



中认信通

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

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Address: 6-8 Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District,
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FCC ID: V7TA33

Product Name: AX3000 Wi-Fi 6 Range Extender

Standard(s): 47 CFR Part 15, Subpart E(15.407)

ANSI C63.10-2013

**KDB 789033 D02 General U-NII Test Procedures New
Rules v02r01**

The above equipment has been tested and found compliant with the requirement of the relative standards
by China Certification ICT Co., Ltd (Dongguan)

Report Number: CR22020001-00B

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Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

1.1.1 General:

EUT Name:	AX3000 Wi-Fi 6 Range Extender
Test Model:	A33
Operation Frequency:	5180-5240 MHz (802.11a/n ht20/ac vht20/ax hew20) 5190-5230 MHz(802.11n ht40/ac vht40/ax hew40) 5210 MHz(802.11ac vht80/ax hew80) 5260-5320 MHz (802.11a/n ht20/ac vht20/ax hew20) 5270-5310 MHz(802.11n ht40/ac vht40/ax hew40) 5290 MHz(802.11ac vht80/ax hew80) 5250 MHz(802.11ac vht160/ax hew160) 5745-5825 MHz (802.11a/n ht20/ac vht20/ax hew20) 5755-5795 MHz(802.11n ht40/ac vht40/ax hew40) 5775 MHz(802.11ac vht80/ax hew80)
Maximum Average Output Power (Conducted):	19.00 dBm (5150-5250 MHz) 19.87 dBm (5250-5350 MHz) 23.60 dBm (5725-5850 MHz)
Modulation Type:	802.11a/n:OFDM-BPSK, QPSK, 16QAM, 64QAM 802.11ax: OFDMA-BPSK, QPSK, 16QAM, 64QAM,256QAM,1024QAM
Rated Input Voltage:	AC100~240V
Serial Number:	CR22020001-RF-S1
EUT Received Date:	2022.2.9
EUT Received Status:	Good

1.1.2 Operation Frequency Detail:

For 802.11a/n ht20/ac vht20/ax hew20:

5150-5250MHz Band		5250-5350 MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	52	5260	149	5745
40	5200	56	5280	153	5765
44	5220	60	5300	157	5785
48	5240	64	5320	161	5805
/	/	/	/	165	5825
Per section 15.31(m), the above in bold frequencies were performed the test.					

For 802.11n ht40/ac vht40/ax hew40:

5150-5250MHz Band		5250-5350 MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	54	5270	151	5755
46	5230	62	5310	159	5795
Per section 15.31(m), the above in bold frequencies were performed the test.					

For 802.11ac vht80/ax hew80:

5150-5250MHz Band		5250-5350 MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210	58	5290	155	5775
Per section 15.31(m), the above in bold frequencies were performed the test.					

For 802.11ac vht160/ax hew160:

5150-5250MHz Band~5250-5350 MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
50	5250	/	/
Per section 15.31(m), the above in bold frequencies were performed the test.			

1.1.3 Antenna Information Detail▲:

Antenna Chain	Manufacturer	Antenna Type	input impedance (Ohm)	Antenna Gain /Frequency Range	§15.203 Requirement
0	SHENZHEN TENDA TECHNOLOGY CO.,LTD.	PCB	50	4.2dBi/ 2.4~2.5GHz 5.0dBi/ 5.15~5.85GHz	Compliance
1		PCB	50	4.2dBi/ 2.4~2.5GHz 5.0dBi/ 5.15~5.85GHz	Compliance

The Method of §15.203 Compliance:

- ☒ Antenna must be permanently attached to the unit.
☐ Antenna must use a unique type of connector to attach to the EUT.
☐ Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

1.1.4 Accessory Information:

Accessory Description	Manufacturer	Model	Parameters
/	/	/	/

1.2 Description of Test Configuration

1.2.1 EUT Operation Condition:

EUT Operation Mode:	The system was configured for testing in Engineering Mode, which was provided by the manufacturer.
Equipment Modifications:	No
EUT Exercise Software:	accessMtool
The software "Access Mtool" was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer▲:	

Band	Mode	Channel	Frequency (MHz)	Data Rate	RU Config.	Power level	
						Chain 0	Chain 1
5150-5250 MHz	802.11a	Low	5180	6Mbps	N/A	73	78
		Middle	5200	6Mbps	N/A	73	78
		High	5240	6Mbps	N/A	70	77
	802.11n ht20	Low	5180	MCS0	N/A	75	75
		Middle	5200	MCS0	N/A	75	75
		High	5240	MCS0	N/A	75	75
	802.11n ht40	Low	5190	MCS0	N/A	67	67
		High	5230	MCS0	N/A	67	67
	802.11ac vht20	Low	5180	MCS0	N/A	75	75
		Middle	5200	MCS0	N/A	75	75
		High	5240	MCS0	N/A	75	75
	802.11ac vht40	Low	5190	MCS0	N/A	63	63
		High	5230	MCS0	N/A	63	63
	802.11ac vht80	Middle	5210	MCS0	N/A	70	70
	802.11ax hew20	Low	5180	MCS0	26/0	72	72
					52/37	72	72
					106/53	72	72
					242/61	72	72
		Middle	5200	MCS0	26/0	72	72
					52/37	72	72
					106/53	72	72
					242/61	72	72
		High	5240	MCS0	26/0	72	72
					52/37	72	72
					106/53	72	72
					242/61	72	72
	802.11ax hew40	Low	5190	MCS0	26/0	65	65
					52/37	65	65
					106/53	65	65
					242/61	65	65
		High	5230	MCS0	484/65	65	65
					26/0	65	65
					52/37	65	65
					106/53	65	65
					242/61	65	65
					484/65	65	65
	802.11ax hew80	Middle	5210	MCS0	26/0	67	67
					52/37	67	67
					106/53	67	67
					242/61	67	67
					484/65	67	67
					996/67	67	67

Band	Mode	Channel	Frequency (MHz)	Data Rate	RU Config.	Power level	
						Chain 0	Chain 1
5250-5350 MHz	802.11a	Low	5260	6Mbps	N/A	73	78
		Middle	5280	6Mbps	N/A	73	78
		High	5320	6Mbps	N/A	70	77
	802.11n ht20	Low	5260	MCS0	N/A	75	75
		Middle	5280	MCS0	N/A	75	75
		High	5320	MCS0	N/A	75	75
	802.11n ht40	Low	5270	MCS0	N/A	67	67
		High	5310	MCS0	N/A	67	67
	802.11ac vht20	Low	5260	MCS0	N/A	75	75
		Middle	5280	MCS0	N/A	75	75
		High	5320	MCS0	N/A	75	75
	802.11ac vht40	Low	5270	MCS0	N/A	63	63
		High	5310	MCS0	N/A	63	63
	802.11ac vht80	Middle	5290	MCS0	N/A	70	70
	802.11ax hew20	Low	5260	MCS0	26/0	70	70
					52/37	70	70
					106/53	70	70
					242/61	70	70
		Middle	5280	MCS0	26/0	70	70
					52/37	70	70
					106/53	70	70
					242/61	70	70
		High	5320	MCS0	26/0	70	70
					52/37	70	70
					106/53	70	70
					242/61	70	70
	802.11ax hew40	Low	5270	MCS0	26/0	68	68
					52/37	68	68
					106/53	68	68
					242/61	68	68
		High	5310	MCS0	484/65	68	68
					26/0	68	68
					52/37	68	68
					106/53	68	68
					242/61	68	68
					484/65	68	68
	802.11ax hew80	Middle	5290	MCS0	26/0	70	70
					52/37	70	70
					106/53	70	70
					242/61	70	70
					484/65	70	70
					996/67	70	70

Band	Mode	Channel	Frequency (MHz)	Data Rate	RU Config.	Power level	
						Chain 0	Chain 1
Accross Band	802.11ac vht160	Middle	5250	MCS0	N/A	66	66
	802.11ax hew160	Middle	5250	MCS0	26/0	66	66
					52/37	66	66
					106/53	66	66
					242/61	66	66
					484/65	66	66
					996/67	66	66
					996*2	66	66

Band	Mode	Channel	Frequency (MHz)	Data Rate	RU Config.	Power level	
						Chain 0	Chain 1
5725-5850 MHz	802.11a	Low	5745	6Mbps	N/A	90	90
		Middle	5785	6Mbps	N/A	93	93
		High	5825	6Mbps	N/A	93	93
	802.11n ht20	Low	5745	MCS0	N/A	90	90
		Middle	5785	MCS0	N/A	93	93
		High	5825	MCS0	N/A	93	93
	802.11n ht40	Low	5755	MCS0	N/A	88	88
		High	5795	MCS0	N/A	88	88
	802.11ac vht20	Low	5745	MCS0	N/A	90	90
		Middle	5785	MCS0	N/A	93	93
		High	5825	MCS0	N/A	93	93
	802.11ac vht40	Low	5755	MCS0	N/A	90	90
		High	5795	MCS0	N/A	90	90
	802.11ac vht80	Middle	5775	MCS0	N/A	93	93
	802.11ax hew20	Low	5745	MCS0	26/0	90	90
					52/37	90	90
					106/53	90	90
					242/61	90	90
		Middle	5785	MCS0	26/0	93	93
					52/37	93	93
					106/53	93	93
					242/61	93	93
		High	5825	MCS0	26/0	93	93
					52/37	93	93
					106/53	93	93
					242/61	93	93
	802.11ax hew40	Low	5755	MCS0	26/0	88	88
					52/37	88	88
					106/53	88	88
					242/61	88	88
					484/65	88	88
		High	5795	MCS0	26/0	88	88
					52/37	88	88
					106/53	88	88
					242/61	88	88
					484/65	88	88
	802.11ax hew80	Middle	5775	MCS0	26/0	90	90
					52/37	90	90
					106/53	90	90
					242/61	90	90
					484/65	90	90
					996/67	90	90

The above are the worst-case data rates, which are determined for each mode based upon investigations by measuring the average power and PSD across all data rates, bandwidths, and modulations.

The device supports SISO in all modes, and MIMO 2T2R in 802.11n/ac/ax modes, per pretest, 2T2R mode was the worst mode and reported for 802.11n/ac/ax modes.

The system supports Beamforming and Non-beamforming modes at 802.11n/ac/ax modes. The two modes have same output power, and the Beamforming gain is 3 dBi▲, which are declared by manufacturer.

Therefore, the all RF conducted test were performed at Non-beamforming mode only.

For 802.11 ax testing, all different tone and RU index configurations was performed for output power, the maximum result is in Full RU Configuration, so the other test was only performed at Full RU configuration(802.11ax hew20:242/61, 802.11ax hew40: 484/65, 802.11ax hew80: 996/67, 802.11ax hew160:996*2).

1.2.2 Support Equipment List and Details

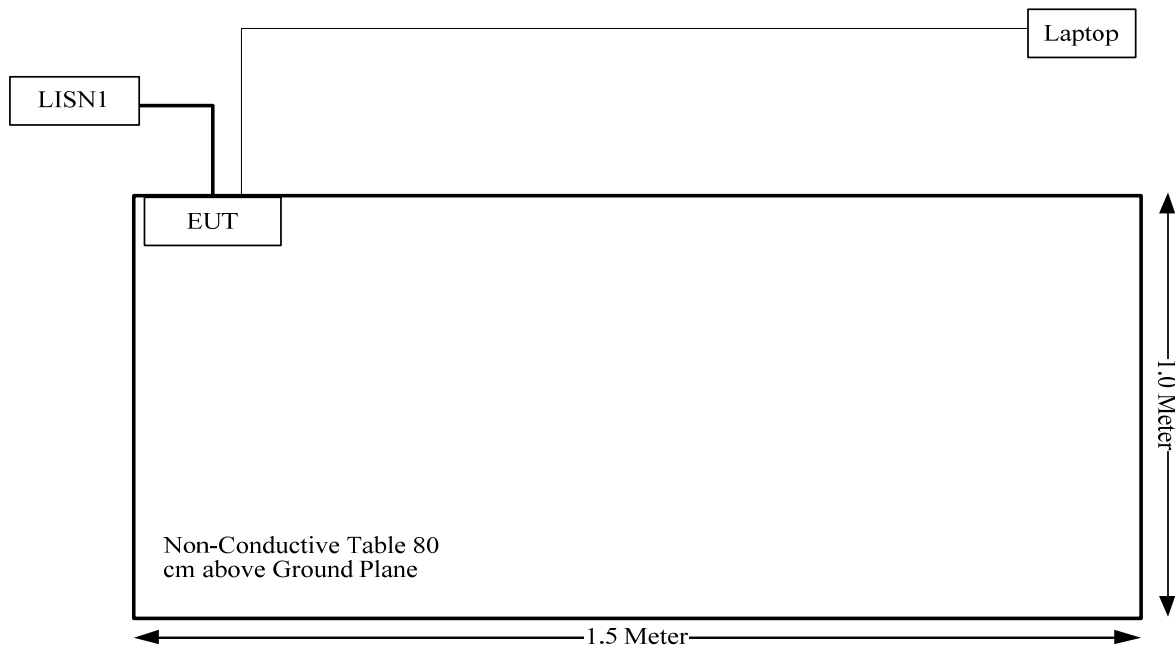
Manufacturer	Description	Model	Serial Number
Lenovo	Laptop	E480	PF-1QQYYP 19/06

1.2.3 Support Cable List and Details

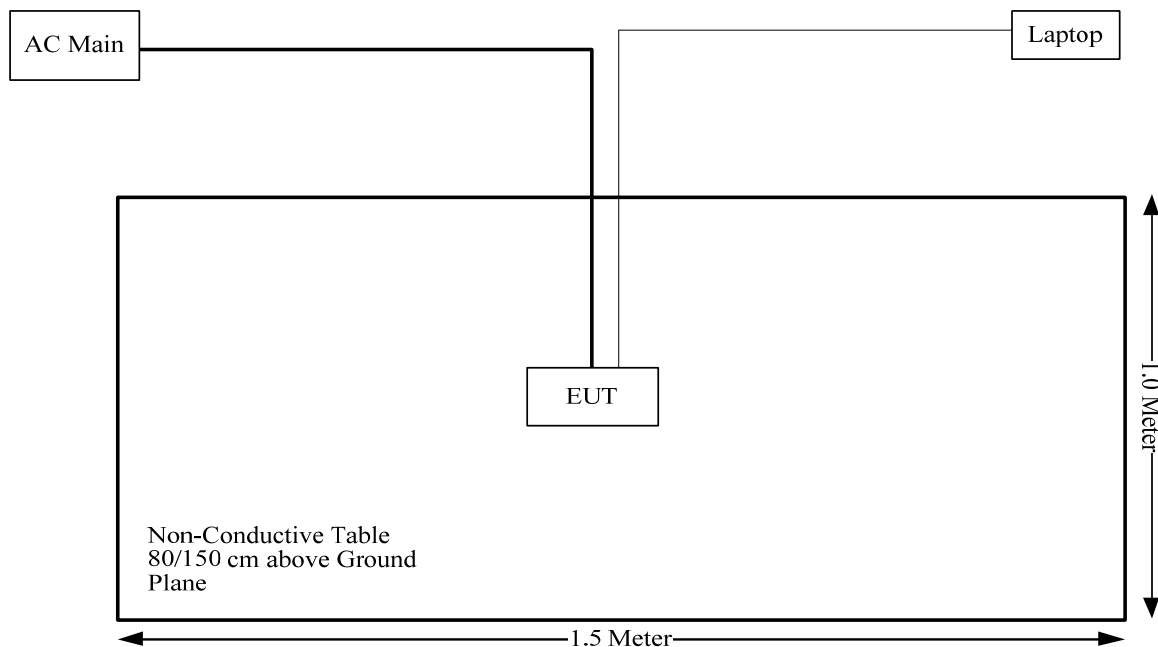
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
RJ45 Cable	Yes	No	10	EUT	Laptop

1.2.4 Block Diagram of Test Setup

AC line conducted emissions:



Spurious Emissions:



1.3 Measurement Uncertainty

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.61dB
Power Spectral Density, conducted	±0.61 dB
Unwanted Emissions, radiated	30M~200MHz: 4.15 dB,200M~1GHz: 5.61 dB,1G~6GHz: 5.14 dB, 6G~18GHz: 5.93 dB,18G~26.5G:5.47 dB,26.5G~40G:5.63 dB
Unwanted Emissions, conducted	±1.26 dB
Temperature	±1 °C
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

2. SUMMARY OF TEST RESULTS

Standard(s) Section	Test Items	Result
FCC§15.207(a)	AC line conducted emissions	Compliant
FCC§15.205& §15.209 &§15.407(b)	Undesirable Emission& Restricted Bands	Compliant
FCC§15.407(h) (e)	Emission Bandwidth	Compliant
FCC§15.407(a)	Conducted Transmitter Output Power	Compliant
FCC§15.407 (a)	Power Spectral Density	Compliant
FCC§15.407 (h)	Dynamic Frequency Selection (DFS)	Compliant ^{Note}
FCC§15.203	Antenna Requirement	Compliant
FCC §15.407 (f) & §1.1307 & §2.1091	RF Exposure Evaluation	Compliant
Note: Dynamic Frequency Selection (DFS) test please refer to the DFS report: CR22020001-DFS.		

3. REQUIREMENTS AND TEST PROCEDURES

3.1 AC Line Conducted Emissions

3.1.1 Applicable Standard

FCC§15.207(a).

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

(b) The limit shown in paragraph (a) of this section shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

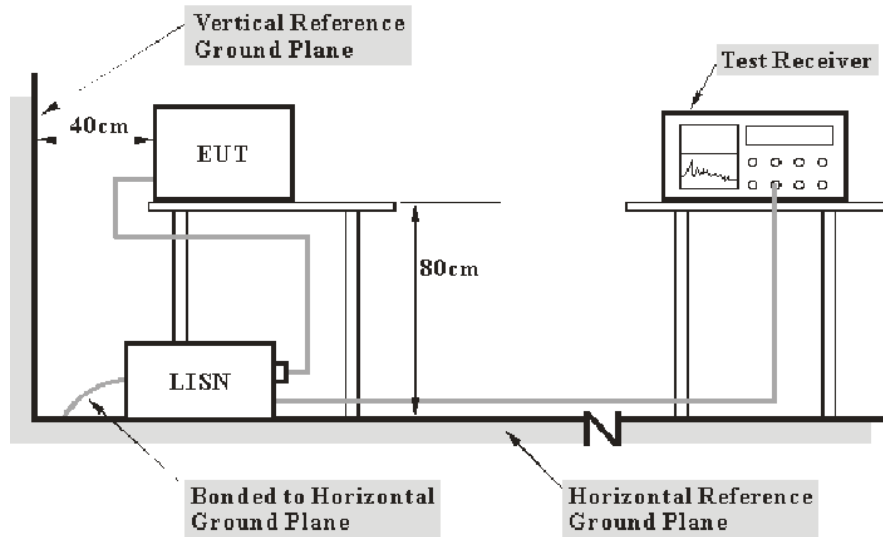
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000 μ V within the frequency band 535-1705 kHz, as measured using a 50 μ H/50 ohms LISN.

(3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in §15.205, §15.209, §15.221, §15.223, or §15.227, as appropriate.

(c) Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

3.1.2 EUT Setup



Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

The adapter or EUT was connected to the main LISN with a 120 V/60 Hz AC power source.

3.1.3 EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

3.1.4 Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase (“hot”) line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

3.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = attenuation caused by cable loss + voltage division factor of AMN

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

3.2 Radiation Spurious Emissions

3.2.1 Applicable Standard

FCC §15.407 (b);

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of - 27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of - 27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of - 27 dBm/MHz.

(4) For transmitters operating solely in the 5.725-5.850 GHz band:

(i) All emissions shall be limited to a level of - 27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

(8) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(9) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in § 15.207.

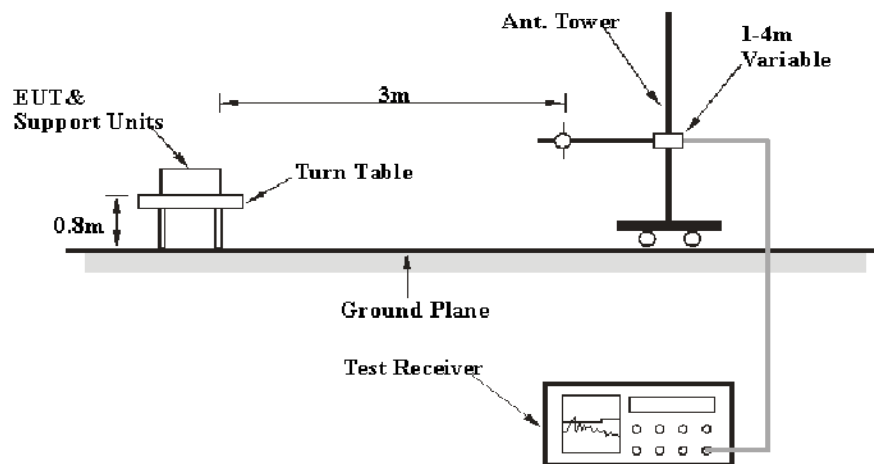
(10) The provisions of § 15.205 apply to intentional radiators operating under this section.

(11) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

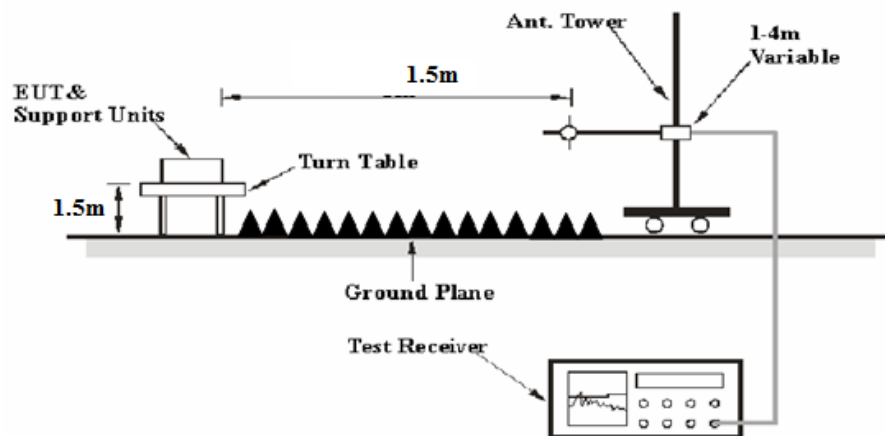
(c) The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

3.2.2 EUT Setup

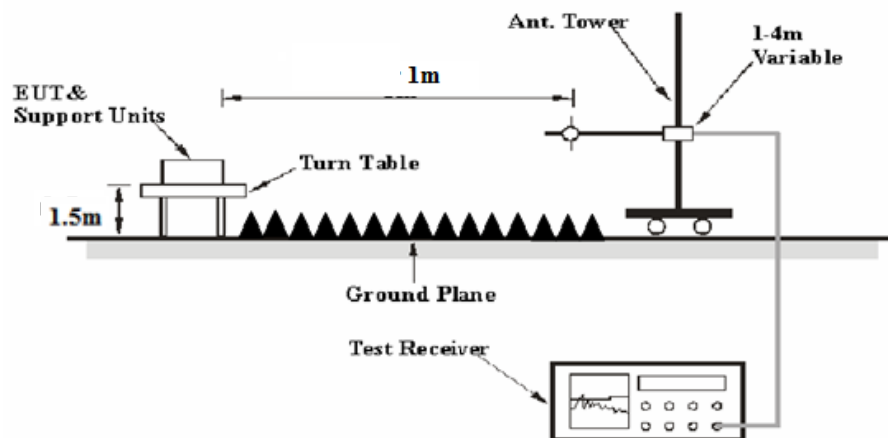
Below 1GHz:



1-26.5 GHz:



26.5-40 GHz:



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was FCC 15.209, FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

3.2.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

30-1000MHz:

Measurement	RBW	Video B/W	IF B/W
QP	120 kHz	300 kHz	120kHz

1GHz- 40GHz:

Measurement	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3 MHz
AV	>98%	1MHz	10 Hz
	<98%	1MHz	1/T

Note: T is minimum transmission duration

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

3.2.4 Test Procedure

During the radiated emission test, the adapter was connected to the first AC floor outlet.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Average detection modes for frequencies above 1GHz.

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: $E [dB\mu V/m] = EIRP[dBm] + 95.2$, for $d = 3$ meters.

According to C63.10, the above 1G test result shall be extrapolated to the specified distance using an extrapolation Factor of 20dB/decade from 3m to 1.5m or 1m

Distance extrapolation Factor = $20 \log (\text{specific distance } [3m] / \text{test distance } [1.5m])$ dB= 6.02 dB

or

Distance extrapolation Factor = $20 \log (\text{specific distance } [3m] / \text{test distance } [1m])$ dB= 9.54 dB

All emissions under the average limit and under the noise floor have not recorded in the report.

3.2.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Factor = Antenna Factor + Cable Loss- Amplifier Gain

For 30MHz-1GHz:

Result = Reading + Factor

For 1GHz-40GHz

Result = Reading + Factor-Distance extrapolation Factor

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

3.3 Emission Bandwidth:

3.3.1 Applicable Standard

FCC §15.407 (a)

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

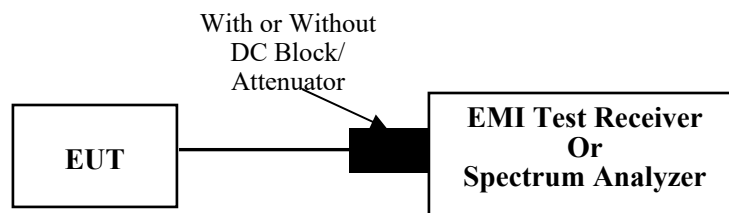
FCC §15.407 (e)

Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

FCC §15.407 (h)

(h)(2) Radar Detection Function of Dynamic Frequency Selection (DFS). U-NII devices operating with any part of its 26 dB emission bandwidth in the 5.25-5.35 GHz and 5.47-5.725 GHz bands shall employ a DFS radar detection mechanism to detect the presence of radar systems and to avoid co-channel operation with radar systems.

3.3.2 EUT Setup



3.3.3 Test Procedure

26dB Emission Bandwidth:

According to ANSI C63.10-2013 Section 12.4.1

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = peak.
- Trace mode = max hold
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

99% Occupied Bandwidth:

According to ANSI C63.10-2013 Section 12.4.2&6.9.3

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

The following procedure shall be used for measuring 99% power bandwidth:

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

6 dB emission bandwidth:

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) ≥ 3 RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) 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 in this section. For devices that use channel aggregation refer to III.A and III.C for determining emission bandwidth.

3.4 Maximum conducted output power:

3.4.1 Applicable Standard

FCC §15.407(a) (1)

(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.

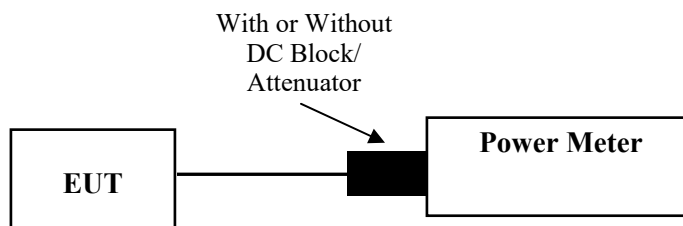
FCC §15.407(a) (2)

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

FCC §15.407(a) (3)(i)

For the band 5.725-5.850 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. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

3.4.2 EUT Setup



3.4.3 Test Procedure

According to ANSI C63.10-2013 Section 11.9.1.3

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

3.5 Maximum power spectral density:

3.5.1 Applicable Standard

FCC §15.407(a) (1)(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.

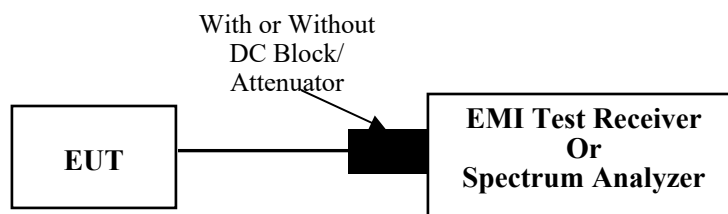
FCC §15.407(a) (2)

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

FCC §15.407(a) (3)(i)

For the band 5.725-5.850 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. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

3.5.2 EUT Setup



3.5.3 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01

Method SA-3 (power averaging (rms) detection with max hold):

- (i) Set span to encompass the entire EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- (ii) Set sweep trigger to “free run.”
- (iii) Set RBW = 1 MHz.

(iv) Set VBW ≥ 3 MHz

(v) Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$. (This ensures that bin-to-bin spacing is $\leq \text{RBW}/2$, so that narrowband signals are not lost between frequency bins.)

(vi) Sweep time $\leq (\text{number of points in sweep}) \times T$, where T is defined in II.B.1.a).

Note: If this results in a sweep time less than the auto sweep time of the analyzer, Method SA-3 Alternative shall not be used. (The purpose of this step is to ensure that averaging time in each bin is less than or equal to the minimum time of a transmission.)

(vii) Detector = power averaging (rms).

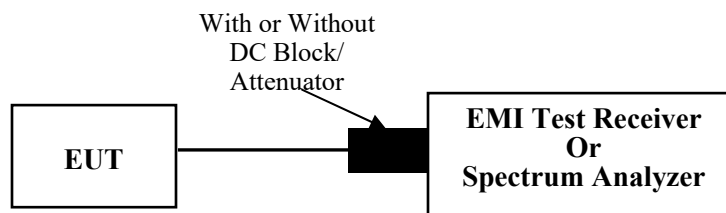
(viii) Trace mode = max hold.

(ix) Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

For devices operating in the band 5.725–5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used.

3.7 Duty Cycle:

3.7.1 EUT Setup



3.7.2 Test Procedure

According to ANSI C63.10-2013 Section 12.2

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:

- 1) Set the center frequency of the instrument to the center frequency of the transmission.
- 2) Set RBW $\geq$ OBW if possible; otherwise, set RBW to the largest available value.
- 3) Set VBW $\geq$ RBW. Set detector = peak or average.
- 4) The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$ and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if $T \leq 16.7 \mu\text{s}$.)

3.8 Antenna Requirement

3.8.1 Applicable Standard

FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

3.8.2 Judgment

Please refer to the Antenna Information detail in Section 1.

4. Test DATA AND RESULTS

4.1 AC Line Conducted Emissions

Serial Number:	CR22020001-RF-S1	Test Date:	2022-02-12
Test Site:	CE	Test Mode:	Transmitting (802.11a Chain 0 5785MHz was the worst)
Tester:	Nick Tang	Test Result:	Pass

Environmental Conditions:

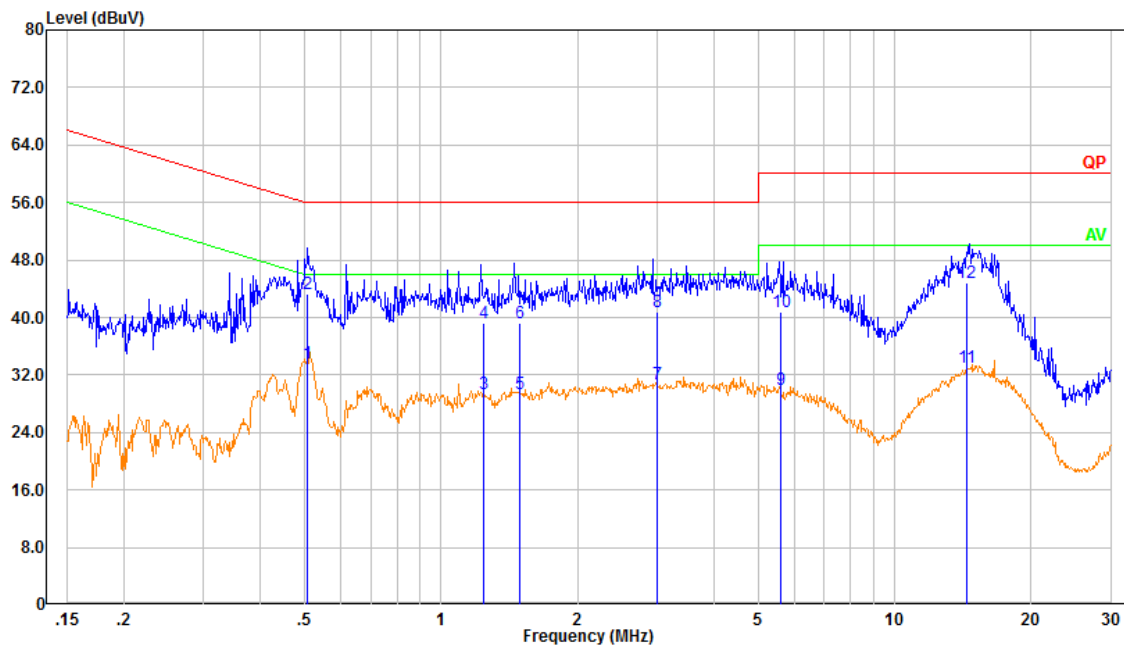
Temperature: (°C)	19.2	Relative Humidity: (%)	67	ATM Pressure: (kPa)	101.2
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101134	2021-04-25	2022-04-24
R&S	EMI Test Receiver	ESR3	102726	2021-07-22	2022-07-21
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2021-08-08	2022-08-07
Audix	Test Software	E3	190306 (V9)	N/A	N/A

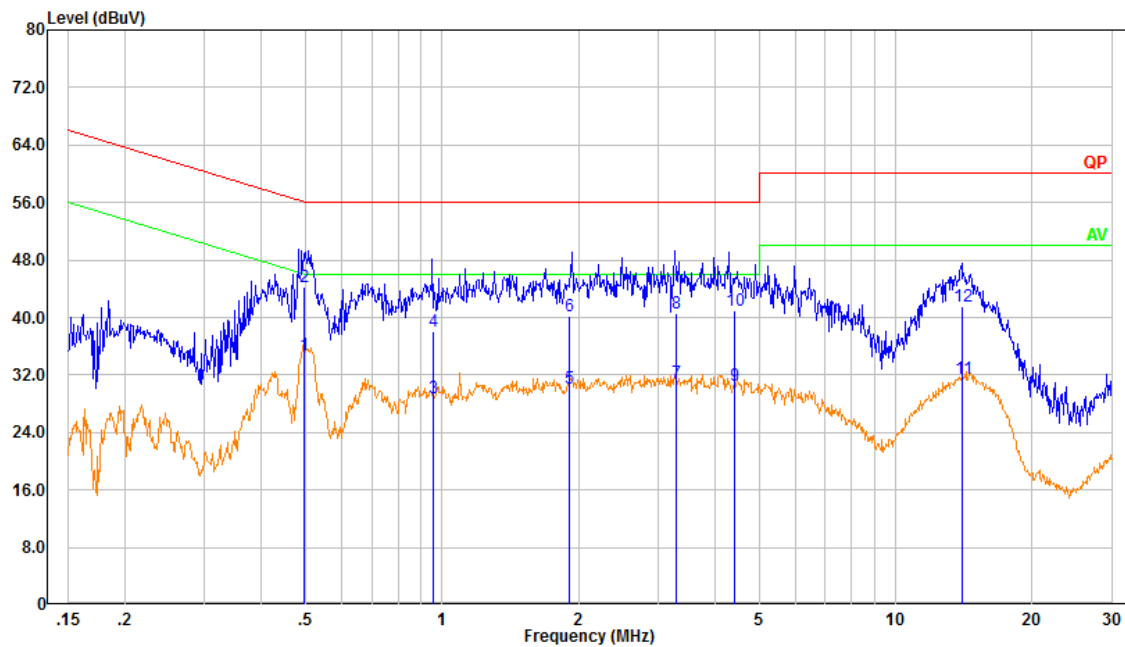
* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Line:



No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector
1	0.508	23.94	9.61	33.55	46.00	12.45	Average
2	0.508	33.62	9.61	43.23	56.00	12.77	QP
3	1.243	19.69	9.62	29.31	46.00	16.69	Average
4	1.243	29.61	9.62	39.23	56.00	16.77	QP
5	1.491	19.78	9.62	29.40	46.00	16.60	Average
6	1.491	29.60	9.62	39.23	56.00	16.77	QP
7	3.001	21.07	9.65	30.72	46.00	15.28	Average
8	3.001	31.14	9.65	40.79	56.00	15.21	QP
9	5.602	20.24	9.66	29.90	50.00	20.10	Average
10	5.602	31.09	9.66	40.75	60.00	19.25	QP
11	14.374	23.45	9.68	33.13	50.00	16.87	Average
12	14.374	35.17	9.68	44.85	60.00	15.15	QP

Neutral:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.496	25.24	9.61	34.85	46.07	11.22	Average
2	0.496	34.68	9.61	44.29	56.07	11.78	QP
3	0.959	19.18	9.62	28.80	46.00	17.20	Average
4	0.959	28.39	9.62	38.01	56.00	17.99	QP
5	1.903	20.58	9.63	30.21	46.00	15.79	Average
6	1.903	30.58	9.63	40.20	56.00	15.80	QP
7	3.288	21.25	9.65	30.90	46.00	15.10	Average
8	3.288	31.00	9.65	40.65	56.00	15.35	QP
9	4.409	20.93	9.65	30.58	46.00	15.42	Average
10	4.409	31.22	9.65	40.87	56.00	15.13	QP
11	14.067	21.86	9.68	31.54	50.00	18.46	Average
12	14.067	31.79	9.68	41.47	60.00	18.53	QP

4.2 Radiation Spurious Emissions

Serial Number:	CR22020001-RF-S1	Test Date:	2022-02-11~2022-03-01
Test Site:	966-1,966-2	Test Mode:	Transmitting
Tester:	Great Qiao, Tommy Luo, Carl Liang	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	17.5~19.3	Relative Humidity: (%)	50~65	ATM Pressure: (kPa)	101.1~101.2

Test Equipment List and Details:

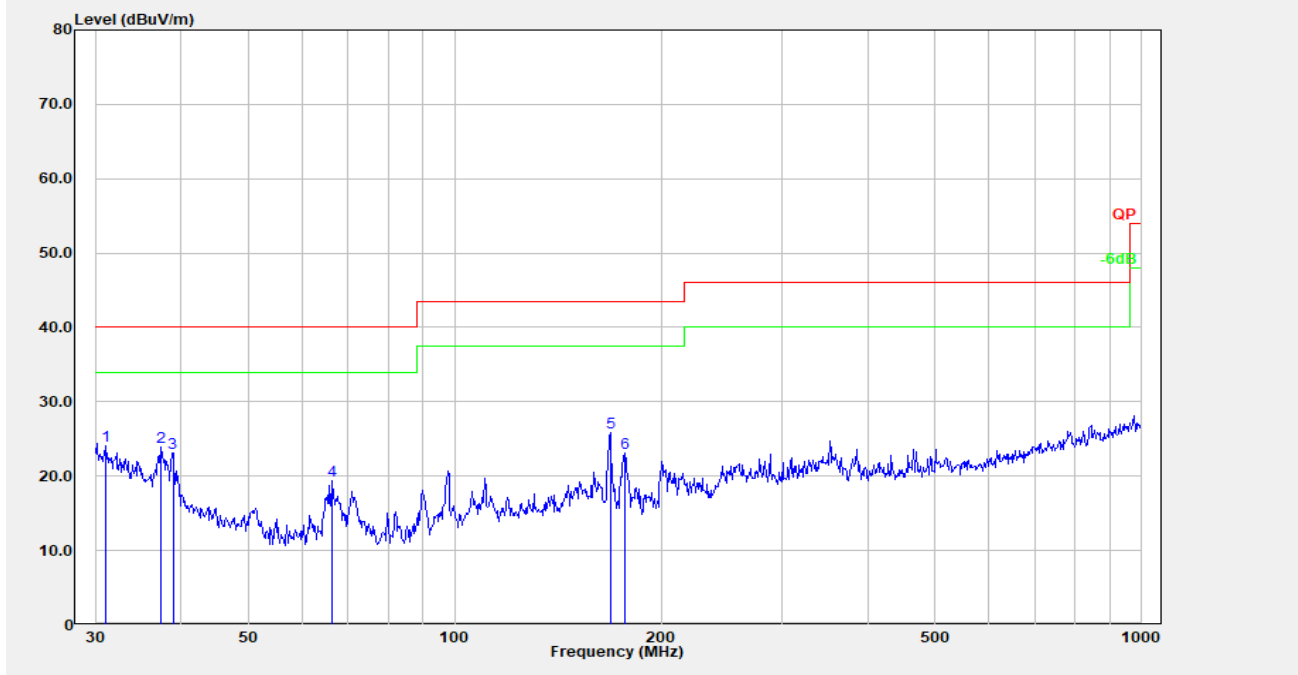
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2020-10-19	2023-10-18
R&S	EMI Test Receiver	ESR3	102724	2021-07-22	2022-07-21
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2021-07-18	2022-07-17
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2021-07-18	2022-07-17
Sonoma	Amplifier	310N	186165	2021-07-18	2022-07-17
Audix	Test Software	E3	201021 (V9)	N/A	N/A
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020-10-13	2023-10-12
R&S	Spectrum Analyzer	FSV40	101591	2021-07-22	2022-07-21
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2021-08-08	2022-08-07
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2021-08-08	2022-08-07
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2021-11-10	2022-11-09
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2021-02-05	2024-02-04
AH	Preamplifier	PAM-1840VH	190	2021-11-19	2022-11-18
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2021-08-08	2022-08-07
E-Microwave	Band Rejection Filter	5150-5850MHz	OE01902423	2021-08-08	2022-08-07
Mini Circuits	High Pass Filter	VHF-6010+	31119	2021-08-08	2022-08-07
PASTERNAK	Horn Antenna	PE9850/2F-20	072001	2021-02-05	2024-02-04

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

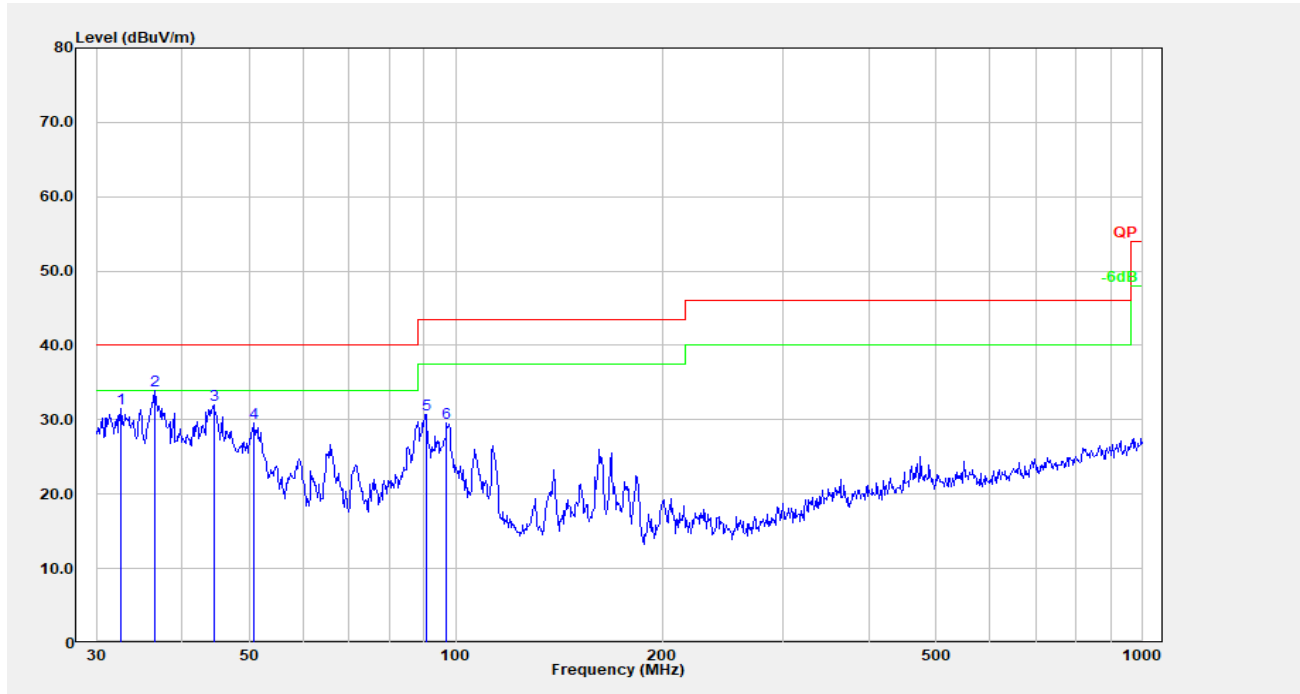
Test Data:

Please refer to the below table and plots.

Note: The device can be mounted in multiple orientations, test was performed with X,Y, Z Axis according to C63.10 figure 8, the worst orientation was photographed and it's data was recorded.

1) 30MHz-1GHz(802.11a Chain 0 5745MHz was the worst)**Horizontal:**

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	31.071	28.73	-4.61	24.12	40.00	15.88	Peak
2	37.285	33.39	-9.40	24.00	40.00	16.00	Peak
3	38.888	33.78	-10.63	23.15	40.00	16.85	Peak
4	66.266	36.42	-17.07	19.35	40.00	20.65	Peak
5	168.414	38.90	-13.02	25.88	43.50	17.62	Peak
6	176.888	36.77	-13.62	23.15	43.50	20.35	Peak

Vertical:

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.520	37.25	-5.74	31.51	40.00	8.49	Peak
2	36.509	42.71	-8.81	33.90	40.00	6.10	Peak
3	44.431	46.08	-14.14	31.94	40.00	8.06	Peak
4	50.942	47.06	-17.43	29.64	40.00	10.36	Peak
5	90.537	47.82	-17.05	30.78	43.50	12.72	Peak
6	97.115	44.83	-15.31	29.52	43.50	13.98	Peak

**2) 1GHz-40GHz:
5150-5250MHz,
802.11a, Chain 0:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11a,Low Channel: 5180MHz							
5180.00	72.79	PK	H	38.68	105.45	N/A	N/A
5180.00	62.67	AV	H	38.68	95.33	N/A	N/A
5180.00	79.86	PK	V	38.68	112.52	N/A	N/A
5180.00	69.72	AV	V	38.68	102.38	N/A	N/A
5150.00	40.10	PK	V	38.64	72.72	74.00	1.28
5150.00	18.49	AV	V	38.64	51.11	54.00	2.89
10360.00	34.88	PK	V	19.18	48.04	68.20	20.16
15540.00	34.46	PK	V	22.44	50.88	74.00	23.12
15540.00	22.07	AV	V	22.44	38.49	54.00	15.51
4970.00	44.25	PK	V	11.22	49.45	74.00	24.55
4970.00	30.64	AV	V	11.22	35.84	54.00	18.16
5993.00	41.01	PK	V	13.32	48.31	68.20	19.89
802.11a,Middle Channel: 5200 MHz							
5200.00	75.13	PK	H	38.70	107.81	N/A	N/A
5200.00	64.81	AV	H	38.70	97.49	N/A	N/A
5200.00	82.19	PK	V	38.70	114.87	N/A	N/A
5200.00	72.03	AV	V	38.70	104.71	N/A	N/A
10400.00	35.76	PK	V	19.16	48.90	68.20	19.30
15600.00	37.09	PK	V	22.41	53.48	74.00	20.52
15600.00	24.58	AV	V	22.41	40.97	54.00	13.03
5003.00	47.06	PK	V	11.19	52.23	74.00	21.77
5003.00	32.72	AV	V	11.19	37.89	54.00	16.11
6038.00	42.19	PK	V	13.51	49.68	68.20	18.52
802.11a,High Channel: 5240 MHz							
5240.00	76.39	PK	H	38.85	109.22	N/A	N/A
5240.00	66.58	AV	H	38.85	99.41	N/A	N/A
5240.00	83.91	PK	V	38.85	116.74	N/A	N/A
5240.00	74.17	AV	V	38.85	107.00	N/A	N/A
5350.00	30.45	PK	V	39.03	63.46	74.00	10.54
5350.00	17.24	AV	V	39.03	50.25	54.00	3.75
10480.00	44.03	PK	V	18.86	56.87	68.20	11.33
15720.00	39.38	PK	V	22.28	55.64	74.00	18.36
15720.00	27.64	AV	V	22.28	43.90	54.00	10.10
4985.00	48.06	PK	V	11.21	53.25	74.00	20.75
4985.00	34.25	AV	V	11.21	39.44	54.00	14.56
5990.00	42.68	PK	V	13.31	49.97	68.20	18.23

802.11a, Chain 1:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11a,Low Channel: 5180MHz							
5180.00	73.30	PK	H	38.68	105.96	N/A	N/A
5180.00	63.15	AV	H	38.68	95.81	N/A	N/A
5180.00	79.53	PK	V	38.68	112.19	N/A	N/A
5180.00	69.74	AV	V	38.68	102.40	N/A	N/A
5150.00	39.93	PK	V	38.64	72.55	74.00	1.45
5150.00	18.58	AV	V	38.64	51.20	54.00	2.80
10360.00	35.04	PK	V	19.18	48.20	68.20	20.00
15540.00	34.86	PK	V	22.44	51.28	74.00	22.72
15540.00	22.31	AV	V	22.44	38.73	54.00	15.27
5024.00	43.05	PK	V	11.19	48.22	74.00	25.78
5024.00	29.72	AV	V	11.19	34.89	54.00	19.11
5969.00	41.51	PK	V	13.25	48.74	68.20	19.46
6470.00	45.67	PK	V	13.45	53.10	68.20	15.10
802.11a,Middle Channel: 5200 MHz							
5200.00	74.40	PK	H	38.70	107.08	N/A	N/A
5200.00	64.33	AV	H	38.70	97.01	N/A	N/A
5200.00	82.24	PK	V	38.70	114.92	N/A	N/A
5200.00	72.22	AV	V	38.70	104.90	N/A	N/A
10400.00	38.62	PK	V	19.16	51.76	68.20	16.44
15600.00	37.25	PK	V	22.41	53.64	74.00	20.36
15600.00	24.83	AV	V	22.41	41.22	54.00	12.78
4988.00	44.56	PK	V	11.20	49.74	74.00	24.26
4988.00	30.48	AV	V	11.20	35.66	54.00	18.34
5969.00	43.40	PK	V	13.25	50.63	68.20	17.57
6932.00	40.76	PK	V	14.04	48.78	68.20	19.42
802.11a,High Channel: 5240 MHz							
5240.00	75.47	PK	H	38.85	108.30	N/A	N/A
5240.00	65.66	AV	H	38.85	98.49	N/A	N/A
5240.00	84.12	PK	V	38.85	116.95	N/A	N/A
5240.00	74.23	AV	V	38.85	107.06	N/A	N/A
5350.00	30.27	PK	V	39.03	63.28	74.00	10.72
5350.00	17.48	AV	V	39.03	50.49	54.00	3.51
10480.00	44.07	PK	V	18.86	56.91	68.20	11.29
15720.00	38.42	PK	V	22.28	54.68	74.00	19.32
15720.00	26.50	AV	V	22.28	42.76	54.00	11.24
4991.00	46.39	PK	V	11.20	51.57	74.00	22.43
4991.00	32.17	AV	V	11.20	37.35	54.00	16.65
5993.00	43.90	PK	V	13.32	51.20	68.20	17.00

802.11n ht20 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11n ht20,Low Channel: 5180MHz							
5180.00	73.57	PK	H	38.68	106.23	N/A	N/A
5180.00	62.26	AV	H	38.68	94.92	N/A	N/A
5180.00	83.28	PK	V	38.68	115.94	N/A	N/A
5180.00	71.33	AV	V	38.68	103.99	N/A	N/A
5150.00	37.89	PK	V	38.64	70.51	74.00	3.49
5150.00	19.92	AV	V	38.64	52.54	54.00	1.46
10360.00	37.16	PK	V	19.18	50.32	68.20	17.88
15540.00	35.47	PK	V	22.44	51.89	74.00	22.11
15540.00	23.16	AV	V	22.44	39.58	54.00	14.42
4958.00	47.01	PK	V	11.23	52.22	74.00	21.78
4958.00	32.66	AV	V	11.23	37.87	54.00	16.13
5972.00	43.03	PK	V	13.26	50.27	68.20	17.93
6470.00	44.85	PK	V	13.45	52.28	68.20	15.92
802.11n ht20, Middle Channel: 5200 MHz							
5200.00	75.82	PK	H	38.70	108.50	N/A	N/A
5200.00	65.34	AV	H	38.70	98.02	N/A	N/A
5200.00	85.52	PK	V	38.70	118.20	N/A	N/A
5200.00	74.00	AV	V	38.70	106.68	N/A	N/A
10400.00	40.90	PK	V	19.16	54.04	68.20	14.16
15600.00	37.46	PK	V	22.41	53.85	74.00	20.15
15600.00	25.14	AV	V	22.41	41.53	54.00	12.47
5003.00	49.11	PK	V	11.19	54.28	74.00	19.72
5003.00	35.04	AV	V	11.19	40.21	54.00	13.79
5975.00	44.26	PK	V	13.27	51.51	68.20	16.69
6932.00	40.51	PK	V	14.04	48.53	68.20	19.67
802.11n ht20, High Channel: 5240 MHz							
5240.00	77.47	PK	H	38.85	110.30	N/A	N/A
5240.00	65.03	AV	H	38.85	97.86	N/A	N/A
5240.00	87.05	PK	V	38.85	119.88	N/A	N/A
5240.00	74.83	AV	V	38.85	107.66	N/A	N/A
5350.00	30.28	PK	V	39.03	63.29	74.00	10.71
5350.00	17.66	AV	V	39.03	50.67	54.00	3.33
10480.00	46.58	PK	V	18.86	59.42	68.20	8.78
15720.00	38.69	PK	V	22.28	54.95	74.00	19.05
15720.00	26.43	AV	V	22.28	42.69	54.00	11.31
4991.00	49.58	PK	V	11.20	54.76	74.00	19.24
4991.00	35.24	AV	V	11.20	40.42	54.00	13.58
5963.00	45.19	PK	V	13.23	52.40	68.20	15.80

802.11n ht40 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11n ht40,Low Channel: 5190 MHz							
5190.00	69.52	PK	H	38.69	102.19	N/A	N/A
5190.00	57.73	AV	H	38.69	90.40	N/A	N/A
5190.00	79.58	PK	V	38.69	112.25	N/A	N/A
5190.00	66.53	AV	V	38.69	99.20	N/A	N/A
5150.00	36.96	PK	V	38.64	69.58	74.00	4.42
5150.00	20.17	AV	V	38.64	52.79	54.00	1.21
10380.00	34.42	PK	V	19.17	47.57	68.20	20.63
15570.00	35.37	PK	V	22.43	51.78	74.00	22.22
15570.00	23.15	AV	V	22.43	39.56	54.00	14.44
5024.00	45.54	PK	V	11.19	50.71	74.00	23.29
5024.00	31.29	AV	V	11.19	36.46	54.00	17.54
6053.00	41.58	PK	V	13.56	49.12	68.20	19.08
802.11n ht40, High Channel: 5230 MHz							
5230.00	70.95	PK	H	38.81	103.74	N/A	N/A
5230.00	58.90	AV	H	38.81	91.69	N/A	N/A
5230.00	81.71	PK	V	38.81	114.50	N/A	N/A
5230.00	69.25	AV	V	38.81	102.04	N/A	N/A
5350.00	30.67	PK	V	39.03	63.68	74.00	10.32
5350.00	17.63	AV	V	39.03	50.64	54.00	3.36
10460.00	39.59	PK	V	18.94	52.51	68.20	15.69
15690.00	38.38	PK	V	22.29	54.65	74.00	19.35
15690.00	25.97	AV	V	22.29	42.24	54.00	11.76
4955.00	46.43	PK	V	11.24	51.65	74.00	22.35
4955.00	32.28	AV	V	11.24	37.50	54.00	16.50
6002.00	43.40	PK	V	13.35	50.73	68.20	17.47

802.11ac vht20 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11n ac vht20, Low Channel: 5180MHz							
5180.00	73.06	PK	H	38.68	105.72	N/A	N/A
5180.00	62.47	AV	H	38.68	95.13	N/A	N/A
5180.00	83.22	PK	V	38.68	115.88	N/A	N/A
5180.00	71.59	AV	V	38.68	104.25	N/A	N/A
5150.00	39.09	PK	V	38.64	71.71	74.00	2.29
5150.00	20.19	AV	V	38.64	52.81	54.00	1.19
10360.00	38.83	PK	V	19.18	51.99	68.20	16.21
15540.00	34.77	PK	V	22.44	51.19	74.00	22.81
15540.00	22.30	AV	V	22.44	38.72	54.00	15.28
4973.00	45.77	PK	V	11.22	50.97	74.00	23.03
4973.00	31.52	AV	V	11.22	36.72	54.00	17.28
5975.00	42.56	PK	V	13.27	49.81	68.20	18.39
6474.00	45.60	PK	V	13.45	53.03	68.20	15.17
802.11n ac vht20, Middle Channel: 5200 MHz							
5200.00	76.31	PK	H	38.70	108.99	N/A	N/A
5200.00	65.55	AV	H	38.70	98.23	N/A	N/A
5200.00	84.99	PK	V	38.70	117.67	N/A	N/A
5200.00	73.88	AV	V	38.70	106.56	N/A	N/A
10400.00	41.14	PK	V	19.16	54.28	68.20	13.92
15600.00	37.77	PK	V	22.41	54.16	74.00	19.84
15600.00	25.19	AV	V	22.41	41.58	54.00	12.42
4997.00	48.13	PK	V	11.19	53.30	74.00	20.70
4997.00	34.55	AV	V	11.19	39.72	54.00	14.28
6005.00	44.50	PK	V	13.36	51.84	68.20	16.36
802.11n ac vht20, High Channel: 5240 MHz							
5240.00	77.36	PK	H	38.85	110.19	N/A	N/A
5240.00	66.89	AV	H	38.85	99.72	N/A	N/A
5240.00	86.95	PK	V	38.85	119.78	N/A	N/A
5240.00	75.88	AV	V	38.85	108.71	N/A	N/A
5350.00	30.37	PK	V	39.03	63.38	74.00	10.62
5350.00	17.75	AV	V	39.03	50.76	54.00	3.24
10480.00	45.65	PK	V	18.86	58.49	68.20	9.71
15720.00	37.72	PK	V	22.28	53.98	74.00	20.02
15720.00	25.24	AV	V	22.28	41.50	54.00	12.50
5015.00	49.79	PK	V	11.19	54.96	74.00	19.04
5015.00	35.46	AV	V	11.19	40.63	54.00	13.37
5969.00	44.30	PK	V	13.25	51.53	68.20	16.67

802.11ac vht40 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ac vht40,Low Channel: 5190MHz							
5190.00	68.72	PK	H	38.69	101.39	N/A	N/A
5190.00	57.79	AV	H	38.69	90.46	N/A	N/A
5190.00	78.49	PK	V	38.69	111.16	N/A	N/A
5190.00	67.30	AV	V	38.69	99.97	N/A	N/A
5150.00	34.42	PK	V	38.64	67.04	74.00	6.96
5150.00	20.08	AV	V	38.64	52.70	54.00	1.30
10380.00	35.17	PK	V	19.17	48.32	68.20	19.88
15570.00	35.65	PK	V	22.43	52.06	74.00	21.94
15570.00	23.07	AV	V	22.43	39.48	54.00	14.52
5030.00	45.05	PK	V	11.19	50.22	74.00	23.78
5030.00	31.60	AV	V	11.19	36.77	54.00	17.23
5987.00	42.11	PK	V	13.30	49.39	68.20	18.81
802.11ac vht40, High Channel: 5230 MHz							
5230.00	70.77	PK	H	38.81	103.56	N/A	N/A
5230.00	60.19	AV	H	38.81	92.98	N/A	N/A
5230.00	80.84	PK	V	38.81	113.63	N/A	N/A
5230.00	69.57	AV	V	38.81	102.36	N/A	N/A
5350.00	30.51	PK	V	39.03	63.52	74.00	10.48
5350.00	17.65	AV	V	39.03	50.66	54.00	3.34
10460.00	38.86	PK	V	18.94	51.78	68.20	16.42
15690.00	38.74	PK	V	22.29	55.01	74.00	18.99
15690.00	26.33	AV	V	22.29	42.60	54.00	11.40
5003.00	46.25	PK	V	11.19	51.42	74.00	22.58
5003.00	32.24	AV	V	11.19	37.41	54.00	16.59
5969.00	42.42	PK	V	13.25	49.65	68.20	18.55

802.11ac vht80 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ac vht80, Middle Channel: 5210 MHz							
5210.00	65.24	PK	H	38.74	97.96	N/A	N/A
5210.00	54.24	AV	H	38.74	86.96	N/A	N/A
5210.00	76.53	PK	V	38.74	109.25	N/A	N/A
5210.00	64.88	AV	V	38.74	97.60	N/A	N/A
5150.00	39.34	PK	V	38.64	71.96	74.00	2.04
5150.00	19.24	AV	V	38.64	51.86	54.00	2.14
5350.00	31.39	PK	V	39.03	64.40	74.00	9.60
5350.00	18.27	AV	V	39.03	51.28	54.00	2.72
10420.00	33.96	PK	V	19.09	47.03	68.20	21.17
15630.00	36.79	PK	V	22.37	53.14	74.00	20.86
15630.00	24.35	AV	V	22.37	40.70	54.00	13.30
5048.00	47.87	PK	V	11.19	53.04	74.00	20.96
5048.00	33.56	AV	V	11.19	38.73	54.00	15.27
5981.00	42.39	PK	V	13.28	49.65	68.20	18.55

802.11ax hew20 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ax hew20,Low Channel: 5180MHz							
5180.00	75.06	PK	H	38.68	107.72	N/A	N/A
5180.00	62.39	AV	H	38.68	95.05	N/A	N/A
5180.00	83.34	PK	V	38.68	116.00	N/A	N/A
5180.00	70.67	AV	V	38.68	103.33	N/A	N/A
5150.00	38.01	PK	V	38.64	70.63	74.00	3.37
5150.00	20.14	AV	V	38.64	52.76	54.00	1.24
10360.00	36.17	PK	V	19.18	49.33	68.20	18.87
15540.00	34.89	PK	V	22.44	51.31	74.00	22.69
15540.00	22.53	AV	V	22.44	38.95	54.00	15.05
4955.00	47.17	PK	V	11.24	52.39	74.00	21.61
4955.00	33.62	AV	V	11.24	38.84	54.00	15.16
5969.00	42.31	PK	V	13.25	49.54	68.20	18.66
6474.00	45.16	PK	V	13.45	52.59	68.20	15.61
802.11ax hew20, Middle Channel: 5200 MHz							
5200.00	77.03	PK	H	38.70	109.71	N/A	N/A
5200.00	63.86	AV	H	38.70	96.54	N/A	N/A
5200.00	85.86	PK	V	38.70	118.54	N/A	N/A
5200.00	72.30	AV	V	38.70	104.98	N/A	N/A
10400.00	39.86	PK	V	19.16	53.00	68.20	15.20
15600.00	37.25	PK	V	22.41	53.64	74.00	20.36
15600.00	24.83	AV	V	22.41	41.22	54.00	12.78
4991.00	48.22	PK	V	11.20	53.40	74.00	20.60
4991.00	34.19	AV	V	11.20	39.37	54.00	14.63
5957.00	43.78	PK	V	13.21	50.97	68.20	17.23
802.11ax hew20, High Channel: 5240 MHz							
5240.00	79.65	PK	H	38.85	112.48	N/A	N/A
5240.00	65.79	AV	H	38.85	98.62	N/A	N/A
5240.00	87.74	PK	V	38.85	120.57	N/A	N/A
5240.00	74.84	AV	V	38.85	107.67	N/A	N/A
5350.00	30.71	PK	V	39.03	63.72	74.00	10.28
5350.00	17.64	AV	V	39.03	50.65	54.00	3.35
10480.00	45.02	PK	V	18.86	57.86	68.20	10.34
15720.00	38.75	PK	V	22.28	55.01	74.00	18.99
15720.00	26.14	AV	V	22.28	42.40	54.00	11.60
5006.00	49.15	PK	V	11.19	54.32	74.00	19.68
5006.00	34.90	AV	V	11.19	40.07	54.00	13.93
5972.00	43.83	PK	V	13.26	51.07	68.20	17.13

802.11ax hew40 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ax hew40,Low Channel: 5190MHz							
5190.00	70.73	PK	H	38.69	103.40	N/A	N/A
5190.00	58.18	AV	H	38.69	90.85	N/A	N/A
5190.00	79.69	PK	V	38.69	112.36	N/A	N/A
5190.00	67.17	AV	V	38.69	99.84	N/A	N/A
5150.00	36.04	PK	V	38.64	68.66	74.00	5.34
5150.00	20.35	AV	V	38.64	52.97	54.00	1.03
10380.00	34.42	PK	V	19.17	47.57	68.20	20.63
15570.00	34.88	PK	V	22.43	51.29	74.00	22.71
15570.00	22.35	AV	V	22.43	38.76	54.00	15.24
4970.00	45.23	PK	V	11.22	50.43	74.00	23.57
4970.00	31.28	AV	V	11.22	36.48	54.00	17.52
5951.00	41.82	PK	V	13.19	48.99	68.20	19.21
802.11ax hew40, High Channel: 5230 MHz							
5230.00	72.14	PK	H	38.81	104.93	N/A	N/A
5230.00	59.74	AV	H	38.81	92.53	N/A	N/A
5230.00	81.74	PK	V	38.81	114.53	N/A	N/A
5230.00	69.59	AV	V	38.81	102.38	N/A	N/A
5350.00	30.74	PK	V	39.03	63.75	74.00	10.25
5350.00	17.75	AV	V	39.03	50.76	54.00	3.24
10460.00	39.56	PK	V	18.94	52.48	68.20	15.72
15690.00	37.86	PK	V	22.29	54.13	74.00	19.87
15690.00	25.08	AV	V	22.29	41.35	54.00	12.65
5030.00	46.55	PK	V	11.19	51.72	74.00	22.28
5030.00	32.10	AV	V	11.19	37.27	54.00	16.73
5966.00	42.84	PK	V	13.24	50.06	68.20	18.14

802.11ax hew80 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector					
802.11ax hew80, middle Channel: 5210 MHz							
5210.00	67.88	PK	H	38.74	100.60	N/A	N/A
5210.00	53.38	AV	H	38.74	86.10	N/A	N/A
5210.00	77.26	PK	V	38.74	109.98	N/A	N/A
5210.00	63.77	AV	V	38.74	96.49	N/A	N/A
5150.00	34.37	PK	V	38.64	66.99	74.00	7.01
5150.00	20.19	AV	V	38.64	52.81	54.00	1.19
5350.00	31.58	PK	V	39.03	64.59	74.00	9.41
5350.00	18.15	AV	V	39.03	51.16	54.00	2.84
10420.00	33.75	PK	V	19.09	46.82	68.20	21.38
15630.00	37.53	PK	V	22.37	53.88	74.00	20.12
15630.00	25.10	AV	V	22.37	41.45	54.00	12.55
5040.00	46.76	PK	V	11.19	51.93	74.00	22.07
5040.00	32.92	AV	V	11.19	38.09	54.00	15.91
5948.00	42.02	PK	V	13.19	49.19	68.20	19.01

5250-5350MHz:**802.11a, Chain 0:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11a,Low Channel: 5260MHz							
5260.00	78.75	PK	H	38.90	111.63	N/A	N/A
5260.00	68.82	AV	H	38.90	101.70	N/A	N/A
5260.00	85.65	PK	V	38.90	118.53	N/A	N/A
5260.00	75.96	AV	V	38.90	108.84	N/A	N/A
5150.00	31.60	PK	V	38.64	64.22	74.00	9.78
5150.00	17.71	AV	V	38.64	50.33	54.00	3.67
10520.00	48.81	PK	V	18.93	61.72	68.20	6.48
15780.00	40.14	PK	V	22.26	56.38	74.00	17.62
15780.00	28.64	AV	V	22.26	44.88	54.00	9.12
4997.00	50.02	PK	V	11.19	55.19	74.00	18.81
4997.00	35.79	AV	V	11.19	40.96	54.00	13.04
5978.00	43.35	PK	V	13.27	50.60	68.20	17.60
802.11a,Middle Channel: 5280 MHz							
5280.00	74.76	PK	H	38.91	107.65	N/A	N/A
5280.00	64.60	AV	H	38.91	97.49	N/A	N/A
5280.00	83.86	PK	V	38.91	116.75	N/A	N/A
5280.00	83.47	AV	V	38.91	116.36	N/A	N/A
10560.00	45.96	PK	V	19.20	59.14	68.20	9.06
15840.00	36.66	PK	V	22.34	52.98	74.00	21.02
15840.00	24.53	AV	V	22.34	40.85	54.00	13.15
4997.00	47.86	PK	V	11.19	53.03	74.00	20.97
4997.00	33.39	AV	V	11.19	38.56	54.00	15.44
5972.00	42.03	PK	V	13.26	49.27	68.20	18.93
802.11a,High Channel: 5320 MHz							
5320.00	74.11	PK	H	38.97	107.06	N/A	N/A
5320.00	64.10	AV	H	38.97	97.05	N/A	N/A
5320.00	82.25	PK	V	38.97	115.20	N/A	N/A
5320.00	71.75	AV	V	38.97	104.70	N/A	N/A
5350.00	39.90	PK	V	39.03	72.91	74.00	1.09
5350.00	19.45	AV	V	39.03	52.46	54.00	1.54
10640.00	49.41	PK	V	19.50	62.89	74.00	11.11
10640.00	38.21	AV	V	19.50	51.69	54.00	2.31
15960.00	37.46	PK	V	22.22	53.66	74.00	20.34
15960.00	25.67	AV	V	22.22	41.87	54.00	12.13
4997.00	46.55	PK	V	11.19	51.72	74.00	22.28
4997.00	32.10	AV	V	11.19	37.27	54.00	16.73
6023.00	42.01	PK	V	13.45	49.44	68.20	18.76

802.11a, Chain 1:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11a,Low Channel: 5260MHz							
5260.00	76.93	PK	H	38.90	109.81	N/A	N/A
5260.00	67.24	AV	H	38.90	100.12	N/A	N/A
5260.00	86.22	PK	V	38.90	119.10	N/A	N/A
5260.00	76.37	AV	V	38.90	109.25	N/A	N/A
5150.00	31.02	PK	V	38.64	63.64	74.00	10.36
5150.00	18.11	AV	V	38.64	50.73	54.00	3.27
10520.00	46.18	PK	V	18.93	59.09	68.20	9.11
15780.00	40.01	PK	V	22.26	56.25	74.00	17.75
15780.00	28.55	AV	V	22.26	44.79	54.00	9.21
5015.00	47.52	PK	V	11.19	52.69	74.00	21.31
5015.00	33.27	AV	V	11.19	38.44	54.00	15.56
5972.00	45.60	PK	V	13.26	52.84	68.20	15.36
802.11a,Middle Channel: 5280 MHz							
5280.00	74.22	PK	H	38.91	107.11	N/A	N/A
5280.00	64.11	AV	H	38.91	97.00	N/A	N/A
5280.00	83.79	PK	V	38.91	116.68	N/A	N/A
5280.00	73.62	AV	V	38.91	106.51	N/A	N/A
10560.00	44.23	PK	V	19.20	57.41	68.20	10.79
15840.00	36.43	PK	V	22.34	52.75	74.00	21.25
15840.00	24.05	AV	V	22.34	40.37	54.00	13.63
5012.00	44.03	PK	V	11.19	49.20	74.00	24.80
5012.00	30.52	AV	V	11.19	35.69	54.00	18.31
5969.00	43.33	PK	V	13.25	50.56	68.20	17.64
802.11a,High Channel: 5320 MHz							
5320.00	72.18	PK	H	38.97	105.13	N/A	N/A
5320.00	62.11	AV	H	38.97	95.06	N/A	N/A
5320.00	81.87	PK	V	38.97	114.82	N/A	N/A
5320.00	71.72	AV	V	38.97	104.67	N/A	N/A
5350.00	39.89	PK	V	39.03	72.90	74.00	1.10
5350.00	19.19	AV	V	39.03	52.20	54.00	1.80
10640.00	45.52	PK	V	19.50	59.00	74.00	15.00
10640.00	34.87	AV	V	19.50	48.35	54.00	5.65
15960.00	37.92	PK	V	22.22	54.12	74.00	19.88
15960.00	25.43	AV	V	22.22	41.63	54.00	12.37
4991.00	42.92	PK	V	11.20	48.10	74.00	25.90
4991.00	28.61	AV	V	11.20	33.79	54.00	20.21
5978.00	44.22	PK	V	13.27	51.47	68.20	16.73

802.11n ht20 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11n ht20,Low Channel: 5260MHz							
5260.00	77.71	PK	H	38.90	110.59	N/A	N/A
5260.00	66.20	AV	H	38.90	99.08	N/A	N/A
5260.00	87.79	PK	V	38.90	120.67	N/A	N/A
5260.00	76.01	AV	V	38.90	108.89	N/A	N/A
5150.00	30.94	PK	V	38.64	63.56	74.00	10.44
5150.00	18.01	AV	V	38.64	50.63	54.00	3.37
10520.00	49.09	PK	V	18.93	62.00	68.20	6.20
15780.00	38.13	PK	V	22.26	54.37	74.00	19.63
15780.00	25.77	AV	V	22.26	42.01	54.00	11.99
5015.00	49.29	PK	V	11.19	54.46	74.00	19.54
5015.00	35.17	AV	V	11.19	40.34	54.00	13.66
5999.00	45.41	PK	V	13.34	52.73	68.20	15.47
802.11n ht20, Middle Channel: 5280 MHz							
5280.00	74.68	PK	H	38.91	107.57	N/A	N/A
5280.00	63.35	AV	H	38.91	96.24	N/A	N/A
5280.00	86.59	PK	V	38.91	119.48	N/A	N/A
5280.00	74.34	AV	V	38.91	107.23	N/A	N/A
10560.00	48.19	PK	V	19.20	61.37	68.20	6.83
15840.00	35.86	PK	V	22.34	52.18	74.00	21.82
15840.00	23.38	AV	V	22.34	39.70	54.00	14.30
5006.00	47.87	PK	V	11.19	53.04	74.00	20.96
5006.00	33.53	AV	V	11.19	38.70	54.00	15.30
5966.00	43.61	PK	V	13.24	50.83	68.20	17.37
802.11n ht20, High Channel: 5320 MHz							
5320.00	73.03	PK	H	38.97	105.98	N/A	N/A
5320.00	62.65	AV	H	38.97	95.60	N/A	N/A
5320.00	84.74	PK	V	38.97	117.69	N/A	N/A
5320.00	72.21	AV	V	38.97	105.16	N/A	N/A
5350.00	37.87	PK	V	39.03	70.88	74.00	3.12
5350.00	19.49	AV	V	39.03	52.50	54.00	1.50
10640.00	50.99	PK	V	19.50	64.47	74.00	9.53
10640.00	36.28	AV	V	19.50	49.76	54.00	4.24
15960.00	37.71	PK	V	22.22	53.91	74.00	20.09
15960.00	25.44	AV	V	22.22	41.64	54.00	12.36
4997.00	46.37	PK	V	11.19	51.54	74.00	22.46
4997.00	32.50	AV	V	11.19	37.67	54.00	16.33
5966.00	42.51	PK	V	13.24	49.73	68.20	18.47

802.11n ht40 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector					
802.11n ht40,Low Channel: 5270 MHz							
5270.00	72.31	PK	H	38.91	105.20	N/A	N/A
5270.00	60.66	AV	H	38.91	93.55	N/A	N/A
5270.00	82.54	PK	V	38.91	115.43	N/A	N/A
5270.00	69.70	AV	V	38.91	102.59	N/A	N/A
5150.00	30.82	PK	V	38.64	63.44	74.00	10.56
5150.00	17.95	AV	V	38.64	50.57	54.00	3.43
10540.00	45.86	PK	V	19.07	58.91	68.20	9.29
15810.00	36.88	PK	V	22.28	53.14	74.00	20.86
15810.00	24.31	AV	V	22.28	40.57	54.00	13.43
4991.00	46.79	PK	V	11.20	51.97	74.00	22.03
4991.00	32.35	AV	V	11.20	37.53	54.00	16.47
5978.00	43.88	PK	V	13.27	51.13	68.20	17.07
802.11n ht40, High Channel: 5310 MHz							
5310.00	67.57	PK	H	38.95	100.50	N/A	N/A
5310.00	56.02	AV	H	38.95	88.95	N/A	N/A
5310.00	80.71	PK	V	38.95	113.64	N/A	N/A
5310.00	68.12	AV	V	38.95	101.05	N/A	N/A
5350.00	36.56	PK	V	39.03	69.57	74.00	4.43
5350.00	19.97	AV	V	39.03	52.98	54.00	1.02
10620.00	46.45	PK	V	19.49	59.92	74.00	14.08
10620.00	34.17	AV	V	19.49	47.64	54.00	6.36
15930.00	36.80	PK	V	22.33	53.11	74.00	20.89
15930.00	24.48	AV	V	22.33	40.79	54.00	13.21
5006.00	44.96	PK	V	11.19	50.13	74.00	23.87
5006.00	30.57	AV	V	11.19	35.74	54.00	18.26
6002.00	41.65	PK	V	13.35	48.98	68.20	19.22

802.11ac vht20 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ac vht20,Low Channel: 5260 MHz							
5260.00	77.69	PK	H	38.90	110.57	N/A	N/A
5260.00	67.70	AV	H	38.90	100.58	N/A	N/A
5260.00	87.96	PK	V	38.90	120.84	N/A	N/A
5260.00	76.72	AV	V	38.90	109.60	N/A	N/A
5150.00	30.53	PK	V	38.64	63.15	74.00	10.85
5150.00	18.09	AV	V	38.64	50.71	54.00	3.29
10520.00	49.77	PK	V	18.93	62.68	68.20	5.52
15780.00	37.84	PK	V	22.26	54.08	74.00	19.92
15780.00	25.63	AV	V	22.26	41.87	54.00	12.13
5000.00	49.27	PK	V	11.19	54.44	74.00	19.56
5000.00	35.03	AV	V	11.19	40.20	54.00	13.80
5984.00	44.16	PK	V	13.29	51.43	68.20	16.77
802.11ac vht20, Middle Channel: 5280 MHz							
5280.00	74.84	PK	H	38.91	107.73	N/A	N/A
5280.00	64.26	AV	H	38.91	97.15	N/A	N/A
5280.00	85.61	PK	V	38.91	118.50	N/A	N/A
5280.00	73.69	AV	V	38.91	106.58	N/A	N/A
10560.00	49.10	PK	V	19.20	62.28	68.20	5.92
15840.00	36.55	PK	V	22.34	52.87	74.00	21.13
15840.00	24.01	AV	V	22.34	40.33	54.00	13.67
4994.00	47.61	PK	V	11.20	52.79	74.00	21.21
4994.00	33.40	AV	V	11.20	38.58	54.00	15.42
5981.00	43.42	PK	V	13.28	50.68	68.20	17.52
802.11ac vht20, High Channel: 5320 MHz							
5320.00	73.07	PK	H	38.97	106.02	N/A	N/A
5320.00	63.17	AV	H	38.97	96.12	N/A	N/A
5320.00	84.54	PK	V	38.97	117.49	N/A	N/A
5320.00	73.74	AV	V	38.97	106.69	N/A	N/A
5350.00	36.16	PK	V	39.03	69.17	74.00	4.83
5350.00	19.93	AV	V	39.03	52.94	54.00	1.06
10640.00	49.62	PK	V	19.50	63.10	74.00	10.90
10640.00	35.29	AV	V	19.50	48.77	54.00	5.23
15960.00	37.09	PK	V	22.22	53.29	74.00	20.71
15960.00	24.65	AV	V	22.22	40.85	54.00	13.15
5003.00	46.75	PK	V	11.19	51.92	74.00	22.08
5003.00	32.28	AV	V	11.19	37.45	54.00	16.55
6002.00	43.51	PK	V	13.35	50.84	68.20	17.36

802.11ac vht40 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector					
802.11ac vht40,Low Channel: 5270MHz							
5270.00	71.19	PK	H	38.91	104.08	N/A	N/A
5270.00	60.79	AV	H	38.91	93.68	N/A	N/A
5270.00	82.55	PK	V	38.91	115.44	N/A	N/A
5270.00	71.40	AV	V	38.91	104.29	N/A	N/A
5150.00	31.06	PK	V	38.64	63.68	74.00	10.32
5150.00	18.03	AV	V	38.64	50.65	54.00	3.35
10540.00	45.46	PK	V	19.07	58.51	68.20	9.69
15810.00	36.94	PK	V	22.28	53.20	74.00	20.80
15810.00	24.58	AV	V	22.28	40.84	54.00	13.16
5003.00	48.08	PK	V	11.19	53.25	74.00	20.75
5003.00	33.70	AV	V	11.19	38.87	54.00	15.13
5984.00	42.77	PK	V	13.29	50.04	68.20	18.16
802.11ac vht40, High Channel: 5310MHz							
5310.00	68.85	PK	H	38.95	101.78	N/A	N/A
5310.00	58.17	AV	H	38.95	91.10	N/A	N/A
5310.00	79.73	PK	V	38.95	112.66	N/A	N/A
5310.00	68.61	AV	V	38.95	101.54	N/A	N/A
5350.00	35.52	PK	V	39.03	68.53	74.00	5.47
5350.00	19.90	AV	V	39.03	52.91	54.00	1.09
10620.00	45.48	PK	V	19.49	58.95	74.00	15.05
10620.00	33.69	AV	V	19.49	47.16	54.00	6.84
15930.00	36.40	PK	V	22.33	52.71	74.00	21.29
15930.00	24.07	AV	V	22.33	40.38	54.00	13.62
5027.00	44.90	PK	V	11.19	50.07	74.00	23.93
5027.00	30.42	AV	V	11.19	35.59	54.00	18.41
5975.00	41.75	PK	V	13.27	49.00	68.20	19.20

802.11ac vht80 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ac vht80, Middle Channel: 5290 MHz							
5290.00	67.13	PK	H	38.92	100.03	N/A	N/A
5290.00	55.60	AV	H	38.92	88.50	N/A	N/A
5290.00	77.02	PK	V	38.92	109.92	N/A	N/A
5290.00	65.29	AV	V	38.92	98.19	N/A	N/A
5150.00	31.26	PK	V	38.64	63.88	74.00	10.12
5150.00	18.36	AV	V	38.64	50.98	54.00	3.02
5350.00	36.50	PK	V	39.03	69.51	74.00	4.49
5350.00	19.28	AV	V	39.03	52.29	54.00	1.71
10580.00	43.63	PK	V	19.34	56.95	68.20	11.25
15870.00	35.26	PK	V	22.39	51.63	74.00	22.37
15870.00	23.02	AV	V	22.39	39.39	54.00	14.61
5015.00	46.03	PK	V	11.19	51.20	74.00	22.80
5015.00	31.84	AV	V	11.19	37.01	54.00	16.99
5951.00	42.34	PK	V	13.19	49.51	68.20	18.69

802.11ax vht20 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11n ax hew20, Low Channel: 5260 MHz							
5260.00	78.35	PK	H	38.90	111.23	N/A	N/A
5260.00	65.87	AV	H	38.90	98.75	N/A	N/A
5260.00	88.09	PK	V	38.90	120.97	N/A	N/A
5260.00	75.41	AV	V	38.90	108.29	N/A	N/A
5150.00	30.87	PK	V	38.64	63.49	74.00	10.51
5150.00	17.93	AV	V	38.64	50.55	54.00	3.45
10520.00	47.16	PK	V	18.93	60.07	68.20	8.13
15780.00	37.88	PK	V	22.26	54.12	74.00	19.88
15780.00	25.39	AV	V	22.26	41.63	54.00	12.37
5006.00	47.71	PK	V	11.19	52.88	74.00	21.12
5006.00	33.58	AV	V	11.19	38.75	54.00	15.25
5972.00	43.40	PK	V	13.26	50.64	68.20	17.56
802.11n hew20, Middle Channel: 5280 MHz							
5280.00	74.86	PK	H	38.91	107.75	N/A	N/A
5280.00	62.08	AV	H	38.91	94.97	N/A	N/A
5280.00	85.31	PK	V	38.91	118.20	N/A	N/A
5280.00	72.57	AV	V	38.91	105.46	N/A	N/A
10560.00	46.80	PK	V	19.20	59.98	68.20	8.22
15840.00	36.59	PK	V	22.34	52.91	74.00	21.09
15840.00	24.20	AV	V	22.34	40.52	54.00	13.48
4997.00	46.29	PK	V	11.19	51.46	74.00	22.54
4997.00	32.14	AV	V	11.19	37.31	54.00	16.69
5978.00	43.05	PK	V	13.27	50.30	68.20	17.90
802.11ac hew20, High Channel: 5320 MHz							
5320.00	73.98	PK	H	38.97	106.93	N/A	N/A
5320.00	61.64	AV	H	38.97	94.59	N/A	N/A
5320.00	83.66	PK	V	38.97	116.61	N/A	N/A
5320.00	71.21	AV	V	38.97	104.16	N/A	N/A
5350.00	34.76	PK	V	39.03	67.77	74.00	6.23
5350.00	19.32	AV	V	39.03	52.33	54.00	1.67
10640.00	47.99	PK	V	19.50	61.47	74.00	12.53
10640.00	34.74	AV	V	19.50	48.22	54.00	5.78
15960.00	37.66	PK	V	22.22	53.86	74.00	20.14
15960.00	25.23	AV	V	22.22	41.43	54.00	12.57
5012.00	44.89	PK	V	11.19	50.06	74.00	23.94
5012.00	30.51	AV	V	11.19	35.68	54.00	18.32
5951.00	42.69	PK	V	13.19	49.86	68.20	18.34

802.11ax vht40 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ax hew40,Low Channel: 5270MHz							
5270.00	72.34	PK	H	38.91	105.23	N/A	N/A
5270.00	60.30	AV	H	38.91	93.19	N/A	N/A
5270.00	83.99	PK	V	38.91	116.88	N/A	N/A
5270.00	70.77	AV	V	38.91	103.66	N/A	N/A
5150.00	31.14	PK	V	38.64	63.76	74.00	10.24
5150.00	18.11	AV	V	38.64	50.73	54.00	3.27
10540.00	45.55	PK	V	19.07	58.60	68.20	9.60
15810.00	38.74	PK	V	22.28	55.00	74.00	19.00
15810.00	26.20	AV	V	22.28	42.46	54.00	11.54
5024.00	47.68	PK	V	11.19	52.85	74.00	21.15
5024.00	33.39	AV	V	11.19	38.56	54.00	15.44
5990.00	43.88	PK	V	13.31	51.17	68.20	17.03
802.11ax hew40, High Channel: 5310MHz							
5310.00	71.26	PK	H	38.95	104.19	N/A	N/A
5310.00	57.81	AV	H	38.95	90.74	N/A	N/A
5310.00	81.60	PK	V	38.95	114.53	N/A	N/A
5310.00	67.89	AV	V	38.95	100.82	N/A	N/A
5350.00	37.02	PK	V	39.03	70.03	74.00	3.97
5350.00	19.96	AV	V	39.03	52.97	54.00	1.03
10620.00	45.89	PK	V	19.49	59.36	74.00	14.64
10620.00	33.67	AV	V	19.49	47.14	54.00	6.86
15930.00	36.11	PK	V	22.33	52.42	74.00	21.58
15930.00	23.70	AV	V	22.33	40.01	54.00	13.99
4961.00	44.55	PK	V	11.23	49.76	74.00	24.24
4961.00	30.73	AV	V	11.23	35.94	54.00	18.06
5996.00	41.54	PK	V	13.33	48.85	68.20	19.35

802.11ax hew80 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ax hew80, Middle Channel: 5290 MHz							
5290.00	67.13	PK	H	38.92	100.03	N/A	N/A
5290.00	55.60	AV	H	38.92	88.50	N/A	N/A
5290.00	77.02	PK	V	38.92	109.92	N/A	N/A
5290.00	65.29	AV	V	38.92	98.19	N/A	N/A
5150.00	31.26	PK	V	38.64	63.88	74.00	10.12
5150.00	18.36	AV	V	38.64	50.98	54.00	3.02
5350.00	36.50	PK	V	39.03	69.51	74.00	4.49
5350.00	19.28	AV	V	39.03	52.29	54.00	1.71
10580.00	43.63	PK	V	19.34	56.95	68.20	11.25
15870.00	35.26	PK	V	22.39	51.63	74.00	22.37
15870.00	23.02	AV	V	22.39	39.39	54.00	14.61
5015.00	46.03	PK	V	11.19	51.20	74.00	22.80
5015.00	31.84	AV	V	11.19	37.01	54.00	16.99
5951.00	42.34	PK	V	13.19	49.51	68.20	18.69

802.11ac/ax hew160 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ac vht160, Middle Channel: 5250MHz							
5250.00	62.21	PK	H	38.89	95.08	N/A	N/A
5250.00	48.86	AV	H	38.89	81.73	N/A	N/A
5250.00	72.11	PK	V	38.89	104.98	N/A	N/A
5250.00	59.64	AV	V	38.89	92.51	N/A	N/A
5150.00	33.87	PK	V	38.64	66.49	74.00	7.51
5150.00	19.21	AV	V	38.64	51.83	54.00	2.17
5350.00	35.57	PK	V	39.03	68.58	74.00	5.42
5350.00	19.78	AV	V	39.03	52.79	54.00	1.21
10500.00	40.55	PK	V	18.79	53.32	68.20	14.88
15750.00	36.12	PK	V	22.27	52.37	74.00	21.63
15750.00	26.25	AV	V	22.27	42.50	54.00	11.50
5928.00	42.78	PK	V	13.21	49.97	68.20	18.23
5003.00	50.55	PK	V	11.19	55.72	74.00	18.28
5003.00	36.24	AV	V	11.19	41.41	54.00	12.59
802.11ax hew160, Middle Channel: 5250MHz							
5250.00	63.24	PK	H	38.89	96.11	N/A	N/A
5250.00	49.13	AV	H	38.89	82.00	N/A	N/A
5250.00	72.53	PK	V	38.89	105.40	N/A	N/A
5250.00	58.31	AV	V	38.89	91.18	N/A	N/A
5150.00	33.64	PK	V	38.64	66.26	74.00	7.74
5150.00	19.75	AV	V	38.64	52.37	54.00	1.63
5350.00	35.68	PK	V	39.03	68.69	74.00	5.31
5350.00	20.18	AV	V	39.03	53.19	54.00	0.81
10500.00	40.65	PK	V	18.79	53.42	68.20	14.78
15750.00	35.42	PK	V	22.27	51.67	74.00	22.33
15750.00	26.34	AV	V	22.27	42.59	54.00	11.41
5945.00	41.92	PK	V	13.20	49.10	68.20	19.10
5004.00	49.36	PK	V	11.19	54.53	74.00	19.47
5004.00	34.32	AV	V	11.19	39.49	54.00	14.51

**5725-5850MHz,
802.11a, Chain 0:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11a,Low Channel: 5745MHz							
5745.00	75.37	PK	H	39.46	108.81	N/A	N/A
5745.00	65.58	AV	H	39.46	99.02	N/A	N/A
5745.00	86.55	PK	V	39.46	119.99	N/A	N/A
5745.00	76.65	AV	V	39.46	110.09	N/A	N/A
5725.00	64.84	PK	V	39.48	98.30	122.20	23.90
5720.00	55.03	PK	V	39.49	88.50	110.80	22.30
5700.00	42.65	PK	V	39.51	76.14	105.20	29.06
5650.00	32.74	PK	V	39.49	66.21	68.20	1.99
11490.00	42.40	PK	V	20.67	57.05	74.00	16.95
11490.00	29.21	AV	V	20.67	43.86	54.00	10.14
17235.00	37.40	PK	V	26.76	58.14	68.20	10.06
5010.00	46.17	PK	V	11.19	51.34	74.00	22.66
5010.00	32.05	AV	V	11.19	37.22	54.00	16.78
5982.00	50.21	PK	V	13.29	57.48	68.20	10.72
802.11a,Middle Channel: 5785MHz							
5785.00	77.11	PK	H	39.44	110.53	N/A	N/A
5785.00	66.66	AV	H	39.44	100.08	N/A	N/A
5785.00	88.28	PK	V	39.44	121.70	N/A	N/A
5785.00	77.53	AV	V	39.44	110.95	N/A	N/A
11570.00	40.73	PK	V	20.83	55.54	74.00	18.46
11570.00	25.89	AV	V	20.83	40.70	54.00	13.30
17355.00	37.72	PK	V	27.74	59.44	68.20	8.76
5006.00	45.60	PK	V	11.19	50.77	74.00	23.23
5006.00	31.49	AV	V	11.19	36.66	54.00	17.34
5982.00	51.63	PK	V	13.29	58.90	68.20	9.30
802.11a,High Channel: 5825MHz							
5825.00	74.03	PK	H	39.46	107.47	N/A	N/A
5825.00	64.14	AV	H	39.46	97.58	N/A	N/A
5825.00	86.83	PK	V	39.46	120.27	N/A	N/A
5825.00	76.98	AV	V	39.46	110.42	N/A	N/A
5850.00	54.18	PK	V	39.49	87.65	122.20	34.55
5855.00	53.59	PK	V	39.51	87.08	110.80	23.72
5875.00	40.47	PK	V	39.60	74.05	105.20	31.15
5925.00	33.34	PK	V	39.68	67.00	68.20	1.20
11650.00	42.60	PK	V	21.07	57.65	74.00	16.35
11650.00	28.35	AV	V	21.07	43.40	54.00	10.60
17475.00	33.84	PK	V	28.61	56.43	68.20	11.77
5006.00	47.60	PK	V	11.19	52.77	74.00	21.23
5006.00	33.91	AV	V	11.19	39.08	54.00	14.92
5931.00	49.50	PK	V	13.21	56.69	68.20	11.51

802.11a, Chain 1:

802.11a, Channel 1:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector					
802.11a,Low Channel: 5745MHz							
5745.00	72.48	PK	H	39.46	105.92	N/A	N/A
5745.00	62.60	AV	H	39.46	96.04	N/A	N/A
5745.00	85.64	PK	V	39.46	119.08	N/A	N/A
5745.00	75.62	AV	V	39.46	109.06	N/A	N/A
5725.00	62.67	PK	V	39.48	96.13	122.20	26.07
5720.00	52.06	PK	V	39.49	85.53	110.80	25.27
5700.00	40.80	PK	V	39.51	74.29	105.20	30.91
5650.00	30.91	PK	V	39.49	64.38	68.20	3.82
11490.00	49.59	PK	V	20.67	64.24	74.00	9.76
11490.00	36.76	AV	V	20.67	51.41	54.00	2.59
17235.00	34.02	PK	V	26.76	54.76	68.20	13.44
3830.00	47.78	PK	V	8.79	50.55	74.00	23.45
3830.00	42.56	AV	V	8.79	45.33	54.00	8.67
5001.00	45.84	PK	V	11.19	51.01	74.00	22.99
5001.00	31.69	AV	V	11.19	36.86	54.00	17.14
5975.00	52.43	PK	V	13.27	59.68	68.20	8.52
802.11a,Middle Channel: 5785MHz							
5785.00	73.36	PK	H	39.44	106.78	N/A	N/A
5785.00	63.37	AV	H	39.44	96.79	N/A	N/A
5785.00	86.88	PK	V	39.44	120.30	N/A	N/A
5785.00	76.92	AV	V	39.44	110.34	N/A	N/A
11570.00	50.95	PK	V	20.83	65.76	74.00	8.24
11570.00	37.61	AV	V	20.83	52.42	54.00	1.58
17355.00	36.62	PK	V	27.74	58.34	68.20	9.86
3857.00	53.46	PK	V	8.84	56.28	74.00	17.72
3857.00	49.37	AV	V	8.84	52.19	54.00	1.81
5013.00	44.68	PK	V	11.19	49.85	74.00	24.15
5013.00	30.27	AV	V	11.19	35.44	54.00	18.56
5999.00	52.74	PK	V	13.34	60.06	68.20	8.14
802.11a,High Channel: 5825MHz							
5825.00	72.96	PK	H	39.46	106.40	N/A	N/A
5825.00	63.25	AV	H	39.46	96.69	N/A	N/A
5825.00	86.78	PK	V	39.46	120.22	N/A	N/A
5825.00	76.97	AV	V	39.46	110.41	N/A	N/A
5850.00	57.69	PK	V	39.49	91.16	122.20	31.04
5855.00	55.53	PK	V	39.51	89.02	110.80	21.78
5875.00	43.04	PK	V	39.60	76.62	105.20	28.58
5925.00	32.34	PK	V	39.68	66.00	68.20	2.20
11650.00	51.50	PK	V	21.07	66.55	74.00	7.45
11650.00	37.15	AV	V	21.07	52.20	54.00	1.80
17475.00	34.27	PK	V	28.61	56.86	68.20	11.34
3833.00	50.57	PK	V	8.80	53.35	74.00	20.65
3833.00	45.12	AV	V	8.80	47.90	54.00	6.10
5023.00	45.51	PK	V	11.19	50.68	74.00	23.32
5023.00	31.72	AV	V	11.19	36.89	54.00	17.11
5928.00	50.94	PK	V	13.21	58.13	68.20	10.07

802.11n ht20 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11n ht20,Low Channel: 5745MHz							
5745.00	74.85	PK	H	39.46	108.29	N/A	N/A
5745.00	63.74	AV	H	39.46	97.18	N/A	N/A
5745.00	88.46	PK	V	39.46	121.90	N/A	N/A
5745.00	76.06	AV	V	39.46	109.50	N/A	N/A
5725.00	59.46	PK	V	39.48	92.92	122.20	29.28
5720.00	50.53	PK	V	39.49	84.00	110.80	26.80
5700.00	36.79	PK	V	39.51	70.28	105.20	34.92
5650.00	29.64	PK	V	39.49	63.11	68.20	5.09
11490.00	50.21	PK	V	20.67	64.86	74.00	9.14
11490.00	37.91	AV	V	20.67	52.56	54.00	1.44
17235.00	35.02	PK	V	26.76	55.76	68.20	12.44
3830.00	48.45	PK	V	8.79	51.22	74.00	22.78
3830.00	43.37	AV	V	8.79	46.14	54.00	7.86
5001.00	48.35	PK	V	11.19	53.52	74.00	20.48
5001.00	34.62	AV	V	11.19	39.79	54.00	14.21
5982.00	52.71	PK	V	13.29	59.98	68.20	8.22
802.11n ht20, Middle Channel: 5785MHz							
5785.00	76.42	PK	H	39.44	109.84	N/A	N/A
5785.00	63.35	AV	H	39.44	96.77	N/A	N/A
5785.00	89.04	PK	V	39.44	122.46	N/A	N/A
5785.00	76.08	AV	V	39.44	109.50	N/A	N/A
11570.00	49.85	PK	V	20.83	64.66	74.00	9.34
11570.00	36.79	AV	V	20.83	51.60	54.00	2.40
17355.00	34.71	PK	V	27.74	56.43	68.20	11.77
3857.00	49.87	PK	V	8.84	52.69	74.00	21.31
3857.00	44.78	AV	V	8.84	47.60	54.00	6.40
4989.00	49.71	PK	V	11.20	54.89	74.00	19.11
4989.00	35.28	AV	V	11.20	40.46	54.00	13.54
5999.00	54.25	PK	V	13.34	61.57	68.20	6.63
802.11n ht20, High Channel: 5825MHz							
5825.00	77.17	PK	H	39.46	110.61	N/A	N/A
5825.00	65.73	AV	H	39.46	99.17	N/A	N/A
5825.00	90.25	PK	V	39.46	123.69	N/A	N/A
5825.00	77.92	AV	V	39.46	111.36	N/A	N/A
5850.00	63.28	PK	V	39.49	96.75	122.20	25.45
5855.00	58.44	PK	V	39.51	91.93	110.80	18.87
5875.00	44.45	PK	V	39.60	78.03	105.20	27.17
5925.00	31.15	PK	V	39.68	64.81	68.20	3.39
11650.00	50.74	PK	V	21.07	65.79	74.00	8.21
11650.00	36.25	AV	V	21.07	51.30	54.00	2.70
17475.00	34.43	PK	V	28.61	57.02	68.20	11.18
3883.00	49.42	PK	V	8.94	52.34	74.00	21.66
3883.00	44.18	AV	V	8.94	47.10	54.00	6.90
4988.00	48.66	PK	V	11.20	53.84	74.00	20.16
4988.00	33.79	AV	V	11.20	38.97	54.00	15.03
5928.00	53.55	PK	V	13.21	60.74	68.20	7.46

802.11n ht40 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11n ht40,Low Channel: 5755MHz							
5755.00	70.37	PK	H	39.45	103.80	N/A	N/A
5755.00	57.39	AV	H	39.45	90.82	N/A	N/A
5755.00	83.72	PK	V	39.45	117.15	N/A	N/A
5755.00	71.49	AV	V	39.45	104.92	N/A	N/A
5725.00	54.74	PK	V	39.48	88.20	122.20	34.00
5720.00	53.42	PK	V	39.49	86.89	110.80	23.91
5700.00	36.94	PK	V	39.51	70.43	105.20	34.77
5650.00	33.15	PK	V	39.49	66.62	68.20	1.58
11510.00	48.12	PK	V	20.67	62.77	74.00	11.23
11510.00	31.32	AV	V	20.67	45.97	54.00	8.03
17265.00	34.69	PK	V	26.94	55.61	68.20	12.59
5965.00	51.75	PK	V	13.24	58.97	68.20	9.23
5001.00	47.65	PK	V	11.19	52.82	74.00	21.18
5001.00	32.84	AV	V	11.19	38.01	54.00	15.99
3836.00	47.49	PK	V	8.80	50.27	74.00	23.73
3836.00	42.57	AV	V	8.80	45.35	54.00	8.65
802.11n ht40, High Channel: 5795MHz							
5795.00	71.13	PK	H	39.43	104.54	N/A	N/A
5795.00	57.64	AV	H	39.43	91.05	N/A	N/A
5795.00	83.62	PK	V	39.43	117.03	N/A	N/A
5795.00	70.85	AV	V	39.43	104.26	N/A	N/A
5850.00	36.07	PK	V	39.49	69.54	122.20	52.66
5855.00	35.26	PK	V	39.51	68.75	110.80	42.05
5875.00	32.97	PK	V	39.60	66.55	105.20	38.65
5925.00	30.69	PK	V	39.68	64.35	68.20	3.85
11590.00	48.26	PK	V	20.88	63.12	74.00	10.88
11590.00	32.01	AV	V	20.88	46.87	54.00	7.13
17385.00	32.95	PK	V	28.07	55.00	68.20	13.20
5975.00	53.42	PK	V	13.27	60.67	68.20	7.53
4993.00	48.36	PK	V	11.20	53.54	74.00	20.46
4993.00	33.62	AV	V	11.20	38.80	54.00	15.20
3863.00	48.54	PK	V	8.86	51.38	74.00	22.62
3863.00	43.69	AV	V	8.86	46.53	54.00	7.47

802.11ac vht20 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ac vht20, Low Channel: 5745MHz							
5745.00	77.13	PK	H	39.46	110.57	N/A	N/A
5745.00	66.31	AV	H	39.46	99.75	N/A	N/A
5745.00	90.16	PK	V	39.46	123.60	N/A	N/A
5745.00	78.64	AV	V	39.46	112.08	N/A	N/A
5725.00	68.88	PK	V	39.48	102.34	122.20	19.86
5720.00	58.94	PK	V	39.49	92.41	110.80	18.39
5700.00	44.88	PK	V	39.51	78.37	105.20	26.83
5650.00	32.45	PK	V	39.49	65.92	68.20	2.28
11490.00	50.17	PK	V	20.67	64.82	74.00	9.18
11490.00	37.62	AV	V	20.67	52.27	54.00	1.73
17235.00	44.75	PK	V	26.76	65.49	68.20	2.71
4993.00	47.22	PK	V	11.20	52.40	74.00	21.60
4993.00	32.69	AV	V	11.20	37.87	54.00	16.13
5969.00	53.16	PK	V	13.25	60.39	68.20	7.81
3830.00	48.50	PK	V	8.79	51.27	74.00	22.73
3830.00	43.69	AV	V	8.79	46.46	54.00	7.54
802.11ac vht20, Middle Channel: 5785MHz							
5785.00	78.13	PK	H	39.44	111.55	N/A	N/A
5785.00	65.65	AV	H	39.44	99.07	N/A	N/A
5785.00	90.44	PK	V	39.44	123.86	N/A	N/A
5785.00	76.84	AV	V	39.44	110.26	N/A	N/A
11570.00	51.87	PK	V	20.83	66.68	74.00	7.32
11570.00	38.18	AV	V	20.83	52.99	54.00	1.01
17355.00	42.18	PK	V	27.74	63.90	68.20	4.30
3857.00	51.28	PK	V	8.84	54.10	74.00	19.90
3857.00	47.27	AV	V	8.84	50.09	54.00	3.91
4979.00	48.42	PK	V	11.21	53.61	74.00	20.39
4979.00	34.17	AV	V	11.21	39.36	54.00	14.64
5949.00	54.73	PK	V	13.19	61.90	68.20	6.30
802.11ac vht20, High Channel: 5825MHz							
5825.00	77.69	PK	H	39.46	111.13	N/A	N/A
5825.00	66.29	AV	H	39.46	99.73	N/A	N/A
5825.00	90.65	PK	V	39.46	124.09	N/A	N/A
5825.00	78.22	AV	V	39.46	111.66	N/A	N/A
5850.00	62.99	PK	V	39.49	96.46	122.20	25.74
5855.00	58.01	PK	V	39.51	91.50	110.80	19.30
5875.00	43.33	PK	V	39.60	76.91	105.20	28.29
5925.00	31.24	PK	V	39.68	64.90	68.20	3.30
11650.00	51.82	PK	V	21.07	66.87	74.00	7.13
11650.00	37.46	AV	V	21.07	52.51	54.00	1.49
17475.00	34.19	PK	V	28.61	56.78	68.20	11.42
3883.00	49.19	PK	V	8.94	52.11	74.00	21.89
3883.00	44.61	AV	V	8.94	47.53	54.00	6.47
5006.00	49.47	PK	V	11.19	54.64	74.00	19.36
5006.00	35.62	AV	V	11.19	40.79	54.00	13.21
5931.00	54.15	PK	V	13.21	61.34	68.20	6.86

802.11ac vht40 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ac vht40,Low Channel: 5755MHz							
5755.00	70.72	PK	H	39.45	104.15	N/A	N/A
5755.00	57.84	AV	H	39.45	91.27	N/A	N/A
5755.00	83.63	PK	V	39.45	117.06	N/A	N/A
5755.00	71.17	AV	V	39.45	104.60	N/A	N/A
5725.00	54.87	PK	V	39.48	88.33	122.20	33.87
5720.00	53.46	PK	V	39.49	86.93	110.80	23.87
5700.00	38.64	PK	V	39.51	72.13	105.20	33.07
5650.00	33.43	PK	V	39.49	66.90	68.20	1.30
11510.00	47.07	PK	V	20.67	61.72	74.00	12.28
11510.00	31.24	AV	V	20.67	45.89	54.00	8.11
17265.00	33.64	PK	V	26.94	54.56	68.20	13.64
5969.00	53.29	PK	V	13.25	60.52	68.20	7.68
4989.00	47.99	PK	V	11.20	53.17	74.00	20.83
4989.00	32.75	AV	V	11.20	37.93	54.00	16.07
3863.00	47.26	PK	V	8.86	50.10	74.00	23.90
3863.00	42.83	AV	V	8.86	45.67	54.00	8.33
802.11ac vht40, high Channel: 5795MHz							
5795.00	70.82	PK	H	39.43	104.23	N/A	N/A
5795.00	58.65	AV	H	39.43	92.06	N/A	N/A
5795.00	83.17	PK	V	39.43	116.58	N/A	N/A
5795.00	71.19	AV	V	39.43	104.60	N/A	N/A
5850.00	39.47	PK	V	39.49	72.94	122.20	49.26
5855.00	38.02	PK	V	39.51	71.51	110.80	39.29
5875.00	32.28	PK	V	39.60	65.86	105.20	39.34
5925.00	29.64	PK	V	39.68	63.30	68.20	4.90
11590.00	46.89	PK	V	20.88	61.75	74.00	12.25
11590.00	29.74	AV	V	20.88	44.60	54.00	9.40
17385.00	34.15	PK	V	28.07	56.20	68.20	12.00
5969.00	53.02	PK	V	13.25	60.25	68.20	7.95
5003.00	48.14	PK	V	11.19	53.31	74.00	20.69
5003.00	32.96	AV	V	11.19	38.13	54.00	15.87
3863.00	48.78	PK	V	8.86	51.62	74.00	22.38
3863.00	43.85	AV	V	8.86	46.69	54.00	7.31

802.11ac vht80 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ac vht80, Middle Channel: 5775MHz							
5775.00	66.36	PK	H	39.44	99.78	N/A	N/A
5775.00	54.37	AV	H	39.44	87.79	N/A	N/A
5775.00	78.26	PK	V	39.44	111.68	N/A	N/A
5775.00	65.84	AV	V	39.44	99.26	N/A	N/A
5725.00	41.45	PK	V	39.48	74.91	122.20	47.29
5720.00	41.39	PK	V	39.49	74.86	110.80	35.94
5700.00	38.19	PK	V	39.51	71.68	105.20	33.52
5650.00	33.12	PK	V	39.49	66.59	68.20	1.61
5850.00	37.96	PK	V	39.49	71.43	122.20	50.77
5855.00	37.84	PK	V	39.51	71.33	110.80	39.47
5875.00	33.45	PK	V	39.60	67.03	105.20	38.17
5925.00	32.98	PK	V	39.68	66.64	68.20	1.56
11550.00	43.05	PK	V	20.78	57.81	74.00	16.19
11550.00	26.26	AV	V	20.78	41.02	54.00	12.98
17325.00	33.16	PK	V	27.41	54.55	68.20	13.65
5938.00	52.82	PK	V	13.20	60.00	68.20	8.20
5013.00	43.47	PK	V	11.19	48.64	74.00	25.36
5013.00	30.24	AV	V	11.19	35.41	54.00	18.59
3850.00	42.66	PK	V	8.81	45.45	74.00	28.55
3850.00	37.58	AV	V	8.81	40.37	54.00	13.63

802.11ax vht20 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ax hew20,Low Channel: 5745MHz							
5745.00	77.43	PK	H	39.46	110.87	N/A	N/A
5745.00	64.82	AV	H	39.46	98.26	N/A	N/A
5745.00	89.44	PK	V	39.46	122.88	N/A	N/A
5745.00	77.26	AV	V	39.46	110.70	N/A	N/A
5725.00	63.33	PK	V	39.48	96.79	122.20	25.41
5720.00	57.88	PK	V	39.49	91.35	110.80	19.45
5700.00	40.92	PK	V	39.51	74.41	105.20	30.79
5650.00	32.33	PK	V	39.49	65.80	68.20	2.40
11490.00	48.43	PK	V	20.67	63.08	74.00	10.92
11490.00	35.53	AV	V	20.67	50.18	54.00	3.82
17235.00	37.62	PK	V	26.76	58.36	68.20	9.84
5010.00	48.13	PK	V	11.19	53.30	74.00	20.70
5010.00	35.26	AV	V	11.19	40.43	54.00	13.57
5997.00	53.11	PK	V	13.33	60.42	68.20	7.78
802.11ax hew20, Middle Channel: 5785MHz							
5785.00	76.78	PK	H	39.44	110.20	N/A	N/A
5785.00	64.68	AV	H	39.44	98.10	N/A	N/A
5785.00	90.24	PK	V	39.44	123.66	N/A	N/A
5785.00	78.42	AV	V	39.44	111.84	N/A	N/A
11570.00	44.27	PK	V	20.83	59.08	74.00	14.92
11570.00	30.02	AV	V	20.83	44.83	54.00	9.17
17355.00	34.69	PK	V	27.74	56.41	68.20	11.79
3857.00	41.04	PK	V	8.84	43.86	74.00	30.14
3857.00	33.12	AV	V	8.84	35.94	54.00	18.06
5006.00	48.71	PK	V	11.19	53.88	74.00	20.12
5006.00	35.16	AV	V	11.19	40.33	54.00	13.67
5975.00	53.58	PK	V	13.27	60.83	68.20	7.37
802.11ax hew20, High Channel: 5825MHz							
5825.00	76.12	PK	H	39.46	109.56	N/A	N/A
5825.00	63.45	AV	H	39.46	96.89	N/A	N/A
5825.00	89.14	PK	V	39.46	122.58	N/A	N/A
5825.00	76.66	AV	V	39.46	110.10	N/A	N/A
5850.00	60.83	PK	V	39.49	94.30	122.20	27.90
5855.00	50.04	PK	V	39.51	83.53	110.80	27.27
5875.00	39.07	PK	V	39.60	72.65	105.20	32.55
5925.00	30.26	PK	V	39.68	63.92	68.20	4.28
11650.00	45.99	PK	V	21.07	61.04	74.00	12.96
11650.00	31.63	AV	V	21.07	46.68	54.00	7.32
17475.00	34.44	PK	V	28.61	57.03	68.20	11.17
3883.00	42.36	PK	V	8.94	45.28	74.00	28.72
3883.00	34.16	AV	V	8.94	37.08	54.00	16.92
5013.00	47.43	PK	V	11.19	52.60	74.00	21.40
5013.00	34.72	AV	V	11.19	39.89	54.00	14.11
5928.00	56.36	PK	V	13.21	63.55	68.20	4.65

802.11ax vht40 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ax hew40,Low Channel: 5755MHz							
5755.00	71.99	PK	H	39.45	105.42	N/A	N/A
5755.00	57.94	AV	H	39.45	91.37	N/A	N/A
5755.00	84.52	PK	V	39.45	117.95	N/A	N/A
5755.00	72.18	AV	V	39.45	105.61	N/A	N/A
5725.00	56.78	PK	V	39.48	90.24	122.20	31.96
5720.00	55.46	PK	V	39.49	88.93	110.80	21.87
5700.00	39.02	PK	V	39.51	72.51	105.20	32.69
5650.00	33.43	PK	V	39.49	66.90	68.20	1.30
11510.00	47.74	PK	V	20.67	62.39	74.00	11.61
11510.00	30.85	AV	V	20.67	45.50	54.00	8.50
17265.00	32.48	PK	V	26.94	53.40	68.20	14.80
5986.00	53.59	PK	V	13.30	60.87	68.20	7.33
4993.00	48.16	PK	V	11.20	53.34	74.00	20.66
4993.00	33.28	AV	V	11.20	38.46	54.00	15.54
3836.00	46.76	PK	V	8.80	49.54	74.00	24.46
3836.00	41.36	AV	V	8.80	44.14	54.00	9.86
802.11ax hew40, High Channel: 5795MHz							
5795.00	72.06	PK	H	39.43	105.47	N/A	N/A
5795.00	58.59	AV	H	39.43	92.00	N/A	N/A
5795.00	84.12	PK	V	39.43	117.53	N/A	N/A
5795.00	71.19	AV	V	39.43	104.60	N/A	N/A
5850.00	40.21	PK	V	39.49	73.68	122.20	48.52
5855.00	39.32	PK	V	39.51	72.81	110.80	37.99
5875.00	33.62	PK	V	39.60	67.20	105.20	38.00
5925.00	31.25	PK	V	39.68	64.91	68.20	3.29
11590.00	45.75	PK	V	20.88	60.61	74.00	13.39
11590.00	29.76	AV	V	20.88	44.62	54.00	9.38
17385.00	32.69	PK	V	28.07	54.74	68.20	13.46
6016.00	53.32	PK	V	13.41	60.71	68.20	7.49
5003.00	48.78	PK	V	11.19	53.95	74.00	20.05
5003.00	33.49	AV	V	11.19	38.66	54.00	15.34
3863.00	48.27	PK	V	8.86	51.11	74.00	22.89
3863.00	43.89	AV	V	8.86	46.73	54.00	7.27

802.11ax hew80 Mode(2TX Non-beamforming mode was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ax hew80,Middle Channel: 5775MHz							
5775.00	67.45	PK	H	39.44	100.87	N/A	N/A
5775.00	53.69	AV	H	39.44	87.11	N/A	N/A
5775.00	78.62	PK	V	39.44	112.04	N/A	N/A
5775.00	66.29	AV	V	39.44	99.71	N/A	N/A
5725.00	42.95	PK	V	39.48	76.41	122.20	45.79
5720.00	41.35	PK	V	39.49	74.82	110.80	35.98
5700.00	38.21	PK	V	39.51	71.70	105.20	33.50
5650.00	33.55	PK	V	39.49	67.02	68.20	1.18
5850.00	37.96	PK	V	39.49	71.43	122.20	50.77
5855.00	37.85	PK	V	39.51	71.34	110.80	39.46
5875.00	33.14	PK	V	39.60	66.72	105.20	38.48
5925.00	33.19	PK	V	39.68	66.85	68.20	1.35
11550.00	43.16	PK	V	20.78	57.92	74.00	16.08
11550.00	26.15	AV	V	20.78	40.91	54.00	13.09
17325.00	33.07	PK	V	27.41	54.46	68.20	13.74
5931.00	51.52	PK	V	13.21	58.71	68.20	9.49
5006.00	43.84	PK	V	11.19	49.01	74.00	24.99
5006.00	30.69	AV	V	11.19	35.86	54.00	18.14
3850.00	43.18	PK	V	8.81	45.97	74.00	28.03
3850.00	38.05	AV	V	8.81	40.84	54.00	13.16

Note:

Result = Reading + Factor- Distance extrapolation Factor

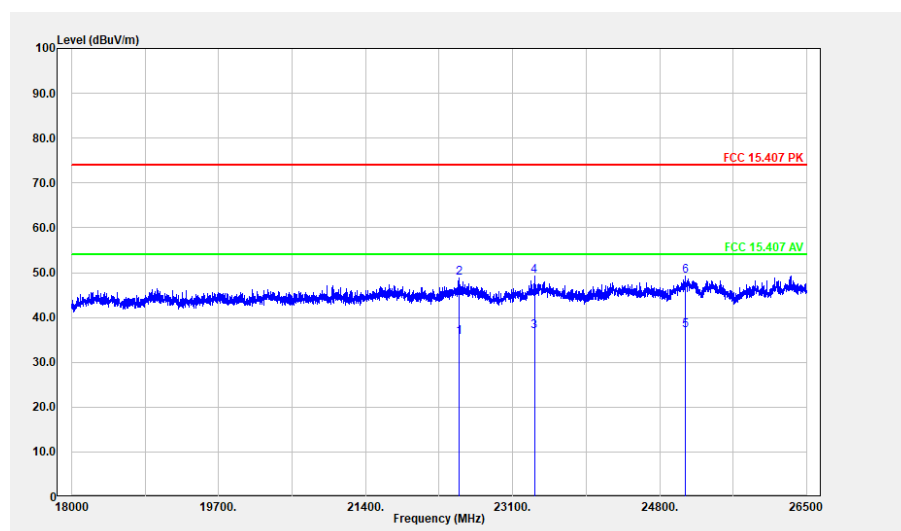
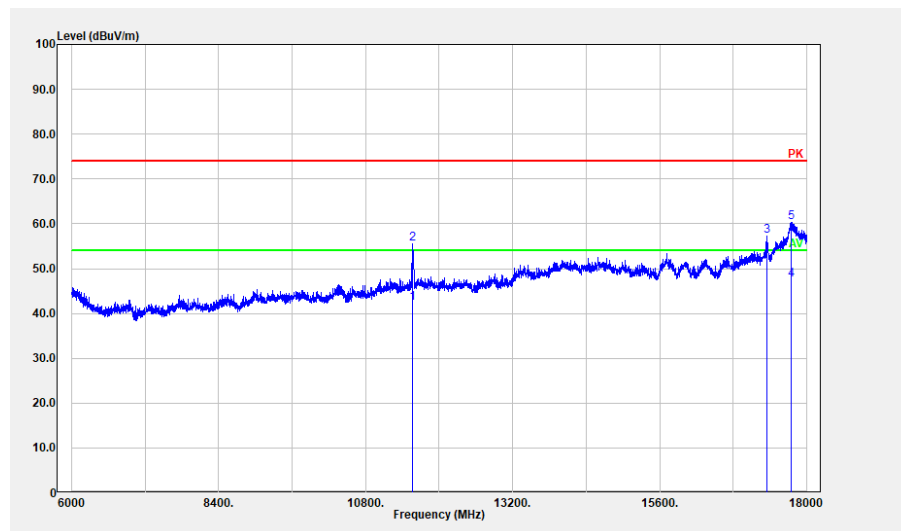
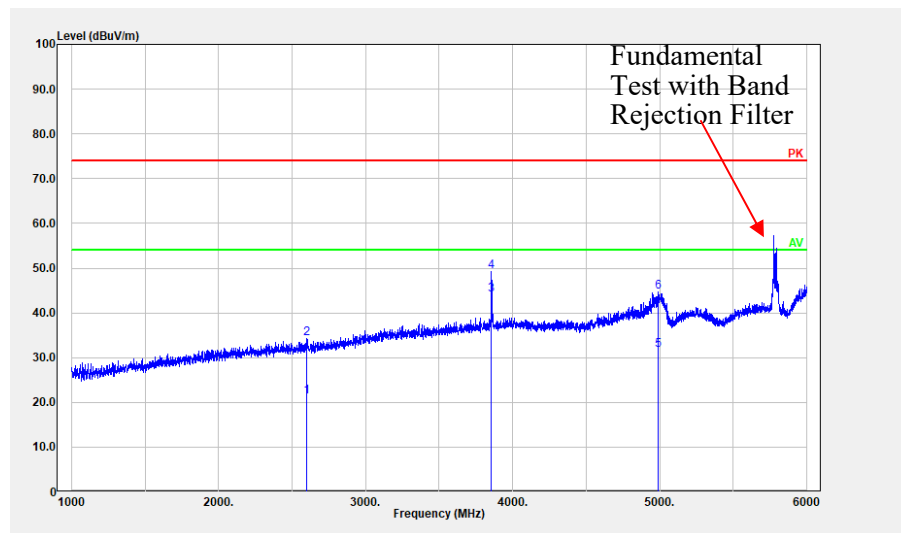
For 1-26.5GHz:

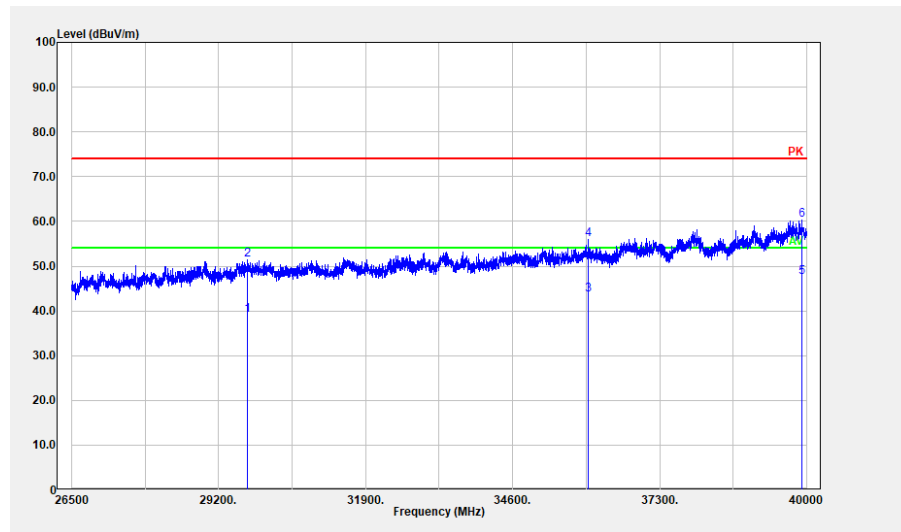
Distance extrapolation Factor = $20 \log (\text{specific distance [3m]}/\text{test distance [1.5m]})$ dB= 6.02 dB

For 26.5-40GHz:

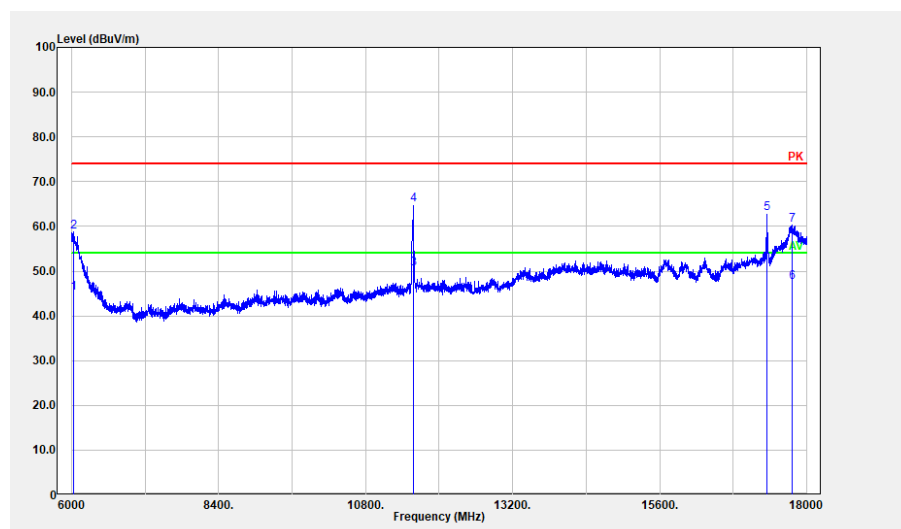
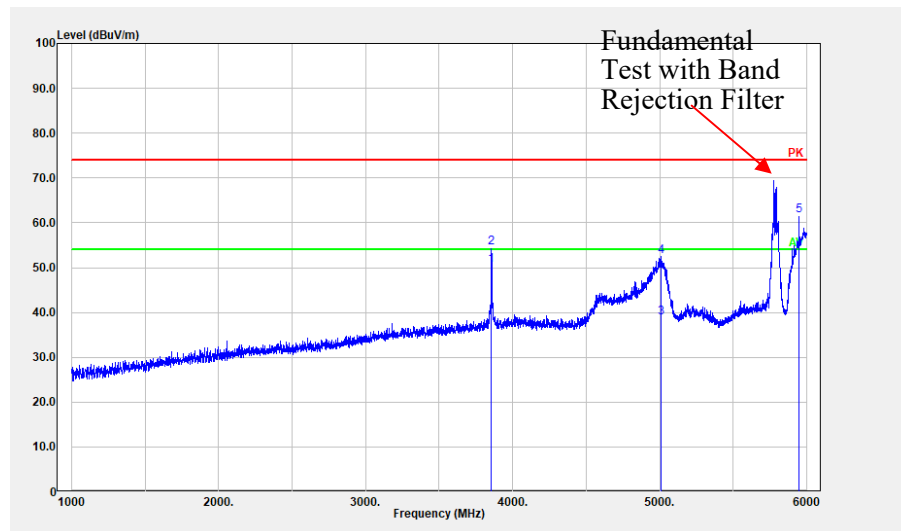
Distance extrapolation Factor = $20 \log (\text{specific distance [3m]}/\text{test distance [1m]})$ dB= 9.54 dB

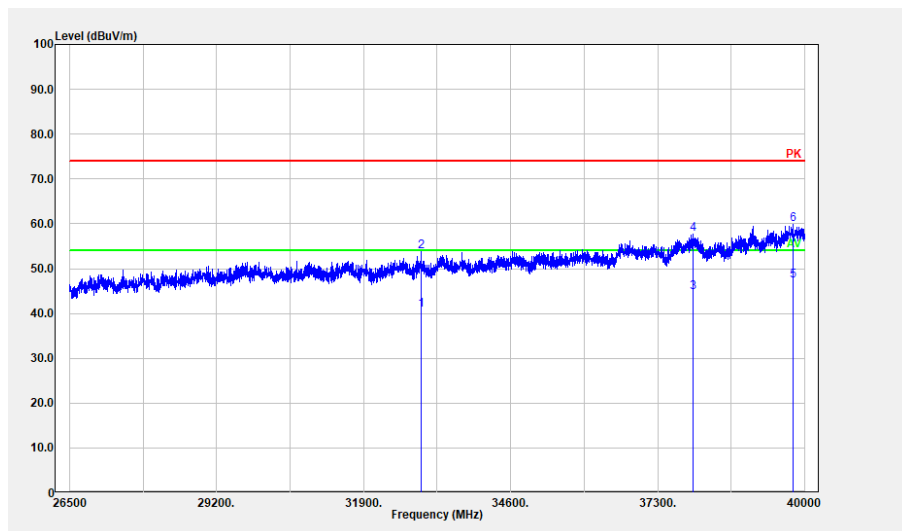
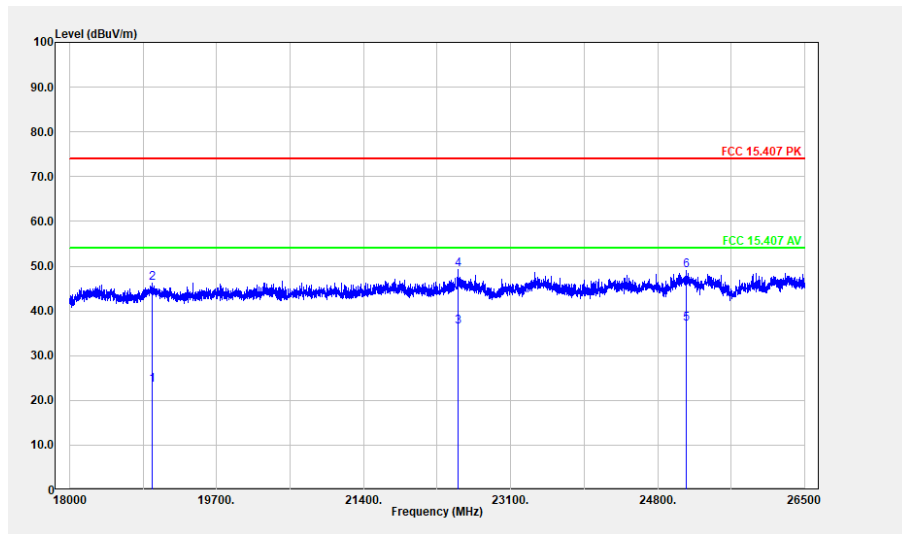
Worst Test plots(802.11ac vht20 2Tx Non-beamforming mode middle channel was the worst)
Horizontal:





Vertical:





4.3 Emission Bandwidth:

Serial Number:	CR22020001-RF-S1	Test Date:	2022-05-26
Test Site:	RF	Test Mode:	Transmitting
Tester:	Julie Tan	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.7	Relative Humidity: (%)	55	ATM Pressure: (kPa)	100.1
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2021-07-22	2022-07-21
YINSAIGE	Coaxial Cable	LMR300	NJ0100002	Each time	N/A

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5180	21.600	17.200
	5200	21.600	17.120
	5240	21.600	17.200
802.11n ht20	5180	21.840	18.000
	5200	21.760	18.000
	5240	22.160	18.080
802.11n ht40	5190	39.840	36.640
	5230	39.840	36.640
802.11ac vht20	5180	21.760	18.080
	5200	21.680	18.000
	5240	21.680	18.160
802.11ac vht40	5190	39.840	36.480
	5230	40.000	36.480
802.11ac vht80	5210	81.920	76.160
802.11ax hew20	5180	21.120	18.960
	5200	21.120	18.960
	5240	21.120	18.960
802.11ax hew40	5190	39.520	37.760
	5230	39.520	37.760
802.11ax hew80	5210	82.560	77.120
Note: Test only was performed at Chain 0. The 99% Occupied Bandwidth have not fall into the band 5250-5350MHz, please refer to the test plots of 99% Occupied Bandwidth.			

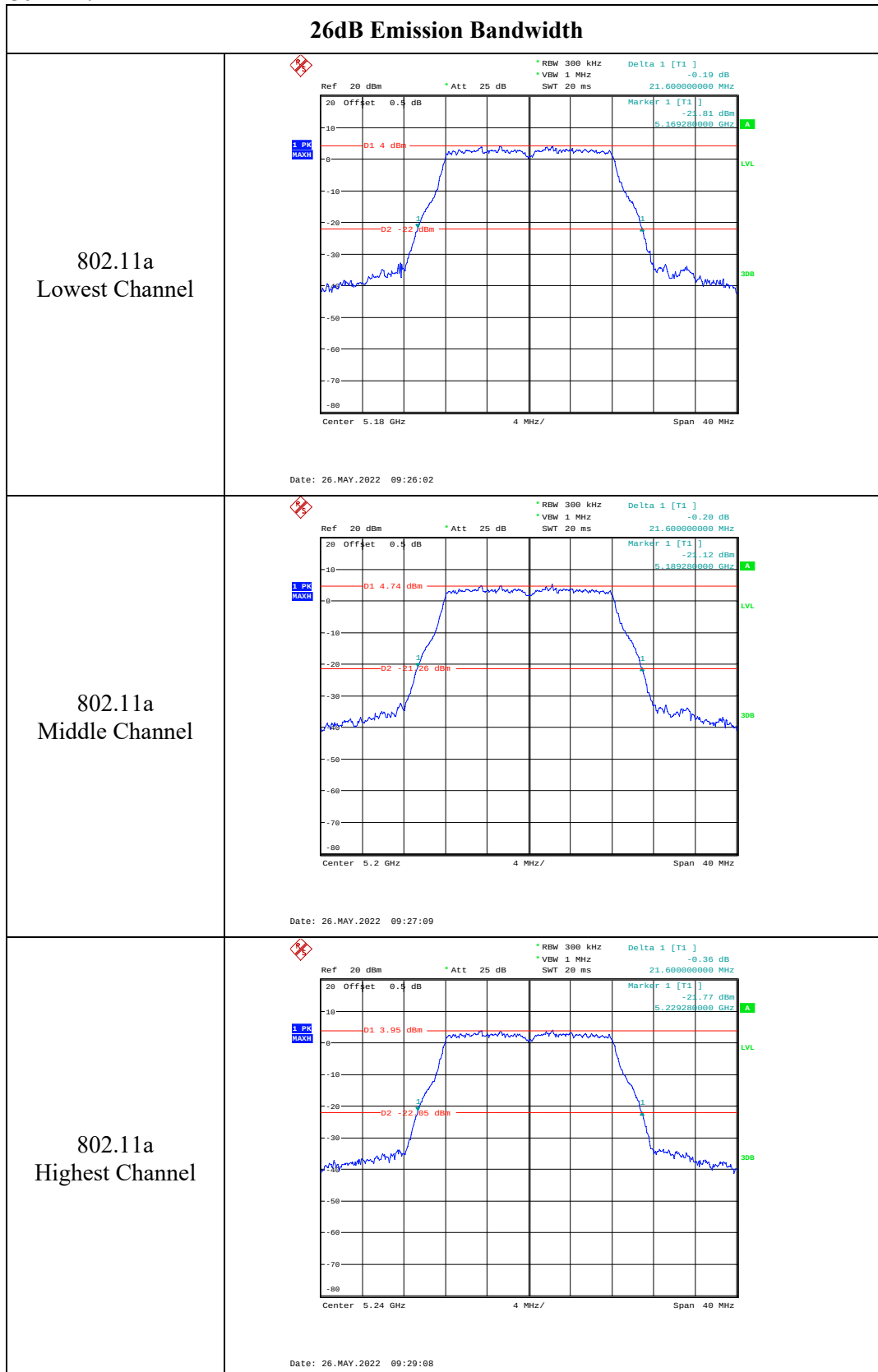
5250-5350 MHz:

Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5180	21.680	17.280
	5200	21.840	17.280
	5240	23.680	17.360
802.11n ht20	5180	21.920	18.080
	5200	24.320	18.080
	5240	26.160	18.160
802.11n ht40	5190	39.680	36.480
	5230	39.680	36.480
802.11ac vht20	5180	21.680	18.080
	5200	21.680	18.080
	5240	21.680	18.160
802.11ac vht40	5190	40.160	36.480
	5230	40.000	36.640
802.11ac vht80	5210	81.600	76.160
802.11ax hew20	5180	21.200	18.960
	5200	21.120	19.040
	5240	21.200	18.960
802.11ax hew40	5190	39.520	37.760
	5230	39.520	37.760
802.11ax hew80	5210	82.560	77.120
802.11ac vht160	5250	163.077	154.359
802.11ax hew160	5250	163.795	155.897
Note: Test only was performed at Chain 0.			

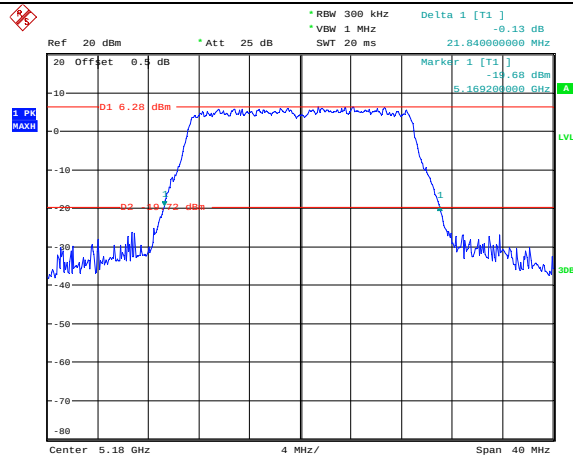
5725-5850 MHz:

Test Modes	Test Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5745	16.400	19.520
	5785	16.400	19.760
	5825	16.400	19.600
802.11n ht20	5745	17.520	19.360
	5785	17.520	19.840
	5825	17.440	19.680
802.11n ht40	5755	35.840	38.240
	5795	36.000	37.280
802.11ac vht20	5745	17.600	18.880
	5785	17.440	19.600
	5825	17.680	19.040
802.11ac vht40	5755	36.480	37.920
	5795	36.480	37.440
802.11ac vht80	5775	75.840	77.440
802.11ax hew20	5745	18.720	19.360
	5785	19.040	19.440
	5825	18.960	19.440
802.11ax hew40	5755	37.280	38.560
	5795	37.280	38.240
802.11ax hew80	5775	76.160	78.400
Note: 6dB Emission Bandwidth Limit: ≥ 0.5 MHz Test only was performed at Chain 0. The 99% Occupied Bandwidth have not fall into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.			

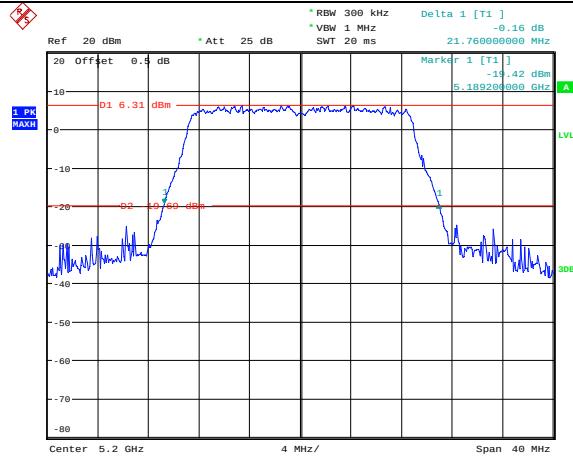
5150-5250MHz:



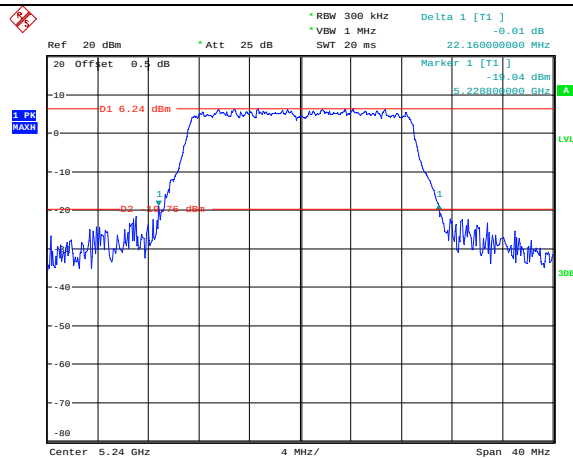
26dB Emission Bandwidth

802.11n ht20
Lowest Channel

Date: 26.MAY.2022 09:56:49

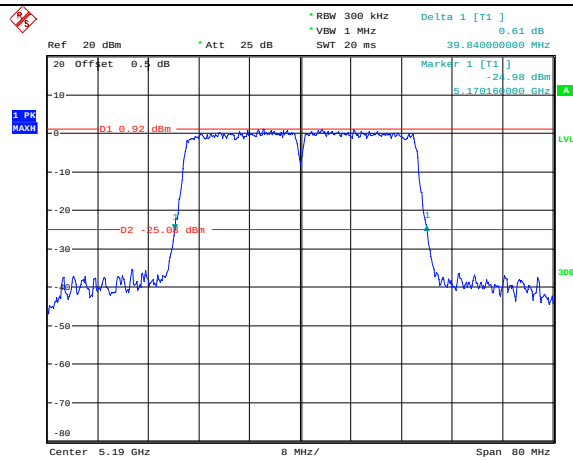
802.11n ht20
Middle Channel

Date: 26.MAY.2022 09:58:08

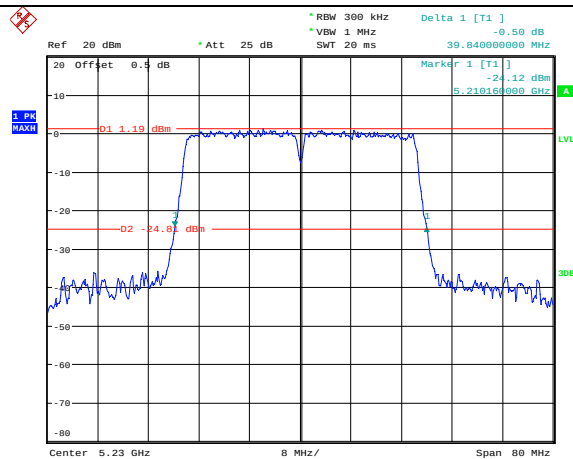
802.11n ht20
Highest Channel

Date: 26.MAY.2022 09:59:22

26dB Emission Bandwidth

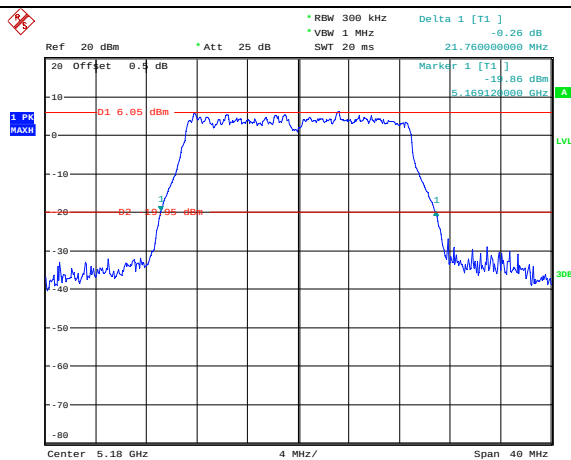
802.11n ht40
Lowest Channel

Date: 26.MAY.2022 10:00:54

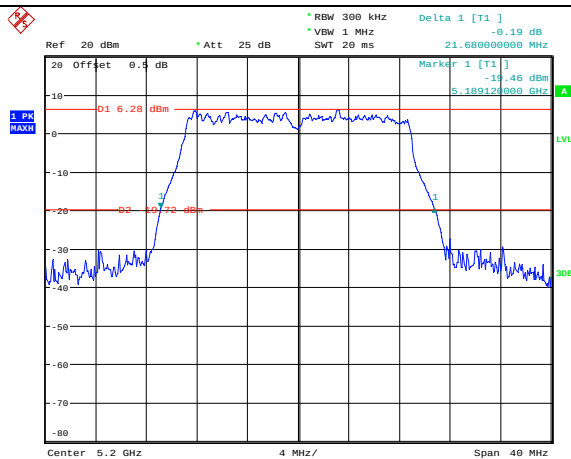
802.11n ht40
Highest Channel

Date: 26.MAY.2022 10:01:58

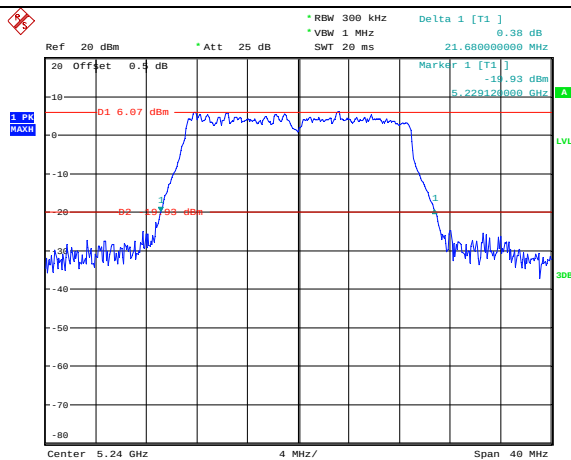
26dB Emission Bandwidth

802.11ac vht20
Lowest Channel

Date: 26.MAY.2022 10:15:08

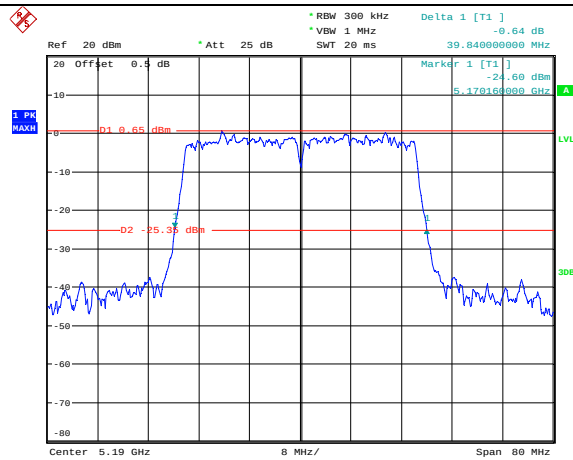
802.11ac vht20
Middle Channel

Date: 26.MAY.2022 10:13:54

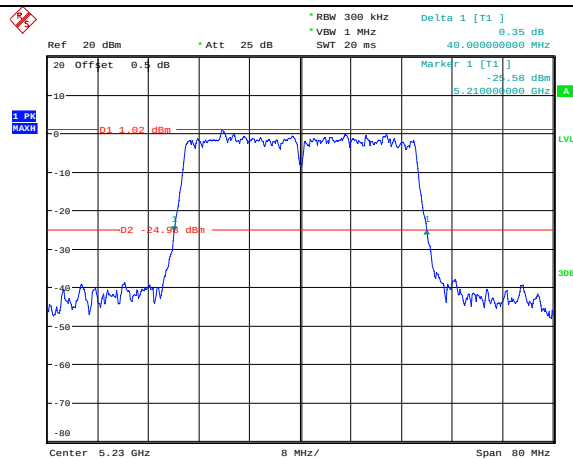
802.11ac vht20
Highest Channel

Date: 26.MAY.2022 10:12:46

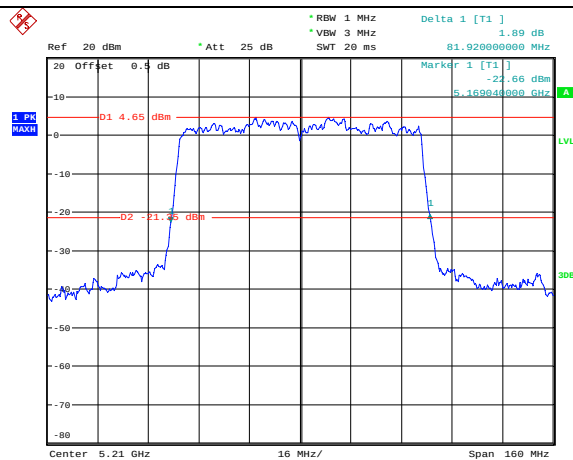
26dB Emission Bandwidth

802.11ac vht40
Lowest Channel

Date: 26.MAY.2022 10:16:26

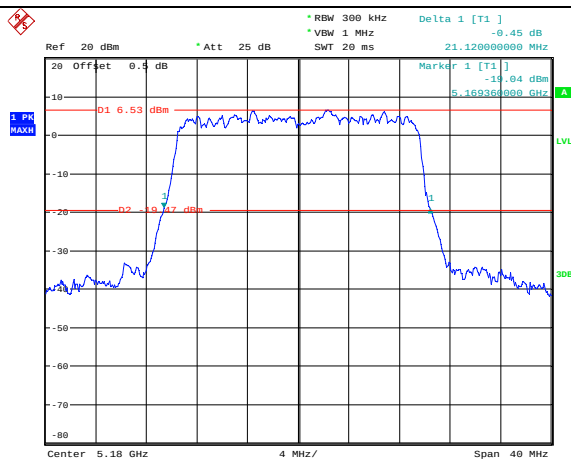
802.11ac vht40
Highest Channel

Date: 26.MAY.2022 10:17:19

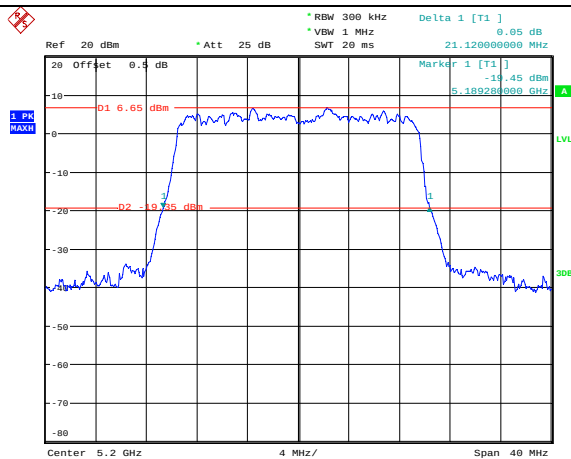
802.11ac vht80
Middle Channel

Date: 26.MAY.2022 10:26:32

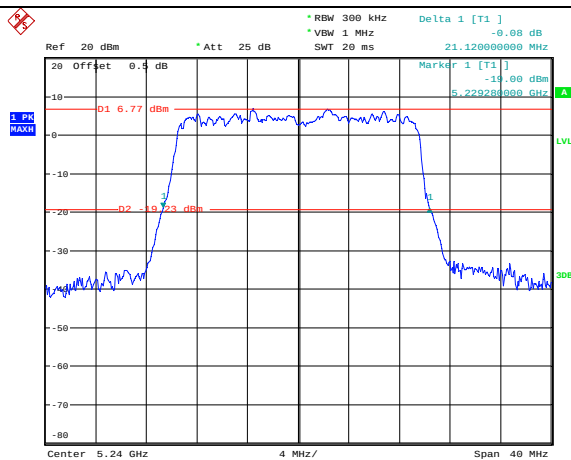
26dB Emission Bandwidth

802.11ax hew20
Lowest Channel

Date: 25.MAY.2022 21:15:33

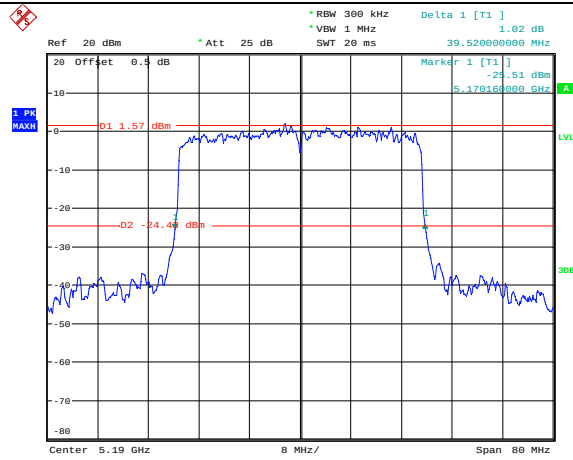
802.11ax hew20
Middle Channel

Date: 25.MAY.2022 21:16:44

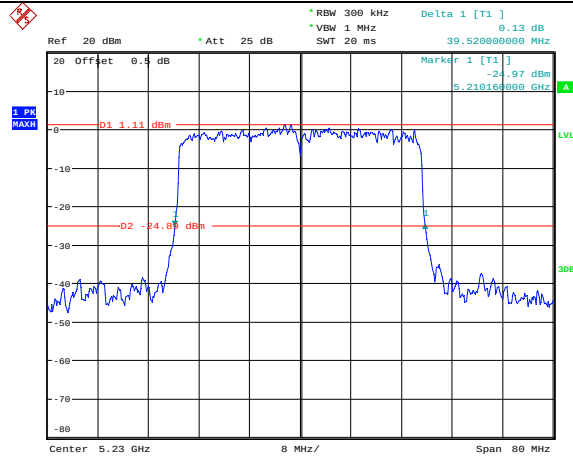
802.11ax hew20
Highest Channel

Date: 25.MAY.2022 21:17:45

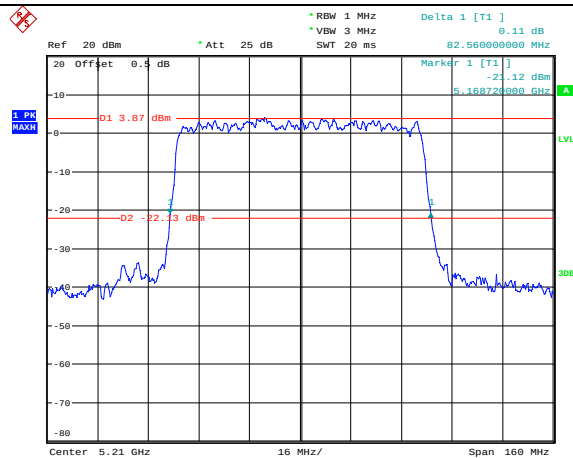
26dB Emission Bandwidth

802.11ax hew40
Lowest Channel

Date: 25.MAY.2022 21:26:08

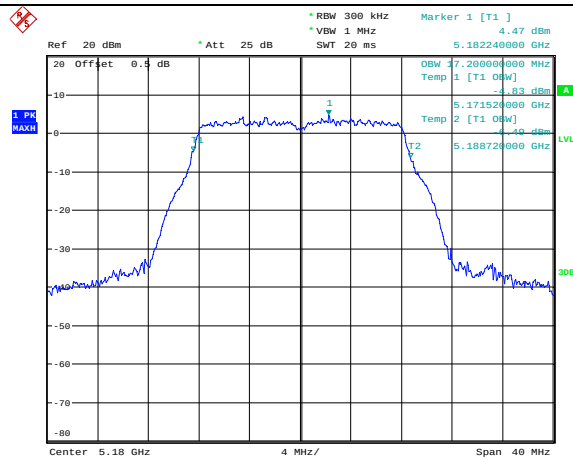
802.11ax hew40
Highest Channel

Date: 25.MAY.2022 21:25:15

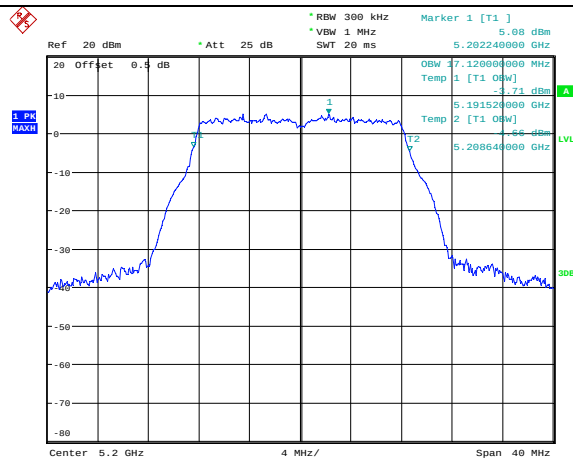
802.11ax hew80
Middle Channel

Date: 25.MAY.2022 21:28:06

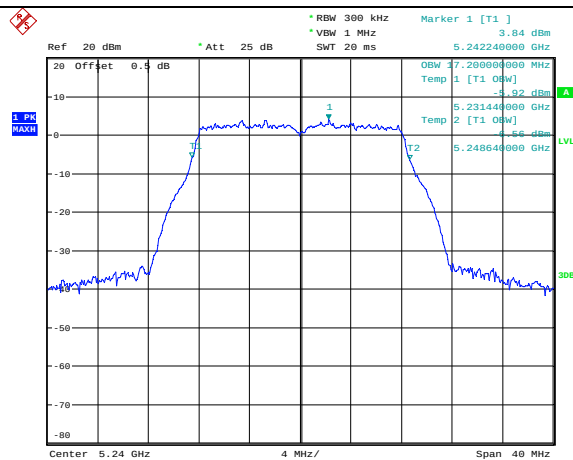
99% Emission Bandwidth

802.11a
Lowest Channel

Date: 26.MAY.2022 09:26:17

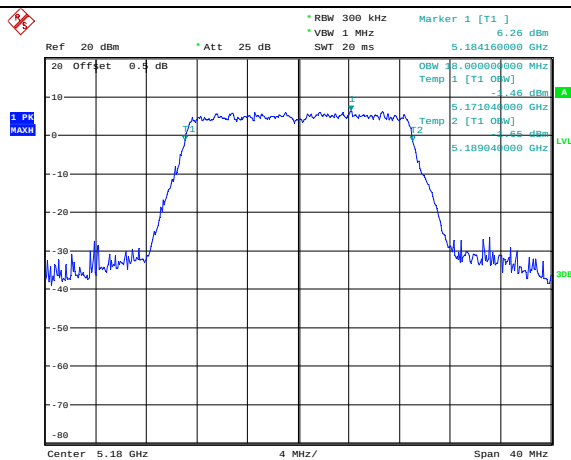
802.11a
Middle Channel

Date: 26.MAY.2022 09:27:28

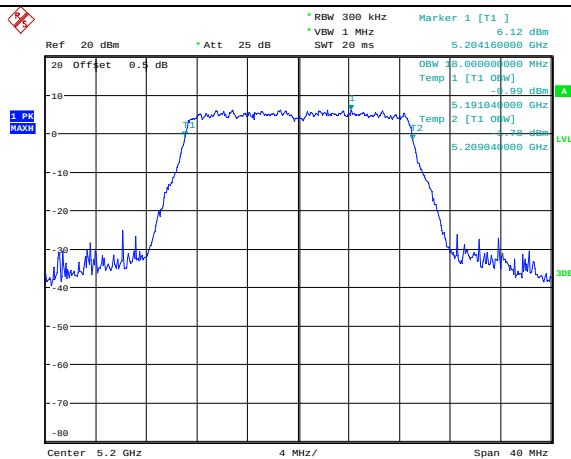
802.11a
Highest Channel

Date: 26.MAY.2022 09:29:26

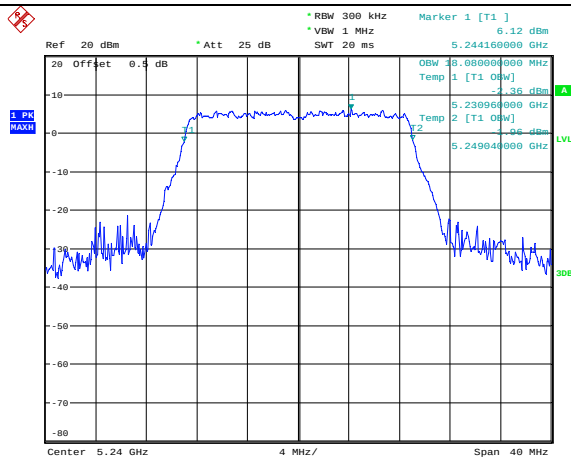
99% Emission Bandwidth

802.11n ht20
Lowest Channel

Date: 26.MAY.2022 09:57:09

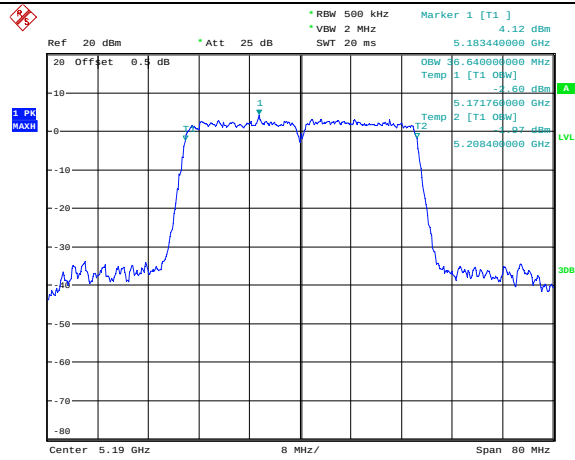
802.11n ht20
Middle Channel

Date: 26.MAY.2022 09:58:24

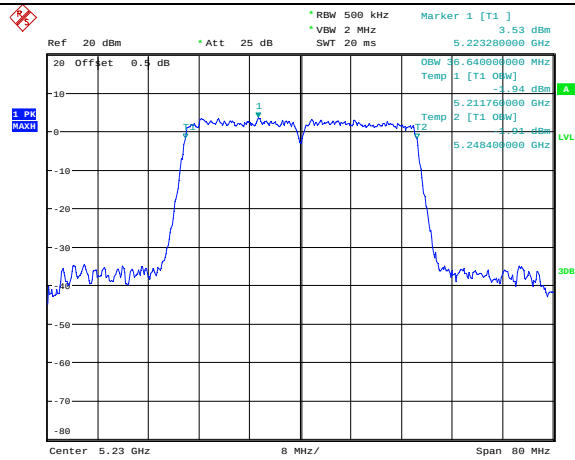
802.11n ht20
Highest Channel

Date: 26.MAY.2022 09:59:39

99% Emission Bandwidth

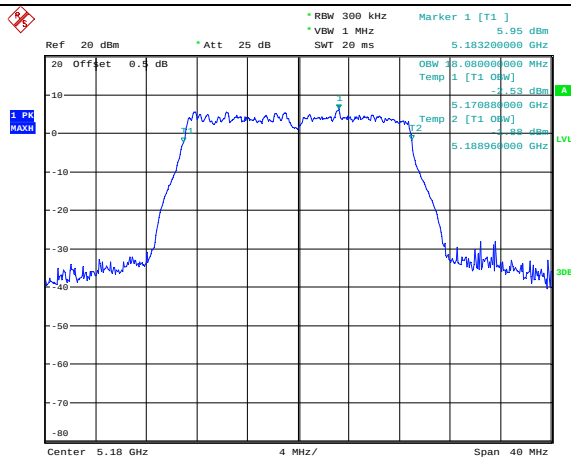
802.11n ht40
Lowest Channel

Date: 26.MAY.2022 10:01:08

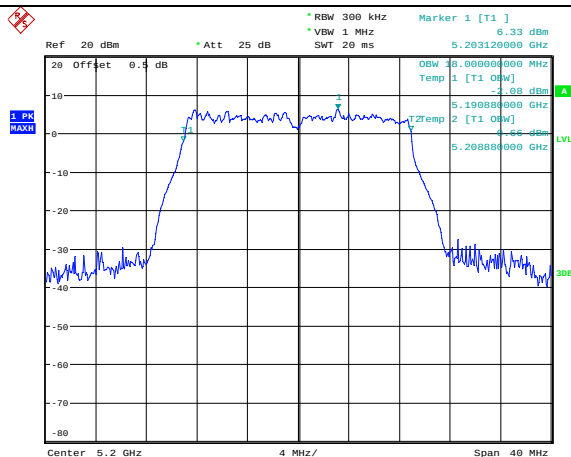
802.11n ht40
Highest Channel

Date: 26.MAY.2022 10:02:17

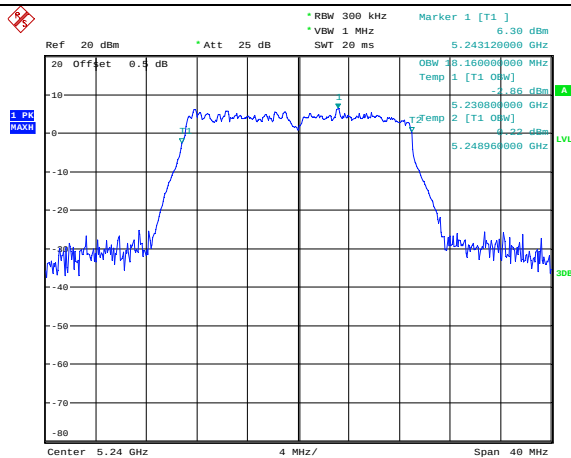
99% Emission Bandwidth

802.11ac vht20
Lowest Channel

Date: 26.MAY.2022 10:15:24

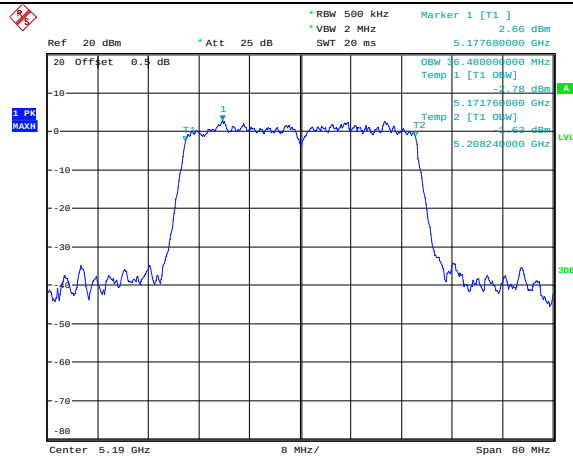
802.11ac vht20
Middle Channel

Date: 26.MAY.2022 10:14:14

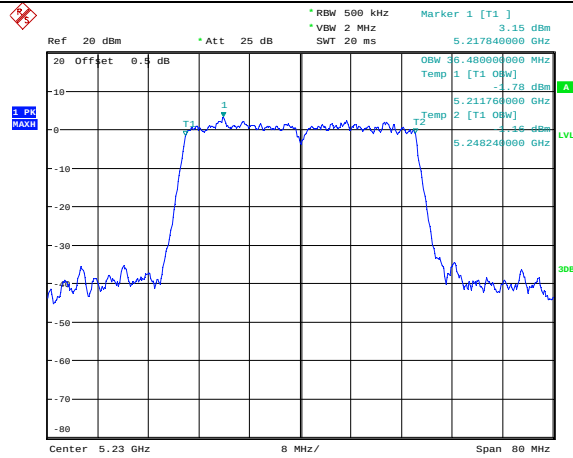
802.11ac vht20
Highest Channel

Date: 26.MAY.2022 10:13:10

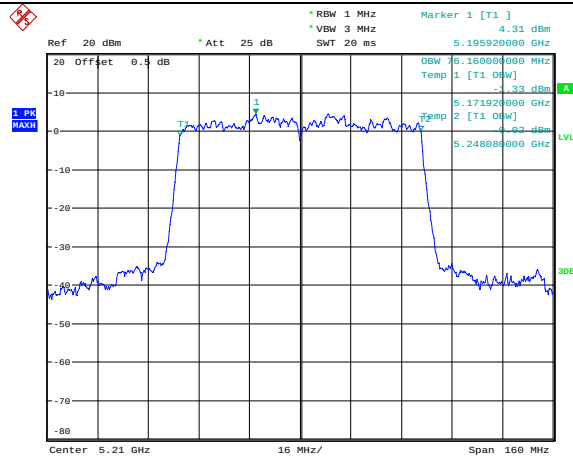
99% Emission Bandwidth

802.11ac vht40
Lowest Channel

Date: 26.MAY.2022 10:16:41

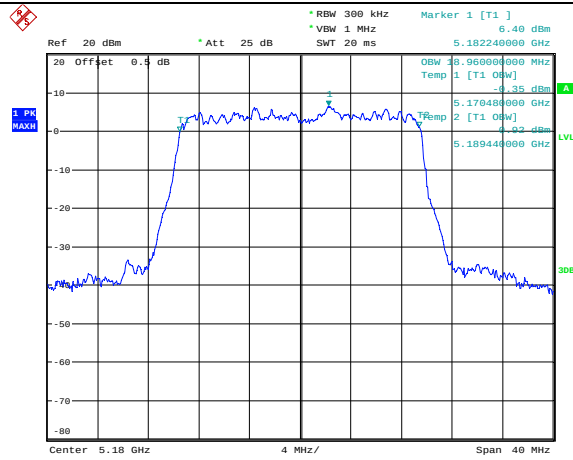
802.11ac vht40
Highest Channel

Date: 26.MAY.2022 10:17:34

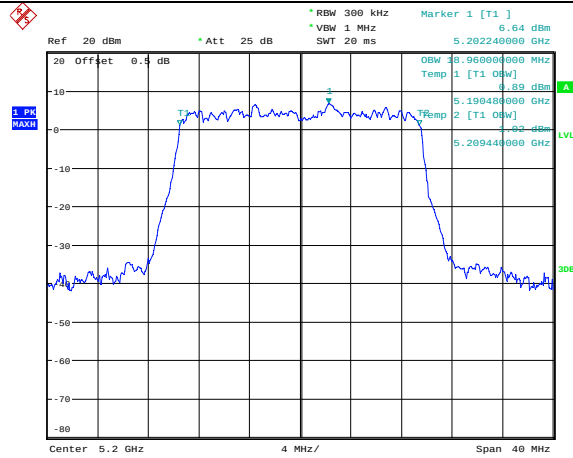
802.11ac vht80
Middle Channel

Date: 26.MAY.2022 10:26:44

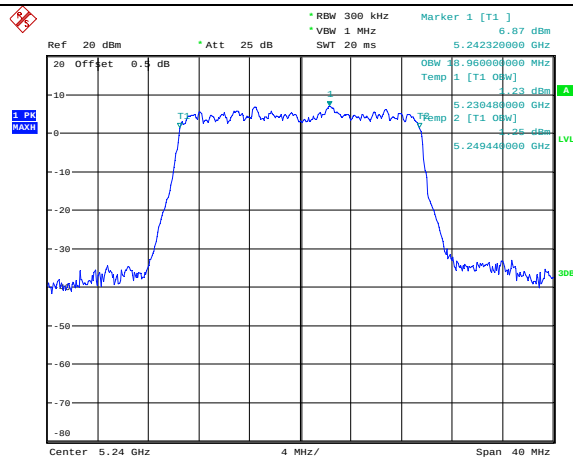
99% Emission Bandwidth

802.11ax hew20
Lowest Channel

Date: 25.MAY.2022 21:15:46

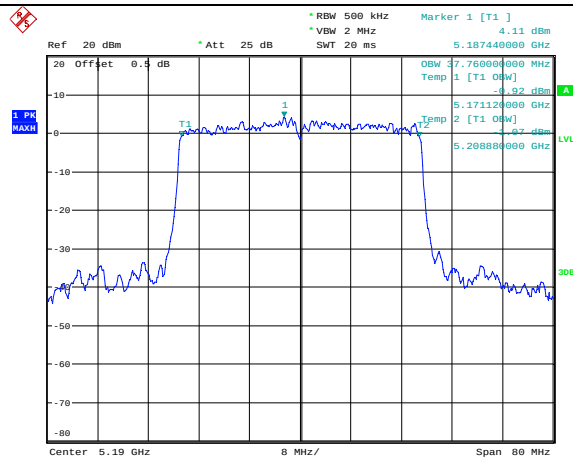
802.11ax hew20
Middle Channel

Date: 25.MAY.2022 21:17:00

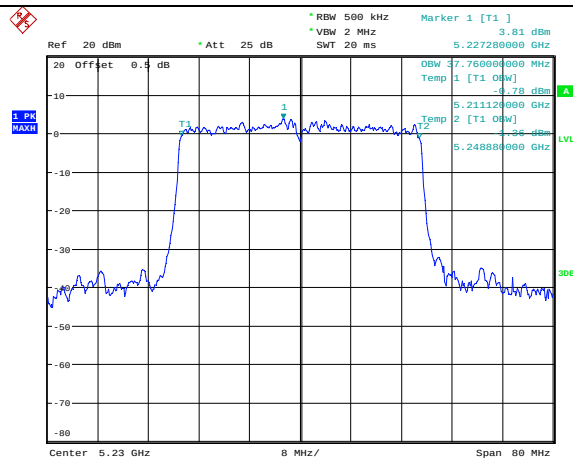
802.11ax hew20
Highest Channel

Date: 25.MAY.2022 21:18:05

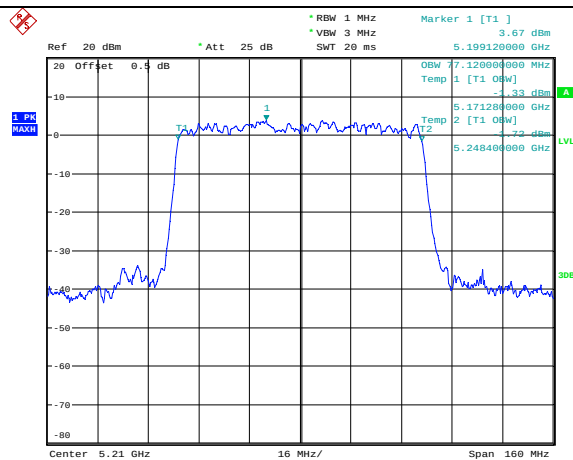
99% Emission Bandwidth

802.11ax hew40
Lowest Channel

Date: 25.MAY.2022 21:26:24

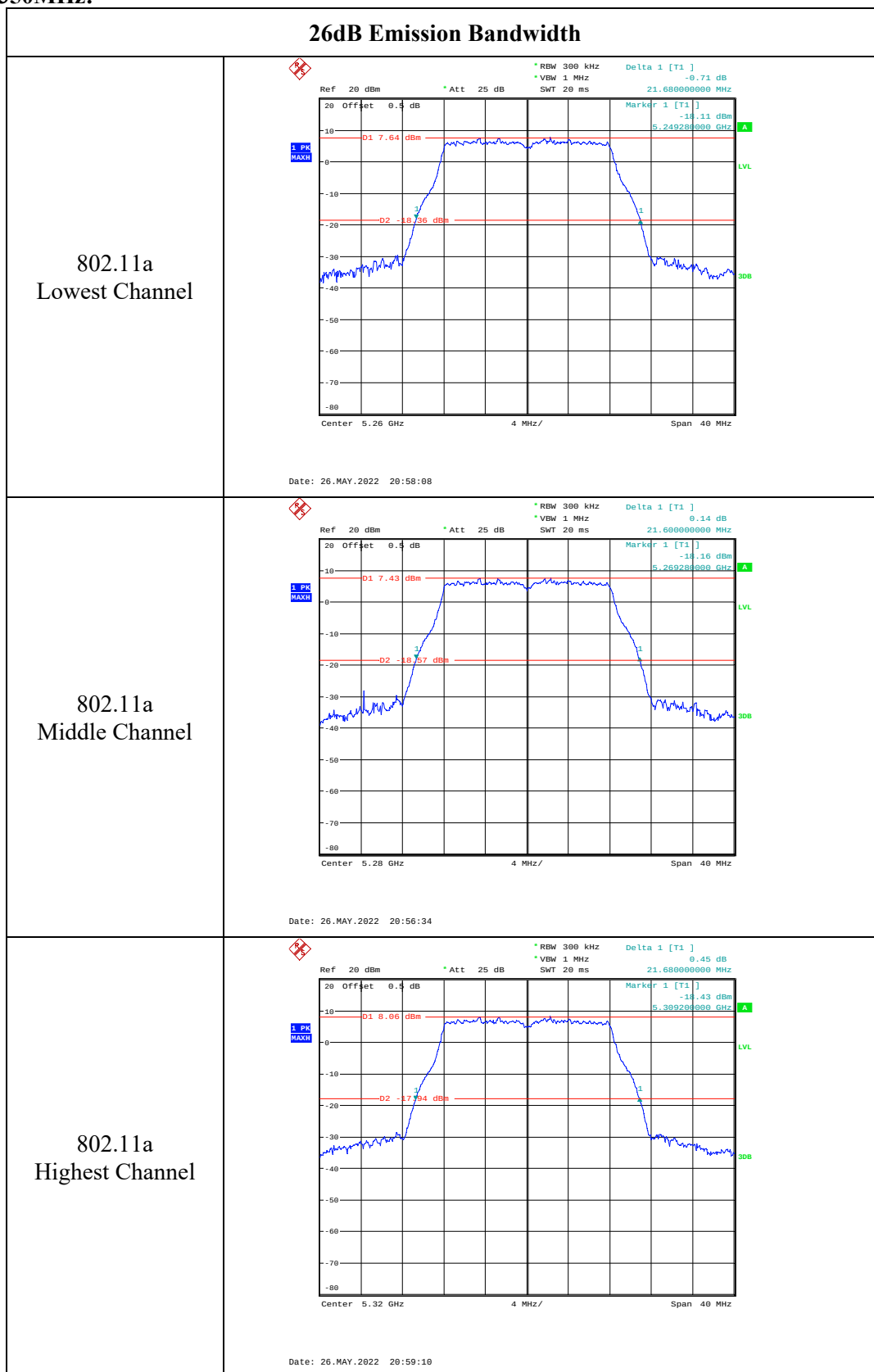
802.11ax hew40
Highest Channel

Date: 25.MAY.2022 21:25:30

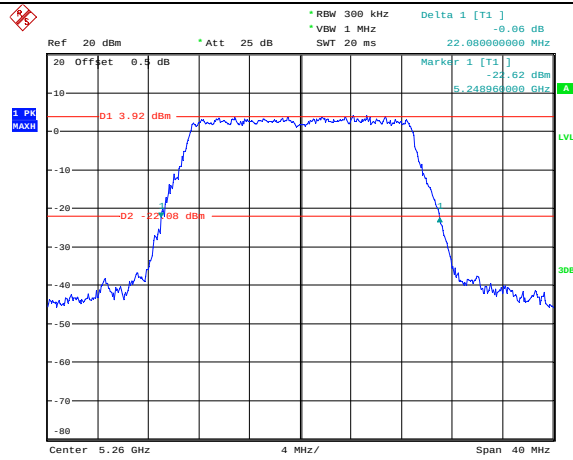
802.11ax hew80
Middle Channel

Date: 25.MAY.2022 21:28:21

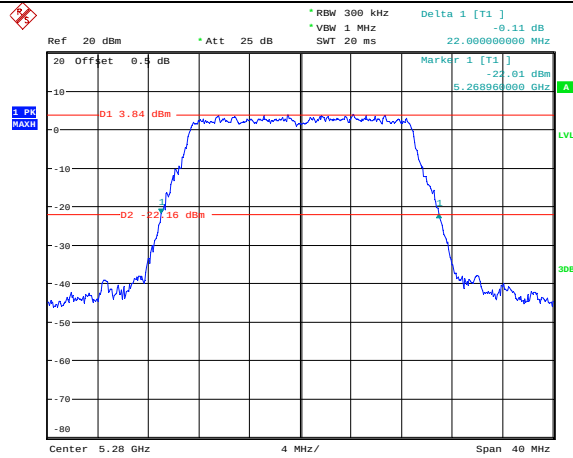
5250-5350MHz:



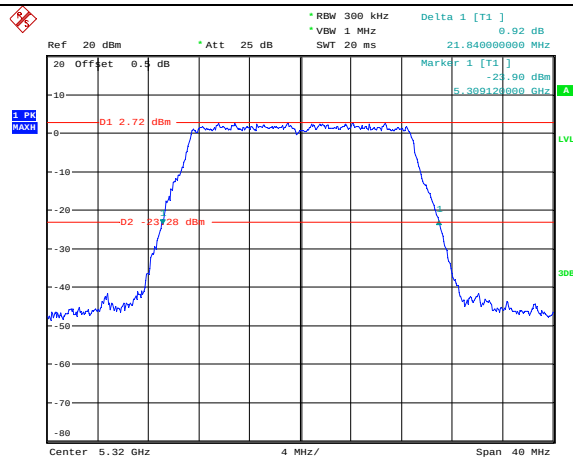
26dB Emission Bandwidth

802.11n ht20
Lowest Channel

Date: 26.MAY.2022 20:01:50

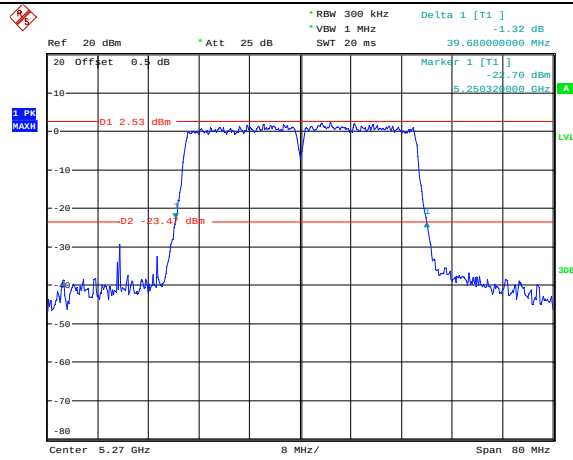
802.11n ht20
Middle Channel

Date: 26.MAY.2022 20:02:38

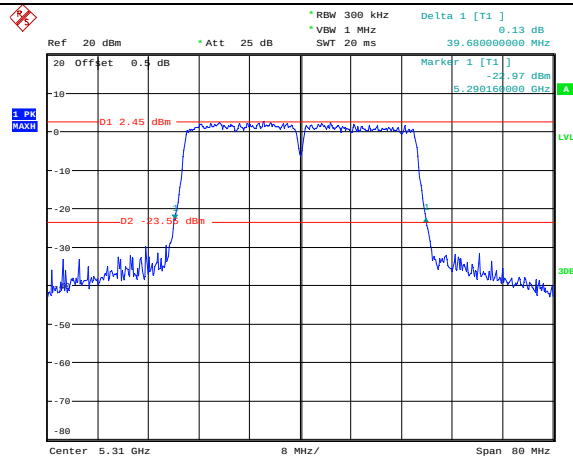
802.11n ht20
Highest Channel

Date: 26.MAY.2022 20:43:16

26dB Emission Bandwidth

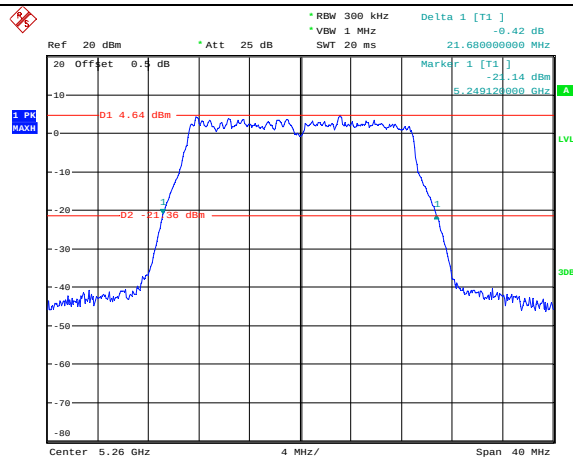
802.11n ht40
Lowest Channel

Date: 26.MAY.2022 10:45:17

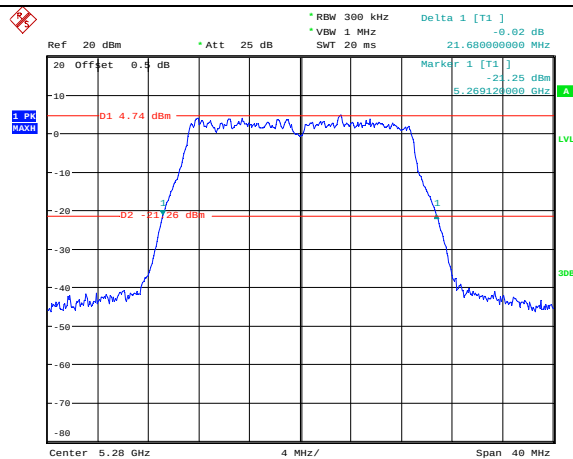
802.11n ht40
Highest Channel

Date: 26.MAY.2022 10:46:32

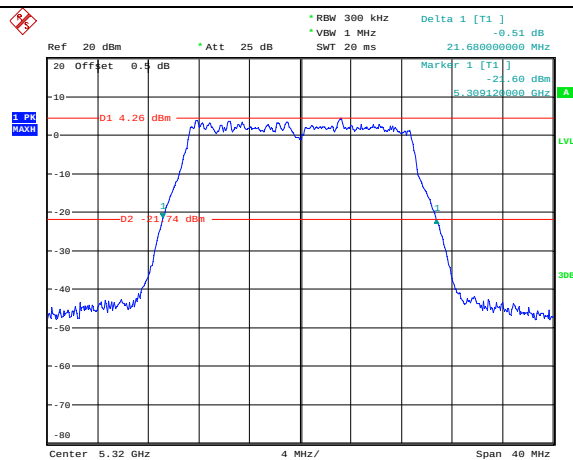
26dB Emission Bandwidth

802.11ac vht20
Lowest Channel

Date: 26.MAY.2022 19:40:18

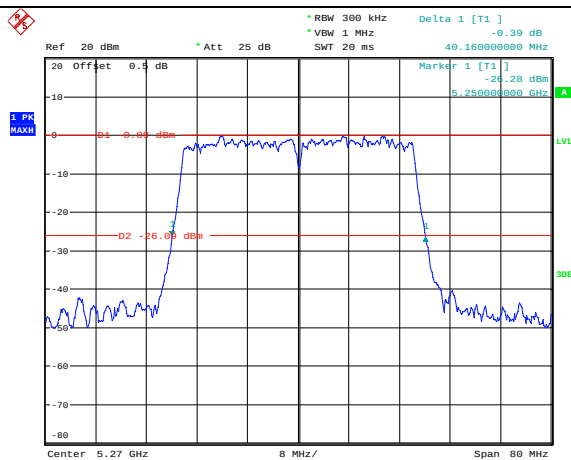
802.11ac vht20
Middle Channel

Date: 26.MAY.2022 19:41:03

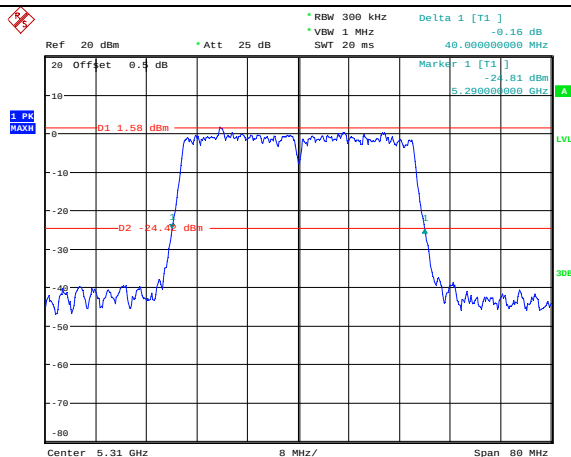
802.11ac vht20
Highest Channel

Date: 26.MAY.2022 19:39:27

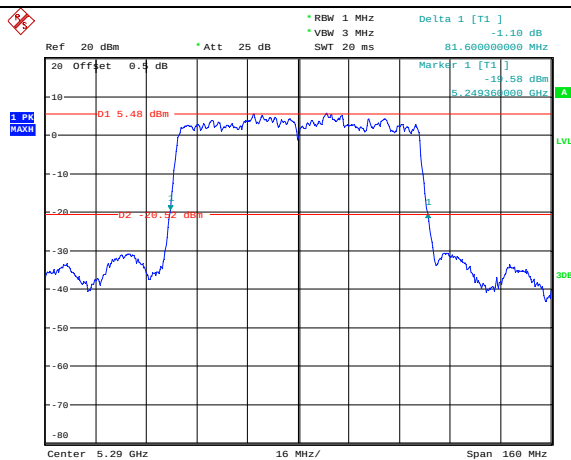
26dB Emission Bandwidth

802.11ac vht40
Lowest Channel

Date: 26.MAY.2022 11:00:32

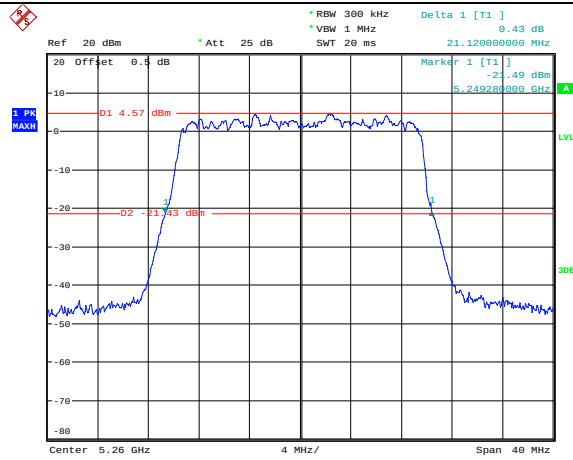
802.11ac vht40
Highest Channel

Date: 26.MAY.2022 11:01:33

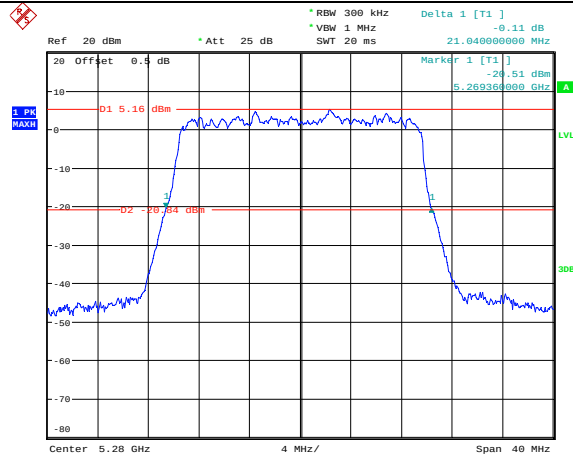
802.11ac vht80
Middle Channel

Date: 26.MAY.2022 10:28:17

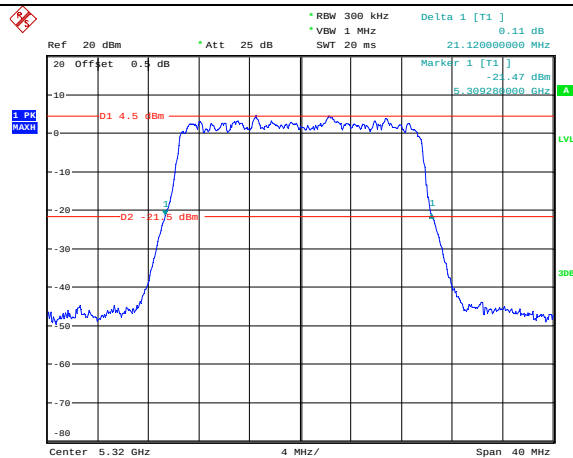
26dB Emission Bandwidth

802.11ax hew20
Lowest Channel

Date: 26.MAY.2022 21:14:14

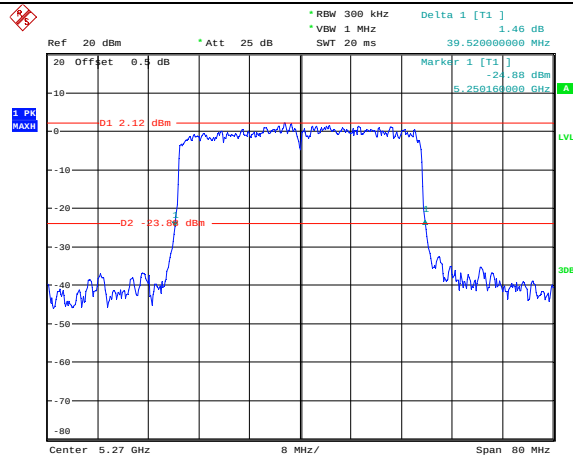
802.11ax hew20
Middle Channel

Date: 26.MAY.2022 21:15:00

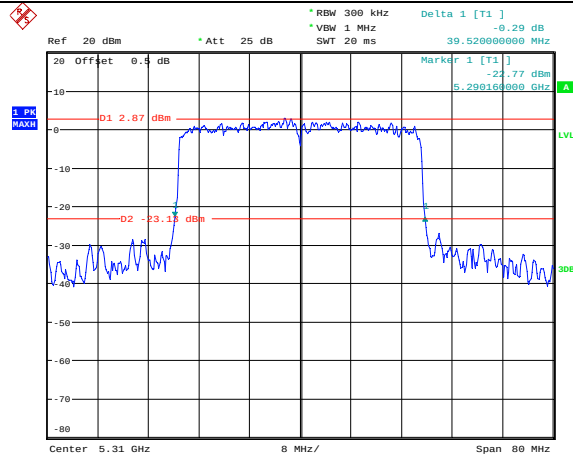
802.11ax hew20
Highest Channel

Date: 26.MAY.2022 21:16:03

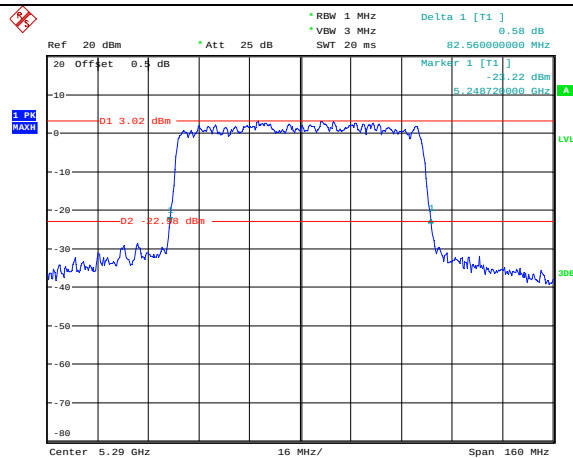
26dB Emission Bandwidth

802.11ax hew40
Lowest Channel

Date: 25.MAY.2022 21:40:22

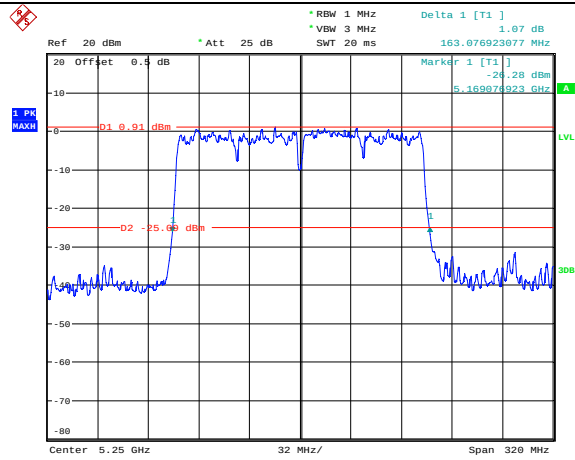
8802.11ax hew40
Highest Channel

Date: 25.MAY.2022 21:41:24

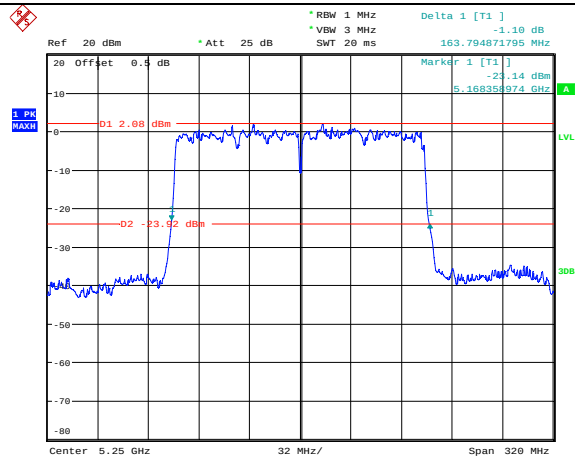
802.11ax hew80
Middle Channel

Date: 25.MAY.2022 21:45:53

26dB Emission Bandwidth

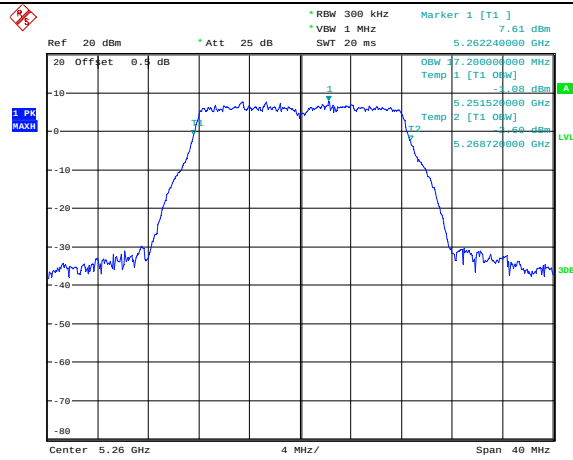
802.11ac vht160
Middle Channel

Date: 26.MAY.2022 16:43:06

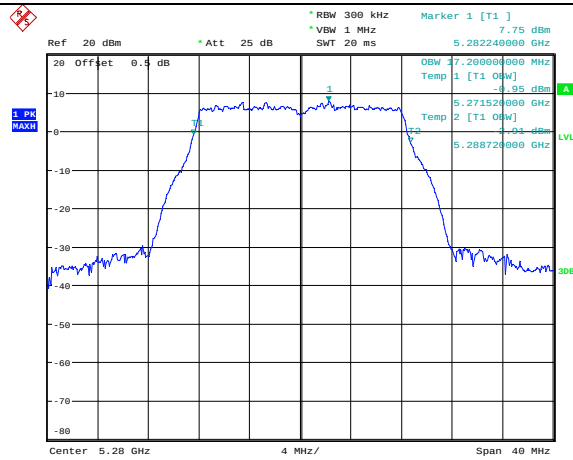
802.11ax hew160
Middle Channel

Date: 26.MAY.2022 16:39:27

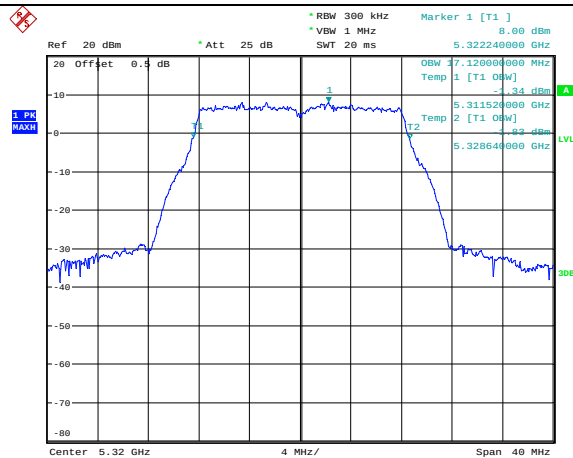
99% Emission Bandwidth

802.11a
Lowest Channel

Date: 26.MAY.2022 20:58:25

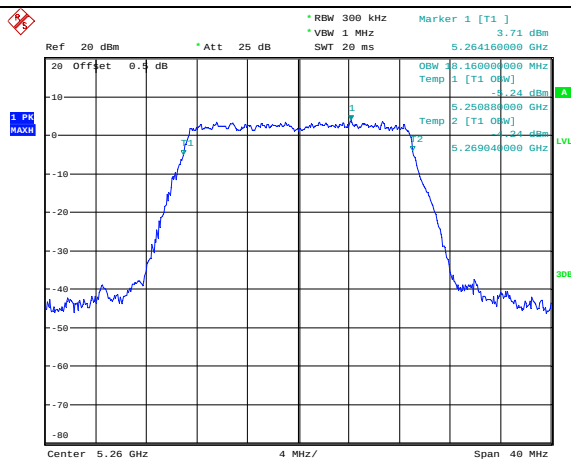
802.11a
Middle Channel

Date: 26.MAY.2022 20:57:40

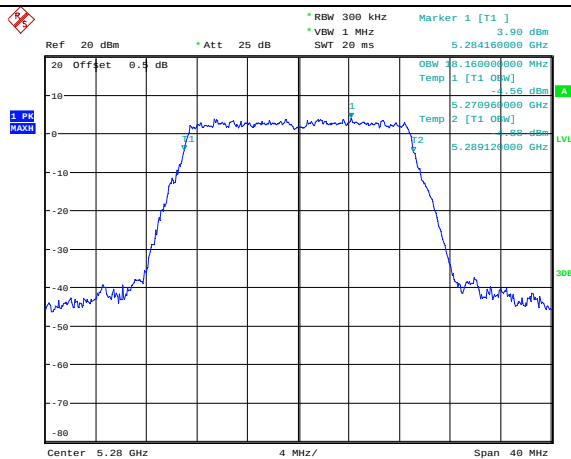
802.11a
Highest Channel

Date: 26.MAY.2022 21:00:38

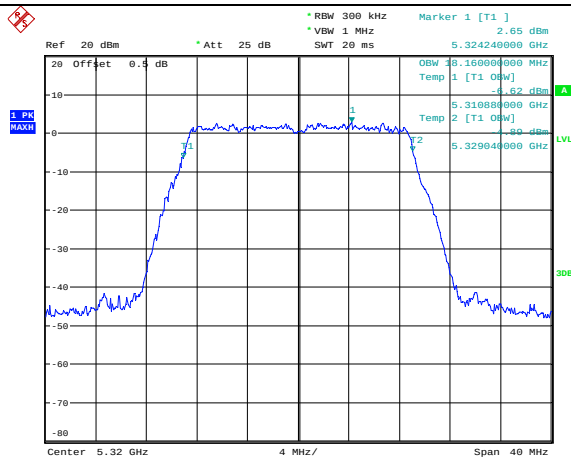
99% Emission Bandwidth

802.11n ht20
Lowest Channel

Date: 26.MAY.2022 20:02:10

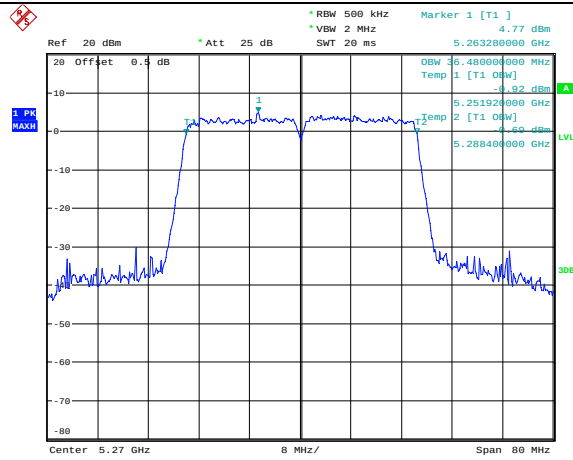
802.11n ht20
Middle Channel

Date: 26.MAY.2022 20:02:59

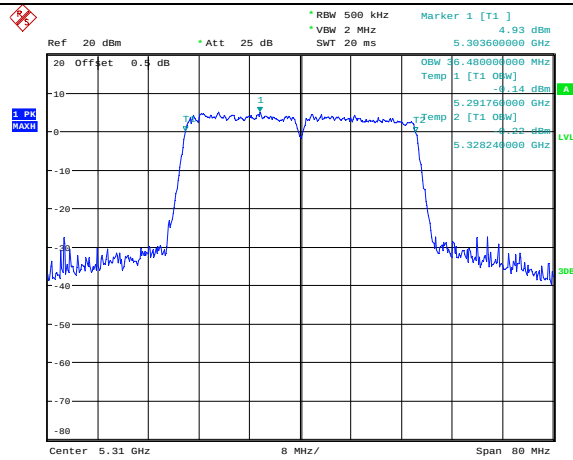
802.11n ht20
Highest Channel

Date: 26.MAY.2022 20:43:43

99% Emission Bandwidth

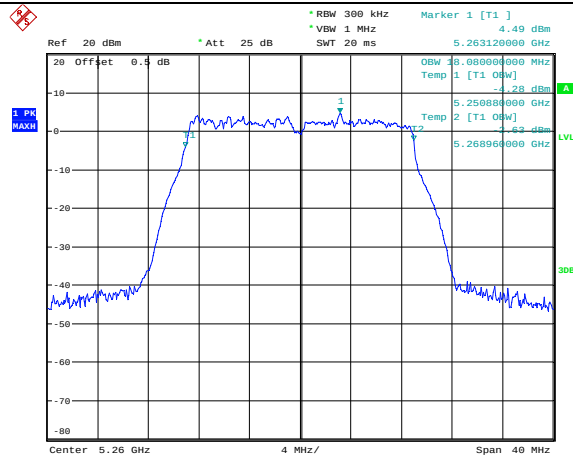
802.11n ht40
Lowest Channel

Date: 26.MAY.2022 10:45:33

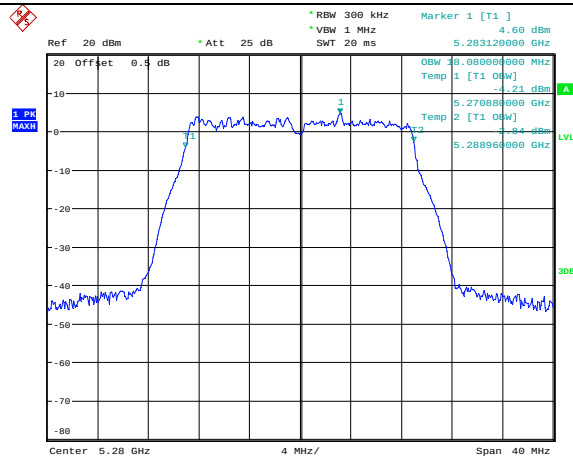
802.11n ht40
Highest Channel

Date: 26.MAY.2022 10:46:48

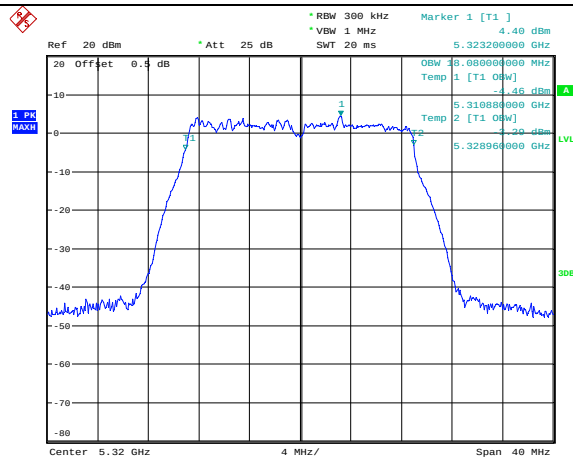
99% Emission Bandwidth

802.11ac vht20
Lowest Channel

Date: 26.MAY.2022 19:40:35

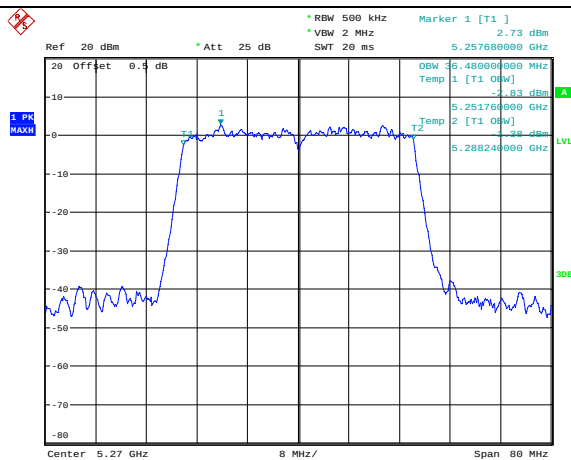
802.11ac vht20
Middle Channel

Date: 26.MAY.2022 19:41:21

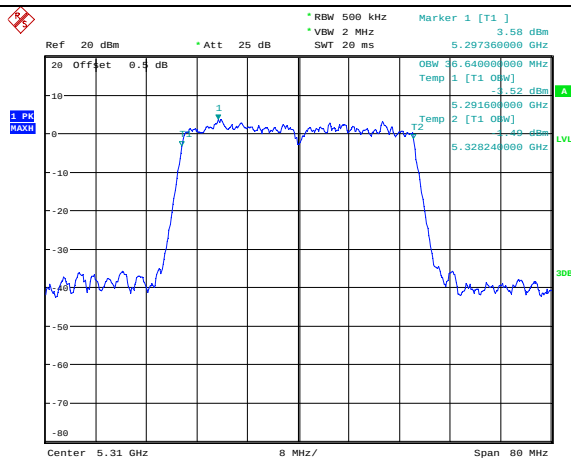
802.11ac vht20
Highest Channel

Date: 26.MAY.2022 19:39:45

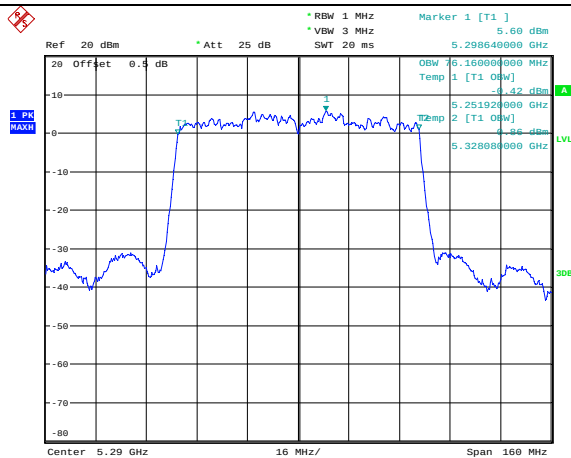
99% Emission Bandwidth

802.11ac vht40
Lowest Channel

Date: 26.MAY.2022 11:00:46

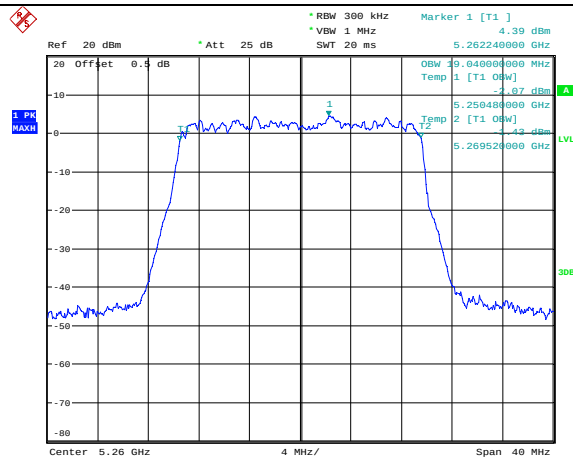
802.11ac vht40
Highest Channel

Date: 26.MAY.2022 11:01:44

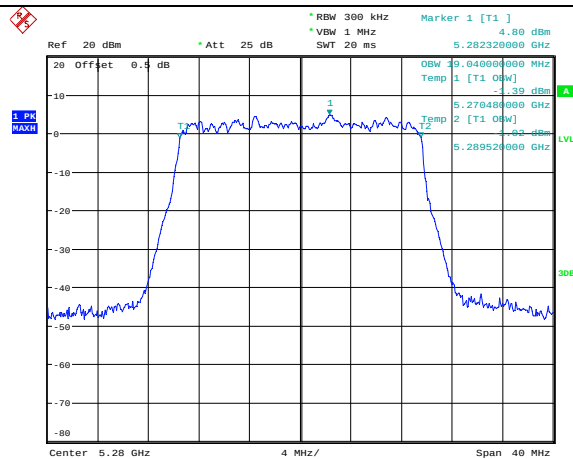
802.11ac vht80
Middle Channel

Date: 26.MAY.2022 10:28:34

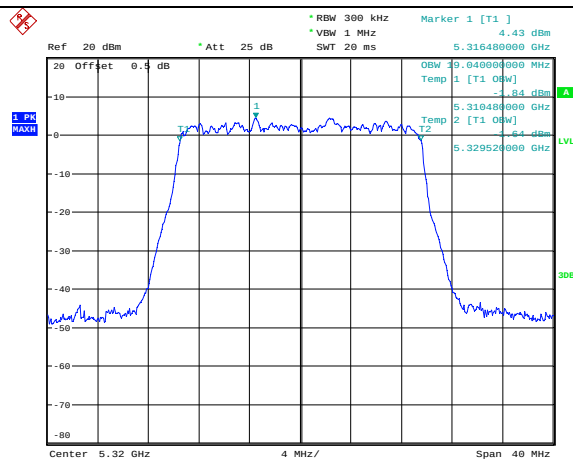
99% Emission Bandwidth

802.11ax hew20
Lowest Channel

Date: 26.MAY.2022 21:14:30

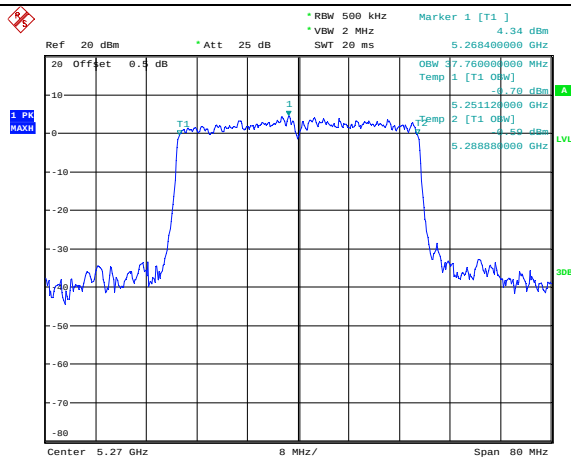
802.11ax hew20
Middle Channel

Date: 26.MAY.2022 21:15:16

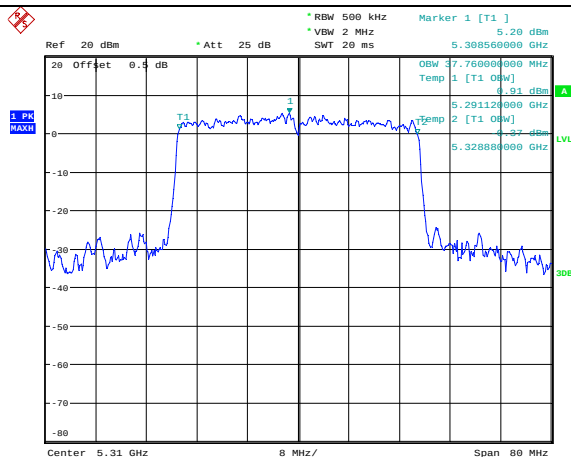
802.11ax hew20
Highest Channel

Date: 26.MAY.2022 21:16:19

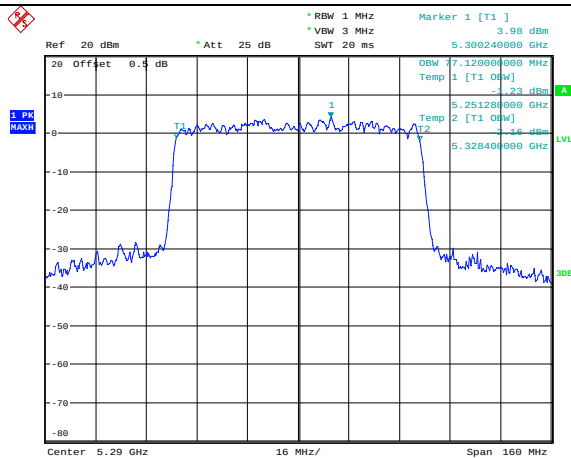
99% Emission Bandwidth

802.11ax hew40
Lowest Channel

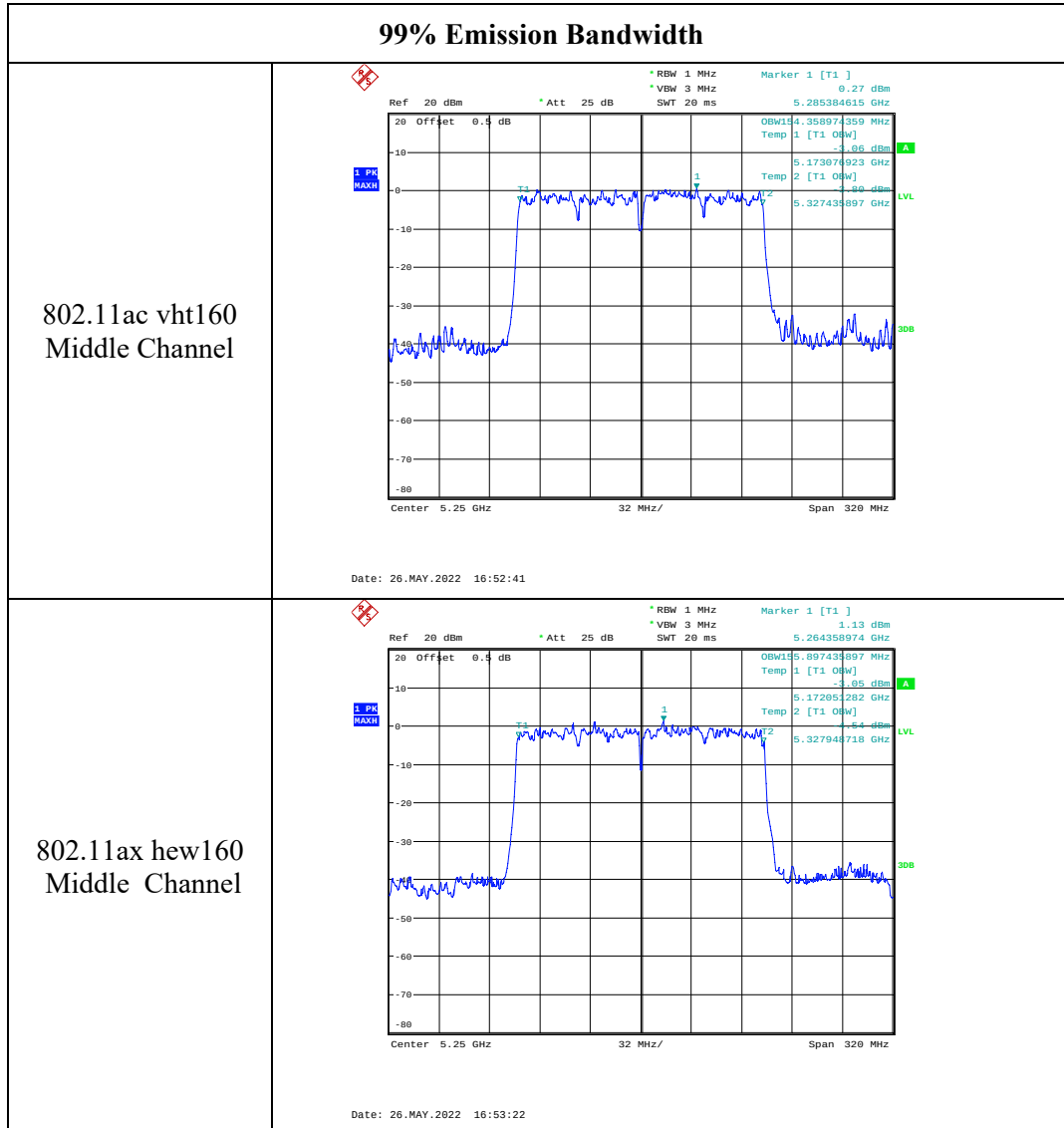
Date: 25.MAY.2022 21:40:37

802.11ax hew40
Highest Channel

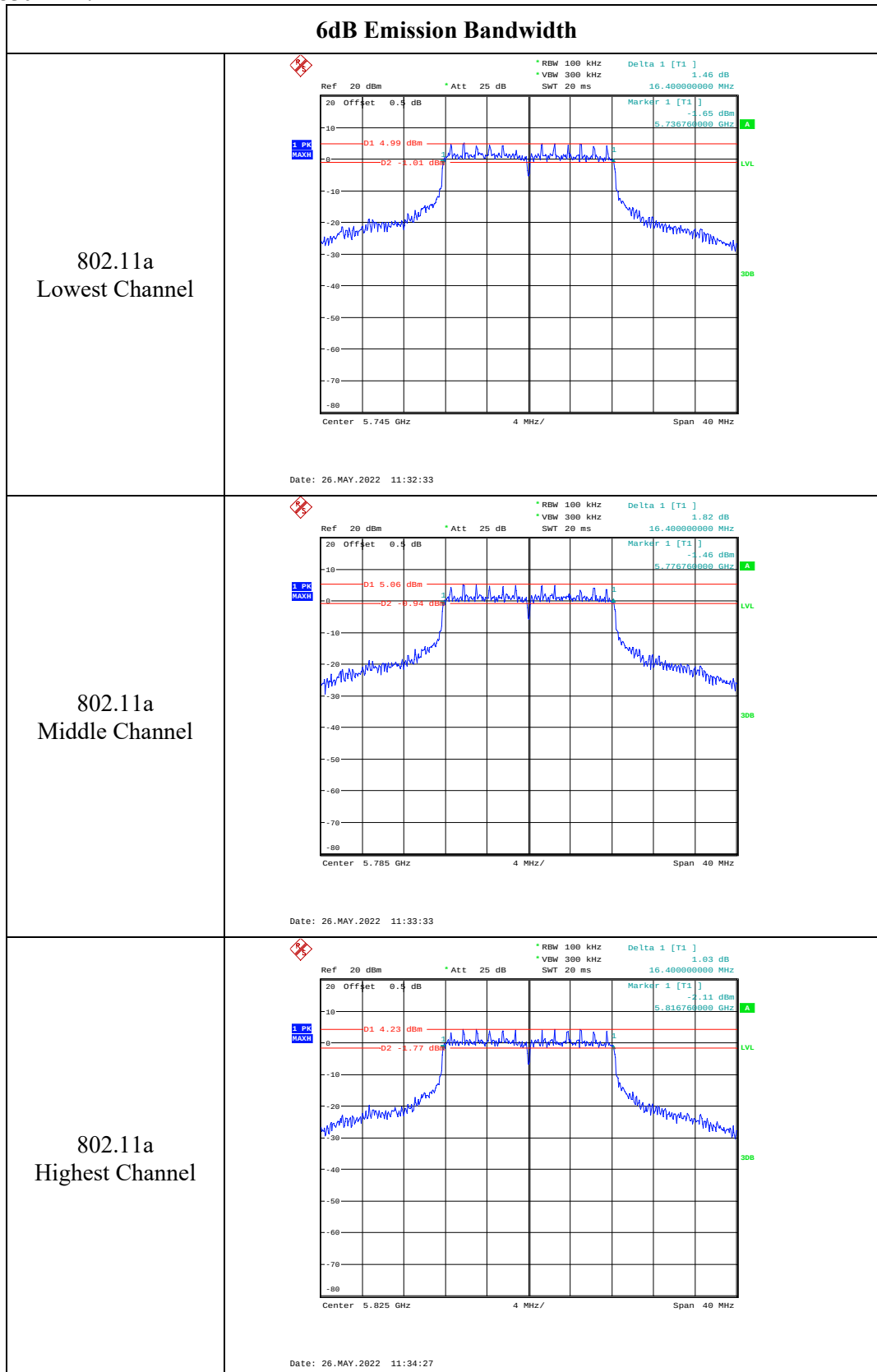
Date: 25.MAY.2022 21:41:40

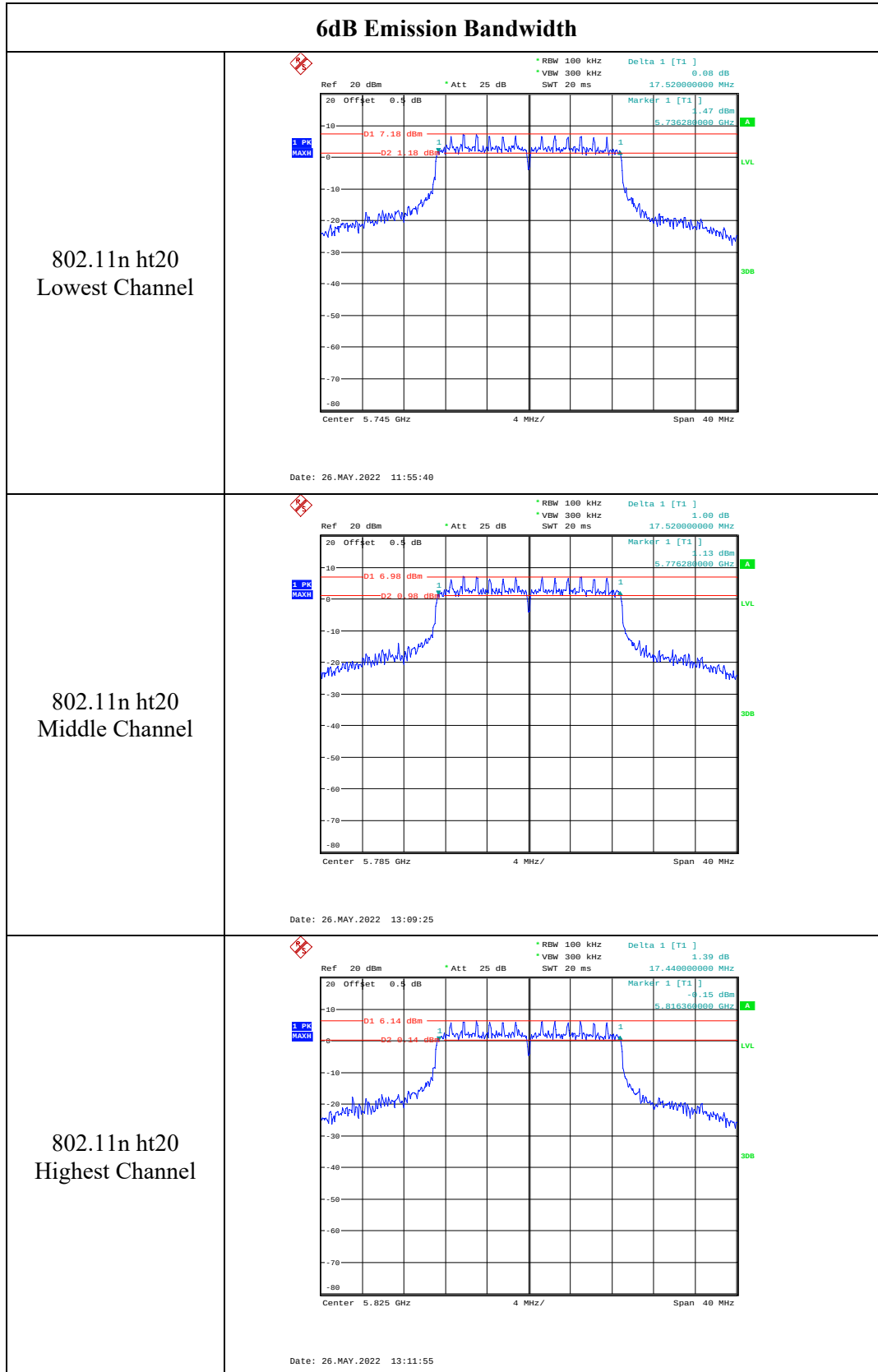
802.11ax hew80
Middle Channel

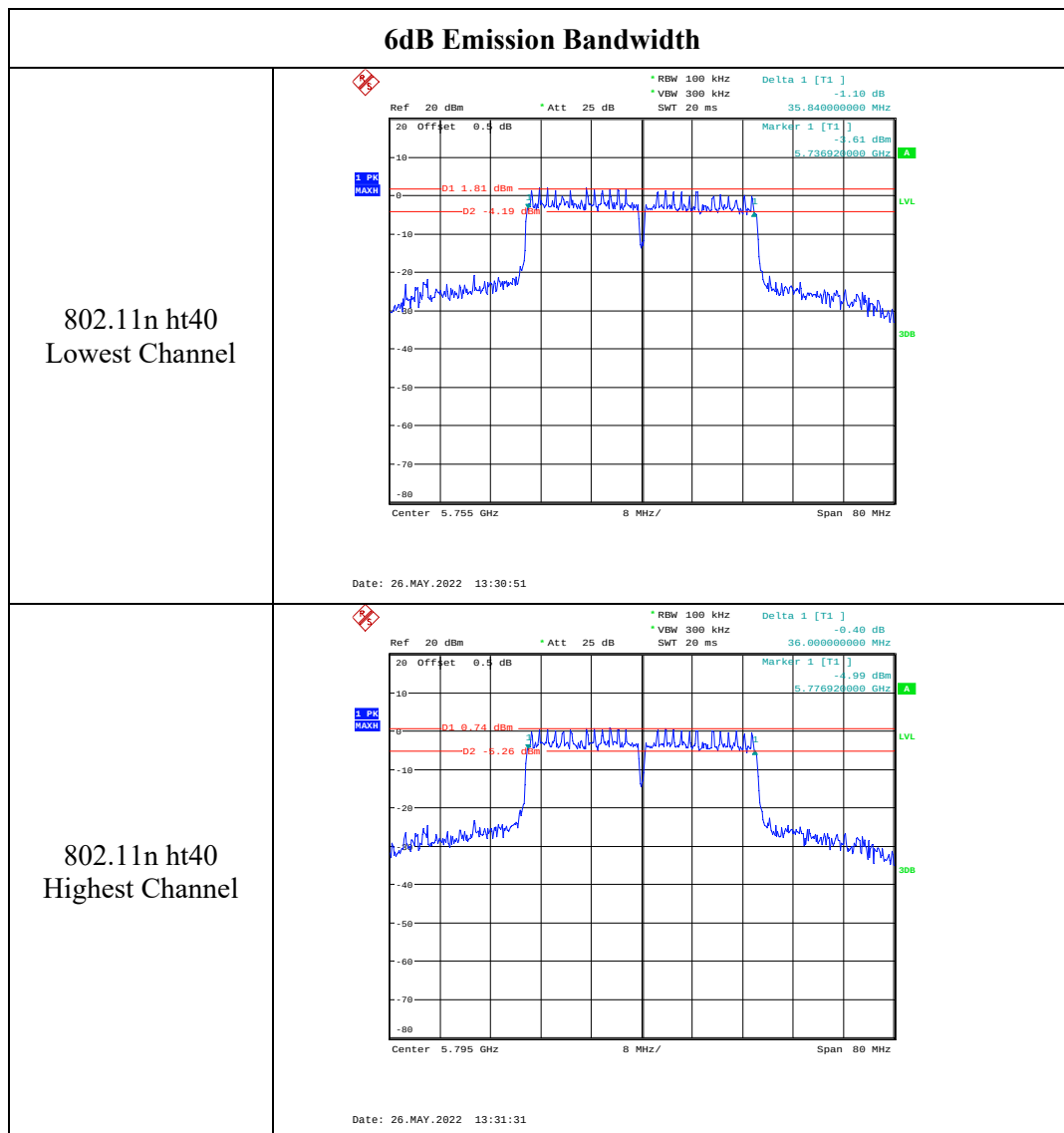
Date: 25.MAY.2022 21:46:08

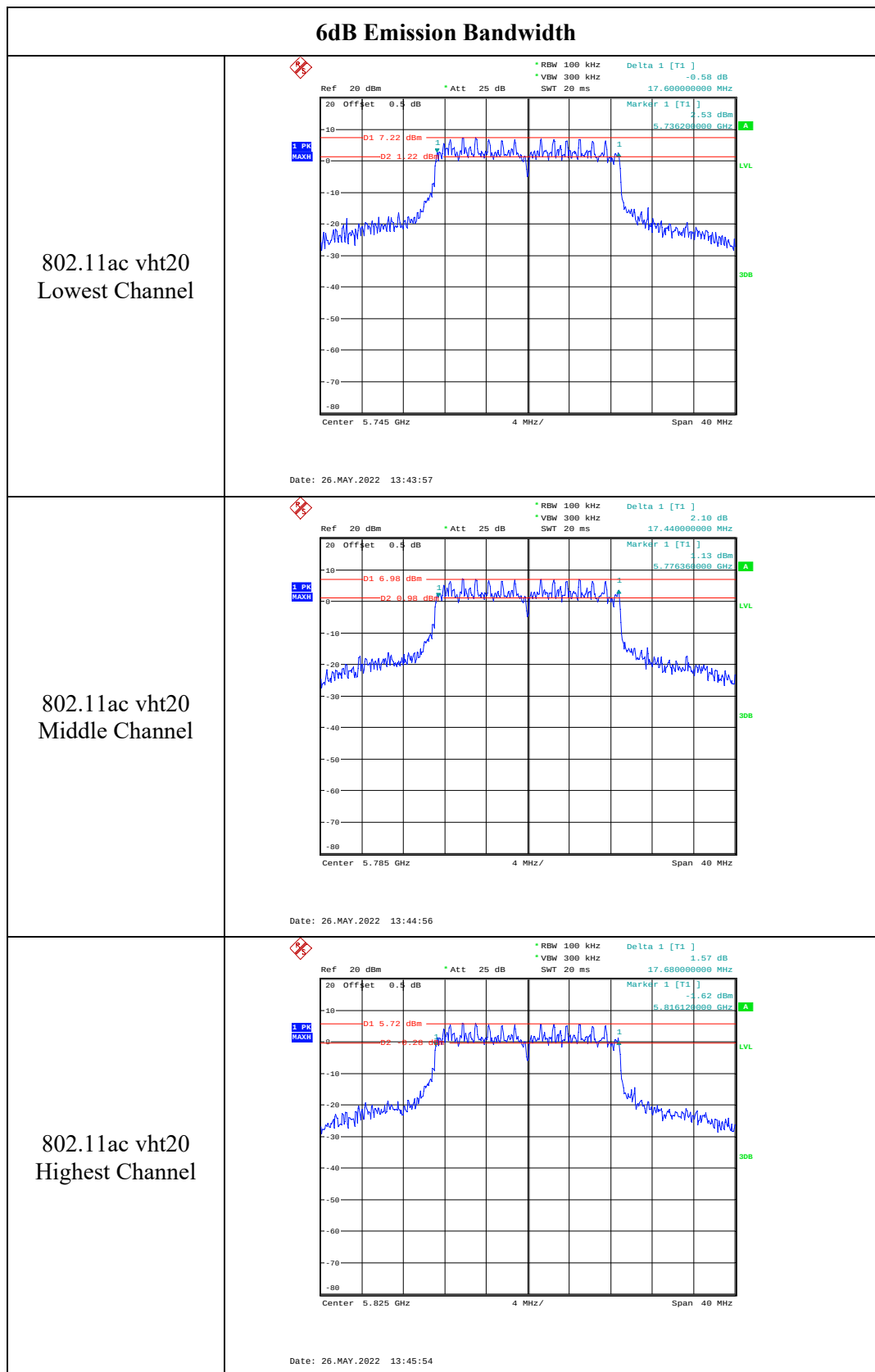


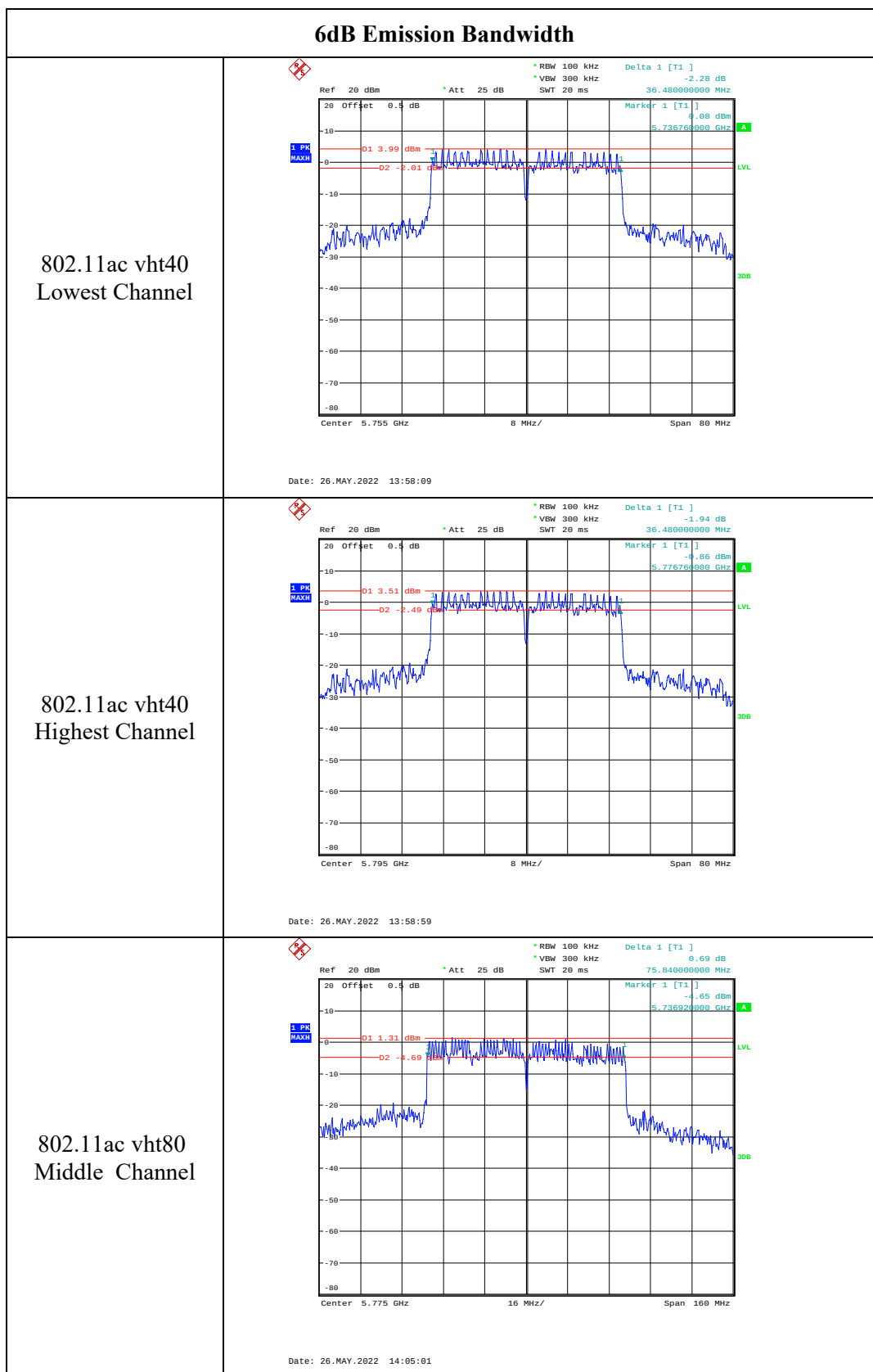
5725-5850MHz:



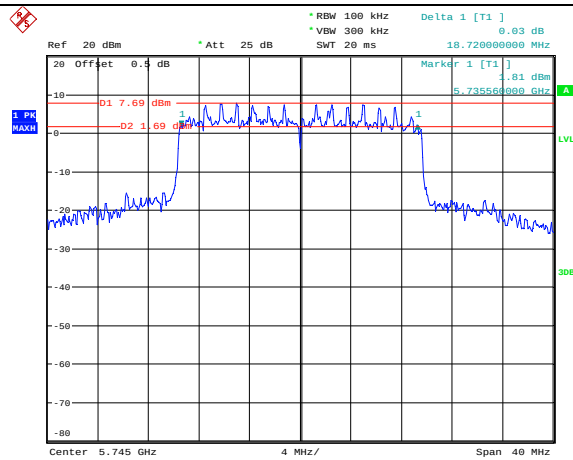




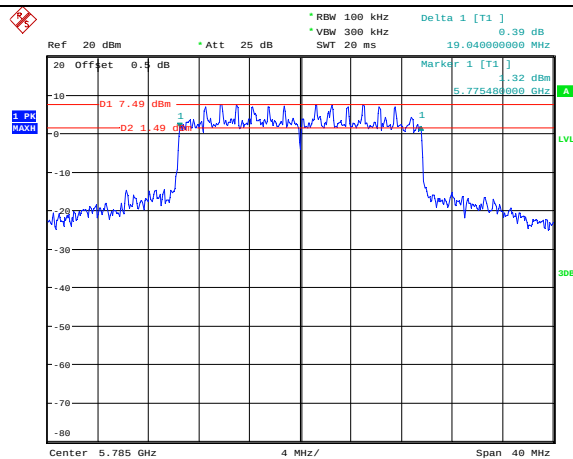




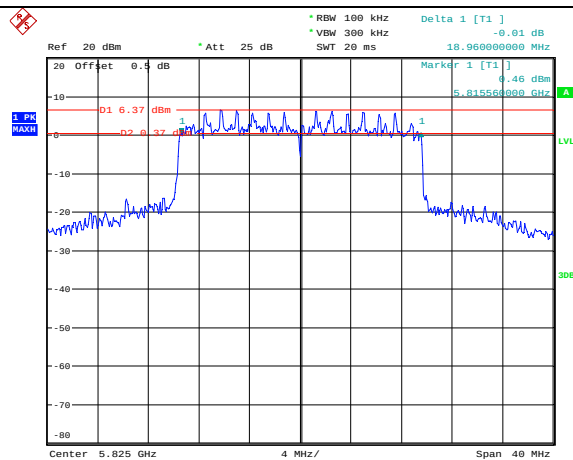
6dB Emission Bandwidth

802.11ax hew20
Lowest Channel

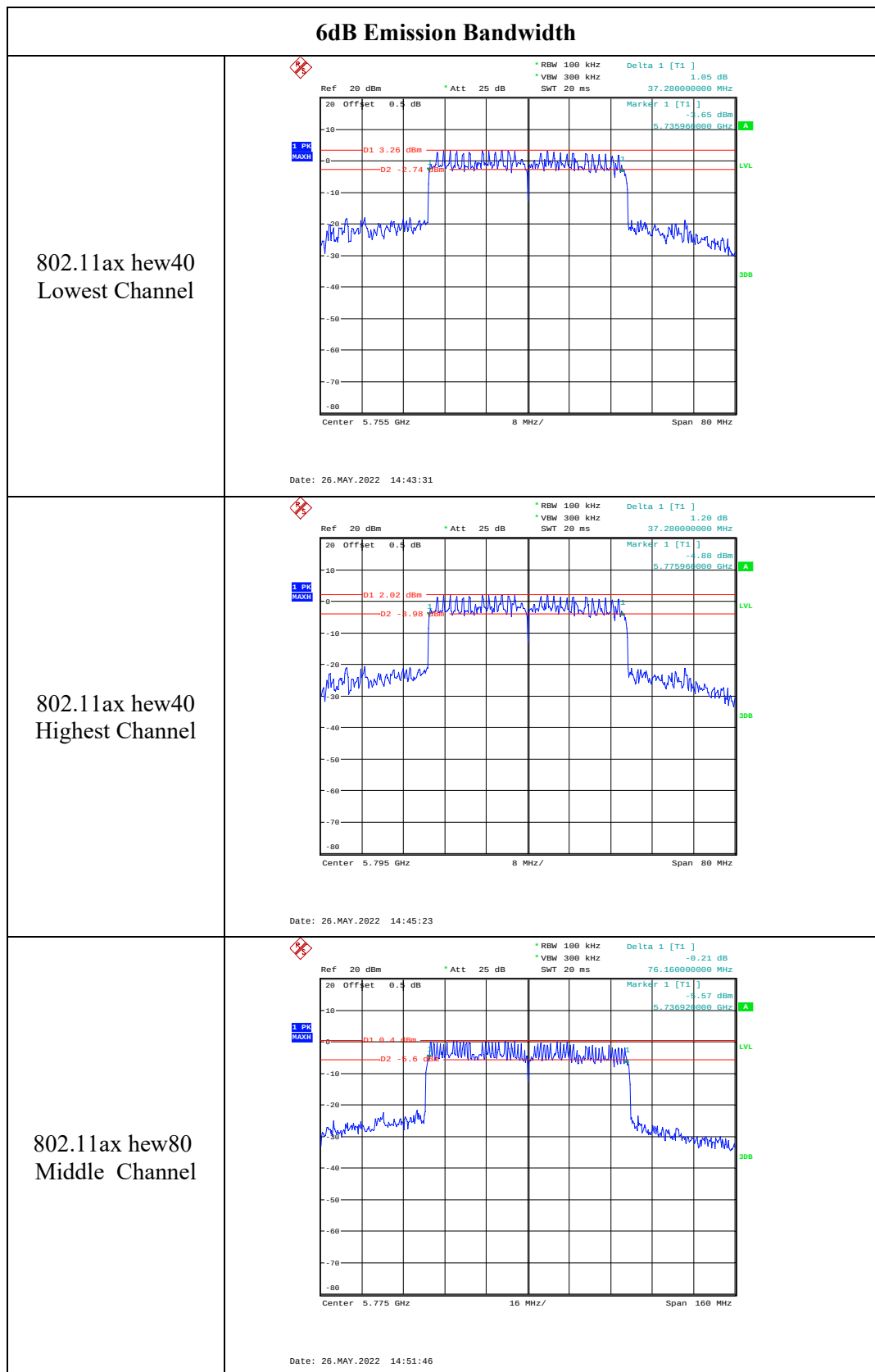
Date: 26.MAY.2022 14:34:55

802.11ax hew20
Middle Channel

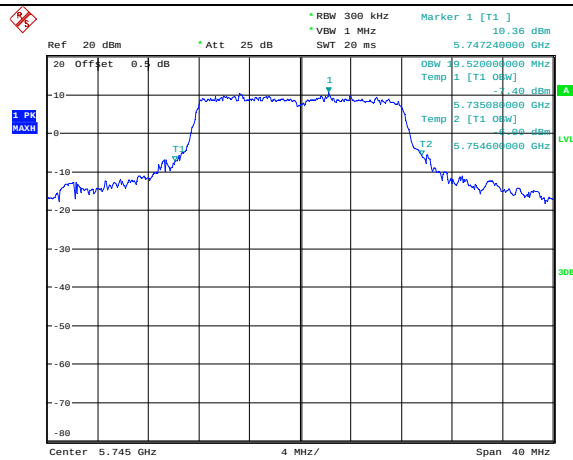
Date: 26.MAY.2022 14:36:11

802.11ax hew20
Highest Channel

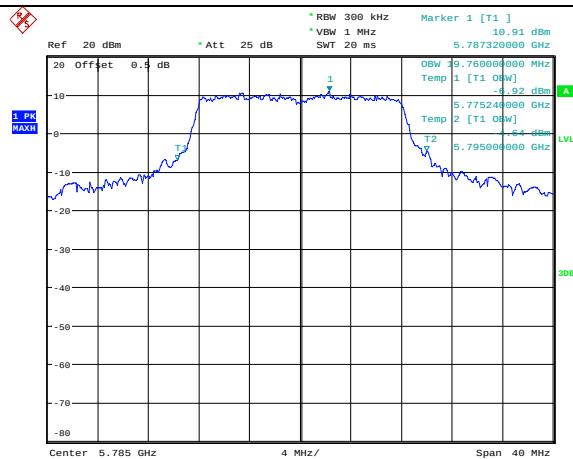
Date: 26.MAY.2022 14:37:16



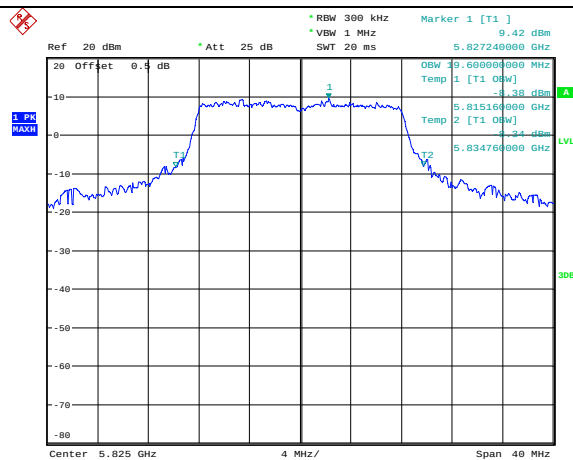
99% Emission Bandwidth

802.11a
Lowest Channel

Date: 26.MAY.2022 11:50:21

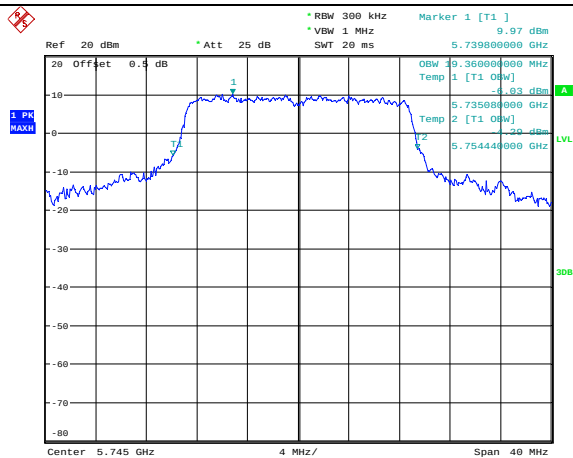
802.11a
Middle Channel

Date: 26.MAY.2022 13:10:46

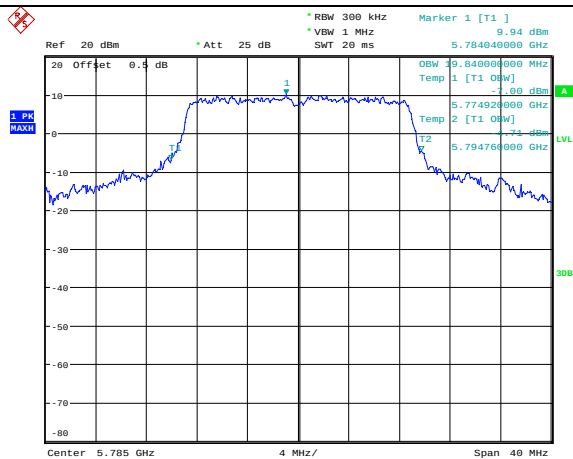
802.11a
Highest Channel

Date: 26.MAY.2022 11:51:38

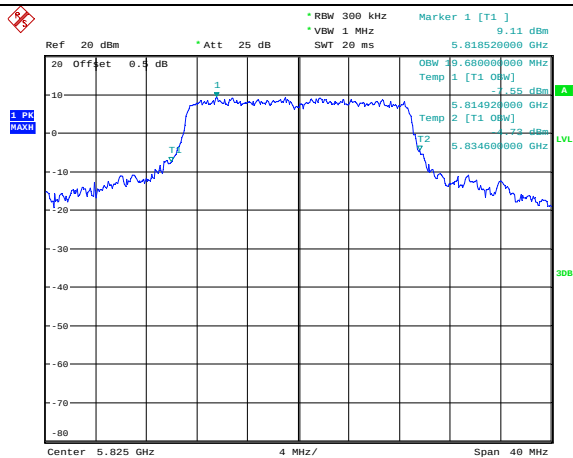
99% Emission Bandwidth

802.11n ht20
Lowest Channel

Date: 26.MAY.2022 11:55:56

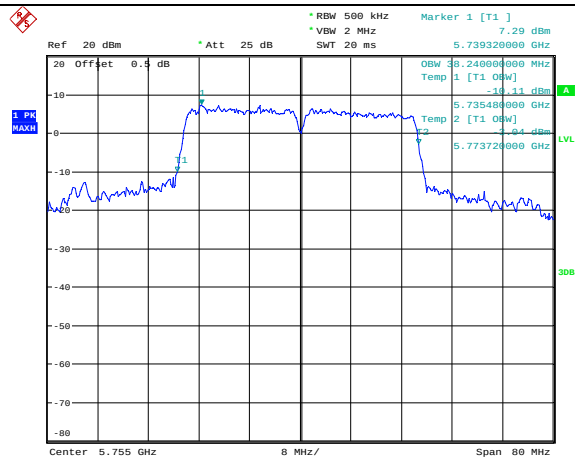
802.11n ht20
Middle Channel

Date: 26.MAY.2022 13:09:41

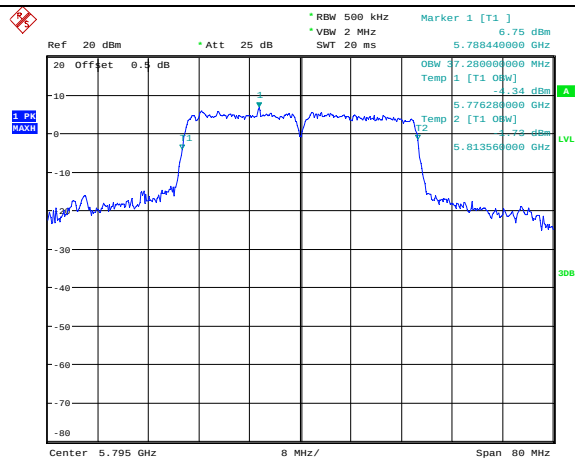
802.11n ht20
Highest Channel

Date: 26.MAY.2022 13:12:11

99% Emission Bandwidth

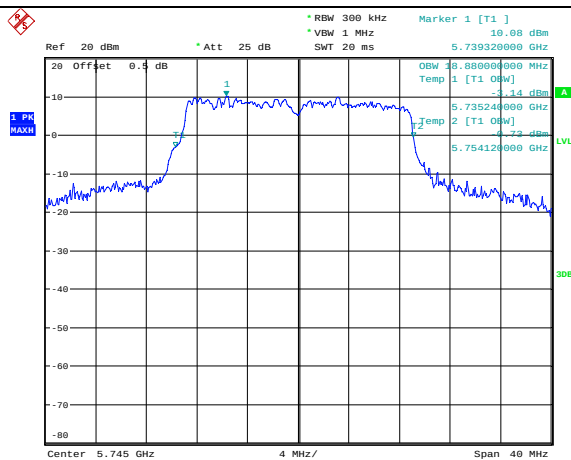
802.11n ht40
Lowest Channel

Date: 26.MAY.2022 13:30:14

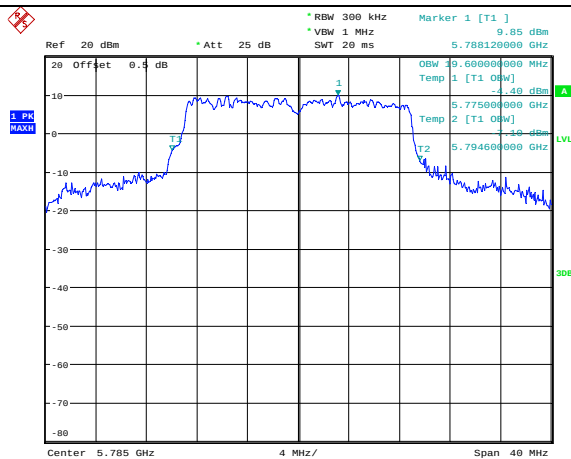
802.11n ht40
Highest Channel

Date: 26.MAY.2022 13:31:43

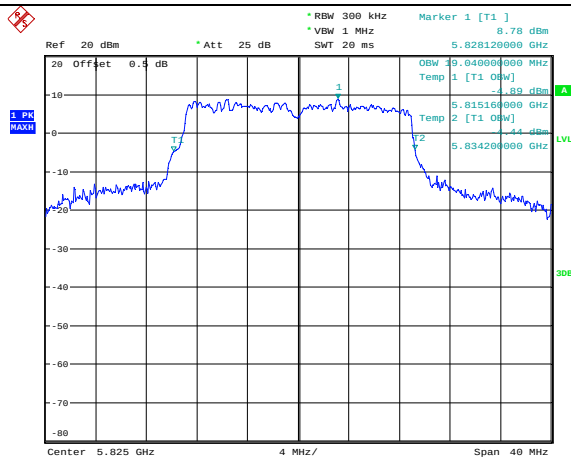
99% Emission Bandwidth

802.11ac vht20
Lowest Channel

Date: 26.MAY.2022 13:44:13

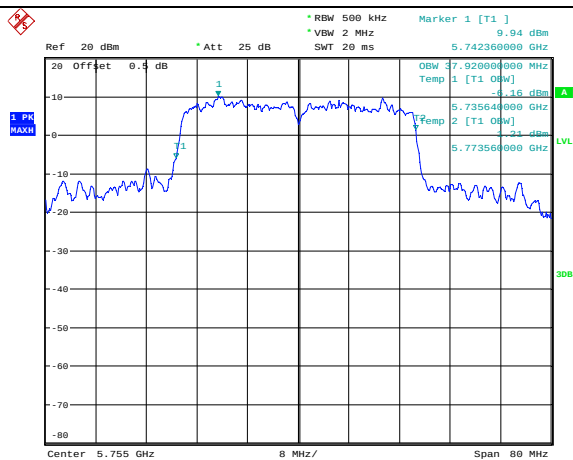
802.11ac vht20
Middle Channel

Date: 26.MAY.2022 13:45:16

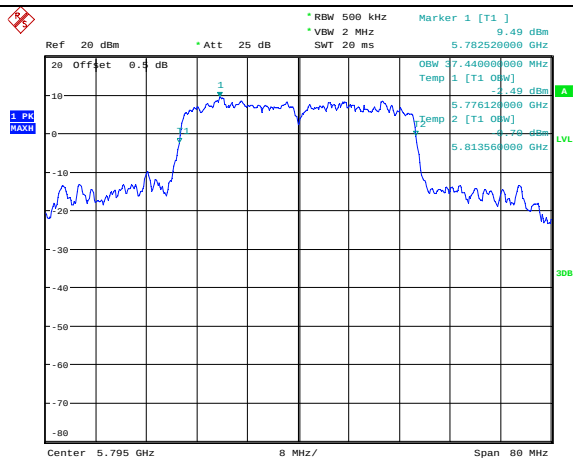
802.11ac vht20
Highest Channel

Date: 26.MAY.2022 13:46:09

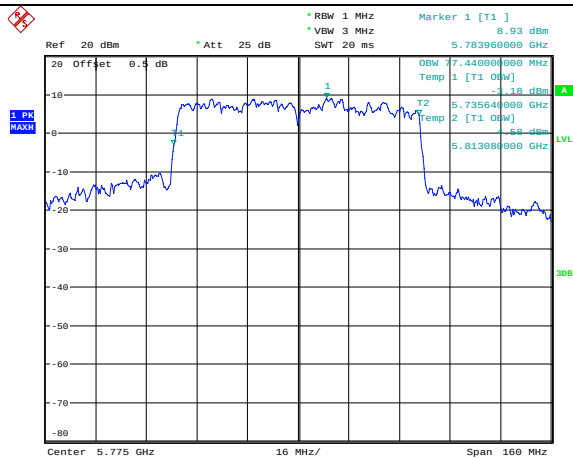
99% Emission Bandwidth

802.11ac vht40
Lowest Channel

Date: 26.MAY.2022 13:58:24

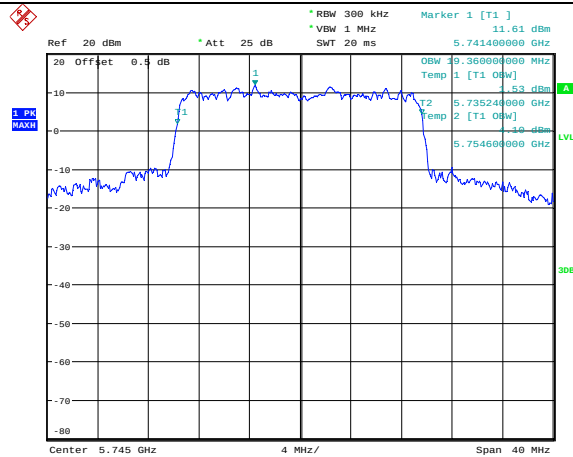
802.11ac vht40
Highest Channel

Date: 26.MAY.2022 13:59:14

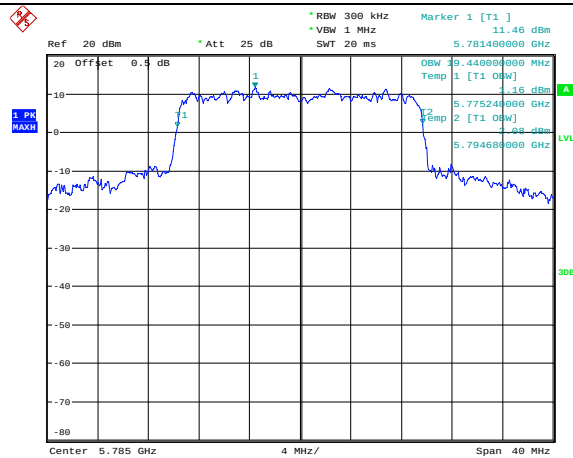
802.11ac vht80
Middle Channel

Date: 26.MAY.2022 14:06:18

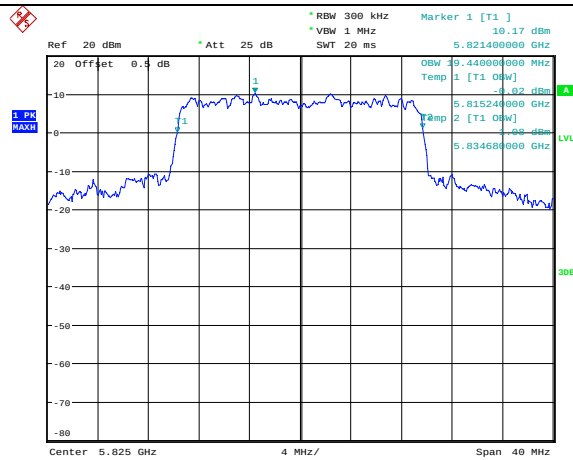
99% Emission Bandwidth

802.11ax hew20
Lowest Channel

Date: 26.MAY.2022 14:35:15

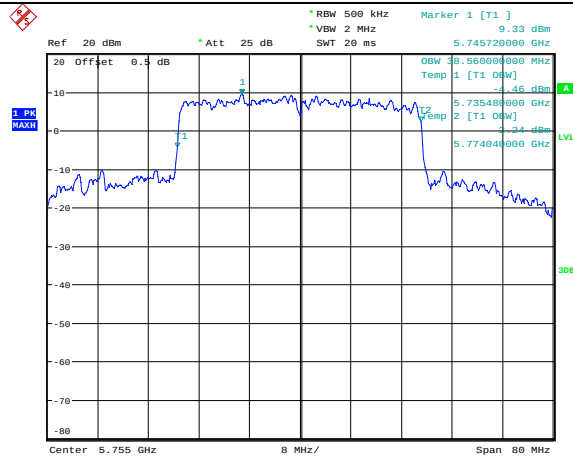
802.11ax hew20
Middle Channel

Date: 26.MAY.2022 14:36:30

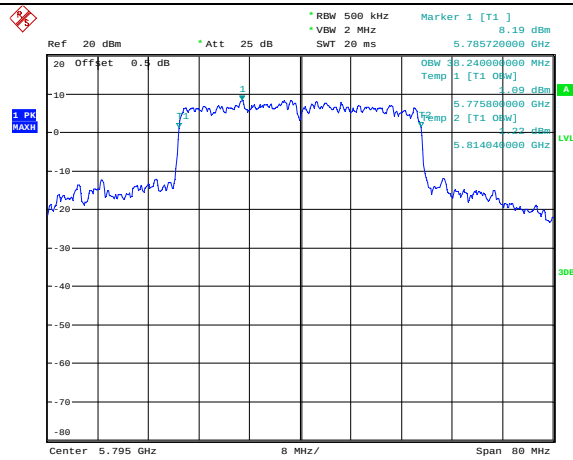
802.11ax hew20
Highest Channel

Date: 26.MAY.2022 14:37:28

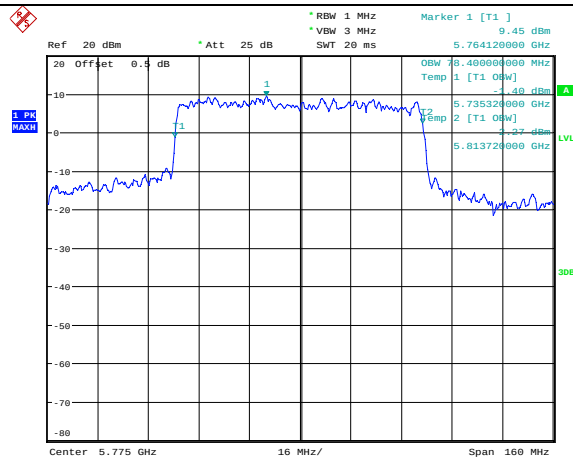
99% Emission Bandwidth

802.11ax hew40
Lowest Channel

Date: 26.MAY.2022 14:44:12

802.11ax hew40
Highest Channel

Date: 26.MAY.2022 14:45:37

802.11ax hew80
Middle Channel

Date: 26.MAY.2022 14:51:59

4.4 Maximum Conducted Output Power:

Serial Number:	CR22020001-RF-S1	Test Date:	2022-05-26
Test Site:	RF	Test Mode:	Transmitting
Tester:	Julie Tan	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.7	Relative Humidity: (%)	55	ATM Pressure: (kPa)	100.1
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	USB Wideband Power Sensor	U2021XA	MY54080015	2021-07-22	2022-07-21
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A
YINSAIGE	Coaxial Cable	LMR300	NJ0100002	Each time	N/A

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	RU Config.	Max. Conducted Average Output Power (dBm)				
			Chain 0	Chain 1	Total	Limit For Non-beamforming	Limit For Beamforming
802.11a	5180	N/A	14.34	14.65	/	≤30	/
	5200	N/A	14.61	15.08	/	≤30	/
	5240	N/A	14.85	14.67	/	≤30	/
802.11n ht20	5180	N/A	15.14	13.31	17.33	≤30	≤28
	5200	N/A	15.44	13.7	17.67	≤30	≤28
	5240	N/A	16.21	14.17	18.32	≤30	≤28
802.11n ht40	5190	N/A	13.48	12.4	15.98	≤30	≤28
	5230	N/A	13.91	12.73	16.37	≤30	≤28
802.11ac vht20	5180	N/A	14.91	15.02	17.98	≤30	≤28
	5200	N/A	15.58	15.08	18.35	≤30	≤28
	5240	N/A	16.21	15.76	19.00	≤30	≤28
802.11ac vht40	5190	N/A	11.69	11.94	14.83	≤30	≤28
	5230	N/A	12.38	12.02	15.21	≤30	≤28
802.11ac vht80	5210	N/A	12.48	12.82	15.66	≤30	≤28
802.11ax hew20	5180	26/0	5.02	4.51	7.78	≤30	≤28
		52/37	8.14	7.54	10.86	≤30	≤28
		106/53	11.25	10.68	13.98	≤30	≤28
		242/61	14.61	13.99	17.32	≤30	≤28
	5200	26/0	5.55	5.04	8.31	≤30	≤28
		52/37	8.67	8.10	11.40	≤30	≤28
		106/53	11.87	11.25	14.58	≤30	≤28
		242/61	14.95	14.46	17.72	≤30	≤28
	5240	26/0	6.47	5.49	9.02	≤30	≤28
		52/37	9.74	8.87	12.34	≤30	≤28
		106/53	12.87	12.01	15.47	≤30	≤28
		242/61	15.91	15.21	18.58	≤30	≤28
802.11ax hew40	5190	26/0	0.11	0.17	3.15	≤30	≤28
		52/37	3.25	3.22	6.25	≤30	≤28
		106/53	6.54	6.41	9.49	≤30	≤28
		242/61	9.68	9.54	12.62	≤30	≤28
		484/65	12.86	12.7	15.79	≤30	≤28
	5230	26/0	1.04	0.51	3.79	≤30	≤28
		52/37	4.29	3.87	7.10	≤30	≤28
		106/53	7.49	6.98	10.25	≤30	≤28
		242/61	10.58	10.02	13.32	≤30	≤28
		484/65	13.75	13.03	16.42	≤30	≤28
802.11ax hew80	5210	26/0	-3.14	-3.96	-0.52	≤30	≤28
		52/37	0.49	-0.55	3.01	≤30	≤28
		106/53	3.87	2.91	6.43	≤30	≤28

		242/61	6.99	5.97	9.52	≤ 30	≤ 28
		484/65	10.14	9.22	12.71	≤ 30	≤ 28
		996/67	13.23	12.42	15.85	≤ 30	≤ 28

Note:

The duty cycle factor has been calculated into the result.

The device is an indoor AP. The maximum antenna gain is 5.0dBi in 5GHz band. The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:

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

So:

For Non-beamforming mode:

Directional gain = 5dBi

For Beamforming mode:

Directional gain = 5+3 = 8 dBi

5250-5350 MHz:

Test Modes	Test Frequency (MHz)	RU Config.	Max. Conducted Average Output Power (dBm)				
			Chain 0	Chain 1	Total	Limit For Non-beamforming	Limit For Beamforming
802.11a	5260	N/A	16.83	15.81	/	≤24	/
	5280	N/A	17.09	15.45	/	≤24	/
	5320	N/A	17.62	15.94	/	≤24	/
802.11n ht20	5260	N/A	12.31	12.77	15.56	≤24	≤22
	5280	N/A	12.8	12.32	15.58	≤24	≤22
	5320	N/A	12.54	13.46	16.03	≤24	≤22
802.11n ht40	5270	N/A	14.2	14.34	17.28	≤24	≤22
	5310	N/A	15	14.46	17.75	≤24	≤22
802.11ac vht20	5260	N/A	15.47	15.51	18.50	≤24	≤22
	5280	N/A	15.97	15.77	18.88	≤24	≤22
	5320	N/A	16.61	16.59	19.61	≤24	≤22
802.11ac vht40	5270	N/A	13.61	12.45	16.08	≤24	≤22
	5310	N/A	13.88	13.31	16.61	≤24	≤22
802.11ac vht80	5290	N/A	13.33	12.79	16.08	≤24	≤22
802.11ax hew20	5260	26/0	5.21	5.47	8.35	≤24	≤22
		52/37	8.47	8.74	11.62	≤24	≤22
		106/53	11.54	11.98	14.78	≤24	≤22
		242/61	14.64	15.02	17.84	≤24	≤22
	5280	26/0	5.47	4.88	8.20	≤24	≤22
		52/37	8.97	8.01	11.53	≤24	≤22
		106/53	12.02	11.25	14.66	≤24	≤22
		242/61	15.12	14.34	17.76	≤24	≤22
	5320	26/0	6.05	5.69	8.88	≤24	≤22
		52/37	9.41	8.87	12.16	≤24	≤22
		106/53	12.58	11.98	15.30	≤24	≤22
		242/61	15.91	15.12	18.54	≤24	≤22
802.11ax hew40	5270	26/0	1.55	0.15	3.92	≤24	≤22
		52/37	4.98	3.47	7.30	≤24	≤22
		106/53	8.12	6.88	10.55	≤24	≤22
		242/61	11.24	10.01	13.68	≤24	≤22
		484/65	14.46	13.14	16.86	≤24	≤22
	5310	26/0	2.14	-0.77	3.93	≤24	≤22
		52/37	5.15	2.32	6.97	≤24	≤22
		106/53	8.47	7.54	11.04	≤24	≤22
		242/61	11.55	10.87	14.23	≤24	≤22
		484/65	14.69	13.97	17.36	≤24	≤22
802.11ax hew80	5290	26/0	-1.98	-3.22	0.45	≤24	≤22
		52/37	1.99	0.25	4.22	≤24	≤22
		106/53	5.01	3.44	7.31	≤24	≤22
		242/61	8.14	6.58	10.44	≤24	≤22

		484/65	11.28	9.78	13.60	≤ 24	≤ 22
		996/67	14.51	12.96	16.81	≤ 24	≤ 22
802.11ac hew160	5250	N/A	11.77	11.65	14.72	≤ 24	≤ 22
802.11ax hew160	5250	26/0	-6.87	-5.84	-3.31	≤ 24	≤ 22
		52/37	-3.02	-2.14	0.45	≤ 24	≤ 22
		106/53	0.11	0.98	3.58	≤ 24	≤ 22
		242/61	3.28	4.11	6.73	≤ 24	≤ 22
		484/65	6.55	7.22	9.91	≤ 24	≤ 22
		996/67	9.57	10.54	13.09	≤ 24	≤ 22
		996*2	12.61	13.85	16.28	≤ 24	≤ 22

Note:

The duty cycle factor has been calculated into the result.

The device is an indoor AP. The maximum antenna gain is 5.0dBi in 5GHz band. The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:

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

So:

For Non-beamforming mode:

Directional gain = 5dBi

For Beamforming mode:

Directional gain = 5+3 = 8 dBi

5725-5850 MHz:

Test Modes	Test Frequency (MHz)	RU Config.	Max. Conducted Average Output Power (dBm)				
			Chain 0	Chain 1	Total	Limit For Non-beamforming	Limit For Beamforming
802.11a	5745	N/A	19.89	20.09	/	≤30	/
	5785	N/A	19.65	19.77	/	≤30	/
	5825	N/A	18.92	19.17	/	≤30	/
802.11n ht20	5745	N/A	19.93	20.23	23.09	≤30	≤28
	5785	N/A	19.79	20.15	22.98	≤30	≤28
	5825	N/A	19.01	19.24	22.14	≤30	≤28
802.11n ht40	5755	N/A	19.21	19.48	22.36	≤30	≤28
	5795	N/A	18.04	18.61	21.34	≤30	≤28
802.11ac vht20	5745	N/A	20.1	20.32	23.22	≤30	≤28
	5785	N/A	20.02	20.37	23.21	≤30	≤28
	5825	N/A	19.18	19.56	22.38	≤30	≤28
802.11ac vht40	5755	N/A	19.01	18.34	21.70	≤30	≤28
	5795	N/A	17.24	17.66	20.47	≤30	≤28
802.11ac vht80	5775	N/A	18.2	18.51	21.37	≤30	≤28
802.11ax hew20	5745	26/0	10.88	11.02	13.96	≤30	≤28
		52/37	14.11	14.25	17.19	≤30	≤28
		106/53	17.25	17.54	20.41	≤30	≤28
		242/61	20.49	20.68	23.60	≤30	≤28
	5785	26/0	10.87	10.87	13.88	≤30	≤28
		52/37	14.01	14.11	17.07	≤30	≤28
		106/53	17.22	17.24	20.24	≤30	≤28
		242/61	20.37	20.55	23.47	≤30	≤28
	5825	26/8	10.04	10.28	13.17	≤30	≤28
		52/40	13.14	13.41	16.29	≤30	≤28
		106/54	16.28	16.58	19.44	≤30	≤28
		242/61	19.58	19.78	22.69	≤30	≤28
802.11ax hew40	5755	26/0	7.14	7.14	10.15	≤30	≤28
		52/37	10.11	10.22	13.18	≤30	≤28
		106/53	13.25	13.25	16.26	≤30	≤28
		242/61	16.54	16.47	19.52	≤30	≤28
		484/65	19.66	19.75	22.72	≤30	≤28
	5795	26/0	6.01	7.01	9.55	≤30	≤28
		52/37	9.25	10.11	12.71	≤30	≤28
		106/53	12.44	13.25	15.87	≤30	≤28
		242/61	15.74	16.54	19.17	≤30	≤28
		484/65	18.8	18.95	21.89	≤30	≤28
802.11ax hew80	5775	26/0	3.55	2.99	6.29	≤30	≤28
		52/37	6.58	6.05	9.33	≤30	≤28
		106/53	9.78	9.25	12.53	≤30	≤28
		242/61	12.98	12.48	15.75	≤30	≤28

		484/65	16.14	15.99	19.08	≤ 30	≤ 28
		996/67	19.33	19.08	22.22	≤ 30	≤ 28

Note:

The duty cycle factor has been calculated into the result.

The maximum antenna gain is 5.0dBi in 5GHz band. The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:

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

So:

For Non-beamforming mode:

Directional gain = 5dBi

For Beamforming mode:

Directional gain = 5+3 = 8 dBi

4.5 Maximum power spectral density:

Serial Number:	CR22020001-RF-S1	Test Date:	2022-05-26
Test Site:	RF	Test Mode:	Transmitting
Tester:	Julie Tan	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.7	Relative Humidity: (%)	55	ATM Pressure: (kPa)	100.1
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2021-07-22	2022-07-21
YINSAIGE	Coaxial Cable	LMR300	NJ0100002	Each time	N/A

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	1.39	2.71	/	≤17.00
	5200	1.97	2.51	/	≤17.00
	5240	0.86	1.63	/	≤17.00
802.11n ht20	5180	3.58	2.33	6.01	≤12.00
	5200	3.72	2.49	6.16	≤12.00
	5240	3.67	2.38	6.08	≤12.00
802.11n ht40	5190	-1.16	-1.86	1.51	≤12.00
	5230	-1.21	-1.85	1.49	≤12.00
802.11ac vht20	5180	3.39	2.73	6.08	≤12.00
	5200	3.49	2.69	6.12	≤12.00
	5240	3.42	2.74	6.10	≤12.00
802.11ac vht40	5190	-2.22	-3.85	0.05	≤12.00
	5230	-2.23	0.18	2.15	≤12.00
802.11ac vht80	5210	-4.18	-4.55	-1.35	≤12.00
802.11ax hew20	5180	2.61	1.59	5.14	≤12.00
	5200	2.67	1.25	5.03	≤12.00
	5240	3.02	1.09	5.17	≤12.00
802.11ax hew40	5190	-1.83	-2.45	0.88	≤12.00
	5230	-2.09	-2.04	0.95	≤12.00
802.11ax hew80	5210	-4.74	-5.35	-2.02	≤12.00

Note:

The device is an Indoor AP.

The maximum antenna gain is 5 dBi. And beamforming gain is 3dBi. The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

$$\text{Array Gain} = 10 \log(N_{\text{ANT}}/N_{\text{SS}}) \text{ dB.}$$

So:

Directional gain = $G_{\text{ANT}} + \text{Array Gain} = 5 + 10 \cdot \log(2/1) = 8 \text{ dBi}$ for Non-beamforming modeDirectional gain = $G_{\text{ANT}} + \text{Array Gain} = 5 + 3 + 10 \cdot \log(2/1) = 11 \text{ dBi}$ for Beamforming mode

The worst limit Beamforming mode was used in the table.

Method SA-3 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01 was used for PSD test.

5250-5350 MHz:

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			
		Chain 0	Chain 1	Total	Limit
802.11a	5260	4.46	4.60	/	≤11.00
	5280	4.50	4.70	/	≤11.00
	5320	4.89	4.49	/	≤11.00
802.11n ht20	5260	0.91	2.19	4.61	≤6.00
	5280	1.01	2.03	4.56	≤6.00
	5320	0.50	2.38	4.55	≤6.00
802.11n ht40	5270	-0.19	-1.00	2.43	≤6.00
	5310	0.44	-1.37	2.64	≤6.00
802.11ac vht20	5260	3.28	2.24	5.80	≤6.00
	5280	0.66	2.33	4.59	≤6.00
	5320	0.51	2.07	4.37	≤6.00
802.11ac vht40	5270	-2.35	-2.38	0.65	≤6.00
	5310	-1.54	-1.01	1.74	≤6.00
802.11ac vht80	5290	-3.04	-4.21	-0.58	≤6.00
802.11ax hew20	5260	1.16	2.14	4.69	≤6.00
	5280	1.23	2.16	4.73	≤6.00
	5320	1.35	2.33	4.88	≤6.00
802.11ax hew40	5270	-1.33	-3.78	0.63	≤6.00
	5310	-0.45	-2.25	1.75	≤6.00
802.11ax hew80	5290	-4.98	-5.29	-2.12	≤6.00
802.11ac vht160	5290	-7.62	-7.41	-4.50	≤6.00
802.11ax hew160	5290	-9.01	-7.41	-5.13	≤6.00

Note:

The maximum antenna gain is 5 dBi. And beamforming gain is 3dBi. The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

$$\text{Array Gain} = 10 \log(N_{\text{ANT}}/N_{\text{SS}}) \text{ dB.}$$

So:

Directional gain = $G_{\text{ANT}} + \text{Array Gain} = 5 + 10 \cdot \log(2/1) = 8 \text{ dBi}$ for Non-beamforming mode

Directional gain = $G_{\text{ANT}} + \text{Array Gain} = 5 + 3 + 10 \cdot \log(2/1) = 11 \text{ dBi}$ for Beamforming mode

The worst limit Beamforming mode was used in the table.

Method SA-3 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01 was used for PSD test.

5725-5850 MHz:

Test Modes	Test Frequency (MHz)	Reading (dBm/300kHz)		Maximum Power Spectral Density (dBm/500kHz)			
		Chain 0	Chain 1	Chain 0	Chain 1	Total	Limit
802.11a	5745	2.13	4.45	4.35	6.67	/	≤30.00
	5785	2.20	4.23	4.42	6.45	/	≤30.00
	5825	2.07	4.33	4.29	6.55	/	≤30.00
802.11n ht20	5745	4.76	6.22	6.98	8.44	10.78	≤25.00
	5785	4.83	5.73	7.05	7.95	10.53	≤25.00
	5825	3.74	5.50	5.96	7.72	9.94	≤25.00
802.11n ht40	5755	-0.78	1.18	1.44	3.4	5.54	≤25.00
	5795	-1.96	0.46	0.26	2.68	4.65	≤25.00
802.11ac vht20	5745	4.74	6.61	6.96	8.83	11.01	≤25.00
	5785	4.36	5.54	6.58	7.76	10.22	≤25.00
	5825	5.74	5.62	7.96	7.84	10.91	≤25.00
802.11ac vht40	5755	1.35	2.59	3.57	4.81	7.24	≤25.00
	5795	1.05	1.72	3.27	3.94	6.63	≤25.00
802.11ac vht80	5775	-1.56	0.12	0.66	2.34	4.59	≤25.00
802.11ax hew20	5745	5.28	6.52	7.5	8.74	11.17	≤25.00
	5785	5.16	5.74	7.38	7.96	10.69	≤25.00
	5825	3.84	5.41	6.06	7.63	9.93	≤25.00
802.11ax hew40	5755	0.89	2.47	3.11	4.69	6.98	≤25.00
	5795	0.07	1.20	2.29	3.42	5.90	≤25.00
802.11ax hew80	5775	-2.57	-1.62	-0.35	0.6	3.16	≤25.00

Note:

The maximum antenna gain is 5 dBi. And beamforming gain is 3dBi. The device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

$$\text{Array Gain} = 10 \log(N_{\text{ANT}}/N_{\text{SS}}) \text{ dB.}$$

So:

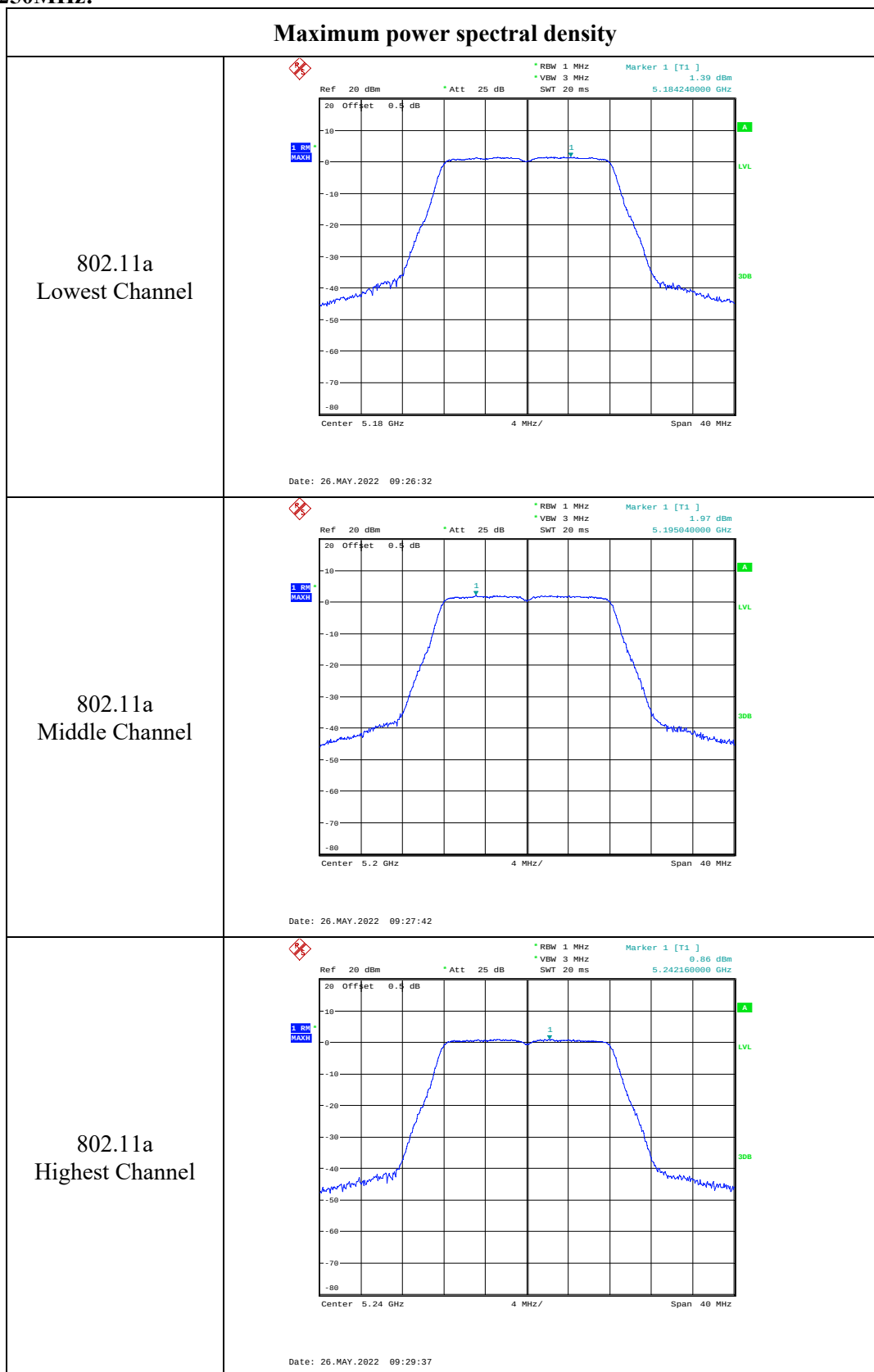
Directional gain = $G_{\text{ANT}} + \text{Array Gain} = 5 + 10 \cdot \log(2/1) = 8 \text{ dBi}$ for Non-beamforming mode

Directional gain = $G_{\text{ANT}} + \text{Array Gain} = 5 + 3 + 10 \cdot \log(2/1) = 11 \text{ dBi}$ for Beamforming mode

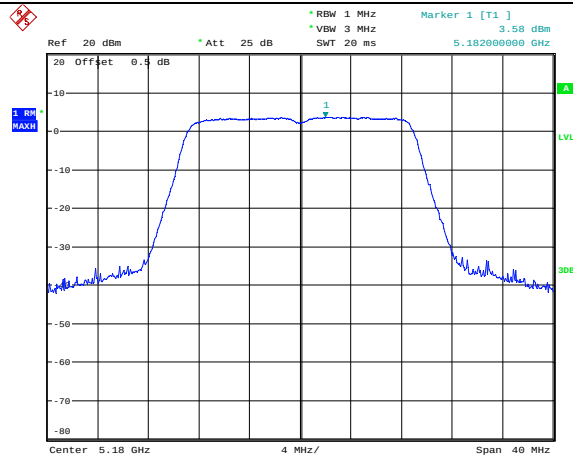
The worst limit Beamforming mode was used in the table.

Method SA-3 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01 was used for PSD test.

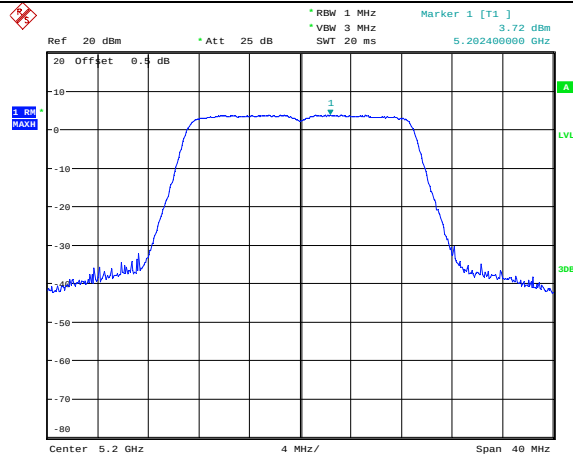
If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log(500 \text{ kHz} / \text{RBW})$ to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement

Chain 0:
5150-5250MHz:

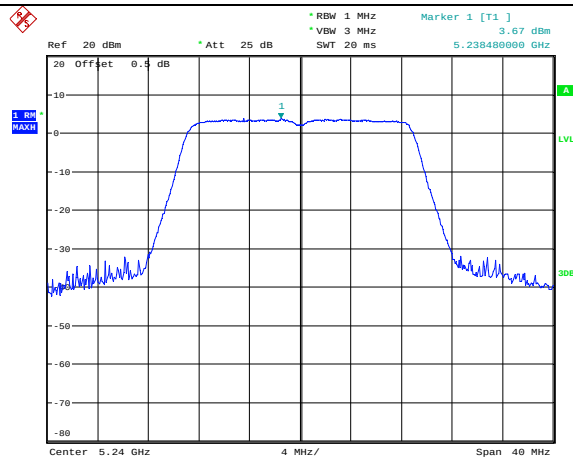
Maximum power spectral density

802.11n ht20
Lowest Channel

Date: 26.MAY.2022 09:57:24

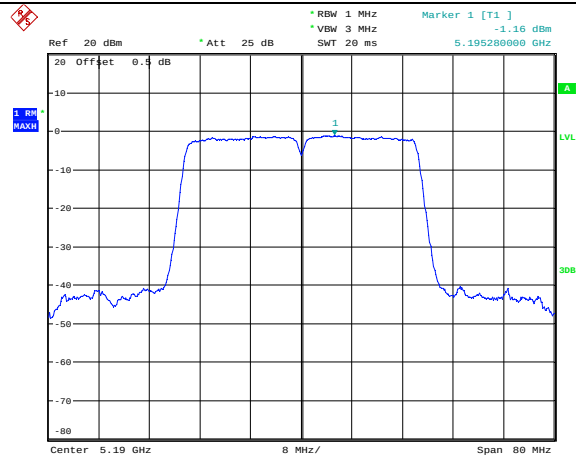
802.11n ht20
Middle Channel

Date: 26.MAY.2022 09:58:40

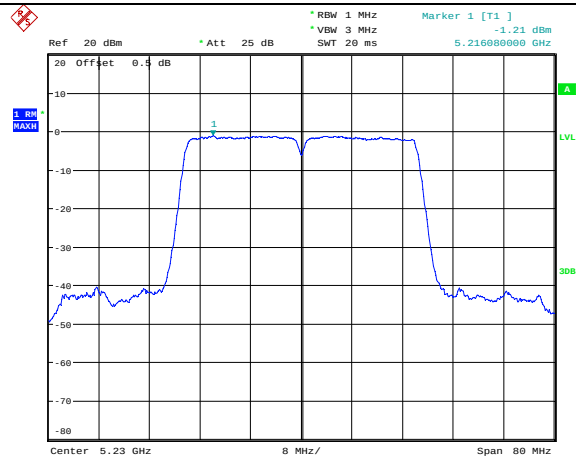
802.11n ht20
Highest Channel

Date: 26.MAY.2022 09:59:53

Maximum power spectral density

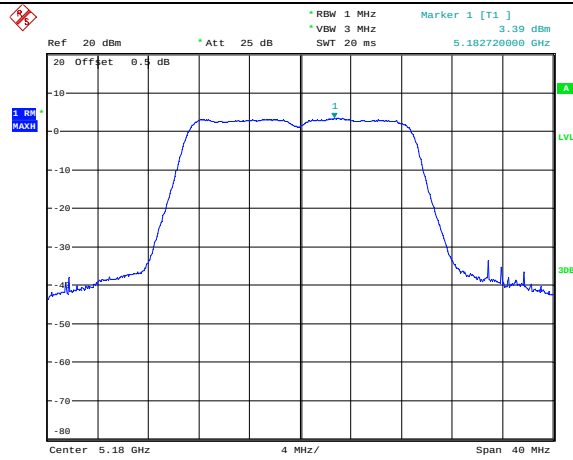
802.11n ht40
Lowest Channel

Date: 26.MAY.2022 10:01:24

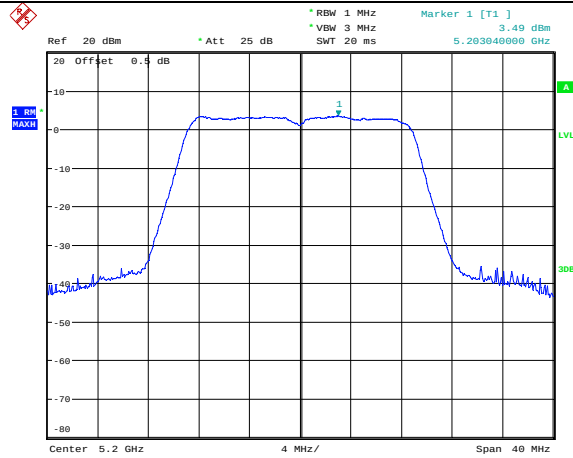
802.11n ht40
Highest Channel

Date: 26.MAY.2022 10:02:32

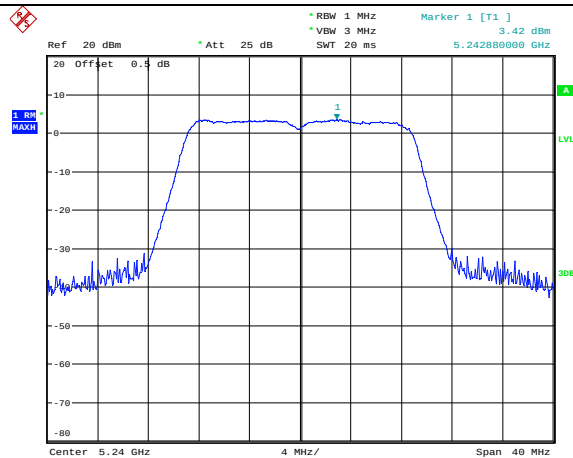
Maximum power spectral density

802.11ac vht20
Lowest Channel

Date: 26.MAY.2022 10:15:35

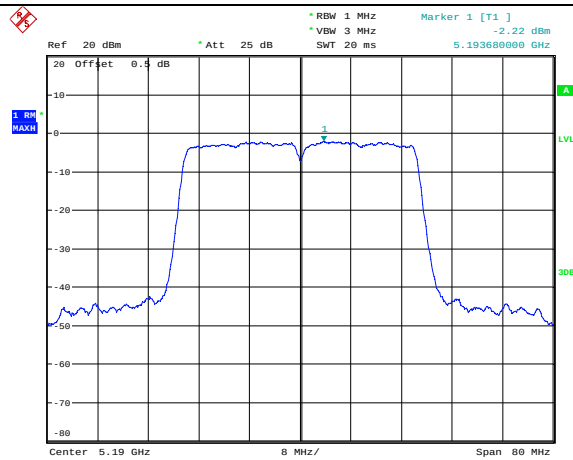
802.11ac vht20
Middle Channel

Date: 26.MAY.2022 10:14:28

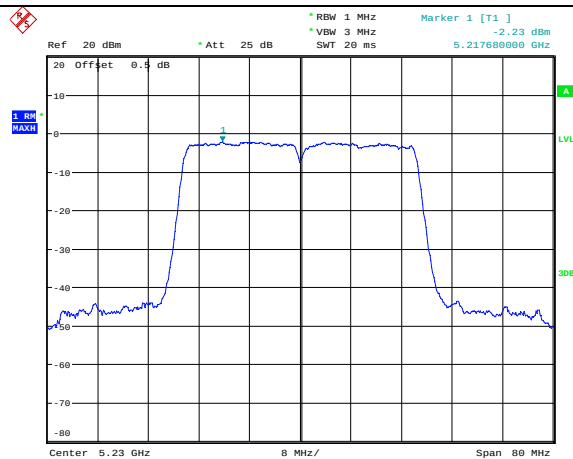
802.11ac vht20
Highest Channel

Date: 26.MAY.2022 10:13:25

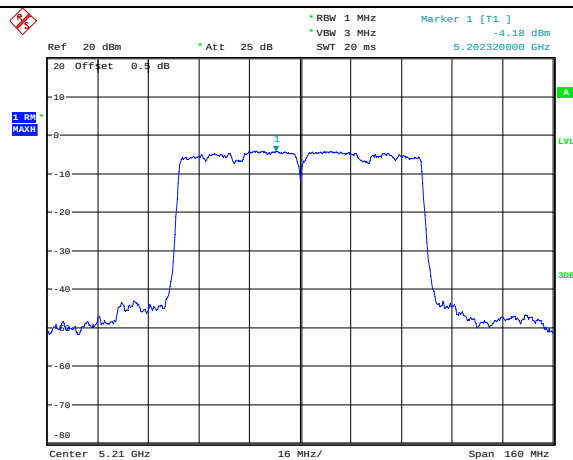
Maximum power spectral density

802.11ac vht40
Lowest Channel

Date: 26.MAY.2022 10:16:53

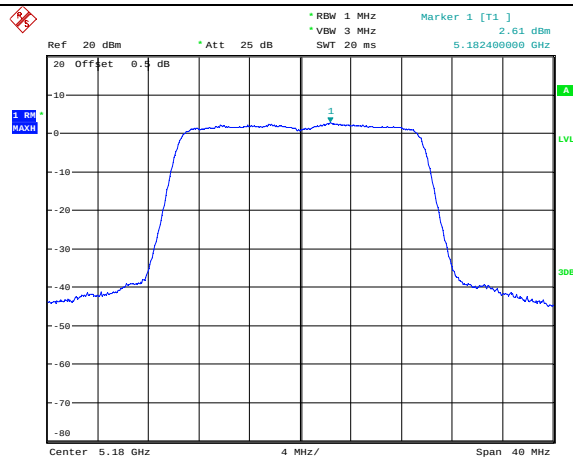
802.11ac vht40
Highest Channel

Date: 26.MAY.2022 10:17:46

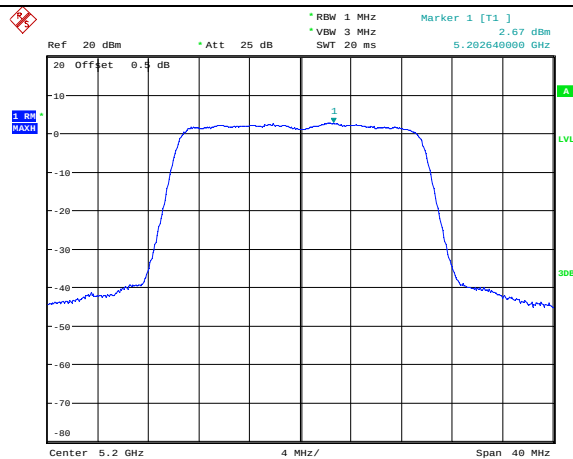
802.11ac vht80
Middle Channel

Date: 26.MAY.2022 10:26:55

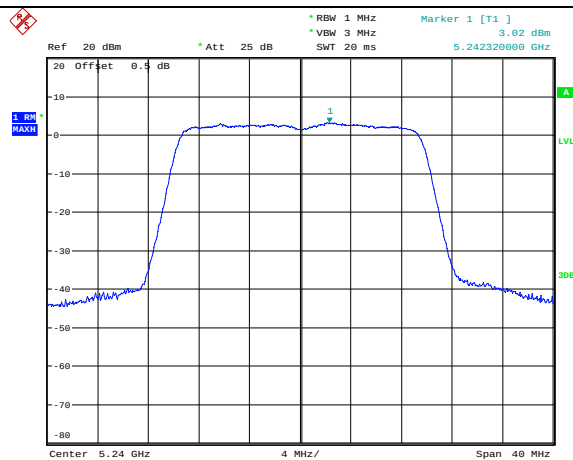
Maximum power spectral density

802.11ax hew20
Lowest Channel

Date: 25.MAY.2022 21:15:57

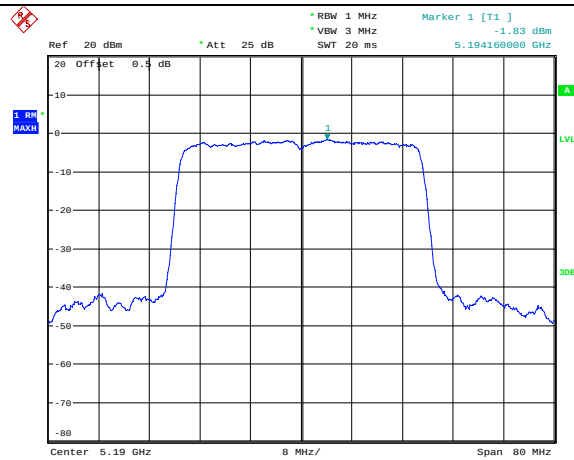
802.11ax hew20
Middle Channel

Date: 25.MAY.2022 21:17:11

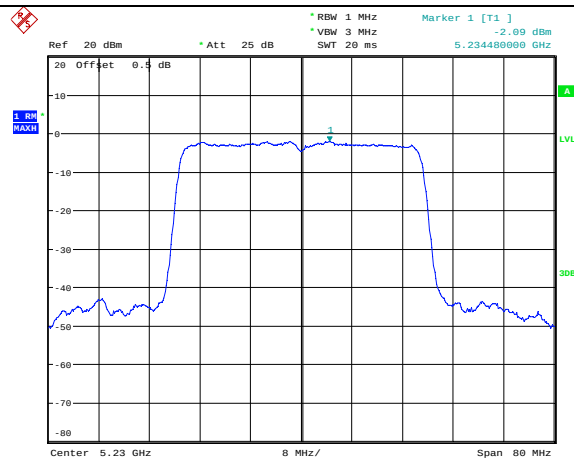
802.11ax hew20
Highest Channel

Date: 25.MAY.2022 21:18:19

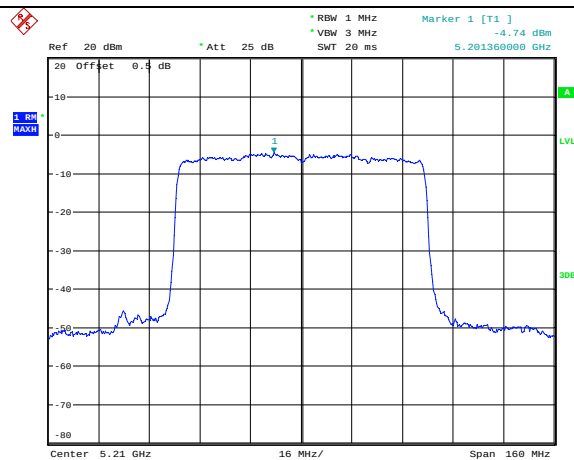
Maximum power spectral density

802.11ax hew40
Lowest Channel

Date: 25.MAY.2022 21:26:35

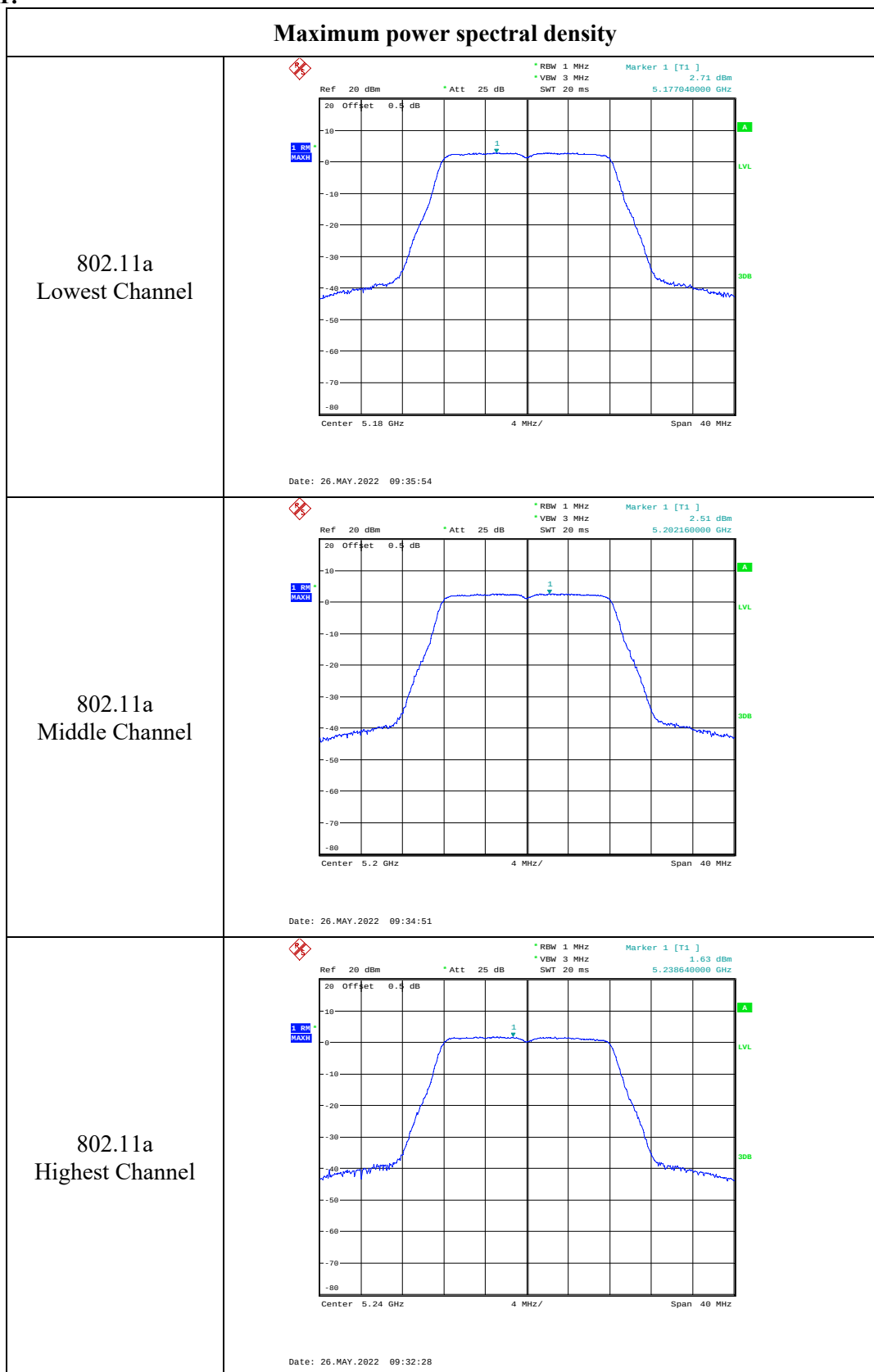
802.11ax hew40
Highest Channel

Date: 25.MAY.2022 21:25:41

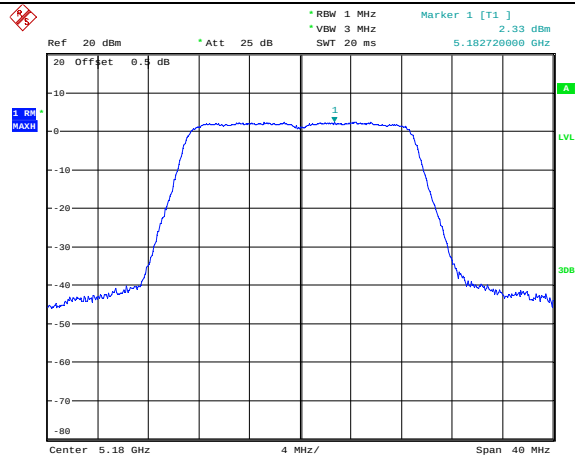
802.11ax hew80
Middle Channel

Date: 25.MAY.2022 21:28:32

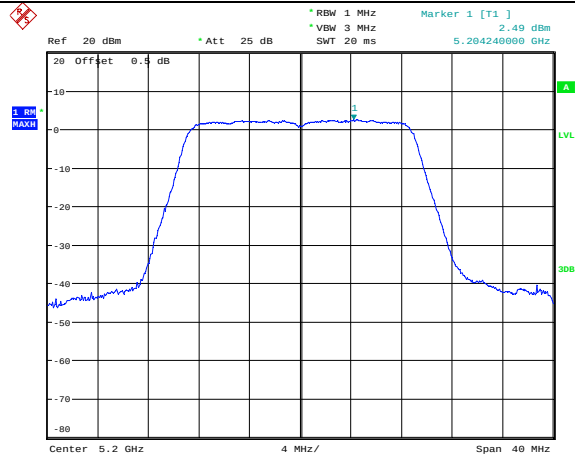
Chain 1:



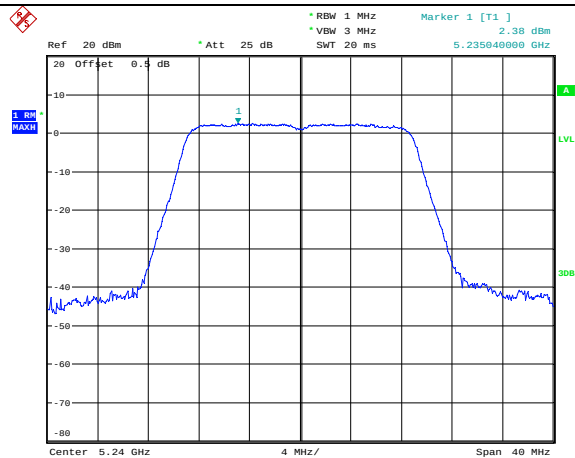
Maximum power spectral density

802.11n ht20
Lowest Channel

Date: 26.MAY.2022 09:37:19

802.11n ht20
Middle Channel

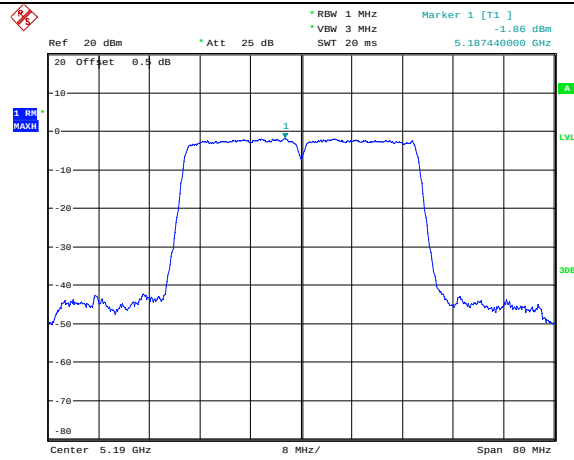
Date: 26.MAY.2022 09:38:24

802.11n ht20
Highest Channel

Date: 26.MAY.2022 09:39:27

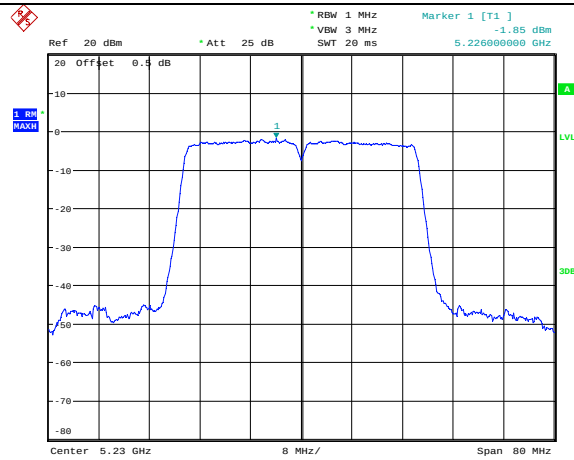
Maximum power spectral density

802.11n ht40
Lowest Channel



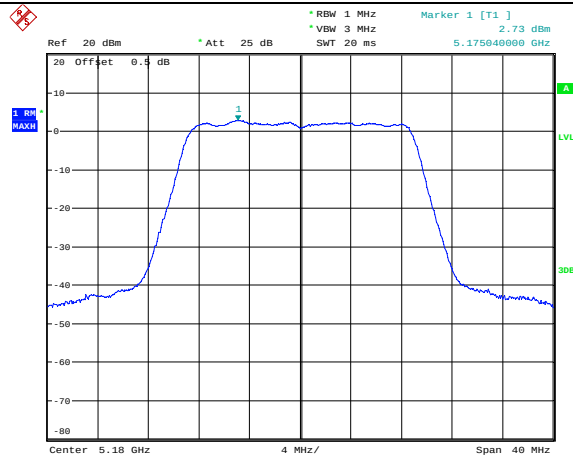
Date: 26.MAY.2022 10:05:13

802.11n ht40
Highest Channel

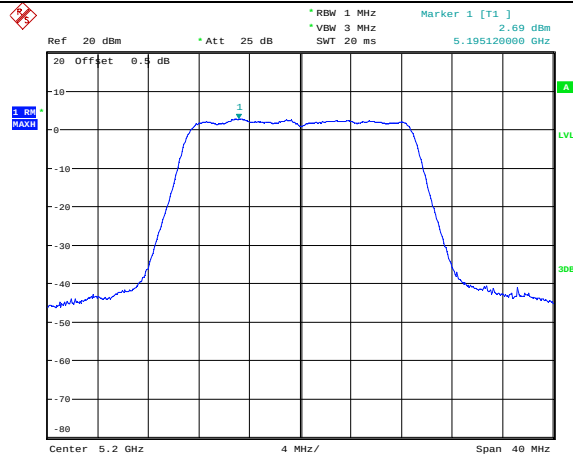


Date: 26.MAY.2022 10:04:06

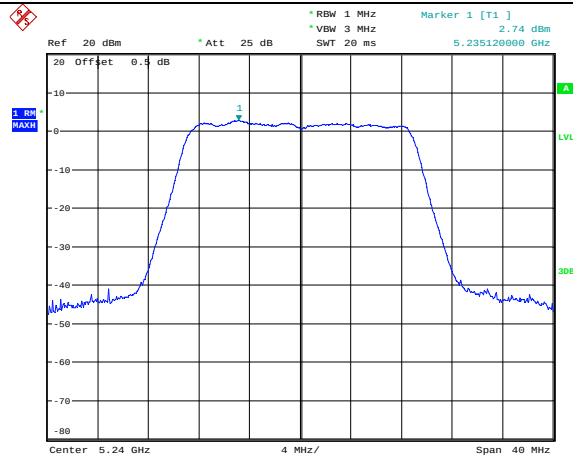
Maximum power spectral density

802.11ac vht20
Lowest Channel

Date: 26.MAY.2022 10:09:29

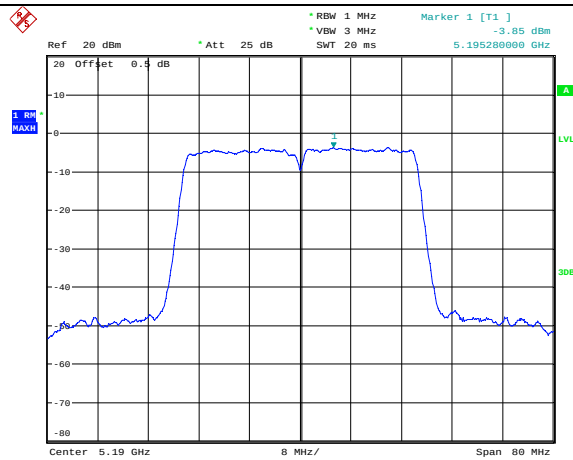
802.11ac vht20
Middle Channel

Date: 26.MAY.2022 10:10:27

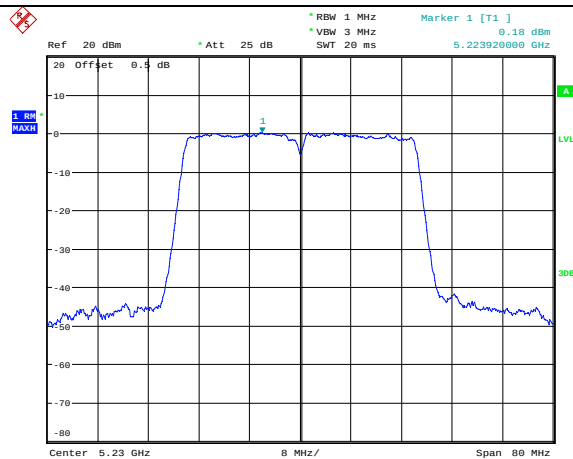
802.11ac vht20
Highest Channel

Date: 26.MAY.2022 10:11:45

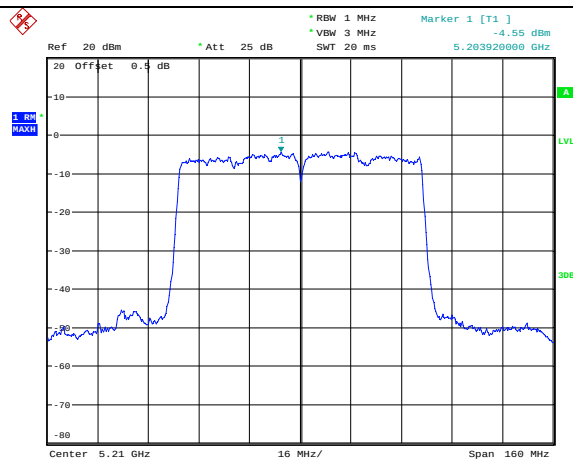
Maximum power spectral density

802.11ac vht40
Lowest Channel

Date: 26.MAY.2022 10:20:20

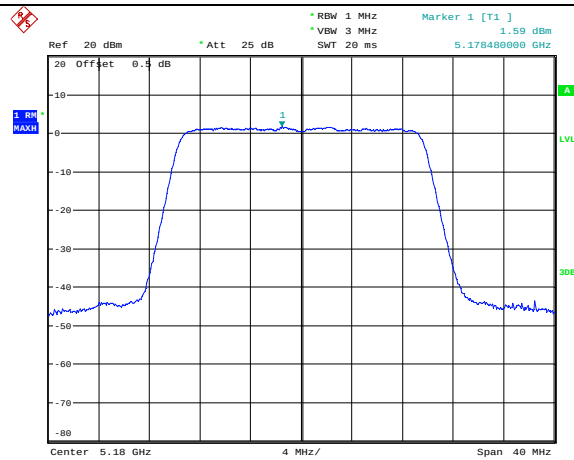
802.11ac vht40
Highest Channel

Date: 26.MAY.2022 10:19:02

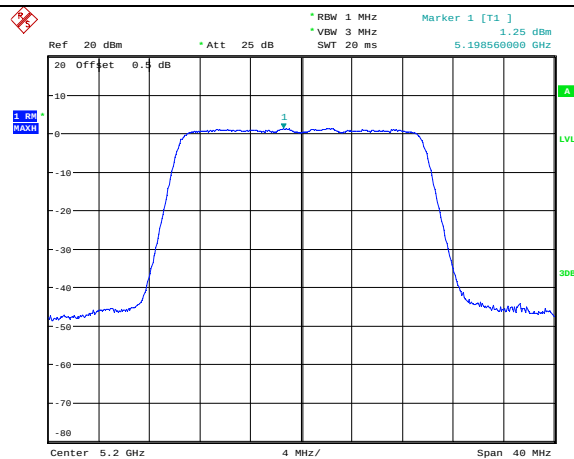
802.11ac vht80
Middle Channel

Date: 26.MAY.2022 10:25:55

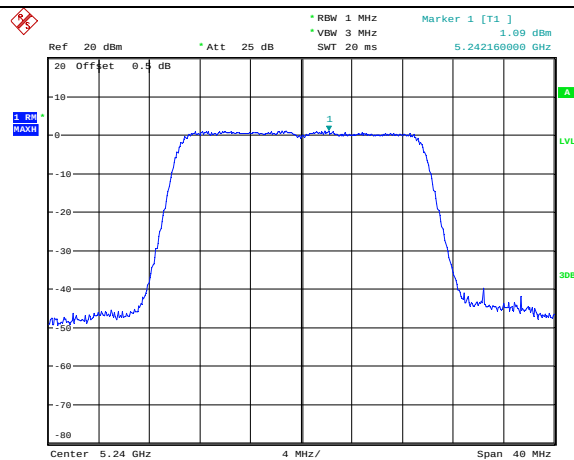
Maximum power spectral density

802.11ax hew20
Lowest Channel

Date: 25.MAY.2022 21:20:47

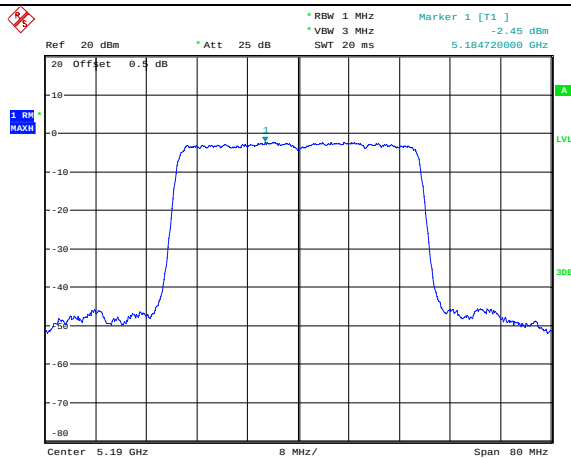
802.11ax hew20
Middle Channel

Date: 25.MAY.2022 21:21:46

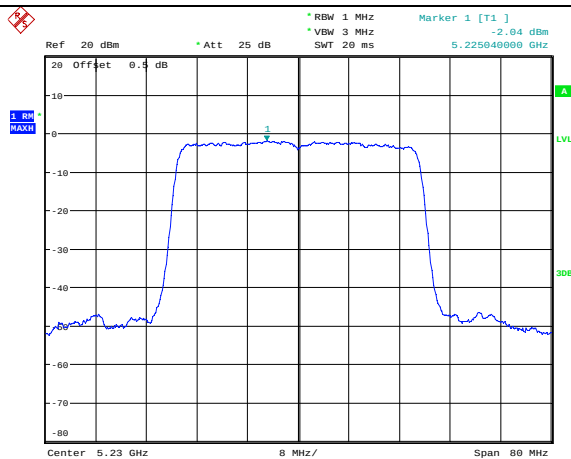
802.11ax hew20
Highest Channel

Date: 25.MAY.2022 21:19:46

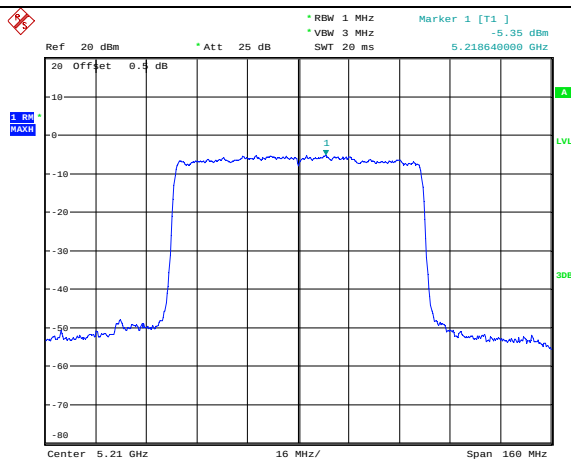
Maximum power spectral density

802.11ax hew40
Lowest Channel

Date: 25.MAY.2022 21:23:28

802.11ax hew40
Highest Channel

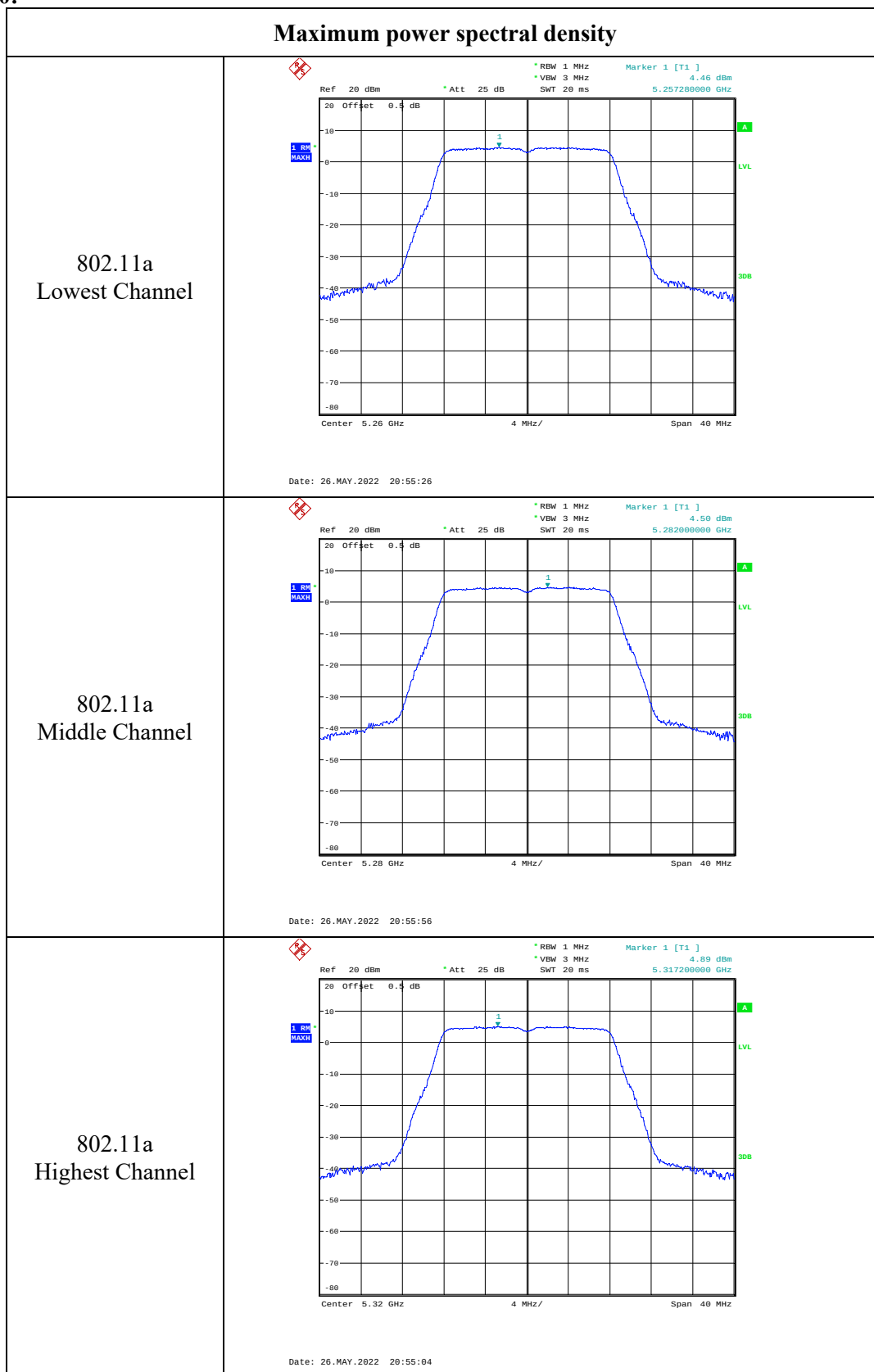
Date: 25.MAY.2022 21:24:33

802.11ax hew80
Middle Channel

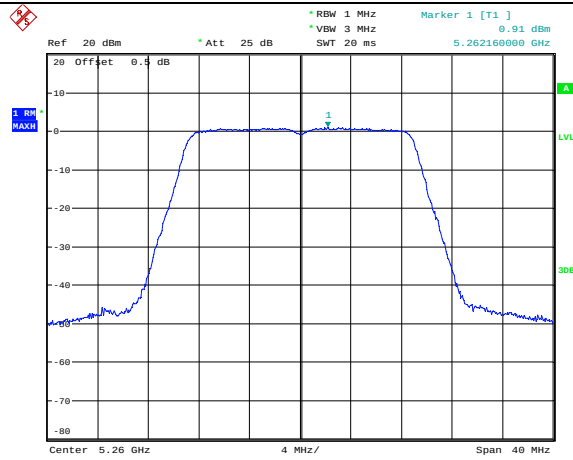
Date: 25.MAY.2022 21:29:53

5250-5350MHz:

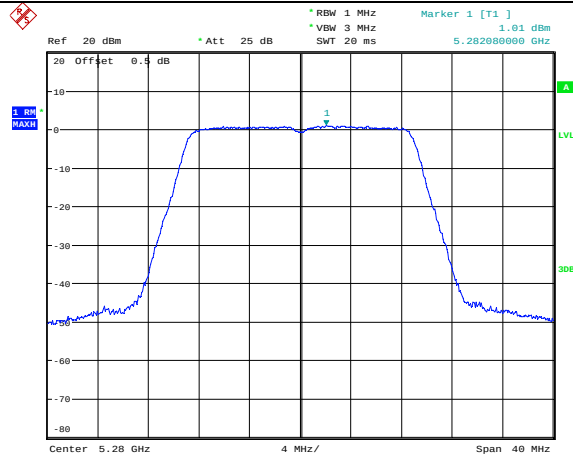
Chain 0:



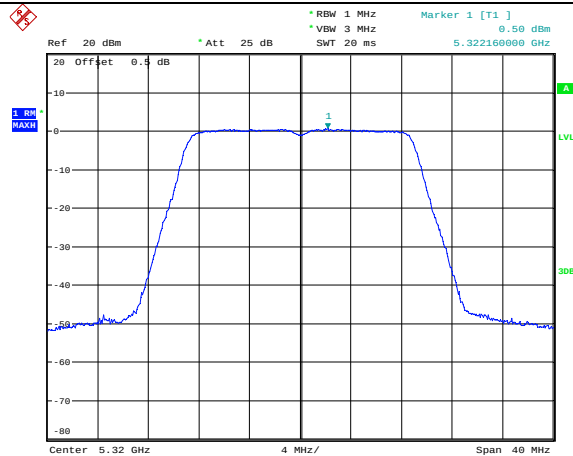
Maximum power spectral density

802.11n ht20
Lowest Channel

Date: 26.MAY.2022 19:46:04

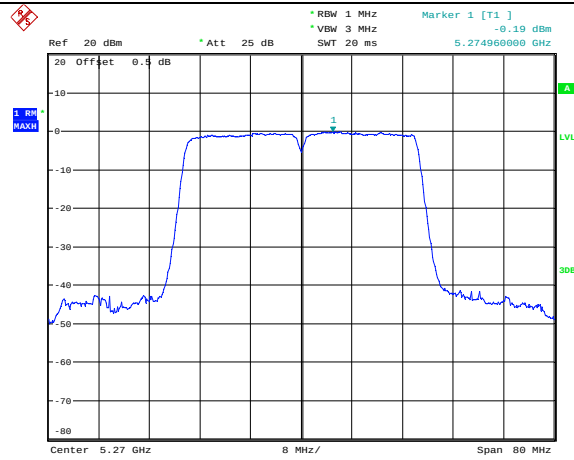
802.11n ht20
Middle Channel

Date: 26.MAY.2022 19:46:29

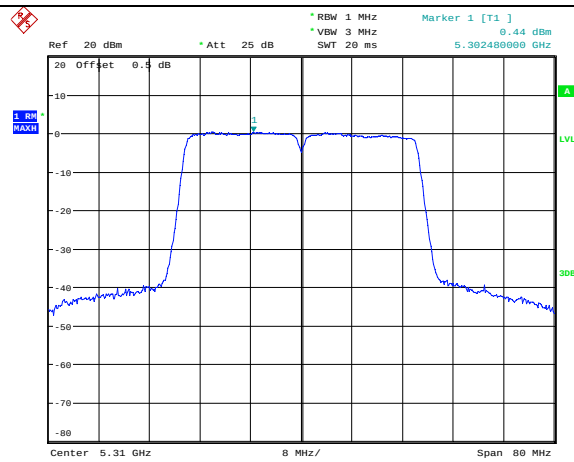
802.11n ht20
Highest Channel

Date: 26.MAY.2022 19:44:42

Maximum power spectral density

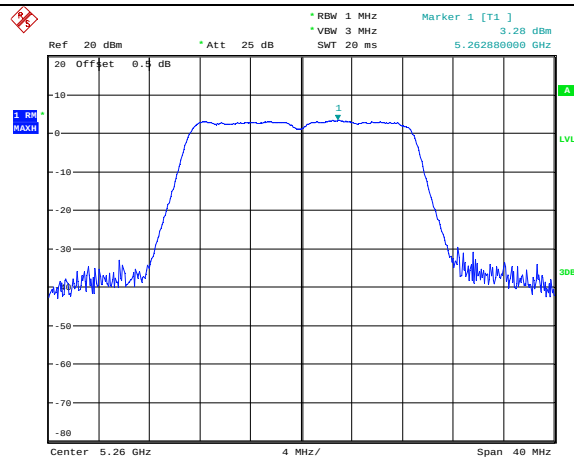
802.11n ht40
Lowest Channel

Date: 26.MAY.2022 10:45:47

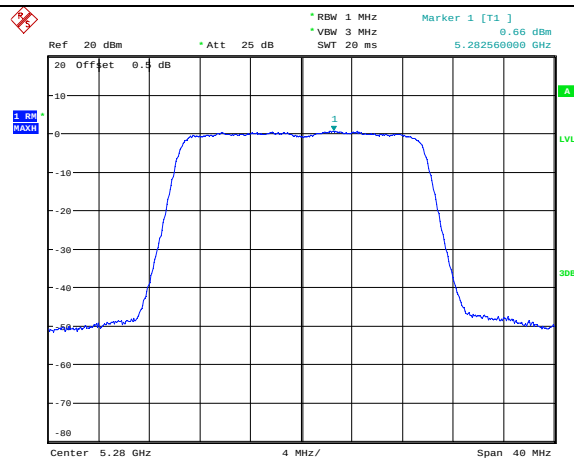
802.11n ht40
Highest Channel

Date: 26.MAY.2022 10:47:03

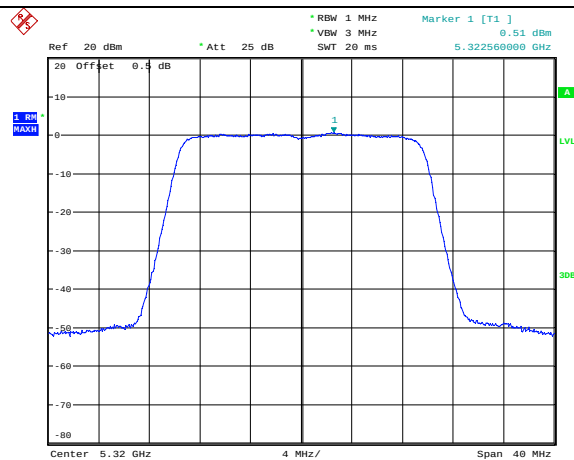
Maximum power spectral density

802.11ac vht20
Lowest Channel

Date: 26.MAY.2022 10:58:33

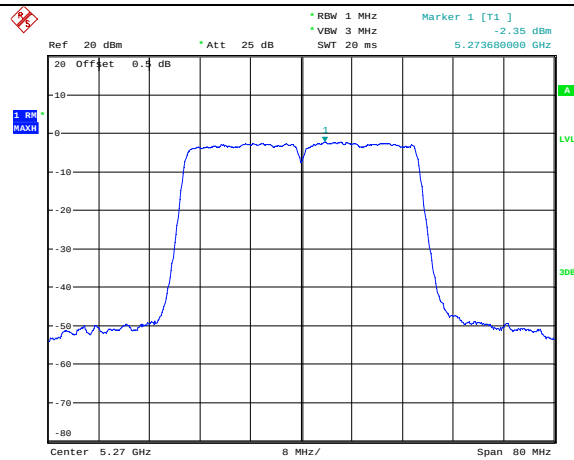
802.11ac vht20
Middle Channel

Date: 26.MAY.2022 21:12:45

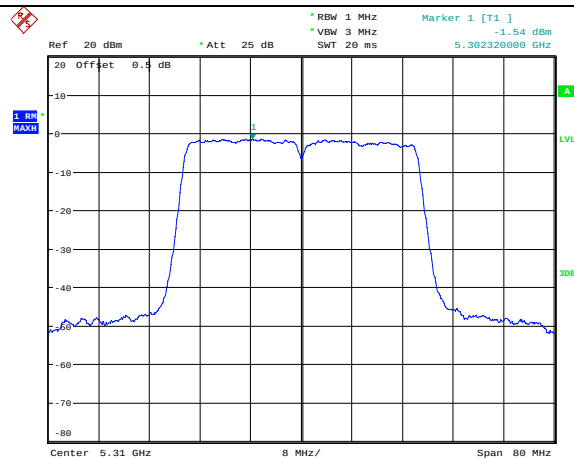
802.11ac vht20
Highest Channel

Date: 26.MAY.2022 21:11:02

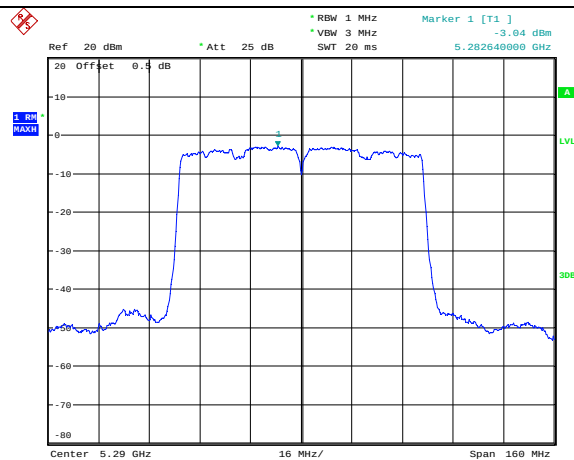
Maximum power spectral density

802.11ac vht40
Lowest Channel

Date: 26.MAY.2022 11:00:58

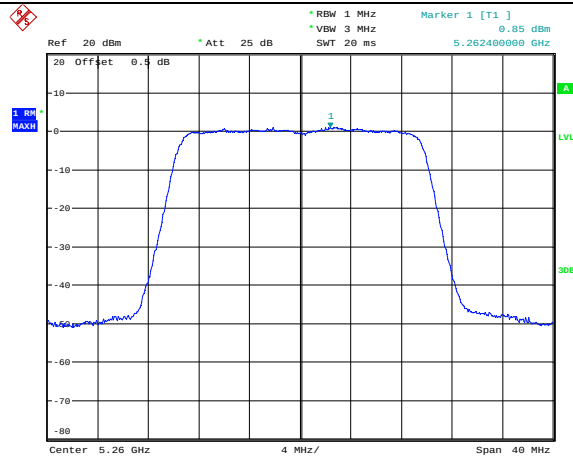
802.11ac vht40
Highest Channel

Date: 26.MAY.2022 11:01:56

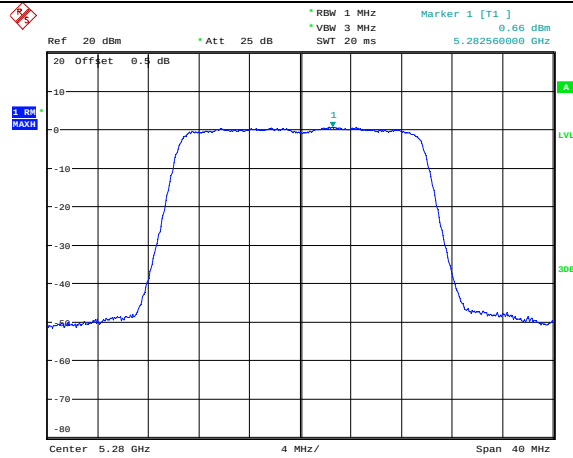
802.11ac vht80
Middle Channel

Date: 26.MAY.2022 10:28:48

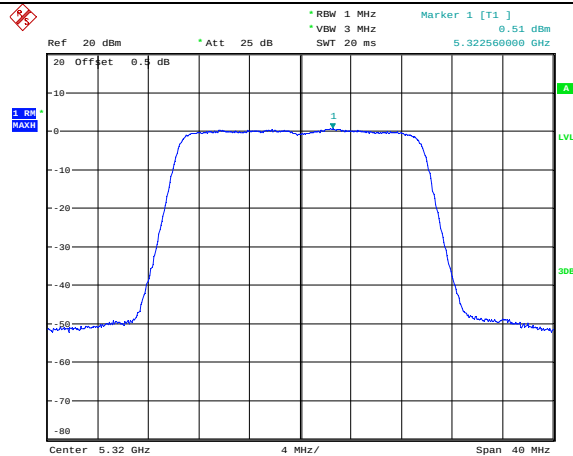
Maximum power spectral density

802.11ax hew20
Lowest Channel

Date: 26.MAY.2022 21:13:42

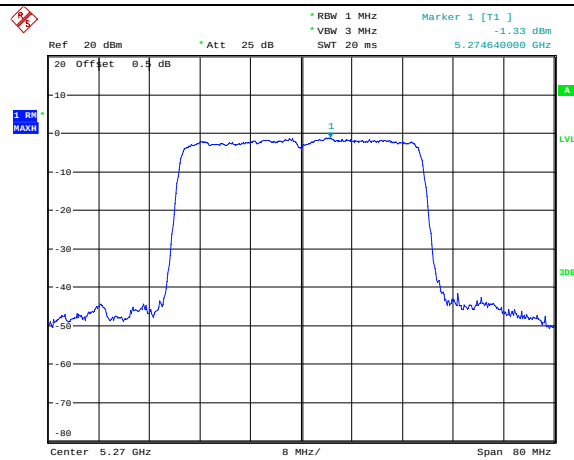
802.11ax hew20
Middle Channel

Date: 26.MAY.2022 21:12:45

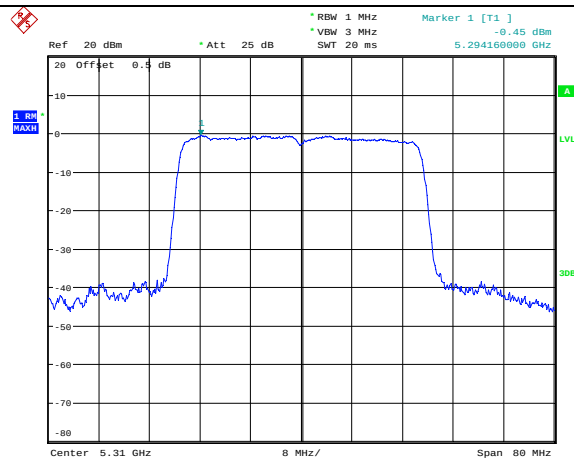
802.11ax hew20
Highest Channel

Date: 26.MAY.2022 21:11:02

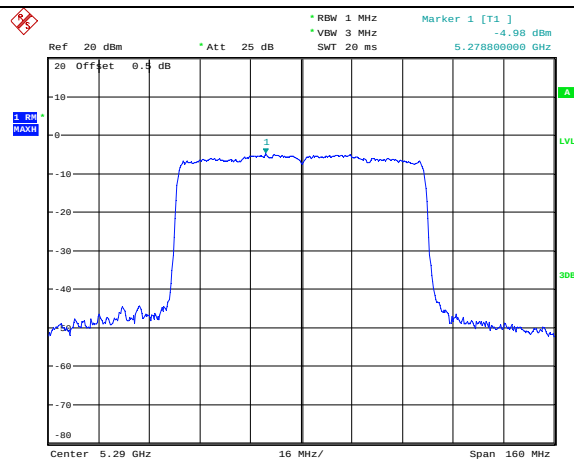
Maximum power spectral density

802.11ax hew40
Lowest Channel

Date: 25.MAY.2022 21:40:48

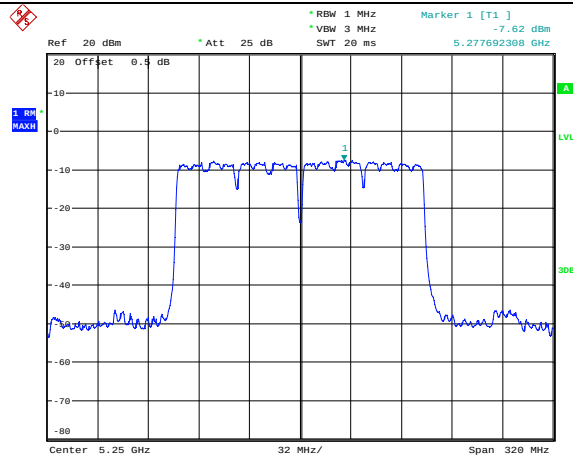
802.11ax hew40
Highest Channel

Date: 25.MAY.2022 21:41:51

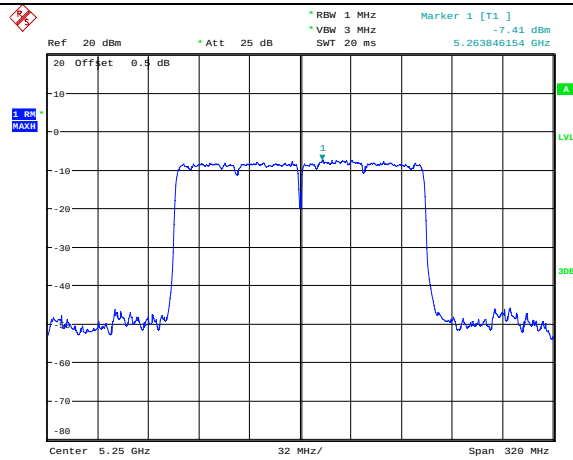
802.11ax hew80
Middle Channel

Date: 25.MAY.2022 21:46:23

Maximum power spectral density

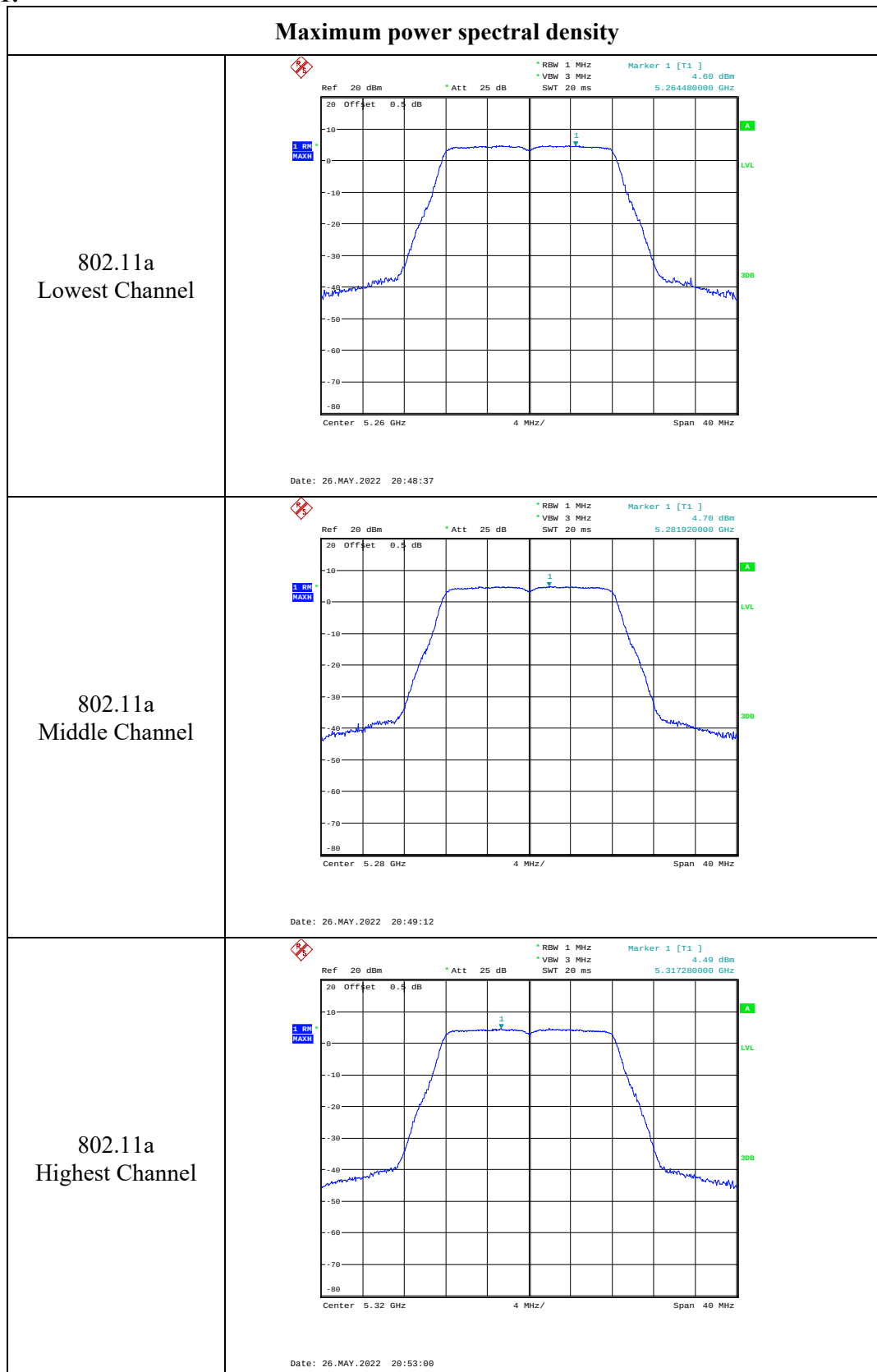
802.11ac vht160
Middle Channel

Date: 26.MAY.2022 17:04:44

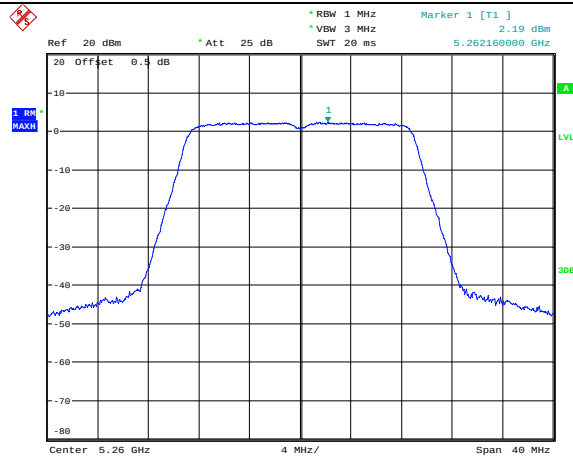
802.11ax vht160
Middle Channel

Date: 26.MAY.2022 17:02:29

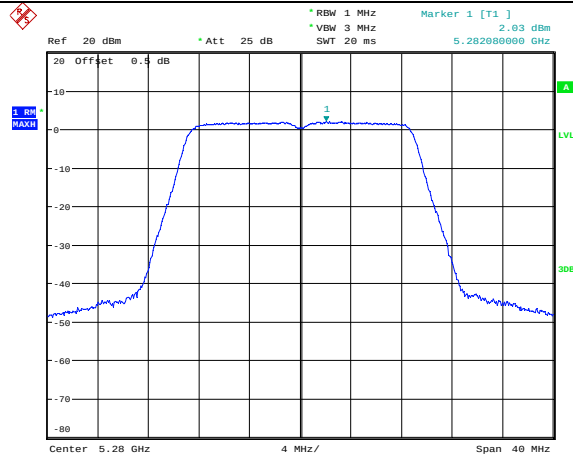
Chain 1:



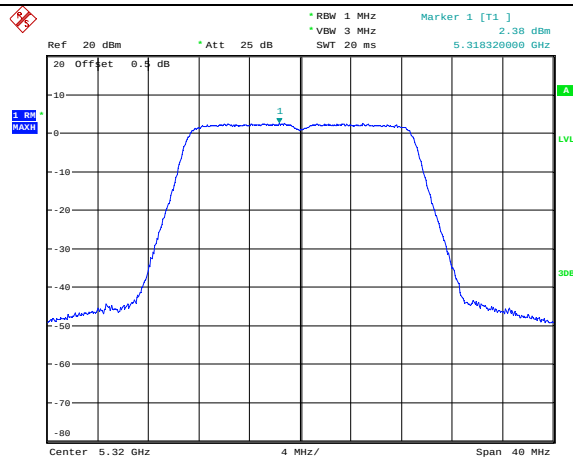
Maximum power spectral density

802.11n ht20
Lowest Channel

Date: 26.MAY.2022 19:42:55

802.11n ht20
Middle Channel

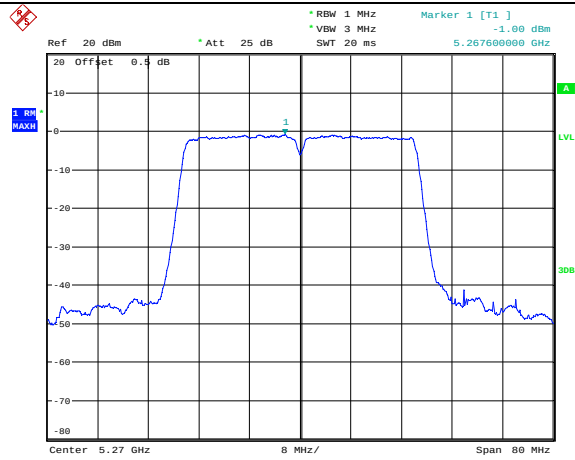
Date: 26.MAY.2022 19:43:23

802.11n ht20
Highest Channel

Date: 26.MAY.2022 19:43:46

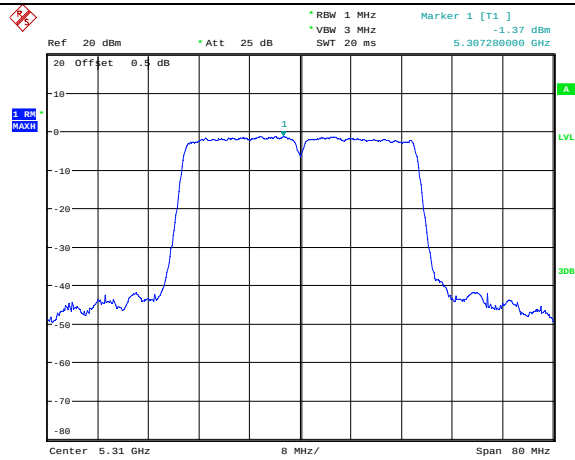
Maximum power spectral density

802.11n ht40
Lowest Channel



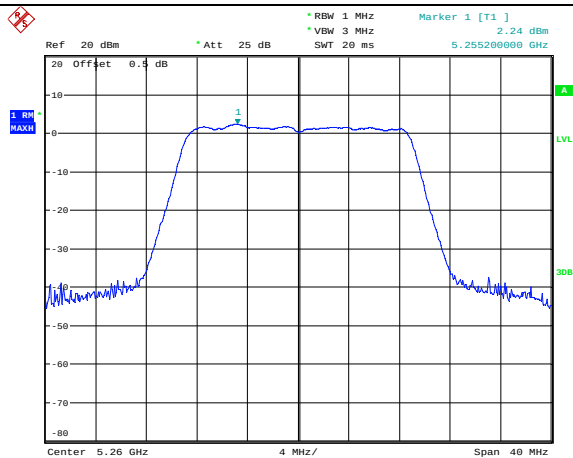
Date: 26.MAY.2022 10:49:15

802.11n ht40
Highest Channel

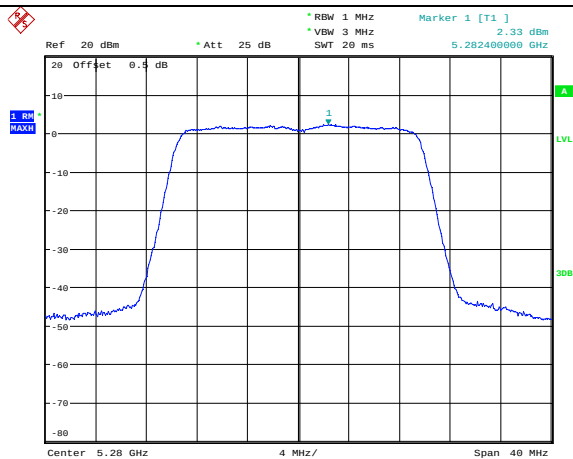


Date: 26.MAY.2022 10:48:16

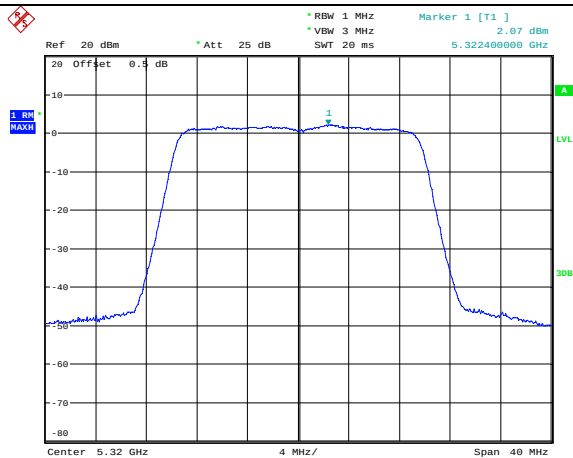
Maximum power spectral density

802.11ac vht20
Lowest Channel

Date: 26.MAY.2022 10:51:02

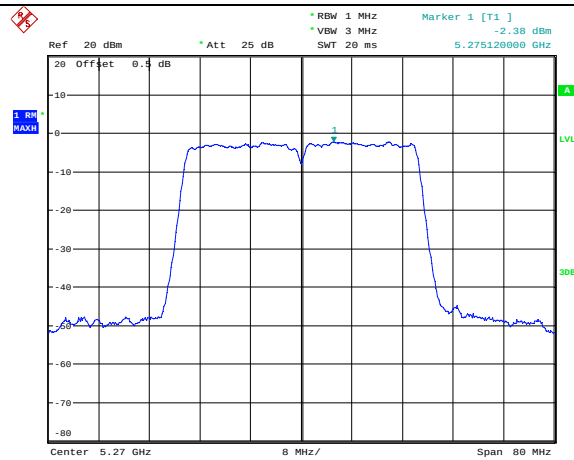
802.11ac vht20
Middle Channel

Date: 26.MAY.2022 21:08:46

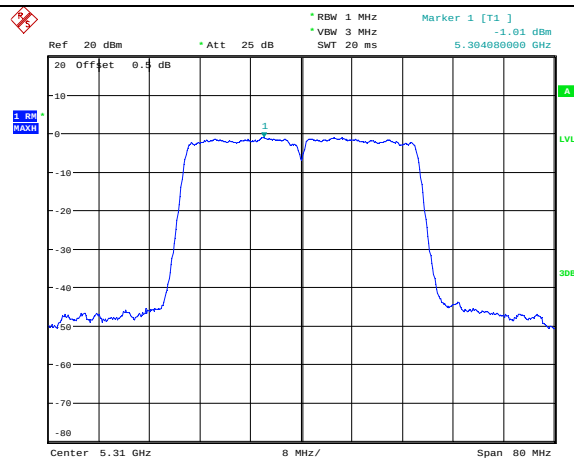
802.11ac vht20
Highest Channel

Date: 26.MAY.2022 21:10:28

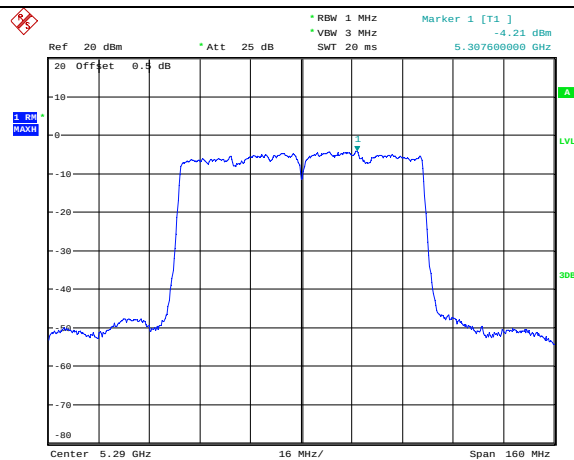
Maximum power spectral density

802.11ac vht40
Lowest Channel

Date: 26.MAY.2022 11:04:04

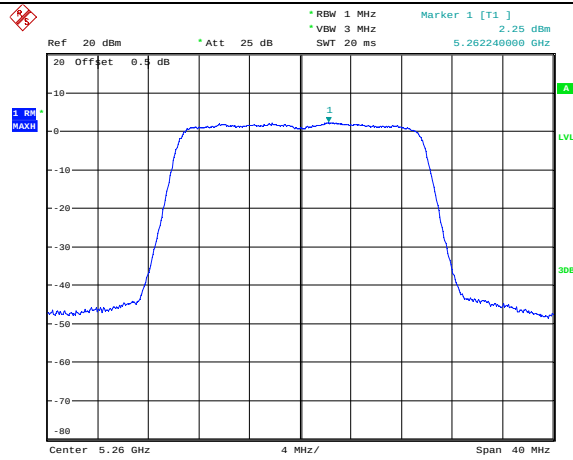
802.11ac vht40
Highest Channel

Date: 26.MAY.2022 11:03:14

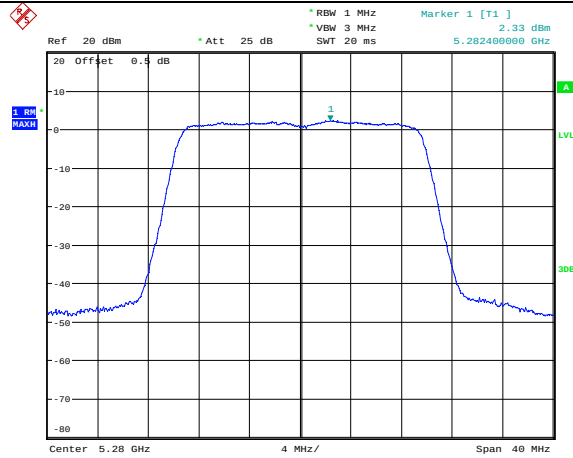
802.11ac vht80
Middle Channel

Date: 26.MAY.2022 11:05:46

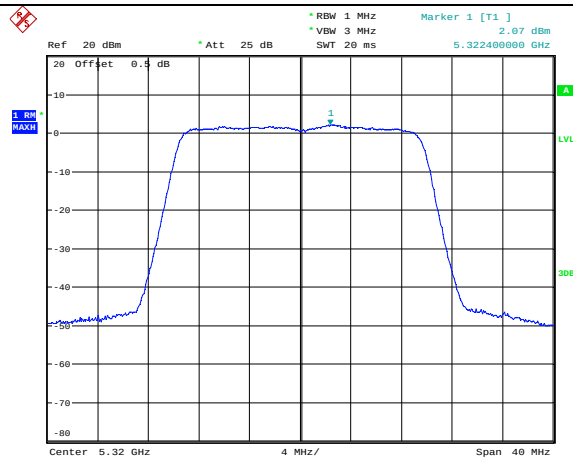
Maximum power spectral density

802.11ax hew20
Lowest Channel

Date: 26.MAY.2022 21:08:11

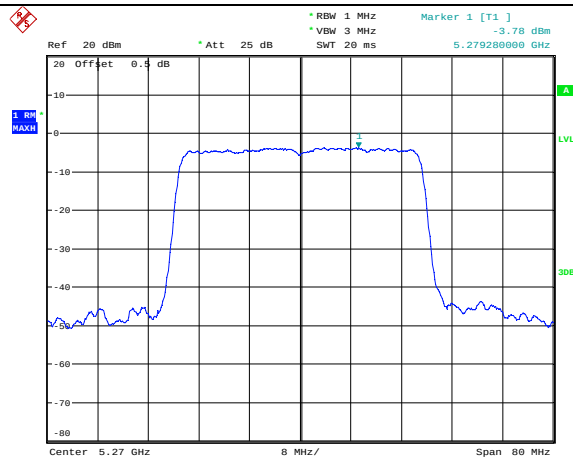
802.11ax hew20
Middle Channel

Date: 26.MAY.2022 21:08:46

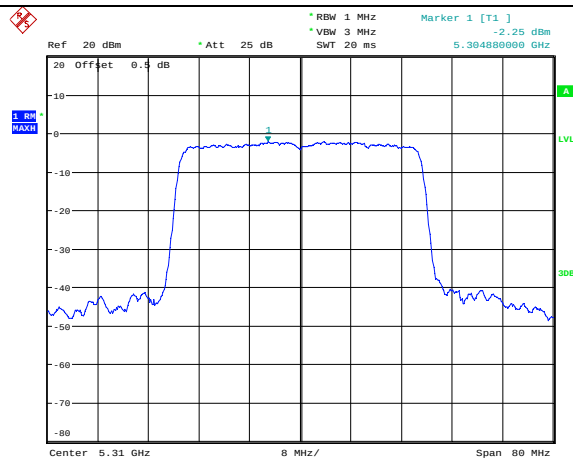
802.11ax hew20
Highest Channel

Date: 26.MAY.2022 21:10:28

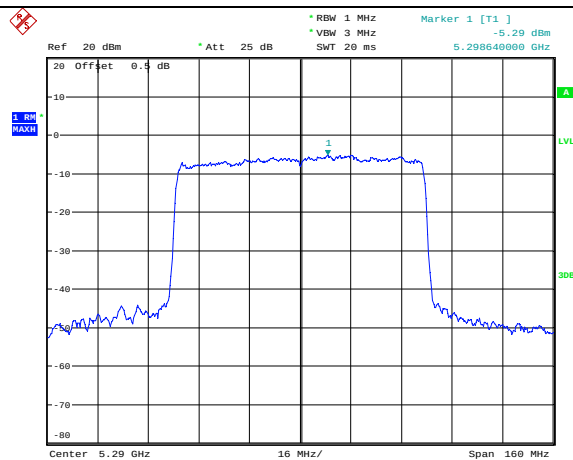
Maximum power spectral density

802.11ax hew40
Lowest Channel

Date: 25.MAY.2022 21:43:57

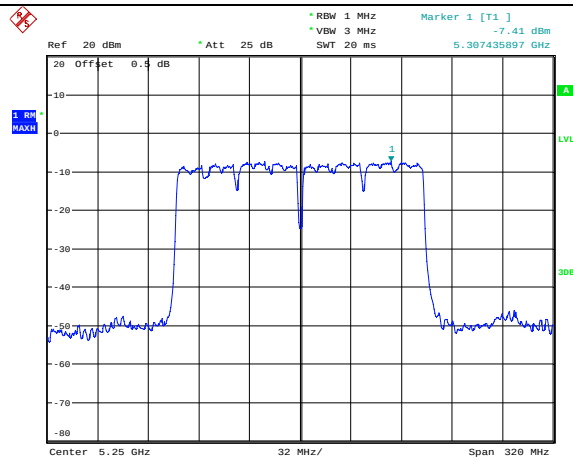
802.11ax hew40
Highest Channel

Date: 25.MAY.2022 21:42:57

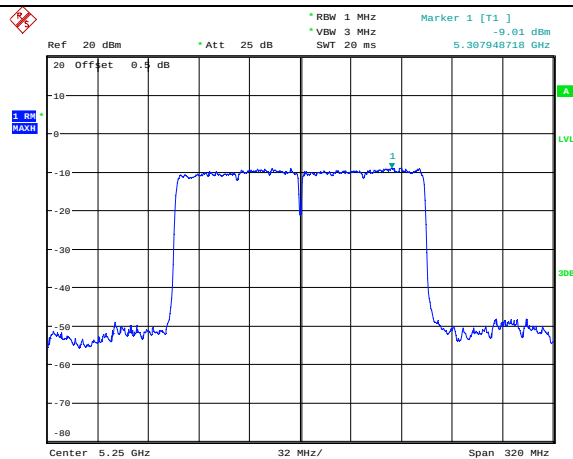
802.11ax hew80
Middle Channel

Date: 25.MAY.2022 21:45:16

Maximum power spectral density

802.11ac vht160
Middle Channel

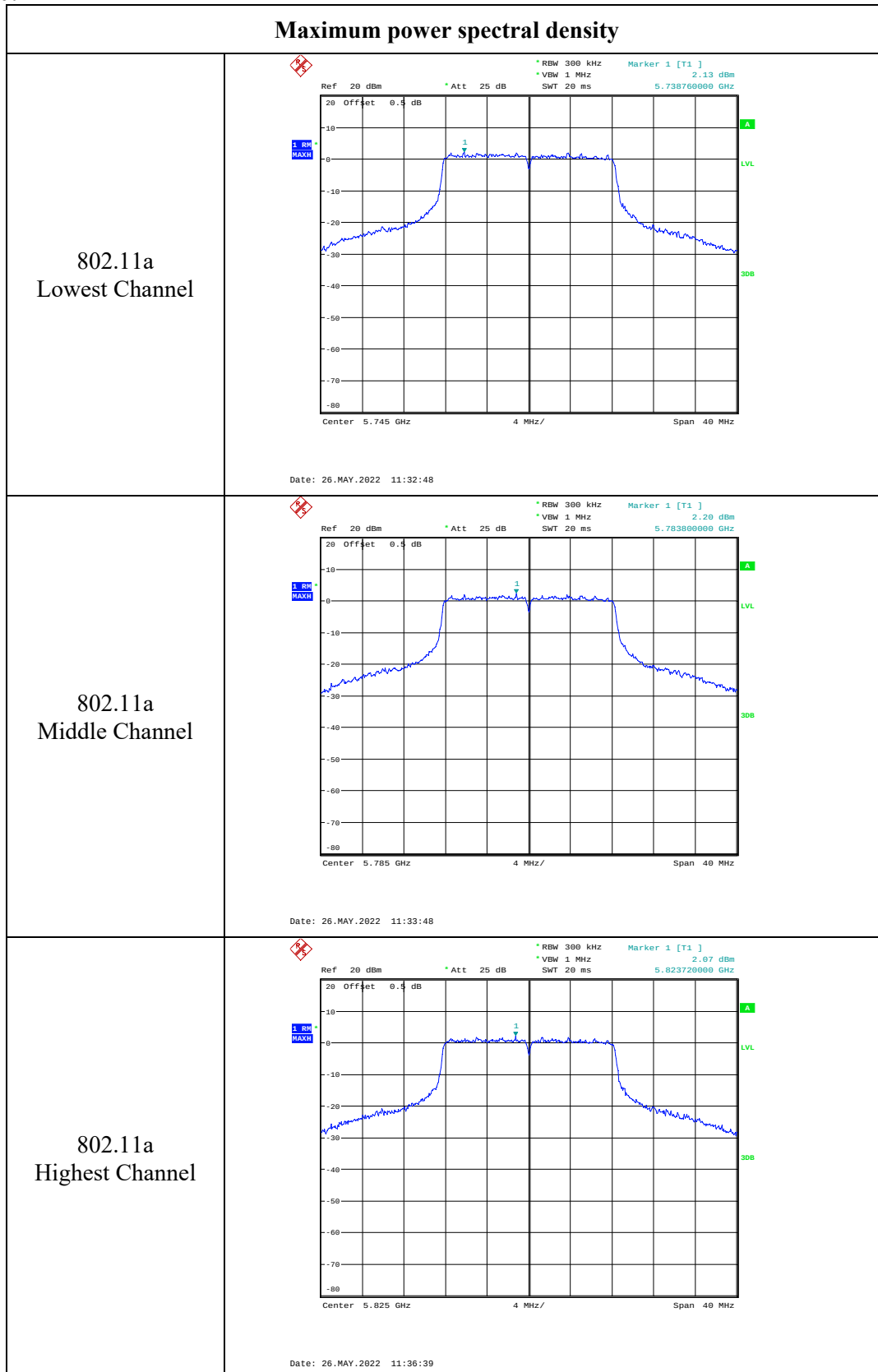
Date: 26.MAY.2022 17:05:26

802.11ax vht160
Middle Channel

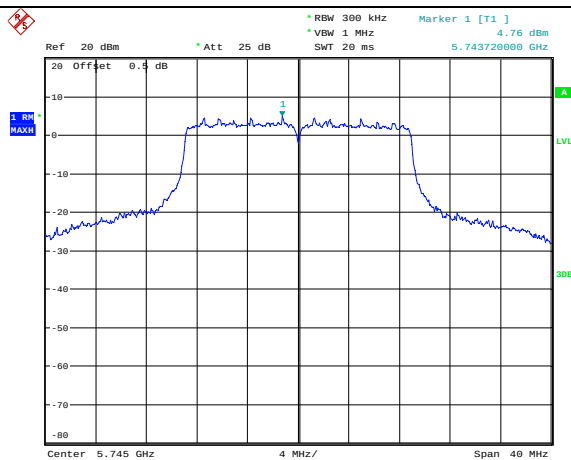
Date: 26.MAY.2022 17:01:33

5725-5850MHz:

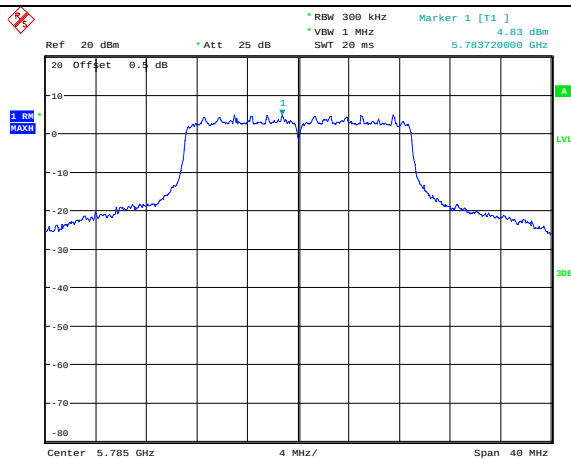
Chain 0:



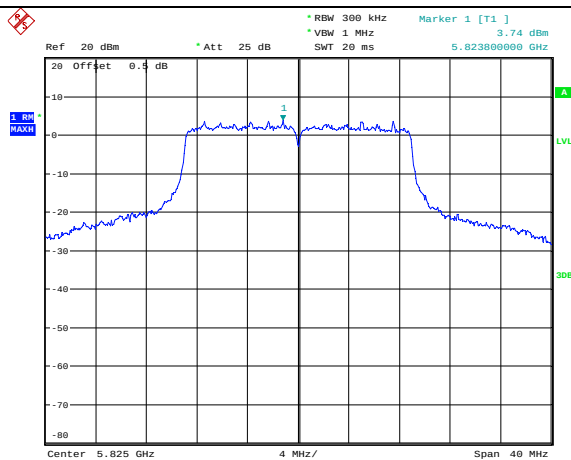
Maximum power spectral density

802.11n ht20
Lowest Channel

Date: 26.MAY.2022 11:56:07

802.11n ht20
Middle Channel

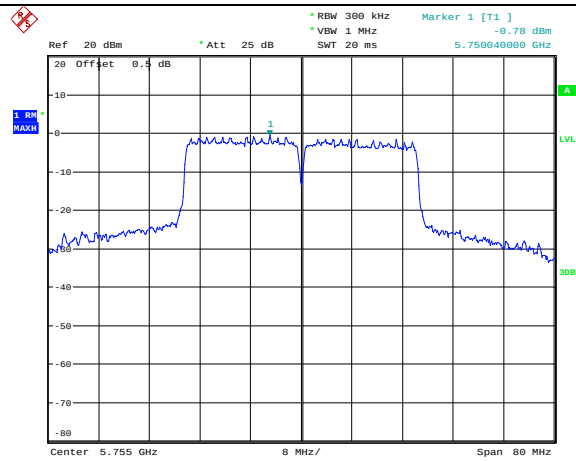
Date: 26.MAY.2022 13:09:56

802.11n ht20
Highest Channel

Date: 26.MAY.2022 13:12:22

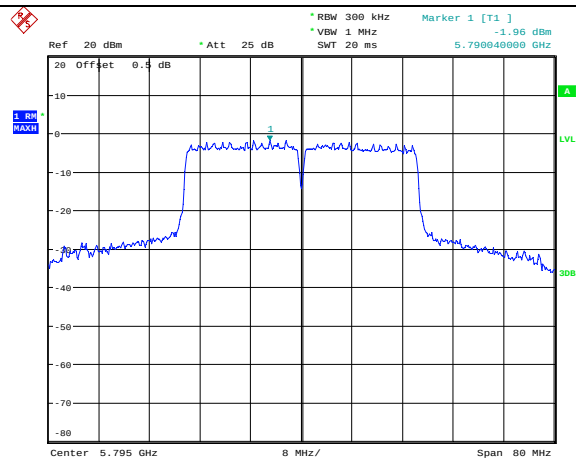
Maximum power spectral density

802.11n ht40
Lowest Channel



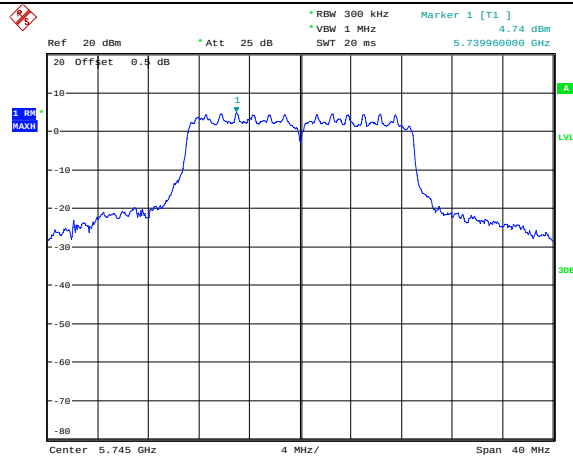
Date: 26.MAY.2022 13:31:02

802.11n ht40
Highest Channel

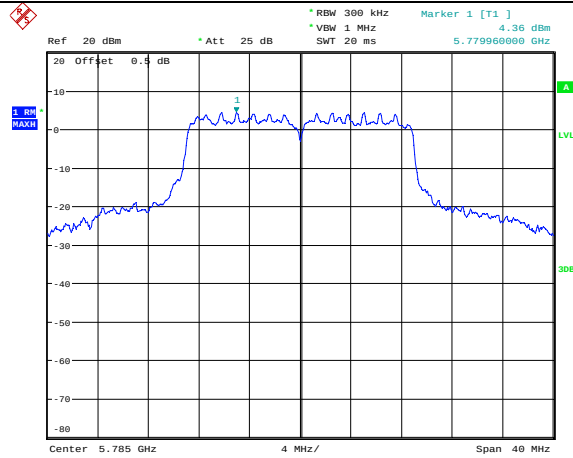


Date: 26.MAY.2022 13:31:59

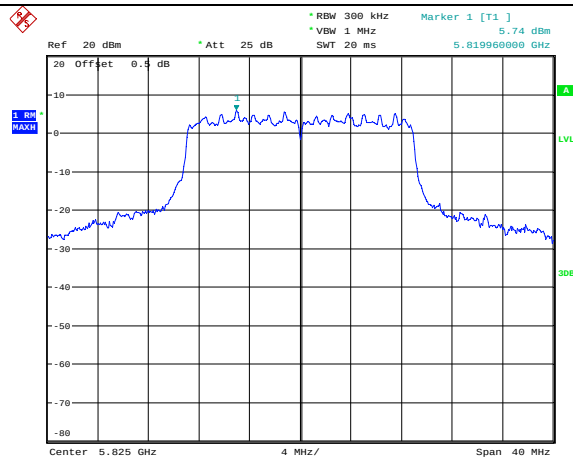
Maximum power spectral density

802.11ac vht20
Lowest Channel

Date: 26.MAY.2022 13:44:24

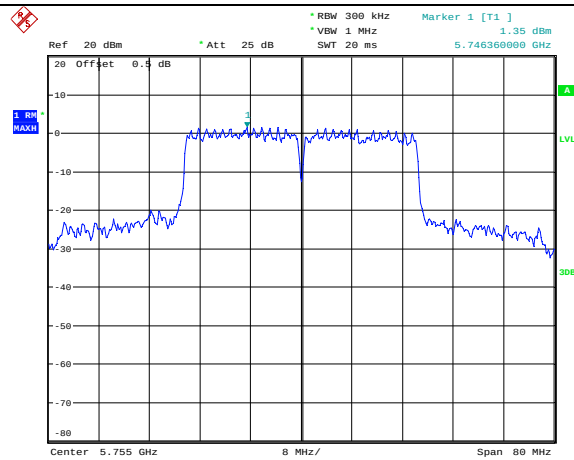
802.11ac vht20
Middle Channel

Date: 26.MAY.2022 13:45:26

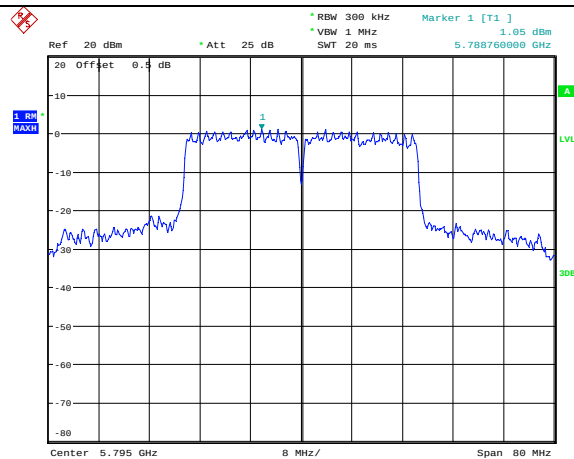
802.11ac vht20
Highest Channel

Date: 26.MAY.2022 13:53:55

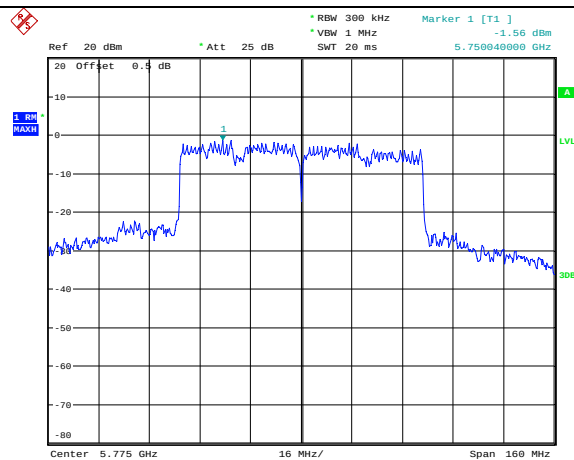
Maximum power spectral density

802.11ac vht40
Lowest Channel

Date: 26.MAY.2022 13:58:36

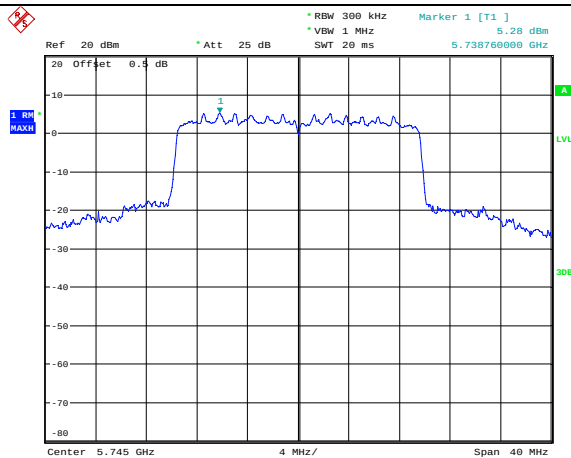
802.11ac vht40
Highest Channel

Date: 26.MAY.2022 13:59:25

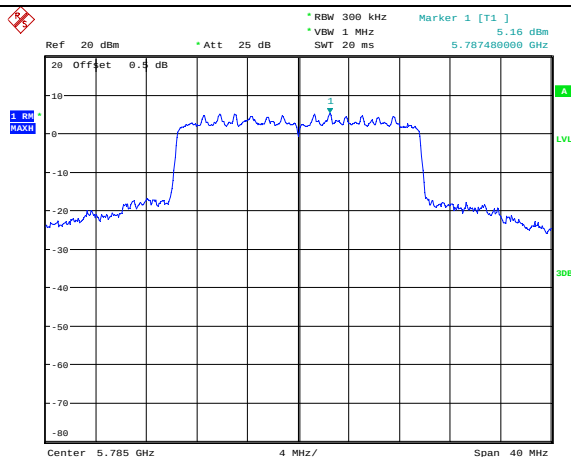
802.11ac vht80
Middle Channel

Date: 26.MAY.2022 14:05:32

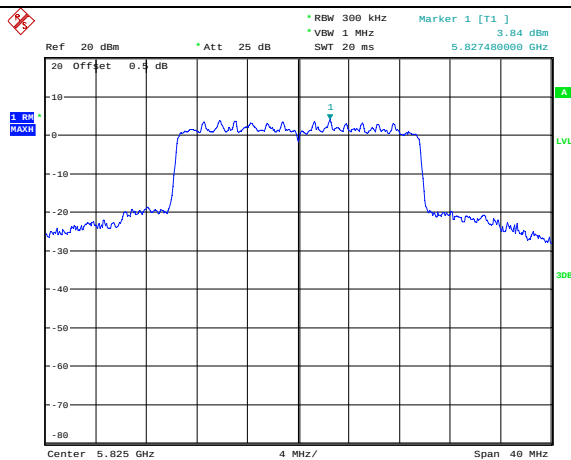
Maximum power spectral density

802.11ax hew20
Lowest Channel

Date: 26.MAY.2022 14:35:30

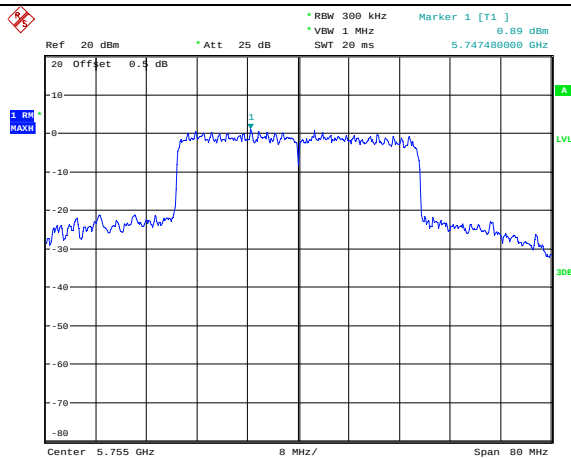
802.11ax hew20
Middle Channel

Date: 26.MAY.2022 14:36:45

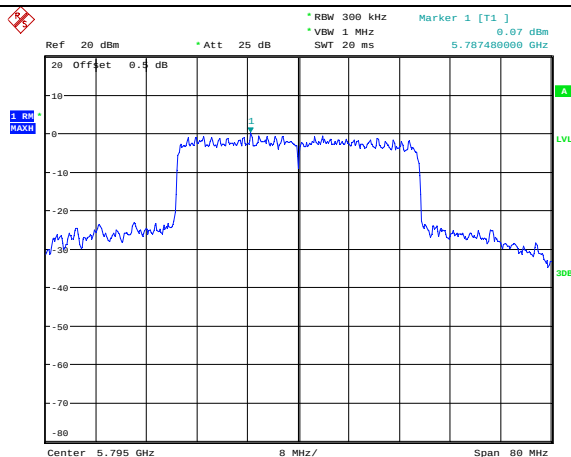
802.11ax hew20
Highest Channel

Date: 26.MAY.2022 14:37:37

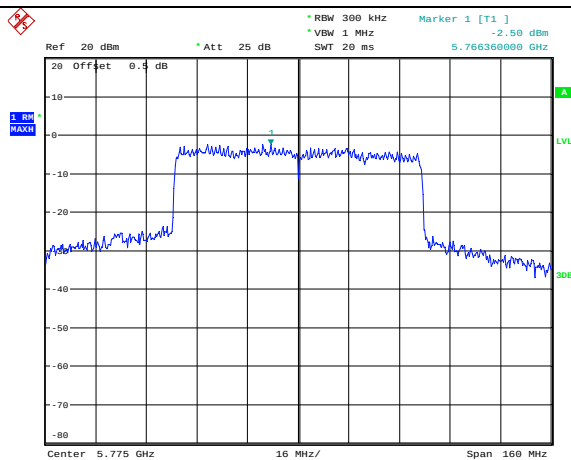
Maximum power spectral density

802.11ax hew40
Lowest Channel

Date: 26.MAY.2022 14:44:27

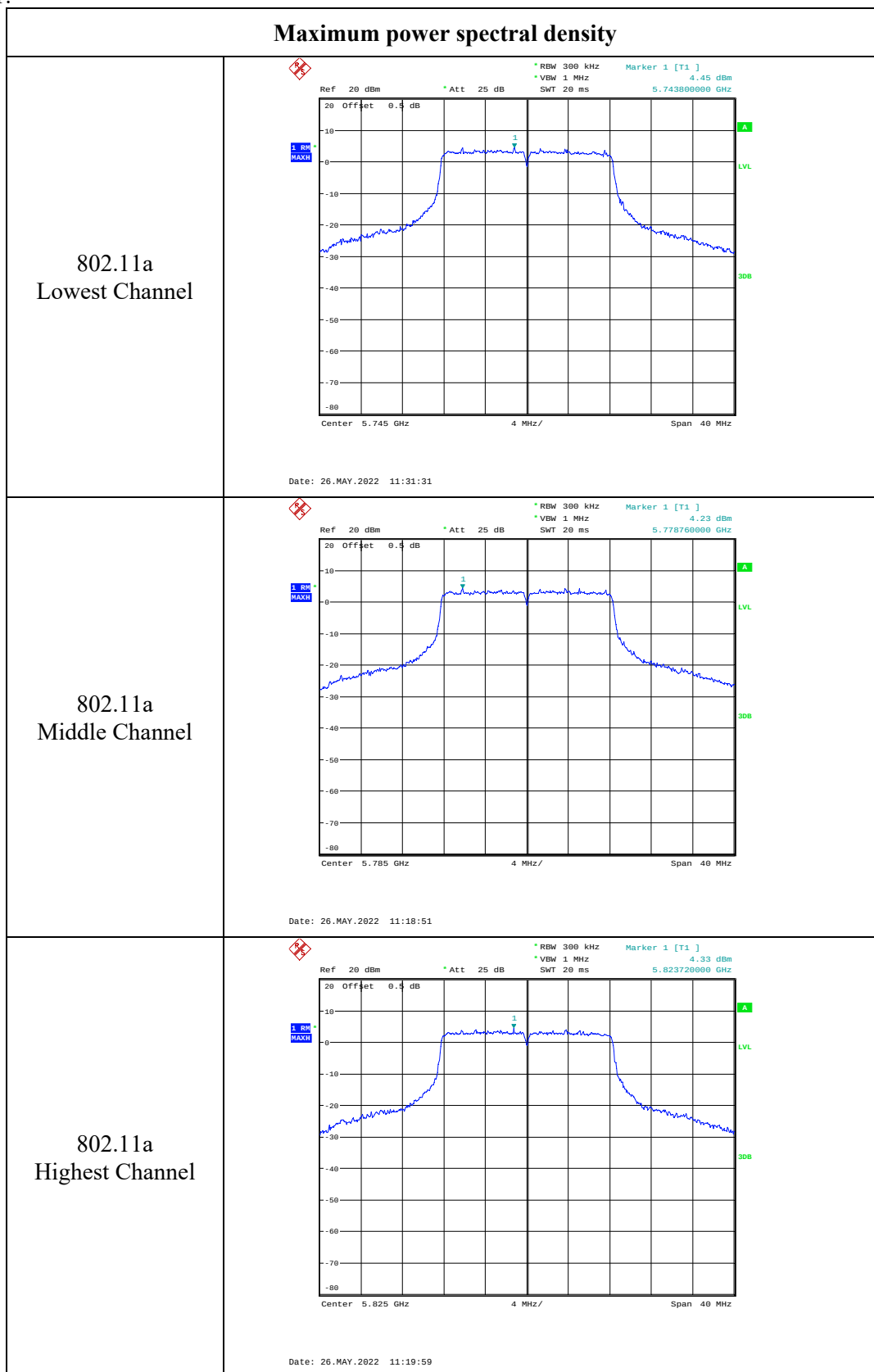
802.11ax hew40
Highest Channel

Date: 26.MAY.2022 14:45:00

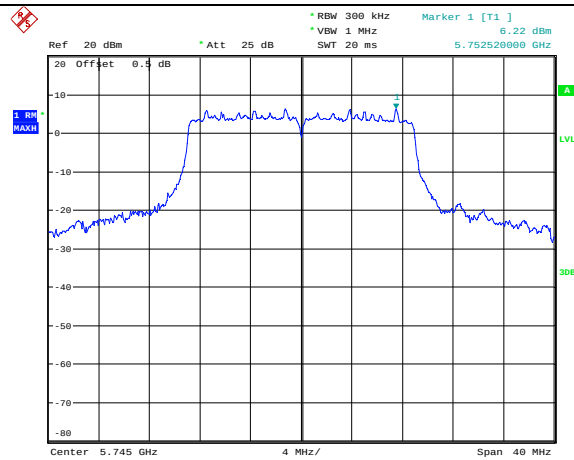
802.11ax hew80
Middle Channel

Date: 26.MAY.2022 14:52:12

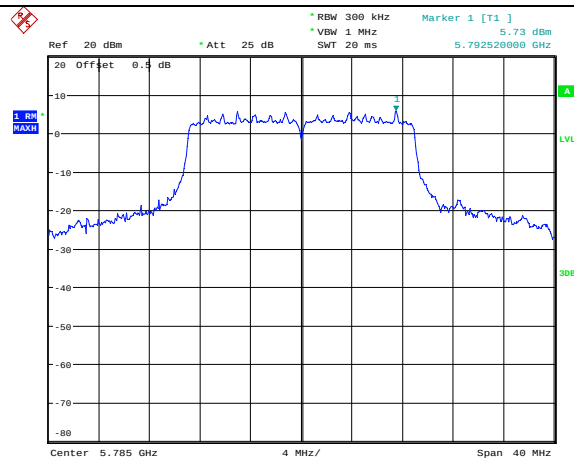
Chain 1:



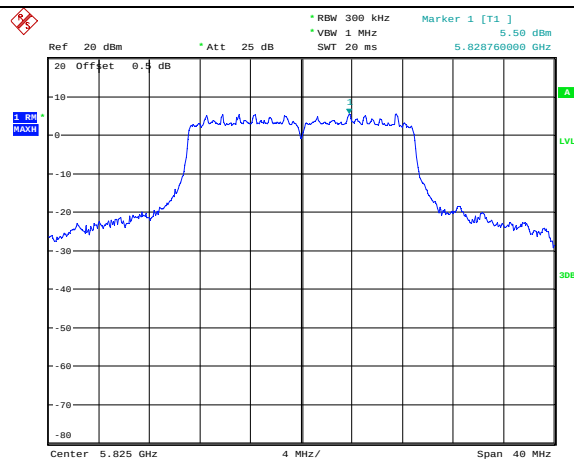
Maximum power spectral density

802.11n ht20
Lowest Channel

Date: 26.MAY.2022 13:16:24

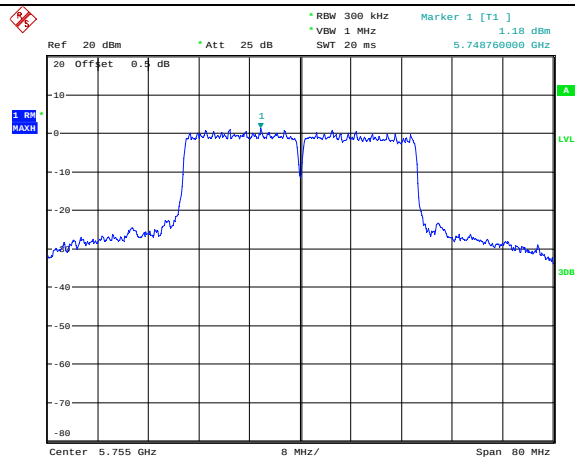
802.11n ht20
Middle Channel

Date: 26.MAY.2022 13:14:58

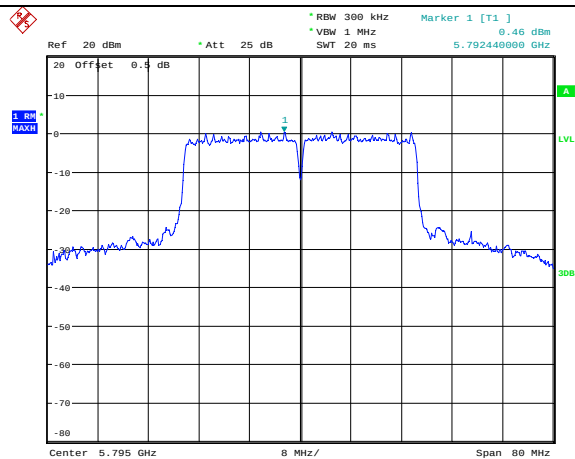
802.11n ht20
Highest Channel

Date: 26.MAY.2022 13:13:48

Maximum power spectral density

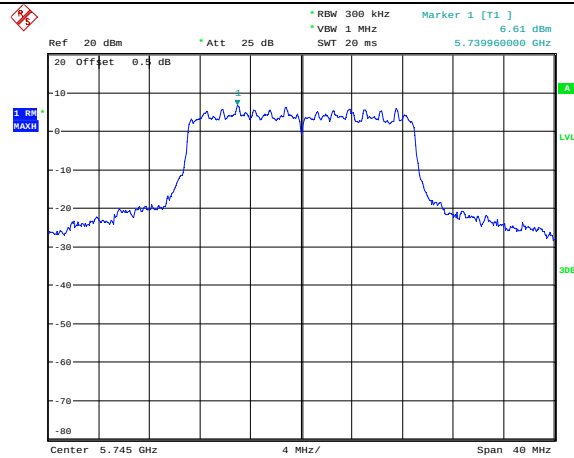
802.11n ht40
Lowest Channel

Date: 26.MAY.2022 13:35:51

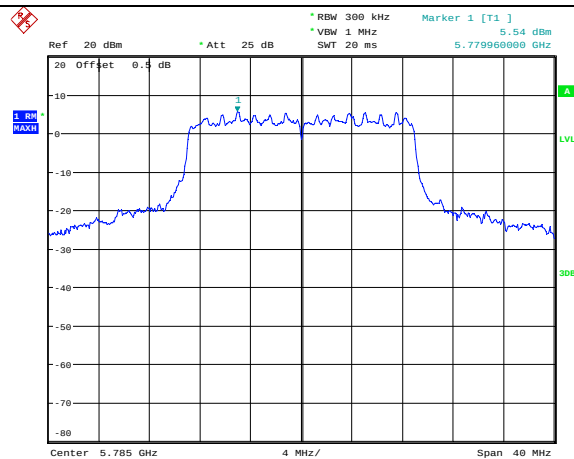
802.11n ht40
Highest Channel

Date: 26.MAY.2022 13:34:54

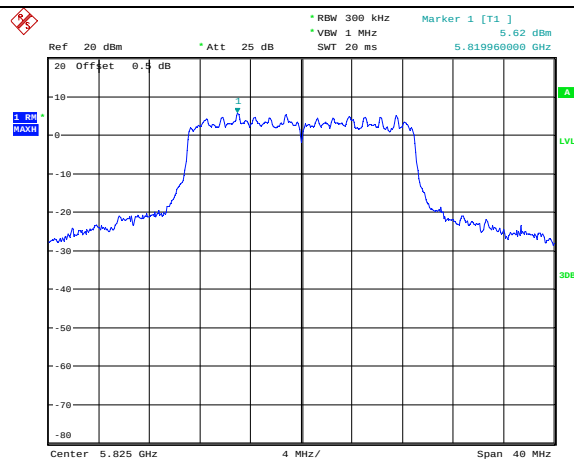
Maximum power spectral density

802.11ac vht20
Lowest Channel

Date: 26.MAY.2022 13:50:29

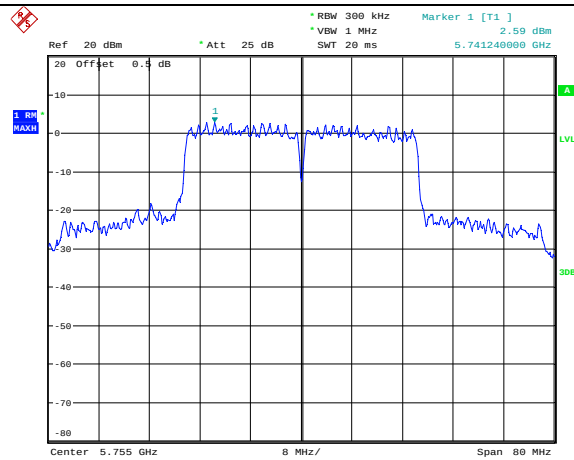
802.11ac vht20
Middle Channel

Date: 26.MAY.2022 13:49:24

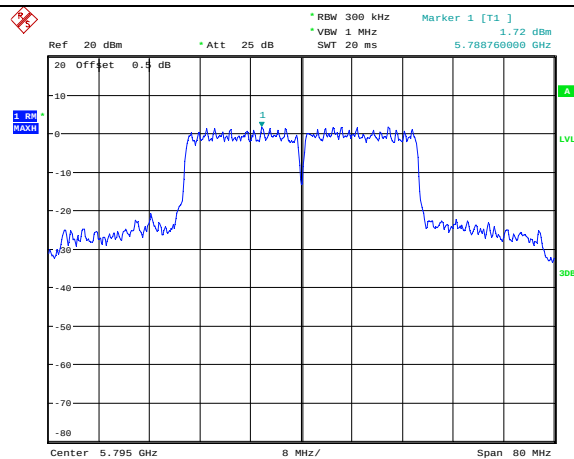
802.11ac vht20
Highest Channel

Date: 26.MAY.2022 13:48:05

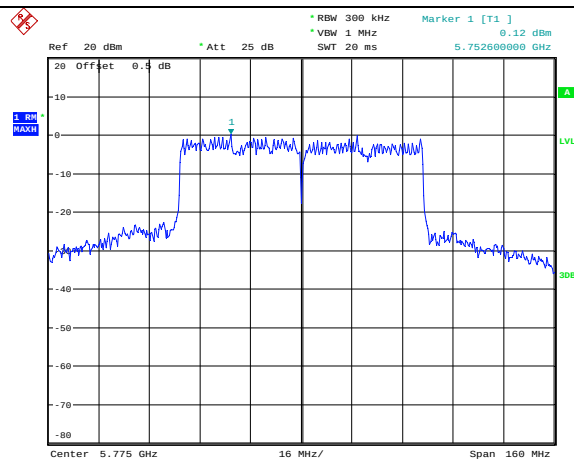
Maximum power spectral density

802.11ac vht40
Lowest Channel

Date: 26.MAY.2022 13:57:15

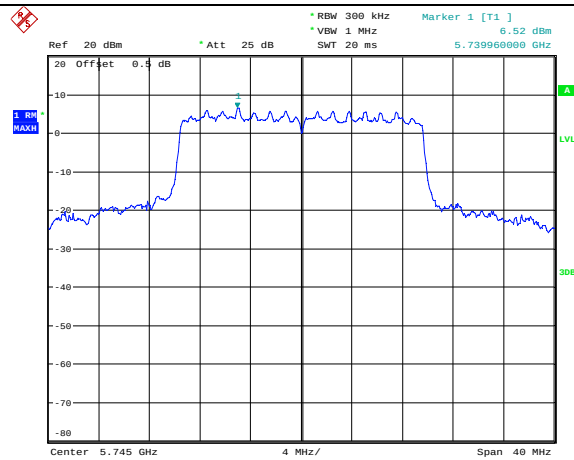
802.11ac vht40
Highest Channel

Date: 26.MAY.2022 14:00:33

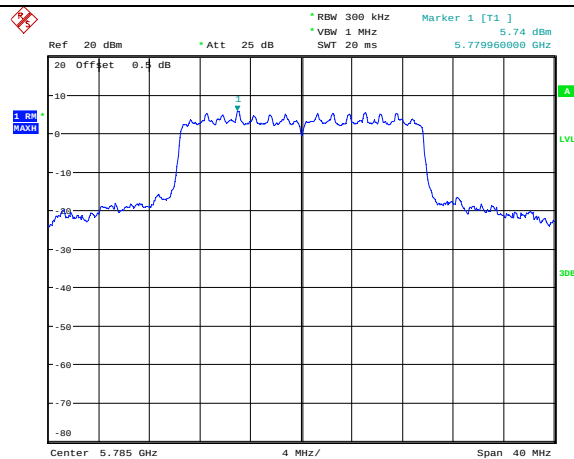
802.11ac vht80
Middle Channel

Date: 26.MAY.2022 14:04:18

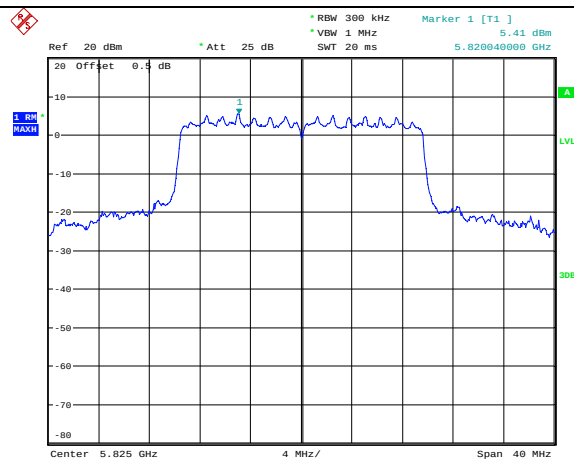
Maximum power spectral density

802.11ax hew20
Lowest Channel

Date: 26.MAY.2022 14:40:54

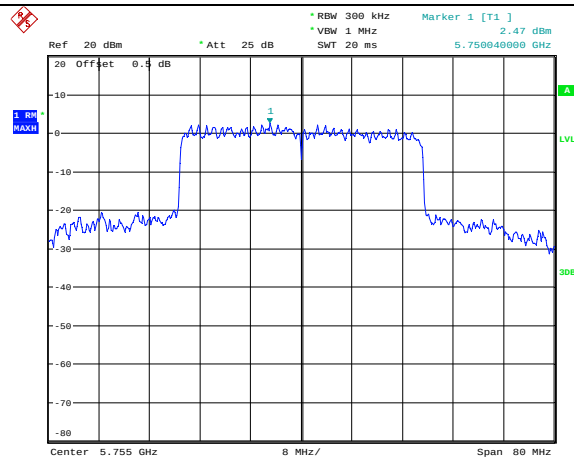
802.11ax hew20
Middle Channel

Date: 26.MAY.2022 14:39:59

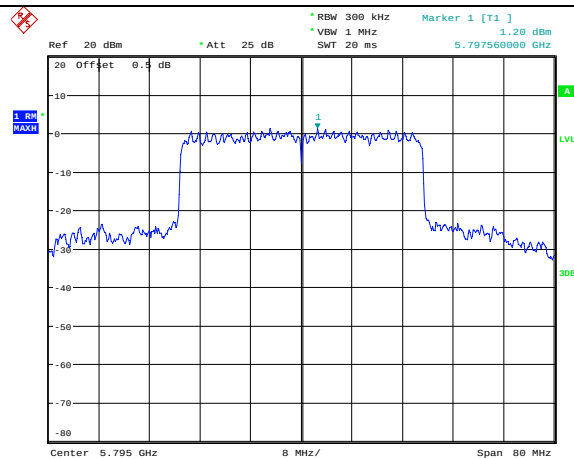
802.11ax hew20
Highest Channel

Date: 26.MAY.2022 14:38:42

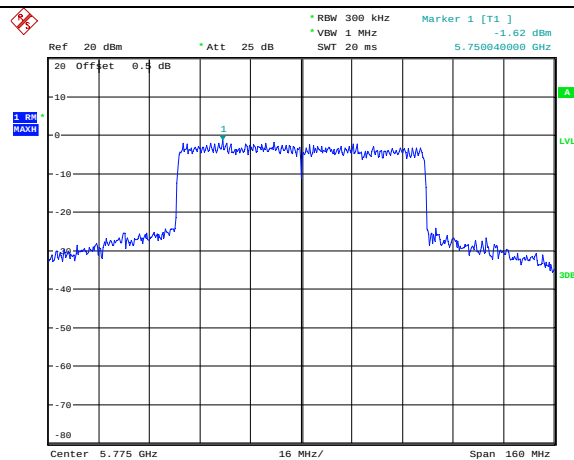
Maximum power spectral density

802.11ax hew40
Lowest Channel

Date: 26.MAY.2022 14:47:38

802.11ax hew40
Highest Channel

Date: 26.MAY.2022 14:46:43

802.11ax hew80
Middle Channel

Date: 26.MAY.2022 14:53:02

4.6 Duty Cycle:

Serial Number:	CR22020001-RF-S1	Test Date:	2022-05-26
Test Site:	RF	Test Mode:	Transmitting
Tester:	Julie Tan	Test Result:	N/A

Environmental Conditions:

Temperature: (°C)	25.7	Relative Humidity: (%)	55	ATM Pressure: (kPa)	100.1
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2021-07-22	2022-07-21
YINSAIGE	Coaxial Cable	LMR300	NJ0100002	Each time	N/A

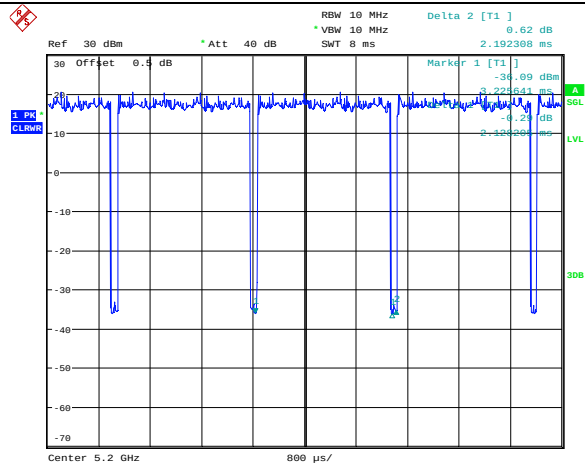
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

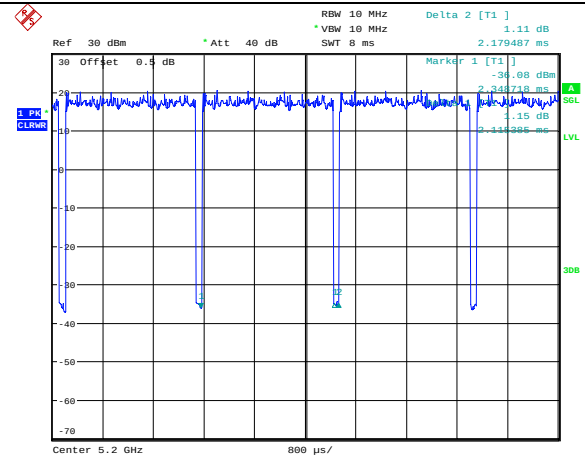
Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)
802.11a	2.128	2.192	97.08
802.11n ht20	2.115	2.179	97.06
802.11n ht40	2.097	2.167	96.77
802.11ac vht20	2.072	2.7	76.74
802.11ac vht40	2.062	2.1	98.19
802.11ac vht80	0.068	0.095	71.58
802.11ax hew20	0.14	0.167	83.83
802.11ax hew40	0.115	0.139	82.73
802.11ax hew80	0.099	0.126	78.57
802.11ac vht160	0.06	0.086	69.77
802.11ax hew160	0.085	0.11	77.27

Duty Cycle

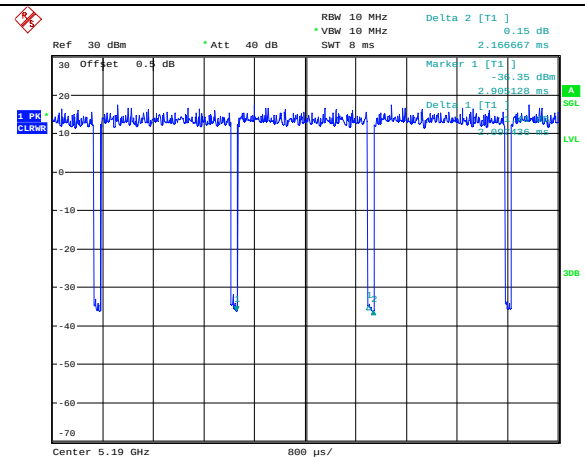
802.11a



802.11n ht20



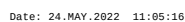
802.11n ht40



802.11ac vht20



802.11ac vht40

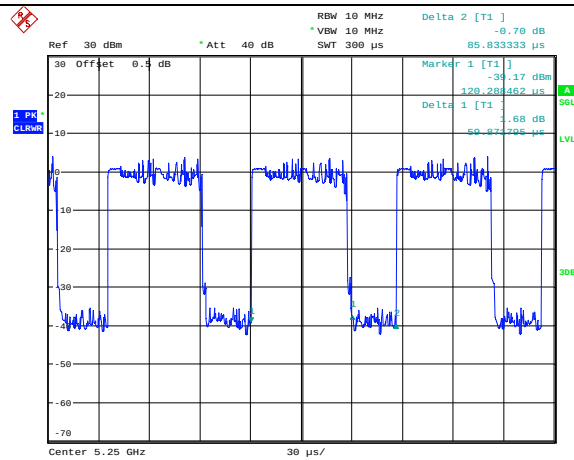


802.11ac vht80



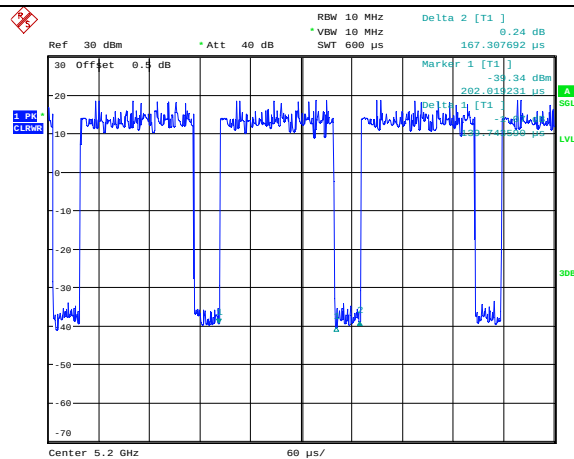
Duty Cycle

802.11ac vht160



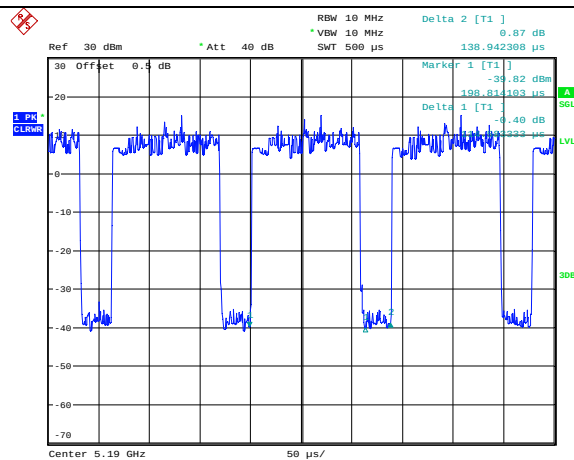
Date: 26.MAY.2022 15:48:47

802.11ax hew20

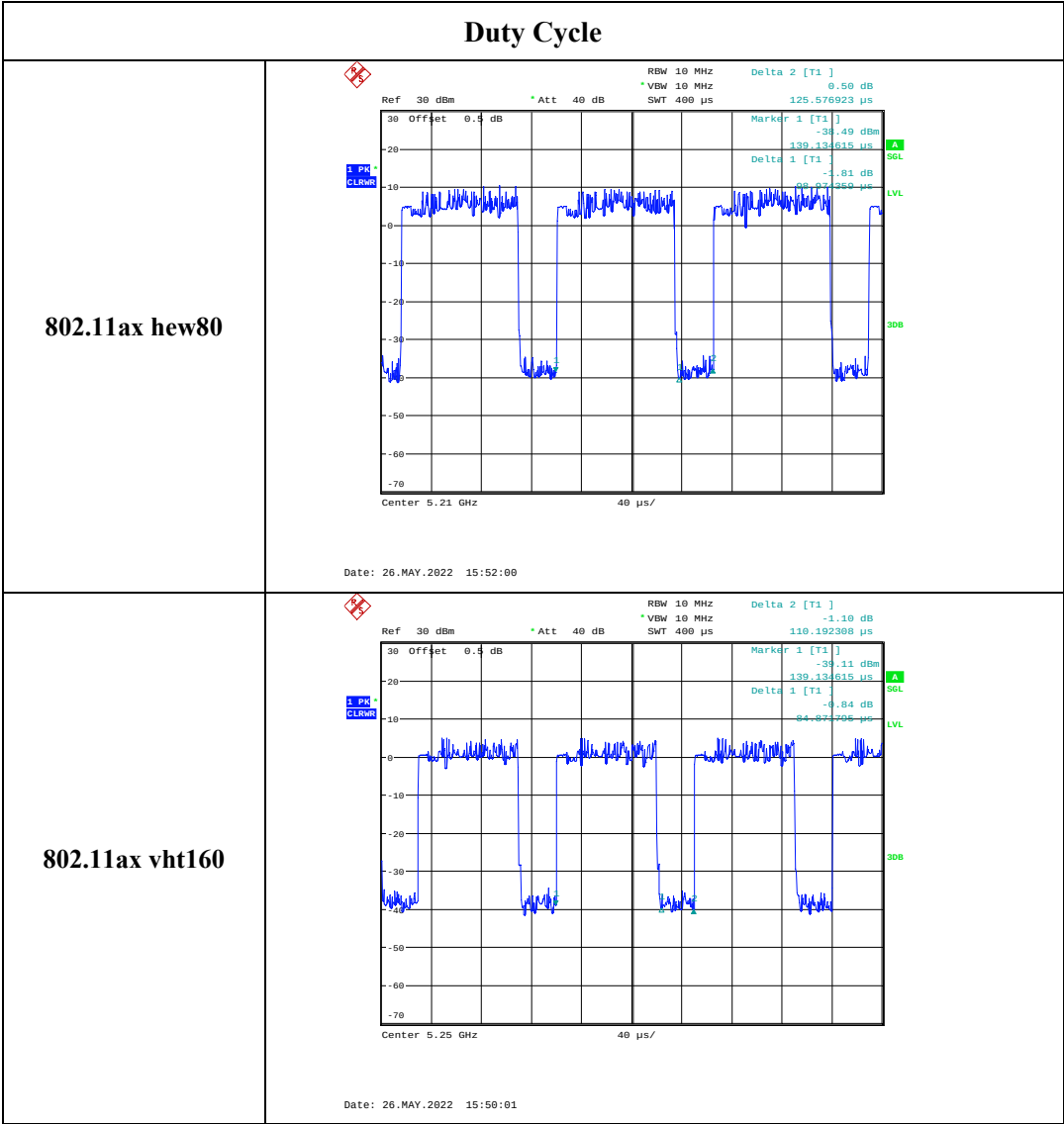


Date: 26.MAY.2022 16:04:37

802.11ax hew40



Date: 26.MAY.2022 16:06:11



5. RF EXPOSURE EVALUATION

5.1 Applicable Standard

FCC §15.247 (i)

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See §1.1307(b)(1) of this chapter.

5.2 Procedure

According to §1.1307(b)(3)(i)

(B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);

5.3 Measurement Result

Frequency (MHz)	Distance (mm)	P_{th}		Maximum Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP (dBm)	Exemption
		(mW)	(dBm)				
2412-2462	200	3060	34.86	28	4.2	30.05	Compliant
5150-5850	200	3060	34.86	24	5	26.85	Compliant

Note: 2.4G WIFI and 5G WIFI can't transmission simultaneously.

Result: The device compliant the Exemption at 20cm distances.

===== END OF REPORT =====