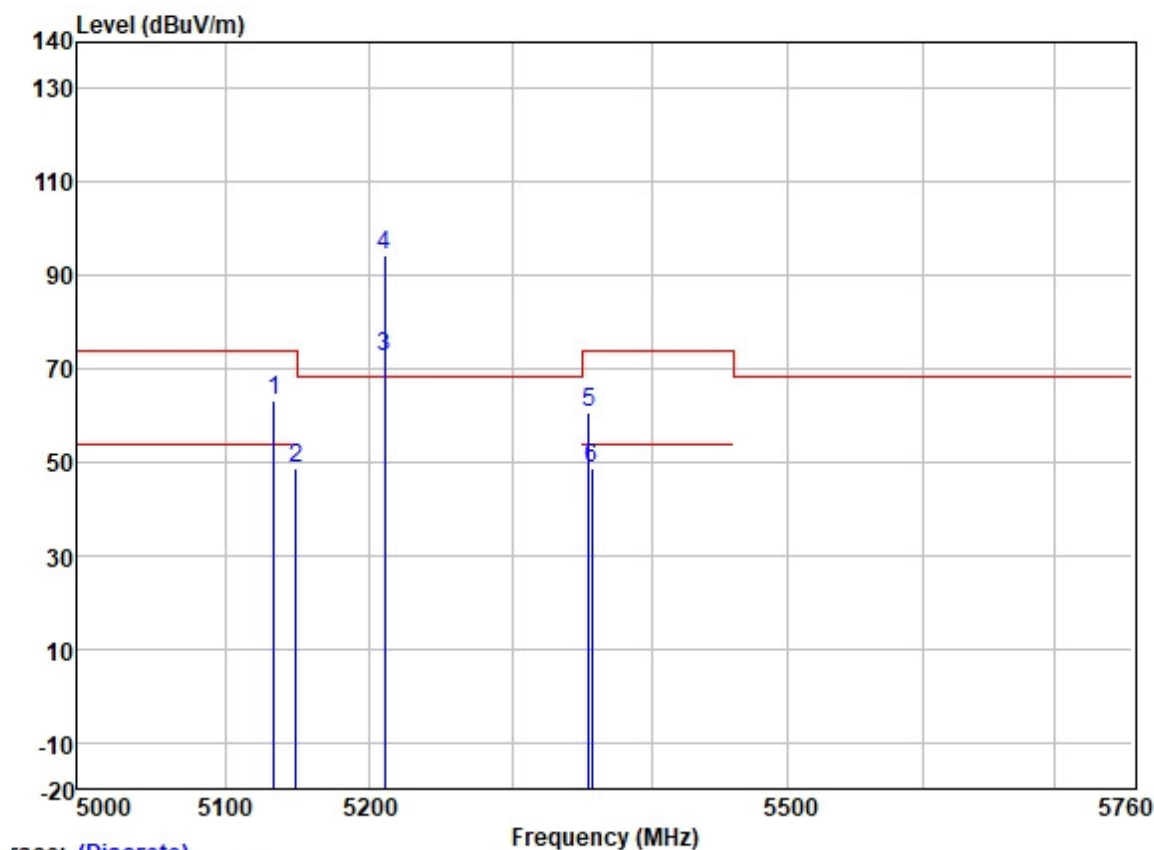
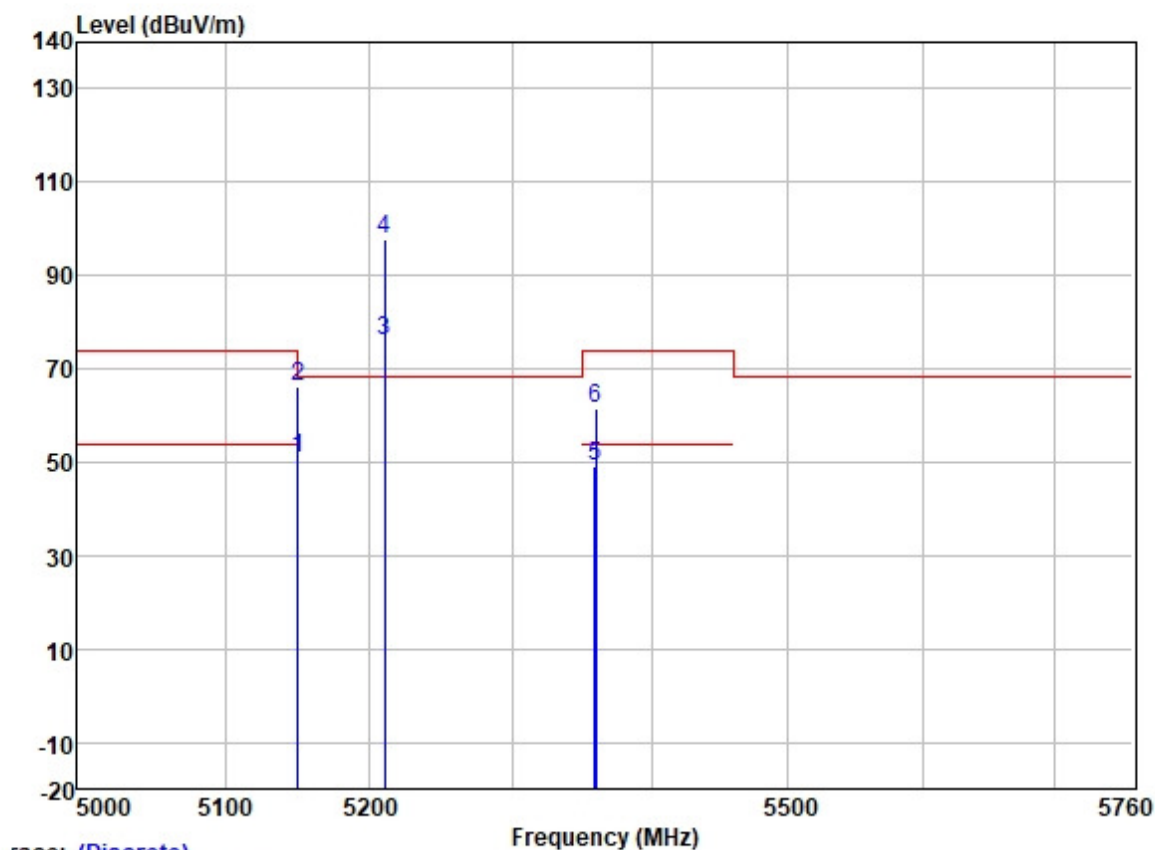


Test Mode: 04; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 80MHz; Channel: middle



	Freq	Read	Antenna	Cable	Preamp	Limit	Over		
	MHz	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	5133.329	62.80	31.72	5.63	36.86	63.29	74.00	-10.71	HORIZONTAL Peak
2	5148.922	48.27	31.72	5.62	36.86	48.75	54.00	-5.25	HORIZONTAL Average
3	5210.000	72.13	31.74	5.65	36.87	72.65	-----	-----	HORIZONTAL Average
4 *	5210.000	93.76	31.74	5.65	36.87	94.28	68.20	26.08	HORIZONTAL Peak
5	5354.406	59.58	31.78	6.03	36.88	60.51	74.00	-13.49	HORIZONTAL Peak
6	5356.803	47.90	31.78	6.03	36.88	48.83	54.00	-5.17	HORIZONTAL Average

Test Mode: 04; Polarity: Vertical; Modulation: 802.11ac; Bandwidth: 80MHz; Channel: middle



	Freq	Read	Antenna	Cable	Preamp	Limit	Over		
	MHz	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	5149.690	50.24	31.72	5.62	36.86	50.72	54.00	-3.28	VERTICAL
2	5149.947	65.80	31.72	5.62	36.86	66.28	74.00	-7.72	VERTICAL
3	5210.000	75.53	31.74	5.65	36.87	76.05	-----	-----	VERTICAL
4 *	5210.000	97.21	31.74	5.65	36.87	97.73	68.20	29.53	VERTICAL
5	5359.201	48.11	31.78	6.03	36.88	49.04	54.00	-4.96	VERTICAL
6	5360.000	60.62	31.78	6.03	36.88	61.55	74.00	-12.45	VERTICAL

7.9 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart C 15.407 (g)
Test Method: ANSI C63.10 (2013) Section 6.8

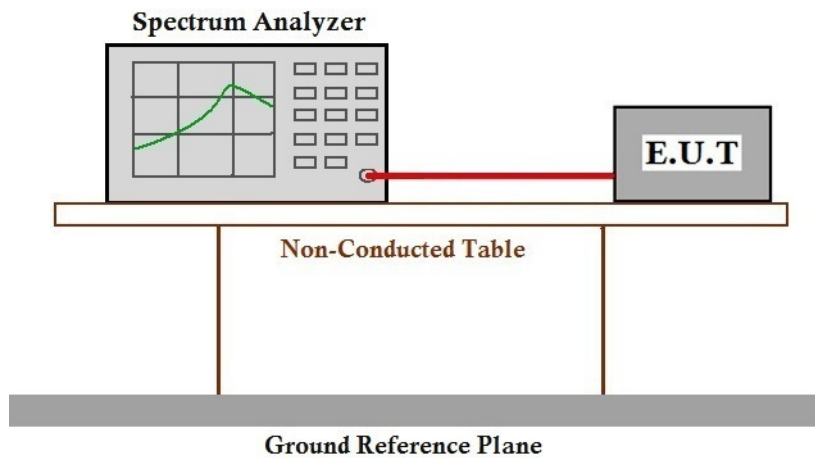
7.9.1 E.U.T. Operation

Operating Environment:
Temperature: 21.6 °C Humidity: 51.8 % RH Atmospheric Pressure: 1003 mbar

7.9.2 Test Mode Description

Pre-scan / Mode	Description
Final test Code	
Final test 04	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

7.9.3 Test Setup Diagram



7.9.4 Measurement Procedure and Data

The applicant declares that the emissions are maintained within the band of operation under all conditions of normal operation as specified in the user's manual and meets Section 15.407(g) requirements.

7.10 Radiated Emissions (above 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

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

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

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

(4) For transmitters operating in the 5.725-5.85 GHz band:

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

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 22.3 °C Humidity: 51.4 % RH Atmospheric Pressure: 1003 mbar

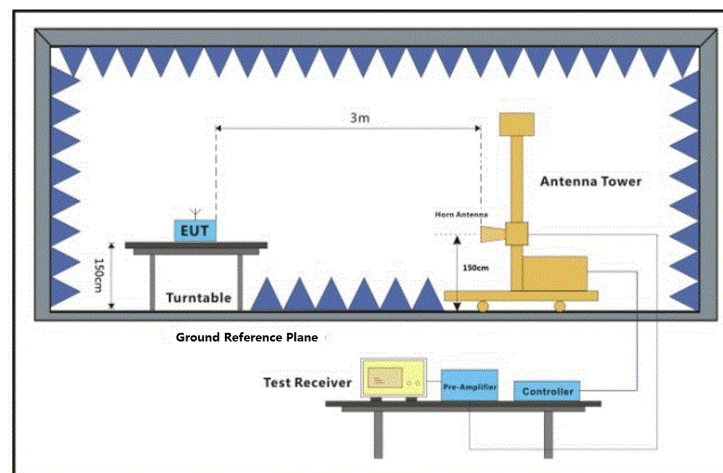
7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
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Final test	04	
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TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report.

7.10.3 Test Setup Diagram



7.10.4 Measurement Procedure and Data

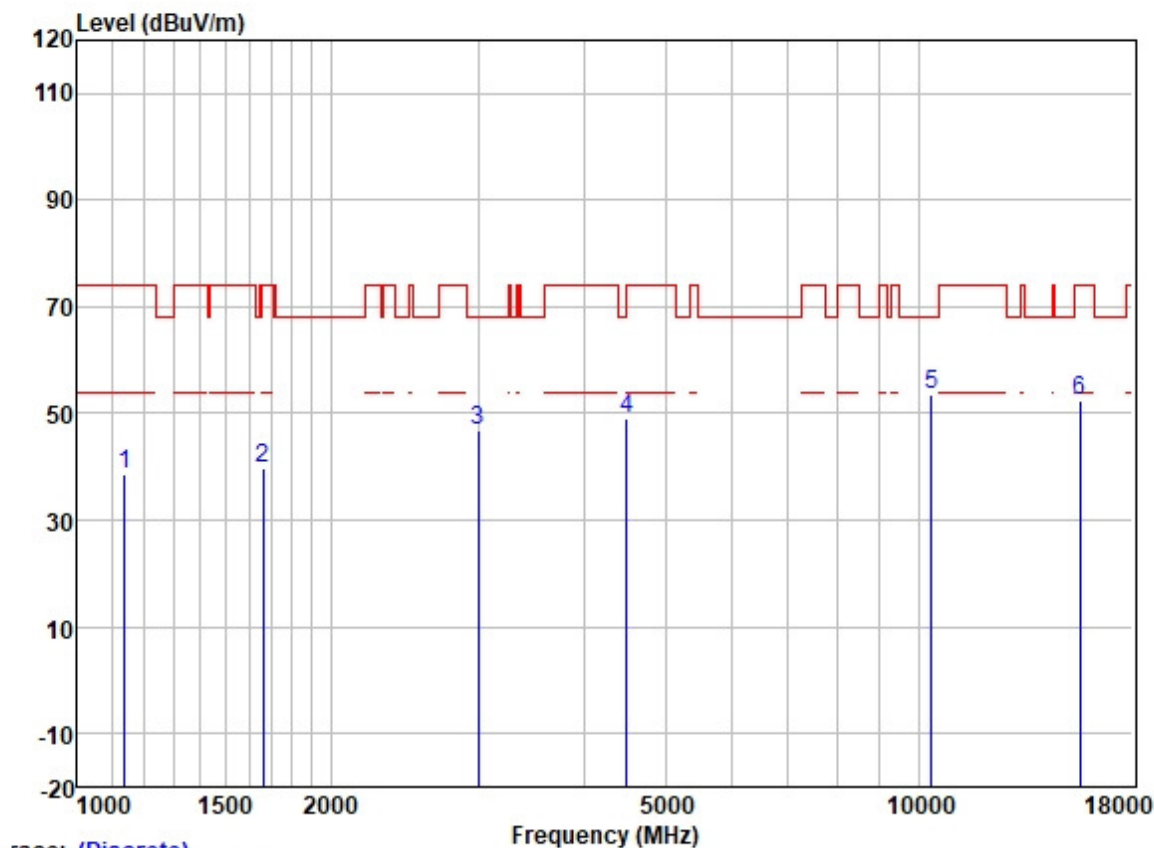
- a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 1GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
4. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

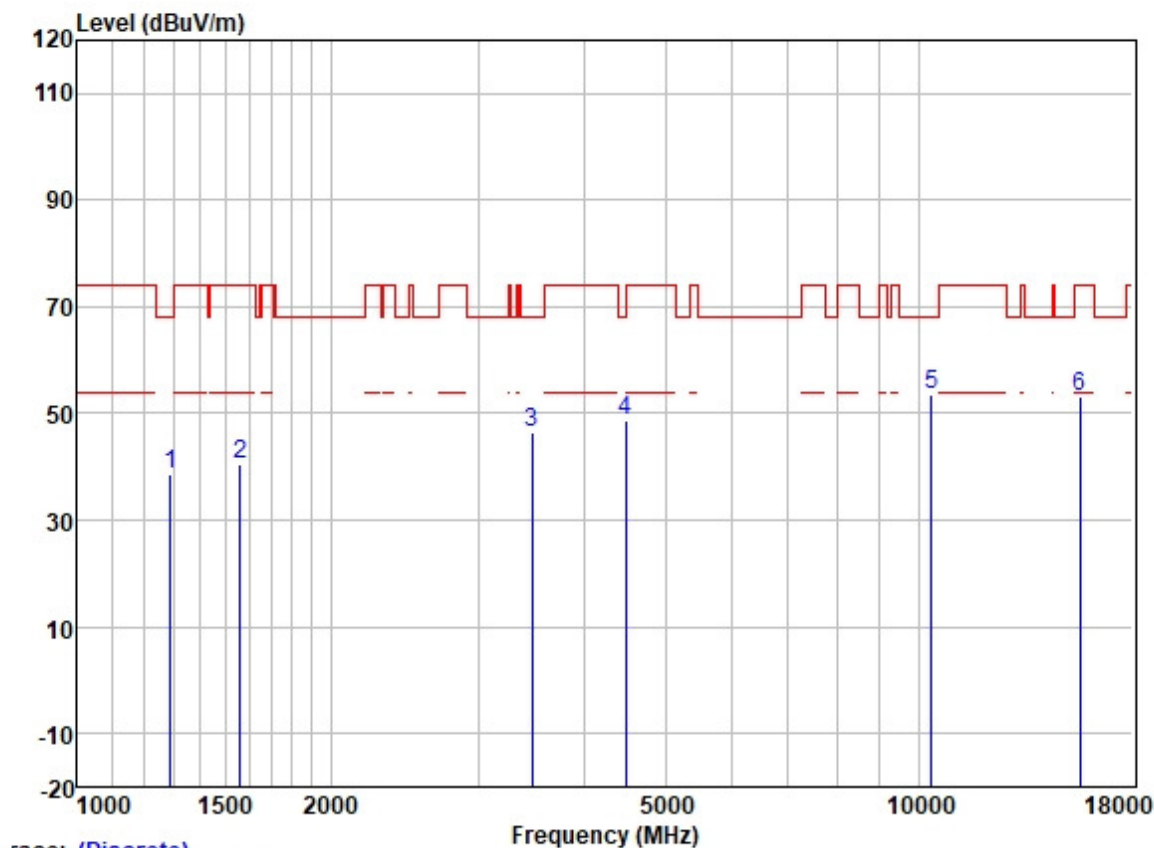


Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



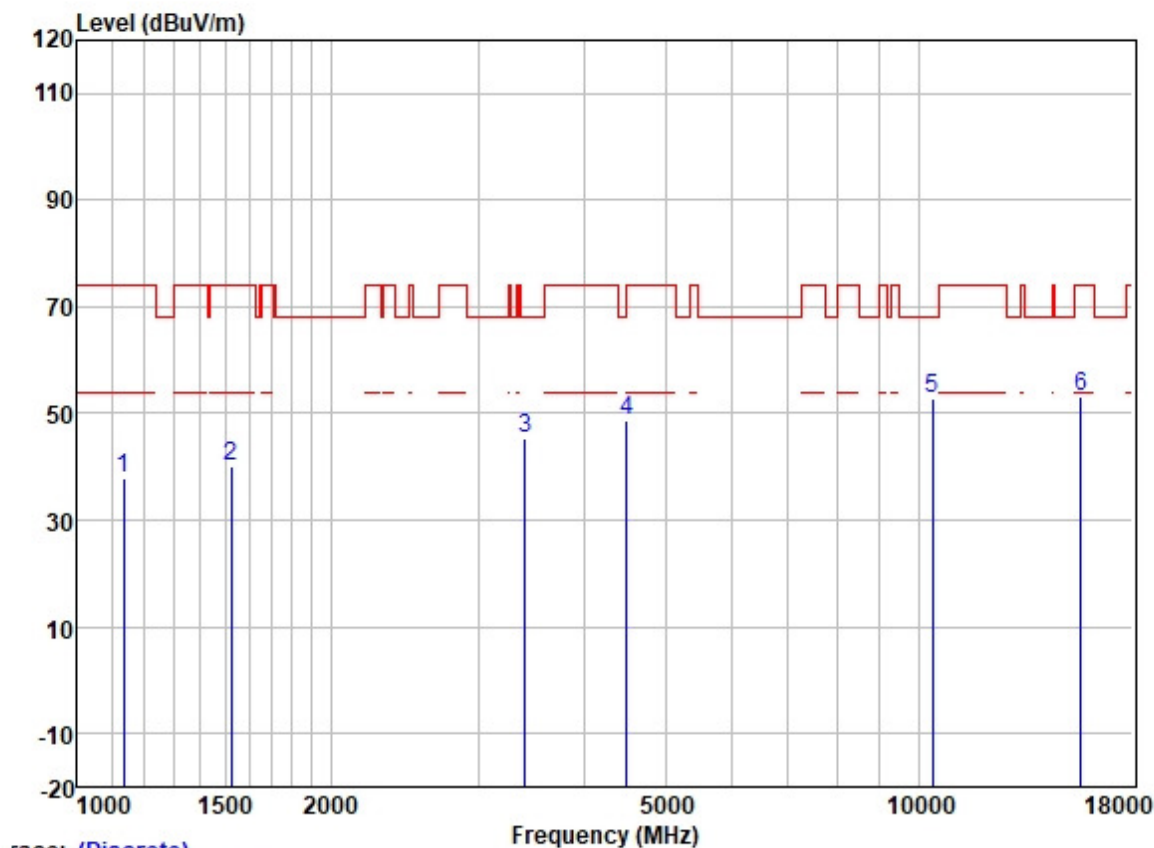
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1138.904	50.45	24.46	2.27	38.42	38.76	74.00	-35.24	HORIZONTAL	Peak
2	1663.137	49.18	25.65	2.80	37.91	39.72	74.00	-34.28	HORIZONTAL	Peak
3	2999.187	51.96	28.40	3.80	37.25	46.91	68.20	-21.29	HORIZONTAL	Peak
4	4495.125	49.91	30.80	5.05	36.82	48.94	68.20	-19.26	HORIZONTAL	Peak
5	10360.000	44.20	39.28	7.29	37.37	53.40	68.20	-14.80	HORIZONTAL	Peak
6	15540.000	39.00	39.05	9.88	35.39	52.54	74.00	-21.46	HORIZONTAL	Peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



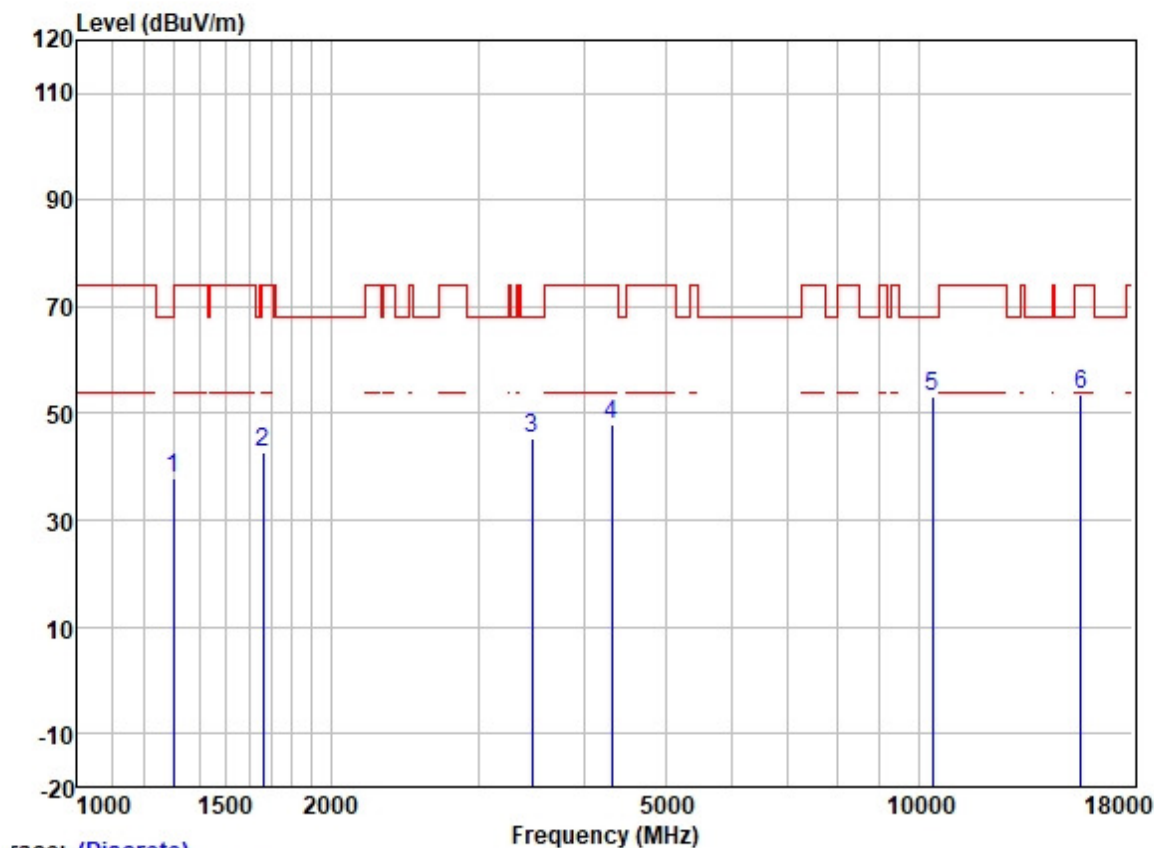
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1289.627	49.27	25.17	2.55	38.31	38.68	68.20	-29.52	VERTICAL	Peak
2	1560.673	50.14	25.54	2.80	38.03	40.45	74.00	-33.55	VERTICAL	Peak
3	3475.541	50.39	28.89	4.25	36.95	46.58	68.20	-21.62	VERTICAL	Peak
4	4482.150	49.80	30.78	4.99	36.81	48.76	68.20	-19.44	VERTICAL	Peak
5	10360.000	44.47	39.28	7.29	37.37	53.67	68.20	-14.53	VERTICAL	Peak
6	15540.000	39.57	39.05	9.88	35.39	53.11	74.00	-20.89	VERTICAL	Peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



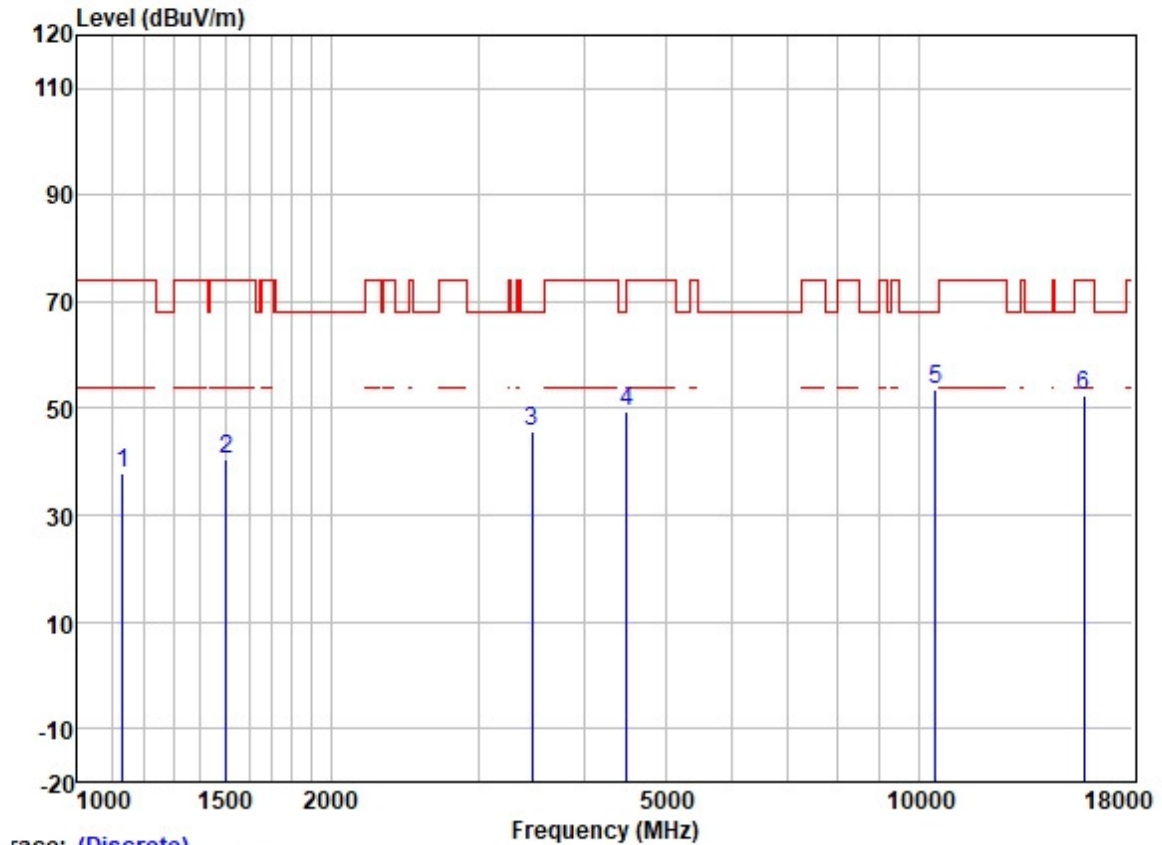
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1135.617	49.61	24.45	2.25	38.43	37.88	74.00	-36.12	HORIZONTAL	Peak
2	1525.000	49.87	25.52	2.80	38.07	40.12	74.00	-33.88	HORIZONTAL	Peak
3	3405.929	49.21	28.85	4.11	36.98	45.19	68.20	-23.01	HORIZONTAL	Peak
4	4495.125	49.69	30.80	5.05	36.82	48.72	68.20	-19.48	HORIZONTAL	Peak
5	10400.000	43.68	39.33	7.32	37.36	52.97	68.20	-15.23	HORIZONTAL	Peak
6	15600.000	39.86	38.99	9.88	35.39	53.34	74.00	-20.66	HORIZONTAL	Peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



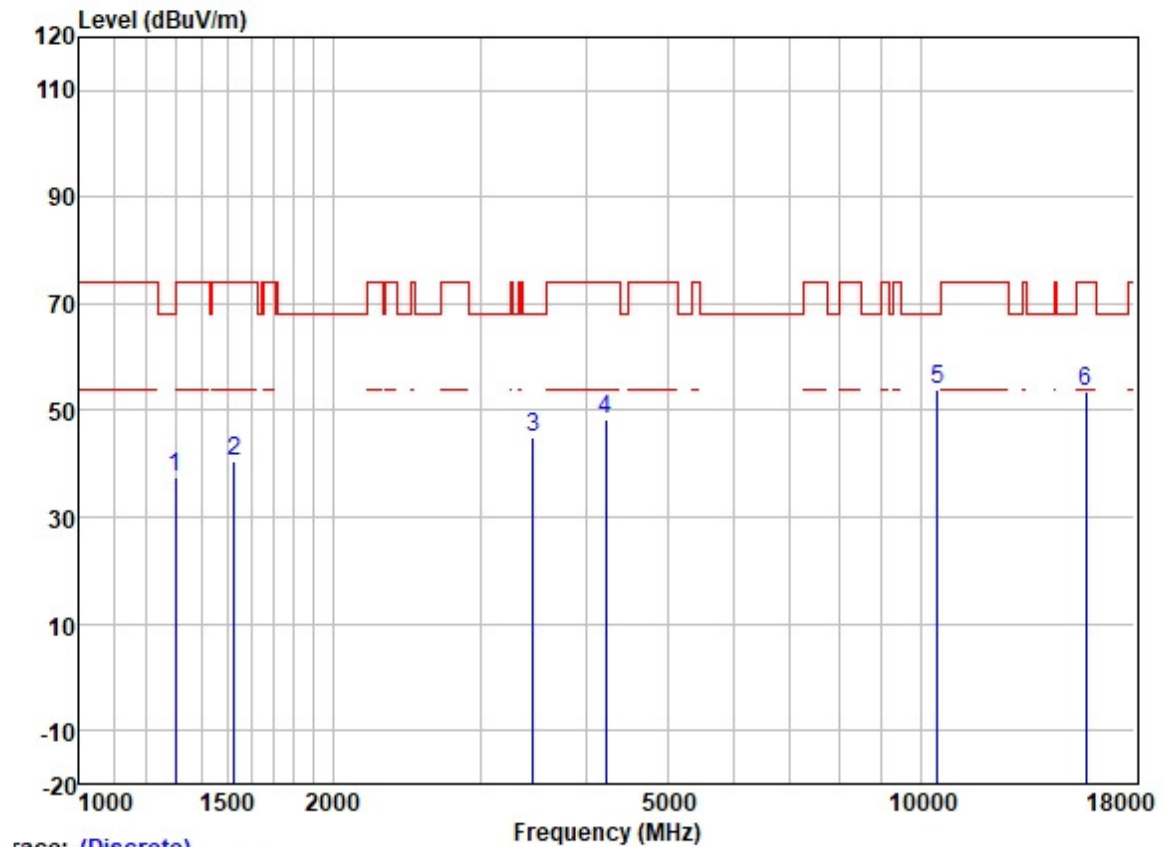
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	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1300.858	48.54	25.20	2.60	38.31	38.03	74.00	-35.97	VERTICAL	Peak
2	1663.137	52.24	25.65	2.80	37.91	42.78	74.00	-31.22	VERTICAL	Peak
3	3475.541	49.09	28.89	4.25	36.95	45.28	68.20	-22.92	VERTICAL	Peak
4	4316.859	49.62	30.51	4.66	36.81	47.98	74.00	-26.02	VERTICAL	Peak
5	10400.000	43.71	39.33	7.32	37.36	53.00	68.20	-15.20	VERTICAL	Peak
6	15600.000	40.06	38.99	9.88	35.39	53.54	74.00	-20.46	VERTICAL	Peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



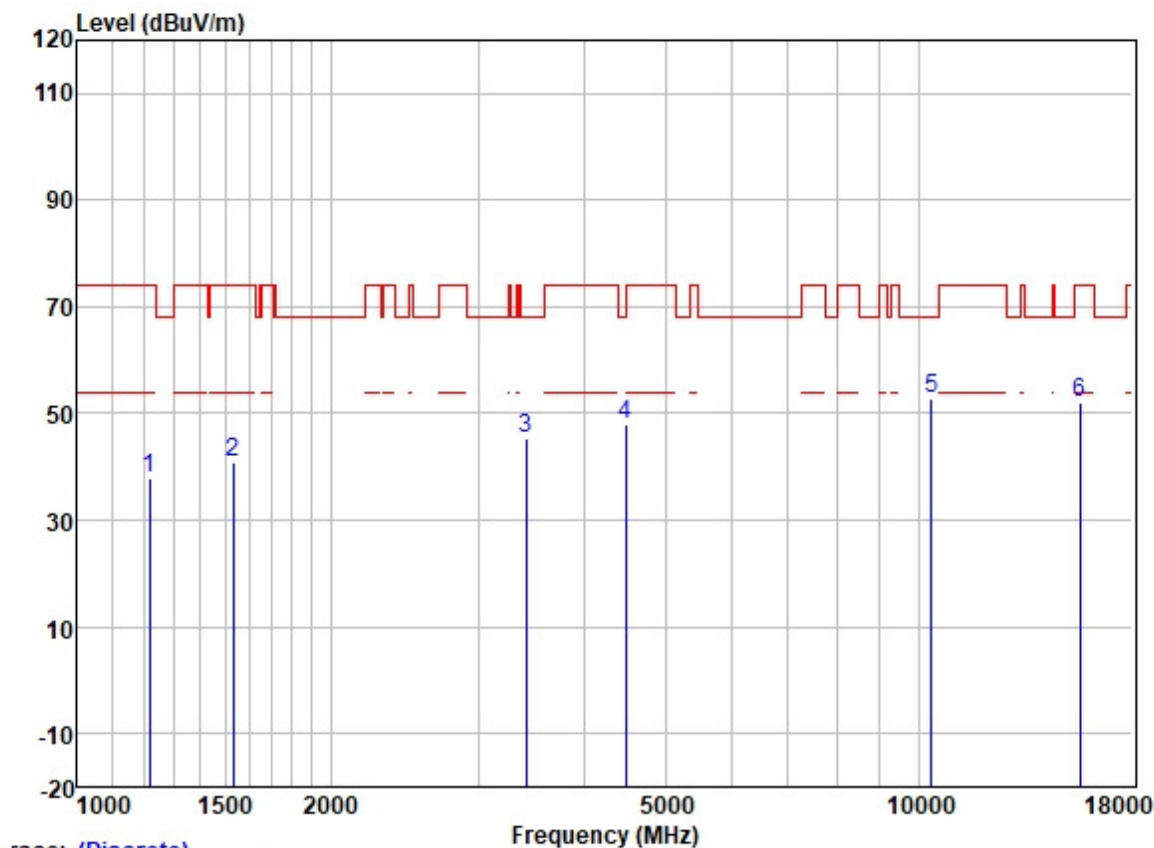
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1132.340	49.75	24.44	2.22	38.43	37.98	74.00	-36.02	HORIZONTAL	Peak
2	1503.119	50.41	25.50	2.80	38.10	40.61	74.00	-33.39	HORIZONTAL	Peak
3	3475.541	49.52	28.89	4.25	36.95	45.71	68.20	-22.49	HORIZONTAL	Peak
4	4495.125	50.36	30.80	5.05	36.82	49.39	68.20	-18.81	HORIZONTAL	Peak
5	10480.000	43.86	39.46	7.40	37.36	53.36	68.20	-14.84	HORIZONTAL	Peak
6	15720.000	39.35	38.78	9.87	35.39	52.61	74.00	-21.39	HORIZONTAL	Peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



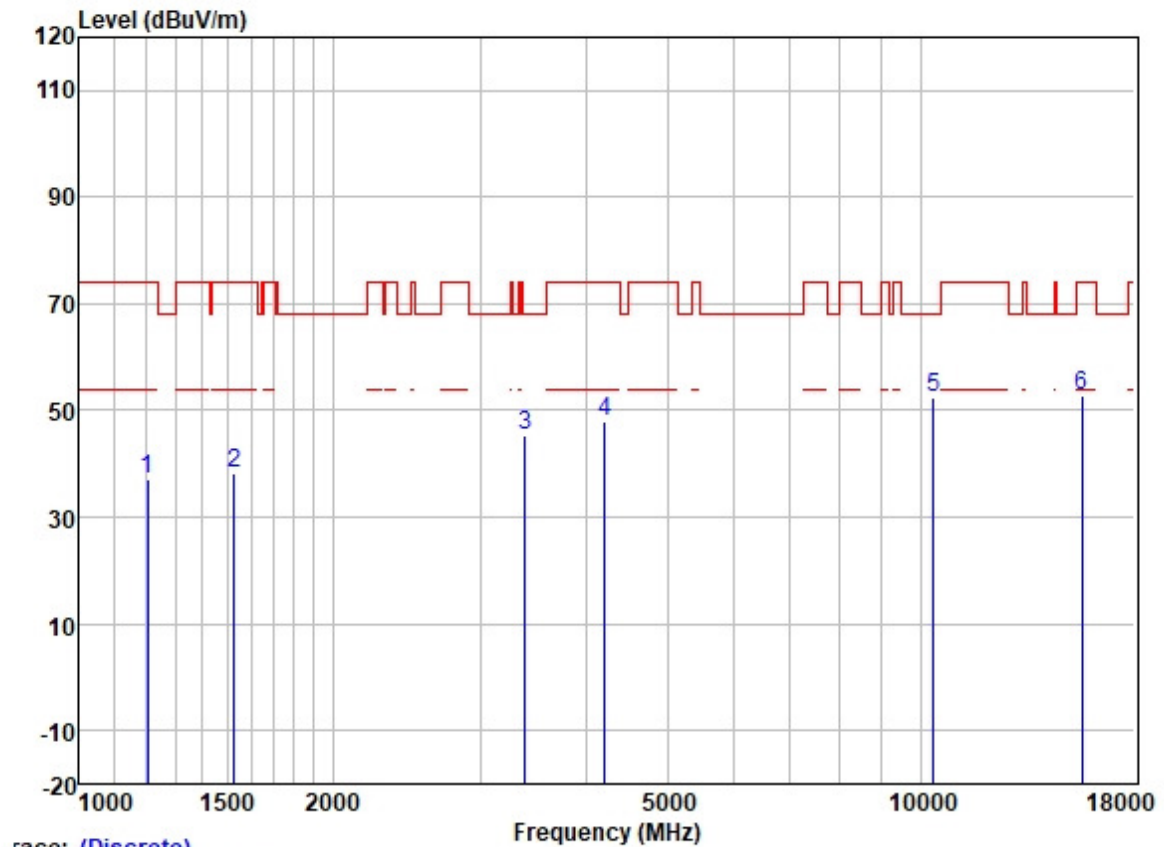
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1300.858	47.98	25.20	2.60	38.31	37.47	74.00	-36.53	VERTICAL	Peak
2	1529.414	50.36	25.52	2.80	38.07	40.61	74.00	-33.39	VERTICAL	Peak
3	3465.510	48.91	28.88	4.22	36.95	45.06	68.20	-23.14	VERTICAL	Peak
4	4230.396	50.18	30.26	4.61	36.81	48.24	74.00	-25.76	VERTICAL	Peak
5	10480.000	44.54	39.46	7.40	37.36	54.04	68.20	-14.16	VERTICAL	Peak
6	15720.000	40.12	38.78	9.87	35.39	53.38	74.00	-20.62	VERTICAL	Peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



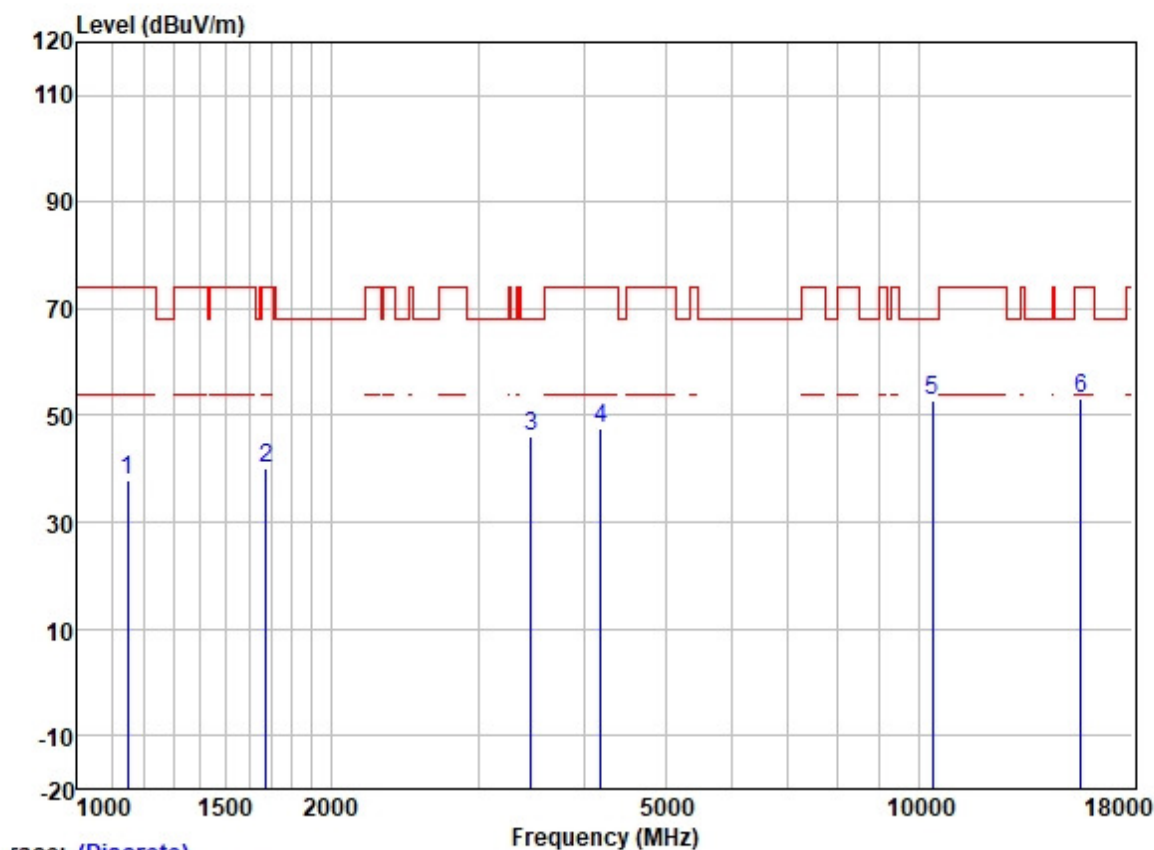
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1217.190	48.95	24.79	2.32	38.37	37.69	74.00	-36.31	HORIZONTAL	Peak
2	1533.841	50.42	25.52	2.80	38.07	40.67	74.00	-33.33	HORIZONTAL	Peak
3	3415.787	49.31	28.85	4.13	36.97	45.32	68.20	-22.88	HORIZONTAL	Peak
4	4482.150	48.92	30.78	4.99	36.81	47.88	68.20	-20.32	HORIZONTAL	Peak
5	10360.000	43.47	39.28	7.29	37.37	52.67	68.20	-15.53	HORIZONTAL	Peak
6	15540.000	38.67	39.05	9.88	35.39	52.21	74.00	-21.79	HORIZONTAL	Peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low



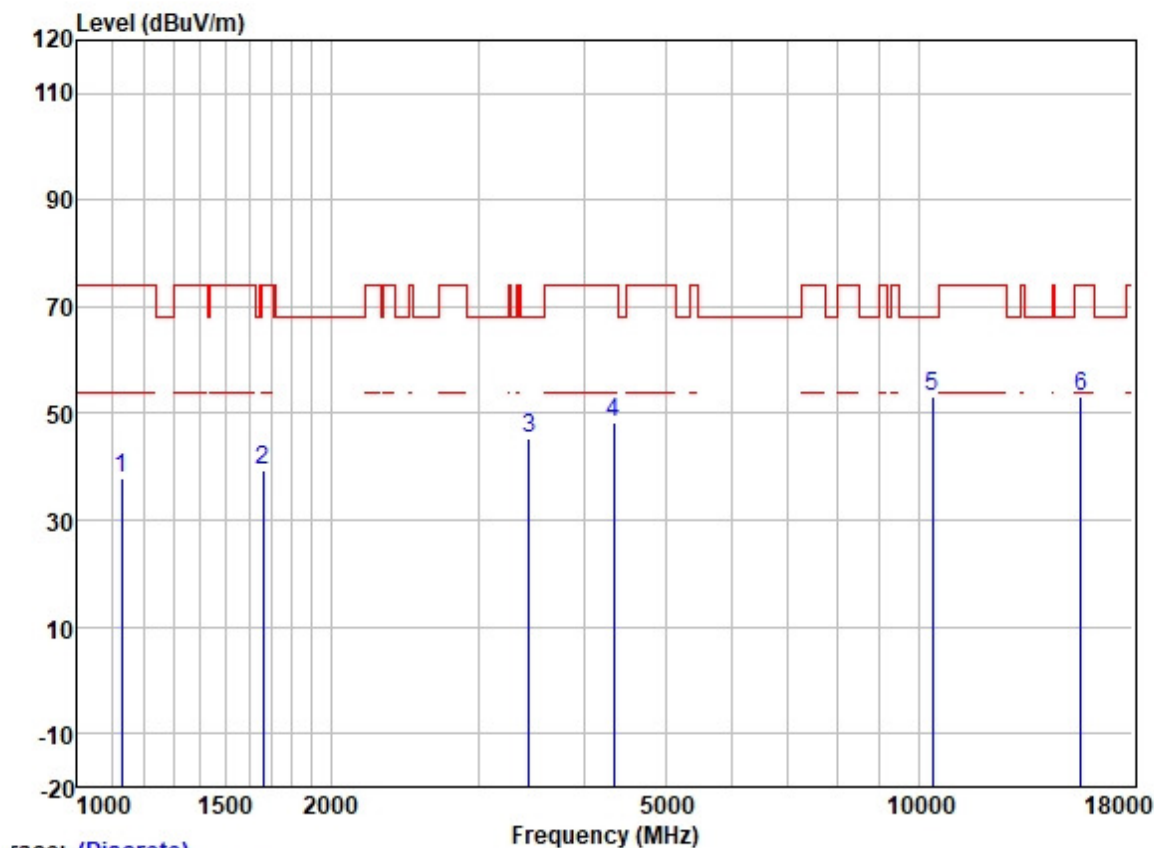
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	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1206.682	48.58	24.72	2.33	38.39	37.24	74.00	-36.76	VERTICAL	Peak
2	1529.414	48.15	25.52	2.80	38.07	38.40	74.00	-35.60	VERTICAL	Peak
3	3386.297	49.37	28.83	4.10	36.99	45.31	68.20	-22.89	VERTICAL	Peak
4	4218.186	49.80	30.22	4.60	36.81	47.81	74.00	-26.19	VERTICAL	Peak
5	10360.000	43.26	39.28	7.29	37.37	52.46	68.20	-15.74	VERTICAL	Peak
6	15540.000	39.43	39.05	9.88	35.39	52.97	74.00	-21.03	VERTICAL	Peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



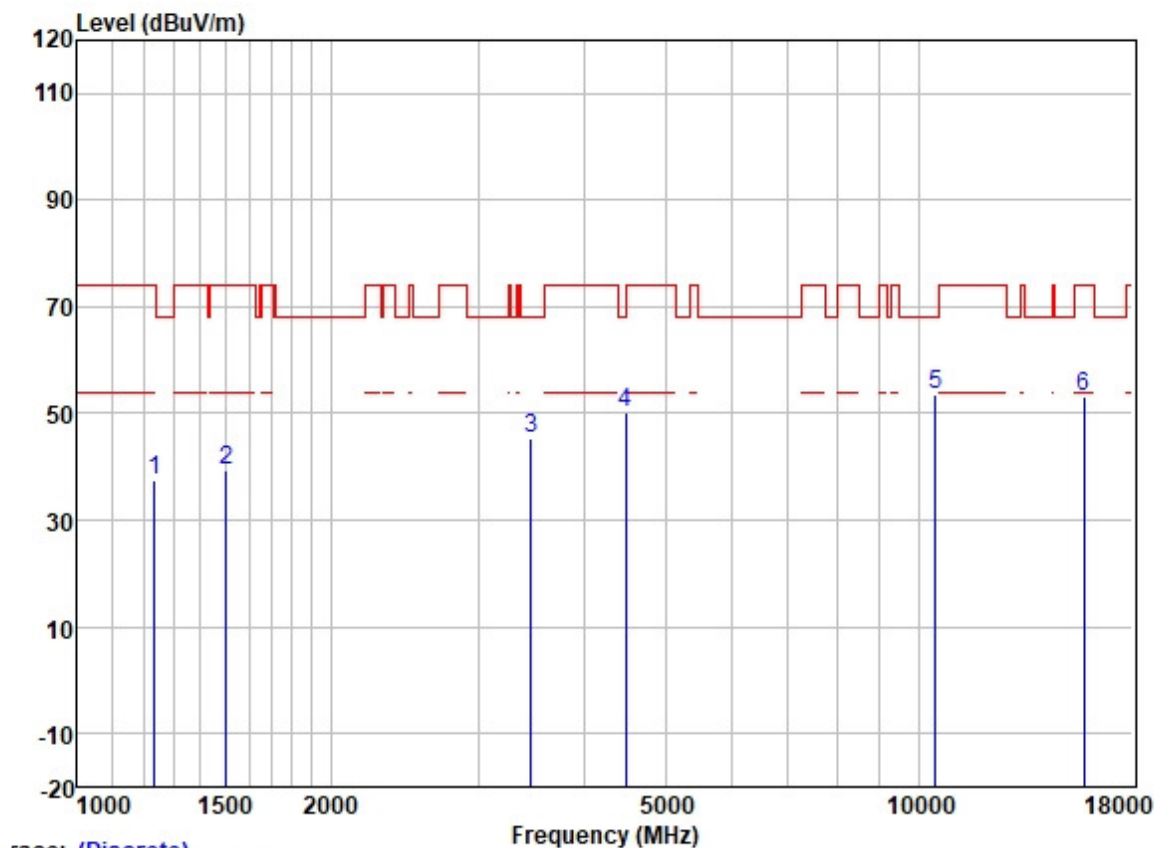
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1148.823	49.61	24.49	2.34	38.42	38.02	74.00	-35.98	HORIZONTAL	Peak
2	1677.621	49.57	25.68	2.80	37.91	40.14	74.00	-33.86	HORIZONTAL	Peak
3	3465.510	49.81	28.88	4.22	36.95	45.96	68.20	-22.24	HORIZONTAL	Peak
4	4193.872	49.59	30.15	4.60	36.81	47.53	74.00	-26.47	HORIZONTAL	Peak
5	10400.000	43.68	39.33	7.32	37.36	52.97	68.20	-15.23	HORIZONTAL	Peak
6	15600.000	39.81	38.99	9.88	35.39	53.29	74.00	-20.71	HORIZONTAL	Peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



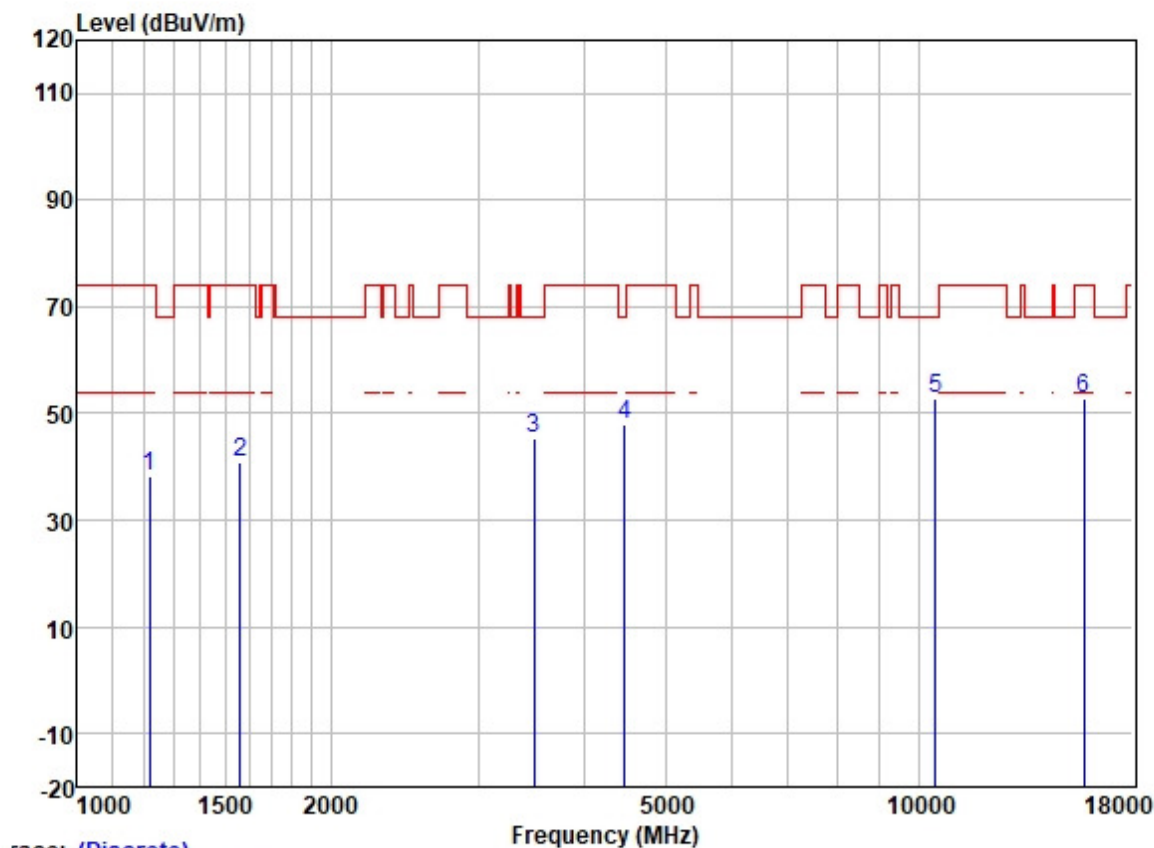
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1129.072	49.59	24.43	2.20	38.43	37.79	74.00	-36.21	VERTICAL	Peak
2	1663.137	48.94	25.65	2.80	37.91	39.48	74.00	-34.52	VERTICAL	Peak
3	3445.535	49.32	28.87	4.18	36.96	45.41	68.20	-22.79	VERTICAL	Peak
4	4341.886	49.91	30.57	4.67	36.81	48.34	74.00	-25.66	VERTICAL	Peak
5	10400.000	43.96	39.33	7.32	37.36	53.25	68.20	-14.95	VERTICAL	Peak
6	15600.000	39.67	38.99	9.88	35.39	53.15	74.00	-20.85	VERTICAL	Peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High



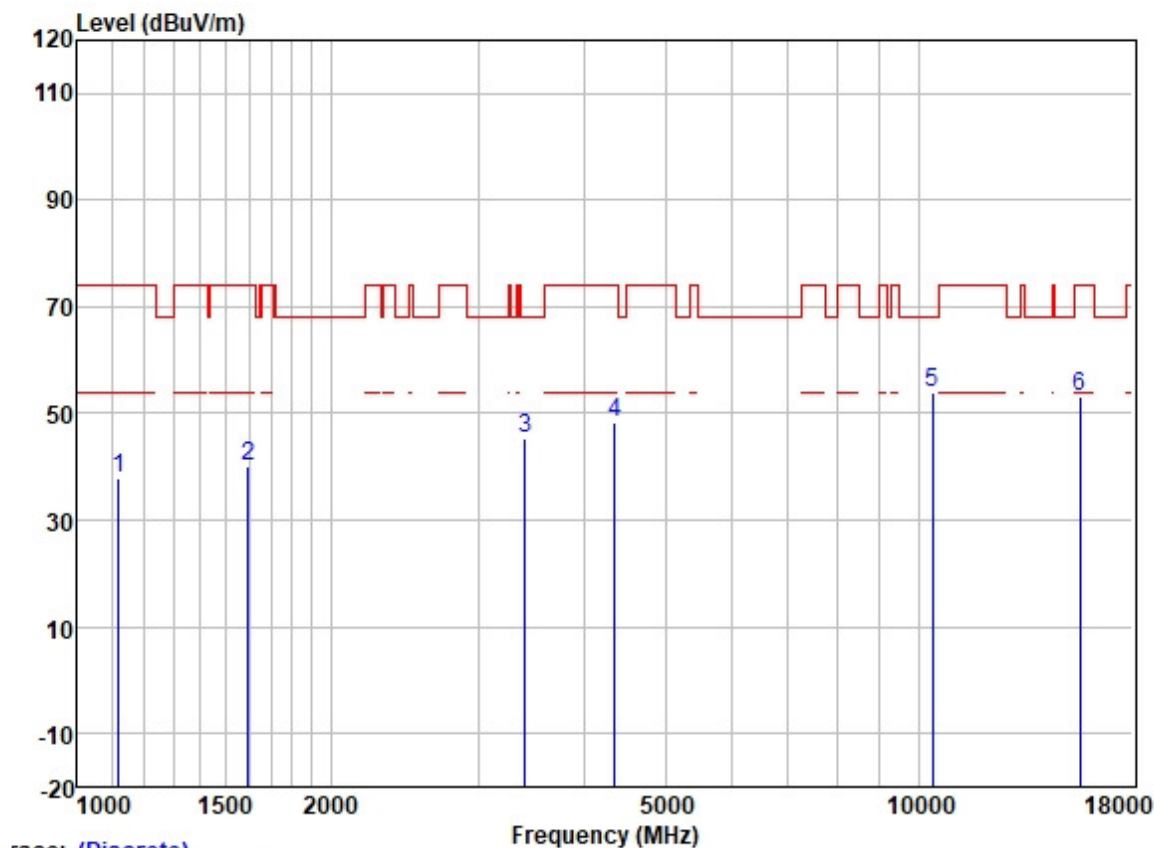
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1234.909	48.61	24.93	2.30	38.37	37.47	74.00	-36.53	HORIZONTAL	Peak
2	1503.119	49.27	25.50	2.80	38.10	39.47	74.00	-34.53	HORIZONTAL	Peak
3	3465.510	49.09	28.88	4.22	36.95	45.24	68.20	-22.96	HORIZONTAL	Peak
4	4482.150	51.24	30.78	4.99	36.81	50.20	68.20	-18.00	HORIZONTAL	Peak
5	10480.000	43.98	39.46	7.40	37.36	53.48	68.20	-14.72	HORIZONTAL	Peak
6	15720.000	39.96	38.78	9.87	35.39	53.22	74.00	-20.78	HORIZONTAL	Peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High



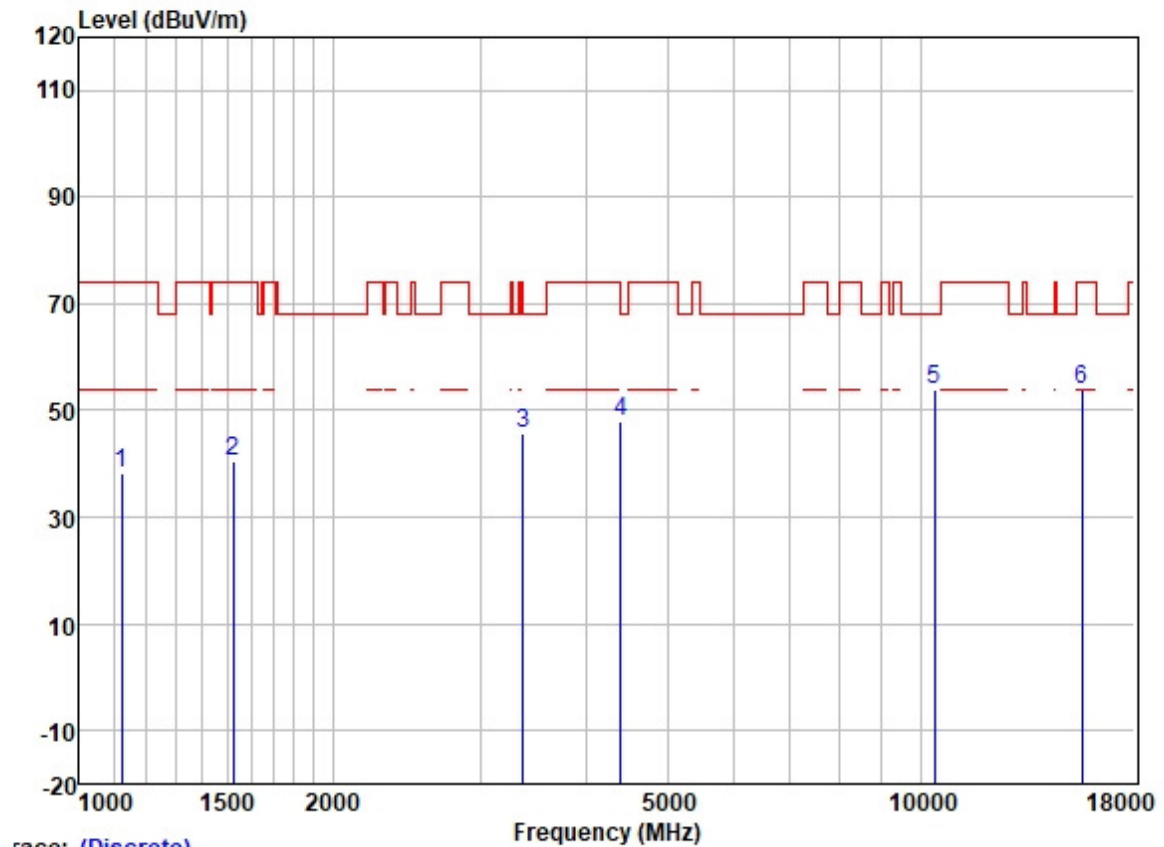
		Read	Antenna	Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1217.190	49.50	24.79	2.32	38.37	38.24	74.00	-35.76	VERTICAL	Peak
2	1560.673	50.45	25.54	2.80	38.03	40.76	74.00	-33.24	VERTICAL	Peak
3	3495.691	49.06	28.90	4.30	36.94	45.32	68.20	-22.88	VERTICAL	Peak
4	4469.214	48.93	30.77	4.93	36.81	47.82	68.20	-20.38	VERTICAL	Peak
5	10480.000	43.41	39.46	7.40	37.36	52.91	68.20	-15.29	VERTICAL	Peak
6	15720.000	39.41	38.78	9.87	35.39	52.67	74.00	-21.33	VERTICAL	Peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



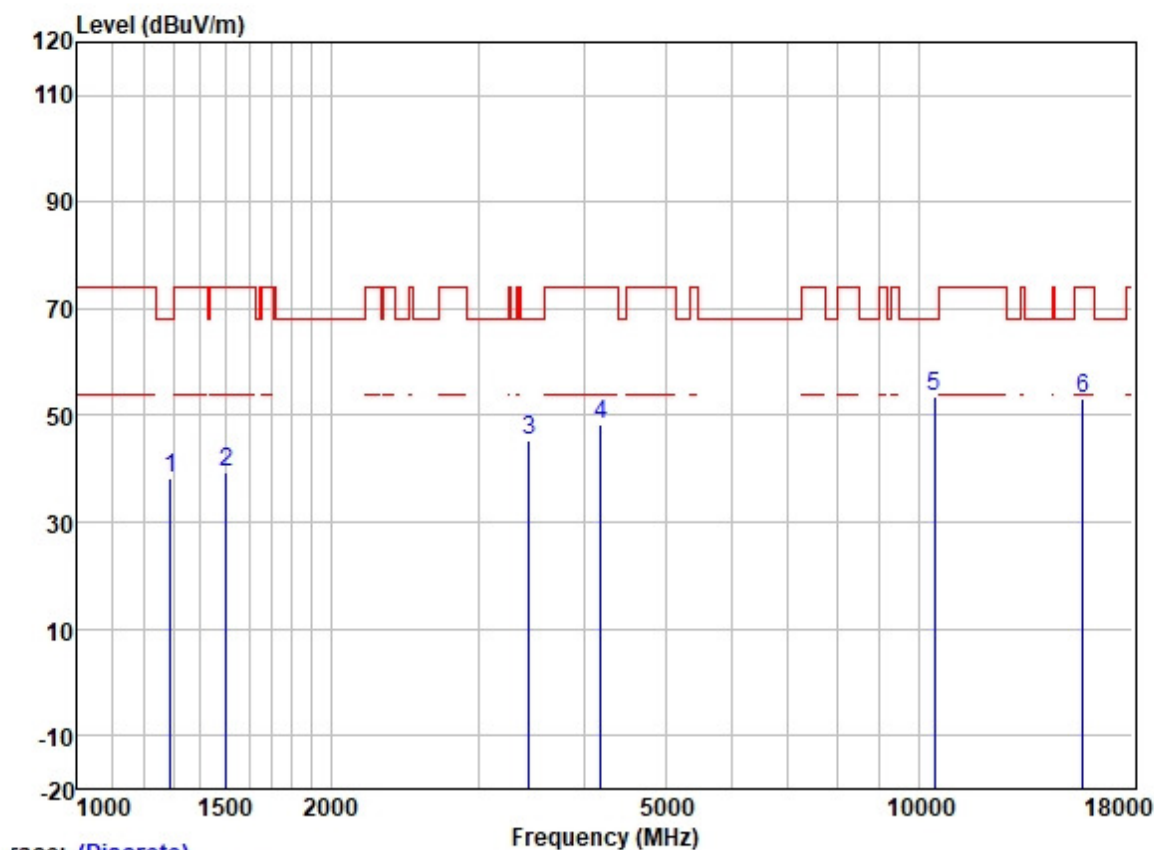
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1119.323	49.77	24.41	2.24	38.43	37.99	74.00	-36.01	HORIZONTAL	Peak
2	1597.181	49.58	25.58	2.80	37.98	39.98	74.00	-34.02	HORIZONTAL	Peak
3	3405.929	49.19	28.85	4.11	36.98	45.17	68.20	-23.03	HORIZONTAL	Peak
4	4354.454	49.80	30.59	4.68	36.81	48.26	74.00	-25.74	HORIZONTAL	Peak
5	10380.000	44.51	39.33	7.32	37.37	53.79	68.20	-14.41	HORIZONTAL	Peak
6	15570.000	39.87	38.99	9.88	35.39	53.35	74.00	-20.65	HORIZONTAL	Peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



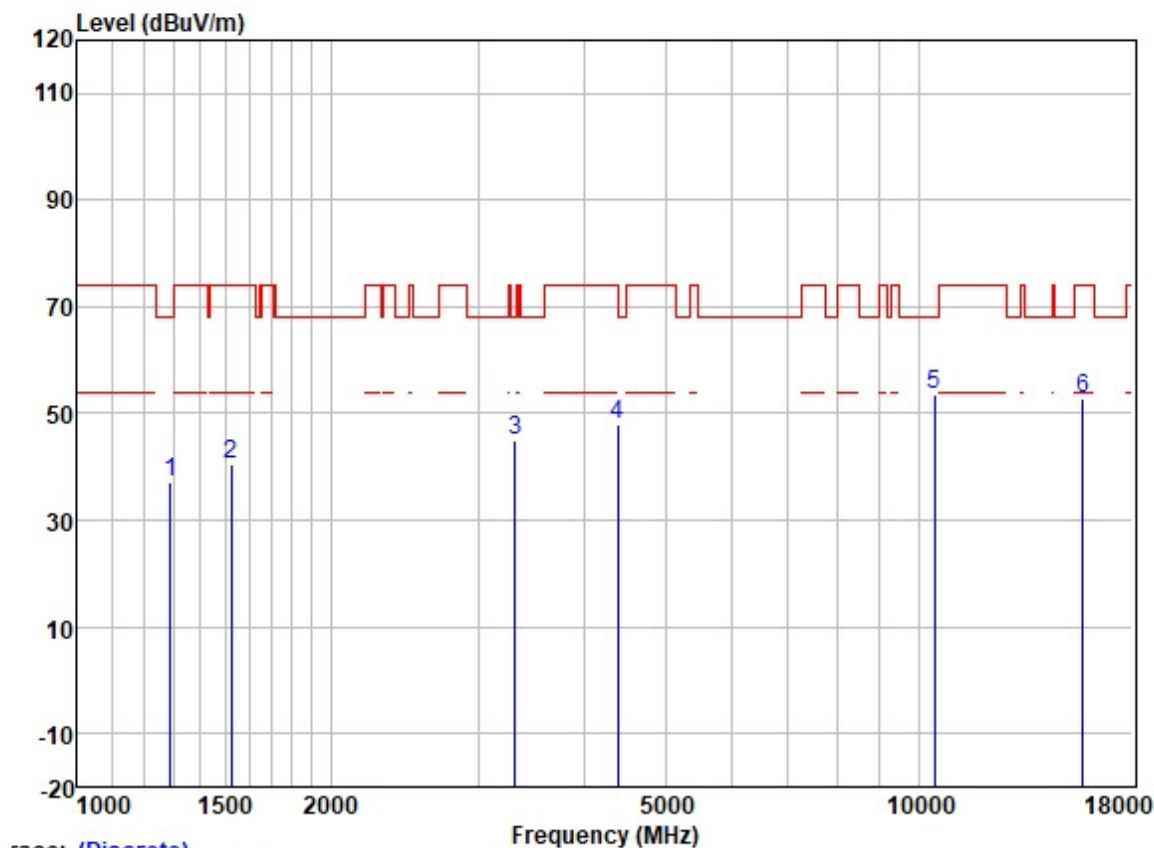
	Freq	Read	Antenna	Cable	Preamp	Limit	Over		
	MHz	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1122.563	49.95	24.42	2.22	38.43	38.16	74.00	-35.84	VERTICAL Peak
2	1525.000	50.14	25.52	2.80	38.07	40.39	74.00	-33.61	VERTICAL Peak
3	3366.778	49.70	28.82	4.09	36.99	45.62	68.20	-22.58	VERTICAL Peak
4	4405.090	49.41	30.68	4.70	36.81	47.98	68.20	-20.22	VERTICAL Peak
5	10380.000	44.61	39.33	7.32	37.37	53.89	68.20	-14.31	VERTICAL Peak
6	15570.000	40.30	38.99	9.88	35.39	53.78	74.00	-20.22	VERTICAL Peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



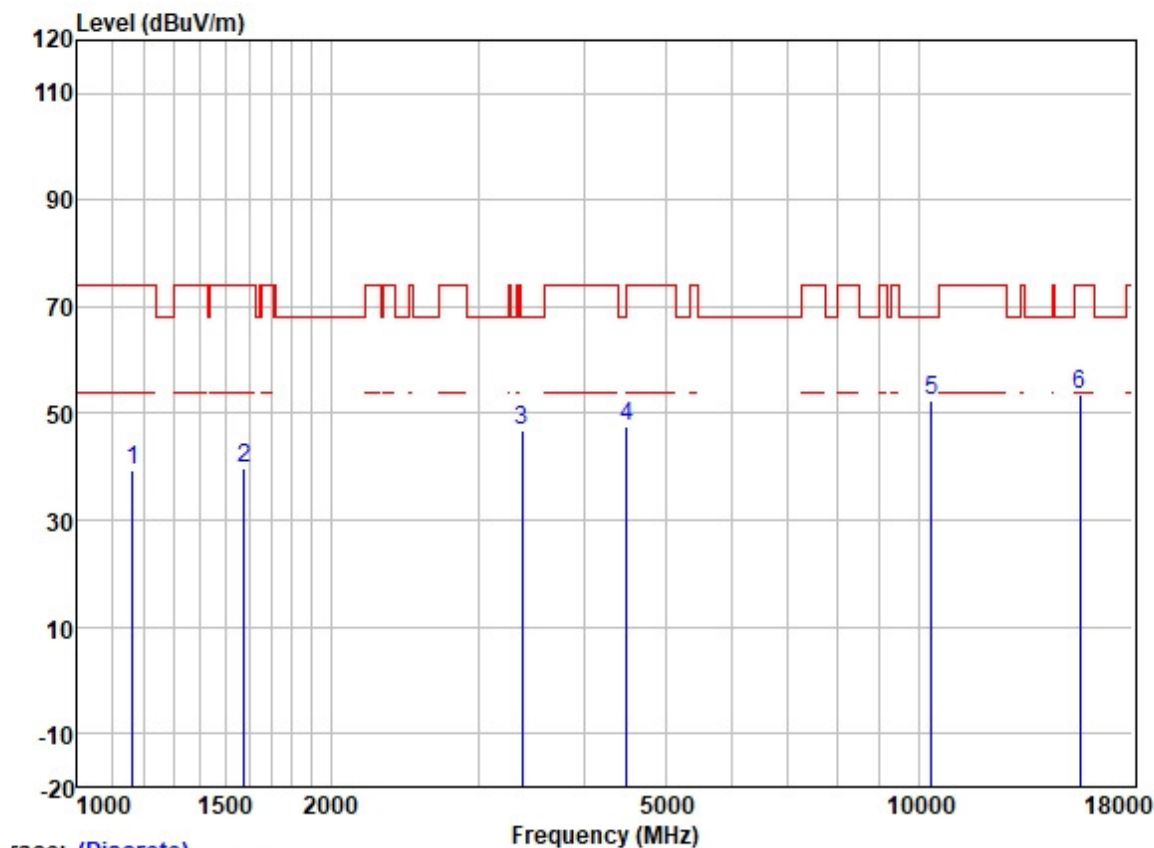
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1289.627	48.68	25.17	2.55	38.31	38.09	68.20	-30.11	HORIZONTAL	Peak
2	1503.119	49.07	25.50	2.80	38.10	39.27	74.00	-34.73	HORIZONTAL	Peak
3	3445.535	49.37	28.87	4.18	36.96	45.46	68.20	-22.74	HORIZONTAL	Peak
4	4193.872	50.44	30.15	4.60	36.81	48.38	74.00	-25.62	HORIZONTAL	Peak
5	10460.000	43.99	39.42	7.37	37.36	53.42	68.20	-14.78	HORIZONTAL	Peak
6	15690.000	39.66	38.86	9.87	35.39	53.00	74.00	-21.00	HORIZONTAL	Peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



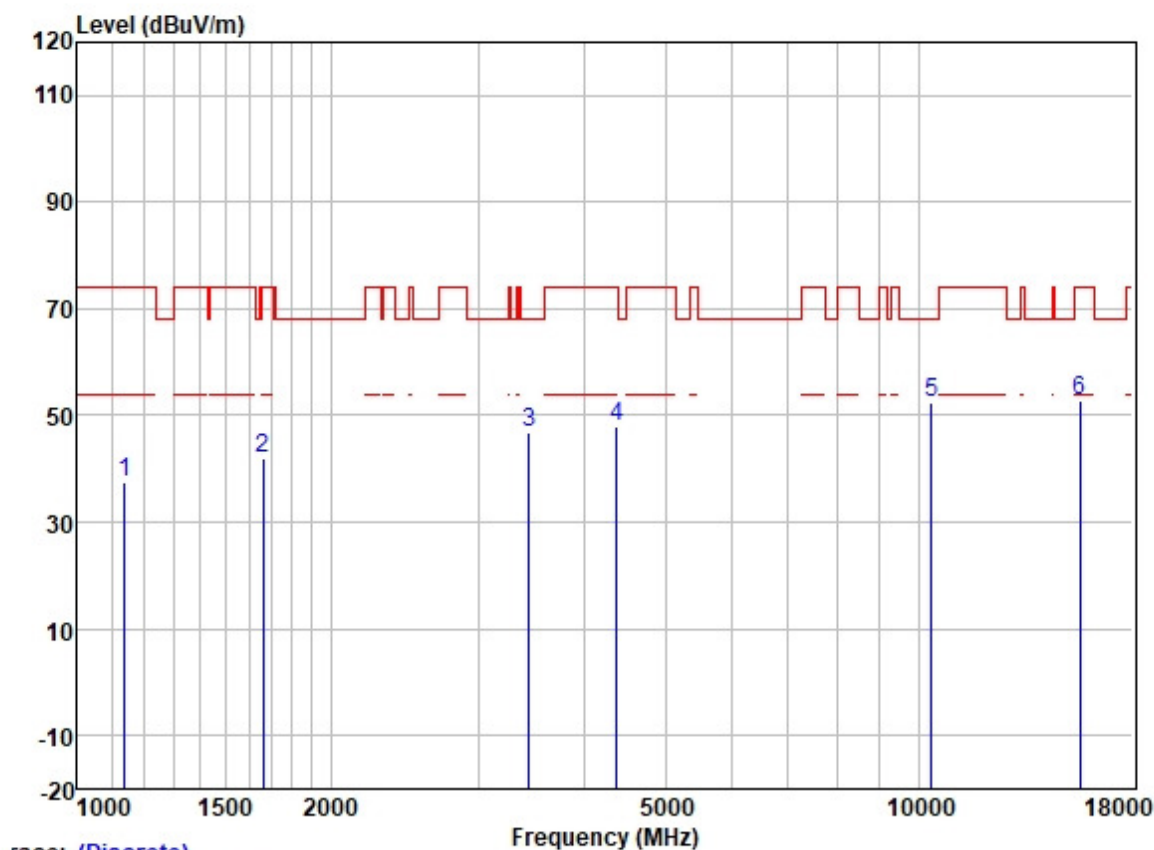
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1289.627	47.75	25.17	2.55	38.31	37.16	68.20	-31.04	VERTICAL	Peak
2	1525.000	50.17	25.52	2.80	38.07	40.42	74.00	-33.58	VERTICAL	Peak
3	3318.471	49.02	28.77	4.07	37.02	44.84	68.20	-23.36	VERTICAL	Peak
4	4392.376	49.25	30.66	4.70	36.81	47.80	74.00	-26.20	VERTICAL	Peak
5	10460.000	44.03	39.42	7.37	37.36	53.46	68.20	-14.74	VERTICAL	Peak
6	15690.000	39.53	38.86	9.87	35.39	52.87	74.00	-21.13	VERTICAL	Peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1162.182	50.70	24.53	2.40	38.42	39.21	74.00	-34.79	HORIZONTAL	Peak
2	1578.822	49.33	25.56	2.80	38.00	39.69	74.00	-34.31	HORIZONTAL	Peak
3	3376.523	50.88	28.83	4.09	36.99	46.81	68.20	-21.39	HORIZONTAL	Peak
4	4495.125	48.68	30.80	5.05	36.82	47.71	68.20	-20.49	HORIZONTAL	Peak
5	10360.000	43.32	39.28	7.29	37.37	52.52	68.20	-15.68	HORIZONTAL	Peak
6	15540.000	39.93	39.05	9.88	35.39	53.47	74.00	-20.53	HORIZONTAL	Peak

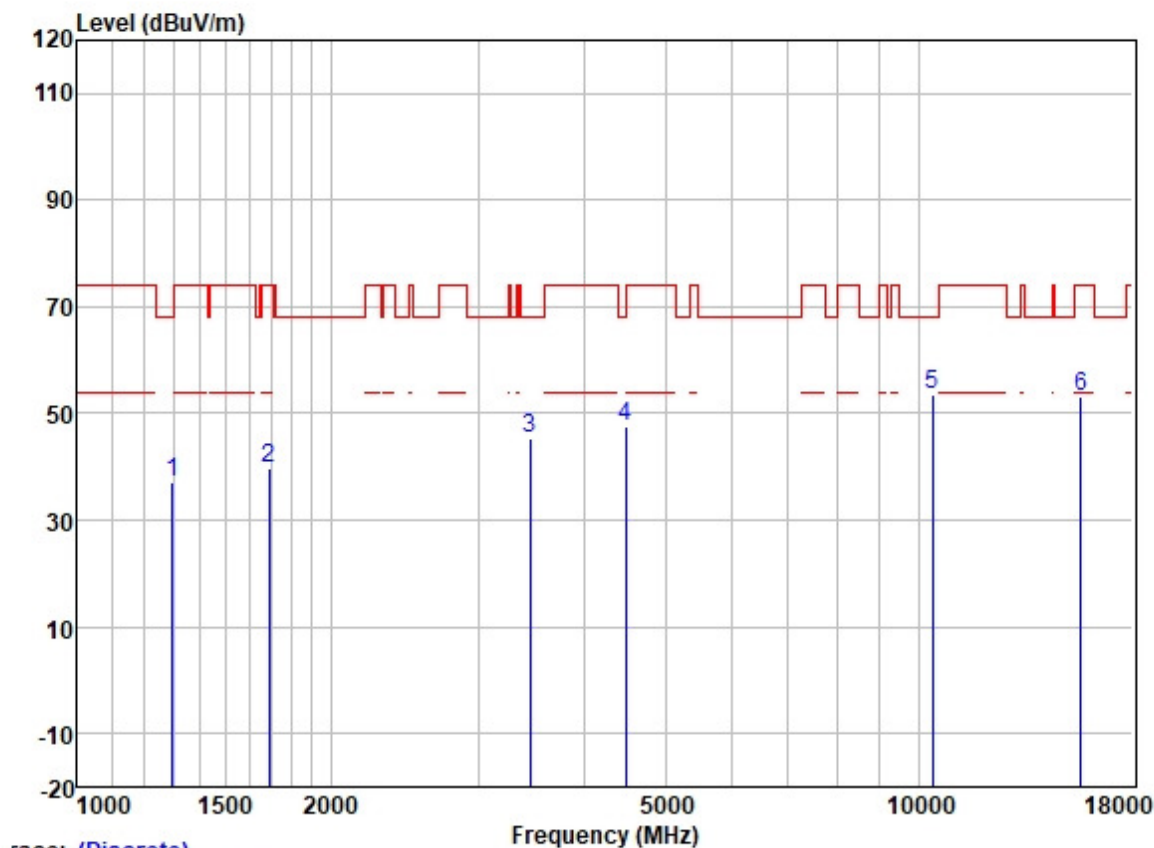
Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low



Trace: (Discrete)

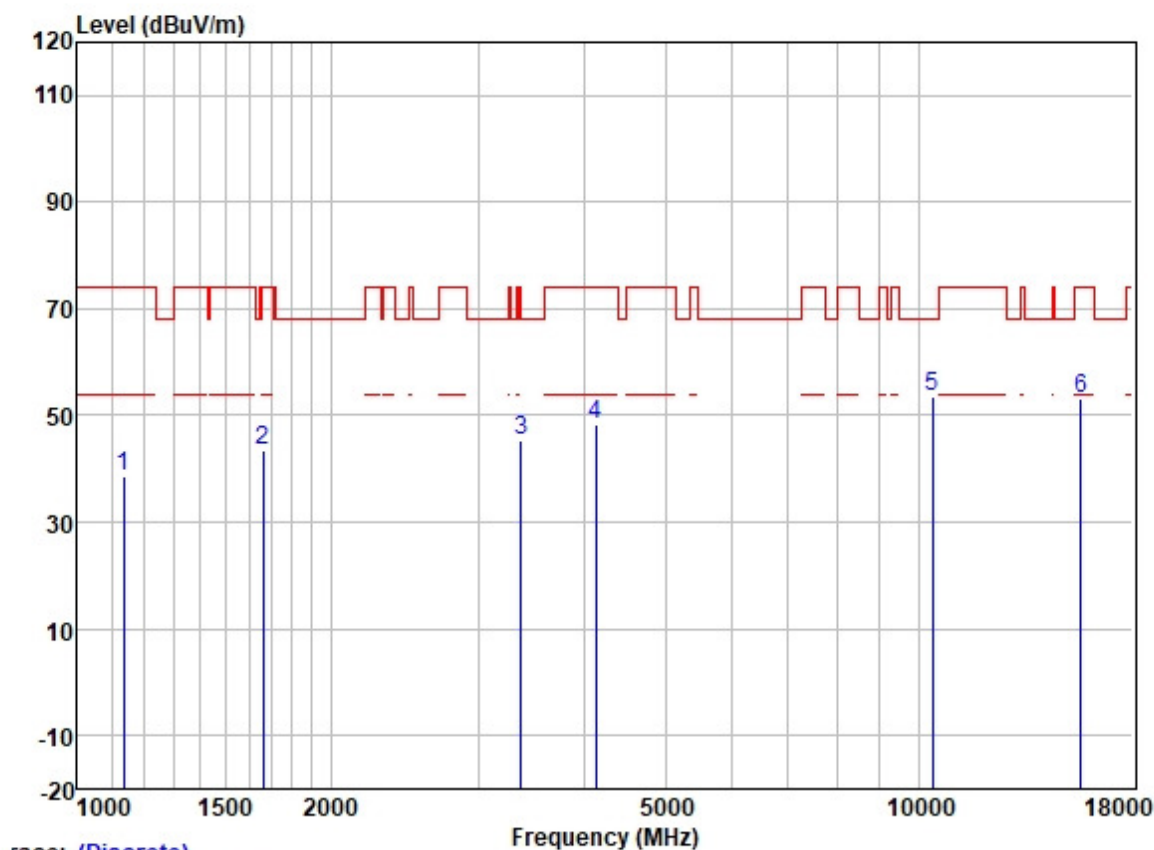
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1138.904	49.07	24.46	2.27	38.42	37.38	74.00	-36.62	VERTICAL	Peak
2	1663.137	51.32	25.65	2.80	37.91	41.86	74.00	-32.14	VERTICAL	Peak
3	3445.535	50.67	28.87	4.18	36.96	46.76	68.20	-21.44	VERTICAL	Peak
4	4379.699	49.28	30.64	4.69	36.81	47.80	74.00	-26.20	VERTICAL	Peak
5	10360.000	43.19	39.28	7.29	37.37	52.39	68.20	-15.81	VERTICAL	Peak
6	15540.000	39.43	39.05	9.88	35.39	52.97	74.00	-21.03	VERTICAL	Peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle



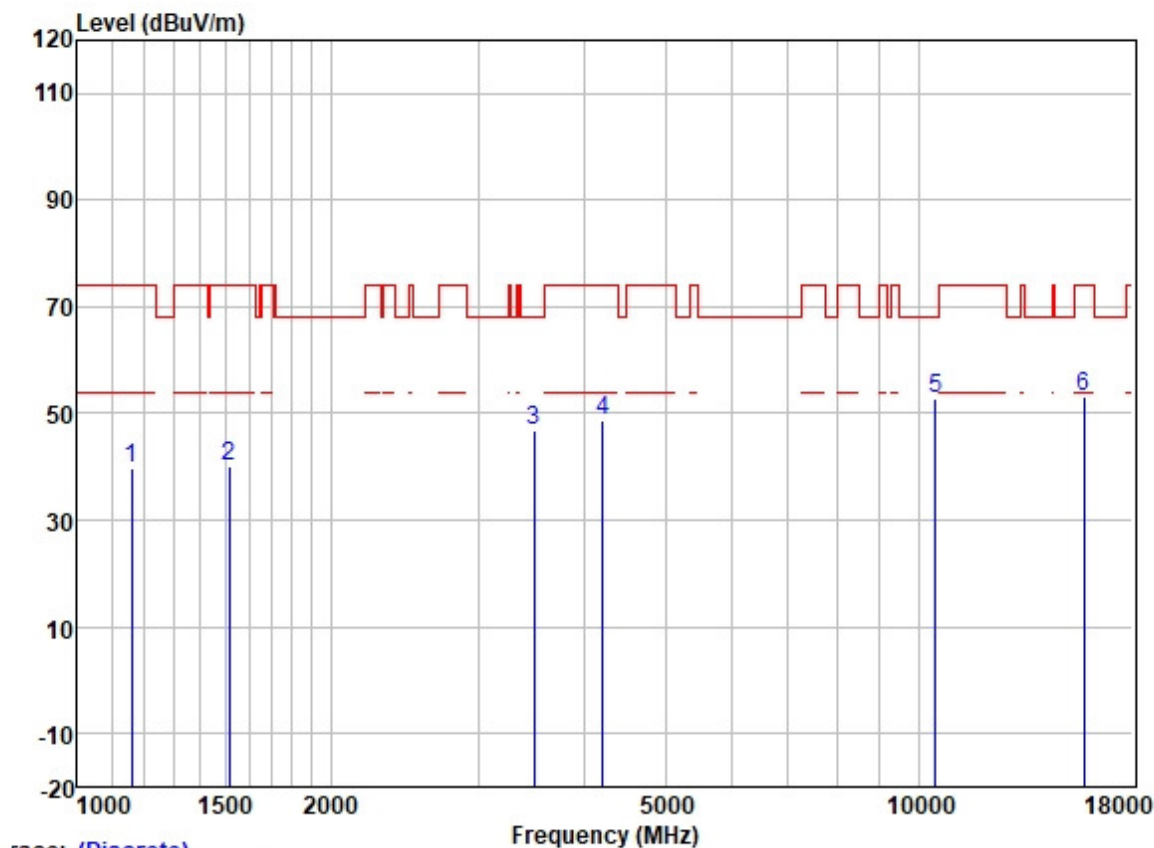
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1297.103	47.82	25.19	2.58	38.31	37.28	68.20	-30.92	HORIZONTAL	Peak
2	1692.231	49.25	25.70	2.80	37.89	39.86	74.00	-34.14	HORIZONTAL	Peak
3	3455.508	49.33	28.88	4.20	36.96	45.45	68.20	-22.75	HORIZONTAL	Peak
4	4482.150	48.66	30.78	4.99	36.81	47.62	68.20	-20.58	HORIZONTAL	Peak
5	10400.000	44.41	39.33	7.32	37.36	53.70	68.20	-14.50	HORIZONTAL	Peak
6	15600.000	39.76	38.99	9.88	35.39	53.24	74.00	-20.76	HORIZONTAL	Peak

Test Mode: 04; Polarity: Vertical; Modulation: 802.11ac; Bandwidth: 20MHz; Channel: middle



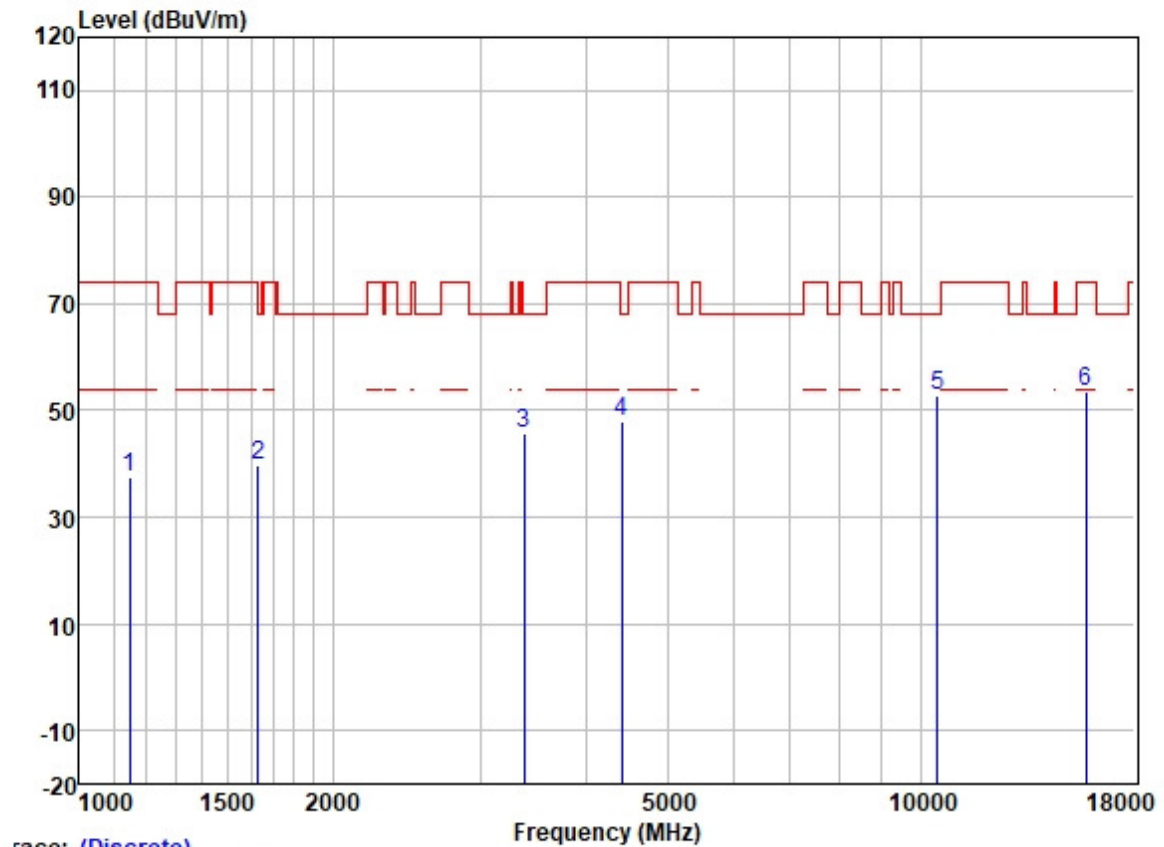
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1135.617	50.42	24.45	2.25	38.43	38.69	74.00	-35.31	VERTICAL	Peak
2	1663.137	52.94	25.65	2.80	37.91	43.48	74.00	-30.52	VERTICAL	Peak
3	3366.778	49.50	28.82	4.09	36.99	45.42	68.20	-22.78	VERTICAL	Peak
4	4133.699	50.62	30.01	4.60	36.80	48.43	74.00	-25.57	VERTICAL	Peak
5	10400.000	44.23	39.33	7.32	37.36	53.52	68.20	-14.68	VERTICAL	Peak
6	15600.000	39.76	38.99	9.88	35.39	53.24	74.00	-20.76	VERTICAL	Peak

Test Mode: 04; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 20MHz; Channel: High



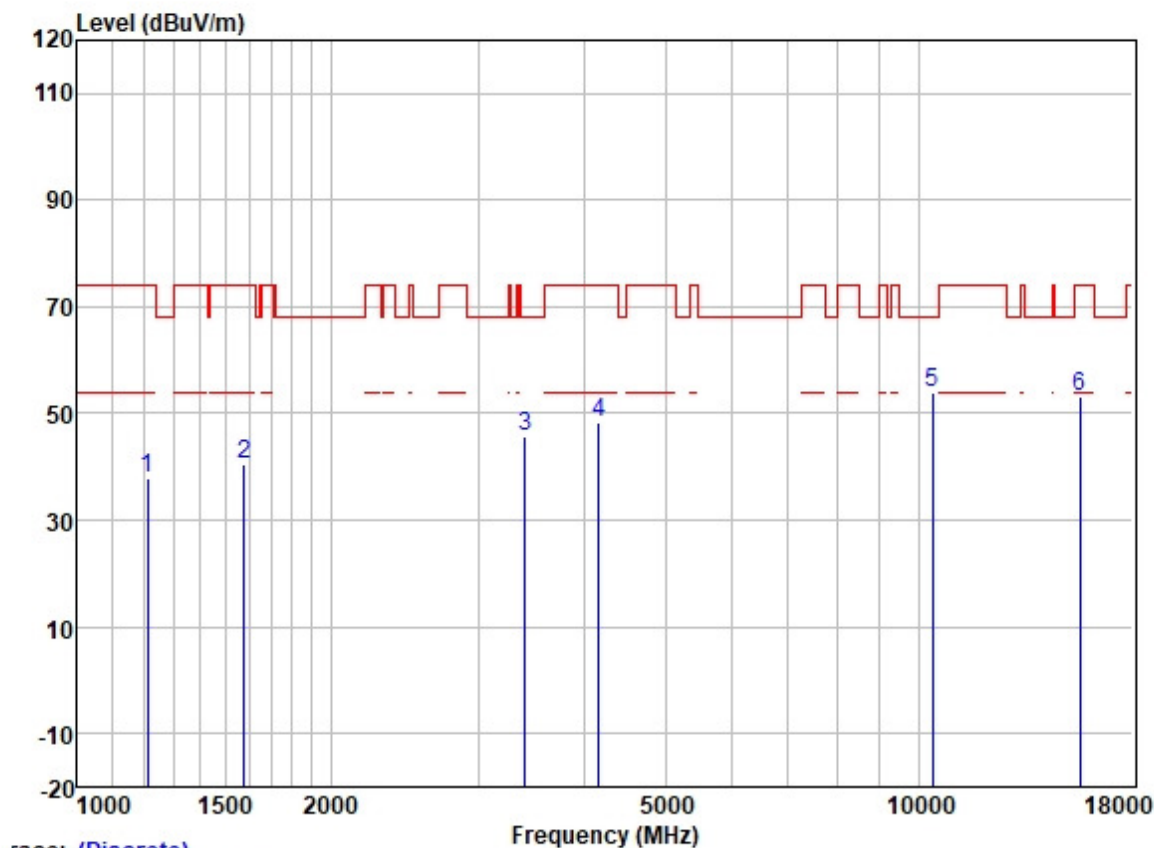
		ReadAntenna	Cable	Preamp		Limit	Over			
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1158.828	51.26	24.52	2.40	38.42	39.76	74.00	-34.24	HORIZONTAL	Peak
2	1516.210	49.80	25.51	2.80	38.07	40.04	74.00	-33.96	HORIZONTAL	Peak
3	3495.691	50.40	28.90	4.30	36.94	46.66	68.20	-21.54	HORIZONTAL	Peak
4	4218.186	50.71	30.22	4.60	36.81	48.72	74.00	-25.28	HORIZONTAL	Peak
5	10480.000	43.19	39.46	7.40	37.36	52.69	68.20	-15.51	HORIZONTAL	Peak
6	15720.000	40.03	38.78	9.87	35.39	53.29	74.00	-20.71	HORIZONTAL	Peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



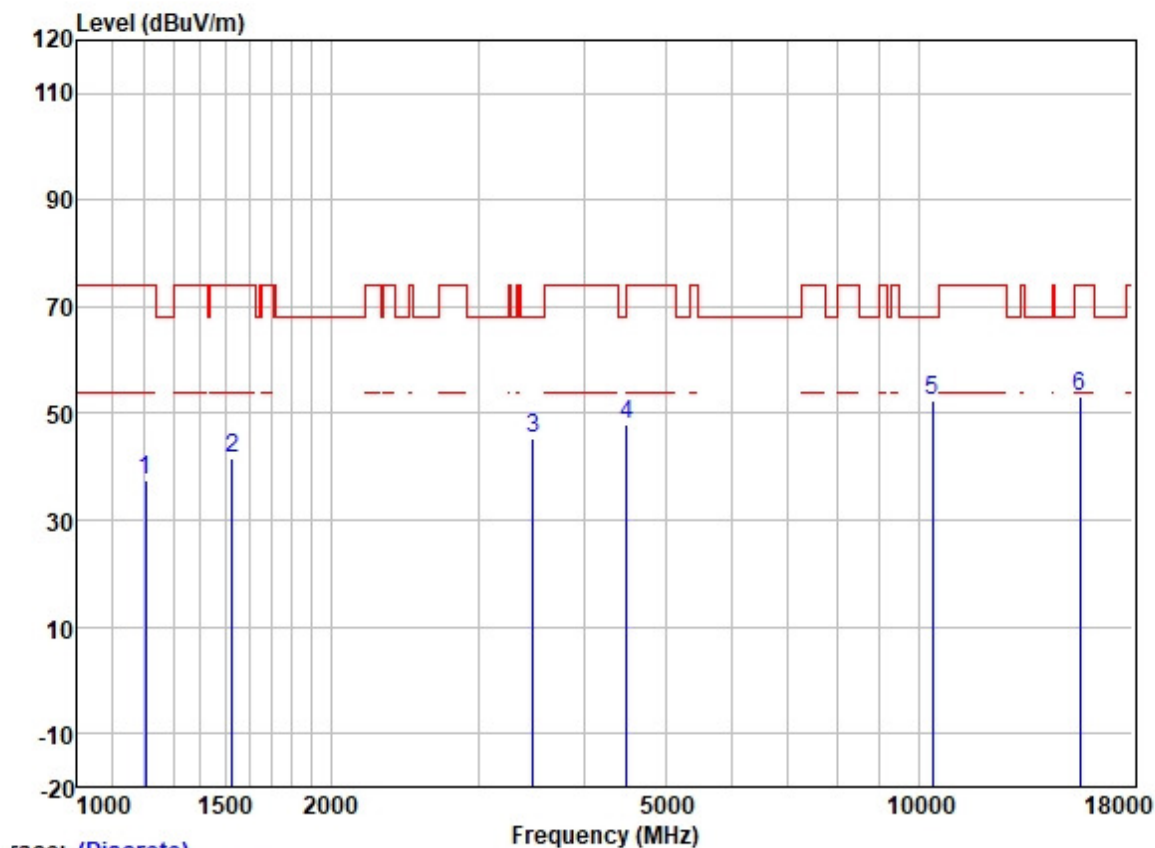
	Freq	Read	Antenna	Cable	Preamp	Limit	Over		
	MHz	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1148.823	49.15	24.49	2.34	38.42	37.56	74.00	-36.44	VERTICAL Peak
2	1629.825	49.36	25.61	2.80	37.95	39.82	68.20	-28.38	VERTICAL Peak
3	3376.523	49.66	28.83	4.09	36.99	45.59	68.20	-22.61	VERTICAL Peak
4	4417.841	49.34	30.70	4.74	36.81	47.97	68.20	-20.23	VERTICAL Peak
5	10480.000	43.41	39.46	7.40	37.36	52.91	68.20	-15.29	VERTICAL Peak
6	15720.000	40.37	38.78	9.87	35.39	53.63	74.00	-20.37	VERTICAL Peak

Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



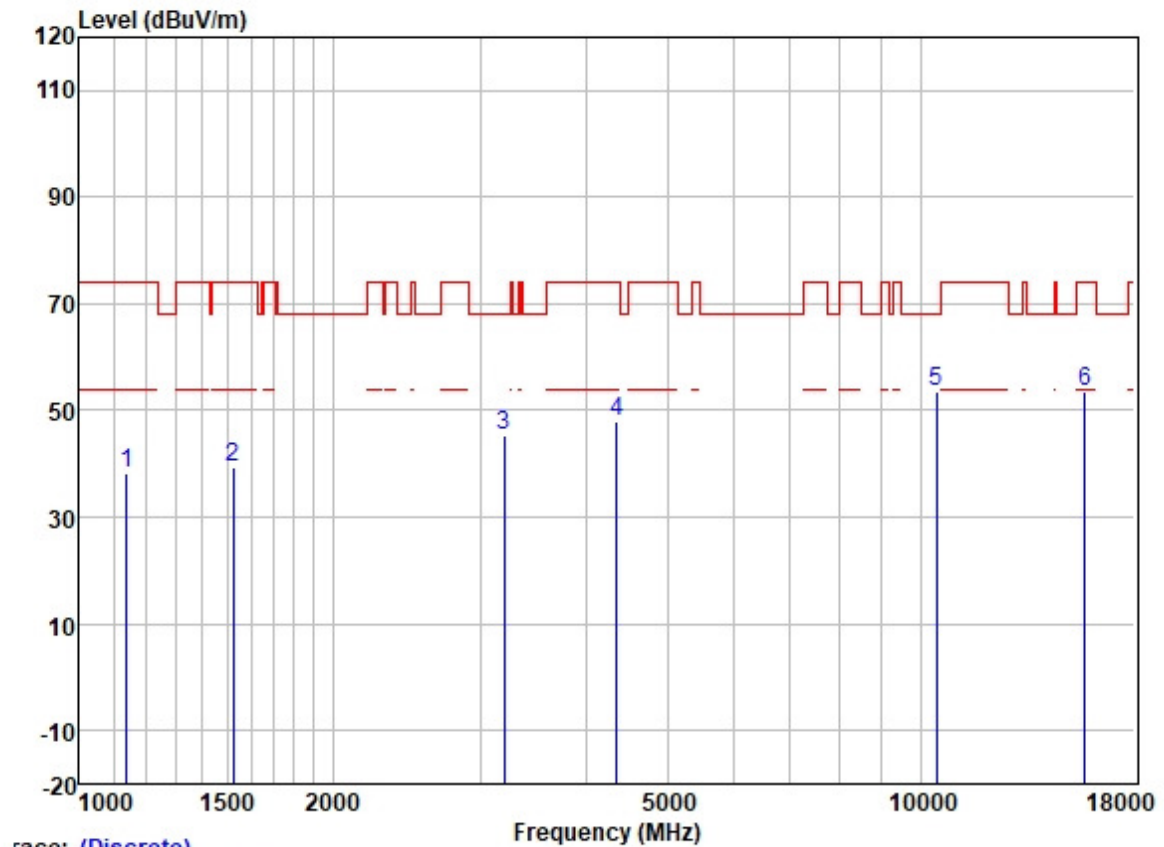
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1210.174	49.10	24.74	2.33	38.39	37.78	74.00	-36.22	HORIZONTAL	Peak
2	1578.822	49.97	25.56	2.80	38.00	40.33	74.00	-33.67	HORIZONTAL	Peak
3	3405.929	49.91	28.85	4.11	36.98	45.89	68.20	-22.31	HORIZONTAL	Peak
4	4169.698	50.25	30.09	4.60	36.80	48.14	74.00	-25.86	HORIZONTAL	Peak
5	10380.000	44.66	39.33	7.32	37.37	53.94	68.20	-14.26	HORIZONTAL	Peak
6	15570.000	39.78	38.99	9.88	35.39	53.26	74.00	-20.74	HORIZONTAL	Peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low



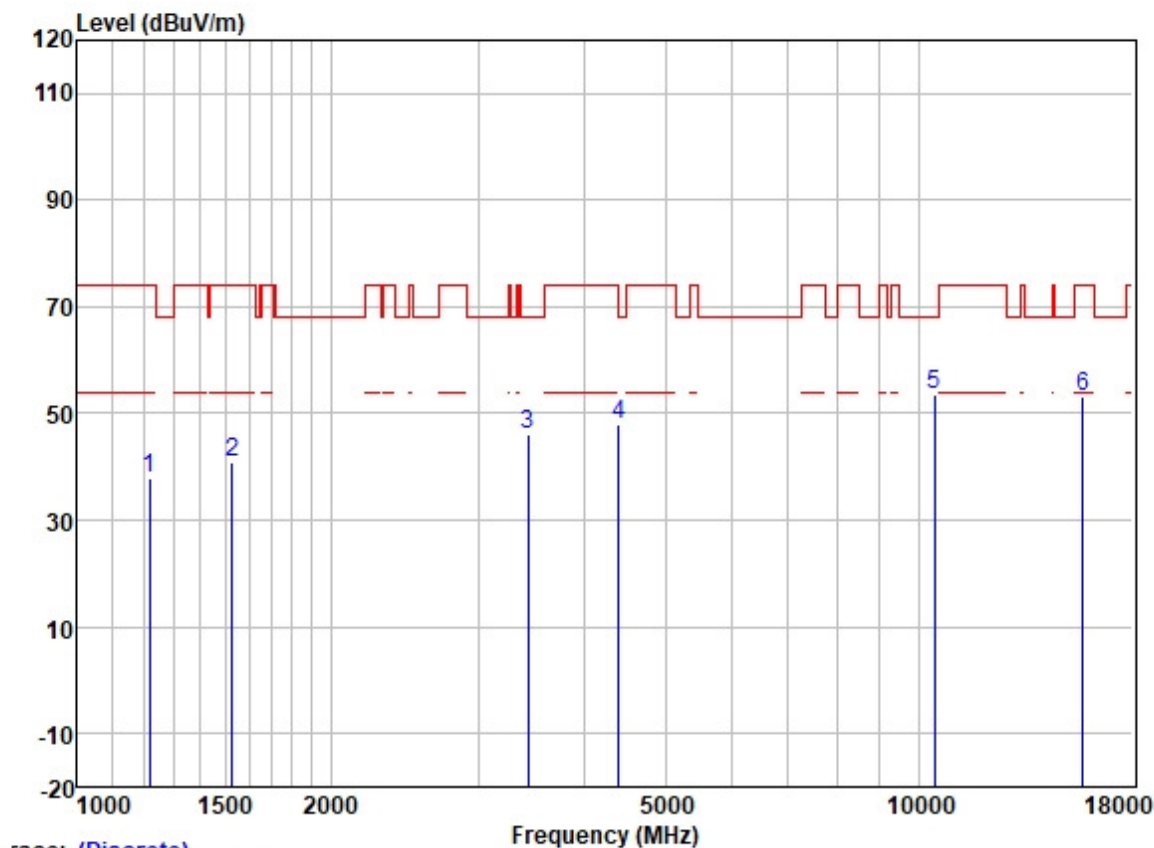
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1206.682	48.65	24.72	2.33	38.39	37.31	74.00	-36.69	VERTICAL	Peak
2	1529.414	51.39	25.52	2.80	38.07	41.64	74.00	-32.36	VERTICAL	Peak
3	3485.601	49.29	28.89	4.27	36.95	45.50	68.20	-22.70	VERTICAL	Peak
4	4495.125	48.86	30.80	5.05	36.82	47.89	68.20	-20.31	VERTICAL	Peak
5	10380.000	43.13	39.33	7.32	37.37	52.41	68.20	-15.79	VERTICAL	Peak
6	15570.000	39.55	38.99	9.88	35.39	53.03	74.00	-20.97	VERTICAL	Peak

Test Mode: 04; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 40MHz; Channel: High



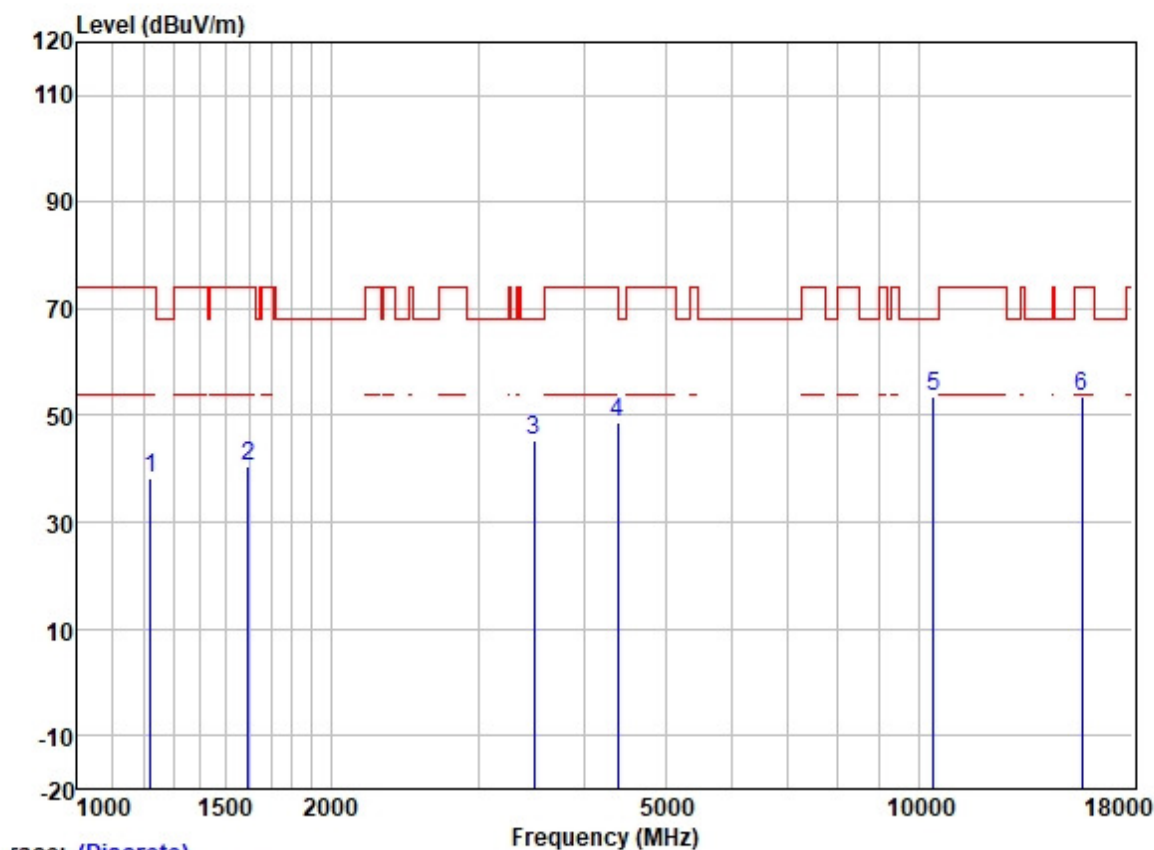
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1138.904	49.91	24.46	2.27	38.42	38.22	74.00	-35.78	HORIZONTAL	Peak
2	1525.000	49.17	25.52	2.80	38.07	39.42	74.00	-34.58	HORIZONTAL	Peak
3	3196.094	49.97	28.58	4.00	37.09	45.46	68.20	-22.74	HORIZONTAL	Peak
4	4354.454	49.65	30.59	4.68	36.81	48.11	74.00	-25.89	HORIZONTAL	Peak
5	10460.000	44.08	39.42	7.37	37.36	53.51	68.20	-14.69	HORIZONTAL	Peak
6	15690.000	40.23	38.86	9.87	35.39	53.57	74.00	-20.43	HORIZONTAL	Peak

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



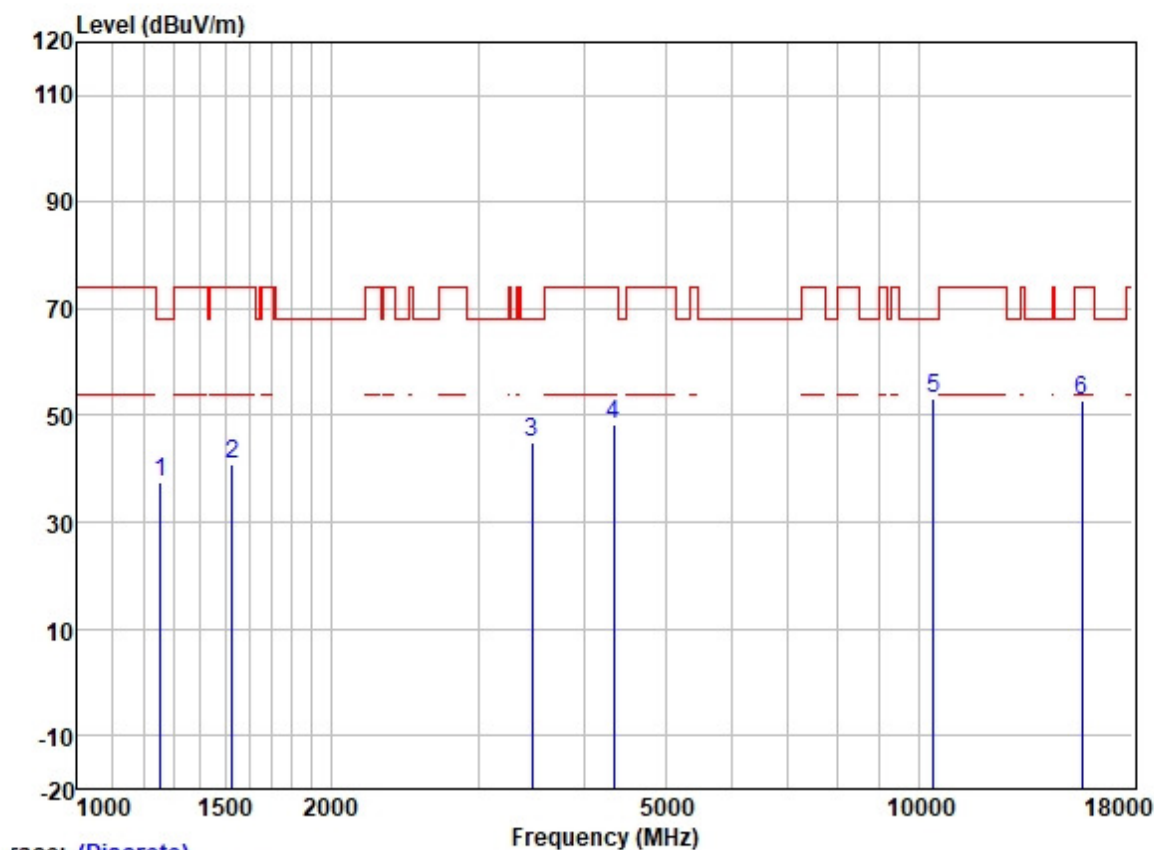
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1217.190	49.00	24.79	2.32	38.37	37.74	74.00	-36.26	VERTICAL	Peak
2	1529.414	50.58	25.52	2.80	38.07	40.83	74.00	-33.17	VERTICAL	Peak
3	3435.590	49.96	28.87	4.16	36.97	46.02	68.20	-22.18	VERTICAL	Peak
4	4405.090	49.45	30.68	4.70	36.81	48.02	68.20	-20.18	VERTICAL	Peak
5	10460.000	44.19	39.42	7.37	37.36	53.62	68.20	-14.58	VERTICAL	Peak
6	15690.000	39.96	38.86	9.87	35.39	53.30	74.00	-20.70	VERTICAL	Peak

Test Mode: 04; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 80MHz; Channel: middle



		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1220.714	49.41	24.82	2.32	38.37	38.18	74.00	-35.82	HORIZONTAL	Peak
2	1597.181	50.10	25.58	2.80	37.98	40.50	74.00	-33.50	HORIZONTAL	Peak
3	3495.691	49.04	28.90	4.30	36.94	45.30	68.20	-22.90	HORIZONTAL	Peak
4	4392.376	50.06	30.66	4.70	36.81	48.61	74.00	-25.39	HORIZONTAL	Peak
5	10420.000	44.16	39.38	7.35	37.36	53.53	68.20	-14.67	HORIZONTAL	Peak
6	15630.000	40.00	38.92	9.87	35.39	53.40	74.00	-20.60	HORIZONTAL	Peak

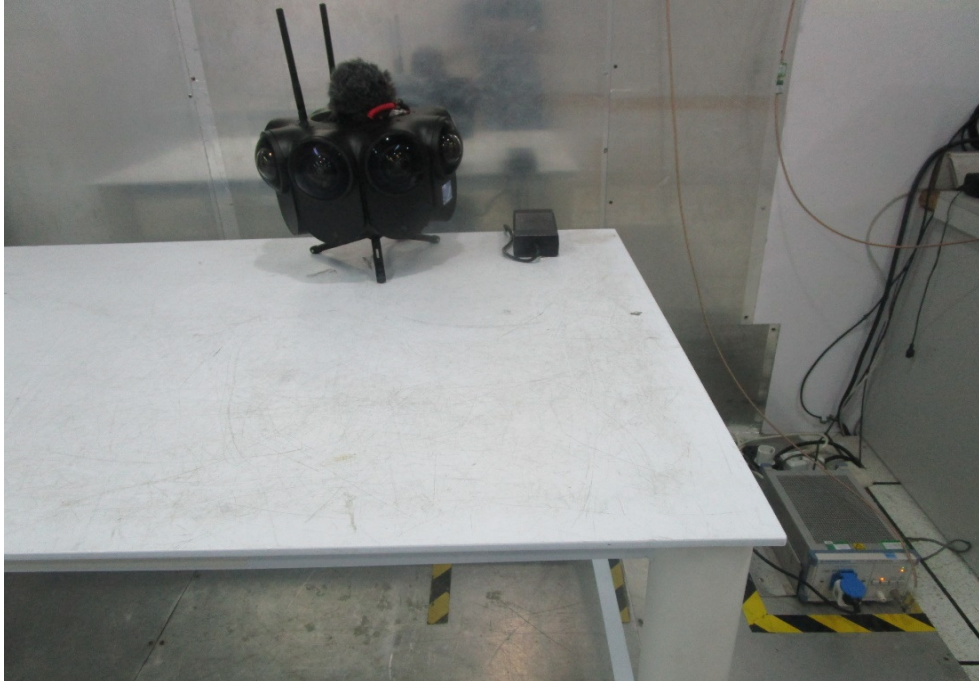
Test Mode: 04; Polarity: Vertical; Modulation: 802.11ac; Bandwidth: 80MHz; Channel: middle



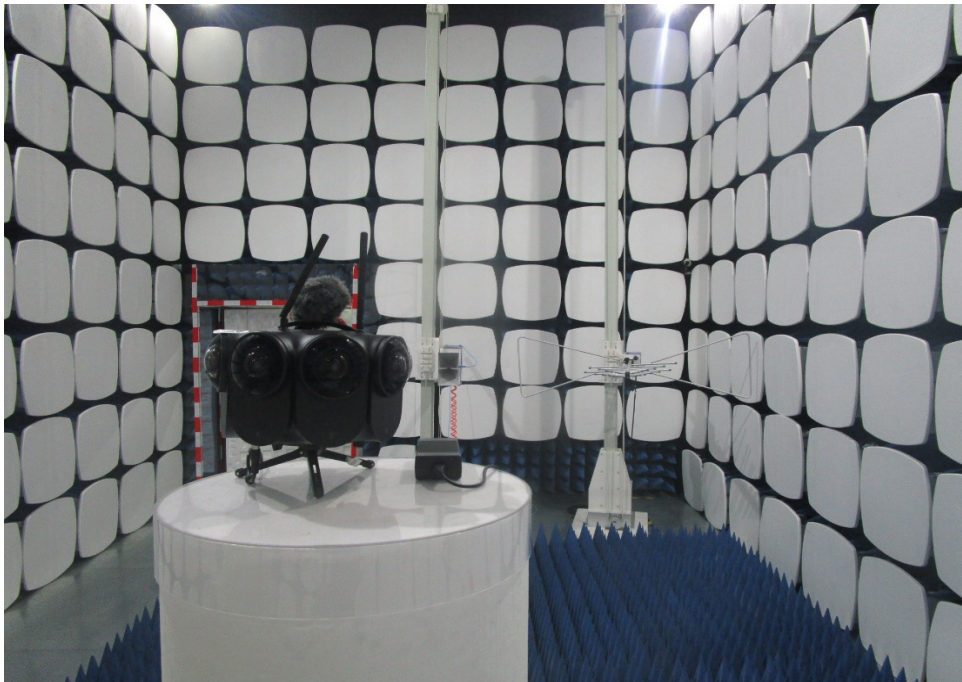
		ReadAntenna		Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1256.512	48.52	25.05	2.38	38.35	37.60	68.20	-30.60	VERTICAL	Peak
2	1529.414	50.53	25.52	2.80	38.07	40.78	74.00	-33.22	VERTICAL	Peak
3	3475.541	48.69	28.89	4.25	36.95	44.88	68.20	-23.32	VERTICAL	Peak
4	4341.886	50.00	30.57	4.67	36.81	48.43	74.00	-25.57	VERTICAL	Peak
5	10420.000	43.86	39.38	7.35	37.36	53.23	68.20	-14.97	VERTICAL	Peak
6	15630.000	39.46	38.92	9.87	35.39	52.86	74.00	-21.14	VERTICAL	Peak

8 Test Setup Photo

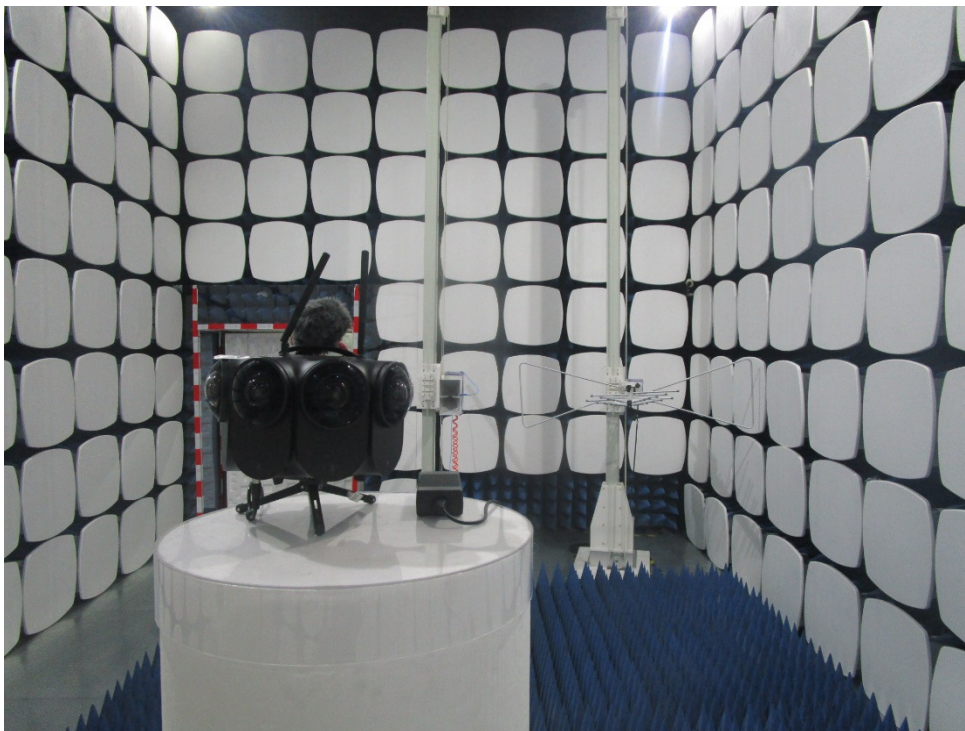
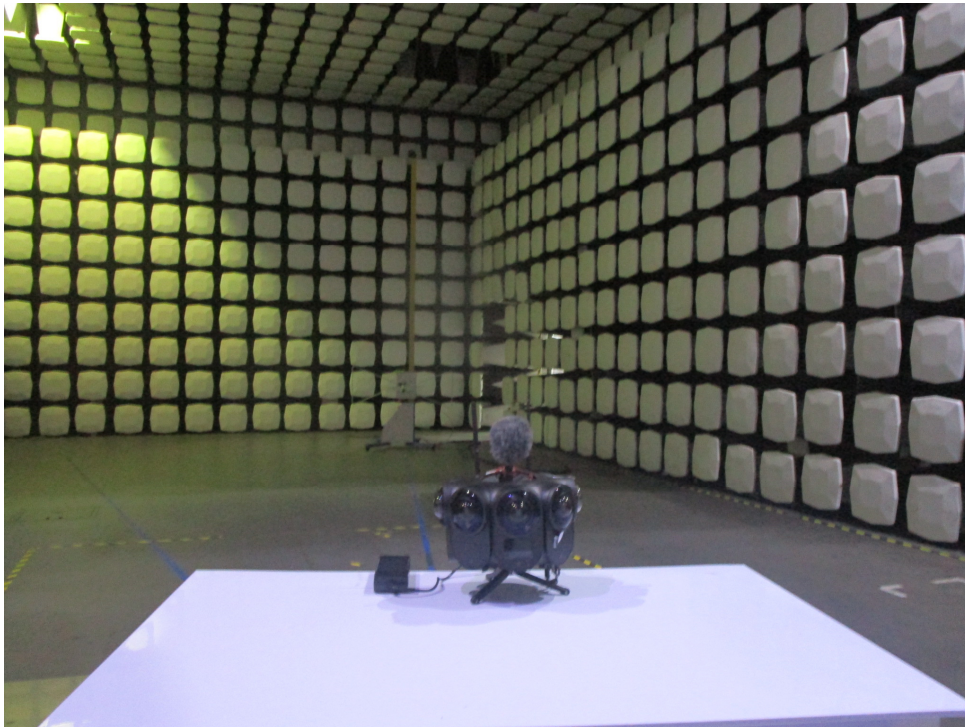
Conducted Emissions at AC Power Line (150kHz-30MHz)



Radiated Emissions which fall in the restricted bands



Radiated Emissions



9 EUT Constructional Details (EUT Photos)

Refer to Appendix – External and Internal Photos for GZCR2110021203AT

10 Appendix

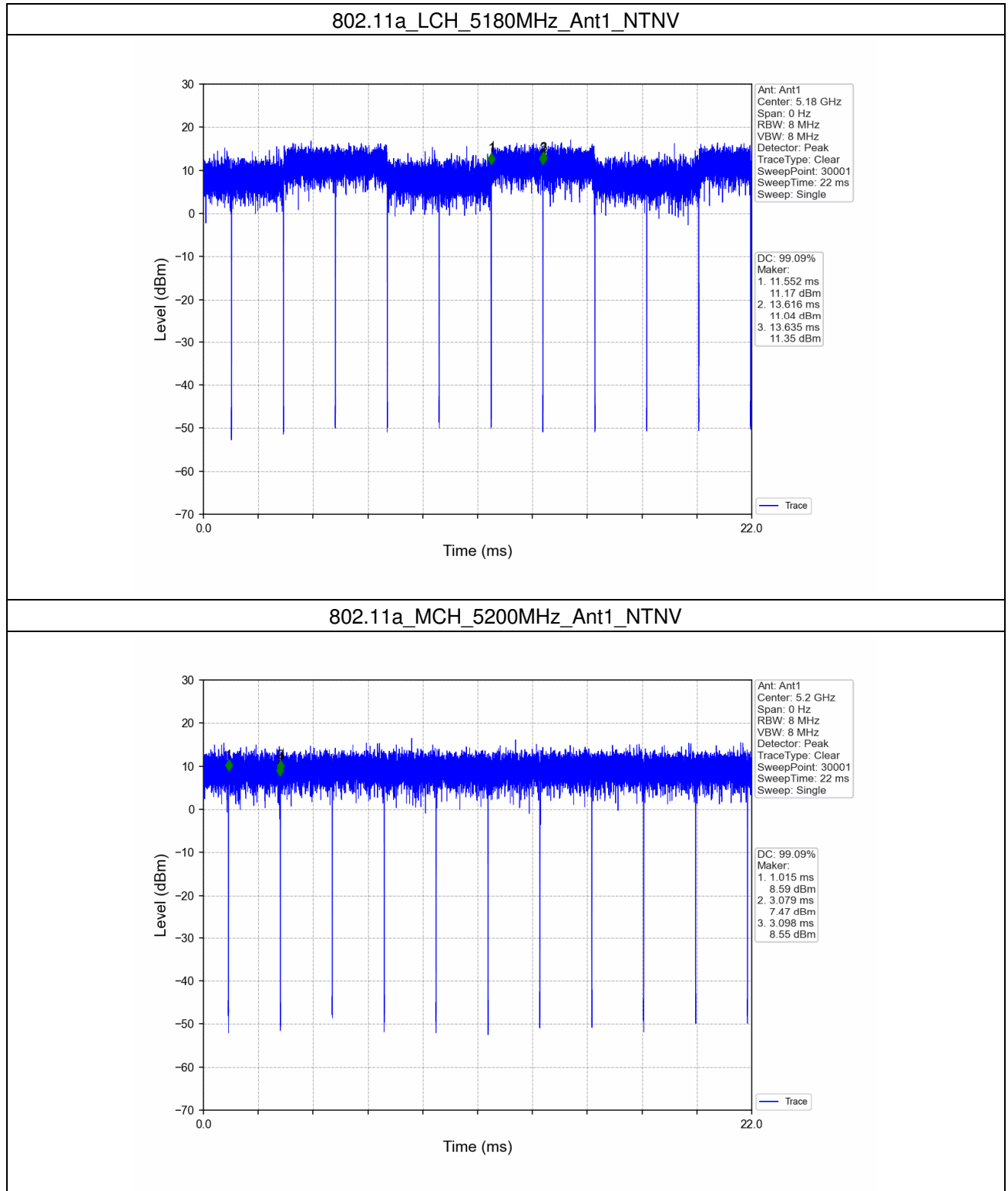
1. Duty Cycle

1.1 Ant1

1.1.1 Test Result

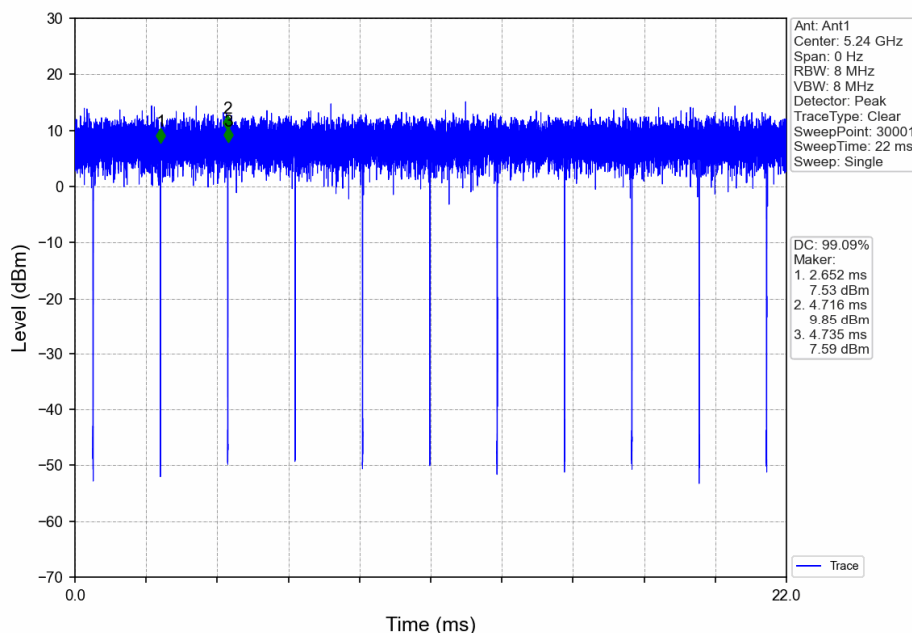
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	2.064	2.083	99.09	0.04	0.04
		5200	2.064	2.083	99.09	0.04	0.04
		5240	2.064	2.083	99.09	0.04	0.04
802.11n (HT20)	SISO	5180	1.920	1.940	98.97	0.05	0.03
		5200	1.919	1.939	98.97	0.05	0.03
		5240	1.920	1.939	99.02	0.04	0.03
802.11n (HT40)	SISO	5190	1.535	1.555	98.71	0.06	0.03
		5230	1.536	1.555	98.78	0.05	0.03
802.11ac (VHT20)	SISO	5180	1.932	1.951	99.03	0.04	0.03
		5200	1.932	1.951	99.03	0.04	0.03
		5240	1.932	1.951	99.03	0.04	0.03
802.11ac (VHT40)	SISO	5190	1.544	1.563	98.78	0.05	0.03
		5230	1.543	1.563	98.72	0.06	0.03
802.11ac (VHT80)	SISO	5210	2.240	2.260	99.12	0.04	0.04

1.1.2 Test Graph

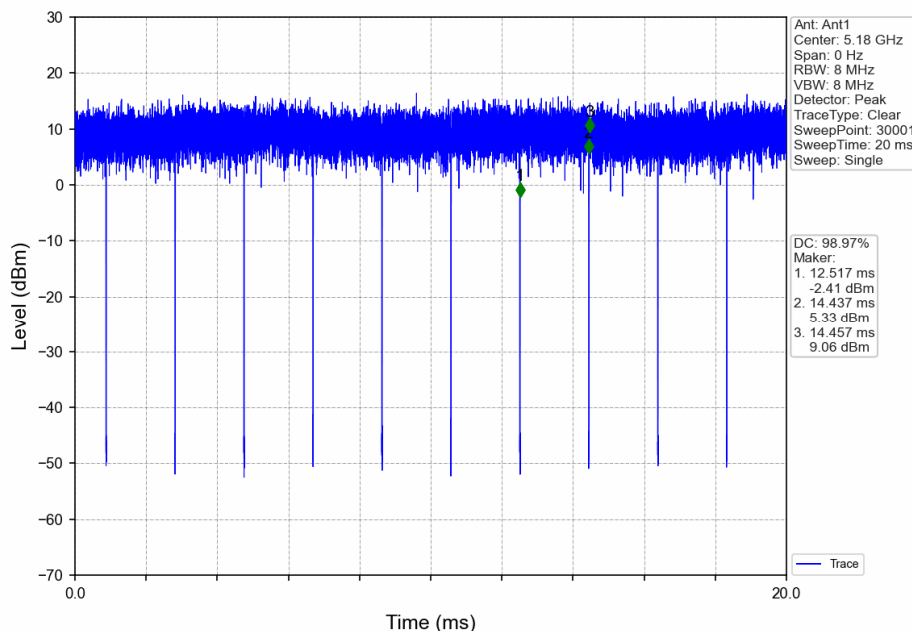


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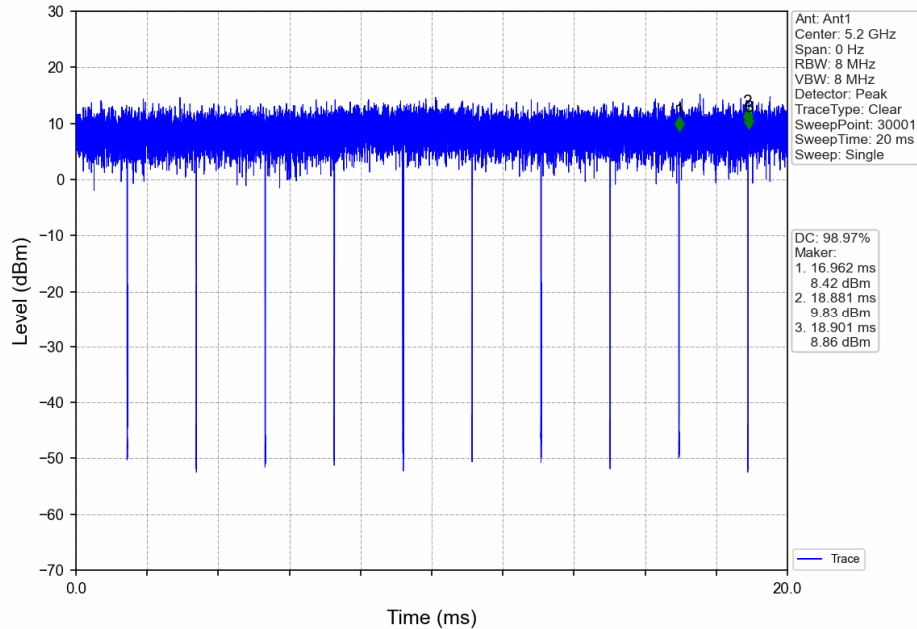
802.11a_HCH_5240MHz_Ant1_NTNV



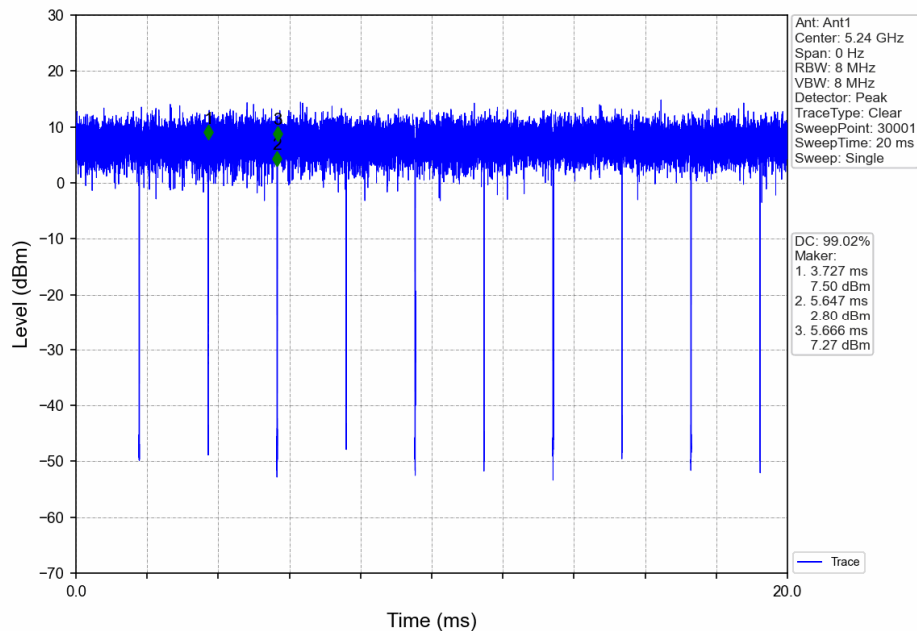
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



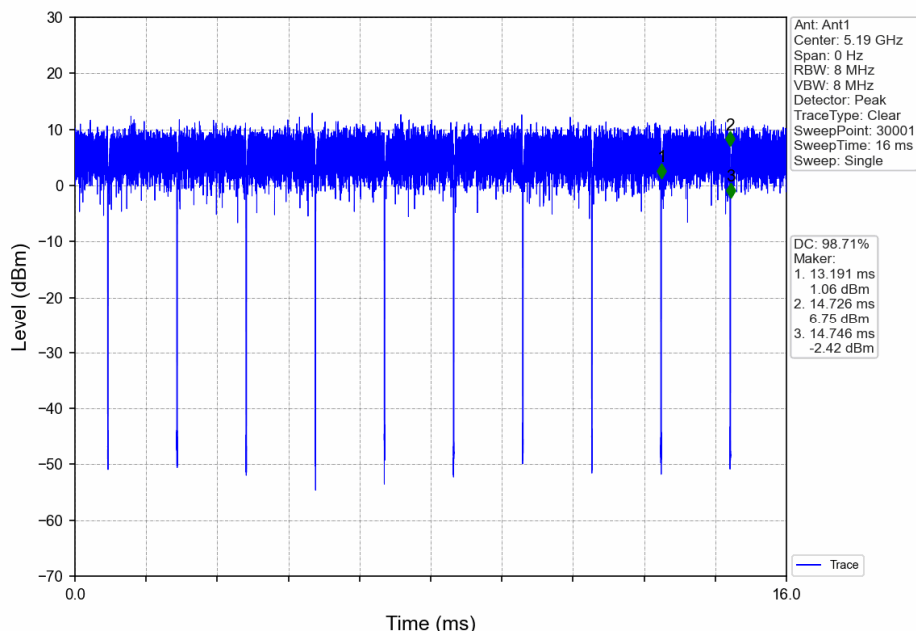
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



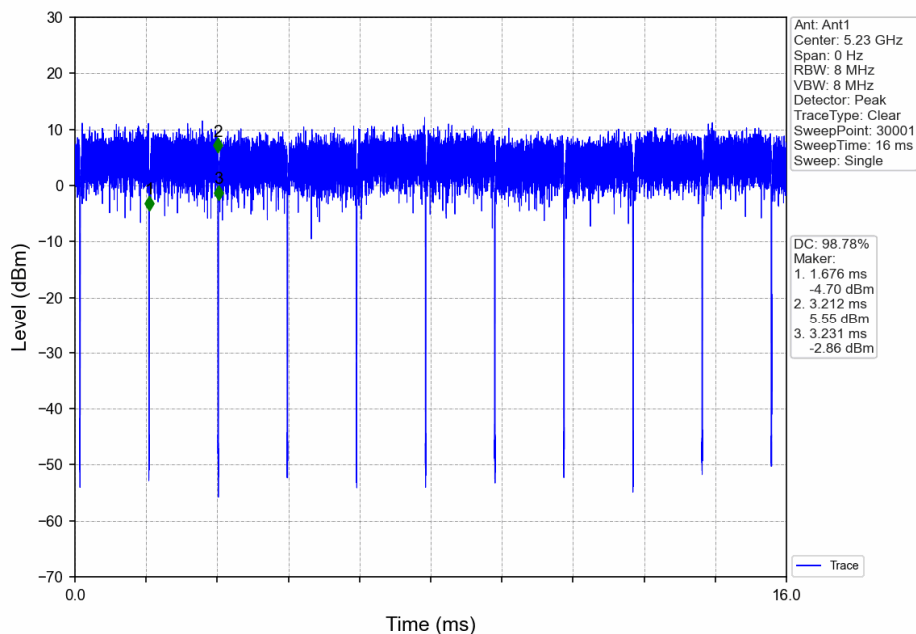
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



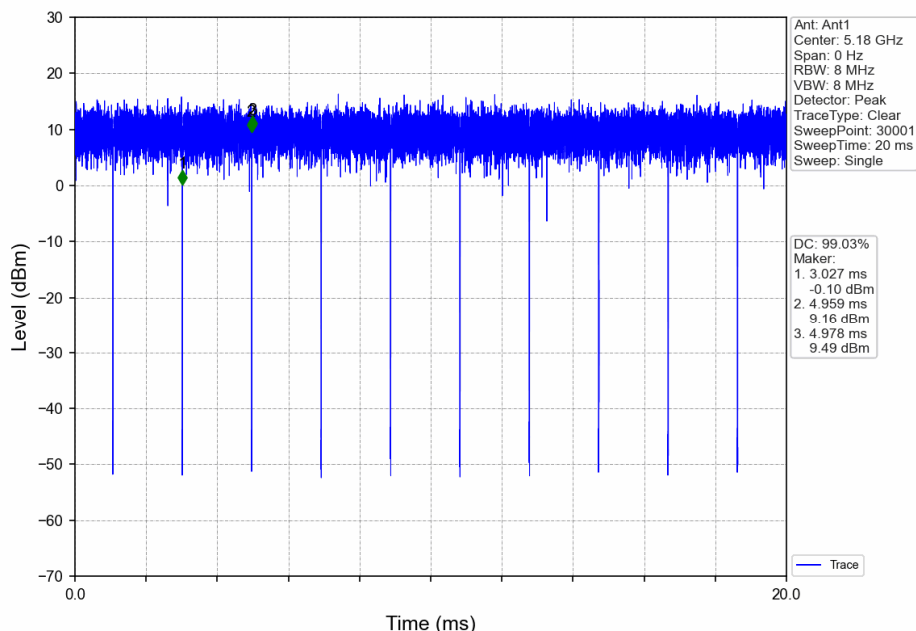
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



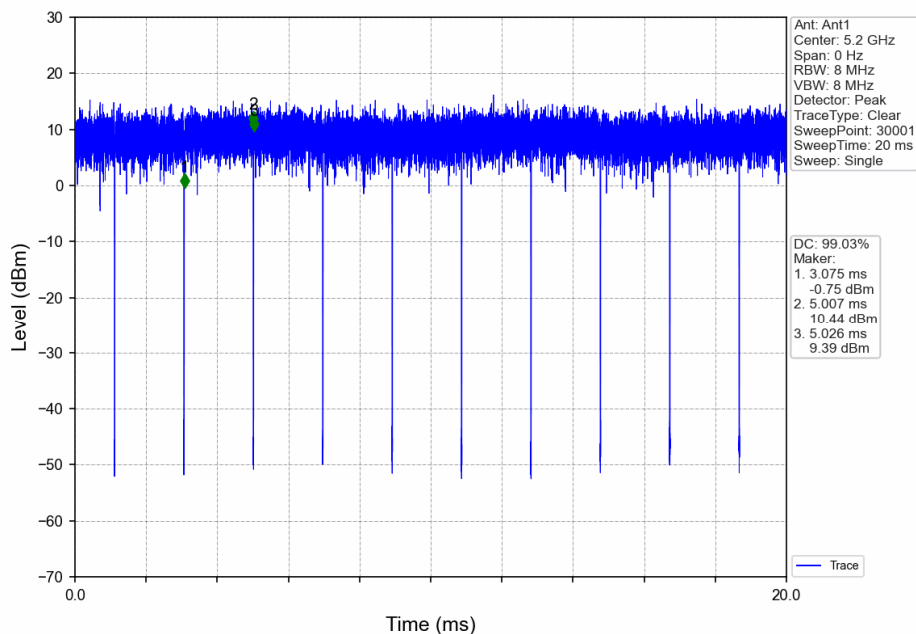
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



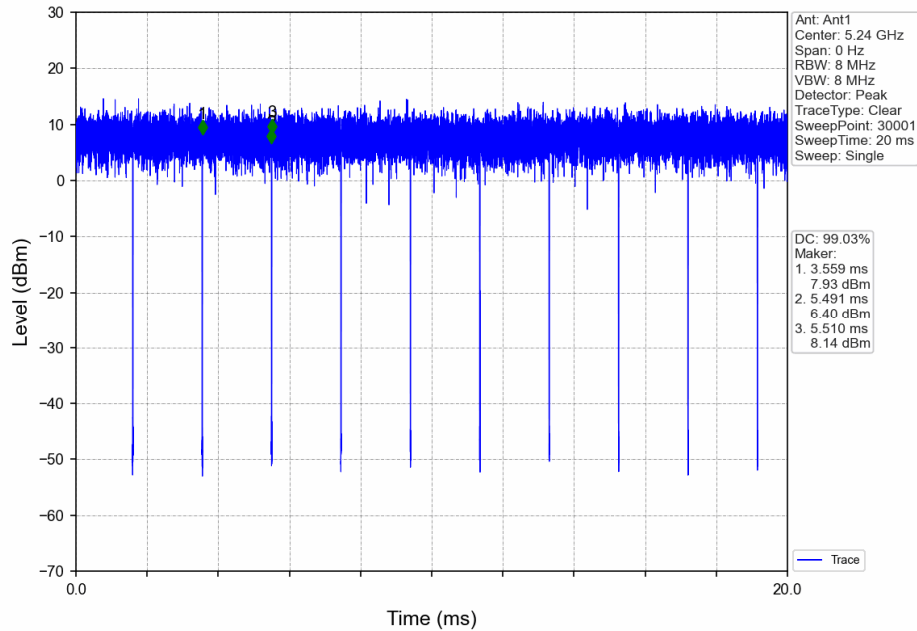
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



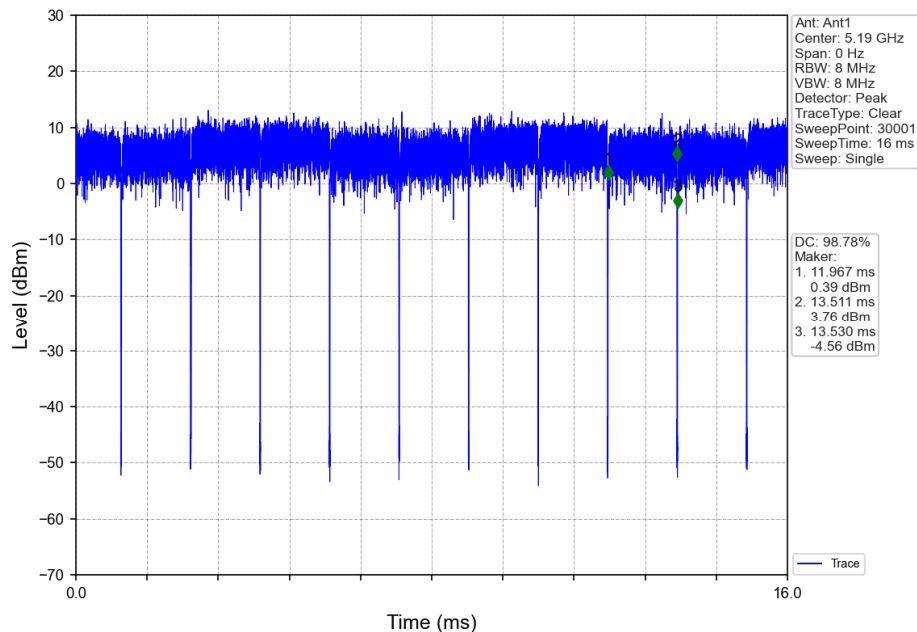
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



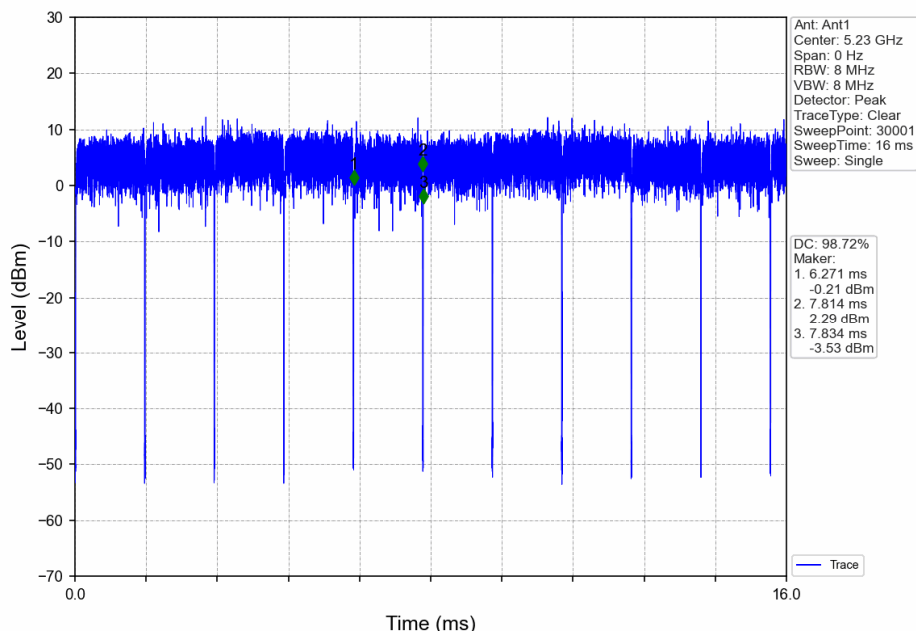
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV

