



RF TEST REPORT

Applicant ZTE Corporation
FCC ID SRQ-ZTEA2022PG
Product 5G NR/LTE/WCDMA/GSM(GPRS)
Multi-Mode Digital Mobile Phone
Marketing ZTE Axon 30 Ultra 5G
Model ZTE A2022PG
Report No. R2103A0263-R8V2
Issue Date May 11, 2021

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15E (2019)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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Version	Revision description	Issue Date
Rev.0	Initial issue of report.	April 27, 2021
Rev.1	Update description and test data; Update information in Page 8	May 10, 2021
Rev.2	Update general information in Page 6; Update description in Page 95-101.	May 11, 2021
Note: This revised report (Report No. R2103A0263-R8V2) supersedes and replaces the previously issued report (Report No. R2103A0263-R8V1). Please discard or destroy the previously issued report and dispose of it accordingly.		



Summary of measurement results

Number	Test Case	Clause in FCC rules	Verdict
1	Average output power	15.407(a)	PASS
2	Occupied bandwidth	15.407(e)	PASS
3	Frequency stability	15.407(g)	PASS
4	Power spectral density	15.407(a)	PASS
5	Unwanted Emissions	15.407(b)	PASS
6	Conducted Emissions	15.207	PASS

Date of Testing: April 4, 2021~ May 7, 2021
Date of Sample Received: March 18, 2021

Note: PASS: The EUT complies with the essential requirements in the standard.
FAIL: The EUT does not comply with the essential requirements in the standard.
All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.



1. Test Laboratory

1.1. Notes of the test report

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

1.2. Test facility

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

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

A2LA (Certificate Number: 3857.01)

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

1.3. Testing Location

Company: TA Technology (Shanghai) Co., Ltd.
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong
City: Shanghai
Post code: 201201
Country: P. R. China
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E-mail: xukai@ta-shanghai.com

2. General Description of Equipment under Test

2.1. Applicant and Manufacturer Information

Applicant	ZTE Corporation
Applicant address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China
Manufacturer	ZTE Corporation
Manufacturer address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

2.2. General information

EUT Description	
Model	ZTE A2022PG
IMEI	IMEI 1:861959050001059 IMEI 2:861959050002059
Hardware Version	ZTE A2022PGHW1.0
Software Version 1	MyOS11.0.0_A2022PG_GLB
Software Version 2	MyOS11.0.0_A2022PG_TEL
FLASH	8+128G,12+256G
Power Supply	Battery / AC adapter
Antenna Type	Internal Antenna
Antenna Gain	-2.15 dBi for Wi-Fi antenna 1 -3.10 dBi for Wi-Fi antenna 2
Directional Gain	Power Directional Gain: -2.15 dBi PSD Directional Gain: 0.86 dBi
Test Band	U-NII-1(5150MHz-5250MHz) U-NII-2A(5250MHz-5350MHz) U-NII-2C(5470MHz-5600MHz, 5650MHz-5725MHz) U-NII-3(5725MHz-5850MHz)
Modulation Type	802.11a/n (HT20/HT40) : OFDM 802.11ac (VHT20/VHT40/VHT80): OFDM 802.11ax(HE20/HE40/HE80): OFDM, OFDMA
Max. Conducted Power	23.45 dBm
Operating Frequency Range(s)	U-NII-1: 5150MHz-5250MHz U-NII-2A:5250MHz -5350MHz U-NII-2C: 5470MHz-5600MHz, 5650MHz-5725MHz U-NII-3: 5725MHz -5850MHz
Extreme temperature range:	-20 ° C to 50° C



Operating temperature range:	-10 ° C to 45° C
Operating voltage range:	3.4V to 4.2 V
State DC voltage:	3.85V
EUT Accessory	
Adapter 1	Manufacturer: ShenZhen KunXing Technology Co., Ltd. Model: STC-A59152050AC-Z
Adapter 2	Manufacturer: ShenZhen KunXing Technology Co., Ltd. Model: STC-A59152050AC-A
Earphone	Manufacturer: Shen zhen FDC Electronic Co.,Ltd. Model: DEM-9A
Battery	Manufacturer: Zhuhai CosMX Battery Co., Ltd. Model: Li3941T44P8h826453
USB Cable	Manufacturer: Shenzhen Luxshare Precision Industry Co.,Ltd. Model: TC20-TC20-W-100-M-6A-HSF
Type-C to 3.5 mm Headphone Jack Adapter	Manufacture: HUIZHOU JUWEI ELECTRONICS CO. ,LTD Model: JWUB1389-Z01
<p>Note: 1.The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.</p> <p>2. There is more than one FLASH/Adapter, each one should be applied throughout the compliance test respectively, and however, only the worst case (12+256G / Adapter 1) will be recorded in this report.</p> <p>3.The two different software versions are for different market requirement.</p>	



3. Applied Standards

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

Test standards:

FCC CFR47 Part 15E (2019) Unlicensed National Information Infrastructure Devices

ANSI C63.10 (2013)

Reference standard:

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

4. Test Configuration

Test Mode

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

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

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

Worst-case data rates are shown as following table.

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

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

Test Cases	Antenna 1	Antenna 2	MIMO
Average conducted output power	O	O	802.11n HT20/HT40 802.11ac VHT20/VHT40/VHT80 802.11ax HE20/HE40/HE80
Occupied bandwidth	802.11a	--	802.11n HT20/HT40 802.11ac VHT20/VHT40/VHT80 802.11ax HE20/HE40/HE80
Frequency stability	802.11a	--	802.11n HT20/HT40 802.11ac VHT20/VHT40/VHT80 802.11ax HE20/HE40/HE80
Power Spectral Density	O	O	802.11n HT20/HT40 802.11ac VHT20/VHT40/VHT80 802.11ax HE20/HE40/HE80
Unwanted Emissions	802.11a	--	802.11n HT20/HT40 802.11ac VHT20/VHT40/VHT80



			802.11ax HE20/HE40/HE80
Conducted Emissions	802.11a	--	802.11n HT20/HT40 802.11ac VHT20/VHT40/VHT80 802.11ax HE20/HE40/HE80
Note: "O": test all bands			

According to RF Output power results in chapter 5.1, MIMO was selected as the worst antenna for 802.11n HT20/40, 802.11ac VHT20/40/80, 802.11ax HE20/HE40/HE80. SISO Antenna 1 was selected as the worst SISO antenna for 802.11a.



Wireless Technology and Frequency Range

Wireless Technology		Bandwidth	Channel	Frequency	
Wi-Fi	U-NII-1	20 MHz	36	5180MHz	
			40	5200MHz	
			44	5220MHz	
			48	5240MHz	
		40 MHz	38	5190MHz	
			46	5230MHz	
			80 MHz	42	5210MHz
		U-NII-2A	20 MHz	52	5260MHz
				56	5280MHz
	60			5300MHz	
	64			5320MHz	
	40 MHz		54	5270MHz	
			62	5310MHz	
			80 MHz	58	5290MHz
	U-NII-2C		20 MHz	100	5500MHz
				104	5520MHz
		108		5540MHz	
		112		5560MHz	
		116		5580MHz	
		132		5660MHz	
		136		5680MHz	
		40 MHz	140	5700MHz	
			102	5510MHz	
			110	5550MHz	
			118	5590MHz	
			134	5670MHz	
		80 MHz	142	5710MHz	
			106	5530MHz	
			138	5690MHz	
	U-NII-3	20 MHz	149	5745MHz	
153			5765MHz		
157			5785MHz		
161			5805MHz		
165			5825MHz		
40 MHz		151	5755MHz		
		159	5795MHz		
80 MHz		155	5775MHz		
Does this device support TPC Function? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					



Does this device support TDWR Band? Yes No

5. Test Case Results

5.1. Occupied Bandwidth

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

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

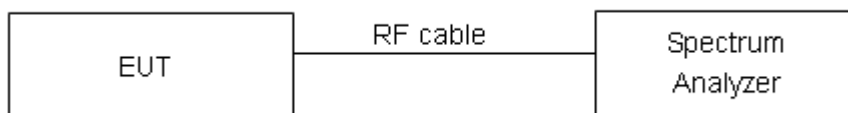
For U-NII-1/U-NII-2A/U-NII-2C, set RBW \approx 1% OCB kHz, VBW \geq 3 \times RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level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

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

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

Use the 99 % power bandwidth function of the instrument

Test Setup



Limits

Rule FCC Part §15.407(e)

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

Measurement Uncertainty

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

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

Mode	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	5180	16.361	18.96	PASS
	5200	16.347	19.15	PASS
	5240	16.361	19.08	PASS
802.11n HT20	5180	17.562	19.92	PASS
	5200	17.545	19.98	PASS
	5240	17.571	20.12	PASS
802.11n HT40	5190	36.043	39.71	PASS
	5230	36.018	39.24	PASS
802.11ac VHT20	5180	17.563	20.02	PASS
	5200	17.568	20.03	PASS
	5240	17.568	19.90	PASS
802.11ac VHT40	5190	36.036	39.47	PASS
	5230	36.037	39.69	PASS
802.11ac VHT80	5210	75.366	81.40	PASS
802.11ax HE20	5180	18.932	20.98	PASS
	5200	18.943	20.86	PASS
	5240	18.940	20.79	PASS
802.11ax HE40	5190	37.715	40.39	PASS
	5230	37.735	40.43	PASS
802.11ax HE80	5210	77.185	81.36	PASS

Mode	RU Size	Index	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11ax HE20 MU Mode	26-Tones	0	5180	18.078	20.010	PASS
		4	5200	13.699	14.588	PASS
		8	5240	18.135	19.654	PASS
802.11ax HE20 MU Mode	52-Tones	37	5180	17.181	18.719	PASS
		38	5200	15.464	18.397	PASS
		40	5240	17.425	18.892	PASS
802.11ax HE20 MU Mode	106-Tones	53	5180	17.909	20.773	PASS
		53	5200	18.133	20.668	PASS
		54	5240	17.677	19.460	PASS
802.11ax HE20 SU Mode	242-Tones	61	5180	18.998	21.901	PASS
		61	5200	18.993	21.877	PASS



		61	5240	19.005	21.684	PASS
802.11ax HE40 SU Mode	484- Tones	65	5190	37.892	43.514	PASS
		65	5230	37.885	42.093	PASS
802.11ax HE80 SU Mode	996- Tones	67	5210	77.477	85.566	PASS

U-NII-2A

Mode	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	5260	16.385	19.28	PASS
	5300	16.370	19.85	PASS
	5320	16.394	19.01	PASS
802.11n HT20	5260	17.566	19.86	PASS
	5300	17.575	20.07	PASS
	5320	17.573	19.95	PASS
802.11n HT40	5270	36.017	39.36	PASS
	5310	36.006	39.64	PASS
802.11ac VHT20	5260	17.570	19.98	PASS
	5300	17.549	20.09	PASS
	5320	17.554	20.02	PASS
802.11ac VHT40	5270	36.046	39.43	PASS
	5310	36.035	39.75	PASS
802.11ac VHT80	5290	75.370	81.64	PASS
802.11ax HE20	5260	18.926	20.76	PASS
	5300	18.917	21.06	PASS
	5320	18.934	20.74	PASS
802.11ax HE40	5270	37.725	40.34	PASS
	5310	37.724	40.29	PASS
802.11ax HE80	5290	77.133	81.19	PASS

Mode	RU Size	Index	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11ax HE20 MU Mode	26- Tones	0	5260	13.092	14.716	PASS
		4	5300	12.433	13.039	PASS
		8	5320	17.462	20.091	PASS
802.11ax HE20 MU Mode	52- Tones	37	5260	16.218	20.338	PASS
		38	5300	15.235	16.778	PASS
		40	5320	15.062	16.497	PASS



802.11ax HE20 MU Mode	106- Tones	53	5260	17.819	20.561	PASS
		53	5300	18.132	19.757	PASS
		54	5320	17.552	20.712	PASS
802.11ax HE20 SU Mode	242- Tones	61	5260	19.021	21.885	PASS
		61	5300	18.981	21.790	PASS
		61	5320	18.988	21.422	PASS
802.11ax HE40 SU Mode	484- Tones	65	5270	37.926	57.520	PASS
		65	5310	37.895	43.200	PASS
802.11ax HE80 SU Mode	996- Tones	67	5290	77.482	99.929	PASS

U-NII-2C

Mode	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	5500	16.359	19.01	PASS
	5580	16.384	19.21	PASS
	5700	16.372	19.09	PASS
	5720	16.359	18.91	PASS
802.11n HT20	5500	16.377	18.88	PASS
	5580	16.363	19.12	PASS
	5700	16.378	18.89	PASS
	5720	16.347	18.74	PASS
802.11n HT40	5510	36.076	39.69	PASS
	5550	35.986	39.66	PASS
	5670	36.053	39.36	PASS
	5710	36.031	39.36	PASS
802.11ac VHT20	5500	17.550	19.95	PASS
	5580	17.567	20.03	PASS
	5700	17.567	19.89	PASS
	5720	17.552	20.31	PASS
802.11ac VHT40	5510	36.054	39.59	PASS
	5550	35.985	39.41	PASS
	5670	36.034	39.82	PASS
	5710	36.028	39.17	PASS
802.11ac VHT80	5530	75.386	81.52	PASS
	5690	75.566	81.78	PASS
802.11ax HE20	5500	18.942	21.00	PASS
	5580	18.951	20.61	PASS
	5700	18.934	20.80	PASS



	5710	18.899	20.98	PASS
802.11ax HE40	5510	37.749	40.34	PASS
	5590	35.585	39.41	PASS
	5670	37.750	40.36	PASS
	5710	37.693	40.32	PASS
802.11ax HE80	5530	77.203	82.01	PASS
	5690	77.197	82.41	PASS

Mode	RU Size	Index	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11ax HE20 MU Mode	26-Tones	0	5500	17.714	19.603	PASS
		4	5580	14.371	18.261	PASS
		8	5700	18.219	19.908	PASS
		8	5720	17.804	19.866	PASS
802.11ax HE20 MU Mode	52-Tones	37	5500	17.893	20.483	PASS
		38	5580	15.322	16.992	PASS
		40	5700	17.196	19.844	PASS
		40	5720	16.768	19.654	PASS
802.11ax HE20 MU Mode	106-Tones	53	5500	16.540	18.148	PASS
		53	5580	17.640	20.570	PASS
		54	5700	16.551	19.706	PASS
		54	5720	17.362	18.906	PASS
802.11ax HE20 SU Mode	242-Tones	61	5500	19.008	22.398	PASS
		61	5580	19.003	22.341	PASS
		61	5700	18.999	21.738	PASS
		61	5720	18.994	21.874	PASS
802.11ax HE40 SU Mode	484-Tones	65	5510	38.010	45.940	PASS
		65	5590	37.886	42.680	PASS
		65	5670	37.948	43.150	PASS
		65	5710	37.919	43.803	PASS
802.11ax HE80 SU Mode	996-Tones	67	5530	77.689	103.228	PASS
		67	5690	77.572	86.898	PASS

U-NII-3

Mode	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11a	5745	16.401	16.37	500	PASS
	5785	16.384	16.33	500	PASS

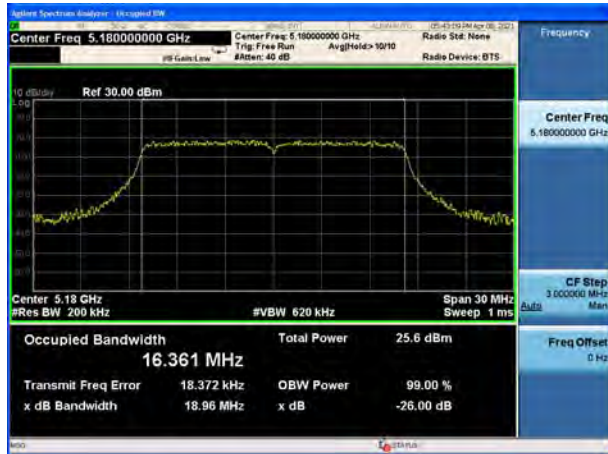


	5825	16.398	16.34	500	PASS
802.11n HT20	5745	17.568	17.54	500	PASS
	5785	17.573	17.59	500	PASS
	5825	17.582	17.59	500	PASS
802.11n HT40	5755	36.086	36.18	500	PASS
	5795	36.025	35.96	500	PASS
802.11ac VHT20	5745	17.559	17.58	500	PASS
	5785	17.570	17.35	500	PASS
	5825	17.547	17.58	500	PASS
802.11ac VHT40	5755	36.070	36.08	500	PASS
	5795	36.029	36.06	500	PASS
802.11ac VHT80	5775	75.481	75.59	500	PASS
802.11ax HE20	5745	18.936	18.94	500	PASS
	5785	18.899	18.84	500	PASS
	5825	18.936	18.94	500	PASS
802.11ax HE40	5755	37.777	37.96	500	PASS
	5795	37.740	37.82	500	PASS
802.11ax HE80	5775	77.178	77.14	500	PASS

Mode	RU Size	Index	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11ax HE20 MU Mode	26-Tones	0	5745	16.895	1.998	500	PASS
		4	5785	15.812	2.623	500	PASS
		8	5825	18.151	2.037	500	PASS
802.11ax HE20 MU Mode	52-Tones	37	5745	16.553	16.910	500	PASS
		38	5785	15.343	12.512	500	PASS
		40	5825	16.431	16.975	500	PASS
802.11ax HE20 MU Mode	106-Tones	53	5745	17.978	18.042	500	PASS
		53	5785	18.068	14.609	500	PASS
		54	5825	15.972	17.065	500	PASS
802.11ax HE20 SU Mode	242-Tones	61	5745	18.990	18.977	500	PASS
		61	5785	18.998	18.879	500	PASS
		61	5825	19.014	19.048	500	PASS
802.11ax HE40 SU Mode	484-Tones	65	5755	37.924	38.017	500	PASS
		65	5795	37.919	38.122	500	PASS
802.11ax HE80 SU Mode	996-Tones	67	5775	77.373	77.816	500	PASS



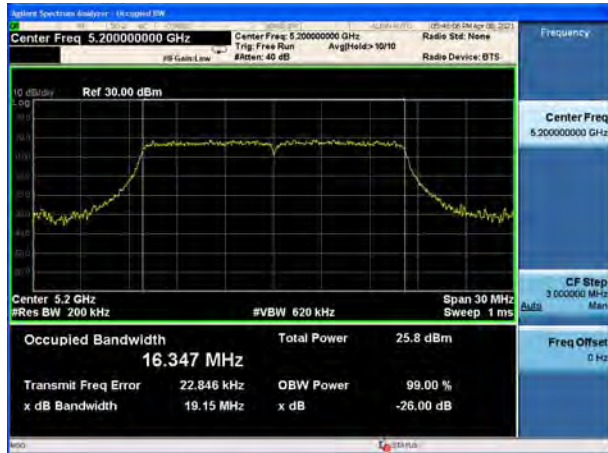
U-NII-1, 802.11a
Carrier frequency (MHz): 5180



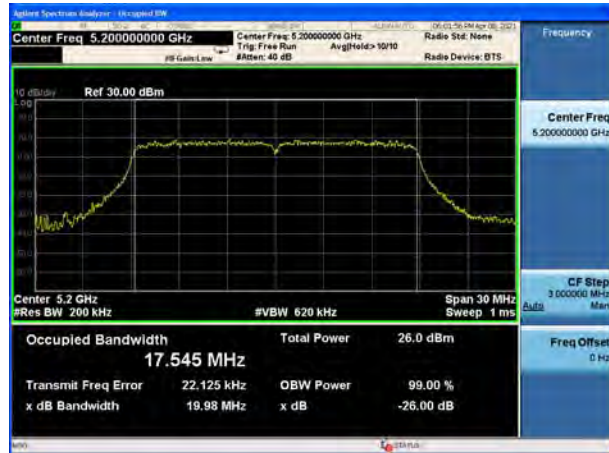
U-NII-1, 802.11n HT20
Carrier frequency (MHz): 5180



U-NII-1, 802.11a
Carrier frequency (MHz): 5200



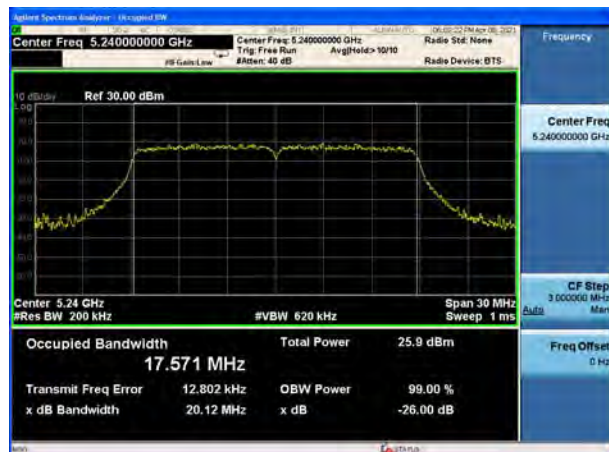
U-NII-1, 802.11n HT20
Carrier frequency (MHz): 5200



U-NII-1, 802.11a
Carrier frequency (MHz): 5240



U-NII-1, 802.11n HT20
Carrier frequency (MHz): 5240

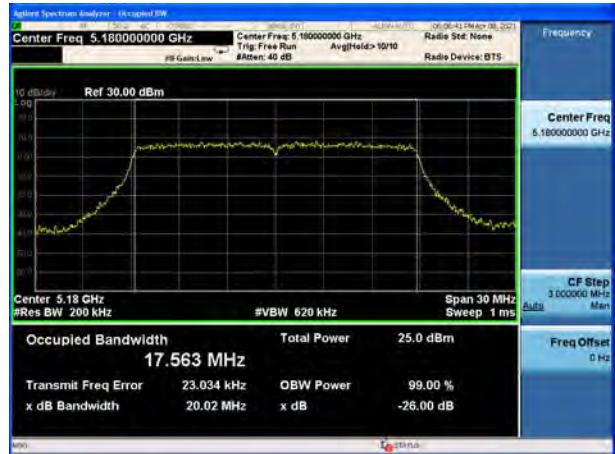




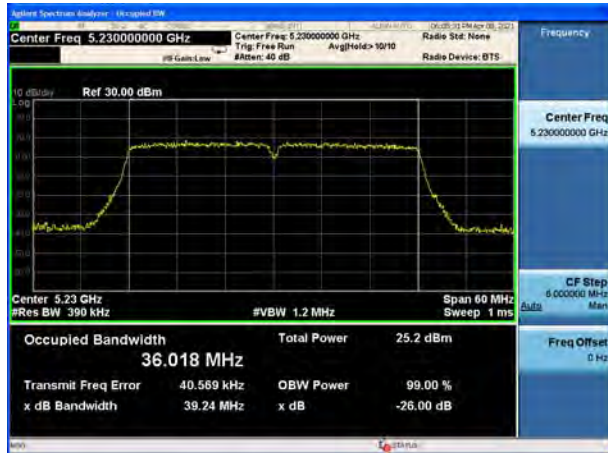
U-NII-1, 802.11n HT40
Carrier frequency (MHz): 5190



U-NII-1, 802.11ac VHT20
Carrier frequency (MHz): 5180



U-NII-1, 802.11n HT40
Carrier frequency (MHz): 5230



U-NII-1, 802.11ac VHT20
Carrier frequency (MHz): 5200



U-NII-1, 802.11ac VHT40
Carrier frequency (MHz): 5190



U-NII-1, 802.11ac VHT20
Carrier frequency (MHz): 5240



U-NII-1, 802.11ac VHT40
Carrier frequency (MHz): 5230



U-NII-1, 802.11ac VHT80
Carrier frequency (MHz): 5210



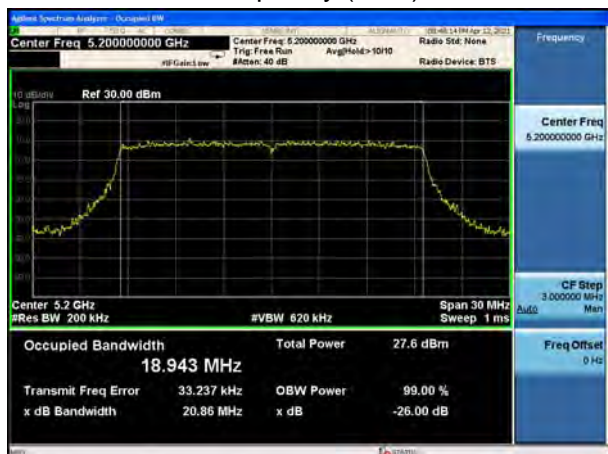
U-NII-1, 802.11ax HE20
Carrier frequency (MHz): 5180



U-NII-1, 802.11ax HE40
Carrier frequency (MHz): 5190



U-NII-1, 802.11ax HE20
Carrier frequency (MHz): 5200



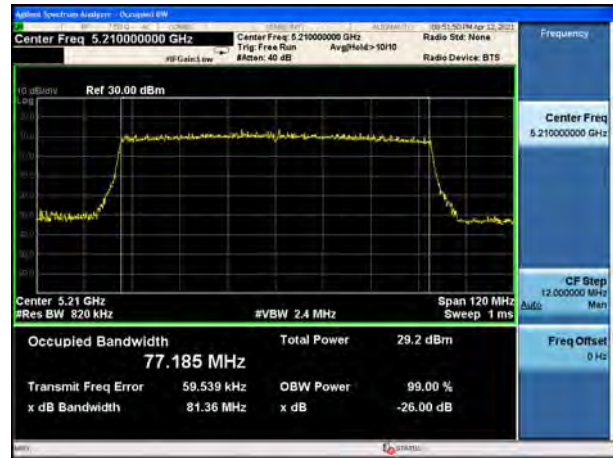
U-NII-1, 802.11ax HE40
Carrier frequency (MHz): 5230



U-NII-1, 802.11ax HE20
Carrier frequency (MHz): 5240



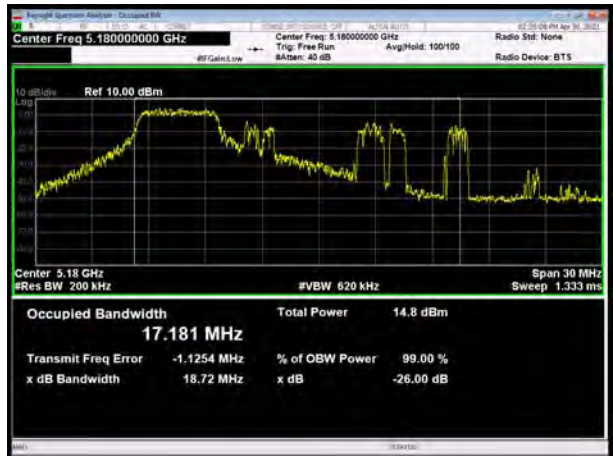
U-NII-1, 802.11ax HE80
Carrier frequency (MHz): 5210



U-NII-1, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5180



U-NII-1, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5180



U-NII-1, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5200



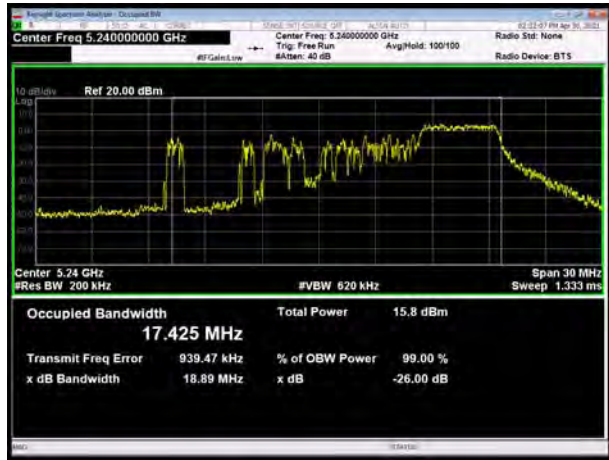
U-NII-1, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5200



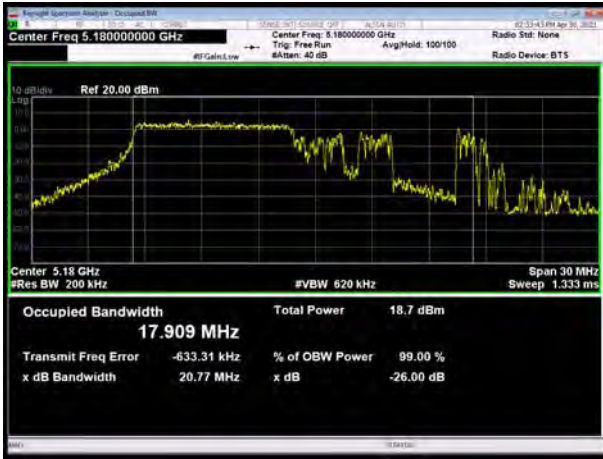
U-NII-1, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5240



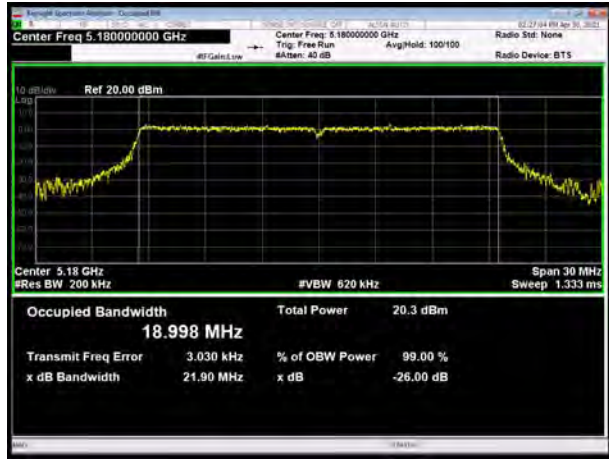
U-NII-1, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5240



U-NII-1, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5180



U-NII-1, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5180



U-NII-1, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5200



U-NII-1, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5200



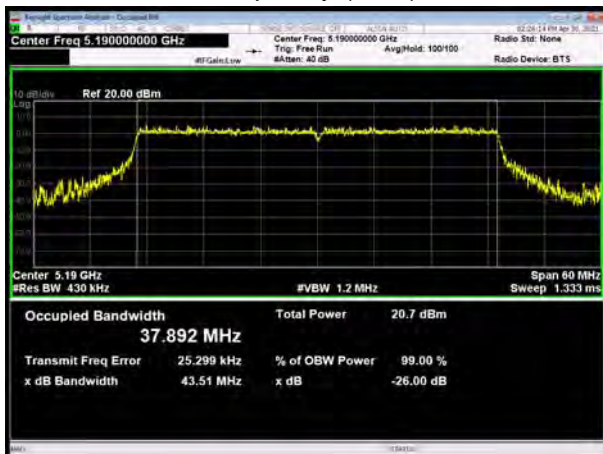
U-NII-1, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5240



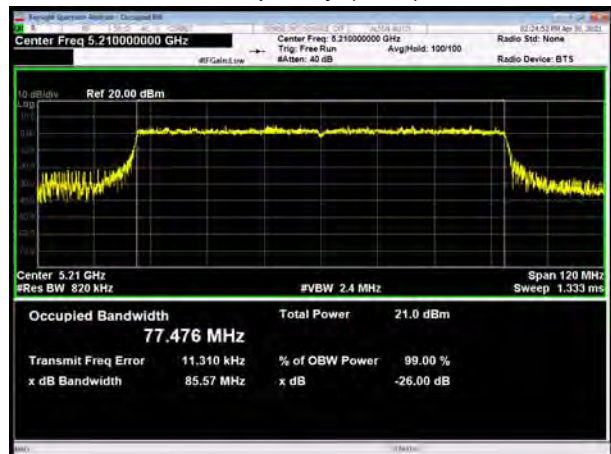
U-NII-1, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5240



U-NII-1, 802.11ax HE40 SU Mode 484-Tones,
Carrier frequency (MHz): 5190



U-NII-1, 802.11ax HE80 SU Mode 996-Tones,
Carrier frequency (MHz): 5210



U-NII-1, 802.11ax HE40 SU Mode 484-Tones,
Carrier frequency (MHz): 5230

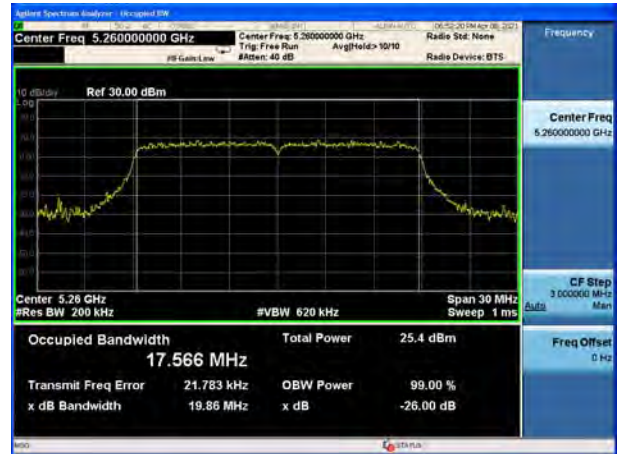




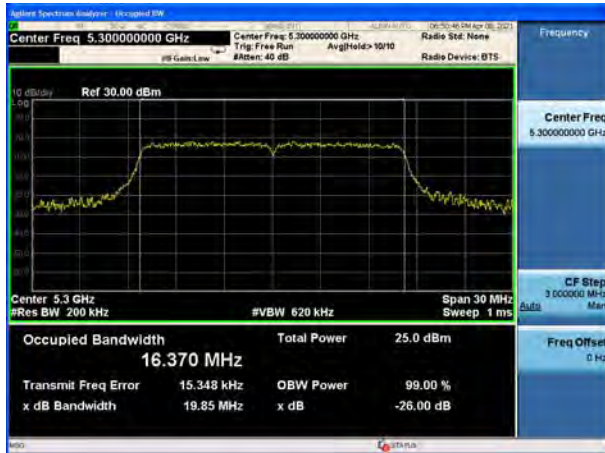
U-NII-2A, 802.11a
Carrier frequency (MHz): 5260



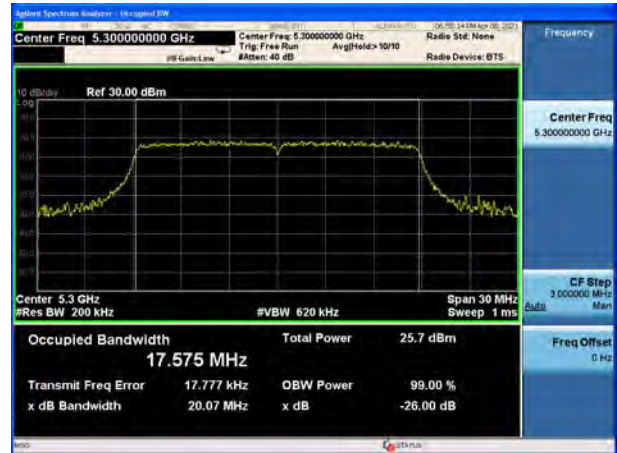
U-NII-2A, 802.11n HT20
Carrier frequency (MHz): 5260

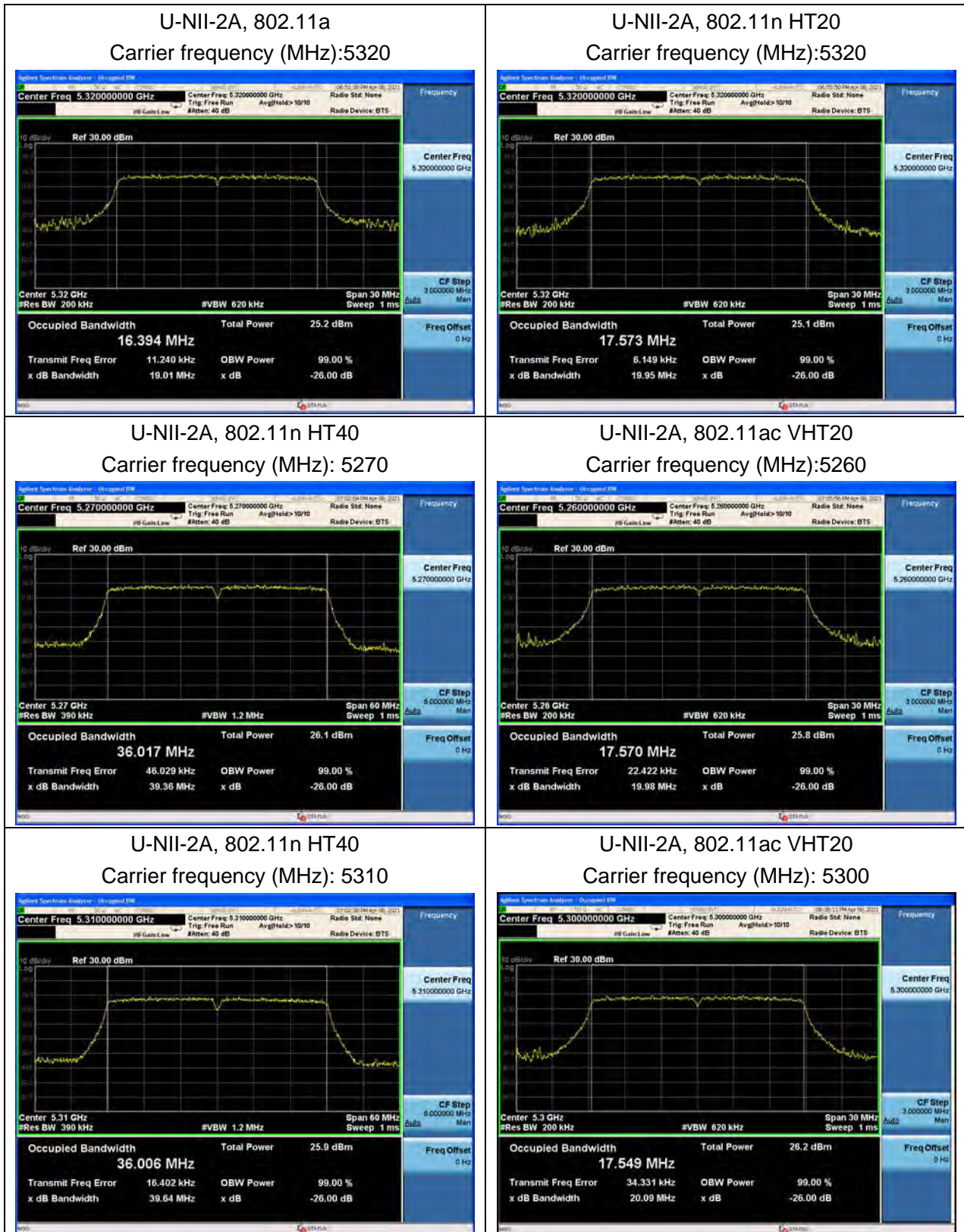


U-NII-2A, 802.11a
Carrier frequency (MHz): 5300

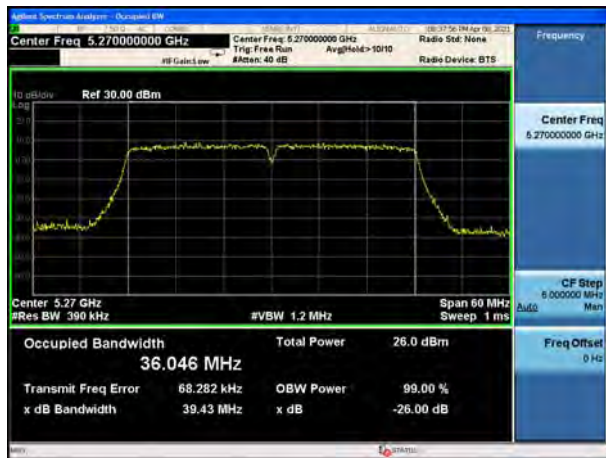


U-NII-2A, 802.11n HT20
Carrier frequency (MHz): 5300

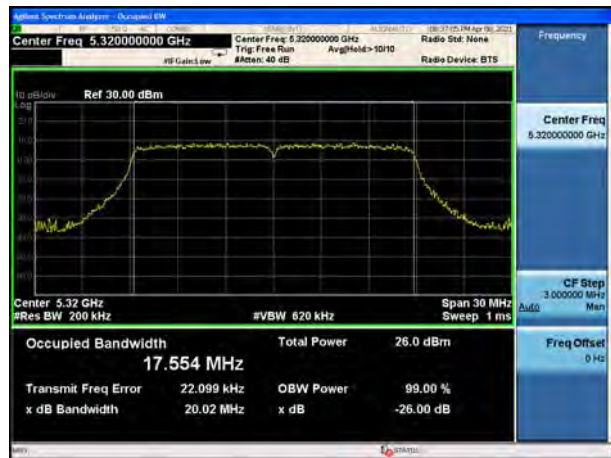




U-NII-2A, 802.11ac VHT40
Carrier frequency (MHz): 5270



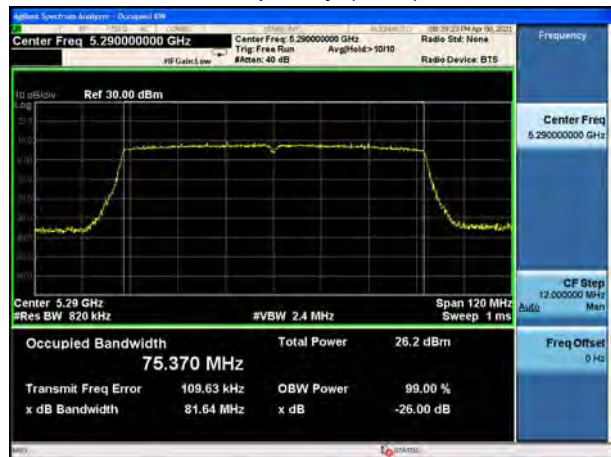
U-NII-2A, 802.11ac VHT20
Carrier frequency (MHz): 5320



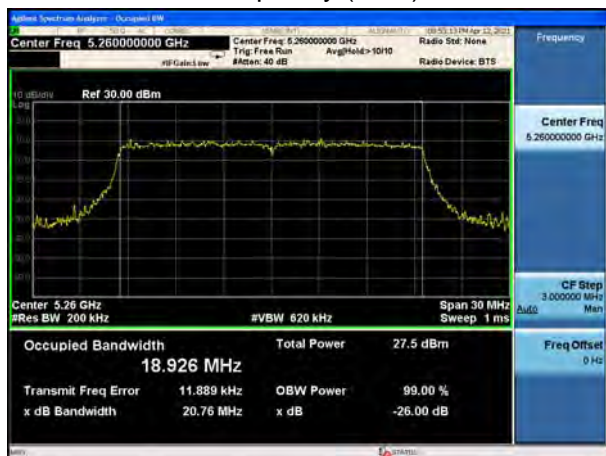
U-NII-2A, 802.11ac VHT40
Carrier frequency (MHz): 5310



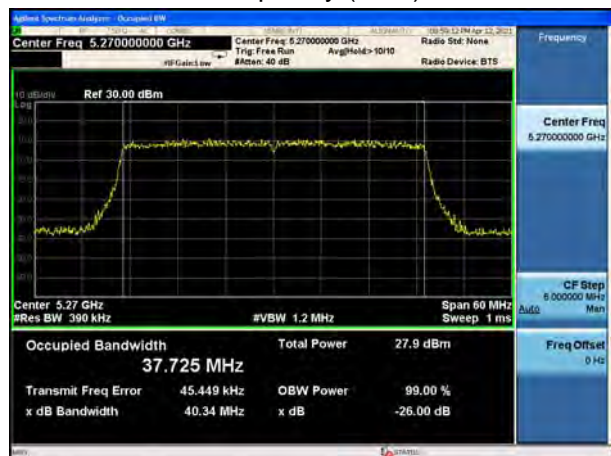
U-NII-2A, 802.11ac VHT80
Carrier frequency (MHz): 5290



U-NII-2A, 802.11ax HE20
Carrier frequency (MHz): 5260



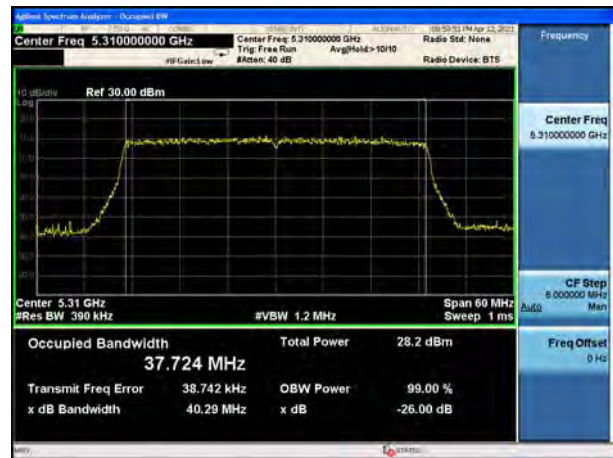
U-NII-2A, 802.11ax HE40
Carrier frequency (MHz): 5270



U-NII-2A, 802.11ax HE20
Carrier frequency (MHz): 5300



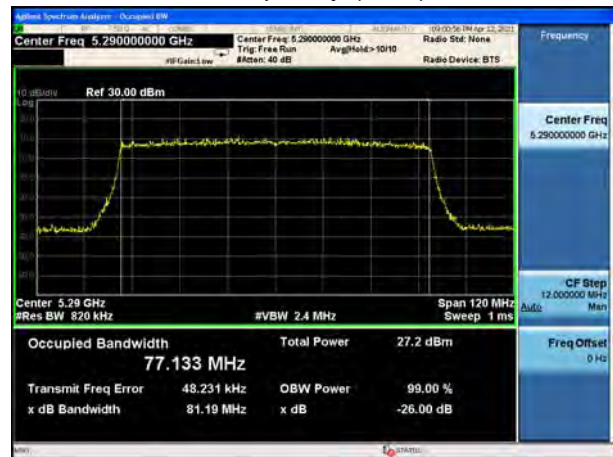
U-NII-2A, 802.11ax HE40
Carrier frequency (MHz): 5310



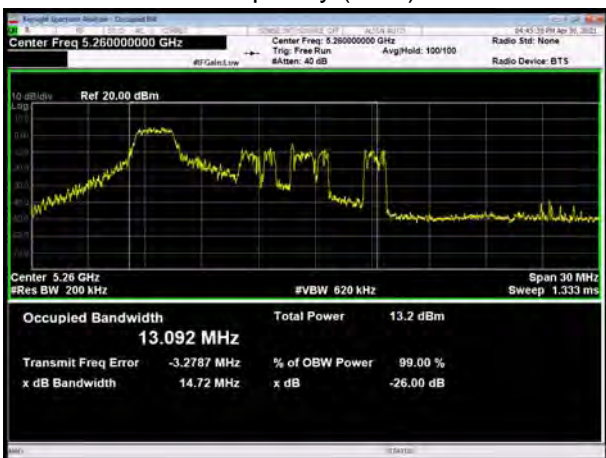
U-NII-2A, 802.11ax HE20
Carrier frequency (MHz): 5320



U-NII-2A, 802.11ax HE80
Carrier frequency (MHz): 5290



U-NII-2A, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5260



U-NII-2A, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5260



U-NII-2A, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5300



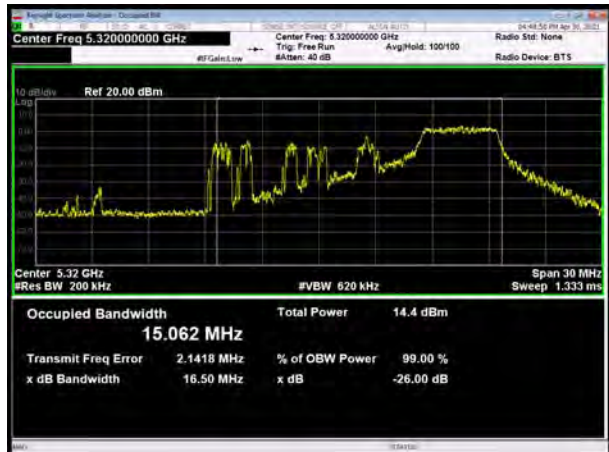
U-NII-2A, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5300



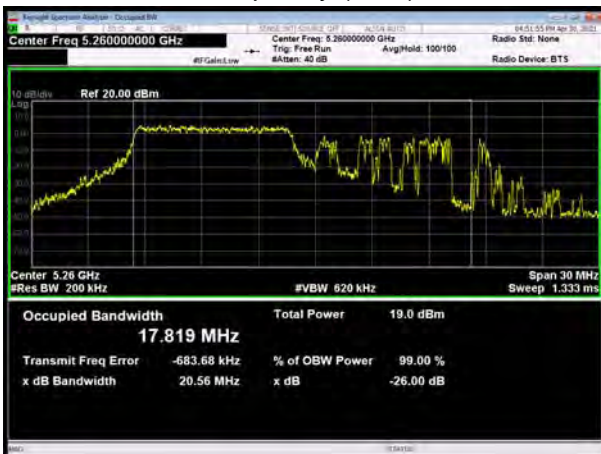
U-NII-2A, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5320



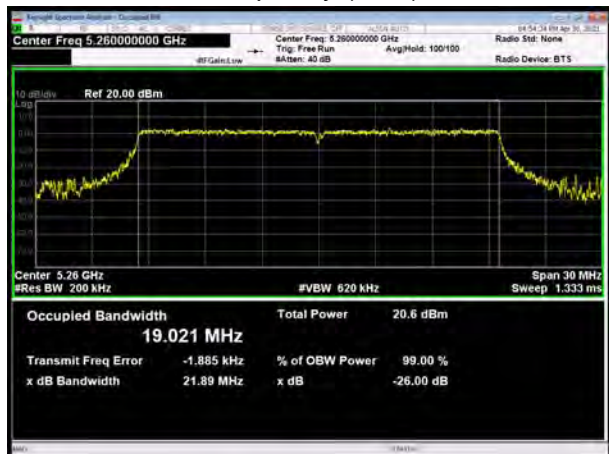
U-NII-2A, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5320



U-NII-2A, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5260



U-NII-2A, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5260



U-NII-2A, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5300



U-NII-2A, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5300



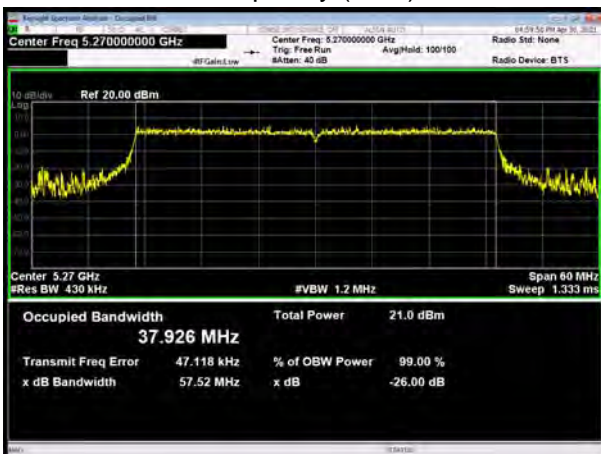
U-NII-2A, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5320



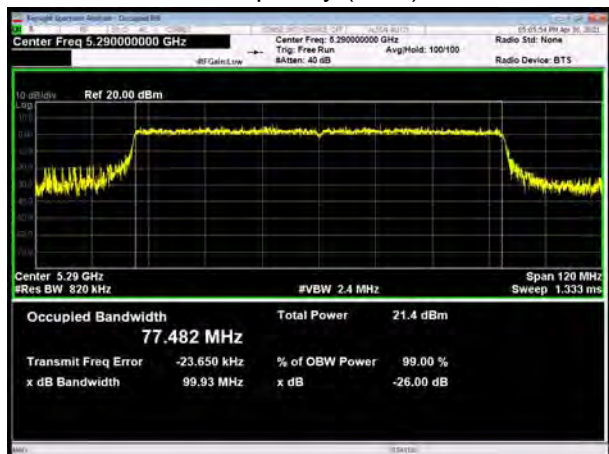
U-NII-2A, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5320



U-NII-2A, 802.11ax HE40 SU Mode 484-Tones,
Carrier frequency (MHz): 5270



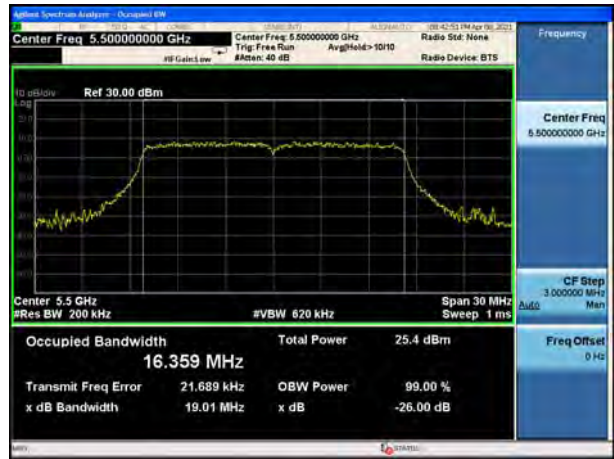
U-NII-2A, 802.11ax HE80 SU Mode 996-Tones,
Carrier frequency (MHz): 5290



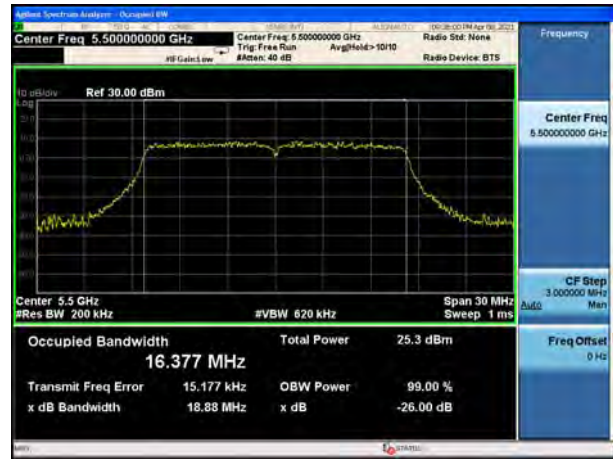
U-NII-2A, 802.11ax HE40 SU Mode 484-Tones,
Carrier frequency (MHz): 5310



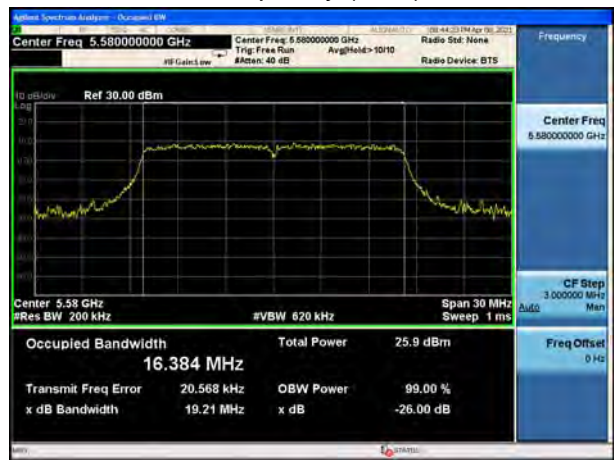
U-NII-2C, 802.11a
Carrier frequency (MHz): 5500



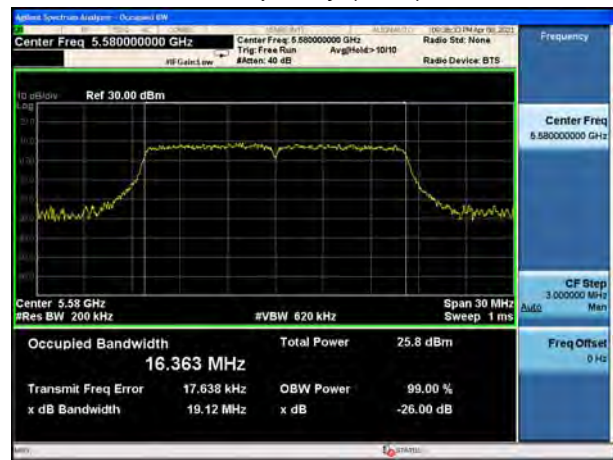
U-NII-2C, 802.11n HT20
Carrier frequency (MHz): 5500

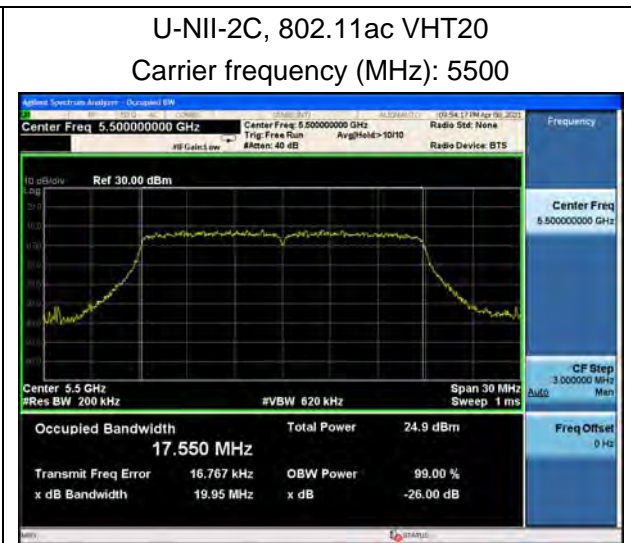
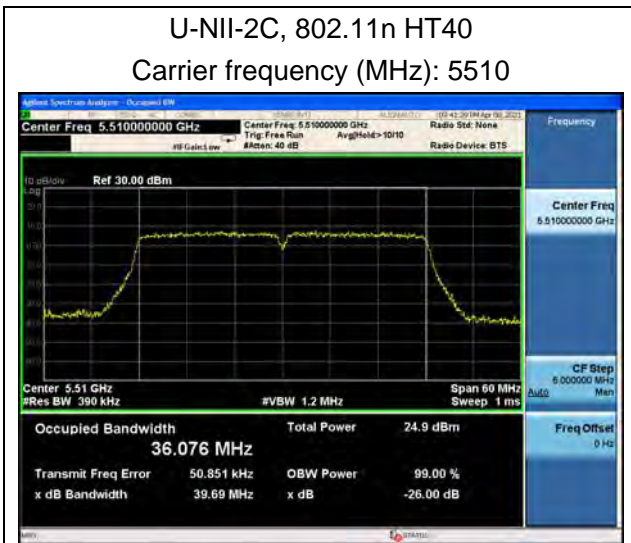
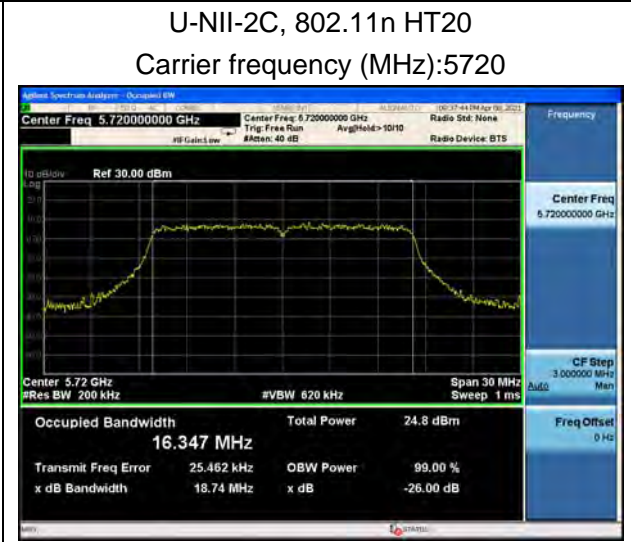
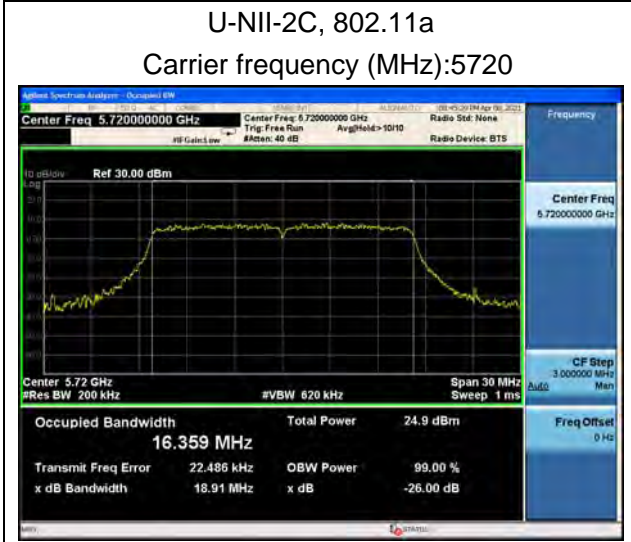
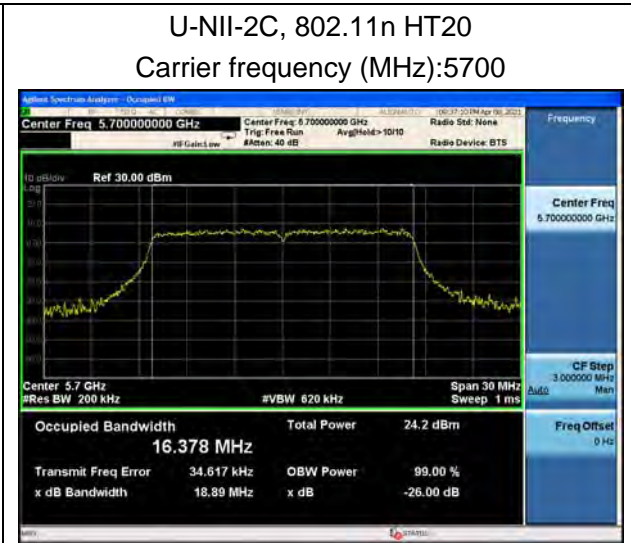
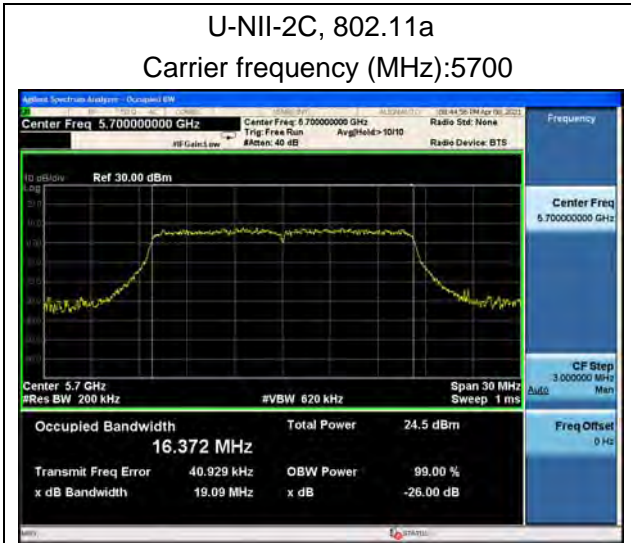


U-NII-2C, 802.11a
Carrier frequency (MHz): 5580

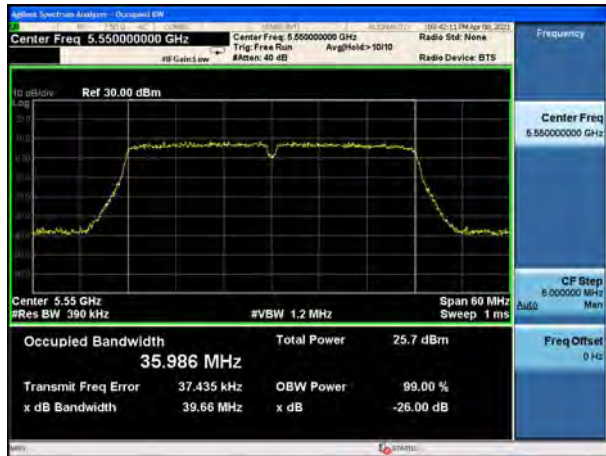


U-NII-2C, 802.11n HT20
Carrier frequency (MHz): 5580

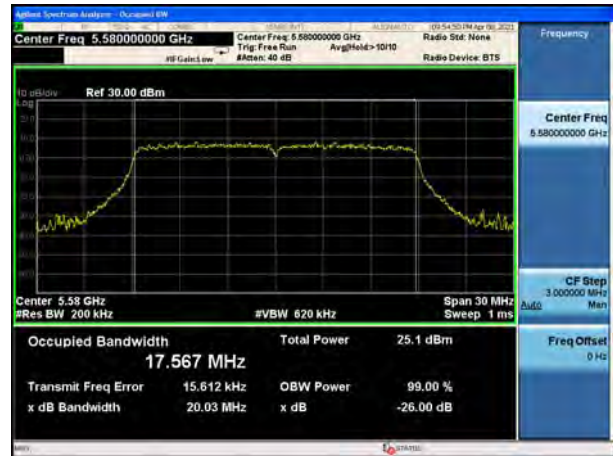




U-NII-2C, 802.11n HT40
Carrier frequency (MHz): 5550



U-NII-2C, 802.11ac VHT20
Carrier frequency (MHz): 5580



U-NII-2C, 802.11n HT40
Carrier frequency (MHz): 5670



U-NII-2C, 802.11ac VHT20
Carrier frequency (MHz): 5700



U-NII-2C, 802.11n HT40
Carrier frequency (MHz): 5710



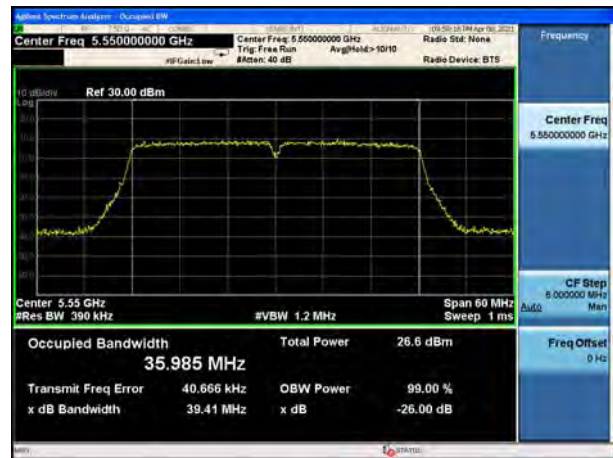
U-NII-2C, 802.11ac VHT20
Carrier frequency (MHz): 5720



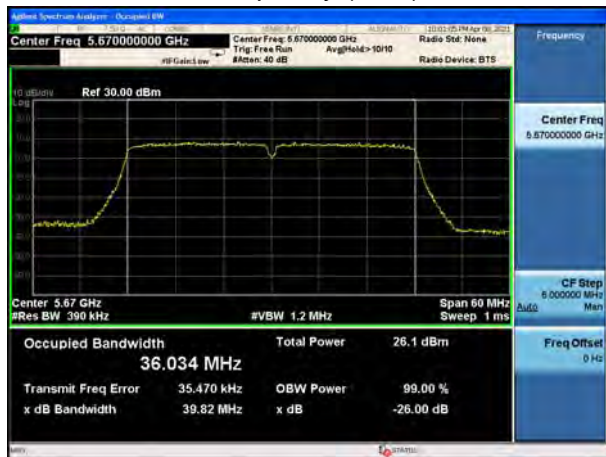
U-NII-2C, 802.11ac VHT40
Carrier frequency (MHz): 5510



U-NII-2C, 802.11ac VHT40
Carrier frequency (MHz): 5550



U-NII-2C, 802.11ac VHT40
Carrier frequency (MHz): 5670



U-NII-2C, 802.11ac VHT40
Carrier frequency (MHz): 5710



U-NII-2C, 802.11ac VHT80
Carrier frequency (MHz): 5530



U-NII-2C, 802.11ac VHT80
Carrier frequency (MHz): 5690



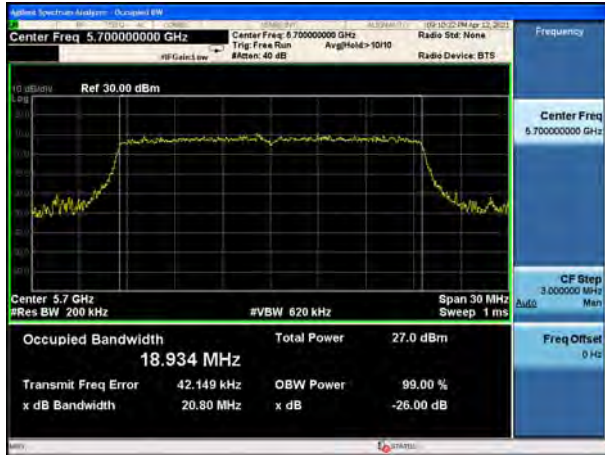
U-NII-2C, 802.11ax HE20
Carrier frequency (MHz): 5500



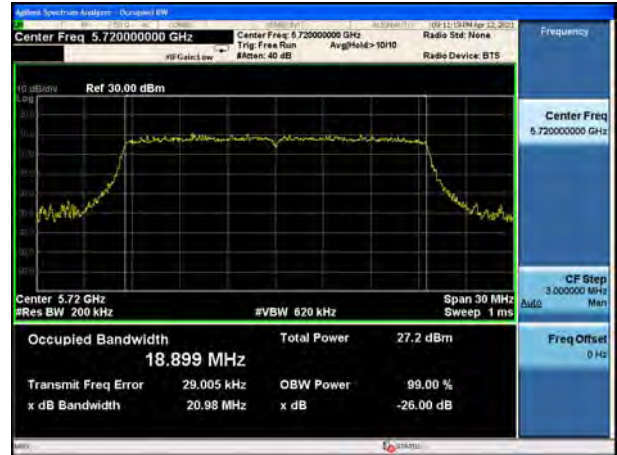
U-NII-2C, 802.11ax HE20
Carrier frequency (MHz): 5580



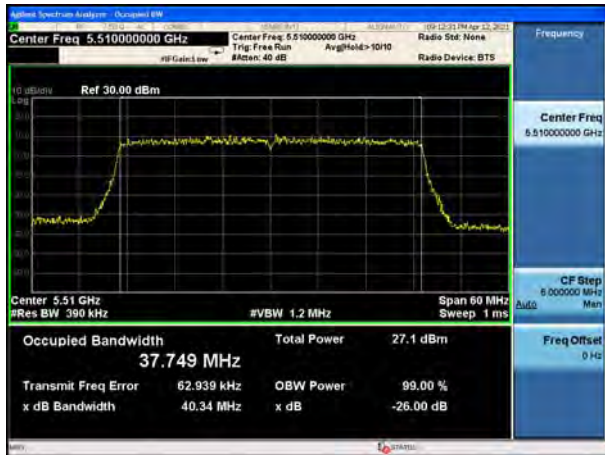
U-NII-2C, 802.11ax HE20
Carrier frequency (MHz):5700



U-NII-2C, 802.11ax HE20
Carrier frequency (MHz):5720



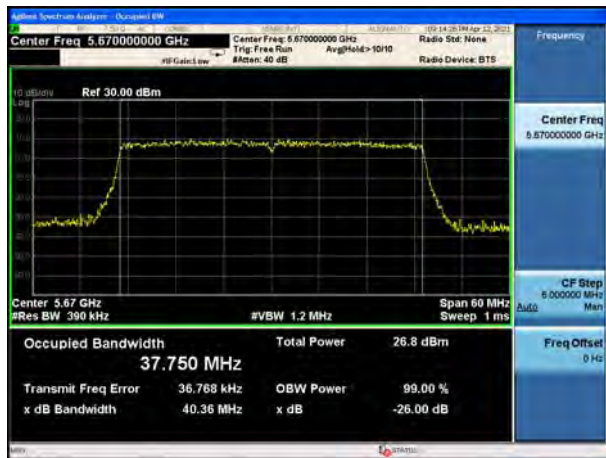
U-NII-2C, 802.11ax HE40
Carrier frequency (MHz): 5510



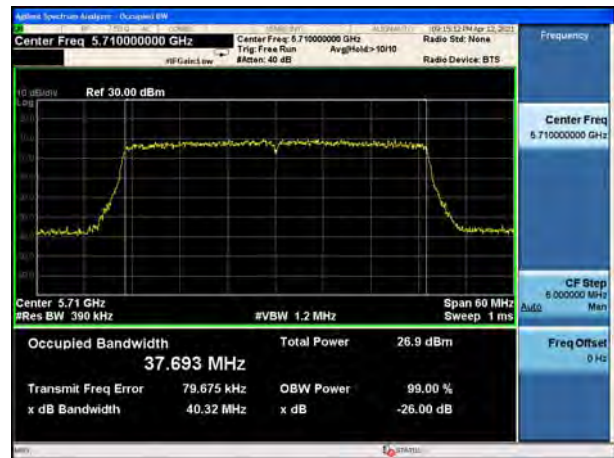
U-NII-2C, 802.11ax HE40
Carrier frequency (MHz): 5550



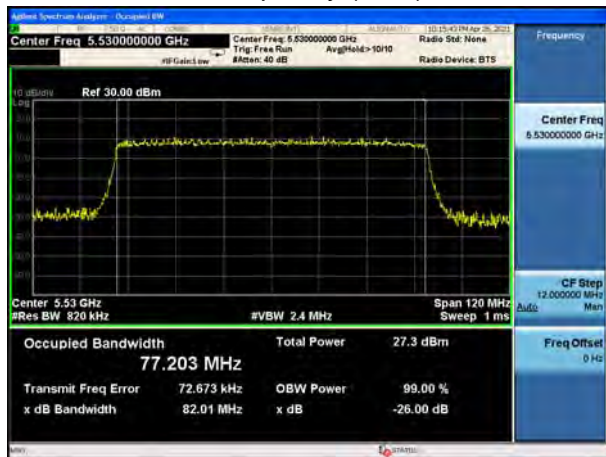
U-NII-2C, 802.11ax HE40
Carrier frequency (MHz):5670



U-NII-2C, 802.11ax HE40
Carrier frequency (MHz):5710



U-NII-2C, 802.11ax HE80
Carrier frequency (MHz):5530



U-NII-2C, 802.11ax HE80
Carrier frequency (MHz):5690



U-NII-2C, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5500



U-NII-2C, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5500



U-NII-2C, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5580



U-NII-2C, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5580



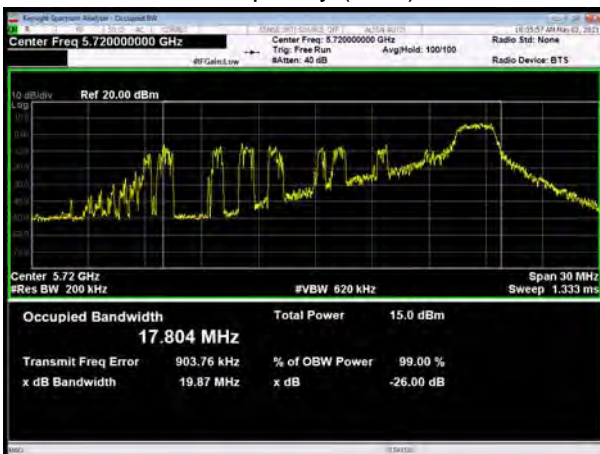
U-NII-2C, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5700



U-NII-2C, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5700



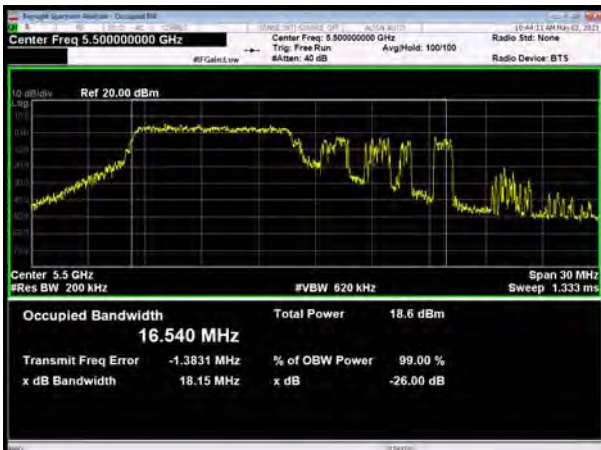
U-NII-2C, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5720



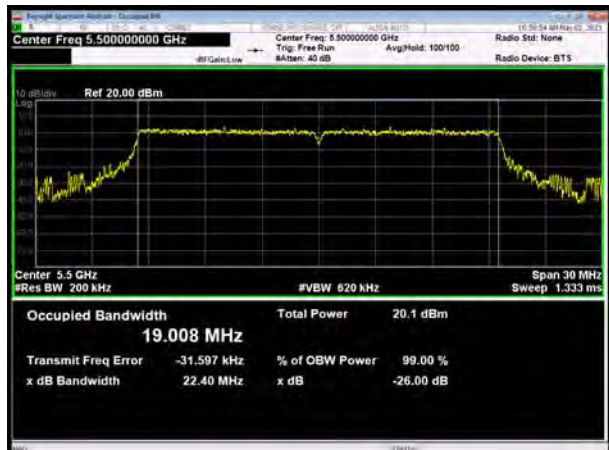
U-NII-2C, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5720



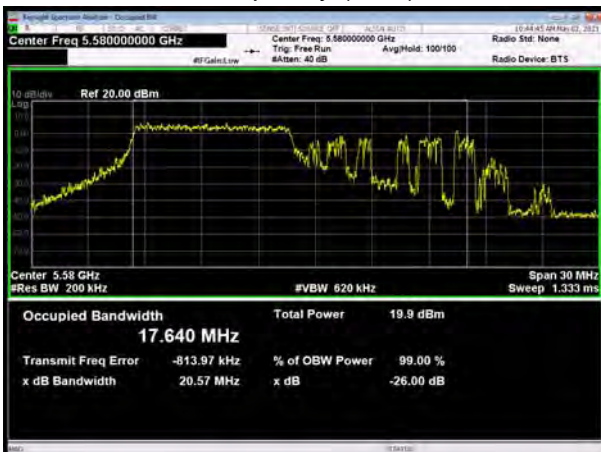
U-NII-2C, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5500



U-NII-2C, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5500



U-NII-2C, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5580



U-NII-2C, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5580



U-NII-2C, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5700



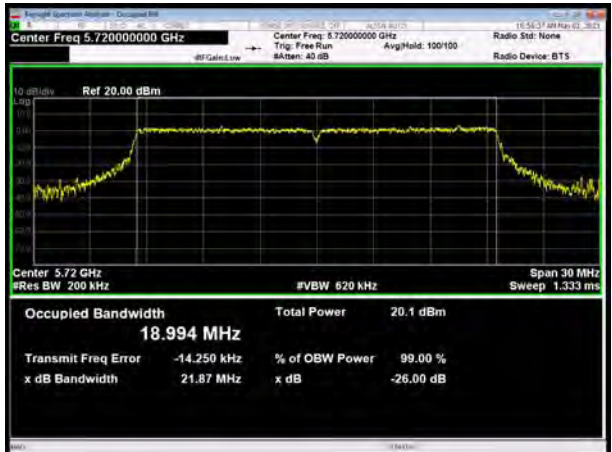
U-NII-2C, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5700



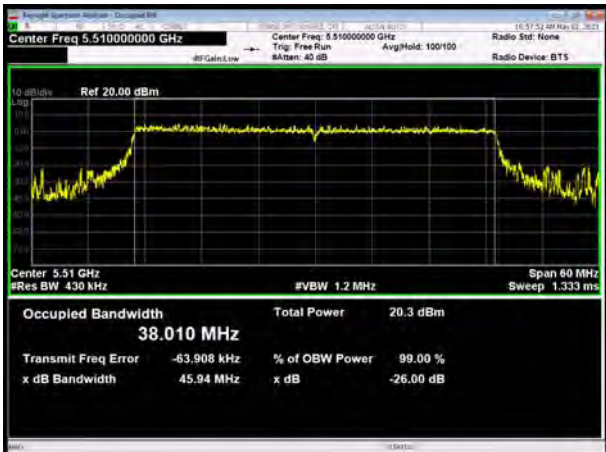
U-NII-2C, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5720



U-NII-2C, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5720



U-NII-2C, 802.11ax HE40 SU Mode 484-Tones,
Carrier frequency (MHz): 5510



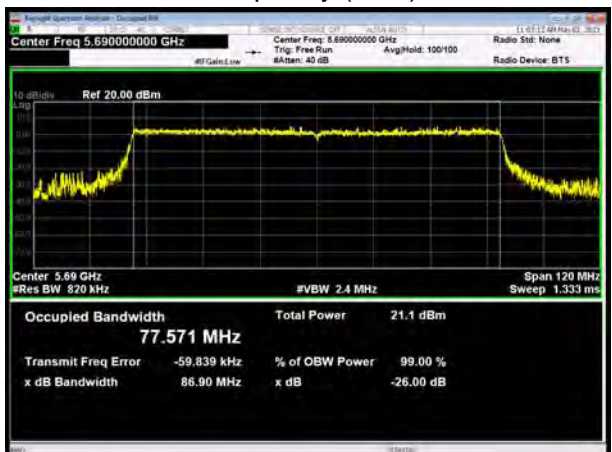
U-NII-2C, 802.11ax HE80 SU Mode 996-Tones,
Carrier frequency (MHz): 5530



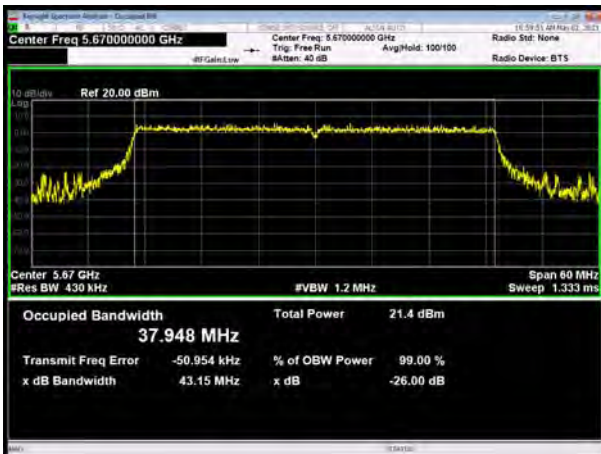
U-NII-2C, 802.11ax HE40 SU Mode 484-Tones,
Carrier frequency (MHz): 5550



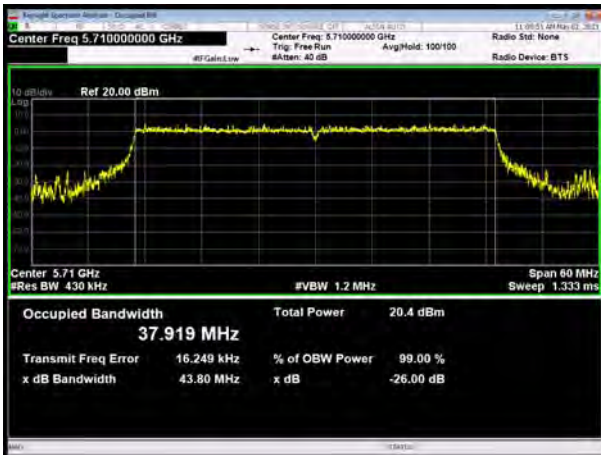
U-NII-2C, 802.11ax HE80 SU Mode 996-Tones,
Carrier frequency (MHz): 5690



U-NII-2C, 802.11ax HE40 SU Mode 484-Tones,
Carrier frequency (MHz): 5670

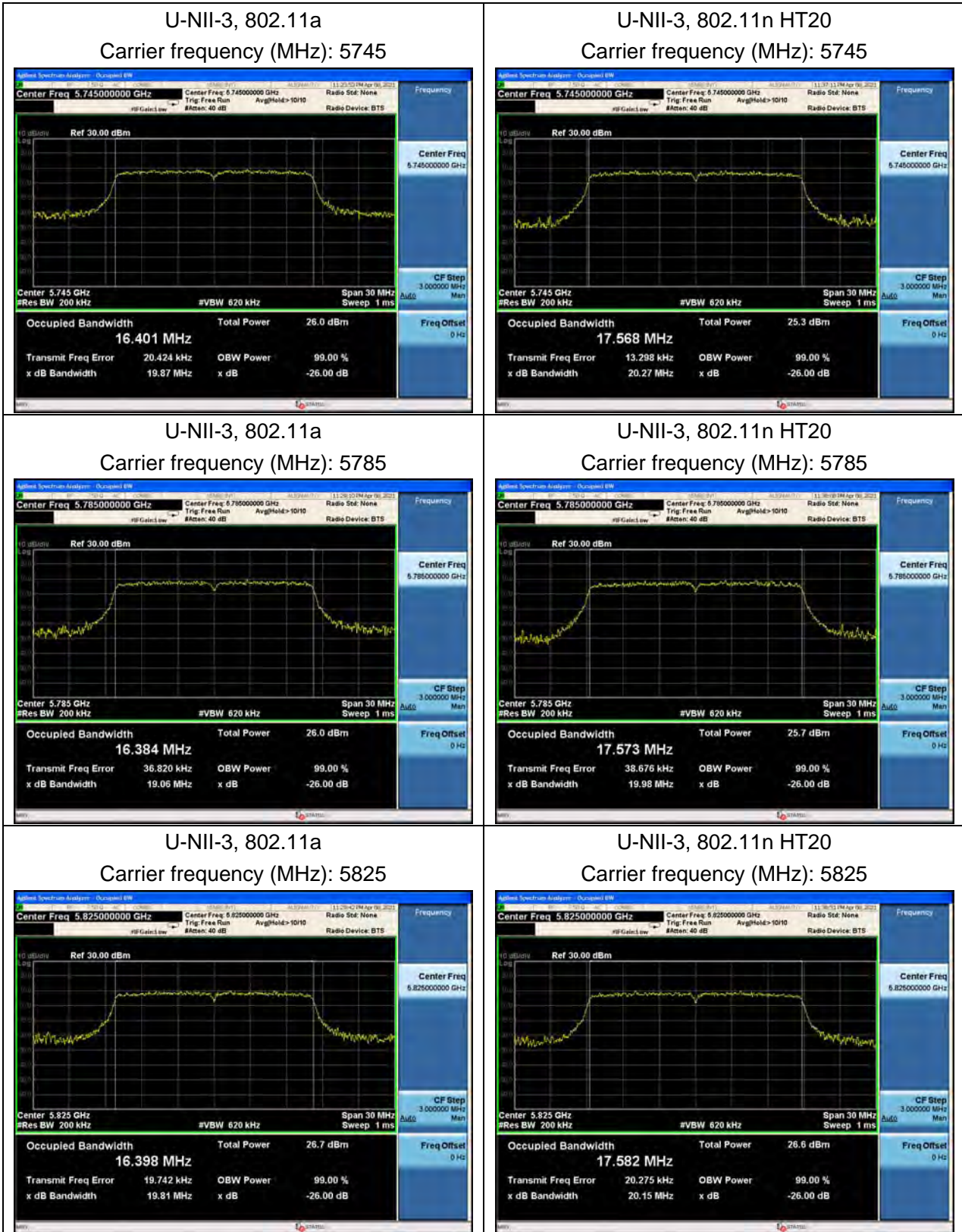


U-NII-2C, 802.11ax HE40 SU Mode 484-Tones,
Carrier frequency (MHz): 5710





99% bandwidth



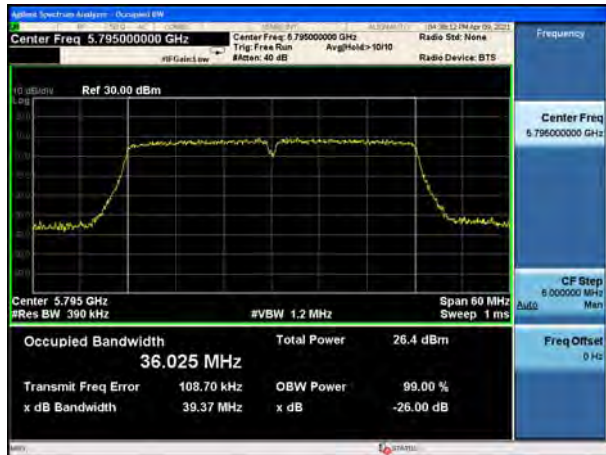
U-NII-3, 802.11n HT40
Carrier frequency (MHz): 5755



U-NII-3, 802.11ac VHT20
Carrier frequency (MHz): 5745



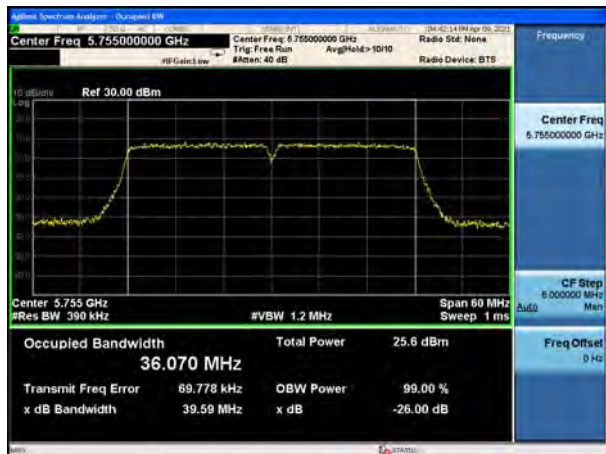
U-NII-3, 802.11n HT40
Carrier frequency (MHz): 5795



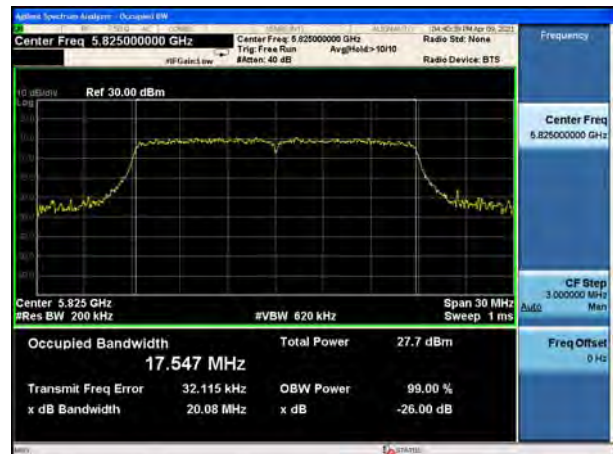
U-NII-3, 802.11ac VHT20
Carrier frequency (MHz): 5785



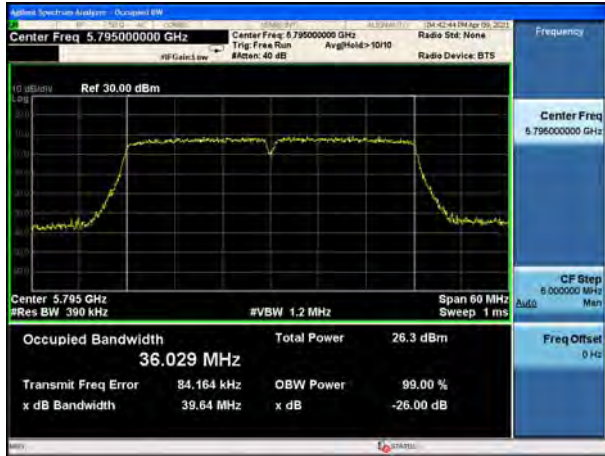
U-NII-3, 802.11ac VHT40
Carrier frequency (MHz): 5755



U-NII-3, 802.11ac VHT20
Carrier frequency (MHz): 5825



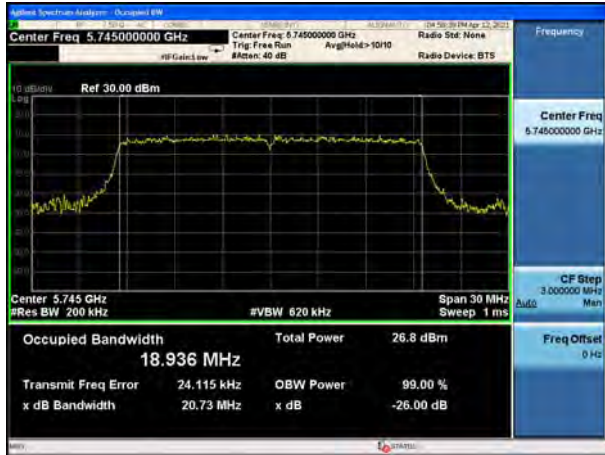
U-NII-3, 802.11ac VHT40
Carrier frequency (MHz): 5795



U-NII-3, 802.11ac VHT80
Carrier frequency (MHz): 5775



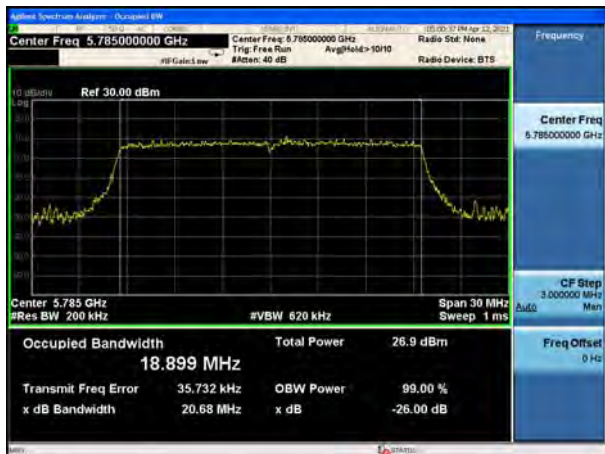
U-NII-3, 802.11ax HE20
Carrier frequency (MHz): 5745



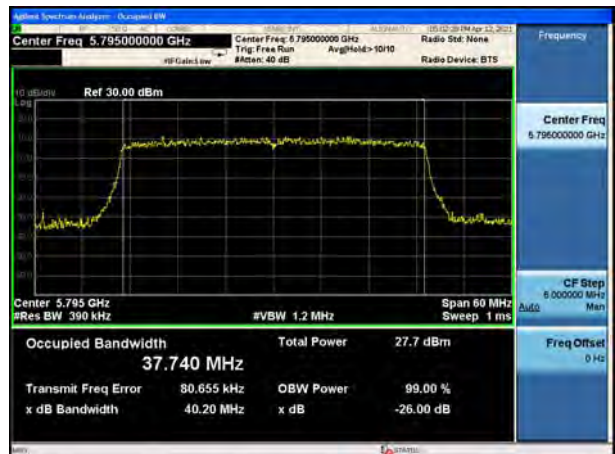
U-NII-3, 802.11ax HE40
Carrier frequency (MHz): 5755



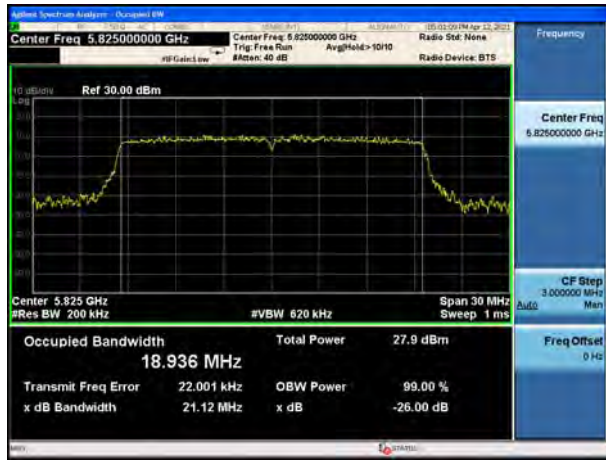
U-NII-3, 802.11ax HE20
Carrier frequency (MHz): 5785



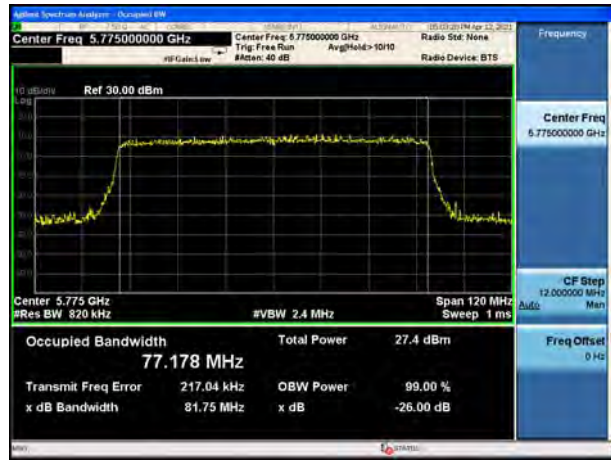
U-NII-3, 802.11ax HE40
Carrier frequency (MHz): 5795



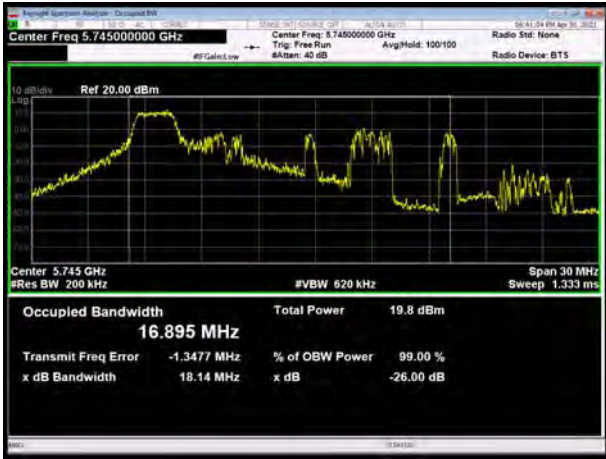
U-NII-3, 802.11ax HE20
Carrier frequency (MHz): 5825



U-NII-3, 802.11ax HE80
Carrier frequency (MHz): 5775



U-NII-3, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5745



U-NII-3, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5745



U-NII-3, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5785



U-NII-3, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5785



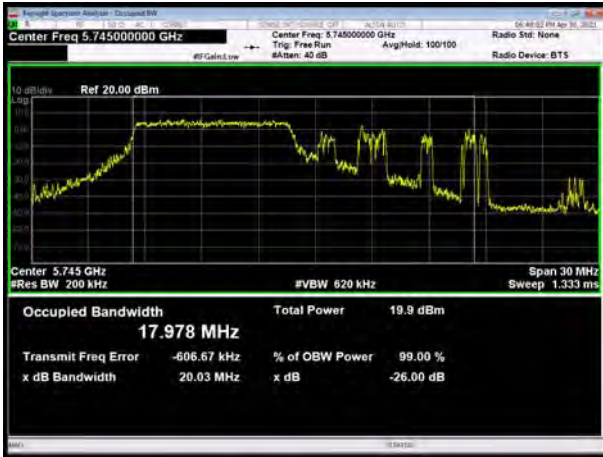
U-NII-3, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5825



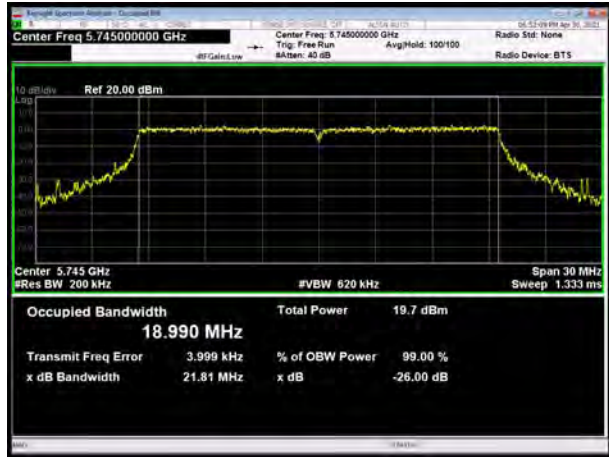
U-NII-3, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5825



U-NII-3, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5745



U-NII-3, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5745



U-NII-3, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5785



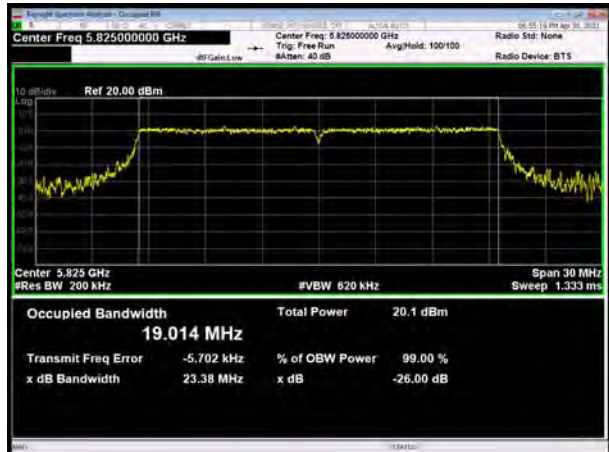
U-NII-3, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5785



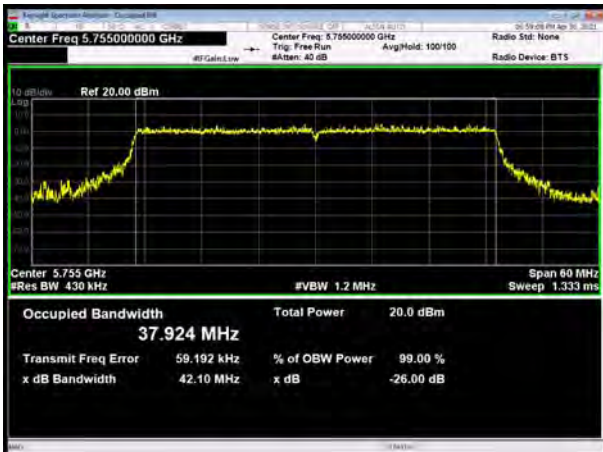
U-NII-3, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5825



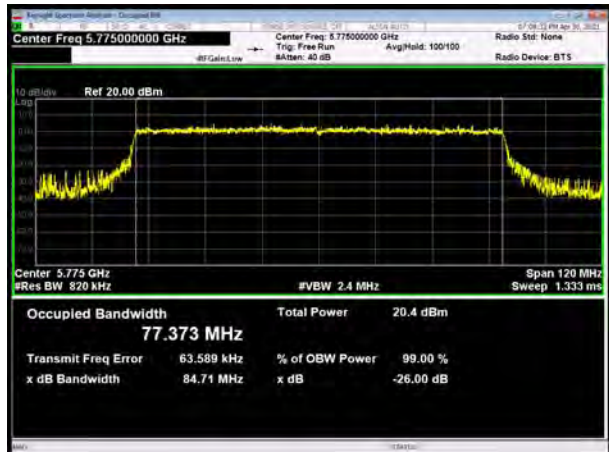
U-NII-3, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5825



U-NII-3, 802.11ax HE40 SU Mode 484-Tones,
Carrier frequency (MHz): 5755



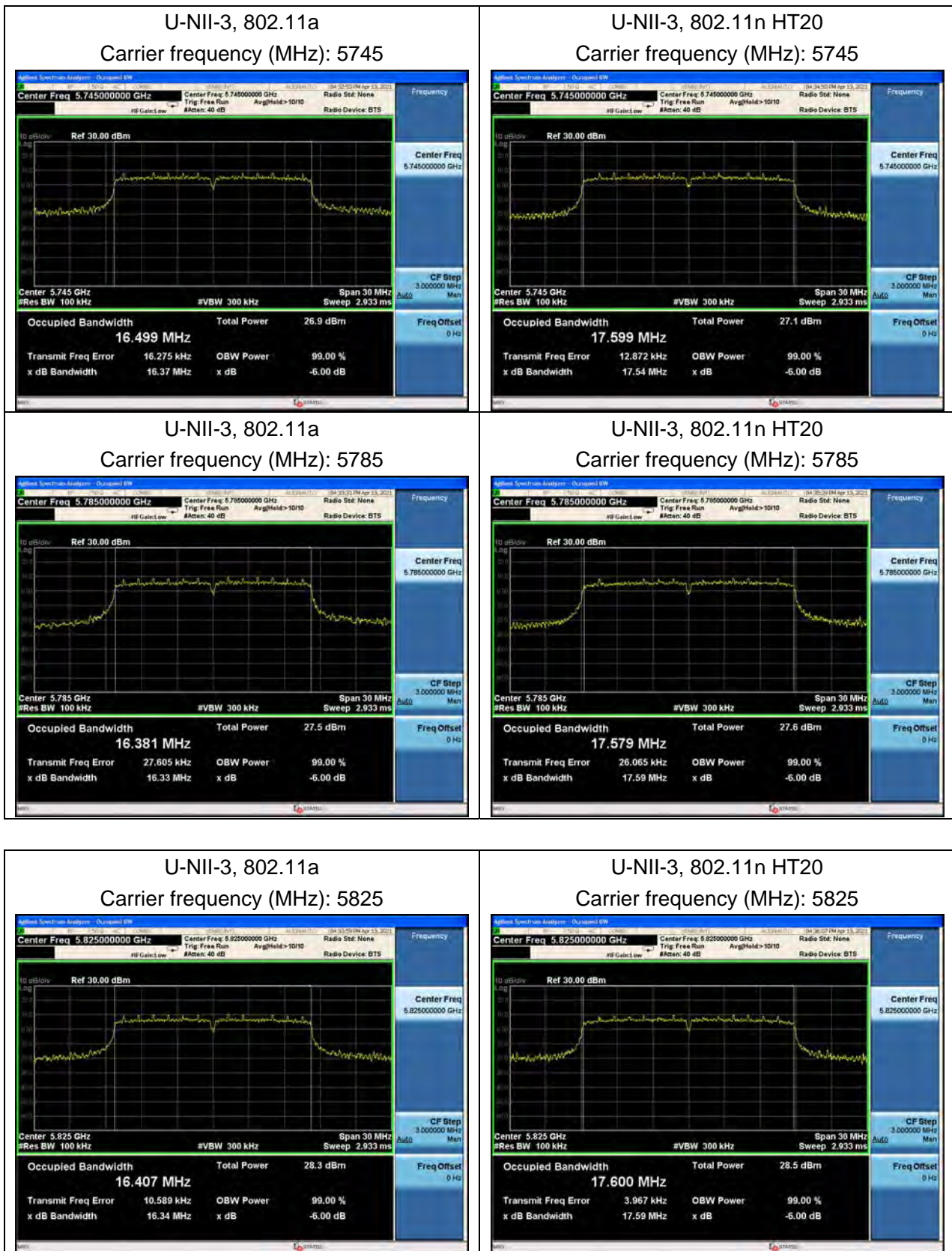
U-NII-3, 802.11ax HE80 SU Mode 996-Tones,
Carrier frequency (MHz): 5775



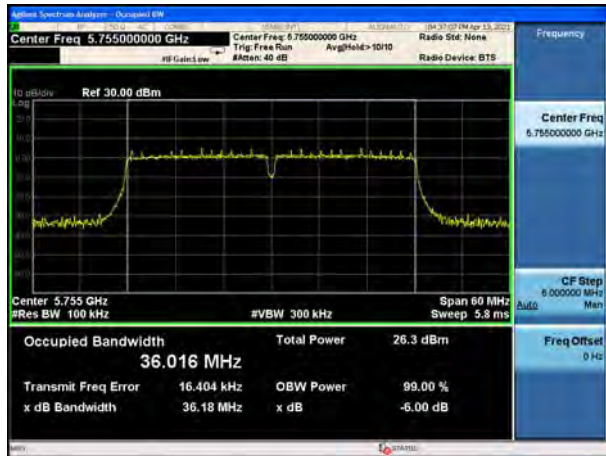
U-NII-3, 802.11ax HE40 SU Mode 484-Tones,
Carrier frequency (MHz): 5795



Minimum 6 dB bandwidth



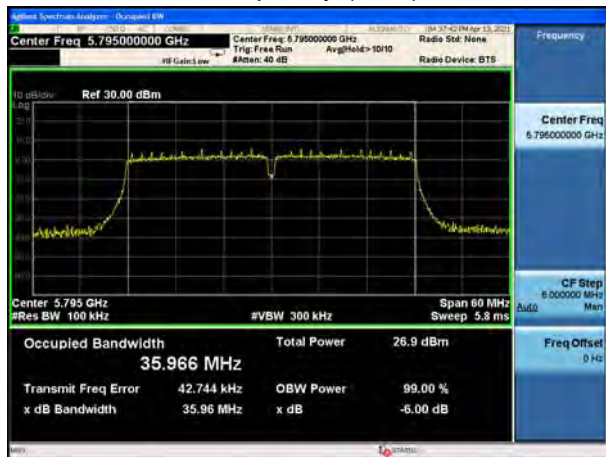
U-NII-3, 802.11n HT40
Carrier frequency (MHz): 5755



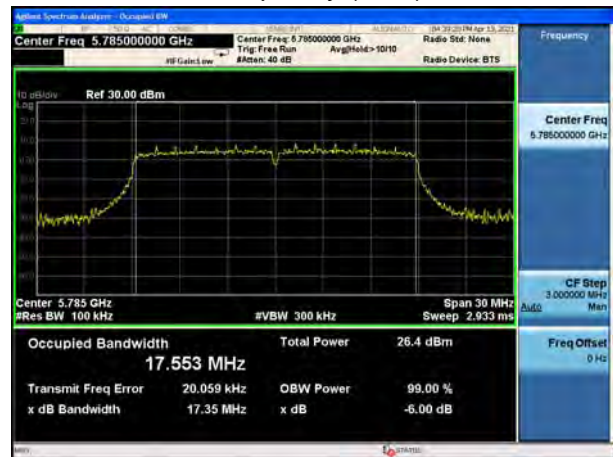
U-NII-3, 802.11ac VHT20
Carrier frequency (MHz): 5745



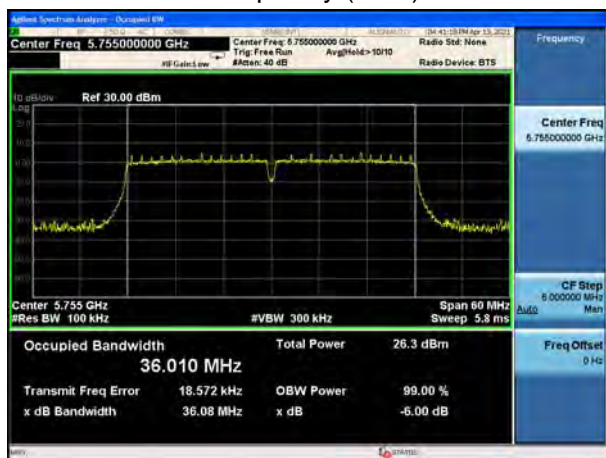
U-NII-3, 802.11n HT40
Carrier frequency (MHz): 5795



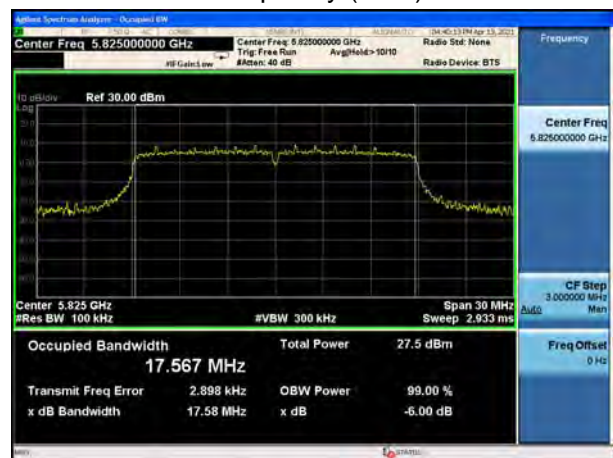
U-NII-3, 802.11ac VHT20
Carrier frequency (MHz): 5785



U-NII-3, 802.11ac VHT40
Carrier frequency (MHz): 5755



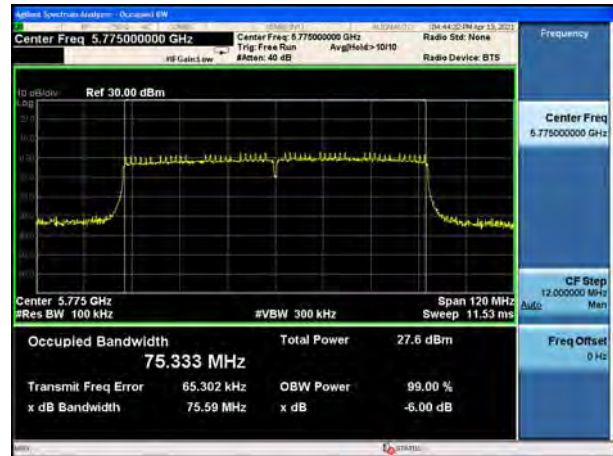
U-NII-3, 802.11ac VHT20
Carrier frequency (MHz): 5825



U-NII-3, 802.11ac VHT40
Carrier frequency (MHz): 5795



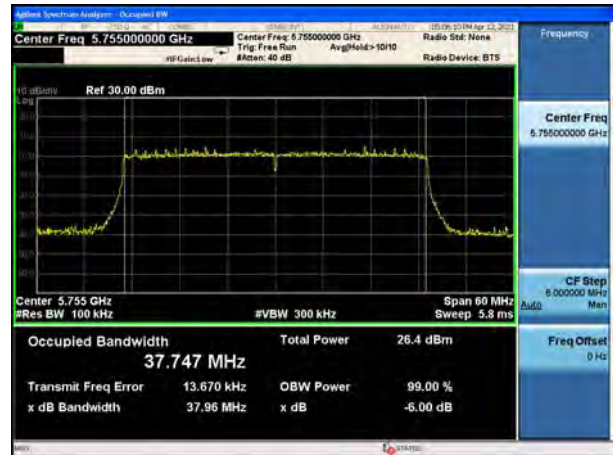
U-NII-3, 802.11ac VHT80
Carrier frequency (MHz): 5775



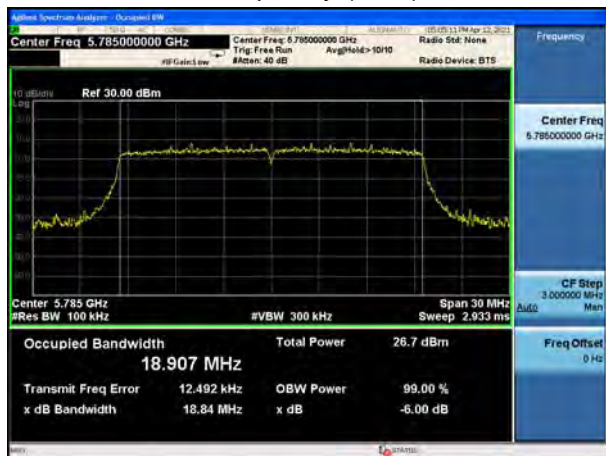
U-NII-3, 802.11ax HE20
Carrier frequency (MHz): 5745



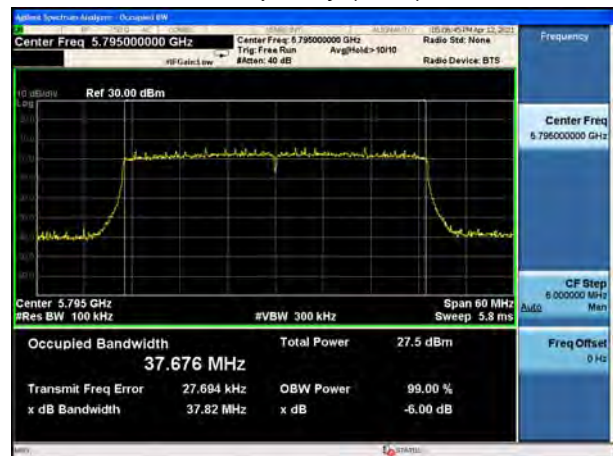
U-NII-3, 802.11ax HE40
Carrier frequency (MHz): 5755



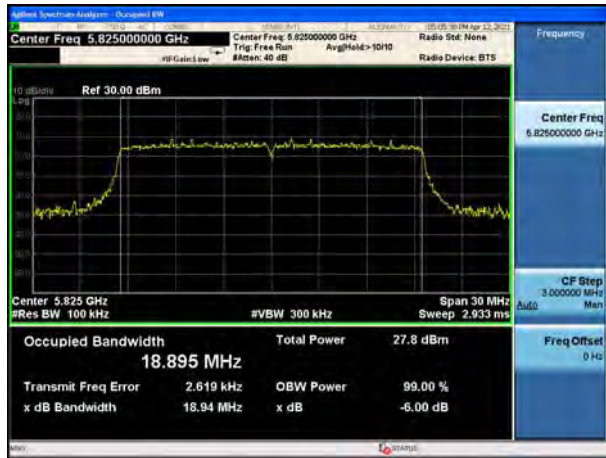
U-NII-3, 802.11ax HE20
Carrier frequency (MHz): 5785



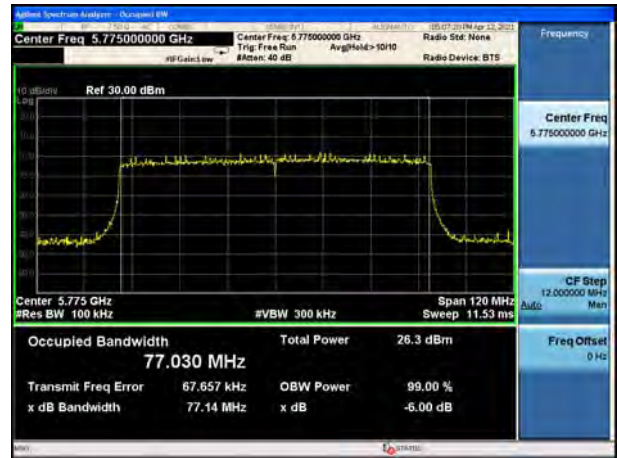
U-NII-3, 802.11ax HE40
Carrier frequency (MHz): 5795



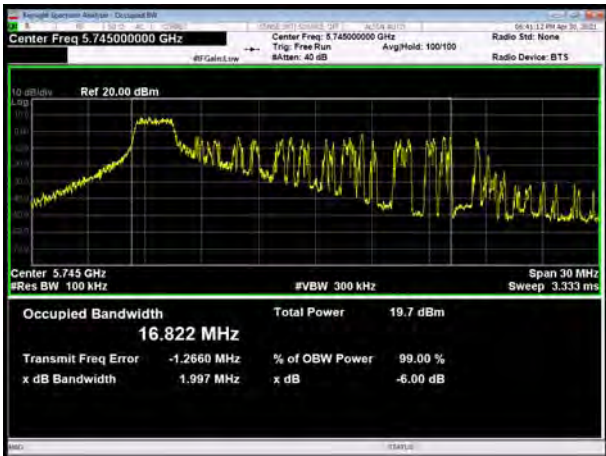
U-NII-3, 802.11ax HE20
Carrier frequency (MHz): 5825



U-NII-3, 802.11ax HE80
Carrier frequency (MHz): 5775



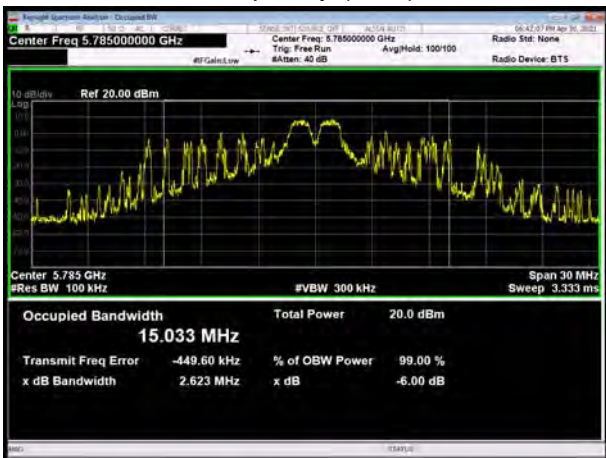
U-NII-3, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5745



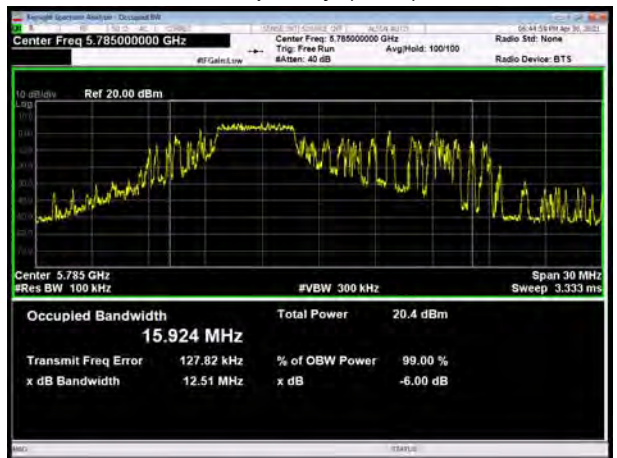
U-NII-3, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5745



U-NII-3, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5785



U-NII-3, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5785



U-NII-3, 802.11ax HE20 MU Mode 26-Tones,
Carrier frequency (MHz): 5825



U-NII-3, 802.11ax HE20 MU Mode 52-Tones,
Carrier frequency (MHz): 5825



U-NII-3, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5745



U-NII-3, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5745



U-NII-3, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5785



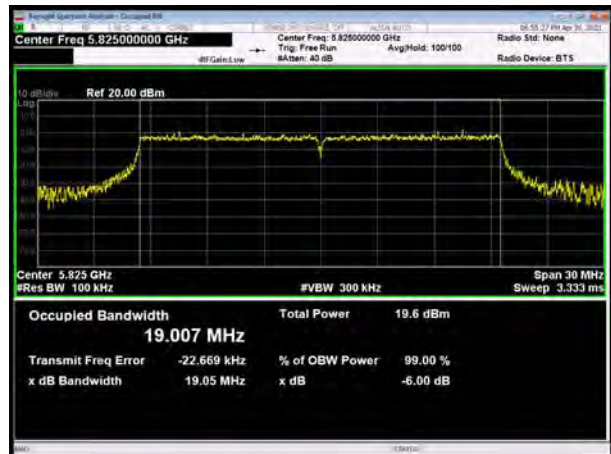
U-NII-3, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5785



U-NII-3, 802.11ax HE20 MU Mode 106-Tones,
Carrier frequency (MHz): 5825



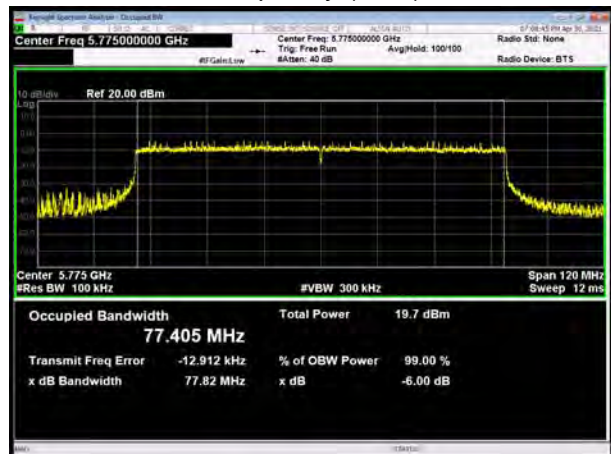
U-NII-3, 802.11ax HE20 SU Mode 242-Tones,
Carrier frequency (MHz): 5825



U-NII-3, 802.11ax HE40 SU Mode 484-Tones,
Carrier frequency (MHz): 5755



U-NII-3, 802.11ax HE80 SU Mode 996-Tones,
Carrier frequency (MHz): 5775



U-NII-3, 802.11ax HE40 SU Mode 484-Tones,
Carrier frequency (MHz): 5795



5.2. Average Power Output

Ambient condition

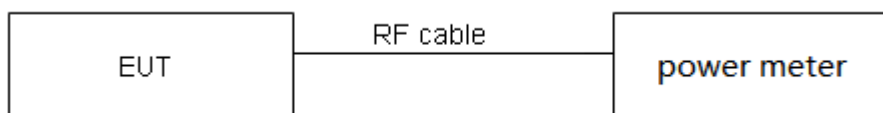
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

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

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

Test Setup



Limits

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

(1) For the band 5.15-5.25 GHz.

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

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

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



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

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

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

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

Measurement Uncertainty

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



Test Results

Mode	T _{on} (ms)	T _(on+off) (ms)	Duty cycle	Duty cycle correction Factor(dB)
802.11a	1.00	1.00	1.00	NA
802.11n HT20	1.00	1.00	1.00	NA
802.11n HT40	1.00	1.00	1.00	NA
802.11ac VHT20	1.00	1.00	1.00	NA
802.11ac VHT40	1.00	1.00	1.00	NA
802.11ac VHT80	1.00	1.00	1.00	NA
802.11ax HE20	1.00	1.00	1.00	NA
802.11ax HE40	1.00	1.00	1.00	NA
802.11ax HE80	1.00	1.00	1.00	NA
802.11ax HE20 MU mode 26-Tones	1.00	1.00	1.00	NA
802.11ax HE20 MU mode 52-Tones	1.00	1.00	1.00	NA
802.11ax HE20 MU mode 106-Tones	1.00	1.00	1.00	NA
802.11ax HE20 SU mode 242-Tones	1.00	1.00	1.00	NA
802.11ax HE40 SU mode 484-Tones	1.00	1.00	1.00	NA
802.11ax HE80 SU mode 996-Tones	1.00	1.00	1.00	NA

Note: when Duty cycle ≥ 0.98 , Duty cycle correction Factor not required.

Power Index											
Channel	802.11a	802.11n HT20	802.11ac VHT20	802.11ax HE20	Channel	802.11n HT40	802.11ac VHT40	802.11ax HE40	Channel	802.11ac VHT80	802.11ax HE80
CH36	18	18	17.5	17	CH38	17	17	16.5	CH42	17	16
CH40	18	18	17.5	17	CH46	17	17	16.5	/	/	/
CH48	18	18	17.5	17	/	/	/	/	/	/	/
CH52	18	18	17.5	17	CH54	17	17	16.5	CH58	16	15
CH60	18	18	17.5	17	CH62	17	17	16.5	/	/	/
CH64	18	18	17.5	17	/	/	/	/	/	/	/
CH100	17	18	17.5	18	CH102	17	17	17	CH106	17	16.5
CH116	17	18	17.5	18	CH110	17	17	17	CH138	17	16.5
CH140	17	18	17.5	18	CH134	17	17	17	/	/	/



CH144	17	18	17.5	18	CH142	17	17	17	/	/	/
CH149	19	19	18.5	18	CH151	18	18	18	CH155	18	17
CH157	19	19	18.5	18	CH159	18	18	18	/	/	/
CH165	19	19	18.5	18	/	/	/	/	/	/	/

Network Standards		Channel/ Frequency (MHz)	B=26 dB bandwidth (MHz)	Limit 11 dBm + 10 log B (dBm)	Final Limit(dBm)
U-NII-2A	802.11a	52/5260	19.28	23.85<24	23.85
		60/5300	19.85	23.98<24	23.98
		64/5320	19.01	23.79<24	23.79
	802.11n HT20	52/5260	19.86	23.98<24	23.98
		60/5300	20.07	24.03>24	24.00
		64/5320	19.95	24.00	24.00
	802.11n HT40	54/5270	39.36	26.95>24	24.00
		62/5310	39.64	26.98>24	24.00
	802.11ac VHT20	52/5260	19.98	24.01>24	24.00
		60/5300	20.09	24.03>24	24.00
		64/5320	20.02	24.01>24	24.00
	802.11ac VHT40	54/5270	39.43	26.96>24	24.00
		62/5310	39.75	26.99>24	24.00
	802.11ac VHT80	58/5290	81.64	30.12>24	24.00
	802.11ax HE20	52/5260	20.76	24.17>24	24.00
		60/5300	21.06	24.23>24	24.00
		64/5320	20.74	24.17>24	24.00
	802.11ax HE40	54/5270	40.34	27.06>24	24.00
		62/5310	40.29	27.05>24	24.00
	802.11ax HE80	58/5290	81.19	30.10>24	24.00
802.11ax HE20 MU mode 26-Tones: Index 0	52/5260	14.72	22.68<24	22.68	
802.11ax HE20 MU mode 26-Tones: Index 4	60/5300	13.04	22.15<24	22.15	
802.11ax HE20 MU mode 26-Tones: Index 8	64/5320	20.09	24.03>24	24.00	
802.11ax HE20 MU mode 52-Tones: Index 37	52/5260	20.34	24.08>24	24.00	
802.11ax HE20 MU mode 52-Tones: Index 38	60/5300	16.78	23.25<24	23.25	
802.11ax HE20 MU mode	64/5320	16.50	23.17<24	23.17	



	52-Tones: Index 40				
	802.11ax HE20 MU mode	52/5260	20.56	24.13>24	24.00
	106-Tones: Index 53	60/5300	19.76	23.96<24	23.96
	802.11ax HE20 MU mode	64/5320	20.71	24.16>24	24.00
	106-Tones: Index 54				
	802.11ax HE20 SU mode	52/5260	21.89	24.40>24	24.00
	242-Tones: Index 61	60/5300	21.79	24.38>24	24.00
		64/5320	21.42	24.31>24	24.00
	802.11ax HE40 SU mode	54/5270	57.52	28.60>24	24.00
	484-Tones: Index 65	62/5310	43.2	27.35>24	24.00
	802.11ax HE80 SU mode	58/5290	99.93	31.00>24	24.00
	996-Tones: Index 67				
U-NII-2C	802.11a	100/5500	19.01	23.79<24	23.79
		116/5580	19.21	23.84<24	23.84
		140/5700	19.09	23.81<24	23.81
		144/5720	18.91	23.77<24	23.77
	802.11n HT20	100/5500	18.88	23.76<24	23.76
		116/5580	19.12	23.81<24	23.81
		140/5700	18.89	23.76<24	23.76
		144/5720	18.74	23.73<24	23.73
	802.11n HT40	102/5510	39.69	26.99>24	24.00
		110/5550	39.66	26.98>24	24.00
		134/5670	39.36	26.95>24	24.00
		142/5710	39.36	26.95>24	24.00
	802.11ac VHT20	100/5500	19.95	24.00	24.00
		116/5580	20.03	24.02>24	24.00
		140/5700	19.89	23.99<24	23.99
		144/5720	20.31	24.08>24	24.00
	802.11ac VHT40	102/5510	39.59	26.98>24	24.00
		110/5550	39.41	26.96>24	24.00
		134/5670	39.82	27.00>24	24.00
		142/5710	39.17	26.93>24	24.00
	802.11ac VHT80	106/5530	81.52	30.11>24	24.00
		138/5690	81.78	30.13>24	24.00
	802.11ax HE20	100/5500	21.00	24.22>24	24.00
		116/5580	20.61	24.14>24	24.00
		140/5700	20.80	24.18>24	24.00
		144/5720	20.98	24.22>24	24.00
	802.11ax HE40	102/5510	40.34	27.06>24	24.00
		110/5550	39.41	26.96>24	24.00



		134/5670	40.36	27.06>24	24.00
		142/5710	40.32	27.06>24	24.00
	802.11ax HE80	106/5530	82.01	30.14>24	24.00
		138/5690	82.41	30.16>24	24.00
	802.11ax HE20 MU mode 26-Tones: Index 0	100/5500	19.60	23.92<24	23.92
	802.11ax HE20 MU mode 26-Tones: Index 4	116/5580	18.26	23.62<24	23.62
	802.11ax HE20 MU mode 26-Tones: Index 8	140/5700	19.91	23.99<24	23.99
		144/5720	19.87	23.98<24	23.98
	802.11ax HE20 MU mode 52-Tones: Index 37	100/5500	20.48	24.11>24	24.00
	802.11ax HE20 MU mode 52-Tones: Index 38	116/5580	16.99	23.30<24	23.30
	802.11ax HE20 MU mode 52-Tones: Index 40	140/5700	19.84	23.98<24	23.98
		144/5720	19.65	23.93<24	23.93
	802.11ax HE20 MU mode 106-Tones: Index 53	102/5510	18.50	23.67<24	23.67
		110/5550	20.57	24.13>24	24.00
	802.11ax HE20 MU mode 106-Tones: Index 53	134/5670	19.71	23.95<24	23.95
		142/5710	18.91	23.77<24	23.77
	802.11ax HE20 SU mode 242-Tones: Index 61	100/5500	22.40	24.50>24	24.00
		116/5580	22.34	24.49>24	24.00
		140/5700	21.74	24.37>24	24.00
		144/5720	21.87	24.40>24	24.00
	802.11ax HE40 SU mode 484-Tones: Index 65	102/5510	45.94	27.62>24	24.00
		110/5550	42.68	27.30>24	24.00
		134/5670	43.15	27.35>24	24.00
		142/5710	43.80	27.41>24	24.00
	802.11ax HE80 SU mode 996-Tones: Index 67	106/5530	103.20	31.14>24	24.00
		138/5690	86.90	30.39>24	24.00

Note: 250mW=24dBm



Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

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Network Standards	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	36/5180	19.42	19.42	24	PASS
	40/5200	19.51	19.51	24	PASS
	48/5240	18.85	18.85	24	PASS
802.11n HT20	36/5180	19.49	19.49	24	PASS
	40/5200	19.16	19.16	24	PASS
	48/5240	18.71	18.71	24	PASS
802.11n HT40	38/5190	18.75	18.75	24	PASS
	46/5230	18.21	18.21	24	PASS
802.11ac VHT20	36/5180	18.90	18.90	24	PASS
	40/5200	19.04	19.04	24	PASS
	48/5240	18.35	18.35	24	PASS
802.11ac VHT40	38/5190	18.71	18.71	24	PASS
	46/5230	18.20	18.20	24	PASS
802.11ac VHT80	42/5210	18.78	18.78	24	PASS
802.11ax HE20	36/5180	19.96	19.96	24	PASS
	40/5200	19.98	19.98	24	PASS
	48/5240	19.64	19.64	24	PASS
802.11axHE40	38/5190	19.38	19.38	24	PASS
	46/5230	19.19	19.19	24	PASS
802.11ax HE80	42/5210	19.21	19.21	24	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

Network Standards	RU Size	Index	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11ax HE20 MU Mode	26- Tones	0	36/5180	11.33	11.33	24	PASS
		4	40/5200	12.04	12.04	24	PASS
		8	48/5240	11.13	11.13	24	PASS
802.11ax HE20 MU Mode	52- Tones	37	36/5180	13.45	13.45	24	PASS
		38	40/5200	14.55	14.55	24	PASS
		40	48/5240	13.23	13.23	24	PASS
802.11ax HE20 MU Mode	106- Tones	53	36/5180	16.44	16.44	24	PASS
		53	40/5200	16.46	16.46	24	PASS



		54	48/5240	15.94	15.94	24	PASS
802.11ax HE20 SU Mode	242- Tones	61	36/5180	19.44	19.44	24	PASS
		61	40/5200	19.58	19.58	24	PASS
		61	48/5240	19.22	19.22	24	PASS
802.11ax HE40 SU Mode	484- Tones	65	38/5190	19.27	19.27	24	PASS
		65	46/5230	19.15	19.15	24	PASS
802.11ax HE80 SU Mode	996- Tones	67	42/5210	18.56	18.56	24	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

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Network Standards	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	52/5260	19.04	19.04	23.85	PASS
	60/5300	18.99	18.99	23.98	PASS
	64/5320	19.43	19.43	23.79	PASS
802.11n HT20	52/5260	18.90	18.90	23.98	PASS
	60/5300	18.89	18.89	24.00	PASS
	64/5320	19.33	19.33	24.00	PASS
802.11n HT40	54/5270	18.39	18.39	24.00	PASS
	62/5310	18.64	18.64	24.00	PASS
802.11ac VHT20	52/5260	18.45	18.45	24.00	PASS
	60/5300	18.42	18.42	24.00	PASS
	64/5320	18.85	18.85	24.00	PASS
802.11ac VHT40	54/5270	18.36	18.36	24.00	PASS
	62/5310	18.62	18.62	24.00	PASS
802.11ac VHT80	58/5290	18.59	18.59	24.00	PASS
802.11ax HE20	52/5260	20.14	20.14	24.00	PASS
	60/5300	20.21	20.21	24.00	PASS
	64/5320	20.27	20.27	24.00	PASS
802.11ax HE40	54/5270	19.76	19.76	24.00	PASS
	62/5310	19.78	19.78	24.00	PASS
802.11ax HE80	58/5290	18.84	18.84	24.00	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

Network Standards	RU Size	Index	Channel/ Frequency (MHz)	Average Power Measured	Average Power with duty factor	Limit (dBm)	Conclusion
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				(dBm)	(dBm)		
802.11ax HE20 MU Mode	26- Tones	0	52/5260	10.75	10.75	22.68	PASS
		4	60/5300	11.44	11.44	22.15	PASS
		8	64/5320	10.57	10.57	24.00	PASS
802.11ax HE20 MU Mode	52- Tones	37	52/5260	12.66	12.66	24.00	PASS
		38	60/5300	13.58	13.58	23.25	PASS
		40	64/5320	13.87	13.87	23.17	PASS
802.11ax HE20 MU Mode	106- Tones	53	52/5260	16.44	16.44	24.00	PASS
		53	60/5300	16.83	16.83	23.96	PASS
		54	64/5320	16.25	16.25	24.00	PASS
802.11ax HE20 SU Mode	242- Tones	61	52/5260	19.04	19.04	24.00	PASS
		61	60/5300	19.11	19.11	24.00	PASS
		61	64/5320	19.03	19.03	24.00	PASS
802.11ax HE40 SU Mode	484- Tones	65	54/5270	19.13	19.13	24.00	PASS
		65	62/5310	18.99	18.99	24.00	PASS
802.11ax HE80 SU Mode	996- Tones	67	58/5290	18.21	18.21	24.00	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

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Network Standards	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	100/5500	18.07	18.07	23.79	PASS
	116/5580	18.17	18.17	23.84	PASS
	140/5700	17.91	17.91	23.81	PASS
	144/5720	17.89	17.89	23.77	PASS
802.11n HT20	100/5500	18.93	18.93	23.76	PASS
	116/5580	19.39	19.39	23.81	PASS
	140/5700	18.96	18.96	23.76	PASS
	144/5720	18.74	18.74	23.73	PASS
802.11n HT40	102/5510	18.48	18.48	24.00	PASS
	110/5550	18.59	18.59	24.00	PASS
	134/5670	17.53	17.53	24.00	PASS
	142/5710	18.08	18.08	24.00	PASS
802.11ac VHT20	100/5500	18.54	18.54	24.00	PASS
	116/5580	18.83	18.83	24.00	PASS
	140/5700	18.45	18.45	23.99	PASS



	144/5720	18.17	18.17	24.00	PASS
802.11ac VHT40	102/5510	18.56	18.56	24.00	PASS
	110/5550	18.84	18.84	24.00	PASS
	134/5670	17.56	17.56	24.00	PASS
	142/2710	18.12	18.12	24.00	PASS
802.11ac VHT80	106/5530	18.53	18.53	24.00	PASS
	138/5690	18.44	18.44	24.00	PASS
802.11ax HE20	100/5500	19.85	19.85	24.00	PASS
	116/5580	20.08	20.08	24.00	PASS
	140/5700	19.04	19.04	24.00	PASS
	144/5720	19.22	19.22	24.00	PASS
802.11ax HE40	102/5510	18.92	18.92	24.00	PASS
	110/5550	19.29	19.29	24.00	PASS
	134/5670	18.46	18.46	24.00	PASS
	142/5710	18.24	18.24	24.00	PASS
802.11ax HE80	106/5530	19.01	19.01	24.00	PASS
	138/5690	18.15	18.15	24.00	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor					

Network Standards	RU Size	Index	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11ax HE20 MU Mode	26- Tones	0	100/5500	11.03	11.03	23.92	PASS
		4	116/5580	11.46	11.46	23.62	PASS
		8	140/5700	10.23	10.23	23.99	PASS
		8	144/5720	11.67	11.67	23.98	PASS
802.11ax HE20 MU Mode	52- Tones	37	100/5500	12.94	12.94	24.00	PASS
		38	116/5580	13.29	13.29	23.30	PASS
		40	140/5700	13.88	13.88	23.98	PASS
		40	144/5720	13.94	13.94	23.93	PASS
802.11ax HE20 MU Mode	106- Tones	53	100/5500	16.34	16.34	23.67	PASS
		53	116/5580	16.55	16.55	24.00	PASS
		54	140/5700	17.04	17.04	23.95	PASS
		54	144/5720	16.87	16.87	23.77	PASS
802.11ax HE20 SU Mode	242- Tones	61	100/5500	18.85	18.85	24.00	PASS
		61	116/5580	18.56	18.56	24.00	PASS
		61	140/5700	18.04	18.04	24.00	PASS
		61	144/5720	18.03	18.03	24.00	PASS
802.11ax HE40 SU	484-	65	102/5510	18.52	18.52	24.00	PASS



Mode	Tones	65	110/5550	18.67	18.67	24.00	PASS
		65	134/5670	18.23	18.23	24.00	PASS
		65	142/5710	18.11	18.11	24.00	PASS
802.11ax HE80 SU Mode	996-Tones	67	106/5530	17.65	17.65	24.00	PASS
		67	138/5690	17.51	17.51	24.00	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

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Network Standards	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	149/5745	20.46	20.46	30	PASS
	157/5785	20.61	20.61	30	PASS
	165/5825	20.72	20.72	30	PASS
802.11n HT20	149/5745	20.36	20.36	30	PASS
	157/5785	20.48	20.48	30	PASS
	165/5825	20.71	20.71	30	PASS
802.11n HT40	151/5755	19.49	19.49	30	PASS
	159/5795	19.72	19.72	30	PASS
802.11ac VHT20	149/5745	19.74	19.74	30	PASS
	157/5785	19.92	19.92	30	PASS
	165/5825	20.08	20.08	30	PASS
802.11ac VHT40	151/5755	19.53	19.53	30	PASS
	159/5795	19.69	19.69	30	PASS
802.11ac VHT80	155/5775	19.84	19.84	30	PASS
802.11ax HE20	149/5745	19.16	19.16	30	PASS
	157/5785	19.85	19.85	30	PASS
	165/5825	20.36	20.36	30	PASS
802.11ax HE40	151/5755	19.04	19.04	30	PASS
	159/5795	19.69	19.69	30	PASS
802.11ax HE80	155/5775	18.79	18.79	30	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

Network Standards	RU Size	Index	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11ax HE20 MU Mode	26-Tones	0	149/5745	18.57	18.57	30	PASS
		4	157/5785	18.14	18.14	30	PASS



		8	165/5825	18.46	18.46	30	PASS
802.11ax HE20 MU Mode	52- Tones	37	149/5745	18.77	18.77	30	PASS
		38	157/5785	18.45	18.45	30	PASS
		40	165/5825	18.67	18.67	30	PASS
802.11ax HE20 MU Mode	106- Tones	53	149/5745	18.73	18.73	30	PASS
		53	157/5785	18.68	18.68	30	PASS
		54	165/5825	18.66	18.66	30	PASS
802.11ax HE20 SU Mode	242- Tones	61	149/5745	17.94	17.94	30	PASS
		61	157/5785	17.85	17.85	30	PASS
		61	165/5825	18.05	18.05	30	PASS
802.11ax HE40 SU Mode	484- Tones	65	151/5755	17.89	17.89	30	PASS
		65	159/5795	17.92	17.92	30	PASS
802.11ax HE80 SU Mode	996- Tones	67	155/5775	17.46	17.46	30	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

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Network Standards	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	36/5180	19.42	19.42	24	PASS
	40/5200	19.51	19.51	24	PASS
	48/5240	18.85	18.85	24	PASS
802.11n HT20	36/5180	19.49	19.49	24	PASS
	40/5200	19.16	19.16	24	PASS
	48/5240	18.71	18.71	24	PASS
802.11n HT40	38/5190	18.75	18.75	24	PASS
	46/5230	18.21	18.21	24	PASS
802.11ac VHT20	36/5180	18.90	18.90	24	PASS
	40/5200	19.04	19.04	24	PASS
	48/5240	18.35	18.35	24	PASS
802.11ac VHT40	38/5190	18.71	18.71	24	PASS
	46/5230	18.20	18.20	24	PASS
802.11ac VHT80	42/5210	18.78	18.78	24	PASS
802.11ax HE20	36/5180	19.81	19.81	24	PASS
	40/5200	19.67	19.67	24	PASS
	48/5240	19.04	19.04	24	PASS
802.11axHE40	38/5190	19.76	19.76	24	PASS



	46/5230	19.23	19.23	24	PASS
802.11ax HE80	42/5210	19.18	19.18	24	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

Network Standards	RU Size	Index	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11ax HE20 MU Mode	26- Tones	0	36/5180	11.03	11.03	24	PASS
		4	40/5200	11.42	11.42	24	PASS
		8	48/5240	10.94	10.94	24	PASS
802.11ax HE20 MU Mode	52- Tones	37	36/5180	12.77	12.77	24	PASS
		38	40/5200	13.52	13.52	24	PASS
		40	48/5240	12.71	12.71	24	PASS
802.11ax HE20 MU Mode	106- Tones	53	36/5180	15.67	15.67	24	PASS
		53	40/5200	15.72	15.72	24	PASS
		54	48/5240	15.89	15.89	24	PASS
802.11ax HE20 SU Mode	242- Tones	61	36/5180	18.72	18.72	24	PASS
		61	40/5200	18.66	18.66	24	PASS
		61	48/5240	18.82	18.82	24	PASS
802.11ax HE40 SU Mode	484- Tones	65	38/5190	18.71	18.71	24	PASS
		65	46/5230	18.88	18.88	24	PASS
802.11ax HE80 SU Mode	996- Tones	67	42/5210	18.23	18.23	24	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

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Network Standards	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	52/5260	19.04	19.04	23.85	PASS
	60/5300	18.99	18.99	23.98	PASS
	64/5320	19.43	19.43	23.79	PASS
802.11n HT20	52/5260	18.90	18.90	23.98	PASS
	60/5300	18.89	18.89	24.00	PASS
	64/5320	19.33	19.33	24.00	PASS
802.11n HT40	54/5270	18.39	18.39	24.00	PASS
	62/5310	18.64	18.64	24.00	PASS
802.11ac	52/5260	18.45	18.45	24.00	PASS



VHT20	60/5300	18.42	18.42	24.00	PASS
	64/5320	18.85	18.85	24.00	PASS
802.11ac VHT40	54/5270	18.36	18.36	24.00	PASS
	62/5310	18.62	18.62	24.00	PASS
802.11ac VHT80	58/5290	18.59	18.59	24.00	PASS
802.11ax HE20	52/5260	19.48	19.48	24.00	PASS
	60/5300	19.27	19.27	24.00	PASS
	64/5320	19.61	19.61	24.00	PASS
802.11ax HE40	54/5270	19.51	19.51	24.00	PASS
	62/5310	19.66	19.66	24.00	PASS
802.11ax HE80	58/5290	18.83	18.83	24.00	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

Network Standards	RU Size	Index	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11ax HE20 MU Mode	26- Tones	0	52/5260	9.99	9.99	22.68	PASS
		4	60/5300	10.74	10.74	22.15	PASS
		8	64/5320	10.27	10.27	24.00	PASS
802.11ax HE20 MU Mode	52- Tones	37	52/5260	11.84	11.84	24.00	PASS
		38	60/5300	12.78	12.78	23.25	PASS
		40	64/5320	13.39	13.39	23.17	PASS
802.11ax HE20 MU Mode	106- Tones	53	52/5260	15.93	15.93	24.00	PASS
		53	60/5300	15.97	15.97	23.96	PASS
		54	64/5320	16.04	16.04	24.00	PASS
802.11ax HE20 SU Mode	242- Tones	61	52/5260	18.37	18.37	24.00	PASS
		61	60/5300	18.48	18.48	24.00	PASS
		61	64/5320	18.75	18.75	24.00	PASS
802.11ax HE40 SU Mode	484- Tones	65	54/5270	18.84	18.84	24.00	PASS
		65	62/5310	18.76	18.76	24.00	PASS
802.11ax HE80 SU Mode	996- Tones	67	58/5290	18.02	18.02	24.00	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

U-NII-2C

Network Standards	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
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802.11a	100/5500	18.07	18.07	23.79	PASS
	116/5580	18.17	18.17	23.84	PASS
	140/5700	17.91	17.91	23.81	PASS
	144/5720	17.89	17.89	23.77	PASS
802.11n HT20	100/5500	18.93	18.93	23.76	PASS
	116/5580	19.39	19.39	23.81	PASS
	140/5700	18.96	18.96	23.76	PASS
	144/5720	18.74	18.74	23.73	PASS
802.11n HT40	102/5510	18.48	18.48	24.00	PASS
	110/5550	18.59	18.59	24.00	PASS
	134/5670	17.53	17.53	24.00	PASS
	142/5710	18.08	18.08	24.00	PASS
802.11ac VHT20	100/5500	18.54	18.54	24.00	PASS
	116/5580	18.83	18.83	24.00	PASS
	140/5700	18.45	18.45	23.99	PASS
	144/5720	18.17	18.17	24.00	PASS
802.11ac VHT40	102/5510	18.56	18.56	24.00	PASS
	110/5550	18.84	18.84	24.00	PASS
	134/5670	17.56	17.56	24.00	PASS
	142/2710	18.12	18.12	24.00	PASS
802.11ac VHT80	106/5530	18.53	18.53	24.00	PASS
	138/5690	18.44	18.44	24.00	PASS
802.11ax HE20	100/5500	19.48	19.48	24.00	PASS
	116/5580	19.61	19.61	24.00	PASS
	140/5700	19.27	19.27	24.00	PASS
	144/5720	19.23	19.23	24.00	PASS
802.11ax HE40	102/5510	19.62	19.62	24.00	PASS
	110/5550	19.71	19.71	24.00	PASS
	134/5670	18.51	18.51	24.00	PASS
	142/5710	19.26	19.26	24.00	PASS
802.11ax HE80	106/5530	18.46	18.46	24.00	PASS
	138/5690	18.65	18.65	24.00	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

Network Standards	RU Size	Index	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11ax HE20 MU Mode	26- Tones	0	100/5500	10.66	10.66	23.92	PASS
		4	116/5580	10.84	10.84	23.62	PASS



		8	140/5700	10.23	10.23	23.99	PASS
		8	144/5720	11.37	11.37	23.98	PASS
802.11ax HE20 MU Mode	52- Tones	37	100/5500	12.57	12.57	24.00	PASS
		38	116/5580	12.85	12.85	23.30	PASS
		40	140/5700	13.36	13.36	23.98	PASS
		40	144/5720	13.17	13.17	23.93	PASS
802.11ax HE20 MU Mode	106- Tones	53	102/5510	15.54	15.54	23.67	PASS
		53	110/5550	15.55	15.55	24.00	PASS
		54	134/5670	16.67	16.67	23.95	PASS
		54	142/5710	16.38	16.38	23.77	PASS
802.11ax HE20 SU Mode	242- Tones	61	100/5500	18.27	18.27	24.00	PASS
		61	116/5580	18.18	18.18	24.00	PASS
		61	140/5700	17.77	17.77	24.00	PASS
		61	144/5720	17.57	17.57	24.00	PASS
802.11ax HE40 SU Mode	484- Tones	65	102/5510	17.75	17.75	24.00	PASS
		65	110/5550	17.99	17.99	24.00	PASS
		65	134/5670	17.63	17.63	24.00	PASS
		65	142/5710	17.48	17.48	24.00	PASS
802.11ax HE80 SU Mode	996- Tones	67	106/5530	16.57	16.57	24.00	PASS
		67	138/5690	16.53	16.53	24.00	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

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Network Standards	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	149/5745	20.46	20.46	30	PASS
	157/5785	20.61	20.61	30	PASS
	165/5825	20.72	20.72	30	PASS
802.11n HT20	149/5745	20.36	20.36	30	PASS
	157/5785	20.48	20.48	30	PASS
	165/5825	20.71	20.71	30	PASS
802.11n HT40	151/5755	19.49	19.49	30	PASS
	159/5795	19.72	19.72	30	PASS
802.11ac VHT20	149/5745	19.74	19.74	30	PASS
	157/5785	19.92	19.92	30	PASS
	165/5825	20.08	20.08	30	PASS
802.11ac VHT40	151/5755	19.53	19.53	30	PASS
	159/5795	19.69	19.69	30	PASS



802.11ac VHT80	155/5775	19.84	19.84	30	PASS
802.11ax HE20	149/5745	19.79	19.79	30	PASS
	157/5785	20.02	20.02	30	PASS
	165/5825	20.18	20.18	30	PASS
802.11ax HE40	151/5755	19.28	19.28	30	PASS
	159/5795	19.39	19.39	30	PASS
802.11ax HE80	155/5775	19.13	19.13	30	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

Network Standards	RU Size	Index	Channel/Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11ax HE20 MU Mode	26-Tones	0	149/5745	17.67	17.67	30	PASS
		4	157/5785	17.47	17.47	30	PASS
		8	165/5825	18.55	18.55	30	PASS
802.11ax HE20 MU Mode	52-Tones	37	149/5745	17.54	17.54	30	PASS
		38	157/5785	17.65	17.65	30	PASS
		40	165/5825	18.49	18.49	30	PASS
802.11ax HE20 MU Mode	106-Tones	53	149/5745	17.56	17.56	30	PASS
		53	157/5785	17.58	17.58	30	PASS
		54	165/5825	18.45	18.45	30	PASS
802.11ax HE20 SU Mode	242-Tones	61	149/5745	17.73	17.73	30	PASS
		61	157/5785	17.67	17.67	30	PASS
		61	165/5825	17.71	17.71	30	PASS
802.11ax HE40 SU Mode	484-Tones	65	151/5755	17.66	17.66	30	PASS
		65	159/5795	17.58	17.58	30	PASS
802.11ax HE80 SU Mode	996-Tones	67	155/5775	17.43	17.43	30	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

MIMO
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Network Standards	Channel/Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			



802.11n HT20	36/5180	19.87	19.87	18.84	18.84	22.40	24.00	PASS
	44/5220	20.14	20.14	18.78	18.78	22.52	24.00	PASS
	48/5240	20.02	20.02	18.17	18.17	22.20	24.00	PASS
802.11n HT40	38/5190	19.81	19.81	18.25	18.25	22.11	24.00	PASS
	46/5230	19.76	19.76	17.87	17.87	21.93	24.00	PASS
802.11ac VHT20	36/5180	19.56	19.56	18.26	18.26	21.97	24.00	PASS
	44/5220	19.73	19.73	18.30	18.30	22.08	24.00	PASS
	48/5240	19.39	19.39	17.66	17.66	21.62	24.00	PASS
802.11ac VHT40	38/5190	19.62	19.62	18.20	18.20	21.98	24.00	PASS
	46/5230	19.57	19.57	17.77	17.77	21.77	24.00	PASS
802.11ac VHT80	42/5210	19.77	19.77	18.53	18.53	22.20	24.00	PASS
802.11ax HE20	36/5180	19.79	19.79	19.12	19.12	22.48	24.00	PASS
	44/5220	19.82	19.82	18.88	18.88	22.39	24.00	PASS
	48/5240	19.43	19.43	18.32	18.32	21.92	24.00	PASS
802.11ax HE40	38/5190	19.37	19.37	19.27	19.27	22.33	24.00	PASS
	46/5230	19.18	19.18	18.74	18.74	21.98	24.00	PASS
802.11ax HE80	42/5210	19.23	19.23	18.65	18.65	21.96	24.00	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),

The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)})$.

2. The manufacturer declared the transmitter output signals is CDD mode And $N_{SS}=1$. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = $G_{ANT} + \text{Array Gain}$,

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

3. If antenna gains are not equal, the user may use either of the following methods to calculate directional gain, provided that each transmit antenna is driven by only one spatial stream: Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain.

So directional gain = $G_{ANT} + \text{Array Gain} = -2.15 + 0 = -2.15$ dBi < 6dBi. So the power limit is 24dBm.



Network Standards	RU Size	Index	Channel/Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		Total Power (dBm)	Limit (dBm)	Conclusion
				Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11ax HE20 MU Mode	26-Tones	0	36/5180	11.21	11.21	10.84	10.84	14.04	24.00	PASS
		4	40/5200	11.95	11.95	11.32	11.32	14.66	24.00	PASS
		8	48/5240	11.09	11.09	10.81	10.81	13.96	24.00	PASS
802.11ax HE20 MU Mode	52-Tones	37	36/5180	13.24	13.24	12.57	12.57	15.93	24.00	PASS
		38	40/5200	14.29	14.29	13.34	13.34	16.85	24.00	PASS
		40	48/5240	12.97	12.97	12.61	12.61	15.80	24.00	PASS
802.11ax HE20 MU Mode	106-Tones	53	36/5180	16.32	16.32	15.54	15.54	18.96	24.00	PASS
		53	40/5200	16.31	16.31	15.52	15.52	18.94	24.00	PASS
		54	48/5240	15.86	15.86	15.69	15.69	18.79	24.00	PASS
802.11ax HE20 SU Mode	242-Tones	61	36/5180	19.32	19.32	18.62	18.62	21.99	24.00	PASS
		61	40/5200	19.41	19.41	18.56	18.56	22.02	24.00	PASS
		61	48/5240	18.97	18.97	18.26	18.26	21.64	24.00	PASS
802.11ax HE40 SU Mode	484-Tones	65	38/5190	19.25	19.25	18.62	18.62	21.96	24.00	PASS
		65	46/5230	19.11	19.11	18.62	18.62	21.88	24.00	PASS
802.11ax HE80 SU Mode	996-Tones	67	42/5210	18.47	18.47	18.06	18.06	21.28	24.00	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),
The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)})$.

2. The manufacturer declared the transmitter output signals is CDD mode And $N_{ss}=1$. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = $G_{ANT} + \text{Array Gain}$,
For power measurements on IEEE 802.11 devices,
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;
Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

3.If antenna gains are not equal, the user may use either of the following methods to calculate directional gain, provided that each transmit antenna is driven by only one spatial stream: Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain.
So directional gain = $G_{ANT} + \text{Array Gain} = -2.15 + 0 = -2.15$ dBi < 6 dBi. So the power limit is 24dBm.



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Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11n HT20	52/5260	20.25	20.25	18.15	18.15	22.34	23.98	PASS
	60/5300	20.75	20.75	18.12	18.12	22.64	24.00	PASS
	64/5320	20.55	20.55	18.54	18.54	22.67	24.00	PASS
802.11n HT40	54/5270	19.91	19.91	17.68	17.68	21.95	24.00	PASS
	62/5310	20.14	20.14	18.13	18.13	22.26	24.00	PASS
802.11ac VHT20	52/5260	19.84	19.84	17.58	17.58	21.87	24.00	PASS
	60/5300	20.16	20.16	17.61	17.61	22.08	24.00	PASS
	64/5320	20.09	20.09	17.92	17.92	22.15	24.00	PASS
802.11ac VHT40	54/5270	20.06	20.06	17.82	17.82	22.09	24.00	PASS
	62/5310	19.98	19.98	18.09	18.09	22.15	24.00	PASS
802.11ac VHT80	58/5290	20.24	20.24	18.02	18.02	22.28	24.00	PASS
802.11ax HE20	52/5260	19.91	19.91	18.71	18.71	22.36	24.00	PASS
	60/5300	20.28	20.28	18.60	18.60	22.53	24.00	PASS
	64/5320	20.04	20.04	19.03	19.03	22.57	24.00	PASS
802.11ax HE40	54/5270	19.68	19.68	19.22	19.22	22.47	24.00	PASS
	62/5310	19.73	19.73	19.36	19.36	22.56	24.00	PASS
802.11ax HE80	58/5290	18.77	18.77	18.42	18.42	21.61	24.00	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),
The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)})$.

Network Standards	RU Size	Index	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		Total Power (dBm)	Limit (dBm)	Conclusion
				Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11ax	26-	0	52/5260	10.64	10.64	9.85	9.85	13.27	22.68	PASS



HE20 MU Mode	Tones	4	60/5300	11.36	11.36	10.63	10.63	14.02	22.15	PASS
		8	64/5320	10.42	10.42	10.07	10.07	13.26	24.00	PASS
802.11ax HE20 MU Mode	52-Tones	37	52/5260	12.43	12.43	11.74	11.74	15.11	24.00	PASS
		38	60/5300	13.31	13.31	12.68	12.68	16.02	23.25	PASS
		40	64/5320	13.62	13.62	13.29	13.29	16.47	23.17	PASS
802.11ax HE20 MU Mode	106-Tones	53	52/5260	16.24	16.24	15.83	15.83	19.05	24.00	PASS
		53	60/5300	16.51	16.51	15.87	15.87	19.21	23.96	PASS
		54	64/5320	16.18	16.18	15.96	15.96	19.08	24.00	PASS
802.11ax HE20 SU Mode	242-Tones	61	52/5260	18.95	18.95	18.26	18.26	21.63	24.00	PASS
		61	60/5300	19.03	19.03	18.34	18.34	21.71	24.00	PASS
		61	64/5320	18.86	18.86	18.62	18.62	21.75	24.00	PASS
802.11ax HE40 SU Mode	484-Tones	65	54/5270	18.96	18.96	18.73	18.73	21.86	24.00	PASS
		65	62/5310	18.87	18.87	18.65	18.65	21.77	24.00	PASS
802.11ax HE80 SU Mode	996-Tones	67	58/5290	17.93	17.93	17.82	17.82	20.89	24.00	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),
 The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)})$.

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Network Standards	Channel/Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11n HT20	100/5500	18.93	18.93	18.65	18.65	21.80	23.76	PASS
	116/5580	19.14	19.14	19.12	19.12	22.14	23.81	PASS
	140/5700	17.86	17.86	18.67	18.67	21.29	23.76	PASS
	144/5720	18.07	18.07	18.51	18.51	21.31	23.73	PASS
802.11n HT40	102/5510	18.44	18.44	18.41	18.41	21.44	24.00	PASS
	110/5550	19.17	19.17	18.74	18.74	21.97	24.00	PASS
	134/5670	17.84	17.84	17.39	17.39	20.63	24.00	PASS
	142/5710	17.61	17.61	17.77	17.77	20.70	24.00	PASS
802.11ac VHT20	100/5500	18.42	18.42	18.36	18.36	21.40	24.00	PASS
	116/5580	18.88	18.88	18.52	18.52	21.71	24.00	PASS
	140/5700	17.45	17.45	17.96	17.96	20.72	23.99	PASS
	144/5720	17.74	17.74	17.72	17.72	20.74	24.00	PASS



802.11ac VHT40	102/5510	18.53	18.53	18.37	18.37	21.46	24.00	PASS
	110/5550	19.26	19.26	18.64	18.64	21.97	24.00	PASS
	134/5670	17.99	17.99	17.37	17.37	20.70	24.00	PASS
	142/5710	17.66	17.66	17.71	17.71	20.70	24.00	PASS
802.11ac VHT80	106/5530	18.86	18.86	18.36	18.36	21.63	24.00	PASS
	138/5690	17.75	17.75	18.18	18.18	20.98	24.00	PASS
802.11ax HE20	100/5500	19.37	19.37	19.29	19.29	22.34	24.00	PASS
	116/5580	19.72	19.72	19.56	19.56	22.65	24.00	PASS
	140/5700	18.23	18.23	19.13	19.13	21.71	24.00	PASS
802.11ax HE40	144/5720	18.47	18.47	19.02	19.02	21.76	24.00	PASS
	102/5510	18.66	18.66	19.62	19.62	22.18	24.00	PASS
	110/5550	19.35	19.35	19.75	19.75	22.56	24.00	PASS
	134/5670	18.03	18.03	18.52	18.52	21.29	24.00	PASS
802.11ax HE80	142/5710	17.64	17.64	19.24	19.24	21.52	24.00	PASS
	106/5530	19.14	19.14	18.85	18.85	22.01	24.00	PASS
	138/5690	18.04	18.04	18.69	18.69	21.39	24.00	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),
The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)})$.

Network Standards	RU Size	Index	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		Total Power (dBm)	Limit (dBm)	Conclusion
				Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11ax HE20 MU Mode	26- Tones	0	100/5500	10.98	10.98	10.46	10.46	13.74	23.92	PASS
		4	116/5580	11.10	11.10	10.68	10.68	13.91	23.62	PASS
		8	140/5700	10.15	10.15	10.03	10.03	13.10	23.99	PASS
		8	144/5720	11.56	11.56	11.09	11.09	14.34	23.98	PASS
802.11ax HE20 MU Mode	52- Tones	37	100/5500	12.85	12.85	12.37	12.37	15.63	24.00	PASS
		38	116/5580	13.03	13.03	12.78	12.78	15.92	23.30	PASS
		40	140/5700	13.86	13.86	13.12	13.12	16.52	23.98	PASS
		40	144/5720	13.79	13.79	13.08	13.08	16.46	23.93	PASS
802.11ax HE20 MU Mode	106- Tones	53	100/5500	16.12	16.12	15.34	15.34	18.76	23.67	PASS
		53	116/5580	16.34	16.34	15.41	15.41	18.91	24.00	PASS
		54	140/5700	16.98	16.98	16.45	16.45	19.73	23.95	PASS
		54	144/5720	16.72	16.72	16.24	16.24	19.50	23.77	PASS
802.11ax	242-	61	100/5500	18.63	18.63	18.11	18.11	21.39	24.00	PASS



HE20 SU Mode	Tones	61	116/5580	18.34	18.34	18.10	18.10	21.23	24.00	PASS
		61	140/5700	17.96	17.96	17.53	17.53	20.76	24.00	PASS
		61	144/5720	17.84	17.84	17.46	17.46	20.66	24.00	PASS
802.11ax HE40 SU Mode	484- Tones	65	102/5510	18.32	18.32	17.66	17.66	21.01	24.00	PASS
		65	110/5550	18.47	18.47	17.84	17.84	21.18	24.00	PASS
		65	134/5670	18.01	18.01	17.45	17.45	20.75	24.00	PASS
		65	142/5710	17.58	17.58	17.38	17.38	20.49	24.00	PASS
802.11ax HE80 SU Mode	996- Tones	67	106/5530	17.35	17.35	16.42	16.42	19.92	24.00	PASS
		67	138/5690	17.11	17.11	16.37	16.37	19.77	24.00	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),
 The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)})$.

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Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11n HT20	149/5745	19.21	19.21	20.23	20.23	22.76	30.00	PASS
	157/5785	19.95	19.95	20.48	20.48	23.23	30.00	PASS
	165/5825	20.37	20.37	20.51	20.51	23.45	30.00	PASS
802.11n HT40	151/5755	18.64	18.64	19.47	19.47	22.09	30.00	PASS
	159/5795	19.38	19.38	19.60	19.60	22.50	30.00	PASS
802.11ac VHT20	149/5745	18.72	18.72	19.62	19.62	22.20	30.00	PASS
	157/5785	19.46	19.46	19.78	19.78	22.63	30.00	PASS
	165/5825	19.83	19.83	19.85	19.85	22.85	30.00	PASS
802.11ac VHT40	151/5755	18.64	18.64	19.52	19.52	22.11	30.00	PASS
	159/5795	19.38	19.38	19.69	19.69	22.55	30.00	PASS
802.11ac VHT80	155/5775	19.33	19.33	19.67	19.67	22.51	30.00	PASS
802.11ax HE20	149/5745	18.17	18.17	19.70	19.70	22.01	30.00	PASS
	157/5785	18.78	18.78	19.95	19.95	22.41	30.00	PASS
	165/5825	19.78	19.78	20.17	20.17	22.99	30.00	PASS
802.11ax HE40	151/5755	18.27	18.27	19.14	19.14	21.74	30.00	PASS
	159/5795	19.03	19.03	19.32	19.32	22.19	30.00	PASS
802.11ax HE80	155/5775	18.18	18.18	19.18	19.18	21.72	30.00	PASS



Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),
The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)})$.

Network Standards	RU Size	Index	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		Total Power (dBm)	Limit (dBm)	Conclusion
				Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11ax HE20 MU Mode	26- Tones	0	149/5745	18.11	18.11	17.46	17.46	20.81	30.00	PASS
		4	157/5785	18.02	18.02	17.23	17.23	20.65	30.00	PASS
		8	165/5825	18.36	18.36	18.35	18.35	21.37	30.00	PASS
802.11ax HE20 MU Mode	52- Tones	37	149/5745	18.02	18.02	17.24	17.24	20.66	30.00	PASS
		38	157/5785	18.39	18.39	17.35	17.35	20.91	30.00	PASS
		40	165/5825	18.34	18.34	18.12	18.12	21.24	30.00	PASS
802.11ax HE20 MU Mode	106- Tones	53	149/5745	18.15	18.15	17.47	17.47	20.83	30.00	PASS
		53	157/5785	18.57	18.57	17.39	17.39	21.03	30.00	PASS
		54	165/5825	18.53	18.53	18.24	18.24	21.40	30.00	PASS
802.11ax HE20 SU Mode	242- Tones	61	149/5745	17.88	17.88	17.56	17.56	20.73	30.00	PASS
		61	157/5785	17.77	17.77	17.51	17.51	20.65	30.00	PASS
		61	165/5825	17.96	17.96	17.63	17.63	20.81	30.00	PASS
802.11ax HE40 SU Mode	484- Tones	65	151/5755	17.73	17.73	17.52	17.52	20.64	30.00	PASS
		65	159/5795	17.72	17.72	17.49	17.49	20.62	30.00	PASS
802.11ax HE80 SU Mode	996- Tones	67	155/5775	17.26	17.26	17.13	17.13	20.21	30.00	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),
The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)})$.

5.3. Frequency Stability

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

1. Frequency stability with respect to ambient temperature

- a) Supply the EUT with a nominal ac voltage or install a new or fully charged battery in the EUT. If possible, a dummy load shall be connected to the EUT because an antenna near the metallic walls of an environmental test chamber could affect the output frequency of the EUT. If the EUT is equipped with a permanently attached, adjustable-length antenna, then the EUT shall be placed in the center of the chamber with the antenna adjusted to the shortest length possible. Turn ON the EUT and tune it to one of the number of frequencies shown in 5.6.
- b) Couple the unlicensed wireless device output to the measuring instrument by connecting an antenna to the measuring instrument with a suitable length of coaxial cable and placing the measuring antenna near the EUT (e.g., 15 cm away), or by connecting a dummy load to the measuring instrument, through an attenuator if necessary.
- c) Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
- d) Turn the EUT OFF and place it inside the environmental temperature chamber. For devices that have oscillator heaters, energize only the heater circuit.
- e) Set the temperature control on the chamber to the highest specified in the regulatory requirements for the type of device and allow the oscillator heater and the chamber temperature to stabilize.
- f) While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.
- g) Measure the frequency at each of frequencies specified in 5.6.
- h) Switch OFF the EUT but do not switch OFF the oscillator heater.
- i) Lower the chamber temperature by not more than 10°C, and allow the temperature inside the chamber to stabilize.
- j) Repeat step f) through step i) down to the lowest specified temperature.

2. Frequency stability when varying supply voltage

Unless otherwise specified, these tests shall be made at ambient room temperature (+15°C to +25 °C). An antenna shall be connected to the antenna output terminals of the EUT if possible. If the EUT is equipped with or uses an adjustable-length antenna, then it shall be fully extended.

- a) Supply the EUT with nominal voltage or install a new or fully charged battery in the EUT. Turn ON the EUT and couple its output to a frequency counter or other frequency-measuring instrument.



- b) Tune the EUT to one of the number of frequencies required in 5.6. Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
- c) Measure the frequency at each of the frequencies specified in 5.6.
- d) Repeat the above procedure at 85% and 115% of the nominal supply voltage.

Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

Measurement Uncertainty

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

**Test Results**

Voltage (V)	Temperature (°C)	U-NII-1 Test Results			
		5200MHz			
		1min	2min	5min	10min
3.85v	-20	5200.009068	5199.999235	5199.995785	5199.994628
3.85v	-10	5200.015807	5199.998619	5199.989872	5199.989274
3.85v	0	5200.008888	5199.991329	5199.988969	5199.983555
3.85v	10	5200.001953	5199.989064	5199.980857	5199.980481
3.85v	20	5199.999477	5199.985490	5199.972301	5199.974624
3.85v	30	5199.993141	5199.984704	5199.969902	5199.974619
3.85v	40	5199.992479	5199.984624	5199.962704	5199.968091
3.85v	50	5199.988198	5199.978479	5199.952724	5199.960692
3.4V	20	5199.983397	5199.973706	5199.952551	5199.954102
4.2v	20	5199.981546	5199.971321	5199.945324	5199.944563
MHz		-0.018454	-0.028679	-0.054676	-0.055437
PPM		-3.548760	-5.515212	-10.514634	-10.661024

Voltage (V)	Temperature (°C)	U-NII-2A Test Results			
		5300MHz			
		1min	2min	5min	10min
3.85v	-20	5300.000989	5300.000229	5299.995771	5299.993404
3.85v	-10	5299.998967	5299.990540	5299.990245	5299.986559
3.85v	0	5299.997717	5299.989981	5299.985060	5299.982328
3.85v	10	5299.988649	5299.983073	5299.984726	5299.973959
3.85v	20	5299.979262	5299.981098	5299.983088	5299.970772
3.85v	30	5299.975286	5299.974091	5299.974529	5299.963257
3.85v	40	5299.967725	5299.970565	5299.970627	5299.954308
3.85v	50	5299.967700	5299.963561	5299.962022	5299.952867
3.4V	20	5299.961793	5299.959791	5299.955188	5299.943828
4.2v	20	5299.958046	5299.954443	5299.952874	5299.934784
MHz		-0.041954	-0.045557	-0.047126	-0.065216
PPM		-7.915886	-8.595709	-8.891633	-12.304981



Voltage (V)	Temperature (°C)	U-NII-2C Test Results			
		5580MHz			
		1min	2min	5min	10min
3.85v	-20	5580.005041	5579.996977	5579.995109	5579.992060
3.85v	-10	5580.000358	5579.989271	5579.992326	5579.987001
3.85v	0	5579.996584	5579.984733	5579.989768	5579.977678
3.85v	10	5579.988280	5579.981203	5579.989340	5579.976163
3.85v	20	5579.981967	5579.974550	5579.983192	5579.969543
3.85v	30	5579.978831	5579.973242	5579.973623	5579.964530
3.85v	40	5579.978768	5579.972504	5579.967828	5579.956976
3.85v	50	5579.975382	5579.970028	5579.964975	5579.955332
3.4V	20	5579.969655	5579.965405	5579.961022	5579.954403
4.2v	20	5579.962495	5579.960016	5579.958825	5579.945101
MHz		-0.037505	-0.039984	-0.041175	-0.054899
PPM		-6.721297	-7.165527	-7.378954	-9.838529

Voltage (V)	Temperature (°C)	U-NII-3 Test Results			
		5785MHz			
		1min	2min	5min	10min
3.85v	-20	5784.993230	5784.983626	5784.977283	5784.970097
3.85v	-10	5784.984896	5784.983384	5784.973664	5784.969616
3.85v	0	5784.979063	5784.979391	5784.964850	5784.959886
3.85v	10	5784.969700	5784.972379	5784.956586	5784.955204
3.85v	20	5784.966550	5784.965918	5784.951581	5784.949622
3.85v	30	5784.961734	5784.961806	5784.941596	5784.942384
3.85v	40	5784.956230	5784.960698	5784.939511	5784.937005
3.85v	50	5784.946710	5784.959085	5784.936584	5784.927431
3.4V	20	5784.937161	5784.953240	5784.930050	5784.920673
4.2v	20	5784.930377	5784.947778	5784.926618	5784.916478
MHz		-0.069623	-0.052222	-0.073382	-0.083522
PPM		-12.035135	-9.027171	-12.684905	-14.437742

5.4. Power Spectral Density

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

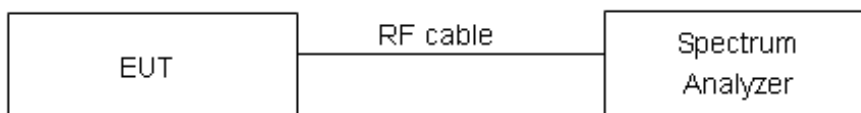
Method of Measurement

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

Set RBW = 1MHz, VBW =3MHz for the band 5.150-5.250GHz, 5.250-5.350GHz, 5.470-5.725GHz.
 Set RBW = 470kHz, VBW =1.5MHz for the band 5.725-5.850GHz

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

Test setup



Limits

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

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 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the



amount in dB that the directional gain of the antenna exceeds 6 dBi.

Frequency Bands/MHz	Limits
5150-5250	11dBm/MHz
5.25-5.35 GHz and 5.47-5.725 GHz	11dBm/MHz
5725-5850	30dBm/500kHz

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.75\text{dB}$.

**Test Results:**

Note: Power Spectral Density =Read Value+Duty cycle correction factor

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

Mode	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	36	7.25	7.25	11	PASS
	40	7.53	7.53	11	PASS
	48	7.61	7.61	11	PASS
802.11n HT20	36	7.49	7.49	11	PASS
	40	7.39	7.39	11	PASS
	48	7.44	7.44	11	PASS
802.11n HT40	38	3.76	3.76	11	PASS
	46	3.77	3.77	11	PASS
802.11ac VHT20	36	7.08	7.08	11	PASS
	40	6.99	6.99	11	PASS
	48	7.03	7.03	11	PASS
802.11ac VHT40	38	3.90	3.90	11	PASS
	46	3.89	3.89	11	PASS
802.11ac VHT80	42	0.84	0.84	11	PASS
802.11ax HE20	36	7.78	7.78	11	PASS
	40	7.58	7.58	11	PASS
	48	7.37	7.37	11	PASS
802.11ax HE40	38	5.36	5.36	11	PASS
	46	4.94	4.94	11	PASS
802.11ax HE80	42	2.40	2.40	11	PASS

Mode	RU Size	Index	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11ax HE20 MU Mode	26-Tones	0	36	8.53	8.53	11	PASS
		4	40	8.09	8.09	11	PASS
		8	48	8.71	8.71	11	PASS



802.11ax HE20 MU Mode	52- Tones	37	36	7.62	7.62	11	PASS
		38	40	7.63	7.63	11	PASS
		40	48	8.03	8.03	11	PASS
802.11ax HE20 MU Mode	106- Tones	53	36	8.69	8.69	11	PASS
		53	40	7.90	7.90	11	PASS
		54	48	8.09	8.09	11	PASS
802.11ax HE20 SU Mode	242- Tones	61	36	7.53	7.53	11	PASS
		61	40	6.46	6.46	11	PASS
		61	48	6.45	6.45	11	PASS
802.11ax HE40 SU Mode	484- Tones	65	38	4.25	4.25	11	PASS
		65	46	3.40	3.40	11	PASS
802.11ax HE80 SU Mode	996- Tones	67	42	1.67	1.67	11	PASS

U-NII-2A

Mode	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	52	7.74	7.74	11	PASS
	60	7.58	7.58	11	PASS
	64	7.02	7.02	11	PASS
802.11n HT20	52	7.07	7.07	11	PASS
	60	7.76	7.76	11	PASS
	64	7.16	7.16	11	PASS
802.11n HT40	54	4.10	4.10	11	PASS
	62	4.36	4.36	11	PASS
802.11ac VHT20	52	7.69	7.69	11	PASS
	60	7.79	7.79	11	PASS
	64	7.90	7.90	11	PASS
802.11ac VHT40	54	4.75	4.75	11	PASS
	62	4.58	4.58	11	PASS
802.11ac VHT80	58	1.03	1.03	11	PASS
802.11ax HE20	52	7.71	7.71	11	PASS
	60	7.80	7.80	11	PASS



	64	7.75	7.75	11	PASS
802.11ax HE40	54	4.75	4.75	11	PASS
	62	4.55	4.55	11	PASS
802.11ax HE80	58	0.76	0.76	11	PASS

Mode	RU Size	Index	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11ax HE20 MU Mode	26-Tones	0	52	7.48	7.48	11	PASS
		4	60	6.63	6.63	11	PASS
		8	64	7.43	7.43	11	PASS
802.11ax HE20 MU Mode	52-Tones	37	52	6.85	6.85	11	PASS
		38	60	7.36	7.36	11	PASS
		40	64	6.81	6.81	11	PASS
802.11ax HE20 MU Mode	106-Tones	53	52	8.42	8.42	11	PASS
		53	60	7.86	7.86	11	PASS
		54	64	8.13	8.13	11	PASS
802.11ax HE20 SU Mode	242-Tones	61	52	6.82	6.82	11	PASS
		61	60	6.37	6.37	11	PASS
		61	64	6.58	6.58	11	PASS
802.11ax HE40 SU Mode	484-Tones	65	54	4.12	4.12	11	PASS
		65	62	3.40	3.40	11	PASS
802.11ax HE80 SU Mode	996-Tones	67	58	0.72	0.72	11	PASS

U-NII-2C

Mode	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	100	7.61	7.61	11	PASS
	116	7.59	7.59	11	PASS
	140	6.97	6.97	11	PASS
	144	7.30	7.30	11	PASS
802.11n HT20	100	7.45	7.45	11	PASS
	116	7.73	7.73	11	PASS



	140	6.13	6.13	11	PASS
	144	7.03	7.03	11	PASS
802.11n HT40	102	3.01	3.01	11	PASS
	110	4.44	4.44	11	PASS
	134	2.88	2.88	11	PASS
	142	2.67	2.67	11	PASS
802.11ac VHT20	100	6.44	6.44	11	PASS
	116	7.10	7.10	11	PASS
	140	5.75	5.75	11	PASS
	144	7.03	7.03	11	PASS
802.11ac VHT40	102	4.43	4.43	11	PASS
	110	5.20	5.20	11	PASS
	134	3.65	3.65	11	PASS
	142	3.27	3.27	11	PASS
802.11ac VHT80	106	1.77	1.77	11	PASS
	138	0.12	0.12	11	PASS
802.11ax HE20	100	7.73	7.73	11	PASS
	116	7.96	7.96	11	PASS
	140	6.90	6.90	11	PASS
	144	7.36	7.36	11	PASS
802.11ax HE40	102	3.81	3.81	11	PASS
	110	4.84	4.84	11	PASS
	134	3.44	3.44	11	PASS
	142	3.33	3.33	11	PASS
802.11ax HE80	106	0.32	0.32	11	PASS
	138	-0.06	-0.06	11	PASS

Mode	RU Size	Index	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11ax HE20 MU Mode	26-Tones	0	100	8.66	8.66	11	PASS
		4	116	7.95	7.95	11	PASS
		8	140	8.14	8.14	11	PASS
		8	144	9.36	9.36	11	PASS



802.11ax HE20 MU Mode	52- Tones	37	100	7.81	7.81	11	PASS
		38	116	8.43	8.43	11	PASS
		40	140	7.23	7.23	11	PASS
		40	144	8.38	8.38	11	PASS
802.11ax HE20 MU Mode	106- Tones	53	100	7.57	7.57	11	PASS
		53	116	8.75	8.75	11	PASS
		54	140	8.51	8.51	11	PASS
		54	144	8.64	8.64	11	PASS
802.11ax HE20 SU Mode	242- Tones	61	100	6.10	6.10	11	PASS
		61	116	7.29	7.29	11	PASS
		61	140	5.79	5.79	11	PASS
		61	144	6.01	6.01	11	PASS
802.11ax HE40 SU Mode	484- Tones	65	102	3.00	3.00	11	PASS
		65	110	3.97	3.97	11	PASS
		65	134	4.19	4.19	11	PASS
		65	142	3.17	3.17	11	PASS
802.11ax HE80 SU Mode	996- Tones	67	106	0.59	0.59	11	PASS
		67	138	0.38	0.38	11	PASS

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Mode	Channel Number	Read Value (dBm/470kHz)	Power Spectral Density (dBm/500kHz)	Limit (dBm/500kHz)	Conclusion
802.11a	149	4.63	4.90	30	PASS
	157	5.23	5.50	30	PASS
	165	5.46	5.73	30	PASS
802.11n HT20	149	4.30	4.57	30	PASS
	157	4.43	4.70	30	PASS
	165	5.37	5.64	30	PASS
802.11n HT40	151	1.04	1.31	30	PASS
	159	2.04	2.31	30	PASS
802.11ac VHT20	149	4.36	4.63	30	PASS
	157	4.69	4.96	30	PASS
	165	5.88	6.15	30	PASS



802.11ac VHT40	151	0.85	1.12	30	PASS
	159	1.51	1.78	30	PASS
802.11ac VHT80	155	-1.24	-0.97	30	PASS
802.11ax HE20	149	3.73	4.00	30	PASS
	157	4.13	4.40	30	PASS
	165	5.02	5.29	30	PASS
802.11ax HE40	151	0.68	0.95	30	PASS
	159	1.39	1.66	30	PASS
802.11ax HE80	155	-2.18	-1.91	30	PASS

Note:PSD=Read Value+Duty cycle+10*LOG(500/470) correction factor

Mode	RU Size	Index	Channel Number	Read Value (dBm/470kHz)	Power Spectral Density (dBm/500kHz)	Limit (dBm/500kHz)	Conclusion
802.11ax HE20 MU Mode	26-Tones	0	149	12.50	12.77	30	PASS
		4	157	10.90	11.17	30	PASS
		8	165	13.36	13.63	30	PASS
802.11ax HE20 MU Mode	52-Tones	37	149	9.94	10.21	30	PASS
		38	157	8.68	8.95	30	PASS
		40	165	10.25	10.52	30	PASS
802.11ax HE20 MU Mode	106-Tones	53	149	6.84	7.11	30	PASS
		53	157	6.21	6.48	30	PASS
		54	165	7.29	7.56	30	PASS
802.11ax HE20 SU Mode	242-Tones	61	149	3.19	3.46	30	PASS
		61	157	2.36	2.63	30	PASS
		61	165	4.05	4.32	30	PASS
802.11ax HE40 SU Mode	484-Tones	65	151	0.16	0.43	30	PASS
		65	159	-0.48	-0.21	30	PASS
802.11ax HE80 SU Mode	996-Tones	67	155	-3.04	-2.77	30	PASS

Note:PSD=Read Value+Duty cycle+10*LOG(500/470) correction factor

SISO Antenna 2

U-NII-1

Mode	Channel Number	Read Value (dBm /MHz)	Power Spectral	Limit (dBm /MHz)	Conclusion
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			Density (dBm /MHz)		
802.11a	36	7.29	7.29	11	PASS
	40	6.84	6.84	11	PASS
	48	6.52	6.52	11	PASS
802.11n HT20	36	7.03	7.03	11	PASS
	40	6.45	6.45	11	PASS
	48	6.15	6.15	11	PASS
802.11n HT40	38	3.34	3.34	11	PASS
	46	2.60	2.60	11	PASS
802.11ac VHT20	36	5.91	5.91	11	PASS
	40	6.50	6.50	11	PASS
	48	5.56	5.56	11	PASS
802.11ac VHT40	38	3.03	3.03	11	PASS
	46	2.59	2.59	11	PASS
802.11ac VHT80	42	0.37	0.37	11	PASS
802.11ax HE20	36	7.58	7.58	11	PASS
	40	7.15	7.15	11	PASS
	48	7.09	7.09	11	PASS
802.11ax HE40	38	5.21	5.21	11	PASS
	46	4.04	4.04	11	PASS
802.11ax HE80	42	1.19	1.19	11	PASS

Mode	RU Size	Index	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11ax HE20 MU Mode	26- Tones	0	36	8.13	8.13	11	PASS
		4	40	7.53	7.53	11	PASS
		8	48	7.89	7.89	11	PASS
802.11ax HE20 MU Mode	52- Tones	37	36	7.15	7.15	11	PASS
		38	40	7.05	7.05	11	PASS
		40	48	7.20	7.20	11	PASS
802.11ax HE20 MU Mode	106- Tones	53	36	7.39	7.39	11	PASS
		53	40	7.31	7.31	11	PASS



		54	48	7.09	7.09	11	PASS
802.11ax HE20 SU Mode	242- Tones	61	36	6.37	6.37	11	PASS
		61	40	6.15	6.15	11	PASS
		61	48	6.44	6.44	11	PASS
802.11ax HE40 SU Mode	484- Tones	65	38	3.52	3.52	11	PASS
		65	46	3.13	3.13	11	PASS
802.11ax HE80 SU Mode	996- Tones	67	42	0.11	0.11	11	PASS

U-NII-2A

Mode	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	52	6.80	6.80	11	PASS
	60	6.89	6.89	11	PASS
	64	6.57	6.57	11	PASS
802.11n HT20	52	6.45	6.45	11	PASS
	60	6.45	6.45	11	PASS
	64	6.69	6.69	11	PASS
802.11n HT40	54	3.40	3.40	11	PASS
	62	2.67	2.67	11	PASS
802.11ac VHT20	52	6.09	6.09	11	PASS
	60	5.75	5.75	11	PASS
	64	5.95	5.95	11	PASS
802.11ac VHT40	54	2.93	2.93	11	PASS
	62	2.77	2.77	11	PASS
802.11ac VHT80	58	-0.97	-0.97	11	PASS
802.11ax HE20	52	7.08	7.08	11	PASS
	60	7.20	7.20	11	PASS
	64	7.17	7.17	11	PASS
802.11ax HE40	54	4.08	4.08	11	PASS
	62	4.65	4.65	11	PASS
802.11ax HE80	58	0.85	0.85	11	PASS



Mode	RU Size	Index	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11ax HE20 MU Mode	26-Tones	0	52	7.58	7.58	11	PASS
		4	60	7.43	7.43	11	PASS
		8	64	6.95	6.95	11	PASS
802.11ax HE20 MU Mode	52-Tones	37	52	6.71	6.71	11	PASS
		38	60	8.25	8.25	11	PASS
		40	64	6.40	6.40	11	PASS
802.11ax HE20 MU Mode	106-Tones	53	52	7.69	7.69	11	PASS
		53	60	8.09	8.09	11	PASS
		54	64	7.30	7.30	11	PASS
802.11ax HE20 SU Mode	242-Tones	61	52	6.66	6.66	11	PASS
		61	60	6.66	6.66	11	PASS
		61	64	6.38	6.38	11	PASS
802.11ax HE40 SU Mode	484-Tones	65	54	3.45	3.45	11	PASS
		65	62	3.76	3.76	11	PASS
802.11ax HE80 SU Mode	996-Tones	67	58	0.52	0.52	11	PASS

U-NII-2C

Mode	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	100	6.72	6.72	11	PASS
	116	6.81	6.81	11	PASS
	140	7.10	7.10	11	PASS
	144	6.59	6.59	11	PASS
802.11n HT20	100	6.29	6.29	11	PASS
	116	6.17	6.17	11	PASS
	140	6.15	6.15	11	PASS
	144	3.02	3.02	11	PASS
802.11n HT40	102	2.86	2.86	11	PASS
	110	3.32	3.32	11	PASS
	134	2.10	2.10	11	PASS



	142	2.75	2.75	11	PASS
802.11ac VHT20	100	5.90	5.90	11	PASS
	116	6.04	6.04	11	PASS
	140	5.72	5.72	11	PASS
	144	5.11	5.11	11	PASS
802.11ac VHT40	102	2.83	2.83	11	PASS
	110	3.05	3.05	11	PASS
	134	1.99	1.99	11	PASS
	142	2.34	2.34	11	PASS
802.11ac VHT80	106	-0.28	-0.28	11	PASS
	138	-0.44	-0.44	11	PASS
802.11ax HE20	100	7.28	7.28	11	PASS
	116	7.25	7.25	11	PASS
	140	7.23	7.23	11	PASS
	144	7.18	7.18	11	PASS
802.11ax HE40	102	4.60	4.60	11	PASS
	110	3.85	3.85	11	PASS
	134	3.46	3.46	11	PASS
	142	4.35	4.35	11	PASS
802.11ax HE80	106	0.26	0.26	11	PASS
	138	0.66	0.66	11	PASS

Mode	RU Size	Index	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11ax HE20 MU Mode	26- Tones	0	100	8.67	8.67	11	PASS
		4	116	7.95	7.95	11	PASS
		8	140	8.16	8.16	11	PASS
		8	144	8.83	8.83	11	PASS
802.11ax HE20 MU Mode	52- Tones	37	100	7.87	7.87	11	PASS
		38	116	8.02	8.02	11	PASS
		40	140	8.54	8.54	11	PASS
		40	144	8.11	8.11	11	PASS
802.11ax HE20	106-	53	100	8.42	8.42	11	PASS



MU Mode	Tones	53	116	8.40	8.40	11	PASS
		54	140	8.65	8.65	11	PASS
		54	144	8.26	8.26	11	PASS
802.11ax HE20 SU Mode	242- Tones	61	100	7.21	7.21	11	PASS
		61	116	7.09	7.09	11	PASS
		61	140	7.12	7.12	11	PASS
		61	144	6.94	6.94	11	PASS
802.11ax HE40 SU Mode	484- Tones	65	102	3.55	3.55	11	PASS
		65	110	4.26	4.26	11	PASS
		65	134	3.80	3.80	11	PASS
		65	142	3.98	3.98	11	PASS
802.11ax HE80 SU Mode	996- Tones	67	106	0.75	0.75	11	PASS
		67	138	0.17	0.17	11	PASS

U-NII-3

Mode	Channel Number	Read Value (dBm/470kHz)	Power Spectral Density (dBm/500kHz)	Limit (dBm/500kHz)	Conclusion
802.11a	149	5.27	5.54	30	PASS
	157	5.61	5.88	30	PASS
	165	5.48	5.75	30	PASS
802.11n HT20	149	4.79	5.06	30	PASS
	157	5.17	5.44	30	PASS
	165	5.25	5.52	30	PASS
802.11n HT40	151	0.79	1.06	30	PASS
	159	1.27	1.54	30	PASS
802.11ac VHT20	149	4.17	4.44	30	PASS
	157	4.24	4.51	30	PASS
	165	4.83	5.10	30	PASS
802.11ac VHT40	151	0.77	1.04	30	PASS
	159	0.91	1.18	30	PASS
802.11ac VHT80	155	-2.07	-1.80	30	PASS
802.11ax HE20	149	4.31	4.31	30	PASS
	157	4.07	4.07	30	PASS



	165	4.49	4.49	30	PASS
802.11ax HE40	151	0.69	0.69	30	PASS
	159	0.83	0.83	30	PASS
802.11ax HE80	155	-2.39	-2.39	30	PASS

Note: PSD=Read Value+Duty cycle+10*LOG(500/470) correction factor

Mode	RU Size	Index	Channel Number	Read Value (dBm/470kHz)	Power Spectral Density (dBm/500kHz)	Limit (dBm/500kHz)	Conclusion
802.11ax HE20 MU Mode	26-Tones	0	149	12.10	12.37	30	PASS
		4	157	12.15	12.42	30	PASS
		8	165	12.13	12.40	30	PASS
802.11ax HE20 MU Mode	52-Tones	37	149	9.40	9.67	30	PASS
		38	157	9.46	9.73	30	PASS
		40	165	9.21	9.48	30	PASS
802.11ax HE20 MU Mode	106-Tones	53	149	7.39	7.66	30	PASS
		53	157	7.52	7.79	30	PASS
		54	165	7.25	7.52	30	PASS
802.11ax HE20 SU Mode	242-Tones	61	149	3.95	4.22	30	PASS
		61	157	4.18	4.45	30	PASS
		61	165	3.71	3.98	30	PASS
802.11ax HE40 SU Mode	484-Tones	65	151	0.95	1.22	30	PASS
		65	159	0.87	1.14	30	PASS
802.11ax HE80 SU Mode	996-Tones	67	155	-2.05	-1.78	30	PASS

Note: PSD=Read Value+Duty cycle+10*LOG(500/470) correction factor

MIMO

U-NII-1

Mode	Channel/ Frequency (MHz)	Power Spectral Density					Limit (dBm /MHz)	Conclusion
		Antenna 1		Antenna 2		Total Power (dBm /MHz)		
		Read Value (dBm/MHz)	PSD (dBm /MHz)	Read Value (dBm/MHz)	PSD (dBm /MHz)			
802.11n HT20	36/5180	7.52	7.52	6.28	6.28	9.96	11	PASS
	40/5200	7.65	7.65	6.33	6.33	10.05	11	PASS
	48/5240	7.56	7.56	5.53	5.53	9.68	11	PASS



802.11n HT40	38/5190	4.02	4.02	2.57	2.57	6.36	11	PASS
	46/5230	4.07	4.07	2.06	2.06	6.19	11	PASS
802.11ac VHT20	36/5180	6.66	6.66	5.48	5.48	9.12	11	PASS
	40/5200	7.24	7.24	5.34	5.34	9.41	11	PASS
	48/5240	6.95	6.95	5.46	5.46	9.28	11	PASS
802.11ac VHT40	38/5190	3.75	3.75	2.49	2.49	6.18	11	PASS
	46/5230	4.26	4.26	2.15	2.15	6.34	11	PASS
802.11ac VHT80	42/5210	1.18	1.18	-0.48	-0.48	3.44	11	PASS
802.11ax HE20	36/5180	7.53	7.53	7.29	7.29	10.42	11	PASS
	40/5200	7.84	7.84	7.07	7.07	10.48	11	PASS
	48/5240	7.12	7.12	6.27	6.27	9.73	11	PASS
802.11ax HE40	38/5190	4.08	4.08	4.47	4.47	7.29	11	PASS
	46/5230	4.30	4.30	3.99	3.99	7.16	11	PASS
802.11ax HE80	42/5210	1.04	1.04	1.16	1.16	4.11	11	PASS

Note: 1. Power Spectral Density =Read Value+Duty cycle correction factor
 2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),the power spectral density= $10\log(10^{(PSD_{antenna1} \text{ in dBm}/10)} + 10^{(PSD_{antenna2} \text{ in dBm}/10)})$
 3.If antenna gains are not equal, the user may use either of the following methods to calculate directional gain, provided that each transmit antenna is driven by only one spatial stream: Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain. And $N_{ss}=1$, Array Gain= $10\log(N_{ant}/N_{ss})$ dB, so directional gain = $G_{ANT} +$ Array Gain= $-2.15\text{dBi}+10\log(2/1)=0.86\text{dBi} < 6\text{dBi}$. So the PSD limit is 11dBm.

Mode	RU Size	Index	Channel/ Frequency (MHz)	Power Spectral Density					Limit (dBm /MHz)	Conclusion
				Antenna 1		Antenna 2		Total Power (dBm /MHz)		
				Read Value (dBm/MHz)	PSD (dBm /MHz)	Read Value (dBm/MHz)	PSD (dBm /MHz)			
802.11ax HE20 MU Mode	26- Tones	0	36/5180	7.73	7.73	6.32	6.32	10.09	11	PASS
		4	40/5200	8.41	8.41	7.09	7.09	10.81	11	PASS
		8	48/5240	7.83	7.83	7.72	7.72	10.78	11	PASS
802.11ax HE20 MU Mode	52- Tones	37	36/5180	7.99	7.99	6.45	6.45	10.30	11	PASS
		38	40/5200	7.62	7.62	6.75	6.75	10.22	11	PASS
		40	48/5240	7.14	7.14	7.18	7.18	10.17	11	PASS
802.11ax HE20 MU Mode	106- Tones	53	36/5180	8.09	8.09	6.45	6.45	10.36	11	PASS
		53	40/5200	7.68	7.68	6.68	6.68	10.22	11	PASS
		54	48/5240	8.00	8.00	7.36	7.36	10.70	11	PASS
802.11ax HE20	242- Tones	61	36/5180	6.41	6.41	5.25	5.25	8.88	11	PASS
		61	40/5200	7.49	7.49	6.62	6.62	10.09	11	PASS



SU Mode		61	48/5240	7.63	7.63	6.59	6.59	10.15	11	PASS
802.11ax HE40 SU Mode	484- Tones	65	38/5190	3.66	3.66	3.42	3.42	6.55	11	PASS
		65	46/5230	4.08	4.08	4.00	4.00	7.05	11	PASS
802.11ax HE80 SU Mode	996- Tones	67	42/5210	1.22	1.22	0.30	0.30	3.80	11	PASS

Note: 1. Power Spectral Density =Read Value+Duty cycle correction factor
 2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),the power spectral density= $10\log(10^{(PSD_{antenna1} \text{ in dBm}/10)}+10^{(PSD_{antenna2} \text{ in dBm}/10)})$
 3.If antenna gains are not equal, the user may use either of the following methods to calculate directional gain, provided that each transmit antenna is driven by only one spatial stream: Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain. And $N_{ss}=1$, Array Gain= $10\log(N_{ant}/N_{ss})$ dB, so directional gain = $G_{ANT} + \text{Array Gain} = -2.15\text{dBi} + 10\log(2/1)=0.86\text{dBi} < 6\text{dBi}$. So the PSD limit is 11dBm.

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Mode	Channel /Frequency (MHz)	Power Spectral Density					Limit (dBm/MHz)	Conclusion
		Antenna 1		Antenna 2		Total PSD (dBm/MHz)		
		Read Value (dBm/MHz)	PSD (dBm/MHz)	Read Value (dBm/MHz)	PSD (dBm/MHz)			
802.11n HT20	52/5260	7.89	7.89	5.98	5.98	10.05	11	PASS
	60/5300	8.08	8.08	5.64	5.64	10.04	11	PASS
	64/5320	7.92	7.92	6.53	6.53	10.29	11	PASS
802.11n HT40	54/5270	4.51	4.51	2.21	2.21	6.52	11	PASS
	62/5310	4.34	4.34	2.77	2.77	6.63	11	PASS
802.11ac VHT20	52/5260	7.24	7.24	5.31	5.31	9.39	11	PASS
	60/5300	7.88	7.88	5.30	5.30	9.79	11	PASS
	64/5320	7.59	7.59	5.66	5.66	9.74	11	PASS
802.11ac VHT40	54/5270	4.44	4.44	2.28	2.28	6.50	11	PASS
	62/5310	4.65	4.65	2.79	2.79	6.83	11	PASS
802.11ac VHT80	58/5290	2.08	2.08	-0.56	-0.56	3.97	11	PASS
802.11ax HE20	52/5260	7.54	7.54	7.03	7.03	10.30	11	PASS
	60/5300	8.03	8.03	6.42	6.42	10.31	11	PASS
	64/5320	7.72	7.72	7.07	7.07	10.42	11	PASS
802.11ax	54/5270	4.54	4.54	4.25	4.25	7.41	11	PASS



HE40	62/5310	5.12	5.12	4.37	4.37	7.77	11	PASS
802.11ax HE80	58/5290	1.20	1.20	0.48	0.48	3.86	11	PASS

Note: 1. Power Spectral Density =Read Value+Duty cycle correction factor
 2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),the power spectral density= $10\log(10^{(PSD\ antenna1\ in\ dBm/10)}+10^{(PSD\ antenna2\ in\ dBm/10)})$
 3.If antenna gains are not equal, the user may use either of the following methods to calculate directional gain, provided that each transmit antenna is driven by only one spatial stream: Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain. And $Nss=1$, Array Gain= $10\log(Nant/Nss)$ dB, so directional gain = $G_{ANT} +$ Array Gain= $-2.15dBi+10\log(2/1)=0.86dBi <6dBi$. So the PSD limit is 11dBm.

Mode	RU Size	Index	Channel/ Frequency (MHz)	Power Spectral Density					Limit (dBm /MHz)	Conclusion
				Antenna 1		Antenna 2		Total Power (dBm /MHz)		
				Read Value (dBm/MHz)	PSD (dBm /MHz)	Read Value (dBm/MHz)	PSD (dBm /MHz)			
802.11ax HE20 MU Mode	26- Tones	0	52/5260	7.73	7.73	6.32	6.32	10.09	11	PASS
		4	60/5300	8.41	8.41	7.09	7.09	10.81	11	PASS
		8	64/5320	7.83	7.83	7.72	7.72	10.78	11	PASS
802.11ax HE20 MU Mode	52- Tones	37	52/5260	7.99	7.99	6.45	6.45	10.30	11	PASS
		38	60/5300	7.62	7.62	6.75	6.75	10.22	11	PASS
		40	64/5320	7.14	7.14	7.18	7.18	10.17	11	PASS
802.11ax HE20 MU Mode	106- Tones	53	52/5260	8.09	8.09	6.45	6.45	10.36	11	PASS
		53	60/5300	7.68	7.68	6.68	6.68	10.22	11	PASS
		54	64/5320	8.00	8.00	7.36	7.36	10.70	11	PASS
802.11ax HE20 SU Mode	242- Tones	61	52/5260	6.41	6.41	5.25	5.25	8.88	11	PASS
		61	60/5300	7.49	7.49	6.62	6.62	10.09	11	PASS
		61	64/5320	7.63	7.63	6.59	6.59	10.15	11	PASS
802.11ax HE40 SU Mode	484- Tones	65	54/5270	3.66	3.66	3.42	3.42	6.55	11	PASS
		65	62/5310	4.08	4.08	4.00	4.00	7.05	11	PASS
802.11ax HE80 SU Mode	996- Tones	67	58/5290	1.22	1.22	0.30	0.30	3.80	11	PASS

Note: 1. Power Spectral Density =Read Value+Duty cycle correction factor
 2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),the power spectral density= $10\log(10^{(PSD\ antenna1\ in\ dBm/10)}+10^{(PSD\ antenna2\ in\ dBm/10)})$
 3.If antenna gains are not equal, the user may use either of the following methods to calculate directional gain, provided that each transmit antenna is driven by only one spatial stream: Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain. And $Nss=1$, Array Gain= $10\log(Nant/Nss)$ dB, so directional gain = $G_{ANT} +$ Array Gain=



-2.15dBi+10log(2/1)=0.86dBi <6dBi. So the PSD limit is 11dBm.

U-NII-2C

Mode	Channel /Frequency (MHz)	Power Spectral Density					Limit (dBm/MHz)	Conclusion
		Antenna 1		Antenna 2		Total PSD (dBm/MHz)		
		Read Value (dBm/MHz)	PSD (dBm/MHz)	Read Value (dBm/MHz)	PSD (dBm/MHz)			
802.11n HT20	100/5500	5.68	5.68	6.23	6.23	8.98	11	PASS
	116/5580	5.68	5.68	7.05	7.05	9.43	11	PASS
	140/5700	4.79	4.79	6.57	6.57	8.78	11	PASS
	144/5720	5.05	5.05	6.08	6.08	8.60	11	PASS
802.11n HT40	102/5510	1.87	1.87	3.14	3.14	5.56	11	PASS
	110/5550	2.85	2.85	3.20	3.20	6.04	11	PASS
	134/5670	1.22	1.22	1.71	1.71	4.48	11	PASS
	142/5710	1.37	1.37	2.35	2.35	4.90	11	PASS
802.11ac VHT20	100/5500	4.68	4.68	6.24	6.24	8.54	11	PASS
	116/5580	4.98	4.98	6.18	6.18	8.63	11	PASS
	140/5700	4.09	4.09	5.81	5.81	8.05	11	PASS
	144/5720	4.30	4.30	5.59	5.59	8.00	11	PASS
802.11ac VHT 40	102/5510	2.13	2.13	3.27	3.27	5.75	11	PASS
	110/5550	2.46	2.46	2.79	2.79	5.64	11	PASS
	134/5670	1.09	1.09	2.16	2.16	4.67	11	PASS
	142/5710	1.27	1.27	2.35	2.35	4.86	11	PASS
802.11ac VHT80	106/5530	-1.08	-1.08	0.18	0.18	2.61	11	PASS
	138/5690	-1.88	-1.88	-0.25	-0.25	2.02	11	PASS
802.11ax HE20	100/5500	6.97	6.97	7.13	7.13	10.06	11	PASS
	116/5580	7.53	7.53	7.35	7.35	10.45	11	PASS
	140/5700	6.16	6.16	6.69	6.69	9.44	11	PASS
	144/5720	6.38	6.38	6.95	6.95	9.68	11	PASS
802.11ax HE40	102/5510	3.86	3.86	4.89	4.89	7.42	11	PASS
	110/5550	4.72	4.72	5.06	5.06	7.90	11	PASS
	134/5670	3.14	3.14	3.77	3.77	6.48	11	PASS
	142/5710	2.88	2.88	4.30	4.30	6.66	11	PASS
802.11ax	106/5530	1.12	1.12	1.51	1.51	4.33	11	PASS



HE80	138/5690	-0.06	-0.06	1.15	1.15	3.60	11	PASS
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Note: 1. Power Spectral Density =Read Value+Duty cycle correction factor
 2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),the power spectral density= $10\log(10^{(PSD\ antenna1\ in\ dBm/10)}+10^{(PSD\ antenna2\ in\ dBm/10)})$
 3.If antenna gains are not equal, the user may use either of the following methods to calculate directional gain, provided that each transmit antenna is driven by only one spatial stream: Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain. And $N_{ss}=1$, Array Gain= $10\log(N_{ant}/N_{ss})$ dB, so directional gain = $G_{ANT} + \text{Array Gain} = -2.15\text{dBi} + 10\log(2/1) = 0.86\text{dBi} < 6\text{dBi}$. So the PSD limit is 11dBm.

Mode	RU Size	Index	Channel/ Frequency (MHz)	Power Spectral Density					Limit (dBm /MHz)	Conclusion
				Antenna 1		Antenna 2		Total Power (dBm /MHz)		
				Read Value (dBm/MHz)	PSD (dBm /MHz)	Read Value (dBm/MHz)	PSD (dBm /MHz)			
802.11ax HE20 MU Mode	26- Tones	0	100/5500	7.64	7.64	7.25	7.25	10.46	11	PASS
		4	116/5580	7.70	7.70	7.12	7.12	10.43	11	PASS
		8	140/5700	8.05	8.05	7.03	7.03	10.58	11	PASS
		8	144/5720	7.63	7.63	6.61	6.61	10.16	11	PASS
802.11ax HE20 MU Mode	52- Tones	37	100/5500	7.62	7.62	7.61	7.61	10.62	11	PASS
		38	116/5580	8.14	8.14	7.37	7.37	10.78	11	PASS
		40	140/5700	7.95	7.95	6.50	6.50	10.30	11	PASS
		40	144/5720	8.18	8.18	7.14	7.14	10.70	11	PASS
802.11ax HE20 MU Mode	106- Tones	53	100/5500	8.04	8.04	7.36	7.36	10.73	11	PASS
		53	116/5580	8.43	8.43	7.18	7.18	10.86	11	PASS
		54	140/5700	8.20	8.20	6.82	6.82	10.57	11	PASS
		54	144/5720	8.21	8.21	7.12	7.12	10.71	11	PASS
802.11ax HE20 SU Mode	242- Tones	61	100/5500	6.32	6.32	6.30	6.30	9.32	11	PASS
		61	116/5580	6.97	6.97	6.29	6.29	9.66	11	PASS
		61	140/5700	7.04	7.04	6.33	6.33	9.71	11	PASS
		61	144/5720	6.65	6.65	5.96	5.96	9.32	11	PASS
802.11ax HE40 SU Mode	484- Tones	65	102/5510	3.46	3.46	3.44	3.44	6.46	11	PASS
		65	110/5550	4.64	4.64	3.03	3.03	6.92	11	PASS
		65	134/5670	3.85	3.85	3.01	3.01	6.46	11	PASS
		65	142/5710	3.97	3.97	2.85	2.85	6.46	11	PASS
802.11ax HE80 SU Mode	996- Tones	67	106/5530	0.57	0.57	0.60	0.60	3.59	11	PASS
		67	138/5690	0.03	0.03	-1.40	-1.40	2.38	11	PASS

Note: 1. Power Spectral Density =Read Value+Duty cycle correction factor
 2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),the power spectral density= $10\log(10^{(PSD\ antenna1\ in\ dBm/10)}+10^{(PSD\ antenna2\ in\ dBm/10)})$
 3.If antenna gains are not equal, the user may use either of the following methods to calculate directional gain,



provided that each transmit antenna is driven by only one spatial stream: Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain. And $N_{ss}=1$, Array Gain= $10\log(N_{ant}/N_{ss})$ dB, so directional gain = $G_{ANT} + \text{Array Gain} = -2.15\text{dBi} + 10\log(2/1) = 0.86\text{dBi} < 6\text{dBi}$. So the PSD limit is 11dBm.

U-NII-3

Mode	Channel/ Frequency (MHz)	Power Spectral Density				Total Power (dBm/ 500kHz)	Limit (dBm/ 500kHz)	Conclusion
		Antenna 1		Antenna 2				
		Read Value (dBm/ 470kHz)	PSD (dBm/ 500kHz)	Read Value (dBm/ 470kHz)	PSD (dBm/ 500kHz)			
802.11n HT20	149/5745	4.72	4.99	5.26	5.53	8.28	30	PASS
	157/5785	5.39	5.66	5.64	5.91	8.79	30	PASS
	165/5825	6.37	6.64	6.12	6.39	9.53	30	PASS
802.11n HT40	151/5755	0.76	1.03	1.44	1.71	4.39	30	PASS
	159/5795	1.55	1.82	1.76	2.03	4.94	30	PASS
802.11ac VHT20	149/5745	4.34	4.61	4.83	5.10	7.87	30	PASS
	157/5785	5.00	5.27	5.18	5.45	8.37	30	PASS
	165/5825	5.61	5.88	5.35	5.62	8.76	30	PASS
802.11ac VHT40	151/5755	0.54	0.81	1.58	1.85	4.37	30	PASS
	159/5795	0.98	1.25	2.14	2.41	4.88	30	PASS
802.11ac VHT80	155/5775	-2.07	-1.80	-1.22	-0.95	1.66	30	PASS
802.11ax HE20	149/5745	3.03	3.30	4.29	4.56	6.98	30	PASS
	157/5785	3.60	3.87	4.61	4.88	7.41	30	PASS
	165/5825	4.92	5.19	4.80	5.07	8.14	30	PASS
802.11ax HE40	151/5755	0.28	0.55	0.97	1.24	3.92	30	PASS
	159/5795	0.89	1.16	1.36	1.63	4.41	30	PASS
802.11ax HE80	155/5775	-2.74	-2.47	-1.59	-1.32	1.16	30	PASS

Note: 1. Power Spectral Density = Read Value + Duty cycle + $10 \cdot \text{LOG}(500/470)$ correction factor

2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a), the power spectral density = $10\log(10^{(\text{PSD antenna1 in dBm}/10)} + 10^{(\text{PSD antenna2 in dBm}/10)})$

3. If antenna gains are not equal, the user may use either of the following methods to calculate directional gain, provided that each transmit antenna is driven by only one spatial stream: Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain. And $N_{ss}=1$, Array Gain= $10\log(N_{ant}/N_{ss})$ dB, so directional gain = $G_{ANT} + \text{Array Gain} = -2.15\text{dBi} + 10\log(2/1) = 0.86\text{dBi} < 6\text{dBi}$. So the PSD limit is 30dBm.



Mode	RU Size	Index	Channel/ Frequency (MHz)	Power Spectral Density					Limit (dBm/ 500kHz)	Conclusion
				Antenna 1		Antenna 2		Total Power (dBm/ 500kHz)		
				Read Value (dBm/ 470kHz)	PSD (dBm/ 500kHz)	Read Value (dBm/ 470kHz)	PSD (dBm/ 500kHz)			
802.11ax HE20 MU Mode	26- Tones	0	149/5745	12.17	12.44	11.41	11.68	15.09	30.00	PASS
		4	157/5785	10.52	10.79	10.58	10.85	13.83	30.00	PASS
		8	165/5825	12.96	13.23	11.70	11.97	15.66	30.00	PASS
802.11ax HE20 MU Mode	52- Tones	37	149/5745	9.10	9.37	8.30	8.57	12.00	30.00	PASS
		38	157/5785	7.97	8.24	8.31	8.58	11.42	30.00	PASS
		40	165/5825	10.06	10.33	8.31	8.58	12.55	30.00	PASS
802.11ax HE20 MU Mode	106- Tones	53	149/5745	6.02	6.29	7.41	7.68	10.05	30.00	PASS
		53	157/5785	5.21	5.48	7.43	7.70	9.74	30.00	PASS
		54	165/5825	7.01	7.28	7.21	7.48	10.39	30.00	PASS
802.11ax HE20 SU Mode	242- Tones	61	149/5745	2.73	3.00	4.03	4.30	6.71	30.00	PASS
		61	157/5785	1.90	2.17	3.91	4.18	6.30	30.00	PASS
		61	165/5825	3.29	3.56	3.84	4.11	6.85	30.00	PASS
802.11ax HE40 SU Mode	484- Tones	65	151/5755	-0.60	-0.33	0.93	1.20	3.51	30.00	PASS
		65	159/5795	-0.98	-0.71	0.58	0.85	3.15	30.00	PASS
802.11ax HE80 SU Mode	996- Tones	67	155/5775	-3.61	-3.34	-2.36	-2.09	0.34	30.00	PASS

Note: 1. Power Spectral Density = Read Value+Duty cycle+10*LOG(500/470) correction factor

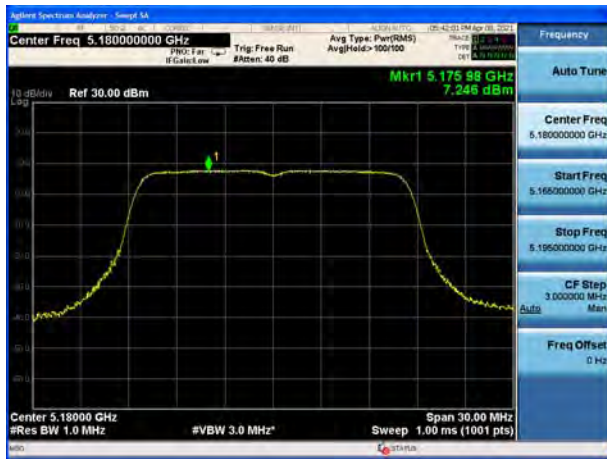
2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),the power spectral density= $10\log(10^{(\text{PSD antenna1 in dBm}/10)} + 10^{(\text{PSD antenna2 in dBm}/10)})$

3.If antenna gains are not equal, the user may use either of the following methods to calculate directional gain, provided that each transmit antenna is driven by only one spatial stream: Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain. And $N_{\text{ss}}=1$, Array Gain= $10\log(N_{\text{ant}}/N_{\text{ss}})$ dB, so directional gain = $G_{\text{ANT}} + \text{Array Gain} = -2.15\text{dBi} + 10\log(2/1) = 0.86\text{dBi} < 6\text{dBi}$. So the PSD limit is 30dBm.



SISO Antenna 1

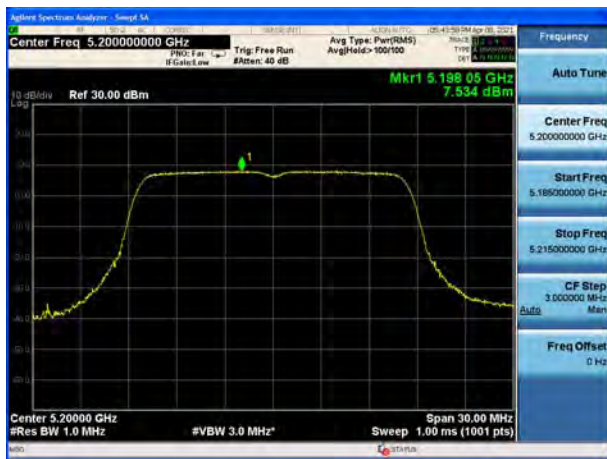
U-NII-1, 802.11a, Channel No.: 36



U-NII-1, 802.11n HT20, Channel No.: 36



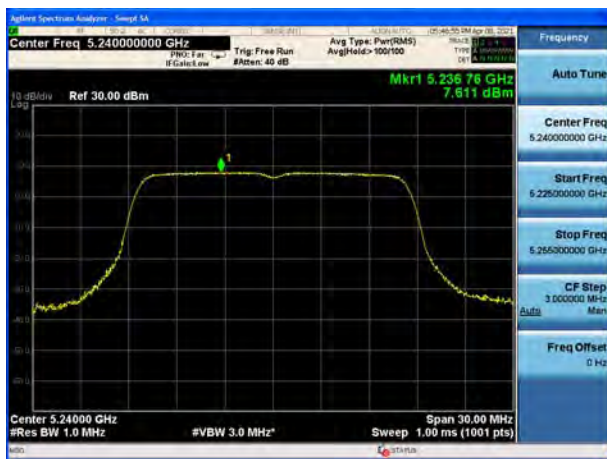
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U-NII-1, 802.11n HT20, Channel No.: 40



U-NII-1, 802.11a, Channel No.: 48



U-NII-1, 802.11n HT20, Channel No.: 48



U-NII-1, 802.11n HT40, Channel No.: 38



U-NII-1, 802.11ac VHT20, Channel No.: 36



U-NII-1, 802.11n HT40, Channel No.: 46



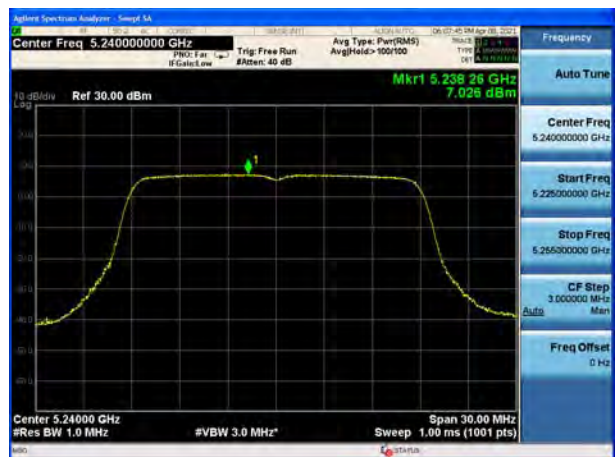
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U-NII-1, 802.11ac VHT40, Channel No.: 38



U-NII-1, 802.11ac VHT20, Channel No.: 48





U-NII-1, 802.11ac VHT40, Channel No.: 46



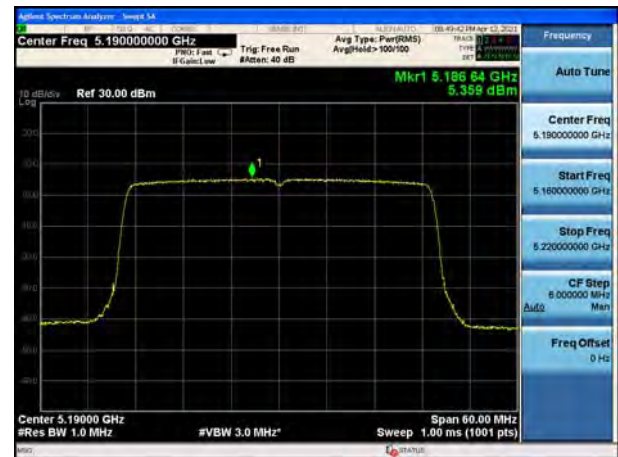
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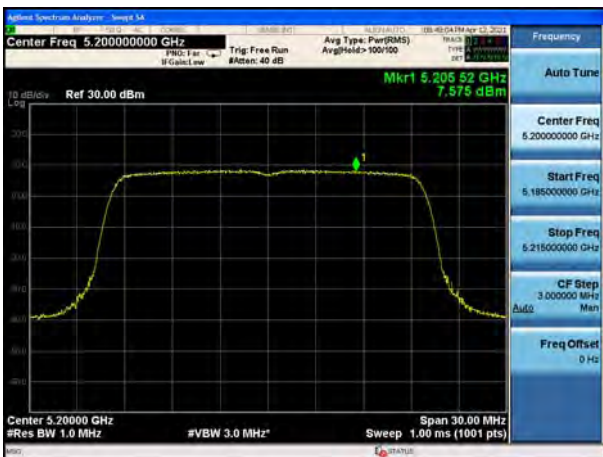
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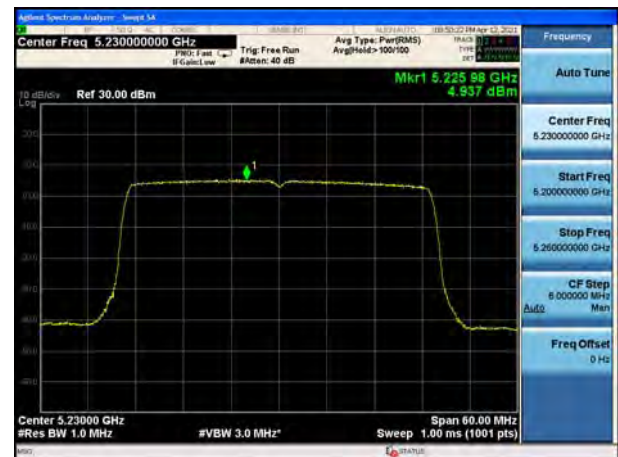
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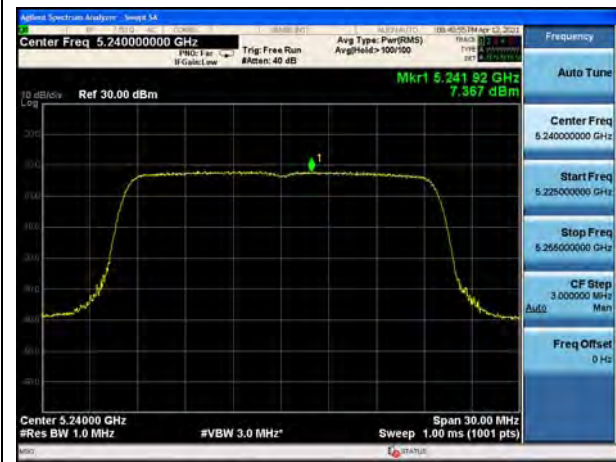
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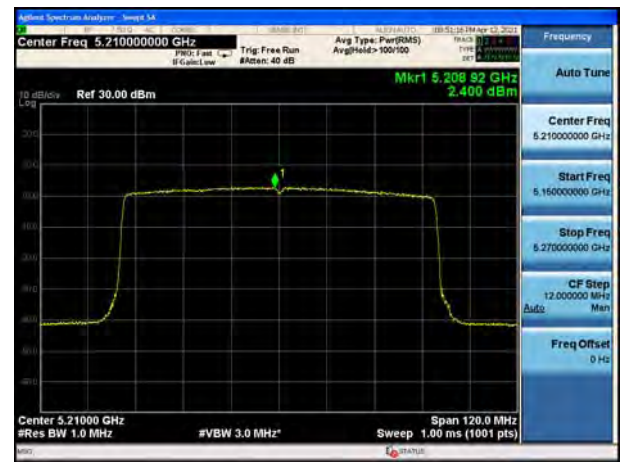
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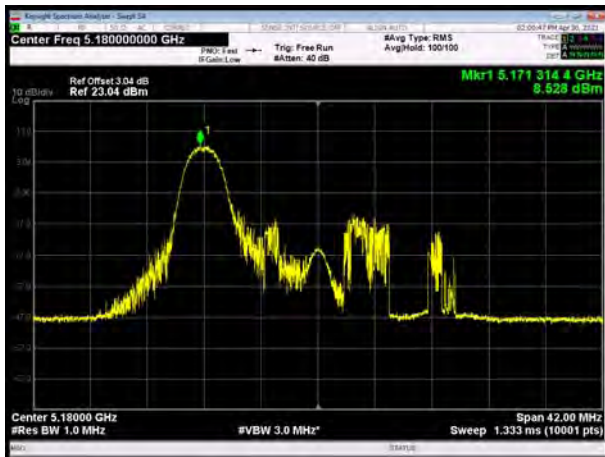
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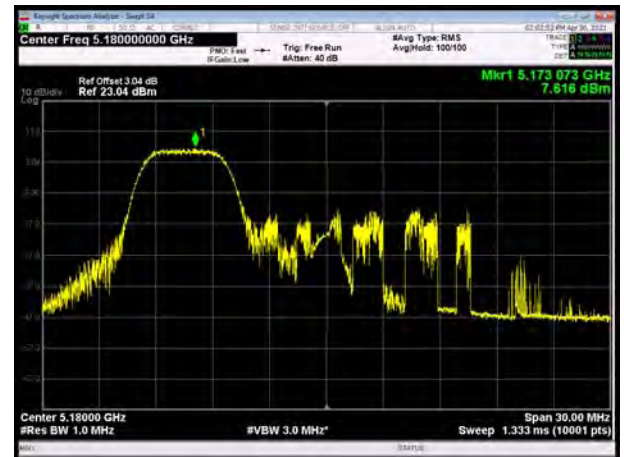
U-NII-1, 802.11ax HE80, Channel No.: 42



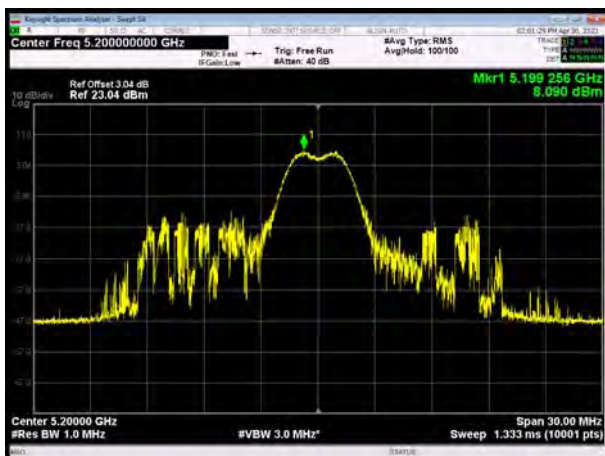
U-NII-1, 802.11ax HE20 MU Mode 26-Tones, Channel No.: 36



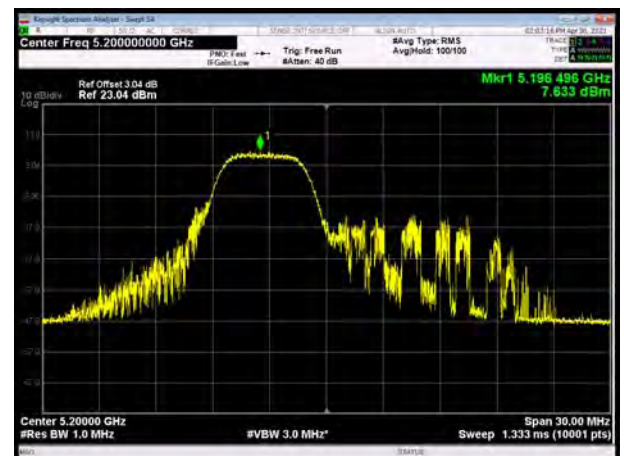
U-NII-1, 802.11ax HE20 MU Mode 52-Tones, Channel No.: 36



U-NII-1, 802.11ax HE20 MU Mode 26-Tones, Channel No.: 40

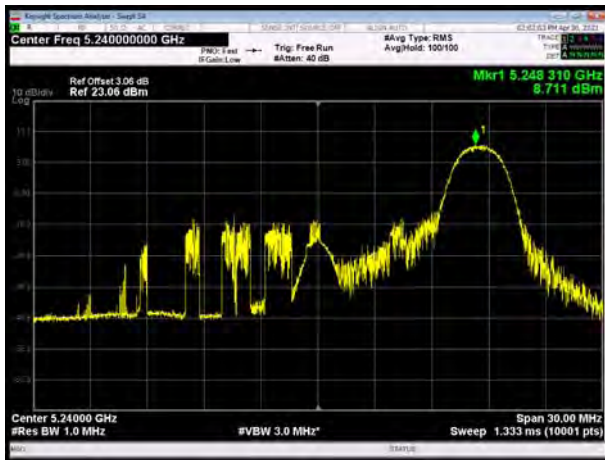


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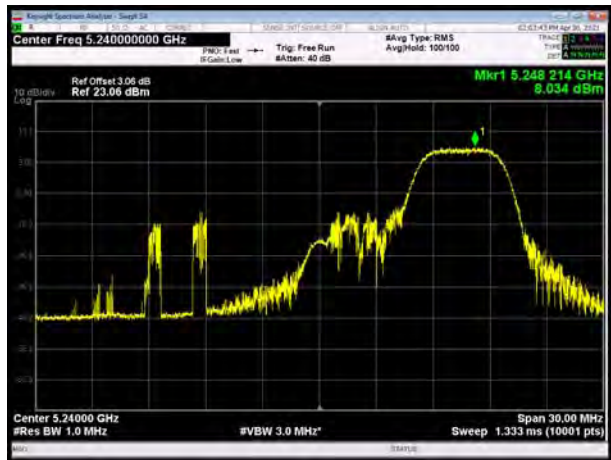




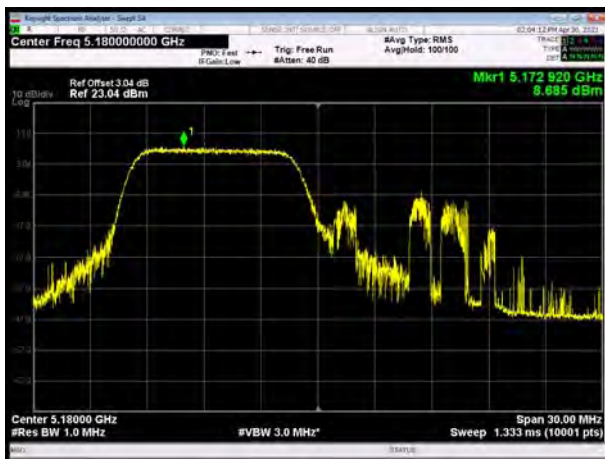
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Channel No.: 48



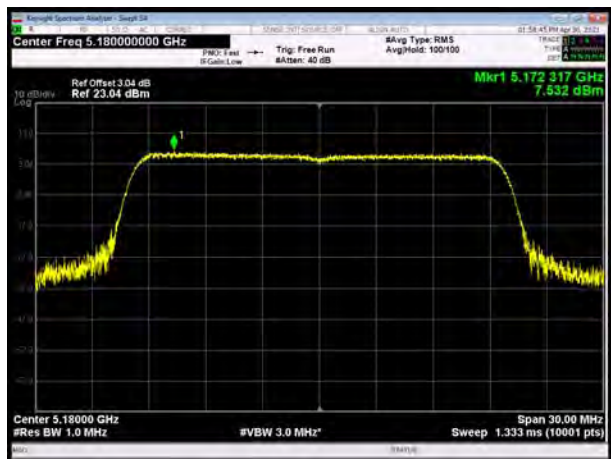
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Channel No.: 48



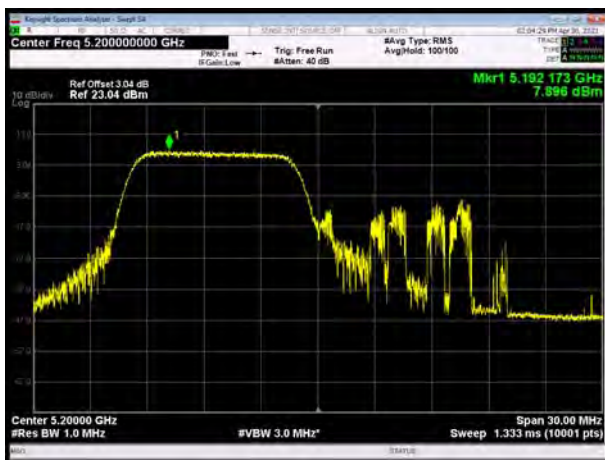
U-NII-1, 802.11ax HE20 MU Mode 106-Tones,
Channel No.: 36



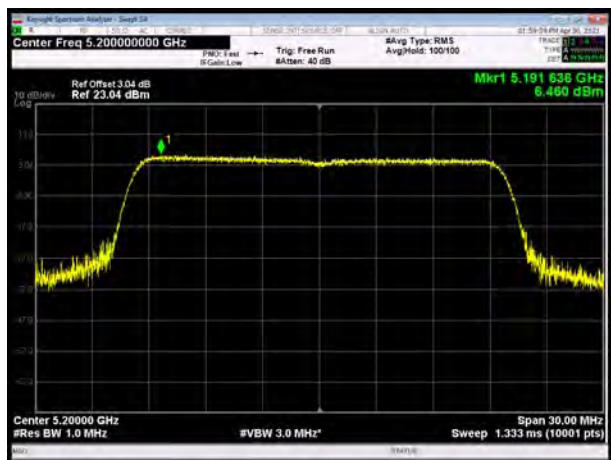
U-NII-1, 802.11ax HE20 SU Mode 242-Tones,
Channel No.: 36



U-NII-1, 802.11ax HE20 MU Mode 106-Tones,
Channel No.: 40

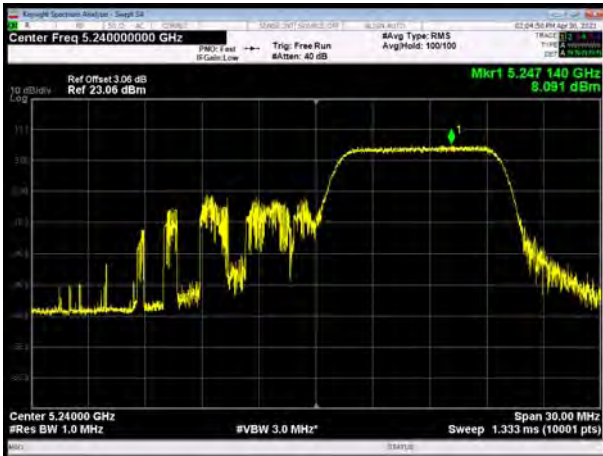


U-NII-1, 802.11ax HE20 SU Mode 242-Tones,
Channel No.: 40

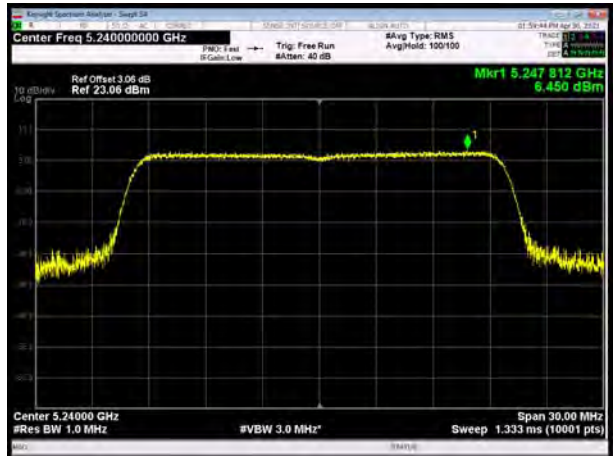




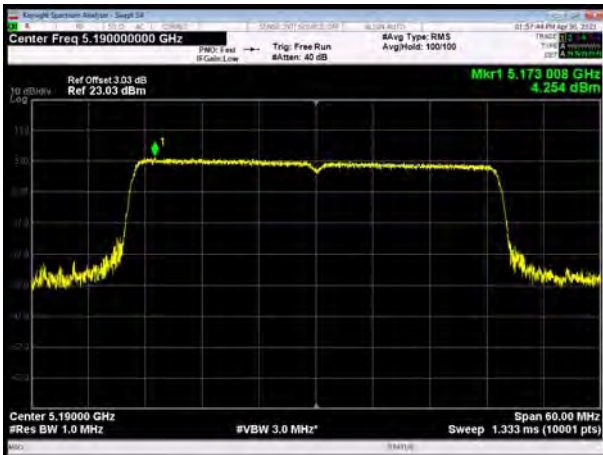
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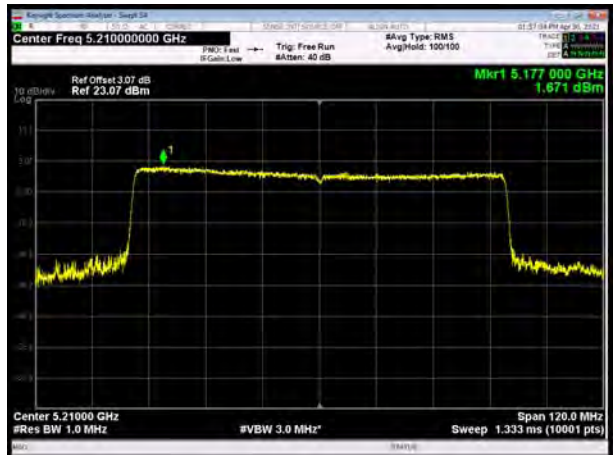
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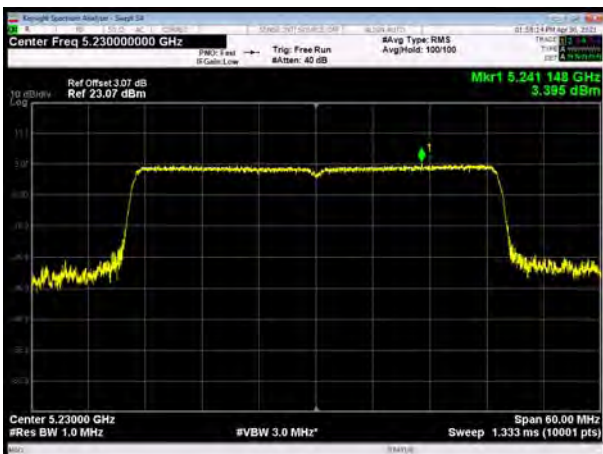
U-NII-1, 802.11ax HE40 SU Mode 484-Tones,
Channel No.: 38



U-NII-1, 802.11ax HE80 SU Mode 996-Tones,
Channel No.: 42



U-NII-1, 802.11ax HE40 SU Mode 484-Tones,
Channel No.: 46



U-NII-2A, 802.11a, Channel No.: 52



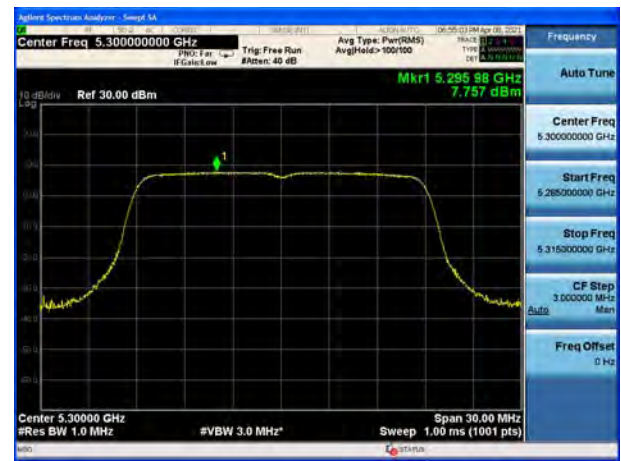
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U-NII-2A, 802.11a, Channel No.: 60



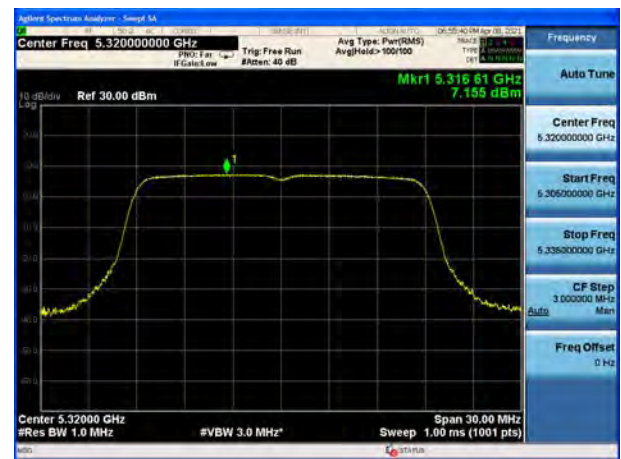
U-NII-2A, 802.11n HT20, Channel No.: 60



U-NII-2A, 802.11a, Channel No.: 64



U-NII-2A, 802.11n HT20, Channel No.: 64





U-NII-2A, 802.11n HT40, Channel No.: 54



U-NII-2A, 802.11ac VHT20, Channel No.:52



U-NII-2A, 802.11n HT40, Channel No.: 62



U-NII-2A, 802.11ac VHT20, Channel No.: 60



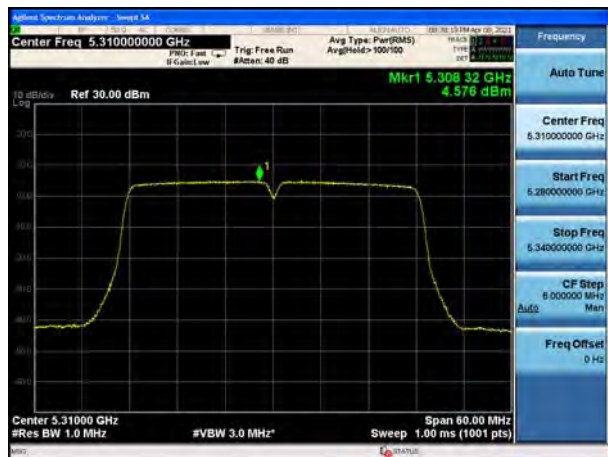
U-NII-2A, 802.11ac VHT40, Channel No.: 54



U-NII-2A, 802.11ac VHT20, Channel No.: 64



U-NII-2A, 802.11ac VHT40, Channel No.: 62



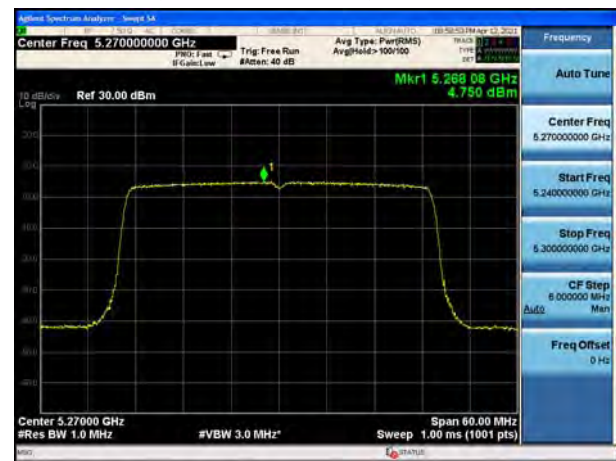
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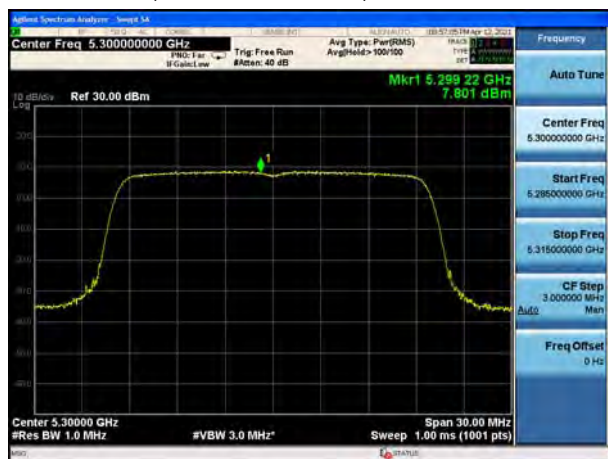
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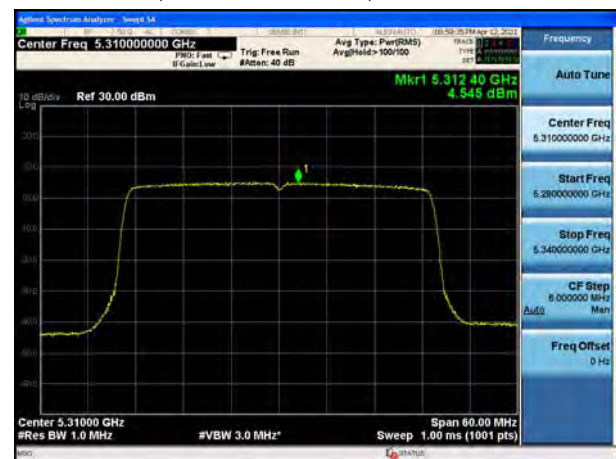
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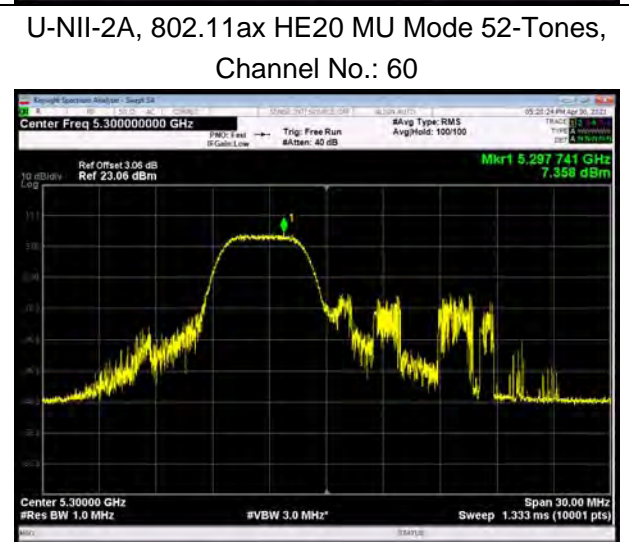
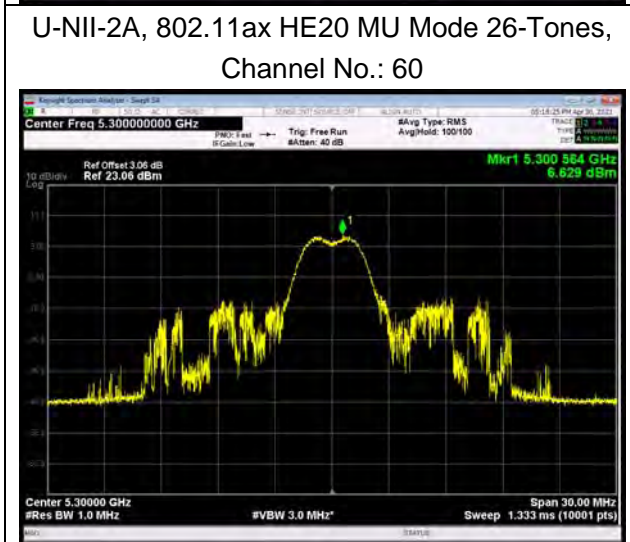
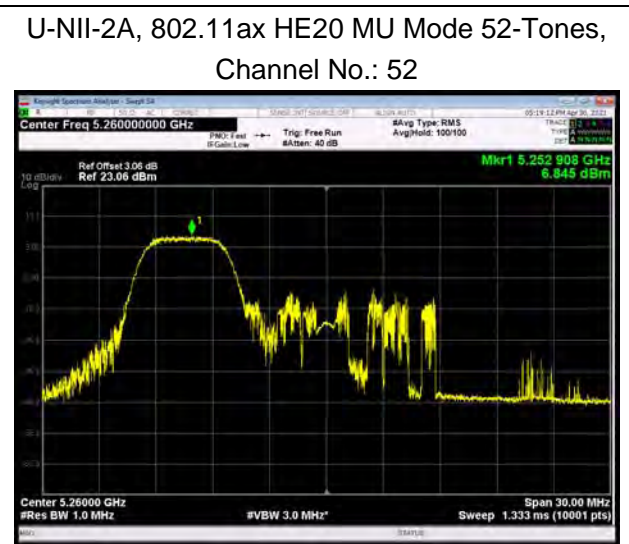
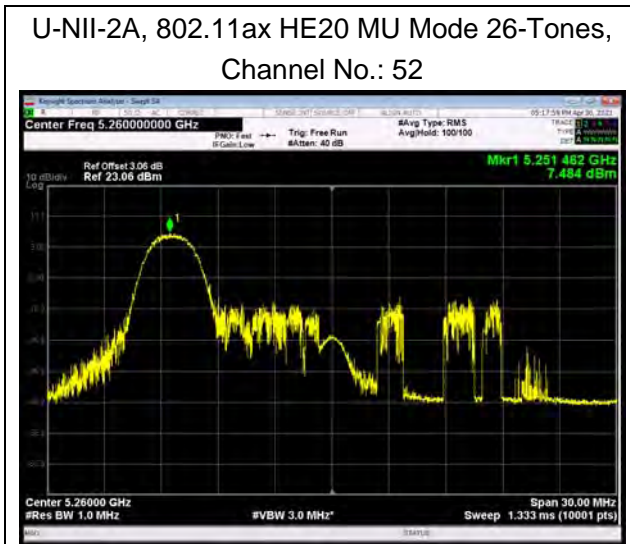
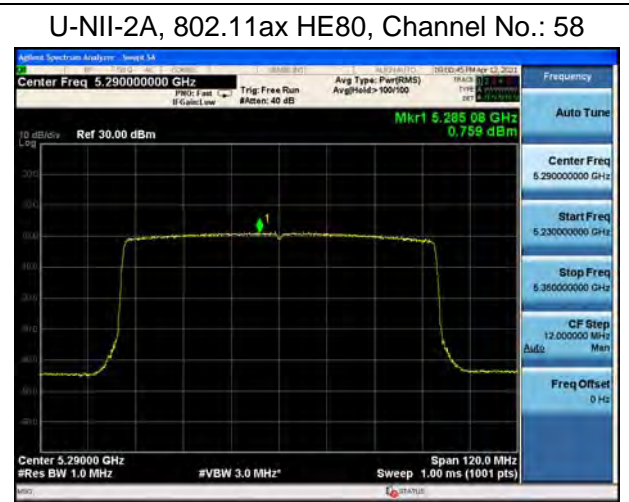
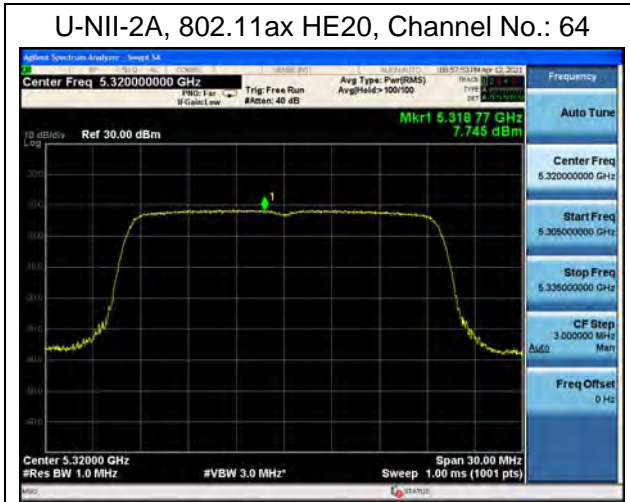


U-NII-2A, 802.11ax HE20, Channel No.: 60

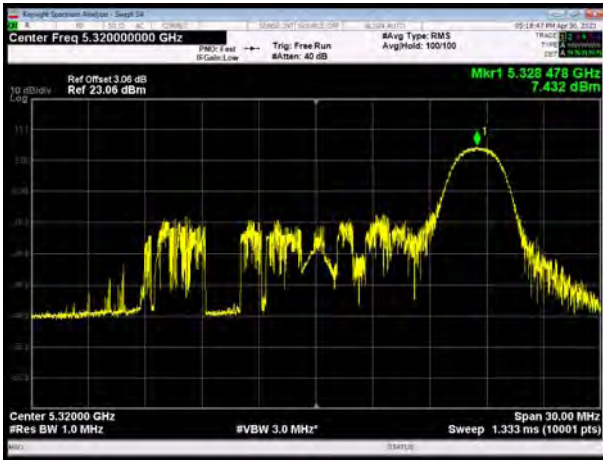


U-NII-2A, 802.11ax HE40, Channel No.: 62

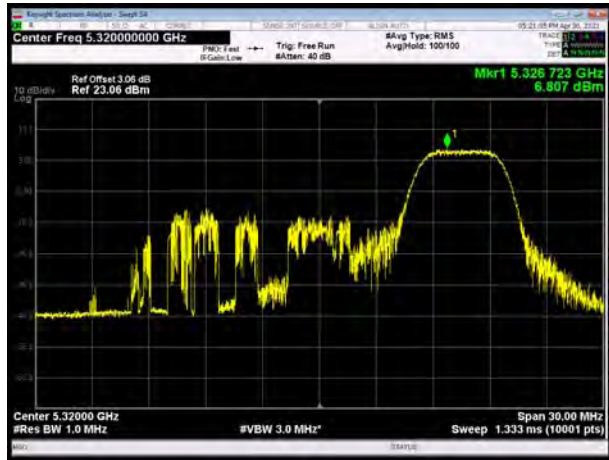




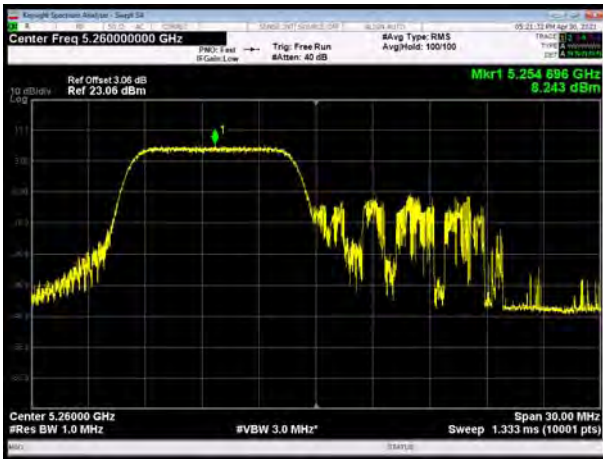
U-NII-2A, 802.11ax HE20 MU Mode 26-Tones,
Channel No.: 64



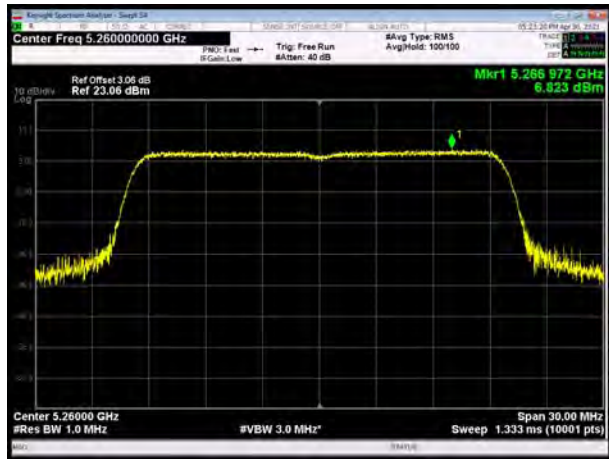
U-NII-2A, 802.11ax HE20 MU Mode 52-Tones,
Channel No.: 64



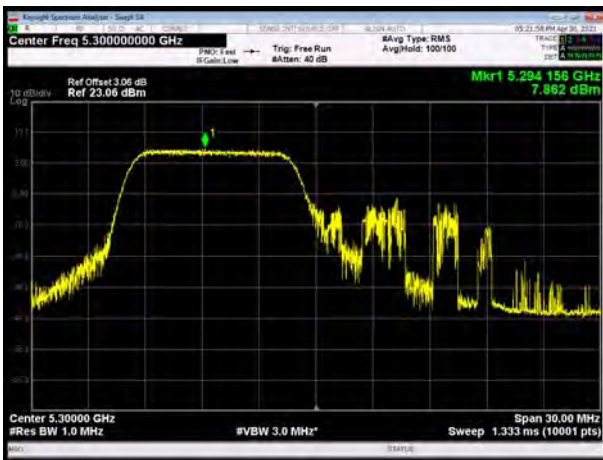
U-NII-2A, 802.11ax HE20 MU Mode 106-Tones,
Channel No.: 52



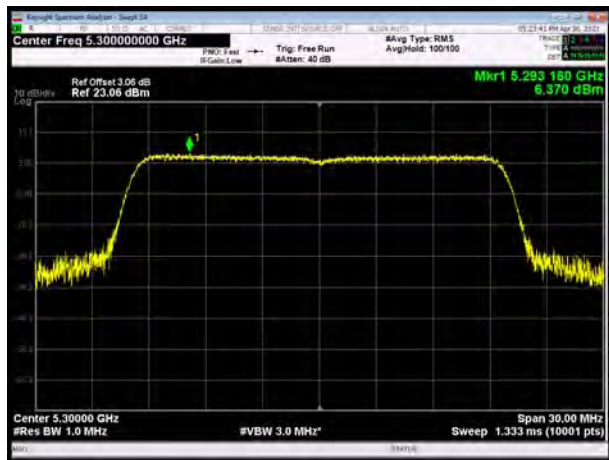
U-NII-2A, 802.11ax HE20 SU Mode 242-Tones,
Channel No.: 52



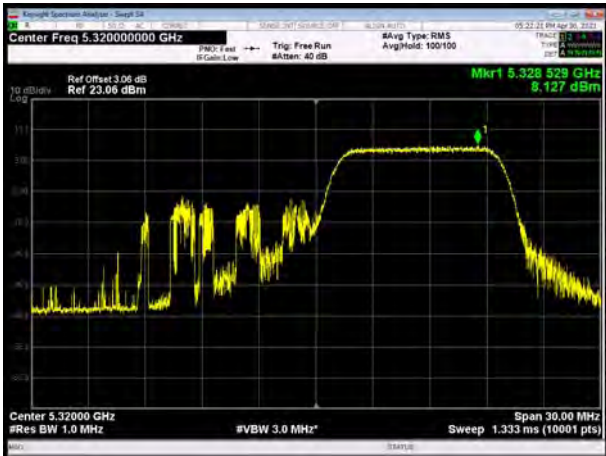
U-NII-2A, 802.11ax HE20 MU Mode 106-Tones,
Channel No.: 60



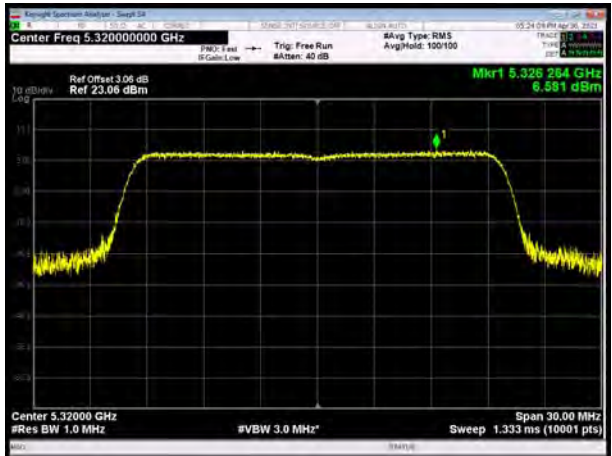
U-NII-2A, 802.11ax HE20 SU Mode 242-Tones,
Channel No.: 60



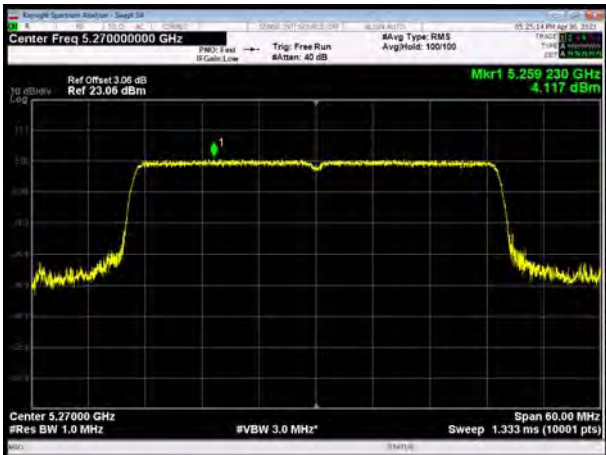
U-NII-2A, 802.11ax HE20 MU Mode 106-Tones,
Channel No.: 64



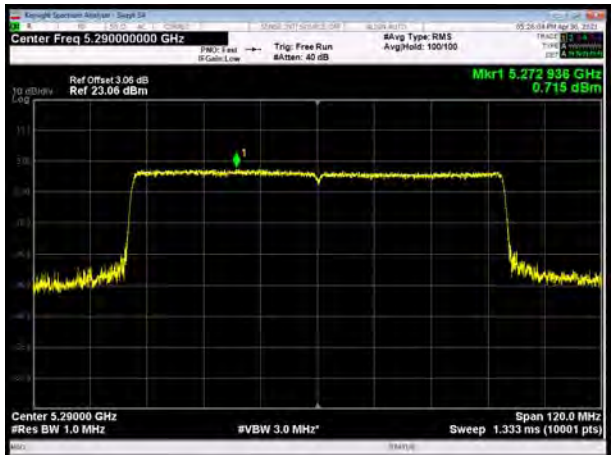
U-NII-2A, 802.11ax HE20 SU Mode 242-Tones,
Channel No.: 64



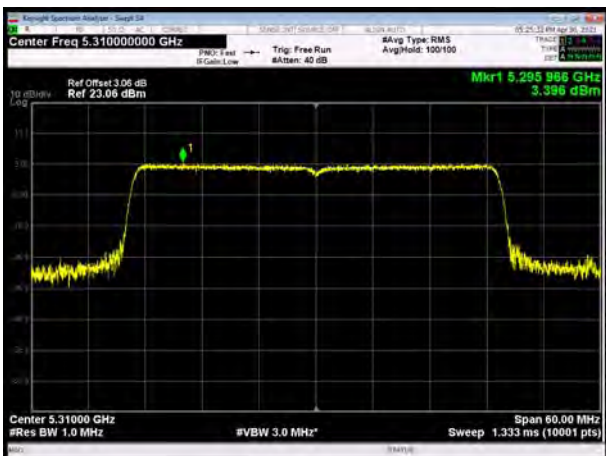
U-NII-2A, 802.11ax HE40 SU Mode 484-Tones,
Channel No.: 54



U-NII-2A, 802.11ax HE80 SU Mode 996-Tones,
Channel No.: 58

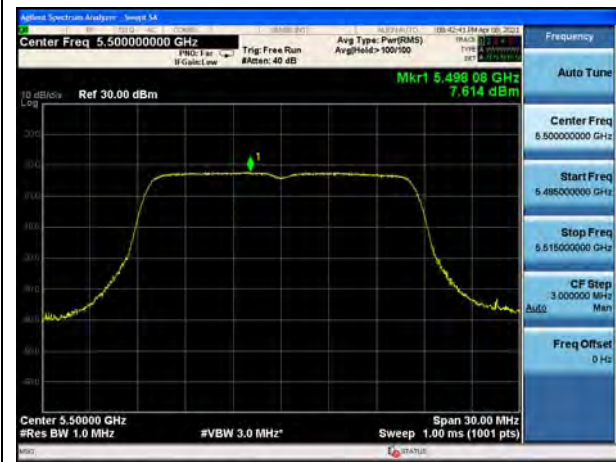


U-NII-2A, 802.11ax HE40 SU Mode 484-Tones,
Channel No.: 62

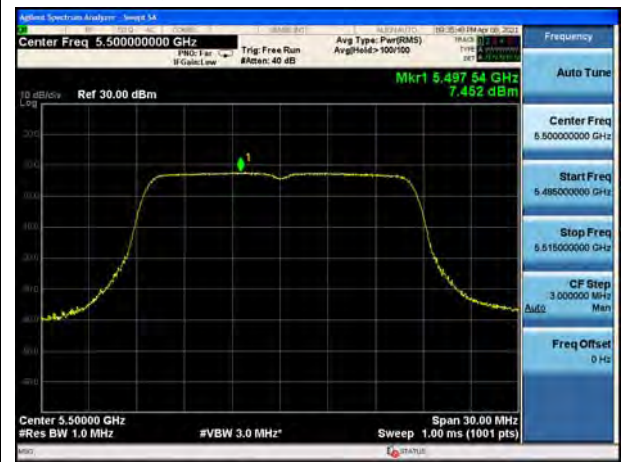




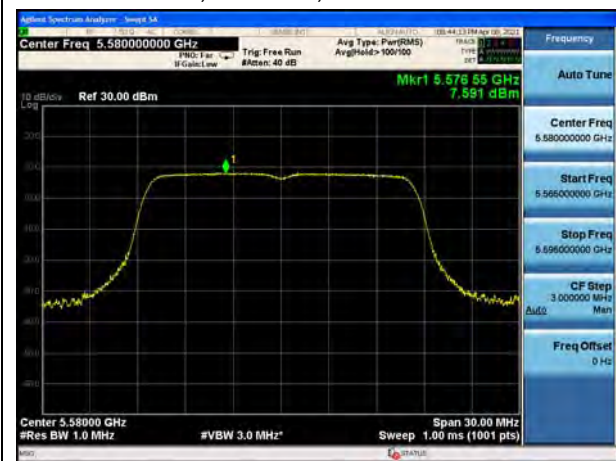
U-NII-2C, 802.11a, Channel No.: 100



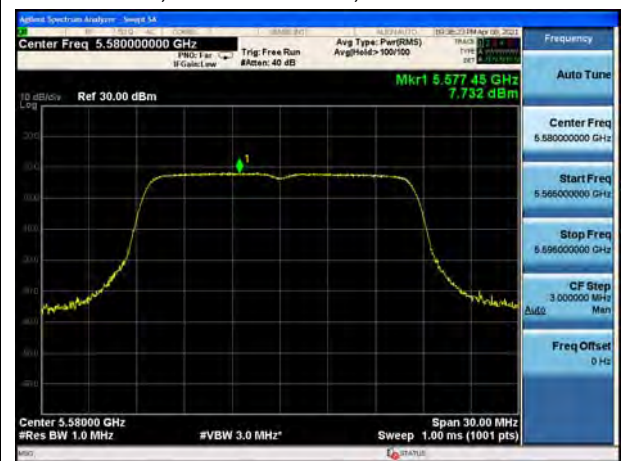
U-NII-2C, 802.11n HT20, Channel No.: 100



U-NII-2C, 802.11a, Channel No.: 116



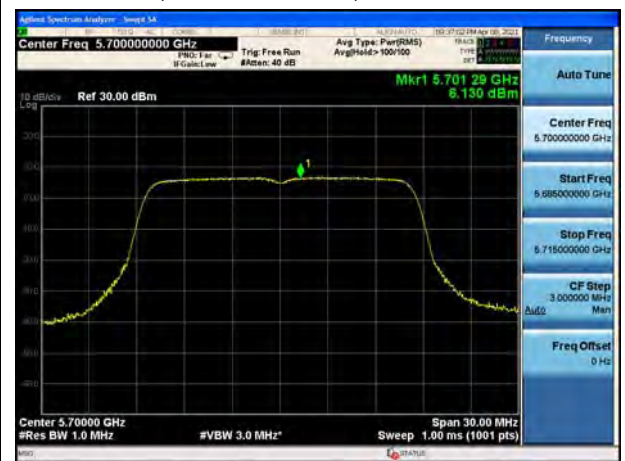
U-NII-2C, 802.11n HT20, Channel No.: 116



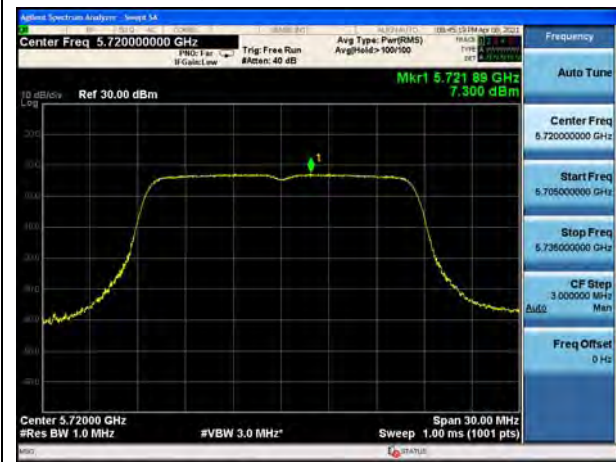
U-NII-2C, 802.11a, Channel No.: 140



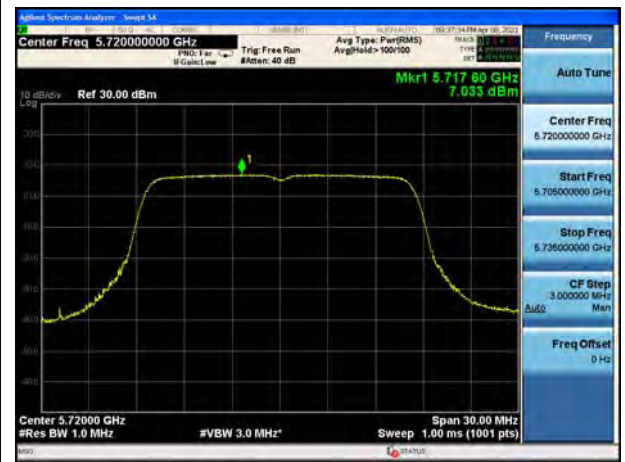
U-NII-2C, 802.11n HT20, Channel No.: 140



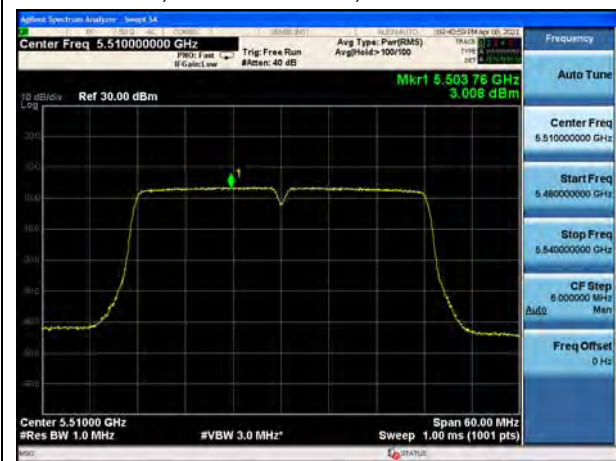
U-NII-2C, 802.11a, Channel No.: 144



U-NII-2C, 802.11n HT20, Channel No.: 144



U-NII-2C, 802.11n HT40, Channel No.: 102



U-NII-2C, 802.11ac VHT20, Channel No.: 100

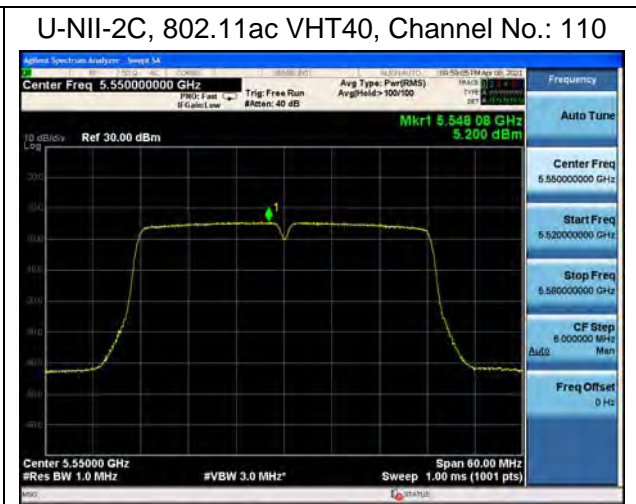
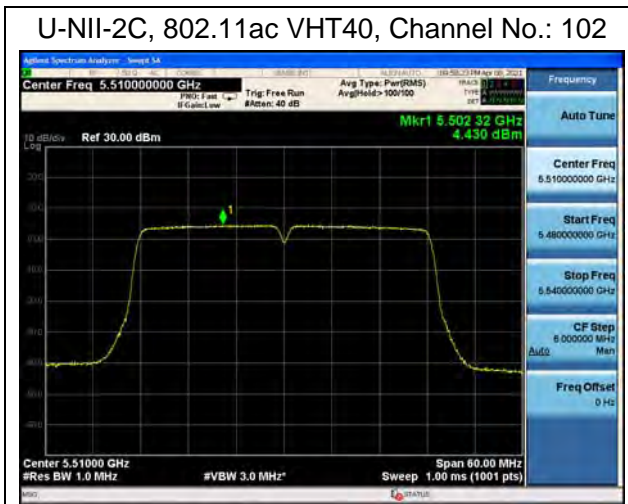
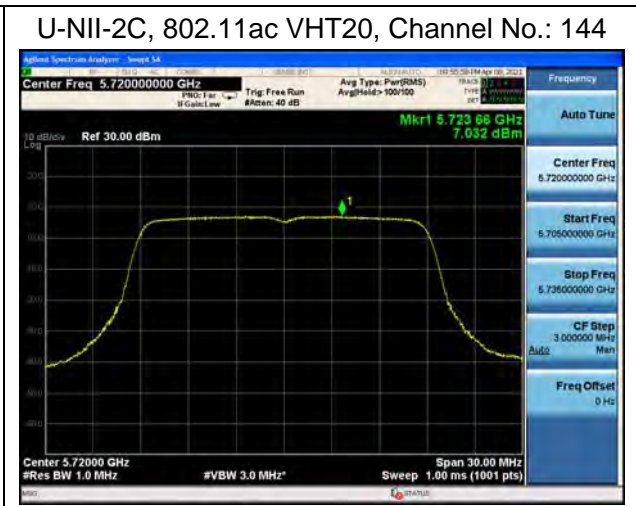
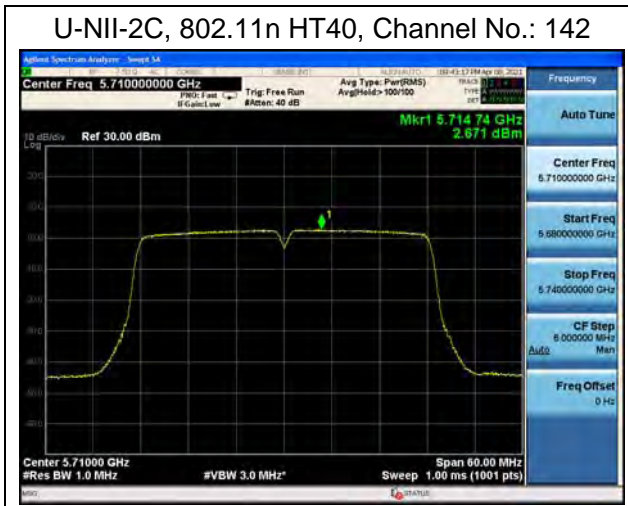
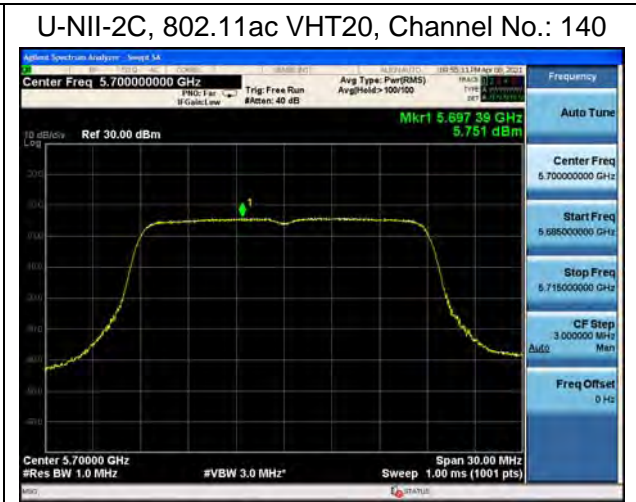
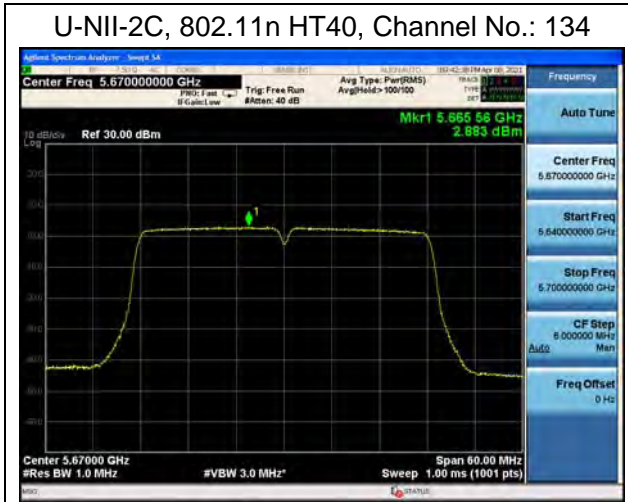


U-NII-2C, 802.11n HT40, Channel No.: 110



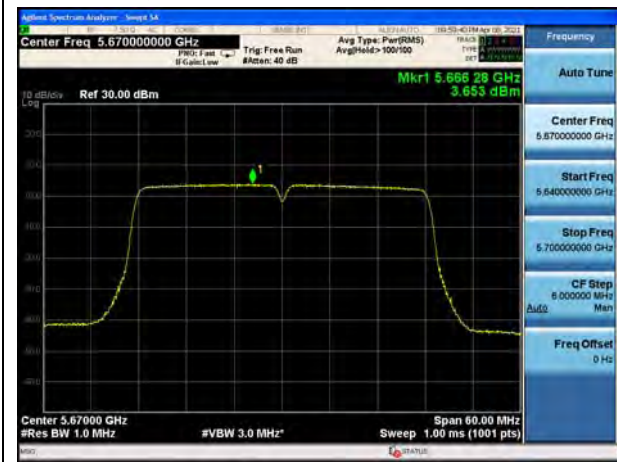
U-NII-2C, 802.11ac VHT20, Channel No.: 116







U-NII-2C, 802.11ac VHT40, Channel No.: 134



U-NII-2C, 802.11ac VHT40, Channel No.: 142



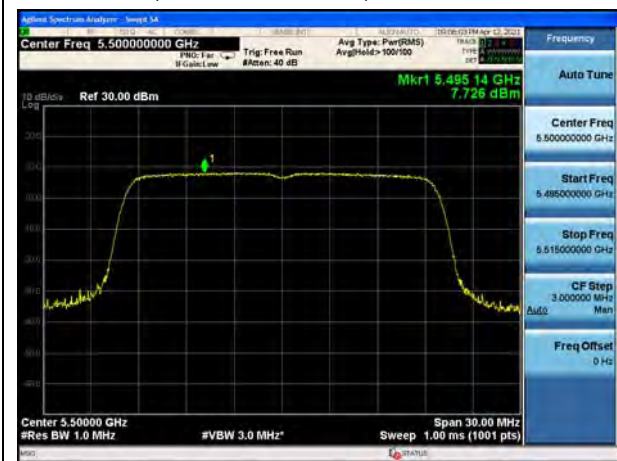
U-NII-2C, 802.11ac VHT80, Channel No.: 106



U-NII-2C, 802.11ac VHT80, Channel No.: 138



U-NII-2C, 802.11ax HE20, Channel No.: 100



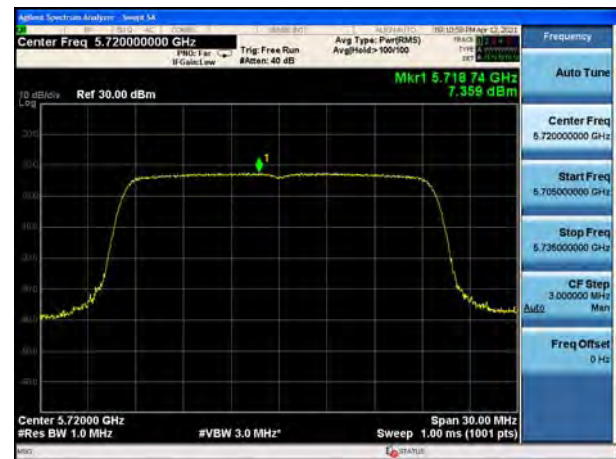
U-NII-2C, 802.11ax HE20, Channel No.: 116



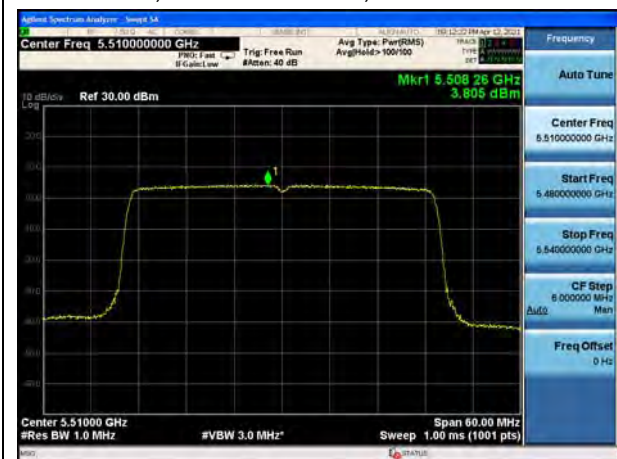
U-NII-2C, 802.11ax HE20, Channel No.: 140



U-NII-2C, 802.11ax HE20, Channel No.: 144



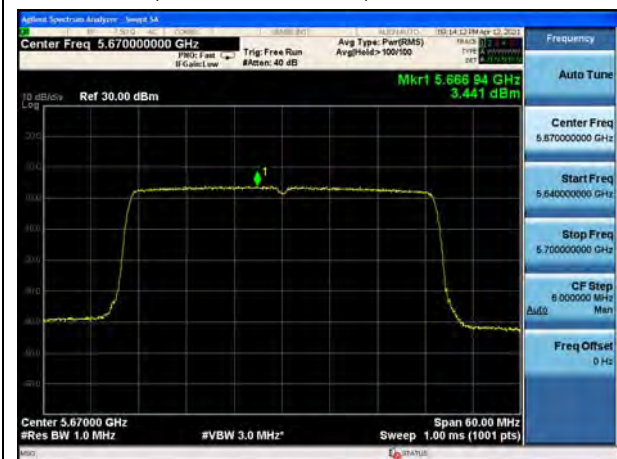
U-NII-2C, 802.11ax HE40, Channel No.: 102



U-NII-2C, 802.11ax HE40, Channel No.: 110

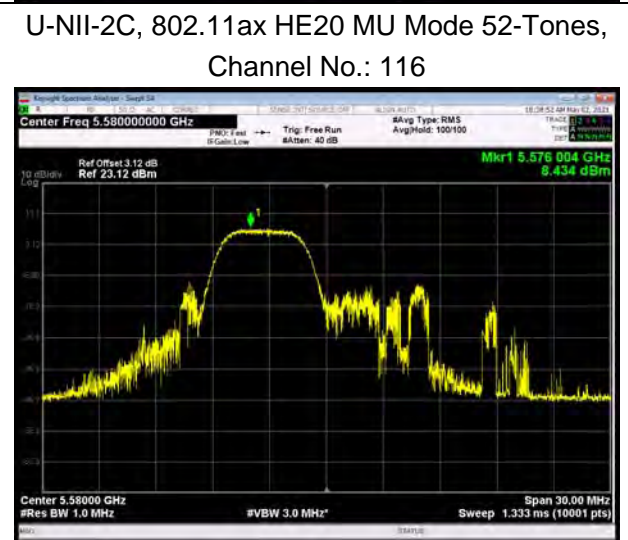
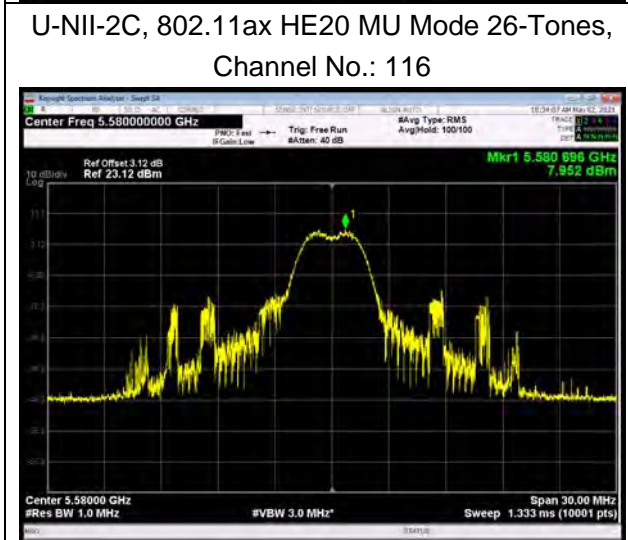
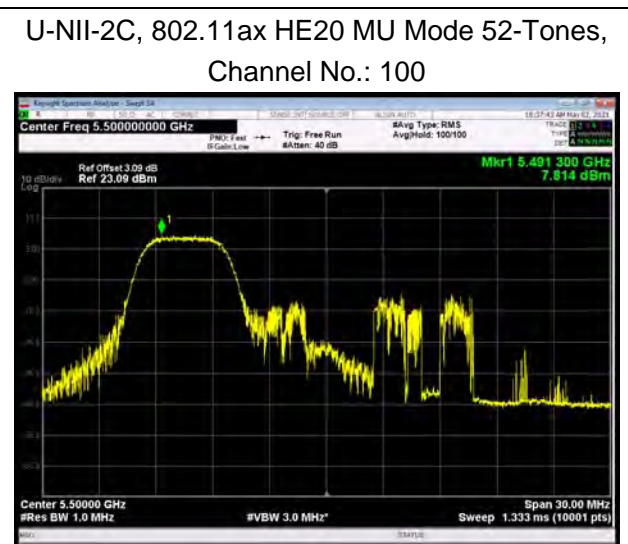
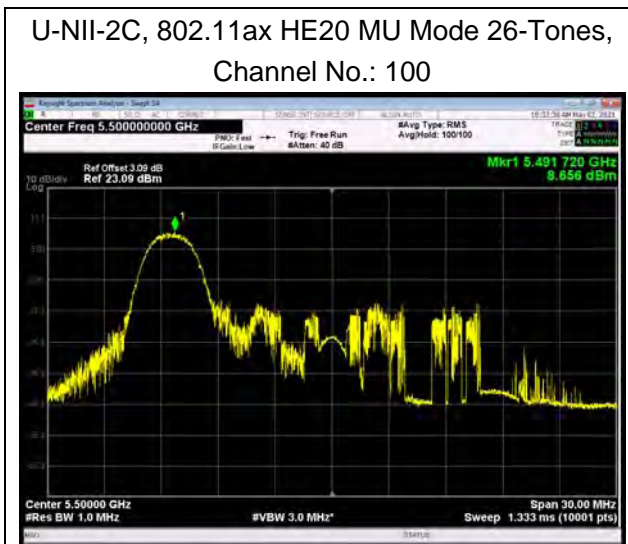
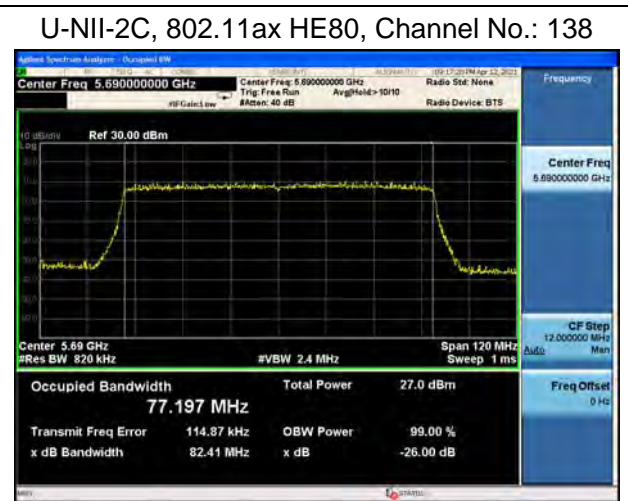
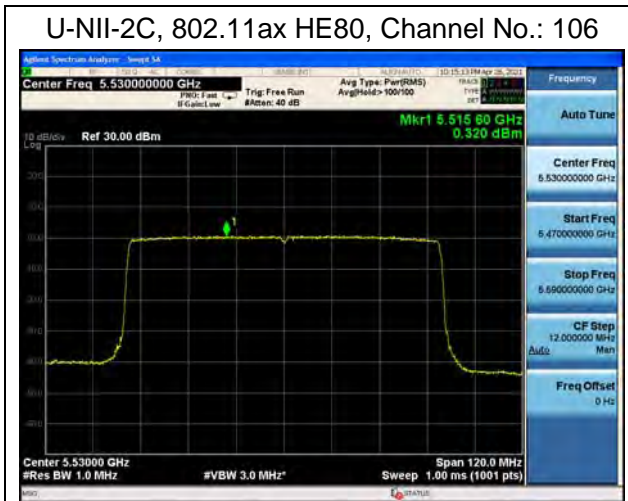


U-NII-2C, 802.11ax HE40, Channel No.: 134

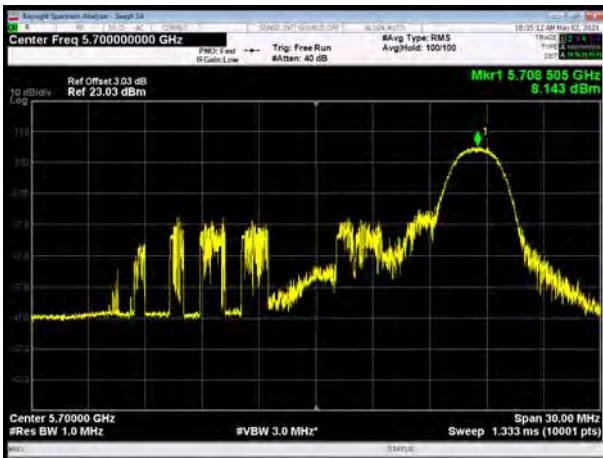


U-NII-2C, 802.11ax HE40, Channel No.: 142

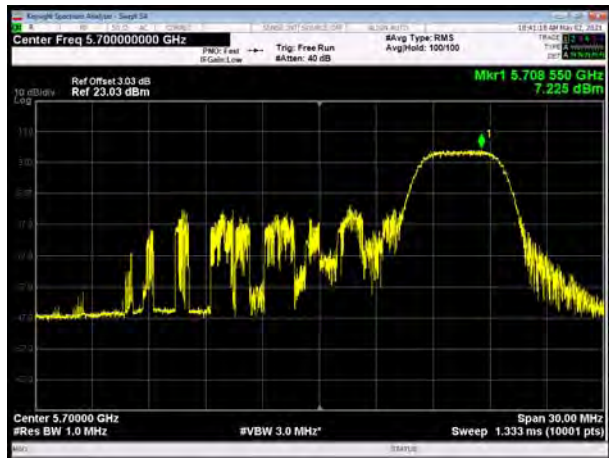




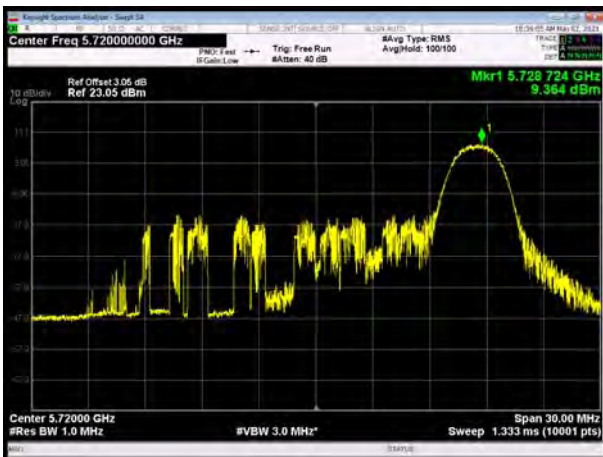
U-NII-2C, 802.11ax HE20 MU Mode 26-Tones,
Channel No.: 140



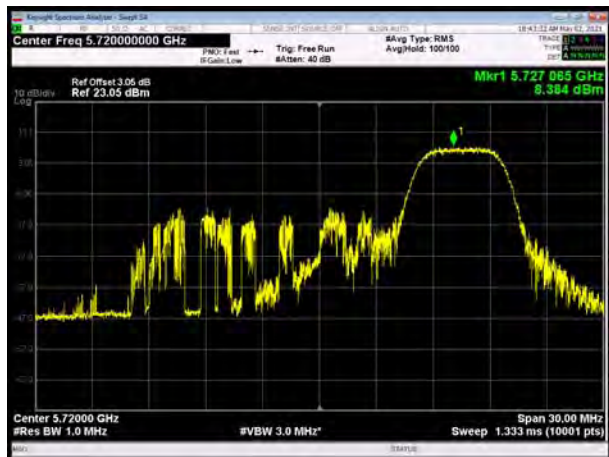
U-NII-2C, 802.11ax HE20 MU Mode 52-Tones,
Channel No.: 140



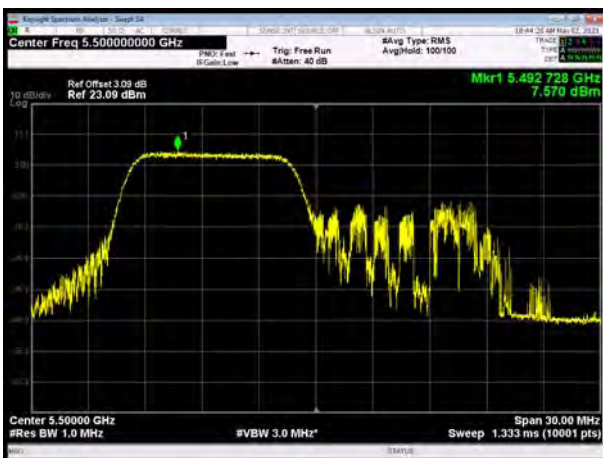
U-NII-2C, 802.11ax HE20 MU Mode 26-Tones,
Channel No.: 144



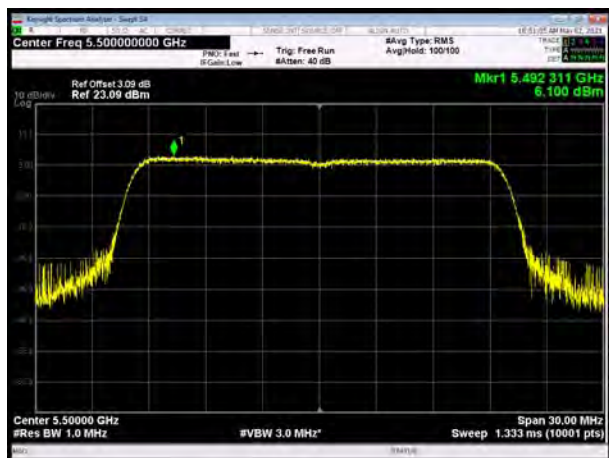
U-NII-2C, 802.11ax HE20 MU Mode 52-Tones,
Channel No.: 144



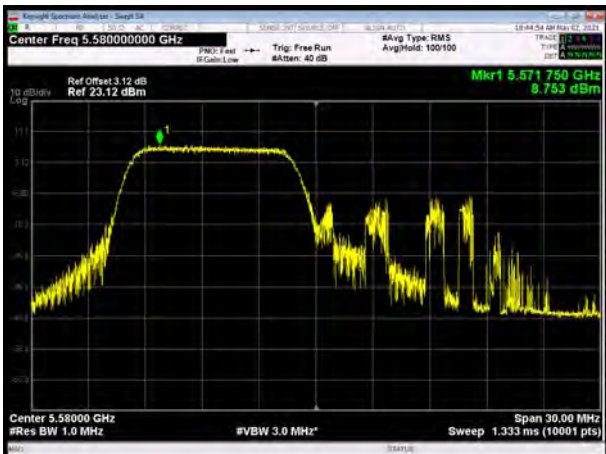
U-NII-2C, 802.11ax HE20 MU Mode 106-Tones,
Channel No.: 100



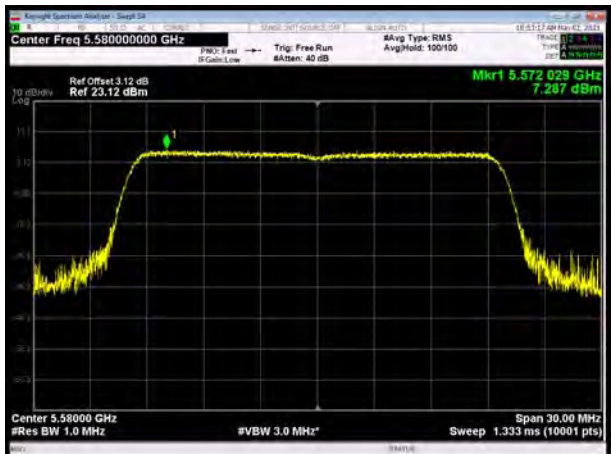
U-NII-2C, 802.11ax HE20 SU Mode 242-Tones,
Channel No.: 100



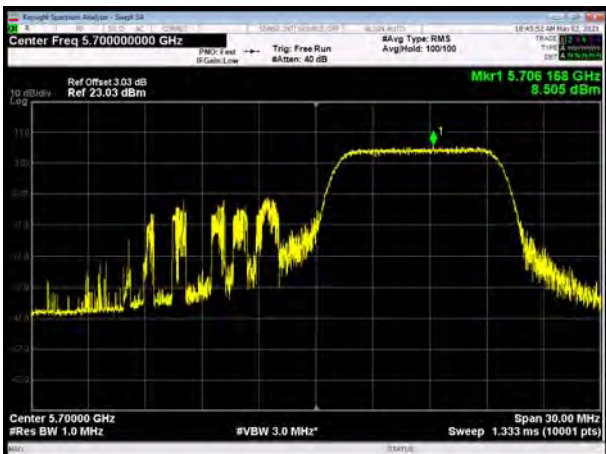
U-NII-2C, 802.11ax HE20 MU Mode 106-Tones,
Channel No.: 116



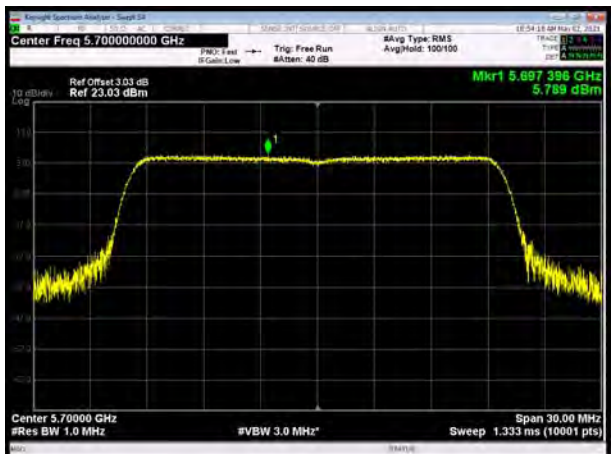
U-NII-2C, 802.11ax HE20 SU Mode 242-Tones,
Channel No.: 116



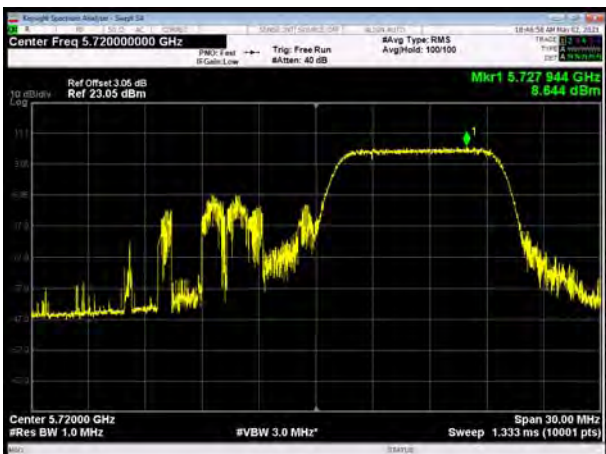
U-NII-2C, 802.11ax HE20 MU Mode 106-Tones,
Channel No.: 140



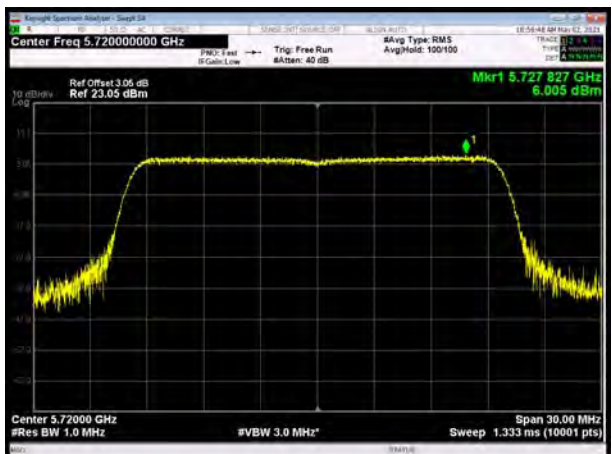
U-NII-2C, 802.11ax HE20 SU Mode 242-Tones,
Channel No.: 140



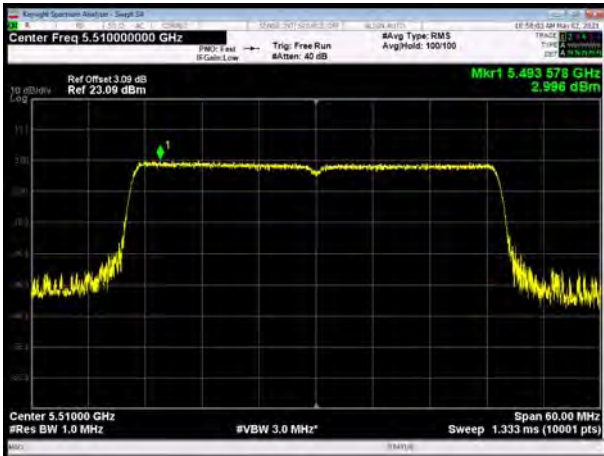
U-NII-2C, 802.11ax HE20 MU Mode 106-Tones,
Channel No.: 144



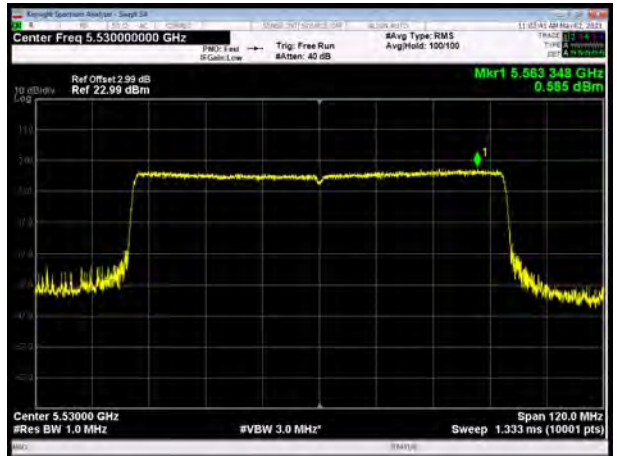
U-NII-2C, 802.11ax HE20 SU Mode 242-Tones,
Channel No.: 144



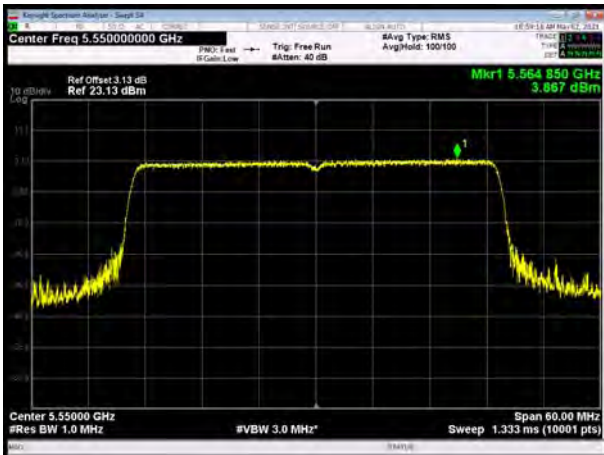
U-NII-2C, 802.11ax HE40 SU Mode 484-Tones,
Channel No.: 102



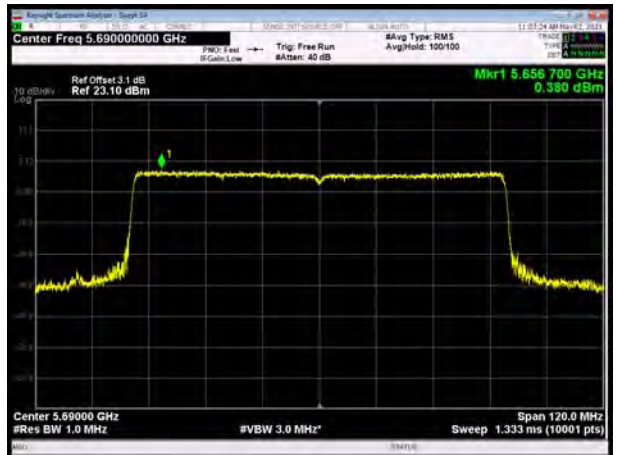
U-NII-2C, 802.11ax HE80 SU Mode 996-Tones,
Channel No.: 106



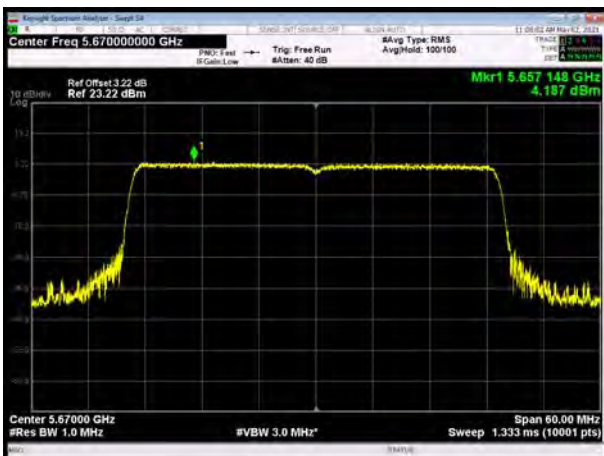
U-NII-2C, 802.11ax HE40 SU Mode 484-Tones,
Channel No.: 110



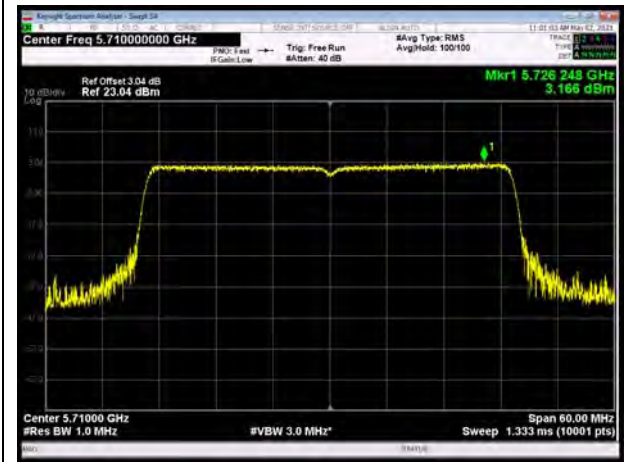
U-NII-2C, 802.11ax HE80 SU Mode 996-Tones,
Channel No.: 138



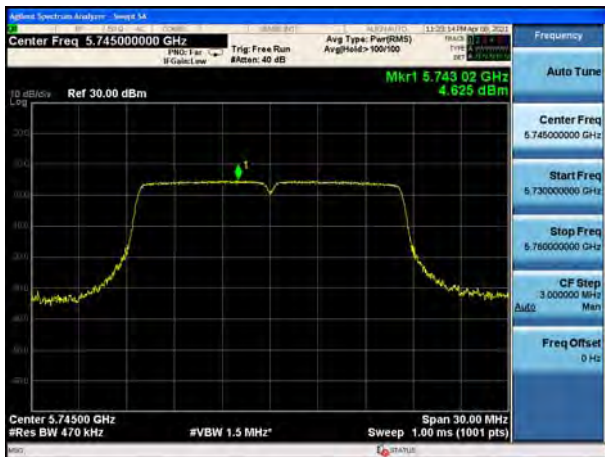
U-NII-2C, 802.11ax HE40 SU Mode 484-Tones,
Channel No.: 134



U-NII-2C, 802.11ax HE40 SU Mode 484-Tones,
Channel No.: 142



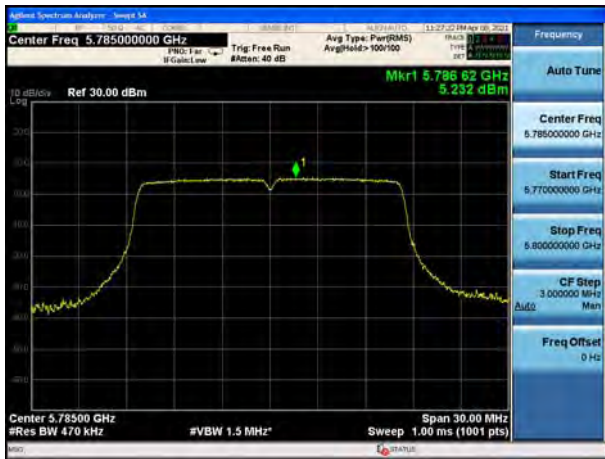
U-NII-3, 802.11a, Channel No.: 149



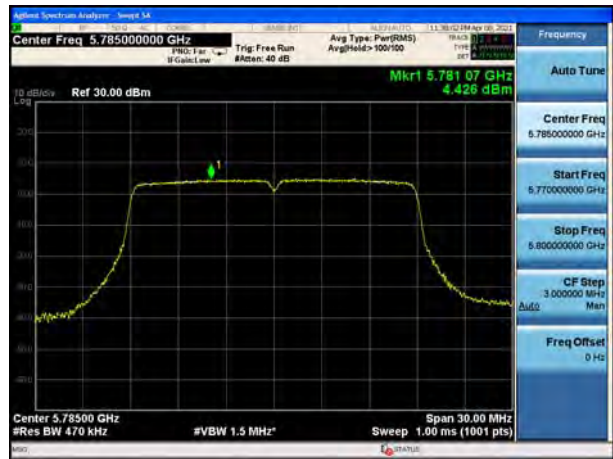
U-NII-3, 802.11n HT20, Channel No.: 149



U-NII-3, 802.11a, Channel No.: 157



U-NII-3, 802.11n HT20, Channel No.: 157





U-NII-3, 802.11a, Channel No.: 165



U-NII-3, 802.11n HT20, Channel No.: 165



U-NII-3, 802.11n HT40, Channel No.: 151



U-NII-3, 802.11ac VHT20, Channel No.: 149



U-NII-3, 802.11n HT40, Channel No.: 159



U-NII-3, 802.11ac VHT20, Channel No.: 157



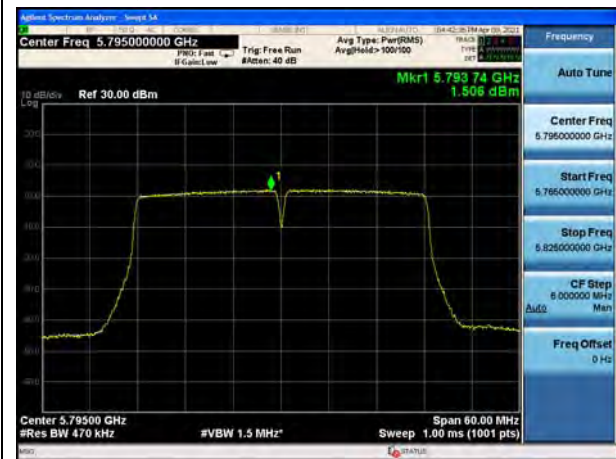
U-NII-3, 802.11ac VHT40, Channel No.: 151



U-NII-3, 802.11ac VHT20, Channel No.: 165



U-NII-3, 802.11ac VHT40, Channel No.: 159



U-NII-3, 802.11ac VHT80, Channel No.: 155



U-NII-3, 802.11ax HE20, Channel No.: 149



U-NII-3, 802.11ax HE40, Channel No.: 151

