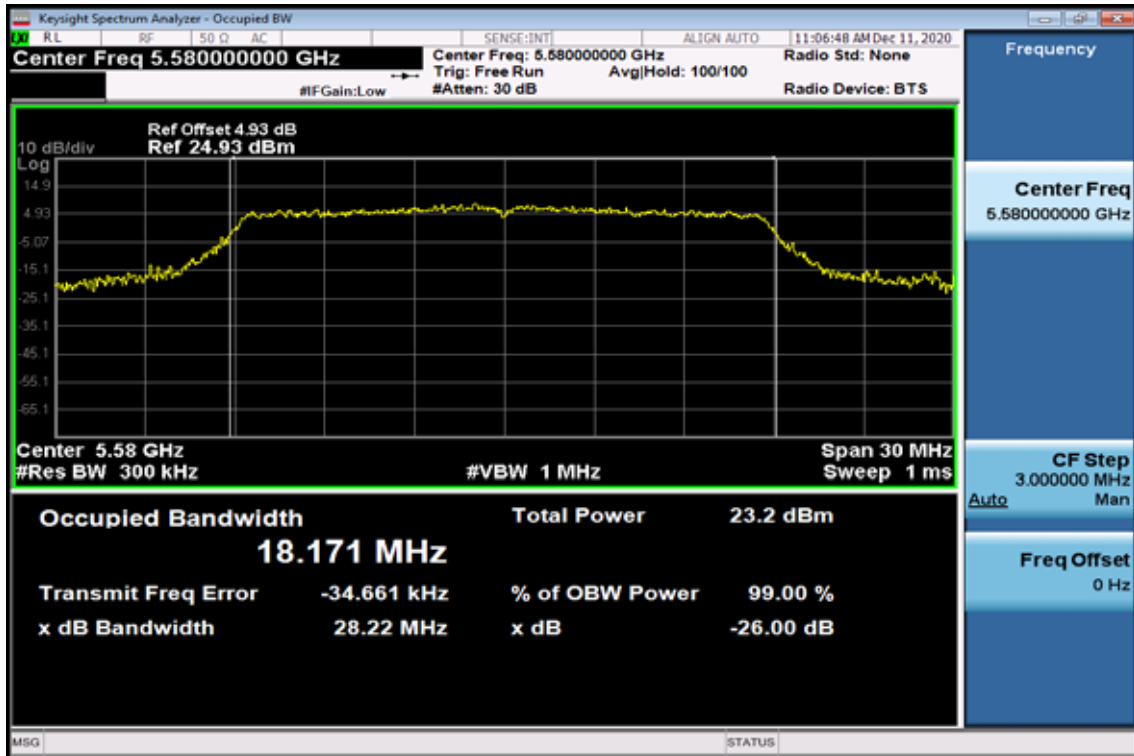


802.11n HT20

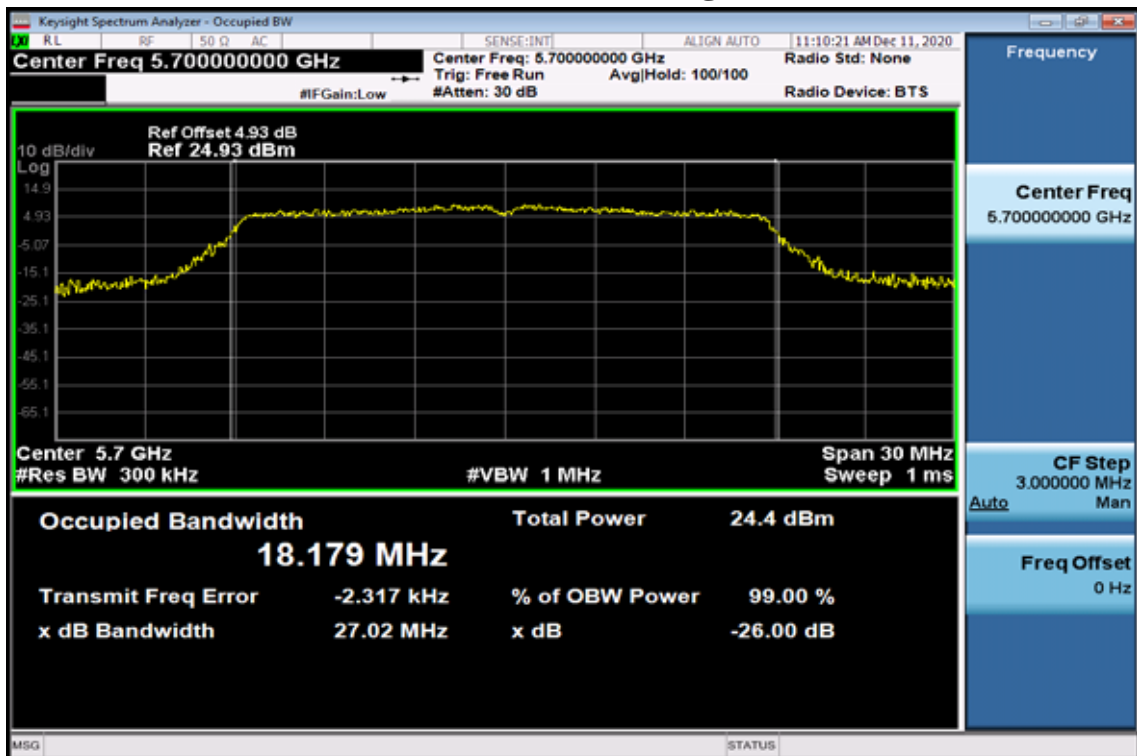
26dB / 99% Band Width Test Data CH-Low



26dB / 99% Band Width Test Data CH-Mid

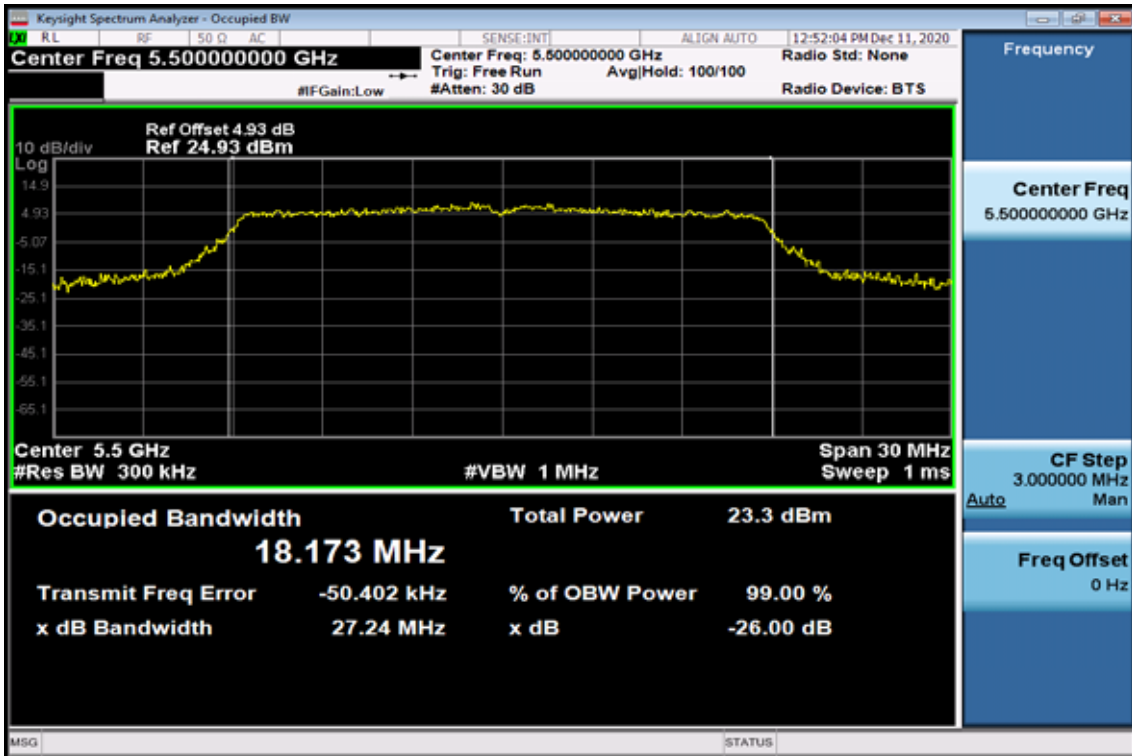


26dB / 99% Band Width Test Data CH-High

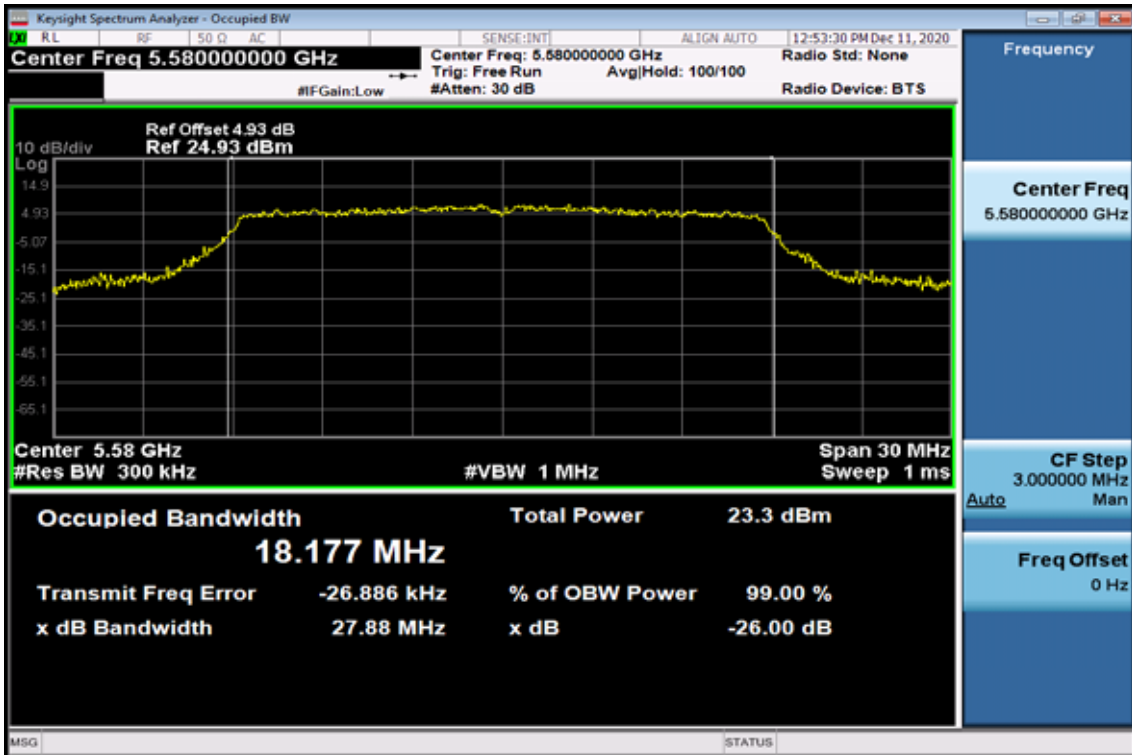


802.11ac VHT20

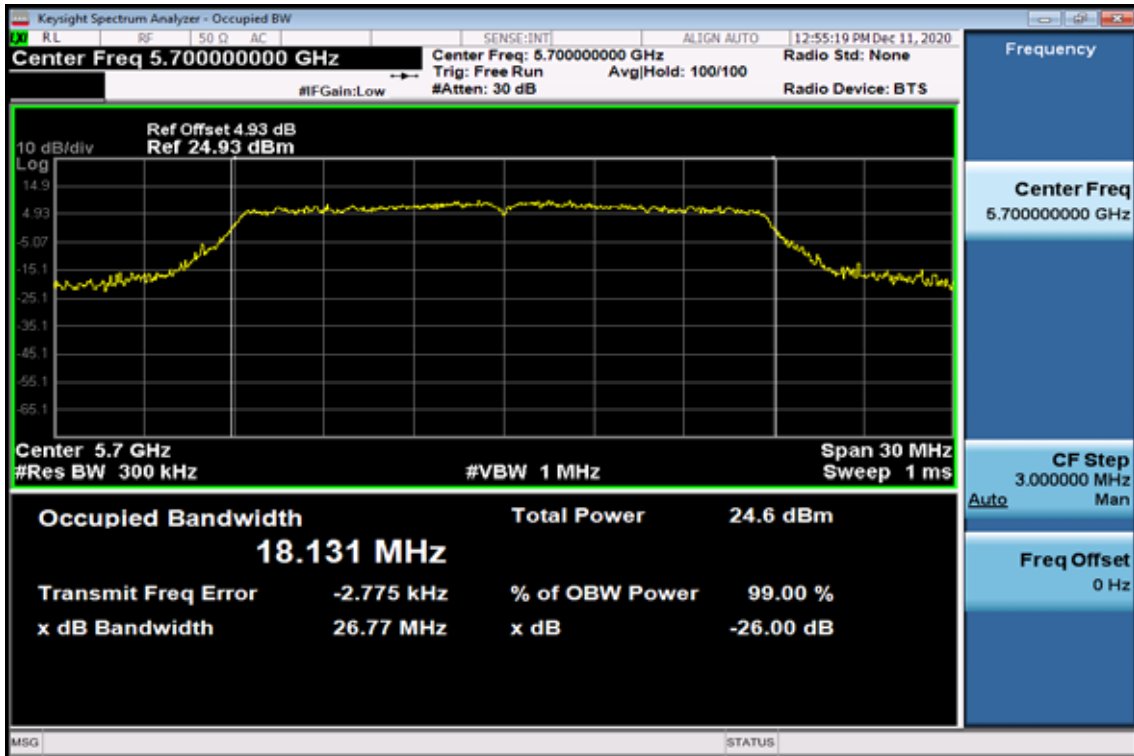
26dB / 99% Band Width Test Data CH-Low



26dB / 99% Band Width Test Data CH-Mid

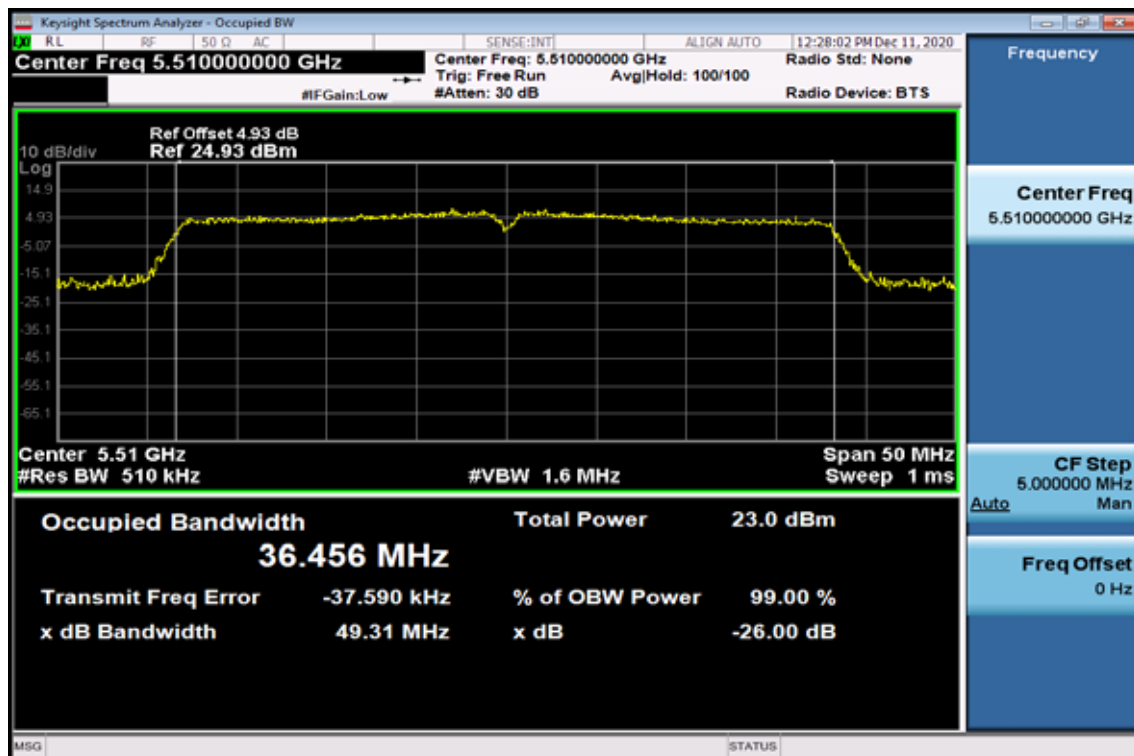


26dB / 99% Band Width Test Data CH-High

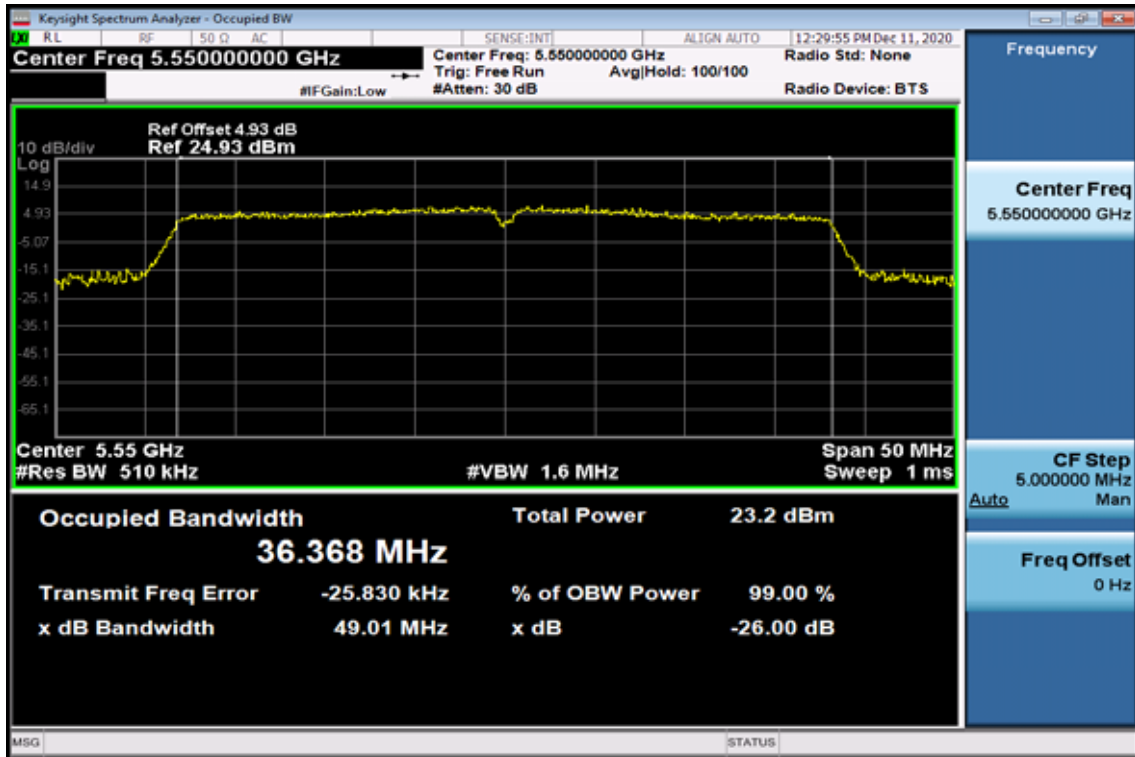


802.11n HT40

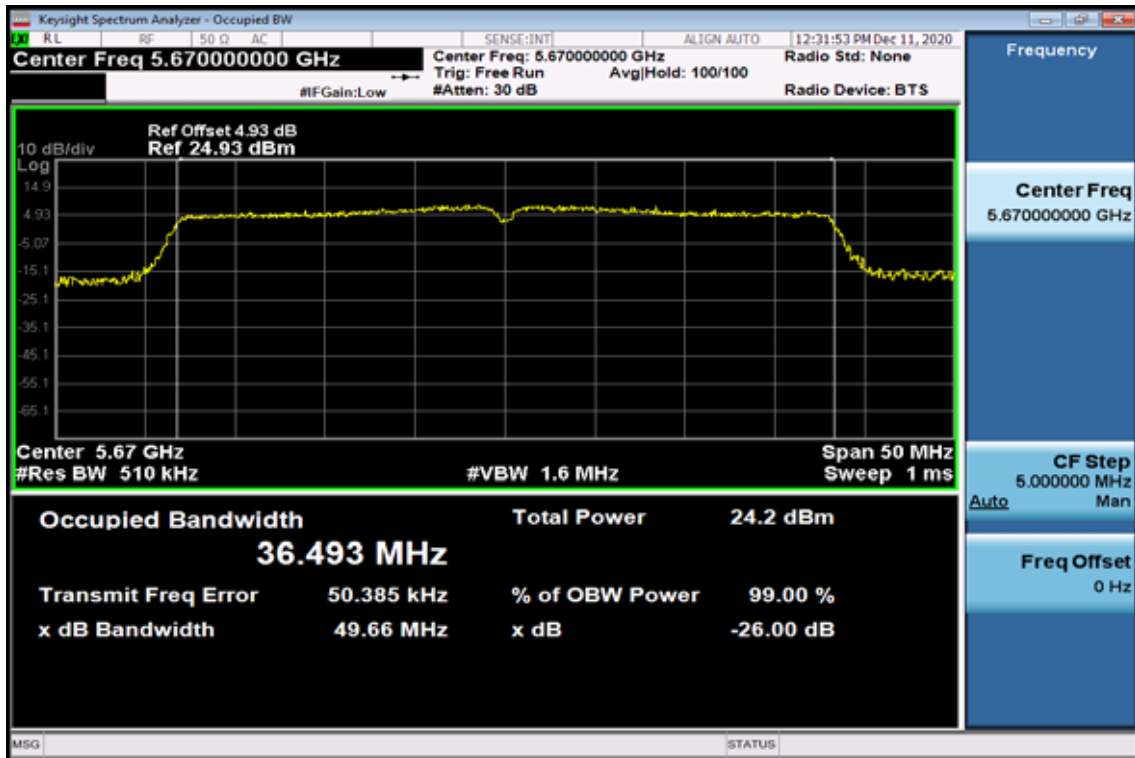
26dB / 99% Band Width Test Data CH-Low



26dB / 99%Band Width Test Data CH-Mid

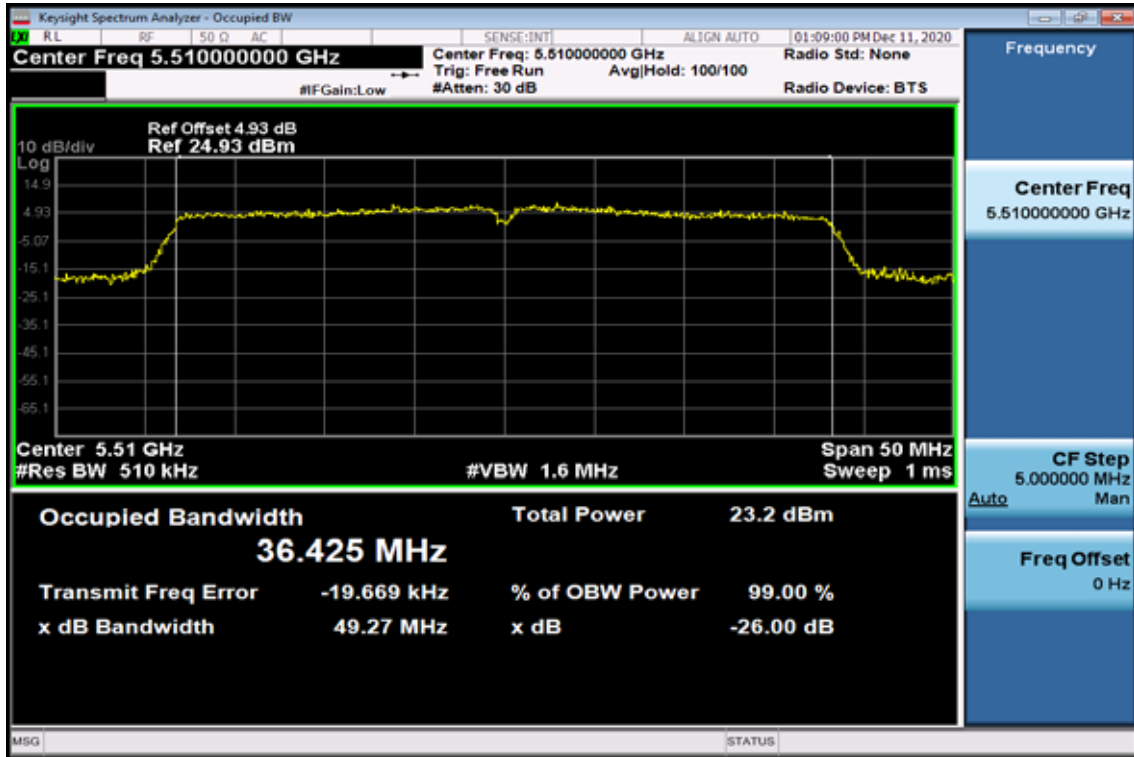


26dB / 99%Band Width Test Data CH-High

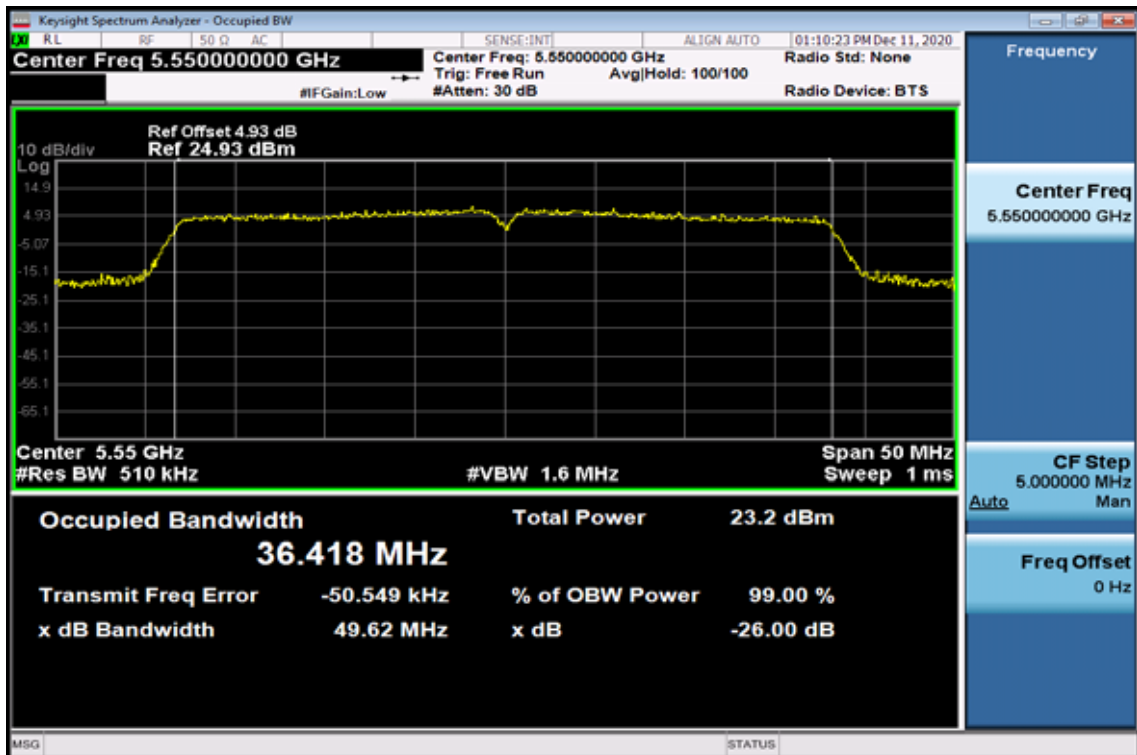


802.11ac VHT40

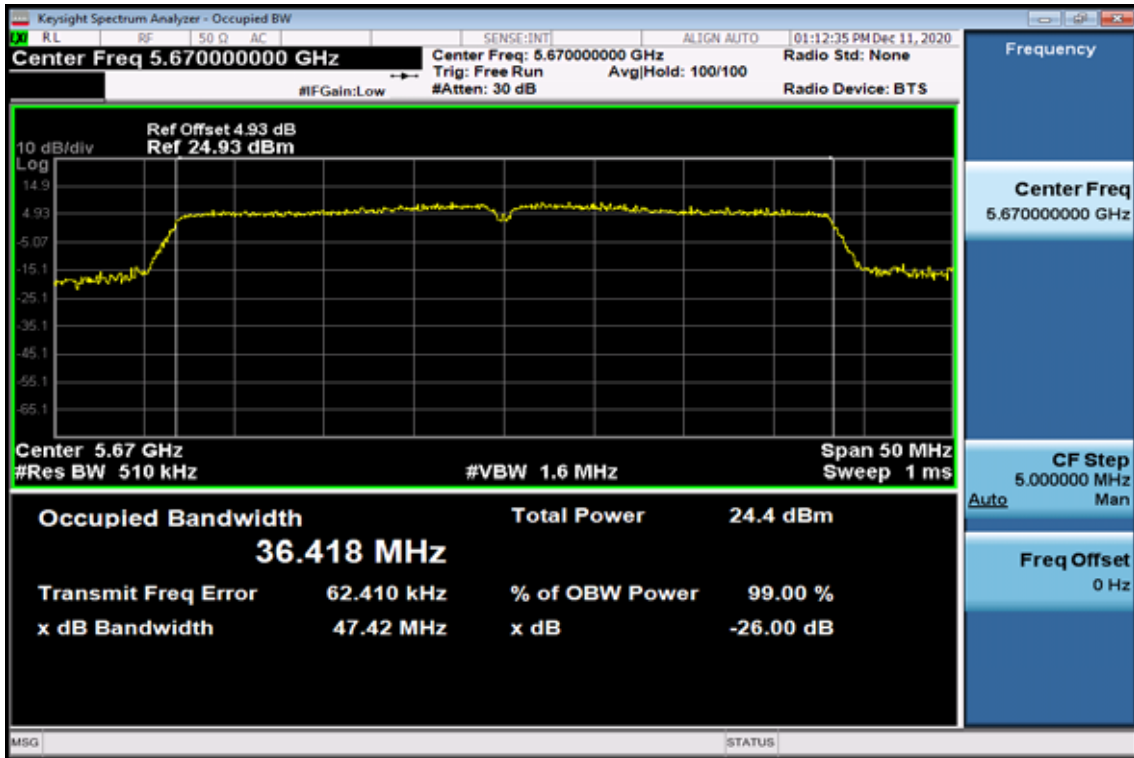
26dB / 99% Band Width Test Data CH-Low



26dB / 99%Band Width Test Data CH-Mid

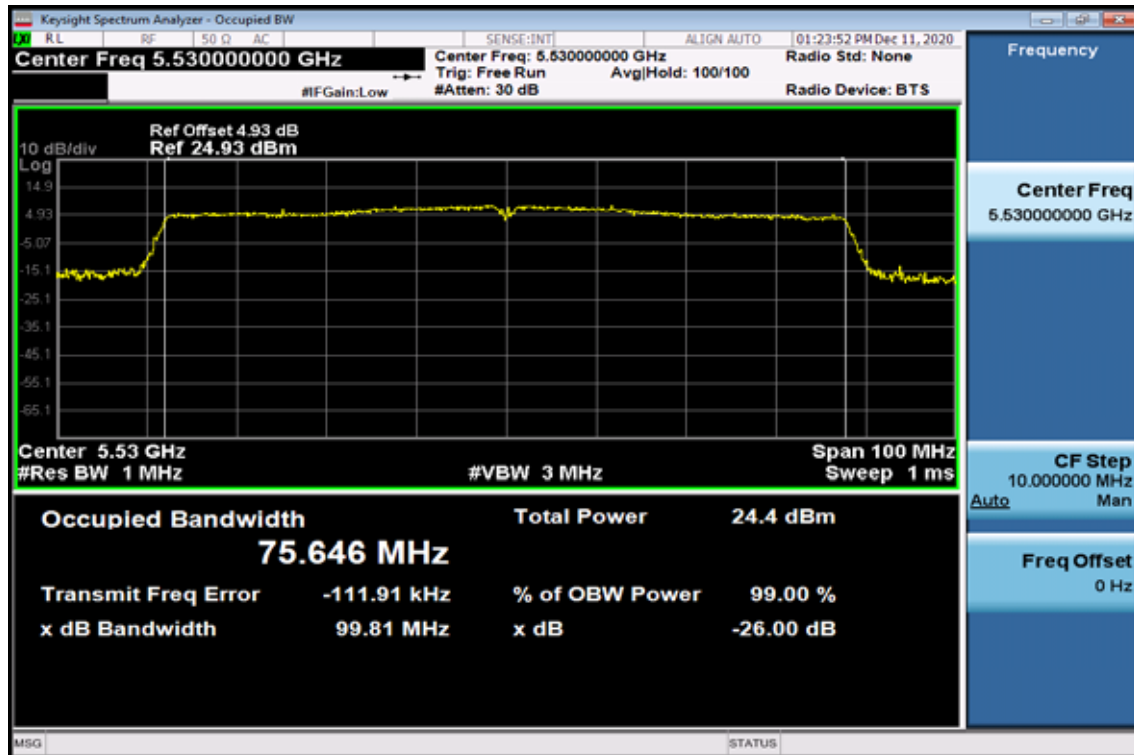


26dB / 99% Band Width Test Data CH-High



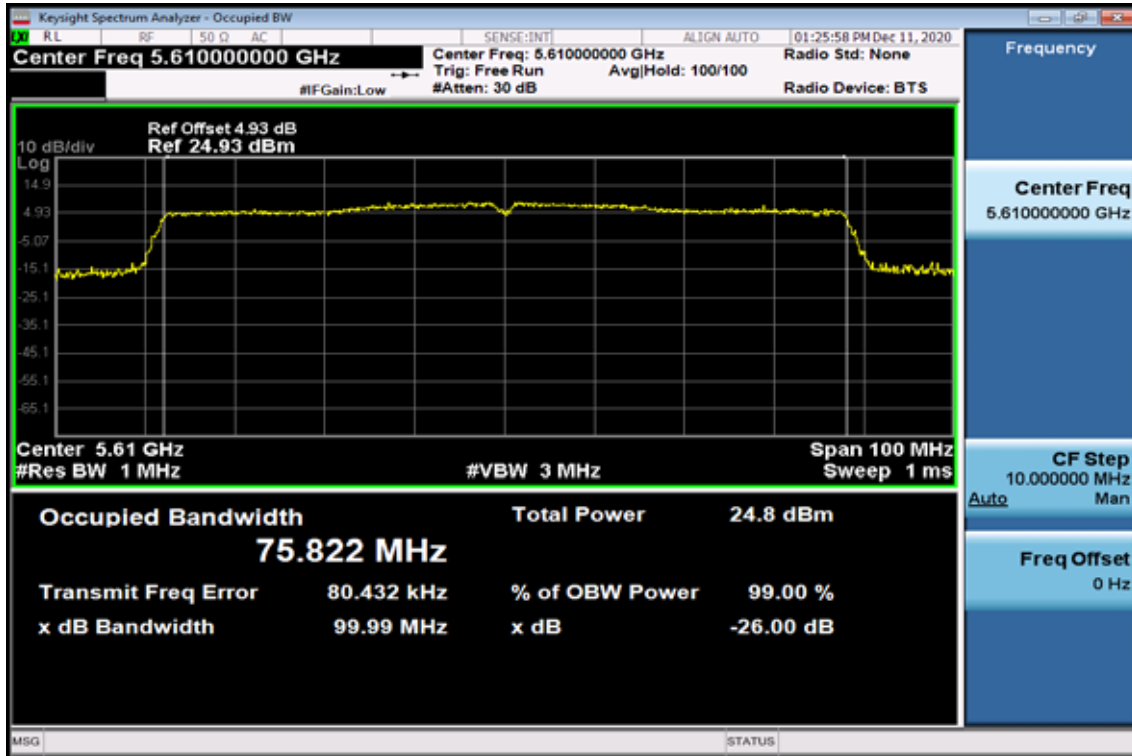
802.11 ac VHT80

26dB / 99% Band Width Test Data CH-Low



802.11 ac VHT80

26dB / 99% Band Width Test Data CH-High



8. 6dB Emission Bandwidth Measurement

8.1. Standard Applicable

According to §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.

8.2. Measurement Procedure

1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as RBW=100kHz, VBW =300MHz, Span= 50MHz, Sweep=auto
4. Mark the peak frequency and -6dB (upper and lower) frequency.
5. Repeat above procedures until all frequency measured were complete.

Refer to section D of KDB Document: KDB 789033 D02 General UNII Test Procedures New Rules v01r03

8.3. Measurement Equipment Used:

Refer to section 6.3 for details.

8.4. Test Set-up:

Refer to section 6.4 for details.

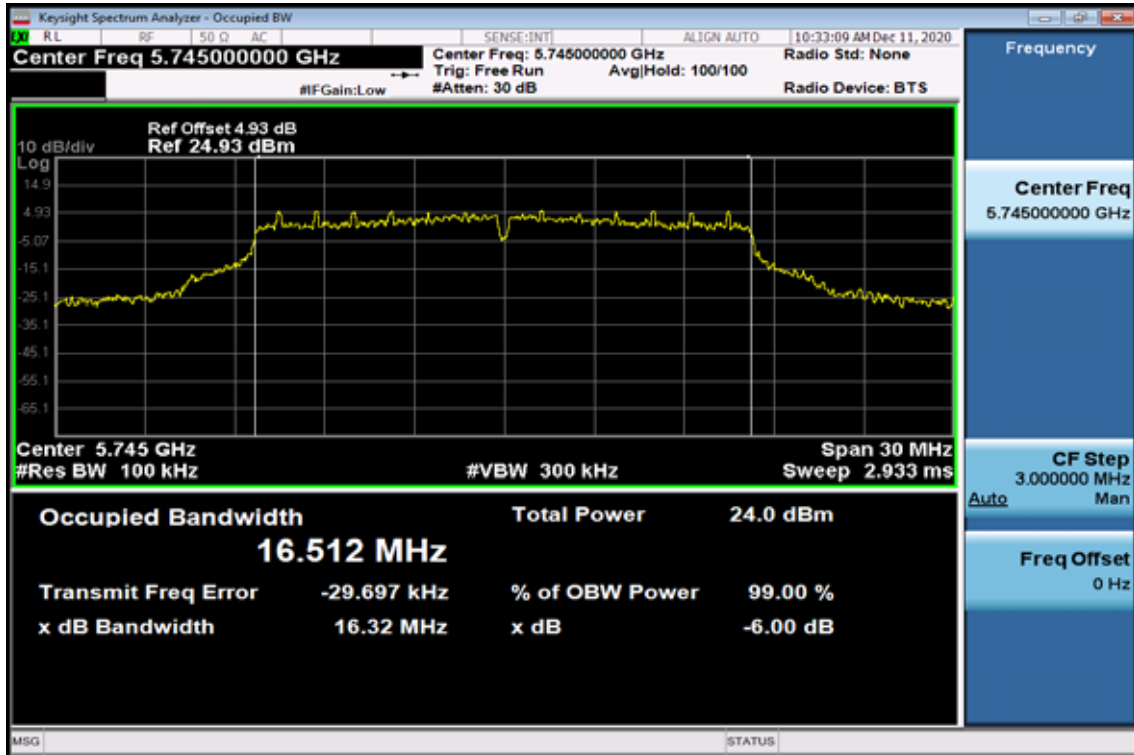
8.5. Measurement Result

Band	Mode	Frequency (MHz)	6dB Bandwidth (MHz)	99% OBW (MHz)	6dB BW Limit (kHz)
UNII-3	11a	5745	16.32	16.51	> 500
		5785	16.29	16.54	> 500
		5825	16.34	16.55	> 500
	HT20	5745	16.85	17.69	> 500
		5785	17.08	17.68	> 500
		5825	17.18	17.72	> 500
	HT40	5755	35.80	36.07	> 500
		5795	35.72	36.08	> 500
	VHT20	5745	17.29	17.67	> 500
		5785	17.29	17.70	> 500
		5825	17.18	17.70	> 500
	VHT40	5755	35.64	36.09	> 500
		5795	35.74	36.09	> 500
	VHT80	5775	75.32	75.28	> 500

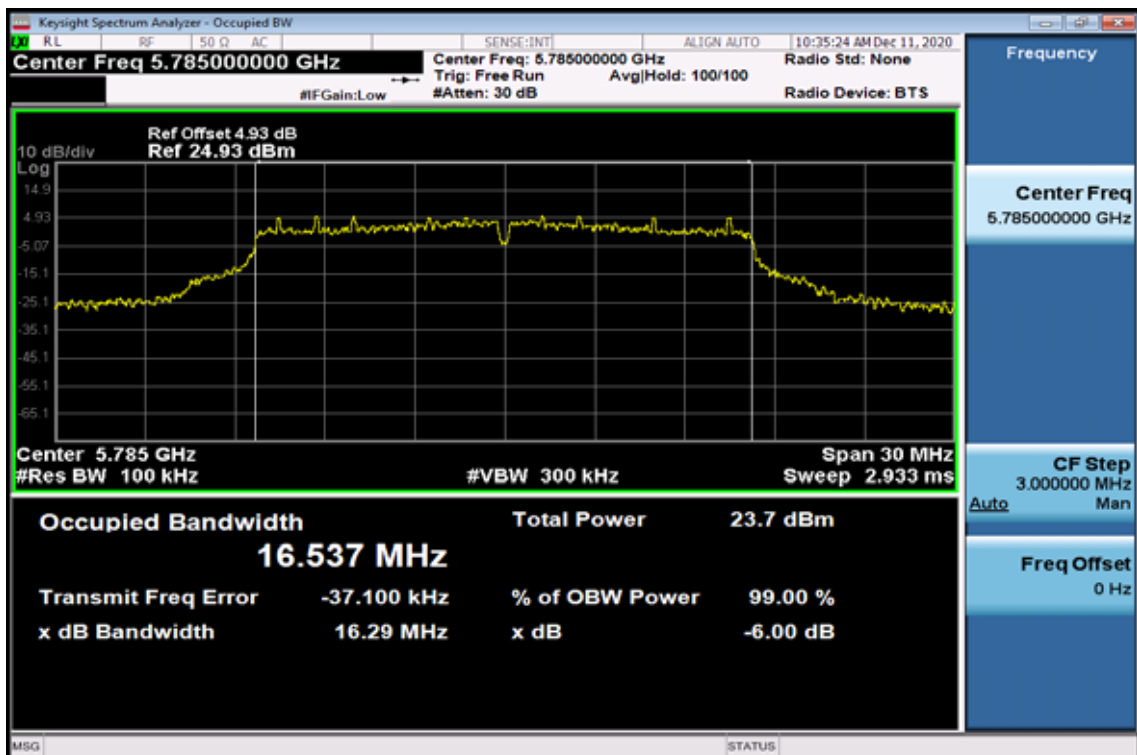
Band UNII-3

802.11a

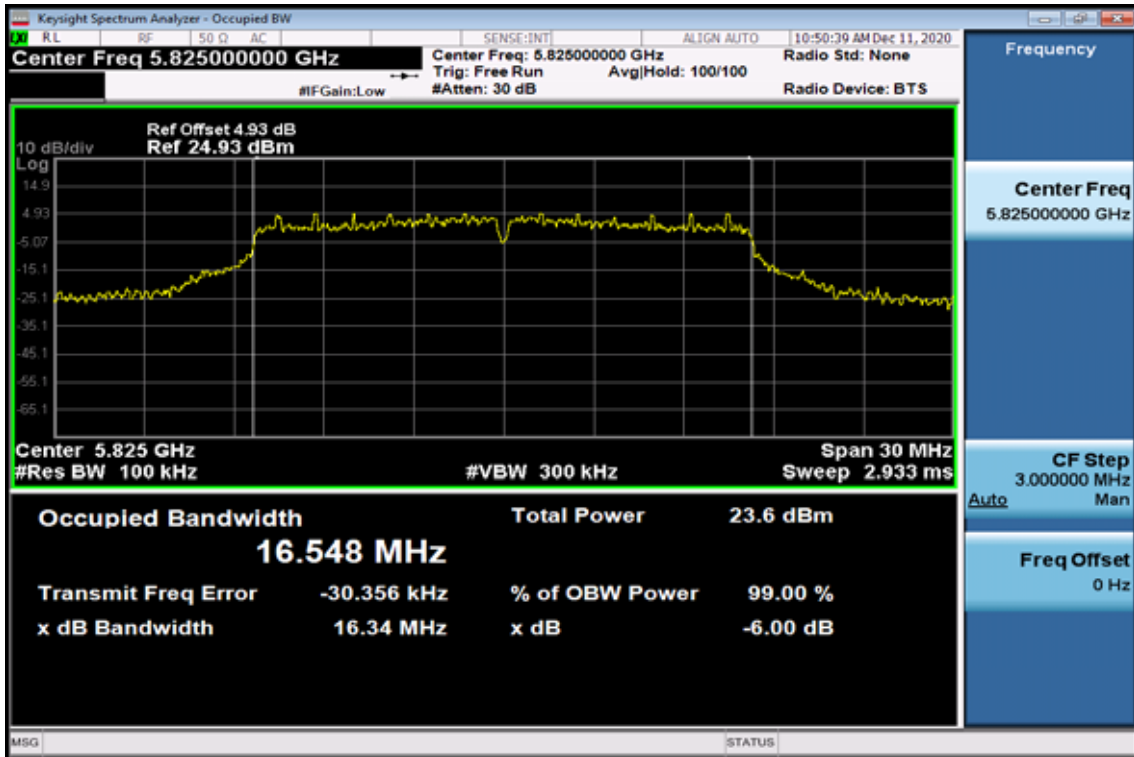
6dB Band Width Test Data CH-Low



6dB Band Width Data CH-Mid

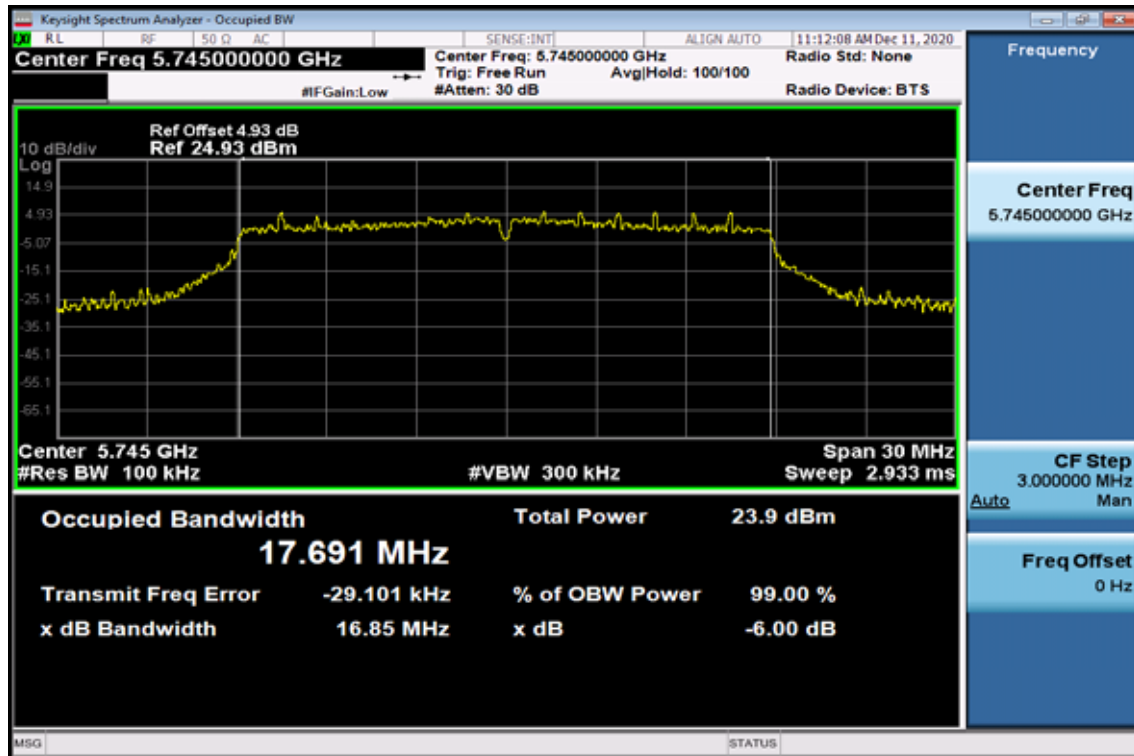


6dB Band Width Data CH-High

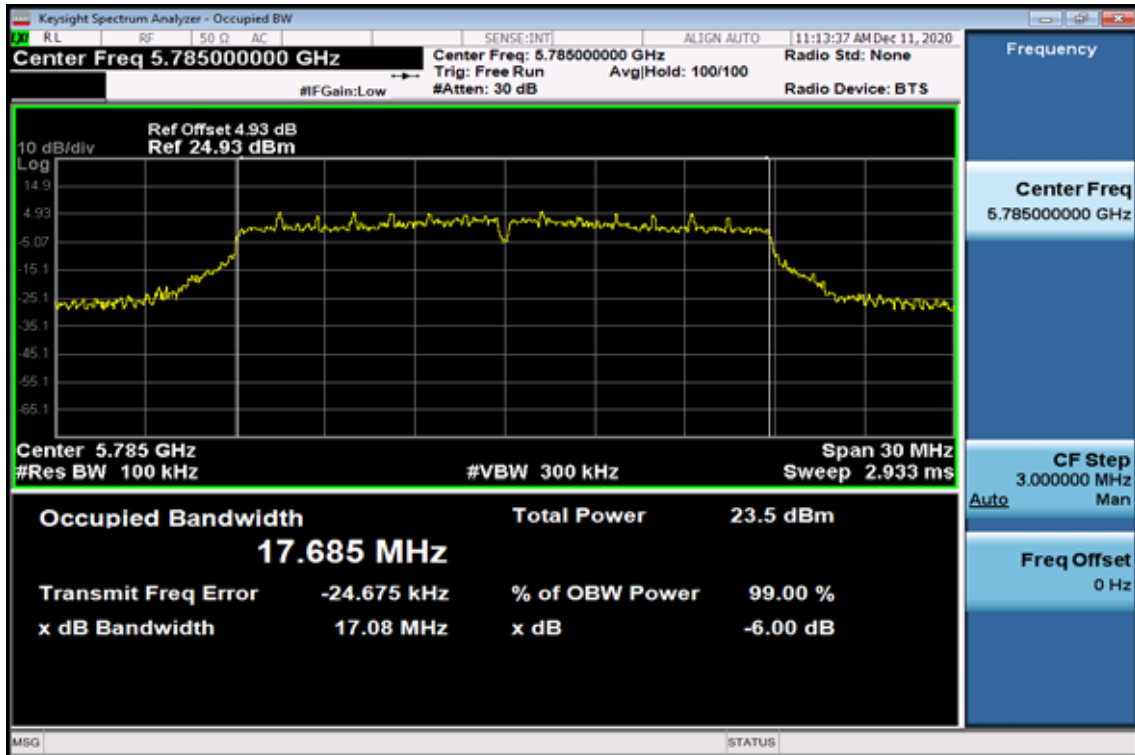


802.11n HT20

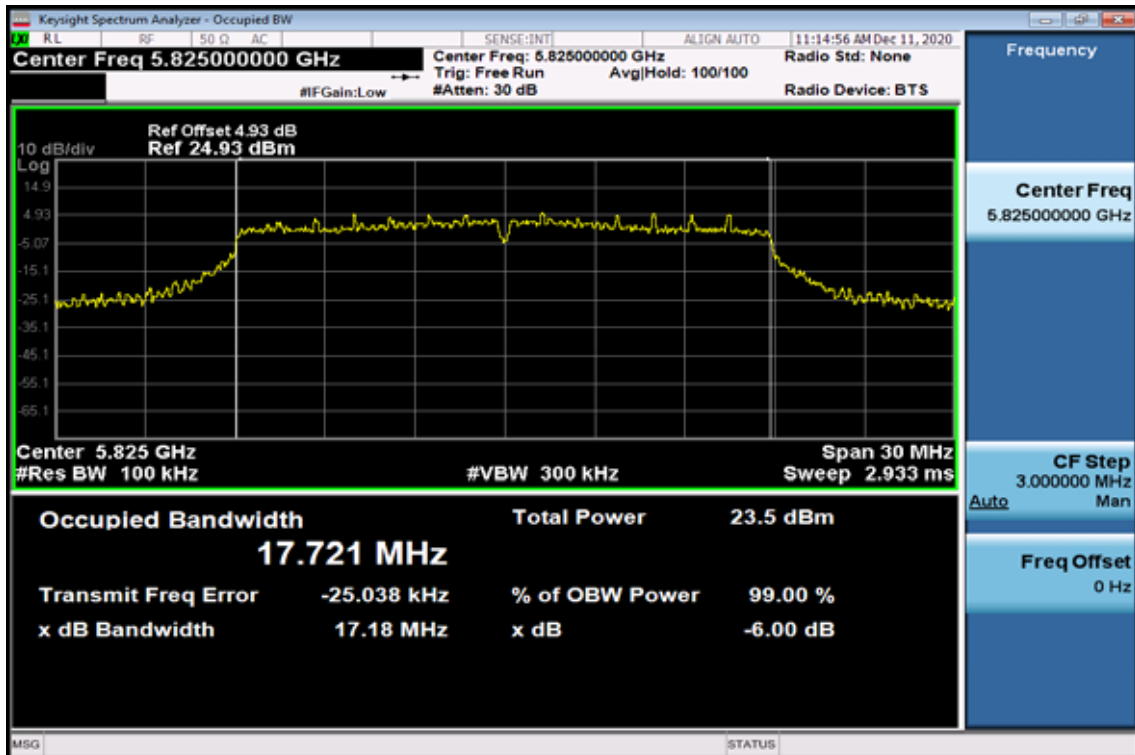
6dB Band Width Data CH-Low



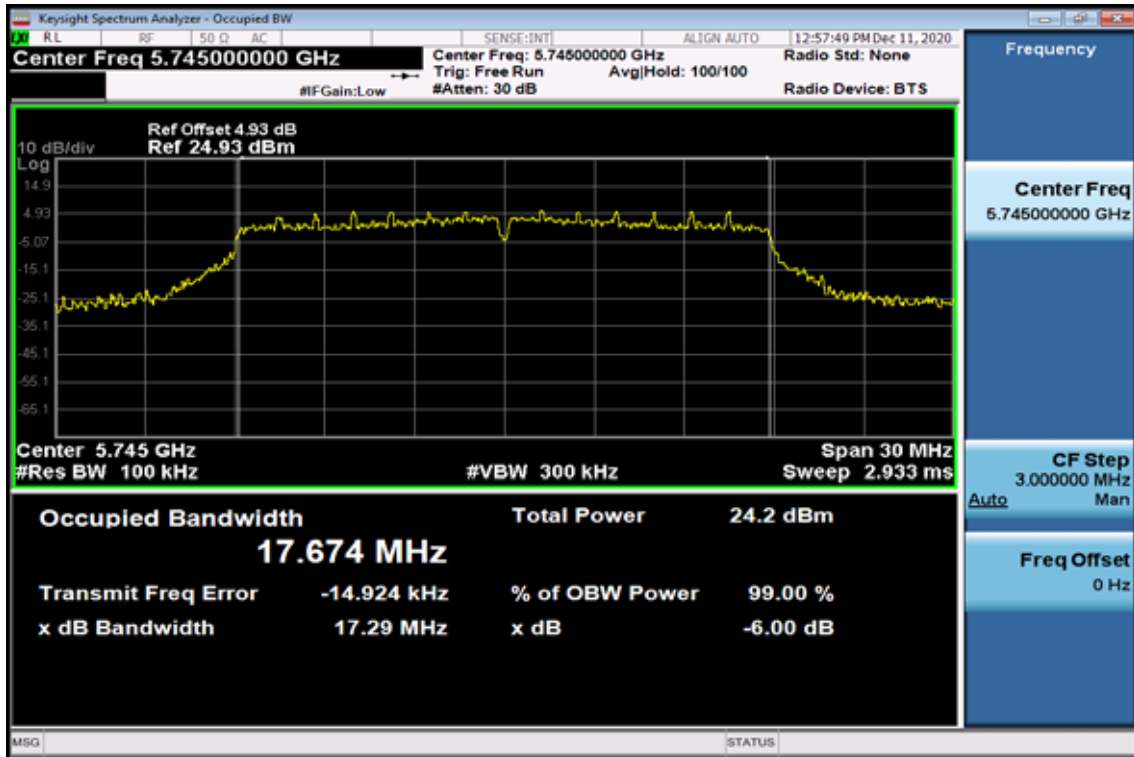
6dB Band Width Data CH-Mid



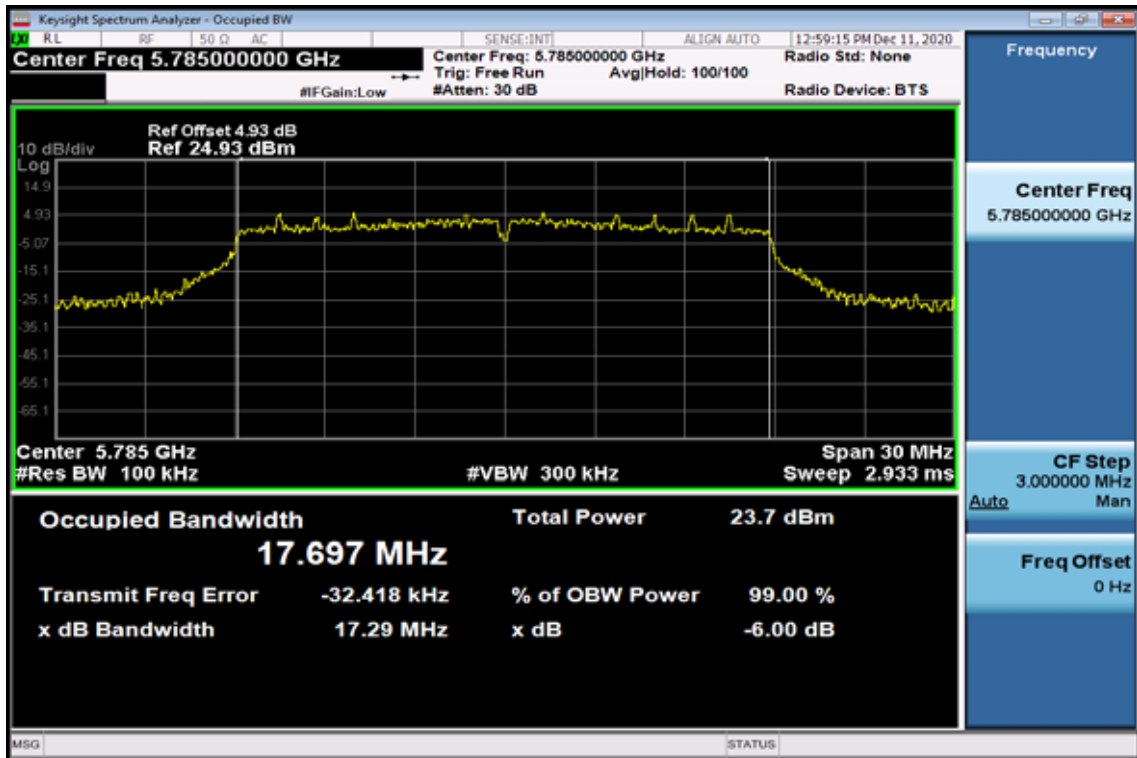
6dB Band Width Data CH-High



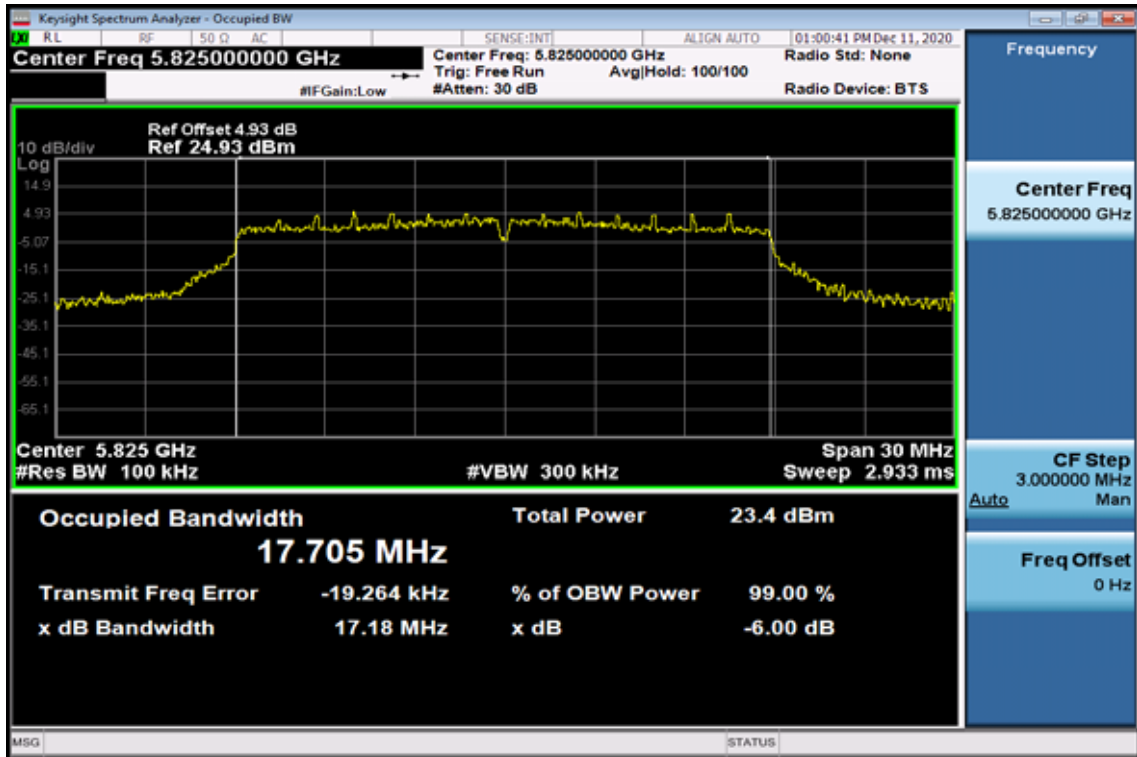
802.11ac VHT20 6dB Band Width Data CH-Low



6dB Band Width Data CH-Mid

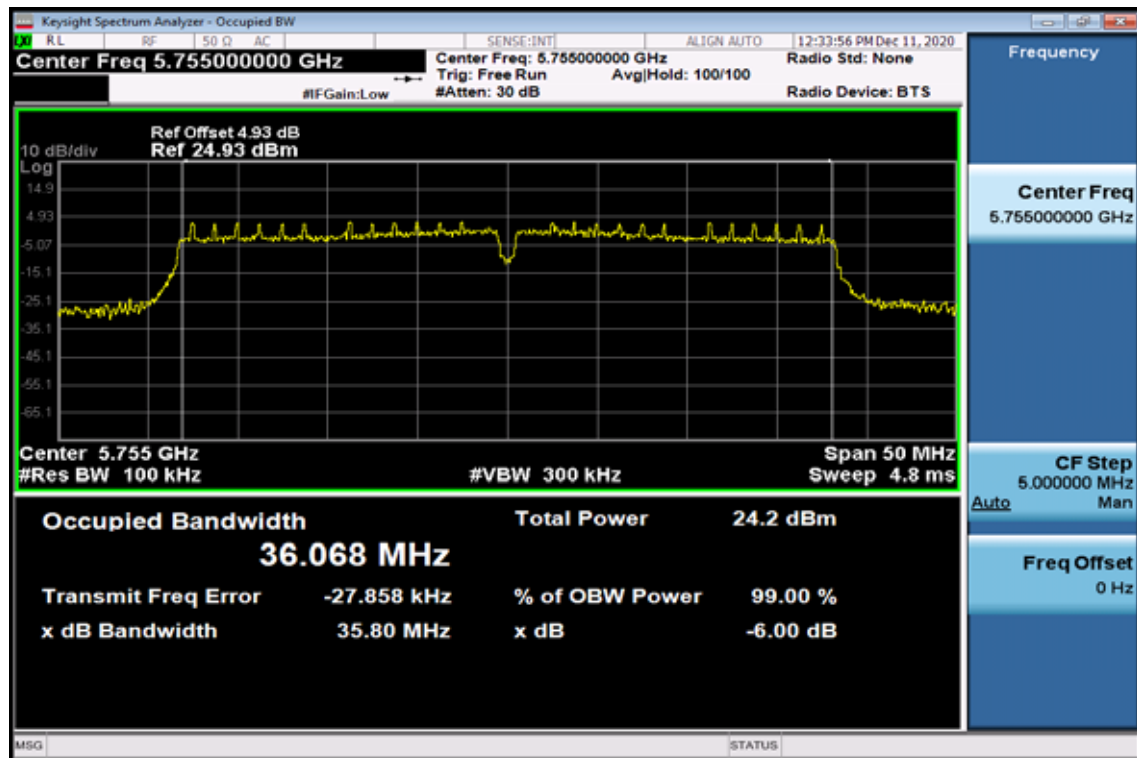


6dB Band Width Data CH-High

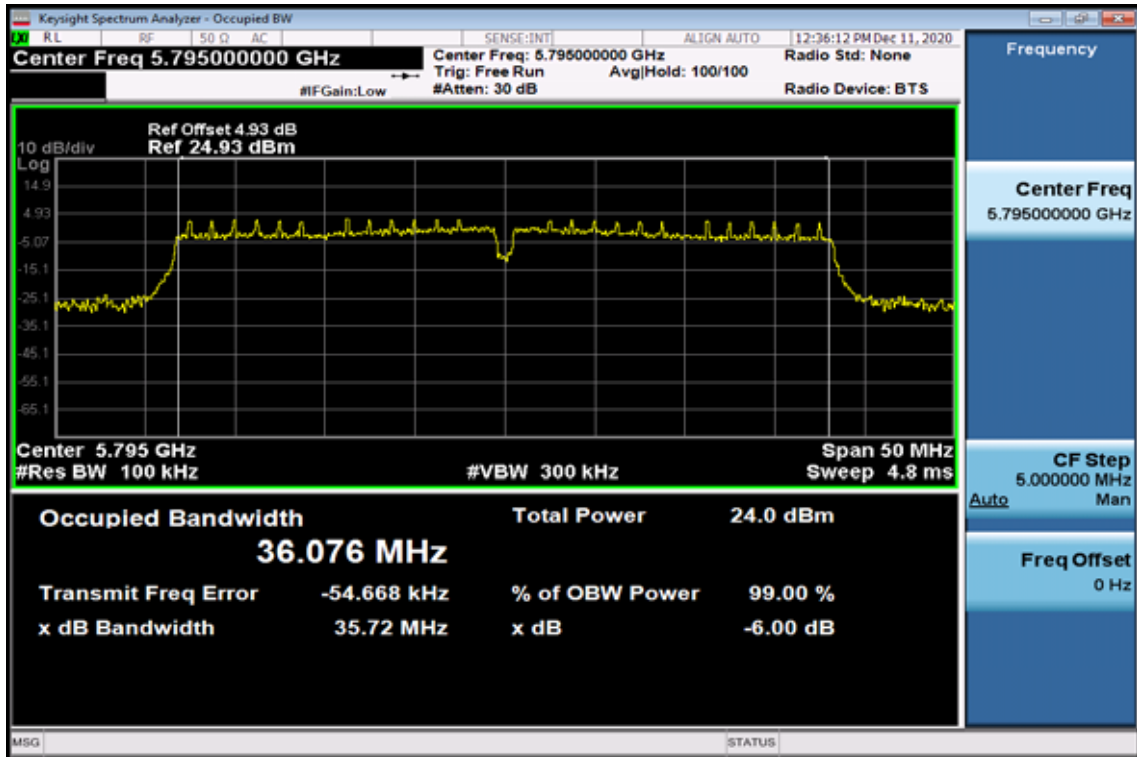


802.11n HT40

6dB Band Width Data CH-Low

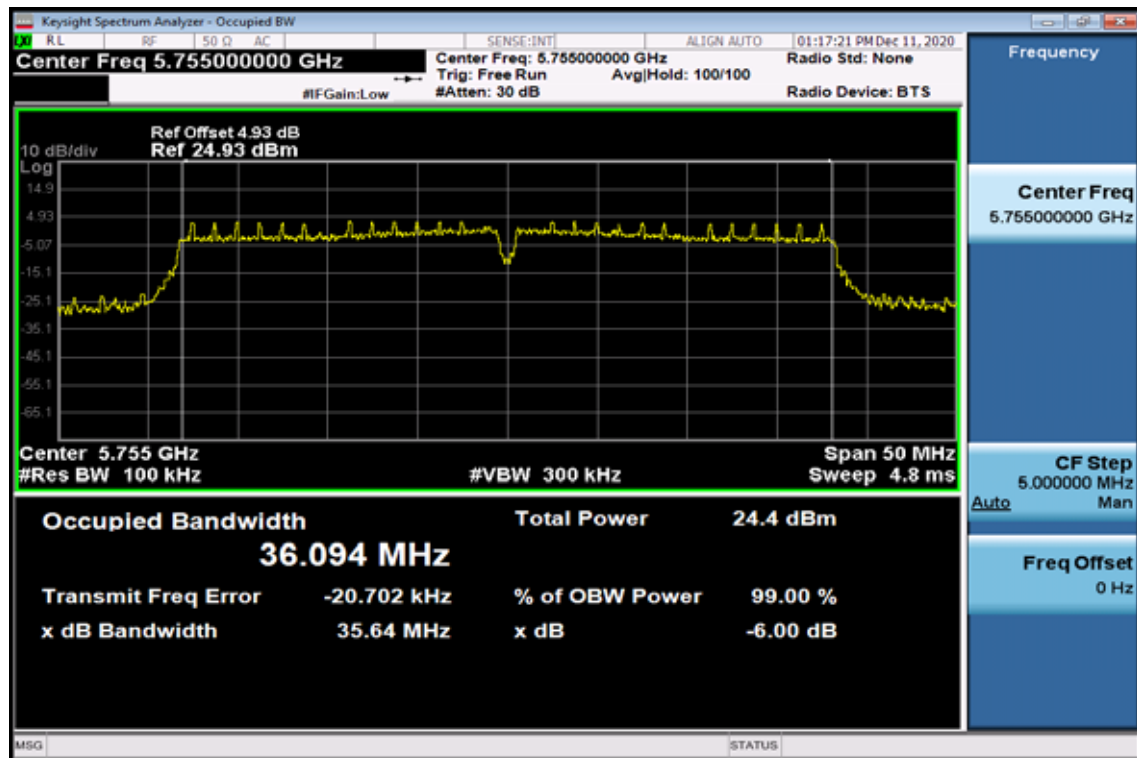


6dB Band Width Data CH-High

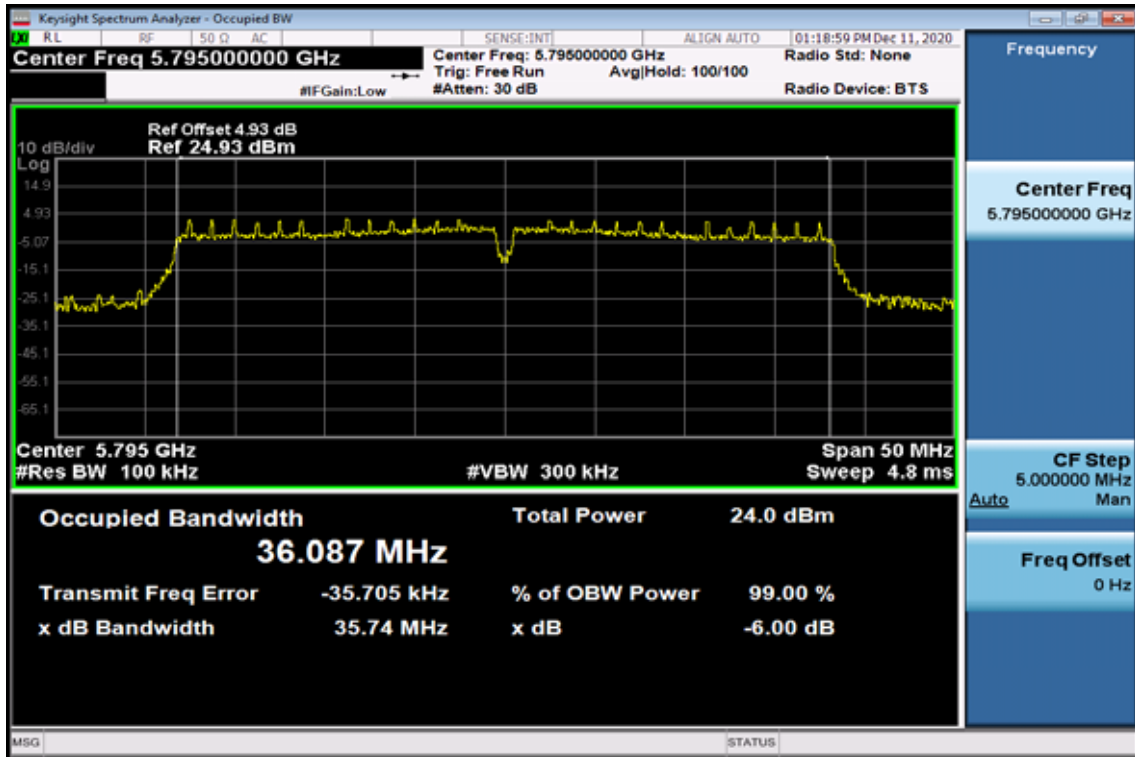


802.11ac VHT40

6dB Band Width Data CH-Low

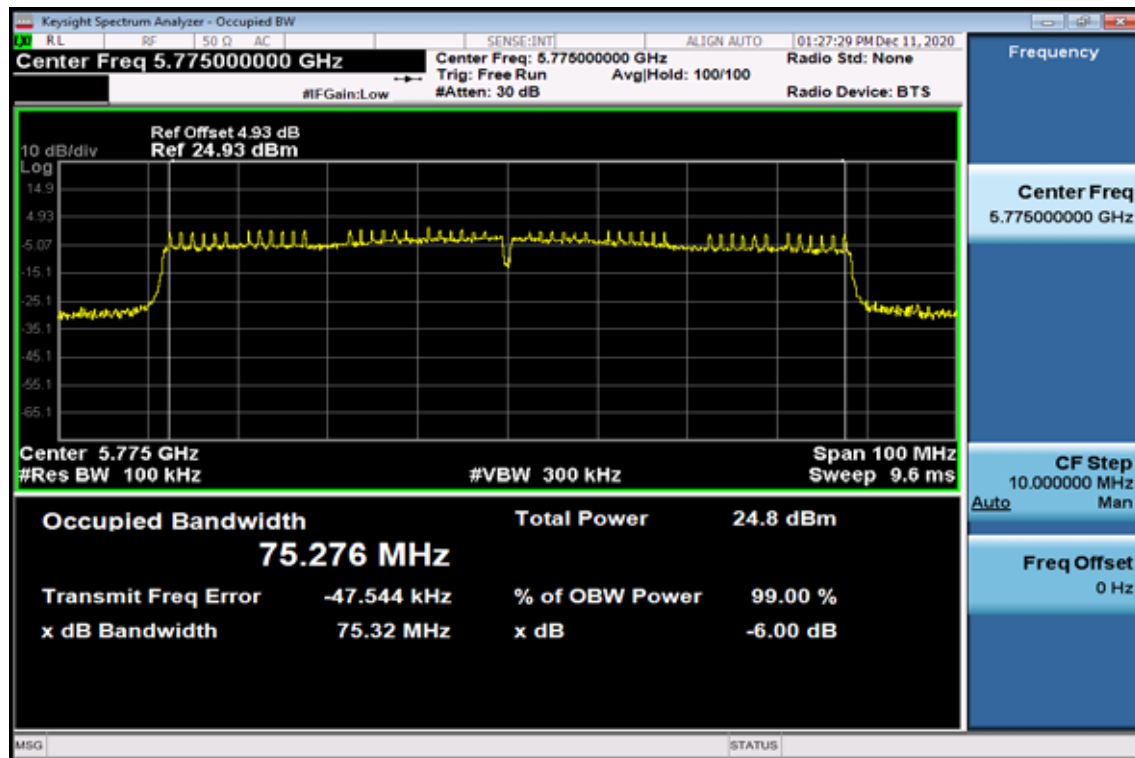


6dB Band Width Data CH-High



802.11 ac VHT80

6dB Band Width Data CH-Low



9. Undesirable emission – Radiated Measurement

9.1. Standard Applicable

According to §15.407(b), Undesirable Emission Limits: Except as shown in Paragraph (b)(7) of this section, the peak emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (5) The above emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in Section 15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in Section 15.207.
- (7) The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.
- (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

§15.205- RESTRICTED BANDS OF OPERATIONS

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 -	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.52525	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.7 - 156.9	3260 - 3267	23.6 - 24.0
12.29 - 12.293	162.0125 - 167.17	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	167.72 - 173.2	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	240 - 285	3600 - 4400	(²)
13.36 - 13.41	322 - 335.4		

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

§15.209- RADIATED EMISSION LIMITS: GENERAL REQUIREMENTS

FCC PART 15.209

MEASURING DISTANCE OF 3 METER		
FREQUENCY RANGE (MHz)	FIELD STRENGTH (Microvolts/m)	FIELD STRENGTH (dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

9.2. EUT Setup

1. The radiated emission tests were performed in the 3 meter open-test site, using the setup in accordance with the ANSI C63.10: 2013
2. The EUT was put in the front of the test table. The host PC system was placed on the center of the back edge on the test table. The peripherals like modem, monitor printer, K/B, and mouse were placed on the side of the host PC system. The rear of the EUT and peripherals were placed flushed with the rear of the tabletop.
3. The keyboard was placed directly in the front of the monitor, flushed with the front tabletop. The mouse was placed next to the Keyboard, flushed with the back of keyboard.
4. The spacing between the peripherals was 10 centimeters.
5. External I/O cables were draped along the edge of the test table and bundle when necessary.
6. The host PC system was connected with 120Vac/60Hz power source.

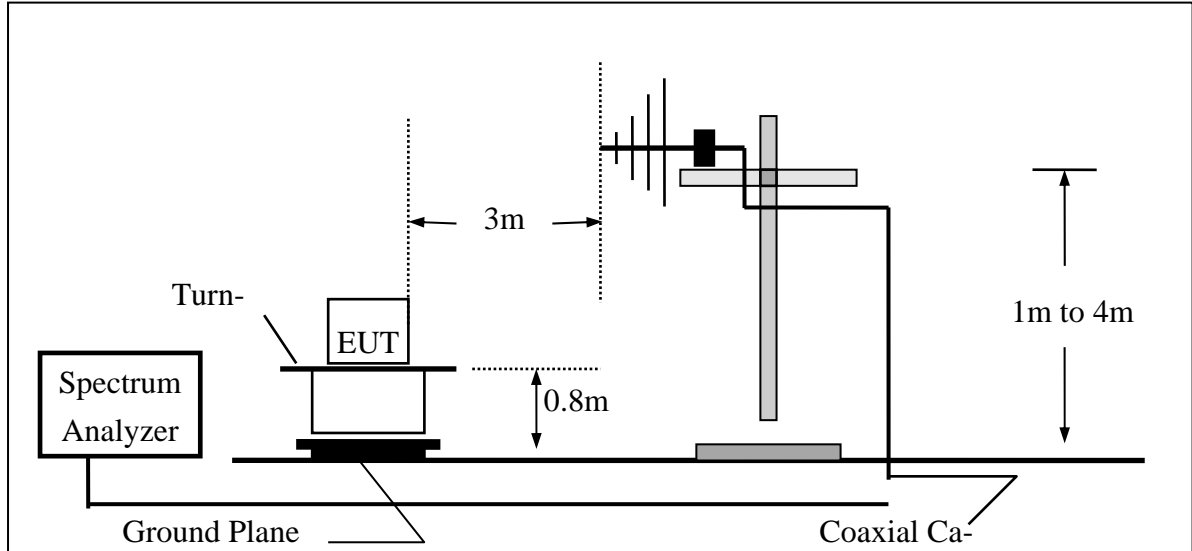
9.3. Measurement Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. The turn table shall rotate 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until all frequency measured were complete.

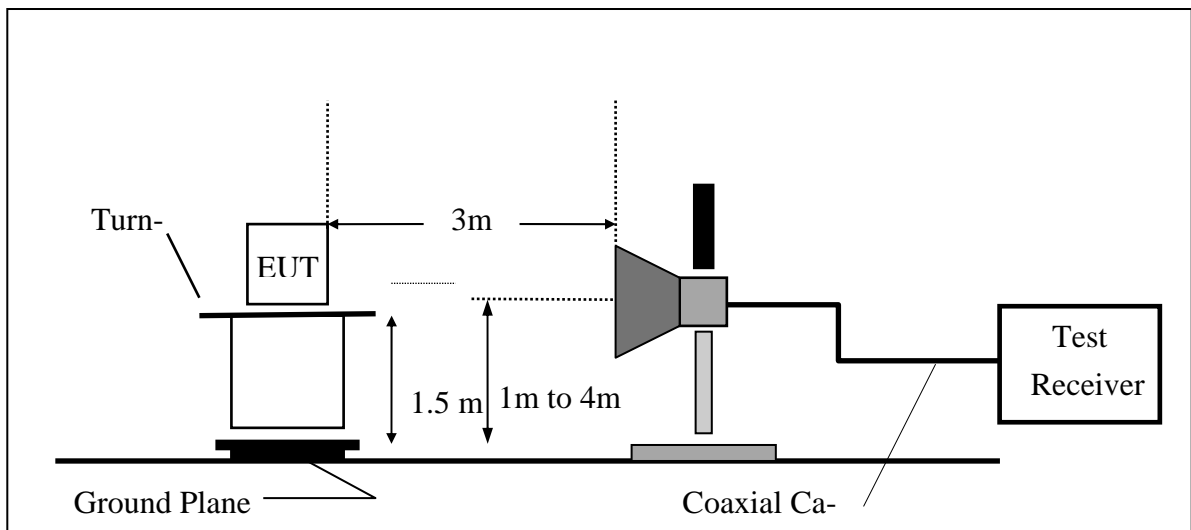
Refer to section F of KDB Document: KDB 789033 D02 General U-NII Test Procedures New Rules v02r01

9.4. Test SET-UP (Block Diagram of Configuration)

(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(B) Radiated Emission Test Set-UP Frequency Over 1 GHz



9.5. Measurement Equipment Used:

Location	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
CHAMBER 19	SIGNAL ANALYZER	R&S	FSV40	101919	08/13/2020	08/13/2021
CHAMBER 19	EMI RECEIVER	R&S	ESR3	102461	05/05/2020	05/05/2021
CHAMBER 19	LOOP ANTENNA	EM	EM-6879	271	05/21/2020	05/21/2021
CHAMBER 19	BILOG ANTENNA (30MHZ-1GHZ)	SCHWARZBECK	VULB9168 w 6DB ATT.	736	02/11/2020	02/11/2021
CHAMBER 19	HORN ANTENNA (1GHZ-18GHZ)	ETS LINDGREN	3117	00218718	09/25/2020	09/25/2021
CHAMBER 19	HORN ANTENNA (18GHZ-26GHZ)	COM-POWER	AH-826	081001	11/23/2020	11/23/2021
CHAMBER 19	HORN ANTENNA (26GHZ-40GHZ)	COM-POWER	AH-640	100A	03/13/2020	03/13/2021
CHAMBER 19	PREAMPLIFIER (9KHZ-1GHZ)	HP	8447F	3113A04621	06/19/2020	06/19/2021
CHAMBER 19	PREAMPLIFIER (1GHZ - 26GHZ)	EM	EM01M26G	060681	05/04/2020	05/04/2021
CHAMBER 19	PREAMPLIFIER (26GHZ-40GHZ)	MITEQ	JS4-26004000- 27-5A	818471	05/04/2020	05/04/2021
CHAMBER 19	RF CABLE (9KHZ-18GHZ)	HUBER SUHNER & WOKEN	SUCOFLEX 104A & 18GHZ SMA(M)-SM A(M)-10M	MY817/4A & 20200525	12/25/2020	12/25/2021
CHAMBER 19	RF CABLE (18GHZ-40GHZ)	HUBER SU- HNER	SUCOFLEX 102	27963/2&374 21/2	11/19/2020	11/19/2021
CHAMBER 19	SIGNAL GENERATOR	ANRITSU	MG3692A	20311	01/03/2021	01/03/2022
CHAMBER 19	TEST SOFTWARE	AUDIX	E3 VER:6.12023	N/A	N/A	N/A

9.6. Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

9.7. Measurement Result

Refer to attach tabular data sheets.

NOTE:

The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 100kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz. And RBW 1MHz for frequency above 1GHz.

Radiated Spurious Emission Measurement Result (below 1GHz)

(Band UNII-1 / Band UNII-2A, 802.11a mode)

Operation Mode	TX MODE	Test Date	2020/12/30
Channel Number	CH Low	Test By	Barry
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	720.64	30.71	3.27	33.98	46.00	-12.02	Peak	VERTICAL
2	779.81	30.02	4.39	34.41	46.00	-11.59	Peak	VERTICAL
3	821.52	30.03	5.04	35.07	46.00	-10.93	Peak	VERTICAL
4	851.59	30.01	5.37	35.38	46.00	-10.62	Peak	VERTICAL
5	889.42	29.85	5.92	35.77	46.00	-10.23	Peak	VERTICAL
6	925.31	29.68	6.81	36.49	46.00	-9.51	Peak	VERTICAL
1	595.51	35.17	1.38	36.55	46.00	-9.45	Peak	HORIZONTAL
2	600.36	42.41	1.58	43.99	46.00	-2.01	Peak	HORIZONTAL
3	604.24	34.92	1.67	36.59	46.00	-9.41	Peak	HORIZONTAL
4	611.03	33.86	1.78	35.64	46.00	-10.36	Peak	HORIZONTAL
5	814.73	30.58	4.74	35.32	46.00	-10.68	Peak	HORIZONTAL
6	944.71	29.52	7.11	36.63	46.00	-9.37	Peak	HORIZONTAL

Remark:

- 1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9kHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/12/30
Channel Number	CH Mid	Test By	Barry
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	600.36	31.50	1.58	33.08	46.00	-12.92	Peak	VERTICAL
2	727.43	30.32	3.49	33.81	46.00	-12.19	Peak	VERTICAL
3	772.05	30.45	4.27	34.72	46.00	-11.28	Peak	VERTICAL
4	835.10	30.23	5.16	35.39	46.00	-10.61	Peak	VERTICAL
5	901.06	34.63	6.17	40.80	46.00	-5.20	Peak	VERTICAL
6	941.80	29.99	7.09	37.08	46.00	-8.92	Peak	VERTICAL
1	599.39	40.31	1.55	41.86	46.00	-4.14	Peak	HORIZONTAL
2	607.15	35.84	1.74	37.58	46.00	-8.42	Peak	HORIZONTAL
3	614.91	35.27	1.72	36.99	46.00	-9.01	Peak	HORIZONTAL
4	774.96	30.49	4.27	34.76	46.00	-11.24	Peak	HORIZONTAL
5	912.70	31.55	6.39	37.94	46.00	-8.06	Peak	HORIZONTAL
6	931.13	31.41	6.95	38.36	46.00	-7.64	Peak	HORIZONTAL

Remark:

- 1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9kHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/12/30
Channel Number	CH High	Test By	Barry
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	600.36	30.86	1.58	32.44	46.00	-13.56	Peak	VERTICAL
2	684.75	30.05	2.73	32.78	46.00	-13.22	Peak	VERTICAL
3	739.07	30.15	3.72	33.87	46.00	-12.13	Peak	VERTICAL
4	833.16	29.87	5.14	35.01	46.00	-10.99	Peak	VERTICAL
5	900.09	30.51	6.17	36.68	46.00	-9.32	Peak	VERTICAL
6	921.43	30.84	6.79	37.63	46.00	-8.37	Peak	VERTICAL
1	596.48	38.82	1.42	40.24	46.00	-5.76	Peak	HORIZONTAL
2	599.39	40.51	1.55	42.06	46.00	-3.94	Peak	HORIZONTAL
3	605.21	35.47	1.69	37.16	46.00	-8.84	Peak	HORIZONTAL
4	611.03	34.15	1.78	35.93	46.00	-10.07	Peak	HORIZONTAL
5	863.23	30.55	5.44	35.99	46.00	-10.01	Peak	HORIZONTAL
6	900.09	31.43	6.17	37.60	46.00	-8.40	Peak	HORIZONTAL

Remark:

- 1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9kHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

**Radiated Spurious Emission Measurement Result (below 1GHz)
(Band UNII-1 / Band UNII-2A, 802.11n HT20 mode)**

Operation Mode	TX MODE	Test Date	2020/12/30
Channel Number	CH Low	Test By	Barry
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	600.36	34.31	1.58	35.89	46.00	-10.11	Peak	VERTICAL
2	659.53	29.82	2.44	32.26	46.00	-13.74	Peak	VERTICAL
3	747.80	30.34	3.93	34.27	46.00	-11.73	Peak	VERTICAL
4	807.94	30.36	4.62	34.98	46.00	-11.02	Peak	VERTICAL
5	899.12	31.81	6.15	37.96	46.00	-8.04	Peak	VERTICAL
6	952.47	30.90	7.25	38.15	46.00	-7.85	Peak	VERTICAL
1	600.36	42.31	1.58	43.89	46.00	-2.11	Peak	HORIZONTAL
2	665.35	30.52	2.27	32.79	46.00	-13.21	Peak	HORIZONTAL
3	774.96	30.44	4.27	34.71	46.00	-11.29	Peak	HORIZONTAL
4	854.50	30.34	5.44	35.78	46.00	-10.22	Peak	HORIZONTAL
5	888.45	30.56	5.91	36.47	46.00	-9.53	Peak	HORIZONTAL
6	953.44	29.52	7.25	36.77	46.00	-9.23	Peak	HORIZONTAL

Remark:

- 1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9kHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/12/30
Channel Number	CH Mid	Test By	Barry
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	600.36	31.24	1.58	32.82	46.00	-13.18	Peak	VERTICAL
2	694.45	30.02	2.96	32.98	46.00	-13.02	Peak	VERTICAL
3	758.47	29.98	4.35	34.33	46.00	-11.67	Peak	VERTICAL
4	829.28	29.94	5.13	35.07	46.00	-10.93	Peak	VERTICAL
5	900.09	31.13	6.17	37.30	46.00	-8.70	Peak	VERTICAL
6	933.07	30.39	7.01	37.40	46.00	-8.60	Peak	VERTICAL
1	596.48	35.38	1.42	36.80	46.00	-9.20	Peak	HORIZONTAL
2	599.39	40.65	1.55	42.20	46.00	-3.80	Peak	HORIZONTAL
3	612.00	33.34	1.77	35.11	46.00	-10.89	Peak	HORIZONTAL
4	763.32	30.33	4.36	34.69	46.00	-11.31	Peak	HORIZONTAL
5	861.29	30.72	5.45	36.17	46.00	-9.83	Peak	HORIZONTAL
6	960.23	31.77	7.29	39.06	54.00	-14.94	Peak	HORIZONTAL

Remark:

- 1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9kHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/12/30
Channel Number	CH High	Test By	Barry
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	600.36	38.92	1.58	40.50	46.00	-5.50	Peak	VERTICAL
2	677.96	31.44	2.54	33.98	46.00	-12.02	Peak	VERTICAL
3	749.74	29.95	3.97	33.92	46.00	-12.08	Peak	VERTICAL
4	776.90	30.60	4.33	34.93	46.00	-11.07	Peak	VERTICAL
5	817.64	31.09	4.87	35.96	46.00	-10.04	Peak	VERTICAL
6	900.09	30.83	6.17	37.00	46.00	-9.00	Peak	VERTICAL
1	599.39	42.14	1.55	43.69	46.00	-2.31	Peak	HORIZONTAL
2	605.21	38.51	1.69	40.20	46.00	-5.80	Peak	HORIZONTAL
3	611.03	34.16	1.78	35.94	46.00	-10.06	Peak	HORIZONTAL
4	622.67	33.76	1.75	35.51	46.00	-10.49	Peak	HORIZONTAL
5	806.00	31.15	4.60	35.75	46.00	-10.25	Peak	HORIZONTAL
6	891.36	30.91	5.96	36.87	46.00	-9.13	Peak	HORIZONTAL

Remark:

- 1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9kHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.