Appendix RF test data for 5G WIFI

1. Duty Cycle

1.1 Test Result

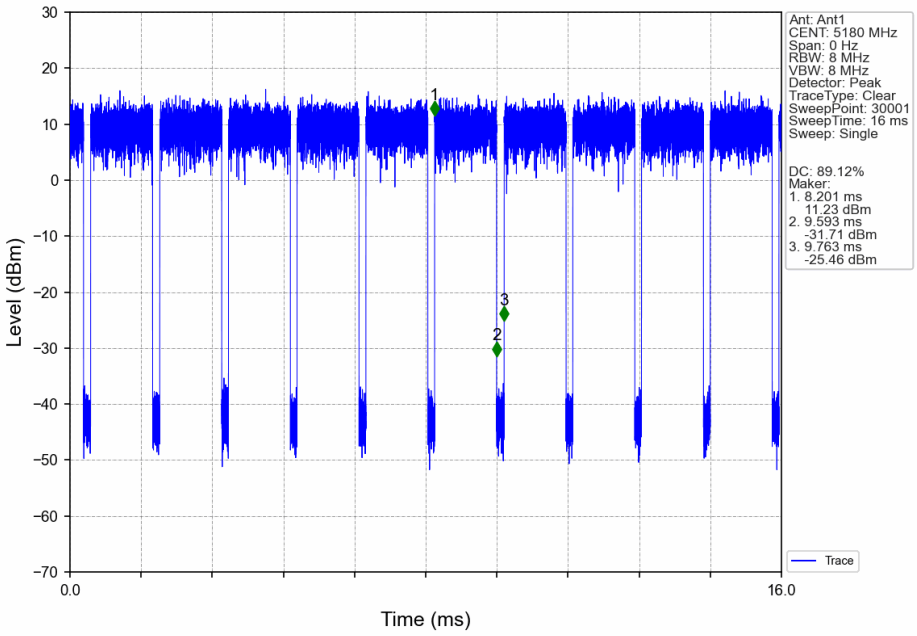
1.1.1 Ant1

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	1.392	1.562	89.12	0.50	1.17
		5200	1.393	1.563	89.12	0.50	1.58
		5240	1.392	1.596	87.22	0.59	3.43
		5745	1.393	1.563	89.12	0.50	1.55
		5785	1.392	1.576	88.32	0.54	2.30
		5825	1.393	1.563	89.12	0.50	1.58
802.11n (HT20)	SISO	5180	1.174	1.345	87.29	0.59	1.79
		5200	1.174	1.345	87.29	0.59	1.80
		5240	1.174	1.345	87.29	0.59	1.83
		5745	1.174	1.345	87.29	0.59	1.82
		5785	1.175	1.345	87.36	0.59	1.80
		5825	1.174	1.345	87.29	0.59	1.79
802.11n (HT40)	SISO	5190	0.587	0.739	79.43	1.00	0.99
		5230	0.587	0.757	77.54	1.10	2.91
		5755	0.588	0.757	77.68	1.10	2.88
		5795	0.587	0.766	76.63	1.16	3.81
802.11ac (VHT20)	SISO	5180	1.186	1.357	87.40	0.58	1.78
		5200	1.185	7.417	15.98	7.97	72.30
		5240	1.185	1.356	87.39	0.59	1.78
		5745	1.185	1.356	87.39	0.59	1.79
		5785	1.186	1.357	87.40	0.58	1.29
		5825	1.185	1.356	87.39	0.59	1.79
802.11ac (VHT40)	SISO	5190	0.592	0.761	77.79	1.09	2.85
		5230	0.592	0.761	77.79	1.09	2.88
		5755	0.592	0.770	76.88	1.14	3.79
		5795	0.591	0.761	77.66	1.10	2.85
802.11ac (VHT80)	SISO	5210	0.302	0.448	67.41	1.71	1.46
		5775	0.296	0.448	66.07	1.80	1.38

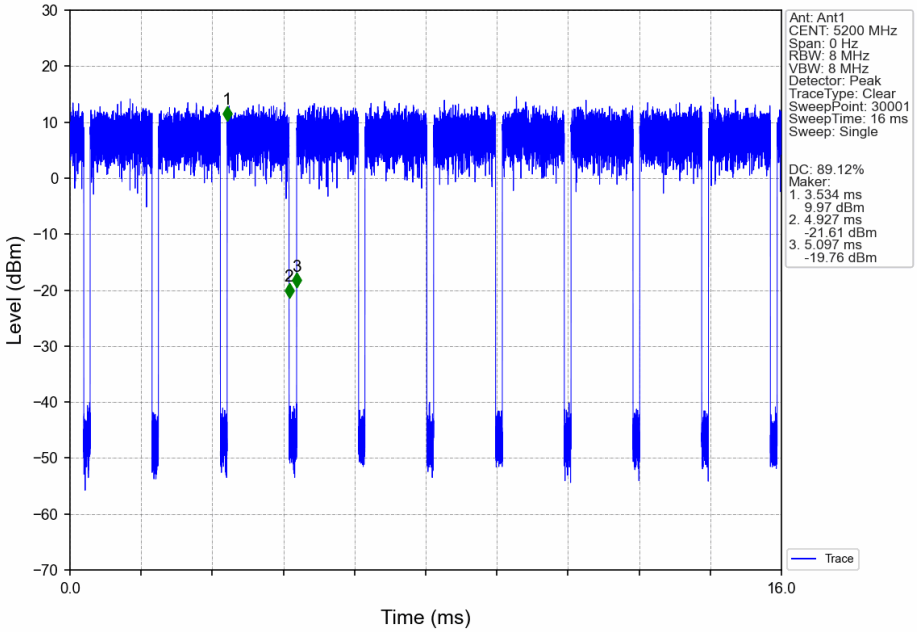
1.2 Test Graph

1.2.1 Ant1

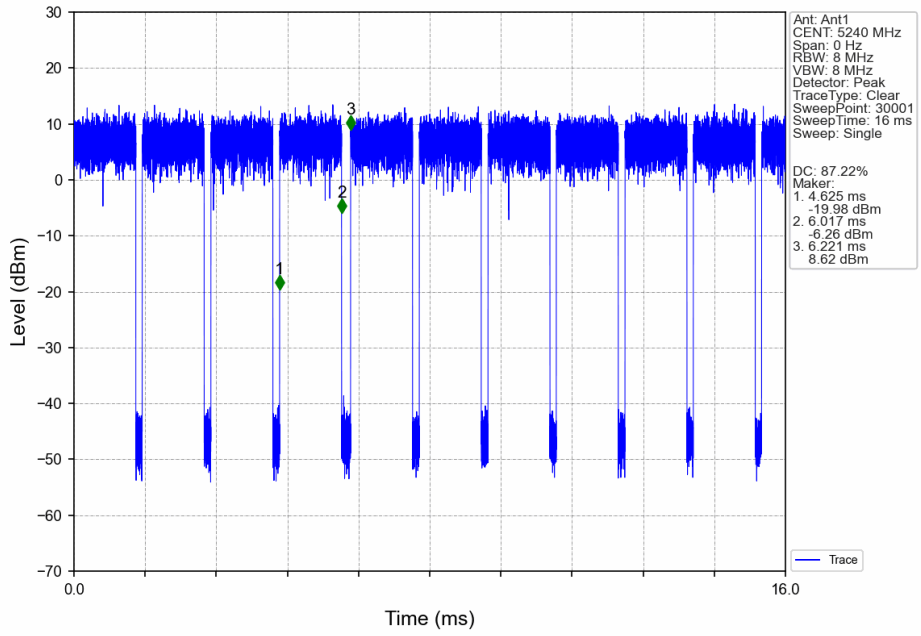
802.11a_LCH_5180MHz_Ant1_NTNV



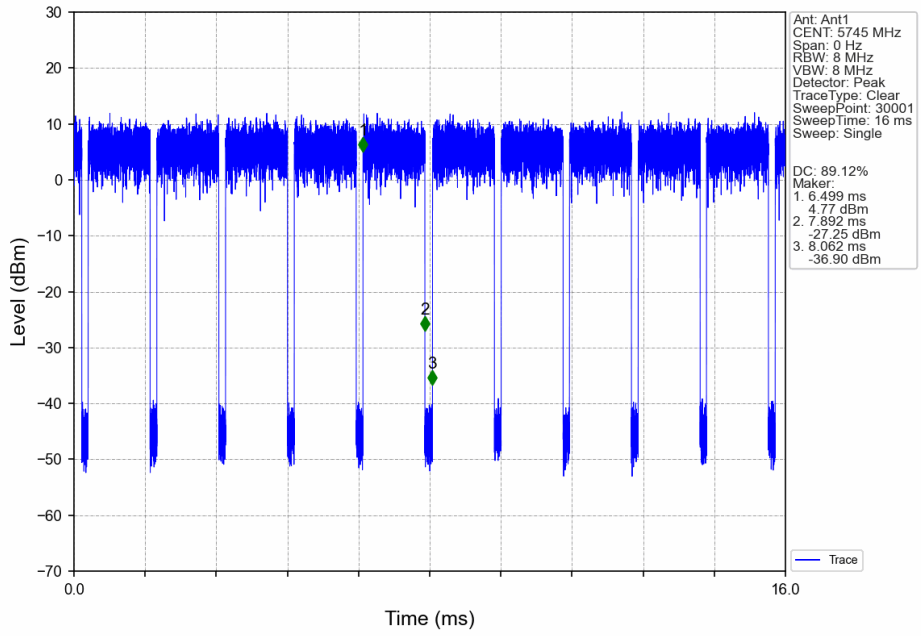
802.11a_MCH_5200MHz_Ant1_NTNV



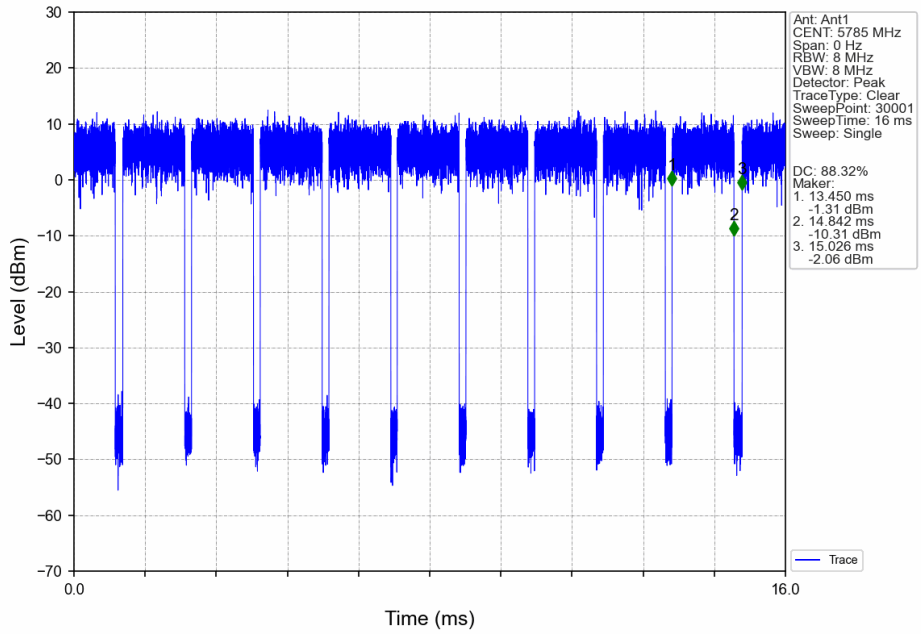
802.11a_HCH_5240MHz_Ant1_NTNV



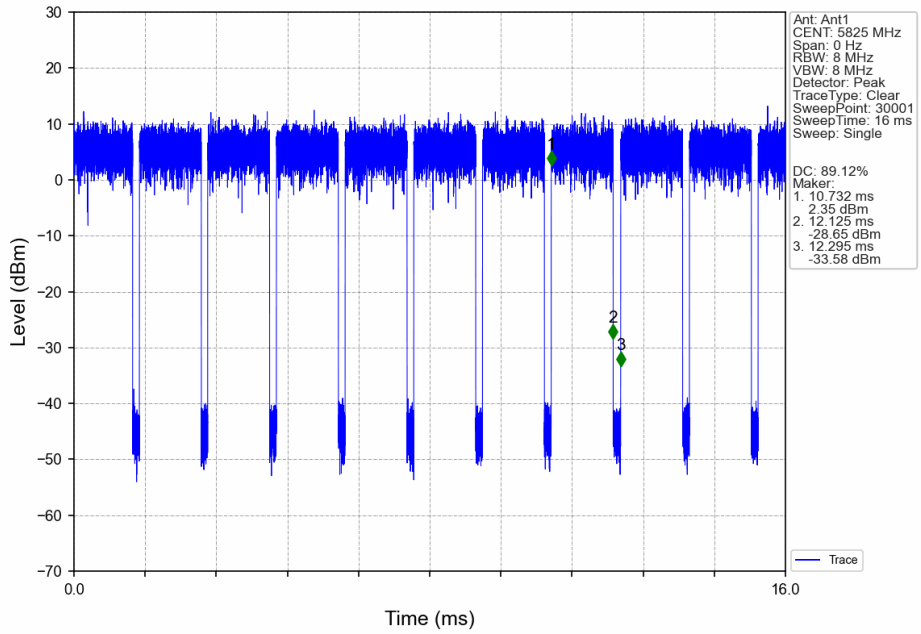
802.11a_LCH_5745MHz_Ant1_NTNV



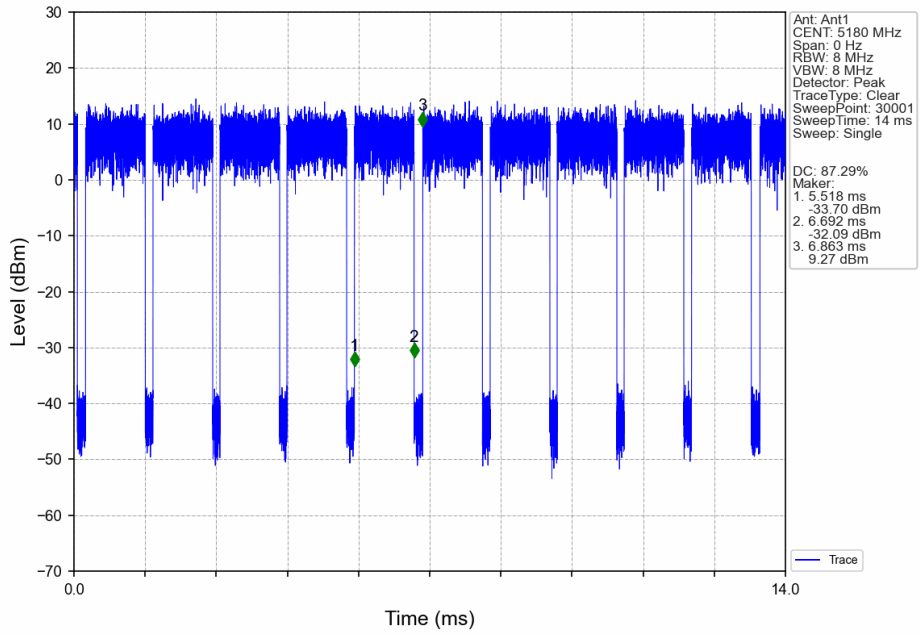
802.11a_MCH_5785MHz_Ant1_NTNV



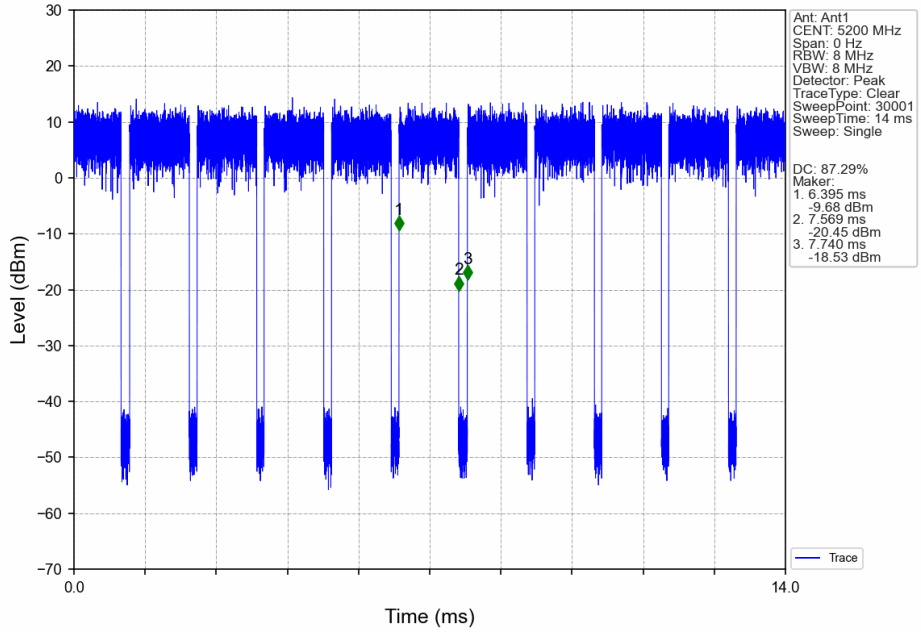
802.11a_HCH_5825MHz_Ant1_NTNV



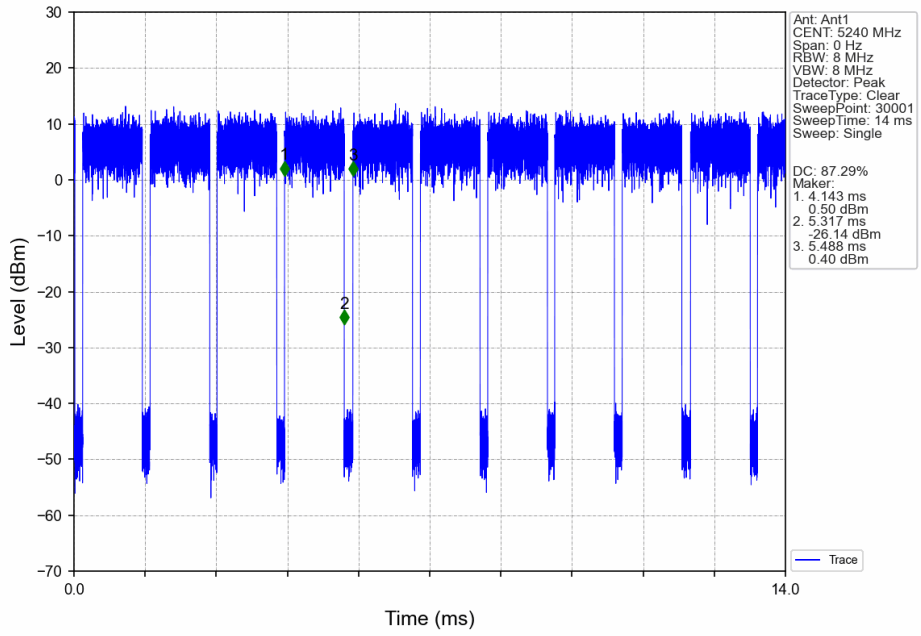
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



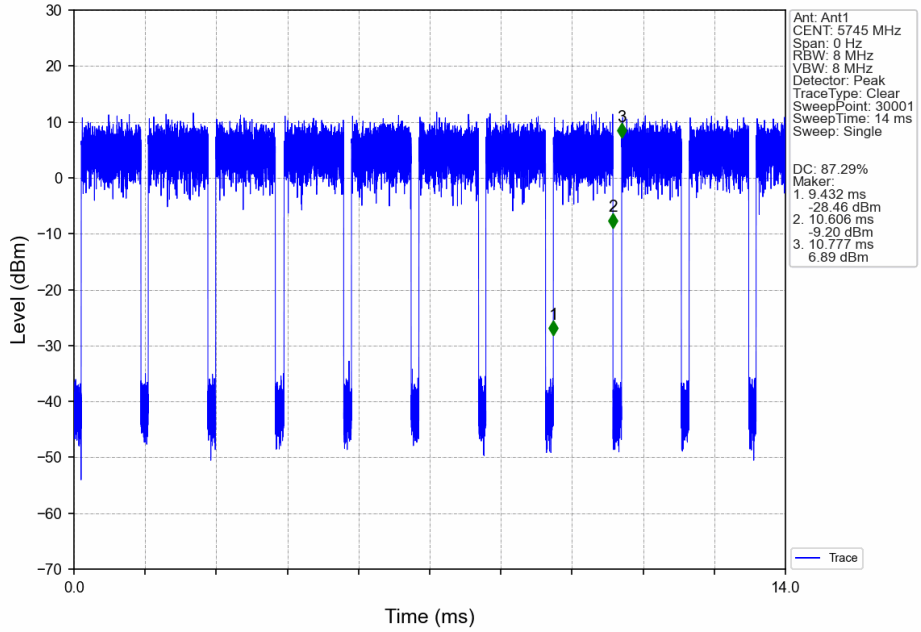
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



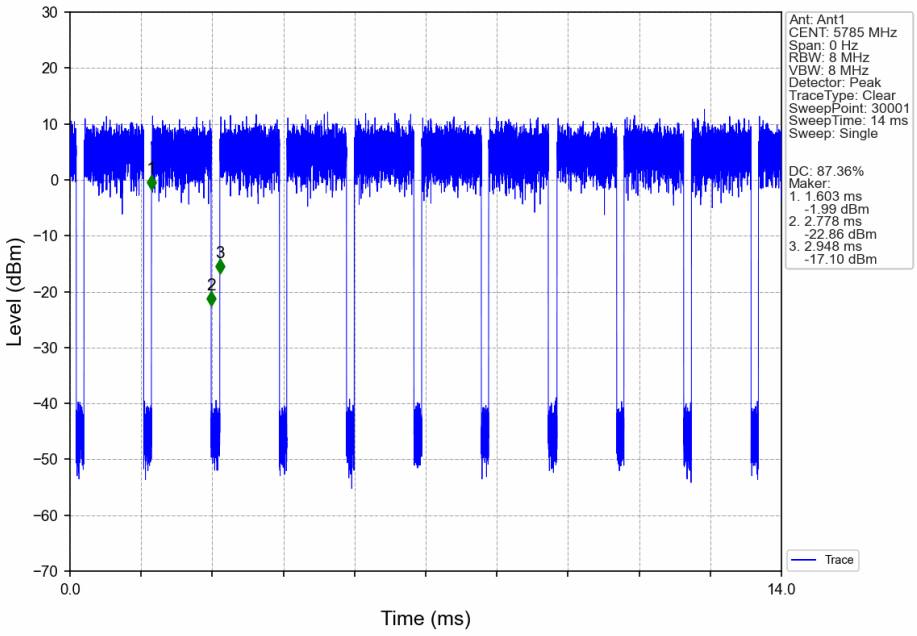
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



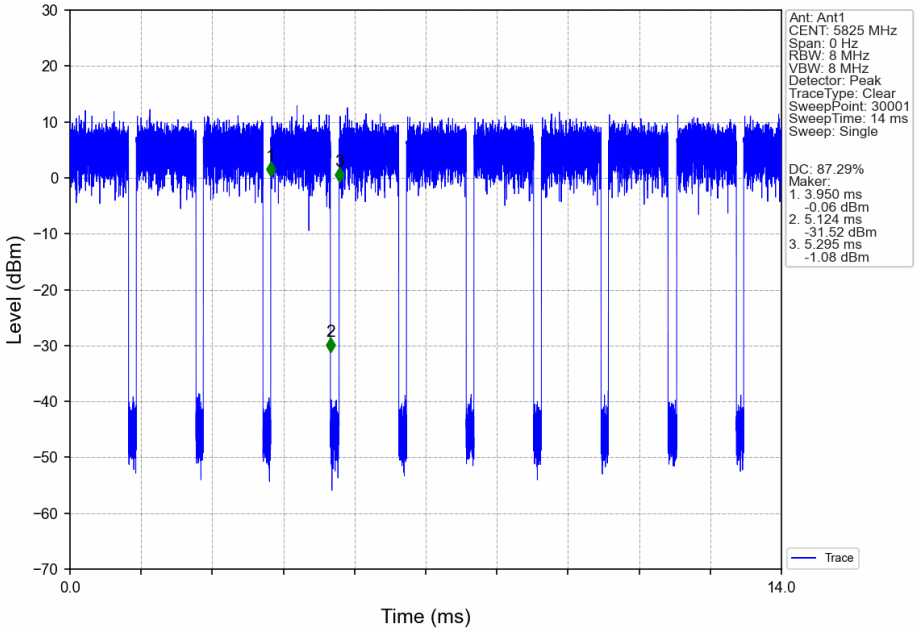
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



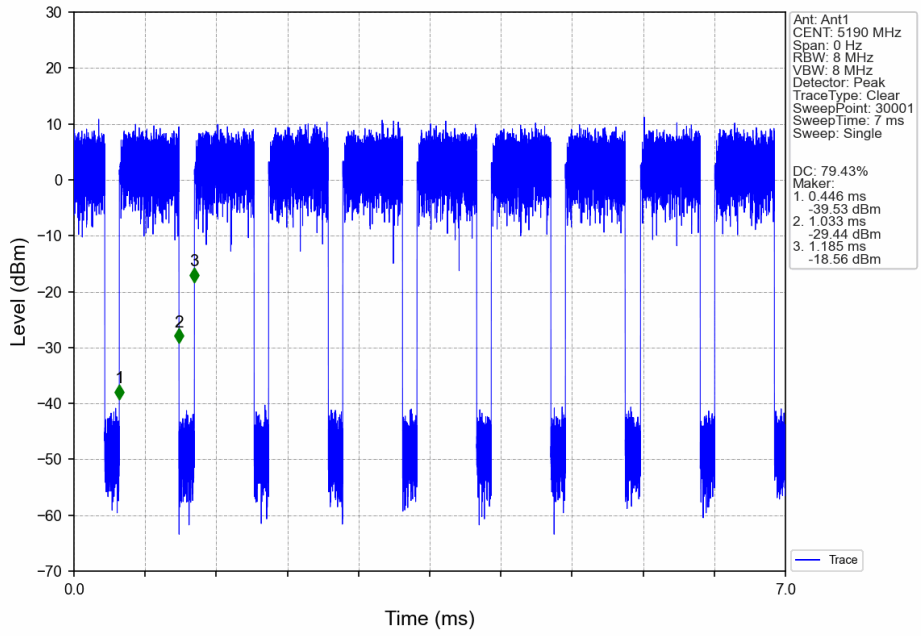
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



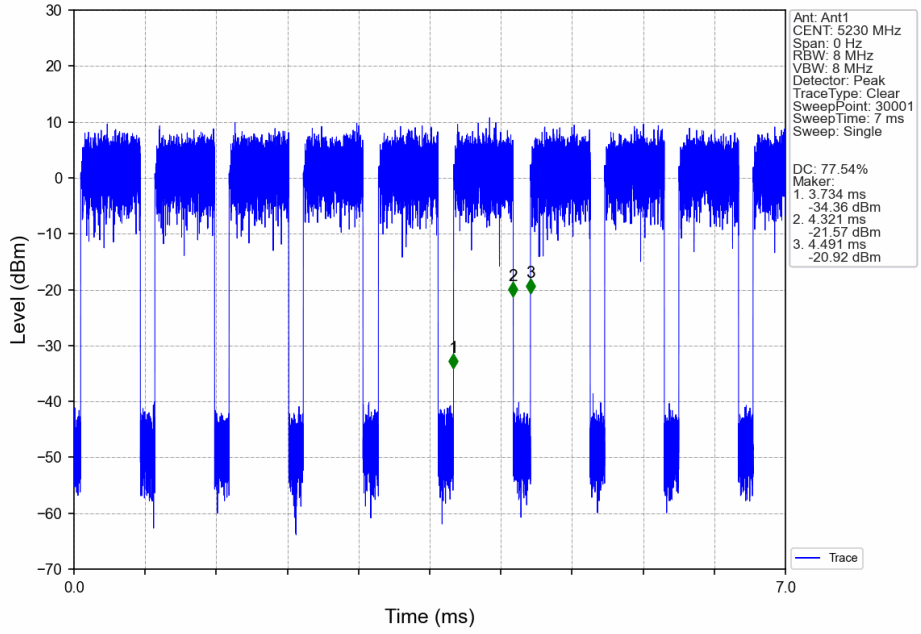
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



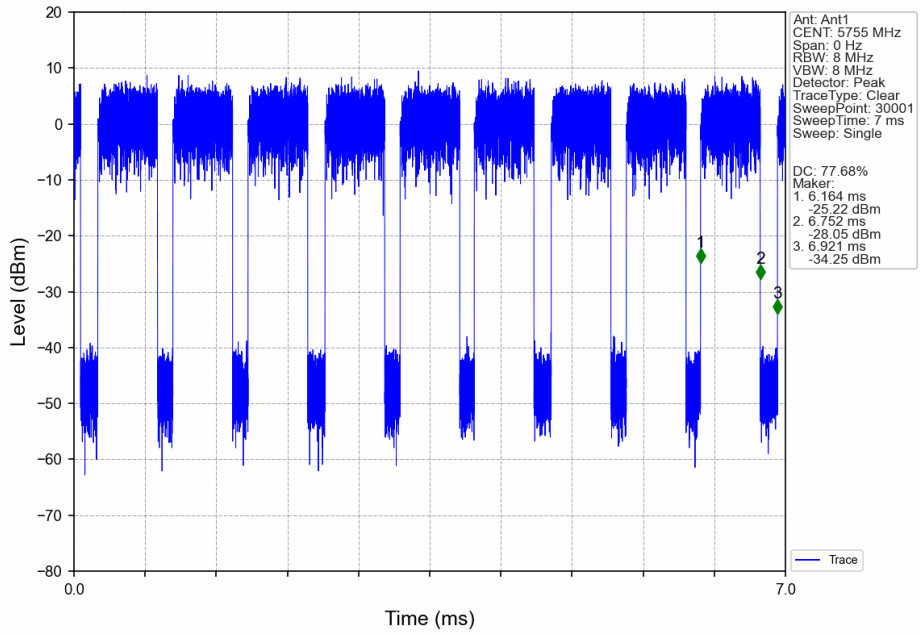
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



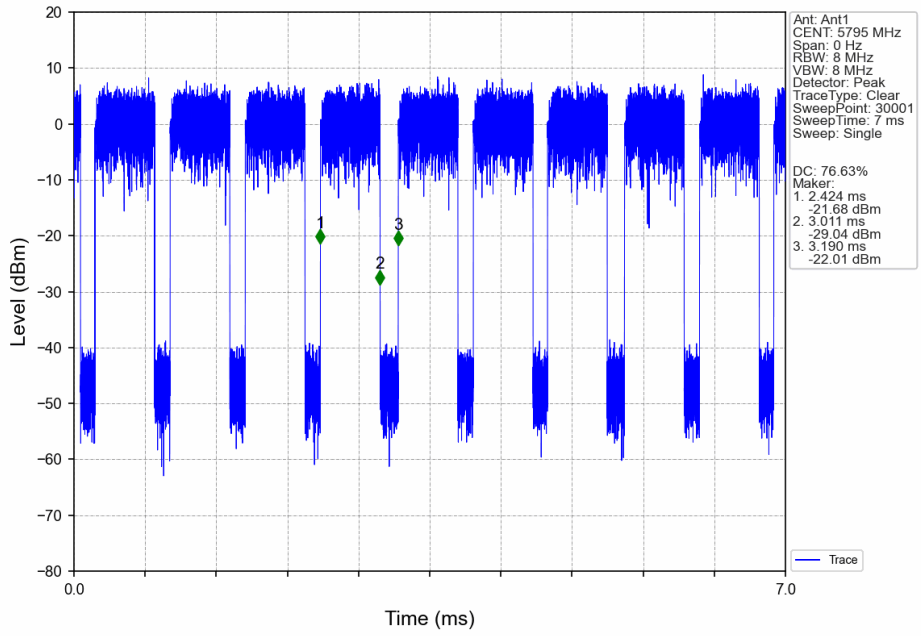
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



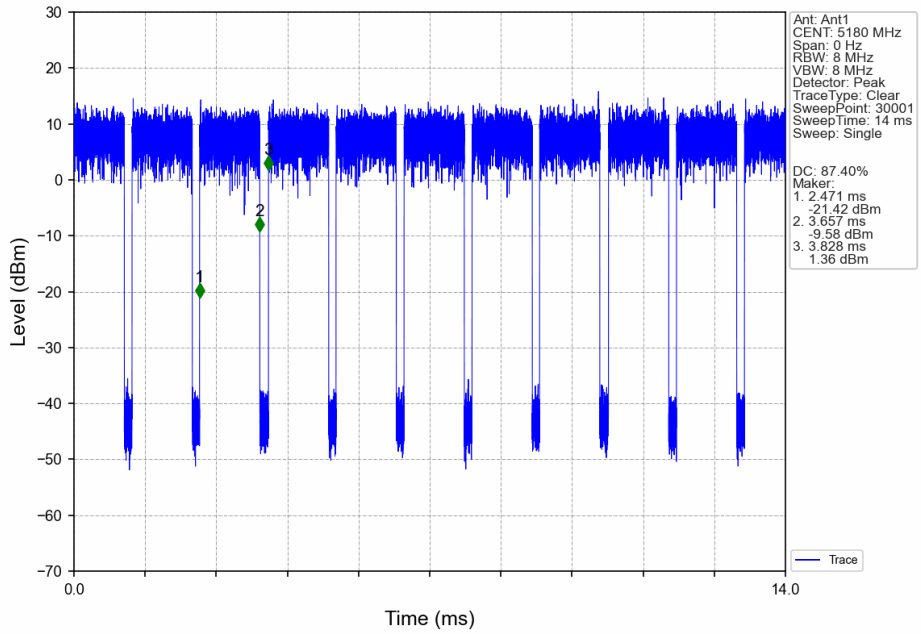
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



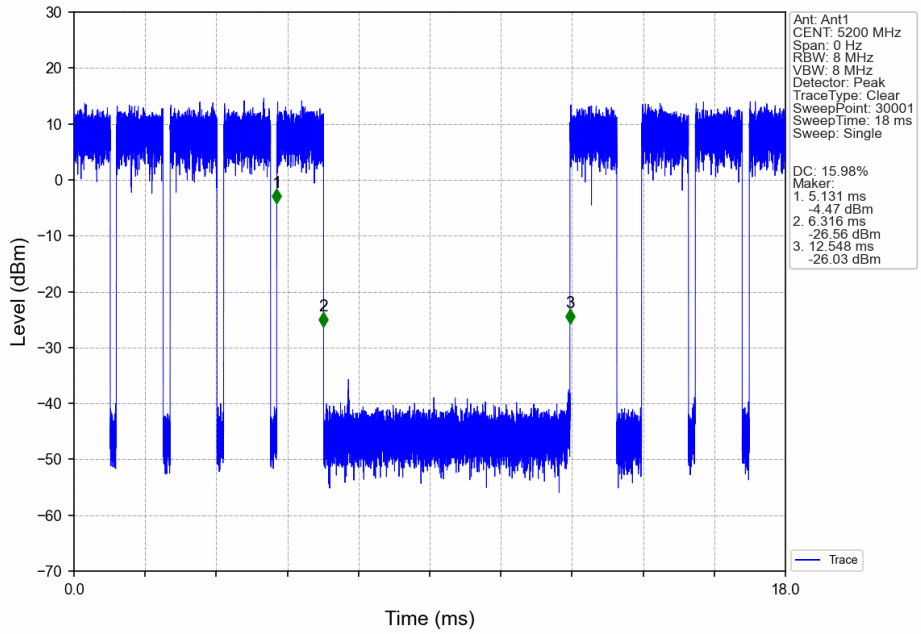
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



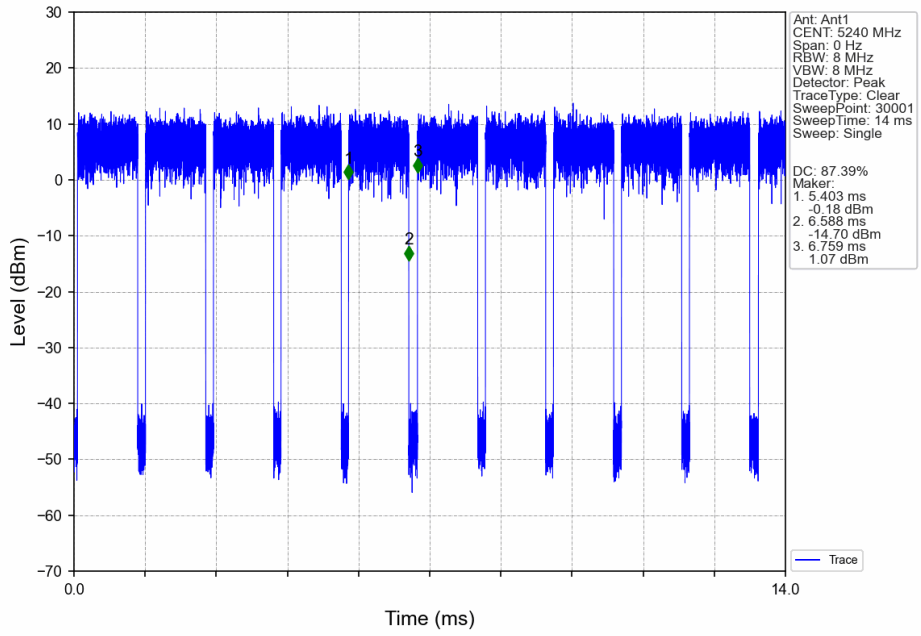
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



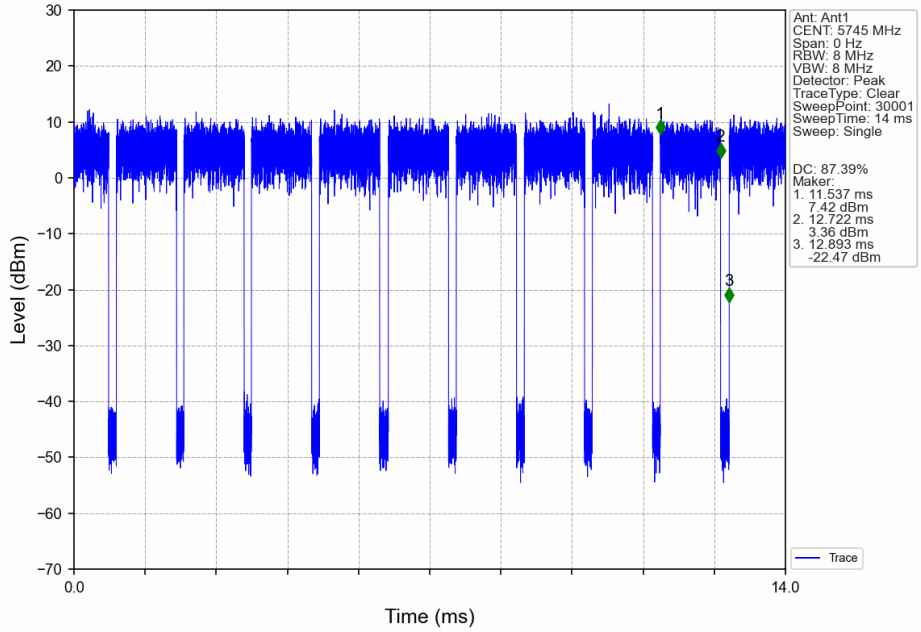
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



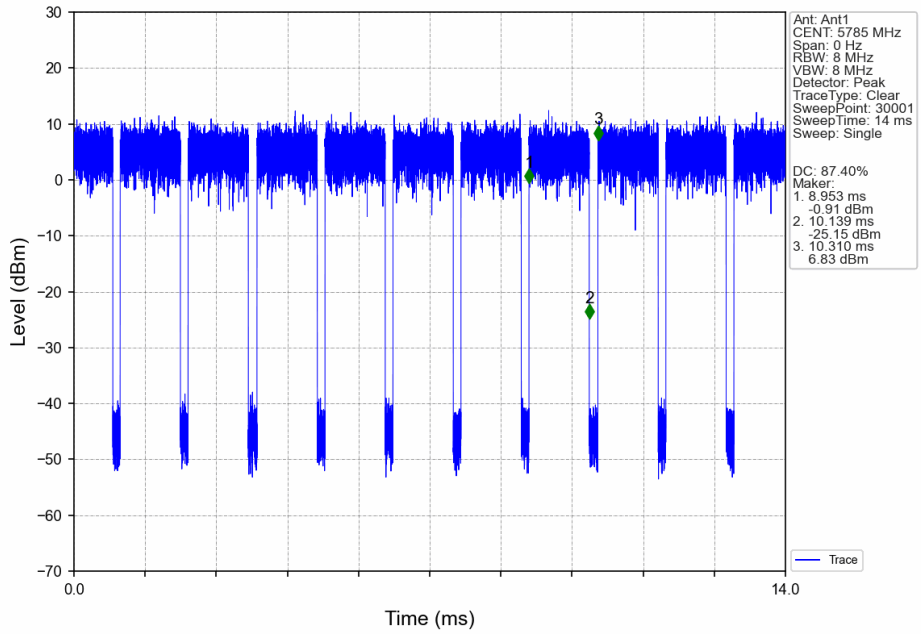
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



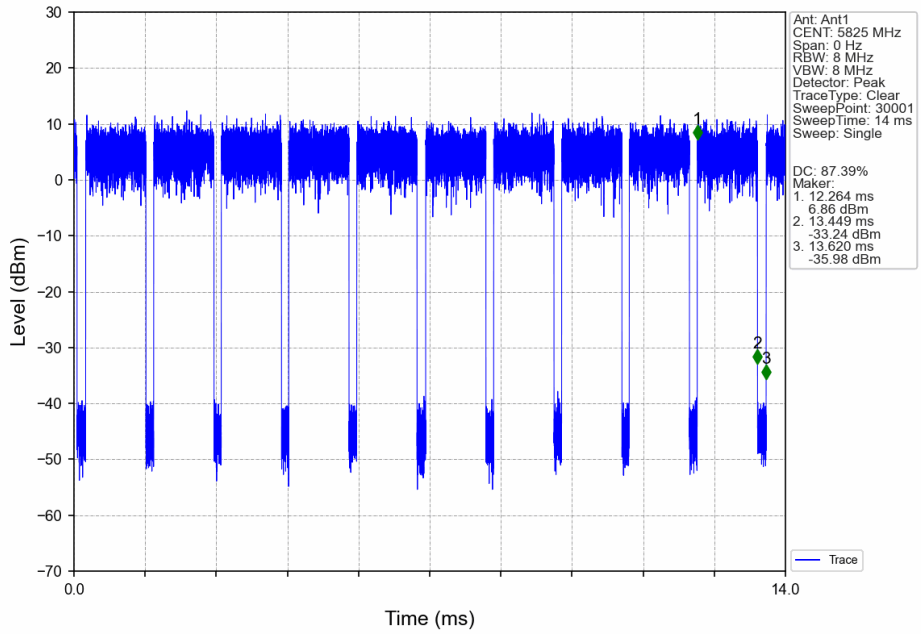
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



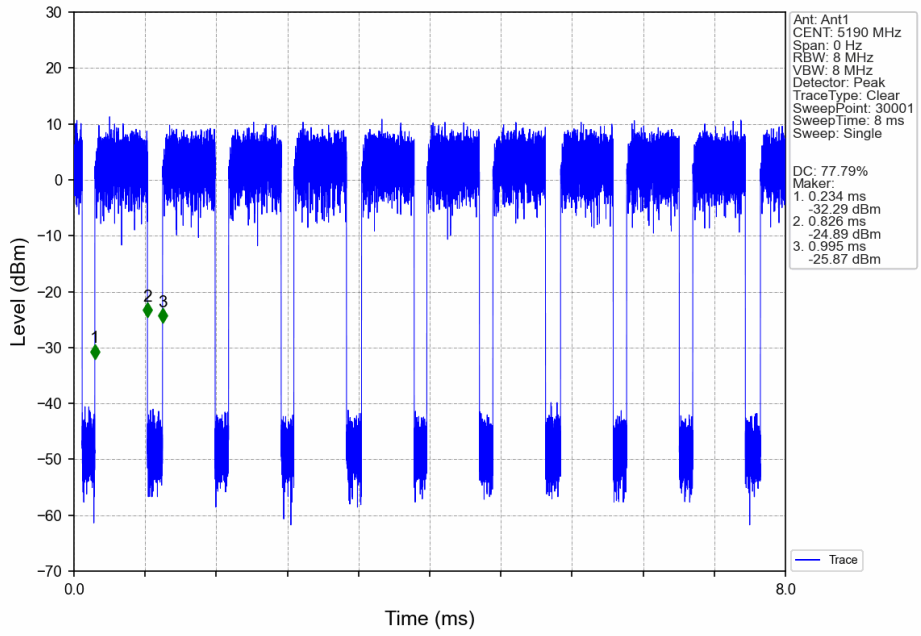
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



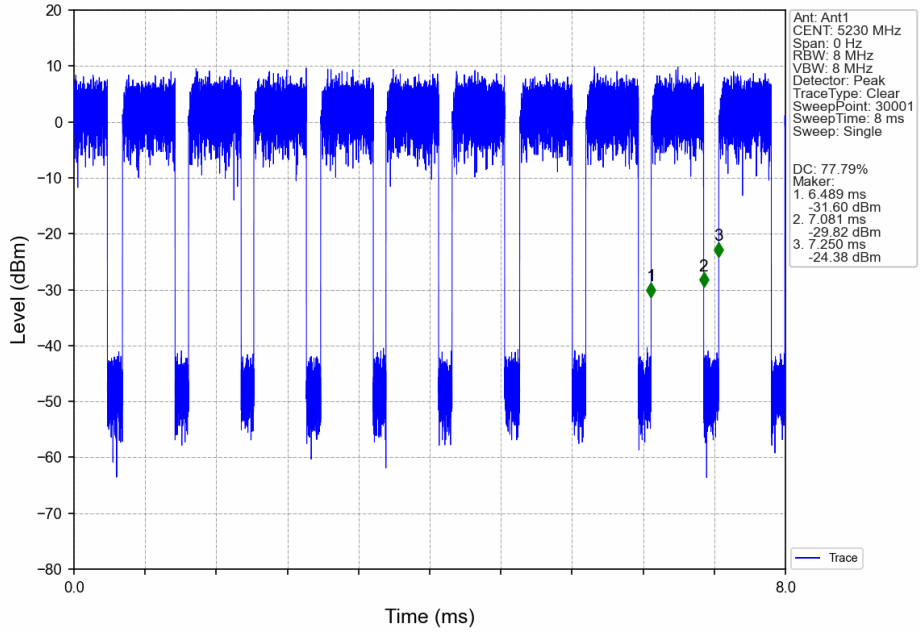
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



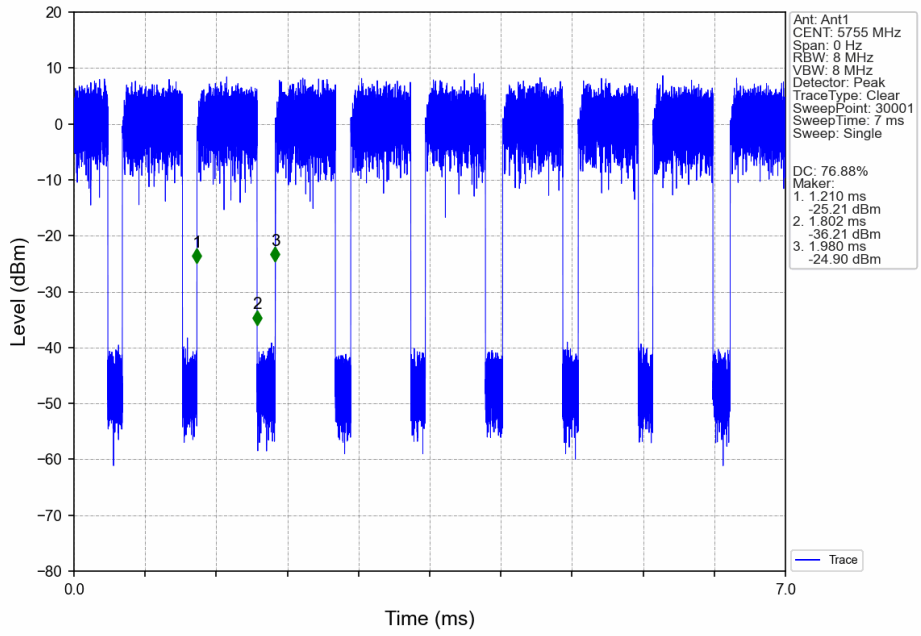
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



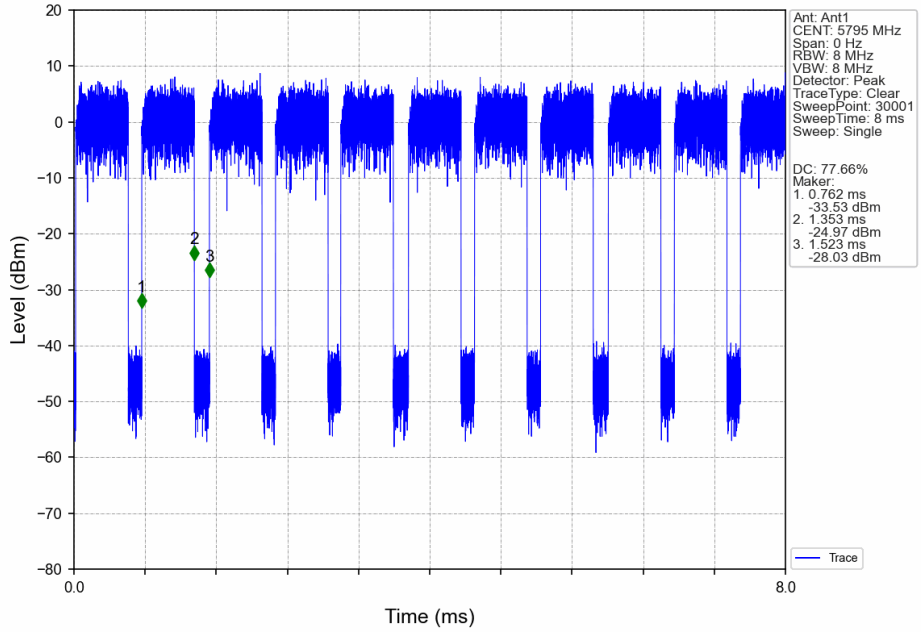
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



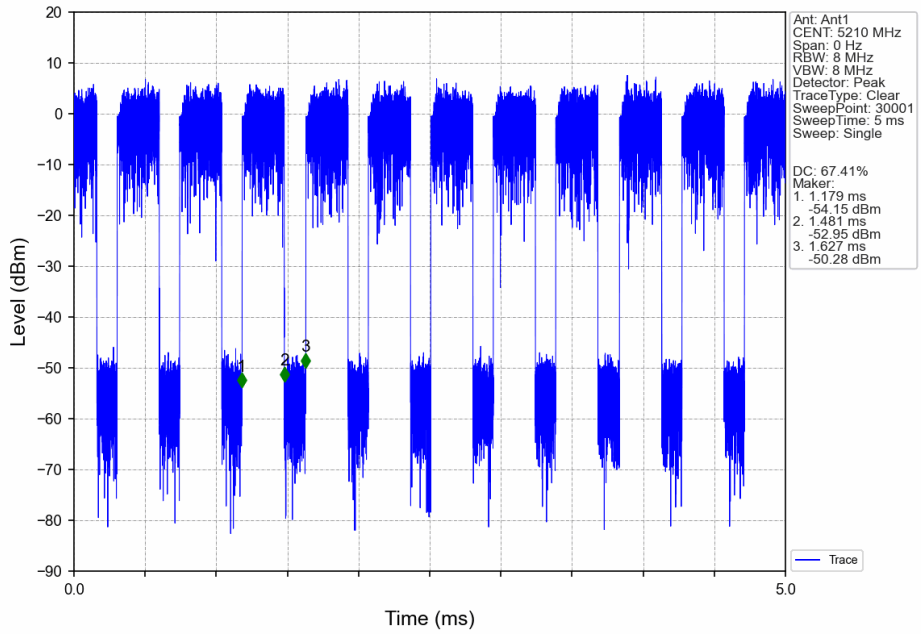
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



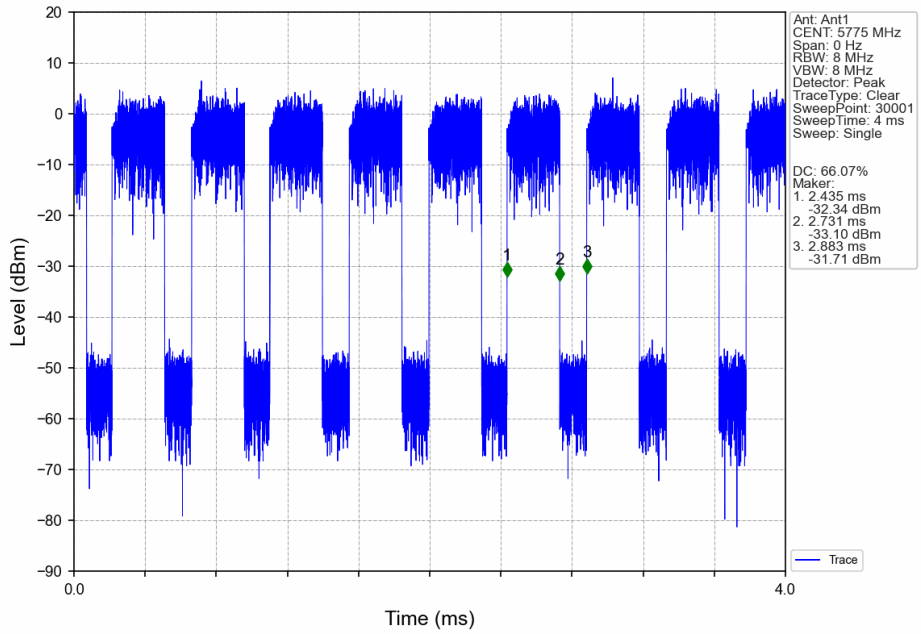
802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_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	16.717	/	Pass
		5200	1	16.626	/	Pass
		5240	1	16.685	/	Pass
		5745	1	16.607	/	Pass
		5785	1	16.648	/	Pass
		5825	1	16.603	/	Pass
802.11n (HT20)	SISO	5180	1	17.773	/	Pass
		5200	1	17.778	/	Pass
		5240	1	17.737	/	Pass
		5745	1	17.754	/	Pass
		5785	1	17.726	/	Pass
		5825	1	17.694	/	Pass
802.11n (HT40)	SISO	5190	1	37.078	/	Pass
		5230	1	37.144	/	Pass
		5755	1	37.019	/	Pass
		5795	1	37.106	/	Pass
802.11ac (VHT20)	SISO	5180	1	17.702	/	Pass
		5200	1	17.732	/	Pass
		5240	1	17.695	/	Pass
		5745	1	17.680	/	Pass
		5785	1	17.677	/	Pass
		5825	1	17.644	/	Pass
802.11ac (VHT40)	SISO	5190	1	37.083	/	Pass
		5230	1	37.244	/	Pass
		5755	1	36.854	/	Pass
		5795	1	36.867	/	Pass
802.11ac (VHT80)	SISO	5210	1	75.840	/	Pass
		5775	1	75.416	/	Pass

2.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	28.017	/	Pass
		5200	1	26.710	/	Pass
		5240	1	27.866	/	Pass
802.11n (HT20)	SISO	5180	1	40.704	/	Pass
		5200	1	38.515	/	Pass
		5240	1	40.472	/	Pass
802.11n (HT40)	SISO	5190	1	71.185	/	Pass
		5230	1	76.873	/	Pass
802.11ac (VHT20)	SISO	5180	1	37.235	/	Pass
		5200	1	39.808	/	Pass
		5240	1	35.537	/	Pass
802.11ac (VHT40)	SISO	5190	1	69.900	/	Pass
		5230	1	70.488	/	Pass

802.11ac (VHT80)	SISO	5210	1	183.155	/	Pass

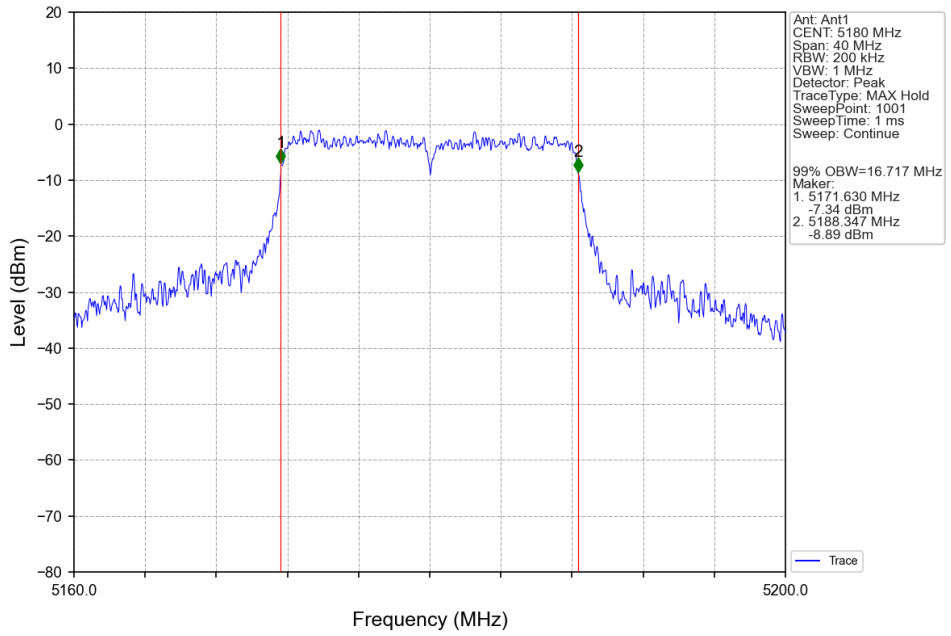
2.1.3 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	16.405	>=0.5	Pass
		5785	1	16.397	>=0.5	Pass
		5825	1	16.438	>=0.5	Pass
802.11n (HT20)	SISO	5745	1	17.453	>=0.5	Pass
		5785	1	17.430	>=0.5	Pass
		5825	1	17.382	>=0.5	Pass
802.11n (HT40)	SISO	5755	1	36.145	>=0.5	Pass
		5795	1	36.124	>=0.5	Pass
802.11ac (VHT20)	SISO	5745	1	17.628	>=0.5	Pass
		5785	1	17.186	>=0.5	Pass
		5825	1	17.322	>=0.5	Pass
802.11ac (VHT40)	SISO	5755	1	36.154	>=0.5	Pass
		5795	1	36.053	>=0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.375	>=0.5	Pass

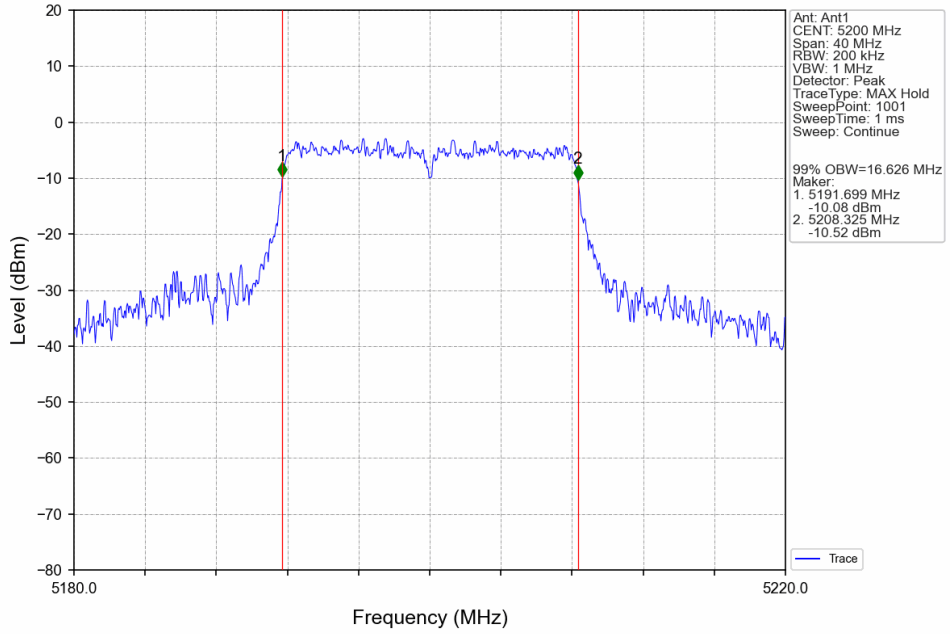
2.2 Test Graph

2.2.1 OBW

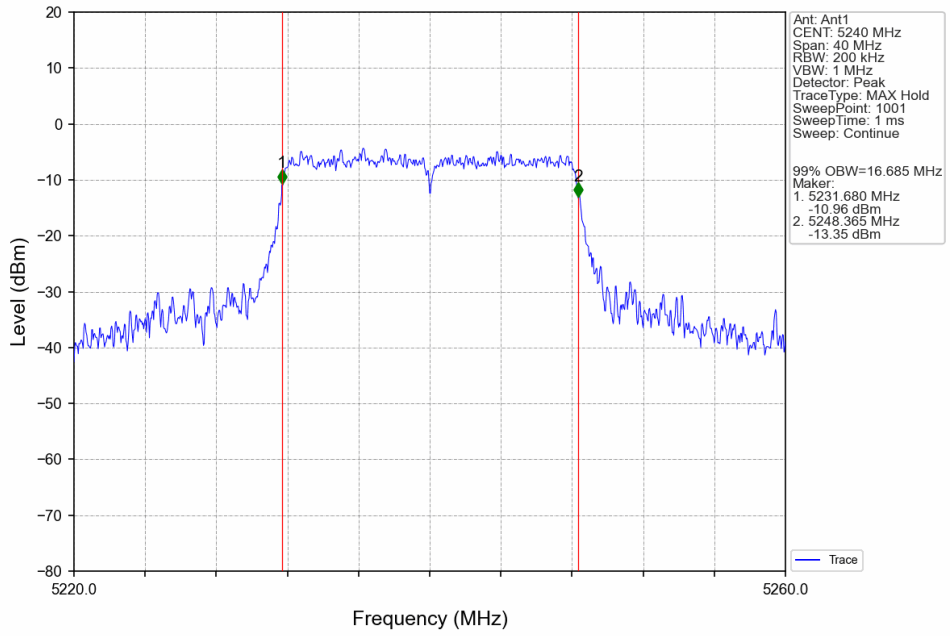
802.11a_LCH_5180MHz_Ant1_NTNV



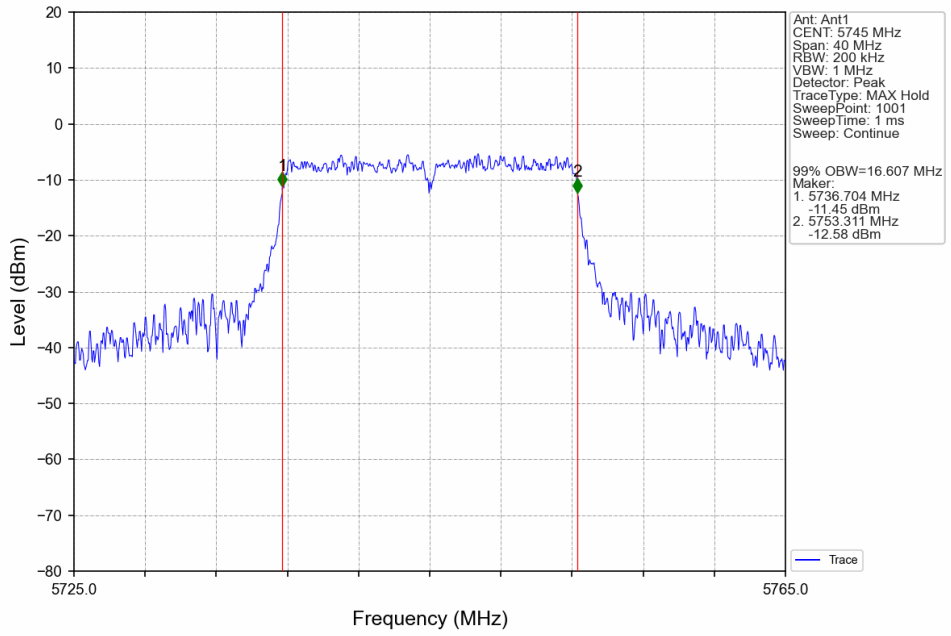
802.11a_MCH_5200MHz_Ant1_NTNV



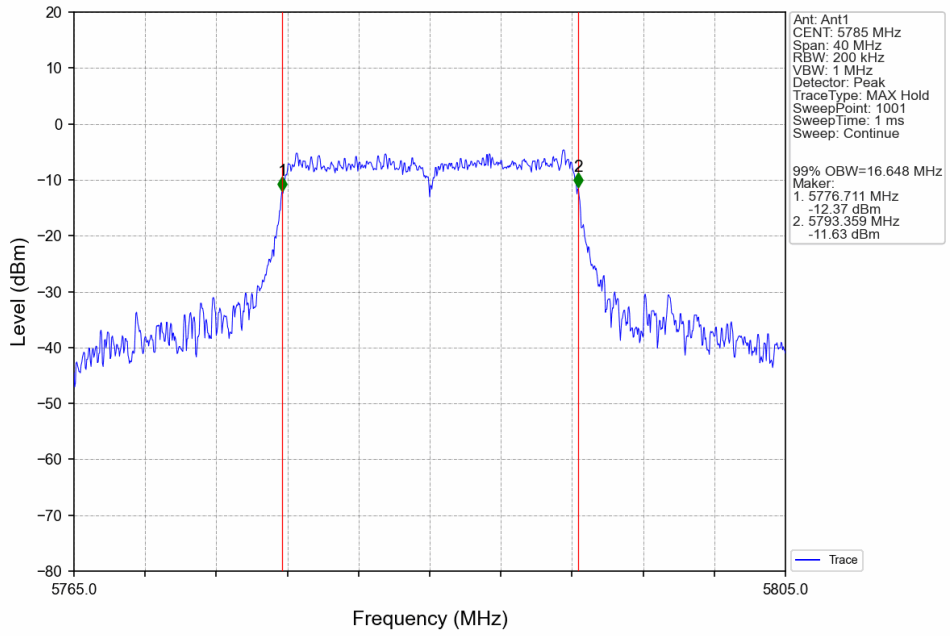
802.11a_HCH_5240MHz_Ant1_NTNV



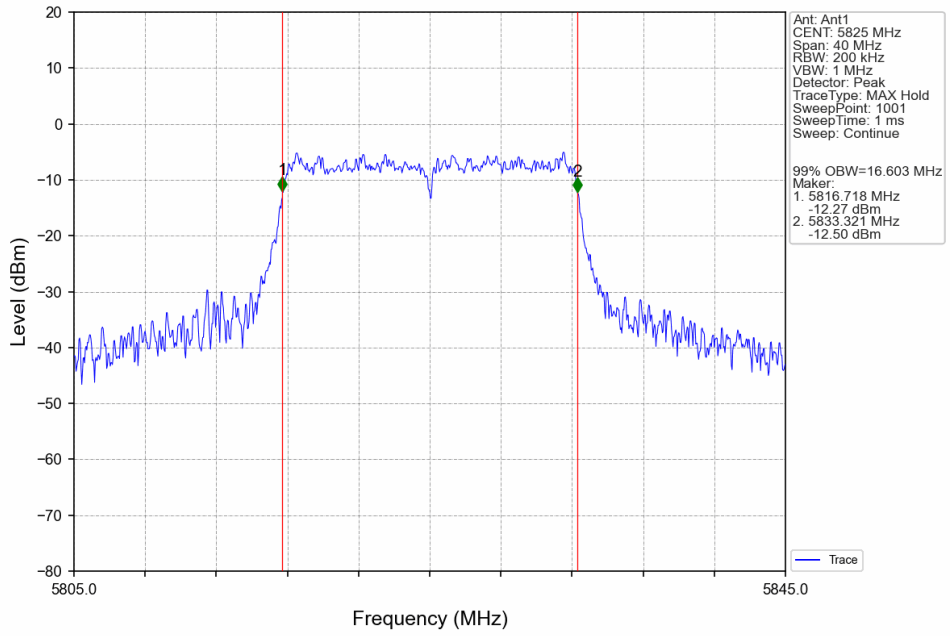
802.11a_LCH_5745MHz_Ant1_NTNV



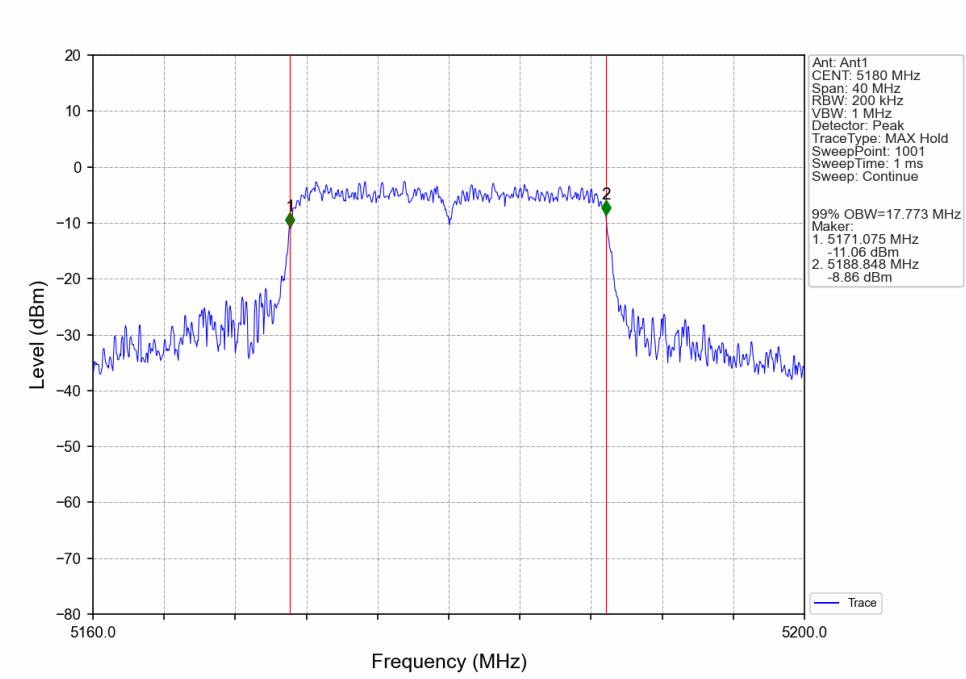
802.11a_MCH_5785MHz_Ant1_NTNV



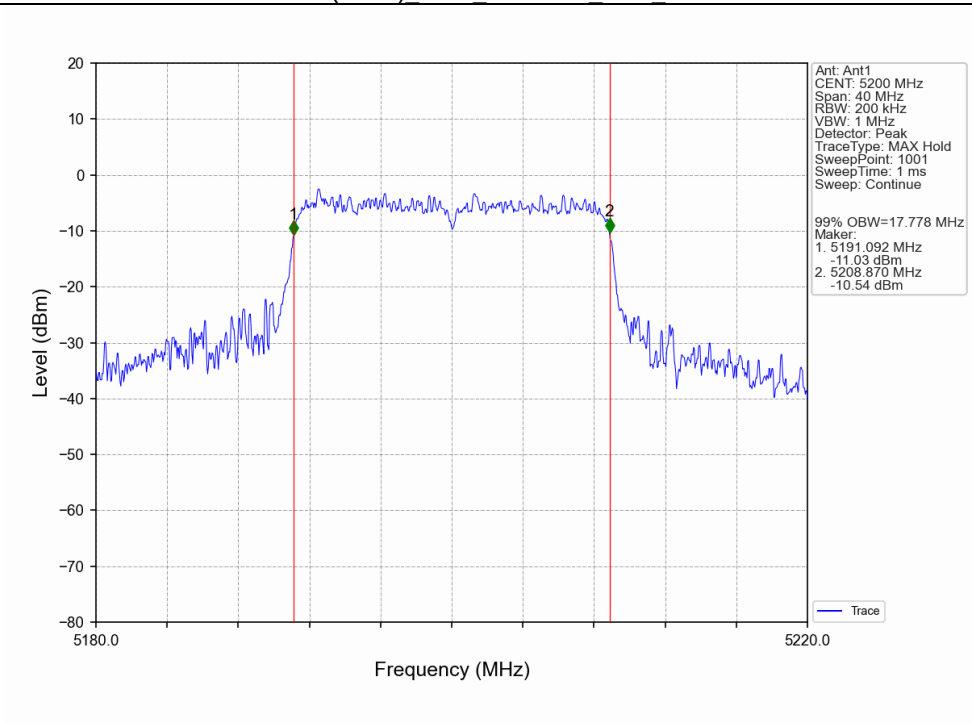
802.11a_HCH_5825MHz_Ant1_NTNV



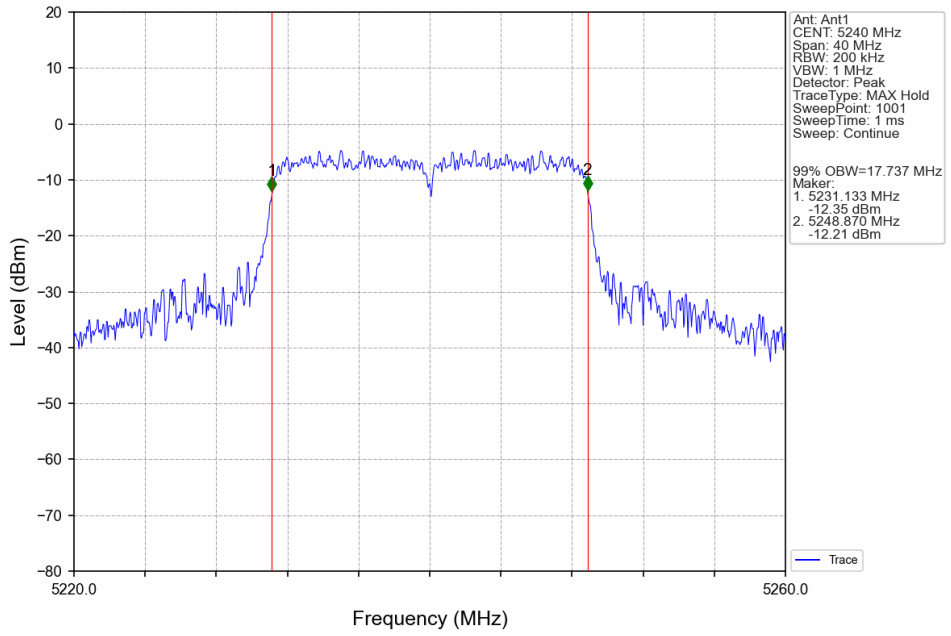
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



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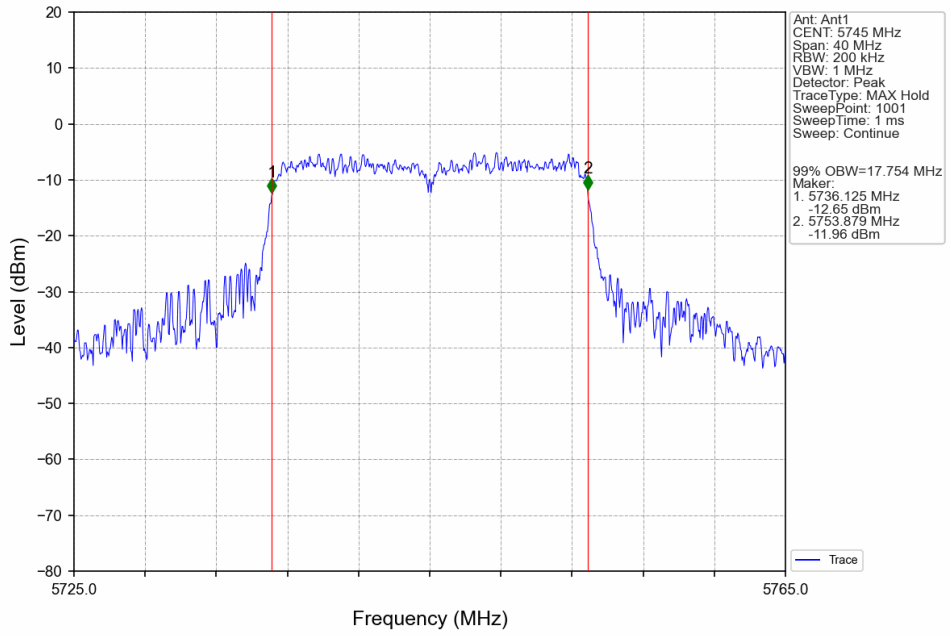

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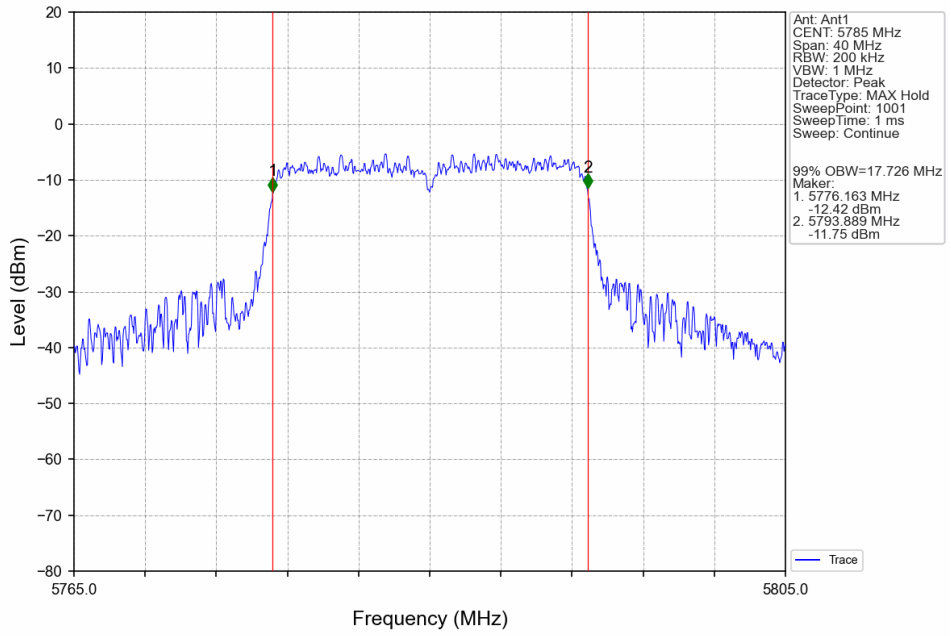

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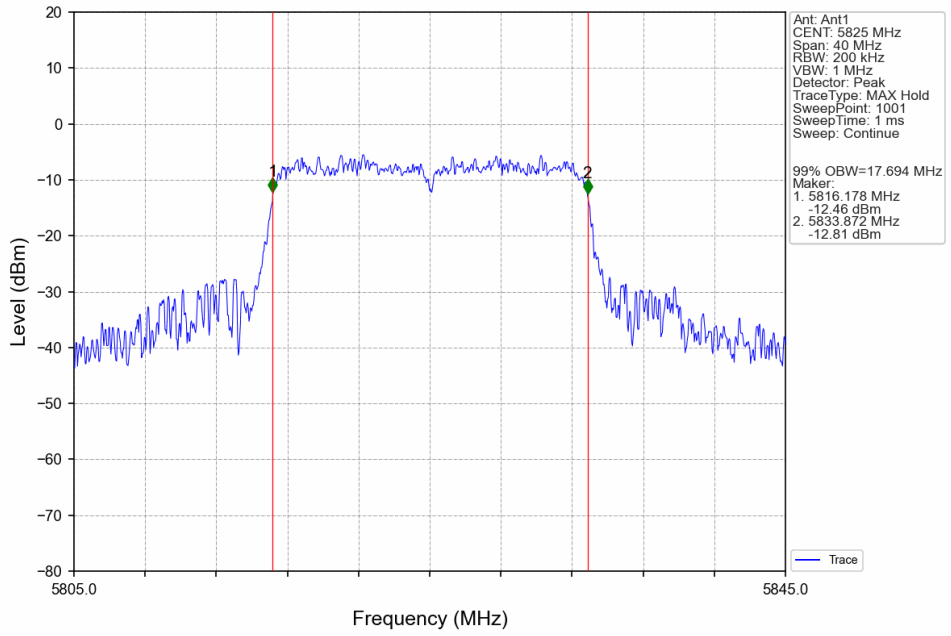

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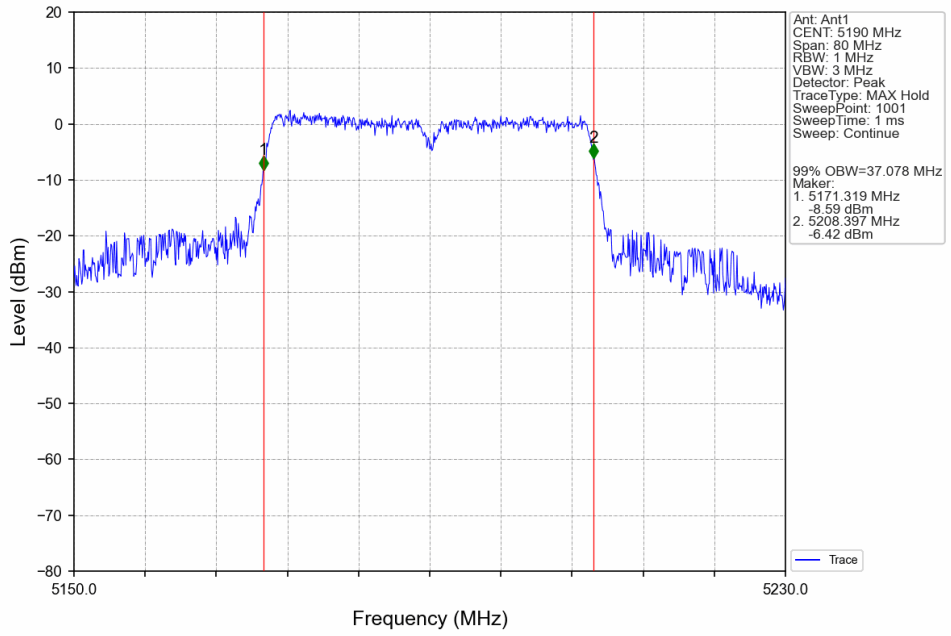

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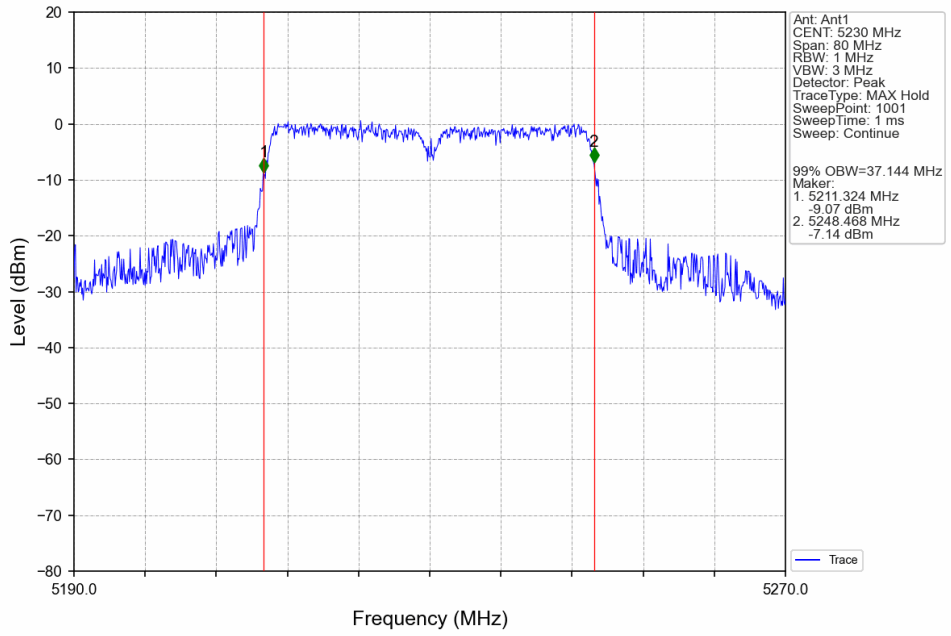

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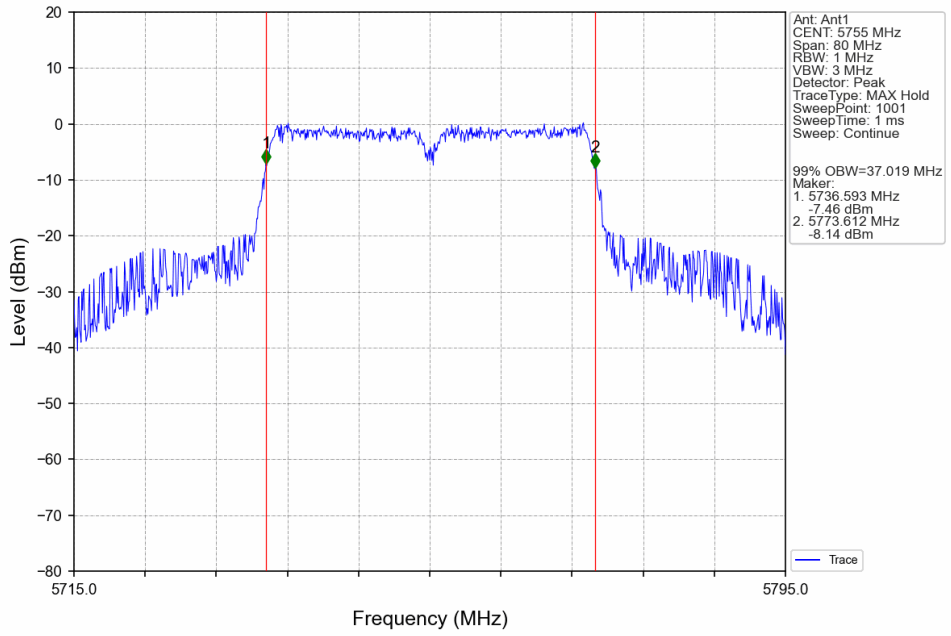

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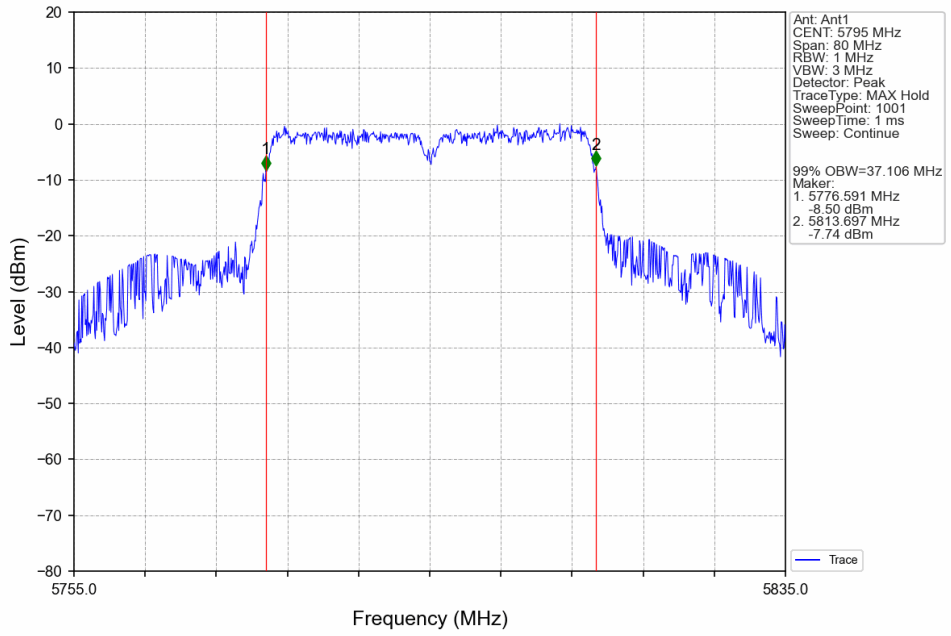

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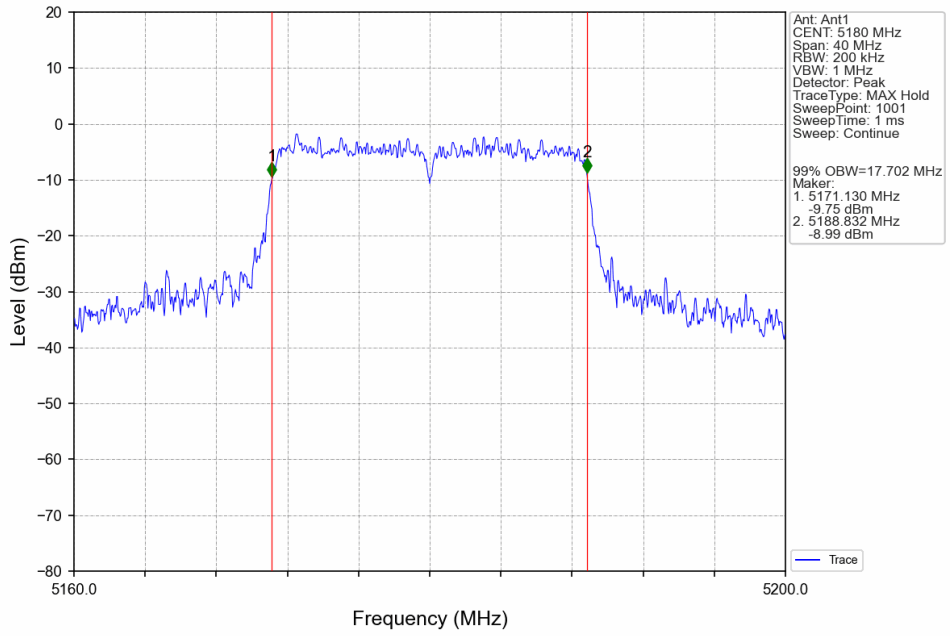

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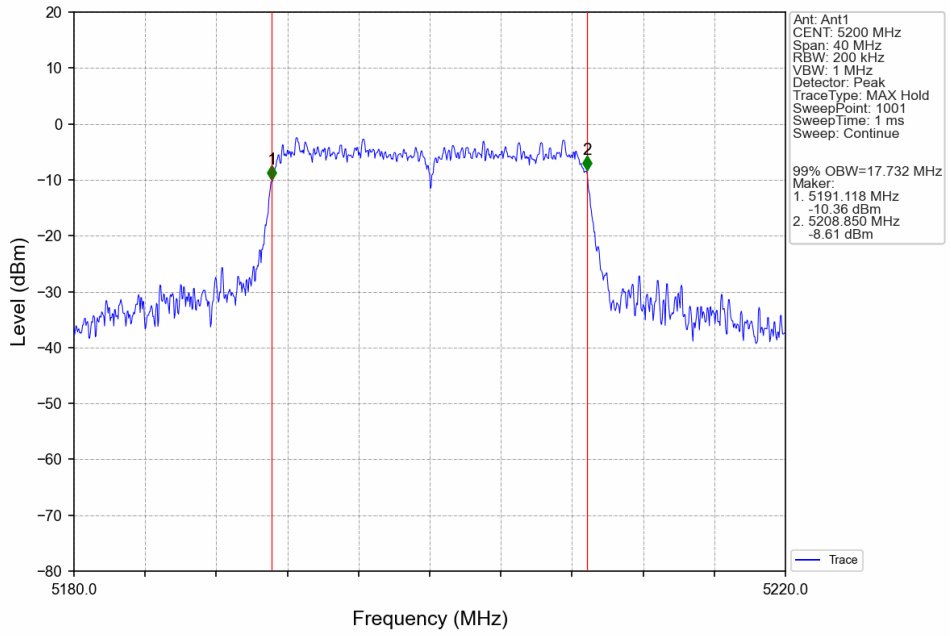

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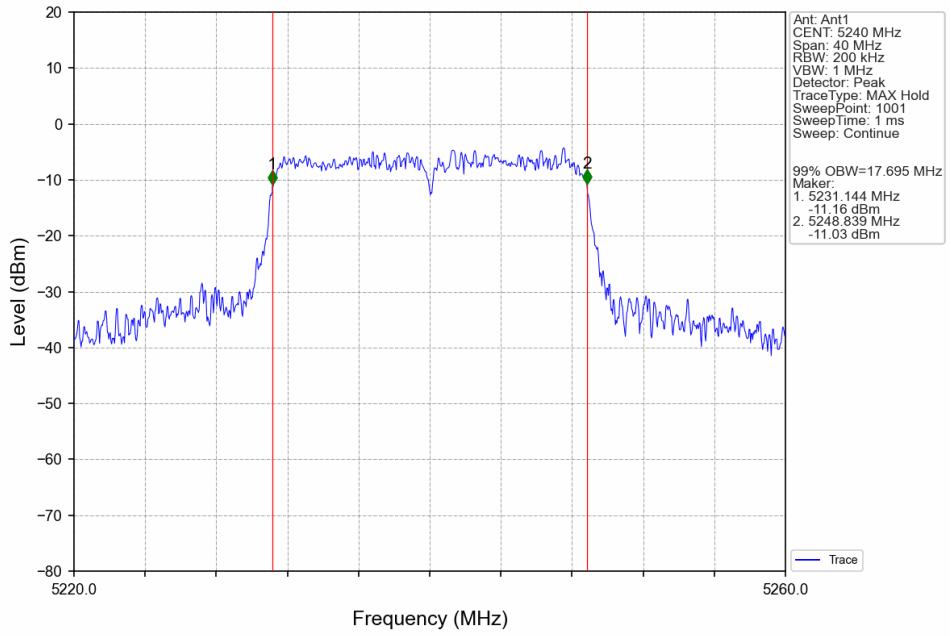

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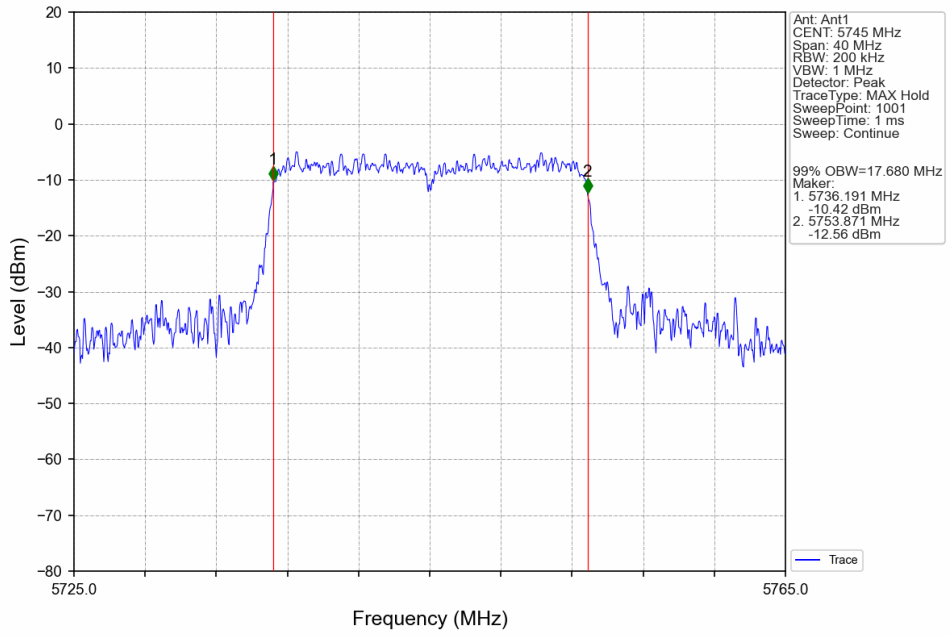
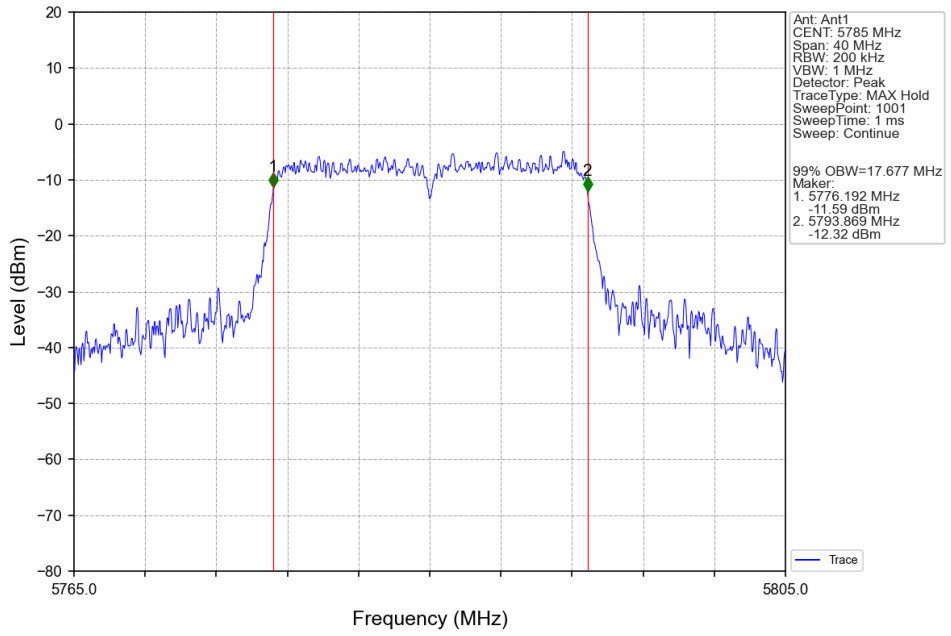
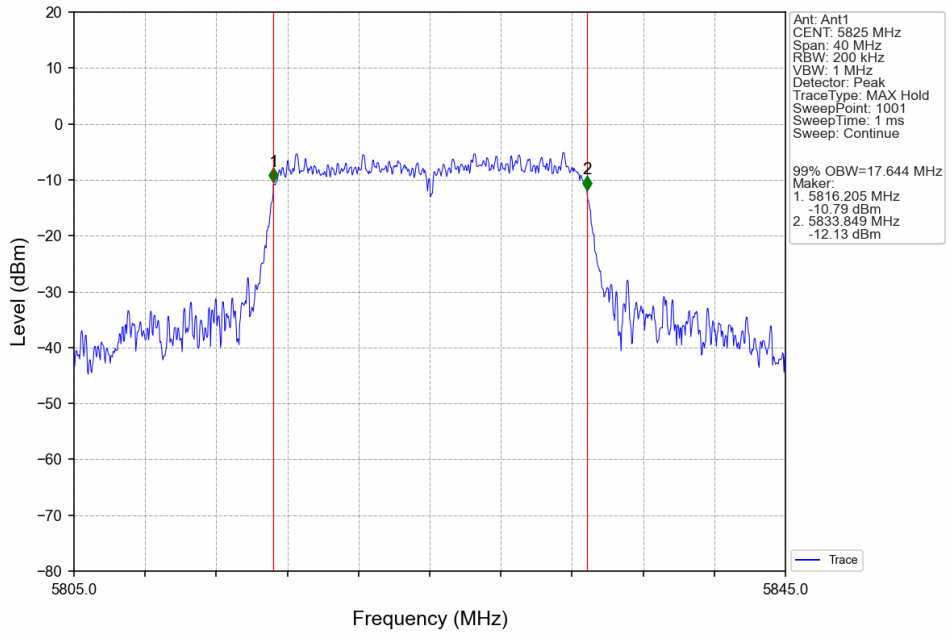


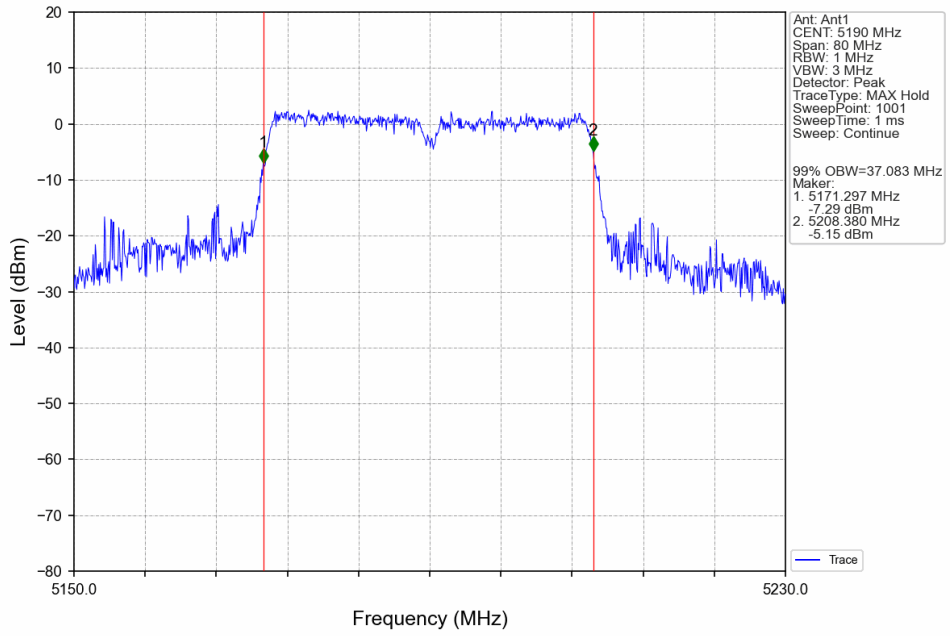
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



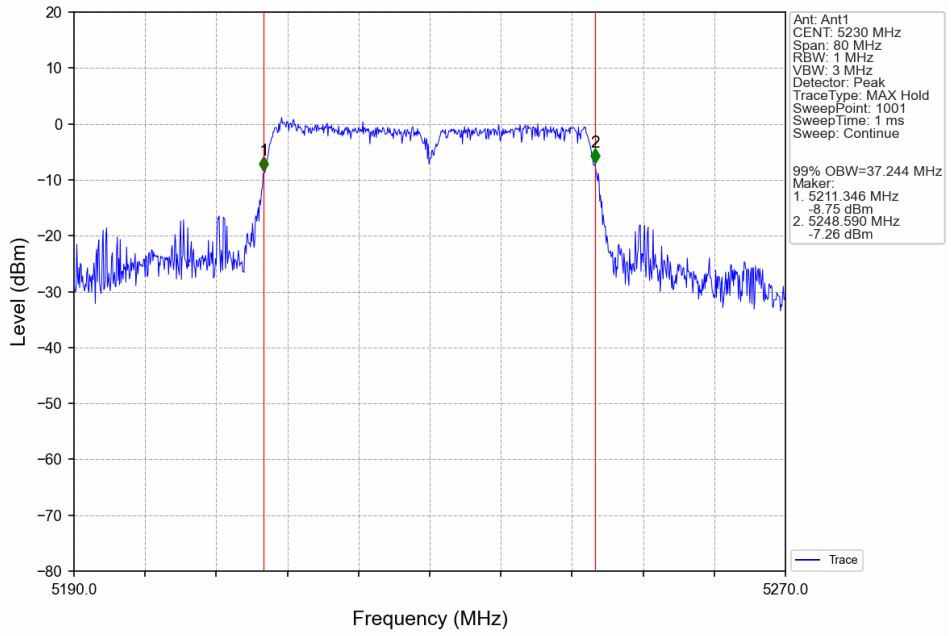
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



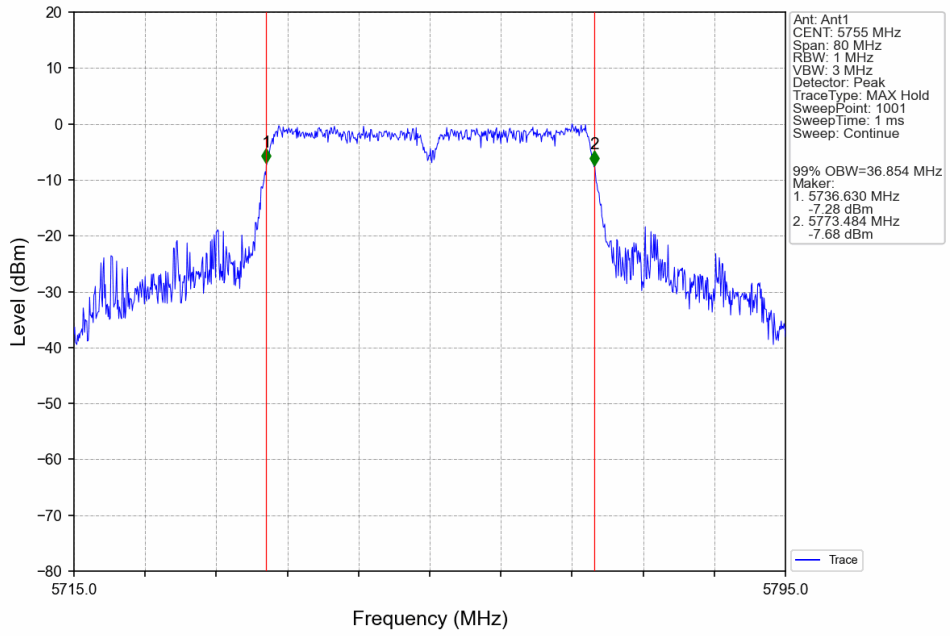
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



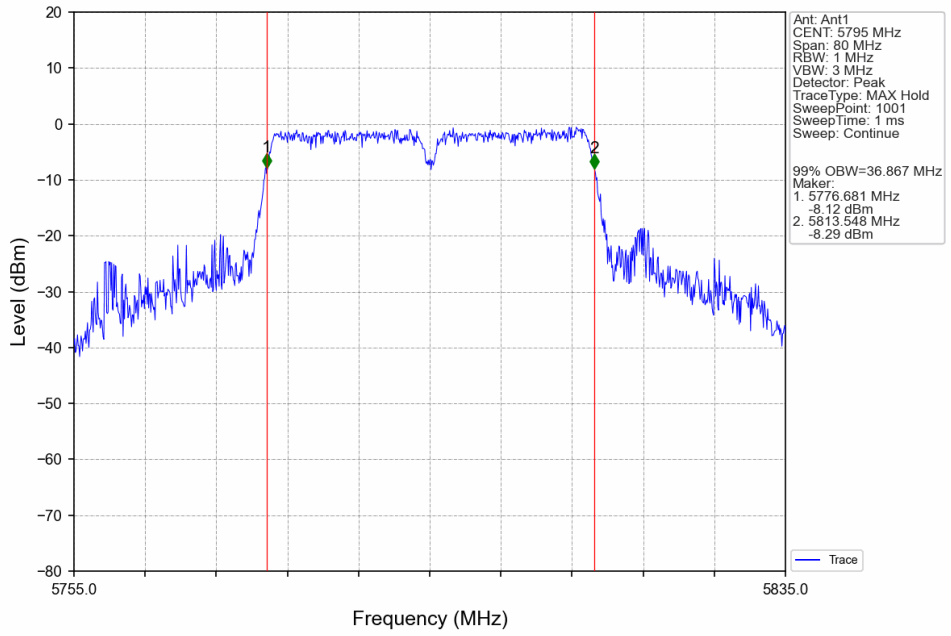
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



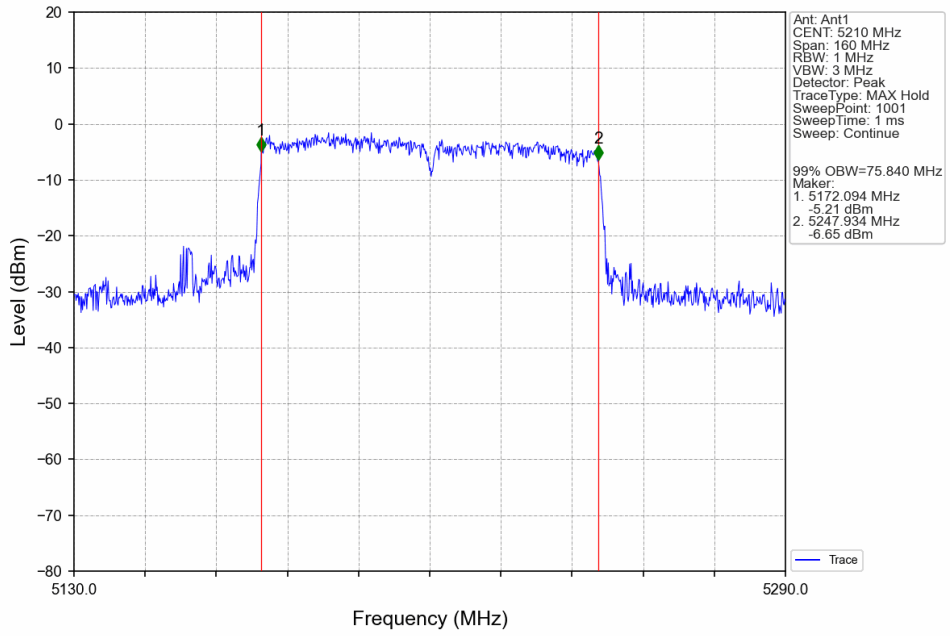
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



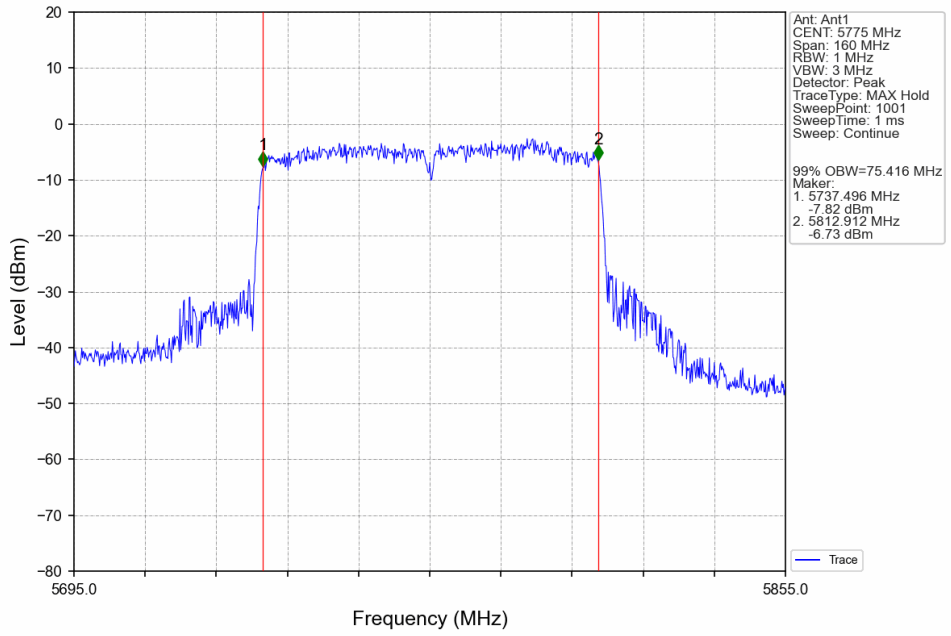
802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV

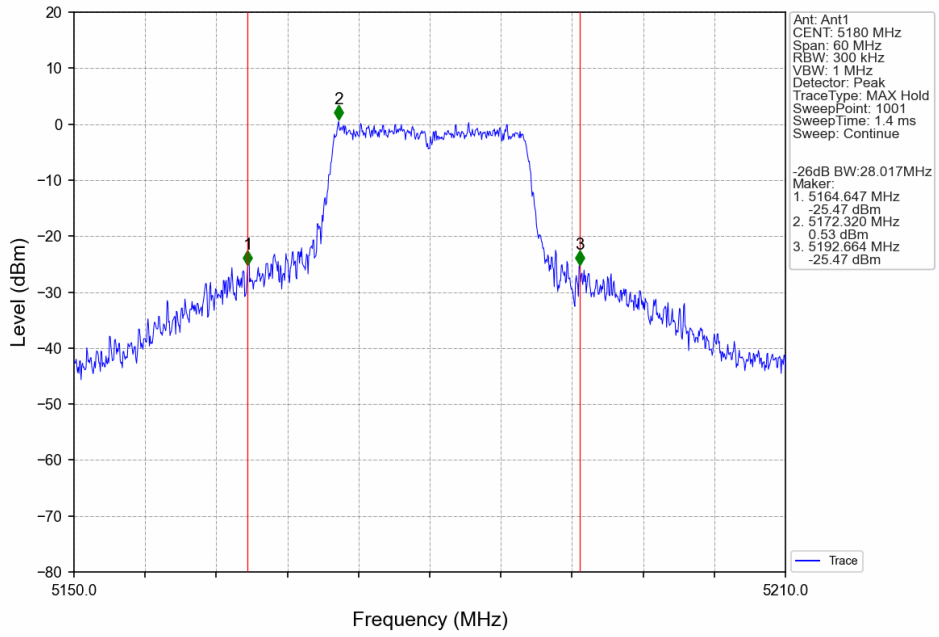


802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV

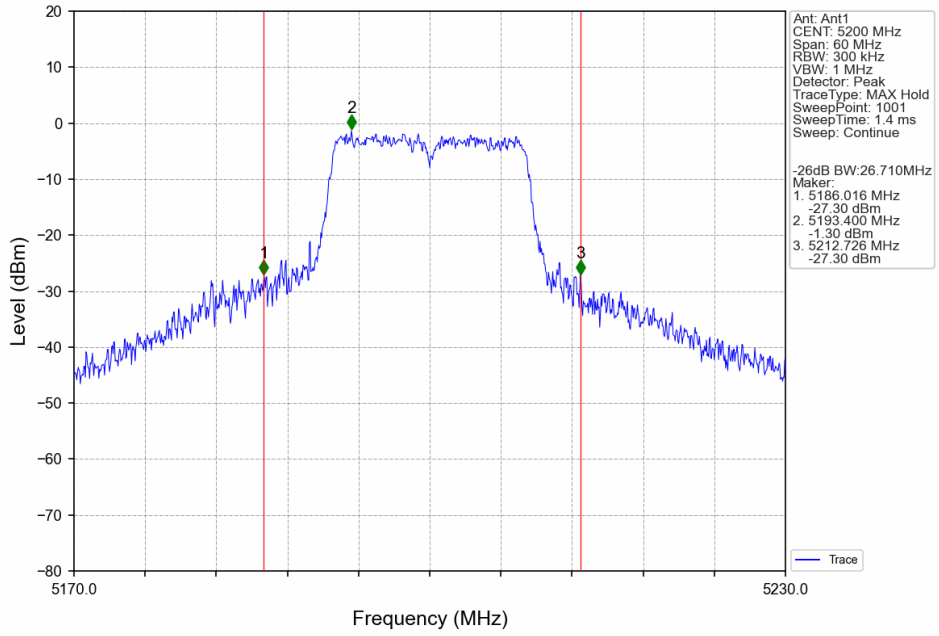


2.2.2 26dB BW

802.11a_LCH_5180MHz_Ant1_NTNV



802.11a_MCH_5200MHz_Ant1_NTNV



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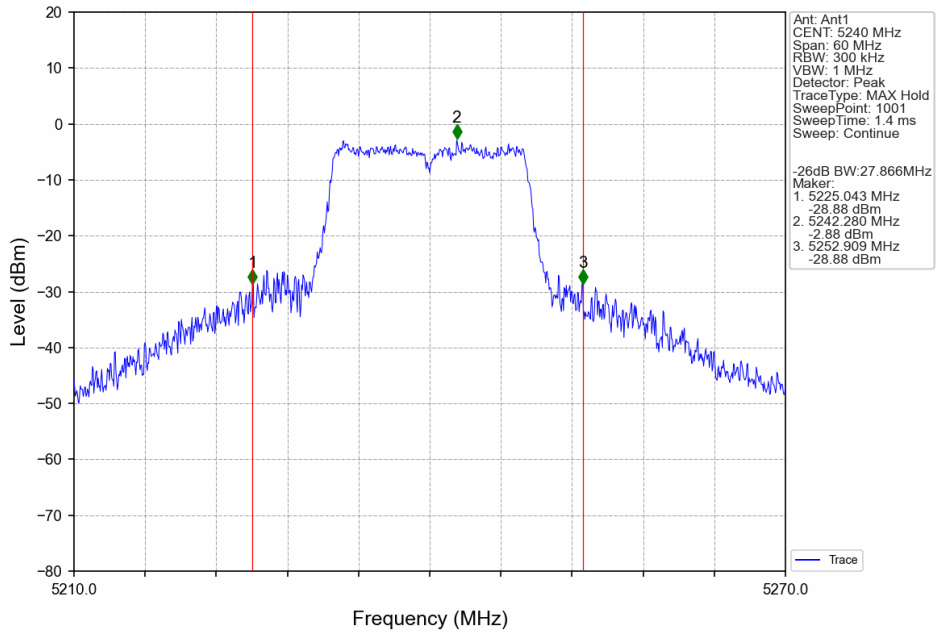
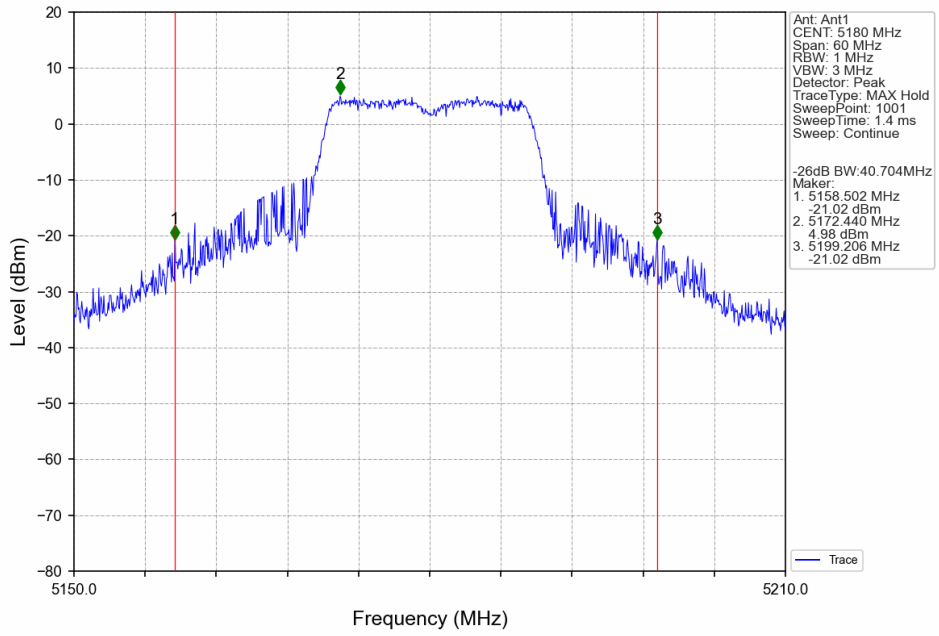
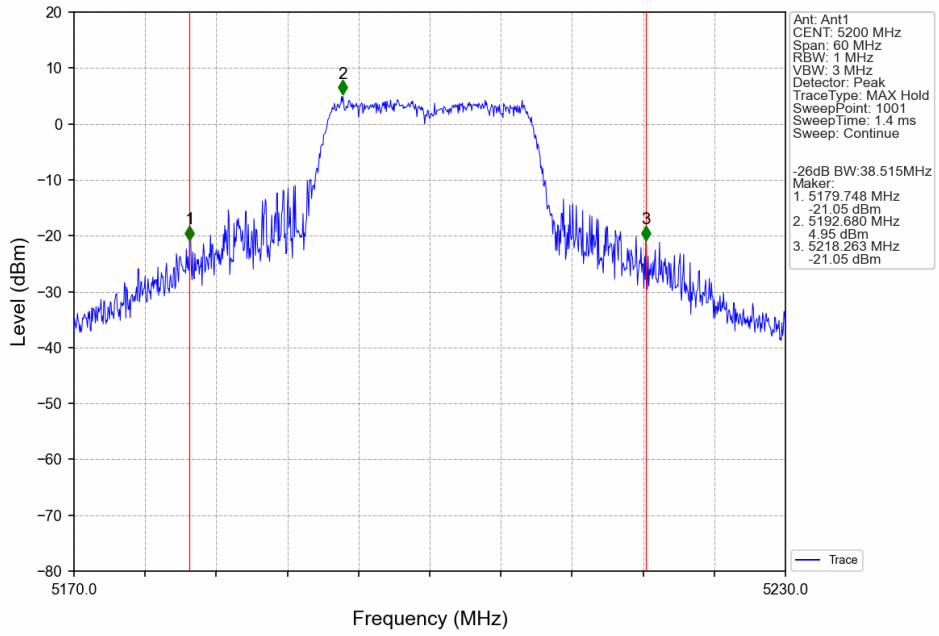


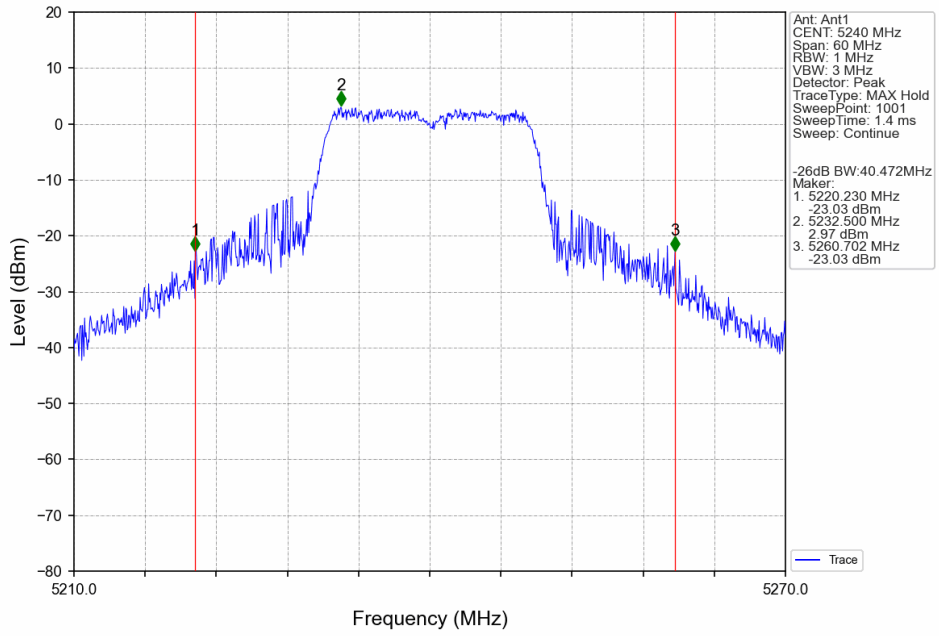
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



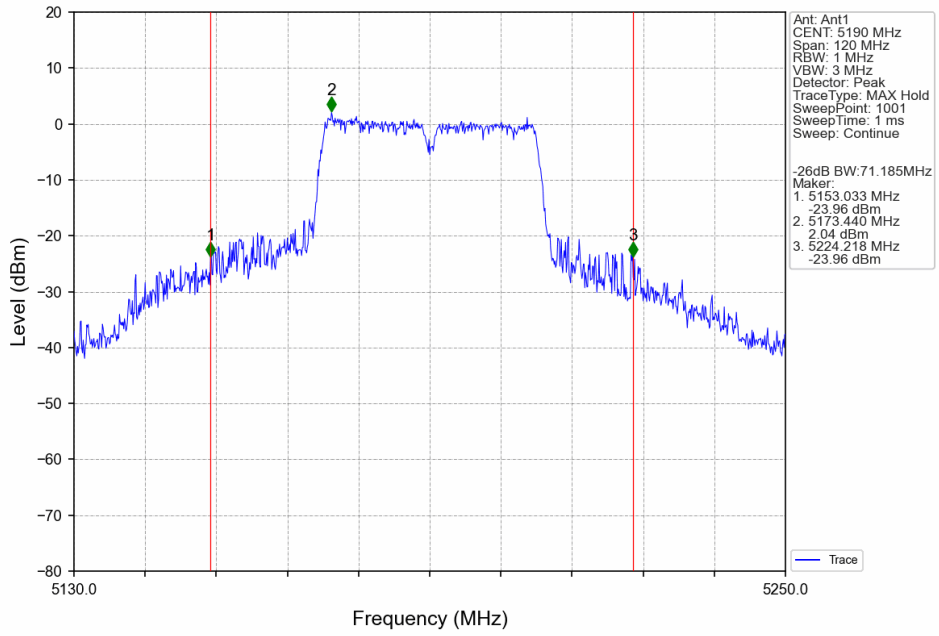
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



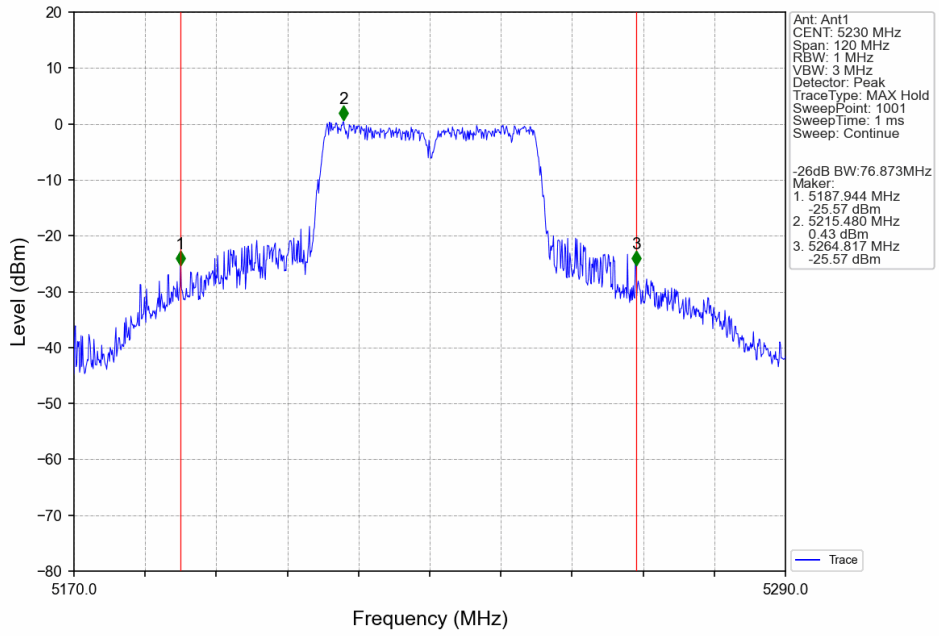
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



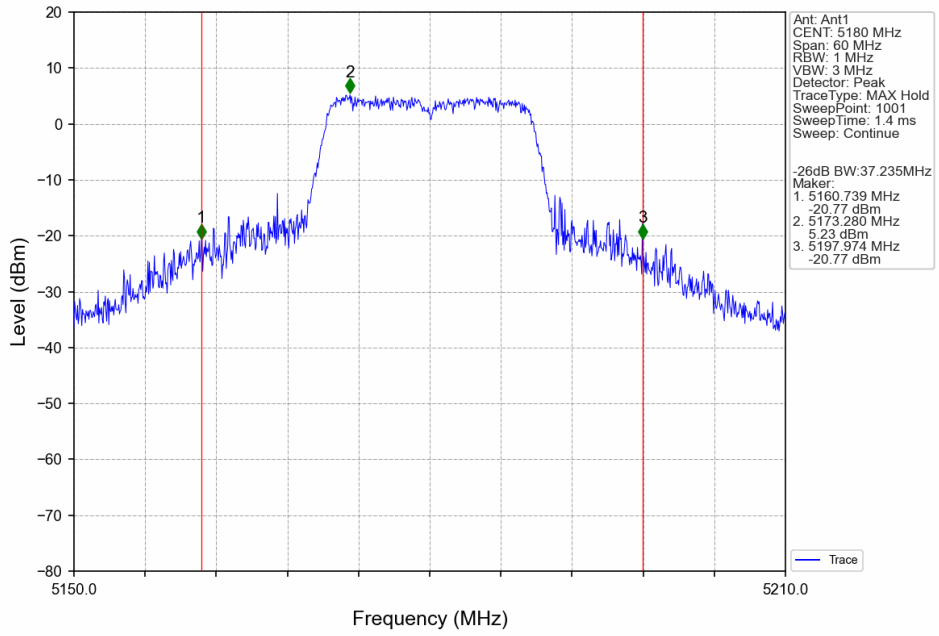
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



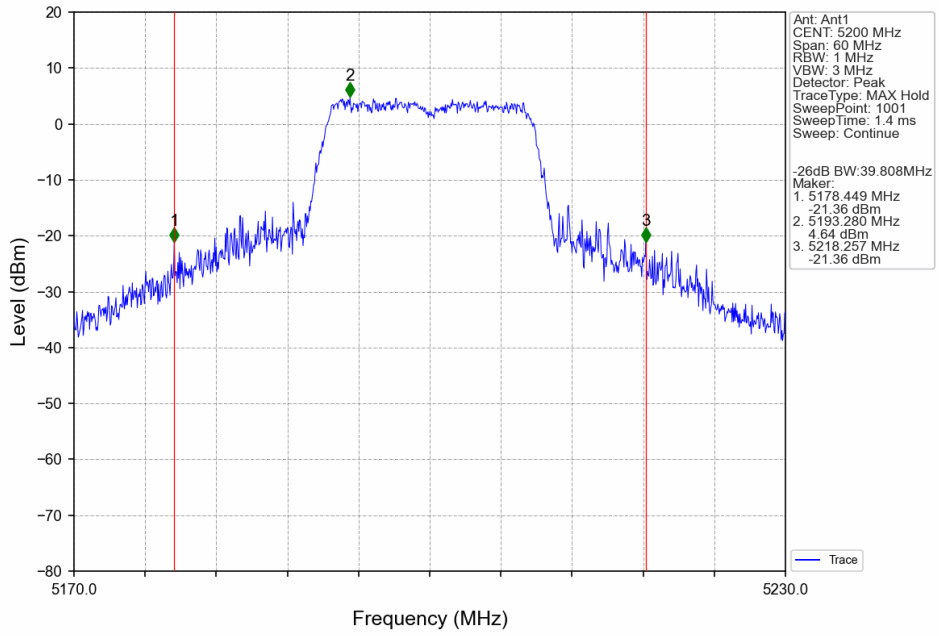
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



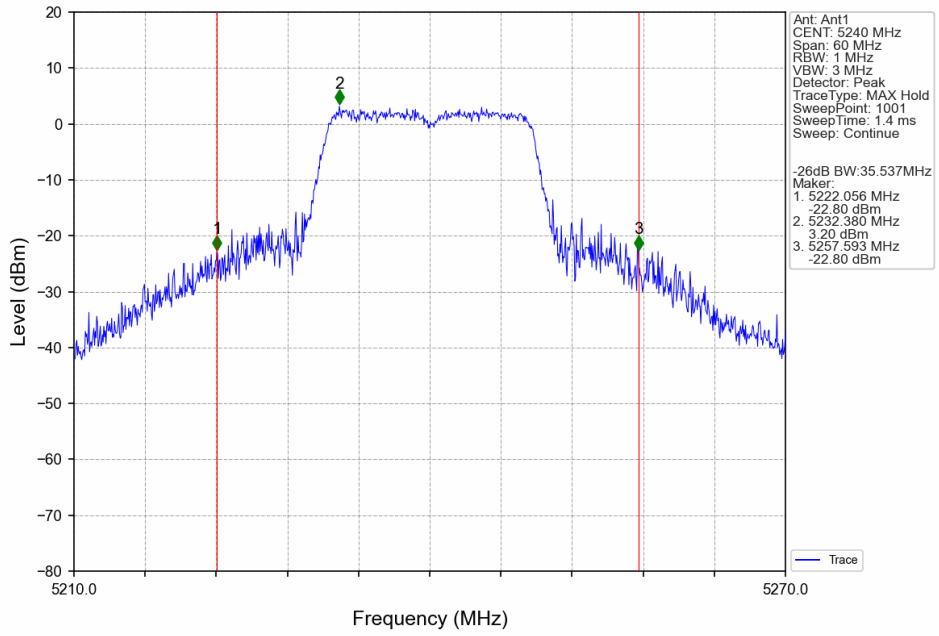
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



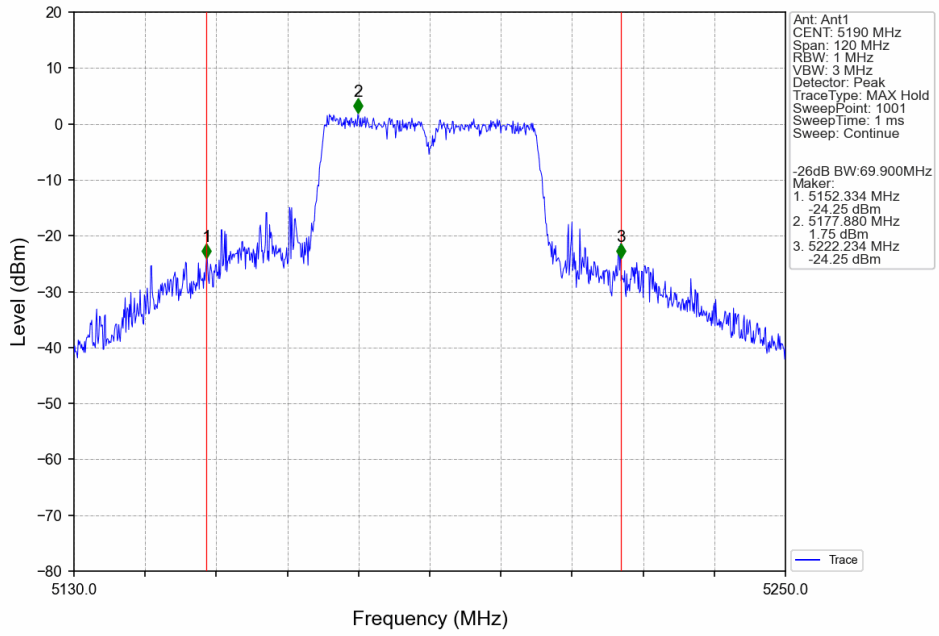
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



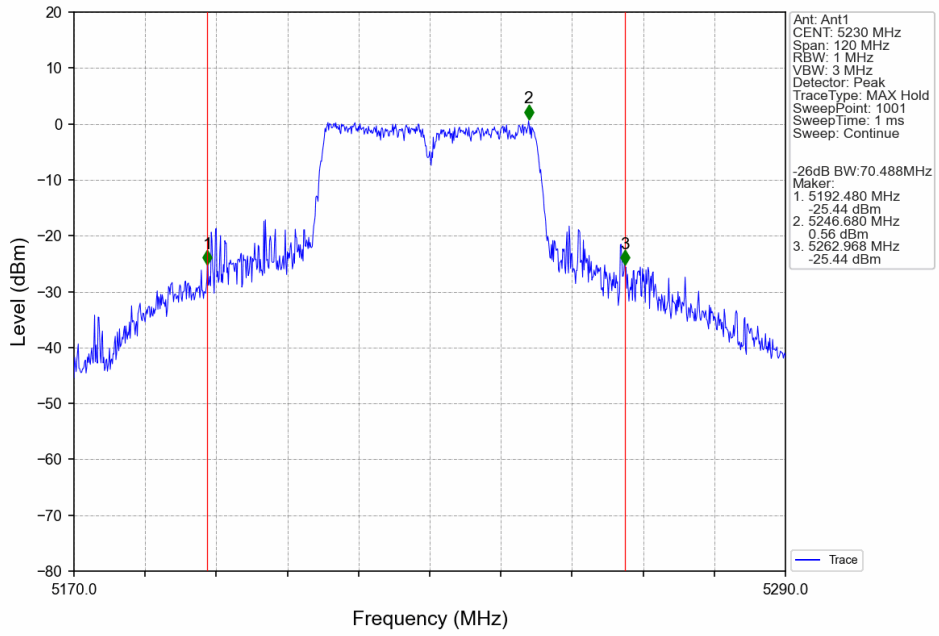
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



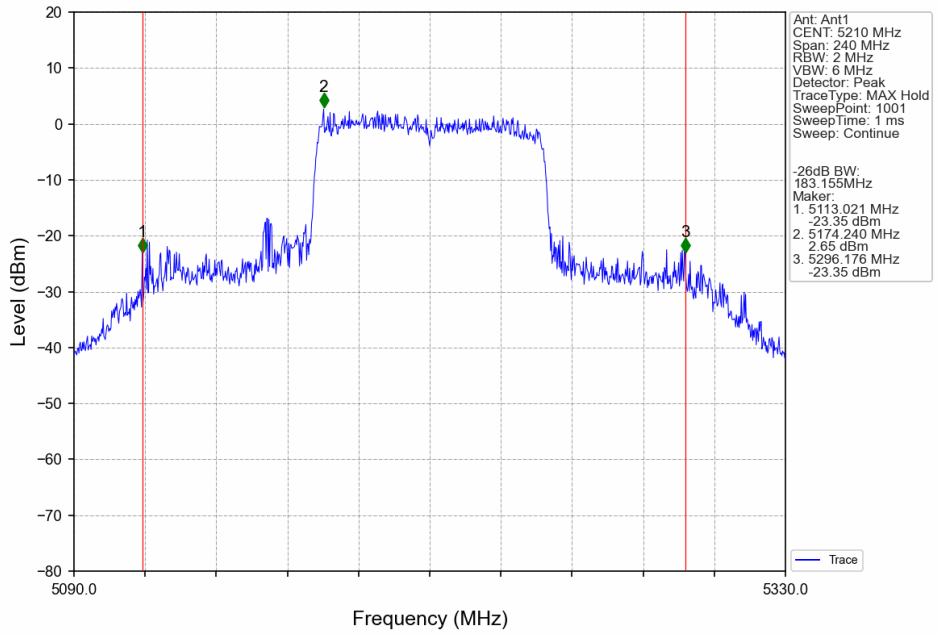
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV

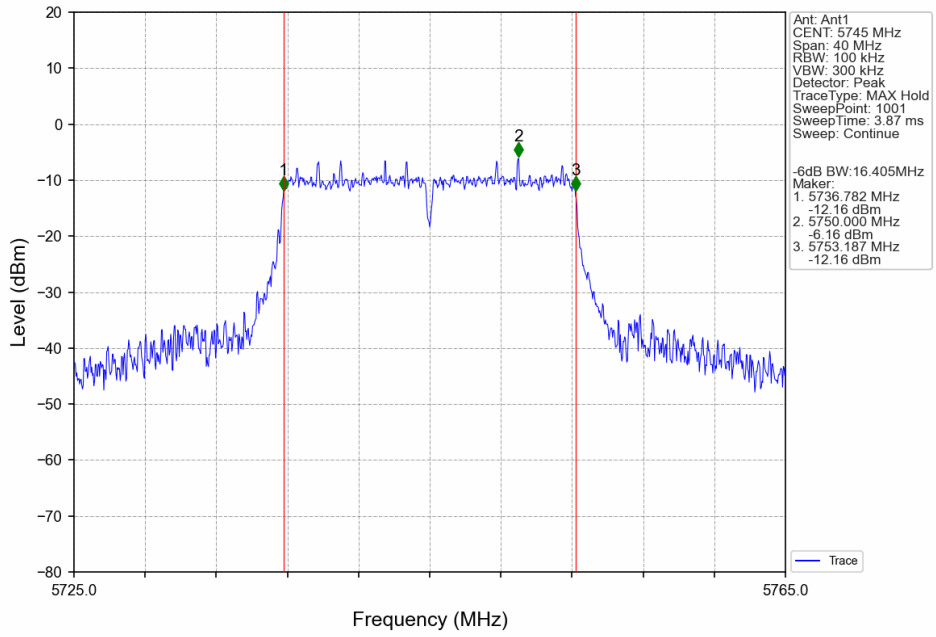


802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV

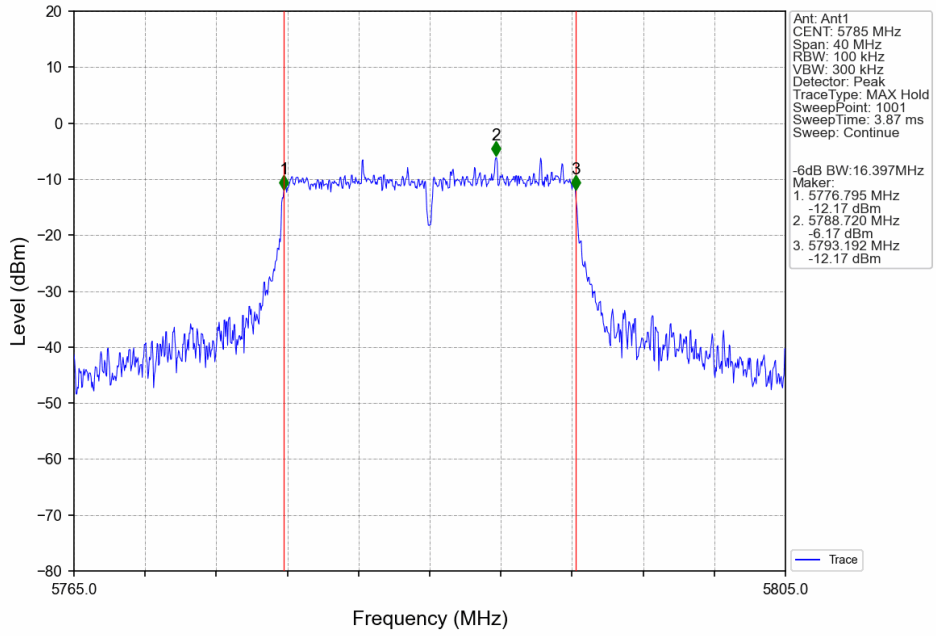


2.2.3 6dB BW

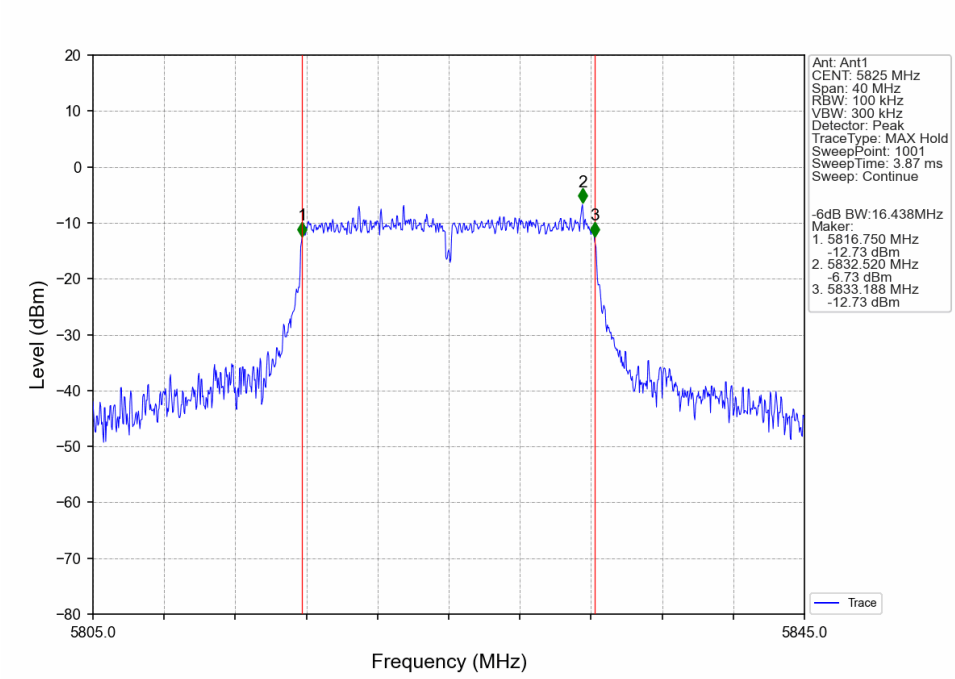
802.11a_LCH_5745MHz_Ant1_NTNV



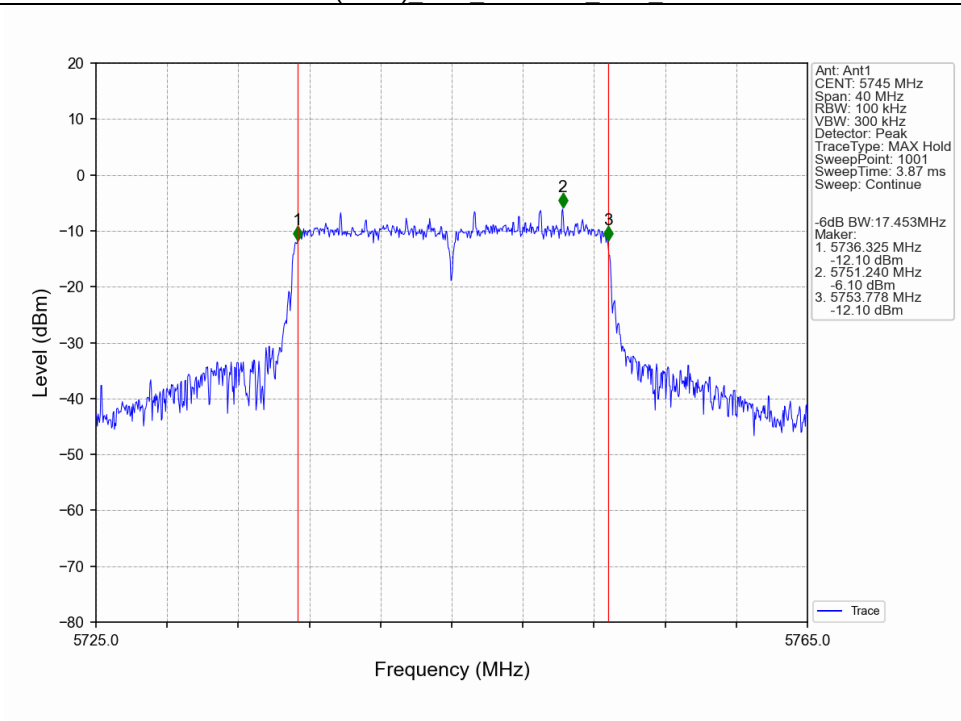
802.11a_MCH_5785MHz_Ant1_NTNV



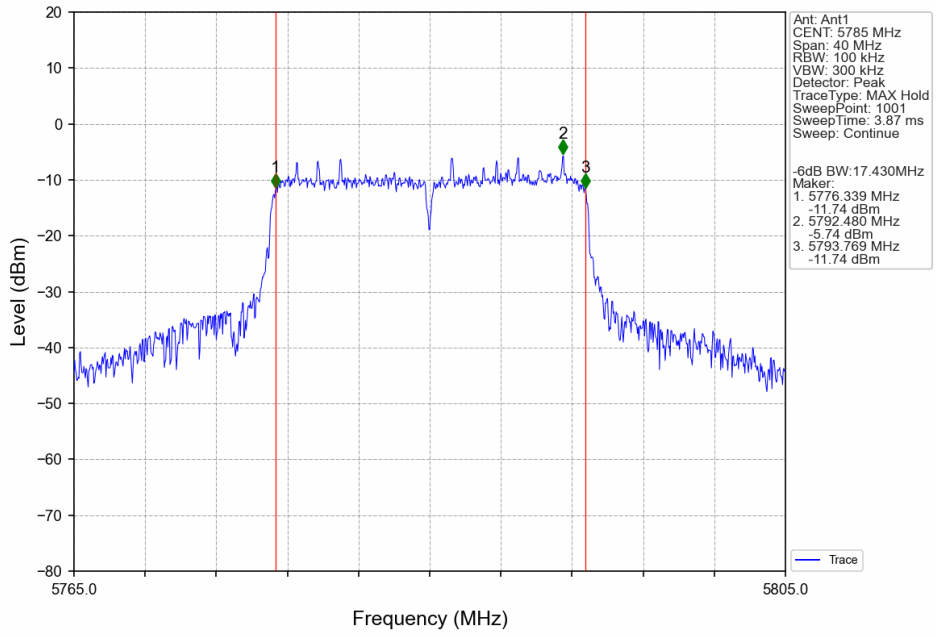
802.11a_HCH_5825MHz_Ant1_NTNV



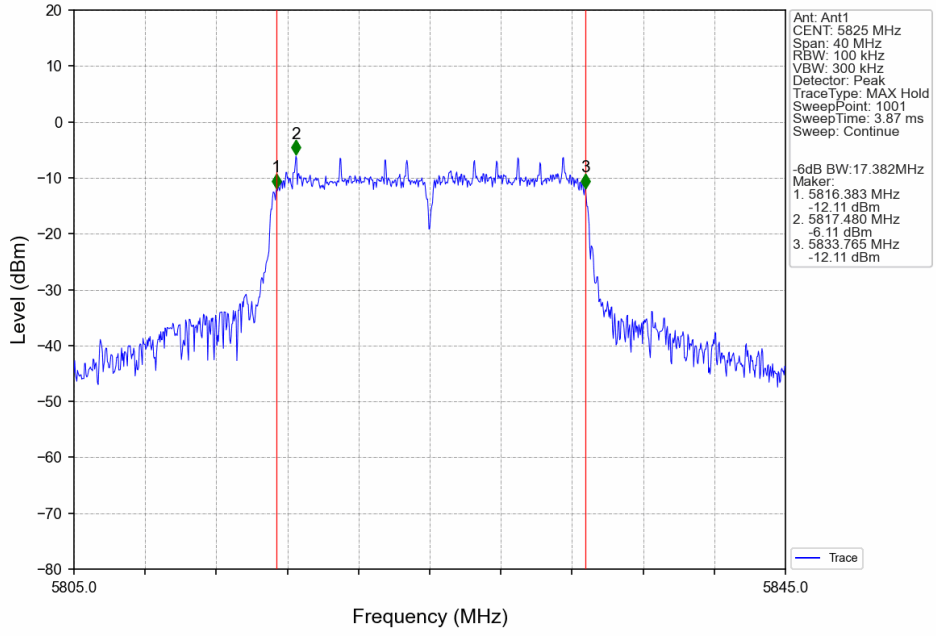
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



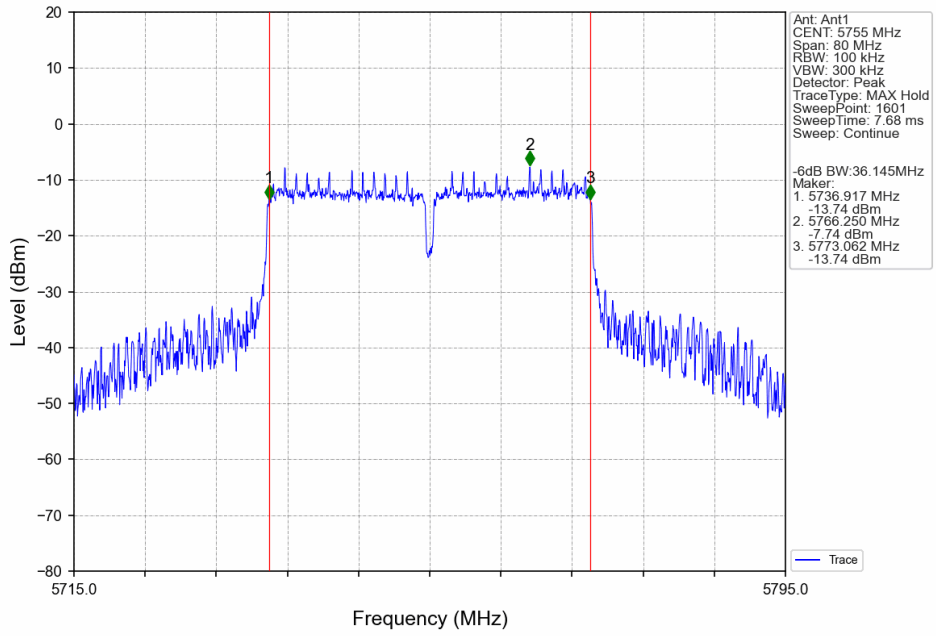
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



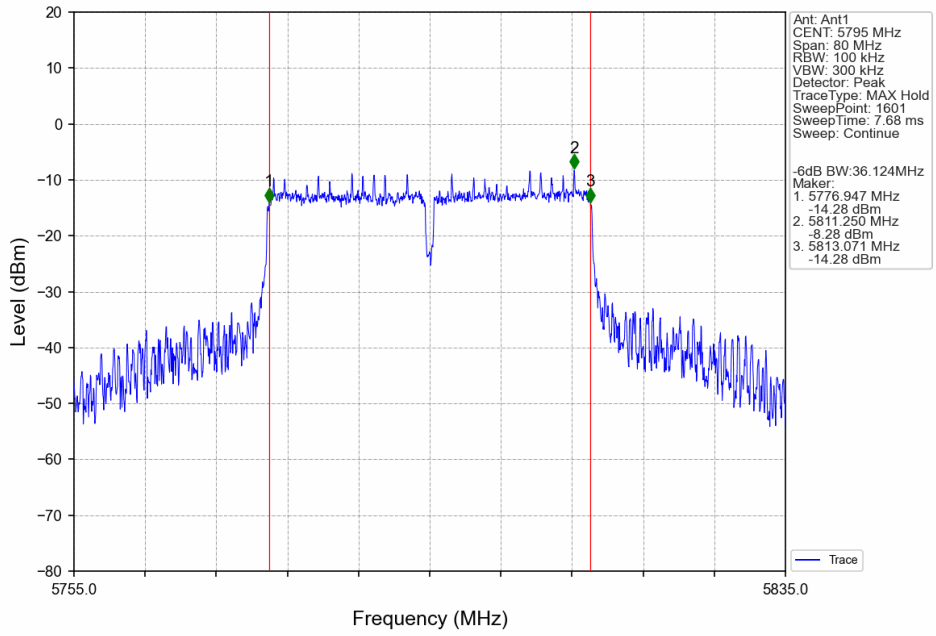
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



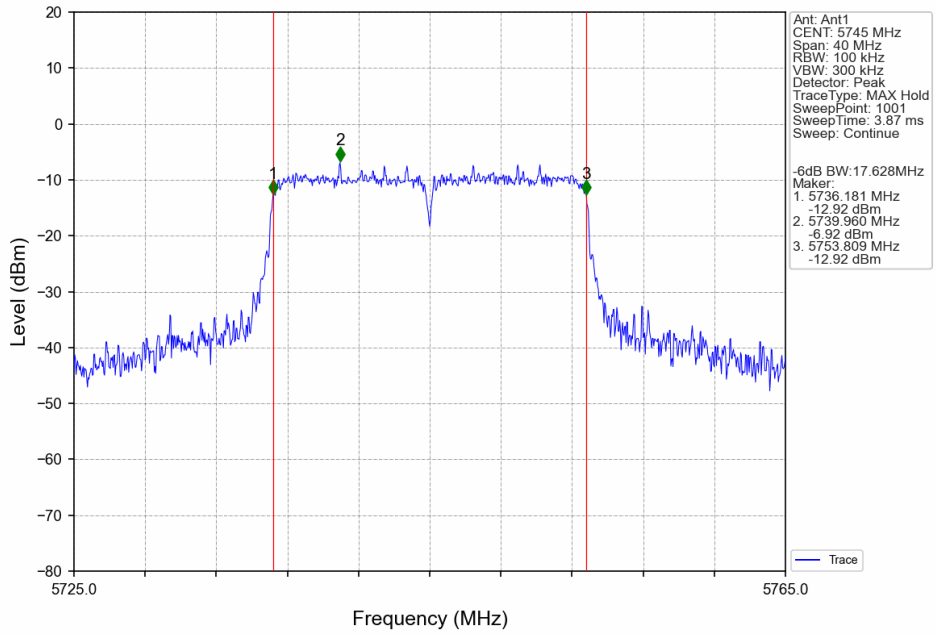
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



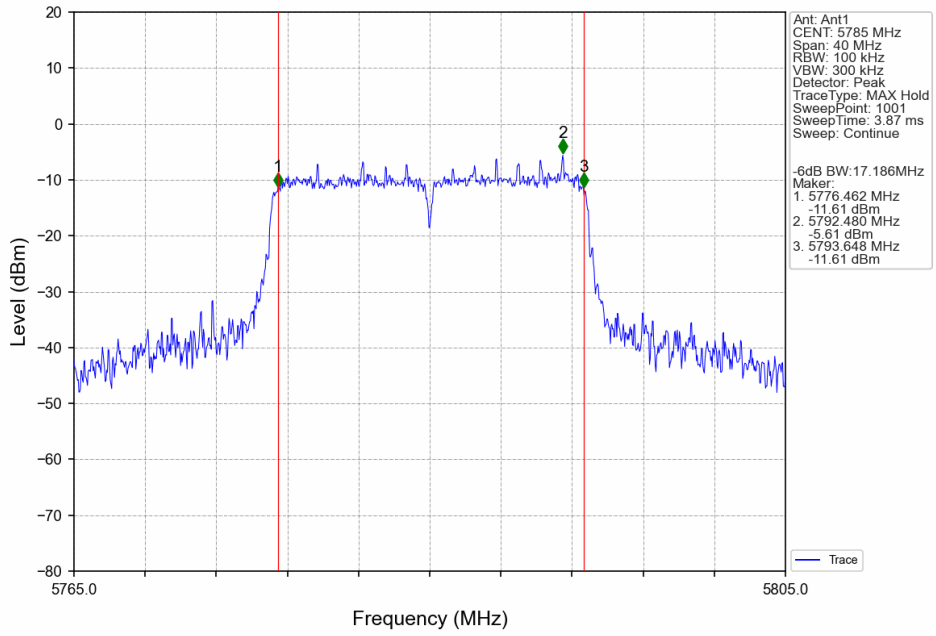
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



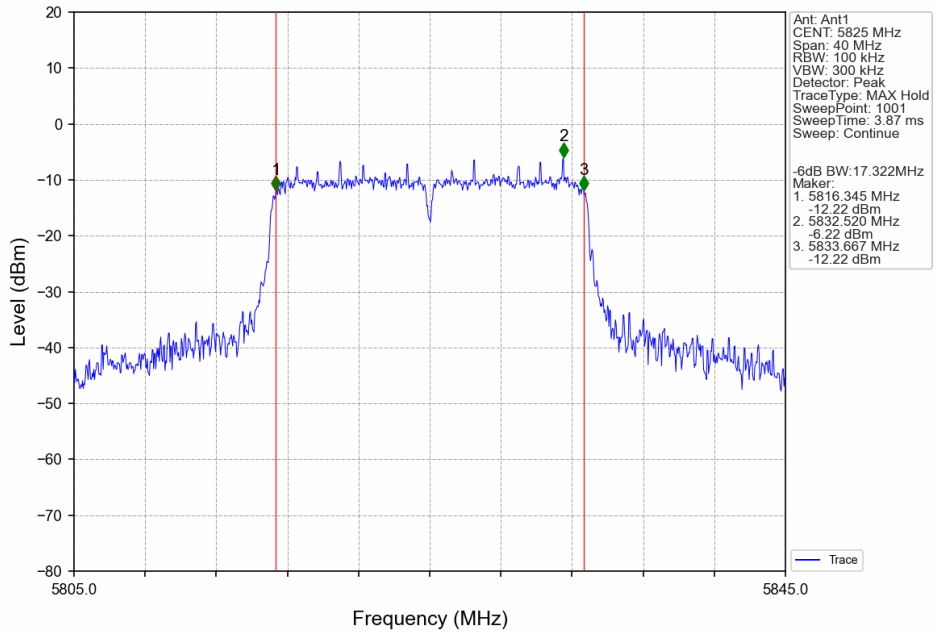
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



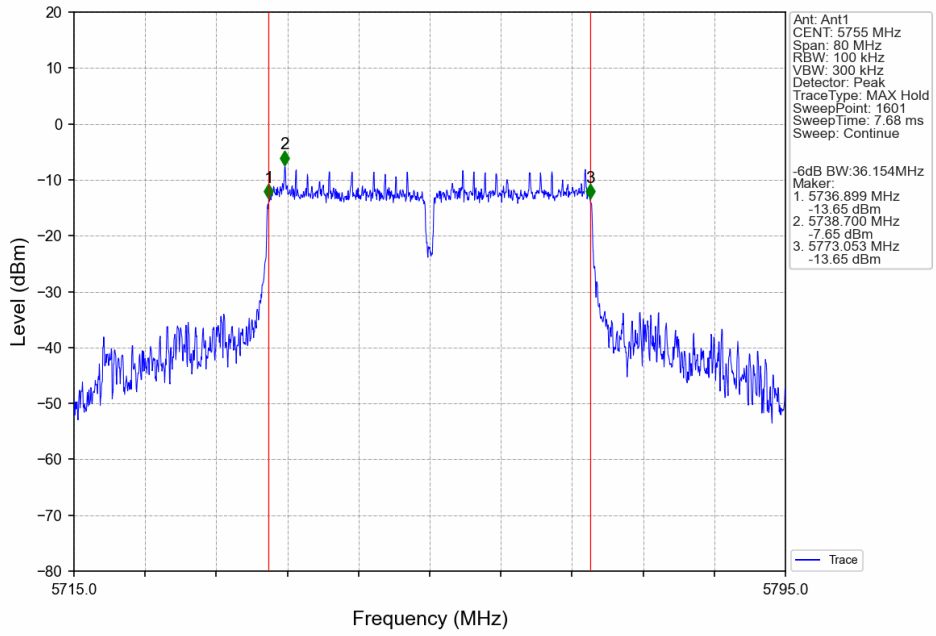
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



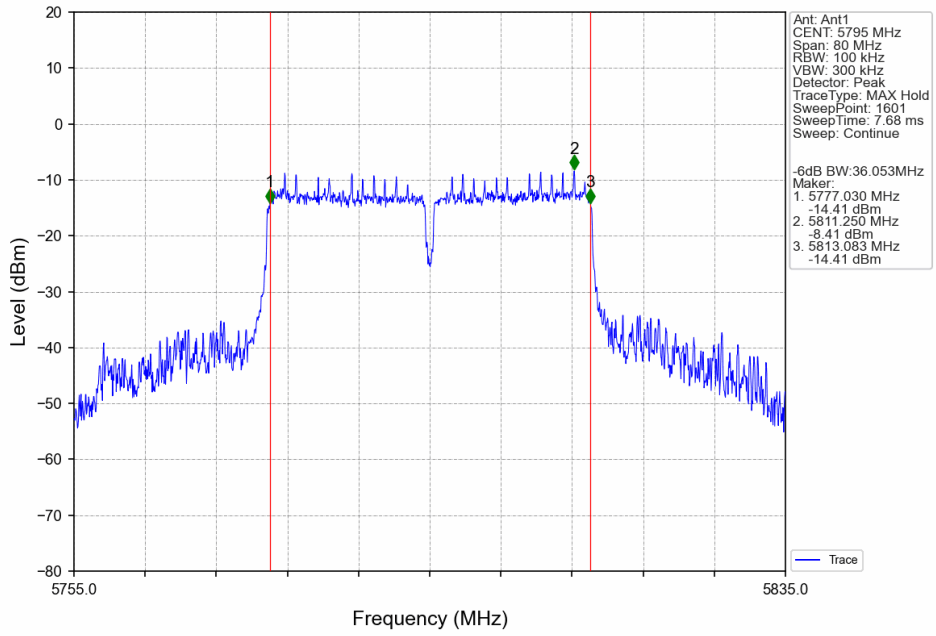
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



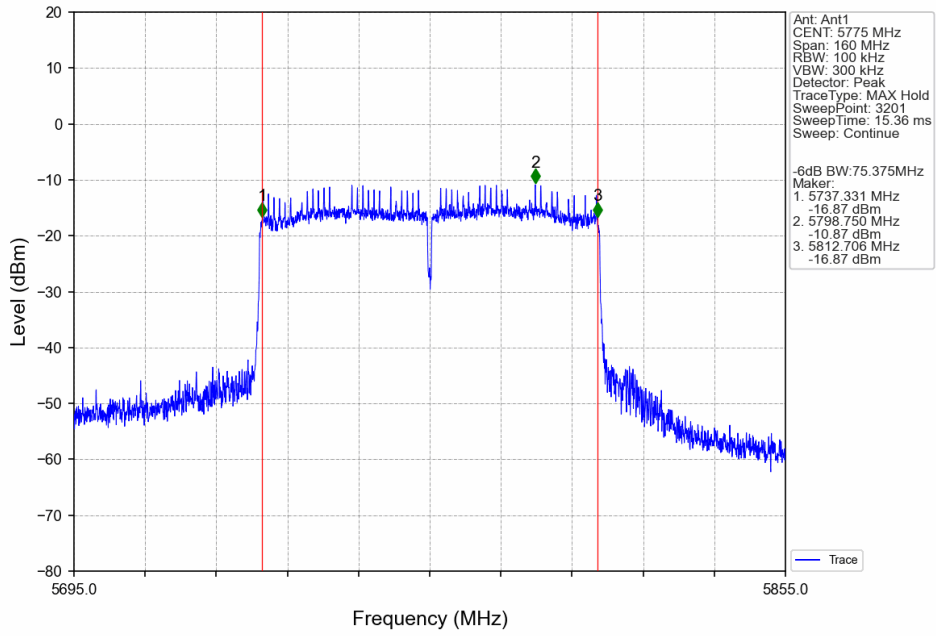
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



3. Maximum Conducted Output Power

3.1 Test Result

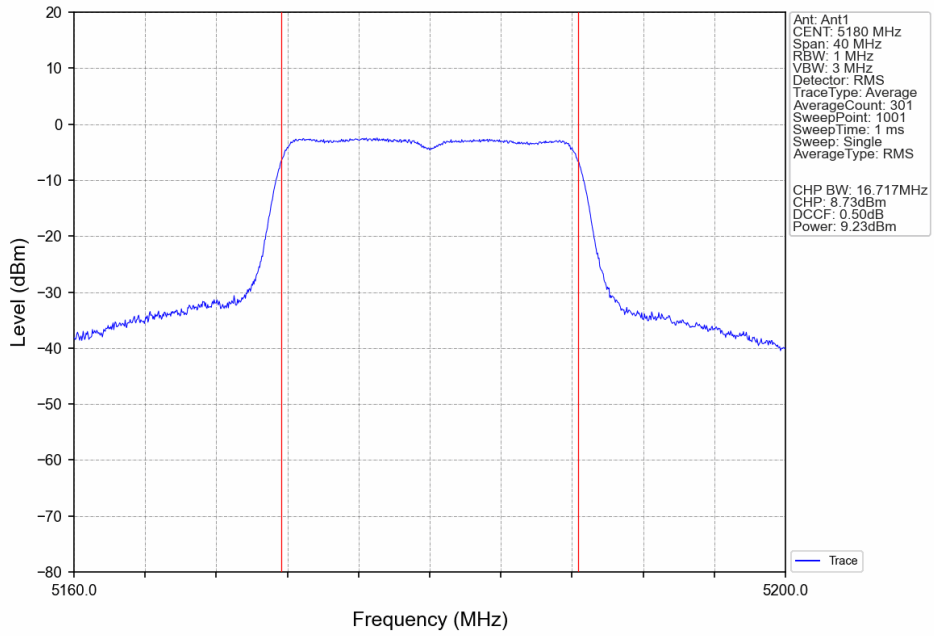
3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	9.23	<=23.98	Pass
		5200	7.14	<=23.98	Pass
		5240	5.84	<=23.98	Pass
		5745	5.21	<=30	Pass
		5785	5.20	<=30	Pass
		5825	5.17	<=30	Pass
802.11n (HT20)	SISO	5180	7.91	<=23.98	Pass
		5200	7.41	<=23.98	Pass
		5240	5.92	<=23.98	Pass
		5745	5.44	<=30	Pass
		5785	5.28	<=30	Pass
		5825	5.05	<=30	Pass
802.11n (HT40)	SISO	5190	8.03	<=23.98	Pass
		5230	6.34	<=23.98	Pass
		5755	6.03	<=30	Pass
		5795	5.56	<=30	Pass
802.11ac (VHT20)	SISO	5180	8.15	<=23.98	Pass
		5200	7.50	<=23.98	Pass
		5240	6.00	<=23.98	Pass
		5745	5.18	<=30	Pass
		5785	5.15	<=30	Pass
		5825	5.11	<=30	Pass
802.11ac (VHT40)	SISO	5190	8.18	<=23.98	Pass
		5230	6.47	<=23.98	Pass
		5755	5.99	<=30	Pass
		5795	5.52	<=30	Pass
802.11ac (VHT80)	SISO	5210	6.88	<=23.98	Pass
		5775	5.89	<=30	Pass

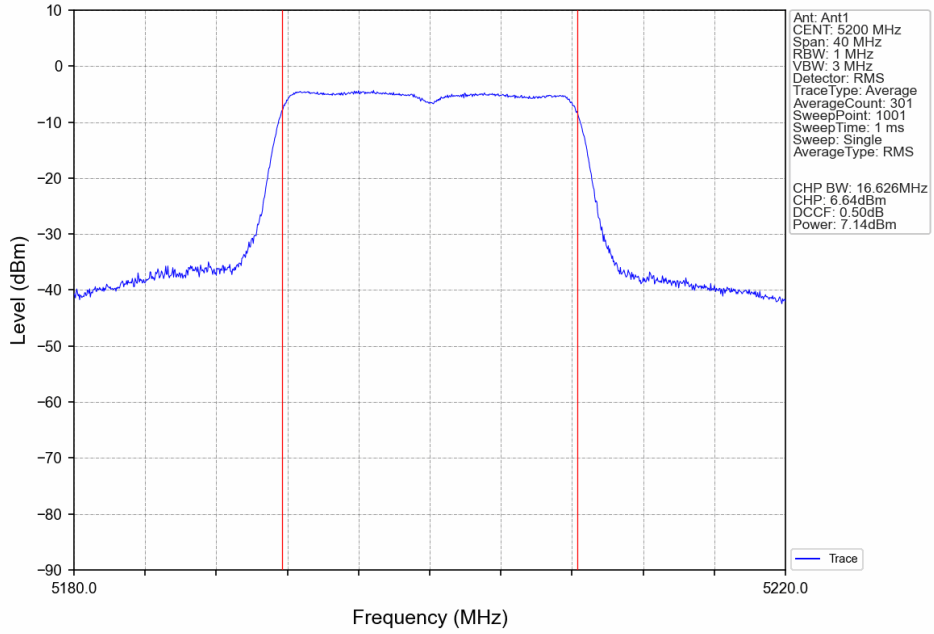
3.2 Test Graph

3.2.1 Power

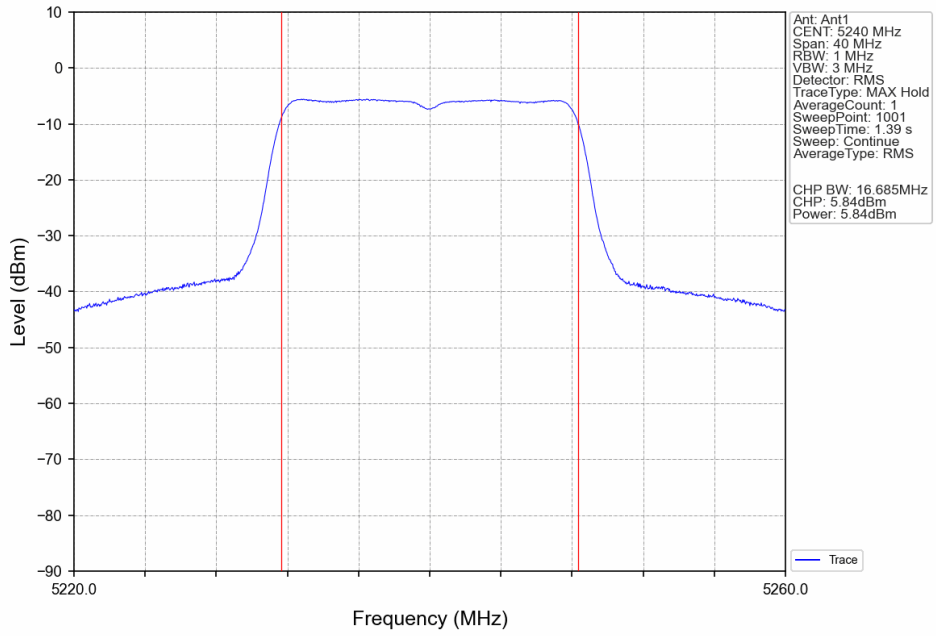
802.11a_LCH_5180MHz_Ant1_NTNV



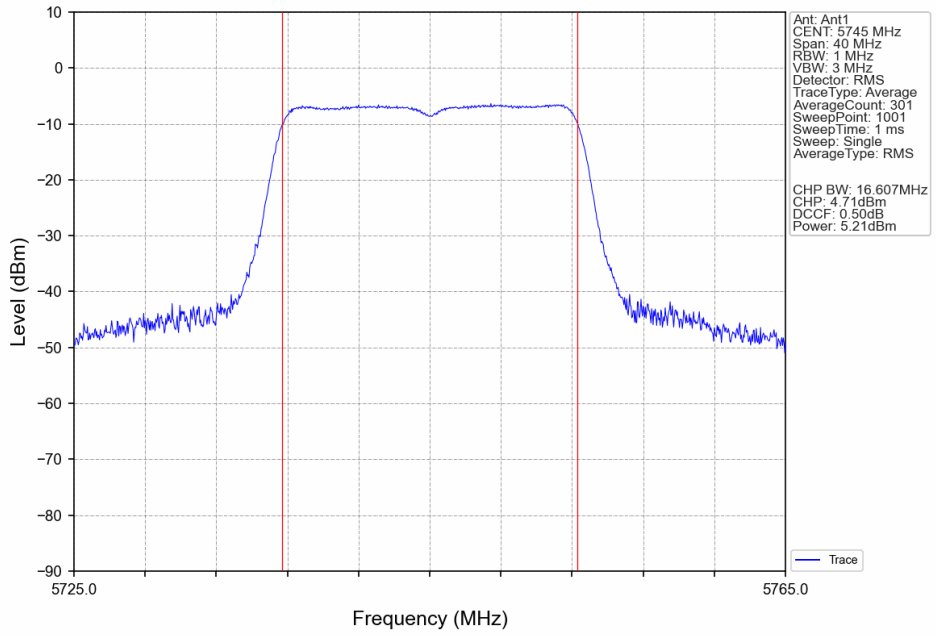
802.11a_MCH_5200MHz_Ant1_NTNV



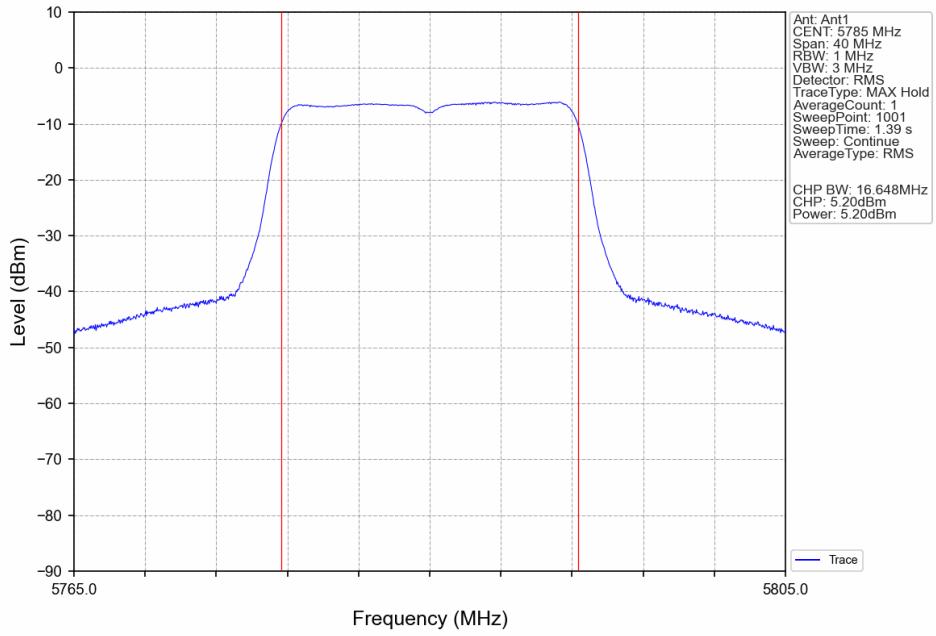
802.11a_HCH_5240MHz_Ant1_NTNV



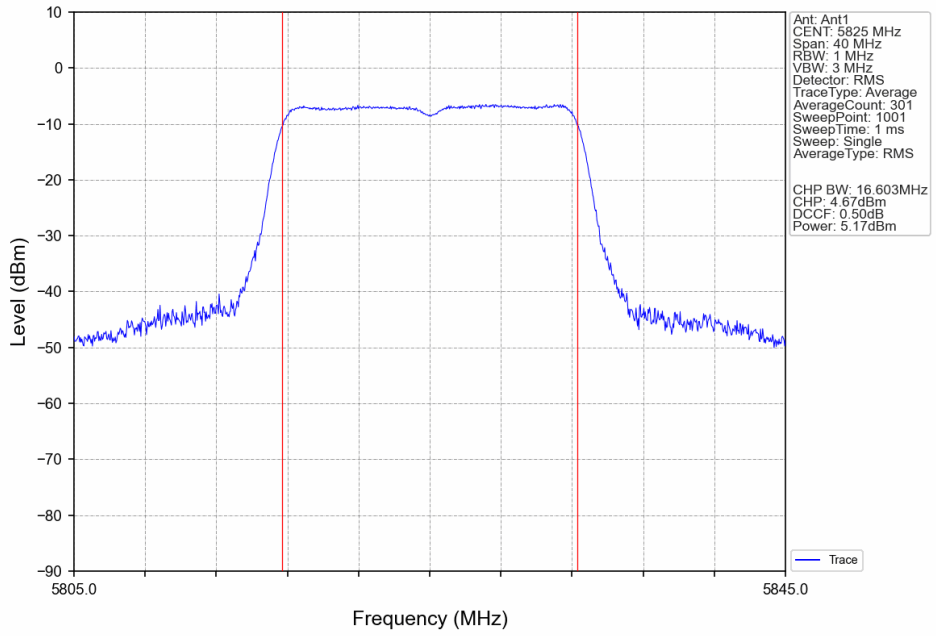
802.11a_LCH_5745MHz_Ant1_NTNV



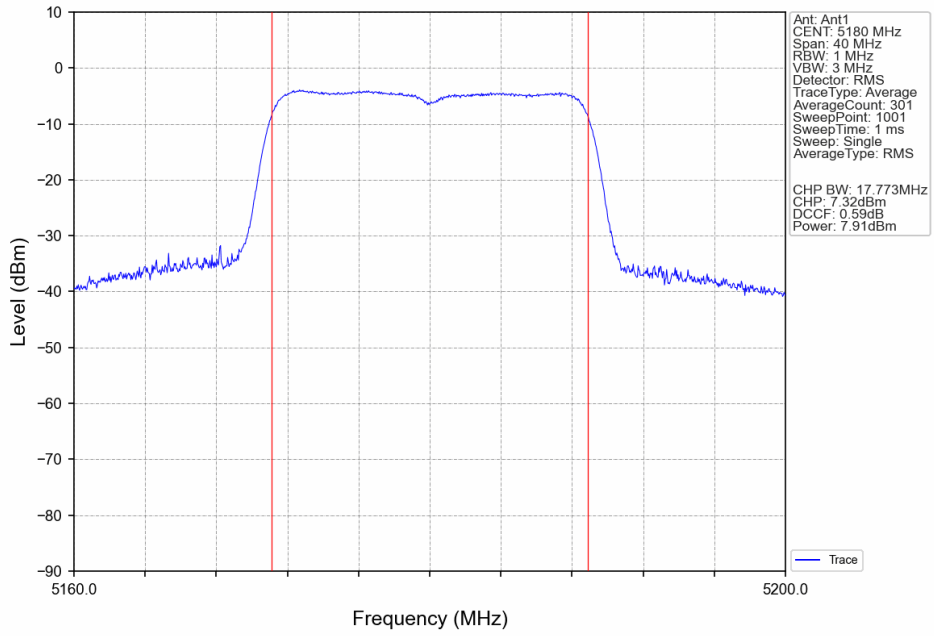
802.11a_MCH_5785MHz_Ant1_NTNV



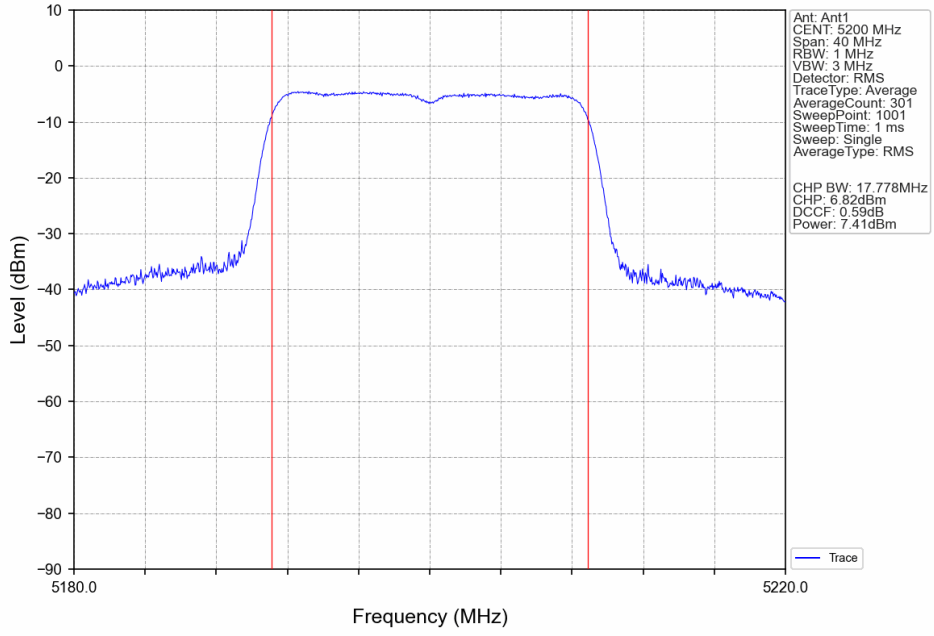
802.11a_HCH_5825MHz_Ant1_NTNV



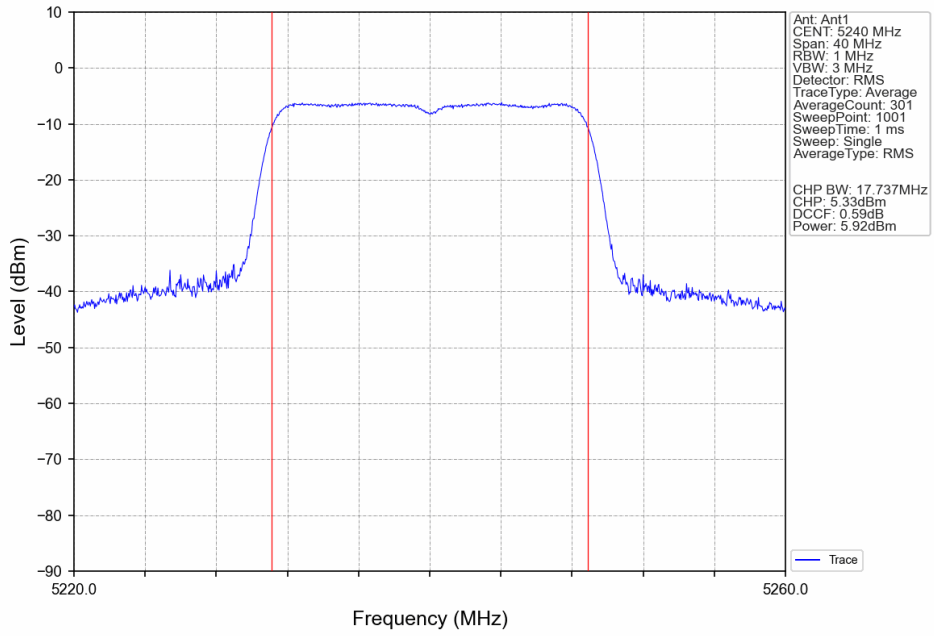
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



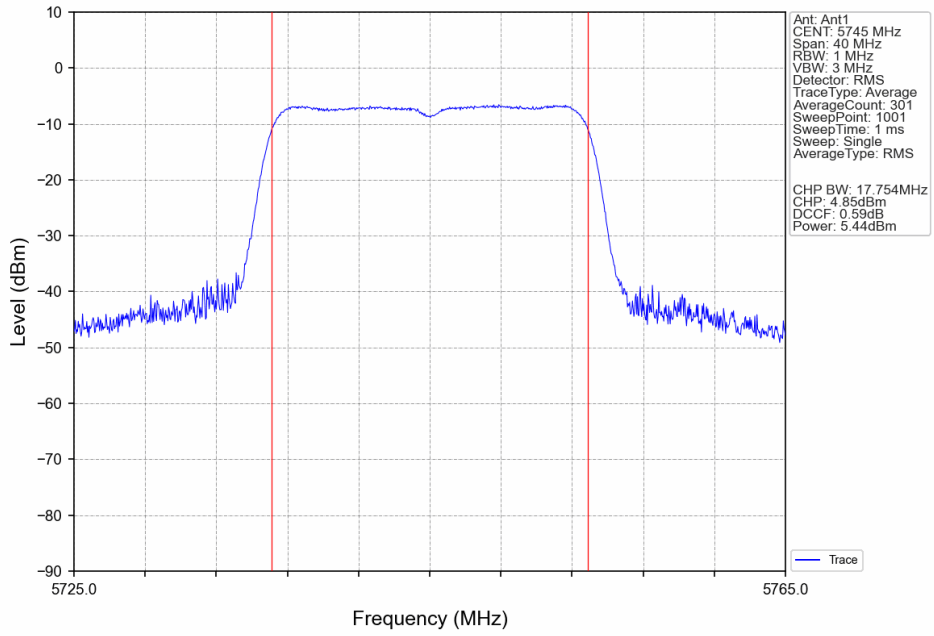
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



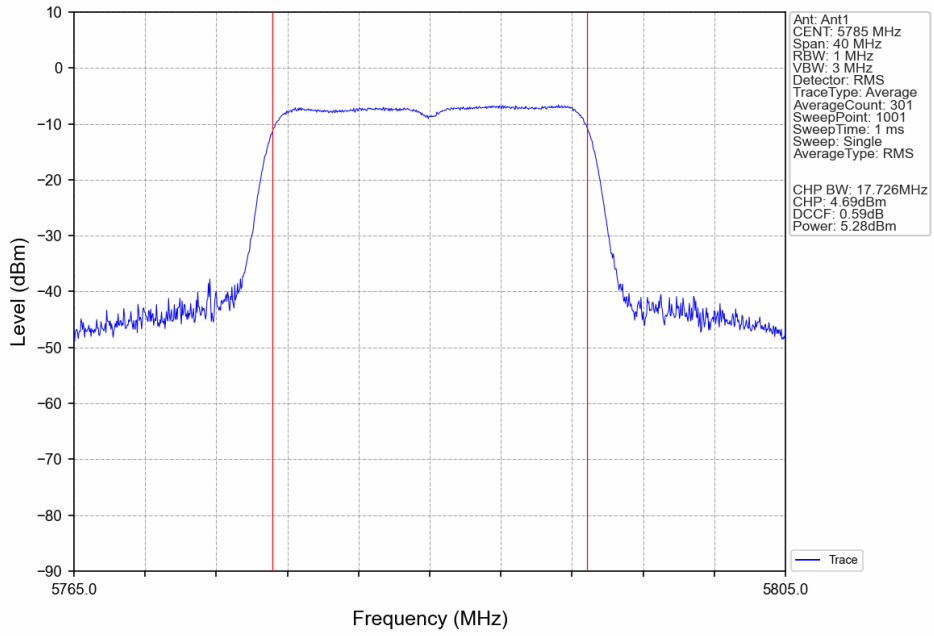
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



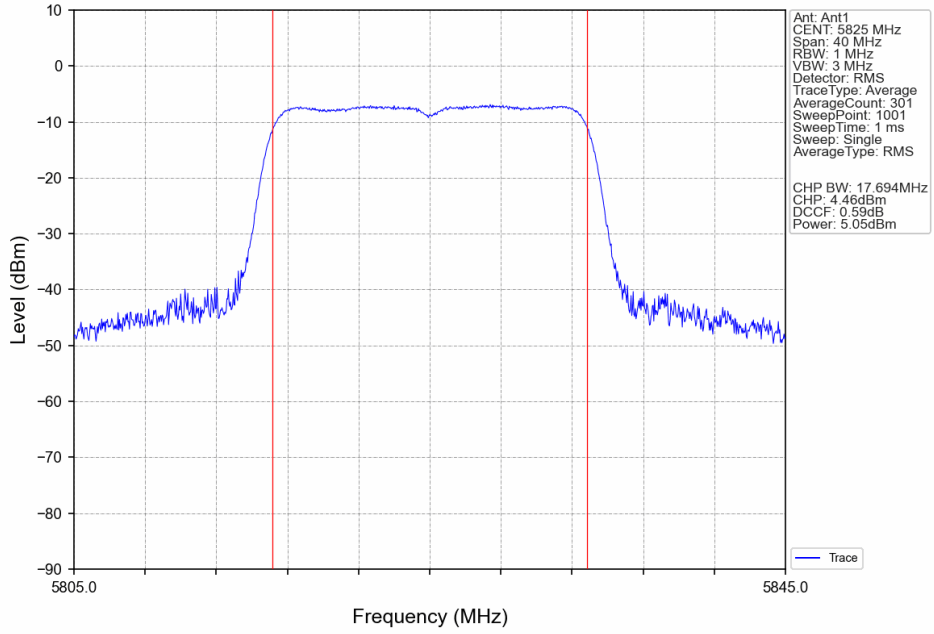
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



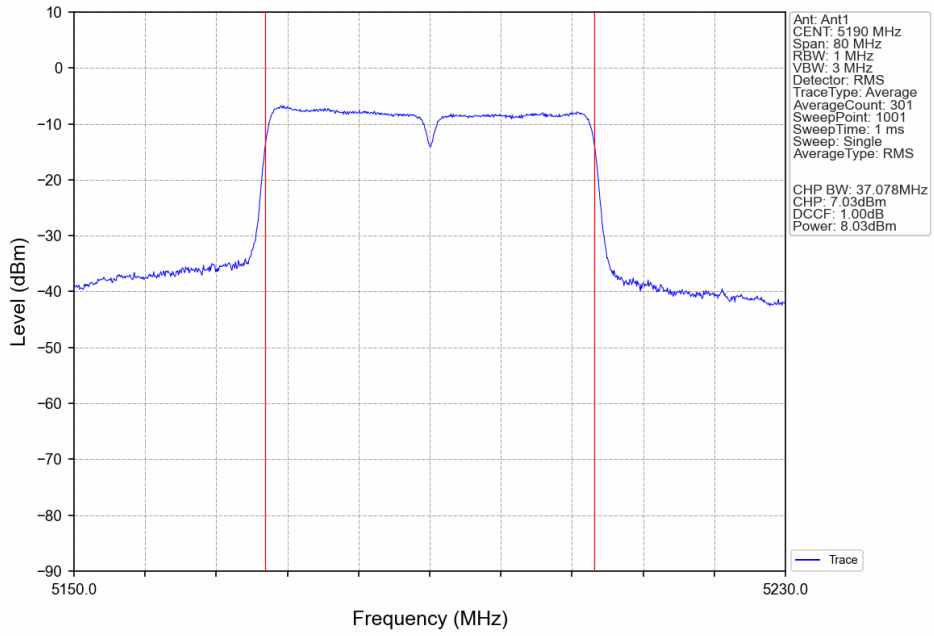
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



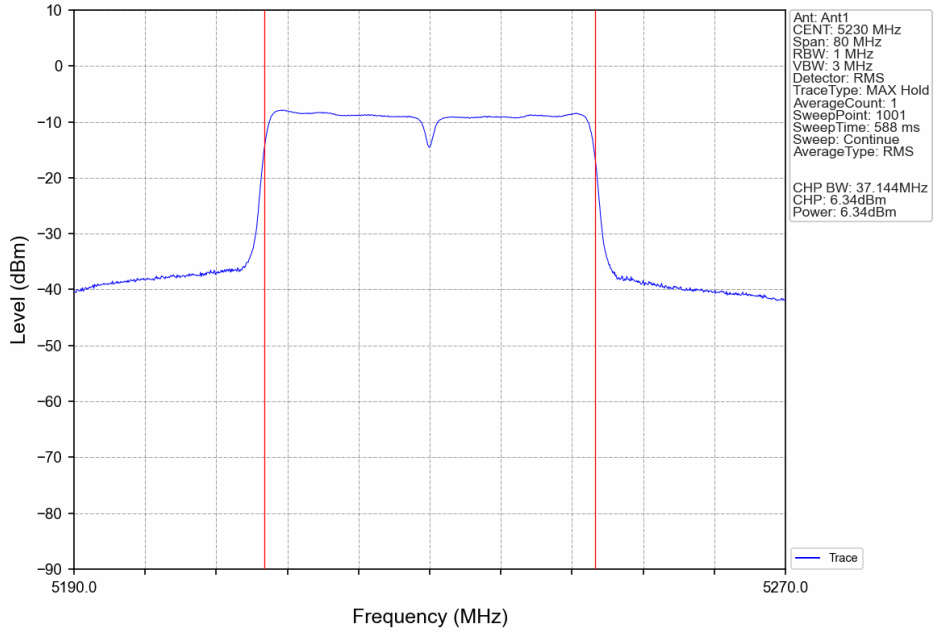
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



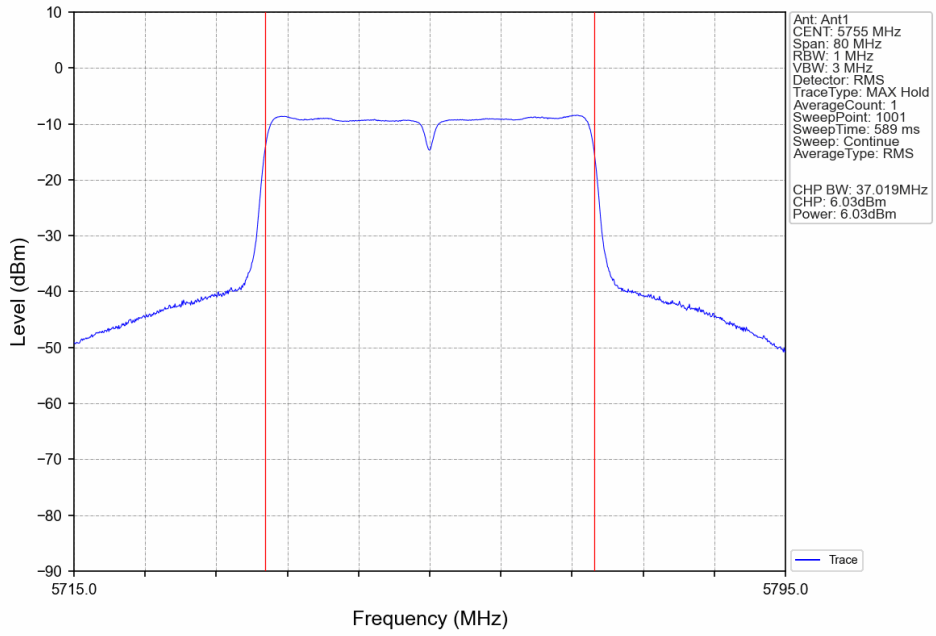
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



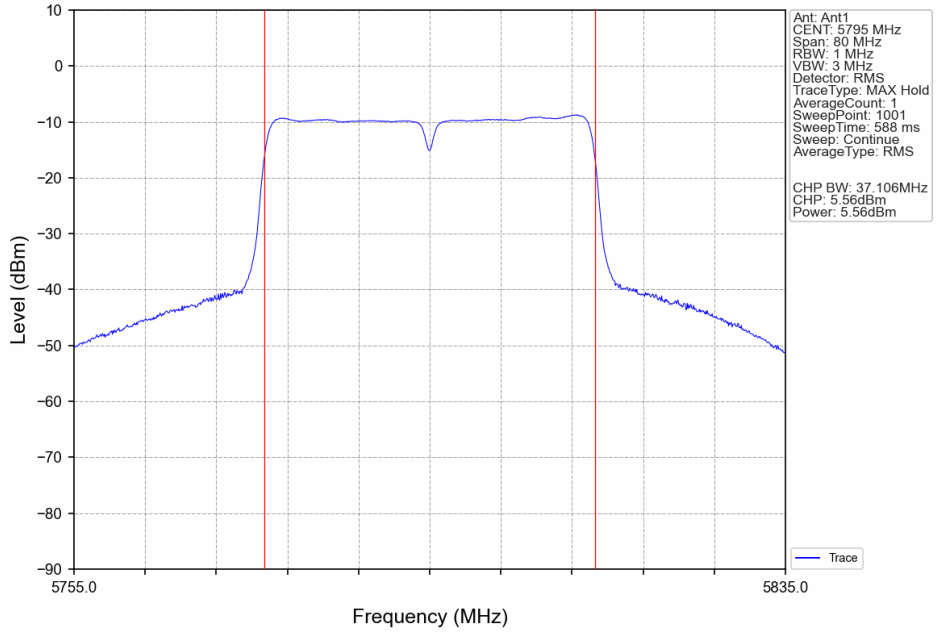
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



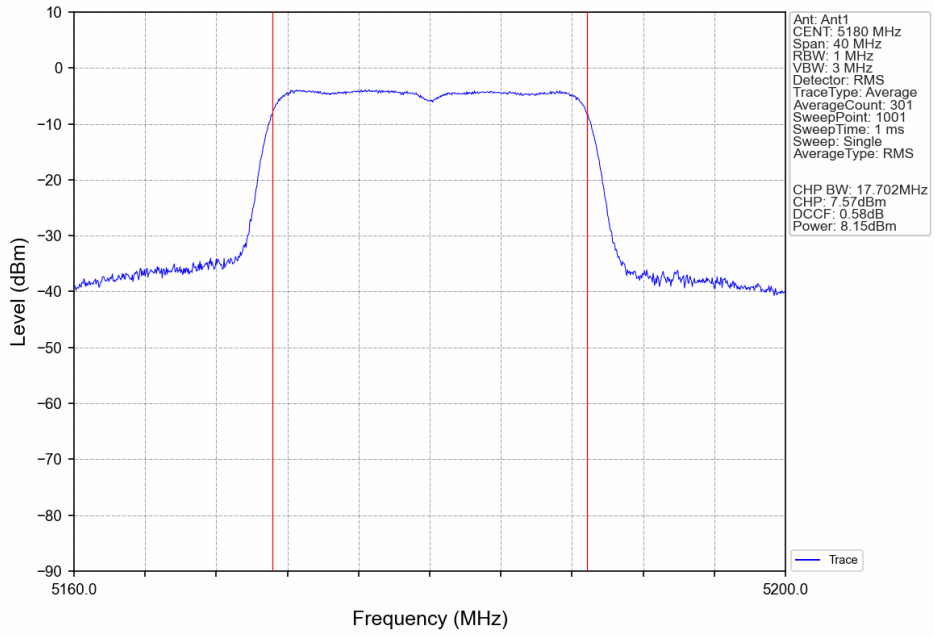
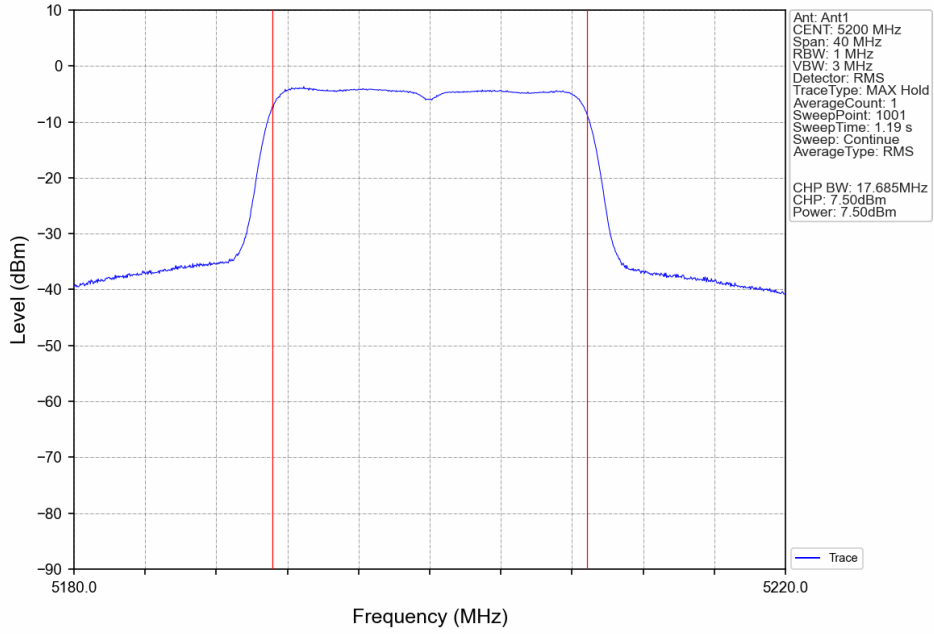
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV