RF TEST REPORT

Applicant	Xiaomi Communications Co., Ltd.
FCC ID	2AFZZJ20SG
Product	Mobile Phone
Brand	POCO
Model	M2102J20SG
Report No.	R2012A0844-R6
Issue Date	January 19, 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.

Prepared by: Peng Tao *Approved by: Kai Xu*

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Summary of measurement results

Number	Test Case	Clause in FCC rules	Verdict
1	Average output power	15.407(a)	PASS
2	Occupied bandwidth	15.407(e)	PASS
3	Frequency stability	15.407(g)	PASS
4	Power spectral density	15.407(a)	PASS
5	Unwanted Emissions	15.407(b)	PASS
6	Conducted Emissions	15.207	PASS
Date of Testing: December 19, 2020 ~January 12, 2021			
Date of Sample Received: December 14, 2020			
Note: 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
Contact:	Xu Kai
Telephone:	+86-021-50791141/2/3
Fax:	+86-021-50791141/2/3-8000
Website:	http://www.ta-shanghai.com
E-mail:	xukai@ta-shanghai.com

2. General Description of Equipment under Test

2.1. Applicant and Manufacturer Information

Applicant	Xiaomi Communications Co., Ltd.
Applicant address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Manufacturer	Xiaomi Communications Co., Ltd.
Manufacturer address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

2.2. General information

EUT Description			
Model	M2102J20SG		
IMEI	IMEI 1: 864460050025122 IMEI 2: 864460050025130		
Hardware Version	P1		
Software Version	MIUI12		
Power Supply	Battery / AC adapter		
Antenna Type	Internal Antenna		
Antenna Gain	Band	SISO Antenna 1 (dBi)	SISO Antenna 2 (dBi)
	U-NII-1	-2.25	1.44
	U-NII-2A	-2.25	1.44
	U-NII-2C	-3.81	1.59
	U-NII-3	-2.92	-0.5
Directional Gain	Mode	Band	Directional Gain(dBi)
	Without Beamforming Mode for Power	U-NII-1	1.44
		U-NII-2A	1.44
		U-NII-2C	1.59
		U-NII-3	-0.5
	Without Beamforming Mode for PSD	U-NII-1	4.45
		U-NII-2A	4.45
		U-NII-2C	4.6
		U-NII-3	2.51
	With Beamforming Mode for Power	U-NII-1	4.45
		U-NII-2A	4.45
		U-NII-2C	4.6
		U-NII-3	2.51
	With	U-NII-1	4.45

	Beamforming Mode for PSD	U-NII-2A	4.45
		U-NII-2C	4.6
		U-NII-3	2.51
Test Band/ Operating Frequency Range(s)	U-NII-1(5150MHz-5250MHz) U-NII-2A(5250MHz-5350MHz) U-NII-2C(5470MHz-5725MHz) U-NII-3(5725MHz-5850MHz)		
Modulation Type	802.11a/n (HT20/HT40) : OFDM 802.11ac (VHT20/VHT40/VHT80): OFDM		
Max. Conducted Power	20.73dBm		
Extreme Temperature	-20°C ~ +50°C		
Operating temperature range:	0°C ~ +40°C		
Operating voltage range:	3.6V~ 4.4V		
State DC voltage:	3.87V		
Note:1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.			

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 lie-down 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	MCS0
802.11ac VHT40	MCS0	MCS0	MCS0
802.11ac VHT80	MCS0	MCS0	MCS0

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	O
Occupied bandwidth	--	--	O
Frequency stability	--	--	O
Power Spectral Density	O	O	O
Unwanted Emissions	--	--	O
Conducted Emissions	--	--	802.11ac VHT80
Note：“O”: test all bands			

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

Wireless Technology and Frequency Range

Wireless Technology		Bandwidth	Channel	Frequency
Wi-Fi	U-NII-1	20 MHz	36	5180MHz
			40	5200MHz
			44	5220MHz
			48	5240MHz
		40 MHz	38	5190MHz
			46	5230MHz
		80 MHz	42	5210MHz
	U-NII-2A	20 MHz	52	5260MHz
			56	5280MHz
			60	5300MHz
			64	5320MHz
		40 MHz	54	5270MHz
			62	5310MHz
		80 MHz	58	5290MHz
	U-NII-2C	20 MHz	100	5500MHz
			104	5520MHz
			108	5540MHz
			112	5560MHz
			116	5580MHz
			120	5600MHz
			124	5620MHz
			128	5640MHz
			132	5660MHz
			136	5680MHz
			140	5700MHz
		40 MHz	102	5510MHz
			110	5550MHz
			118	5590MHz
			126	5630MHz
			134	5670MHz
			142	5710MHz
		80 MHz	106	5530MHz
			122	5610MHz
			138	5690MHz
	U-NII-3	20 MHz	149	5745MHz
			153	5765MHz
			157	5785MHz
			161	5805MHz

			165	5825MHz
		40 MHz	151	5755MHz
			159	5795MHz
		80 MHz	155	5775MHz
Does this device support TPC Function? ☐Yes ☒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.

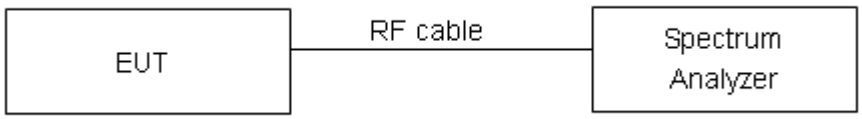
For U-NII-1/U-NII-2A/U-NII-2C, set RBW ≈1% OCB kHz, VBW ≥ 3 × RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in the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

For U-NII-3, Set RBW = 100 kHz, VBW ≥ 3 × 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	Channel/Frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	36/5180	16.511	21.68	PASS
	40/5200	16.555	22.02	PASS
	48/5240	16.521	21.94	PASS
802.11n HT20	36/5180	17.679	21.73	PASS
	40/5200	17.737	22.22	PASS
	48/5240	17.682	21.59	PASS
802.11n HT40	38/5190	36.136	41.07	PASS
	46/5230	36.068	40.60	PASS
802.11ac VHT20	36/5180	17.686	22.11	PASS
	40/5200	17.752	22.91	PASS
	48/5240	17.690	23.05	PASS
802.11ac VHT40	38/5190	36.123	40.80	PASS
	46/5230	36.096	40.49	PASS
802.11ac VHT80	42/5210	75.555	83.19	PASS

U-NII-2A

Mode	Channel/Frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	52/5260	16.546	21.42	PASS
	60/5300	16.556	21.95	PASS
	64/5320	16.535	21.67	PASS
802.11n HT20	52/5260	17.751	23.92	PASS
	60/5300	17.725	21.99	PASS
	64/5320	17.695	21.93	PASS
802.11n HT40	54/5270	36.178	40.99	PASS
	62/5310	36.246	41.18	PASS
802.11ac VHT20	52/5260	17.754	22.16	PASS
	60/5300	17.719	21.08	PASS
	64/5320	17.697	21.61	PASS
802.11ac VHT40	54/5270	36.153	40.98	PASS
	62/5310	36.228	41.28	PASS
802.11ac VHT80	58/5290	75.508	86.01	PASS

U-NII-2C

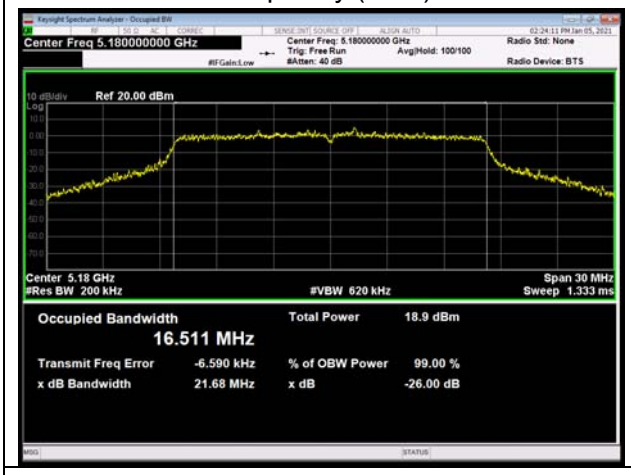
	Channel/Frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	100/5500	16.501	20.44	PASS
	120/5600	16.562	21.96	PASS
	140/5700	16.523	21.31	PASS
	144/5720	16.495	21.37	PASS
802.11n HT20	100/5500	17.707	22.69	PASS
	120/5600	17.739	22.84	PASS
	140/5700	17.718	22.70	PASS
	144/5720	17.685	22.02	PASS
802.11n HT40	102/5510	36.265	41.17	PASS
	118/5590	36.211	41.44	PASS
	134/5670	36.191	41.25	PASS
	142/5710	36.204	41.13	PASS
802.11ac VHT20	100/5500	17.715	22.63	PASS
	120/5600	17.701	22.04	PASS
	140/5700	17.719	23.91	PASS
	144/5720	17.681	20.93	PASS
802.11ac VHT40	102/5510	36.202	41.64	PASS
	118/5590	36.212	40.83	PASS
	134/5670	36.184	40.67	PASS
	142/5710	36.227	40.90	PASS
802.11ac VHT80	122/5610	75.529	82.59	PASS
	138/5690	75.510	85.63	PASS

U-NII-3

Mode	Channel/Frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (MHz)	Conclusion
802.11a	149/5745	16.516	16.01	0.5	PASS
	157/5785	16.506	15.26	0.5	PASS
	165/5825	16.474	15.11	0.5	PASS
802.11n HT20	149/5745	17.720	16.89	0.5	PASS
	157/5785	17.681	14.75	0.5	PASS
	165/5825	17.638	12.58	0.5	PASS
802.11n HT40	151/5755	36.298	36.32	0.5	PASS
	159/5795	36.282	35.90	0.5	PASS
802.11ac VHT20	149/5745	17.754	14.65	0.5	PASS
	157/5785	17.719	15.43	0.5	PASS
	165/5825	17.665	16.66	0.5	PASS
802.11ac VHT40	151/5755	36.305	36.01	0.5	PASS
	159/5795	36.253	35.73	0.5	PASS
802.11ac VHT80	155/5775	75.512	75.09	0.5	PASS

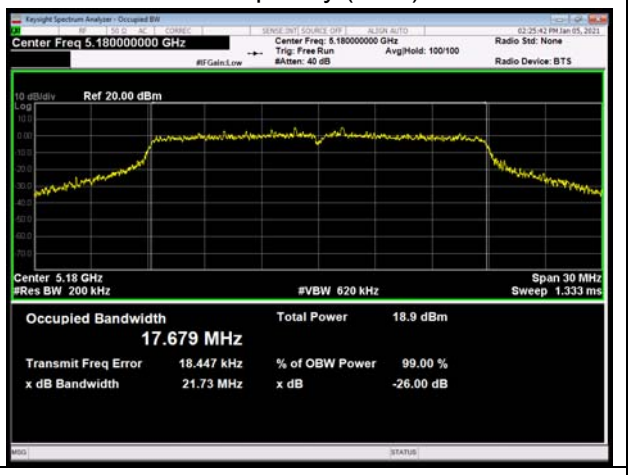
U-NII-1, 802.11a

Carrier frequency (MHz): 5180



U-NII-1, 802.11n HT20

Carrier frequency (MHz): 5180



U-NII-1, 802.11a

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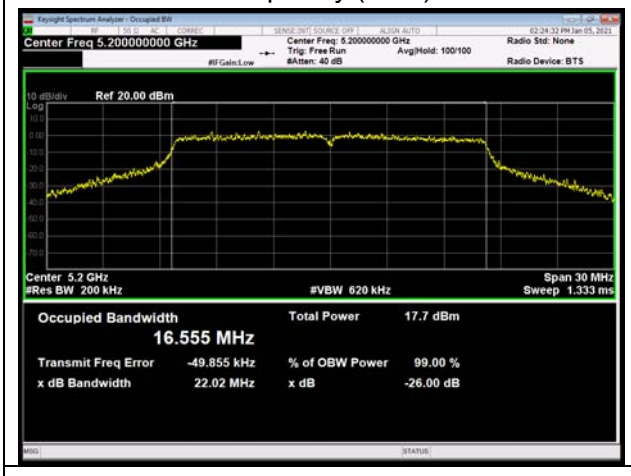

U-NII-1, 802.11n HT20

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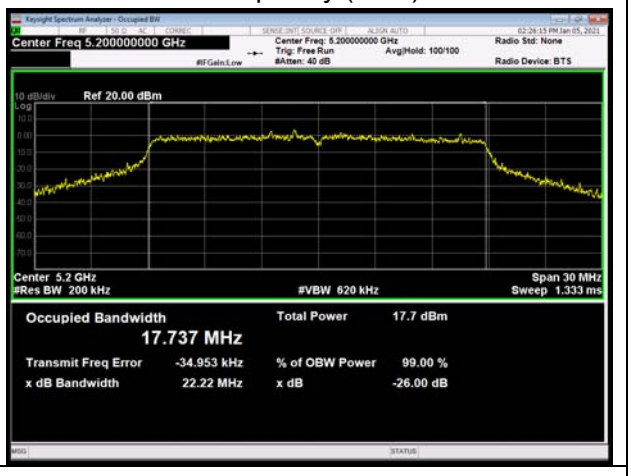

U-NII-1, 802.11a

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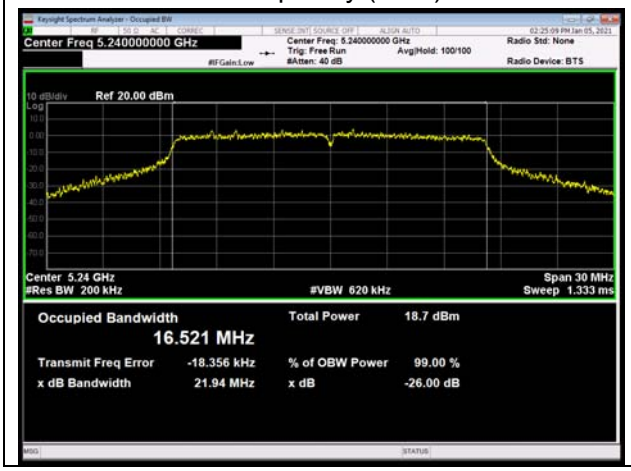
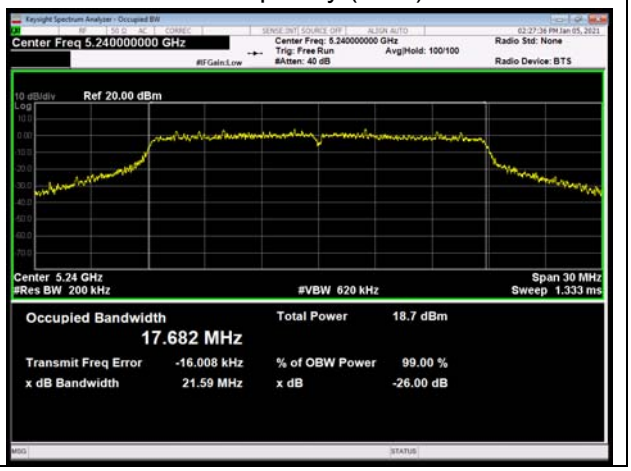


U-NII-1, 802.11n HT20

Carrier frequency (MHz):5240

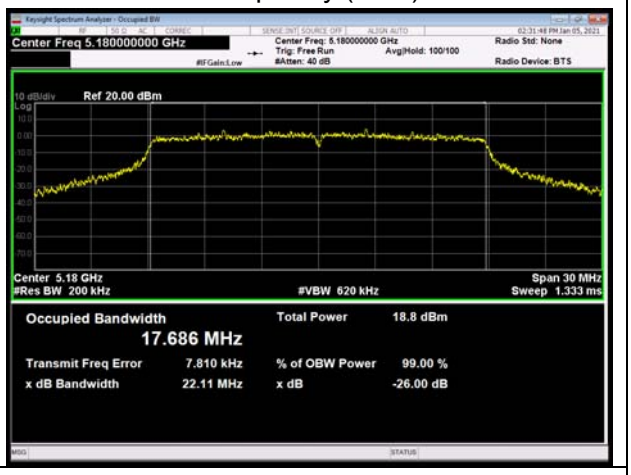


U-NII-1, 802.11n HT40

Carrier frequency (MHz): 5190

U-NII-1, 802.11ac VHT20

Carrier frequency (MHz): 5180

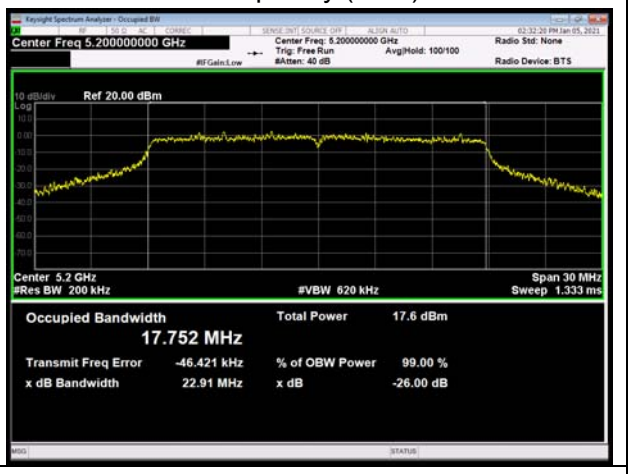


U-NII-1, 802.11n HT40

Carrier frequency (MHz): 5230

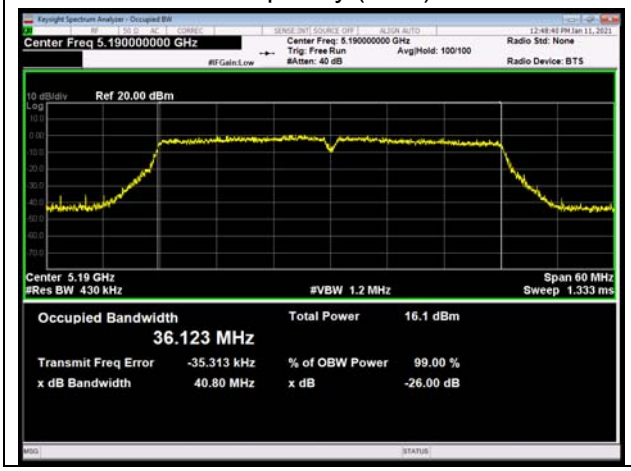
U-NII-1, 802.11ac VHT20

Carrier frequency (MHz): 5200



U-NII-1, 802.11ac VHT40

Carrier frequency (MHz): 5190



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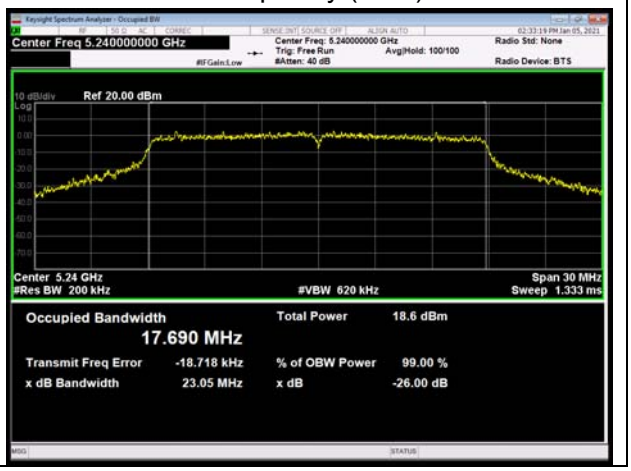
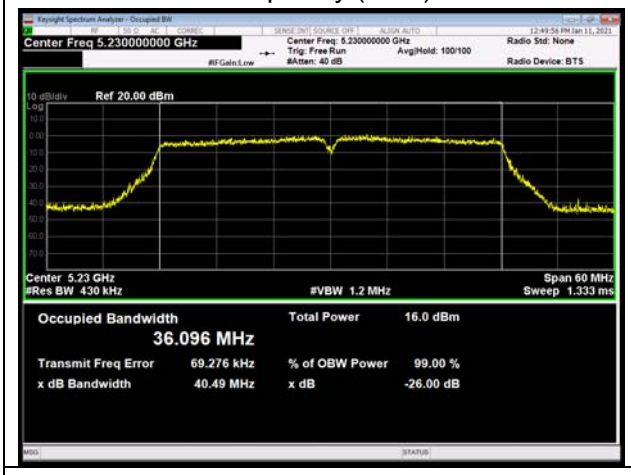


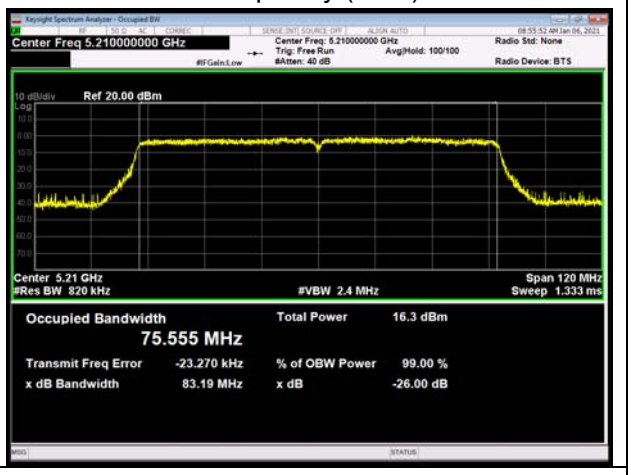
U-NII-1, 802.11ac VHT40

Carrier frequency (MHz): 5230



U-NII-1, 802.11ac VHT80

Carrier frequency (MHz): 5210

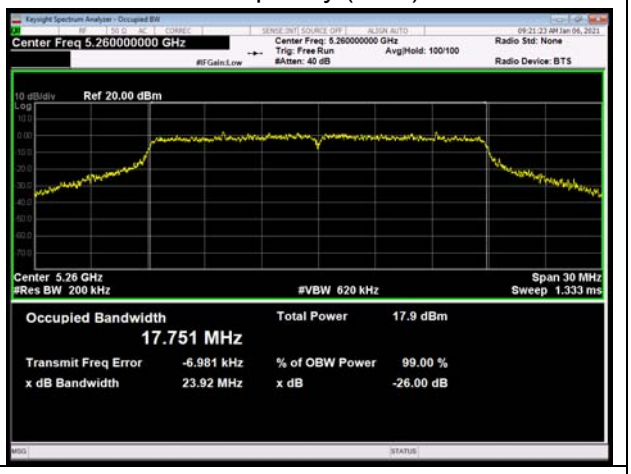


U-NII-2A, 802.11a

Carrier frequency (MHz): 5260

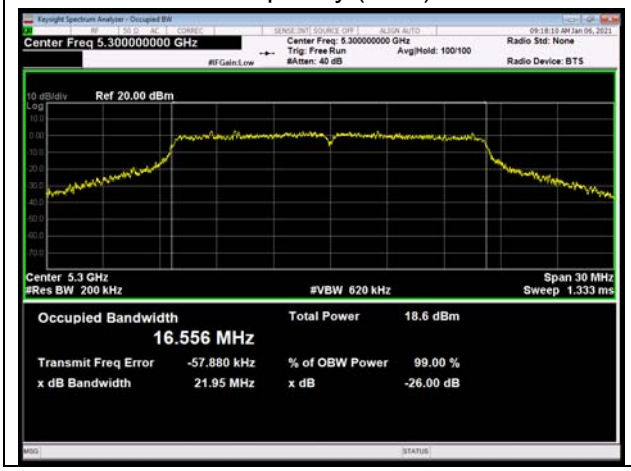
U-NII-2A, 802.11n HT20

Carrier frequency (MHz): 5260



U-NII-2A, 802.11a

Carrier frequency (MHz): 5300



U-NII-2A, 802.11n HT20

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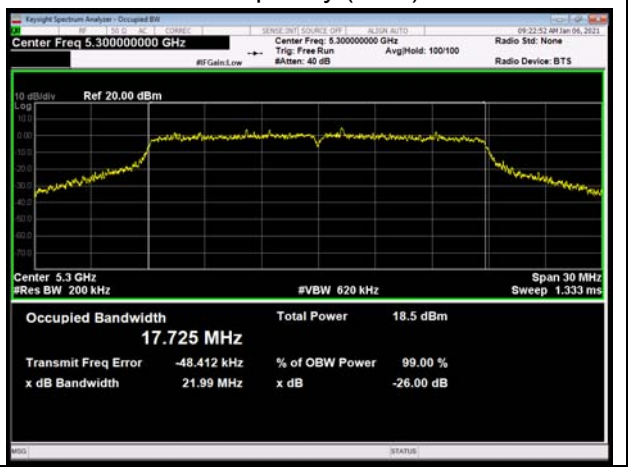
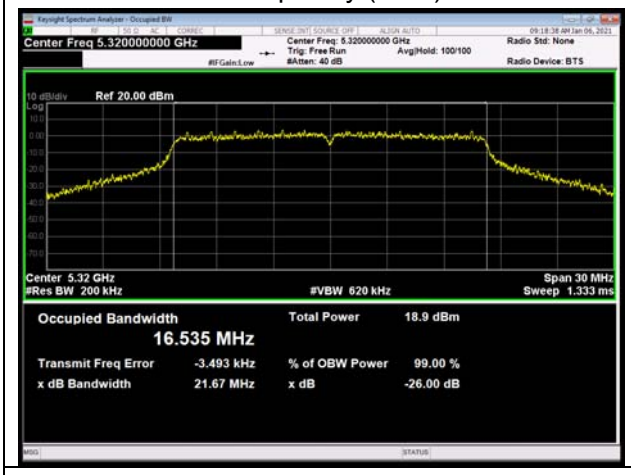


U-NII-2A, 802.11a

Carrier frequency (MHz):5320



U-NII-2A, 802.11n HT20

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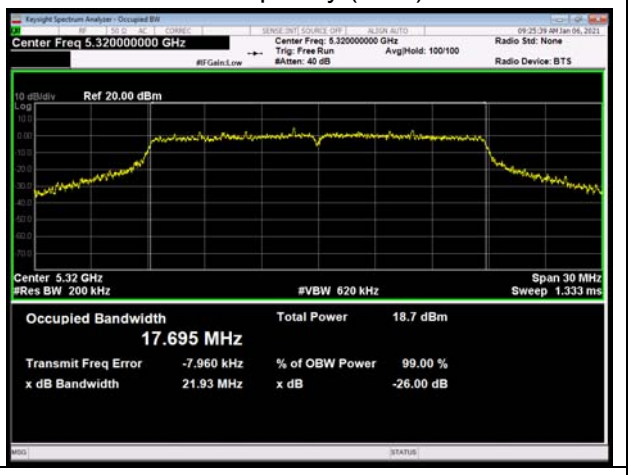
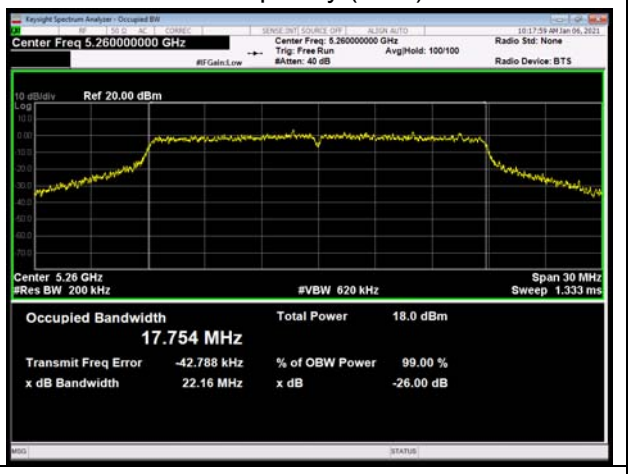


U-NII-2A, 802.11n HT40

Carrier frequency (MHz): 5270

U-NII-2A, 802.11ac VHT20

Carrier frequency (MHz):5260

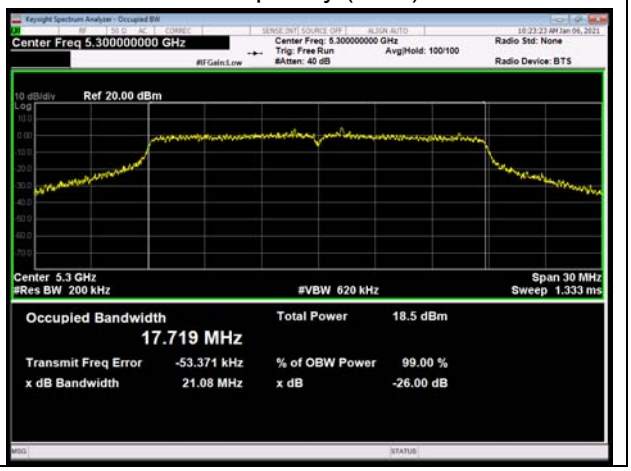


U-NII-2A, 802.11n HT40

Carrier frequency (MHz): 5310

U-NII-2A, 802.11ac VHT20

Carrier frequency (MHz): 5300

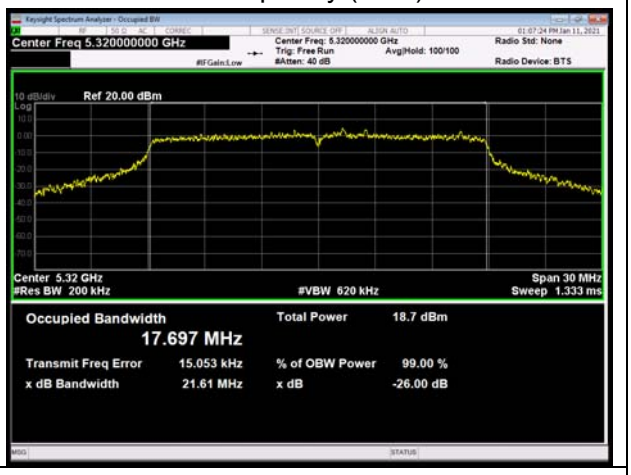


U-NII-2A, 802.11ac VHT40

Carrier frequency (MHz): 5270

U-NII-2A, 802.11ac VHT20

Carrier frequency (MHz):5320

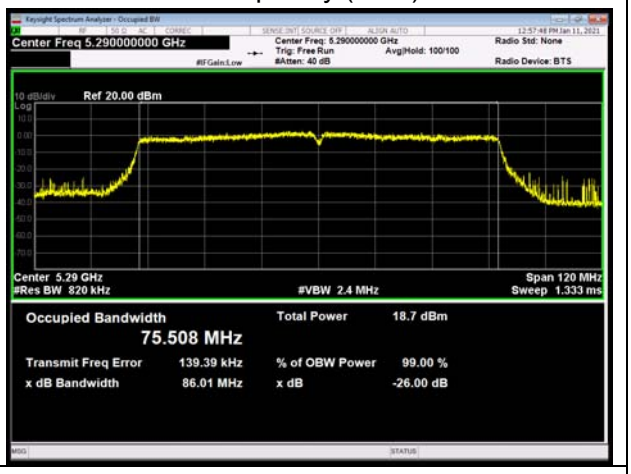


U-NII-2A, 802.11ac VHT40

Carrier frequency (MHz): 5310

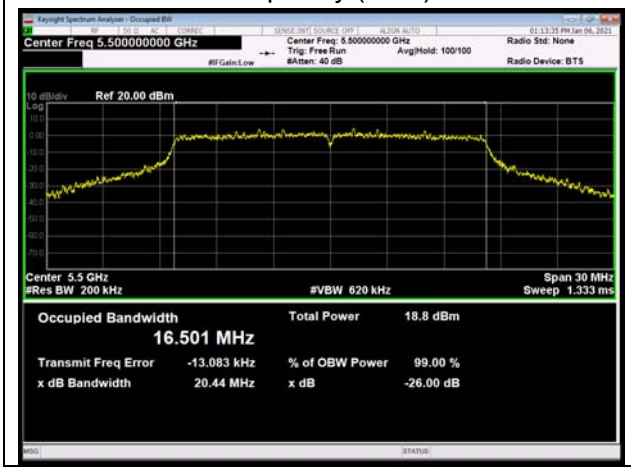
U-NII-2A, 802.11ac VHT80

Carrier frequency (MHz): 5290



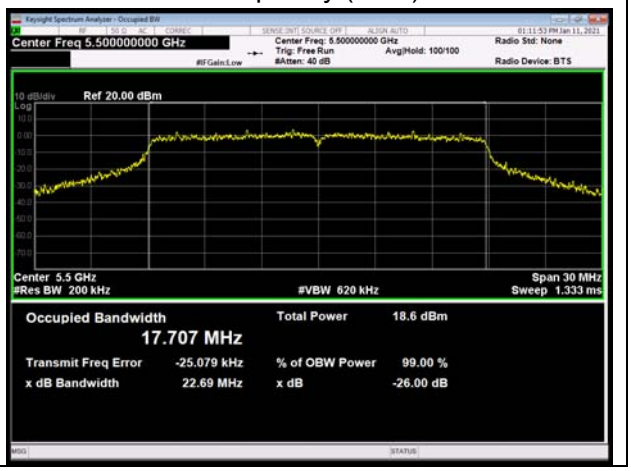
U-NII-2C, 802.11a

Carrier frequency (MHz): 5500



U-NII-2C, 802.11n HT20

Carrier frequency (MHz): 5500

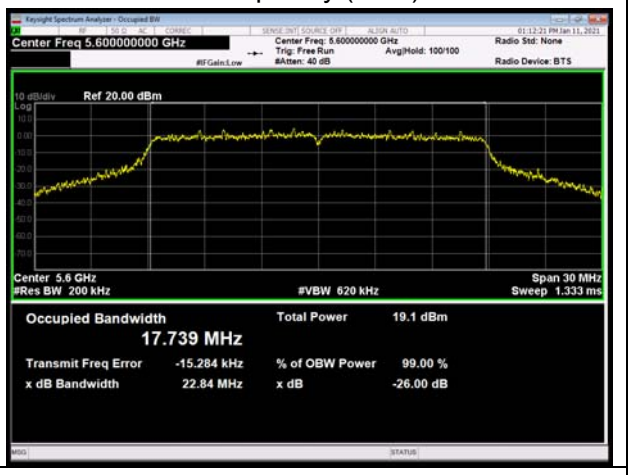


U-NII-2C, 802.11a

Carrier frequency (MHz): 5600

U-NII-2C, 802.11n HT20

Carrier frequency (MHz): 5600

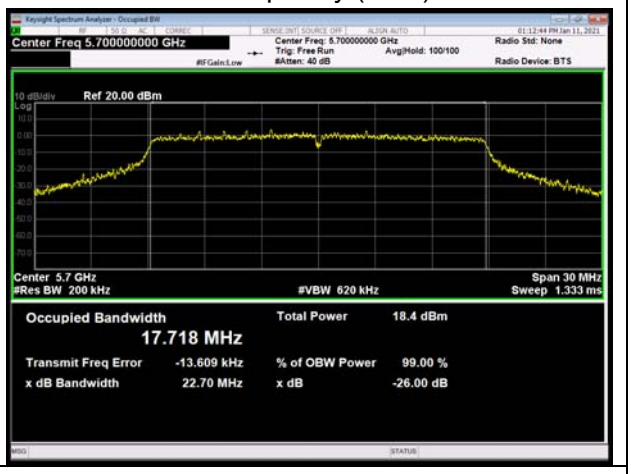


U-NII-2C, 802.11a

Carrier frequency (MHz):5700

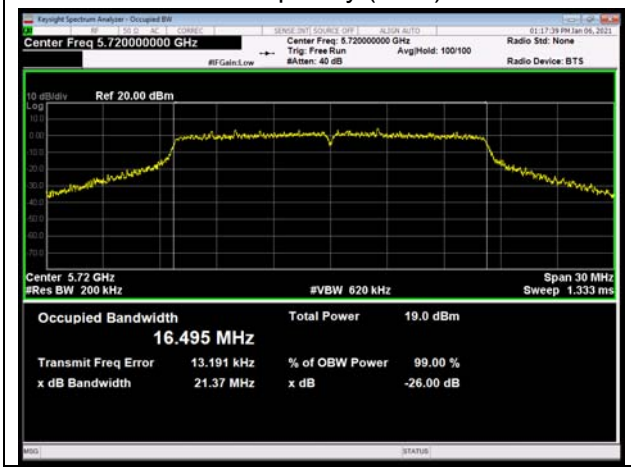
U-NII-2C, 802.11n HT20

Carrier frequency (MHz):5700



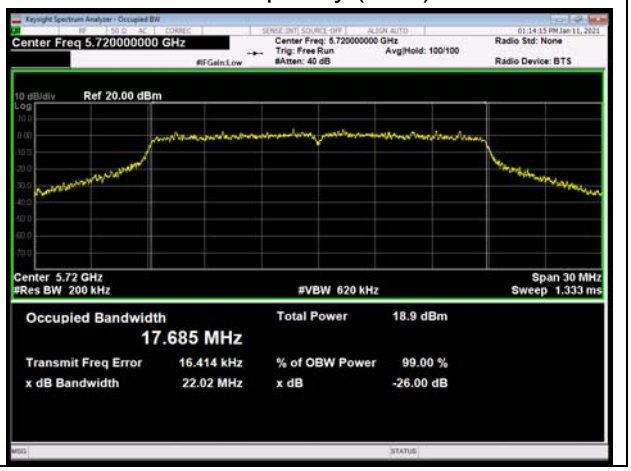
U-NII-2C, 802.11a

Carrier frequency (MHz):5720



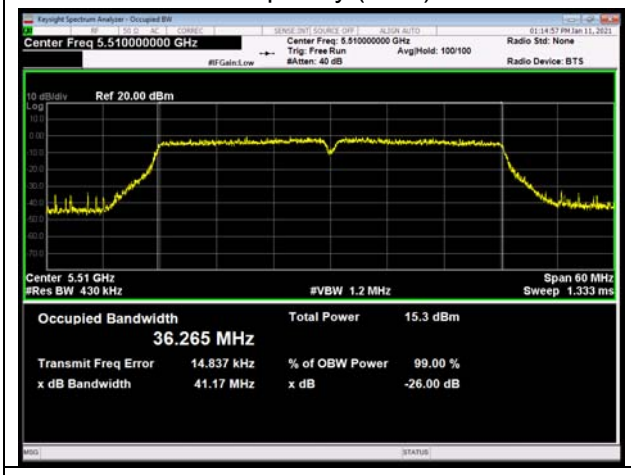
U-NII-2C, 802.11n HT20

Carrier frequency (MHz):5720



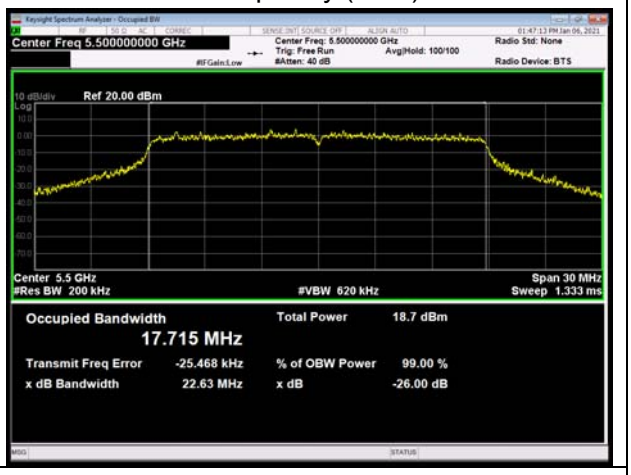
U-NII-2C, 802.11n HT40

Carrier frequency (MHz): 5510



U-NII-2C, 802.11ac VHT20

Carrier frequency (MHz): 5500

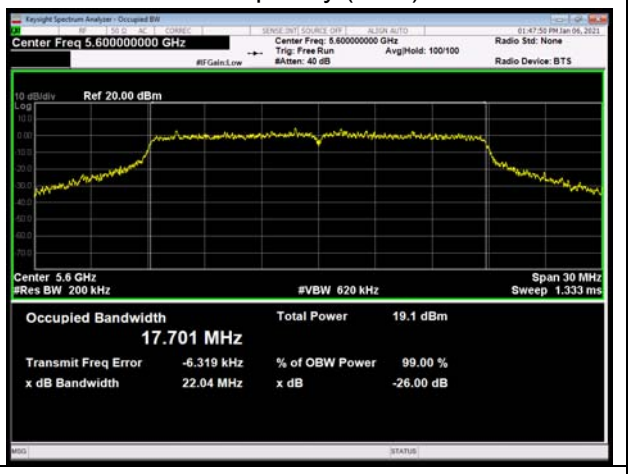


U-NII-2C, 802.11n HT40

Carrier frequency (MHz): 5590

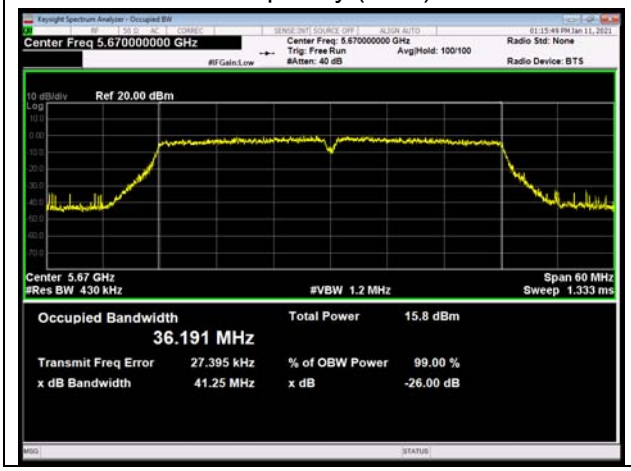
U-NII-2C, 802.11ac VHT20

Carrier frequency (MHz): 5600



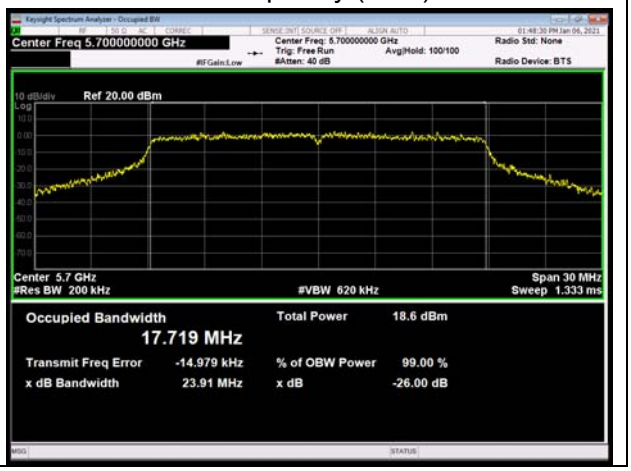
U-NII-2C, 802.11n HT40

Carrier frequency (MHz): 5670

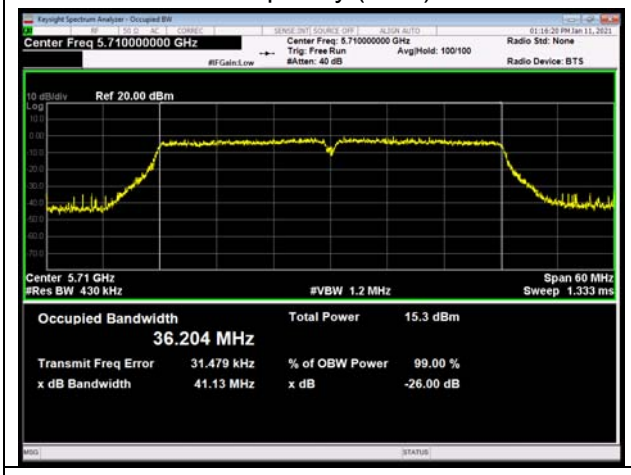


U-NII-2C, 802.11ac VHT20

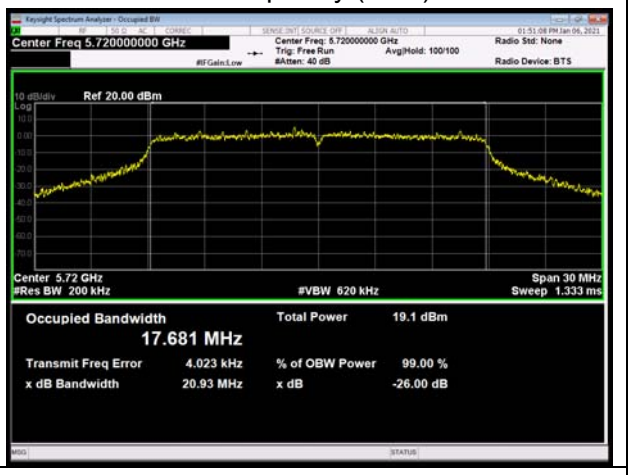
Carrier frequency (MHz):5700



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

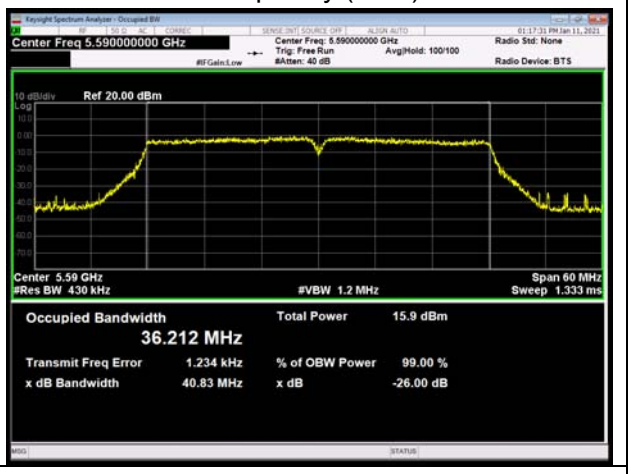


U-NII-2C, 802.11ac VHT20
Carrier frequency (MHz):5720

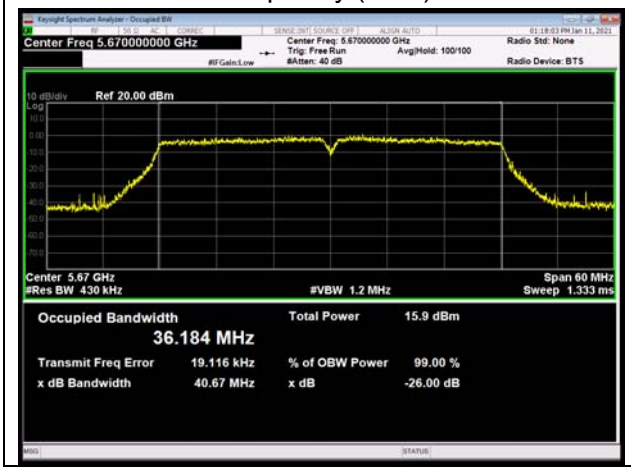


U-NII-2C, 802.11ac VHT40
Carrier frequency (MHz): 5510

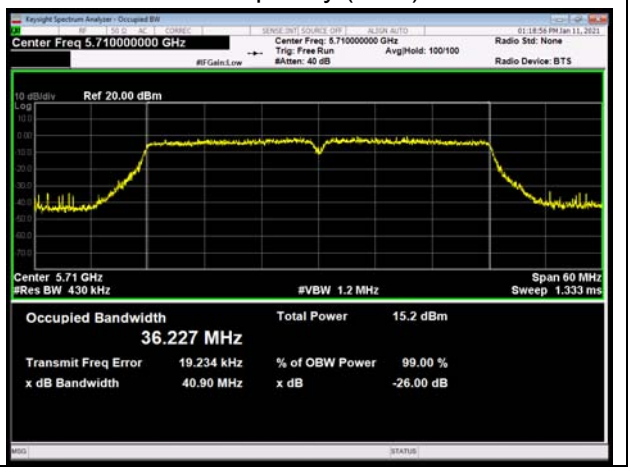
U-NII-2C, 802.11ac VHT40
Carrier frequency (MHz): 5590

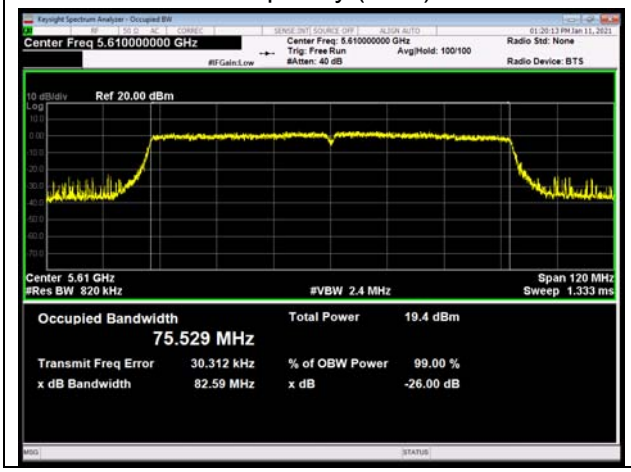


U-NII-2C, 802.11ac VHT40
Carrier frequency (MHz): 5670



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



U-NII-2C, 802.11ac VHT80 Carrier frequency (MHz): 5610	U-NII-2C, 802.11ac VHT80 Carrier frequency (MHz): 5690
	

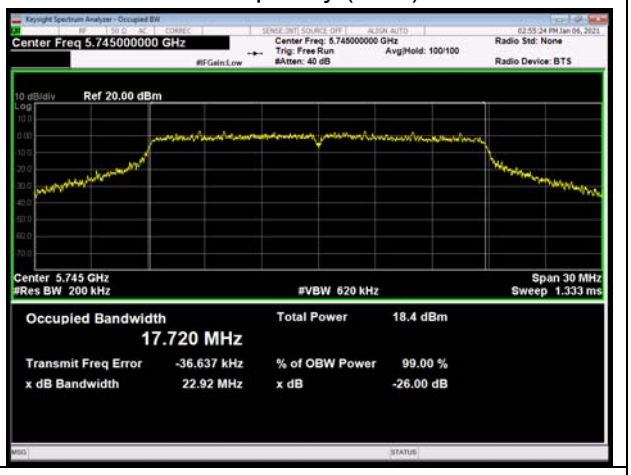
99% bandwidth

U-NII-3, 802.11a

Carrier frequency (MHz): 5745

U-NII-3, 802.11n HT20

Carrier frequency (MHz): 5745



U-NII-3, 802.11a

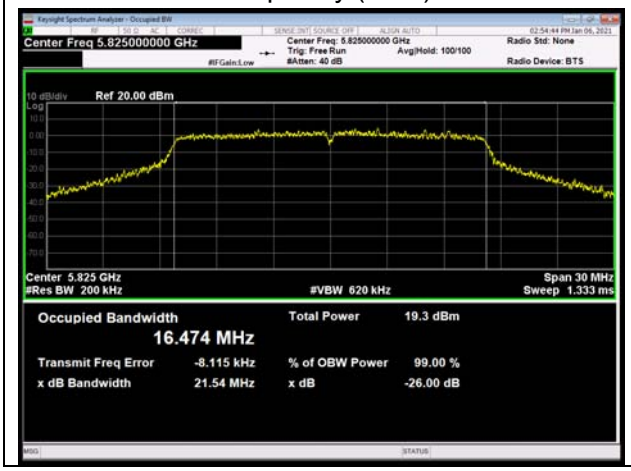
Carrier frequency (MHz): 5785

U-NII-3, 802.11n HT20

Carrier frequency (MHz): 5785

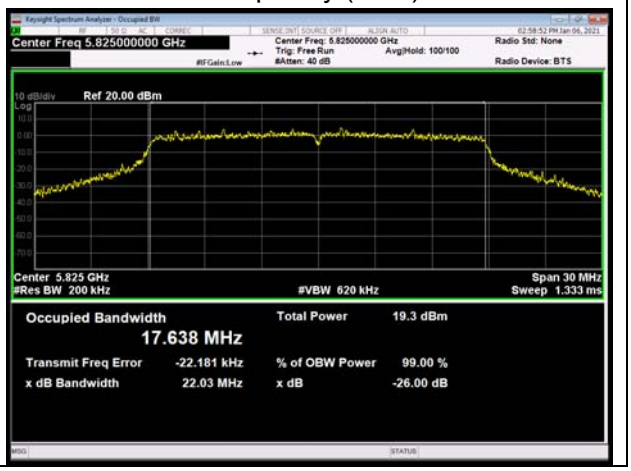
U-NII-3, 802.11a

Carrier frequency (MHz): 5825



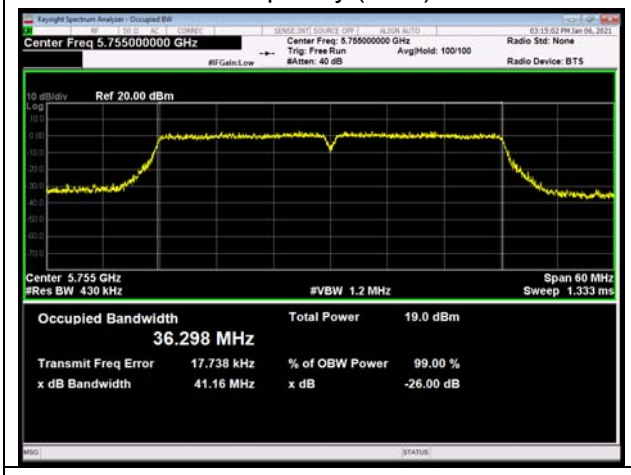
U-NII-3, 802.11n HT20

Carrier frequency (MHz): 5825



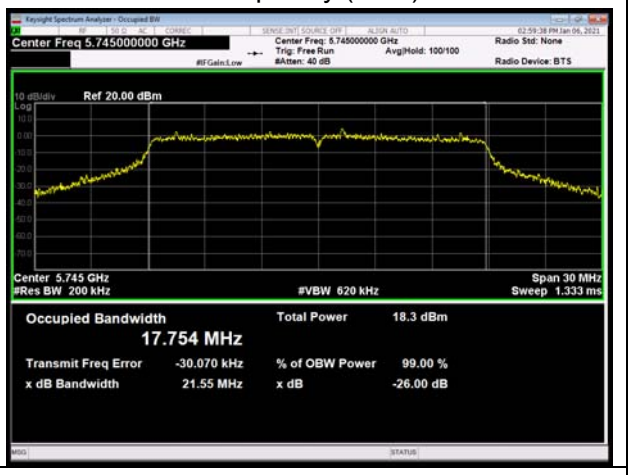
U-NII-3, 802.11n HT40

Carrier frequency (MHz): 5755



U-NII-3, 802.11ac VHT20

Carrier frequency (MHz): 5745

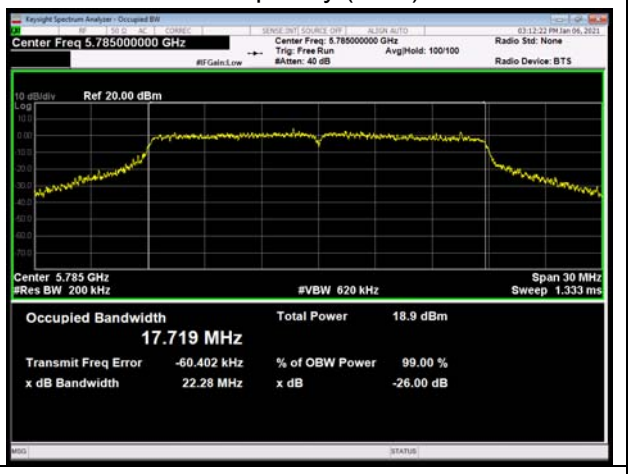


U-NII-3, 802.11n HT40

Carrier frequency (MHz): 5795

U-NII-3, 802.11ac VHT20

Carrier frequency (MHz): 5785

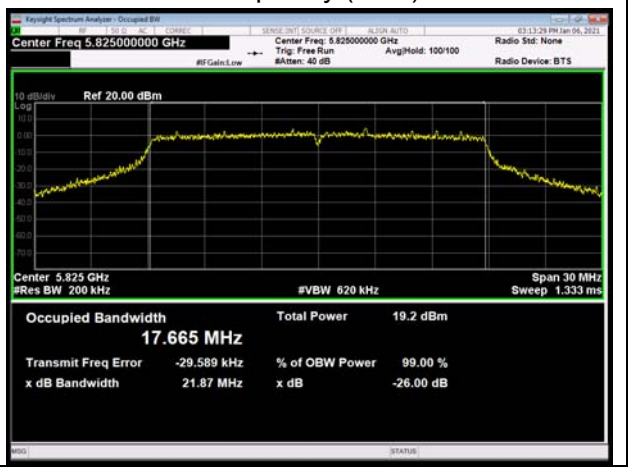


U-NII-3, 802.11ac VHT40

Carrier frequency (MHz): 5755

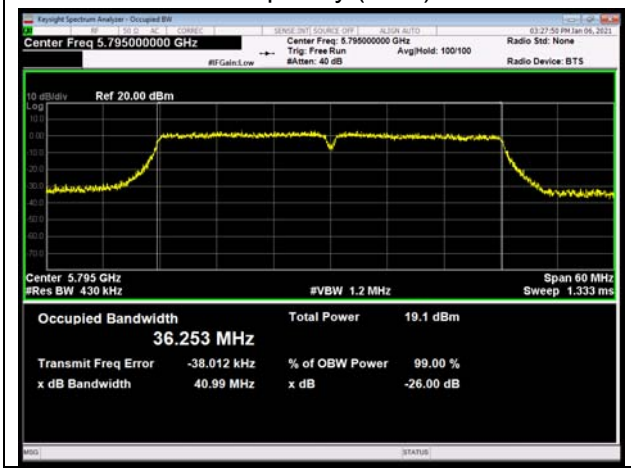
U-NII-3, 802.11ac VHT20

Carrier frequency (MHz): 5825



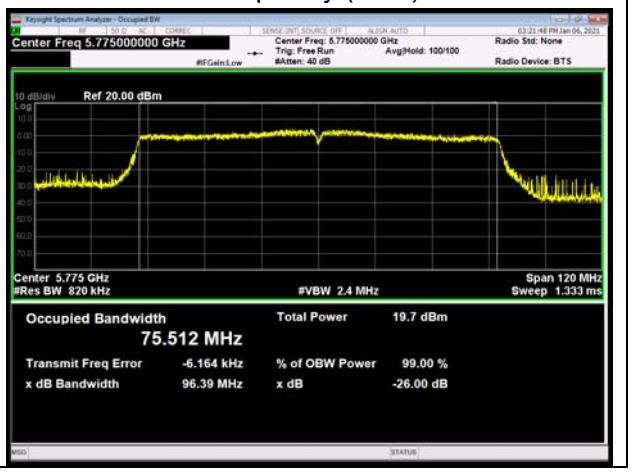
U-NII-3, 802.11ac VHT40

Carrier frequency (MHz): 5795



U-NII-3, 802.11ac VHT80

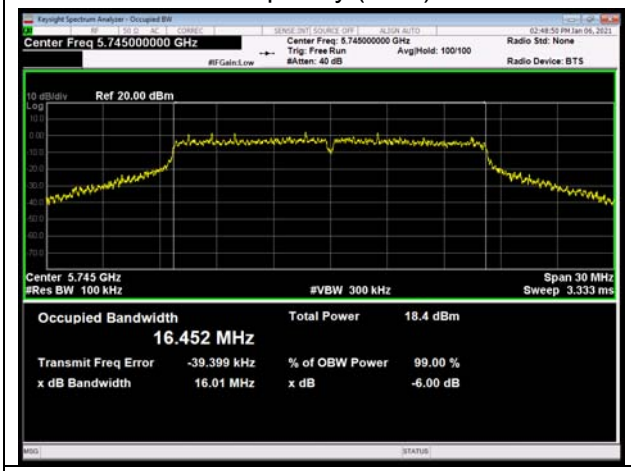
Carrier frequency (MHz): 5775



Minimum 6 dB bandwidth

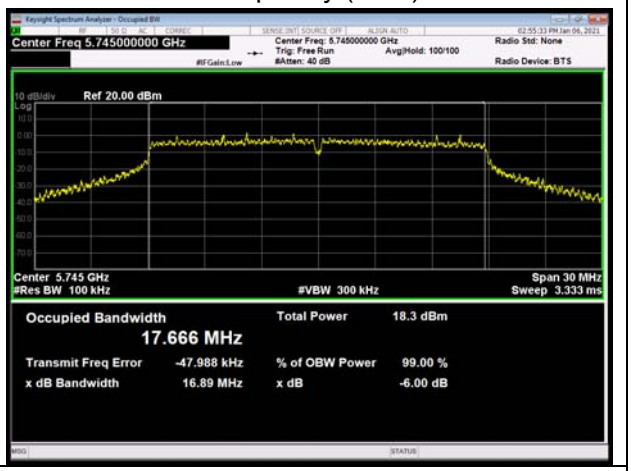
U-NII-3, 802.11a

Carrier frequency (MHz): 5745



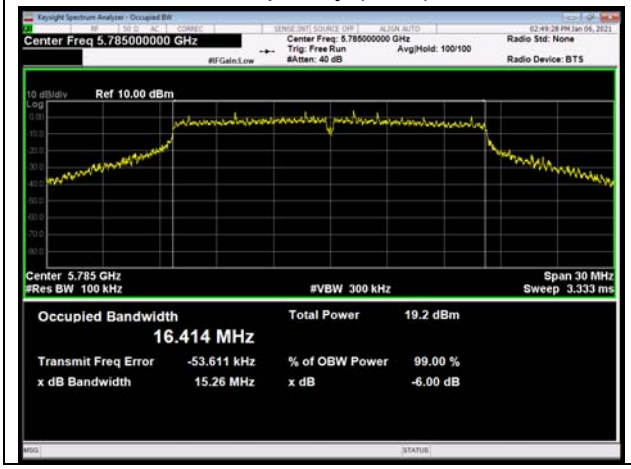
U-NII-3, 802.11n HT20

Carrier frequency (MHz): 5745



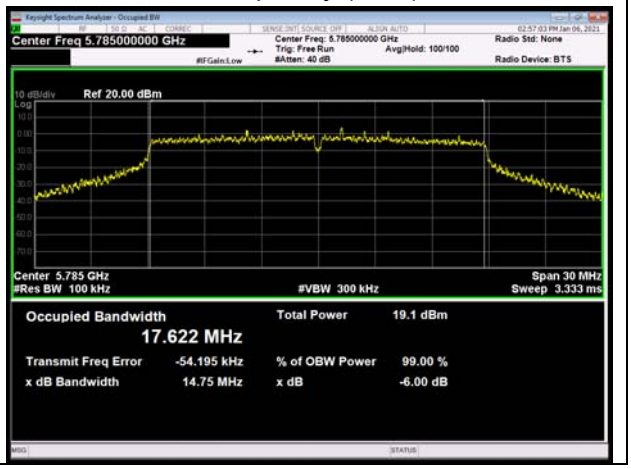
U-NII-3, 802.11a

Carrier frequency (MHz): 5785



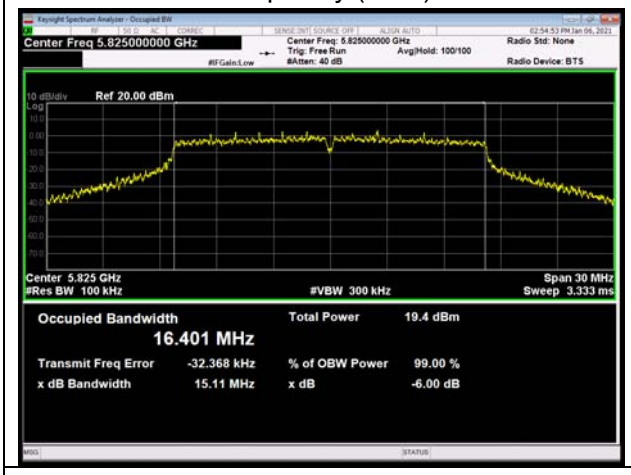
U-NII-3, 802.11n HT20

Carrier frequency (MHz): 5785



U-NII-3, 802.11a

Carrier frequency (MHz): 5825



U-NII-3, 802.11n HT20

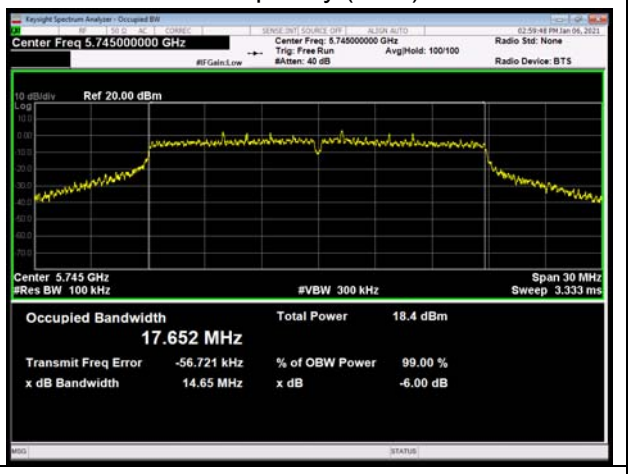
Carrier frequency (MHz): 5825

U-NII-3, 802.11n HT40

Carrier frequency (MHz): 5755

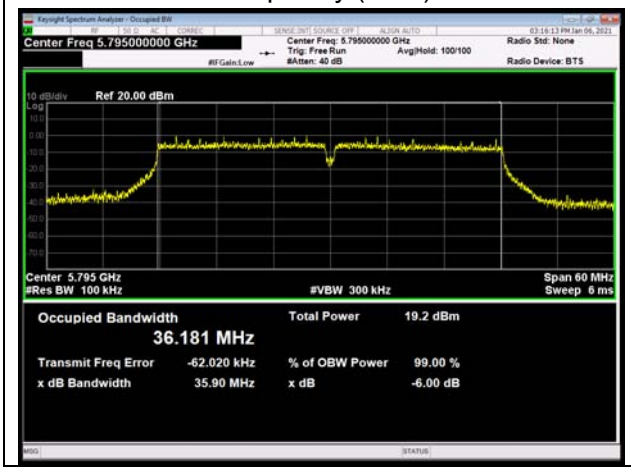
U-NII-3, 802.11ac VHT20

Carrier frequency (MHz): 5745



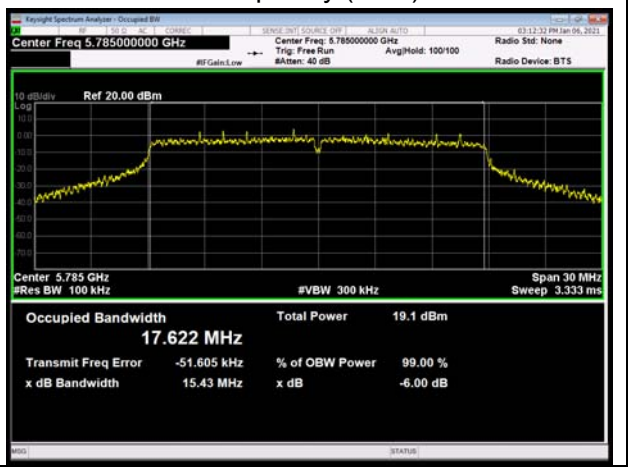
U-NII-3, 802.11n HT40

Carrier frequency (MHz): 5795

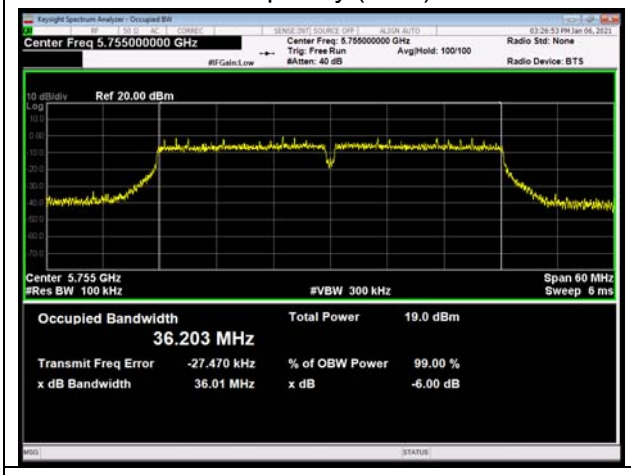


U-NII-3, 802.11ac VHT20

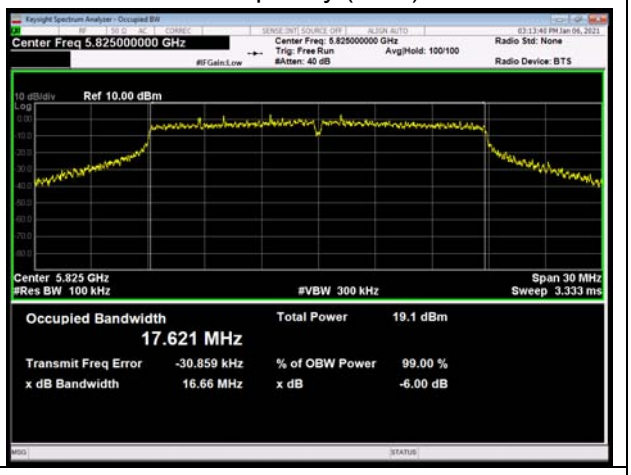
Carrier frequency (MHz): 5785



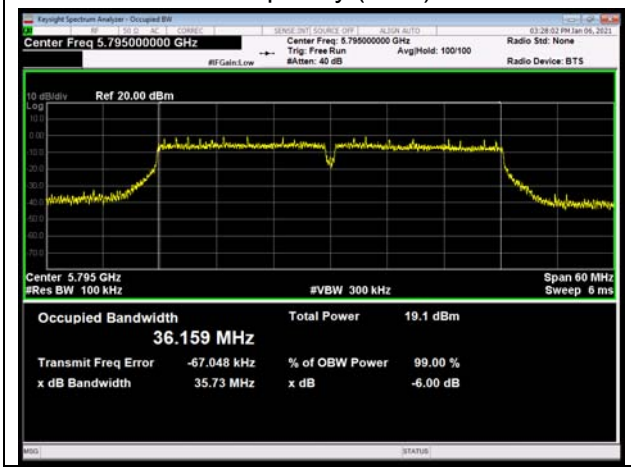
U-NII-3, 802.11ac VHT40
Carrier frequency (MHz): 5755



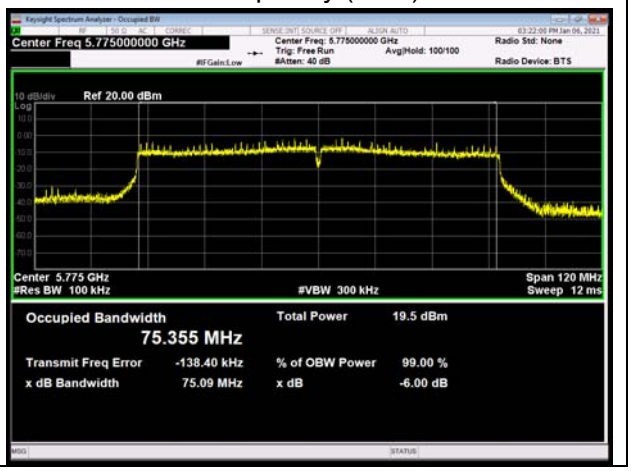
U-NII-3, 802.11ac VHT20
Carrier frequency (MHz): 5825



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



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



5.2. Average Power Output

Ambient condition

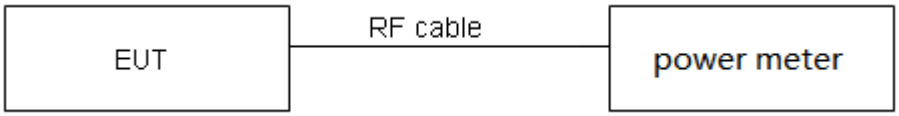
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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 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 dB.

Test Results

Mode	T_{on} (ms)	$T_{(on+off)}$ (ms)	Duty cycle	Duty cycle correction Factor(dB)
802.11a	2.02	2.06	0.98	NA
802.11n HT20	1.89	1.93	0.98	NA
802.11n HT40	0.92	0.96	0.96	0.17
802.11ac HT20	1.90	1.94	0.98	NA
802.11ac HT40	0.94	0.97	0.96	0.16
802.11ac HT80	0.45	0.49	0.91	0.39
Note: when Duty cycle≥0.98, Duty cycle correction Factor not required.				

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	21.42	24.31 >24	24
		60/5300	21.95	24.41 >24	24
		64/5320	21.67	24.36 >24	24
	802.11n HT20	52/5260	23.92	24.79 >24	24
		60/5300	21.99	24.42 >24	24
		64/5320	21.93	24.41 >24	24
	802.11n HT40	54/5270	40.99	27.13 >24	24
		62/5310	41.18	27.15 >24	24
	802.11ac VHT20	52/5260	22.16	24.46 >24	24
		60/5300	21.08	24.24 >24	24
		64/5320	21.61	24.35 >24	24
	802.11ac VHT40	54/5270	40.98	27.13 >24	24
		62/5310	41.28	27.16 >24	24
	802.11ac VHT80	58/5290	86.01	30.35 >24	24
U-NII-2C	802.11a	100/5500	20.44	24.10 >24	24
		120/5600	21.96	24.42 >24	24
		140/5700	21.31	24.29 >24	24
		144/5720	21.37	24.30 >24	24
	802.11n HT20	100/5500	22.69	24.56 >24	24
		120/5600	22.84	24.59 >24	24
		140/5700	22.70	24.56 >24	24
		144/5720	22.02	24.43 >24	24
	802.11n HT40	102/5510	41.17	27.15 >24	24
		118/5590	41.44	27.17 >24	24

		134/5670	41.25	27.15 >24	24
		142/5710	41.13	27.14 >24	24
	802.11ac VHT20	100/5500	22.63	24.55 >24	24
		120/5600	22.04	24.43 >24	24
		140/5700	23.91	24.79 >24	24
		144/5720	20.93	24.21 >24	24
	802.11ac VHT40	102/5510	41.64	27.20 >24	24
		118/5590	40.83	27.11 >24	24
		134/5670	40.67	27.09 >24	24
		142/5710	40.90	27.12 >24	24
	802.11ac VHT80	122/5610	82.59	30.17 >24	24
		138/5690	85.63	30.33 >24	24
Note: 250mW=24dBm					

SISO Antenna 1

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Network Standards	Channel/ Frequency (MHz)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	36/5180	17	16.96	16.96	24	PASS
	40/5200	17	16.55	16.55	24	PASS
	48/5240	17	17.03	17.03	24	PASS
802.11n HT20	36/5180	17	17.04	17.04	24	PASS
	40/5200	17	16.66	16.66	24	PASS
	48/5240	17	17.14	17.14	24	PASS
802.11n HT40	38/5190	14	14.08	14.25	24	PASS
	46/5230	14	14.12	14.29	24	PASS
802.11ac VHT20	36/5180	17	17.09	17.09	24	PASS
	40/5200	17	16.74	16.74	24	PASS
	48/5240	17	17.25	17.25	24	PASS
802.11ac VHT40	38/5190	14	13.99	14.15	24	PASS
	46/5230	14	13.96	14.12	24	PASS
802.11ac VHT80	42/5210	14	14.35	14.74	24	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor						

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Network Standards	Channel/ Frequency (MHz)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	52/5260	17	16.83	16.83	24	PASS
	60/5300	17	16.85	16.85	24	PASS
	64/5320	17	17.24	17.24	24	PASS
802.11n HT20	52/5260	17	17.09	17.09	24	PASS
	60/5300	17	17.11	17.11	24	PASS
	64/5320	17	17.35	17.35	24	PASS
802.11n HT40	54/5270	17	17.37	17.54	24	PASS
	62/5310	17	17.45	17.62	24	PASS
802.11ac VHT20	52/5260	17	17.08	17.08	24	PASS
	60/5300	17	17.01	17.01	24	PASS
	64/5320	17	17.33	17.33	24	PASS
802.11ac VHT40	54/5270	17	17.52	17.68	24	PASS
	62/5310	17	17.72	17.88	24	PASS
802.11ac VHT80	58/5290	16	16.74	17.13	24	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor						

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Network Standards	Channel/ Frequency (MHz)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	100/5500	17	17.03	17.03	24	PASS
	120/5600	17	16.97	16.97	24	PASS
	140/5700	17	16.84	16.84	24	PASS
	144/5720	17	16.81	16.81	24	PASS
802.11n HT20	100/5500	17	17.01	17.01	24	PASS
	120/5600	17	17.08	17.08	24	PASS
	140/5700	17	17.03	17.03	24	PASS
	144/5720	17	17.06	17.06	24	PASS
802.11n HT40	102/5510	13	13.33	13.50	24	PASS
	118/5590	13	13.42	13.59	24	PASS
	134/5670	13	13.28	13.45	24	PASS

	142/5710	13	13.21	13.38	24	PASS
802.11ac VHT20	100/5500	17	16.93	16.93	24	PASS
	120/5600	17	17.03	17.03	24	PASS
	140/5700	17	16.97	16.97	24	PASS
	144/5720	17	16.94	16.94	24	PASS
802.11ac VHT40	102/5510	13	13.42	13.58	24	PASS
	118/5590	13	13.47	13.63	24	PASS
	134/5670	13	13.36	13.52	24	PASS
	142/5710	13	13.28	13.44	24	PASS
802.11ac VHT80	122/5610	16	16.59	16.98	24	PASS
	138/5690	16	16.24	16.63	24	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor						

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Network Standards	Channel/ Frequency (MHz)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	149/5745	17	16.54	16.54	30	PASS
	157/5785	17	17.41	17.41	30	PASS
	165/5825	17	17.03	17.03	30	PASS
802.11n HT20	149/5745	17	16.64	16.64	30	PASS
	157/5785	17	17.52	17.52	30	PASS
	165/5825	17	17.23	17.23	30	PASS
802.11n HT40	151/5755	17	16.89	17.06	30	PASS
	159/5795	17	17.77	17.94	30	PASS
802.11ac VHT20	149/5745	17	16.56	16.56	30	PASS
	157/5785	17	17.51	17.51	30	PASS
	165/5825	17	17.11	17.11	30	PASS
802.11ac VHT40	151/5755	17	16.92	17.08	30	PASS
	159/5795	17	17.81	17.97	30	PASS
802.11ac VHT80	155/5775	17	17.42	17.81	30	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor						

SISO Antenna 2

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Network Standards	Channel/ Frequency (MHz)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	36/5180	17	17.52	17.52	24	PASS
	40/5200	17	16.84	16.84	24	PASS
	48/5240	17	16.88	16.88	24	PASS
802.11n HT20	36/5180	17	17.36	17.36	24	PASS
	40/5200	17	16.75	16.75	24	PASS
	48/5240	17	16.87	16.87	24	PASS
802.11n HT40	38/5190	14	13.98	14.15	24	PASS
	46/5230	14	14.01	14.18	24	PASS
802.11ac VHT20	36/5180	17	17.38	17.38	24	PASS
	40/5200	17	16.94	16.94	24	PASS
	48/5240	17	16.89	16.89	24	PASS
802.11ac VHT40	38/5190	14	14.56	14.72	24	PASS
	46/5230	14	14.17	14.33	24	PASS
802.11ac VHT80	42/5210	14	14.26	14.65	24	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor						

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Network Standards	Channel/ Frequency (MHz)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	52/5260	17	17.22	17.22	24	PASS
	60/5300	17	16.84	16.84	24	PASS
	64/5320	17	16.95	16.95	24	PASS
802.11n HT20	52/5260	17	16.98	16.98	24	PASS
	60/5300	17	16.83	16.83	24	PASS
	64/5320	17	16.94	16.94	24	PASS
802.11n HT40	54/5270	17	17.42	17.59	24	PASS
	62/5310	17	17.19	17.36	24	PASS
802.11ac VHT20	52/5260	17	17.04	17.04	24	PASS
	60/5300	17	16.75	16.75	24	PASS
	64/5320	17	16.82	16.82	24	PASS

802.11ac VHT40	54/5270	17	17.27	17.43	24	PASS
	62/5310	17	17.31	17.47	24	PASS
802.11ac VHT80	58/5290	16	16.26	16.65	24	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor						

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Network Standards	Channel/ Frequency (MHz)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	100/5500	17	17.51	17.51	24	PASS
	120/5600	17	17.63	17.63	24	PASS
	140/5700	17	17.27	17.27	24	PASS
	144/5720	17	16.96	16.96	24	PASS
802.11n HT20	100/5500	17	17.44	17.44	24	PASS
	120/5600	17	17.63	17.63	24	PASS
	140/5700	17	16.89	16.89	24	PASS
	144/5720	17	16.94	16.94	24	PASS
802.11n HT40	102/5510	13	13.25	13.42	24	PASS
	118/5590	13	13.16	13.33	24	PASS
	134/5670	13	13.53	13.70	24	PASS
	142/5710	13	13.31	13.48	24	PASS
802.11ac VHT20	100/5500	17	17.31	17.31	24	PASS
	120/5600	17	17.63	17.63	24	PASS
	140/5700	17	16.88	16.88	24	PASS
	144/5720	17	16.94	16.94	24	PASS
802.11ac VHT40	102/5510	13	13.27	13.43	24	PASS
	118/5590	13	13.42	13.58	24	PASS
	134/5670	13	13.19	13.35	24	PASS
	142/5710	13	13.24	13.40	24	PASS
802.11ac VHT80	122/5610	16	16.73	17.12	24	PASS
	138/5690	16	16.68	17.07	24	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor						

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Network Standards	Channel/ Frequency (MHz)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	149/5745	17	17.49	17.49	30	PASS
	157/5785	17	17.28	17.28	30	PASS
	165/5825	17	17.41	17.41	30	PASS
802.11n HT20	149/5745	17	17.38	17.38	30	PASS
	157/5785	17	17.28	17.28	30	PASS
	165/5825	17	17.33	17.33	30	PASS
802.11n HT40	151/5755	17	17.77	17.94	30	PASS
	159/5795	17	17.58	17.75	30	PASS
802.11ac VHT20	149/5745	17	17.26	17.26	30	PASS
	157/5785	17	17.23	17.23	30	PASS
	165/5825	17	16.94	16.94	30	PASS
802.11ac VHT40	151/5755	17	17.73	17.89	30	PASS
	159/5795	17	17.61	17.77	30	PASS
802.11ac VHT80	155/5775	17	17.55	17.94	30	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor						

MIMO without Beamforming

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Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1			MIMO Antenna 2			Total Power (dBm)	Limit (dBm)	Conclusion
		Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	36/5180	17	16.93	16.93	17	17.32	17.32	20.14	24	PASS
	40/5200	17	16.51	16.51	17	16.73	16.73	19.63	24	PASS
	48/5240	17	16.83	16.83	17	16.64	16.64	19.75	24	PASS
802.11n HT20	36/5180	17	16.93	16.93	17	17.22	17.22	20.09	24	PASS
	40/5200	17	16.55	16.55	17	16.67	16.67	19.62	24	PASS
	48/5240	17	16.82	16.82	17	16.68	16.68	19.76	24	PASS
802.11n HT40	38/5190	14	14.22	14.39	14	14.29	14.46	17.43	24	PASS
	46/5230	14	14.20	14.37	14	14.13	14.30	17.34	24	PASS
802.11ac VHT20	36/5180	17	17.07	17.07	17	17.26	17.26	20.18	24	PASS
	40/5200	17	16.78	16.78	17	16.69	16.69	19.75	24	PASS
	48/5240	17	17.22	17.22	17	16.61	16.61	19.94	24	PASS
802.11ac VHT40	38/5190	14	14.28	14.44	14	14.47	14.63	17.55	24	PASS
	46/5230	14	14.16	14.32	14	14.05	14.21	17.28	24	PASS
802.11ac VHT80	42/5210	14	14.09	14.48	14	14.17	14.56	17.53	24	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} + 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} + Array Gain =1.44+0=1.44dBi<6dBi. So the power limit is 24dBm.

U-NII-2A

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1			MIMO Antenna 2			Total Power (dBm)	Limit (dBm)	Conclusion
		Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	52/5260	17	16.77	16.77	17	16.95	16.95	19.87	24	PASS
	60/5300	17	16.82	16.82	17	16.67	16.67	19.76	24	PASS
	64/5320	17	17.01	17.01	17	16.73	16.73	19.88	24	PASS
802.11n HT20	52/5260	17	16.85	16.85	17	16.78	16.78	19.83	24	PASS
	60/5300	17	16.94	16.94	17	16.69	16.69	19.83	24	PASS
	64/5320	17	17.11	17.11	17	16.76	16.76	19.95	24	PASS
802.11n HT40	54/5270	17	17.33	17.50	17	17.21	17.38	20.45	24	PASS
	62/5310	17	17.42	17.59	17	17.08	17.25	20.43	24	PASS
802.11ac VHT20	52/5260	17	17.08	17.08	17	16.88	16.88	19.99	24	PASS
	60/5300	17	17.00	17.00	17	16.59	16.59	19.81	24	PASS
	64/5320	17	17.29	17.29	17	16.76	16.76	20.04	24	PASS
802.11ac VHT40	54/5270	17	17.35	17.51	17	17.17	17.33	20.44	24	PASS
	62/5310	17	17.48	17.64	17	17.11	17.27	20.47	24	PASS
802.11ac VHT80	58/5290	16	16.32	16.71	16	16.08	16.47	19.60	24	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} + 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} + Array Gain =1.44+0=1.44dBi<6dBi. So the power limit is 24dBm.

U-NII-2C

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1			MIMO Antenna 2			Total Power (dBm)	Limit (dBm)	Conclusion
		Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	100/5500	17	16.78	16.78	17	17.23	17.23	20.02	24	PASS
	120/5600	17	16.81	16.81	17	17.43	17.43	20.14	24	PASS
	140/5700	17	16.62	16.62	17	17.01	17.01	19.83	24	PASS
	144/5720	17	16.73	16.73	17	16.77	16.77	19.76	24	PASS
802.11n HT20	100/5500	17	16.82	16.82	17	17.24	17.24	20.05	24	PASS
	120/5600	17	16.86	16.86	17	17.51	17.51	20.21	24	PASS
	140/5700	17	16.79	16.79	17	16.75	16.75	19.78	24	PASS
	144/5720	17	16.73	16.73	17	16.67	16.67	19.71	24	PASS
802.11n HT40	102/5510	13	13.12	13.29	13	13.62	13.79	16.55	24	PASS
	118/5590	13	13.46	13.63	13	13.17	13.34	16.49	24	PASS
	134/5670	13	13.12	13.29	13	13.53	13.70	16.51	24	PASS
	142/5710	13	13.05	13.22	13	13.08	13.25	16.24	24	PASS
802.11ac VHT20	100/5500	17	16.88	16.88	17	17.15	17.15	20.03	24	PASS
	120/5600	17	16.79	16.79	17	17.44	17.44	20.14	24	PASS
	140/5700	17	16.72	16.72	17	16.78	16.78	19.76	24	PASS
	144/5720	17	16.77	16.77	17	16.64	16.64	19.72	24	PASS
802.11ac VHT40	102/5510	13	13.21	13.37	13	13.74	13.90	16.66	24	PASS
	118/5590	13	13.49	13.65	13	13.22	13.38	16.53	24	PASS
	134/5670	13	13.06	13.22	13	13.58	13.74	16.50	24	PASS
	142/5710	13	13.14	13.30	13	13.02	13.18	16.25	24	PASS
802.11ac VHT80	122/5610	16	16.27	16.66	16	16.69	17.08	19.88	24	PASS
	138/5690	16	15.93	16.32	16	16.44	16.83	19.59	24	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} + 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} + Array Gain =1.59+0=1.59dBi<6dBi. So the power limit is 24dBm.

U-NII-3

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1			MIMO Antenna 2			Total Power (dBm)	Limit (dBm)	Conclusion
		Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	149/5745	17	16.57	16.57	17	17.23	17.23	19.92	30	PASS
	157/5785	17	17.17	17.17	17	17.03	17.03	20.11	30	PASS
	165/5825	17	17.03	17.03	17	17.14	17.14	20.10	30	PASS
802.11n HT20	149/5745	17	16.53	16.53	17	17.04	17.04	19.80	30	PASS
	157/5785	17	17.28	17.28	17	16.97	16.97	20.14	30	PASS
	165/5825	17	16.99	16.99	17	16.94	16.94	19.98	30	PASS
802.11n HT40	151/5755	17	17.04	17.21	17	17.54	17.71	20.47	30	PASS
	159/5795	17	17.72	17.89	17	17.31	17.48	20.70	30	PASS
802.11ac VHT20	149/5745	17	16.55	16.55	17	17.03	17.03	19.81	30	PASS
	157/5785	17	17.21	17.21	17	16.98	16.98	20.11	30	PASS
	165/5825	17	17.03	17.03	17	16.78	16.78	19.92	30	PASS
802.11ac VHT40	151/5755	17	16.91	17.07	17	17.52	17.68	20.40	30	PASS
	159/5795	17	17.78	17.94	17	17.31	17.47	20.73	30	PASS
802.11ac VHT80	155/5775	17	17.26	17.65	17	17.34	17.73	20.70	30	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} + Array Gain, For power measurements on IEEE 802.11 devices,
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \le 4$;
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 $N_{ANT} \ge 5$.
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} + Array Gain =-0.5+0=-0.5dBi<6dBi. So the power limit is 30dBm.

MIMO with Beamforming

U-NII-1

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1			MIMO Antenna 2			Total Power (dBm)	Limit (dBm)	Conclusion
		Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11n HT20	36/5180	17	16.82	16.90	17	17.16	17.24	20.09	24	PASS
	40/5200	17	16.49	16.57	17	16.67	16.75	19.67	24	PASS
	48/5240	17	16.83	16.91	17	16.61	16.69	19.81	24	PASS
802.11n HT40	38/5190	14	14.18	14.35	14	14.24	14.41	17.39	24	PASS
	46/5230	14	14.13	14.30	14	14.06	14.23	17.27	24	PASS
802.11ac VHT20	36/5180	17	16.95	17.03	17	17.18	17.26	20.16	24	PASS
	40/5200	17	16.83	16.91	17	16.63	16.71	19.82	24	PASS
	48/5240	17	17.19	17.27	17	16.52	16.60	19.96	24	PASS
802.11ac VHT40	38/5190	14	14.17	14.33	14	14.32	14.48	17.42	24	PASS
	46/5230	14	14.21	14.37	14	14.01	14.17	17.29	24	PASS
802.11ac VHT80	42/5210	14	14.03	14.42	14	14.08	14.47	17.45	24	PASS

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

2. The manufacturer declared the transmitter output signals is CDD mode And Nss=1. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = GANT + Array Gain, For power measurements on all devices, Array Gain=10log(Nant/Nss)dB,

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=GANT+ Array Gain=1.44+10log（2/1)=4.45<6dBi. So the power limit is 24dBm.

U-NII-2A

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1			MIMO Antenna 2			Total Power (dBm)	Limit (dBm)	Conclusion
		Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11n HT20	52/5260	17	16.79	16.87	17	16.71	16.79	19.84	24	PASS
	60/5300	17	16.86	16.94	17	16.65	16.73	19.85	24	PASS
	64/5320	17	17.07	17.15	17	16.73	16.81	20.00	24	PASS
802.11n HT40	54/5270	17	17.29	17.46	17	17.16	17.33	20.40	24	PASS
	62/5310	17	17.38	17.55	17	17.04	17.21	20.39	24	PASS
802.11ac VHT20	52/5260	17	17.02	17.10	17	16.83	16.91	20.02	24	PASS
	60/5300	17	16.95	17.03	17	16.53	16.61	19.84	24	PASS
	64/5320	17	17.18	17.26	17	16.72	16.80	20.05	24	PASS
802.11ac VHT40	54/5270	17	17.30	17.46	17	17.16	17.32	20.40	24	PASS
	62/5310	17	17.36	17.52	17	17.08	17.24	20.40	24	PASS
802.11ac VHT80	58/5290	16	16.25	16.64	16	16.06	16.45	19.55	24	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 Nss=1. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = GANT + Array Gain, For power measurements on all devices, Array Gain=10log(Nant/Nss)dB,
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=GANT+ Array Gain=1.44+10log（2/1)=4.45<6dBi. So the power limit is 24dBm.

U-NII-2C

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1			MIMO Antenna 2			Total Power (dBm)	Limit (dBm)	Conclusion
		Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11n HT20	100/5500	17	16.78	16.86	17	17.13	17.21	20.05	24	PASS
	120/5600	17	16.84	16.92	17	17.45	17.53	20.25	24	PASS
	140/5700	17	16.72	16.80	17	16.72	16.80	19.81	24	PASS
	144/5720	17	16.65	16.73	17	16.62	16.70	19.73	24	PASS
802.11n HT40	102/5510	13	13.08	13.25	13	13.42	13.59	16.43	24	PASS
	118/5590	13	13.42	13.59	13	13.08	13.25	16.43	24	PASS
	134/5670	13	13.08	13.25	13	13.42	13.59	16.43	24	PASS
	142/5710	13	13.02	13.19	13	13.06	13.23	16.22	24	PASS
802.11ac VHT20	100/5500	17	16.79	16.87	17	17.11	17.19	20.04	24	PASS
	120/5600	17	16.72	16.80	17	17.38	17.46	20.15	24	PASS
	140/5700	17	16.68	16.76	17	16.71	16.79	19.79	24	PASS
	144/5720	17	16.72	16.80	17	16.58	16.66	19.74	24	PASS
802.11ac VHT40	102/5510	13	13.15	13.31	13	13.72	13.88	16.62	24	PASS
	118/5590	13	13.26	13.42	13	13.19	13.35	16.40	24	PASS
	134/5670	13	13.02	13.18	13	13.54	13.70	16.46	24	PASS
	142/5710	13	13.08	13.24	13	12.98	13.14	16.20	24	PASS
802.11ac VHT80	122/5610	16	16.22	16.61	16	16.63	17.02	19.83	24	PASS
	138/5690	16	15.86	16.25	16	16.37	16.76	19.52	24	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),
The Total Power =10log($10^{(\text{Power antenna1 in dBm}/10)}$+$10^{(\text{Power antenna2 in dBm}/10)}$).
2. The manufacturer declared the transmitter output signals is CDD mode And Nss=1. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = GANT + Array Gain, For power measurements on all devices, Array Gain=10log(Nant/Nss)dB,
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=GANT+ Array Gain=1.59+10log（2/1)=4.6<6dBi. 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
		Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Power Index	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11n HT20	149/5745	17	16.49	16.57	17	16.93	17.01	19.81	30	PASS
	157/5785	17	17.21	17.29	17	16.91	16.99	20.15	30	PASS
	165/5825	17	16.94	17.02	17	16.89	16.97	20.01	30	PASS
802.11n HT40	151/5755	17	17.02	17.19	17	17.47	17.64	20.43	30	PASS
	159/5795	17	17.66	17.83	17	17.26	17.43	20.64	30	PASS
802.11ac VHT20	149/5745	17	16.47	16.55	17	16.98	17.06	19.82	30	PASS
	157/5785	17	17.18	17.26	17	16.92	17.00	20.14	30	PASS
	165/5825	17	16.95	17.03	17	16.73	16.81	19.93	30	PASS
802.11ac VHT40	151/5755	17	16.83	16.99	17	17.49	17.65	20.35	30	PASS
	159/5795	17	17.64	17.80	17	17.26	17.42	20.63	30	PASS
802.11ac VHT80	155/5775	17	17.19	17.58	17	17.28	17.67	20.63	30	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 Nss=1. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = GANT + Array Gain, For power measurements on all devices, Array Gain=10log(Nant/Nss)dB,
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=GANT+ Array Gain=-0.5+10log（2/1)=2.51<6dBi. So the power limit is 30dBm.

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 that 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= 936Hz

Test Results

Voltage (V)	Temperature (°C)	U-NII-1 Test Results			
		5200MHz			
		1min	2min	5min	10min
3.87	-20	5199.998812	5199.998026	5199.993449	5199.989836
3.87	-10	5200.002959	5199.995640	5199.989349	5199.984681
3.87	0	5200.002402	5199.987633	5199.983112	5199.982754
3.87	10	5200.000459	5199.987078	5199.974672	5199.977684
3.87	20	5199.996974	5199.984785	5199.970444	5199.975794
3.87	30	5199.994192	5199.981830	5199.962654	5199.969256
3.87	40	5199.990627	5199.975107	5199.961761	5199.964136
3.87	50	5199.989612	5199.969923	5199.953216	5199.959211
3.6	20	5199.987642	5199.965004	5199.948076	5199.954613
4.4	20	5199.986644	5199.958545	5199.943600	5199.950959
MHz		-0.013356	-0.041455	-0.056400	-0.049041
PPM		-2.568394	-7.972096	-10.846211	-9.430887

Voltage (V)	Temperature (°C)	U-NII-2A Test Results			
		5300MHz			
		1min	2min	5min	10min
3.87	-20	5300.008741	5300.006546	5299.998455	5299.994539
3.87	-10	5299.999082	5299.996808	5299.991454	5299.988755
3.87	0	5299.990038	5299.996318	5299.982530	5299.979284
3.87	10	5299.985188	5299.993570	5299.982201	5299.970213
3.87	20	5299.980587	5299.984729	5299.977348	5299.966142
3.87	30	5299.973245	5299.980765	5299.969855	5299.957888
3.87	40	5299.969608	5299.978150	5299.965620	5299.952653
3.87	50	5299.967238	5299.969733	5299.963770	5299.952245
3.6	20	5299.961435	5299.960268	5299.960667	5299.942285
4.4	20	5299.956786	5299.952749	5299.951854	5299.940102
MHz		-0.043214	-0.047251	-0.048146	-0.059898
PPM		-8.153560	-8.915369	-9.084179	-11.301478

Voltage (V)	Temperature (°C)	U-NII-2C Test Results			
		5580MHz			
		1min	2min	5min	10min
3.87	-20	5579.995267	5579.994429	5579.993270	5579.986370
3.87	-10	5579.994474	5579.990743	5579.983479	5579.980077
3.87	0	5579.993500	5579.985009	5579.983354	5579.971813
3.87	10	5579.986256	5579.981434	5579.982170	5579.966734
3.87	20	5579.982045	5579.973469	5579.974880	5579.958932
3.87	30	5579.975087	5579.970654	5579.971457	5579.949512
3.87	40	5579.968763	5579.961533	5579.968240	5579.944644
3.87	50	5579.959689	5579.954183	5579.960664	5579.942231
3.6	20	5579.958734	5579.945689	5579.957684	5579.936060
4.4	20	5579.958249	5579.945586	5579.950756	5579.934178
MHz		-0.041751	-0.054414	-0.049244	-0.065822
PPM		-7.482284	-9.751625	-8.825124	-11.796126

Voltage (V)	Temperature (°C)	U-NII-3 Test Results			
		5785MHz			
		1min	2min	5min	10min
3.87	-20	5784.998947	5784.996224	5784.986325	5784.985946
3.87	-10	5784.990187	5784.992929	5784.983868	5784.980734
3.87	0	5784.990104	5784.989878	5784.979638	5784.975258
3.87	10	5784.988426	5784.985108	5784.971894	5784.968459
3.87	20	5784.980613	5784.977856	5784.971774	5784.968281
3.87	30	5784.974107	5784.973758	5784.969390	5784.961818
3.87	40	5784.970010	5784.973285	5784.969231	5784.954590
3.87	50	5784.963601	5784.967980	5784.968555	5784.947742
3.6	20	5784.961867	5784.966540	5784.967976	5784.944399
4.4	20	5784.956950	5784.964947	5784.966863	5784.936322
MHz		-0.043050	-0.035053	-0.033137	-0.063678
PPM		-7.441605	-6.059211	-5.728136	-11.007460

5.4. Power Spectral Density

Ambient condition

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

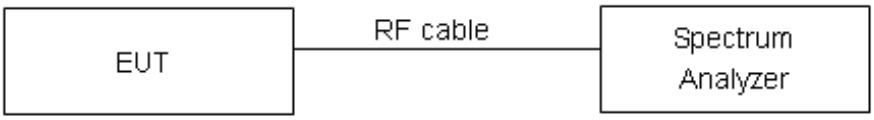
Method of Measurement

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.
(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.

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 transmittingantennas 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= 0.75dB.

Test Results:

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

SISO Antenna 1

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Mode	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	36	6.56	6.56	11	PASS
	40	5.29	5.29	11	PASS
	48	6.63	6.63	11	PASS
802.11n HT20	36	6.21	6.21	11	PASS
	40	4.94	4.94	11	PASS
	48	6.28	6.28	11	PASS
802.11n HT40	38	0.40	0.56	11	PASS
	46	0.29	0.45	11	PASS
802.11ac VHT20	36	6.22	6.22	11	PASS
	40	5.14	5.14	11	PASS
	48	6.11	6.11	11	PASS
802.11ac VHT40	38	0.80	0.96	11	PASS
	46	0.76	0.93	11	PASS
802.11ac VHT80	42	-4.00	-3.61	11	PASS

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Mode	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	52	5.58	5.58	11	PASS
	60	6.21	6.21	11	PASS
	64	6.65	6.65	11	PASS
802.11n HT20	52	5.20	5.20	11	PASS
	60	5.71	5.71	11	PASS
	64	5.97	5.97	11	PASS
802.11n HT40	54	3.39	3.55	11	PASS
	62	3.30	3.47	11	PASS

802.11ac VHT20	52	5.13	5.13	11	PASS
	60	5.82	5.82	11	PASS
	64	6.21	6.21	11	PASS
802.11ac VHT40	54	3.36	3.52	11	PASS
	62	3.18	3.34	11	PASS
802.11ac VHT80	58	-0.26	0.13	11	PASS

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Mode	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	100	6.59	6.59	11	PASS
	120	6.70	6.70	11	PASS
	140	6.04	6.04	11	PASS
	144	6.68	6.68	11	PASS
802.11n HT20	100	7.07	7.07	11	PASS
	120	7.77	7.77	11	PASS
	140	7.43	7.43	11	PASS
	144	7.59	7.59	11	PASS
802.11n HT40	102	1.16	1.33	11	PASS
	118	0.89	1.05	11	PASS
	134	0.15	0.31	11	PASS
	142	1.03	1.20	11	PASS
802.11ac VHT20	100	6.01	6.01	11	PASS
	120	6.23	6.23	11	PASS
	140	5.80	5.80	11	PASS
	144	6.31	6.31	11	PASS
802.11ac VHT40	102	1.21	1.38	11	PASS
	118	1.01	1.18	11	PASS
	134	0.41	0.57	11	PASS
	142	1.01	1.18	11	PASS
802.11ac VHT80	122	1.17	1.56	11	PASS
	138	0.96	1.35	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	2.60	2.87	30	PASS
	157	3.45	3.72	30	PASS
	165	3.83	4.10	30	PASS
802.11n HT20	149	2.40	2.67	30	PASS
	157	3.06	3.33	30	PASS
	165	3.44	3.71	30	PASS
802.11n HT40	151	-0.69	-0.26	30	PASS
	159	-0.35	0.08	30	PASS
802.11ac VHT20	149	2.15	2.42	30	PASS
	157	3.38	3.65	30	PASS
	165	3.51	3.78	30	PASS
802.11ac VHT40	151	-0.75	-0.32	30	PASS
	159	-0.36	0.07	30	PASS
802.11ac VHT80	155	-2.78	-2.13	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 Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	36	6.90	6.90	11	PASS
	40	6.12	6.12	11	PASS
	48	6.86	6.86	11	PASS
802.11n HT20	36	6.61	6.61	11	PASS
	40	5.87	5.87	11	PASS
	48	6.73	6.73	11	PASS
802.11n HT40	38	1.10	1.27	11	PASS
	46	0.25	0.41	11	PASS
802.11ac VHT20	36	6.59	6.59	11	PASS
	40	5.71	5.71	11	PASS
	48	6.49	6.49	11	PASS
802.11ac VHT40	38	1.09	1.26	11	PASS
	46	0.47	0.64	11	PASS
802.11ac VHT80	42	-4.03	-3.64	11	PASS

U-NII-2A

Mode	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	52	5.72	5.72	11	PASS
	60	6.83	6.83	11	PASS
	64	5.58	5.58	11	PASS
802.11n HT20	52	5.15	5.15	11	PASS
	60	6.40	6.40	11	PASS
	64	5.28	5.28	11	PASS
802.11n HT40	54	2.47	2.63	11	PASS
	62	3.31	3.48	11	PASS
802.11ac VHT20	52	5.09	5.09	11	PASS
	60	6.40	6.40	11	PASS

	64	5.13	5.13	11	PASS
802.11ac VHT40	54	3.10	3.26	11	PASS
	62	3.39	3.55	11	PASS
802.11ac VHT80	58	-0.22	0.17	11	PASS

U-NII-2C

Mode	Channel Number	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	100	7.84	7.84	11	PASS
	120	7.73	7.73	11	PASS
	140	7.25	7.25	11	PASS
	144	6.54	6.54	11	PASS
802.11n HT20	100	7.13	7.13	11	PASS
	120	7.20	7.20	11	PASS
	140	6.51	6.51	11	PASS
	144	6.05	6.05	11	PASS
802.11n HT40	102	0.30	0.47	11	PASS
	118	0.30	0.46	11	PASS
	134	-0.20	-0.03	11	PASS
	142	0.09	0.25	11	PASS
802.11ac VHT20	100	7.39	7.39	11	PASS
	120	7.19	7.19	11	PASS
	140	6.82	6.82	11	PASS
	144	6.16	6.16	11	PASS
802.11ac VHT40	102	0.15	0.31	11	PASS
	118	0.34	0.51	11	PASS
	134	-0.24	-0.07	11	PASS
	142	0.07	0.24	11	PASS
802.11ac VHT80	122	0.44	0.82	11	PASS
	138	0.00	0.39	11	PASS

U-NII-3

Mode	Channel Number	Read Value (dBm/470kHz)	Power Spectral Density (dBm/500kHz)	Limit (dBm/500kHz)	Conclusion
802.11a	149	3.63	3.90	30	PASS
	157	3.20	3.47	30	PASS
	165	2.84	3.11	30	PASS
802.11n HT20	149	3.72	3.99	30	PASS
	157	2.84	3.11	30	PASS
	165	2.64	2.91	30	PASS
802.11n HT40	151	0.95	1.39	30	PASS
	159	0.42	0.85	30	PASS
802.11ac VHT20	149	3.07	3.34	30	PASS
	157	3.06	3.33	30	PASS
	165	2.49	2.76	30	PASS
802.11ac VHT40	151	0.94	1.38	30	PASS
	159	0.77	1.20	30	PASS
802.11ac VHT80	155	-3.14	-2.48	30	PASS
Note:PSD=Read Value+Duty cycle+10*LOG(500/470) correction factor					

MIMO without Beamforming

U-NII-1

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)			
802.11a	36/5180	6.22	6.22	7.07	7.07	9.67	11	PASS
	40/5200	5.29	5.29	6.67	6.67	9.05	11	PASS
	48/5240	5.06	5.06	5.03	5.03	8.06	11	PASS
802.11n HT20	36/5180	5.77	5.77	6.58	6.58	9.20	11	PASS
	40/5200	5.04	5.04	6.13	6.13	8.63	11	PASS
	48/5240	4.82	4.82	4.03	4.03	7.45	11	PASS
802.11n HT40	38/5190	0.06	0.22	1.82	1.99	4.20	11	PASS
	46/5230	1.30	1.47	-0.34	-0.18	3.73	11	PASS
802.11ac VHT20	36/5180	5.82	5.82	6.54	6.54	9.20	11	PASS
	40/5200	5.08	5.08	6.19	6.19	8.68	11	PASS
	48/5240	4.33	4.33	4.51	4.51	7.43	11	PASS
802.11ac VHT40	38/5190	-0.22	-0.05	1.67	1.83	4.00	11	PASS
	46/5230	1.06	1.22	-0.61	-0.45	3.48	11	PASS
802.11ac VHT80	42/5210	-2.77	-2.39	-2.48	-2.09	0.77	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=$10\log(10^{(\text{PSD antenna1 in dBm/10})}+10^{(\text{PSD antenna2 in dBm/10})})$

3. The manufacturer declared the transmitter output signals is CDD mode And Nss=1. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = GANT + Array Gain, For PSD measurements on all devices,Array Gain=10log(Nant/Nss)dB,

4.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=GANT+ Array Gain=1.44+10log（2/1)=4.45<6dBi. So the PSD limit is 11dBm.

U-NII-2A

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)			
802.11a	52/5260	6.66	6.66	6.58	6.58	9.63	11	PASS
	60/5300	6.78	6.78	7.72	7.72	10.28	11	PASS
	64/5320	7.41	7.41	6.82	6.82	10.13	11	PASS
802.11n HT20	52/5260	5.82	5.82	5.85	5.85	8.84	11	PASS
	60/5300	6.32	6.32	7.06	7.06	9.72	11	PASS
	64/5320	7.26	7.26	6.16	6.16	9.75	11	PASS
802.11n HT40	54/5270	3.05	3.22	4.29	4.45	6.89	11	PASS
	62/5310	4.19	4.36	4.10	4.26	7.32	11	PASS
802.11ac VHT20	52/5260	5.72	5.72	5.98	5.98	8.86	11	PASS
	60/5300	6.47	6.47	6.84	6.84	9.67	11	PASS
	64/5320	6.96	6.96	6.23	6.23	9.62	11	PASS
802.11ac VHT40	54/5270	3.18	3.35	4.17	4.33	6.88	11	PASS
	62/5310	4.10	4.26	4.09	4.26	7.27	11	PASS
802.11ac VHT80	58/5290	-0.66	-0.27	0.44	0.83	3.32	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=$10\log(10^{(\text{PSD antenna1 in dBm/10})}+10^{(\text{PSD antenna2 in dBm/10})})$

3. The manufacturer declared the transmitter output signals is CDD mode And Nss=1. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = GANT + Array Gain, For PSD measurements on all devices,Array Gain=10log(Nant/Nss)dB,

4.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=GANT+ Array Gain=1.44+10log（2/1)=4.45<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)			
802.11a	100/5500	6.07	6.07	6.56	6.56	9.33	11	PASS
	120/5600	6.55	6.55	7.51	7.51	10.07	11	PASS
	140/5700	5.89	5.89	6.55	6.55	9.24	11	PASS
	144/5720	6.04	6.04	5.70	5.70	8.89	11	PASS
802.11n HT20	100/5500	6.64	6.64	7.16	7.16	9.92	11	PASS
	120/5600	7.06	7.06	7.37	7.37	10.23	11	PASS
	140/5700	6.20	6.20	7.01	7.01	9.63	11	PASS
	144/5720	6.35	6.35	6.26	6.26	9.31	11	PASS
802.11n HT40	102/5510	-0.02	0.14	0.02	0.19	3.18	11	PASS
	118/5590	0.43	0.59	1.56	1.72	4.20	11	PASS
	134/5670	0.60	0.76	0.67	0.83	3.81	11	PASS
	142/5710	0.16	0.33	0.07	0.24	3.29	11	PASS
802.11ac VHT20	100/5500	6.05	6.05	6.61	6.61	9.34	11	PASS
	120/5600	6.19	6.19	7.09	7.09	9.67	11	PASS
	140/5700	5.33	5.33	6.14	6.14	8.76	11	PASS
	144/5720	5.72	5.72	5.52	5.52	8.63	11	PASS
802.11ac VHT40	102/5510	-0.08	0.08	0.24	0.40	3.26	11	PASS
	118/5590	0.60	0.77	1.78	1.94	4.40	11	PASS
	134/5670	0.71	0.88	0.88	1.04	3.97	11	PASS
	142/5710	-0.32	-0.16	-0.25	-0.08	2.89	11	PASS
802.11ac VHT80	122/5610	0.08	0.46	0.17	0.55	3.52	11	PASS
	138/5690	-0.11	0.28	0.71	1.09	3.71	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=$10\log(10^{(\text{PSD antenna1 in dBm/10})}+10^{(\text{PSD antenna2 in dBm/10})})$

3. The manufacturer declared the transmitter output signals is CDD mode And Nss=1. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = GANT + Array Gain, For PSD measurements on all devices,Array Gain=10log(Nant/Nss)dB,

4.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=GANT+ Array Gain=1.59+10log（2/1)=4.6<6dBi. So the PSD limit is 11dBm.

U-NII-3

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)			
802.11a	149/5745	4.26	4.53	3.64	3.91	7.24	30	PASS
	157/5785	3.00	3.27	3.88	4.15	6.74	30	PASS
	165/5825	4.23	4.50	3.01	3.28	6.94	30	PASS
802.11n HT20	149/5745	3.95	4.22	3.14	3.41	6.84	30	PASS
	157/5785	2.30	2.57	4.24	4.51	6.66	30	PASS
	165/5825	3.85	4.12	2.63	2.90	6.57	30	PASS
802.11n HT40	151/5755	0.60	1.04	1.04	1.48	4.27	30	PASS
	159/5795	-0.40	0.03	0.51	0.94	3.52	30	PASS
802.11ac VHT20	149/5745	3.61	3.88	3.17	3.44	6.68	30	PASS
	157/5785	2.52	2.79	3.61	3.88	6.38	30	PASS
	165/5825	3.70	3.97	2.69	2.96	6.50	30	PASS
802.11ac VHT40	151/5755	1.00	1.43	0.93	1.36	4.41	30	PASS
	159/5795	-0.31	0.12	0.54	0.97	3.58	30	PASS
802.11ac VHT80	155/5775	-3.41	-2.76	-1.80	-1.14	1.14	30	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=$10\log(10^{(\text{PSD antenna1 in dBm/10})}+10^{(\text{PSD antenna2 in dBm/10})})$

3. The manufacturer declared the transmitter output signals is CDD mode And Nss=1. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = GANT + Array Gain, For PSD measurements on all devices,Array Gain=10log(Nant/Nss)dB,

4.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=GANT+ Array Gain=-0.5+10log（2/1)=2.51<6dBi. So the PSD limit is 30dBm.

MIMO with Beamforming

U-NII-1

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	36/5180	6.01	6.09	6.26	6.34	9.22	11.00	PASS
	40/5200	4.85	4.93	5.81	5.89	8.45	11.00	PASS
	48/5240	4.31	4.40	4.22	4.30	7.36	11.00	PASS
802.11n HT40	38/5190	0.04	0.20	1.64	1.81	4.09	11.00	PASS
	46/5230	1.12	1.28	-0.44	-0.27	3.59	11.00	PASS
802.11ac VHT20	36/5180	5.51	5.59	6.47	6.56	9.11	11.00	PASS
	40/5200	4.84	4.92	5.94	6.02	8.52	11.00	PASS
	48/5240	4.33	4.41	4.19	4.27	7.35	11.00	PASS
802.11ac VHT40	38/5190	0.16	0.32	1.68	1.84	4.16	11.00	PASS
	46/5230	1.31	1.47	-0.41	-0.24	3.71	11.00	PASS
802.11ac VHT80	42/5210	-2.39	-2.00	-2.24	-1.85	1.09	11.00	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=$10\log(10^{(\text{PSD antenna1 in dBm/10})}+10^{(\text{PSD antenna2 in dBm/10})})$

3. The manufacturer declared the transmitter output signals is CDD mode And Nss=1. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = GANT + Array Gain, For PSD measurements on all devices,Array Gain=10log(Nant/Nss)dB,

4.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=GANT+ Array Gain=1.44+10log（2/1)=4.45<6dBi. So the PSD limit is 11dBm.

U-NII-2A

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	6.07	6.15	6.04	6.12	9.15	11.00	PASS
	60/5300	6.46	6.54	7.18	7.26	9.93	11.00	PASS
	64/5320	7.02	7.10	6.27	6.35	9.75	11.00	PASS
802.11n HT40	54/5270	3.39	3.56	3.94	4.11	6.85	11.00	PASS
	62/5310	4.05	4.21	4.14	4.30	7.27	11.00	PASS
802.11ac VHT20	52/5260	5.94	6.02	5.92	6.00	9.02	11.00	PASS
	60/5300	6.40	6.48	7.16	7.24	9.89	11.00	PASS
	64/5320	6.97	7.05	6.55	6.63	9.86	11.00	PASS
802.11ac VHT40	54/5270	3.06	3.22	3.96	4.12	6.70	11.00	PASS
	62/5310	4.18	4.34	3.93	4.10	7.23	11.00	PASS
802.11ac VHT80	58/5290	-0.56	-0.17	0.36	0.74	3.32	11.00	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=$10\log(10^{(\text{PSD antenna1 in dBm/10})}+10^{(\text{PSD antenna2 in dBm/10})})$

3. The manufacturer declared the transmitter output signals is CDD mode And Nss=1. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = GANT + Array Gain, For PSD measurements on all devices,Array Gain=10log(Nant/Nss)dB,

4.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=GANT+ Array Gain=1.44+10log（2/1)=4.45<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	6.34	6.42	7.07	7.15	9.81	11.00	PASS
	120/5600	6.60	6.69	7.46	7.54	10.14	11.00	PASS
	140/5700	6.22	6.30	6.97	7.05	9.70	11.00	PASS
	144/5720	6.49	6.57	6.25	6.33	9.46	11.00	PASS
802.11n HT40	102/5510	-0.31	-0.14	0.01	0.17	3.03	11.00	PASS
	118/5590	0.59	0.76	1.66	1.83	4.34	11.00	PASS
	134/5670	0.67	0.84	0.74	0.90	3.88	11.00	PASS
	142/5710	-0.35	-0.19	-0.17	0.00	2.92	11.00	PASS
802.11ac VHT20	100/5500	6.20	6.28	6.41	6.49	9.40	11.00	PASS
	120/5600	6.02	6.10	6.84	6.92	9.54	11.00	PASS
	140/5700	5.09	5.17	6.10	6.18	8.72	11.00	PASS
	144/5720	5.75	5.83	5.59	5.67	8.76	11.00	PASS
802.11ac VHT40	102/5510	0.22	0.38	0.10	0.27	3.34	11.00	PASS
	118/5590	0.64	0.81	1.69	1.85	4.37	11.00	PASS
	134/5670	0.47	0.64	0.83	1.00	3.83	11.00	PASS
	142/5710	-0.32	-0.16	-0.10	0.07	2.97	11.00	PASS
802.11ac VHT80	122/5610	0.14	0.52	0.42	0.81	3.68	11.00	PASS
	138/5690	-0.47	-0.08	0.37	0.75	3.37	11.00	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=$10\log(10^{(\text{PSD antenna1 in dBm/10})}+10^{(\text{PSD antenna2 in dBm/10})})$

3. The manufacturer declared the transmitter output signals is CDD mode And Nss=1. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = GANT + Array Gain, For PSD measurements on all devices,Array Gain=10log(Nant/Nss)dB,

4.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=GANT+ Array Gain=1.59+10log（2/1)=4.6<6dBi. So the PSD limit is 11dBm.

U-NII-3

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	149/5745	3.69	4.04	3.20	3.55	6.81	30.00	PASS
	157/5785	2.36	2.71	3.51	3.86	6.33	30.00	PASS
	165/5825	3.70	4.05	2.52	2.87	6.51	30.00	PASS
802.11n HT40	151/5755	0.64	1.07	0.79	1.22	4.16	30.00	PASS
	159/5795	-0.29	0.15	0.58	1.02	3.61	30.00	PASS
802.11ac VHT20	149/5745	4.24	4.60	2.87	3.22	6.97	30.00	PASS
	157/5785	2.51	2.86	3.66	4.01	6.48	30.00	PASS
	165/5825	3.94	4.30	2.52	2.87	6.65	30.00	PASS
802.11ac VHT40	151/5755	0.84	1.27	0.99	1.42	4.36	30.00	PASS
	159/5795	-0.01	0.43	0.59	1.02	3.74	30.00	PASS
802.11ac VHT80	155/5775	-3.51	-2.85	-1.83	-1.17	1.08	30.00	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=$10\log(10^{(\text{PSD antenna1 in dBm/10})}+10^{(\text{PSD antenna2 in dBm/10})})$

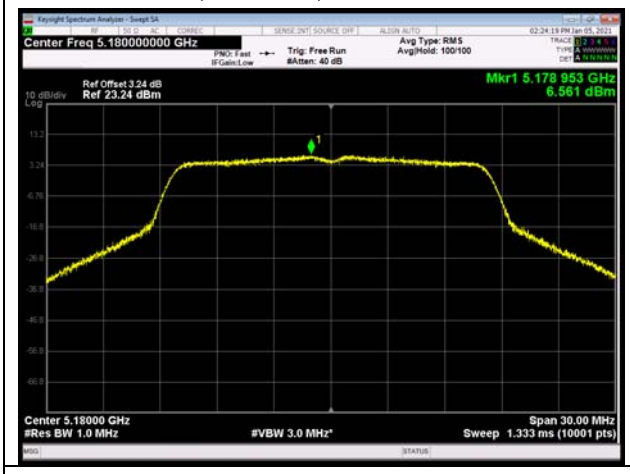
3. The manufacturer declared the transmitter output signals is CDD mode And Nss=1. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = GANT + Array Gain, For PSD measurements on all devices,Array Gain=10log(Nant/Nss)dB,

4.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.

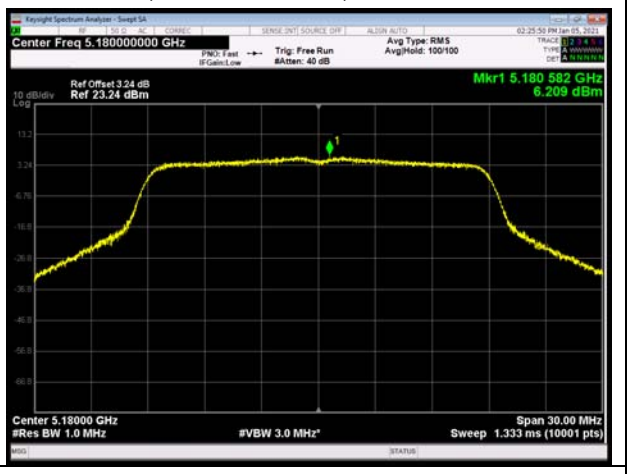
so directional gain=GANT+ Array Gain=-0.5+10log（2/1)=2.51<6dBi. So the PSD limit is 30dBm.

SISO Antenna 1

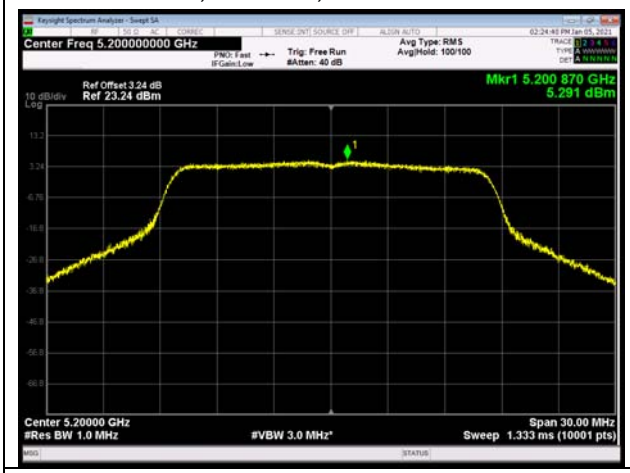
U-NII-1, 802.11a, Channel No.: 36



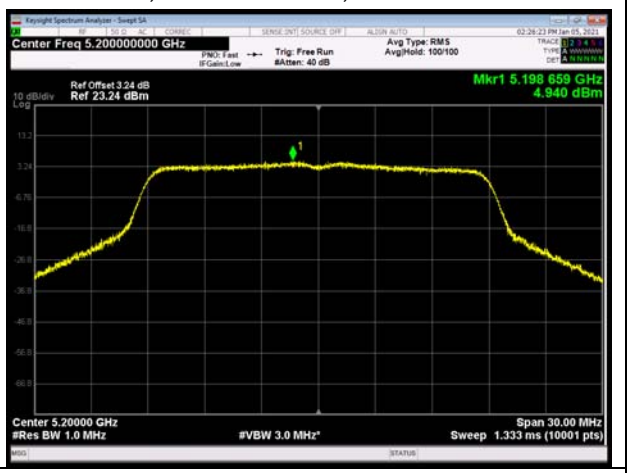
U-NII-1, 802.11n HT20, Channel No.: 36



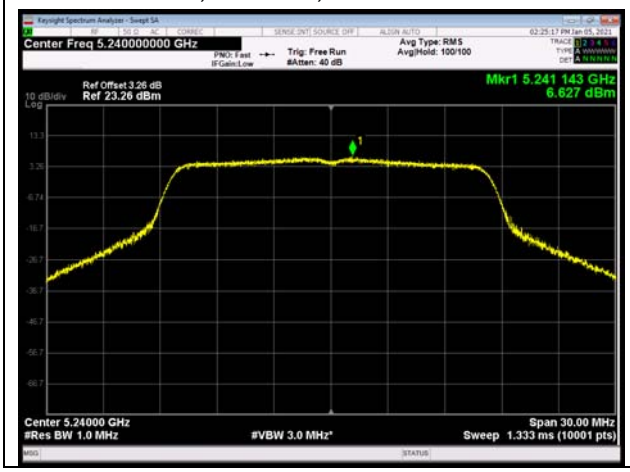
U-NII-1, 802.11a, Channel No.: 40



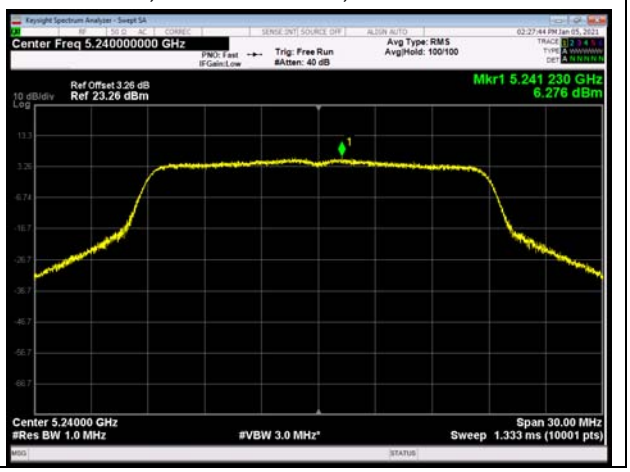
U-NII-1, 802.11n HT20, Channel No.: 40



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

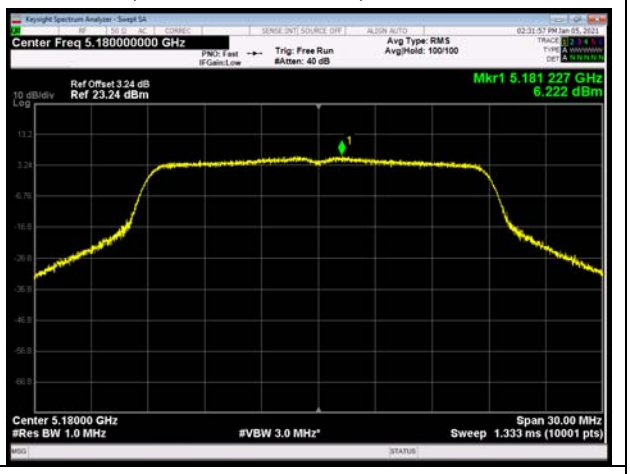


U-NII-1, 802.11n HT20, Channel No.: 48



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

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



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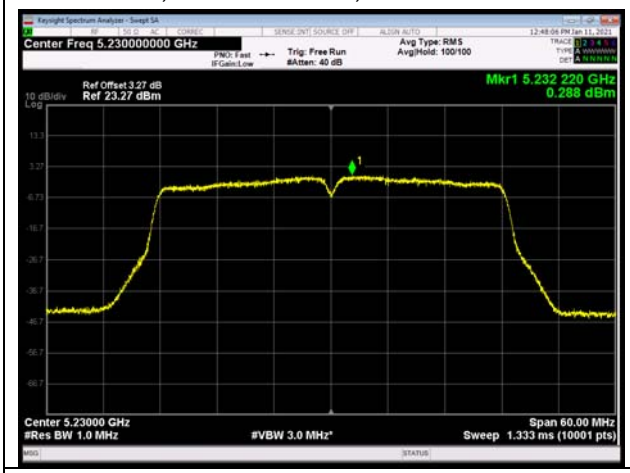
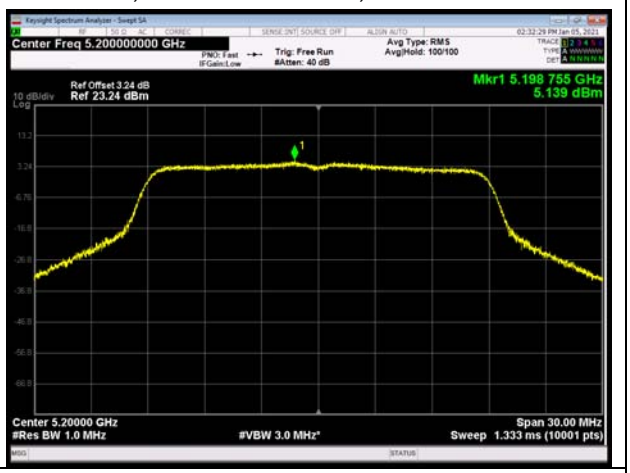
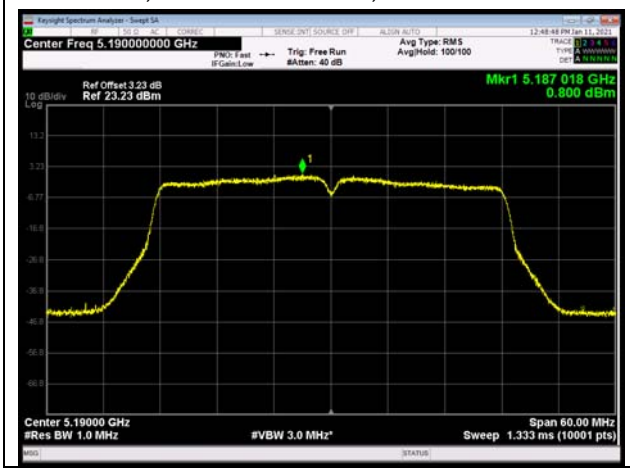


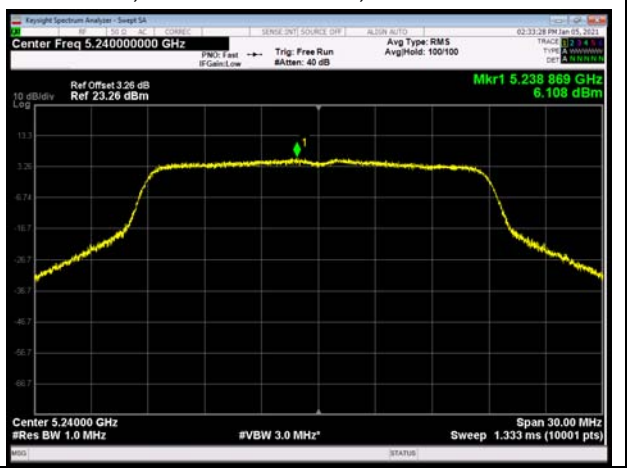
U-NII-1, 802.11ac VHT20, Channel No.: 40



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

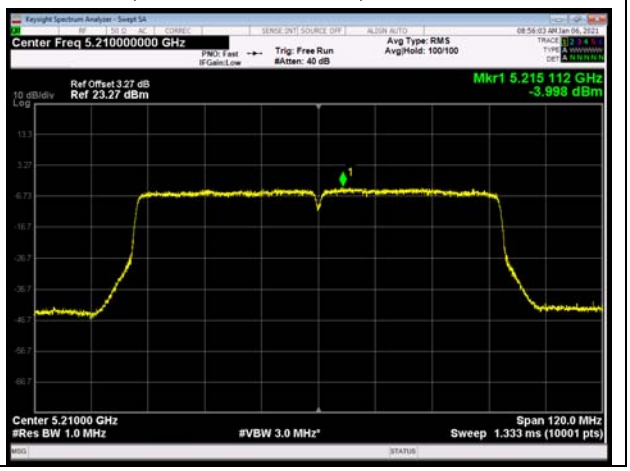


U-NII-1, 802.11ac VHT20, Channel No.: 48

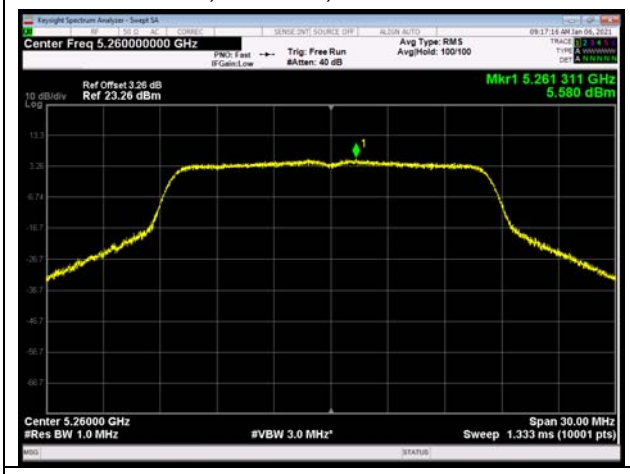


U-NII-1, 802.11ac VHT40, Channel No.: 46

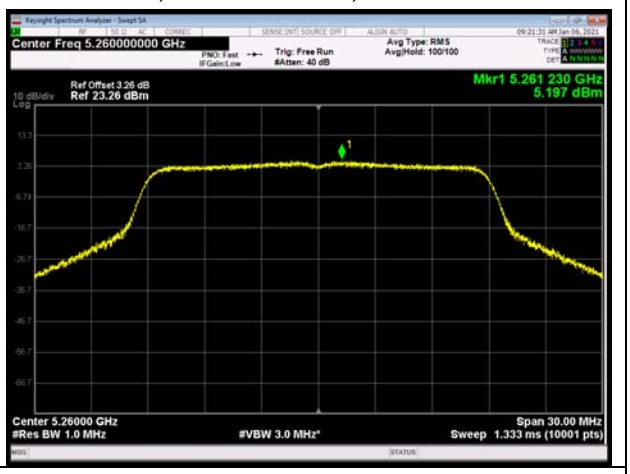
U-NII-1, 802.11ac VHT80, Channel No.: 42



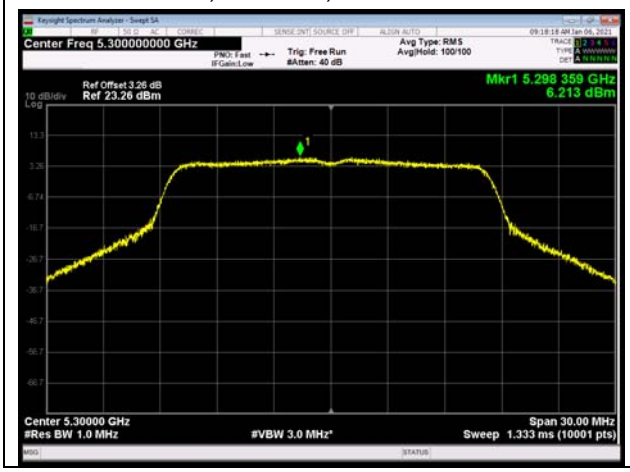
U-NII-2A, 802.11a, Channel No.: 52



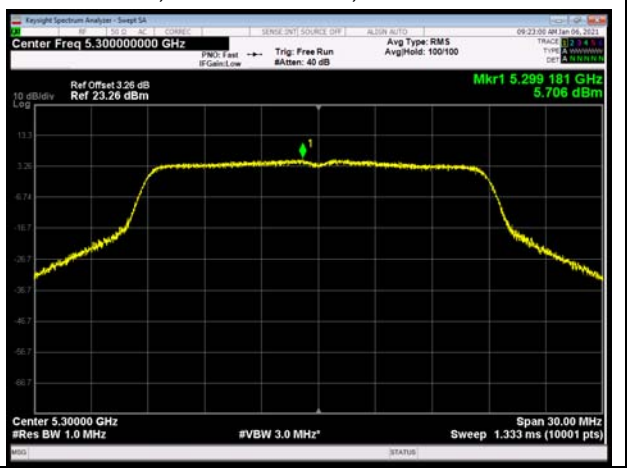
U-NII-2A, 802.11n HT20, Channel No.: 52



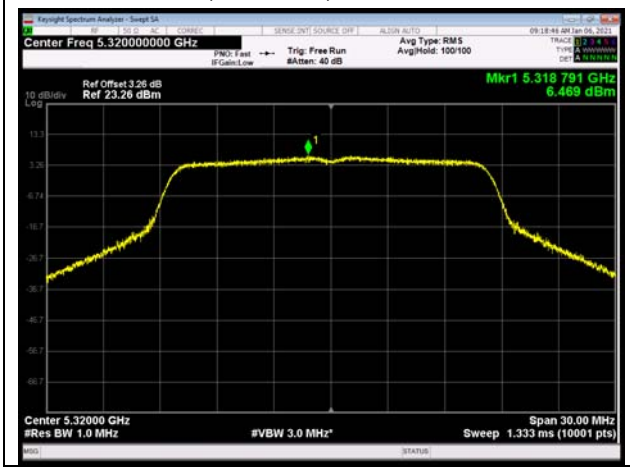
U-NII-2A, 802.11a, Channel No.: 60



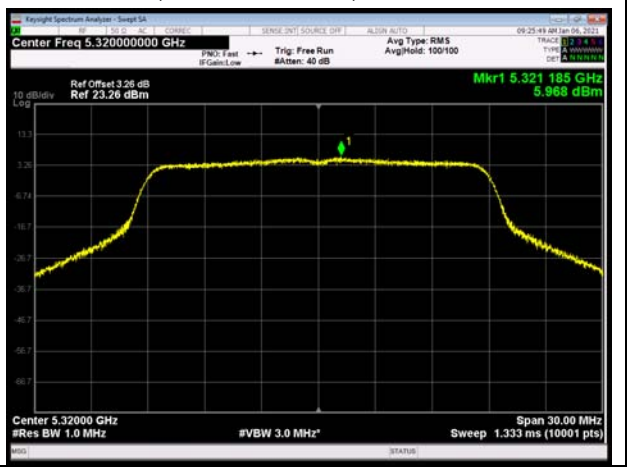
U-NII-2A, 802.11n HT20, Channel No.: 60



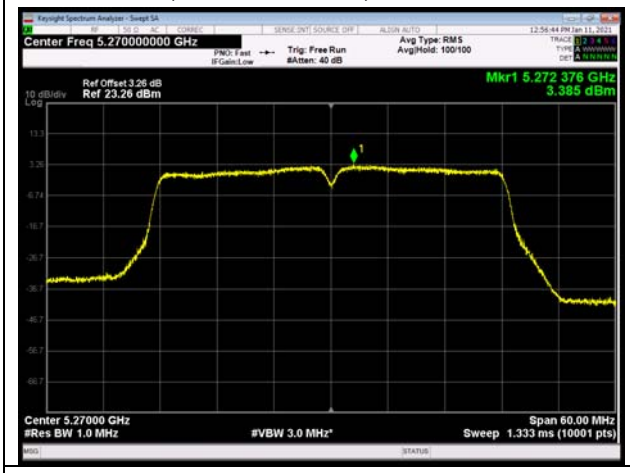
U-NII-2A, 802.11a, Channel No.: 64



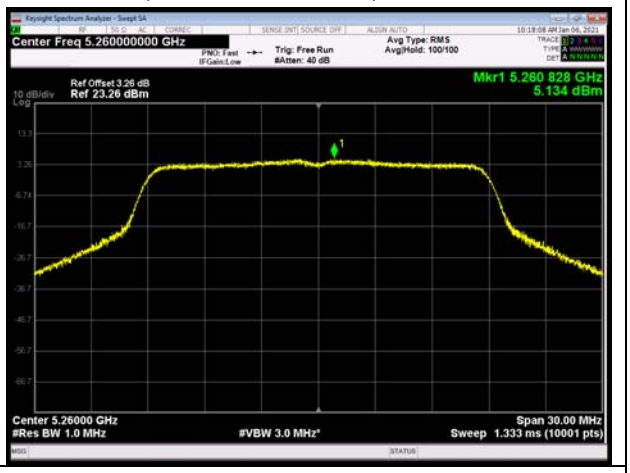
U-NII-2A, 802.11n HT20, Channel No.: 64



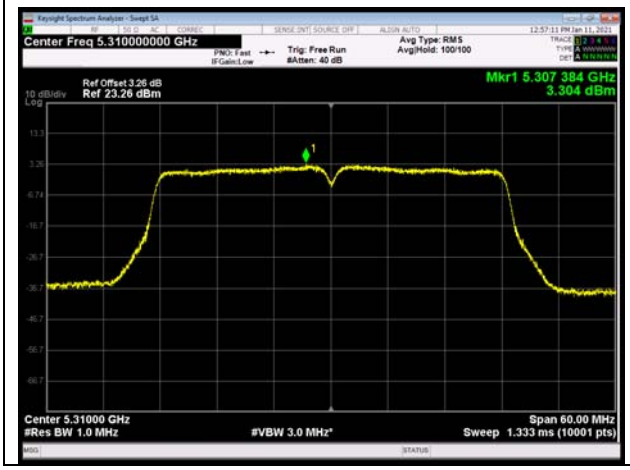
U-NII-2A, 802.11n HT40, Channel No.: 54



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



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



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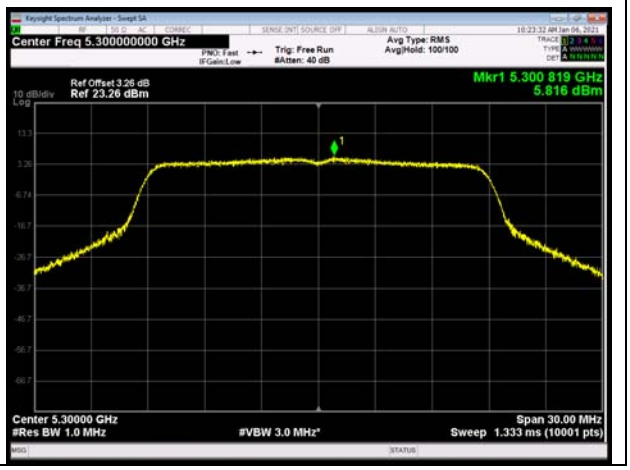

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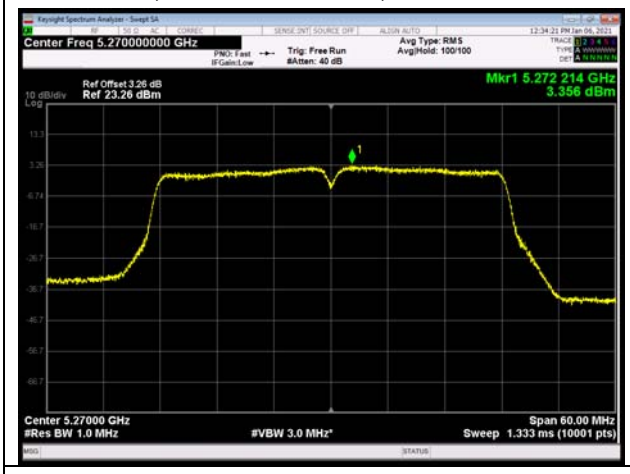

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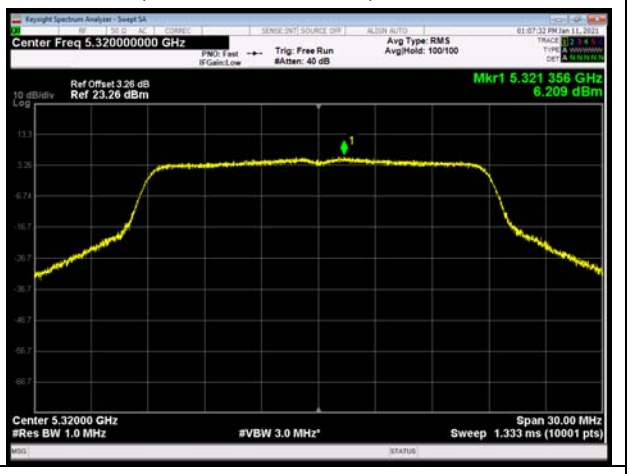

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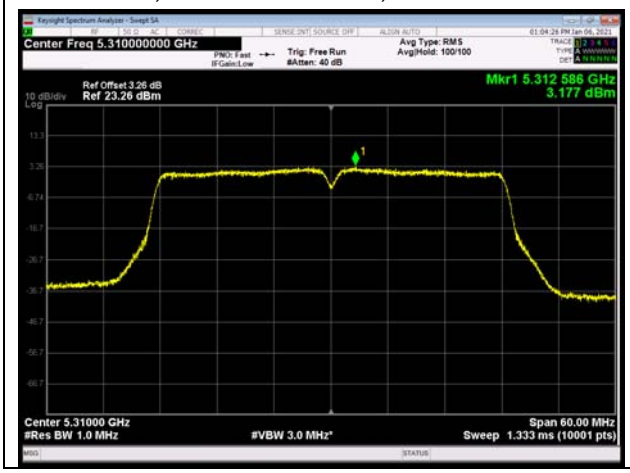
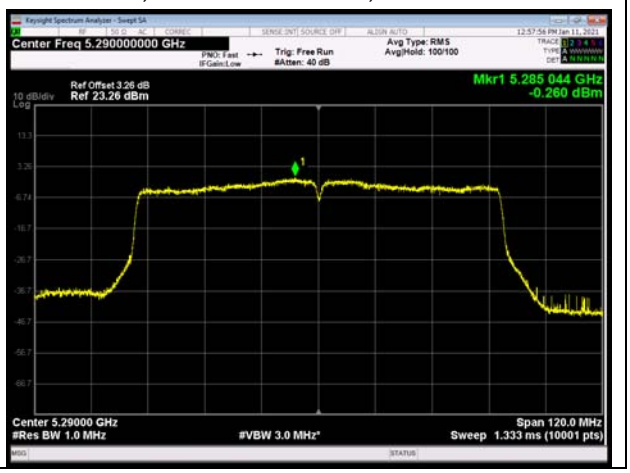
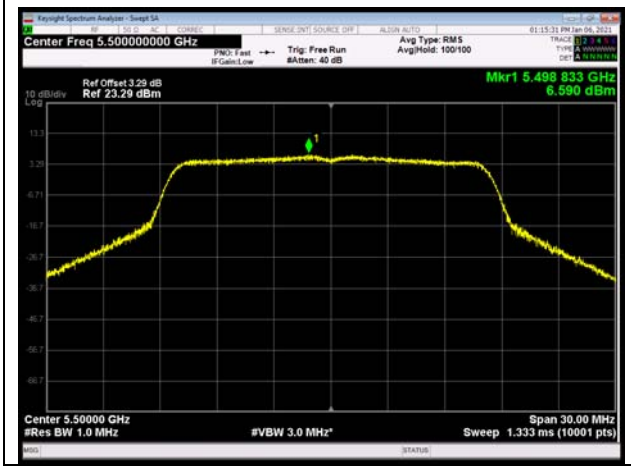


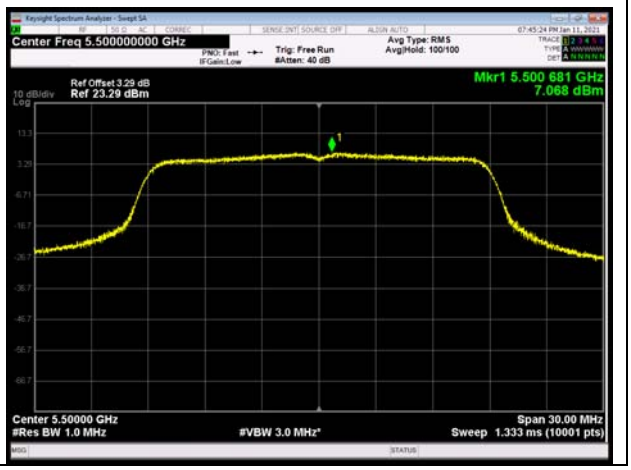
U-NII-2A, 802.11ac VHT80, Channel No.: 58



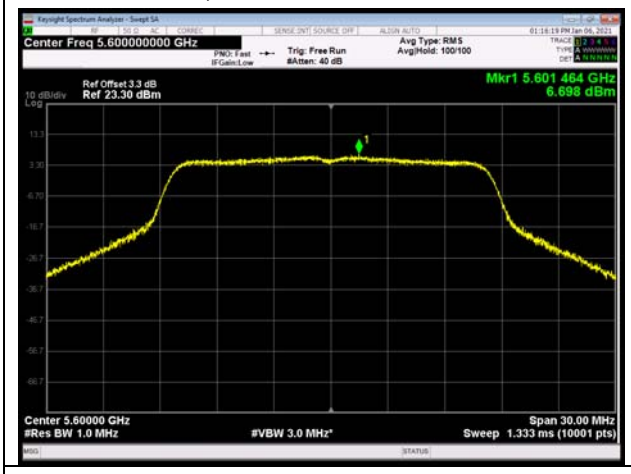
U-NII-2C, 802.11a Channel No.: 100



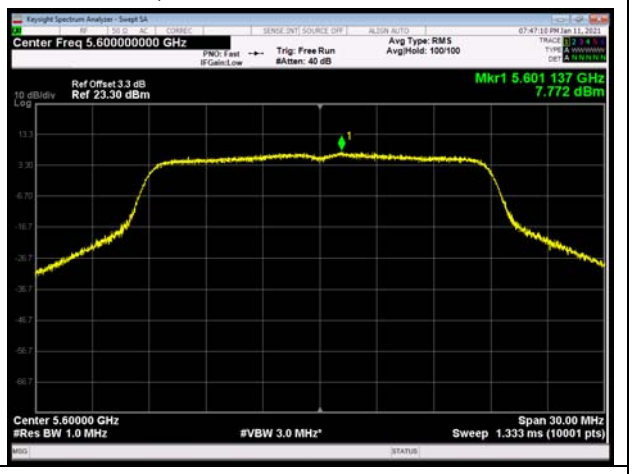
U-NII-2C, 802.11n HT20 Channel No.: 100



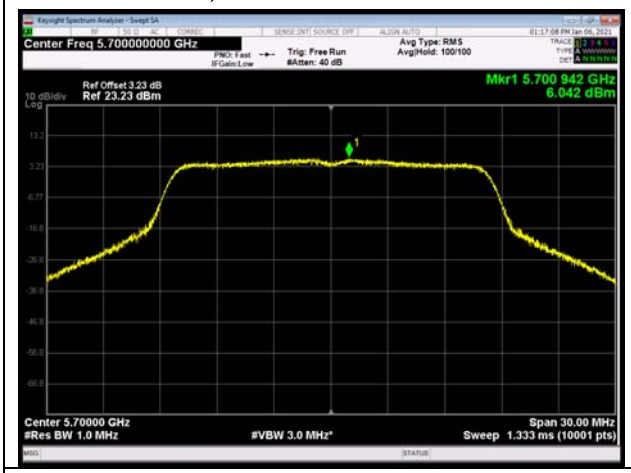
U-NII-2C, 802.11a Channel No.: 120



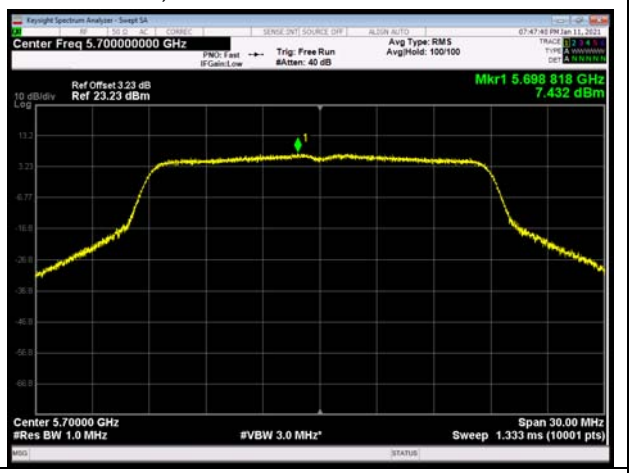
U-NII-2C, 802.11n HT20 Channel No.: 120



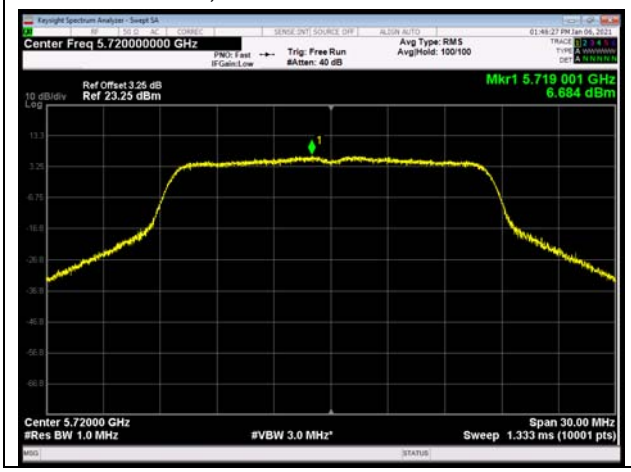
U-NII-2C, 802.11a Channel No.:140



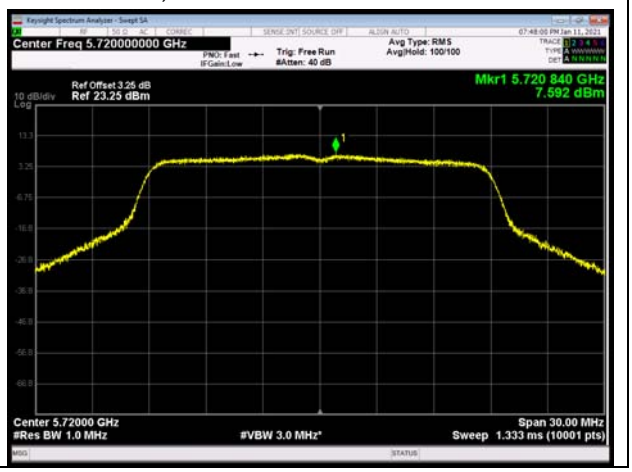
U-NII-2C, 802.11n HT20 Channel No.:140



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

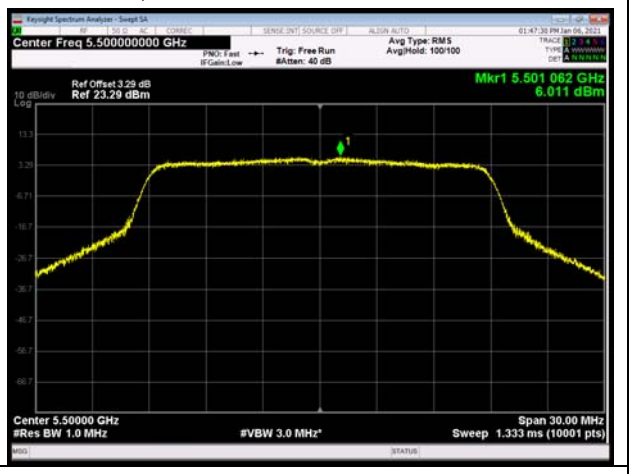


U-NII-2C, 802.11n HT20 Channel No.:144

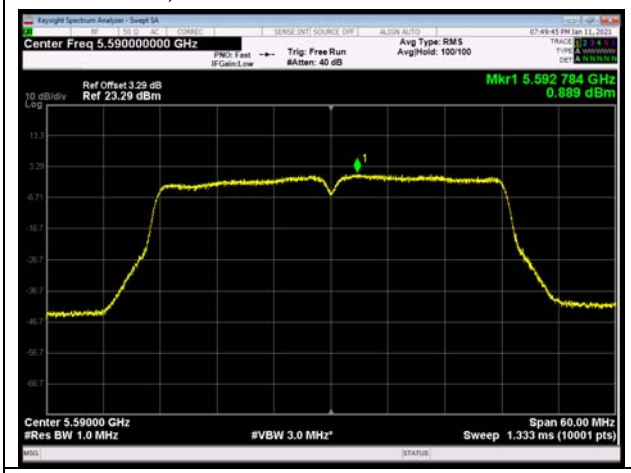


U-NII-2C, 802.11n HT40 Channel No.: 102

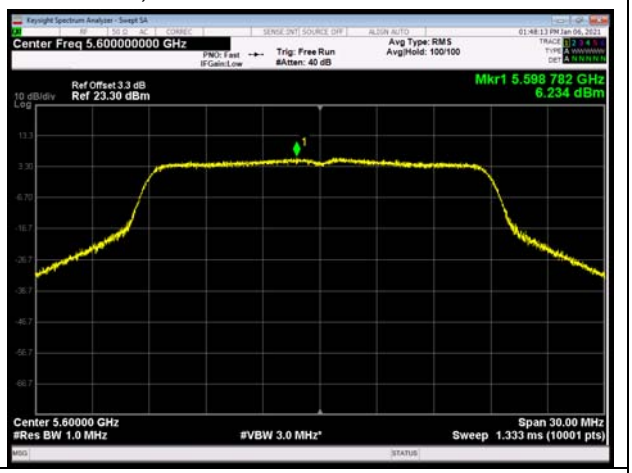
U-NII-2C, 802.11ac VHT20 Channel No.: 100



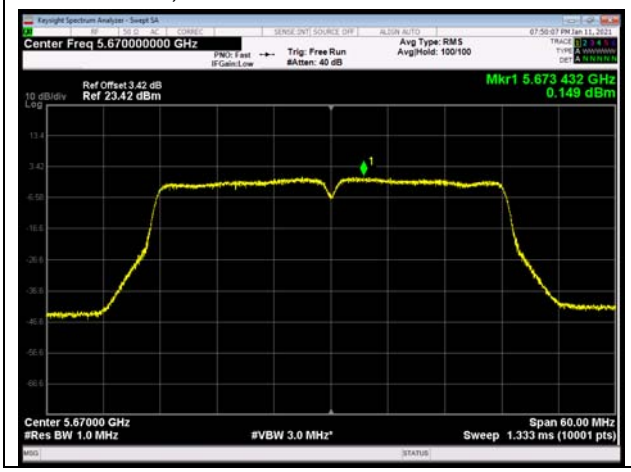
U-NII-2C, 802.11n HT40 Channel No.: 118



U-NII-2C, 802.11ac VHT20 Channel No.: 120



U-NII-2C, 802.11n HT40 Channel No.:134



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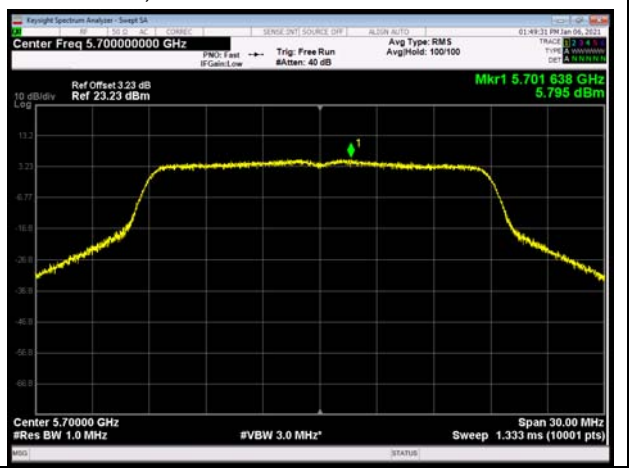

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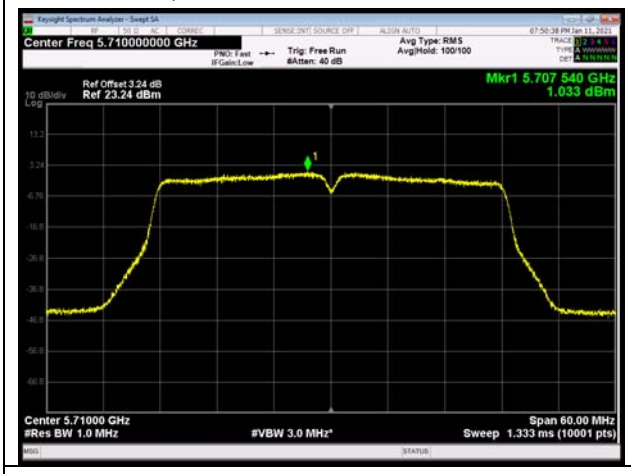
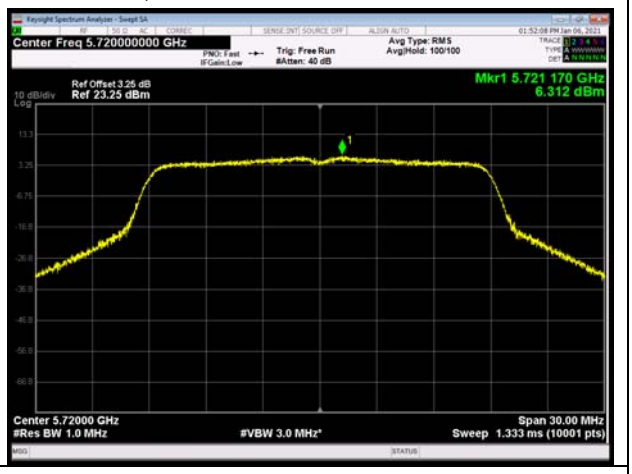


U-NII-2C, 802.11ac VHT20 Channel No.:144



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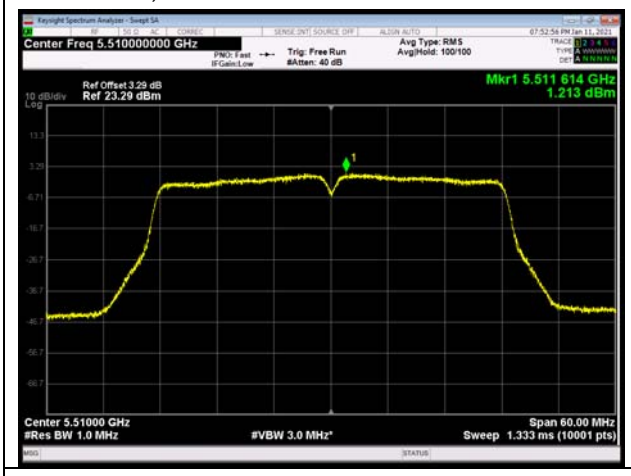

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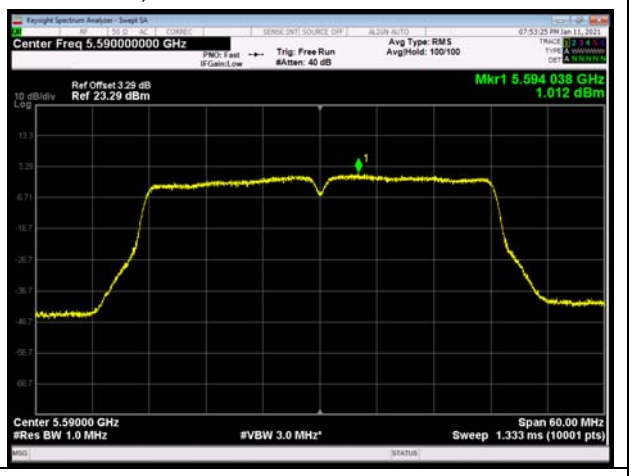

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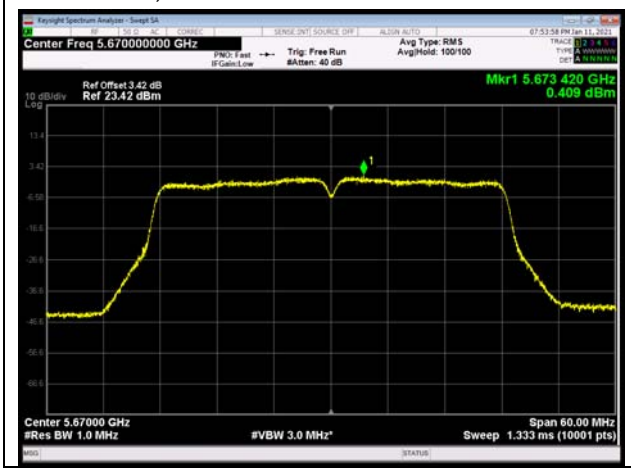

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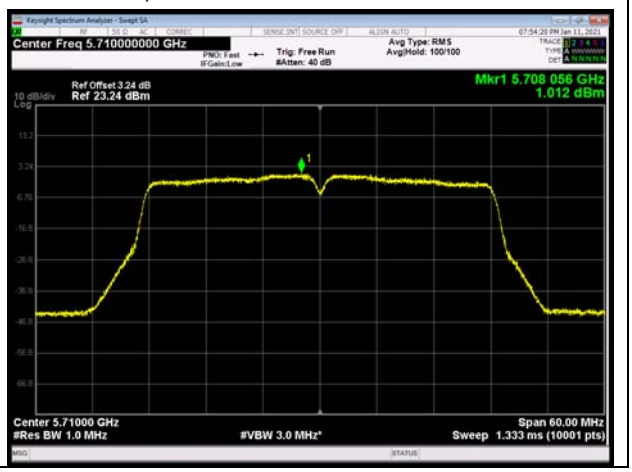
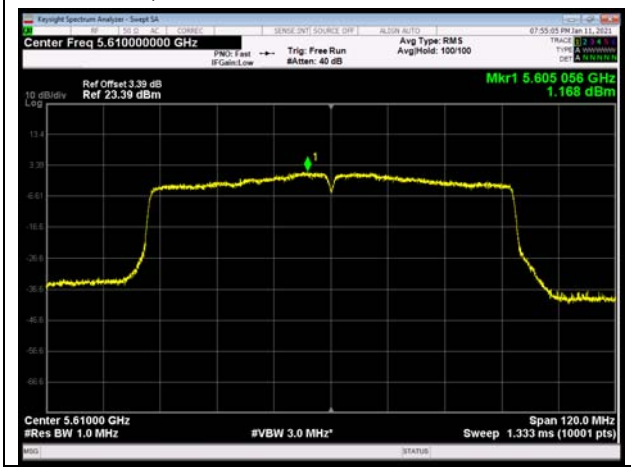
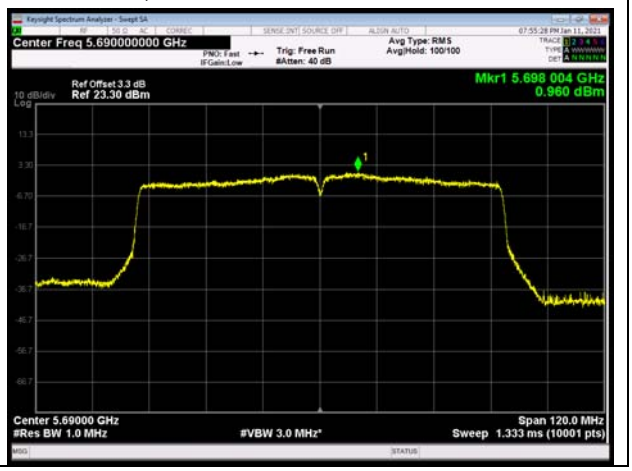


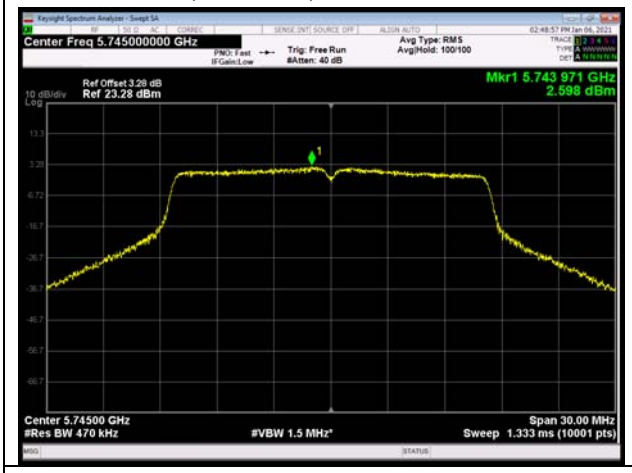
U-NII-2C, 802.11ac VHT80 Channel No.: 122



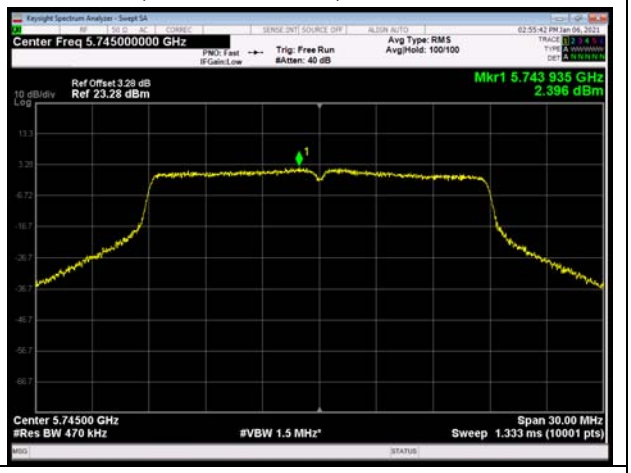
U-NII-2C, 802.11ac VHT80 Channel No.:138



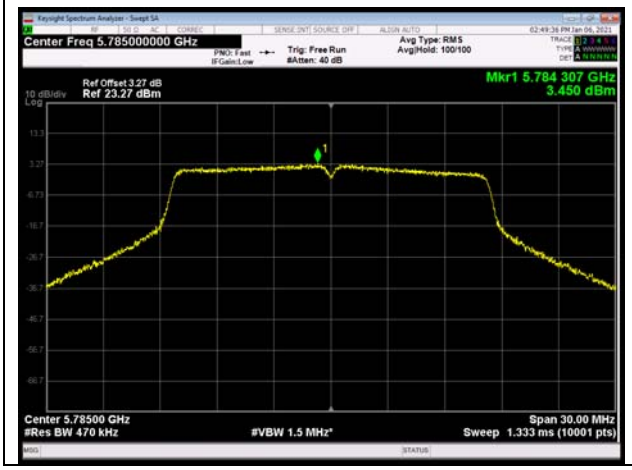
U-NII-3, 802.11a, Channel No.: 149



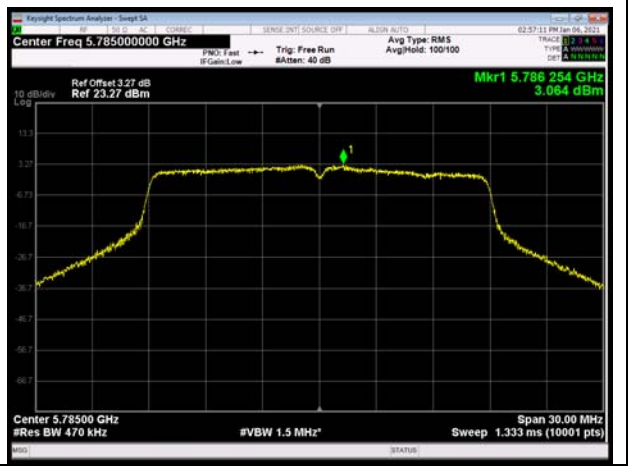
U-NII-3, 802.11n HT20, Channel No.: 149



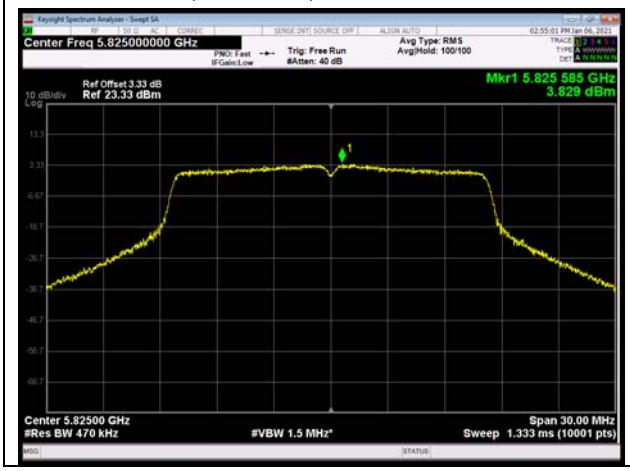
U-NII-3, 802.11a, Channel No.: 157



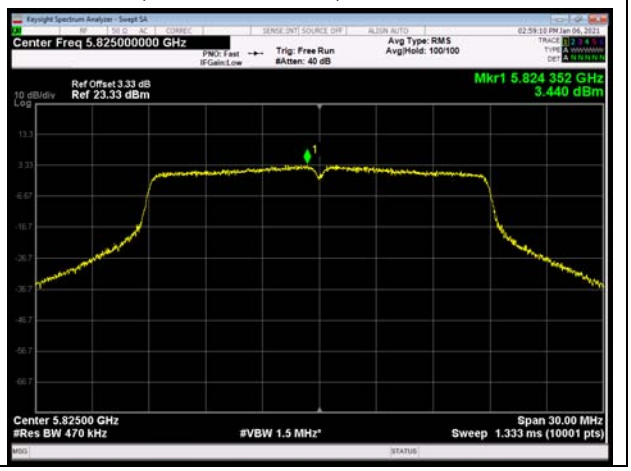
U-NII-3, 802.11n HT20, Channel No.: 157



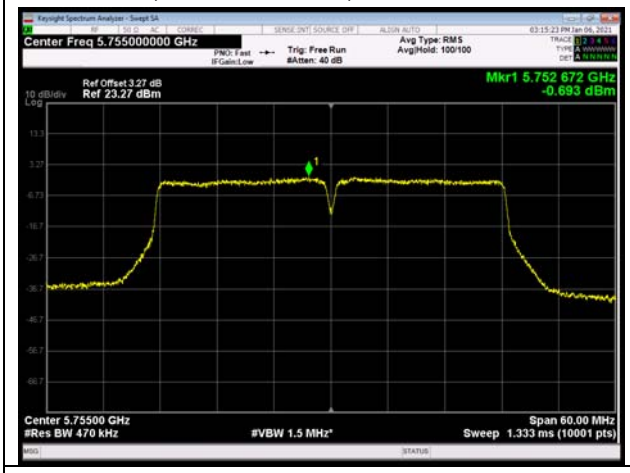
U-NII-3, 802.11a, Channel No.: 165



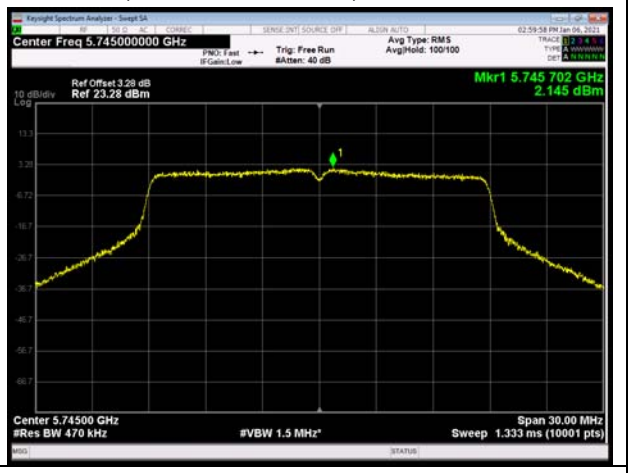
U-NII-3, 802.11n HT20, Channel No.: 165



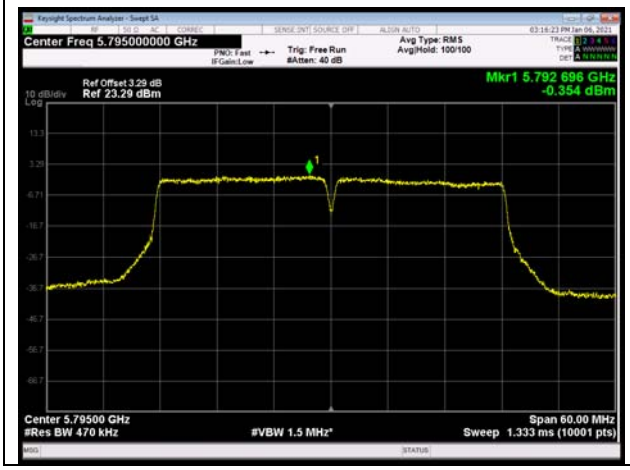
U-NII-3, 802.11n HT40, Channel No.: 151



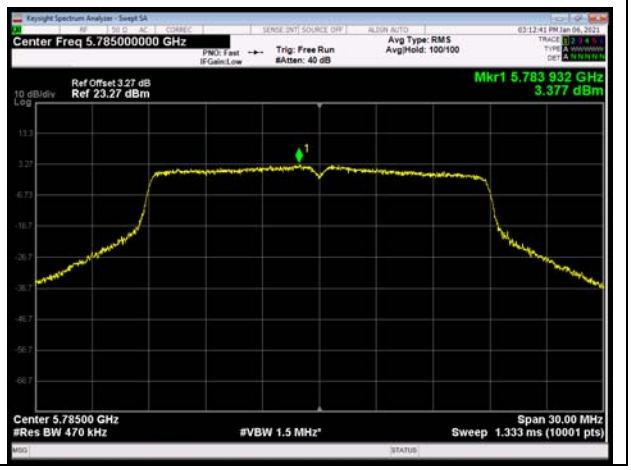
U-NII-3, 802.11ac VHT20, Channel No.: 149



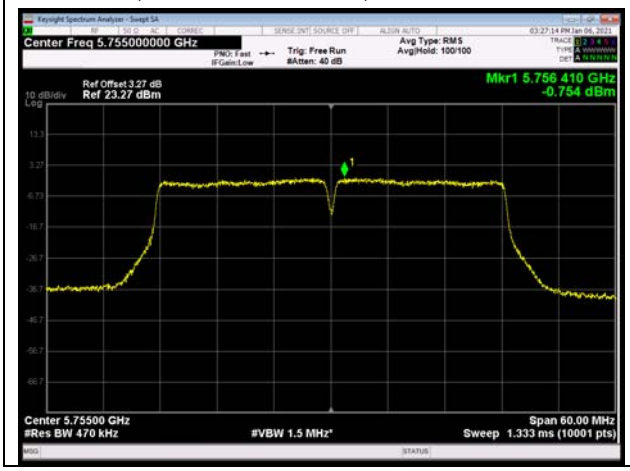
U-NII-3, 802.11n HT40, Channel No.: 159



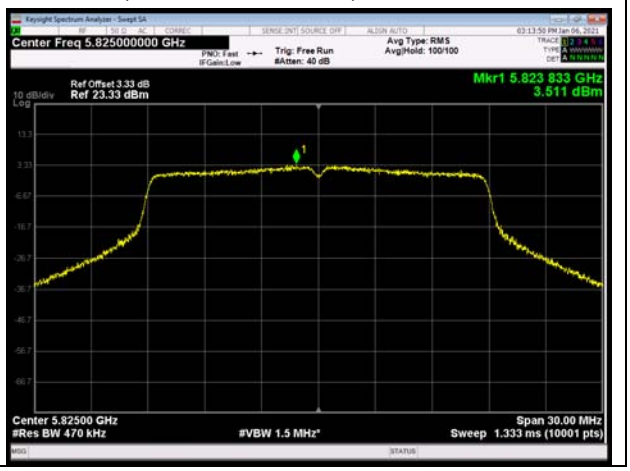
U-NII-3, 802.11ac VHT20, Channel No.: 157



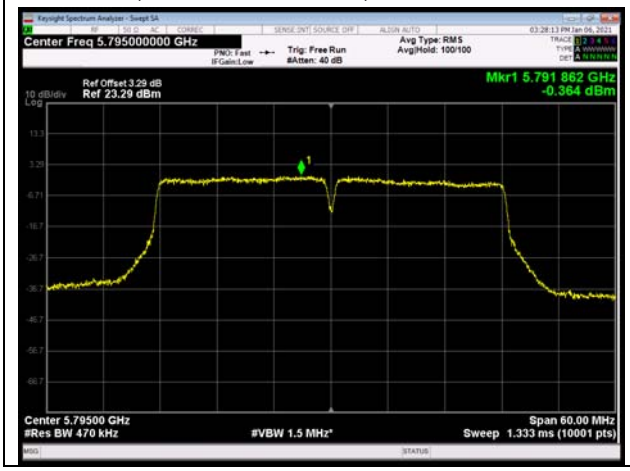
U-NII-3, 802.11ac VHT40, Channel No.: 151



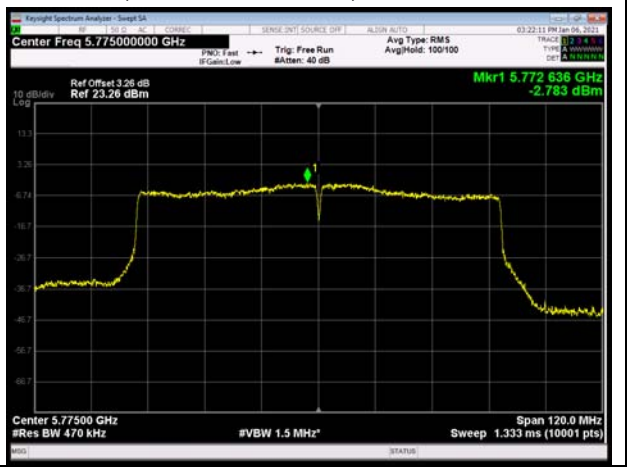
U-NII-3, 802.11ac VHT20, Channel No.: 165



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

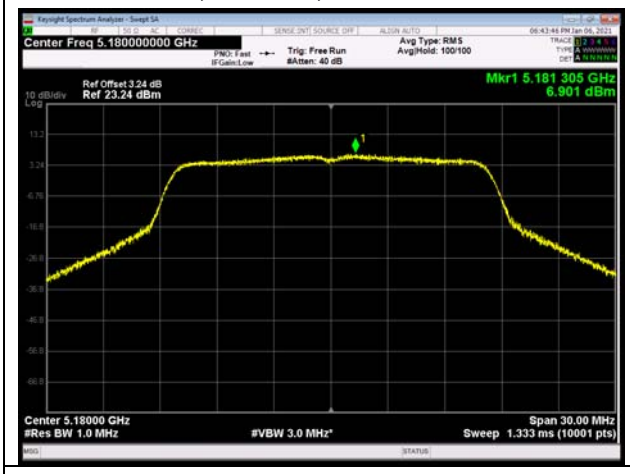


U-NII-3, 802.11ac VHT80, Channel No.: 155

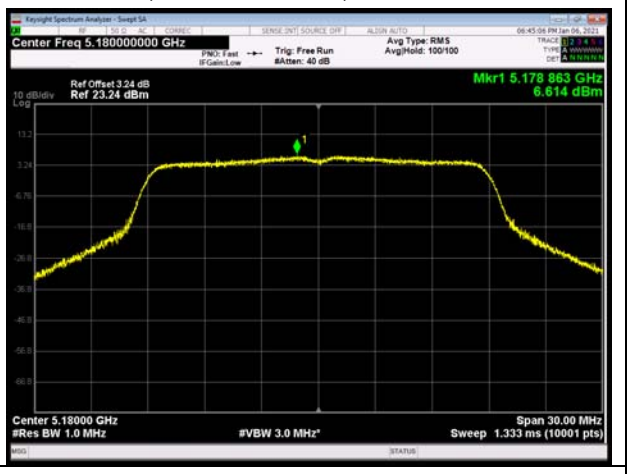


SISO Antenna 2

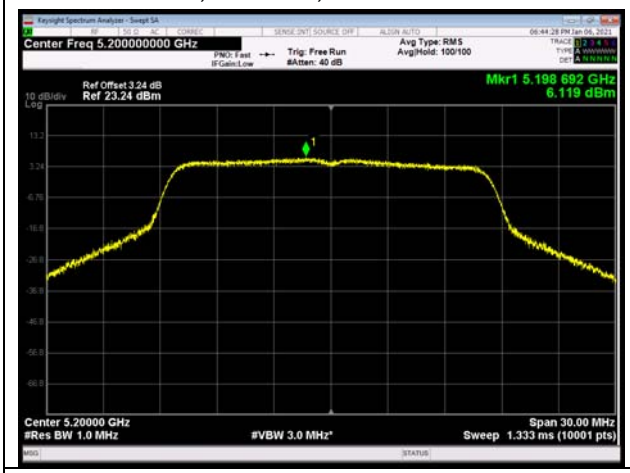
U-NII-1, 802.11a, Channel No.: 36



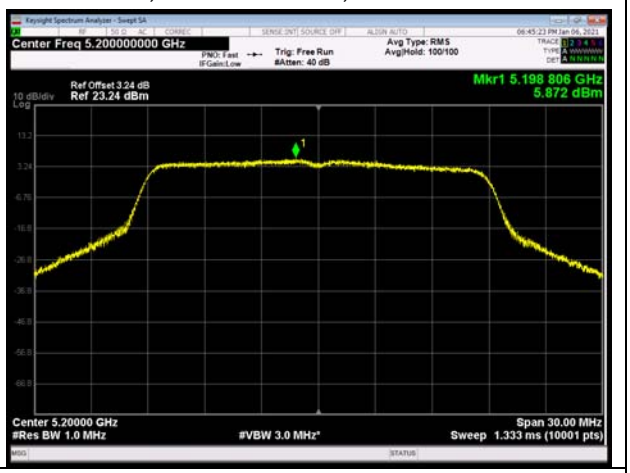
U-NII-1, 802.11n HT20, Channel No.: 36



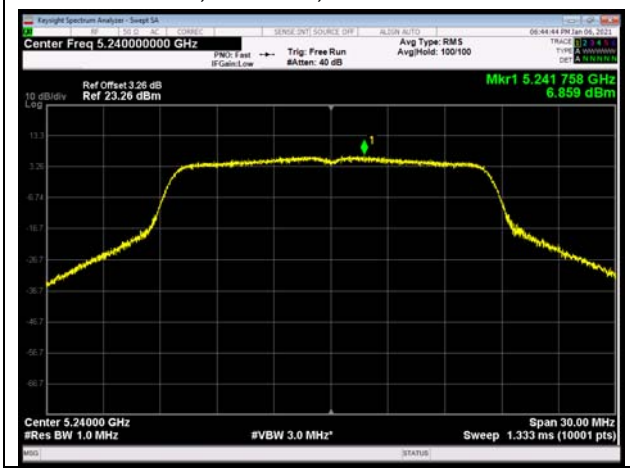
U-NII-1, 802.11a, Channel No.: 40



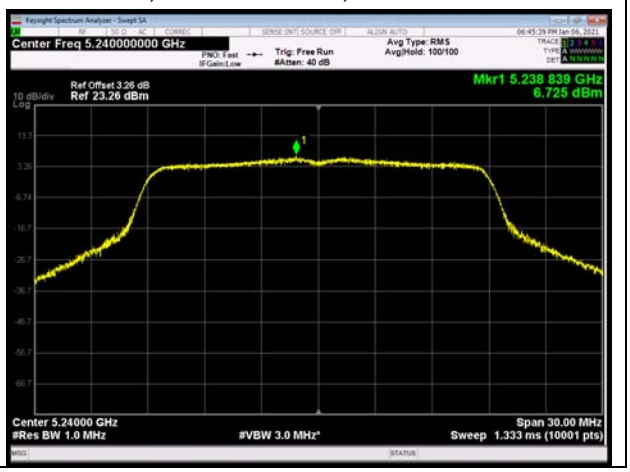
U-NII-1, 802.11n HT20, Channel No.: 40



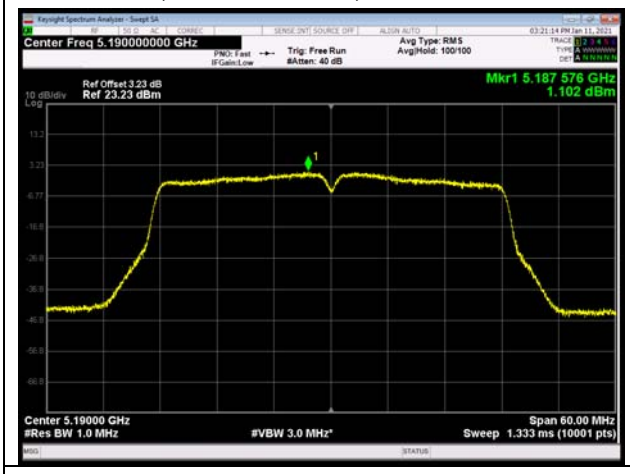
U-NII-1, 802.11a, Channel No.: 48



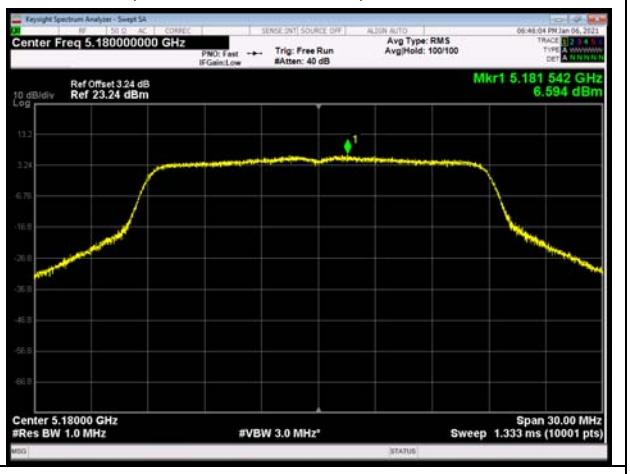
U-NII-1, 802.11n HT20, Channel No.: 48



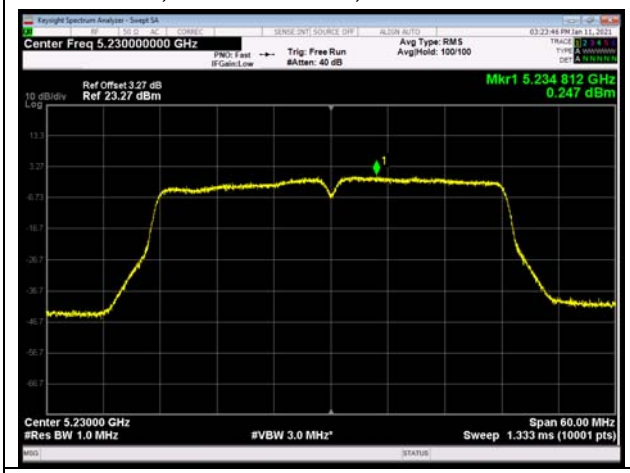
U-NII-1, 802.11n HT40, Channel No.: 38



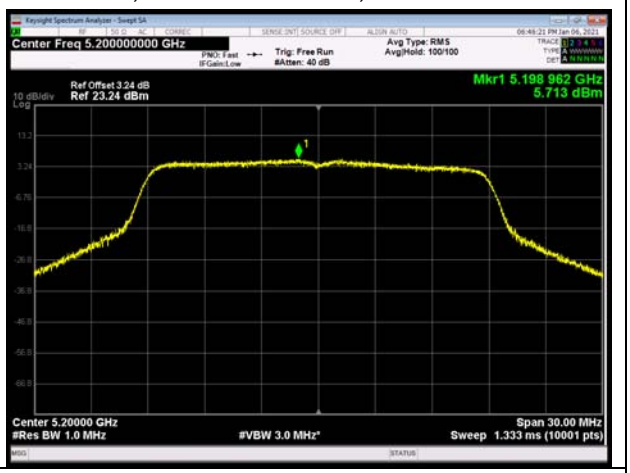
U-NII-1, 802.11ac VHT20, Channel No.: 36



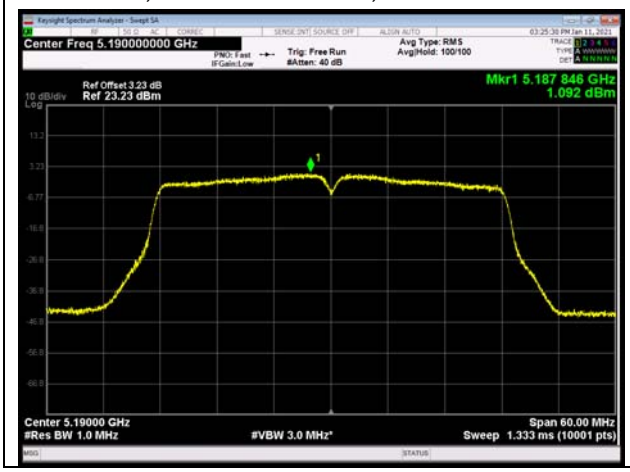
U-NII-1, 802.11n HT40, Channel No.: 46



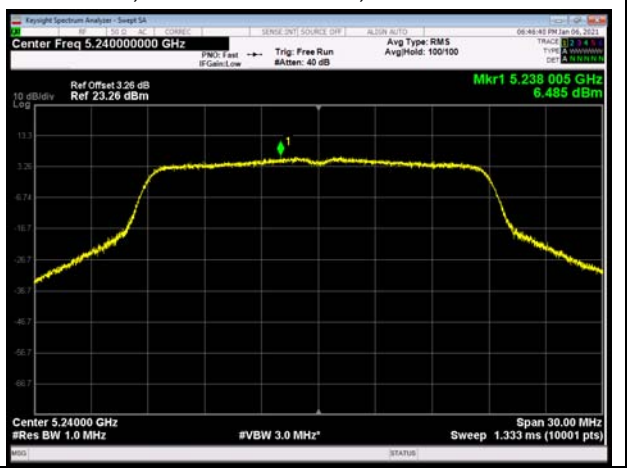
U-NII-1, 802.11ac VHT20, Channel No.: 40



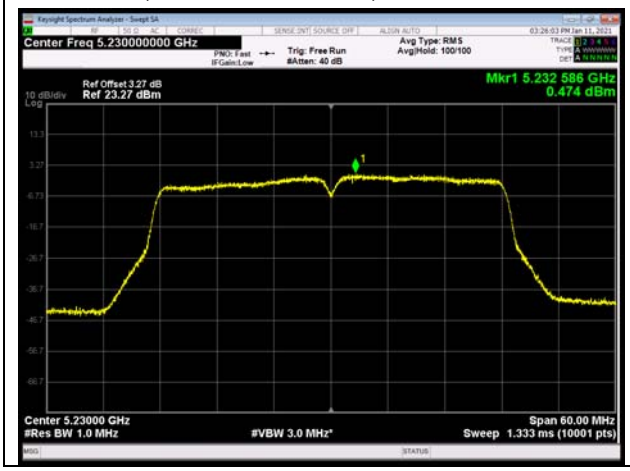
U-NII-1, 802.11ac VHT40, Channel No.: 38



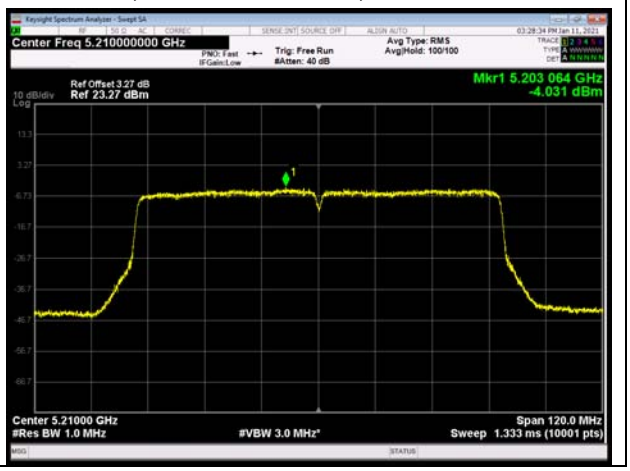
U-NII-1, 802.11ac VHT20, Channel No.: 48



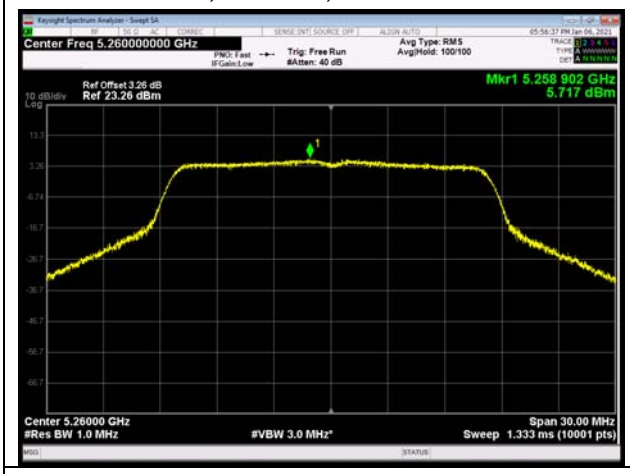
U-NII-1, 802.11ac VHT40, Channel No.: 46



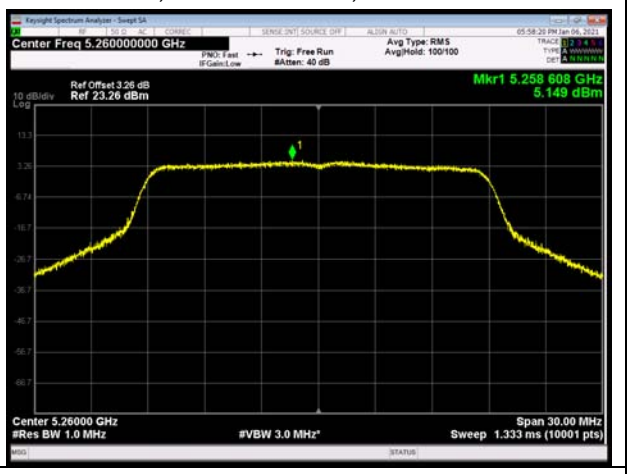
U-NII-1, 802.11ac VHT80, Channel No.: 42



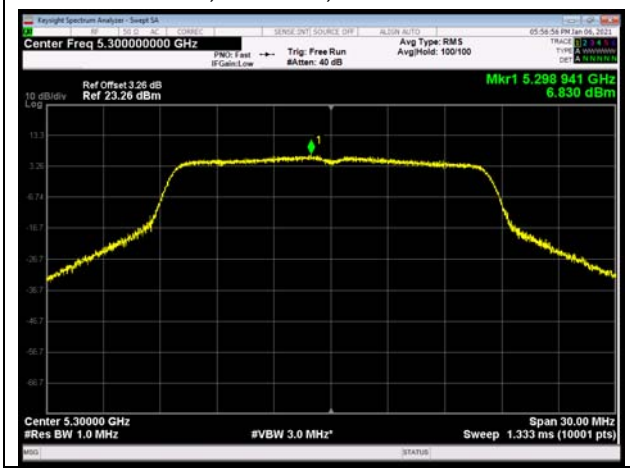
U-NII-2A, 802.11a, Channel No.: 52



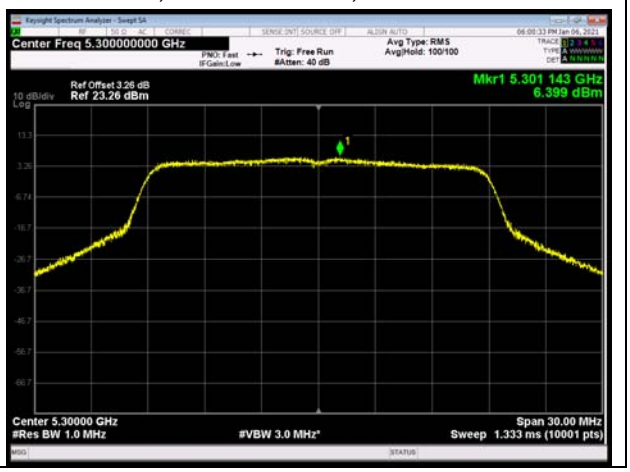
U-NII-2A, 802.11n HT20, Channel No.: 52



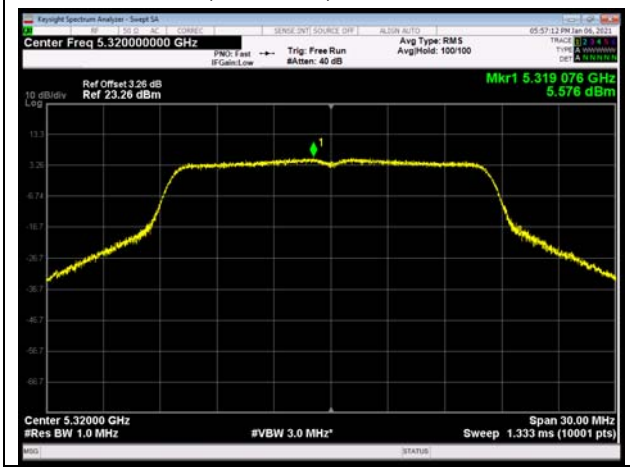
U-NII-2A, 802.11a, Channel No.: 60



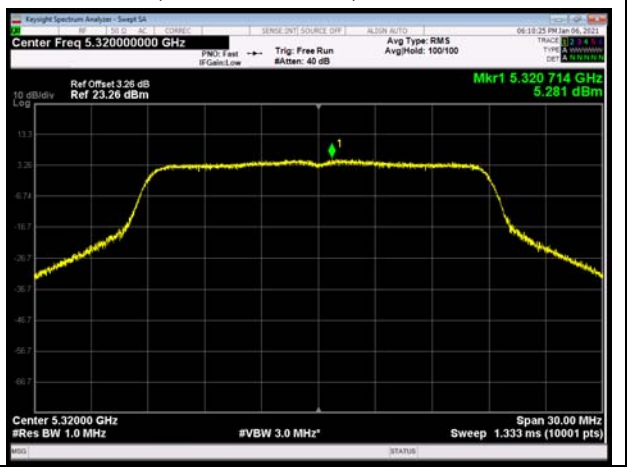
U-NII-2A, 802.11n HT20, Channel No.: 60



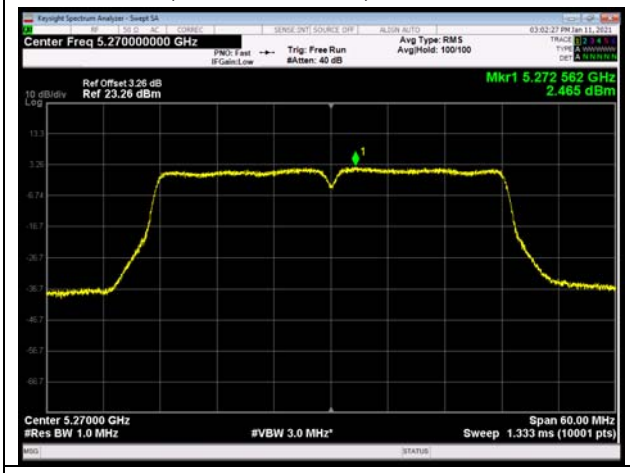
U-NII-2A, 802.11a, Channel No.: 64



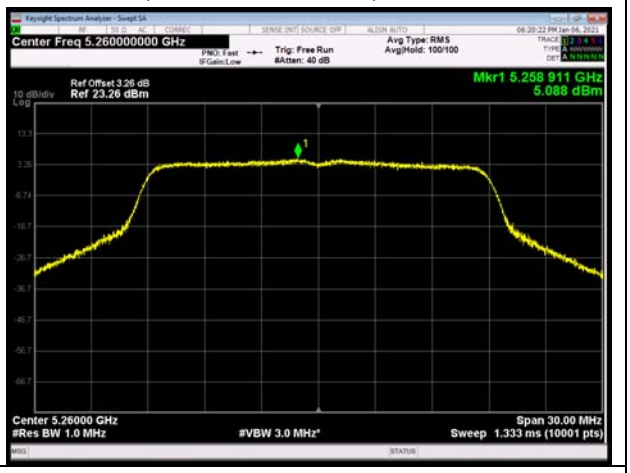
U-NII-2A, 802.11n HT20, Channel No.: 64



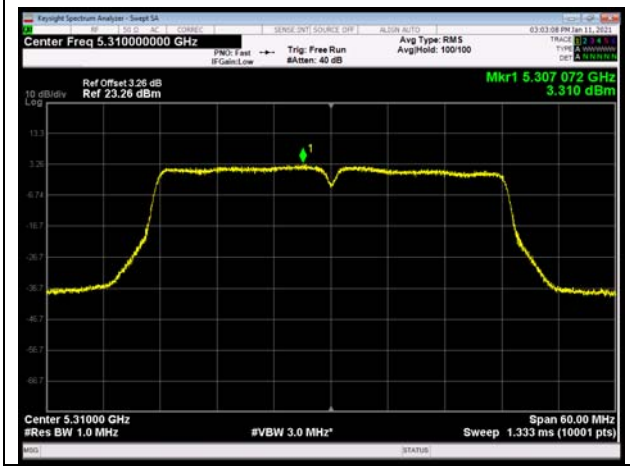
U-NII-2A, 802.11n HT40, Channel No.: 54



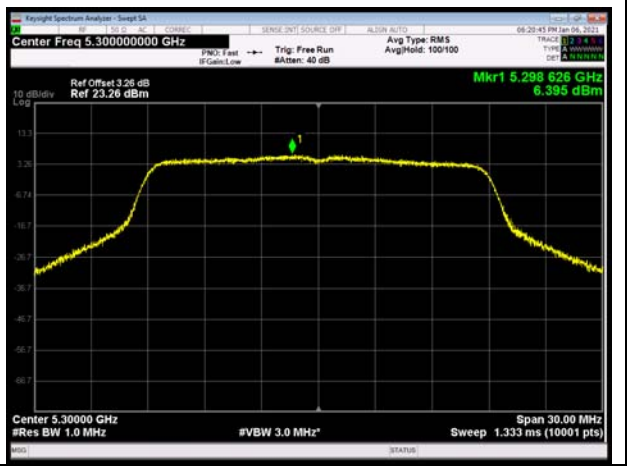
U-NII-2A, 802.11ac VHT20, Channel No.:52



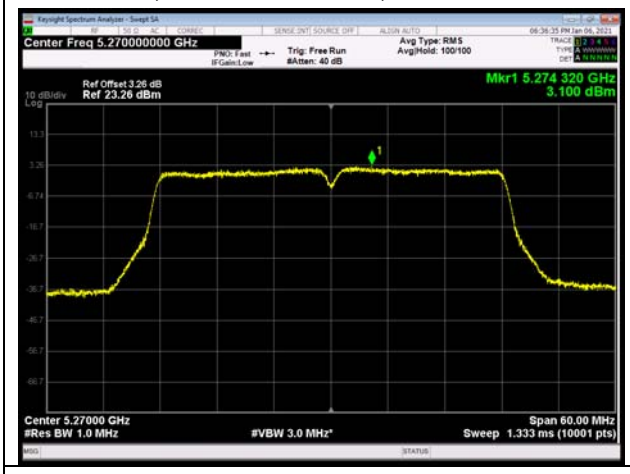
U-NII-2A, 802.11n HT40, Channel No.: 62



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



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



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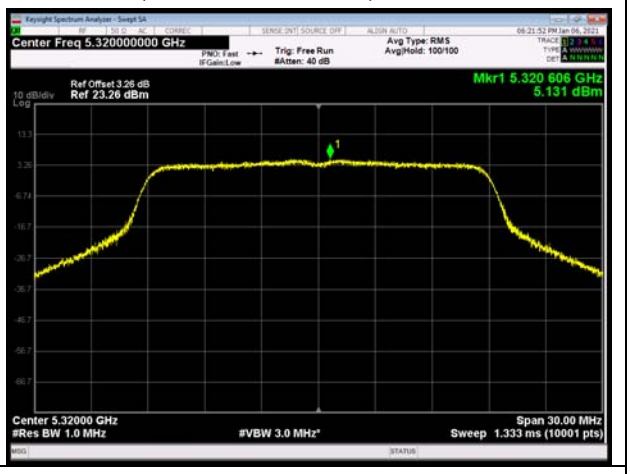
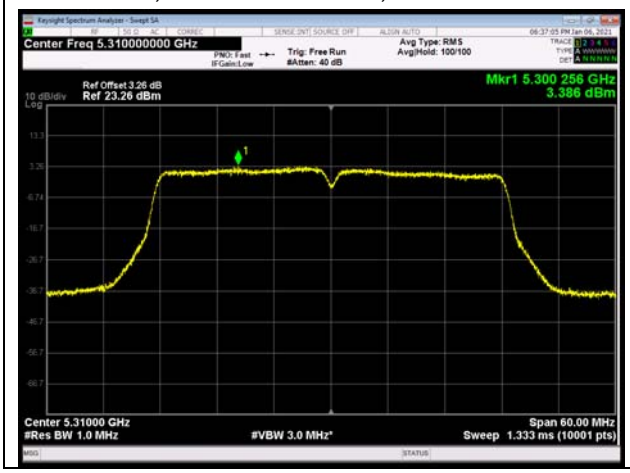
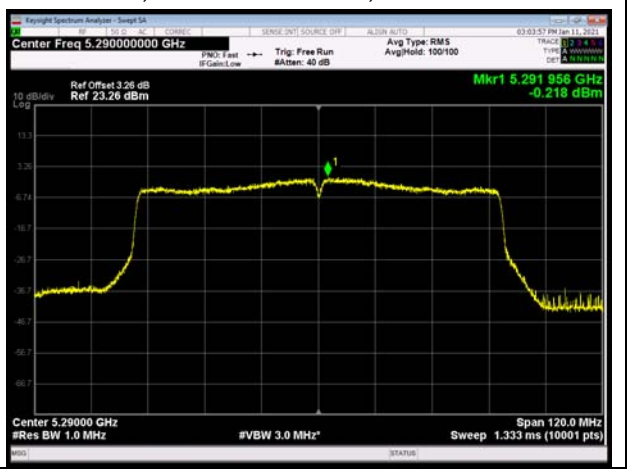


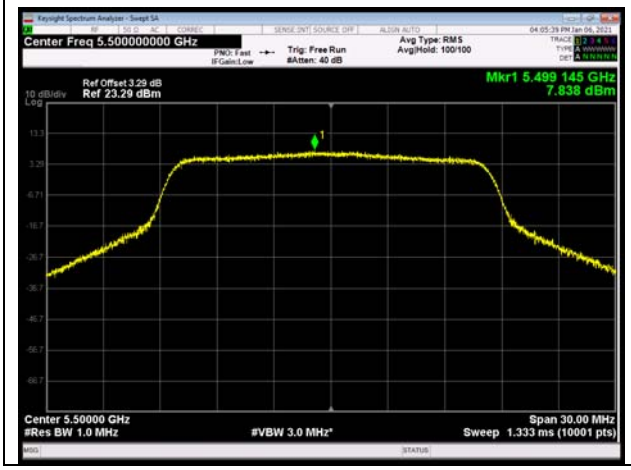
U-NII-2A, 802.11ac VHT40, Channel No.: 62



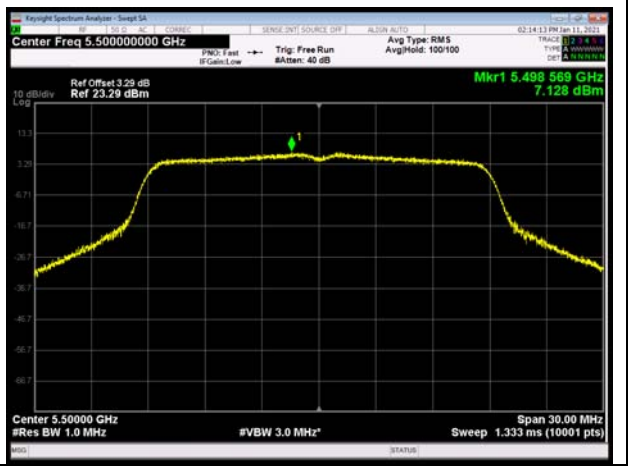
U-NII-2A, 802.11ac VHT80, Channel No.: 58



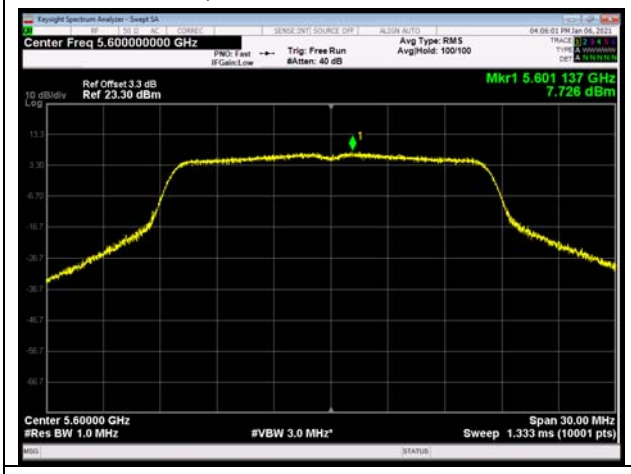
U-NII-2C, 802.11a Channel No.: 100



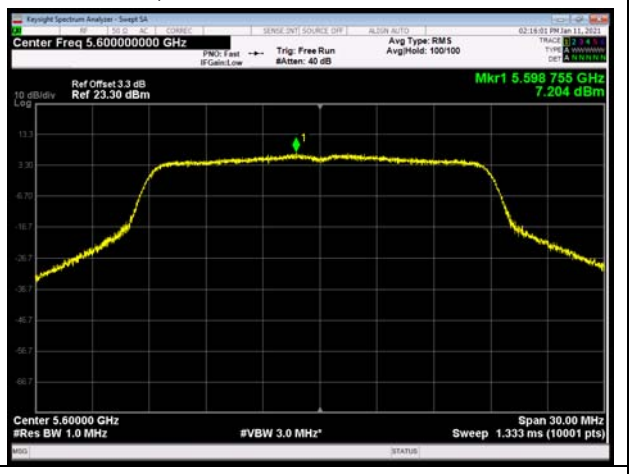
U-NII-2C, 802.11n HT20 Channel No.: 100



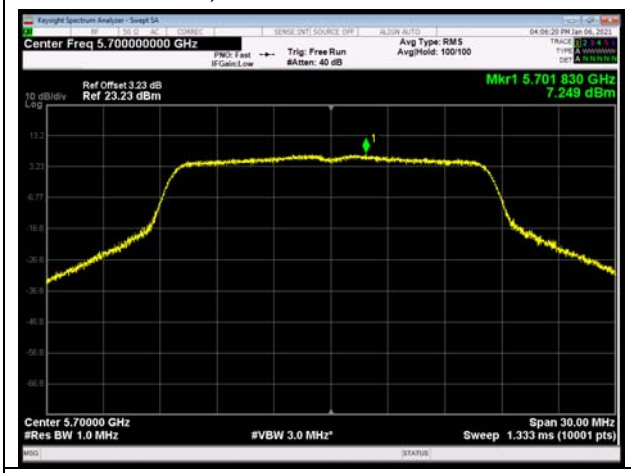
U-NII-2C, 802.11a Channel No.: 120



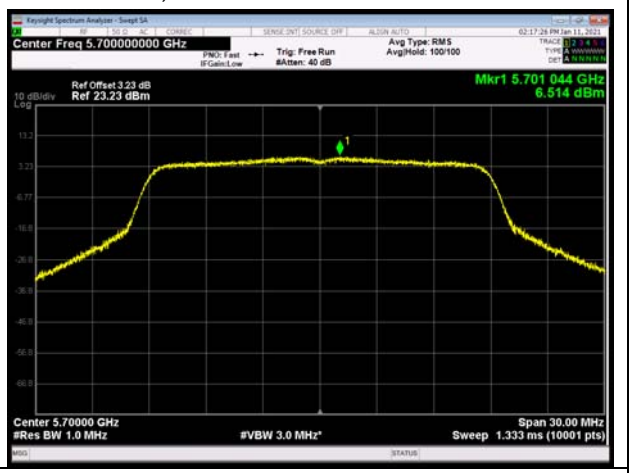
U-NII-2C, 802.11n HT20 Channel No.: 120



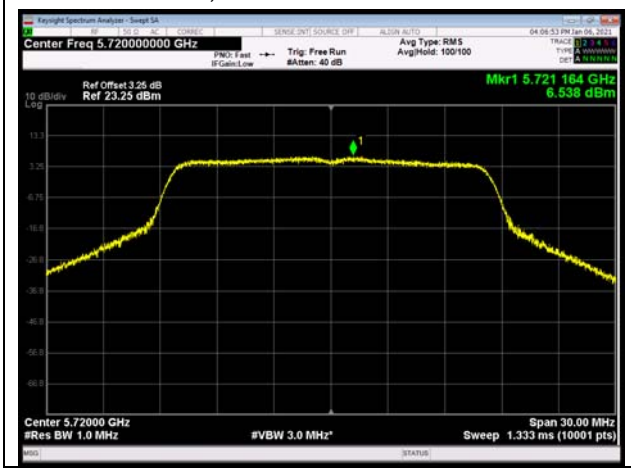
U-NII-2C, 802.11a Channel No.:140



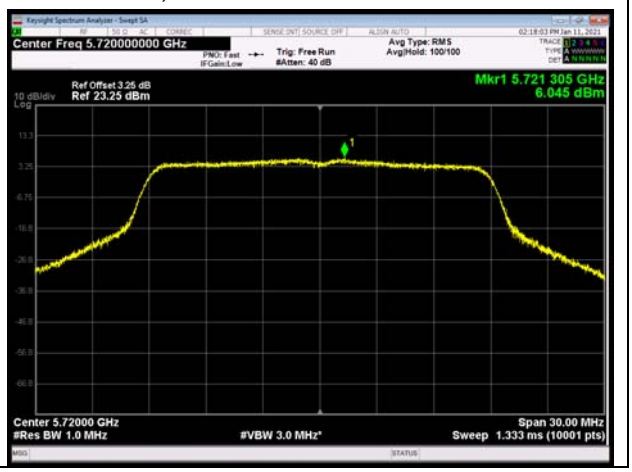
U-NII-2C, 802.11n HT20 Channel No.:140



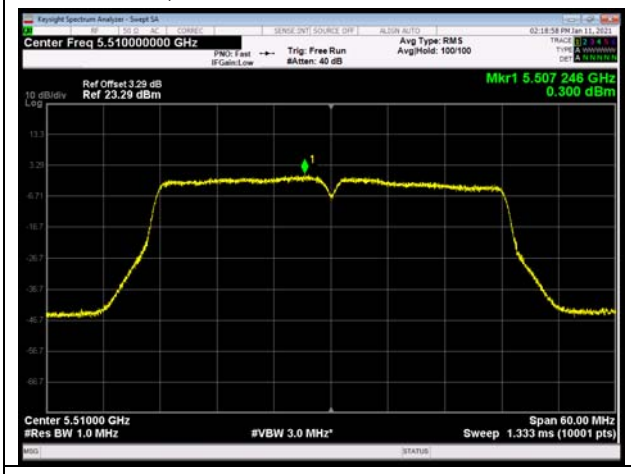
U-NII-2C, 802.11a Channel No.:144



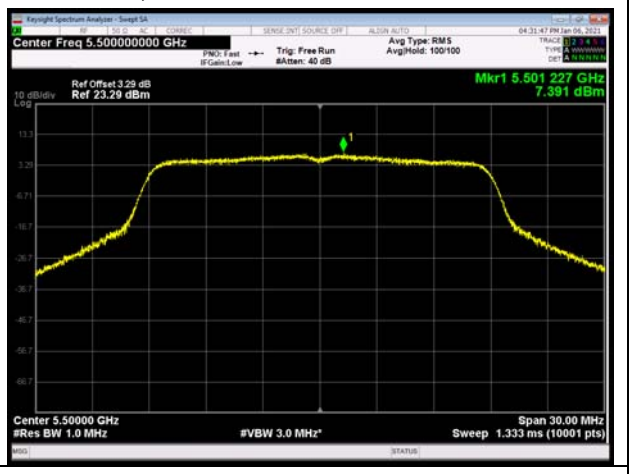
U-NII-2C, 802.11n HT20 Channel No.:144



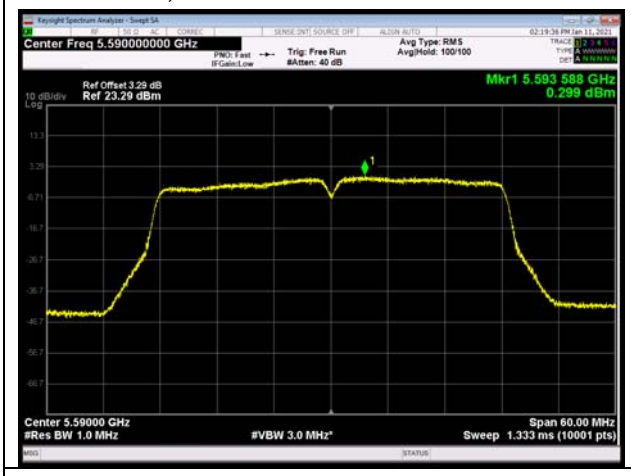
U-NII-2C, 802.11n HT40 Channel No.: 102



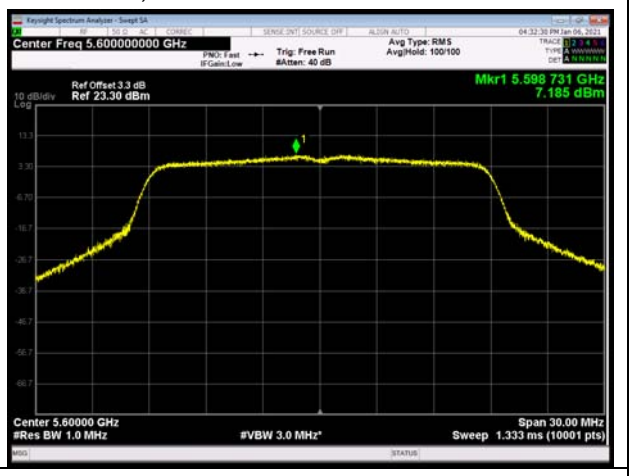
U-NII-2C, 802.11ac VHT20 Channel No.: 100



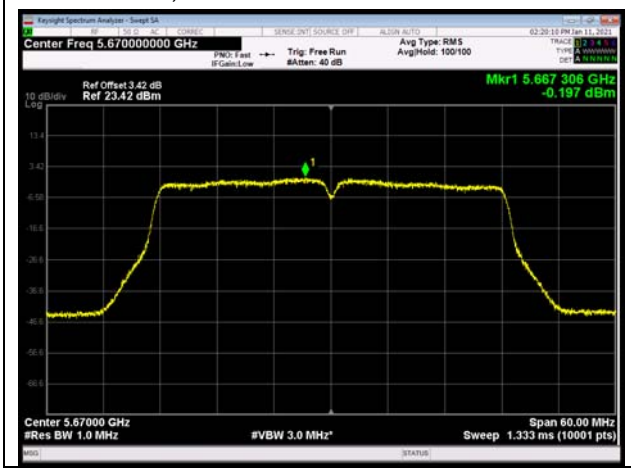
U-NII-2C, 802.11n HT40 Channel No.: 118



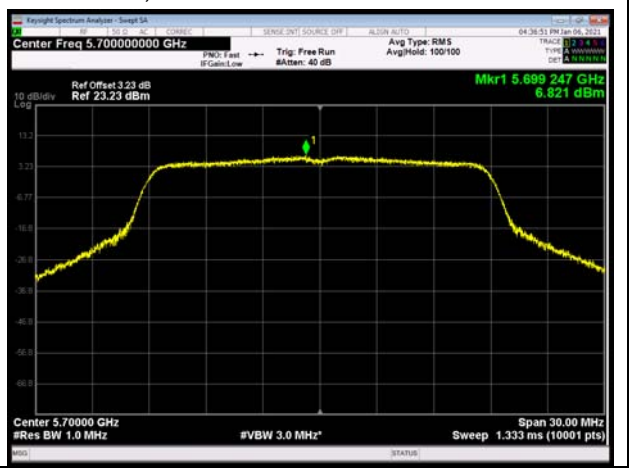
U-NII-2C, 802.11ac VHT20 Channel No.: 120



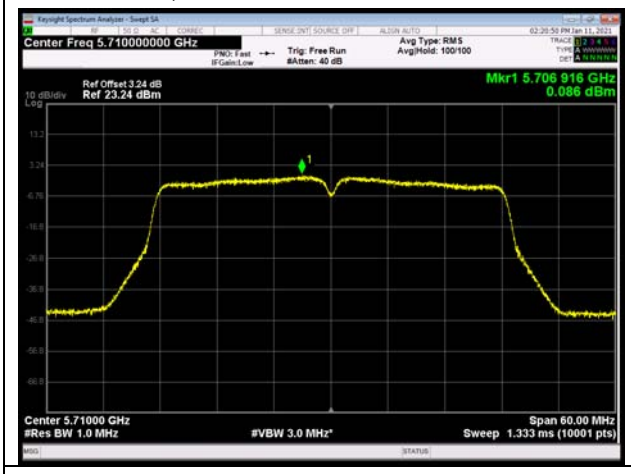
U-NII-2C, 802.11n HT40 Channel No.:134



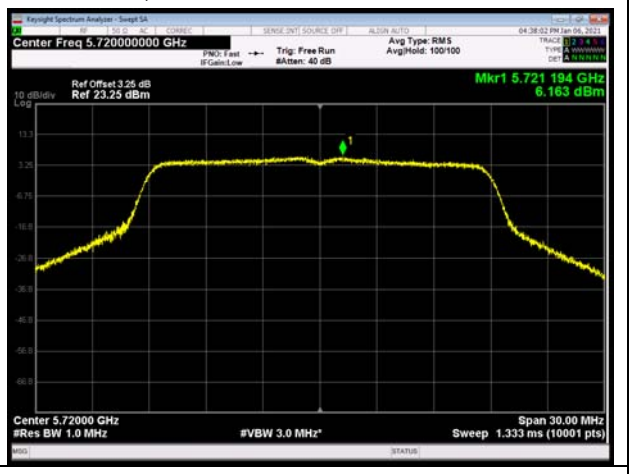
U-NII-2C, 802.11ac VHT20 Channel No.:140



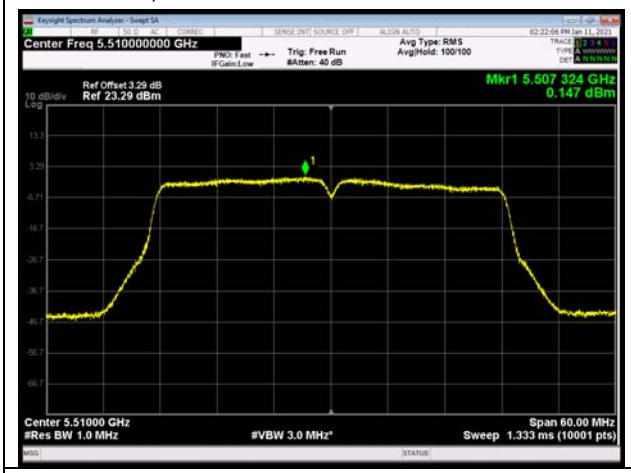
U-NII-2C, 802.11n HT40 Channel No.:142



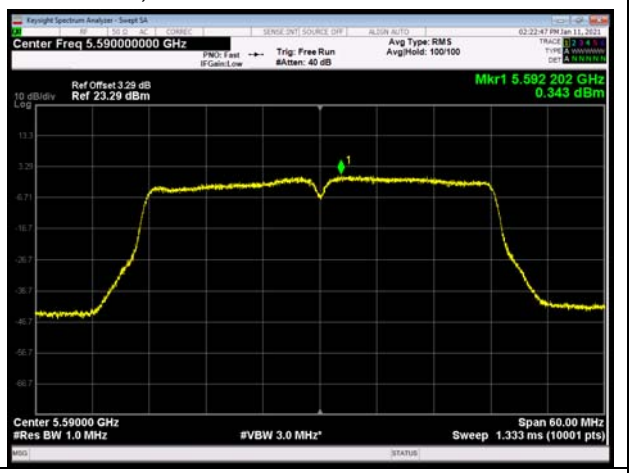
U-NII-2C, 802.11ac VHT20 Channel No.:144



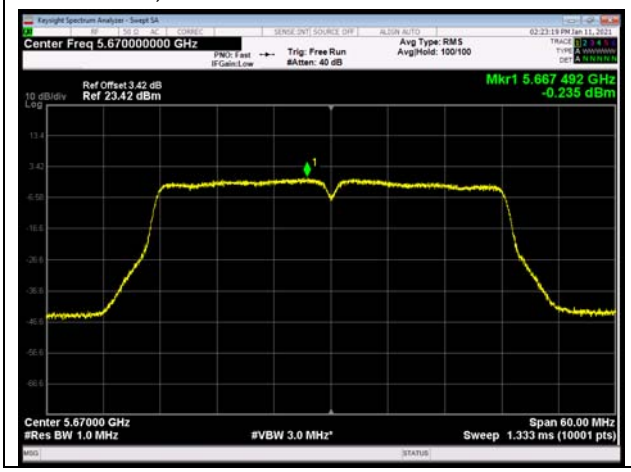
U-NII-2C, 802.11ac VHT40 Channel No.: 102



U-NII-2C, 802.11ac VHT40 Channel No.: 118



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



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