

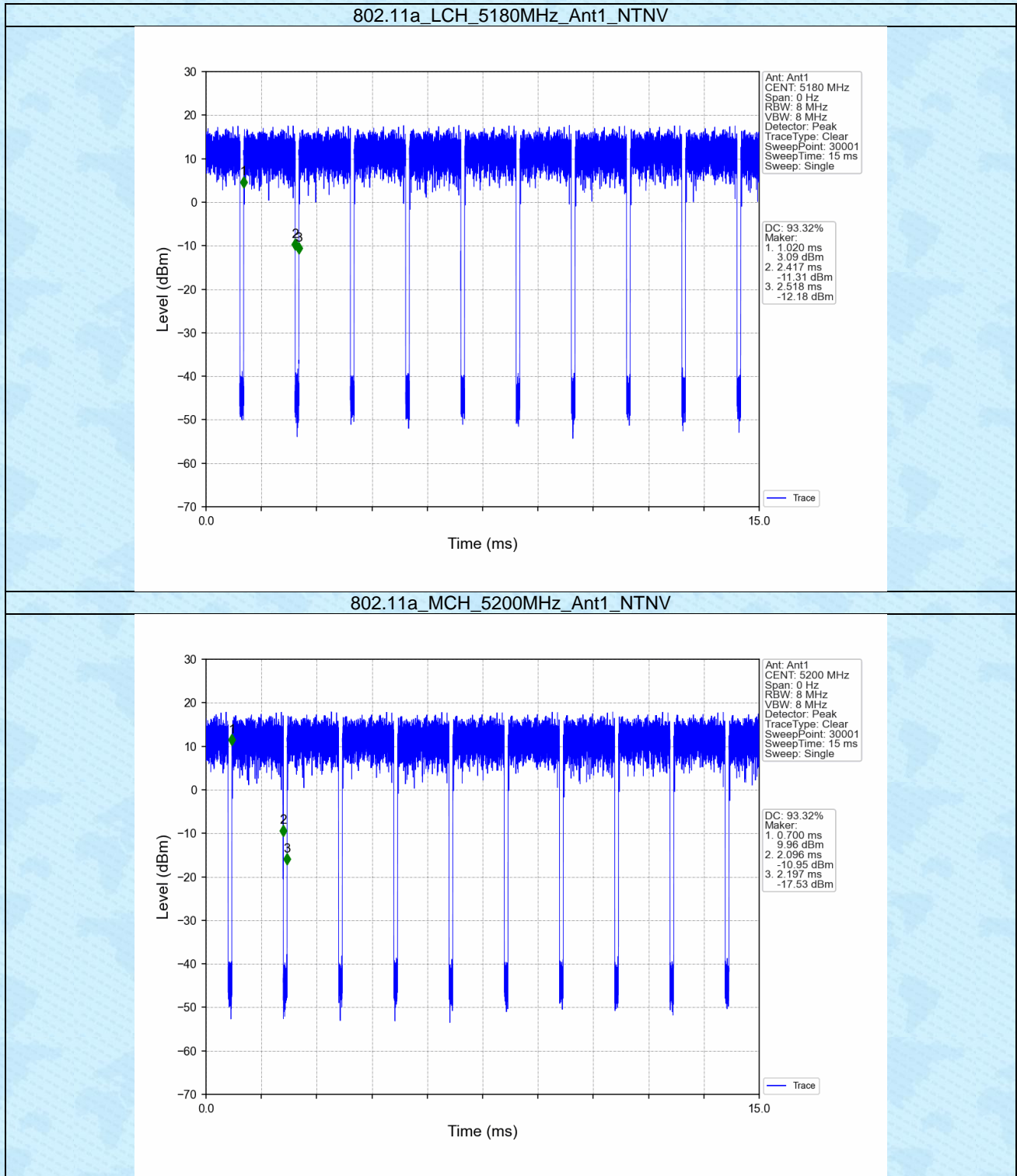
Appendix for 15.407

1. Duty Cycle

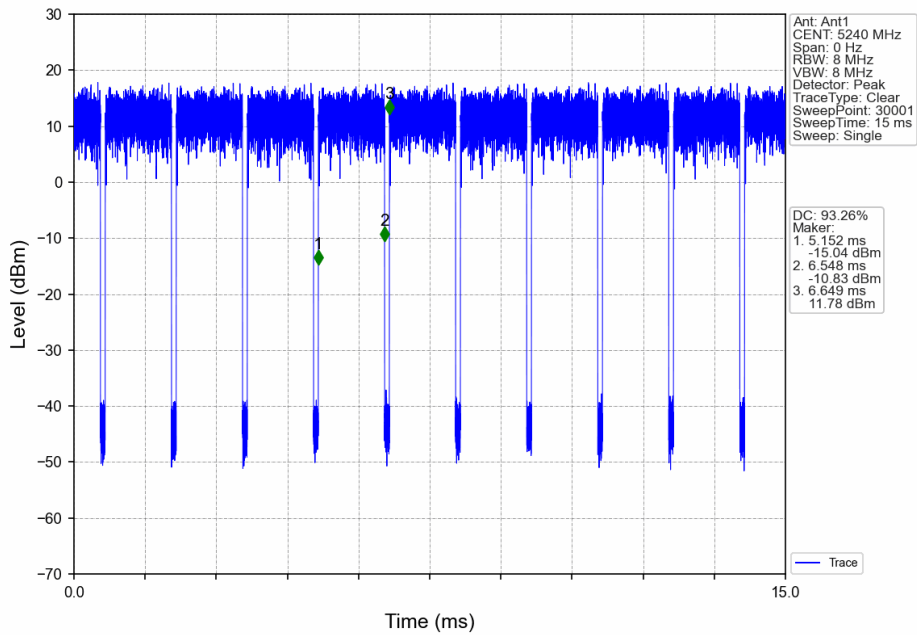
1.1 Test Result

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	1.398	1.498	93.32	0.30	0.03
		5200	1.398	1.498	93.32	0.30	0.03
		5240	1.397	1.498	93.26	0.30	0.06
802.11n (HT20)	SISO	5180	1.309	1.409	92.90	0.32	0.03
		5200	1.309	1.410	92.84	0.32	0.03
		5240	1.309	1.410	92.84	0.32	0.03
802.11n (HT40)	SISO	5190	0.650	0.690	94.20	0.26	0.04
		5230	0.649	0.689	94.19	0.26	0.10
802.11ac (VHT20)	SISO	5180	1.317	1.357	97.05	0.13	0.03
		5200	1.317	1.357	97.05	0.13	0.03
		5240	1.316	1.357	96.98	0.13	0.03
802.11ac (VHT40)	SISO	5190	0.659	0.697	94.55	0.24	0.13
		5230	0.658	0.697	94.40	0.25	0.10
802.11ac (VHT80)	SISO	5210	0.327	0.426	76.76	1.15	0.03

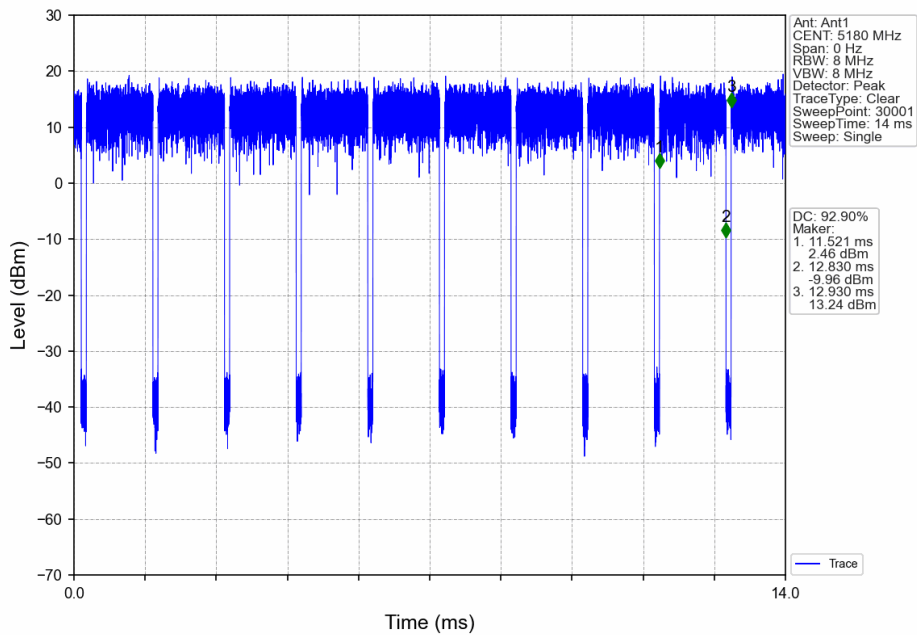
1.2 Test Graph



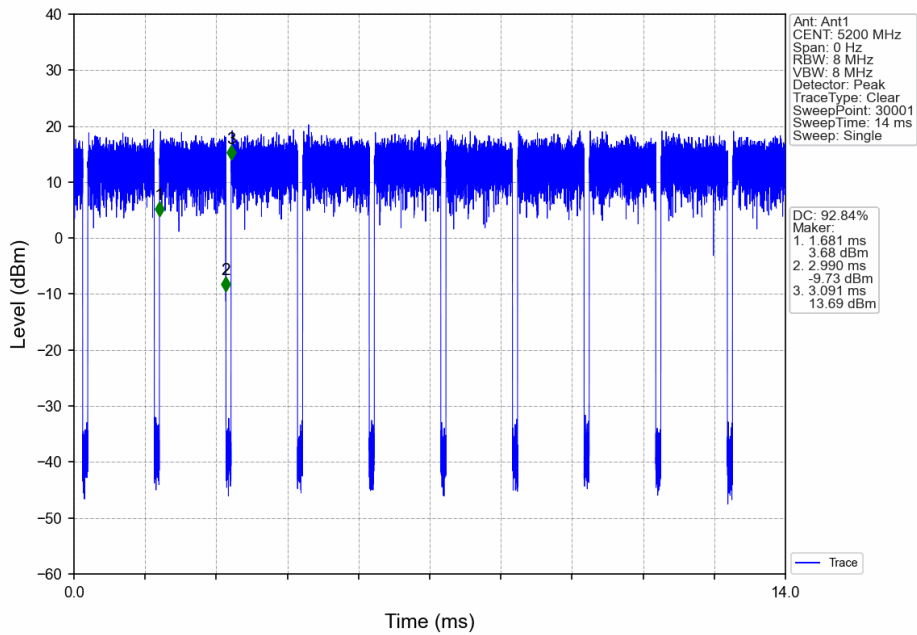
802.11a_HCH_5240MHz_Ant1_NTNV



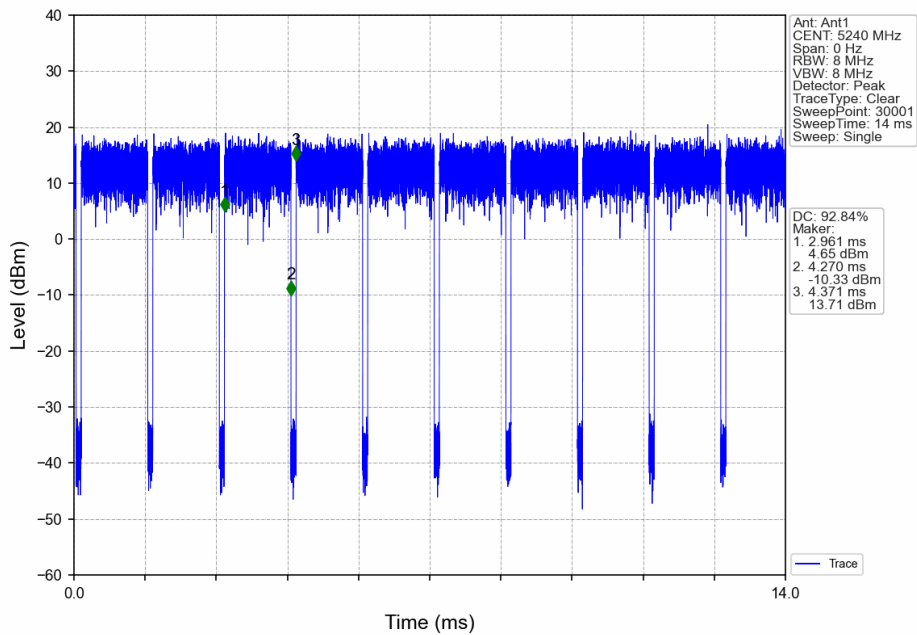
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



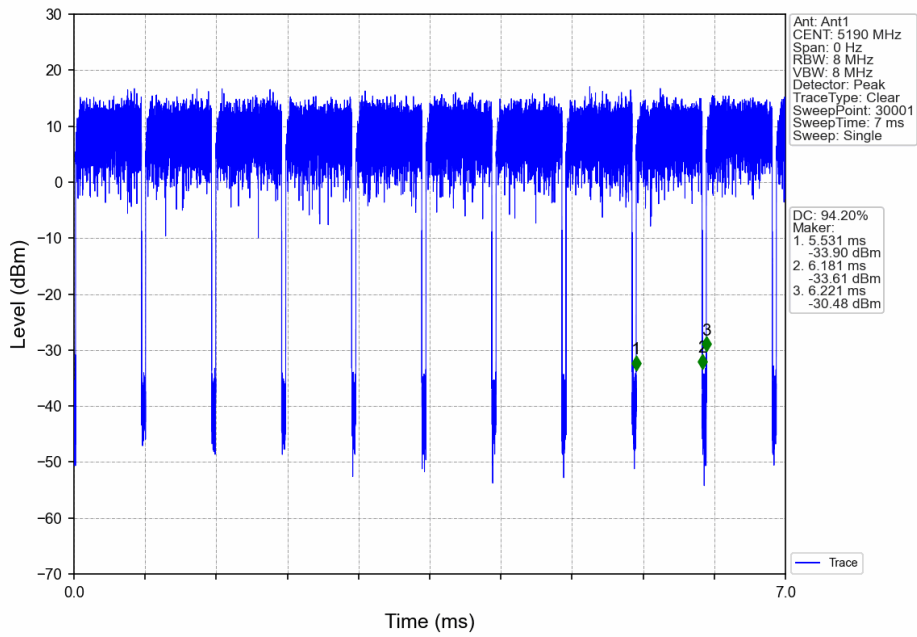
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



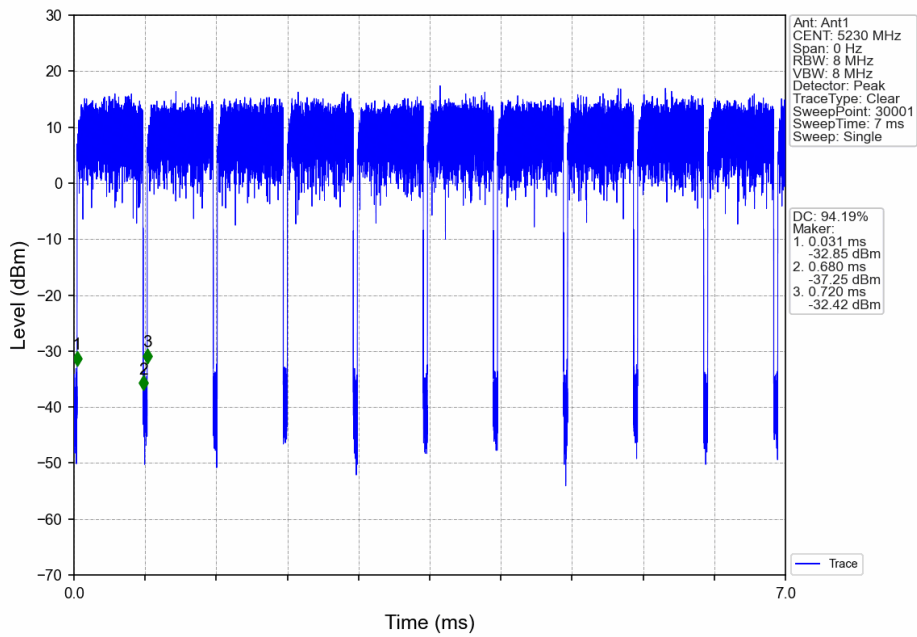
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



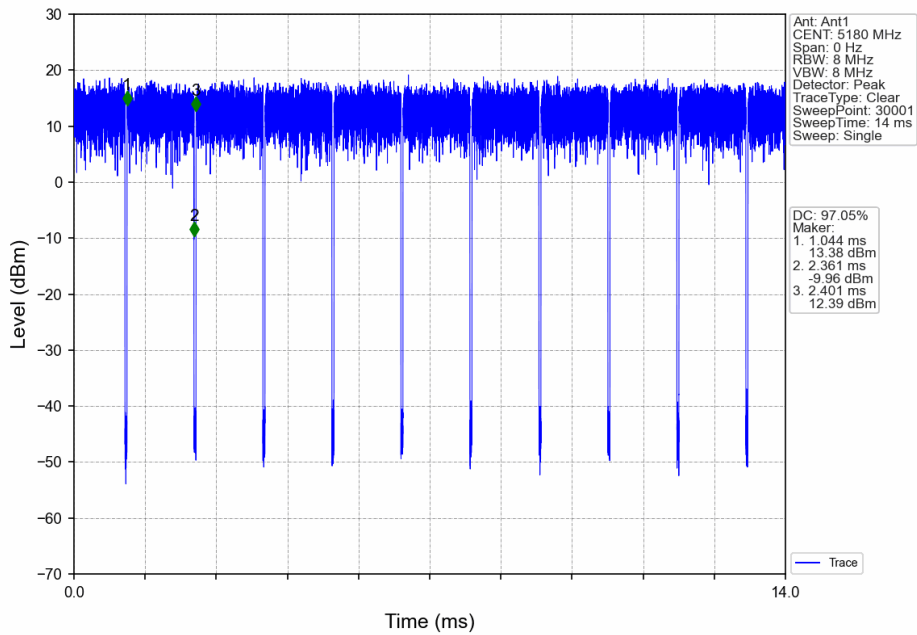
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



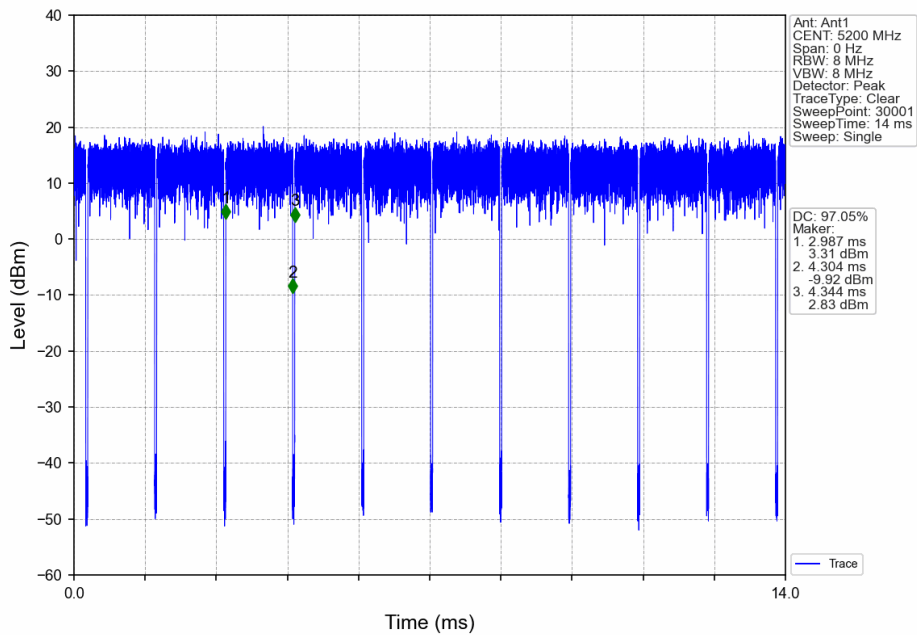
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



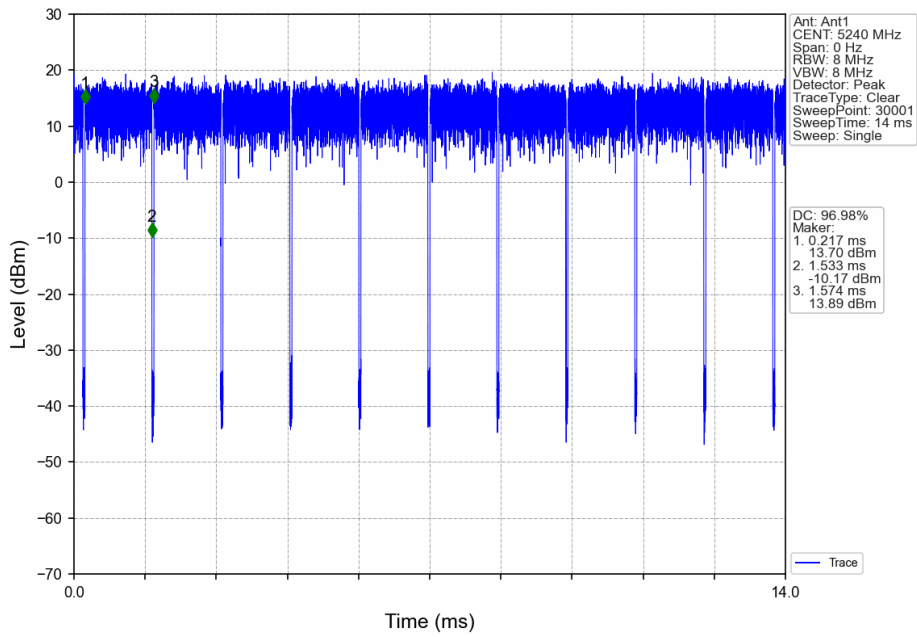
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



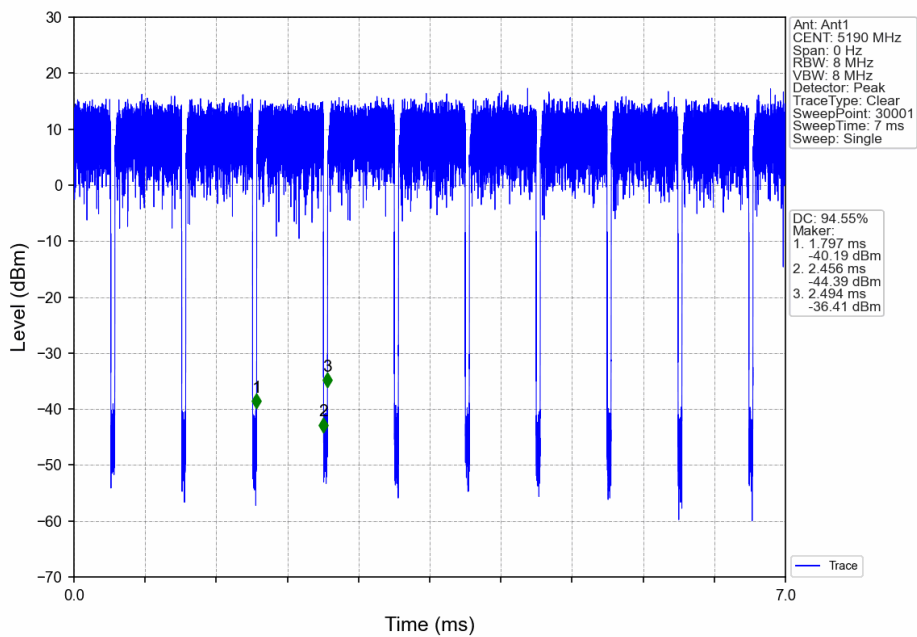
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



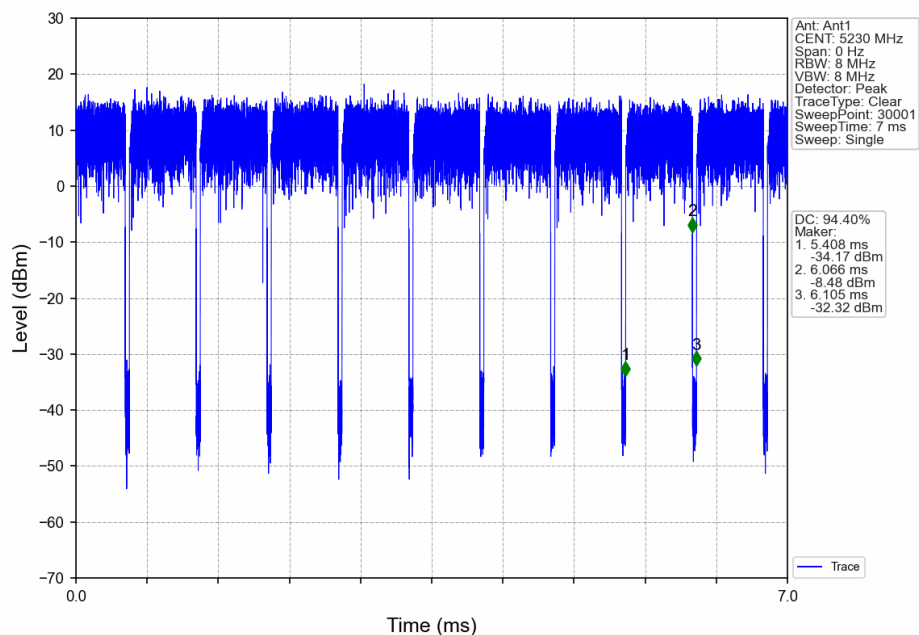
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



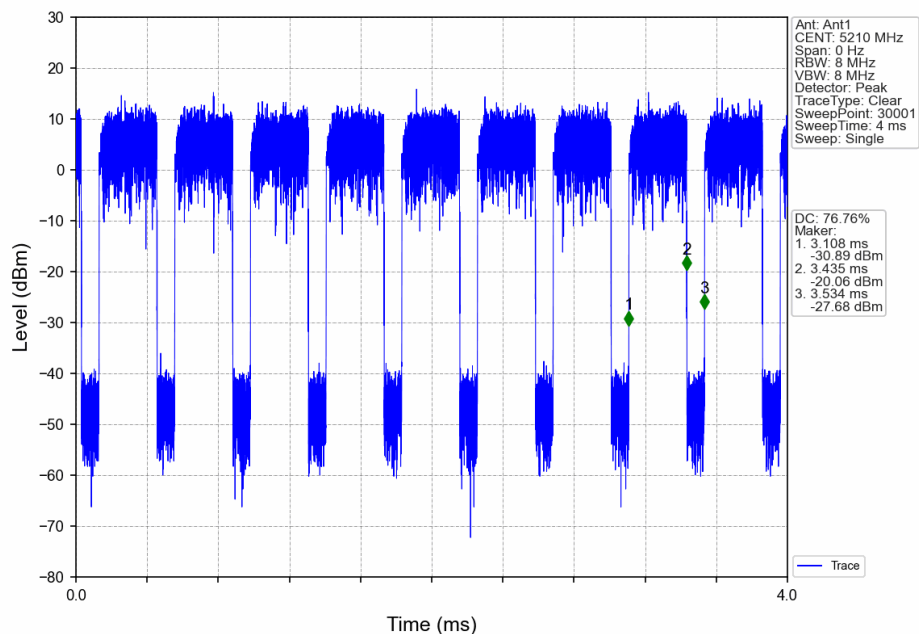
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



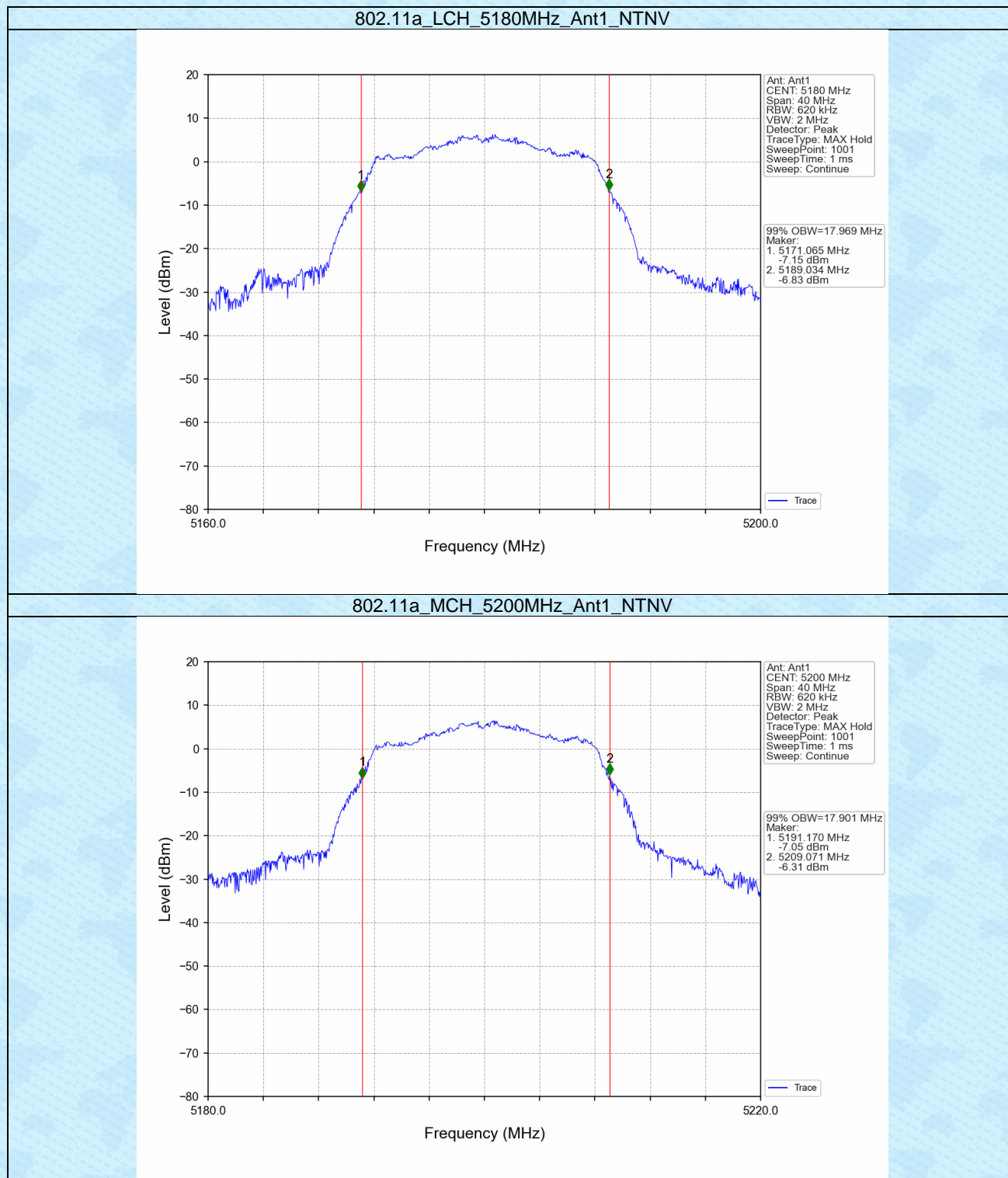
2. Bandwidth

2.1 OBW

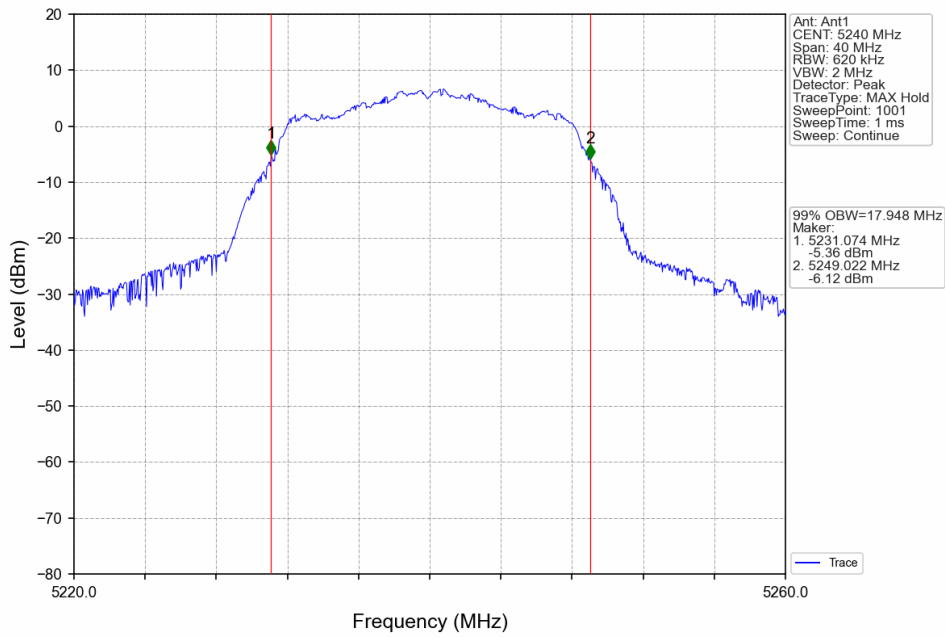
2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5180	1	17.969	Pass
		5200	1	17.901	Pass
		5240	1	17.948	Pass
802.11n (HT20)	SISO	5180	1	19.024	Pass
		5200	1	18.901	Pass
		5240	1	18.943	Pass
802.11n (HT40)	SISO	5190	1	36.827	Pass
		5230	1	36.718	Pass
802.11ac (VHT20)	SISO	5180	1	18.949	Pass
		5200	1	18.912	Pass
		5240	1	18.897	Pass
802.11ac (VHT40)	SISO	5190	1	36.788	Pass
		5230	1	36.712	Pass
802.11ac (VHT80)	SISO	5210	1	75.900	Pass

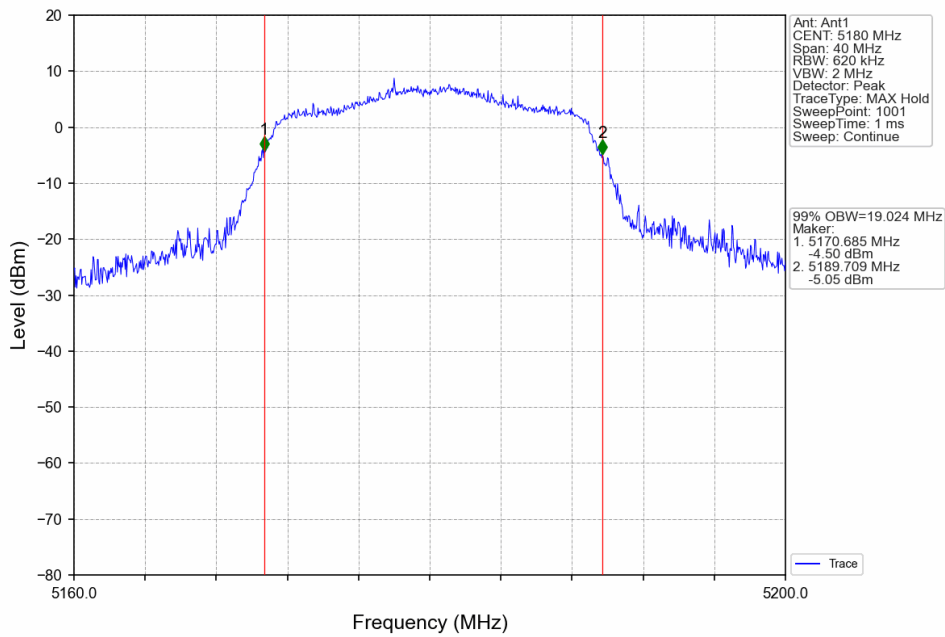
2.1.2 Test Graph



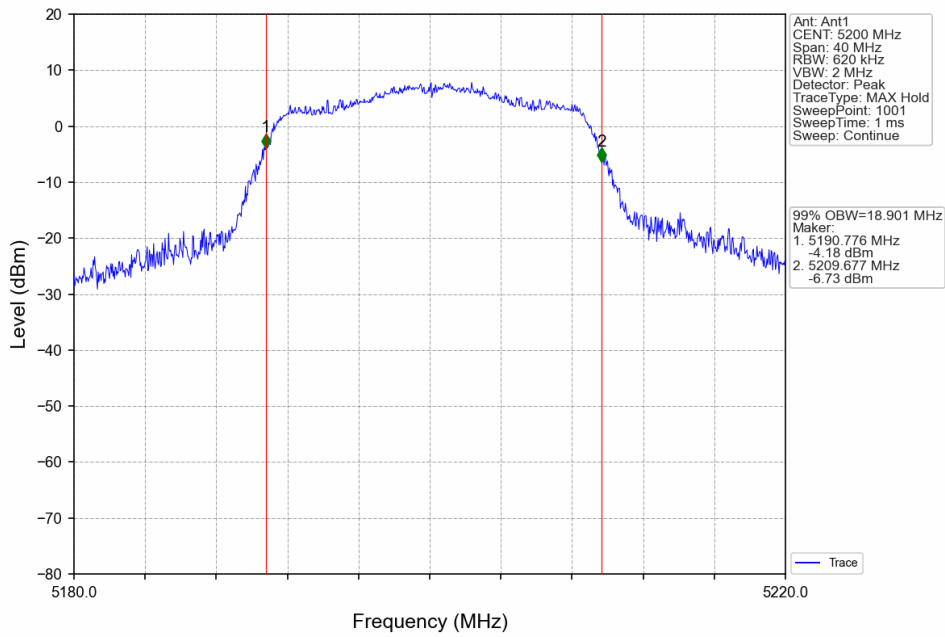
802.11a_HCH_5240MHz_Ant1_NTNV



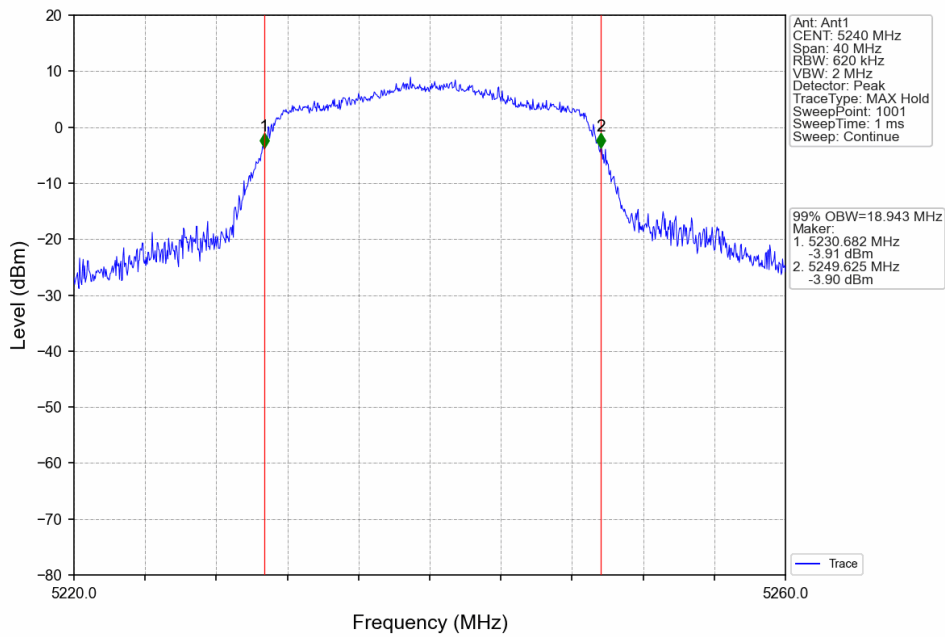
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



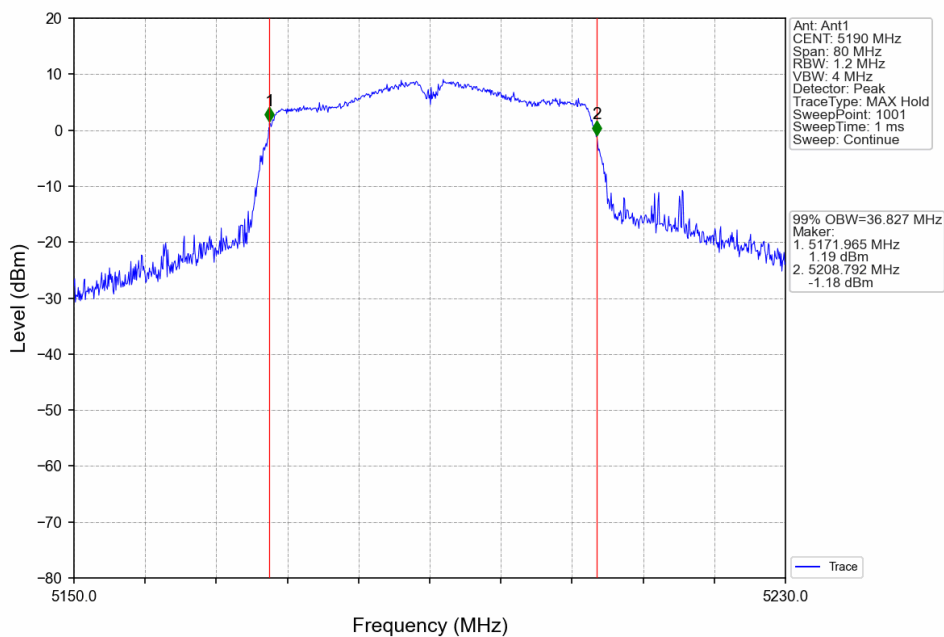
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



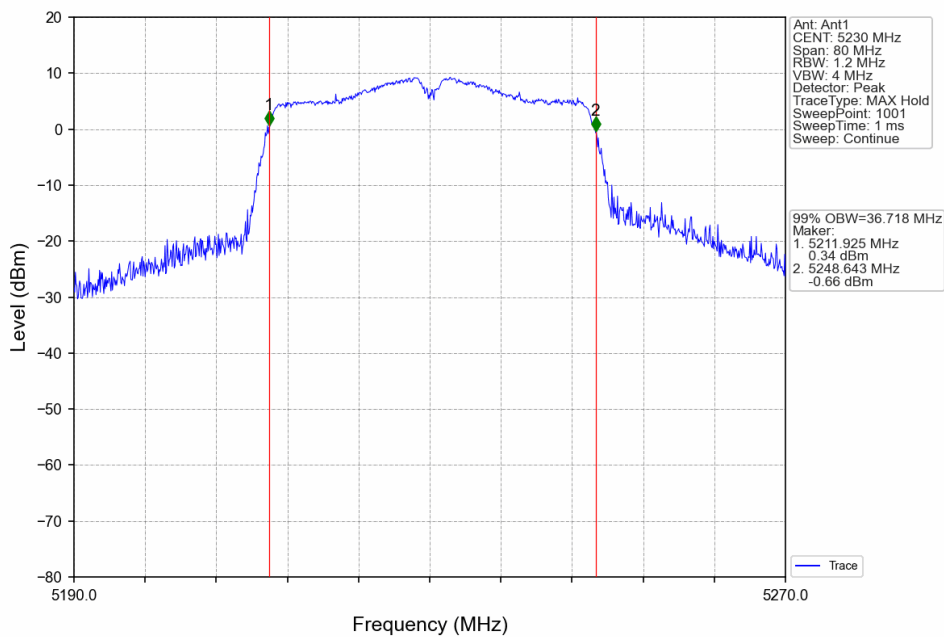
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



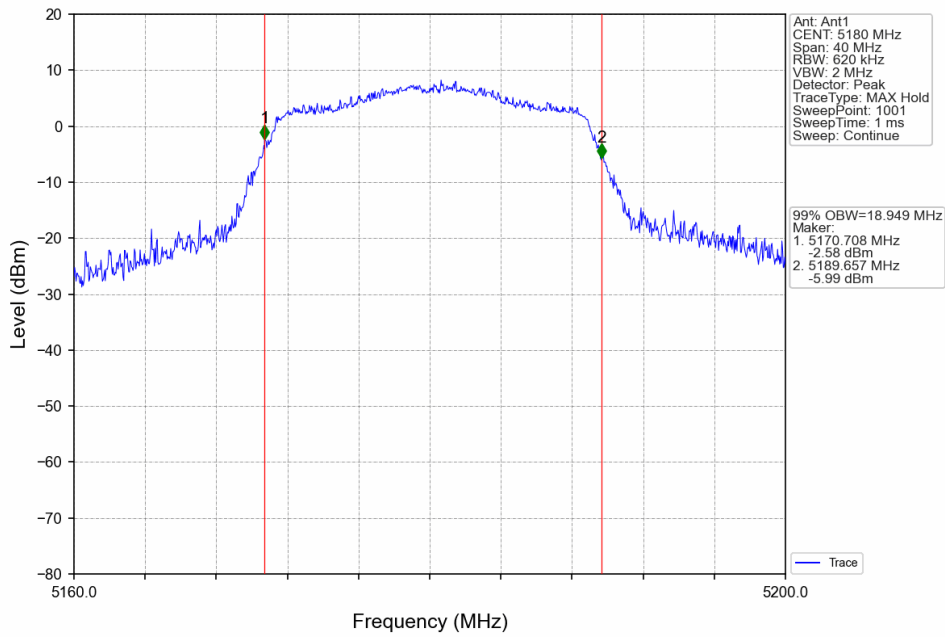
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



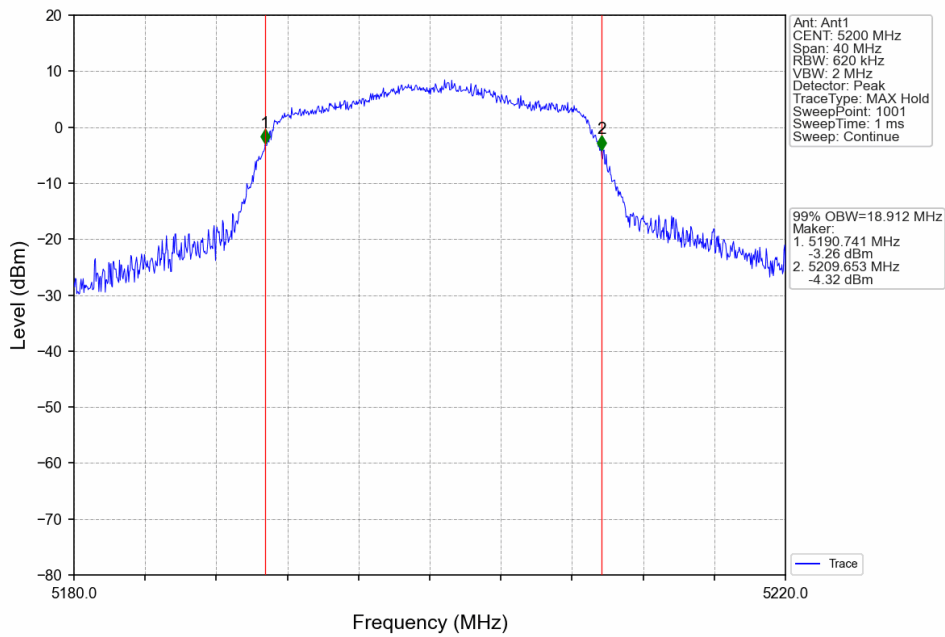
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



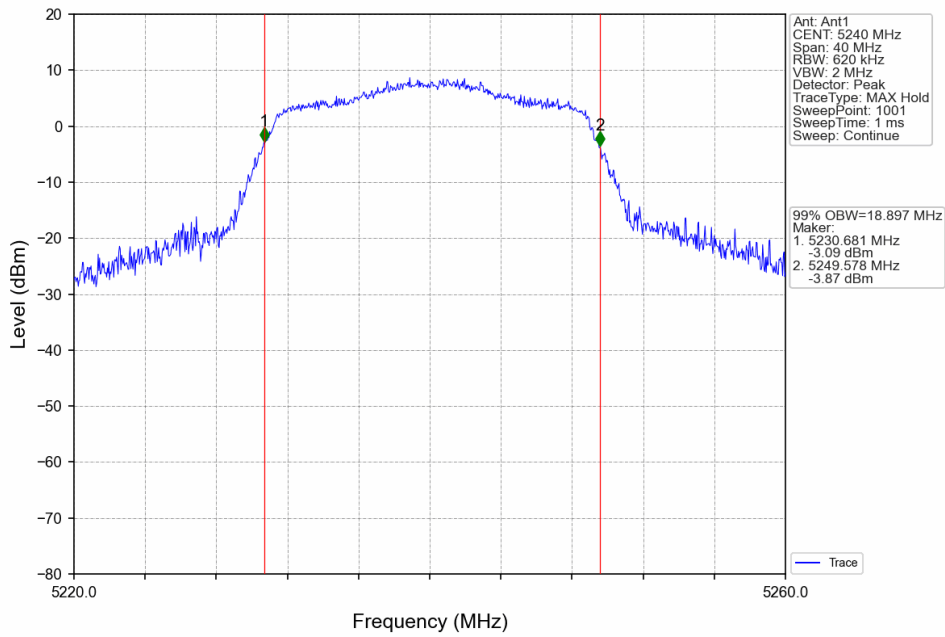
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



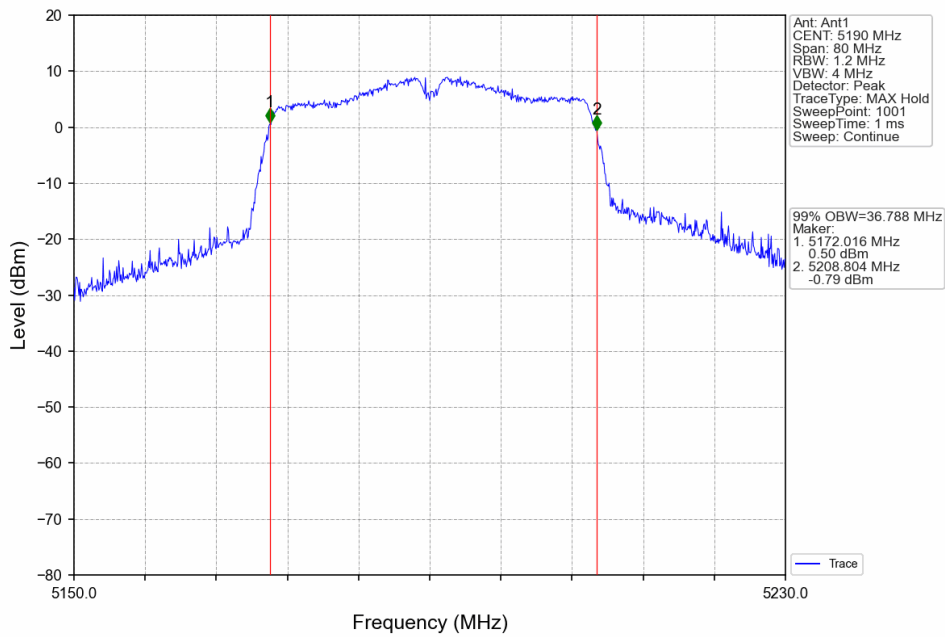
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



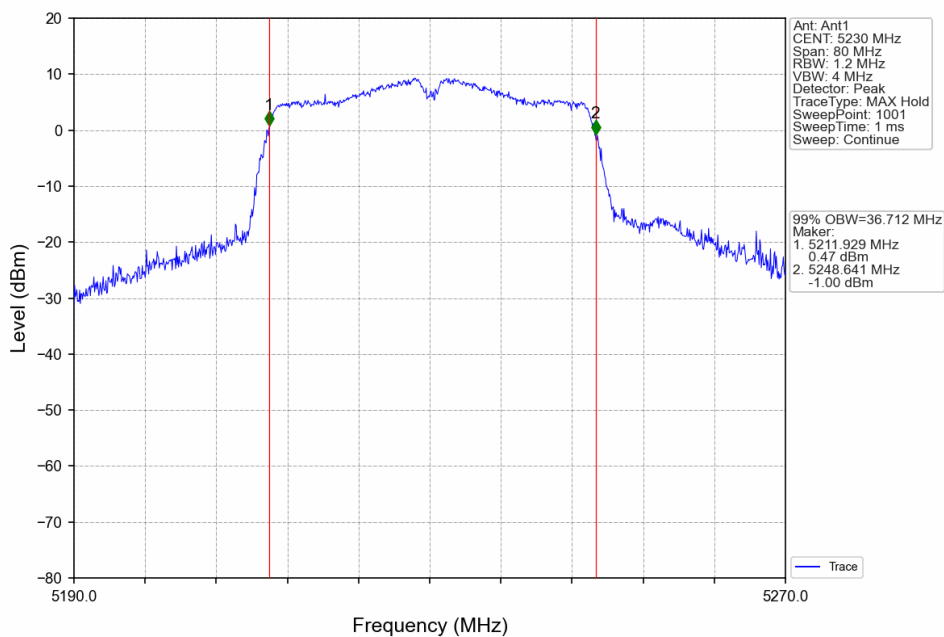
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



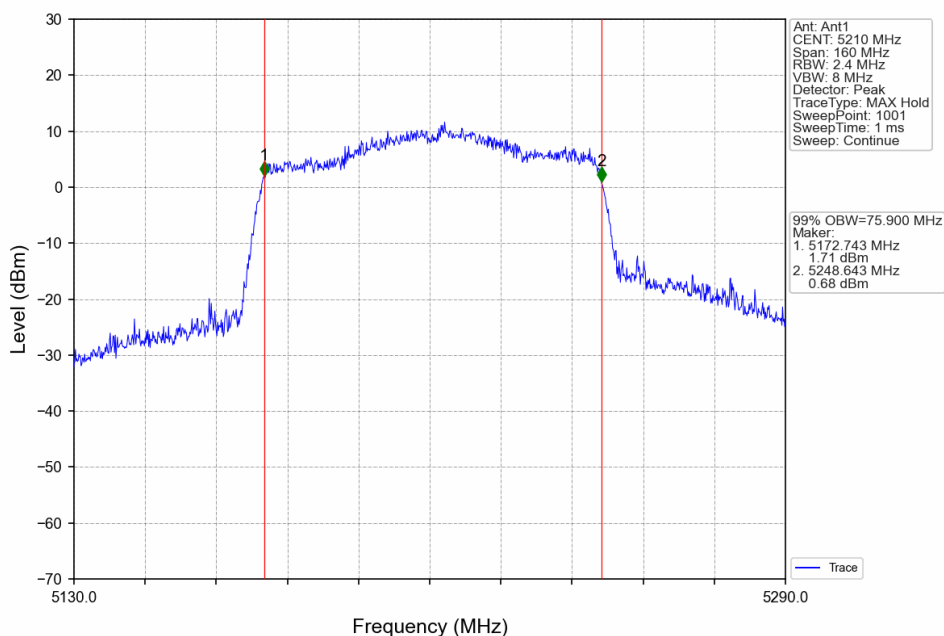
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV

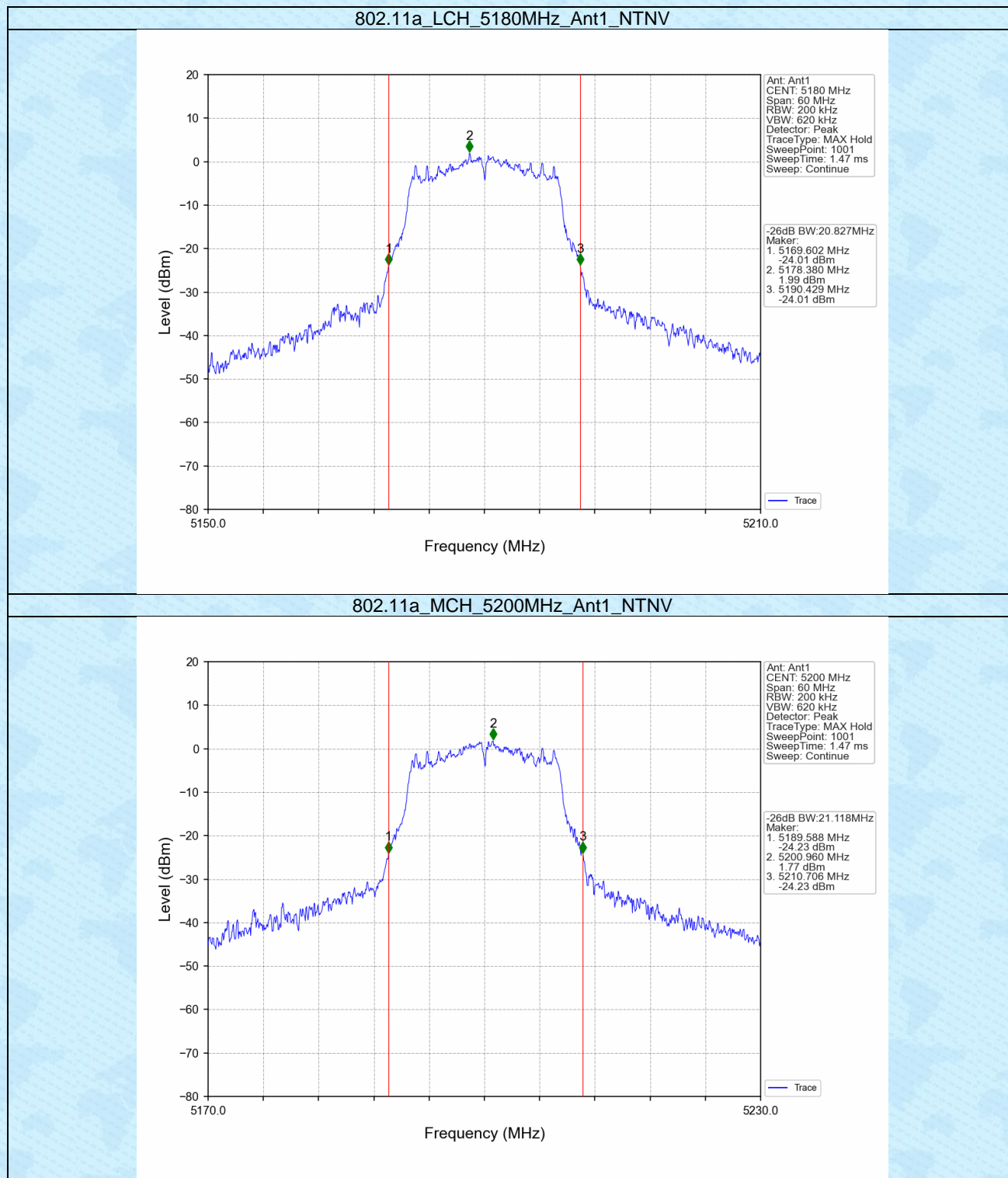


2.2 26dB BW

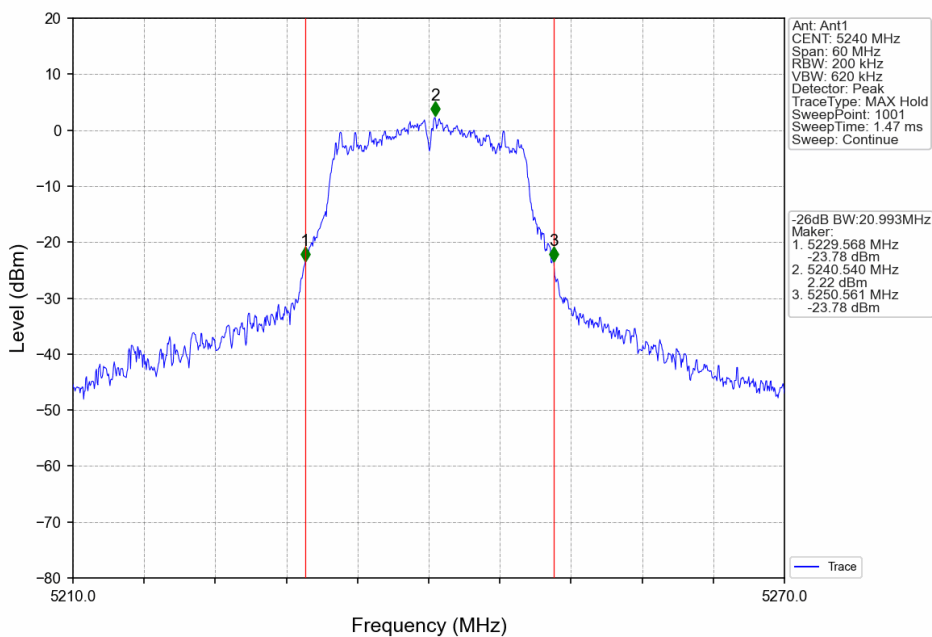
2.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5180	1	20.827	Pass
		5200	1	21.118	Pass
		5240	1	20.993	Pass
802.11n (HT20)	SISO	5180	1	21.777	Pass
		5200	1	22.238	Pass
		5240	1	21.983	Pass
802.11n (HT40)	SISO	5190	1	50.309	Pass
		5230	1	45.489	Pass
802.11ac (VHT20)	SISO	5180	1	22.456	Pass
		5200	1	22.203	Pass
		5240	1	22.709	Pass
802.11ac (VHT40)	SISO	5190	1	45.179	Pass
		5230	1	45.430	Pass
802.11ac (VHT80)	SISO	5210	1	80.631	Pass

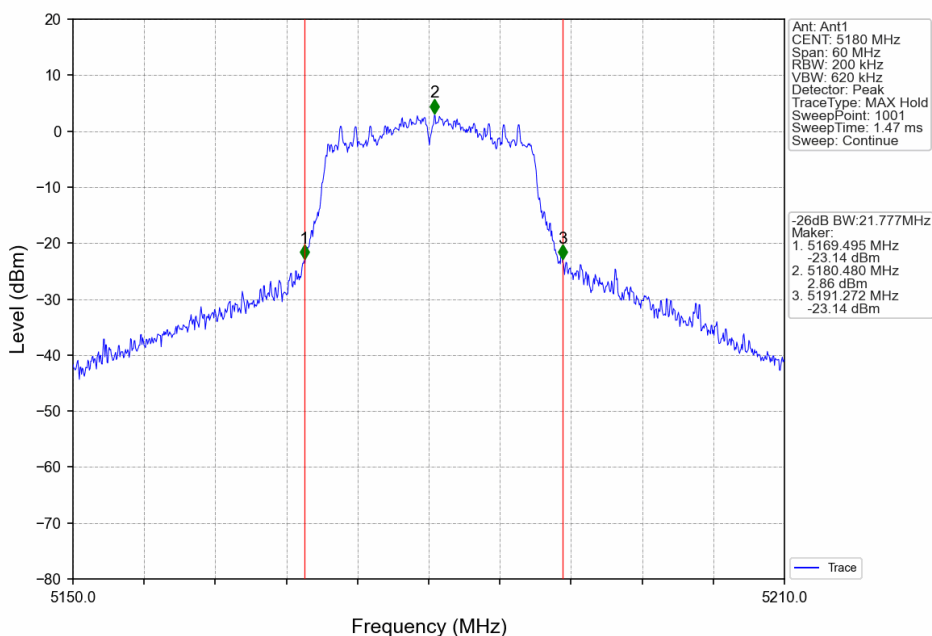
2.2.2 Test Graph



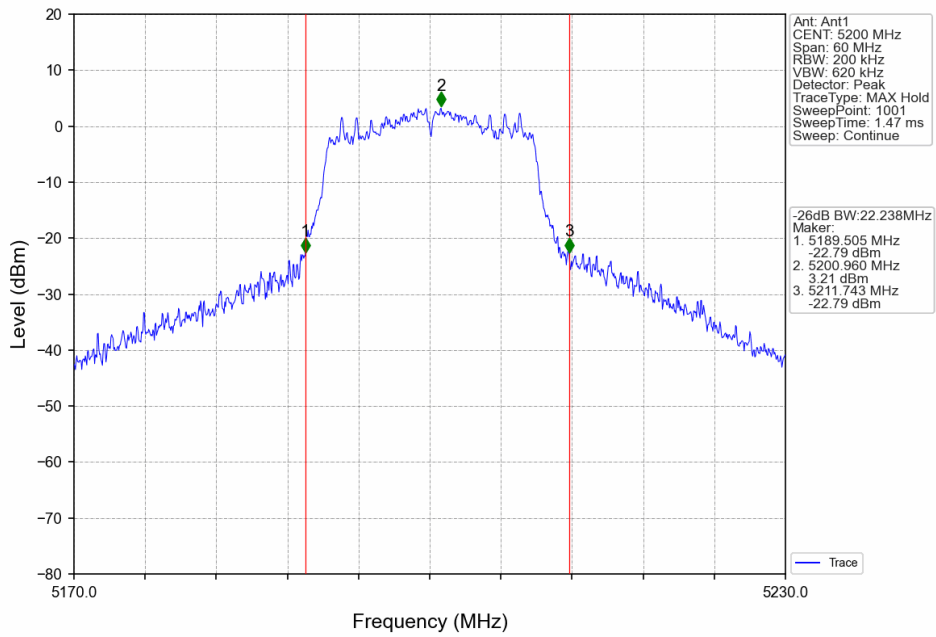
802.11a_HCH_5240MHz_Ant1_NTNV



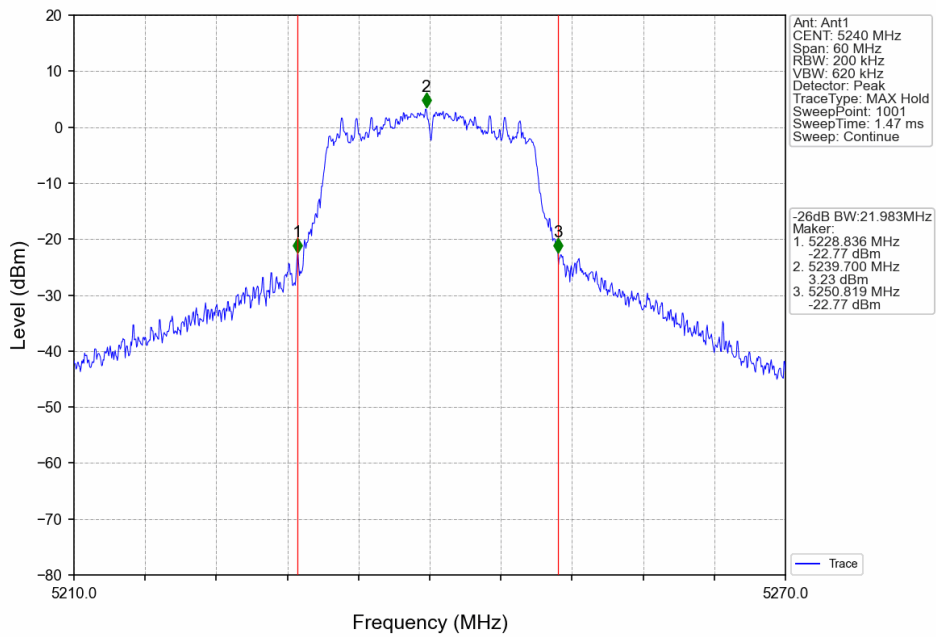
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



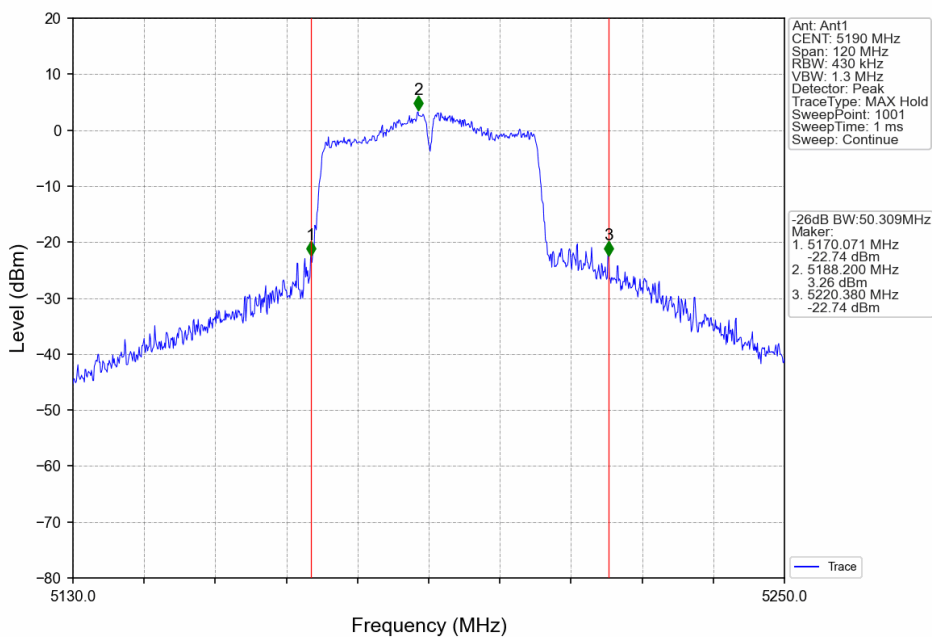
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



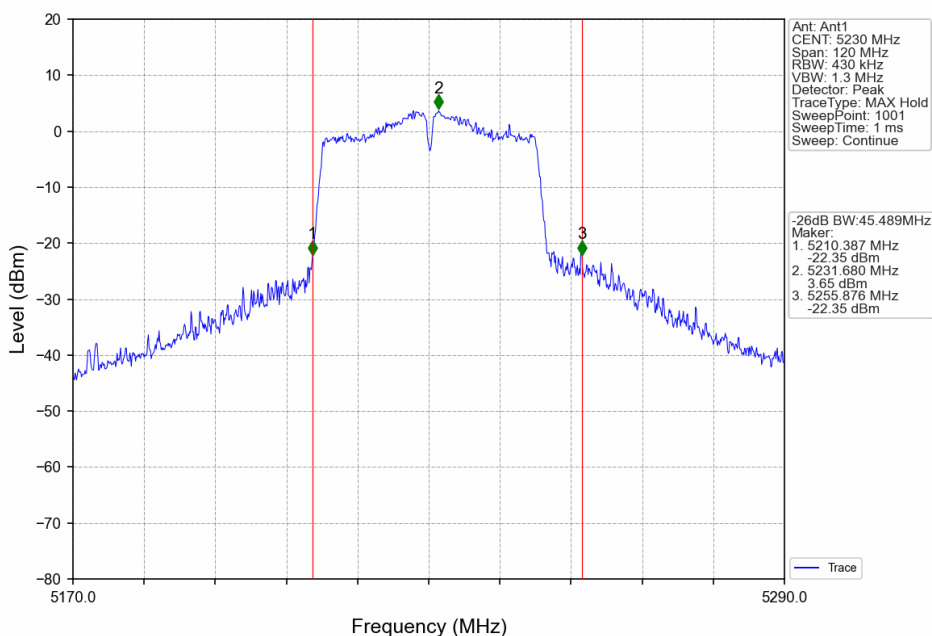
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



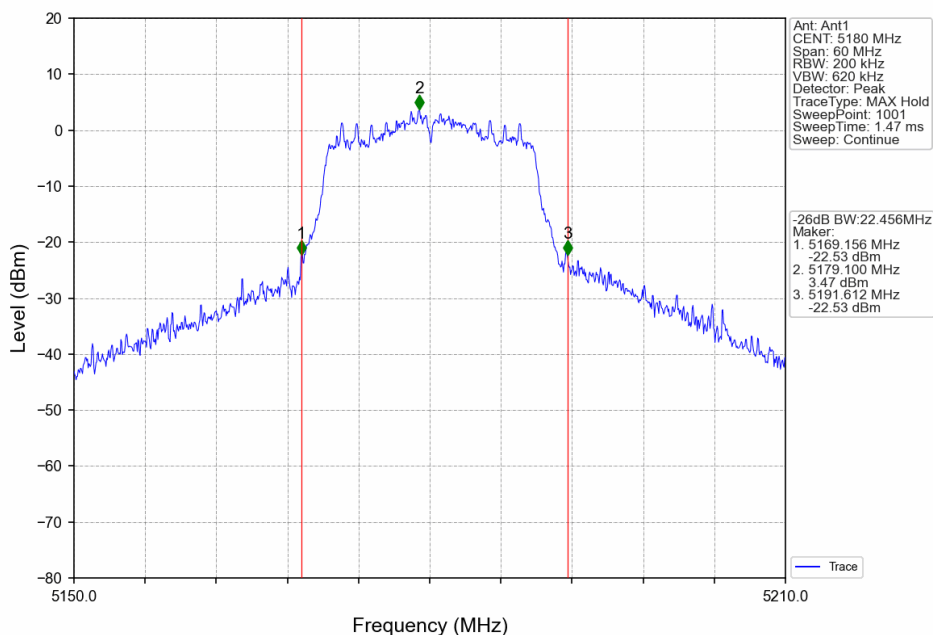
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



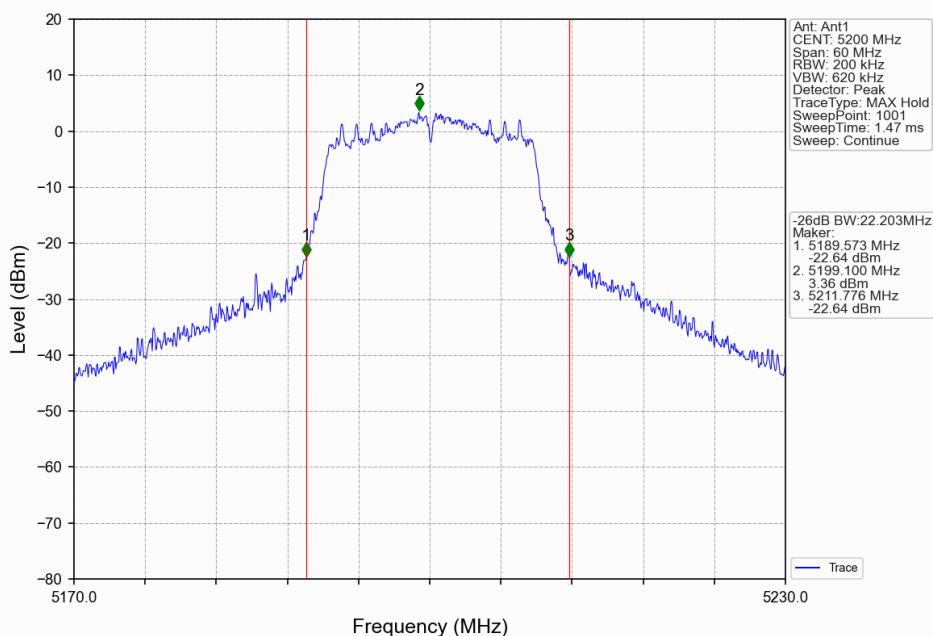
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



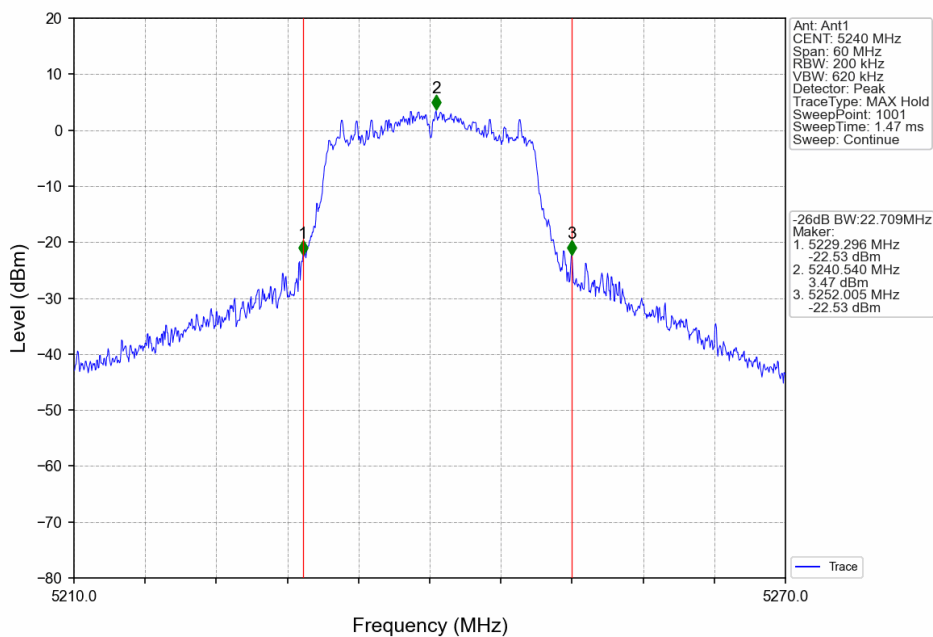
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



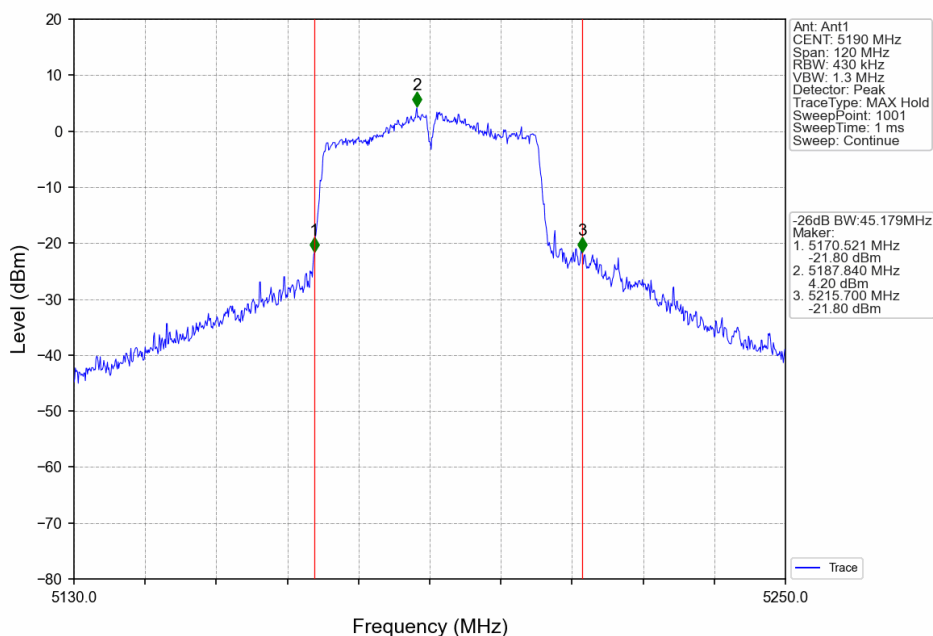
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



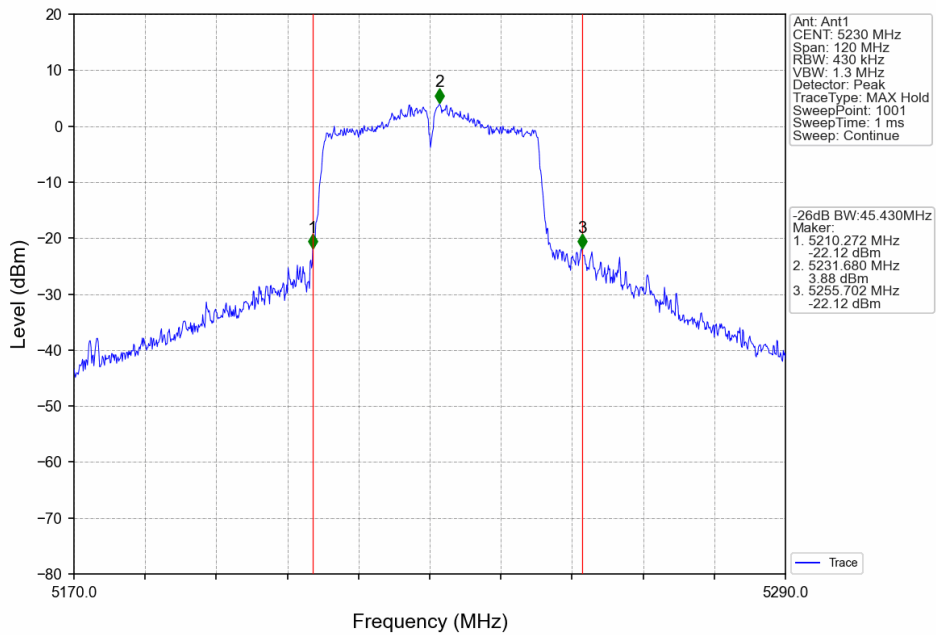
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



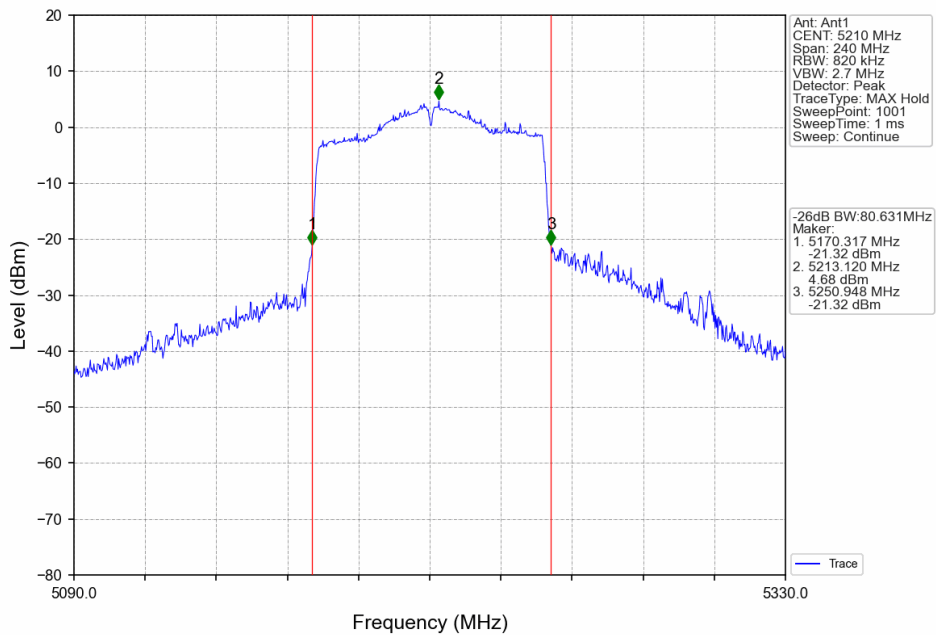
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



3. Maximum Conducted Output Power

3.1 Test Result

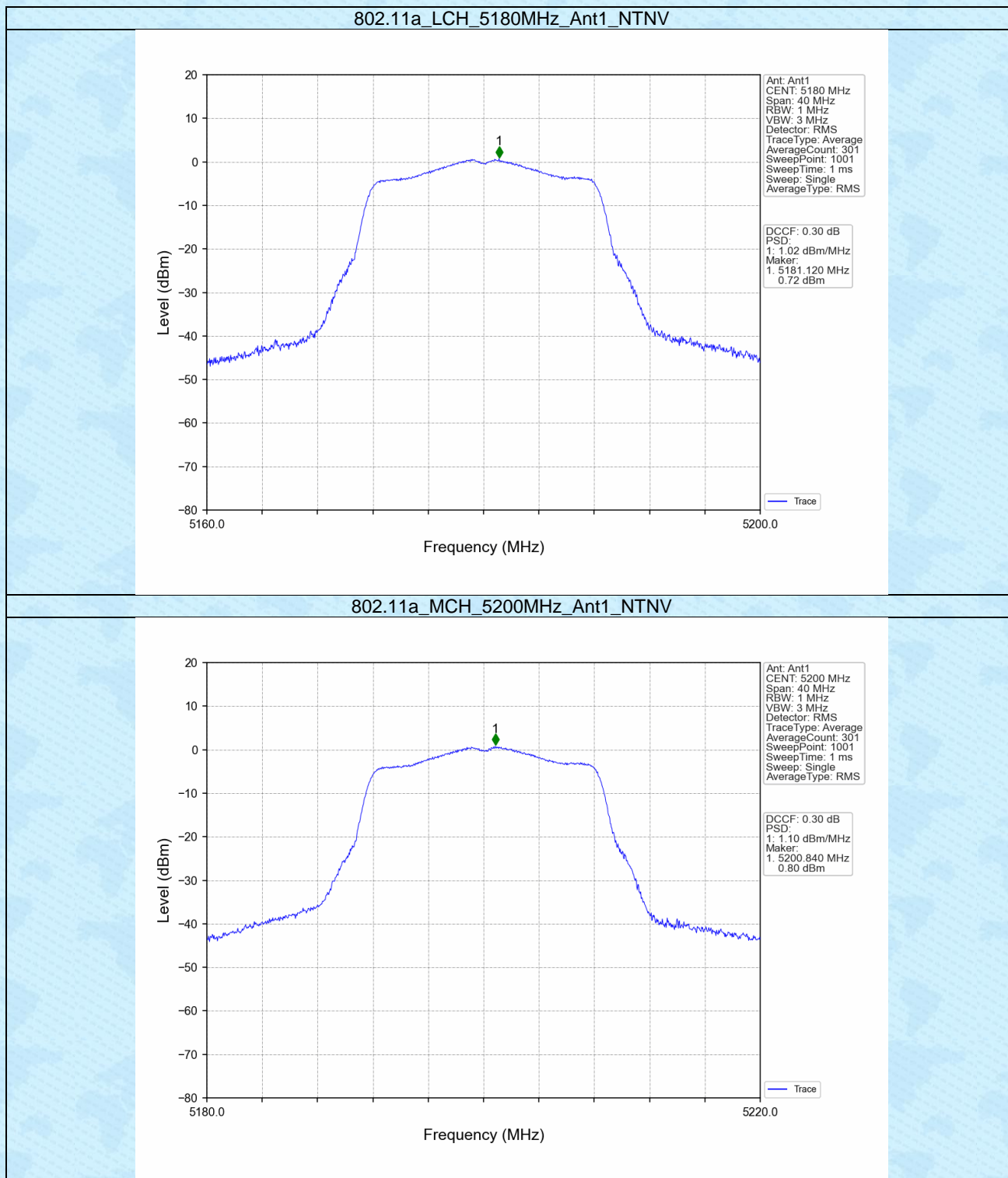
Mode	TX Type	Frequency (MHz)	Maximum Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	10.33	<=23.98	Pass
		5200	10.52	<=23.98	Pass
		5240	10.78	<=23.98	Pass
802.11n (HT20)	SISO	5180	11.59	<=23.98	Pass
		5200	12.12	<=23.98	Pass
		5240	12.28	<=23.98	Pass
802.11n (HT40)	SISO	5190	11.84	<=23.98	Pass
		5230	12.29	<=23.98	Pass
802.11ac (VHT20)	SISO	5180	11.79	<=23.98	Pass
		5200	11.99	<=23.98	Pass
		5240	12.36	<=23.98	Pass
802.11ac (VHT40)	SISO	5190	11.91	<=23.98	Pass
		5230	12.39	<=23.98	Pass
802.11ac (VHT80)	SISO	5210	11.86	<=23.98	Pass

4. Maximum Power Spectral Density

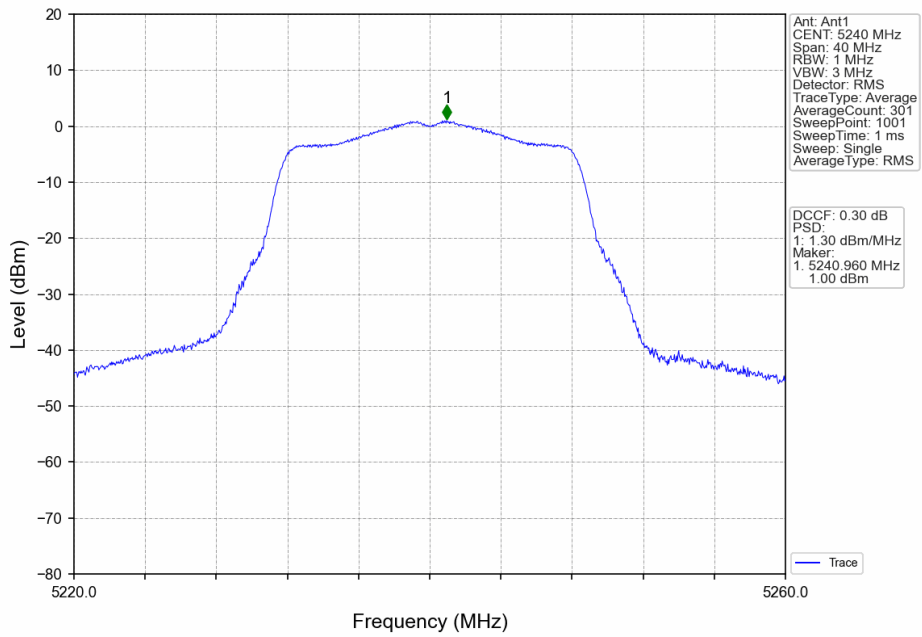
4.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	1.02	<=11	Pass
		5200	1.10	<=11	Pass
		5240	1.30	<=11	Pass
802.11n (HT20)	SISO	5180	1.93	<=11	Pass
		5200	2.62	<=11	Pass
		5240	2.55	<=11	Pass
802.11n (HT40)	SISO	5190	-0.73	<=11	Pass
		5230	-0.36	<=11	Pass
802.11ac (VHT20)	SISO	5180	2.24	<=11	Pass
		5200	2.28	<=11	Pass
		5240	2.84	<=11	Pass
802.11ac (VHT40)	SISO	5190	-0.62	<=11	Pass
		5230	0.04	<=11	Pass
802.11ac (VHT80)	SISO	5210	-3.59	<=11	Pass

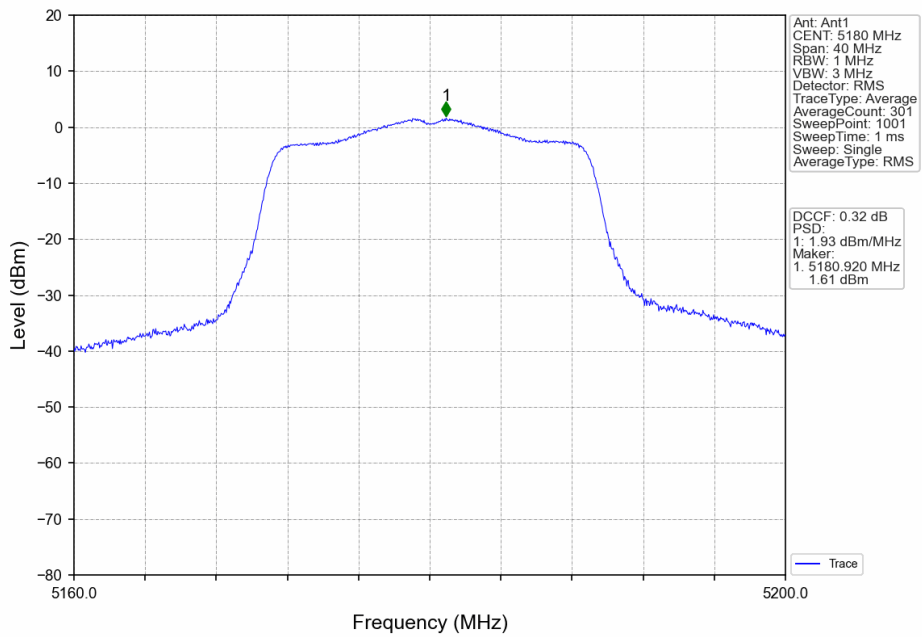
4.2 Test Graph



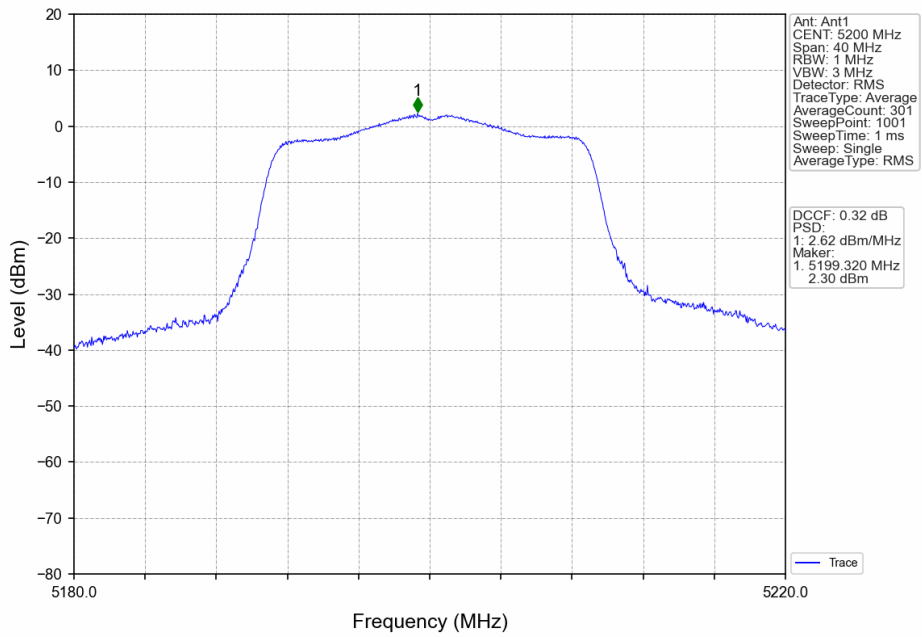
802.11a_HCH_5240MHz_Ant1_NTNV



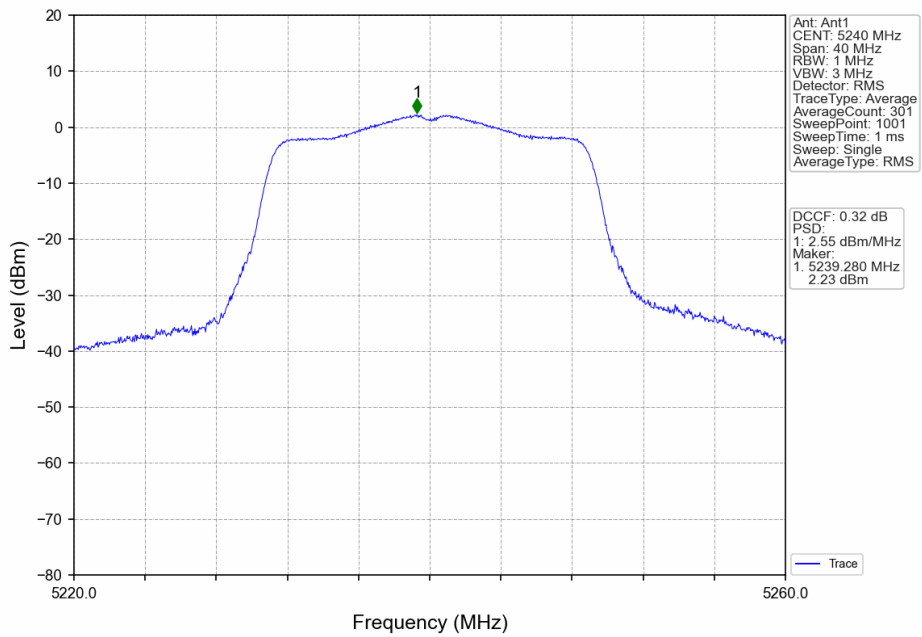
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



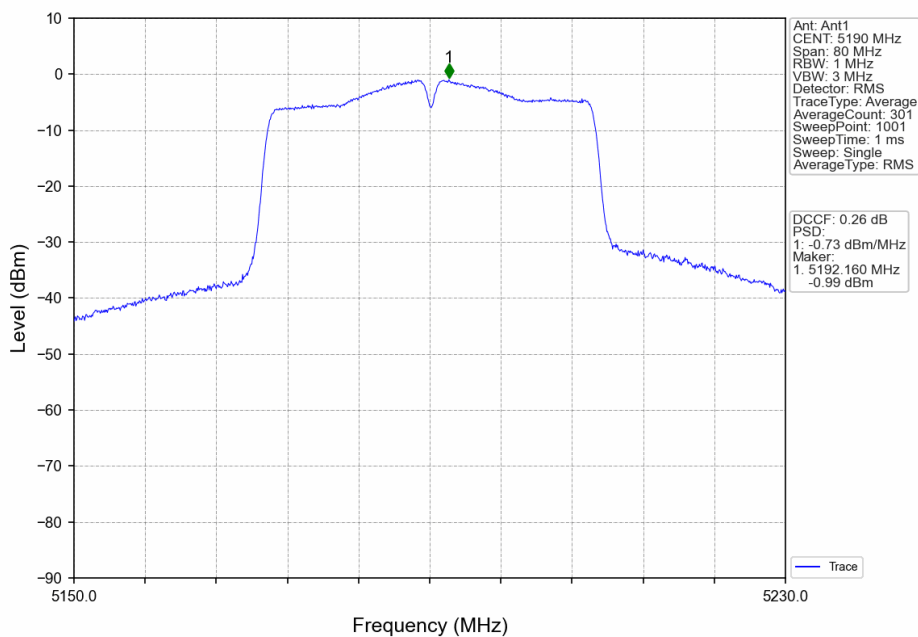
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



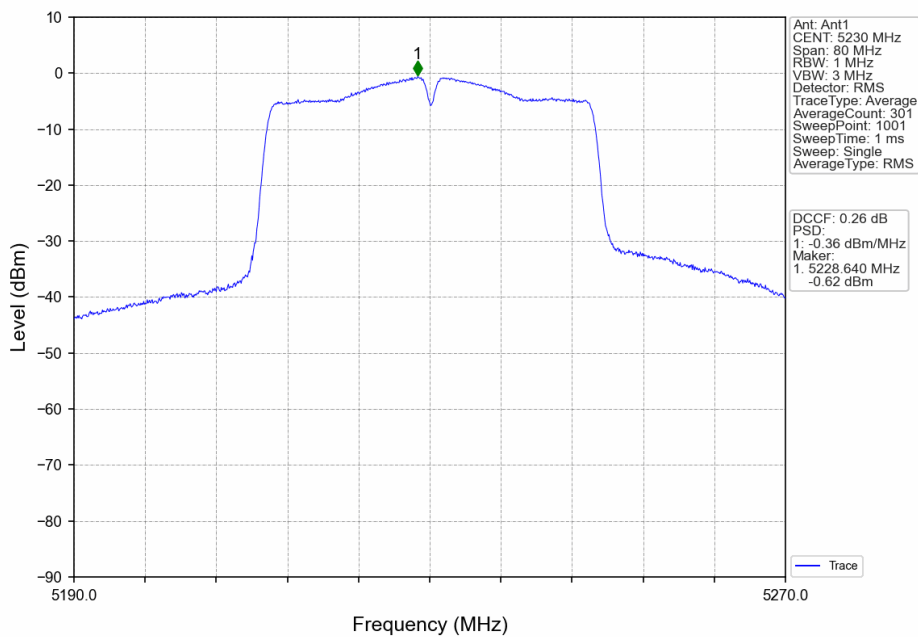
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



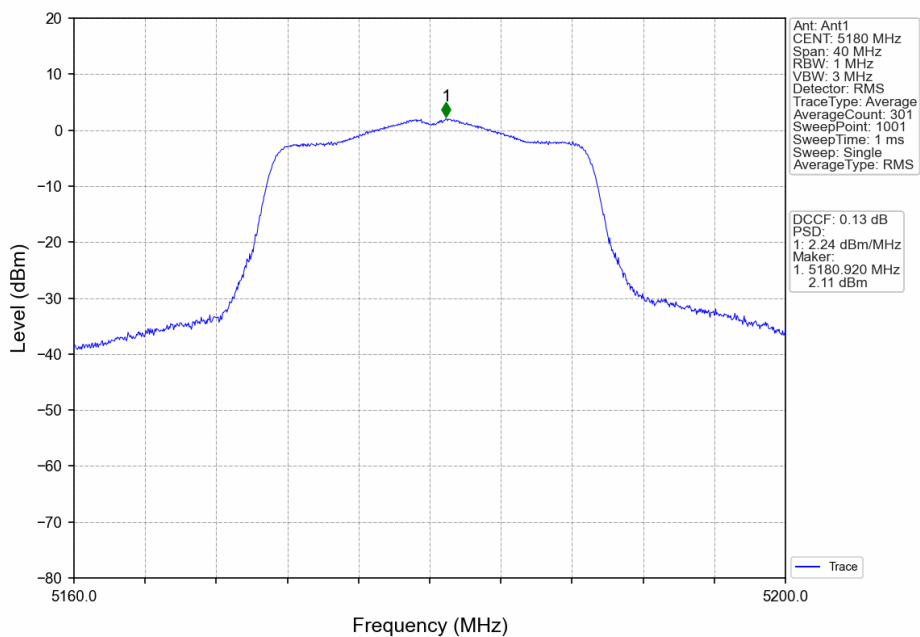
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



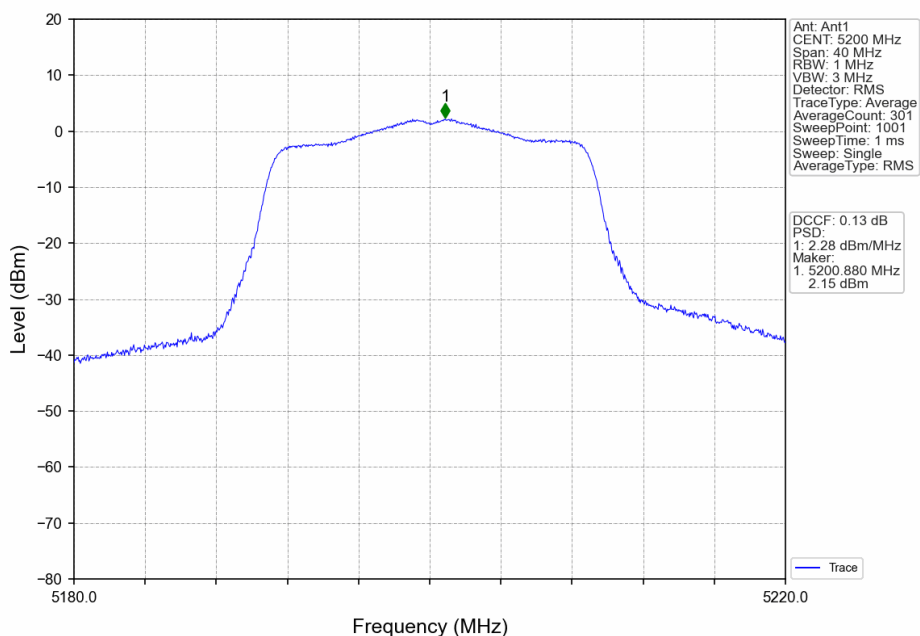
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



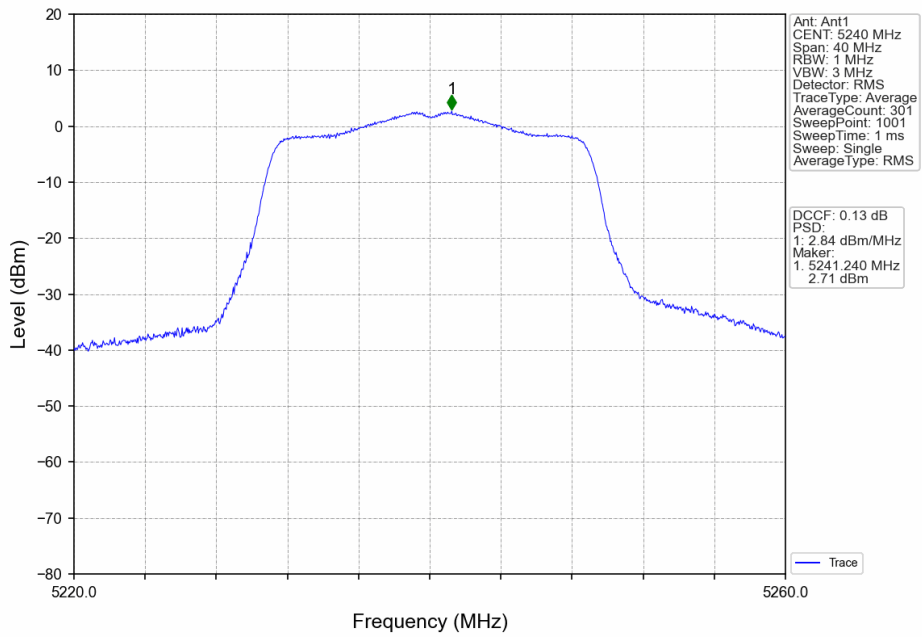
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



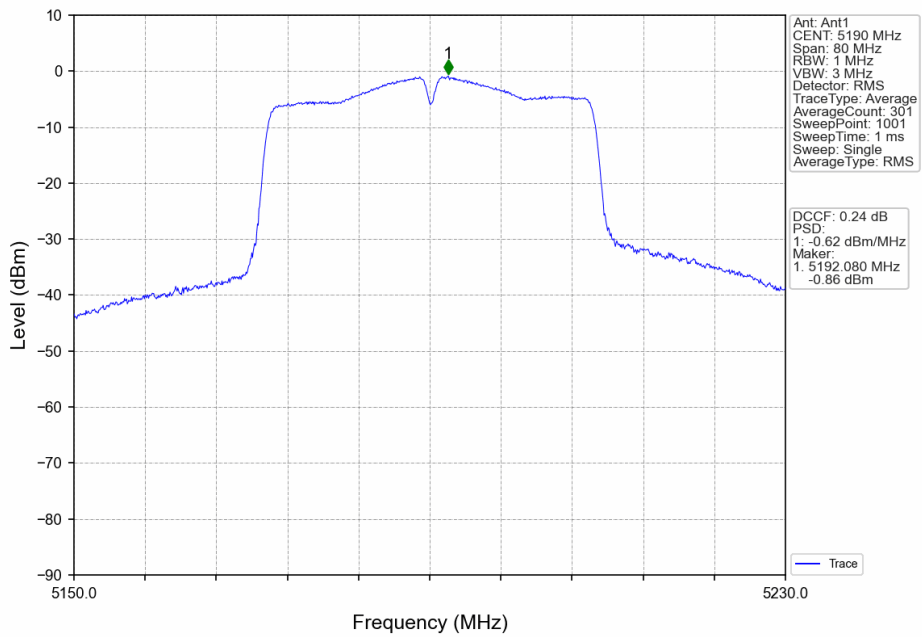
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



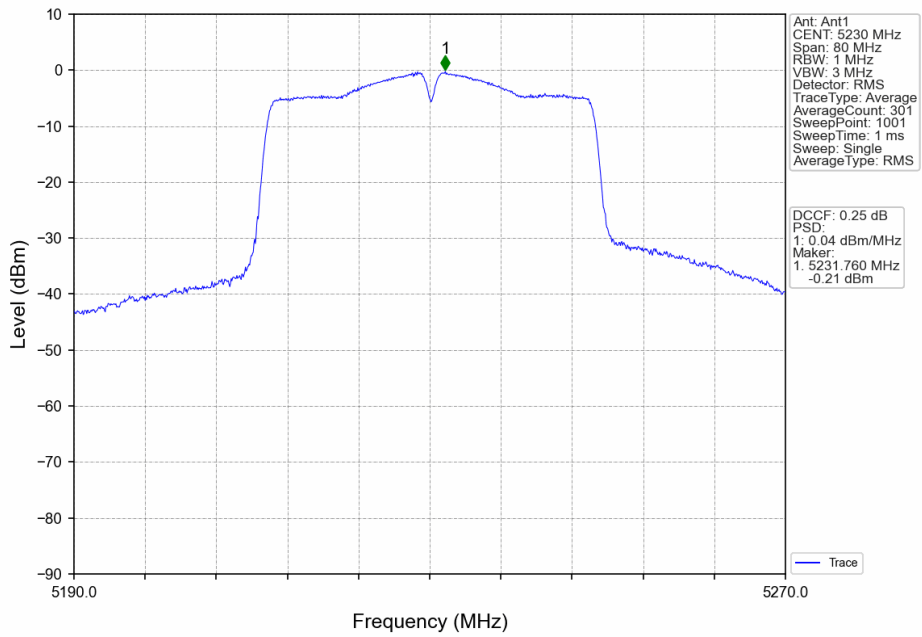
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



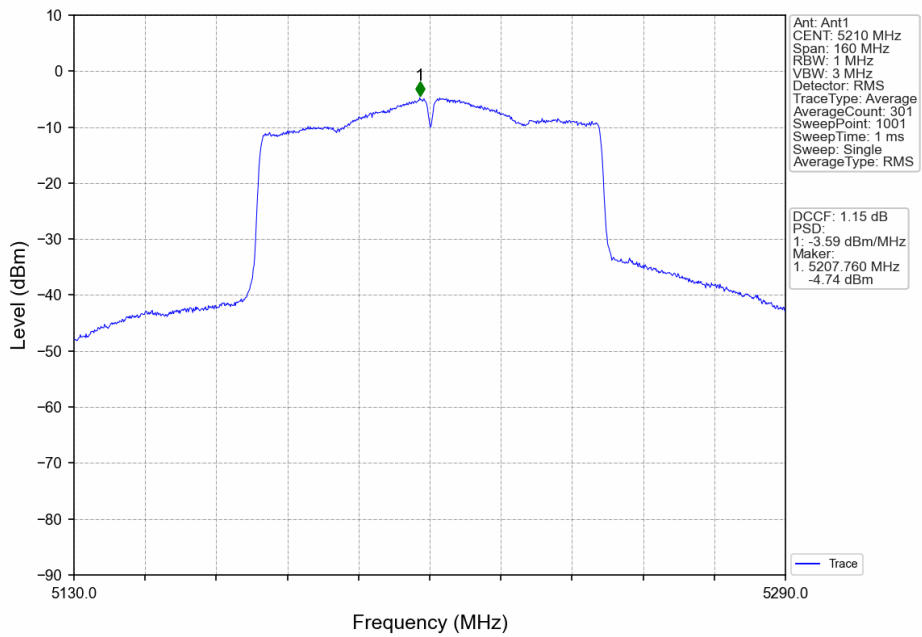
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



5. Frequency Stability

5.1 Test Result

Ant1									
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict		
Carrier Wave	SISO	5180	20	102	5180.012	5150 to 5250	Pass		
				120	5180.010	5150 to 5250	Pass		
				138	5180.008	5150 to 5250	Pass		
			5200	-30	120	5180.007	5150 to 5250	Pass	
					-20	120	5180.005	5150 to 5250	Pass
						120	5180.005	5150 to 5250	Pass
				0	120	5180.003	5150 to 5250	Pass	
					10	5180.003	5150 to 5250	Pass	
					30	5180.003	5150 to 5250	Pass	
		40			5180.002	5150 to 5250	Pass		
		50			5180.002	5150 to 5250	Pass		
		5240			20	102	5200.002	5150 to 5250	Pass
			120	5200.003		5150 to 5250	Pass		
			138	5200.005		5150 to 5250	Pass		
			5190	-30	120	5200.007	5150 to 5250	Pass	
					-20	120	5200.009	5150 to 5250	Pass
						120	5200.011	5150 to 5250	Pass
				0	120	5200.013	5150 to 5250	Pass	
					10	5200.016	5150 to 5250	Pass	
					30	5200.018	5150 to 5250	Pass	
		40			5200.020	5150 to 5250	Pass		
		50			5200.023	5150 to 5250	Pass		
		5230			20	102	5240.031	5150 to 5250	Pass
			120	5240.034		5150 to 5250	Pass		
			138	5240.036		5150 to 5250	Pass		
			5190	-30	120	5240.038	5150 to 5250	Pass	
					-20	120	5240.040	5150 to 5250	Pass
						120	5240.042	5150 to 5250	Pass
				0	120	5240.043	5150 to 5250	Pass	
					10	5240.045	5150 to 5250	Pass	
					30	5240.046	5150 to 5250	Pass	
		40			5240.047	5150 to 5250	Pass		
		50			5240.049	5150 to 5250	Pass		
		5190			20	102	5190.059	5150 to 5250	Pass
			120	5190.060		5150 to 5250	Pass		
			138	5190.060		5150 to 5250	Pass		
			5230	-30	120	5190.062	5150 to 5250	Pass	
					-20	120	5190.062	5150 to 5250	Pass
						120	5190.063	5150 to 5250	Pass
				0	120	5190.064	5150 to 5250	Pass	
					10	5190.064	5150 to 5250	Pass	
					30	5190.065	5150 to 5250	Pass	
		40			5190.065	5150 to 5250	Pass		
		50			5190.066	5150 to 5250	Pass		
		5230			20	102	5230.069	5150 to 5250	Pass
120	5230.070		5150 to 5250	Pass					
138	5230.070		5150 to 5250	Pass					
5230	-30		120	5230.071	5150 to 5250	Pass			
			-20	120	5230.071	5150 to 5250	Pass		
				120	5230.071	5150 to 5250	Pass		
	-10		120	5230.071	5150 to 5250	Pass			
			0	120	5230.072	5150 to 5250	Pass		
				10	5230.072	5150 to 5250	Pass		

			30	120	5230.072	5150 to 5250	Pass
			40	120	5230.073	5150 to 5250	Pass
			50	120	5230.073	5150 to 5250	Pass
	5210	20	102	5210.073	5150 to 5250	Pass	
			120	5210.073	5150 to 5250	Pass	
			138	5210.074	5150 to 5250	Pass	
		-30	120	5210.075	5150 to 5250	Pass	
		-20	120	5210.075	5150 to 5250	Pass	
		-10	120	5210.075	5150 to 5250	Pass	
		0	120	5210.075	5150 to 5250	Pass	
		10	120	5210.075	5150 to 5250	Pass	
		30	120	5210.075	5150 to 5250	Pass	
		40	120	5210.074	5150 to 5250	Pass	
		50	120	5210.073	5150 to 5250	Pass	

-----End-----