



FCC PART 15.407

TEST REPORT

For

Crestron Electronics Inc

15 Volvo Drive, Rockleigh, New Jersey, 07647, USA

FCC ID: EROAM-TX3

Report Type: Original Report	Product Name: Wireless Media Transmitter
Report Number: <u>RSZ210323004-00B</u>	
Report Date: <u>2021-05-12</u>	
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

EUT Name:	Wireless Media Transmitter
Applicant:	Crestron Electronics Inc
Applicant Address:	15 Volvo Drive, Rockleigh, New Jersey, 07647, USA
Manufacture:	Crestron Electronics Inc
Manufacture Address:	15 Volvo Drive, Rockleigh, New Jersey, 07647, USA
EUT Model:	M202018002
SKU	AM-TX3-100(For US), AM-TX3-100-I(For World)
Operation Frequency:	5150-5250MHz, 5250-5350 MHz, 5470-5725MHz, 5725-5850 MHz
Maximum Output Power (Conducted):	5150-5250MHz: 14.89dBm 5250-5350 MHz:14.98 dBm 5470-5725MHz :14.83 dBm 5725-5850 MHz: 14.78 dBm
Antenna Gain[▲]:	1.5dBi
Modulation Type:	OFDM
Rated Input Voltage:	DC 5V from Type-C Port
Serial Number:	RSZ210323004-RF-S1
EUT Received Date:	2021.03.24
EUT Received Status:	Good

Objective

This type approval report is prepared on behalf of **Crestron Electronics Inc** in accordance with Part 2-Subpart J, Part 15-Subparts A, and E of the Federal Communications Commission's rules.

The tests were performed in order to determine compliance with FCC Rules Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. And KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Dongguan).

Measurement Uncertainty

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: 4.55 dB, 200M~1GHz: 5.92 dB, 1G~6GHz: 4.98 dB, 6G~18GHz: 5.89 dB, 18G~26.5G: 5.47 dB, 26.5G~40G: 5.63 dB
Unwanted Emissions, conducted	±1.5 dB
Temperature	±1 °C
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%
AC Power Lines Conducted Emission	3.12 dB (150 kHz to 30 MHz)

Note: 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.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.12, Pulong East 1st Road, Tangxia 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. : 897218, the FCC Designation No. : CN1220.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

Declarations

BACL 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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SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system support 802.11a/n ht20/n ht40/ac vht20/ac vht40/ac vht80/ax20/ax40/ax80, the vht20/vht40 were reduced since the identical parameters with 802.11n ht20 and ht40.

For 5150~5250 MHz band, 7 channels are provided:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240
42	5210	/	/

For 802.11a, 802.11n ht20/ax20, Channel 36, 40 and 48 were tested, for 802.11n ht40/ax40 Channel 38, 46 were tested, for 802.11ac vht80/ax80 channel 42 was tested.

For 5250~5350 MHz band, 7 channels are provided:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
54	5270	62	5310
56	5280	64	5320
58	5290	/	/

For 802.11a, 802.11n ht20/ax20, Channel 52, 56 and 64 were tested, for 802.11n ht40/ax40 Channel 54, 62 were tested, for 802.11ac vht80/ax80 channel 58 was tested.

For 5470~5725MHz band, 18 channels are provided:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	116	5580	132	5660
102	5510	118	5590	134	5670
104	5520	120	5600	136	5680
106	5530	122	5610	140	5700
108	5540	124	5620	/	/
110	5550	126	5630	/	/
112	5560	128	5640	/	/

For 802.11a, 802.11n ht20/ax20 Channel 100, 116 and 140 were tested, for 802.11n ht40/ax40 Channel 102, 110 and 134 were tested, for 802.11ac vht80/ax80 channel 106.

For 5725~5850MHz band, 8 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	157	5785
151	5755	159	5795
153	5765	161	5805
155	5775	165	5825

For 802.11a, 802.11n ht20, channel 149, 157 and 165 was tested, for 802.11n ht40, channel 151, 159 were tested, for 802.11ac vht80, channel 155 was tested.

EUT Exercise Software

Software " ADB " was used during test, which was provided by manufacturer▲.

For each antenna kit configuration, the maximum output power was configured as below, which was provided by manufacturer▲:

Band	Mode	Channel	Frequency (MHz)	Data rate (Mbps)	Power level	Power level
					Chain 0	Chain 1
5.2G	802.11 a	Low	5180	6	15	12
		Middle	5200	6	15	12
		High	5240	6	15	12
	802.11n ht20	Low	5180	MCS 0	15	12
		Middle	5200	MCS 0	15	12
		High	5240	MCS 0	15	12
	802.11n ht40	Low	5190	MCS 0	16	13
		High	5230	MCS 0	16	13
	802.11ax hew20	Low	5180	MCS 0	13	10
		Middle	5200	MCS 0	13	10
		High	5240	MCS 0	13	10
	802.11ax hew40	Low	5190	MCS 0	14	12
		High	5230	MCS 0	14	12
5.3G	802.11 a	Low	5260	6	16	14
		Middle	5280	6	16	14
		High	5320	6	16	14
	802.11n ht20	Low	5260	MCS 0	16	14
		Middle	5280	MCS 0	16	14
		High	5320	MCS 0	16	14
	802.11n ht40	Low	5270	MCS 0	16	14
		High	5310	MCS 0	16	14
	802.11ax hew20	Low	5260	MCS 0	13	11
		Middle	5280	MCS 0	13	11
		High	5320	MCS 0	13	11
	802.11ax hew40	Low	5270	MCS 0	14	12
		High	5310	MCS 0	14	12
5.6G	802.11 a	Low	5500	6	14	12
		Middle	5580	6	14	12
		High	5700	6	14	12
	802.11n ht20	Low	5500	MCS 0	13	12
		Middle	5580	MCS 0	14	12
		High	5700	MCS 0	14	12
	802.11n ht40	Low	5510	MCS 0	14	12
		Middle	5550	MCS 0	14	11
		High	5670	MCS 0	14	11
	802.11ax hew20	Low	5500	MCS 0	12	9
		Middle	5580	MCS 0	12	9
		High	5700	MCS 0	12	9

	802.11ax hew40	Low	5510	MCS 0	13	11
		Middle	5550	MCS 0	13	11
		High	5670	MCS 0	13	12
	802.11ac vht80	Low	5530	MCS 0	14	11
	802.11ax hew80	Low	5530	MCS 0	15	11
5.8G	802.11 a	Low	5745	6	17	17
		Middle	5785	6	17	17
		High	5825	6	17	17
	802.11n ht20	Low	5745	MCS 0	17	17
		Middle	5785	MCS 0	17	17
		High	5825	MCS 0	17	17
	802.11n ht40	Low	5755	MCS 0	17	17
		High	5795	MCS 0	17	17
	802.11ax hew 20	Low	5745	MCS 0	16	14
		Middle	5785	MCS 0	16	14
		High	5825	MCS 0	16	14
	802.11ax hew40	Low	5755	MCS 0	16	16
		High	5795	MCS 0	16	16
	802.11ac vht80	Middle	5775	MCS 0	18	16
	802.11ax hew80	Middle	5775	MCS 0	18	16

Equipment Modifications

No modification was made to the EUT.

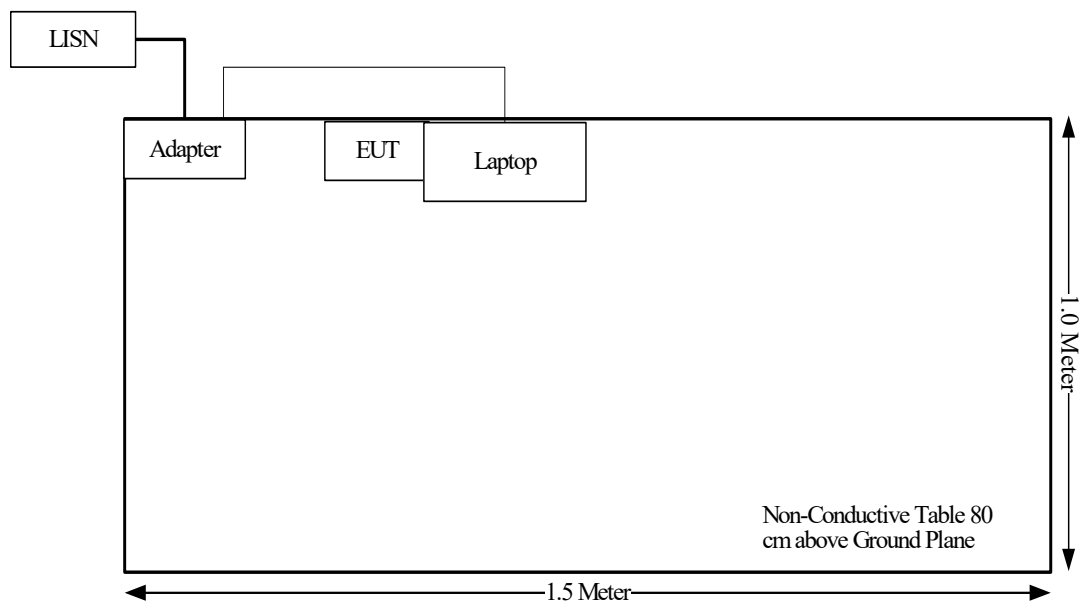
Local Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
DELL	Laptop	E6410	586N3Q1
DELL	Adapter	E6410	/

Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
/	/	/	/	/	/

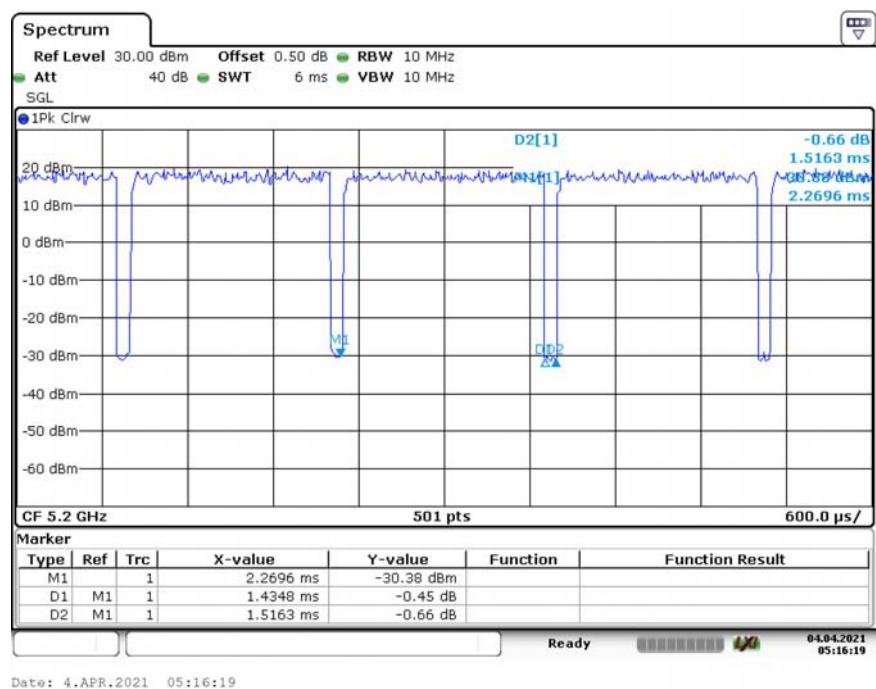
Block Diagram of Test Setup



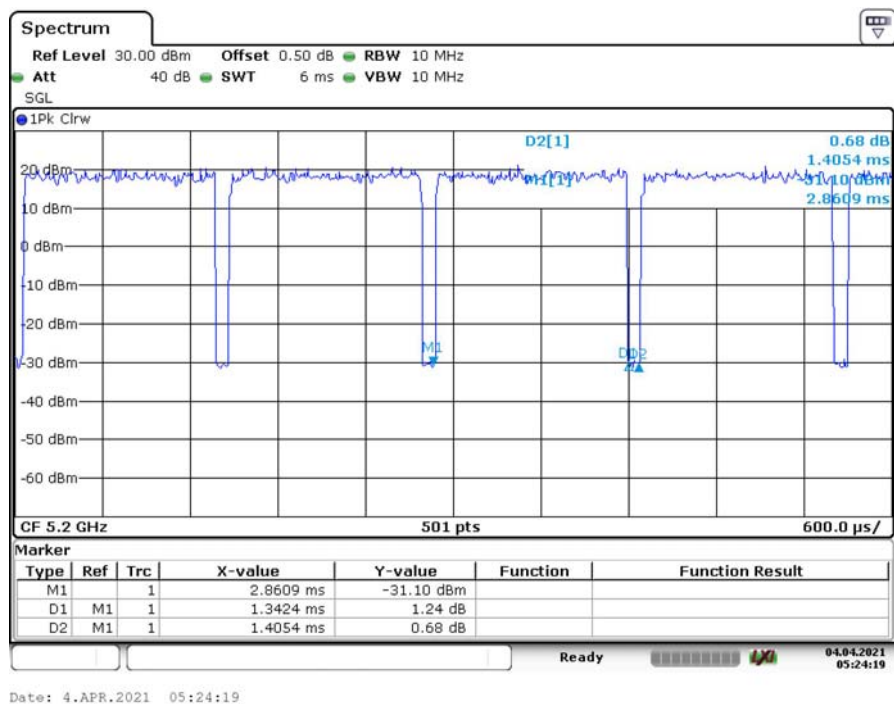
The duty cycle as below:

Mode	T _{on} (ms)	T _{on+off} (ms)	Duty Cycle (%)
802.11 a	1.4348	1.5163	94.63
802.11n ht20	1.3424	1.4054	95.52
802.11n ht40	0.6652	0.7505	88.63
802.11ax hew20	1.0535	1.1259	93.57
802.11ax hew40	0.5580	0.6436	86.70
802.11ac vht80	0.3373	0.4214	80.04
802.11ax hew80	0.3030	0.3913	77.43

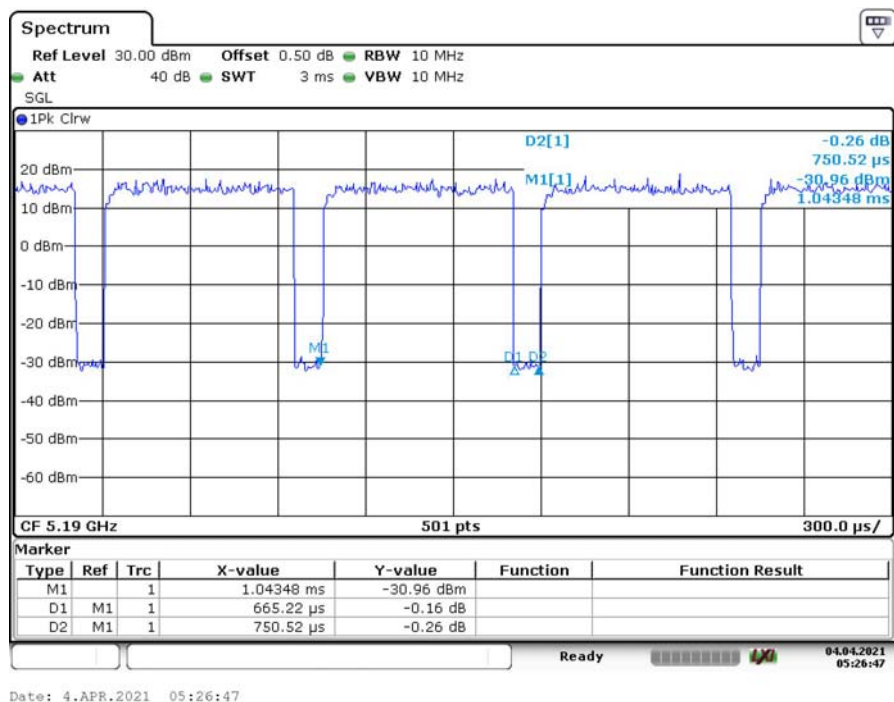
802.11a



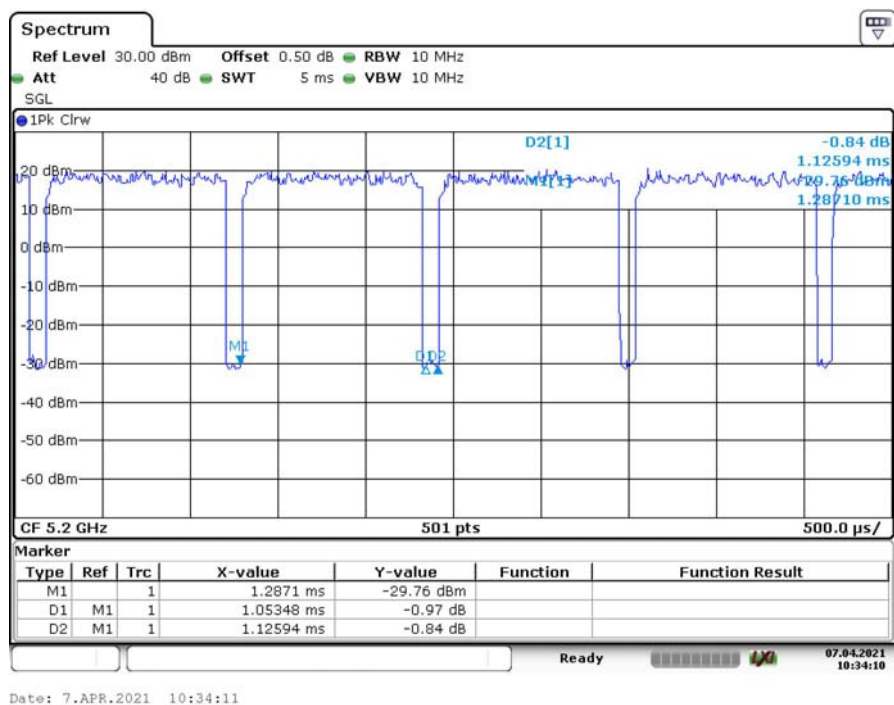
802.11n ht20



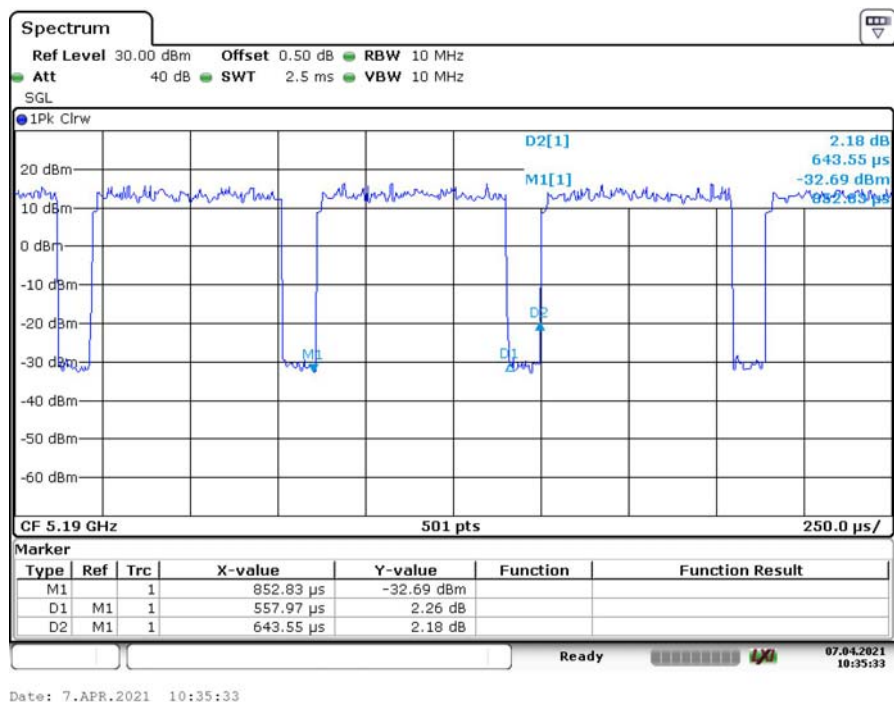
802.11n ht40



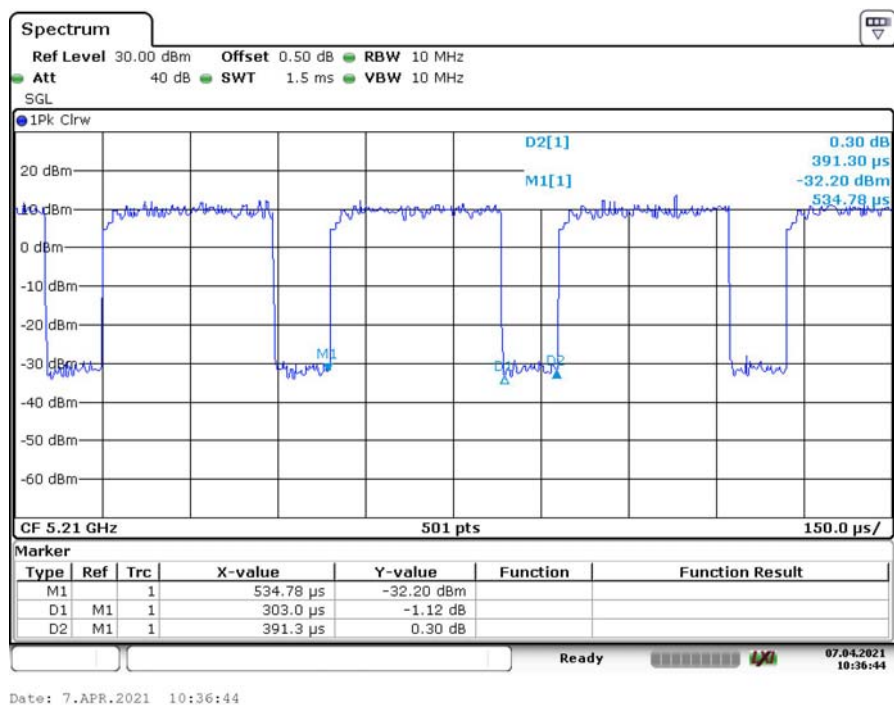
802.11ax hew20



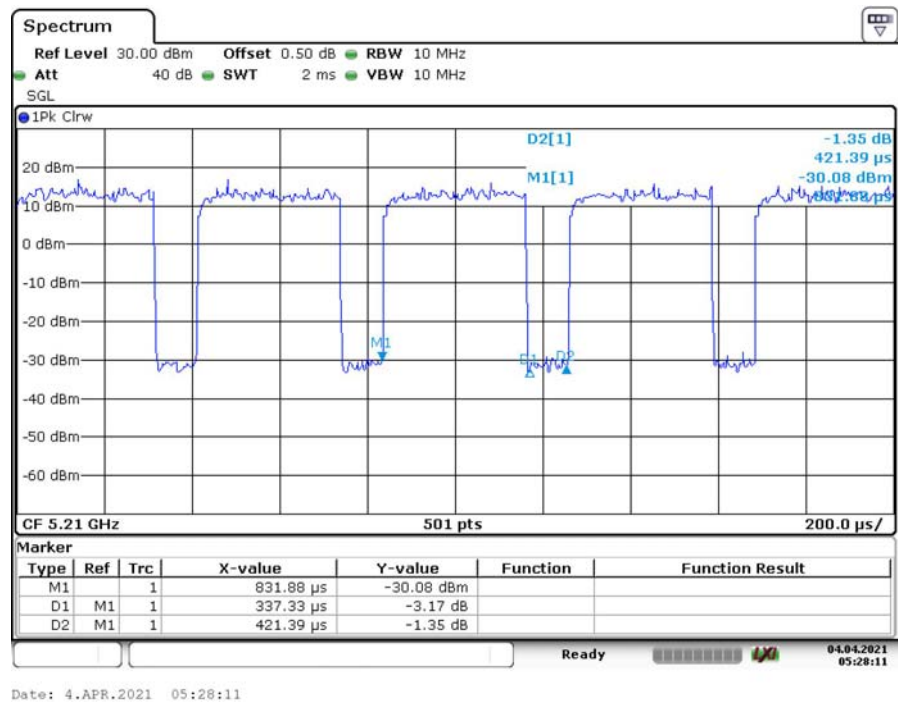
802.11ax hew40



802.11ac vht80



802.11ax hew80



SUMMARY OF TEST RESULTS

Rules	Description of Test	Result
FCC §15.407 (f) & §1.1310 & §2.1091	Maximum Permissible Exposure (MPE)	Compliance
FCC§15.203	Antenna Requirement	Compliance
FCC§15.407(b)(6)& §15.207(a)	Conducted Emissions	Compliance
FCC§15.205& §15.209 &§15.407(b)	Undesirable Emission& Restricted Bands	Compliance
FCC§15.407(b)	Out Of Band Emissions	Compliance
FCC§15.407(a) (e)	Emission Bandwidth	Compliance
FCC§15.407(a)	Conducted Transmitter Output Power	Compliance
FCC§15.407 (a)	Power Spectral Density	Compliance

FCC §15.407 (f) & §1.1310 & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart 15.407(f) and subpart §1.1310, 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 level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculation formula:

Prediction of power density at the distance of the applicable MPE limit

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain Factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

Calculated Data:

Mode	Frequency (MHz)	Antenna Gain		Conducted output power including Tune-up Tolerance		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
WLAN	5150-5850	1.5	1.41	15	31.62	20.00	0.009	1.0

Note: the 2.4G and 5G can't transmitting simultenuously.

Result: The device meet FCC MPE at **20 cm** distance

FCC §15.203- ANTENNA REQUIREMENT

Applicable Standard

According to 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 user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

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

Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

Antenna Connector Construction

The EUT has 2 PCB antennas for Wi-Fi which was permanently attached to the unit; fulfill the requirement of this section. Please refer to the EUT photos and below information:

Antenna	Antenna Type	input impedance (Ohm)	Antenna Gain /Frequency Range
5G Chain 0 (5G ANT 1)	PCB	50	1.5 dBi/5.18-5.85GHz
5G Chain 1 (5G ANT 2)	PCB	50	1.5 dBi/5.18-5.85GHz

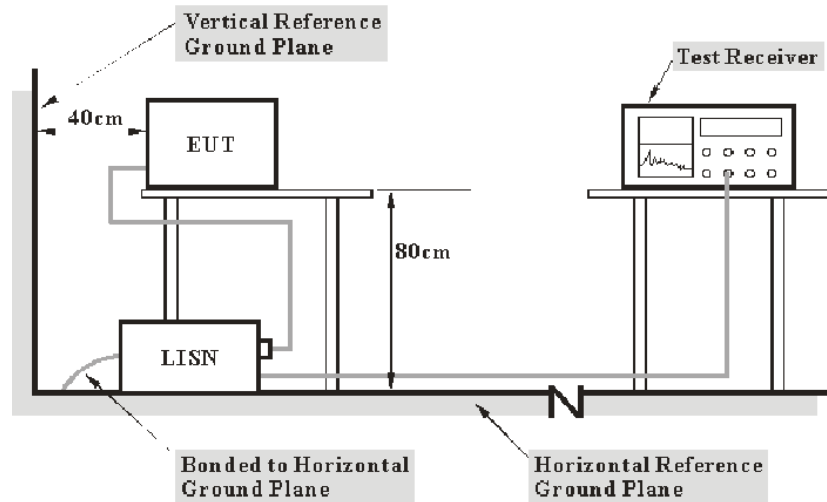
Result: Compliance.

FCC §15.207(a)– CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a), §15.407(b) (6).

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 was connected to the main lisn with a 120 V/60 Hz AC power source.

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

Corrected Amplitude & Margin Calculation

The basic equation is as follows:

$$V_C = V_R + A_C + VDF$$

$$C_f = A_C + VDF$$

Herein,

V_C (cord. Reading): corrected voltage amplitude

V_R : reading voltage amplitude

A_c : attenuation caused by cable loss

VDF: voltage division Factor of AMN

C_f : Correction Factor

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV 216	101614	2020-09-12	2021-09-12
R&S	EMI Test Receiver	ESCI	101121	2020-07-07	2021-07-07
MICRO-COAX	Coaxial Cable	C-NJNJ-50	C-0200-01	2020-09-05	2021-09-05
R&S	Test Software	EMC32	Version 9.10.00	N/A	N/A

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Procedure

During the conducted emission test, the adapter was connected to the first LISN.

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.

Test Data

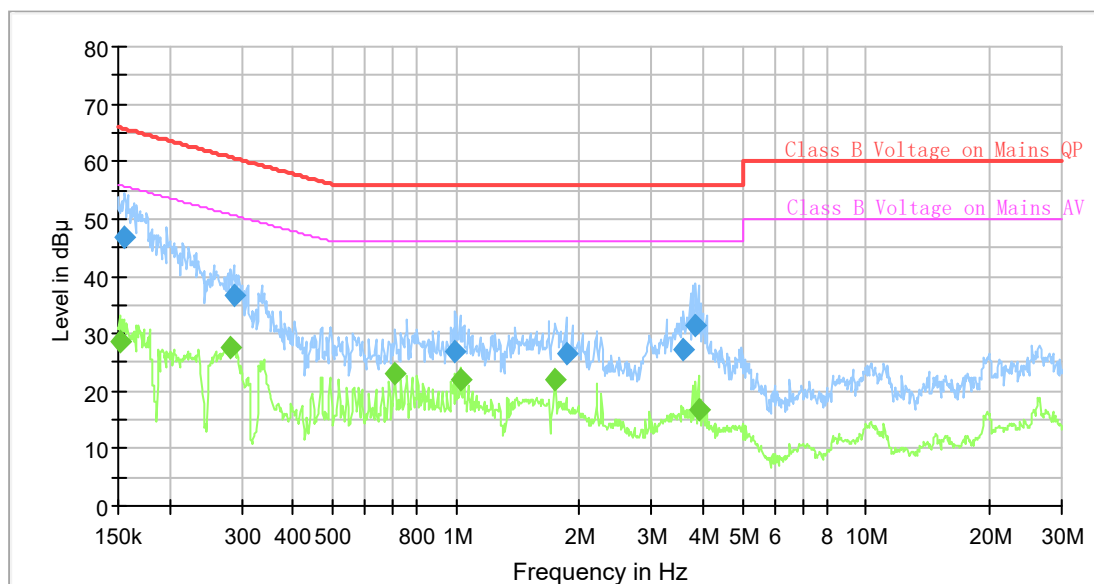
Environmental Conditions

Temperature:	24.5°C
Relative Humidity:	67%
ATM Pressure:	101.2kPa
Tester:	Walker Chen
Test Date:	2021-04-12

Test Result: Compliance.

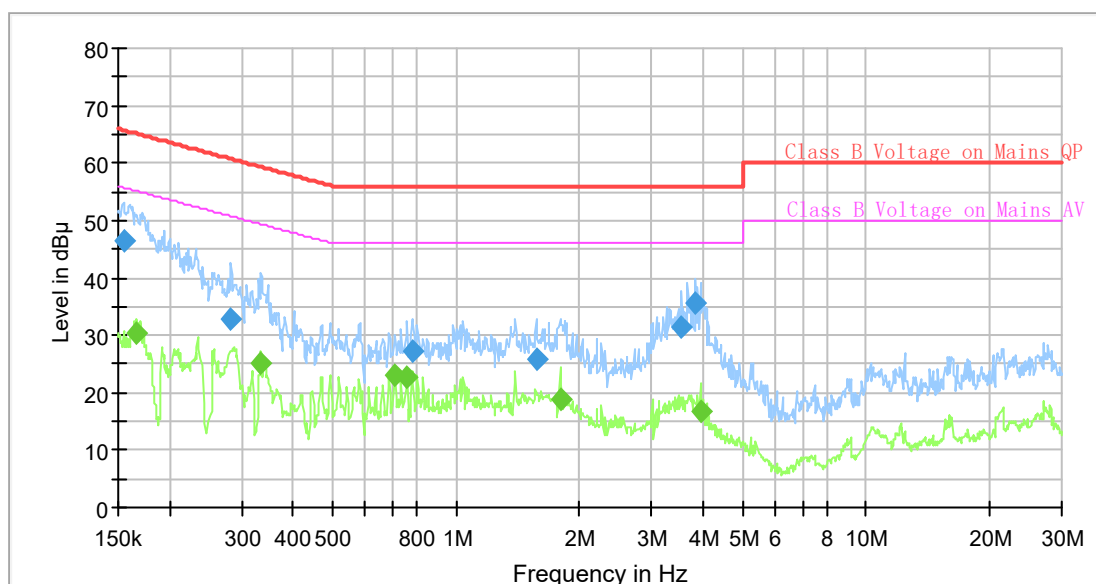
Test Mode: Transmitting (802.11a 5200MHz chain 1 was the worst)

AC120 V, 60 Hz, Line:



Final Result

Frequency (MHz)	QuasiPeak (dB μ V)	Average (dB μ V)	Limit (dB μ V)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.151504	---	28.59	55.92	27.33	9.000	L1	9.6
0.155329	46.72	---	65.71	18.99	9.000	L1	9.6
0.282606	---	27.70	50.74	23.04	9.000	L1	9.6
0.286866	36.52	---	60.61	24.09	9.000	L1	9.6
0.711054	---	22.98	46.00	23.02	9.000	L1	9.7
0.998148	26.96	---	56.00	29.04	9.000	L1	9.7
1.023352	---	22.08	46.00	23.92	9.000	L1	9.7
1.744993	---	21.90	46.00	24.10	9.000	L1	9.7
1.861883	26.45	---	56.00	29.55	9.000	L1	9.7
3.596438	27.41	---	56.00	28.59	9.000	L1	9.7
3.837350	31.54	---	56.00	24.46	9.000	L1	9.7
3.895198	---	16.62	46.00	29.38	9.000	L1	9.7

AC120 V, 60 Hz, Neutral:**Final Result**

Frequency (MHz)	QuasiPeak (dB μ V)	Average (dB μ V)	Limit (dB μ V)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.154557	46.58	---	65.75	19.17	9.000	N	9.6
0.166563	---	30.54	55.13	24.59	9.000	N	9.6
0.282606	32.72	---	60.74	28.02	9.000	N	9.6
0.334832	---	25.32	49.33	24.01	9.000	N	9.6
0.711054	---	23.08	46.00	22.92	9.000	N	9.6
0.758685	---	22.85	46.00	23.15	9.000	N	9.6
0.781732	27.16	---	56.00	28.84	9.000	N	9.6
1.571471	25.87	---	56.00	30.13	9.000	N	9.6
1.798001	---	18.71	46.00	27.29	9.000	N	9.6
3.543027	31.38	---	56.00	24.62	9.000	N	9.6
3.837350	35.60	---	56.00	20.40	9.000	N	9.6
3.953919	---	16.70	46.00	29.30	9.000	N	9.6

FCC §15.209, §15.205 , §15.407(b) –UNWANTED EMISSION

Applicable Standard

FCC §15.407; §15.209; §15.205;

(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 in the 5.725-5.85 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 manufac vhturing, 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 manufac vhturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

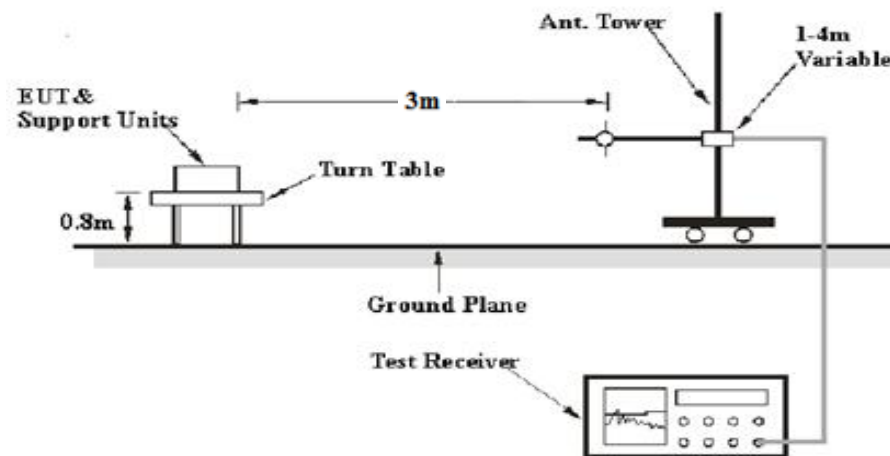
(5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(6) 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.

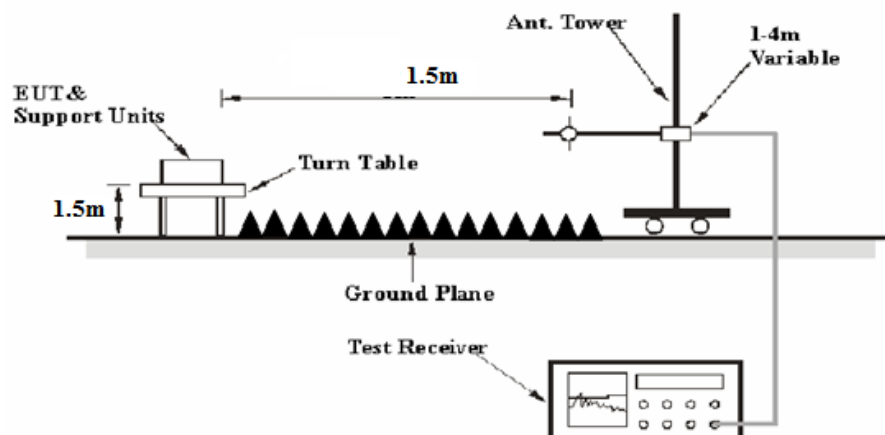
(7) The provisions of §15.205 apply to intentional radiators operating under this section.

EUT Setup

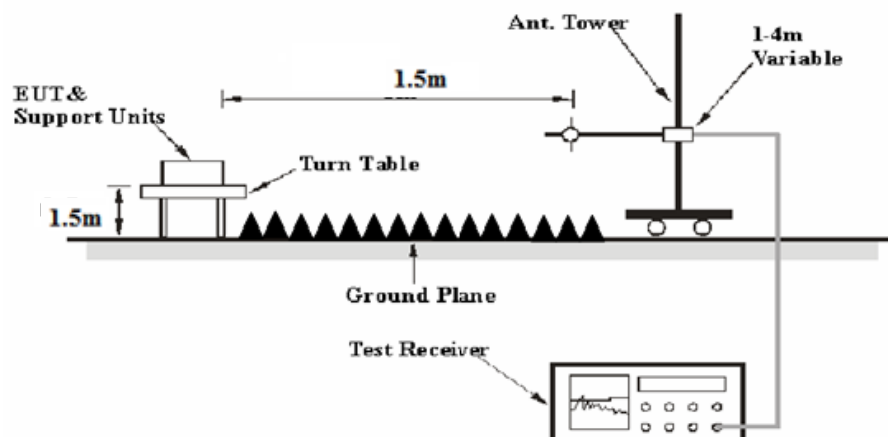
Below 1 GHz:



1-26.5 GHz:



26.5-40 GHz:



The radiated emission Below 1GHz tests were performed in the 3 meters chamber test site A, above 1GHz tests were performed in the 3 meters chamber test site B, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and 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.

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
Ave.	>98%	1MHz	10 Hz
	<98%	1MHz	1/T

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.

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.

Corrected Amplitude & Margin Calculation

For the range 30MHz-1GHz, the Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

For the range 1GHz-40GHz, Test performed at 1.5m or 1m, the Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading and the Distance extrapolation Factor. The basic equation is as follows:

$$\begin{aligned} &\text{Corrected Amplitude} \\ &= \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain} - \text{Distance extrapolation factor} \end{aligned}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiation Below 1GHz Test					
Sunol Sciences	Antenna	JB3	A060611-2	2020-08-25	2023-08-25
R&S	EMI Test Receiver	ESCI	100224	2020-09-12	2021-09-12
Unknown	Coaxial Cable	C-NJNJ-50	C-1000-01	2020-09-05	2021-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-02	2020-09-05	2021-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0530-01	2020-09-24	2021-09-24
Sonoma	Amplifier	310N	185914	2020-10-13	2021-10-13
Farad	Test Software	EZ-EMC	V1.1.4.2	N/A	N/A
Radiation Above 1GHz Test					
ETS-Lindgren	Horn Antenna	3115	000 527 35	2018-10-12	2021-10-12
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-01 1304	2020-12-05	2023-12-04
Ducommun Technologies	Horn Antenna	ARH-2823-02	1007726-01 1302	2020-12-05	2023-12-04
R&S	Spectrum Analyzer	FSP 38	100478	2020-07-07	2021-07-07
Agilent	Spectrum Analyzer	E4440A	SG43360054	2020-07-07	2021-07-07
Unknown	Coaxial Cable	C-SJSJ-50	C-0800-01	2020-09-05	2021-09-05
Unknown	Coaxial Cable	C-2.4J2.4J-50	C-0700-02	2020-06-27	2021-06-27
Mini-Circuit	Amplifier	ZVA-213-S+	54201245	2020-09-05	2021-09-05
Quinstar	Amplifier	QLW-18405536-JO	15964001001	2020-06-27	2021-06-27
Farad	Test Software	EZ-EMC	V1.1.4.2	N/A	N/A
Sinoscite	Bandstop Filters	BSF5150-5850MN-0899-003	0899003	2020-05-06	2021-05-06
Mini Circuits	High Pass Filter	VHF-6010+	31118	2020-06-16	2021-06-16

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

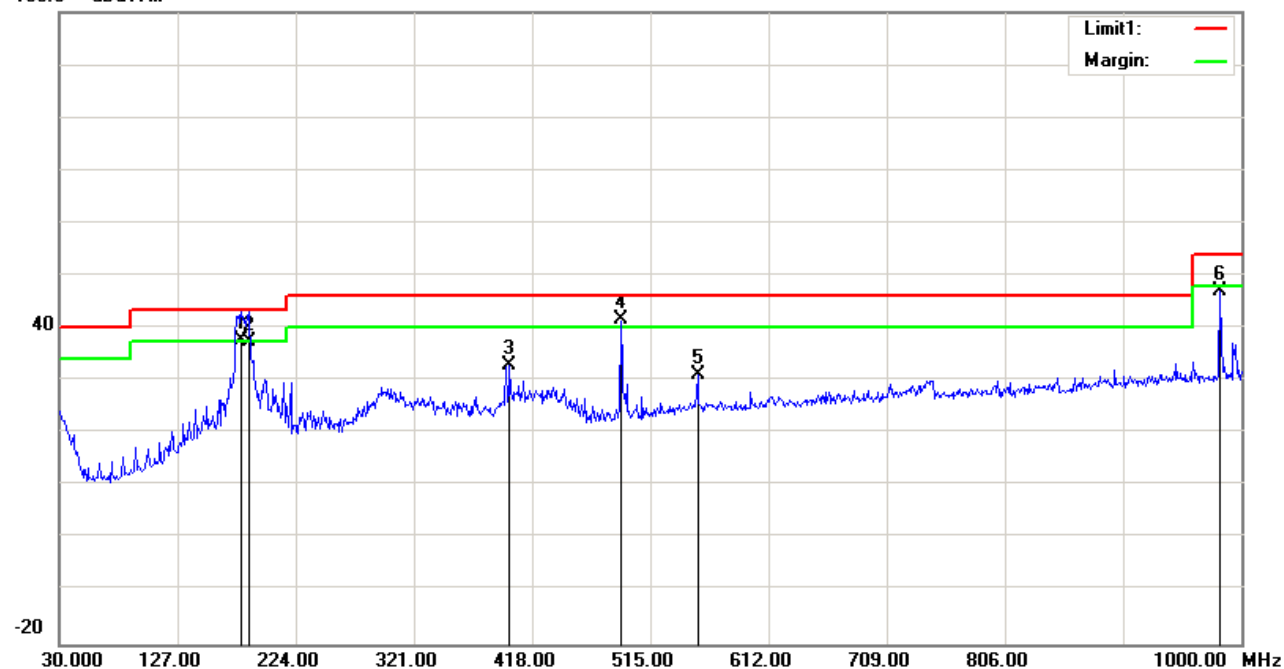
Test Items	Radiation Below 1GHz	Radiation Above 1GHz
Temperature:	26 °C	26.9~27.2°C
Relative Humidity:	46 %	46~47 %
ATM Pressure:	101.1kPa	100.4~100.6kPa
Tester:	King Wang	Lee Li
Test Date:	2021.04.22	2021.04.23~2021.04.25

Test Mode: Transmitting

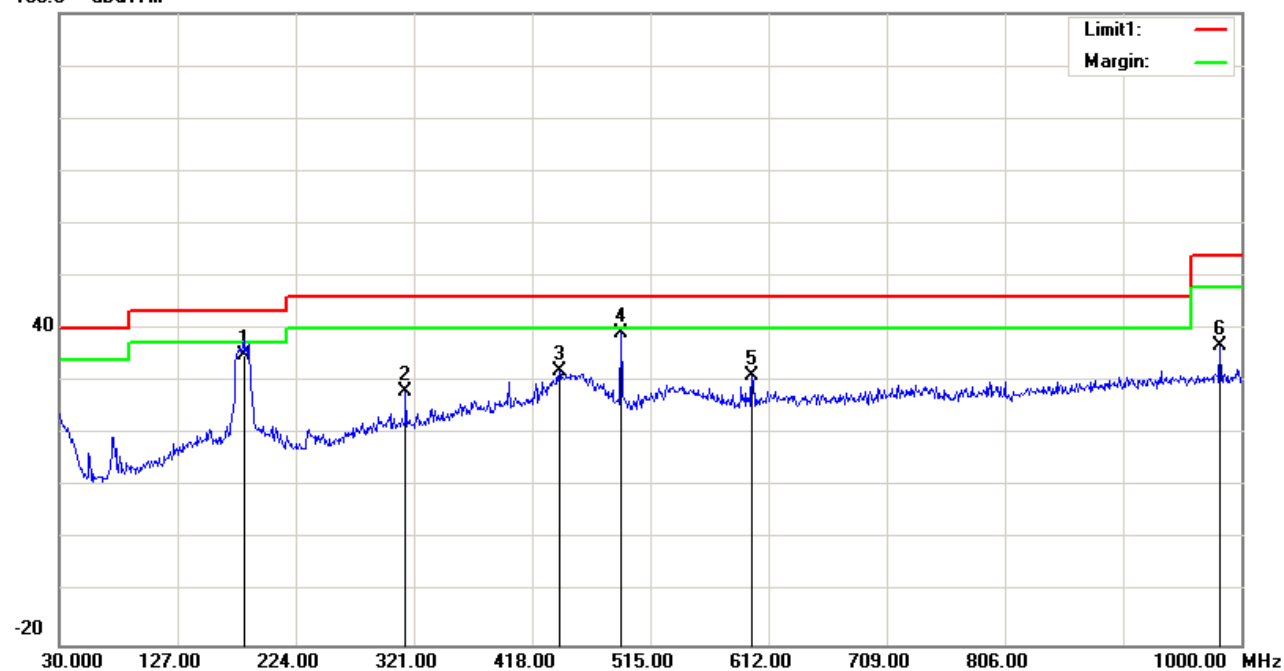
1) Below 1GHz(802.11a chain 0 5745 MHz was the worst):

Horizontal:

100.0 dB μ V/m



Frequency (MHz)	Receiver Reading (dB μ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
179.3800	47.68	QP	-9.80	37.88	43.50	5.62
185.2000	47.68	QP	-10.12	37.56	43.50	5.94
399.5700	38.29	peak	-5.27	33.02	46.00	12.98
490.7500	45.15	QP	-3.50	41.65	46.00	4.35
553.8000	32.81	peak	-1.72	31.09	46.00	14.91
982.5400	42.03	peak	4.94	46.97	54.00	7.03

Vertical:100.0 dB μ V/m

Frequency (MHz)	Receiver Reading (dB μ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
181.3200	44.86	QP	-9.87	34.99	43.50	8.51
314.2100	35.14	peak	-7.02	28.12	46.00	17.88
440.3100	36.47	peak	-4.53	31.94	46.00	14.06
490.7500	42.90	peak	-3.50	39.40	46.00	6.60
598.4200	32.58	peak	-1.45	31.13	46.00	14.87
982.5400	31.81	peak	4.94	36.75	54.00	17.25

**2) 1GHz-40GHz:
5150-5250MHz**

802.11a

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5180 MHz										
5180.00	71.16	PK	H	33.59	3.58	0.00	108.33	102.31	N/A	N/A
5180.00	62.36	AV	H	33.59	3.58	0.00	99.53	93.51	N/A	N/A
5180.00	68.29	PK	V	33.59	3.58	0.00	105.46	99.44	N/A	N/A
5180.00	59.68	AV	V	33.59	3.58	0.00	96.85	90.83	N/A	N/A
5150.00	36.52	PK	H	33.54	3.56	0.00	73.62	67.6	74.00	6.40
5150.00	21.79	AV	H	33.54	3.56	0.00	58.89	52.87	54.00	1.13
10360.00	36.19	PK	H	38.17	6.29	25.46	55.19	49.17	68.20	19.03
15540.00	37.94	PK	H	38.06	8.85	24.27	60.58	54.56	74.00	19.44
15540.00	25.96	AV	H	38.06	8.85	24.27	48.60	42.58	54.00	11.42
Middle Channel: 5200 MHz										
5200.00	70.27	PK	H	33.62	3.60	0.00	107.49	101.47	N/A	N/A
5200.00	61.54	AV	H	33.62	3.60	0.00	98.76	92.74	N/A	N/A
5200.00	66.40	PK	V	33.62	3.60	0.00	103.62	97.6	N/A	N/A
5200.00	57.57	AV	V	33.62	3.60	0.00	94.79	88.77	N/A	N/A
10400.00	36.13	PK	H	38.18	6.32	25.46	55.17	49.15	68.20	19.05
15600.00	37.93	PK	H	38.00	8.83	24.31	60.45	54.43	74.00	19.57
15600.00	25.90	AV	H	38.00	8.83	24.31	48.42	42.4	54.00	11.60
High Channel: 5240 MHz										
5240.00	69.98	PK	H	33.68	3.52	0.00	107.18	101.16	N/A	N/A
5240.00	61.28	AV	H	33.68	3.52	0.00	98.48	92.46	N/A	N/A
5240.00	66.11	PK	V	33.68	3.52	0.00	103.31	97.29	N/A	N/A
5240.00	57.28	AV	V	33.68	3.52	0.00	94.48	88.46	N/A	N/A
5350.00	31.67	PK	H	33.86	3.52	0.00	69.05	63.03	74.00	10.97
5350.00	20.40	AV	H	33.86	3.52	0.00	57.78	51.76	54.00	2.24
10480.00	36.07	PK	H	38.20	6.37	25.47	55.17	49.15	68.20	19.05
15720.00	37.82	PK	H	37.88	8.79	24.39	60.10	54.08	74.00	19.92
15720.00	25.84	AV	H	37.88	8.79	24.39	48.12	42.1	54.00	11.90

802.11n ht20:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5180 MHz										
5180.00	70.01	PK	H	33.59	3.58	0.00	107.18	101.16	N/A	N/A
5180.00	61.35	AV	H	33.59	3.58	0.00	98.52	92.5	N/A	N/A
5180.00	67.55	PK	V	33.59	3.58	0.00	104.72	98.7	N/A	N/A
5180.00	58.80	AV	V	33.59	3.58	0.00	95.97	89.95	N/A	N/A
5150.00	33.46	PK	H	33.54	3.56	0.00	70.56	64.54	74.00	9.46
5150.00	19.79	AV	H	33.54	3.56	0.00	56.89	50.87	54.00	3.13
10360.00	35.06	PK	H	38.17	6.29	25.46	54.06	48.04	68.20	20.16
15540.00	36.88	PK	H	38.06	8.85	24.27	59.52	53.5	74.00	20.50
15540.00	25.97	AV	H	38.06	8.85	24.27	48.61	42.59	54.00	11.41
Middle Channel: 5200 MHz										
5200.00	69.81	PK	H	33.62	3.60	0.00	107.03	101.01	N/A	N/A
5200.00	60.13	AV	H	33.62	3.60	0.00	97.35	91.33	N/A	N/A
5200.00	65.88	PK	V	33.62	3.60	0.00	103.10	97.08	N/A	N/A
5200.00	56.02	AV	V	33.62	3.60	0.00	93.24	87.22	N/A	N/A
10400.00	35.18	PK	H	38.18	6.32	25.46	54.22	48.2	68.20	20.00
15600.00	37.00	PK	H	38.00	8.83	24.31	59.52	53.5	74.00	20.50
15600.00	26.09	AV	H	38.00	8.83	24.31	48.61	42.59	54.00	11.41
High Channel: 5240 MHz										
5240.00	69.70	PK	H	33.68	3.52	0.00	106.90	100.88	N/A	N/A
5240.00	59.97	AV	H	33.68	3.52	0.00	97.17	91.15	N/A	N/A
5240.00	65.69	PK	V	33.68	3.52	0.00	102.89	96.87	N/A	N/A
5240.00	55.86	AV	V	33.68	3.52	0.00	93.06	87.04	N/A	N/A
5350.00	31.97	PK	H	33.86	3.52	0.00	69.35	63.33	74.00	10.67
5350.00	20.46	AV	H	33.86	3.52	0.00	57.84	51.82	54.00	2.18
10480.00	35.29	PK	H	38.20	6.37	25.47	54.39	48.37	68.20	19.83
15720.00	37.11	PK	H	37.88	8.79	24.39	59.39	53.37	74.00	20.63
15720.00	26.20	AV	H	37.88	8.79	24.39	48.48	42.46	54.00	11.54

802.11ax20::

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5180 MHz										
5180.00	71.92	PK	H	33.59	3.58	0.00	109.09	103.07	N/A	N/A
5180.00	59.47	AV	H	33.59	3.58	0.00	96.64	90.62	N/A	N/A
5180.00	67.25	PK	V	33.59	3.58	0.00	104.42	98.4	N/A	N/A
5180.00	55.96	AV	V	33.59	3.58	0.00	93.13	87.11	N/A	N/A
5150.00	32.75	PK	H	33.54	3.56	0.00	69.85	63.83	74.00	10.17
5150.00	18.57	AV	H	33.54	3.56	0.00	55.67	49.65	54.00	4.35
10360.00	35.26	PK	H	38.17	6.29	25.46	54.26	48.24	68.20	19.96
15540.00	37.51	PK	H	38.06	8.85	24.27	60.15	54.13	74.00	19.87
15540.00	26.13	AV	H	38.06	8.85	24.27	48.77	42.75	54.00	11.25
Middle Channel: 5200 MHz										
5200.00	72.07	PK	H	33.62	3.60	0.00	109.29	103.27	N/A	N/A
5200.00	60.15	AV	H	33.62	3.60	0.00	97.37	91.35	N/A	N/A
5200.00	66.87	PK	V	33.62	3.60	0.00	104.09	98.07	N/A	N/A
5200.00	55.10	AV	V	33.62	3.60	0.00	92.32	86.3	N/A	N/A
10400.00	35.02	PK	H	38.18	6.32	25.46	54.06	48.04	68.20	20.16
15600.00	37.24	PK	H	38.00	8.83	24.31	59.76	53.74	74.00	20.26
15600.00	25.89	AV	H	38.00	8.83	24.31	48.41	42.39	54.00	11.61
High Channel: 5240 MHz										
5240.00	72.36	PK	H	33.68	3.52	0.00	109.56	103.54	N/A	N/A
5240.00	60.44	AV	H	33.68	3.52	0.00	97.64	91.62	N/A	N/A
5240.00	67.16	PK	V	33.68	3.52	0.00	104.36	98.34	N/A	N/A
5240.00	55.39	AV	V	33.68	3.52	0.00	92.59	86.57	N/A	N/A
5350.00	31.66	PK	H	33.86	3.52	0.00	69.04	63.02	74.00	10.98
5350.00	20.49	AV	H	33.86	3.52	0.00	57.87	51.85	54.00	2.15
10480.00	35.13	PK	H	38.20	6.37	25.47	54.23	48.21	68.20	19.99
15720.00	37.38	PK	H	37.88	8.79	24.39	59.66	53.64	74.00	20.36
15720.00	26.05	AV	H	37.88	8.79	24.39	48.33	42.31	54.00	11.69

802.11n40:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5190 MHz										
5190.00	65.48	PK	H	33.60	3.59	0.00	102.67	96.65	N/A	N/A
5190.00	56.79	AV	H	33.60	3.59	0.00	93.98	87.96	N/A	N/A
5190.00	62.18	PK	V	33.60	3.59	0.00	99.37	93.35	N/A	N/A
5190.00	53.47	AV	V	33.60	3.59	0.00	90.66	84.64	N/A	N/A
5150.00	33.54	PK	H	33.54	3.56	0.00	70.64	64.62	74.00	9.38
5150.00	19.36	AV	H	33.54	3.56	0.00	56.46	50.44	54.00	3.56
10380.00	36.14	PK	H	38.18	6.31	25.46	55.17	49.15	68.20	19.05
15570.00	36.11	PK	H	38.03	8.84	24.29	58.69	52.67	74.00	21.33
15570.00	24.78	AV	H	38.03	8.84	24.29	47.36	41.34	54.00	12.66
High Channel: 5230 MHz										
5230.00	66.97	PK	H	33.67	3.54	0.00	104.18	98.16	N/A	N/A
5230.00	58.34	AV	H	33.67	3.54	0.00	95.55	89.53	N/A	N/A
5230.00	62.60	PK	V	33.67	3.54	0.00	99.81	93.79	N/A	N/A
5230.00	54.25	AV	V	33.67	3.54	0.00	91.46	85.44	N/A	N/A
5350.00	32.07	PK	H	33.86	3.52	0.00	69.45	63.43	74.00	10.57
5350.00	20.55	AV	H	33.86	3.52	0.00	57.93	51.91	54.00	2.09
10460.00	36.25	PK	H	38.19	6.36	25.47	55.33	49.31	68.20	18.89
15690.00	36.25	PK	H	37.91	8.80	24.37	58.59	52.57	74.00	21.43
15690.00	24.92	AV	H	37.91	8.80	24.37	47.26	41.24	54.00	12.76

802.11ax40:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5190 MHz										
5190.00	66.15	PK	H	33.60	3.59	0.00	103.34	97.32	N/A	N/A
5190.00	54.67	AV	H	33.60	3.59	0.00	91.86	85.84	N/A	N/A
5190.00	60.88	PK	V	33.60	3.59	0.00	98.07	92.05	N/A	N/A
5190.00	49.24	AV	V	33.60	3.59	0.00	86.43	80.41	N/A	N/A
5150.00	33.26	PK	H	33.54	3.56	0.00	70.36	64.34	74.00	9.66
5150.00	19.56	AV	H	33.54	3.56	0.00	56.66	50.64	54.00	3.36
10380.00	35.61	PK	H	38.18	6.31	25.46	54.64	48.62	68.20	19.58
15570.00	37.25	PK	H	38.03	8.84	24.29	59.83	53.81	74.00	20.19
15570.00	26.00	AV	H	38.03	8.84	24.29	48.58	42.56	54.00	11.44
High Channel: 5230 MHz										
5230.00	68.52	PK	H	33.67	3.54	0.00	105.73	99.71	N/A	N/A
5230.00	57.07	AV	H	33.67	3.54	0.00	94.28	88.26	N/A	N/A
5230.00	65.34	PK	V	33.67	3.54	0.00	102.55	96.53	N/A	N/A
5230.00	54.24	AV	V	33.67	3.54	0.00	91.45	85.43	N/A	N/A
5350.00	32.31	PK	H	33.86	3.52	0.00	69.69	63.67	74.00	10.33
5350.00	20.62	AV	H	33.86	3.52	0.00	58.00	51.98	54.00	2.02
10460.00	35.95	PK	H	38.19	6.36	25.47	55.03	49.01	68.20	19.19
15690.00	37.16	PK	H	37.91	8.80	24.37	59.50	53.48	74.00	20.52
15690.00	25.01	AV	H	37.91	8.80	24.37	47.35	41.33	54.00	12.67

802.11ac80:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (Db)	Amplifier Gain (Db)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (Db)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (Db/m)						
Middle Channel: 5210 MHz										
5210.00	66.84	PK	H	33.64	3.58	0.00	104.06	98.04	N/A	N/A
5210.00	57.94	AV	H	33.64	3.58	0.00	95.16	89.14	N/A	N/A
5210.00	62.16	PK	V	33.64	3.58	0.00	99.38	93.36	N/A	N/A
5210.00	53.28	AV	V	33.64	3.58	0.00	90.50	84.48	N/A	N/A
5150.00	32.19	PK	H	33.54	3.56	0.00	69.29	63.27	74.00	10.73
5150.00	20.60	AV	H	33.54	3.56	0.00	57.70	51.68	54.00	2.32
5350.00	32.08	PK	H	33.86	3.52	0.00	69.46	63.44	74.00	10.56
5350.00	20.82	AV	H	33.86	3.52	0.00	58.20	52.18	54.00	1.82
10420.00	35.68	PK	H	38.18	6.33	25.47	54.72	48.7	68.20	19.50
15630.00	36.31	PK	H	37.97	8.82	24.33	58.77	52.75	74.00	21.25
15630.00	25.70	AV	H	37.97	8.82	24.33	48.16	42.14	54.00	11.86

802.11ax80:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (Db)	Amplifier Gain (Db)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (Db)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (Db/m)						
Middle Channel: 5210 MHz										
5210.00	64.91	PK	H	33.64	3.58	0.00	102.13	96.11	N/A	N/A
5210.00	55.06	AV	H	33.64	3.58	0.00	92.28	86.26	N/A	N/A
5210.00	60.78	PK	V	33.64	3.58	0.00	98.00	91.98	N/A	N/A
5210.00	52.14	AV	V	33.64	3.58	0.00	89.36	83.34	N/A	N/A
5150.00	32.51	PK	H	33.54	3.56	0.00	69.61	63.59	74.00	10.41
5150.00	19.36	AV	H	33.54	3.56	0.00	56.46	50.44	54.00	3.56
5350.00	31.66	PK	H	33.86	3.52	0.00	69.04	63.02	74.00	10.98
5350.00	20.71	AV	H	33.86	3.52	0.00	58.09	52.07	54.00	1.93
10420.00	35.49	PK	H	38.18	6.33	25.47	54.53	48.51	68.20	19.69
15630.00	36.12	PK	H	37.97	8.82	24.33	58.58	52.56	74.00	21.44
15630.00	24.51	AV	H	37.97	8.82	24.33	46.97	40.95	54.00	13.05

5250-5350MHz:
802.11a

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5260 MHz										
5260.00	69.73	PK	H	33.72	3.49	0.00	106.94	100.92	N/A	N/A
5260.00	60.98	AV	H	33.72	3.49	0.00	98.19	92.17	N/A	N/A
5260.00	66.86	PK	V	33.72	3.49	0.00	104.07	98.05	N/A	N/A
5260.00	57.89	AV	V	33.72	3.49	0.00	95.10	89.08	N/A	N/A
5150.00	32.51	PK	H	33.54	3.56	0.00	69.61	63.59	74.00	10.41
5150.00	20.04	AV	H	33.54	3.56	0.00	57.14	51.12	54.00	2.88
10520.00	36.02	PK	H	38.21	6.39	25.47	55.15	49.13	68.20	19.07
15780.00	37.59	PK	H	37.82	8.76	24.42	59.75	53.73	74.00	20.27
15780.00	26.17	AV	H	37.82	8.76	24.42	48.33	42.31	54.00	11.69
Middle Channel: 5280 MHz										
5280.00	67.97	PK	H	33.75	3.45	0.00	105.17	99.15	N/A	N/A
5280.00	59.64	AV	H	33.75	3.45	0.00	96.84	90.82	N/A	N/A
5280.00	64.58	PK	V	33.75	3.45	0.00	101.78	95.76	N/A	N/A
5280.00	57.12	AV	V	33.75	3.45	0.00	94.32	88.3	N/A	N/A
10560.00	36.34	PK	H	38.24	6.40	25.47	55.51	49.49	68.20	18.71
15840.00	37.87	PK	H	37.76	8.74	24.46	59.91	53.89	74.00	20.11
15840.00	26.45	AV	H	37.76	8.74	24.46	48.49	42.47	54.00	11.53
High Channel: 5320 MHz										
5320.00	67.69	PK	H	33.81	3.45	0.00	104.95	98.93	N/A	N/A
5320.00	59.36	AV	H	33.81	3.45	0.00	96.62	90.6	N/A	N/A
5320.00	64.28	PK	V	33.81	3.45	0.00	101.54	95.52	N/A	N/A
5320.00	56.84	AV	V	33.81	3.45	0.00	94.10	88.08	N/A	N/A
5350.00	31.72	PK	H	33.86	3.52	0.00	69.10	63.08	74.00	10.92
5350.00	20.38	AV	H	33.86	3.52	0.00	57.76	51.74	54.00	2.26
10640.00	37.17	PK	H	38.28	6.43	25.46	56.42	50.4	74.00	23.60
10640.00	25.31	AV	H	38.28	6.43	25.46	44.56	38.54	54.00	15.46
15960.00	37.20	PK	H	37.64	8.70	24.54	59.00	52.98	74.00	21.02
15960.00	25.34	AV	H	37.64	8.70	24.54	47.14	41.12	54.00	12.88

802.11n ht20:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5260 MHz										
5260.00	71.29	PK	H	33.72	3.49	0.00	108.50	102.48	N/A	N/A
5260.00	61.69	AV	H	33.72	3.49	0.00	98.90	92.88	N/A	N/A
5260.00	66.14	PK	V	33.72	3.49	0.00	103.35	97.33	N/A	N/A
5260.00	56.39	AV	V	33.72	3.49	0.00	93.60	87.58	N/A	N/A
5150.00	32.06	PK	H	33.54	3.56	0.00	69.16	63.14	74.00	10.86
5150.00	20.04	AV	H	33.54	3.56	0.00	57.14	51.12	54.00	2.88
10520.00	37.07	PK	H	38.21	6.39	25.47	56.20	50.18	68.20	18.02
15780.00	37.22	PK	H	37.82	8.76	24.42	59.38	53.36	74.00	20.64
15780.00	25.69	AV	H	37.82	8.76	24.42	47.85	41.83	54.00	12.17
Middle Channel: 5280 MHz										
5280.00	71.03	PK	H	33.75	3.45	0.00	108.23	102.21	N/A	N/A
5280.00	61.47	AV	H	33.75	3.45	0.00	98.67	92.65	N/A	N/A
5280.00	65.88	PK	V	33.75	3.45	0.00	103.08	97.06	N/A	N/A
5280.00	56.13	AV	V	33.75	3.45	0.00	93.33	87.31	N/A	N/A
10560.00	36.81	PK	H	38.24	6.40	25.47	55.98	49.96	68.20	18.24
15840.00	36.96	PK	H	37.76	8.74	24.46	59.00	52.98	74.00	21.02
15840.00	25.43	AV	H	37.76	8.74	24.46	47.47	41.45	54.00	12.55
High Channel: 5320 MHz										
5320.00	65.97	PK	H	33.81	3.45	0.00	103.23	97.21	N/A	N/A
5320.00	55.89	AV	H	33.81	3.45	0.00	93.15	87.13	N/A	N/A
5320.00	61.56	PK	V	33.81	3.45	0.00	98.82	92.8	N/A	N/A
5320.00	51.57	AV	V	33.81	3.45	0.00	88.83	82.81	N/A	N/A
5350.00	34.73	PK	H	33.86	3.52	0.00	72.11	66.09	74.00	7.91
5350.00	19.78	AV	H	33.86	3.52	0.00	57.16	51.14	54.00	2.86
10640.00	36.45	PK	H	38.28	6.43	25.46	55.70	49.68	74.00	24.32
10640.00	24.16	AV	H	38.28	6.43	25.46	43.41	37.39	54.00	16.61
15960.00	36.78	PK	H	37.64	8.70	24.54	58.58	52.56	74.00	21.44
15960.00	24.86	AV	H	37.64	8.70	24.54	46.66	40.64	54.00	13.36

802.11n40:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5270 MHz										
5270.00	66.36	PK	H	33.73	3.47	0.00	103.56	97.54	N/A	N/A
5270.00	58.22	AV	H	33.73	3.47	0.00	95.42	89.4	N/A	N/A
5270.00	61.26	PK	V	33.73	3.47	0.00	98.46	92.44	N/A	N/A
5270.00	53.11	AV	V	33.73	3.47	0.00	90.31	84.29	N/A	N/A
5150.00	32.01	PK	H	33.54	3.56	0.00	69.11	63.09	74.00	10.91
5150.00	21.38	AV	H	33.54	3.56	0.00	58.48	52.46	54.00	1.54
10540.00	35.74	PK	H	38.22	6.40	25.47	54.89	48.87	68.20	19.33
15810.00	36.09	PK	H	37.79	8.75	24.44	58.19	52.17	74.00	21.83
15810.00	24.16	AV	H	37.79	8.75	24.44	46.26	40.24	54.00	13.76
High Channel: 5310 MHz										
5310.00	64.78	PK	H	33.80	3.43	0.00	102.01	95.99	N/A	N/A
5310.00	55.29	AV	H	33.80	3.43	0.00	92.52	86.5	N/A	N/A
5310.00	60.38	PK	V	33.80	3.43	0.00	97.61	91.59	N/A	N/A
5310.00	52.56	AV	V	33.80	3.43	0.00	89.79	83.77	N/A	N/A
5350.00	33.24	PK	H	33.86	3.52	0.00	70.62	64.6	74.00	9.40
5350.00	19.58	AV	H	33.86	3.52	0.00	56.96	50.94	54.00	3.06
10620.00	35.54	PK	H	38.27	6.43	25.47	54.77	48.75	74.00	25.25
10620.00	23.86	AV	H	38.27	6.43	25.47	43.09	37.07	54.00	16.93
15930.00	36.41	PK	H	37.67	8.71	24.52	58.27	52.25	74.00	21.75
15930.00	24.74	AV	H	37.67	8.71	24.52	46.60	40.58	54.00	13.42

802.11ac80:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (Db)	Amplifier Gain (Db)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (Db)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (Db/m)						
Middle Channel: 5290 MHz										
5290.00	62.87	PK	H	33.76	3.43	0.00	100.06	94.04	N/A	N/A
5290.00	53.23	AV	H	33.76	3.43	0.00	90.42	84.4	N/A	N/A
5290.00	59.26	PK	V	33.76	3.43	0.00	96.45	90.43	N/A	N/A
5290.00	50.29	AV	V	33.76	3.43	0.00	87.48	81.46	N/A	N/A
5150.00	32.08	PK	H	33.54	3.56	0.00	69.18	63.16	74.00	10.84
5150.00	18.69	AV	H	33.54	3.56	0.00	55.79	49.77	54.00	4.23
5350.00	32.28	PK	H	33.86	3.52	0.00	69.66	63.64	74.00	10.36
5350.00	19.36	AV	H	33.86	3.52	0.00	56.74	50.72	54.00	3.28
10580.00	36.42	PK	H	38.25	6.41	25.47	55.61	49.59	68.20	18.61
15870.00	36.88	PK	H	37.73	8.73	24.48	58.86	52.84	74.00	21.16
15870.00	24.19	AV	H	37.73	8.73	24.48	46.17	40.15	54.00	13.85

802.11ax20

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5260 MHz										
5260.00	73.15	PK	H	33.72	3.49	0.00	110.36	104.34	N/A	N/A
5260.00	61.47	AV	H	33.72	3.49	0.00	98.68	92.66	N/A	N/A
5260.00	67.74	PK	V	33.72	3.49	0.00	104.95	98.93	N/A	N/A
5260.00	55.65	AV	V	33.72	3.49	0.00	92.86	86.84	N/A	N/A
5150.00	32.07	PK	H	33.54	3.56	0.00	69.17	63.15	74.00	10.85
5150.00	20.08	AV	H	33.54	3.56	0.00	57.18	51.16	54.00	2.84
10520.00	36.23	PK	H	38.21	6.39	25.47	55.36	49.34	68.20	18.86
15780.00	37.22	PK	H	37.82	8.76	24.42	59.38	53.36	74.00	20.64
15780.00	25.17	AV	H	37.82	8.76	24.42	47.33	41.31	54.00	12.69
Middle Channel: 5280 MHz										
5280.00	72.07	PK	H	33.75	3.45	0.00	109.27	103.25	N/A	N/A
5280.00	60.39	AV	H	33.75	3.45	0.00	97.59	91.57	N/A	N/A
5280.00	66.66	PK	V	33.75	3.45	0.00	103.86	97.84	N/A	N/A
5280.00	54.57	AV	V	33.75	3.45	0.00	91.77	85.75	N/A	N/A
10560.00	36.15	PK	H	38.24	6.40	25.47	55.32	49.3	68.20	18.90
15840.00	37.14	PK	H	37.76	8.74	24.46	59.18	53.16	74.00	20.84
15840.00	25.09	AV	H	37.76	8.74	24.46	47.13	41.11	54.00	12.89
High Channel: 5320 MHz										
5320.00	71.25	PK	H	33.81	3.45	0.00	108.51	102.49	N/A	N/A
5320.00	59.82	AV	H	33.81	3.45	0.00	97.08	91.06	N/A	N/A
5320.00	66.49	PK	V	33.81	3.45	0.00	103.75	97.73	N/A	N/A
5320.00	54.07	AV	V	33.81	3.45	0.00	91.33	85.31	N/A	N/A
5350.00	38.05	PK	H	33.86	3.52	0.00	75.43	69.41	74.00	4.59
5350.00	21.13	AV	H	33.86	3.52	0.00	58.51	52.49	54.00	1.51
10640.00	36.14	PK	H	38.28	6.43	25.46	55.39	49.37	74.00	24.63
10640.00	24.09	AV	H	38.28	6.43	25.46	43.34	37.32	54.00	16.68
15960.00	37.09	PK	H	37.64	8.70	24.54	58.89	52.87	74.00	21.13
15960.00	25.01	AV	H	37.64	8.70	24.54	46.81	40.79	54.00	13.21

802.11ax40:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5270 MHz										
5270.00	68.53	PK	H	33.73	3.47	0.00	105.73	99.71	N/A	N/A
5270.00	56.51	AV	H	33.73	3.47	0.00	93.71	87.69	N/A	N/A
5270.00	62.95	PK	V	33.73	3.47	0.00	100.15	94.13	N/A	N/A
5270.00	50.16	AV	V	33.73	3.47	0.00	87.36	81.34	N/A	N/A
5150.00	31.68	PK	H	33.54	3.56	0.00	68.78	62.76	74.00	11.24
5150.00	20.51	AV	H	33.54	3.56	0.00	57.61	51.59	54.00	2.41
10540.00	36.12	PK	H	38.22	6.40	25.47	55.27	49.25	68.20	18.95
15810.00	36.89	PK	H	37.79	8.75	24.44	58.99	52.97	74.00	21.03
15810.00	24.81	AV	H	37.79	8.75	24.44	46.91	40.89	54.00	13.11
High Channel: 5310 MHz										
5310.00	66.98	PK	H	33.80	3.43	0.00	104.21	98.19	N/A	N/A
5310.00	55.04	AV	H	33.80	3.43	0.00	92.27	86.25	N/A	N/A
5310.00	63.34	PK	V	33.80	3.43	0.00	100.57	94.55	N/A	N/A
5310.00	52.17	AV	V	33.80	3.43	0.00	89.40	83.38	N/A	N/A
5350.00	32.22	PK	H	33.86	3.52	0.00	69.60	63.58	74.00	10.42
5350.00	18.79	AV	H	33.86	3.52	0.00	56.17	50.15	54.00	3.85
10620.00	36.25	PK	H	38.27	6.43	25.47	55.48	49.46	74.00	24.54
10620.00	24.12	AV	H	38.27	6.43	25.47	43.35	37.33	54.00	16.67
15930.00	37.06	PK	H	37.67	8.71	24.52	58.92	52.9	74.00	21.10
15930.00	25.01	AV	H	37.67	8.71	24.52	46.87	40.85	54.00	13.15

802.11ax80:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (Db)	Amplifier Gain (Db)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (Db)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (Db/m)						
Middle Channel: 5290 MHz										
5290.00	64.52	PK	H	33.76	3.43	0.00	101.71	95.69	N/A	N/A
5290.00	52.80	AV	H	33.76	3.43	0.00	89.99	83.97	N/A	N/A
5290.00	60.51	PK	V	33.76	3.43	0.00	97.70	91.68	N/A	N/A
5290.00	48.19	AV	V	33.76	3.43	0.00	85.38	79.36	N/A	N/A
5150.00	32.29	PK	H	33.54	3.56	0.00	69.39	63.37	74.00	10.63
5150.00	18.69	AV	H	33.54	3.56	0.00	55.79	49.77	54.00	4.23
5350.00	32.68	PK	H	33.86	3.52	0.00	70.06	64.04	74.00	9.96
5350.00	21.14	AV	H	33.86	3.52	0.00	58.52	52.5	54.00	1.50
10580.00	35.26	PK	H	38.25	6.41	25.47	54.45	48.43	68.20	19.77
15870.00	36.74	PK	H	37.73	8.73	24.48	58.72	52.7	74.00	21.30
15870.00	24.08	AV	H	37.73	8.73	24.48	46.06	40.04	54.00	13.96

5470-5725 MHz:**802.11a**

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5500 MHz										
5500.00	67.69	PK	H	34.10	3.54	0.00	105.33	99.31	N/A	N/A
5500.00	58.64	AV	H	34.10	3.54	0.00	96.28	90.26	N/A	N/A
5500.00	64.67	PK	V	34.10	3.54	0.00	102.31	96.29	N/A	N/A
5500.00	55.36	AV	V	34.10	3.54	0.00	93.00	86.98	N/A	N/A
5470.00	31.34	PK	H	34.05	3.56	0.00	68.95	62.93	68.20	5.27
11000.00	35.13	PK	H	38.50	6.57	25.45	54.75	48.73	74.00	25.27
11000.00	23.47	AV	H	38.50	6.57	25.45	43.09	37.07	54.00	16.93
16500.00	36.12	PK	H	38.20	8.63	24.27	58.68	52.66	68.20	15.54
5460.00	32.34	PK	H	34.04	3.57	25.34	44.61	38.59	74.00	35.41
5460.00	19.64	AV	H	34.04	3.57	25.34	31.91	25.89	54.00	28.11
Middle Channel: 5580 MHz										
5580.00	67.81	PK	H	34.13	3.56	0.00	105.50	99.48	N/A	N/A
5580.00	58.48	AV	H	34.13	3.56	0.00	96.17	90.15	N/A	N/A
5580.00	65.33	PK	V	34.13	3.56	0.00	103.02	97	N/A	N/A
5580.00	56.78	AV	V	34.13	3.56	0.00	94.47	88.45	N/A	N/A
11160.00	35.12	PK	H	38.66	6.58	25.47	54.89	48.87	74.00	25.13
11160.00	23.15	AV	H	38.66	6.58	25.47	42.92	36.9	54.00	17.10
16740.00	36.14	PK	H	39.16	8.67	24.12	59.85	53.83	68.20	14.37
High Channel: 5700 MHz										
5700.00	67.78	PK	H	34.18	3.68	0.00	105.64	99.62	N/A	N/A
5700.00	58.76	AV	H	34.18	3.68	0.00	96.62	90.6	N/A	N/A
5700.00	66.25	PK	V	34.18	3.68	0.00	104.11	98.09	N/A	N/A
5700.00	57.23	AV	V	34.18	3.68	0.00	95.09	89.07	N/A	N/A
5725.00	32.81	PK	H	34.19	3.69	0.00	70.69	64.67	68.20	3.53
11400.00	35.68	PK	H	38.90	6.59	25.50	55.67	49.65	74.00	24.35
11400.00	23.46	AV	V	38.90	6.59	25.50	43.45	37.43	54.00	16.57
17100.00	35.14	PK	V	40.78	8.75	23.85	60.82	54.8	68.20	13.40

802.11n ht20:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5500 MHz										
5500.00	67.78	PK	H	34.10	3.54	0.00	105.42	99.4	N/A	N/A
5500.00	58.87	AV	H	34.10	3.54	0.00	96.51	90.49	N/A	N/A
5500.00	64.59	PK	V	34.10	3.54	0.00	102.23	96.21	N/A	N/A
5500.00	55.32	AV	V	34.10	3.54	0.00	92.96	86.94	N/A	N/A
5470.00	32.37	PK	H	34.05	3.56	0.00	69.98	63.96	68.20	4.24
11000.00	35.46	PK	H	38.50	6.57	25.45	55.08	49.06	74.00	24.94
11000.00	23.68	AV	V	38.50	6.57	25.45	43.30	37.28	54.00	16.72
16500.00	35.79	PK	V	38.20	8.63	24.27	58.35	52.33	68.20	15.87
Middle Channel: 5580 MHz										
5580.00	67.18	PK	H	34.13	3.56	0.00	104.87	98.85	N/A	N/A
5580.00	58.69	AV	H	34.13	3.56	0.00	96.38	90.36	N/A	N/A
5580.00	64.24	PK	V	34.13	3.56	0.00	101.93	95.91	N/A	N/A
5580.00	55.02	AV	V	34.13	3.56	0.00	92.71	86.69	N/A	N/A
11160.00	35.47	PK	H	38.66	6.58	25.47	55.24	49.22	74.00	24.78
11160.00	23.46	AV	H	38.66	6.58	25.47	43.23	37.21	54.00	16.79
16740.00	35.14	PK	H	39.16	8.67	24.12	58.85	52.83	68.20	15.37
High Channel: 5700 MHz										
5700.00	69.27	PK	H	34.18	3.68	0.00	107.13	101.11	N/A	N/A
5700.00	58.68	AV	H	34.18	3.68	0.00	96.54	90.52	N/A	N/A
5700.00	67.23	PK	V	34.18	3.68	0.00	105.09	99.07	N/A	N/A
5700.00	57.24	AV	V	34.18	3.68	0.00	95.10	89.08	N/A	N/A
5725.00	33.32	PK	H	34.19	3.69	0.00	71.20	65.18	68.20	3.02
11400.00	35.63	PK	H	38.90	6.59	25.50	55.62	49.6	74.00	24.40
11400.00	23.14	AV	V	38.90	6.59	25.50	43.13	37.11	54.00	16.89
17100.00	35.89	PK	V	40.78	8.75	23.85	61.57	55.55	68.20	12.65

802.11n40:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5510 MHz										
5510.00	66.12	PK	H	34.10	3.54	0.00	103.76	97.74	N/A	N/A
5510.00	56.83	AV	H	34.10	3.54	0.00	94.47	88.45	N/A	N/A
5510.00	64.23	PK	V	34.10	3.54	0.00	101.87	95.85	N/A	N/A
5510.00	54.62	AV	V	34.10	3.54	0.00	92.26	86.24	N/A	N/A
5470.00	34.69	PK	H	34.05	3.56	0.00	72.30	66.28	68.20	1.92
11020.00	35.89	PK	H	38.52	6.57	25.45	55.53	49.51	74.00	24.49
11020.00	23.69	AV	V	38.52	6.57	25.45	43.33	37.31	54.00	16.69
16530.00	35.14	PK	V	38.32	8.64	24.25	57.85	51.83	68.20	16.37
Middle Channel: 5550 MHz										
5550.00	66.17	PK	H	34.12	3.56	0.00	103.85	97.83	N/A	N/A
5550.00	57.48	AV	H	34.12	3.56	0.00	95.16	89.14	N/A	N/A
5550.00	63.71	PK	V	34.12	3.56	0.00	101.39	95.37	N/A	N/A
5550.00	53.14	AV	V	34.12	3.56	0.00	90.82	84.8	N/A	N/A
11100.00	35.26	PK	H	38.60	6.57	25.46	54.97	48.95	74.00	25.05
11100.00	23.15	AV	H	38.60	6.57	25.46	42.86	36.84	54.00	17.16
16650.00	35.03	PK	H	38.80	8.66	24.17	58.32	52.3	68.20	15.90
High Channel: 5670 MHz										
5670.00	65.92	PK	H	34.17	3.65	0.00	103.74	97.72	N/A	N/A
5670.00	57.32	AV	H	34.17	3.65	0.00	95.14	89.12	N/A	N/A
5670.00	63.45	PK	V	34.17	3.65	0.00	101.27	95.25	N/A	N/A
5670.00	54.02	AV	V	34.17	3.65	0.00	91.84	85.82	N/A	N/A
5725.00	32.44	PK	H	34.19	3.69	0.00	70.32	64.3	68.20	3.90
11340.00	35.78	PK	H	38.84	6.58	25.49	55.71	49.69	74.00	24.31
11340.00	23.47	AV	V	38.84	6.58	25.49	43.40	37.38	54.00	16.62
17010.00	34.65	PK	V	40.26	8.72	23.94	59.69	53.67	68.20	14.53

802.11ac80:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5530 MHz										
5530.00	63.39	PK	H	34.11	3.55	0.00	101.05	95.03	N/A	N/A
5530.00	54.57	AV	H	34.11	3.55	0.00	92.23	86.21	N/A	N/A
5530.00	60.35	PK	V	34.11	3.55	0.00	98.01	91.99	N/A	N/A
5530.00	51.36	AV	V	34.11	3.55	0.00	89.02	83	N/A	N/A
5470.00	32.51	PK	H	34.05	3.56	0.00	70.12	64.1	68.20	4.10
11060.00	35.69	PK	H	38.56	6.57	25.46	55.36	49.34	74.00	24.66
11060.00	23.46	AV	V	38.56	6.57	25.46	43.13	37.11	54.00	16.89
16590.00	34.56	PK	V	38.56	8.65	24.21	57.56	51.54	68.20	16.66

802.11ax20:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5500 MHz										
5500.00	65.75	PK	H	34.10	3.54	0.00	103.39	97.37	N/A	N/A
5500.00	56.39	AV	H	34.10	3.54	0.00	94.03	88.01	N/A	N/A
5500.00	63.27	PK	V	34.10	3.54	0.00	100.91	94.89	N/A	N/A
5500.00	54.78	AV	V	34.10	3.54	0.00	92.42	86.4	N/A	N/A
5470.00	32.46	PK	H	34.05	3.56	0.00	70.07	64.05	68.20	4.15
11000.00	35.49	PK	H	38.50	6.57	25.45	55.11	49.09	74.00	24.91
11000.00	23.64	AV	V	38.50	6.57	25.45	43.26	37.24	54.00	16.76
16500.00	35.02	PK	V	38.20	8.63	24.27	57.58	51.56	68.20	16.64
Middle Channel: 5580 MHz										
5580.00	66.47	PK	H	34.13	3.56	0.00	104.16	98.14	N/A	N/A
5580.00	56.78	AV	H	34.13	3.56	0.00	94.47	88.45	N/A	N/A
5580.00	62.67	PK	V	34.13	3.56	0.00	100.36	94.34	N/A	N/A
5580.00	51.24	AV	V	34.13	3.56	0.00	88.93	82.91	N/A	N/A
11160.00	35.65	PK	H	38.66	6.58	25.47	55.42	49.4	74.00	24.60
11160.00	23.41	AV	H	38.66	6.58	25.47	43.18	37.16	54.00	16.84
16740.00	35.23	PK	H	39.16	8.67	24.12	58.94	52.92	68.20	15.28
High Channel: 5700 MHz										
5700.00	68.49	PK	H	34.18	3.68	0.00	106.35	100.33	N/A	N/A
5700.00	59.47	AV	H	34.18	3.68	0.00	97.33	91.31	N/A	N/A
5700.00	67.74	PK	V	34.18	3.68	0.00	105.60	99.583	N/A	N/A
5700.00	58.68	AV	V	34.18	3.68	0.00	96.54	90.52	N/A	N/A
5725.00	33.14	PK	H	34.19	3.69	0.00	71.02	65	68.20	3.20
11400.00	35.79	PK	H	38.90	6.59	25.50	55.78	49.76	74.00	24.24
11400.00	23.54	AV	V	38.90	6.59	25.50	43.53	37.51	54.00	16.49
17100.00	34.76	PK	V	40.78	8.75	23.85	60.44	54.42	68.20	13.78

802.11ax40:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5510 MHz										
5510.00	65.27	PK	H	34.10	3.54	0.00	102.91	96.89	N/A	N/A
5510.00	56.76	AV	H	34.10	3.54	0.00	94.40	88.38	N/A	N/A
5510.00	62.04	PK	V	34.10	3.54	0.00	99.68	93.66	N/A	N/A
5510.00	52.13	AV	V	34.10	3.54	0.00	89.77	83.75	N/A	N/A
5470.00	32.67	PK	H	34.05	3.56	0.00	70.28	64.26	68.20	3.94
11020.00	35.77	PK	H	38.52	6.57	25.45	55.41	49.39	74.00	24.61
11020.00	23.46	AV	V	38.52	6.57	25.45	43.10	37.08	54.00	16.92
16530.00	34.16	PK	V	38.32	8.64	24.25	56.87	50.85	68.20	17.35
Middle Channel: 5590 MHz										
5590.00	66.14	PK	H	34.14	3.57	0.00	103.85	97.83	N/A	N/A
5590.00	57.23	AV	H	34.14	3.57	0.00	94.94	88.92	N/A	N/A
5590.00	62.35	PK	V	34.14	3.57	0.00	100.06	94.04	N/A	N/A
5590.00	51.47	AV	V	34.14	3.57	0.00	89.18	83.16	N/A	N/A
11180.00	35.97	PK	H	38.68	6.58	25.47	55.76	49.74	74.00	24.26
11180.00	23.47	AV	H	38.68	6.58	25.47	43.26	37.24	54.00	16.76
16770.00	35.12	PK	H	39.28	8.68	24.10	58.98	52.96	68.20	15.24
High Channel: 5670 MHz										
5670.00	66.75	PK	H	34.17	3.65	0.00	104.57	98.55	N/A	N/A
5670.00	57.68	AV	H	34.17	3.65	0.00	95.50	89.48	N/A	N/A
5670.00	63.79	PK	V	34.17	3.65	0.00	101.61	95.59	N/A	N/A
5670.00	54.12	AV	V	34.17	3.65	0.00	91.94	85.92	N/A	N/A
5725.00	31.41	PK	H	34.19	3.69	0.00	69.29	63.27	68.20	4.93
11340.00	36.16	PK	H	38.84	6.58	25.49	56.09	50.07	74.00	23.93
11340.00	24.03	AV	V	38.84	6.58	25.49	43.96	37.94	54.00	16.06
17010.00	35.13	PK	V	40.26	8.72	23.94	60.17	54.15	68.20	14.05

802.11ax80:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Middle Channel: 5530 MHz										
5530.00	62.71	PK	H	34.11	3.55	0.00	100.37	94.35	N/A	N/A
5530.00	53.47	AV	H	34.11	3.55	0.00	91.13	85.11	N/A	N/A
5530.00	62.12	PK	V	34.11	3.55	0.00	99.78	93.76	N/A	N/A
5530.00	51.78	AV	V	34.11	3.55	0.00	89.44	83.42	N/A	N/A
5470.00	33.51	PK	H	34.05	3.56	0.00	71.12	65.1	68.20	3.10
11060.00	35.74	PK	H	38.56	6.57	25.46	55.41	49.39	74.00	24.61
11060.00	23.46	AV	V	38.56	6.57	25.46	43.13	37.11	54.00	16.89
16590.00	35.64	PK	V	38.56	8.65	24.21	58.64	52.62	68.20	15.58

5725-5850MHz**802.11a**

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5745 MHz										
5745.00	69.29	PK	H	34.20	3.69	0.00	107.18	101.16	N/A	N/A
5745.00	60.65	AV	H	34.20	3.69	0.00	98.54	92.52	N/A	N/A
5745.00	67.33	PK	V	34.20	3.69	0.00	105.22	99.2	N/A	N/A
5745.00	58.34	AV	V	34.20	3.69	0.00	96.23	90.21	N/A	N/A
5725.00	44.51	PK	H	34.19	3.69	0.00	82.39	76.37	122.20	45.83
5720.00	41.22	PK	H	34.19	3.69	0.00	79.10	73.08	110.80	37.72
5700.00	35.26	PK	H	34.18	3.68	0.00	73.12	67.1	105.20	38.10
5650.00	33.26	PK	H	34.16	3.63	0.00	71.05	65.03	68.20	3.17
11490.00	35.23	PK	H	38.99	6.59	25.51	55.30	49.28	74.00	24.72
11490.00	23.14	AV	H	38.99	6.59	25.51	43.21	37.19	54.00	16.81
17235.00	35.67	PK	H	41.56	8.78	23.72	62.29	56.27	68.20	11.93
Middle Channel: 5785 MHz										
5785.00	69.55	PK	H	34.21	3.71	0.00	107.47	101.45	N/A	N/A
5785.00	60.91	AV	H	34.21	3.71	0.00	98.83	92.81	N/A	N/A
5785.00	67.59	PK	V	34.21	3.71	0.00	105.51	99.49	N/A	N/A
5785.00	58.60	AV	V	34.21	3.71	0.00	96.52	90.5	N/A	N/A
11570.00	35.49	PK	H	39.00	6.61	25.46	55.64	49.62	74.00	24.38
11570.00	23.40	AV	H	39.00	6.61	25.46	43.55	37.53	54.00	16.47
17355.00	35.93	PK	H	42.26	8.81	23.60	63.40	57.38	68.20	10.82
High Channel: 5825 MHz										
5825.00	70.15	PK	H	34.23	3.73	0.00	108.11	102.09	N/A	N/A
5825.00	61.73	AV	H	34.23	3.73	0.00	99.69	93.67	N/A	N/A
5825.00	66.17	PK	V	34.23	3.73	0.00	104.13	98.11	N/A	N/A
5825.00	57.25	AV	V	34.23	3.73	0.00	95.21	89.19	N/A	N/A
5850.00	41.25	PK	H	34.24	3.75	0.00	79.24	73.22	122.20	48.98
5855.00	38.81	PK	H	34.24	3.75	0.00	76.80	70.78	110.80	40.02
5875.00	33.88	PK	H	34.25	3.77	0.00	71.90	65.88	105.20	39.32
5925.00	33.64	PK	H	34.27	3.80	0.00	71.71	65.69	68.20	2.51
11650.00	35.23	PK	H	39.00	6.64	25.41	55.46	49.44	74.00	24.56
11650.00	23.14	AV	H	39.00	6.64	25.41	43.37	37.35	54.00	16.65
17475.00	35.67	PK	H	42.96	8.84	23.48	63.99	57.97	68.20	10.23

802.11n ht20:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5745 MHz										
5745.00	69.15	PK	H	34.20	3.69	0.00	107.04	101.02	N/A	N/A
5745.00	60.46	AV	H	34.20	3.69	0.00	98.35	92.33	N/A	N/A
5745.00	67.13	PK	V	34.20	3.69	0.00	105.02	99	N/A	N/A
5745.00	58.13	AV	V	34.20	3.69	0.00	96.02	90	N/A	N/A
5725.00	44.74	PK	H	34.19	3.69	0.00	82.62	76.6	122.20	45.60
5720.00	39.22	PK	H	34.19	3.69	0.00	77.10	71.08	110.80	39.72
5700.00	33.39	PK	H	34.18	3.68	0.00	71.25	65.23	105.20	39.97
5650.00	32.09	PK	H	34.16	3.63	0.00	69.88	63.86	68.20	4.34
11490.00	36.12	PK	H	38.99	6.59	25.51	56.19	50.17	74.00	23.83
11490.00	24.06	AV	H	38.99	6.59	25.51	44.13	38.11	54.00	15.89
17235.00	36.79	PK	H	41.56	8.78	23.72	63.41	57.39	68.20	10.81
Middle Channel: 5785 MHz										
5785.00	70.58	PK	H	34.21	3.71	0.00	108.50	102.48	N/A	N/A
5785.00	61.11	AV	H	34.21	3.71	0.00	99.03	93.01	N/A	N/A
5785.00	65.61	PK	V	34.21	3.71	0.00	103.53	97.51	N/A	N/A
5785.00	56.12	AV	V	34.21	3.71	0.00	94.04	88.02	N/A	N/A
11570.00	35.96	PK	H	39.00	6.61	25.46	56.11	50.09	74.00	23.91
11570.00	23.93	AV	H	39.00	6.61	25.46	44.08	38.06	54.00	15.94
17355.00	36.63	PK	H	42.26	8.81	23.60	64.10	58.08	68.20	10.12
High Channel: 5825 MHz										
5825.00	70.74	PK	H	34.23	3.73	0.00	108.70	102.68	N/A	N/A
5825.00	61.27	AV	H	34.23	3.73	0.00	99.23	93.21	N/A	N/A
5825.00	65.77	PK	V	34.23	3.73	0.00	103.73	97.71	N/A	N/A
5825.00	56.28	AV	V	34.23	3.73	0.00	94.24	88.22	N/A	N/A
5850.00	41.13	PK	H	34.24	3.75	0.00	79.12	73.1	122.20	49.10
5855.00	39.33	PK	H	34.24	3.75	0.00	77.32	71.3	110.80	39.50
5875.00	35.24	PK	H	34.25	3.77	0.00	73.26	67.24	105.20	37.96
5925.00	33.05	PK	H	34.27	3.80	0.00	71.12	65.1	68.20	3.10
11650.00	35.96	PK	H	39.00	6.64	25.41	56.19	50.17	74.00	23.83
11650.00	23.90	AV	H	39.00	6.64	25.41	44.13	38.11	54.00	15.89
17475.00	36.63	PK	H	42.96	8.84	23.48	64.95	58.93	68.20	9.27

802.11n ht40:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5755 MHz										
5755.00	65.66	PK	H	34.20	3.70	0.00	103.56	97.54	N/A	N/A
5755.00	56.62	AV	H	34.20	3.70	0.00	94.52	88.5	N/A	N/A
5755.00	63.74	PK	V	34.20	3.70	0.00	101.64	95.62	N/A	N/A
5755.00	54.36	AV	V	34.20	3.70	0.00	92.26	86.24	N/A	N/A
5725.00	37.06	PK	H	34.19	3.69	0.00	74.94	68.92	122.20	53.28
5720.00	35.95	PK	H	34.19	3.69	0.00	73.83	67.81	110.80	42.99
5700.00	33.61	PK	H	34.18	3.68	0.00	71.47	65.45	105.20	39.75
5650.00	31.98	PK	H	34.16	3.63	0.00	69.77	63.75	68.20	4.45
11510.00	35.89	PK	H	39.00	6.59	25.50	55.98	49.96	74.00	24.04
11510.00	23.54	AV	H	39.00	6.59	25.50	43.63	37.61	54.00	16.39
17265.00	35.78	PK	H	41.74	8.79	23.69	62.62	56.6	68.20	11.60
High Channel: 5795 MHz										
5795.00	67.23	PK	H	34.22	3.71	0.00	105.16	99.14	N/A	N/A
5795.00	58.79	AV	H	34.22	3.71	0.00	96.72	90.7	N/A	N/A
5795.00	65.26	PK	V	34.22	3.71	0.00	103.19	97.17	N/A	N/A
5795.00	56.38	AV	V	34.22	3.71	0.00	94.31	88.29	N/A	N/A
5850.00	34.31	PK	H	34.24	3.75	0.00	72.30	66.28	122.20	55.92
5855.00	34.35	PK	H	34.24	3.75	0.00	72.34	66.32	110.80	44.48
5875.00	33.82	PK	H	34.25	3.77	0.00	71.84	65.82	105.20	39.38
5925.00	31.61	PK	H	34.27	3.80	0.00	69.68	63.66	68.20	4.54
11590.00	35.69	PK	H	39.00	6.62	25.45	55.86	49.84	74.00	24.16
11590.00	23.78	AV	H	39.00	6.62	25.45	43.95	37.93	54.00	16.07
17385.00	35.17	PK	H	42.43	8.82	23.57	62.85	56.83	68.20	11.37

802.11ac80:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Middle Channel: 5775 MHz										
5775.00	65.57	PK	H	34.21	3.70	0.00	103.48	97.46	N/A	N/A
5775.00	52.69	AV	H	34.21	3.70	0.00	90.60	84.58	N/A	N/A
5775.00	63.49	PK	V	34.21	3.70	0.00	101.40	95.38	N/A	N/A
5775.00	51.68	AV	V	34.21	3.70	0.00	89.59	83.57	N/A	N/A
5725.00	34.91	PK	H	34.19	3.69	0.00	72.79	66.77	122.20	55.43
5720.00	33.61	PK	H	34.19	3.69	0.00	71.49	65.47	110.80	45.33
5700.00	33.87	PK	H	34.18	3.68	0.00	71.73	65.71	105.20	39.49
5650.00	32.41	PK	H	34.16	3.63	0.00	70.20	64.18	68.20	4.02
5850.00	35.61	PK	H	34.24	3.75	0.00	73.60	67.58	122.20	54.62
5855.00	35.17	PK	H	34.24	3.75	0.00	73.16	67.143	110.80	43.66
5875.00	34.32	PK	H	34.25	3.77	0.00	72.34	66.32	105.20	38.88
5925.00	34.01	PK	H	34.27	3.80	0.00	72.08	66.06	68.20	2.14
11550.00	35.79	PK	H	39.00	6.61	25.48	55.92	49.9	74.00	24.10
11550.00	23.47	AV	H	39.00	6.61	25.48	43.60	37.58	54.00	16.42
17325.00	34.69	PK	H	42.09	8.80	23.63	61.95	55.93	68.20	12.27

802.11ax20:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5745 MHz										
5745.00	70.95	PK	H	34.20	3.69	0.00	108.84	102.82	N/A	N/A
5745.00	61.58	AV	H	34.20	3.69	0.00	99.47	93.45	N/A	N/A
5745.00	68.93	PK	V	34.20	3.69	0.00	106.82	100.8	N/A	N/A
5745.00	59.67	AV	V	34.20	3.69	0.00	97.56	91.54	N/A	N/A
5725.00	34.91	PK	H	34.19	3.69	0.00	72.79	66.77	122.20	55.43
5720.00	33.61	PK	H	34.19	3.69	0.00	71.49	65.47	110.80	45.33
5700.00	31.81	PK	H	34.18	3.68	0.00	69.67	63.65	105.20	41.55
5650.00	32.88	PK	H	34.16	3.63	0.00	70.67	64.65	68.20	3.55
11490.00	35.64	PK	H	38.99	6.59	25.51	55.71	49.69	74.00	24.31
11490.00	23.75	AV	H	38.99	6.59	25.51	43.82	37.8	54.00	16.20
17235.00	35.03	PK	H	41.56	8.78	23.72	61.65	55.63	68.20	12.57
Middle Channel: 5785 MHz										
5785.00	71.78	PK	H	34.21	3.71	0.00	109.70	103.68	N/A	N/A
5785.00	61.48	AV	H	34.21	3.71	0.00	99.40	93.38	N/A	N/A
5785.00	69.33	PK	V	34.21	3.71	0.00	107.25	101.23	N/A	N/A
5785.00	59.36	AV	V	34.21	3.71	0.00	97.28	91.26	N/A	N/A
11570.00	35.89	PK	H	39.00	6.61	25.46	56.04	50.02	74.00	23.98
11570.00	23.51	AV	H	39.00	6.61	25.46	43.66	37.64	54.00	16.36
17355.00	35.61	PK	H	42.26	8.81	23.60	63.08	57.06	68.20	11.14
High Channel: 5825 MHz										
5825.00	72.46	PK	H	34.23	3.73	0.00	110.42	104.4	N/A	N/A
5825.00	61.35	AV	H	34.23	3.73	0.00	99.31	93.29	N/A	N/A
5825.00	70.64	PK	V	34.23	3.73	0.00	108.60	102.58	N/A	N/A
5825.00	59.78	AV	V	34.23	3.73	0.00	97.74	91.72	N/A	N/A
5850.00	34.73	PK	H	34.24	3.75	0.00	72.72	66.7	122.20	55.50
5855.00	33.91	PK	H	34.24	3.75	0.00	71.90	65.88	110.80	44.92
5875.00	34.42	PK	H	34.25	3.77	0.00	72.44	66.42	105.20	38.78
5925.00	33.35	PK	H	34.27	3.80	0.00	71.42	65.4	68.20	2.80
11650.00	35.79	PK	H	39.00	6.64	25.41	56.02	50	74.00	24.00
11650.00	23.46	AV	H	39.00	6.64	25.41	43.69	37.67	54.00	16.33
17475.00	35.44	PK	H	42.96	8.84	23.48	63.76	57.74	68.20	10.46

802.11ax40:

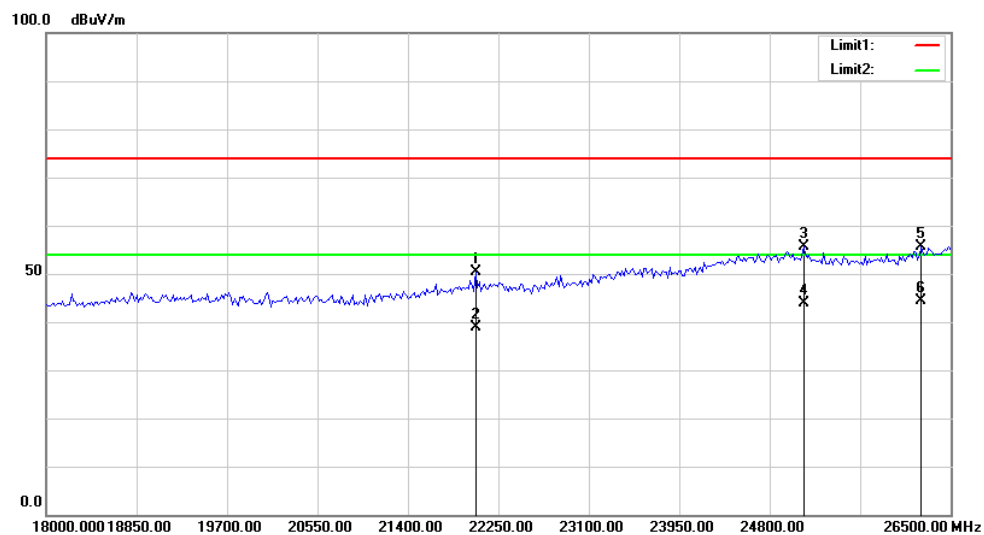
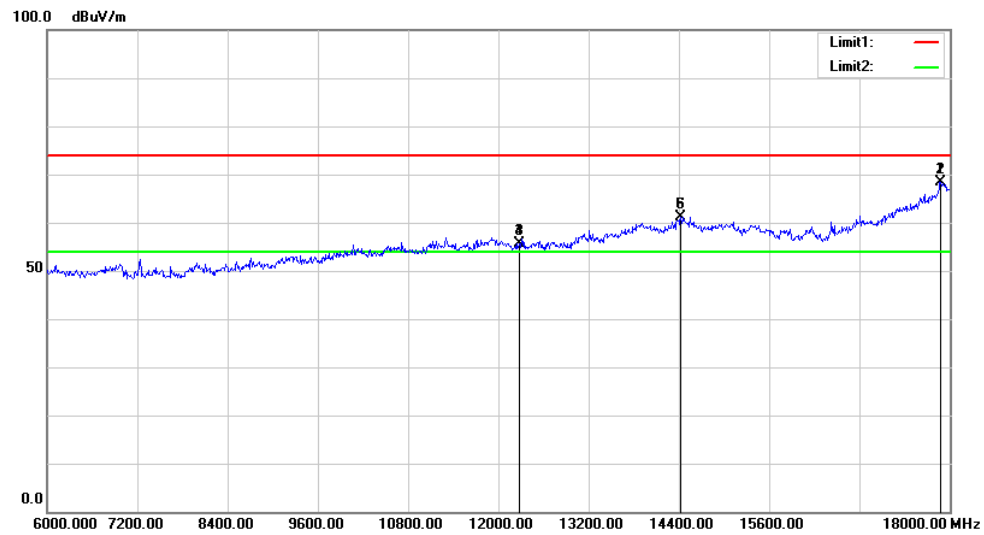
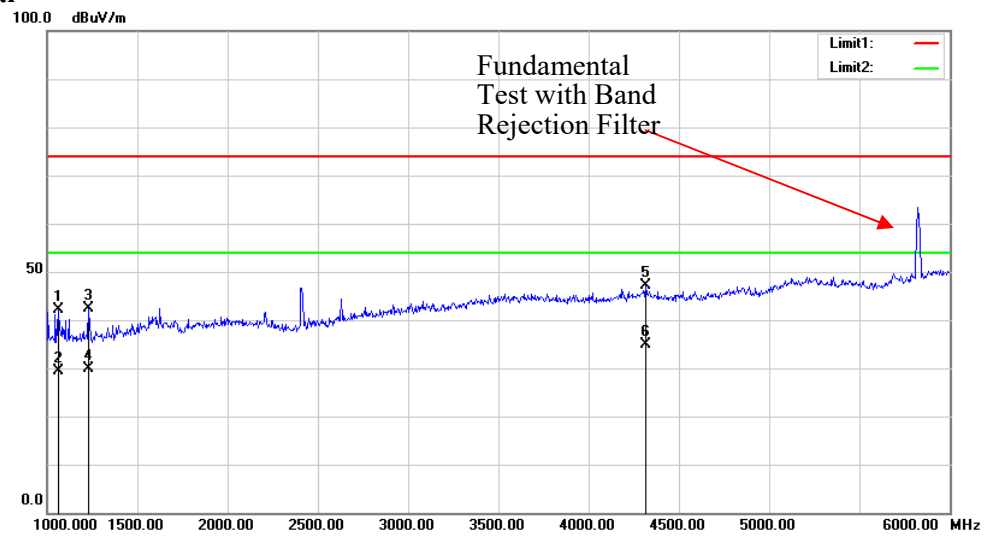
Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5755 MHz										
5755.00	67.28	PK	H	34.20	3.70	0.00	105.18	99.16	N/A	N/A
5755.00	56.39	AV	H	34.20	3.70	0.00	94.29	88.27	N/A	N/A
5755.00	64.58	PK	V	34.20	3.70	0.00	102.48	96.46	N/A	N/A
5755.00	53.69	AV	V	34.20	3.70	0.00	91.59	85.57	N/A	N/A
5725.00	39.12	PK	H	34.19	3.69	0.00	77.00	70.98	122.20	51.22
5720.00	39.05	PK	H	34.19	3.69	0.00	76.93	70.91	110.80	39.89
5700.00	37.15	PK	H	34.18	3.68	0.00	75.01	68.99	105.20	36.21
5650.00	32.83	PK	H	34.16	3.63	0.00	70.62	64.6	68.20	3.60
11510.00	35.64	PK	H	39.00	6.59	25.50	55.73	49.71	74.00	24.29
11510.00	23.46	AV	H	39.00	6.59	25.50	43.55	37.53	54.00	16.47
17265.00	35.01	PK	H	41.74	8.79	23.69	61.85	55.83	68.20	12.37
High Channel: 5795 MHz										
5795.00	68.81	PK	H	34.22	3.71	0.00	106.74	100.72	N/A	N/A
5795.00	56.15	AV	H	34.22	3.71	0.00	94.08	88.06	N/A	N/A
5795.00	66.38	PK	V	34.22	3.71	0.00	104.31	98.29	N/A	N/A
5795.00	55.27	AV	V	34.22	3.71	0.00	93.20	87.18	N/A	N/A
5850.00	33.51	PK	H	34.24	3.75	0.00	71.50	65.48	122.20	56.72
5855.00	32.64	PK	H	34.24	3.75	0.00	70.63	64.61	110.80	46.19
5875.00	33.09	PK	H	34.25	3.77	0.00	71.11	65.09	105.20	40.11
5925.00	32.29	PK	H	34.27	3.80	0.00	70.36	64.34	68.20	3.86
11590.00	36.14	PK	H	39.00	6.62	25.45	56.31	50.29	74.00	23.71
11590.00	24.55	AV	H	39.00	6.62	25.45	44.72	38.7	54.00	15.30
17385.00	35.36	PK	H	42.43	8.82	23.57	63.04	57.02	68.20	11.18

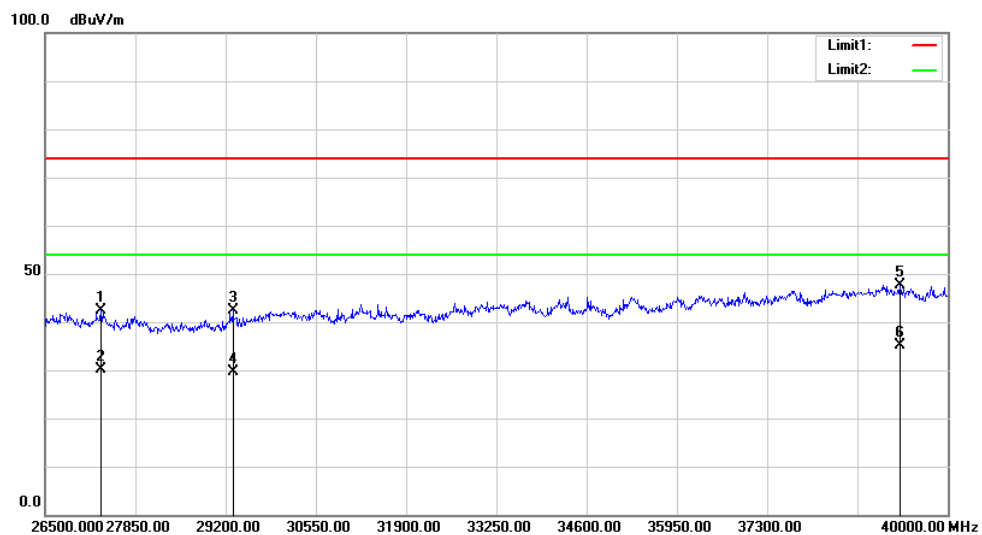
802.11ax80:

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Middle Channel: 5775 MHz										
5775.00	65.30	PK	H	34.21	3.70	0.00	103.21	97.19	N/A	N/A
5775.00	53.86	AV	H	34.21	3.70	0.00	91.77	85.75	N/A	N/A
5775.00	61.38	PK	V	34.21	3.70	0.00	99.29	93.27	N/A	N/A
5775.00	51.24	AV	V	34.21	3.70	0.00	89.15	83.13	N/A	N/A
5725.00	38.89	PK	H	34.19	3.69	0.00	76.77	70.75	122.20	51.45
5720.00	38.44	PK	H	34.19	3.69	0.00	76.32	70.3	110.80	40.50
5700.00	37.24	PK	H	34.18	3.68	0.00	75.10	69.08	105.20	36.12
5650.00	32.57	PK	H	34.16	3.63	0.00	70.36	64.34	68.20	3.86
5850.00	39.05	PK	H	34.24	3.75	0.00	77.04	71.02	122.20	51.18
5855.00	38.04	PK	H	34.24	3.75	0.00	76.03	70.01	110.80	40.79
5875.00	37.44	PK	H	34.25	3.77	0.00	75.46	69.44	105.20	35.76
5925.00	34.15	PK	H	34.27	3.80	0.00	72.22	66.2	68.20	2.00
11550.00	35.47	PK	H	39.00	6.61	25.48	55.60	49.58	74.00	24.42
11550.00	23.45	AV	H	39.00	6.61	25.48	43.58	37.56	54.00	16.44
17325.00	34.89	PK	H	42.09	8.80	23.63	62.15	56.13	68.20	12.07

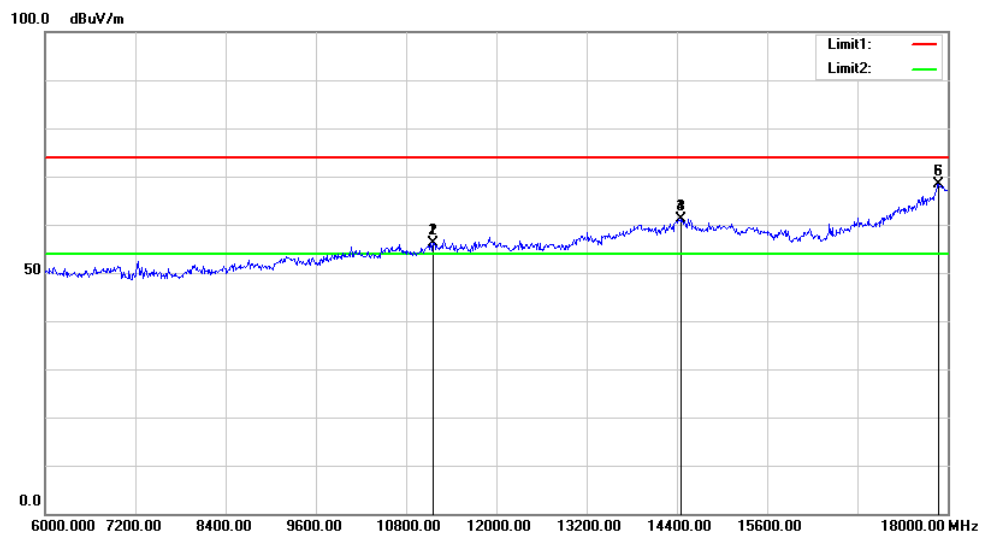
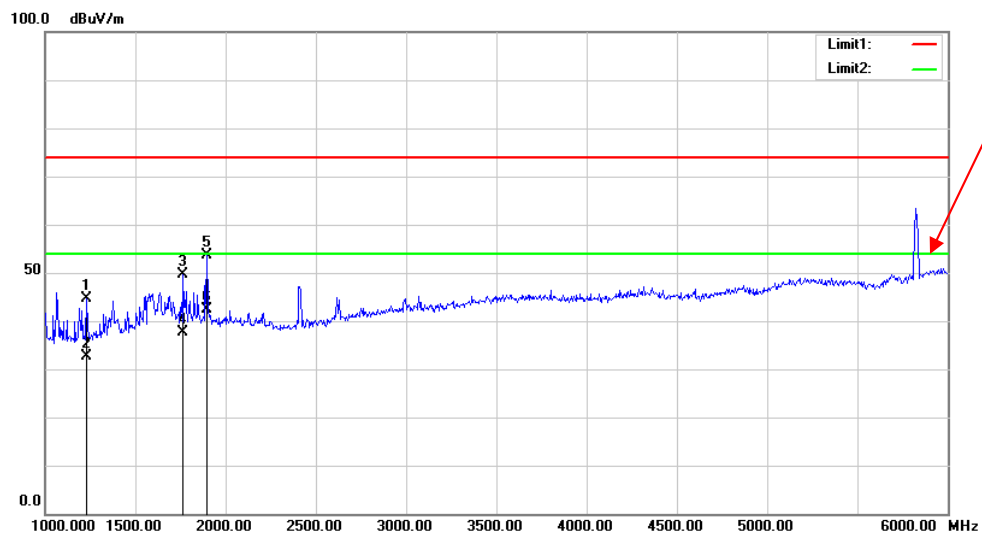
Test Plots(802.11a mode chain 1 5825MHz was the worst)

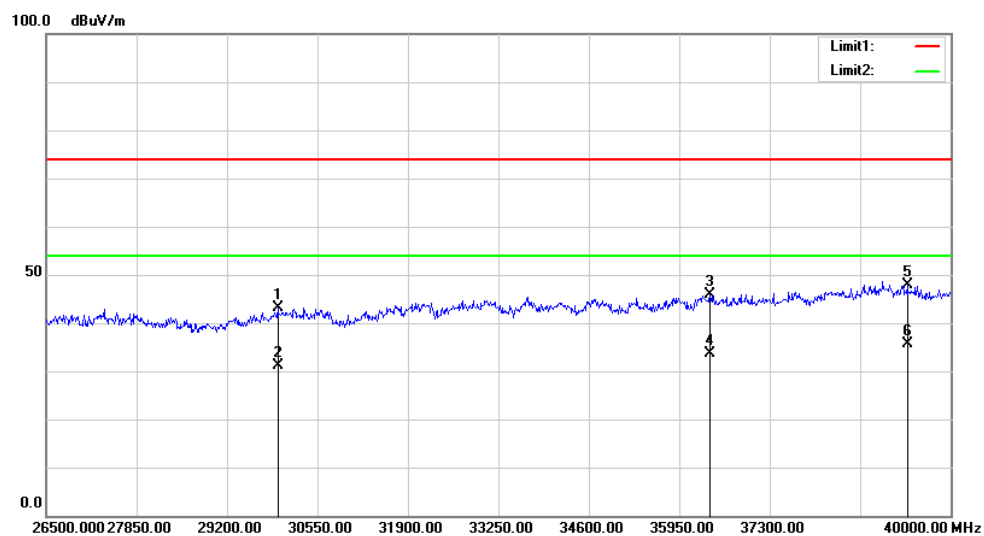
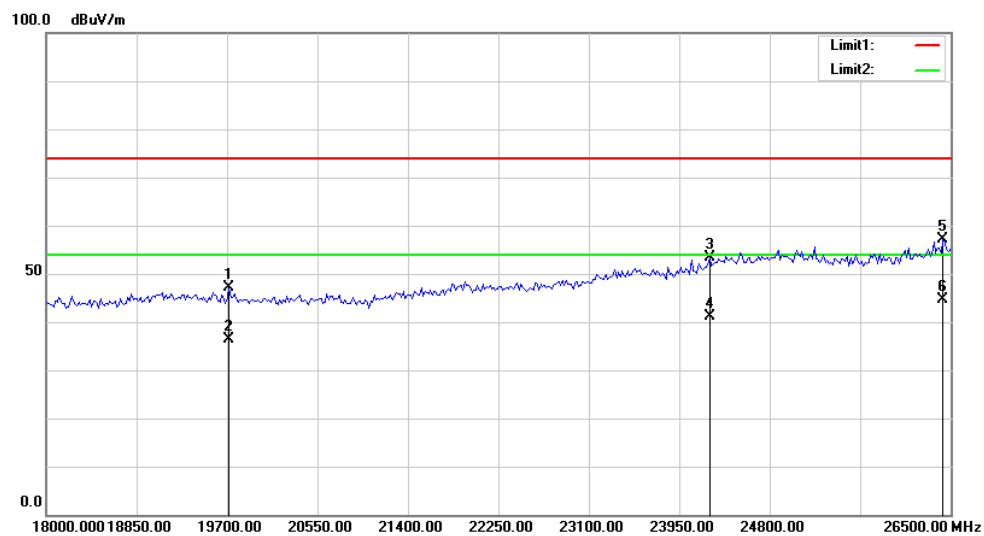
Horizontal





Vertical





FCC §15.407(a)(e)–EMISSION BANDWIDTH AND OCCUPIED BANDWIDTH

Applicable Standard

15.407(a) (e).

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU 26	200256	2020-07-07	2021-07-07
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	N/A

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Procedure

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

Test Data

Environmental Conditions

Temperature:	22.9~26.8 °C
Relative Humidity:	52~69 %
ATM Pressure:	100.4~101.9 kPa
Test by:	Tiger Mo
Test Date:	2021-04-04~2021-05-07

Test Result: Pass.

Please refer to the following tables and plots.

Test mode: Transmitting (test was only performed at chain 0)

5150-5250MHz:

Mode	Frequency (MHz)	26 dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11 a	5180	26.240	17.485
	5200	25.360	17.485
	5240	26.800	17.725
802.11n ht20	5180	24.240	18.363
	5200	22.720	18.443
	5240	24.241	18.683
802.11n ht40	5190	39.840	37.206
	5230	40.160	37.206
802.11ax hew20	5180	21.840	19.082
	5200	21.600	19.002
	5240	24.240	19.082
802.11ax hew40	5190	40.320	38.004
	5230	40.320	38.004
802.11ac vht80	5210	83.200	76.008
802.11ax hew80	5210	82.560	77.285

5250-5350MHz:

Mode	Frequency (MHz)	26 dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11 a	5260	21.680	17.166
	5280	25.680	17.485
	5320	21.680	17.166
802.11n ht20	5260	26.560	18.443
	5280	28.800	18.523
	5320	23.280	18.363
802.11n ht40	5270	40.000	37.206
	5310	40.000	37.206
802.11ax hew20	5260	21.680	19.002
	5280	21.680	19.002
	5320	21.920	19.002
802.11ax hew40	5270	40.160	38.004
	5310	40.320	38.004
802.11ac vht80	5290	88.640	76.008
802.11ax hew80	5290	82.560	77.605

5470-5725 MHz:

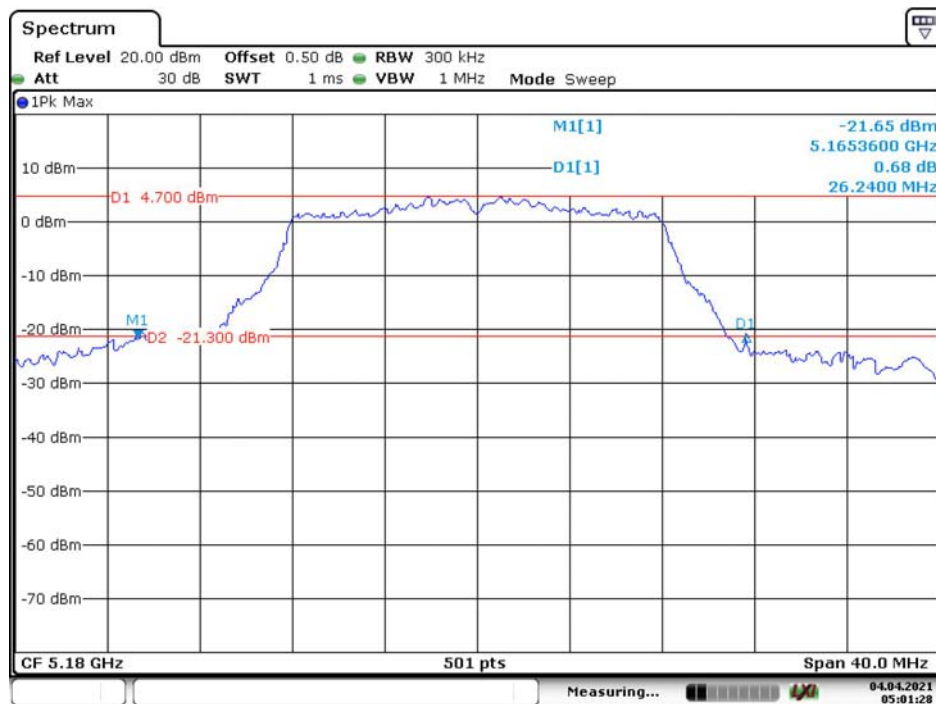
Mode	Frequency (MHz)	26 dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11 a	5500	21.760	17.246
	5580	22.000	17.246
	5700	24.720	17.405
802.11n ht20	5500	25.200	18.443
	5580	24.960	18.443
	5700	31.920	18.683
802.11n ht40	5510	40.160	37.046
	5550	40.000	37.206
	5670	56.000	37.525
802.11ax hew20	5500	21.920	19.162
	5580	23.600	19.082
	5700	23.200	19.002
802.11ax hew40	5510	40.960	37.844
	5550	52.960	38.164
	5670	68.460	38.164
802.11ac vht80	5530	96.320	76.327
802.11ax hew80	5530	89.920	77.605

5725-5850 MHz:

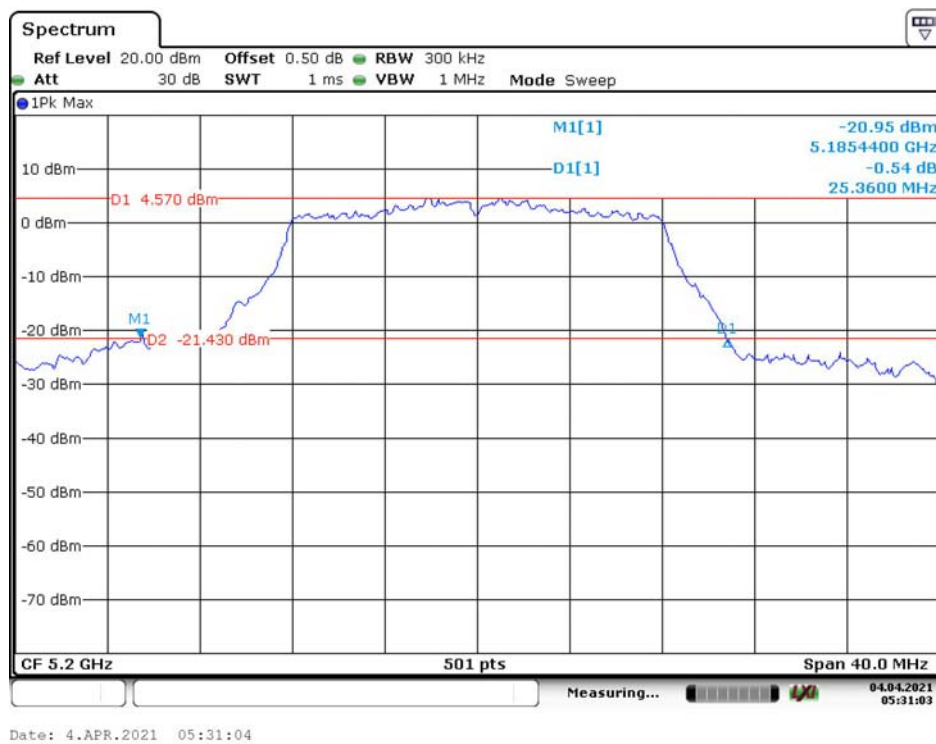
Mode	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	6 dB Emission Bandwidth Limit (MHz)
802.11 a	5745	16.400	17.325	≥0.5
	5785	16.320	17.325	≥0.5
	5825	16.320	17.405	≥0.5
802.11n ht20	5745	17.600	18.683	≥0.5
	5785	17.360	18.523	≥0.5
	5825	17.600	18.683	≥0.5
802.11n ht40	5755	36.160	37.685	≥0.5
	5795	35.840	37.525	≥0.5
802.11ax hew20	5745	18.560	19.162	≥0.5
	5785	18.480	19.082	≥0.5
	5825	18.720	19.162	≥0.5
802.11ax hew40	5755	38.080	38.164	≥0.5
	5795	37.600	38.004	≥0.5
802.11ac vht80	5775	76.160	76.647	≥0.5
802.11ax hew80	5775	77.760	77.605	≥0.5

5150-5250MHz:
26dB Emission Bandwidth:

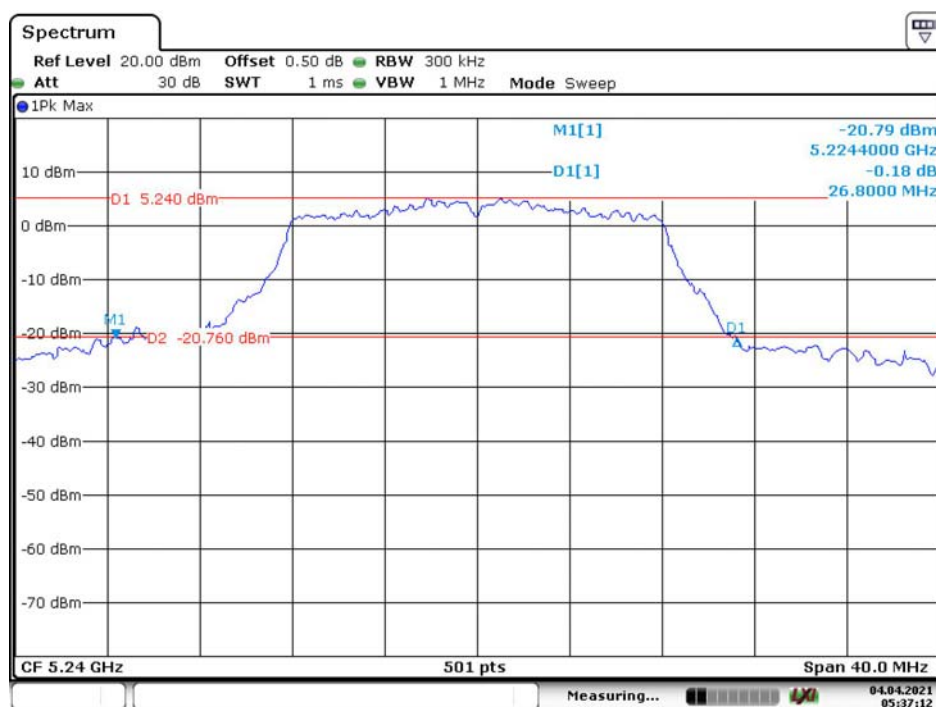
802.11a Low Channel



802.11a Middle Channel

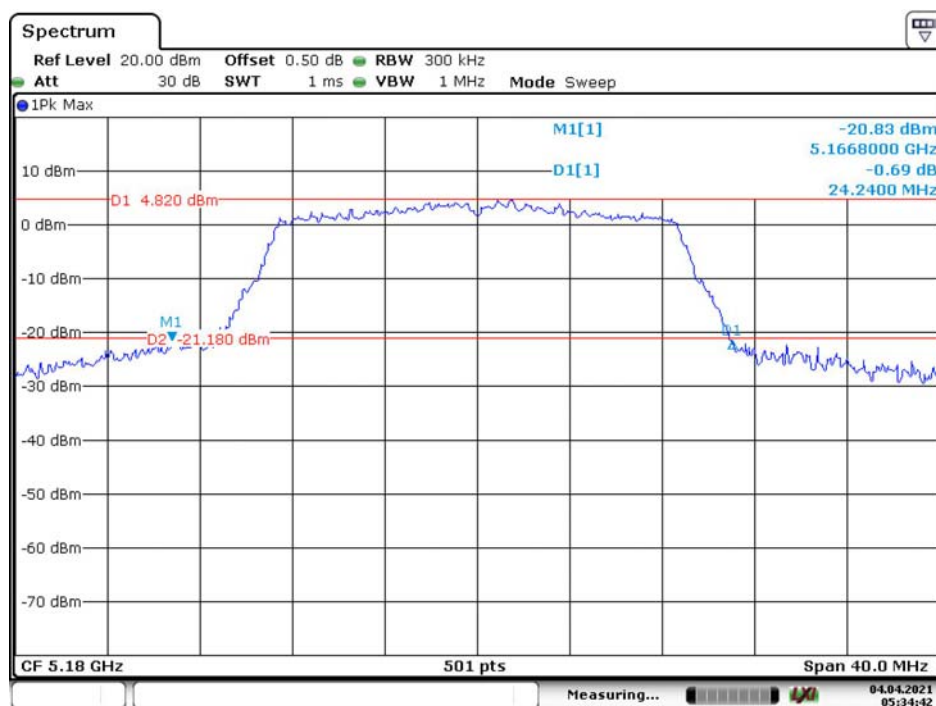


802.11a High Channel



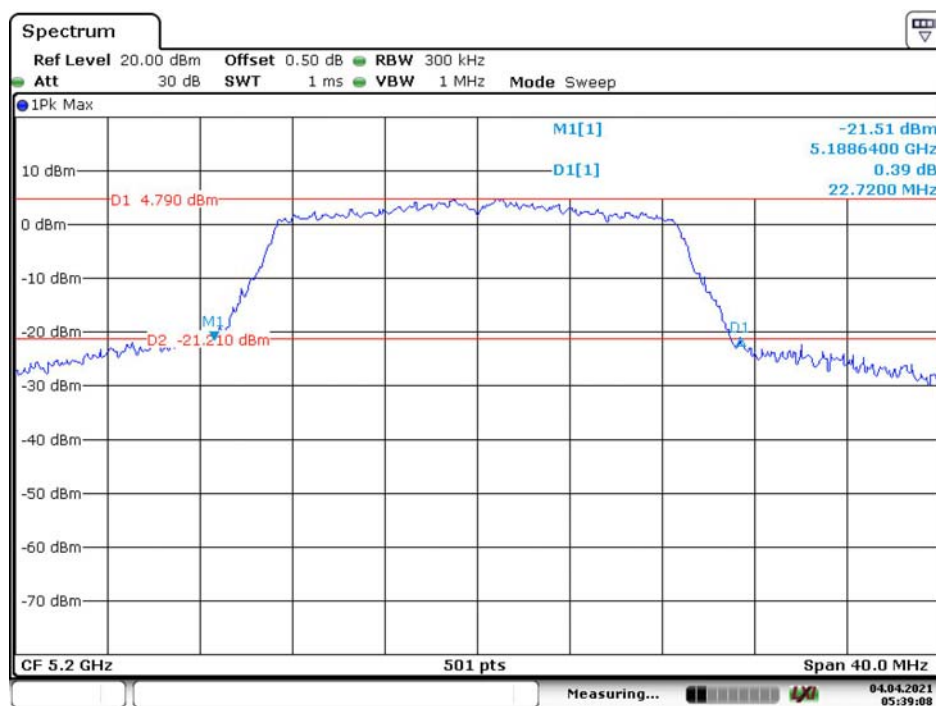
Date: 4.APR.2021 05:37:12

802.11n ht20 Low Channel



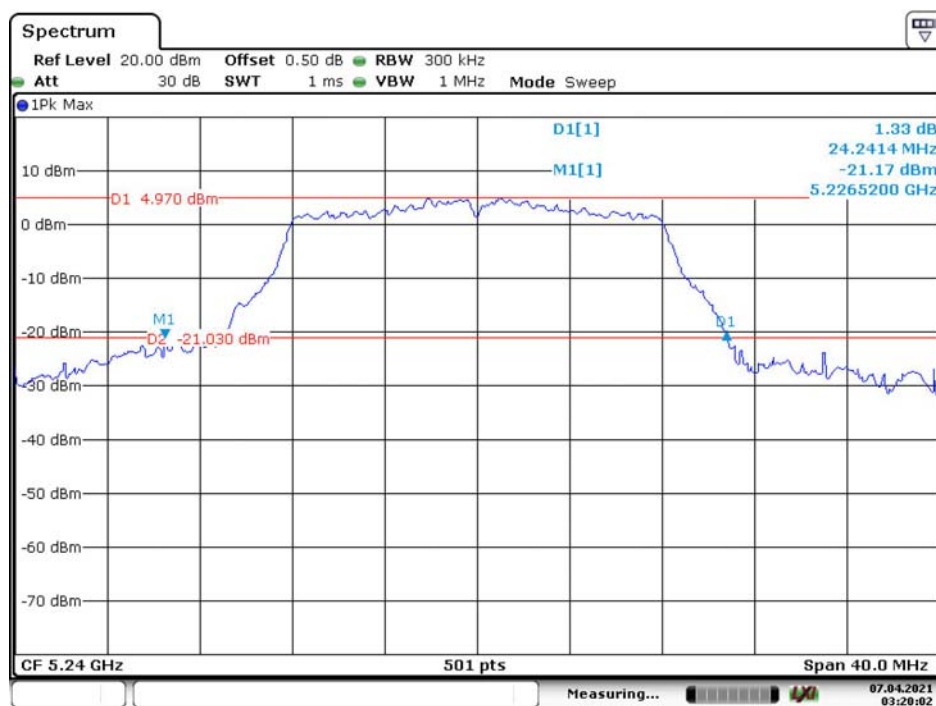
Date: 4.APR.2021 05:34:43

802.11n ht20 Middle Channel



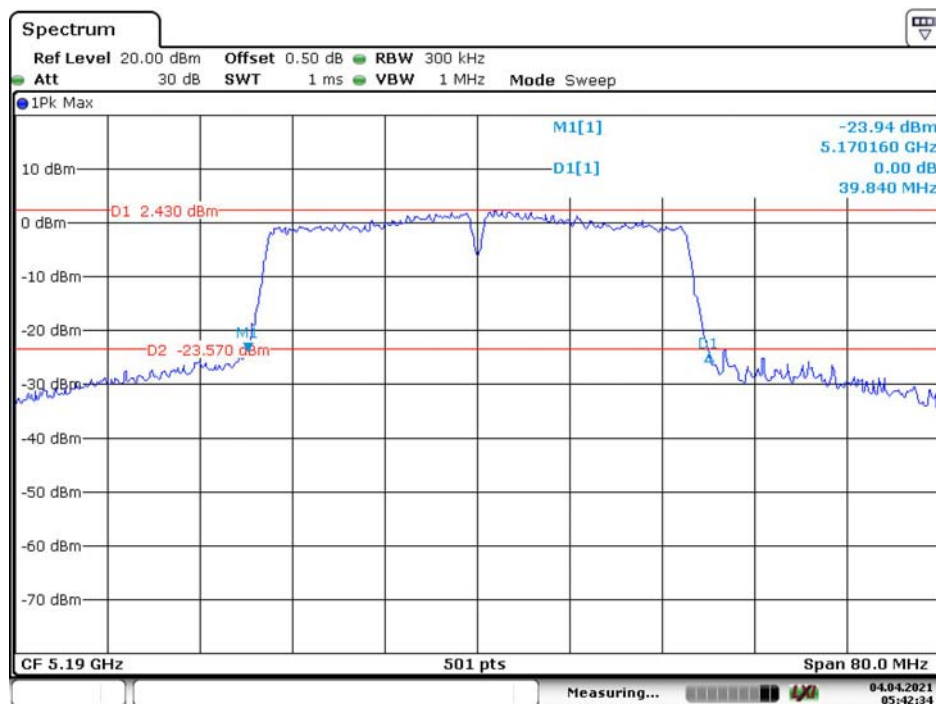
Date: 4.APR.2021 05:39:09

802.11n ht20 High Channel



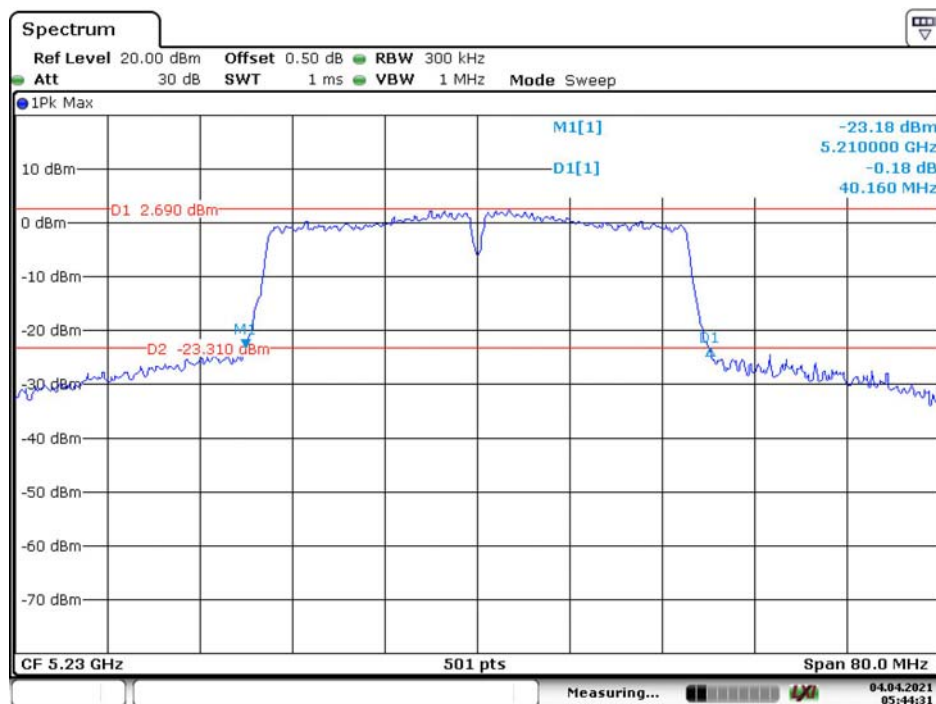
Date: 7.APR.2021 03:20:02

802.11n ht40 Low Channel



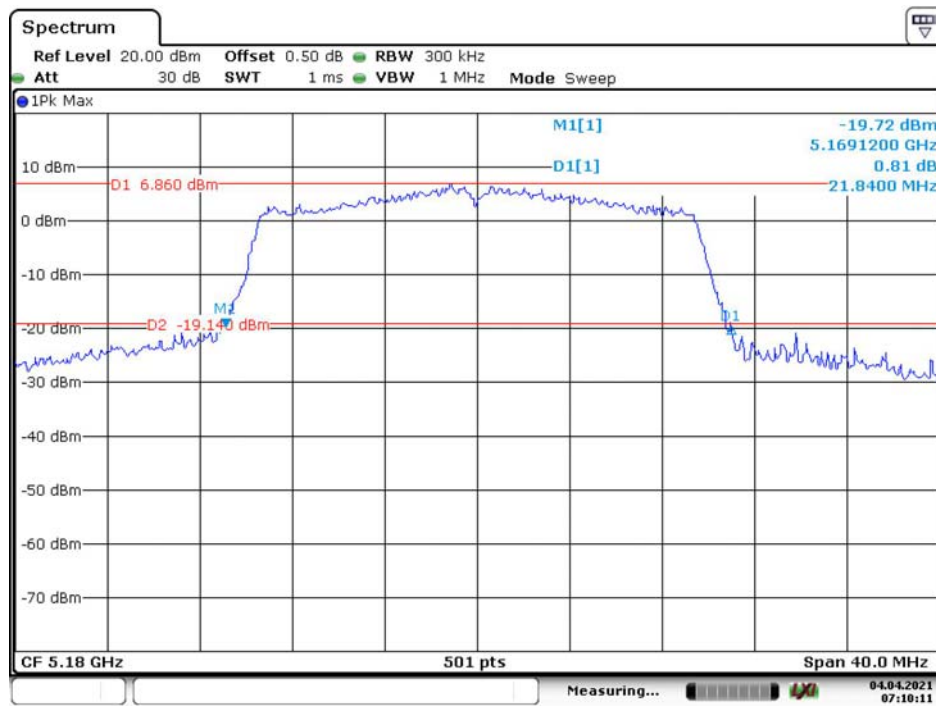
Date: 4.APR.2021 05:42:34

802.11n ht40 High Channel



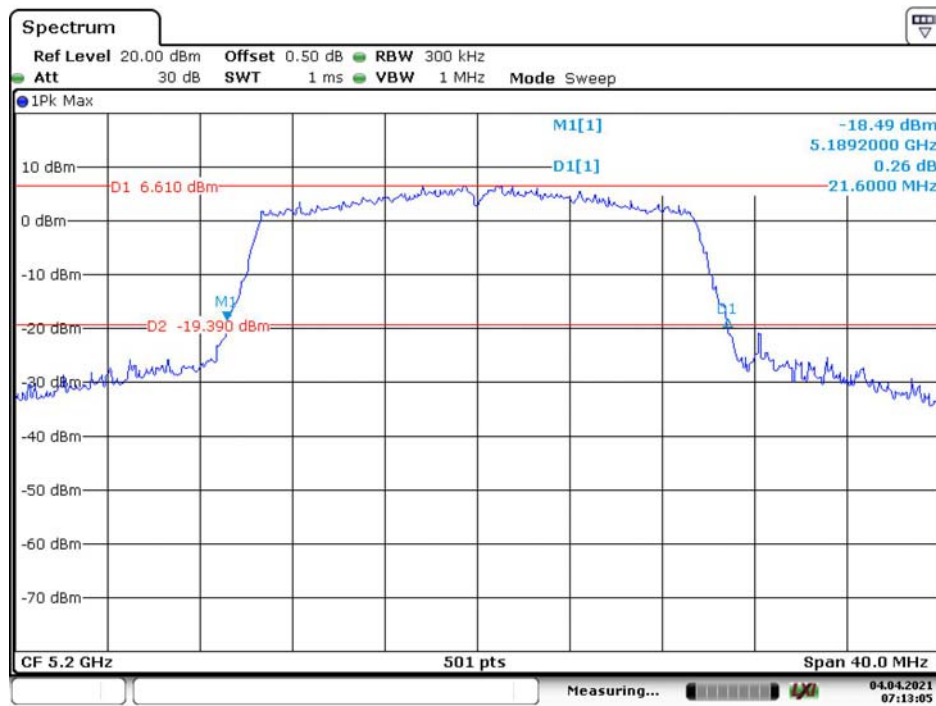
Date: 4.APR.2021 05:44:32

802.11ax hew20 Low Channel



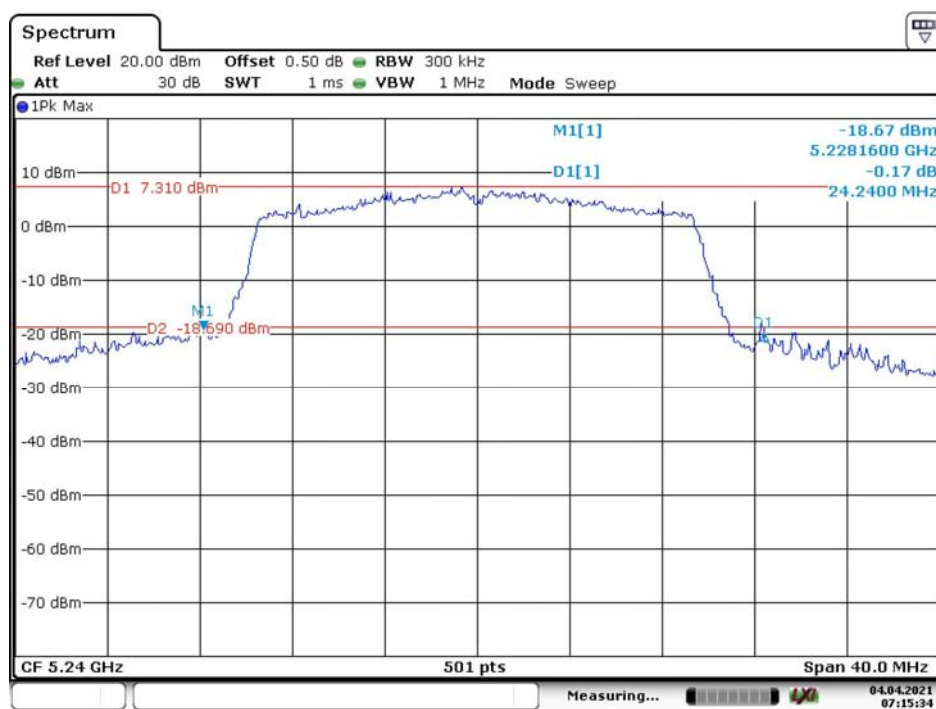
Date: 4.APR.2021 07:10:11

802.11ax hew20 Middle Channel



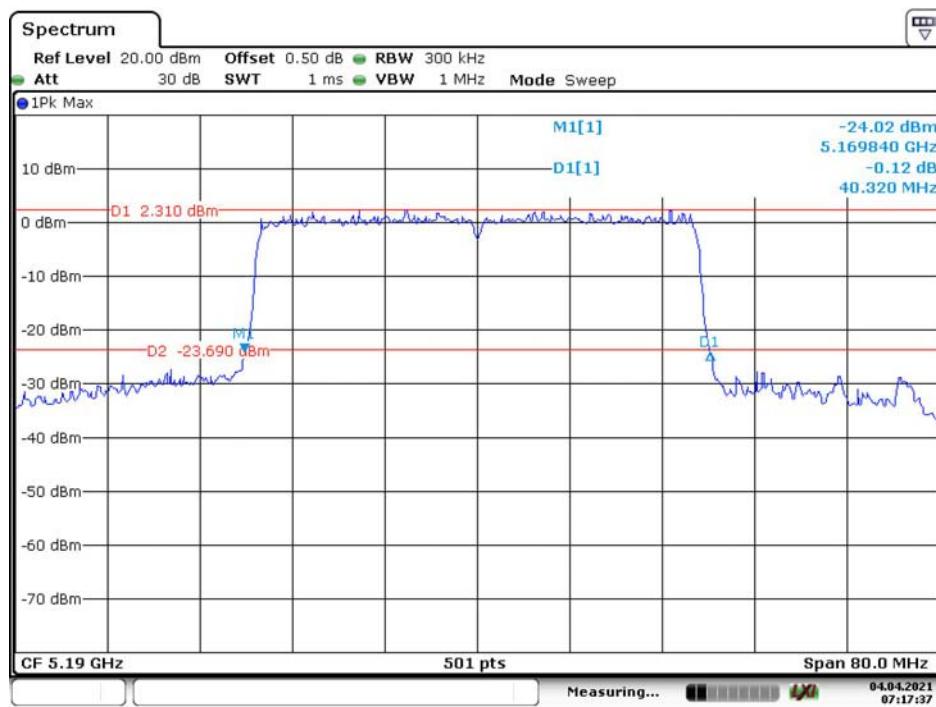
Date: 4.APR.2021 07:13:05

802.11ax hew20 High Channel



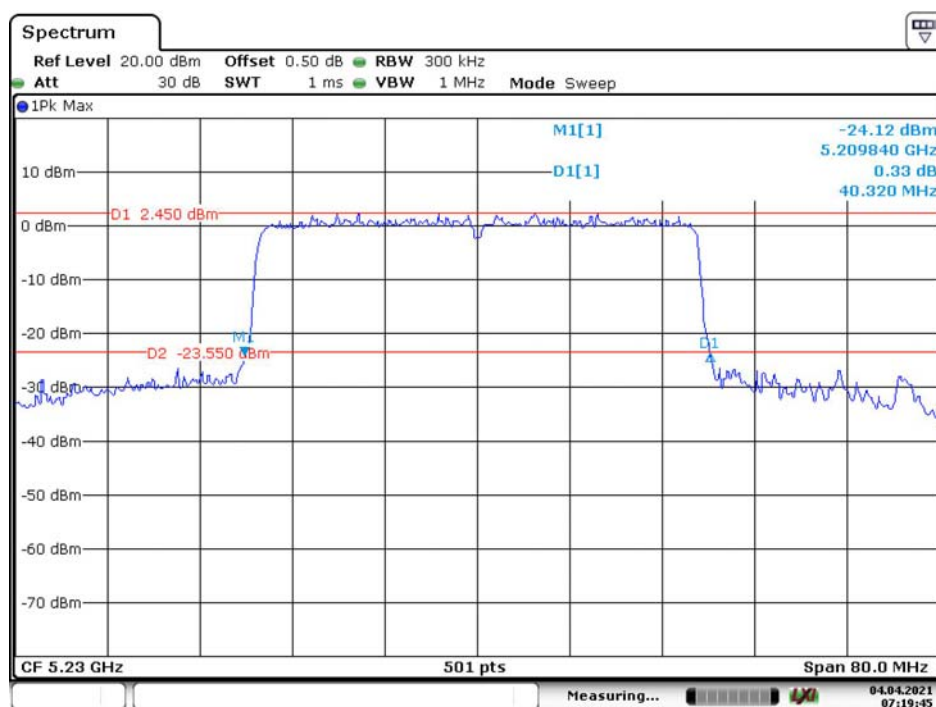
Date: 4.APR.2021 07:15:34

802.11ax hew40 Low Channel



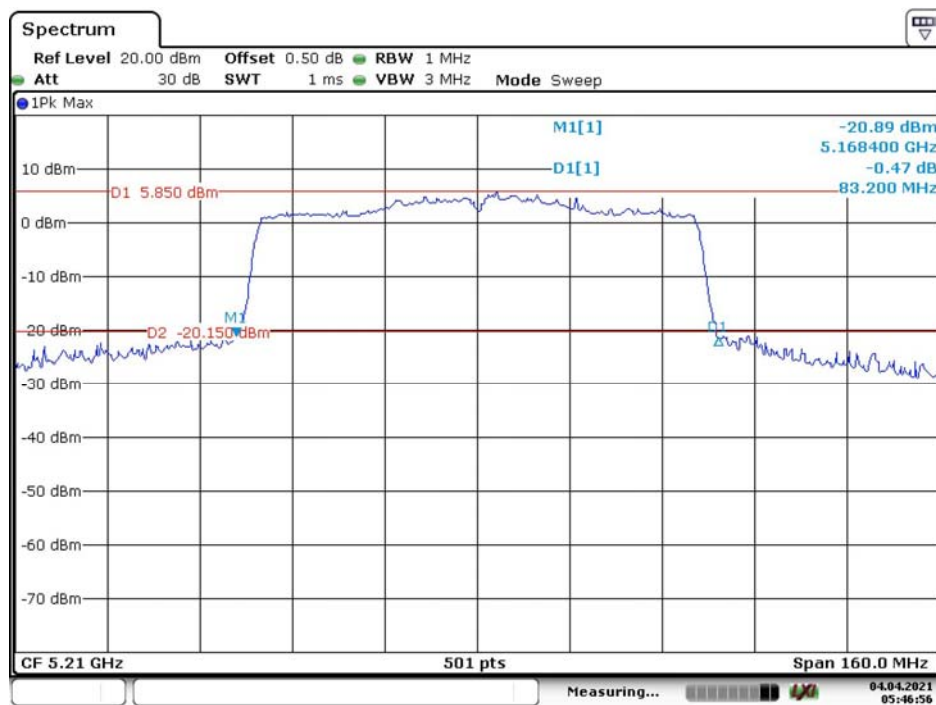
Date: 4.APR.2021 07:17:37

802.11ax hew40 High Channel



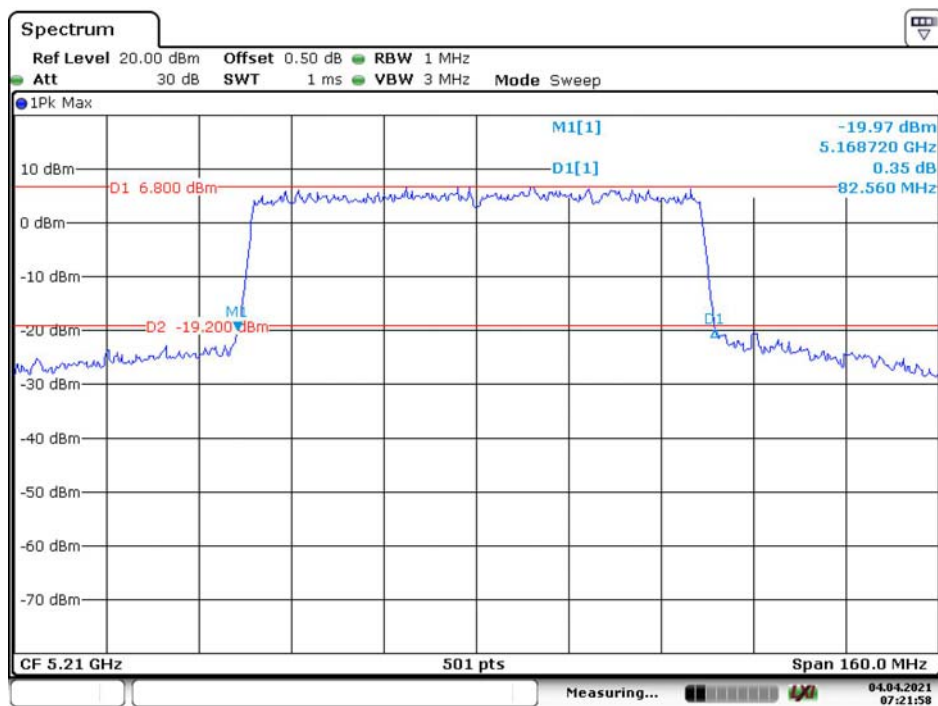
Date: 4.APR.2021 07:19:45

802.11ac vht80 Middle Channel



Date: 4.APR.2021 05:46:57

802.11ax hew80 Middle Channel



Date: 4.APR.2021 07:21:58

99% Occupied Bandwidth:**802.11a Low Channel**

Date: 4.APR.2021 05:01:49

802.11a Middle Channel

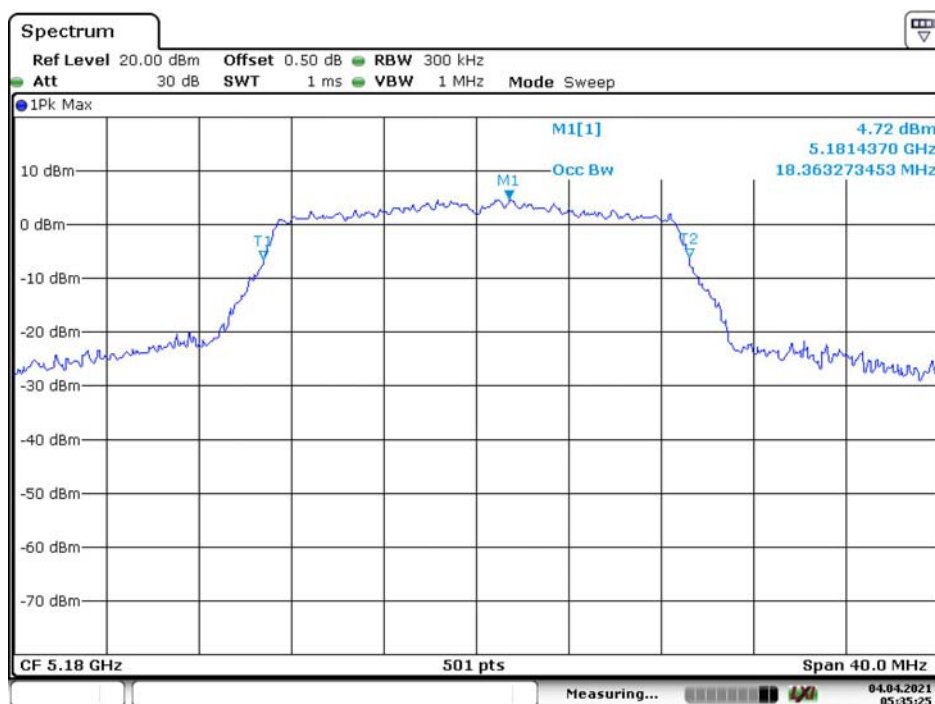
Date: 4.APR.2021 05:31:24

802.11a High Channel



Date: 4.APR.2021 05:37:29

802.11n ht20 Low Channel



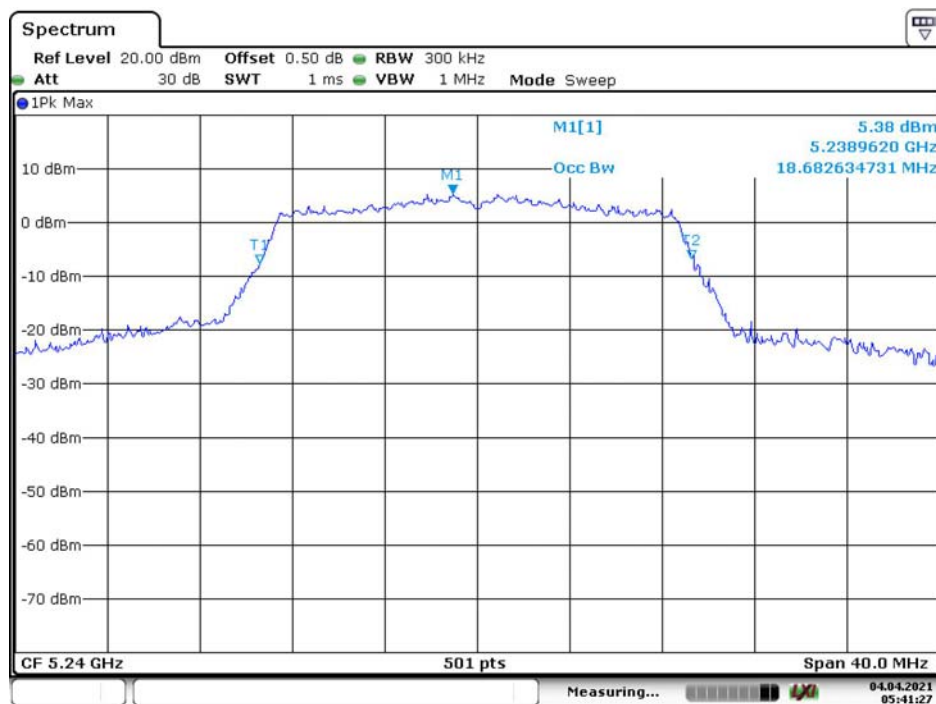
Date: 4.APR.2021 05:35:25

802.11n ht20 Middle Channel



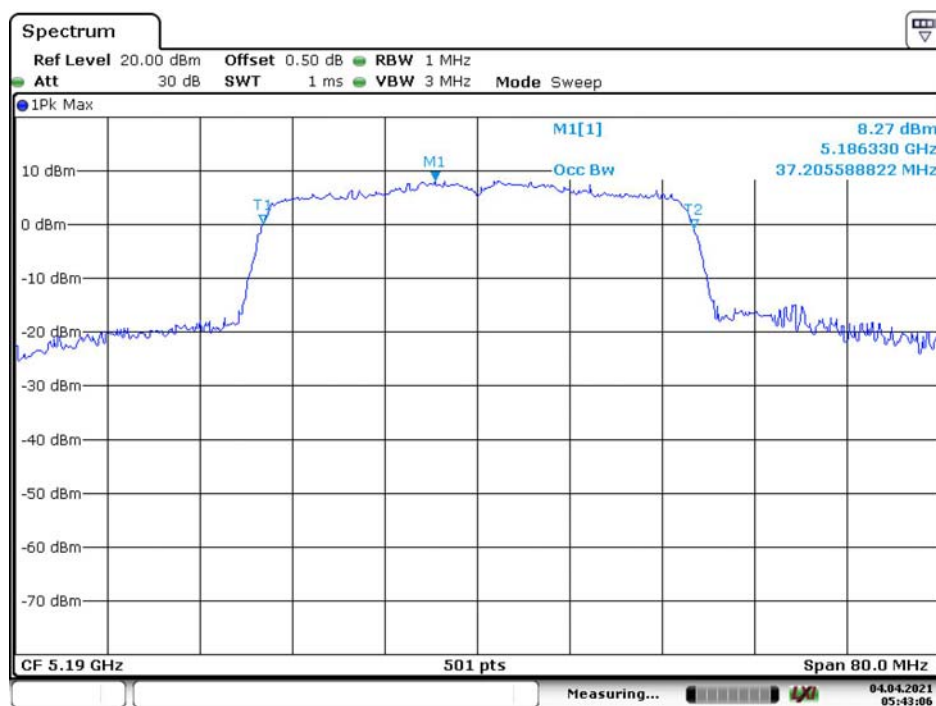
Date: 4.APR.2021 05:39:32

802.11n ht20 High Channel



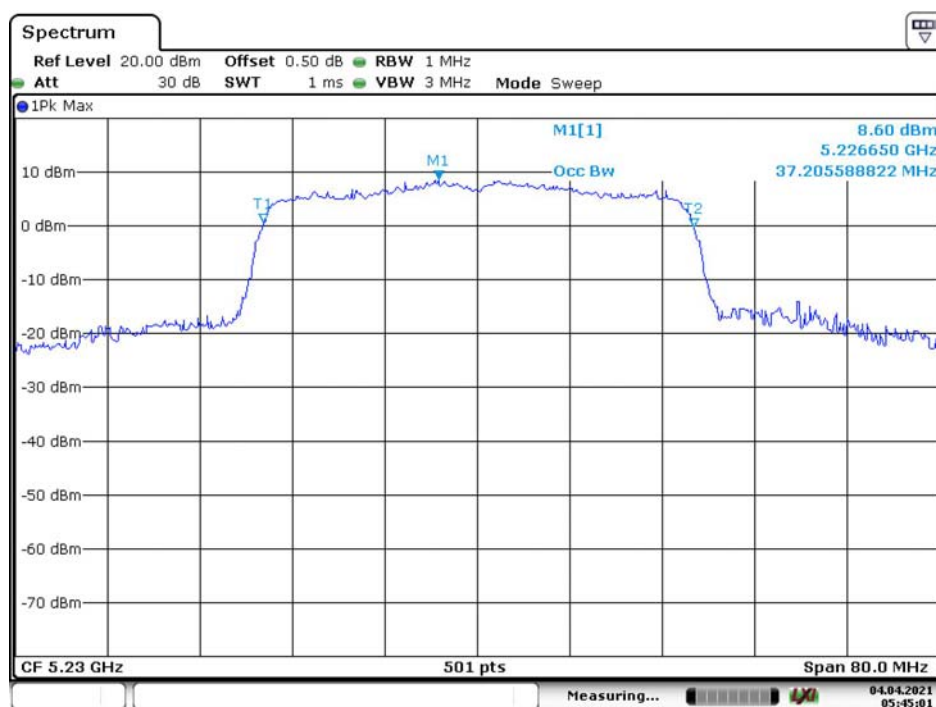
Date: 4.APR.2021 05:41:28

802.11n ht40 Low Channel



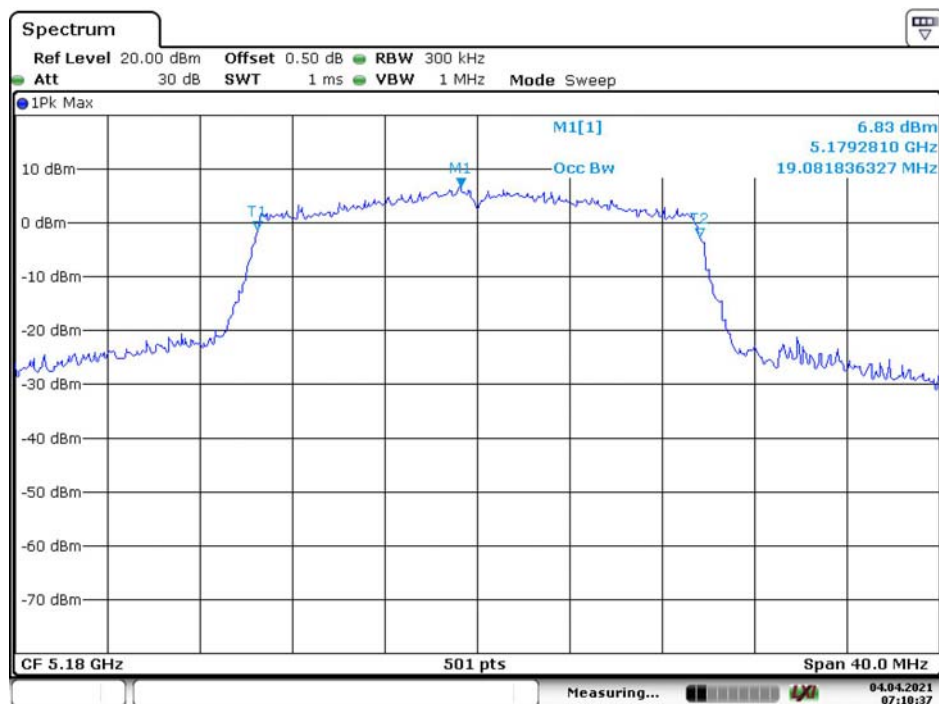
Date: 4.APR.2021 05:43:07

802.11n ht40 High Channel



Date: 4.APR.2021 05:45:01

802.11ax hew20 Low Channel



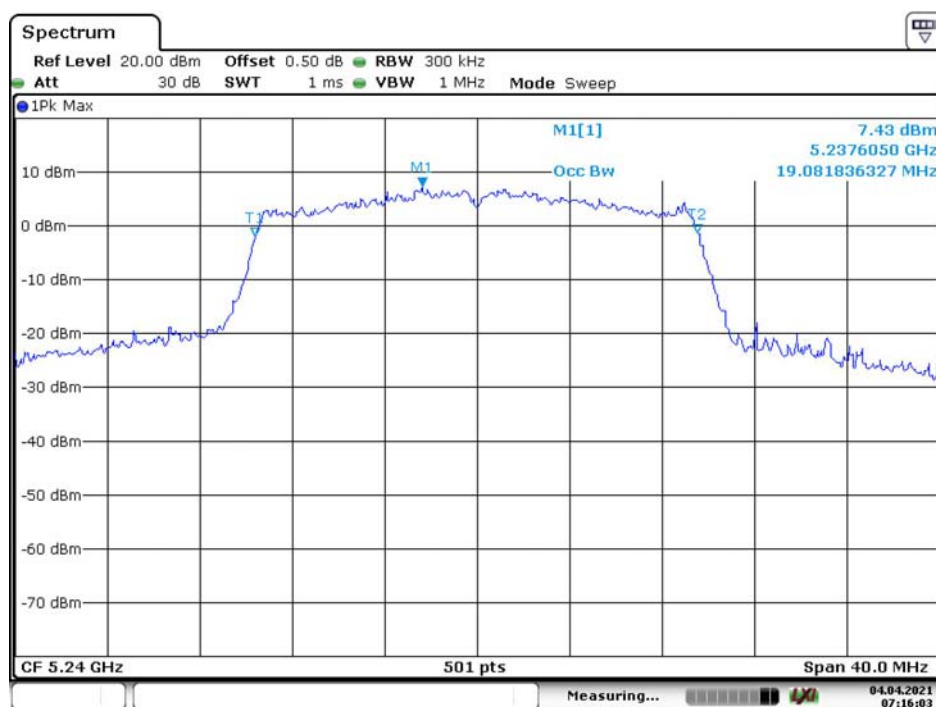
Date: 4.APR.2021 07:10:37

802.11ax hew20 Middle Channel



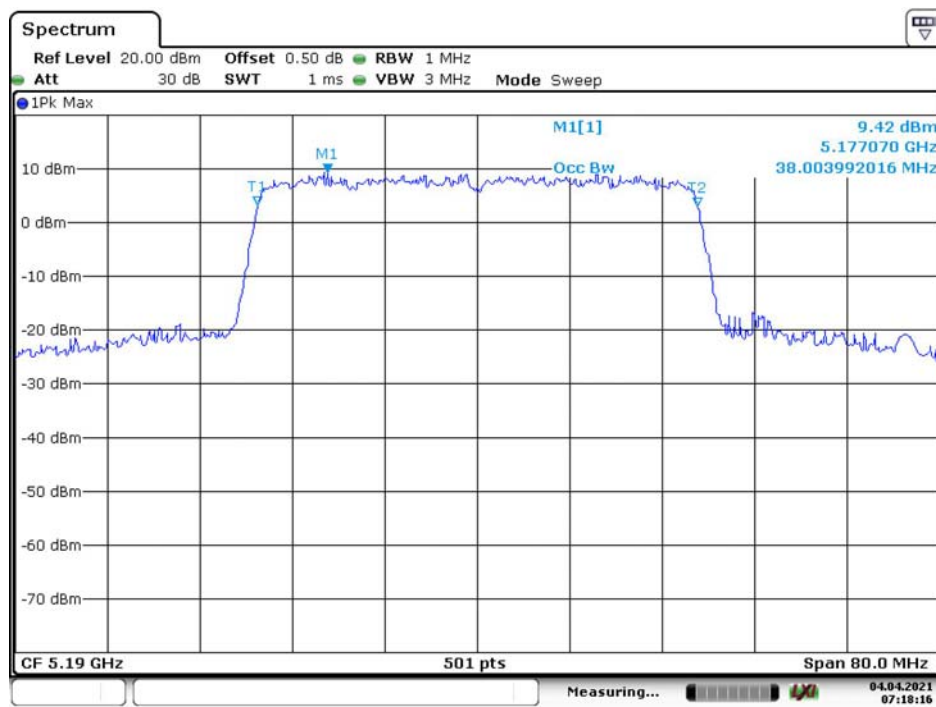
Date: 4.APR.2021 07:13:37

802.11ax hew20 High Channel



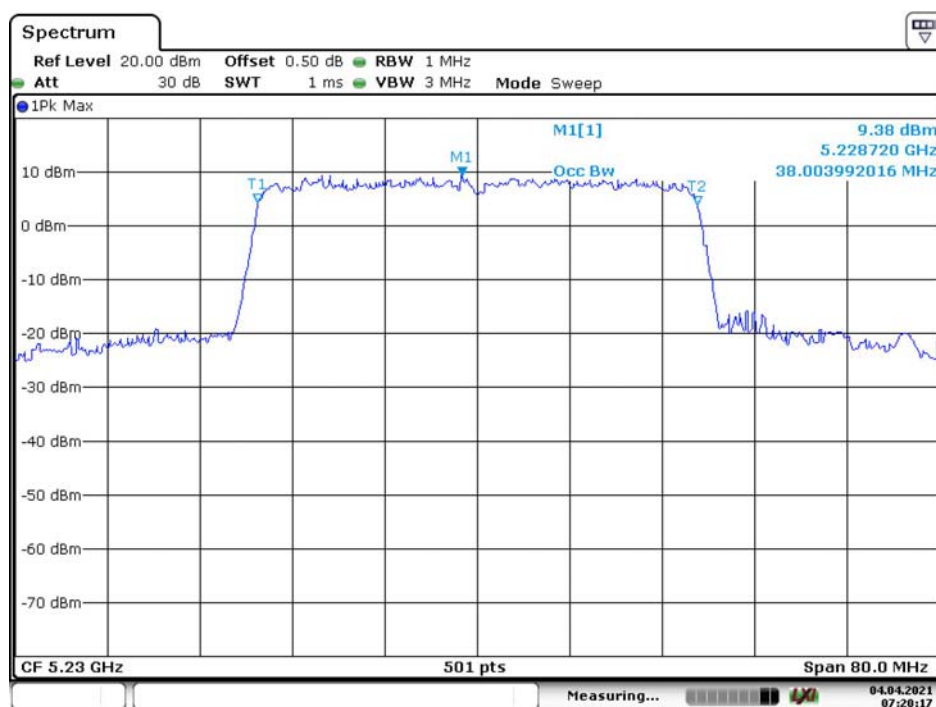
Date: 4.APR.2021 07:16:03

802.11ax hew40 Low Channel



Date: 4.APR.2021 07:18:16

802.11ax hew40 High Channel



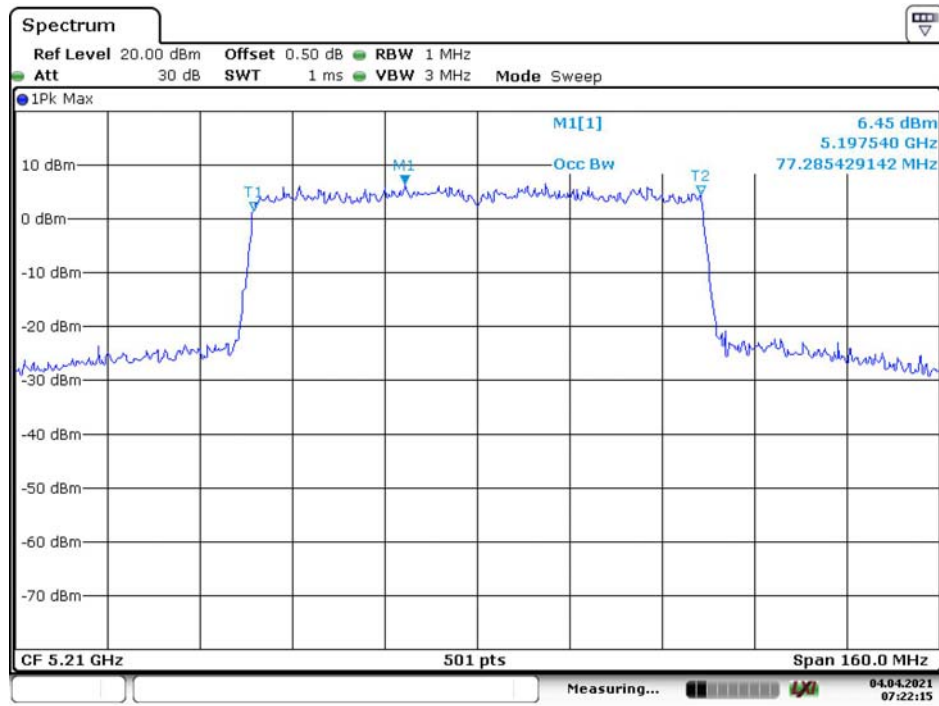
Date: 4.APR.2021 07:20:17

802.11ac vht80 Middle Channel



Date: 4.APR.2021 05:47:29

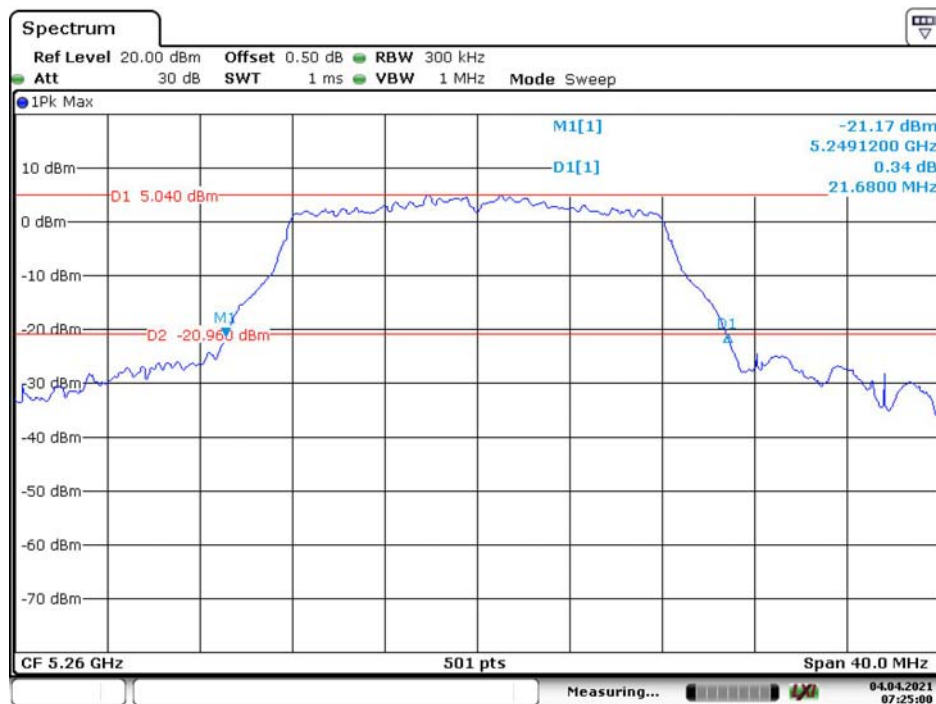
802.11ax hew80 Middle Channel



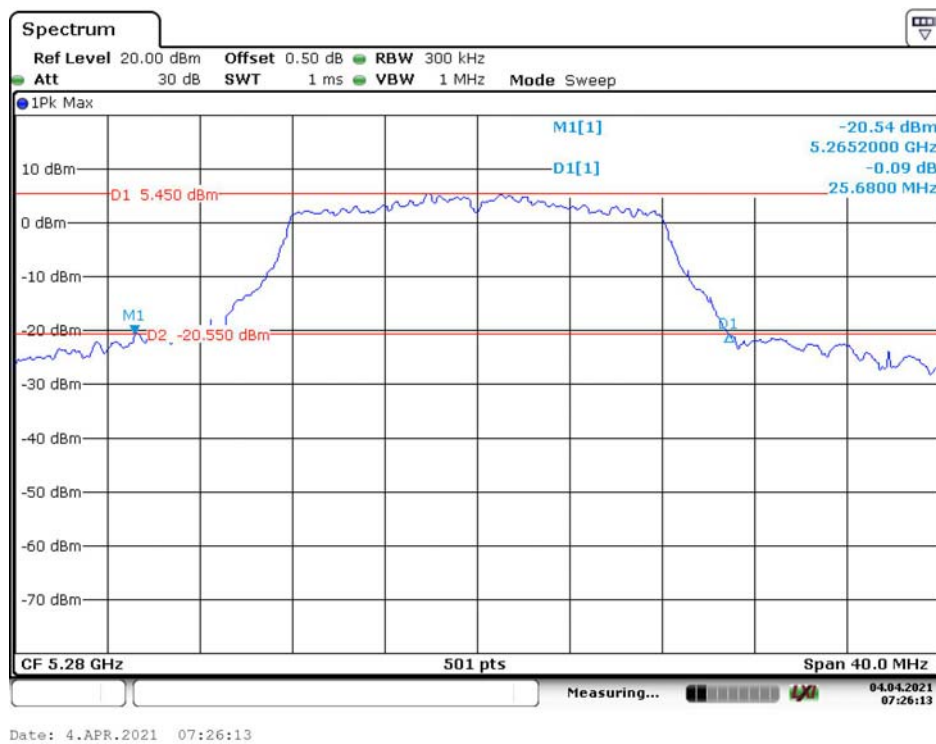
Date: 4.APR.2021 07:22:15

5250-5350MHz:
26dB Emission Bandwidth:

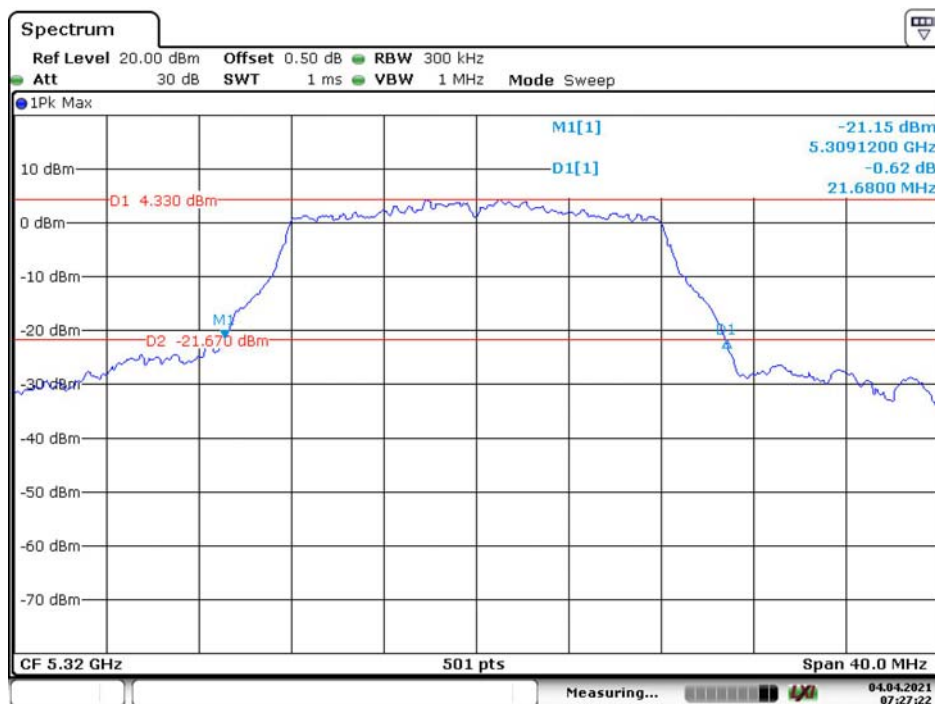
802.11a Low Channel



802.11a Middle Channel

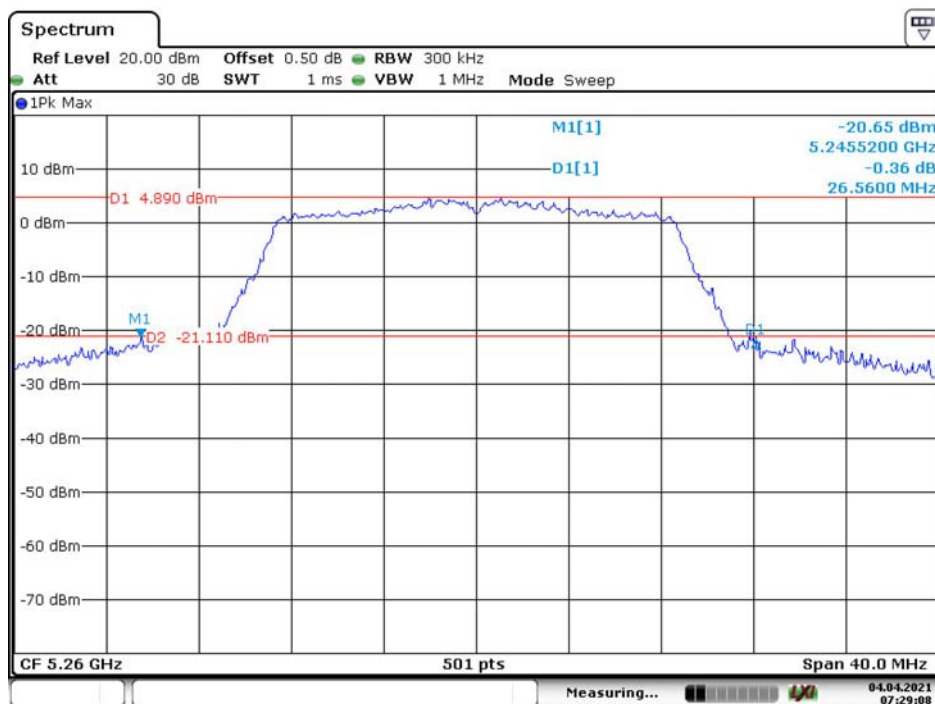


802.11a High Channel



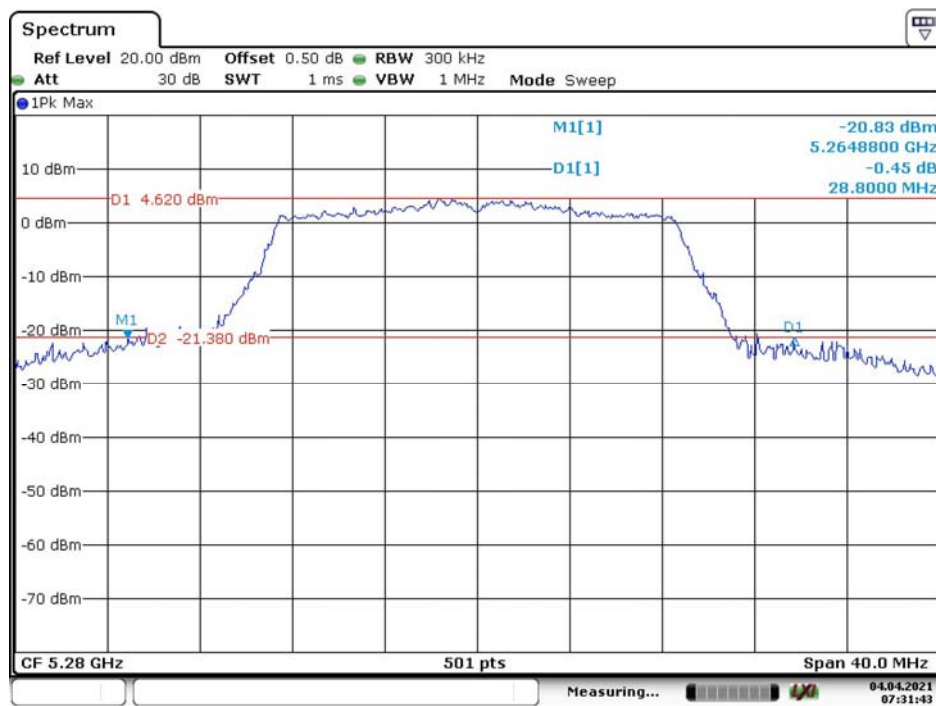
Date: 4.APR.2021 07:27:22

802.11n ht20 Low Channel



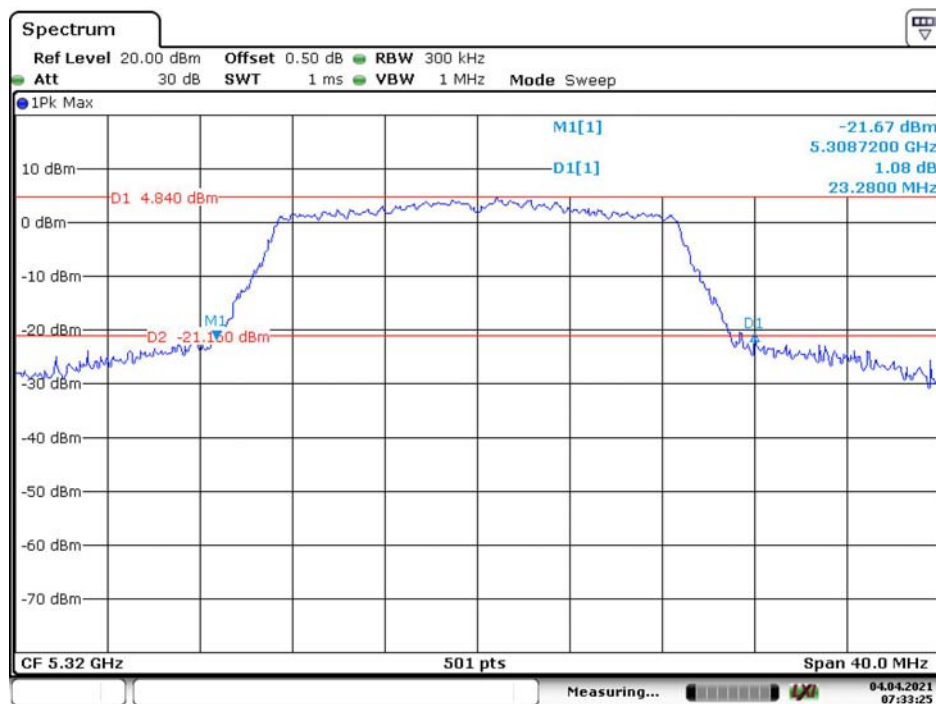
Date: 4.APR.2021 07:29:08

802.11n ht20 Middle Channel



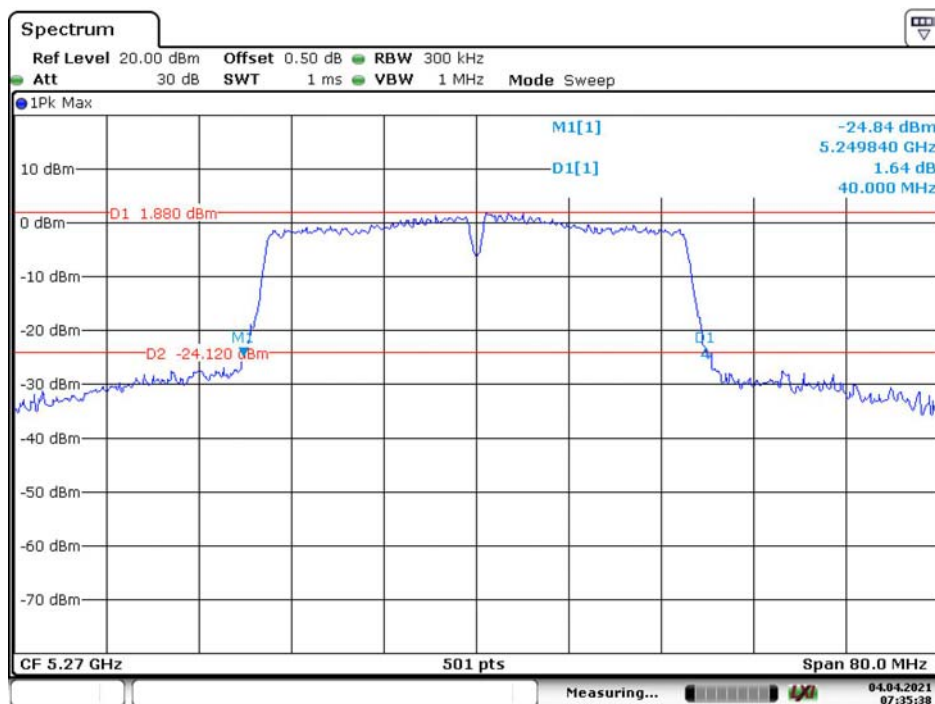
Date: 4.APR.2021 07:31:43

802.11n ht20 High Channel



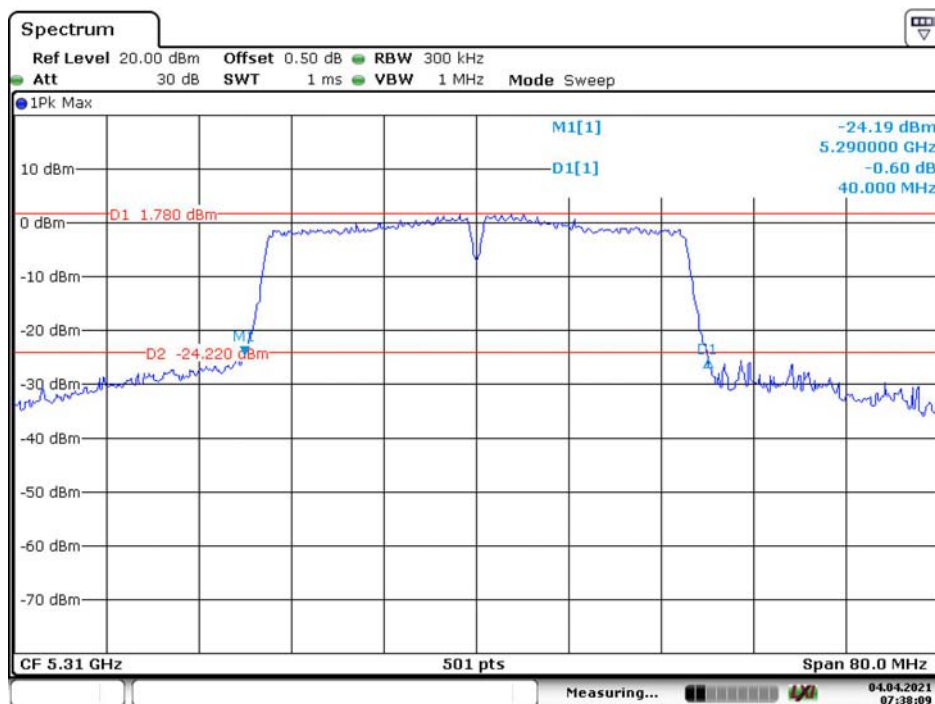
Date: 4.APR.2021 07:33:25

802.11n ht40 Low Channel



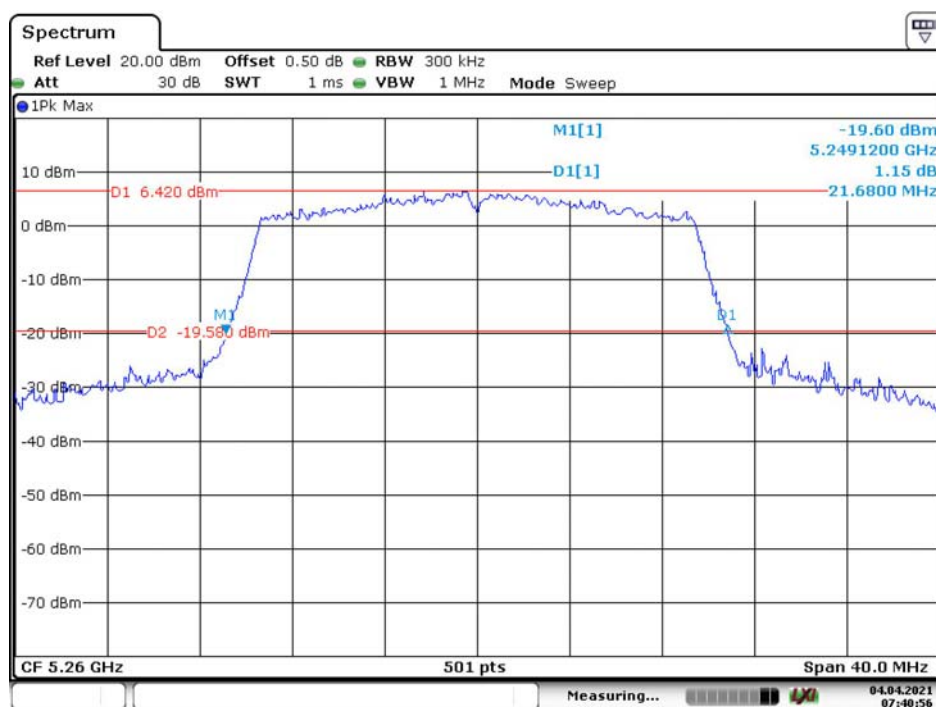
Date: 4.APR.2021 07:35:38

802.11n ht40 High Channel



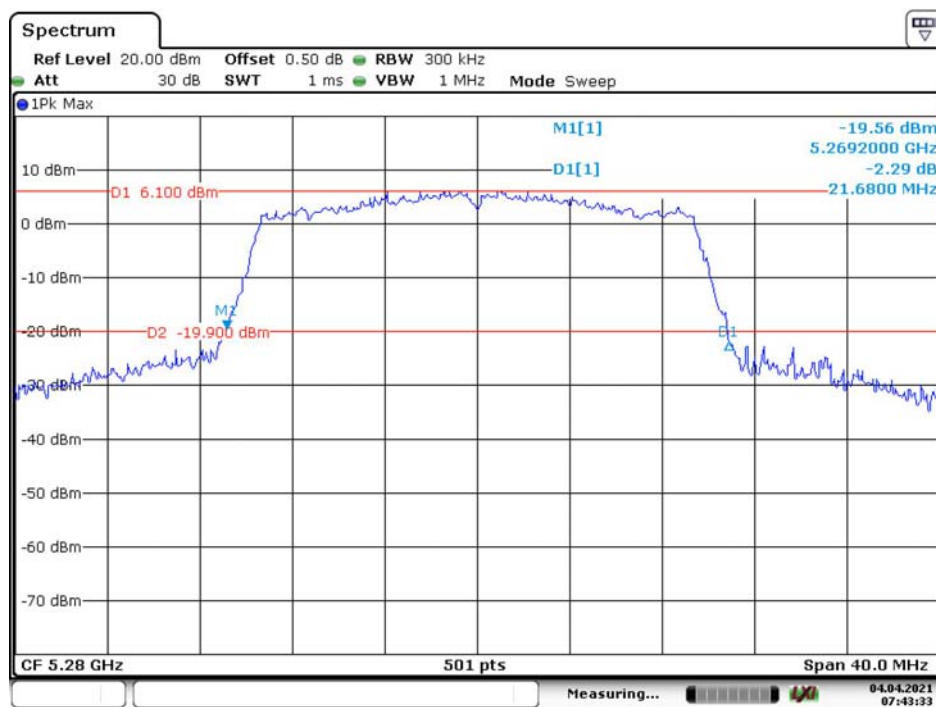
Date: 4.APR.2021 07:38:09

802.11ax hew20 Low Channel



Date: 4.APR.2021 07:40:56

802.11ax hew20 Middle Channel

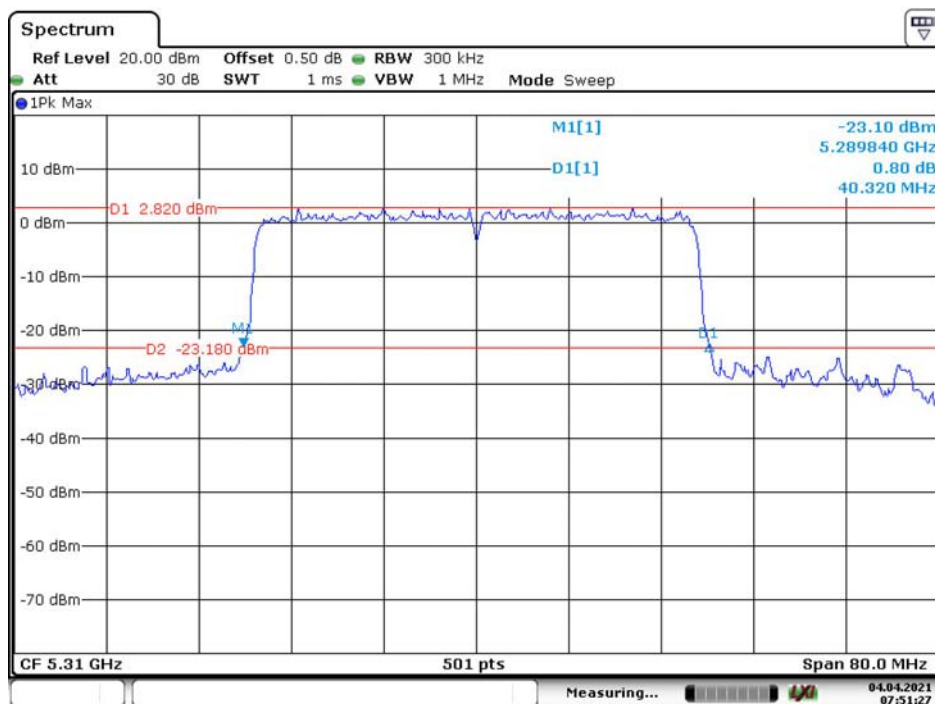


Date: 4.APR.2021 07:43:33

Date: 4.APR.2021 07:46:44

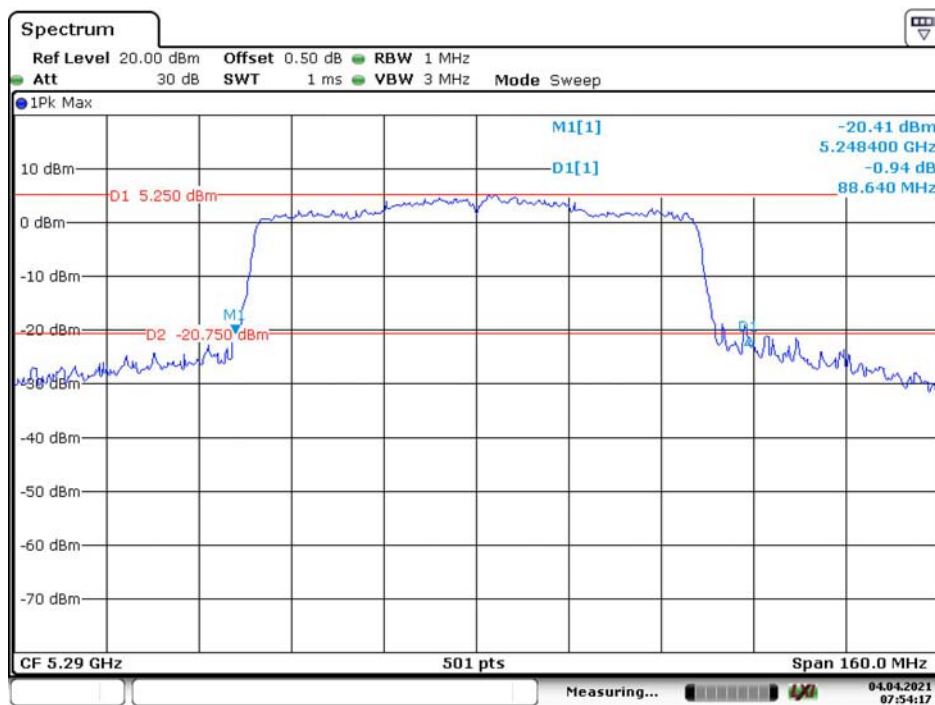
Date: 4.APR.2021 07:49:01

802.11ax hew40 High Channel



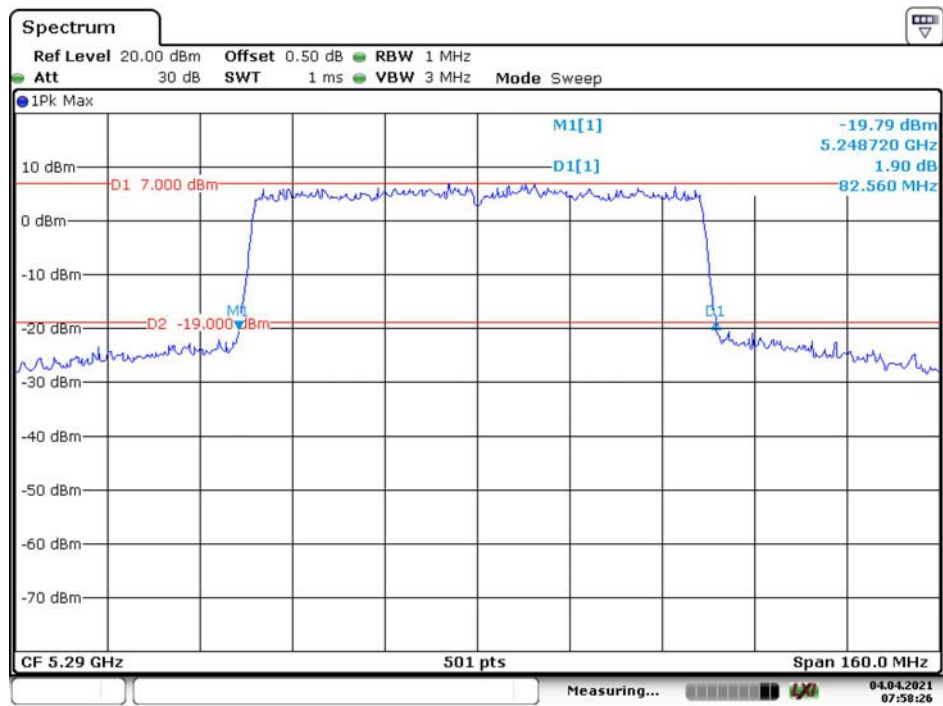
Date: 4.APR.2021 07:51:28

802.11ac vht80 Middle Channel



Date: 4.APR.2021 07:54:17

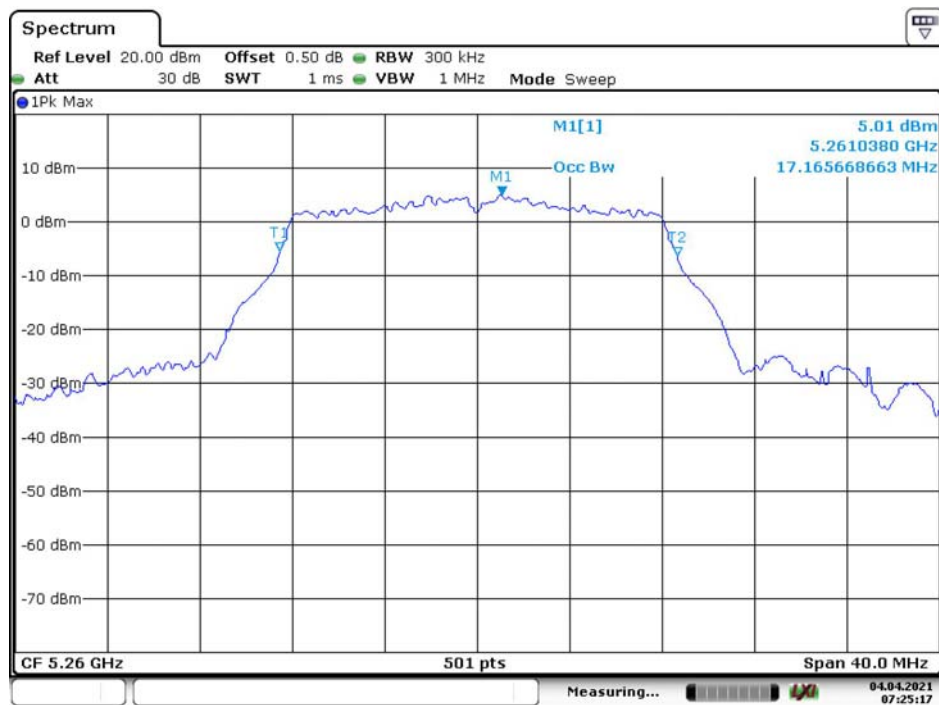
802.11ax hew80 Middle Channel



Date: 4.APR.2021 07:58:26

99% Occupied Bandwidth:

802.11a Low Channel



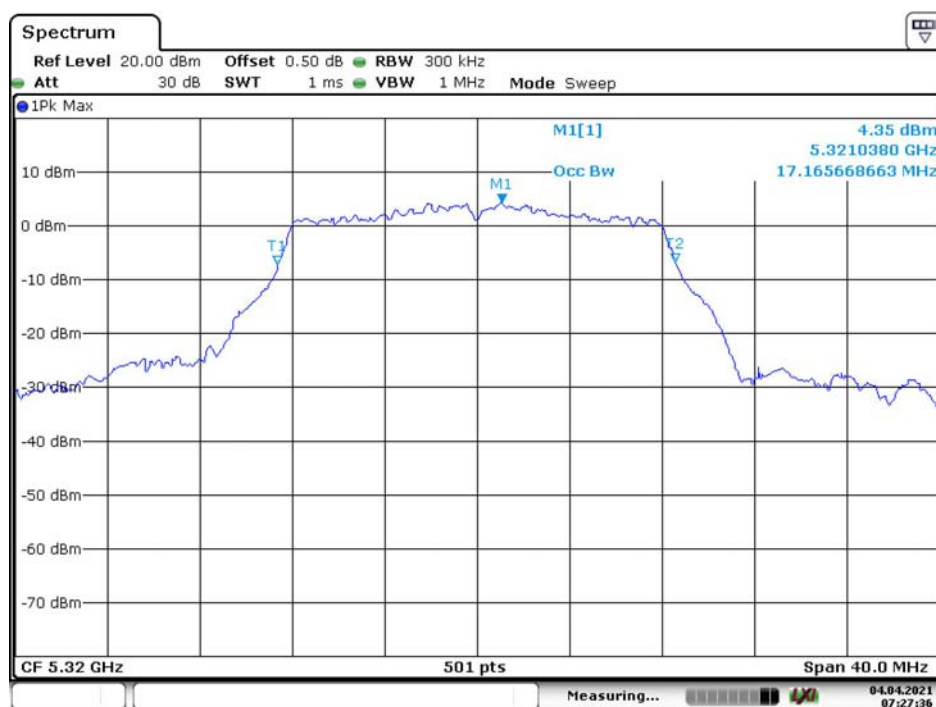
Date: 4.APR.2021 07:25:17

802.11a Middle Channel



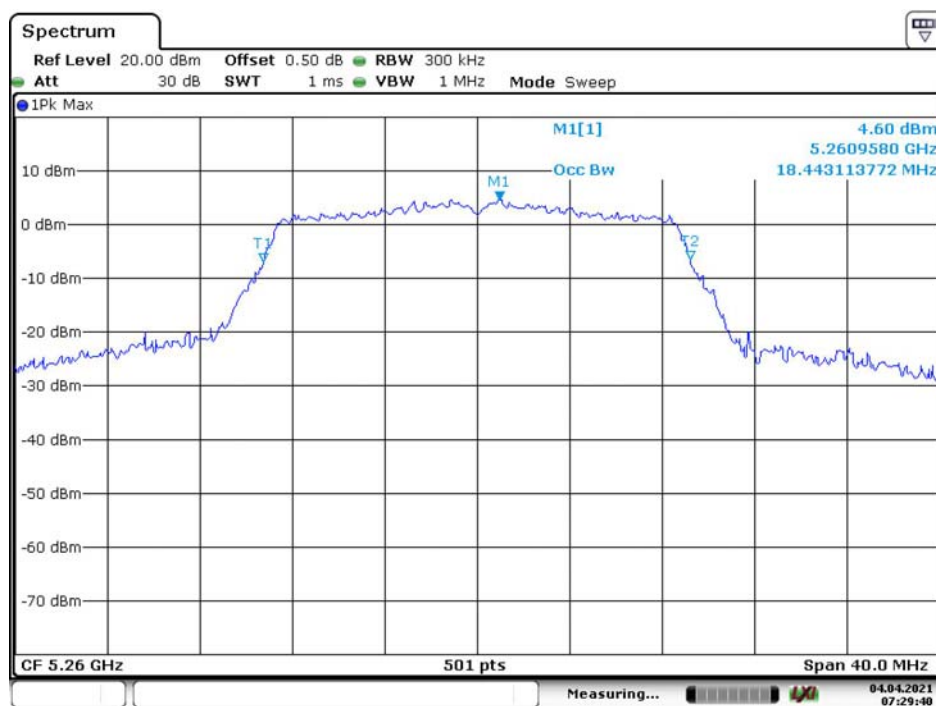
Date: 4.APR.2021 07:26:27

802.11a High Channel



Date: 4.APR.2021 07:27:36

802.11n ht20 Low Channel



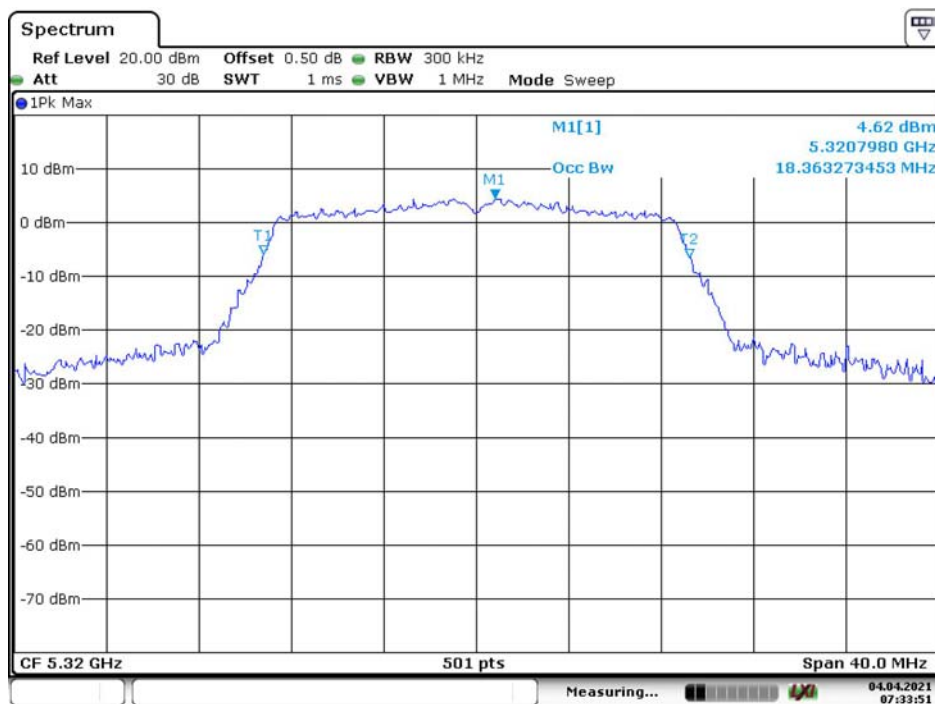
Date: 4.APR.2021 07:29:40

802.11n ht20 Middle Channel



Date: 4.APR.2021 07:32:06

802.11n ht20 High Channel



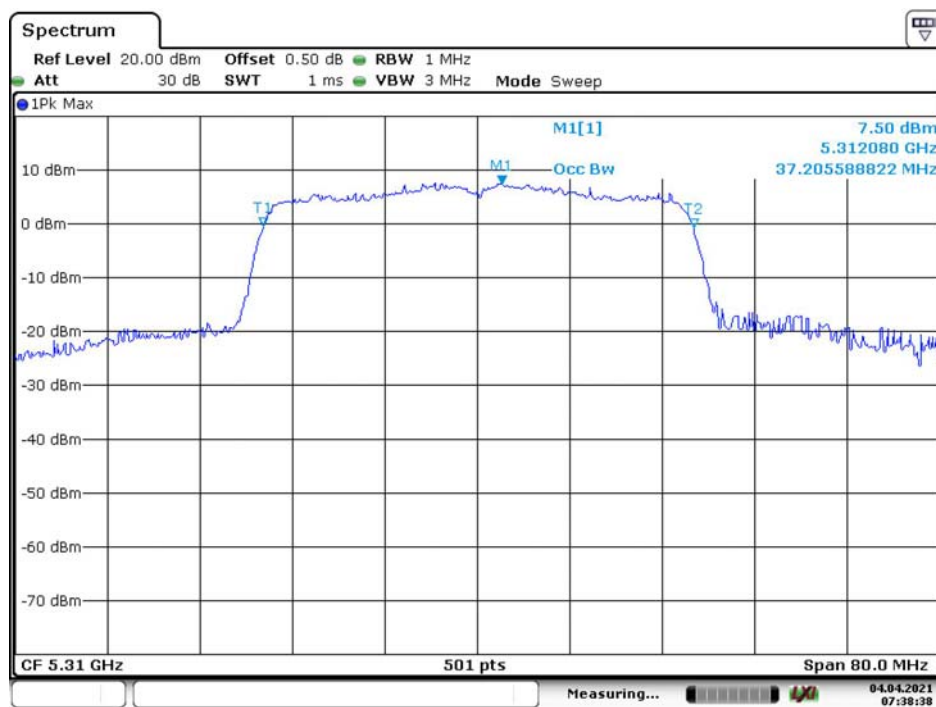
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802.11n ht40 Low Channel



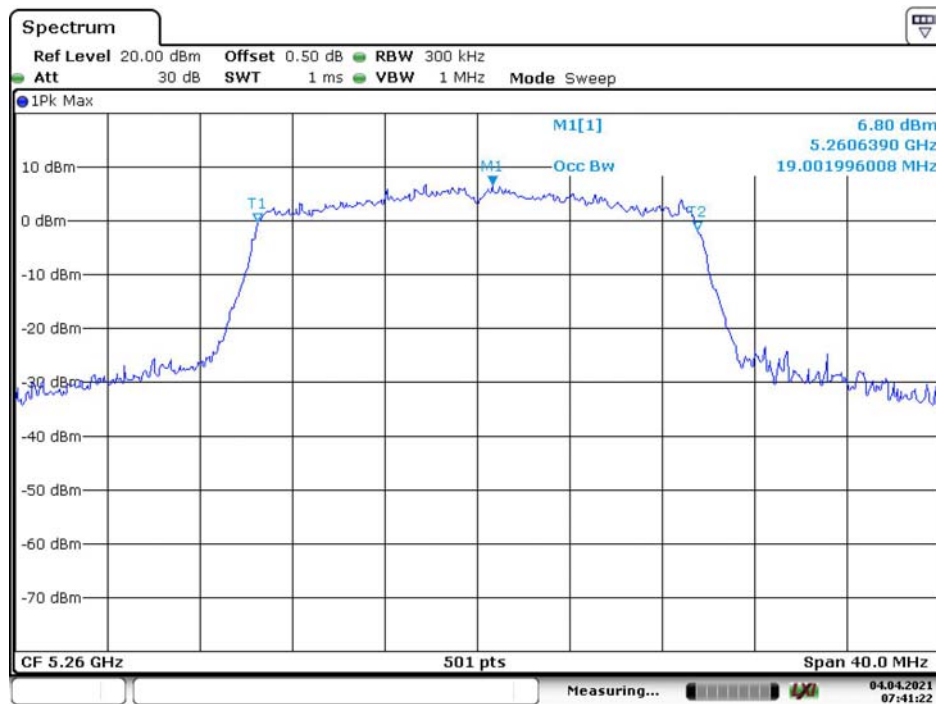
Date: 4.APR.2021 07:36:10

802.11n ht40 High Channel



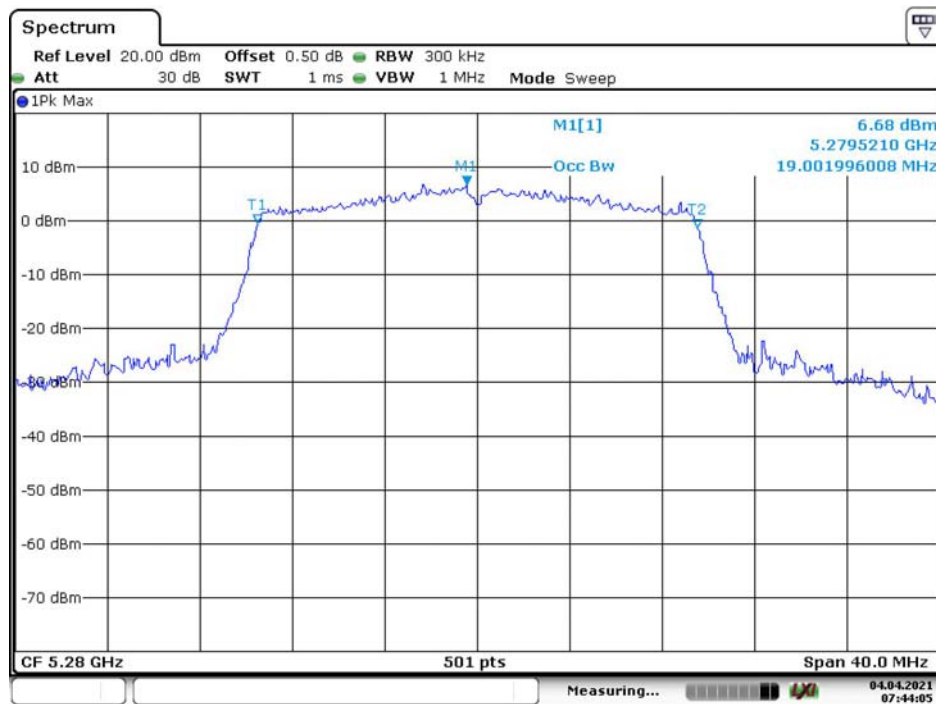
Date: 4.APR.2021 07:38:38

802.11ax hew20 Low Channel



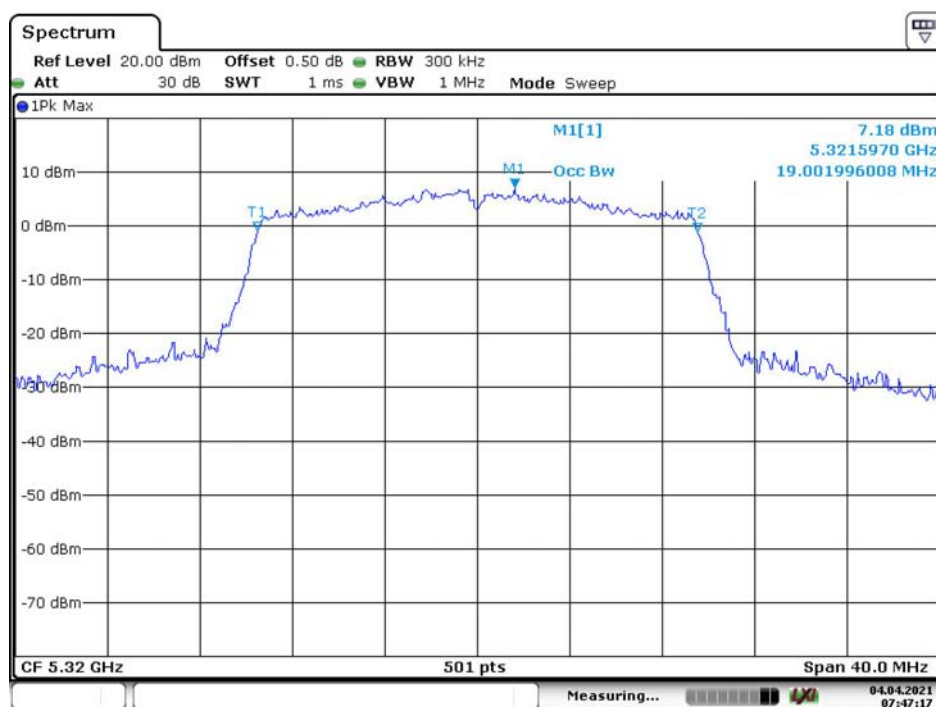
Date: 4.APR.2021 07:41:22

802.11ax hew20 Middle Channel



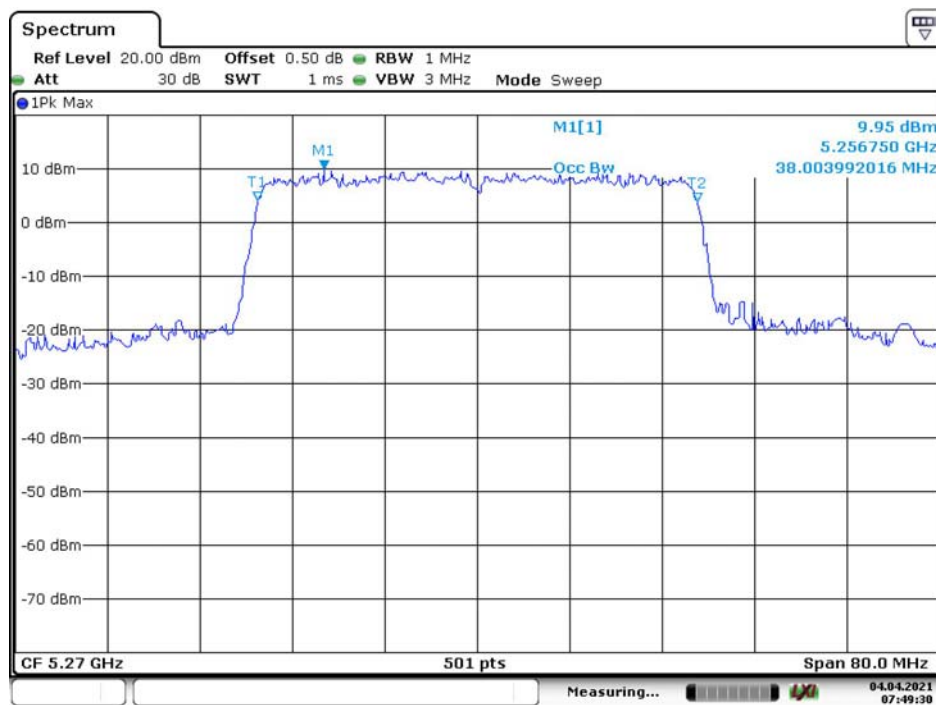
Date: 4.APR.2021 07:44:05

802.11ax hew20 High Channel



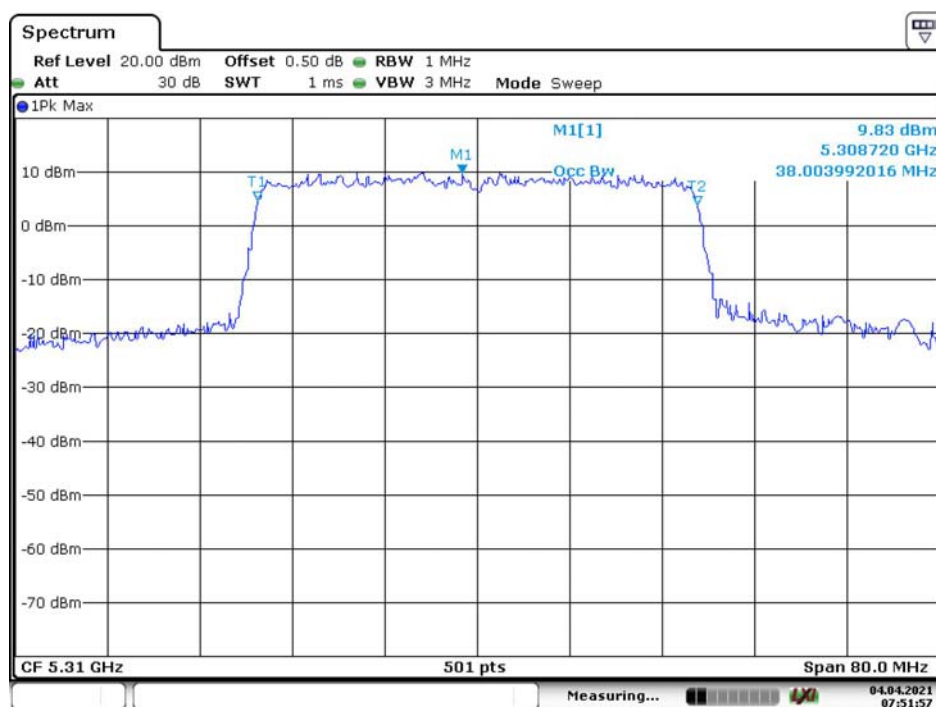
Date: 4.APR.2021 07:47:17

802.11ax hew40 Low Channel



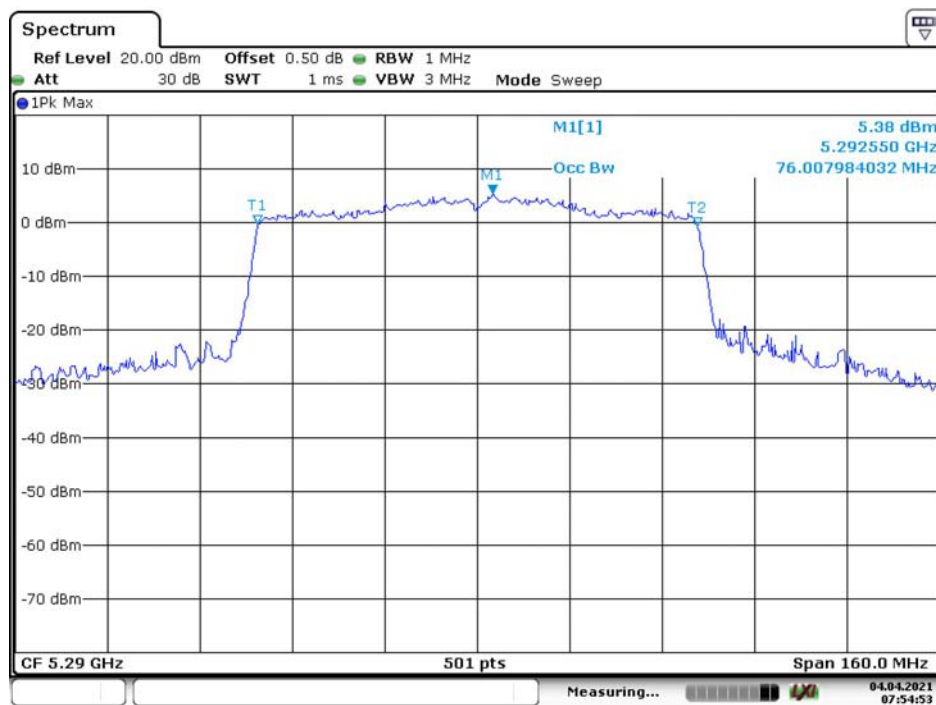
Date: 4.APR.2021 07:49:30

802.11ax hew40 High Channel



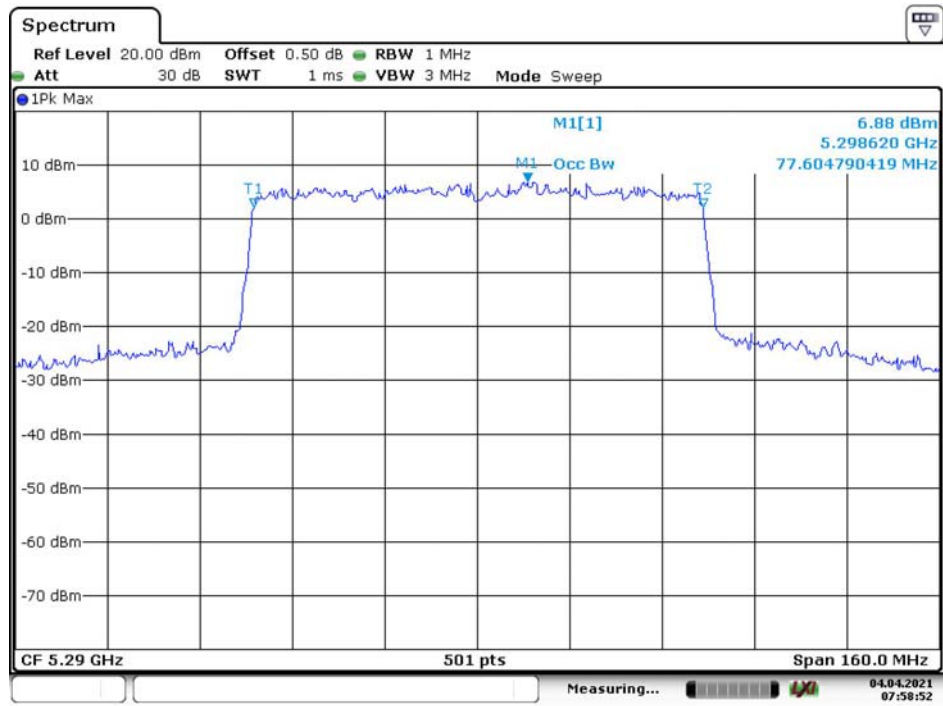
Date: 4.APR.2021 07:51:57

802.11ac vht80 Middle Channel



Date: 4.APR.2021 07:54:53

802.11ax hew80 Middle Channel



Date: 4.APR.2021 07:58:52

802.11a Low Channel



Spectrum

Ref Level 20.00 dBm Offset 0.50 dB RBW 300 kHz
 Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep

1Pk Max

M1[1] -21.93 dBm
 5.5688900 GHz
 0.20 dB
 22.0000 MHz

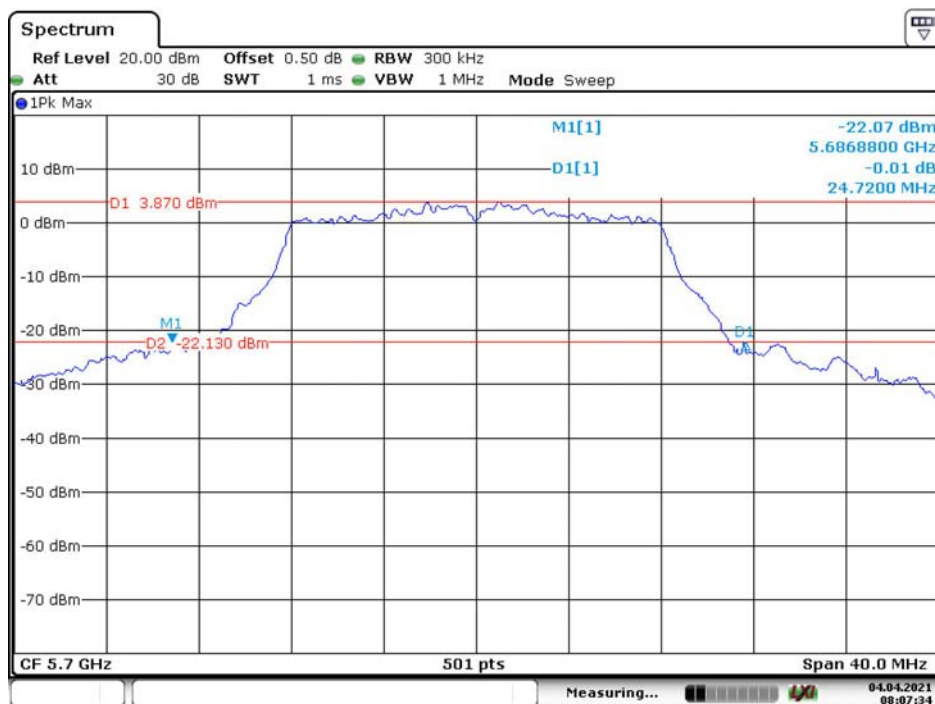
D1 4.270 dBm
 D2 -21.750 dBm

CF 5.58 GHz 501 pts Span 40.0 MHz

Measuring... 04/04/2021 08:04:34

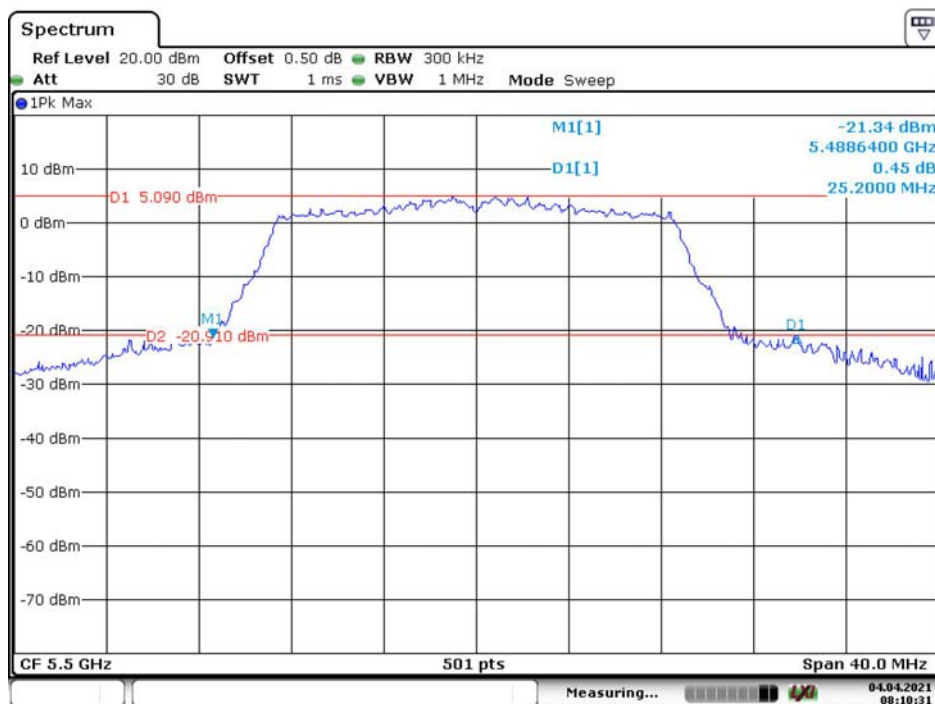
Date: 4.APR.2021 08:04:34

802.11a High Channel



Date: 4.APR.2021 08:07:34

802.11n ht20 Low Channel



Date: 4.APR.2021 08:10:31

Spectrum

Ref Level 20.00 dBm Offset 0.50 dB RBW 300 kHz
 Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep

1Pk Max

M1[1] -21.49 dBm
 5.5689600 GHz
 0.48 dB
 24.9600 MHz

D1 4.430 dBm
 D2 -21.570 dBm
 M2

CF 5.58 GHz 501 pts Span 40.0 MHz

Measuring... 04.04.2021 08:12:50

Date: 4.APR.2021 08:12:50

Spectrum

Ref Level 20.00 dBm Offset 0.50 dB RBW 300 kHz
 Att 30 dB SWT 1 ms VBW 1 MHz Mode Sweep

● 1Pk Max

M1[1] -23.19 dBm
 5.6841600 GHz
 1.30 dB
 31.9200 MHz

D1 4.030 dBm

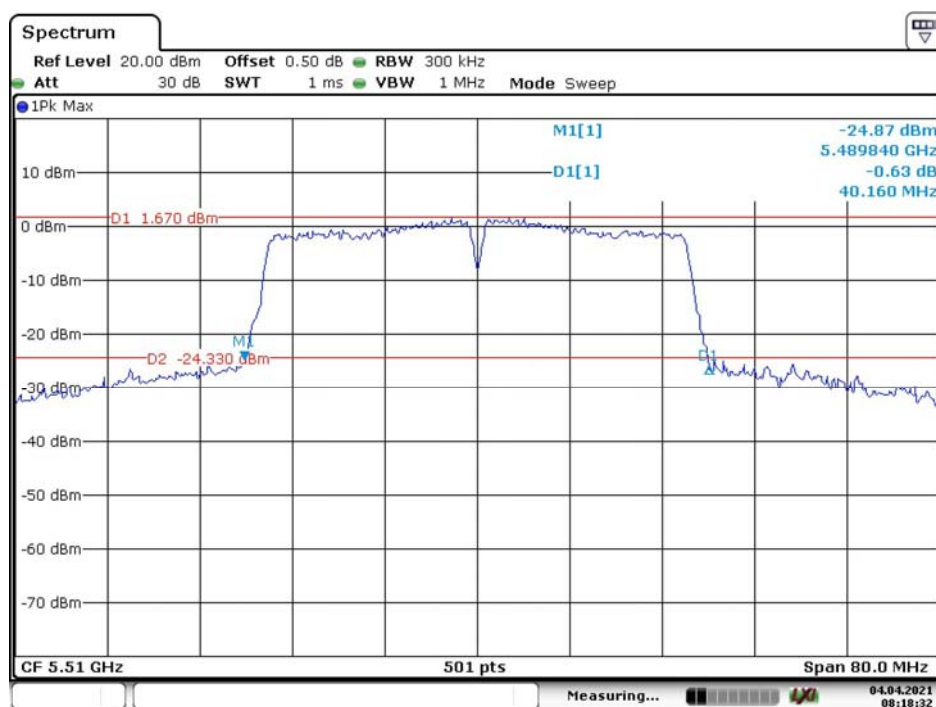
D2 -21.970 dBm

CF 5.7 GHz 501 pts Span 40.0 MHz

Measuring... 04/04/2021 08:16:38

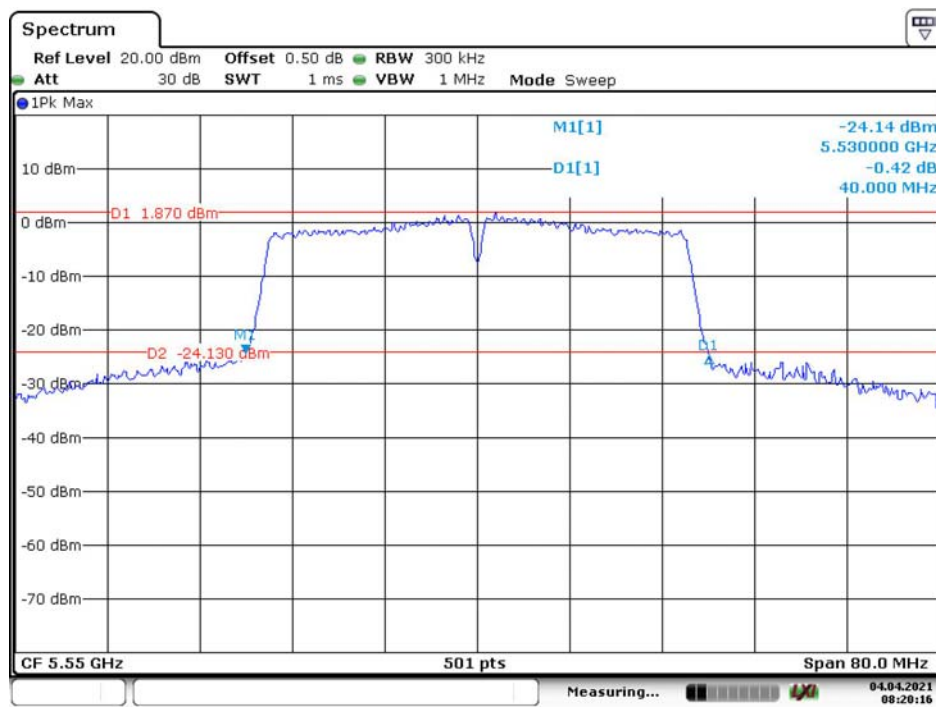
Date: 4.APR.2021 08:16:38

802.11n ht40 Low Channel



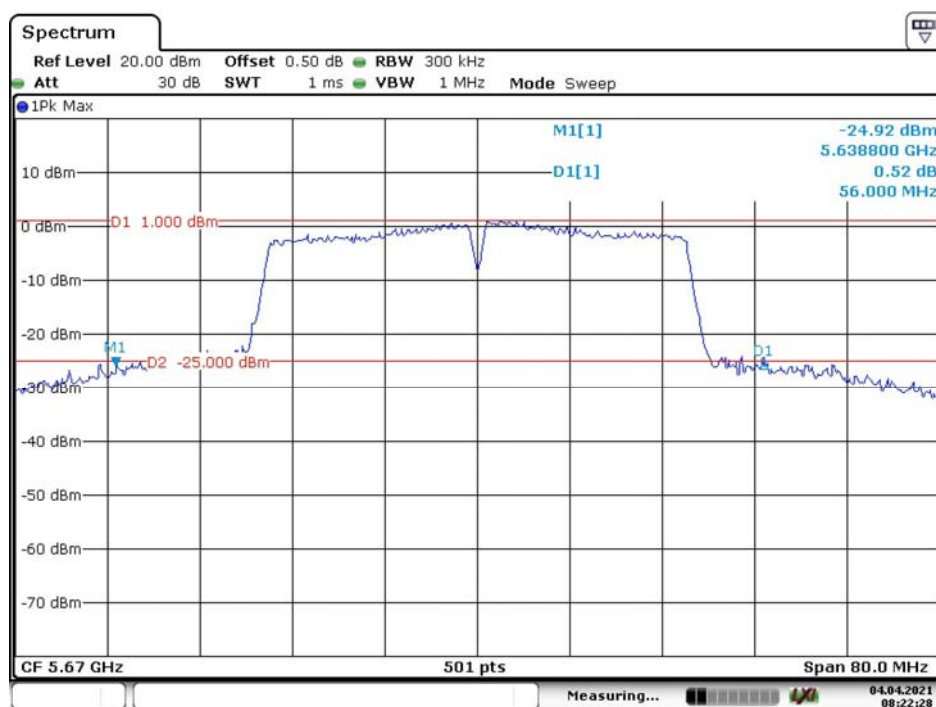
Date: 4.APR.2021 08:18:32

802.11n ht40 Middle Channel



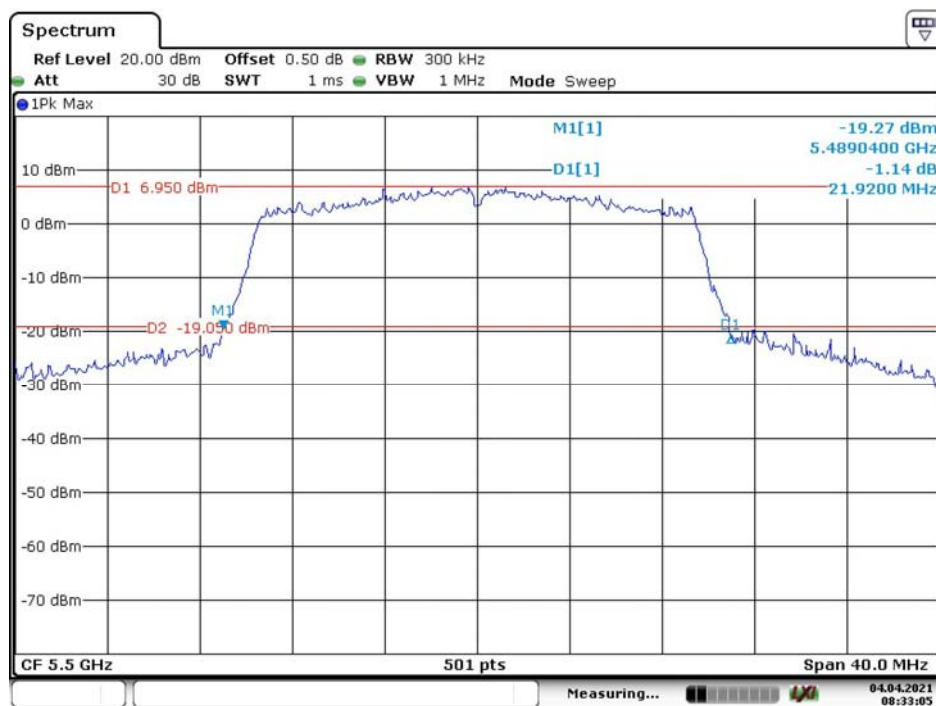
Date: 4.APR.2021 08:20:16

802.11n ht40 High Channel



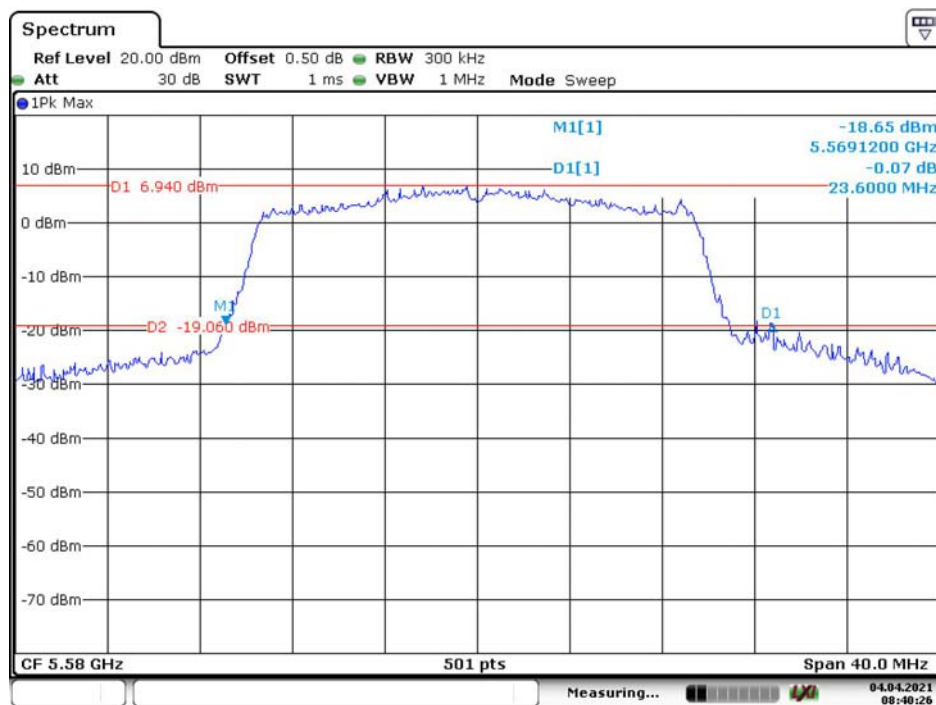
Date: 4.APR.2021 08:22:29

802.11ax hew20 Low Channel



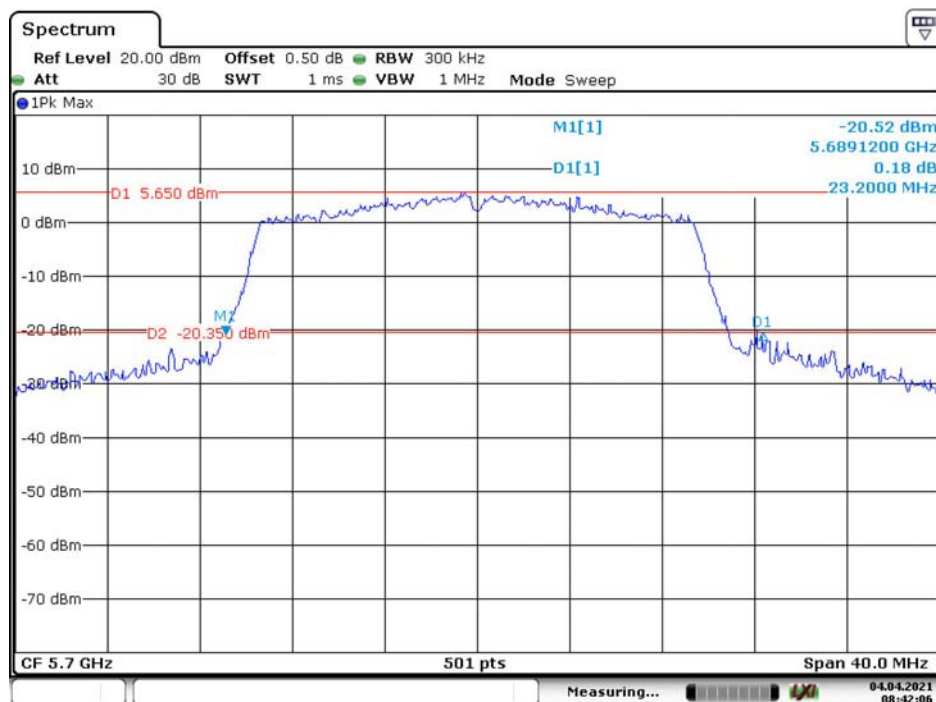
Date: 4.APR.2021 08:33:05

802.11ax hew20 Middle Channel



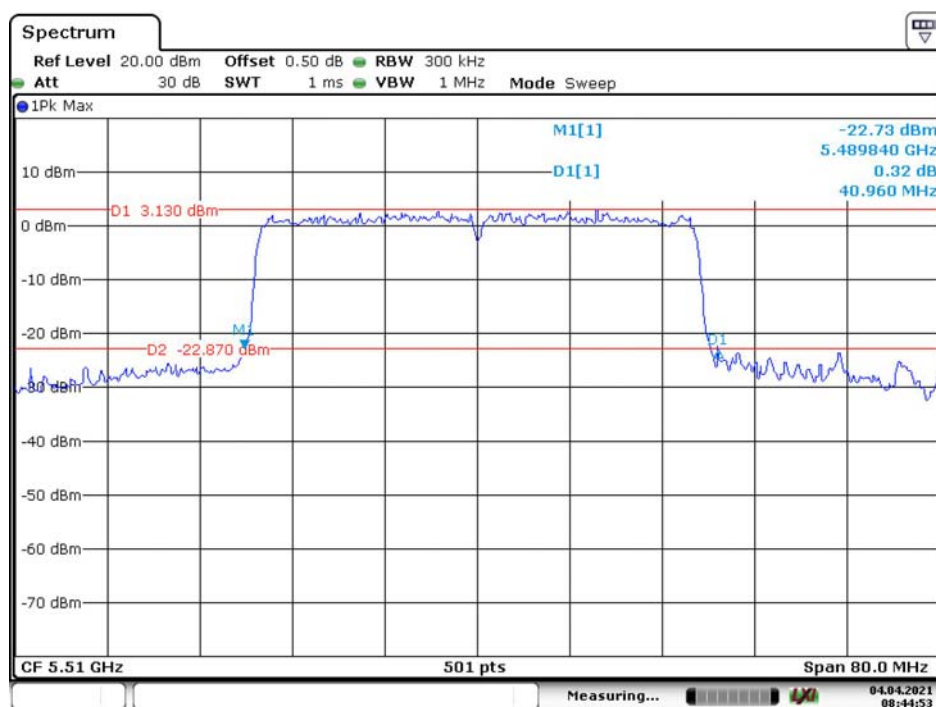
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802.11ax hew20 High Channel



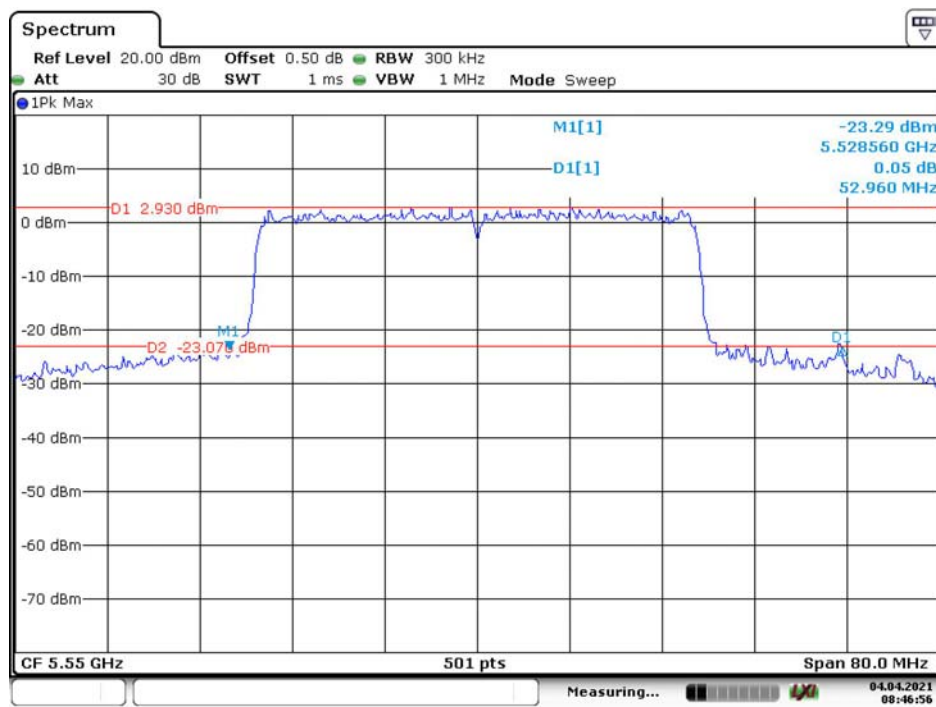
Date: 4.APR.2021 08:42:06

802.11ax hew40 Low Channel



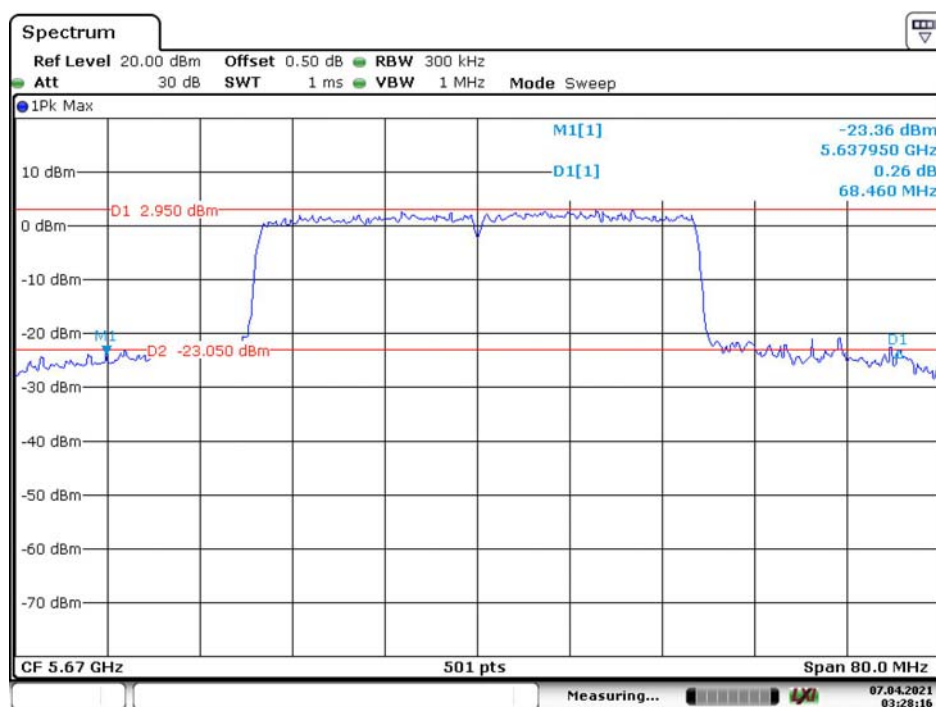
Date: 4.APR.2021 08:44:53

802.11ax hew40 Middle Channel



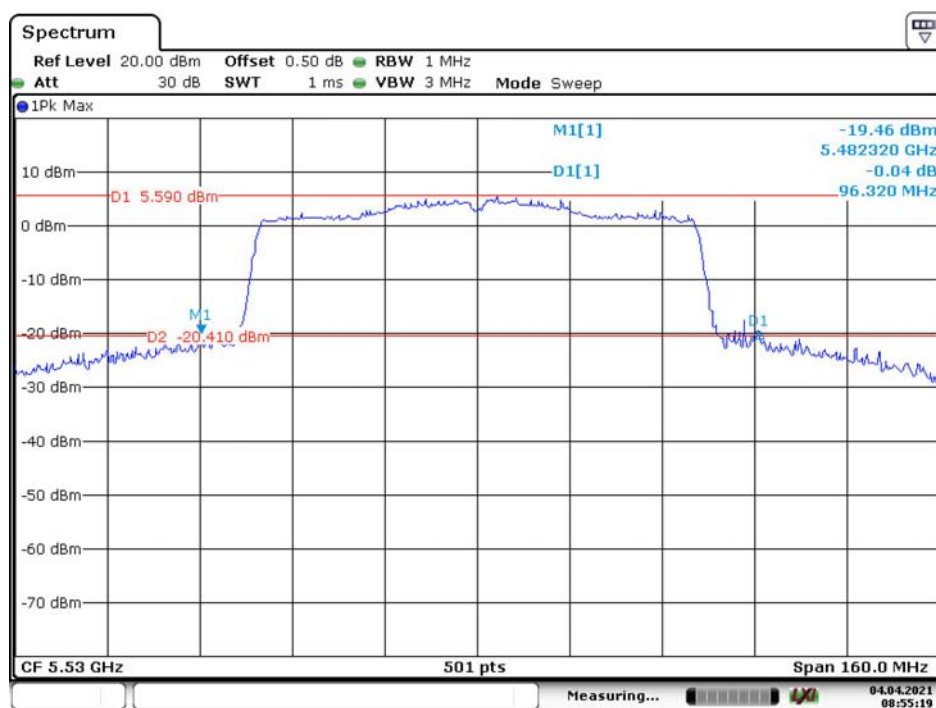
Date: 4.APR.2021 08:46:56

802.11ax hew40 High Channel



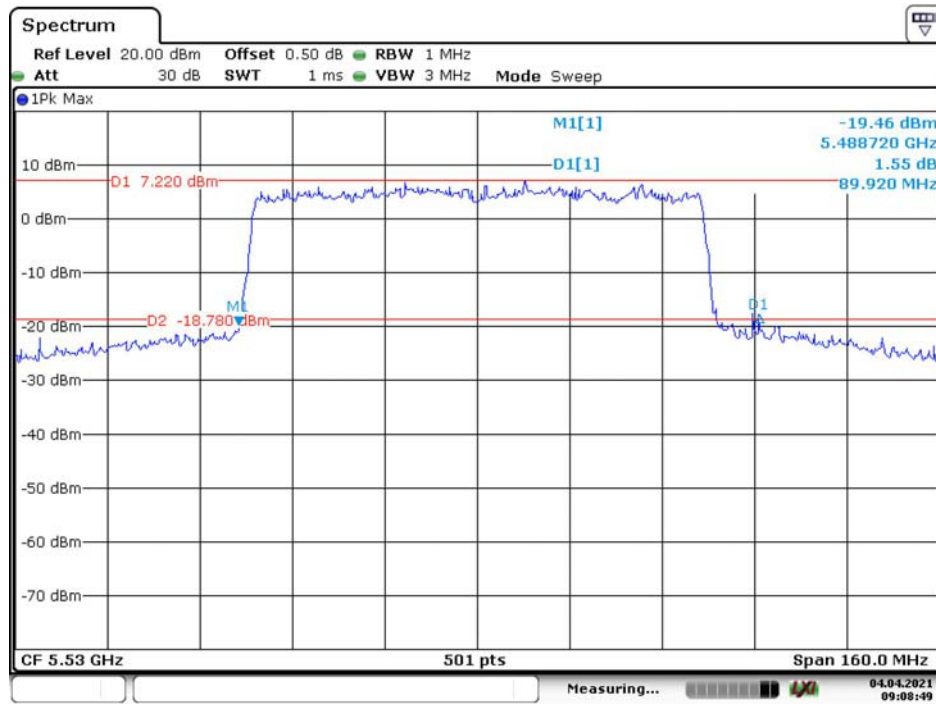
Date: 7.APR.2021 03:28:16

802.11ac vht80 Low Channel



Date: 4.APR.2021 08:55:19

802.11ax hew80 Low Channel



Date: 4.APR.2021 09:08:49