

Appendix RF Test Data for WIFI 5G

Company: : Dongguan K-Play Technology Co., Ltd

EUT : Motorcycle Monitor

FCC ID: : 2BRSX-M782

Model Number : M782

Report No. : HTT202603232F01

Reviewed By : Heber He

1. Duty Cycle

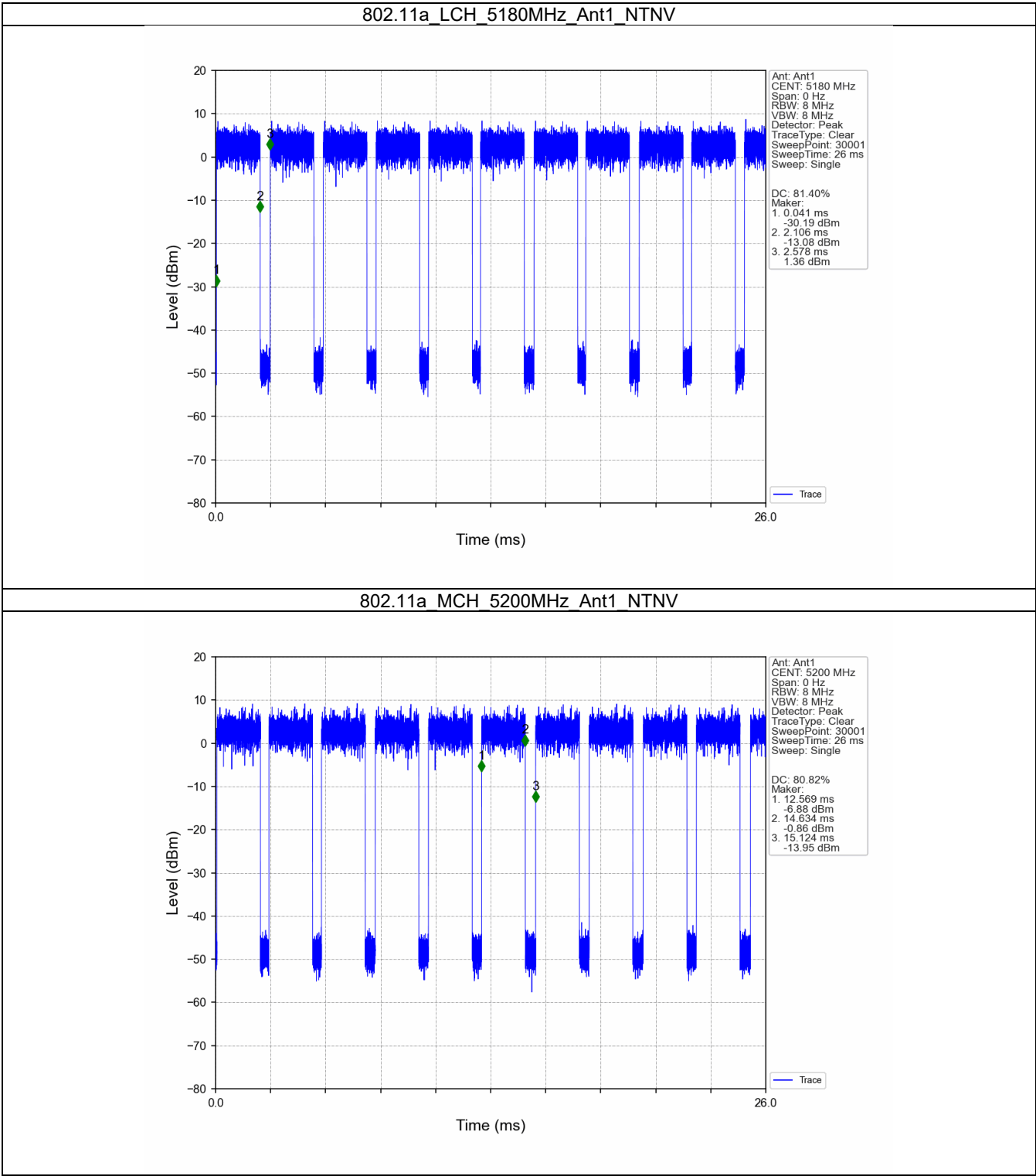
1.1 Test Result

1.1.1 Ant1

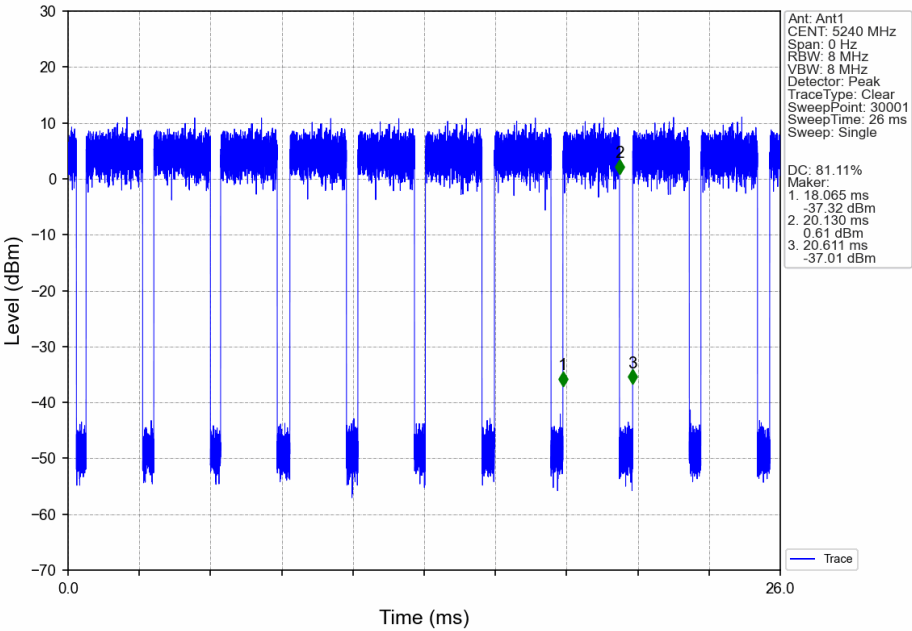
Ant1							
Mode	Tx Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	2.065	2.537	81.40	0.89	3.03
		5200	2.065	2.555	80.82	0.92	2.96
		5240	2.065	2.546	81.11	0.91	3.61
		5745	2.066	2.556	80.83	0.92	4.21
		5785	2.066	2.537	81.43	0.89	3.94
		5825	2.065	2.555	80.82	0.92	3.88
802.11n (HT20)	SISO	5180	1.921	2.152	89.27	0.49	5.98
		5200	1.920	2.151	89.26	0.49	5.16
		5240	1.921	2.133	90.06	0.45	5.24
		5745	1.921	3.504	54.82	2.61	38.38
		5785	1.921	2.151	89.31	0.49	4.72
		5825	1.921	2.151	89.31	0.49	5.98
802.11n (HT40)	SISO	5190	0.945	1.175	80.43	0.95	10.41
		5230	0.945	1.175	80.43	0.95	9.64
		5755	0.945	1.148	82.32	0.85	7.77
		5795	0.945	1.157	81.68	0.88	8.40
802.11ac (VHT20)	SISO	5180	2.065	2.546	81.11	0.91	3.61
		5200	2.064	2.555	80.78	0.93	4.21
		5240	2.065	2.528	81.69	0.88	3.66
		5745	2.064	2.555	80.78	0.93	4.18
		5785	2.065	2.546	81.11	0.91	4.21
		5825	2.065	2.555	80.82	0.92	3.55
802.11ac (VHT40)	SISO	5190	2.065	2.555	80.82	0.92	4.18
		5230	2.066	2.537	81.43	0.89	3.60
		5755	2.065	2.568	80.41	0.95	4.63
		5795	2.065	2.537	81.40	0.89	3.64

1.2 Test Graph

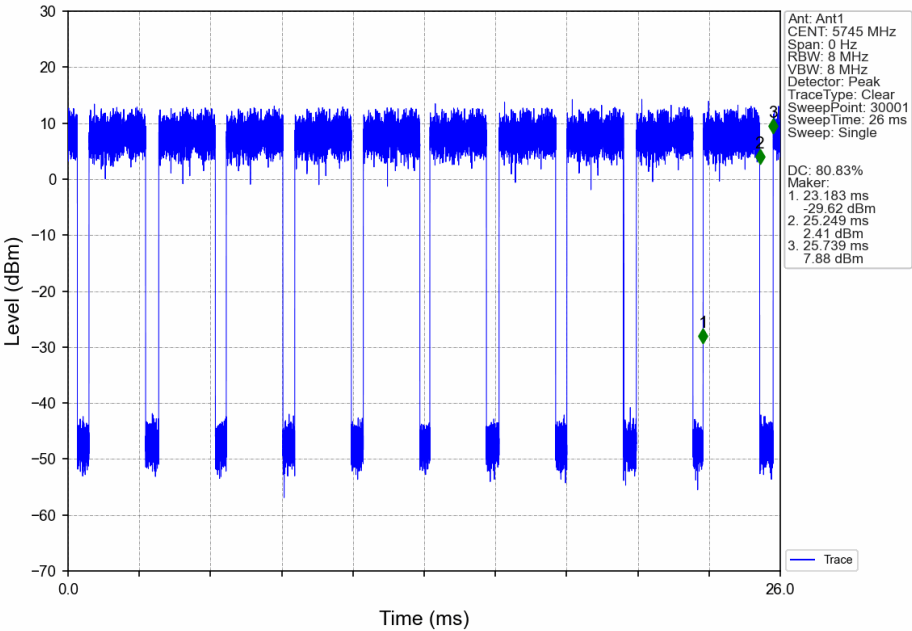
1.2.1 Ant1



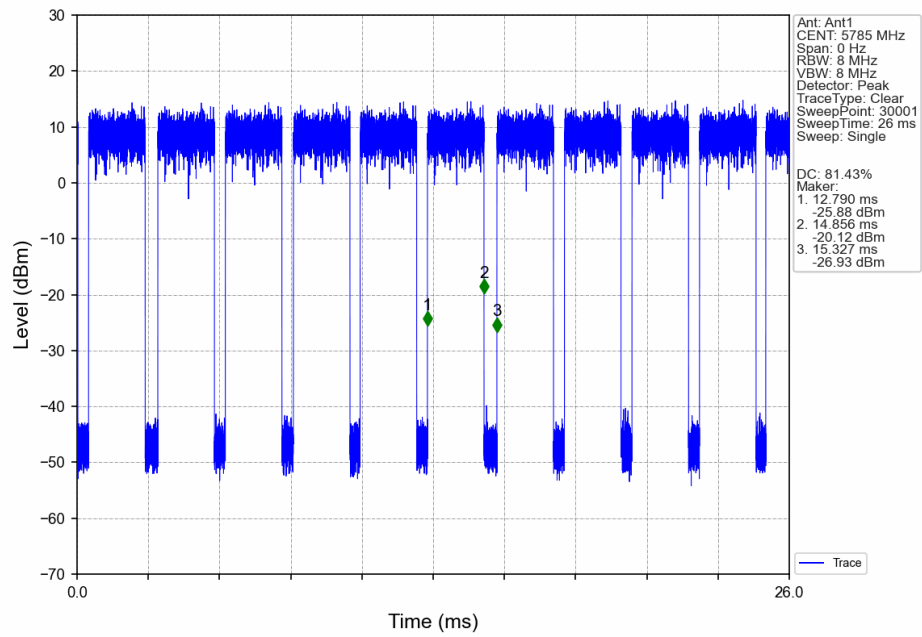
802.11a_HCH_5240MHz_Ant1_NTNV



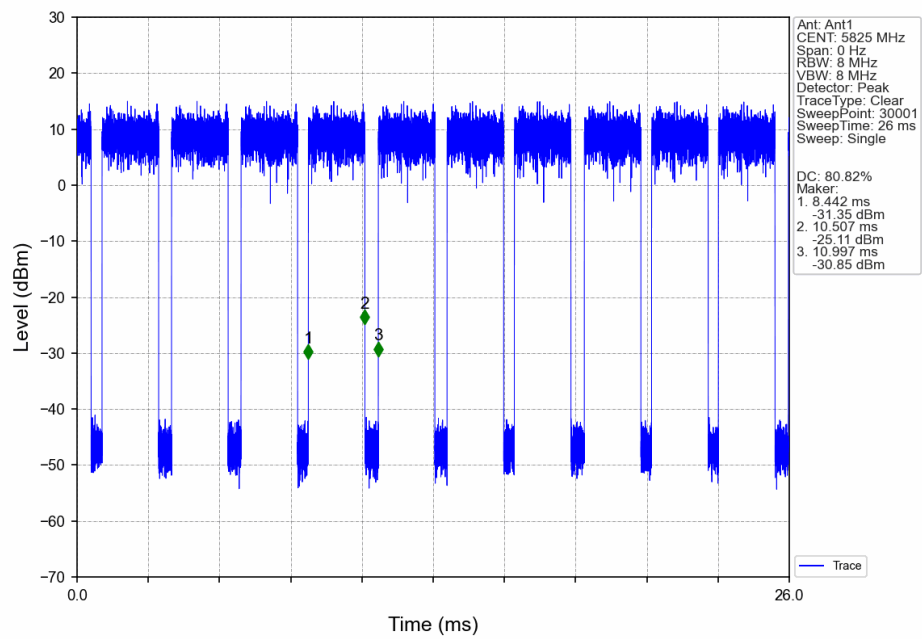
802.11a_LCH_5745MHz_Ant1_NTNV



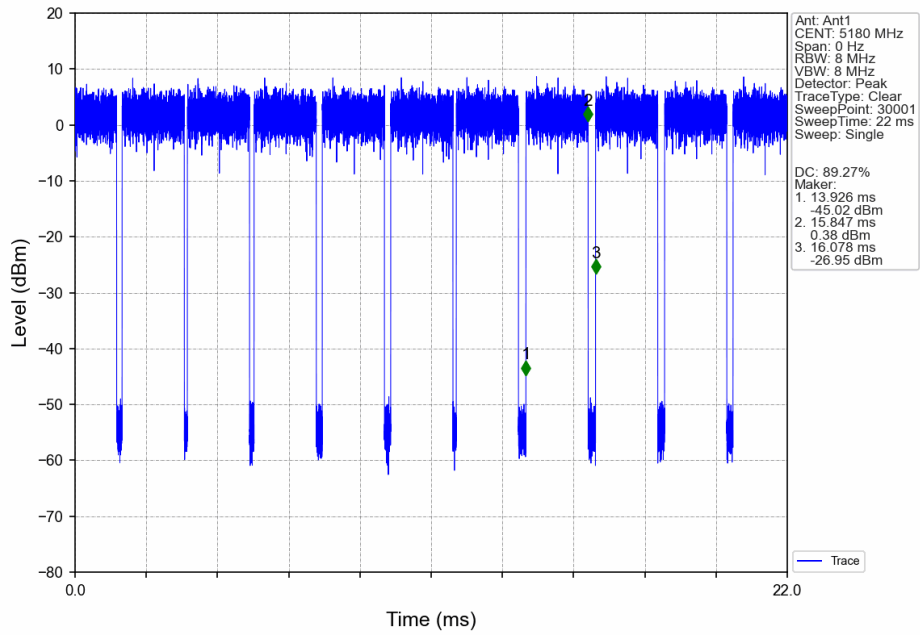
802.11a_MCH_5785MHz_Ant1_NTNV



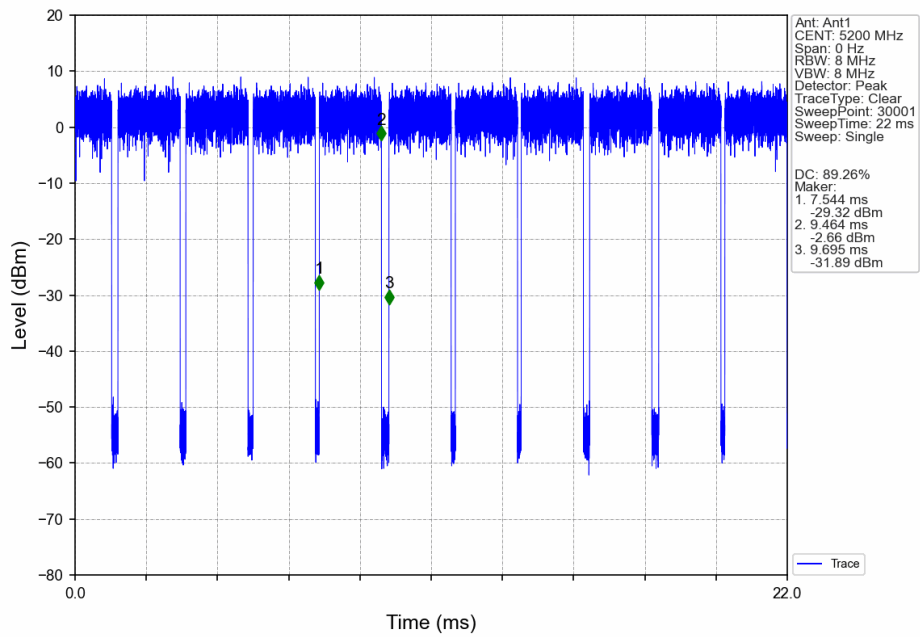
802.11a_HCH_5825MHz_Ant1_NTNV



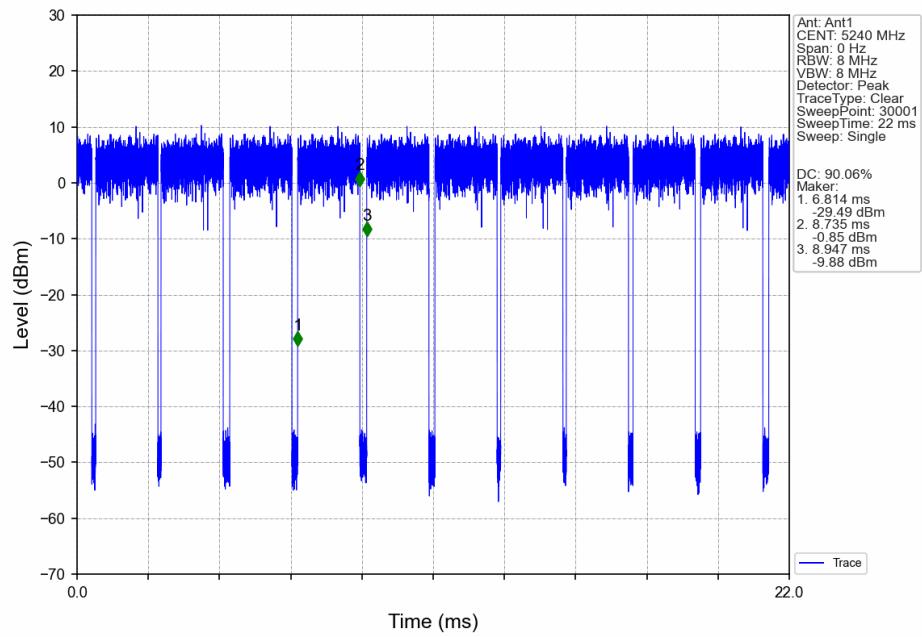
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



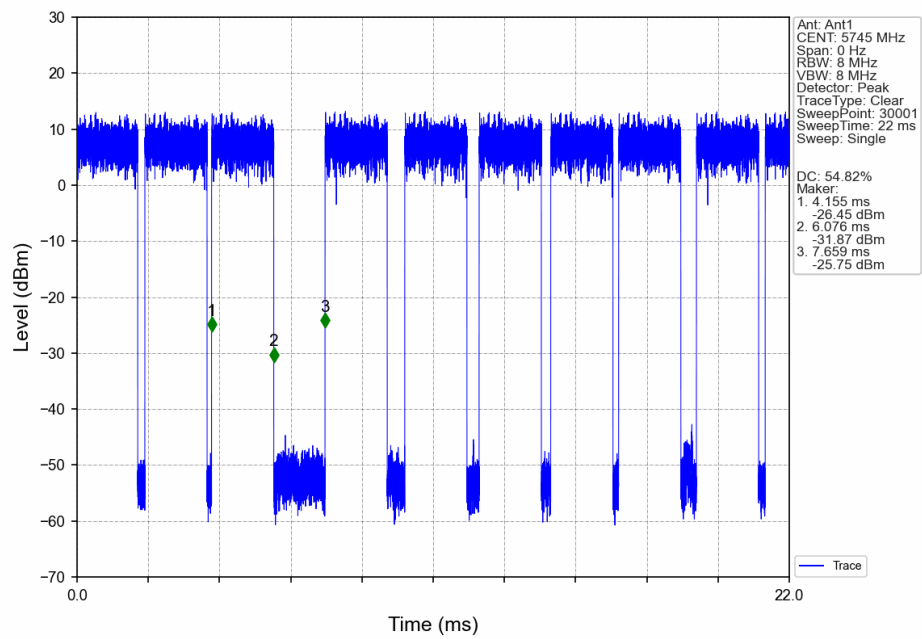
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



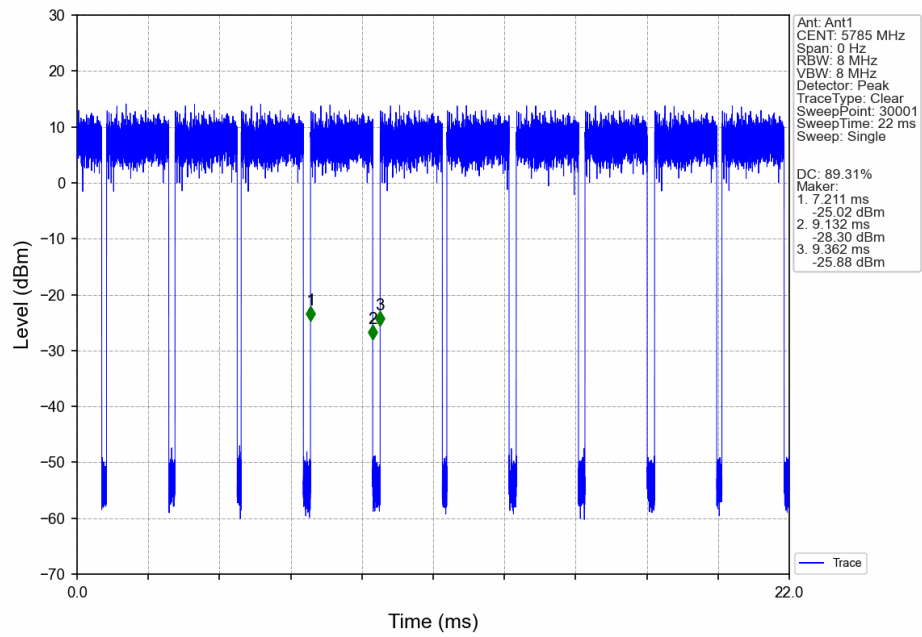
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



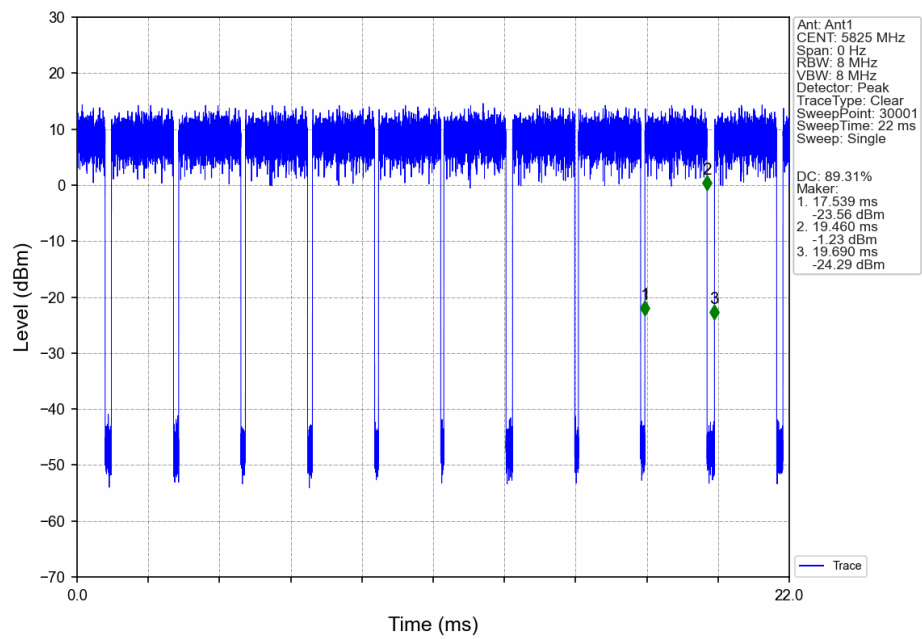
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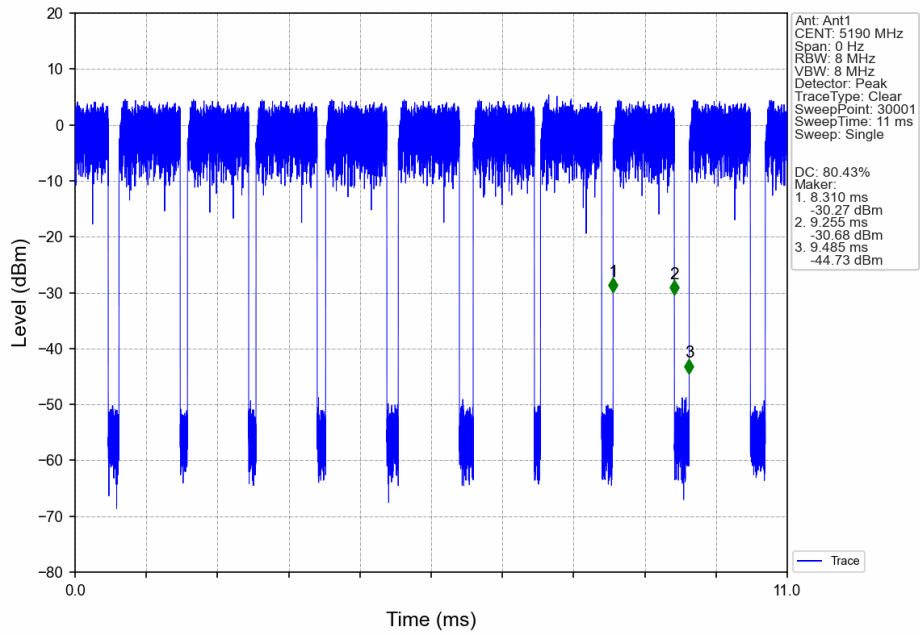
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



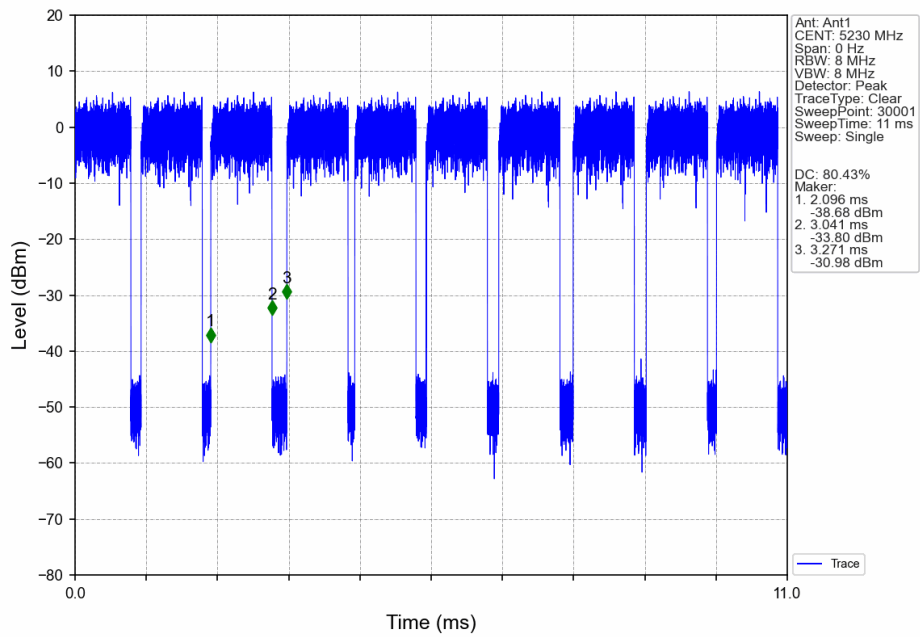
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



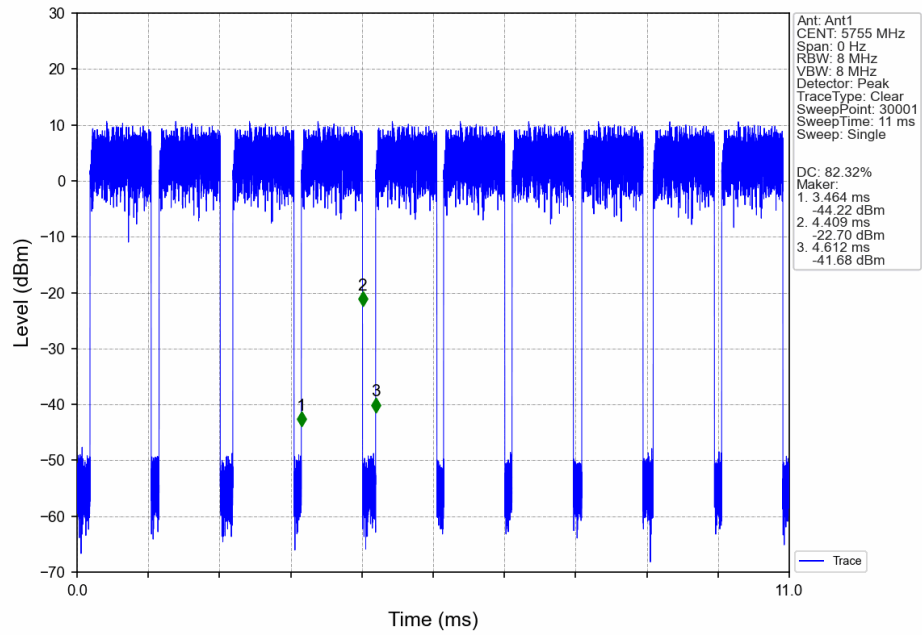
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



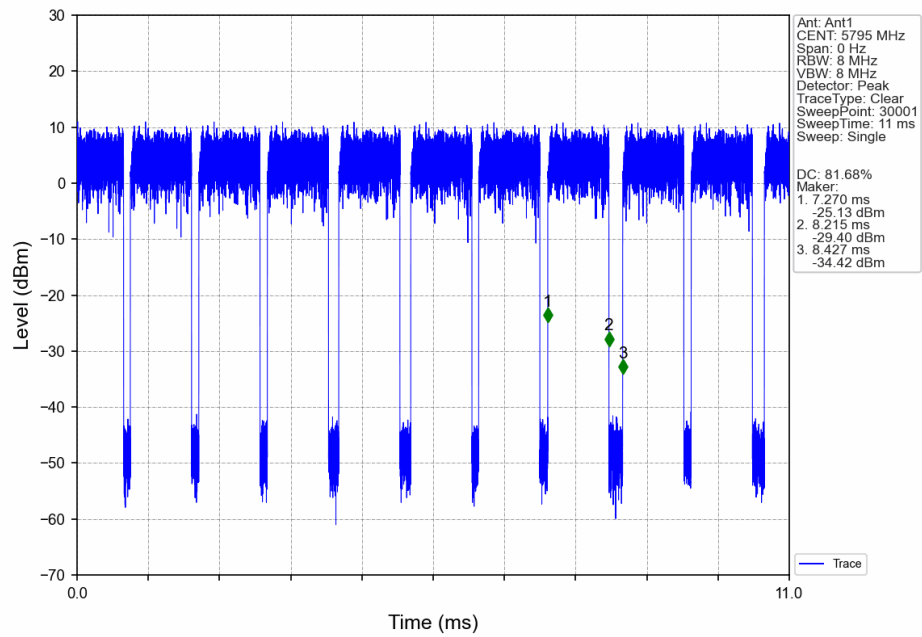
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



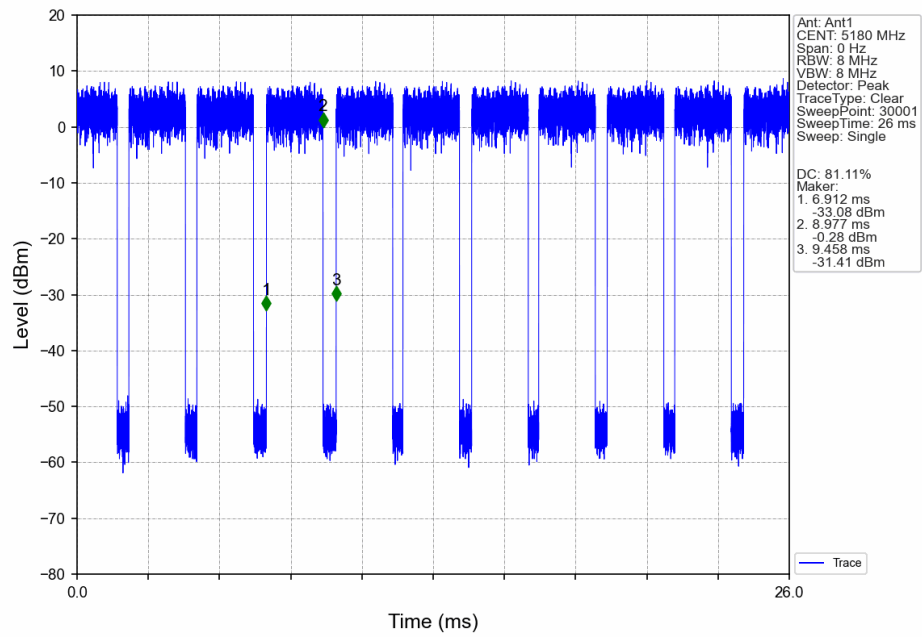
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



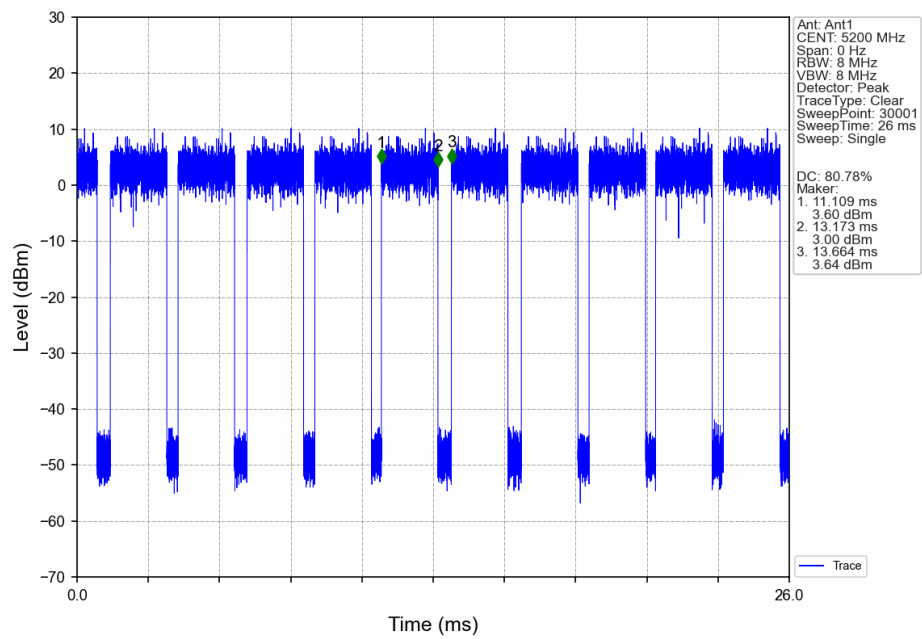
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



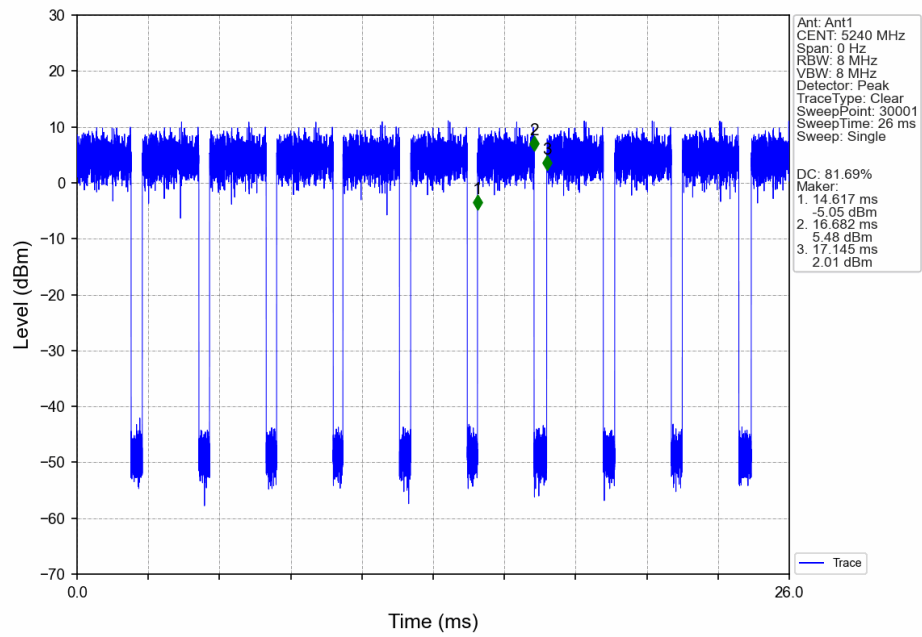
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



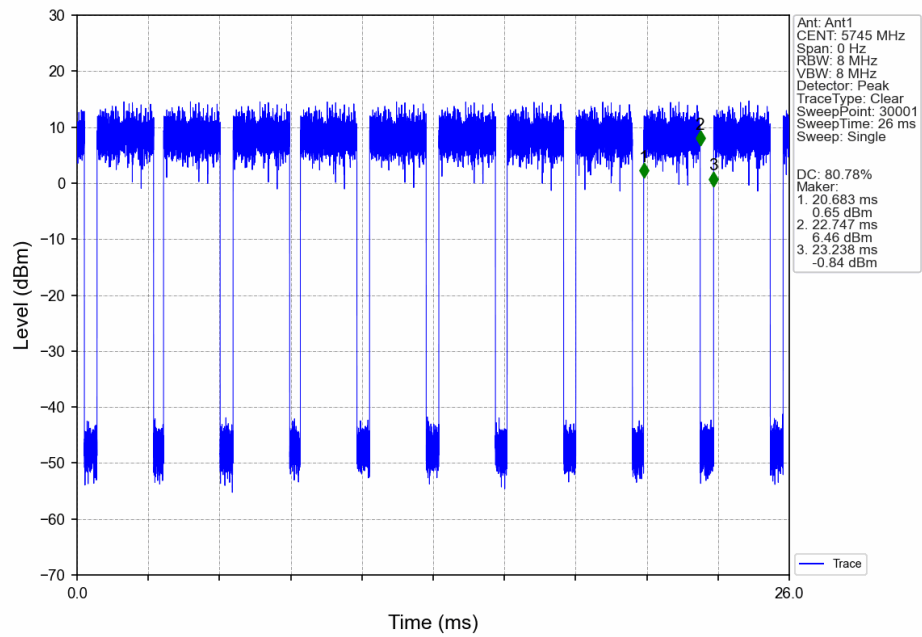
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



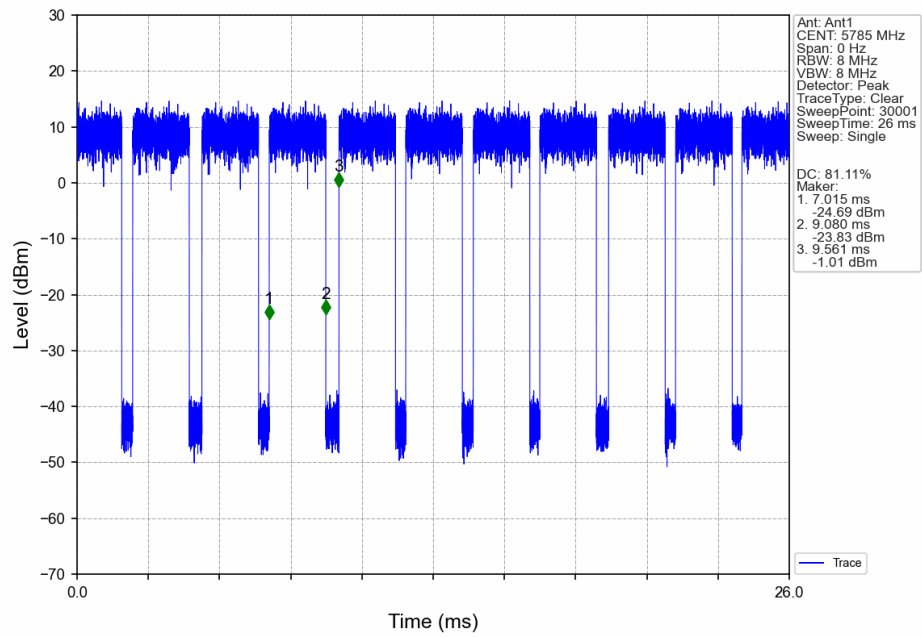
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



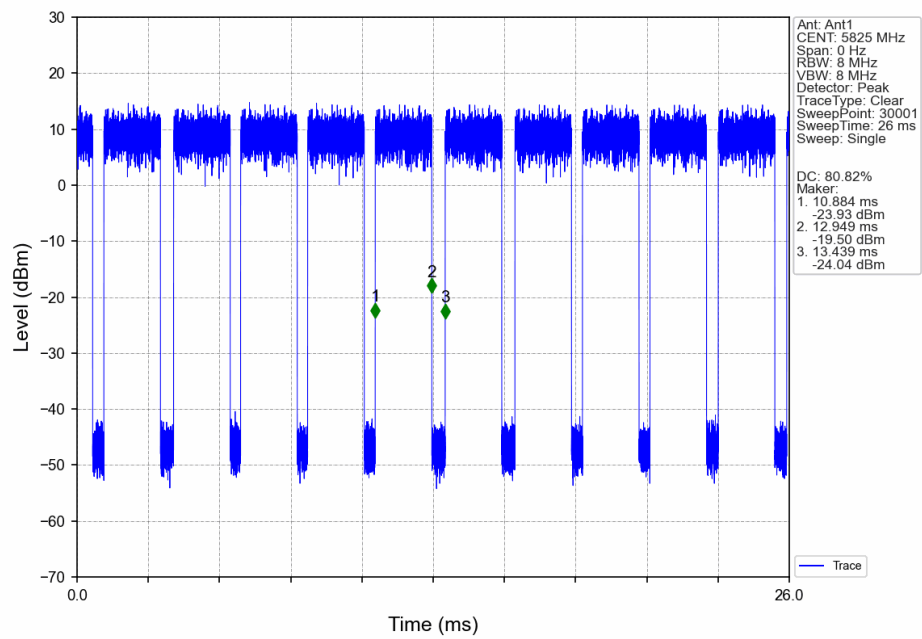
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



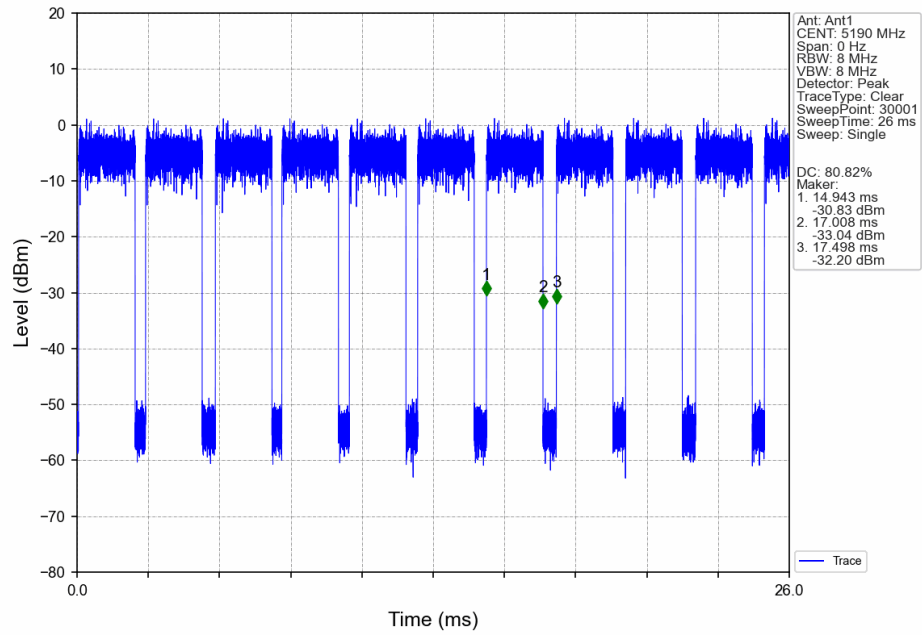
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



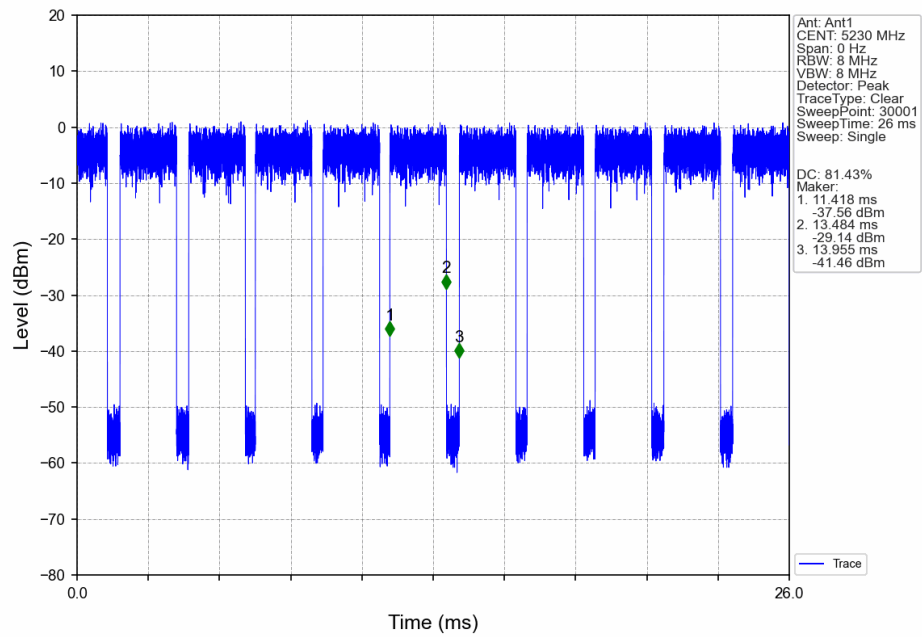
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



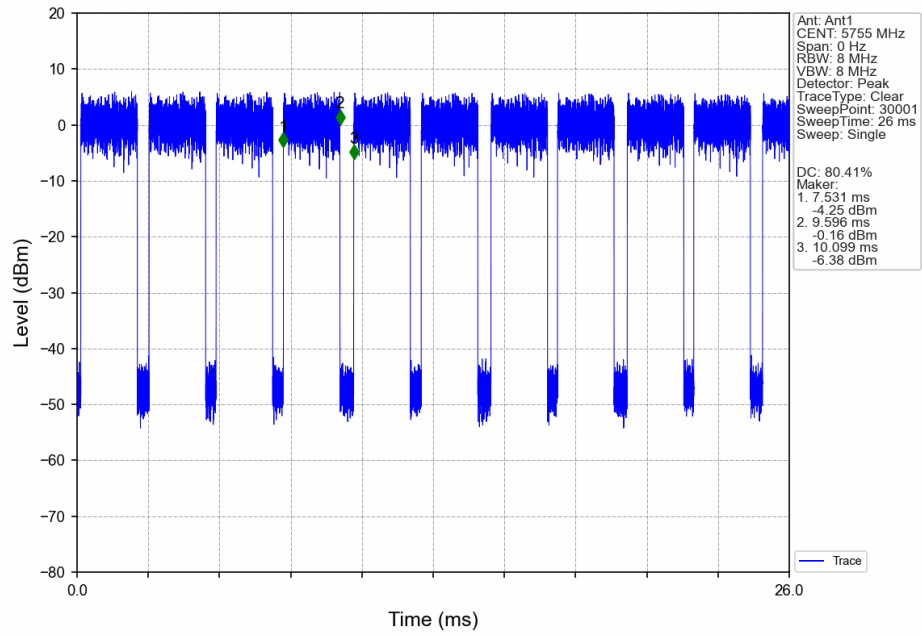
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



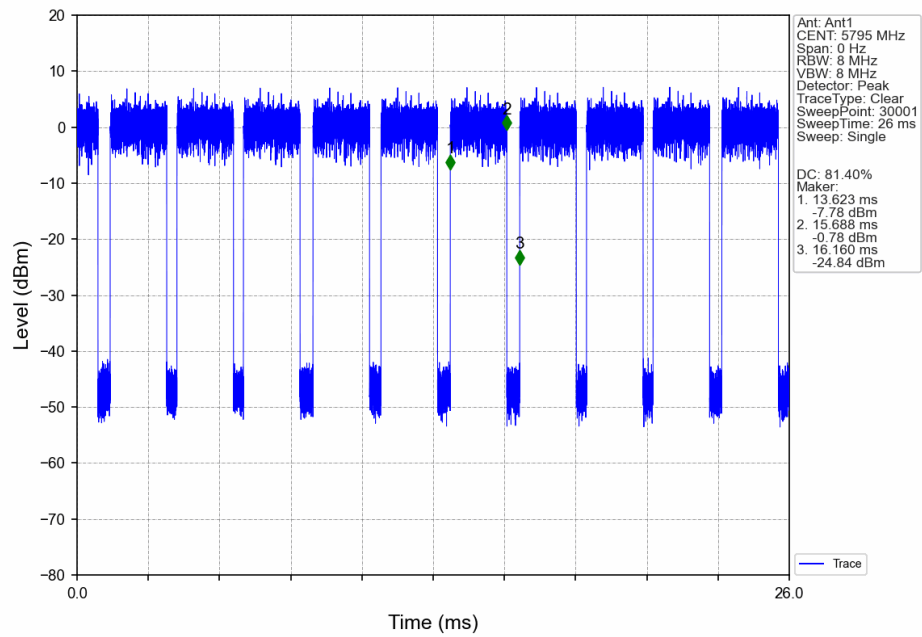
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_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	16.216	/	Pass
		5200	1	16.224	/	Pass
		5240	1	16.205	/	Pass
		5745	1	16.233	/	Pass
		5785	1	16.190	/	Pass
		5825	1	16.199	/	Pass
802.11n (HT20)	SISO	5180	1	17.326	/	Pass
		5200	1	17.326	/	Pass
		5240	1	17.289	/	Pass
		5745	1	17.304	/	Pass
		5785	1	17.338	/	Pass
		5825	1	17.288	/	Pass
802.11n (HT40)	SISO	5190	1	35.172	/	Pass
		5230	1	35.087	/	Pass
		5755	1	35.183	/	Pass
		5795	1	35.123	/	Pass
802.11ac (VHT20)	SISO	5180	1	16.223	/	Pass
		5200	1	16.210	/	Pass
		5240	1	16.200	/	Pass
		5745	1	16.197	/	Pass
		5785	1	16.253	/	Pass
		5825	1	16.228	/	Pass
802.11ac (VHT40)	SISO	5190	1	35.779	/	Pass
		5230	1	35.552	/	Pass
		5755	1	35.745	/	Pass
		5795	1	35.667	/	Pass

2.1.2 26dB BW

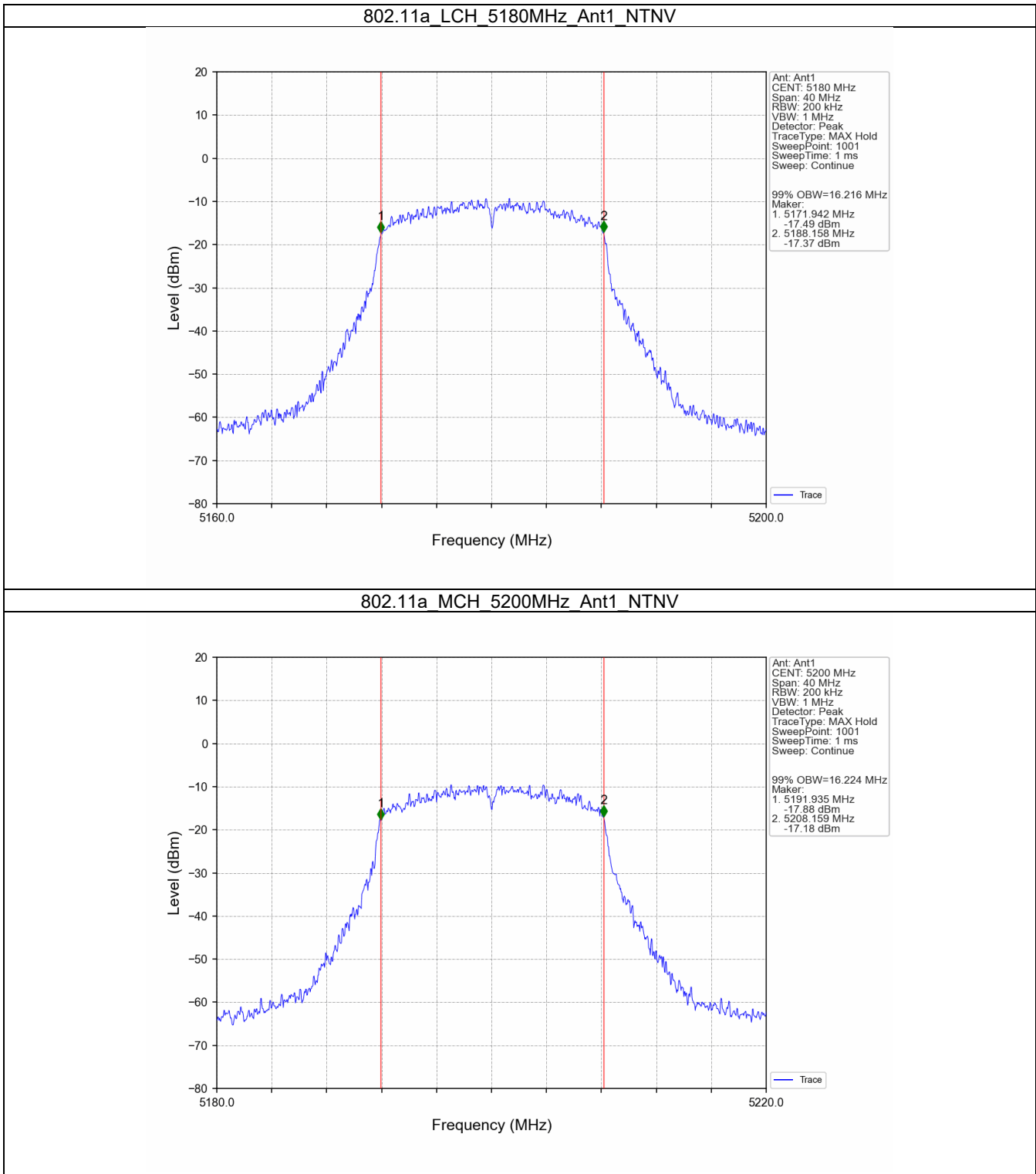
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	19.250	/	Pass
		5200	1	18.917	/	Pass
		5240	1	18.801	/	Pass
802.11n (HT20)	SISO	5180	1	19.788	/	Pass
		5200	1	19.763	/	Pass
		5240	1	19.684	/	Pass
802.11n (HT40)	SISO	5190	1	38.685	/	Pass
		5230	1	38.817	/	Pass
802.11ac (VHT20)	SISO	5180	1	18.810	/	Pass
		5200	1	19.225	/	Pass
		5240	1	18.700	/	Pass
802.11ac (VHT40)	SISO	5190	1	41.758	/	Pass
		5230	1	41.460	/	Pass

2.1.3 6dB BW

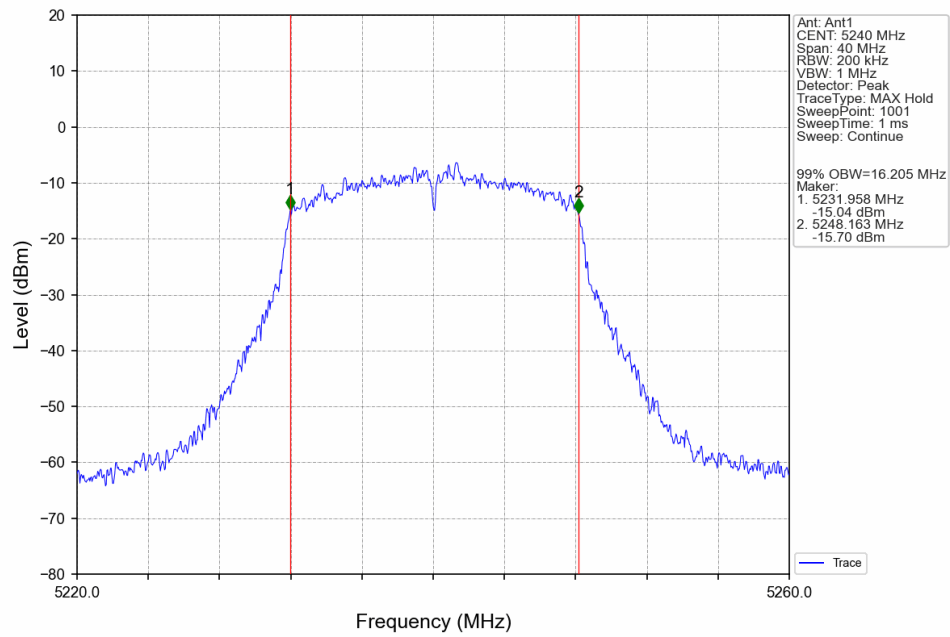
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	11.715	≥ 0.5	Pass
		5785	1	11.689	≥ 0.5	Pass
		5825	1	15.044	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	12.689	≥ 0.5	Pass
		5785	1	13.897	≥ 0.5	Pass
		5825	1	11.671	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	31.331	≥ 0.5	Pass
		5795	1	30.027	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	14.897	≥ 0.5	Pass
		5785	1	15.073	≥ 0.5	Pass
		5825	1	15.115	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	33.818	≥ 0.5	Pass
		5795	1	32.316	≥ 0.5	Pass

2.2 Test Graph

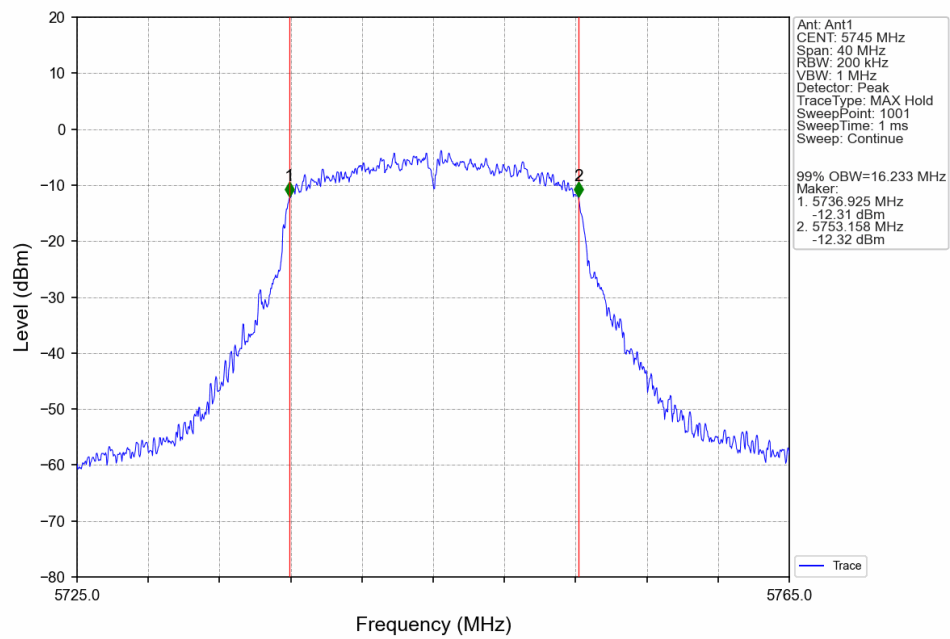
2.2.1 OBW



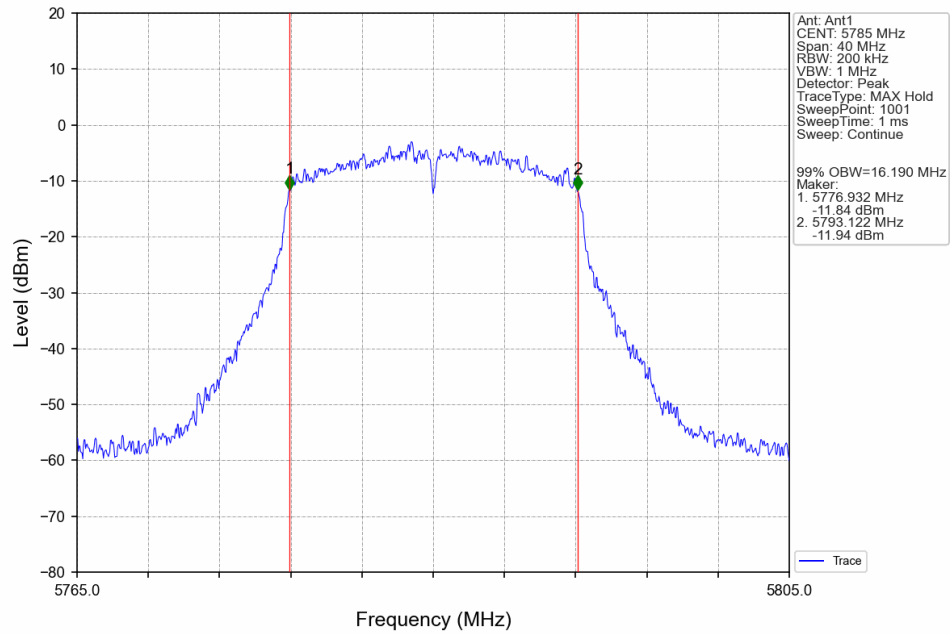
802.11a_HCH_5240MHz_Ant1_NTNV



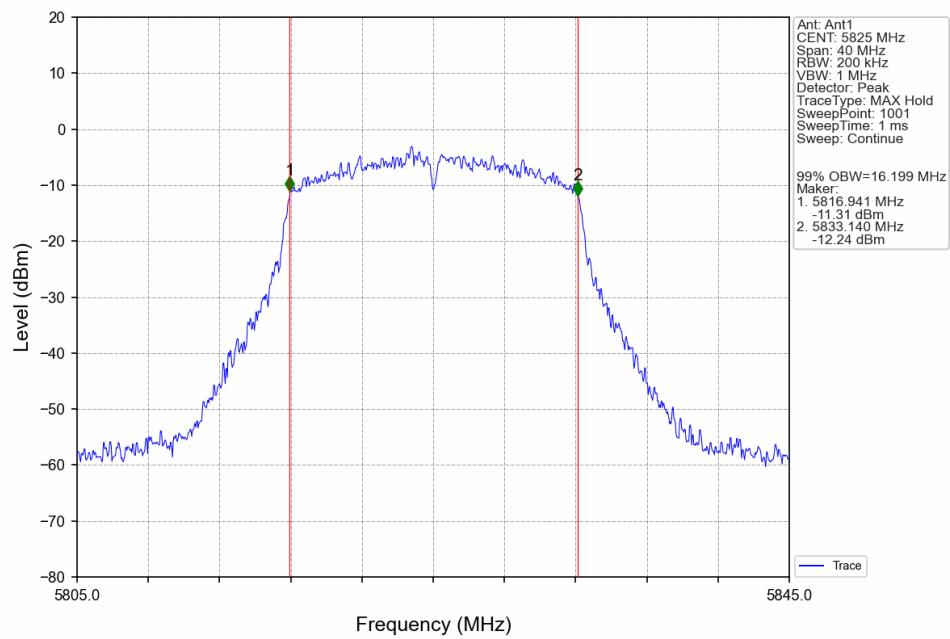
802.11a_LCH_5745MHz_Ant1_NTNV



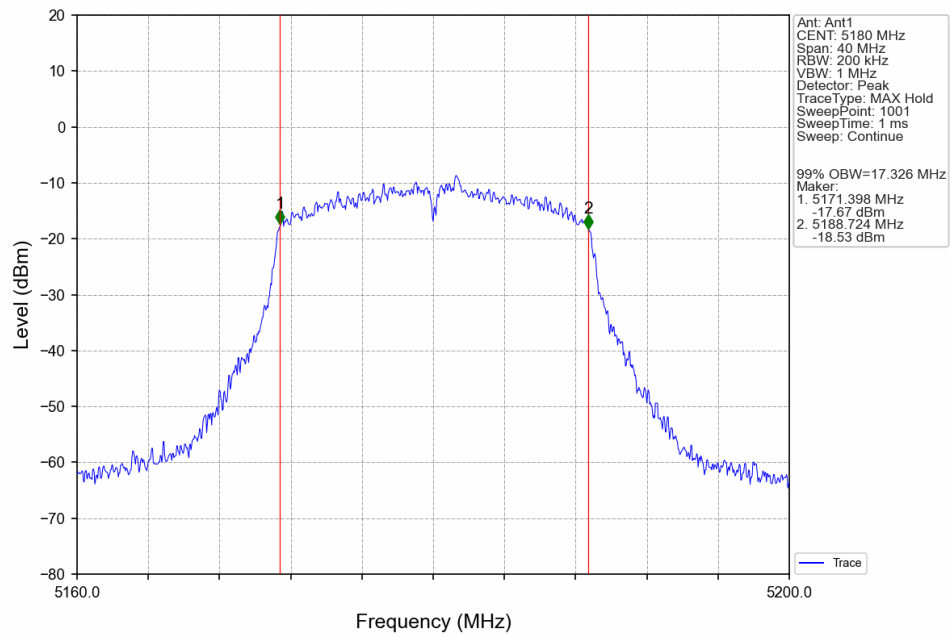
802.11a_MCH_5785MHz_Ant1_NTNV



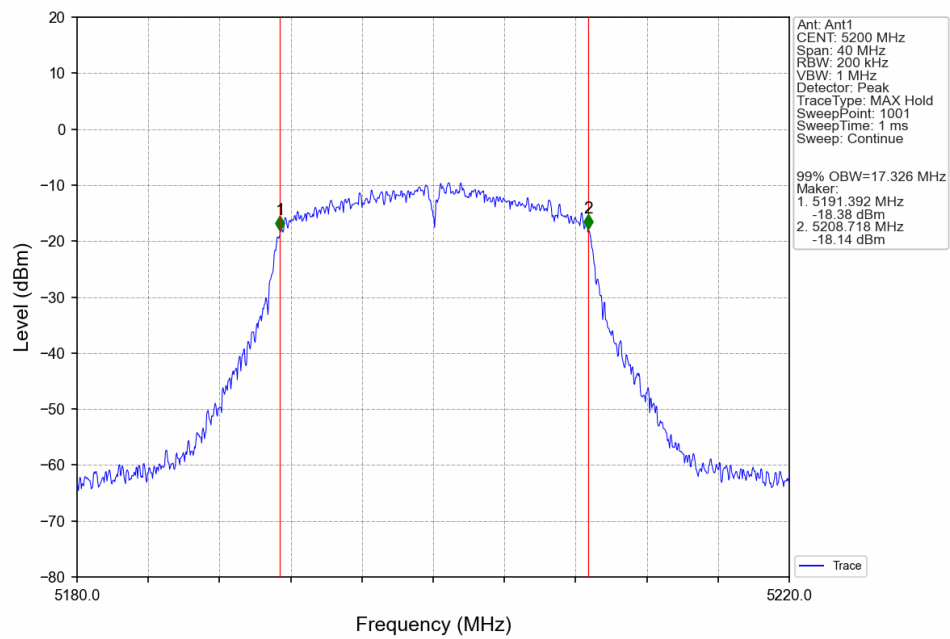
802.11a_HCH_5825MHz_Ant1_NTNV



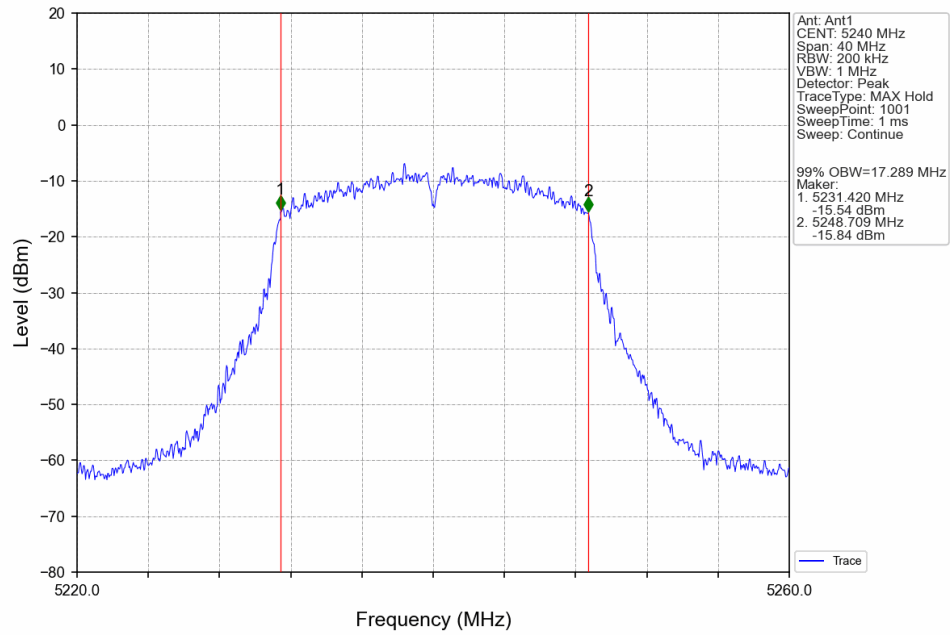
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



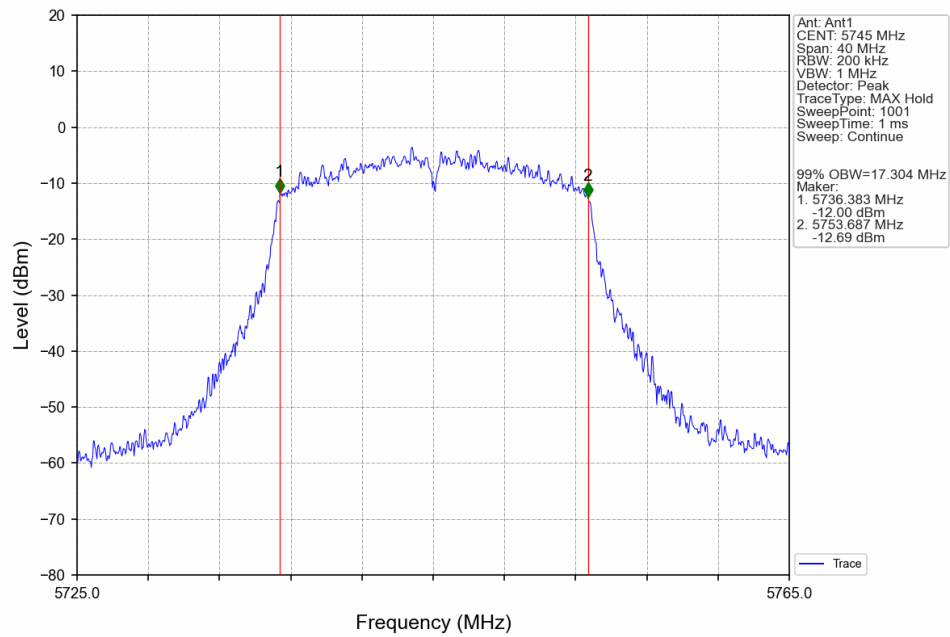
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



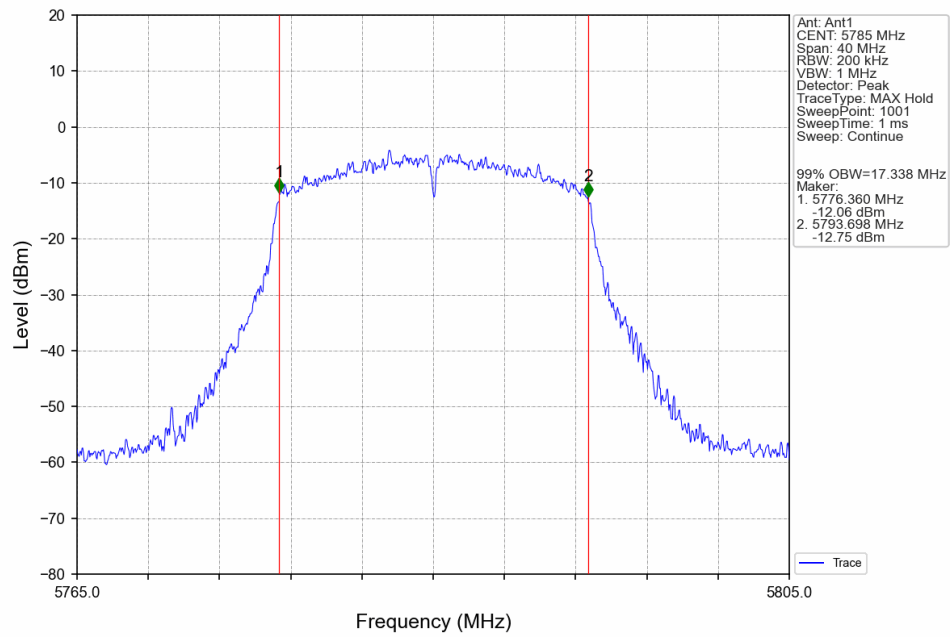
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



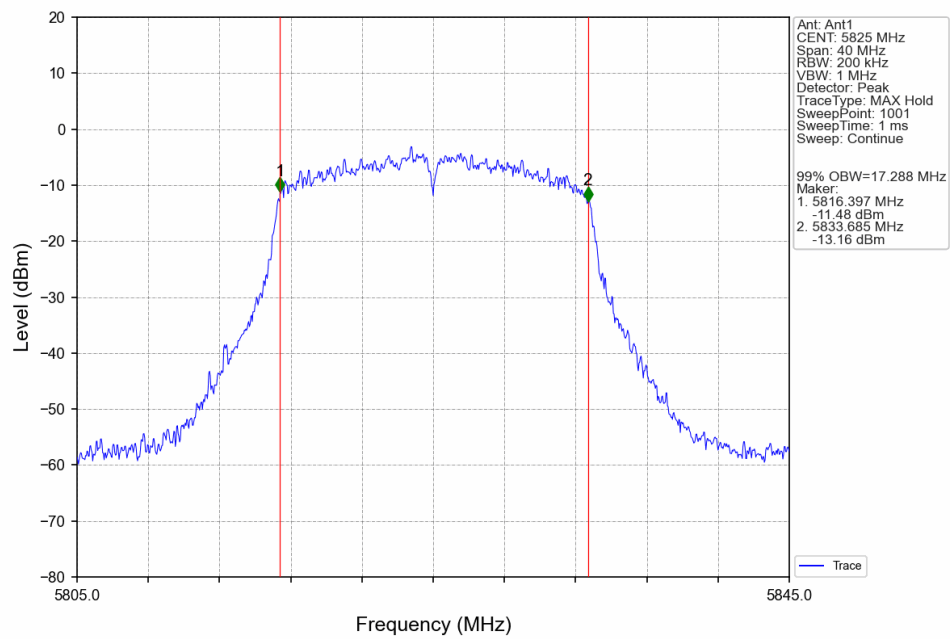
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



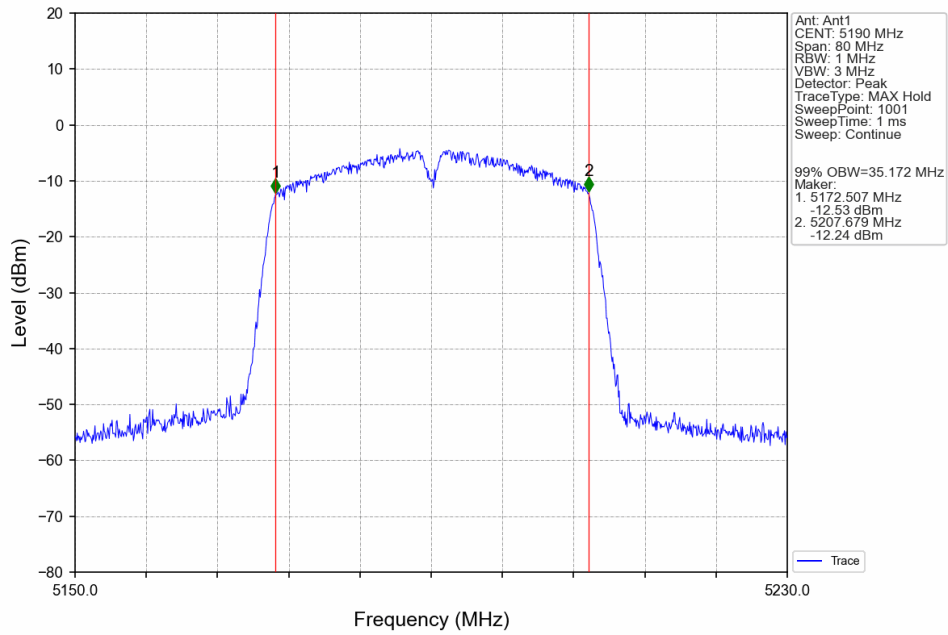
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



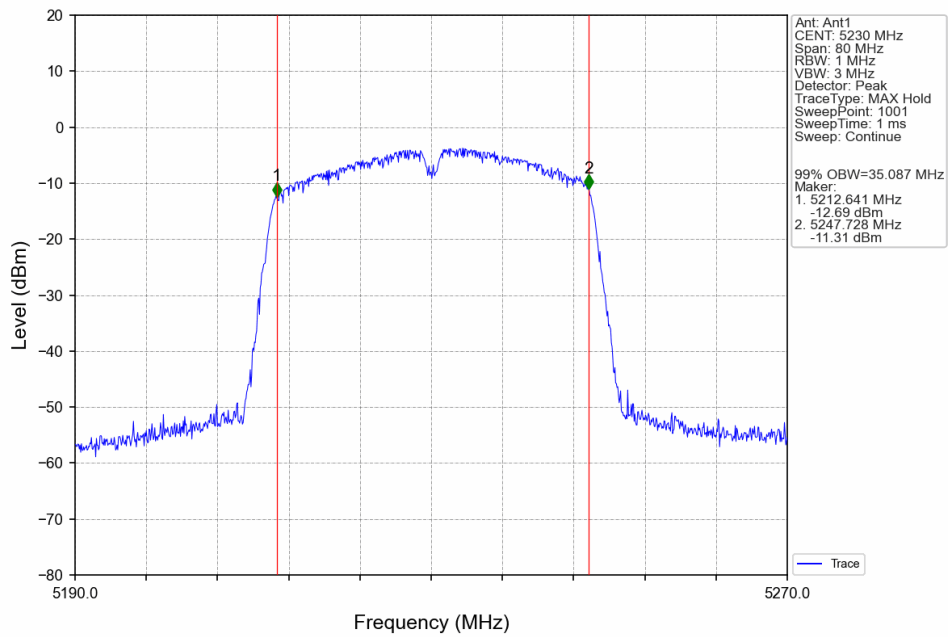
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



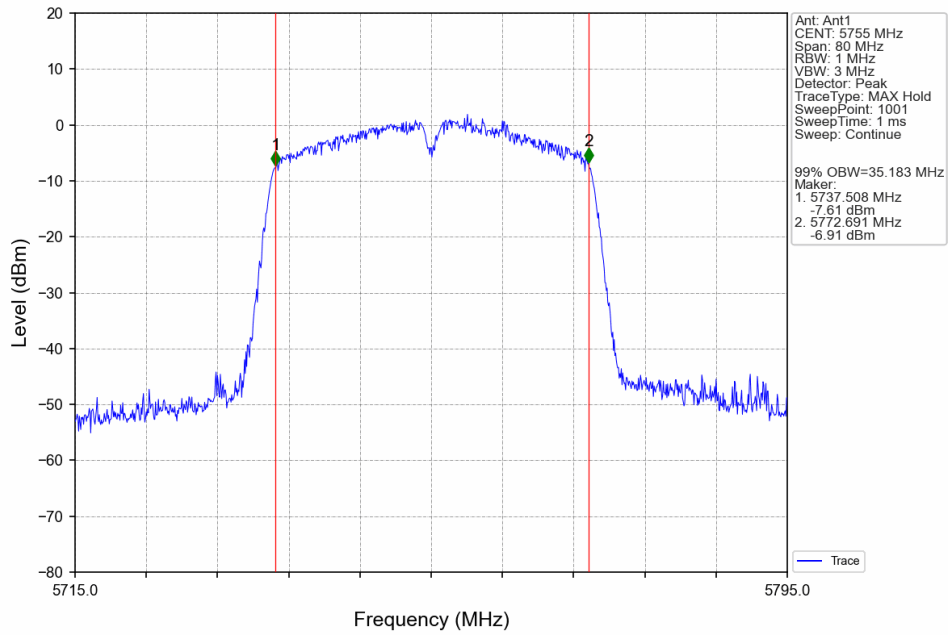
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



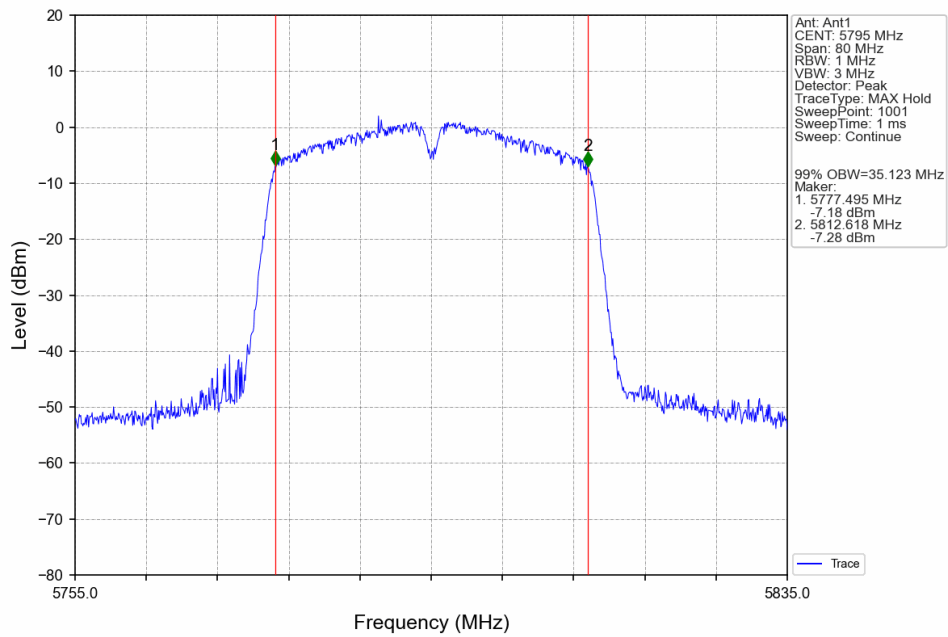
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



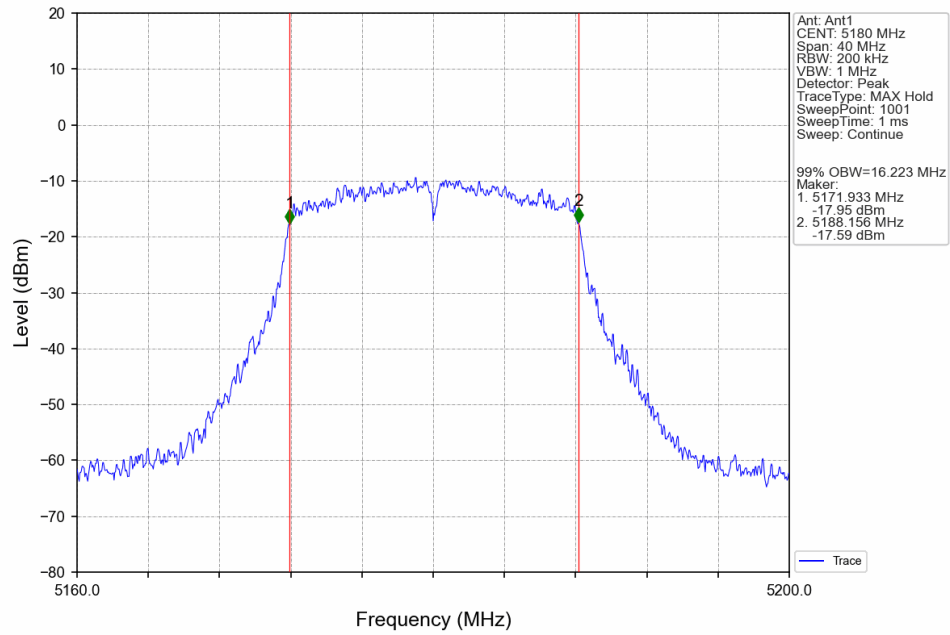
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



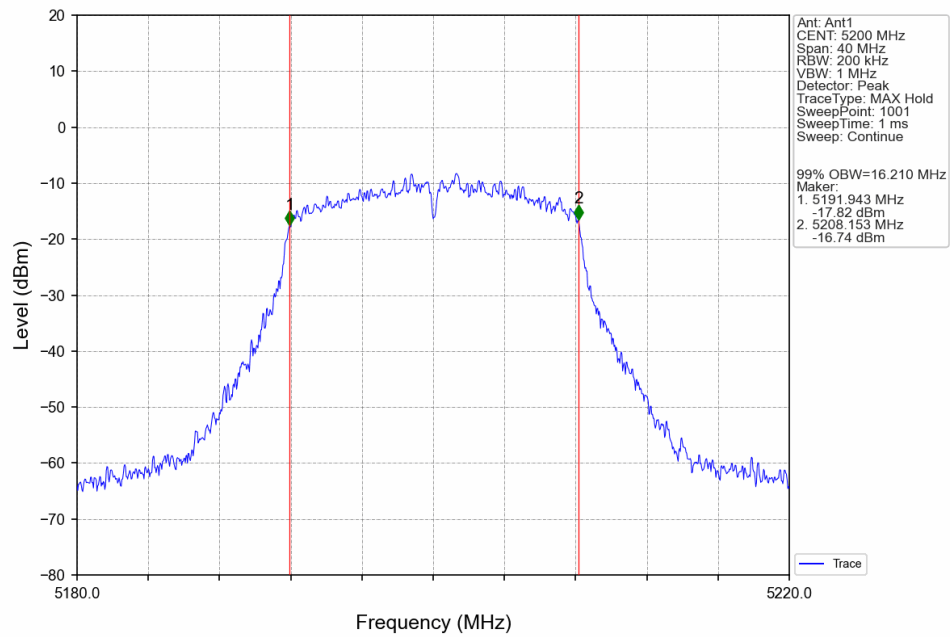
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



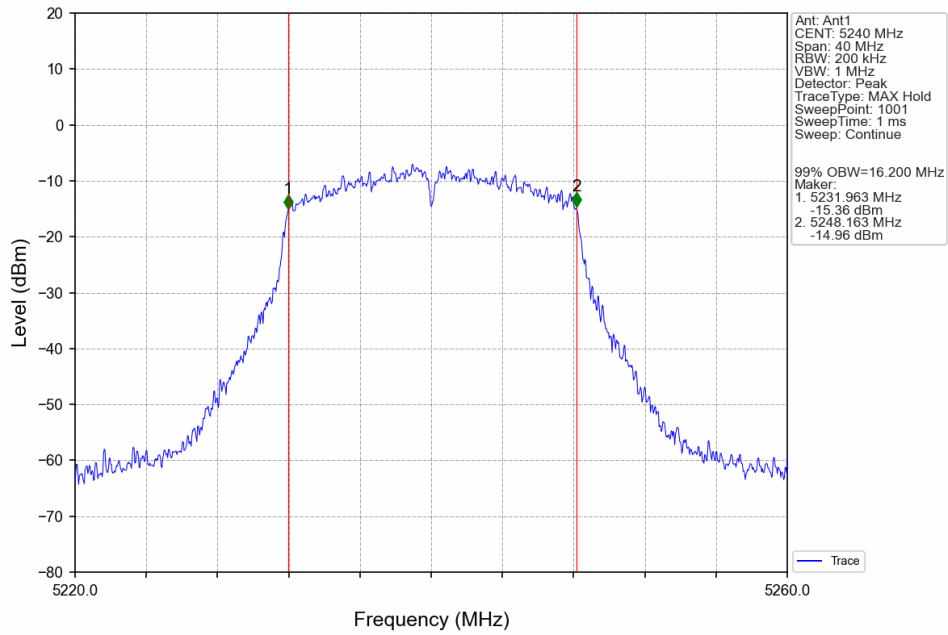
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



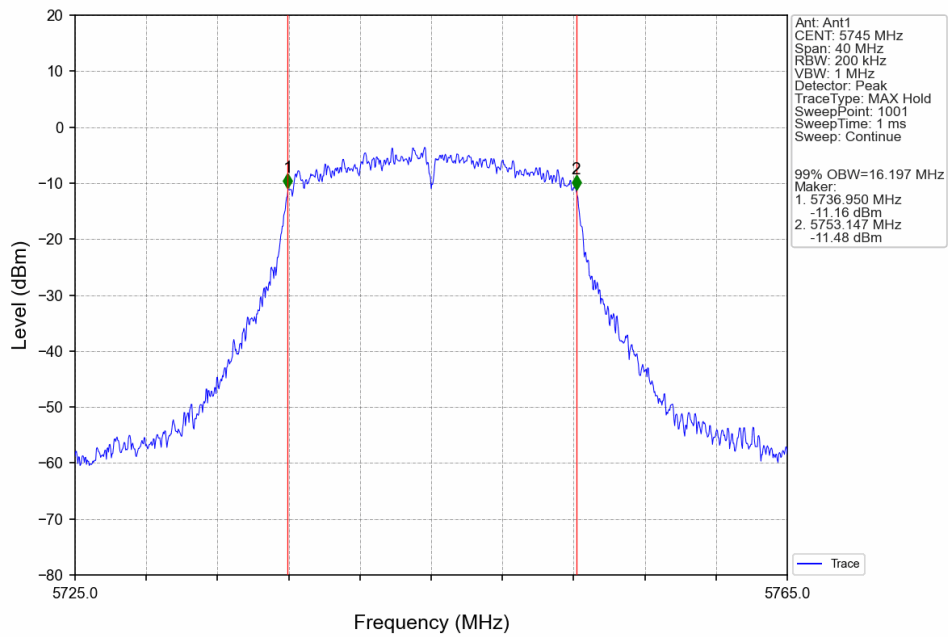
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



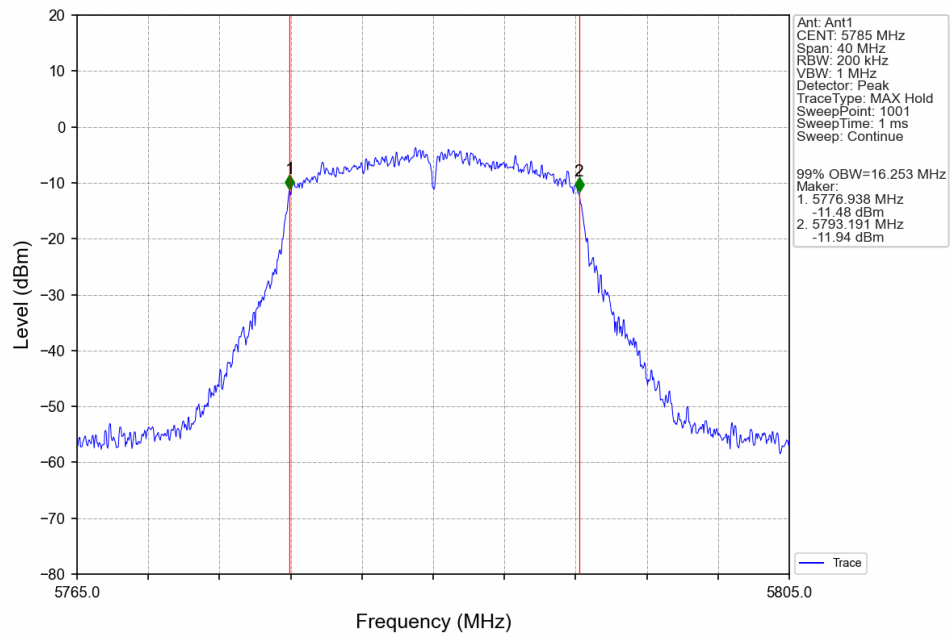
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



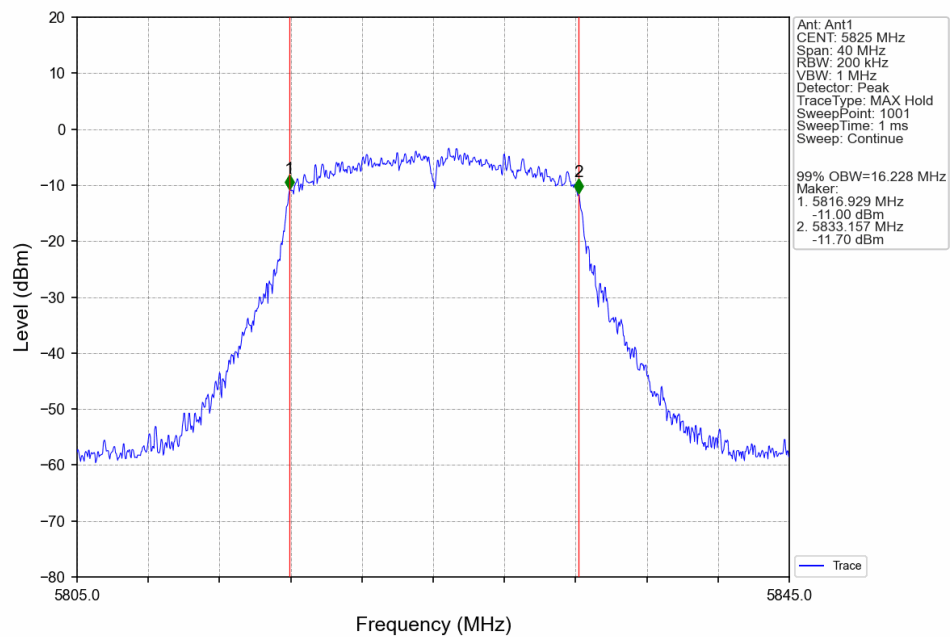
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



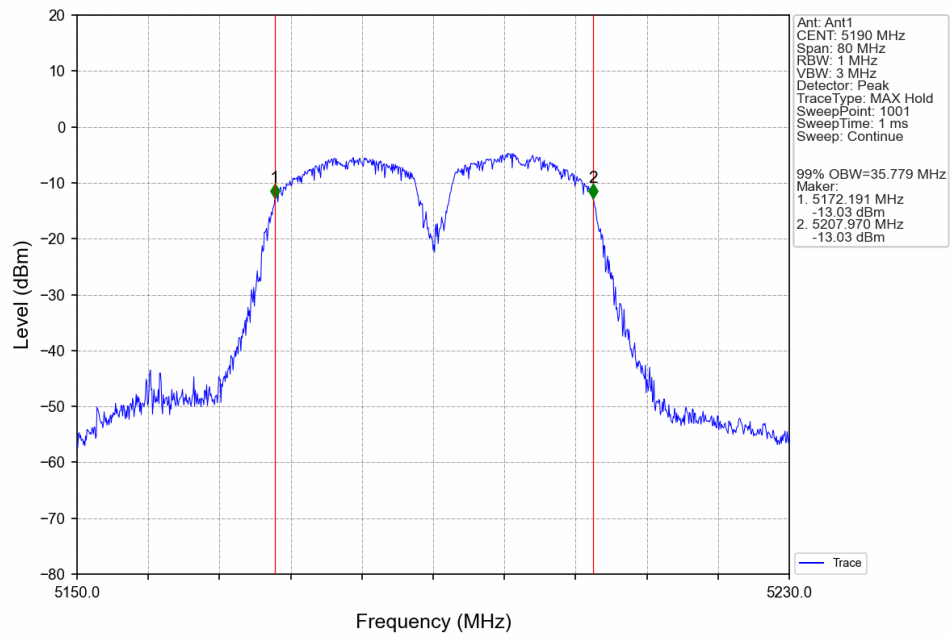
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



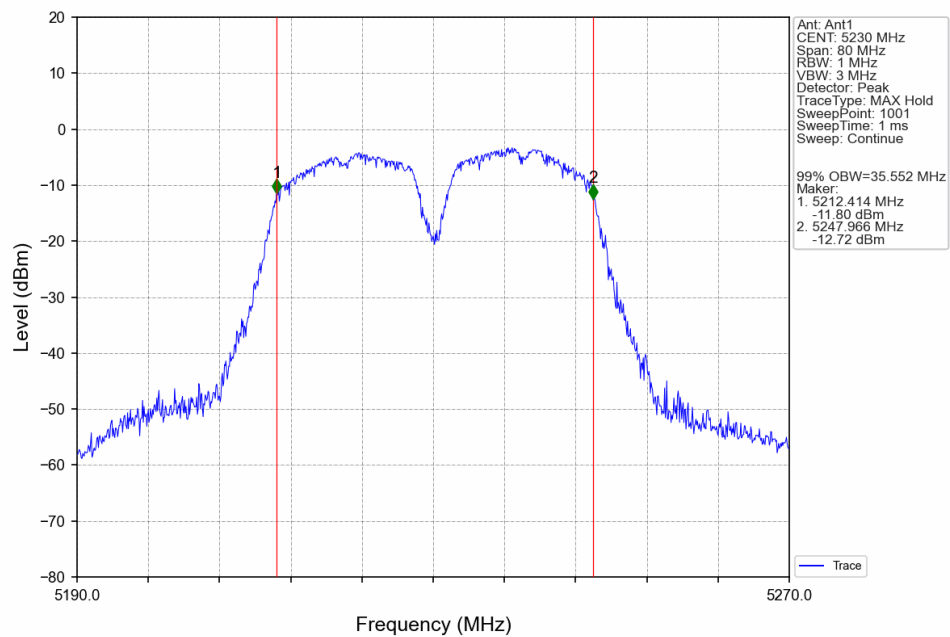
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



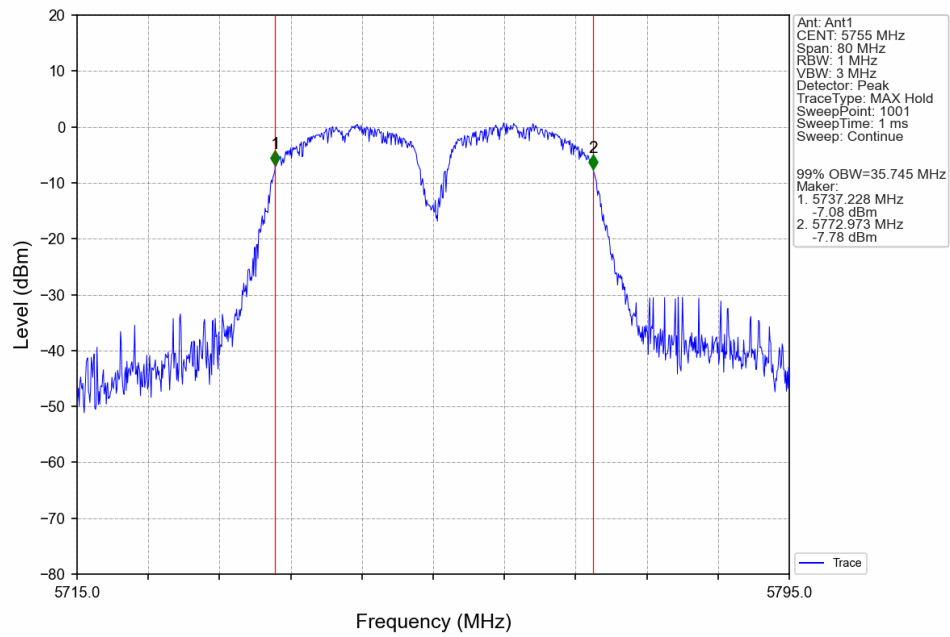
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



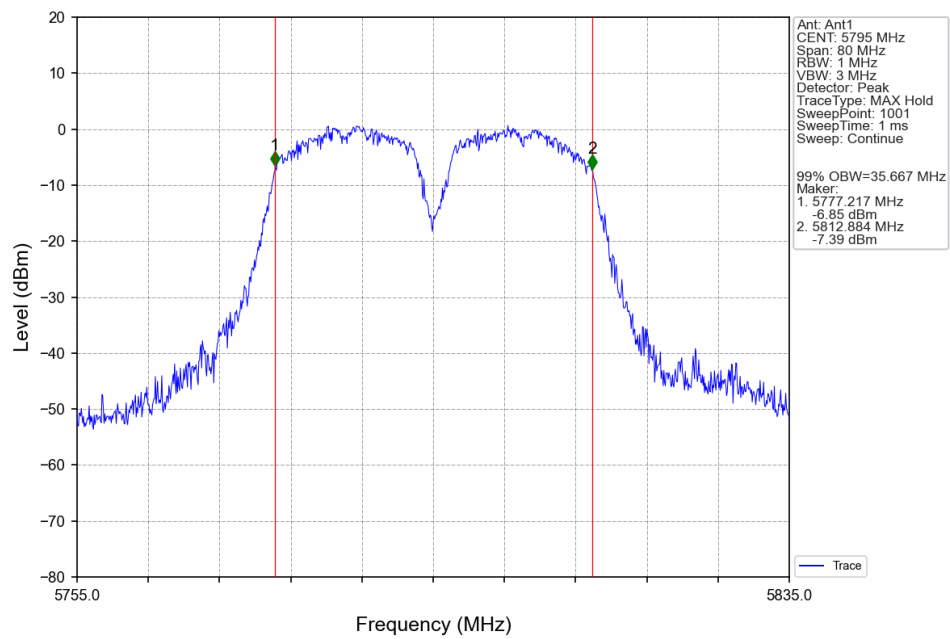
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



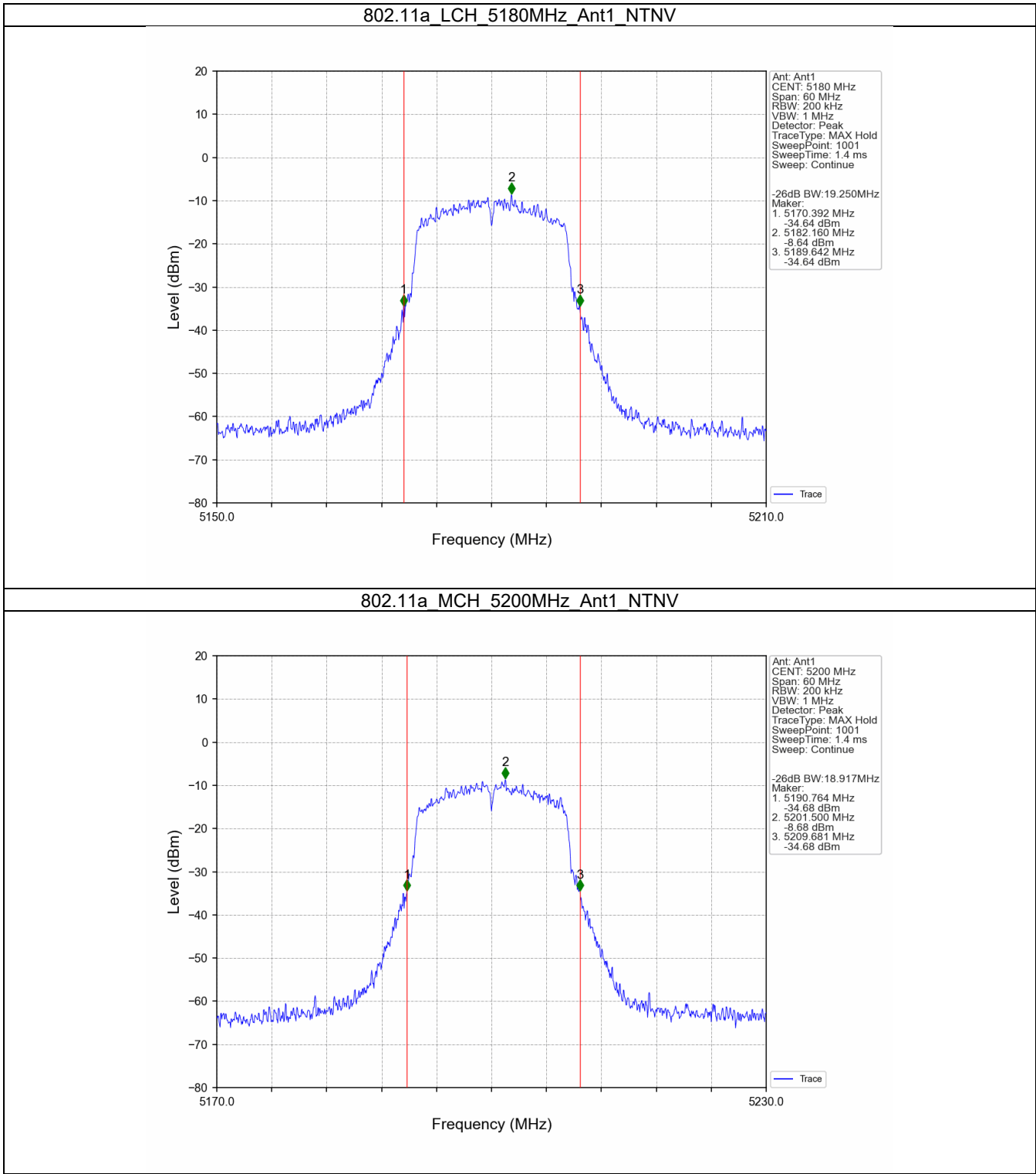
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



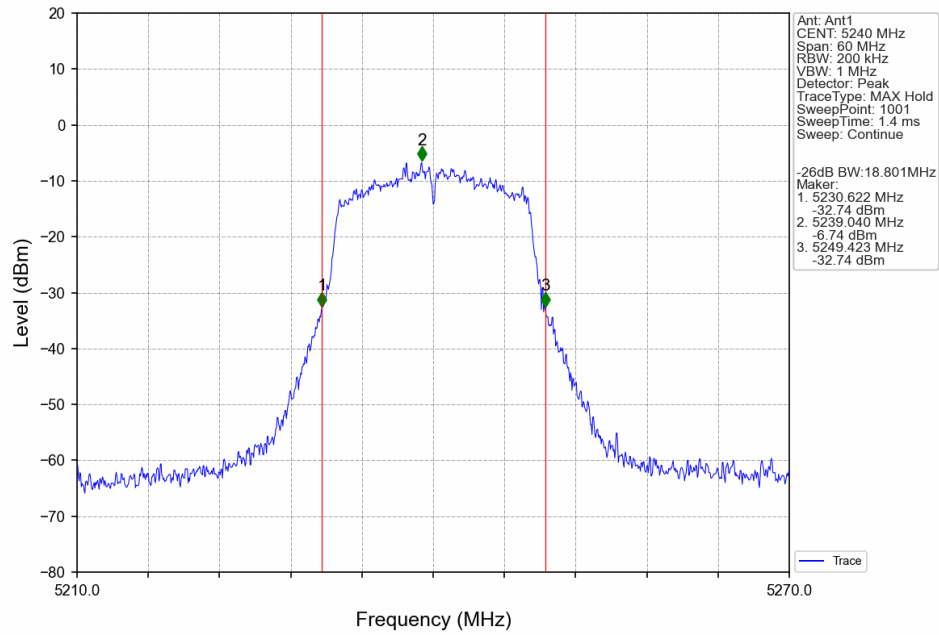
802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



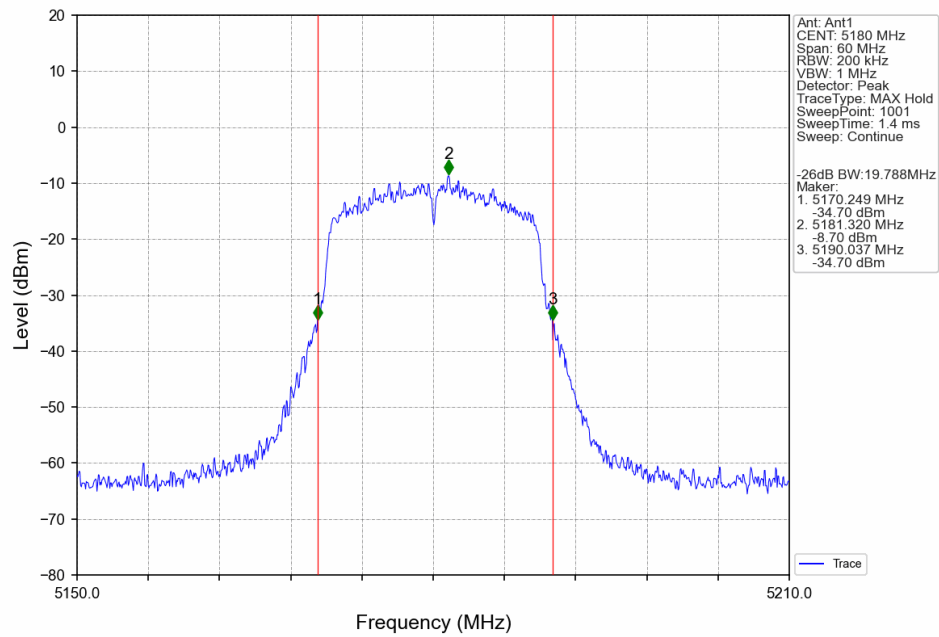
2.2.2 26dB BW



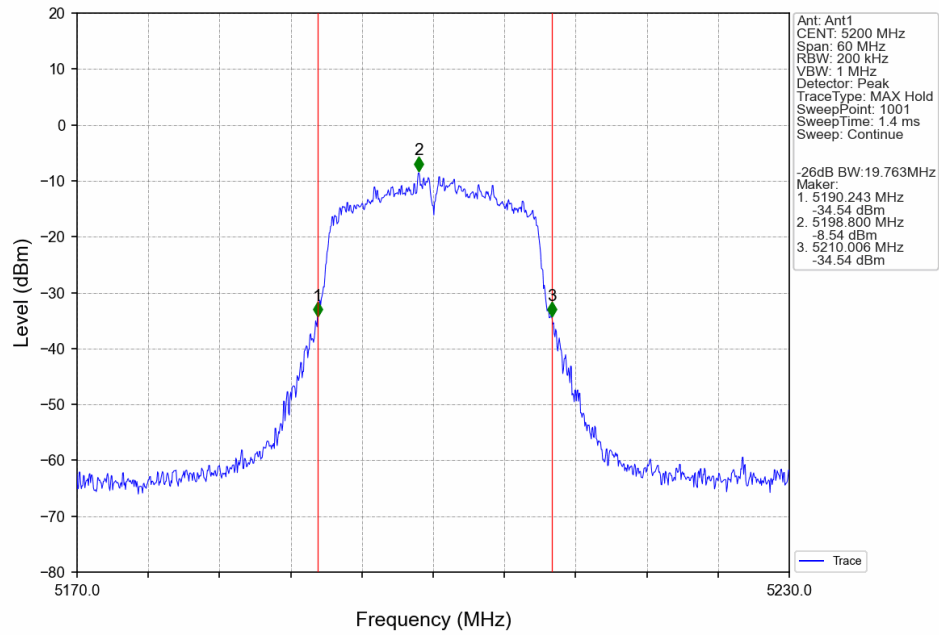
802.11a_HCH_5240MHz_Ant1_NTNV



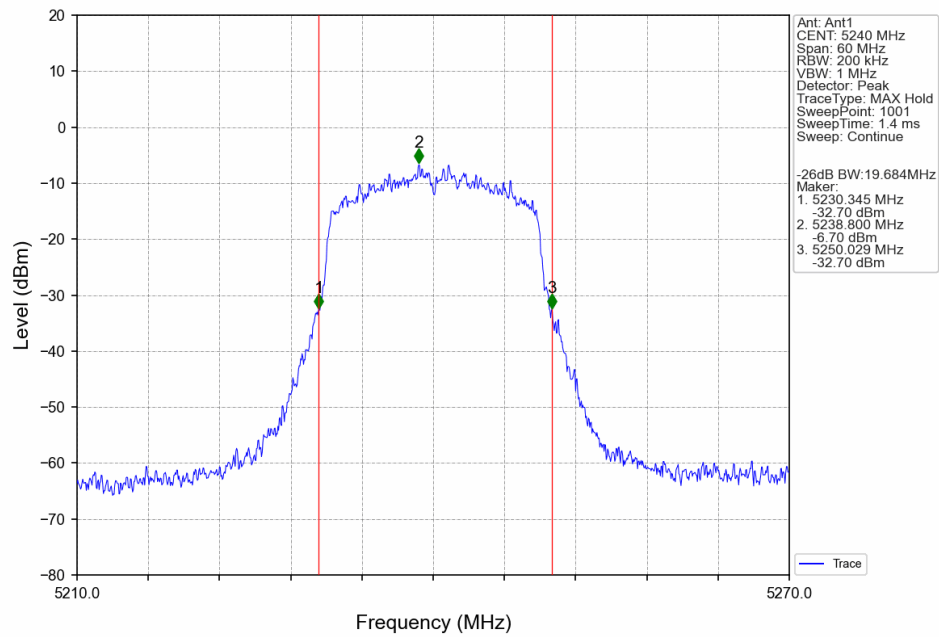
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



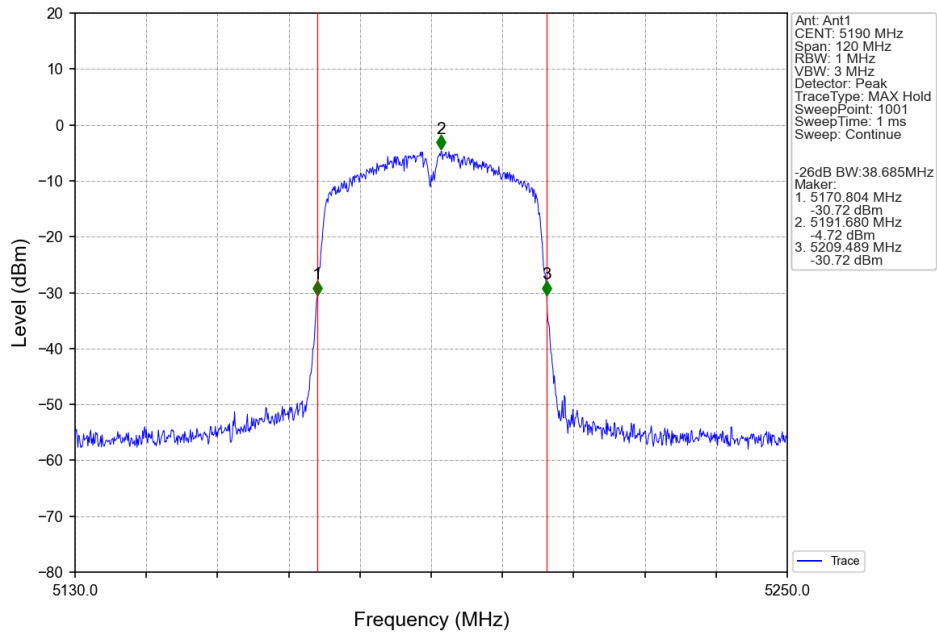
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



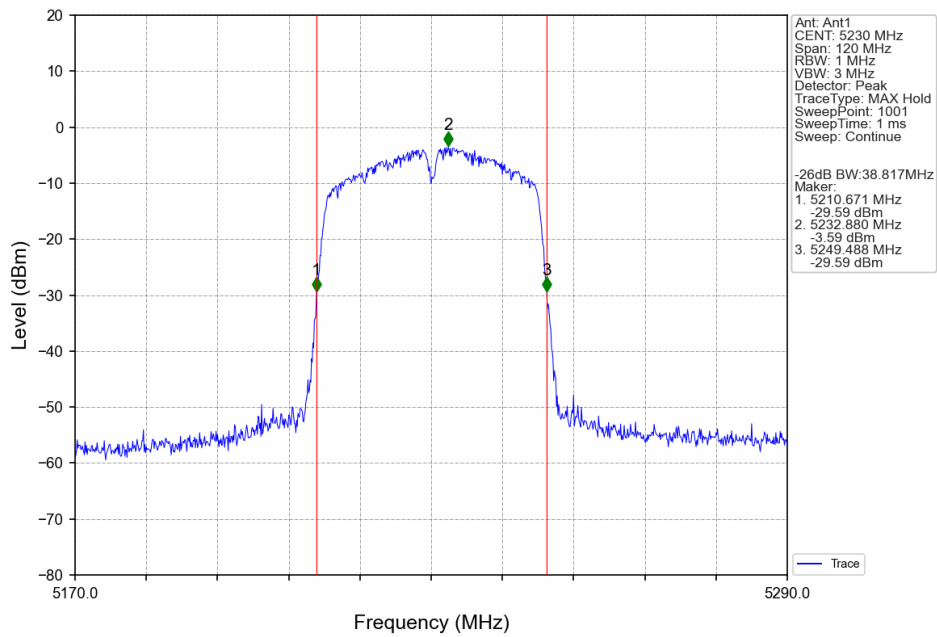
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



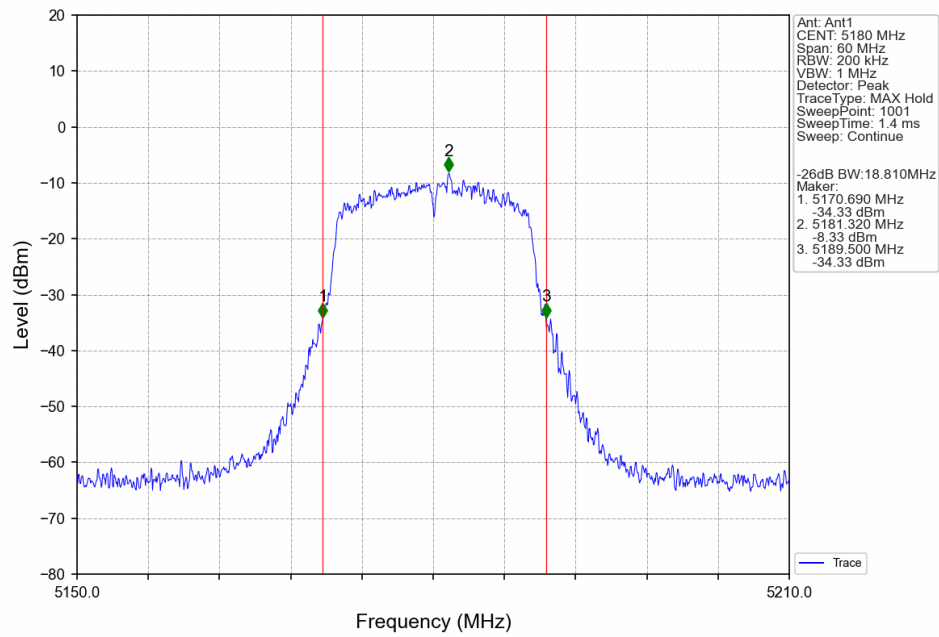
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



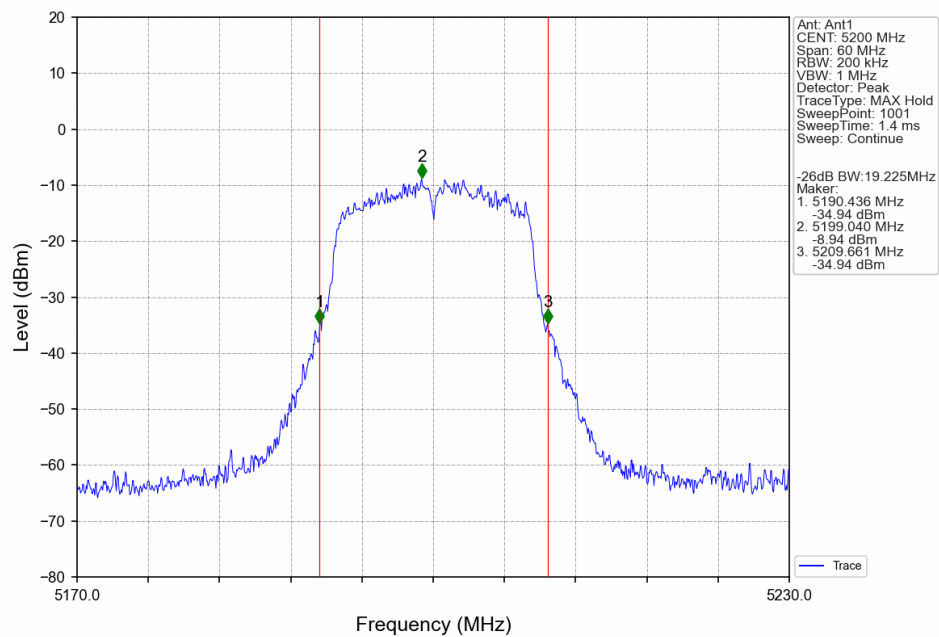
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



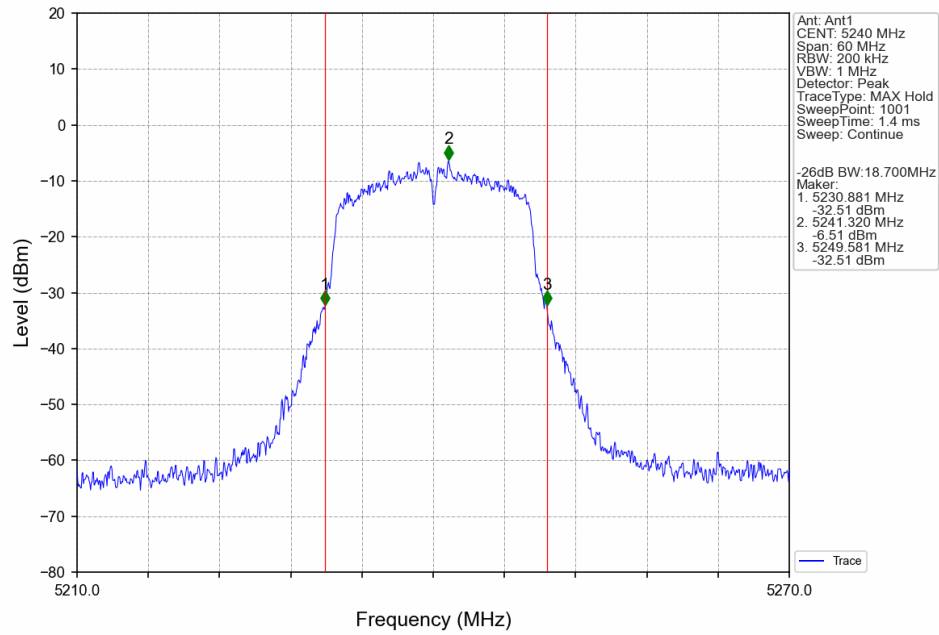
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



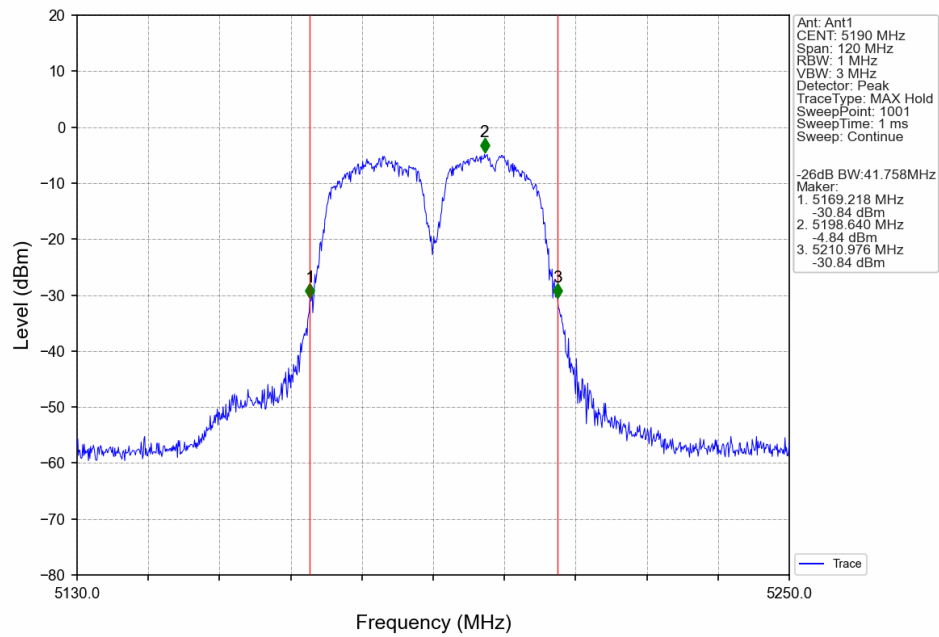
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



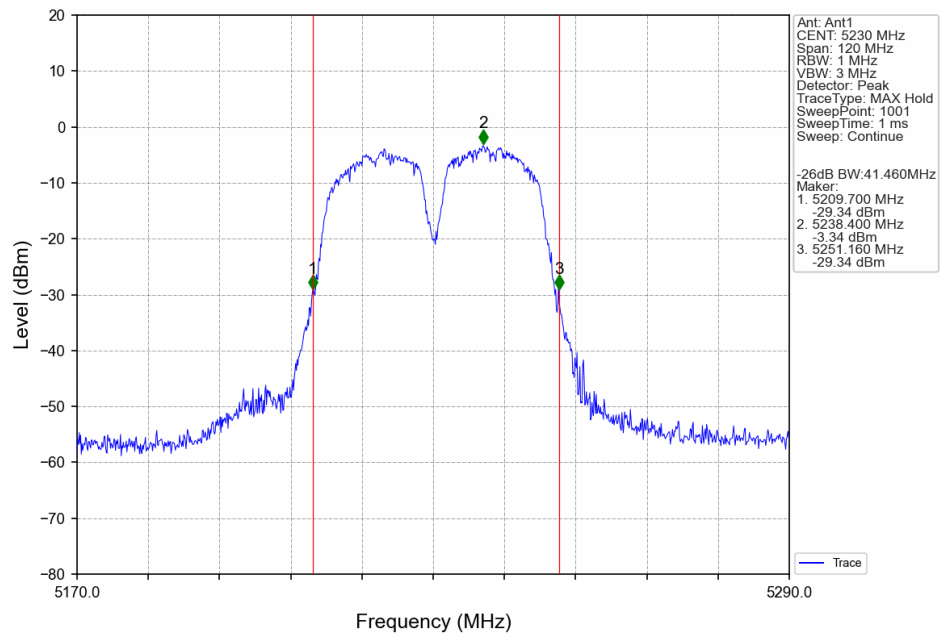
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



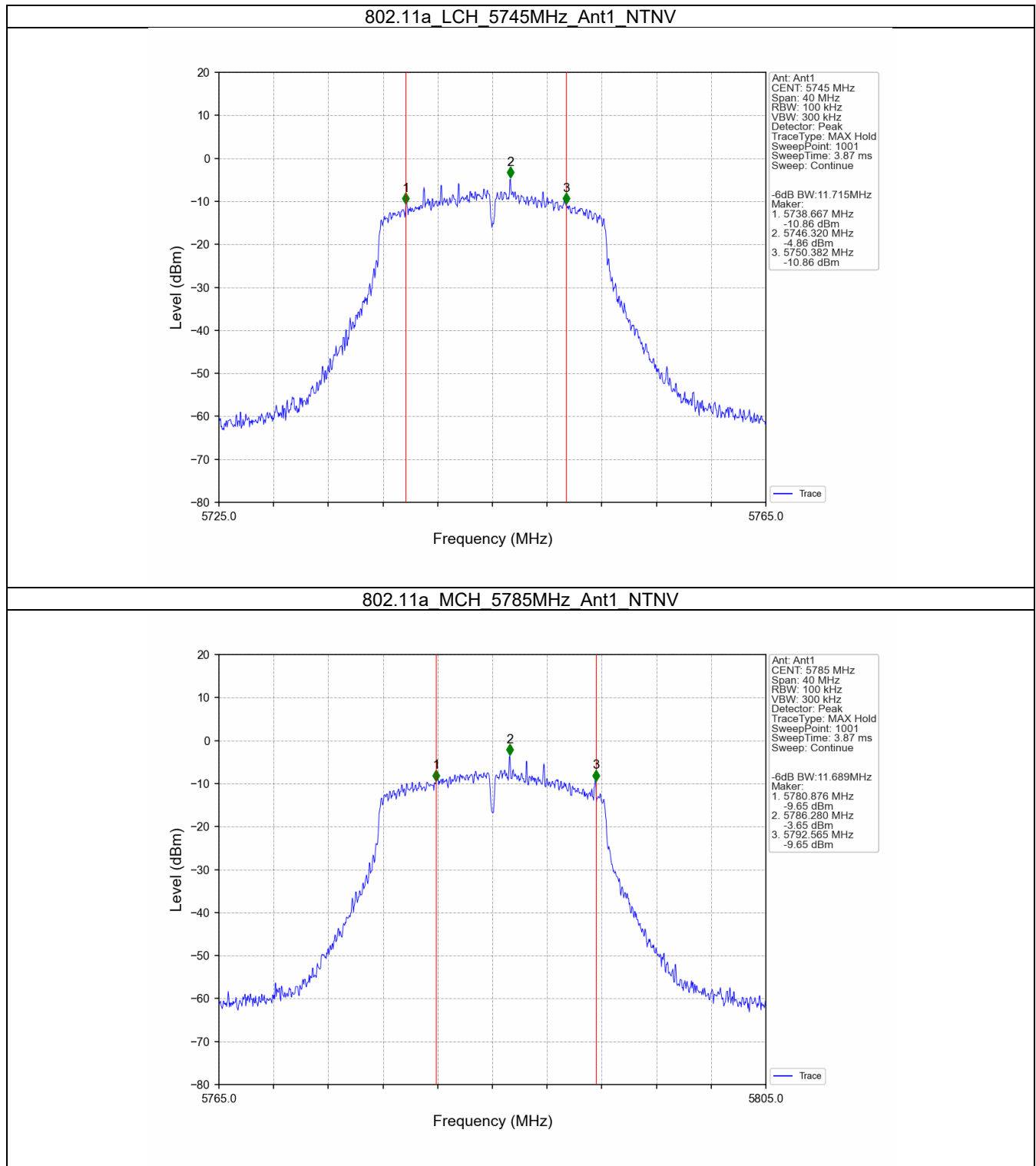
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



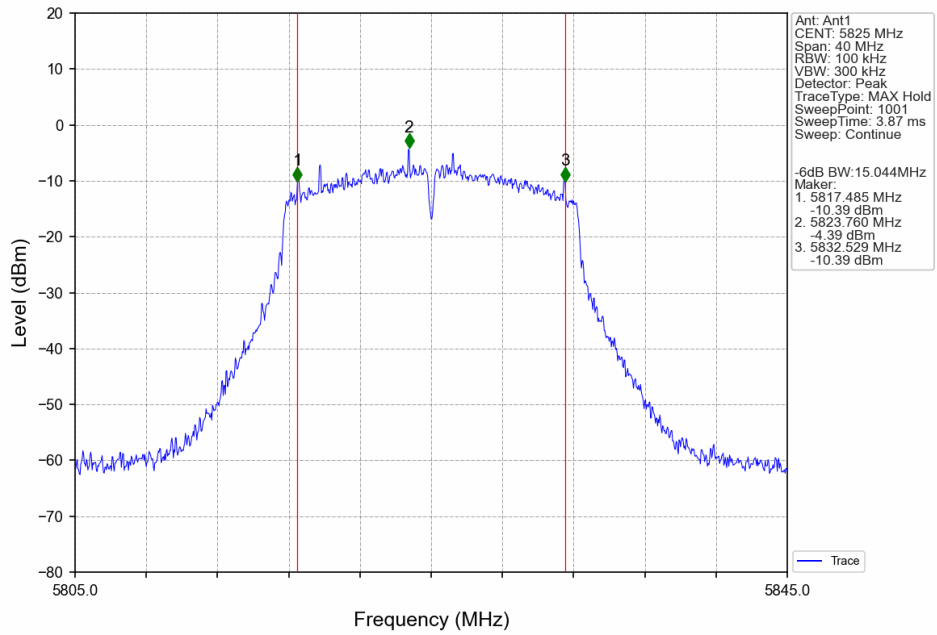
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



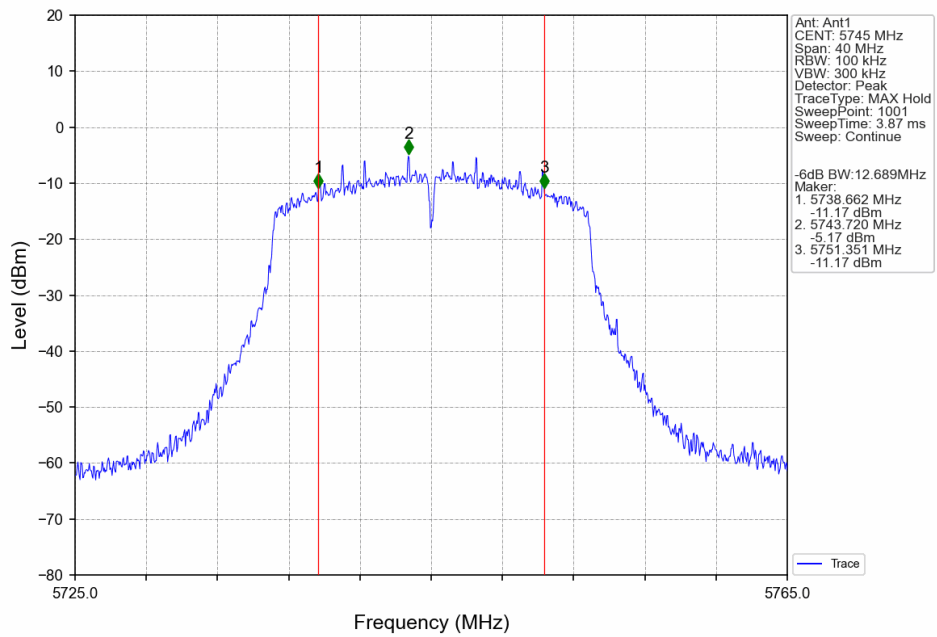
2.2.3 6dB BW



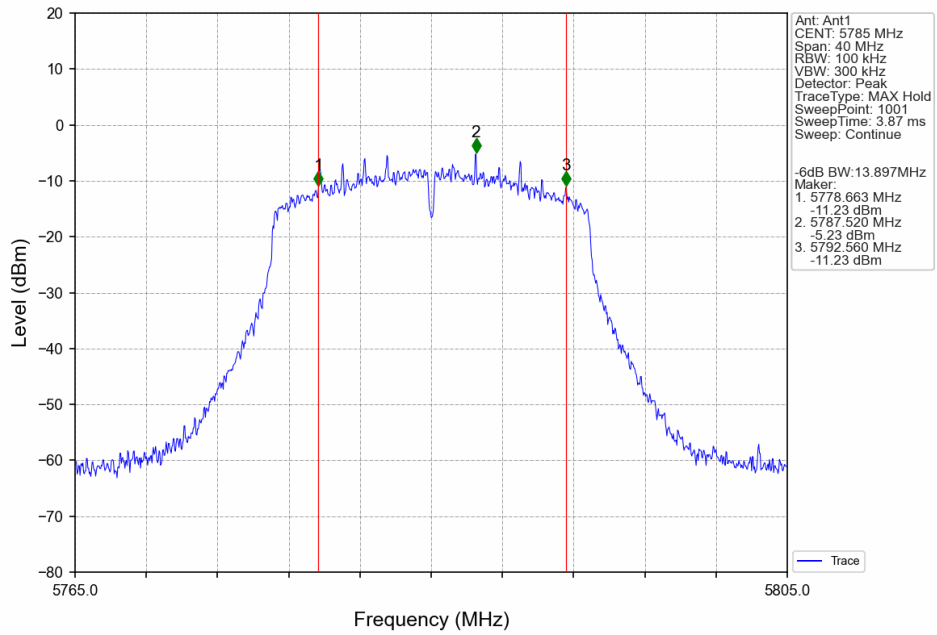
802.11a_HCH_5825MHz_Ant1_NTNV



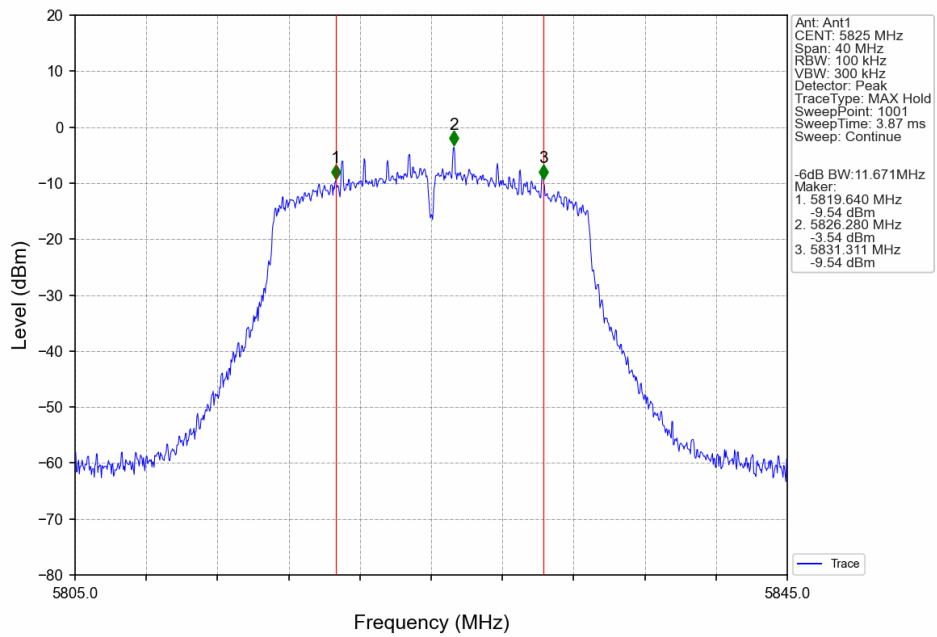
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



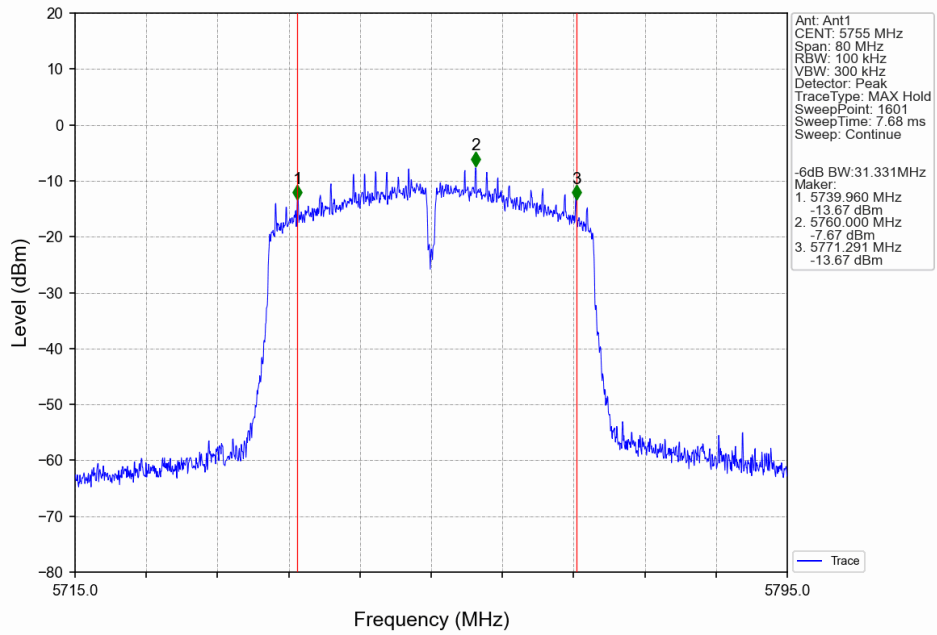
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



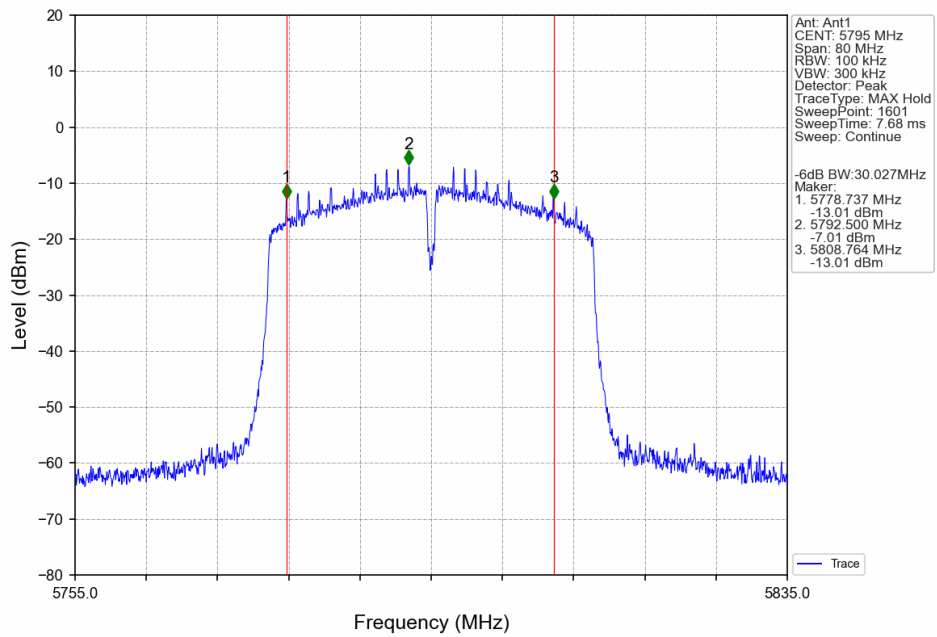
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



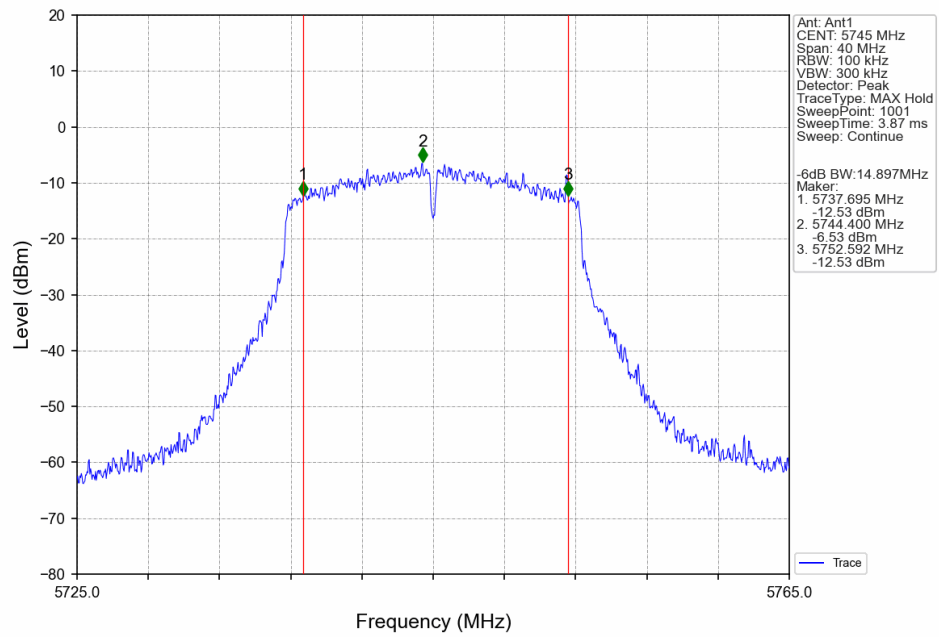
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



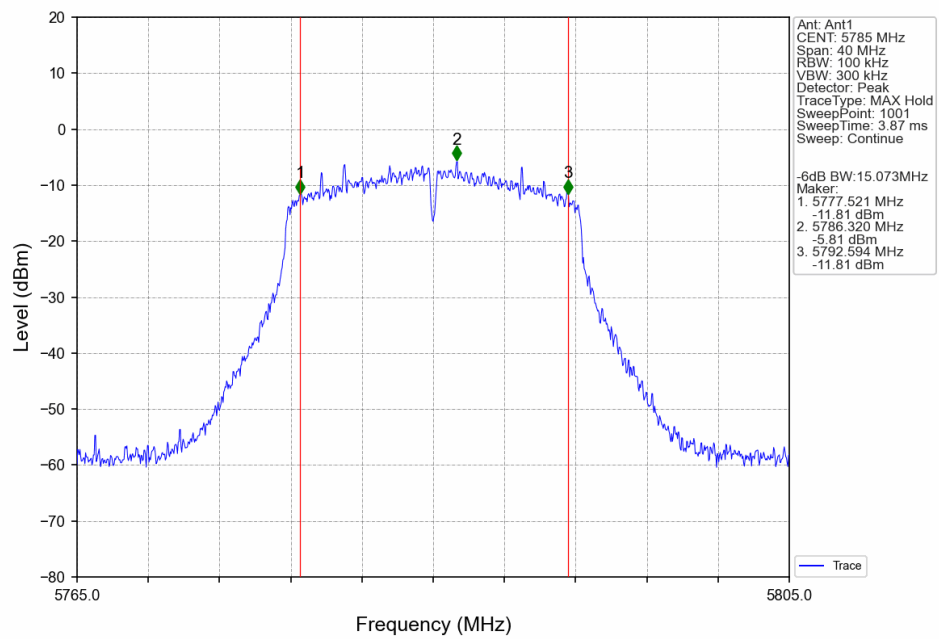
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



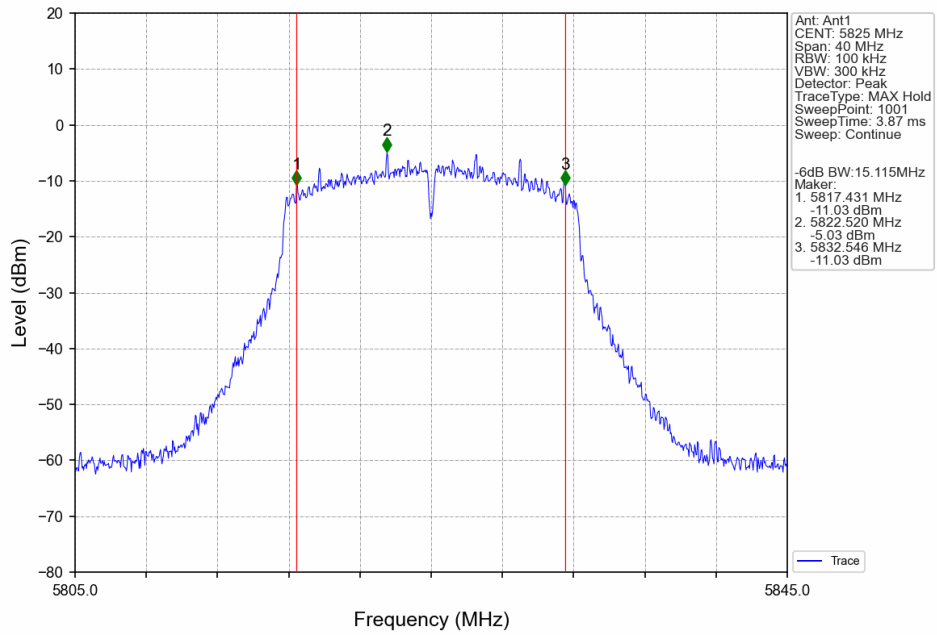
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



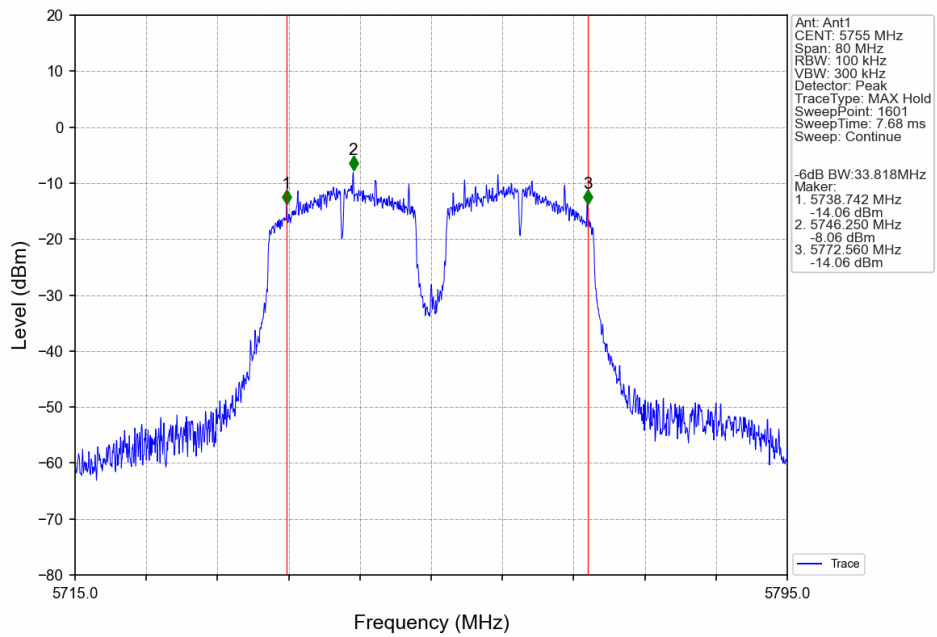
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



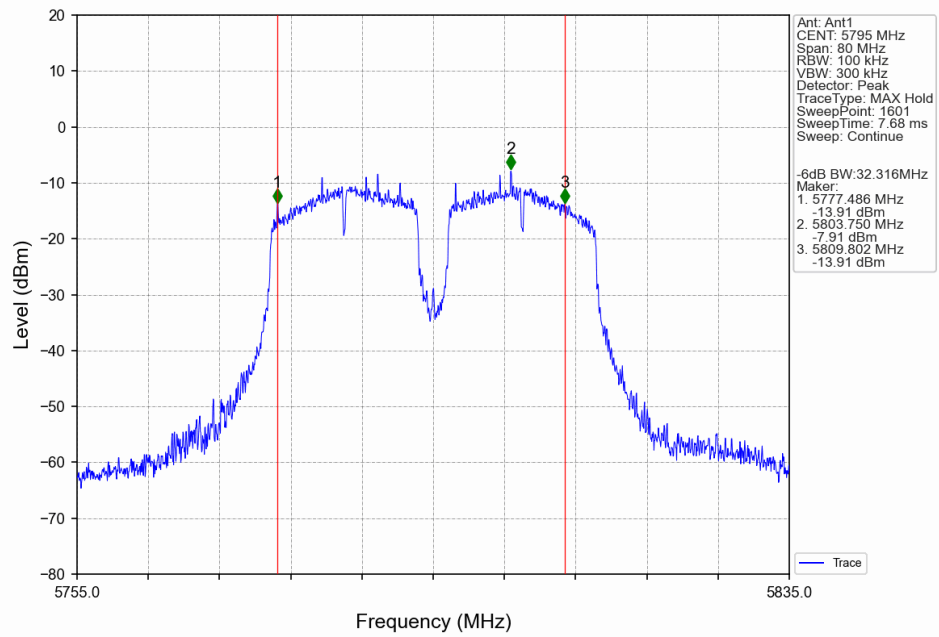
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	0.17	<=23.98	Pass
		5200	0.73	<=23.98	Pass
		5240	2.05	<=23.98	Pass
		5745	5.65	<=30	Pass
		5785	6.29	<=30	Pass
		5825	6.47	<=30	Pass
802.11n (HT20)	SISO	5180	-0.20	<=23.98	Pass
		5200	0.34	<=23.98	Pass
		5240	1.52	<=23.98	Pass
		5745	5.75	<=30	Pass
		5785	5.89	<=30	Pass
		5825	6.39	<=30	Pass
802.11n (HT40)	SISO	5190	0.07	<=23.98	Pass
		5230	1.24	<=23.98	Pass
		5755	6.08	<=30	Pass
		5795	6.05	<=30	Pass
802.11ac (VHT20)	SISO	5180	0.23	<=23.98	Pass
		5200	0.64	<=23.98	Pass
		5240	2.07	<=23.98	Pass
		5745	6.27	<=30	Pass
		5785	6.51	<=30	Pass
		5825	6.63	<=30	Pass
802.11ac (VHT40)	SISO	5190	0.01	<=23.98	Pass
		5230	1.38	<=23.98	Pass
		5755	6.00	<=30	Pass
		5795	5.90	<=30	Pass

4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

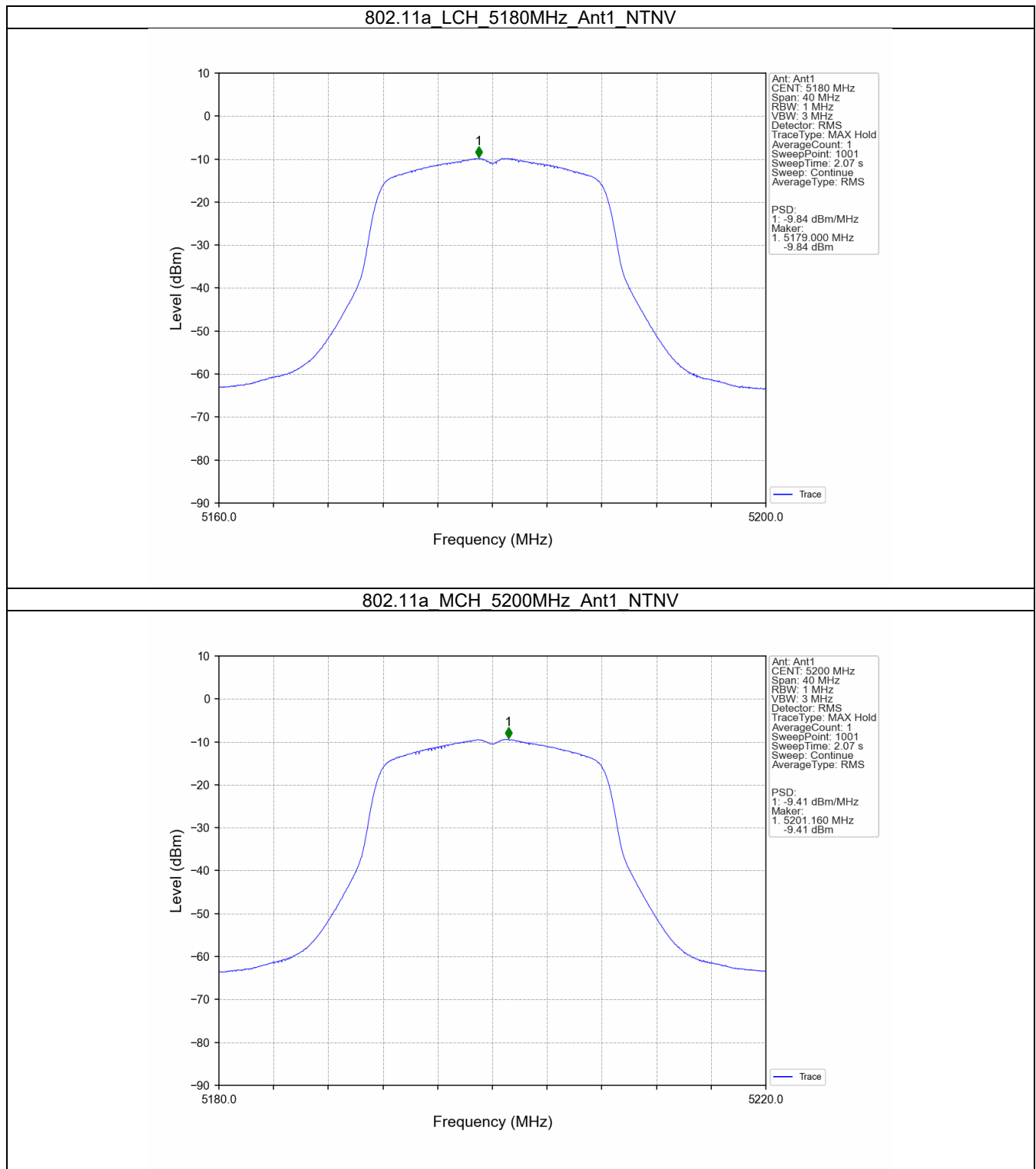
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	-9.84	<=11	Pass
		5200	-9.41	<=11	Pass
		5240	-7.61	<=11	Pass
802.11n (HT20)	SISO	5180	-10.39	<=11	Pass
		5200	-9.95	<=11	Pass
		5240	-8.31	<=11	Pass
802.11n (HT40)	SISO	5190	-12.96	<=11	Pass
		5230	-11.82	<=11	Pass
802.11ac (VHT20)	SISO	5180	-9.82	<=11	Pass
		5200	-9.47	<=11	Pass
		5240	-7.65	<=11	Pass
802.11ac (VHT40)	SISO	5190	-12.72	<=11	Pass
		5230	-11.13	<=11	Pass

4.1.2 PSD-Band3

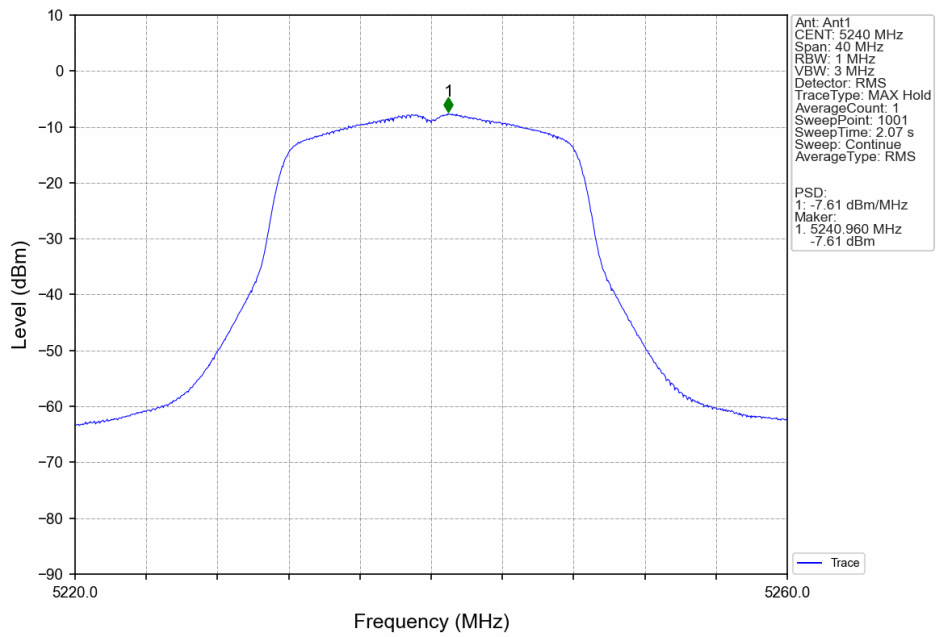
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	-6.84	<=30	Pass
		5785	-6.34	<=30	Pass
		5825	-6.13	<=30	Pass
802.11n (HT20)	SISO	5745	-6.76	<=30	Pass
		5785	-6.94	<=30	Pass
		5825	-6.42	<=30	Pass
802.11n (HT40)	SISO	5755	-9.70	<=30	Pass
		5795	-9.76	<=30	Pass
802.11ac (VHT20)	SISO	5745	-6.48	<=30	Pass
		5785	-6.14	<=30	Pass
		5825	-6.16	<=30	Pass
802.11ac (VHT40)	SISO	5755	-9.66	<=30	Pass
		5795	-9.68	<=30	Pass

4.2 Test Graph

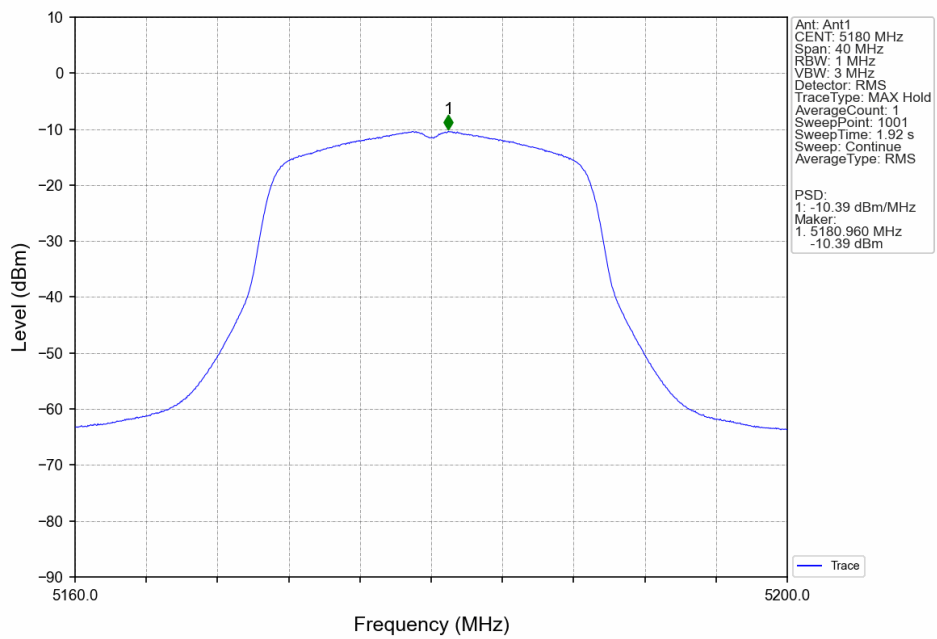
4.2.1 PSD



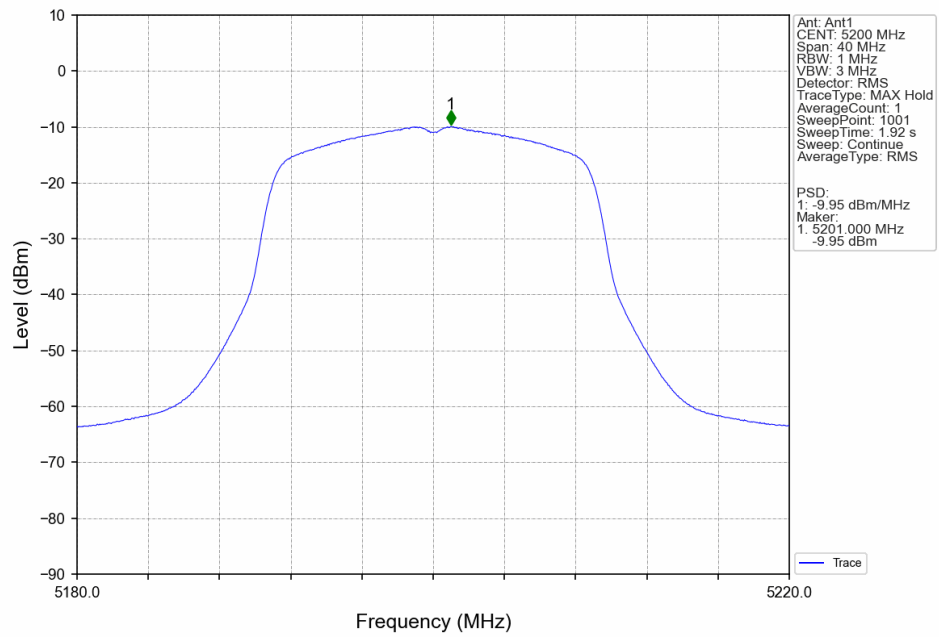
802.11a_HCH_5240MHz_Ant1_NTNV



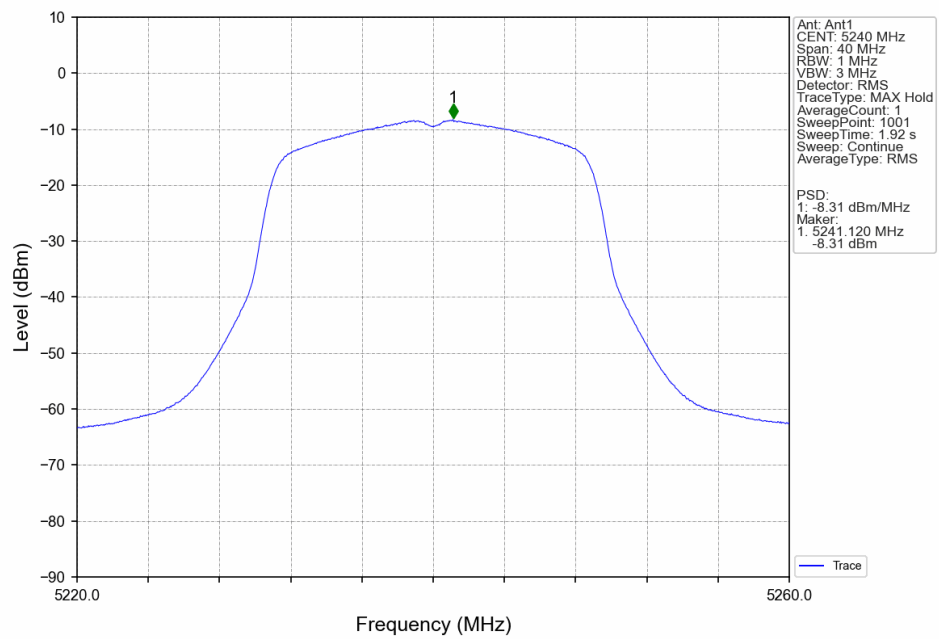
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



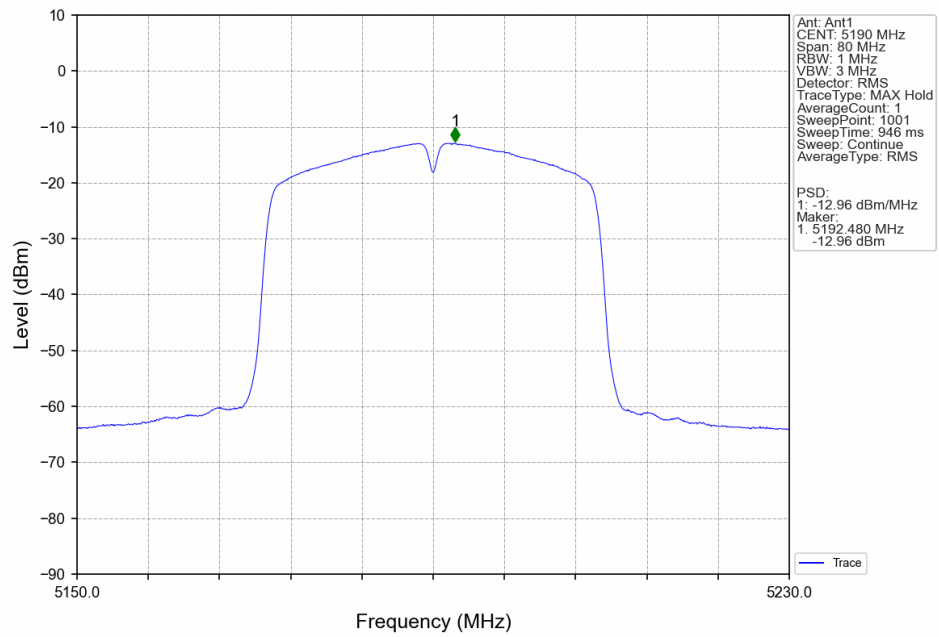
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



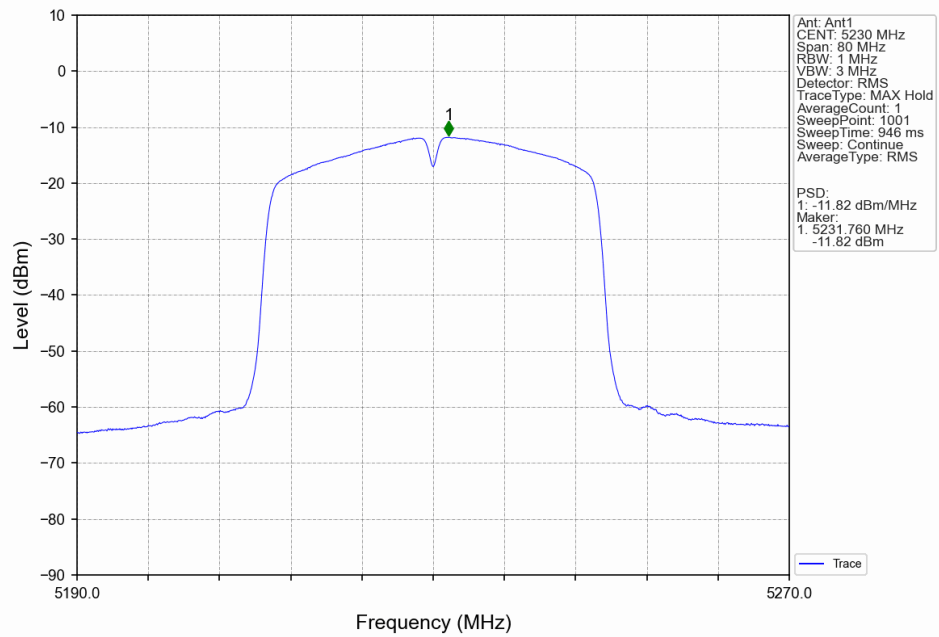
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



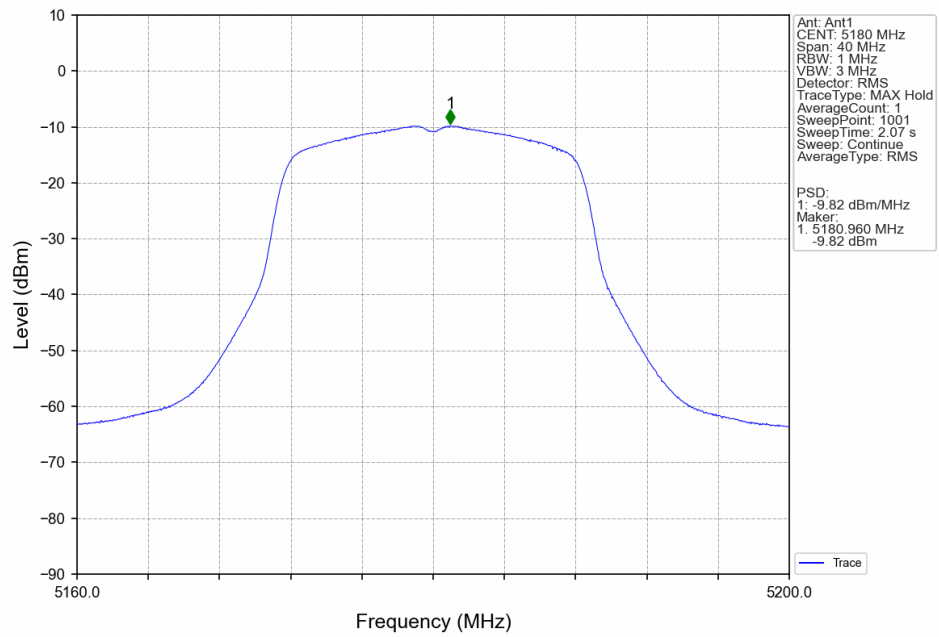
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



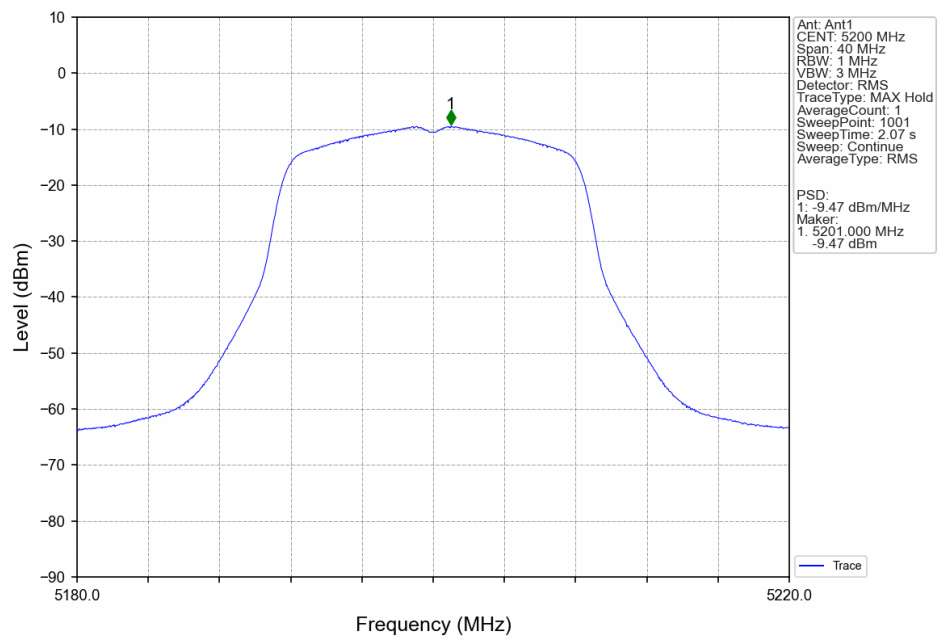
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



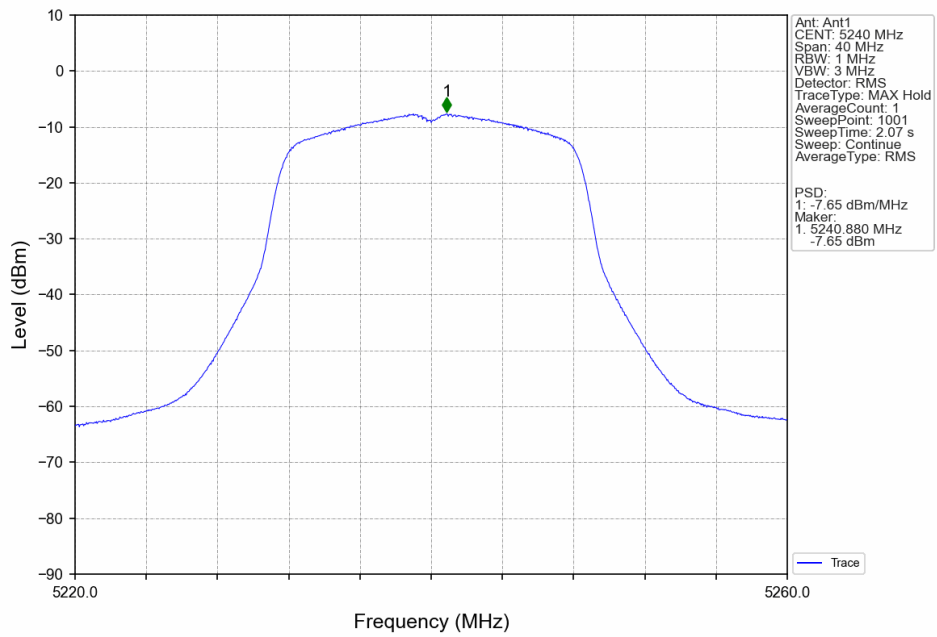
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



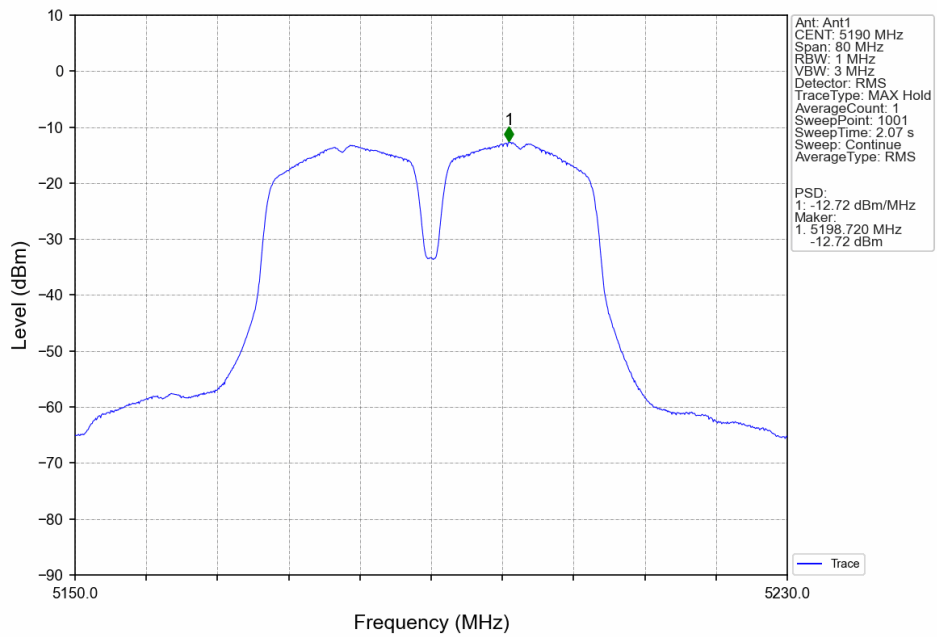
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



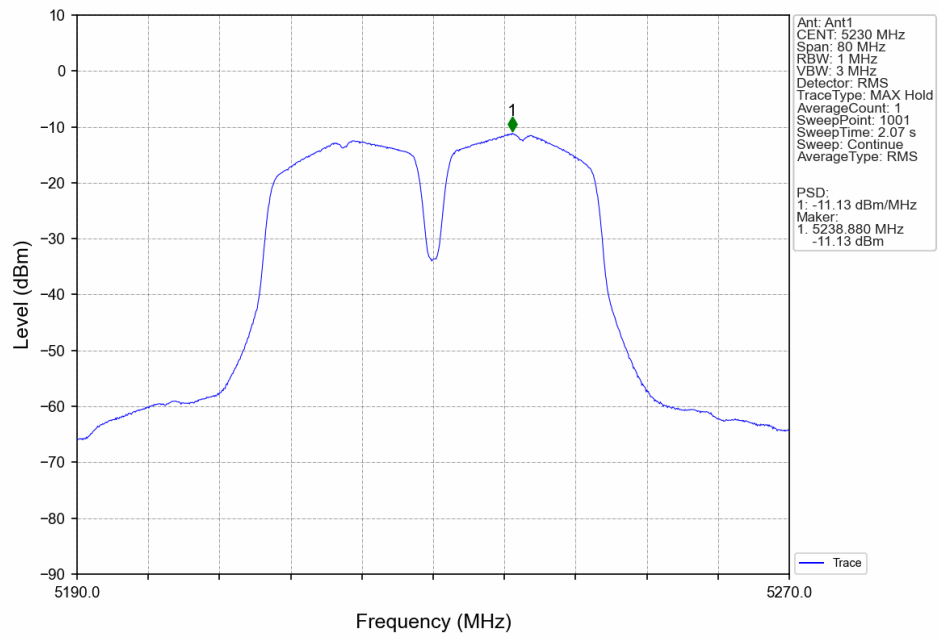
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



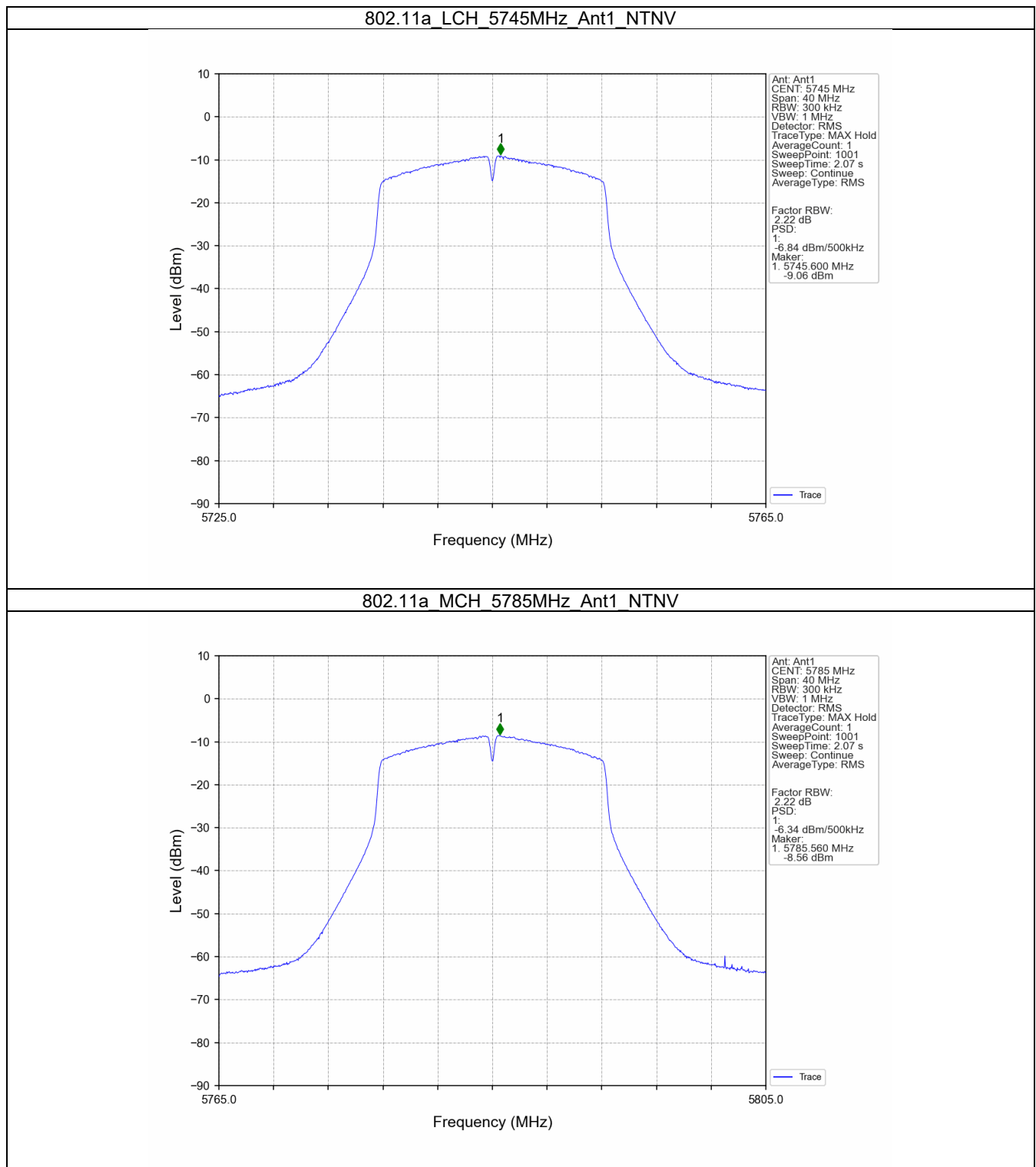
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



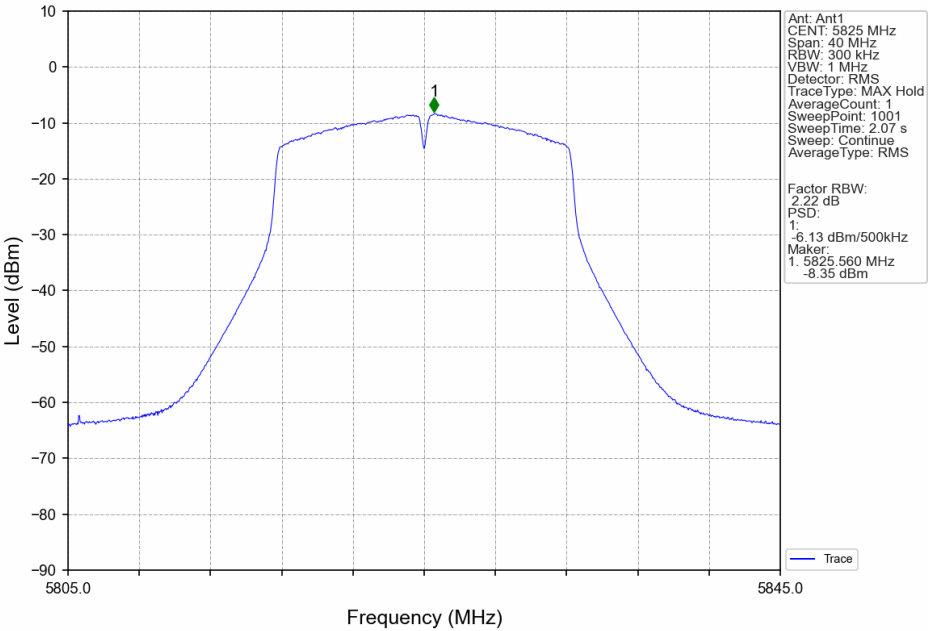
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



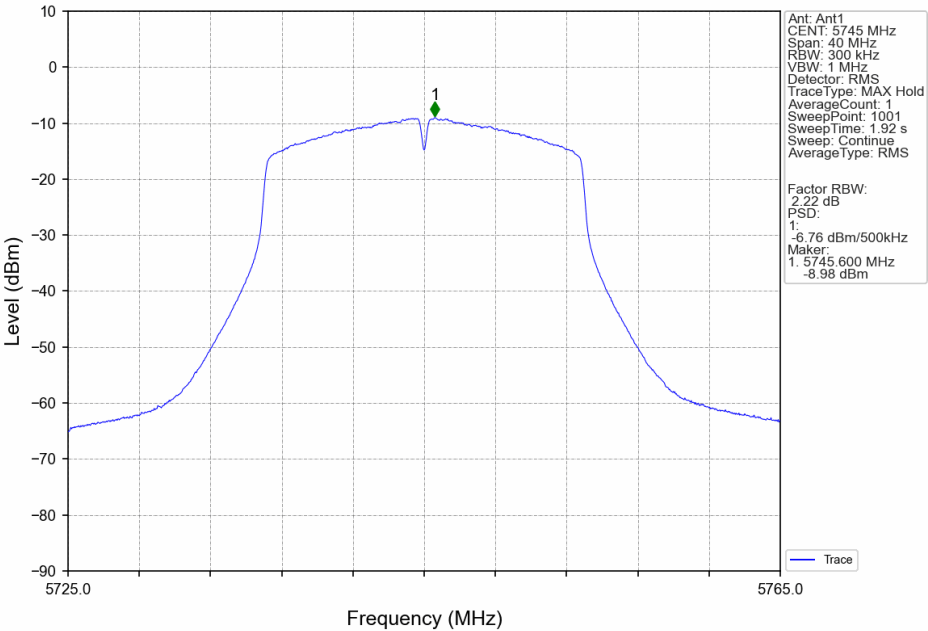
4.2.2 PSD-Band3



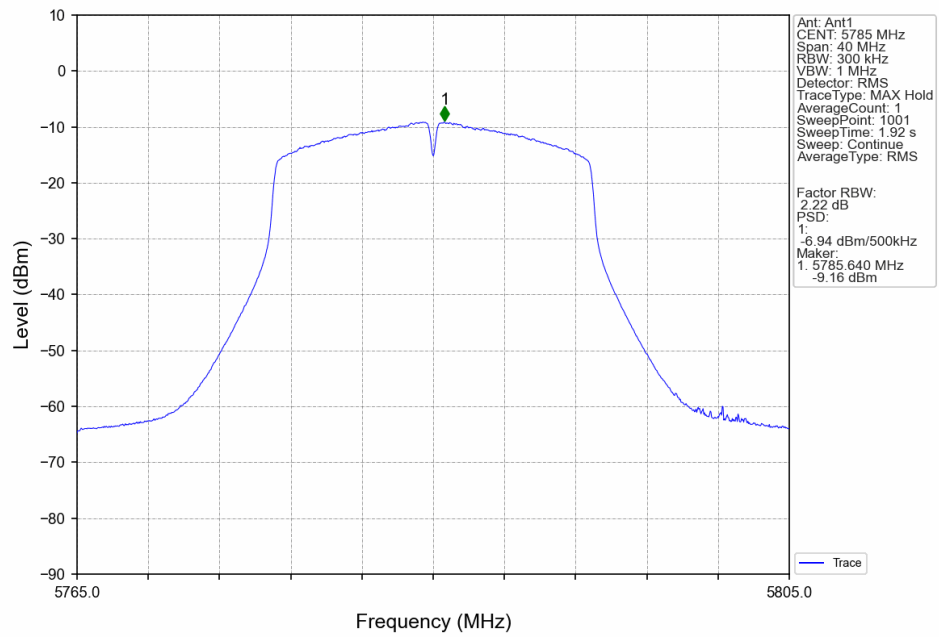
802.11a_HCH_5825MHz_Ant1_NTNV



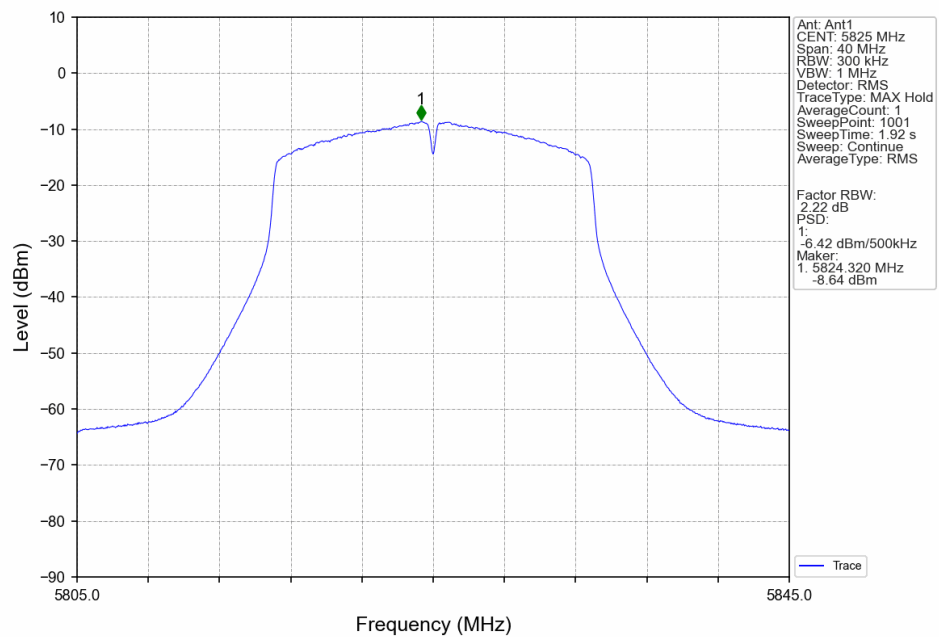
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



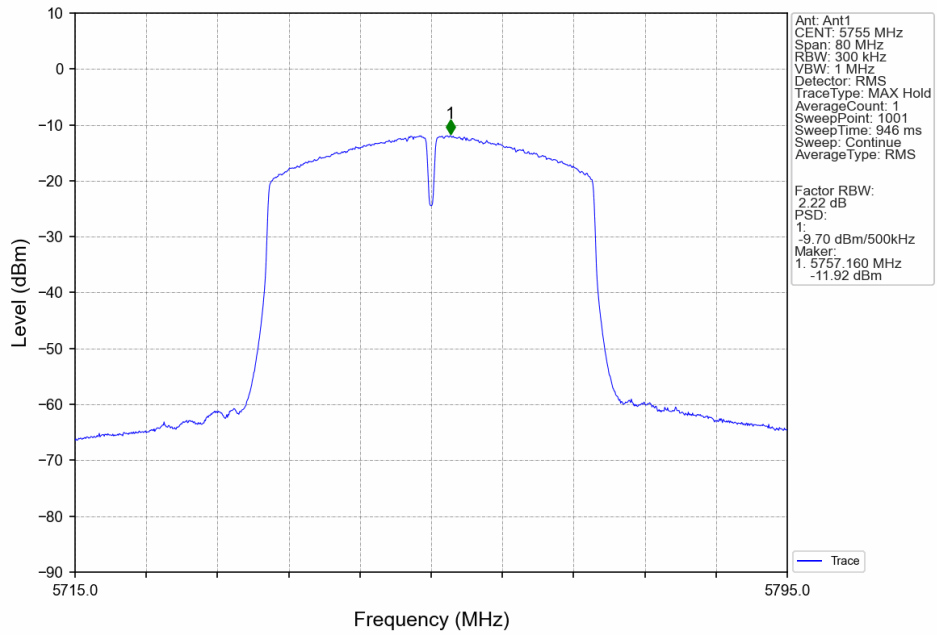
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



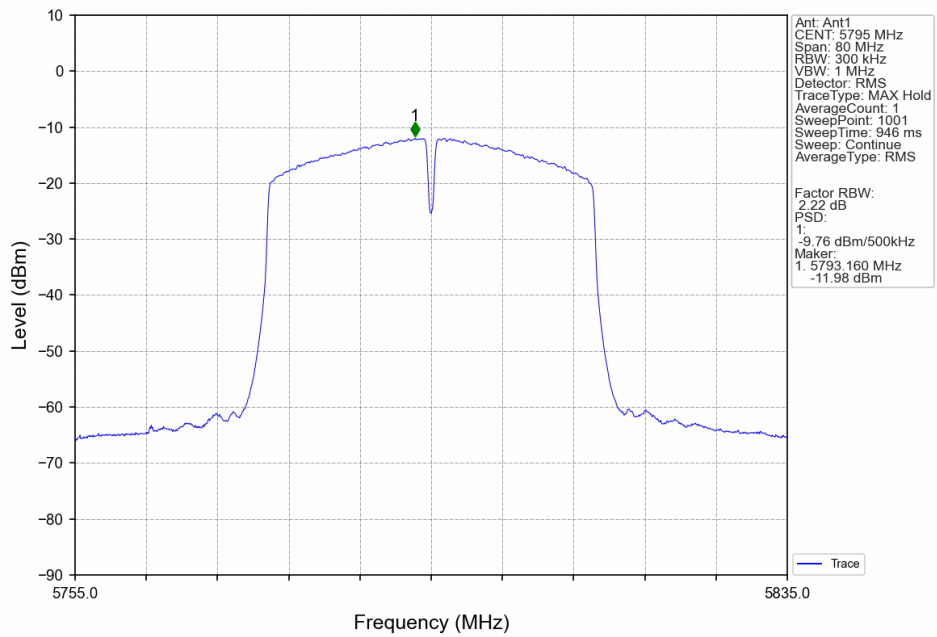
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



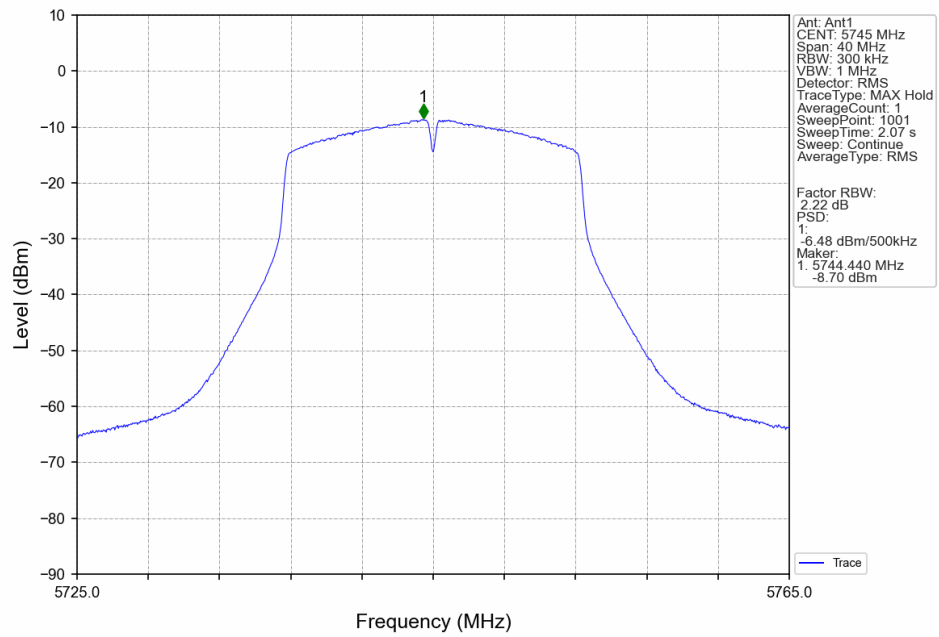
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



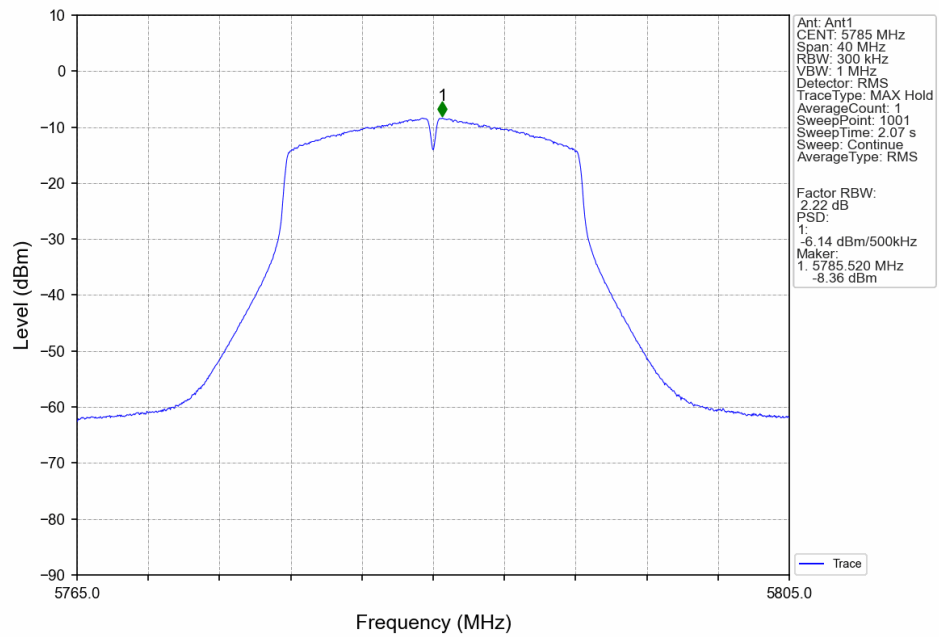
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



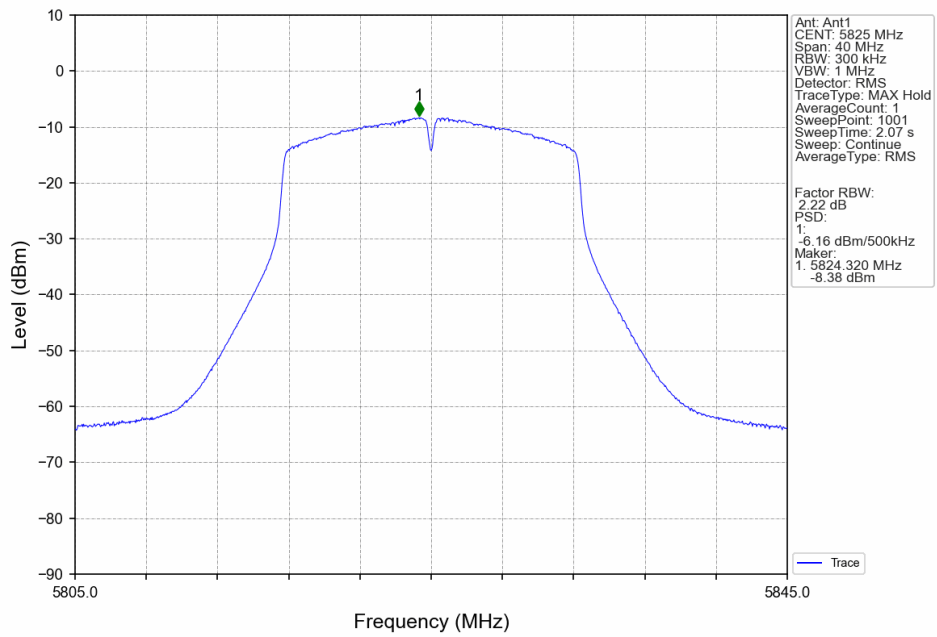
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



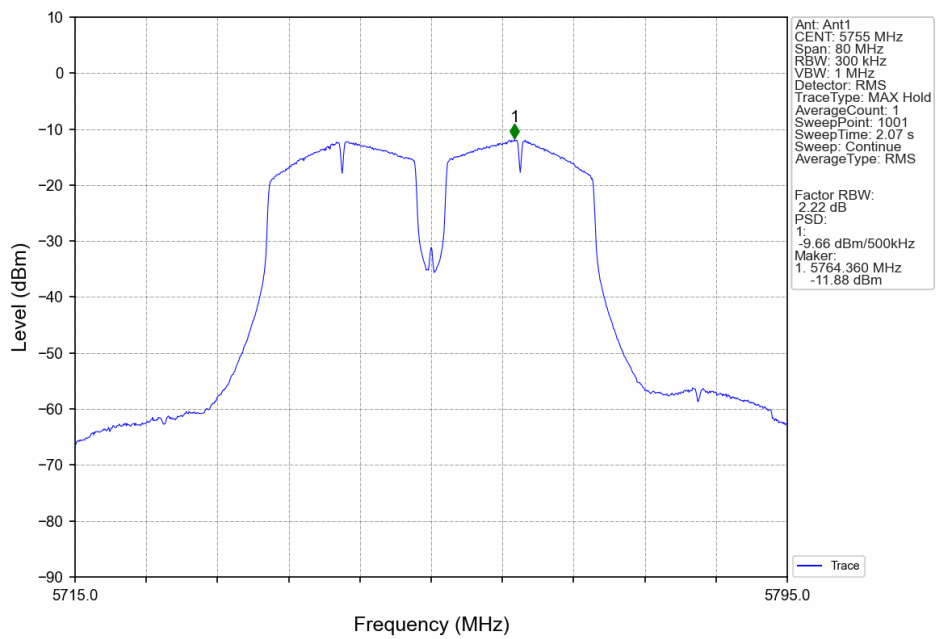
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



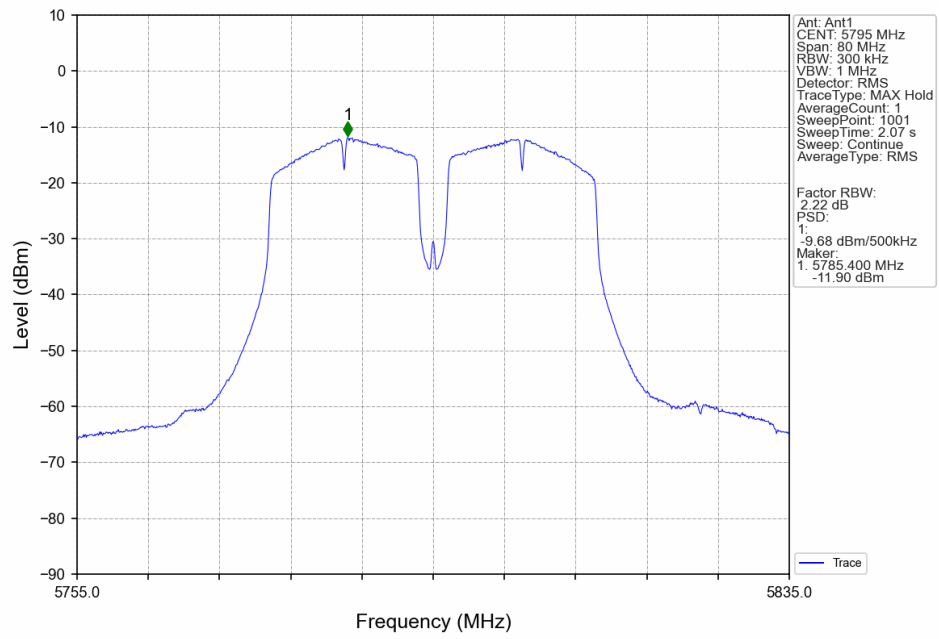
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



5. Unwanted Emissions In Restricted Frequency Bands

5.1 Test Result

5.1.1 RSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Unwanted Emissions (dBm)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	Refer To Test Graph		Pass
		5200	1	Refer To Test Graph		Pass
		5240	1	Refer To Test Graph		Pass
		5745	1	Refer To Test Graph		Pass
		5785	1	Refer To Test Graph		Pass
		5825	1	Refer To Test Graph		Pass
802.11n (HT20)	SISO	5180	1	Refer To Test Graph		Pass
		5200	1	Refer To Test Graph		Pass
		5240	1	Refer To Test Graph		Pass
		5745	1	Refer To Test Graph		Pass
		5785	1	Refer To Test Graph		Pass
		5825	1	Refer To Test Graph		Pass
802.11n (HT40)	SISO	5190	1	Refer To Test Graph		Pass
		5230	1	Refer To Test Graph		Pass
		5755	1	Refer To Test Graph		Pass
		5795	1	Refer To Test Graph		Pass
802.11ac (VHT20)	SISO	5180	1	Refer To Test Graph		Pass
		5200	1	Refer To Test Graph		Pass
		5240	1	Refer To Test Graph		Pass
		5745	1	Refer To Test Graph		Pass
		5785	1	Refer To Test Graph		Pass
		5825	1	Refer To Test Graph		Pass
802.11ac (VHT40)	SISO	5190	1	Refer To Test Graph		Pass
		5230	1	Refer To Test Graph		Pass
		5755	1	Refer To Test Graph		Pass
		5795	1	Refer To Test Graph		Pass

5.2 Test Graph

5.2.1 RSE

