TEST REPORT

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1. Report No : DRTFCC2002-0046(1)
2. Customer
   - Name : LG Electronics USA, Inc.
   - Address : 1000 Sylvan Ave. Englewood Cliffs, New Jersey, United States 07632
3. Use of Report : FCC Original Grant
4. Product Name / Model Name : Mobile Phone / LM-V600EA
   FCC ID : ZNFV600EA
5. Test Method Used : KDB789033 D02v02r01
   Test Specification : FCC Part 15.407 Subpart E
6. Date of Test : 2020.01.06 ~ 2020.02.10
7. Testing Environment : Refer to appended test report.
8. Test Result : Refer to the attached test result.

Affirmation	Tested by Name : JungWoo Kim (Signature)	Reviewed by Name : JaeJin Lee (Signature)

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2020 . 02 . 24 .

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If this report is required to confirmation of authenticity, please contact to report@dtnc.net

Test Report Version

Test Report No.	Date	Description	Tested by	Reviewed by
DRTFCC2002-0046	Feb. 14, 2020	Initial issue	JungWoo Kim	JaeJin Lee
DRTFCC2002-0046(1)	Feb. 24, 2020	Revised the section 8.4	JungWoo Kim	JaeJin Lee

CONTENTS

1. EUT DESCRIPTION

FCC Equipment Class	Unlicensed National Information Infrastructure (UNII)
Product	Mobile Phone
Model Name	LM-V600EA
Add Model Name	LMV600EA, V600EA
Power Supply	DC 3.87 V
Modulation type	OFDM, OFDMA
Antenna Specification	**Antenna type:** PIFA Antenna **Antenna gain:** Refer to the clause 7 in test report.

5GHz Band	Mode	Tx frequency (MHz)	Max power(dBm)
U-NII 1	802.11ax(HE20)_OFDMA	5180 ~ 5240	11.84
	802.11ax(HE20)_OFDM	5180 ~ 5240	**17.70**
	802.11ax(HE40)_OFDMA	5190 ~ 5230	12.10
	802.11ax(HE40)_OFDM	5190 ~ 5230	16.85
	802.11ax(HE80)_OFDMA	5210	12.06
	802.11ax(HE80)_OFDM	5210	13.43
U-NII 2A	802.11ax(HE20)_OFDMA	5260 ~ 5320	11.90
	802.11ax(HE20)_OFDM	5260 ~ 5320	**17.64**
	802.11ax(HE40)_OFDMA	5270 ~ 5310	12.17
	802.11ax(HE40)_OFDM	5270 ~ 5310	16.85
	802.11ax(HE80)_OFDMA	5290	12.12
	802.11ax(HE80)_OFDM	5290	13.32
U-NII 2C	802.11ax(HE20)_OFDMA	5500 ~ 5720	12.03
	802.11ax(HE20)_OFDM	5500 ~ 5720	**17.69**
	802.11ax(HE40)_OFDMA	5510 ~ 5710	12.47
	802.11ax(HE40)_OFDM	5510 ~ 5710	17.04
	802.11ax(HE80)_OFDMA	5530 ~ 5690	12.35
	802.11ax(HE80)_OFDM	5530 ~ 5690	15.64
U-NII 3	802.11ax(HE20)_OFDMA	5745 ~ 5825	11.98
	802.11ax(HE20)_OFDM	5745 ~ 5825	**17.59**
	802.11ax(HE40)_OFDMA	5755 ~ 5795	12.44
	802.11ax(HE40)_OFDM	5755 ~ 5795	17.04
	802.11ax(HE80)_OFDMA	5775	12.24
	802.11ax(HE80)_OFDM	5775	15.29

2. Information about test items

2.1 Transmitting configuration of EUT

Mode	SISO		MIMO (CDD)	MIMO (SDM)
	Ant 1	Ant 2	Ant 1 & 2	Ant 1 & 2
	Data rate			
802.11ax(HE20)	MCS 0 ~ 11(1SS)	MCS 0 ~ 11(1SS)	MCS 0 ~ 11(1SS)	MCS 0 ~ 11(2SS)
802.11ax(HE40)	MCS 0 ~ 11(1SS)	MCS 0 ~ 11(1SS)	MCS 0 ~ 11(1SS)	MCS 0 ~ 11(2SS)
802.11ax(HE80)	MCS 0 ~ 11(1SS)	MCS 0 ~ 11(1SS)	MCS 0 ~ 11(1SS)	MCS 0 ~ 11(2SS)

Note1: SDM = Spatial Diversity Multiplexing, CDD = Cycle Delay Diversity, SS = Spatial Streams

Note2: This device supports WiFi DBS(dual-band simultaneous) transmission operation, which allows for two SISO channels to operate independent of one another in the 2.4GHz and 5GHz bands simultaneously on each antenna. (Ant 1: 2.4GHz band transmitting & ANT 2: 5GHz band transmitting + Ant 1 : 2.4G/5G bands transmitting & Ant 2 : 2.4G/5G bands transmitting) And the test results for WiFi DBS were included in 802.11a/n(HT20) /n(HT40) /ac(VHT20) /ac(VHT40) /ac(VHT80) UNII-WLAN test report.

2.2 Tested Channel Information

5GHz Band	802.11ax(HE20)		
	Channel	Frequency [MHz]	Tones(RU)
U-NII 1	36	5180	26(0, 4, 8) 52(37, 38, 40) 106(53, 54) 242(61) SU
	40	5200	
	48	5240	
U-NII 2A	52	5260	
	60	5300	
	64	5320	
U-NII 2C	100	5500	
	120	5600	
	144	5720	
U-NII 3	149	5745	
	157	5785	
	165	5825	
5GHz Band	**802.11ax(HE40)**		
	Channel	**Frequency [MHz]**	**Tones(RU)**
U-NII 1	38	5190	26(0, 8, 17) 52(37, 40, 44) 106(53, 54, 56) 242(61, 62) 484(65) SU
	46	5230	
U-NII 2A	54	5270	
	62	5310	
U-NII 2C	102	5510	
	118	5590	
	142	5710	
U-NII 3	151	5755	
	159	5795	
5GHz Band	**802.11ax(HE80)**		
	Channel	**Frequency [MHz]**	**Tones(RU)**
U-NII 1	42	5210	26(0, 18, 36) 52(37, 44, 52) 106(53, 56, 60) 242(61, 62, 64) 484(65, 66) 996(67 SU
U-NII 2A	58	5290	
U-NII 2C	106	5530	
	122	5610	
	138	5690	
U-NII 3	155	5775	

2.3 Testing Environment

Temperature	:	20 ºC ~ 25 ºC
Relative humidity content	:	36 % ~ 45 %
Details of power supply	:	DC 3.87 V

2.4 EMI Suppression Device(s)/Modifications

EMI suppression device(s) added and/or modifications made during testing
→ None

2.5 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with requirements of ANSI C 63.4-2014 and ANSI C 63.10-2013. All measurement uncertainty values are shown with a coverage factor of *k* = 2 to indicate a 95 % level of confidence.

Test items	Measurement uncertainty
Transmitter Output Power	0.7 dB (The confidence level is about 95 %, k = 2)
Conducted spurious emission	0.9 dB (The confidence level is about 95 %, k = 2)
AC conducted emission	2.4 dB (The confidence level is about 95 %, k = 2)
Radiated spurious emission (1 GHz Below)	5.1 dB (The confidence level is about 95 %, k = 2)
Radiated spurious emission (1 GHz ~ 18 GHz)	5.4 dB (The confidence level is about 95 %, k = 2)
Radiated spurious emission (18 GHz Above)	5.3 dB (The confidence level is about 95 %, k = 2)

3. SUMMARY OF TESTS

FCC Part Section(s)	RSS Section(s)	Parameter	Limit	Test Condition	Status Note 1
15.407(a)	RSS-247(6.2)	Emission Bandwidth (26 dB Bandwidth)	N/A	Conducted	C
15.407(e)	RSS-247(6.2)	Minimum Emission Bandwidth (6 dB Bandwidth)	> 500 kHz in 5725 ~ 5850 MHz		C
15.407(a)	RSS-247(6.2)	Maximum Conducted Output Power	5150 ~ 5250 MHz : < 23.97 dBm 5250 ~ 5350 & 5470 ~ 5725 MHz : < 250 mW or < 11 + 10 log10(B) dBm, whichever power is less. (B is the 26dB BW.) 5725 ~ 5850 MHz : < 30 dBm		C
15.407(a)	RSS-247(6.2)	Peak Power Spectral Density	5150 ~ 5250 MHz : 11 dBm/MHz 5250 ~ 5350 MHz : 11 dBm/MHz 5470 ~ 5725 MHz : 11 dBm/MHz 5725 ~ 5850 MHz : 30 dBm/500kHz		C
15.407(b)	RSS-247(6.2)	Undesirable Emissions	5150 ~ 5725 MHz: < -27 dBm/MHz EIRP 5725 ~ 5850 MHz: < -27 dBm/MHz or < 10 dBm/MHz or 15.6 dBm/MHz < 27dBm/MHz EIRP	Radiated	C Note 3,4
15.205 15.209 15.407(b)	RSS-GEN(8.9) RSS-GEN(8.10) RSS-247(6.2)	General Field Strength Limits(Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209		C Note 3,4
15.207	RSS-GEN(8.8)	AC Conducted Emissions	FCC 15.207	AC Line Conducted	C
15.203	-	Antenna Requirements	FCC 15.203	-	C

Note 1: **C** = Comply **NC** = Not Comply **NT** = Not Tested **NA** = Not Applicable

Note 2: For radiated emission tests below 30 MHz were performed on semi-anechoic chamber which is correlated with OATS.
Note 3: In case of this test item, we have done all TX test cases. And we attached the result of MIMO mode since MIMO is the worst case.
Note 4: This device supports wireless charging & Dual Display.
So per KDB648474 D03v01r04, the radiated test items were performed all not charging, charging and Dual Display conditions. For wireless charging condition, the handset is placed on the representative charging pad under normal conditions and in a simulated call configuration.
Note 5: The sample was tested according to the following specification:
KDB789033 D02v02r01, KDB662911 D01v02r01, KDB648474 D03v01r04

4. TEST METHODOLOGY

The measurement procedures described in the ANSI C63.10-2013 and the guidance provided in KDB 7899033 D02v02r01 were used in measurement of the EUT.

The EUT was tested per the guidance of KDB789033 D02v02r01. And ANSI C63.10-2013 was used to reference appropriate EUT setup and maximizing procedures of radiated spurious emission and AC line conducted emission testing.

4.1 EUT configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

4.2 EUT exercise

The EUT was operated in the test mode to fix the Tx frequency that was for the purpose of the measurements. According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.407 under the FCC Rules Part 15 Subpart E.

4.3 General test procedures

Conducted Emissions

The power-line conducted emission test procedure is not described on the KDB789033 D02v02r01. So this test was fulfilled with the requirements in Section 6.2 of ANSI C63.10-2013.

The EUT is placed on the wooden table, which is 0.8 m above ground plane and the conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-peak and Average detector.

Radiated Emissions

Basically the radiated tests were performed with KDB789033 D02v02r01. But some requirements and procedures like test site requirements, EUT setup and maximizing procedure were fulfilled with the requirements in Section 5 and 6 of the ANSI C63.10-2013 as stated on KDB789033 D02v02r01.

The EUT is placed on a non-conductive table, which is 0.8 m above ground plane. For emission measurements above 1 GHz, the table height is 1.5 m. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 1 or 3 m away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the highest emission, the relative positions of the EUT were rotated through three orthogonal axis.

4.4 Description of test modes

The EUT has been tested with all modes of operating conditions to determine the worst case emission characteristics.

A test program is used to control the EUT for staying in continuous transmitting mode with maximum fixed duty cycle.

5. INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment , which is traceable to recognized national standards.

6. FACILITIES AND ACCREDITATIONS

6.1 Facilities

DT&C Co., Ltd.		
The 3 m test site and conducted measurement facility used to collect the radiated data are located at the 42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 17042. The test site complies with the requirements of § 2.948 according to ANSI C63.4-2014. **- FCC MRA Accredited Test Firm No. : KR0034**		
www.dtnc.net		
Telephone	:	+ 82-31-321-2664
FAX	:	+ 82-31-321-1664

6.2 Equipment

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, loop, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and peak, quasi-peak detectors are used to perform radiated measurements.
Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements. All receiving equipment conforms to CISPR Publication 16-1, “Radio Interference Measuring Apparatus and Measurement Methods.”

7. ANTENNA REQUIREMENTS

According to FCC 47 CFR §15.203:

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

The antenna is attached on the device by means of unique coupling method (Spring Tension).
Therefore this E.U.T Complies with the requirement of §15.203

Directional antenna gain:

Bands	SISO		MIMO (CDD) Note 1.	MIMO (SDM) Note 2
	ANT 1 [dBi]	ANT 2 [dBi]	Directional Gain[dBi]	Directional Gain[dBi]
U-NII 1	-4.23	-4.40	***-1.30***	-4.31
U-NII 2A	-4.23	-4.40	***-1.30***	-4.31
U-NII 2C	-1.41	-5.82	***-0.33***	-3.08
U-NII 3	-2.58	-3.73	***-0.13***	-3.12

Note 1. Directional gain(correlated signal with unequal antenna gain and equal transmit power)
$10 \log [(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N^{ANT}]$ dBi
Note 2. Directional gain(completely uncorrelated signal with unequal antenna gain and equal transmit power)
$10 \log [(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N^{ANT}]$ dBi

8. TEST RESULT

8.1 Emission Bandwidth (26 dB Bandwidth)

▣ Test Requirements

The bandwidth at 26 dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating in transmission mode at the appropriate frequencies.

The 26 dB bandwidth is used to determine the conducted output power limit.

▣ Test Configuration

Refer to the APPENDIX I.

▣ Test Procedure

The transmitter output is connected to the Spectrum Analyzer and used following test procedure of **KDB789033 D02v02r01**.

1. Set resolution bandwidth (RBW) = approximately **1 %** of the EBW.
2. Set the video bandwidth **(VBW) > RBW**.
3. Detector = **Peak**.
4. Trace mode = **max hold**.

Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

▣ **Test Results : Comply**

Mode	Band	Frequency [MHz]	Tone	RU Index	Test Result [MHz]			
					CDD		SDM	
					ANT 1	ANT 2	ANT 1	ANT 2
802.11ax (HE20)	U-NII 1	5180	26	0	17.30	13.85	19.51	19.28
				4	15.51	16.27	15.58	18.09
				8	19.37	19.13	18.50	18.95
		5200	26	0	19.62	17.50	18.49	18.71
				4	14.36	17.22	17.46	18.07
				8	16.77	18.95	19.54	19.47
		5240	26	0	19.58	19.52	19.45	16.92
				4	16.05	17.18	16.95	17.25
				8	17.11	15.52	19.53	18.37
	U-NII 2A	5260	26	0	19.78	18.81	17.87	19.14
				4	16.09	17.00	15.44	17.50
				8	18.18	18.79	19.40	19.56
		5300	26	0	19.65	19.58	19.11	19.26
				4	14.19	16.80	16.42	16.99
				8	19.51	18.42	19.35	19.51
		5320	26	0	19.13	19.28	19.55	19.32
				4	15.37	18.03	15.74	18.13
				8	19.29	19.47	19.12	19.56
	U-NII 2C	5500	26	0	17.79	13.07	19.44	18.37
				4	16.90	15.55	17.84	17.96
				8	15.31	19.41	19.31	19.37
		5600	26	0	19.72	19.69	19.39	16.64
				4	16.52	15.42	18.25	17.78
				8	19.65	18.20	19.53	18.82
		5720	26	0	11.60	19.18	17.16	19.22
				4	14.91	14.44	17.03	17.18
				8	15.88	17.71	19.28	19.10

Mode	Band	Frequency [MHz]	Tone	RU Index	Test Result [MHz]			
					CDD		SDM	
					ANT 1	ANT 2	ANT 1	ANT 2
802.11ax (HE20)	U-NII 1	5180	242	61	21.89	21.15	21.24	21.69
		5200	242	61	21.10	20.60	20.84	20.37
		5240	242	61	20.99	21.53	21.89	21.50
	U-NII 2A	5260	242	61	20.54	21.17	20.10	20.68
		5300	242	61	21.78	21.83	21.59	21.59
		5320	242	61	20.23	20.72	20.67	20.38
	U-NII 2C	5500	242	61	21.29	21.05	20.77	21.53
		5600	242	61	20.37	20.62	20.66	20.92
		5720	242	61	21.77	21.48	21.30	21.49
802.11ax (HE20)	U-NII 1	5180	SU	NA	20.56	20.49	20.70	20.58
		5200	SU	NA	21.81	21.66	21.91	21.23
		5240	SU	NA	20.36	20.47	20.36	20.80
	U-NII 2A	5260	SU	NA	21.94	20.84	21.29	21.65
		5300	SU	NA	20.49	20.63	20.53	20.46
		5320	SU	NA	21.03	21.18	20.66	22.06
	U-NII 2C	5500	SU	NA	20.51	20.35	20.50	20.61
		5600	SU	NA	21.57	21.26	21.00	22.25
		5720	SU	NA	20.37	20.43	20.56	20.56

Mode	Band	Frequency [MHz]	Tone	RU Index	Test Result [MHz]			
					CDD		SDM	
					ANT 1	ANT 2	ANT 1	ANT 2
802.11ax (HE40)	U-NII 1	5190	26	0	38.06	39.10	39.64	39.40
				8	37.93	33.02	37.17	37.02
				17	38.30	40.05	37.64	39.89
		5230	26	0	39.89	37.19	39.35	38.25
				8	35.26	34.49	38.03	36.02
				17	40.10	39.07	39.59	39.89
	U-NII 2A	5270	26	0	37.61	39.06	39.42	38.73
				8	37.87	37.99	37.16	36.94
				17	36.28	39.39	38.14	38.62
		5310	26	0	26.93	39.54	39.52	39.59
				8	37.95	34.51	36.68	37.86
				17	33.44	31.29	38.37	39.91
	U-NII 2C	5510	26	0	38.47	35.77	39.77	39.60
				8	37.33	25.49	37.20	38.01
				17	39.89	40.07	39.38	39.77
		5590	26	0	40.23	32.84	39.14	39.50
				8	32.75	36.33	37.14	38.08
				17	37.61	40.22	38.37	38.71
		5710	26	0	35.68	18.70	37.32	35.85
				8	31.92	37.29	36.42	36.27
				17	28.50	39.07	39.60	38.62
802.11ax (HE40)	U-NII 1	5190	484	65	42.39	42.00	42.09	42.47
		5230	484	65	40.02	39.82	39.64	39.94
	U-NII 2A	5270	484	65	42.28	42.44	42.24	41.75
		5310	484	65	40.29	40.20	39.98	39.79
	U-NII 2C	5510	484	65	42.15	42.39	42.21	41.90
		5590	484	65	39.83	39.94	40.33	39.76
		5710	484	65	43.17	41.50	41.78	41.91
802.11ax (HE40)	U-NII 1	5190	SU	NA	39.93	39.91	40.11	39.97
		5230	SU	NA	43.26	42.62	42.60	41.79
	U-NII 2A	5270	SU	NA	39.98	40.02	39.96	40.05
		5310	SU	NA	42.60	42.76	42.41	41.66
	U-NII 2C	5510	SU	NA	40.32	39.81	39.74	39.86
		5590	SU	NA	42.40	42.47	41.93	41.38
		5710	SU	NA	39.90	40.15	40.01	40.00

Mode	Band	Frequency [MHz]	Tone	RU Index	Test Result [MHz]			
					CDD		SDM	
					ANT 1	ANT 2	ANT 1	ANT 2
802.11ax (HE80)	U-NII 1	5210	26	0	79.17	80.06	80.99	75.52
				18	59.52	78.13	71.02	73.50
				36	81.07	79.83	80.55	79.73
	U-NII 2A	5290	26	0	81.64	81.41	81.30	73.30
				18	71.04	76.23	77.74	77.62
				36	82.16	81.22	80.90	81.41
	U-NII 2C	5530	26	0	78.92	81.45	81.10	80.88
				18	78.76	64.31	48.17	78.13
				36	80.44	81.11	76.78	80.83
		5610	26	0	60.94	78.41	82.30	80.17
				18	65.41	76.84	68.76	78.03
				36	76.64	81.48	81.06	81.23
		5690	26	0	76.93	81.48	73.59	69.61
				18	59.43	76.06	69.67	78.07
				36	81.69	81.65	78.76	82.13
802.11ax (HE80)	U-NII 1	5210	996	67	86.14	84.63	86.50	85.35
	U-NII 2A	5290	996	67	81.51	81.08	81.62	81.34
	U-NII 2C	5530	996	67	84.59	83.80	85.69	85.08
		5610	996	67	81.25	82.03	81.10	81.70
		5690	996	67	86.84	84.94	84.88	86.03
802.11ax (HE80)	U-NII 1	5210	SU	NA	81.56	81.59	81.23	81.42
	U-NII 2A	5290	SU	NA	84.61	85.02	87.05	83.93
	U-NII 2C	5530	SU	NA	81.61	81.90	80.83	81.91
		5610	SU	NA	85.54	86.09	83.90	86.24
		5690	SU	NA	81.70	81.86	80.96	81.16

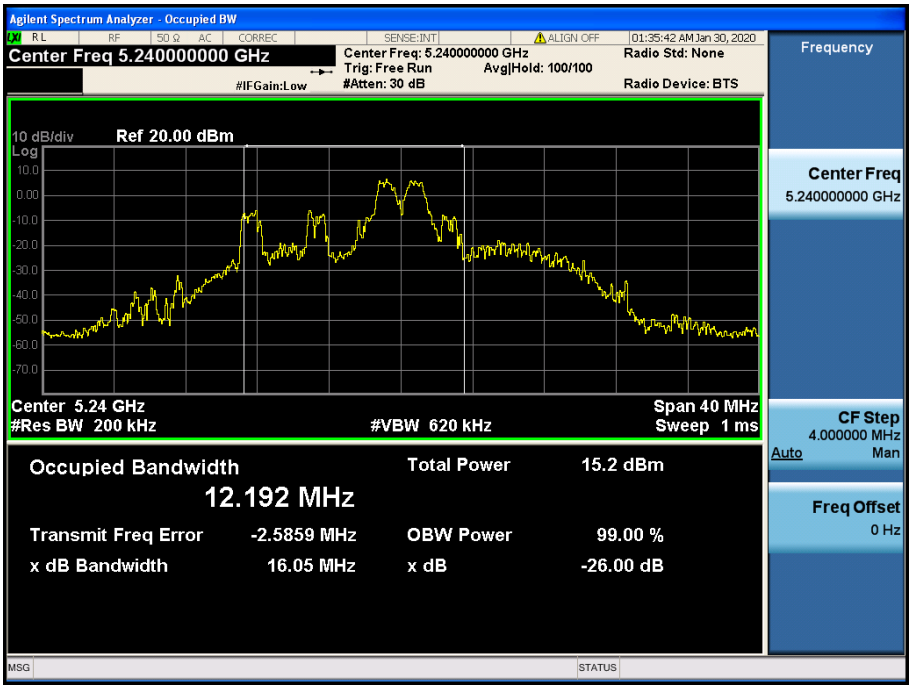
▣ Result Plots

- This test item has been tested in all cases and only the plot of the smallest RU in BW is listed.

26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 1 & 26T & 4RU & Ch.36

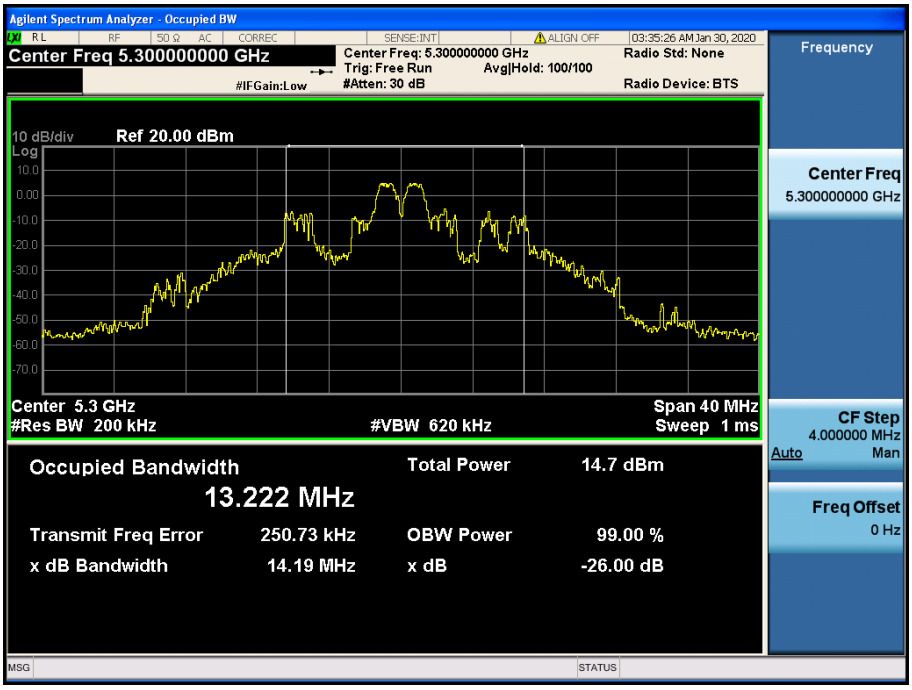
26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 1 & 26T & 4RU & Ch.40

26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 1 & 26T & 4RU & Ch.48



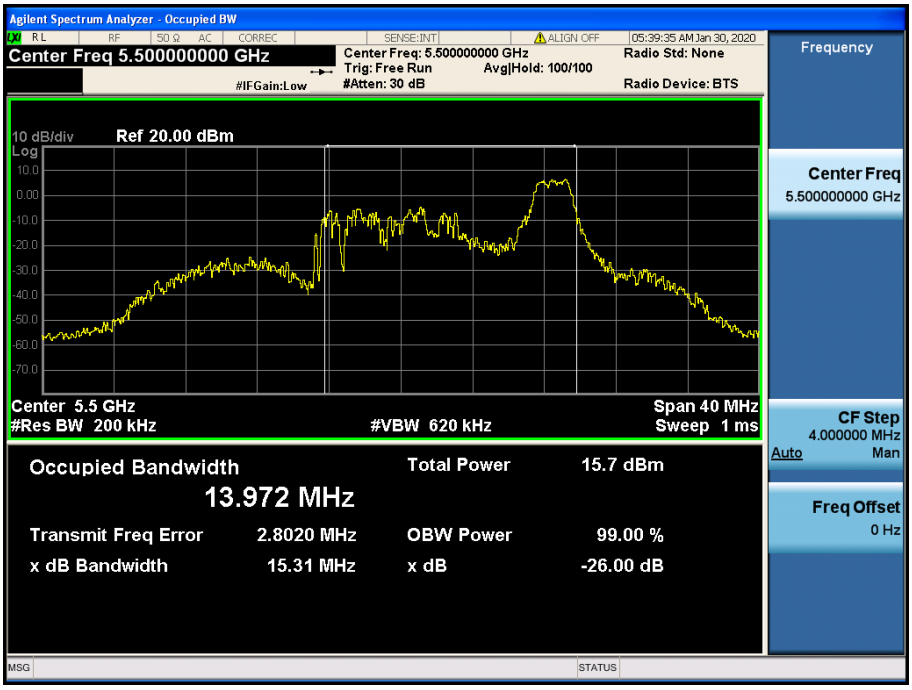
26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 1 & 26T & 4RU & Ch.52

26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 1 & 26T & 4RU & Ch.60

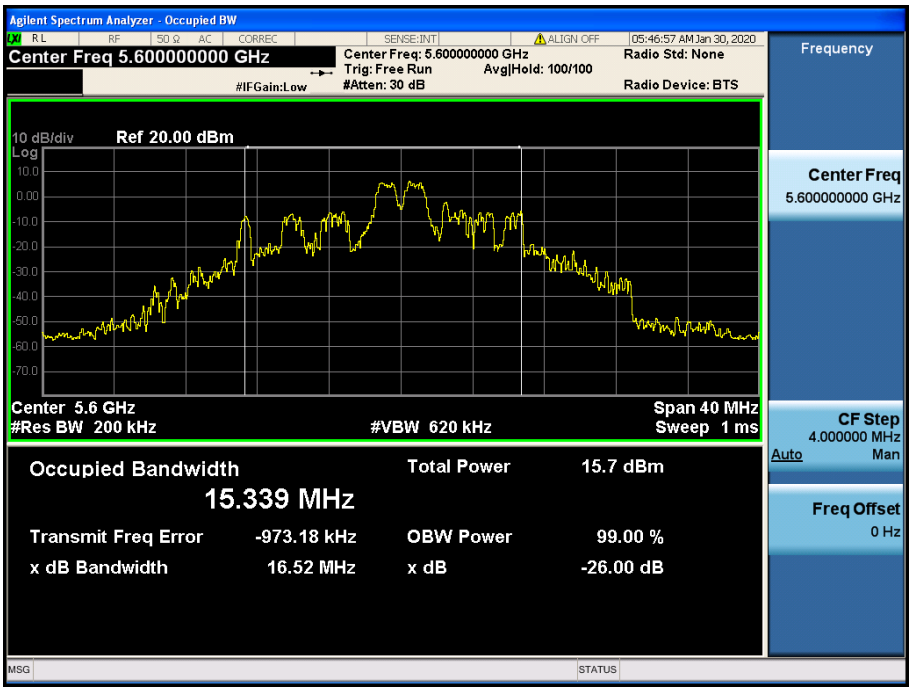


26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 1 & 26T & 4RU & Ch.64

26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 1 & 26T & 8RU & Ch.100

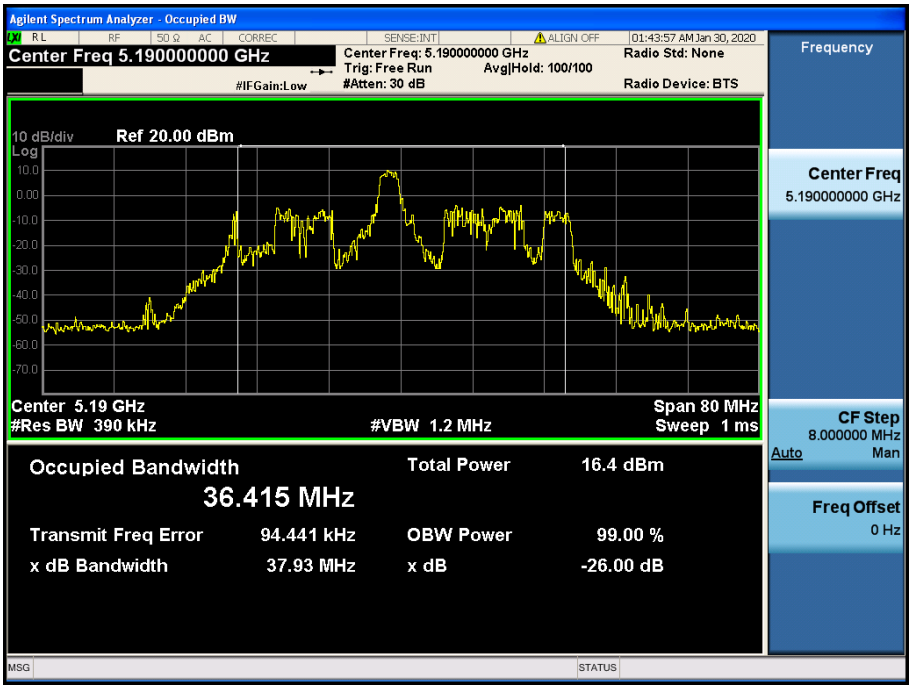


26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 1 & 26T & 4RU & Ch.120

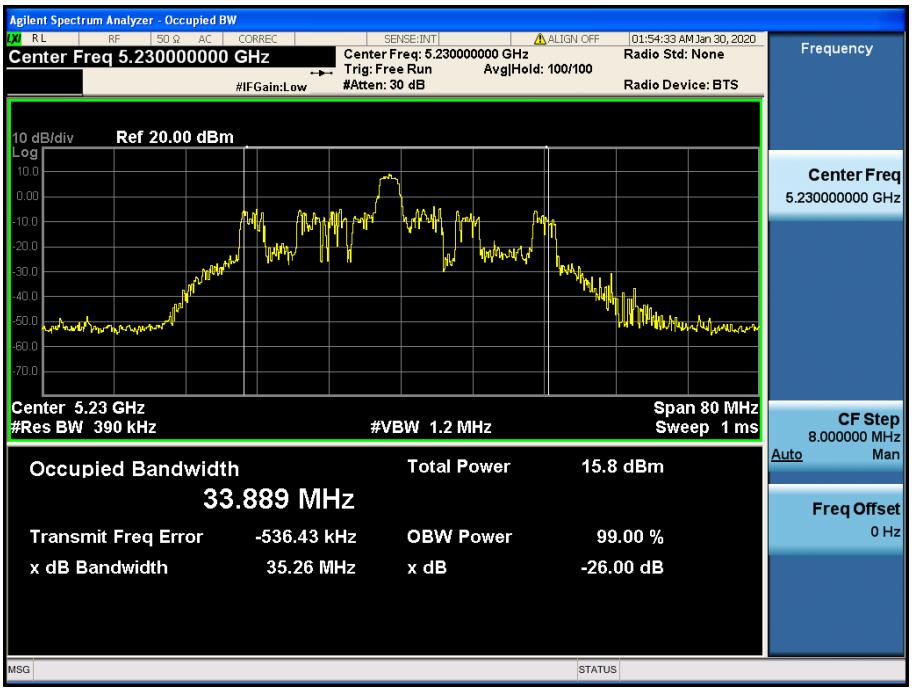


26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 1 & 26T & 0RU & Ch.144

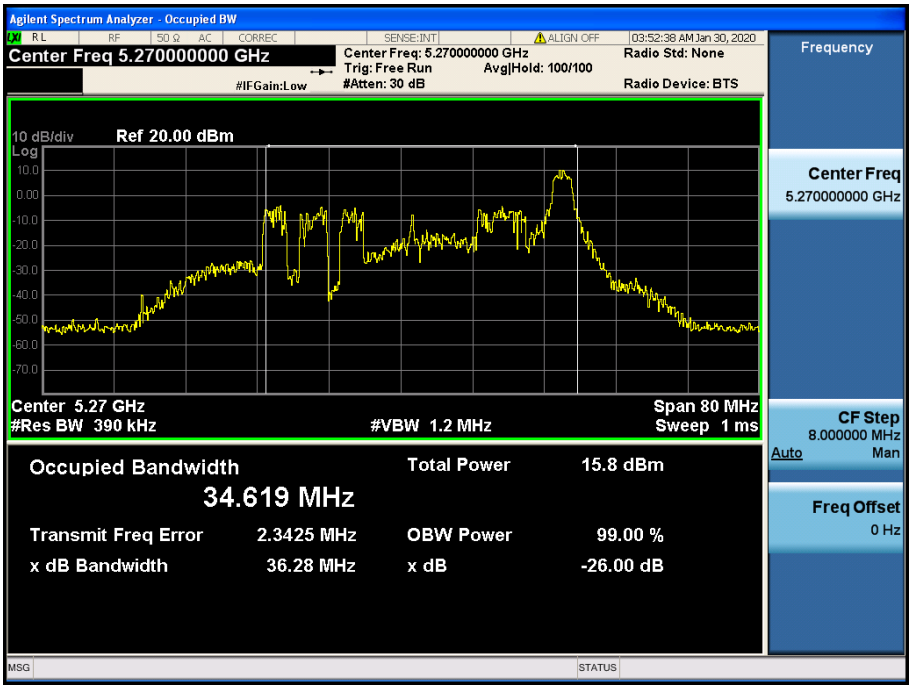
26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 1 & 26T & 8RU & Ch.38



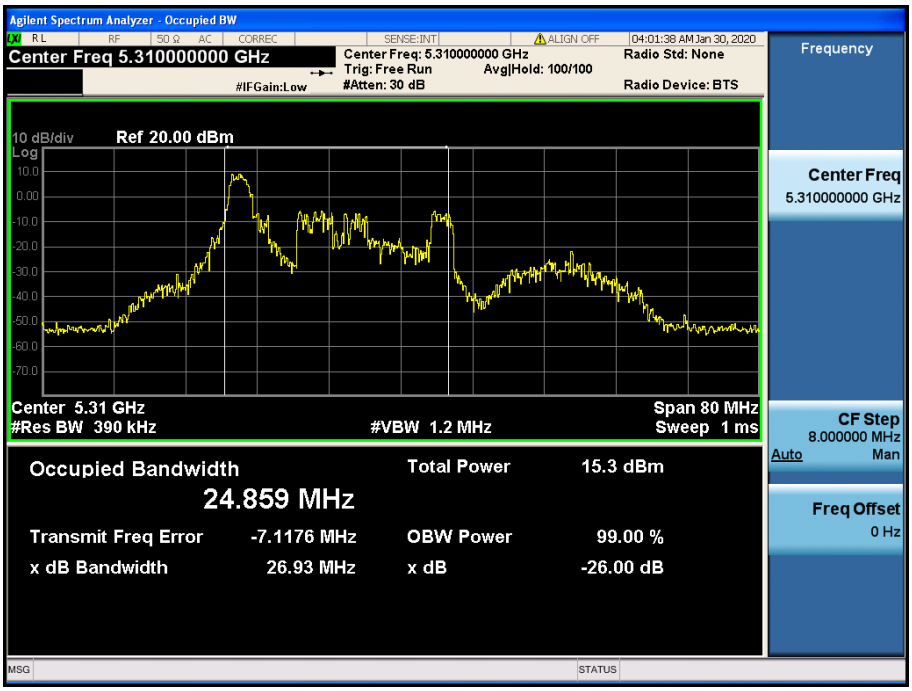
26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 1 & 26T & 8RU & Ch.46



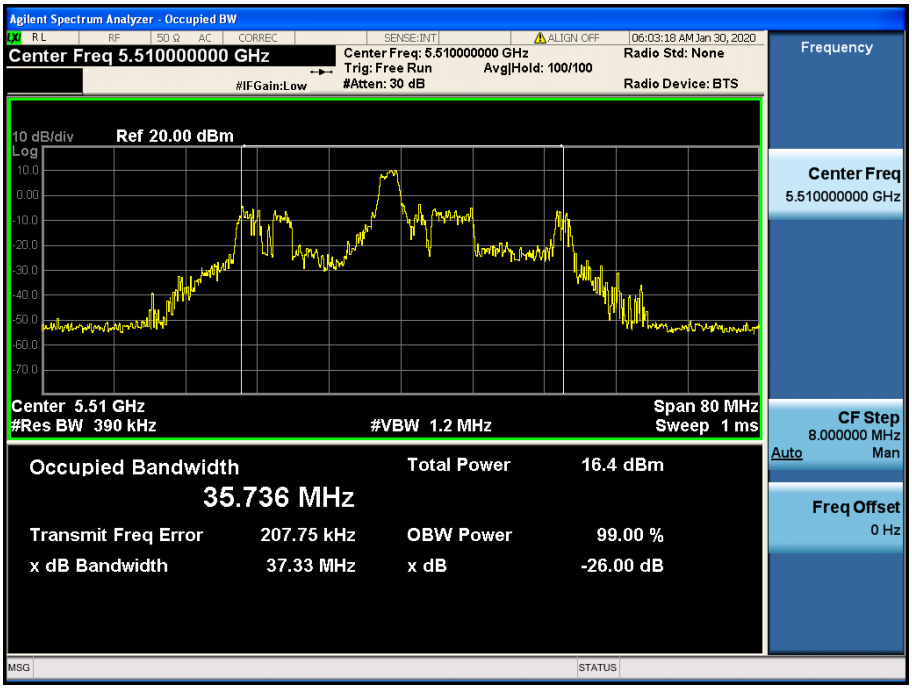
26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 1 & 26T & 17RU & Ch.54



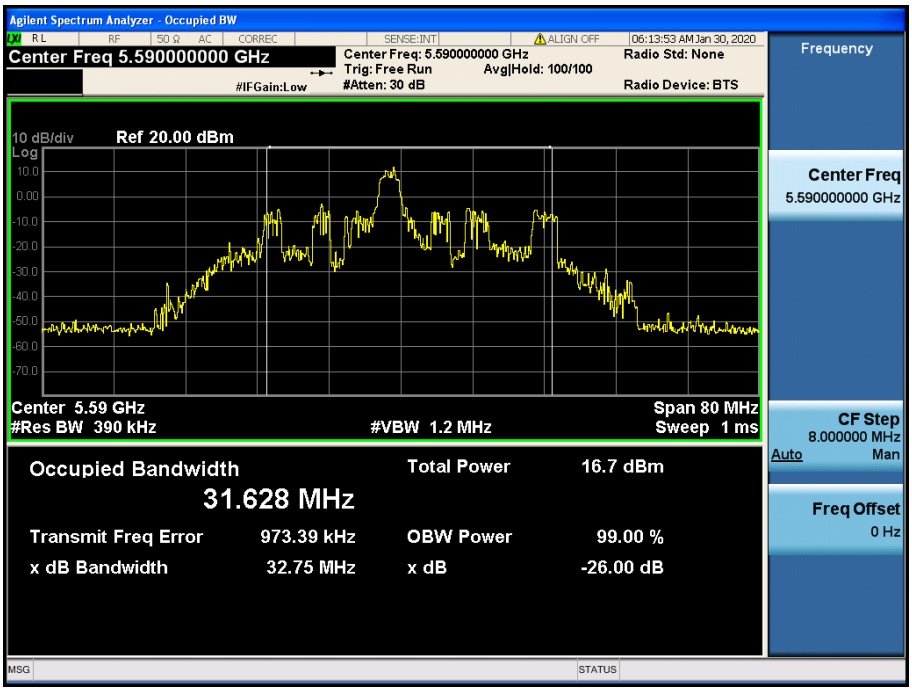
26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 1 & 26T & 0RU & Ch.62



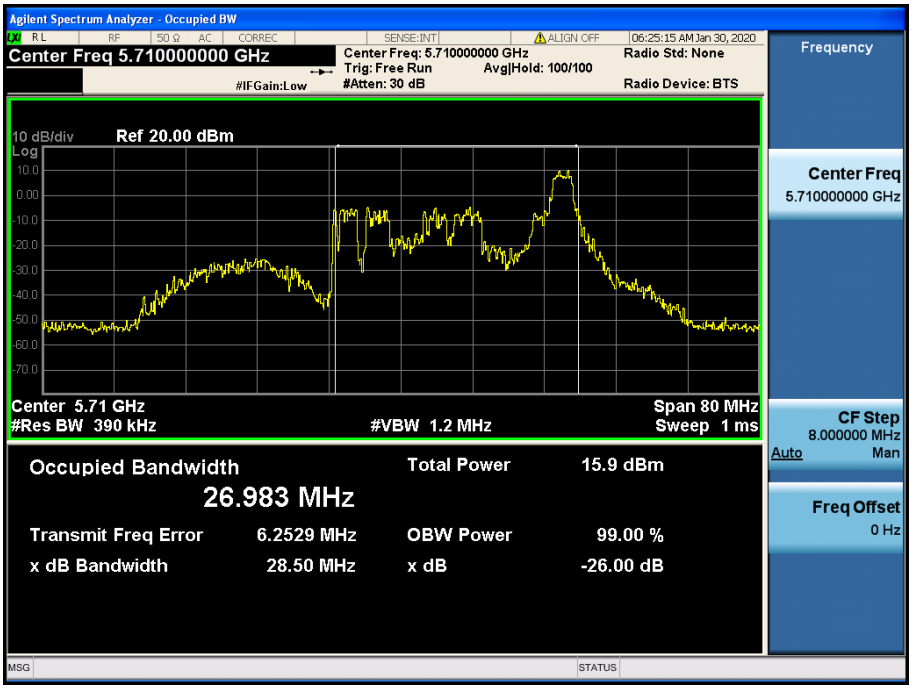
26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 1 & 26T & 8RU & Ch.102



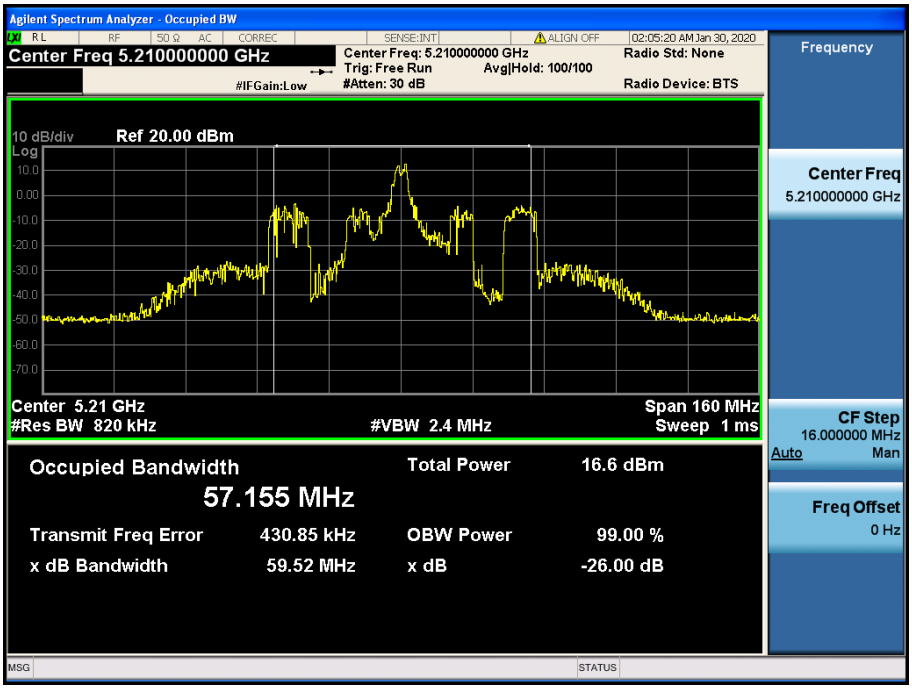
26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 1 & 26T & 8RU & Ch.118



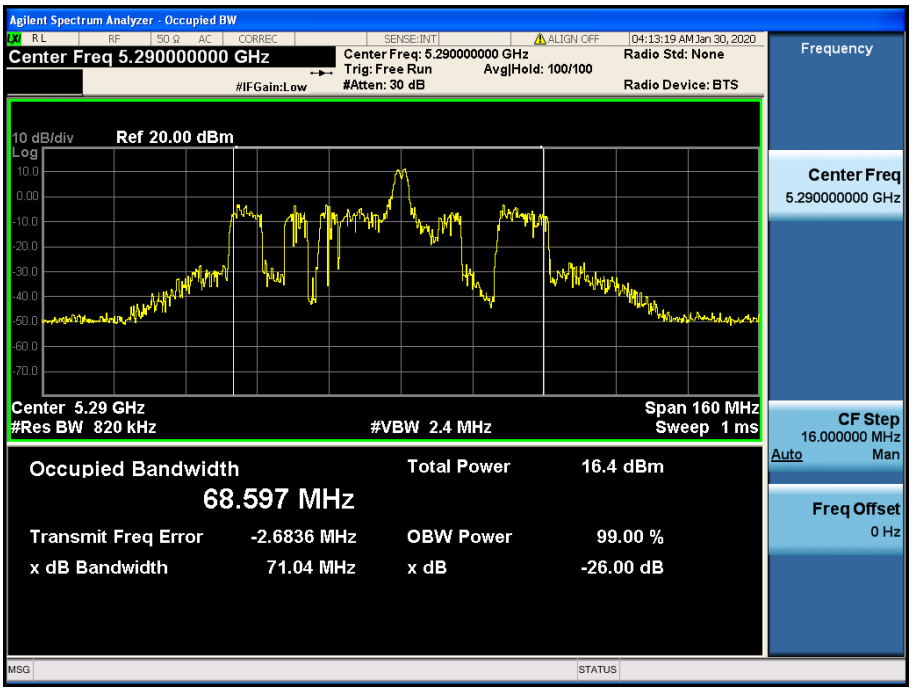
26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 1 & 26T & 17RU & Ch.142



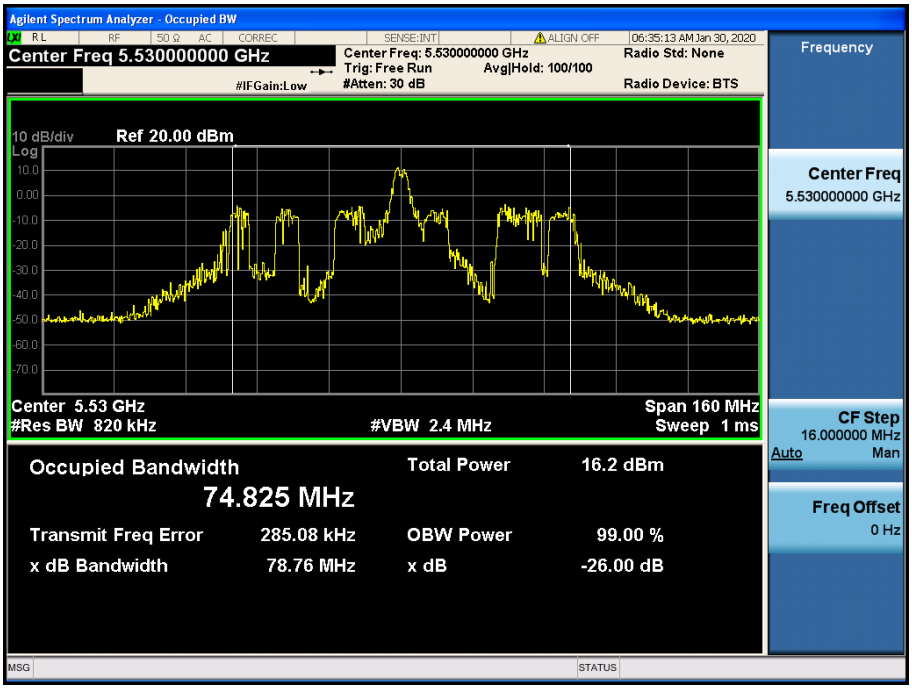
26 dB Bandwidth Test Mode: 802.11ax HE80 & ANT 1 & T26 & 18RU &Ch.42



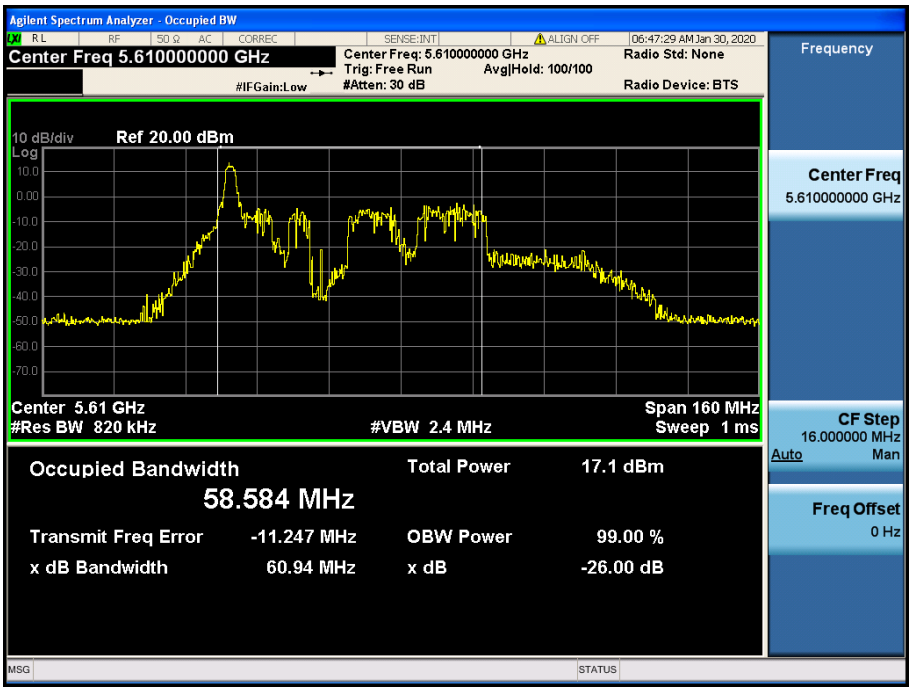
26 dB Bandwidth Test Mode: 802.11ax HE80 & ANT 1 & T26 & 18RU &Ch.58



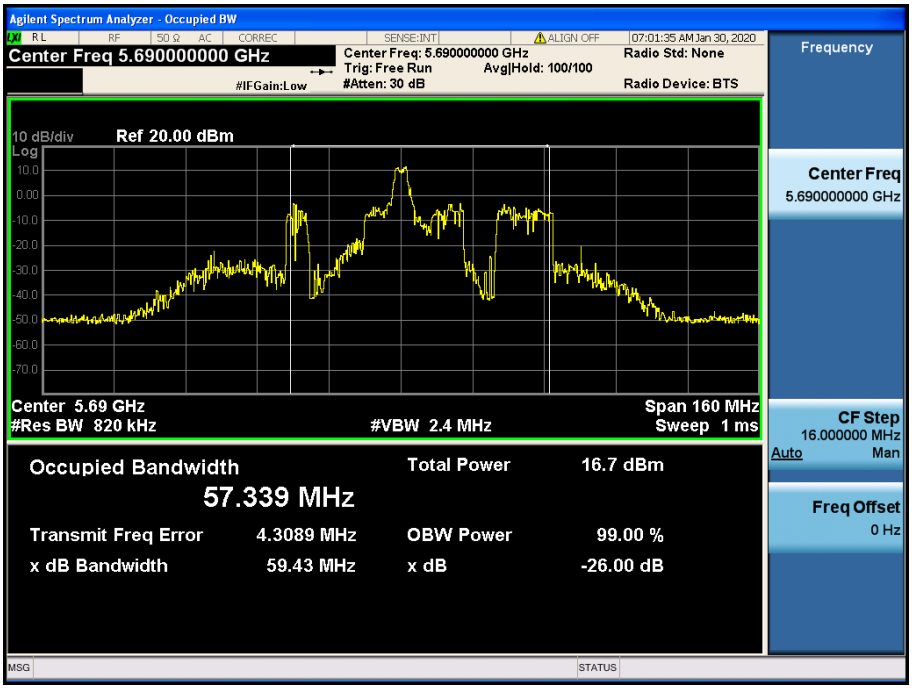
26 dB Bandwidth Test Mode: 802.11ax HE80 & ANT 1 & T26 & 18RU &Ch.106



26 dB Bandwidth Test Mode: 802.11ax HE80 & ANT 1 & T26 & 0RU &Ch.122

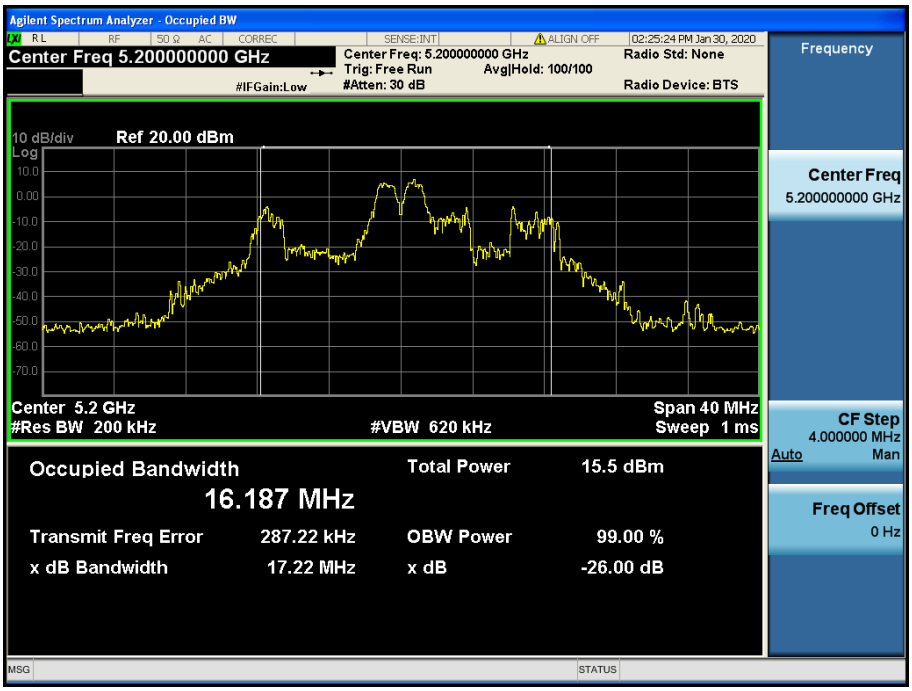


26 dB Bandwidth Test Mode: 802.11ax HE80 & ANT 1 & T26 & 18RU &Ch.138



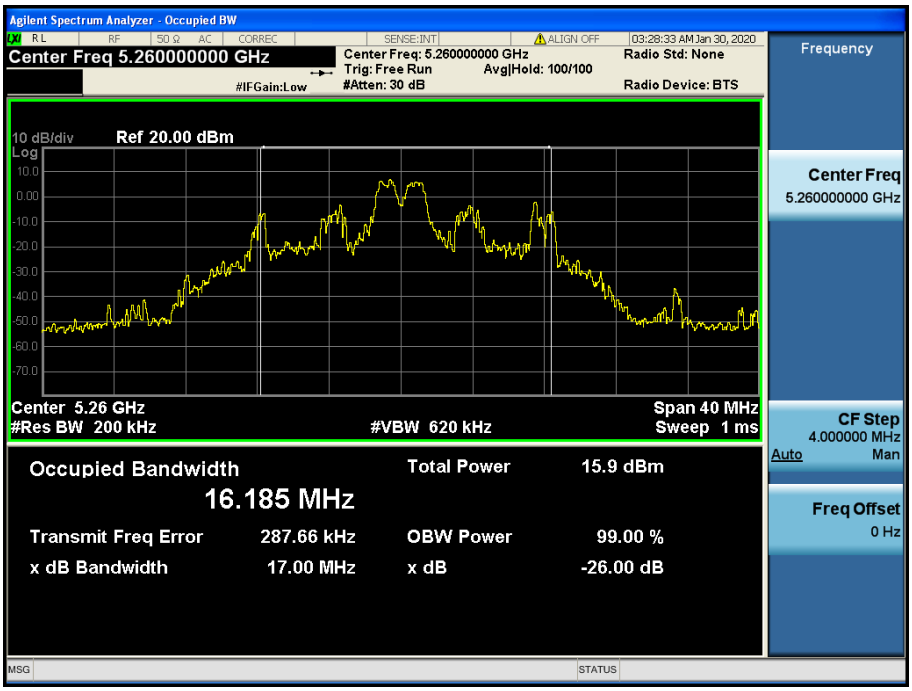
26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 2 & 26T & 0RU & Ch.36

26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 2 & 26T & 4RU & Ch.40

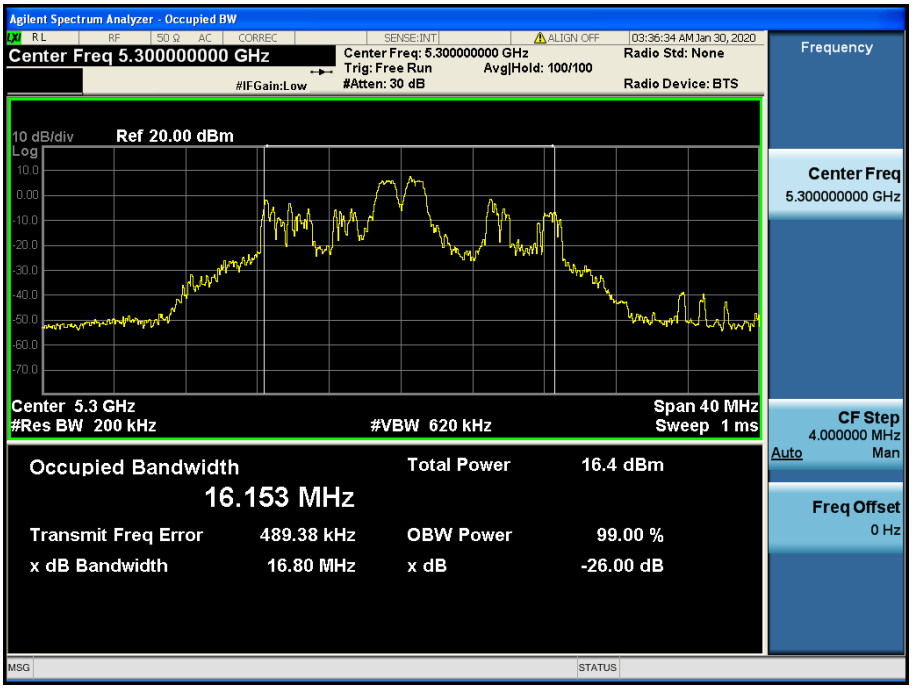


26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 2 & 26T & 8RU & Ch.48

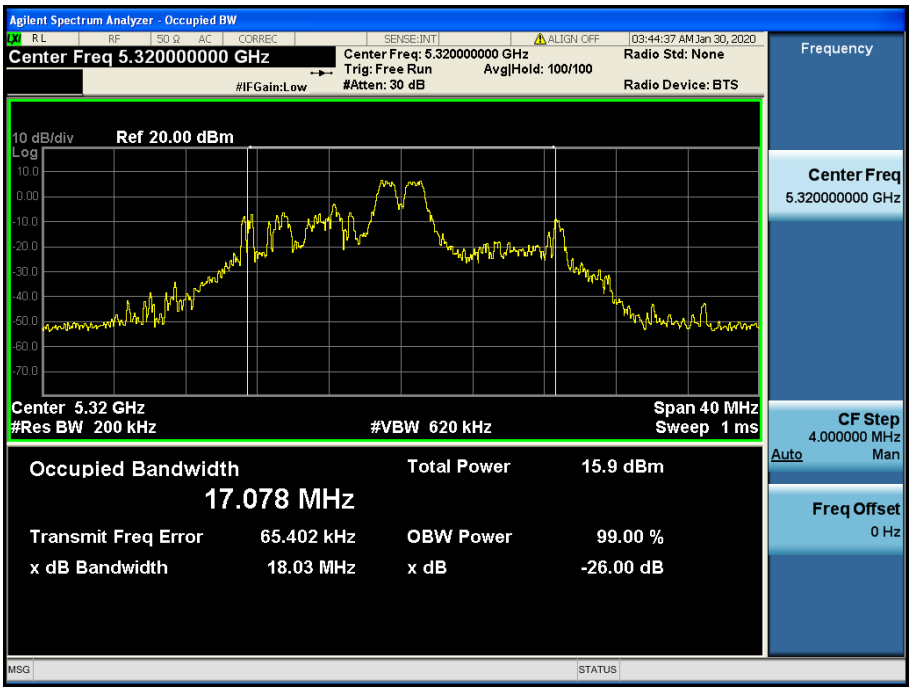
26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 2 & 26T & 4RU & Ch.52



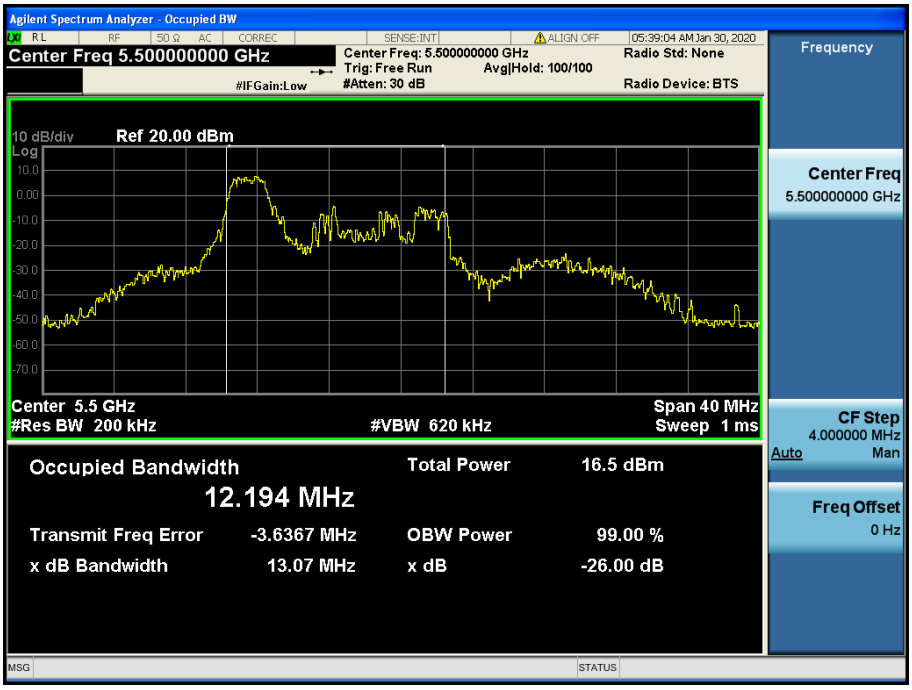
26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 2 & 26T & 4RU & Ch.60



26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 2 & 26T & 4RU & Ch.64



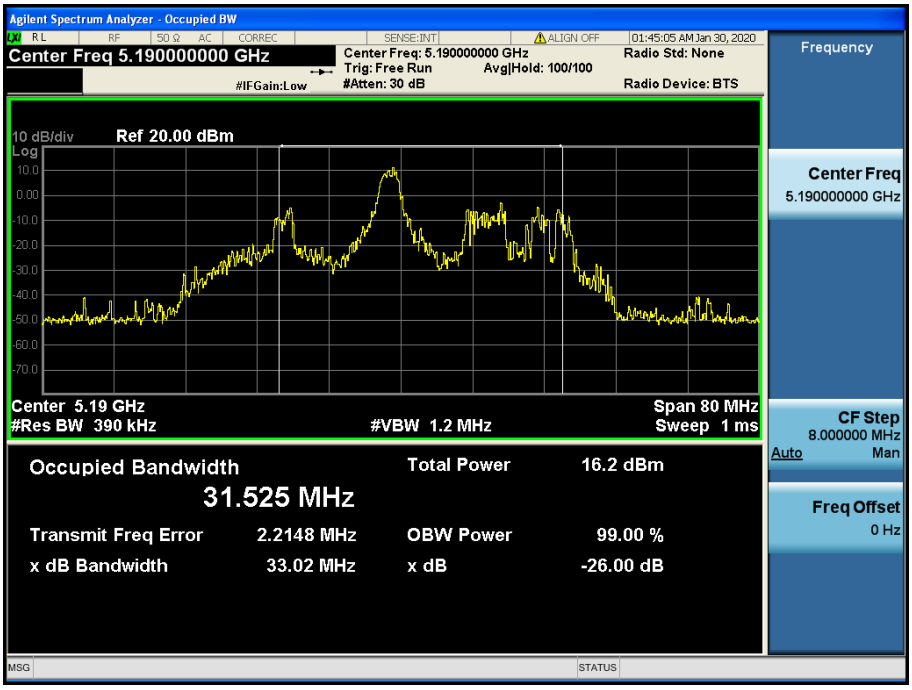
26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 2 & 26T & 0RU & Ch.100



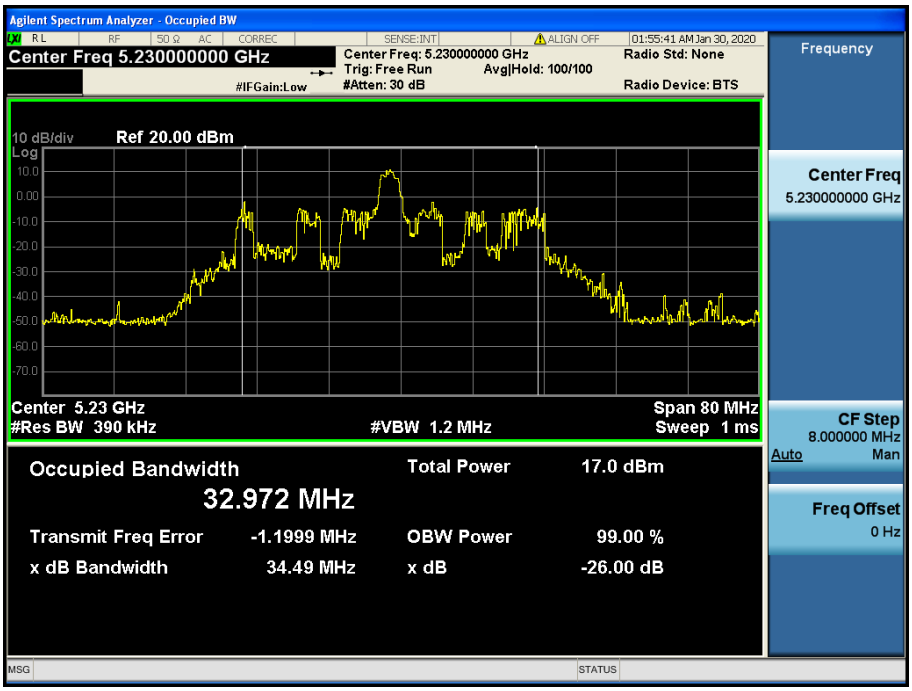
26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 2 & 26T & 4RU & Ch.120

26 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 2 & 26T & 4RU & Ch.144

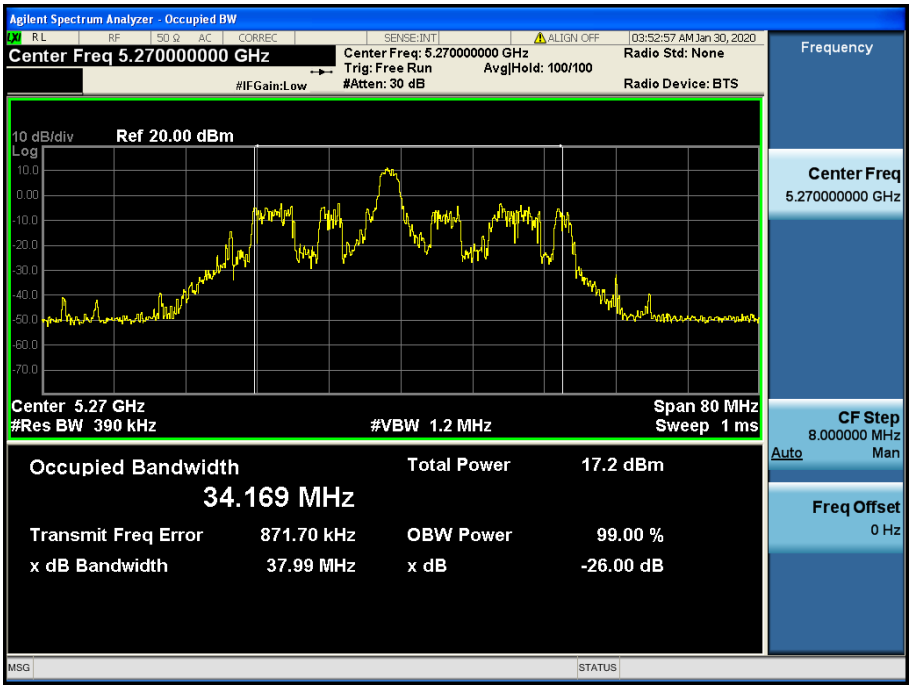
26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 2 & 26T & 8RU & Ch.38



26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 2 & 26T & 8RU & Ch.46

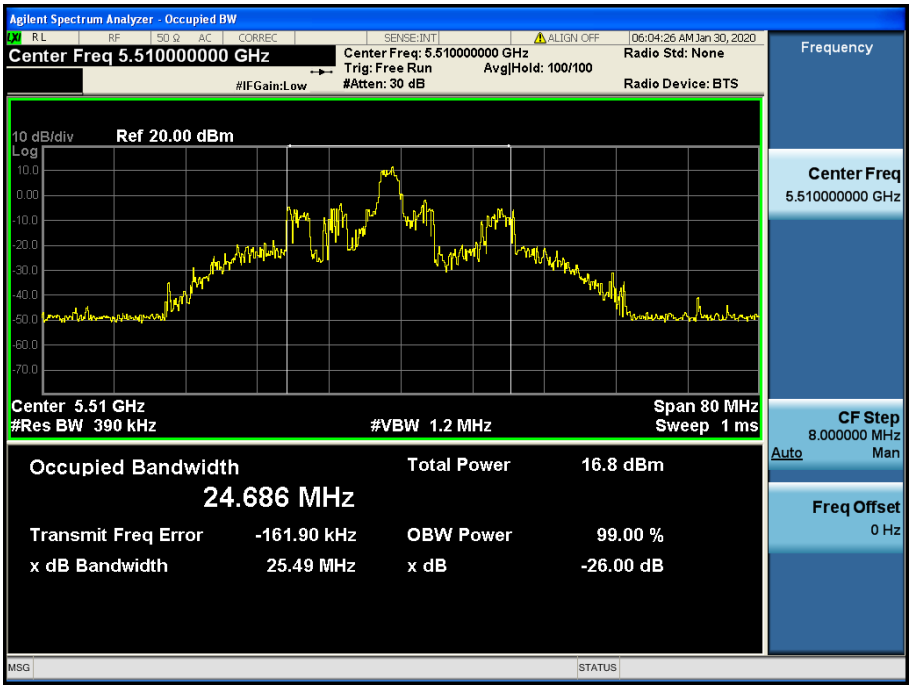


26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 2 & 26T & 8RU & Ch.54



26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 2 & 26T & 17RU & Ch.62

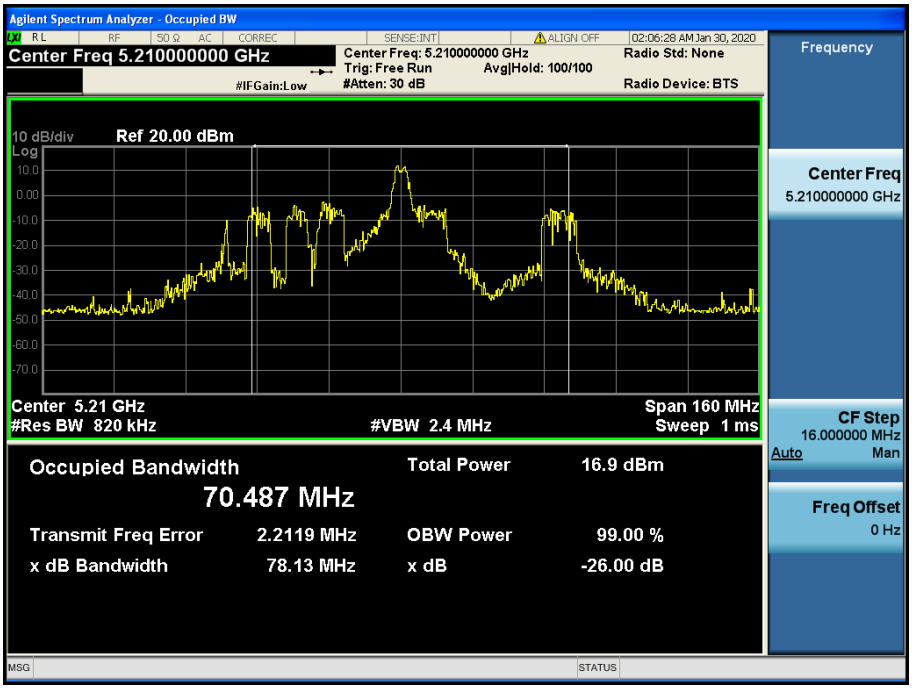
26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 2 & 26T & 8RU & Ch.102



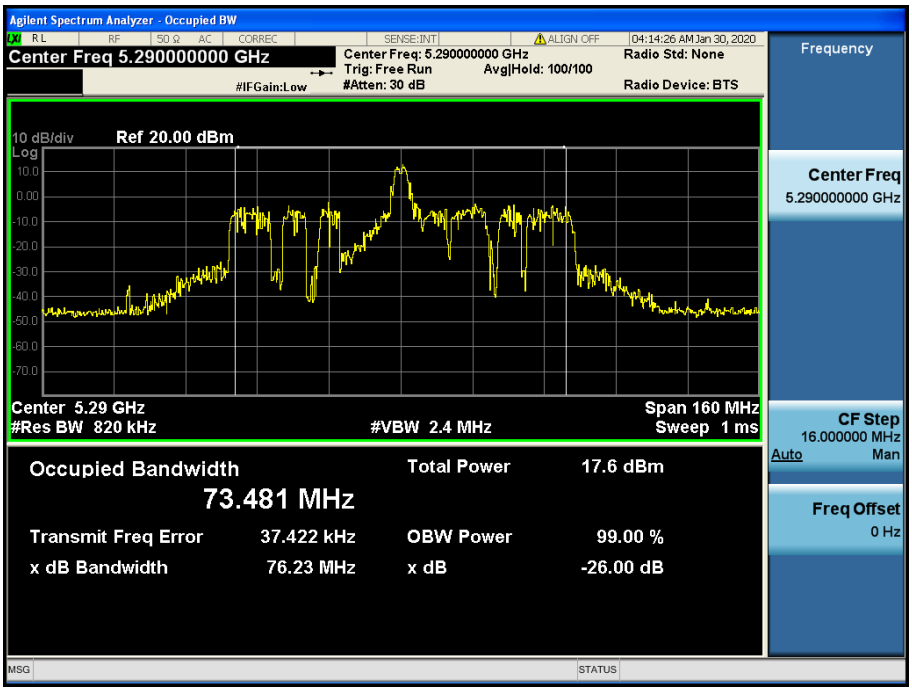
26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 2 & 26T & 0RU & Ch.118

26 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 1 & 26T & 0RU & Ch.142

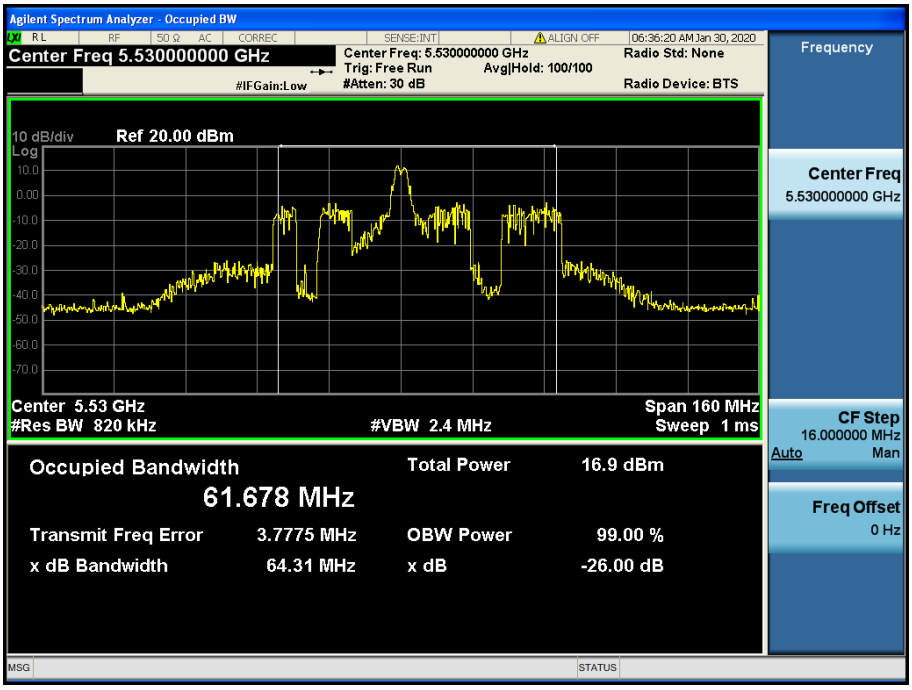
26 dB Bandwidth Test Mode: 802.11ax HE80 & ANT 2 & T26 & 18RU &Ch.42



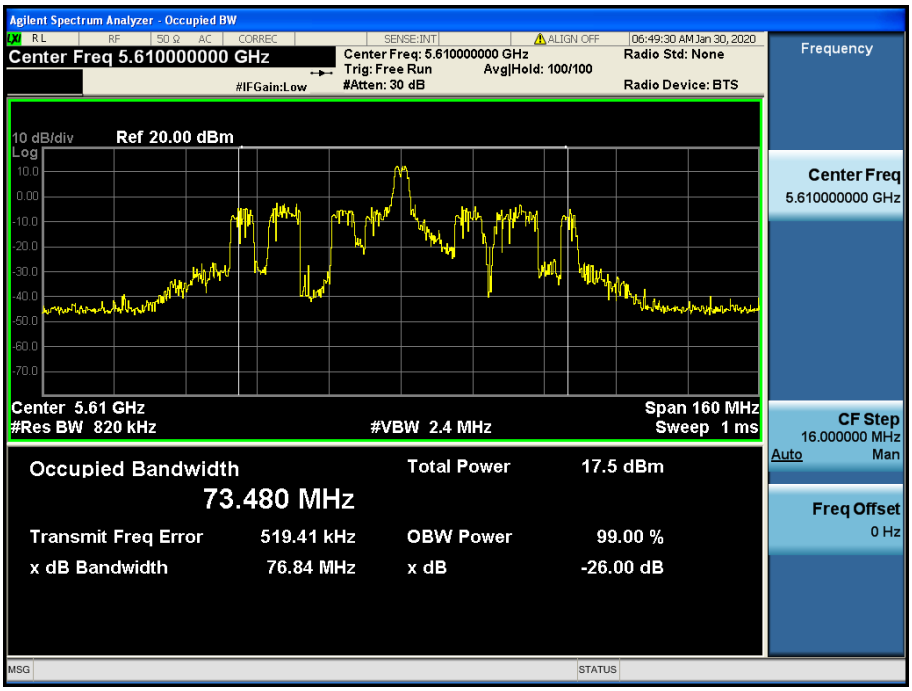
26 dB Bandwidth Test Mode: 802.11ax HE80 & ANT 2 & T26 & 18RU &Ch.58



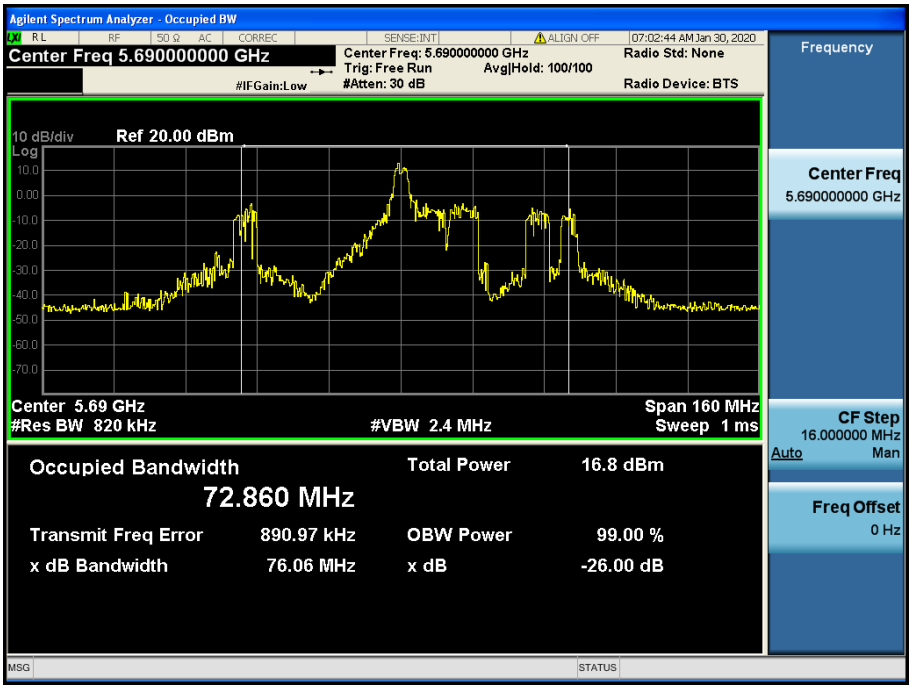
26 dB Bandwidth Test Mode: 802.11ax HE80 & ANT 2 & T26 & 18RU &Ch.106



26 dB Bandwidth Test Mode: 802.11ax HE80 & ANT 2 & T26 & 18RU &Ch.122



26 dB Bandwidth Test Mode: 802.11ax HE80 & ANT 2 & T26 & 18RU &Ch.138



8.2 Minimum Emission Bandwidth (6 dB Bandwidth)

▣ Test Requirements

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

▣ Test Configuration

Refer to the APPENDIX I.

▣ Test Procedure

The transmitter output is connected to the Spectrum Analyzer and used following test procedure of **KDB789033 D02v02r01**.

1. Set resolution bandwidth (RBW) = 100 kHz
2. Set the video bandwidth **≥ 3 x RBW**.
3. Detector = **Peak**.
4. Trace mode = **max hold**.

   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.

▣ Test Results: Comply

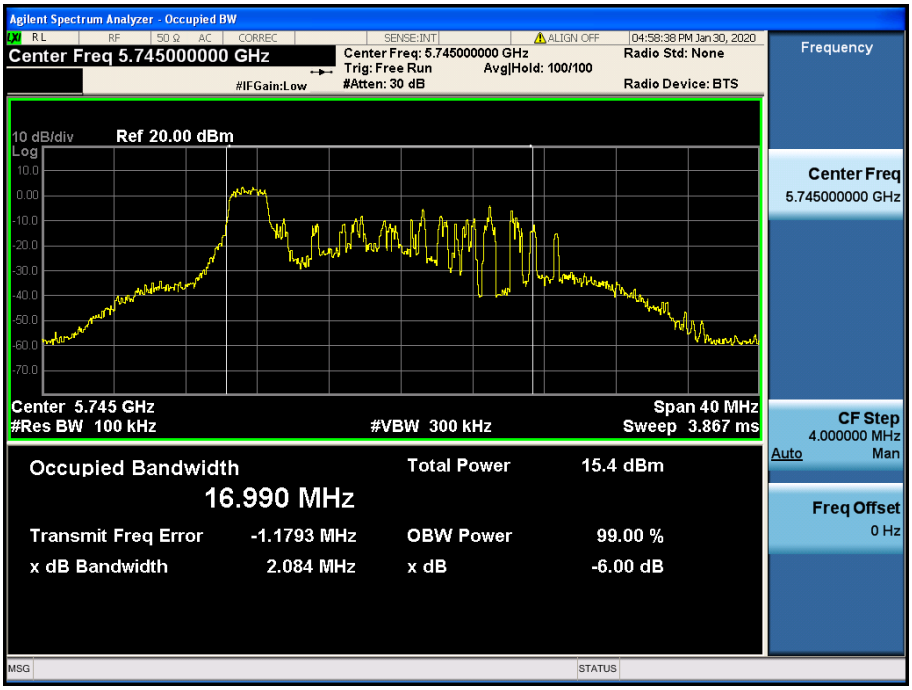
Mode	Band	Frequency [MHz]	Tone	RU Index	Test Result [MHz]			
					ANT 1	ANT 2	ANT 1	ANT 2
802.11ax(HE20)	U-NII 3	5745	26	0	2.08	2.03	2.07	2.06
				4	2.65	2.61	2.63	2.68
				8	2.13	2.04	2.07	2.07
		5785	26	0	2.02	2.07	2.05	2.05
				4	2.70	2.60	2.64	2.63
				8	2.03	2.05	2.09	2.11
		5825	26	0	2.11	2.11	1.99	2.11
				4	2.64	2.65	2.68	2.66
				8	2.08	2.03	2.07	2.08
802.11ax(HE20)	U-NII 3	5745	242	61	19.09	18.82	18.98	19.00
		5785	242	61	18.14	18.25	17.77	18.70
		5825	242	61	18.80	19.00	19.02	19.02
802.11ax(HE20)	U-NII 3	5745	SU	NA	16.42	18.67	18.55	18.18
		5785	SU	NA	18.91	19.01	18.97	19.04
		5825	SU	NA	18.25	17.04	18.34	17.81

Mode	Band	Frequency [MHz]	Tone	RU Index	Test Result [MHz]			
					ANT 1	ANT 2	ANT 1	ANT 2
802.11ax(HE40)	U-NII 3	5755	26	0	2.13	2.11	2.10	2.05
				8	2.11	2.15	2.13	2.14
				17	2.12	2.10	2.09	2.15
		5795	26	0	2.14	2.10	2.12	2.08
				8	2.13	2.13	2.17	2.08
				17	2.12	2.12	2.03	2.04
802.11ax(HE40)	U-NII 3	5755	484	65	38.00	38.16	38.16	38.14
		5795	484	65	37.22	37.92	38.06	35.83
		5755	SU	NA	38.07	38.28	38.19	38.11
		5795	SU	NA	37.73	36.69	36.91	37.41
802.11ax(HE80)	U-NII 3	5775	26	0	2.19	2.20	2.16	2.18
				18	2.77	2.74	2.81	2.83
				36	2.24	2.24	2.25	2.22
802.11ax(HE80)	U-NII 3	5775	996	67	77.94	78.05	78.21	78.30
			SU	NA	76.46	77.76	76.85	76.96

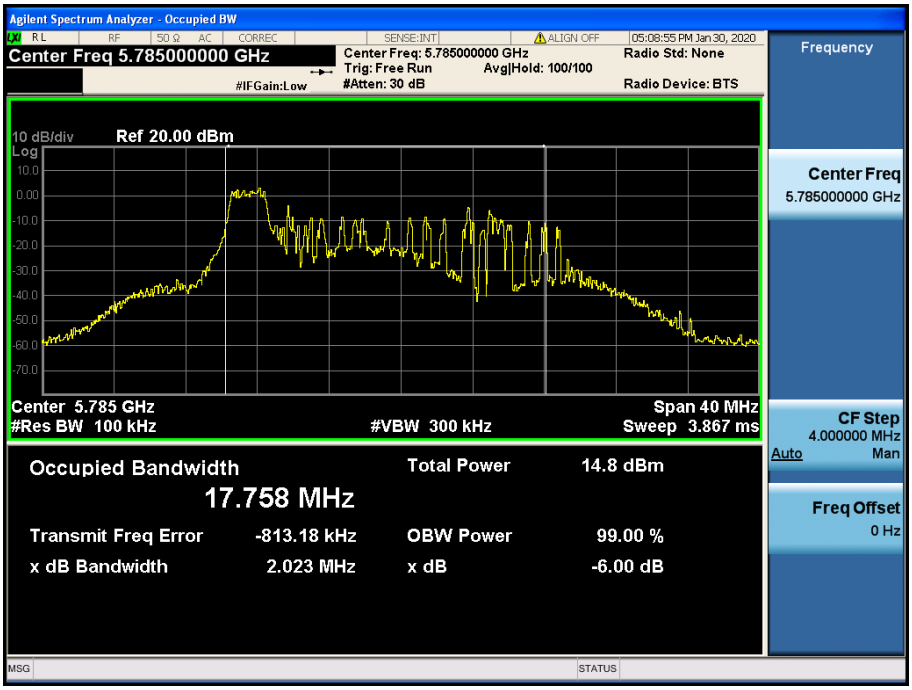
▣ Result Plots

-This test item has been tested in all cases and only the plot of the RU closest to Limit is reported.

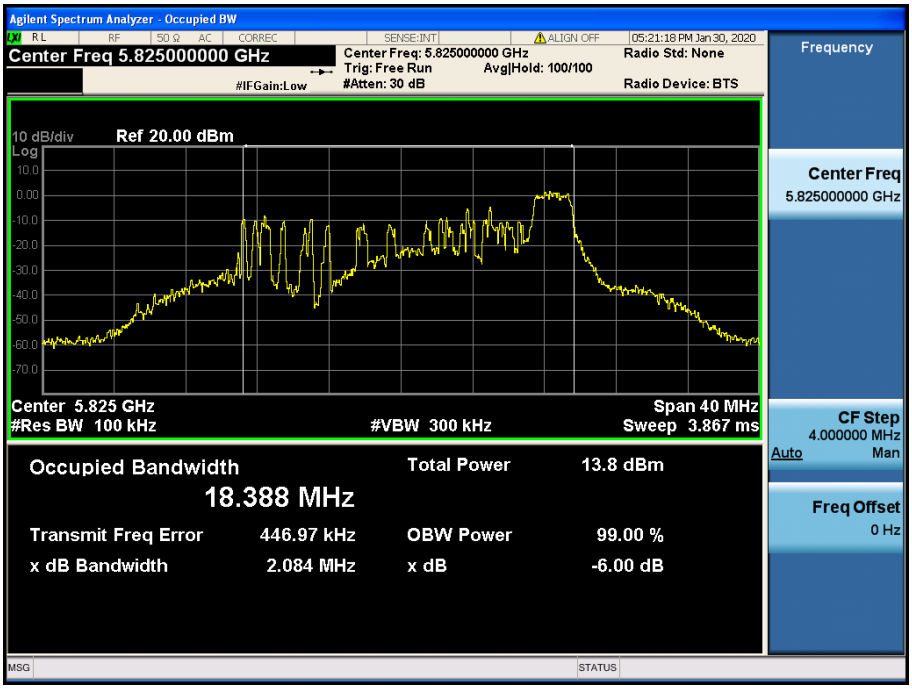
6 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 1 & T26 & 0RU & Ch.149



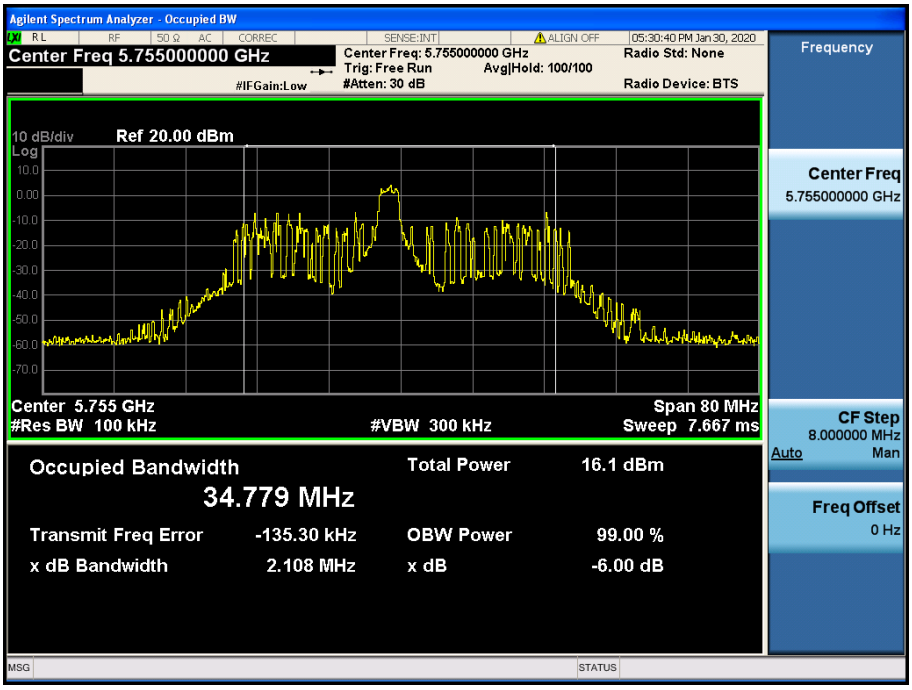
6 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 1 & T26 & 0RU & Ch.157



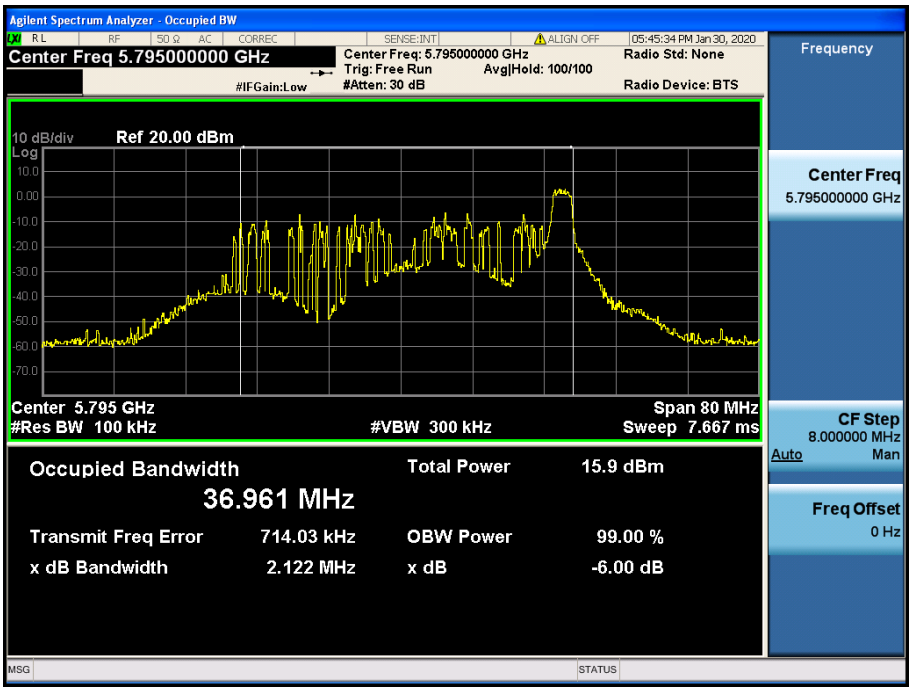
6 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 1 & T26 & 8RU & Ch.165



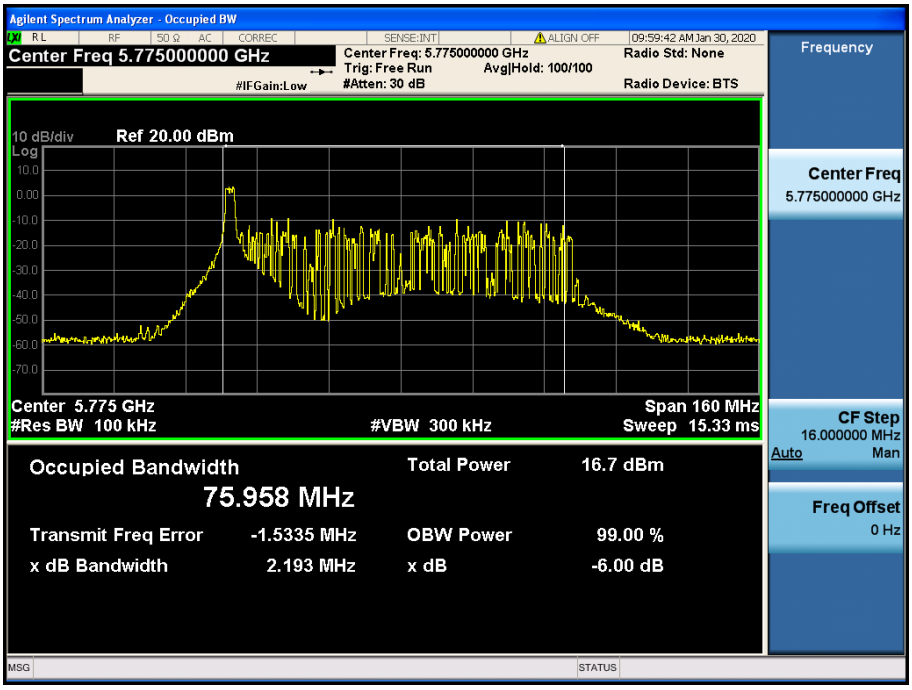
6 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 1 & T26 & 8RU & Ch.151



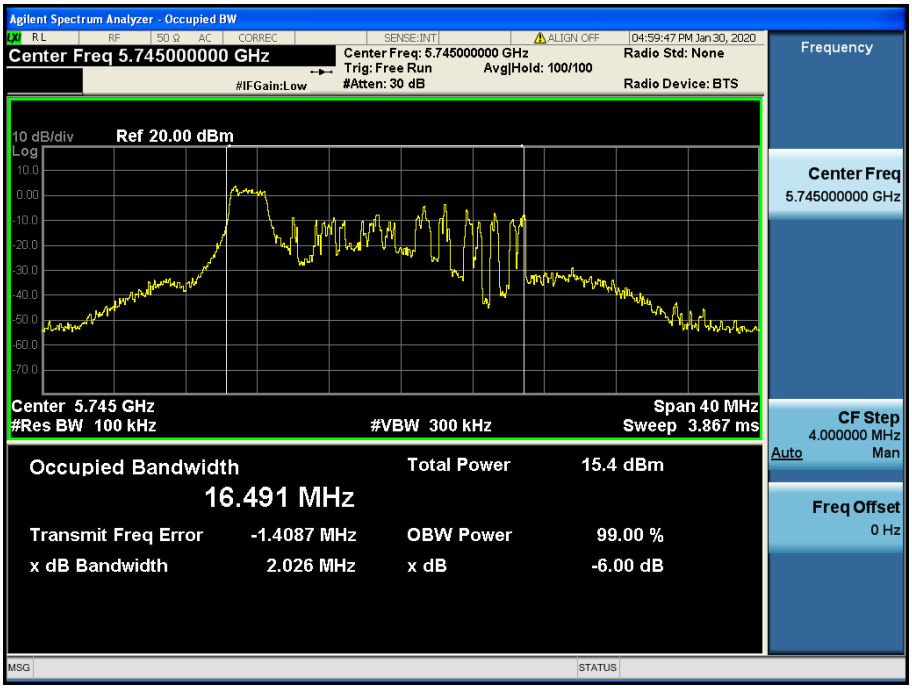
6 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 1 & T26 & 17RU & Ch.159



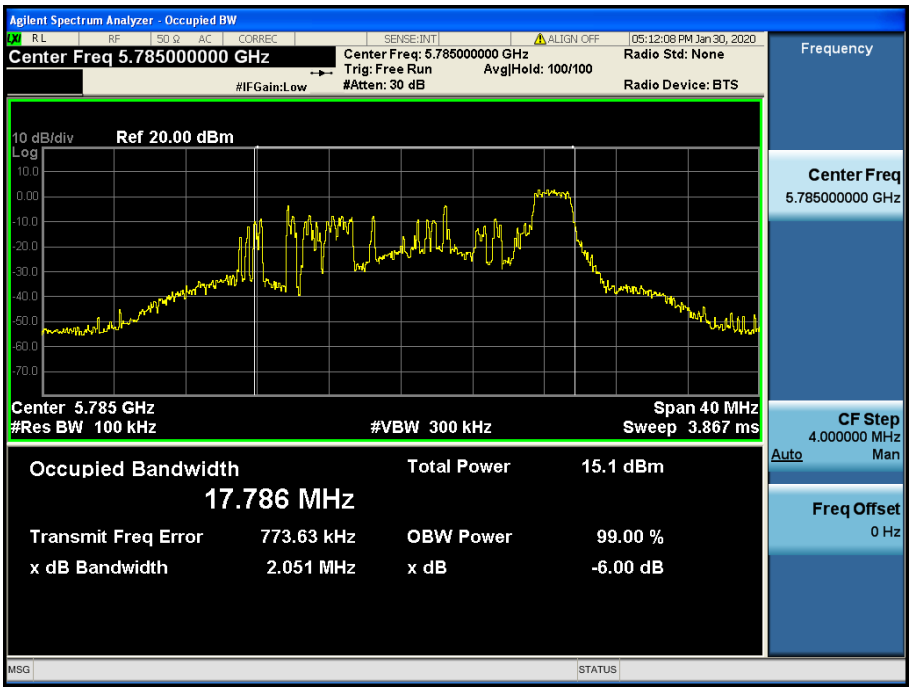
6 dB Bandwidth Test Mode: 802.11ax HE80 & ANT 1 & T26 & 0RU & Ch.155



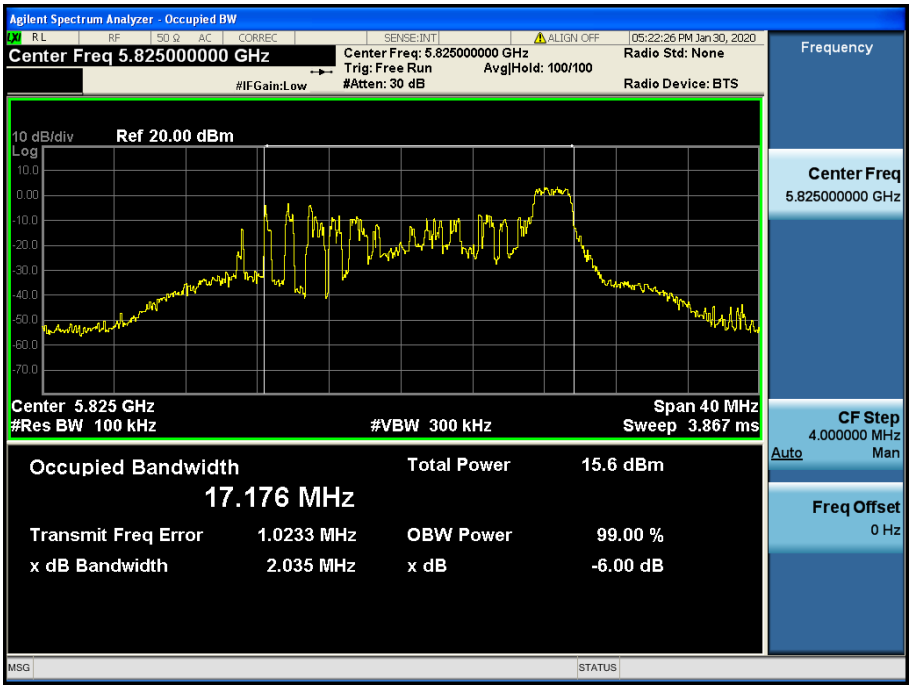
6 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 2 & T26 & 0RU & Ch.149



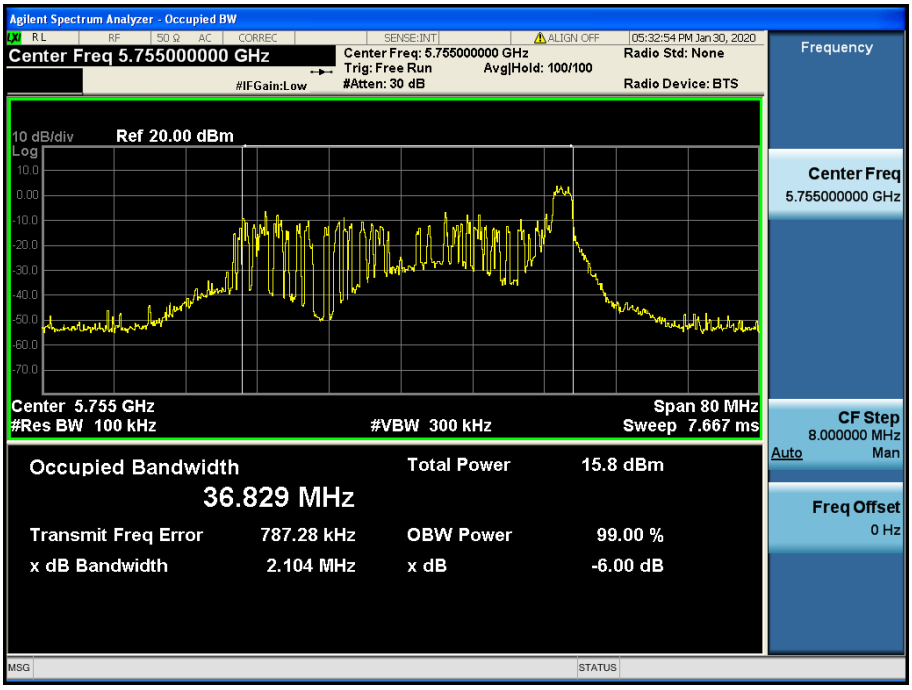
6 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 2 & T26 & 8RU & Ch.157



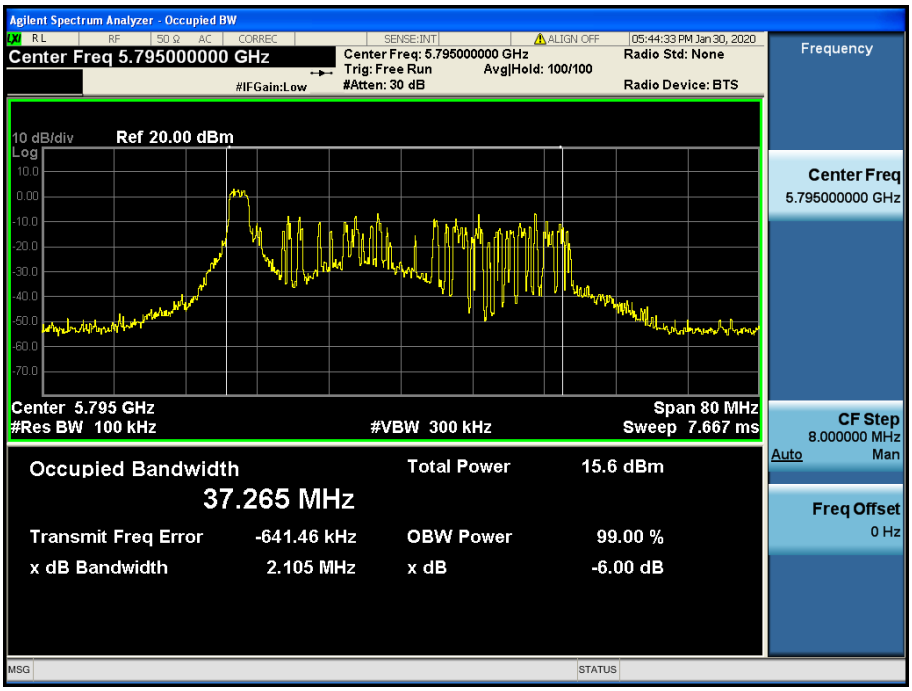
6 dB Bandwidth Test Mode: 802.11ax HE20 & ANT 2 & T26 & 8RU & Ch.165



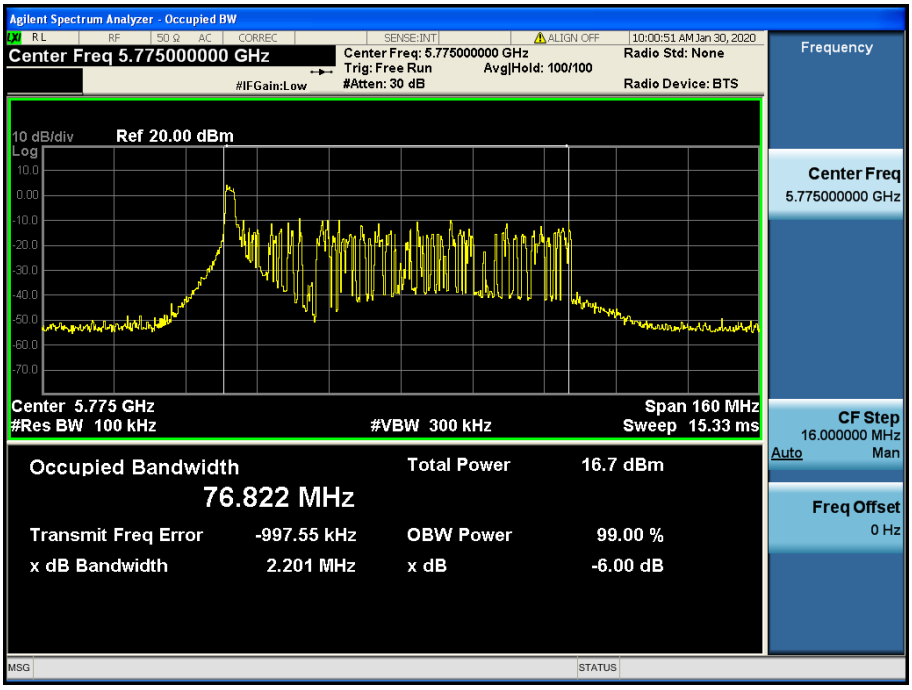
6 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 2 & T26 & 17RU & Ch.151



6 dB Bandwidth Test Mode: 802.11ax HE40 & ANT 2 & T26 & 0RU & Ch.159



6 dB Bandwidth Test Mode: 802.11ax HE80 & ANT 2 & T26 & 0RU & Ch.155



8.3 Maximum Conducted Output Power

▣ Test Requirements

Part. 15.407(a)

(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. 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. 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. 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 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.

(2) For the 5.25 - 5.35 GHz
(3) 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 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, 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.

(4) 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, 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. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. 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.

- Output power Limit Calculation

Band	Power Limit [mW]	Calculated Limit [dBm]	Antenna Gain (Worst case) [dBi]	Determined Limit [dBm]
U-NII 1	250	23.97	-1.30	**23.97**

Band	Power Limit [mW] / Least 26 dBc BW [MHz]	Calculated Limit [dBm]	Antenna Gain (Worst case) [dBi]	Determined Limit [dBm]
U-NII 2A	250	23.97	-1.30	**22.52**
	14.19	22.52		
U-NII 2C	250	23.97	-0.33	**21.64**
	11.60	21.64		

Band	Power Limit [mW]	Calculated Limit [dBm]	Antenna Gain [dBi]	Determined Limit [dBm]
U-NII 3	1000	30.00	-0.13	**30.00**

▣ Test Configuration

Method PM-G

▣ Test Procedure

Method PM-G of KDB789033 D02

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

▣ **Test Results: Comply**

- Output Power: Single & CDD

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax HE20	5180	26	0	8.16	8.52	11.36
			4	8.23	8.53	11.39
			8	8.03	8.44	11.25
	5200	26	0	8.44	8.02	11.25
			4	8.47	8.11	11.30
			8	8.38	8.06	11.23
	5240	26	0	8.69	8.23	11.48
			4	8.61	8.34	11.49
			8	8.50	8.22	11.37
	5260	26	0	8.62	8.13	11.39
			4	8.59	8.22	11.42
			8	8.45	8.21	11.34
	5300	26	0	8.35	8.48	11.43
			4	8.44	8.53	11.49
			8	8.32	8.49	11.42
	5320	26	0	8.15	8.03	11.10
			4	8.10	8.03	11.07
			8	8.05	8.02	11.05
	5500	26	0	8.92	8.04	11.51
			4	9.03	8.18	11.64
			8	8.95	8.11	11.56
	5600	26	0	8.74	8.30	11.53
			4	8.74	8.37	11.57
			8	8.59	8.23	11.42
	5720	26	0	8.74	8.05	11.42
			4	8.64	8.12	11.40
			8	8.46	8.06	11.27
	5745	26	0	9.12	8.01	11.61
			4	9.00	8.05	11.56
			8	8.85	8.01	11.46
	5785	26	0	8.72	8.04	11.40
			4	8.67	8.05	11.38
			8	8.46	8.01	11.25
	5825	26	0	8.29	8.09	11.20
			4	8.32	8.12	11.23
			8	8.12	8.03	11.08

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax HE20	5180	52	37	8.22	8.45	11.34
			38	8.33	8.57	11.46
			40	8.12	8.53	11.34
	5200	52	37	8.51	8.01	11.28
			38	8.61	8.02	11.34
			40	8.49	8.03	11.28
	5240	52	37	8.69	8.35	11.53
			38	8.80	8.44	11.63
			40	8.59	8.43	11.52
	5260	52	37	8.67	8.25	11.47
			38	8.71	8.37	11.55
			40	8.54	8.29	11.43
	5300	52	37	8.41	8.56	11.50
			38	8.60	8.63	11.62
			40	8.42	8.53	11.48
	5320	52	37	8.25	8.02	11.14
			38	8.41	8.11	11.27
			40	8.21	8.03	11.13
	5500	52	37	9.03	8.17	11.63
			38	9.12	8.31	11.74
			40	8.99	8.21	11.63
	5600	52	37	8.76	8.37	11.58
			38	8.84	8.45	11.66
			40	8.62	8.34	11.49
	5720	52	37	8.79	8.18	11.50
			38	8.83	8.23	11.55
			40	8.52	8.08	11.32
	5745	52	37	9.14	8.20	11.70
			38	9.14	8.20	11.71
			40	8.92	8.00	11.50
	5785	52	37	8.82	8.13	11.50
			38	8.88	8.22	11.57
			40	8.59	8.05	11.34
	5825	52	37	8.43	8.19	11.32
			38	8.50	8.26	11.39
			40	8.23	8.04	11.15

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax HE20	5180	106	53	8.34	8.62	11.49
			54	8.22	8.69	11.47
	5200	106	53	8.63	8.11	11.39
			54	8.60	8.12	11.38
	5240	106	53	8.83	8.51	11.68
			54	8.75	8.49	11.63
	5260	106	53	8.77	8.42	11.61
			54	8.71	8.42	11.58
	5300	106	53	8.56	8.73	11.66
			54	8.55	8.67	11.62
	5320	106	53	8.38	8.23	11.32
			54	8.30	8.11	11.22
	5500	106	53	9.17	8.34	11.78
			54	9.09	8.31	11.73
	5600	106	53	8.90	8.51	11.72
			54	8.84	8.53	11.70
	5720	106	53	8.88	8.31	11.62
			54	8.73	8.21	11.48
	5745	106	53	9.27	8.31	11.82
			54	9.13	8.13	11.67
	5785	106	53	8.91	8.25	11.60
			54	8.81	8.12	11.49
	5825	106	53	8.61	8.27	11.45
			54	8.39	8.23	11.32

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax HE20	5180	242	61	8.51	8.76	11.65
	5200	242	61	8.81	8.28	11.56
	5240	242	61	9.02	8.64	11.84
	5260	242	61	8.92	8.58	11.76
	5300	242	61	8.89	8.89	11.90
	5320	242	61	8.51	8.29	11.41
	5500	242	61	9.35	8.50	11.96
	5600	242	61	9.08	8.69	11.90
	5720	242	61	9.04	8.40	11.74
	5745	242	61	9.45	8.37	11.95
	5785	242	61	9.00	8.32	11.68
	5825	242	61	8.71	8.39	11.56
802.11ax HE20	5180	SU	NA	14.58	14.60	17.60
	5200	SU	NA	14.45	14.67	17.57
	5240	SU	NA	14.23	14.66	17.46
	5260	SU	NA	14.25	14.67	17.48
	5300	SU	NA	14.34	14.42	17.39
	5320	SU	NA	14.20	14.48	17.35
	5500	SU	NA	14.51	14.20	17.37
	5600	SU	NA	14.46	14.54	17.51
	5720	SU	NA	14.71	14.17	17.46
	5745	SU	NA	14.64	14.17	17.42
	5785	SU	NA	14.54	13.98	17.28
	5825	SU	NA	14.17	14.22	17.20

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax HE40	5190	26	0	8.48	8.05	11.28
			8	9.03	8.62	11.84
			17	8.21	8.44	11.33
	5230	26	0	8.33	8.42	11.38
			8	8.78	8.98	11.89
			17	8.15	8.58	11.38
	5270	26	0	8.54	8.35	11.46
			8	9.01	8.86	11.95
			17	8.41	8.44	11.44
	5310	26	0	8.44	8.41	11.44
			8	8.85	8.90	11.89
			17	8.34	8.35	11.36
	5510	26	0	8.57	8.17	11.38
			8	9.07	8.75	11.92
			17	8.61	8.38	11.50
	5590	26	0	8.76	8.21	11.51
			8	9.22	8.86	12.06
			17	8.56	8.45	11.52
	5710	26	0	9.22	8.28	11.78
			8	9.59	8.72	12.19
			17	8.93	8.14	11.56
	5755	26	0	8.93	8.39	11.68
			8	9.28	8.76	12.04
			17	8.45	8.10	11.29
	5795	26	0	9.40	8.32	11.91
			8	9.65	8.68	12.20
			17	8.68	8.01	11.37

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax HE40	5190	52	37	8.67	8.15	11.43
			40	8.97	8.61	11.81
			44	8.51	8.32	11.43
	5230	52	37	8.39	8.53	11.47
			40	8.77	9.04	11.92
			44	8.24	8.67	11.47
	5270	52	37	8.71	8.42	11.57
			40	9.02	8.88	11.96
			44	8.55	8.52	11.54
	5310	52	37	8.50	8.56	11.54
			40	8.86	8.93	11.91
			44	8.36	8.46	11.42
	5510	52	37	8.70	8.30	11.51
			40	9.09	8.79	11.95
			44	8.61	8.51	11.57
	5590	52	37	8.88	8.44	11.68
			40	9.20	8.88	12.06
			44	8.65	8.54	11.60
	5710	52	37	9.26	8.37	11.85
			40	9.65	8.74	12.23
			44	9.00	8.26	11.66
	5755	52	37	8.98	8.52	11.77
			40	9.17	8.82	12.01
			44	8.57	8.25	11.42
	5795	52	37	9.40	8.41	11.94
			40	9.67	8.73	12.23
			44	8.93	8.05	11.52

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax HE40	5190	106	53	8.89	8.45	11.68
			54	9.09	8.76	11.94
			56	8.61	8.56	11.60
	5230	106	53	8.77	8.80	11.79
			54	8.96	9.12	12.05
			56	8.49	8.87	11.69
	5270	106	53	8.98	8.68	11.84
			54	9.19	8.98	12.09
			56	8.74	8.74	11.75
	5310	106	53	8.82	8.72	11.78
			54	9.00	9.01	12.02
			56	8.69	8.79	11.75
	5510	106	53	9.00	8.56	11.79
			54	9.22	8.90	12.07
			56	8.93	8.75	11.85
	5590	106	53	9.11	8.64	11.89
			54	9.38	8.96	12.18
			56	8.95	8.80	11.88
	5710	106	53	9.57	8.61	12.13
			54	9.73	8.87	12.33
			56	9.37	8.53	11.98
	5755	106	53	9.28	8.75	12.03
			54	9.42	8.90	12.18
			56	8.95	8.47	11.72
	5795	106	53	9.59	8.58	12.12
			54	9.73	8.79	12.30
			56	9.23	8.24	11.77

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax HE40	5190	242	61	8.86	8.43	11.66
			62	8.80	8.53	11.67
	5230	242	61	8.79	8.83	11.82
			62	8.59	9.00	11.81
	5270	242	61	9.01	8.81	11.92
			62	8.82	8.78	11.81
	5310	242	61	8.69	8.74	11.73
			62	8.78	8.79	11.79
	5510	242	61	9.06	8.61	11.85
			62	9.01	8.72	11.88
	5590	242	61	9.06	8.73	11.91
			62	9.02	8.71	11.88
	5710	242	61	9.61	8.62	12.15
			62	9.42	8.57	12.03
	5755	242	61	9.25	8.72	12.00
			62	9.18	8.55	11.89
	5795	242	61	9.61	8.57	12.13
			62	9.42	8.39	11.95
802.11ax HE40	5190	484	65	8.95	8.53	11.76
	5230	484	65	8.72	8.88	11.81
	5270	484	65	8.97	8.78	11.89
	5310	484	65	8.84	8.82	11.84
	5510	484	65	9.01	8.66	11.85
	5590	484	65	9.18	8.78	11.99
	5710	484	65	9.64	8.64	12.18
	5755	484	65	9.19	8.67	11.95
	5795	484	65	9.52	8.48	12.04
802.11ax HE40	5190	SU	NA	10.50	10.39	13.45
	5230	SU	NA	13.89	13.79	16.85
	5270	SU	NA	13.83	13.79	16.82
	5310	SU	NA	10.33	10.21	13.28
	5510	SU	NA	10.64	9.90	13.29
	5590	SU	NA	14.28	13.75	17.03
	5710	SU	NA	14.39	13.60	17.03
	5755	SU	NA	14.40	13.53	17.00
	5795	SU	NA	14.29	13.48	16.92

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax HE80	5210	26	0	8.59	8.18	11.40
			18	8.66	8.98	11.83
			36	8.07	8.76	11.44
	5290	26	0	8.46	8.70	11.59
			18	8.49	9.21	11.88
			36	8.13	8.90	11.54
	5530	26	0	8.66	8.41	11.55
			18	8.80	8.74	11.78
			36	8.31	8.47	11.40
	5610	26	0	9.08	8.59	11.85
			18	9.27	8.87	12.08
			36	8.60	8.53	11.57
	5690	26	0	9.18	8.55	11.89
			18	9.05	8.63	11.85
			36	8.50	8.16	11.35
	5775	26	0	9.28	8.58	11.95
			18	8.97	8.60	11.80
			36	8.12	8.02	11.08
802.11ax HE80	5210	52	37	8.56	8.31	11.45
			44	8.78	8.92	11.86
			52	8.32	8.93	11.64
	5290	52	37	8.65	8.66	11.67
			44	8.57	9.16	11.88
			52	8.18	9.12	11.69
	5530	52	37	8.72	8.24	11.50
			44	8.89	8.74	11.83
			52	8.55	8.61	11.59
	5610	52	37	9.12	8.56	11.86
			44	9.33	8.82	12.09
			52	8.81	8.77	11.80
	5690	52	37	8.94	8.70	11.83
			44	9.13	8.70	11.93
			52	8.48	8.43	11.47
	5775	52	37	9.24	8.63	11.96
			44	9.17	8.61	11.91
			52	8.39	8.41	11.41

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax HE80	5210	106	53	8.82	8.42	11.63
			56	8.85	8.95	11.91
			60	8.21	8.90	11.58
	5290	106	53	8.64	8.86	11.77
			56	8.71	9.20	11.97
			60	8.33	9.04	11.71
	5530	106	53	8.88	8.48	11.69
			56	8.98	8.69	11.85
			60	8.41	8.70	11.56
	5610	106	53	9.35	8.75	12.07
			56	9.37	8.92	12.16
			60	8.90	8.87	11.89
	5690	106	53	9.07	8.71	11.90
			56	9.21	8.85	12.04
			60	8.62	8.51	11.58
	5775	106	53	9.37	8.74	12.07
			56	9.23	8.69	11.98
			60	8.36	8.08	11.23
802.11ax HE80	5210	242	61	8.83	8.65	11.75
			62	8.85	8.88	11.88
			64	8.41	8.97	11.71
	5290	242	61	8.82	8.87	11.85
			62	8.69	9.16	11.94
			64	8.38	9.16	11.80
	5530	242	61	8.96	8.54	11.76
			62	9.11	8.71	11.92
			64	8.54	8.69	11.63
	5610	242	61	9.52	8.74	12.16
			62	9.50	8.91	12.22
			64	8.89	8.92	11.92
	5690	242	61	9.32	8.73	12.05
			62	9.39	8.78	12.11
			64	8.77	8.49	11.64
	5775	242	61	9.65	8.76	12.24
			62	9.50	8.68	12.12
			64	8.50	8.43	11.48

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax HE80	5210	484	65	8.93	8.75	11.85
			66	8.52	9.03	11.79
	5290	484	65	8.84	8.99	11.93
			66	8.41	9.27	11.87
	5530	484	65	9.11	8.57	11.86
			66	8.76	8.78	11.78
	5610	484	65	9.52	8.83	12.20
			66	9.06	8.80	11.94
	5690	484	65	9.29	8.74	12.04
			66	8.84	8.56	11.72
	5775	484	65	9.58	8.77	12.21
			66	8.71	8.52	11.63
802.11ax HE80	5210	996	67	8.65	8.73	11.70
	5290	996	67	8.47	9.00	11.75
	5530	996	67	8.72	8.54	11.64
	5610	996	67	9.24	8.76	12.02
	5690	996	67	9.06	8.52	11.81
	5775	996	67	9.00	8.41	11.73
802.11ax HE80	5210	SU	NA	10.64	10.19	13.43
	5290	SU	NA	10.27	10.25	13.27
	5530	SU	NA	12.74	11.96	15.38
	5610	SU	NA	12.82	12.09	15.48
	5690	SU	NA	12.69	12.03	15.38
	5775	SU	NA	12.62	11.61	15.15

- Summed Output Power: SDM

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (SDM)
802.11ax HE20	5180	26	0	8.13	8.48	11.32
			4	8.11	8.65	11.40
			8	8.19	8.47	11.34
	5200	26	0	8.48	8.02	11.26
			4	8.39	8.15	11.29
			8	8.58	8.05	11.33
	5240	26	0	8.69	8.37	11.54
			4	8.61	8.56	11.60
			8	8.63	8.39	11.52
	5260	26	0	8.70	8.25	11.49
			4	8.56	8.54	11.56
			8	8.66	8.32	11.50
	5300	26	0	8.53	8.69	11.62
			4	8.38	8.93	11.67
			8	8.56	8.60	11.59
	5320	26	0	8.25	8.19	11.23
			4	8.21	8.34	11.29
			8	8.30	8.11	11.22
	5500	26	0	9.03	8.38	11.73
			4	9.01	8.63	11.83
			8	9.11	8.33	11.75
	5600	26	0	8.74	8.57	11.67
			4	8.66	8.74	11.71
			8	8.78	8.44	11.62
	5720	26	0	8.74	8.35	11.56
			4	8.66	8.48	11.58
			8	8.68	8.11	11.41
	5745	26	0	9.12	8.31	11.74
			4	8.94	8.41	11.69
			8	9.07	8.08	11.61
	5785	26	0	8.80	8.25	11.55
			4	8.71	8.45	11.59
			8	8.77	8.02	11.42
	5825	26	0	8.45	8.33	11.40
			4	8.32	8.42	11.38
			8	8.42	8.01	11.23

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (SDM)
802.11ax HE20	5180	52	37	8.36	8.50	11.44
			38	8.45	8.71	11.59
			40	8.29	8.58	11.45
	5200	52	37	8.65	8.07	11.38
			38	8.70	8.13	11.43
			40	8.55	8.10	11.34
	5240	52	37	8.85	8.46	11.67
			38	8.97	8.59	11.79
			40	8.79	8.52	11.66
	5260	52	37	8.88	8.41	11.66
			38	8.89	8.51	11.71
			40	8.76	8.46	11.62
	5300	52	37	8.70	8.80	11.76
			38	8.69	8.91	11.81
			40	8.61	8.79	11.71
	5320	52	37	8.43	8.28	11.36
			38	8.58	8.41	11.51
			40	8.47	8.20	11.35
	5500	52	37	9.17	8.42	11.83
			38	9.20	8.58	11.91
			40	9.21	8.49	11.87
	5600	52	37	8.88	8.62	11.76
			38	8.98	8.75	11.87
			40	8.92	8.66	11.80
	5720	52	37	8.91	8.32	11.63
			38	8.98	8.34	11.68
			40	8.74	8.18	11.48
	5745	52	37	9.23	8.26	11.78
			38	9.33	8.32	11.87
			40	9.21	8.14	11.72
	5785	52	37	8.92	8.23	11.60
			38	8.94	8.34	11.66
			40	8.81	8.10	11.48
	5825	52	37	8.63	8.22	11.44
			38	8.64	8.32	11.49
			40	8.45	8.06	11.27

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (SDM)
802.11ax HE20	5180	106	53	8.34	8.68	11.52
			54	8.30	8.67	11.50
	5200	106	53	8.83	8.08	11.48
			54	8.51	8.16	11.35
	5240	106	53	8.87	8.41	11.66
			54	8.72	8.59	11.66
	5260	106	53	8.91	8.38	11.66
			54	8.74	8.52	11.64
	5300	106	53	8.76	8.80	11.79
			54	8.59	8.85	11.74
	5320	106	53	8.51	8.24	11.39
			54	8.39	8.34	11.37
	5500	106	53	9.21	8.44	11.85
			54	9.14	8.66	11.91
	5600	106	53	8.98	8.64	11.82
			54	8.85	8.70	11.79
	5720	106	53	8.95	8.38	11.68
			54	8.78	8.40	11.61
	5745	106	53	9.31	8.40	11.89
			54	9.19	8.33	11.79
	5785	106	53	8.95	8.32	11.66
			54	8.76	8.33	11.56
	5825	106	53	8.63	8.35	11.50
			54	8.45	8.26	11.36

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (SDM)
802.11ax HE20	5180	242	61	8.48	8.69	11.59
	5200	242	61	8.79	8.20	11.52
	5240	242	61	8.98	8.63	11.82
	5260	242	61	9.03	8.60	11.83
	5300	242	61	8.82	8.92	11.88
	5320	242	61	8.63	8.39	11.52
	5500	242	61	9.35	8.66	12.03
	5600	242	61	9.09	8.78	11.95
	5720	242	61	9.03	8.48	11.77
	5745	242	61	9.40	8.49	11.98
	5785	242	61	9.09	8.38	11.75
	5825	242	61	8.75	8.44	11.61
802.11ax HE20	5180	SU	NA	14.66	14.73	17.70
	5200	SU	NA	14.59	14.73	17.67
	5240	SU	NA	14.41	14.84	17.64
	5260	SU	NA	14.42	14.83	17.64
	5300	SU	NA	14.53	14.69	17.62
	5320	SU	NA	14.38	14.68	17.54
	5500	SU	NA	14.68	14.44	17.57
	5600	SU	NA	14.61	14.75	17.69
	5720	SU	NA	14.86	14.39	17.64
	5745	SU	NA	14.79	14.35	17.59
	5785	SU	NA	14.73	14.25	17.50
	5825	SU	NA	14.42	14.44	17.44

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (SDM)
802.11ax HE40	5190	26	0	8.54	8.07	11.32
			8	9.03	8.67	11.86
			17	8.45	8.18	11.32
	5230	26	0	8.40	8.52	11.47
			8	8.93	9.04	11.99
			17	8.31	8.62	11.48
	5270	26	0	8.65	8.51	11.59
			8	9.15	8.97	12.07
			17	8.53	8.49	11.52
	5310	26	0	8.61	8.53	11.58
			8	9.04	9.10	12.08
			17	8.41	8.57	11.50
	5510	26	0	8.74	8.42	11.59
			8	9.26	8.99	12.14
			17	8.74	8.61	11.68
	5590	26	0	8.82	8.49	11.67
			8	9.34	9.07	12.22
			17	8.74	8.69	11.72
	5710	26	0	9.28	8.48	11.91
			8	9.84	8.79	12.36
			17	9.12	8.46	11.81
	5755	26	0	8.96	8.55	11.77
			8	9.46	8.86	12.18
			17	8.75	8.41	11.59
	5795	26	0	9.39	8.44	11.95
			8	9.74	8.74	12.28
			17	9.04	8.11	11.61

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (SDM)
802.11ax HE40	5190	52	37	8.59	8.42	11.51
			40	8.93	8.75	11.85
			44	8.64	8.43	11.55
	5230	52	37	8.42	8.67	11.56
			40	8.82	9.16	12.01
			44	8.47	8.66	11.57
	5270	52	37	8.68	8.64	11.67
			40	9.03	9.07	12.06
			44	8.74	8.59	11.67
	5310	52	37	8.58	8.71	11.65
			40	9.00	9.14	12.08
			44	8.60	8.47	11.54
	5510	52	37	8.76	8.55	11.67
			40	9.17	9.08	12.13
			44	8.88	8.66	11.78
	5590	52	37	8.85	8.67	11.77
			40	9.28	9.14	12.22
			44	8.82	8.69	11.77
	5710	52	37	9.30	8.66	12.00
			40	9.65	9.02	12.35
			44	9.28	8.43	11.89
	5755	52	37	8.97	8.78	11.89
			40	9.30	9.11	12.21
			44	8.92	8.44	11.70
	5795	52	37	9.39	8.63	12.04
			40	9.69	8.92	12.33
			44	9.21	8.41	11.84

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (SDM)
802.11ax HE40	5190	106	53	8.72	8.62	11.68
			54	9.02	8.83	11.94
			56	8.69	8.69	11.70
	5230	106	53	8.58	9.00	11.81
			54	8.94	9.24	12.10
			56	8.51	9.05	11.80
	5270	106	53	8.83	8.92	11.89
			54	9.15	9.17	12.17
			56	8.80	8.94	11.88
	5310	106	53	8.67	9.10	11.90
			54	9.08	9.19	12.15
			56	8.75	8.95	11.86
	5510	106	53	8.87	8.95	11.92
			54	9.24	9.18	12.22
			56	8.97	8.99	11.99
	5590	106	53	9.00	9.05	12.04
			54	9.32	9.27	12.31
			56	9.00	9.02	12.02
	5710	106	53	9.42	9.00	12.23
			54	9.75	9.14	12.47
			56	9.34	8.74	12.06
	5755	106	53	9.15	9.02	12.10
			54	9.41	9.20	12.32
			56	9.01	8.65	11.85
	5795	106	53	9.53	8.89	12.23
			54	9.79	9.04	12.44
			56	9.34	8.53	11.96

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (SDM)
802.11ax HE40	5190	242	61	8.90	8.59	11.76
			62	8.83	8.65	11.75
	5230	242	61	8.78	8.99	11.89
			62	8.70	9.01	11.87
	5270	242	61	9.04	8.90	11.98
			62	8.99	9.03	12.02
	5310	242	61	8.87	8.99	11.94
			62	8.86	8.97	11.93
	5510	242	61	9.06	8.91	11.99
			62	9.12	8.97	12.05
	5590	242	61	9.17	9.02	12.10
			62	9.14	9.02	12.09
	5710	242	61	9.55	8.93	12.26
			62	9.54	8.78	12.19
	5755	242	61	9.29	9.00	12.16
			62	9.16	8.76	11.97
	5795	242	61	9.64	8.81	12.25
			62	9.40	8.66	12.06
802.11ax HE40	5190	484	65	8.90	8.70	11.81
	5230	484	65	8.71	9.08	11.91
	5270	484	65	8.97	9.02	12.01
	5310	484	65	8.91	9.03	11.98
	5510	484	65	9.12	9.00	12.07
	5590	484	65	9.20	9.09	12.15
	5710	484	65	9.55	8.94	12.27
	5755	484	65	9.25	8.94	12.11
	5795	484	65	9.58	8.76	12.20
802.11ax HE40	5190	SU	NA	10.39	10.33	13.37
	5230	SU	NA	13.84	13.84	16.85
	5270	SU	NA	13.80	13.87	16.85
	5310	SU	NA	10.31	10.33	13.33
	5510	SU	NA	10.66	10.08	13.39
	5590	SU	NA	14.18	13.88	17.04
	5710	SU	NA	14.31	13.72	17.04
	5755	SU	NA	14.38	13.64	17.04
	5795	SU	NA	14.26	13.51	16.91

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (SDM)
802.11ax HE80	5210	26	0	8.51	8.47	11.50
			18	8.65	9.10	11.89
			36	8.21	8.74	11.49
	5290	26	0	8.48	8.85	11.68
			18	8.56	9.42	12.02
			36	8.31	8.85	11.60
	5530	26	0	8.52	8.42	11.48
			18	8.92	9.04	11.99
			36	8.64	8.58	11.62
	5610	26	0	9.08	8.71	11.91
			18	9.32	9.24	12.29
			36	9.04	8.64	11.86
	5690	26	0	8.86	8.66	11.77
			18	9.10	9.02	12.07
			36	8.71	8.30	11.52
	5775	26	0	9.07	8.75	11.92
			18	9.08	8.89	12.00
			36	8.43	8.02	11.24
802.11ax HE80	5210	52	37	8.57	8.66	11.63
			44	8.93	8.89	11.92
			52	8.43	8.94	11.70
	5290	52	37	8.45	8.95	11.72
			44	8.81	9.25	12.04
			52	8.38	9.18	11.81
	5530	52	37	8.53	8.55	11.55
			44	9.11	8.79	11.97
			52	8.72	8.88	11.81
	5610	52	37	9.03	8.80	11.92
			44	9.52	8.99	12.27
			52	9.11	8.98	12.06
	5690	52	37	8.83	8.80	11.82
			44	9.33	8.76	12.06
			52	8.77	8.56	11.67
	5775	52	37	8.97	8.82	11.90
			44	9.36	8.72	12.06
			52	8.57	8.33	11.46

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (SDM)
802.11ax HE80	5210	106	53	8.58	8.85	11.73
			56	9.04	9.06	12.06
			60	8.27	9.03	11.68
	5290	106	53	8.37	9.27	11.85
			56	8.81	9.40	12.12
			60	8.32	9.10	11.73
	5530	106	53	8.47	8.78	11.64
			56	9.09	9.00	12.06
			60	8.67	8.90	11.80
	5610	106	53	9.07	9.05	12.07
			56	9.52	9.15	12.35
			60	9.02	8.96	12.00
	5690	106	53	8.83	9.02	11.94
			56	9.34	9.00	12.18
			60	8.75	8.58	11.68
	5775	106	53	9.05	9.02	12.04
			56	9.32	8.85	12.10
			60	8.56	8.26	11.42
802.11ax HE80	5210	242	61	8.77	8.91	11.85
			62	8.94	9.02	11.99
			64	8.47	9.05	11.78
	5290	242	61	8.62	9.30	11.99
			62	8.79	9.40	12.12
			64	8.49	9.20	11.87
	5530	242	61	8.70	8.80	11.76
			62	9.03	8.97	12.01
			64	8.80	8.92	11.87
	5610	242	61	9.23	9.01	12.13
			62	9.50	9.08	12.31
			64	9.20	9.00	12.11
	5690	242	61	9.07	9.01	12.05
			62	9.37	8.96	12.18
			64	8.91	8.65	11.79
	5775	242	61	9.25	9.00	12.14
			62	9.37	8.93	12.17
			64	8.75	8.43	11.60

Mode	Freq.[MHz]	Tone	RU Index	Test Result [dBm]		
				ANT 1	ANT 2	ANT1+ANT2 (SDM)
802.11ax HE80	5210	484	65	8.80	9.00	11.91
			66	8.73	9.00	11.88
	5290	484	65	8.69	9.34	12.04
			66	8.73	9.28	12.03
	5530	484	65	8.90	8.89	11.90
			66	9.04	8.90	11.98
	5610	484	65	9.43	9.09	12.28
			66	9.41	9.11	12.27
	5690	484	65	9.19	9.01	12.11
			66	9.18	8.73	11.97
	5775	484	65	9.32	8.95	12.15
			66	9.06	8.53	11.81
802.11ax HE80	5210	996	67	8.78	8.92	11.86
	5290	996	67	8.60	9.24	11.94
	5530	996	67	8.97	8.87	11.93
	5610	996	67	9.41	8.97	12.20
	5690	996	67	9.12	8.78	11.96
	5775	996	67	9.14	8.68	11.92
802.11ax HE80	5210	SU	NA	10.64	10.11	13.39
	5290	SU	NA	10.38	10.24	13.32
	5530	SU	NA	12.87	12.08	15.50
	5610	SU	NA	12.99	12.23	15.64
	5690	SU	NA	12.80	12.14	15.49
	5775	SU	NA	12.76	11.74	15.29

8.4 Maximum Power Spectral Density

▣ Test requirements

Part. 15.407(a)

(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 power spectral density shall not exceed 17 dBm in any 1 MHz band. **note1**

(ii) For an indoor access point operating in the band 5.15 - 5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 MHz band. note1

(iii) For fixed point-to-point access points operating in the band 5.15 - 5.25 GHz, transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.

(iv) For mobile and portable client devices in the 5.15 - 5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 MHz band. note1

(2) For the 5.25 - 5.35 GHz and 5.47 - 5.725 GHz bands, the peak power spectral density shall not exceed 11 dBm in any 1 MHz band. note1

(3) For the band 5.725 - 5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500 kHz band. note1,note2

Note1: If transmitting antennas of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note2: Fixed point - to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information.

- Peak Power Spectral Density Limit Calculation

Band	Limit [dBm]	Antenna Gain (Worst case) [dBi]	Determined Limit [dBm]
U-NII 1	11	-1.30	11
U-NII 2A	11	-1.30	11
U-NII 2C	11	-0.33	11
U-NII 3	30	-0.13	30

▣ Test Configuration

Refer to the APPENDIX I.

▣ Test Procedure

Maximum Power Spectral Density is measured using Measurement Procedure **of KDB789033 D02v02r01**

1) Create an average power spectrum for the EUT operating mode being tested by following the instructions in section II.E.2. for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA - 1, SA - 2, **SA - 3, or alternatives** to each) and apply it up to, but not including, the step labeled, "Compute power…". (This procedure is required even if the maximum conducted output power measurement was performed using a power meter, method PM.)

Method SA-3 Alternative (Reduced VBW with max hold):

-Set span to encompass the entire emission bandwidth (EBW) of the signal.
-Set sweep trigger to "free run."
-Set RBW = 1 MHz.
-Set VBW ≥ 1/T Note2
-Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
-Sweep time = auto
-Detector = peak.
-Video filtering shall be applied to a voltage-squared or power signal (rms), if possible. Otherwise, it shall be set to operate on a linear voltage signal (which may require use of linear display mode). Log mode must not be used.
*The preferred voltage-squared (i.e., power or rms) mode is selected on some analyzers by setting the "Average-VBW Type" to power or rms.
*If power averaging (rms) mode is not available, linear voltage mode is selected on some analyzers by setting the display mode to linear. Other analyzers have a setting for "Average-VBW Type" that can be set to "Voltage" regardless of the display mode.
-Trace mode = max hold.
-Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

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

3) Make the following adjustments to the peak value of the spectrum, if applicable:
a) If Method SA - 2 or SA - 2 Alternative was used, add 10 log(1 / x), where x is the duty cycle, to the peak of the spectrum.
b) If Method SA - 3 Alternative was used and the linear mode was used in step II.E.2.g (viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.

4) The result is the Maximum PSD over 1 MHz reference bandwidth.

5) For devices operating in the bands 5.15 - 5.25 GHz, 5.25 - 5.35 GHz, and 5.47 - 5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in §15.407(a)(5). For devices operating in the band 5.725 - 5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:
a) Set RBW ≥ 1 / T, where T is defined in section II.B.1.a). (Refer to Appendix II)
b) Set VBW ≥ 3 RBW.
c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10 log(500 kHz / RBW) to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10 log(1 MHz / RBW) to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note1: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the sections 5.c) and 5.d) above, since RBW = 100 kHz is available on nearly all spectrum analyzers.
Note2: Refer to the Appendix I for actual setting the VBW.

▣ **Test Results: Comply**

- Summed Power spectral density: CDD

Mode	Frequency [MHz]	Tone	RU Index	Test Result [dBm]		Test Result [dBm]
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax (HE20)	5180	26	0	5.18	6.63	8.97
			4	4.07	5.56	7.88
			8	5.01	6.65	8.92
	5200	26	0	5.67	5.82	8.75
			4	4.80	4.92	7.87
			8	5.81	6.01	8.92
	5240	26	0	5.38	6.29	8.87
			4	4.52	5.19	7.88
			8	5.62	6.44	9.06
	5260	26	0	5.56	6.30	8.96
			4	4.37	5.22	7.82
			8	5.31	6.31	8.85
	5300	26	0	5.32	6.31	8.85
			4	4.27	5.41	7.89
			8	5.20	6.58	8.96
	5320	26	0	5.20	6.05	8.66
			4	4.23	5.04	7.66
			8	5.44	6.13	8.81
	5500	26	0	6.18	6.48	9.34
			4	5.10	5.54	8.34
			8	6.16	6.54	9.36
	5600	26	0	6.02	6.84	9.46
			4	4.96	5.76	8.39
			8	5.92	6.78	9.38
	5720	26	0	6.24	6.18	9.22
			4	5.22	4.92	8.08
			8	6.08	5.73	8.92
	5745	26	0	4.26	4.08	7.18
			4	4.14	4.13	7.14
			8	4.03	3.98	7.02
	5785	26	0	3.66	4.23	6.97
			4	3.65	4.30	7.00
			8	3.55	4.37	6.99
	5825	26	0	3.49	4.75	7.18
			4	3.14	4.68	6.99
			8	2.79	4.53	6.76

Mode	Frequency [MHz]	Tone	RU Index	Test Result [dBm]		Test Result [dBm]
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax (HE20)	5180	52	37	2.48	3.95	6.29
			38	2.46	4.00	6.31
			40	2.28	3.91	6.18
	5200	52	37	3.11	3.24	6.19
			38	3.22	3.28	6.26
			40	3.14	3.29	6.23
	5240	52	37	2.76	3.57	6.19
			38	2.91	3.61	6.29
			40	2.91	3.65	6.30
	5260	52	37	2.92	3.64	6.30
			38	2.85	3.69	6.30
			40	2.64	3.61	6.16
	5300	52	37	2.78	3.74	6.30
			38	2.68	3.82	6.30
			40	2.49	3.93	6.28
	5320	52	37	2.51	3.39	5.98
			38	2.58	3.44	6.04
			40	2.68	3.43	6.08
	5500	52	37	3.59	3.85	6.73
			38	3.64	4.02	6.85
			40	3.48	3.85	6.68
	5600	52	37	3.36	4.24	6.83
			38	3.40	4.21	6.84
			40	3.23	4.09	6.69
	5720	52	37	3.62	3.46	6.55
			38	3.62	3.42	6.53
			40	3.45	3.10	6.29
	5745	52	37	1.54	1.10	4.33
			38	1.37	1.32	4.36
			40	1.46	1.49	4.48
	5785	52	37	0.94	1.30	4.13
			38	0.83	1.68	4.29
			40	0.88	1.55	4.24
	5825	52	37	0.70	1.78	4.29
			38	0.66	2.03	4.41
			40	0.21	1.91	4.15

Mode	Frequency [MHz]	Tone	RU Index	Test Result [dBm]		Test Result [dBm]
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax (HE20)	5180	106	53	-0.43	1.04	3.38
			54	-0.68	1.11	3.32
	5200	106	53	0.15	0.38	3.28
			54	0.19	0.36	3.29
	5240	106	53	-0.06	0.63	3.31
			54	-0.06	0.71	3.35
	5260	106	53	-0.11	0.73	3.34
			54	-0.17	0.65	3.27
	5300	106	53	-0.28	0.94	3.38
			54	-0.33	1.02	3.40
	5320	106	53	-0.40	0.59	3.13
			54	-0.26	0.58	3.19
	5500	106	53	0.58	1.03	3.82
			54	0.58	0.96	3.78
	5600	106	53	0.39	1.21	3.83
			54	0.39	1.15	3.80
	5720	106	53	0.73	0.47	3.61
			54	0.54	0.24	3.40
	5745	106	53	-1.40	-1.72	1.45
			54	-1.64	-1.31	1.54
	5785	106	53	-2.00	-1.37	1.34
			54	-2.17	-1.01	1.46
	5825	106	53	-2.24	-1.00	1.43
			54	-2.79	-1.08	1.16

Mode	Frequency [MHz]	Tone	RU Index	Test Result [dBm]		Test Result [dBm]
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax (HE20)	5180	242	61	-3.83	-2.37	-0.03
	5200	242	61	-3.14	-3.01	-0.06
	5240	242	61	-3.44	-2.68	-0.03
	5260	242	61	-3.47	-2.68	-0.05
	5300	242	61	-3.66	-2.45	0.00
	5320	242	61	-3.72	-2.85	-0.25
	5500	242	61	-2.76	-2.42	0.43
	5600	242	61	-2.95	-2.18	0.46
	5720	242	61	-2.67	-2.94	0.21
	5745	242	61	-3.87	-3.61	-0.72
	5785	242	61	-4.49	-3.42	-0.91
	5825	242	61	-4.85	-3.18	-0.93
802.11ax (HE20)	5180	SU	NA	3.31	3.70	6.52
	5200	SU	NA	3.39	4.00	6.71
	5240	SU	NA	3.01	3.81	6.44
	5260	SU	NA	2.94	3.76	6.38
	5300	SU	NA	2.71	3.49	6.13
	5320	SU	NA	2.82	3.50	6.19
	5500	SU	NA	3.34	3.45	6.40
	5600	SU	NA	3.49	4.07	6.80
	5720	SU	NA	3.70	3.08	6.41
	5745	SU	NA	2.70	2.72	5.72
	5785	SU	NA	2.60	2.58	5.60
	5825	SU	NA	2.04	3.02	5.57

Mode	Frequency [MHz]	Tone	RU Index	Test Result [dBm]		Test Result [dBm]
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax (HE40)	5190	26	0	5.91	5.91	8.92
			8	6.19	6.33	9.27
			17	5.78	6.11	8.96
	5230	26	0	5.81	6.24	9.04
			8	5.95	6.53	9.26
			17	5.56	6.24	8.92
	5270	26	0	5.66	6.21	8.95
			8	5.76	6.67	9.25
			17	5.16	6.10	8.67
	5310	26	0	5.45	5.92	8.70
			8	5.78	6.60	9.22
			17	5.44	6.12	8.80
	5510	26	0	5.98	6.37	9.19
			8	6.27	6.78	9.54
			17	5.69	6.55	9.15
	5590	26	0	6.09	6.48	9.30
			8	6.52	7.11	9.83
			17	6.05	6.54	9.31
	5710	26	0	6.51	6.16	9.35
			8	6.92	6.51	9.73
			17	6.12	5.54	8.85
	5755	26	0	3.82	4.06	6.95
			8	4.14	4.46	7.31
			17	3.33	3.82	6.59
	5795	26	0	4.38	4.13	7.27
			8	4.61	4.75	7.69
			17	3.87	4.11	7.00

Mode	Frequency [MHz]	Tone	RU Index	Test Result [dBm]		Test Result [dBm]
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax (HE40)	5190	52	37	3.22	3.21	6.23
			40	3.34	3.66	6.51
			44	3.18	3.44	6.32
	5230	52	37	3.22	3.58	6.41
			40	3.32	3.86	6.61
			44	2.90	3.56	6.25
	5270	52	37	3.02	3.56	6.31
			40	3.10	3.85	6.50
			44	2.54	3.51	6.06
	5310	52	37	2.82	3.20	6.03
			40	3.09	3.96	6.56
			44	2.78	3.47	6.15
	5510	52	37	3.27	3.81	6.55
			40	3.55	4.07	6.83
			44	2.97	3.76	6.39
	5590	52	37	3.35	3.87	6.63
			40	3.81	4.27	7.06
			44	3.32	3.82	6.59
	5710	52	37	3.84	3.56	6.71
			40	4.09	3.72	6.92
			44	3.55	2.84	6.22
	5755	52	37	1.32	1.38	4.36
			40	1.27	1.68	4.49
			44	0.87	1.21	4.06
	5795	52	37	1.59	1.49	4.55
			40	1.73	1.86	4.80
			44	1.32	1.39	4.37

Mode	Frequency [MHz]	Tone	RU Index	Test Result [dBm]		Test Result [dBm]
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax (HE40)	5190	106	53	0.37	0.52	3.45
			54	0.36	0.62	3.50
			56	0.31	0.60	3.46
	5230	106	53	0.31	0.83	3.58
			54	0.39	0.86	3.64
			56	0.09	0.69	3.41
	5270	106	53	0.26	0.84	3.57
			54	0.21	0.96	3.61
			56	-0.21	0.67	3.26
	5310	106	53	0.07	0.58	3.34
			54	0.08	0.91	3.52
			56	0.00	0.78	3.42
	5510	106	53	0.55	1.00	3.79
			54	0.60	1.12	3.88
			56	0.26	0.95	3.62
	5590	106	53	0.59	1.22	3.93
			54	0.79	1.35	4.09
			56	0.63	1.08	3.87
	5710	106	53	1.09	0.85	3.98
			54	1.22	0.83	4.04
			56	0.95	0.18	3.59
	5755	106	53	-1.66	-1.40	1.49
			54	-1.56	-1.29	1.59
			56	-1.74	-1.71	1.28
	5795	106	53	-1.16	-1.20	1.83
			54	-1.13	-1.14	1.88
			56	-1.37	-1.32	1.66
802.11ax (HE40)	5190	242	61	-3.17	-2.97	-0.06
			62	-3.18	-3.00	-0.08
	5230	242	61	-3.22	-2.69	0.06
			62	-3.36	-2.85	-0.09
	5270	242	61	-3.36	-2.65	0.02
			62	-3.67	-2.79	-0.20
	5310	242	61	-3.52	-2.78	-0.12
			62	-3.53	-2.73	-0.10
	5510	242	61	-3.03	-2.44	0.29
			62	-3.20	-2.56	0.14
	5590	242	61	-2.84	-2.25	0.48
			62	-2.84	-2.33	0.43
	5710	242	61	-2.42	-2.73	0.44
			62	-2.59	-3.04	0.20
	5755	242	61	-5.14	-4.76	-1.93
			62	-4.99	-4.94	-1.95
	5795	242	61	-4.72	-4.75	-1.72
			62	-4.91	-4.51	-1.69

Mode	Frequency [MHz]	Tone	RU Index	Test Result [dBm]		Test Result [dBm]
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax (HE40)	5190	484	65	-6.00	-5.95	-2.96
	5230	484	65	-6.14	-5.58	-2.84
	5270	484	65	-6.29	-5.61	-2.93
	5310	484	65	-6.44	-5.68	-3.03
	5510	484	65	-6.01	-5.43	-2.70
	5590	484	65	-5.74	-5.20	-2.45
	5710	484	65	-5.32	-5.65	-2.47
	5755	484	65	-7.25	-6.81	-4.01
	5795	484	65	-6.72	-6.58	-3.64
802.11ax (HE40)	5190	SU	NA	-3.88	-3.28	-0.56
	5230	SU	NA	-0.81	0.12	2.69
	5270	SU	NA	-0.76	0.13	2.72
	5310	SU	NA	-4.35	-3.40	-0.84
	5510	SU	NA	-3.73	-3.50	-0.61
	5590	SU	NA	-0.18	0.68	3.28
	5710	SU	NA	0.04	0.07	3.07
	5755	SU	NA	-1.51	-1.19	1.67
	5795	SU	NA	-1.52	-0.85	1.84

Mode	Frequency [MHz]	Tone	RU Index	Test Result [dBm]		Test Result [dBm]
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax (HE80)	5210	26	0	6.26	6.19	9.23
			18	5.06	5.55	8.32
			36	5.83	6.46	9.17
	5290	26	0	6.14	6.61	9.39
			18	4.39	5.53	8.01
			36	5.46	6.81	9.20
	5530	26	0	6.03	6.27	9.16
			18	4.64	5.57	8.14
			36	5.83	6.65	9.27
	5610	26	0	6.45	6.82	9.65
			18	5.35	5.91	8.65
			36	6.40	6.64	9.53
	5690	26	0	6.71	6.68	9.70
			18	5.29	5.41	8.36
			36	5.80	5.64	8.73
	5775	26	0	4.20	4.21	7.21
			18	4.16	4.09	7.13
			36	3.38	3.89	6.65
802.11ax (HE80)	5210	52	37	3.48	3.48	6.49
			44	3.42	3.76	6.60
			52	3.10	3.83	6.49
	5290	52	37	3.31	3.81	6.58
			44	2.71	3.84	6.32
			52	2.72	4.29	6.59
	5530	52	37	3.38	3.57	6.49
			44	2.98	3.69	6.36
			52	3.00	3.98	6.53
	5610	52	37	3.78	4.03	6.92
			44	3.74	4.19	6.98
			52	3.71	4.05	6.89
	5690	52	37	4.04	3.90	6.98
			44	3.75	3.71	6.74
			52	3.26	3.26	6.27
	5775	52	37	1.78	1.61	4.71
			44	1.51	1.28	4.41
			52	0.67	1.37	4.04

Mode	Frequency [MHz]	Tone	RU Index	Test Result [dBm]		Test Result [dBm]
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax (HE80)	5210	106	53	0.73	0.65	3.70
			56	0.54	0.85	3.71
			60	0.16	0.74	3.47
	5290	106	53	0.45	0.99	3.74
			56	-0.09	0.95	3.47
			60	-0.18	1.18	3.56
	5530	106	53	0.54	0.80	3.68
			56	0.10	0.82	3.48
			60	0.07	1.03	3.58
	5610	106	53	1.00	1.18	4.10
			56	0.88	1.23	4.07
			60	0.72	0.99	3.86
	5690	106	53	1.16	1.01	4.09
			56	0.87	0.86	3.87
			60	0.20	0.05	3.13
	5775	106	53	-1.35	-1.50	1.59
			56	-1.45	-1.43	1.57
			60	-2.34	-1.74	0.98
802.11ax (HE80)	5210	242	61	-2.92	-2.85	0.13
			62	-3.04	-2.74	0.12
			64	-3.40	-2.76	-0.06
	5290	242	61	-3.02	-2.50	0.26
			62	-3.39	-2.56	0.05
			64	-3.81	-2.20	0.08
	5530	242	61	-2.98	-2.81	0.11
			62	-3.06	-2.82	0.07
			64	-3.47	-2.48	0.07
	5610	242	61	-2.44	-2.25	0.67
			62	-2.52	-2.29	0.61
			64	-2.83	-2.30	0.45
	5690	242	61	-2.33	-2.55	0.57
			62	-2.43	-2.72	0.44
			64	-3.15	-3.14	-0.14
	5775	242	61	-4.71	-4.81	-1.75
			62	-4.84	-4.85	-1.83
			64	-5.59	-5.10	-2.33

Mode	Frequency [MHz]	Tone	RU Index	Test Result [dBm]		Test Result [dBm]
				ANT 1	ANT 2	ANT1+ANT2 (CDD)
802.11ax (HE80)	5210	484	65	-5.89	-5.72	-2.79
			66	-6.20	-5.59	-2.87
	5290	484	65	-6.08	-5.47	-2.75
			66	-6.83	-5.09	-2.86
	5530	484	65	-5.97	-5.75	-2.85
			66	-6.44	-5.35	-2.85
	5610	484	65	-5.41	-5.18	-2.28
			66	-5.68	-5.18	-2.41
	5690	484	65	-5.31	-5.48	-2.38
			66	-5.84	-5.80	-2.81
	5775	484	65	-7.52	-7.75	-4.63
			66	-8.34	-7.87	-5.09
802.11ax (HE80)	5210	996	67	-9.09	-8.77	-5.91
	5290	996	67	-9.32	-8.37	-5.81
	5530	996	67	-9.16	-8.55	-5.84
	5610	996	67	-8.61	-8.41	-5.50
	5690	996	67	-8.48	-8.70	-5.58
	5775	996	67	-9.95	-9.69	-6.81
802.11ax (HE80)	5210	SU	NA	-6.78	-6.38	-3.56
	5290	SU	NA	-7.53	-6.52	-3.99
	5530	SU	NA	-4.98	-4.21	-1.57
	5610	SU	NA	-4.70	-4.01	-1.33
	5690	SU	NA	-4.61	-4.39	-1.49
	5775	SU	NA	-5.63	-5.37	-2.48

- Summed Power spectral density: SDM

Mode	Frequency [MHz]	Tone	RU Index	Reading [dBm]		T.F [dB] Note 1	Test Result [dBm]
				ANT 1	ANT 2		ANT1+ANT2+T.F (SDM)
802.11ax (HE20)	5180	26	0	5.56	6.82	NA	9.24
			4	4.33	6.00		8.26
			8	5.51	6.85		9.24
	5200	26	0	6.03	6.07		9.06
			4	5.01	5.33		8.18
			8	6.25	6.28		9.28
	5240	26	0	5.79	6.32		9.07
			4	4.75	5.74		8.28
			8	6.02	6.65		9.36
	5260	26	0	5.86	6.48		9.19
			4	4.71	5.78		8.28
			8	5.83	6.60		9.24
	5300	26	0	5.60	6.67		9.18
			4	4.48	6.02		8.33
			8	5.67	6.99		9.39
	5320	26	0	5.39	6.35		8.90
			4	4.41	5.77		8.15
			8	5.79	6.44		9.14
	5500	26	0	6.50	6.86		9.69
			4	5.44	6.10		8.79
			8	6.76	7.00		9.89
	5600	26	0	6.28	7.20		9.78
			4	5.19	6.39		8.84
			8	6.45	7.16		9.83
	5720	26	0	6.52	6.51		9.53
			4	5.28	5.56		8.43
			8	6.66	6.08		9.39
	5745	26	0	-2.08	-1.60	6.99	8.17
			4	-2.14	-1.85		8.01
			8	-1.90	-1.66		8.22
	5785	26	0	-2.36	-1.35		8.17
			4	-2.71	-1.61		7.87
			8	-2.38	-1.70		7.97
	5825	26	0	-2.58	-0.97		8.30
			4	-3.22	-1.33		7.82
			8	-3.25	-1.55		7.68

Note 1: "U-NII 3 [T.F] = 10*LOG(500kHz/100kHz) " = 6.99dB
Note 2: Test Result = Measurement Data + T.F

Mode	Frequency [MHz]	Tone	RU Index	Reading [dBm]		T.F [dB] Note 1	Test Result [dBm]
				ANT 1	ANT 2		ANT1+ANT2+T.F (SDM)
802.11ax (HE20)	5180	52	37	3.20	4.12	NA	6.69
			38	3.14	4.41		6.83
			40	2.99	4.05		6.56
	5200	52	37	3.67	3.37		6.53
			38	3.83	3.71		6.78
			40	3.78	3.38		6.60
	5240	52	37	3.41	3.77		6.60
			38	3.44	4.04		6.76
			40	3.43	3.91		6.69
	5260	52	37	3.55	4.02		6.80
			38	3.57	4.16		6.89
			40	3.40	3.80		6.61
	5300	52	37	3.28	4.19		6.77
			38	3.29	4.30		6.84
			40	3.24	4.19		6.75
	5320	52	37	2.99	3.85		6.45
			38	3.26	4.10		6.71
			40	3.37	3.66		6.53
	5500	52	37	4.13	4.29		7.22
			38	4.20	4.54		7.38
			40	4.18	4.18		7.19
	5600	52	37	3.98	4.53		7.28
			38	4.12	4.74		7.45
			40	4.04	4.39		7.22
	5720	52	37	4.13	3.72		6.94
			38	4.15	3.90		7.03
			40	4.13	3.30		6.74
	5745	52	37	-4.53	-4.48	6.99	5.50
			38	-4.14	-3.67		6.10
			40	-4.73	-4.66		5.31
	5785	52	37	-5.14	-4.42		5.24
			38	-4.58	-3.56		5.96
			40	-5.20	-4.46		5.19
	5825	52	37	-5.19	-3.85		5.53
			38	-4.98	-3.24		5.98
			40	-5.77	-4.24		5.06

Note 1: "U-NII 3 [T.F] = 10*LOG(500kHz/100kHz) " = 6.99dB
Note 2: Test Result = Measurement Data + T.F

Mode	Frequency [MHz]	Tone	RU Index	Reading [dBm]		T.F [dB] Note 1	Test Result [dBm]
				ANT 1	ANT 2		ANT1+ANT2+T.F (SDM)
802.11ax (HE20)	5180	106	53	0.05	1.43	NA	3.81
			54	-0.23	1.32		3.62
	5200	106	53	0.68	0.74		3.72
			54	0.55	0.64		3.60
	5240	106	53	0.33	1.13		3.75
			54	0.34	1.12		3.76
	5260	106	53	0.43	1.28		3.88
			54	0.19	1.11		3.68
	5300	106	53	0.33	1.41		3.92
			54	-0.02	1.39		3.75
	5320	106	53	-0.02	1.17		3.63
			54	0.22	1.04		3.66
	5500	106	53	1.04	1.62		4.35
			54	1.04	1.48		4.28
	5600	106	53	0.91	1.78		4.38
			54	0.82	1.68		4.28
	5720	106	53	0.99	1.08		4.04
			54	0.93	0.63		3.79
	5745	106	53	-7.61	-6.62	6.99	2.91
			54	-7.51	-7.02		2.74
	5785	106	53	-8.25	-6.49		2.72
			54	-8.05	-6.70		2.68
	5825	106	53	-8.27	-6.30		2.82
			54	-8.53	-6.67		2.50

Note 1: "U-NII 3 [T.F] = 10*LOG(500kHz/100kHz) " = 6.99dB
Note 2: Test Result = Measurement Data + T.F

Mode	Frequency [MHz]	Tone	RU Index	Reading [dBm]		T.F [dB] Note 1	Test Result [dBm]
				ANT 1	ANT 2		ANT1+ANT2+T.F (SDM)
802.11ax (HE20)	5180	242	61	-3.50	-2.09	NA	0.27
	5200	242	61	-2.81	-2.71		0.25
	5240	242	61	-3.03	-2.30		0.36
	5260	242	61	-3.08	-2.27		0.35
	5300	242	61	-3.34	-1.93		0.43
	5320	242	61	-3.14	-2.30		0.31
	5500	242	61	-2.32	-1.83		0.94
	5600	242	61	-2.59	-1.61		0.94
	5720	242	61	-2.41	-2.46		0.58
	5745	242	61	-10.08	-9.68	6.99	0.13
	5785	242	61	-10.50	-9.53		0.01
	5825	242	61	-10.94	-9.21		0.01
802.11ax (HE20)	5180	SU	NA	3.46	3.85	NA	6.67
	5200	SU	NA	3.66	4.08		6.89
	5240	SU	NA	3.24	3.91		6.60
	5260	SU	NA	3.36	4.05		6.73
	5300	SU	NA	2.95	3.79		6.40
	5320	SU	NA	3.06	3.97		6.55
	5500	SU	NA	3.70	3.71		6.71
	5600	SU	NA	3.83	4.27		7.06
	5720	SU	NA	3.92	3.24		6.60
	5745	SU	NA	-4.07	-4.00	6.99	5.97
	5785	SU	NA	-4.51	-3.53		6.01
	5825	SU	NA	-4.87	-3.52		5.86

Note 1: "U-NII 3 [T.F] = 10*LOG(500kHz/100kHz) " = 6.99dB
Note 2: Test Result = Measurement Data + T.F

Mode	Frequency [MHz]	Tone	RU Index	Reading [dBm]		T.F [dB]	Test Result [dBm]
				ANT 1	ANT 2	Note 1	ANT1+ANT2+T.F (SDM)
802.11ax (HE40)	5190	26	0	6.48	6.11	NA	9.31
			8	6.56	6.62		9.60
			17	6.29	6.17		9.24
	5230	26	0	6.38	6.38		9.39
			8	6.29	7.00		9.67
			17	6.06	6.36		9.22
	5270	26	0	6.23	6.49		9.37
			8	6.25	7.04		9.67
			17	5.70	6.29		9.02
	5310	26	0	5.82	6.18		9.02
			8	6.11	7.12		9.66
			17	5.86	6.46		9.18
	5510	26	0	6.42	6.60		9.52
			8	6.70	7.30		10.02
			17	6.33	6.79		9.58
	5590	26	0	6.41	6.82		9.63
			8	6.83	7.54		10.21
			17	6.52	6.80		9.67
	5710	26	0	7.08	6.41		9.77
			8	7.12	6.95		10.04
			17	6.76	5.77		9.30
	5755	26	0	-1.48	-1.52	6.99	8.50
			8	-1.94	-0.99		8.56
			17	-1.53	-1.39		8.54
	5795	26	0	-0.93	-1.41		8.84
			8	-1.58	-1.13		8.65
			17	-1.03	-1.37		8.80

Note 1: "U-NII 3 [T.F] = 10*LOG(500kHz/100kHz) " = 6.99dB
Note 2: Test Result = Measurement Data + T.F

Mode	Frequency [MHz]	Tone	RU Index	Reading [dBm]		T.F [dB] Note 1	Test Result [dBm]
				ANT 1	ANT 2		ANT1+ANT2+T.F (SDM)
802.11ax (HE40)	5190	52	37	3.64	3.70	NA	6.68
			40	3.99	3.75		6.88
			44	3.81	3.75		6.79
	5230	52	37	3.77	4.21		7.01
			40	3.95	4.15		7.06
			44	3.61	3.93		6.78
	5270	52	37	3.42	4.18		6.83
			40	3.76	4.28		7.04
			44	3.24	3.84		6.56
	5310	52	37	3.19	3.81		6.52
			40	3.65	4.25		6.97
			44	3.50	4.06		6.80
	5510	52	37	3.70	4.34		7.04
			40	4.19	4.46		7.34
			44	3.72	4.43		7.10
	5590	52	37	3.88	4.47		7.20
			40	4.37	4.86		7.63
			44	4.04	4.39		7.23
	5710	52	37	4.23	4.06		7.15
			40	4.77	4.04		7.43
			44	4.13	3.44		6.81
	5755	52	37	-3.80	-3.95	6.99	6.12
			40	-4.33	-3.47		6.12
			44	-4.57	-4.65		5.39
	5795	52	37	-3.34	-4.22		6.24
			40	-4.12	-3.83		6.03
			44	-4.29	-4.46		5.63

Note 1: "U-NII 3 [T.F] = 10*LOG(500kHz/100kHz) " = 6.99dB
Note 2: Test Result = Measurement Data + T.F

Mode	Frequency [MHz]	Tone	RU Index	Reading [dBm]		T.F [dB] Note 1	Test Result [dBm]
				ANT 1	ANT 2		ANT1+ANT2+T.F (SDM)
802.11ax (HE40)	5190	106	53	0.77	0.90	NA	3.85
			54	0.87	0.94		3.92
			56	0.59	1.17		3.90
	5230	106	53	0.91	1.39		4.16
			54	0.78	1.32		4.07
			56	0.41	1.31		3.90
	5270	106	53	0.62	1.37		4.02
			54	0.62	1.38		4.02
			56	0.21	1.23		3.76
	5310	106	53	0.38	1.18		3.81
			54	0.60	1.33		3.99
			56	0.35	1.43		3.93
	5510	106	53	0.84	1.64		4.27
			54	1.05	1.61		4.35
			56	0.69	1.68		4.22
	5590	106	53	1.02	1.74		4.41
			54	1.21	1.84		4.55
			56	1.02	1.79		4.43
	5710	106	53	1.35	1.35		4.36
			54	1.53	1.32		4.43
			56	1.10	0.92		4.02
	5755	106	53	-7.52	-6.30	6.99	3.14
			54	-7.09	-6.43		3.26
			56	-7.39	-6.99		2.81
	5795	106	53	-7.12	-6.77		3.06
			54	-6.55	-6.70		3.38
			56	-7.09	-6.67		3.12

Note 1: "U-NII 3 [T.F] = 10*LOG(500kHz/100kHz) " = 6.99dB
Note 2: Test Result = Measurement Data + T.F

Mode	Frequency [MHz]	Tone	RU Index	Reading [dBm]		T.F [dB] Note 1	Test Result [dBm]
				ANT 1	ANT 2		ANT1+ANT2+T.F (SDM)
802.11ax (HE40)	5190	242	61	-2.73	-2.66	NA	0.32
			62	-2.66	-2.66		0.35
	5230	242	61	-2.71	-2.20		0.56
			62	-2.87	-2.43		0.37
	5270	242	61	-3.01	-2.31		0.37
			62	-3.10	-2.40		0.27
	5310	242	61	-3.11	-2.34		0.30
			62	-3.00	-2.16		0.45
	5510	242	61	-2.54	-1.97		0.77
			62	-2.54	-2.06		0.72
	5590	242	61	-2.42	-1.80		0.91
			62	-2.30	-1.75		1.00
	5710	242	61	-2.01	-2.31		0.85
			62	-1.97	-2.59		0.74
	5755	242	61	-10.76	-9.91	6.99	-0.31
			62	-11.04	-10.28		-0.64
	5795	242	61	-10.81	-10.08		-0.43
			62	-10.66	-10.39		-0.52
802.11ax (HE40)	5190	484	65	-5.58	-5.47	NA	-2.51
	5230	484	65	-5.70	-4.94		-2.29
	5270	484	65	-5.84	-4.96		-2.37
	5310	484	65	-5.85	-5.16		-2.48
	5510	484	65	-5.43	-4.80		-2.09
	5590	484	65	-5.15	-4.63		-1.87
	5710	484	65	-4.92	-5.12		-2.01
	5755	484	65	-13.37	-12.33	6.99	-2.82
	5795	484	65	-12.96	-12.62		-2.78
802.11ax (HE40)	5190	SU	NA	-3.64	-3.28	NA	-0.45
	5230	SU	NA	-0.58	0.26		2.87
	5270	SU	NA	-0.65	0.27		2.84
	5310	SU	NA	-4.19	-3.20		-0.66
	5510	SU	NA	-3.53	-3.31		-0.41
	5590	SU	NA	0.08	0.93		3.53
	5710	SU	NA	0.23	0.19		3.22
	5755	SU	NA	-7.87	-7.12	6.99	2.52
	5795	SU	NA	-8.13	-6.93		2.51

Note 1: "U-NII 3 [T.F] = 10*LOG(500kHz/100kHz) " = 6.99dB
Note 2: Test Result = Measurement Data + T.F

Mode	Frequency [MHz]	Tone	RU Index	Reading [dBm]		T.F [dB] Note 1	Test Result [dBm]
				ANT 1	ANT 2		ANT1+ANT2+T.F (SDM)
802.11ax (HE80)	5210	26	0	6.51	6.29	NA	9.41
			18	5.28	5.94		8.64
			36	6.05	6.48		9.28
	5290	26	0	6.19	6.94		9.59
			18	4.66	6.15		8.48
			36	5.84	6.91		9.42
	5530	26	0	6.04	6.51		9.29
			18	4.73	6.07		8.46
			36	6.06	6.78		9.45
	5610	26	0	6.60	6.97		9.80
			18	5.53	6.40		9.00
			36	6.70	6.75		9.73
	5690	26	0	6.63	6.72		9.69
			18	5.61	5.95		8.79
			36	6.12	5.75		8.95
	5775	26	0	-1.20	-1.07	6.99	8.87
			18	-2.39	-2.02		7.80
			36	-1.44	-1.35		8.60
802.11ax (HE80)	5210	52	37	3.78	4.00	NA	6.90
			44	3.99	4.31		7.16
			52	3.61	3.94		6.79
	5290	52	37	3.48	4.36		6.95
			44	3.49	4.40		6.98
			52	3.32	4.37		6.89
	5530	52	37	3.37	4.05		6.73
			44	3.48	4.39		6.97
			52	3.64	4.26		6.97
	5610	52	37	3.90	4.50		7.22
			44	4.28	4.79		7.55
			52	4.33	4.31		7.33
	5690	52	37	4.01	4.26		7.14
			44	4.13	4.29		7.22
			52	3.81	3.34		6.59
	5775	52	37	-3.85	-3.90	6.99	6.13
			44	-3.79	-4.04		6.09
			52	-4.29	-3.89		5.92

Note 1: "U-NII 3 [T.F] = 10*LOG(500kHz/100kHz) " = 6.99dB
Note 2: Test Result = Measurement Data + T.F

Mode	Frequency [MHz]	Tone	RU Index	Reading [dBm]		T.F [dB] Note 1	Test Result [dBm]
				ANT 1	ANT 2		ANT1+ANT2+T.F (SDM)
802.11ax (HE80)	5210	106	53	0.64	1.15	NA	3.91
			56	0.90	1.26		4.09
			60	0.26	1.13		3.73
	5290	106	53	0.37	1.58		4.03
			56	0.40	1.40		3.94
			60	-0.01	1.58		3.87
	5530	106	53	0.37	1.27		3.86
			56	0.43	1.22		3.85
			60	0.29	1.42		3.90
	5610	106	53	0.82	1.64		4.26
			56	1.21	1.76		4.51
			60	1.05	1.48		4.28
	5690	106	53	1.07	1.51		4.30
			56	1.15	1.24		4.21
			60	0.52	0.61		3.58
	5775	106	53	-7.88	-6.96	6.99	2.61
			56	-7.76	-7.27		2.49
			60	-8.12	-7.35		2.29
802.11ax (HE80)	5210	242	61	-2.75	-2.51	NA	0.39
			62	-2.61	-2.35		0.53
			64	-3.03	-2.58		0.21
	5290	242	61	-2.99	-2.05		0.52
			62	-3.05	-2.20		0.41
			64	-3.40	-1.95		0.40
	5530	242	61	-2.98	-2.53		0.26
			62	-2.94	-2.26		0.42
			64	-2.98	-2.18		0.45
	5610	242	61	-2.47	-1.90		0.84
			62	-2.25	-1.95		0.91
			64	-2.40	-2.08		0.77
	5690	242	61	-2.34	-2.21		0.74
			62	-2.25	-2.45		0.66
			64	-2.64	-2.79		0.29
	5775	242	61	-10.73	-10.00	6.99	-0.35
			62	-10.60	-10.78		-0.69
			64	-11.01	-10.57		-0.79

Note 1: "U-NII 3 [T.F] = 10*LOG(500kHz/100kHz) " = 6.99dB
Note 2: Test Result = Measurement Data + T.F

Mode	Frequency [MHz]	Tone	RU Index	Reading [dBm]		T.F [dB] Note 1	Test Result [dBm]
				ANT 1	ANT 2		ANT1+ANT2+T.F (SDM)
802.11ax (HE80)	5210	484	65	-5.38	-5.23	NA	-2.29
			66	-5.63	-5.27		-2.44
	5290	484	65	-5.82	-4.91		-2.33
			66	-6.10	-4.97		-2.48
	5530	484	65	-5.75	-5.16		-2.44
			66	-5.69	-5.06		-2.36
	5610	484	65	-5.21	-4.76		-1.97
			66	-5.01	-4.85		-1.92
	5690	484	65	-5.10	-5.08		-2.07
			66	-5.22	-5.41		-2.30
	5775	484	65	-13.86	-13.03	6.99	-3.43
			66	-13.61	-13.43		-3.52
802.11ax (HE80)	5210	996	67	-8.72	-8.54	NA	-5.62
	5290	996	67	-9.19	-8.04		-5.57
	5530	996	67	-9.03	-8.18		-5.58
	5610	996	67	-8.29	-8.03		-5.15
	5690	996	67	-8.46	-8.36		-5.40
	5775	996	67	-16.29	-15.48	6.99	-5.86
802.11ax (HE80)	5210	SU	NA	-6.65	-6.34	NA	-3.48
	5290	SU	NA	-7.41	-6.43		-3.88
	5530	SU	NA	-4.86	-4.09		-1.44
	5610	SU	NA	-4.42	-3.89		-1.14
	5690	SU	NA	-4.58	-4.35		-1.45
	5775	SU	NA	-12.80	-12.10	6.99	-2.44

Note 1: "U-NII 3 [T.F] = 10*LOG(500kHz/100kHz) " = 6.99dB
Note 2: Test Result = Measurement Data + T.F

▣ RESULT PLOTS

-This test item reported the plot of the Worst case of each RU.

- Power spectral density: CDD-Antenna 1

Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & T26 & 0RU & Ch.36

Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & T26 & 8RU & Ch.40

Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & T26 & 8RU & Ch.48

Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & T26 & 0RU & Ch.52

Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & T26 & 0RU & Ch.60

Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & T26 & 8RU & Ch.64

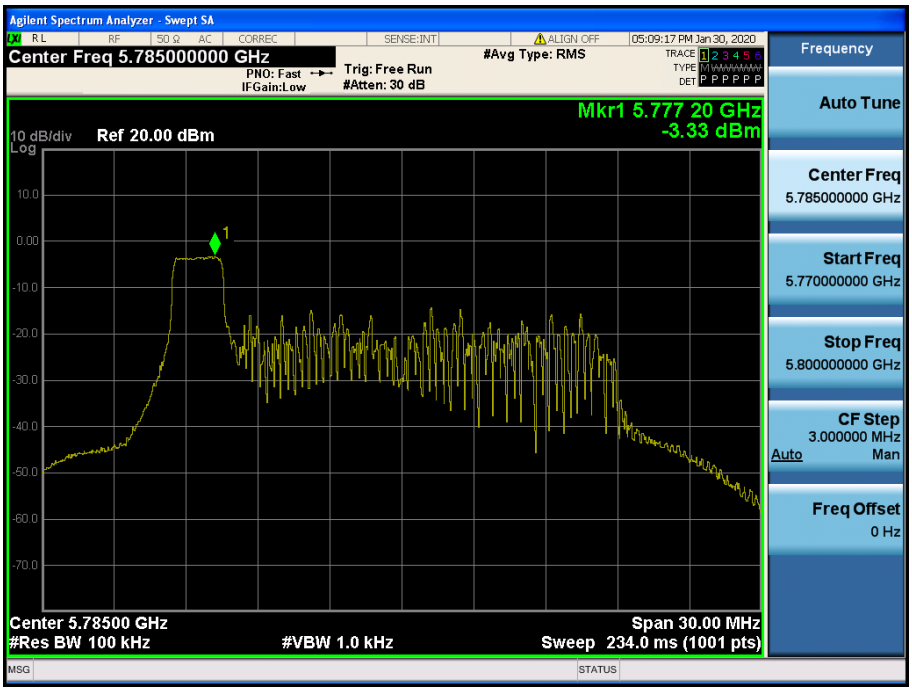
Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & T26 & 0RU & Ch.100

Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & T26 & 0RU & Ch.120

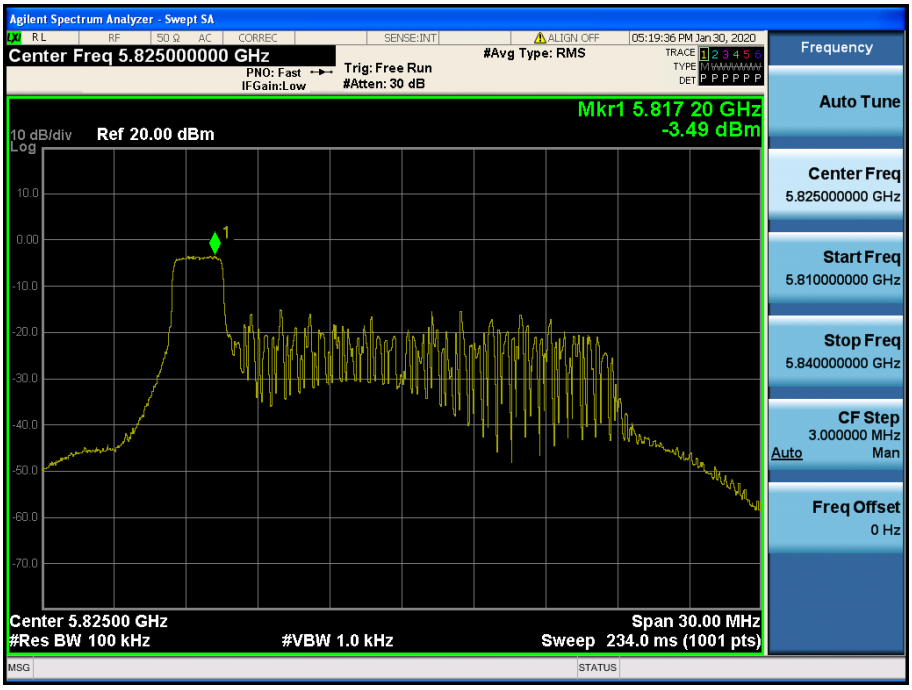
Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & T26 & 0RU & Ch.144

Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & T26 & 0RU & Ch.149

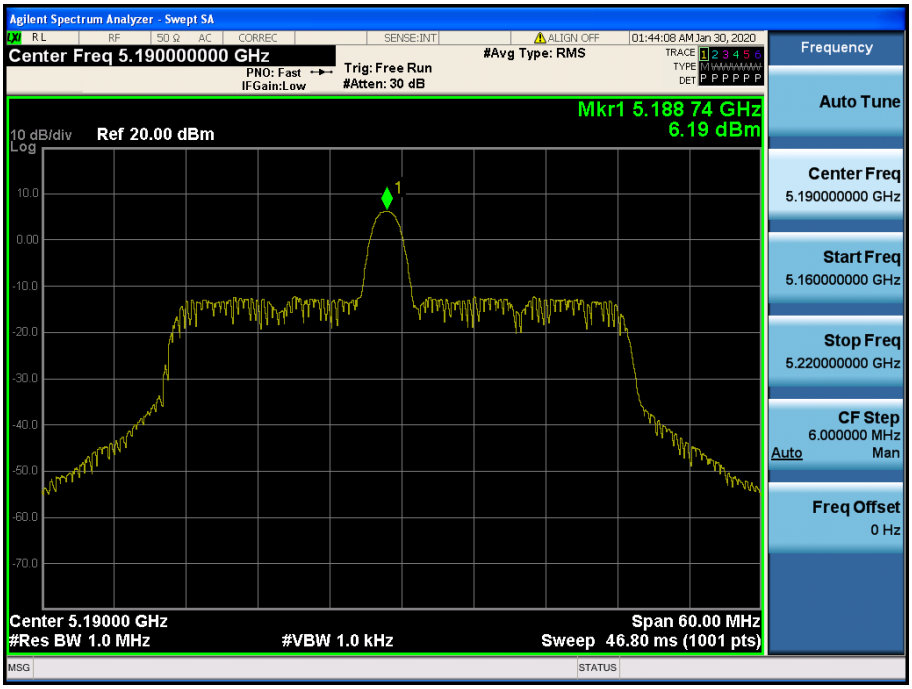
Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & T26 & 0RU & Ch.157



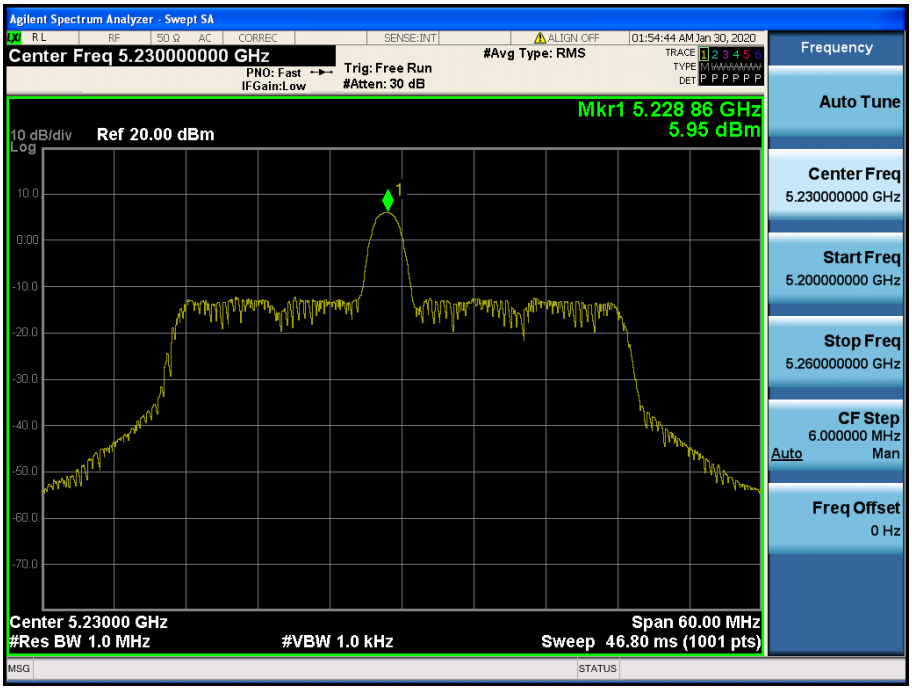
Maximum Power Spectral Density Test Mode: 802.11ax HE20 & ANT 1 & T26 & 0RU & Ch.165



Maximum Power Spectral Density Test Mode: 802.11ax HE40 & ANT 1 & T26 & 8RU & Ch.38

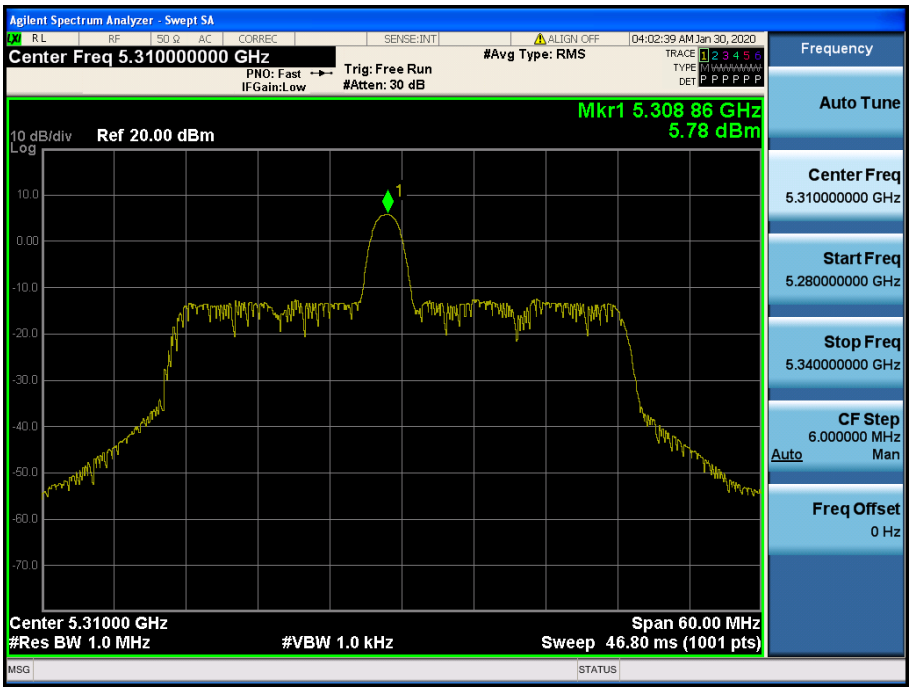


Maximum Power Spectral Density Test Mode: 802.11ax HE40 & ANT 1 & T26 & 8RU & Ch.46

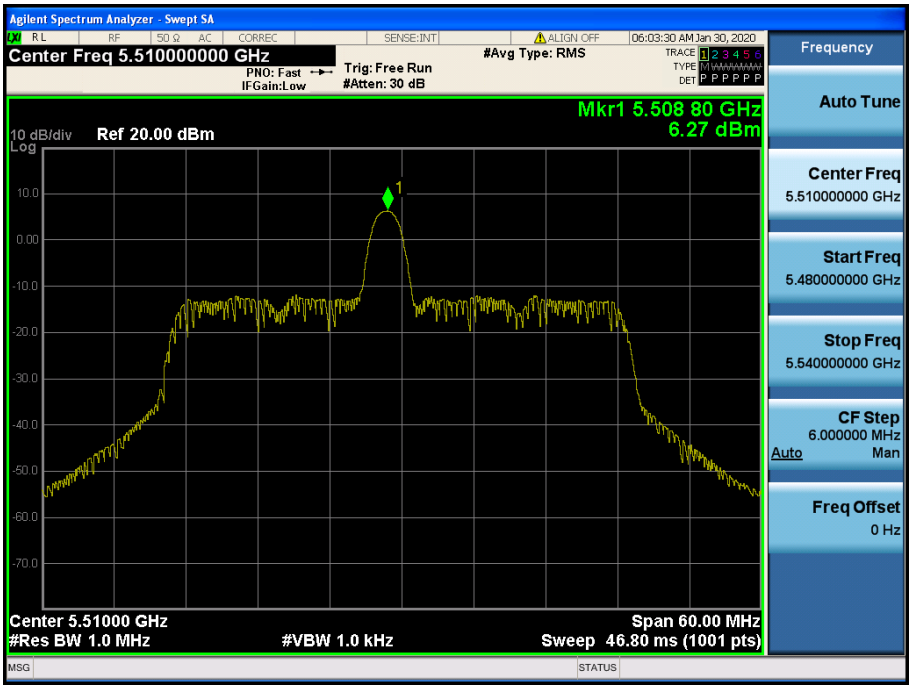


Maximum Power Spectral Density Test Mode: 802.11ax HE40 & ANT 1 & T26 & 8RU & Ch.54

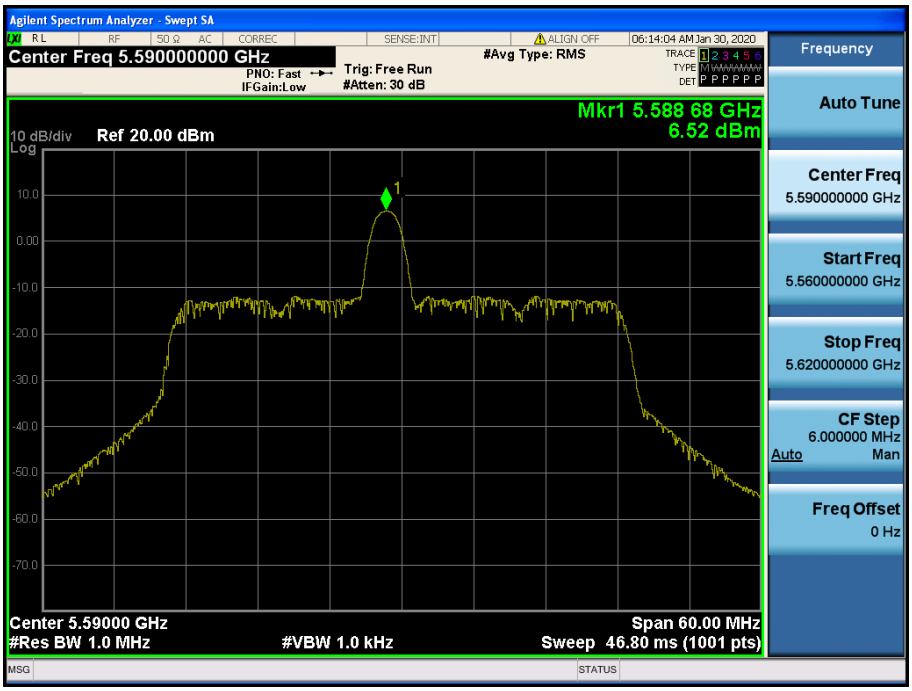
Maximum Power Spectral Density Test Mode: 802.11ax HE40 & ANT 1 & T26 & 8RU & Ch.62



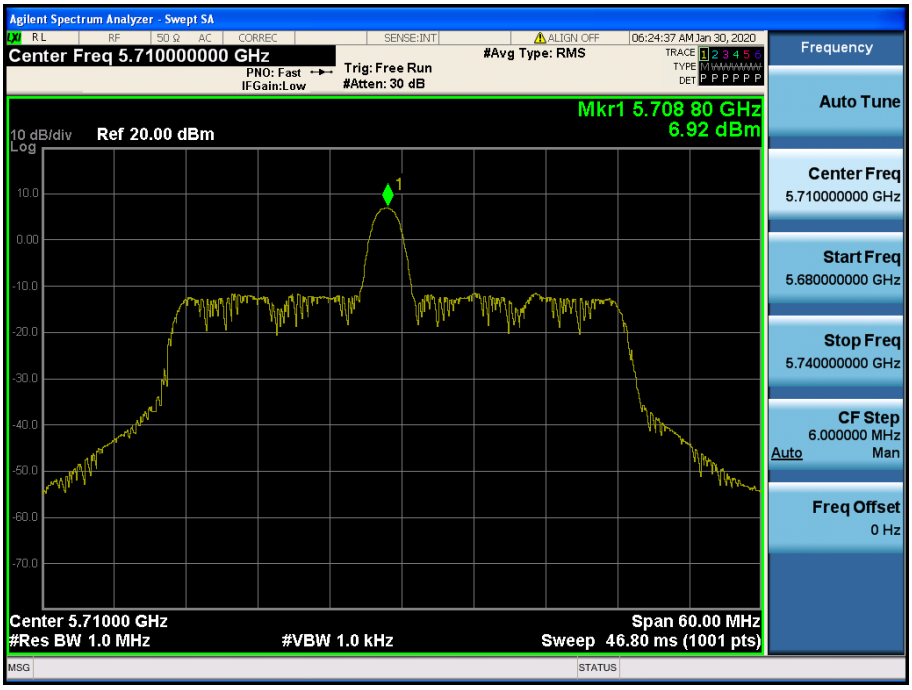
Maximum Power Spectral Density Test Mode: 802.11ax HE40 & ANT 1 & T26 & 8RU & Ch.102



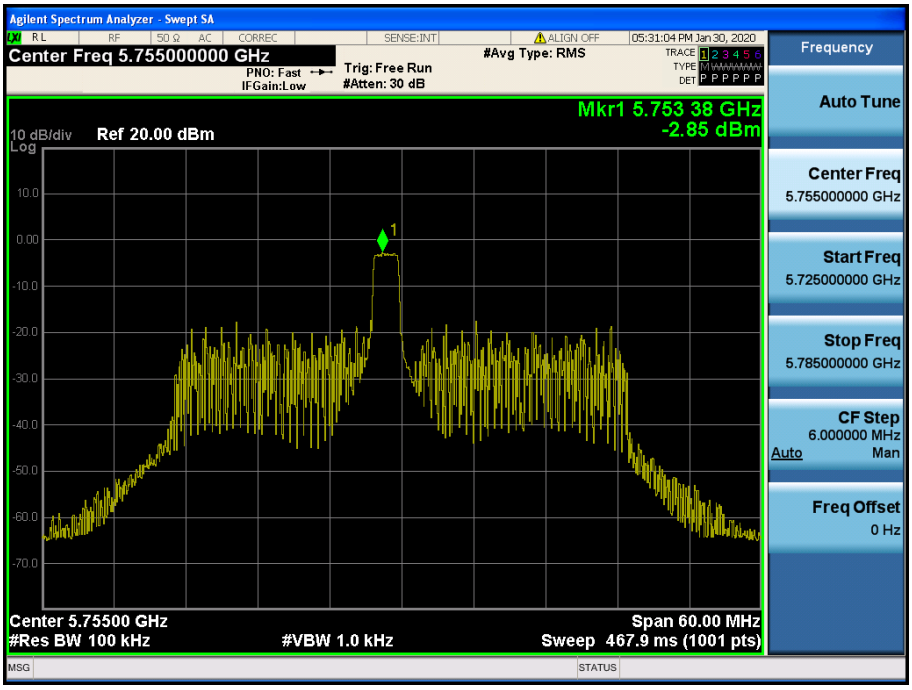
Maximum Power Spectral Density Test Mode: 802.11ax HE40 & ANT 1 & T26 & 8RU & Ch.118



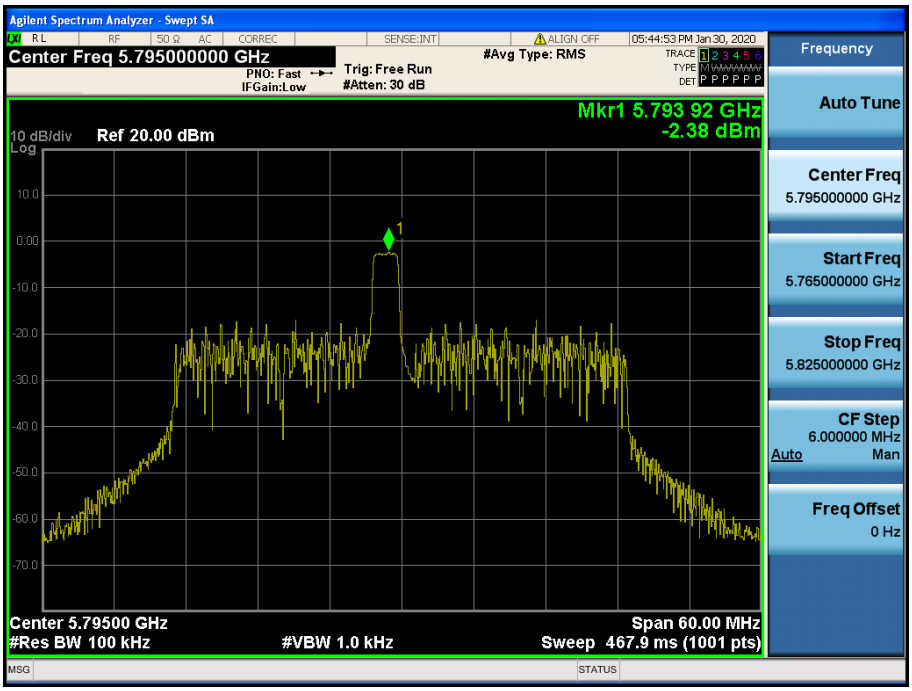
Maximum Power Spectral Density Test Mode: 802.11ax HE40 & ANT 1 & T26 & 8RU & Ch.142



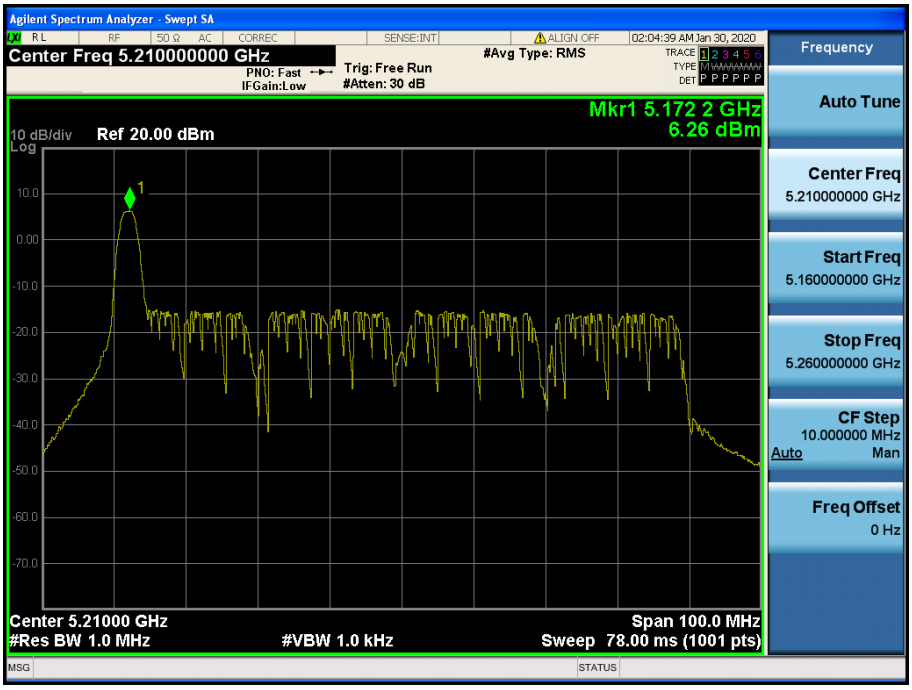
Maximum Power Spectral Density Test Mode: 802.11ax HE40 & ANT 1 & T26 & 8RU & Ch.151



Maximum Power Spectral Density Test Mode: 802.11ax HE40 & ANT 1 & T26 & 8RU & Ch.159



Maximum Power Spectral Density Test Mode: 802.11ax HE80 & ANT 1 & T26 & 0RU & Ch.42



Maximum Power Spectral Density Test Mode: 802.11ax HE80 & ANT 1 & T26 & 0RU & Ch.58