

ANNEX 1 TEST DATA

FCC ID: 2A9PI-LIXELL3

Applicant: SHENZHEN XGRIDS-INNOVATION CO., LTD

Address: 2401-2404, Building3, Shenzhen International Innovation Valley, Nanshan District, Shenzhen

Manufacturer: SHENZHEN XGRIDS-INNOVATION CO., LTD

Address: 2401-2404, Building3, Shenzhen International Innovation Valley, Nanshan District, Shenzhen

Product Name: Mobile Lidar Scanner

Trade Mark: XGRIDS

Model Number: Lixel L3, Lixel L3-16/120, Lixel L3-32/120, Lixel L3-32/300

Date of Receipt: Sep. 01, 2026

Test Date: Sep. 01, 2026 - Sep. 18, 2026

Date of Report: Sep. 18, 2026

Prepared By: Shenzhen DL Testing Technology Co., Ltd.

Address: 101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

Applicable Standards: FCC PART 15 E 15.407
ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024
KDB 662911 D01 Multiple Transmitter Output v02r01
KDB 789033 D02 General U-NII Test Procedures New Rules v02r01

Test Result: Pass

Report Number: DLE-260831029R

1. Duty Cycle

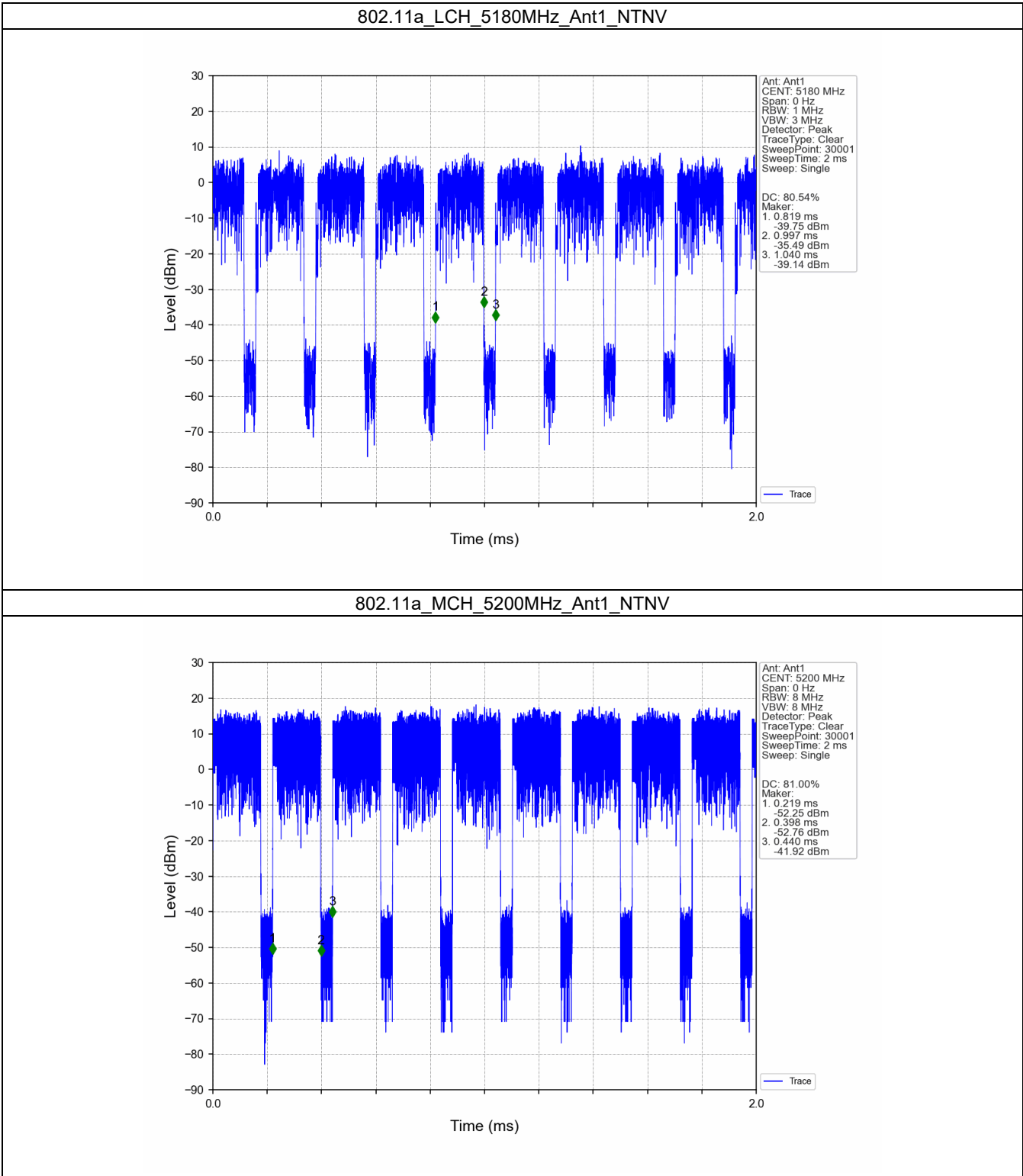
1.1 Test Result

1.1.1 Ant1

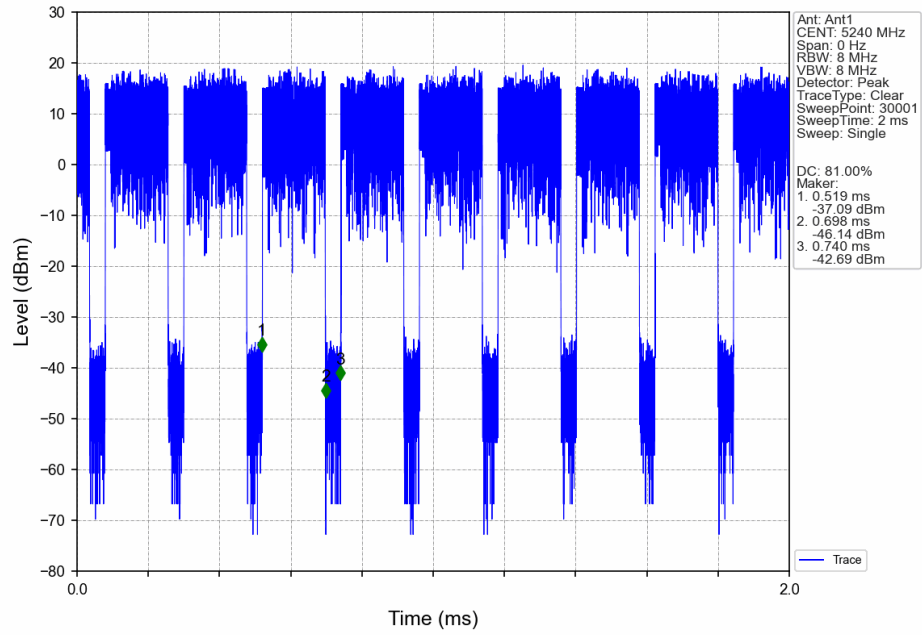
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	0.178	0.221	80.54	0.94	0.33
		5200	0.179	0.221	81.00	0.92	0.13
		5240	0.179	0.221	81.00	0.92	0.17
802.11n (HT20)	SISO	5180	0.166	0.208	79.81	0.98	0.13
		5200	0.167	0.209	79.90	0.97	0.13
		5240	0.167	0.209	79.90	0.97	0.09
802.11n (HT40)	SISO	5190	0.313	0.389	80.46	0.94	0.09
		5230	0.345	0.388	88.92	0.51	0.06
802.11ac (VHT20)	SISO	5180	0.149	0.193	77.20	1.12	0.12
		5200	0.151	0.192	78.65	1.04	0.07
		5240	0.149	0.193	77.20	1.12	0.13
802.11ac (VHT40)	SISO	5190	0.089	0.133	66.92	1.74	0.19
		5230	0.089	0.132	67.42	1.71	0.12
802.11ac (VHT80)	SISO	5210	0.065	0.126	51.59	2.87	8.51

1.2 Test Graph

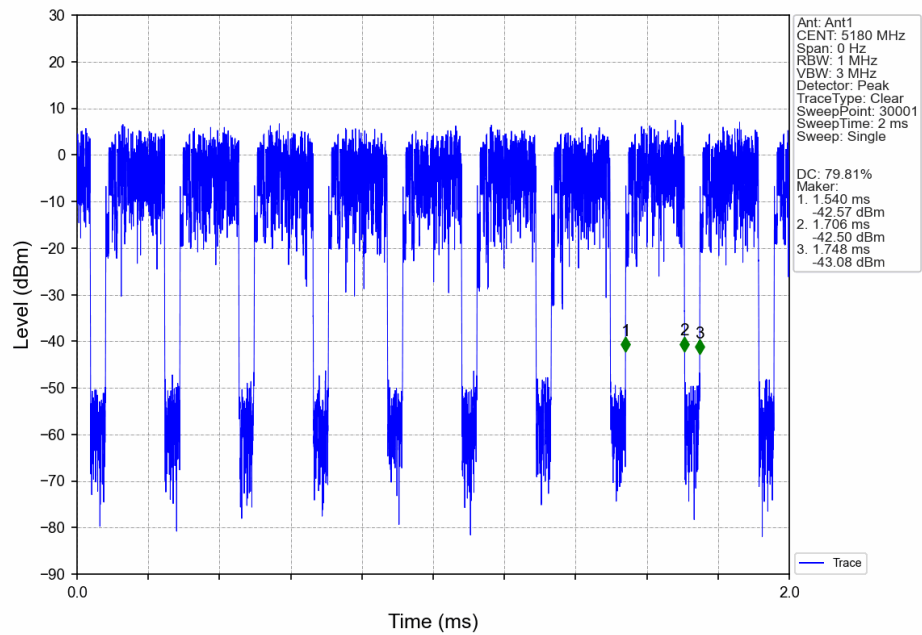
1.2.1 Ant1



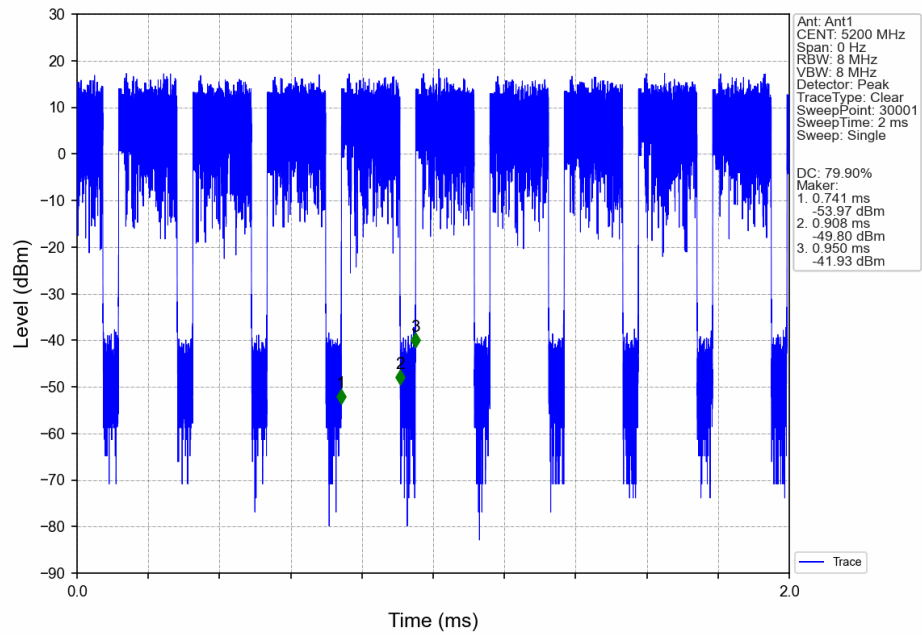
802.11a_HCH_5240MHz_Ant1_NTNV



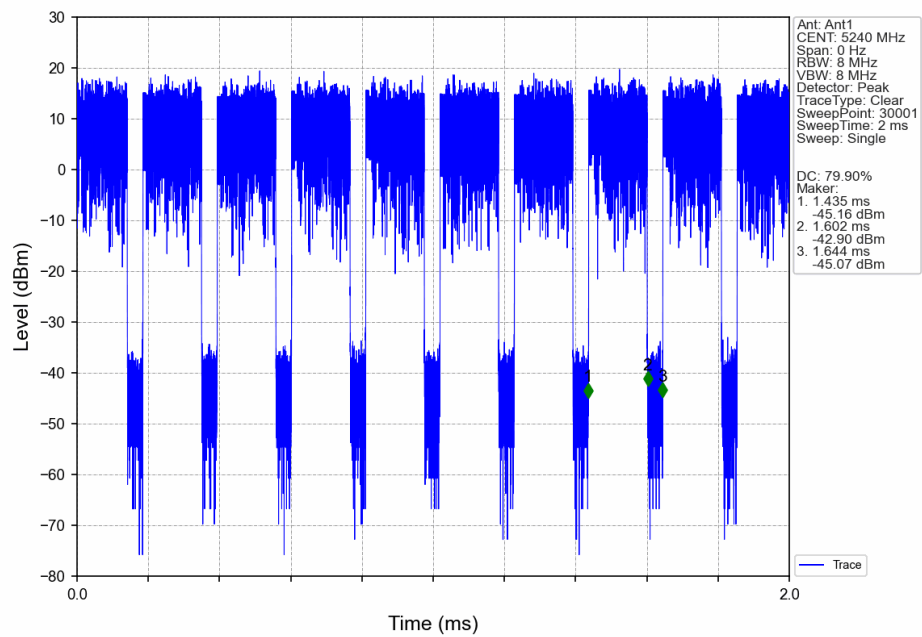
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



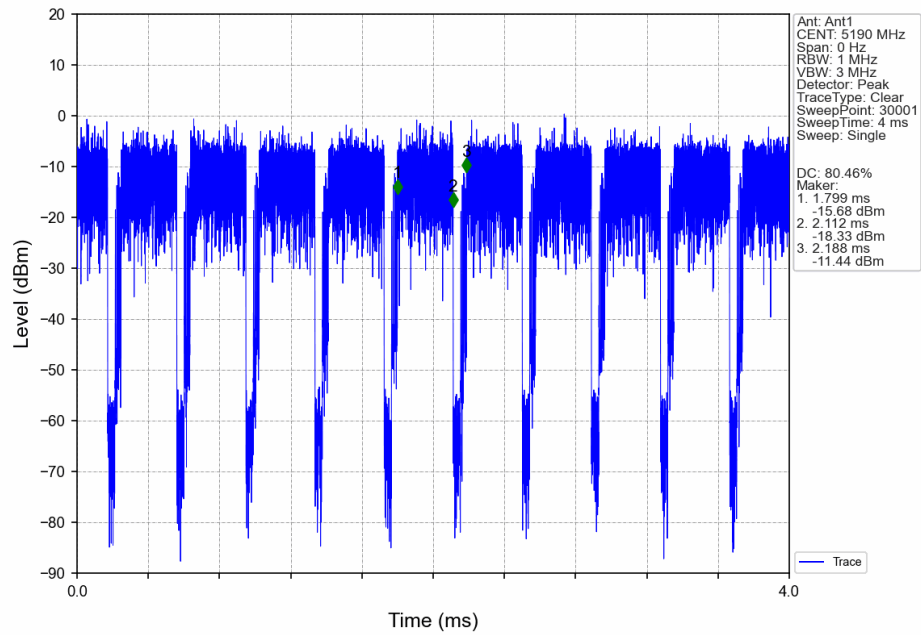
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



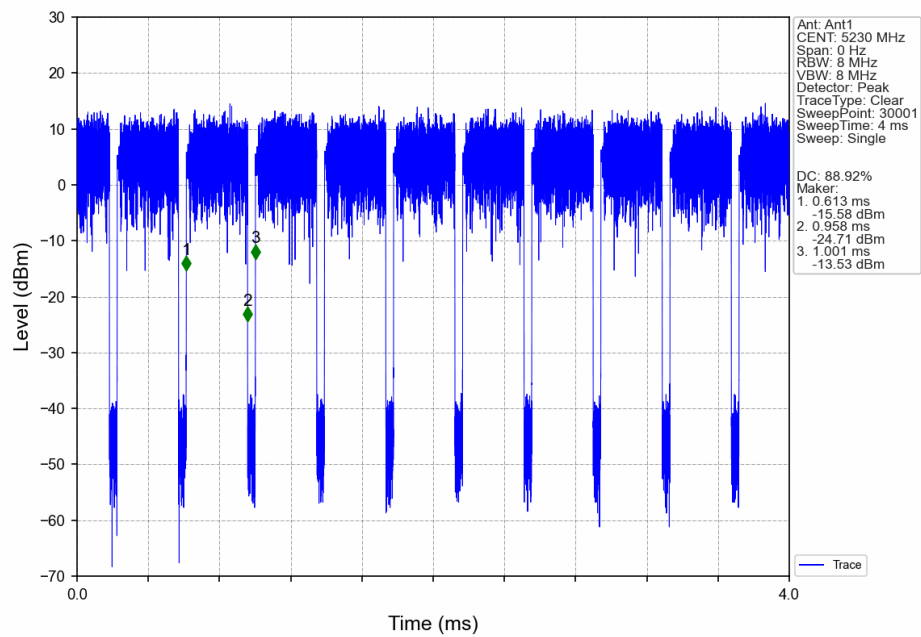
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



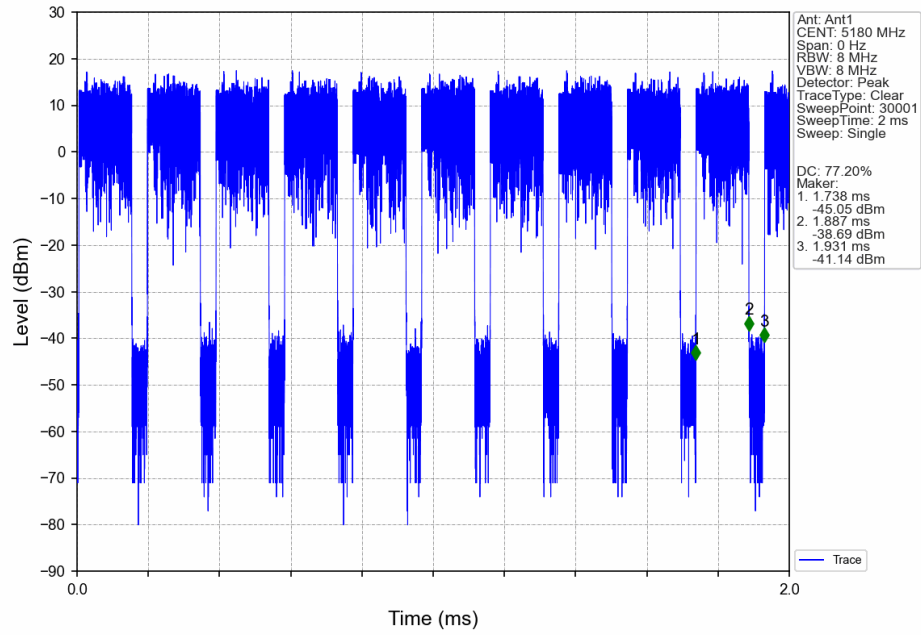
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



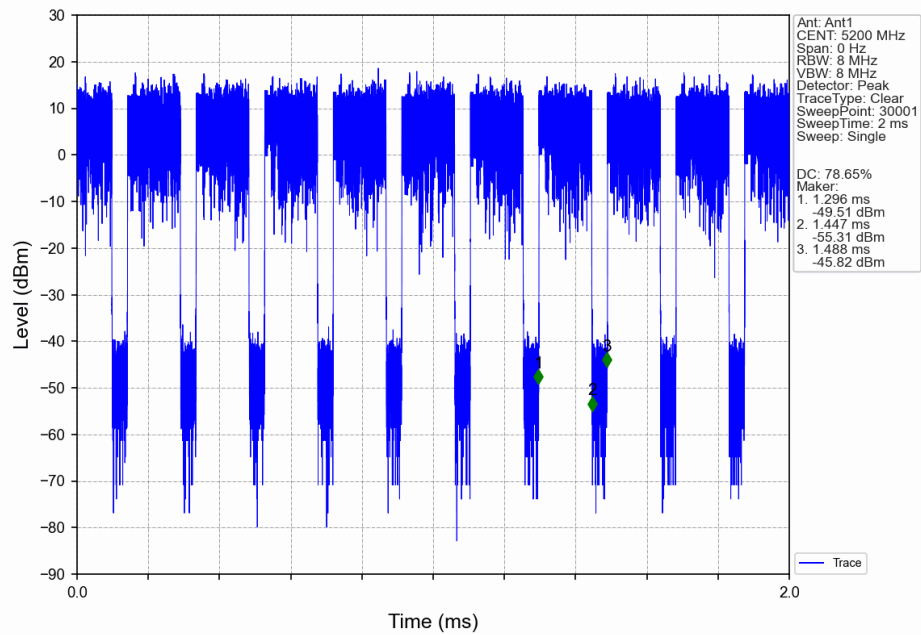
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



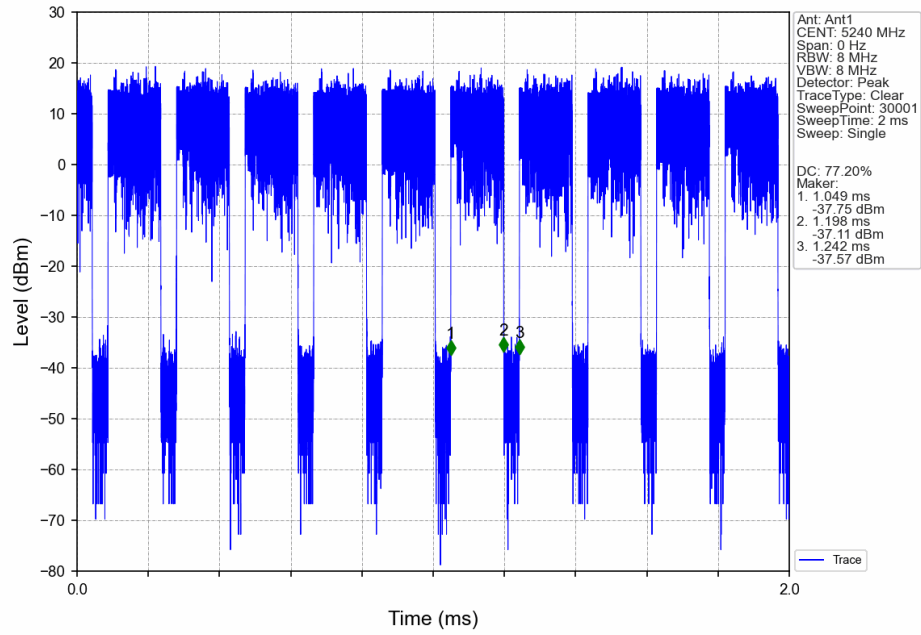
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



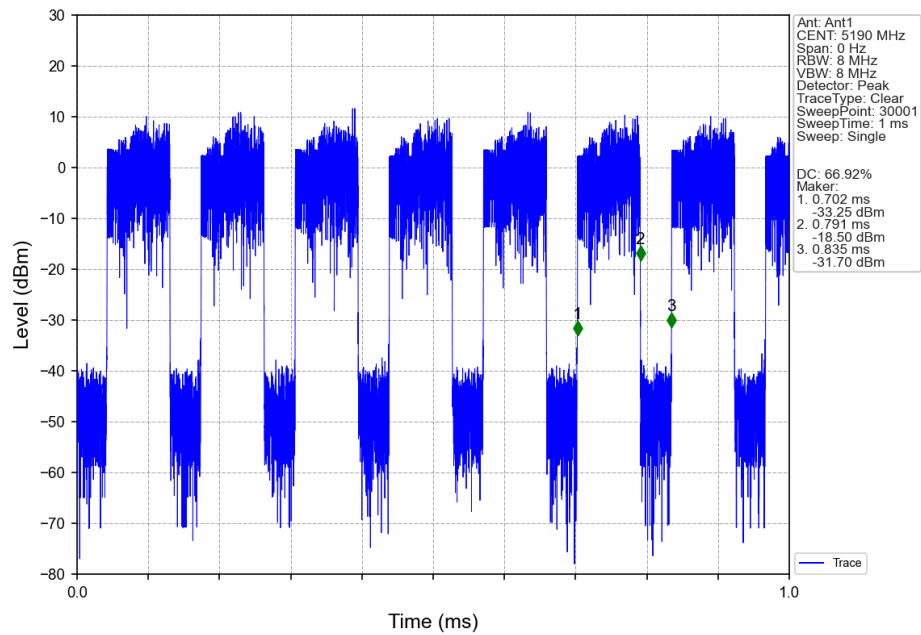
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



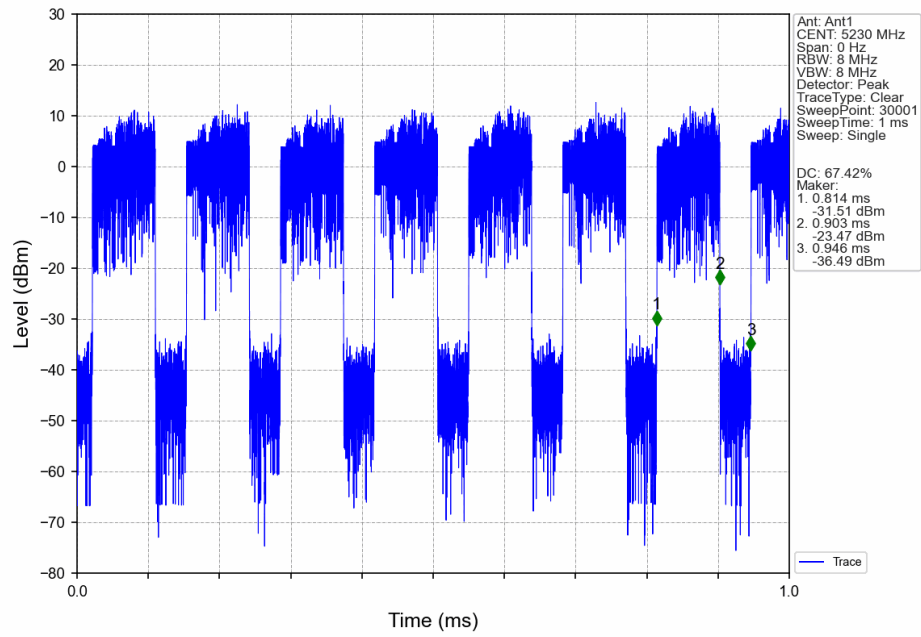
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



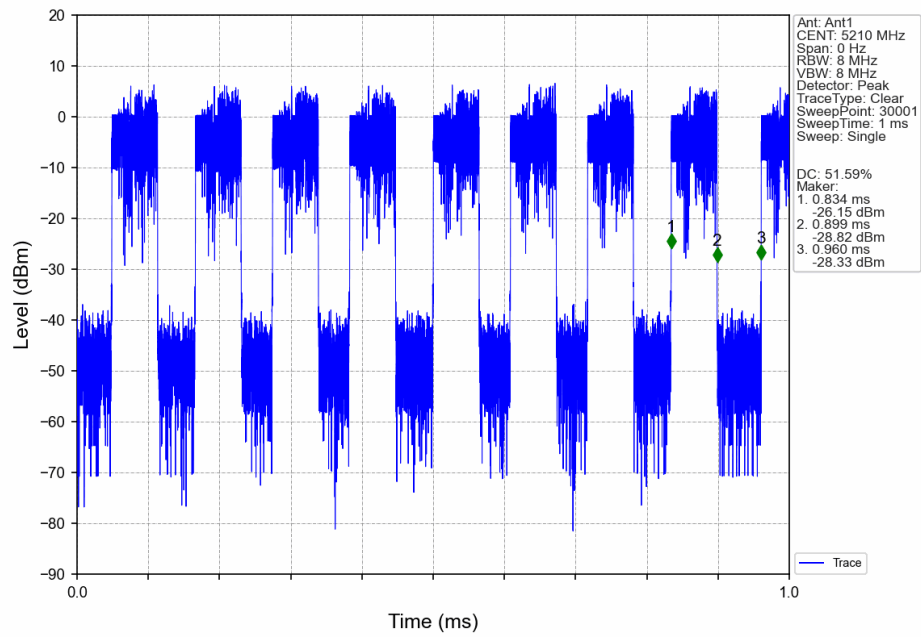
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

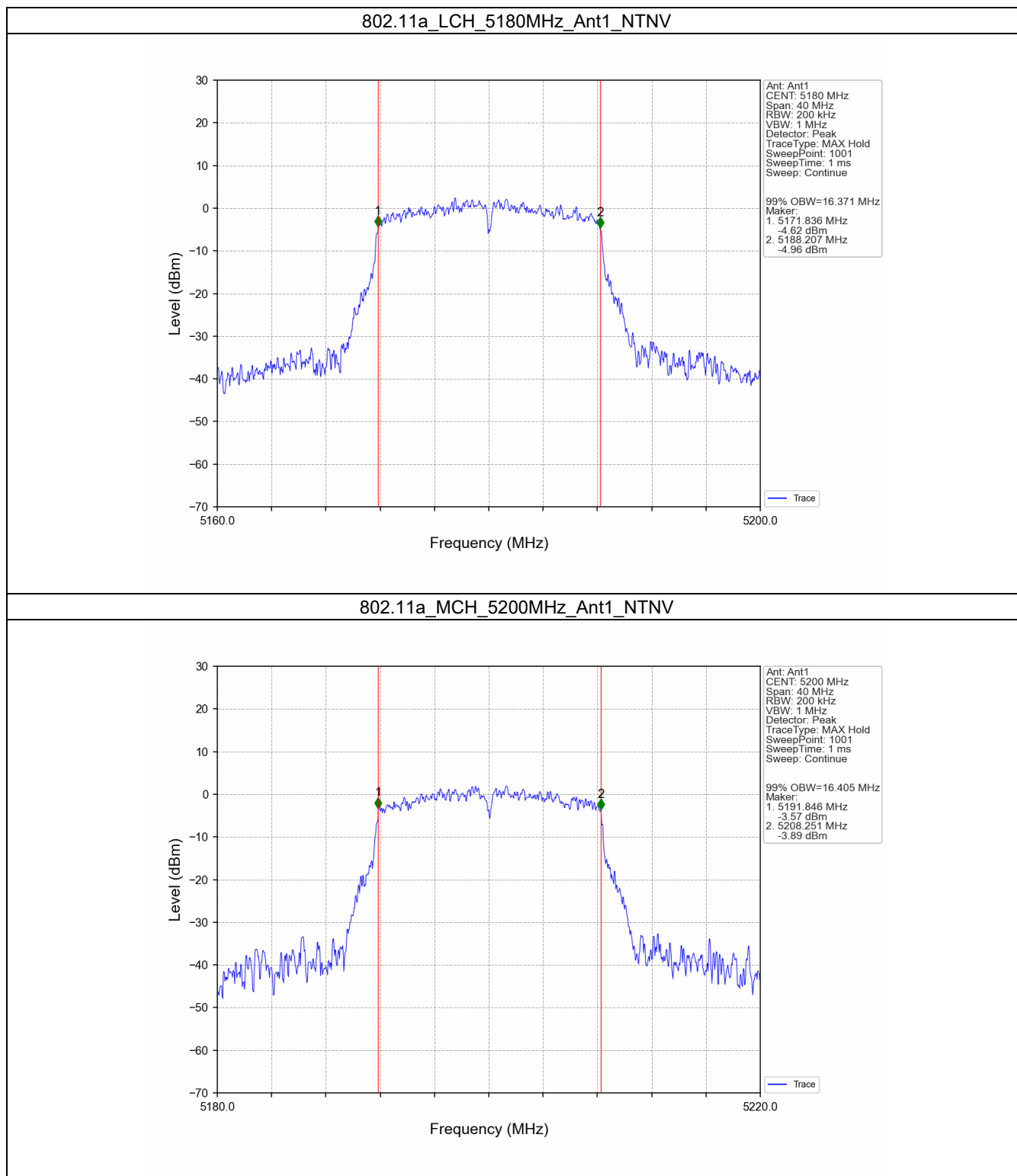
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	16.371	/	Pass
		5200	1	16.405	/	Pass
		5240	1	16.386	/	Pass
802.11n (HT20)	SISO	5180	1	17.553	/	Pass
		5200	1	17.581	/	Pass
		5240	1	17.610	/	Pass
802.11n (HT40)	SISO	5190	1	36.165	/	Pass
		5230	1	36.207	/	Pass
802.11ac (VHT20)	SISO	5180	1	17.550	/	Pass
		5200	1	17.576	/	Pass
		5240	1	17.586	/	Pass
802.11ac (VHT40)	SISO	5190	1	36.200	/	Pass
		5230	1	36.152	/	Pass
802.11ac (VHT80)	SISO	5210	1	75.597	/	Pass

2.1.2 26dB BW

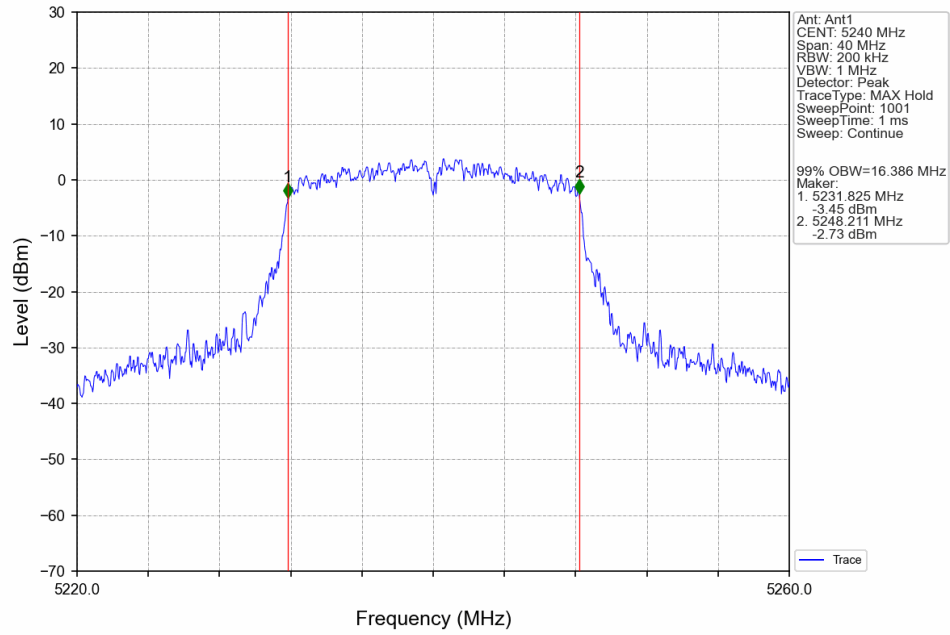
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	19.375	/	Pass
		5200	1	19.336	/	Pass
		5240	1	19.645	/	Pass
802.11n (HT20)	SISO	5180	1	19.768	/	Pass
		5200	1	19.650	/	Pass
		5240	1	19.837	/	Pass
802.11n (HT40)	SISO	5190	1	40.940	/	Pass
		5230	1	40.950	/	Pass
802.11ac (VHT20)	SISO	5180	1	19.726	/	Pass
		5200	1	19.774	/	Pass
		5240	1	19.813	/	Pass
802.11ac (VHT40)	SISO	5190	1	41.314	/	Pass
		5230	1	41.274	/	Pass
802.11ac (VHT80)	SISO	5210	1	80.896	/	Pass

2.2 Test Graph

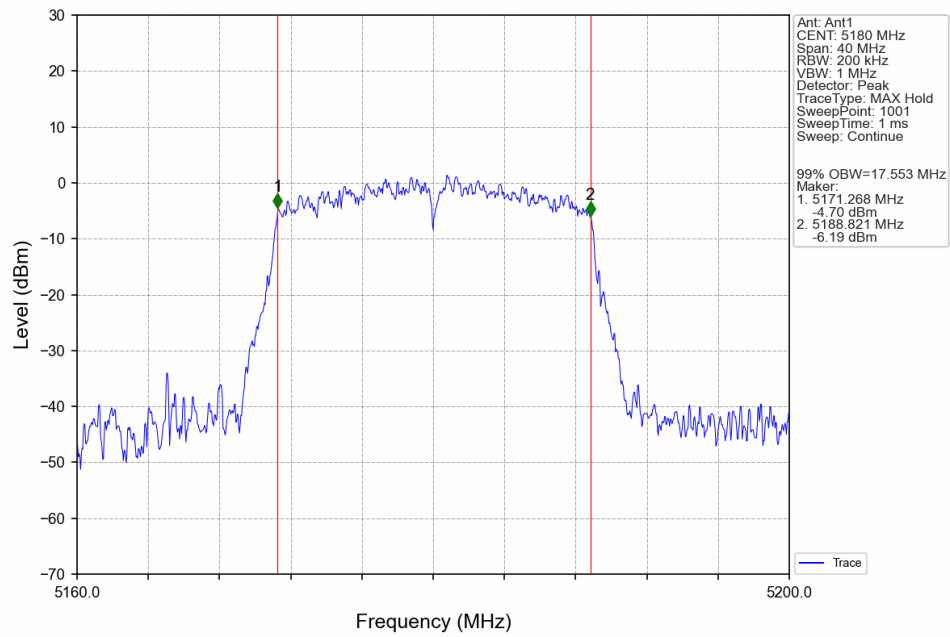
2.2.1 OBW



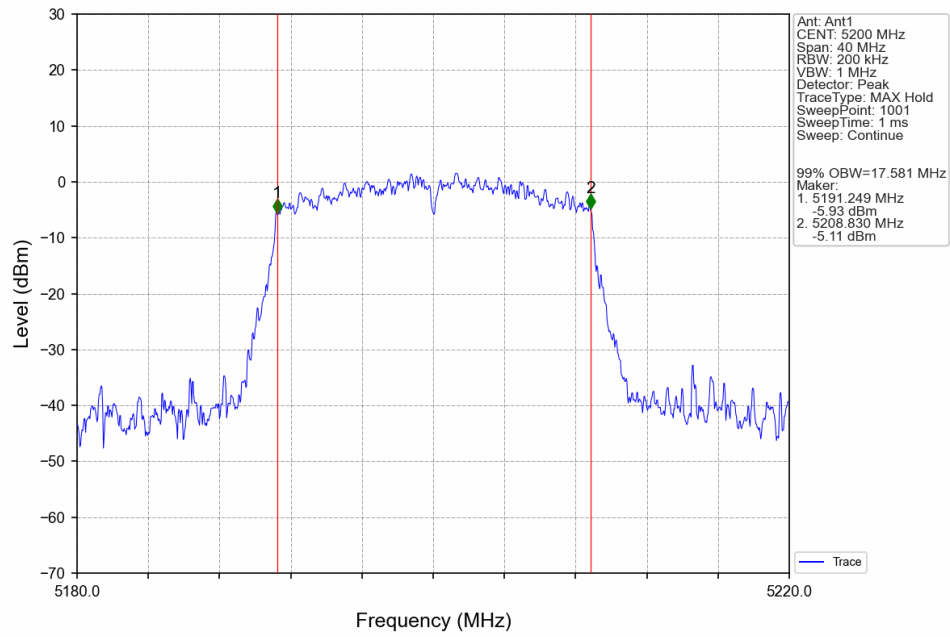
802.11a_HCH_5240MHz_Ant1_NTNV



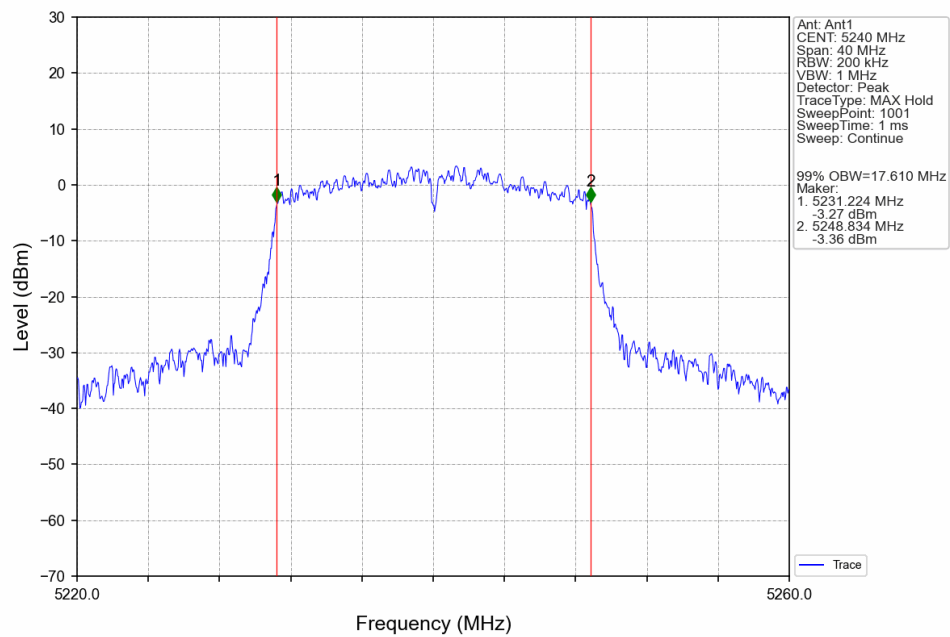
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



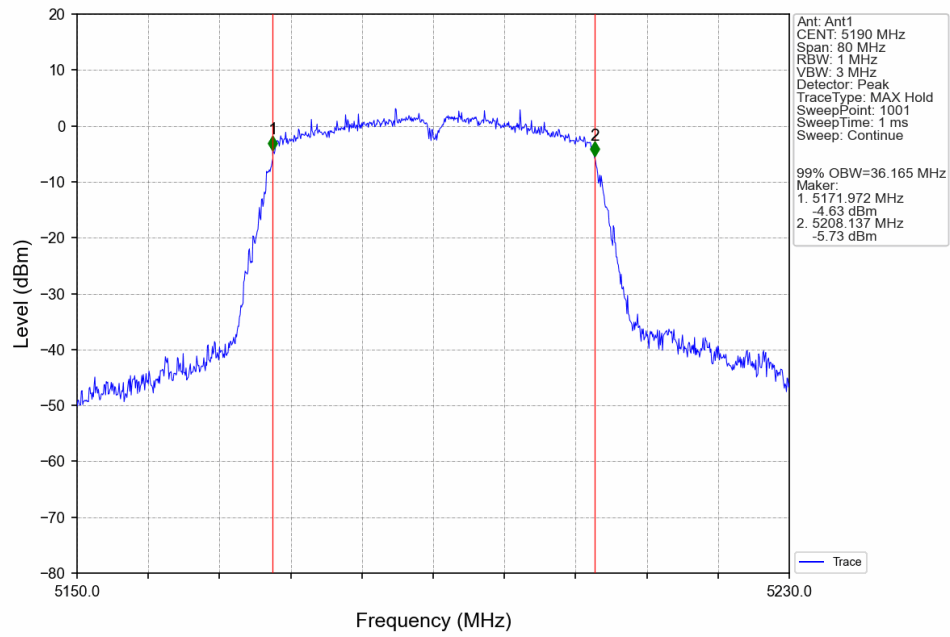
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



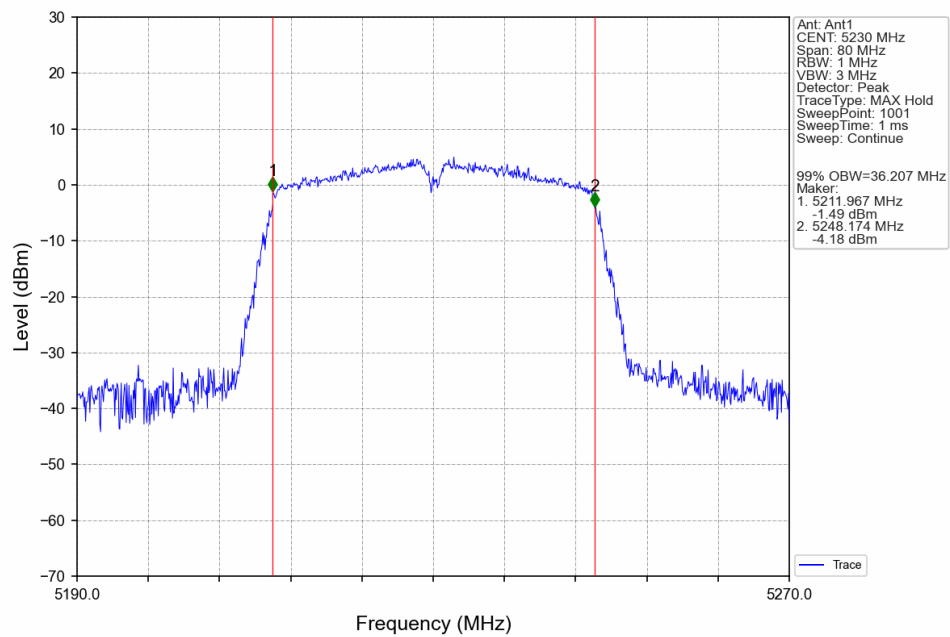
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



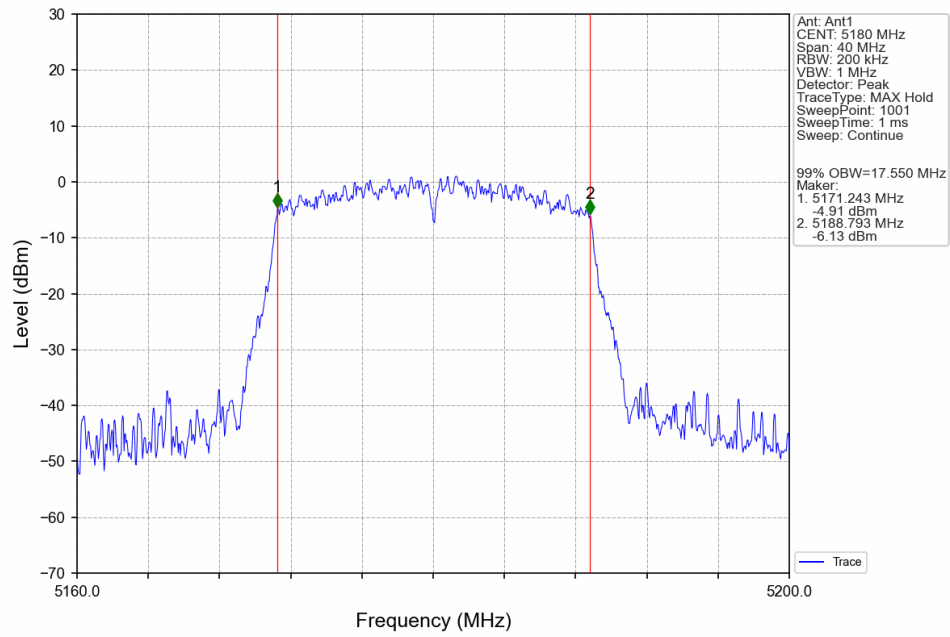
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



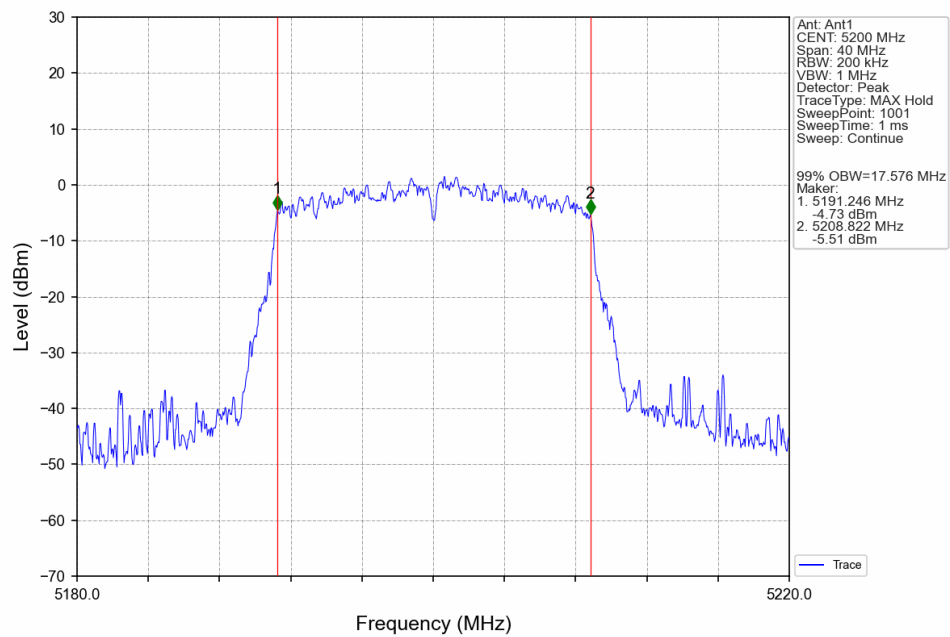
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



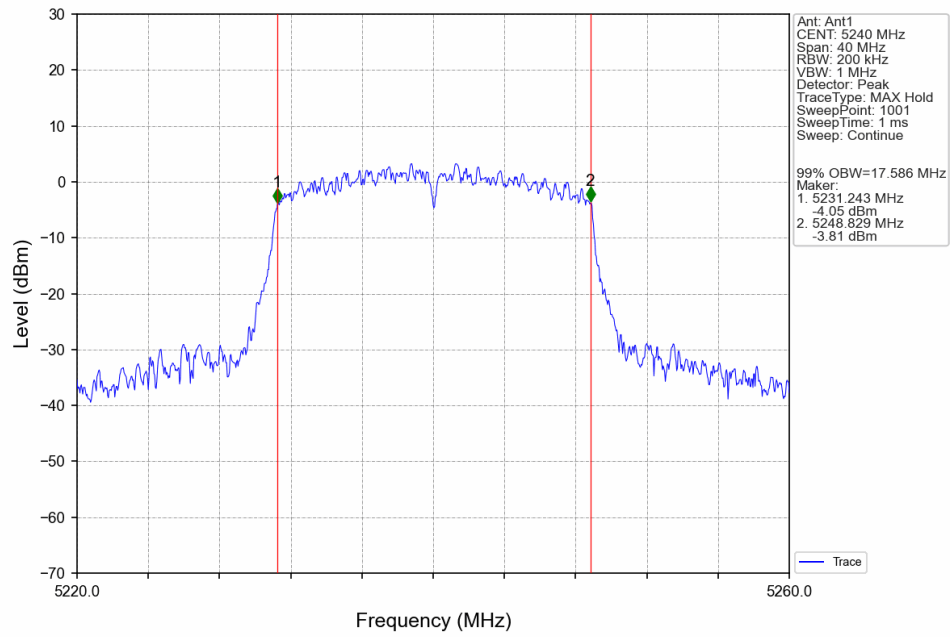
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



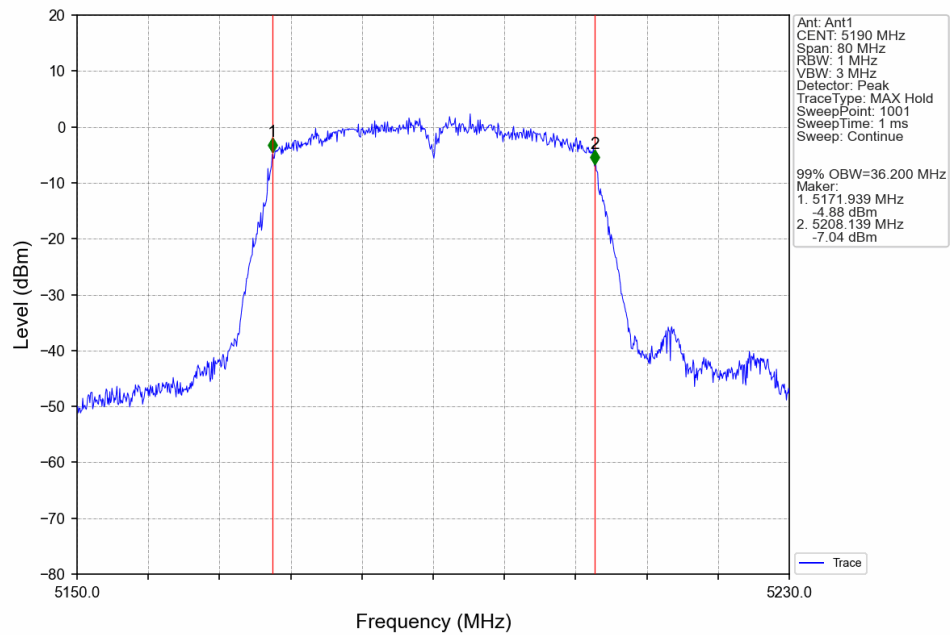
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



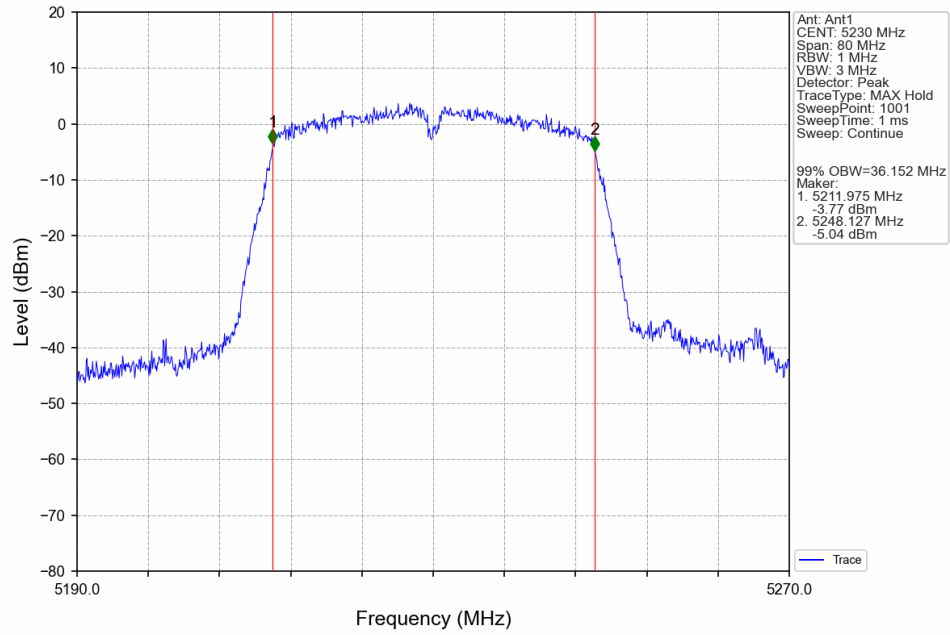
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



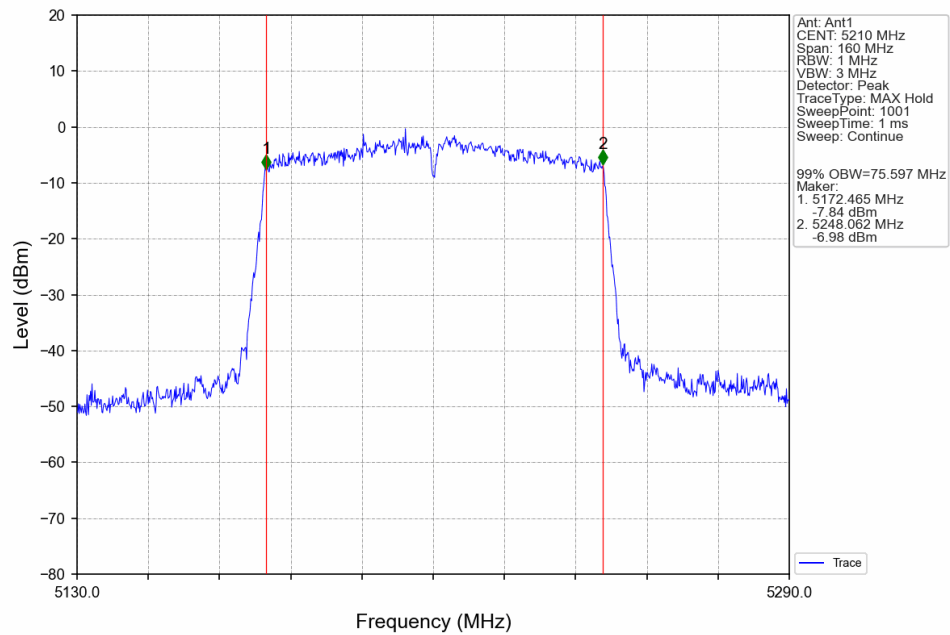
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



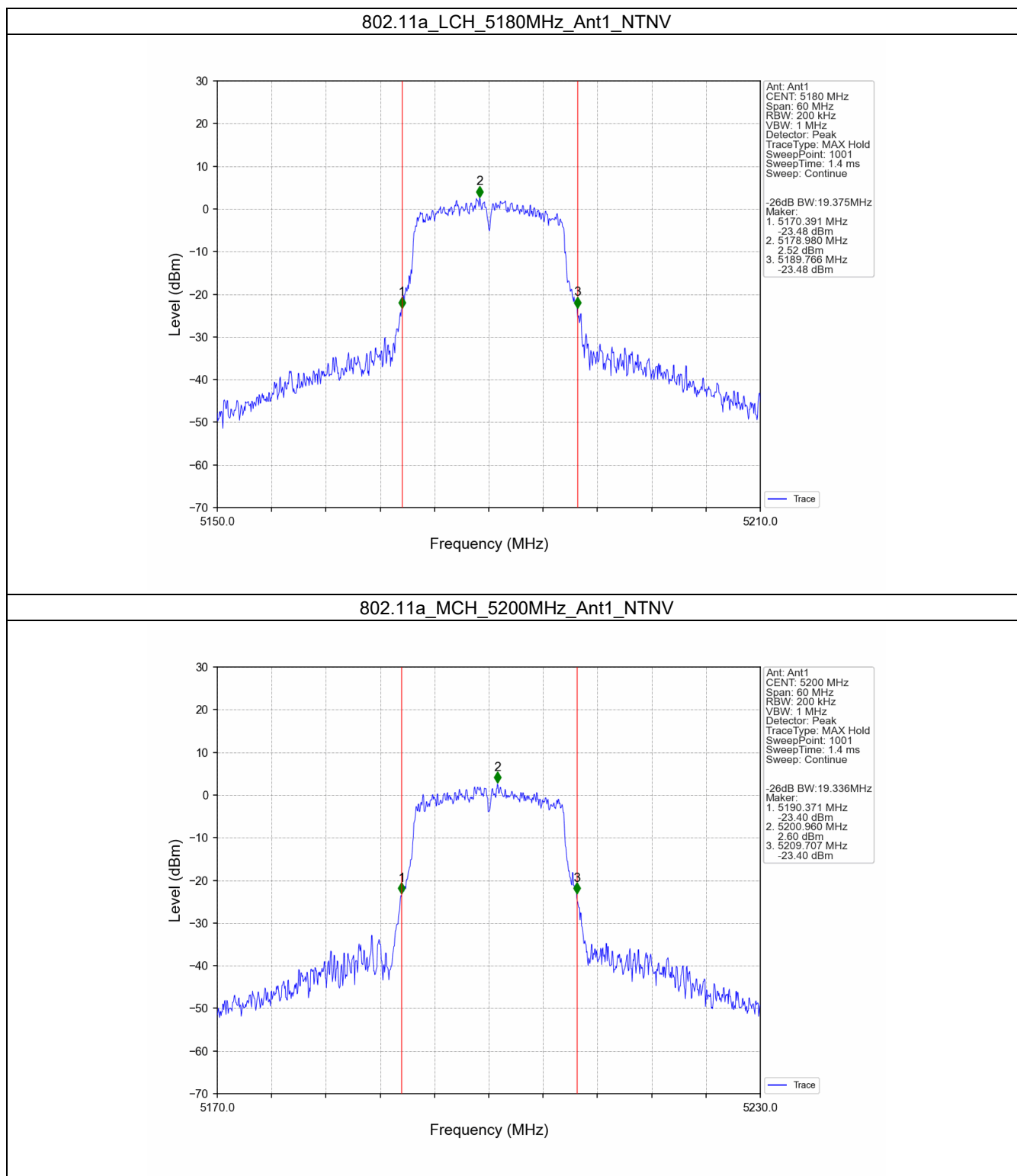
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



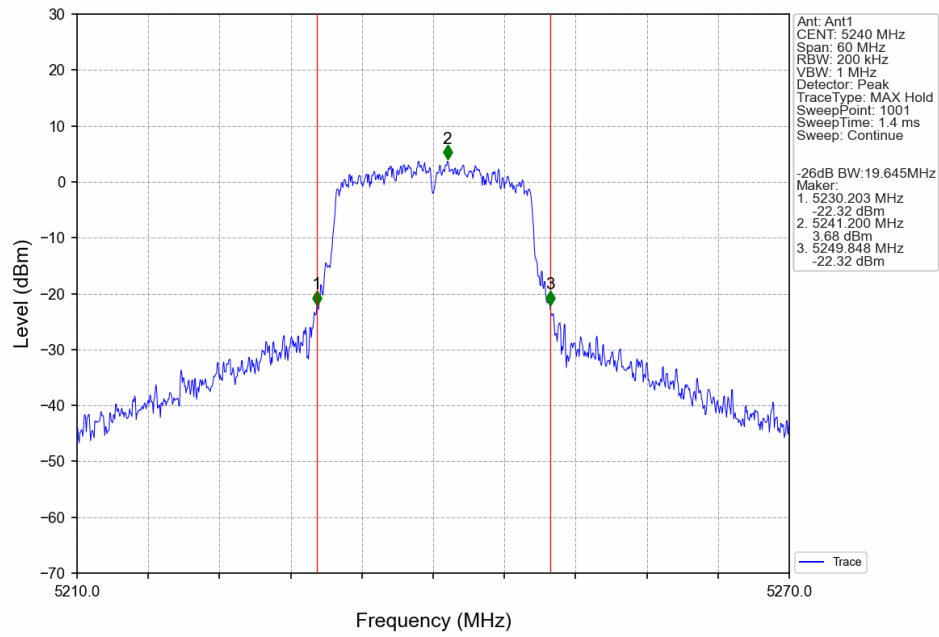
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



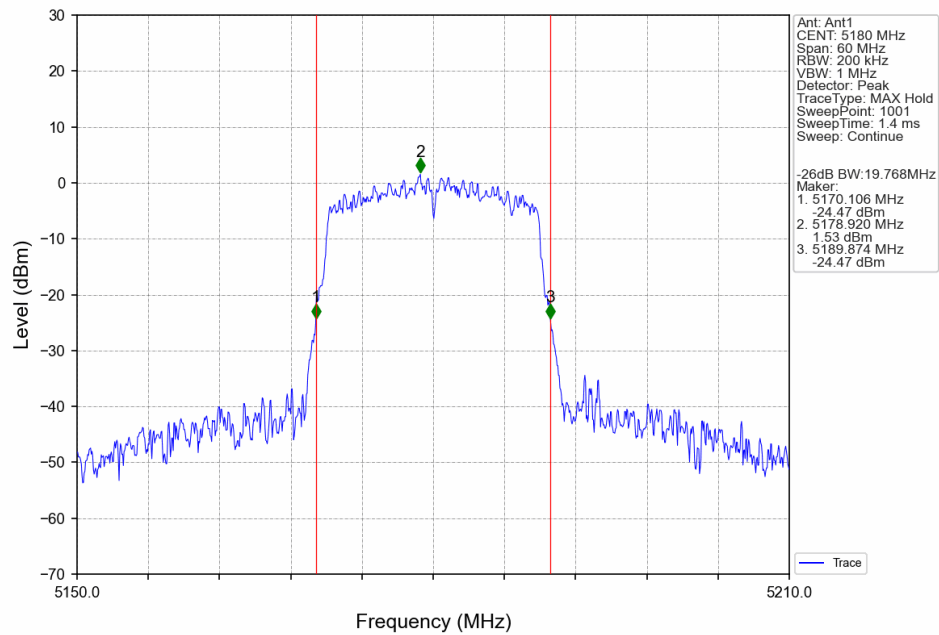
2.2.2 26dB BW



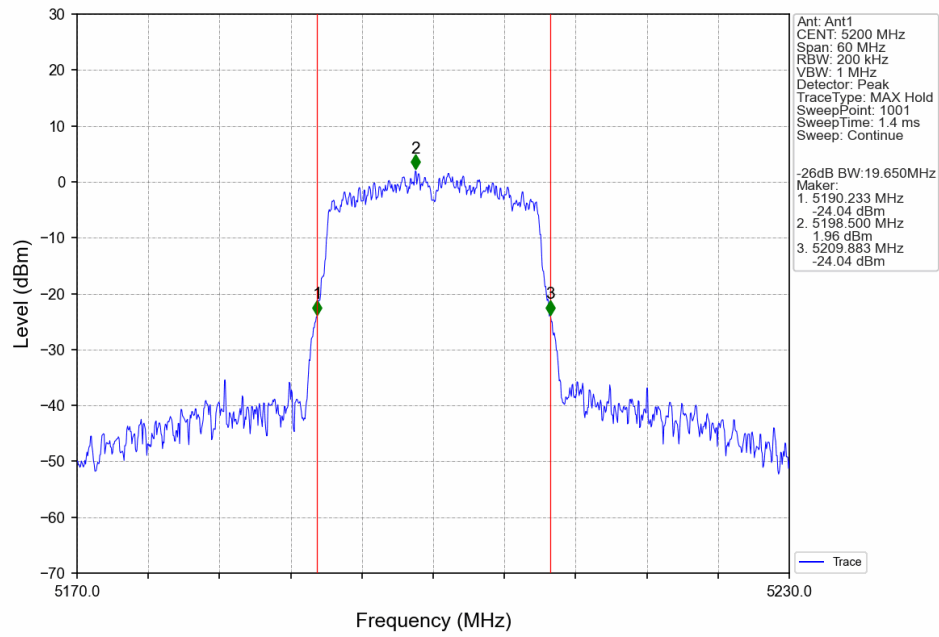
802.11a_HCH_5240MHz_Ant1_NTNV



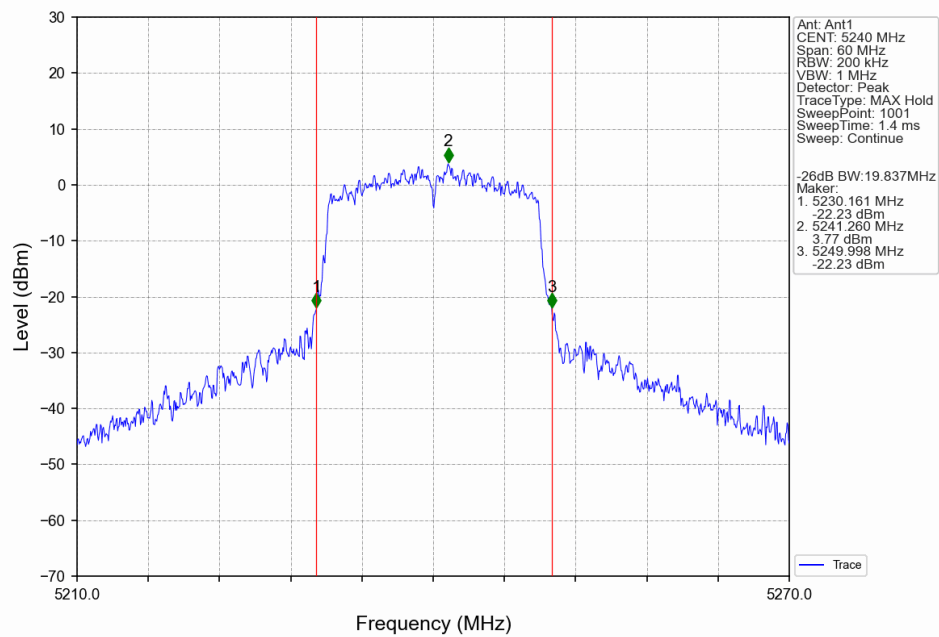
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



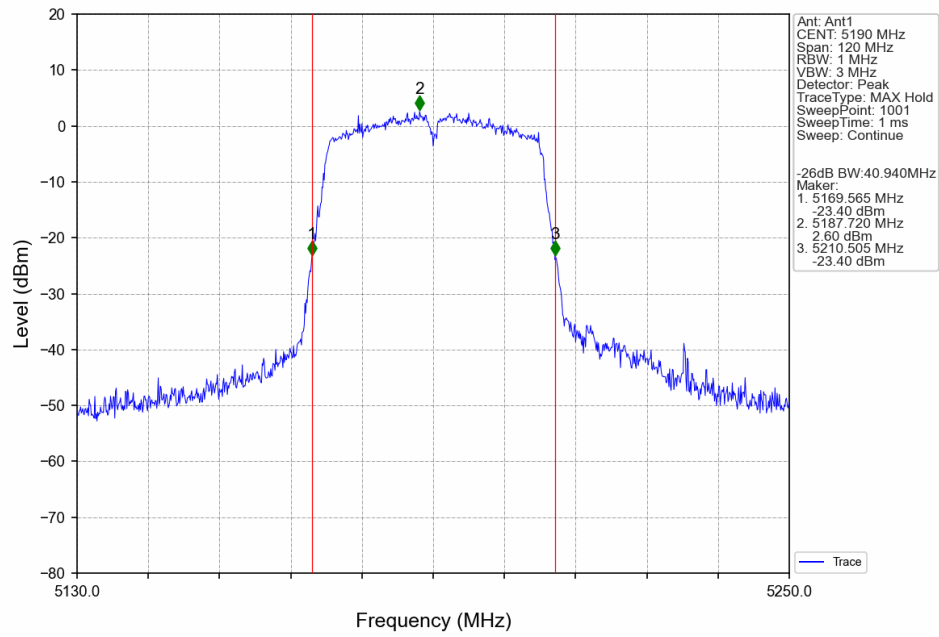
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



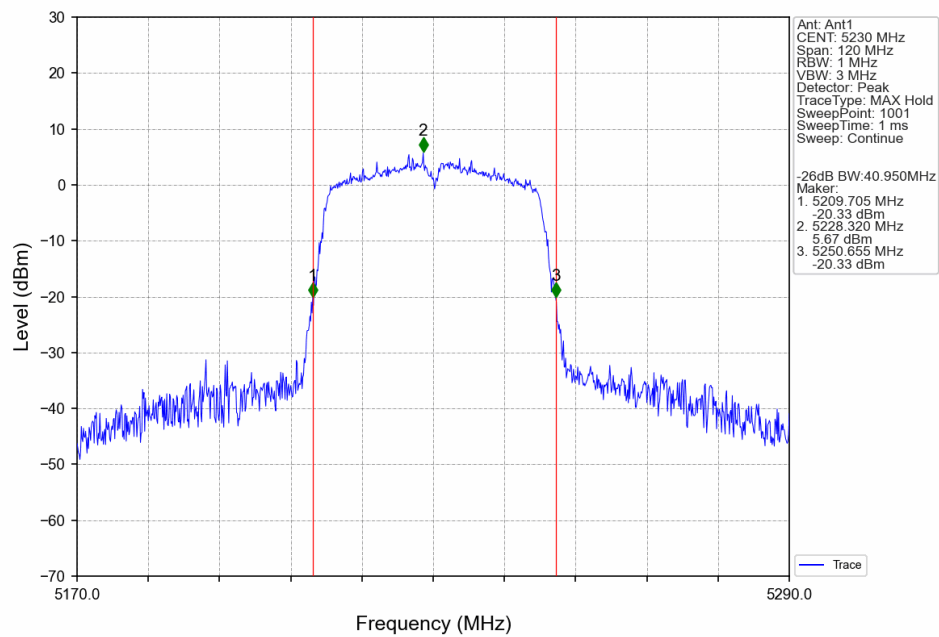
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



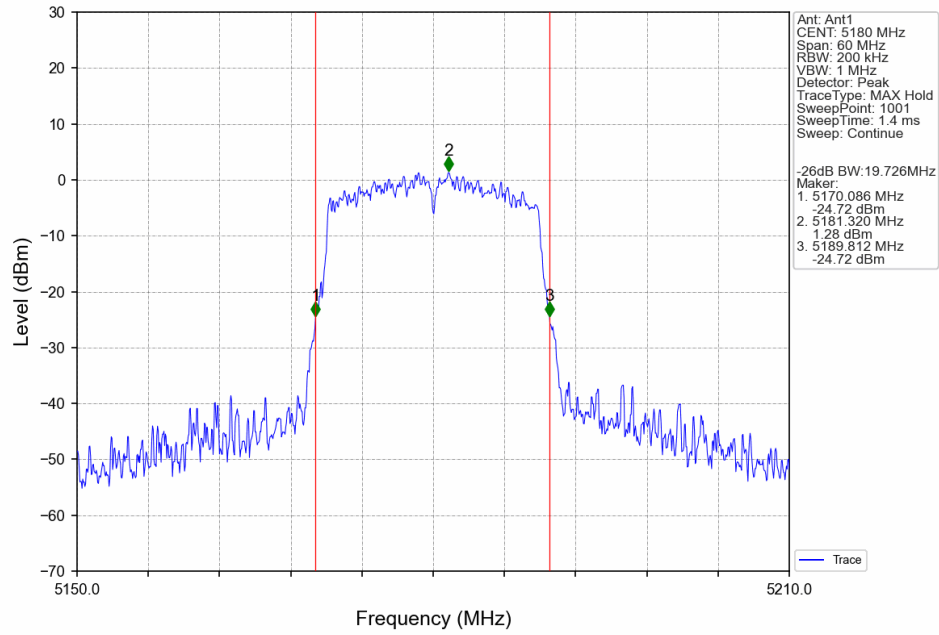
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



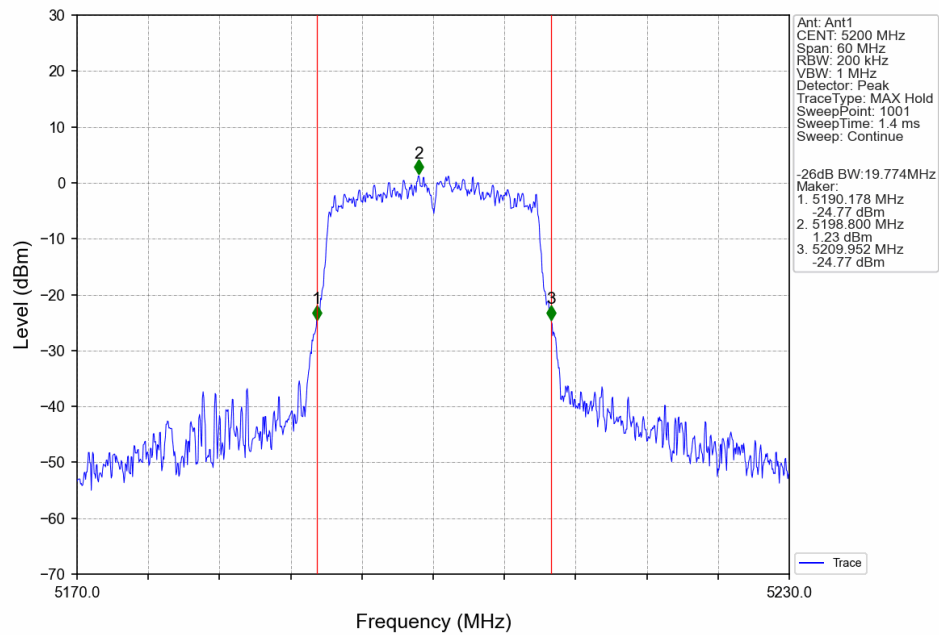
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



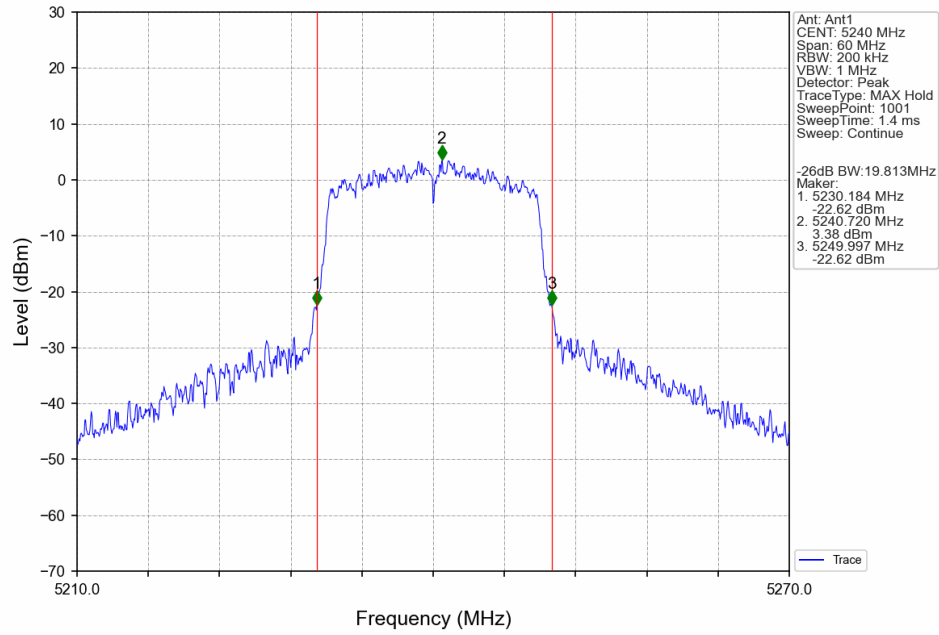
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



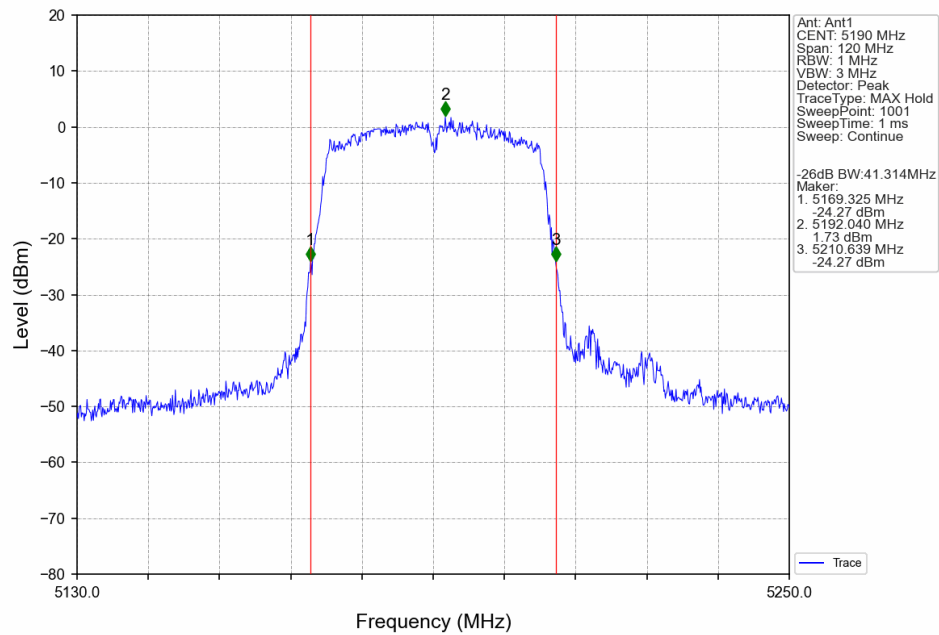
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



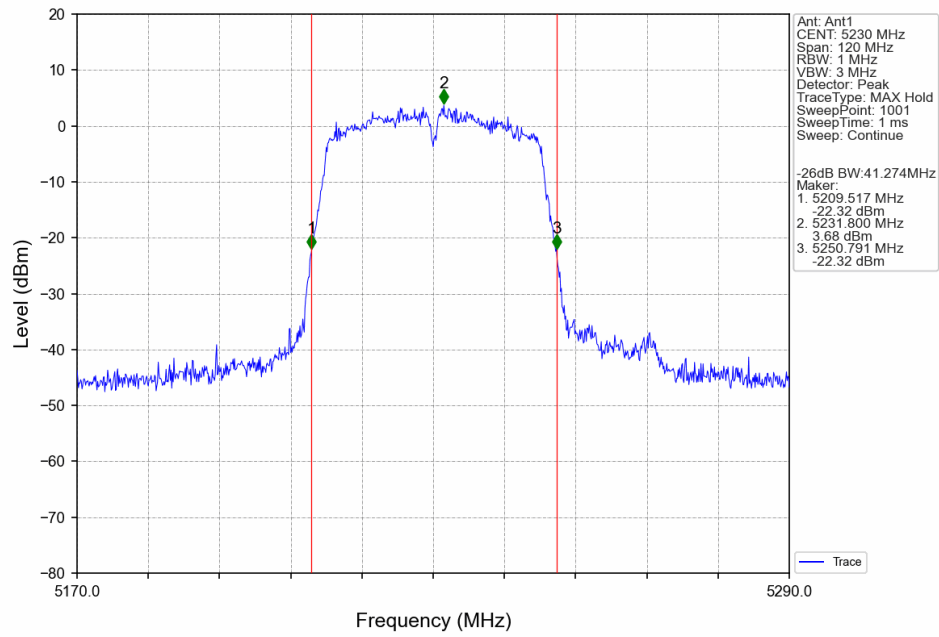
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



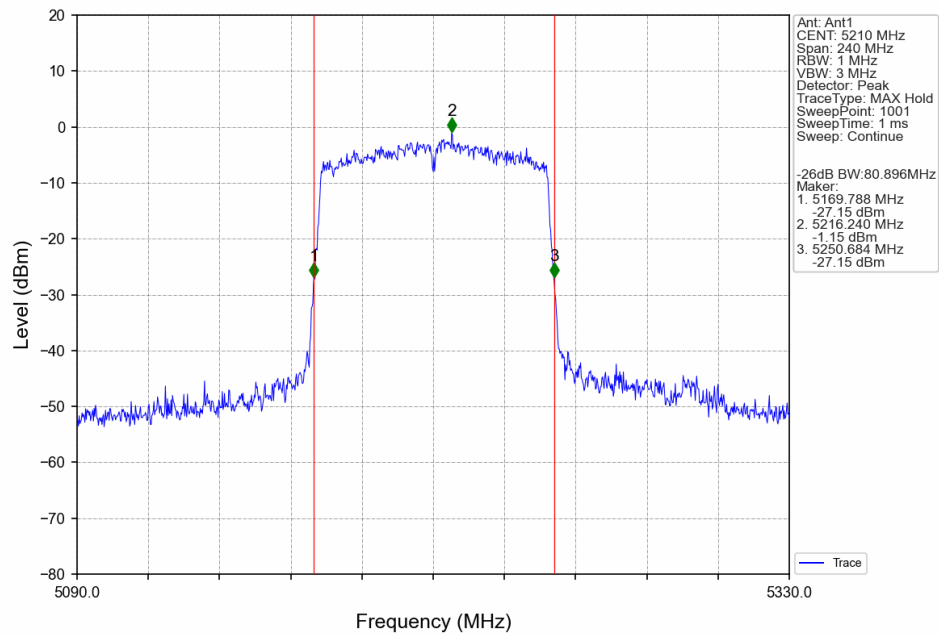
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

Mode	TX Type	Frequency (MHz)	ANT1				Verdict
			Conducted Output Power (dBm)	Duty Factor (dB)	Total Output Power (dBm)	Limit (dBm)	
802.11a	SISO	5180	10.38	0.94	11.32	<=23.98	Pass
		5200	10.19	0.92	11.11	<=23.98	Pass
		5240	12	0.92	12.92	<=23.98	Pass
802.11n (HT20)	SISO	5180	9.18	0.98	10.16	<=23.98	Pass
		5200	9.66	0.97	10.63	<=23.98	Pass
		5240	11.46	0.97	12.43	<=23.98	Pass
802.11n (HT40)	SISO	5190	7.49	0.94	8.43	<=23.98	Pass
		5230	9.5	0.51	10.01	<=23.98	Pass
802.11ac (VHT20)	SISO	5180	9.22	1.12	10.34	<=23.98	Pass
		5200	9.32	1.04	10.36	<=23.98	Pass
		5240	11.38	1.12	12.50	<=23.98	Pass
802.11ac (VHT40)	SISO	5190	4.77	1.74	6.51	<=23.98	Pass
		5230	6.49	1.71	8.20	<=23.98	Pass
802.11ac (VHT80)	SISO	5210	4.39	2.87	7.26	<=23.98	Pass

4. Maximum Power Spectral Density

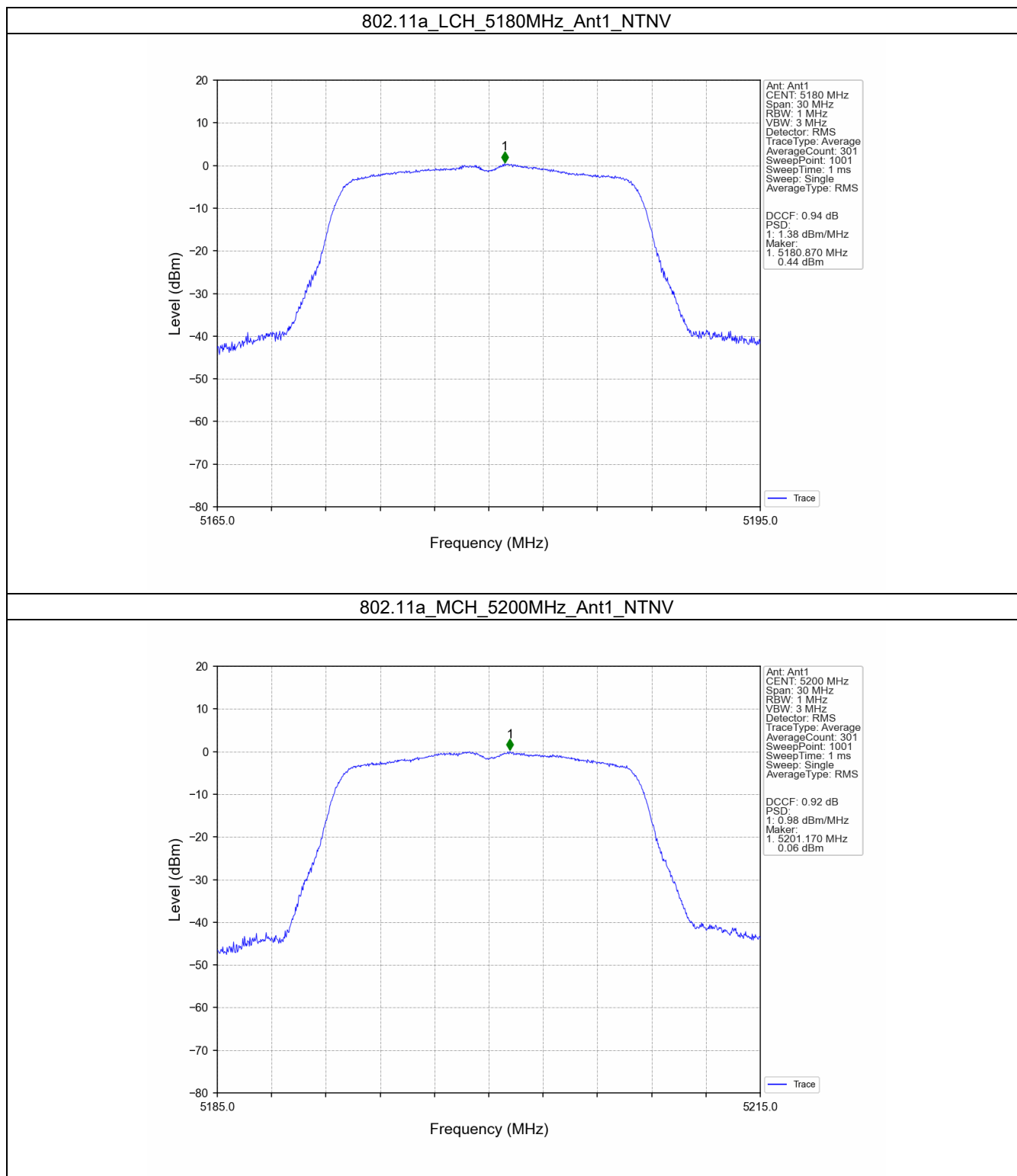
4.1 Test Result

4.1.1 PSD

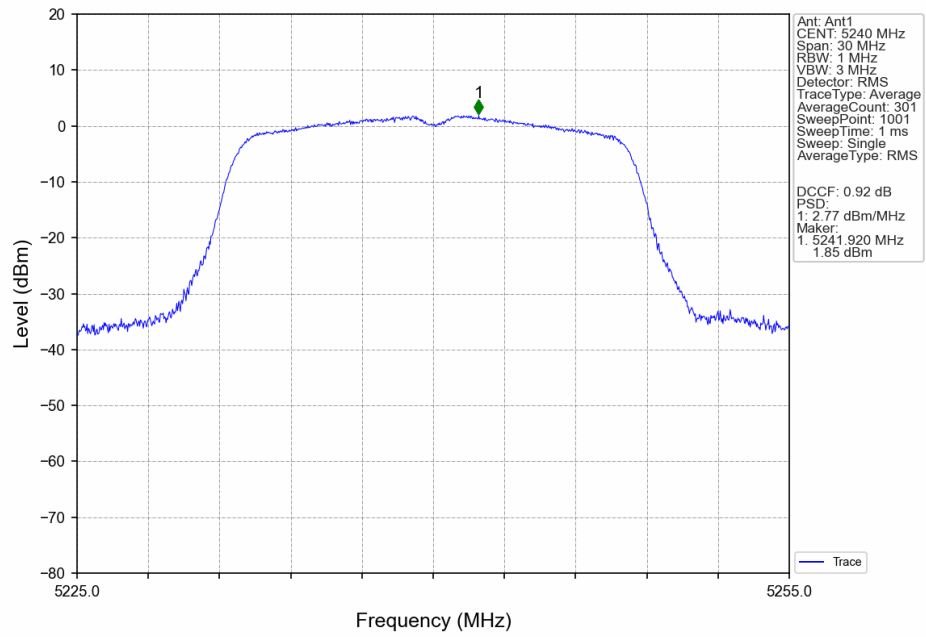
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	1.38	<=11	Pass
		5200	0.98	<=11	Pass
		5240	2.77	<=11	Pass
802.11n (HT20)	SISO	5180	0.01	<=11	Pass
		5200	0.28	<=11	Pass
		5240	2.28	<=11	Pass
802.11n (HT40)	SISO	5190	-4.94	<=11	Pass
		5230	-3.36	<=11	Pass
802.11ac (VHT20)	SISO	5180	-0.02	<=11	Pass
		5200	0.18	<=11	Pass
		5240	2.38	<=11	Pass
802.11ac (VHT40)	SISO	5190	-6.61	<=11	Pass
		5230	-4.32	<=11	Pass
802.11ac (VHT80)	SISO	5210	-8.92	<=11	Pass

4.2 Test Graph

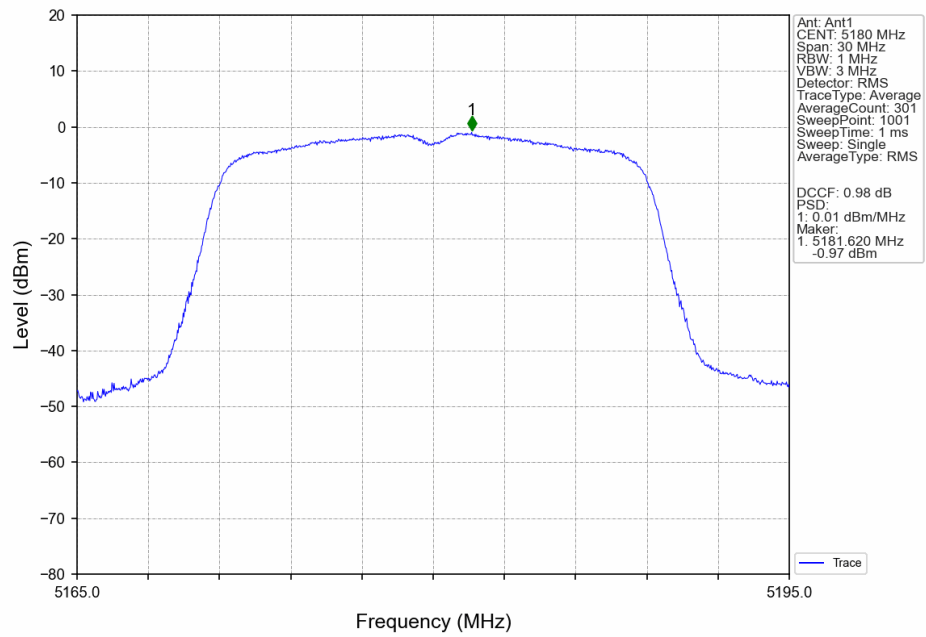
4.2.1 PSD



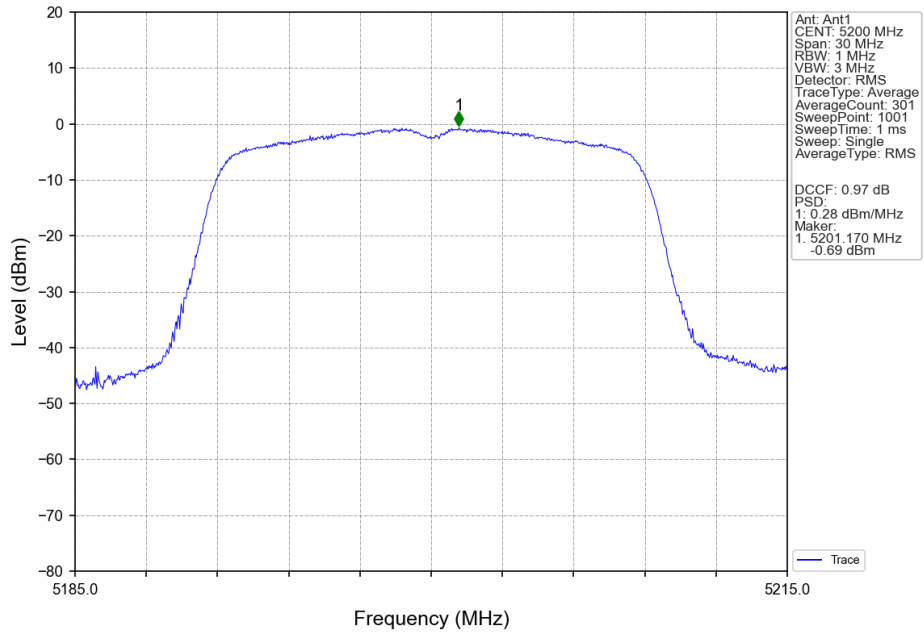
802.11a_HCH_5240MHz_Ant1_NTNV



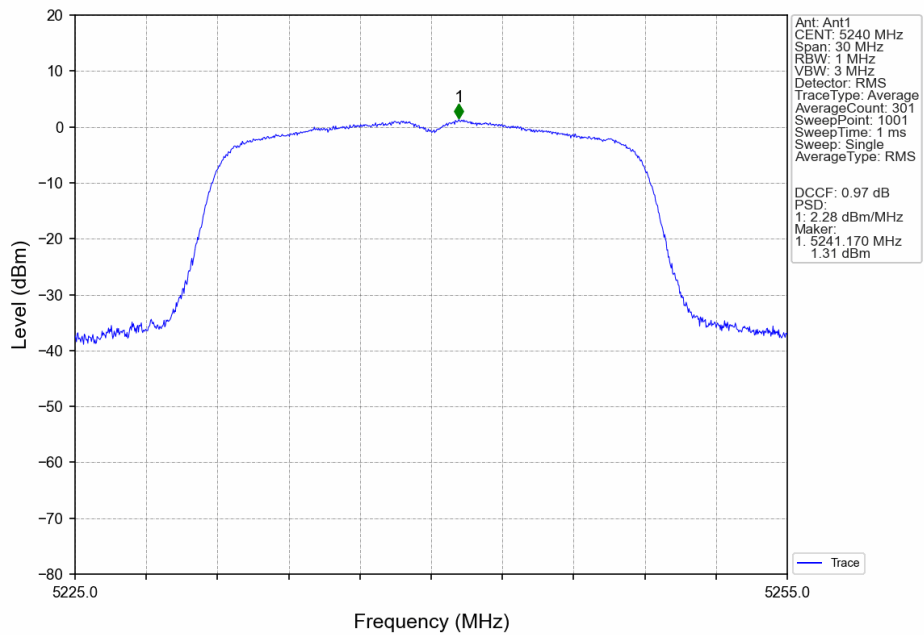
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



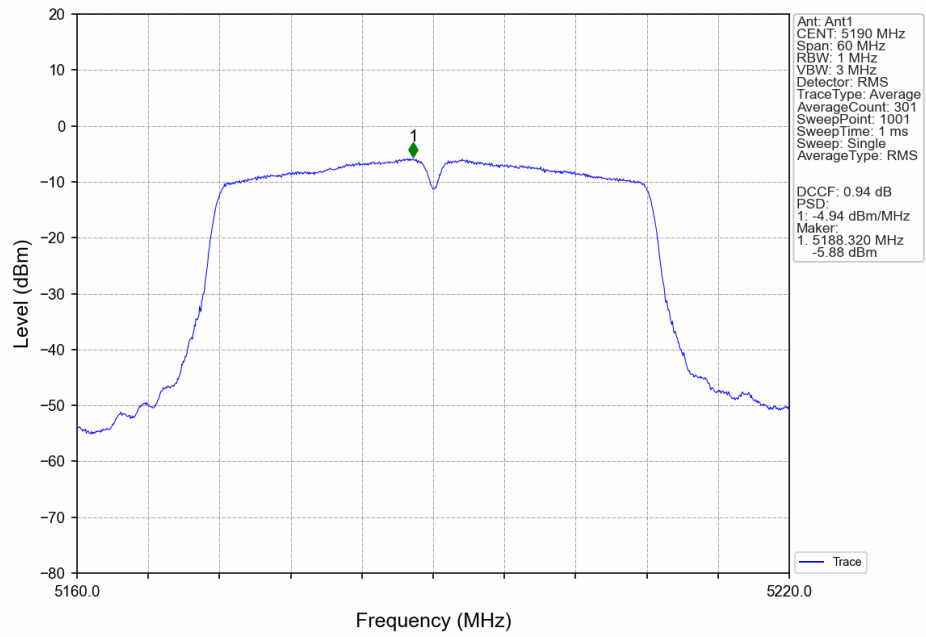
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



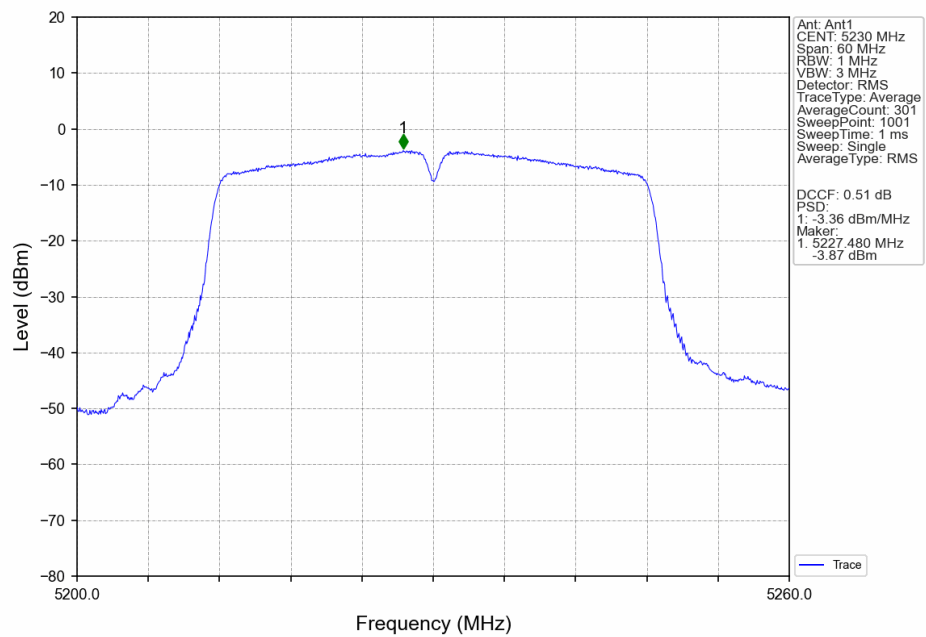
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



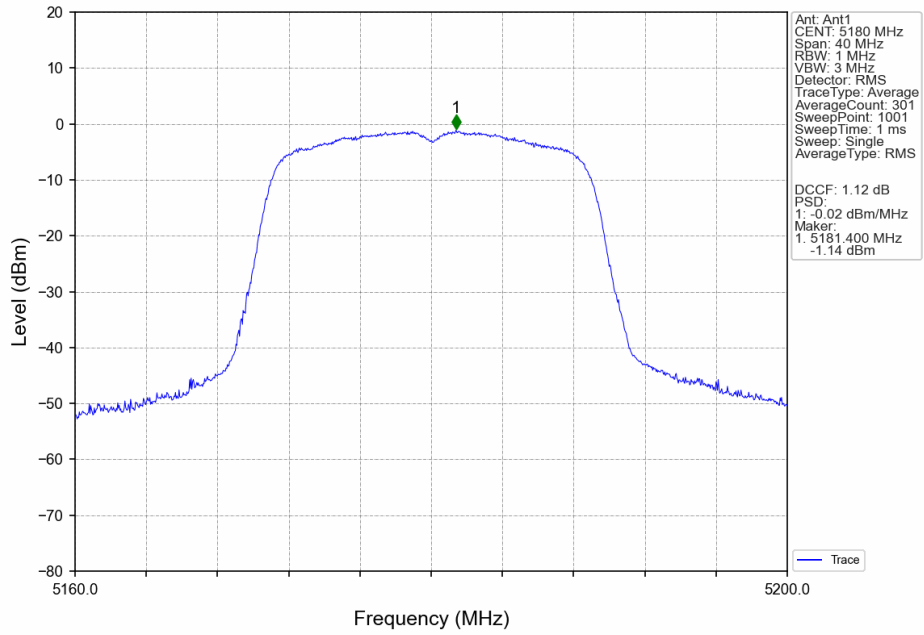
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



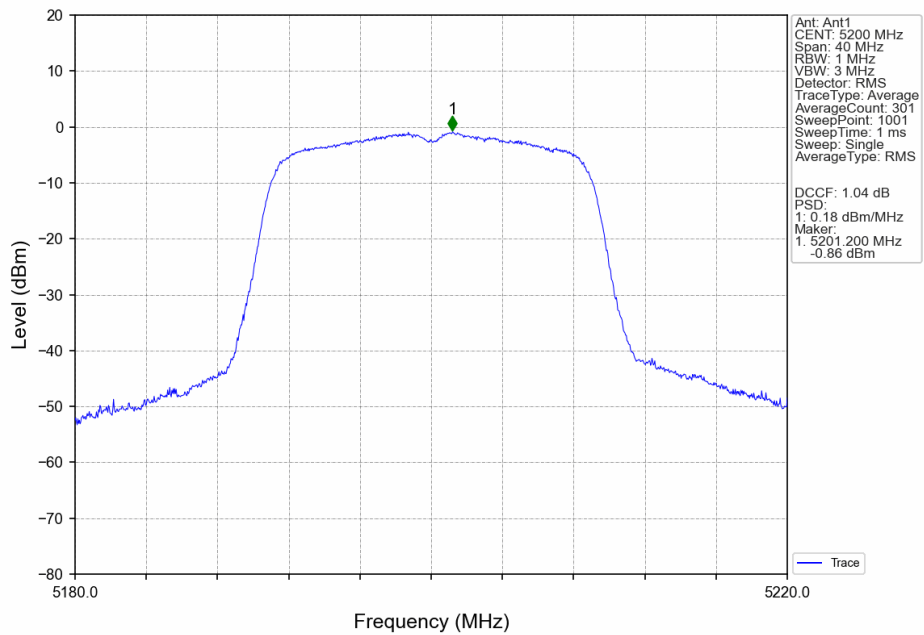
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



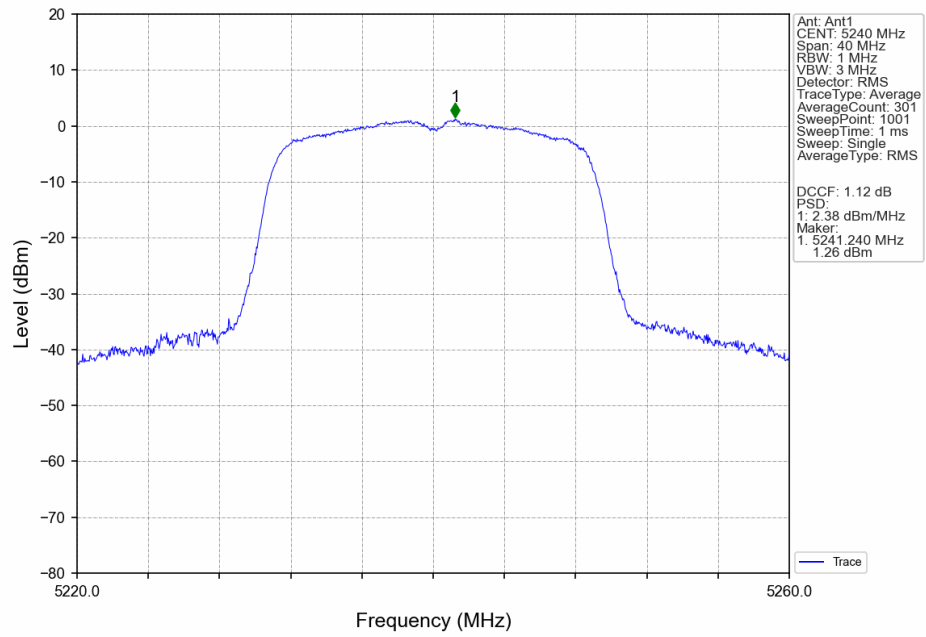
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



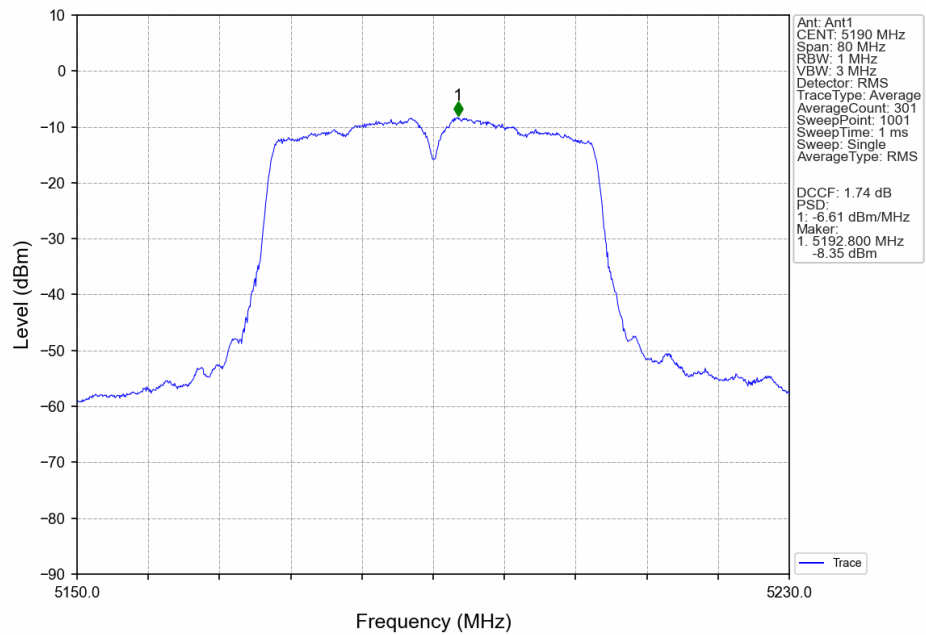
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



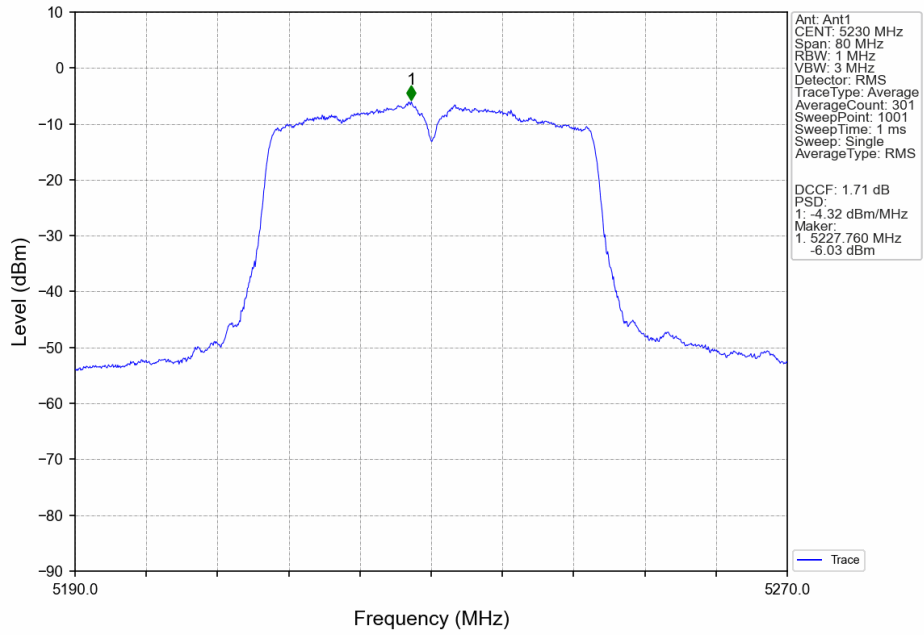
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



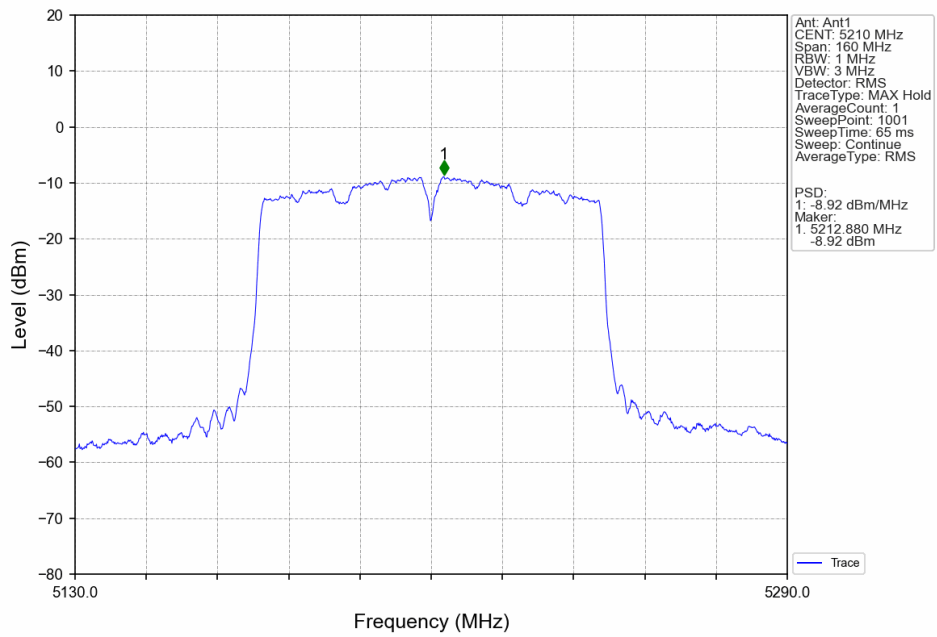
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



5. Band Edge

5.1 Test Result

5.1.1 BandEdge

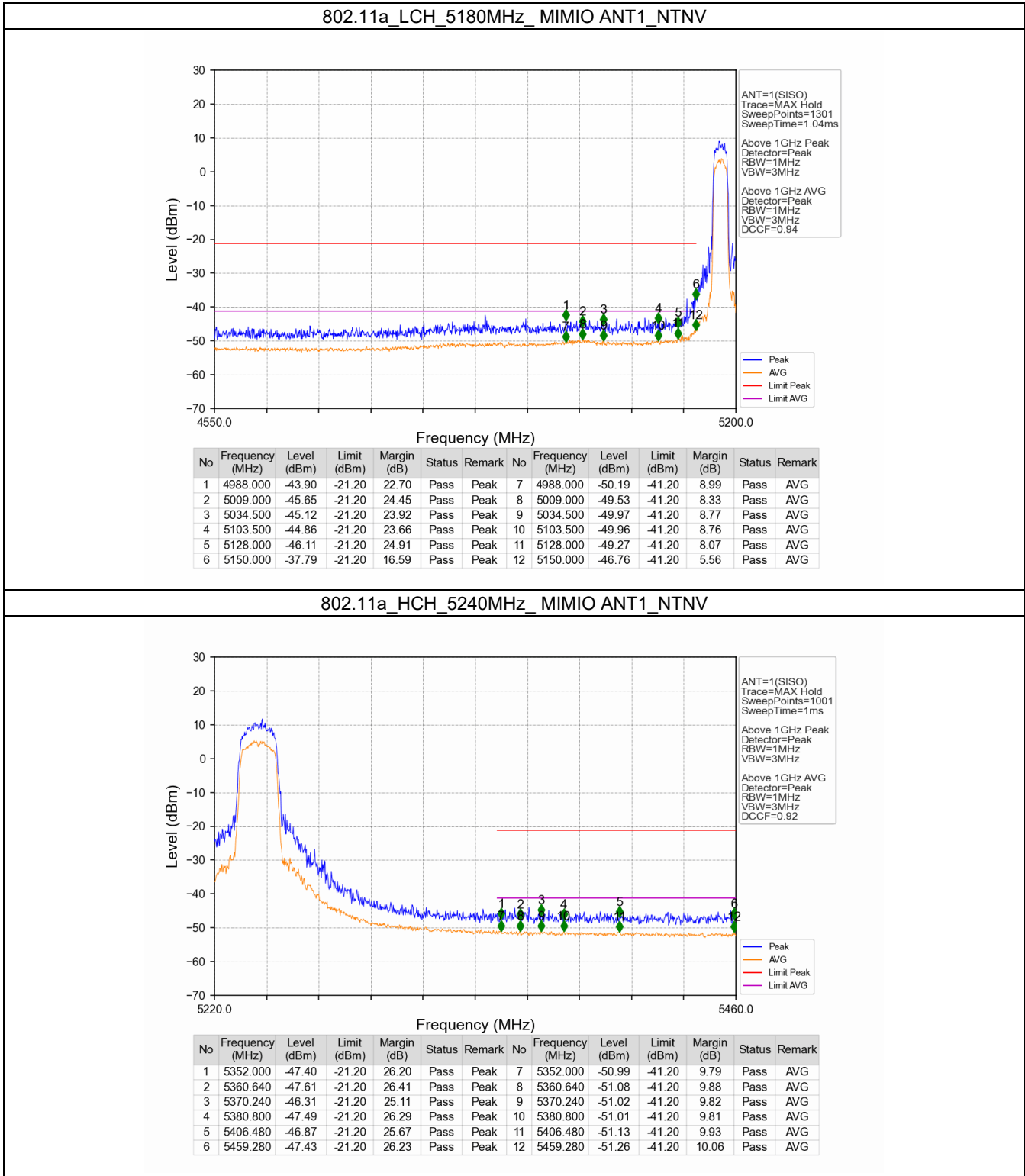
Mode	TX Type	Frequency (MHz)	ANT	Level of Unwanted Emissions (dBm)		Verdict
				Result	Limit	
802.11a	SISO	5180	MIMO ANT1	Refer To Test Graph		Pass
		5240	MIMO ANT1	Refer To Test Graph		Pass
802.11n (HT20)	SISO	5180	MIMO ANT1	Refer To Test Graph		Pass
		5240	MIMO ANT1	Refer To Test Graph		Pass
802.11n (HT40)	SISO	5190	MIMO ANT1	Refer To Test Graph		Pass
		5230	MIMO ANT1	Refer To Test Graph		Pass
802.11ac (VHT20)	SISO	5180	MIMO ANT1	Refer To Test Graph		Pass
		5240	MIMO ANT1	Refer To Test Graph		Pass
802.11ac (VHT40)	SISO	5190	MIMO ANT1	Refer To Test Graph		Pass
		5230	MIMO ANT1	Refer To Test Graph		Pass
802.11ac (VHT80)	SISO	5210	MIMO ANT1	Refer To Test Graph		Pass

Note: The antenna gain is compensated in the test data.

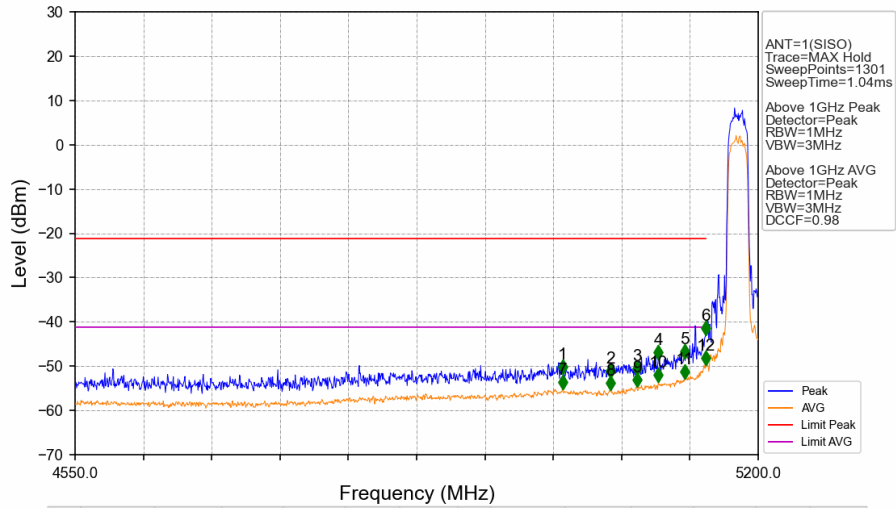
The ANT 1&ANT 2 both has 3dB margin below the limit, so the data only show the antenna1 worst mode.

7.2 Test Graph

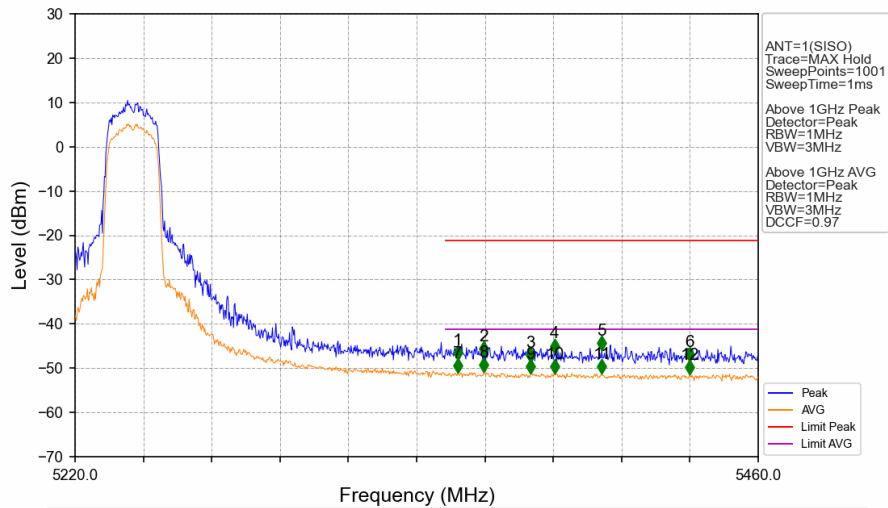
7.2.1 BandEdge



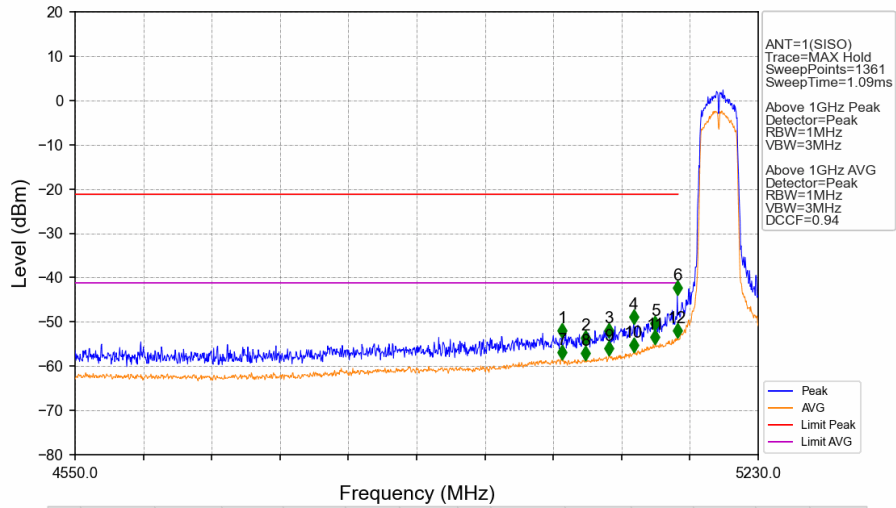
802.11n(HT20)_LCH_5180MHz_MIMIO ANT1_NTNV



802.11n(HT20)_HCH_5240MHz_MIMIO ANT1_NTNV

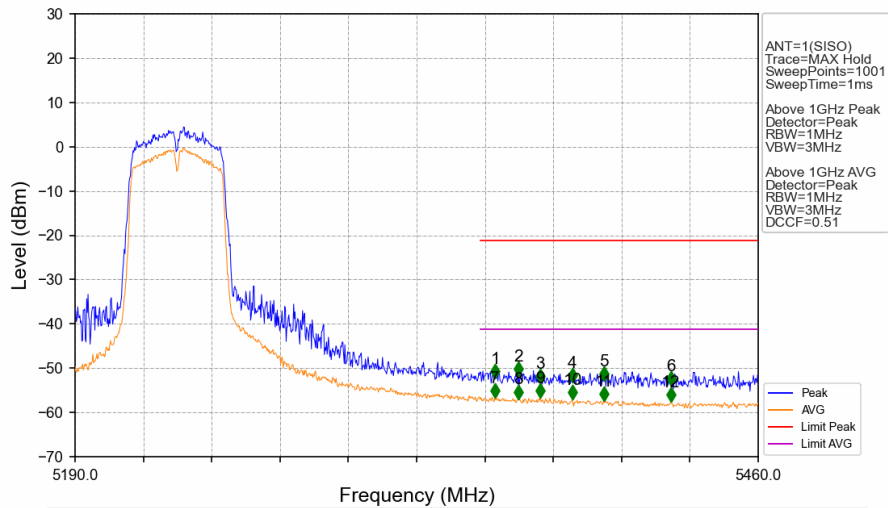


802.11n(HT40)_LCH_5190MHz_MIMIO ANT1_NTNV



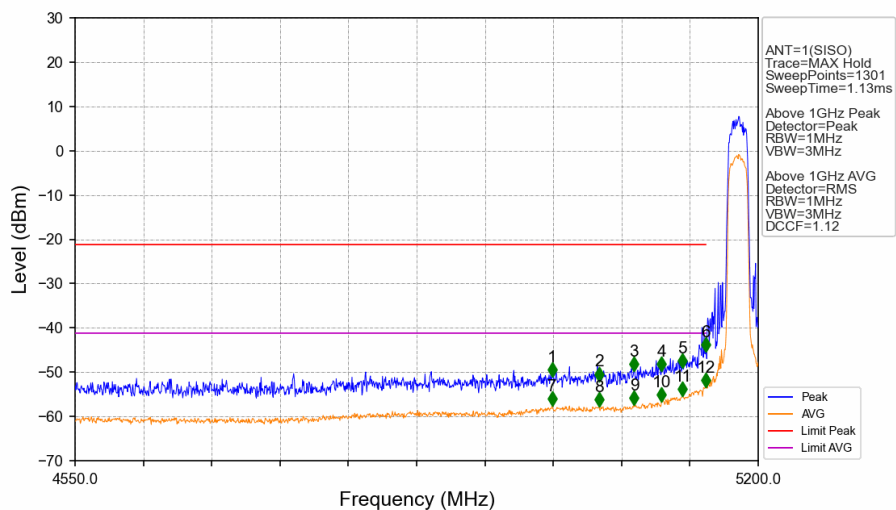
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5035.000	-53.48	-21.20	32.28	Pass	Peak	7	5035.000	-58.46	-41.20	17.26	Pass	AVG
2	5058.000	-55.19	-21.20	33.99	Pass	Peak	8	5058.000	-58.68	-41.20	17.48	Pass	AVG
3	5081.500	-53.60	-21.20	32.40	Pass	Peak	9	5081.500	-57.55	-41.20	16.35	Pass	AVG
4	5106.000	-50.42	-21.20	29.22	Pass	Peak	10	5106.000	-56.83	-41.20	15.63	Pass	AVG
5	5127.500	-51.93	-21.20	30.73	Pass	Peak	11	5127.500	-55.06	-41.20	13.86	Pass	AVG
6	5149.500	-43.87	-21.20	22.67	Pass	Peak	12	5149.500	-53.50	-41.20	12.30	Pass	AVG

802.11n(HT40)_HCH_5230MHz_MIMIO ANT1_NTNV

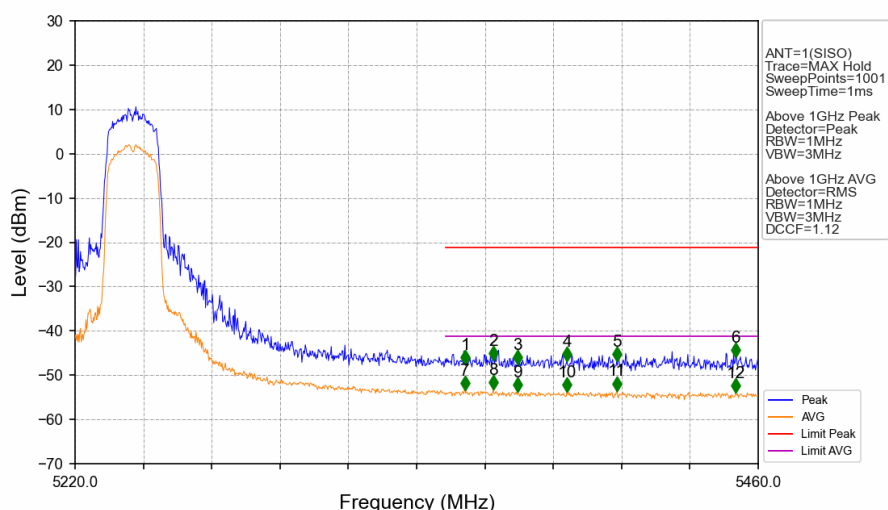


No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5356.050	-52.29	-21.20	31.09	Pass	Peak	7	5356.050	-56.61	-41.20	15.41	Pass	AVG
2	5365.230	-51.80	-21.20	30.60	Pass	Peak	8	5365.230	-56.92	-41.20	15.72	Pass	AVG
3	5373.870	-53.33	-21.20	32.13	Pass	Peak	9	5373.870	-56.71	-41.20	15.51	Pass	AVG
4	5386.560	-53.23	-21.20	32.03	Pass	Peak	10	5386.560	-56.94	-41.20	15.74	Pass	AVG
5	5398.980	-52.86	-21.20	31.66	Pass	Peak	11	5398.980	-57.41	-41.20	16.21	Pass	AVG
6	5425.440	-53.98	-21.20	32.78	Pass	Peak	12	5425.440	-57.62	-41.20	16.42	Pass	AVG

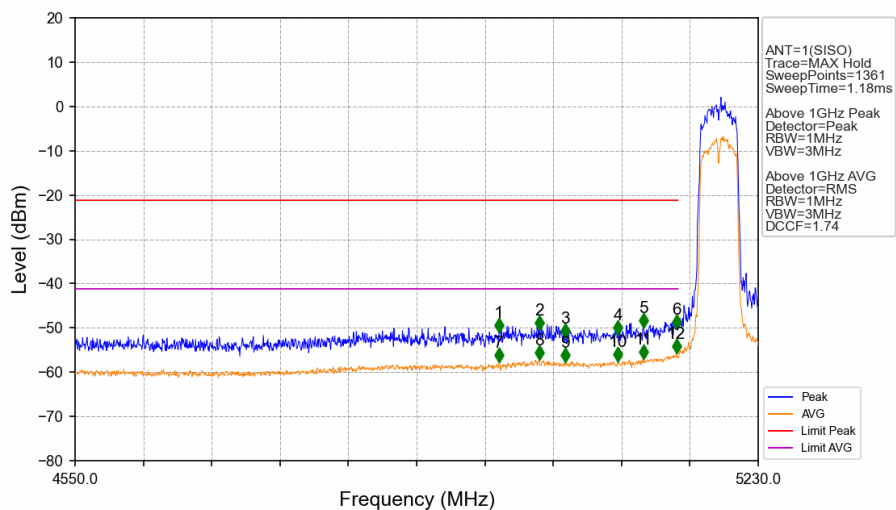
802.11ac(VHT20)_LCH_5180MHz_MIMIO ANT1_NTNV



802.11ac(VHT20)_HCH_5240MHz_MIMIO ANT1_NTNV

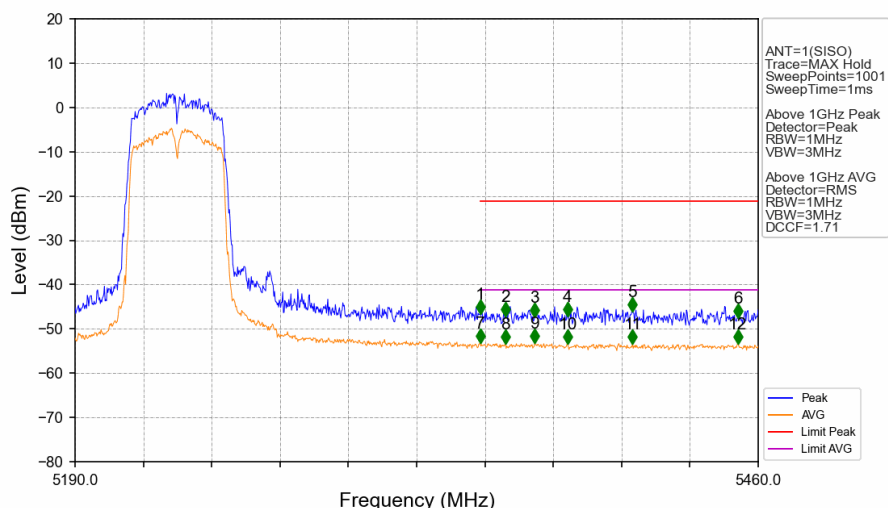


802.11ac(VHT40)_LCH_5190MHz_MIMIO ANT1_NTNV



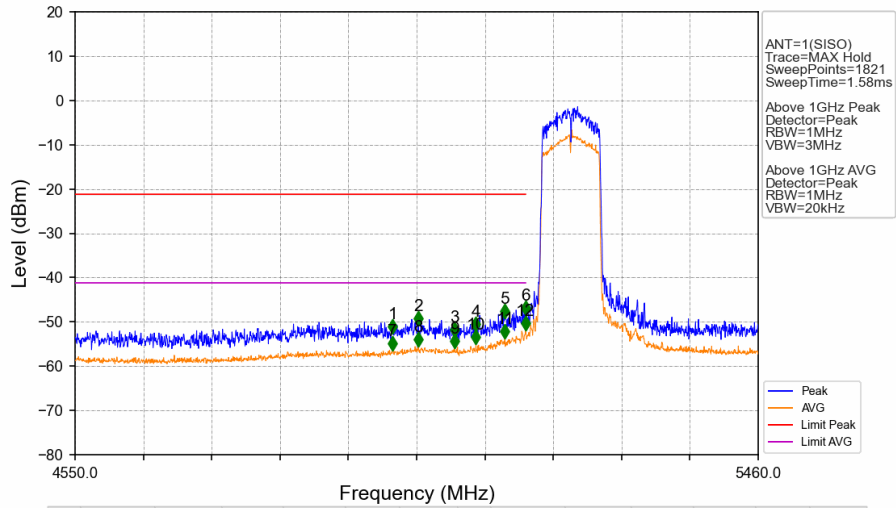
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	4972.000	-51.01	-21.20	29.81	Pass	Peak	7	4972.000	-57.72	-41.20	16.52	Pass	AVG
2	5012.000	-50.37	-21.20	29.17	Pass	Peak	8	5012.000	-57.21	-41.20	16.01	Pass	AVG
3	5038.000	-52.30	-21.20	31.10	Pass	Peak	9	5038.000	-57.66	-41.20	16.46	Pass	AVG
4	5090.500	-51.60	-21.20	30.40	Pass	Peak	10	5090.500	-57.62	-41.20	16.42	Pass	AVG
5	5115.500	-49.85	-21.20	28.65	Pass	Peak	11	5115.500	-57.08	-41.20	15.88	Pass	AVG
6	5148.500	-50.28	-21.20	29.08	Pass	Peak	12	5148.500	-55.81	-41.20	14.61	Pass	AVG

802.11ac(VHT40)_HCH_5230MHz_MIMIO ANT1_NTNV



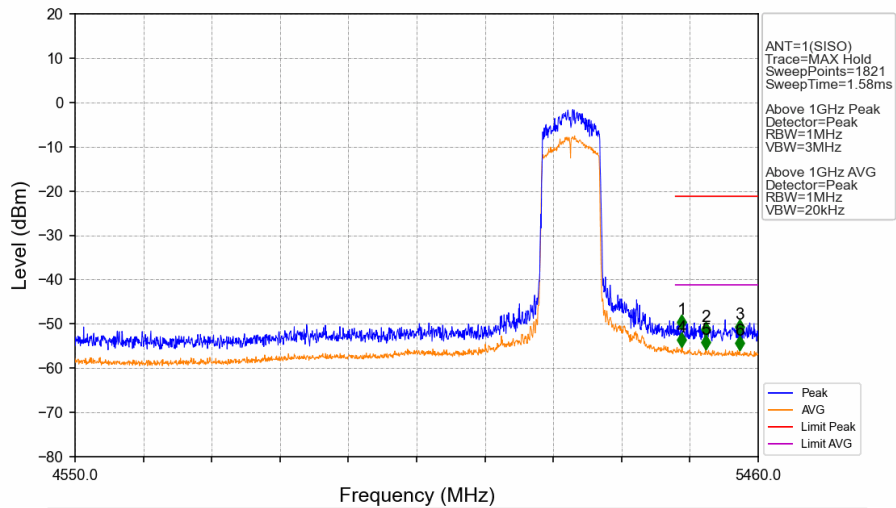
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5350.110	-46.57	-21.20	25.37	Pass	Peak	7	5350.110	-53.14	-41.20	11.94	Pass	AVG
2	5360.100	-47.16	-21.20	25.96	Pass	Peak	8	5360.100	-53.35	-41.20	12.15	Pass	AVG
3	5371.710	-47.39	-21.20	26.19	Pass	Peak	9	5371.710	-53.24	-41.20	12.04	Pass	AVG
4	5384.670	-47.19	-21.20	25.99	Pass	Peak	10	5384.670	-53.31	-41.20	12.11	Pass	AVG
5	5410.320	-46.07	-21.20	24.87	Pass	Peak	11	5410.320	-53.31	-41.20	12.11	Pass	AVG
6	5451.900	-47.56	-21.20	26.36	Pass	Peak	12	5451.900	-53.29	-41.20	12.09	Pass	AVG

802.11ac(VHT80)_MCH_5210MHz_MIMIO ANT1_NTNV



No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	4973.000	-52.67	-21.20	31.47	Pass	Peak	7	4973.000	-56.38	-41.20	15.18	Pass	AVG
2	5007.500	-50.88	-21.20	29.68	Pass	Peak	8	5007.500	-55.55	-41.20	14.35	Pass	AVG
3	5055.500	-53.36	-21.20	32.16	Pass	Peak	9	5055.500	-55.83	-41.20	14.63	Pass	AVG
4	5084.000	-52.06	-21.20	30.86	Pass	Peak	10	5084.000	-55.05	-41.20	13.85	Pass	AVG
5	5122.500	-49.19	-21.20	27.99	Pass	Peak	11	5122.500	-53.78	-41.20	12.58	Pass	AVG
6	5150.000	-48.41	-21.20	27.21	Pass	Peak	12	5150.000	-51.86	-41.20	10.66	Pass	AVG

802.11ac(VHT80)_MCH_5210MHz_MIMIO ANT1_NTNV



No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	5358.000	-51.24	-21.20	30.04	Pass	Peak	4	5358.000	-55.26	-41.20	14.06	Pass	AVG
2	5390.000	-52.73	-21.20	31.53	Pass	Peak	5	5390.000	-55.76	-41.20	14.56	Pass	AVG
3	5435.500	-52.34	-21.20	31.14	Pass	Peak	6	5435.500	-55.95	-41.20	14.75	Pass	AVG