1. Bandwidth

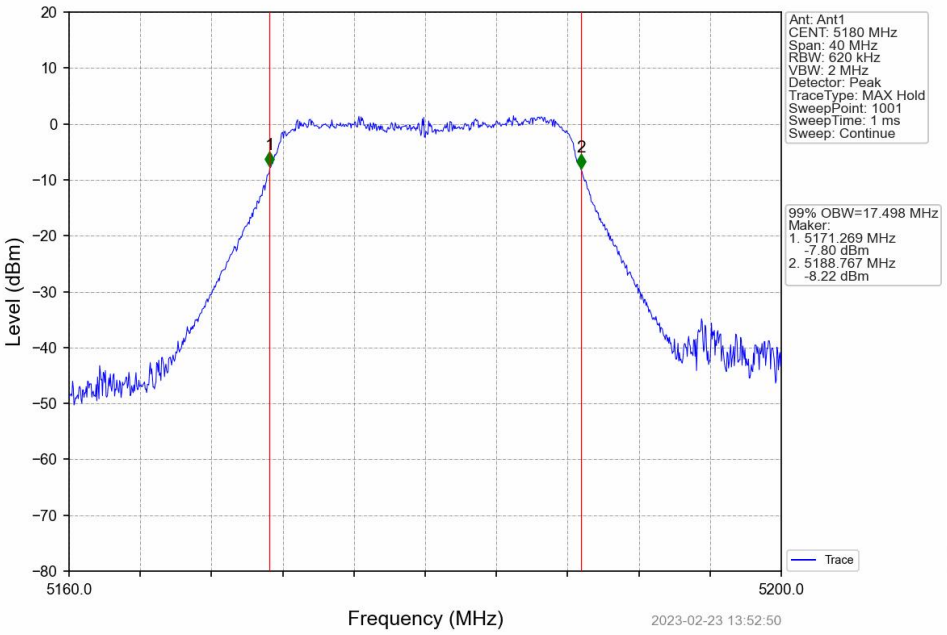
1.1 OBW

1.1.1 Test Result

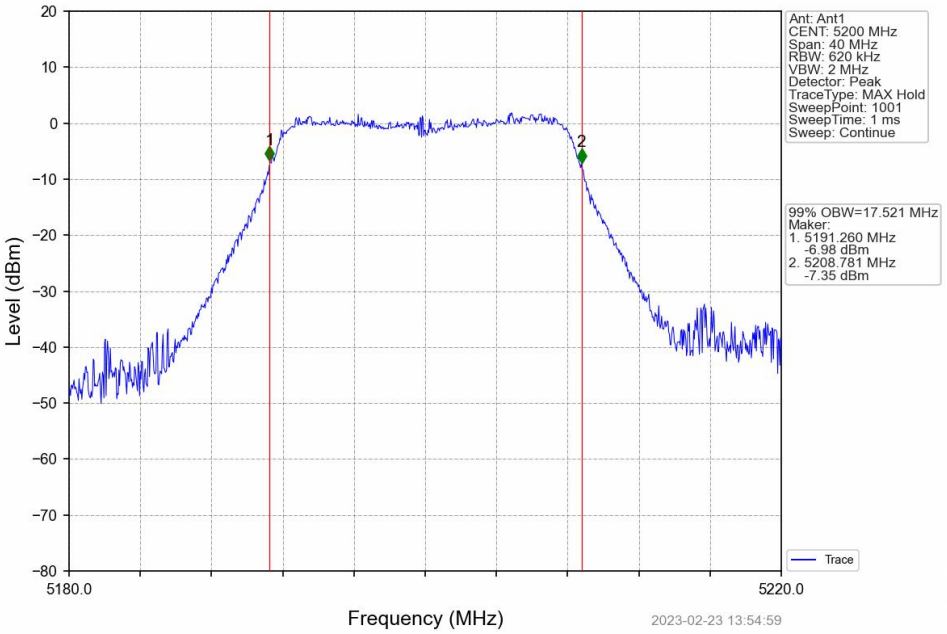
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz) Result	Verdict
802.11a	SISO	5180	1	17.498	Pass
		5200	1	17.521	Pass
		5240	1	17.560	Pass
802.11n (HT20)	SISO	5180	1	18.449	Pass
		5200	1	18.483	Pass
		5240	1	18.505	Pass
802.11n (HT40)	SISO	5190	1	36.929	Pass
		5230	1	36.951	Pass
802.11ac (VHT20)	SISO	5180	1	18.360	Pass
		5200	1	18.438	Pass
		5240	1	18.431	Pass
802.11ac (VHT40)	SISO	5190	1	37.037	Pass
		5230	1	37.153	Pass
802.11ac (VHT80)	SISO	5210	1	76.482	Pass

2.1.2 Test Graph

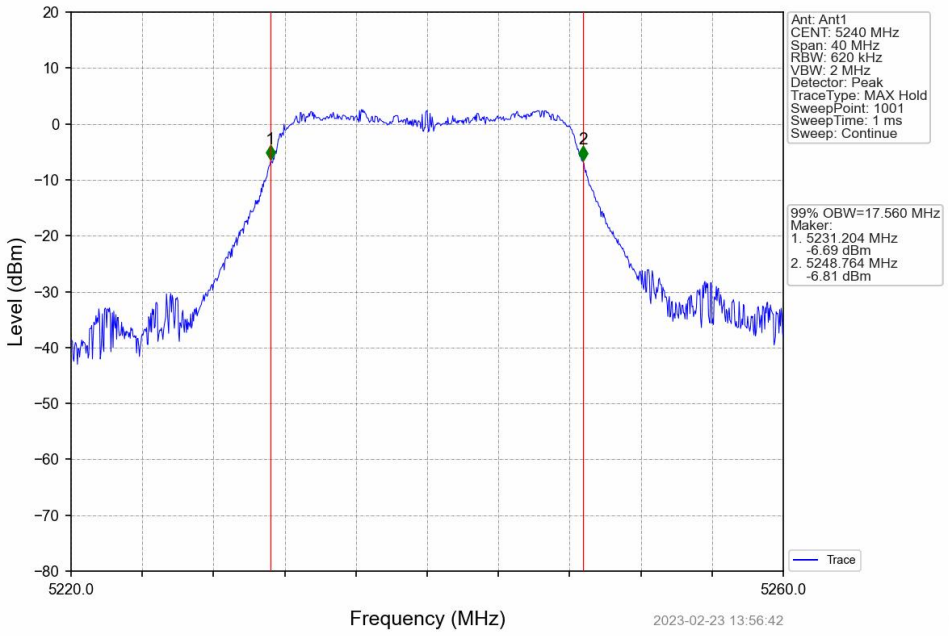
802.11a_LCH_5180MHz_Ant1_NTNV



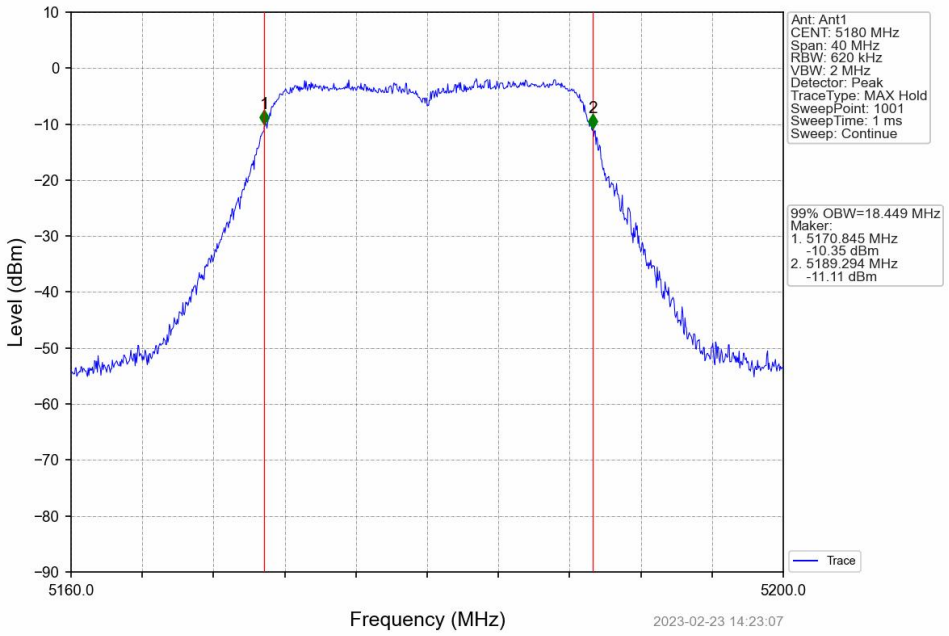
802.11a_MCH_5200MHz_Ant1_NTNV



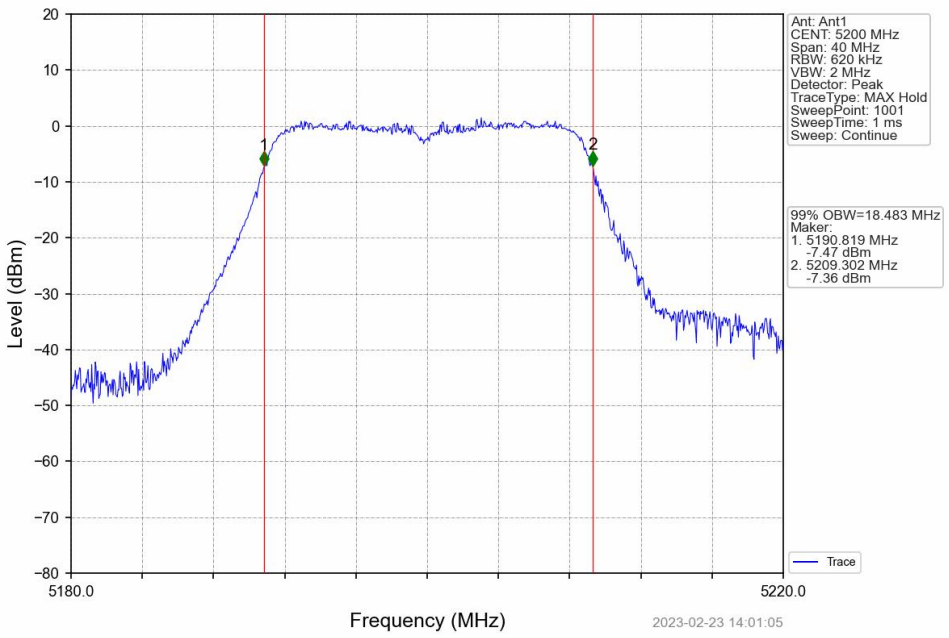
802.11a_HCH_5240MHz_Ant1_NTNV



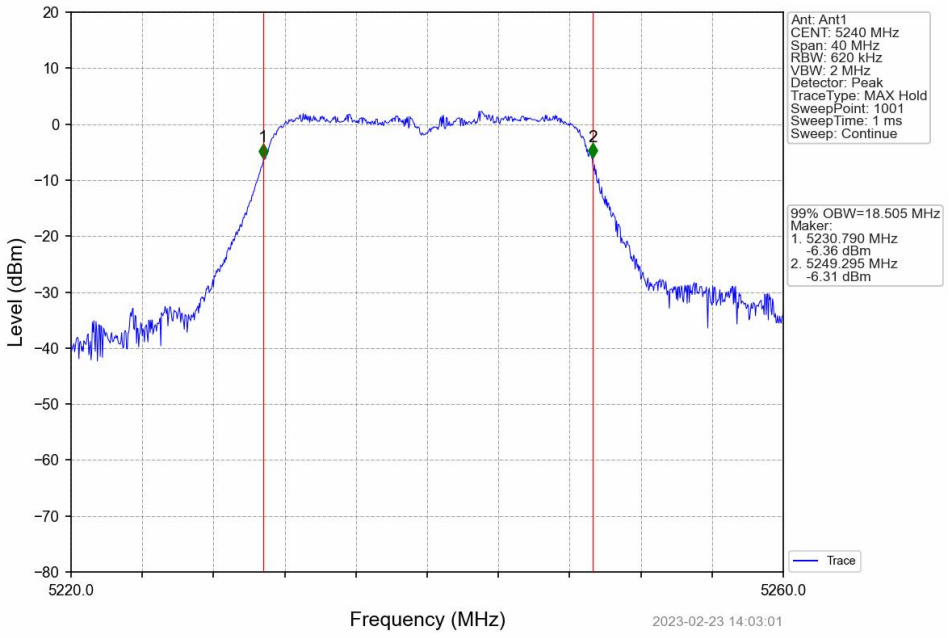
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



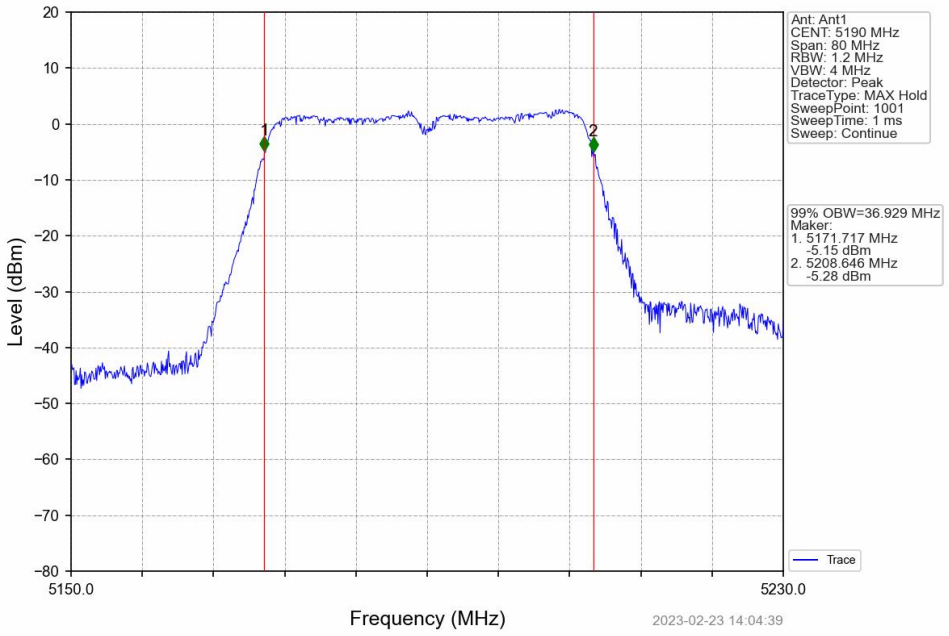
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



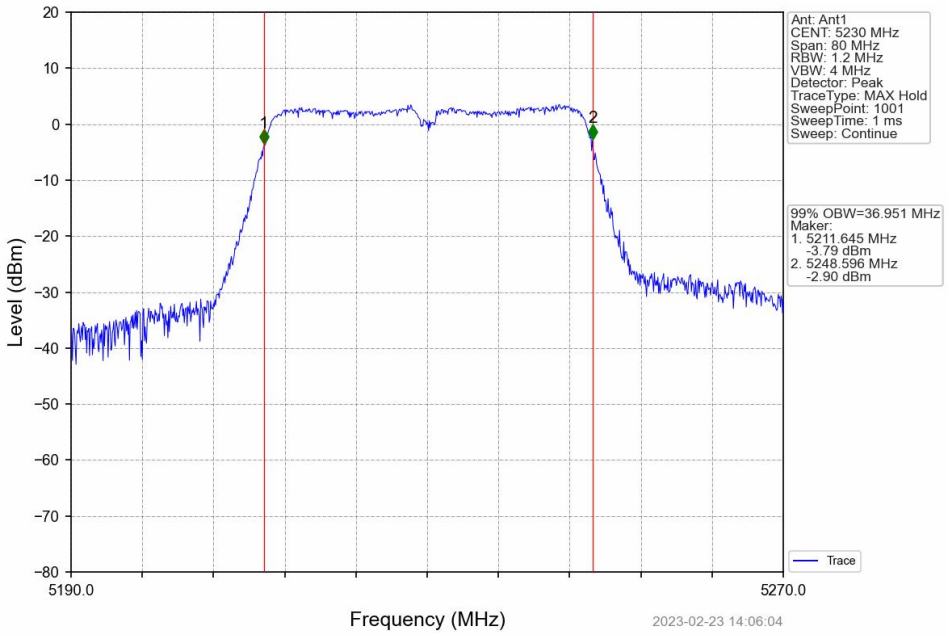
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



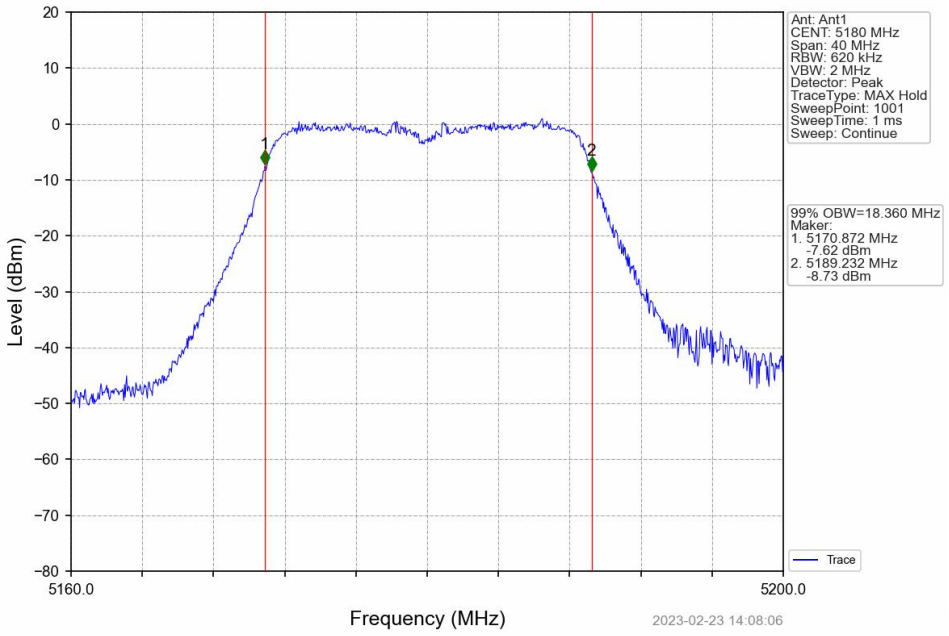
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



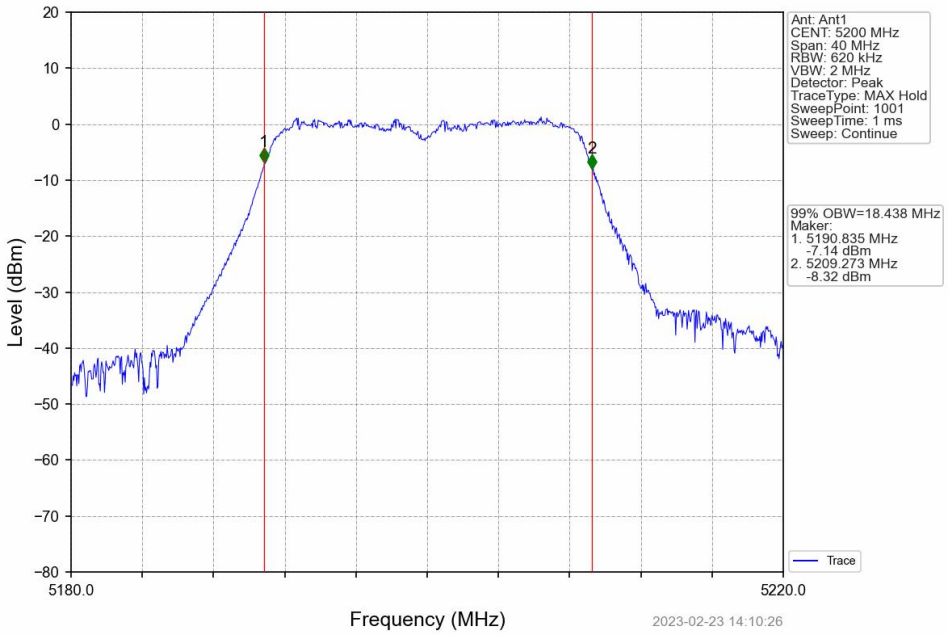
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



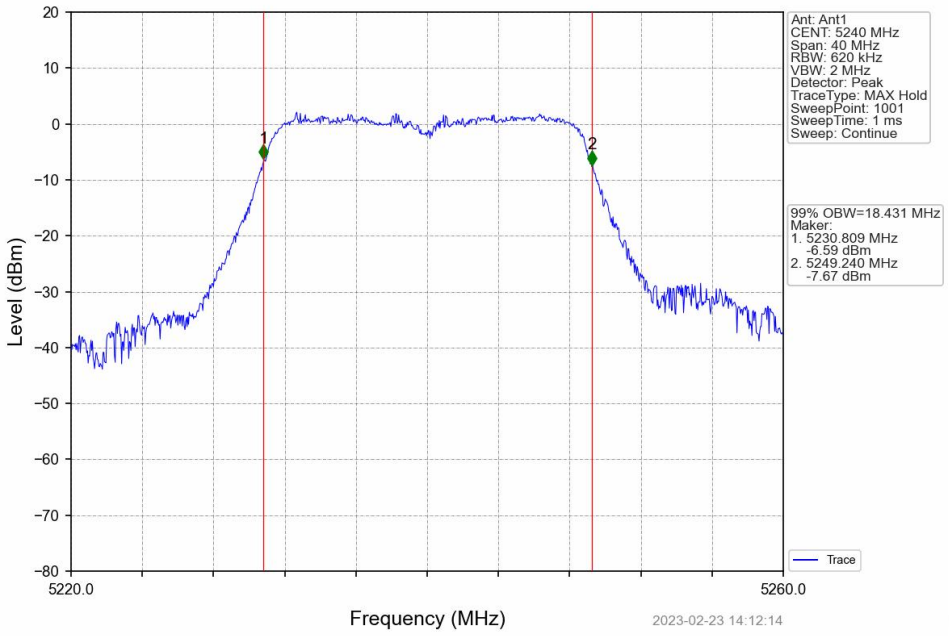
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



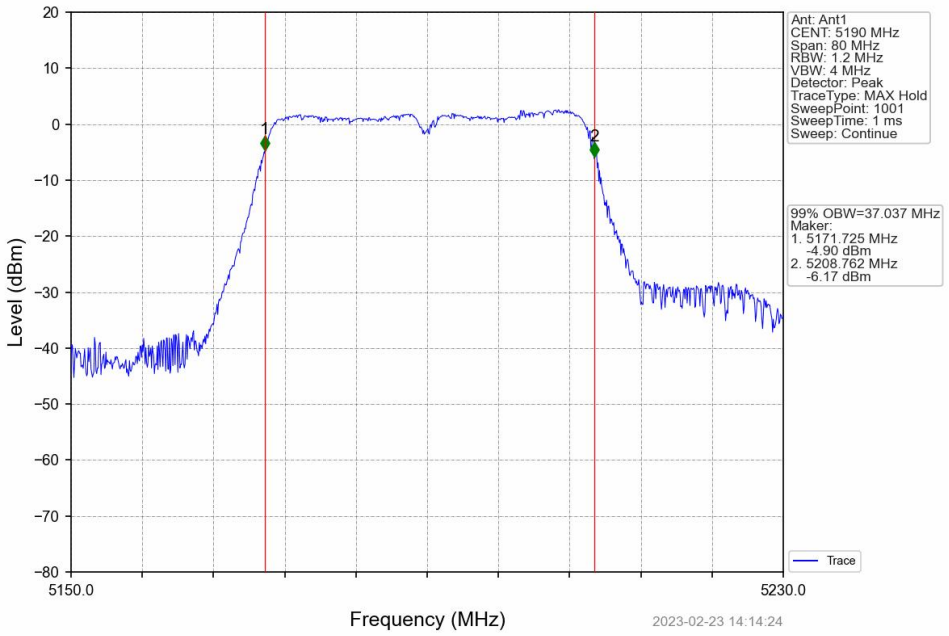
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



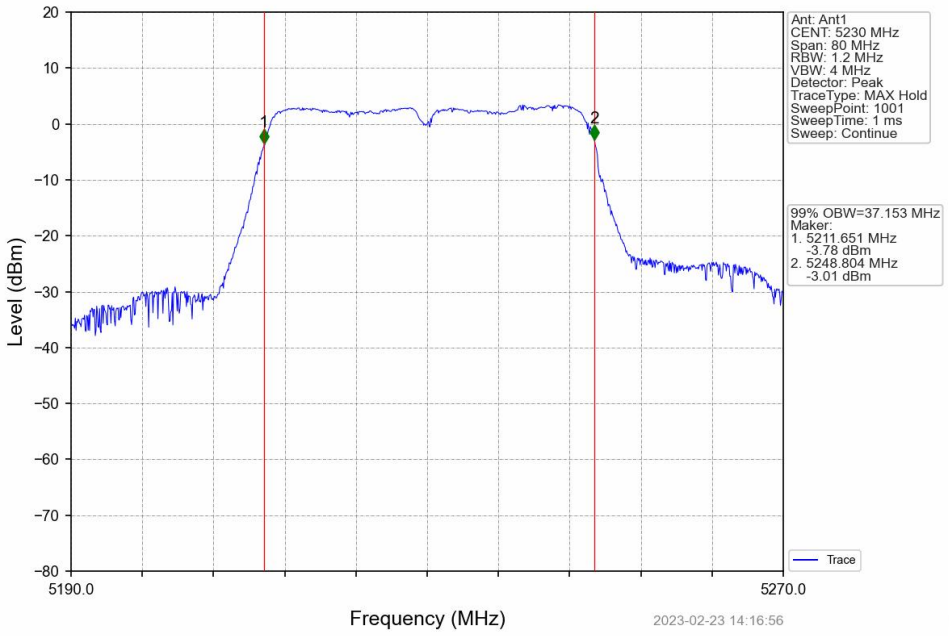
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



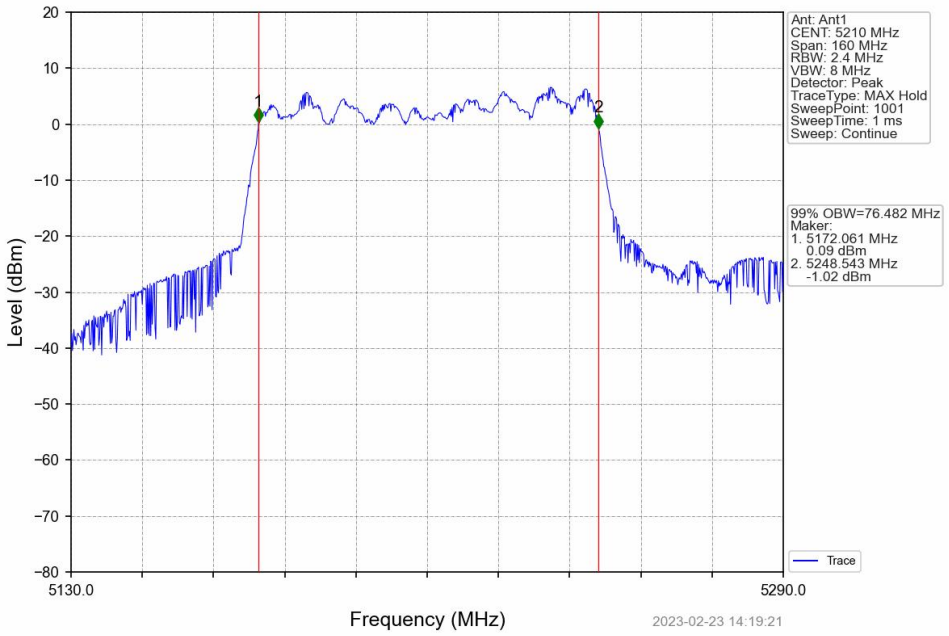
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



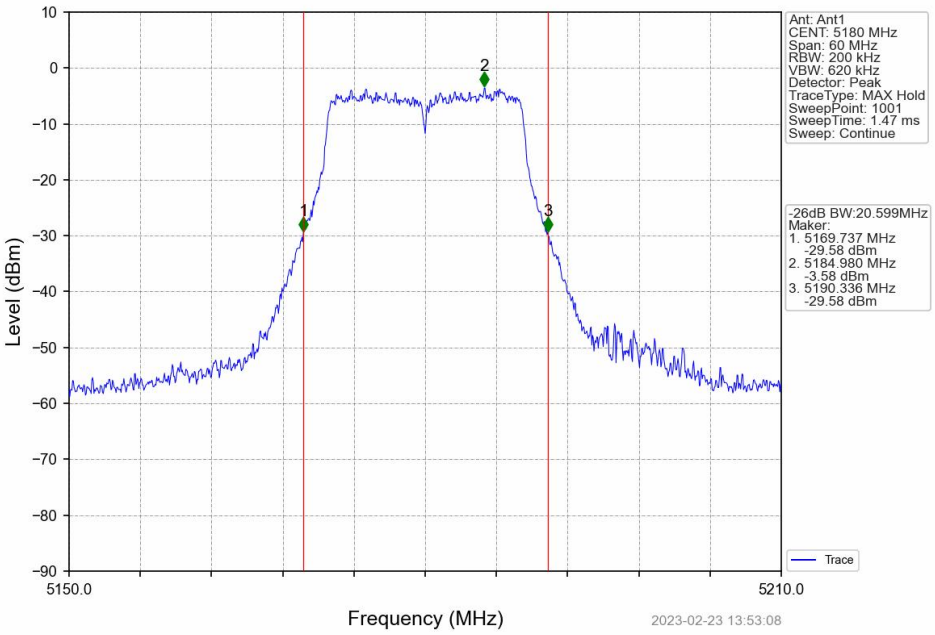
1.2 26dB BW

1.2.1 Test Result

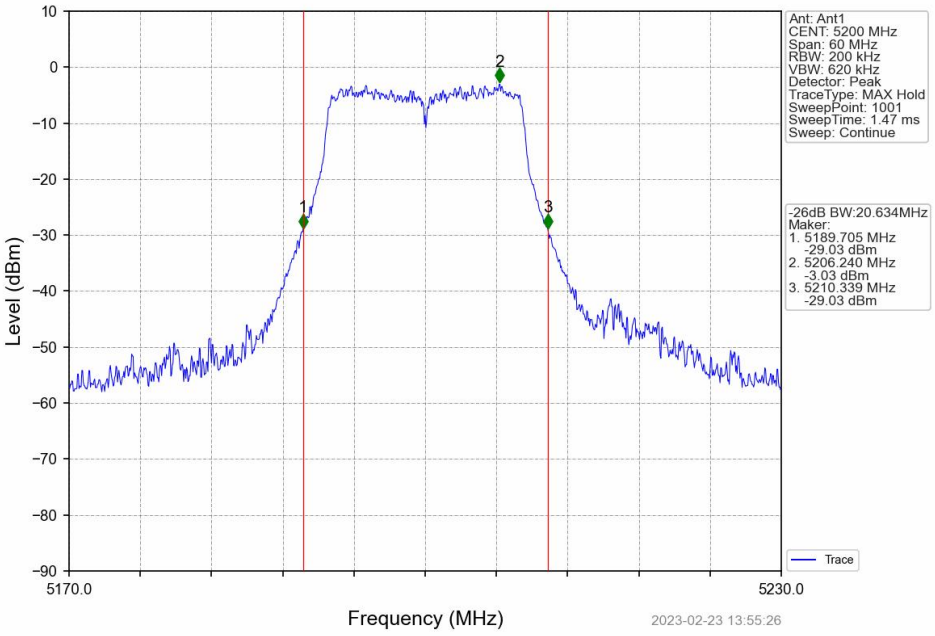
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5180	1	20.599	Pass
		5200	1	20.634	Pass
		5240	1	20.662	Pass
802.11n (HT20)	SISO	5180	1	21.309	Pass
		5200	1	21.316	Pass
		5240	1	21.397	Pass
802.11n (HT40)	SISO	5190	1	41.689	Pass
		5230	1	41.879	Pass
802.11ac (VHT20)	SISO	5180	1	20.961	Pass
		5200	1	21.090	Pass
		5240	1	21.334	Pass
802.11ac (VHT40)	SISO	5190	1	41.625	Pass
		5230	1	41.715	Pass
802.11ac (VHT80)	SISO	5210	1	82.904	Pass

2.2.2 Test Graph

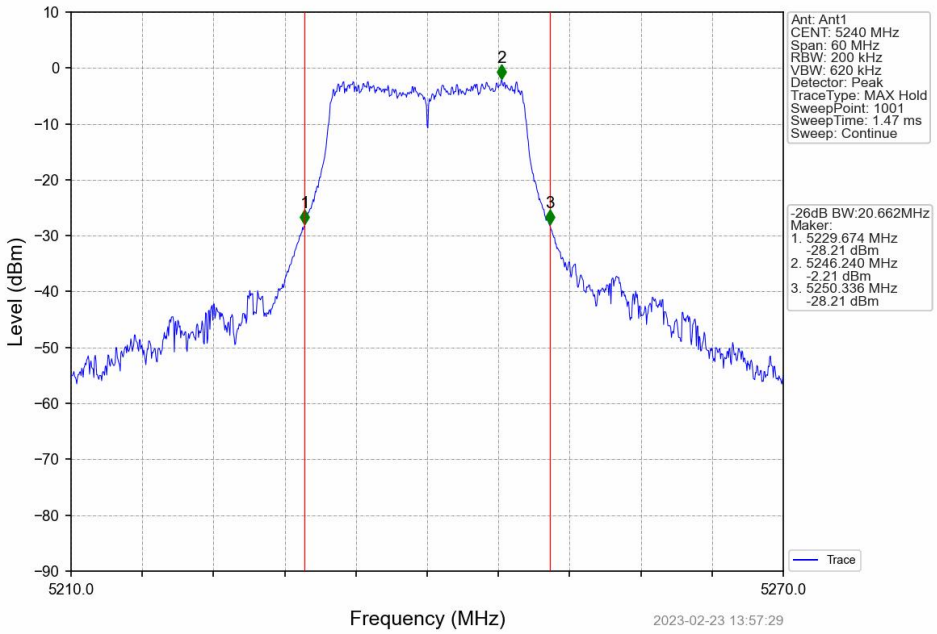
802.11a_LCH_5180MHz_Ant1_NTNV



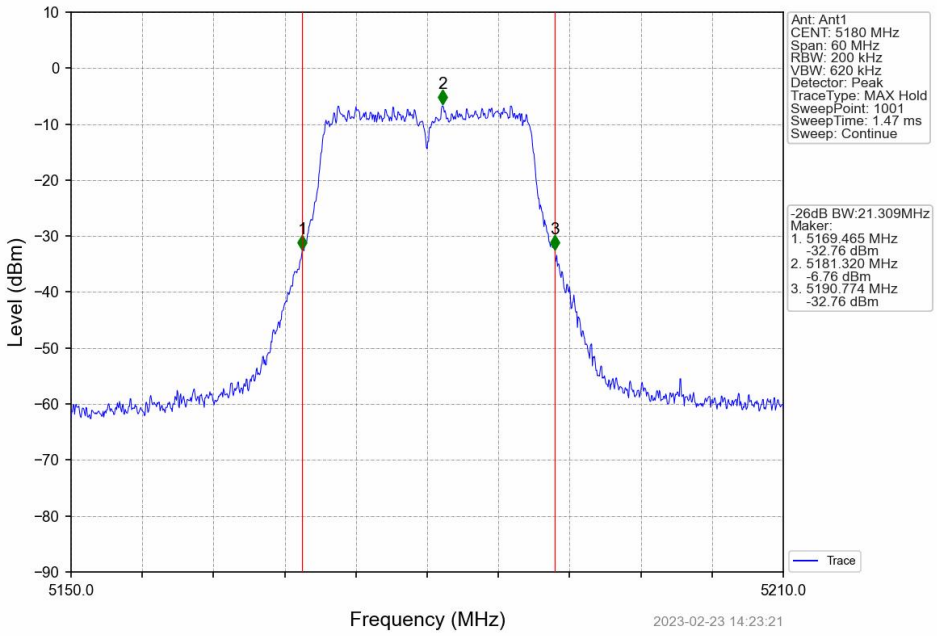
802.11a_MCH_5200MHz_Ant1_NTNV



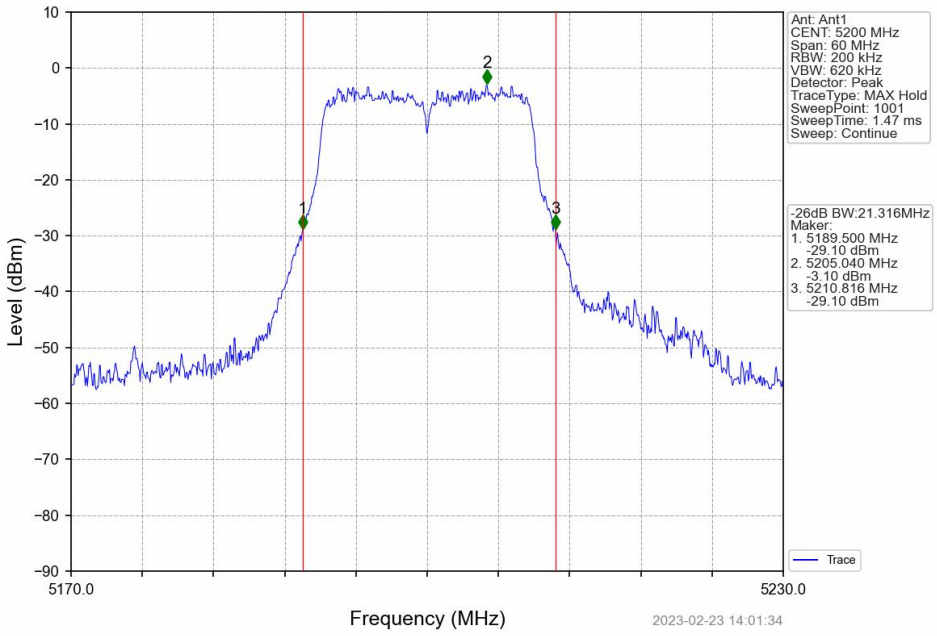
802.11a_HCH_5240MHz_Ant1_NTNV



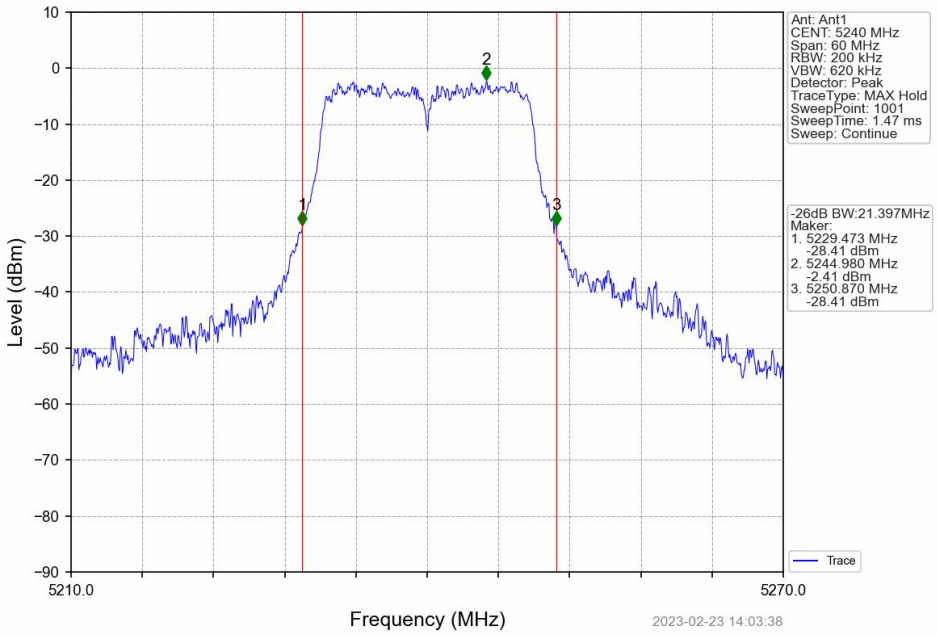
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



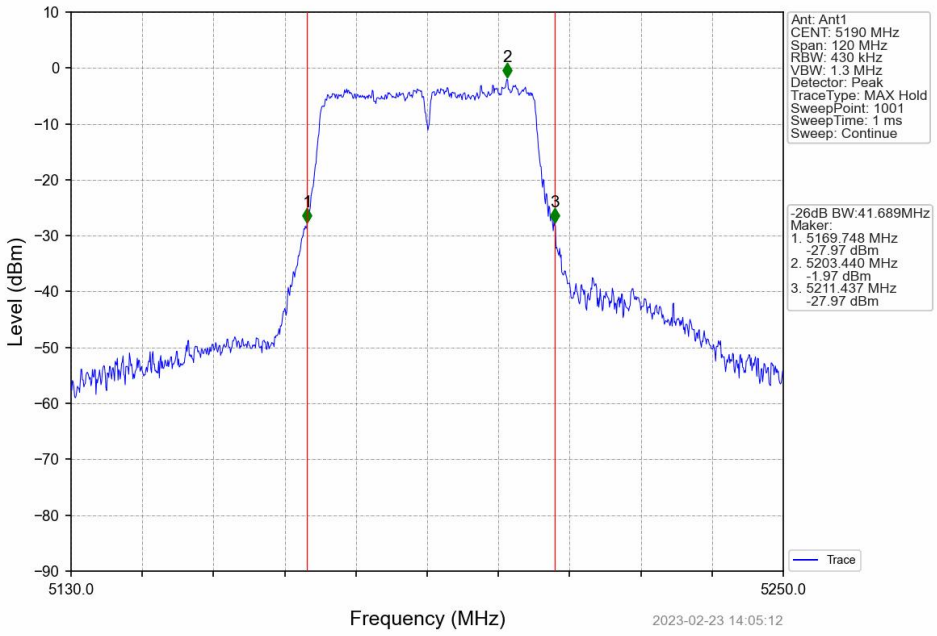
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



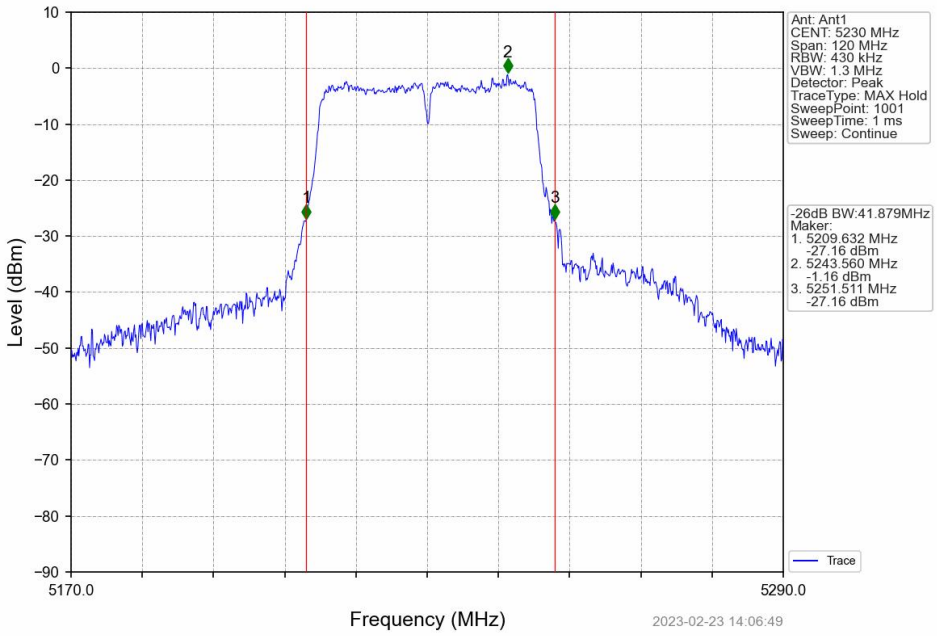
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



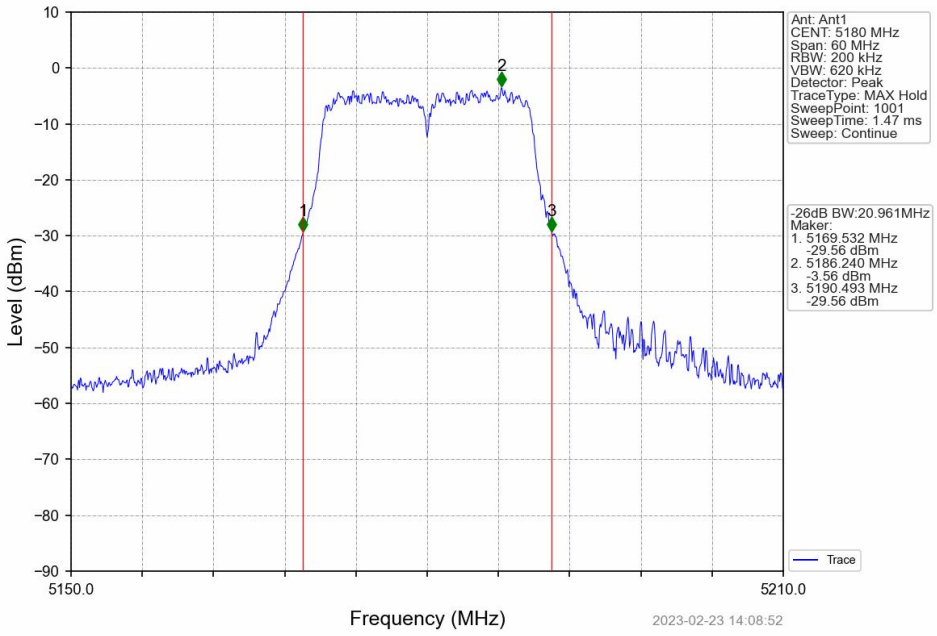
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



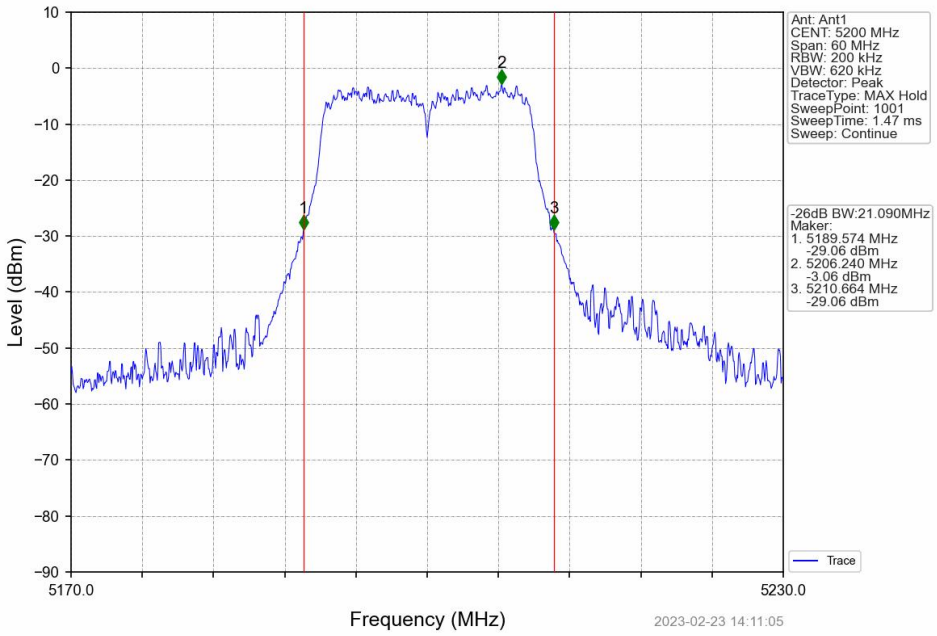
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



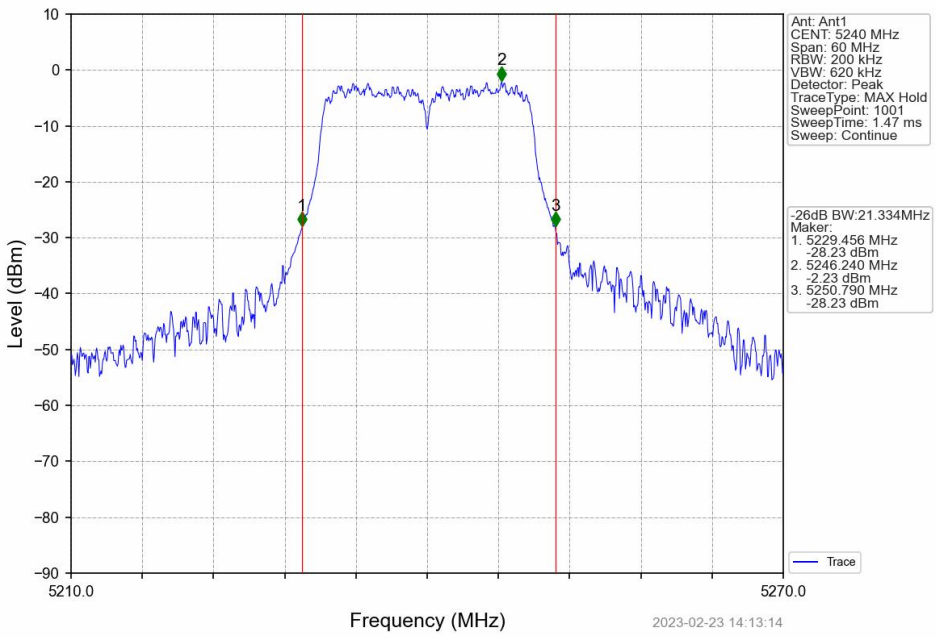
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



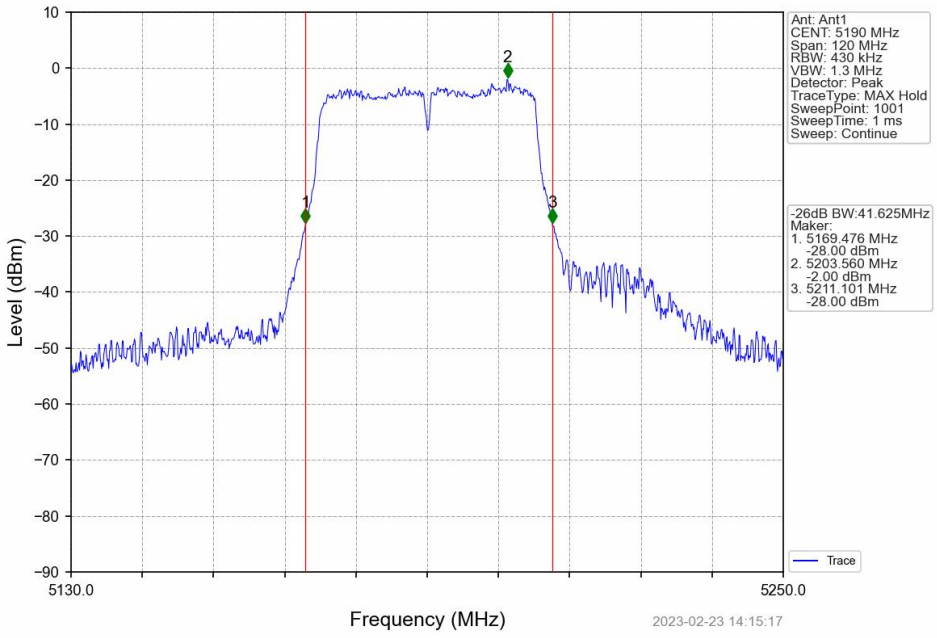
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



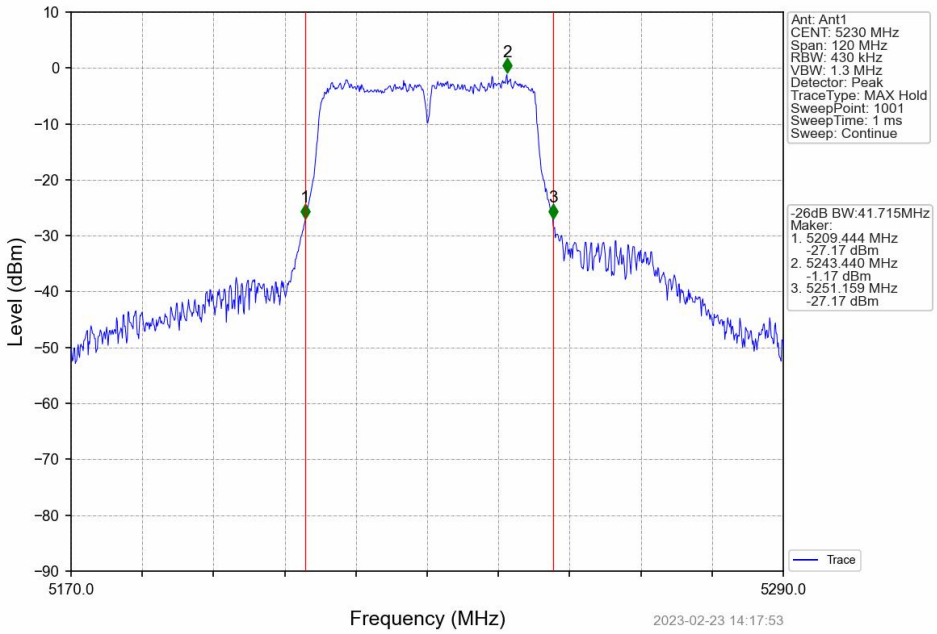
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



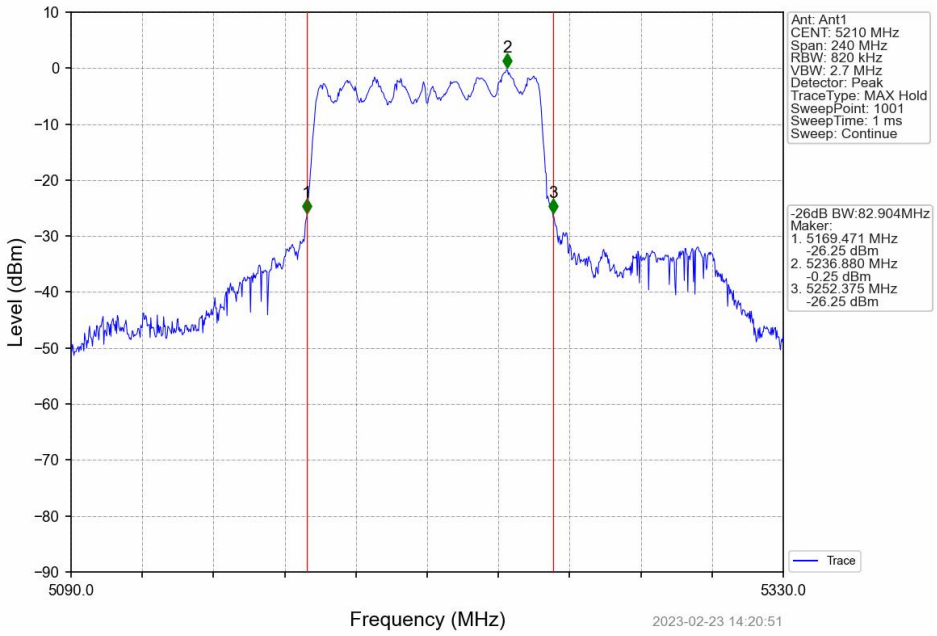
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



2. Maximum Conducted Output Power

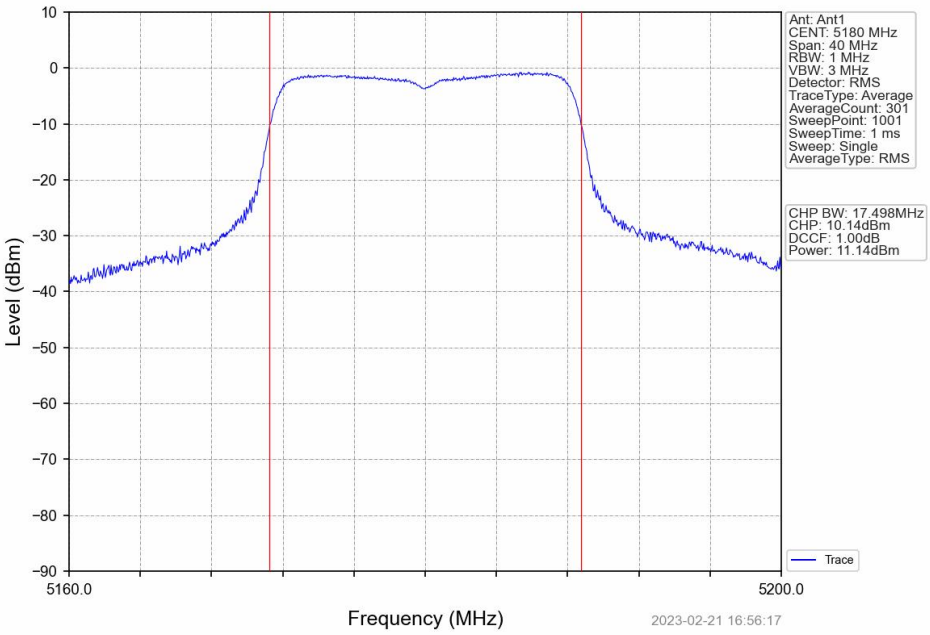
2.1 Power

2.1.1 Test Result

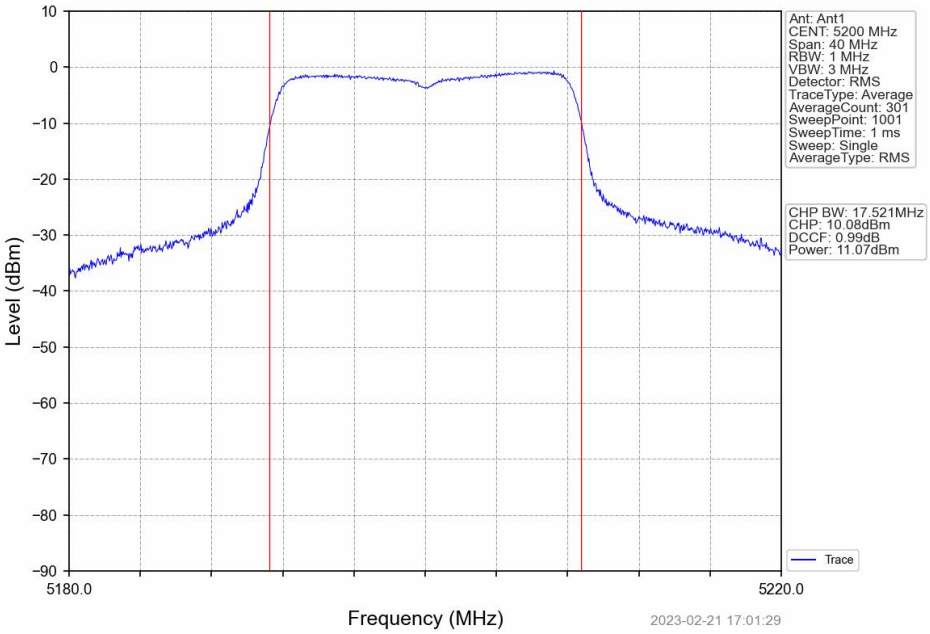
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	11.14	<=23.98	Pass
		5200	11.07	<=23.98	Pass
		5240	12.44	<=23.98	Pass
802.11n (HT20)	SISO	5180	10.31	<=23.98	Pass
		5200	10.85	<=23.98	Pass
		5240	11.45	<=23.98	Pass
802.11n (HT40)	SISO	5190	10.91	<=23.98	Pass
		5230	11.98	<=23.98	Pass
802.11ac (VHT20)	SISO	5180	10.74	<=23.98	Pass
		5200	11.38	<=23.98	Pass
		5240	13.36	<=23.98	Pass
802.11ac (VHT40)	SISO	5190	11.32	<=23.98	Pass
		5230	12.36	<=23.98	Pass
802.11ac (VHT80)	SISO	5210	12.53	<=23.98	Pass
Note1: Antenna Gain: Ant1: 3.80dBi;					

2.1.2 Test Graph

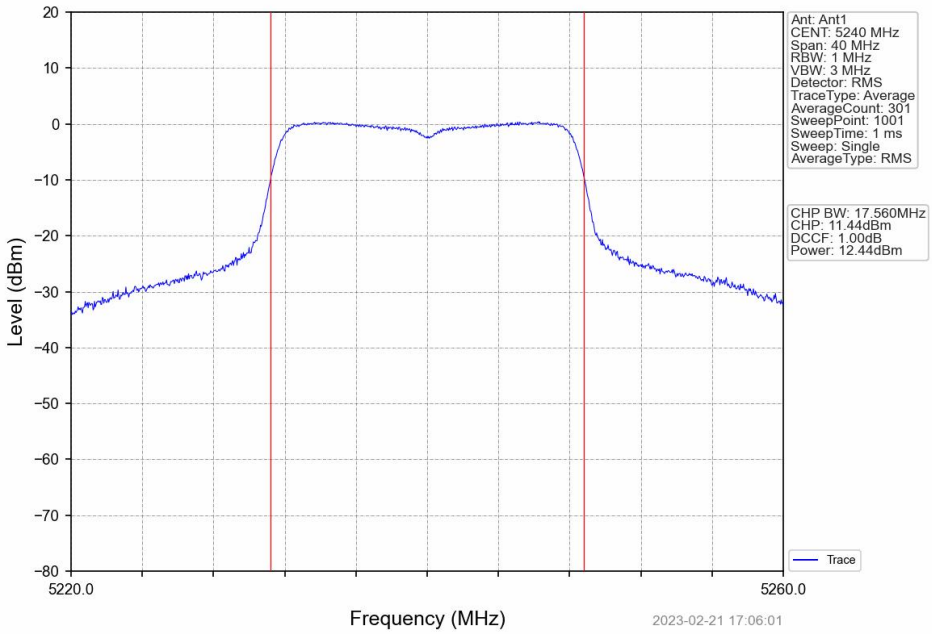
802.11a_LCH_5180MHz_Ant1_NTNV



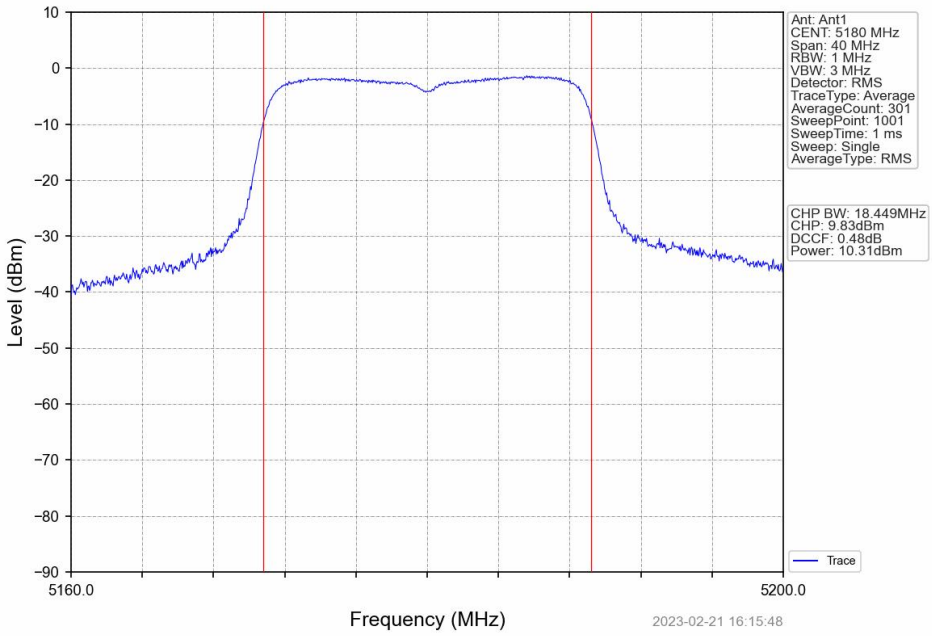
802.11a_MCH_5200MHz_Ant1_NTNV



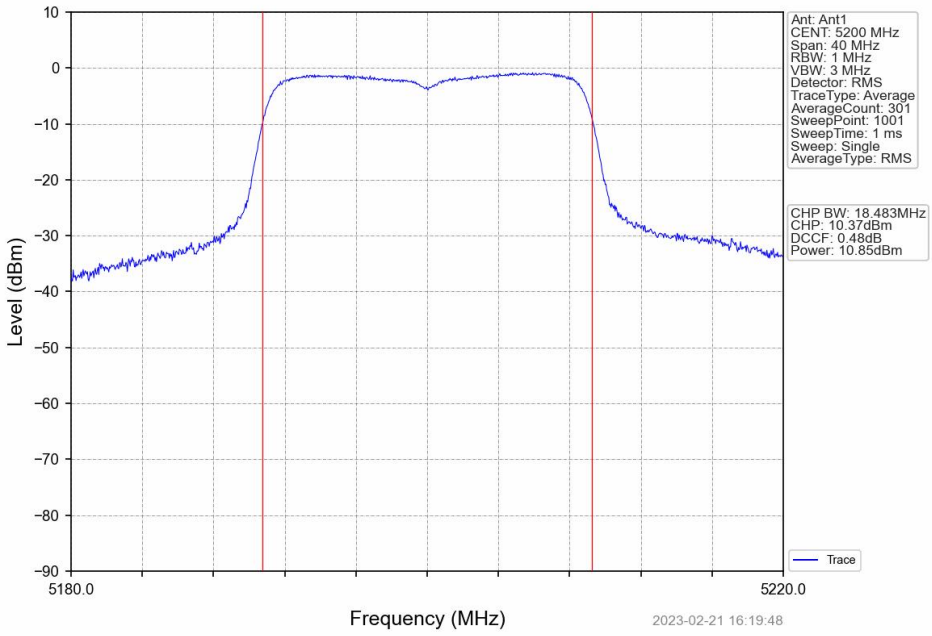
802.11a_HCH_5240MHz_Ant1_NTNV



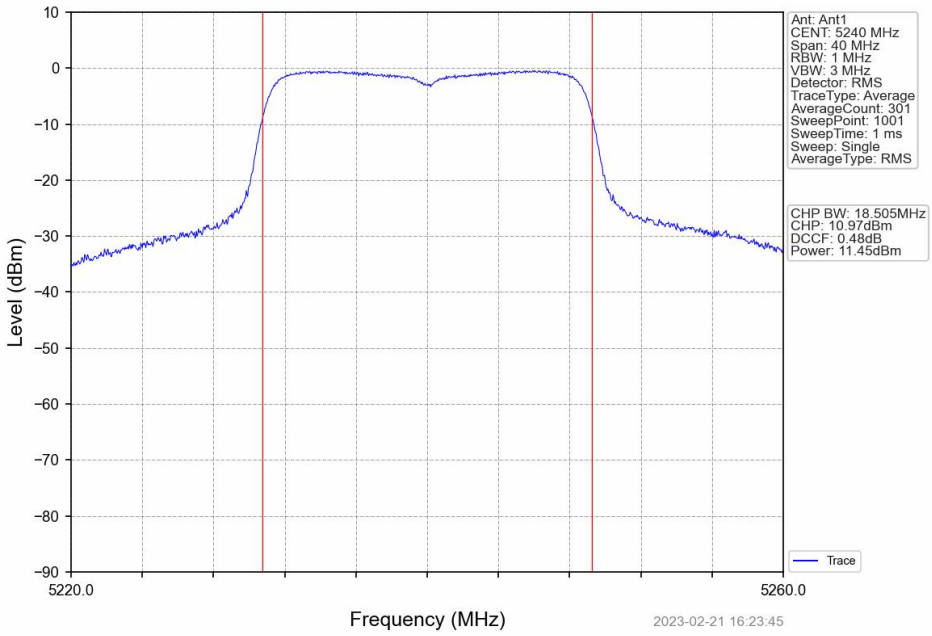
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



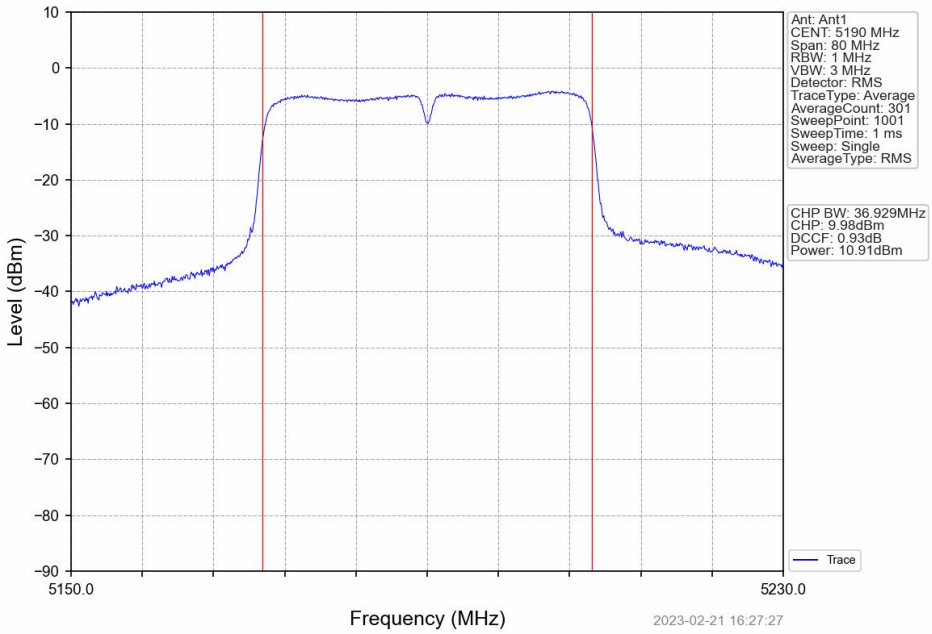
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



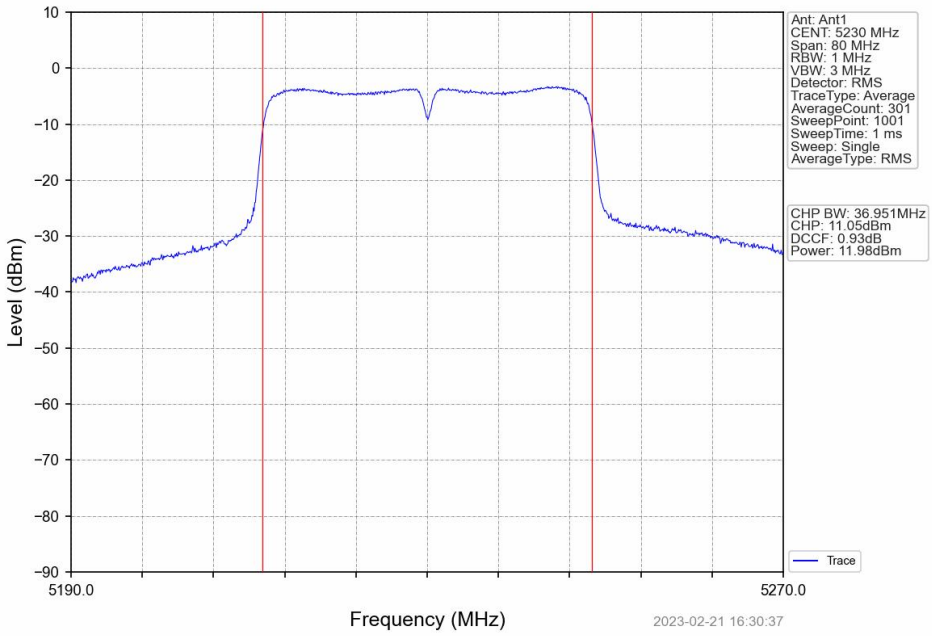
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



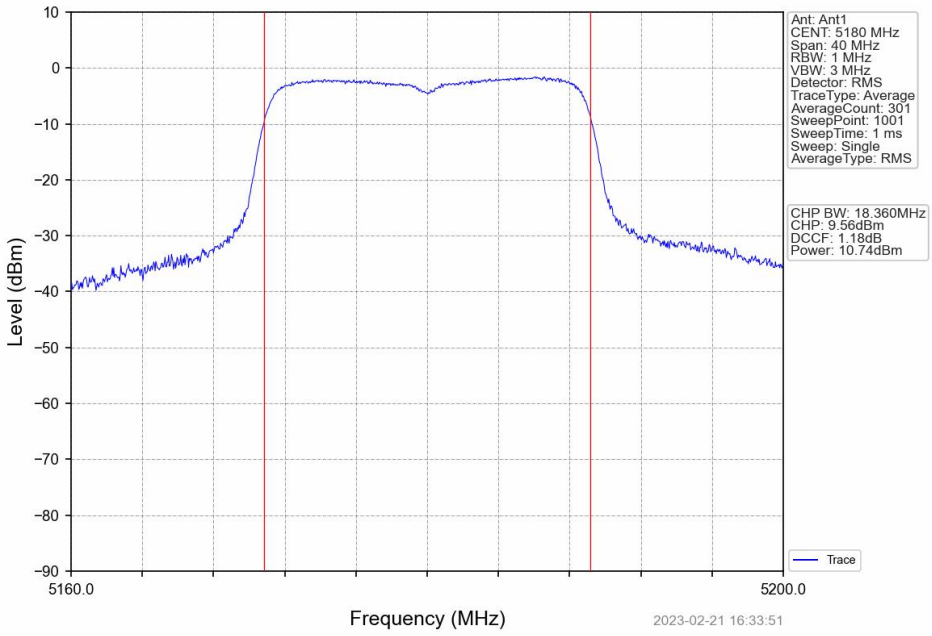
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



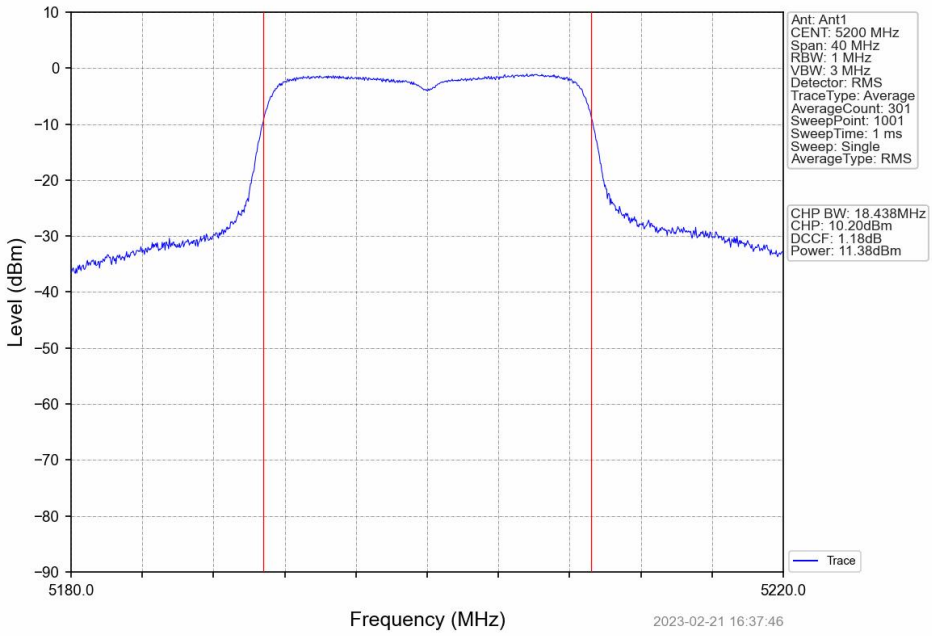
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



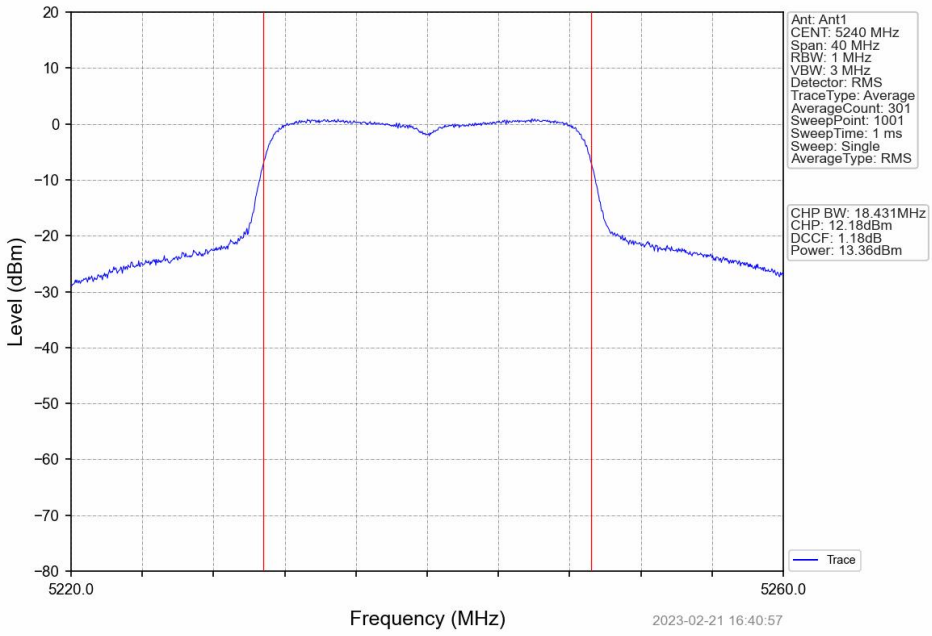
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



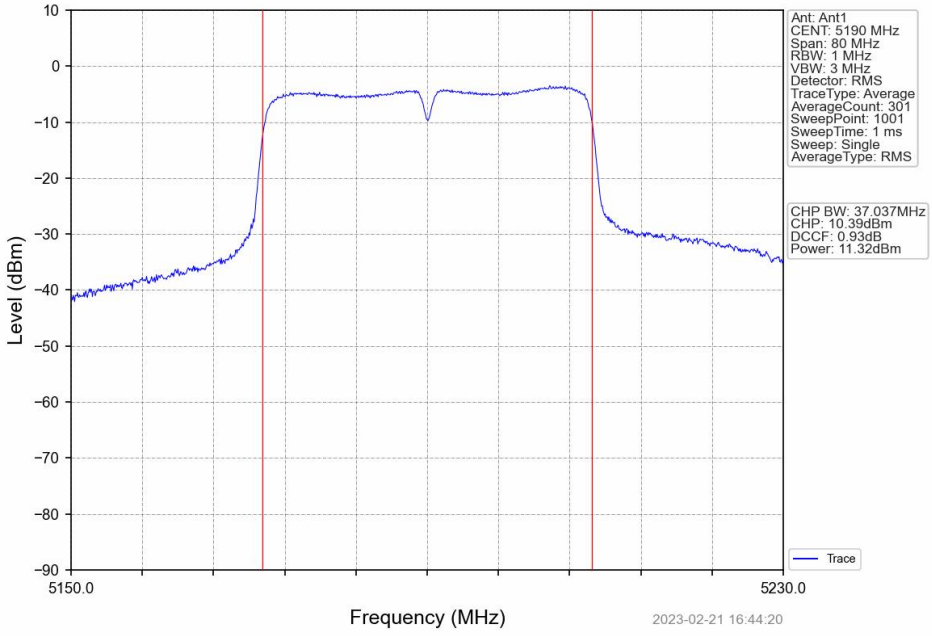
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



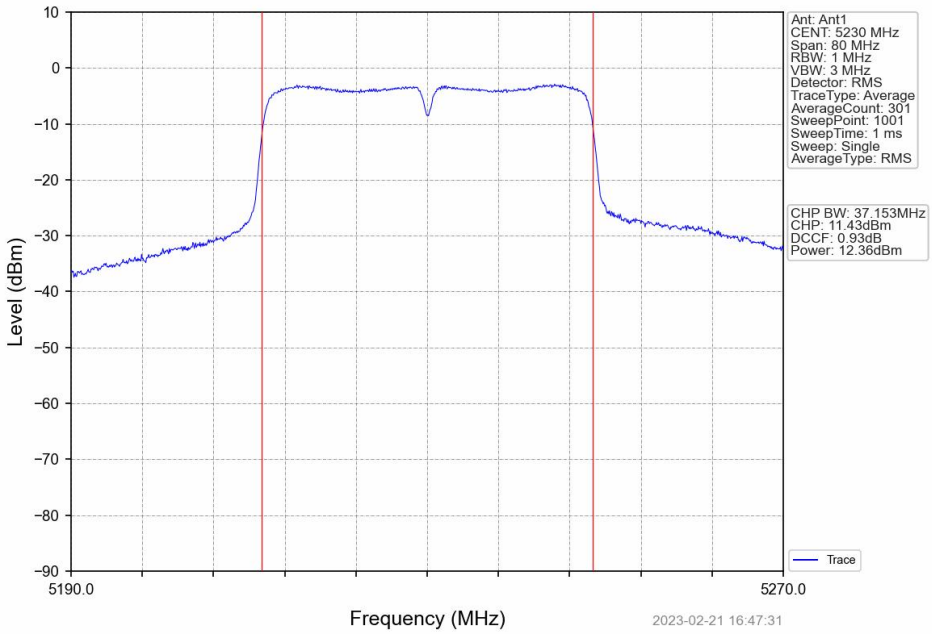
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



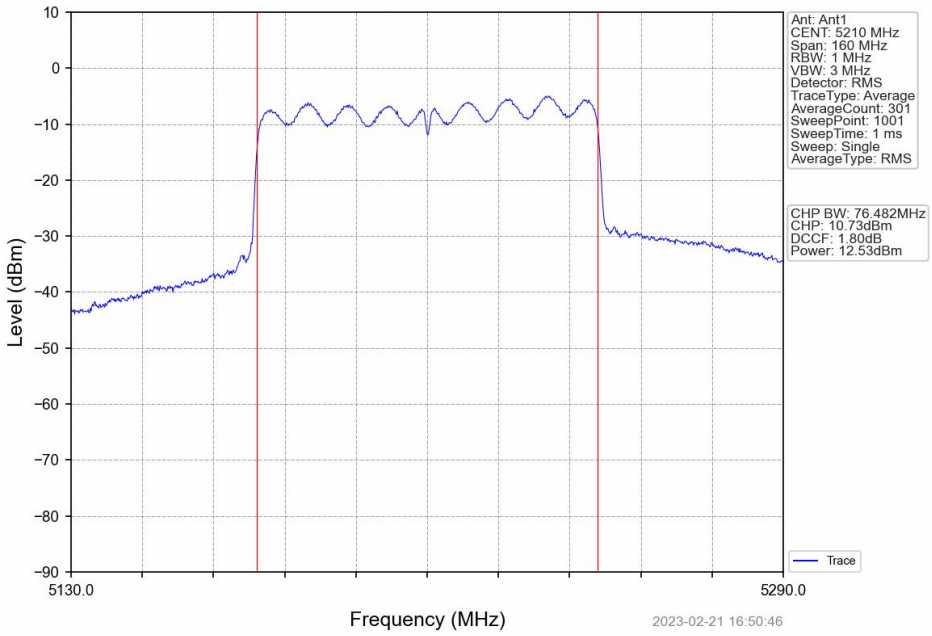
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



3. Maximum Power Spectral Density

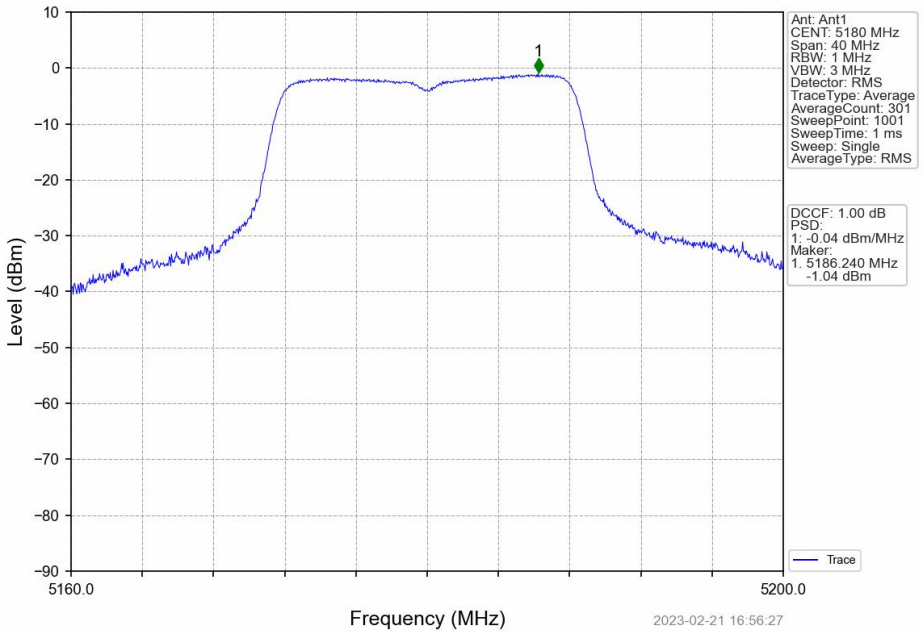
3.1 PSD

3.1.1 Test Result

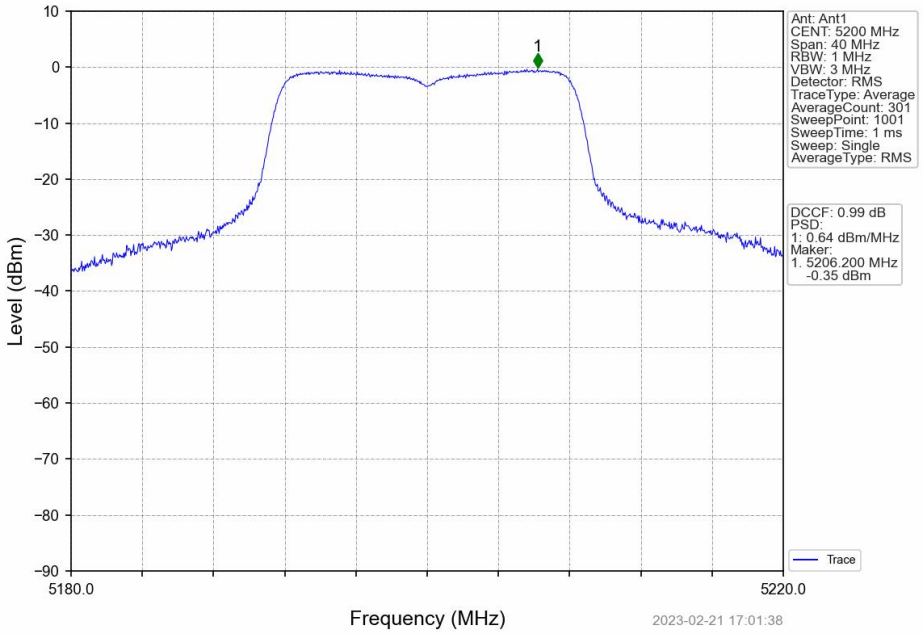
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	-0.04	<=11	Pass
		5200	0.64	<=11	Pass
		5240	1.38	<=11	Pass
802.11n (HT20)	SISO	5180	-0.86	<=11	Pass
		5200	-0.64	<=11	Pass
		5240	0.08	<=11	Pass
802.11n (HT40)	SISO	5190	-3.05	<=11	Pass
		5230	-2.37	<=11	Pass
802.11ac (VHT20)	SISO	5180	-0.40	<=11	Pass
		5200	0.19	<=11	Pass
		5240	2.14	<=11	Pass
802.11ac (VHT40)	SISO	5190	-2.81	<=11	Pass
		5230	-1.98	<=11	Pass
802.11ac (VHT80)	SISO	5210	-3.24	<=11	Pass
Note1: Antenna Gain: Ant1: 3.80dBi;					

3.1.2 Test Graph

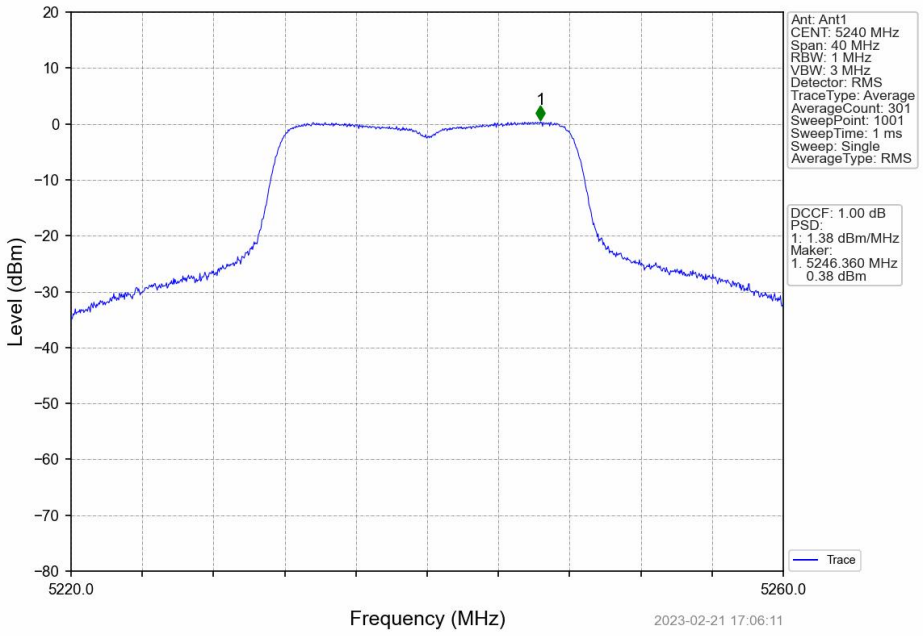
802.11a_LCH_5180MHz_Ant1_NTNV



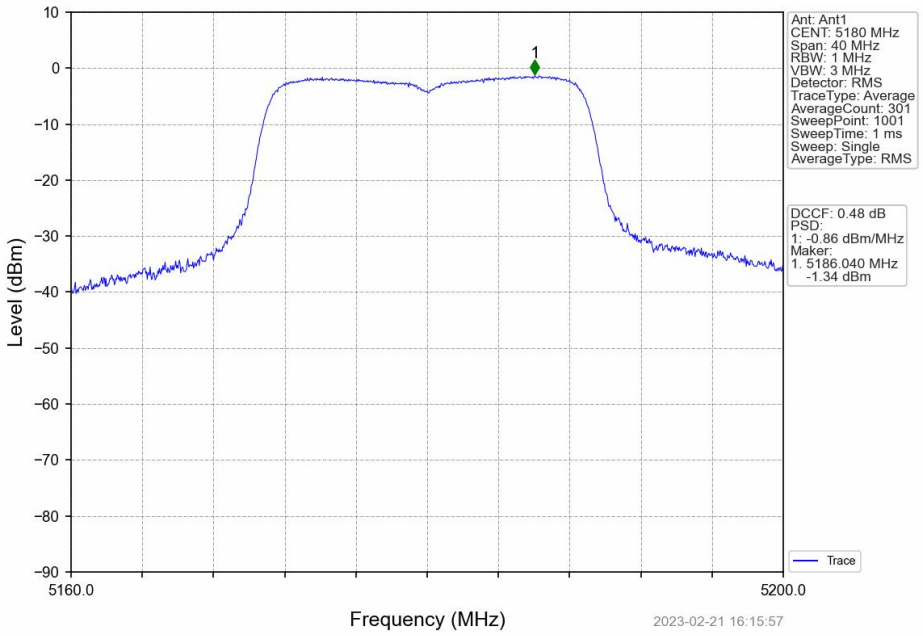
802.11a_MCH_5200MHz_Ant1_NTNV



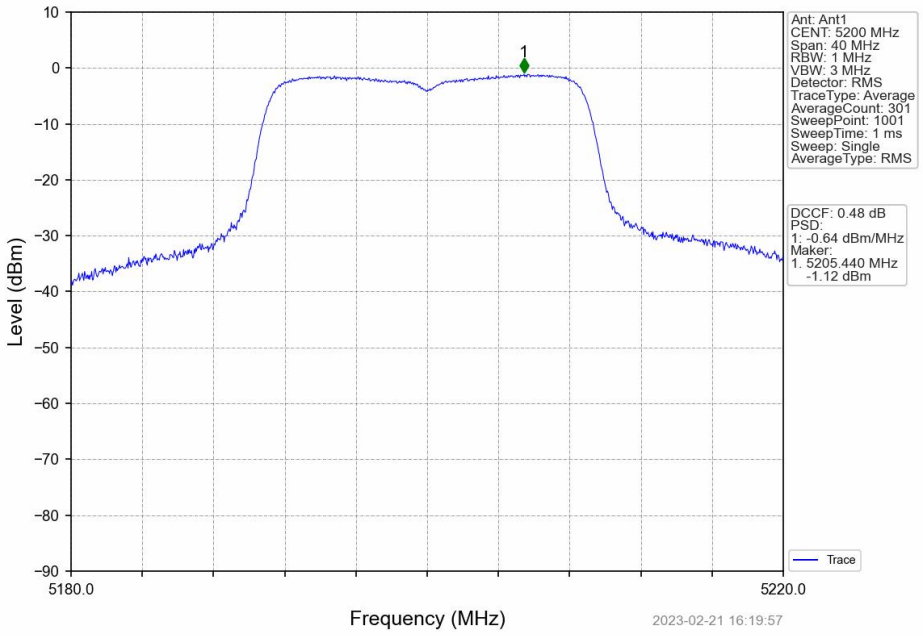
802.11a_HCH_5240MHz_Ant1_NTNV



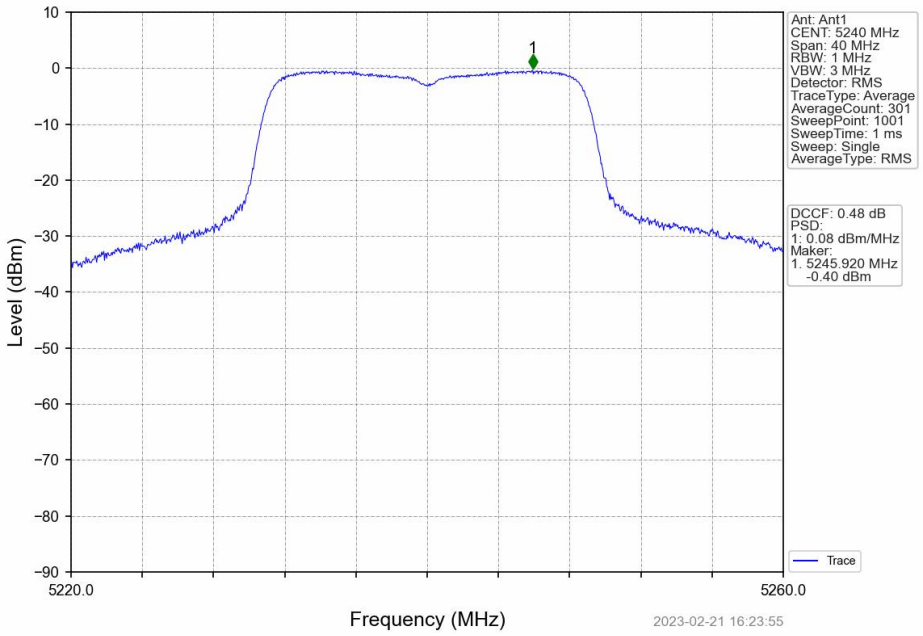
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



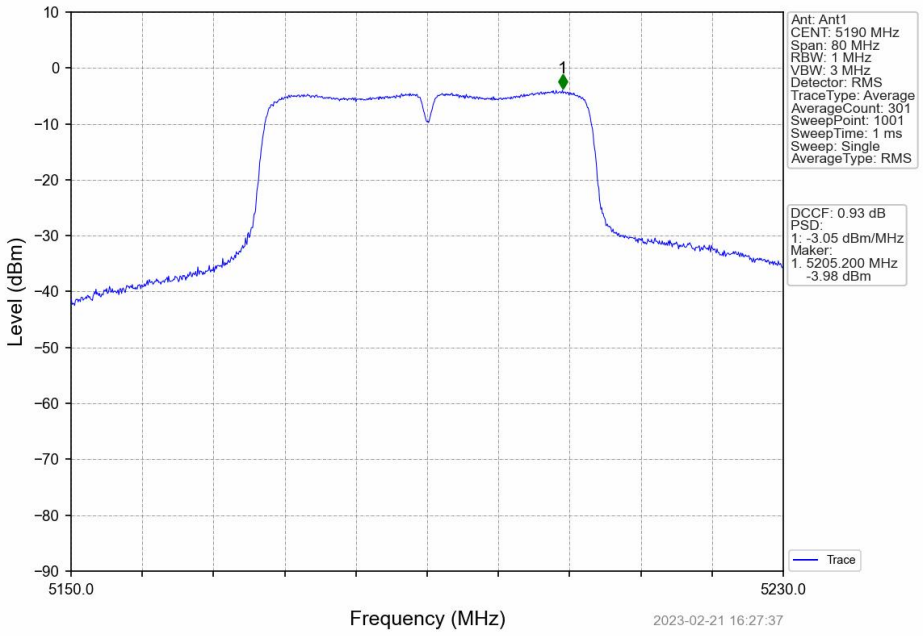
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



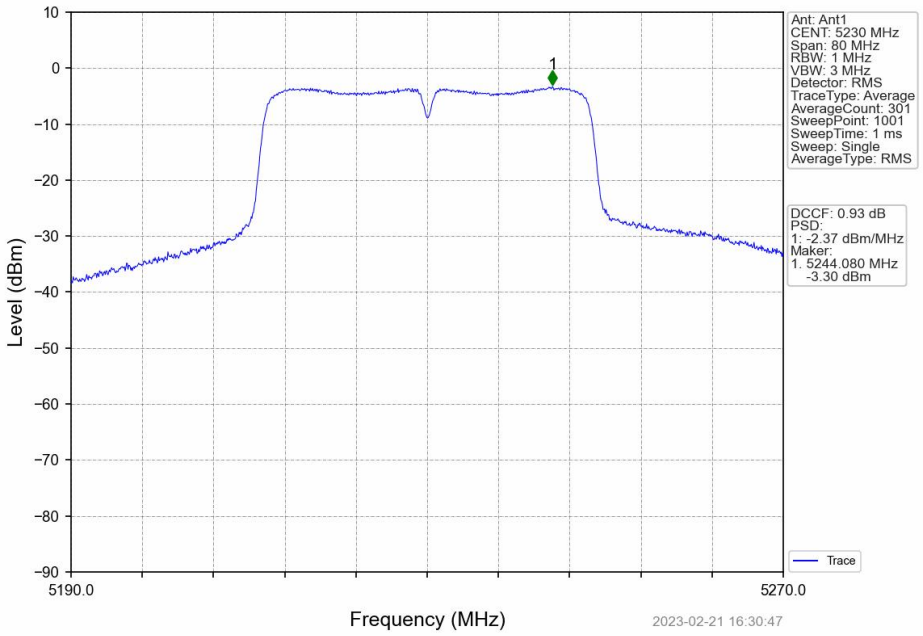
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



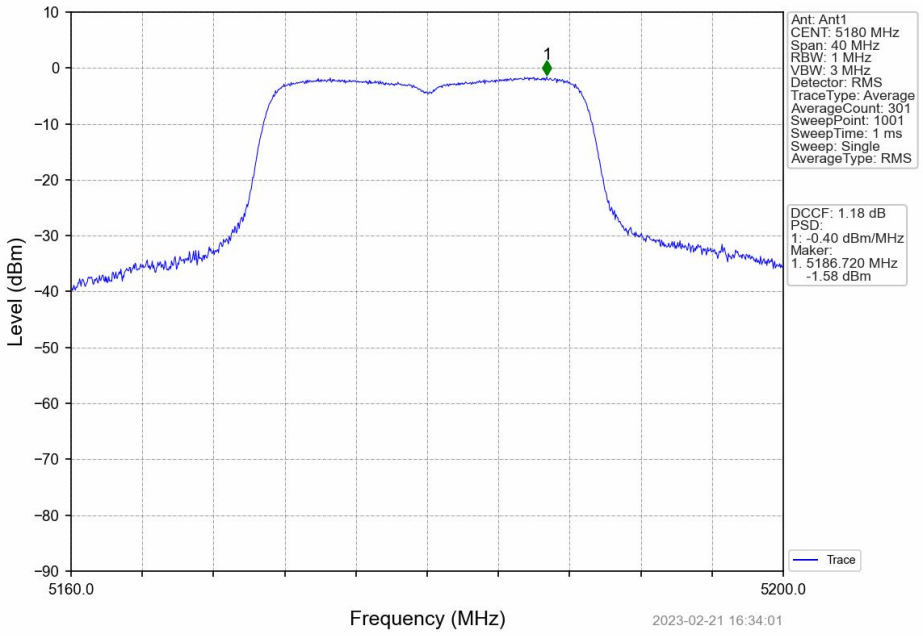
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



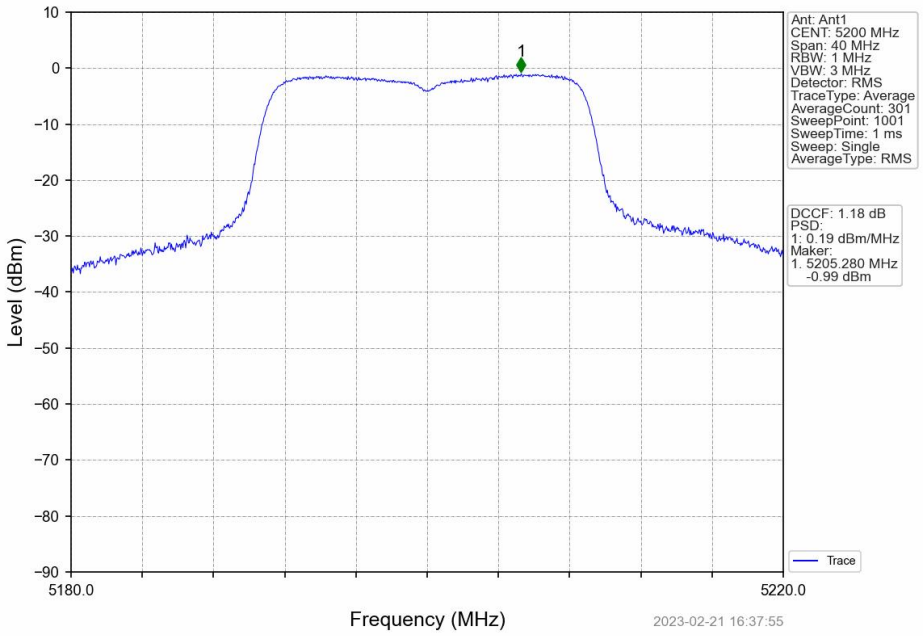
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



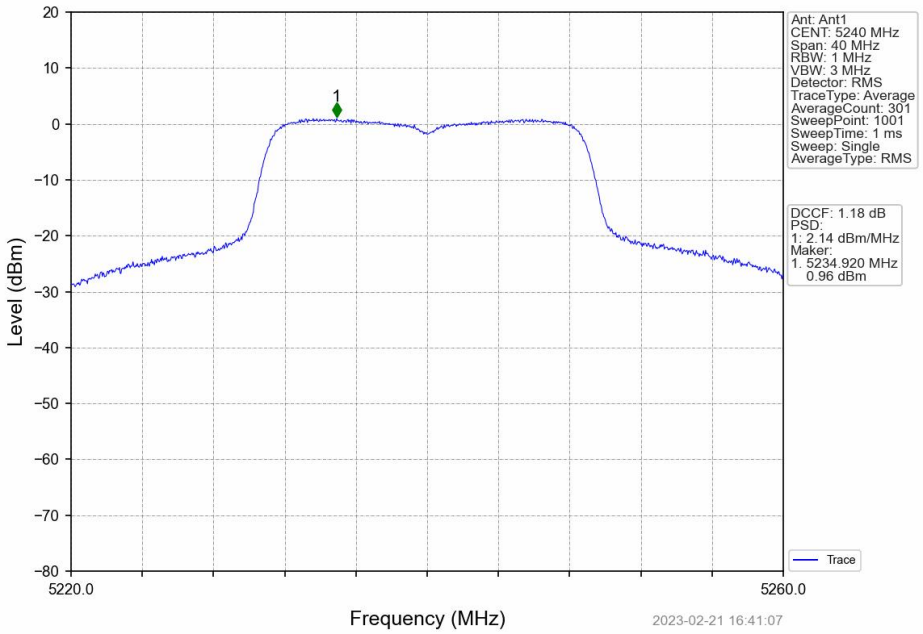
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



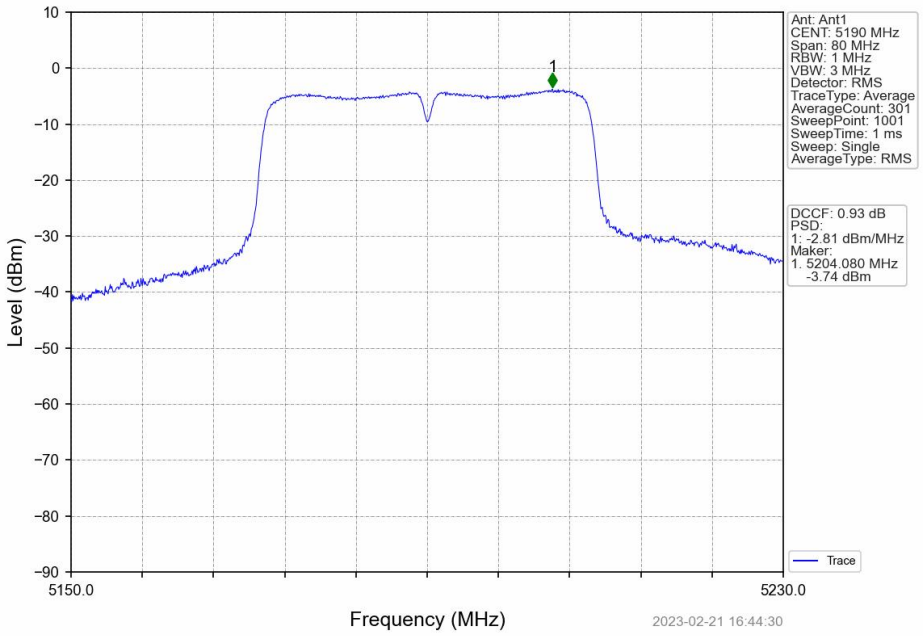
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



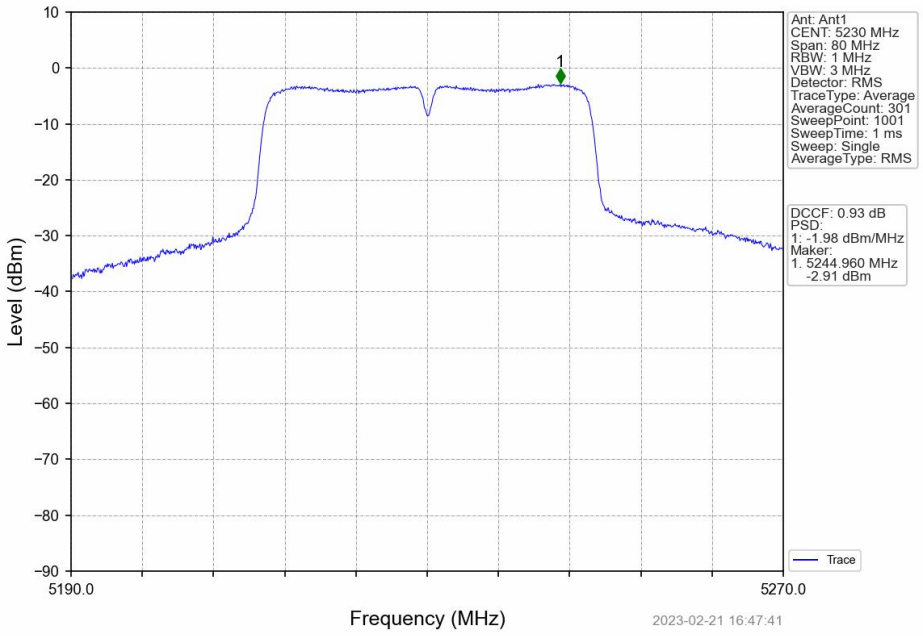
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



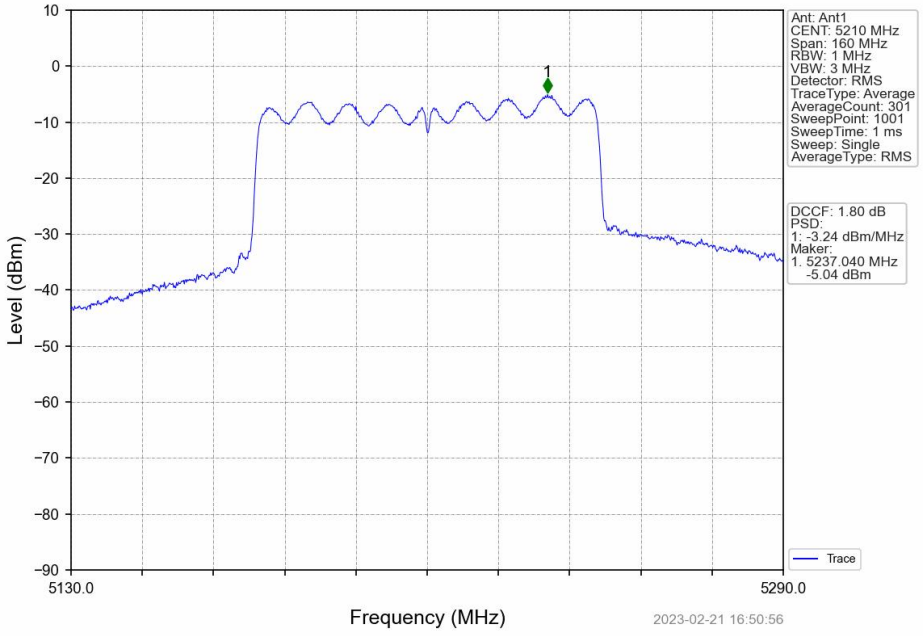
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



4. Frequency Stability

4.1 Ant1

4.1.1 Test Result

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
802.11a	SISO	5180	20	102	5180.020	5150 to 5250	Pass
				120	5180.020	5150 to 5250	Pass
				138	5180.000	5150 to 5250	Pass
			-30	120	5180.020	5150 to 5250	Pass
			-20	120	5180.020	5150 to 5250	Pass
			-10	120	5180.020	5150 to 5250	Pass
			0	120	5180.040	5150 to 5250	Pass
			10	120	5180.060	5150 to 5250	Pass
			30	120	5180.020	5150 to 5250	Pass
			40	120	5180.060	5150 to 5250	Pass
			50	120	5179.980	5150 to 5250	Pass
		5200	20	102	5199.960	5150 to 5250	Pass
				120	5200.000	5150 to 5250	Pass
				138	5200.060	5150 to 5250	Pass
			-30	120	5199.980	5150 to 5250	Pass
			-20	120	5200.040	5150 to 5250	Pass
			-10	120	5200.040	5150 to 5250	Pass
			0	120	5199.980	5150 to 5250	Pass
			10	120	5200.040	5150 to 5250	Pass
			30	120	5200.060	5150 to 5250	Pass
			40	120	5200.020	5150 to 5250	Pass
			50	120	5200.000	5150 to 5250	Pass
		5240	20	102	5240.020	5150 to 5250	Pass
				120	5240.020	5150 to 5250	Pass
				138	5240.000	5150 to 5250	Pass
			-30	120	5239.980	5150 to 5250	Pass
			-20	120	5240.020	5150 to 5250	Pass
			-10	120	5240.020	5150 to 5250	Pass
			0	120	5239.980	5150 to 5250	Pass
			10	120	5240.020	5150 to 5250	Pass
			30	120	5240.020	5150 to 5250	Pass
			40	120	5240.000	5150 to 5250	Pass
			50	120	5240.040	5150 to 5250	Pass
802.11n (HT20)	SISO	5180	20	102	5180.020	5150 to 5250	Pass
				120	5180.060	5150 to 5250	Pass
				138	5180.040	5150 to 5250	Pass
			-30	120	5180.040	5150 to 5250	Pass
			-20	120	5180.040	5150 to 5250	Pass
			-10	120	5180.020	5150 to 5250	Pass
			0	120	5180.040	5150 to 5250	Pass
			10	120	5180.020	5150 to 5250	Pass
			30	120	5180.020	5150 to 5250	Pass
			40	120	5180.000	5150 to 5250	Pass
			50	120	5180.060	5150 to 5250	Pass
		5200	20	102	5200.020	5150 to 5250	Pass
				120	5200.040	5150 to 5250	Pass
				138	5200.020	5150 to 5250	Pass

			-30	120	5200.060	5150 to 5250	Pass
			-20	120	5200.040	5150 to 5250	Pass
			-10	120	5200.040	5150 to 5250	Pass
			0	120	5200.060	5150 to 5250	Pass
			10	120	5200.060	5150 to 5250	Pass
			30	120	5200.040	5150 to 5250	Pass
			40	120	5200.060	5150 to 5250	Pass
			50	120	5200.040	5150 to 5250	Pass
		5240	20	102	5240.040	5150 to 5250	Pass
				120	5240.020	5150 to 5250	Pass
				138	5239.980	5150 to 5250	Pass
			-30	120	5240.000	5150 to 5250	Pass
			-20	120	5240.000	5150 to 5250	Pass
			-10	120	5240.020	5150 to 5250	Pass
			0	120	5240.060	5150 to 5250	Pass
			10	120	5240.000	5150 to 5250	Pass
			30	120	5240.040	5150 to 5250	Pass
			40	120	5240.000	5150 to 5250	Pass
			50	120	5240.020	5150 to 5250	Pass
802.11n (HT40)	SISO	5190	20	102	5190.120	5150 to 5250	Pass
				120	5190.120	5150 to 5250	Pass
				138	5190.120	5150 to 5250	Pass
			-30	120	5190.120	5150 to 5250	Pass
			-20	120	5190.160	5150 to 5250	Pass
			-10	120	5190.120	5150 to 5250	Pass
			0	120	5190.120	5150 to 5250	Pass
			10	120	5190.160	5150 to 5250	Pass
			30	120	5190.040	5150 to 5250	Pass
			40	120	5190.120	5150 to 5250	Pass
			50	120	5190.040	5150 to 5250	Pass
		5230	20	102	5230.040	5150 to 5250	Pass
				120	5230.080	5150 to 5250	Pass
				138	5230.120	5150 to 5250	Pass
			-30	120	5230.080	5150 to 5250	Pass
			-20	120	5230.040	5150 to 5250	Pass
			-10	120	5230.080	5150 to 5250	Pass
			0	120	5230.040	5150 to 5250	Pass
			10	120	5230.040	5150 to 5250	Pass
			30	120	5230.080	5150 to 5250	Pass
			40	120	5230.120	5150 to 5250	Pass
			50	120	5230.080	5150 to 5250	Pass
802.11ac (VHT20)	SISO	5180	20	102	5180.060	5150 to 5250	Pass
				120	5180.060	5150 to 5250	Pass
				138	5180.000	5150 to 5250	Pass
			-30	120	5180.040	5150 to 5250	Pass
			-20	120	5180.000	5150 to 5250	Pass
			-10	120	5180.020	5150 to 5250	Pass
			0	120	5179.980	5150 to 5250	Pass
			10	120	5180.020	5150 to 5250	Pass
			30	120	5179.980	5150 to 5250	Pass
			40	120	5180.040	5150 to 5250	Pass
			50	120	5180.000	5150 to 5250	Pass
		5200	20	102	5200.040	5150 to 5250	Pass
				120	5200.020	5150 to 5250	Pass
				138	5200.040	5150 to 5250	Pass
			-30	120	5200.020	5150 to 5250	Pass
			-20	120	5200.020	5150 to 5250	Pass
			-10	120	5200.040	5150 to 5250	Pass
			0	120	5199.980	5150 to 5250	Pass

			10	120	5200.040	5150 to 5250	Pass
			30	120	5200.000	5150 to 5250	Pass
			40	120	5200.000	5150 to 5250	Pass
			50	120	5200.020	5150 to 5250	Pass
		5240	20	102	5240.040	5150 to 5250	Pass
				120	5240.000	5150 to 5250	Pass
				138	5240.020	5150 to 5250	Pass
			-30	120	5240.000	5150 to 5250	Pass
			-20	120	5240.000	5150 to 5250	Pass
			-10	120	5240.040	5150 to 5250	Pass
			0	120	5239.980	5150 to 5250	Pass
			10	120	5240.060	5150 to 5250	Pass
			30	120	5240.040	5150 to 5250	Pass
			40	120	5240.000	5150 to 5250	Pass
			50	120	5240.020	5150 to 5250	Pass
802.11ac (VHT40)	SISO	5190	20	102	5190.120	5150 to 5250	Pass
				120	5190.040	5150 to 5250	Pass
				138	5190.120	5150 to 5250	Pass
			-30	120	5190.080	5150 to 5250	Pass
			-20	120	5190.160	5150 to 5250	Pass
			-10	120	5190.160	5150 to 5250	Pass
			0	120	5190.080	5150 to 5250	Pass
			10	120	5190.080	5150 to 5250	Pass
			30	120	5190.120	5150 to 5250	Pass
			40	120	5190.080	5150 to 5250	Pass
			50	120	5190.120	5150 to 5250	Pass
		5230	20	102	5230.080	5150 to 5250	Pass
				120	5230.080	5150 to 5250	Pass
				138	5230.040	5150 to 5250	Pass
			-30	120	5230.040	5150 to 5250	Pass
			-20	120	5230.080	5150 to 5250	Pass
			-10	120	5230.080	5150 to 5250	Pass
			0	120	5230.040	5150 to 5250	Pass
			10	120	5230.080	5150 to 5250	Pass
			30	120	5230.080	5150 to 5250	Pass
			40	120	5230.080	5150 to 5250	Pass
			50	120	5230.120	5150 to 5250	Pass
802.11ac (VHT80)	SISO	5210	20	102	5210.075	5150 to 5250	Pass
				120	5210.150	5150 to 5250	Pass
				138	5210.075	5150 to 5250	Pass
			-30	120	5210.150	5150 to 5250	Pass
			-20	120	5210.075	5150 to 5250	Pass
			-10	120	5210.000	5150 to 5250	Pass
			0	120	5210.150	5150 to 5250	Pass
			10	120	5210.150	5150 to 5250	Pass
			30	120	5210.075	5150 to 5250	Pass
			40	120	5210.150	5150 to 5250	Pass
			50	120	5210.075	5150 to 5250	Pass