

Appendix RF test data for 5G WIFI

1. Duty Cycle

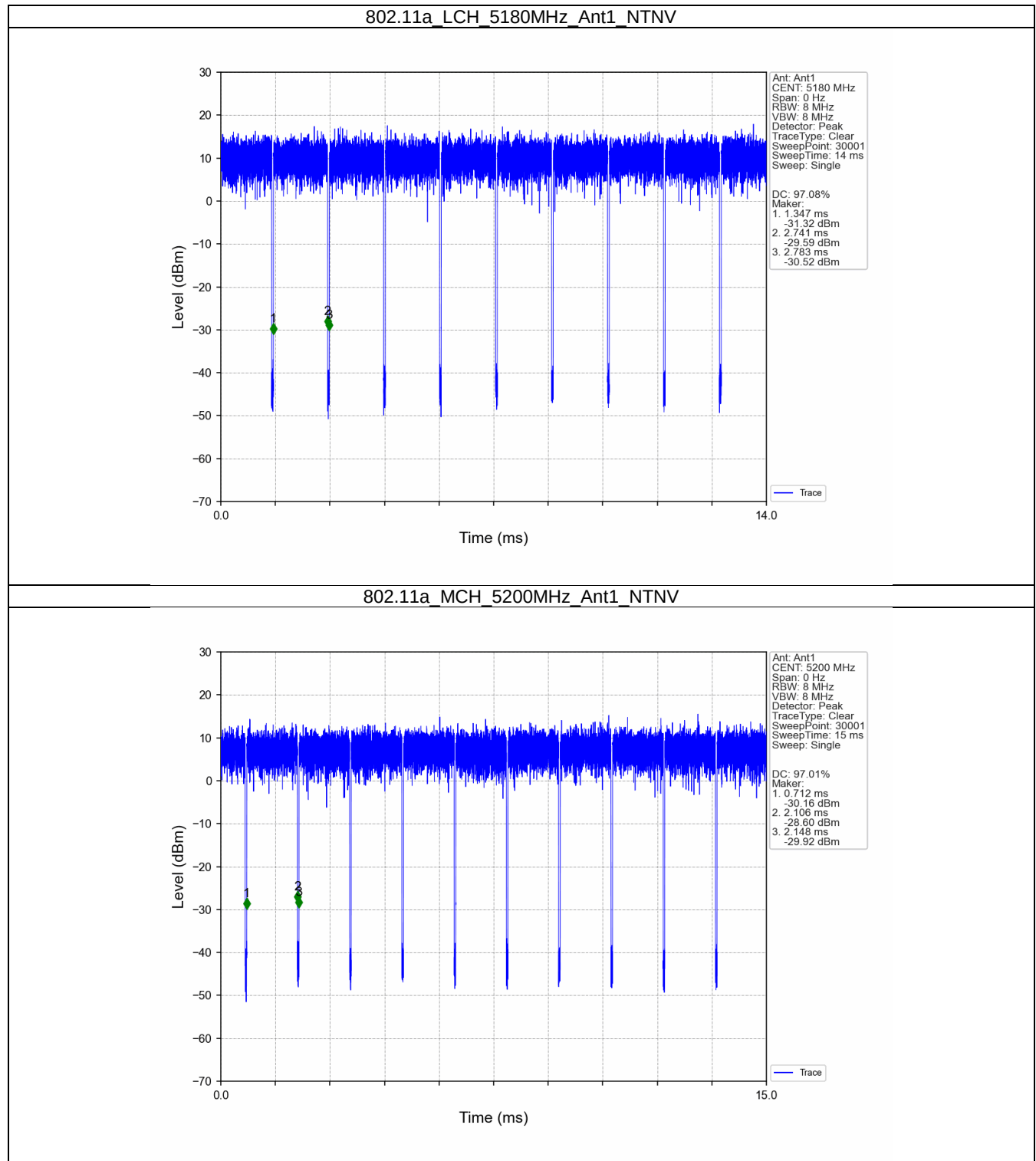
1.1 Test Result

1.1.1 Ant1

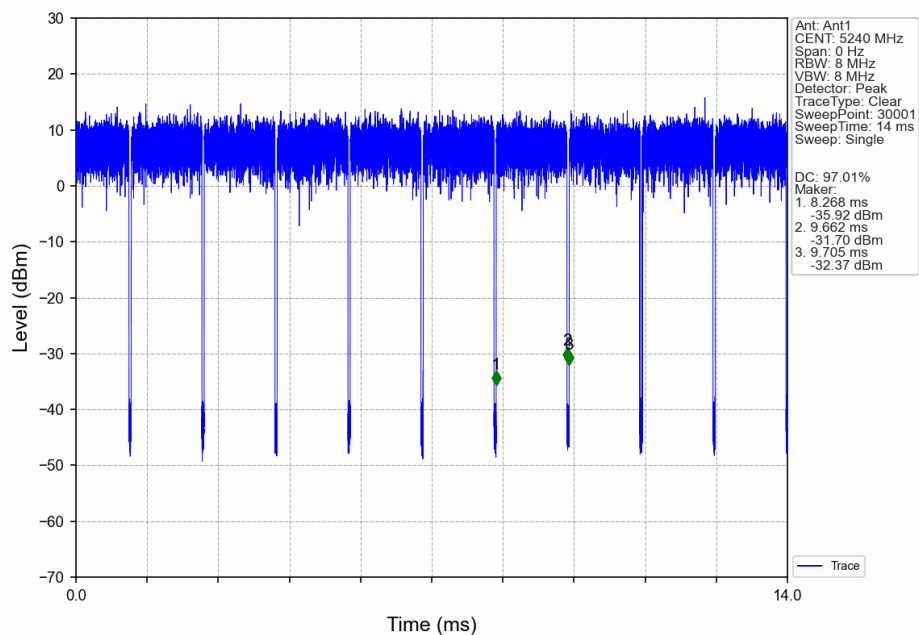
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	1.394	1.436	97.08	0.13	0.03
		5200	1.393	1.436	97.01	0.13	0.03
		5240	1.394	1.437	97.01	0.13	0.03
		5745	1.393	1.436	97.01	0.13	0.00
		5785	1.394	1.437	97.01	0.13	0.03
		5825	1.394	1.437	97.01	0.13	0.03
802.11n (HT20)	SISO	5180	1.302	1.344	96.88	0.14	0.07
		5200	1.302	1.345	96.80	0.14	0.03
		5240	1.301	1.344	96.80	0.14	0.04
		5745	1.302	1.345	96.80	0.14	0.03
		5785	1.302	1.344	96.88	0.14	0.00
		5825	1.302	1.344	96.88	0.14	0.00
802.11n (HT40)	SISO	5190	0.649	0.692	93.79	0.28	0.04
		5230	0.648	0.692	93.64	0.29	0.03
		5755	0.649	0.692	93.79	0.28	0.00
		5795	0.649	0.692	93.79	0.28	0.03
802.11ac (VHT20)	SISO	5180	1.314	1.356	96.90	0.14	0.03
		5200	1.314	1.357	96.83	0.14	0.07
		5240	1.312	1.356	96.76	0.14	0.10
		5745	1.314	1.357	96.83	0.14	0.03
		5785	1.314	1.356	96.90	0.14	0.00
		5825	1.314	1.357	96.83	0.14	0.03
802.11ac (VHT40)	SISO	5190	0.653	0.696	93.82	0.28	0.03
		5230	0.653	0.697	93.69	0.28	0.06
		5755	0.653	0.696	93.82	0.28	0.03
		5795	0.653	0.696	93.82	0.28	0.03
802.11ac (VHT80)	SISO	5210	0.324	0.368	88.04	0.55	0.11
		5775	0.327	0.368	88.86	0.51	0.11

1.2 Test Graph

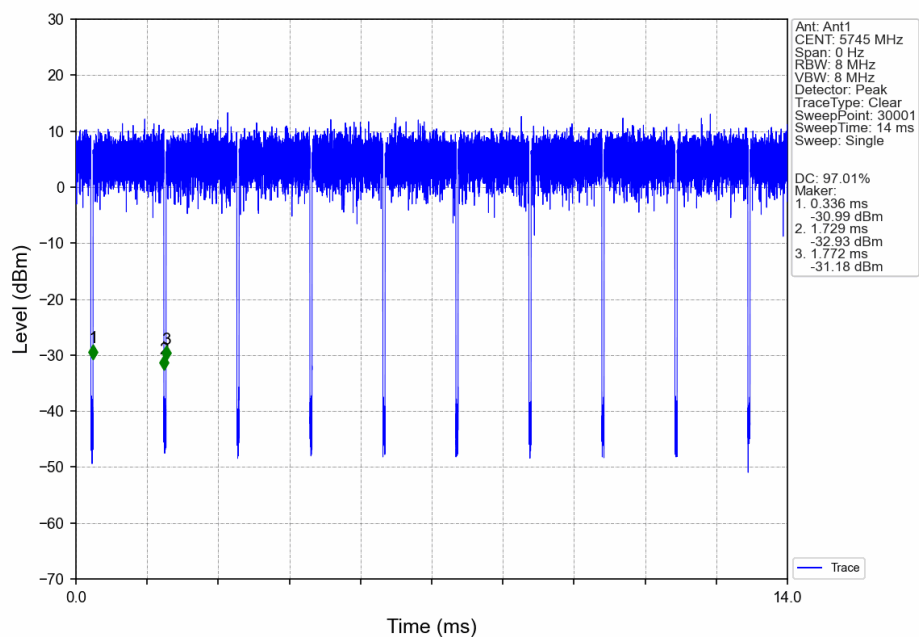
1.2.1 Ant1



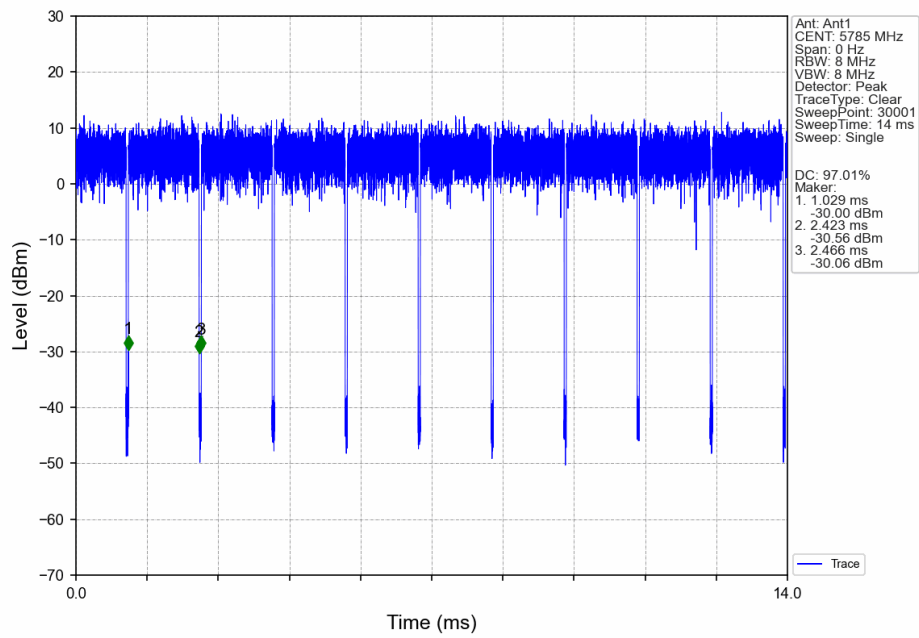
802.11a_HCH_5240MHz_Ant1_NTNV



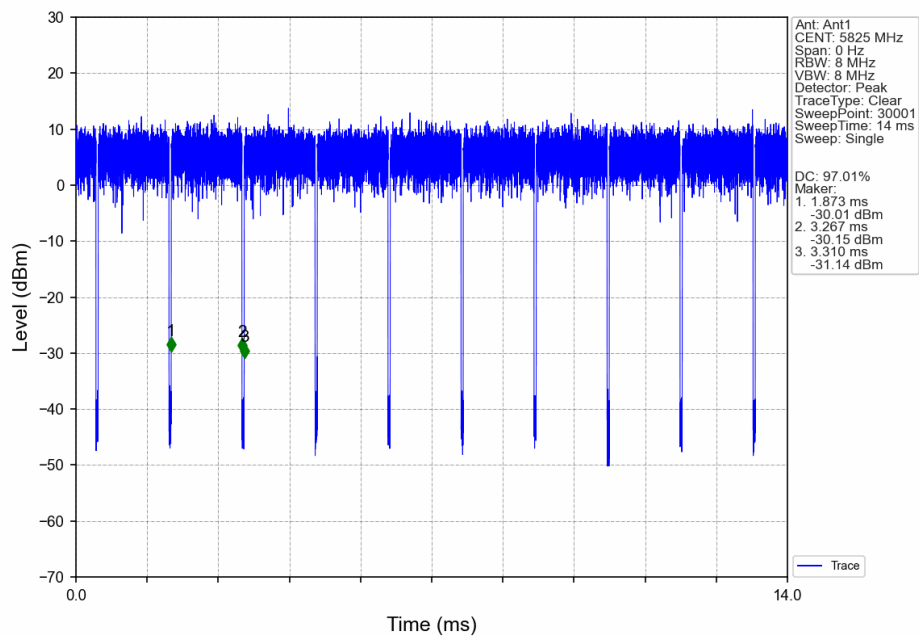
802.11a_LCH_5745MHz_Ant1_NTNV



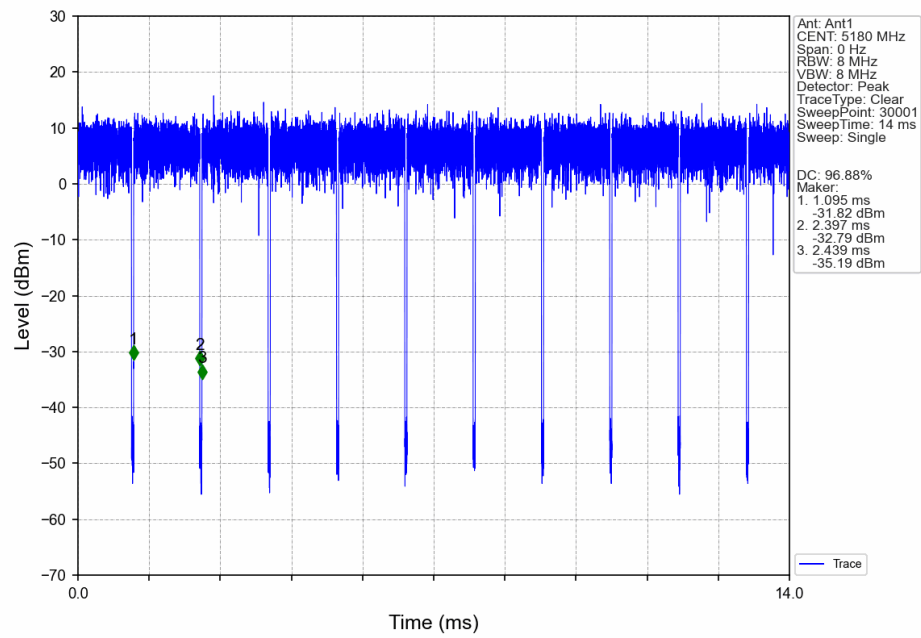
802.11a_MCH_5785MHz_Ant1_NTNV



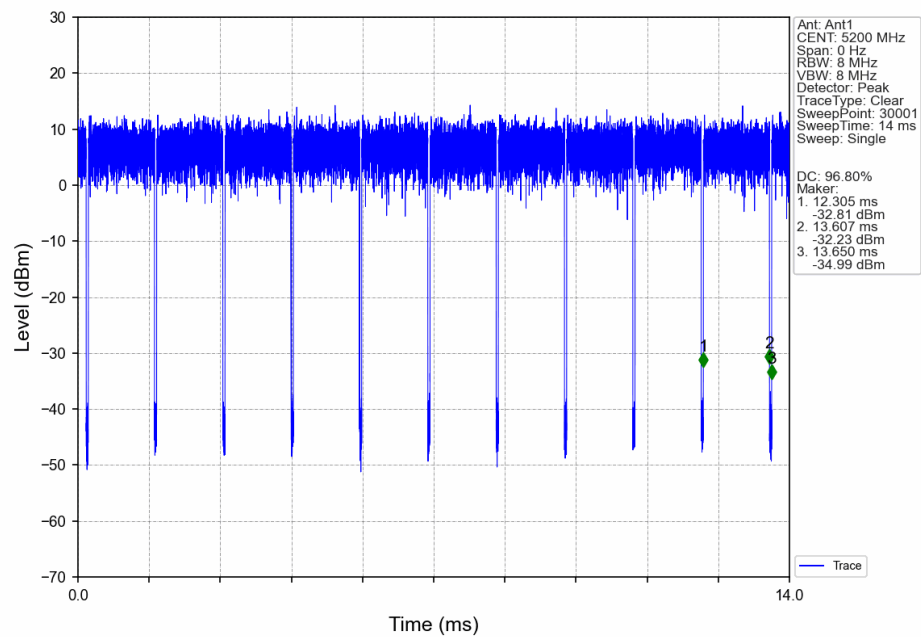
802.11a_HCH_5825MHz_Ant1_NTNV



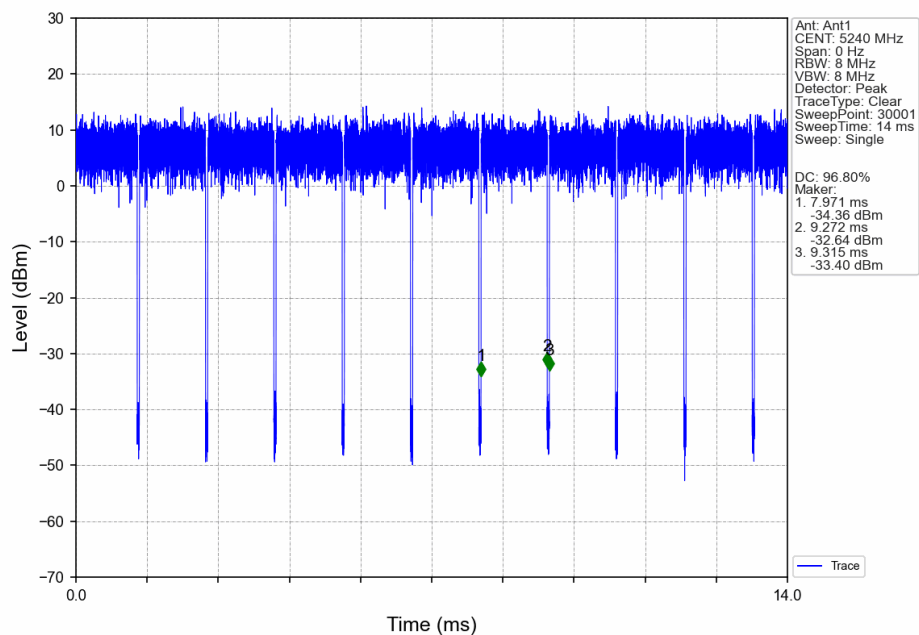
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



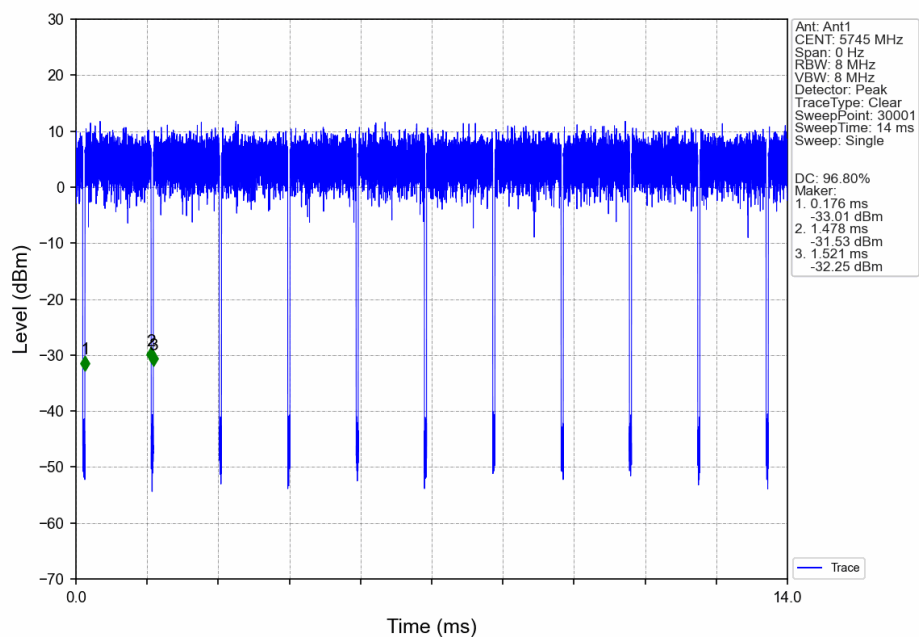
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



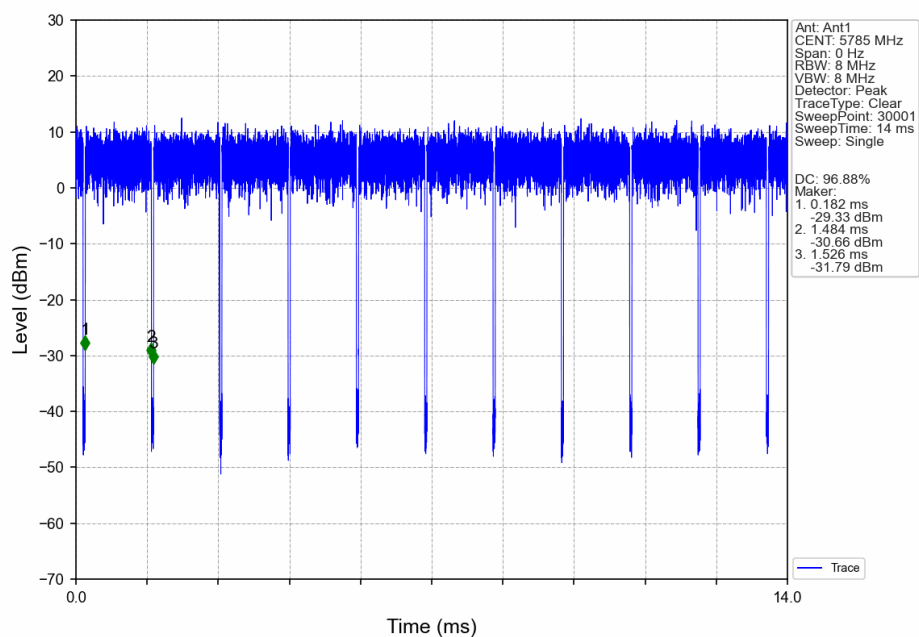
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



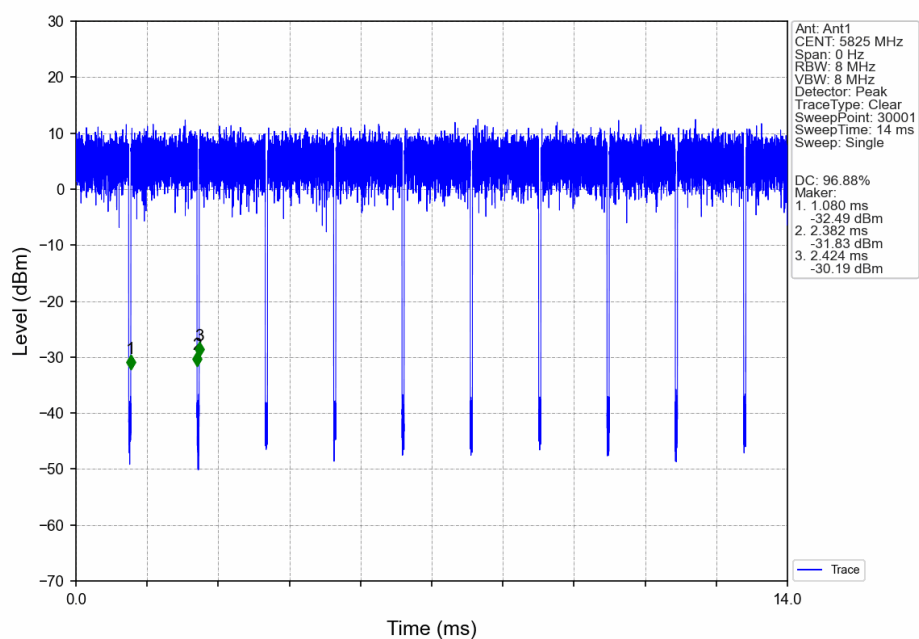
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



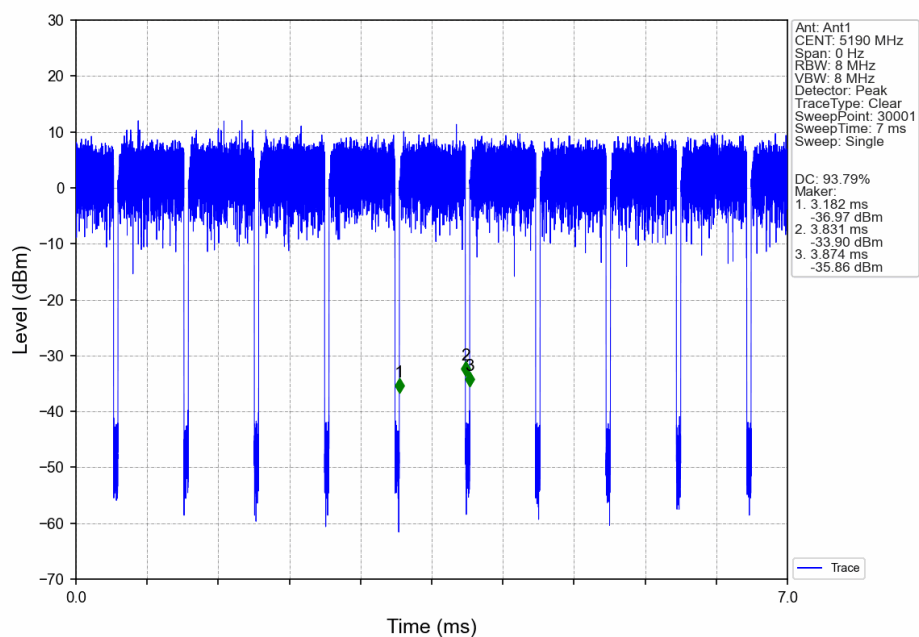
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



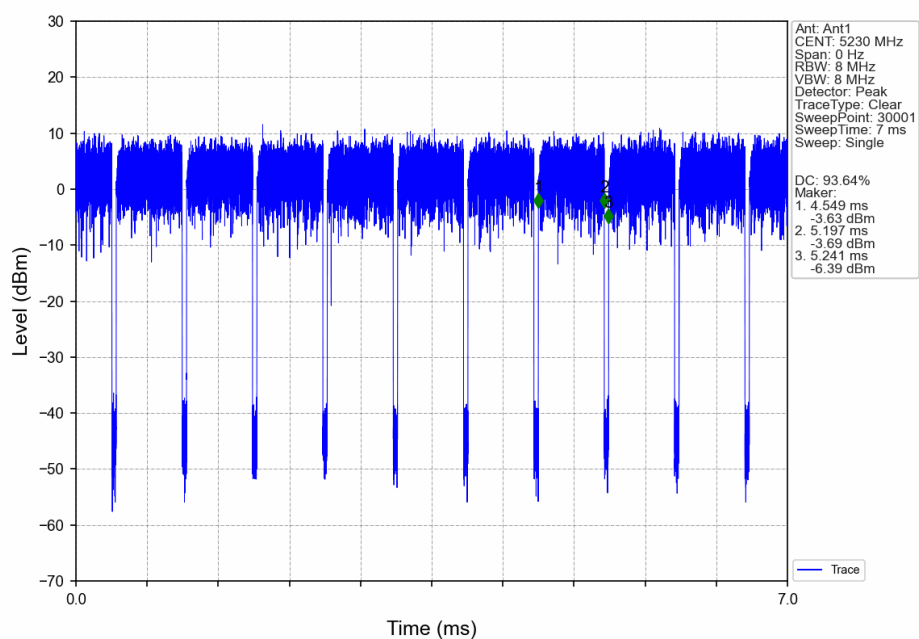
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



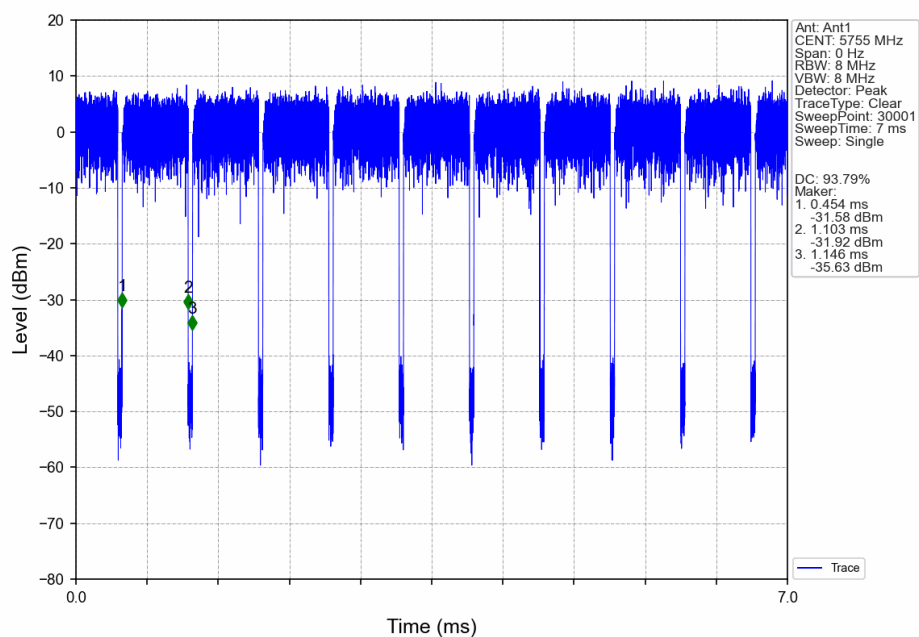
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



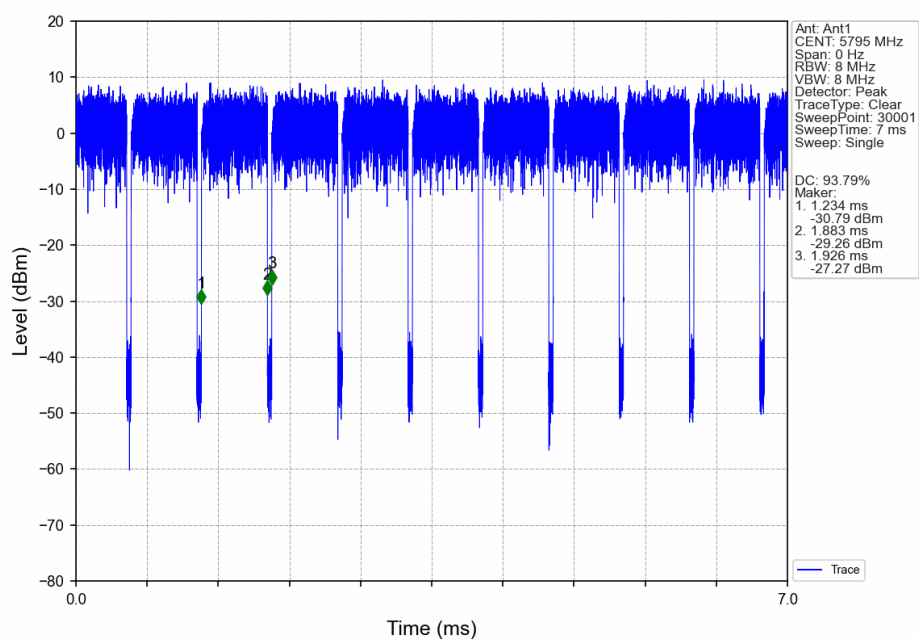
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



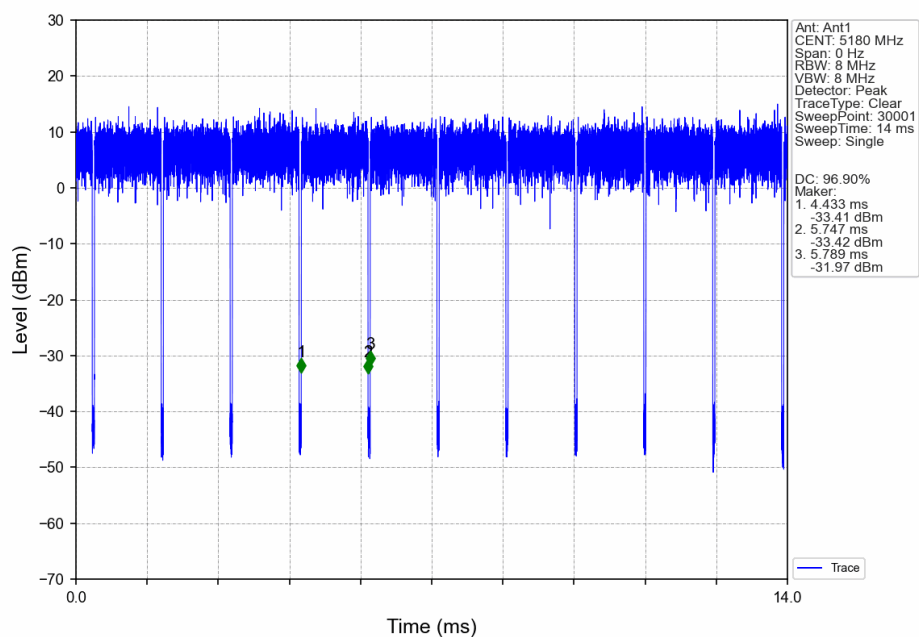
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



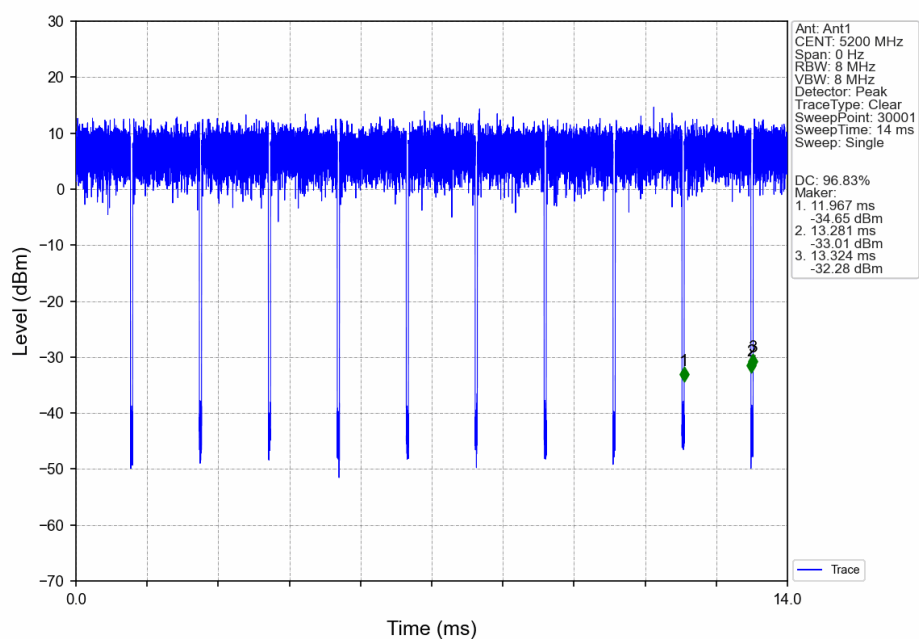
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



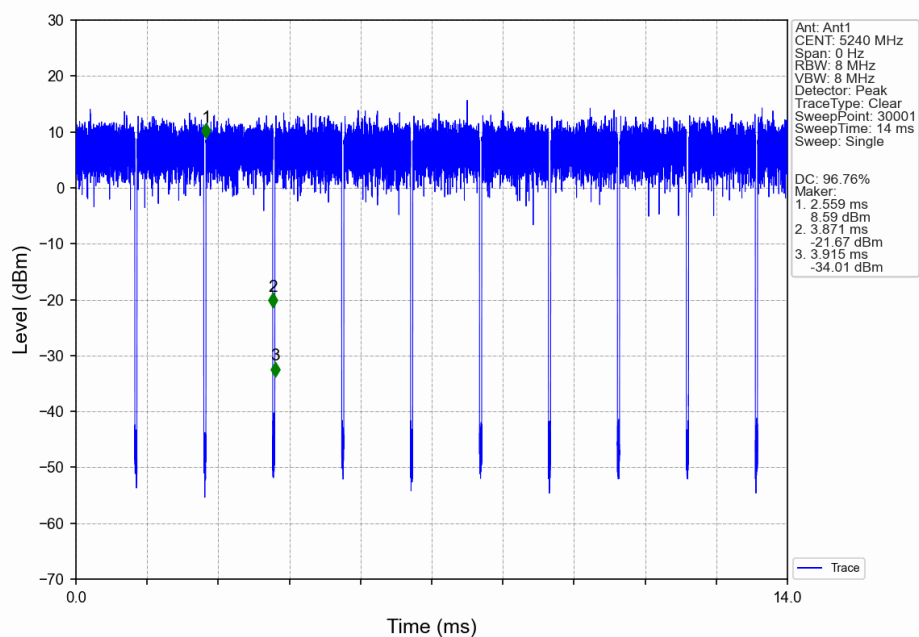
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



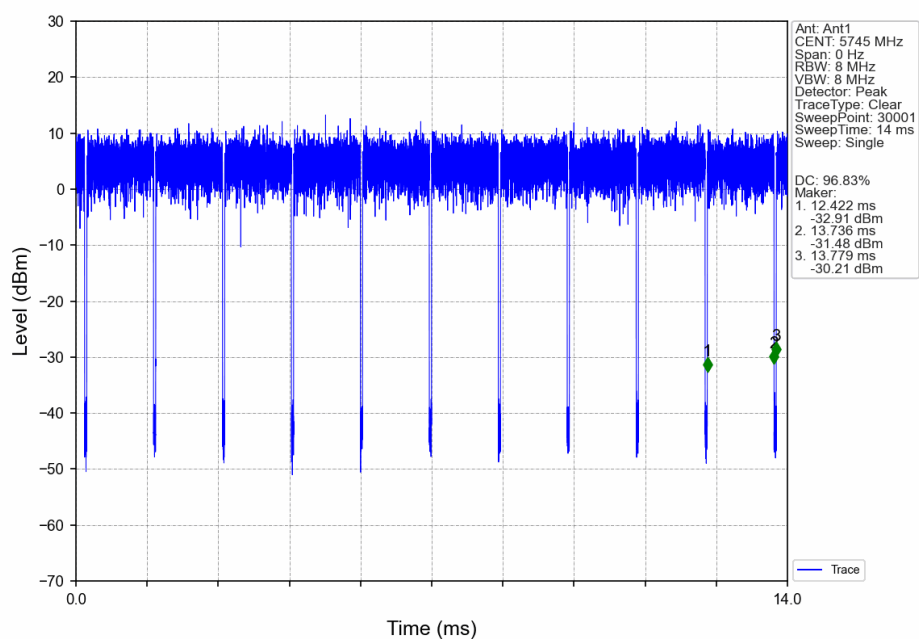
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



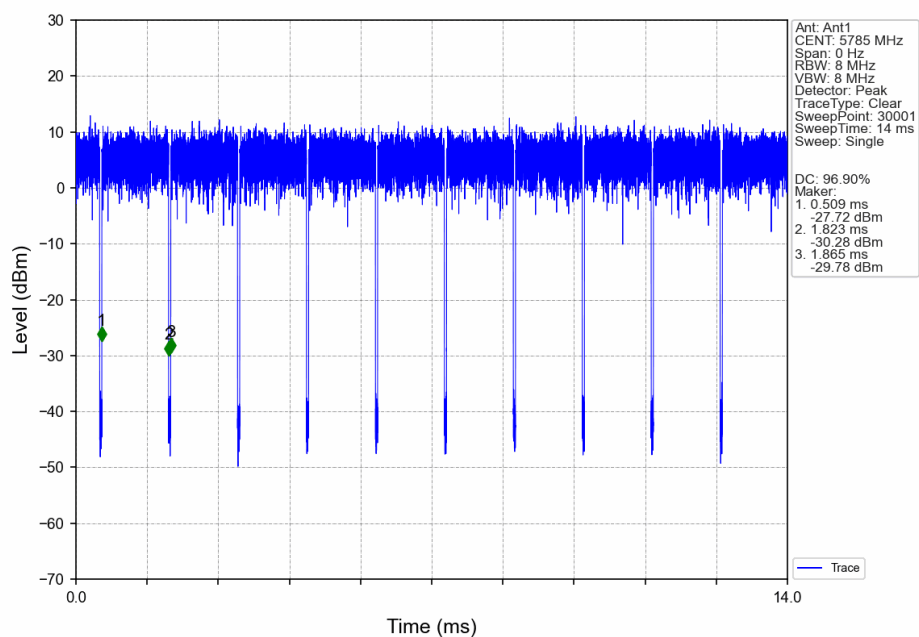
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



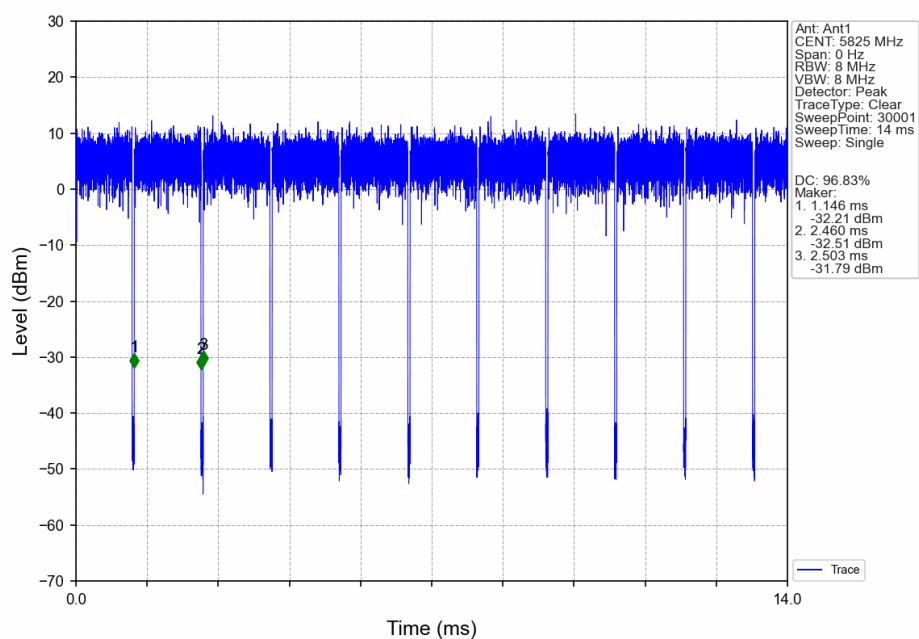
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



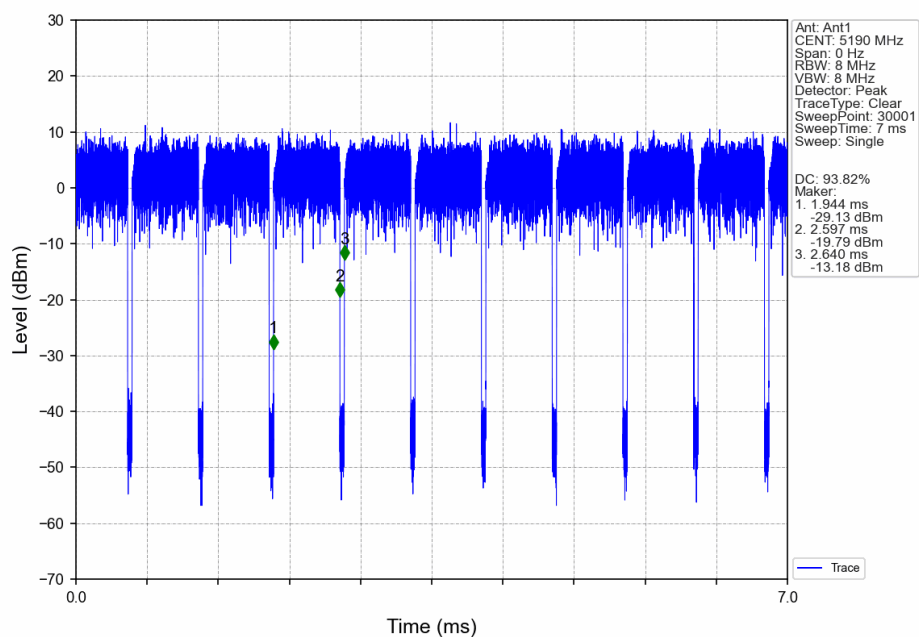
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



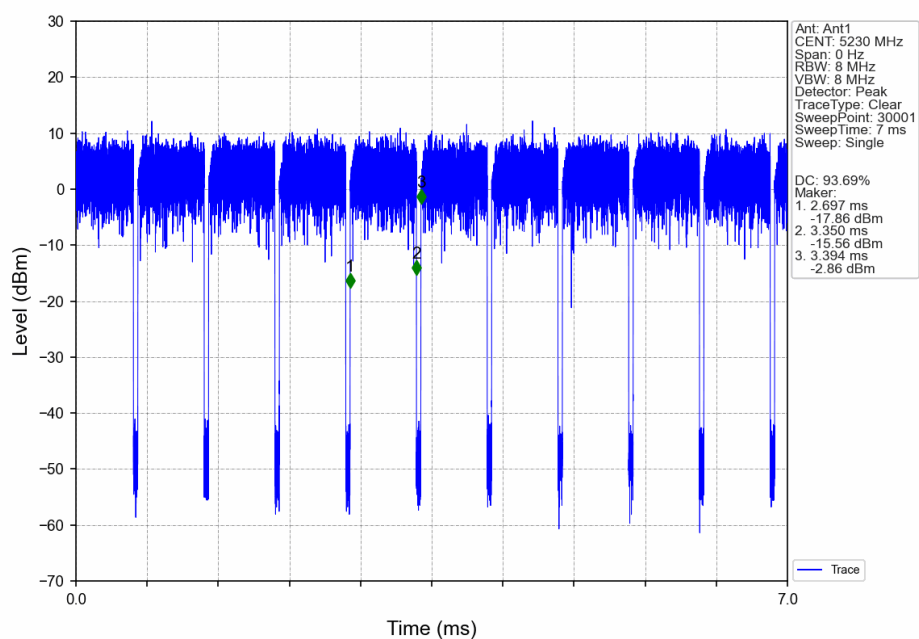
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



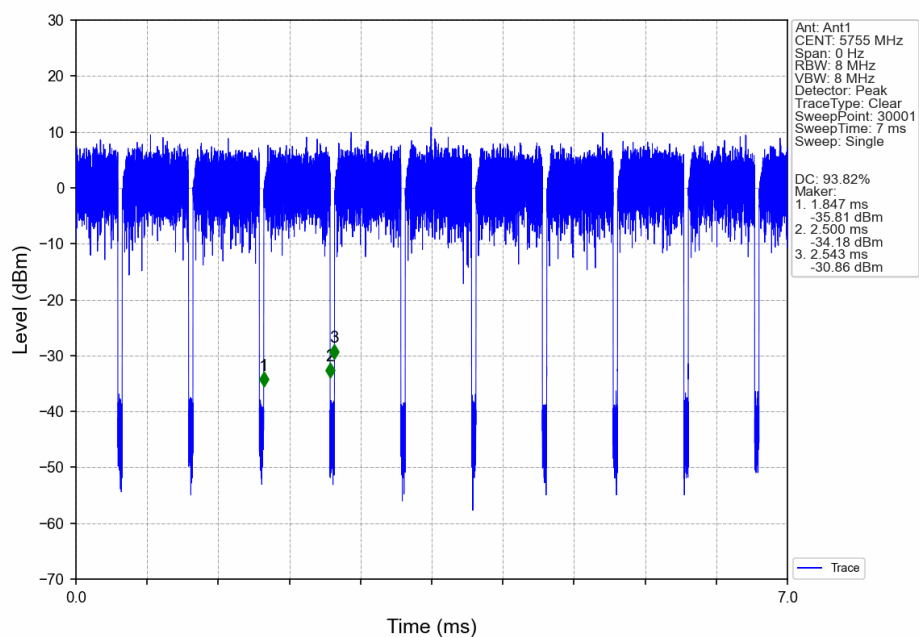
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



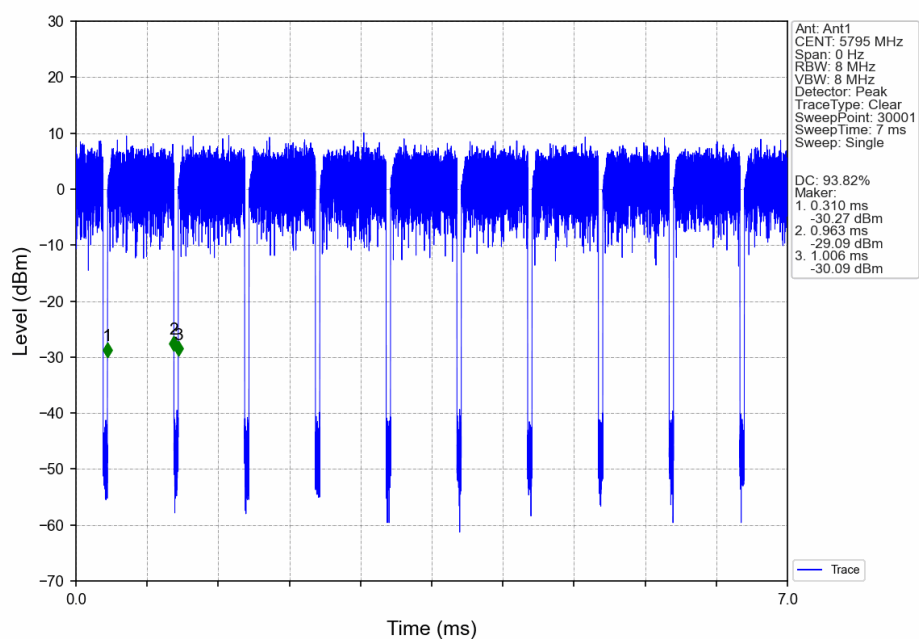
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



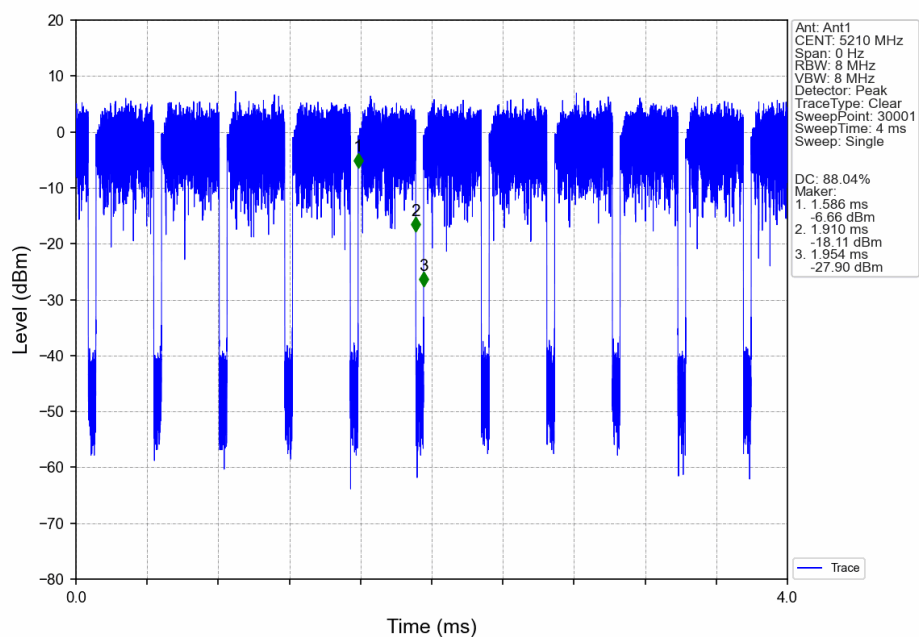
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



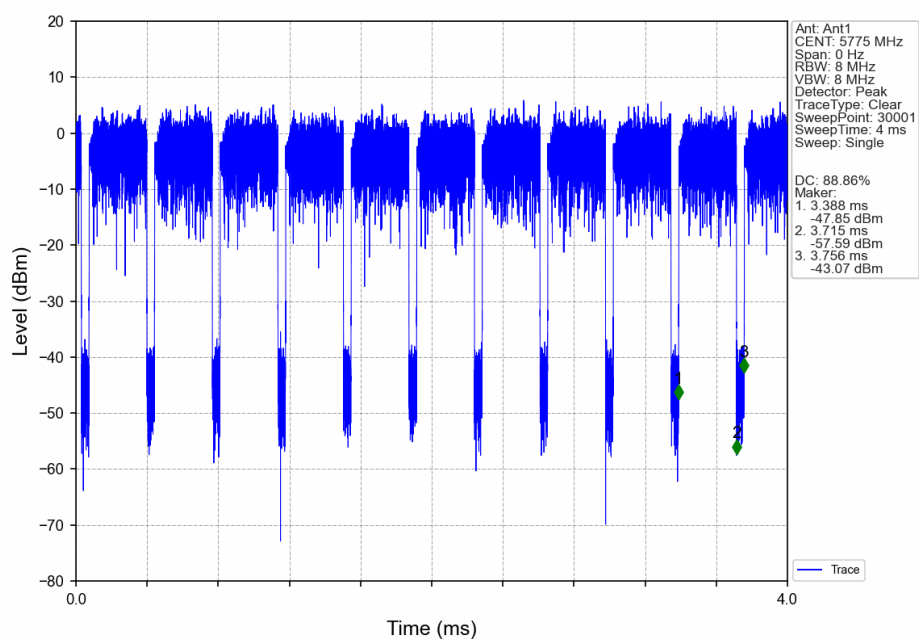
802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



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	17.114	/	Pass
		5200	1	17.125	/	Pass
		5240	1	17.107	/	Pass
		5745	1	17.074	/	Pass
		5785	1	17.104	/	Pass
		5825	1	17.181	/	Pass
802.11n (HT20)	SISO	5180	1	17.984	/	Pass
		5200	1	17.998	/	Pass
		5240	1	18.049	/	Pass
		5745	1	17.921	/	Pass
		5785	1	18.023	/	Pass
		5825	1	18.005	/	Pass
802.11n (HT40)	SISO	5190	1	36.219	/	Pass
		5230	1	36.124	/	Pass
		5755	1	36.073	/	Pass
		5795	1	36.148	/	Pass
802.11ac (VHT20)	SISO	5180	1	18.034	/	Pass
		5200	1	17.987	/	Pass
		5240	1	18.061	/	Pass
		5745	1	17.992	/	Pass
		5785	1	18.028	/	Pass
		5825	1	17.952	/	Pass
802.11ac (VHT40)	SISO	5190	1	36.195	/	Pass
		5230	1	36.305	/	Pass
		5755	1	36.094	/	Pass
		5795	1	36.185	/	Pass
802.11ac (VHT80)	SISO	5210	1	75.659	/	Pass
		5775	1	75.247	/	Pass

2.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	20.262	/	Pass
		5200	1	20.317	/	Pass
		5240	1	20.075	/	Pass
802.11n (HT20)	SISO	5180	1	20.805	/	Pass
		5200	1	20.404	/	Pass
		5240	1	20.416	/	Pass
802.11n (HT40)	SISO	5190	1	40.824	/	Pass
		5230	1	40.865	/	Pass
802.11ac (VHT20)	SISO	5180	1	20.412	/	Pass
		5200	1	20.511	/	Pass
		5240	1	20.648	/	Pass
802.11ac (VHT40)	SISO	5190	1	41.096	/	Pass
		5230	1	40.746	/	Pass

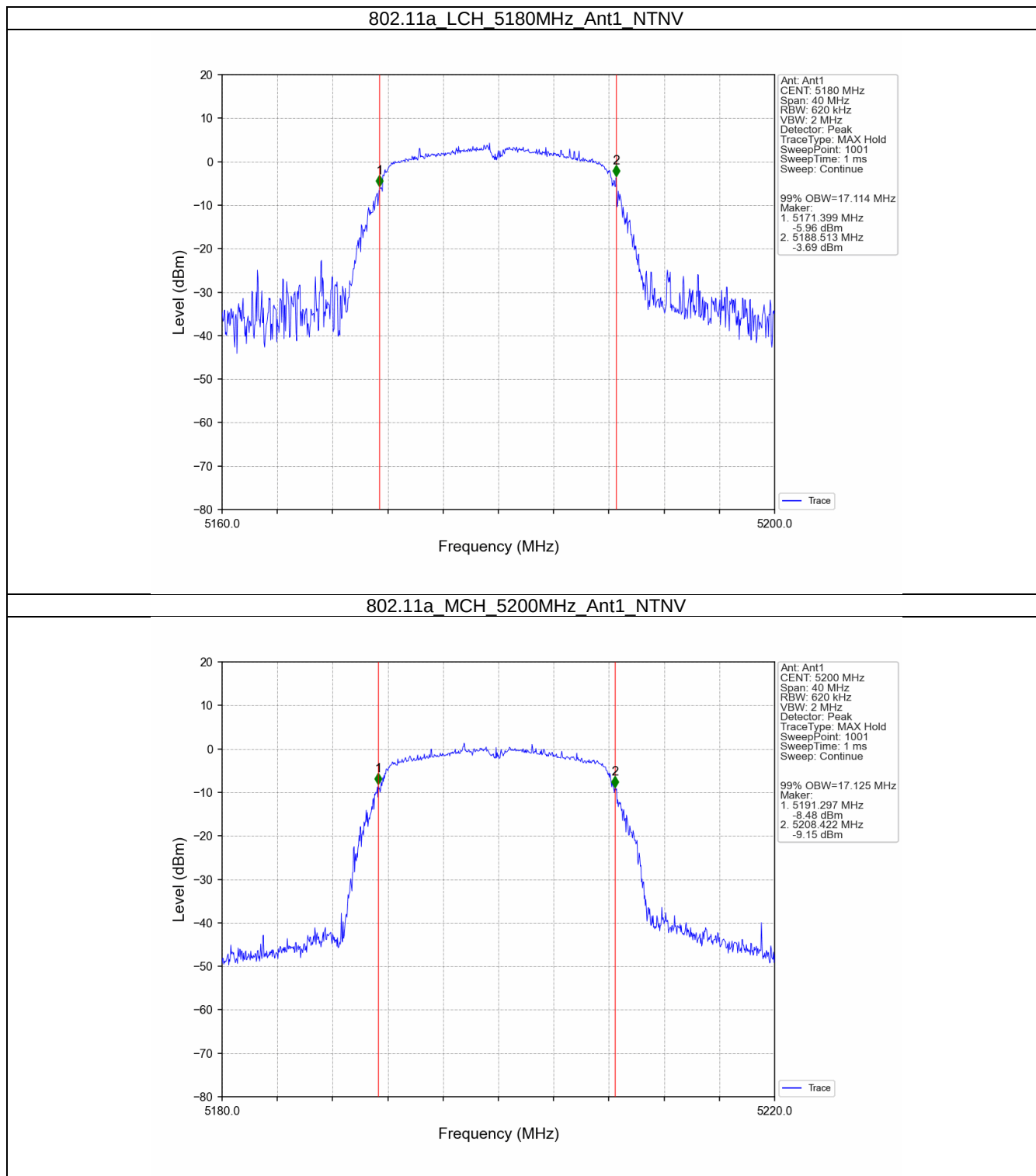
802.11ac (VHT80)	SISO	5210	1	81.470	/	Pass
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2.1.3 6dB BW

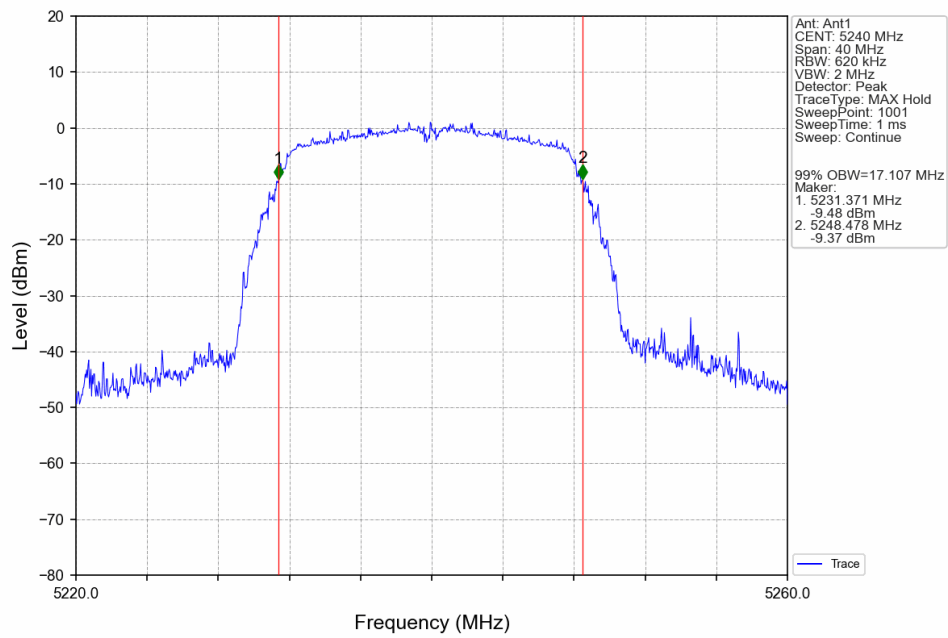
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	15.142	≥ 0.5	Pass
		5785	1	15.272	≥ 0.5	Pass
		5825	1	12.534	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	15.072	≥ 0.5	Pass
		5785	1	15.152	≥ 0.5	Pass
		5825	1	14.233	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	35.134	≥ 0.5	Pass
		5795	1	35.144	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	17.184	≥ 0.5	Pass
		5785	1	15.061	≥ 0.5	Pass
		5825	1	15.149	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	33.878	≥ 0.5	Pass
		5795	1	32.644	≥ 0.5	Pass
802.11ac (VHT80)	SISO	5775	1	73.843	≥ 0.5	Pass

2.2 Test Graph

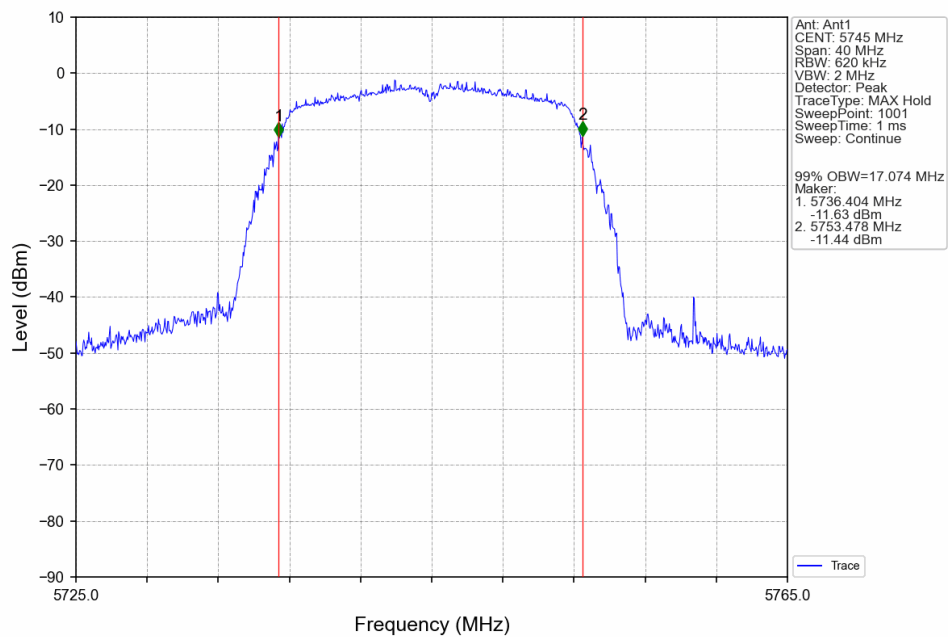
2.2.1 OBW



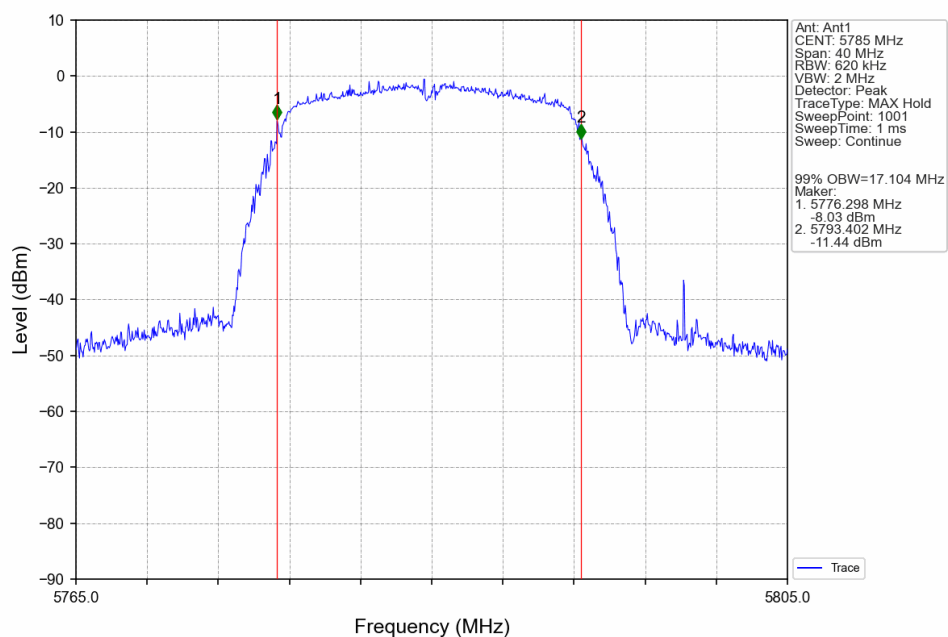
802.11a_HCH_5240MHz_Ant1_NTNV



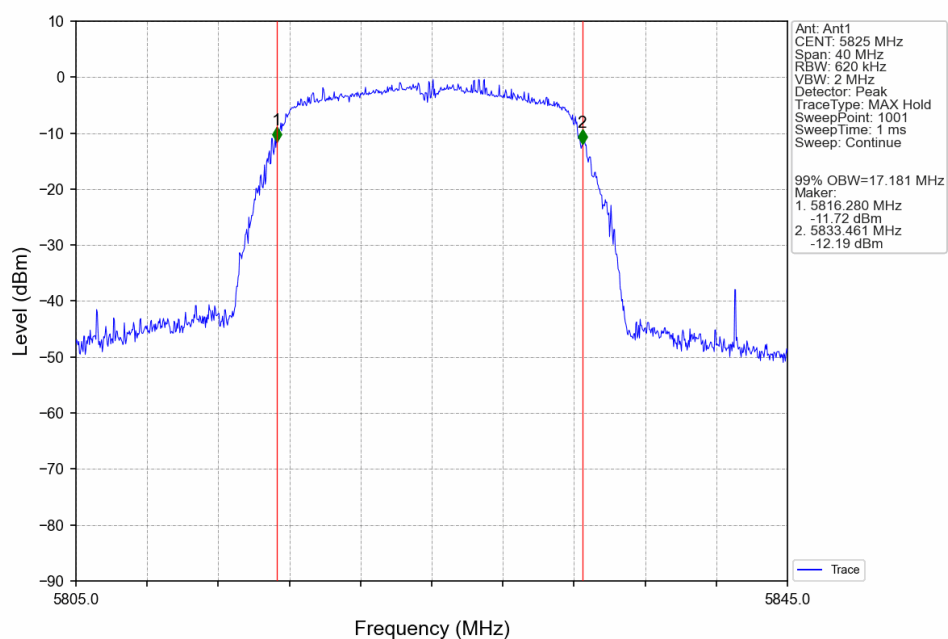
802.11a_LCH_5745MHz_Ant1_NTNV



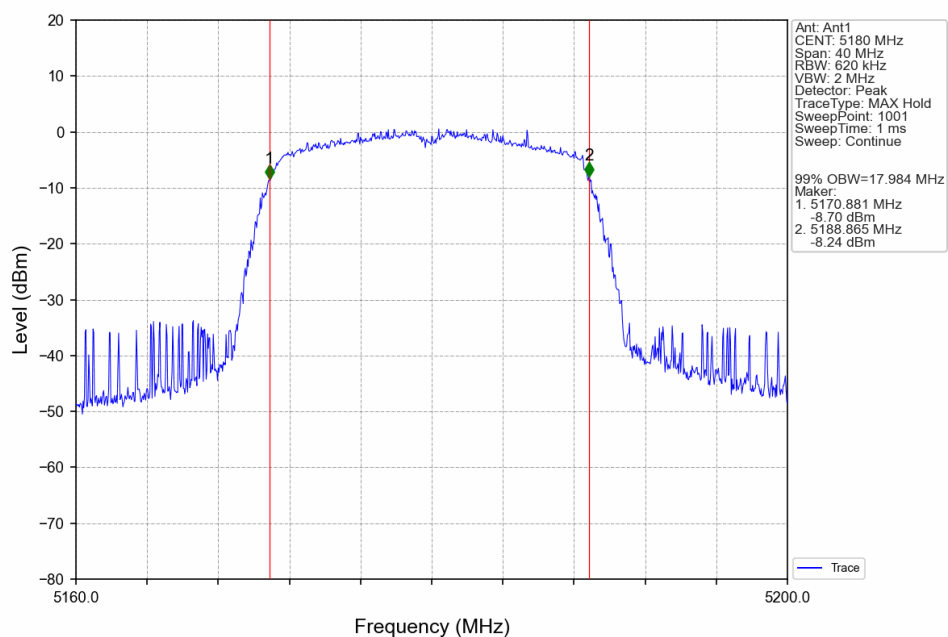
802.11a_MCH_5785MHz_Ant1_NTNV



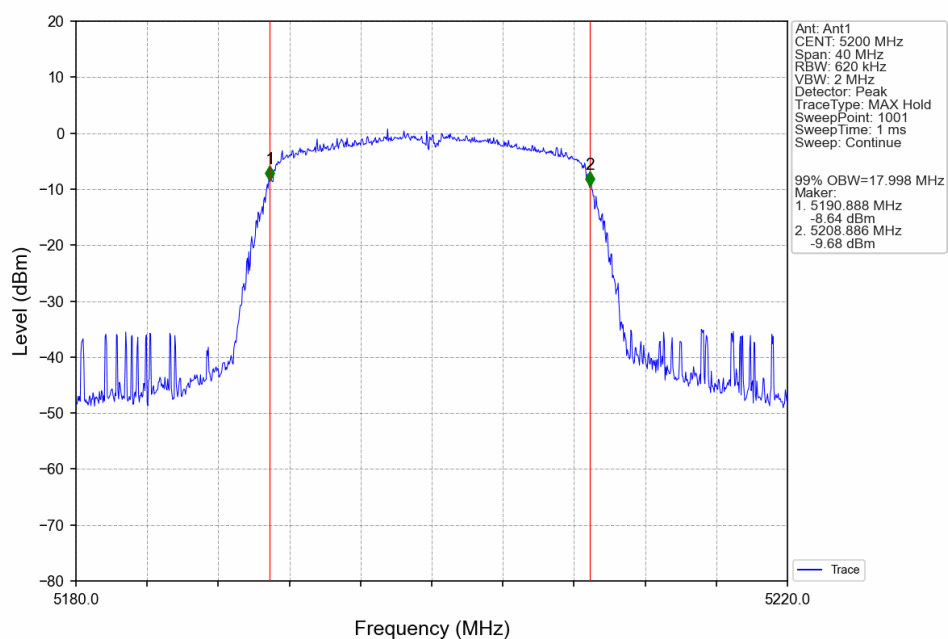
802.11a_HCH_5825MHz_Ant1_NTNV



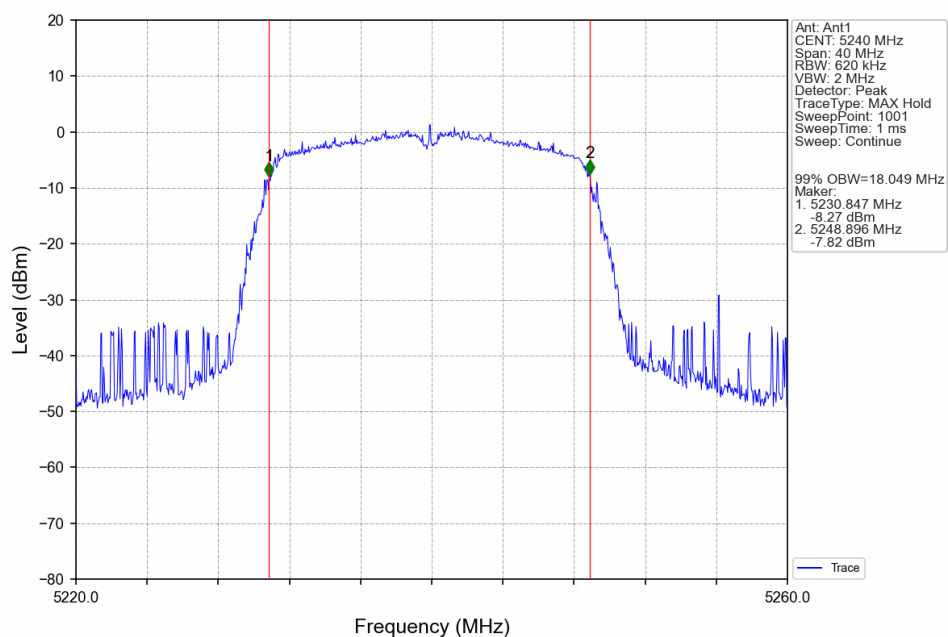
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



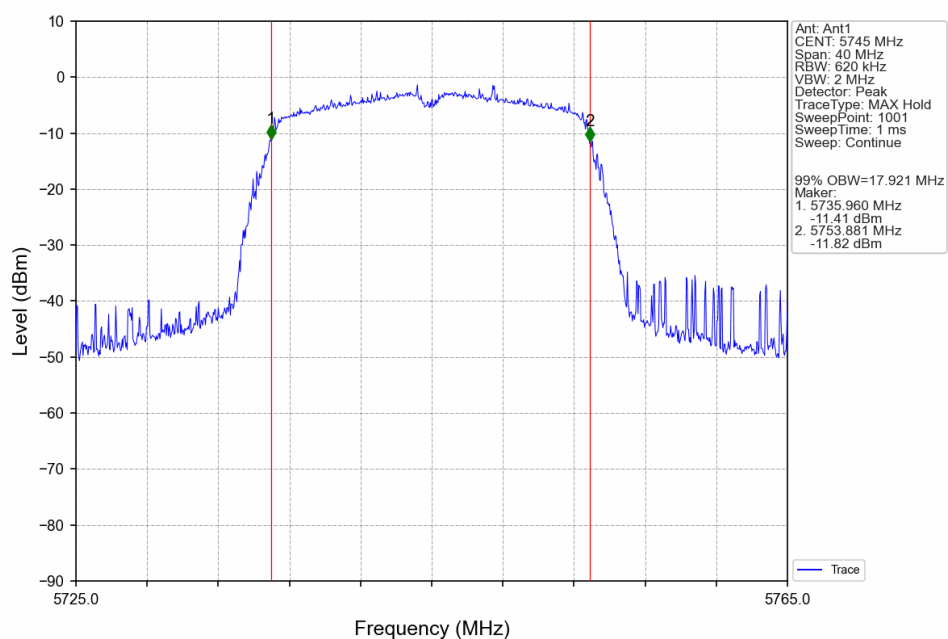
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



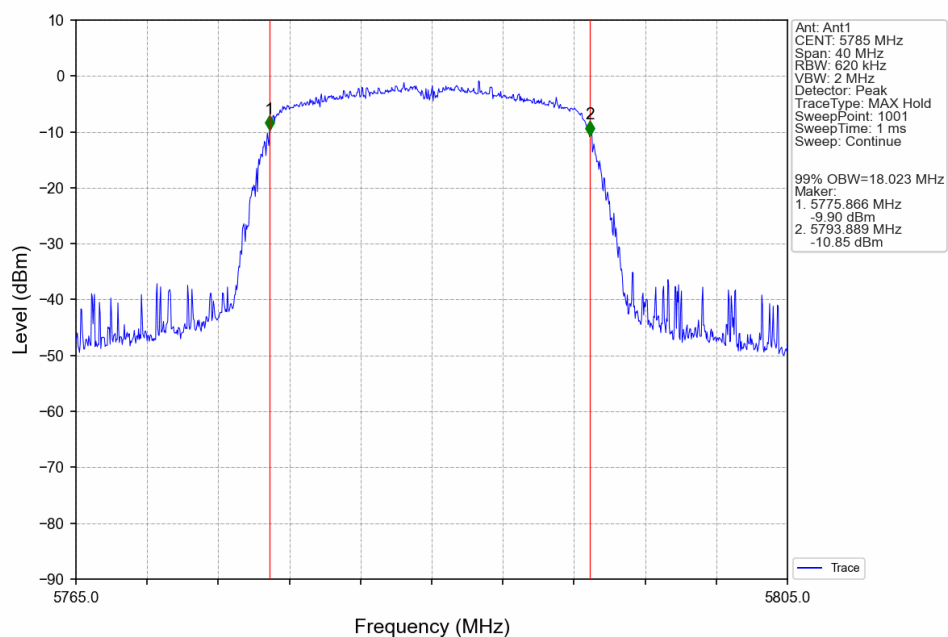
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



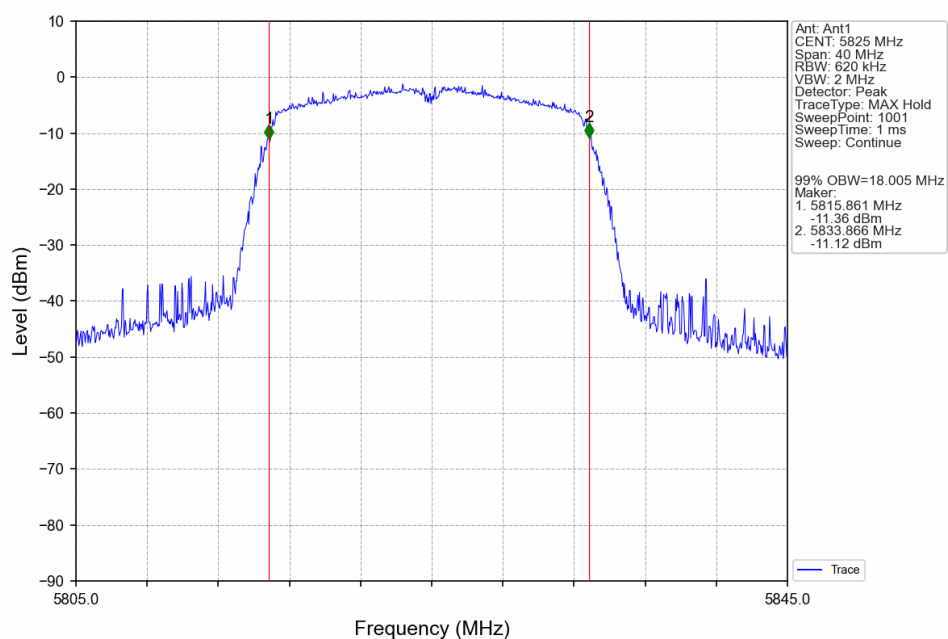
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



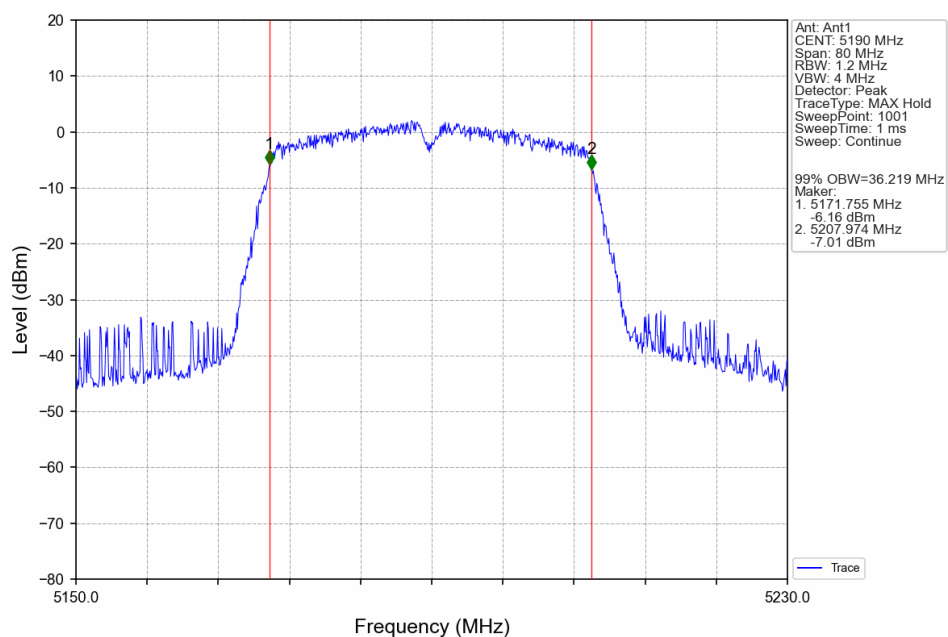
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



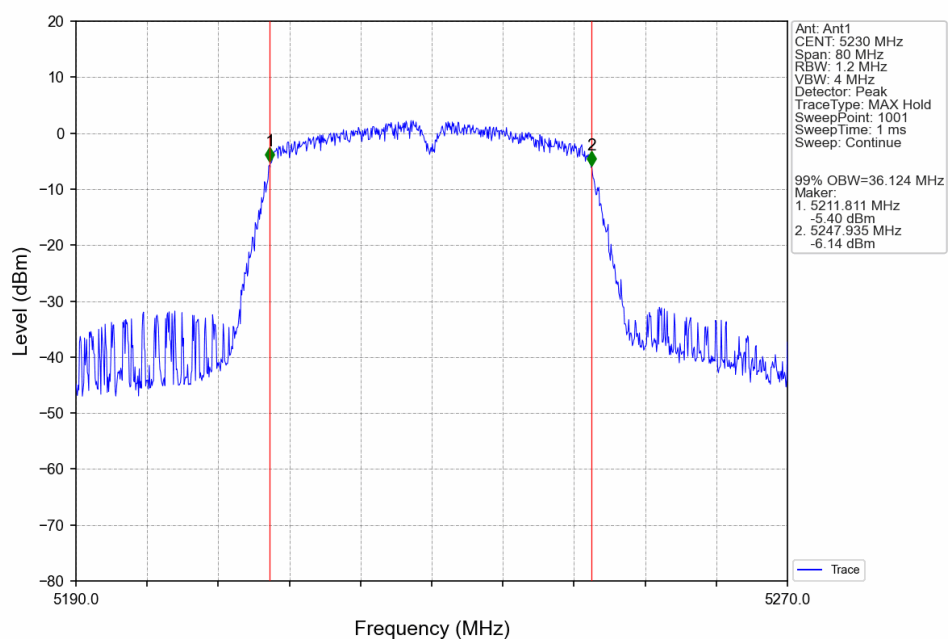
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



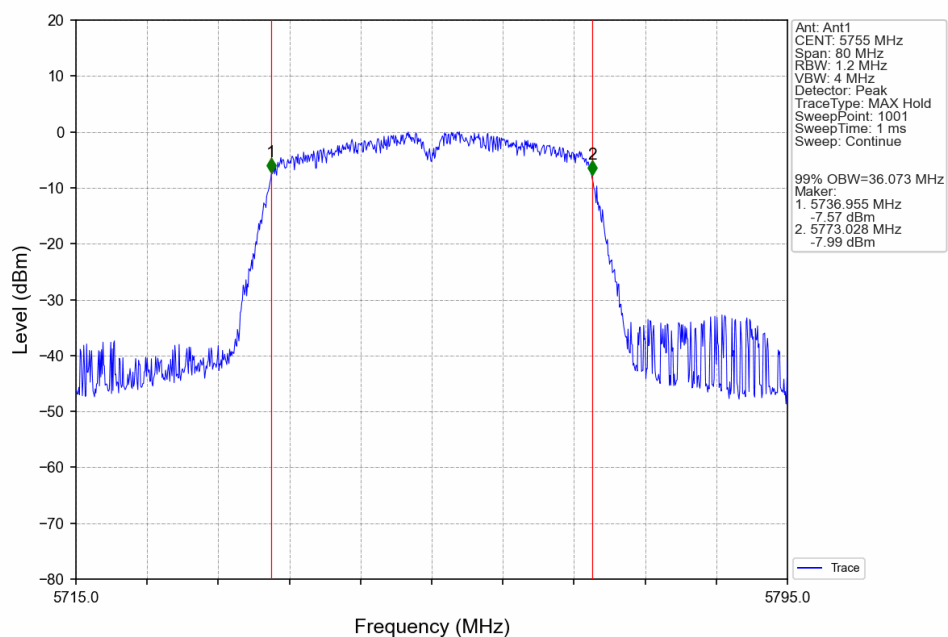
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



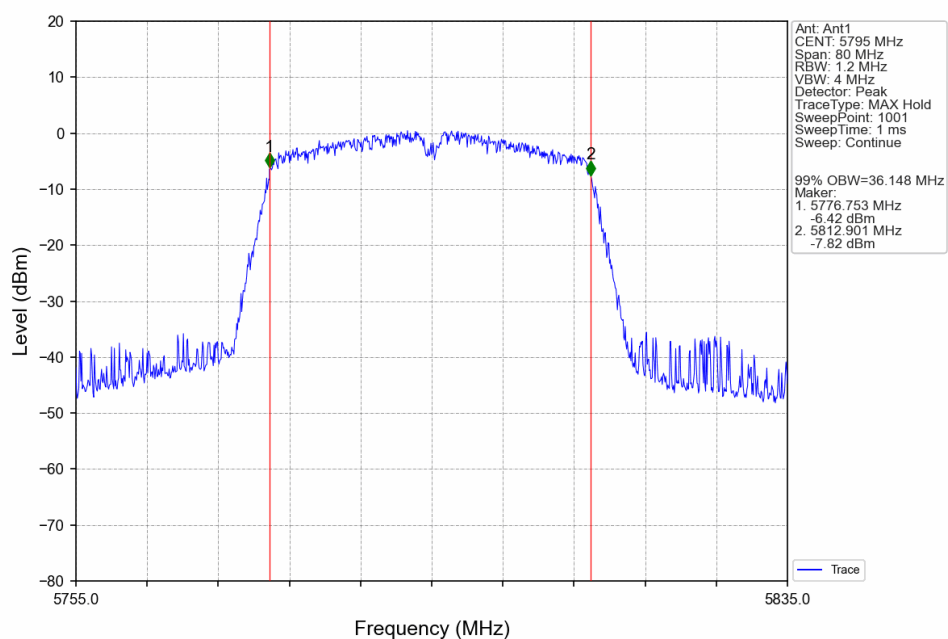
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



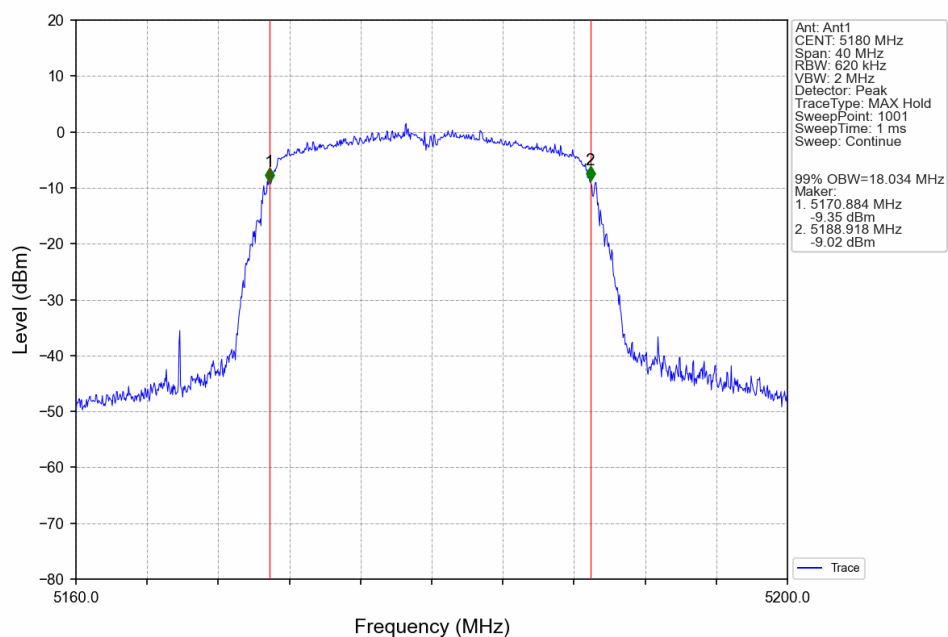
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



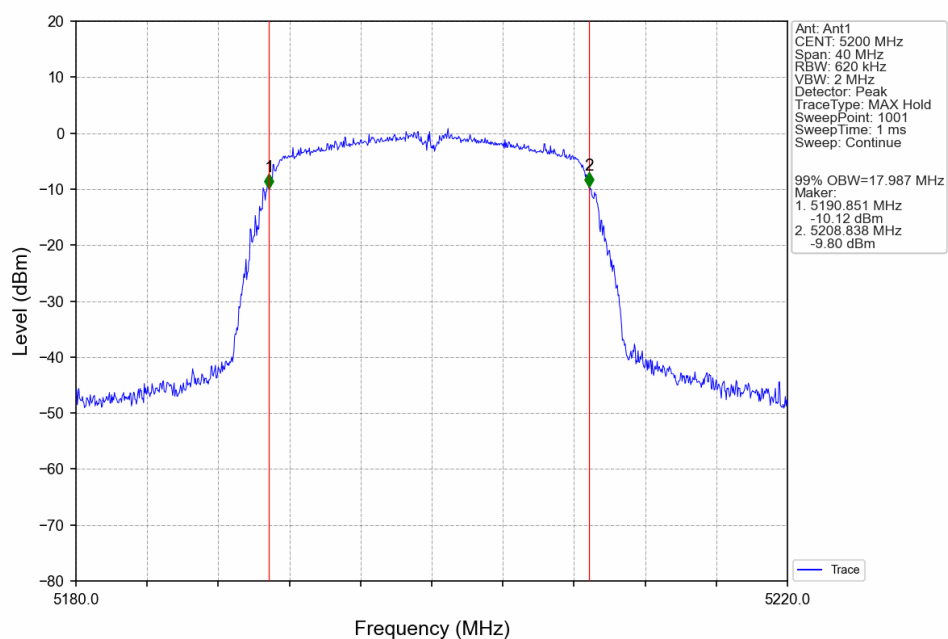
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



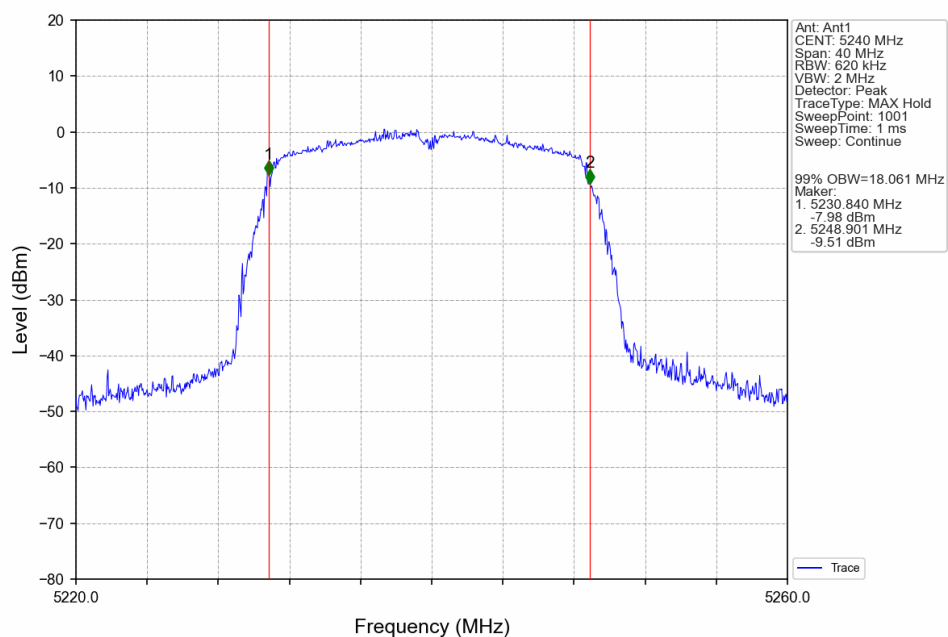
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



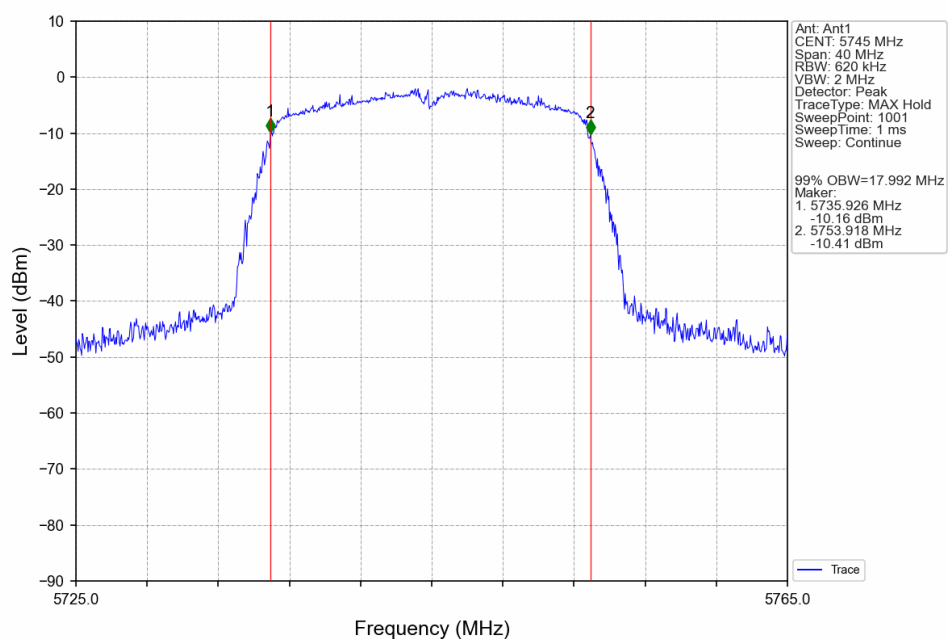
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



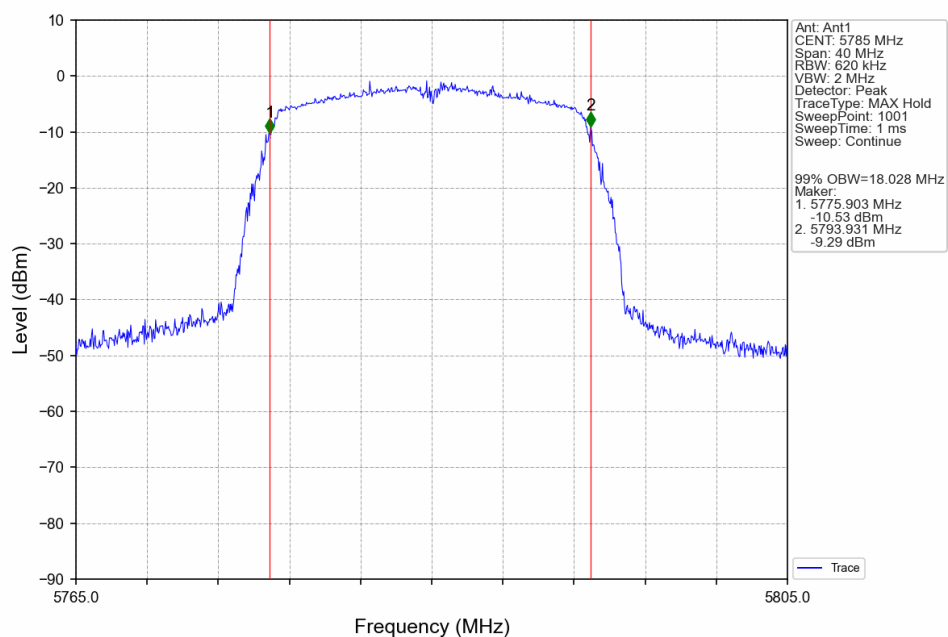
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



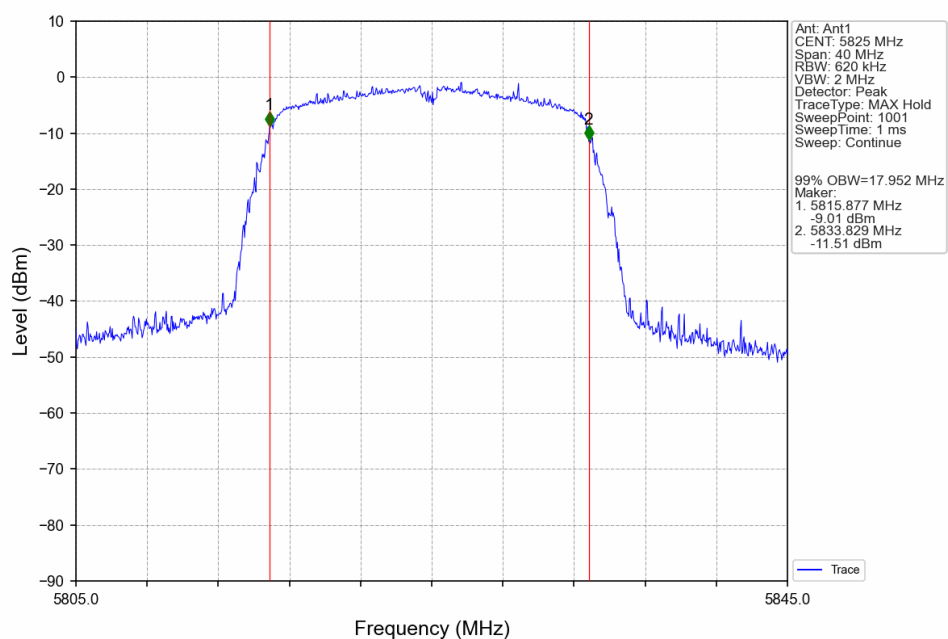
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



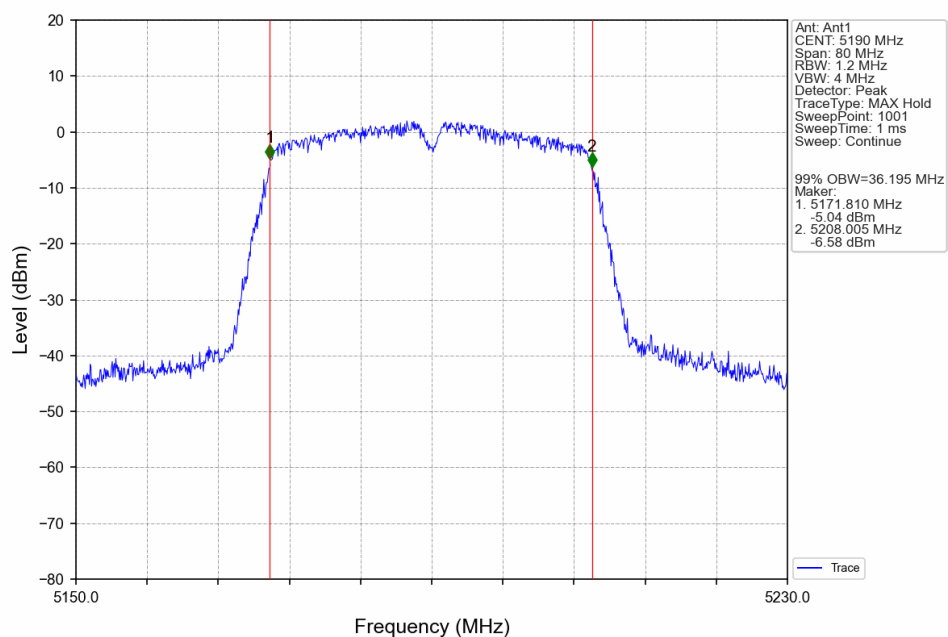
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



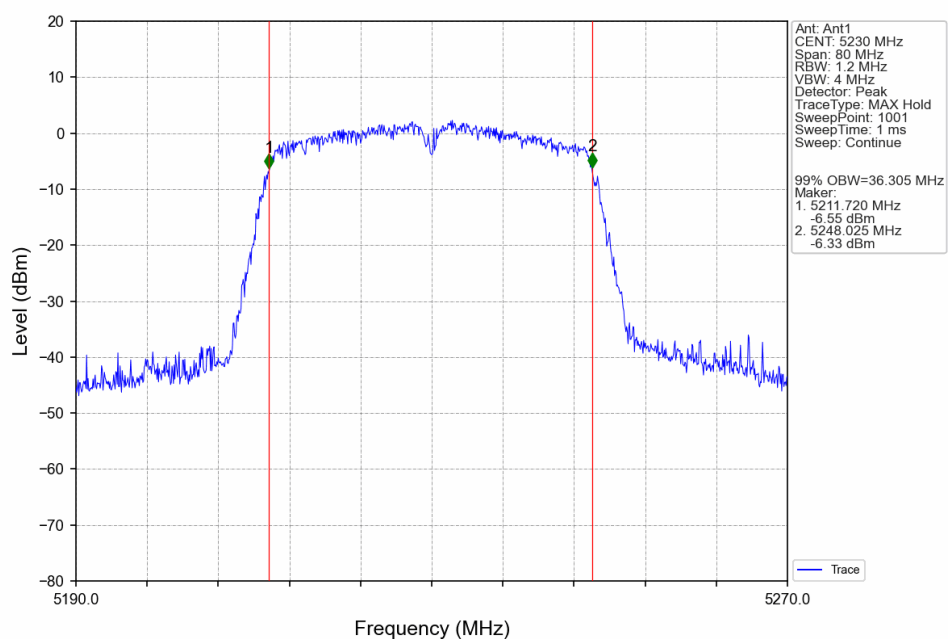
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



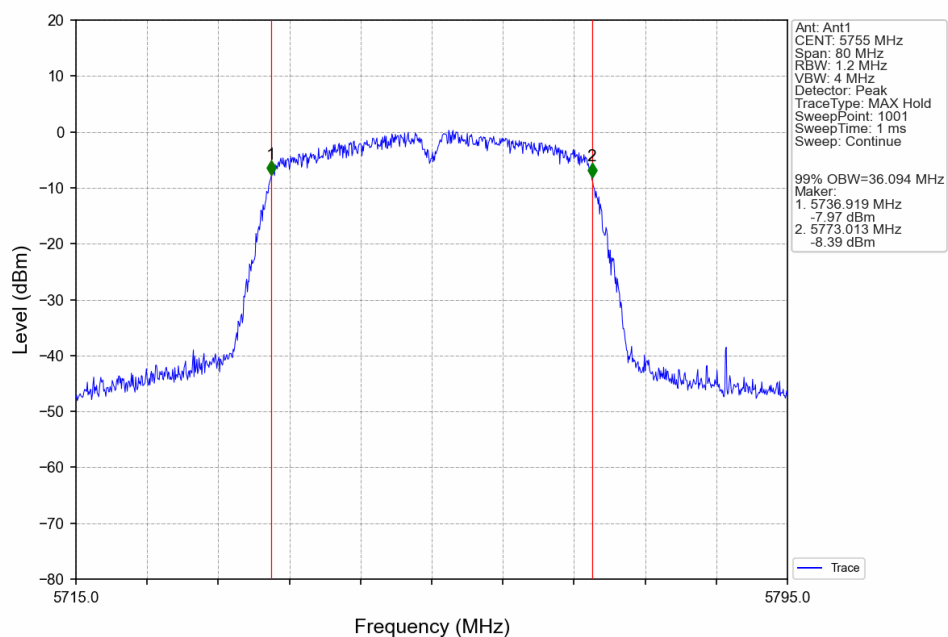
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



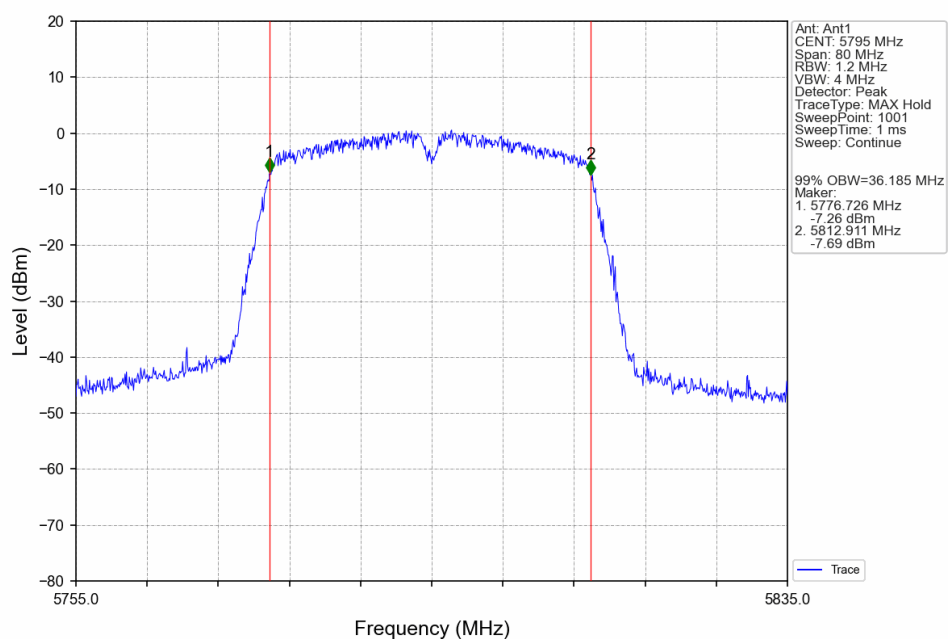
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



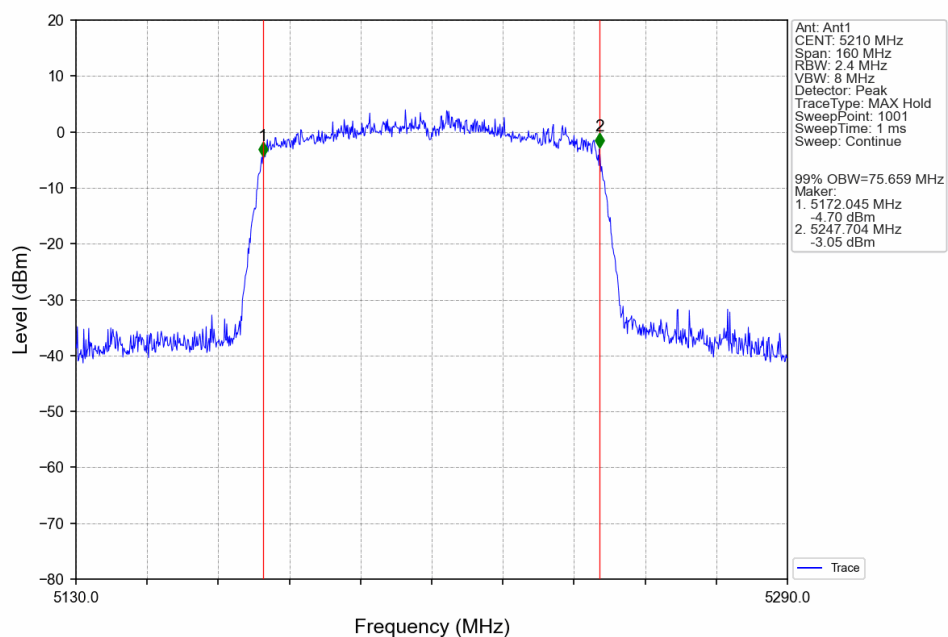
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



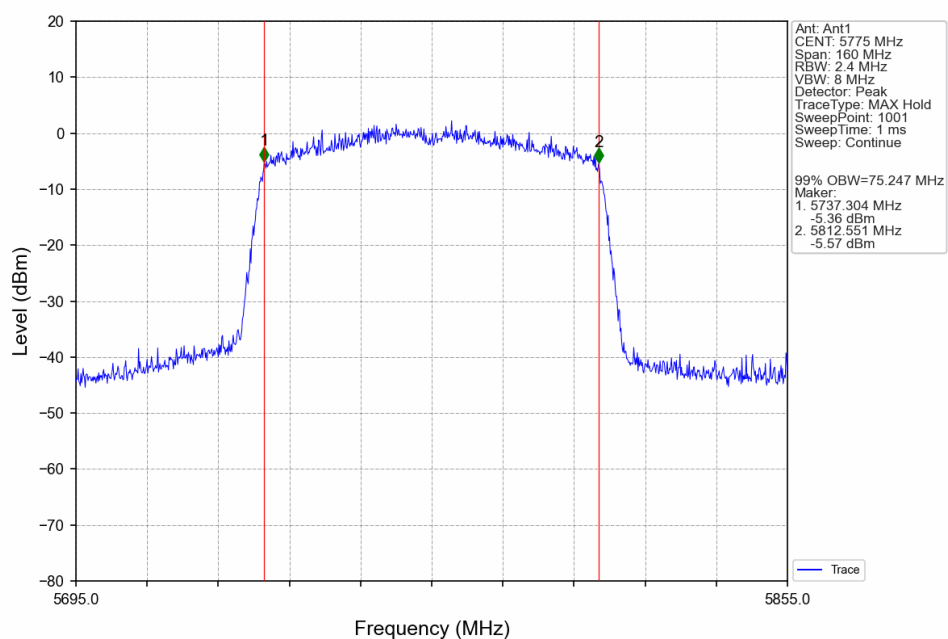
802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



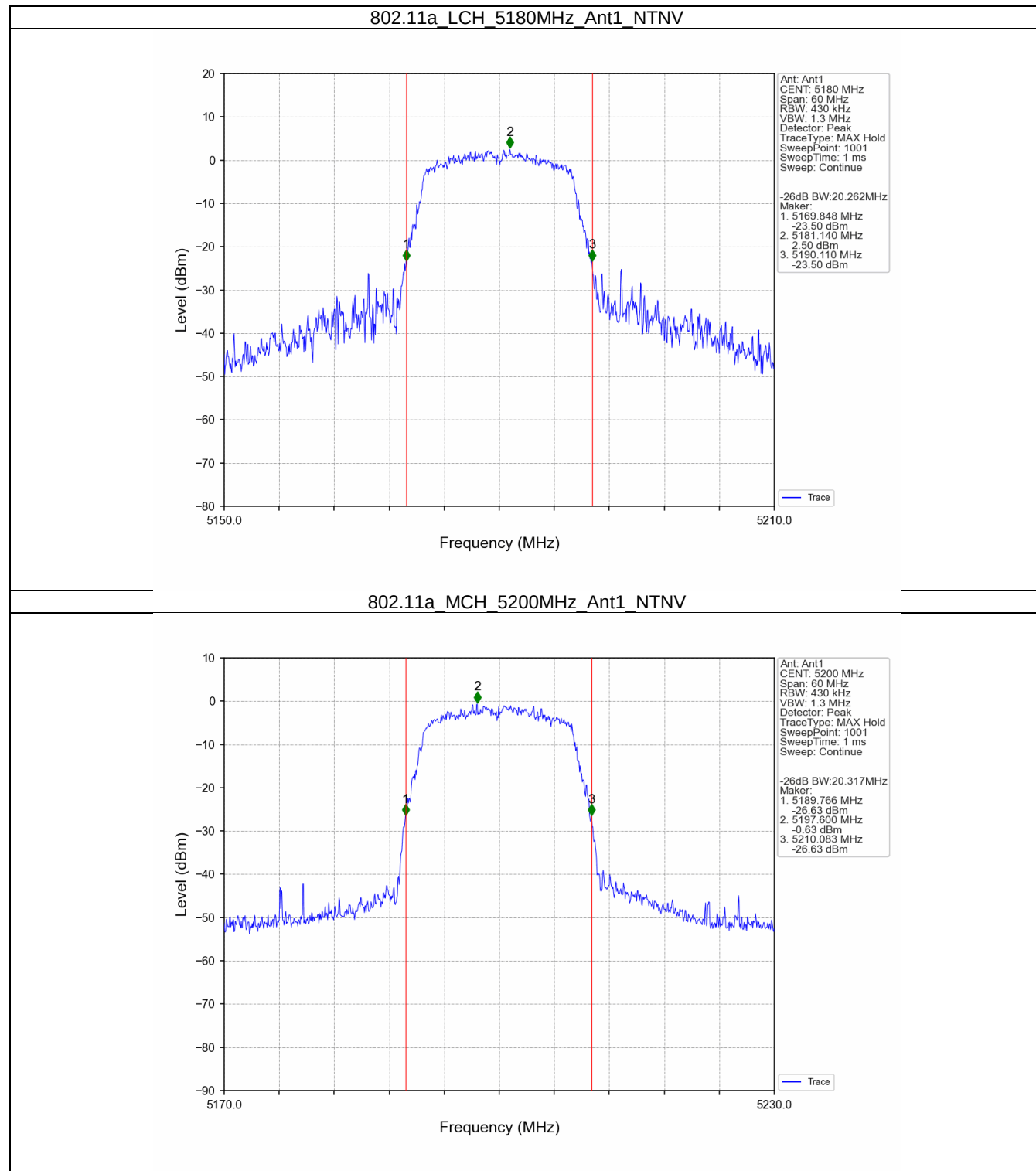
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



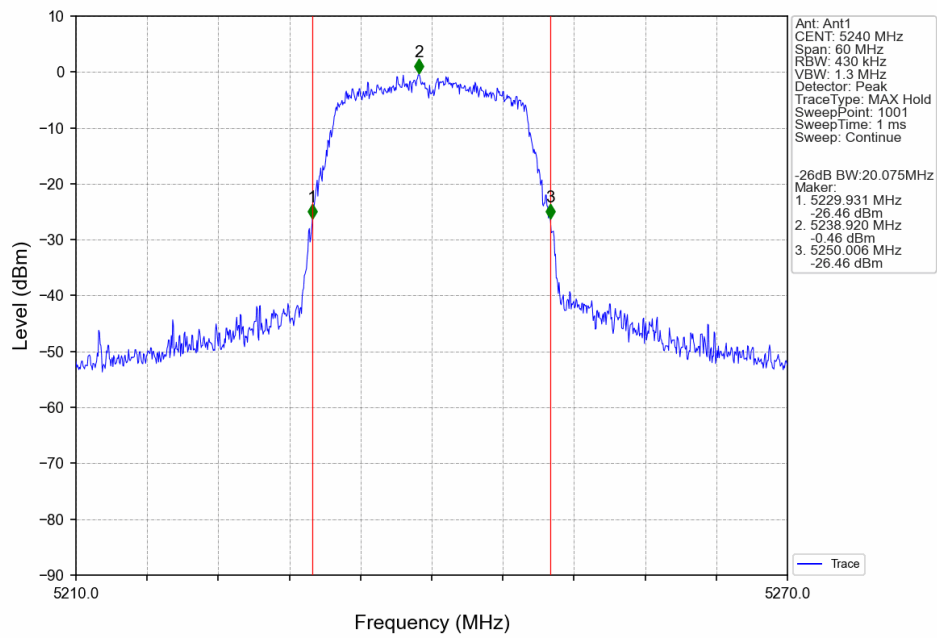
802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



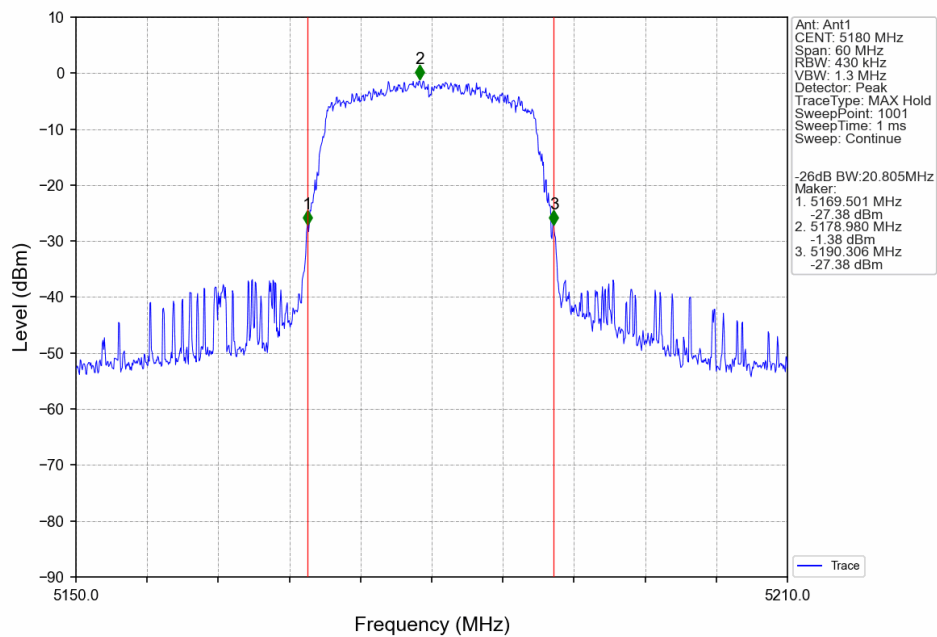
2.2.2 26dB BW



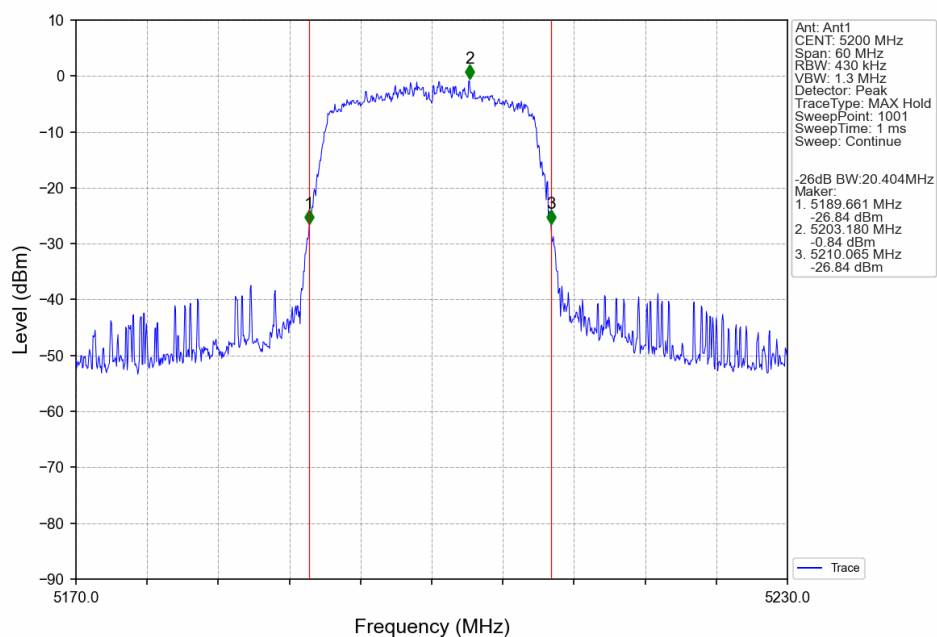
802.11a_HCH_5240MHz_Ant1_NTNV



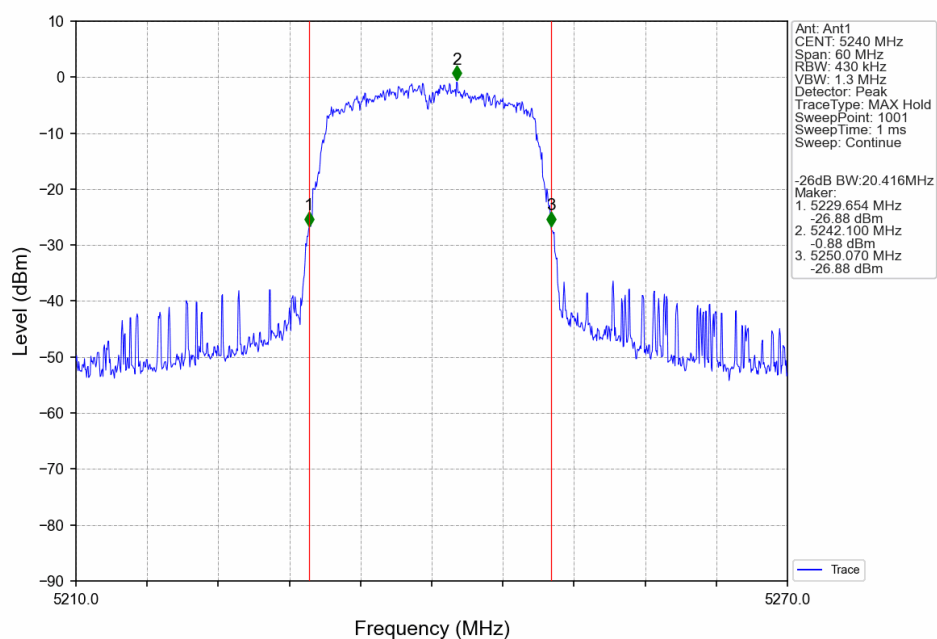
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



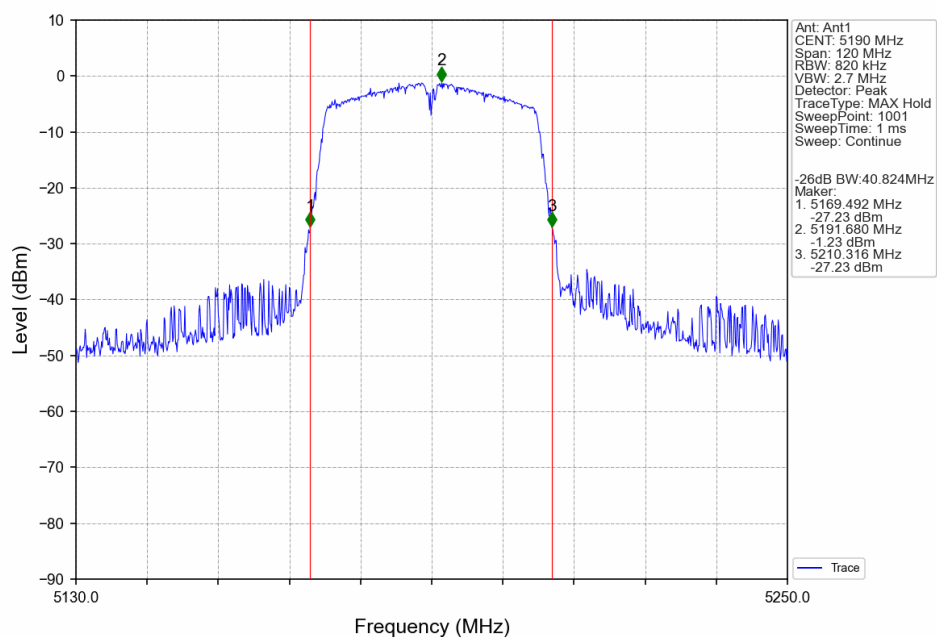
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



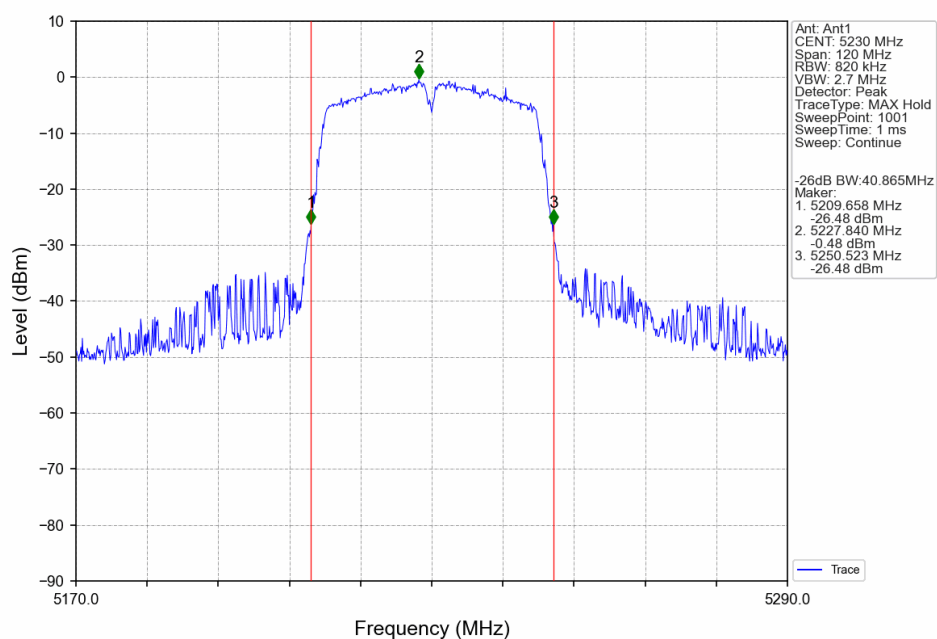
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



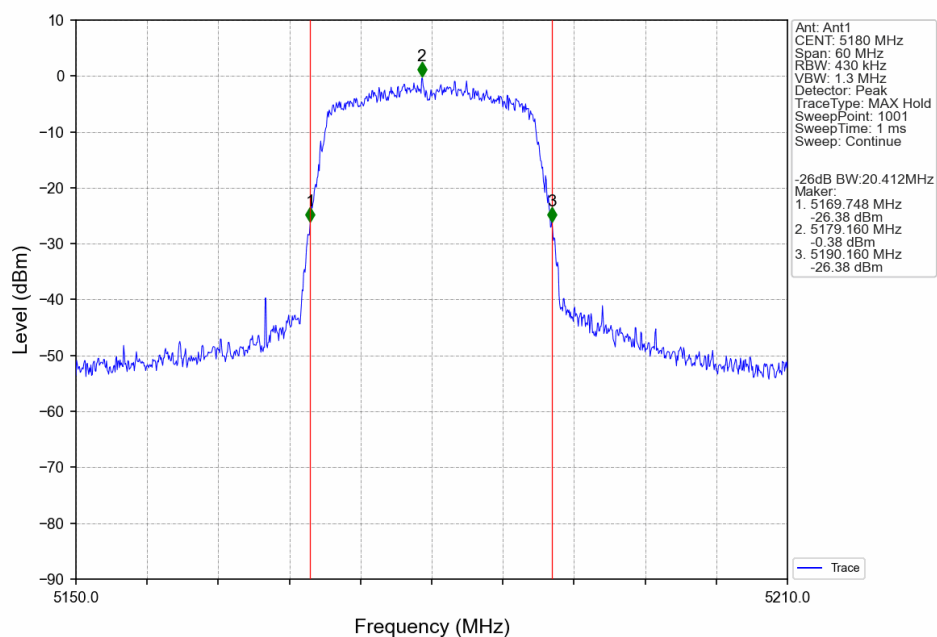
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



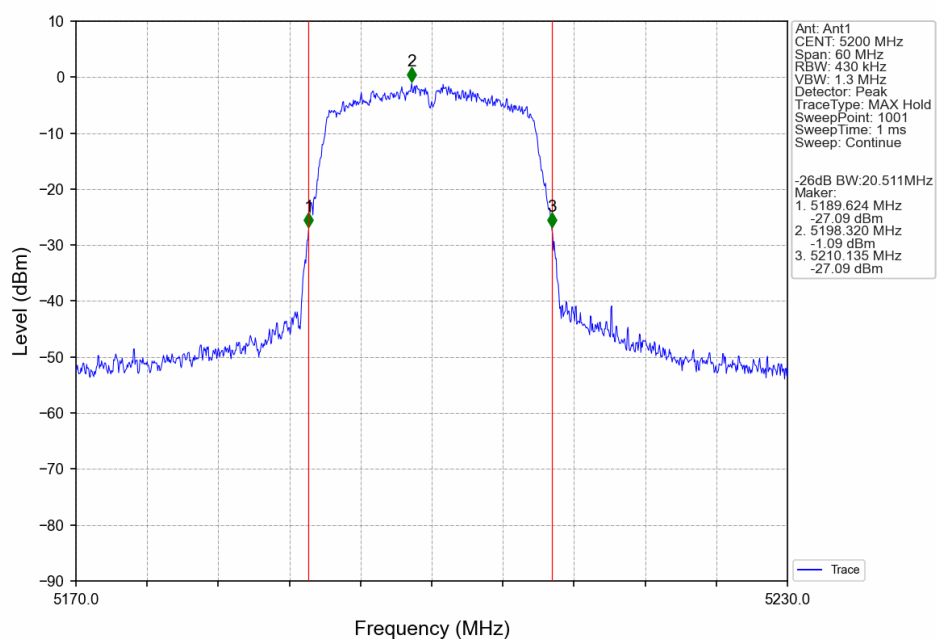
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



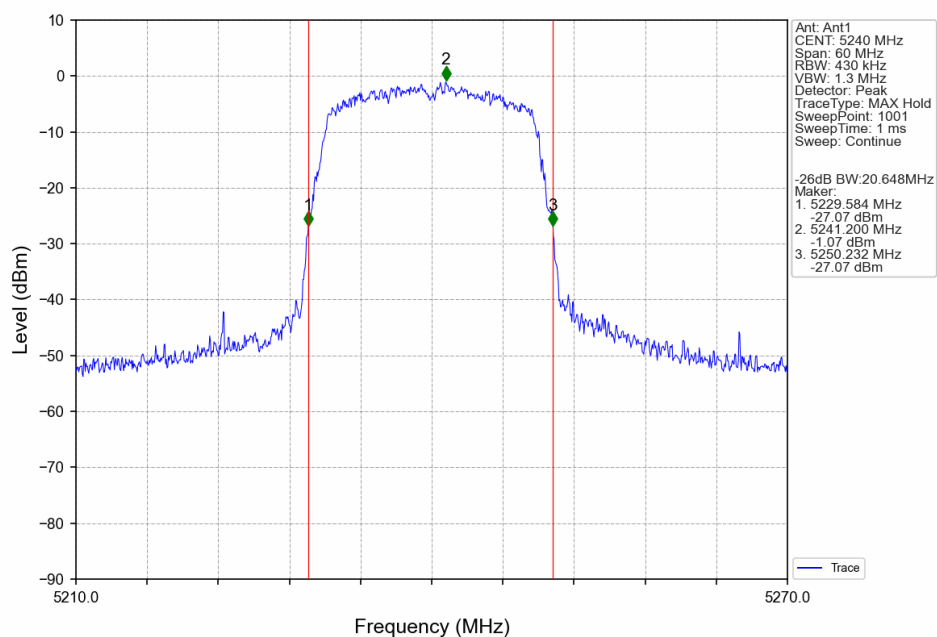
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



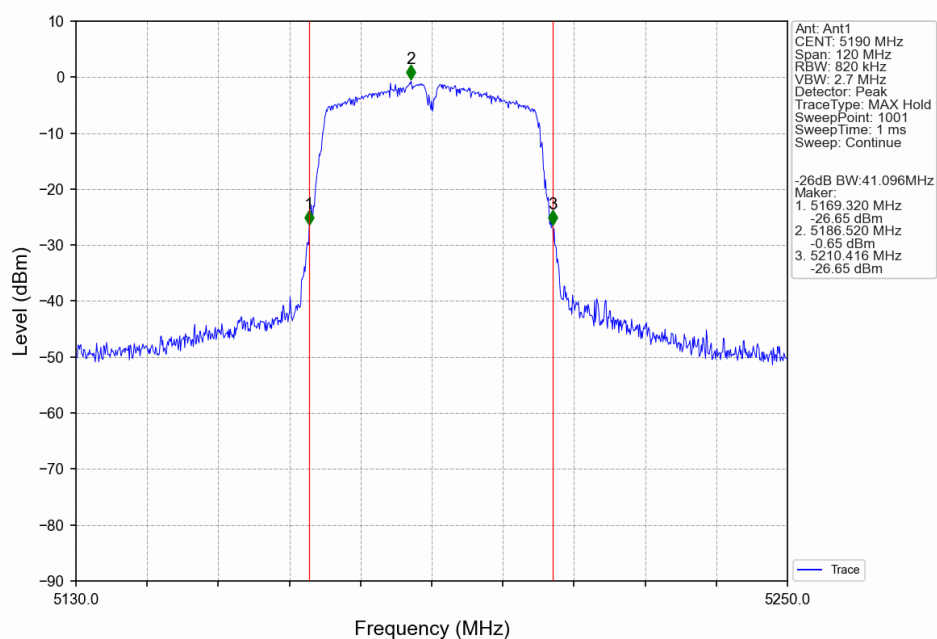
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



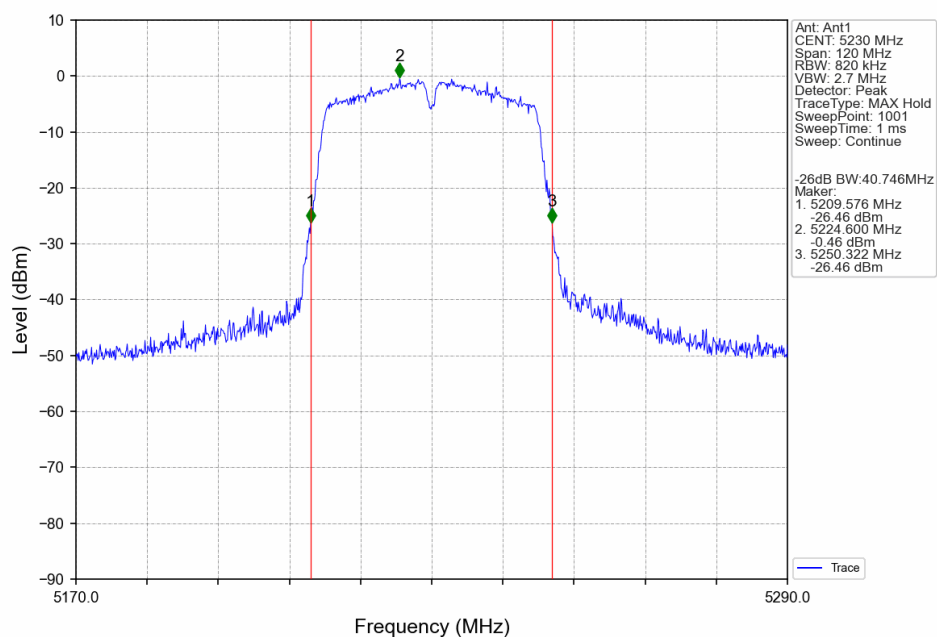
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



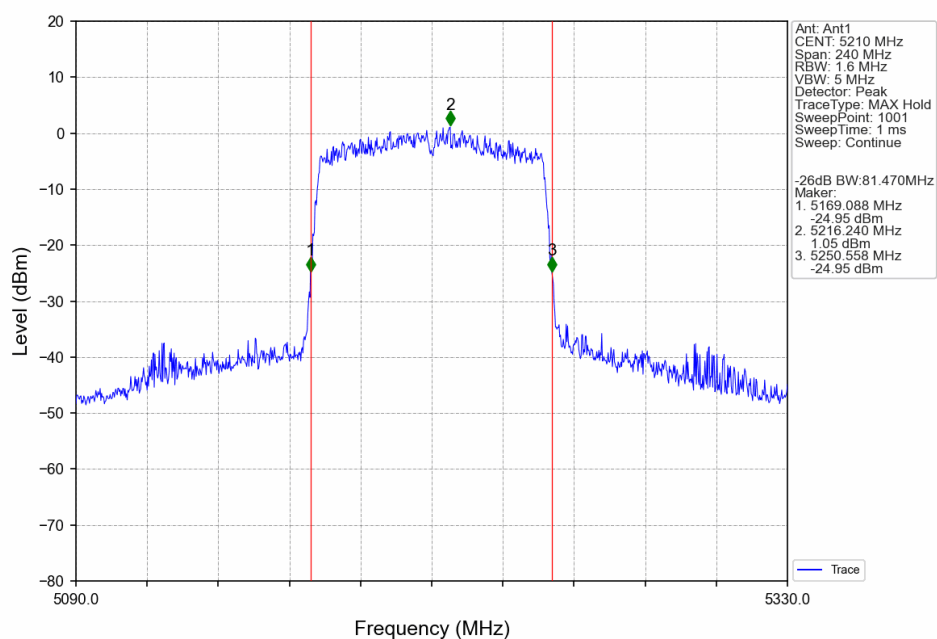
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



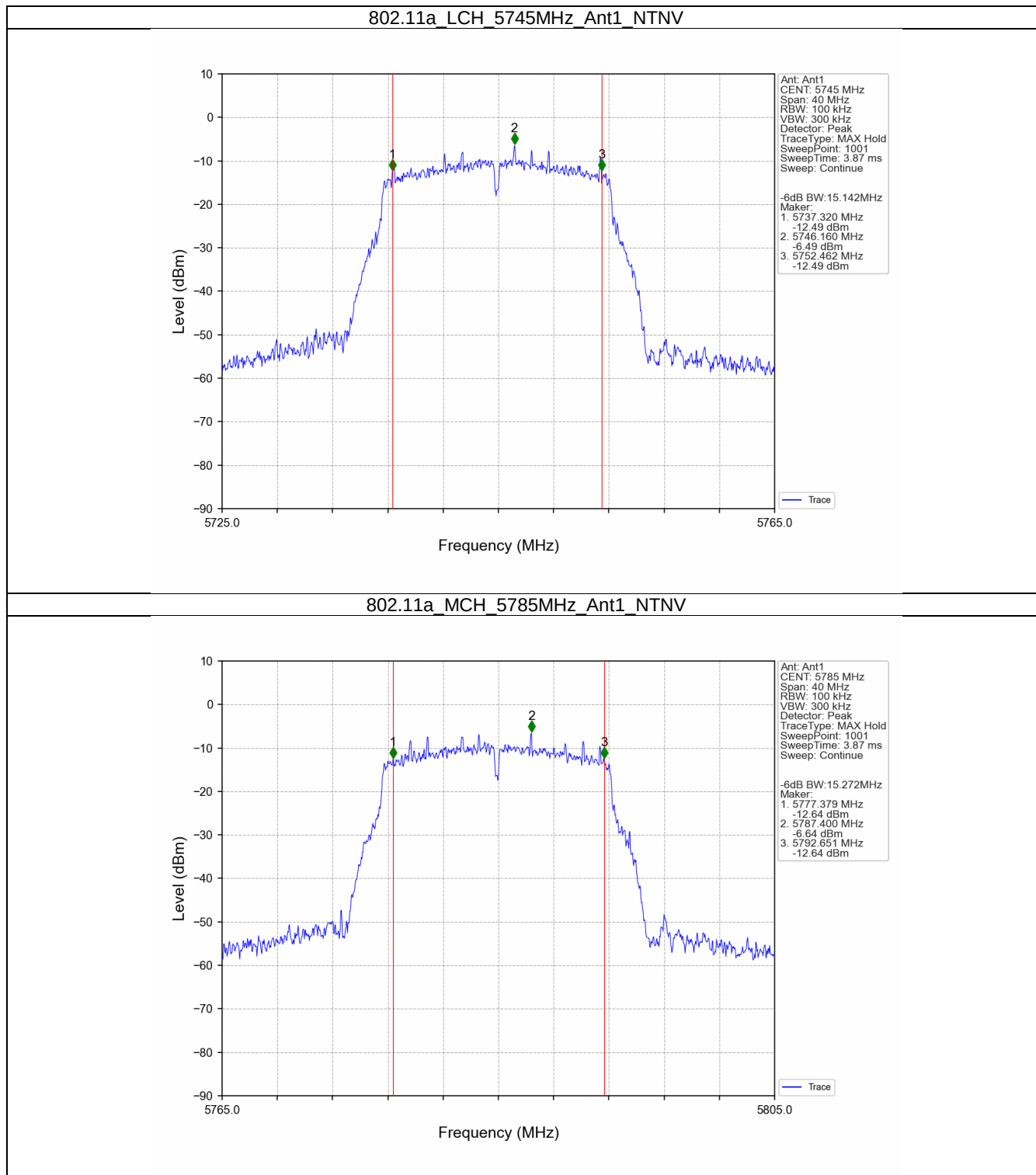
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



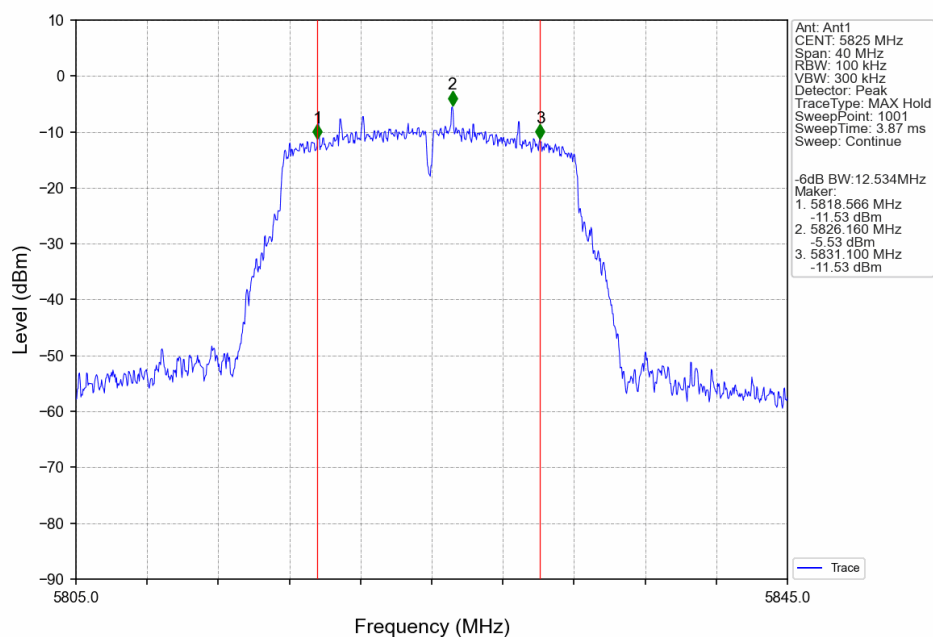
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



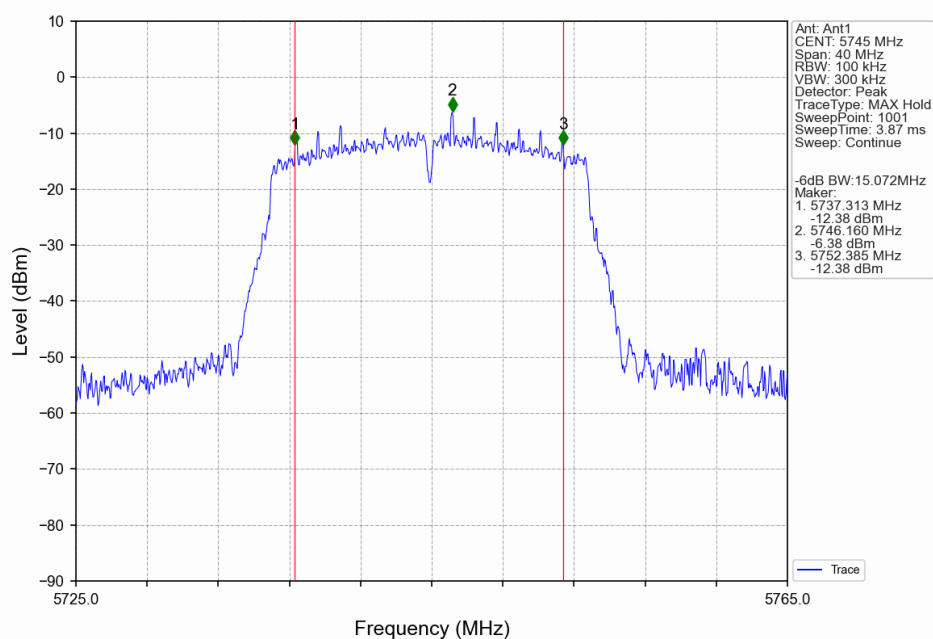
2.2.3 6dB BW



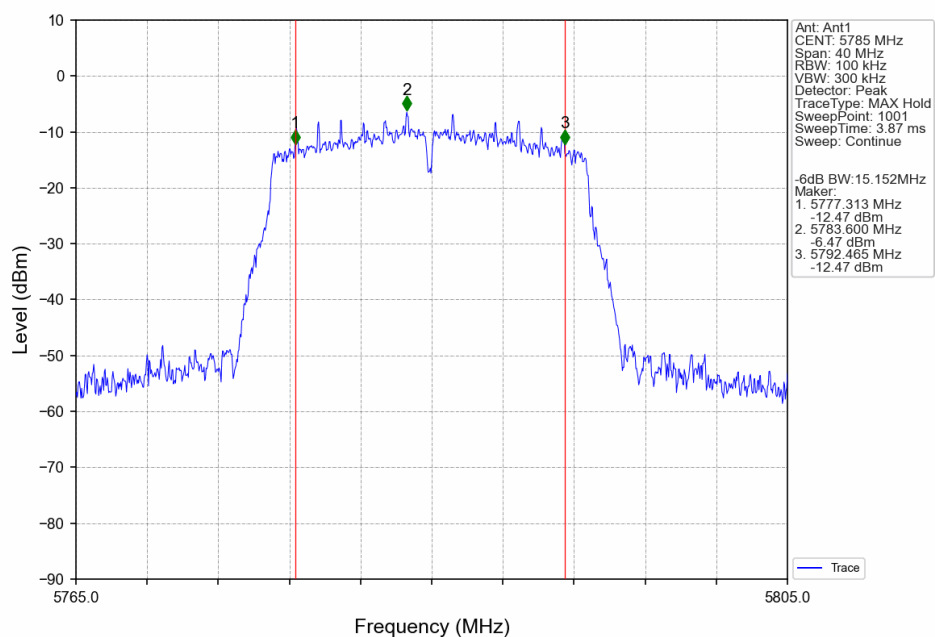
802.11a_HCH_5825MHz_Ant1_NTNV



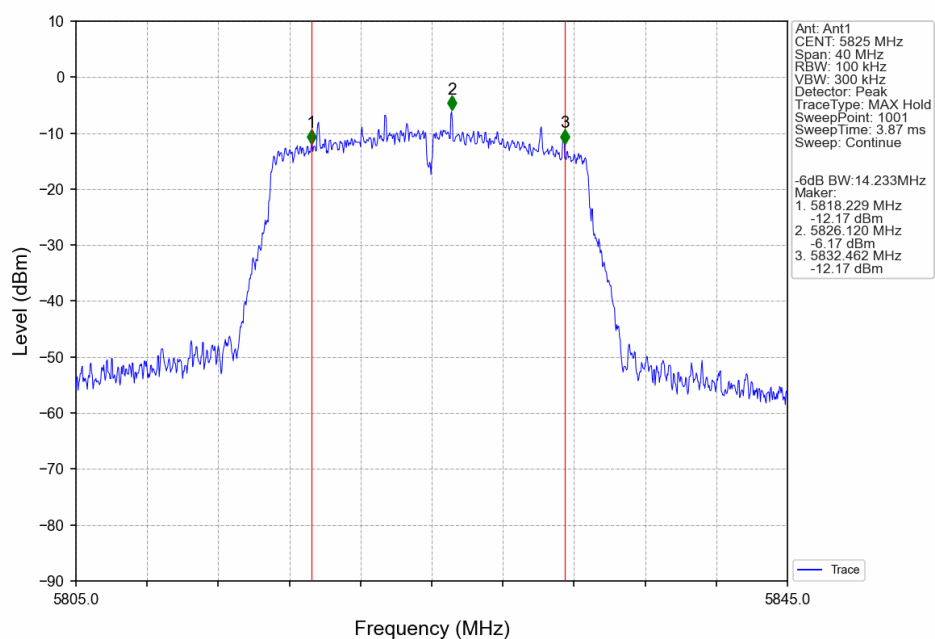
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



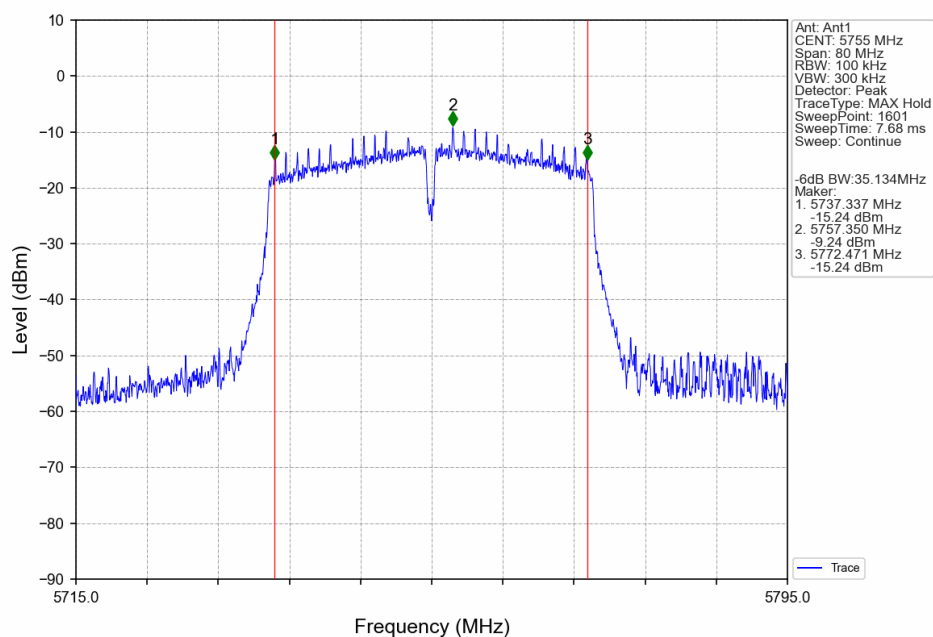
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



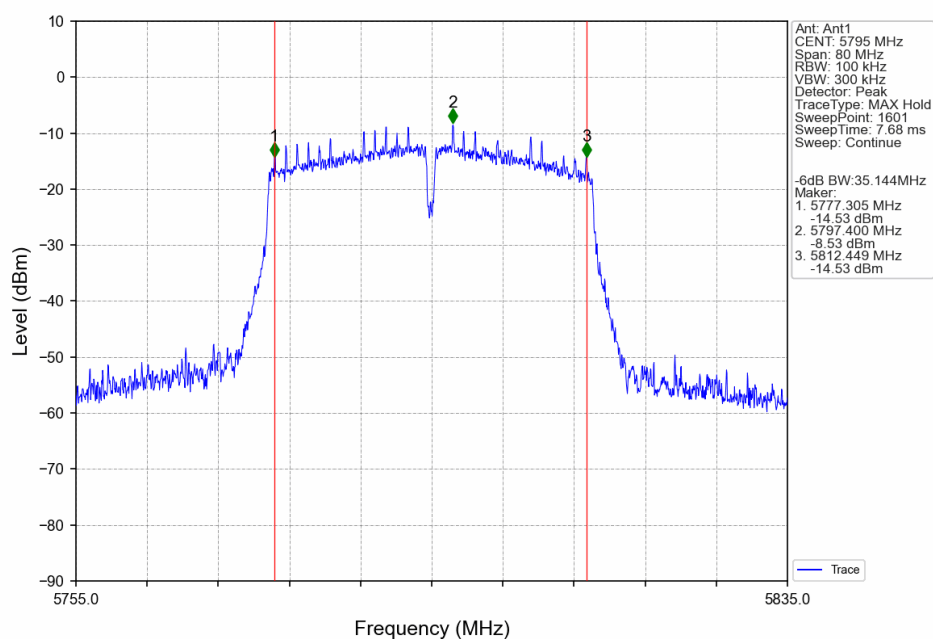
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



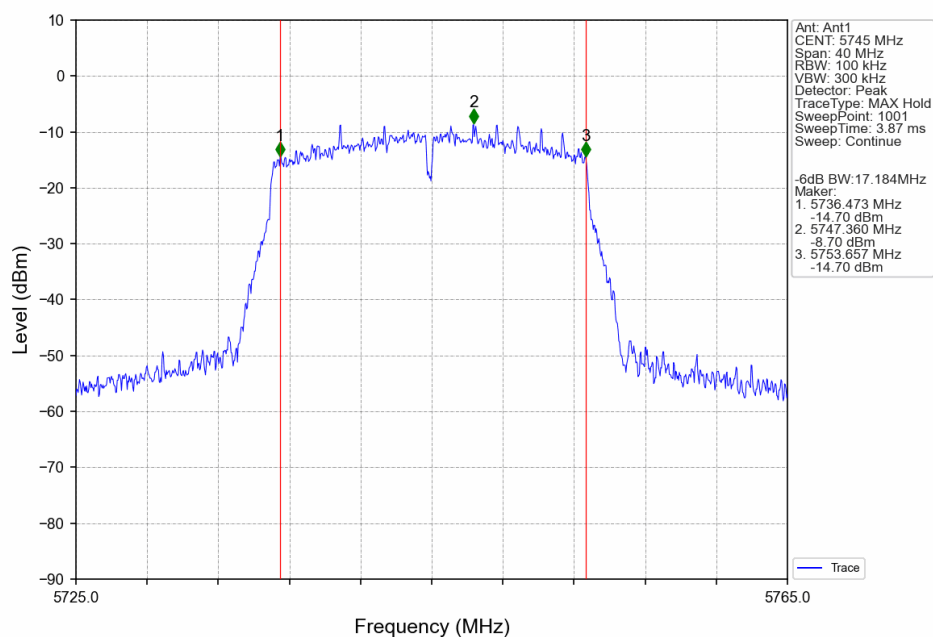
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



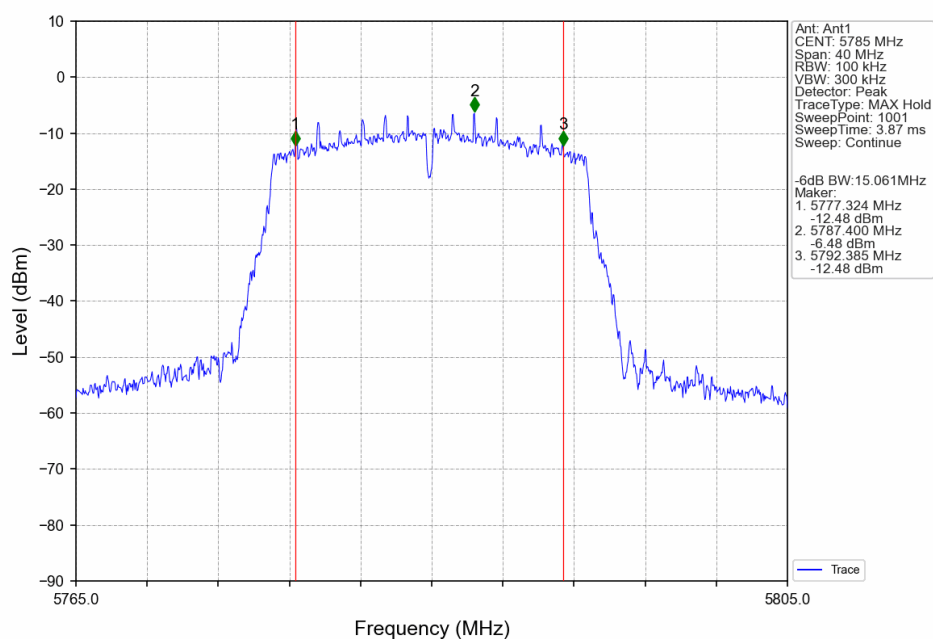
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



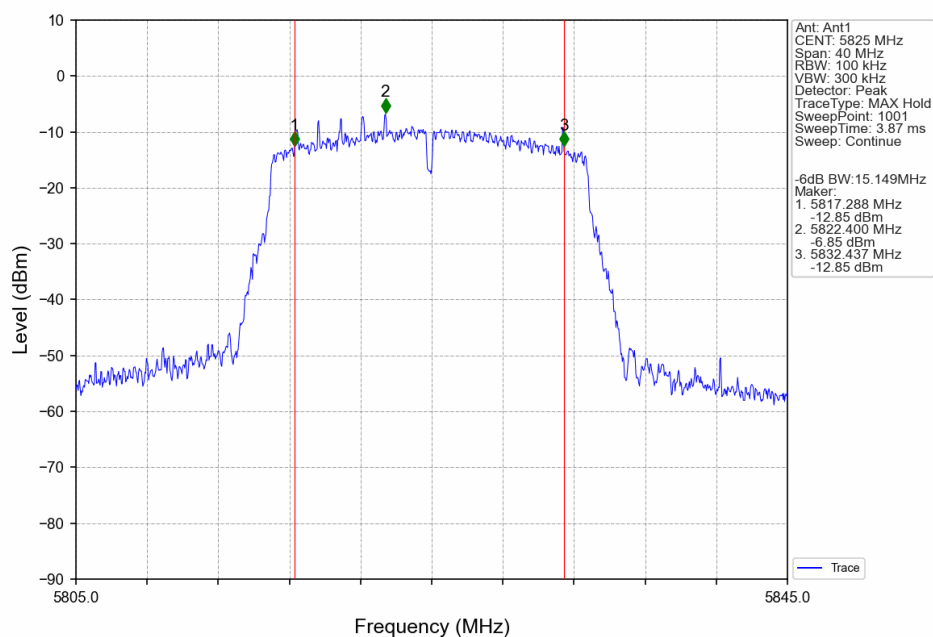
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



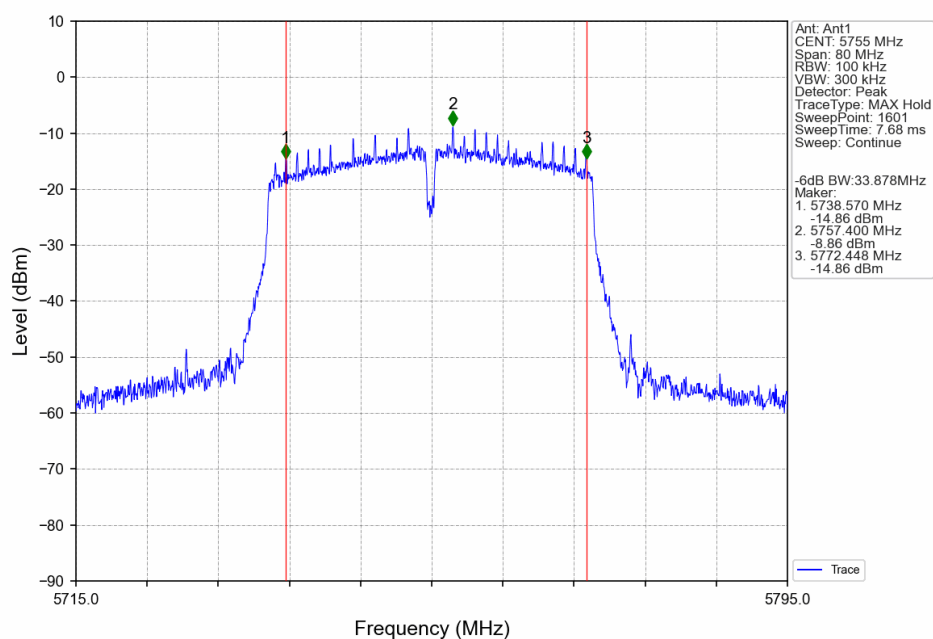
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



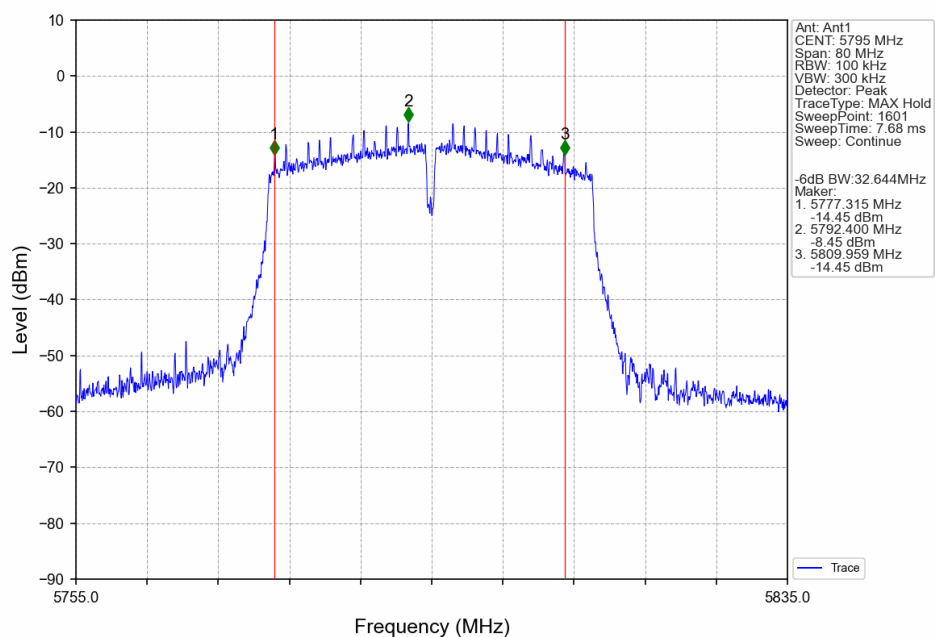
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



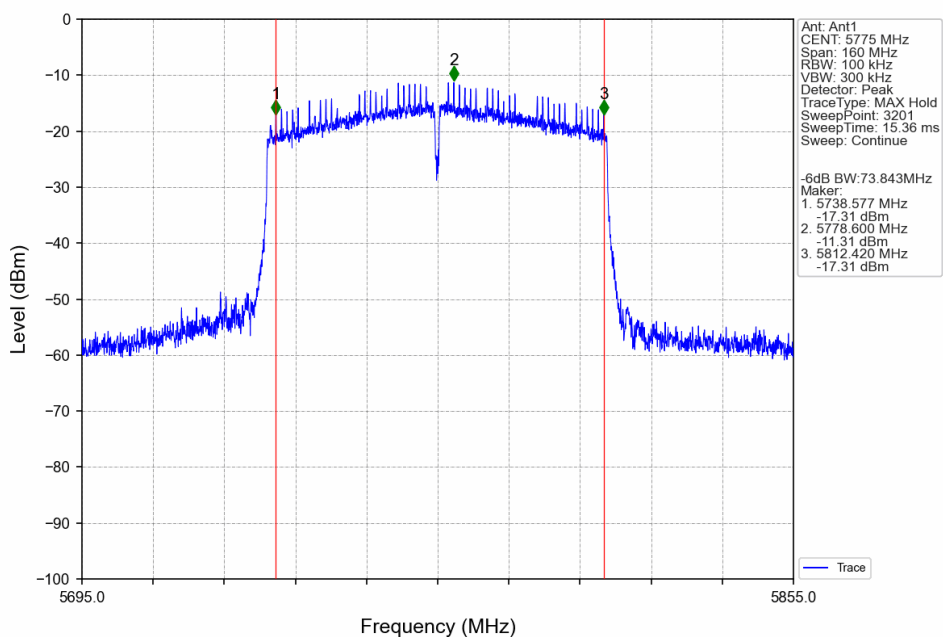
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



3. Maximum Conducted Output Power

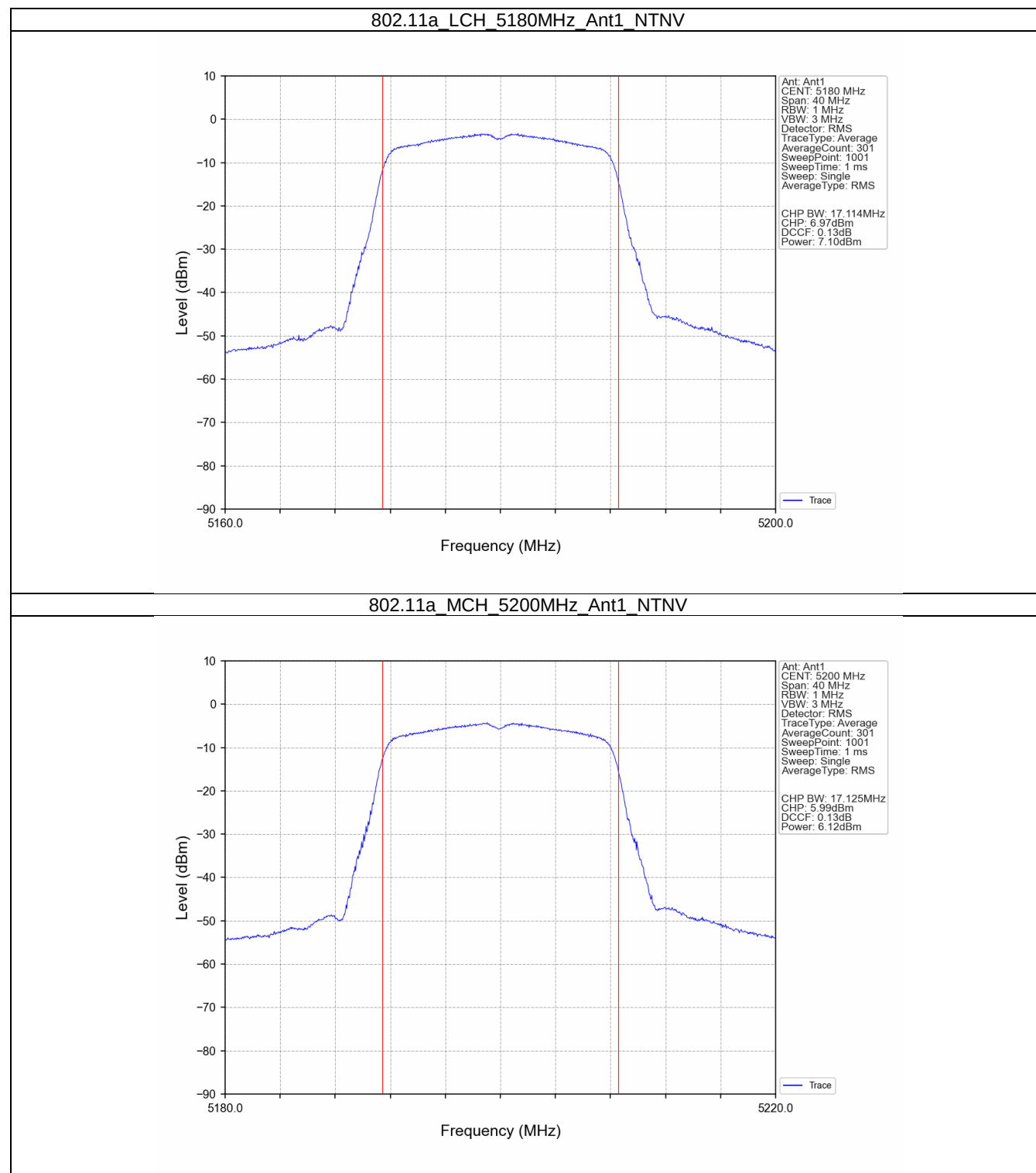
3.1 Test Result

3.1.1 Power

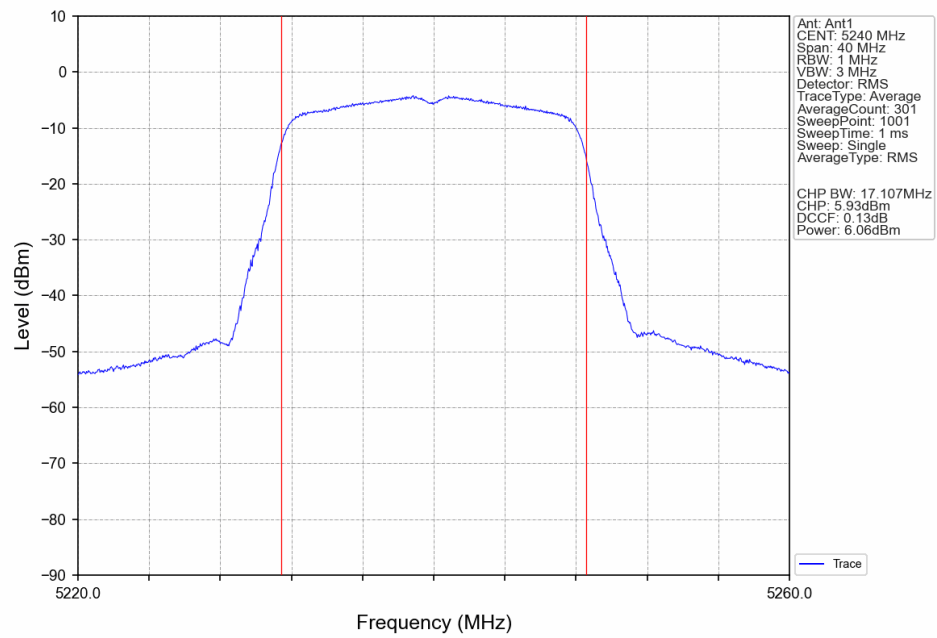
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	7.10	<=23.98	Pass
		5200	6.12	<=23.98	Pass
		5240	6.06	<=23.98	Pass
		5745	3.73	<=30	Pass
		5785	4.49	<=30	Pass
		5825	4.41	<=30	Pass
802.11n (HT20)	SISO	5180	5.94	<=23.98	Pass
		5200	5.80	<=23.98	Pass
		5240	5.93	<=23.98	Pass
		5745	3.42	<=30	Pass
		5785	4.23	<=30	Pass
		5825	4.24	<=30	Pass
802.11n (HT40)	SISO	5190	5.99	<=23.98	Pass
		5230	6.13	<=23.98	Pass
		5755	4.06	<=30	Pass
		5795	4.44	<=30	Pass
802.11ac (VHT20)	SISO	5180	5.90	<=23.98	Pass
		5200	5.75	<=23.98	Pass
		5240	5.93	<=23.98	Pass
		5745	3.52	<=30	Pass
		5785	4.32	<=30	Pass
		5825	4.29	<=30	Pass
802.11ac (VHT40)	SISO	5190	5.92	<=23.98	Pass
		5230	6.12	<=23.98	Pass
		5755	4.05	<=30	Pass
		5795	4.46	<=30	Pass
802.11ac (VHT80)	SISO	5210	6.01	<=23.98	Pass
		5775	4.47	<=30	Pass
Note1: Antenna Gain: - Band: 1 Ant1: 1.68dBi; - Band: 3 Ant1: 1.58dBi;					

3.2 Test Graph

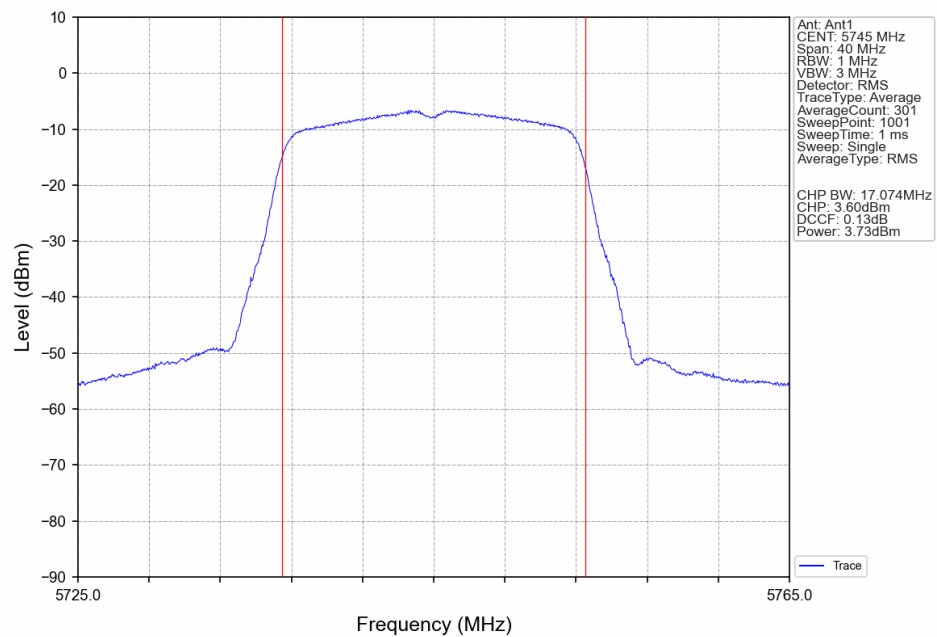
3.2.1 Power



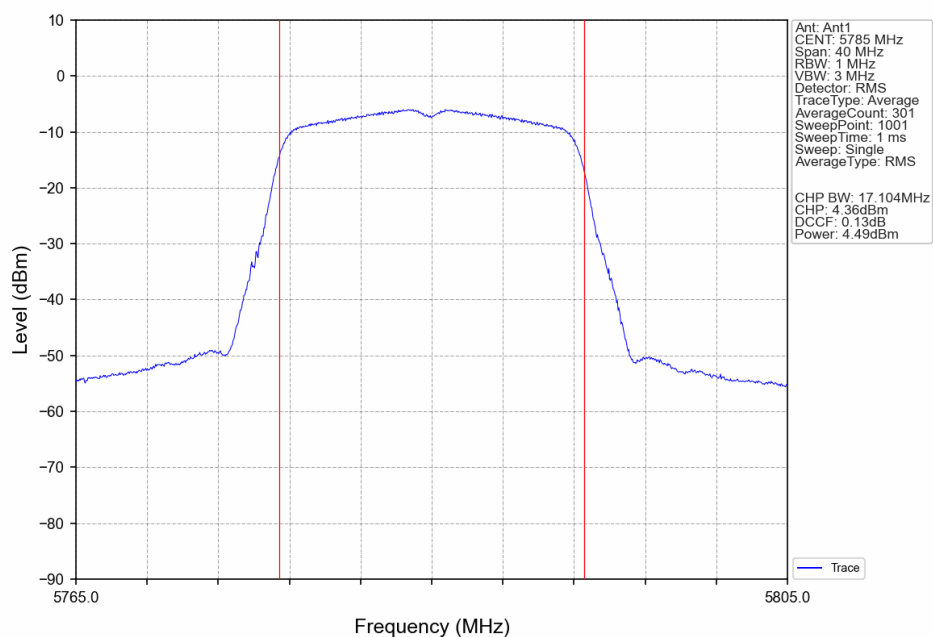
802.11a_HCH_5240MHz_Ant1_NTNV



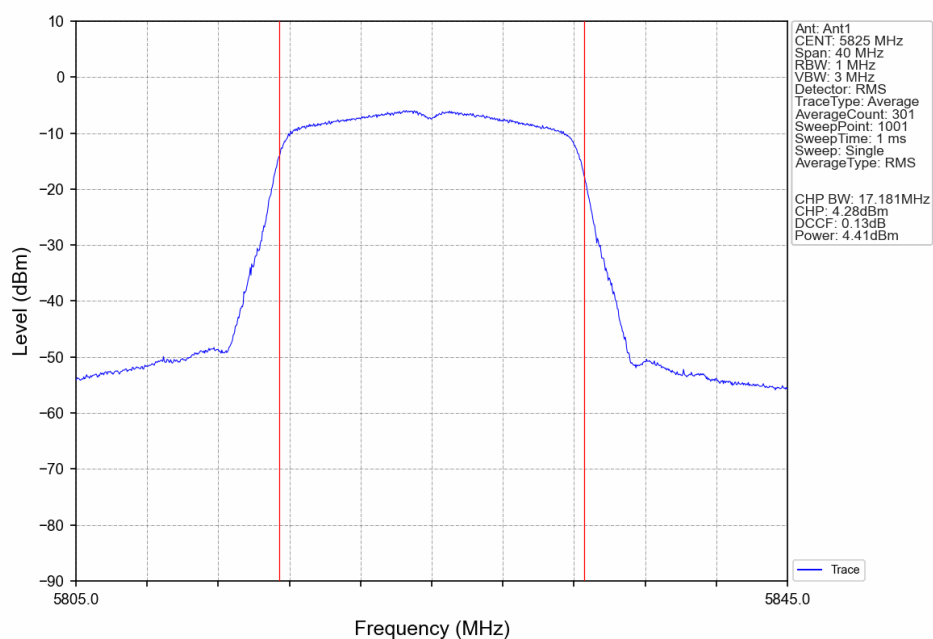
802.11a_LCH_5745MHz_Ant1_NTNV



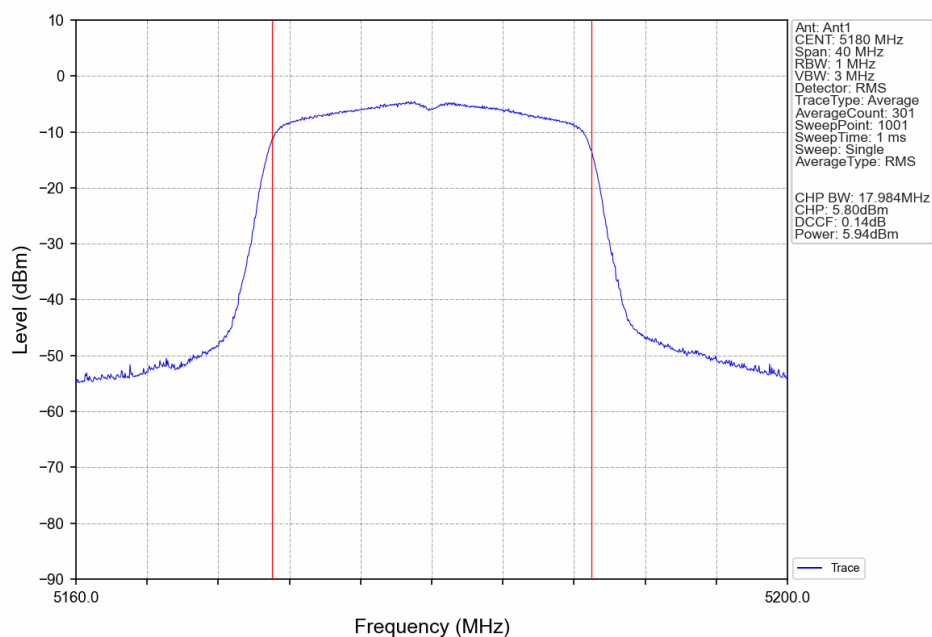
802.11a_MCH_5785MHz_Ant1_NTNV



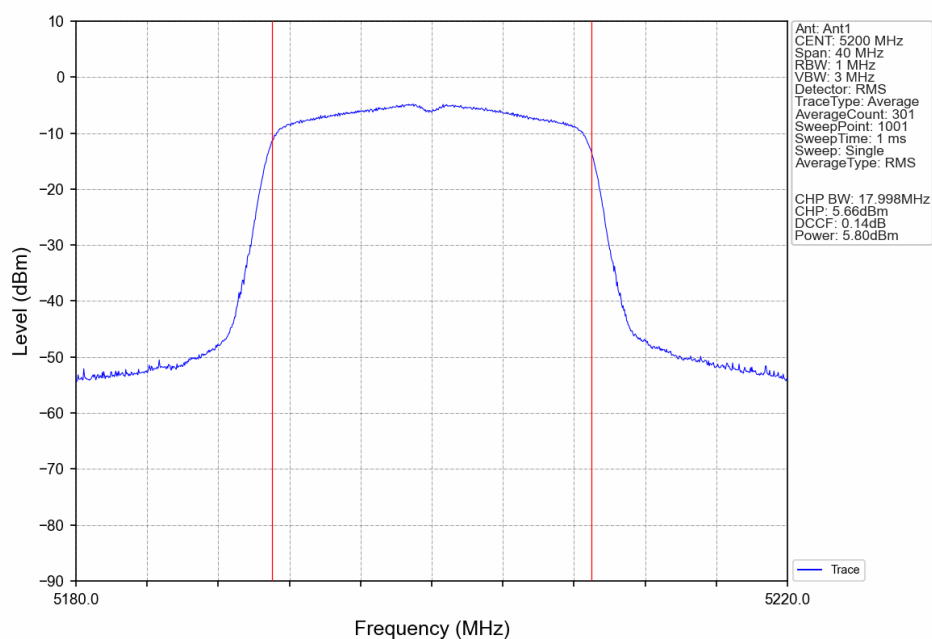
802.11a_HCH_5825MHz_Ant1_NTNV



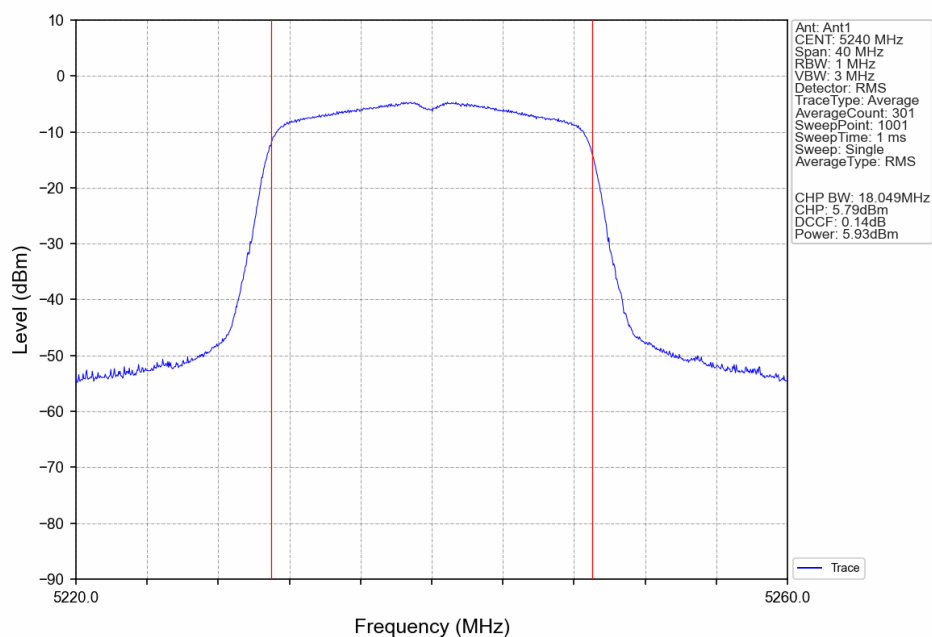
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



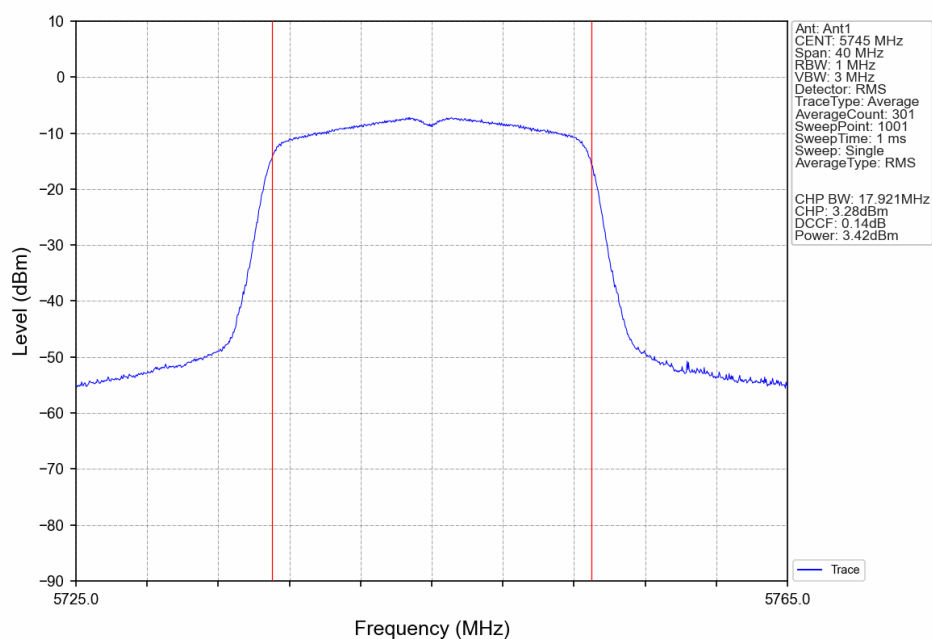
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



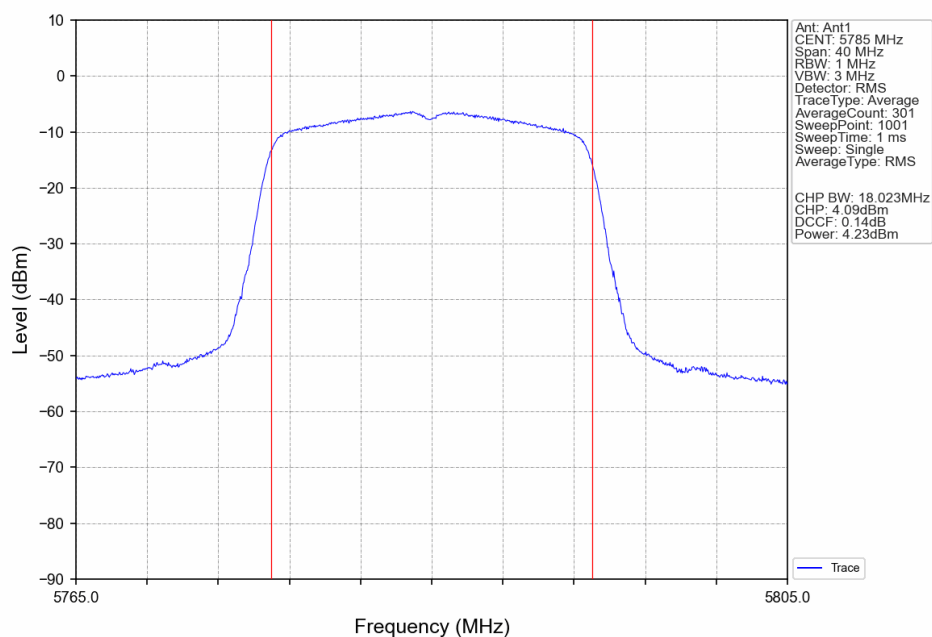
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



802.11n(HT20)_HCH_5825MHz_Ant1_NTNV

