



中认信通

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: Proxim Wireless Corporation

Address: 2114 Ringwood Ave, San Jose, CA 95131, USA

FCC ID: HZB-NGPPS

Product Name: NGP LC 4.9+5 GHz radio

Model Number: MP-1045-BS3-US, AB-CCCCD-XXX-YYY-ZZ

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 compliance with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: CR21090075-00B

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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

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1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	NGP LC 4.9+5 GHz radio
EUT Model:	MP-1045-BS3-US
Multiple Model	AB-CCCCD-XXX-YYY-ZZ (Refer to the DOS letter for details)
FCC Operation Frequency:	5165-5245 MHz(5MHz) 5170-5240 MHz(10MHz) 5180-5240 MHz (802.11a/n ht20/ac vht20) 5190-5230 MHz(802.11n ht40/ac vht40) 5210 MHz(802.11ac vht80) 5730-5845 MHz(5MHz) 5735-5840 MHz(10MHz) 5745-5825 MHz (802.11a/n ht20/ac vht20) 5755-5795 MHz(802.11n ht40/ac vht40) 5775 MHz(802.11ac vht80)
Maximum Average Output Power (Conducted):	22.3 dBm (5150-5250 MHz) 22.89 dBm (5725-5850 MHz)
Modulation Type:	OFDM
Rated Input Voltage:	DC 56V from POE
Serial Number:	CR21090075-RF-S1
EUT Received Date:	2021.09.29
EUT Received Status:	Good
Note: The Multiple models are identical with Test model, please refer to the declaration letter for more detail, which was provided by manufacturer.	

Operation Frequency Detail:

For 5MHz mode:

5150-5250MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
33	5165	146	5730
34	5170	147	5735
~	~	~	~
~	~	~	~
40	5200	158	5790
41	5205	159	5795
~	~	~	~
~	~	~	~
48	5240	168	5840
49	5245	169	5845
Per section 15.31(m), the below frequencies were performed the test as below:			
33	5165	146	5730
40	5200	159	5795
49	5245	169	5845

For 10MHz mode:

5150-5250MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
34	5170	147	5735
35	5175	148	5740
~	~	~	~
~	~	~	~
40	5200	158	5790
41	5205	159	5795
~	~	~	~
~	~	~	~
47	5235	167	5835
48	5240	168	5840
Per section 15.31(m), the below frequencies were performed the test as below:			
34	5170	147	5735
40	5200	159	5795
48	5240	168	5840

For 802.11a/n ht20/ac vht20:

5150-5250MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	149	5745
40	5200	153	5765
44	5220	157	5785
48	5240	161	5805
/	/	165	5825
Per section 15.31(m), the below frequencies were performed the test as below:			
36	5180	149	5745
40	5200	157	5785
48	5240	165	5825

For 802.11n ht40/ac vht40:

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

For 802.11ac vht80:

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

Antenna Information Detail ▲:

Manufacturer	Model	Antenna Type	input impedance (Ohm)	Antenna Gain /Used Frequency Range
ARC Wireless	ARC-OA5813SD1	Dual Pol Omni Antenna	50	13 dBi/ 4.9-5.875GHz
ARC Wireless	ARC-VS5821SD1	Dual Polarization Variable Beamwidth Sector Antenna	50	21 dBi/ 4.94-5.875GHz
Proxim	PA5-0530-DP	High Gain Dual Polarized/Dual Slant Antenna	50	23 dBi/ 4.9-5.875GHz
UBIQUITI Networks	RD5G34	2x2 PtP Bridge Dish Antenna	50	34 dBi/ 4.9-5.875GHz

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.

Accessory Information:

Accessory Description	Manufacturer	Model	Parameters
Adapter	Proxim / RISUNIC	RP025-5600536YG/Proxim 400-00021	Input AC 100-240V 50/60Hz 0.7A Max Output: DC 56.0V 0.536A

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:	QRCT

The software " QRCT "was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer ▲ :

For 13 dBi Antenna:

Frequency Band	Test Modes	Data Rate	Power Level Setting					
			Lowest Channel		Middle Channel		Highest Channel	
			Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1
5150-5250 MHz	5MHz	Default	37	37	37	37	37	37
	10MHz	Default	37	37	37	37	37	37
	802.11a	6Mbps	20	20	20	20	20	20
	802.11n ht20	MCS8	20	20	20	20	20	20
	802.11n ht40	MCS8	19	19	/	/	19	19
	802.11ac vht80	MCS8	/	/	18	18	/	/
5725-5850 MHz	5MHz	Default	40	40	40	40	40	40
	10MHz	Default	40	40	40	40	40	40
	802.11a	6Mbps	20	20	20	20	20	20
	802.11n ht20	MCS8	20	20	20	19	20	19
	802.11n ht40	MCS8	20	20	/	/	20	19
	802.11ac vht80	MCS8	/	/	18	18	/	/

For 21 dBi Antenna:

Frequency Band	Test Modes	Data Rate	Power Level Setting					
			Lowest Channel		Middle Channel		Highest Channel	
			Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1
5150-5250 MHz	5MHz	Default	40	40	40	40	40	40
	10MHz	Default	40	40	40	40	40	40
	802.11a	6Mbps	20	20	20	20	20	20
	802.11n ht20	MCS8	20	20	20	20	20	20
	802.11n ht40	MCS8	19	19	/	/	19	19
	802.11ac vht80	MCS8	/	/	18	18	/	/
5725-5850 MHz	5MHz	Default	40	40	40	40	40	40
	10MHz	Default	40	40	40	40	40	40
	802.11a	6Mbps	20	20	20	20	20	20
	802.11n ht20	MCS8	20	20	20	19	20	19
	802.11n ht40	MCS8	20	20	/	/	20	19
	802.11ac vht80	MCS8	/	/	18	18	/	/

For 23 dBi Antenna:

Frequency Band	Test Modes	Data Rate	Power Level Setting					
			Lowest Channel		Middle Channel		Highest Channel	
			Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1
5150-5250 MHz	5MHz	Default	40	40	40	40	40	40
	10MHz	Default	40	40	40	40	40	40
	802.11a	6Mbps	20	20	20	20	20	20
	802.11n ht20	MCS8	20	20	20	20	20	20
	802.11n ht40	MCS8	19	19	/	/	19	19
	802.11ac vht80	MCS8	/	/	18	18	/	/
5725-5850 MHz	5MHz	Default	40	40	40	40	40	40
	10MHz	Default	40	40	40	40	40	40
	802.11a	6Mbps	20	20	20	20	20	20
	802.11n ht20	MCS8	20	20	20	19	20	19
	802.11n ht40	MCS8	20	20	/	/	20	19
	802.11ac vht80	MCS8	/	/	18	18	/	/

For 34 dBi Antenna:

Frequency Band	Test Modes	Data Rate	Power Level Setting					
			Lowest Channel		Middle Channel		Highest Channel	
			Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1
5150-5250 MHz	5MHz	Default	35	35	35	35	35	35
	10MHz	Default	35	35	35	35	35	35
	802.11a	6Mbps	19	18	18	18	18	18
	802.11n ht20	MCS8	15	16	15	16	15	15
	802.11n ht40	MCS8	17	18	/	/	17	17
	802.11ac vht80	MCS8	/	/	17	17	/	/
5725-5850 MHz	5MHz	Default	40	40	40	40	40	40
	10MHz	Default	40	40	40	40	40	40
	802.11a	6Mbps	20	20	20	20	20	20
	802.11n ht20	MCS8	20	20	20	19	20	19
	802.11n ht40	MCS8	20	20	/	/	20	19
	802.11ac vht80	MCS8	/	/	18	18	/	/

The system support 5MHz/10MHz and 802.11a/n ht20/n ht40/ac vht20/ac vht40/ac vht80, the vht20/vht40 were reduced since the identical parameters with 802.11n ht20 and ht40.

The worst-case data rates are determined to be as follows for each mode based upon investigations by measuring the average power and PSD across all data rates, bandwidths, and modulations. The device supports SISO and MIMO in 802.11n and ac modes, per pretest, MIMO 2TX mode was the worst mode and reported.

For 13dBi/21dBi/23 dBi/34 dBi antennas have same power setting except 13dBi antenna 5MHz/10MHz Mode, 34dBi antenna all modes in 5150-5250 MHz band, so antenna port test items were performed once.

1.2.2 Support Equipment List and Details

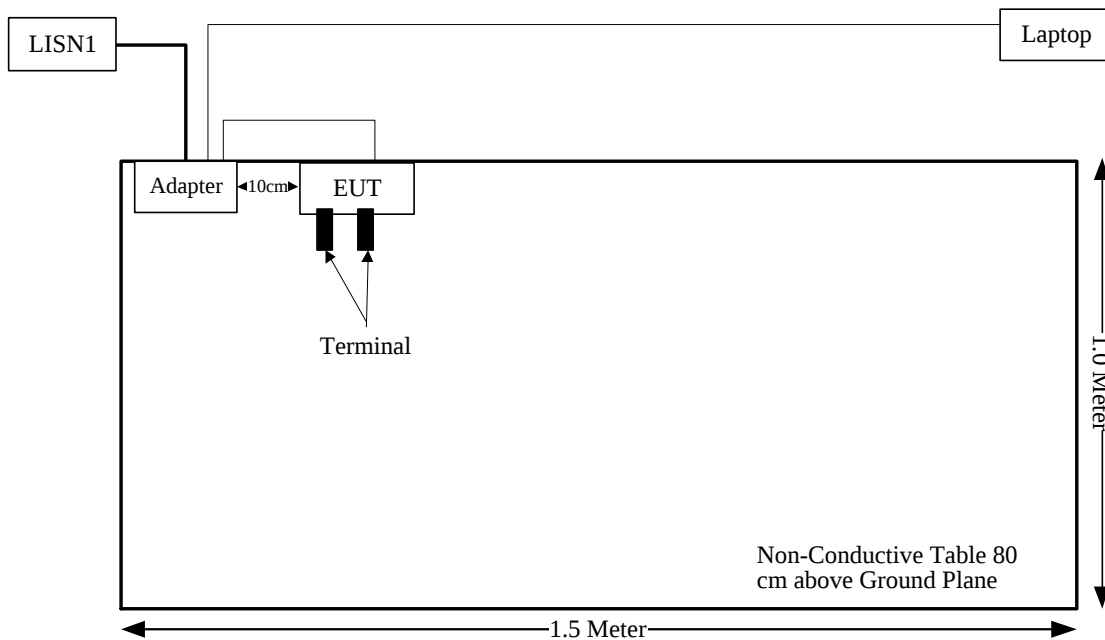
Manufacturer	Description	Model	Serial Number
Lenovo	Laptop	E480	PF-1QQYYP 19/06
Unknown	50 ohms Terminal	Unknown	50 ohms Terminal-1
Unknown	50 ohms Terminal	Unknown	50 ohms Terminal-2

1.2.3 Support Cable List and Details

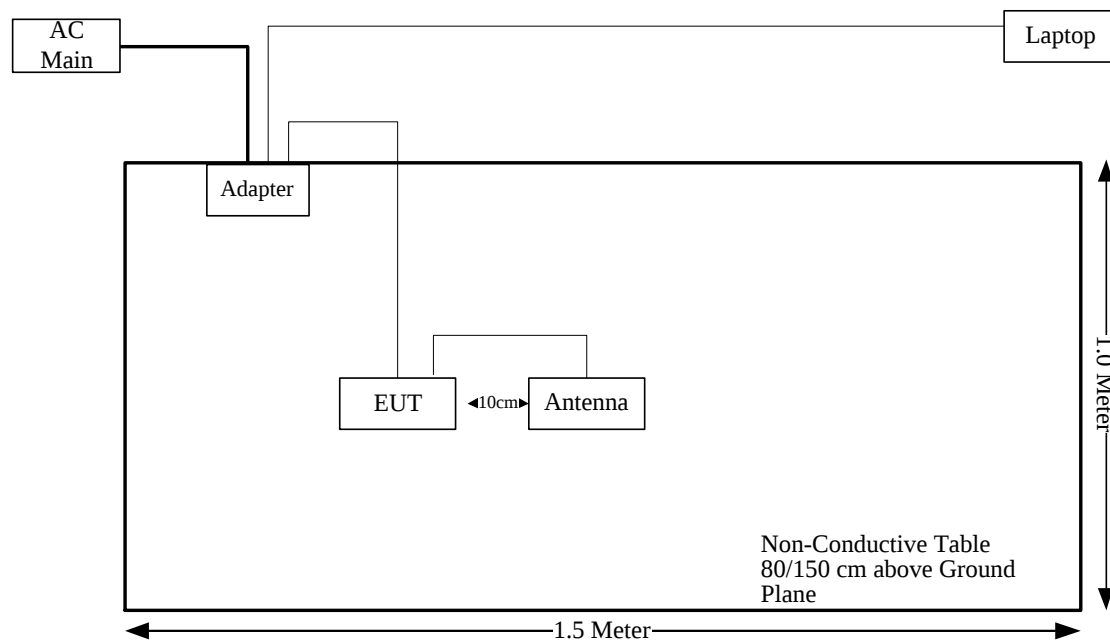
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
RJ45 Cable	No	No	10	PoE Adapter	Laptop

1.2.4 Block Diagram of Test Setup

AC line conducted emissions:



Radiated 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
§15.207(a)	AC line conducted emissions	Compliant
FCC §15.205& §15.209 & §15.407(b)	Undesirable Emission& Restricted Bands	Compliant
FCC §15.407(a) (e)	Emission Bandwidth	Compliant
FCC §15.407(a)	Conducted Transmitter Output Power	Compliant
FCC §15.407 (a)	Power Spectral Density	Compliant
§15.203	Antenna Requirement	Compliant

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:

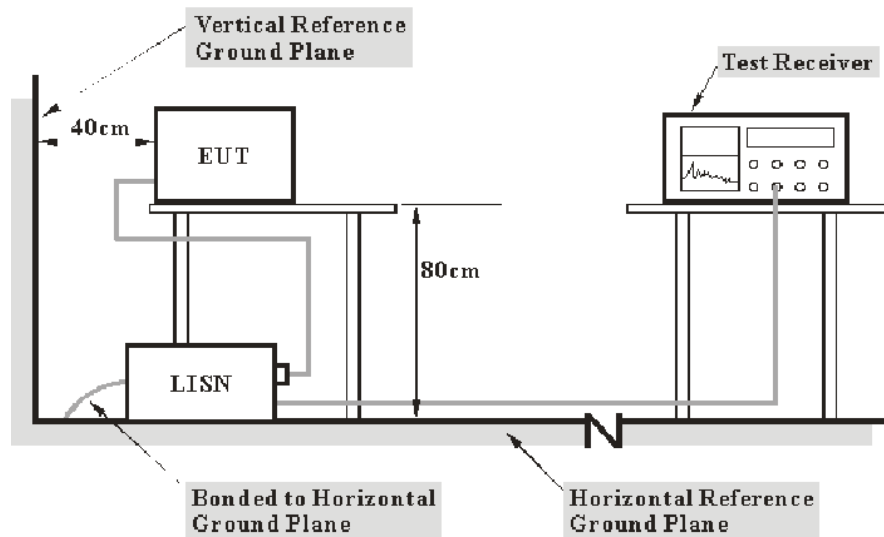
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(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.

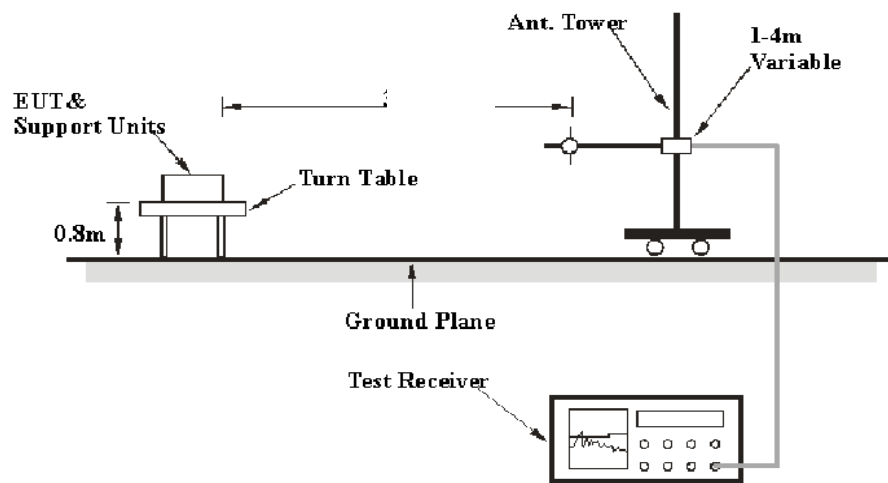
(10) The provisions of § 15.205 apply to intentional radiators operating under this section.

(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.

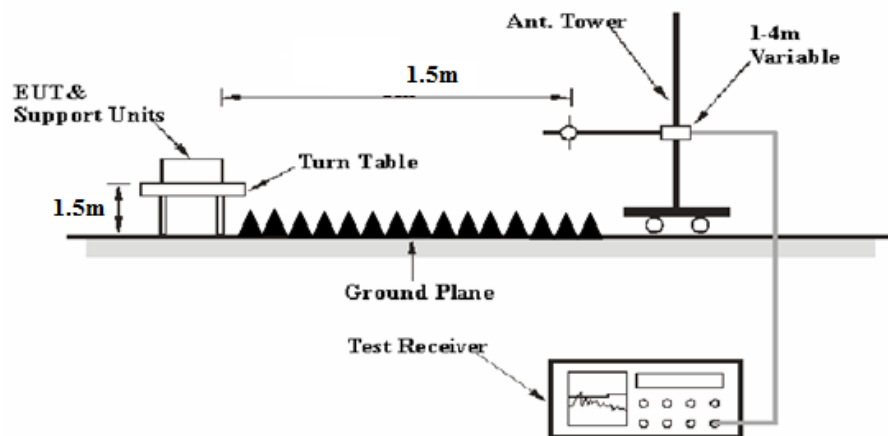
(c) The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies 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

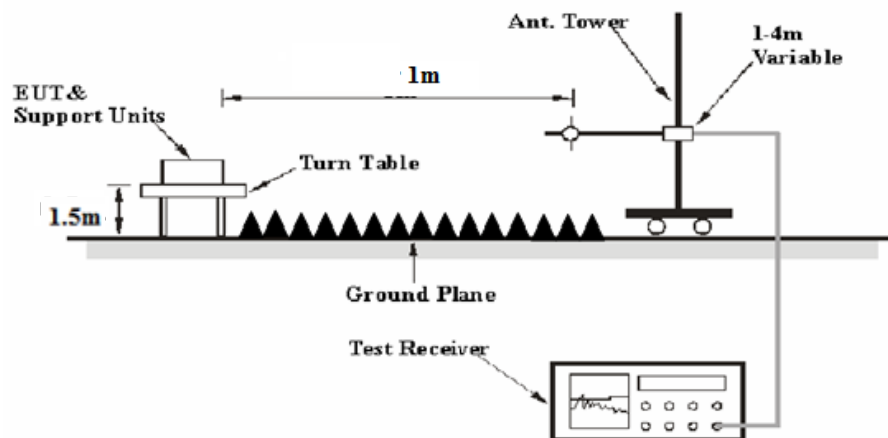
Below 1GHz:



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 15.407limits.

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
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.

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

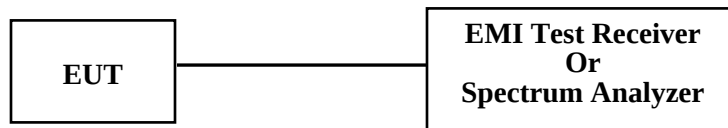
FCC §15.407 (a),(h)

(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.

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.

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:

- 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.
- 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.
- 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.
- Step a) through step c) might require iteration to adjust within the specified range.
- 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.
- 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)(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.

(1) For the band 5.15-5.25 GHz.

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

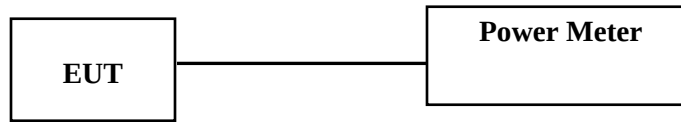
(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz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

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

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

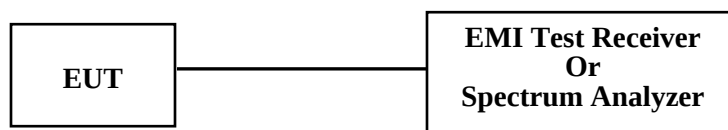
FCC §15.407(a) (1)(iv)

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) (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 $\geq$ 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).

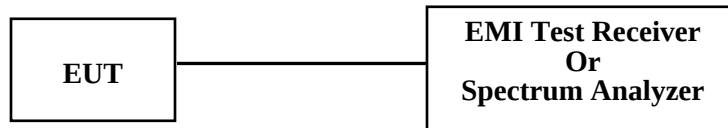
(viii) Trace mode = max hold.

(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 $T \leq 16.7 \mu s$.)

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:	CR21090075-RF-S1	Test Date:	2021-10-25
Test Site:	CE	Test Mode:	Transmitting (802.11a chain 0 5785MHz was the worst)
Tester:	Nick Tang	Test Result:	Pass

Environmental Conditions:

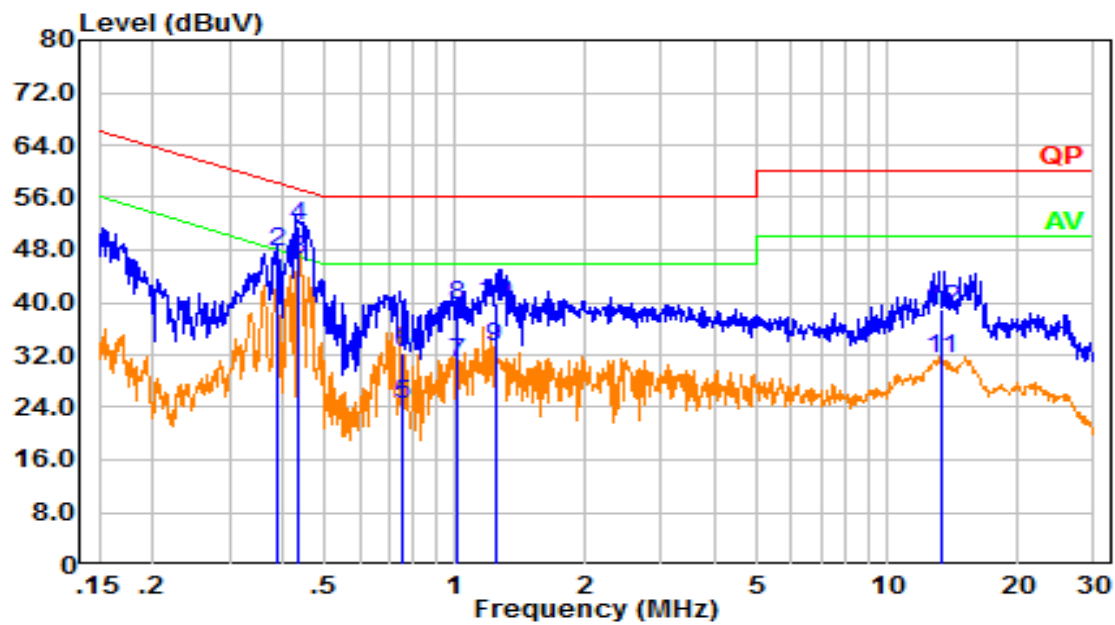
Temperature: (°C)	21.5	Relative Humidity: (%)	74	ATM Pressure: (kPa)	101.3
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101132	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

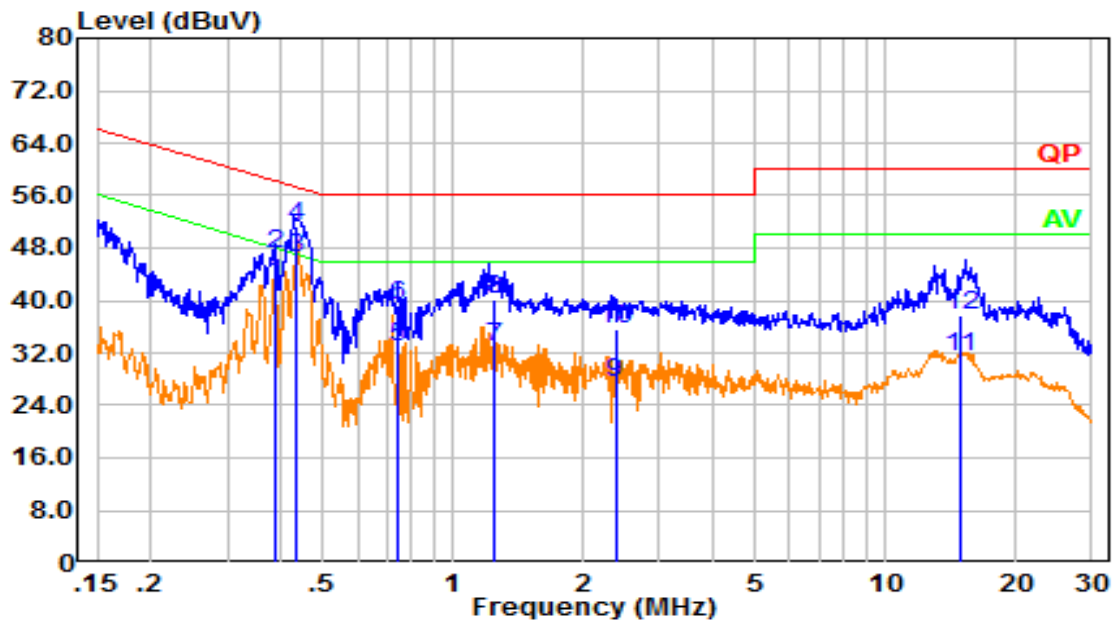
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Line:



No.	Frequency (MHz)	Reading (dBUV)	Factor (dB)	Result (dBUV)	Limit (dBUV)	Margin (dB)	Detector
1	0.386	33.14	9.61	42.75	48.15	5.40	Average
2	0.386	37.95	9.61	47.56	58.15	10.59	QP
3	0.434	37.00	9.61	46.61	47.18	0.57	Average
4	0.434	42.09	9.61	51.70	57.18	5.48	QP
5	0.755	14.94	9.62	24.56	46.00	21.44	Average
6	0.755	22.81	9.62	32.43	56.00	23.57	QP
7	1.007	21.28	9.62	30.90	46.00	15.10	Average
8	1.007	29.96	9.62	39.58	56.00	16.42	QP
9	1.235	23.59	9.62	33.21	46.00	12.79	Average
10	1.235	30.34	9.62	39.96	56.00	16.04	QP
11	13.295	21.64	9.68	31.32	50.00	18.68	Average
12	13.295	29.22	9.68	38.90	60.00	21.10	QP

Neutral:



No.	Frequency (MHz)	Reading (dBUV)	Factor (dB)	Result (dBUV)	Limit (dBUV)	Margin (dB)	Detector
1	0.385	33.05	9.61	42.66	48.16	5.51	Average
2	0.385	37.60	9.61	47.21	58.16	10.96	QP
3	0.434	36.73	9.61	46.34	47.17	0.83	Average
4	0.434	41.60	9.61	51.21	57.17	5.96	QP
5	0.748	23.40	9.62	33.02	46.00	12.98	Average
6	0.748	29.77	9.62	39.39	56.00	16.61	QP
7	1.241	23.27	9.62	32.90	46.00	13.10	Average
8	1.241	30.64	9.62	40.27	56.00	15.73	QP
9	2.372	17.72	9.64	27.36	46.00	18.64	Average
10	2.372	25.84	9.64	35.48	56.00	20.52	QP
11	14.887	21.63	9.69	31.32	50.00	18.68	Average
12	14.887	28.19	9.69	37.88	60.00	22.12	QP

4.2 Radiation Spurious Emissions

Serial Number:	CR21090075-RF-S1	Test Date:	2021-12-29~2022-02-15
Test Site:	966-1,966-2	Test Mode:	Transmitting
Tester:	Great Qiao, Tommy Luo	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	17.1~24.1	Relative Humidity: (%)	62~68	ATM Pressure: (kPa)	100.9~101.4

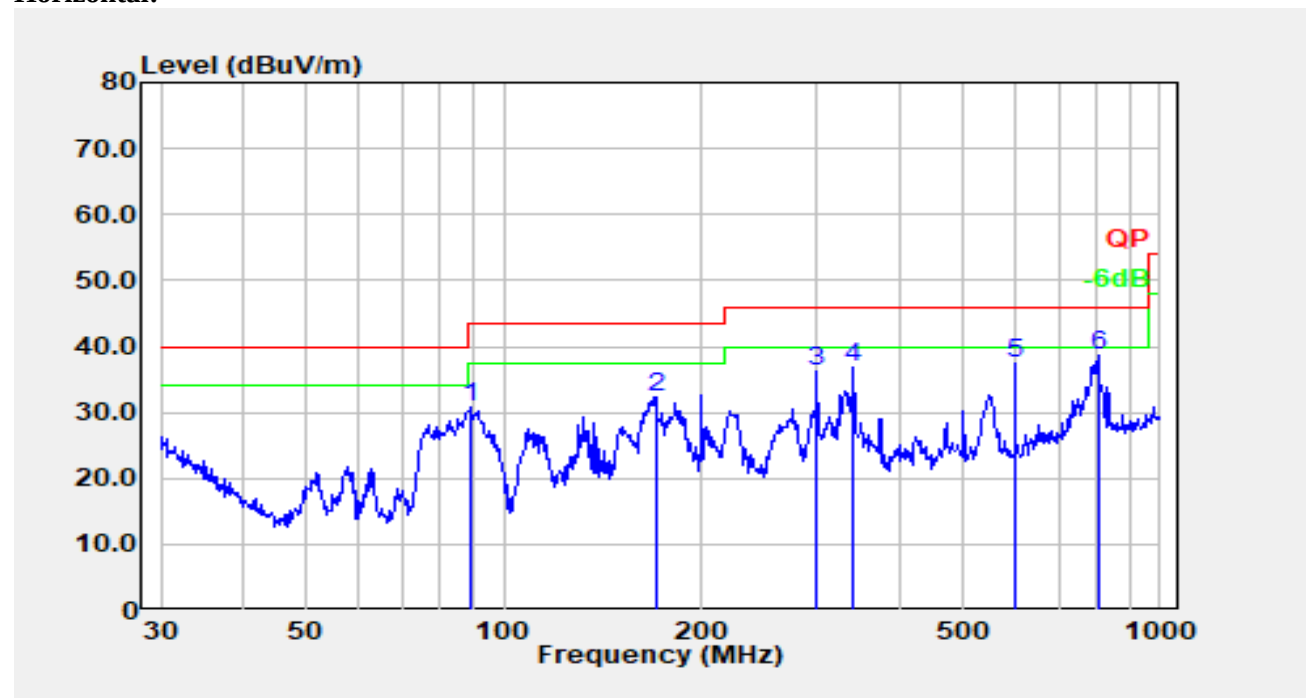
Test Equipment List and Details:

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
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020-10-13	2023-10-12
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2021-02-05	2024-02-04
PASTERNAK	Horn Antenna	PE9850/2F-20	072001	2021-02-05	2024-02-04
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
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2021-08-08	2022-08-07
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2021-11-10	2022-11-09
AH	Preamplifier	PAM-1840VH	190	2021-11-10	2022-11-09
Audix	Test Software	E3	201021 (V9)	N/A	N/A
Mini Circuits	High Pass Filter	VHF-6010+	31119	2021-08-08	2022-08-07
E-Microwave	Band Rejection Filter	5150-5850MHz	OE01902423	2021-08-08	2022-08-07

* 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).

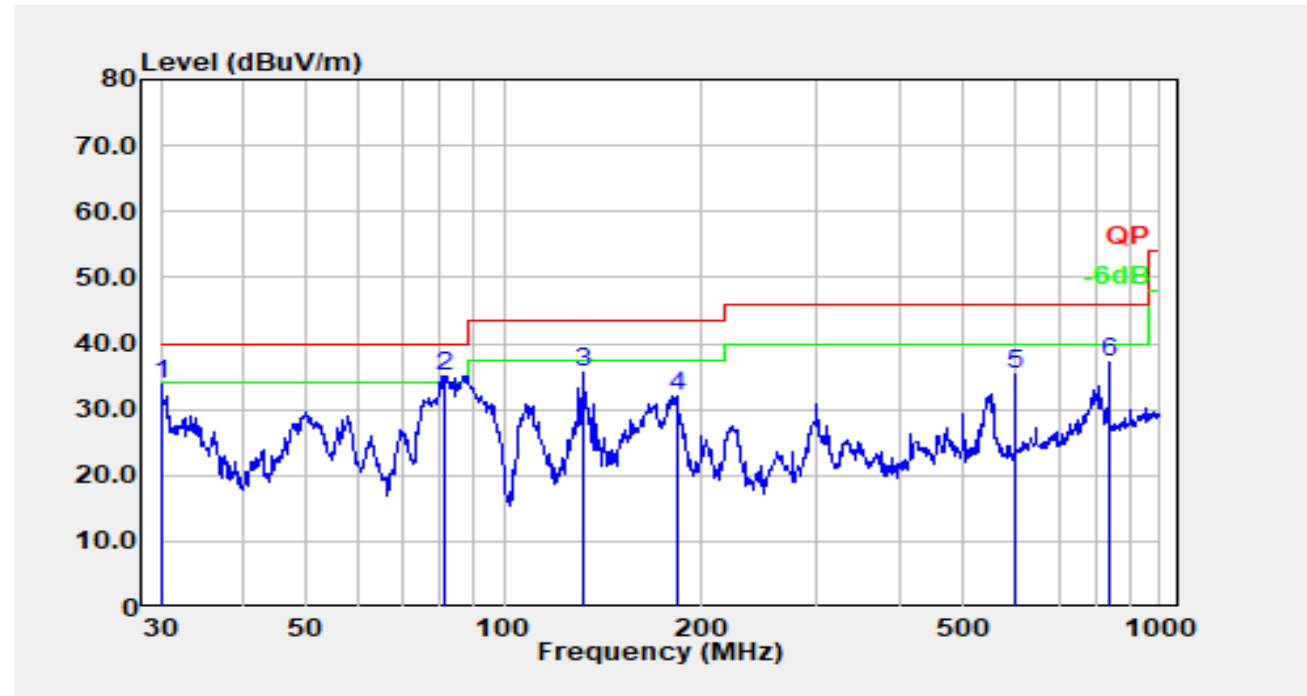
1) 30MHz-1GHz(34dBi antenna 802.11a 5785MHz Chain 0 was the worst)

Horizontal:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	88.964	48.17	-17.25	30.92	43.50	12.58	Peak
2	170.195	45.61	-13.19	32.42	43.50	11.08	Peak
3	300.367	47.10	-10.81	36.29	46.00	9.71	Peak
4	340.782	47.18	-10.23	36.95	46.00	9.05	Peak
5	601.427	42.83	-5.27	37.56	46.00	8.44	Peak
6	804.603	40.96	-2.42	38.54	46.00	7.46	Peak

Vertical:



No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1	30.000	37.62	-3.79	33.83	40.00	6.17	Peak
2	81.212	52.76	-17.63	35.13	40.00	4.87	QP
3	132.685	47.44	-11.73	35.71	43.50	7.79	Peak
4	183.844	45.74	-13.72	32.02	43.50	11.48	Peak
5	601.427	40.59	-5.27	35.32	46.00	10.68	Peak
6	836.244	38.98	-1.92	37.06	46.00	8.94	Peak

2) 1GHz-40GHz:**Antenna:13dBi****5150-5250MHz:****5MHz Mode (2Tx was the worst):**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5165 MHz							
5165.00	91.86	PK	H	38.66	124.50	N/A	N/A
5165.00	80.45	AV	H	38.66	113.09	N/A	N/A
5165.00	92.18	PK	V	38.66	124.82	N/A	N/A
5165.00	81.19	AV	V	38.66	113.83	N/A	N/A
5150.00	32.00	PK	V	38.64	64.62	74.00	9.38
5150.00	16.67	AV	V	38.64	49.29	54.00	4.71
10330.00	34.18	PK	V	9.59	37.75	68.20	30.45
15495.00	33.96	PK	V	8.11	36.05	74.00	37.95
15495.00	21.67	AV	V	8.11	23.76	54.00	30.24
Middle Channel: 5200 MHz							
5200.00	91.99	PK	H	38.70	124.67	N/A	N/A
5200.00	81.09	AV	H	38.70	113.77	N/A	N/A
5200.00	92.09	PK	V	38.70	124.77	N/A	N/A
5200.00	81.00	AV	V	38.70	113.68	N/A	N/A
10400.00	34.26	PK	V	9.62	37.86	68.20	30.34
15600.00	34.41	PK	V	8.34	36.73	74.00	37.27
15600.00	22.32	AV	V	8.34	24.64	54.00	29.36
High Channel: 5245MHz							
5245.00	92.28	PK	H	38.87	125.13	N/A	N/A
5245.00	81.32	AV	H	38.87	114.17	N/A	N/A
5245.00	92.44	PK	V	38.87	125.29	N/A	N/A
5245.00	81.46	AV	V	38.87	114.31	N/A	N/A
5350.00	30.52	PK	V	39.03	63.53	74.00	10.47
5350.00	17.35	AV	V	39.03	50.36	54.00	3.64
10490.00	34.52	PK	V	9.48	37.98	68.20	30.22
15735.00	34.21	PK	V	8.75	36.94	74.00	37.06
15735.00	22.05	AV	V	8.75	24.78	54.00	29.22

10MHz Mode (2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5170 MHz							
5170.00	89.74	PK	V	38.66	122.38	N/A	N/A
5170.00	78.41	AV	V	38.66	111.05	N/A	N/A
5170.00	87.43	PK	H	38.66	120.07	N/A	N/A
5170.00	75.95	AV	H	38.66	108.59	N/A	N/A
5150.00	30.88	PK	V	38.64	63.50	74.00	10.50
5150.00	17.19	AV	V	38.64	49.81	54.00	4.19
10340.00	33.76	PK	V	9.60	37.34	68.20	30.86
15510.00	34.10	PK	V	8.11	36.19	74.00	37.81
15510.00	21.58	AV	V	8.11	23.67	54.00	30.33
Middle Channel: 5200 MHz							
5200.00	90.29	PK	V	38.70	122.97	N/A	N/A
5200.00	79.13	AV	V	38.70	111.81	N/A	N/A
5200.00	87.34	PK	H	38.70	120.02	N/A	N/A
5200.00	76.06	AV	H	38.70	108.74	N/A	N/A
10400.00	34.06	PK	V	9.62	37.66	68.20	30.54
15600.00	33.69	PK	V	8.34	36.01	74.00	37.99
15600.00	21.42	AV	V	8.34	23.74	54.00	30.26
High Channel: 5240MHz							
5240.00	90.06	PK	V	38.85	122.89	N/A	N/A
5240.00	79.01	AV	V	38.85	111.84	N/A	N/A
5240.00	88.18	PK	H	38.85	121.01	N/A	N/A
5240.00	76.73	AV	H	38.85	109.56	N/A	N/A
5350.00	30.43	PK	V	39.03	63.44	74.00	10.56
5350.00	17.19	AV	V	39.03	50.20	54.00	3.80
10480.00	33.32	PK	V	9.49	36.79	68.20	31.41
15720.00	33.84	PK	V	8.70	36.52	74.00	37.48
15720.00	21.26	AV	V	8.70	23.94	54.00	30.06

802.11a:

502112.

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector					
Chain 0, Low Channel: 5180MHz							
5180.00	70.92	PK	H	38.68	103.58	N/A	N/A
5180.00	59.32	AV	H	38.68	91.98	N/A	N/A
5180.00	85.22	PK	V	38.68	117.88	N/A	N/A
5180.00	73.69	AV	V	38.68	106.35	N/A	N/A
5150.00	33.03	PK	V	38.64	65.65	74.00	8.35
5150.00	18.70	AV	V	38.64	51.32	54.00	2.68
10360.00	34.14	PK	V	9.60	37.72	68.20	30.48
15540.00	34.30	PK	V	8.18	36.46	74.00	37.54
15540.00	22.17	AV	V	8.18	24.33	54.00	29.67
Chain 0,Middle Channel: 5200 MHz							
5200.00	69.44	PK	H	38.70	102.12	N/A	N/A
5200.00	57.87	AV	H	38.70	90.55	N/A	N/A
5200.00	84.90	PK	V	38.70	117.58	N/A	N/A
5200.00	74.22	AV	V	38.70	106.90	N/A	N/A
10400.00	34.74	PK	V	9.62	38.34	68.20	29.86
15600.00	34.42	PK	V	8.34	36.74	74.00	37.26
15600.00	21.99	AV	V	8.34	24.31	54.00	29.69
Chain 0, High Channel: 5240 MHz							
5240.00	70.44	PK	H	38.85	103.27	N/A	N/A
5240.00	59.02	AV	H	38.85	91.85	N/A	N/A
5240.00	86.12	PK	V	38.85	118.95	N/A	N/A
5240.00	74.58	AV	V	38.85	107.41	N/A	N/A
5350.00	30.45	PK	V	39.03	63.46	74.00	10.54
5350.00	17.13	AV	V	39.03	50.14	54.00	3.86
10480.00	33.42	PK	V	9.49	36.89	68.20	31.31
15720.00	33.85	PK	V	8.70	36.53	74.00	37.47
15720.00	21.36	AV	V	8.70	24.04	54.00	29.96

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 1, Low Channel: 5180MHz							
5180.00	86.93	PK	H	38.68	119.59	N/A	N/A
5180.00	75.65	AV	H	38.68	108.31	N/A	N/A
5180.00	68.75	PK	V	38.68	101.41	N/A	N/A
5180.00	57.80	AV	V	38.68	90.46	N/A	N/A
5150.00	34.08	PK	H	38.64	66.70	74.00	7.30
5150.00	20.45	AV	H	38.64	53.07	54.00	0.93
10360.00	33.84	PK	H	9.60	37.42	68.20	30.78
15540.00	34.16	PK	H	8.18	36.32	74.00	37.68
15540.00	21.73	AV	H	8.18	23.89	54.00	30.11
Chain 1,Middle Channel: 5200 MHz							
5200.00	87.26	PK	H	38.70	119.94	N/A	N/A
5200.00	76.40	AV	H	38.70	109.08	N/A	N/A
5200.00	68.19	PK	V	38.70	100.87	N/A	N/A
5200.00	56.69	AV	V	38.70	89.37	N/A	N/A
10400.00	34.67	PK	H	9.62	38.27	68.20	29.93
15600.00	34.51	PK	H	8.34	36.83	74.00	37.17
15600.00	22.39	AV	H	8.34	24.71	54.00	29.29
Chain 1,High Channel: 5240 MHz							
5240.00	87.44	PK	H	38.85	120.27	N/A	N/A
5240.00	76.10	AV	H	38.85	108.93	N/A	N/A
5240.00	65.28	PK	V	38.85	98.11	N/A	N/A
5240.00	53.84	AV	V	38.85	86.67	N/A	N/A
5350.00	30.23	PK	H	39.03	63.24	74.00	10.76
5350.00	17.18	AV	H	39.03	50.19	54.00	3.81
10480.00	34.09	PK	H	9.49	37.56	68.20	30.64
15720.00	34.26	PK	H	8.70	36.94	74.00	37.06
15720.00	22.33	AV	H	8.70	25.01	54.00	28.99

802.11n ht20(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5180MHz							
5180.00	86.58	PK	H	38.68	119.24	N/A	N/A
5180.00	74.74	AV	H	38.68	107.40	N/A	N/A
5180.00	84.79	PK	V	38.68	117.45	N/A	N/A
5180.00	73.31	AV	V	38.68	105.97	N/A	N/A
5150.00	33.94	PK	H	38.64	66.56	74.00	7.44
5150.00	20.63	AV	H	38.64	53.25	54.00	0.75
10360.00	34.81	PK	H	9.60	38.39	68.20	29.81
15540.00	33.95	PK	H	8.18	36.11	74.00	37.89
15540.00	21.63	AV	H	8.18	23.79	54.00	30.21
Middle Channel: 5200 MHz							
5200.00	86.75	PK	H	38.70	119.43	N/A	N/A
5200.00	75.29	AV	H	38.70	107.97	N/A	N/A
5200.00	85.36	PK	V	38.70	118.04	N/A	N/A
5200.00	74.13	AV	V	38.70	106.81	N/A	N/A
10400.00	34.35	PK	H	9.62	37.95	68.20	30.25
15600.00	34.06	PK	H	8.34	36.38	74.00	37.62
15600.00	21.78	AV	H	8.34	24.10	54.00	29.90
High Channel: 5240 MHz							
5240.00	86.45	PK	H	38.85	119.28	N/A	N/A
5240.00	74.84	AV	H	38.85	107.67	N/A	N/A
5240.00	85.65	PK	V	38.85	118.48	N/A	N/A
5240.00	74.23	AV	V	38.85	107.06	N/A	N/A
5350.00	31.00	PK	H	39.03	64.01	74.00	9.99
5350.00	17.96	AV	H	39.03	50.97	54.00	3.03
10480.00	33.65	PK	H	9.49	37.12	68.20	31.08
15720.00	33.86	PK	H	8.70	36.54	74.00	37.46
15720.00	21.52	AV	H	8.70	24.20	54.00	29.80

802.11n ht40(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5190 MHz							
5190.00	79.52	PK	H	38.69	112.19	N/A	N/A
5190.00	68.29	AV	H	38.69	100.96	N/A	N/A
5190.00	75.30	PK	V	38.69	107.97	N/A	N/A
5190.00	65.42	AV	V	38.69	98.09	N/A	N/A
5150.00	34.41	PK	H	38.64	67.03	74.00	6.97
5150.00	20.68	AV	H	38.64	53.30	54.00	0.70
10380.00	34.80	PK	H	9.61	38.39	68.20	29.81
15570.00	34.16	PK	H	8.26	36.40	74.00	37.60
15570.00	21.98	AV	H	8.26	24.22	54.00	29.78
High Channel: 5230 MHz							
5230.00	84.82	PK	H	38.81	117.61	N/A	N/A
5230.00	73.23	AV	H	38.81	106.02	N/A	N/A
5230.00	81.74	PK	V	38.81	114.53	N/A	N/A
5230.00	71.38	AV	V	38.81	104.17	N/A	N/A
5350.00	30.08	PK	H	39.03	63.09	74.00	10.91
5350.00	17.12	AV	H	39.03	50.13	54.00	3.87
10460.00	34.27	PK	H	9.52	37.77	68.20	30.43
15690.00	34.39	PK	H	8.60	36.97	74.00	37.03
15690.00	22.15	AV	H	8.60	24.73	54.00	29.27

802.11ac vht80(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5210 MHz							
5210.00	74.26	PK	H	38.74	106.98	N/A	N/A
5210.00	63.00	AV	H	38.74	95.72	N/A	N/A
5210.00	70.34	PK	V	38.74	103.06	N/A	N/A
5210.00	59.74	AV	V	38.74	92.46	N/A	N/A
5150.00	33.65	PK	H	38.64	66.27	74.00	7.73
5150.00	20.18	AV	H	38.64	52.80	54.00	1.20
5350.00	30.84	PK	H	39.03	63.85	74.00	10.15
5350.00	17.07	AV	H	39.03	50.08	54.00	3.92
10420.00	34.34	PK	H	9.59	37.91	68.20	30.29
15630.00	34.52	PK	H	8.43	36.93	74.00	37.07
15630.00	22.40	AV	H	8.43	24.81	54.00	29.19

5725-5850MHz:**5MHz Mode (2Tx was the worst):**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5730 MHz							
5730.00	86.43	PK	H	39.47	119.88	N/A	N/A
5730.00	75.71	AV	H	39.47	109.16	N/A	N/A
5730.00	93.92	PK	V	39.47	127.37	N/A	N/A
5730.00	82.75	AV	V	39.47	116.20	N/A	N/A
5725.00	45.15	PK	V	39.48	78.61	122.20	43.59
5720.00	36.67	PK	V	39.49	70.14	110.80	40.66
5700.00	33.56	PK	V	39.51	67.05	105.20	38.15
5650.00	30.51	PK	V	39.49	63.98	68.20	4.22
11460.00	34.60	PK	V	8.33	36.91	74.00	37.09
11460.00	22.43	AV	V	8.33	24.74	54.00	29.26
17190.00	34.18	PK	V	17.89	46.05	68.20	22.15
Middle Channel: 5795 MHz							
5795.00	87.80	PK	H	39.43	121.21	N/A	N/A
5795.00	77.63	AV	H	39.43	111.04	N/A	N/A
5795.00	94.51	PK	V	39.43	127.92	N/A	N/A
5795.00	84.27	AV	V	39.43	117.68	N/A	N/A
11590.00	34.57	PK	V	8.33	36.88	74.00	37.12
11590.00	22.46	AV	V	8.33	24.77	54.00	29.23
17385.00	34.33	PK	V	20.18	48.49	68.20	19.71
High Channel: 5845MHz							
5845.00	88.49	PK	H	39.48	121.95	N/A	N/A
5845.00	78.13	AV	H	39.48	111.59	N/A	N/A
5845.00	93.31	PK	V	39.48	126.77	N/A	N/A
5845.00	82.79	AV	V	39.48	116.25	N/A	N/A
5850.00	50.36	PK	V	39.49	83.83	122.20	38.37
5855.00	38.88	PK	V	39.51	72.37	110.80	38.43
5875.00	34.52	PK	V	39.60	68.10	105.20	37.10
5925.00	32.14	PK	V	39.68	65.80	68.20	2.40
11690.00	35.07	PK	V	8.84	37.89	74.00	36.11
11690.00	22.65	AV	V	8.84	25.47	54.00	28.53
17535.00	34.52	PK	V	21.38	49.88	68.20	18.32

10MHz Mode (2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5735 MHz							
5735.00	84.50	PK	H	39.47	117.95	N/A	N/A
5735.00	73.53	AV	H	39.47	106.98	N/A	N/A
5735.00	91.78	PK	V	39.47	125.23	N/A	N/A
5735.00	80.44	AV	V	39.47	113.89	N/A	N/A
5725.00	37.51	PK	V	39.48	70.97	122.20	51.23
5720.00	37.18	PK	V	39.49	70.65	110.80	40.15
5700.00	32.32	PK	V	39.51	65.81	105.20	39.39
5650.00	30.61	PK	V	39.49	64.08	68.20	4.12
11470.00	34.63	PK	V	8.28	36.89	74.00	37.11
11470.00	22.35	AV	V	8.28	24.61	54.00	29.39
17205.00	33.96	PK	V	18.03	45.97	68.20	22.23
Middle Channel: 5795 MHz							
5795.00	85.18	PK	H	39.43	118.59	N/A	N/A
5795.00	74.49	AV	H	39.43	107.90	N/A	N/A
5795.00	90.64	PK	V	39.43	124.05	N/A	N/A
5795.00	79.22	AV	V	39.43	112.63	N/A	N/A
11590.00	34.41	PK	V	8.33	36.72	74.00	37.28
11590.00	22.30	AV	V	8.33	24.61	54.00	29.39
17385.00	34.06	PK	V	20.18	48.22	68.20	19.98
High Channel: 5840 MHz							
5840.00	84.09	PK	H	39.48	117.55	N/A	N/A
5840.00	72.89	AV	H	39.48	106.35	N/A	N/A
5840.00	90.34	PK	V	39.48	123.80	N/A	N/A
5840.00	78.89	AV	V	39.48	112.35	N/A	N/A
5850.00	41.18	PK	V	39.49	74.65	122.20	47.55
5855.00	35.15	PK	V	39.51	68.64	110.80	42.16
5875.00	32.99	PK	V	39.60	66.57	105.20	38.63
5925.00	31.51	PK	V	39.68	65.17	68.20	3.03
11680.00	34.65	PK	V	8.78	37.41	74.00	36.59
11680.00	22.26	AV	V	8.78	25.02	54.00	28.98
17520.00	34.37	PK	V	21.33	49.68	68.20	18.52

802.11a:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 0, Low Channel: 5745MHz							
5745.00	69.16	PK	H	39.46	102.60	N/A	N/A
5745.00	57.83	AV	H	39.46	91.27	N/A	N/A
5745.00	86.06	PK	V	39.46	119.50	N/A	N/A
5745.00	75.31	AV	V	39.46	108.75	N/A	N/A
5725.00	36.10	PK	V	39.48	69.56	122.20	52.64
5720.00	35.02	PK	V	39.49	68.49	110.80	42.31
5700.00	32.49	PK	V	39.51	65.98	105.20	39.22
5650.00	31.37	PK	V	39.49	64.84	68.20	3.36
11490.00	34.18	PK	V	8.17	36.33	74.00	37.67
11490.00	21.86	AV	V	8.17	24.01	54.00	29.99
17235.00	34.26	PK	V	18.40	46.64	68.20	21.56
Chain 0,Middle Channel: 5785 MHz							
5785.00	70.12	PK	H	39.44	103.54	N/A	N/A
5785.00	58.80	AV	H	39.44	92.22	N/A	N/A
5785.00	87.46	PK	V	39.44	120.88	N/A	N/A
5785.00	76.20	AV	V	39.44	109.62	N/A	N/A
11570.00	33.75	PK	V	8.28	36.01	74.00	37.99
11570.00	21.44	AV	V	8.28	23.70	54.00	30.30
17355.00	34.12	PK	V	19.84	47.94	68.20	20.26
Chain 0,High Channel: 5825 MHz							
5825.00	71.10	PK	H	39.46	104.54	N/A	N/A
5825.00	60.13	AV	H	39.46	93.57	N/A	N/A
5825.00	87.98	PK	V	39.46	121.42	N/A	N/A
5825.00	77.18	AV	V	39.46	110.62	N/A	N/A
5850.00	36.48	PK	V	39.49	69.95	122.20	52.25
5855.00	34.93	PK	V	39.51	68.42	110.80	42.38
5875.00	33.07	PK	V	39.60	66.65	105.20	38.55
5925.00	31.29	PK	V	39.68	64.95	68.20	3.25
11650.00	35.18	PK	V	8.62	37.78	74.00	36.22
11650.00	22.69	AV	V	8.62	25.29	54.00	28.71
17475.00	34.52	PK	V	21.03	49.53	68.20	18.67

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 1,Low Channel: 5745MHz							
5745.00	82.97	PK	H	39.46	116.41	N/A	N/A
5745.00	71.74	AV	H	39.46	105.18	N/A	N/A
5745.00	75.50	PK	V	39.46	108.94	N/A	N/A
5745.00	64.56	AV	V	39.46	98.00	N/A	N/A
5725.00	33.59	PK	H	39.48	67.05	122.20	55.15
5720.00	32.02	PK	H	39.49	65.49	110.80	45.31
5700.00	31.37	PK	H	39.51	64.86	105.20	40.34
5650.00	30.21	PK	H	39.49	63.68	68.20	4.52
11490.00	33.86	PK	H	8.17	36.01	74.00	37.99
11490.00	21.55	AV	H	8.17	23.70	54.00	30.30
17235.00	34.24	PK	H	18.40	46.62	68.20	21.58
Chain 1,Middle Channel: 5785 MHz							
5785.00	82.96	PK	H	39.44	116.38	N/A	N/A
5785.00	71.65	AV	H	39.44	105.07	N/A	N/A
5785.00	74.73	PK	V	39.44	108.15	N/A	N/A
5785.00	63.29	AV	V	39.44	96.71	N/A	N/A
11570.00	34.92	PK	H	8.28	37.18	74.00	36.82
11570.00	22.61	AV	H	8.28	24.87	54.00	29.13
17355.00	34.38	PK	H	19.84	48.20	68.20	20.00
Chain 1,High Channel: 5825 MHz							
5825.00	82.77	PK	H	39.46	116.21	N/A	N/A
5825.00	71.31	AV	H	39.46	104.75	N/A	N/A
5825.00	75.06	PK	V	39.46	108.50	N/A	N/A
5825.00	63.60	AV	V	39.46	97.04	N/A	N/A
5850.00	32.85	PK	H	39.49	66.32	122.20	55.88
5855.00	32.54	PK	H	39.51	66.03	110.80	44.77
5875.00	31.88	PK	H	39.60	65.46	105.20	39.74
5925.00	31.49	PK	H	39.68	65.15	68.20	3.05
11650.00	34.24	PK	H	8.62	36.84	74.00	37.16
11650.00	22.30	AV	H	8.62	24.90	54.00	29.10
17475.00	34.41	PK	H	21.03	49.42	68.20	18.78

802.11n ht20(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5745 MHz							
5745.00	83.59	PK	H	39.46	117.03	N/A	N/A
5745.00	72.66	AV	H	39.46	106.10	N/A	N/A
5745.00	89.19	PK	V	39.46	122.63	N/A	N/A
5745.00	77.87	AV	V	39.46	111.31	N/A	N/A
5725.00	38.61	PK	V	39.48	72.07	122.20	50.13
5720.00	36.97	PK	V	39.49	70.44	110.80	40.36
5700.00	32.61	PK	V	39.51	66.10	105.20	39.10
5650.00	30.74	PK	V	39.49	64.21	68.20	3.99
11490.00	34.45	PK	V	8.17	36.60	74.00	37.40
11490.00	22.09	AV	V	8.17	24.24	54.00	29.76
17235.00	34.23	PK	V	18.40	46.61	68.20	21.59
Middle Channel: 5785 MHz							
5785.00	85.09	PK	H	39.44	118.51	N/A	N/A
5785.00	73.46	AV	H	39.44	106.88	N/A	N/A
5785.00	89.17	PK	V	39.44	122.59	N/A	N/A
5785.00	77.83	AV	V	39.44	111.25	N/A	N/A
11570.00	34.59	PK	V	8.28	36.85	74.00	37.15
11570.00	22.30	AV	V	8.28	24.56	54.00	29.44
17355.00	34.42	PK	V	19.84	48.24	68.20	19.96
High Channel: 5825MHz							
5825.00	84.90	PK	H	39.46	118.34	N/A	N/A
5825.00	73.29	AV	H	39.46	106.73	N/A	N/A
5825.00	89.77	PK	V	39.46	123.21	N/A	N/A
5825.00	78.49	AV	V	39.46	111.93	N/A	N/A
5850.00	41.35	PK	V	39.49	74.82	122.20	47.38
5855.00	36.21	PK	V	39.51	69.70	110.80	41.10
5875.00	33.67	PK	V	39.60	67.25	105.20	37.95
5925.00	32.49	PK	V	39.68	66.15	68.20	2.05
11650.00	35.30	PK	V	8.62	37.90	74.00	36.10
11650.00	22.85	AV	V	8.62	25.45	54.00	28.55
17475.00	34.67	PK	V	21.03	49.68	68.20	18.52

802.11n ht40(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5755 MHz							
5755.00	80.35	PK	H	39.45	113.78	N/A	N/A
5755.00	69.66	AV	H	39.45	103.09	N/A	N/A
5755.00	83.47	PK	V	39.45	116.90	N/A	N/A
5755.00	72.23	AV	V	39.45	105.66	N/A	N/A
5725.00	42.95	PK	V	39.48	76.41	122.20	45.79
5720.00	40.58	PK	V	39.49	74.05	110.80	36.75
5700.00	32.56	PK	V	39.51	66.05	105.20	39.15
5650.00	30.67	PK	V	39.49	64.14	68.20	4.06
11510.00	34.06	PK	V	8.13	36.17	74.00	37.83
11510.00	21.74	AV	V	8.13	23.85	54.00	30.15
17265.00	34.53	PK	V	18.78	47.29	68.20	20.91
High Channel: 5795 MHz							
5795.00	81.15	PK	H	39.43	114.56	N/A	N/A
5795.00	69.45	AV	H	39.43	102.86	N/A	N/A
5795.00	84.89	PK	V	39.43	118.30	N/A	N/A
5795.00	74.34	AV	V	39.43	107.75	N/A	N/A
5850.00	36.25	PK	V	39.49	69.72	122.20	52.48
5855.00	35.84	PK	V	39.51	69.33	110.80	41.47
5875.00	32.55	PK	V	39.60	66.13	105.20	39.07
5925.00	31.82	PK	V	39.68	65.48	68.20	2.72
11590.00	34.22	PK	V	8.33	36.53	74.00	37.47
11590.00	22.01	AV	V	8.33	24.32	54.00	29.68
17385.00	33.89	PK	V	20.18	48.05	68.20	20.15

802.11ac vht80(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5775 MHz							
5775.00	76.47	PK	H	39.44	109.89	N/A	N/A
5775.00	64.53	AV	H	39.44	97.95	N/A	N/A
5775.00	79.64	PK	V	39.44	113.06	N/A	N/A
5775.00	68.51	AV	V	39.44	101.93	N/A	N/A
5725.00	41.45	PK	V	39.48	74.91	122.20	47.29
5720.00	41.37	PK	V	39.49	74.84	110.80	35.96
5700.00	40.58	PK	V	39.51	74.07	105.20	31.13
5650.00	31.72	PK	V	39.49	65.19	68.20	3.01
5850.00	44.10	PK	V	39.49	77.57	122.20	44.63
5855.00	43.69	PK	V	39.51	77.18	110.80	33.62
5875.00	41.81	PK	V	39.60	75.39	105.20	29.81
5925.00	32.29	PK	V	39.68	65.95	68.20	2.25
11550.00	33.74	PK	V	8.23	35.95	74.00	38.05
11550.00	21.36	AV	V	8.23	23.57	54.00	30.43
17325.00	34.11	PK	V	19.50	47.59	68.20	20.61

Antenna 21dBi:**5150-5250 MHz****5MHz Mode(2Tx was the worst):**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5165 MHz							
5165.00	92.26	PK	H	38.66	124.90	N/A	N/A
5165.00	79.94	AV	H	38.66	112.58	N/A	N/A
5165.00	75.06	PK	V	38.66	107.70	N/A	N/A
5165.00	62.59	AV	V	38.66	95.23	N/A	N/A
5150.00	32.81	PK	H	38.64	65.43	74.00	8.57
5150.00	16.73	AV	H	38.64	49.35	54.00	4.65
10330.00	33.44	PK	H	9.59	37.01	68.20	31.19
15495.00	33.78	PK	H	8.11	35.87	74.00	38.13
15495.00	21.98	AV	H	8.11	24.07	54.00	29.93
Middle Channel: 5200 MHz							
5200.00	91.67	PK	H	38.70	124.35	N/A	N/A
5200.00	77.39	AV	H	38.70	110.07	N/A	N/A
5200.00	74.37	PK	V	38.70	107.05	N/A	N/A
5200.00	62.15	AV	V	38.70	94.83	N/A	N/A
10400.00	33.47	PK	H	9.62	37.07	68.20	31.13
15600.00	33.58	PK	H	8.34	35.90	74.00	38.10
15600.00	21.43	AV	H	8.34	23.75	54.00	30.25
High Channel: 5245MHz							
5245.00	91.35	PK	H	38.87	124.20	N/A	N/A
5245.00	78.64	AV	H	38.87	111.49	N/A	N/A
5245.00	75.38	PK	V	38.87	108.23	N/A	N/A
5245.00	63.49	AV	V	38.87	96.34	N/A	N/A
5350.00	28.78	PK	H	39.03	61.79	74.00	12.21
5350.00	16.79	AV	H	39.03	49.80	54.00	4.20
10490.00	32.79	PK	H	9.48	36.25	68.20	31.95
15735.00	33.54	PK	H	8.75	36.27	74.00	37.73
15735.00	21.83	AV	H	8.75	24.56	54.00	29.44

10MHz Mode(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5170 MHz							
5170.00	86.95	PK	H	38.66	119.59	N/A	N/A
5170.00	72.72	AV	H	38.66	105.36	N/A	N/A
5170.00	90.06	PK	V	38.66	122.70	N/A	N/A
5170.00	76.58	AV	V	38.66	109.22	N/A	N/A
5150.00	30.25	PK	V	38.64	62.87	74.00	11.13
5150.00	16.84	AV	V	38.64	49.46	54.00	4.54
10340.00	31.46	PK	V	9.60	35.04	68.20	33.16
15510.00	33.65	PK	V	8.11	35.74	74.00	38.26
15510.00	20.69	AV	V	8.11	22.78	54.00	31.22
Middle Channel: 5200 MHz							
5200.00	90.44	PK	H	38.70	123.12	N/A	N/A
5200.00	77.94	AV	H	38.70	110.62	N/A	N/A
5200.00	90.99	PK	V	38.70	123.67	N/A	N/A
5200.00	78.42	AV	V	38.70	111.10	N/A	N/A
10400.00	33.57	PK	V	9.62	37.17	68.20	31.03
15600.00	33.49	PK	V	8.34	35.81	74.00	38.19
15600.00	21.85	AV	V	8.34	24.17	54.00	29.83
High Channel: 5240MHz							
5240.00	89.84	PK	H	38.85	122.67	N/A	N/A
5240.00	76.95	AV	H	38.85	109.78	N/A	N/A
5240.00	91.21	PK	V	38.85	124.04	N/A	N/A
5240.00	79.54	AV	V	38.85	112.37	N/A	N/A
5350.00	28.94	PK	V	39.03	61.95	74.00	12.05
5350.00	16.93	AV	V	39.03	49.94	54.00	4.06
10480.00	32.45	PK	V	9.49	35.92	68.20	32.28
15720.00	33.65	PK	V	8.70	36.33	74.00	37.67
15720.00	21.46	AV	V	8.70	24.14	54.00	29.86

802.11a:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 0,Low Channel: 5180MHz,							
5180.00	85.82	PK	V	38.68	118.48	N/A	N/A
5180.00	72.43	AV	V	38.68	105.09	N/A	N/A
5180.00	62.89	PK	H	38.68	95.55	N/A	N/A
5180.00	51.38	AV	H	38.68	84.04	N/A	N/A
5150.00	32.72	PK	V	38.64	65.34	74.00	8.66
5150.00	18.93	AV	V	38.64	51.55	54.00	2.45
10360.00	33.96	PK	V	9.60	37.54	68.20	30.66
15540.00	34.57	PK	V	8.18	36.73	74.00	37.27
15540.00	22.61	AV	V	8.18	24.77	54.00	29.23
Chain 0,Middle Channel: 5200 MHz							
5200.00	84.65	PK	V	38.70	117.33	N/A	N/A
5200.00	72.35	AV	V	38.70	105.03	N/A	N/A
5200.00	62.54	PK	H	38.70	95.22	N/A	N/A
5200.00	51.63	AV	H	38.70	84.31	N/A	N/A
10400.00	33.56	PK	V	9.62	37.16	68.20	31.04
15600.00	34.95	PK	V	8.34	37.27	74.00	36.73
15600.00	22.86	AV	V	8.34	25.18	54.00	28.82
Chain 0,High Channel: 5240 MHz							
5240.00	86.74	PK	V	38.85	119.57	N/A	N/A
5240.00	73.92	AV	V	38.85	106.75	N/A	N/A
5240.00	64.51	PK	H	38.85	97.34	N/A	N/A
5240.00	52.81	AV	H	38.85	85.64	N/A	N/A
5350.00	30.40	PK	V	39.03	63.41	74.00	10.59
5350.00	17.18	AV	V	39.03	50.19	54.00	3.81
10480.00	33.16	PK	V	9.49	36.63	68.20	31.57
15720.00	33.54	PK	V	8.70	36.22	74.00	37.78
15720.00	22.02	AV	V	8.70	24.70	54.00	29.30

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 1,Low Channel: 5180MHz							
5180.00	78.39	PK	H	38.68	111.05	N/A	N/A
5180.00	65.43	AV	H	38.68	98.09	N/A	N/A
5180.00	54.48	PK	V	38.68	87.14	N/A	N/A
5180.00	41.13	AV	V	38.68	73.79	N/A	N/A
5150.00	30.72	PK	H	38.64	63.34	74.00	10.66
5150.00	17.08	AV	H	38.64	49.70	54.00	4.30
10360.00	34.79	PK	H	9.60	38.37	68.20	29.83
15540.00	33.99	PK	H	8.18	36.15	74.00	37.85
15540.00	22.63	AV	H	8.18	24.79	54.00	29.21
Chain 1,Middle Channel: 5200 MHz							
5200.00	76.58	PK	H	38.70	109.26	N/A	N/A
5200.00	64.95	AV	H	38.70	97.63	N/A	N/A
5200.00	54.78	PK	V	38.70	87.46	N/A	N/A
5200.00	43.01	AV	V	38.70	75.69	N/A	N/A
10400.00	33.49	PK	H	9.62	37.09	68.20	31.11
15600.00	33.82	PK	H	8.34	36.14	74.00	37.86
15600.00	21.62	AV	H	8.34	23.94	54.00	30.06
Chain 1,High Channel: 5240 MHz							
5240.00	75.61	PK	H	38.85	108.44	N/A	N/A
5240.00	63.62	AV	H	38.85	96.45	N/A	N/A
5240.00	54.63	PK	V	38.85	87.46	N/A	N/A
5240.00	43.11	AV	V	38.85	75.94	N/A	N/A
5350.00	29.83	PK	H	39.03	62.84	74.00	11.16
5350.00	16.74	AV	H	39.03	49.75	54.00	4.25
10480.00	34.26	PK	H	9.49	37.73	68.20	30.47
15720.00	33.51	PK	H	8.70	36.19	74.00	37.81
15720.00	21.43	AV	H	8.70	24.11	54.00	29.89

802.11n ht20(2Tx was the worst):

02.11.11 12:02:11 was the worst.

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector					
Low Channel: 5180MHz							
5180.00	86.38	PK	H	38.68	119.04	N/A	N/A
5180.00	73.42	AV	H	38.68	106.08	N/A	N/A
5180.00	76.05	PK	V	38.68	108.71	N/A	N/A
5180.00	62.46	AV	V	38.68	95.12	N/A	N/A
5150.00	32.76	PK	H	38.64	65.38	74.00	8.62
5150.00	19.27	AV	H	38.64	51.89	54.00	2.11
10360.00	34.26	PK	H	9.60	37.84	68.20	30.36
15540.00	33.96	PK	H	8.18	36.12	74.00	37.88
15540.00	21.58	AV	H	8.18	23.74	54.00	30.26
Middle Channel: 5200 MHz							
5200.00	84.56	PK	H	38.70	117.24	N/A	N/A
5200.00	71.62	AV	H	38.70	104.30	N/A	N/A
5200.00	75.34	PK	V	38.70	108.02	N/A	N/A
5200.00	63.42	AV	V	38.70	96.10	N/A	N/A
10400.00	34.96	PK	H	9.62	38.56	68.20	29.64
15600.00	33.57	PK	H	8.34	35.89	74.00	38.11
15600.00	21.82	AV	H	8.34	24.14	54.00	29.86
High Channel: 5240 MHz							
5240.00	86.14	PK	H	38.85	118.97	N/A	N/A
5240.00	73.41	AV	H	38.85	106.24	N/A	N/A
5240.00	76.21	PK	V	38.85	109.04	N/A	N/A
5240.00	63.15	AV	V	38.85	95.98	N/A	N/A
5350.00	29.68	PK	H	39.03	62.69	74.00	11.31
5350.00	17.11	AV	H	39.03	50.12	54.00	3.88
10480.00	34.69	PK	H	9.49	38.16	68.20	30.04
15720.00	33.89	PK	H	8.70	36.57	74.00	37.43
15720.00	22.34	AV	H	8.70	25.02	54.00	28.98

802.11n ht40(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5190 MHz							
5190.00	80.43	PK	H	38.69	113.10	N/A	N/A
5190.00	69.02	AV	H	38.69	101.69	N/A	N/A
5190.00	72.82	PK	V	38.69	105.49	N/A	N/A
5190.00	61.22	AV	V	38.69	93.89	N/A	N/A
5150.00	34.04	PK	H	38.64	66.66	74.00	7.34
5150.00	20.67	AV	H	38.64	53.29	54.00	0.71
10380.00	33.35	PK	H	9.61	36.94	68.20	31.26
15570.00	33.64	PK	H	8.26	35.88	74.00	38.12
15570.00	21.58	AV	H	8.26	23.82	54.00	30.18
High Channel: 5230 MHz							
5230.00	80.97	PK	H	38.81	113.76	N/A	N/A
5230.00	69.33	AV	H	38.81	102.12	N/A	N/A
5230.00	71.03	PK	V	38.81	103.82	N/A	N/A
5230.00	59.63	AV	V	38.81	92.42	N/A	N/A
5350.00	30.11	PK	H	39.03	63.12	74.00	10.88
5350.00	16.96	AV	H	39.03	49.97	54.00	4.03
10460.00	33.64	PK	H	9.52	37.14	68.20	31.06
15690.00	33.55	PK	H	8.60	36.13	74.00	37.87
15690.00	21.76	AV	H	8.60	24.34	54.00	29.66

802.11ac vht80(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5210 MHz							
5210.00	75.24	PK	H	38.74	107.96	N/A	N/A
5210.00	63.41	AV	H	38.74	96.13	N/A	N/A
5210.00	66.05	PK	V	38.74	98.77	N/A	N/A
5210.00	54.27	AV	V	38.74	86.99	N/A	N/A
5150.00	33.26	PK	H	38.64	65.88	74.00	8.12
5150.00	20.31	AV	H	38.64	52.93	54.00	1.07
5350.00	30.62	PK	H	39.03	63.63	74.00	10.37
5350.00	17.32	AV	H	39.03	50.33	54.00	3.67
10420.00	33.64	PK	H	9.59	37.21	68.20	30.99
15630.00	33.42	PK	H	8.43	35.83	74.00	38.17
15630.00	21.52	AV	H	8.43	23.93	54.00	30.07

5725-5850MHz:**5MHz Mode (2Tx was the worst):**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector					
Low Channel: 5730 MHz							
5730.00	95.17	PK	H	39.47	128.62	N/A	N/A
5730.00	83.16	AV	H	39.47	116.61	N/A	N/A
5730.00	76.62	PK	V	39.47	110.07	N/A	N/A
5730.00	64.19	AV	V	39.47	97.64	N/A	N/A
5725.00	46.86	PK	H	39.48	80.32	122.20	41.88
5720.00	37.85	PK	H	39.49	71.32	110.80	39.48
5700.00	32.85	PK	H	39.51	66.34	105.20	38.86
5650.00	30.35	PK	H	39.49	63.82	68.20	4.38
11460.00	33.95	PK	H	8.33	36.26	74.00	37.74
11460.00	21.37	AV	H	8.33	23.68	54.00	30.32
17190.00	33.85	PK	H	17.89	45.72	68.20	22.48
Middle Channel: 5795 MHz							
5795.00	96.01	PK	H	39.43	129.42	N/A	N/A
5795.00	83.62	AV	H	39.43	117.03	N/A	N/A
5795.00	77.28	PK	V	39.43	110.69	N/A	N/A
5795.00	64.53	AV	V	39.43	97.94	N/A	N/A
11590.00	32.84	PK	H	8.33	35.15	74.00	38.85
11590.00	21.37	AV	H	8.33	23.68	54.00	30.32
17385.00	33.76	PK	H	20.18	47.92	68.20	20.28
High Channel: 5845MHz							
5845.00	95.44	PK	H	39.48	128.90	N/A	N/A
5845.00	83.26	AV	H	39.48	116.72	N/A	N/A
5845.00	77.73	PK	V	39.48	111.19	N/A	N/A
5845.00	64.65	AV	V	39.48	98.11	N/A	N/A
5850.00	49.85	PK	H	39.49	83.32	122.20	38.88
5855.00	42.85	PK	H	39.51	76.34	110.80	34.46
5875.00	34.27	PK	H	39.60	67.85	105.20	37.35
5925.00	32.15	PK	H	39.68	65.81	68.20	2.39
11690.00	33.67	PK	H	8.84	36.49	74.00	37.51
11690.00	21.69	AV	H	8.84	24.51	54.00	29.49
17535.00	33.92	PK	H	21.38	49.28	68.20	18.92

10MHz Mode (2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5735 MHz							
5735.00	91.94	PK	H	39.47	125.39	N/A	N/A
5735.00	78.52	AV	H	39.47	111.97	N/A	N/A
5735.00	91.71	PK	V	39.47	125.16	N/A	N/A
5735.00	78.33	AV	V	39.47	111.78	N/A	N/A
5725.00	39.19	PK	H	39.48	72.65	122.20	49.55
5720.00	38.27	PK	H	39.49	71.74	110.80	39.06
5700.00	32.22	PK	H	39.51	65.71	105.20	39.49
5650.00	29.51	PK	H	39.49	62.98	68.20	5.22
11470.00	33.97	PK	H	8.28	36.23	74.00	37.77
11470.00	21.68	AV	H	8.28	23.94	54.00	30.06
17205.00	33.29	PK	H	18.03	45.30	68.20	22.90
Middle Channel: 5795 MHz							
5795.00	91.56	PK	H	39.43	124.97	N/A	N/A
5795.00	78.74	AV	H	39.43	112.15	N/A	N/A
5795.00	91.09	PK	V	39.43	124.50	N/A	N/A
5795.00	78.35	AV	V	39.43	111.76	N/A	N/A
11590.00	33.57	PK	H	8.33	35.88	74.00	38.12
11590.00	21.39	AV	H	8.33	23.70	54.00	30.30
17385.00	33.58	PK	H	20.18	47.74	68.20	20.46
High Channel: 5840 MHz							
5840.00	92.08	PK	H	39.48	125.54	N/A	N/A
5840.00	79.24	AV	H	39.48	112.70	N/A	N/A
5840.00	91.48	PK	V	39.48	124.94	N/A	N/A
5840.00	78.59	AV	V	39.48	112.05	N/A	N/A
5850.00	42.89	PK	H	39.49	76.36	122.20	45.84
5855.00	35.42	PK	H	39.51	68.91	110.80	41.89
5875.00	32.58	PK	H	39.60	66.16	105.20	39.04
5925.00	31.36	PK	H	39.68	65.02	68.20	3.18
11680.00	33.76	PK	H	8.78	36.52	74.00	37.48
11680.00	21.67	AV	H	8.78	24.43	54.00	29.57
17520.00	33.98	PK	H	21.33	49.29	68.20	18.91

802.11a:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 0, Low Channel: 5745MHz							
5745.00	85.92	PK	H	39.46	119.36	N/A	N/A
5745.00	73.54	AV	H	39.46	106.98	N/A	N/A
5745.00	63.64	PK	V	39.46	97.08	N/A	N/A
5745.00	50.55	AV	V	39.46	83.99	N/A	N/A
5725.00	34.85	PK	H	39.48	68.31	122.20	53.89
5720.00	34.14	PK	H	39.49	67.61	110.80	43.19
5700.00	32.01	PK	H	39.51	65.50	105.20	39.70
5650.00	29.79	PK	H	39.49	63.26	68.20	4.94
11490.00	33.69	PK	H	8.17	35.84	74.00	38.16
11490.00	21.54	AV	H	8.17	23.69	54.00	30.31
17235.00	33.59	PK	H	18.40	45.97	68.20	22.23
Chain 0, Middle Channel: 5785 MHz							
5785.00	83.06	PK	H	39.44	116.48	N/A	N/A
5785.00	71.46	AV	H	39.44	104.88	N/A	N/A
5785.00	65.10	PK	V	39.44	98.52	N/A	N/A
5785.00	50.99	AV	V	39.44	84.41	N/A	N/A
11570.00	33.97	PK	H	8.28	36.23	74.00	37.77
11570.00	21.57	AV	H	8.28	23.83	54.00	30.17
17355.00	33.66	PK	H	19.84	47.48	68.20	20.72
Chain 0, High Channel: 5825 MHz							
5825.00	88.27	PK	H	39.46	121.71	N/A	N/A
5825.00	74.24	AV	H	39.46	107.68	N/A	N/A
5825.00	68.56	PK	V	39.46	102.00	N/A	N/A
5825.00	55.29	AV	V	39.46	88.73	N/A	N/A
5850.00	34.41	PK	H	39.49	67.88	122.20	54.32
5855.00	34.40	PK	H	39.51	67.89	110.80	42.91
5875.00	32.21	PK	H	39.60	65.79	105.20	39.41
5925.00	31.35	PK	H	39.68	65.01	68.20	3.19
11650.00	34.77	PK	H	8.62	37.37	74.00	36.63
11650.00	22.58	AV	H	8.62	25.18	54.00	28.82
17475.00	33.59	PK	H	21.03	48.60	68.20	19.60

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector					
Chain 1, Low Channel: 5745MHz							
5745.00	55.34	PK	H	39.46	88.78	N/A	N/A
5745.00	43.02	AV	H	39.46	76.46	N/A	N/A
5745.00	71.56	PK	V	39.46	105.00	N/A	N/A
5745.00	59.58	AV	V	39.46	93.02	N/A	N/A
5725.00	31.53	PK	V	39.48	64.99	122.20	57.21
5720.00	31.58	PK	V	39.49	65.05	110.80	45.75
5700.00	30.43	PK	V	39.51	63.92	105.20	41.28
5650.00	29.62	PK	V	39.49	63.09	68.20	5.11
11490.00	34.95	PK	V	8.17	37.10	74.00	36.90
11490.00	22.68	AV	V	8.17	24.83	54.00	29.17
17235.00	33.26	PK	V	18.40	45.64	68.20	22.56
Chain 1, Middle Channel: 5785 MHz							
5785.00	57.88	PK	H	39.44	91.30	N/A	N/A
5785.00	46.04	AV	H	39.44	79.46	N/A	N/A
5785.00	77.33	PK	V	39.44	110.75	N/A	N/A
5785.00	65.48	AV	V	39.44	98.90	N/A	N/A
11570.00	34.75	PK	V	8.28	37.01	74.00	36.99
11570.00	22.58	AV	V	8.28	24.84	54.00	29.16
17355.00	33.95	PK	V	19.84	47.77	68.20	20.43
Chain 1, High Channel: 5825 MHz							
5825.00	58.81	PK	H	39.46	92.25	N/A	N/A
5825.00	46.35	AV	H	39.46	79.79	N/A	N/A
5825.00	77.85	PK	V	39.46	111.29	N/A	N/A
5825.00	64.68	AV	V	39.46	98.12	N/A	N/A
5850.00	32.96	PK	V	39.49	66.43	122.20	55.77
5855.00	32.62	PK	V	39.51	66.11	110.80	44.69
5875.00	32.35	PK	V	39.60	65.93	105.20	39.27
5925.00	30.71	PK	V	39.68	64.37	68.20	3.83
11650.00	35.39	PK	V	8.62	37.99	74.00	36.01
11650.00	23.61	AV	V	8.62	26.21	54.00	27.79
17475.00	33.74	PK	V	21.03	48.75	68.20	19.45

802.11n ht20(2Tx was the worst):

02:11:102021x was the worst.

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector					
Low Channel: 5745 MHz							
5745.00	86.74	PK	H	39.46	120.18	N/A	N/A
5745.00	73.92	AV	H	39.46	107.36	N/A	N/A
5745.00	73.34	PK	V	39.46	106.78	N/A	N/A
5745.00	61.44	AV	V	39.46	94.88	N/A	N/A
5725.00	35.31	PK	H	39.48	68.77	122.20	53.43
5720.00	34.69	PK	H	39.49	68.16	110.80	42.64
5700.00	31.66	PK	H	39.51	65.15	105.20	40.05
5650.00	29.78	PK	H	39.49	63.25	68.20	4.95
11490.00	33.52	PK	H	8.17	35.67	74.00	38.33
11490.00	21.74	AV	H	8.17	23.89	54.00	30.11
17235.00	33.69	PK	H	18.40	46.07	68.20	22.13
Middle Channel: 5785 MHz							
5785.00	85.36	PK	H	39.44	118.78	N/A	N/A
5785.00	72.14	AV	H	39.44	105.56	N/A	N/A
5785.00	77.65	PK	V	39.44	111.07	N/A	N/A
5785.00	65.54	AV	V	39.44	98.96	N/A	N/A
11570.00	34.12	PK	H	8.28	36.38	74.00	37.62
11570.00	22.56	AV	H	8.28	24.82	54.00	29.18
17355.00	33.94	PK	H	19.84	47.76	68.20	20.44
High Channel: 5825MHz							
5825.00	87.63	PK	H	39.46	121.07	N/A	N/A
5825.00	74.83	AV	H	39.46	108.27	N/A	N/A
5825.00	78.31	PK	V	39.46	111.75	N/A	N/A
5825.00	65.34	AV	V	39.46	98.78	N/A	N/A
5850.00	37.16	PK	H	39.49	70.63	122.20	51.57
5855.00	33.66	PK	H	39.51	67.15	110.80	43.65
5875.00	32.84	PK	H	39.60	66.42	105.20	38.78
5925.00	32.04	PK	H	39.68	65.70	68.20	2.50
11650.00	34.69	PK	H	8.62	37.29	74.00	36.71
11650.00	22.58	AV	H	8.62	25.18	54.00	28.82
17475.00	33.17	PK	H	21.03	48.18	68.20	20.02

802.11n ht40(2Tx 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: 5755 MHz							
5755.00	82.04	PK	H	39.45	115.47	N/A	N/A
5755.00	70.12	AV	H	39.45	103.55	N/A	N/A
5755.00	68.99	PK	V	39.45	102.42	N/A	N/A
5755.00	57.21	AV	V	39.45	90.64	N/A	N/A
5725.00	42.35	PK	H	39.48	75.81	122.20	46.39
5720.00	41.27	PK	H	39.49	74.74	110.80	36.06
5700.00	32.33	PK	H	39.51	65.82	105.20	39.38
5650.00	29.83	PK	H	39.49	63.30	68.20	4.90
11510.00	33.91	PK	H	8.13	36.02	74.00	37.98
11510.00	21.68	AV	H	8.13	23.79	54.00	30.21
17265.00	33.47	PK	H	18.78	46.23	68.20	21.97
802.11n ht40, High Channel: 5795 MHz							
5795.00	82.09	PK	H	39.43	115.50	N/A	N/A
5795.00	70.22	AV	H	39.43	103.63	N/A	N/A
5795.00	74.58	PK	V	39.43	107.99	N/A	N/A
5795.00	63.62	AV	V	39.43	97.03	N/A	N/A
5850.00	34.04	PK	H	39.49	67.51	122.20	54.69
5855.00	33.76	PK	H	39.51	67.25	110.80	43.55
5875.00	33.57	PK	H	39.60	67.15	105.20	38.05
5925.00	31.05	PK	H	39.68	64.71	68.20	3.49
11590.00	34.58	PK	H	8.33	36.89	74.00	37.11
11590.00	22.61	AV	H	8.33	24.92	54.00	29.08
17385.00	33.78	PK	H	20.18	47.94	68.20	20.26

802.11ac vht80(2Tx 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: 5775 MHz							
5775.00	76.95	PK	H	39.44	110.37	N/A	N/A
5775.00	64.66	AV	H	39.44	98.08	N/A	N/A
5775.00	69.35	PK	V	39.44	102.77	N/A	N/A
5775.00	57.48	AV	V	39.44	90.90	N/A	N/A
5725.00	41.58	PK	H	39.48	75.04	122.20	47.16
5720.00	41.20	PK	H	39.49	74.67	110.80	36.13
5700.00	40.33	PK	H	39.51	73.82	105.20	31.38
5650.00	32.78	PK	H	39.49	66.25	68.20	1.95
5850.00	43.38	PK	H	39.49	76.85	122.20	45.35
5855.00	41.83	PK	H	39.51	75.32	110.80	35.48
5875.00	39.17	PK	H	39.60	72.75	105.20	32.45
5925.00	32.64	PK	H	39.68	66.30	68.20	1.90
11550.00	34.12	PK	H	8.23	36.33	74.00	37.67
11550.00	22.53	AV	H	8.23	24.74	54.00	29.26
17325.00	33.85	PK	H	19.50	47.33	68.20	20.87

Antenna: 34dBi**5150-5250MHz****5MHz Mode (2Tx was the worst):**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5165 MHz							
5165.00	88.78	PK	H	38.66	121.42	N/A	N/A
5165.00	77.52	AV	H	38.66	110.16	N/A	N/A
5165.00	77.23	PK	V	38.66	109.87	N/A	N/A
5165.00	66.11	AV	V	38.66	98.75	N/A	N/A
5150.00	34.01	PK	H	38.64	66.63	74.00	7.37
5150.00	16.72	AV	H	38.64	49.34	54.00	4.66
10330.00	33.98	PK	H	9.59	37.55	68.20	30.65
15495.00	33.52	PK	H	8.11	35.61	74.00	38.39
15495.00	21.05	AV	H	8.11	23.14	54.00	30.86
Middle Channel: 5200 MHz							
5200.00	90.11	PK	H	38.70	122.79	N/A	N/A
5200.00	77.82	AV	H	38.70	110.50	N/A	N/A
5200.00	82.45	PK	V	38.70	115.13	N/A	N/A
5200.00	69.81	AV	V	38.70	102.49	N/A	N/A
10400.00	33.57	PK	H	9.62	37.17	68.20	31.03
15600.00	33.42	PK	H	8.34	35.74	74.00	38.26
15600.00	21.38	AV	H	8.34	23.70	54.00	30.30
High Channel: 5245MHz							
5245.00	89.15	PK	H	38.87	122.00	N/A	N/A
5245.00	77.14	AV	H	38.87	109.99	N/A	N/A
5245.00	80.52	PK	V	38.87	113.37	N/A	N/A
5245.00	39.80	AV	V	38.87	72.65	N/A	N/A
5350.00	30.24	PK	H	39.03	63.25	74.00	10.75
5350.00	16.86	AV	H	39.03	49.87	54.00	4.13
10490.00	33.49	PK	H	9.48	36.95	68.20	31.25
15735.00	33.67	PK	H	8.75	36.40	74.00	37.60
15735.00	21.58	AV	H	8.75	24.31	54.00	29.69

10MHz Mode (2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5170 MHz							
5170.00	83.99	PK	H	38.66	116.63	N/A	N/A
5170.00	72.73	AV	H	38.66	105.37	N/A	N/A
5170.00	81.32	PK	V	38.66	113.96	N/A	N/A
5170.00	69.92	AV	V	38.66	102.56	N/A	N/A
5150.00	31.89	PK	H	38.64	64.51	74.00	9.49
5150.00	17.24	AV	H	38.64	49.86	54.00	4.14
10340.00	34.25	PK	H	9.60	37.83	68.20	30.37
15510.00	33.62	PK	H	8.11	35.71	74.00	38.29
15510.00	21.56	AV	H	8.11	23.65	54.00	30.35
Middle Channel: 5200 MHz							
5200.00	84.05	PK	H	38.70	116.73	N/A	N/A
5200.00	71.49	AV	H	38.70	104.17	N/A	N/A
5200.00	81.64	PK	V	38.70	114.32	N/A	N/A
5200.00	70.69	AV	V	38.70	103.37	N/A	N/A
10400.00	33.79	PK	H	9.62	37.39	68.20	30.81
15600.00	33.49	PK	H	8.34	35.81	74.00	38.19
15600.00	21.08	AV	H	8.34	23.40	54.00	30.60
High Channel: 5240MHz							
5240.00	84.99	PK	H	38.85	117.82	N/A	N/A
5240.00	73.83	AV	H	38.85	106.66	N/A	N/A
5240.00	81.24	PK	V	38.85	114.07	N/A	N/A
5240.00	70.35	AV	V	38.85	103.18	N/A	N/A
5350.00	31.02	PK	H	39.03	64.03	74.00	9.97
5350.00	17.25	AV	H	39.03	50.26	54.00	3.74
10480.00	33.62	PK	H	9.49	37.09	68.20	31.11
15720.00	33.97	PK	H	8.70	36.65	74.00	37.35
15720.00	21.54	AV	H	8.70	24.22	54.00	29.78

802.11a

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 0,Low Channel: 5180MHz							
5180.00	80.51	PK	H	38.68	113.17	N/A	N/A
5180.00	70.36	AV	H	38.68	103.02	N/A	N/A
5180.00	73.58	PK	V	38.68	106.24	N/A	N/A
5180.00	62.95	AV	V	38.68	95.61	N/A	N/A
5150.00	31.69	PK	H	38.64	64.31	74.00	9.69
5150.00	17.86	AV	H	38.64	50.48	54.00	3.52
10360.00	34.26	PK	H	9.60	37.84	68.20	30.36
15540.00	34.31	PK	H	8.18	36.47	74.00	37.53
15540.00	22.17	AV	H	8.18	24.33	54.00	29.67
Chain 0,Middle Channel: 5200 MHz							
5200.00	81.72	PK	H	38.70	114.40	N/A	N/A
5200.00	70.71	AV	H	38.70	103.39	N/A	N/A
5200.00	73.60	PK	V	38.70	106.28	N/A	N/A
5200.00	63.43	AV	V	38.70	96.11	N/A	N/A
10400.00	34.72	PK	H	9.62	38.32	68.20	29.88
15600.00	34.38	PK	H	8.34	36.70	74.00	37.30
15600.00	21.79	AV	H	8.34	24.11	54.00	29.89
Chain 0,High Channel: 5240 MHz							
5240.00	80.14	PK	H	38.85	112.97	N/A	N/A
5240.00	69.83	AV	H	38.85	102.66	N/A	N/A
5240.00	74.21	PK	V	38.85	107.04	N/A	N/A
5240.00	63.58	AV	V	38.85	96.41	N/A	N/A
5350.00	30.55	PK	H	39.03	63.56	74.00	10.44
5350.00	16.74	AV	H	39.03	49.75	54.00	4.25
10480.00	33.82	PK	H	9.49	37.29	68.20	30.91
15720.00	34.16	PK	H	8.70	36.84	74.00	37.16
15720.00	21.73	AV	H	8.70	24.41	54.00	29.59

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 1,Low Channel: 5180MHz							
5180.00	74.28	PK	H	38.68	106.94	N/A	N/A
5180.00	64.70	AV	H	38.68	97.36	N/A	N/A
5180.00	77.95	PK	V	38.68	110.61	N/A	N/A
5180.00	68.22	AV	V	38.68	100.88	N/A	N/A
5150.00	31.53	PK	V	38.64	64.15	74.00	9.85
5150.00	18.17	AV	V	38.64	50.79	54.00	3.21
10360.00	35.41	PK	V	9.60	38.99	68.20	29.21
15540.00	34.62	PK	V	8.18	36.78	74.00	37.22
15540.00	22.23	AV	V	8.18	24.39	54.00	29.61
Chain 1,Middle Channel: 5200 MHz							
5200.00	75.79	PK	H	38.70	108.47	N/A	N/A
5200.00	65.81	AV	H	38.70	98.49	N/A	N/A
5200.00	78.92	PK	V	38.70	111.60	N/A	N/A
5200.00	67.41	AV	V	38.70	100.09	N/A	N/A
10400.00	34.33	PK	V	9.62	37.93	68.20	30.27
15600.00	34.50	PK	V	8.34	36.82	74.00	37.18
15600.00	22.31	AV	V	8.34	24.63	54.00	29.37
Chain 1,High Channel: 5240 MHz							
5240.00	77.26	PK	H	38.85	110.09	N/A	N/A
5240.00	66.47	AV	H	38.85	99.30	N/A	N/A
5240.00	80.02	PK	V	38.85	112.85	N/A	N/A
5240.00	69.20	AV	V	38.85	102.03	N/A	N/A
5350.00	29.83	PK	V	39.03	62.84	74.00	11.16
5350.00	16.72	AV	V	39.03	49.73	54.00	4.27
10480.00	33.98	PK	V	9.49	37.45	68.20	30.75
15720.00	33.85	PK	V	8.70	36.53	74.00	37.47
15720.00	21.50	AV	V	8.70	24.18	54.00	29.82

802.11n ht20(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5180MHz							
5180.00	82.97	PK	H	38.68	115.63	N/A	N/A
5180.00	72.56	AV	H	38.68	105.22	N/A	N/A
5180.00	81.13	PK	V	38.68	113.79	N/A	N/A
5180.00	70.32	AV	V	38.68	102.98	N/A	N/A
5150.00	30.64	PK	H	38.64	63.26	74.00	10.74
5150.00	18.15	AV	H	38.64	50.77	54.00	3.23
10360.00	34.29	PK	H	9.60	37.87	68.20	30.33
15540.00	34.64	PK	H	8.18	36.80	74.00	37.20
15540.00	22.39	AV	H	8.18	24.55	54.00	29.45
Middle Channel: 5200 MHz							
5200.00	81.42	PK	H	38.70	114.10	N/A	N/A
5200.00	71.35	AV	H	38.70	104.03	N/A	N/A
5200.00	79.79	PK	V	38.70	112.47	N/A	N/A
5200.00	69.37	AV	V	38.70	102.05	N/A	N/A
10400.00	34.45	PK	H	9.62	38.05	68.20	30.15
15600.00	34.36	PK	H	8.34	36.68	74.00	37.32
15600.00	21.75	AV	H	8.34	24.07	54.00	29.93
High Channel: 5240 MHz							
5240.00	82.19	PK	H	38.85	115.02	N/A	N/A
5240.00	71.87	AV	H	38.85	104.70	N/A	N/A
5240.00	81.71	PK	V	38.85	114.54	N/A	N/A
5240.00	70.81	AV	V	38.85	103.64	N/A	N/A
5350.00	29.74	PK	H	39.03	62.75	74.00	11.25
5350.00	16.75	AV	H	39.03	49.76	54.00	4.24
10480.00	33.22	PK	H	9.49	36.69	68.20	31.51
15720.00	34.43	PK	H	8.70	37.11	74.00	36.89
15720.00	22.09	AV	H	8.70	24.77	54.00	29.23

802.11n ht40(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5190 MHz							
5190.00	80.43	PK	H	38.69	113.10	N/A	N/A
5190.00	70.72	AV	H	38.69	103.39	N/A	N/A
5190.00	78.01	PK	V	38.69	110.68	N/A	N/A
5190.00	67.99	AV	V	38.69	100.66	N/A	N/A
5150.00	35.83	PK	H	38.64	68.45	74.00	5.55
5150.00	20.96	AV	H	38.64	53.58	54.00	0.42
10380.00	33.87	PK	H	9.61	37.46	68.20	30.74
15570.00	34.29	PK	H	8.26	36.53	74.00	37.47
15570.00	21.86	AV	H	8.26	24.10	54.00	29.90
High Channel: 5230 MHz							
5230.00	80.69	PK	H	38.81	113.48	N/A	N/A
5230.00	71.30	AV	H	38.81	104.09	N/A	N/A
5230.00	77.65	PK	V	38.81	110.44	N/A	N/A
5230.00	67.67	AV	V	38.81	100.46	N/A	N/A
5350.00	29.51	PK	H	39.03	62.52	74.00	11.48
5350.00	16.90	AV	H	39.03	49.91	54.00	4.09
10460.00	33.43	PK	H	9.52	36.93	68.20	31.27
15690.00	34.52	PK	H	8.60	37.10	74.00	36.90
15690.00	21.83	AV	H	8.60	24.41	54.00	29.59

802.11ac vht80(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5210 MHz							
5210.00	74.62	PK	H	38.74	107.34	N/A	N/A
5210.00	64.17	AV	H	38.74	96.89	N/A	N/A
5210.00	72.13	PK	V	38.74	104.85	N/A	N/A
5210.00	61.03	AV	V	38.74	93.75	N/A	N/A
5150.00	32.74	PK	H	38.64	65.36	74.00	8.64
5150.00	18.68	AV	H	38.64	51.30	54.00	2.70
5350.00	29.57	PK	H	39.03	62.58	74.00	11.42
5350.00	16.68	AV	H	39.03	49.69	54.00	4.31
10420.00	33.72	PK	H	9.59	37.29	68.20	30.91
15630.00	33.89	PK	H	8.43	36.30	74.00	37.70
15630.00	21.50	AV	H	8.43	23.91	54.00	30.09

5725-5850MHz:**5MHz Mode (2Tx was the worst):**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5730 MHz							
5730.00	87.39	PK	H	39.47	120.84	N/A	N/A
5730.00	76.31	AV	H	39.47	109.76	N/A	N/A
5730.00	76.20	PK	V	39.47	109.65	N/A	N/A
5730.00	65.25	AV	V	39.47	98.70	N/A	N/A
5725.00	38.30	PK	H	39.48	71.76	122.20	50.44
5720.00	33.27	PK	H	39.49	66.74	110.80	44.06
5700.00	31.48	PK	H	39.51	64.97	105.20	40.23
5650.00	30.26	PK	H	39.49	63.73	68.20	4.47
11460.00	32.19	PK	H	8.33	34.50	74.00	39.50
11460.00	20.35	AV	H	8.33	22.66	54.00	31.34
17190.00	33.85	PK	H	17.89	45.72	68.20	22.48
Middle Channel: 5795 MHz							
5795.00	88.89	PK	H	39.43	122.30	N/A	N/A
5795.00	75.97	AV	H	39.43	109.38	N/A	N/A
5795.00	79.29	PK	V	39.43	112.70	N/A	N/A
5795.00	65.75	AV	V	39.43	99.16	N/A	N/A
11590.00	32.81	PK	H	8.33	35.12	74.00	38.88
11590.00	20.46	AV	H	8.33	22.77	54.00	31.23
17385.00	33.69	PK	H	20.18	47.85	68.20	20.35
High Channel: 5845MHz							
5845.00	88.21	PK	H	39.48	121.67	N/A	N/A
5845.00	77.26	AV	H	39.48	110.72	N/A	N/A
5845.00	80.46	PK	V	39.48	113.92	N/A	N/A
5845.00	69.41	AV	V	39.48	102.87	N/A	N/A
5850.00	40.70	PK	H	39.49	74.17	122.20	48.03
5855.00	37.08	PK	H	39.51	70.57	110.80	40.23
5875.00	32.74	PK	H	39.60	66.32	105.20	38.88
5925.00	31.96	PK	H	39.68	65.62	68.20	2.58
11690.00	33.86	PK	H	8.84	36.68	74.00	37.32
11690.00	21.54	AV	H	8.84	24.36	54.00	29.64
17535.00	33.57	PK	H	21.38	48.93	68.20	19.28

10MHz Mode (2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5735 MHz							
5735.00	84.64	PK	H	39.47	118.09	N/A	N/A
5735.00	73.47	AV	H	39.47	106.92	N/A	N/A
5735.00	84.15	PK	V	39.47	117.60	N/A	N/A
5735.00	71.49	AV	V	39.47	104.94	N/A	N/A
5725.00	33.87	PK	H	39.48	67.33	122.20	54.87
5720.00	32.90	PK	H	39.49	66.37	110.80	44.43
5700.00	31.02	PK	H	39.51	64.51	105.20	40.69
5650.00	31.67	PK	H	39.49	65.14	68.20	3.06
11470.00	33.98	PK	H	8.28	36.24	74.00	37.76
11470.00	21.48	AV	H	8.28	23.74	54.00	30.26
17205.00	33.46	PK	H	18.03	45.47	68.20	22.73
Middle Channel: 5795 MHz							
5795.00	86.35	PK	H	39.43	119.76	N/A	N/A
5795.00	73.99	AV	H	39.43	107.40	N/A	N/A
5795.00	85.16	PK	V	39.43	118.57	N/A	N/A
5795.00	71.99	AV	V	39.43	105.40	N/A	N/A
11590.00	33.54	PK	H	8.33	35.85	74.00	38.15
11590.00	21.58	AV	H	8.33	23.89	54.00	30.11
17385.00	33.46	PK	H	20.18	47.62	68.20	20.58
High Channel: 5840 MHz							
5840.00	85.07	PK	H	39.48	118.53	N/A	N/A
5840.00	73.72	AV	H	39.48	107.18	N/A	N/A
5840.00	83.67	PK	V	39.48	117.13	N/A	N/A
5840.00	72.65	AV	V	39.48	106.11	N/A	N/A
5850.00	39.24	PK	H	39.49	72.71	122.20	49.49
5855.00	33.16	PK	H	39.51	66.65	110.80	44.15
5875.00	32.23	PK	H	39.60	65.81	105.20	39.39
5925.00	31.66	PK	H	39.68	65.32	68.20	2.88
11680.00	35.12	PK	H	8.78	37.88	74.00	36.12
11680.00	23.61	AV	H	8.78	26.37	54.00	27.63
17520.00	33.65	PK	H	21.33	48.96	68.20	19.24

802.11a

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 0, Low Channel: 5745MHz							
5745.00	77.21	PK	H	39.46	110.65	N/A	N/A
5745.00	67.01	AV	H	39.46	100.45	N/A	N/A
5745.00	71.74	PK	V	39.46	105.18	N/A	N/A
5745.00	61.58	AV	V	39.46	95.02	N/A	N/A
5725.00	32.90	PK	H	39.48	66.36	122.20	55.84
5720.00	32.05	PK	H	39.49	65.52	110.80	45.28
5700.00	30.91	PK	H	39.51	64.40	105.20	40.80
5650.00	30.62	PK	H	39.49	64.09	68.20	4.11
11490.00	33.52	PK	H	8.17	35.67	74.00	38.33
11490.00	21.06	AV	H	8.17	23.21	54.00	30.79
17235.00	34.24	PK	H	18.40	46.62	68.20	21.58
Chain 0, Middle Channel: 5785 MHz							
5785.00	79.48	PK	H	39.44	112.90	N/A	N/A
5785.00	68.67	AV	H	39.44	102.09	N/A	N/A
5785.00	74.72	PK	V	39.44	108.14	N/A	N/A
5785.00	64.57	AV	V	39.44	97.99	N/A	N/A
11570.00	34.21	PK	H	8.28	36.47	74.00	37.53
11570.00	22.10	AV	H	8.28	24.36	54.00	29.64
17355.00	34.55	PK	H	19.84	48.37	68.20	19.83
Chain 0, High Channel: 5825 MHz							
5825.00	80.06	PK	H	39.46	113.50	N/A	N/A
5825.00	68.78	AV	H	39.46	102.22	N/A	N/A
5825.00	74.04	PK	V	39.46	107.48	N/A	N/A
5825.00	63.98	AV	V	39.46	97.42	N/A	N/A
5850.00	32.94	PK	H	39.49	66.41	122.20	55.79
5855.00	32.52	PK	H	39.51	66.01	110.80	44.79
5875.00	32.03	PK	H	39.60	65.61	105.20	39.59
5925.00	31.46	PK	H	39.68	65.12	68.20	3.08
11650.00	34.80	PK	H	8.62	37.40	74.00	36.60
11650.00	22.64	AV	H	8.62	25.24	54.00	28.76
17475.00	35.46	PK	H	21.03	50.47	68.20	17.73

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 1, Low Channel: 5745MHz							
5745.00	77.31	PK	H	39.46	110.75	N/A	N/A
5745.00	67.07	AV	H	39.46	100.51	N/A	N/A
5745.00	78.18	PK	V	39.46	111.62	N/A	N/A
5745.00	67.49	AV	V	39.46	100.93	N/A	N/A
5725.00	31.19	PK	V	39.48	64.65	122.20	57.55
5720.00	31.56	PK	V	39.49	65.03	110.80	45.77
5700.00	30.43	PK	V	39.51	63.92	105.20	41.28
5650.00	30.23	PK	V	39.49	63.70	68.20	4.50
11490.00	33.86	PK	V	8.17	36.01	74.00	37.99
11490.00	21.47	AV	V	8.17	23.62	54.00	30.38
17235.00	34.13	PK	V	18.40	46.51	68.20	21.69
Chain 1,Middle Channel: 5785 MHz							
5785.00	75.56	PK	H	39.44	108.98	N/A	N/A
5785.00	65.21	AV	H	39.44	98.63	N/A	N/A
5785.00	78.23	PK	V	39.44	111.65	N/A	N/A
5785.00	68.32	AV	V	39.44	101.74	N/A	N/A
11570.00	33.78	PK	V	8.28	36.04	74.00	37.96
11570.00	21.24	AV	V	8.28	23.50	54.00	30.50
17355.00	33.60	PK	V	19.84	47.42	68.20	20.78
Chain 1,High Channel: 5825 MHz							
5825.00	75.47	PK	H	39.46	108.91	N/A	N/A
5825.00	65.75	AV	H	39.46	99.19	N/A	N/A
5825.00	79.88	PK	V	39.46	113.32	N/A	N/A
5825.00	68.54	AV	V	39.46	101.98	N/A	N/A
5850.00	32.48	PK	V	39.49	65.95	122.20	56.25
5855.00	32.96	PK	V	39.51	66.45	110.80	44.35
5875.00	32.18	PK	V	39.60	65.76	105.20	39.44
5925.00	31.70	PK	V	39.68	65.36	68.20	2.84
11650.00	34.61	PK	V	8.62	37.21	74.00	36.79
11650.00	22.39	AV	V	8.62	24.99	54.00	29.01
17475.00	34.20	PK	V	21.03	49.21	68.20	18.99

802.11n ht20(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5745 MHz							
5745.00	81.43	PK	H	39.46	114.87	N/A	N/A
5745.00	70.99	AV	H	39.46	104.43	N/A	N/A
5745.00	80.12	PK	V	39.46	113.56	N/A	N/A
5745.00	69.13	AV	V	39.46	102.57	N/A	N/A
5725.00	32.27	PK	H	39.48	65.73	122.20	56.47
5720.00	32.42	PK	H	39.49	65.89	110.80	44.91
5700.00	30.88	PK	H	39.51	64.37	105.20	40.83
5650.00	30.54	PK	H	39.49	64.01	68.20	4.19
11490.00	33.94	PK	H	8.17	36.09	74.00	37.91
11490.00	21.35	AV	H	8.17	23.50	54.00	30.50
17235.00	34.31	PK	H	18.40	46.69	68.20	21.51
Middle Channel: 5785 MHz							
5785.00	81.65	PK	H	39.44	115.07	N/A	N/A
5785.00	71.71	AV	H	39.44	105.13	N/A	N/A
5785.00	80.66	PK	V	39.44	114.08	N/A	N/A
5785.00	69.75	AV	V	39.44	103.17	N/A	N/A
11570.00	34.24	PK	H	8.28	36.50	74.00	37.50
11570.00	21.45	AV	H	8.28	23.71	54.00	30.29
17355.00	34.48	PK	H	19.84	48.30	68.20	19.90
High Channel: 5825MHz							
5825.00	81.26	PK	H	39.46	114.70	N/A	N/A
5825.00	70.85	AV	H	39.46	104.29	N/A	N/A
5825.00	80.92	PK	V	39.46	114.36	N/A	N/A
5825.00	69.94	AV	V	39.46	103.38	N/A	N/A
5850.00	33.34	PK	H	39.49	66.81	122.20	55.39
5855.00	32.86	PK	H	39.51	66.35	110.80	44.45
5875.00	32.92	PK	H	39.60	66.50	105.20	38.70
5925.00	31.48	PK	H	39.68	65.14	68.20	3.06
11650.00	34.41	PK	H	8.62	37.01	74.00	36.99
11650.00	22.08	AV	H	8.62	24.68	54.00	29.32
17475.00	34.33	PK	H	21.03	49.34	68.20	18.86

802.11n ht40(2Tx 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: 5755 MHz							
5755.00	78.09	PK	H	39.45	111.52	N/A	N/A
5755.00	68.78	AV	H	39.45	102.21	N/A	N/A
5755.00	77.35	PK	V	39.45	110.78	N/A	N/A
5755.00	67.54	AV	V	39.45	100.97	N/A	N/A
5725.00	33.58	PK	H	39.48	67.04	122.20	55.16
5720.00	34.02	PK	H	39.49	67.49	110.80	43.31
5700.00	30.72	PK	H	39.51	64.21	105.20	40.99
5650.00	30.55	PK	H	39.49	64.02	68.20	4.18
11510.00	33.39	PK	H	8.13	35.50	74.00	38.50
11510.00	21.58	AV	H	8.13	23.69	54.00	30.31
17265.00	34.56	PK	H	18.78	47.32	68.20	20.88
802.11n ht40, High Channel: 5795 MHz							
5795.00	77.94	PK	H	39.43	111.35	N/A	N/A
5795.00	68.64	AV	H	39.43	102.05	N/A	N/A
5795.00	78.48	PK	V	39.43	111.89	N/A	N/A
5795.00	68.38	AV	V	39.43	101.79	N/A	N/A
5850.00	33.25	PK	H	39.49	66.72	122.20	55.48
5855.00	31.94	PK	H	39.51	65.43	110.80	45.37
5875.00	31.79	PK	H	39.60	65.37	105.20	39.83
5925.00	31.69	PK	H	39.68	65.35	68.20	2.85
11590.00	34.08	PK	H	8.33	36.39	74.00	37.61
11590.00	21.74	AV	H	8.33	24.05	54.00	29.95
17385.00	33.90	PK	H	20.18	48.06	68.20	20.14

802.11ac vht80(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
802.11ac80, Middle Channel: 5775 MHz							
5775.00	73.64	PK	H	39.44	107.06	N/A	N/A
5775.00	63.18	AV	H	39.44	96.60	N/A	N/A
5775.00	74.59	PK	V	39.44	108.01	N/A	N/A
5775.00	63.81	AV	V	39.44	97.23	N/A	N/A
5725.00	36.01	PK	H	39.48	69.47	122.20	52.73
5720.00	37.35	PK	H	39.49	70.82	110.80	39.98
5700.00	35.60	PK	H	39.51	69.09	105.20	36.11
5650.00	31.24	PK	H	39.49	64.71	68.20	3.49
5850.00	36.26	PK	H	39.49	69.73	122.20	52.47
5855.00	34.31	PK	H	39.51	67.80	110.80	43.00
5875.00	34.19	PK	H	39.60	67.77	105.20	37.43
5925.00	31.50	PK	H	39.68	65.16	68.20	3.04
11550.00	34.91	PK	H	8.23	37.12	74.00	36.88
11550.00	22.20	AV	H	8.23	24.41	54.00	29.59
17325.00	34.37	PK	H	19.50	47.85	68.20	20.35

Antenna:23dBi**5150-5250MHz****5MHz Mode (2Tx was the worst):**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5165 MHz							
5165.00	90.34	PK	V	38.66	122.98	N/A	N/A
5165.00	78.15	AV	V	38.66	110.79	N/A	N/A
5165.00	94.35	PK	H	38.66	126.99	N/A	N/A
5165.00	80.41	AV	H	38.66	113.05	N/A	N/A
5150.00	40.14	PK	H	38.64	72.76	74.00	1.24
5150.00	19.49	AV	H	38.64	52.11	54.00	1.89
10330.00	35.86	PK	H	9.59	39.43	68.20	28.77
15495.00	34.57	PK	H	8.11	36.66	74.00	37.34
15495.00	22.38	AV	H	8.11	24.47	54.00	29.53
Middle Channel: 5200 MHz							
5200.00	89.77	PK	V	38.70	122.45	N/A	N/A
5200.00	77.21	AV	V	38.70	109.89	N/A	N/A
5200.00	93.36	PK	H	38.70	126.04	N/A	N/A
5200.00	80.58	AV	H	38.70	113.26	N/A	N/A
10400.00	35.27	PK	H	9.62	38.87	68.20	29.33
15600.00	34.22	PK	H	8.34	36.54	74.00	37.46
15600.00	22.01	AV	H	8.34	24.33	54.00	29.67
High Channel: 5245MHz							
5245.00	88.28	PK	V	38.87	121.13	N/A	N/A
5245.00	75.76	AV	V	38.87	108.61	N/A	N/A
5245.00	91.84	PK	H	38.87	124.69	N/A	N/A
5245.00	78.65	AV	H	38.87	111.50	N/A	N/A
5350.00	29.64	PK	H	39.03	62.65	74.00	11.35
5350.00	17.15	AV	H	39.03	50.16	54.00	3.84
10490.00	34.52	PK	H	9.48	37.98	68.20	30.22
15735.00	34.18	PK	H	8.75	36.91	74.00	37.09
15735.00	22.66	AV	H	8.75	25.39	54.00	28.61

10MHz Mode (2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5170 MHz							
5170.00	90.79	PK	V	38.66	123.43	N/A	N/A
5170.00	78.07	AV	V	38.66	110.71	N/A	N/A
5170.00	91.21	PK	H	38.66	123.85	N/A	N/A
5170.00	78.42	AV	H	38.66	111.06	N/A	N/A
5150.00	32.45	PK	H	38.64	65.07	74.00	8.93
5150.00	16.65	AV	H	38.64	49.27	54.00	4.73
10340.00	34.61	PK	H	9.60	38.19	68.20	30.01
15510.00	33.96	PK	H	8.11	36.05	74.00	37.95
15510.00	21.68	AV	H	8.11	23.77	54.00	30.23
Middle Channel: 5200 MHz							
5200.00	89.65	PK	V	38.70	122.33	N/A	N/A
5200.00	76.95	AV	V	38.70	109.63	N/A	N/A
5200.00	91.65	PK	H	38.70	124.33	N/A	N/A
5200.00	78.76	AV	H	38.70	111.44	N/A	N/A
10400.00	33.85	PK	H	9.62	37.45	68.20	30.75
15600.00	33.64	PK	H	8.34	35.96	74.00	38.04
15600.00	21.75	AV	H	8.34	24.07	54.00	29.93
High Channel: 5240MHz							
5240.00	87.96	PK	V	38.85	120.79	N/A	N/A
5240.00	75.29	AV	V	38.85	108.12	N/A	N/A
5240.00	90.36	PK	H	38.85	123.19	N/A	N/A
5240.00	76.96	AV	H	38.85	109.79	N/A	N/A
5350.00	31.52	PK	H	39.03	64.53	74.00	9.47
5350.00	17.63	AV	H	39.03	50.64	54.00	3.36
10480.00	34.96	PK	H	9.49	38.43	68.20	29.77
15720.00	33.45	PK	H	8.70	36.13	74.00	37.87
15720.00	21.38	AV	H	8.70	24.06	54.00	29.94

802.11a:

002111d.

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector					
Chain 0, Low Channel: 5180MHz							
5180.00	70.81	PK	H	38.68	103.47	N/A	N/A
5180.00	57.71	AV	H	38.68	90.37	N/A	N/A
5180.00	90.47	PK	V	38.68	123.13	N/A	N/A
5180.00	80.58	AV	V	38.68	113.24	N/A	N/A
5150.00	32.81	PK	V	38.64	65.43	74.00	8.57
5150.00	20.65	AV	V	38.64	53.27	54.00	0.73
10360.00	33.89	PK	V	9.60	37.47	68.20	30.73
15540.00	33.54	PK	V	8.18	35.70	74.00	38.30
15540.00	21.24	AV	V	8.18	23.40	54.00	30.60
Chain 0, Middle Channel: 5200 MHz							
5200.00	70.83	PK	H	38.70	103.51	N/A	N/A
5200.00	58.82	AV	H	38.70	91.50	N/A	N/A
5200.00	92.57	PK	V	38.70	125.25	N/A	N/A
5200.00	80.24	AV	V	38.70	112.92	N/A	N/A
10400.00	34.23	PK	V	9.62	37.83	68.20	30.37
15600.00	33.96	PK	V	8.34	36.28	74.00	37.72
15600.00	21.65	AV	V	8.34	23.97	54.00	30.03
Chain 0, High Channel: 5240 MHz							
5240.00	71.35	PK	H	38.85	104.18	N/A	N/A
5240.00	62.02	AV	H	38.85	94.85	N/A	N/A
5240.00	93.41	PK	V	38.85	126.24	N/A	N/A
5240.00	82.03	AV	V	38.85	114.86	N/A	N/A
5350.00	31.72	PK	V	39.03	64.73	74.00	9.27
5350.00	19.44	AV	V	39.03	52.45	54.00	1.55
10480.00	34.55	PK	V	9.49	38.02	68.20	30.18
15720.00	31.75	PK	V	8.70	34.43	74.00	39.57
15720.00	20.58	AV	V	8.70	23.26	54.00	30.74

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 1, Low Channel: 5180MHz							
5180.00	91.53	PK	H	38.68	124.19	N/A	N/A
5180.00	79.66	AV	H	38.68	112.32	N/A	N/A
5180.00	68.48	PK	V	38.68	101.14	N/A	N/A
5180.00	54.74	AV	V	38.68	87.40	N/A	N/A
5150.00	32.62	PK	H	38.64	65.24	74.00	8.76
5150.00	20.98	AV	H	38.64	53.60	54.00	0.40
10360.00	34.61	PK	H	9.60	38.19	68.20	30.01
15540.00	33.87	PK	H	8.18	36.03	74.00	37.97
15540.00	21.69	AV	H	8.18	23.85	54.00	30.15
Chain 1, Middle Channel: 5200 MHz							
5200.00	90.21	PK	H	38.70	122.89	N/A	N/A
5200.00	78.55	AV	H	38.70	111.23	N/A	N/A
5200.00	67.56	PK	V	38.70	100.24	N/A	N/A
5200.00	55.38	AV	V	38.70	88.06	N/A	N/A
10400.00	34.86	PK	H	9.62	38.46	68.20	29.74
15600.00	34.59	PK	H	8.34	36.91	74.00	37.09
15600.00	21.69	AV	H	8.34	24.01	54.00	29.99
Chain 1, High Channel: 5240 MHz							
5240.00	90.91	PK	H	38.85	123.74	N/A	N/A
5240.00	79.12	AV	H	38.85	111.95	N/A	N/A
5240.00	69.48	PK	V	38.85	102.31	N/A	N/A
5240.00	65.55	AV	V	38.85	98.38	N/A	N/A
5350.00	32.36	PK	H	39.03	65.37	74.00	8.63
5350.00	19.63	AV	H	39.03	52.64	54.00	1.36
10480.00	34.15	PK	H	9.49	37.62	68.20	30.58
15720.00	33.88	PK	H	8.70	36.56	74.00	37.44
15720.00	21.79	AV	H	8.70	24.47	54.00	29.53

802.11n ht20(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5180MHz							
5180.00	91.82	PK	V	38.68	124.48	N/A	N/A
5180.00	79.41	AV	V	38.68	112.07	N/A	N/A
5180.00	93.28	PK	H	38.68	125.94	N/A	N/A
5180.00	79.94	AV	H	38.68	112.60	N/A	N/A
5150.00	32.71	PK	H	38.64	65.33	74.00	8.67
5150.00	20.44	AV	H	38.64	53.06	54.00	0.94
10360.00	34.87	PK	H	9.60	38.45	68.20	29.75
15540.00	34.25	PK	H	8.18	36.41	74.00	37.59
15540.00	22.66	AV	H	8.18	24.82	54.00	29.18
Middle Channel: 5200 MHz							
5200.00	93.06	PK	V	38.70	125.74	N/A	N/A
5200.00	80.28	AV	V	38.70	112.96	N/A	N/A
5200.00	93.61	PK	H	38.70	126.29	N/A	N/A
5200.00	80.49	AV	H	38.70	113.17	N/A	N/A
10400.00	34.76	PK	H	9.62	38.36	68.20	29.84
15600.00	34.52	PK	H	8.34	36.84	74.00	37.16
15600.00	22.16	AV	H	8.34	24.48	54.00	29.52
High Channel: 5240 MHz							
5240.00	90.42	PK	V	38.85	123.25	N/A	N/A
5240.00	77.98	AV	V	38.85	110.81	N/A	N/A
5240.00	94.18	PK	H	38.85	127.01	N/A	N/A
5240.00	81.56	AV	H	38.85	114.39	N/A	N/A
5350.00	32.64	PK	H	39.03	65.65	74.00	8.35
5350.00	19.33	AV	H	39.03	52.34	54.00	1.66
10480.00	34.98	PK	H	9.49	38.45	68.20	29.75
15720.00	33.96	PK	H	8.70	36.64	74.00	37.36
15720.00	21.48	AV	H	8.70	24.16	54.00	29.84

802.11n ht40(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5190 MHz							
5190.00	84.41	PK	V	38.69	117.08	N/A	N/A
5190.00	73.89	AV	V	38.69	106.56	N/A	N/A
5190.00	85.33	PK	H	38.69	118.00	N/A	N/A
5190.00	74.21	AV	H	38.69	106.88	N/A	N/A
5150.00	32.14	PK	H	38.64	64.76	74.00	9.24
5150.00	19.86	AV	H	38.64	52.48	54.00	1.52
10380.00	34.88	PK	H	9.61	38.47	68.20	29.73
15570.00	32.51	PK	H	8.26	34.75	74.00	39.25
15570.00	21.02	AV	H	8.26	23.26	54.00	30.74
High Channel: 5230 MHz							
5230.00	84.28	PK	V	38.81	117.07	N/A	N/A
5230.00	72.34	AV	V	38.81	105.13	N/A	N/A
5230.00	87.01	PK	H	38.81	119.80	N/A	N/A
5230.00	75.23	AV	H	38.81	108.02	N/A	N/A
5350.00	30.43	PK	H	39.03	63.44	74.00	10.56
5350.00	17.90	AV	H	39.03	50.91	54.00	3.09
10460.00	34.09	PK	H	9.52	37.59	68.20	30.61
15690.00	33.25	PK	H	8.60	35.83	74.00	38.17
15690.00	21.67	AV	H	8.60	24.25	54.00	29.75

802.11ac vht80(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5210 MHz							
5210.00	79.45	PK	V	38.74	112.17	N/A	N/A
5210.00	67.35	AV	V	38.74	100.07	N/A	N/A
5210.00	79.54	PK	H	38.74	112.26	N/A	N/A
5210.00	67.74	AV	H	38.74	100.46	N/A	N/A
5150.00	32.23	PK	H	38.64	64.85	74.00	9.15
5150.00	19.20	AV	H	38.64	51.82	54.00	2.18
5350.00	29.73	PK	H	39.03	62.74	74.00	11.26
5350.00	18.14	AV	H	39.03	51.15	54.00	2.85
10420.00	34.45	PK	H	9.59	38.02	68.20	30.18
15630.00	33.59	PK	H	8.43	36.00	74.00	38.00
15630.00	21.48	AV	H	8.43	23.89	54.00	30.11

5725-5850MHz:**5MHz Mode (2Tx was the worst):**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5730 MHz							
5730.00	93.15	PK	H	39.47	126.60	N/A	N/A
5730.00	82.05	AV	H	39.47	115.50	N/A	N/A
5730.00	93.97	PK	V	39.47	127.42	N/A	N/A
5730.00	81.06	AV	V	39.47	114.51	N/A	N/A
5725.00	44.49	PK	V	39.48	77.95	122.20	44.25
5720.00	38.42	PK	V	39.49	71.89	110.80	38.91
5700.00	32.85	PK	V	39.51	66.34	105.20	38.86
5650.00	32.74	PK	V	39.49	66.21	68.20	1.99
11460.00	32.45	PK	V	8.33	34.76	74.00	39.24
11460.00	21.69	AV	V	8.33	24.00	54.00	30.00
17190.00	33.62	PK	V	17.89	45.49	68.20	22.71
Middle Channel: 5795 MHz							
5795.00	91.82	PK	H	39.43	125.23	N/A	N/A
5795.00	79.46	AV	H	39.43	112.87	N/A	N/A
5795.00	93.96	PK	V	39.43	127.37	N/A	N/A
5795.00	81.05	AV	V	39.43	114.46	N/A	N/A
11590.00	34.76	PK	V	8.33	37.07	74.00	36.93
11590.00	22.54	AV	V	8.33	24.85	54.00	29.15
17385.00	33.64	PK	V	20.18	47.80	68.20	20.40
High Channel: 5845MHz							
5845.00	92.68	PK	H	39.48	126.14	N/A	N/A
5845.00	80.14	AV	H	39.48	113.60	N/A	N/A
5845.00	94.26	PK	V	39.48	127.72	N/A	N/A
5845.00	81.56	AV	V	39.48	115.02	N/A	N/A
5850.00	42.65	PK	V	39.49	76.12	122.20	46.08
5855.00	42.26	PK	V	39.51	75.75	110.80	35.05
5875.00	33.61	PK	V	39.60	67.19	105.20	38.01
5925.00	31.85	PK	V	39.68	65.51	68.20	2.69
11690.00	34.57	PK	V	8.84	37.39	74.00	36.61
11690.00	22.48	AV	V	8.84	25.30	54.00	28.70
17535.00	31.29	PK	V	21.38	46.65	68.20	21.55

10MHz Mode (2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5735 MHz							
5735.00	91.38	PK	H	39.47	124.83	N/A	N/A
5735.00	78.46	AV	H	39.47	111.91	N/A	N/A
5735.00	91.98	PK	V	39.47	125.43	N/A	N/A
5735.00	79.11	AV	V	39.47	112.56	N/A	N/A
5725.00	37.15	PK	V	39.48	70.61	122.20	51.59
5720.00	37.25	PK	V	39.49	70.72	110.80	40.08
5700.00	32.81	PK	V	39.51	66.30	105.20	38.90
5650.00	32.36	PK	V	39.49	65.83	68.20	2.37
11470.00	33.68	PK	V	8.28	35.94	74.00	38.06
11470.00	21.39	AV	V	8.28	23.65	54.00	30.35
17205.00	33.85	PK	V	18.03	45.86	68.20	22.34
Middle Channel: 5795 MHz							
5795.00	92.14	PK	H	39.43	125.55	N/A	N/A
5795.00	79.84	AV	H	39.43	113.25	N/A	N/A
5795.00	92.69	PK	V	39.43	126.10	N/A	N/A
5795.00	79.91	AV	V	39.43	113.32	N/A	N/A
11590.00	34.58	PK	V	8.33	36.89	74.00	37.11
11590.00	22.17	AV	V	8.33	24.48	54.00	29.52
17385.00	33.67	PK	V	20.18	47.83	68.20	20.37
High Channel: 5840 MHz							
5840.00	90.78	PK	H	39.48	124.24	N/A	N/A
5840.00	78.32	AV	H	39.48	111.78	N/A	N/A
5840.00	91.99	PK	V	39.48	125.45	N/A	N/A
5840.00	79.65	AV	V	39.48	113.11	N/A	N/A
5850.00	42.17	PK	V	39.49	75.64	122.20	46.56
5855.00	36.64	PK	V	39.51	70.13	110.80	40.67
5875.00	32.44	PK	V	39.60	66.02	105.20	39.18
5925.00	31.64	PK	V	39.68	65.30	68.20	2.90
11680.00	34.25	PK	V	8.78	37.01	74.00	36.99
11680.00	22.62	AV	V	8.78	25.38	54.00	28.62
17520.00	33.68	PK	V	21.33	48.99	68.20	19.21

802.11a:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 0, Low Channel: 5745MHz							
5745.00	74.65	PK	H	39.46	108.09	N/A	N/A
5745.00	62.98	AV	H	39.46	96.42	N/A	N/A
5745.00	95.34	PK	V	39.46	128.78	N/A	N/A
5745.00	83.76	AV	V	39.46	117.20	N/A	N/A
5725.00	43.16	PK	V	39.48	76.62	122.20	45.58
5720.00	40.62	PK	V	39.49	74.09	110.80	36.71
5700.00	36.61	PK	V	39.51	70.10	105.20	35.10
5650.00	33.57	PK	V	39.49	67.04	68.20	1.16
11490.00	33.68	PK	V	8.17	35.83	74.00	38.17
11490.00	21.59	AV	V	8.17	23.74	54.00	30.26
17235.00	33.61	PK	V	18.40	45.99	68.20	22.21
Chain 0, Middle Channel: 5785 MHz							
5785.00	73.75	PK	H	39.44	107.17	N/A	N/A
5785.00	62.59	AV	H	39.44	96.01	N/A	N/A
5785.00	91.80	PK	V	39.44	125.22	N/A	N/A
5785.00	80.09	AV	V	39.44	113.51	N/A	N/A
11570.00	33.95	PK	V	8.28	36.21	74.00	37.79
11570.00	21.74	AV	V	8.28	24.00	54.00	30.00
17355.00	33.26	PK	V	19.84	47.08	68.20	21.12
Chain 0, High Channel: 5825 MHz							
5825.00	72.58	PK	H	39.46	106.02	N/A	N/A
5825.00	61.94	AV	H	39.46	95.38	N/A	N/A
5825.00	90.02	PK	V	39.46	123.46	N/A	N/A
5825.00	76.87	AV	V	39.46	110.31	N/A	N/A
5850.00	33.92	PK	V	39.49	67.39	122.20	54.81
5855.00	33.30	PK	V	39.51	66.79	110.80	44.01
5875.00	33.46	PK	V	39.60	67.04	105.20	38.16
5925.00	33.32	PK	V	39.68	66.98	68.20	1.22
11650.00	33.94	PK	V	8.62	36.54	74.00	37.46
11650.00	21.38	AV	V	8.62	23.98	54.00	30.02
17475.00	33.75	PK	V	21.03	48.76	68.20	19.44

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Chain 1, Low Channel: 5745MHz							
5745.00	84.69	PK	H	39.46	118.13	N/A	N/A
5745.00	72.65	AV	H	39.46	106.09	N/A	N/A
5745.00	59.68	PK	V	39.46	93.12	N/A	N/A
5745.00	48.34	AV	V	39.46	81.78	N/A	N/A
5725.00	33.47	PK	H	39.48	66.93	122.20	55.27
5720.00	32.27	PK	H	39.49	65.74	110.80	45.06
5700.00	31.97	PK	H	39.51	65.46	105.20	39.74
5650.00	31.94	PK	H	39.49	65.41	68.20	2.79
11490.00	34.76	PK	H	8.17	36.91	74.00	37.09
11490.00	22.51	AV	H	8.17	24.66	54.00	29.34
17235.00	33.68	PK	H	18.40	46.06	68.20	22.14
Chain 1,Middle Channel: 5785 MHz							
5785.00	85.89	PK	H	39.44	119.31	N/A	N/A
5785.00	73.69	AV	H	39.44	107.11	N/A	N/A
5785.00	60.25	PK	V	39.44	93.67	N/A	N/A
5785.00	49.68	AV	V	39.44	83.10	N/A	N/A
11570.00	33.85	PK	H	8.28	36.11	74.00	37.89
11570.00	21.49	AV	H	8.28	23.75	54.00	30.25
17355.00	33.62	PK	H	19.84	47.44	68.20	20.76
Chain 1,High Channel: 5825 MHz							
5825.00	87.21	PK	H	39.46	120.65	N/A	N/A
5825.00	74.43	AV	H	39.46	107.87	N/A	N/A
5825.00	62.71	PK	V	39.46	96.15	N/A	N/A
5825.00	50.21	AV	V	39.46	83.65	N/A	N/A
5850.00	0.00	PK	H	39.49	33.47	122.20	88.73
5855.00	34.21	PK	H	39.51	67.70	110.80	43.10
5875.00	33.62	PK	H	39.60	67.20	105.20	38.00
5925.00	32.95	PK	H	39.68	66.61	68.20	1.59
11650.00	34.55	PK	H	8.62	37.15	74.00	36.85
11650.00	22.36	AV	H	8.62	24.96	54.00	29.04
17475.00	33.44	PK	H	21.03	48.45	68.20	19.75

802.11n ht20(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5745 MHz							
5745.00	84.79	PK	V	39.46	118.23	N/A	N/A
5745.00	72.15	AV	V	39.46	105.59	N/A	N/A
5745.00	86.22	PK	H	39.46	119.66	N/A	N/A
5745.00	75.05	AV	H	39.46	108.49	N/A	N/A
5725.00	33.48	PK	H	39.48	66.94	122.20	55.26
5720.00	31.38	PK	H	39.49	64.85	110.80	45.95
5700.00	32.06	PK	H	39.51	65.55	105.20	39.65
5650.00	31.35	PK	H	39.49	64.82	68.20	3.38
11490.00	34.67	PK	H	8.17	36.82	74.00	37.18
11490.00	22.53	AV	H	8.17	24.68	54.00	29.32
17235.00	33.46	PK	H	18.40	45.84	68.20	22.36
Middle Channel: 5785 MHz							
5785.00	85.84	PK	V	39.44	119.26	N/A	N/A
5785.00	72.76	AV	V	39.44	106.18	N/A	N/A
5785.00	89.16	PK	H	39.44	122.58	N/A	N/A
5785.00	76.34	AV	H	39.44	109.76	N/A	N/A
11570.00	34.74	PK	H	8.28	37.00	74.00	37.00
11570.00	21.85	AV	H	8.28	24.11	54.00	29.89
17355.00	33.66	PK	H	19.84	47.48	68.20	20.72
High Channel: 5825MHz							
5825.00	86.51	PK	V	39.46	119.95	N/A	N/A
5825.00	74.33	AV	V	39.46	107.77	N/A	N/A
5825.00	89.73	PK	H	39.46	123.17	N/A	N/A
5825.00	76.86	AV	H	39.46	110.30	N/A	N/A
5850.00	35.62	PK	H	39.49	69.09	122.20	53.11
5855.00	34.63	PK	H	39.51	68.12	110.80	42.68
5875.00	34.17	PK	H	39.60	67.75	105.20	37.45
5925.00	32.65	PK	H	39.68	66.31	68.20	1.89
11650.00	34.96	PK	H	8.62	37.56	74.00	36.44
11650.00	22.38	AV	H	8.62	24.98	54.00	29.02
17475.00	33.51	PK	H	21.03	48.52	68.20	19.68

802.11n ht40(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 5755 MHz							
5755.00	83.13	PK	V	39.45	116.56	N/A	N/A
5755.00	70.92	AV	V	39.45	104.35	N/A	N/A
5755.00	85.32	PK	H	39.45	118.75	N/A	N/A
5755.00	73.59	AV	H	39.45	107.02	N/A	N/A
5725.00	33.27	PK	H	39.48	66.73	122.20	55.47
5720.00	32.67	PK	H	39.49	66.14	110.80	44.66
5700.00	31.54	PK	H	39.51	65.03	105.20	40.17
5650.00	31.86	PK	H	39.49	65.33	68.20	2.87
11510.00	34.69	PK	H	8.13	36.80	74.00	37.20
11510.00	22.38	AV	H	8.13	24.49	54.00	29.51
17265.00	33.95	PK	H	18.78	46.71	68.20	21.49
High Channel: 5795 MHz							
5795.00	83.43	PK	V	39.43	116.84	N/A	N/A
5795.00	71.26	AV	V	39.43	104.67	N/A	N/A
5795.00	85.84	PK	H	39.43	119.25	N/A	N/A
5795.00	73.98	AV	H	39.43	107.39	N/A	N/A
5850.00	34.97	PK	H	39.49	68.44	122.20	53.76
5855.00	34.84	PK	H	39.51	68.33	110.80	42.47
5875.00	33.95	PK	H	39.60	67.53	105.20	37.67
5925.00	33.06	PK	H	39.68	66.72	68.20	1.48
11590.00	34.62	PK	H	8.33	36.93	74.00	37.07
11590.00	21.97	AV	H	8.33	24.28	54.00	29.72
17385.00	33.16	PK	H	20.18	47.32	68.20	20.88

802.11ac vht80(2Tx was the worst):

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Middle Channel: 5775 MHz							
5775.00	78.13	PK	V	39.44	111.55	N/A	N/A
5775.00	65.84	AV	V	39.44	99.26	N/A	N/A
5775.00	80.53	PK	H	39.44	113.95	N/A	N/A
5775.00	69.69	AV	H	39.44	103.11	N/A	N/A
5725.00	33.85	PK	H	39.48	67.31	122.20	54.89
5720.00	33.98	PK	H	39.49	67.45	110.80	43.35
5700.00	34.47	PK	H	39.51	67.96	105.20	37.24
5650.00	31.62	PK	H	39.49	65.09	68.20	3.11
5850.00	35.12	PK	H	39.49	68.59	122.20	53.61
5855.00	35.44	PK	H	39.51	68.93	110.80	41.87
5875.00	33.91	PK	H	39.60	67.49	105.20	37.71
5925.00	33.16	PK	H	39.68	66.82	68.20	1.38
11550.00	34.92	PK	H	8.23	37.13	74.00	36.87
11550.00	22.56	AV	H	8.23	24.77	54.00	29.23
17325.00	33.94	PK	H	19.50	47.42	68.20	20.78

Simultaneous transmission:

(The 4.9G Radio and 5G NII can't transmit simultaneously, 4.9G Radio or 5G NII can transmit simultaneously with BLE)

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Worst: 23dBi antenna 802.11a Chain 0 5825 MHz+BLE 2480MHz							
11650.00	47.99	PK	H	21.07	63.04	74.00	10.96
11650.00	36.18	AV	H	21.07	51.23	54.00	2.77
17475.00	36.58	PK	H	28.61	59.17	68.20	9.03
4960.00	44.14	PK	H	11.23	49.35	74.00	24.65
4960.00	37.26	AV	H	11.23	42.47	54.00	11.53
7440.00	42.14	PK	H	15.26	51.38	74.00	22.62
7440.00	33.58	AV	H	15.26	42.82	54.00	11.18

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

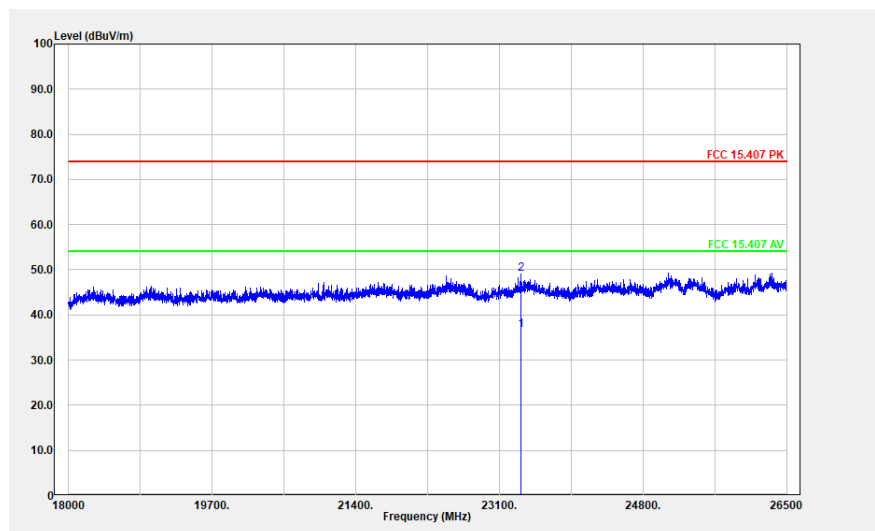
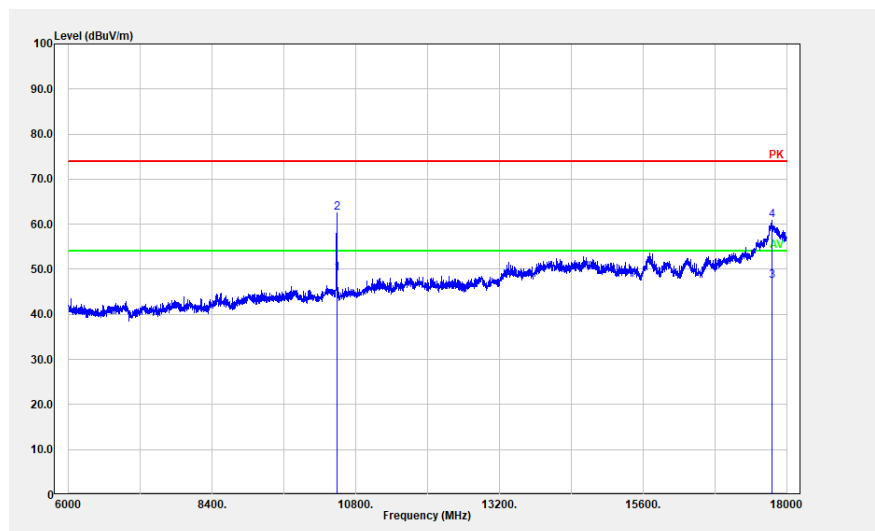
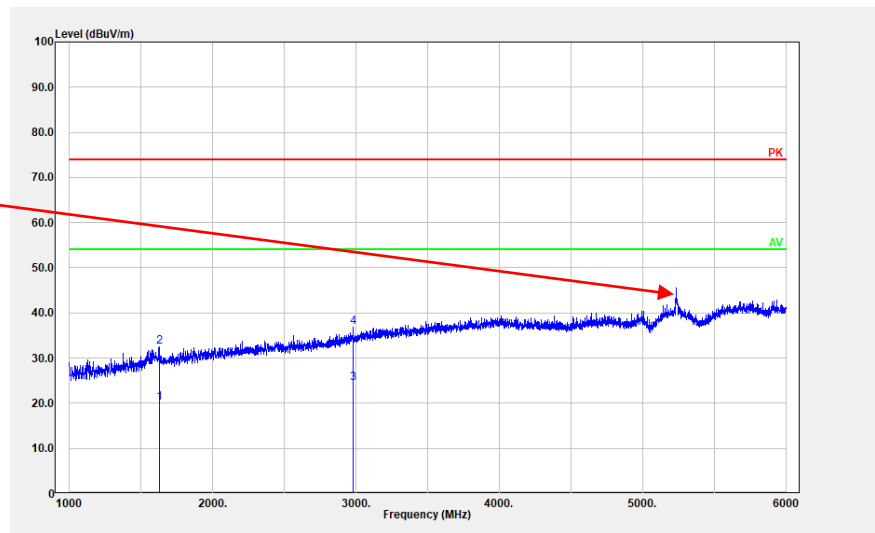
For 26.5-40GHz:

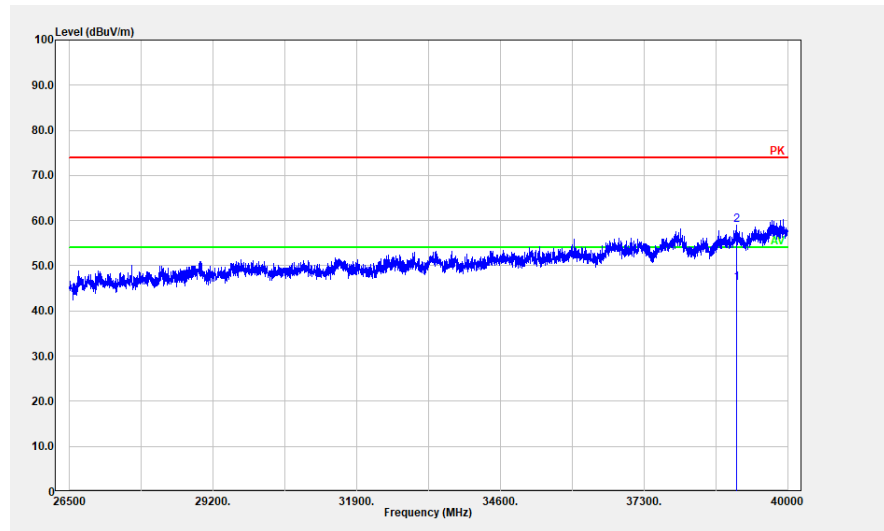
Distance extrapolation Factor = $20 \log (\text{specific distance [3m]}/\text{test distance [1m]})$ dB= 9.54 dB

Worst Test plots (23dBi antenna 802.11a chain 0 5825 MHz was the worst)

Horizontal:

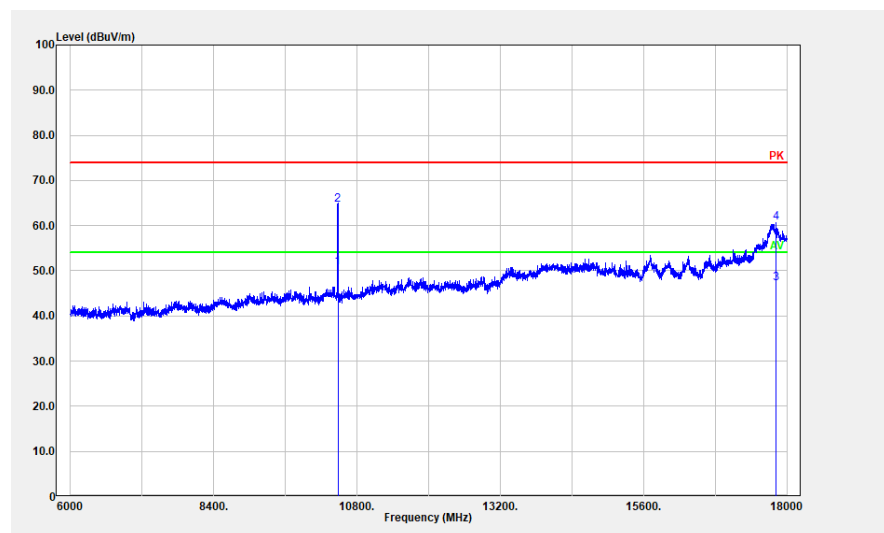
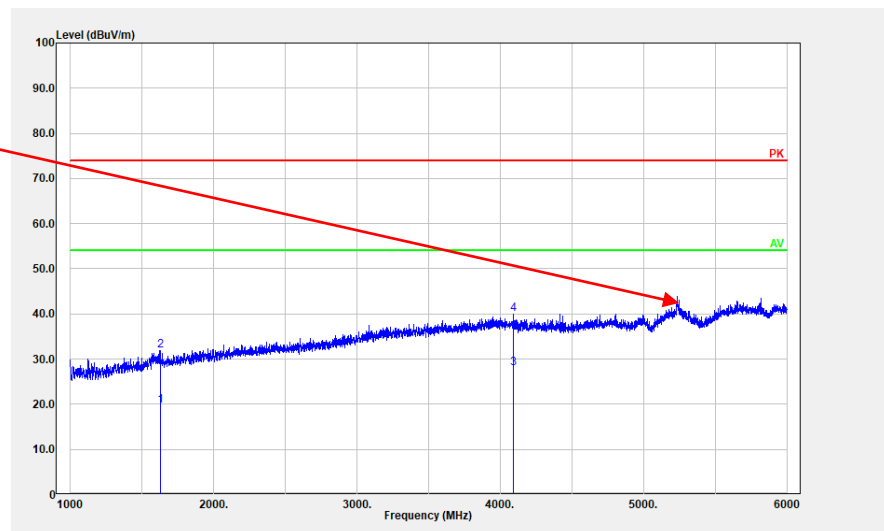
Fundamental
Test with Band
Rejection Filter

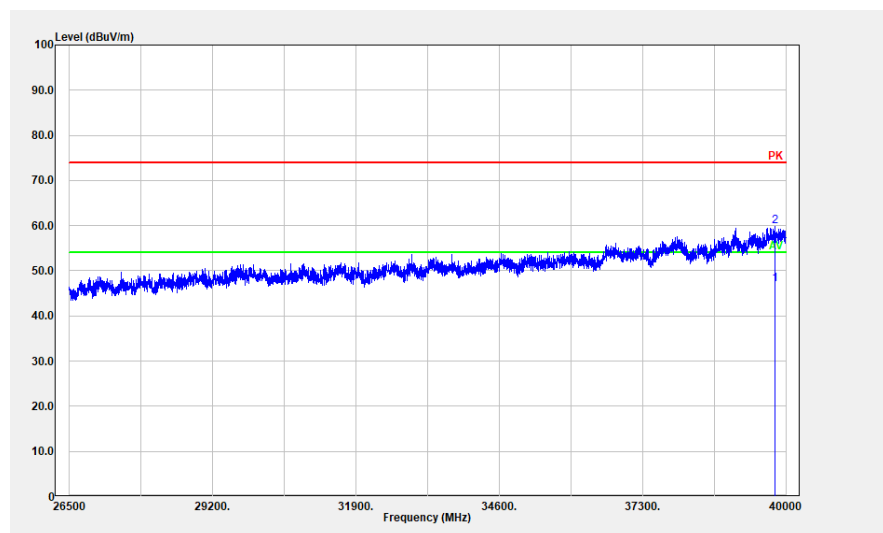
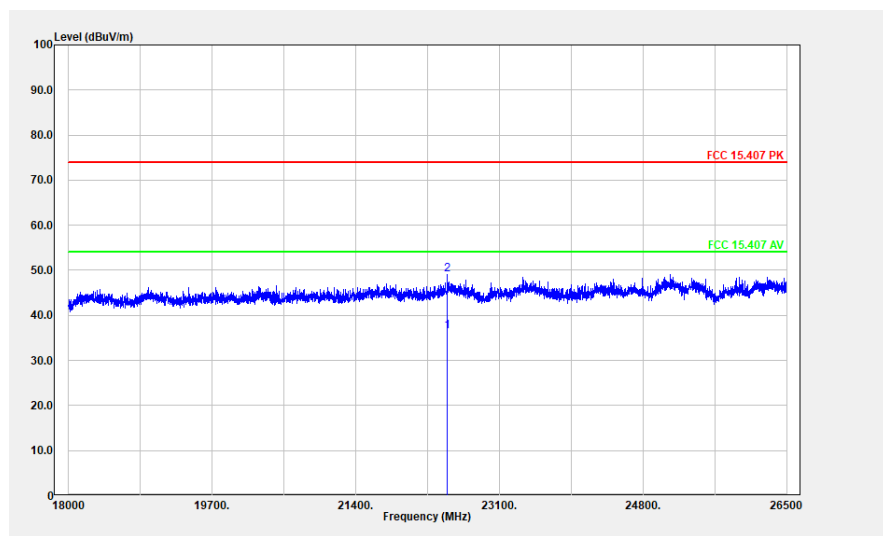




Vertical:

Fundamental
Test with Band
Rejection Filter





4.3 Emission Bandwidth:

Serial Number:	CR21090075-RF-S1	Test Date:	2022-03-23~2022-06-02
Test Site:	RF	Test Mode:	Transmitting (Test only performed at chain 0 at maximum power level setting)
Tester:	Julie Tan	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	23.5~24	Relative Humidity: (%)	54~60	ATM Pressure: (kPa)	101~101.1
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU 26	200160/026	2021-10-26	2022-10-25
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	N/A
E-Microwave	Coaxial Attenuators	EMCA10-5RN-6	OE01203239	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:**5150-5250MHz:**

Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5180	20.640	17.680
	5200	20.720	17.680
	5240	20.640	17.680
802.11n ht20	5180	20.640	17.680
	5200	20.640	17.680
	5240	20.720	17.680
802.11n ht40	5190	39.520	36.000
	5230	39.680	35.840
802.11ac vht80	5210	83.840	76.160
5MHz	5165	5.228	4.455
	5200	5.218	4.455
	5245	5.24	4.439
10MHz	5170	10.769	9.006
	5200	10.782	9.006
	5240	10.801	8.974
Note: Test only was performed at Chain 0.			

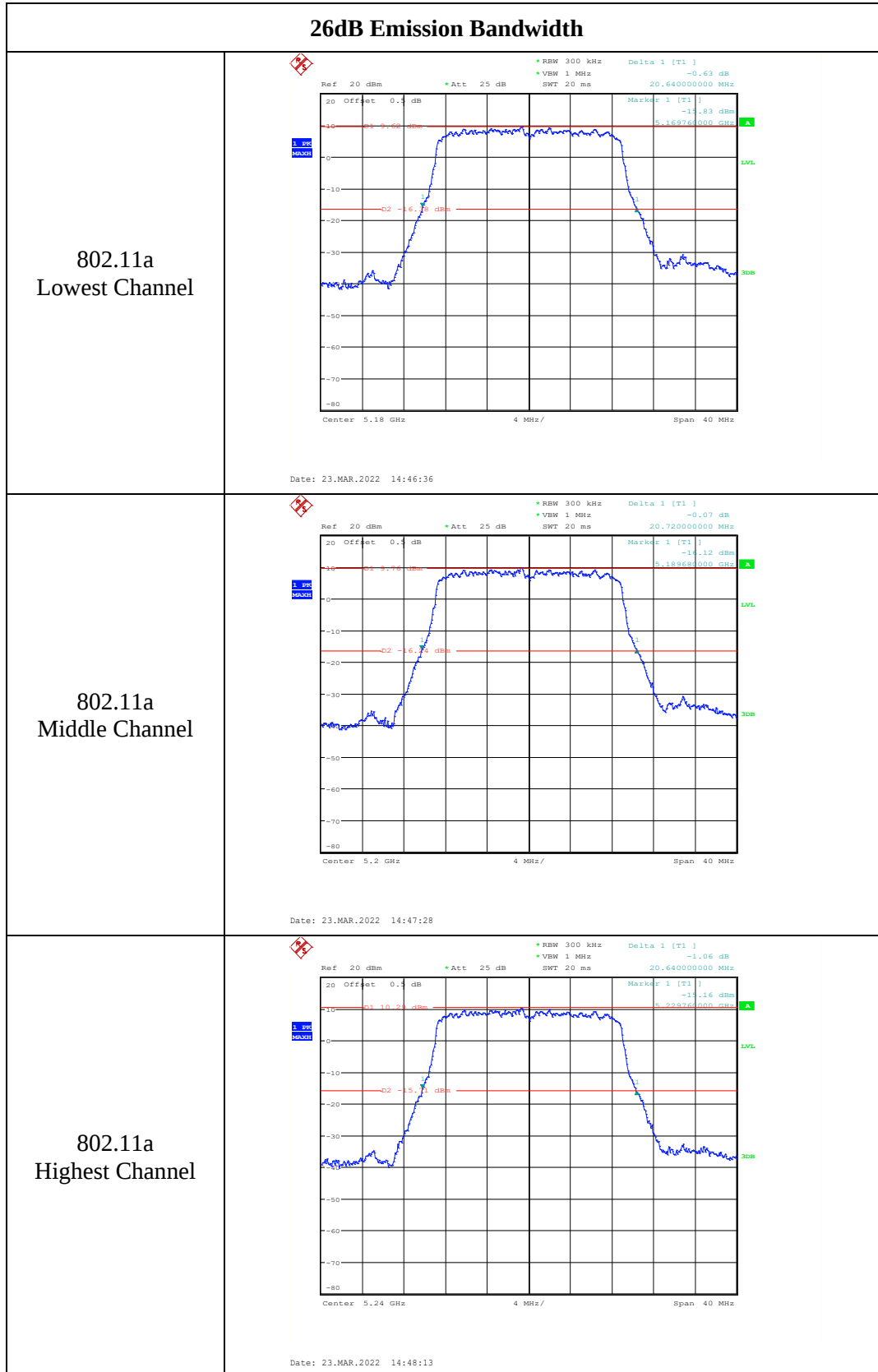
Note: the 99% Occupied Bandwidth have not fall into the band 5250-5350MHz or 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

5725-5850MHz:

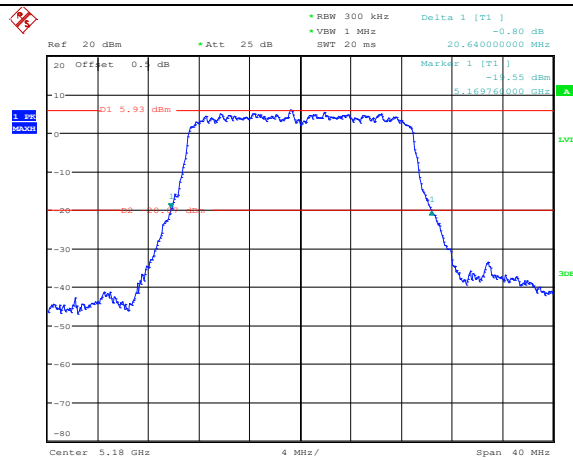
Test Modes	Test Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5745	17.280	17.680
	5785	16.880	17.680
	5825	16.880	17.680
802.11n ht20	5745	16.960	17.680
	5785	17.440	17.680
	5825	17.600	17.680
802.11n ht40	5755	35.200	36.000
	5795	35.520	36.000
802.11ac vht80	5775	75.840	75.840
5MHz	5730	4.458	4.455
	5795	4.449	4.455
	5845	4.458	4.455
10MHz	5735	8.878	9.006
	5795	8.846	9.006
	5840	8.923	9.006
Note: 6dB Emission Bandwidth Limit: ≥ 0.5 MHz Test only was performed at Chain 0.			

Note: the 99% Occupied Bandwidth have not fall into the band 5250-5350MHz or 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

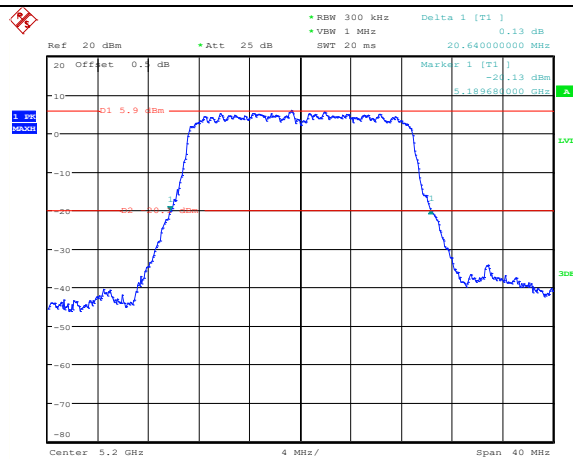
5150-5250MHz:



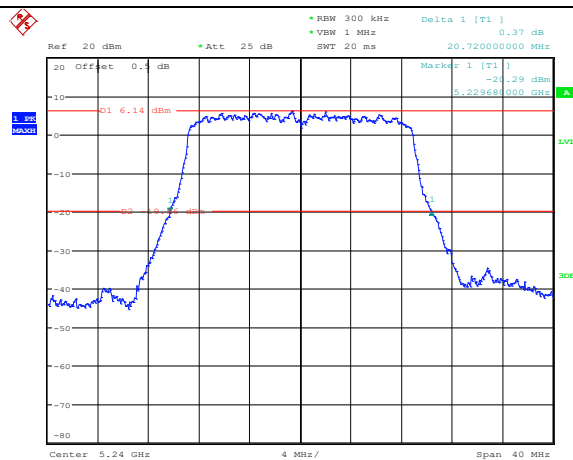
26dB Emission Bandwidth

802.11n ht20
Lowest Channel

Date: 23.MAR.2022 14:49:15

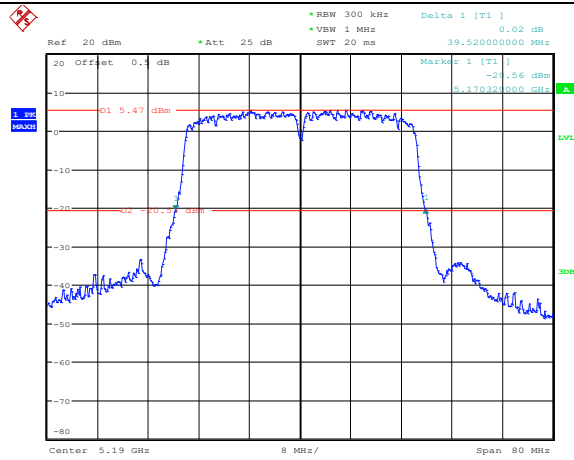
802.11n ht20
Middle Channel

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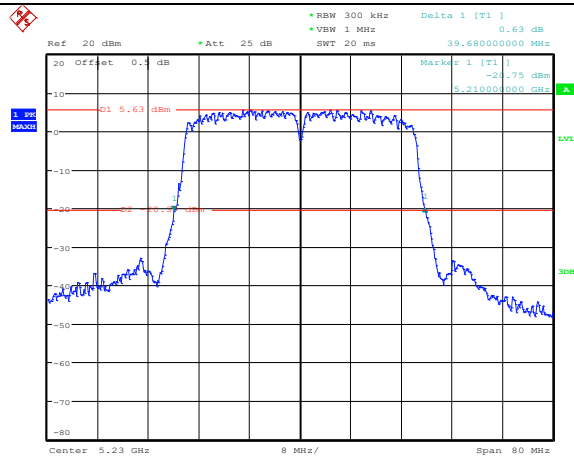
802.11n ht20
Highest Channel

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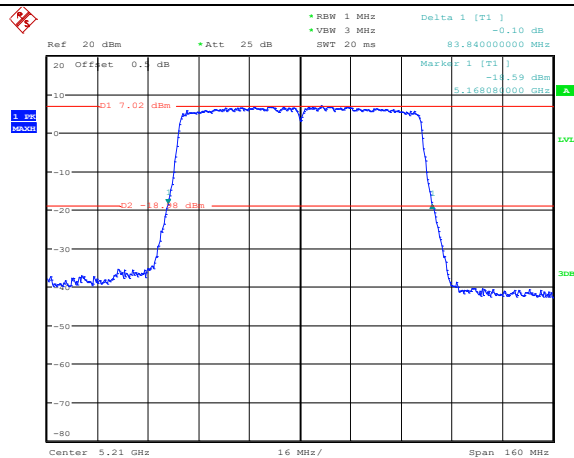
26dB Emission Bandwidth

802.11 n40
Lowest Channel

Date: 23.MAR.2022 14:52:12

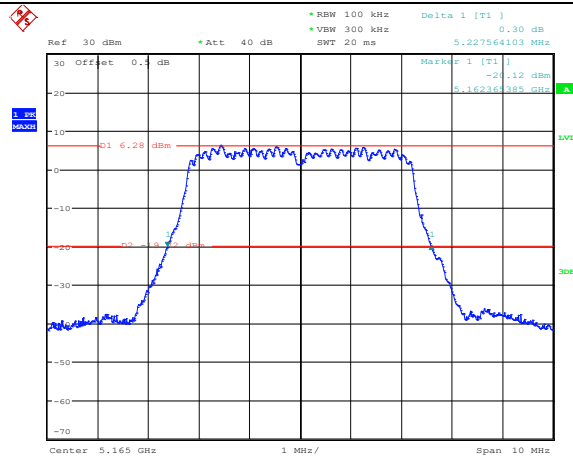
802.11 n40
Highest Channel

Date: 23.MAR.2022 14:53:01

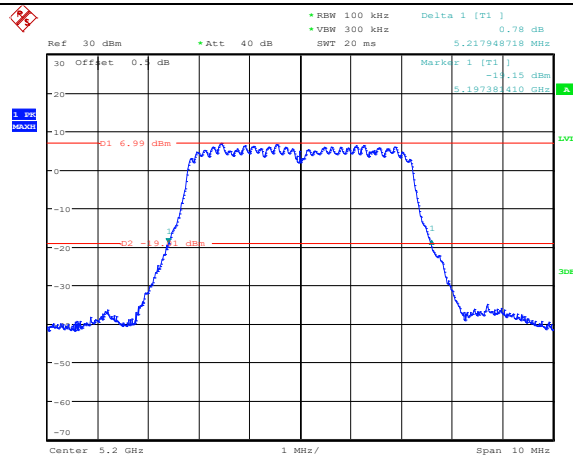
802.11 ac80
Middle Channel

Date: 23.MAR.2022 14:53:58

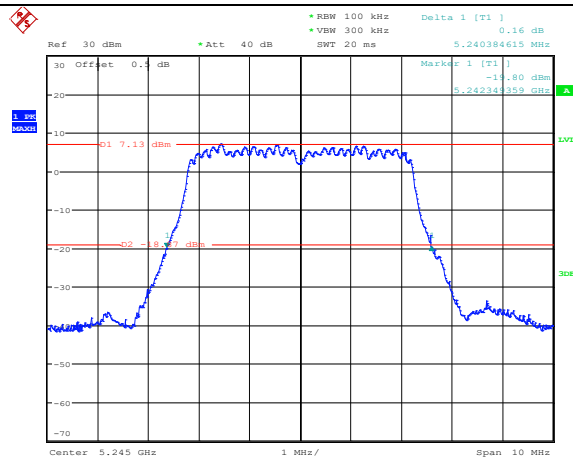
26dB Emission Bandwidth

5M
Lowest Channel

Date: 24.MAR.2022 19:10:51

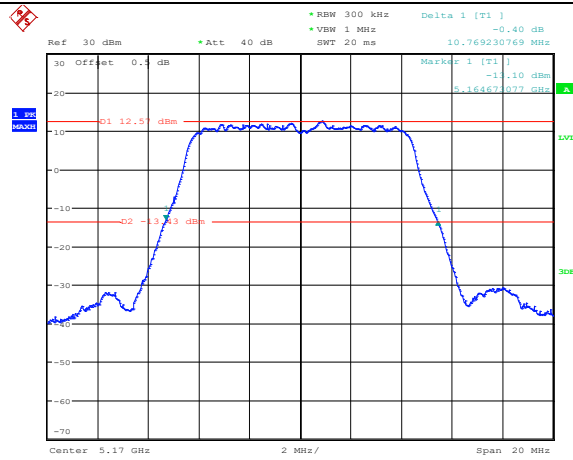
5M
Middle Channel

Date: 24.MAR.2022 19:13:37

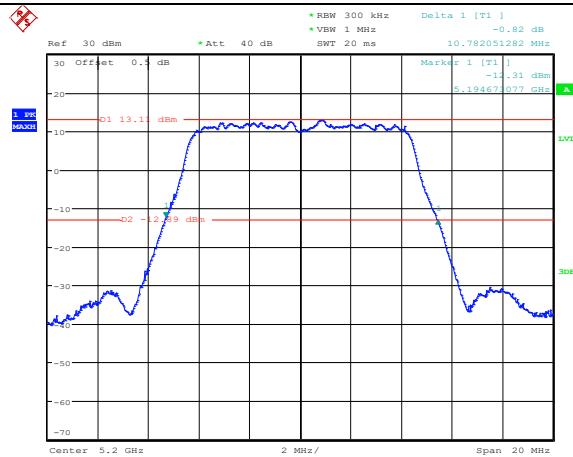
5M
Highest Channel

Date: 24.MAR.2022 19:18:59

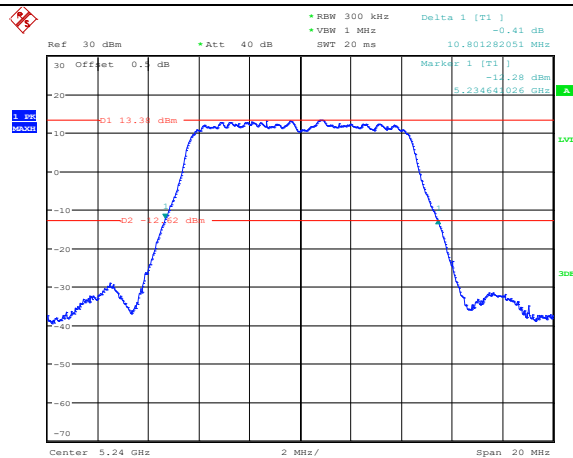
26dB Emission Bandwidth

10M
Lowest Channel

Date: 24.MAR.2022 18:22:00

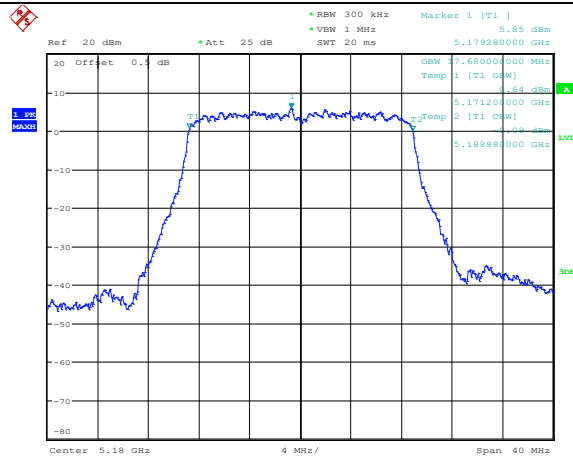
10M
Middle Channel

Date: 24.MAR.2022 18:25:48

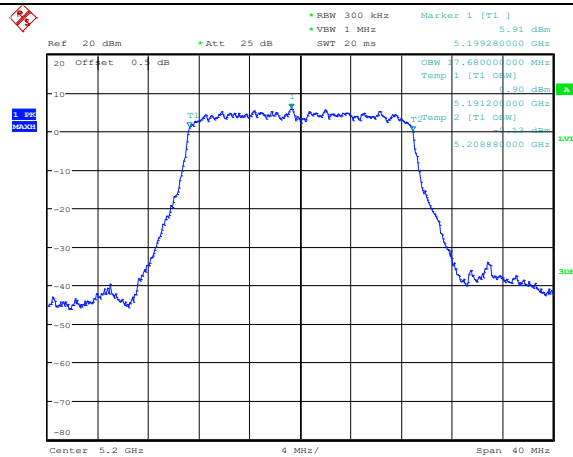
10M
Highest Channel

Date: 24.MAR.2022 18:28:39

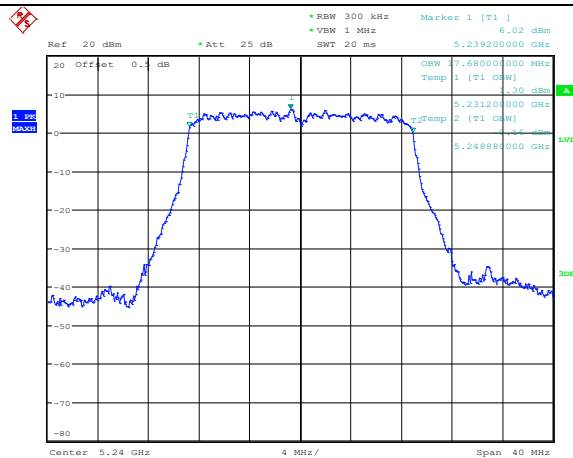
99% Emission Bandwidth

802.11n ht20
Lowest Channel

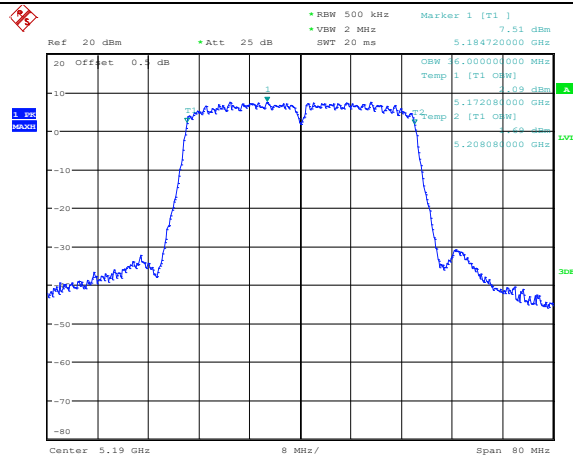
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802.11n ht20
Middle Channel

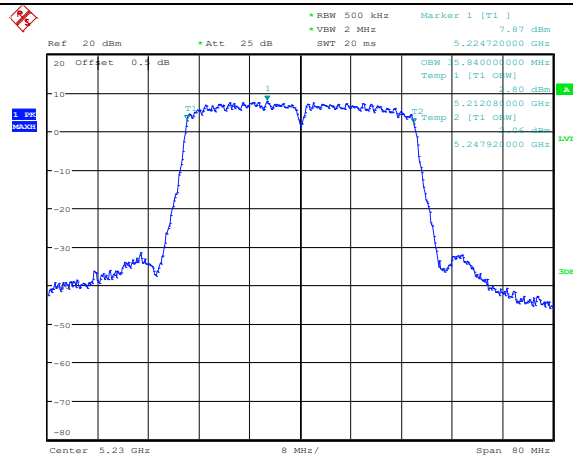
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802.11n ht20
Highest Channel

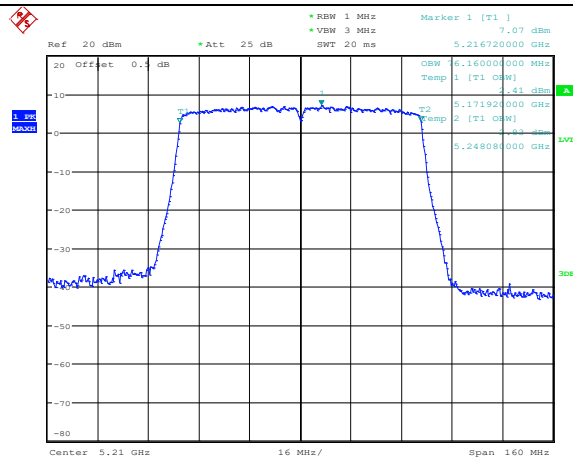
Date: 23.MAR.2022 14:51:03

99% Emission Bandwidth802.11n ht40
Lowest Channel

Date: 23.MAR.2022 14:52:31

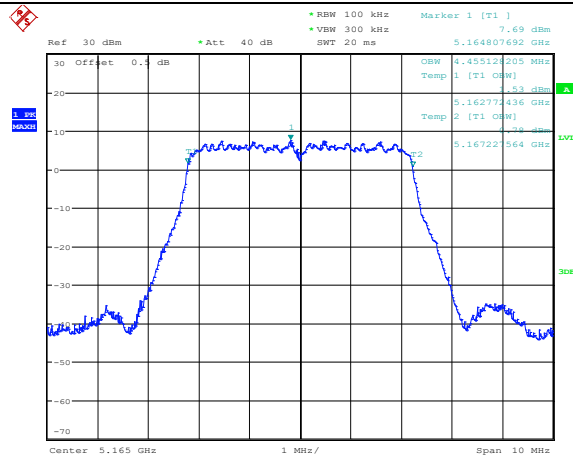
802.11n ht40
Highest Channel

Date: 23.MAR.2022 14:53:16

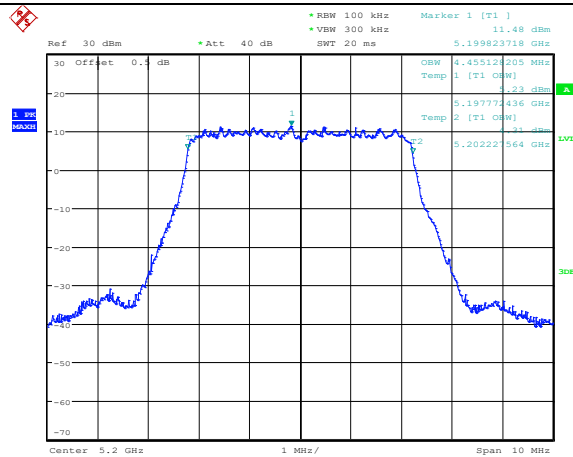
802.11 ac80
Middle Channel

Date: 23.MAR.2022 14:54:13

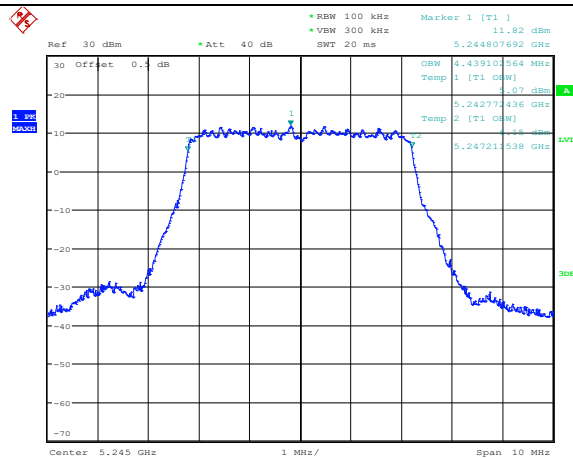
99% Emission Bandwidth

5M
Lowest Channel

Date: 24.MAR.2022 20:45:27

5M
Middle Channel

Date: 24.MAR.2022 20:46:39

5M
Highest Channel

Date: 24.MAR.2022 20:47:42

10M
Lowest Channel



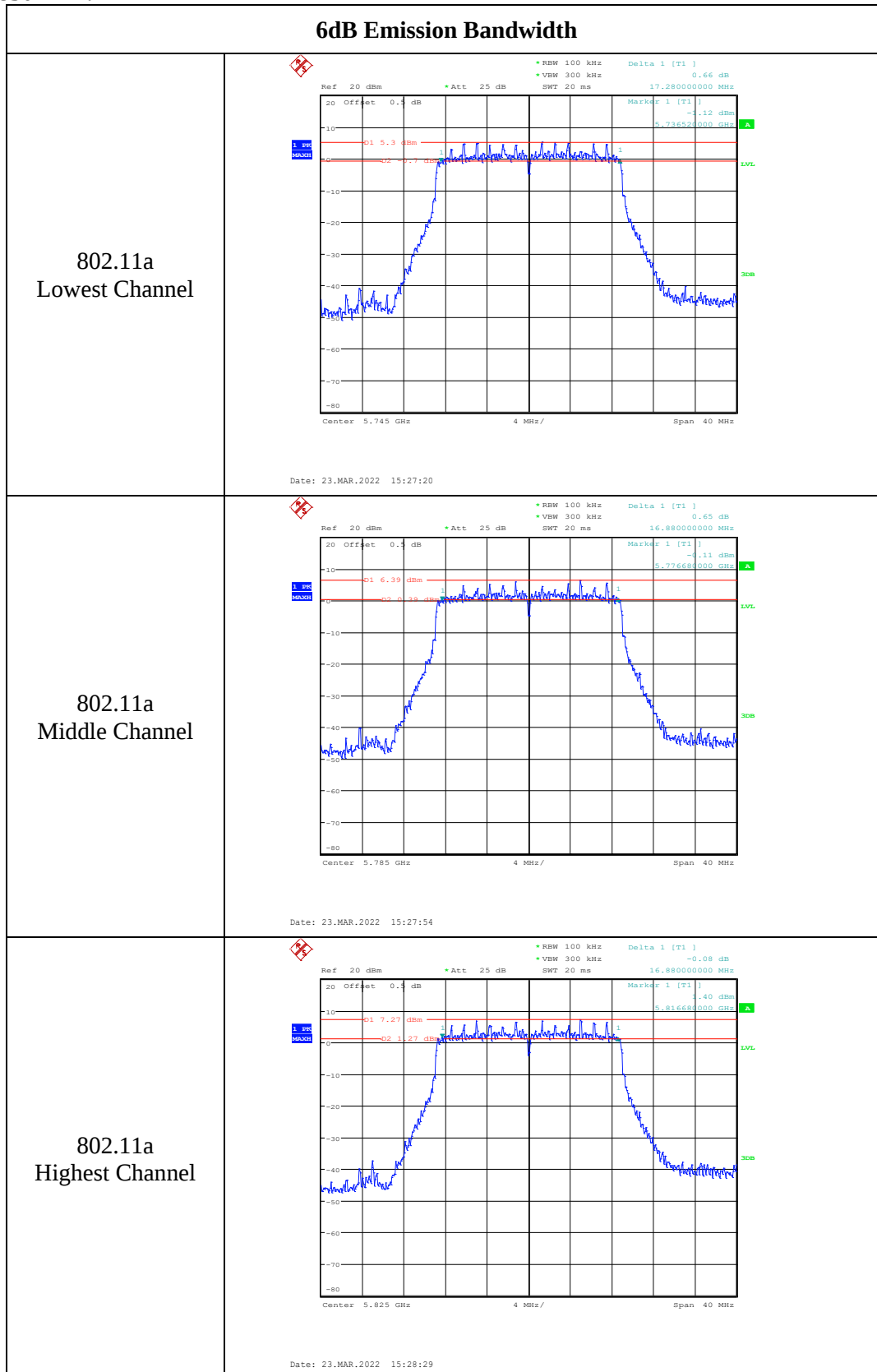
10M
Middle Channel



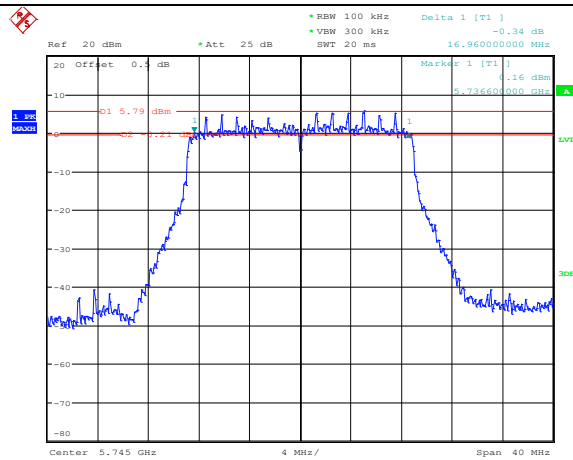
10M
Highest Channel



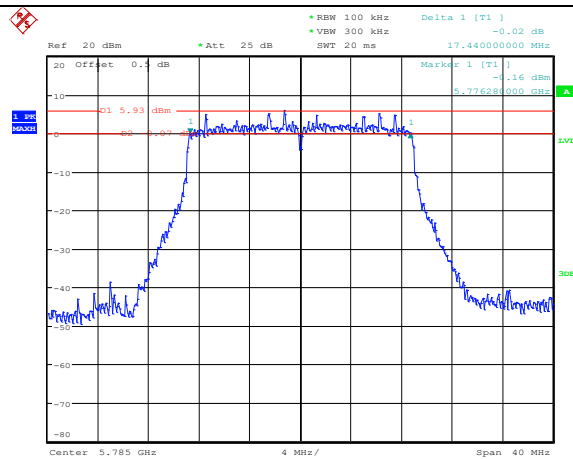
5725-5850MHz:



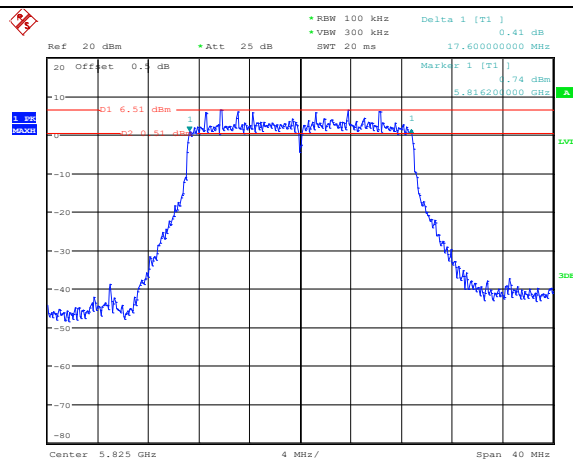
6dB Emission Bandwidth

802.11n ht20
Lowest Channel

Date: 23.MAR.2022 15:29:38

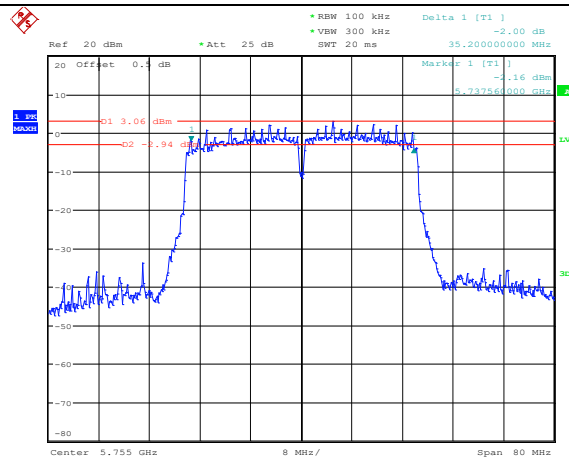
802.11n ht20
Middle Channel

Date: 23.MAR.2022 15:30:06

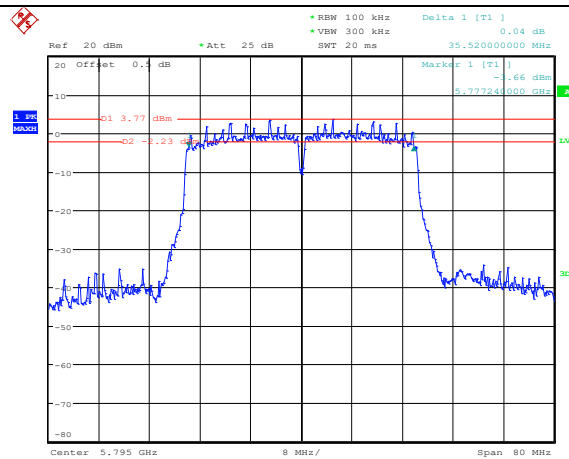
802.11n ht20
Highest Channel

Date: 23.MAR.2022 15:30:33

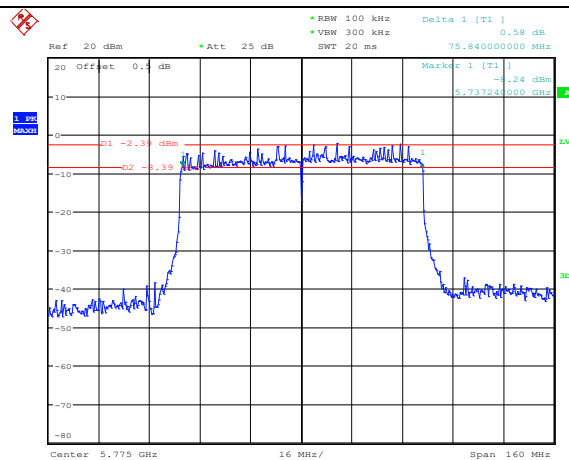
6dB Emission Bandwidth

802.11 n40
Lowest Channel

Date: 23.MAR.2022 15:31:16

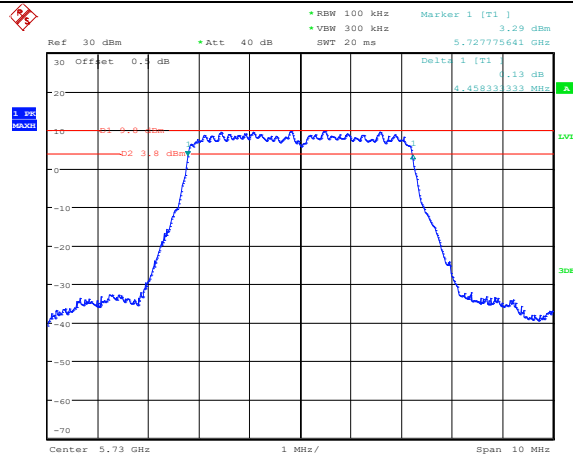
802.11 n40
Highest Channel

Date: 23.MAR.2022 15:31:48

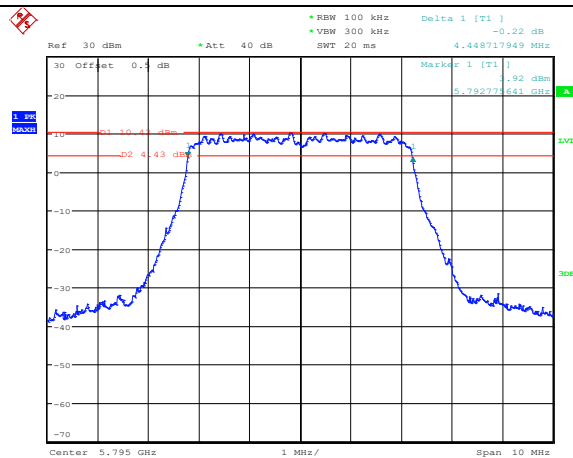
802.11 ac80
Middle Channel

Date: 23.MAR.2022 15:32:34

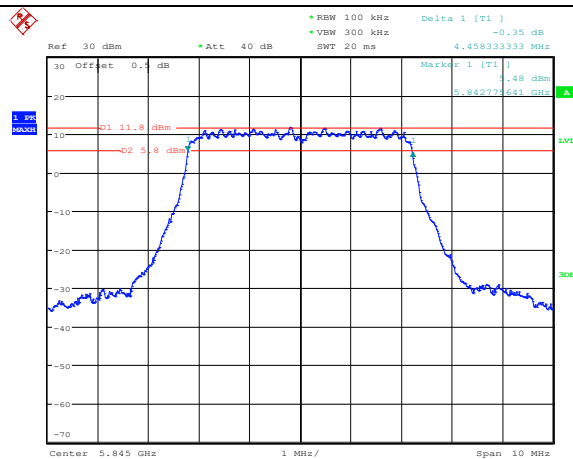
6dB Emission Bandwidth

5M
Lowest Channel

Date: 24.MAR.2022 20:10:43

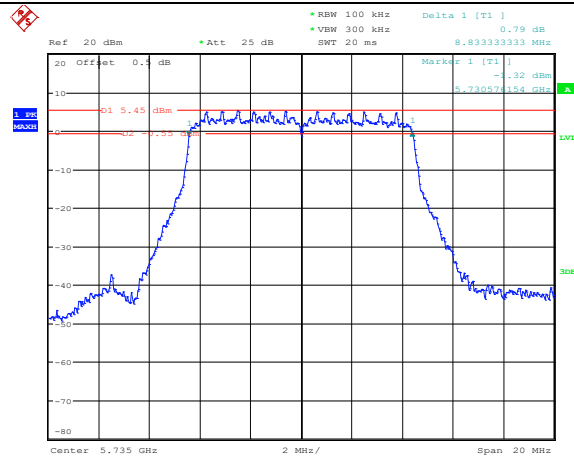
5M
Middle Channel

Date: 24.MAR.2022 20:13:36

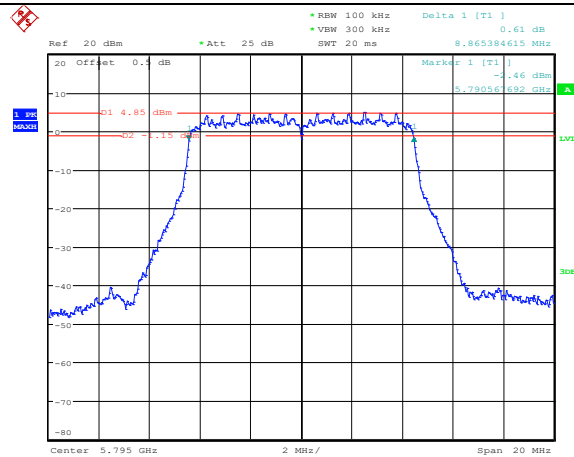
5M
Highest Channel

Date: 24.MAR.2022 20:19:29

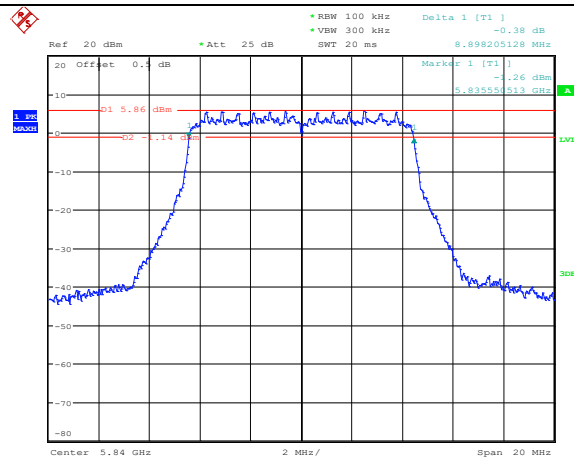
6dB Emission Bandwidth

10M
Lowest Channel

Date: 2.JUN.2022 14:38:54

10M
Middle Channel

Date: 2.JUN.2022 15:35:30

10M
Highest Channel

Date: 2.JUN.2022 15:40:08

802.11a
Lowest Channel



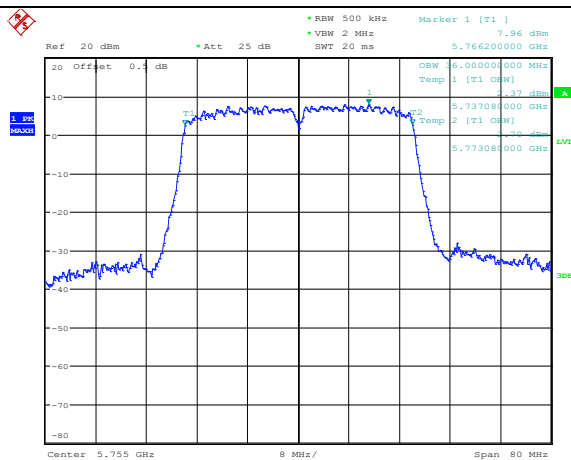
802.11a
Middle Channel



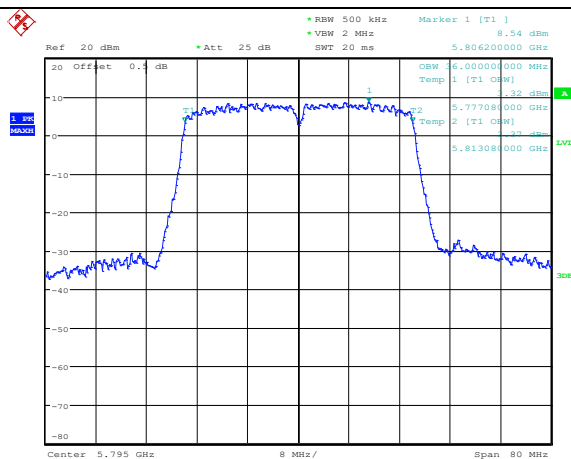
802.11a
Highest Channel



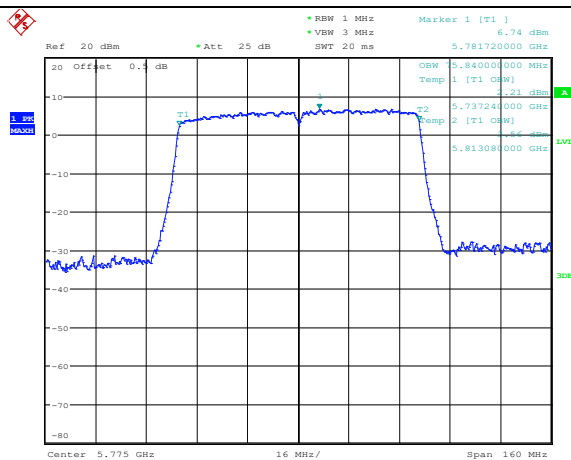
99% Emission Bandwidth

802.11n ht40
Lowest Channel

Date: 23.MAR.2022 15:01:05

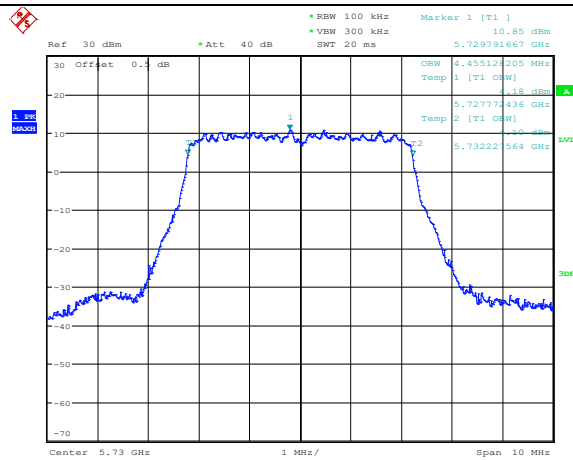
802.11n ht40
Highest Channel

Date: 23.MAR.2022 15:02:00

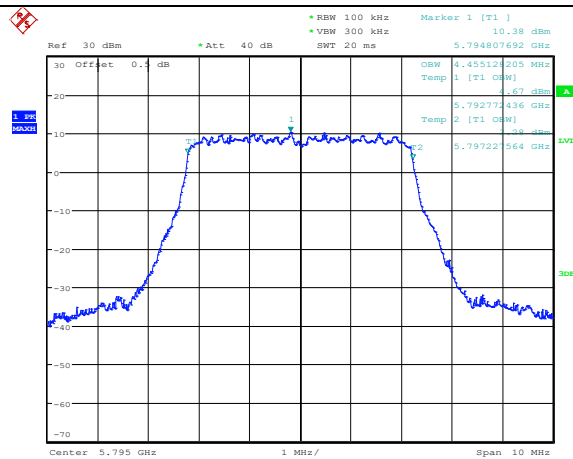
802.11 ac80
Middle Channel

Date: 23.MAR.2022 15:03:09

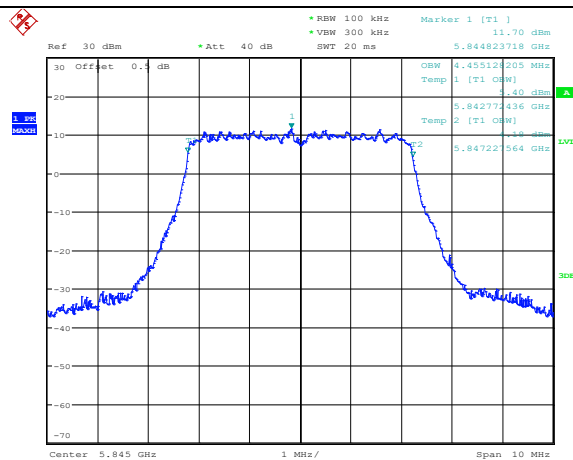
99% Emission Bandwidth

5M
Lowest Channel

Date: 24.MAR.2022 20:48:58

5M
Middle Channel

Date: 24.MAR.2022 20:50:19

5M
Highest Channel

Date: 24.MAR.2022 20:54:52

10M
Lowest Channel



10M
Middle Channel



10M
Highest Channel



4.4 Maximum Conducted Output Power:

Serial Number:	CR21090075-RF-S1	Test Date:	2022-03-24
Test Site:	RF	Test Mode:	Transmitting
Tester:	Julie Tan	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24	Relative Humidity: (%)	54	ATM Pressure: (kPa)	101
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	USB Wideband Power Sensor	U2022XA	MY54170006	2021-07-22	2022-07-21
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	N/A
E-Microwave	Coaxial Attenuators	EMCA10-5RN-6	OE01203239	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:

Note: Same power level setting with all antennas except 13dBi antenna 5MHz/10MHz Mode, 34dBi antenna all modes in 5150-5250 MHz band, all result listed is for calculation different antenna compliance with the limits.

Antenna:13dBi
5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	18.82	19.41	/	23
	5200	19.22	19.45	/	23
	5240	19.83	19.87	/	23
802.11n ht20	5180	15.03	15.11	18.08	23
	5200	15.51	15.22	18.38	23
	5240	15.85	15.89	18.88	23
802.11n ht40	5190	17.59	18.15	20.89	23
	5230	18.07	18.6	21.35	23
802.11ac vht80	5210	17.14	17.22	20.19	23
5MHz	5165	13.49	13.51	16.51	23
	5200	12.8	12.85	15.84	23
	5245	13.59	13.63	16.62	23
10MHz	5170	11.89	11.92	14.92	23
	5200	12.15	12.22	15.2	23
	5240	12.69	12.83	15.77	23
Note: This is Outdoor AP application. The duty cycle factor has been calculated into the test data. 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 $N_{ANT} \leq 4$					
Antenna Gain:	13	dBi	Directional gain:	13.00	dBi
Maximum antenna gain/EIRP above 30 degrees as measured from the horizon: The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon not exceed 125 mW (21 dBm), please refer to the antenna specification:					
Maximum antenna gain:	-1.0	dBi	Maximum EIRP:	20.35	dBm

5725-5850 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power(dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5745	18.64	19.71	/	23
	5785	19.32	19.92	/	23
	5825	20.06	20.1	/	23
802.11n ht20	5745	18.72	19.59	22.19	23
	5785	19.29	18.82	22.07	23
	5825	20.02	19.1	22.59	23
802.11n ht40	5755	18.76	19.53	22.17	23
	5795	19.56	18.86	22.23	23
802.11ac vht80	5775	17.18	17.73	20.47	23
5MHz	5730	17.19	17.17	20.19	23
	5795	17.72	17.65	20.7	23
	5845	18.29	18.25	21.28	23
10MHz	5735	18.44	18.4	21.43	23
	5795	19.33	19.3	22.33	23
	5840	19.9	19.85	22.89	23

Note:
 This is Outdoor AP application.
 The duty cycle factor has been calculated into the test data.
 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 $N_{ANT} \leq 4$

Antenna Gain:	13	dBi	Directional gain:	13.00	dBi
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Antenna:21dBi
5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	18.82	19.41	/	30
	5200	19.22	19.45	/	30
	5240	19.83	19.87	/	30
802.11n ht20	5180	15.03	15.11	18.08	30
	5200	15.51	15.22	18.38	30
	5240	15.85	15.89	18.88	30
802.11n ht40	5190	17.59	18.15	20.89	30
	5230	18.07	18.6	21.35	30
802.11ac vht80	5210	17.14	17.22	20.19	30
5MHz	5165	17.65	17.74	20.71	30
	5200	17.89	17.81	20.86	30
	5245	15.53	15.47	18.51	30
10MHz	5170	18.48	18.45	21.48	30
	5200	18.99	18.86	21.94	30
	5240	19.3	19.27	22.3	30
This is a fixed point-to-point AP application. The duty cycle factor has been calculated into the test data. Note: 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 $N_{ANT} \leq 4$					
Antenna Gain:	21.00	dBi	Directional gain:	21.00	dBi

5725-5850 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power(dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5745	18.64	19.71	/	30
	5785	19.32	19.92	/	30
	5825	20.06	20.1	/	30
802.11n ht20	5745	18.72	19.59	22.19	30
	5785	19.29	18.82	22.07	30
	5825	20.02	19.1	22.59	30
802.11n ht40	5755	18.76	19.53	22.17	30
	5795	19.56	18.86	22.23	30
802.11ac vht80	5775	17.18	17.73	20.47	30
5MHz	5730	17.19	17.17	20.19	30
	5795	17.72	17.65	20.7	30
	5845	18.29	18.25	21.28	30
10MHz	5735	18.44	18.4	21.43	30
	5795	19.33	19.3	22.33	30
	5840	19.9	19.85	22.89	30

Note:
 This is a fixed point-to-point AP application
 The duty cycle factor has been calculated into the test data.
 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 $N_{ANT} \leq 4$

Antenna Gain:	21	dBi	Directional gain:	21.00	dBi
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Antenna: 23dBi
5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	18.82	19.41	/	30
	5200	19.22	19.45	/	30
	5240	19.83	19.87	/	30
802.11n ht20	5180	15.03	15.11	18.08	30
	5200	15.51	15.22	18.38	30
	5240	15.85	15.89	18.88	30
802.11n ht40	5190	17.59	18.15	20.89	30
	5230	18.07	18.6	21.35	30
802.11ac vht80	5210	17.14	17.22	20.19	30
5MHz	5165	17.65	17.74	20.71	30
	5200	17.89	17.81	20.86	30
	5245	15.53	15.47	18.51	30
10MHz	5170	18.48	18.45	21.48	30
	5200	18.99	18.86	21.94	30
	5240	19.3	19.27	22.3	30
Note: This is a fixed point-to-point AP application The duty cycle factor has been calculated into the test data. 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 $N_{ANT} \leq 4$					
Antenna Gain:	23	dBi	Directional gain:	23	dBi

5725-5850 MHz:

Test Modes	Test Frequency(MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5745	18.64	19.71	/	30
	5785	19.32	19.92	/	30
	5825	20.06	20.1	/	30
802.11n ht20	5745	18.72	19.59	22.19	30
	5785	19.29	18.82	22.07	30
	5825	20.02	19.1	22.59	30
802.11n ht40	5755	18.76	19.53	22.17	30
	5795	19.56	18.86	22.23	30
802.11ac vht80	5775	17.18	17.73	20.47	30
5MHz	5730	17.19	17.17	20.19	30
	5795	17.72	17.65	20.7	30
	5845	18.29	18.25	21.28	30
10MHz	5735	18.44	18.4	21.43	30
	5795	19.33	19.3	22.33	30
	5840	19.9	19.85	22.89	30

Note:
 This is a fixed point-to-point AP application
 The duty cycle factor has been calculated into the test data.
 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 $N_{ANT} \leq 4$

Antenna Gain:	23	dBi	Directional gain:	23	dBi
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Antenna: 34dBi**5150-5250 MHz:**

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	7.41	9.57	/	19
	5200	7.21	10.29	/	19
	5240	8.13	11.33	/	19
802.11n ht20	5180	4.59	7.29	9.16	19
	5200	4.72	7.75	9.50	19
	5240	5.11	8.8	10.35	19
802.11n ht40	5190	5.07	7.34	9.36	19
	5230	5.14	8.41	10.09	19
802.11ac vht80	5210	2.18	4.23	6.34	19
5MHz	5165	10.87	9.85	13.4	19
	5200	10.62	9.5	13.11	19
	5245	9.7	9.94	12.83	19
10MHz	5170	11.3	9.36	13.45	19
	5200	11.46	10	13.8	19
	5240	11.53	9.81	13.76	19
Note: This is a fixed point-to-point AP application The duty cycle factor has been calculated into the test data. 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 $N_{ANT} \leq 4$					
Antenna Gain:	34	dBi	Directional gain:	34.00	dBi

5725-5850 MHz:

Test Modes	Test Frequency(MHz)	Max. Conducted Average Output Power (dBm)			
		Chain 0	Chain 1	Total	Limit
802.11a	5745	18.64	19.71	/	30
	5785	19.32	19.92	/	30
	5825	20.06	20.1	/	30
802.11n ht20	5745	18.72	19.59	22.19	30
	5785	19.29	18.82	22.07	30
	5825	20.02	19.1	22.59	30
802.11n ht40	5755	18.76	19.53	22.17	30
	5795	19.56	18.86	22.23	30
802.11ac vht80	5775	17.18	17.73	20.47	30
5MHz	5730	17.19	17.17	20.19	30
	5795	17.72	17.65	20.7	30
	5845	18.29	18.25	21.28	30
10MHz	5735	18.44	18.4	21.43	30
	5795	19.33	19.3	22.33	30
	5840	19.9	19.85	22.89	30
Note: This is a fixed point-to-point AP application 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 $N_{ANT} \leq 4$					
Antenna Gain:	34	dBi	Directional gain:	34.00	dBi

4.5 Maximum power spectral density:

Serial Number:	CR21090075-RF-S1	Test Date:	2022-03-22~2022-03-29
Test Site:	RF	Test Mode:	Transmitting
Tester:	Julie Tan	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	21.7~25.4	Relative Humidity: (%)	54~69	ATM Pressure: (kPa)	100.5~101.2

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU 26	200160/026	2021-10-26	2022-10-25
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	N/A
E-Microwave	Coaxial Attenuators	EMCA10-5RN-6	OE01203239	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:

Note: Same power level setting with all antennas except except 13dBi antenna 5MHz/10MHz Mode, 34dBi antenna all modes in 5150-5250 MHz band, all result listed is for calculation different antenna compliance with the limits.

Antenna: 13dBi
5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	6.72	5.91	/	10
	5200	7.47	6.49	/	10
	5240	8.23	7.39	/	10
802.11n ht20	5180	2.73	2.83	5.79	7
	5200	2.81	3.29	6.07	7
	5240	3.04	3.31	6.19	7
802.11n ht40	5190	2.53	3.25	5.92	7
	5230	3.10	3.44	6.28	7
802.11ac vht80	5210	-0.74	-0.31	2.49	7
5MHz	5165	3.52	3.59	6.57	7
	5200	3.28	3.51	6.41	7
	5245	3.42	3.56	6.5	7
10MHz	5170	3.36	3.47	6.43	7
	5200	3.56	3.63	6.61	7
	5240	3.79	3.87	6.84	7

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

Antenna Gain:	13	dBi	Directional gain:	16.00	dBi
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Note:

This is Outdoor AP application

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	3.95	3.94	6.17	6.16	/	23
	5785	4.11	4.62	6.33	6.84	/	23
	5825	5.36	4.86	7.58	7.08	/	23
802.11n ht20	5745	3.37	4.15	5.59	6.37	9.01	20
	5785	2.73	2.99	4.95	5.21	8.09	20
	5825	4.70	3.25	6.92	5.47	9.27	20
802.11n ht40	5755	0.21	1.61	2.43	3.83	6.20	20
	5795	0.88	0.65	3.1	2.87	6.00	20
802.11ac vht80	5775	-5.13	-3.91	-2.91	-1.69	0.75	20
5MHz	5730	8.38	8.92	10.6	11.14	13.89	20
	5795	10.71	8.36	12.93	10.58	14.92	20
	5845	11.14	8.87	13.36	11.09	15.38	20
10MHz	5735	9.50	9.81	11.72	12.03	14.89	20
	5795	9.04	10.06	11.26	12.28	14.81	20
	5840	10.51	10.84	12.73	13.06	15.91	20

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

Antenna Gain:	13	dBi	Directional gain:	16.00	dBi
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Note:

This is Outdoor AP application

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.

Antenna: 21dBi
5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	6.72	5.91	/	17
	5200	7.47	6.49	/	17
	5240	8.23	7.39	/	17
802.11n ht20	5180	2.73	2.83	5.79	17
	5200	2.81	3.29	6.07	17
	5240	3.04	3.31	6.19	17
802.11n ht40	5190	2.53	3.25	5.92	17
	5230	3.10	3.44	6.28	17
802.11ac vht80	5210	-0.74	-0.31	2.49	17
5MHz	5165	11.66	13.52	15.70	17
	5200	11.80	10.72	14.30	17
	5245	9.50	14.14	15.42	17
10MHz	5170	8.92	9.73	12.35	17
	5200	9.30	10.59	13.00	17
	5240	10.31	10.52	13.43	17

Note:

The maximum antenna gain is 21dBi in 5GHz band. This Antenna has two Cross-polarized antennas, per KDB 662911 D01 Multiple Transmitter Output v02r01, Clause F) 2):

- b) *Sectorized antenna systems.* In sectorized antenna systems in which each antenna is used to transmit different data in a different direction from the other antennas, directional gain is equal to the gain of an individual sector antenna.
- c) *Cross-polarized antennas.* For a system in which the antennas have fixed orientations relative to one another that ensure that the antennas are cross-polarized regardless of any user actions, the directional gain is computed as follows.
- (i) *Cross-polarized antennas with $N_{ANT} = 2$.* In the case of a transmitter with only two outputs driving a pair of antennas that are cross-polarized (e.g., vertical and horizontal or left-circular and right-circular), directional gain is the gain of an individual antenna. If the two antennas have different gains, the larger gain applies.

So:

$$\text{Directional gain} = G_{ANT} = 21\text{dBi}$$

Antenna Gain:	21	dBi	Directional gain:	21	dBi
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Note:

This is a fixed point-to-point AP application.

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	3.95	3.94	6.17	6.16	/	30
	5785	4.11	4.62	6.33	6.84	/	30
	5825	5.36	4.86	7.58	7.08	/	30
802.11n ht20	5745	3.37	4.15	5.59	6.37	9.01	30
	5785	2.73	2.99	4.95	5.21	8.09	30
	5825	4.70	3.25	6.92	5.47	9.27	30
802.11n ht40	5755	0.21	1.61	2.43	3.83	6.20	30
	5795	0.88	0.65	3.1	2.87	6.00	30
802.11ac vht80	5775	-5.13	-3.91	-2.91	-1.69	0.75	30
5MHz	5730	8.38	8.92	10.6	11.14	13.89	30
	5795	10.71	8.36	12.93	10.58	14.92	30
	5845	11.14	8.87	13.36	11.09	15.38	30
10MHz	5735	9.50	9.81	11.72	12.03	14.89	30
	5795	9.04	10.06	11.26	12.28	14.81	30
	5840	10.51	10.84	12.73	13.06	15.91	30

Note:

The maximum antenna gain is 21dBi in 5GHz band. This Antenna has two Cross-polarized antennas, per KDB 662911 D01 Multiple Transmitter Output v02r01, Clause F) 2):

- b) *Sectorized antenna systems.* In sectorized antenna systems in which each antenna is used to transmit different data in a different direction from the other antennas, directional gain is equal to the gain of an individual sector antenna.
- c) *Cross-polarized antennas.* For a system in which the antennas have fixed orientations relative to one another that ensure that the antennas are cross-polarized regardless of any user actions, the directional gain is computed as follows.
- (i) *Cross-polarized antennas with $N_{ANT} = 2$.* In the case of a transmitter with only two outputs driving a pair of antennas that are cross-polarized (e.g., vertical and horizontal or left-circular and right-circular), directional gain is the gain of an individual antenna. If the two antennas have different gains, the larger gain applies.

So:

Directional gain = $G_{ANT} = 21\text{dBi}$

Antenna Gain:	21	dBi	Directional gain:	21	dBi
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Note:

This is a fixed point-to-point AP application.

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 ($< 500\text{ KHz}$) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

Antenna: 23dBi
5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	6.72	5.91	/	17
	5200	7.47	6.49	/	17
	5240	8.23	7.39	/	17
802.11n ht20	5180	2.73	2.83	5.79	17
	5200	2.81	3.29	6.07	17
	5240	3.04	3.31	6.19	17
802.11n ht40	5190	2.53	3.25	5.92	17
	5230	3.10	3.44	6.28	17
802.11ac vht80	5210	-0.74	-0.31	2.49	17
5MHz	5165	11.66	13.52	15.70	17
	5200	11.80	10.72	14.30	17
	5245	9.50	14.14	15.42	17
10MHz	5170	8.92	9.73	12.35	17
	5200	9.30	10.59	13.00	17
	5240	10.31	10.52	13.43	17

Note:

The maximum antenna gain is 23 dBi in 5GHz band. This Antenna has two Cross-polarized antennas, per KDB 662911 D01 Multiple Transmitter Output v02r01, Clause F) 2):

- b) *Sectorized antenna systems.* In sectorized antenna systems in which each antenna is used to transmit different data in a different direction from the other antennas, directional gain is equal to the gain of an individual sector antenna.
- c) *Cross-polarized antennas.* For a system in which the antennas have fixed orientations relative to one another that ensure that the antennas are cross-polarized regardless of any user actions, the directional gain is computed as follows.
- (i) *Cross-polarized antennas with $N_{ANT} = 2$.* In the case of a transmitter with only two outputs driving a pair of antennas that are cross-polarized (e.g., vertical and horizontal or left-circular and right-circular), directional gain is the gain of an individual antenna. If the two antennas have different gains, the larger gain applies.

So:

$$\text{Directional gain} = G_{ANT} = 23 \text{ dBi}$$

Antenna Gain:	23	dBi	Directional gain:	23	dBi
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Note:

This is a fixed point-to-point AP application.

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	3.95	3.94	6.17	6.16	/	30
	5785	4.11	4.62	6.33	6.84	/	30
	5825	5.36	4.86	7.58	7.08	/	30
802.11n ht20	5745	3.37	4.15	5.59	6.37	9.01	30
	5785	2.73	2.99	4.95	5.21	8.09	30
	5825	4.70	3.25	6.92	5.47	9.27	30
802.11n ht40	5755	0.21	1.61	2.43	3.83	6.20	30
	5795	0.88	0.65	3.1	2.87	6.00	30
802.11ac vht80	5775	-5.13	-3.91	-2.91	-1.69	0.75	30
5MHz	5730	8.38	8.92	10.6	11.14	13.89	30
	5795	10.71	8.36	12.93	10.58	14.92	30
	5845	11.14	8.87	13.36	11.09	15.38	30
10MHz	5735	9.50	9.81	11.72	12.03	14.89	30
	5795	9.04	10.06	11.26	12.28	14.81	30
	5840	10.51	10.84	12.73	13.06	15.91	30

Note:

The maximum antenna gain is 23dBi in 5GHz band. This Antenna has two Cross-polarized antennas, per KDB 662911 D01 Multiple Transmitter Output v02r01, Clause F) 2):

- b) *Sectorized antenna systems.* In sectorized antenna systems in which each antenna is used to transmit different data in a different direction from the other antennas, directional gain is equal to the gain of an individual sector antenna.
- c) *Cross-polarized antennas.* For a system in which the antennas have fixed orientations relative to one another that ensure that the antennas are cross-polarized regardless of any user actions, the directional gain is computed as follows.
- (i) *Cross-polarized antennas with $N_{ANT} = 2$.* In the case of a transmitter with only two outputs driving a pair of antennas that are cross-polarized (e.g., vertical and horizontal or left-circular and right-circular), directional gain is the gain of an individual antenna. If the two antennas have different gains, the larger gain applies.

So:

Directional gain = $G_{ANT} = 23\text{dBi}$

Antenna Gain:	23	dBi	Directional gain:	23	dBi
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Note:

This is a fixed point-to-point AP application.

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 ($< 500\text{ KHz}$) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

Antenna: 34dBi
5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Maximum Power Spectral Density (dBm/MHz)			
		Chain 0	Chain 1	Total	Limit
802.11a	5180	5.65	5.18	/	6.0
	5200	5.29	5.23	/	6.0
	5240	5.78	5.60	/	6.0
802.11n ht20	5180	1.16	3.09	5.24	6.0
	5200	2.05	3.43	5.80	6.0
	5240	2.45	2.81	5.64	6.0
802.11n ht40	5190	1.74	3.28	5.59	6.0
	5230	1.99	2.37	5.19	6.0
802.11ac vht80	5210	-0.93	-0.53	2.28	6.0
5MHz	5165	2.39	2.64	5.53	6.0
	5200	2.42	2.48	5.46	6.0
	5245	2.77	2.48	5.64	6.0
10MHz	5170	2.40	2.75	5.59	6.0
	5200	2.32	2.96	5.66	6.0
	5240	2.95	2.57	5.77	6.0

Note:

The maximum antenna gain is 34 dBi in 5GHz band. This Antenna has two Cross-polarized antennas, per KDB 662911 D01 Multiple Transmitter Output v02r01, Clause F) 2):

- b) *Sectorized antenna systems.* In sectorized antenna systems in which each antenna is used to transmit different data in a different direction from the other antennas, directional gain is equal to the gain of an individual sector antenna.
- c) *Cross-polarized antennas.* For a system in which the antennas have fixed orientations relative to one another that ensure that the antennas are cross-polarized regardless of any user actions, the directional gain is computed as follows.
- (i) *Cross-polarized antennas with $N_{ANT} = 2$.* In the case of a transmitter with only two outputs driving a pair of antennas that are cross-polarized (e.g., vertical and horizontal or left-circular and right-circular), directional gain is the gain of an individual antenna. If the two antennas have different gains, the larger gain applies.

So:

$$\text{Directional gain} = G_{ANT} = 34 \text{ dBi}$$

Antenna Gain:	34	dBi	Directional gain:	34	dBi
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Note:

This is a fixed point-to-point AP application.

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	3.95	3.94	6.17	6.16	/	30
	5785	4.11	4.62	6.33	6.84	/	30
	5825	5.36	4.86	7.58	7.08	/	30
802.11n ht20	5745	3.37	4.15	5.59	6.37	9.01	30
	5785	2.73	2.99	4.95	5.21	8.09	30
	5825	4.70	3.25	6.92	5.47	9.27	30
802.11n ht40	5755	0.21	1.61	2.43	3.83	6.20	30
	5795	0.88	0.65	3.1	2.87	6.00	30
802.11ac vht80	5775	-5.13	-3.91	-2.91	-1.69	0.75	30
5MHz	5730	8.38	8.92	10.6	11.14	13.89	30
	5795	10.71	8.36	12.93	10.58	14.92	30
	5845	11.14	8.87	13.36	11.09	15.38	30
10MHz	5735	9.50	9.81	11.72	12.03	14.89	30
	5795	9.04	10.06	11.26	12.28	14.81	30
	5840	10.51	10.84	12.73	13.06	15.91	30

Note:

The maximum antenna gain is 34dBi in 5GHz band. This Antenna has two Cross-polarized antennas, per KDB 662911 D01 Multiple Transmitter Output v02r01, Clause F) 2):

- b) *Sectorized antenna systems.* In sectorized antenna systems in which each antenna is used to transmit different data in a different direction from the other antennas, directional gain is equal to the gain of an individual sector antenna.
- c) *Cross-polarized antennas.* For a system in which the antennas have fixed orientations relative to one another that ensure that the antennas are cross-polarized regardless of any user actions, the directional gain is computed as follows.
- (i) *Cross-polarized antennas with $N_{ANT} = 2$.* In the case of a transmitter with only two outputs driving a pair of antennas that are cross-polarized (e.g., vertical and horizontal or left-circular and right-circular), directional gain is the gain of an individual antenna. If the two antennas have different gains, the larger gain applies.

So:

Directional gain = $G_{ANT} = 34\text{dBi}$

Antenna Gain:	34	dBi	Directional gain:	34	dBi
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Note:

This is a fixed point-to-point AP application.

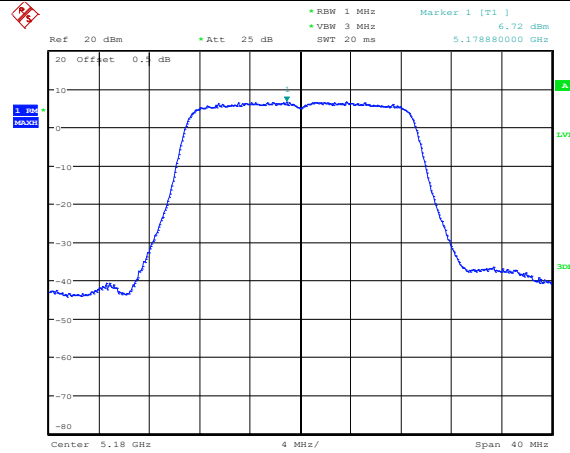
Method SA-3 in KDB 789033 D02 General UNII Test Procedures New Rules v02r01 was used for PSD test.

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 ($< 500\text{ KHz}$) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

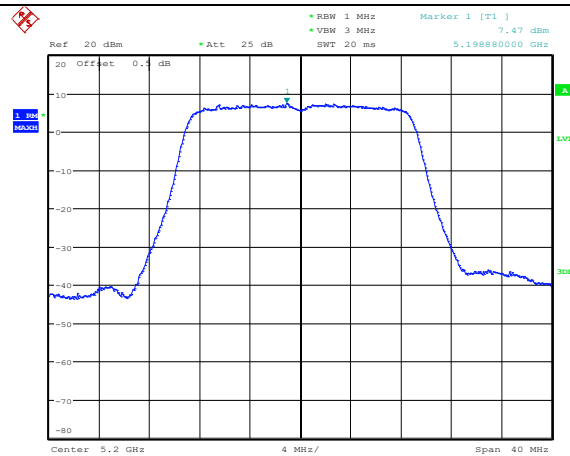
5150-5250MHz

For 13/21/23 dBi except 5/10M for 13dBi Antenna:

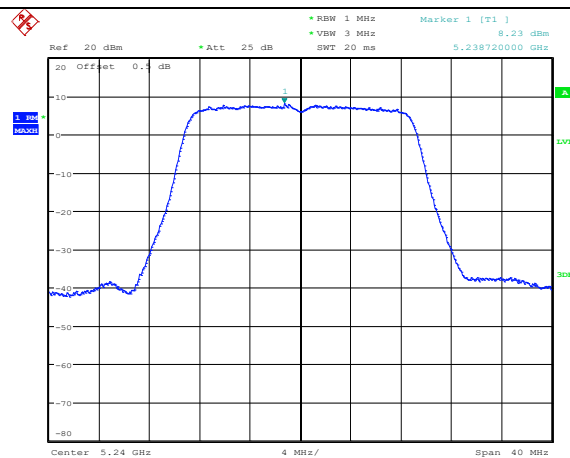
Maximum power spectral density

Chain 0, 802.11a
Lowest Channel

Date: 23.MAR.2022 13:25:27

Chain 0, 802.11a
Middle Channel

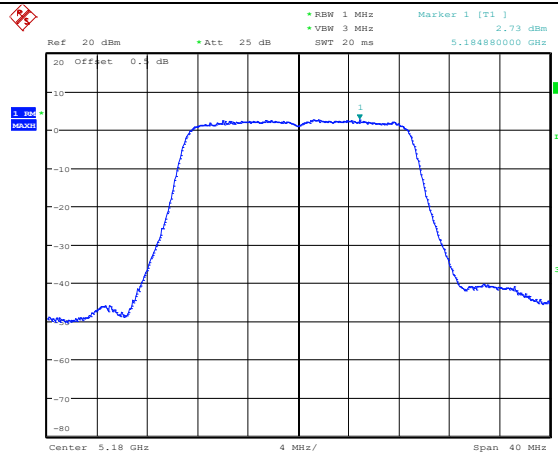
Date: 23.MAR.2022 13:25:54

Chain 0, 802.11a
Highest Channel

Date: 23.MAR.2022 13:26:27

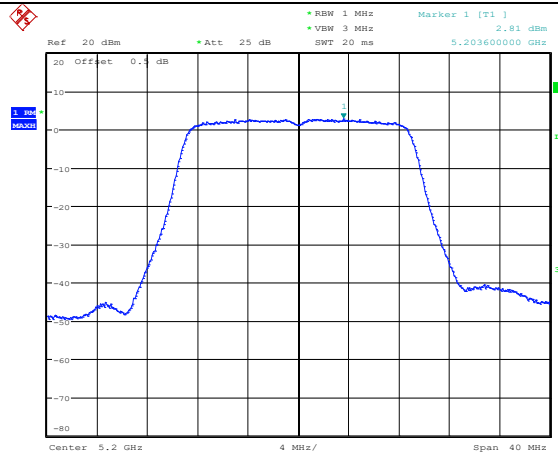
Maximum power spectral density

Chain 0
802.11n ht20
Lowest Channel



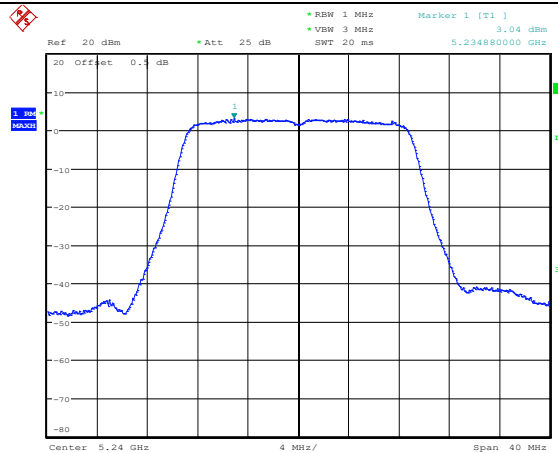
Date: 23.MAR.2022 14:42:59

Chain 0
802.11n ht20
Middle Channel



Date: 23.MAR.2022 14:43:25

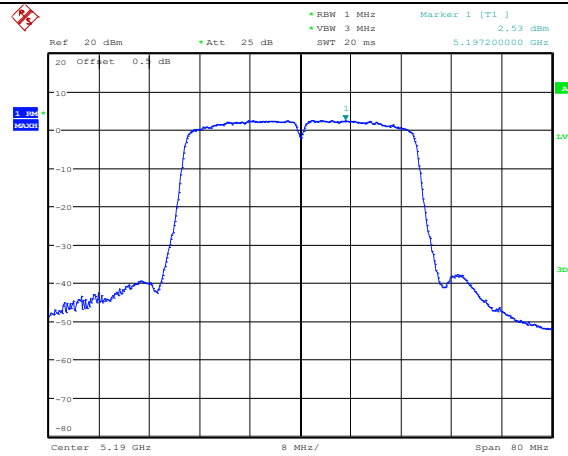
Chain 0
802.11n ht20
Highest Channel



Date: 23.MAR.2022 14:43:49

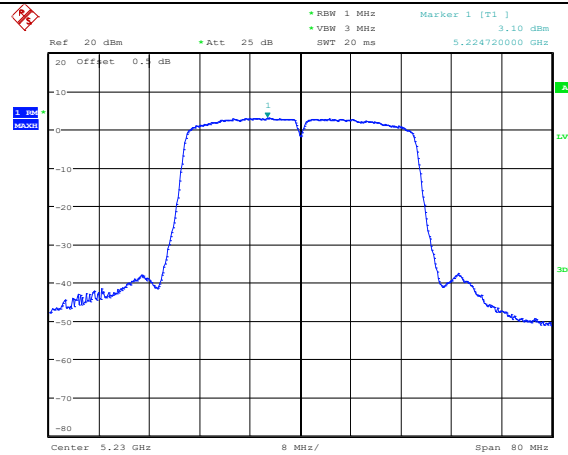
Maximum power spectral density

Chain 0
802.11n ht40
Lowest Channel



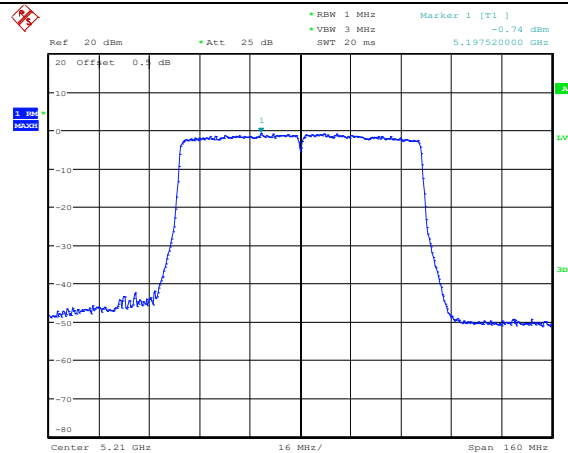
Date: 23.MAR.2022 14:05:56

Chain 0
802.11n ht40
Highest Channel



Date: 23.MAR.2022 14:05:28

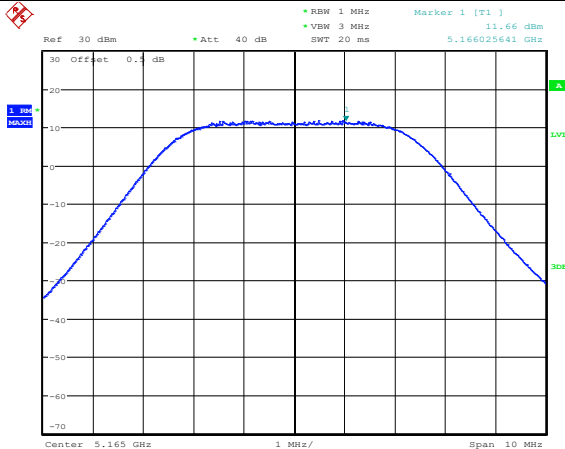
Chain 0
802.11ac vht80
Middle Channel



Date: 23.MAR.2022 13:30:55

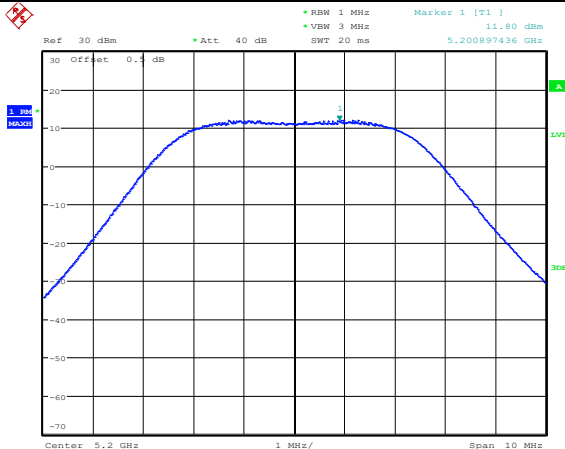
Maximum power spectral density

Chain 0
5MHz
Lowest Channel



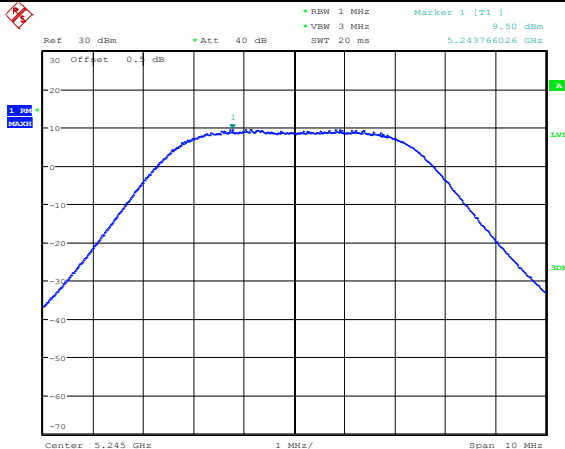
Date: 24.MAR.2022 16:08:02

Chain 0
5MHz
Middle Channel



Date: 24.MAR.2022 16:07:06

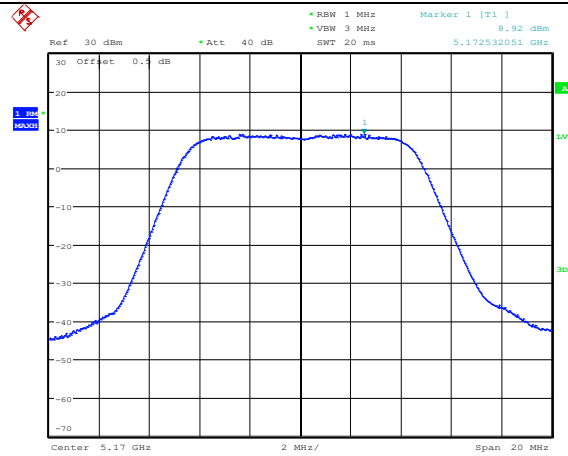
Chain 0
5MHz
Highest Channel



Date: 24.MAR.2022 13:59:41

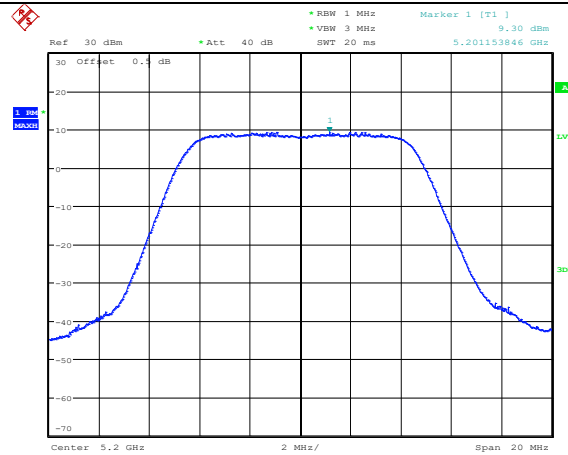
Maximum power spectral density

Chain 0
10MHz
Lowest Channel



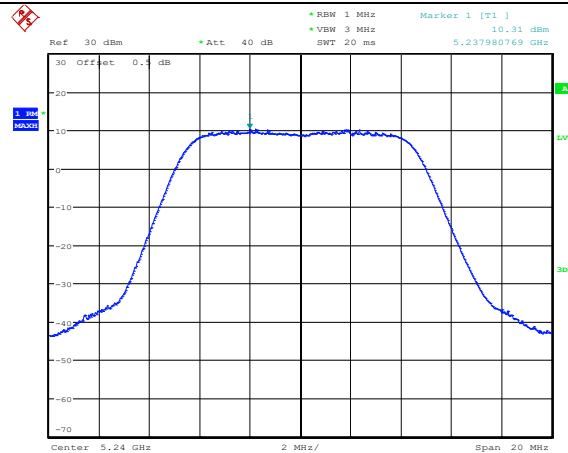
Date: 24.MAR.2022 14:22:49

Chain 0
10MHz
Middle Channel



Date: 24.MAR.2022 14:23:49

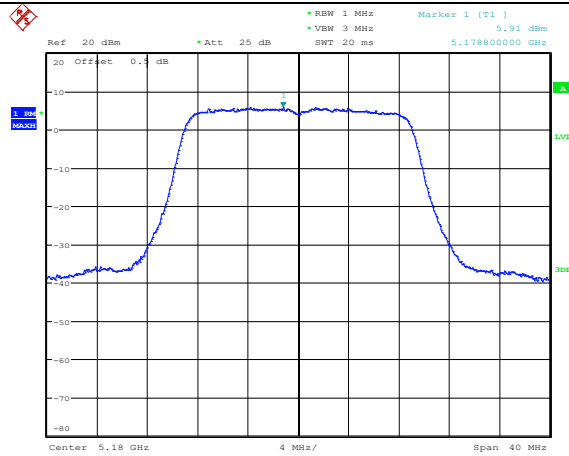
Chain 0
10MHz
Highest Channel



Date: 24.MAR.2022 14:26:27

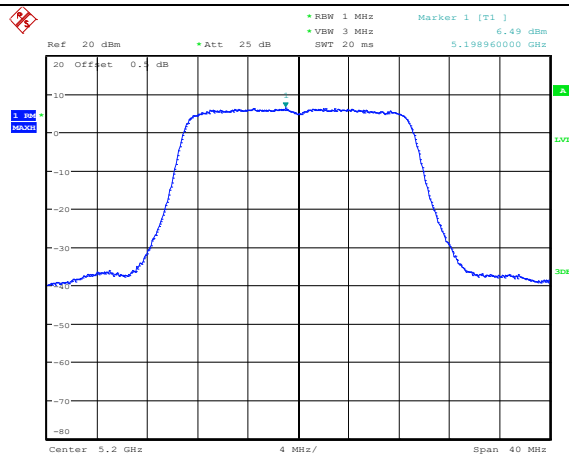
Maximum power spectral density

Chain 1
802.11a
Lowest Channel



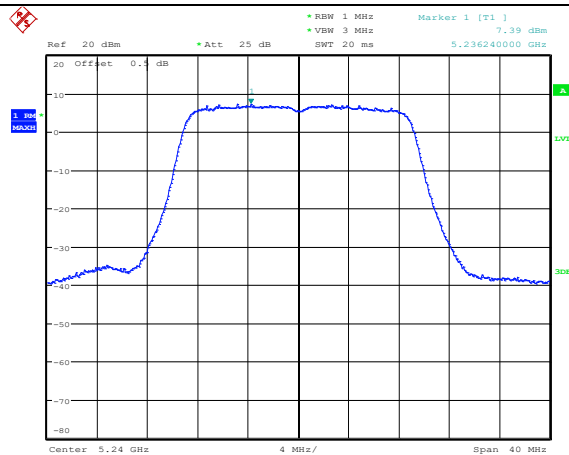
Date: 23.MAR.2022 11:38:55

Chain 1
802.11a
Middle Channel



Date: 23.MAR.2022 11:39:50

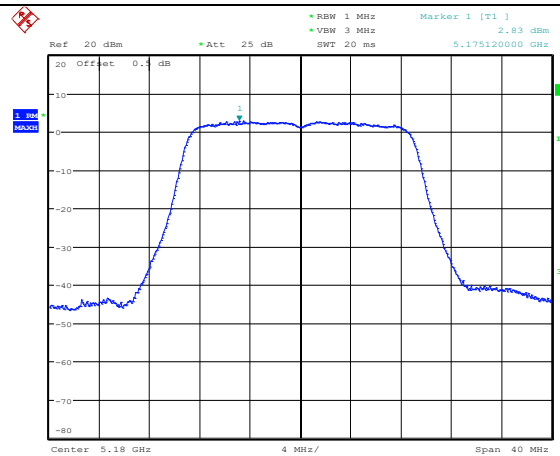
Chain 1
802.11a
Highest Channel



Date: 23.MAR.2022 11:40:35

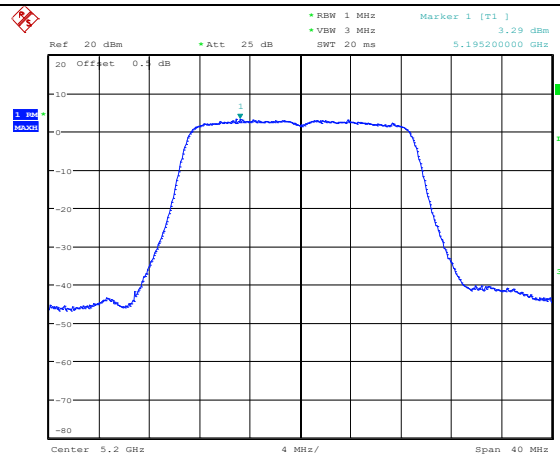
Maximum power spectral density

Chain 1
802.11n ht20
Lowest Channel



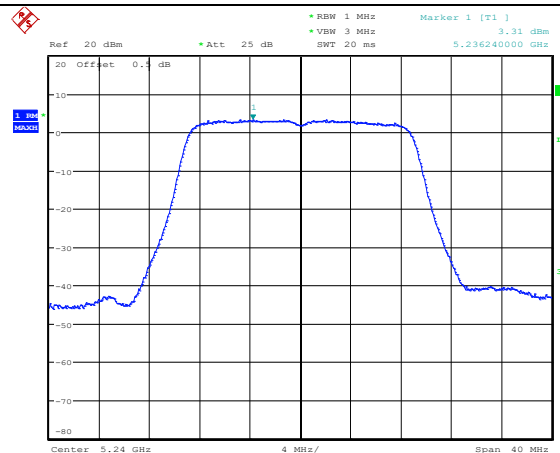
Date: 23.MAR.2022 14:40:25

Chain 1
802.11n ht20
Middle Channel



Date: 23.MAR.2022 14:40:48

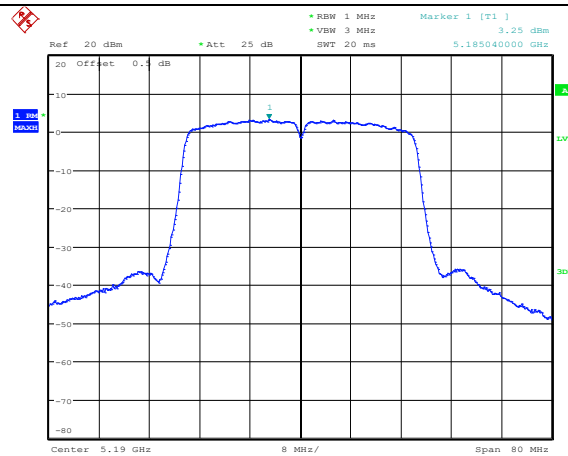
Chain 1
802.11n ht20
Highest Channel



Date: 23.MAR.2022 14:41:14

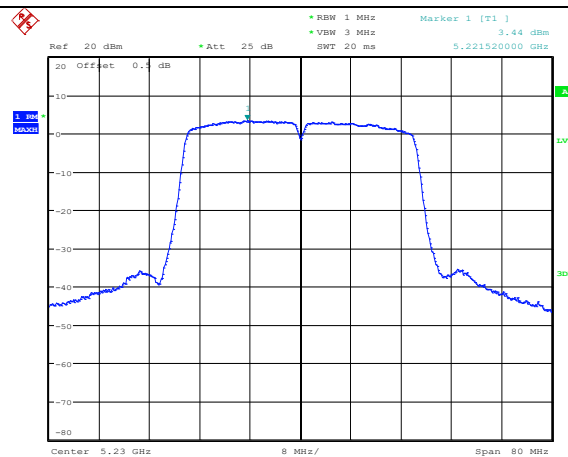
Maximum power spectral density

Chain 1
802.11n ht40
Lowest Channel



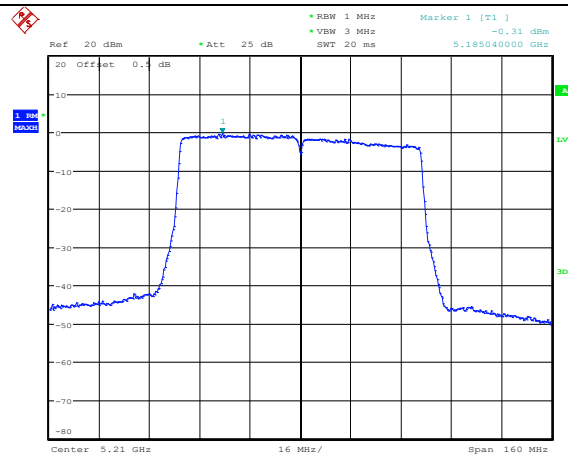
Date: 23.MAR.2022 14:03:57

Chain 1
802.11n ht40
Highest Channel



Date: 23.MAR.2022 14:04:22

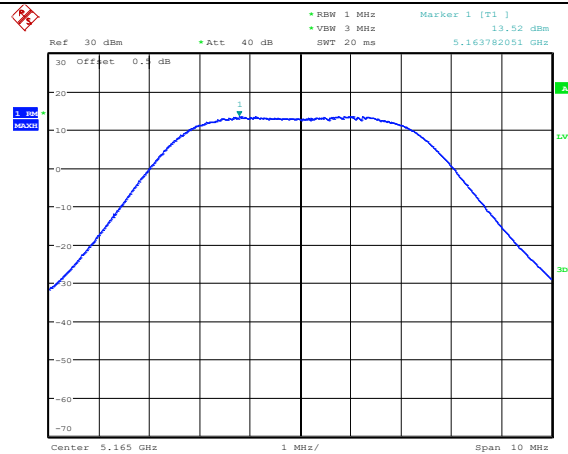
Chain 1
802.11ac vht80
Middle Channel



Date: 23.MAR.2022 13:37:55

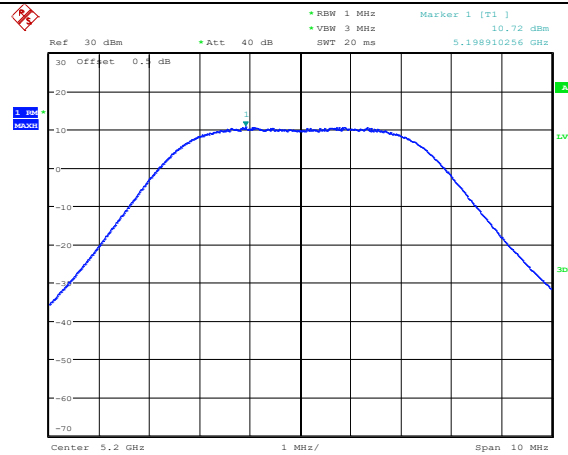
Maximum power spectral density

Chain 1
5MHz
Lowest Channel



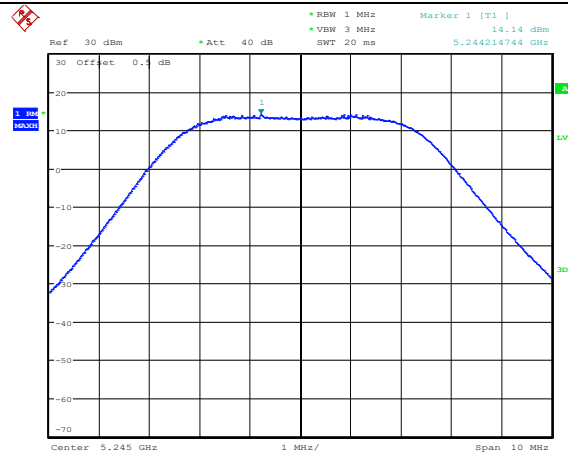
Date: 24.MAR.2022 13:19:11

Chain 1
5MHz
Middle Channel



Date: 24.MAR.2022 15:31:31

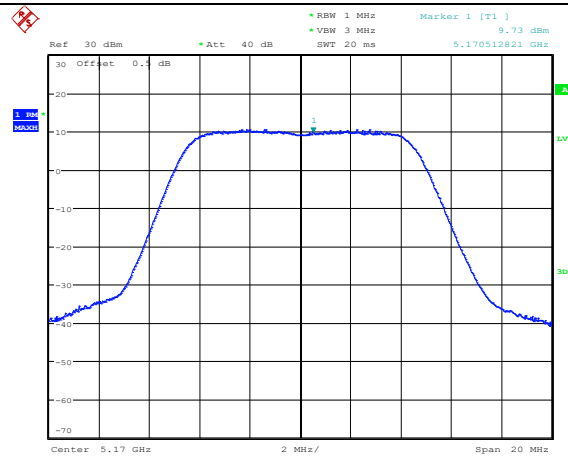
Chain 1
5MHz
Highest Channel



Date: 24.MAR.2022 15:32:41

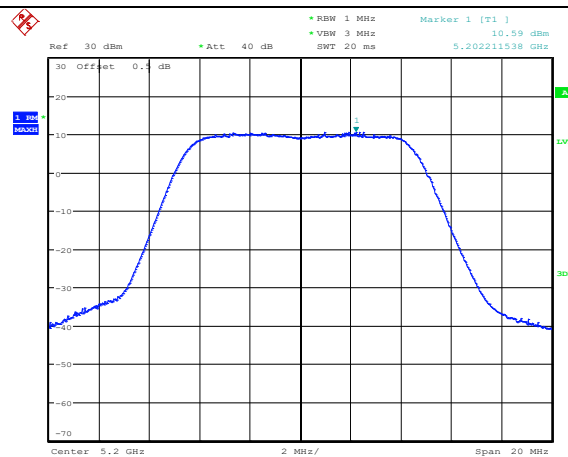
Maximum power spectral density

Chain 1
10MHz
Lowest Channel



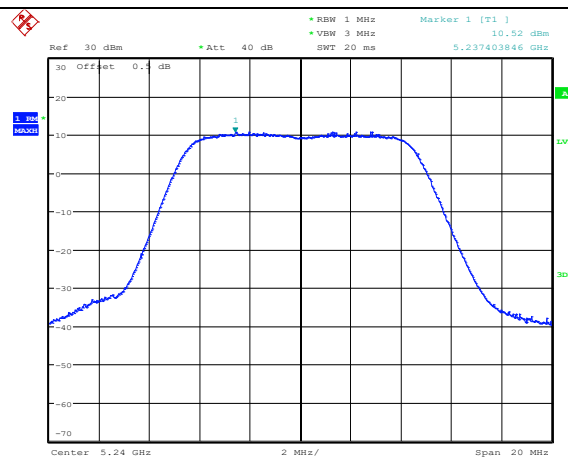
Date: 24.MAR.2022 13:32:51

Chain 1
10MHz
Middle Channel



Date: 24.MAR.2022 13:34:31

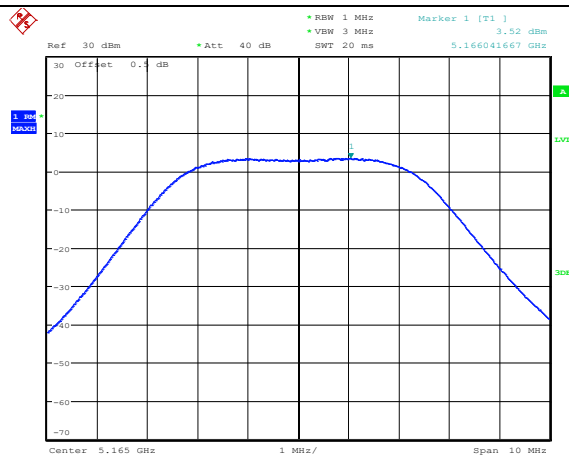
Chain 1
10MHz
Highest Channel



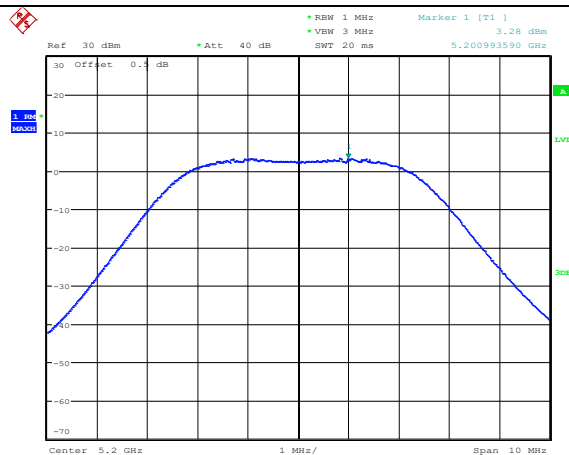
Date: 24.MAR.2022 13:35:31

For 13dBi Antenna 5/10M:**Maximum power spectral density**

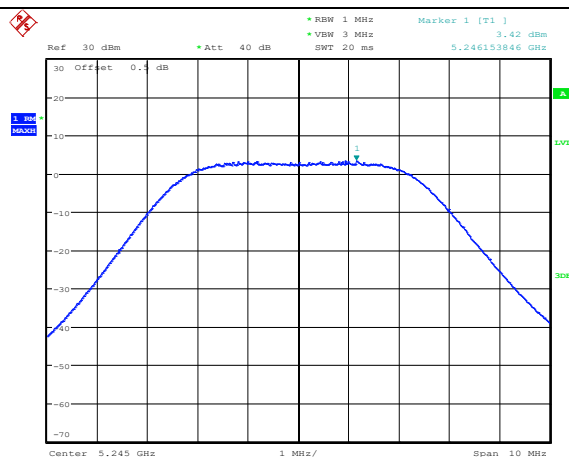
Chain 0
5MHz
Lowest Channel

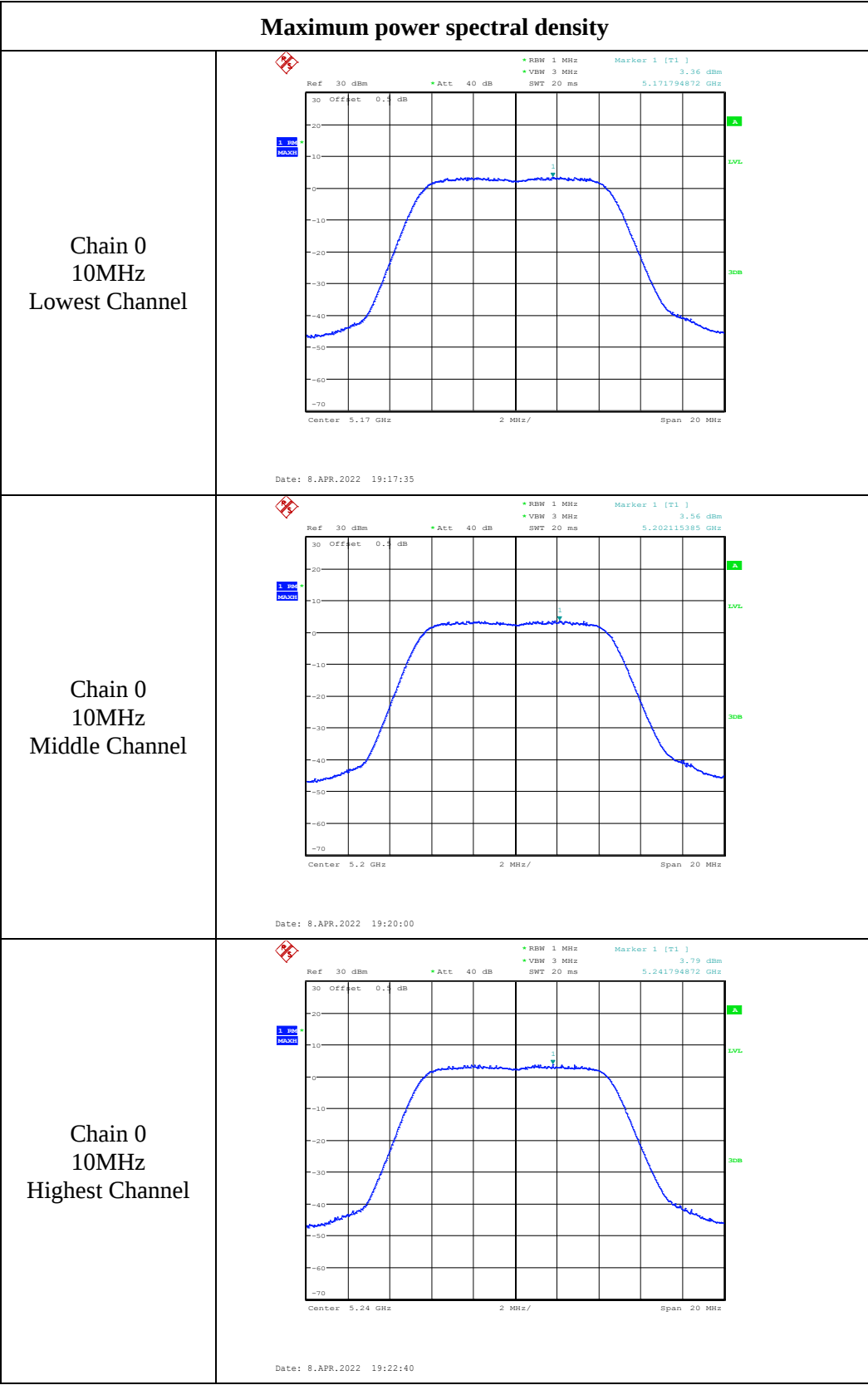


Chain 0
5MHz
Middle Channel



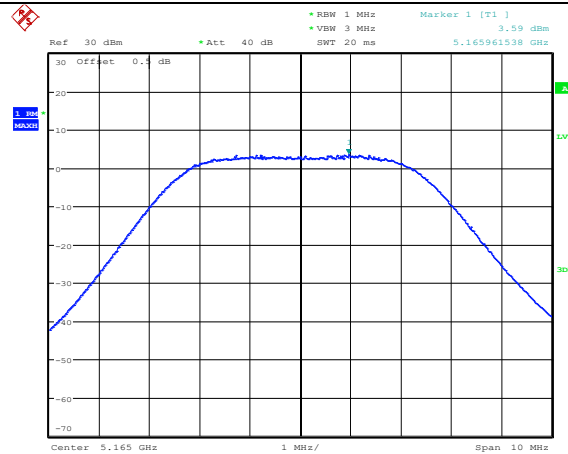
Chain 0
5MHz
Highest Channel





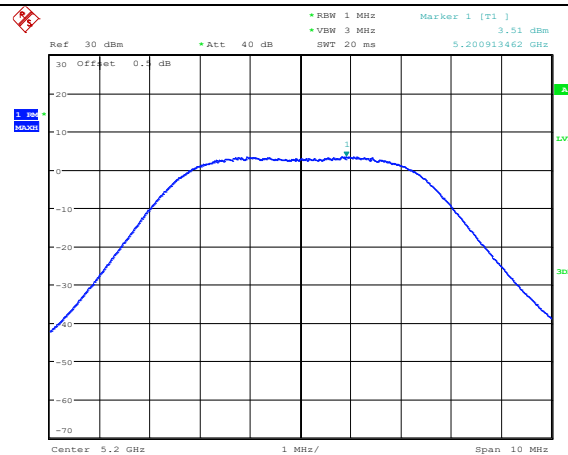
Maximum power spectral density

Chain 1
5MHz
Lowest Channel



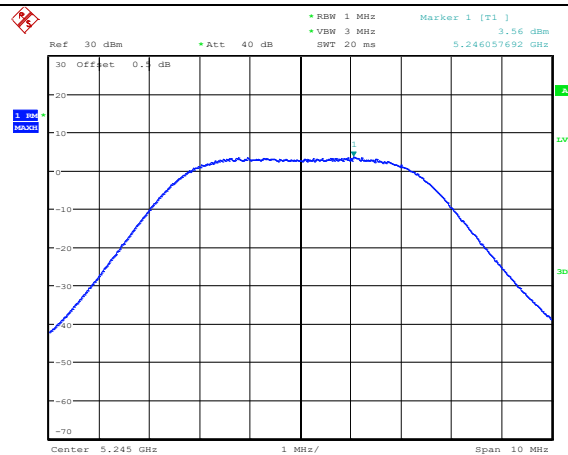
Date: 8.APR.2022 19:08:36

Chain 1
5MHz
Middle Channel



Date: 8.APR.2022 19:11:42

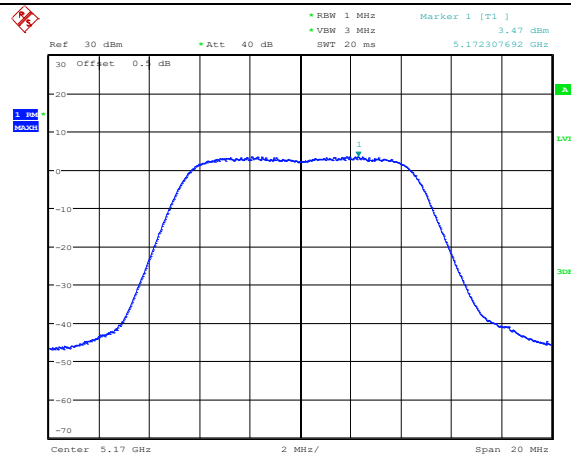
Chain 1
5MHz
Highest Channel



Date: 8.APR.2022 19:15:07

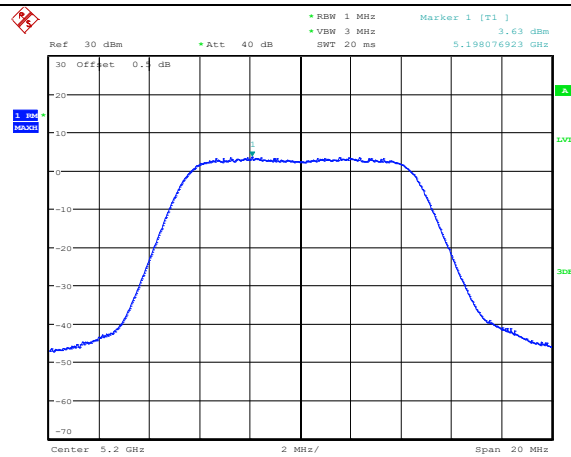
Maximum power spectral density

Chain 1
10MHz
Lowest Channel



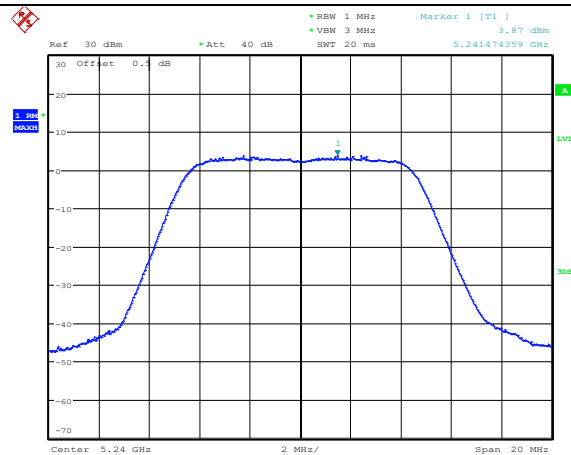
Date: 8.APR.2022 19:18:40

Chain 1
10MHz
Middle Channel

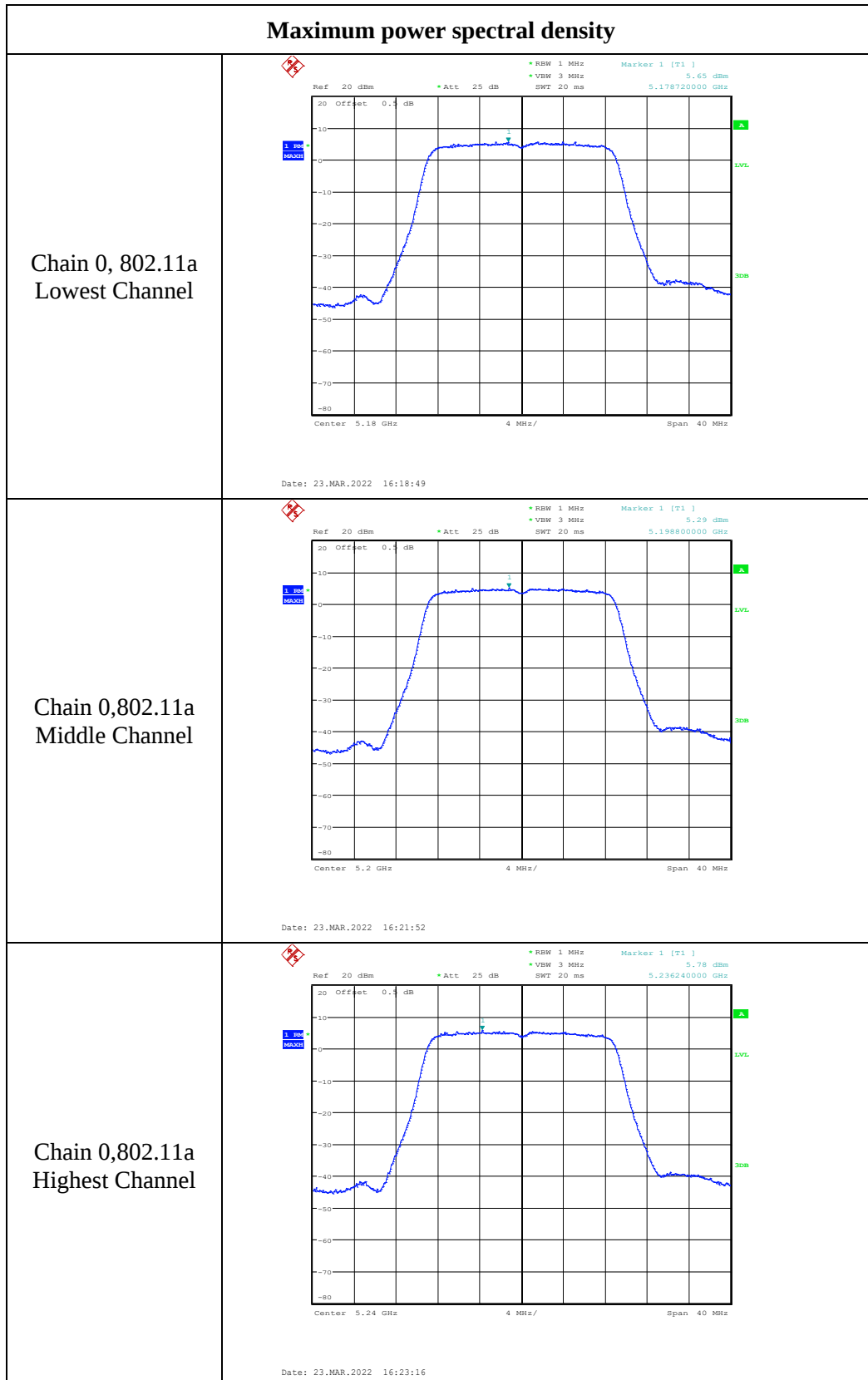


Date: 8.APR.2022 19:20:31

Chain 1
10MHz
Highest Channel

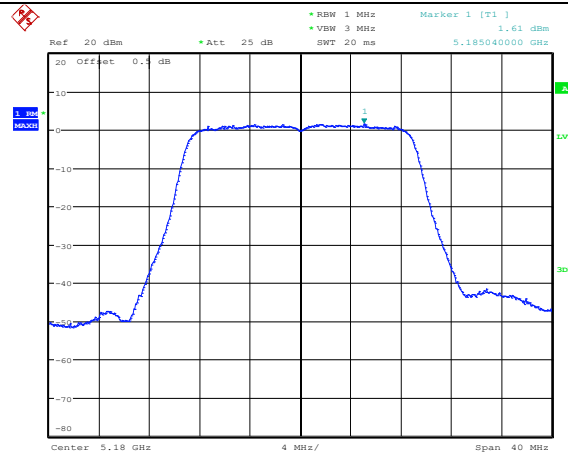


Date: 8.APR.2022 19:23:00

For 34dBi Antenna:

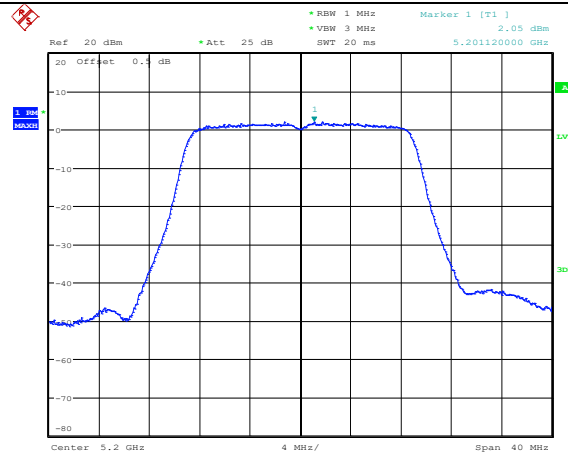
Maximum power spectral density

Chain 0
802.11n ht20
Lowest Channel



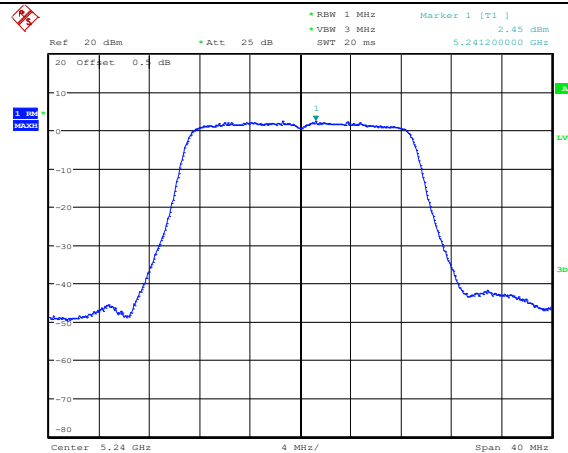
Date: 23.MAR.2022 16:12:03

Chain 0
802.11n ht20
Middle Channel



Date: 23.MAR.2022 16:12:43

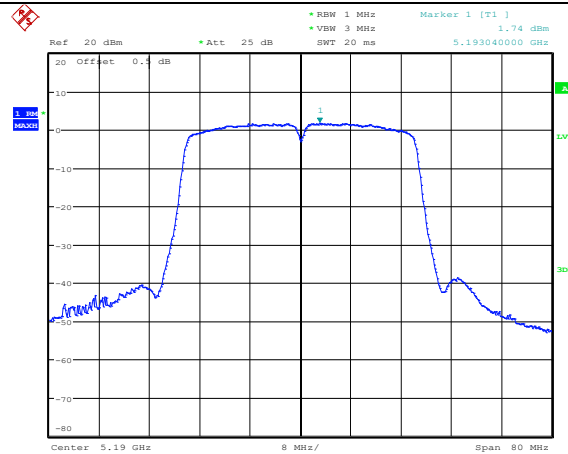
Chain 0
802.11n ht20
Highest Channel



Date: 23.MAR.2022 16:13:10

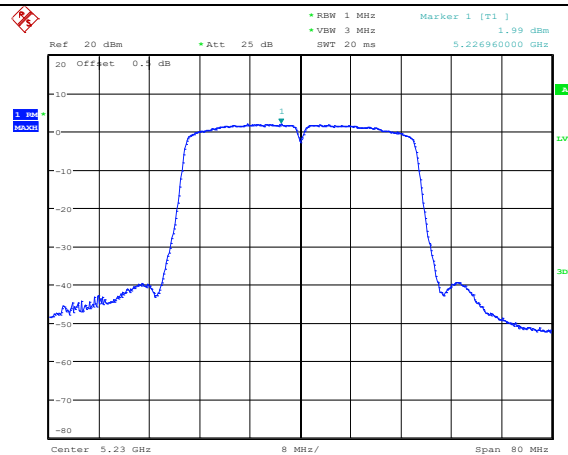
Maximum power spectral density

Chain 0
802.11n ht40
Lowest Channel



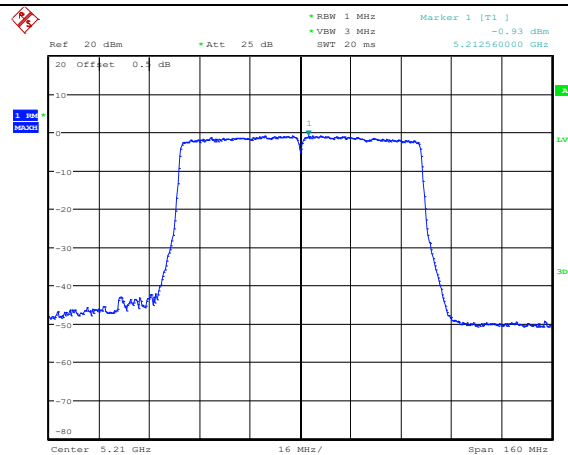
Date: 23.MAR.2022 16:16:14

Chain 0
802.11n ht40
Highest Channel



Date: 23.MAR.2022 16:16:48

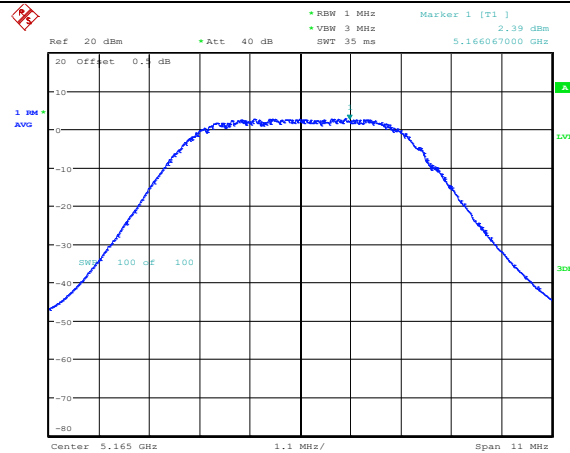
Chain 0
802.11ac vht80
Middle Channel



Date: 23.MAR.2022 16:09:19

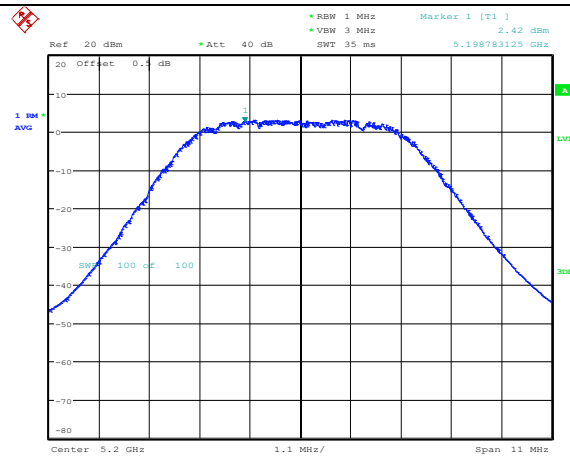
Maximum power spectral density

Chain 0
5MHz
Lowest Channel



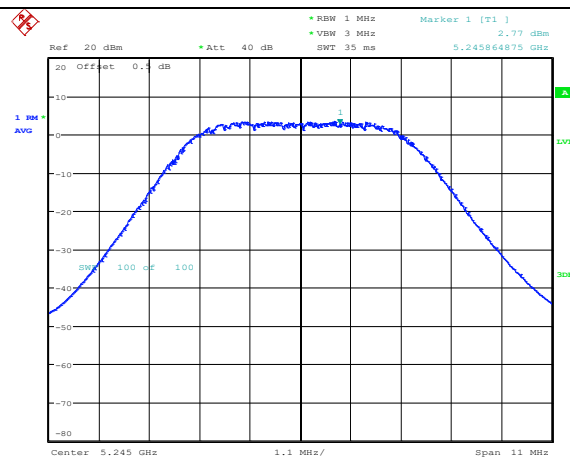
Date: 29.MAR.2022 17:07:45

Chain 0
5MHz
Middle Channel



Date: 29.MAR.2022 17:05:06

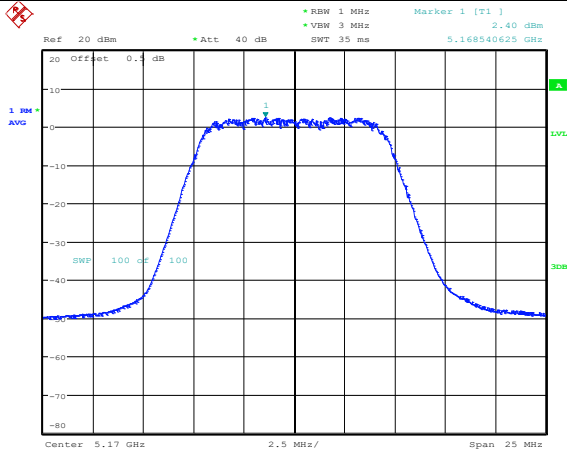
Chain 0
5MHz
Highest Channel



Date: 29.MAR.2022 17:01:15

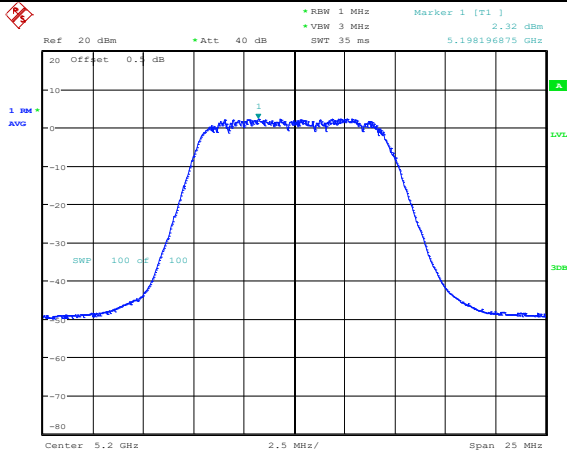
Maximum power spectral density

Chain 0
10MHz
Lowest Channel



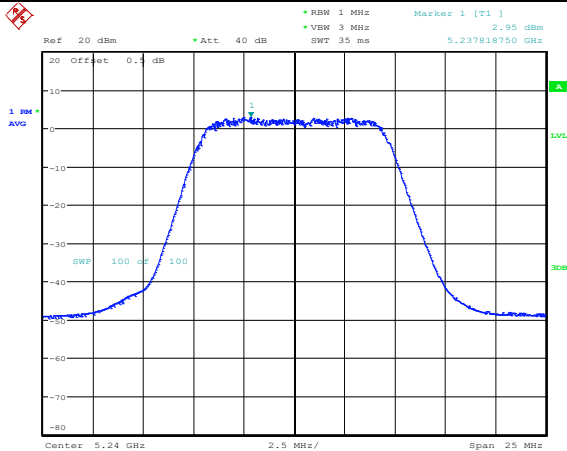
Date: 29.MAR.2022 17:13:02

Chain 0
10MHz
Middle Channel



Date: 29.MAR.2022 17:14:19

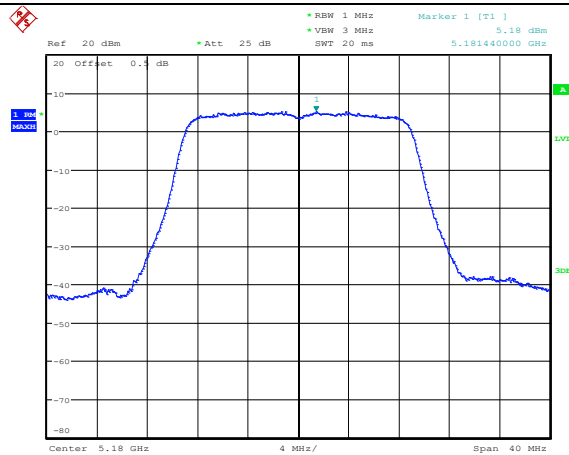
Chain 0
10MHz
Highest Channel



Date: 29.MAR.2022 17:16:45

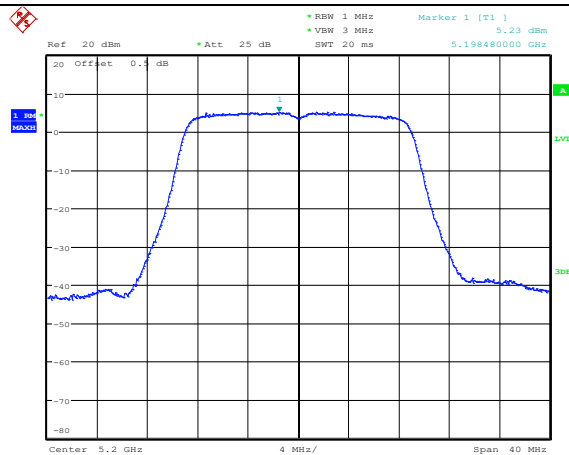
Maximum power spectral density

Chain 1
802.11a
Lowest Channel



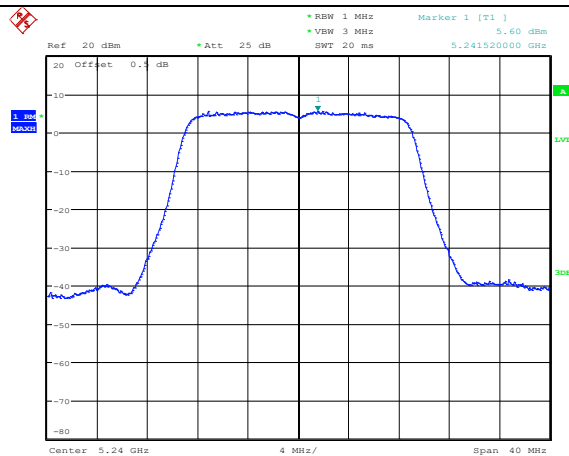
Date: 23.MAR.2022 16:29:59

Chain 1
802.11a
Middle Channel



Date: 23.MAR.2022 16:30:24

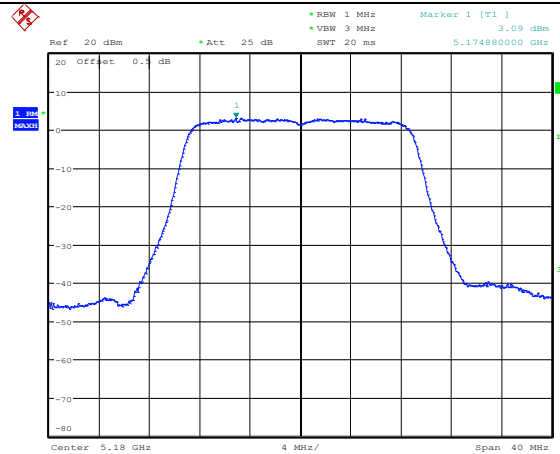
Chain 1
802.11a
Highest Channel



Date: 23.MAR.2022 16:30:48

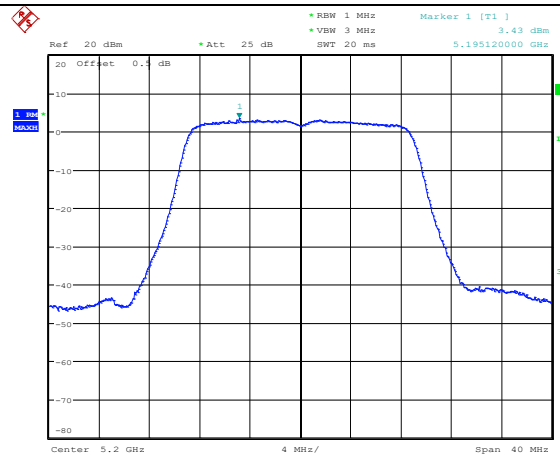
Maximum power spectral density

Chain 1
802.11n ht20
Lowest Channel



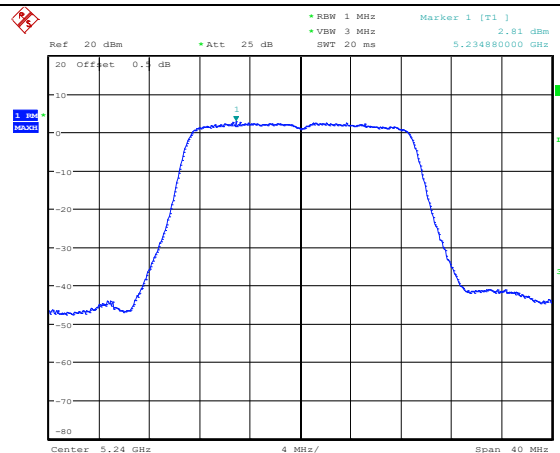
Date: 23.MAR.2022 16:04:56

Chain 1
802.11n ht20
Middle Channel



Date: 23.MAR.2022 16:05:19

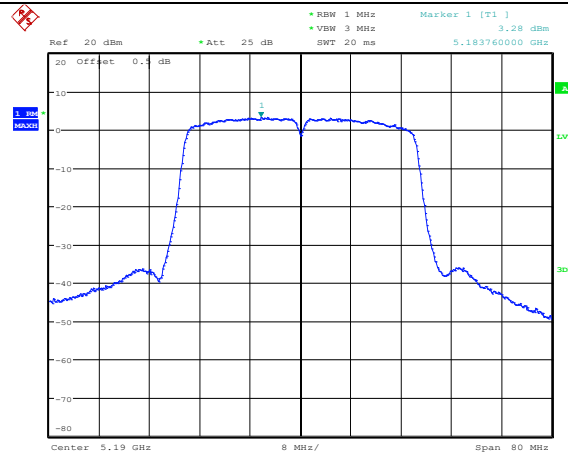
Chain 1
802.11n ht20
Highest Channel



Date: 23.MAR.2022 16:31:53

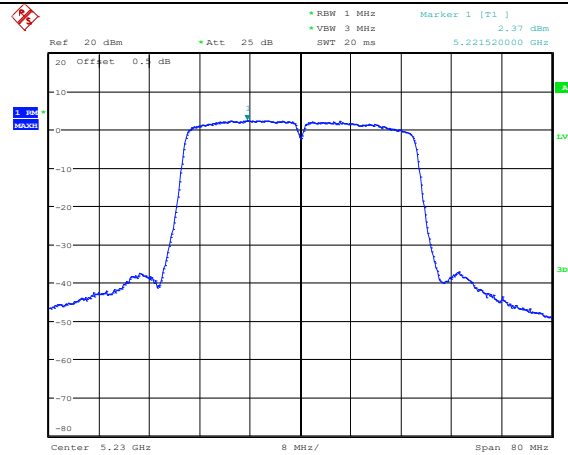
Maximum power spectral density

Chain 1
802.11n ht40
Lowest Channel



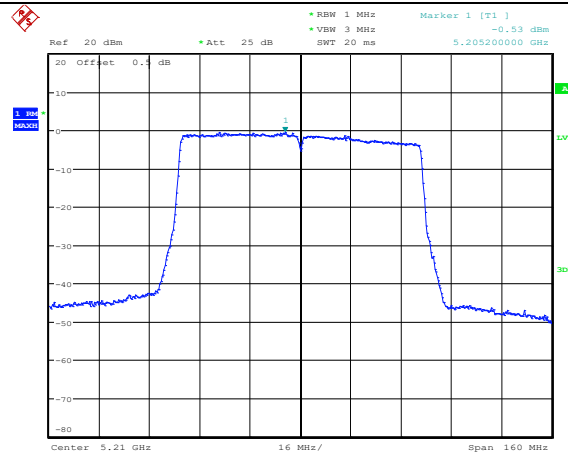
Date: 23.MAR.2022 16:06:50

Chain 1
802.11n ht40
Highest Channel



Date: 23.MAR.2022 16:32:56

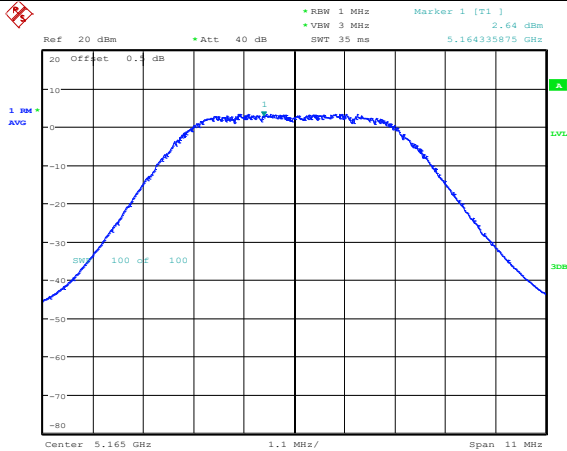
Chain 1
802.11ac vht80
Middle Channel



Date: 23.MAR.2022 16:07:54

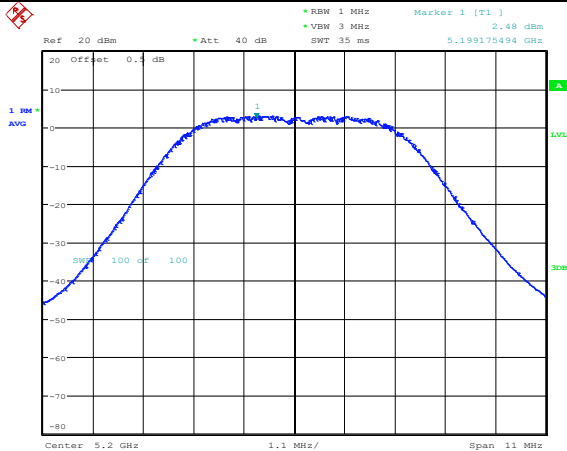
Maximum power spectral density

Chain 1
5MHz
Lowest Channel



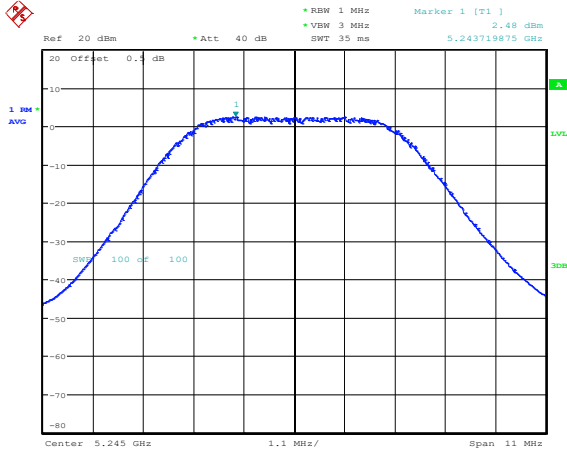
Date: 29.MAR.2022 16:42:34

Chain 1
5MHz
Middle Channel



Date: 29.MAR.2022 16:47:32

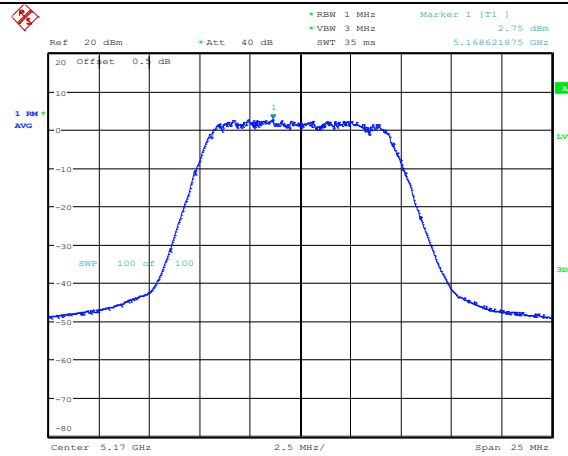
Chain 1
5MHz
Highest Channel



Date: 29.MAR.2022 16:52:14

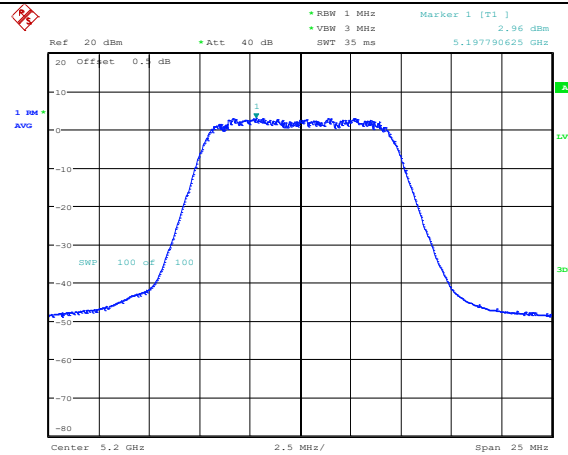
Maximum power spectral density

Chain 1
10MHz
Lowest Channel



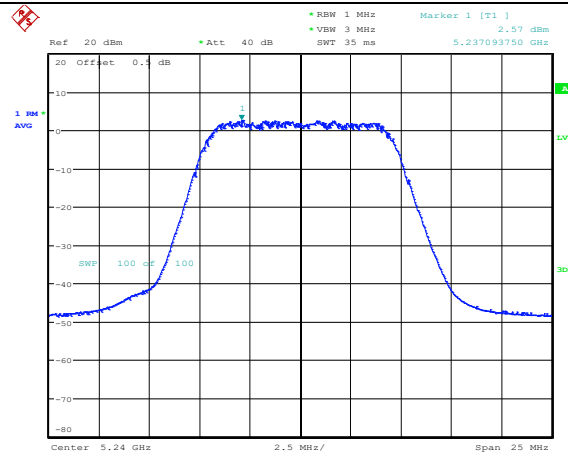
Date: 29.MAR.2022 17:29:52

Chain 1
10MHz
Middle Channel



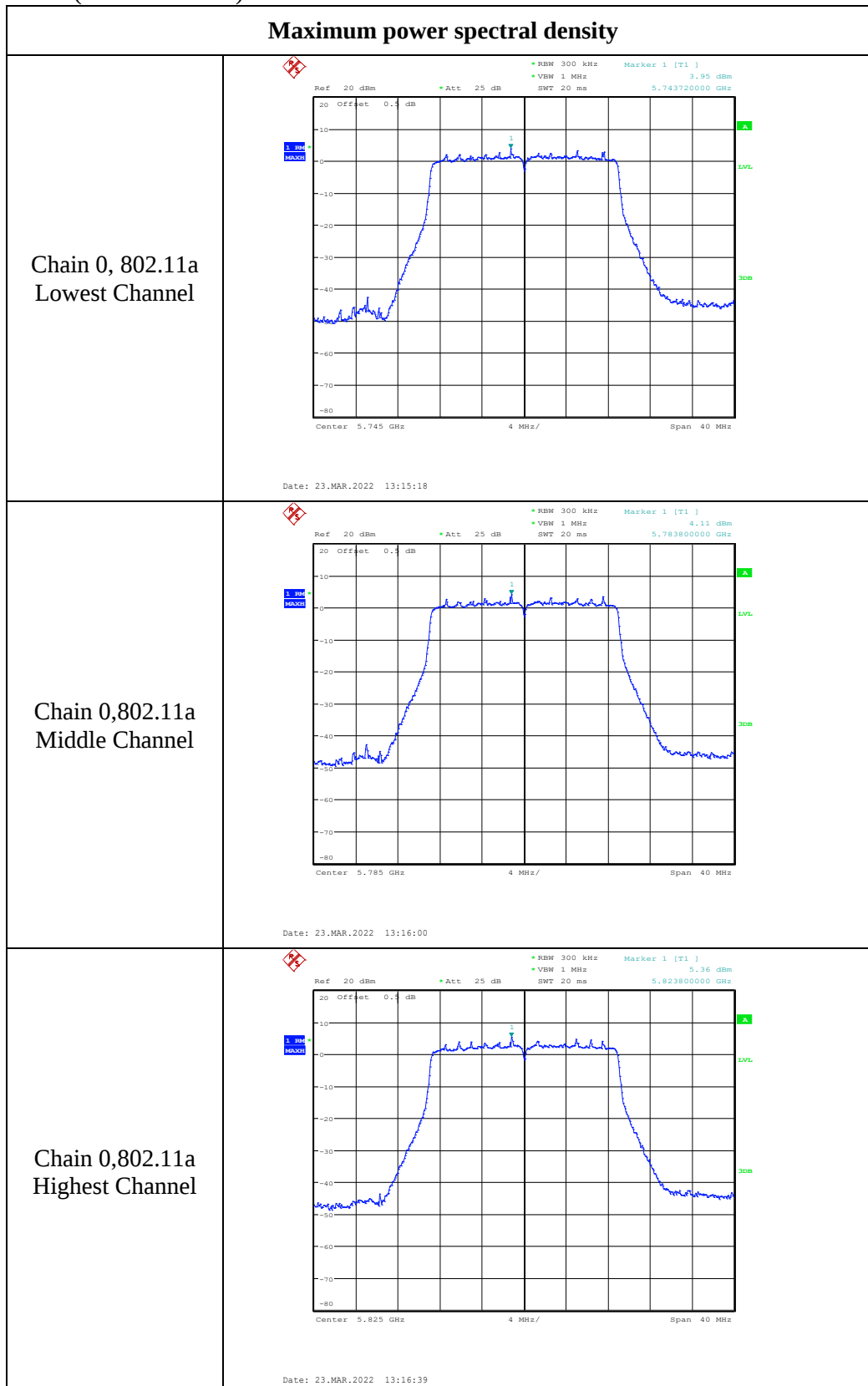
Date: 29.MAR.2022 17:25:30

Chain 1
10MHz
Highest Channel



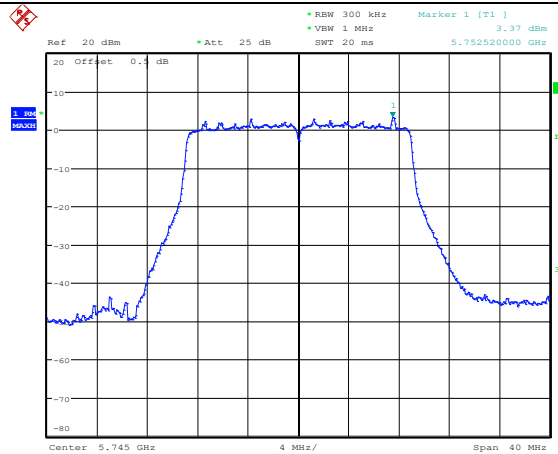
Date: 29.MAR.2022 17:22:57

5725-5850MHz(For All antenna):



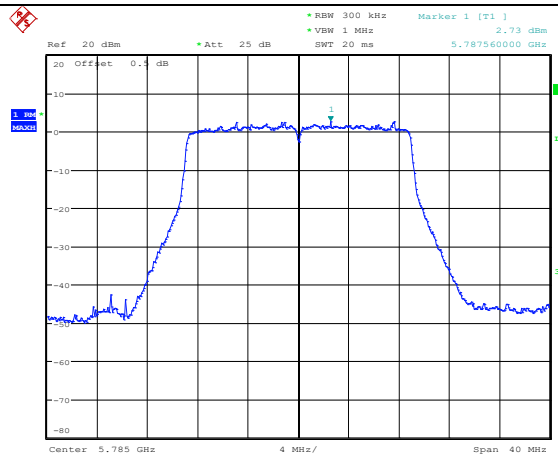
Maximum power spectral density

Chain 0
802.11n ht20
Lowest Channel



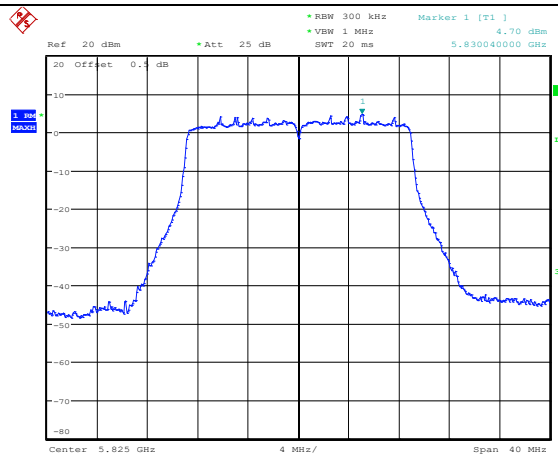
Date: 23.MAR.2022 13:20:31

Chain 0
802.11n ht20
Middle Channel



Date: 23.MAR.2022 13:21:03

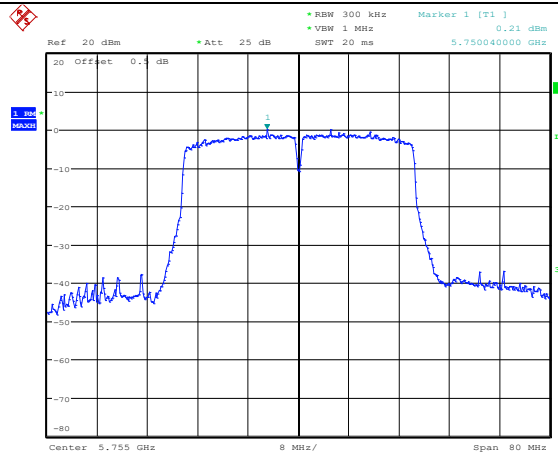
Chain 0
802.11n ht20
Highest Channel



Date: 23.MAR.2022 13:21:42

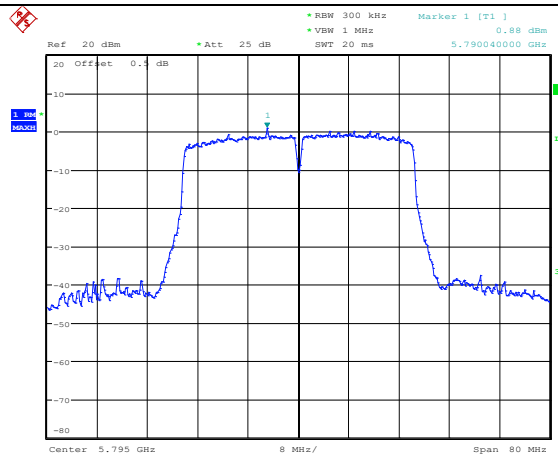
Maximum power spectral density

Chain 0
802.11n ht40
Lowest Channel



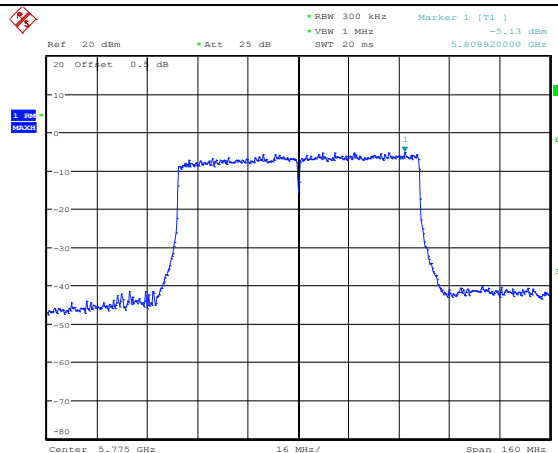
Date: 23.MAR.2022 13:22:44

Chain 0
802.11n ht40
Highest Channel



Date: 23.MAR.2022 13:23:16

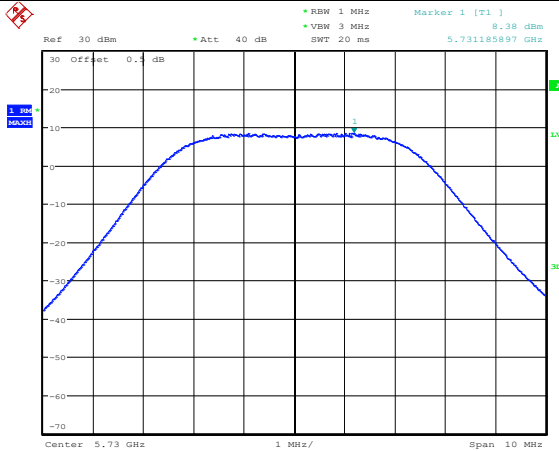
Chain 0
802.11ac vht80
Middle Channel



Date: 23.MAR.2022 13:24:22

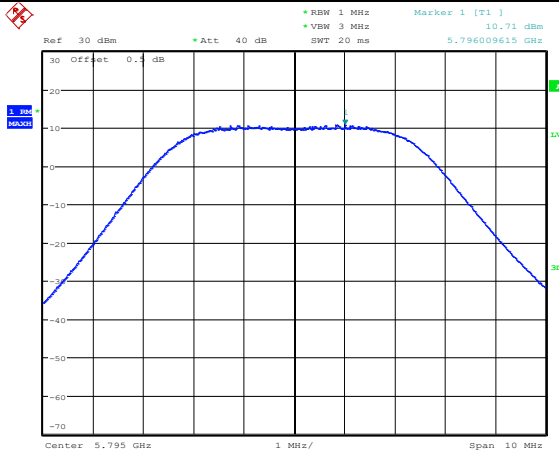
Maximum power spectral density

Chain 0
5MHz
Lowest Channel



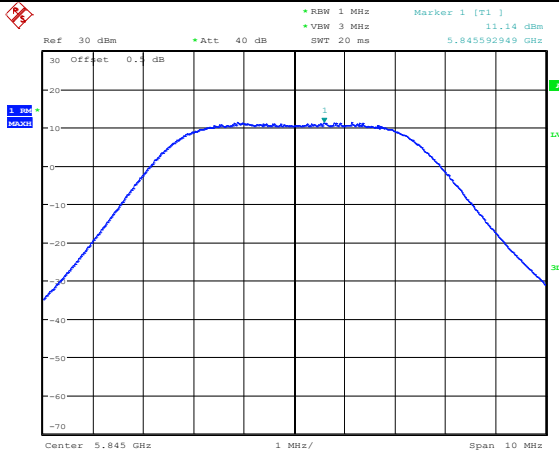
Date: 24.MAR.2022 14:28:32

Chain 0
5MHz
Middle Channel



Date: 24.MAR.2022 14:29:32

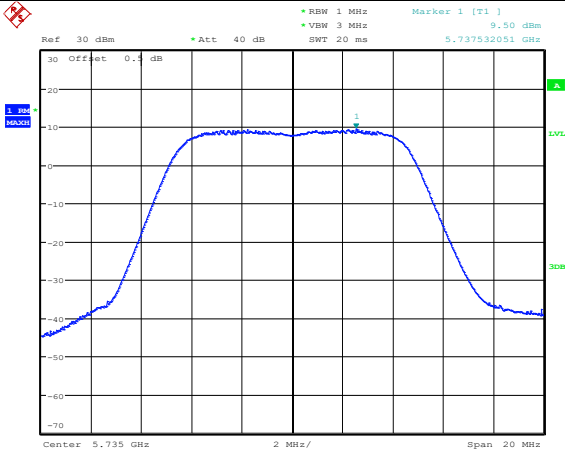
Chain 0
5MHz
Highest Channel



Date: 24.MAR.2022 14:30:56

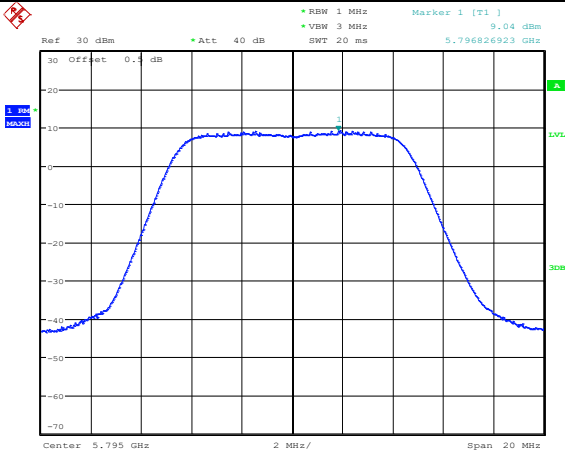
Maximum power spectral density

Chain 0
10MHz
Lowest Channel



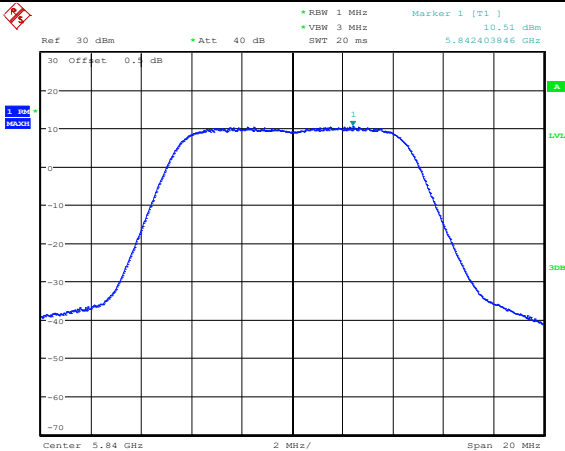
Date: 24.MAR.2022 14:37:33

Chain 0
10MHz
Middle Channel



Date: 24.MAR.2022 14:38:40

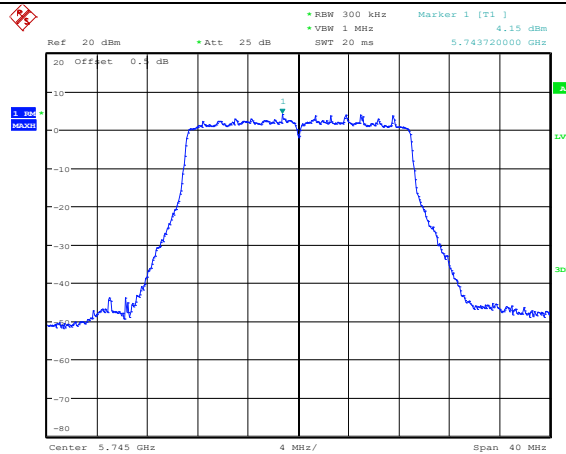
Chain 0
10MHz
Highest Channel



Date: 24.MAR.2022 14:40:05

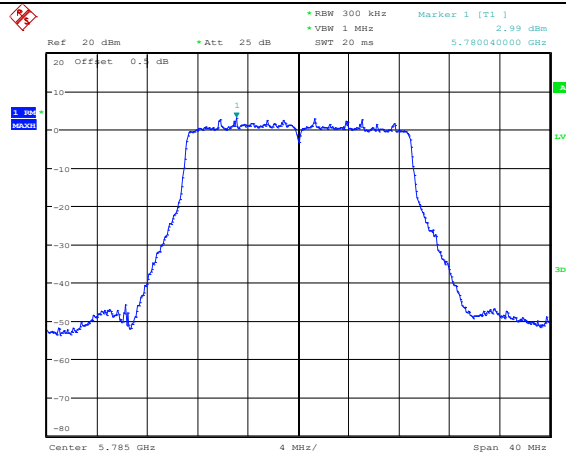
Maximum power spectral density

Chain 1
802.11n ht20
Lowest Channel



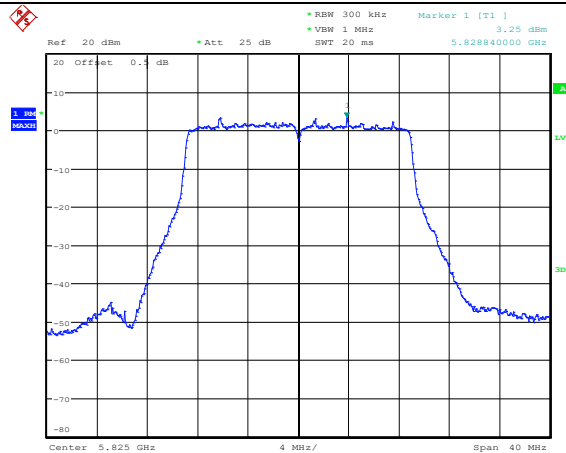
Date: 23.MAR.2022 11:53:58

Chain 1
802.11n ht20
Middle Channel



Date: 23.MAR.2022 11:54:44

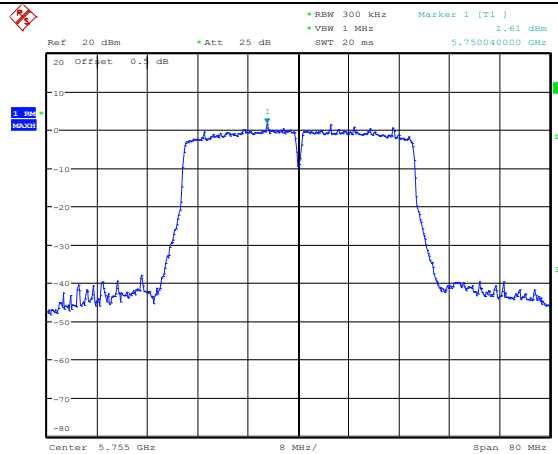
Chain 1
802.11n ht20
Highest Channel



Date: 23.MAR.2022 11:55:25

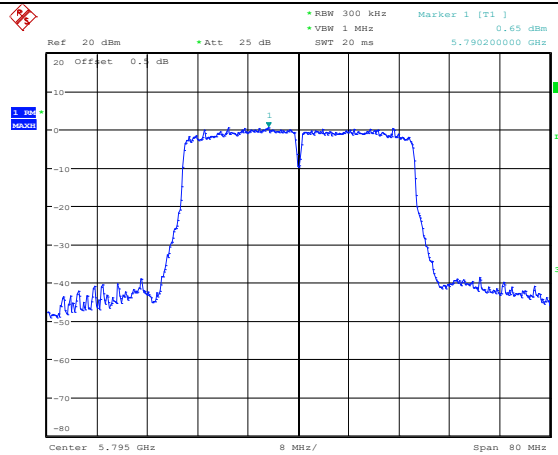
Maximum power spectral density

Chain 1
802.11n ht40
Lowest Channel



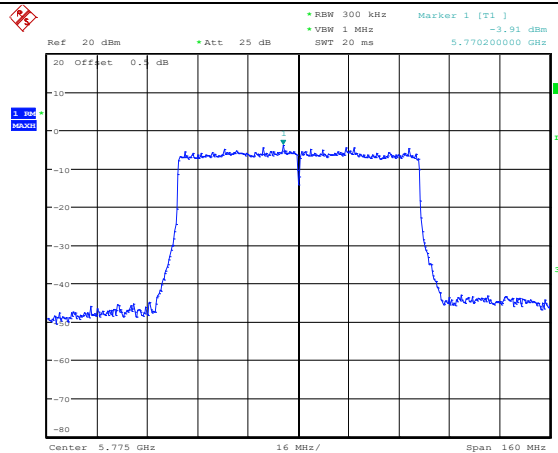
Date: 23.MAR.2022 13:09:55

Chain 1
802.11n ht40
Highest Channel



Date: 23.MAR.2022 13:10:42

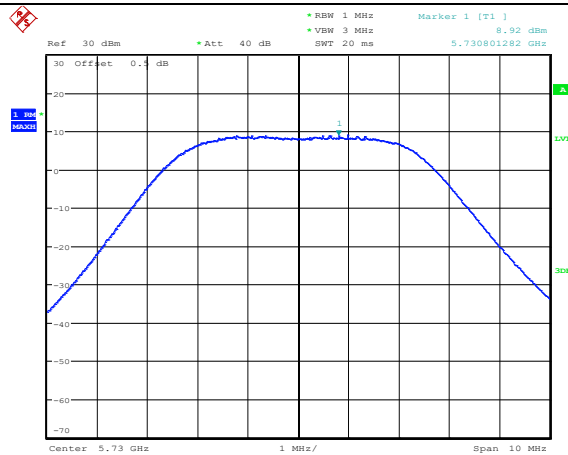
Chain 1
802.11ac vht80
Middle Channel



Date: 23.MAR.2022 13:11:41

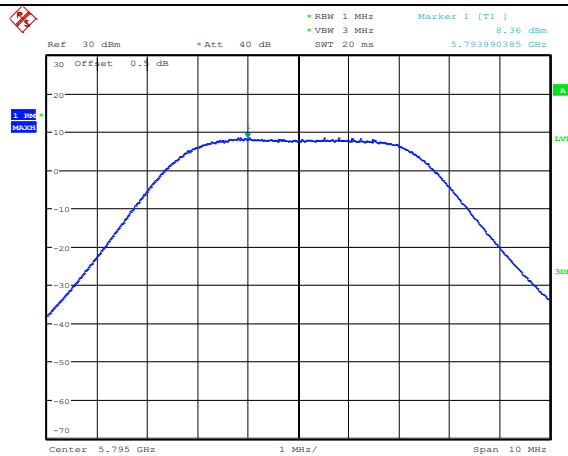
Maximum power spectral density

Chain 1
5MHz
Lowest Channel



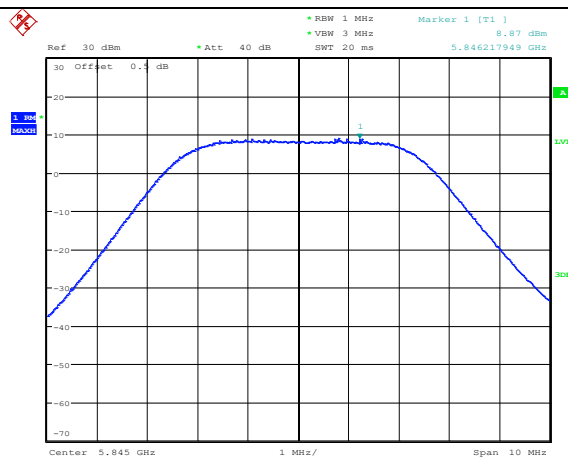
Date: 24.MAR.2022 10:51:48

Chain 1
5MHz
Middle Channel



Date: 24.MAR.2022 11:04:28

Chain 1
5MHz
Highest Channel



Date: 24.MAR.2022 11:05:32

Chain 1
10MHz
Lowest Channel



Chain 1
10MHz
Middle Channel



Chain 1
10MHz
Highest Channel



4.6 Duty Cycle:

Serial Number:	CR21090075-RF-S1	Test Date:	2021-12-01~2022-03-23
Test Site:	RF	Test Mode:	Transmitting
Tester:	Wolf Mo	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	25.9~26.1	Relative Humidity: (%)	60~64	ATM Pressure: (kPa)	100.2~100.3

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101943	2021/10/10	2022/10/9
R&S	Spectrum Analyzer	FSU26	200256	2021/07/22	2022/07/21
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	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 mode	T _{on} (ms)	T _{on+off} (ms)	Duty Cycle (%)
802.11a	2.118	2.156	98.24
802.11n ht20	2.596	2.623	98.97
802.11n ht40	2.481	2.495	99.44
802.11ac vht80	1.181	1.216	97.12
5MHz	20.584	20.744	99.23
10MHz	40.622	40.787	99.60

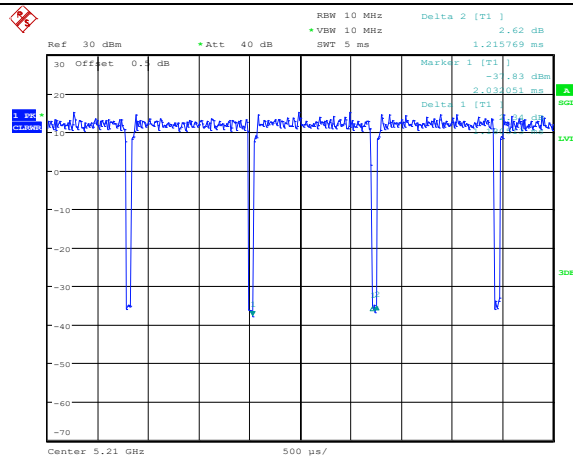
802.11 a



Date: 1.DEC.2021 19:16:30

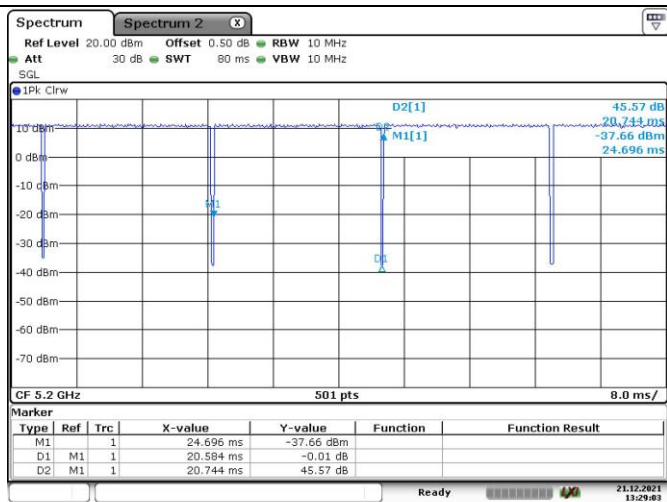
Date: 23.MAR.2022 18:07:16

802.11ac vht80



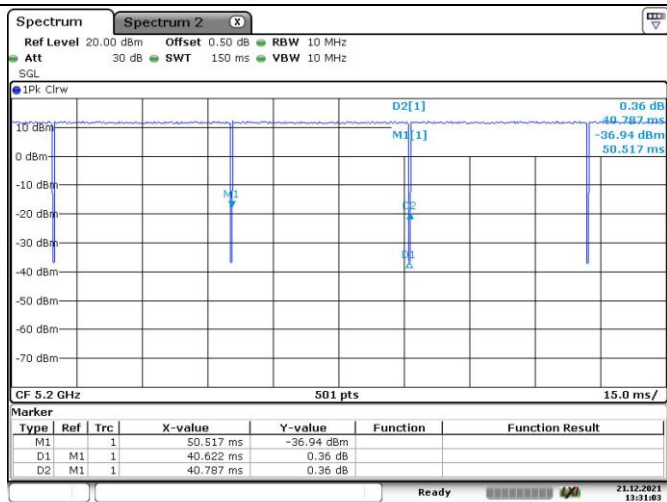
Date: 23.MAR.2022 17:45:57

5MHz



Date: 21.DEC.2021 13:29:03

10MHz



Date: 21.DEC.2021 13:31:03

***** END OF REPORT *****