RF TEST REPORT

Applicant	Nokia ShangHai Bell Co., Ltd.
FCC ID	2ADZRG2425GB
Product	7368 ISAM ONT
Brand	NOKIA
Model	G-2425G-B
Report No.	R2006B0104-R2V1
Issue Date	September 23, 2020

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.

Performed by: Peng Tao

Approved by: Kai Xu

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TABLE OF CONTENT

Version	Revision description	Issue Date
Rev.0	/	August 19, 2020
Rev.1	Update model	September 23, 2020
Note: This revised report (Report No. R2006B0104-R2V1) supersedes and replaces the previously issued report (Report No. R2006B0104-R2). Please discard or destroy the previously issued report and dispose of it accordingly.		

Summary of measurement results

Number	Test Case	Clause in FCC rules	Verdict
1	Average conducted output power	15.407(a)	Refer to the original
2	Occupied bandwidth	15.407(e)	Refer to the original
3	Frequency stability	15.407(g)	Refer to the original
4	Power spectral density	15.407(a)	Refer to the original
5	Unwanted Emissions	15.407(b)	Refer to the original
6	Conducted Emissions	15.207	Refer to the original
Date of Testing: April 17, 2020 ~ May 16, 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.			

G-2425G-B (Report No.: R2006B0104-R2V1) is a variant model of G-2425G-B (Report No.: R2002B0017-R2). The Applicant declares that the only differences between the original and the variant is the deference of DC power chip, boost circuit of the voice part and the power adapter and the rest parts of the two models is the same. Test values duplicated from Original for variant. There is no test for variant in this report.

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 electromagnetic emissions measurements.

A2LA (Certificate Number: 3857.01)

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

1.3. Testing Location

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

2. General Description of Equipment under Test

2.1. Applicant and Manufacturer Information

Applicant	Nokia ShangHai Bell Co., Ltd.
Applicant address	No. 388, Ningqiao Rd. Pilot Free Trade Zone, Shanghai, China
Manufacturer	TAICANG T&W ELECTRONICS CO., LTD
Manufacturer address	89# Jiang Nan RD, Lu Du TownTaicang, Jiangsu, China

2.2. General information

EUT Description	
Model	G-2425G-B
SN	1#
Hardware Version	PEM2
Software Version	/
Power Supply	AC adapter
Antenna Type	Internal Antenna
Antenna Gain	Antenna 1: 3.0 dBi Antenna 2: 3.0 dBi Antenna 3: 3.0 dBi Antenna 4: 3.0 dBi
Directional Gain	Without Beamforming Mode: 3.0 dBi Beamforming Mode for Power: 3.0 dBi Beamforming Mode for PSD: 9.02 dBi
Test Mode(s)	U-NII-1(5150MHz-5250MHz) U-NII-2A(5250MHz-5350MHz) U-NII-2C(5470MHz-5725MHz without 5600MHz -5650MHz) U-NII-3(5725MHz-5850MHz)
Modulation Type	802.11a/n (HT20/HT40) : OFDM 802.11ac (VHT20/VHT40/VHT80): OFDM
Max. Conducted Power	29.93 dBm
Operating Frequency Range(s)	U-NII-1: 5150-5250MHz U-NII-2A:5250-5350MHz U-NII-2C:5470-5725MHz (without 5600MHz -5650MHz) U-NII-3: 5725-5850MHz
Operating temperature range:	-5 ° C to 45° C
Operating voltage range:	11.4 V to 12.6 V
State DC voltage:	12V

EUT Accessory	
Adapter 1	Manufacturer: MOSO Power Supply Technology CO.,LTD Model: MSS-V3000WR120-042A0-US
Adapter 2	Manufacturer: ShenZhen SOY Technology Co.,Ltd Model: SUN-1200300
Adapter 3	Manufacturer: ShenZhen SOY Technology Co.,Ltd Model: SOY-1200300-3014-II/BC120300-AE6A-LL07
Adapter 4	Manufacturer: ShenZhen Mass Power Electronic Limited Model: NBS40C120300M2/SL00197
Adapter 5	Manufacturer: Dongguan Shilong Fuhua Electronic Co.,Ltd Model: UES36WV-120300SPA/UE191205GWZF1RI
Adapter 6	Manufacturer: ShenZhen SOY Technology Co.,Ltd Model: SOY-1200300EU/BA120300-EA6A-LLAA
Note:1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.	

Information of Configuration:

No.	Name	Model/Code No.	Edition	Serial No. or Quantity
1	EMA-G-2425G-B	3FE48308AA	PEM2	PEM
2	Power adapter	SUN-1200300	A/0	--
3	Power adapter	MSS-V3000WR120-042A0-US	A/0	--
4	UPS	DTC36U12V3-G	A/0	--
5	UPS	PS36L-P7	A/0	--

ONT Mnemonic	Kit Code	EMA Code	Part Description	Power Adaptor and UPS
G-2425G-B	3FE48293AB	3FE48308AA	Wi-Fi GPON RGW,2POTS,4GE 4x4 11n,4x4 11ac,NAR,US	SOY: SUN-1200300 MOSO: MSS-V3000WR120-042A0-US CyberPower: DTC36U12V3 PSI:PS36L-P7
	3FE48293AE	3FE48308AA	Wi-Fi GPON RGW,2POTS,4GE 4x4 11n,4x4 11ac,NAR,US	SOY: SUN-1200300 MOSO: MSS-V3000WR120-042A0-US CyberPower: DTC36U12V3 PSI:PS36L-P7

Auxiliary equipment details:

No.	Name	Brand name	Model	NSB code	Valid Until
1	Test Center	Spirent	DE48E0	DC2228	No Cal. Required
2	PC	Lenovo	T61	7661MC4L3KW965	No Cal. Required
3	PC	Lenovo	T61	7661MC4L3KW959	No Cal. Required
4	OLT	Alcatel-Lucent	OS6250-24	90273409L3283189	No Cal. Required

Information of Ports:

No.	Port name	Number	Shielded or unshielded	Cable type (optic, twisted pair, etc.)	Max. Cable length
1	AC port	1	Unshielded	--	--
2	GE	4	Unshielded	--	--
3	USB	2	shielded	--	--
4	POTS	2	Unshielded	--	--

3. Applied Standards

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

Test standards:

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

ANSI C63.10 (2013)

Reference standard:

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

4. Test Configuration

Test Mode

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

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

Band	Data Rate				
	Antenna 1	**Antenna 2**	**Antenna 3**	**Antenna 4**	**MIMO**
802.11a	6 Mbps	6 Mbps	6 Mbps	6 Mbps	/
802.11n HT20	MCS0	MCS0	MCS0	MCS0	MCS8
802.11n HT40	MCS0	MCS0	MCS0	MCS0	MCS8
802.11ac VHT20	MCS0	MCS0	MCS0	MCS0	MCS8
802.11ac VHT40	MCS0	MCS0	MCS0	MCS0	MCS8
802.11ac VHT80	MCS0	MCS0	MCS0	MCS0	MCS8

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

Test Cases	Antenna 1	Antenna 2	Antenna 3	Antenna 4	MIMO
Average conducted output power	O	O	O	O	802.11n HT20/40 802.11ac VHT20/40/80
Occupied bandwidth	--	--	802.11a	--	802.11n HT20/40 802.11ac VHT20/40/80
Frequency stability	--	--	802.11a	--	802.11n HT20/40 802.11ac VHT20/40/80
Power Spectral Density	O	O	O	O	802.11n HT20/40 802.11ac VHT20/40/80
Unwanted Emissions	--	--	802.11a	--	802.11n HT20/40 802.11ac

					VHT20/40/80
Conducted Emissions	--	--	O	--	--
Note：“O”: test all bands					

According to RF Output power results in chapter 5.1, MIMO was selected as the worst antenna for 802.11n HT20/40, 802.11ac VHT20/40/80. SISO Antenna 3 was selected as the worst SISO antenna for 802.11a.

Wireless Technology and Frequency Range

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

			161	5805MHz
			165	5825MHz
		40 MHz	151	5755MHz
			159	5795MHz
		80 MHz	155	5775MHz
Does this device support TPC Function? ☐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.

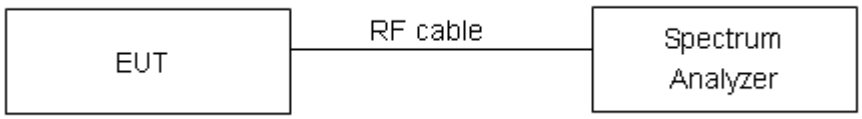
For U-NII-1/U-NII-2A/U-NII-2C, set RBW ≈1% OCB kHz, VBW ≥ 3 × RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in the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

Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	5180	16.392	19.31	PASS
	5200	16.405	19.47	PASS
	5240	16.387	19.39	PASS
802.11n HT20	5180	17.548	19.98	PASS
	5200	17.541	20.20	PASS
	5240	17.528	19.94	PASS
802.11n HT40	5190	35.978	39.74	PASS
	5230	35.833	39.66	PASS
802.11ac VHT20	5180	17.542	20.16	PASS
	5200	17.544	20.16	PASS
	5240	17.551	20.05	PASS
802.11ac VHT40	5190	35.968	39.43	PASS
	5230	35.886	39.31	PASS
802.11ac VHT80	5210	75.422	80.77	PASS

U-NII-2A

Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	5260	16.419	19.54	PASS
	5300	16.430	19.67	PASS
	5320	16.436	19.58	PASS
802.11n HT20	5260	17.619	20.01	PASS
	5300	17.617	20.00	PASS
	5320	17.581	19.86	PASS
802.11n HT40	5270	36.037	39.56	PASS
	5310	36.140	40.05	PASS
802.11ac VHT20	5260	17.603	19.98	PASS
	5300	17.614	19.88	PASS
	5320	17.586	19.91	PASS
802.11ac VHT40	5270	36.032	39.62	PASS
	5310	36.164	40.46	PASS
802.11ac VHT80	5290	75.794	80.04	PASS

U-NII-2C

Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	5500	16.420	19.74	PASS
	5580	16.434	19.69	PASS
	5700	16.410	19.51	PASS
802.11n HT20	5500	17.559	19.98	PASS
	5580	17.599	20.07	PASS
	5700	17.573	19.96	PASS
802.11n HT40	5510	36.092	39.73	PASS
	5550	36.045	39.63	PASS
	5670	36.023	39.77	PASS
	5710	36.011	39.96	PASS
802.11ac VHT20	5500	17.553	19.99	PASS
	5580	17.600	19.97	PASS
	5700	17.588	20.07	PASS
	5720	17.561	19.95	PASS
802.11ac VHT40	5510	36.057	39.95	PASS
	5550	35.985	39.57	PASS
	5670	36.068	39.79	PASS
	5710	35.949	40.28	PASS
802.11ac VHT80	5530	75.597	80.35	PASS
	5690	75.509	80.21	PASS

U-NII-3

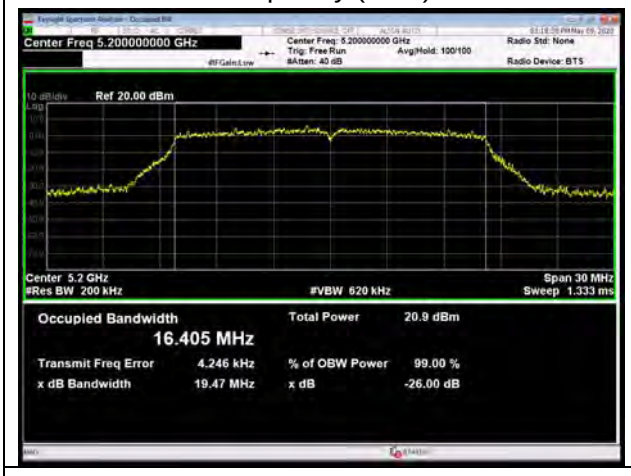
Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11a	5745	16.601	26.95	500	PASS
	5785	16.508	23.54	500	PASS
	5825	16.507	24.50	500	PASS
802.11n HT20	5745	17.650	20.40	500	PASS
	5785	17.593	19.95	500	PASS
	5825	17.593	21.45	500	PASS
802.11n HT40	5755	36.116	40.64	500	PASS
	5795	36.219	39.90	500	PASS
802.11ac VHT20	5745	17.667	20.05	500	PASS
	5785	17.618	20.03	500	PASS
	5825	17.625	20.63	500	PASS

802.11ac VHT40	5755	36.277	48.36	500	PASS
	5795	36.278	48.78	500	PASS
802.11ac VHT80	5775	75.512	79.89	500	PASS

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

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

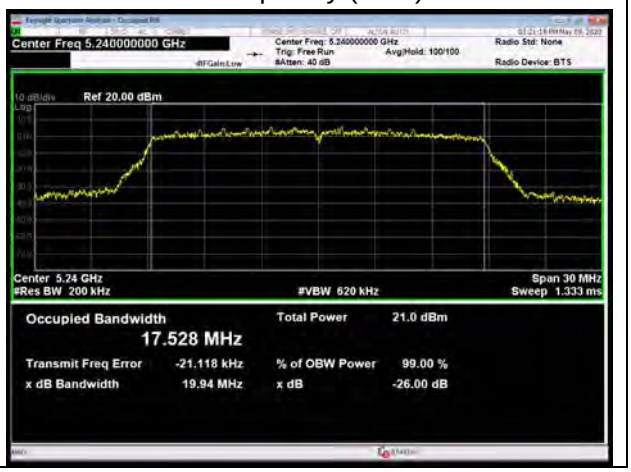
U-NII-1, 802.11a
Carrier frequency (MHz): 5200



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

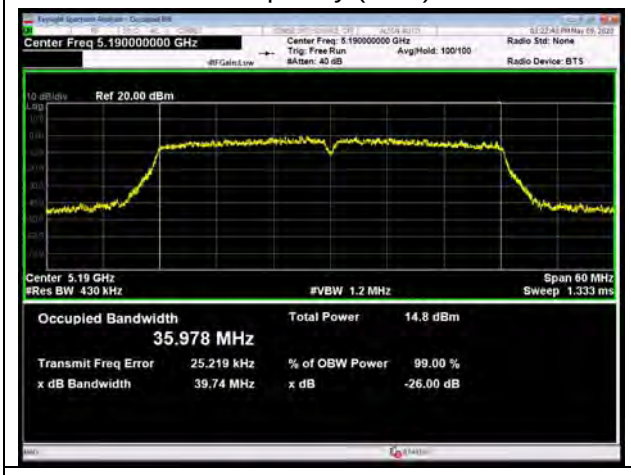
U-NII-1, 802.11a
Carrier frequency (MHz):5240

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



U-NII-1, 802.11n HT40

Carrier frequency (MHz): 5190



U-NII-1, 802.11ac VHT20

Carrier frequency (MHz): 5180

U-NII-1, 802.11n HT40

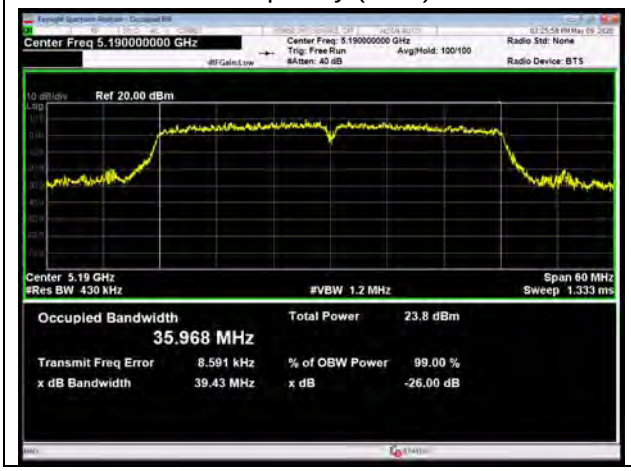
Carrier frequency (MHz): 5230

U-NII-1, 802.11ac VHT20

Carrier frequency (MHz): 5200

U-NII-1, 802.11ac VHT40

Carrier frequency (MHz): 5190

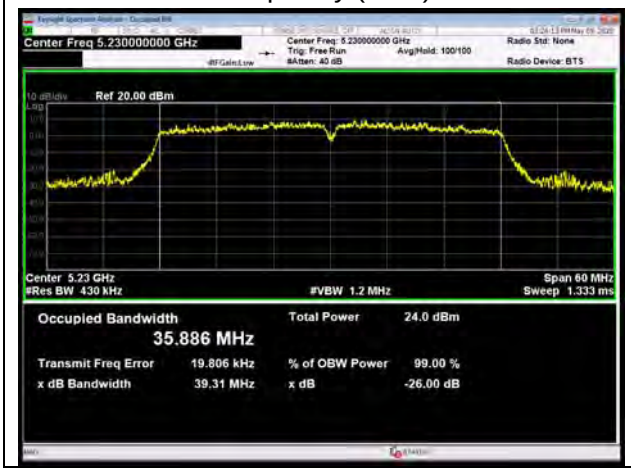


U-NII-1, 802.11ac VHT20

Carrier frequency (MHz):5240

U-NII-1, 802.11ac VHT40

Carrier frequency (MHz): 5230



U-NII-1, 802.11ac VHT80

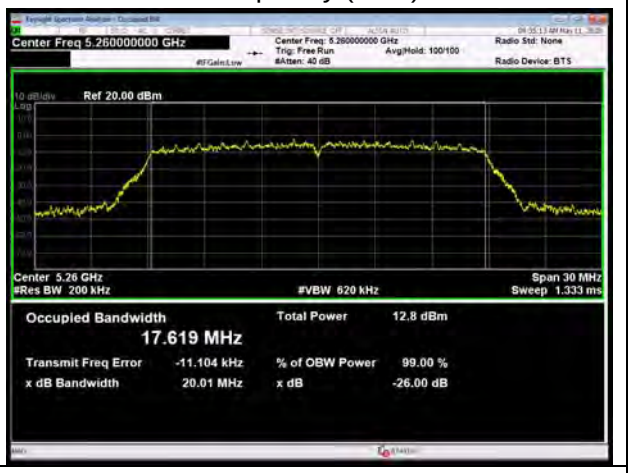
Carrier frequency (MHz): 5210

U-NII-2A, 802.11a

Carrier frequency (MHz): 5260

U-NII-2A, 802.11n HT20

Carrier frequency (MHz): 5260

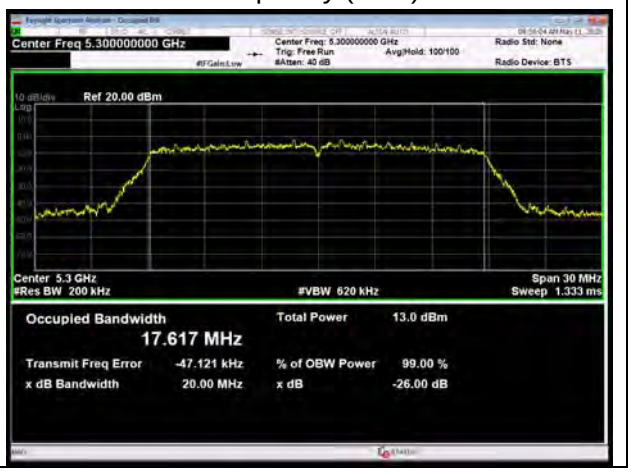


U-NII-2A, 802.11a

Carrier frequency (MHz): 5300

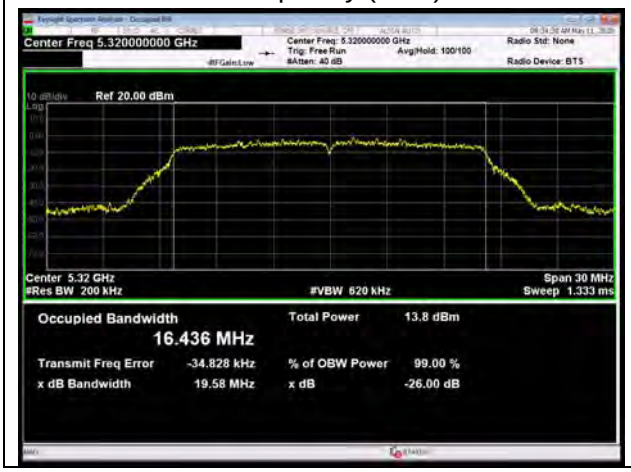
U-NII-2A, 802.11n HT20

Carrier frequency (MHz): 5300



U-NII-2A, 802.11a

Carrier frequency (MHz):5320



U-NII-2A, 802.11n HT20

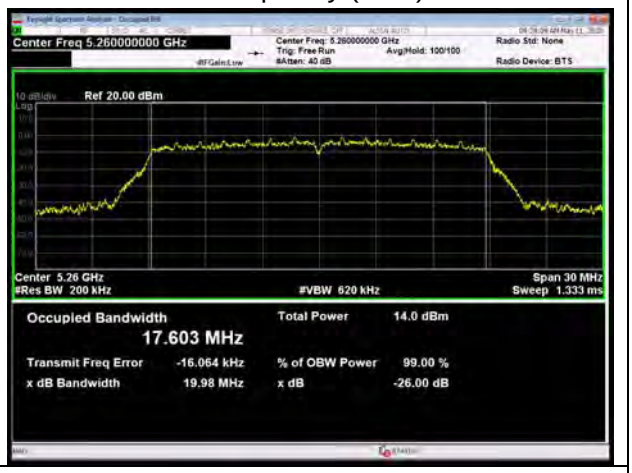
Carrier frequency (MHz):5320

U-NII-2A, 802.11n HT40

Carrier frequency (MHz): 5270

U-NII-2A, 802.11ac VHT20

Carrier frequency (MHz):5260

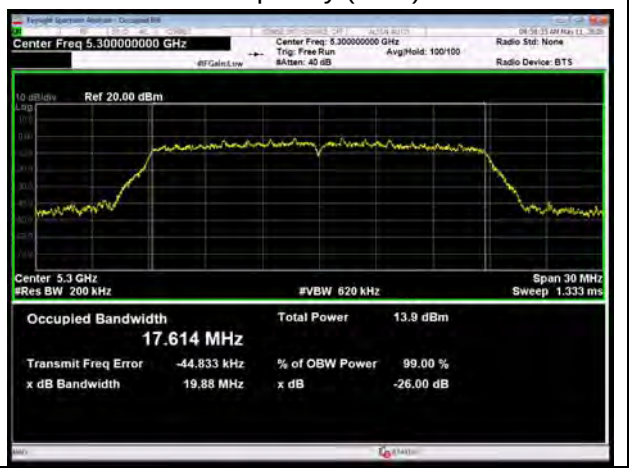


U-NII-2A, 802.11n HT40

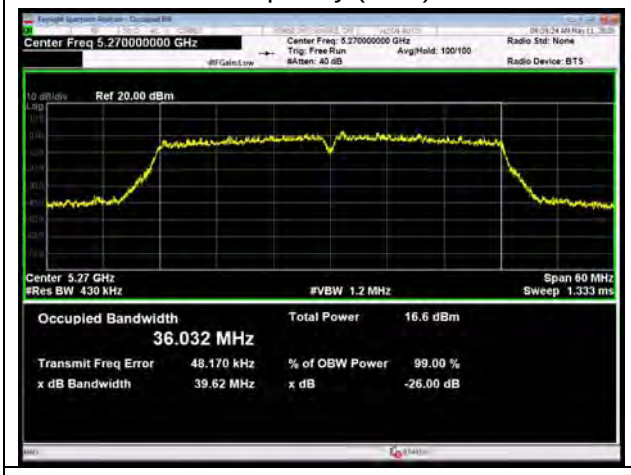
Carrier frequency (MHz): 5310

U-NII-2A, 802.11ac VHT20

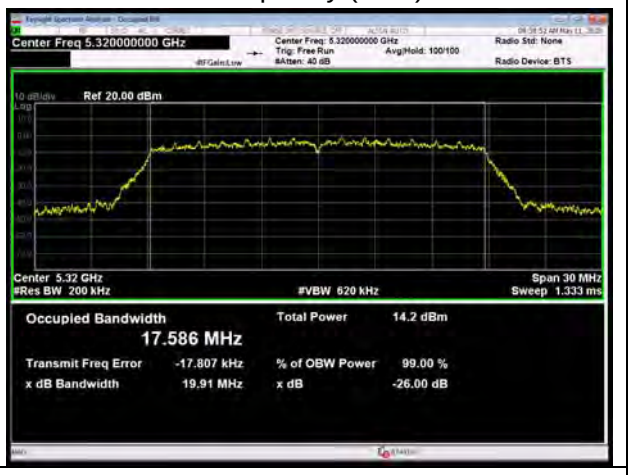
Carrier frequency (MHz): 5300



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

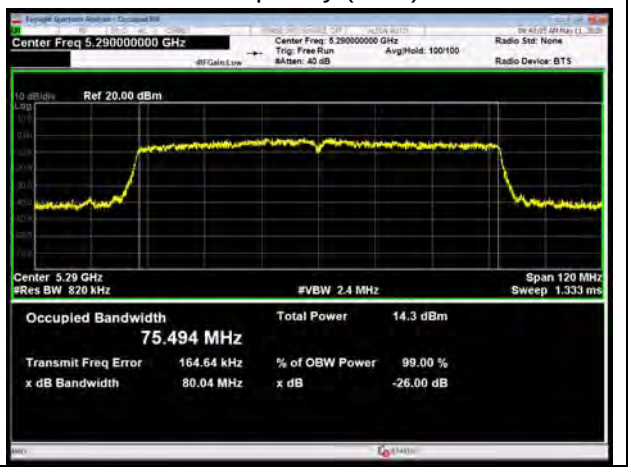


U-NII-2A, 802.11ac VHT20
Carrier frequency (MHz):5320



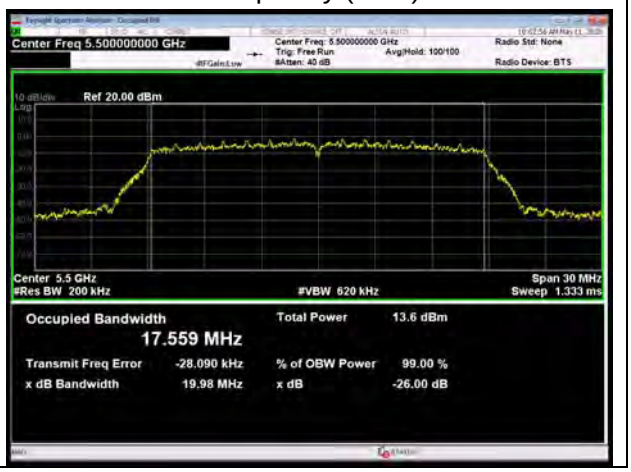
U-NII-2A, 802.11ac VHT40
Carrier frequency (MHz): 5310

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

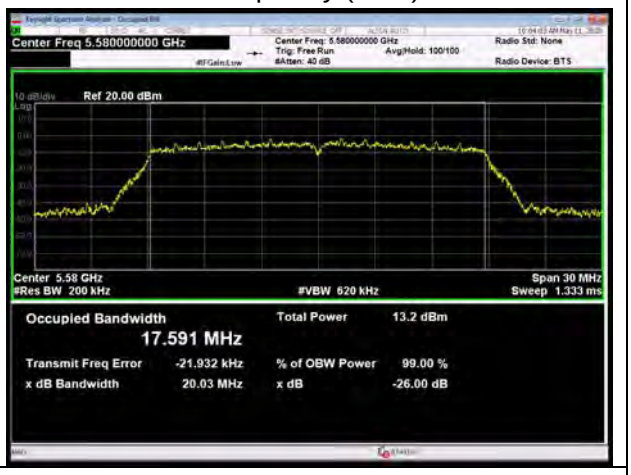


U-NII-2C, 802.11a

Carrier frequency (MHz): 5580

U-NII-2C, 802.11n HT20

Carrier frequency (MHz): 5580



U-NII-2C, 802.11a

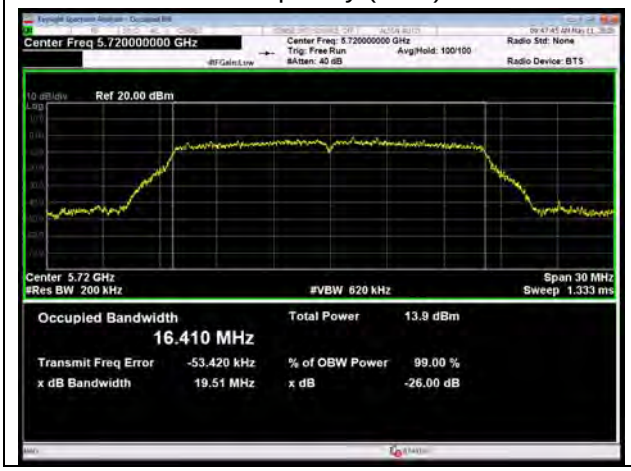
Carrier frequency (MHz):5700

U-NII-2C, 802.11n HT20

Carrier frequency (MHz):5700

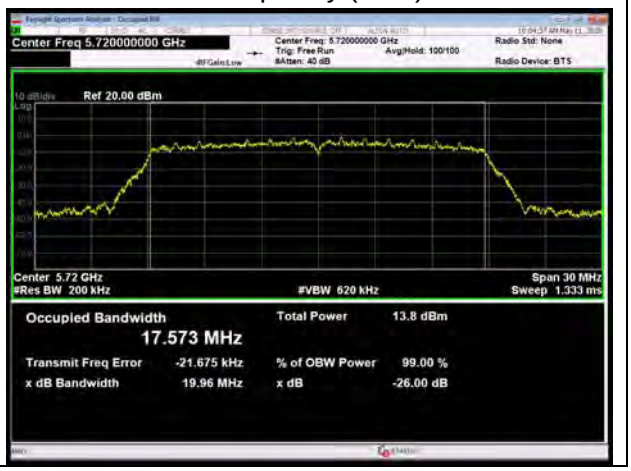
U-NII-2C, 802.11a

Carrier frequency (MHz):5720

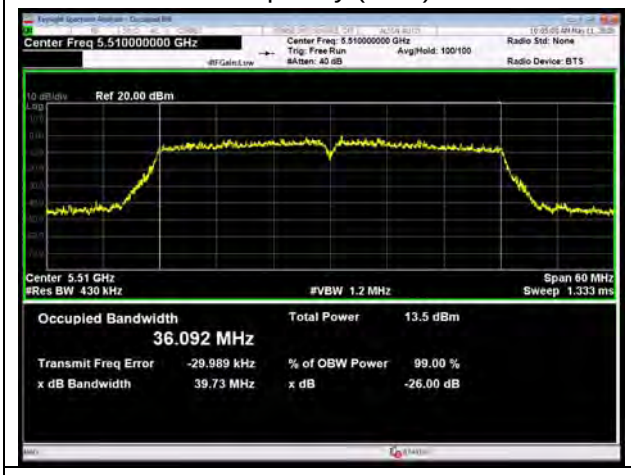


U-NII-2C, 802.11n HT20

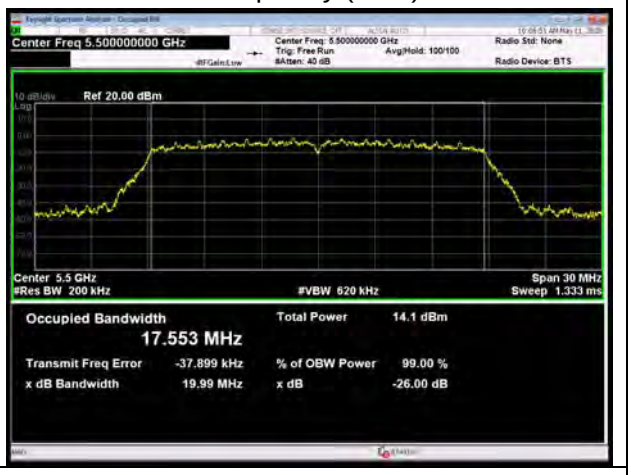
Carrier frequency (MHz):5720



U-NII-2C, 802.11n HT40
Carrier frequency (MHz): 5510



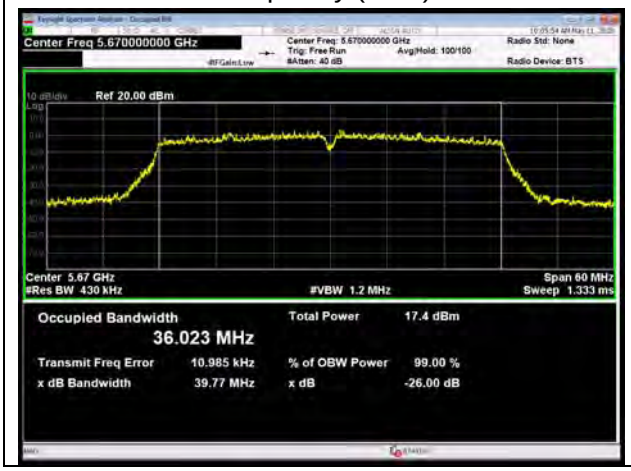
U-NII-2C, 802.11ac VHT20
Carrier frequency (MHz): 5500



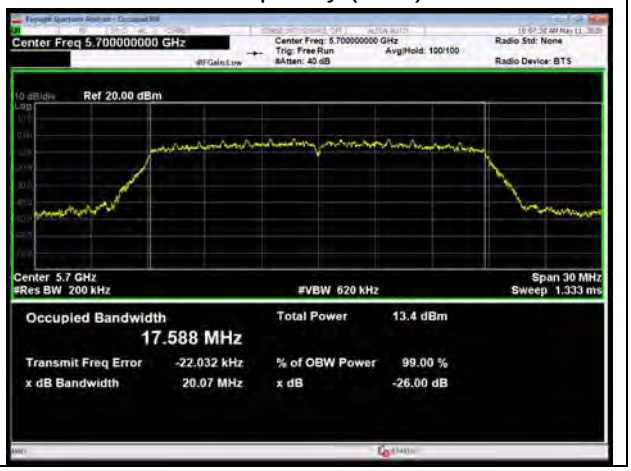
U-NII-2C, 802.11n HT40
Carrier frequency (MHz): 5550

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

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

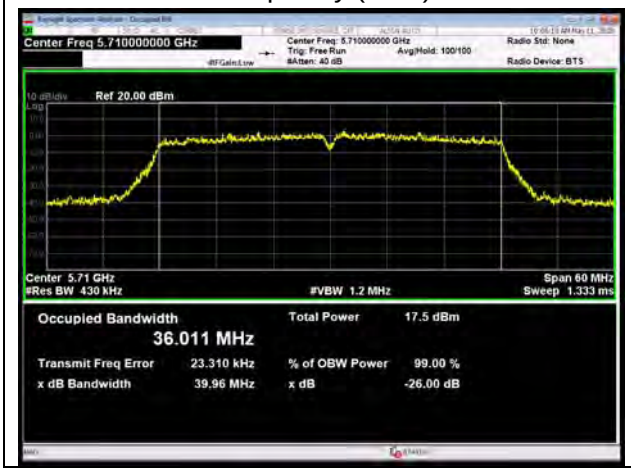


U-NII-2C, 802.11ac VHT20
Carrier frequency (MHz):5700



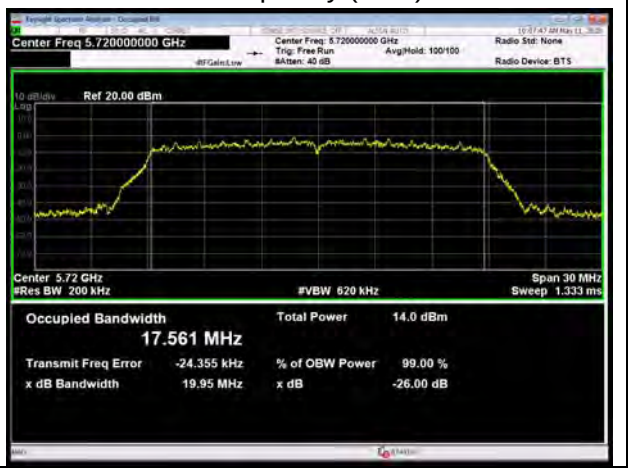
U-NII-2C, 802.11n HT40

Carrier frequency (MHz): 5710



U-NII-2C, 802.11ac VHT20

Carrier frequency (MHz):5720

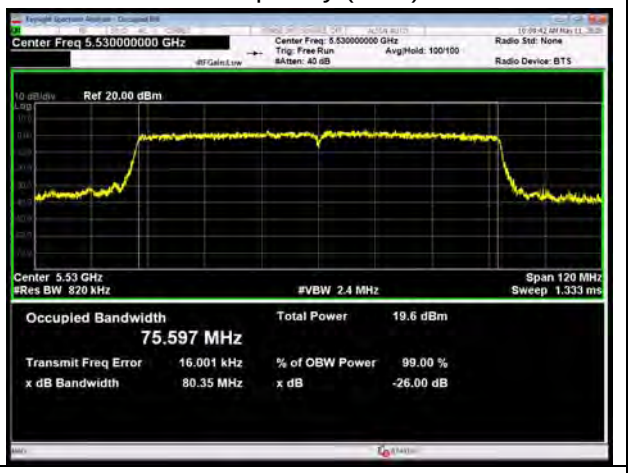


U-NII-2C, 802.11ac VHT40

Carrier frequency (MHz): 5510

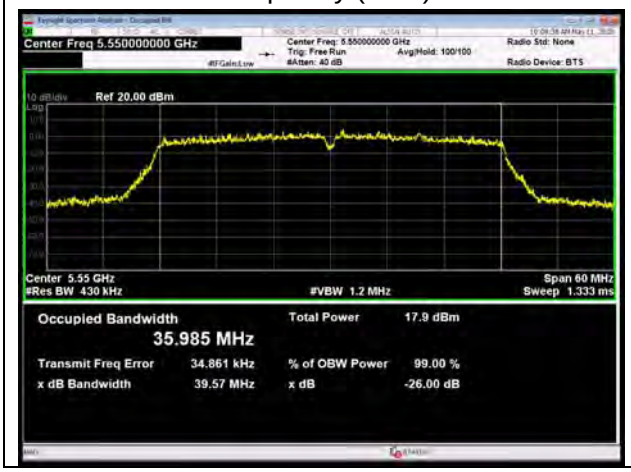
U-NII-2C, 802.11ac VHT80

Carrier frequency (MHz): 5530



U-NII-2C, 802.11ac VHT40

Carrier frequency (MHz): 5550



U-NII-2C, 802.11ac VHT80

Carrier frequency (MHz): 5690

U-NII-2C, 802.11ac VHT40

Carrier frequency (MHz): 5670

U-NII-2C, 802.11ac VHT40

Carrier frequency (MHz): 5710

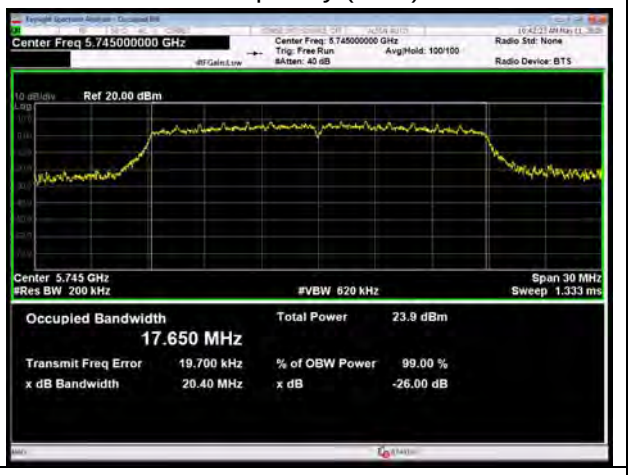
99% bandwidth

U-NII-3, 802.11a

Carrier frequency (MHz): 5745

U-NII-3, 802.11n HT20

Carrier frequency (MHz): 5745



U-NII-3, 802.11a

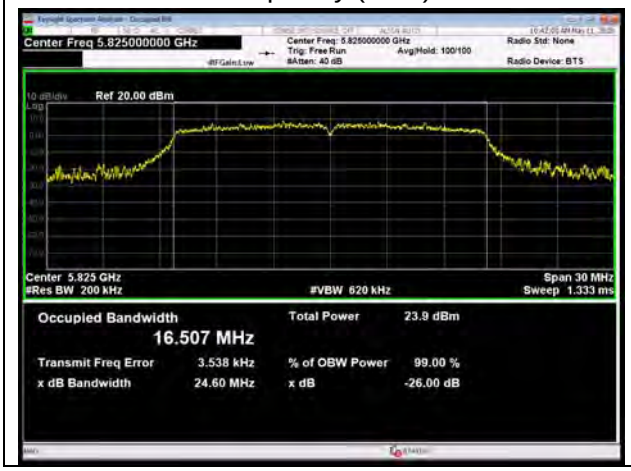
Carrier frequency (MHz): 5785

U-NII-3, 802.11n HT20

Carrier frequency (MHz): 5785

U-NII-3, 802.11a

Carrier frequency (MHz): 5825

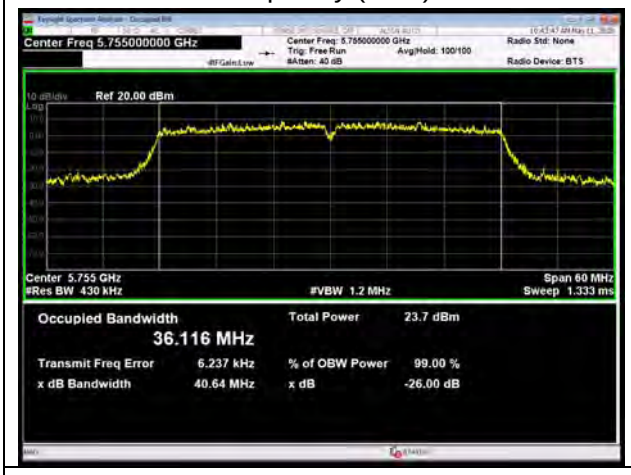


U-NII-3, 802.11n HT20

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

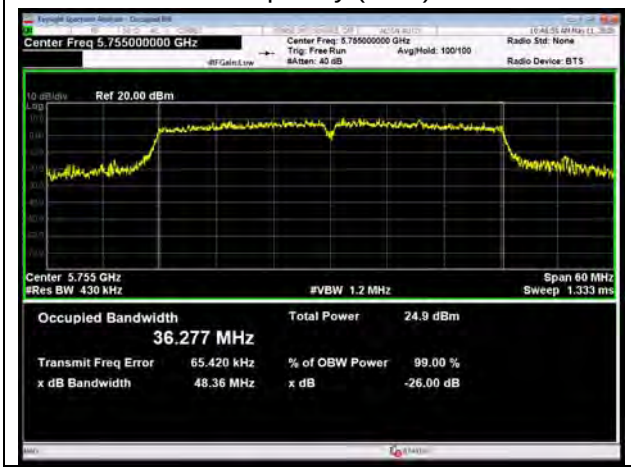
Carrier frequency (MHz): 5795

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

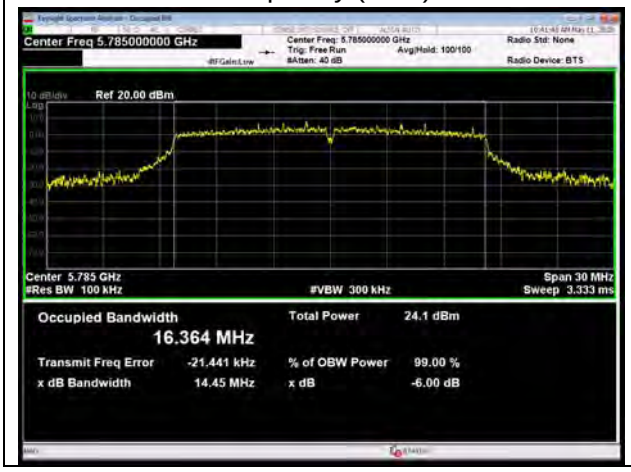
Carrier frequency (MHz): 5745

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

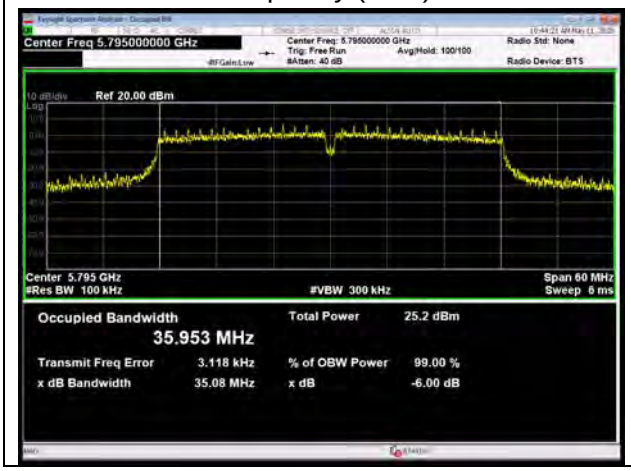
Carrier frequency (MHz): 5755

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

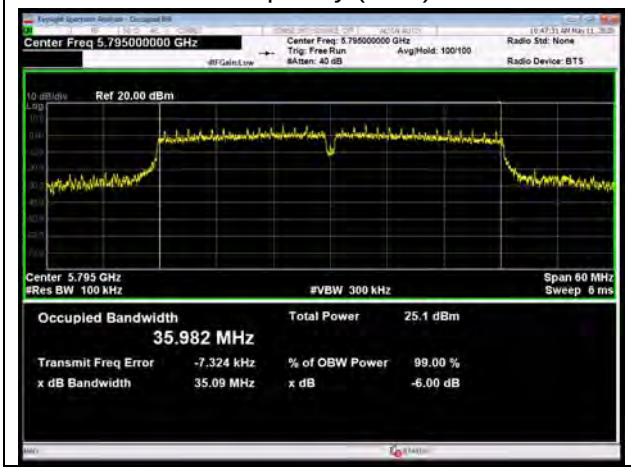
Carrier frequency (MHz): 5755

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 –Conducted

Ambient condition

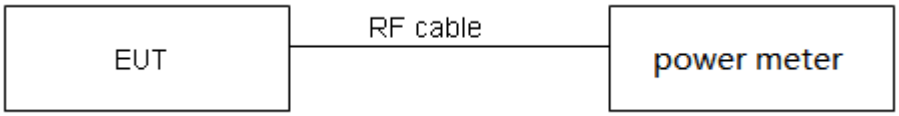
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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

Band	T_{on} (ms)	$T_{(on+off)}$ (ms)	Duty cycle	Duty cycle correction Factor(dB)
802.11a	1.39	1.43	0.97	0.12
802.11n HT20	0.36	0.40	0.89	0.51
802.11n HT40	0.19	0.24	0.81	0.90
802.11ac VHT20	0.37	0.42	0.89	0.51
802.11ac VHT40	0.21	0.25	0.83	0.83
802.11ac VHT80	0.12	0.17	0.74	1.32
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	19.54	23.91<24	23.91
		60/5300	19.67	23.94<24	23.94
		64/5320	19.58	23.92<24	23.92
	802.11n HT20	52/5260	20.01	24.01>24	24.00
		60/5300	20.00	24.01>24	24.00
		64/5320	19.86	23.98<24	23.98
	802.11n HT40	54/5270	39.56	26.97>24	24.00
		62/5310	40.05	27.03>24	24.00
	802.11ac VHT20	52/5260	19.98	24.01>24	24.00
		60/5300	19.88	23.98<24	23.98
		64/5320	19.91	23.99<24	23.99
	802.11ac VHT40	54/5270	39.62	26.98>24	24.00
		62/5310	40.46	27.07>24	24.00
	802.11ac VHT80	58/5290	80.04	30.03>24	24.00
U-NII-2C	802.11a	100/5500	19.74	23.95<24	23.95
		116/5580	19.66	23.94<24	23.94
		140/5700	19.69	23.94<24	23.94
		144/5720	19.51	23.90<24	23.90
	802.11n HT20	100/5500	19.98	24.01>24	24.00
		116/5580	20.03	24.02>24	24.00
		140/5700	20.07	24.03>24	24.00
		144/5720	19.96	24.00>24	24.00
	802.11n HT40	102/5510	39.73	26.99>24	24.00
		110/5550	39.63	26.98>24	24.00

		134/5670	39.77	27.00>24	24.00
		142/5710	39.96	27.02>24	24.00
	802.11ac VHT20	100/5500	19.99	24.01>24	24.00
		116/5580	19.97	24.00>24	24.00
		140/5700	20.07	24.03>24	24.00
		144/5720	19.95	24.00>24	24.00
	802.11ac VHT40	102/5510	39.95	27.02>24	24.00
		110/5550	39.57	26.97>24	24.00
		134/5670	39.79	27.00>24	24.00
		142/5710	40.28	27.05>24	24.00
	802.11ac VHT80	106/5530	80.35	30.05>24	24.00
		138/5690	80.21	30.04>24	24.00
Note: 250mW=24dBm					

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

MIMO(without Beamforming)

U-NII-1

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		MIMO Antenna3		MIMO Antenna4		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	36/5180	18.66	18.78	16.62	16.74	17.09	17.21	18.14	18.26	23.85	30.00	PASS
	40/5200	18.37	18.49	16.31	16.43	16.72	16.84	17.97	18.09	23.57	30.00	PASS
	48/5240	18.61	18.73	16.88	17.00	17.34	17.46	18.71	18.83	24.10	30.00	PASS
802.11n HT20	36/5180	17.44	17.95	15.88	16.39	15.97	16.48	17.66	18.17	23.34	30.00	PASS
	40/5200	18.51	19.02	16.34	16.85	16.83	17.34	18.02	18.53	24.04	30.00	PASS
	48/5240	18.22	18.73	16.45	16.96	17.04	17.55	18.42	18.93	24.13	30.00	PASS
802.11n HT40	38/5190	11.63	12.53	10.28	11.18	10.44	11.34	12.15	13.05	18.11	30.00	PASS
	46/5230	20.77	21.67	19.17	20.07	19.46	20.36	21.02	21.92	27.10	30.00	PASS
802.11ac VHT20	36/5180	18.55	19.06	16.57	17.08	16.78	17.29	17.98	18.49	24.08	30.00	PASS
	40/5200	18.33	18.84	16.24	16.75	16.58	17.09	17.88	18.39	23.87	30.00	PASS
	48/5240	18.22	18.73	16.43	16.94	16.66	17.17	18.06	18.57	23.94	30.00	PASS
802.11ac VHT40	38/5190	21.03	21.86	19.03	19.86	19.44	20.27	20.87	21.70	27.03	30.00	PASS
	46/5230	20.88	21.71	19.12	19.95	19.26	20.09	20.79	21.62	26.94	30.00	PASS
802.11ac VHT80	42/5210	11.78	13.10	10.65	11.97	10.26	11.58	11.98	13.30	18.57	30.00	PASS

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

The Total Power $=10\log(10^{(\text{Power antenna1 in dBm}/10)}+10^{(\text{Power antenna2 in dBm}/10)}+10^{(\text{Power antenna3 in dBm}/10)}) +10^{(\text{Power antenna4 in dBm}/10)})$.

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 $N_{ANT} \geq 5$.

So directional gain = G_{ANT} + Array Gain =3+0=3 dBi<6dBi. So the power limt is 30dBm.

U-NII-2A

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		MIMO Antenna3		MIMO Antenna4		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	52/5260	12.89	13.01	10.54	10.66	11.36	11.48	12.68	12.80	18.12	23.91	PASS
	60/5300	12.84	12.96	11.18	11.30	11.94	12.06	12.88	13.00	18.41	23.94	PASS
	64/5320	13.34	13.46	11.38	11.50	11.84	11.96	12.84	12.96	18.56	23.92	PASS
802.11n HT20	52/5260	12.68	13.19	10.36	10.87	10.94	11.45	12.25	12.76	18.19	24.00	PASS
	60/5300	12.58	13.09	10.55	11.06	11.33	11.84	12.37	12.88	18.31	24.00	PASS
	64/5320	12.96	13.47	10.88	11.39	11.43	11.94	12.54	13.05	18.56	23.98	PASS
802.11n HT40	54/5270	15.44	16.34	13.14	14.04	13.94	14.84	15.28	16.18	21.47	24.00	PASS
	62/5310	12.66	13.56	11.98	12.88	11.68	12.58	13.25	14.15	19.35	24.00	PASS
802.11ac VHT20	52/5260	12.96	13.47	10.65	11.16	11.45	11.96	12.74	13.25	18.58	24.00	PASS
	60/5300	13.11	13.62	11.24	11.75	12.03	12.54	12.96	13.47	18.93	23.98	PASS
	64/5320	13.33	13.84	11.28	11.79	11.89	12.40	12.92	13.43	18.96	23.99	PASS
802.11ac VHT40	54/5270	15.36	16.19	12.89	13.72	13.66	14.49	15.09	15.92	21.22	24.00	PASS
	62/5310	15.55	16.38	13.45	14.28	14.23	15.06	15.27	16.10	21.56	24.00	PASS
802.11ac VHT80	58/5290	11.54	12.86	10.58	11.90	9.88	11.20	11.76	13.08	18.34	24.00	PASS

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

The Total Power $=10\log(10^{(\text{Power antenna1 in dBm}/10)}+10^{(\text{Power antenna2 in dBm}/10)}+10^{(\text{Power antenna3 in dBm}/10)}) +10^{(\text{Power antenna4 in dBm}/10)})$.

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 $N_{ANT} \geq 5$.

So directional gain = G_{ANT} + Array Gain =3+0=3 dBi<6dBi.

U-NII-2C

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		MIMO Antenna3		MIMO Antenna4		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	100/5500	12.45	12.57	11.46	11.58	11.24	11.36	12.42	12.54	18.07	23.95	PASS
	116/5580	12.65	12.77	11.94	12.06	11.54	11.66	12.87	12.99	18.43	23.94	PASS
	140/5700	12.87	12.99	11.17	11.29	11.57	11.69	12.88	13.00	18.33	23.94	PASS
	144/5720	12.73	12.85	11.43	11.55	11.73	11.85	13.04	13.16	18.43	23.90	PASS
802.11n HT20	100/5500	12.43	12.94	11.04	11.55	11.23	11.74	12.21	12.72	18.30	24.00	PASS
	116/5580	12.83	13.34	11.63	12.14	11.52	12.03	12.72	13.23	18.74	24.00	PASS
	140/5700	12.67	13.18	10.98	11.49	11.67	12.18	12.89	13.40	18.65	24.00	PASS
	144/5720	12.76	13.27	11.21	11.72	11.54	12.05	12.78	13.29	18.66	24.00	PASS
802.11n HT40	102/5510	11.33	12.23	10.25	11.15	10.17	11.07	11.38	12.28	17.74	24.00	PASS
	110/5550	15.67	16.57	14.51	15.41	14.53	15.43	15.75	16.65	22.07	24.00	PASS
	134/5670	15.86	16.76	14.11	15.01	14.26	15.16	15.91	16.81	22.03	24.00	PASS
	142/5710	15.87	16.77	14.23	15.13	14.85	15.75	16.21	17.11	22.28	24.00	PASS
802.11ac VHT20	100/5500	12.43	12.94	11.13	11.64	11.35	11.86	12.21	12.72	18.34	24.00	PASS
	116/5580	12.82	13.33	11.62	12.13	11.56	12.07	12.83	13.34	18.78	24.00	PASS
	140/5700	12.76	13.27	11.05	11.56	11.67	12.18	12.89	13.40	18.69	24.00	PASS
	144/5720	12.82	13.33	11.34	11.85	11.76	12.27	13.14	13.65	18.85	24.00	PASS
802.11ac VHT40	102/5510	15.53	16.36	14.27	15.10	14.44	15.27	15.65	16.48	21.87	24.00	PASS
	110/5550	15.42	16.25	14.47	15.30	14.34	15.17	15.75	16.58	21.89	24.00	PASS
	134/5670	15.86	16.69	14.17	15.00	14.33	15.16	15.87	16.70	21.99	24.00	PASS
	142/5710	15.93	16.76	14.34	15.17	14.95	15.78	16.22	17.05	22.28	24.00	PASS
802.11ac VHT80	106/5530	17.02	18.34	15.88	17.20	16.03	17.35	17.11	18.43	23.89	24.00	PASS
	138/5690	17.11	18.43	15.37	16.69	15.63	16.95	17.44	18.76	23.82	24.00	PASS

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

The Total Power $=10\log(10^{(\text{Power antenna1 in dBm}/10)}+10^{(\text{Power antenna2 in dBm}/10)}+10^{(\text{Power antenna3 in dBm}/10)}) +10^{(\text{Power antenna4 in dBm}/10)})$.

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 $N_{ANT} \geq 5$.

So directional gain = G_{ANT} + Array Gain =3+0=3 dBi<6dBi.

U-NII-3

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		MIMO Antenna3		MIMO Antenna4		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11a	149/5745	23.66	23.78	21.98	22.10	22.65	22.77	23.78	23.90	29.22	30.00	PASS
	157/5785	23.49	23.61	21.76	21.88	22.46	22.58	23.79	23.91	29.09	30.00	PASS
	165/5825	23.46	23.58	22.03	22.15	22.35	22.47	23.67	23.79	29.08	30.00	PASS
802.11n HT20	149/5745	23.55	24.06	21.85	22.36	22.36	22.87	23.73	24.24	29.47	30.00	PASS
	157/5785	22.44	22.95	21.27	21.78	20.87	21.38	22.05	22.56	28.23	30.00	PASS
	165/5825	23.41	23.92	21.89	22.40	22.38	22.89	23.71	24.22	29.44	30.00	PASS
802.11n HT40	151/5755	22.57	23.47	21.19	22.09	20.56	21.46	21.75	22.65	28.50	30.00	PASS
	159/5795	23.37	24.27	22.11	23.01	22.42	23.32	23.57	24.47	29.83	30.00	PASS
802.11ac VHT20	149/5745	23.33	23.84	21.48	21.99	22.29	22.80	23.28	23.79	29.19	30.00	PASS
	157/5785	23.42	23.93	21.58	22.09	22.36	22.87	23.37	23.88	29.27	30.00	PASS
	165/5825	23.53	24.04	21.62	22.13	22.48	22.99	23.43	23.94	29.36	30.00	PASS
802.11ac VHT40	151/5755	23.62	24.45	22.17	23.00	22.69	23.52	23.63	24.46	29.93	30.00	PASS
	159/5795	23.45	24.28	22.22	23.05	22.75	23.58	23.44	24.27	29.85	30.00	PASS
802.11ac VHT80	155/5775	19.57	20.89	18.35	19.67	17.73	19.05	19.05	20.37	26.07	30.00	PASS

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

The Total Power $=10\log(10^{(\text{Power antenna1 in dBm}/10)}+10^{(\text{Power antenna2 in dBm}/10)}+10^{(\text{Power antenna3 in dBm}/10)}) +10^{(\text{Power antenna4 in dBm}/10)})$.

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 $N_{ANT} \geq 5$.

So directional gain = G_{ANT} + Array Gain =3+0=3 dBi<6dBi. So the power limt is 30dBm.

MIMO(with Beamforming)

U-NII-1

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		MIMO Antenna3		MIMO Antenna4		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11n HT20	36/5180	17.43	17.94	15.82	16.33	15.88	16.39	17.62	18.13	23.30	26.98	PASS
	40/5200	18.51	19.02	16.34	16.85	16.83	17.34	18.02	18.53	24.04	26.98	PASS
	48/5240	18.22	18.73	16.45	16.96	17.04	17.55	18.42	18.93	24.13	26.98	PASS
802.11n HT40	38/5190	11.62	12.52	10.25	11.15	10.41	11.31	12.10	13.00	18.08	26.98	PASS
	46/5230	20.46	21.36	18.83	19.73	19.21	20.11	20.77	21.67	26.81	26.98	PASS
802.11ac VHT20	36/5180	18.55	19.06	16.57	17.08	16.78	17.29	17.98	18.49	24.08	26.98	PASS
	40/5200	18.33	18.84	16.24	16.75	16.58	17.09	17.88	18.39	23.87	26.98	PASS
	48/5240	18.22	18.73	16.43	16.94	16.66	17.17	18.06	18.57	23.94	26.98	PASS
802.11ac VHT40	38/5190	20.93	21.76	19.03	19.86	19.32	20.15	20.68	21.51	26.92	26.98	PASS
	46/5230	20.88	21.71	19.12	19.95	19.26	20.09	20.79	21.62	26.94	26.98	PASS
802.11ac VHT80	42/5210	11.74	13.06	10.63	11.95	10.21	11.53	11.96	13.28	18.54	26.98	PASS

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

The Total Power $=10\log(10^{(\text{Power antenna1 in dBm}/10)}+10^{(\text{Power antenna2 in dBm}/10)}+10^{(\text{Power antenna3 in dBm}/10)}) +10^{(\text{Power antenna4 in dBm}/10)})$.

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 $N_{ANT} \geq 5$.

So directional gain = G_{ANT} + Array Gain =3+0=3 dBi<6dBi.

U-NII-2A

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		MIMO Antenna3		MIMO Antenna4		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11n HT20	52/5260	12.65	13.16	10.34	10.85	10.92	11.43	12.23	12.74	18.16	20.98	PASS
	60/5300	12.53	13.04	10.52	11.03	11.31	11.82	12.32	12.83	18.27	20.98	PASS
	64/5320	12.92	13.43	10.84	11.35	11.42	11.93	12.48	12.99	18.52	20.96	PASS
802.11n HT40	54/5270	14.88	15.78	12.47	13.37	13.36	14.26	14.42	15.32	20.80	20.98	PASS
	62/5310	12.61	13.51	11.94	12.84	11.62	12.52	13.18	14.08	19.30	20.98	PASS
802.11ac VHT20	52/5260	12.94	13.45	10.64	11.15	11.43	11.94	12.64	13.15	18.54	20.98	PASS
	60/5300	13.10	13.61	11.21	11.72	12.01	12.52	12.86	13.37	18.88	20.96	PASS
	64/5320	13.28	13.79	11.24	11.75	11.87	12.38	12.88	13.39	18.92	20.97	PASS
802.11ac VHT40	54/5270	14.51	15.34	12.89	13.72	12.63	13.46	14.75	15.58	20.65	20.98	PASS
	62/5310	14.36	15.19	13.21	14.04	12.72	13.55	14.63	15.46	20.66	20.98	PASS
802.11ac VHT80	58/5290	11.51	12.83	10.54	11.86	9.83	11.15	11.71	13.03	18.30	20.98	PASS

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

The Total Power $=10\log(10^{(\text{Power antenna1 in dBm/10})}+10^{(\text{Power antenna2 in dBm/10})}+10^{(\text{Power antenna3 in dBm/10})}) +10^{(\text{Power antenna4 in dBm/10})})$.

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 $N_{ANT} \geq 5$.

So directional gain = G_{ANT} + Array Gain =3+0=3 dBi<6dBi.

U-NII-2C

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		MIMO Antenna3		MIMO Antenna4		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11n HT20	100/5500	12.41	12.92	11.02	11.53	11.21	11.72	12.16	12.67	18.27	20.98	PASS
	116/5580	12.77	13.28	11.61	12.12	11.52	12.03	12.65	13.16	18.70	20.98	PASS
	140/5700	12.64	13.15	10.94	11.45	11.63	12.14	12.83	13.34	18.60	20.98	PASS
	144/5720	12.72	13.23	11.21	11.72	11.52	12.03	12.73	13.24	18.63	20.98	PASS
802.11n HT40	102/5510	11.31	12.21	10.22	11.12	10.16	11.06	11.32	12.22	17.71	20.98	PASS
	110/5550	14.29	15.19	13.06	13.96	13.11	14.01	14.33	15.23	20.66	20.98	PASS
	134/5670	14.36	15.26	13.11	14.01	13.33	14.23	14.28	15.18	20.72	20.98	PASS
	142/5710	14.21	15.11	13.27	14.17	13.45	14.35	14.37	15.27	20.77	20.98	PASS
802.11ac VHT20	100/5500	12.41	12.92	13.18	13.69	13.28	13.79	12.16	12.67	19.31	20.98	PASS
	116/5580	12.79	13.30	11.57	12.08	11.51	12.02	12.75	13.26	18.73	20.98	PASS
	140/5700	12.73	13.24	11.02	11.53	11.65	12.16	12.83	13.34	18.65	20.98	PASS
	144/5720	12.76	13.27	11.31	11.82	11.73	12.24	13.12	13.63	18.82	20.98	PASS
802.11ac VHT40	102/5510	14.19	15.02	13.35	14.18	13.16	13.99	14.55	15.38	20.70	20.98	PASS
	110/5550	14.22	15.05	13.54	14.37	13.27	14.10	14.66	15.49	20.81	20.98	PASS
	134/5670	14.03	14.86	13.19	14.02	13.04	13.87	14.48	15.31	20.58	20.98	PASS
	142/5710	14.26	15.09	13.28	14.11	13.02	13.85	14.54	15.37	20.68	20.98	PASS
802.11ac VHT80	106/5530	13.78	15.10	12.79	14.11	12.66	13.98	13.95	15.27	20.67	20.98	PASS
	138/5690	13.69	15.01	12.83	14.15	12.72	14.04	13.78	15.10	20.62	20.98	PASS

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

The Total Power $=10\log(10^{(\text{Power antenna1 in dBm}/10)}+10^{(\text{Power antenna2 in dBm}/10)}+10^{(\text{Power antenna3 in dBm}/10)}) +10^{(\text{Power antenna4 in dBm}/10)})$.

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 $N_{ANT} \geq 5$.

So directional gain = G_{ANT} + Array Gain =3+0=3 dBi<6dBi.

U-NII-3

Network Standards	Channel/ Frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		MIMO Antenna3		MIMO Antenna3		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11n HT20	149/5745	20.66	21.17	19.33	19.84	20.05	20.56	21.16	21.67	26.88	26.98	PASS
	157/5785	19.98	20.49	18.88	19.39	19.88	20.39	21.12	21.63	26.56	26.98	PASS
	165/5825	19.68	20.19	18.75	19.26	19.55	20.06	20.69	21.20	26.25	26.98	PASS
802.11n HT40	151/5755	19.95	20.85	18.71	19.61	19.41	20.31	20.57	21.47	26.63	26.98	PASS
	159/5795	19.86	20.76	18.83	19.73	19.72	20.62	20.64	21.54	26.73	26.98	PASS
802.11ac VHT20	149/5745	19.88	20.39	18.44	18.95	19.25	19.76	20.38	20.89	26.07	26.98	PASS
	157/5785	19.75	20.26	18.65	19.16	19.43	19.94	20.44	20.95	26.14	26.98	PASS
	165/5825	19.69	20.20	18.85	19.36	19.37	19.88	20.66	21.17	26.22	26.98	PASS
802.11ac VHT40	151/5755	19.65	20.48	18.25	19.08	18.79	19.62	20.27	21.10	26.16	26.98	PASS
	159/5795	19.73	20.56	18.46	19.29	19.03	19.86	20.34	21.17	26.30	26.98	PASS
802.11ac VHT80	155/5775	19.25	20.57	18.04	19.36	18.85	20.17	20.02	21.34	26.44	26.98	PASS

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

The Total Power $=10\log(10^{(\text{Power antenna1 in dBm/10})}+10^{(\text{Power antenna2 in dBm/10})}+10^{(\text{Power antenna3 in dBm/10})}) +10^{(\text{Power antenna4 in dBm/10})})$.

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 $N_{ANT} \geq 5$.

So directional gain = G_{ANT} + Array Gain =3+0=3 dBi<6dBi.

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
12	-5	5200.009748	5200.007235	5200.005945	5199.996664
12	0	5200.012265	5200.000399	5200.004862	5199.987810
12	5	5200.004268	5199.992421	5200.003431	5199.982983
12	10	5199.999887	5199.988104	5199.997949	5199.979116
12	20	5199.997000	5199.979669	5199.991641	5199.975417
12	30	5199.995886	5199.973789	5199.983542	5199.971907
12	40	5199.986657	5199.971568	5199.979713	5199.970600
12	45	5199.976800	5199.970544	5199.978571	5199.964065
11.4	20	5199.967770	5199.969765	5199.978226	5199.960341
12.6	20	5199.960376	5199.962145	5199.978081	5199.955643
MHz		-0.039624	-0.037855	-0.021919	-0.044357
PPM		-7.620028	-7.279772	-4.215225	-8.530277

Voltage (V)	Temperature (°C)	U-NII-2A Test Results			
		5300MHz			
		1min	2min	5min	10min
12	-5	5299.993350	5299.990837	5299.984140	5299.980998
12	0	5299.993007	5299.990473	5299.981256	5299.980713
12	5	5299.990648	5299.984164	5299.976227	5299.975315
12	10	5299.983136	5299.975254	5299.970084	5299.971861
12	20	5299.979593	5299.972479	5299.967899	5299.969436
12	30	5299.971831	5299.971598	5299.962047	5299.960065
12	40	5299.962838	5299.964847	5299.956586	5299.954986
12	45	5299.962746	5299.959435	5299.950462	5299.950781
11.4	20	5299.954372	5299.953664	5299.949623	5299.949991
12.6	20	5299.944743	5299.944553	5299.948431	5299.942001
MHz		-0.055257	-0.055447	-0.051569	-0.057999
PPM		-10.425794	-10.461705	-9.730079	-10.943268

Voltage (V)	Temperature (°C)	U-NII-2C Test Results			
		5580MHz			
		1min	2min	5min	10min
12	-5	5580.001967	5579.993563	5579.989763	5579.984401
12	0	5580.001441	5579.985058	5579.988391	5579.978155
12	5	5580.000742	5579.979834	5579.986076	5579.970835
12	10	5579.997630	5579.976737	5579.976602	5579.968976
12	20	5579.993300	5579.968889	5579.974033	5579.965638
12	30	5579.986025	5579.968312	5579.968418	5579.956091
12	40	5579.983460	5579.965952	5579.966932	5579.946821
12	45	5579.978537	5579.959623	5579.959198	5579.941785
11.4	20	5579.969164	5579.953030	5579.952447	5579.938282
12.6	20	5579.966722	5579.948427	5579.944875	5579.935438
MHz		-0.033278	-0.051573	-0.055125	-0.064562
PPM		-5.963809	-9.242400	-9.879027	-11.570254

Voltage (V)	Temperature (°C)	U-NII-3 Test Results			
		5785MHz			
		1min	2min	5min	10min
12	-5	5784.995849	5784.993517	5784.992445	5784.991048
12	0	5784.994047	5784.987944	5784.985415	5784.990426
12	5	5784.991034	5784.979191	5784.982410	5784.980777
12	10	5784.981157	5784.972533	5784.979303	5784.972294
12	20	5784.978406	5784.964282	5784.972865	5784.968215
12	30	5784.969290	5784.964204	5784.966263	5784.958740
12	40	5784.966175	5784.962933	5784.957870	5784.955906
12	45	5784.963867	5784.955976	5784.955241	5784.955116
11.4	20	5784.962069	5784.946920	5784.952594	5784.947428
12.6	20	5784.960676	5784.939420	5784.951534	5784.939895
MHz		-0.039324	-0.060580	-0.048466	-0.060105
PPM		-6.797502	-10.471942	-8.377841	-10.389815

5.4. Power Spectral Density

Ambient condition

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

Method of Measurement

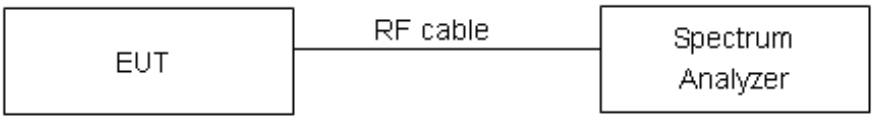
The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

Set RBW = 500 kHz, VBW =1.5MHz for the band 5.725-5.85 GHz

Set RBW = 1 MHz, VBW =3MHz for the band 5.150-5.250 GHz

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

Test setup



Limits

Rule FCC Part 15.407(a)(1)/ Part 15.407(a)(2) / Part 15.407(a)(3)
For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For 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 500-kHz 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	17/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

MIMO without Beamforming

U-NII-1

Network Standards	Channel/ Frequency (MHz)	Power Spectral Density									Limit (dBm /MHz)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Antenna 4		Total Power (dBm /MHz)		
		Read Value (dBm/MHz)	PSD (dBm /MHz)	Read Value (dBm/MHz)	PSD (dBm /MHz)	Read Value (dBm/MHz)	PSD (dBm /MHz)	Read Value (dBm/MHz)	PSD (dBm /MHz)			
802.11a	36/5180	8.89	9.01	7.09	7.21	6.26	6.39	8.39	8.51	13.92	13.98	PASS
	40/5200	8.38	8.50	7.11	7.24	5.72	5.84	8.77	8.90	13.80	13.98	PASS
	48/5240	8.81	8.93	7.18	7.31	6.27	6.39	8.38	8.50	13.91	13.98	PASS
802.11n HT20	36/5180	7.02	7.53	5.39	5.89	5.33	5.83	7.35	7.85	12.90	13.98	PASS
	40/5200	7.49	8.00	6.46	6.97	5.79	6.29	8.00	8.50	13.55	13.98	PASS
	48/5240	7.70	8.21	6.47	6.97	5.84	6.35	7.85	8.36	13.57	13.98	PASS
802.11n HT40	38/5190	-1.66	-0.76	-2.85	-1.95	-3.54	-2.64	-1.00	-0.10	4.77	13.98	PASS
	46/5230	7.63	8.53	5.96	6.86	5.90	6.79	7.67	8.57	13.79	13.98	PASS
802.11ac VHT20	36/5180	7.86	8.37	6.38	6.88	6.34	6.85	8.37	8.88	13.86	13.98	PASS
	40/5200	7.50	8.01	6.27	6.78	5.61	6.12	7.69	8.20	13.38	13.98	PASS
	48/5240	7.66	8.17	6.10	6.61	5.94	6.45	7.07	7.58	13.28	13.98	PASS
802.11ac VHT40	38/5190	7.47	8.30	6.03	6.86	5.95	6.78	7.41	8.24	13.63	13.98	PASS
	46/5230	7.93	8.77	6.24	7.07	6.18	7.01	7.64	8.48	13.92	13.98	PASS
802.11ac VHT80	42/5210	-4.64	-3.32	-5.17	-3.85	-6.04	-4.72	-4.31	-2.99	2.35	13.98	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=10log($10^{(\text{PSD antenna1 in dBm/10})}$+$10^{(\text{PSD antenna2 in dBm/10})}$+$10^{(\text{PSD antenna3 in dBm/10})}$) +$10^{(\text{PSD antenna4 in dBm/10})}$)

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,so directional gain=GANT+Array Gain=3+10log（4/1)=9.02>6 dBi. So the PSD limt is 17-(directional gain-6 dBi) =17-(9.02-6)=13.98 dBm.

U-NII-2A

Network Standards	Channel/ Frequency (MHz)	Power Spectral Density									Limit (dBm/ MHz)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Antenna 4		Total Power (dBm /MHz)		
		Read Value (dBm/ MHz)	PSD (dBm/ MHz)	Read Value (dBm/ MHz)	PSD (dBm/ MHz)	Read Value (dBm/ MHz)	PSD (dBm/ MHz)	Read Value (dBm/ MHz)	PSD (dBm/ MHz)			
802.11a	52/5260	2.15	2.28	1.41	1.54	0.19	0.31	2.31	2.43	7.74	7.98	PASS
	60/5300	2.01	2.13	1.41	1.54	0.37	0.49	2.59	2.71	7.81	7.98	PASS
	64/5320	1.93	2.06	1.69	1.81	0.78	0.90	2.43	2.55	7.89	7.98	PASS
802.11n HT20	52/5260	1.11	1.62	0.03	0.54	-0.87	-0.37	1.50	2.01	7.07	7.98	PASS
	60/5300	1.36	1.87	0.11	0.62	-0.43	0.08	1.35	1.86	7.20	7.98	PASS
	64/5320	1.71	2.22	1.01	1.51	0.25	0.76	1.71	2.21	7.74	7.98	PASS
802.11n HT40	54/5270	1.71	2.60	0.68	1.58	-0.52	0.37	1.51	2.41	7.85	7.98	PASS
	62/5310	-0.66	0.24	-1.48	-0.59	-2.54	-1.65	-0.72	0.18	5.63	7.98	PASS
802.11ac VHT20	52/5260	2.10	2.61	1.00	1.51	0.11	0.61	2.03	2.54	7.91	7.98	PASS
	60/5300	2.55	3.05	1.09	1.59	0.51	1.02	1.21	1.72	7.93	7.98	PASS
	64/5320	2.19	2.70	1.55	2.05	0.84	1.34	0.98	1.48	7.95	7.98	PASS
802.11ac VHT40	54/5270	1.73	2.56	0.53	1.36	-0.33	0.51	1.93	2.76	7.91	7.98	PASS
	62/5310	1.89	2.73	0.55	1.38	-0.21	0.62	1.76	2.59	7.94	7.98	PASS
802.11ac VHT80	58/5290	-5.07	-3.75	-6.24	-4.93	-6.27	-4.95	-4.91	-3.59	1.76	7.98	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=10log($10^{(\text{PSD antenna1 in dBm/10})}$+$10^{(\text{PSD antenna2 in dBm/10})}$+$10^{(\text{PSD antenna3 in dBm/10})}$) +$10^{(\text{PSD antenna4 in dBm/10})}$)

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,so directional gain=GANT+Array Gain=3+10log（4/1)=9.02>6 dBi. So the PSD limt is 11-(directional gain-6 dBi) =11-(9.02-6)=7.98 dBm.

U-NII-2C

Network Standards	Channel/ Frequency (MHz)	Power Spectral Density								Total Power (dBm /MHz)	Limit (dBm/ MHz)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Antenna 4				
		Read Value (dBm/ MHz)	PSD (dBm/ MHz)	Read Value (dBm/ MHz)	PSD (dBm/ MHz)	Read Value (dBm/ MHz)	PSD (dBm/ MHz)	Read Value (dBm/ MHz)	PSD (dBm/ MHz)			
802.11a	100/5500	2.38	2.50	1.09	1.21	0.39	0.51	2.28	2.41	7.76	7.98	PASS
	116/5580	2.39	2.51	0.90	1.02	0.32	0.45	1.86	1.98	7.58	7.98	PASS
	140/5700	2.06	2.18	0.73	0.86	0.36	0.48	1.79	1.91	7.43	7.98	PASS
	144/5720	2.40	2.52	1.06	1.18	0.32	0.45	2.10	2.23	7.69	7.98	PASS
802.11n HT20	100/5500	1.94	2.45	0.83	1.34	0.38	0.89	2.19	2.70	7.93	7.98	PASS
	116/5580	1.87	2.38	1.14	1.64	0.29	0.79	2.08	2.59	7.93	7.98	PASS
	140/5700	2.12	2.63	1.04	1.55	-0.51	-0.01	2.08	2.58	7.83	7.98	PASS
	144/5720	2.40	2.90	1.08	1.59	0.12	0.63	1.78	2.29	7.95	7.98	PASS
802.11n HT40	102/5510	-1.54	-0.65	-2.98	-2.09	-2.92	-2.02	-1.67	-0.77	4.69	7.98	PASS
	110/5550	2.25	3.15	0.86	1.75	-0.05	0.85	0.78	1.68	7.96	7.98	PASS
	134/5670	2.37	3.26	1.19	2.09	-0.19	0.71	0.20	1.10	7.93	7.98	PASS
	142/5710	1.90	2.80	0.96	1.86	-0.21	0.69	0.26	1.16	7.72	7.98	PASS
802.11ac VHT20	100/5500	2.15	2.65	1.33	1.84	0.23	0.73	1.46	1.97	7.87	7.98	PASS
	116/5580	1.84	2.34	1.23	1.74	0.21	0.71	1.44	1.94	7.75	7.98	PASS
	140/5700	2.23	2.74	1.16	1.67	-0.19	0.32	1.46	1.97	7.78	7.98	PASS
	144/5720	2.37	2.87	1.19	1.70	0.15	0.65	1.67	2.18	7.94	7.98	PASS
802.11ac VHT40	102/5510	1.65	2.49	0.45	1.29	-0.03	0.80	1.61	2.45	7.84	7.98	PASS
	110/5550	2.13	2.97	0.93	1.77	-0.02	0.81	0.86	1.69	7.90	7.98	PASS
	134/5670	2.34	3.18	0.75	1.59	0.02	0.86	1.01	1.84	7.97	7.98	PASS
	142/5710	2.24	3.07	1.09	1.92	-0.46	0.37	0.88	1.72	7.90	7.98	PASS
802.11ac VHT80	106/5530	0.03	1.35	-0.66	0.66	-0.90	0.41	-0.34	0.98	6.89	7.98	PASS
	138/5690	0.63	1.94	-1.10	0.22	-1.02	0.30	-0.41	0.91	6.92	7.98	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=10log($10^{(\text{PSD antenna1 in dBm/10})}$+$10^{(\text{PSD antenna2 in dBm/10})}$+$10^{(\text{PSD antenna3 in dBm/10})}$) +$10^{(\text{PSD antenna4 in dBm/10})}$)

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,so directional gain=GANT+Array Gain=3+10log（4/1)=9.02>6 dBi. So the PSD limt is 11-(directional gain-6 dBi) =11-(9.02-6)=7.98 dBm.

U-NII-3

Network Standards	Channel/ Frequency (MHz)	Power Spectral Density								Total Power (dBm/ 500kHz)	Limit (dBm/ 500kHz)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Antenna 4				
		Read Value (dBm/ 500kHz)	PSD (dBm/ 500kHz)	Read Value (dBm/ 500kHz)	PSD (dBm/ 500kHz)	Read Value (dBm/ 500kHz)	PSD (dBm/ 500kHz)	Read Value (dBm/ 500kHz)	PSD (dBm/ 500kHz)			
U-NII-3 802.11a	149/5745	12.94	13.07	11.74	11.86	12.09	12.21	12.01	12.13	18.36	26.98	PASS
	157/5785	12.39	12.52	12.19	12.31	10.89	11.01	11.60	11.73	17.95	26.98	PASS
	165/5825	12.30	12.42	11.42	11.55	10.70	10.83	11.32	11.44	17.62	26.98	PASS
802.11n HT20	149/5745	11.69	12.19	10.69	11.19	10.46	10.97	10.76	11.27	17.45	26.98	PASS
	157/5785	10.73	11.23	10.47	10.97	10.53	11.04	10.06	10.56	16.98	26.98	PASS
	165/5825	11.47	11.98	11.06	11.57	11.02	11.52	10.64	11.15	17.58	26.98	PASS
802.11n HT40	151/5755	7.57	8.47	6.88	7.78	7.11	8.01	7.19	8.08	14.11	26.98	PASS
	159/5795	9.14	10.03	8.23	9.13	8.11	9.00	8.33	9.22	15.39	26.98	PASS
802.11ac VHT20	149/5745	12.02	12.52	11.08	11.59	11.10	11.61	10.95	11.46	17.84	26.98	PASS
	157/5785	11.95	12.46	10.96	11.47	10.87	11.38	11.12	11.63	17.77	26.98	PASS
	165/5825	11.66	12.16	10.88	11.38	10.65	11.15	10.70	11.20	17.51	26.98	PASS
802.11ac VHT40	151/5755	9.38	10.21	8.47	9.30	8.37	9.21	8.45	9.28	15.54	26.98	PASS
	159/5795	9.24	10.07	8.49	9.32	8.90	9.73	8.20	9.04	15.58	26.98	PASS
802.11ac VHT80	155/5775	2.10	3.42	1.83	3.15	1.62	2.94	1.66	2.98	9.15	26.98	PASS

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

The Total Power =$10\log(10^{(\text{Power antenna1 in dBm/10})}+10^{(\text{Power antenna2 in dBm/10})}+10^{(\text{Power antenna3 in dBm/10})}) +10^{(\text{PSD antenna4 in dBm/10})}$).

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 PSD measurements on all devices,Array Gain=10log(Nant/Nss)dB,so directional gain=GANT+Array Gain=4+10log（4/1)=9.02>6 dBi. So the PSD limt is 30-(directional gain-6 dBi) =30-(9.02-6) =26.98 dBm.

MIMO with Beamforming

U-NII-1

Network Standards	Channel/ Frequency (MHz)	Power Spectral Density									Limit (dBm /MHz)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Antenna 4		Total Power (dBm /MHz)		
		Read Value (dBm/MHz)	PSD (dBm /MHz)	Read Value (dBm/MHz)	PSD (dBm /MHz)	Read Value (dBm/MHz)	PSD (dBm /MHz)	Read Value (dBm/MHz)	PSD (dBm /MHz)			
802.11n HT20	36/5180	7.18	7.69	5.66	6.16	5.38	5.88	7.53	8.04	13.06	13.98	PASS
	40/5200	7.50	8.01	6.43	6.94	5.86	6.36	8.18	8.68	13.61	13.98	PASS
	48/5240	7.69	8.20	6.53	7.03	5.89	6.40	7.79	8.29	13.57	13.98	PASS
802.11n HT40	38/5190	-1.83	-0.93	-3.36	-2.47	-3.03	-2.14	-1.06	-0.16	4.70	13.98	PASS
	46/5230	7.61	8.51	5.74	6.64	5.87	6.77	7.93	8.83	13.82	13.98	PASS
802.11ac VHT20	36/5180	7.90	8.41	6.30	6.81	5.92	6.43	8.39	8.90	13.78	13.98	PASS
	40/5200	7.12	7.62	6.08	6.59	5.77	6.28	7.61	8.12	13.24	13.98	PASS
	48/5240	7.63	8.13	6.00	6.50	6.20	6.71	7.33	7.83	13.37	13.98	PASS
802.11ac VHT40	38/5190	7.31	8.14	5.70	6.54	5.36	6.20	7.45	8.28	13.41	13.98	PASS
	46/5230	7.99	8.82	6.23	7.07	5.78	6.61	7.72	8.56	13.89	13.98	PASS
802.11ac VHT80	42/5210	-4.49	-3.18	-5.00	-3.68	-5.99	-4.67	-4.42	-3.10	2.41	13.98	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=10log($10^{(\text{PSD antenna1 in dBm/10})}$+$10^{(\text{PSD antenna2 in dBm/10})}$+$10^{(\text{PSD antenna3 in dBm/10})}$) +$10^{(\text{PSD antenna4 in dBm/10})}$)

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,so directional gain=GANT+Array Gain=3+10log（4/1)=9.02>6 dBi. So the PSD limt is 17-(directional gain-6 dBi) =17-(9.02-6)=13.98 dBm.

U-NII-2A

Network Standards	Channel/ Frequency (MHz)	Power Spectral Density								Total Power (dBm /MHz)	Limit (dBm/ MHz)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Antenna 4				
		Read Value (dBm/ MHz)	PSD (dBm/ MHz)	Read Value (dBm/ MHz)	PSD (dBm/ MHz)	Read Value (dBm/ MHz)	PSD (dBm/ MHz)	Read Value (dBm/ MHz)	PSD (dBm/ MHz)			
802.11n HT20	52/5260	1.04	1.55	0.58	1.08	-0.32	0.18	1.98	2.48	7.42	7.98	PASS
	60/5300	1.24	1.75	0.93	1.44	-0.07	0.43	2.29	2.79	7.70	7.98	PASS
	64/5320	1.72	2.23	1.29	1.80	0.20	0.70	2.28	2.79	7.96	7.98	PASS
802.11n HT40	54/5270	1.00	1.90	-0.12	0.78	-1.31	-0.41	1.24	2.14	7.24	7.98	PASS
	62/5310	-0.49	0.40	-0.93	-0.04	-2.04	-1.14	0.73	1.62	6.35	7.98	PASS
802.11ac VHT20	52/5260	2.01	2.52	1.25	1.76	0.40	0.91	1.87	2.37	7.95	7.98	PASS
	60/5300	2.04	2.54	1.18	1.68	0.67	1.18	1.57	2.07	7.92	7.98	PASS
	64/5320	2.14	2.65	1.28	1.78	0.88	1.39	1.21	1.72	7.93	7.98	PASS
802.11ac VHT40	54/5270	1.22	2.05	-0.04	0.79	-0.53	0.30	1.67	2.50	7.52	7.98	PASS
	62/5310	0.94	1.77	0.26	1.09	-0.75	0.08	1.44	2.28	7.40	7.98	PASS
802.11ac VHT80	58/5290	-4.24	-2.92	-5.89	-4.58	-6.42	-5.10	-4.26	-2.94	2.24	7.98	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=$10\log(10^{(\text{PSD antenna1 in dBm/10})}+10^{(\text{PSD antenna2 in dBm/10})}+10^{(\text{PSD antenna3 in dBm/10})}) +10^{(\text{PSD antenna4 in dBm/10})})$

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,so directional gain=GANT+Array Gain=3+10log（4/1)=9.02>6 dBi. So the PSD limt is 11-(directional gain-6 dBi) =11-(9.02-6)=7.98 dBm.

U-NII-2C

Network Standards	Channel/ Frequency (MHz)	Power Spectral Density									Limit (dBm/ MHz)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Antenna 4		Total Power (dBm /MHz)		
		Read Value (dBm/ MHz)	PSD (dBm/ MHz)	Read Value (dBm/ MHz)	PSD (dBm/ MHz)	Read Value (dBm/ MHz)	PSD (dBm/ MHz)	Read Value (dBm/ MHz)	PSD (dBm/ MHz)			
802.11n HT20	100/5500	1.89	2.39	0.79	1.29	0.46	0.97	2.09	2.60	7.89	7.98	PASS
	116/5580	1.84	2.35	0.69	1.19	0.29	0.80	2.15	2.66	7.84	7.98	PASS
	140/5700	1.81	2.32	0.78	1.29	-0.42	0.09	1.86	2.36	7.63	7.98	PASS
	144/5720	2.12	2.62	1.10	1.60	0.28	0.79	1.97	2.47	7.95	7.98	PASS
802.11n HT40	102/5510	-1.74	-0.85	-2.44	-1.54	-2.64	-1.74	-1.55	-0.65	4.85	7.98	PASS
	110/5550	1.85	2.74	0.40	1.29	-0.21	0.69	0.65	1.54	7.65	7.98	PASS
	134/5670	1.95	2.84	0.54	1.43	-0.59	0.31	0.81	1.71	7.69	7.98	PASS
	142/5710	1.82	2.71	0.65	1.54	-0.78	0.11	0.87	1.77	7.65	7.98	PASS
802.11ac VHT20	100/5500	1.96	2.47	0.96	1.47	0.20	0.71	1.25	1.75	7.66	7.98	PASS
	116/5580	1.50	2.01	0.67	1.18	0.01	0.51	1.60	2.10	7.52	7.98	PASS
	140/5700	1.88	2.39	0.84	1.35	-0.09	0.42	1.38	1.89	7.59	7.98	PASS
	144/5720	1.78	2.28	1.26	1.77	-0.30	0.21	1.76	2.27	7.73	7.98	PASS
802.11ac VHT40	102/5510	1.65	2.48	0.24	1.07	-0.38	0.45	1.31	2.14	7.63	7.98	PASS
	110/5550	1.60	2.44	0.23	1.07	-0.14	0.69	1.42	2.25	7.70	7.98	PASS
	134/5670	1.96	2.80	0.71	1.55	-0.23	0.60	1.33	2.16	7.87	7.98	PASS
	142/5710	1.83	2.66	0.71	1.55	-0.68	0.15	1.06	1.89	7.68	7.98	PASS
802.11ac VHT80	106/5530	-2.72	-1.40	-3.61	-2.29	-3.47	-2.15	-2.81	-1.49	4.20	7.98	PASS
	138/5690	-1.85	-0.53	-3.52	-2.20	-3.52	-2.20	-2.32	-1.00	4.60	7.98	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=$10\log(10^{(\text{PSD antenna1 in dBm/10})}+10^{(\text{PSD antenna2 in dBm/10})}+10^{(\text{PSD antenna3 in dBm/10})}) +10^{(\text{PSD antenna4 in dBm/10})})$

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,so directional gain=GANT+Array Gain=3+10log（4/1)=9.02>6 dBi. So the PSD limt is 11-(directional gain-6 dBi) =11-(9.02-6)=7.98 dBm.

U-NII-3

Network Standards	Channel/ Frequency (MHz)	Power Spectral Density									Limit (dBm/ 500kHz)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Antenna 4		Total Power (dBm/ 500kHz)		
		Read Value (dBm/ 500kHz)	PSD (dBm/ 500kHz)	Read Value (dBm/ 500kHz)	PSD (dBm/ 500kHz)	Read Value (dBm/ 500kHz)	PSD (dBm/ 500kHz)	Read Value (dBm/ 500kHz)	PSD (dBm/ 500kHz)			
802.11n HT20	149/5745	9.48	9.98	8.47	8.98	7.35	7.86	8.20	8.71	14.97	26.98	PASS
	157/5785	8.48	8.99	8.44	8.95	7.61	8.11	7.50	8.00	14.56	26.98	PASS
	165/5825	8.12	8.63	8.47	8.97	7.46	7.96	7.70	8.21	14.48	26.98	PASS
802.11n HT40	151/5755	5.84	6.73	4.70	5.60	4.79	5.69	4.81	5.70	11.98	26.98	PASS
	159/5795	5.55	6.44	4.75	5.65	4.26	5.16	4.03	4.92	11.60	26.98	PASS
802.11ac VHT20	149/5745	9.11	9.62	8.48	8.98	8.08	8.58	7.29	7.80	14.81	26.98	PASS
	157/5785	9.29	9.80	8.43	8.93	7.85	8.36	7.31	7.81	14.81	26.98	PASS
	165/5825	8.95	9.46	8.08	8.59	7.91	8.42	7.15	7.65	14.60	26.98	PASS
802.11ac VHT40	151/5755	6.02	6.85	5.41	6.24	4.71	5.54	4.35	5.18	12.02	26.98	PASS
	159/5795	5.94	6.77	5.67	6.50	4.51	5.34	3.94	4.78	11.94	26.98	PASS
802.11ac VHT80	155/5775	2.34	3.66	1.99	3.31	1.28	2.60	1.44	2.76	9.12	26.98	PASS

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

The Total Power =10log($10^{(\text{Power antenna1 in dBm/10})}$+$10^{(\text{Power antenna2 in dBm/10})}$+$10^{(\text{Power antenna3 in dBm/10})}$) +$10^{(\text{PSD antenna4 in dBm/10})}$).

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 PSD measurements on all devices,Array Gain=10log(Nant/Nss)dB,so directional gain=GANT+Array Gain=4+10log（4/1)=9.02>6 dBi. So the PSD limt is 30-(directional gain-6 dBi) =30-(9.02-6) =26.98 dBm.

MIMO without Beamforming

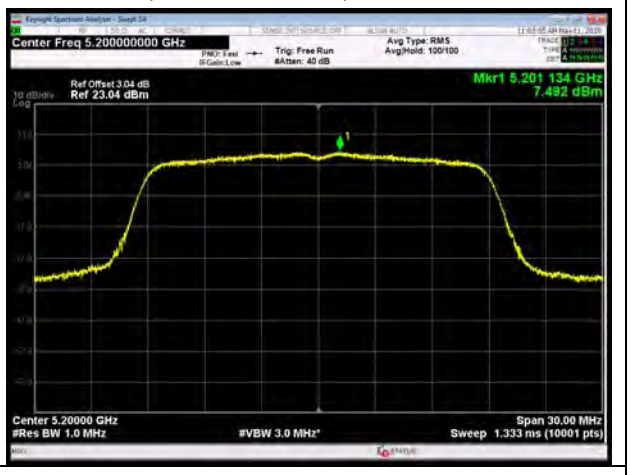
MIMO Antenna 1

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

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

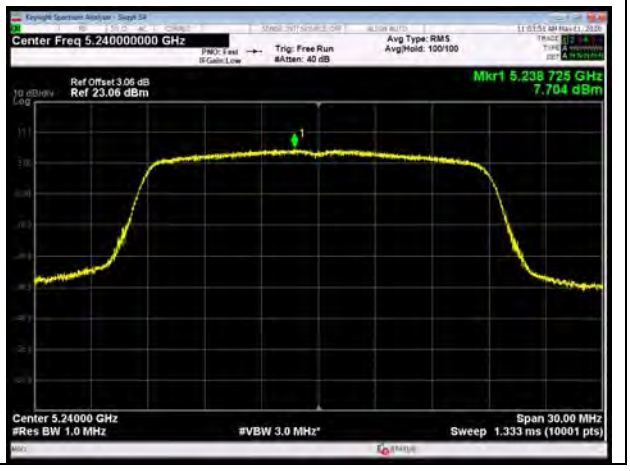
U-NII-1, 802.11a, Channel No.: 40

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



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

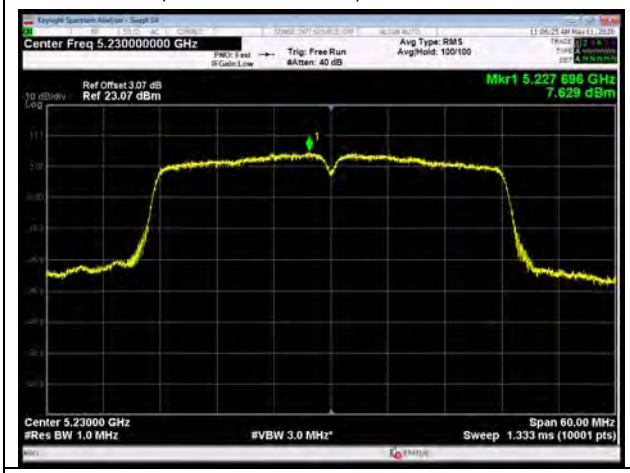
U-NII-1, 802.11n HT20, Channel No.: 48



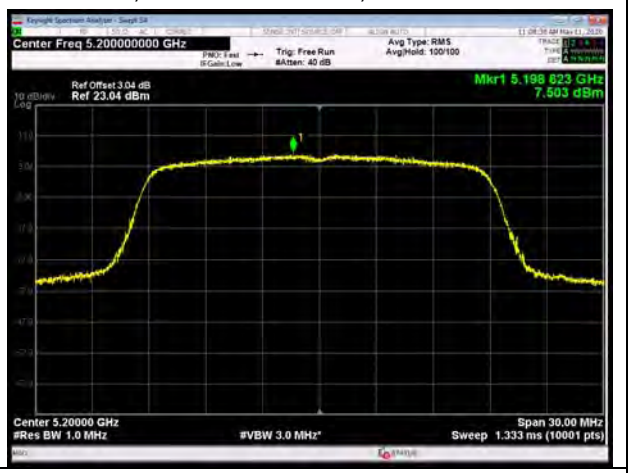
U-NII-1, 802.11n HT40, Channel No.: 38

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

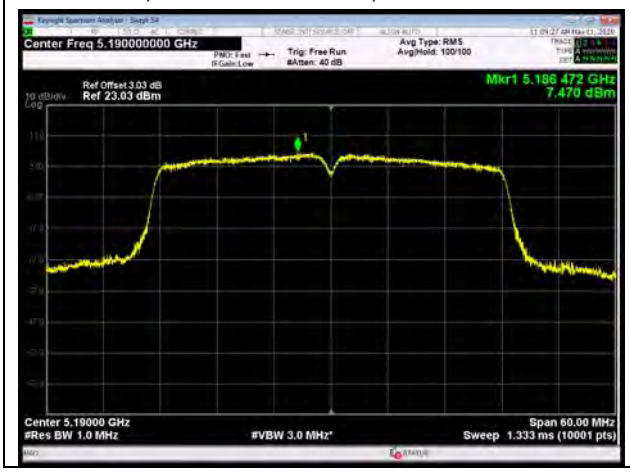
U-NII-1, 802.11n HT40, Channel No.: 46



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



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



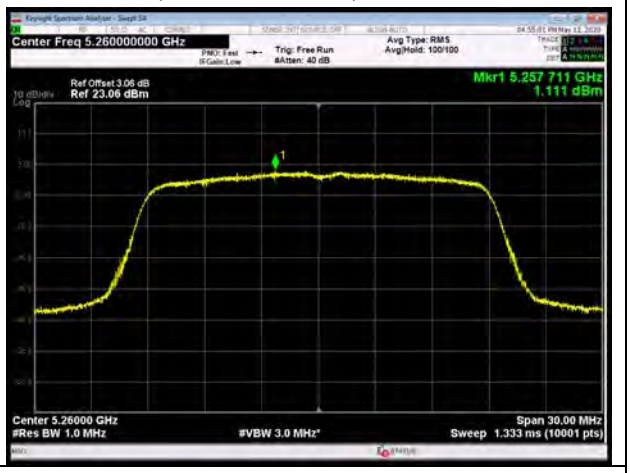
U-NII-1, 802.11ac VHT20, Channel No.: 48

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

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

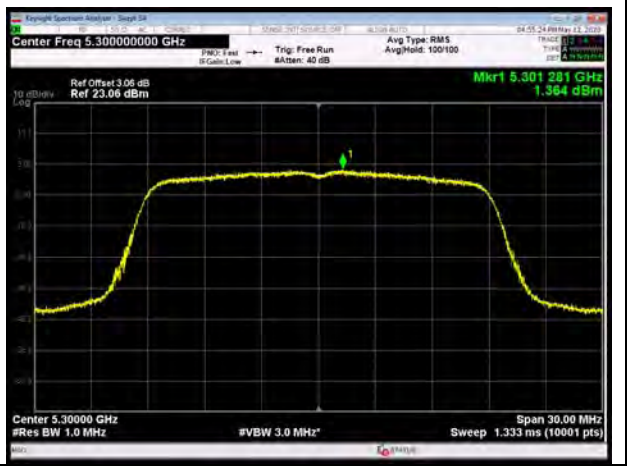
U-NII-2A, 802.11a, Channel No.: 52

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



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

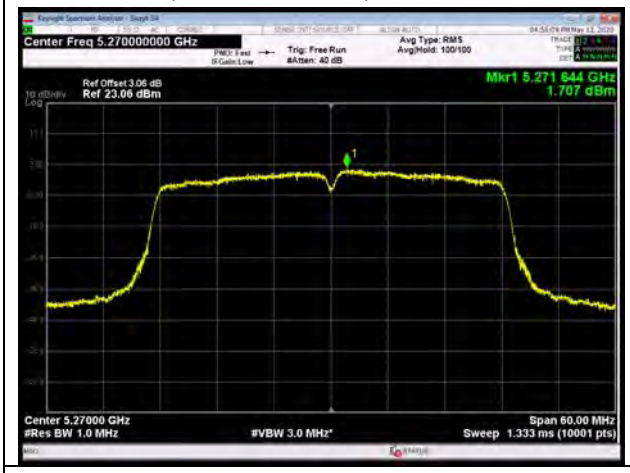
U-NII-2A, 802.11n HT20, Channel No.: 60



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

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

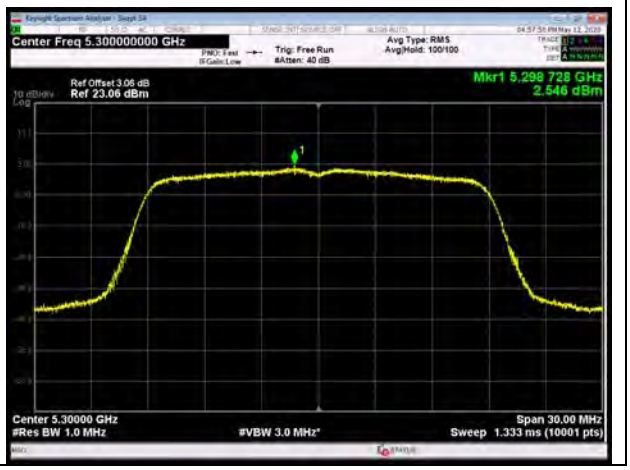
U-NII-2A, 802.11n HT40, Channel No.: 54



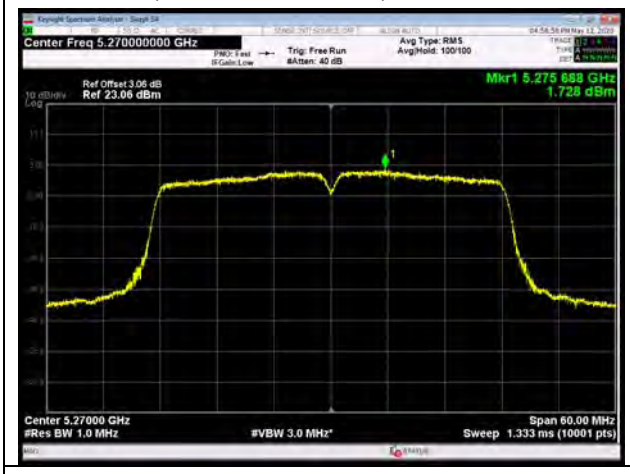
U-NII-2A, 802.11ac VHT20, Channel No.:52

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

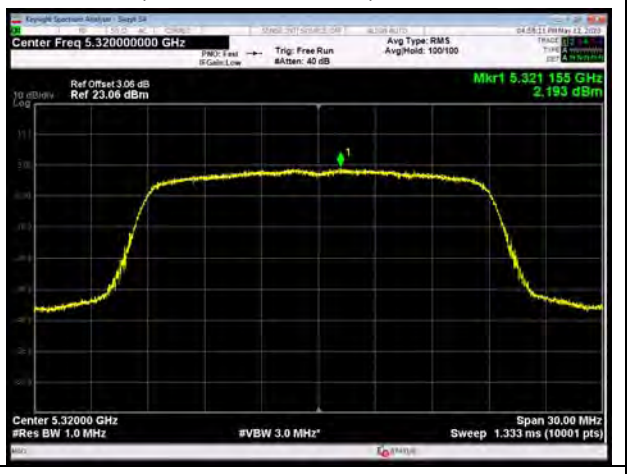
U-NII-2A, 802.11ac VHT20, Channel No.: 60



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



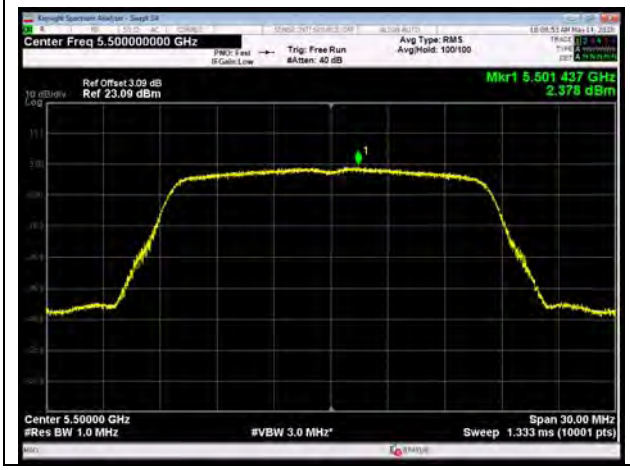
U-NII-2A, 802.11ac VHT20, Channel No.: 64



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

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

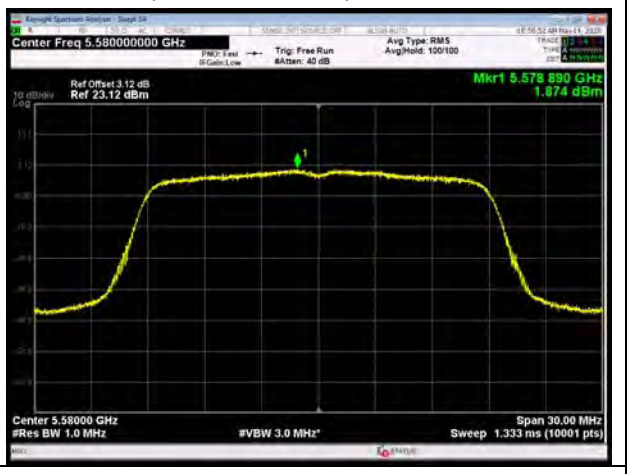
U-NII-2C, 802.11a, Channel No.: 100



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

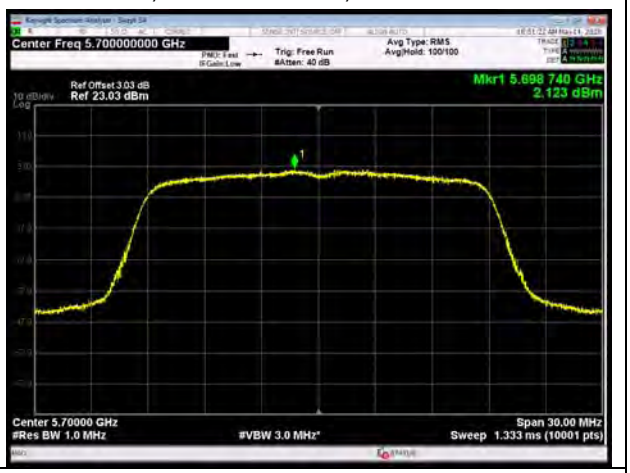
U-NII-2C, 802.11a, Channel No.: 116

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

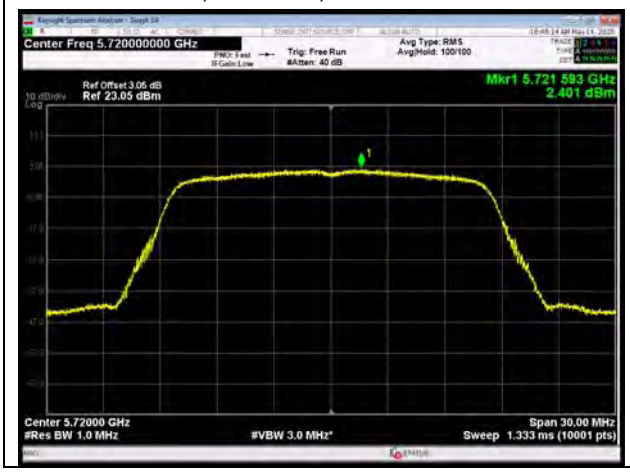


U-NII-2C, 802.11a, Channel No.: 140

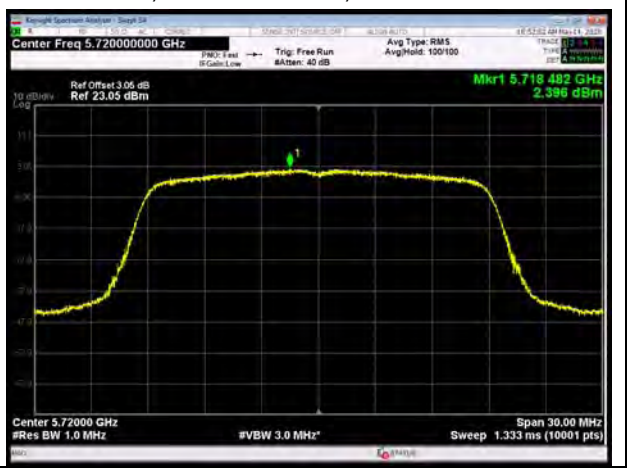
U-NII-2C, 802.11n HT20, Channel No.: 140



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



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



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

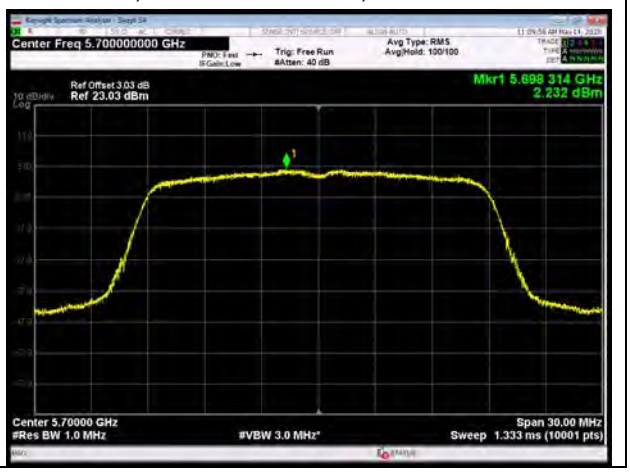
U-NII-2C, 802.11ac VHT20, Channel No.: 100

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

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

U-NII-2C, 802.11n 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

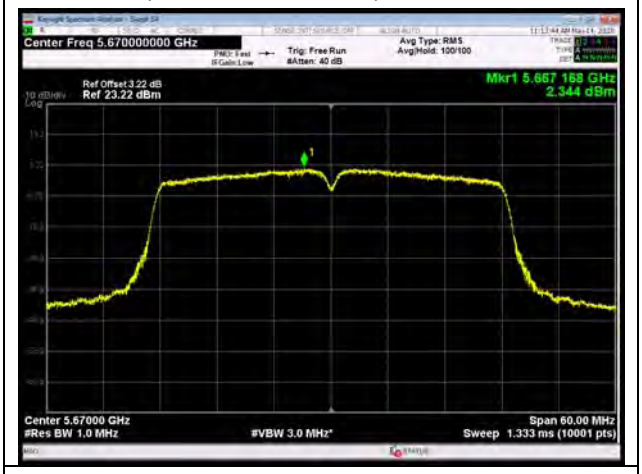
U-NII-2C, 802.11ac VHT40, Channel No.: 102

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

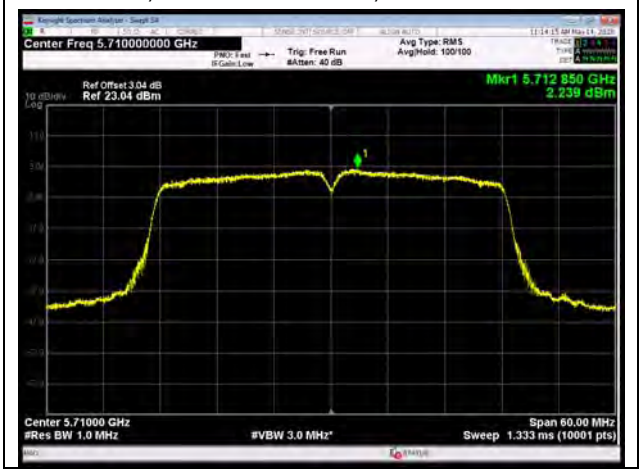
U-NII-2C, 802.11ac VHT40, Channel No.: 110

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

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



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



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

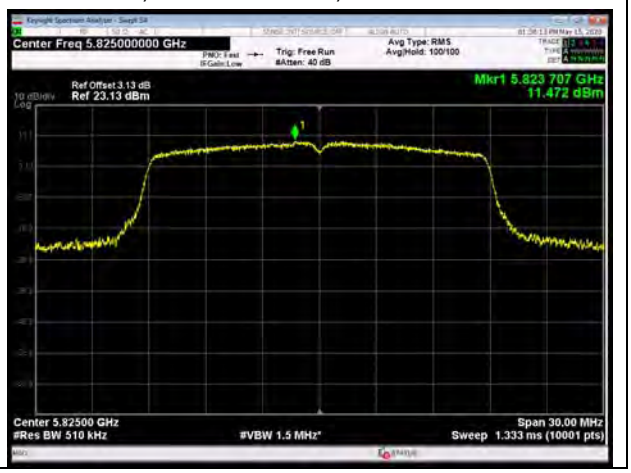
U-NII-3, 802.11n HT20, Channel No.: 149

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

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

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

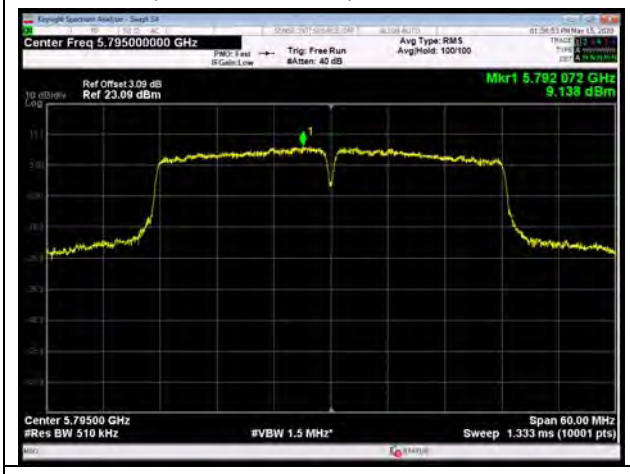
U-NII-3, 802.11n HT20, Channel No.: 165



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

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

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

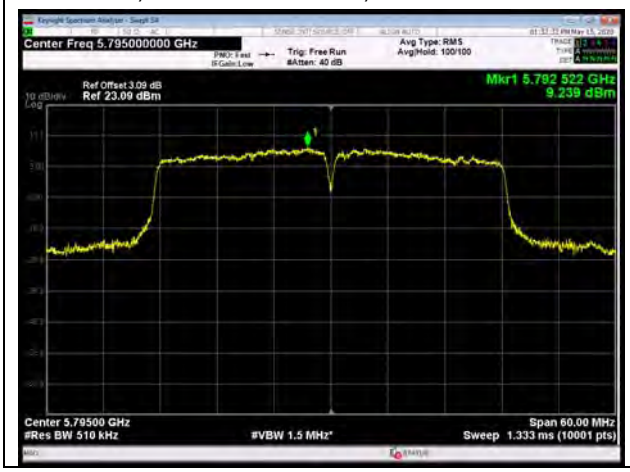


U-NII-3, 802.11ac VHT20, Channel No.: 157

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

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

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



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

MIMO Antenna 2

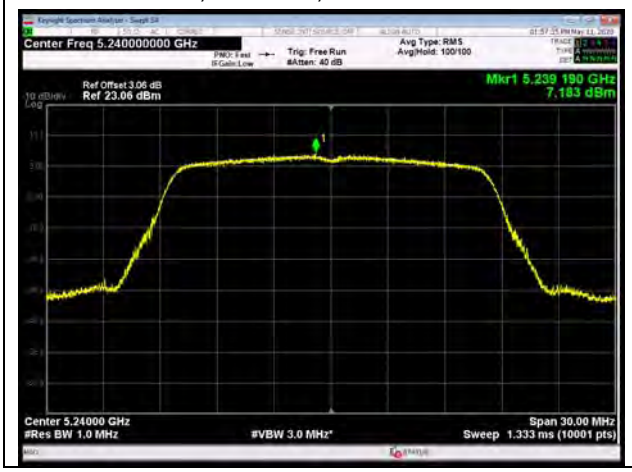
U-NII-1, 802.11a, Channel No.: 36

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

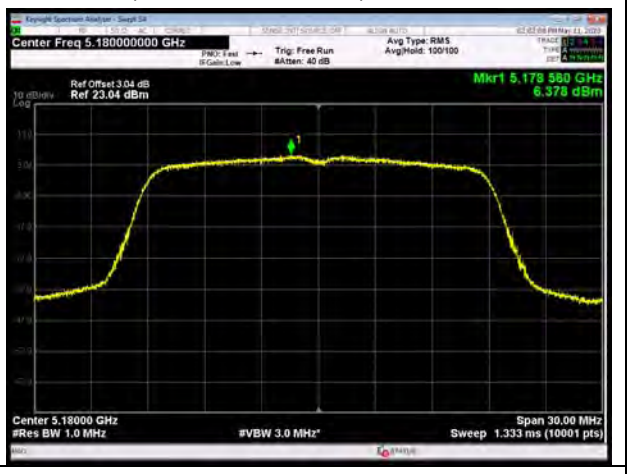
U-NII-1, 802.11a, Channel No.: 48



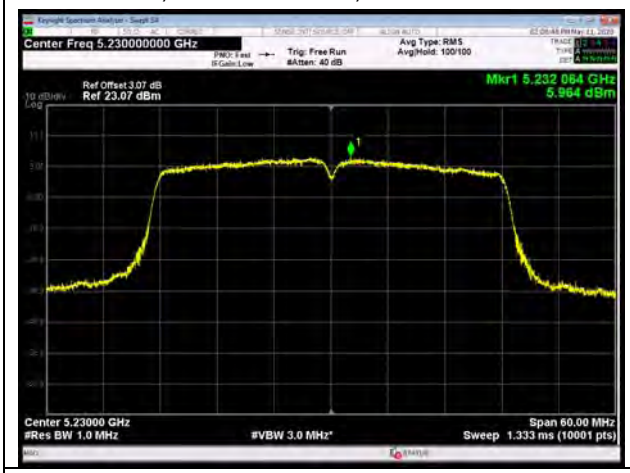
U-NII-1, 802.11n HT20, Channel No.: 48

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

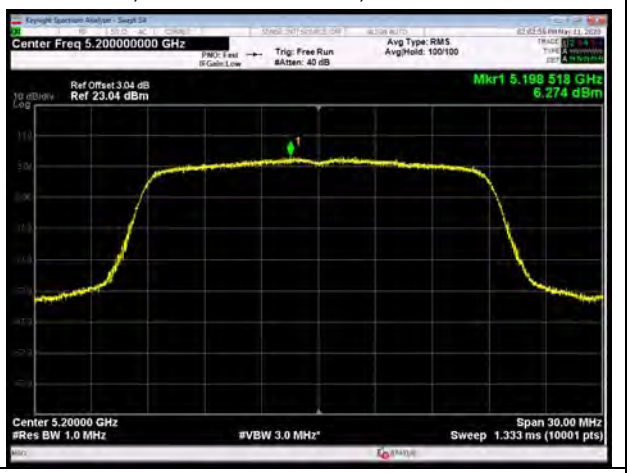
U-NII-1, 802.11ac VHT20, Channel No.: 36



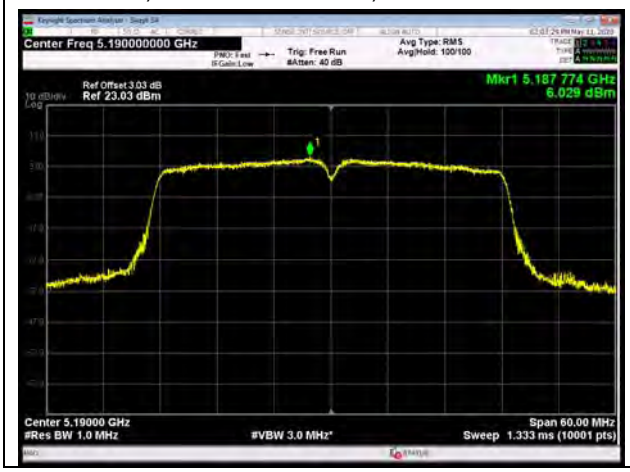
U-NII-1, 802.11n HT40, Channel No.: 46



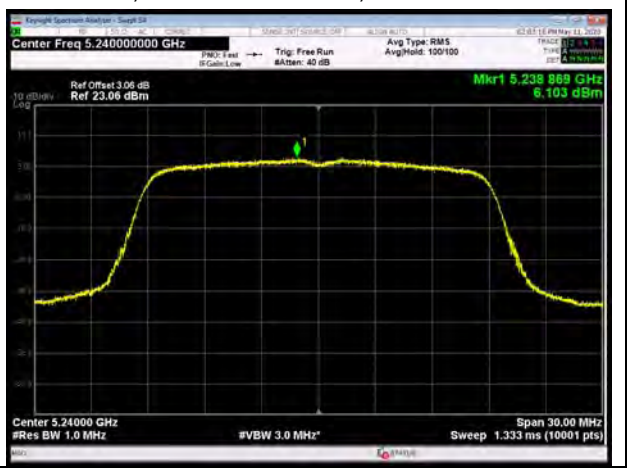
U-NII-1, 802.11ac VHT20, Channel No.: 40



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



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

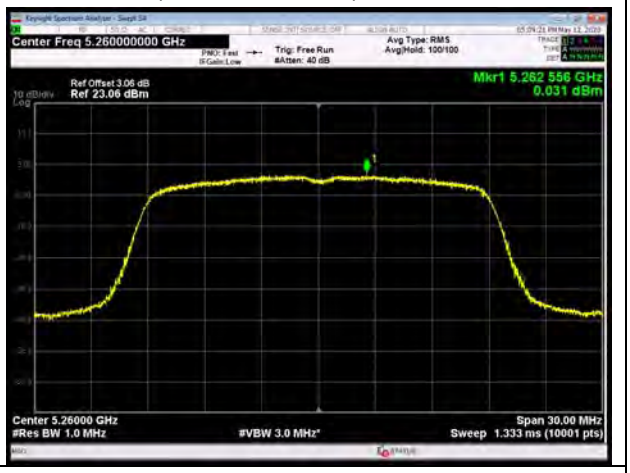


U-NII-1, 802.11ac VHT40, Channel No.: 46

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

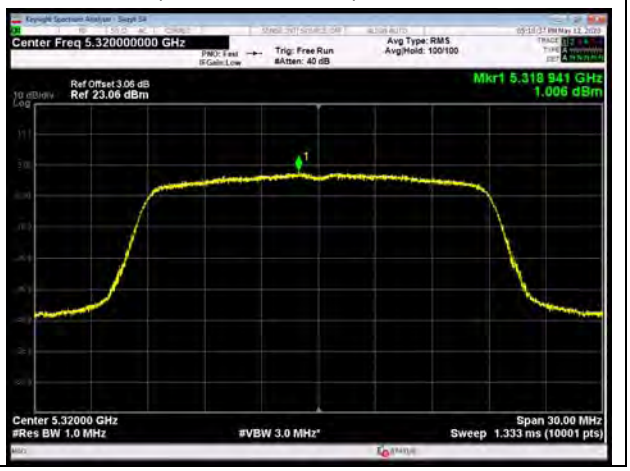


U-NII-2A, 802.11a, Channel No.: 60

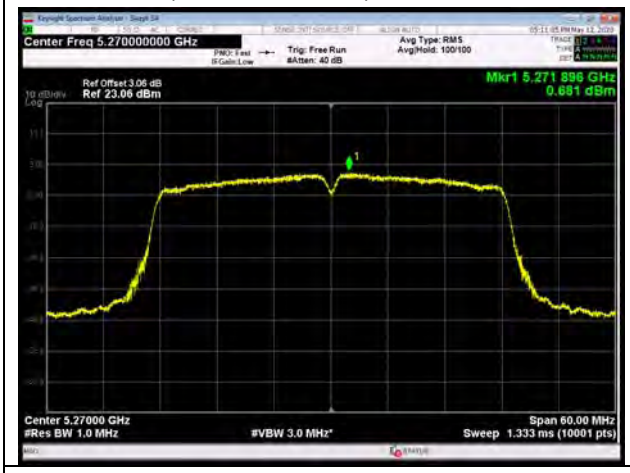
U-NII-2A, 802.11n HT20, Channel No.: 60

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

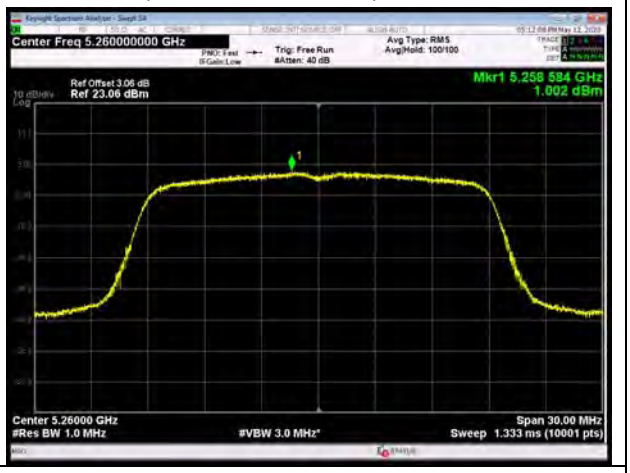
U-NII-2A, 802.11n HT20, Channel No.: 64



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