

Appendix RF test data for 5G WIFI

1. Duty Cycle

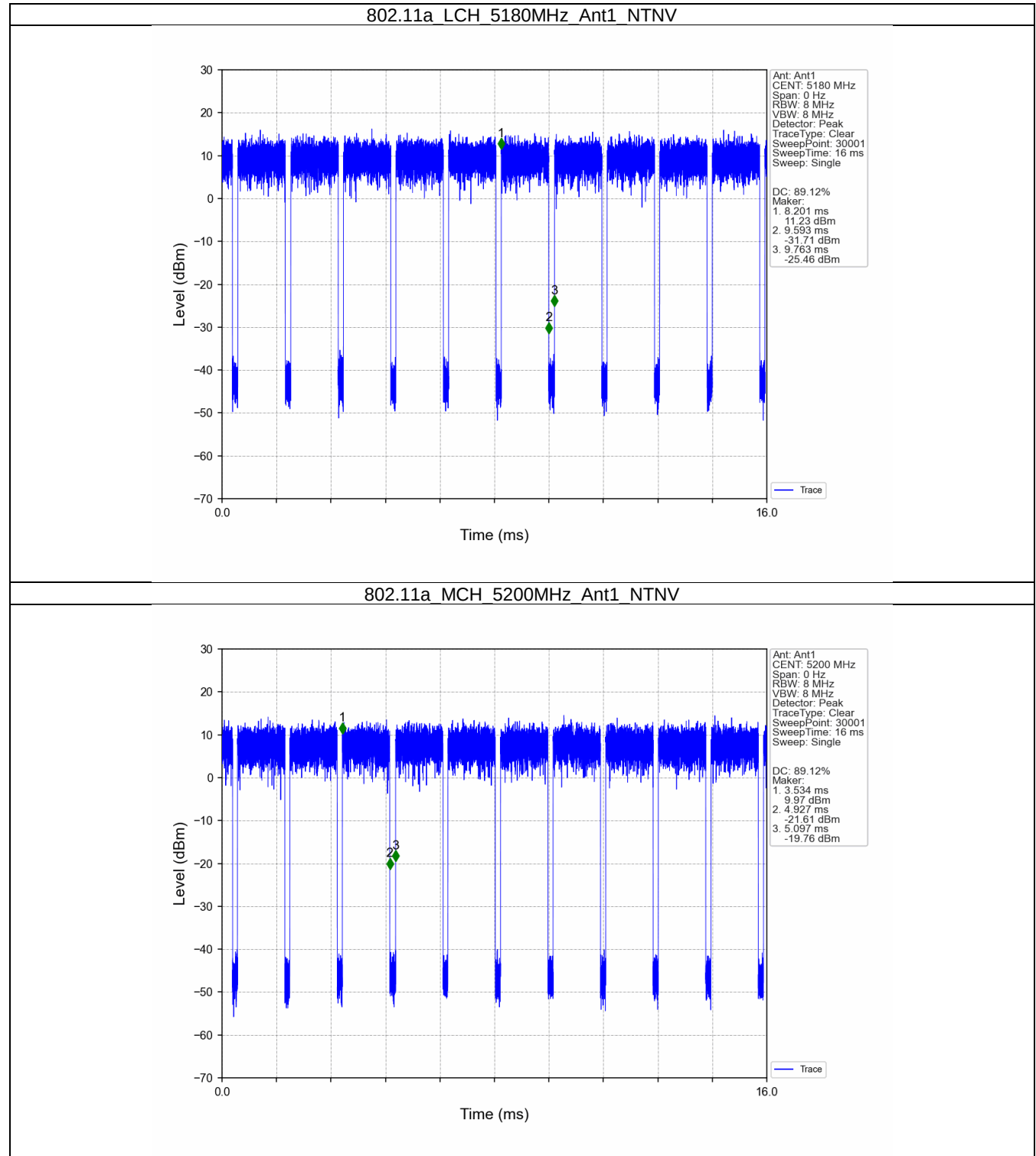
1.1 Test Result

1.1.1 Ant1

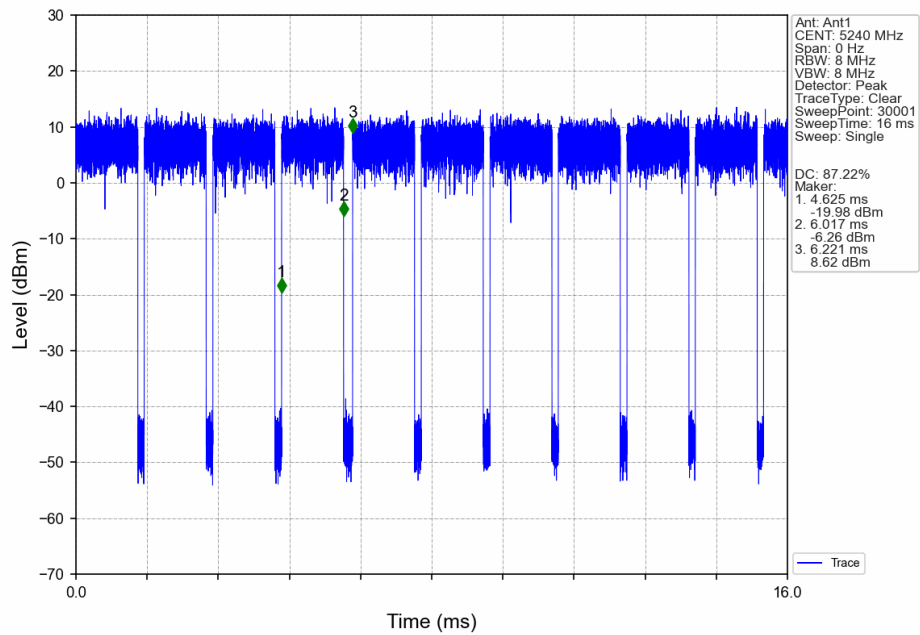
Ant1							
Mode	Tx Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	1.392	1.562	89.12	0.50	1.17
		5200	1.393	1.563	89.12	0.50	1.58
		5240	1.392	1.596	87.22	0.59	3.43
		5745	1.393	1.563	89.12	0.50	1.55
		5785	1.392	1.576	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

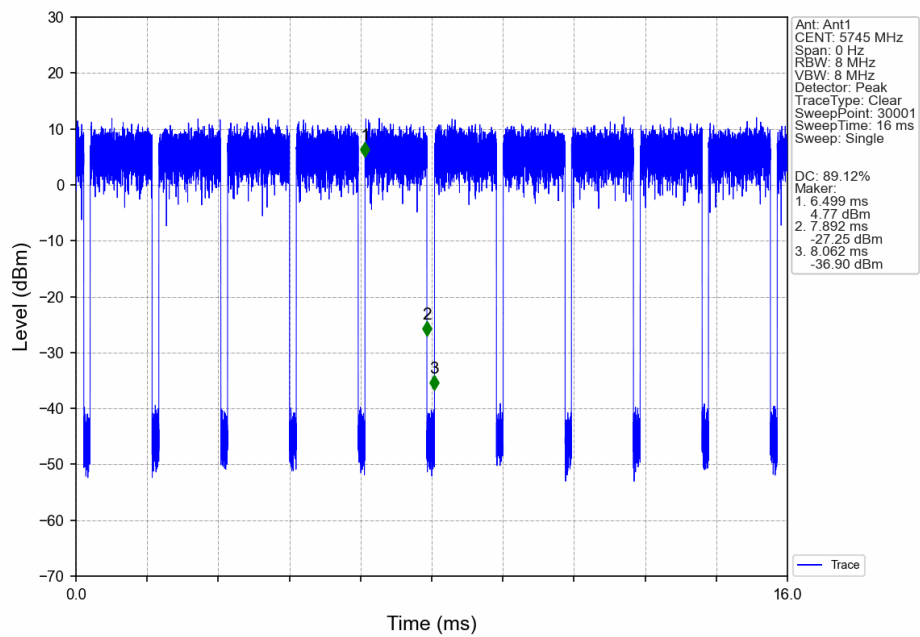
1.2.1 Ant1



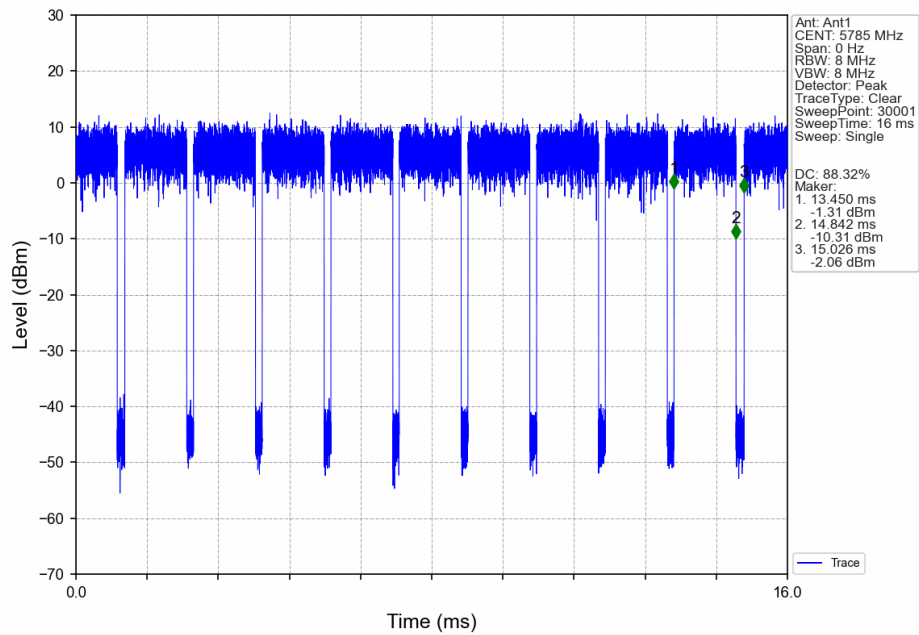
802.11a HCH 5240MHz Ant1 NTN



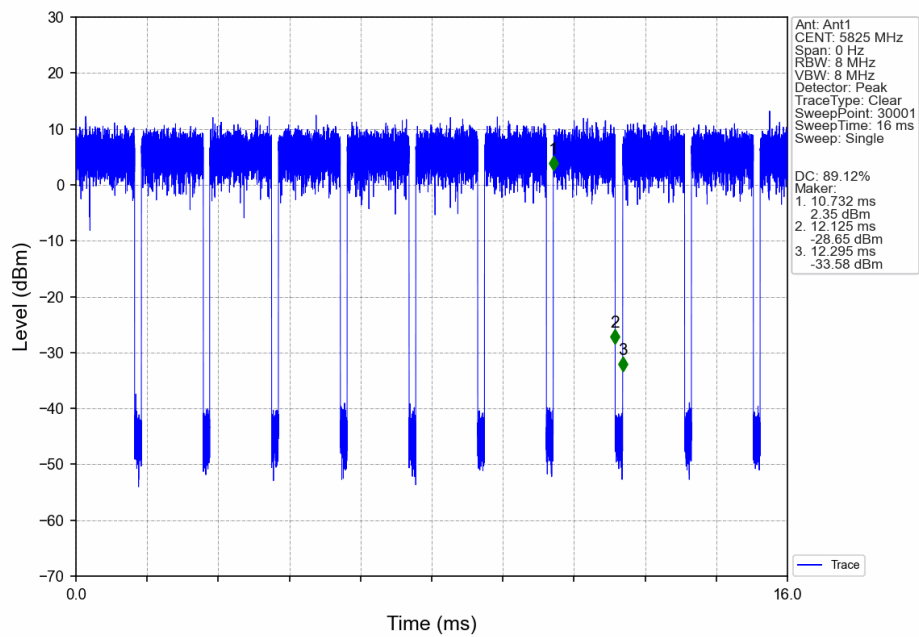
802.11a LCH 5745MHz Ant1 NTN



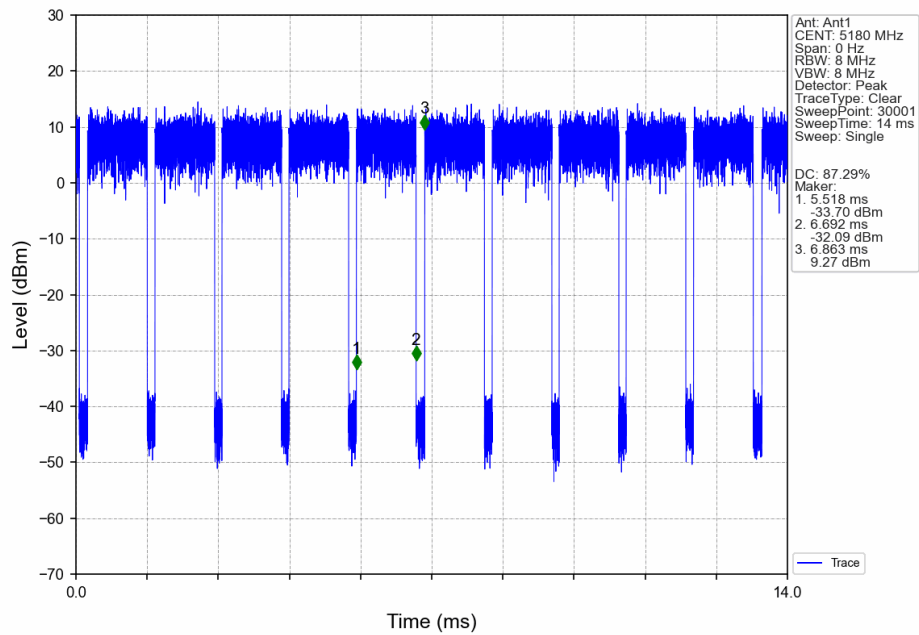
802.11a MCH 5785MHz Ant1 NTNV



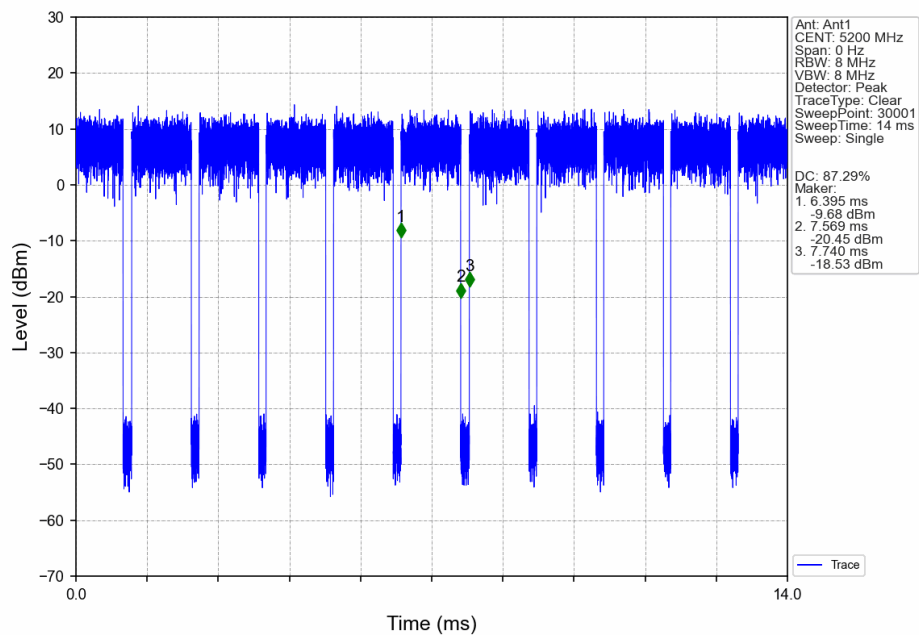
802.11a HCH 5825MHz Ant1 NTNV



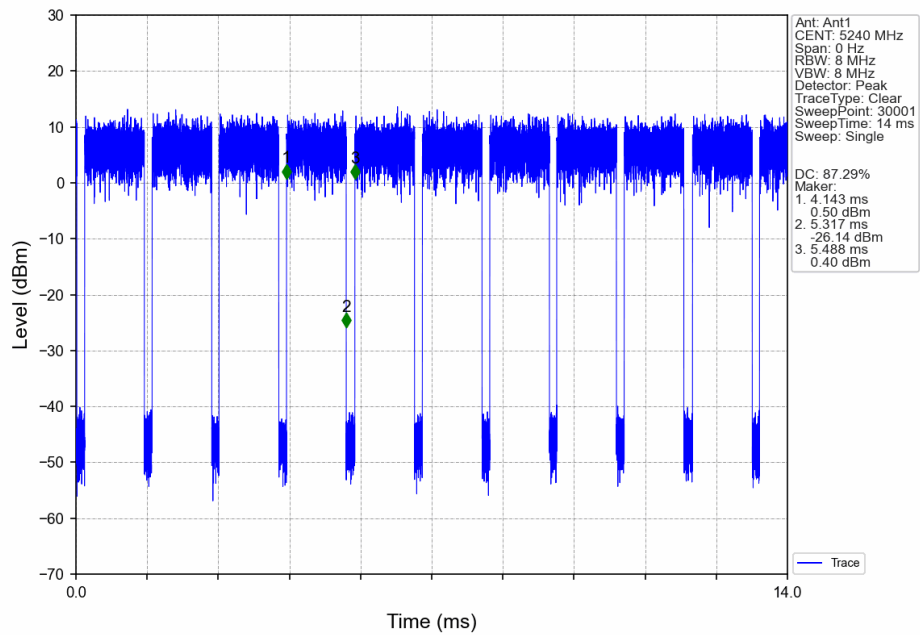
802.11n(HT20) LCH 5180MHz Ant1 NTN



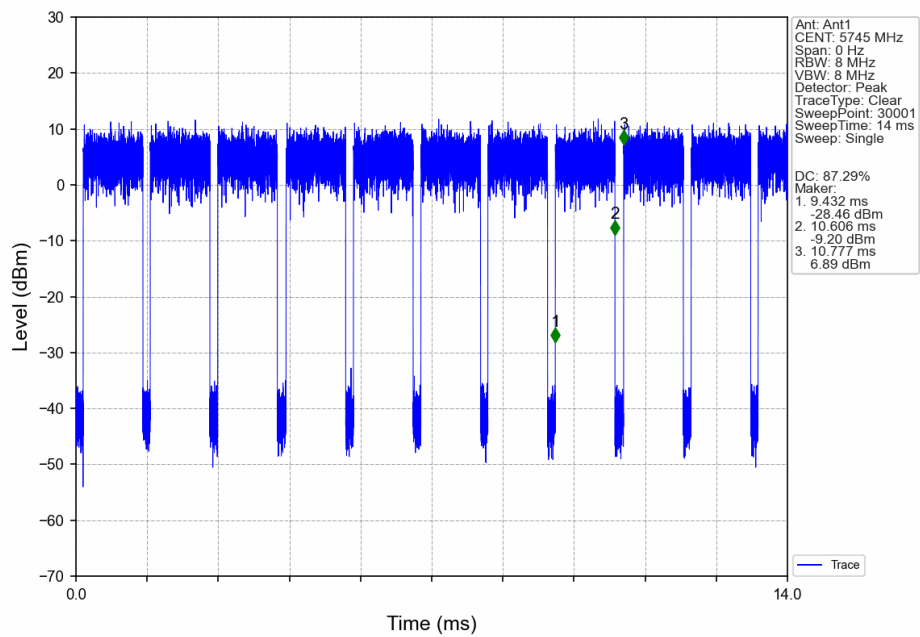
802.11n(HT20) MCH 5200MHz Ant1 NTN



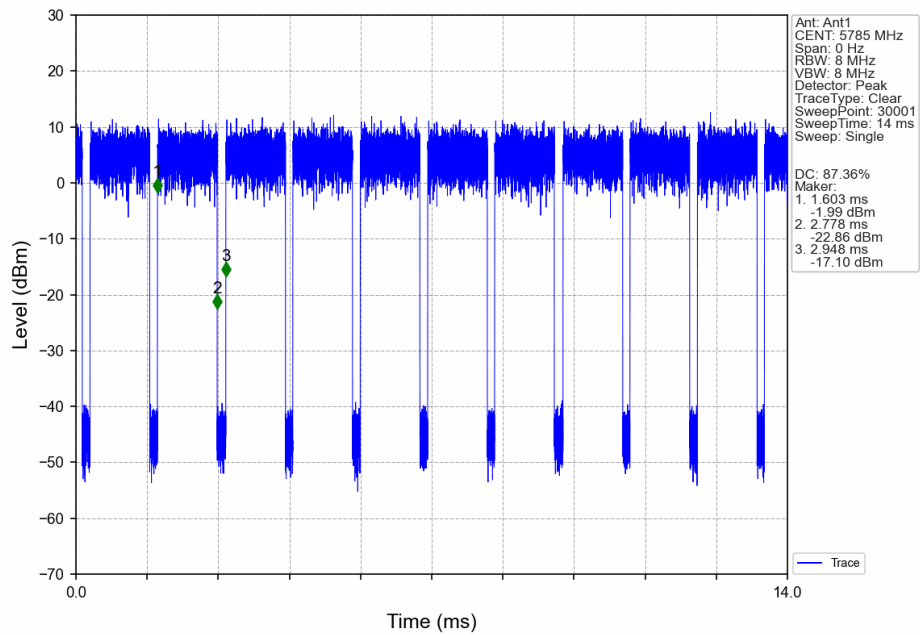
802.11n(HT20) HCH 5240MHz Ant1 NTN



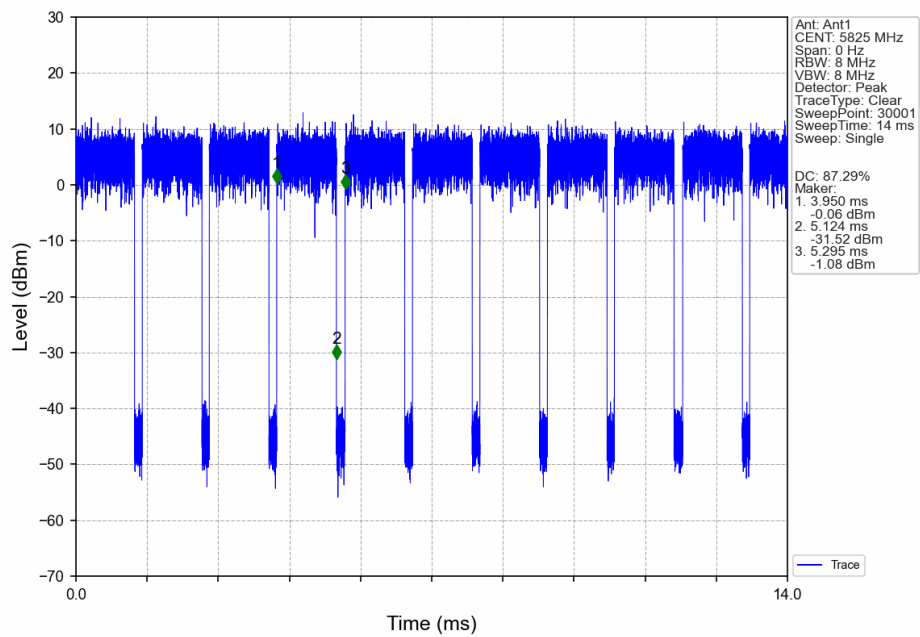
802.11n(HT20) LCH 5745MHz Ant1 NTN



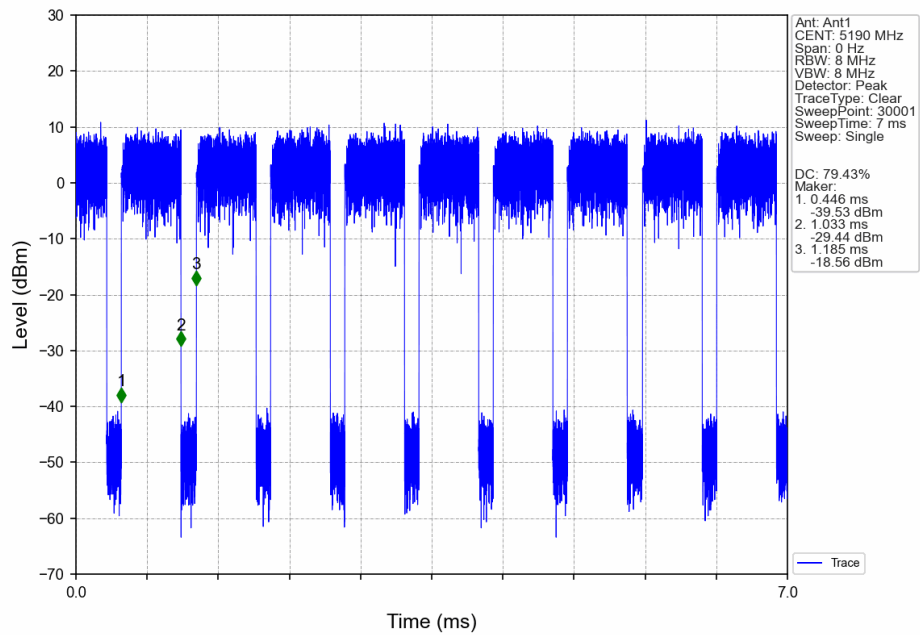
802.11n(HT20) MCH 5785MHz Ant1 NTN



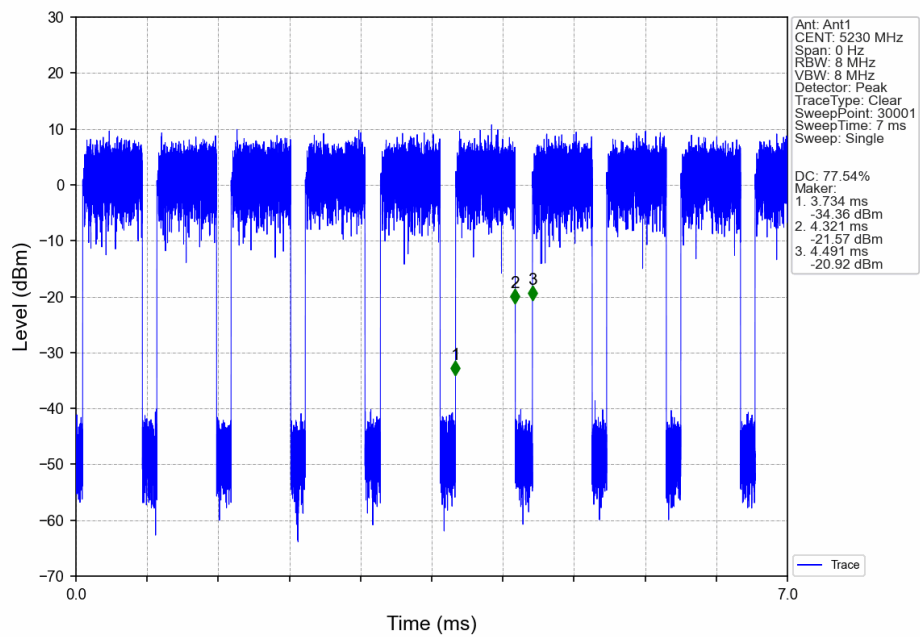
802.11n(HT20) HCH 5825MHz Ant1 NTN



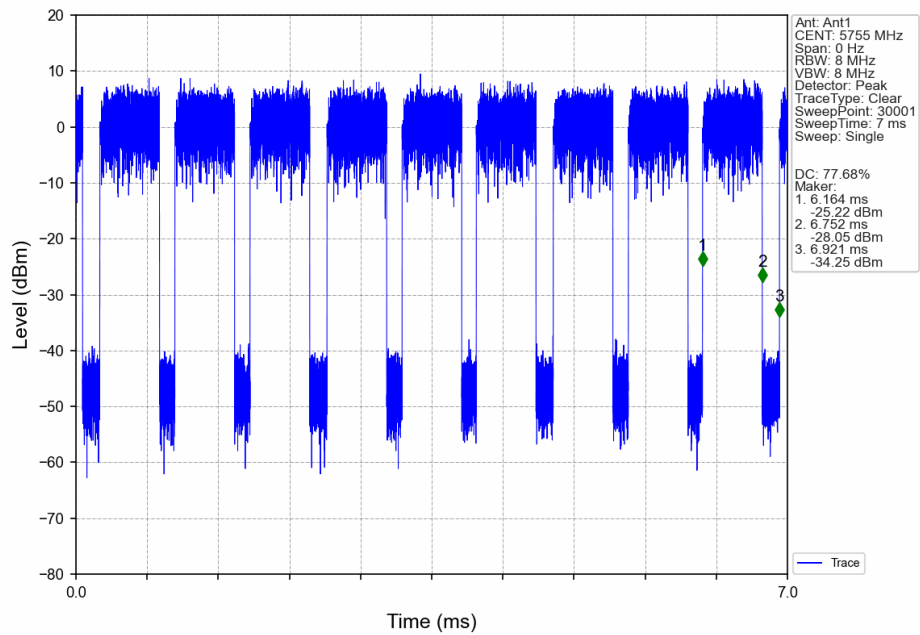
802.11n(HT40) LCH 5190MHz Ant1 NTN



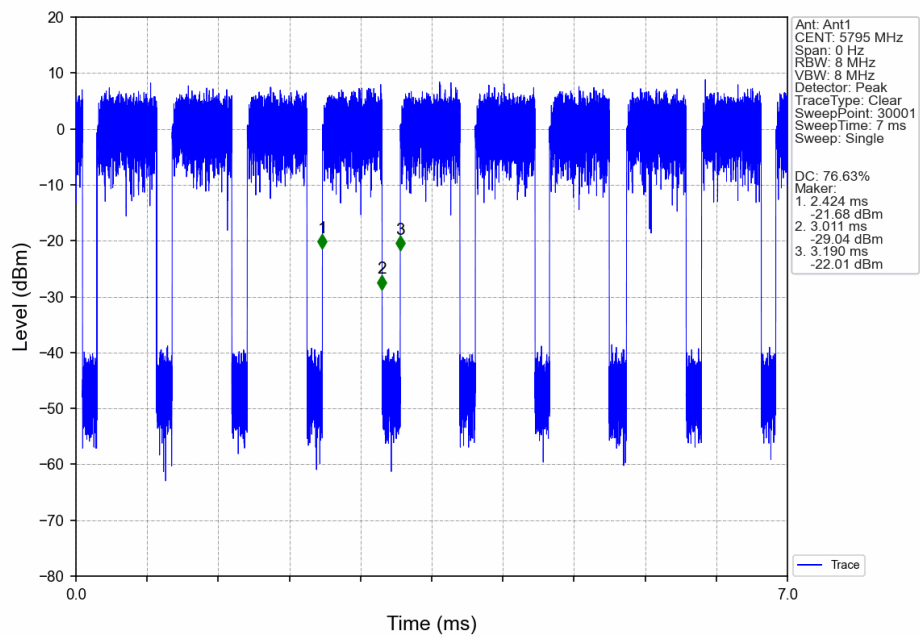
802.11n(HT40) HCH 5230MHz Ant1 NTN



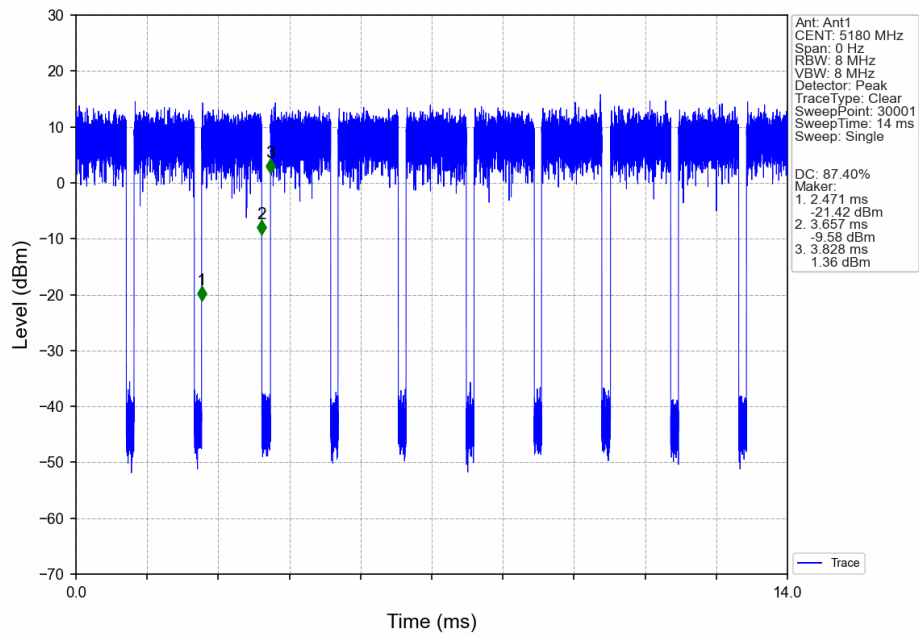
802.11n(HT40) LCH 5755MHz Ant1 NTN



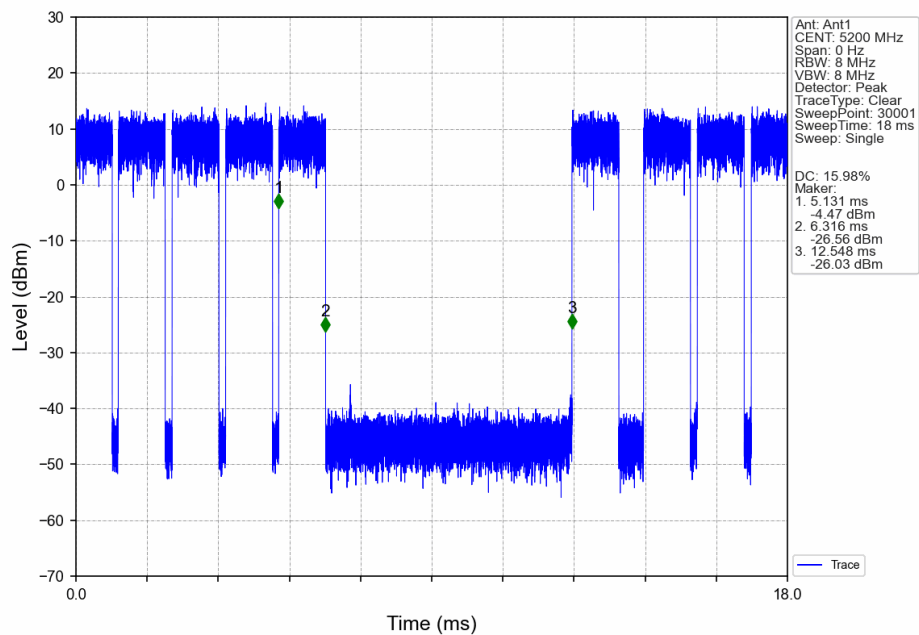
802.11n(HT40) HCH 5795MHz Ant1 NTN



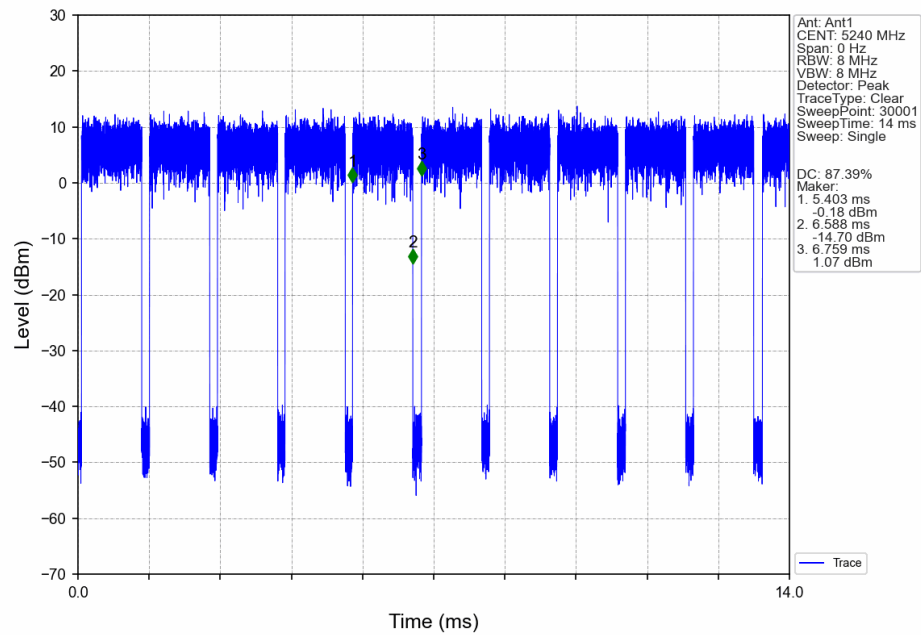
802.11ac(VHT20) LCH 5180MHz Ant1 NTVN



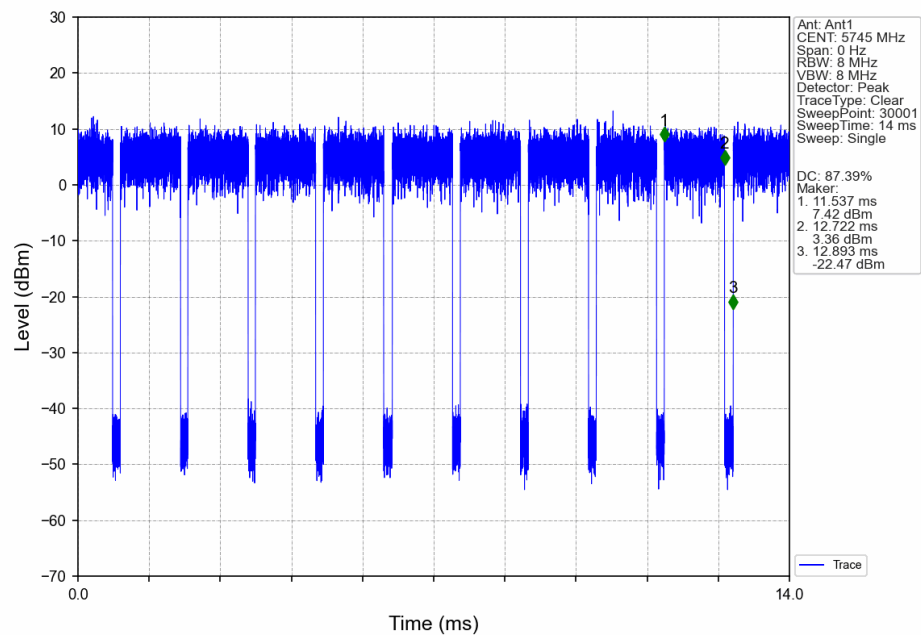
802.11ac(VHT20) MCH 5200MHz Ant1 NTVN



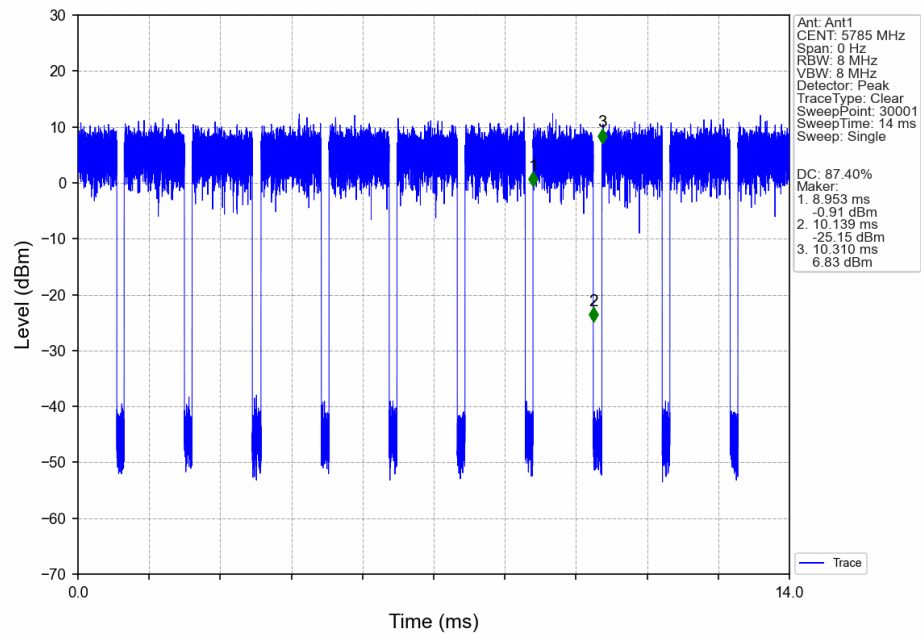
802.11ac(VHT20) HCH 5240MHz Ant1 NTN



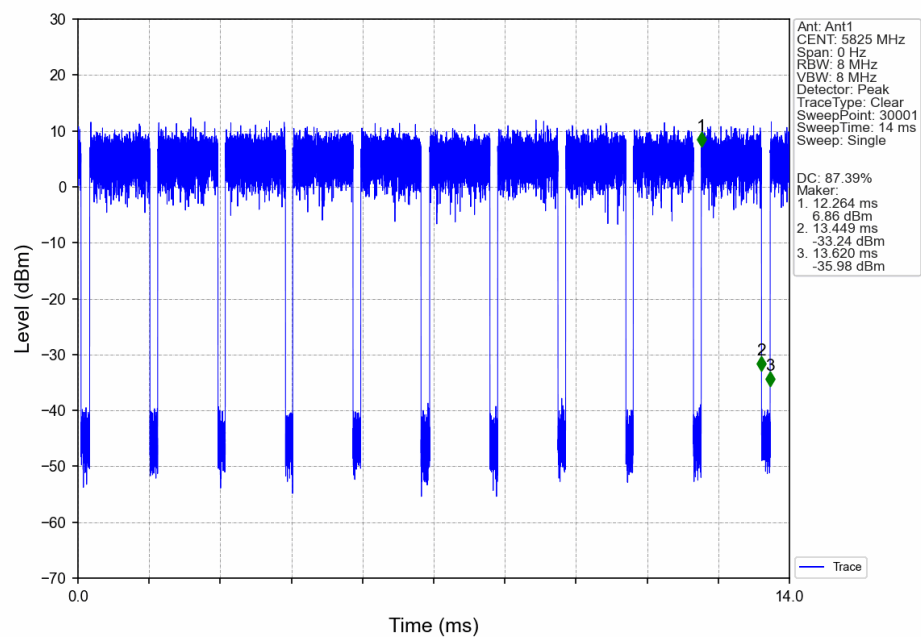
802.11ac(VHT20) LCH 5745MHz Ant1 NTN



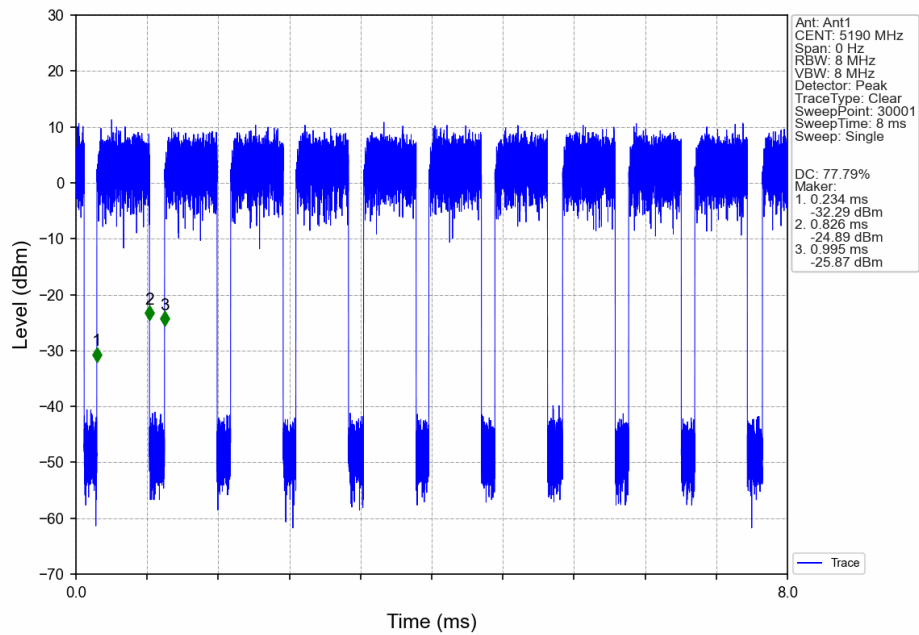
802.11ac(VHT20) MCH 5785MHz Ant1 NTN



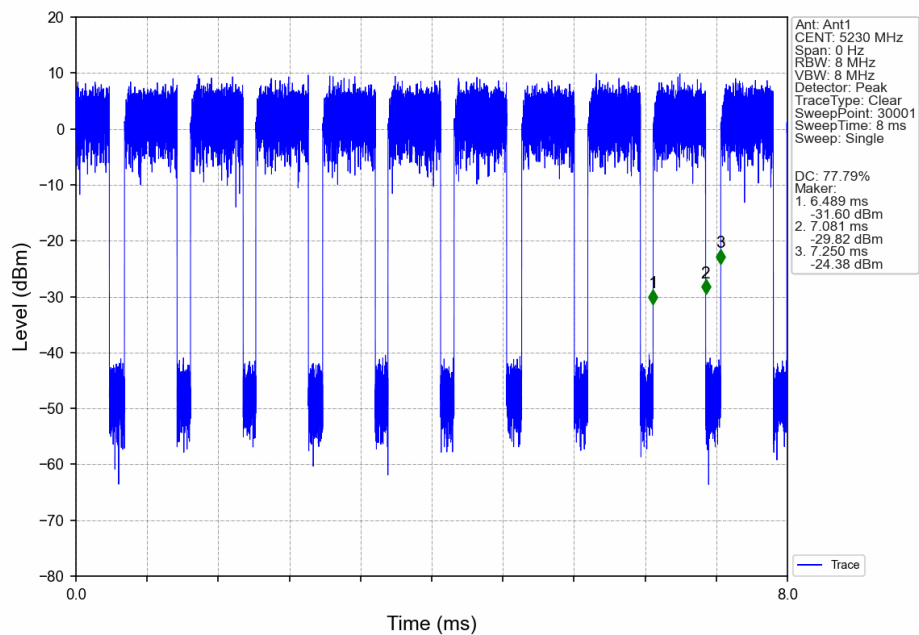
802.11ac(VHT20) HCH 5825MHz Ant1 NTN



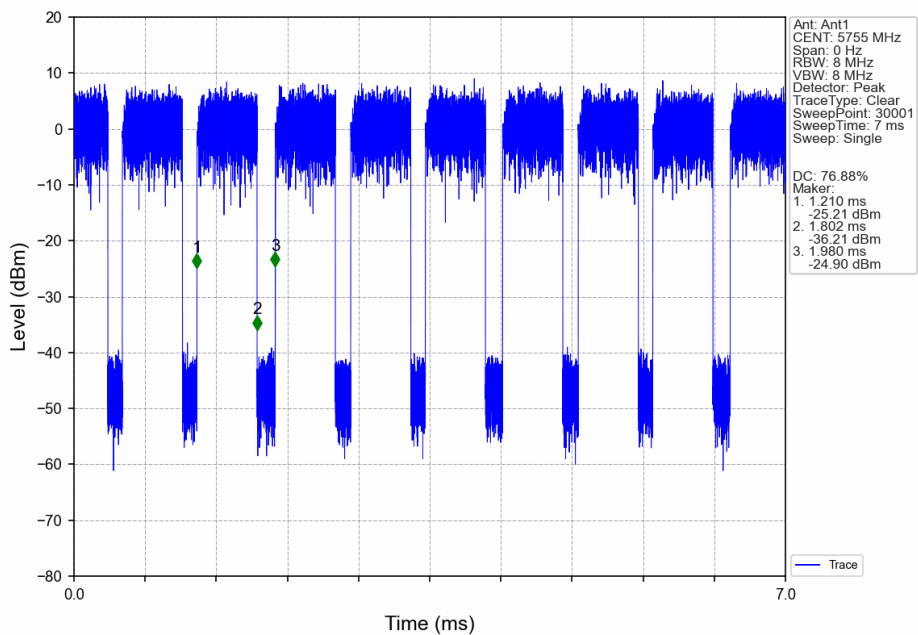
802.11ac(VHT40) LCH 5190MHz Ant1 NTVN



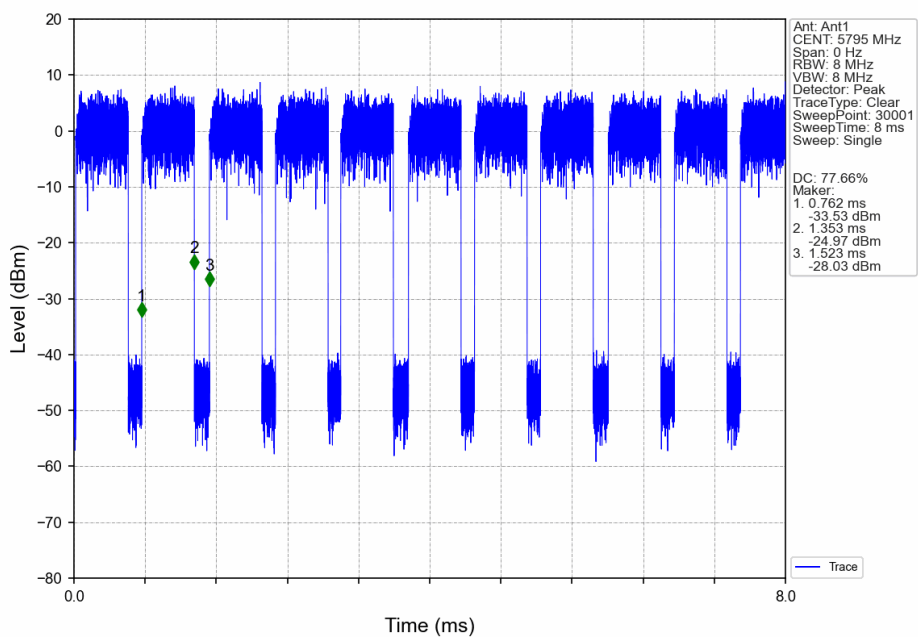
802.11ac(VHT40) HCH 5230MHz Ant1 NTVN



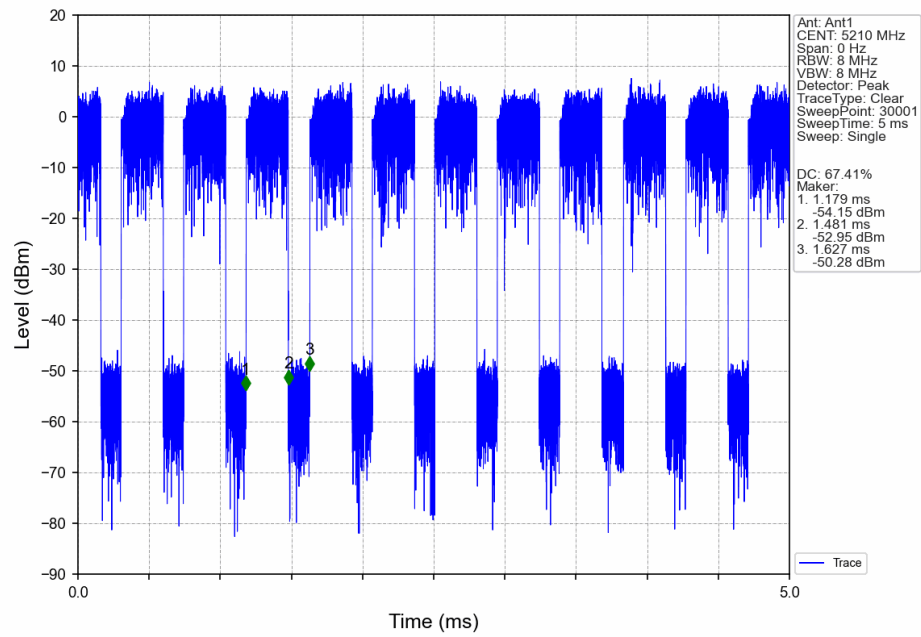
802.11ac(VHT40) LCH 5755MHz Ant1 NTNV



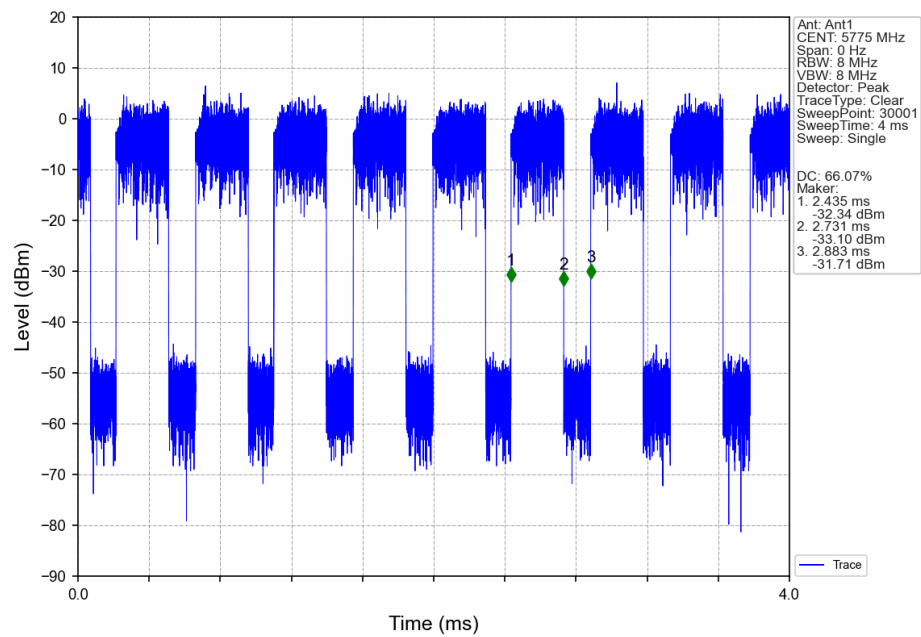
802.11ac(VHT40) HCH 5795MHz Ant1 NTNV



802.11ac(VHT80) MCH 5210MHz Ant1 NTN



802.11ac(VHT80) MCH 5775MHz Ant1 NTN



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

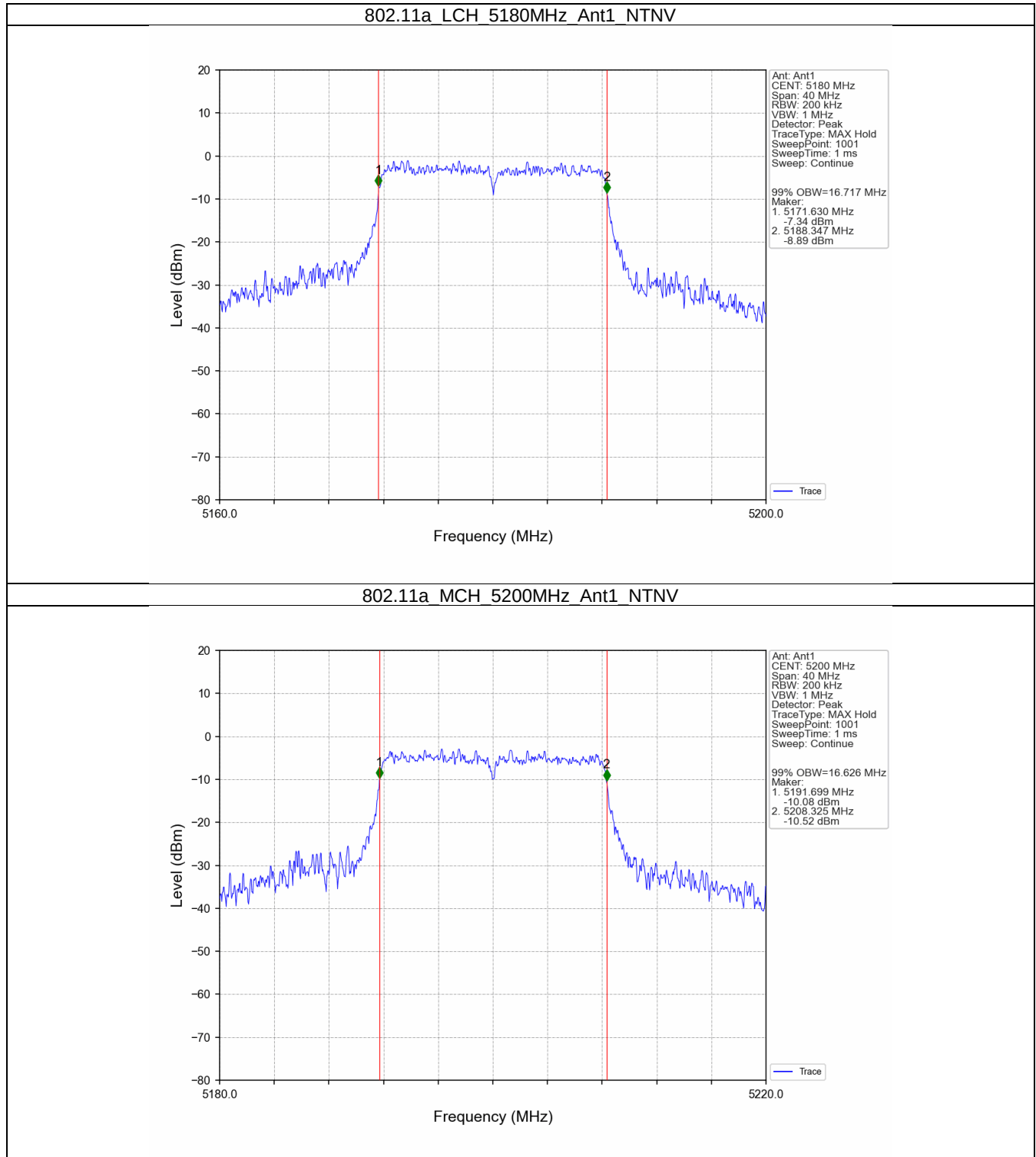
802.11ac (VHT80)	SISO	5210	1	183.155	/	Pass
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2.1.3 6dB BW

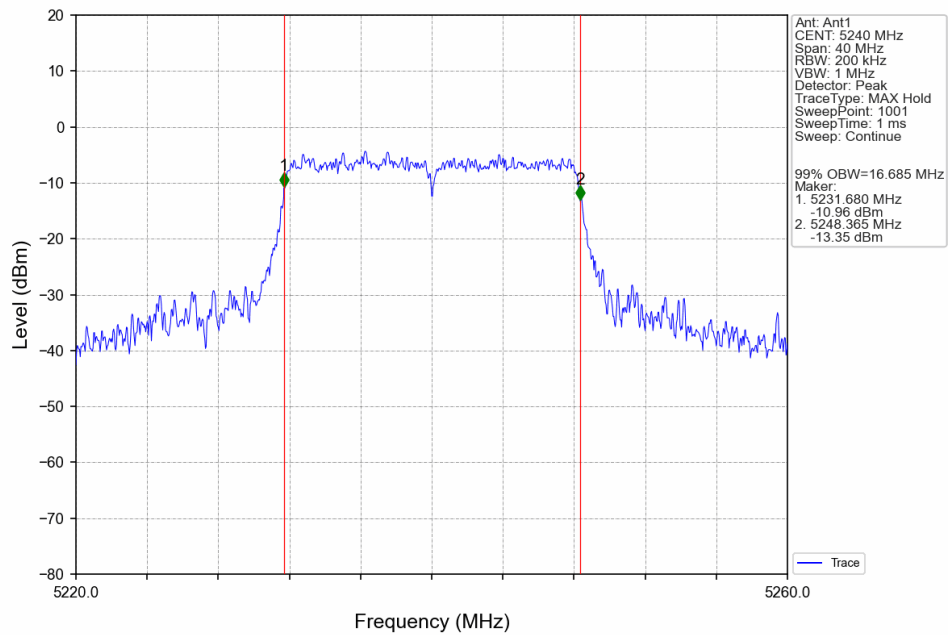
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	16.405	≥ 0.5	Pass
		5785	1	16.397	≥ 0.5	Pass
		5825	1	16.438	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	17.453	≥ 0.5	Pass
		5785	1	17.430	≥ 0.5	Pass
		5825	1	17.382	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	36.145	≥ 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

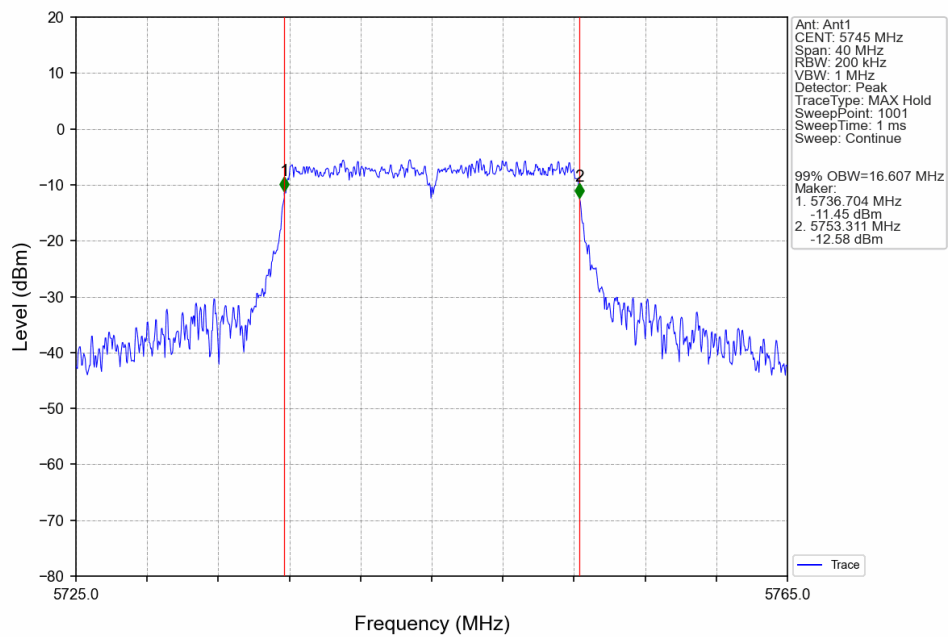
2.2.1 OBW



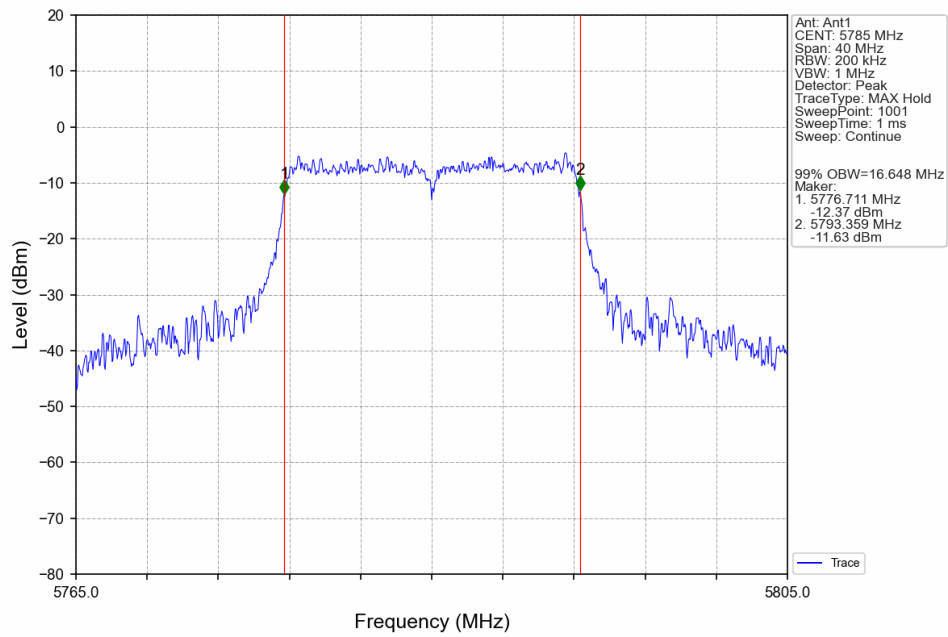
802.11a HCH 5240MHz Ant1 NTNV



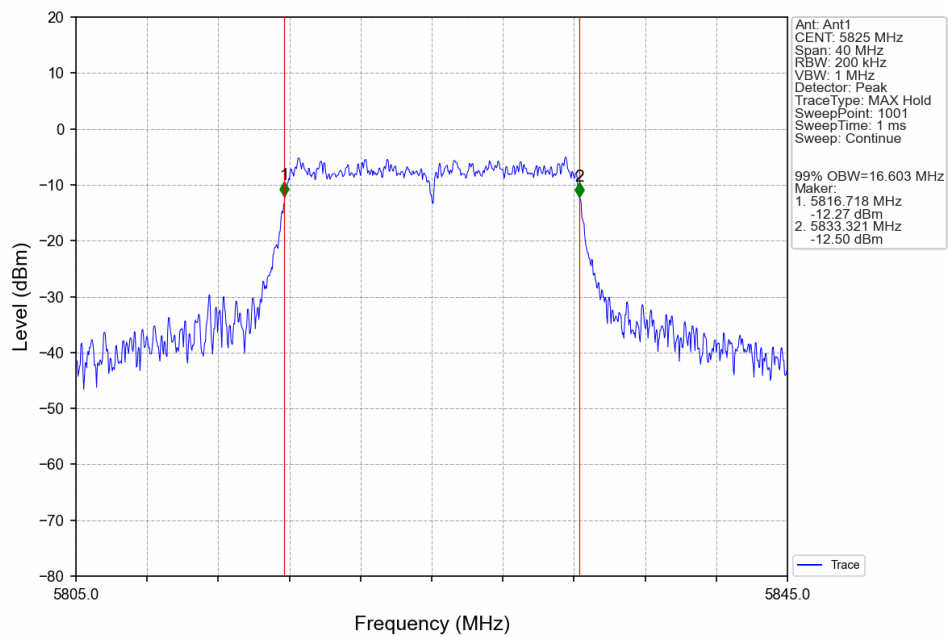
802.11a LCH 5745MHz Ant1 NTNV



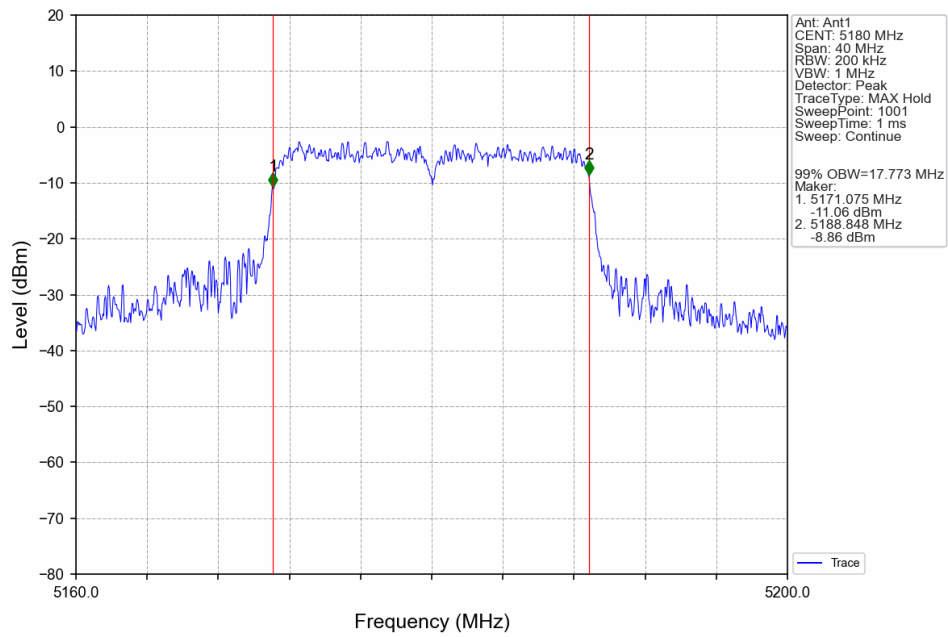
802.11a MCH 5785MHz Ant1 NTNV



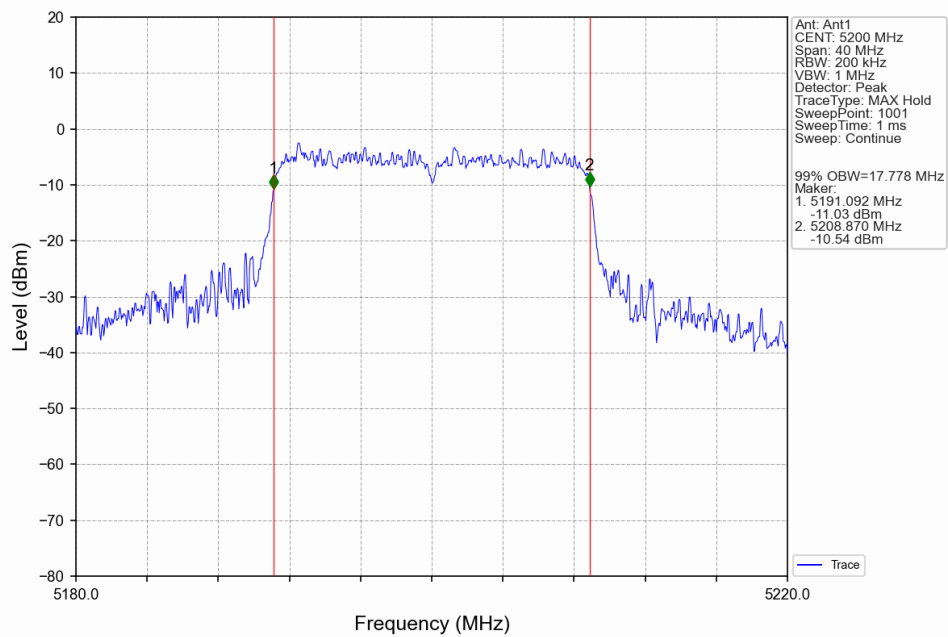
802.11a HCH 5825MHz Ant1 NTNV



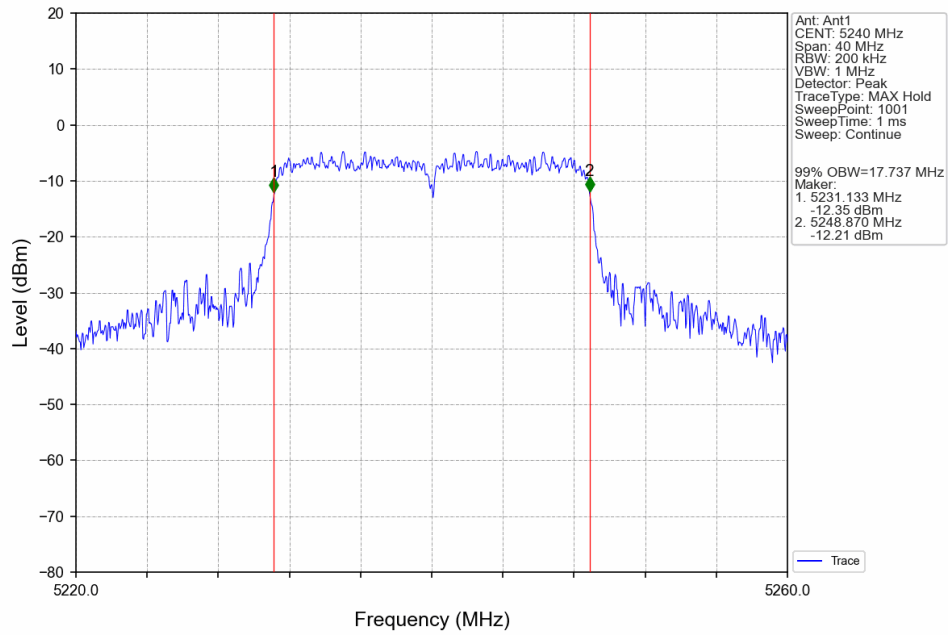
802.11n(HT20) LCH 5180MHz Ant1 NTN



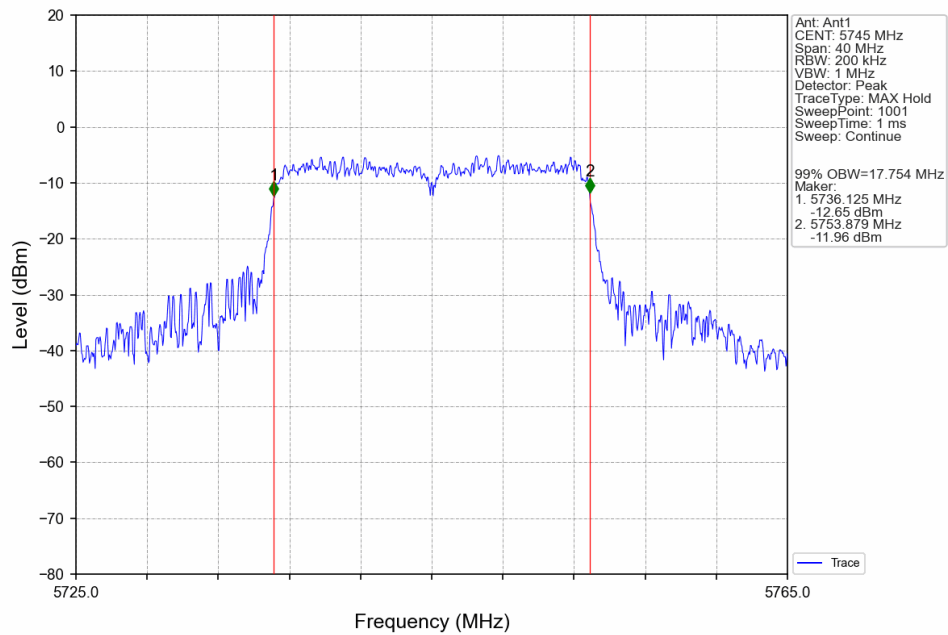
802.11n(HT20) MCH 5200MHz Ant1 NTN



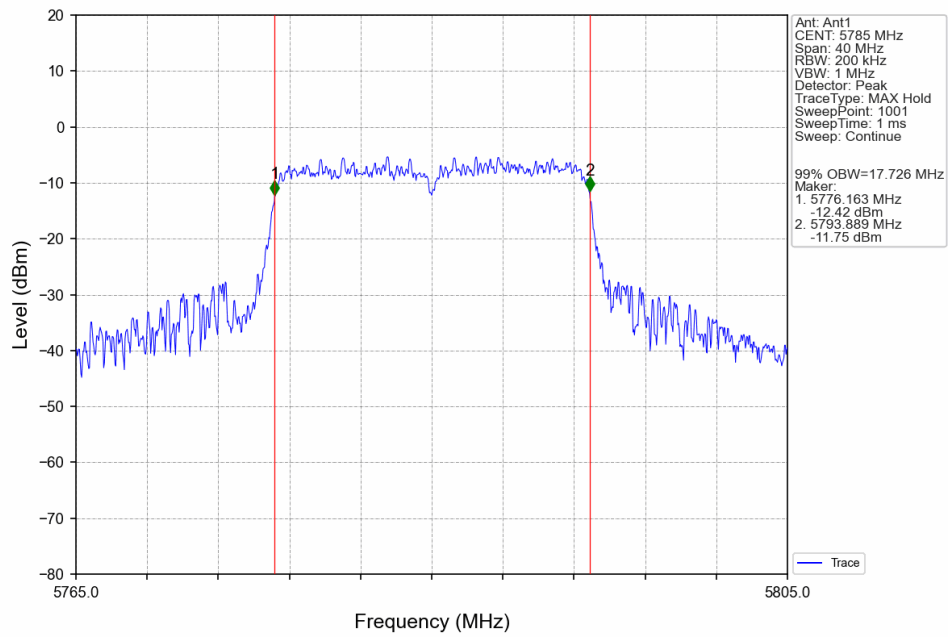
802.11n(HT20) HCH 5240MHz Ant1 NTN



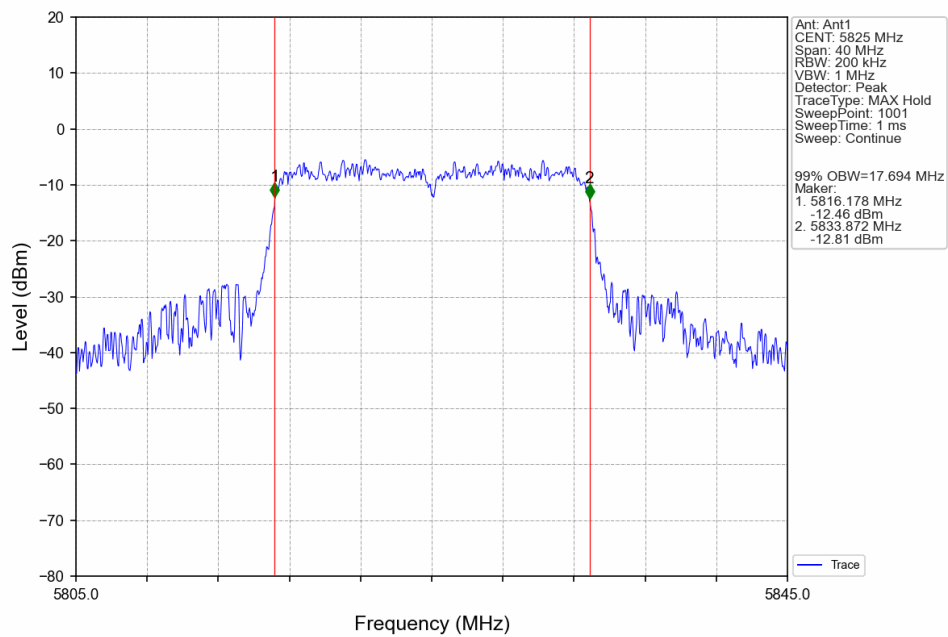
802.11n(HT20) LCH 5745MHz Ant1 NTN



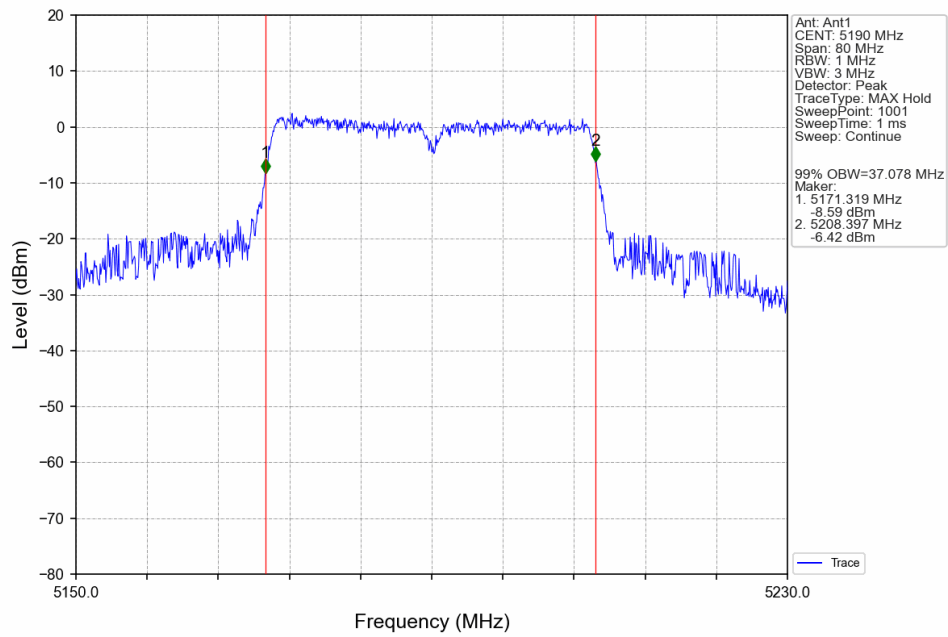
802.11n(HT20) MCH 5785MHz Ant1 NTN



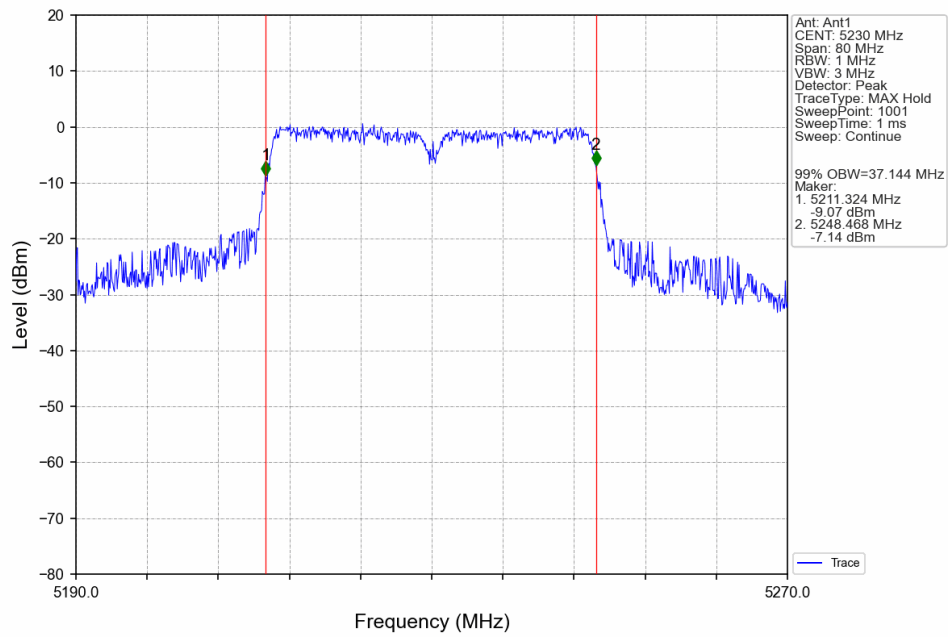
802.11n(HT20) HCH 5825MHz Ant1 NTN



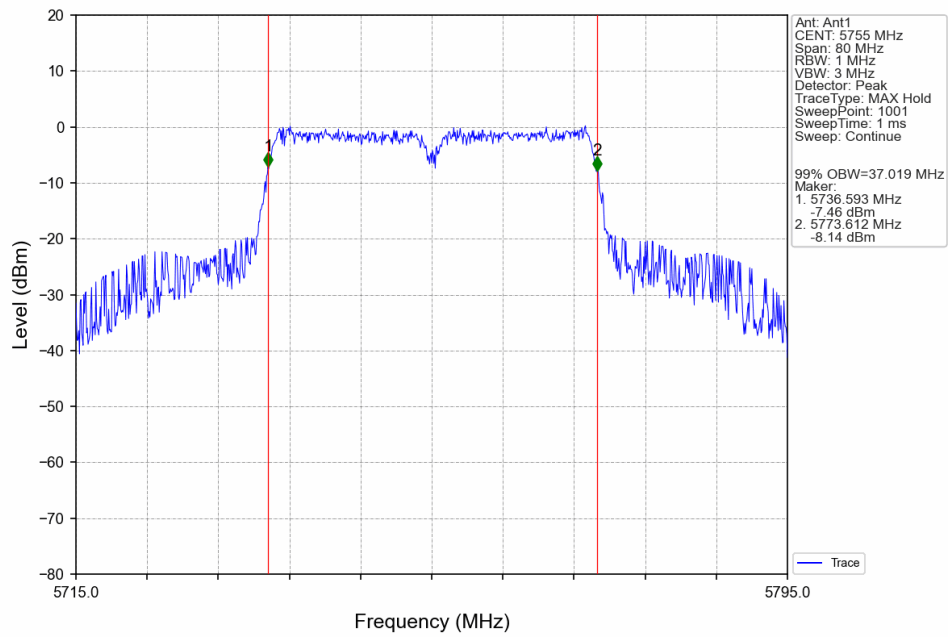
802.11n(HT40) LCH 5190MHz Ant1 NTVN



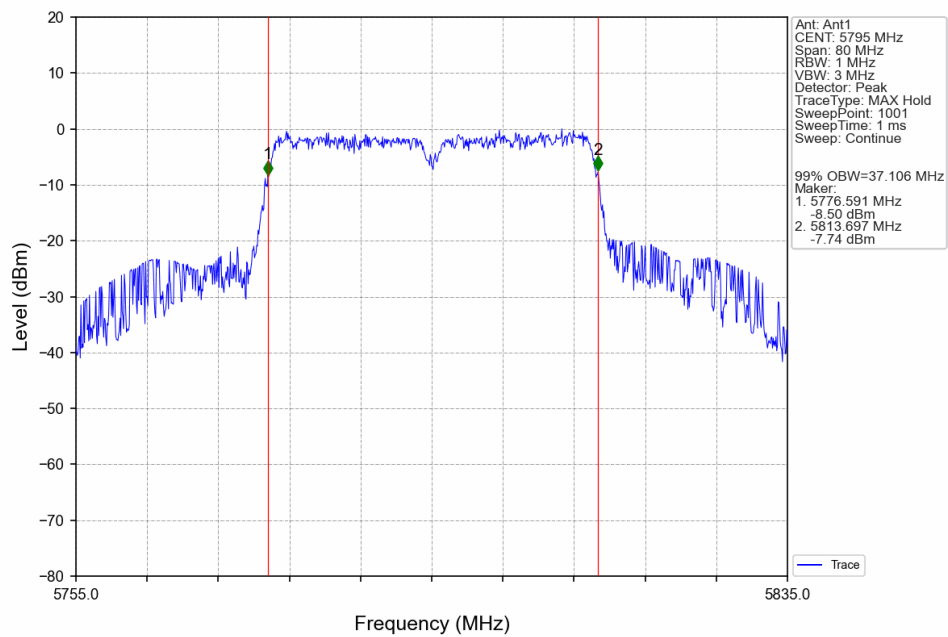
802.11n(HT40) HCH 5230MHz Ant1 NTVN



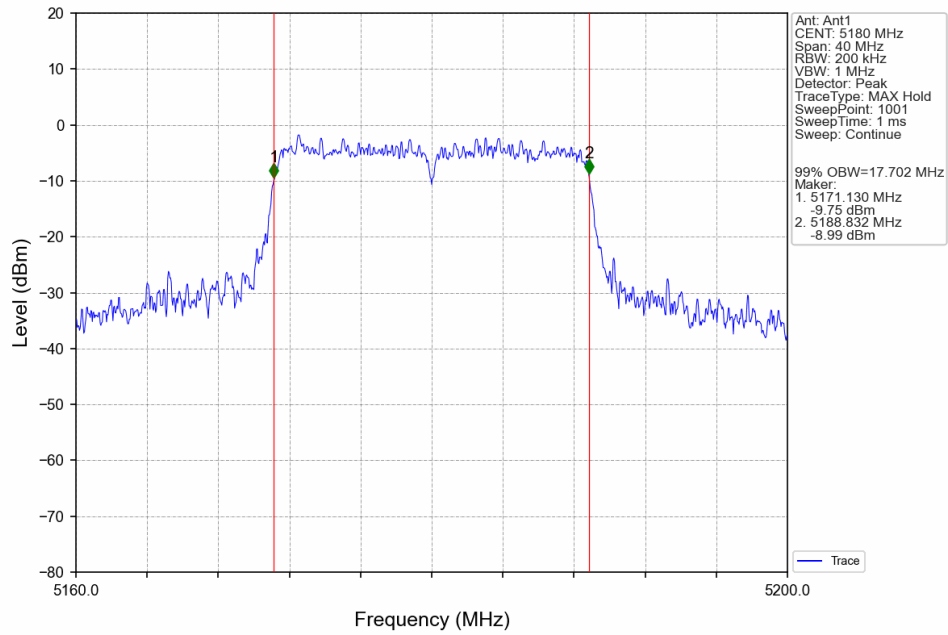
802.11n(HT40) LCH 5755MHz Ant1 NTV



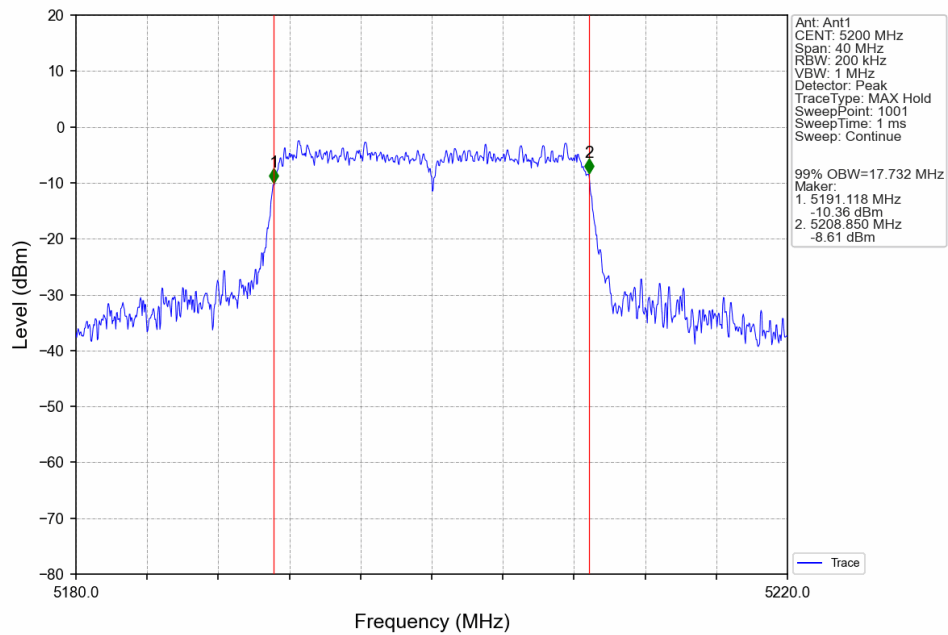
802.11n(HT40) HCH 5795MHz Ant1 NTV



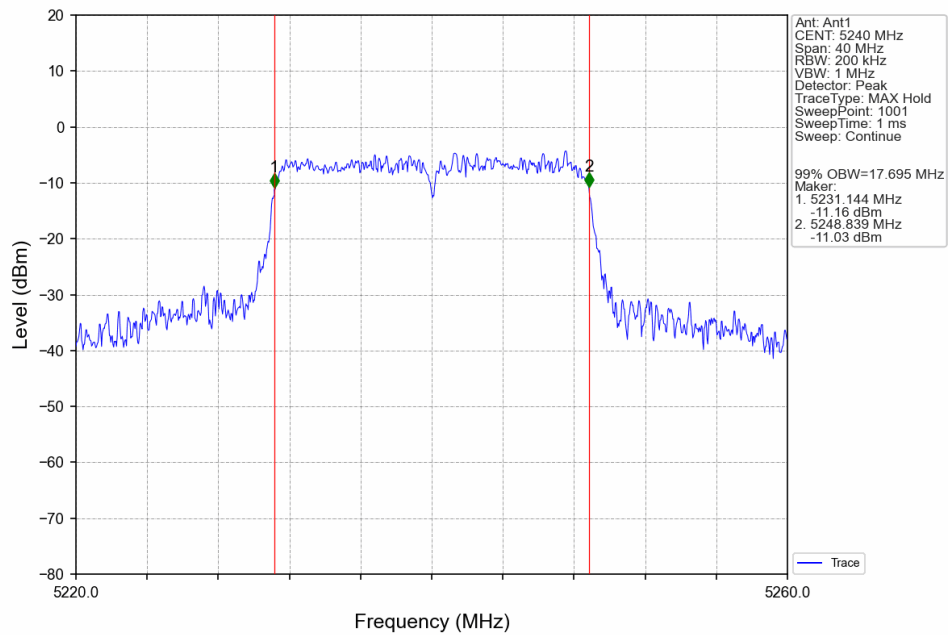
802.11ac(VHT20) LCH 5180MHz Ant1 NTN



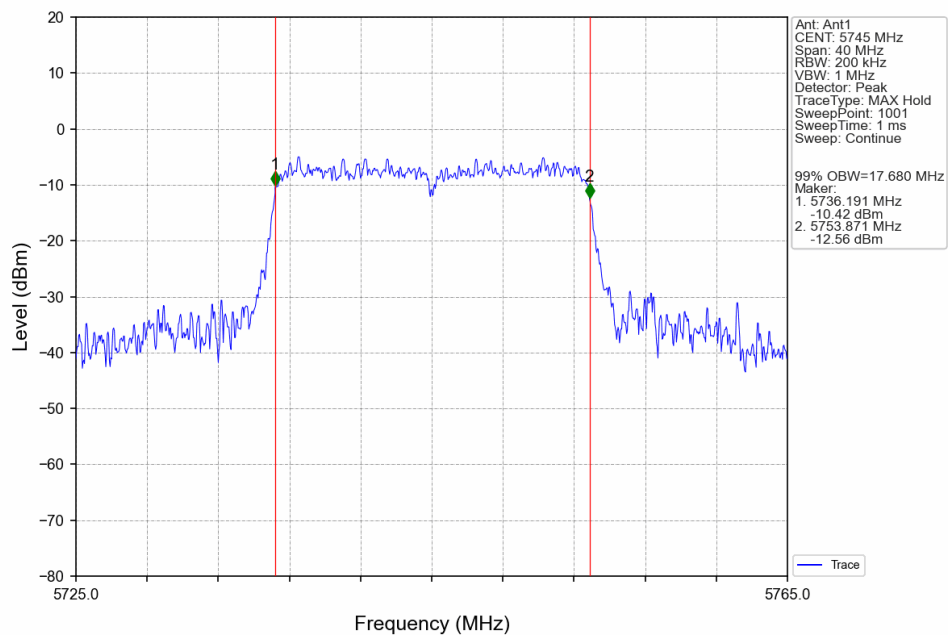
802.11ac(VHT20) MCH 5200MHz Ant1 NTN



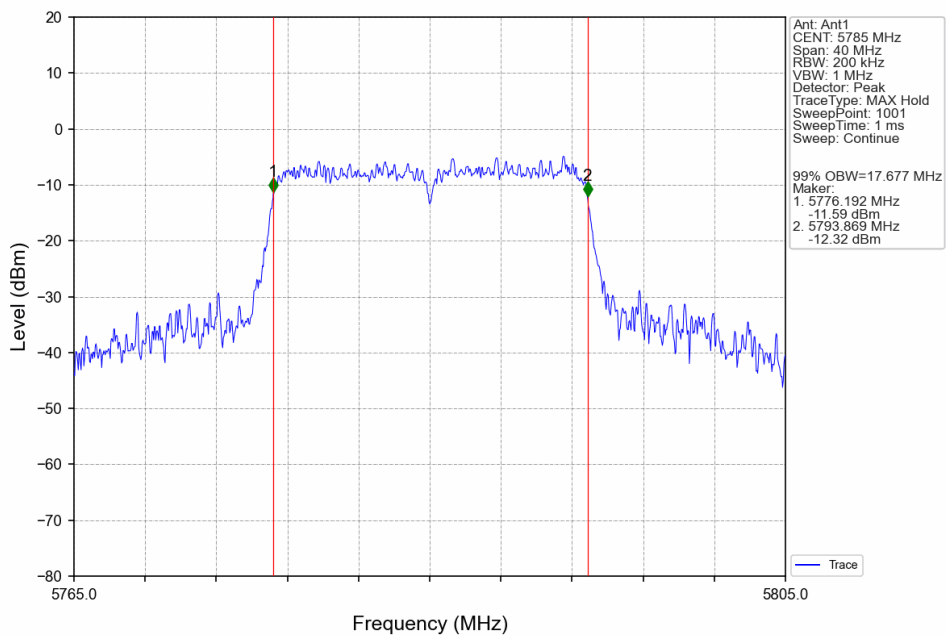
802.11ac(VHT20) HCH 5240MHz Ant1 NTN



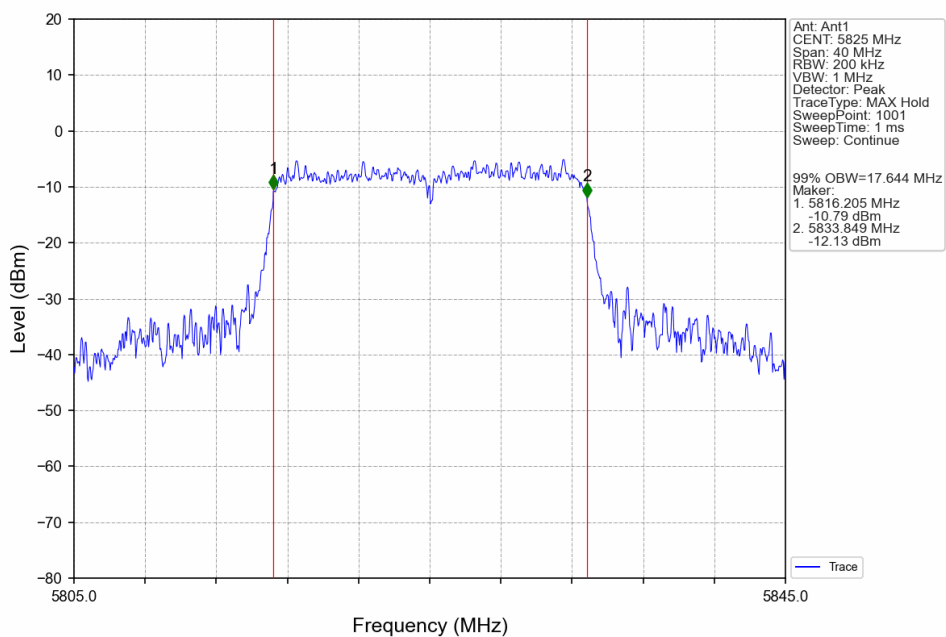
802.11ac(VHT20) LCH 5745MHz Ant1 NTN



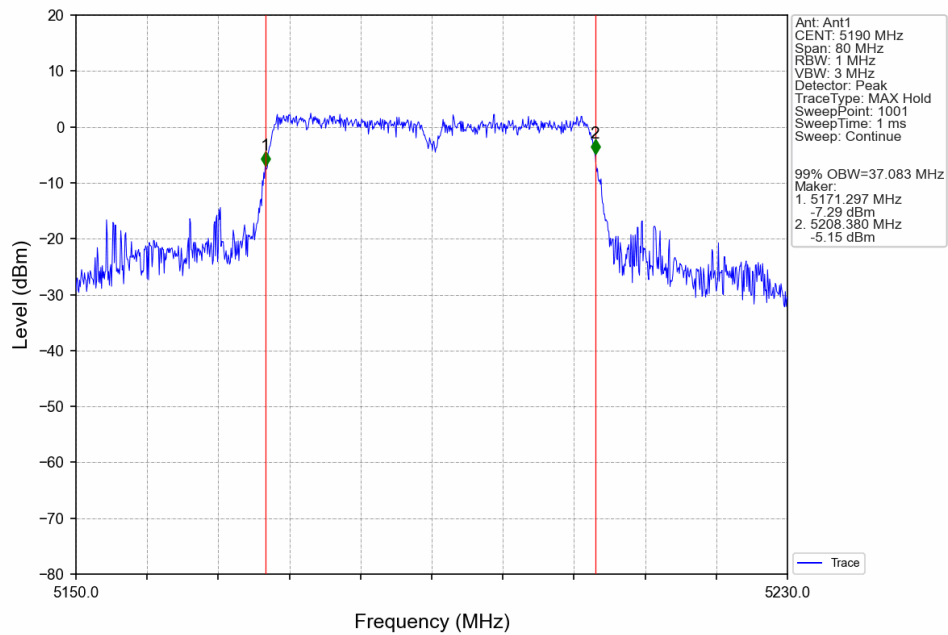
802.11ac(VHT20) MCH 5785MHz Ant1 NTN



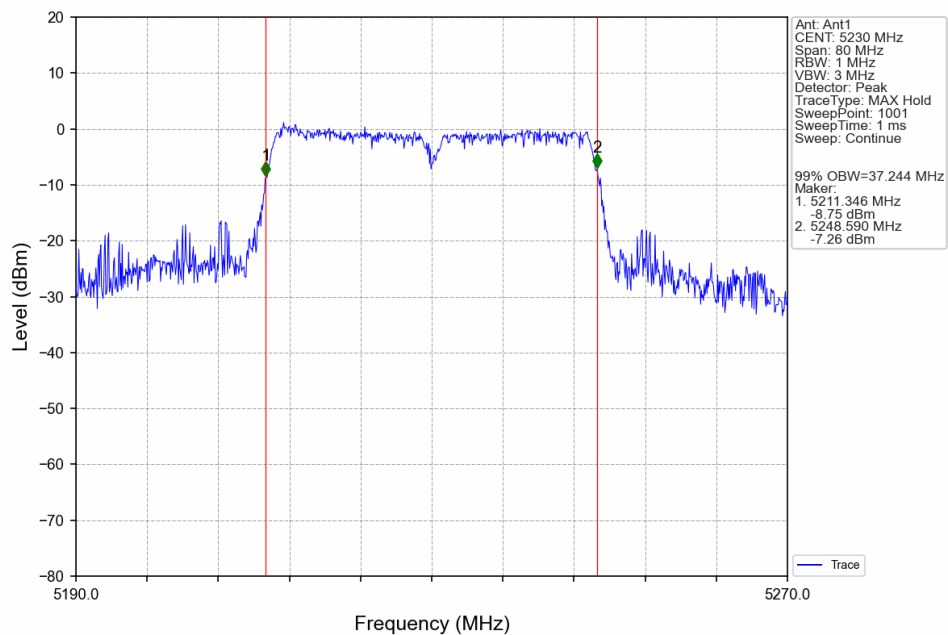
802.11ac(VHT20) HCH 5825MHz Ant1 NTN



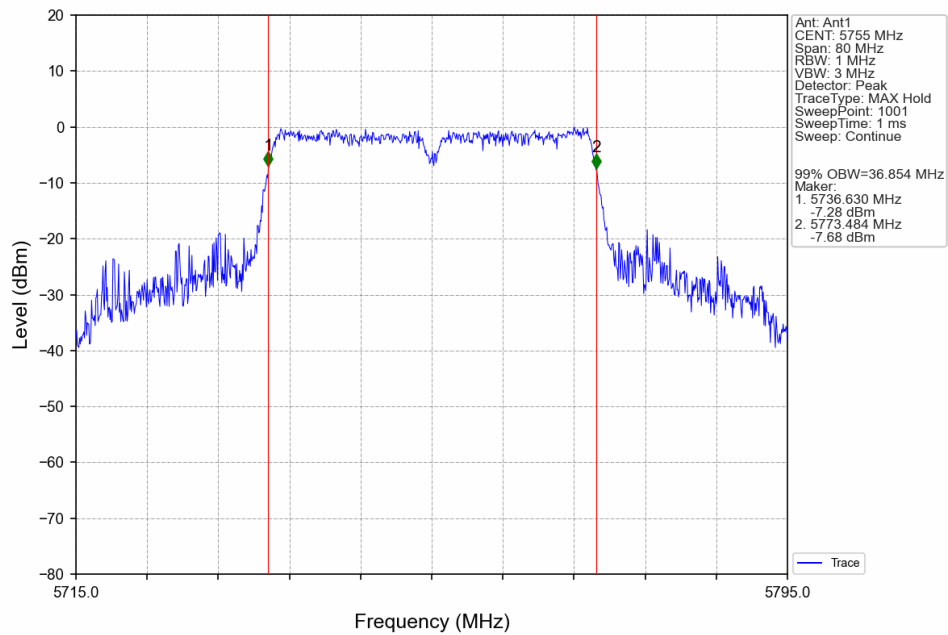
802.11ac(VHT40) LCH 5190MHz Ant1 NTN



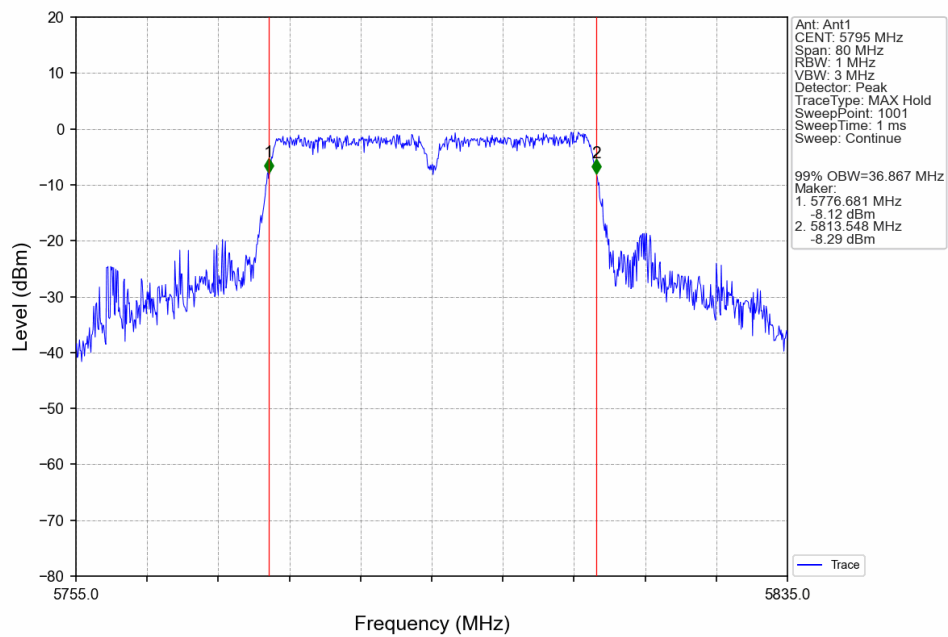
802.11ac(VHT40) HCH 5230MHz Ant1 NTN



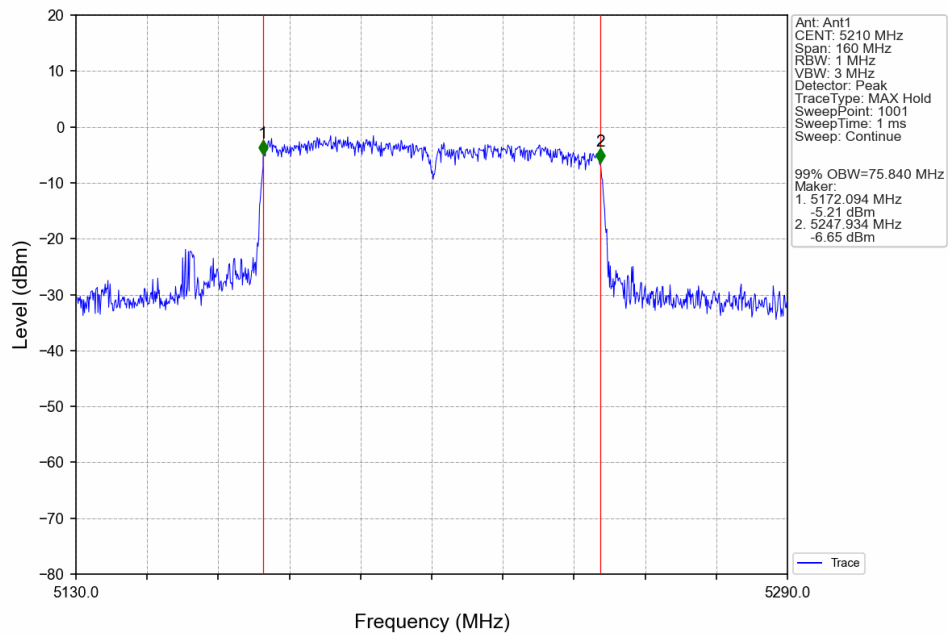
802.11ac(VHT40) LCH 5755MHz Ant1 NTN



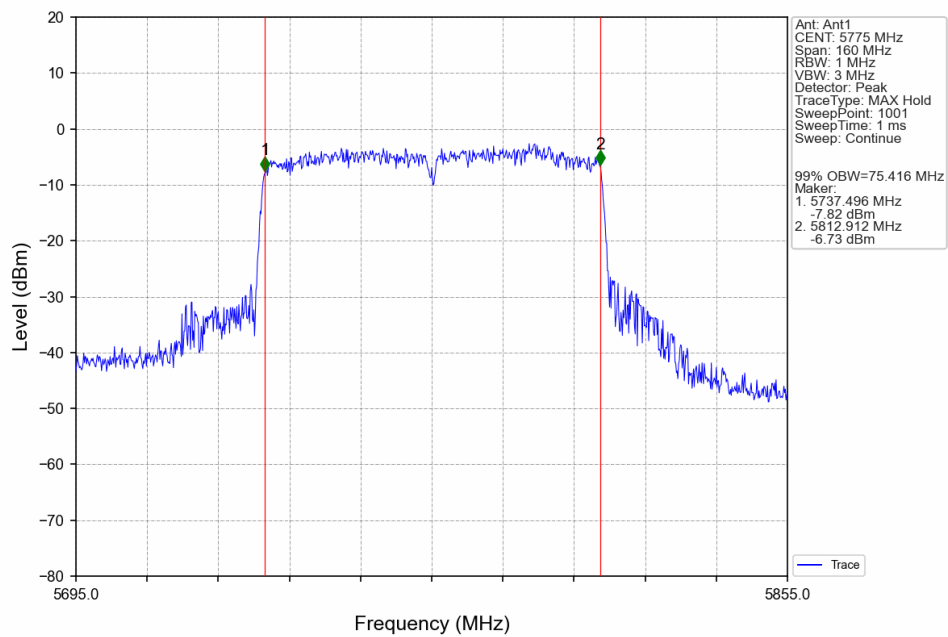
802.11ac(VHT40) HCH 5795MHz Ant1 NTN



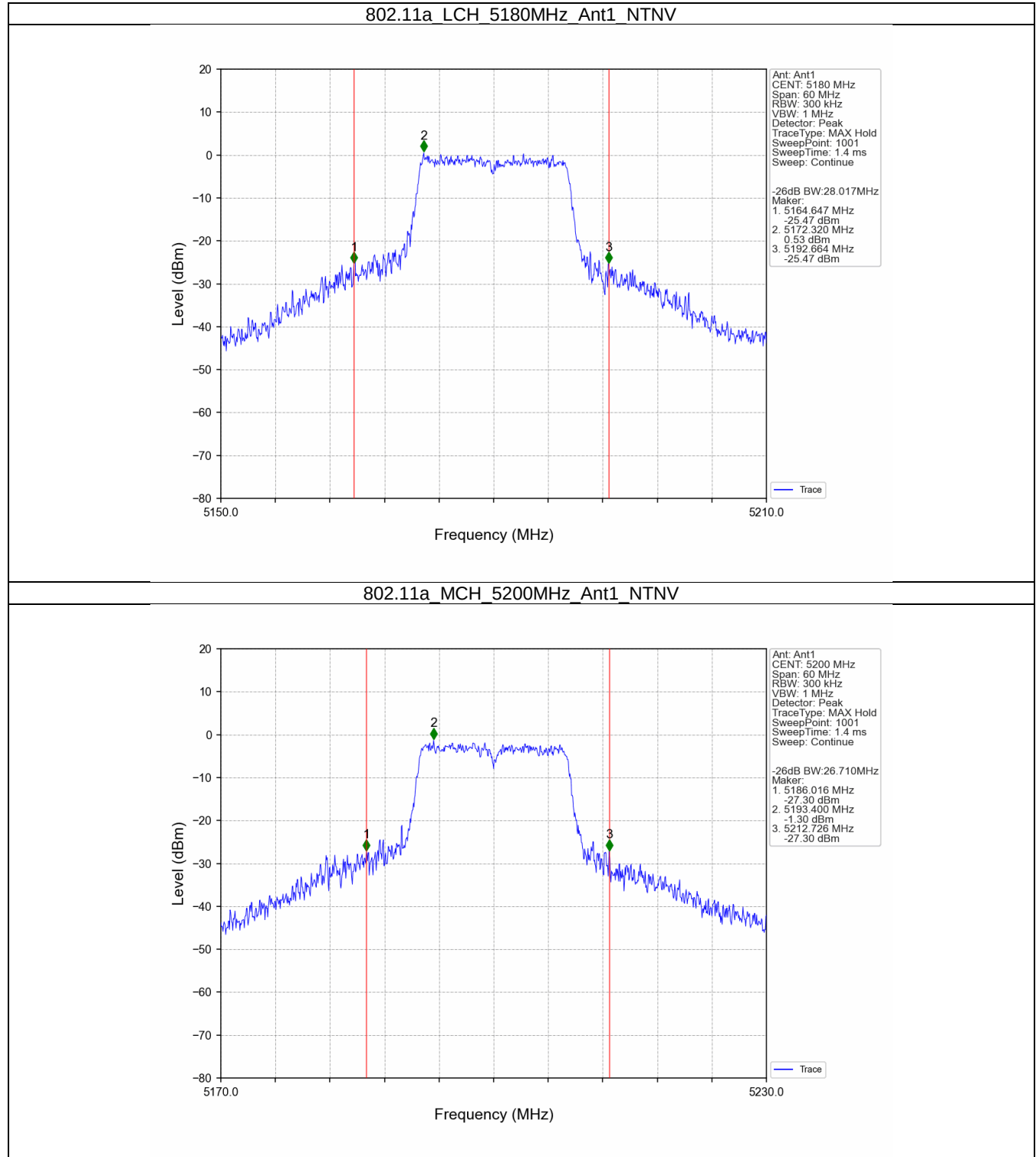
802.11ac(VHT80) MCH 5210MHz Ant1 NTN



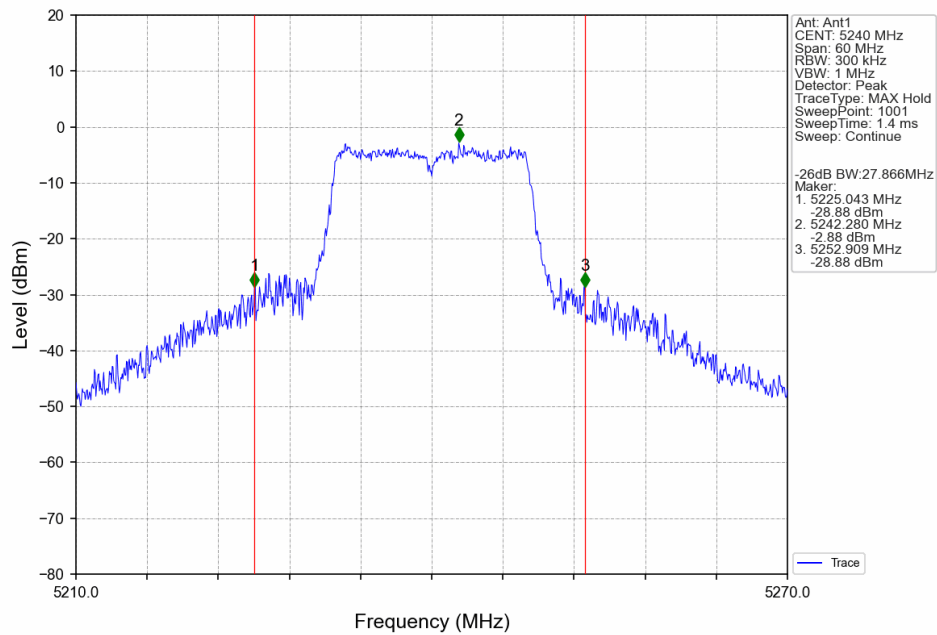
802.11ac(VHT80) MCH 5775MHz Ant1 NTN



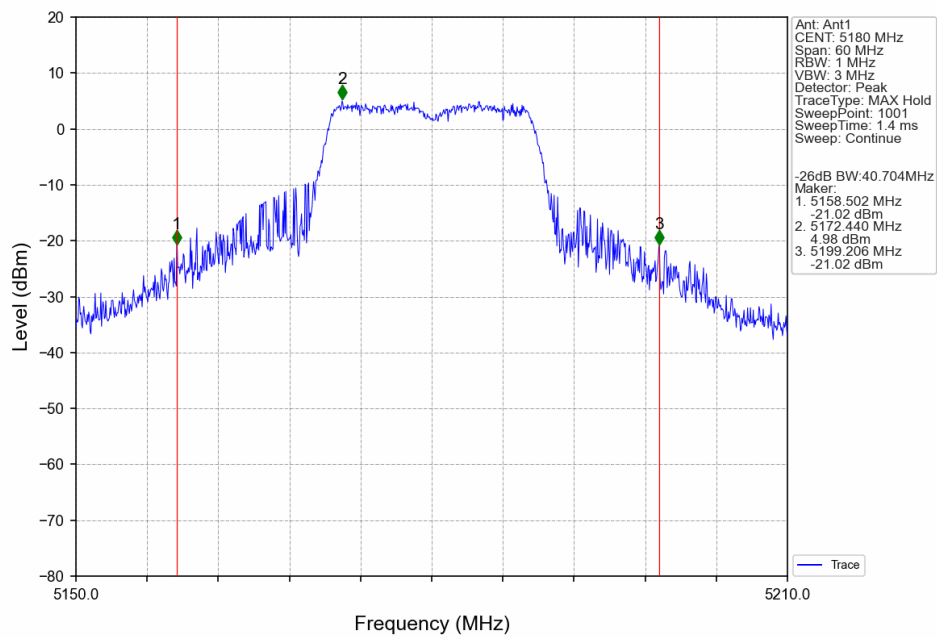
2.2.2 26dB BW



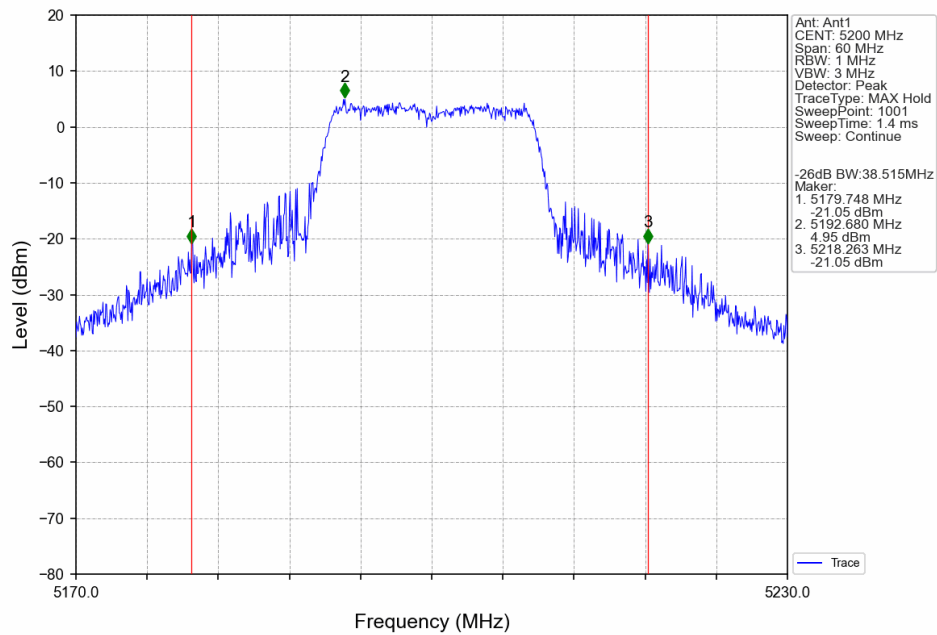
802.11a HCH 5240MHz Ant1 NTVN



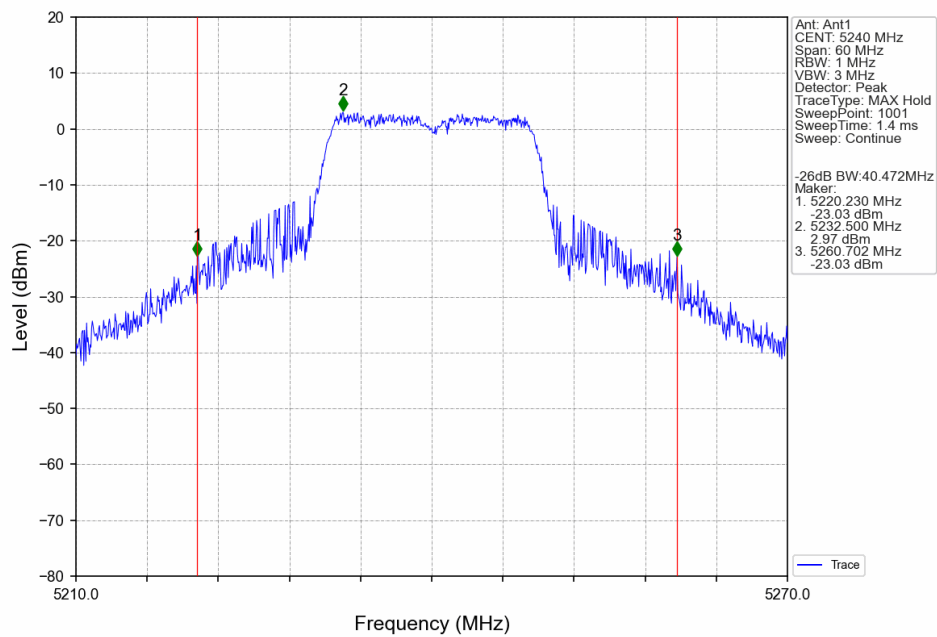
802.11n(HT20) LCH 5180MHz Ant1 NTVN



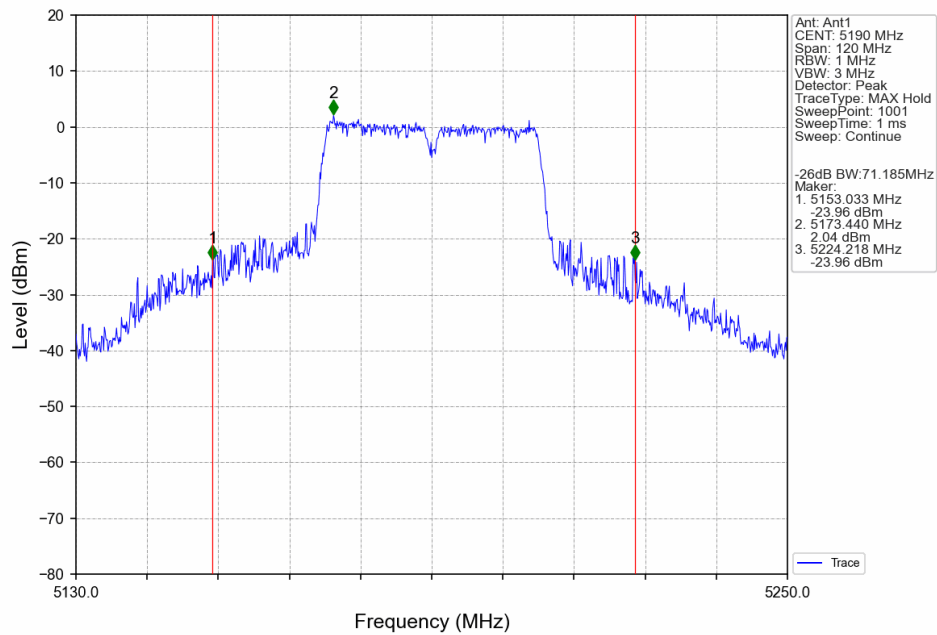
802.11n(HT20) MCH 5200MHz Ant1 NTN



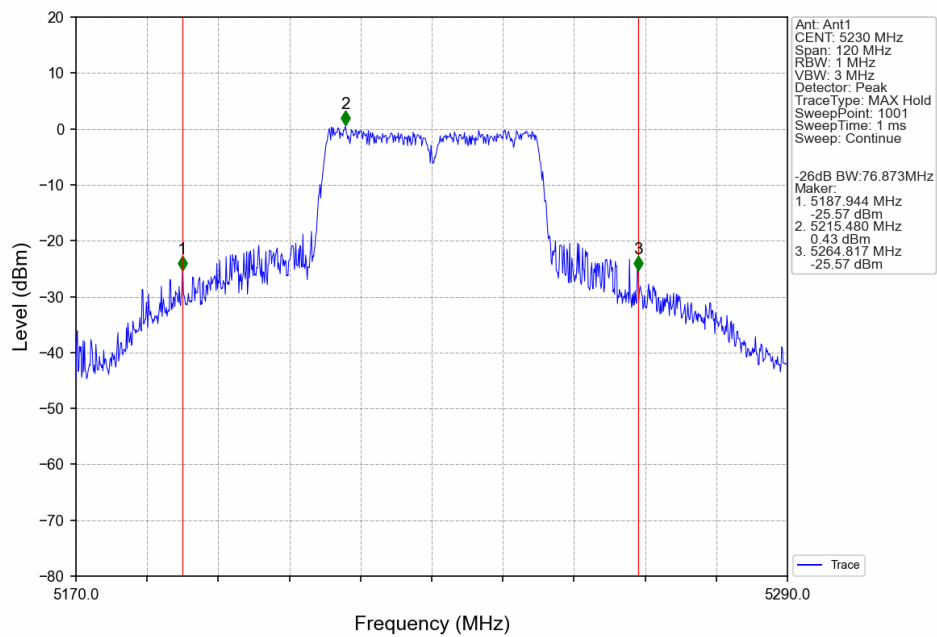
802.11n(HT20) HCH 5240MHz Ant1 NTN



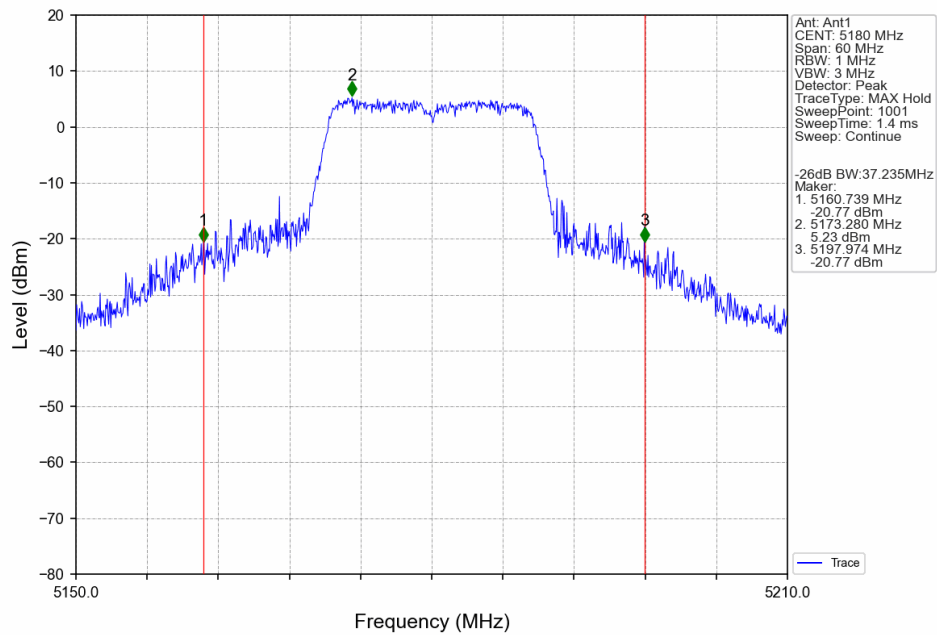
802.11n(HT40) LCH 5190MHz Ant1 NTN



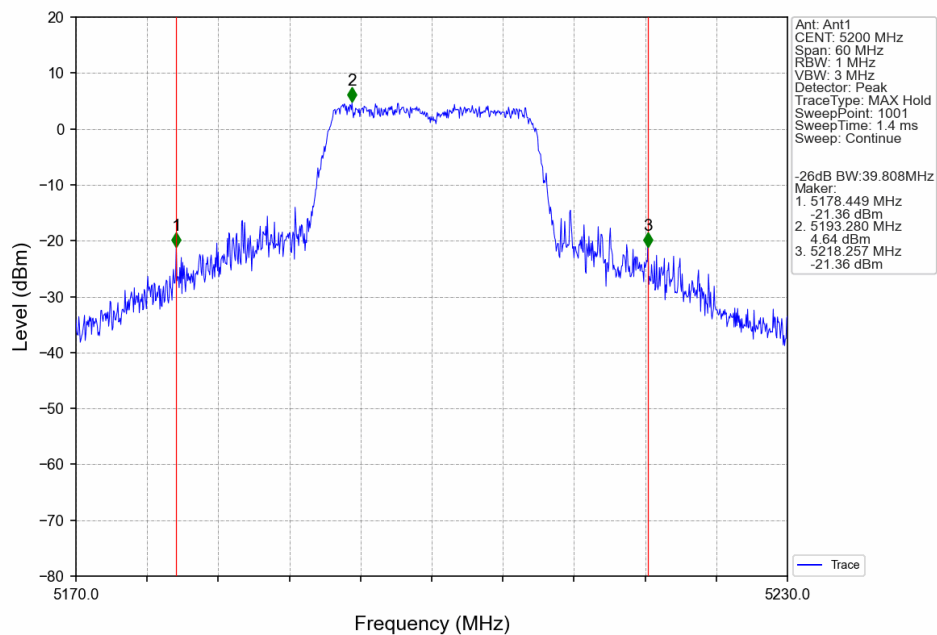
802.11n(HT40) HCH 5230MHz Ant1 NTN



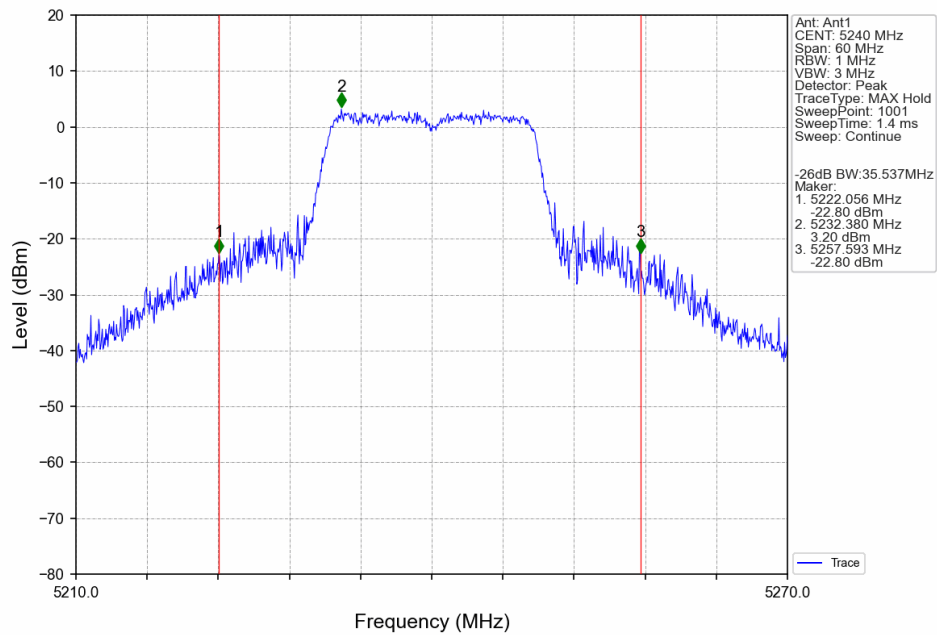
802.11ac(VHT20) LCH 5180MHz Ant1 NTNV



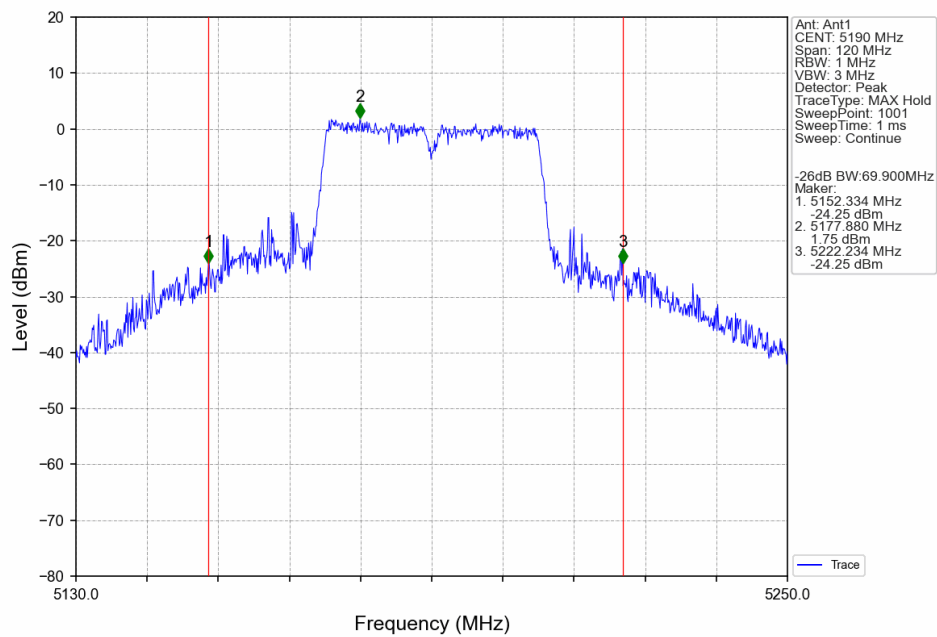
802.11ac(VHT20) MCH 5200MHz Ant1 NTNV



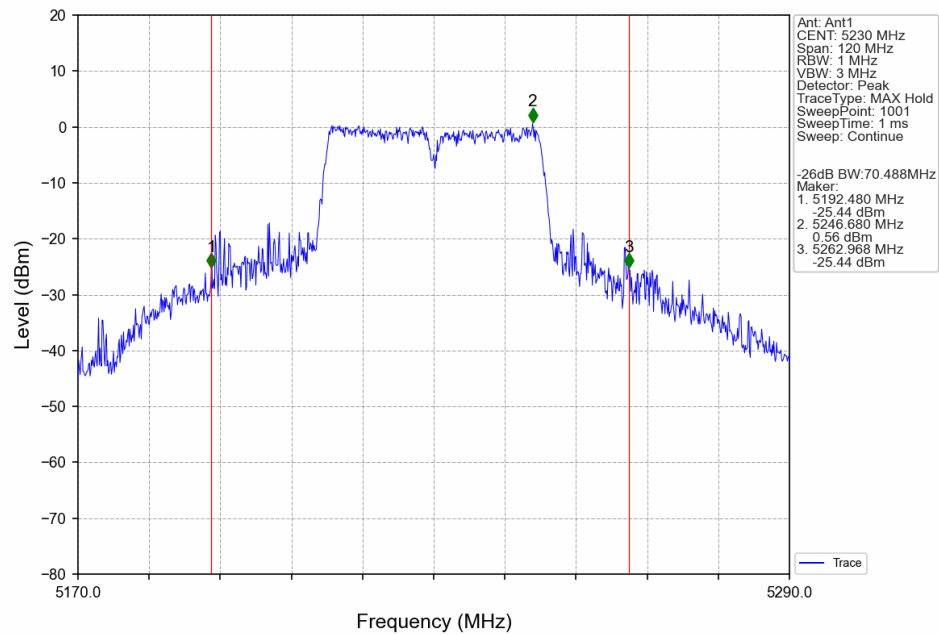
802.11ac(VHT20) HCH 5240MHz Ant1 NTN



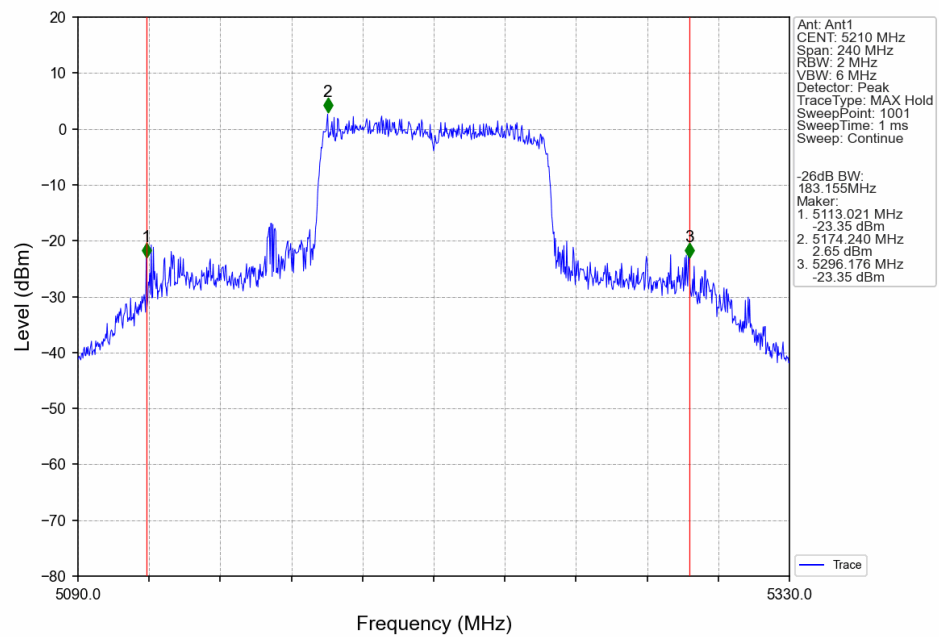
802.11ac(VHT40) LCH 5190MHz Ant1 NTN



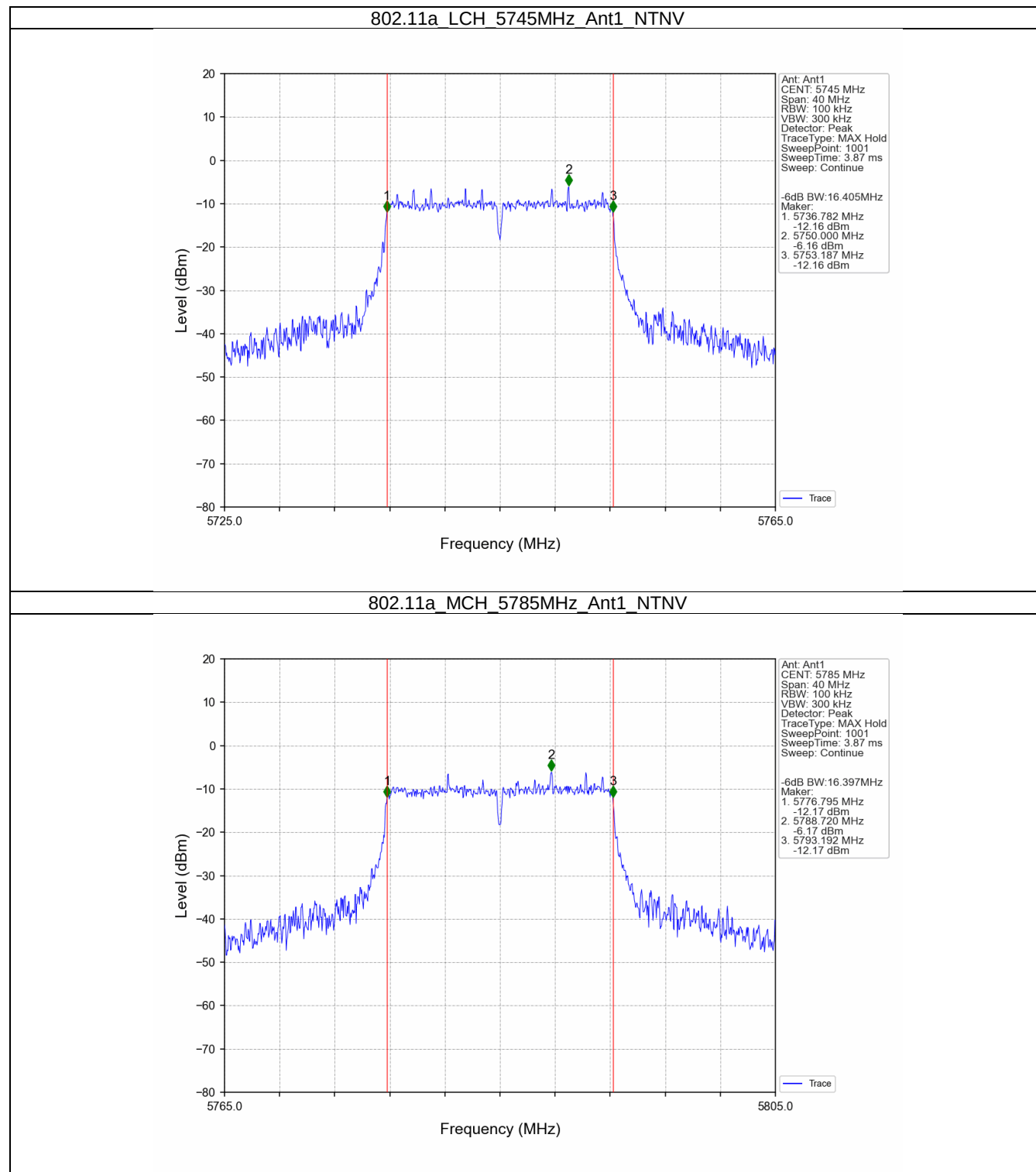
802.11ac(VHT40) HCH 5230MHz Ant1 NTNV



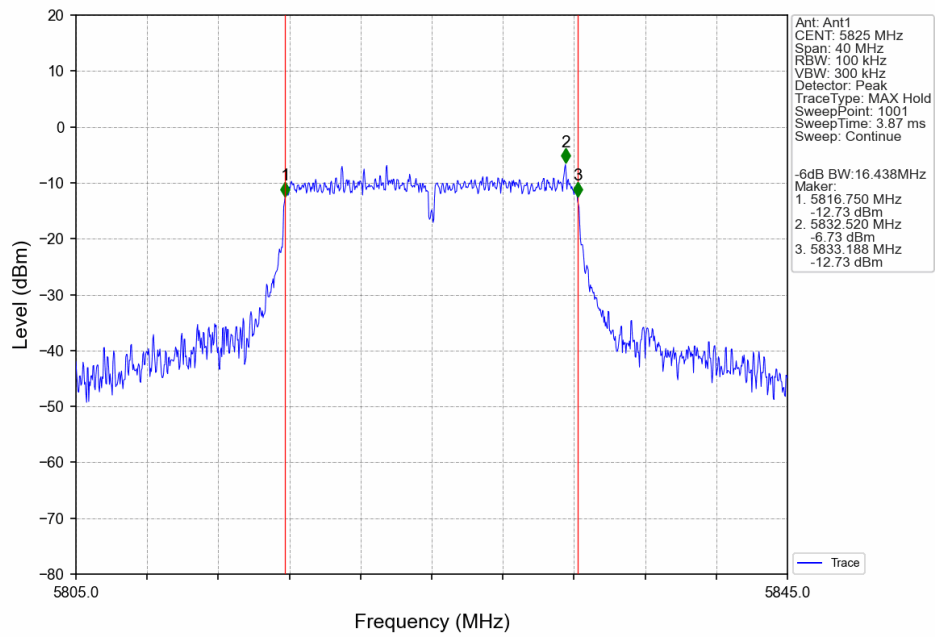
802.11ac(VHT80) MCH 5210MHz Ant1 NTNV



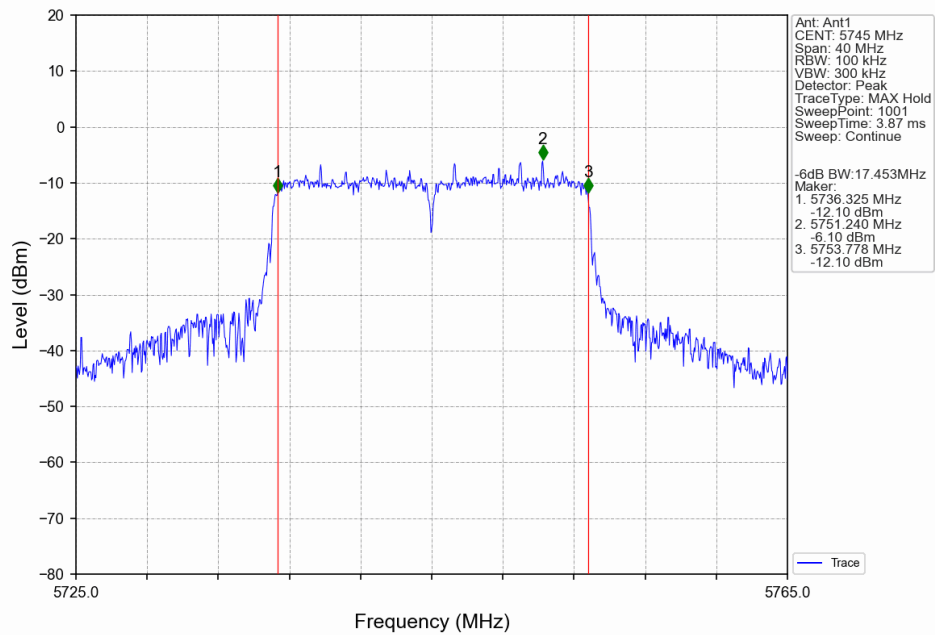
2.2.3 6dB BW



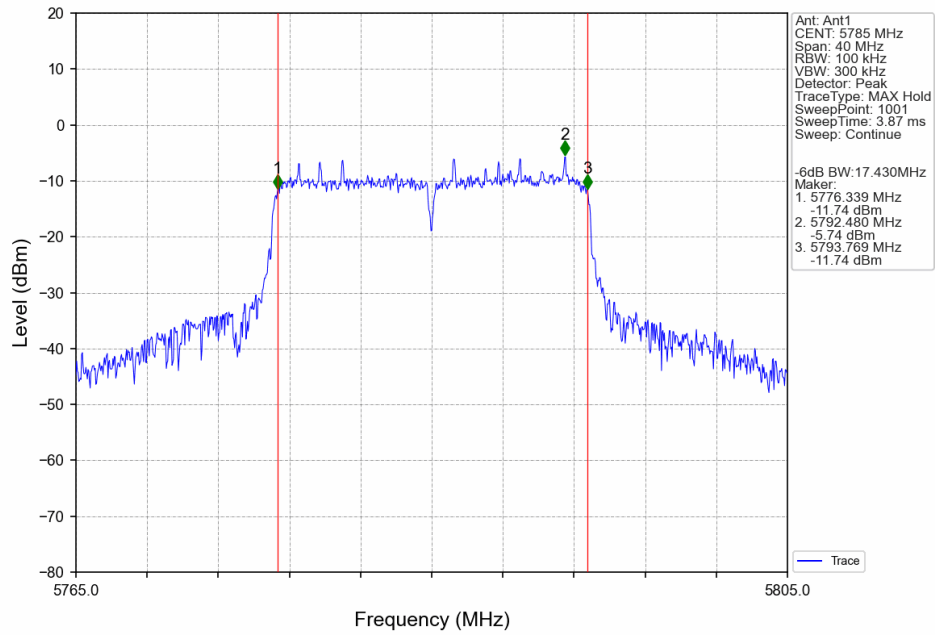
802.11a HCH 5825MHz Ant1 NTV



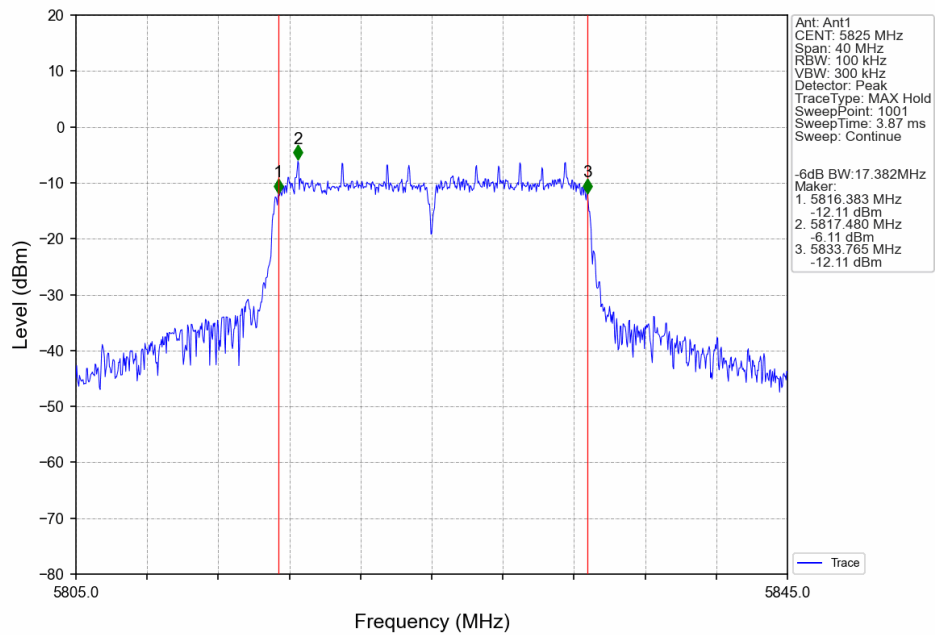
802.11n(HT20) LCH 5745MHz Ant1 NTV



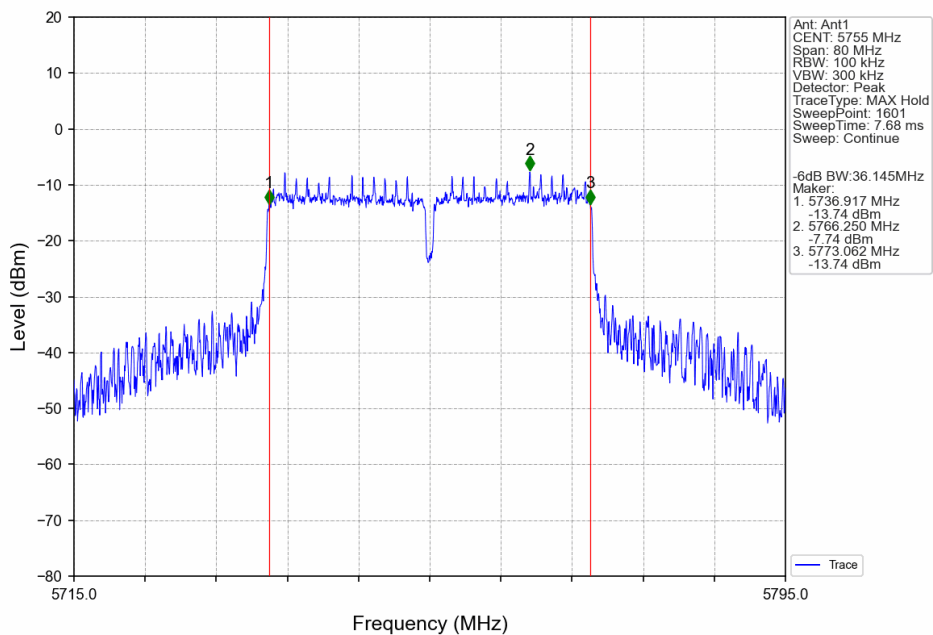
802.11n(HT20) MCH 5785MHz Ant1 NTN



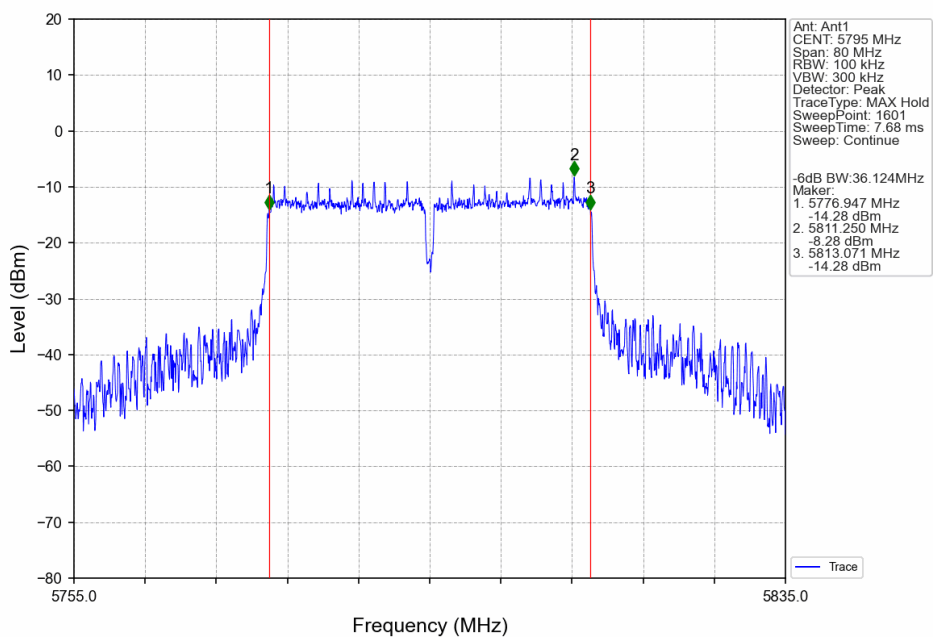
802.11n(HT20) HCH 5825MHz Ant1 NTN



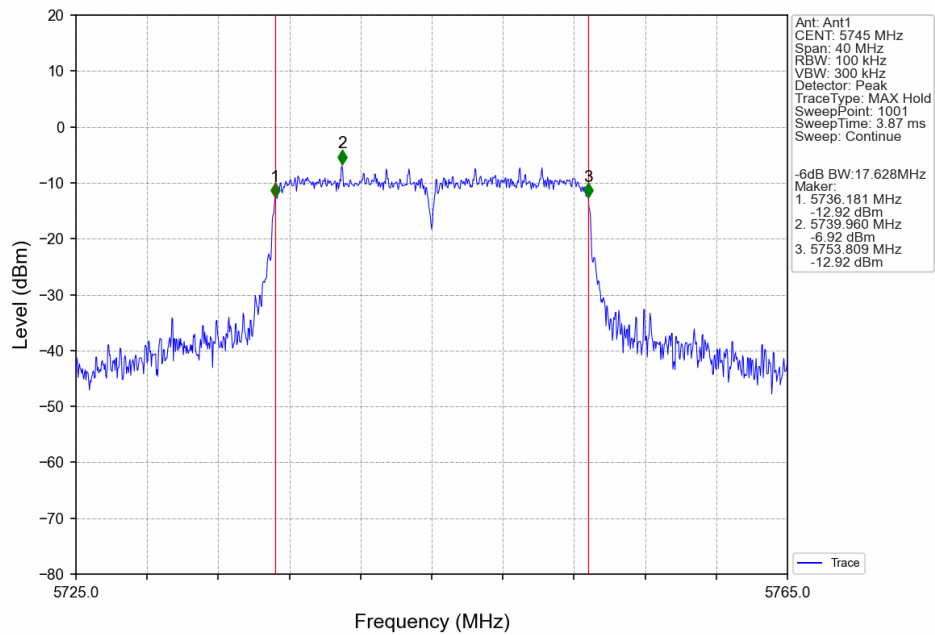
802.11n(HT40) LCH 5755MHz Ant1 NTN



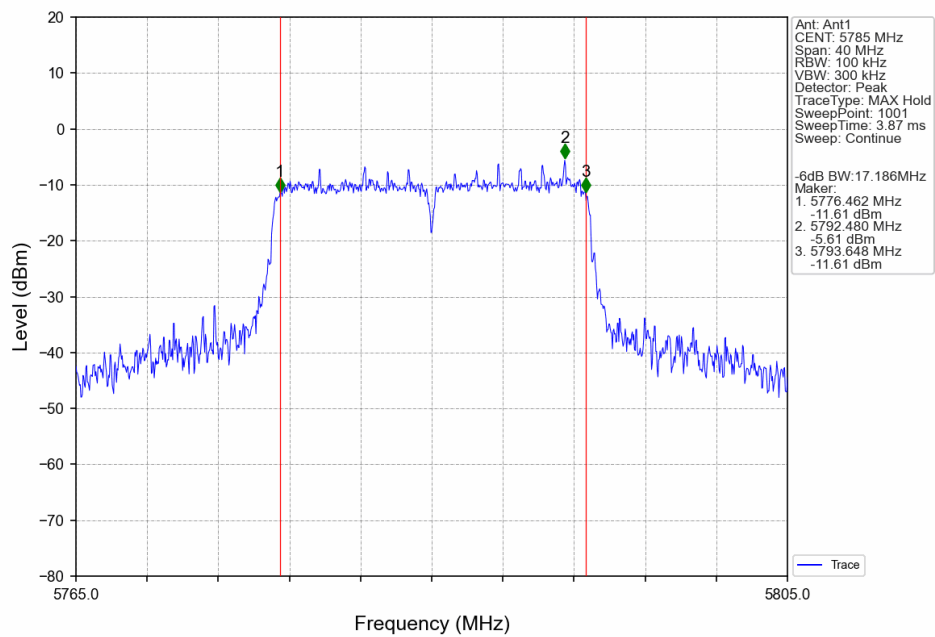
802.11n(HT40) HCH 5795MHz Ant1 NTN



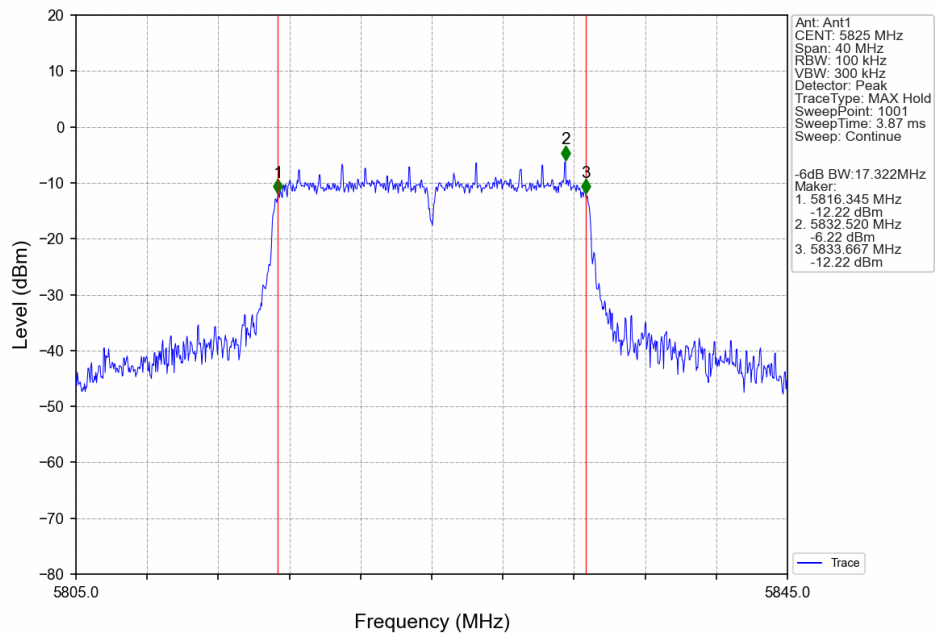
802.11ac(VHT20) LCH 5745MHz Ant1 NTN



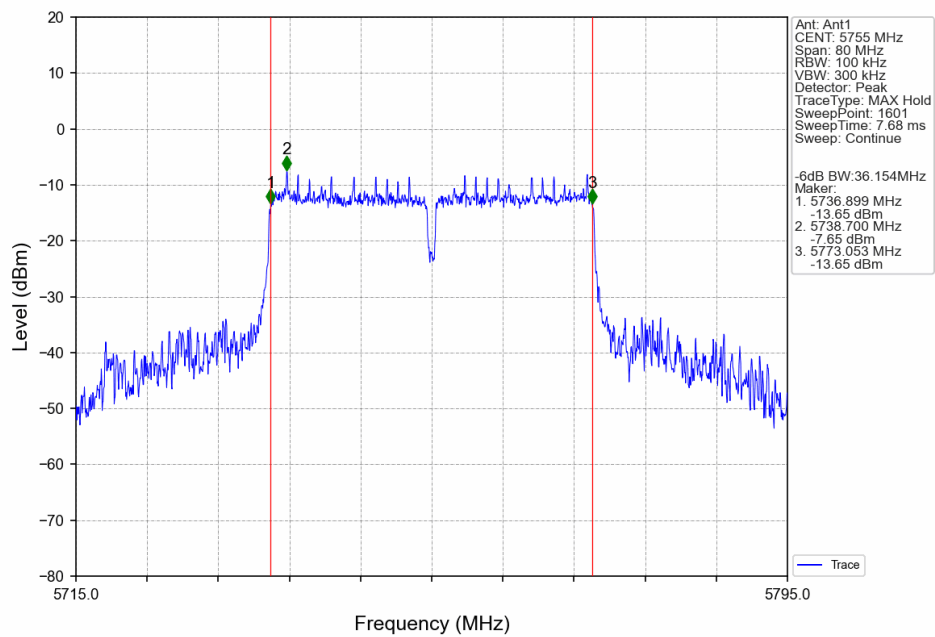
802.11ac(VHT20) MCH 5785MHz Ant1 NTN



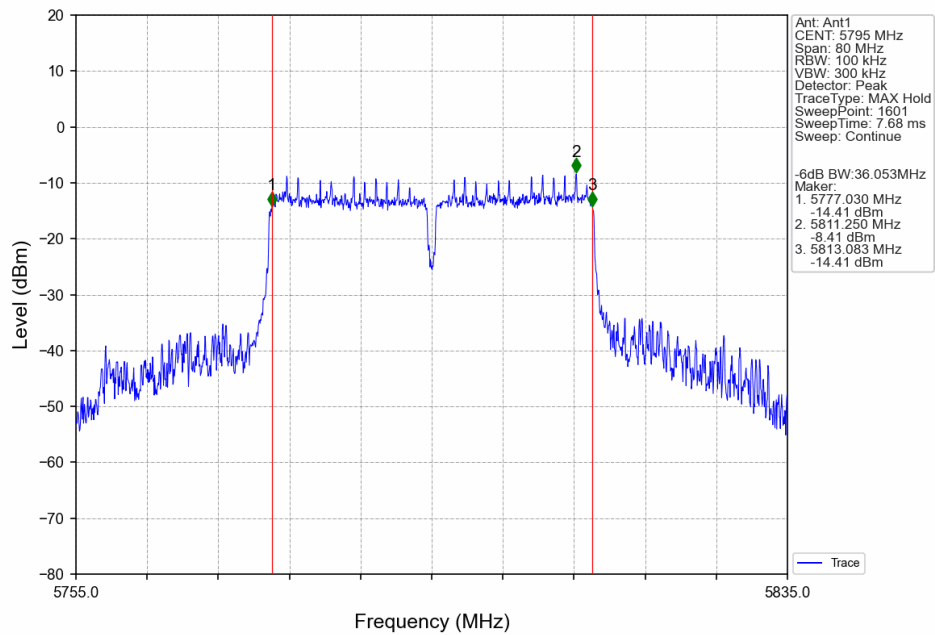
802.11ac(VHT20) HCH 5825MHz Ant1 NTN



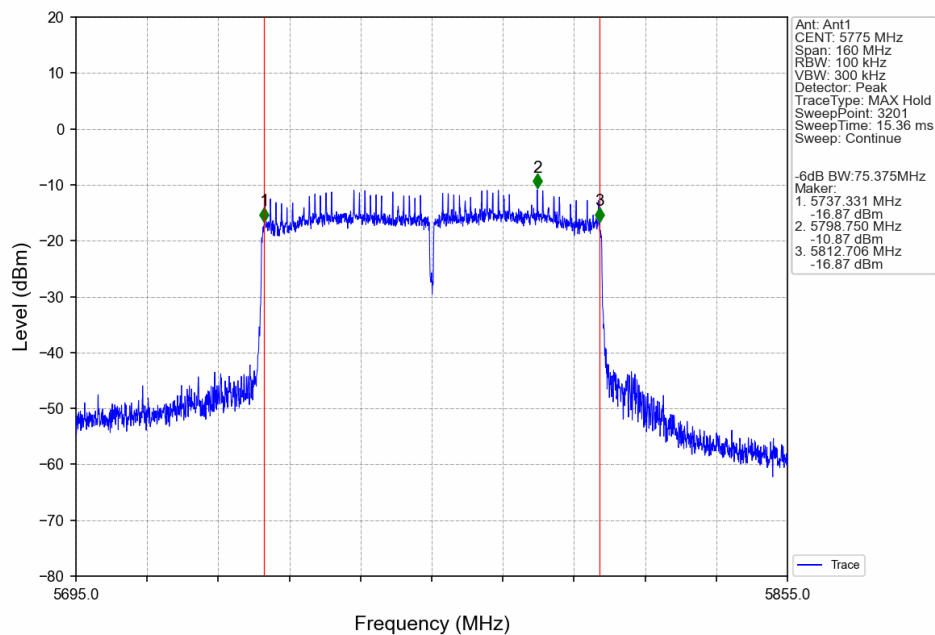
802.11ac(VHT40) LCH 5755MHz Ant1 NTN



802.11ac(VHT40) HCH 5795MHz Ant1 NTN



802.11ac(VHT80) MCH 5775MHz Ant1 NTN



3. Maximum Conducted Output Power

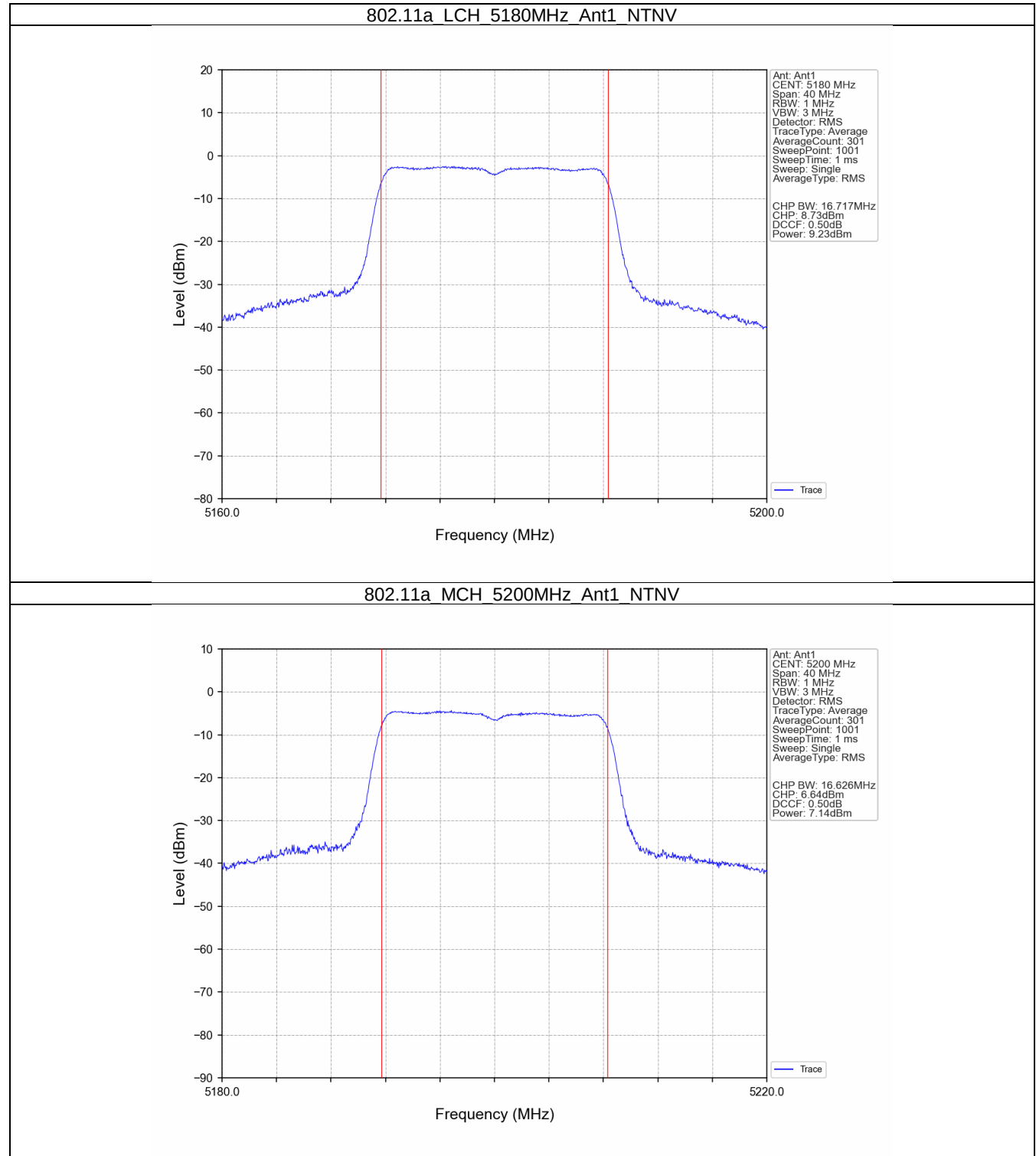
3.1 Test Result

3.1.1 Power

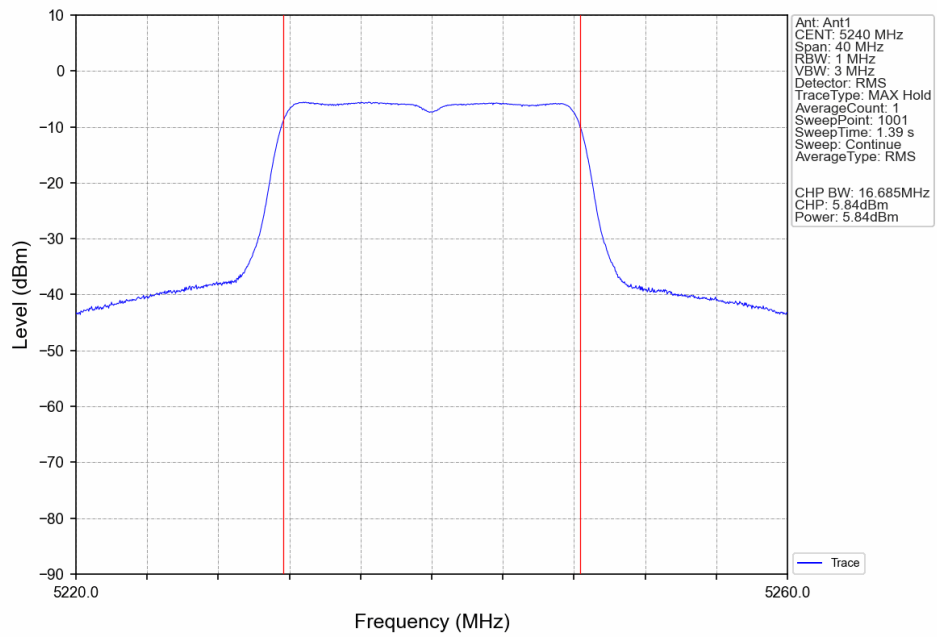
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	9.23	<=23.98	Pass
		5200	7.14	<=23.98	Pass
		5240	5.84	<=23.98	Pass
		5745	5.21	<=30	Pass
		5785	5.20	<=30	Pass
		5825	5.17	<=30	Pass
802.11n (HT20)	SISO	5180	7.91	<=23.98	Pass
		5200	7.41	<=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

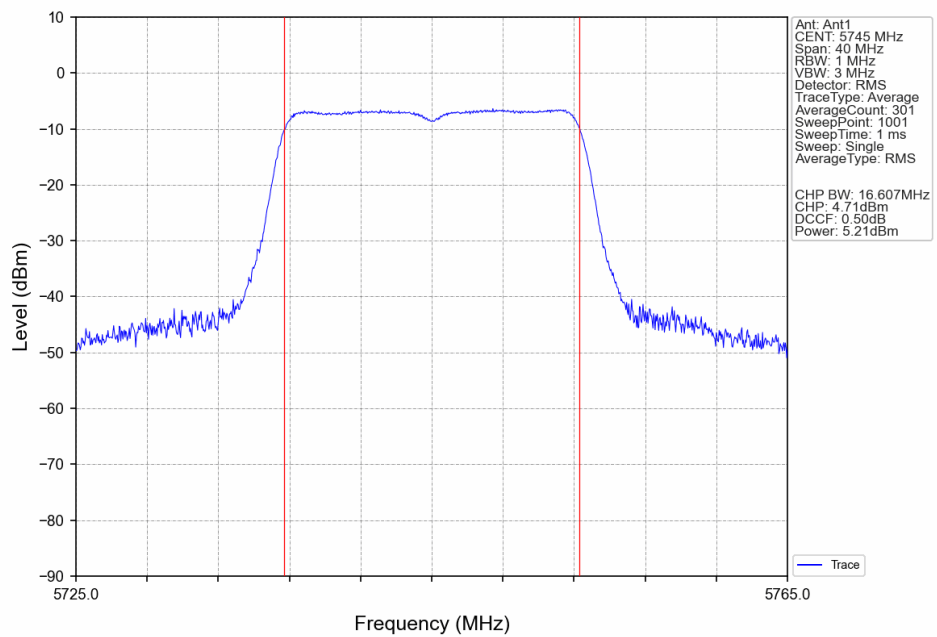
3.2.1 Power



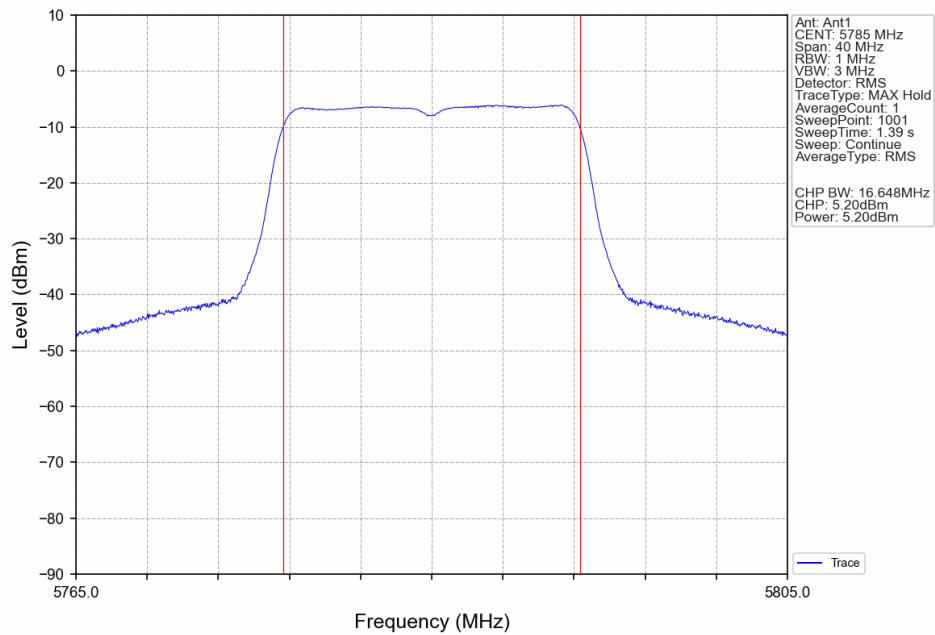
802.11a HCH 5240MHz Ant1 NTNV



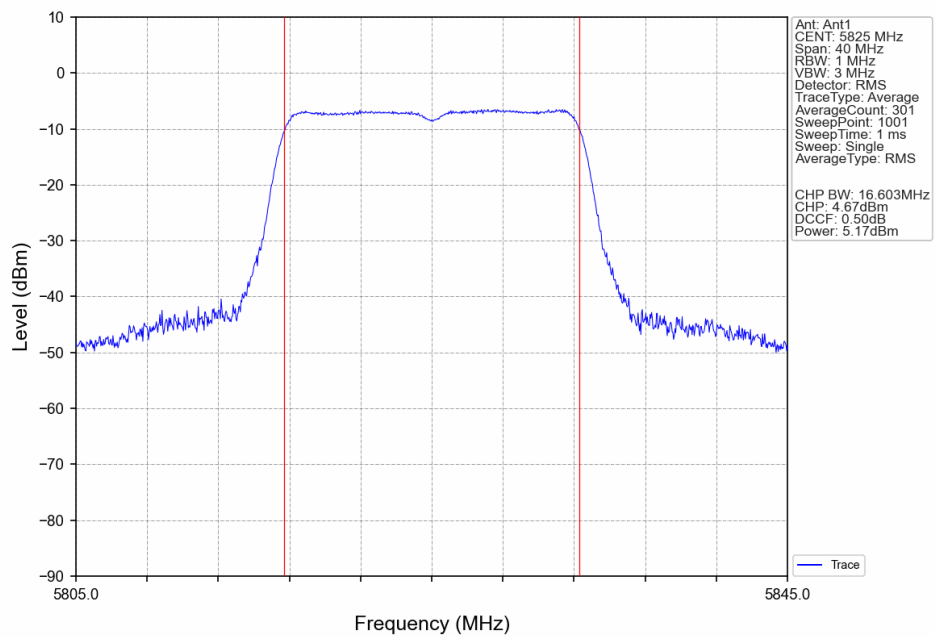
802.11a LCH 5745MHz Ant1 NTNV



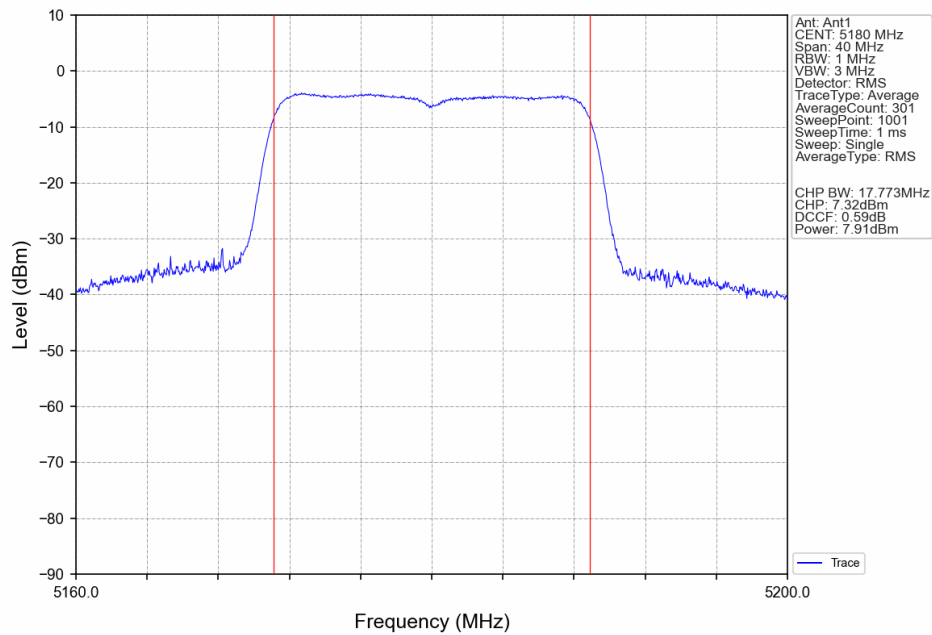
802.11a MCH 5785MHz Ant1 NTV



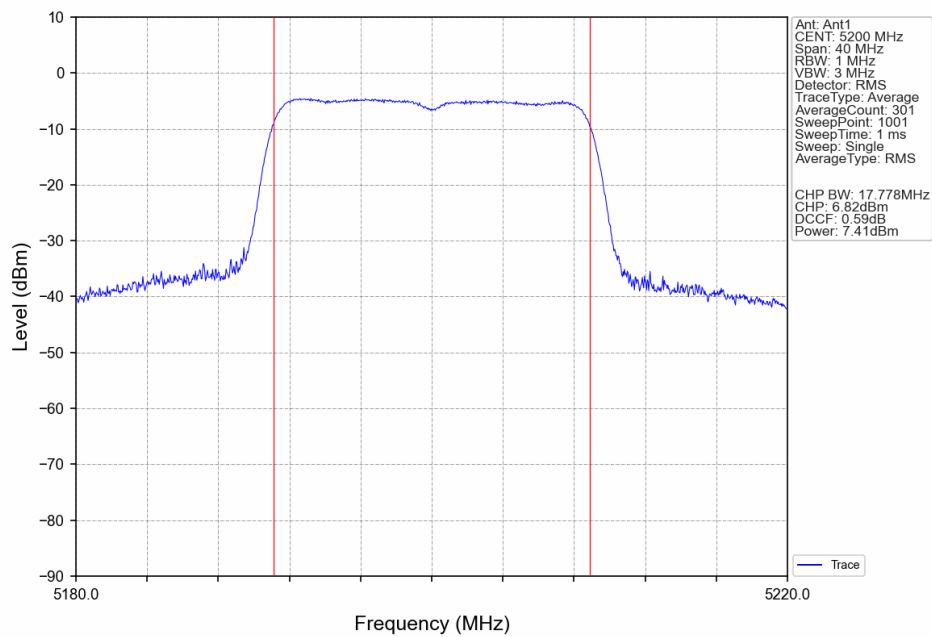
802.11a HCH 5825MHz Ant1 NTV



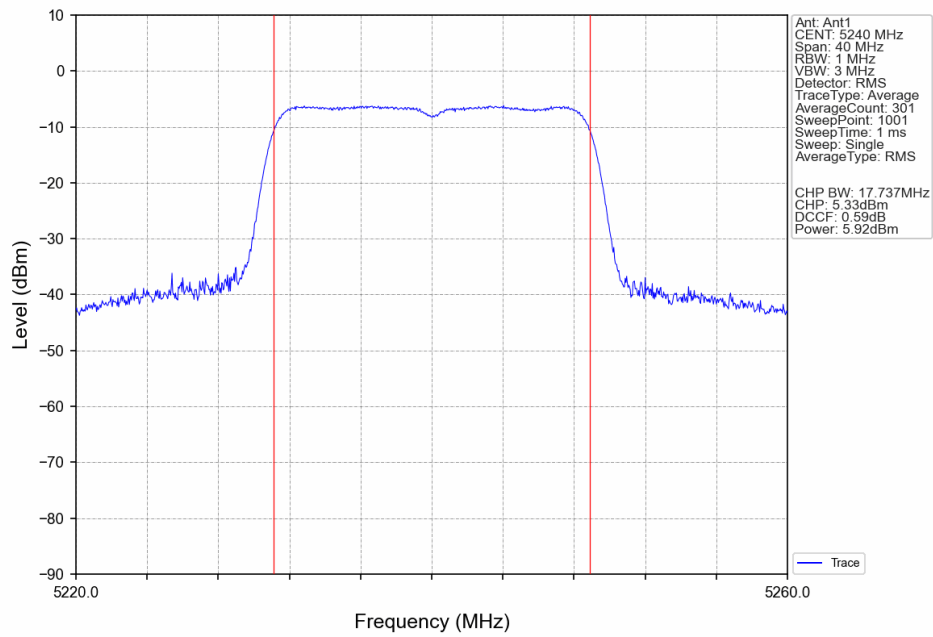
802.11n(HT20) LCH 5180MHz Ant1 NTN



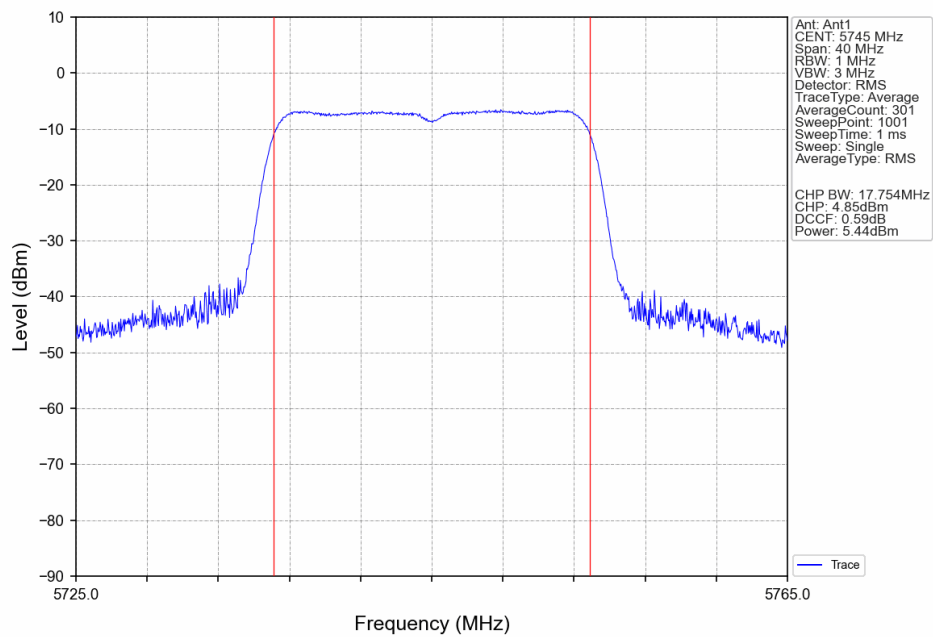
802.11n(HT20) MCH 5200MHz Ant1 NTN



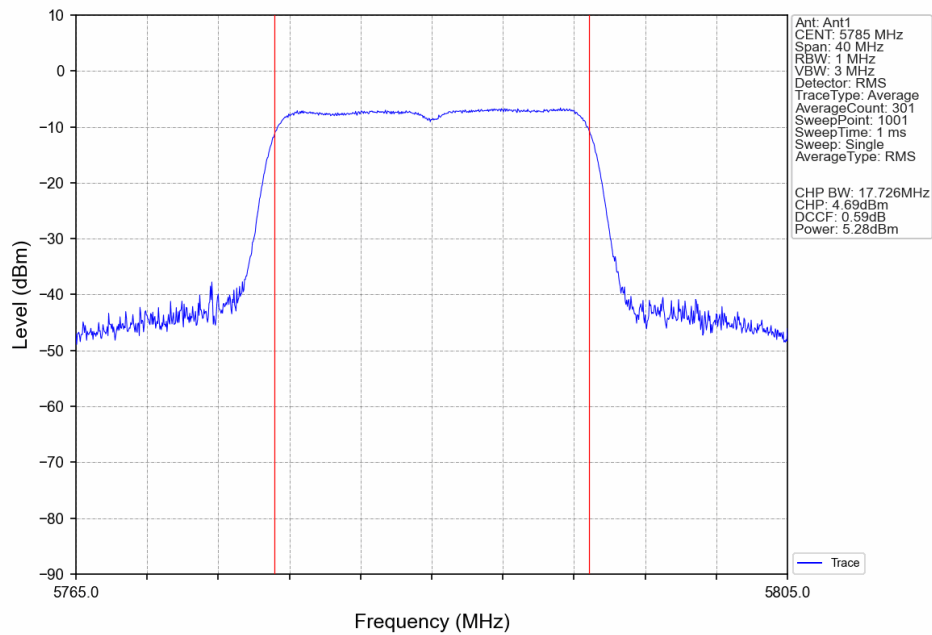
802.11n(HT20) HCH 5240MHz Ant1 NTV



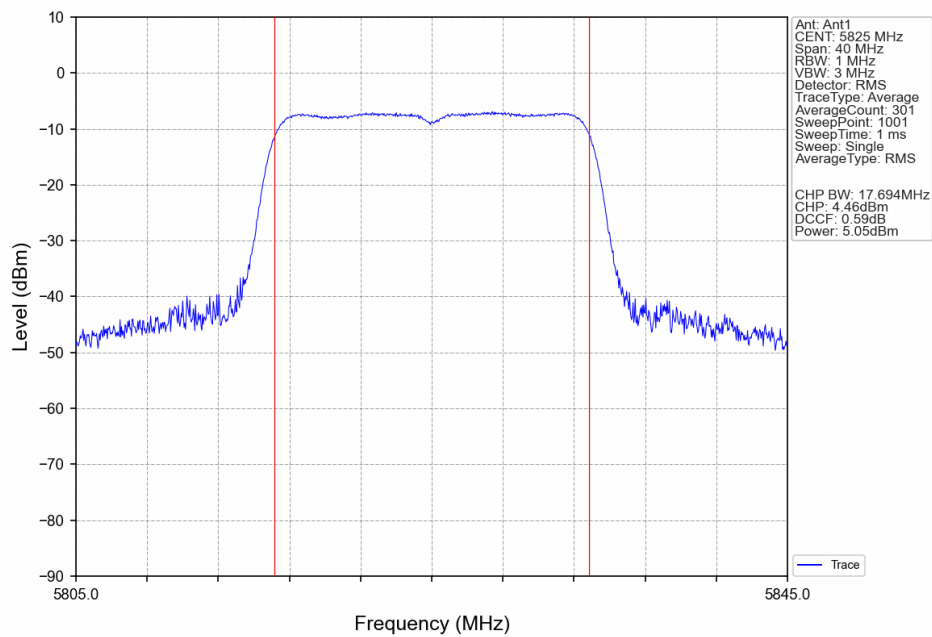
802.11n(HT20) LCH 5745MHz Ant1 NTV



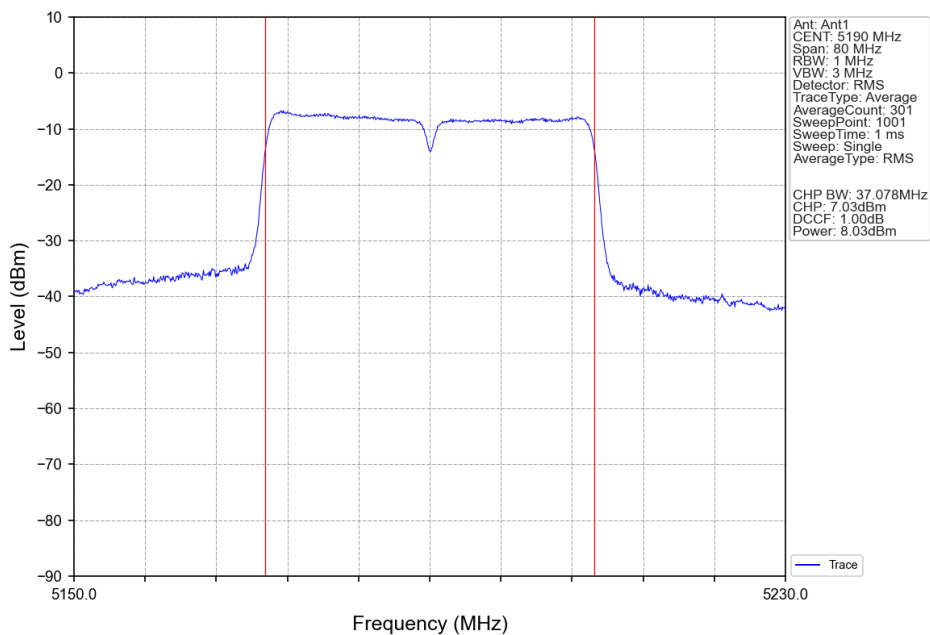
802.11n(HT20) MCH 5785MHz Ant1 NTN



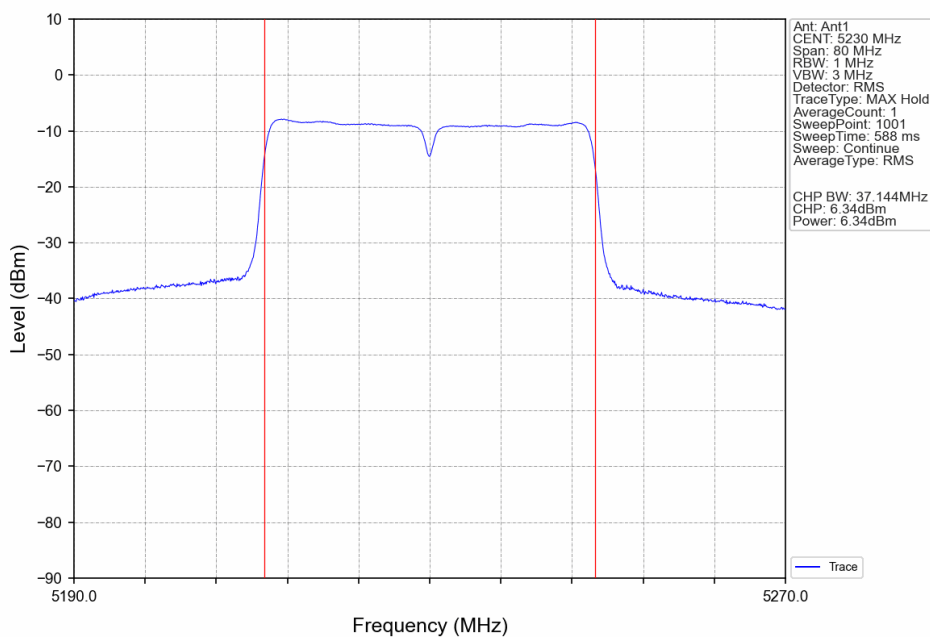
802.11n(HT20) HCH 5825MHz Ant1 NTN



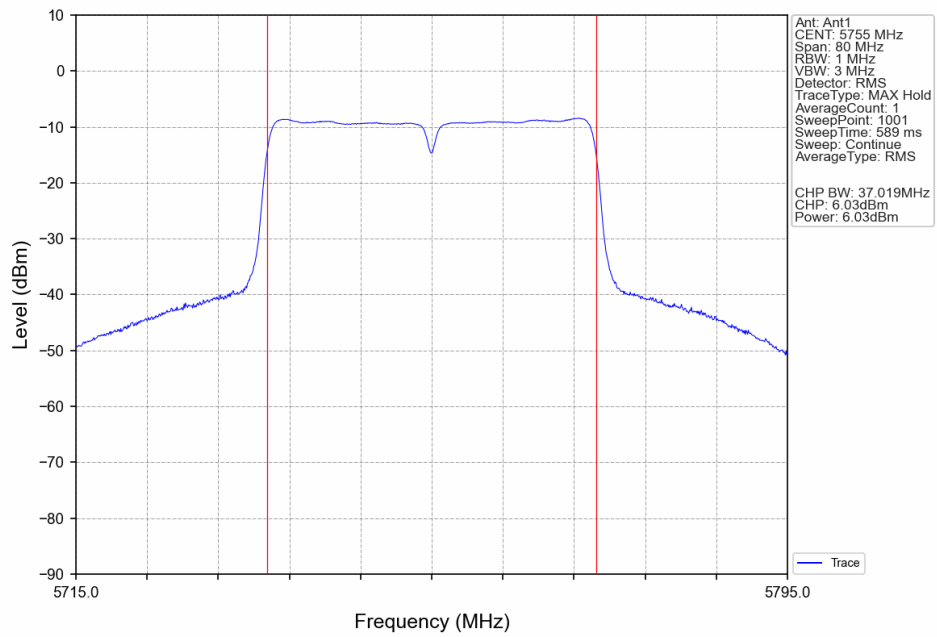
802.11n(HT40) LCH 5190MHz Ant1 NTN



802.11n(HT40) HCH 5230MHz Ant1 NTN



802.11n(HT40) LCH 5755MHz Ant1 NTN



802.11n(HT40) HCH 5795MHz Ant1 NTN

