1. Duty Cycle

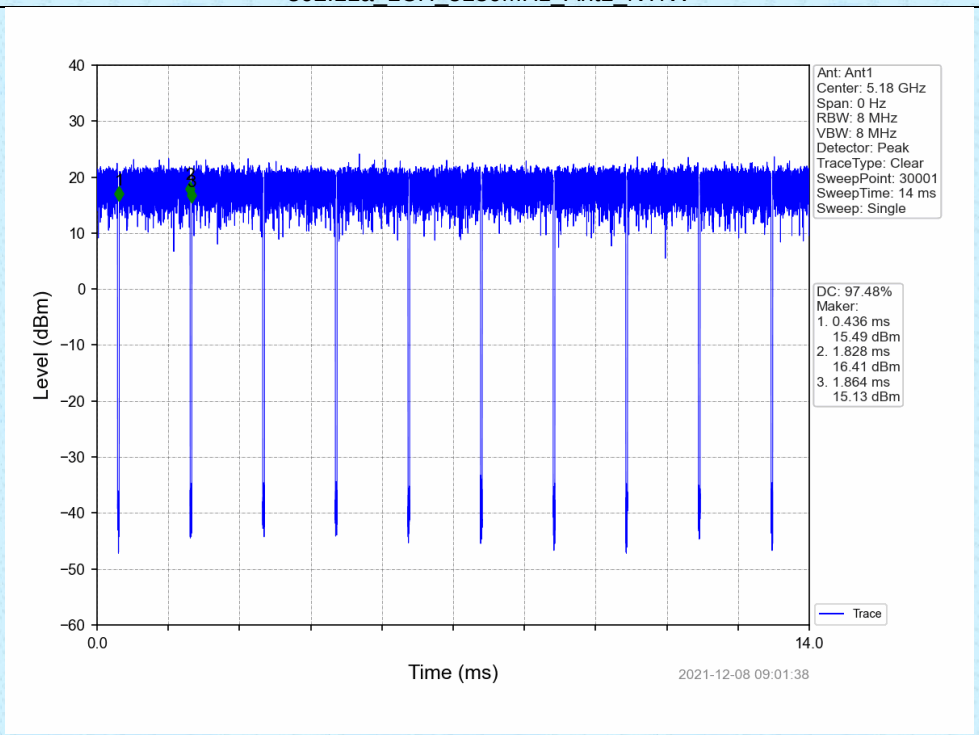
1.1 Ant1

1.1.1 Test Result

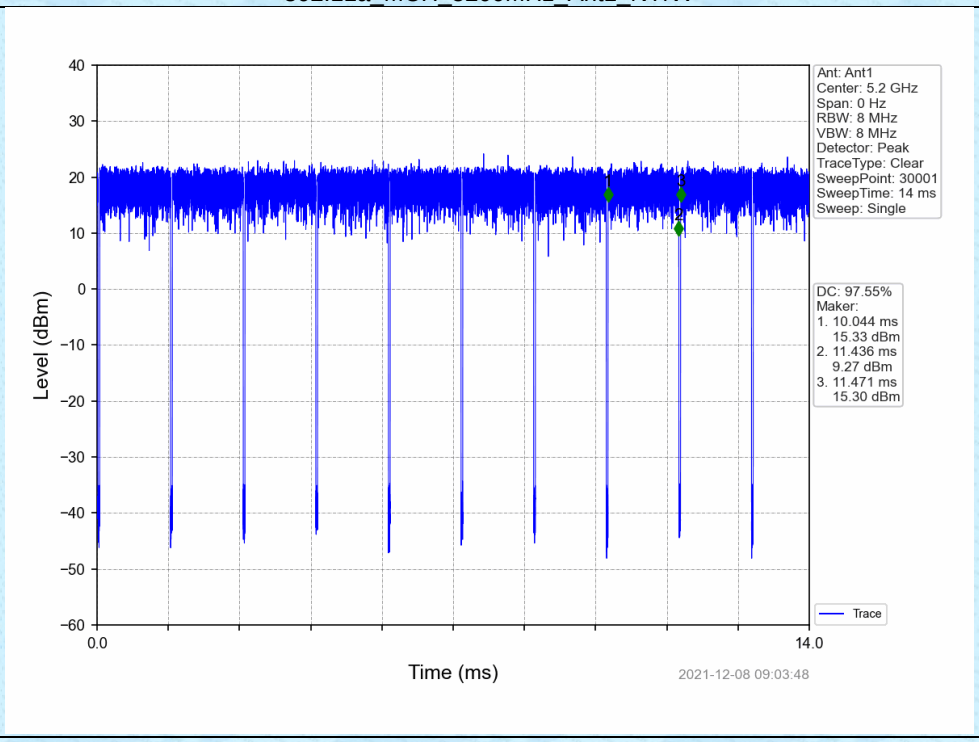
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	1.392	1.428	97.48	0.11	0.03
		5200	1.392	1.427	97.55	0.11	0.03
		5240	1.391	1.427	97.48	0.11	0.03
802.11n (HT20)	SISO	5180	1.299	1.335	97.30	0.12	0.07
		5200	1.300	1.335	97.38	0.12	0.03
		5240	1.299	1.335	97.30	0.12	0.07
802.11n (HT40)	SISO	5190	0.648	0.683	94.88	0.23	0.03
		5230	0.648	0.683	94.88	0.23	0.03
802.11ac (VHT20)	SISO	5180	0.680	0.715	95.10	0.22	0.03
		5200	44.943	45.370	99.06	0.04	0.00
		5240	0.680	0.715	95.10	0.22	0.03
802.11ac (VHT40)	SISO	5190	0.350	0.387	90.44	0.44	0.04
		5230	4.605	4.886	94.25	0.26	0.71

1.1.2 Test Graph

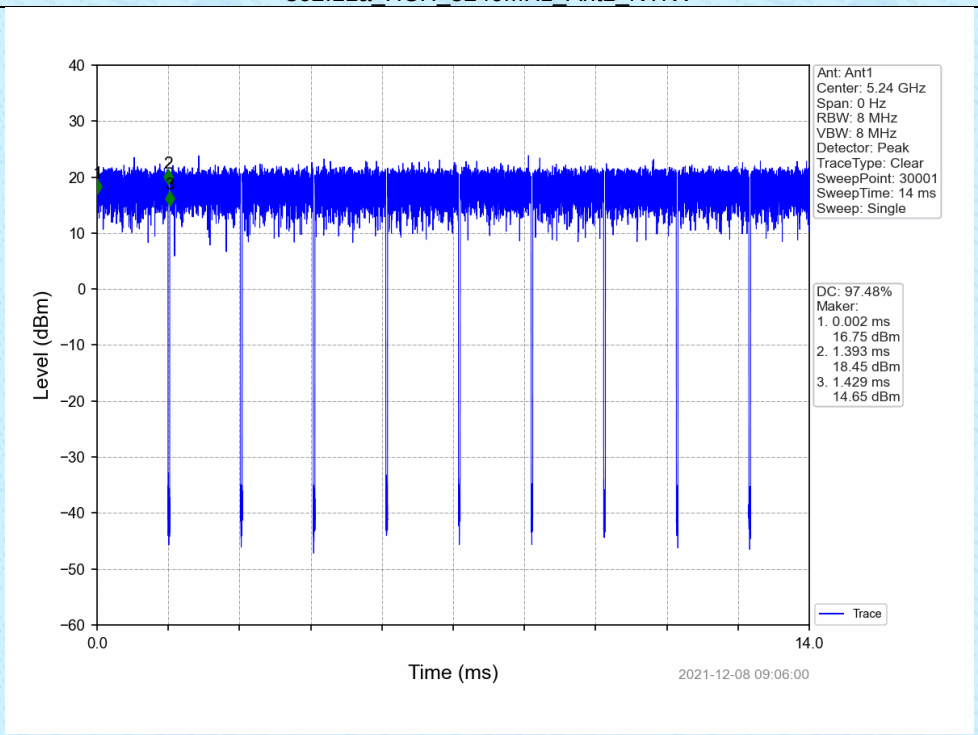
802.11a_LCH_5180MHz_Ant1_NTNV



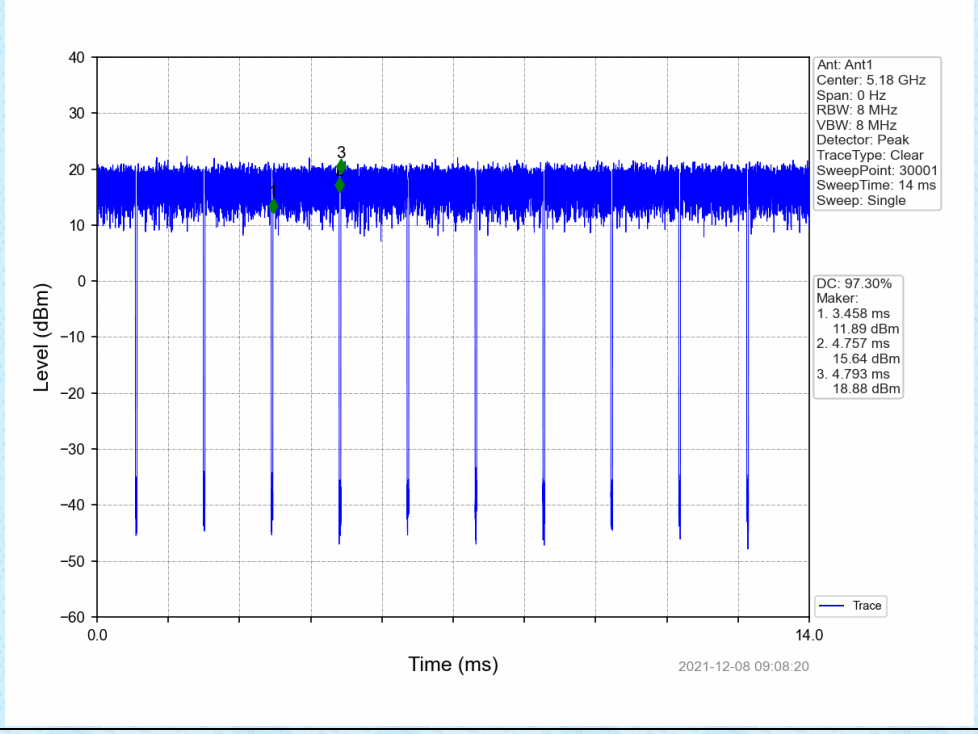
802.11a_MCH_5200MHz_Ant1_NTNV



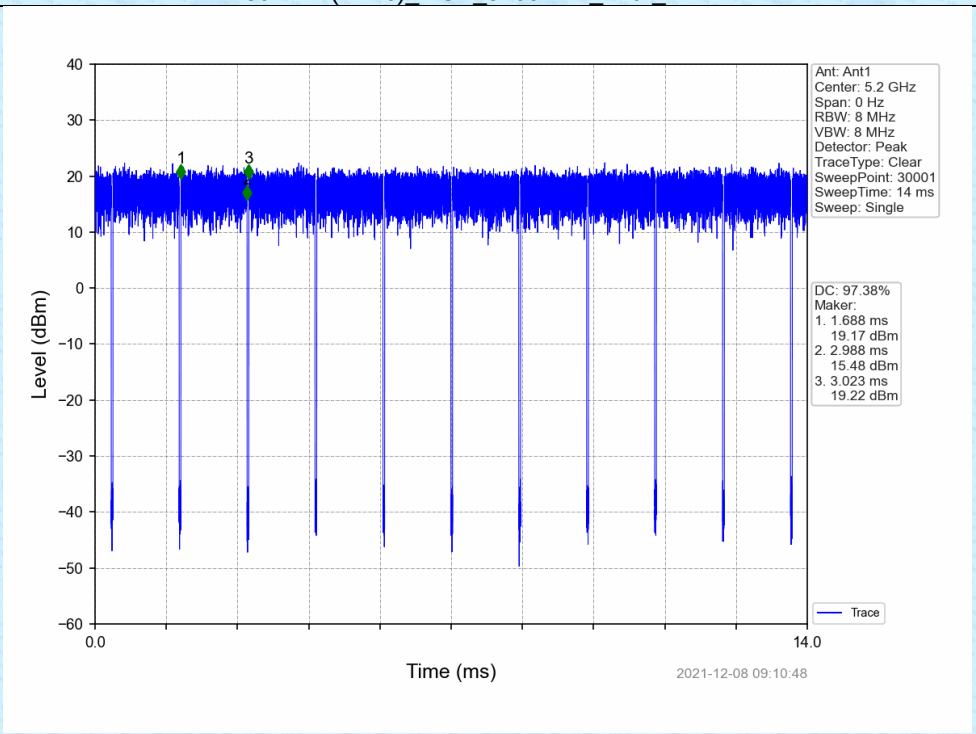
802.11a_HCH_5240MHz_Ant1_NTNV



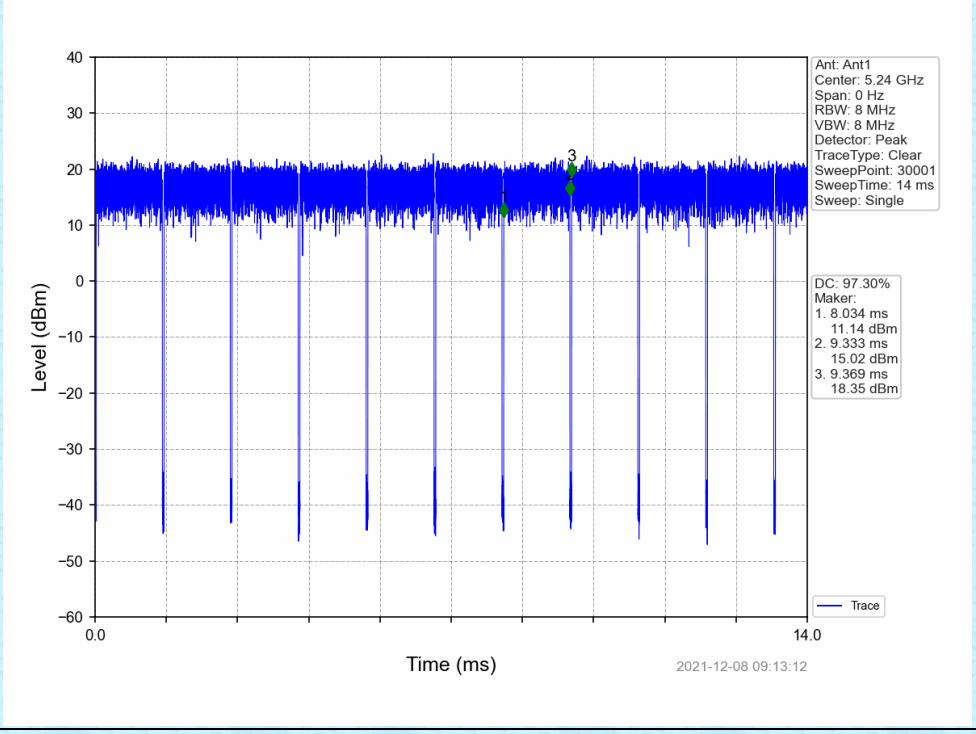
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



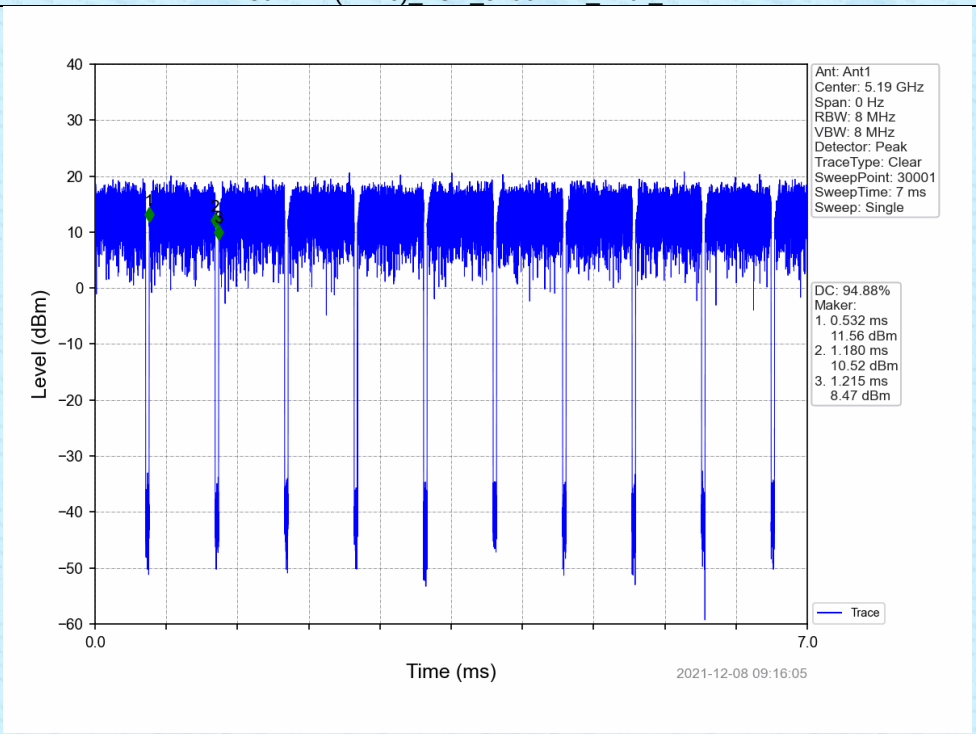
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



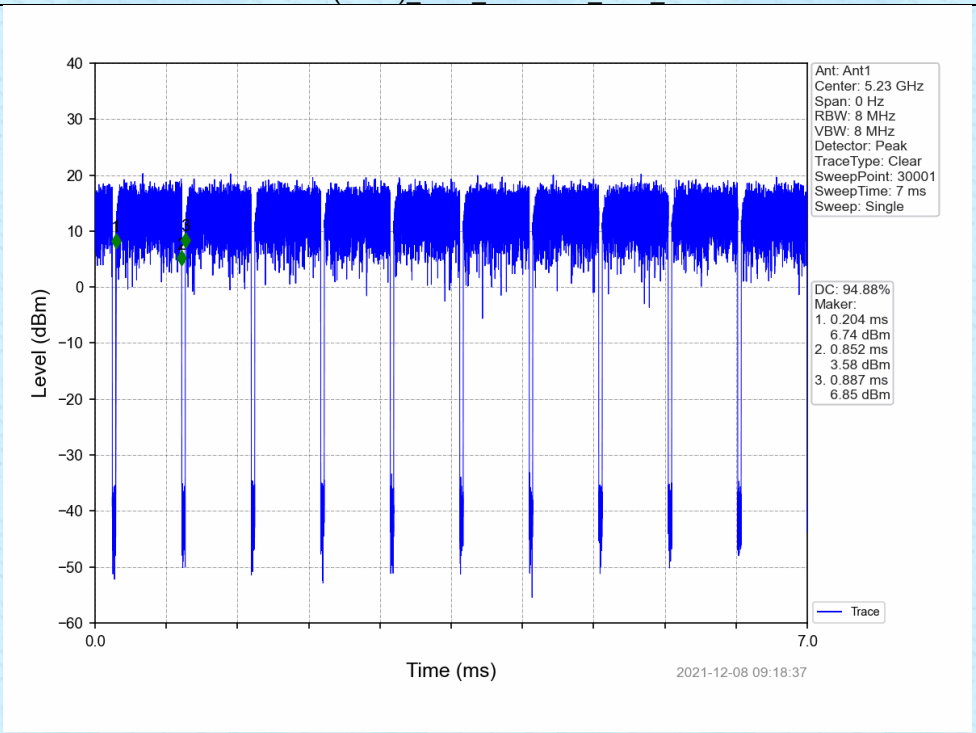
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



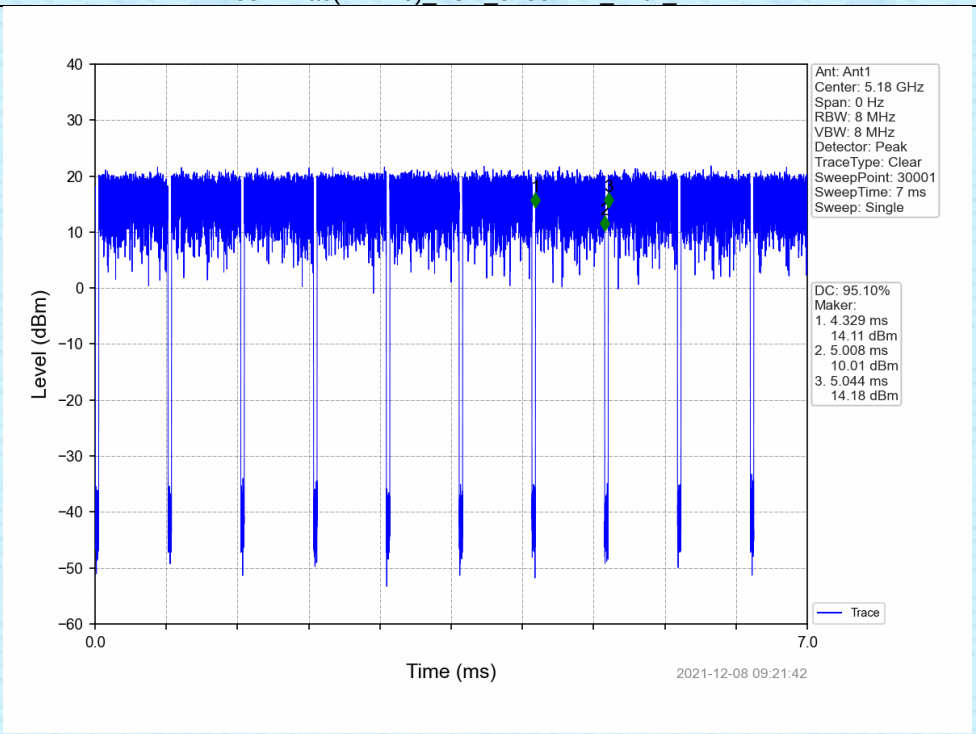
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



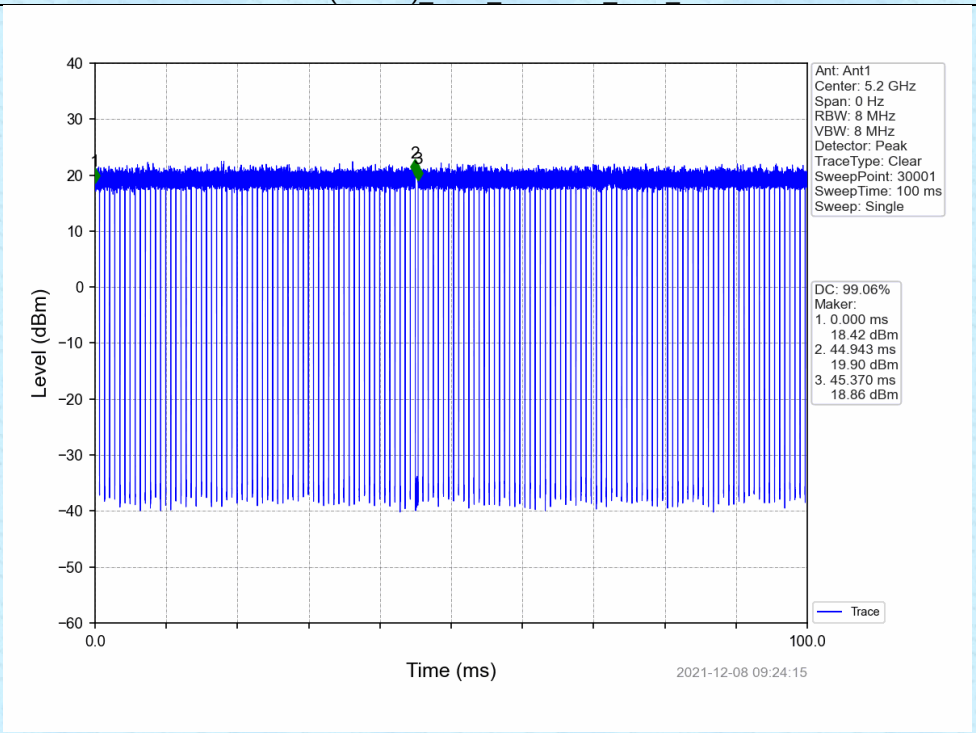
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



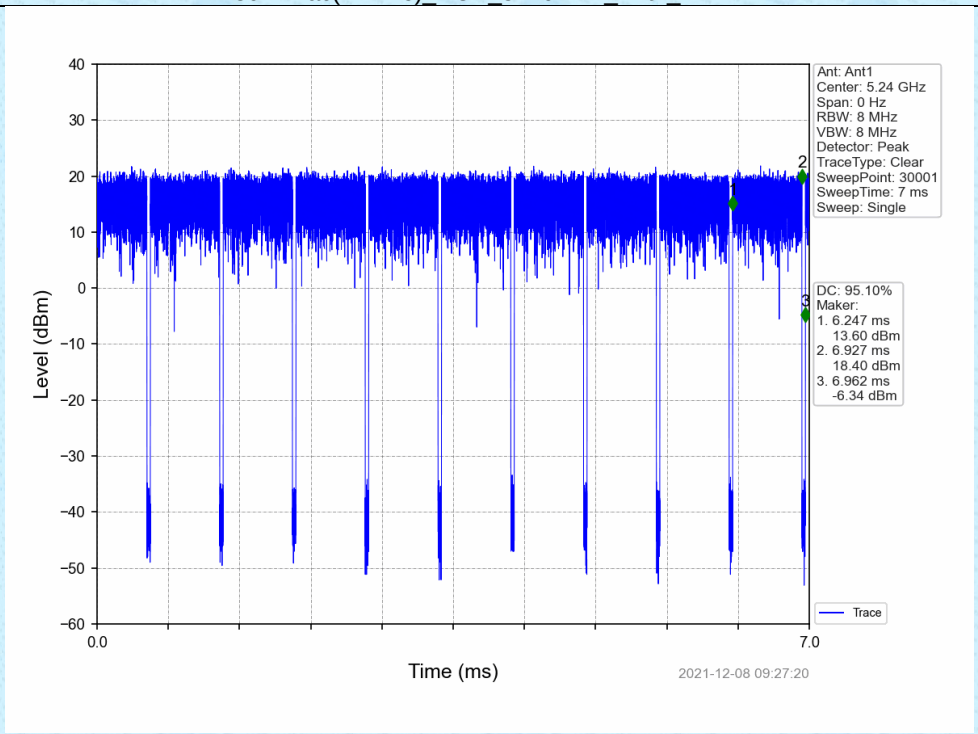
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



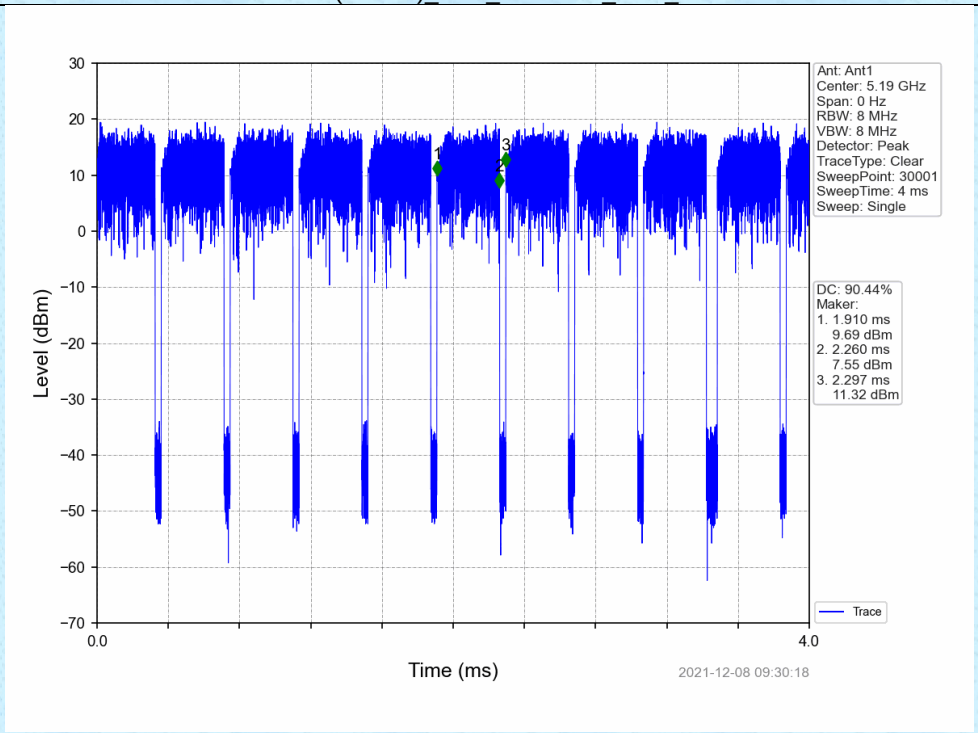
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



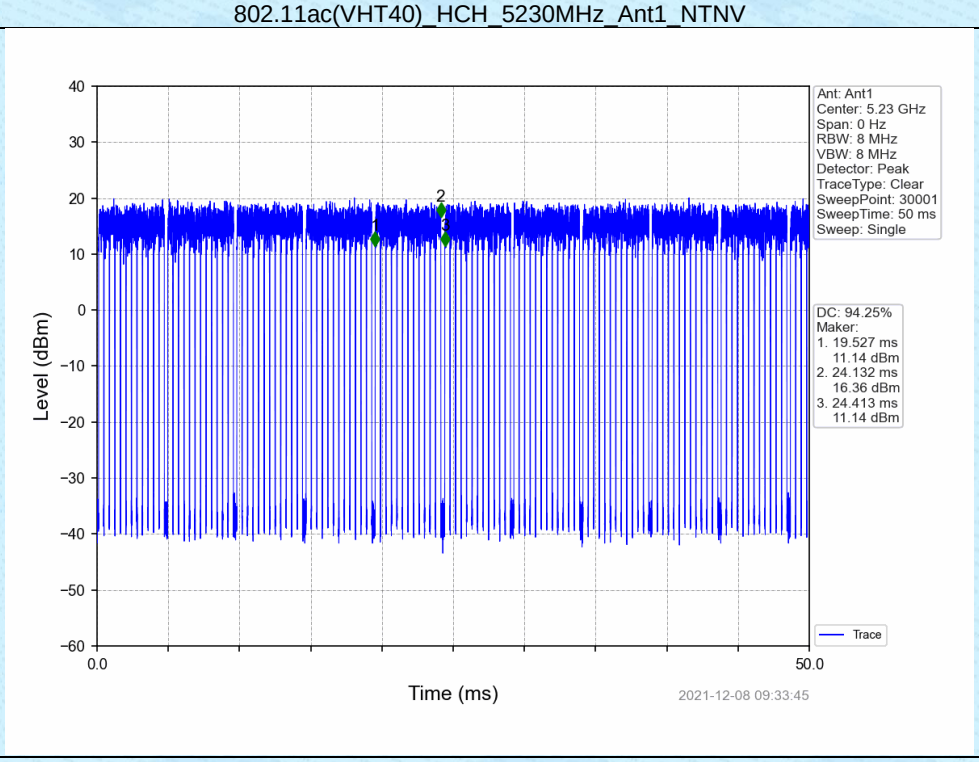
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



2. Bandwidth

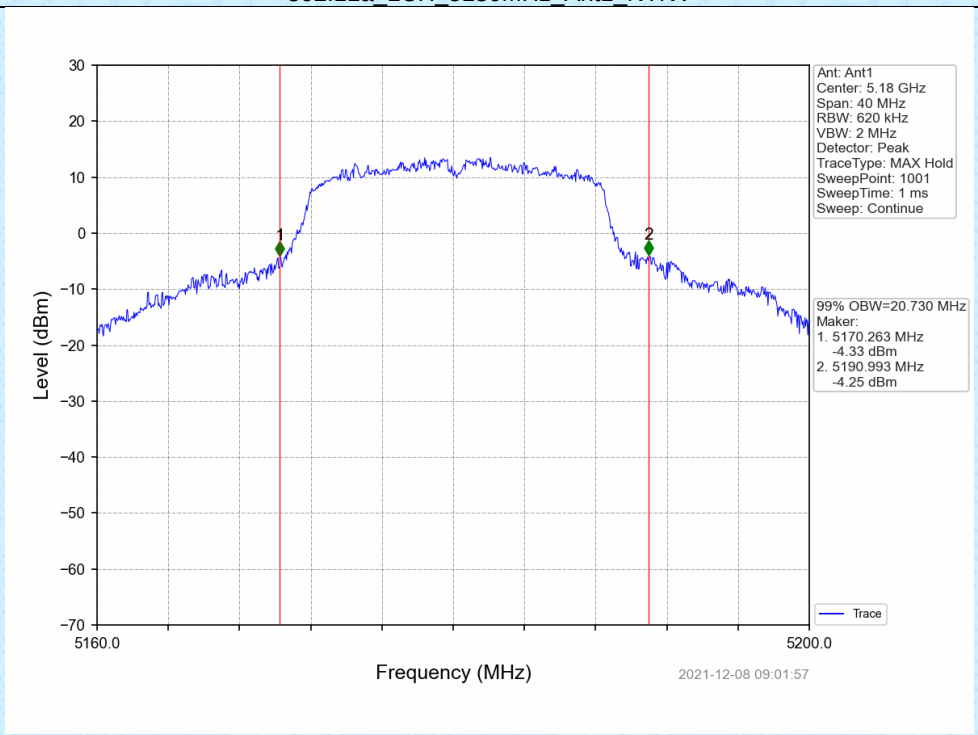
2.1 OBW

2.1.1 Test Result

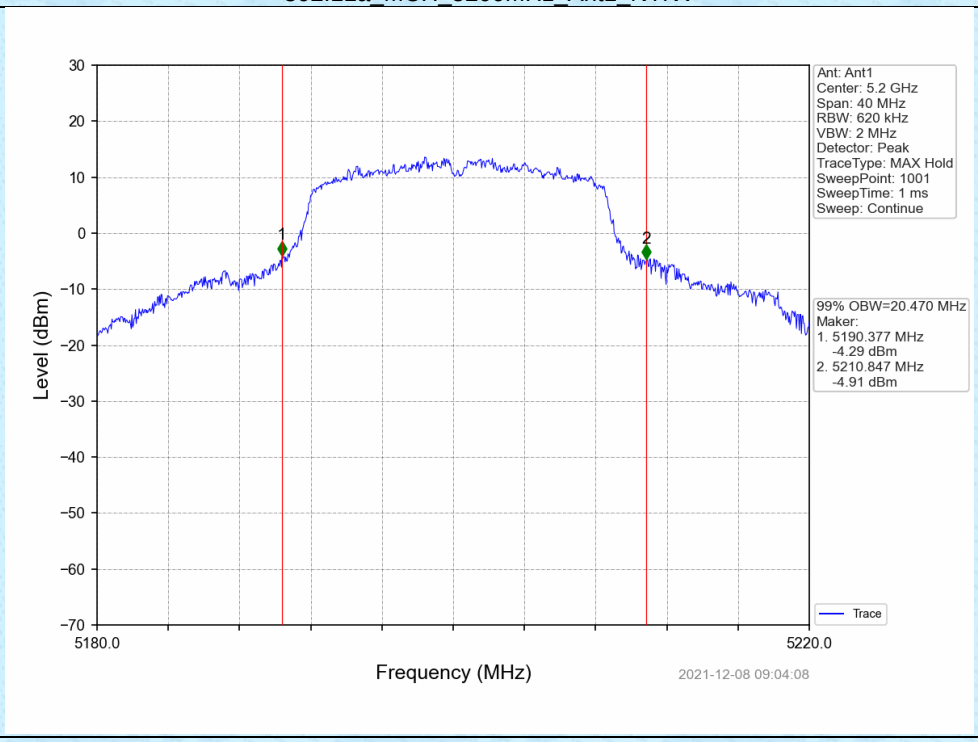
Mode	TX Type	Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz) Result	Verdict
802.11a	SISO	5180	1	20.730	Pass
		5200	1	20.470	Pass
		5240	1	20.167	Pass
802.11n (HT20)	SISO	5180	1	20.199	Pass
		5200	1	19.696	Pass
		5240	1	19.004	Pass
802.11n (HT40)	SISO	5190	1	39.263	Pass
		5230	1	39.034	Pass
802.11ac (VHT20)	SISO	5180	1	18.555	Pass
		5200	1	18.468	Pass
		5240	1	18.311	Pass
802.11ac (VHT40)	SISO	5190	1	37.931	Pass
		5230	1	37.752	Pass

2.1.2 Test Graph

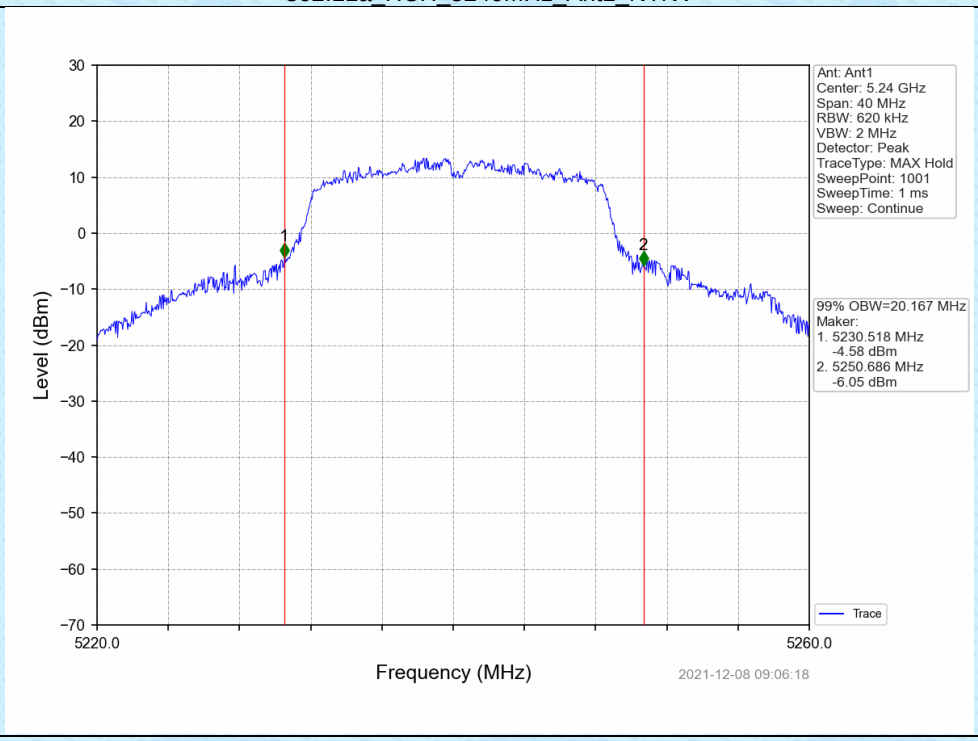
802.11a_LCH_5180MHz_Ant1_NTNV



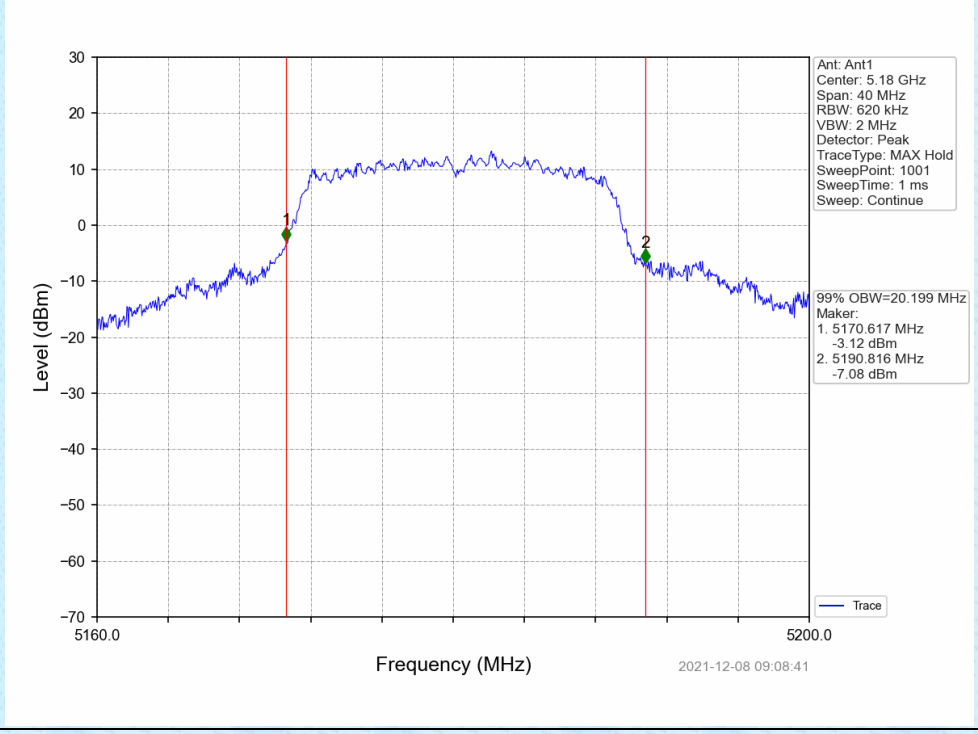
802.11a_MCH_5200MHz_Ant1_NTNV



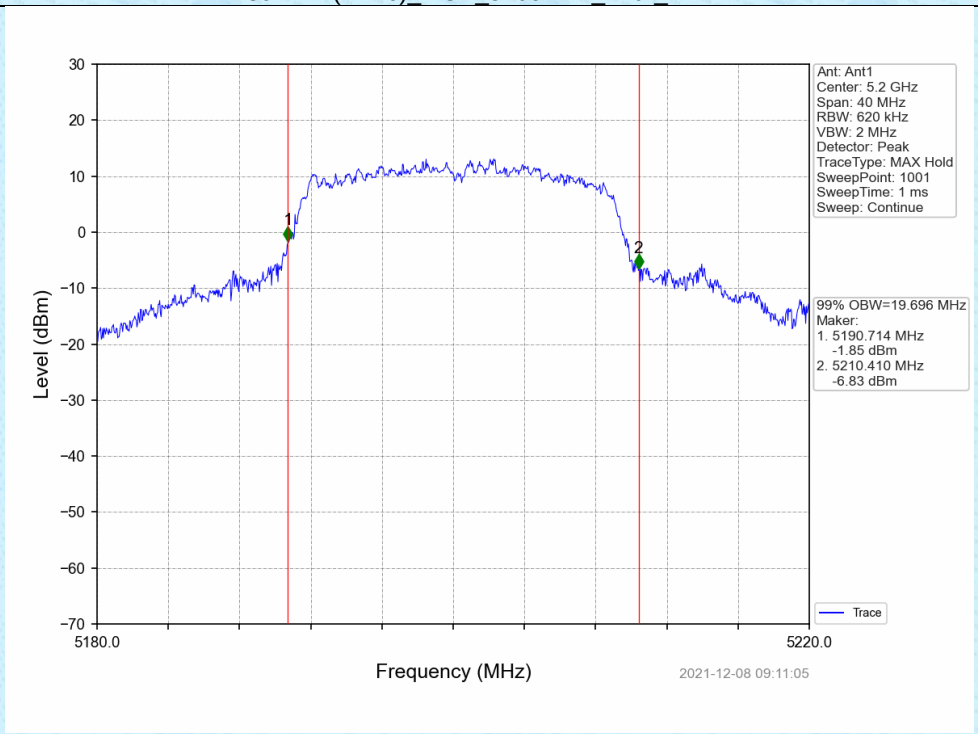
802.11a_HCH_5240MHz_Ant1_NTNV



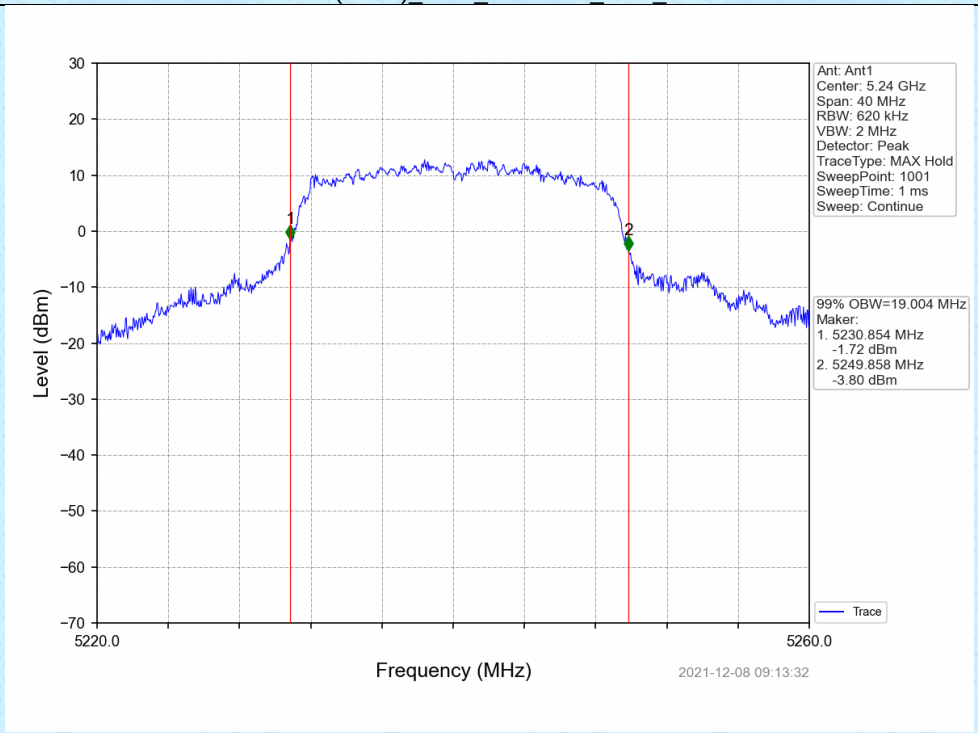
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



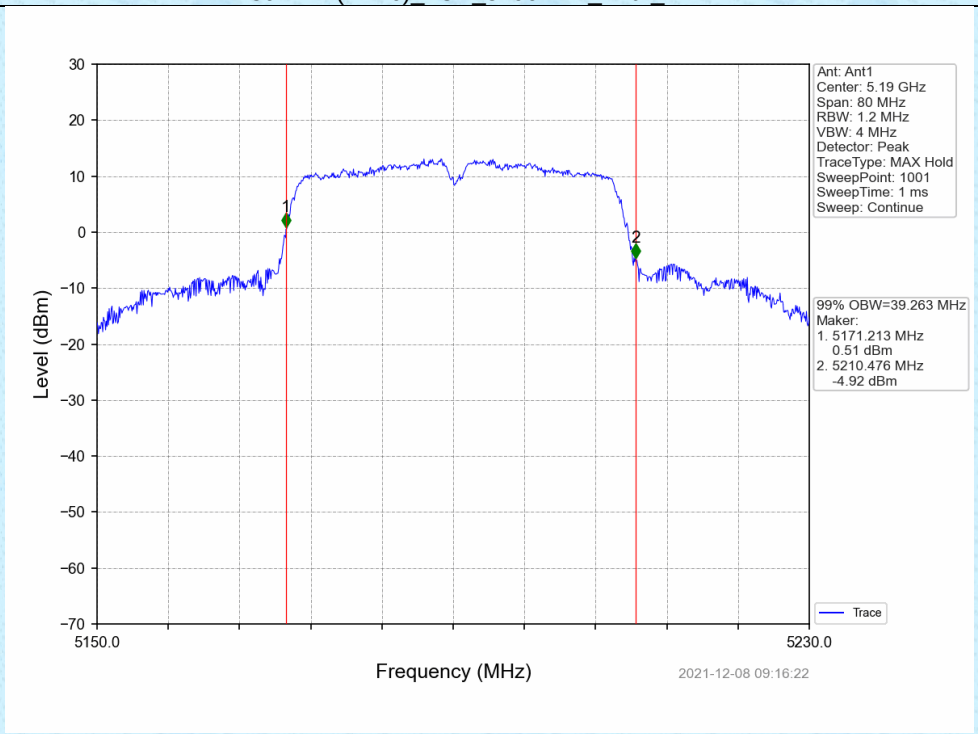
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



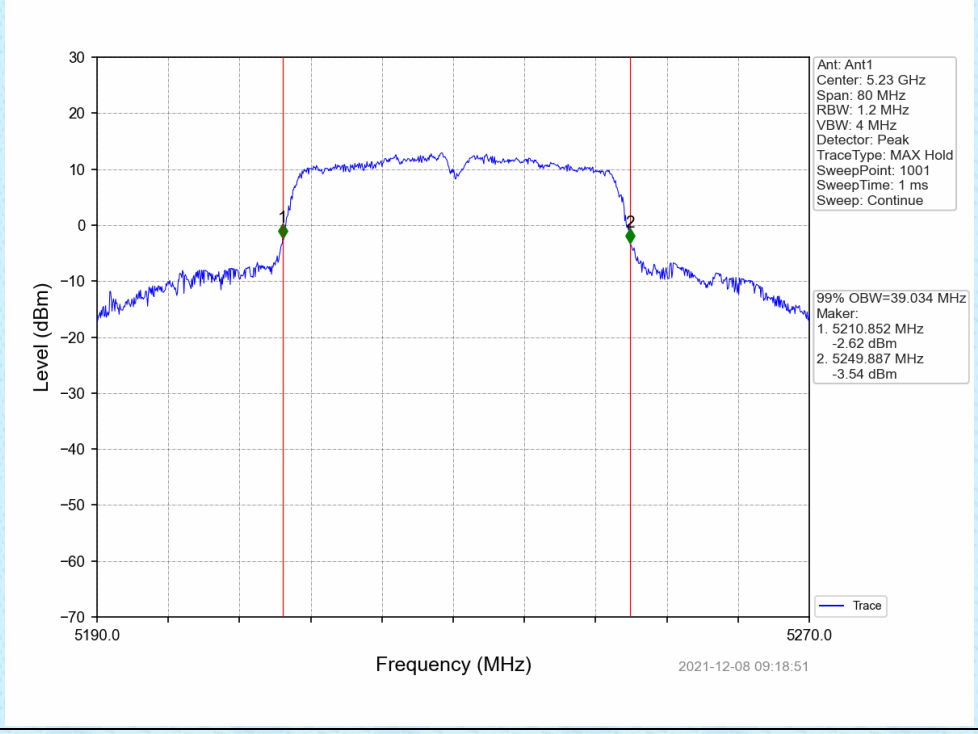
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



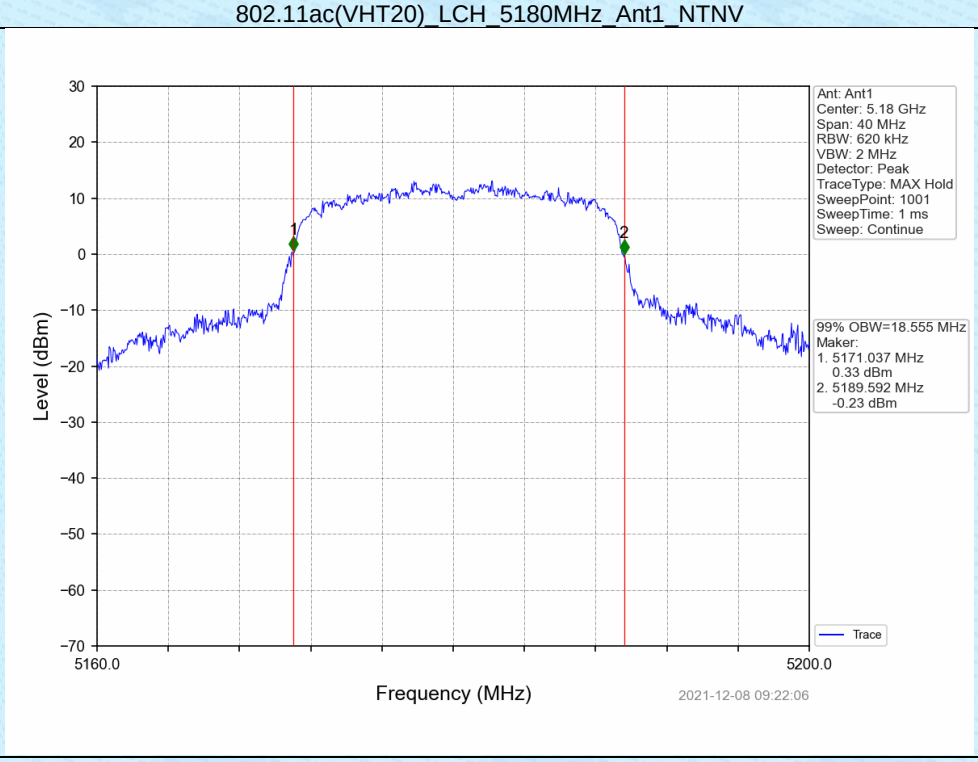
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



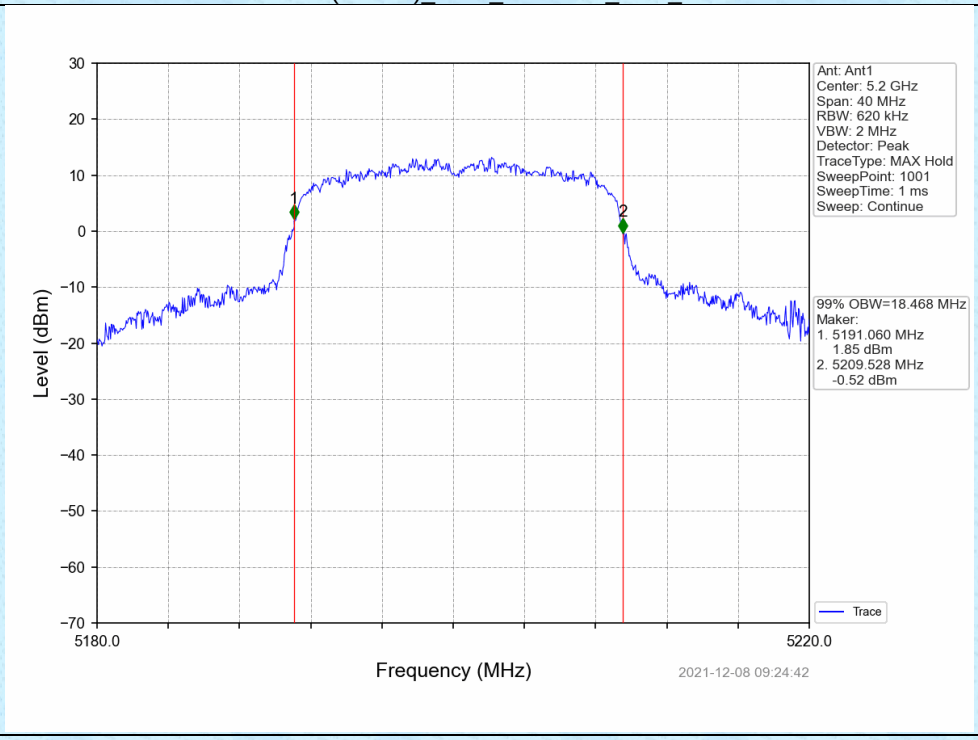
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



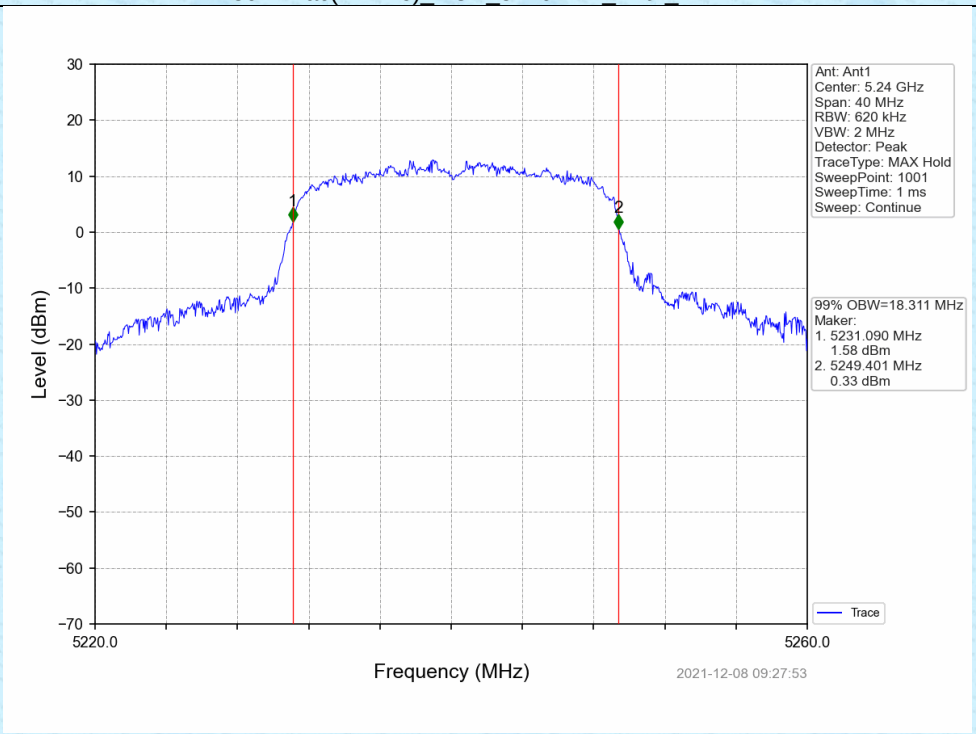
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



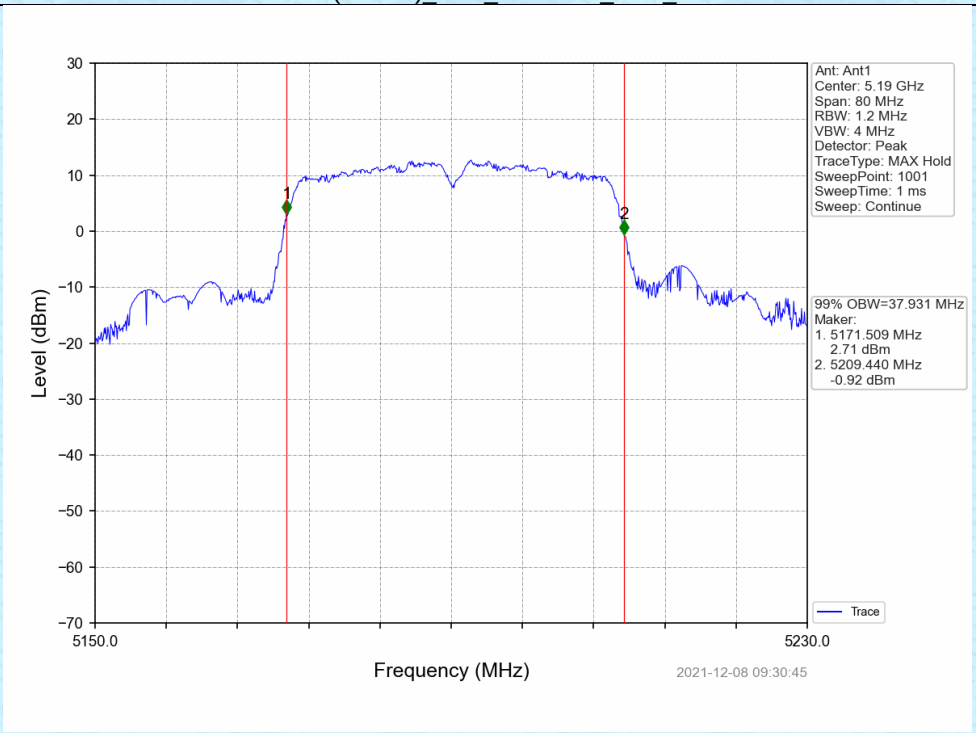
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



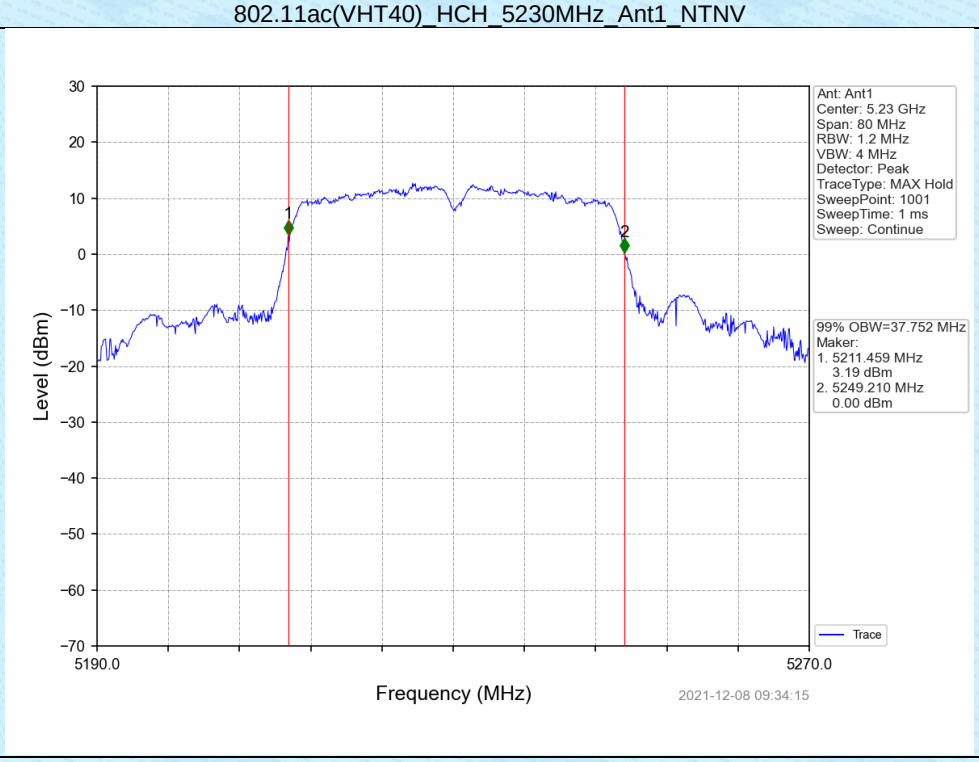
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



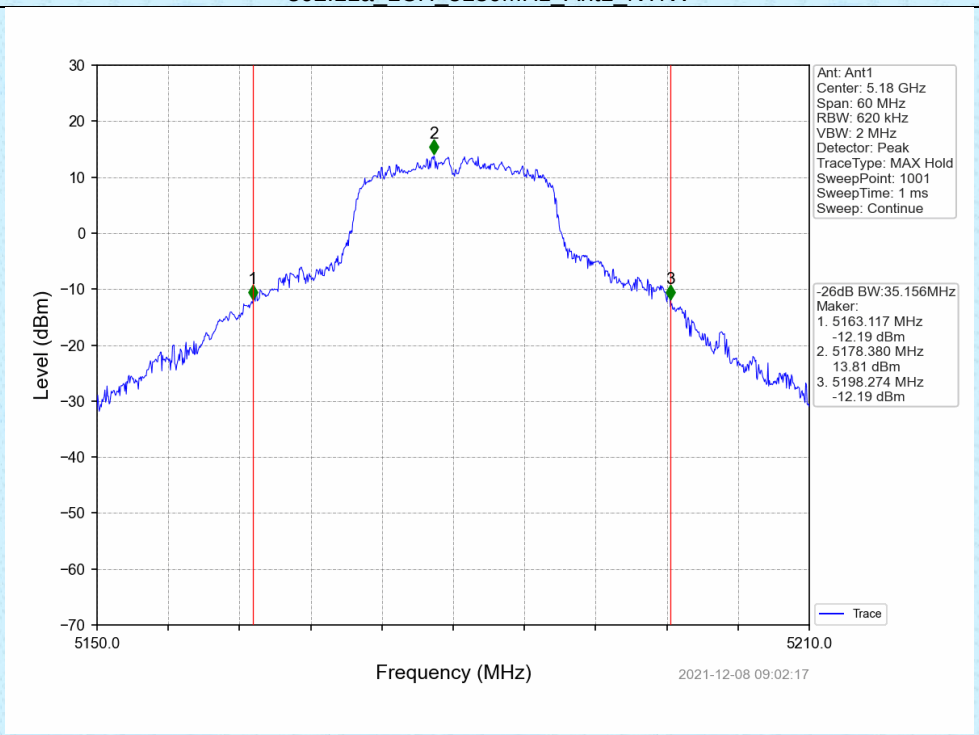
2.2 26dB BW

2.2.1 Test Result

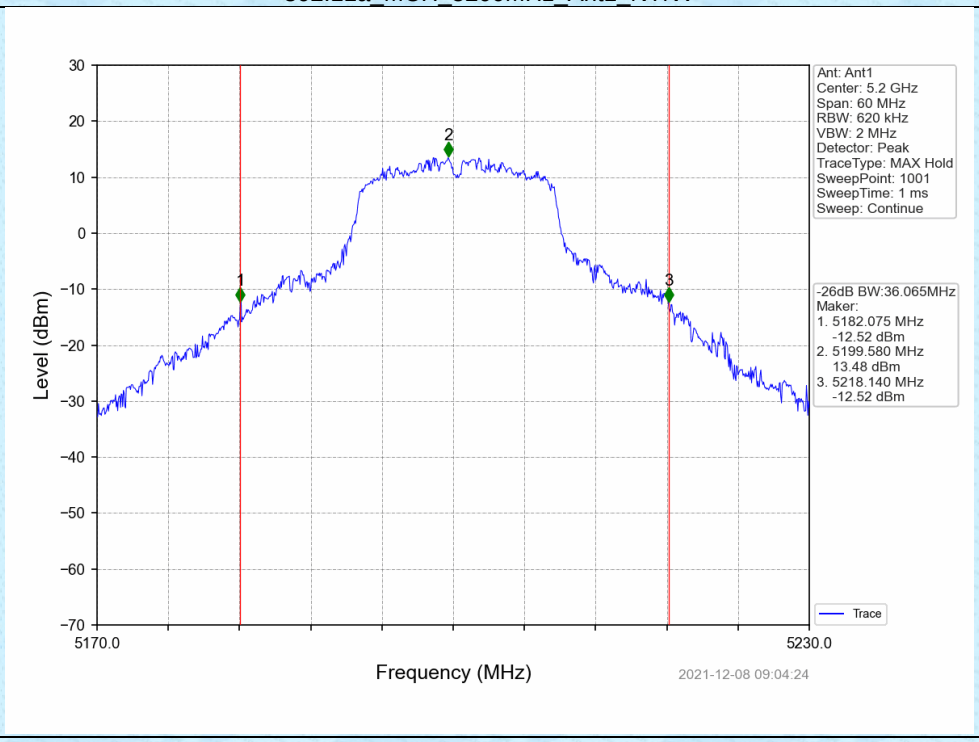
Mode	TX Type	Frequency (MHz)	Ant	26dB Bandwidth (MHz) Result	Verdict
802.11a	SISO	5180	1	35.156	Pass
		5200	1	36.065	Pass
		5240	1	35.100	Pass
802.11n (HT20)	SISO	5180	1	36.492	Pass
		5200	1	36.567	Pass
		5240	1	32.866	Pass
802.11n (HT40)	SISO	5190	1	83.223	Pass
		5230	1	76.324	Pass
802.11ac (VHT20)	SISO	5180	1	31.437	Pass
		5200	1	35.279	Pass
		5240	1	30.863	Pass
802.11ac (VHT40)	SISO	5190	1	73.536	Pass
		5230	1	72.232	Pass

2.2.2 Test Graph

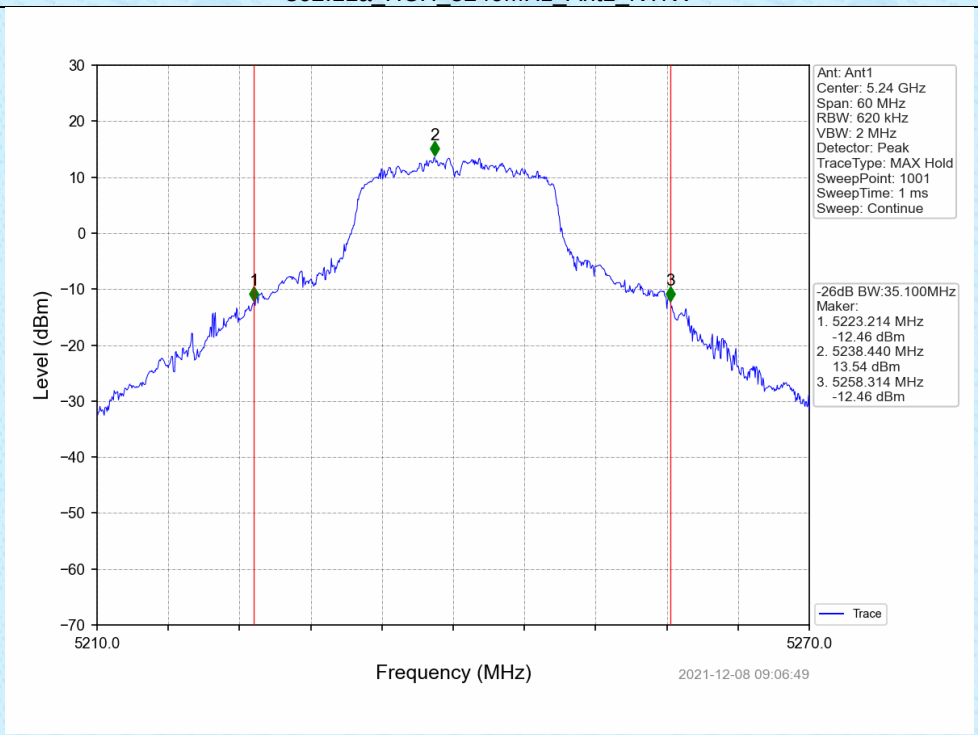
802.11a_LCH_5180MHz_Ant1_NTNV



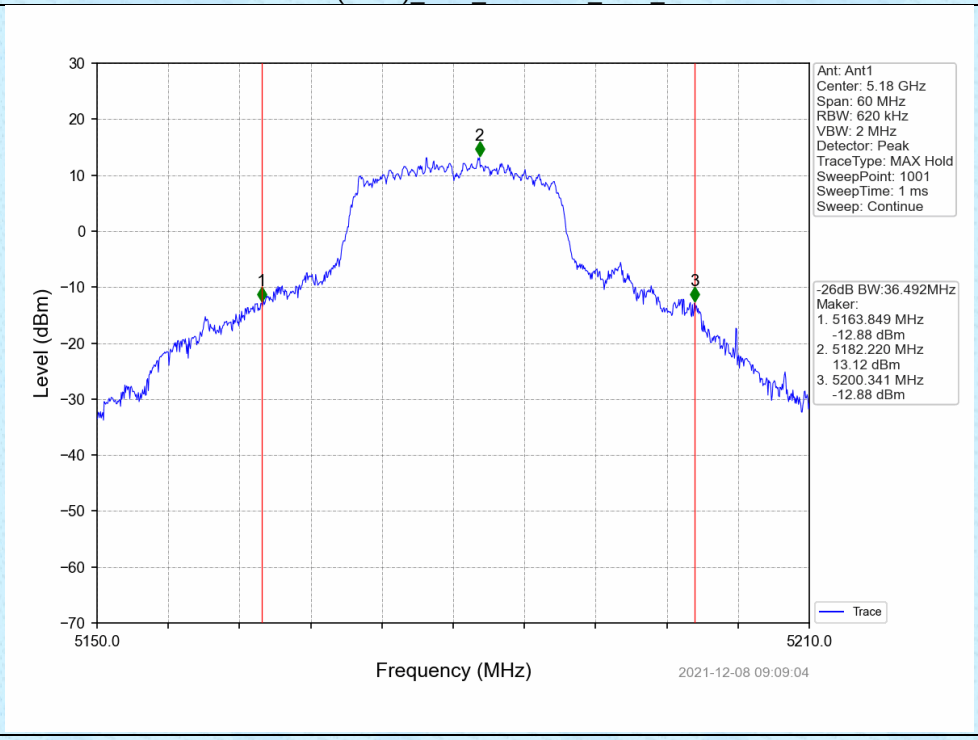
802.11a_MCH_5200MHz_Ant1_NTNV



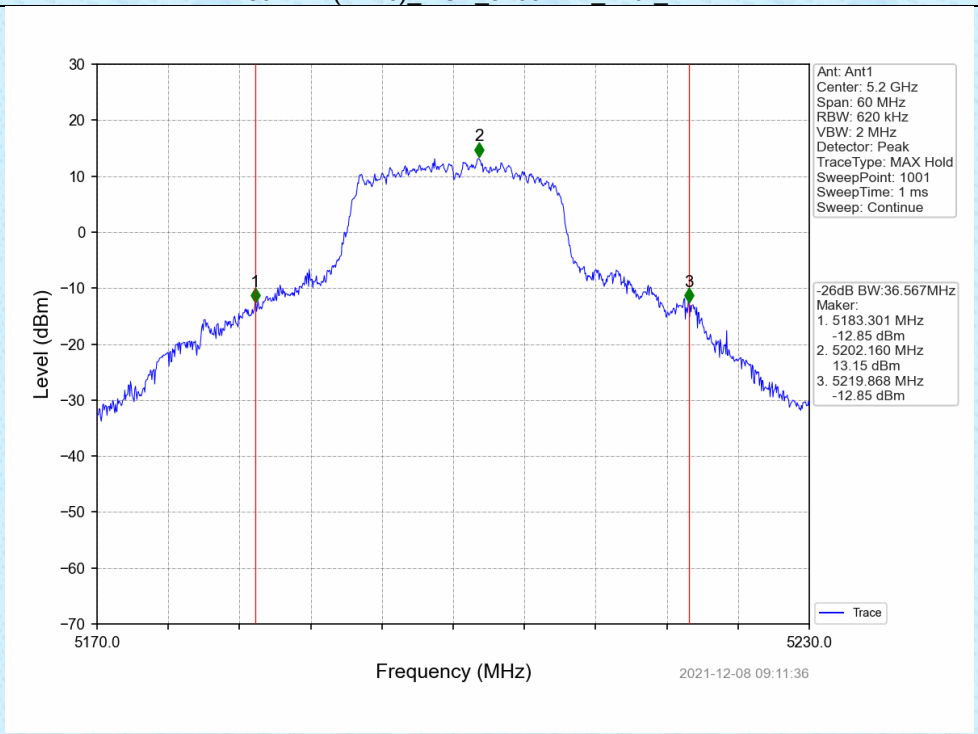
802.11a_HCH_5240MHz_Ant1_NTNV



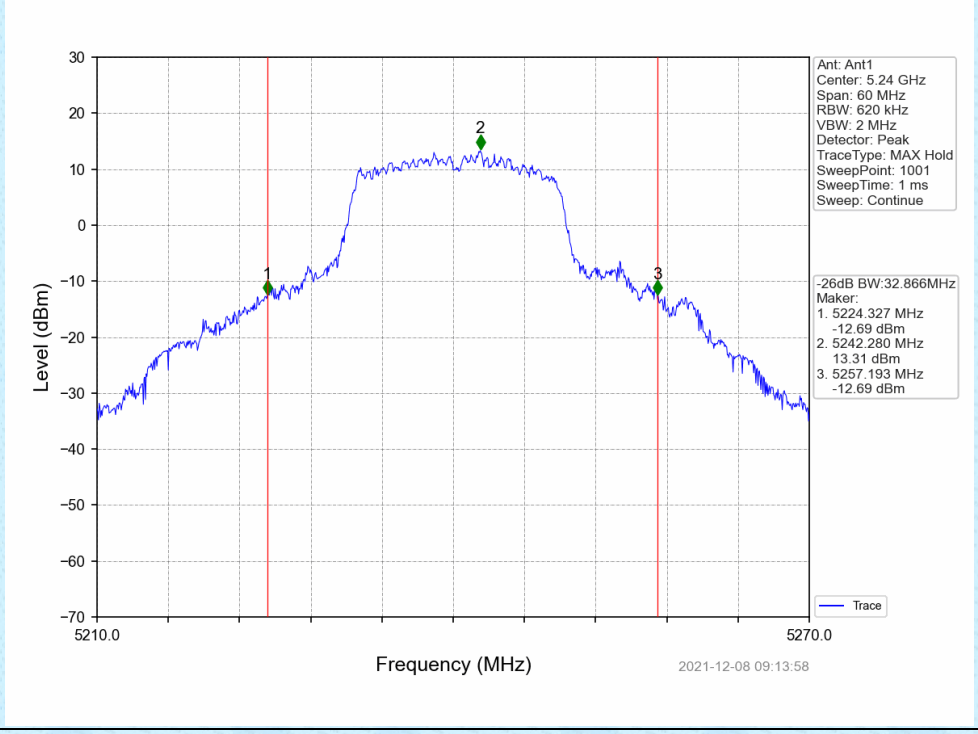
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



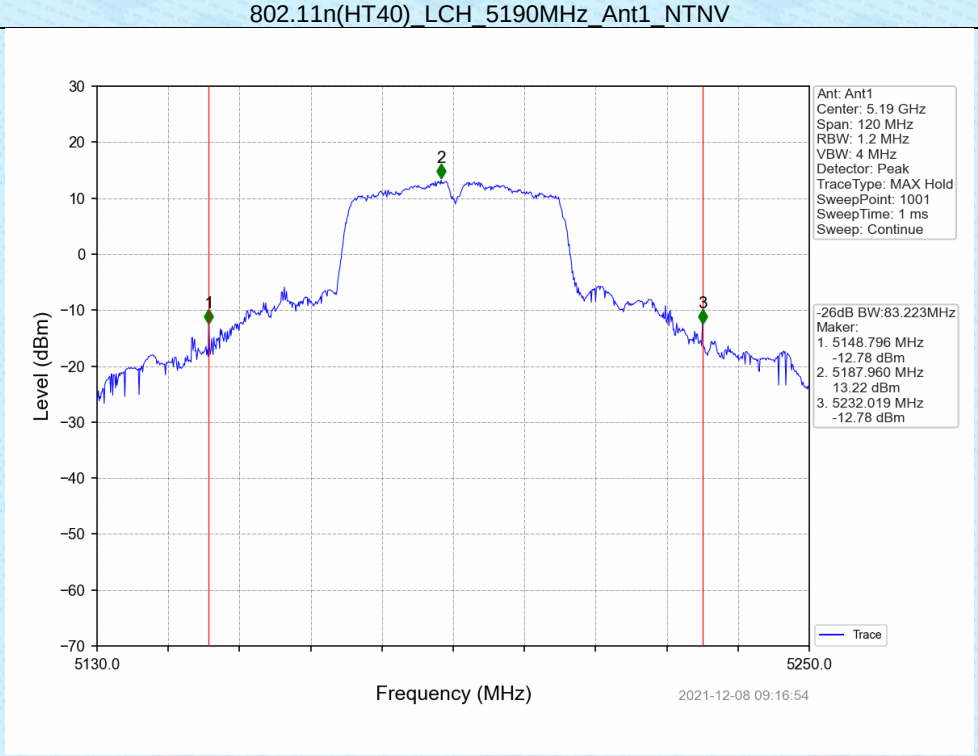
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



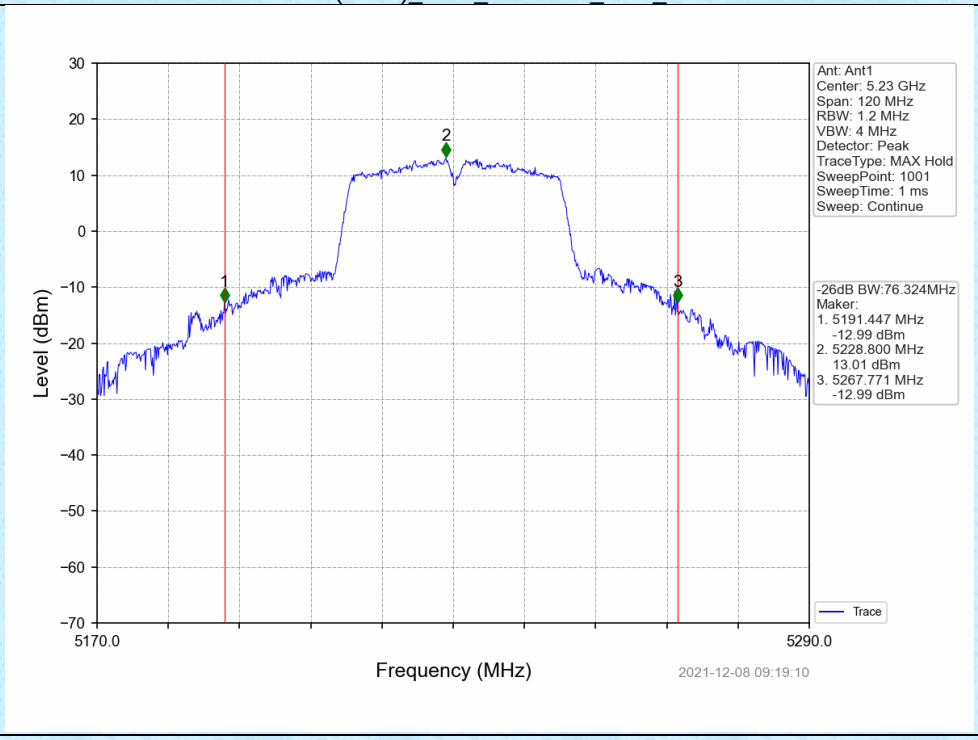
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



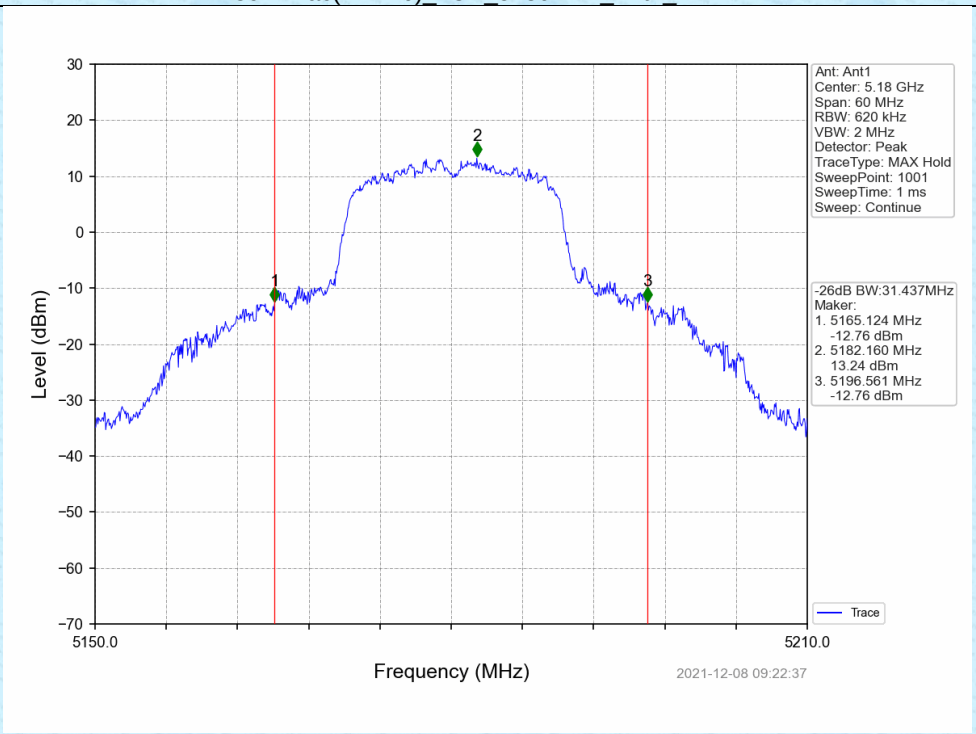
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



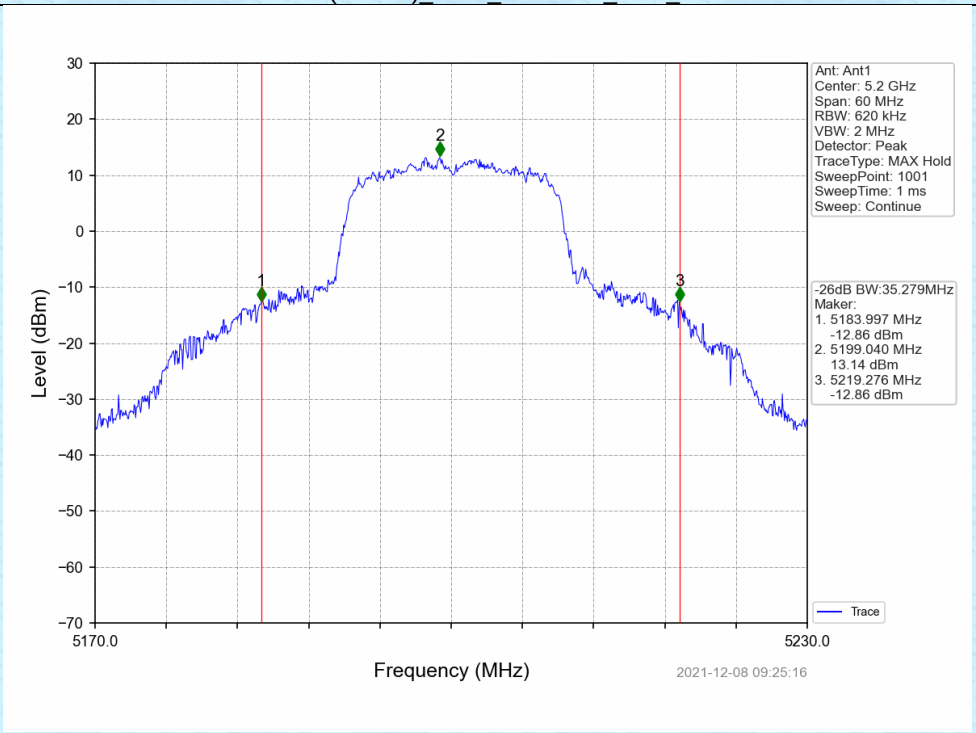
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



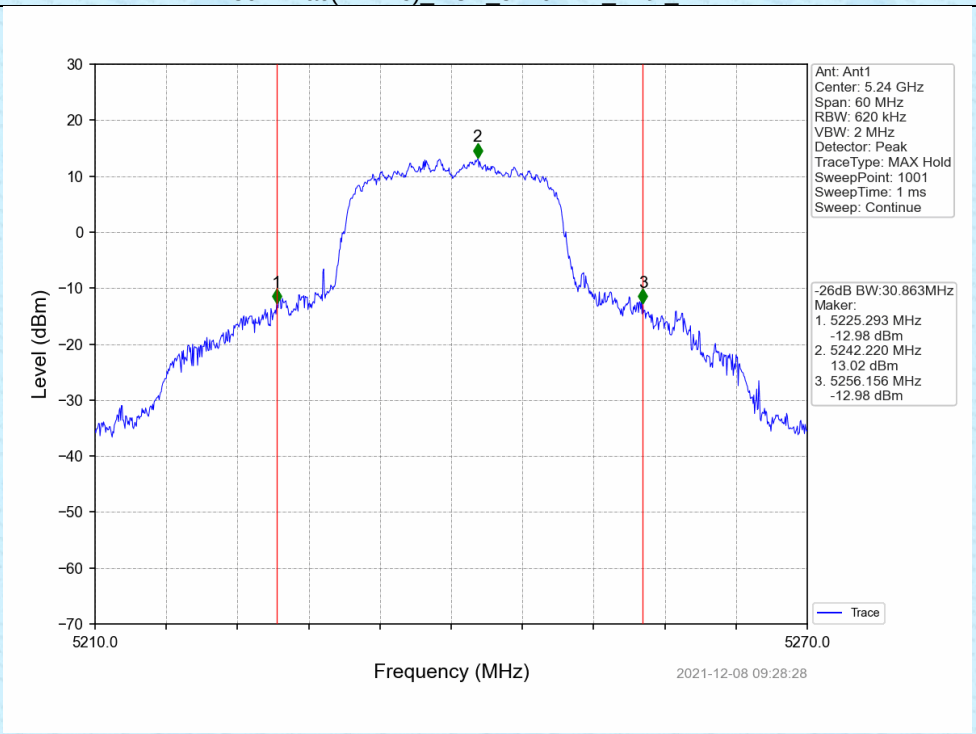
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



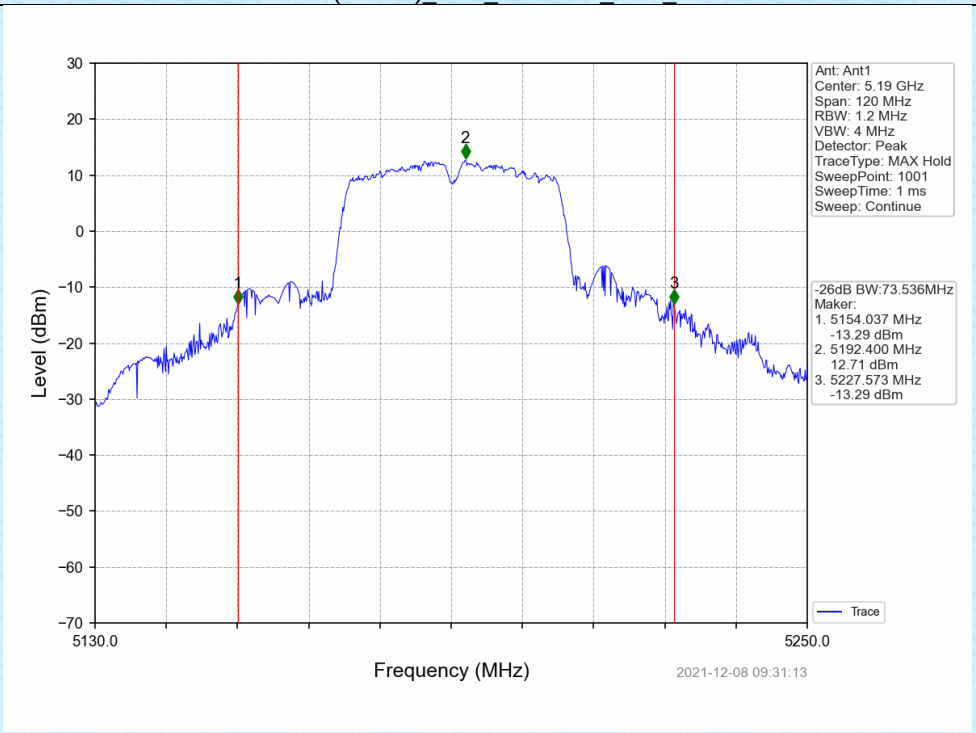
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



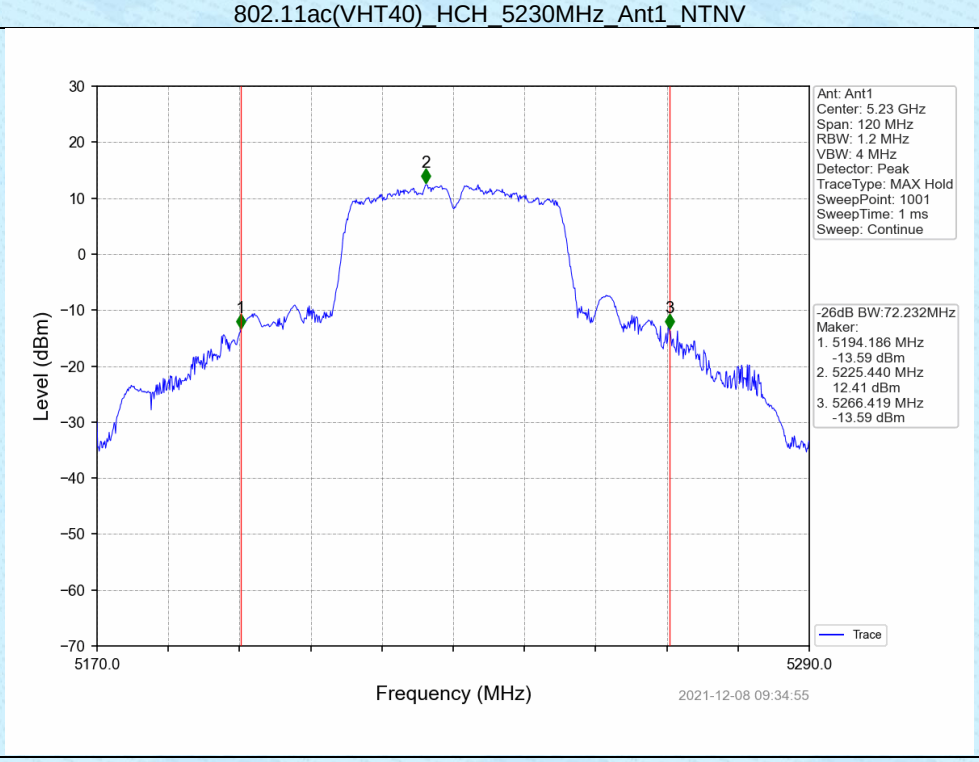
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



3. Maximum Conducted Output Power

3.1 Power

3.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			Ant1	Limit	
802.11a	SISO	5180	17.69	<=23.98	Pass
		5200	17.60	<=23.98	Pass
		5240	17.61	<=23.98	Pass
802.11n (HT20)	SISO	5180	16.55	<=23.98	Pass
		5200	16.78	<=23.98	Pass
		5240	16.66	<=23.98	Pass
802.11n (HT40)	SISO	5190	17.33	<=23.98	Pass
		5230	17.23	<=23.98	Pass
802.11ac (VHT20)	SISO	5180	16.69	<=23.98	Pass
		5200	16.42	<=23.98	Pass
		5240	16.51	<=23.98	Pass
802.11ac (VHT40)	SISO	5190	16.77	<=23.98	Pass
		5230	16.11	<=23.98	Pass
Note1: Antenna Gain: Ant1: 0.00dBi;					

4. Maximum Power Spectral Density

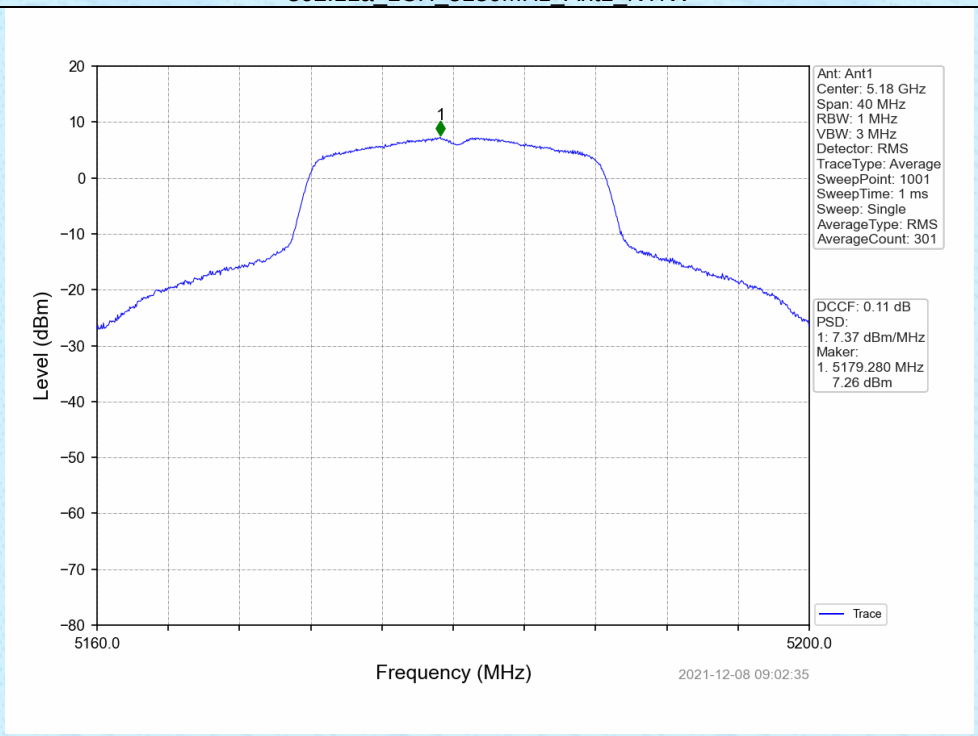
4.1 PSD

4.1.1 Test Result

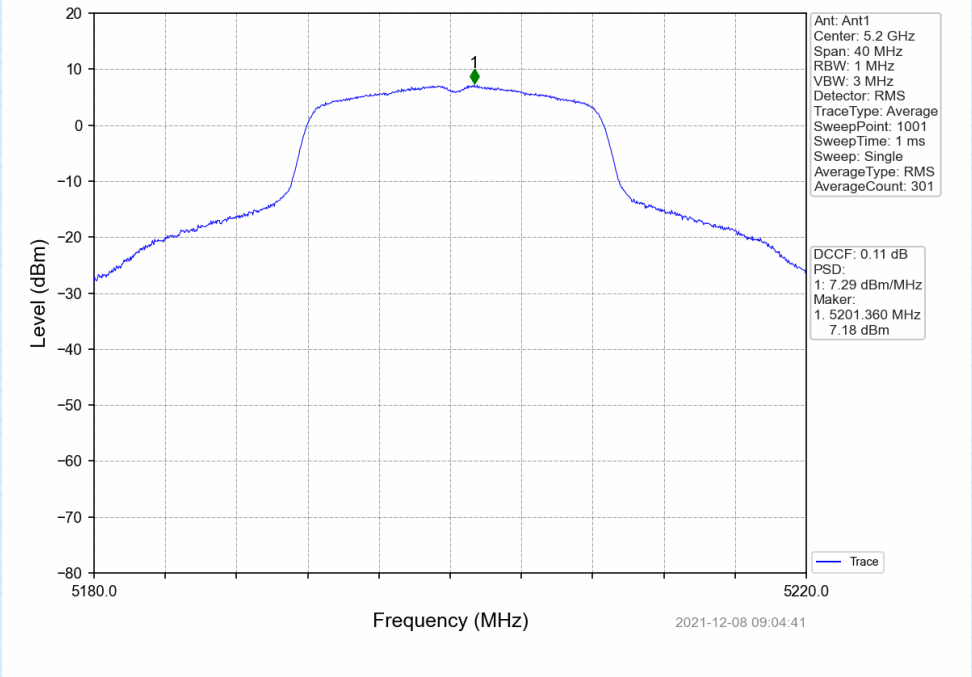
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			Ant1	Limit	
802.11a	SISO	5180	7.37	<=11	Pass
		5200	7.29	<=11	Pass
		5240	7.36	<=11	Pass
802.11n (HT20)	SISO	5180	6.17	<=11	Pass
		5200	6.22	<=11	Pass
		5240	6.26	<=11	Pass
802.11n (HT40)	SISO	5190	3.39	<=11	Pass
		5230	3.28	<=11	Pass
802.11ac (VHT20)	SISO	5180	6.29	<=11	Pass
		5200	5.93	<=11	Pass
		5240	6.08	<=11	Pass
802.11ac (VHT40)	SISO	5190	2.91	<=11	Pass
		5230	2.38	<=11	Pass
Note1: Antenna Gain: Ant1: 0.00dBi; Test result contains DCCF					

4.1.2 Test Graph

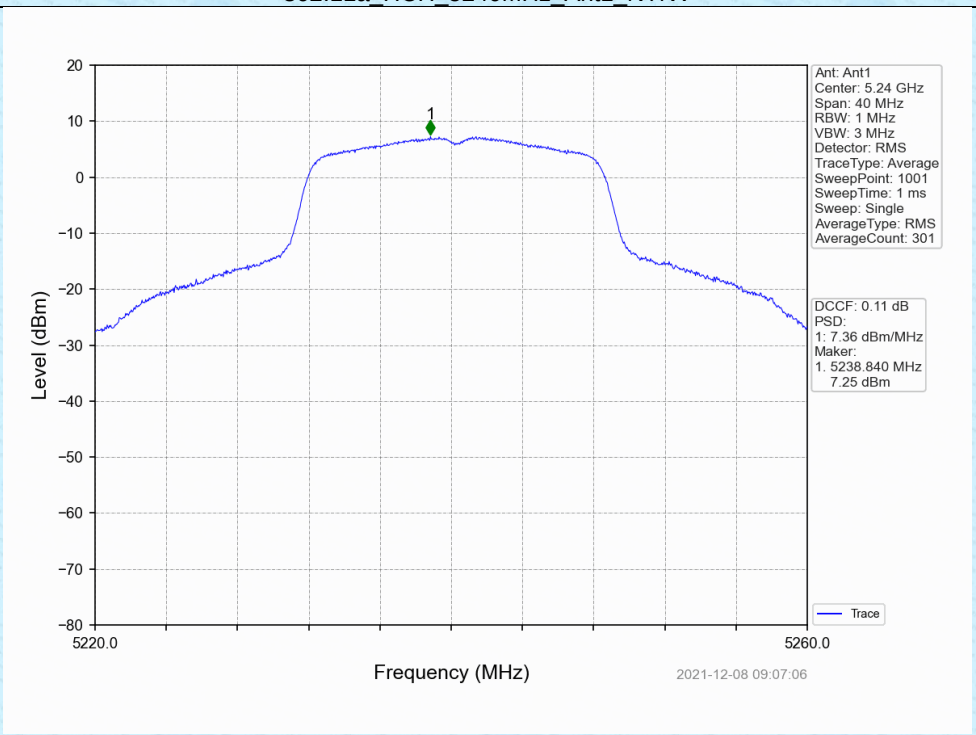
802.11a_LCH_5180MHz_Ant1_NTNV



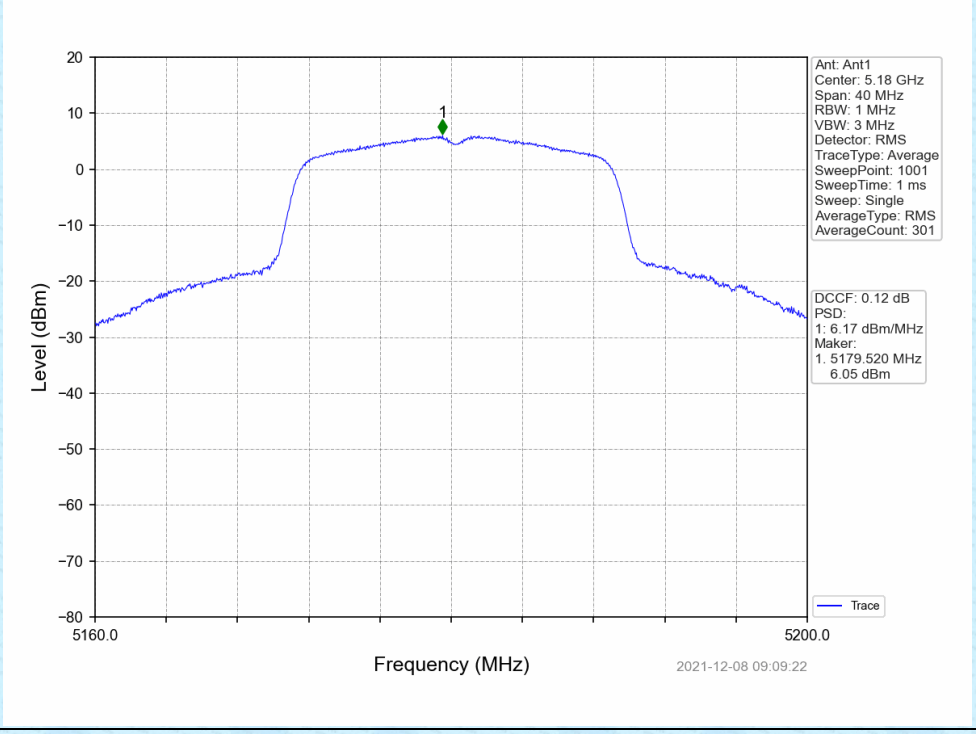
802.11a_MCH_5200MHz_Ant1_NTNV



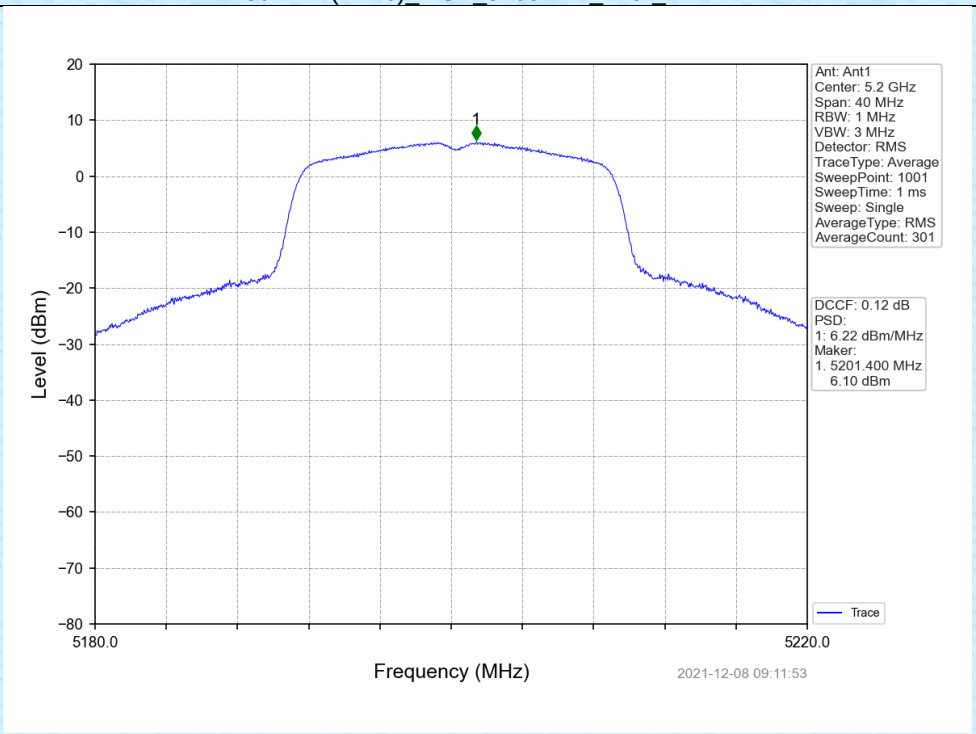
802.11a_HCH_5240MHz_Ant1_NTNV



802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



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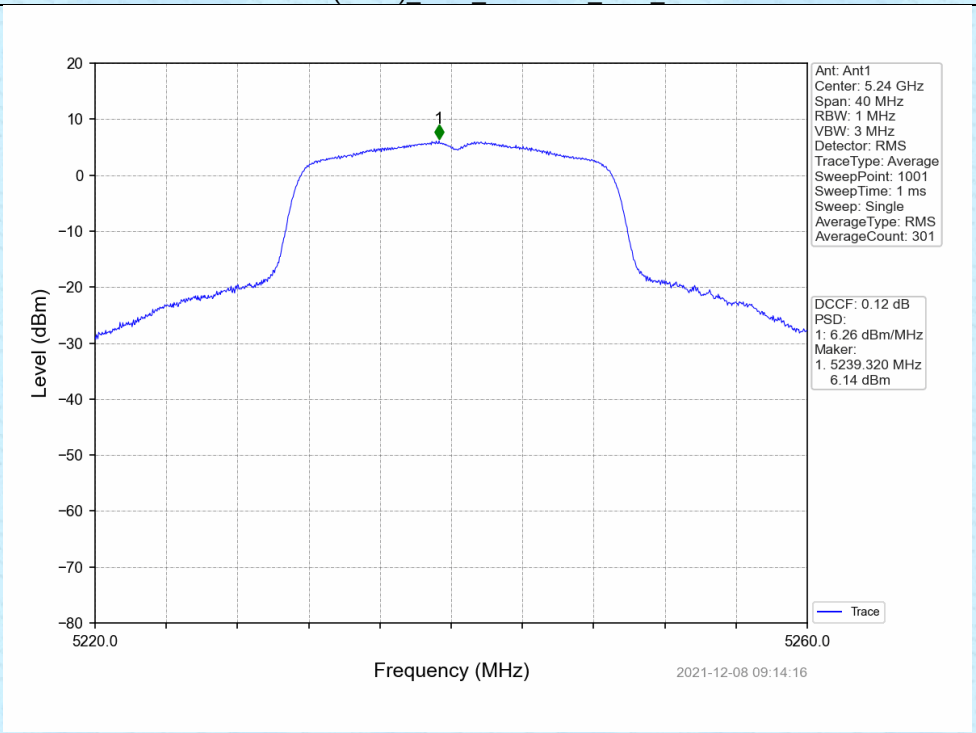
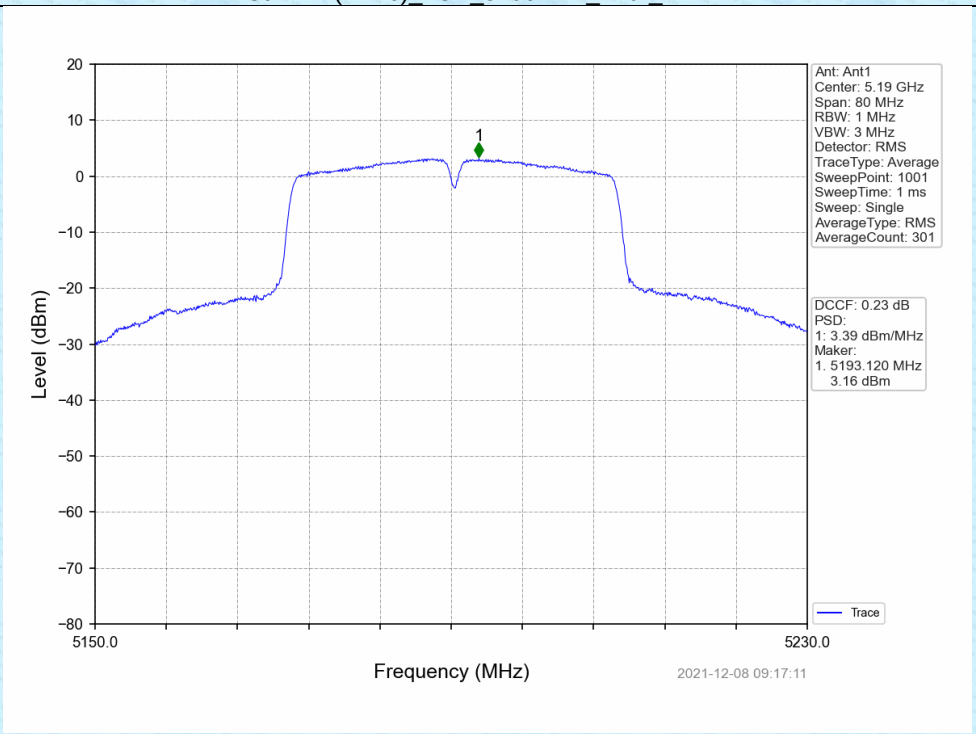
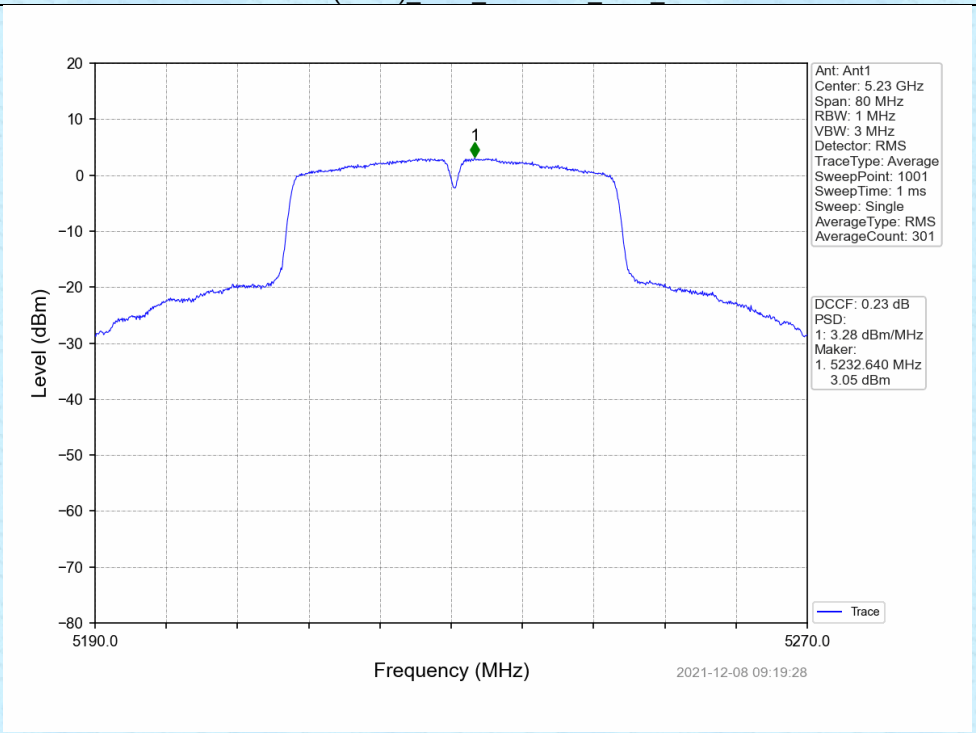


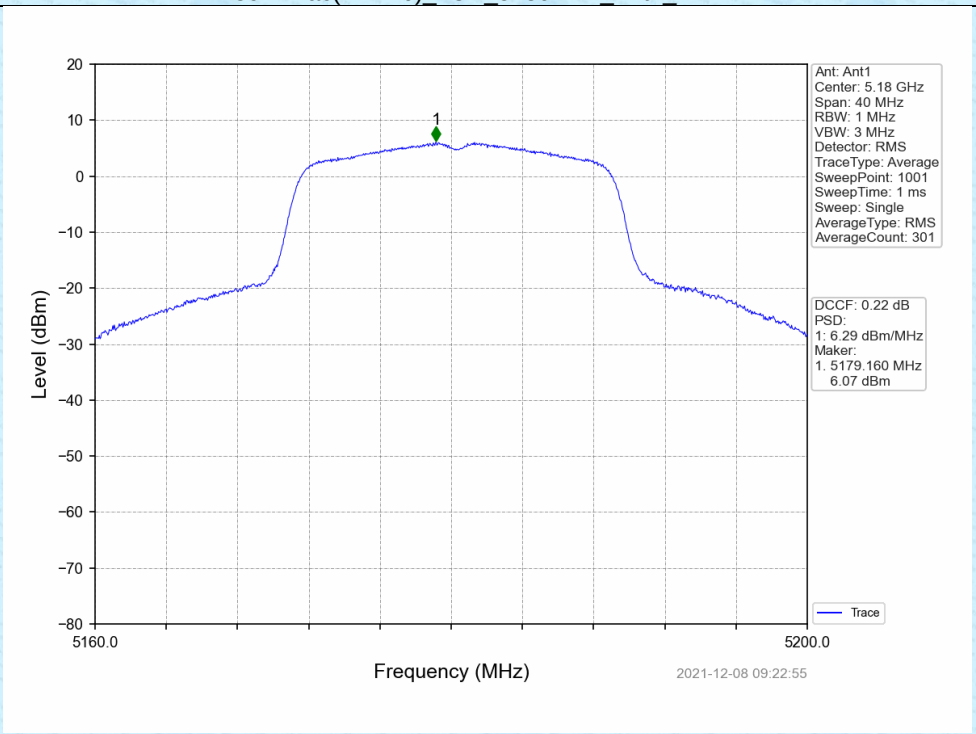
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



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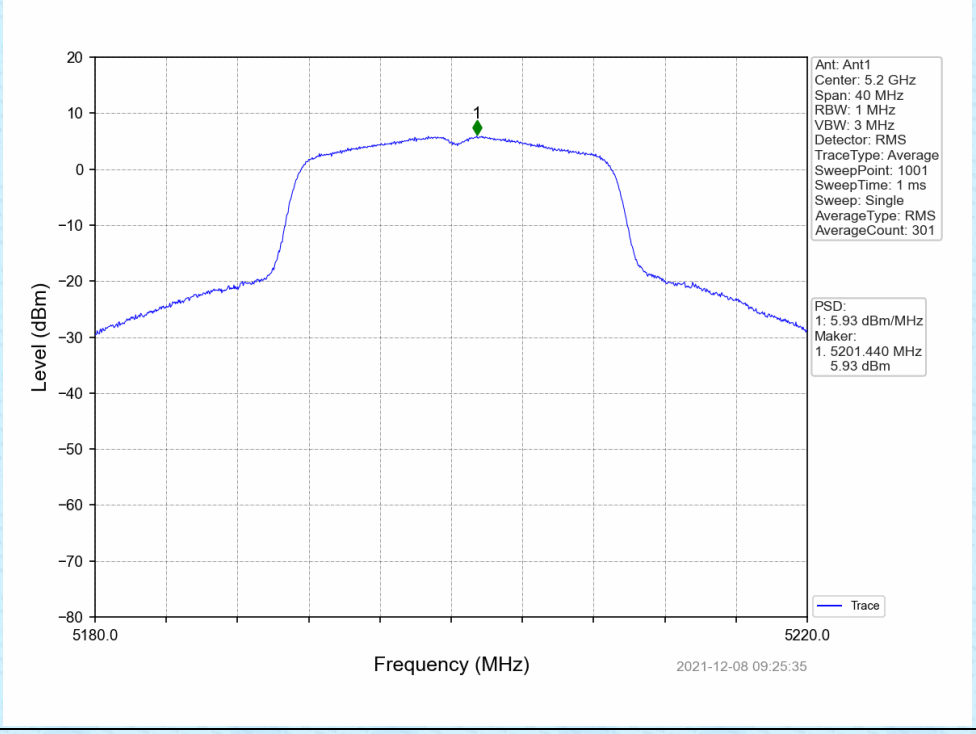

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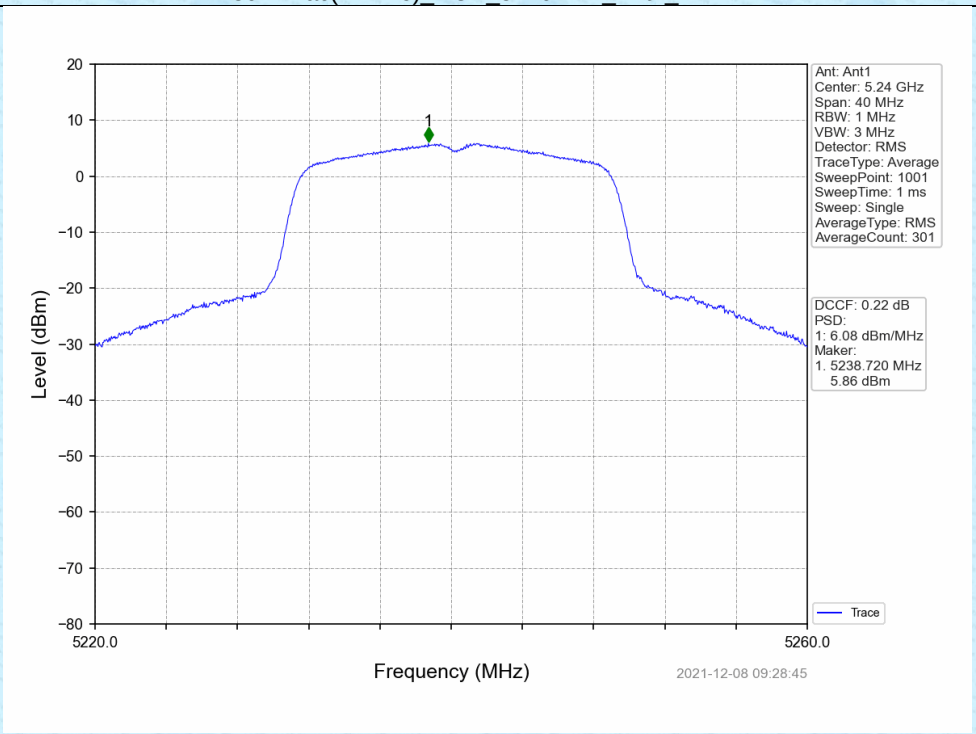

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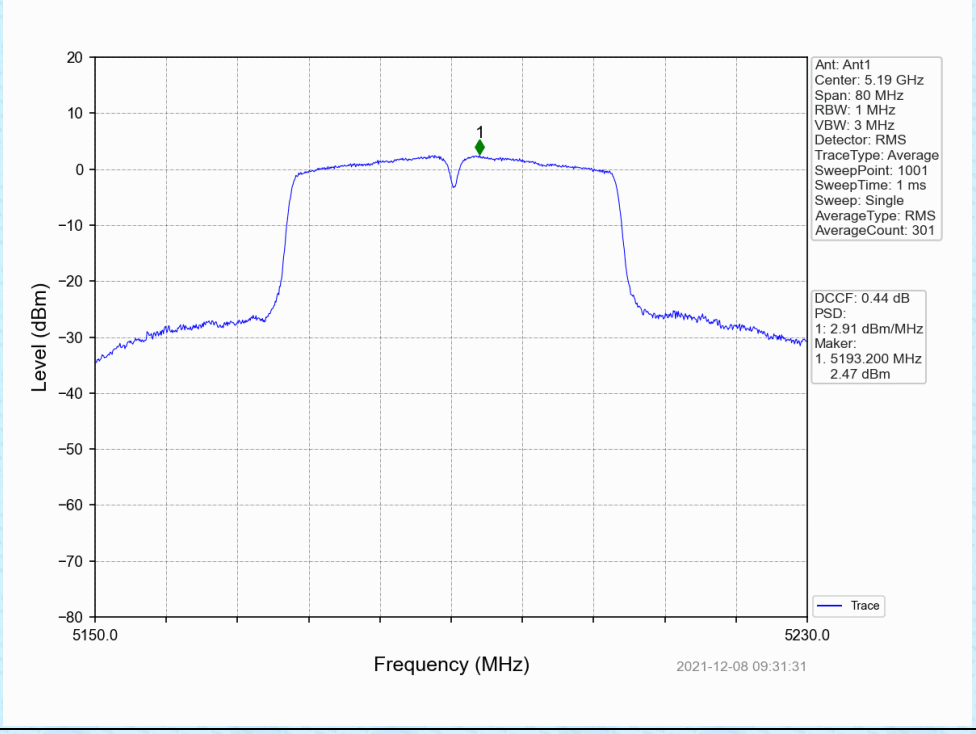
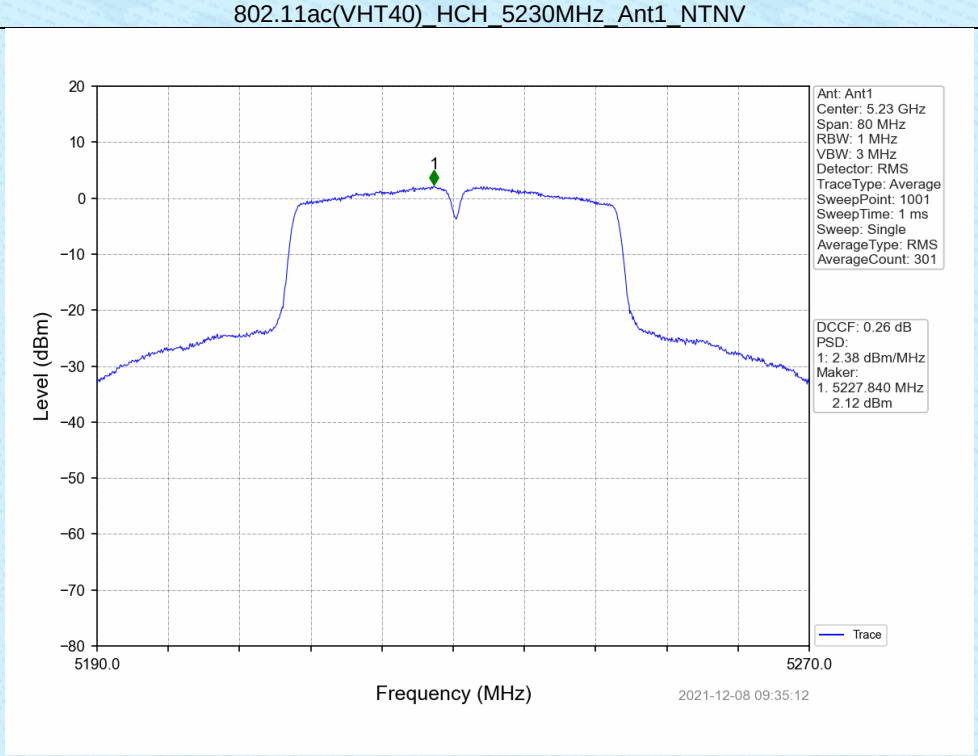


802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



5. Frequency Stability

5.1 Ant1

5.1.1 Test Result

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (Vdc)	Measured Frequency (MHz)	Limit (MHz)	Verdict
802.11a	SISO	5180	20	9	5180.220	5150 to 5250	Pass
				12	5180.260	5150 to 5250	Pass
				16	5180.280	5150 to 5250	Pass
			-30	12	5180.260	5150 to 5250	Pass
			-20	12	5180.300	5150 to 5250	Pass
			-10	12	5180.280	5150 to 5250	Pass
			0	12	5180.260	5150 to 5250	Pass
			10	12	5180.260	5150 to 5250	Pass
			30	12	5180.280	5150 to 5250	Pass
			40	12	5180.240	5150 to 5250	Pass
			50	12	5180.320	5150 to 5250	Pass
		5200	20	9	5200.300	5150 to 5250	Pass
				12	5200.320	5150 to 5250	Pass
				16	5200.300	5150 to 5250	Pass
			-30	12	5200.300	5150 to 5250	Pass
			-20	12	5200.300	5150 to 5250	Pass
			-10	12	5200.300	5150 to 5250	Pass
			0	12	5200.300	5150 to 5250	Pass
			10	12	5200.280	5150 to 5250	Pass
			30	12	5200.320	5150 to 5250	Pass
			40	12	5200.320	5150 to 5250	Pass
			50	12	5200.340	5150 to 5250	Pass
		5240	20	9	5240.340	5150 to 5250	Pass
				12	5240.320	5150 to 5250	Pass
				16	5240.320	5150 to 5250	Pass
			-30	12	5240.320	5150 to 5250	Pass
			-20	12	5240.320	5150 to 5250	Pass
			-10	12	5240.320	5150 to 5250	Pass
			0	12	5240.300	5150 to 5250	Pass
			10	12	5240.300	5150 to 5250	Pass
			30	12	5240.320	5150 to 5250	Pass
			40	12	5240.320	5150 to 5250	Pass
			50	12	5240.320	5150 to 5250	Pass
802.11n (HT20)	SISO	5180	20	9	5180.300	5150 to 5250	Pass
				12	5180.300	5150 to 5250	Pass
				16	5180.300	5150 to 5250	Pass
			-30	12	5180.300	5150 to 5250	Pass
			-20	12	5180.300	5150 to 5250	Pass
			-10	12	5180.280	5150 to 5250	Pass
			0	12	5180.300	5150 to 5250	Pass
			10	12	5180.300	5150 to 5250	Pass
			30	12	5180.300	5150 to 5250	Pass
			40	12	5180.300	5150 to 5250	Pass
			50	12	5180.280	5150 to 5250	Pass
		5200	20	9	5200.300	5150 to 5250	Pass

				12	5200.320	5150 to 5250	Pass
				16	5200.320	5150 to 5250	Pass
			-30	12	5200.320	5150 to 5250	Pass
			-20	12	5200.320	5150 to 5250	Pass
			-10	12	5200.300	5150 to 5250	Pass
			0	12	5200.320	5150 to 5250	Pass
			10	12	5200.340	5150 to 5250	Pass
			30	12	5200.320	5150 to 5250	Pass
			40	12	5200.280	5150 to 5250	Pass
			50	12	5200.320	5150 to 5250	Pass
		5240	20	9	5240.300	5150 to 5250	Pass
				12	5240.300	5150 to 5250	Pass
				16	5240.300	5150 to 5250	Pass
			-30	12	5240.340	5150 to 5250	Pass
			-20	12	5240.320	5150 to 5250	Pass
			-10	12	5240.300	5150 to 5250	Pass
			0	12	5240.300	5150 to 5250	Pass
			10	12	5240.320	5150 to 5250	Pass
			30	12	5240.300	5150 to 5250	Pass
			40	12	5240.280	5150 to 5250	Pass
			50	12	5240.300	5150 to 5250	Pass
802.11n (HT40)	SISO	5190	20	9	5190.360	5150 to 5250	Pass
				12	5190.360	5150 to 5250	Pass
				16	5190.400	5150 to 5250	Pass
			-30	12	5190.400	5150 to 5250	Pass
			-20	12	5190.400	5150 to 5250	Pass
			-10	12	5190.360	5150 to 5250	Pass
			0	12	5190.400	5150 to 5250	Pass
			10	12	5190.360	5150 to 5250	Pass
			30	12	5190.400	5150 to 5250	Pass
			40	12	5190.400	5150 to 5250	Pass
			50	12	5190.400	5150 to 5250	Pass
		5230	20	9	5230.360	5150 to 5250	Pass
				12	5230.360	5150 to 5250	Pass
				16	5230.360	5150 to 5250	Pass
			-30	12	5230.360	5150 to 5250	Pass
			-20	12	5230.320	5150 to 5250	Pass
			-10	12	5230.360	5150 to 5250	Pass
			0	12	5230.360	5150 to 5250	Pass
			10	12	5230.320	5150 to 5250	Pass
			30	12	5230.360	5150 to 5250	Pass
			40	12	5230.360	5150 to 5250	Pass
			50	12	5230.360	5150 to 5250	Pass
802.11ac (VHT20)	SISO	5180	20	9	5180.280	5150 to 5250	Pass
				12	5180.240	5150 to 5250	Pass
				16	5180.280	5150 to 5250	Pass
			-30	12	5180.300	5150 to 5250	Pass
			-20	12	5180.300	5150 to 5250	Pass
			-10	12	5180.280	5150 to 5250	Pass
			0	12	5180.300	5150 to 5250	Pass
			10	12	5180.300	5150 to 5250	Pass
			30	12	5180.300	5150 to 5250	Pass
			40	12	5180.320	5150 to 5250	Pass
			50	12	5180.280	5150 to 5250	Pass
		5200	20	9	5200.280	5150 to 5250	Pass
				12	5200.280	5150 to 5250	Pass
				16	5200.260	5150 to 5250	Pass

			-30	12	5200.220	5150 to 5250	Pass
			-20	12	5200.300	5150 to 5250	Pass
			-10	12	5200.300	5150 to 5250	Pass
			0	12	5200.240	5150 to 5250	Pass
			10	12	5200.300	5150 to 5250	Pass
			30	12	5200.280	5150 to 5250	Pass
			40	12	5200.300	5150 to 5250	Pass
			50	12	5200.240	5150 to 5250	Pass
		5240	20	9	5240.280	5150 to 5250	Pass
				12	5240.300	5150 to 5250	Pass
				16	5240.260	5150 to 5250	Pass
			-30	12	5240.280	5150 to 5250	Pass
			-20	12	5240.280	5150 to 5250	Pass
			-10	12	5240.240	5150 to 5250	Pass
			0	12	5240.260	5150 to 5250	Pass
			10	12	5240.280	5150 to 5250	Pass
			30	12	5240.240	5150 to 5250	Pass
			40	12	5240.280	5150 to 5250	Pass
			50	12	5240.280	5150 to 5250	Pass
802.11ac (VHT40)	SISO	5190	20	9	5190.280	5150 to 5250	Pass
				12	5190.360	5150 to 5250	Pass
				16	5190.320	5150 to 5250	Pass
			-30	12	5190.320	5150 to 5250	Pass
			-20	12	5190.320	5150 to 5250	Pass
			-10	12	5190.320	5150 to 5250	Pass
			0	12	5190.360	5150 to 5250	Pass
			10	12	5190.320	5150 to 5250	Pass
			30	12	5190.320	5150 to 5250	Pass
			40	12	5190.360	5150 to 5250	Pass
			50	12	5190.360	5150 to 5250	Pass
		5230	20	9	5230.280	5150 to 5250	Pass
				12	5230.280	5150 to 5250	Pass
				16	5230.280	5150 to 5250	Pass
			-30	12	5230.280	5150 to 5250	Pass
			-20	12	5230.280	5150 to 5250	Pass
			-10	12	5230.240	5150 to 5250	Pass
			0	12	5230.280	5150 to 5250	Pass
			10	12	5230.280	5150 to 5250	Pass
			30	12	5230.280	5150 to 5250	Pass
			40	12	5230.280	5150 to 5250	Pass
			50	12	5230.280	5150 to 5250	Pass

------End------