

1. Appendix Report

1. Duty Cycle

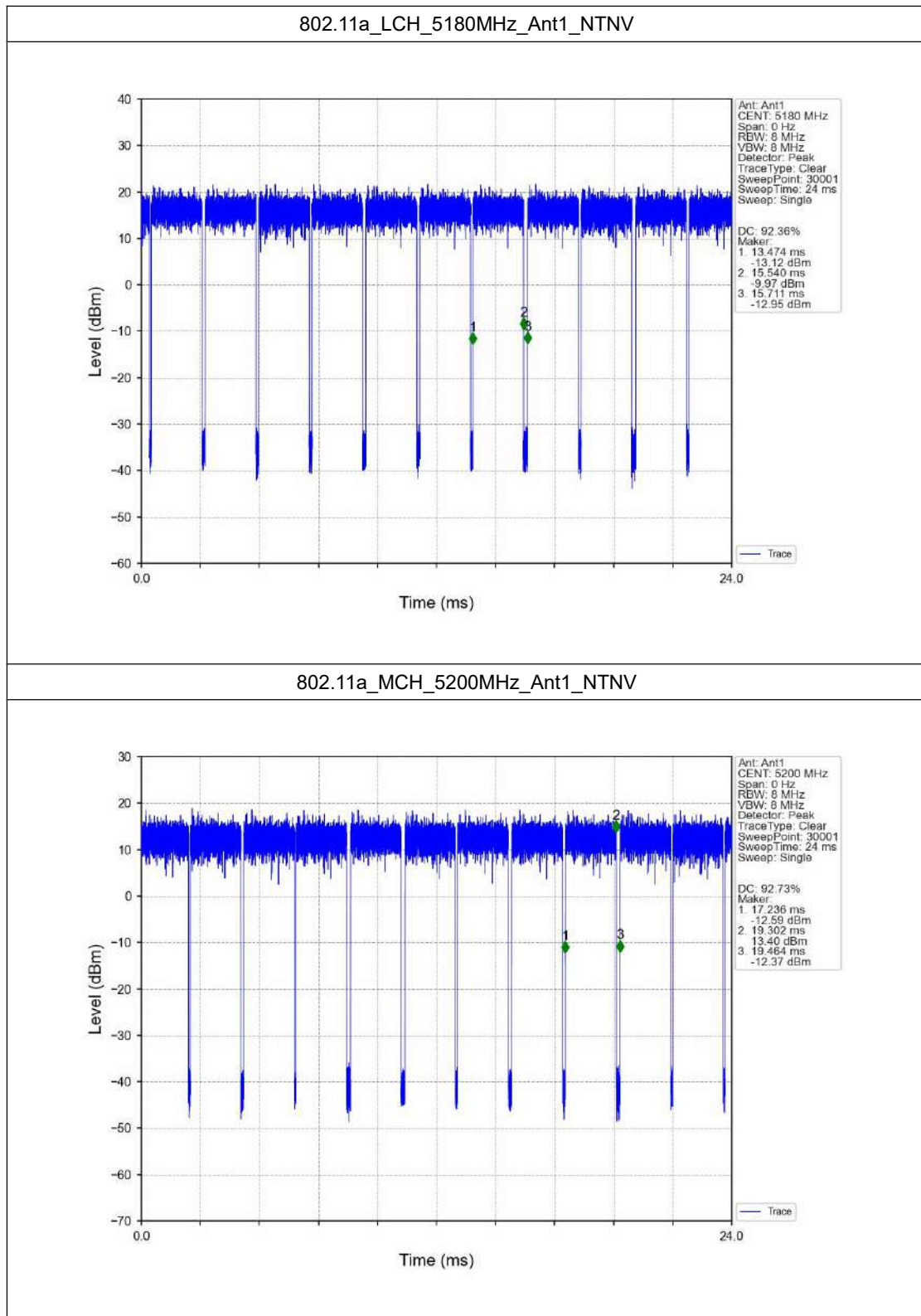
1.1 Test Result

1.1.1 Ant1

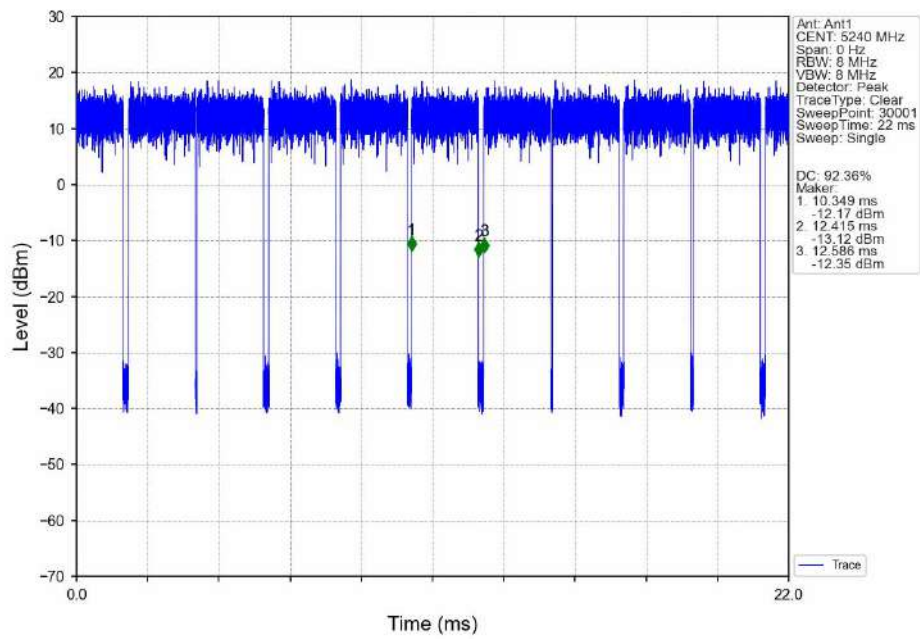
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	2.066	2.237	92.36	0.35	3.46
		5200	2.066	2.228	92.73	0.33	4.72
		5240	2.066	2.237	92.36	0.35	5.52
802.11n (HT20)	SISO	5180	1.927	2.066	93.27	0.30	5.14
		5200	1.922	2.762	69.59	1.57	26.79
		5240	1.922	2.075	92.63	0.33	5.11
802.11n (HT40)	SISO	5190	0.946	1.100	86.00	0.66	10.28
		5230	0.945	1.081	87.42	0.58	8.82
802.11ac (VHT20)	SISO	5180	1.939	2.069	93.72	0.28	4.68
		5200	1.939	2.096	92.51	0.34	5.96
		5240	1.933	2.096	92.22	0.35	5.95
802.11ac (VHT40)	SISO	5190	0.960	1.225	78.37	1.06	18.48
		5230	0.959	1.125	85.24	0.69	11.55
802.11ac (VHT80)	SISO	5210	0.462	0.597	77.39	1.11	15.38

1.2 Test Graph

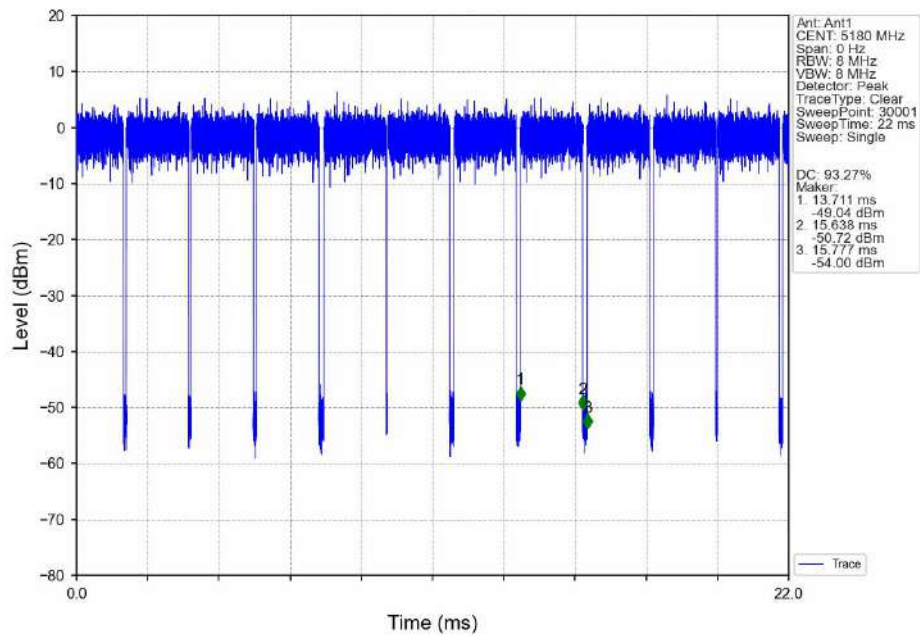
1.2.1 Ant1



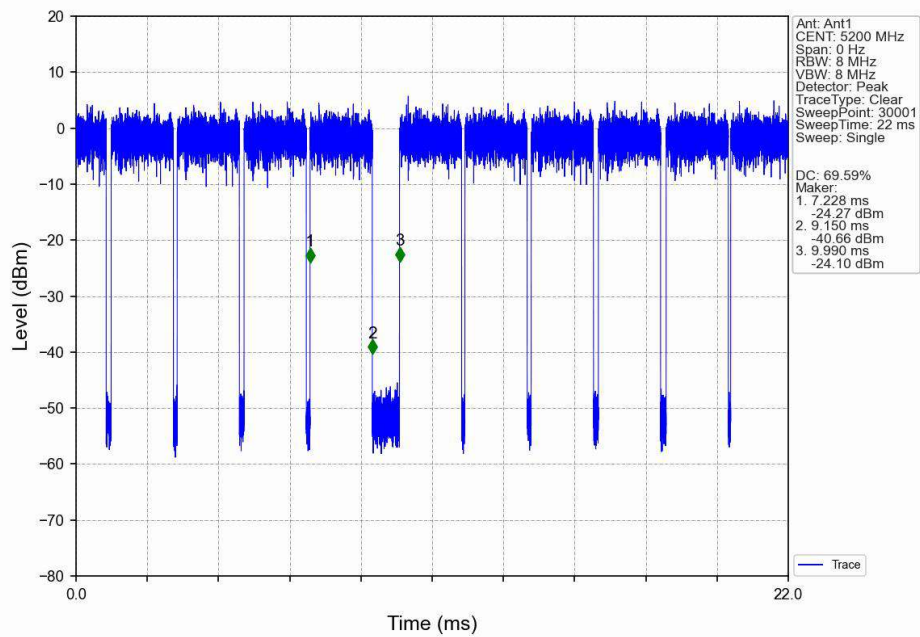
802.11a_HCH_5240MHz_Ant1_NTNV



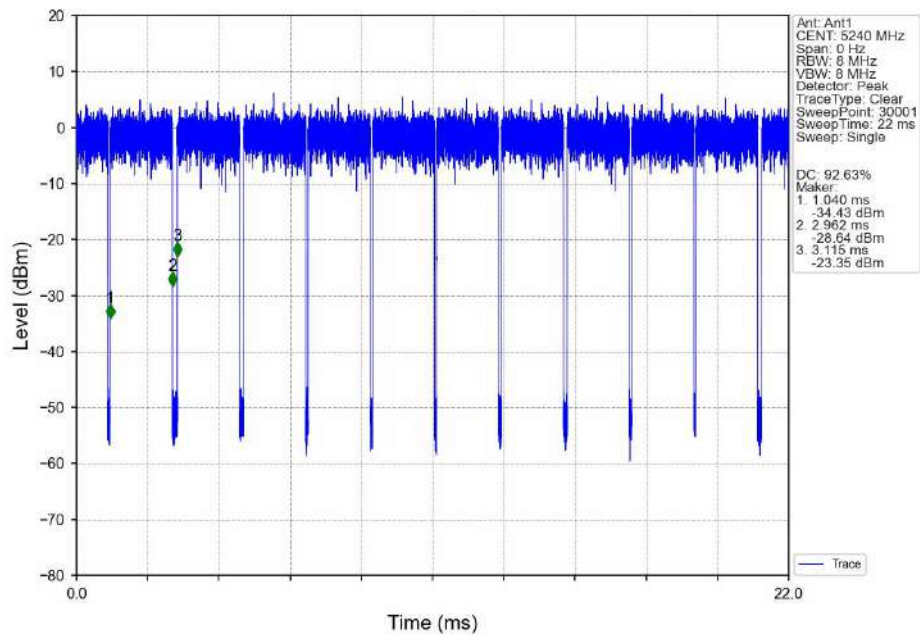
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



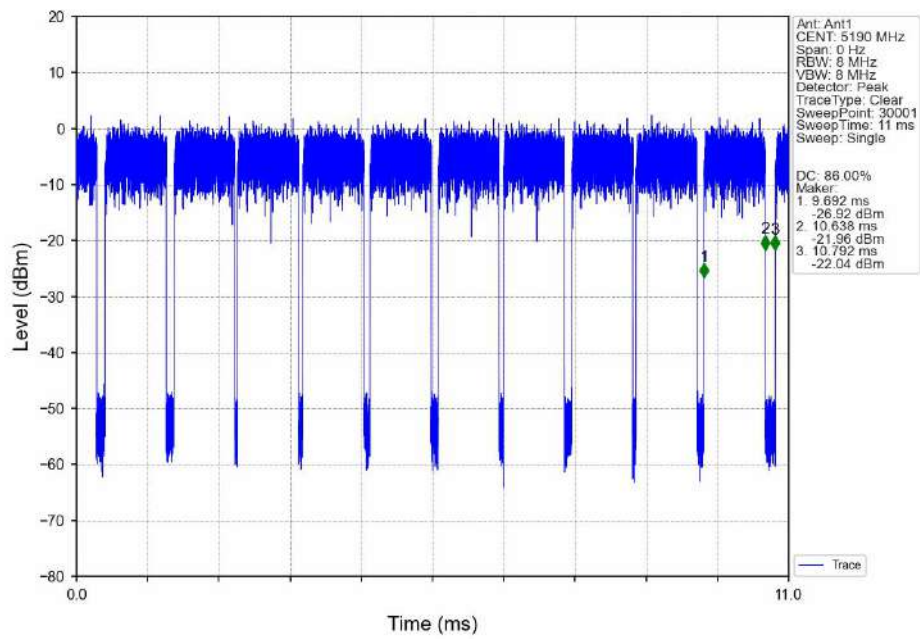
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



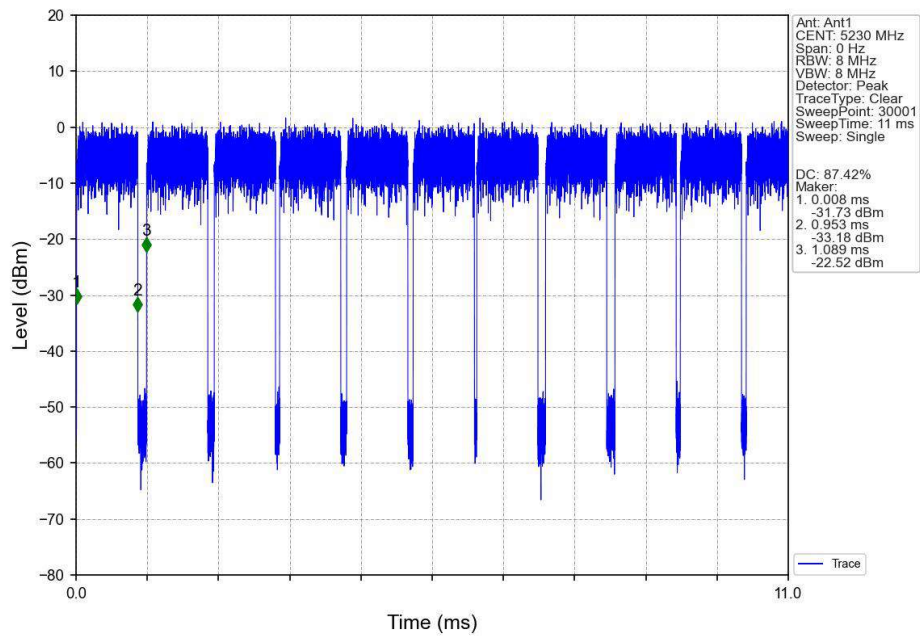
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



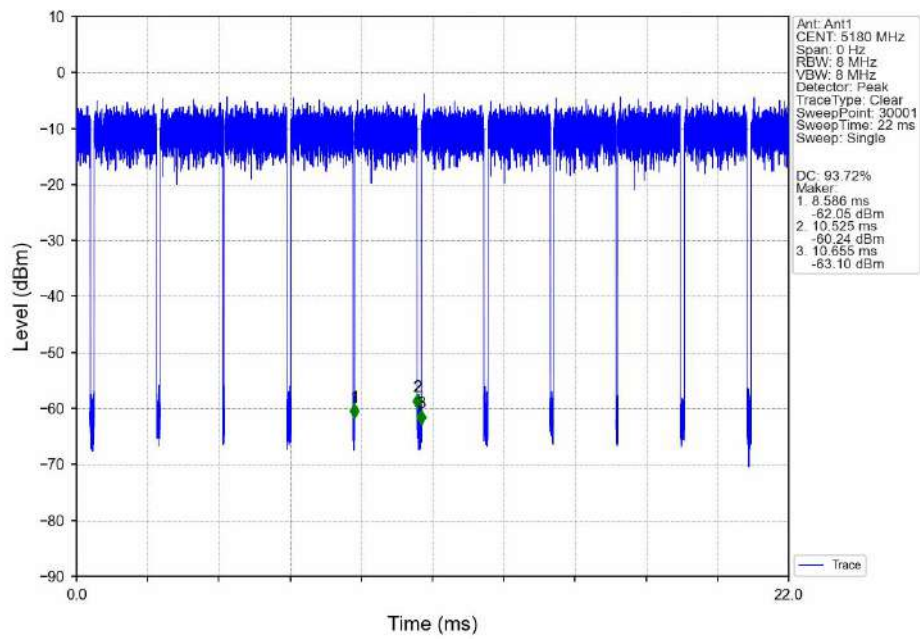
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



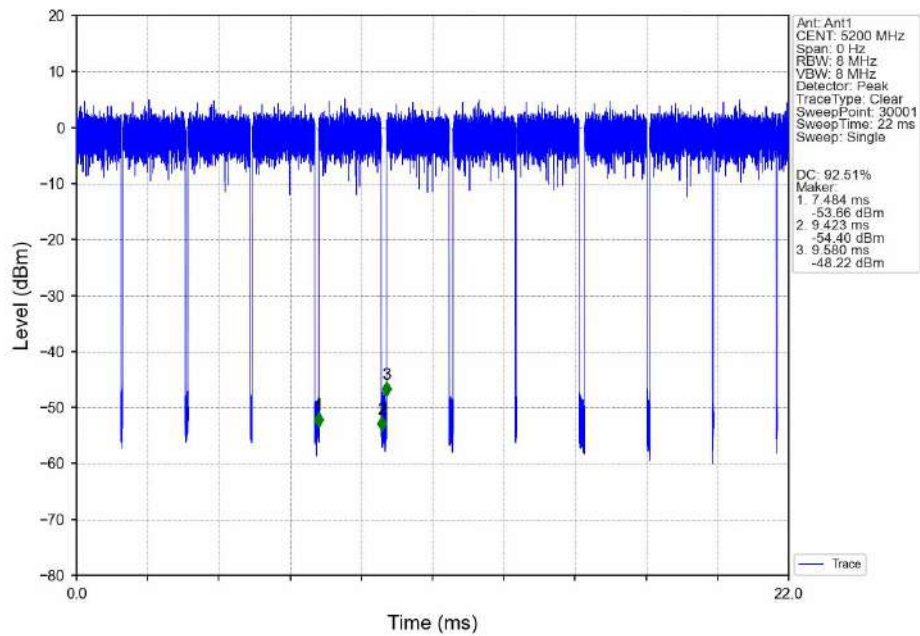
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



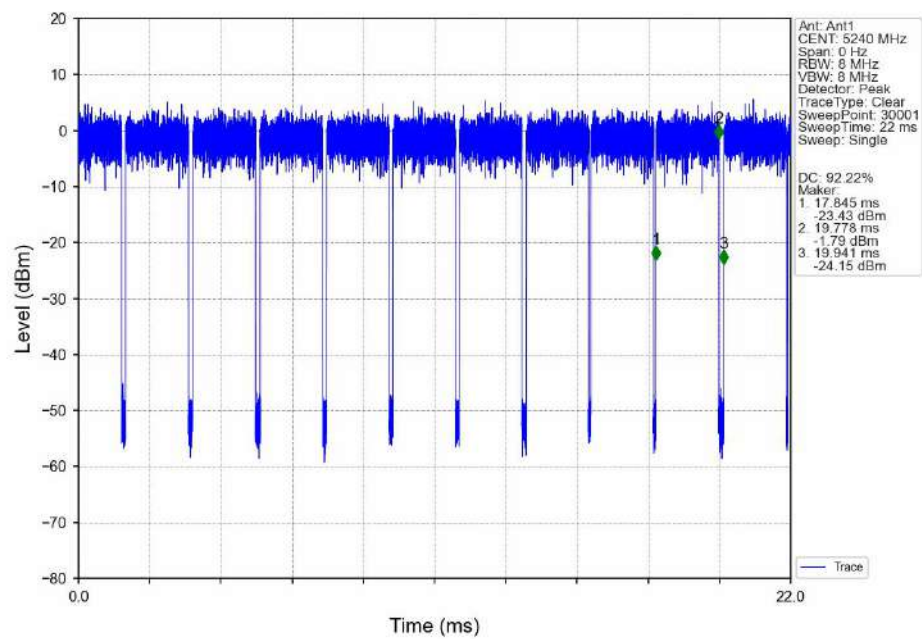
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



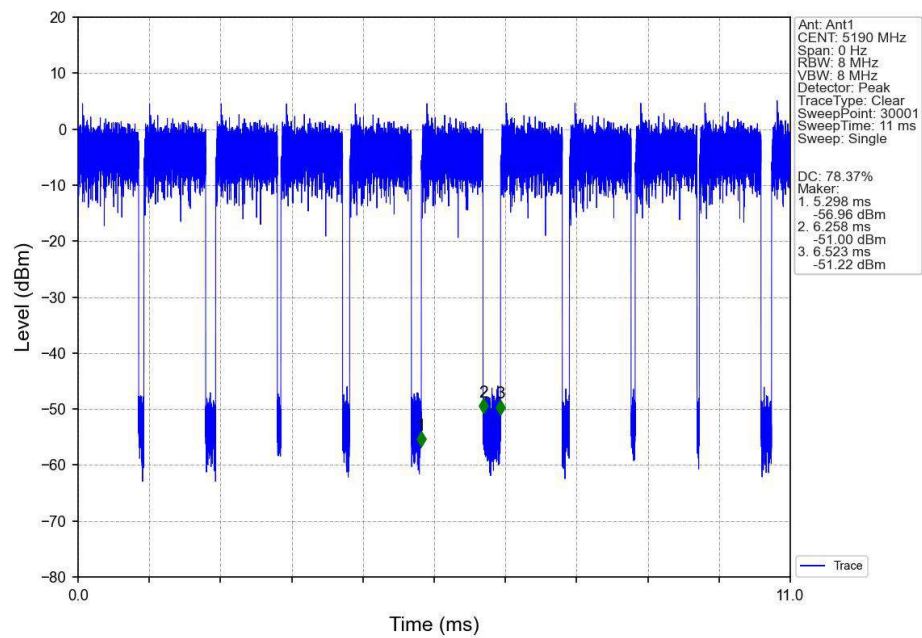
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



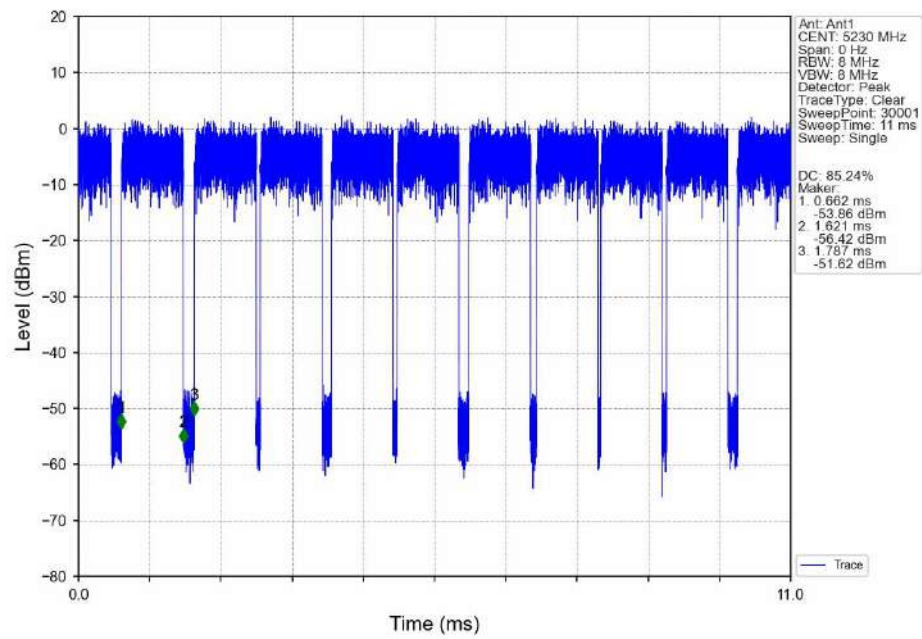
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



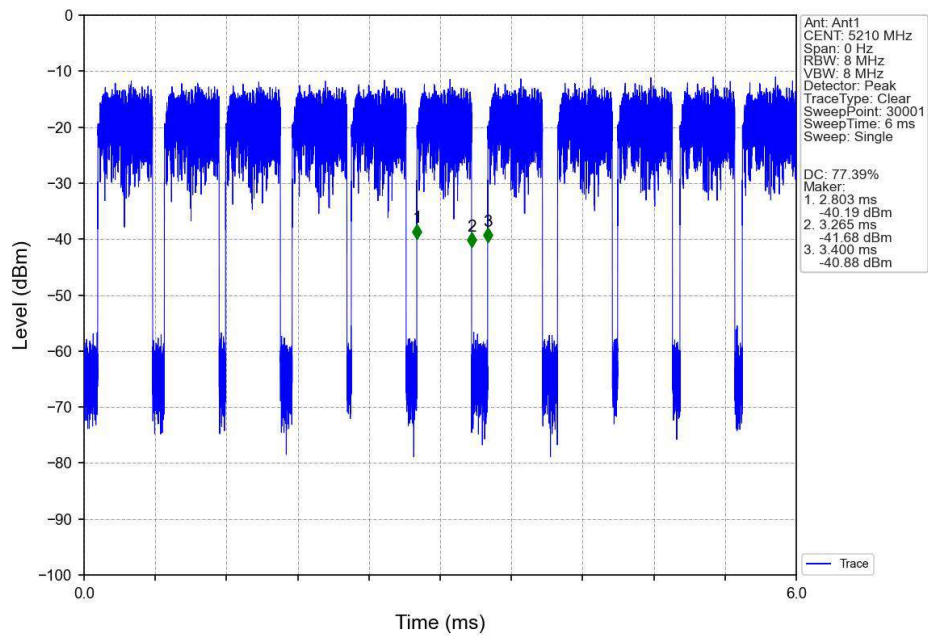
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

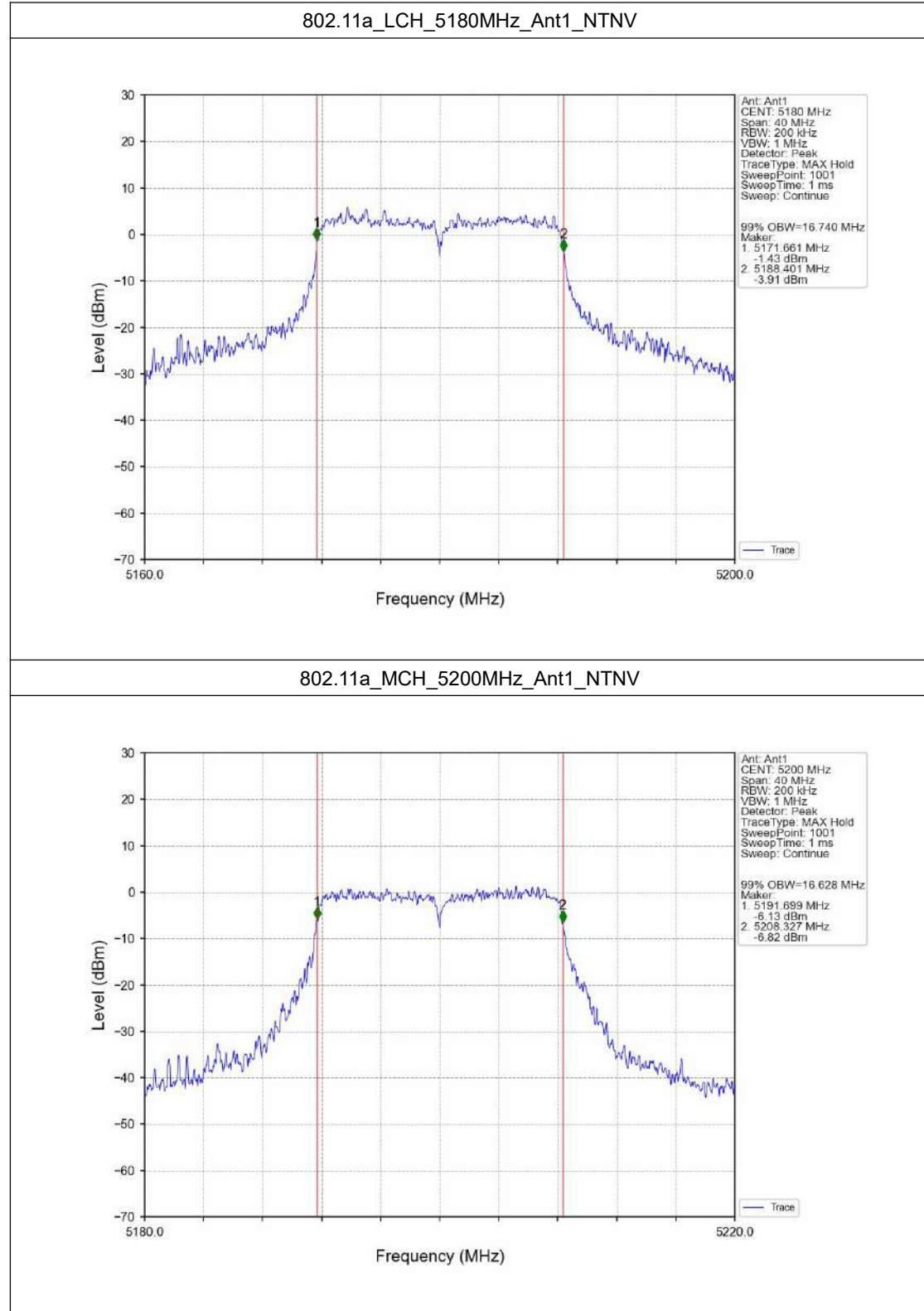
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	16.740	/	Pass
		5200	1	16.628	/	Pass
		5240	1	16.563	/	Pass
802.11n (HT20)	SISO	5180	1	17.707	/	Pass
		5200	1	17.721	/	Pass
		5240	1	17.702	/	Pass
802.11n (HT40)	SISO	5190	1	36.788	/	Pass
		5230	1	36.861	/	Pass
802.11ac (VHT20)	SISO	5180	1	17.692	/	Pass
		5200	1	17.780	/	Pass
		5240	1	17.717	/	Pass
802.11ac (VHT40)	SISO	5190	1	36.734	/	Pass
		5230	1	36.878	/	Pass
802.11ac (VHT80)	SISO	5210	1	75.788	/	Pass

2.1.2 26dB BW

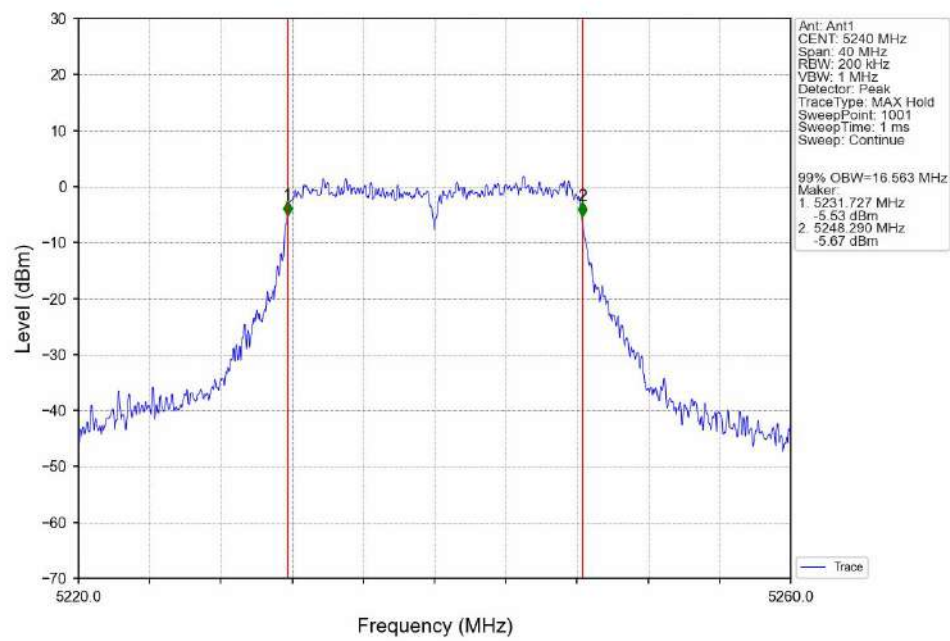
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	28.227	/	Pass
		5200	1	21.481	/	Pass
		5240	1	21.400	/	Pass
802.11n (HT20)	SISO	5180	1	22.013	/	Pass
		5200	1	22.193	/	Pass
		5240	1	22.050	/	Pass
802.11n (HT40)	SISO	5190	1	43.554	/	Pass
		5230	1	43.969	/	Pass
802.11ac (VHT20)	SISO	5180	1	21.434	/	Pass
		5200	1	22.242	/	Pass
		5240	1	22.002	/	Pass
802.11ac (VHT40)	SISO	5190	1	43.983	/	Pass
		5230	1	43.623	/	Pass
802.11ac (VHT80)	SISO	5210	1	82.025	/	Pass

2.2 Test Graph

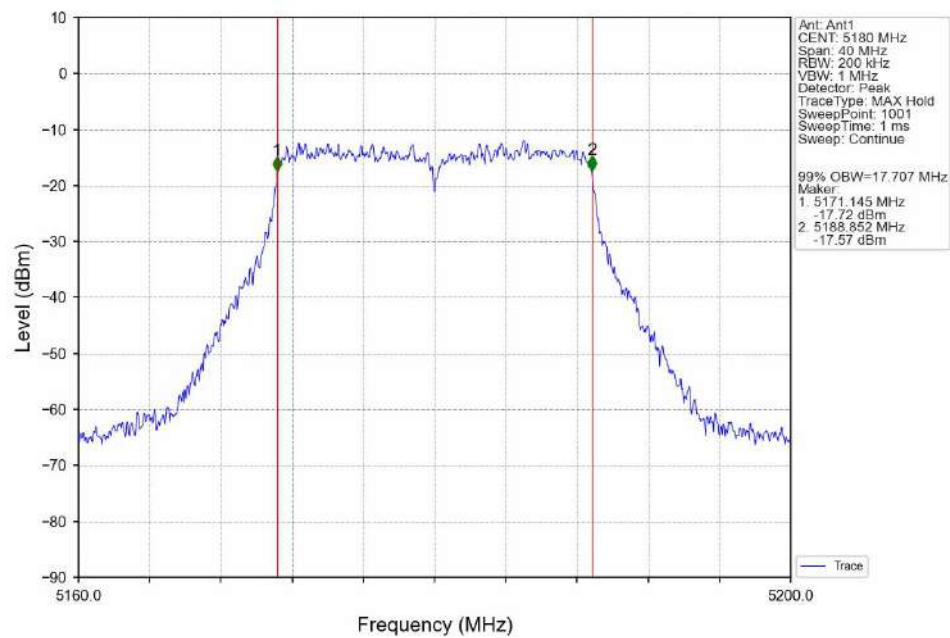
2.2.1 OBW



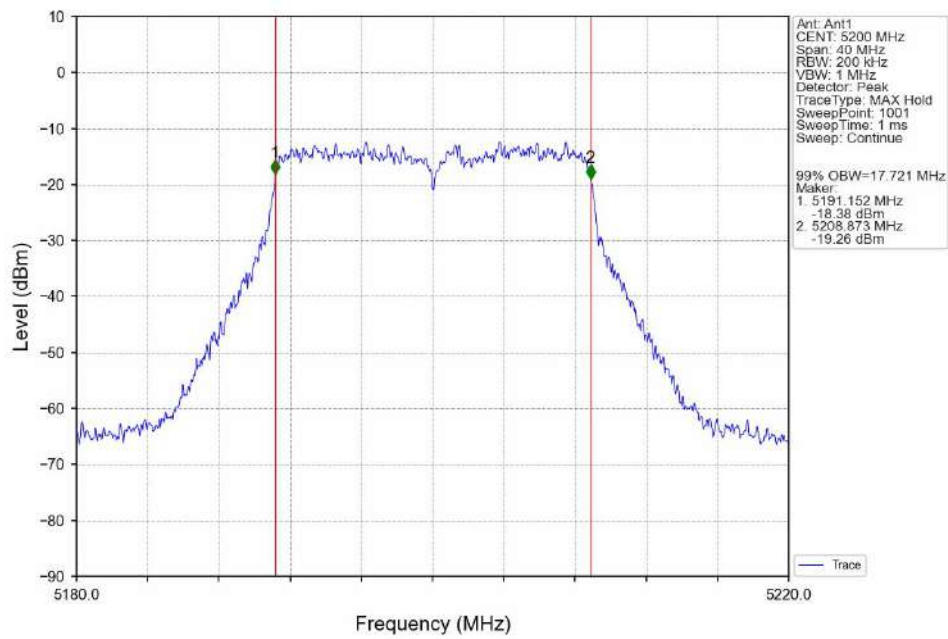
802.11a_HCH_5240MHz_Ant1_NTNV



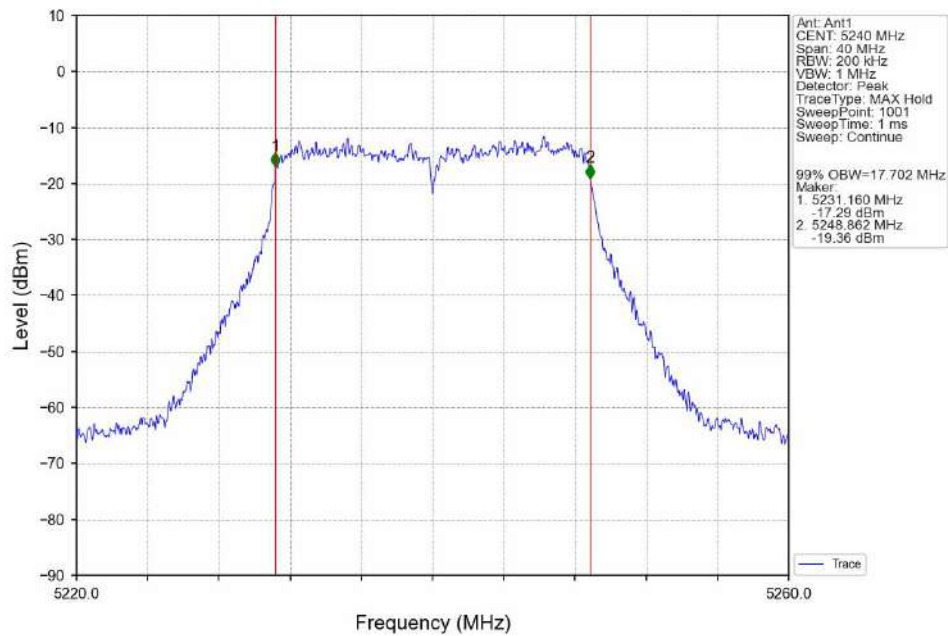
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



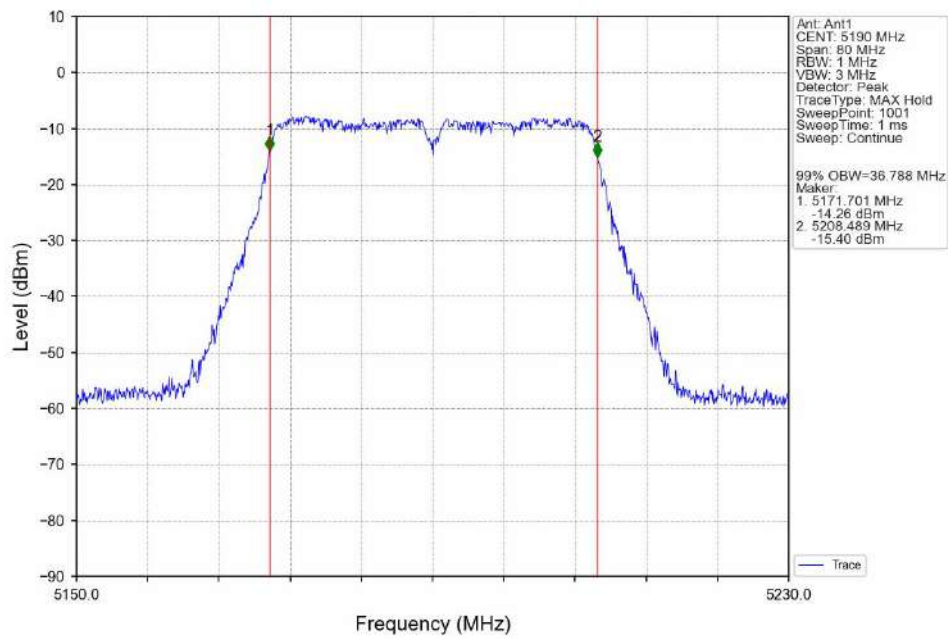
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



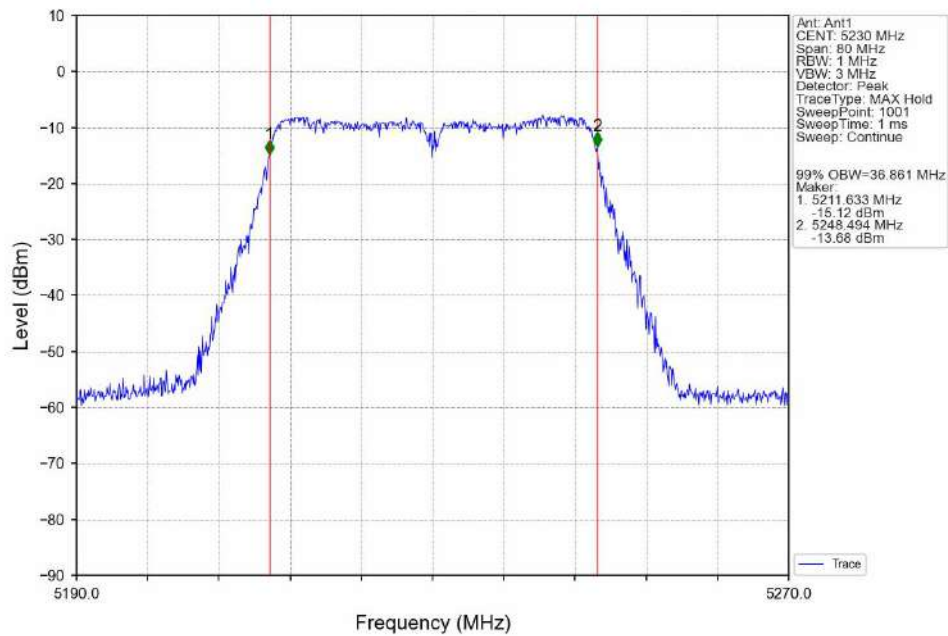
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



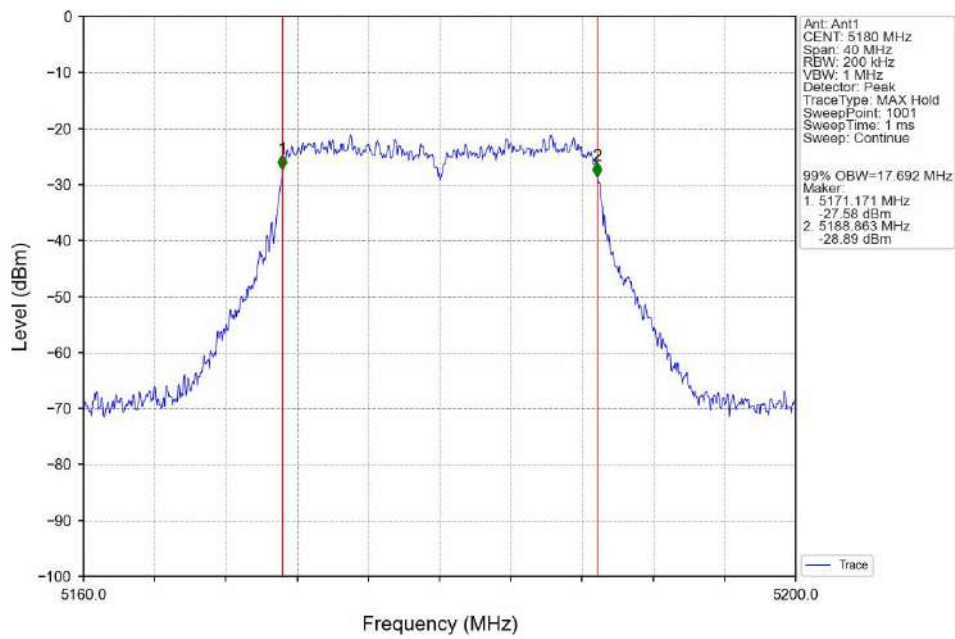
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



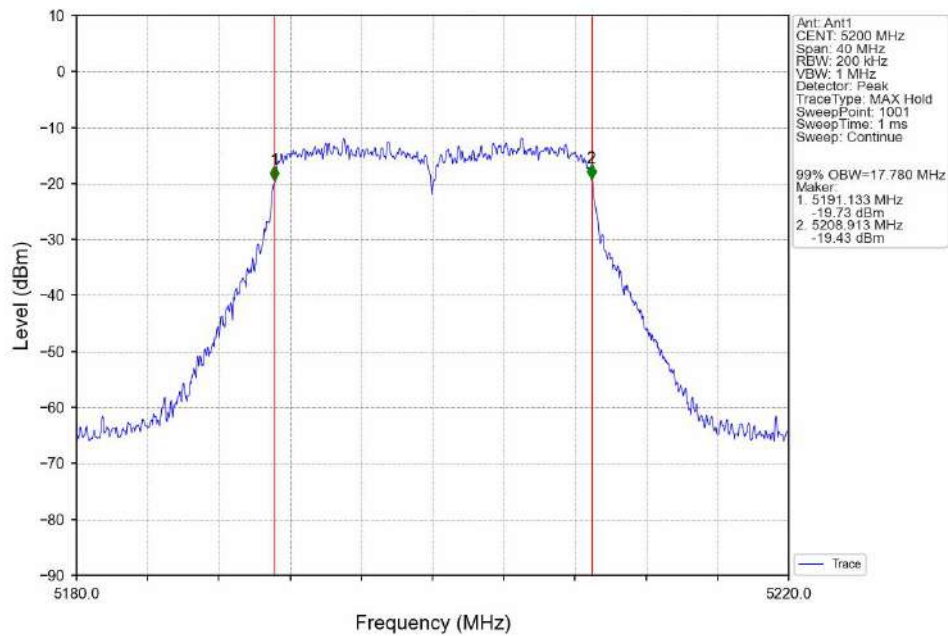
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



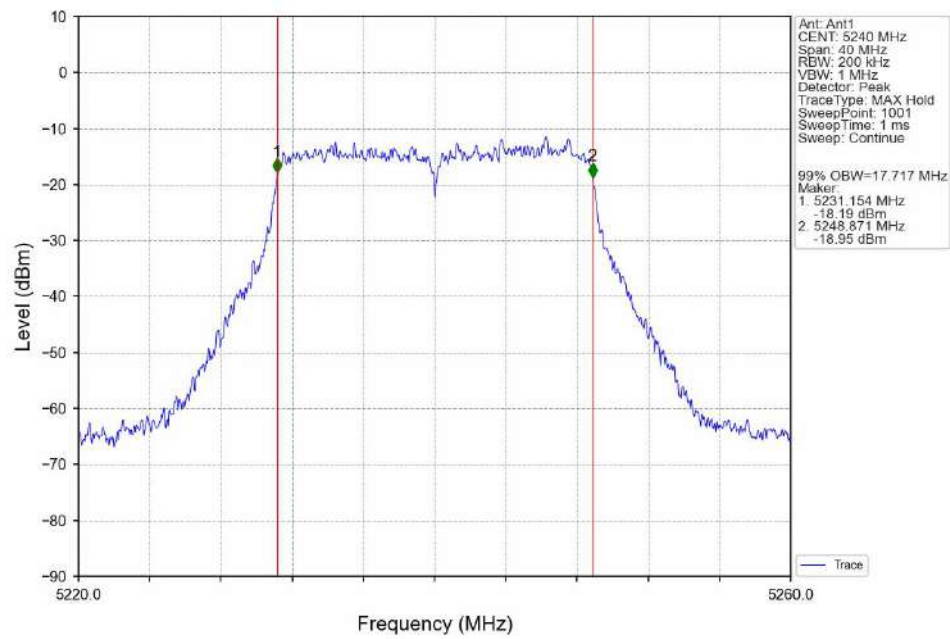
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



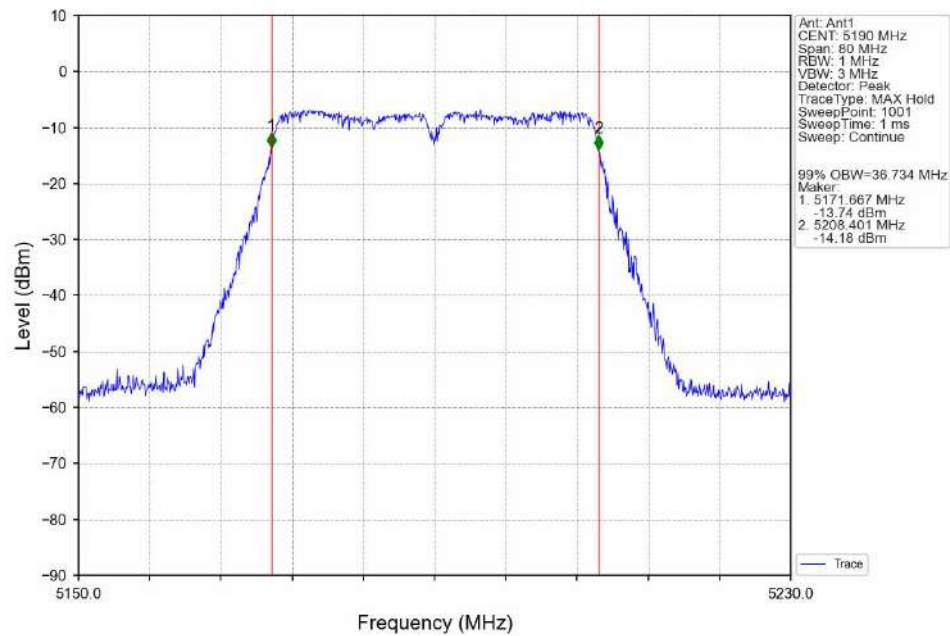
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



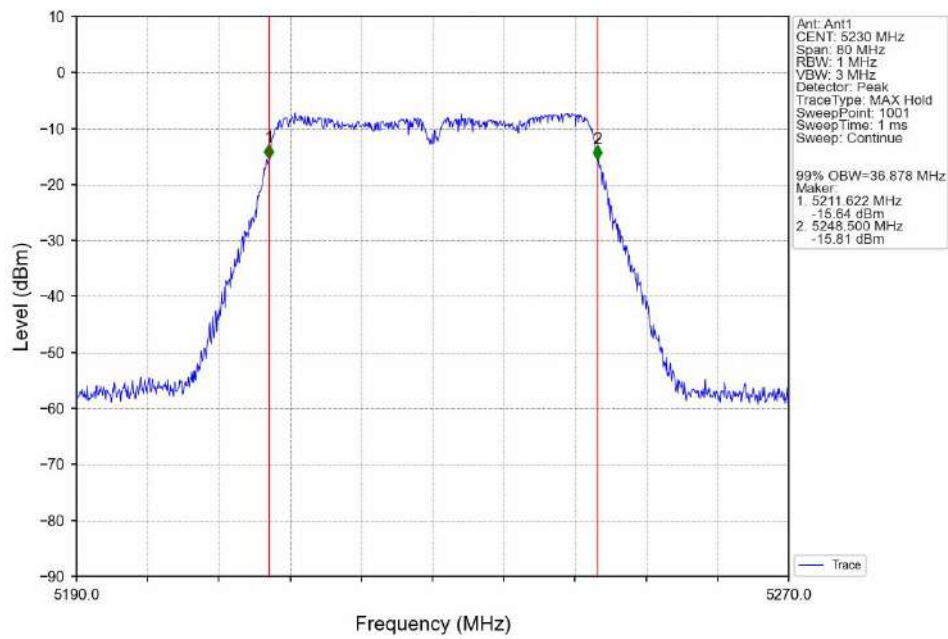
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



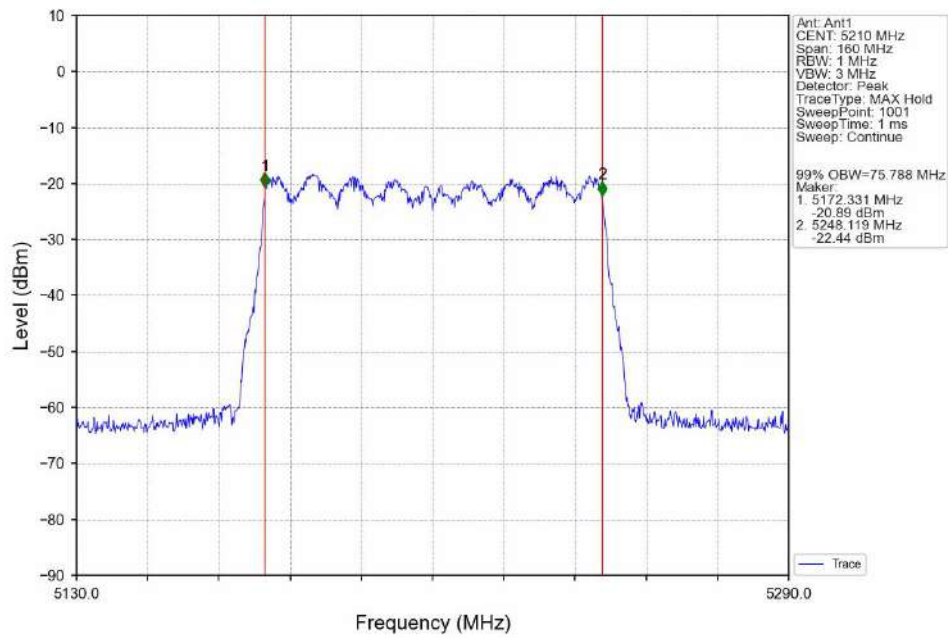
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



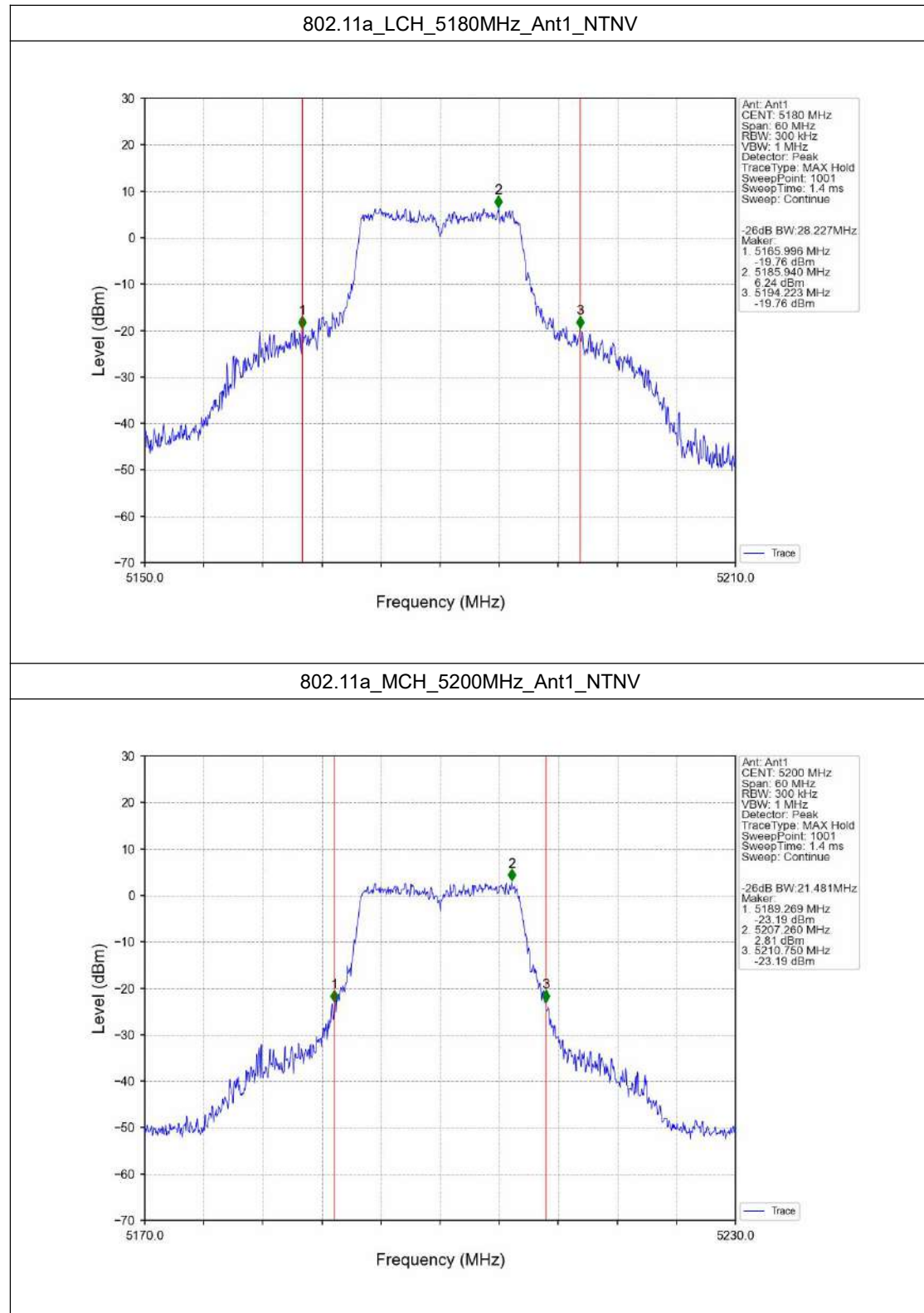
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



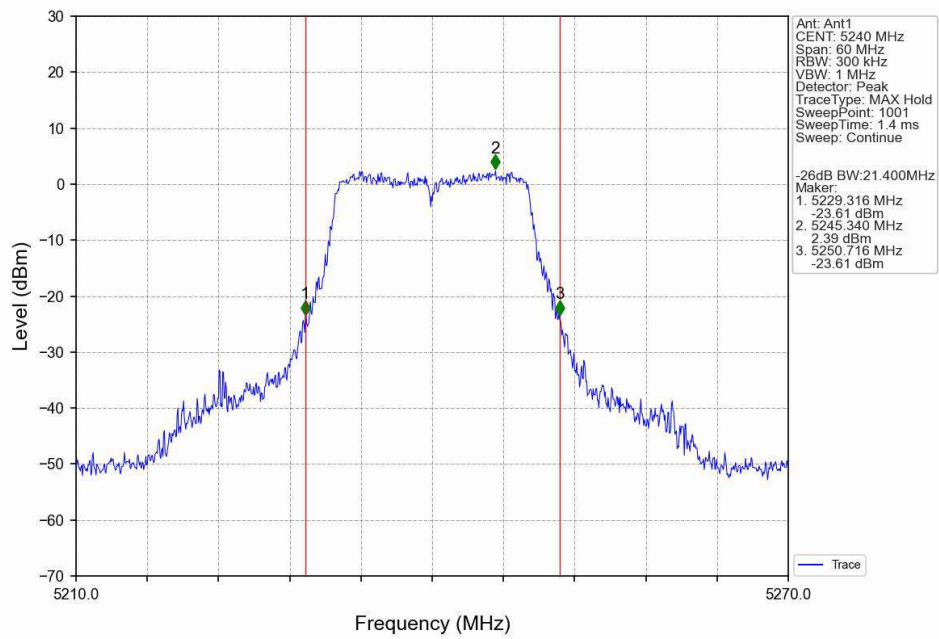
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



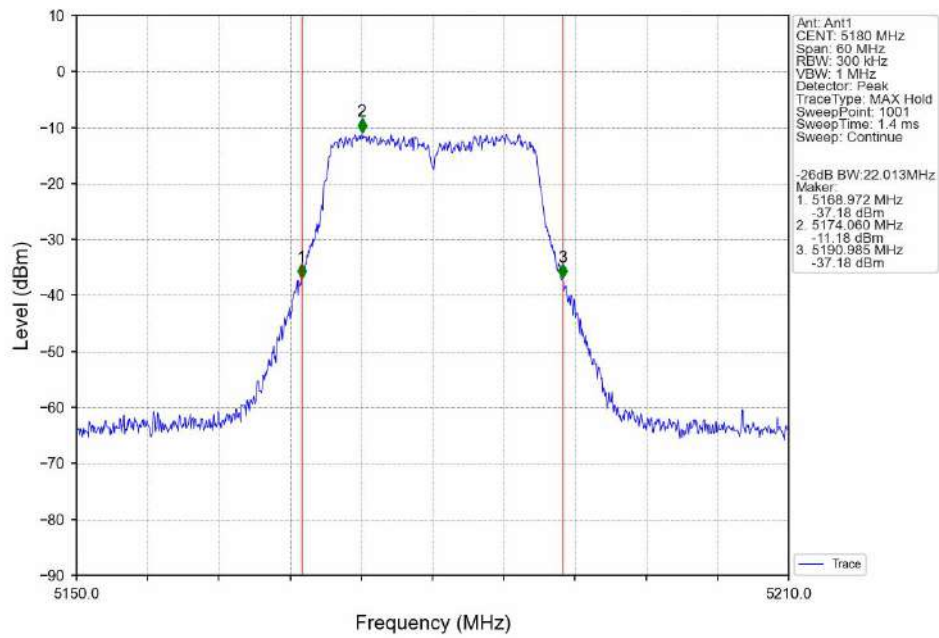
2.2.2 26dB BW



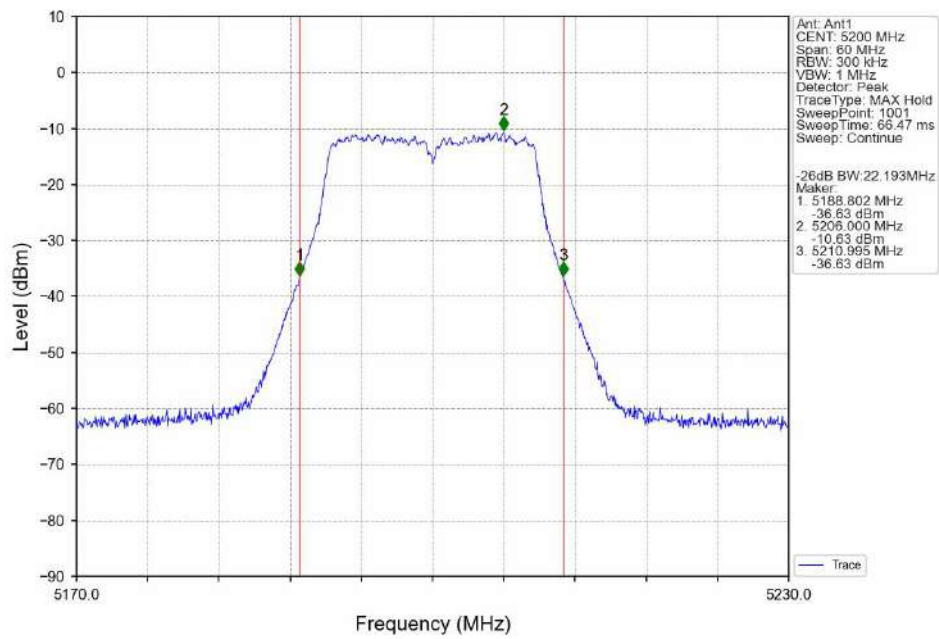
802.11a_HCH_5240MHz_Ant1_NTNV



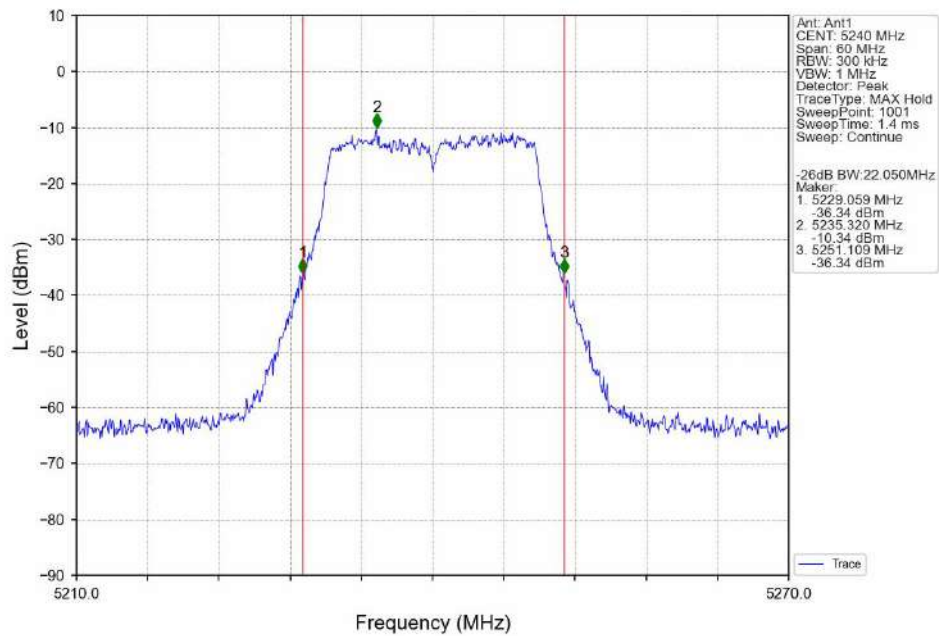
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



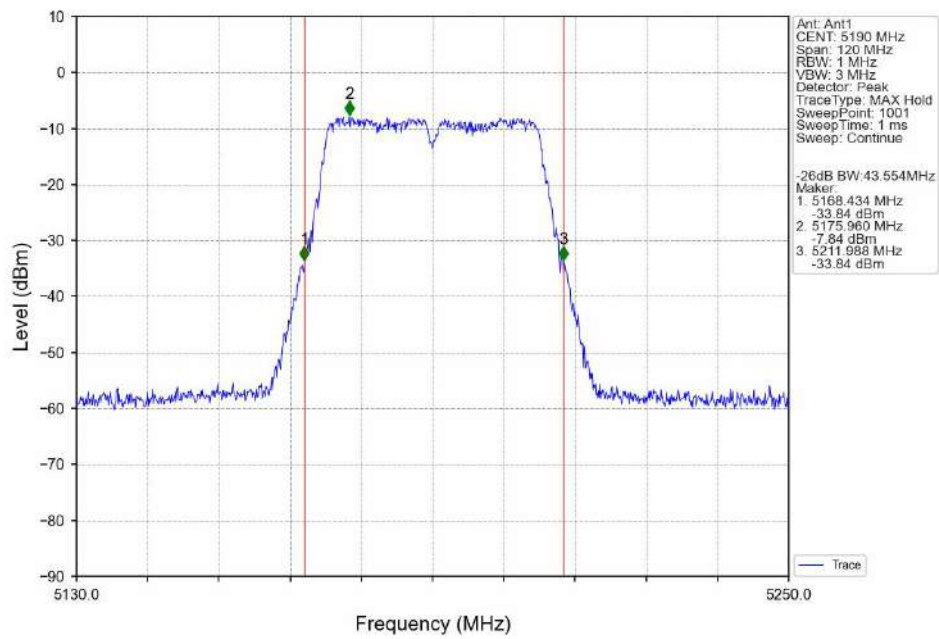
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



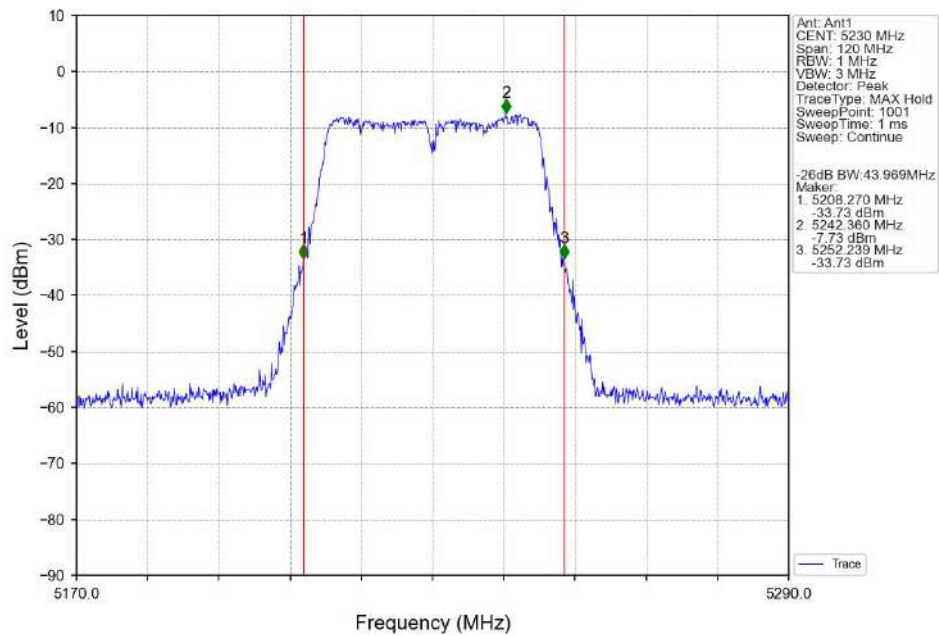
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



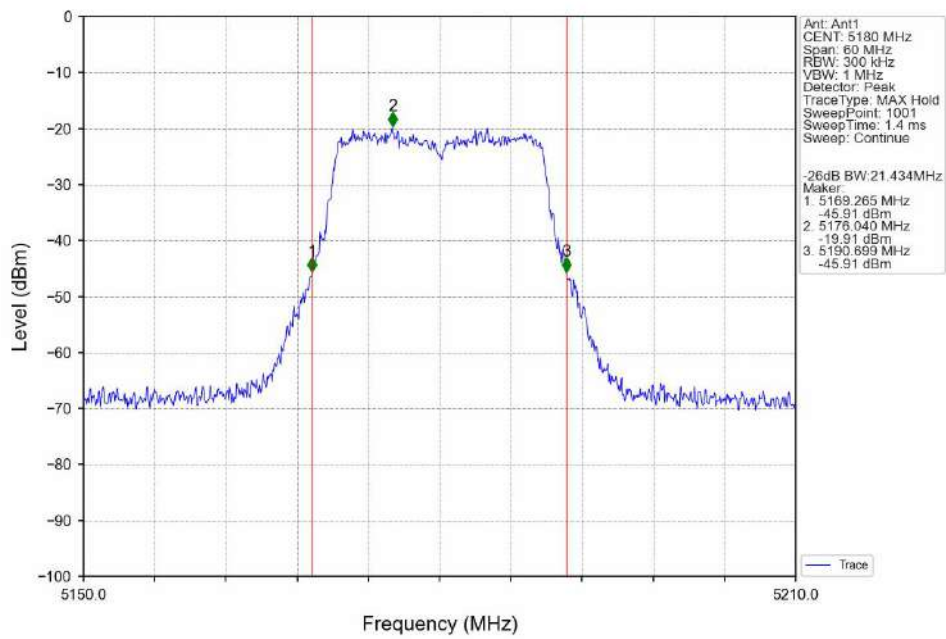
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



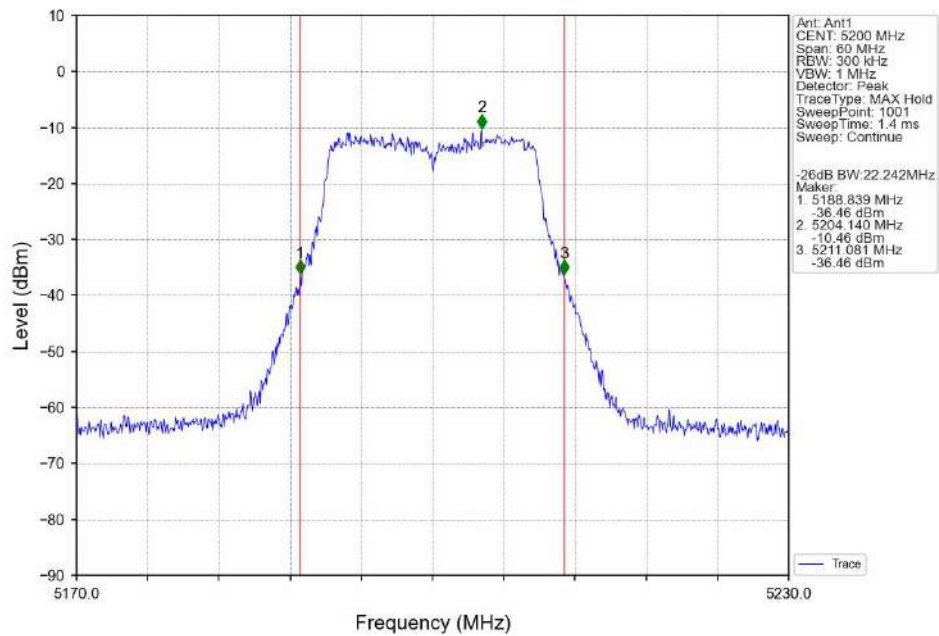
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



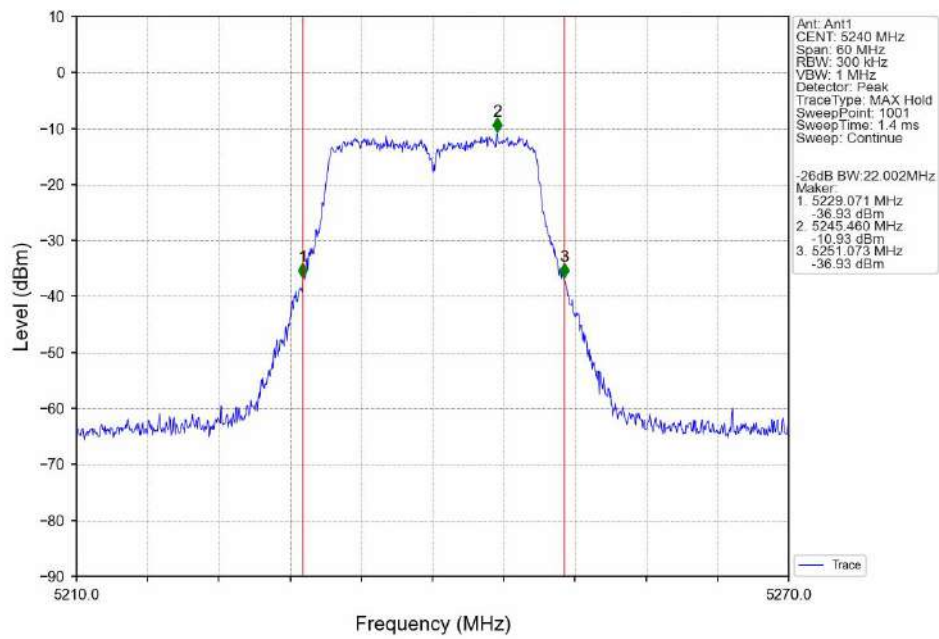
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



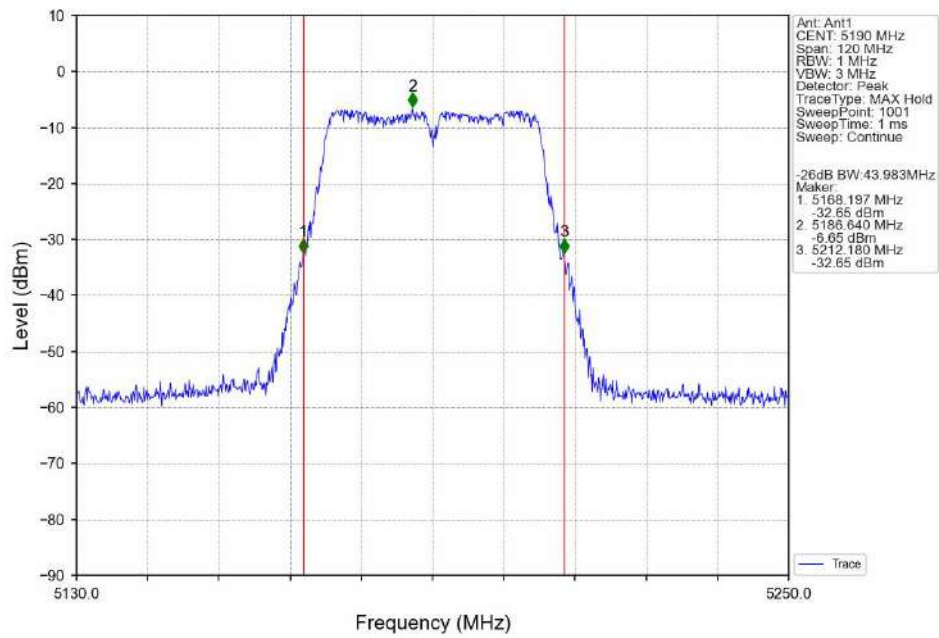
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



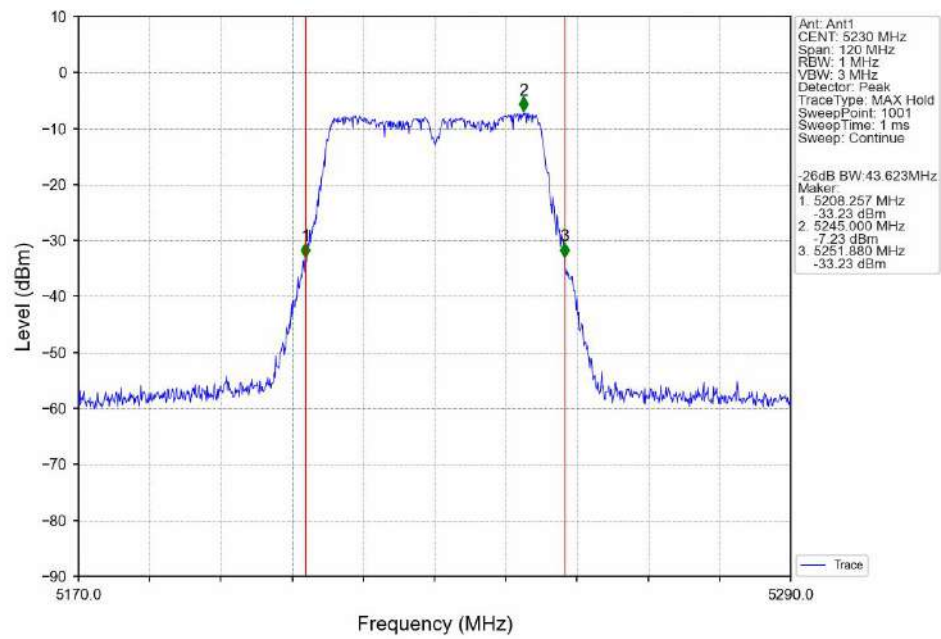
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



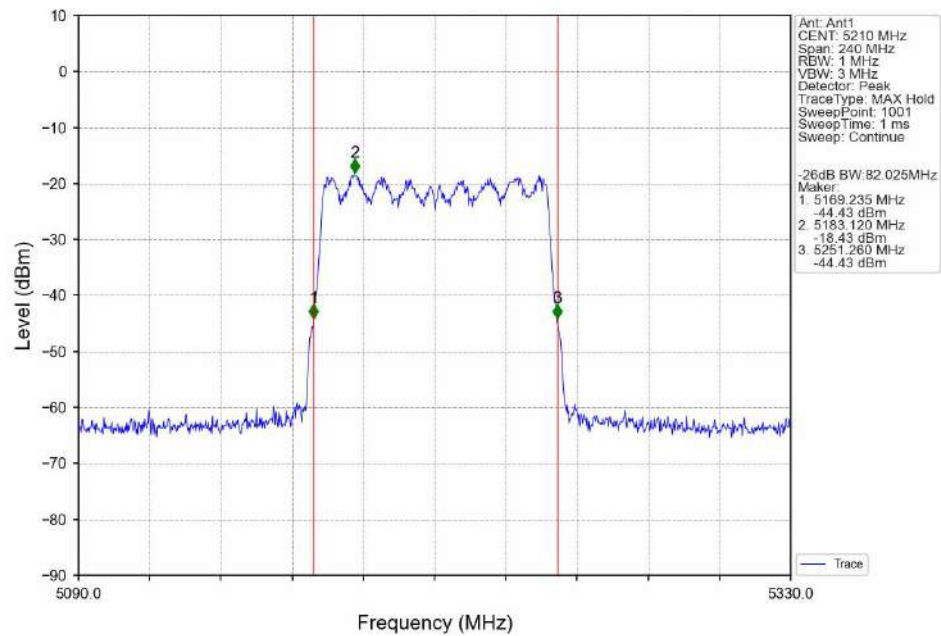
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



3. Maximum Conducted Output Power

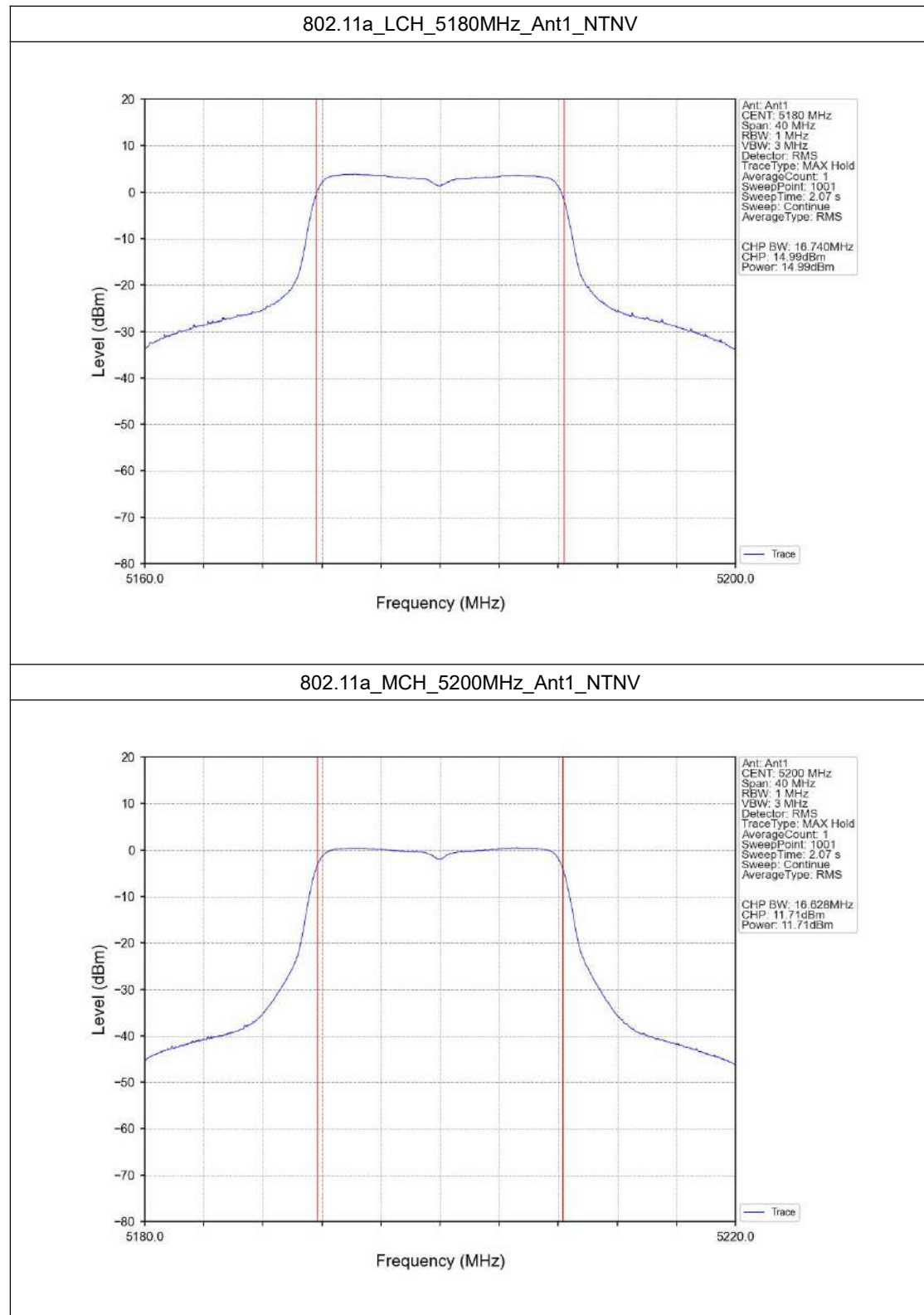
3.1 Test Result

3.1.1 Power

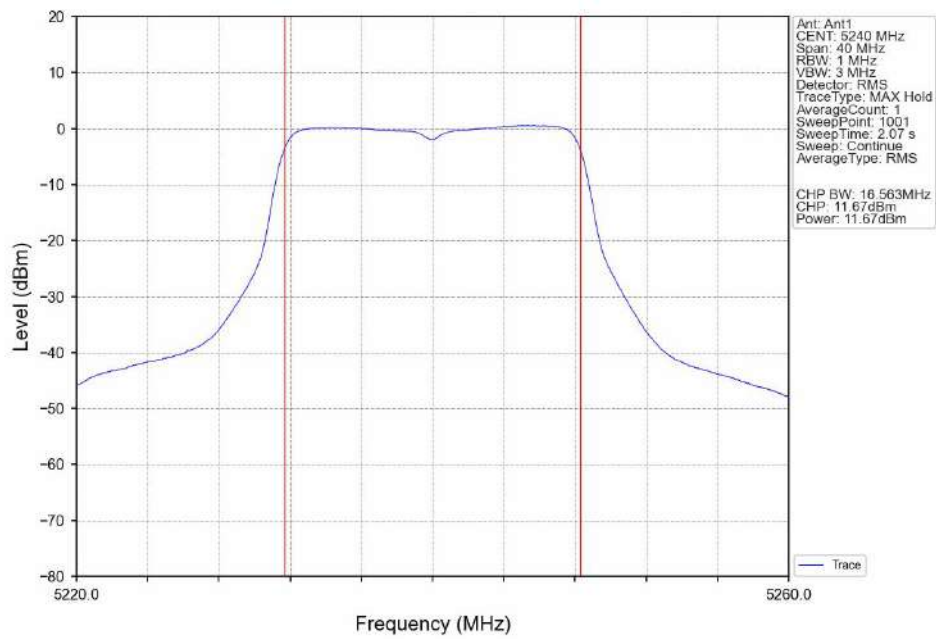
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	14.99	≤ 23.98	Pass
		5200	11.71	≤ 23.98	Pass
		5240	11.67	≤ 23.98	Pass
802.11n (HT20)	SISO	5180	11.04	≤ 23.98	Pass
		5200	10.73	≤ 23.98	Pass
		5240	10.51	≤ 23.98	Pass
802.11n (HT40)	SISO	5190	11.03	≤ 23.98	Pass
		5230	10.95	≤ 23.98	Pass
802.11ac (VHT20)	SISO	5180	11.62	≤ 23.98	Pass
		5200	11.41	≤ 23.98	Pass
		5240	11.29	≤ 23.98	Pass
802.11ac (VHT40)	SISO	5190	12.37	≤ 23.98	Pass
		5230	11.81	≤ 23.98	Pass
802.11ac (VHT80)	SISO	5210	12.28	≤ 23.98	Pass
Note1: Antenna Gain: Ant1: 2.39dBi;					

3.2 Test Graph

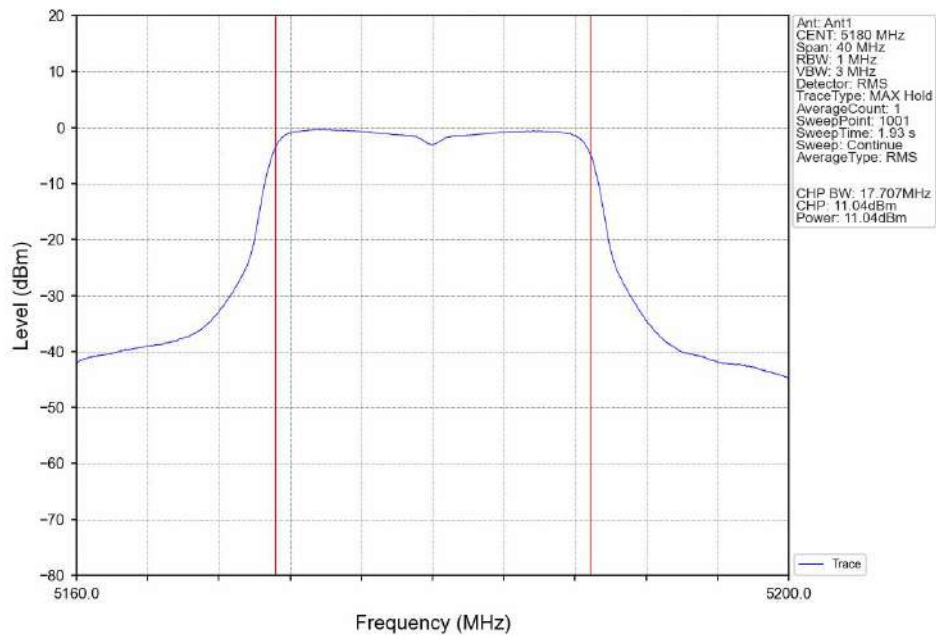
3.2.1 Power



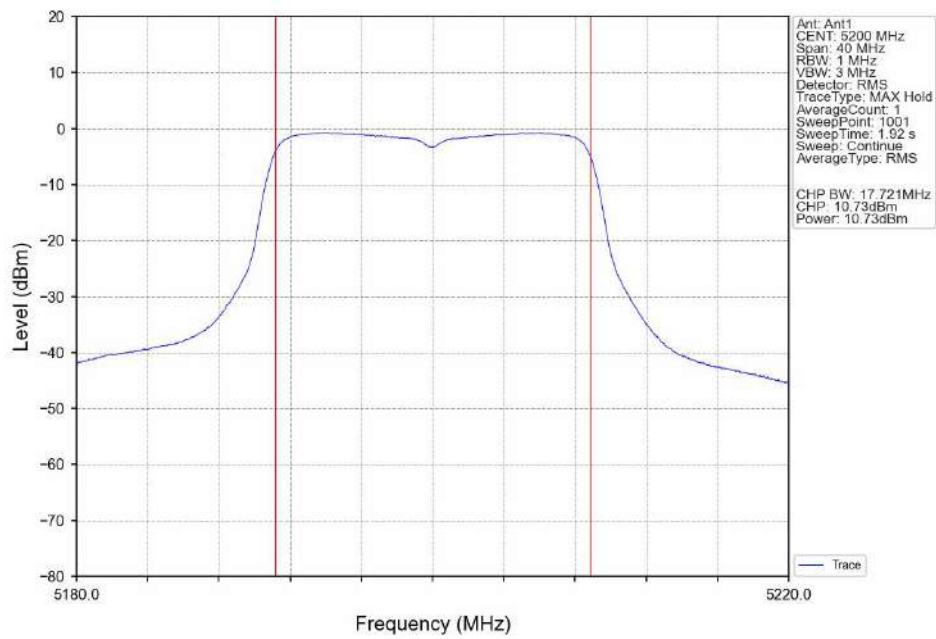
802.11a_HCH_5240MHz_Ant1_NTNV



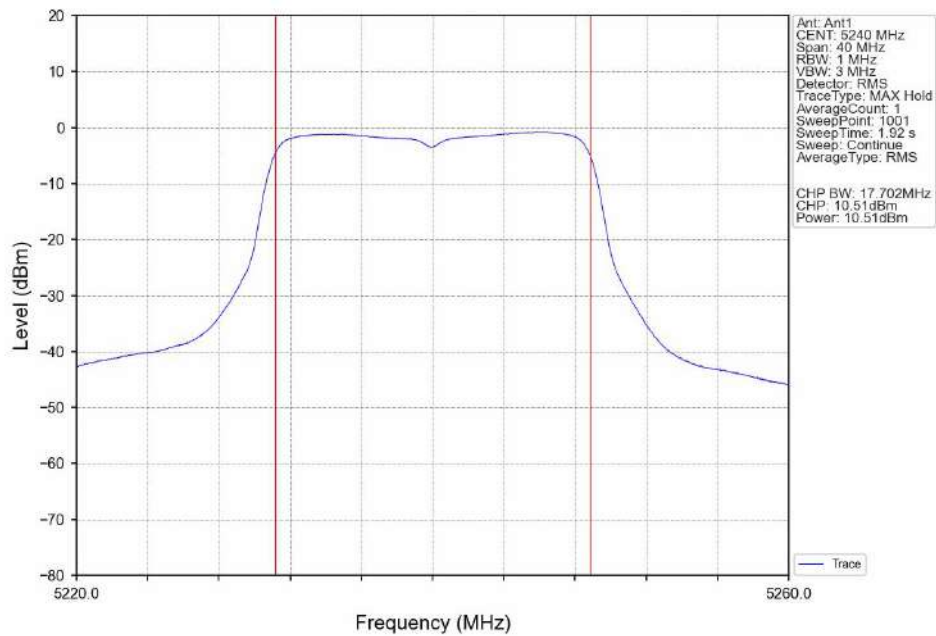
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



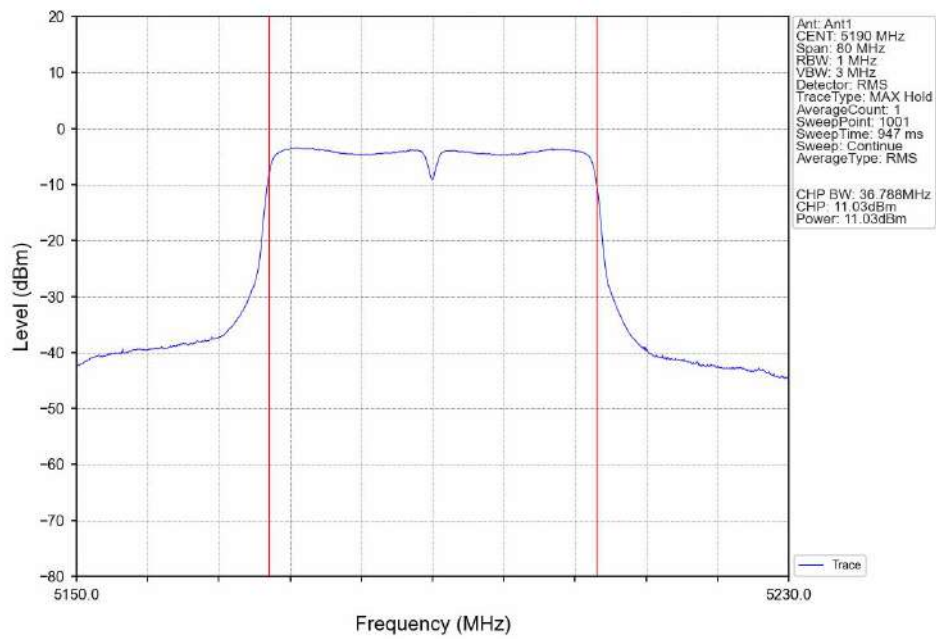
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



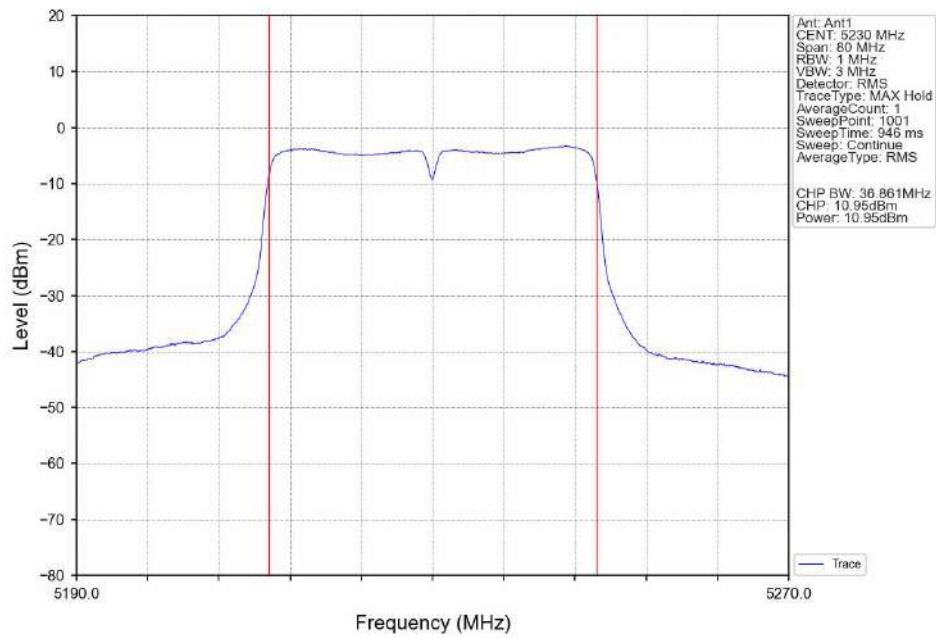
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



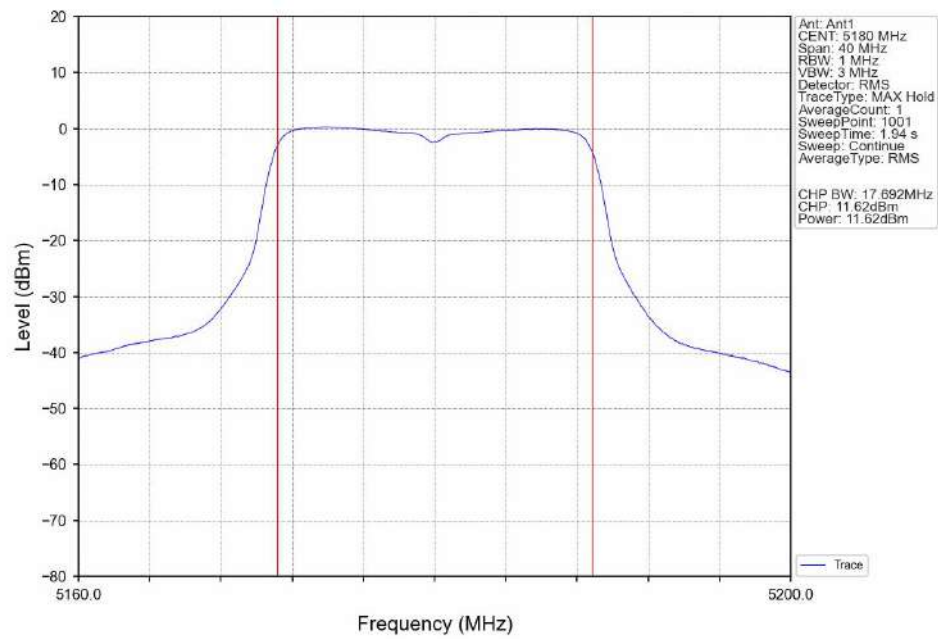
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



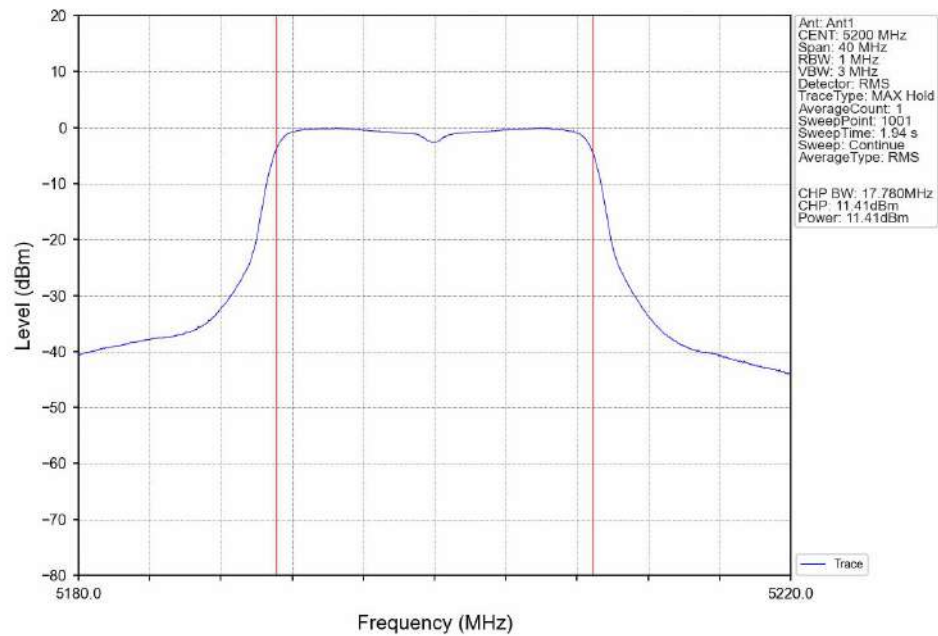
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



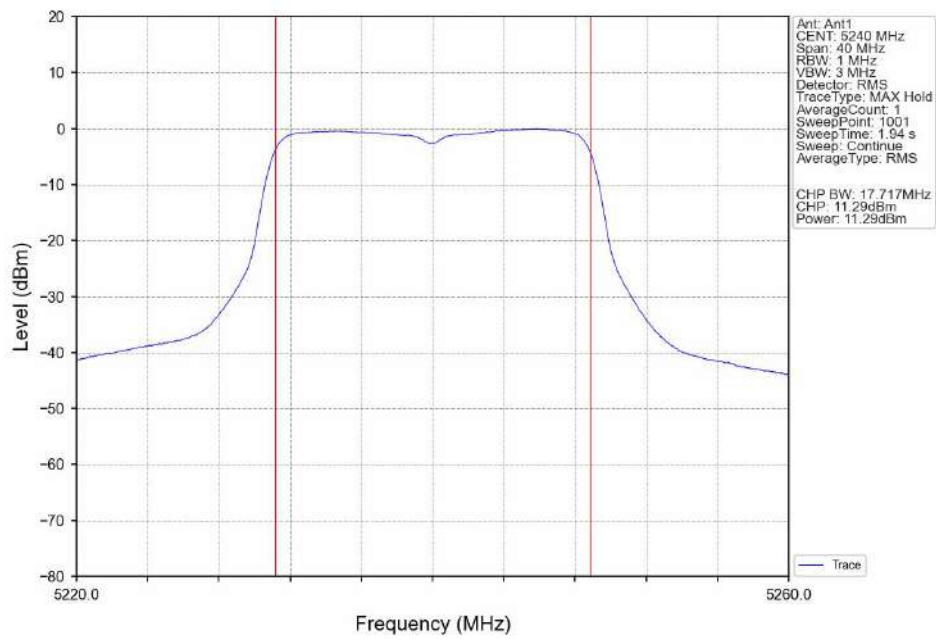
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



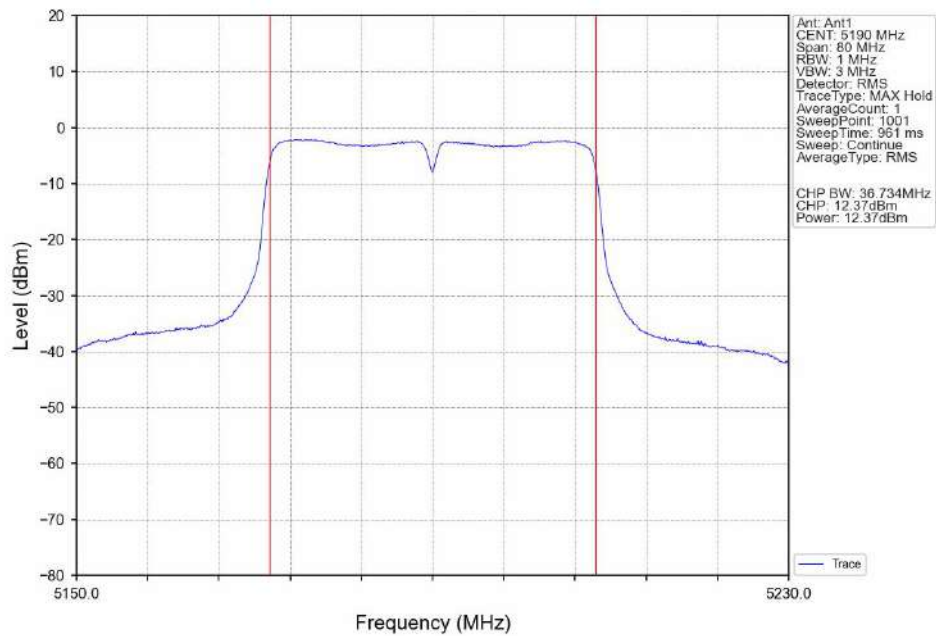
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



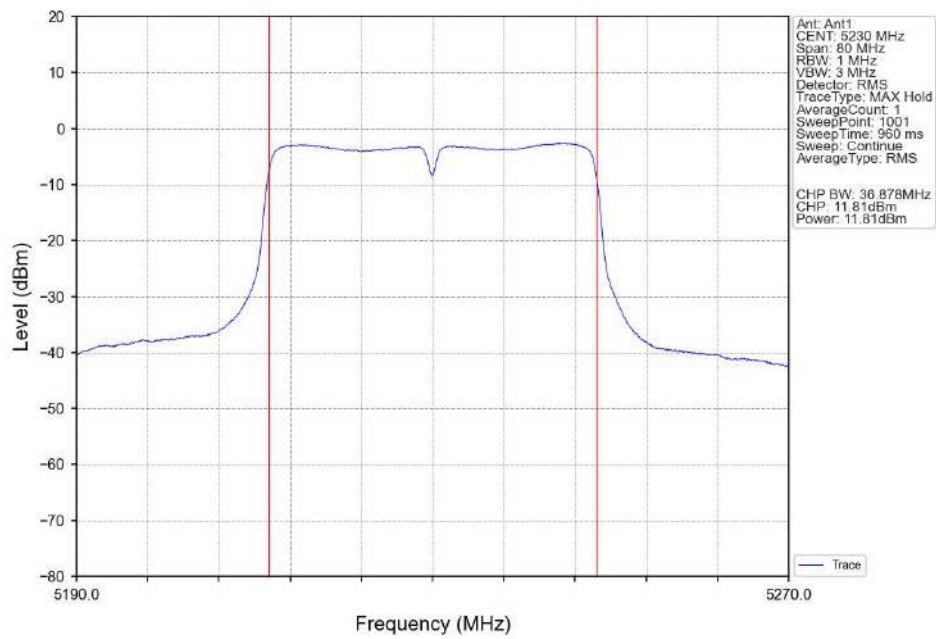
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



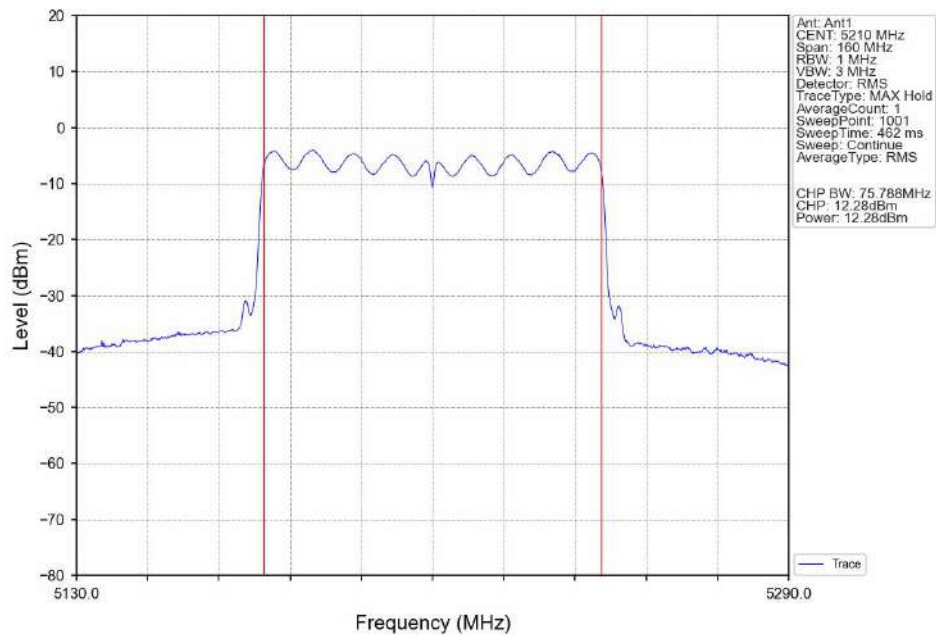
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



4. Maximum Power Spectral Density

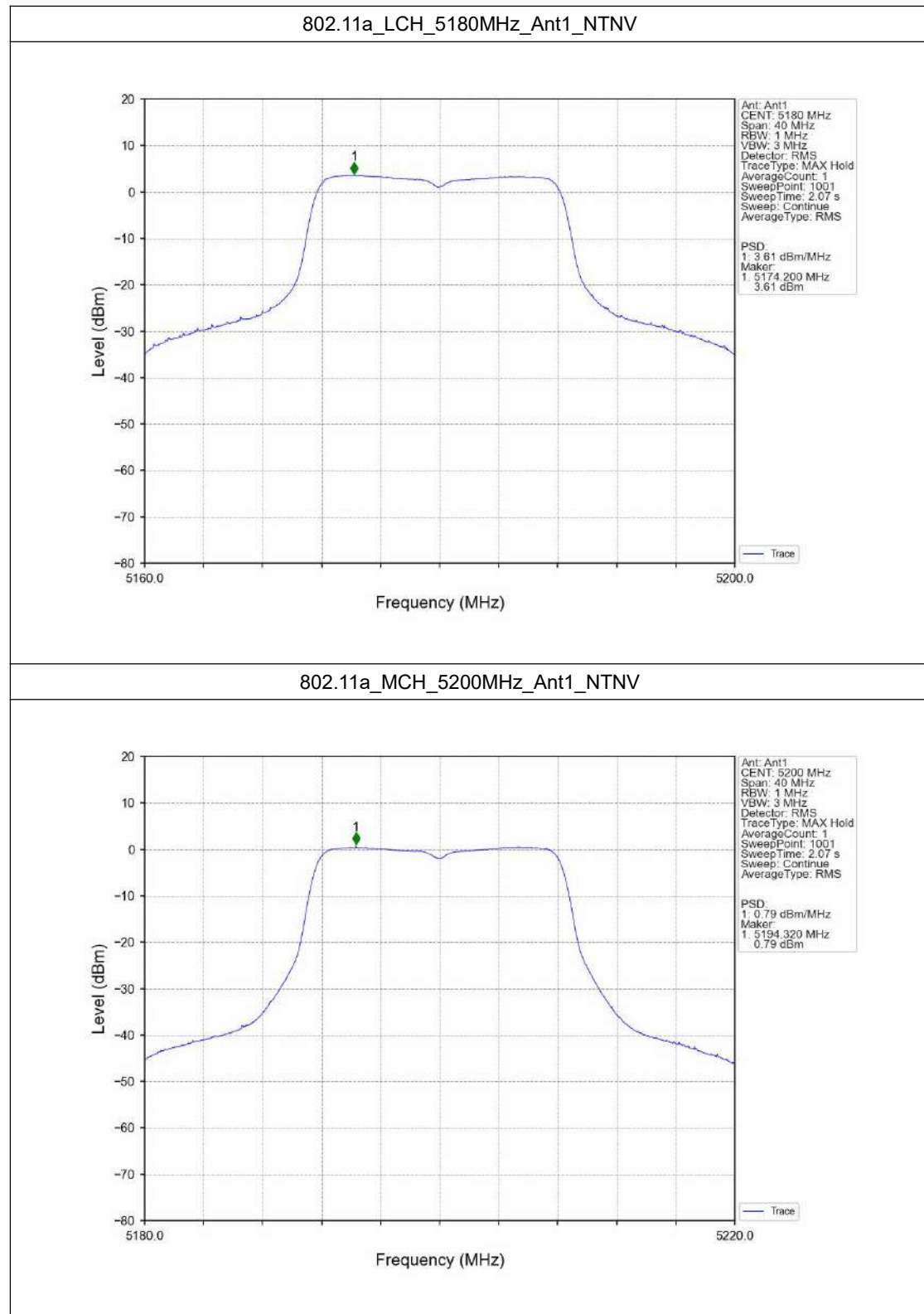
4.1 Test Result

4.1.1 PSD

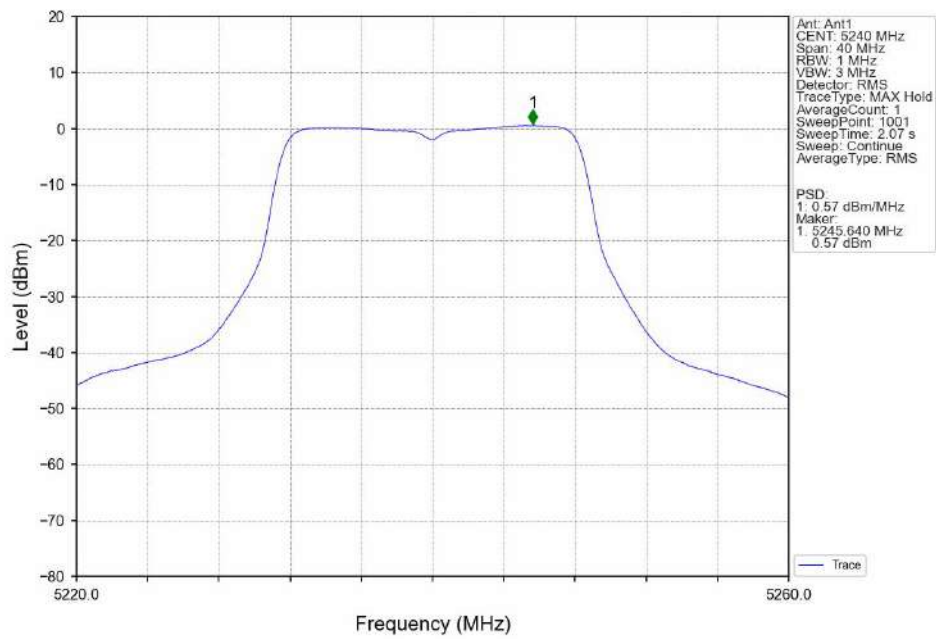
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	3.61	≤ 11	Pass
		5200	0.79	≤ 11	Pass
		5240	0.57	≤ 11	Pass
802.11n (HT20)	SISO	5180	-0.37	≤ 11	Pass
		5200	-1.22	≤ 11	Pass
		5240	-0.99	≤ 11	Pass
802.11n (HT40)	SISO	5190	-3.53	≤ 11	Pass
		5230	-3.22	≤ 11	Pass
802.11ac (VHT20)	SISO	5180	0.12	≤ 11	Pass
		5200	-0.24	≤ 11	Pass
		5240	-0.19	≤ 11	Pass
802.11ac (VHT40)	SISO	5190	-2.40	≤ 11	Pass
		5230	-2.81	≤ 11	Pass
802.11ac (VHT80)	SISO	5210	-4.19	≤ 11	Pass
Note1: Antenna Gain: Ant1: 2.39dBi;					

4.2 Test Graph

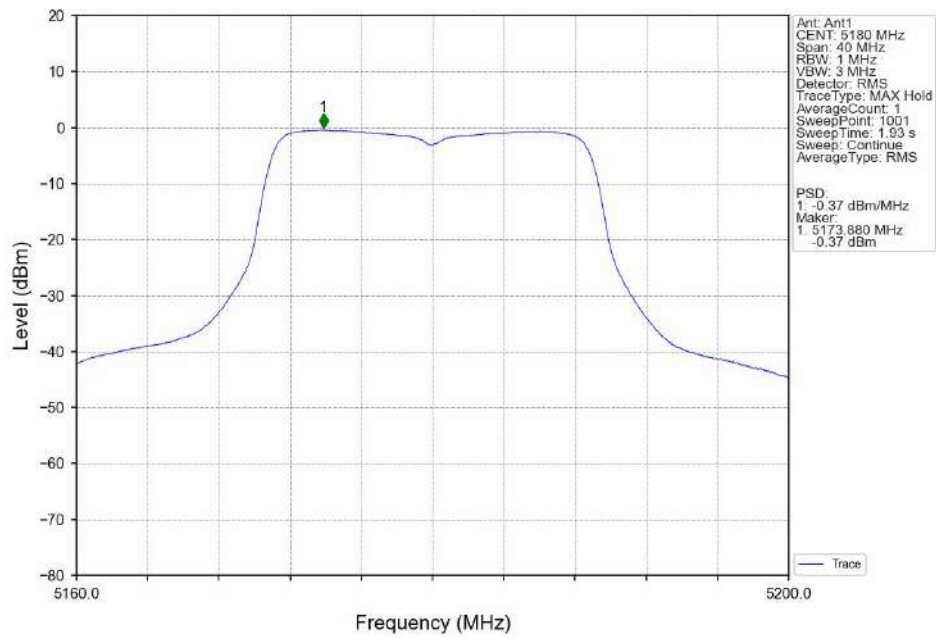
4.2.1 PSD



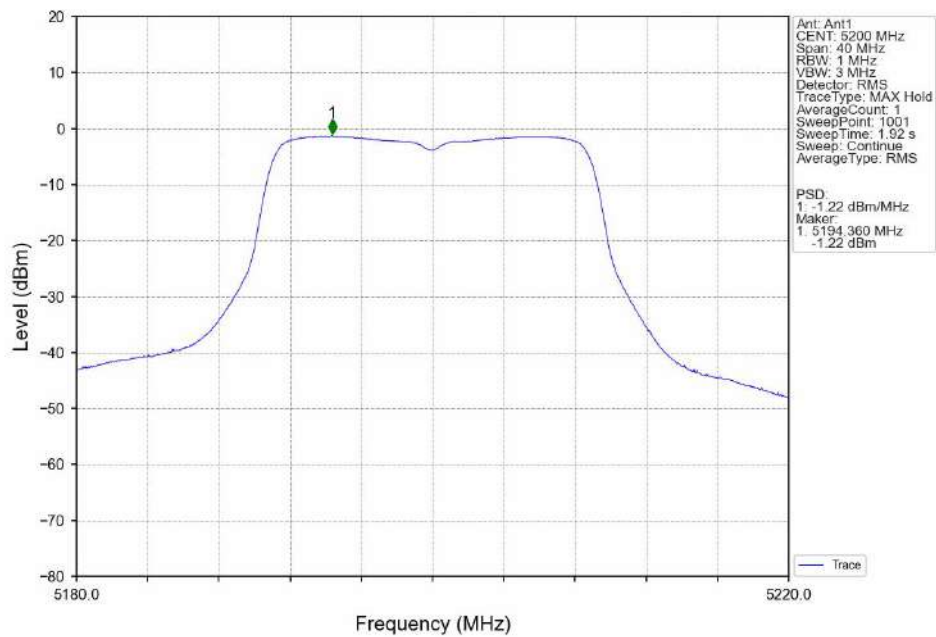
802.11a_HCH_5240MHz_Ant1_NTNV



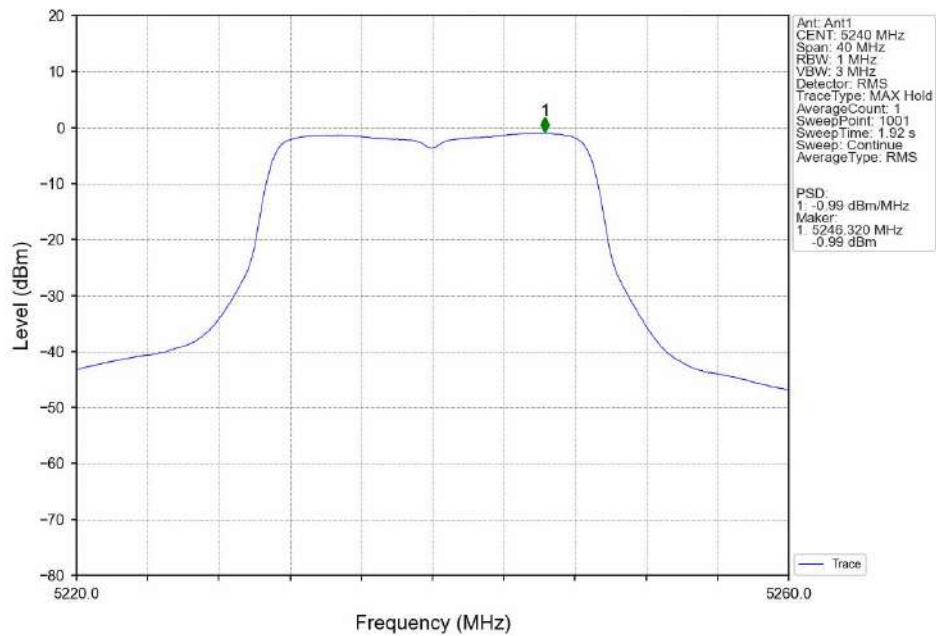
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



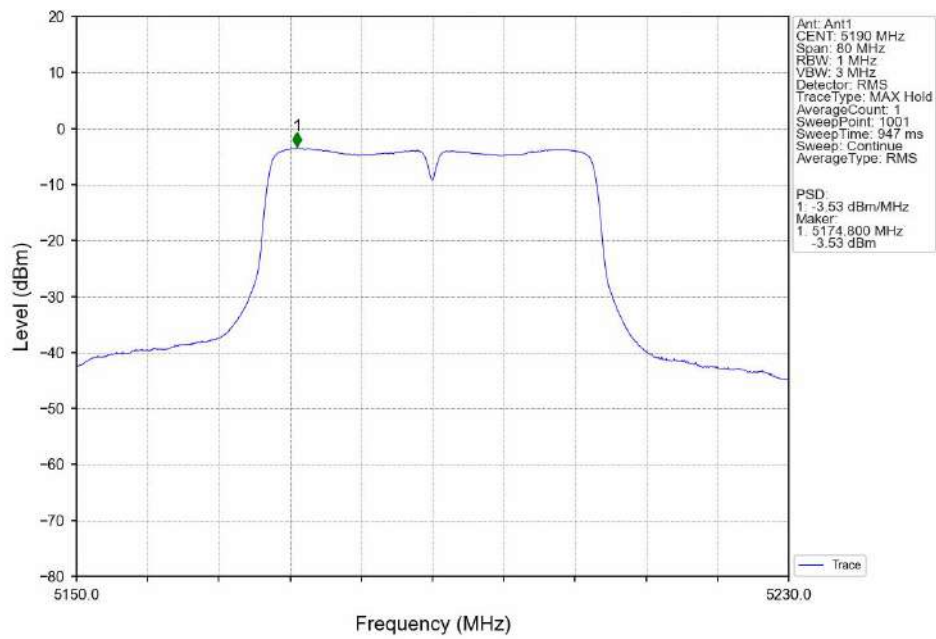
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



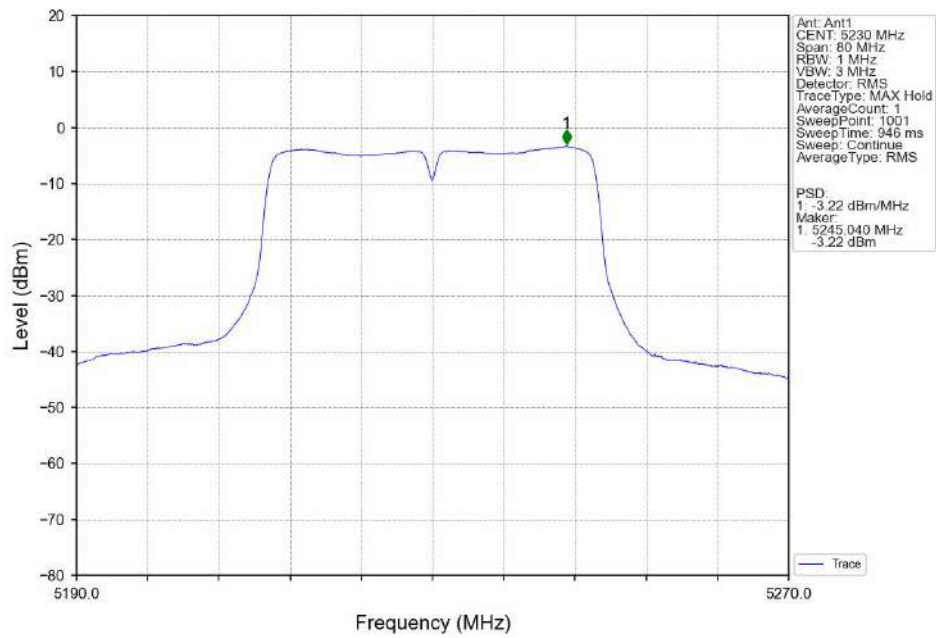
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



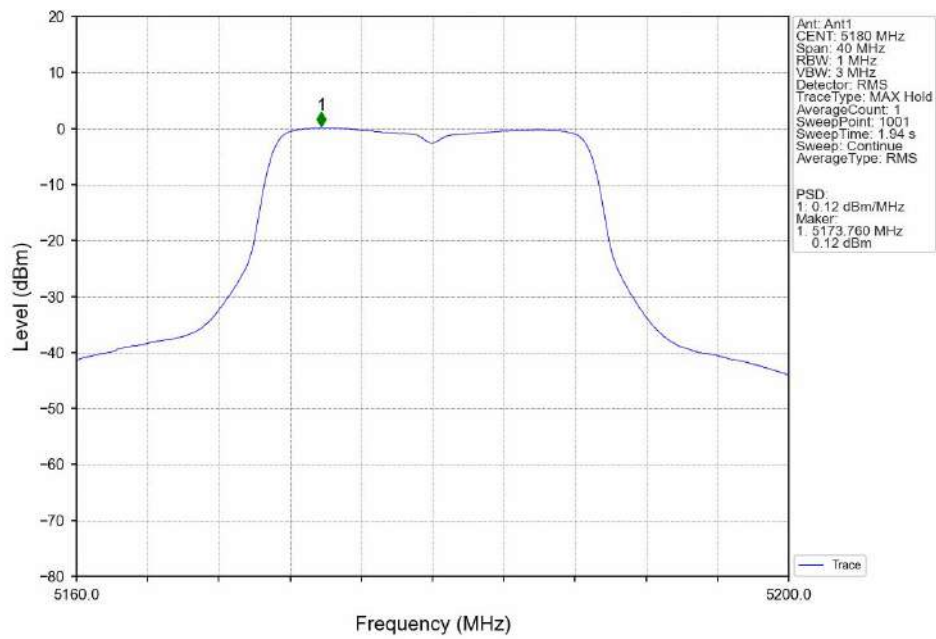
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



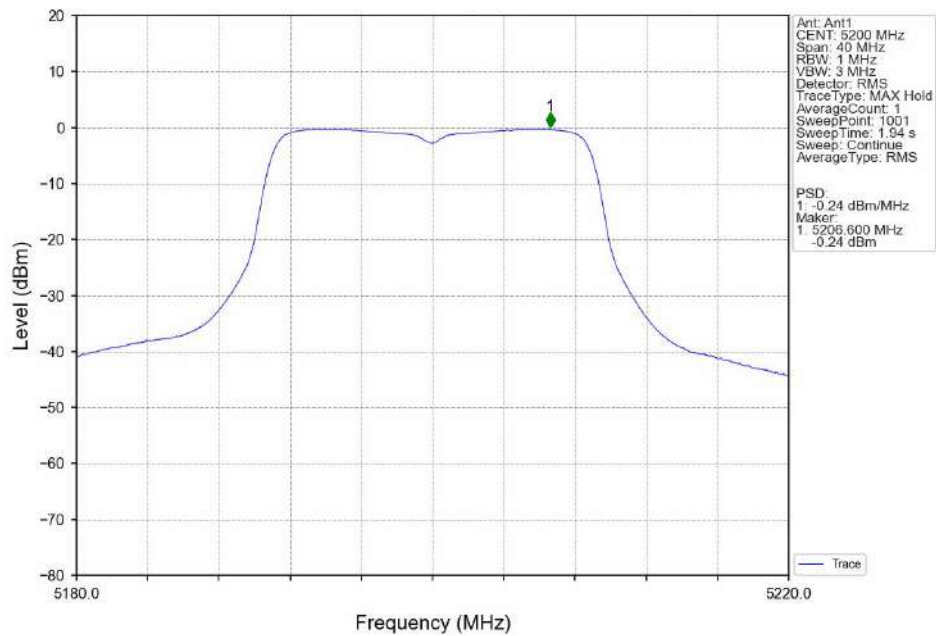
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



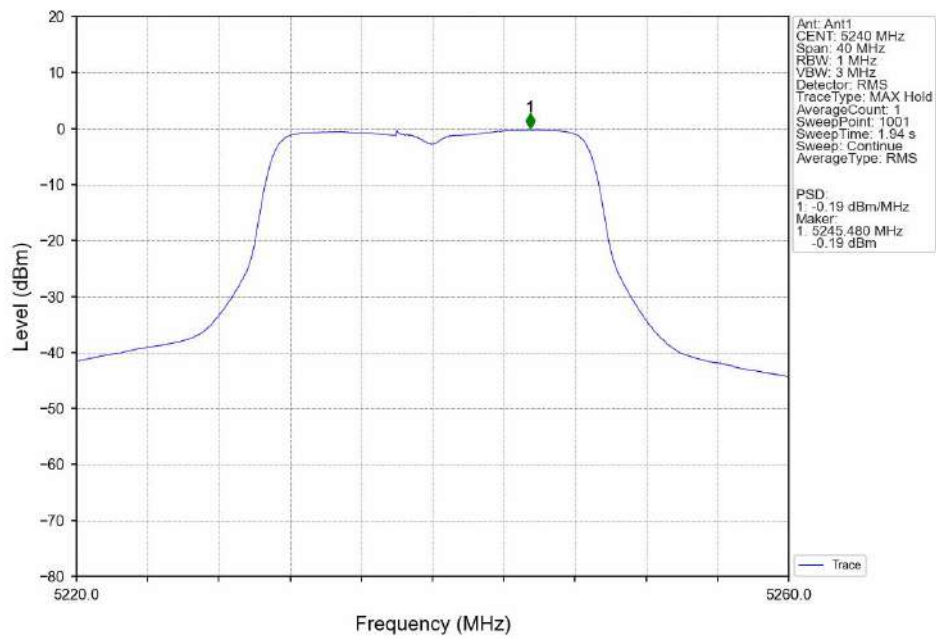
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



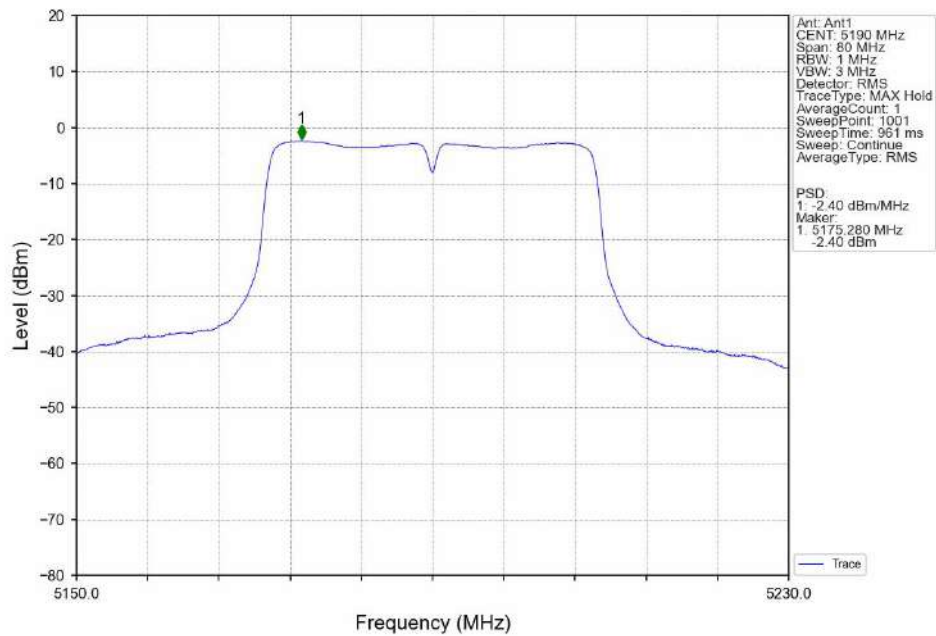
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



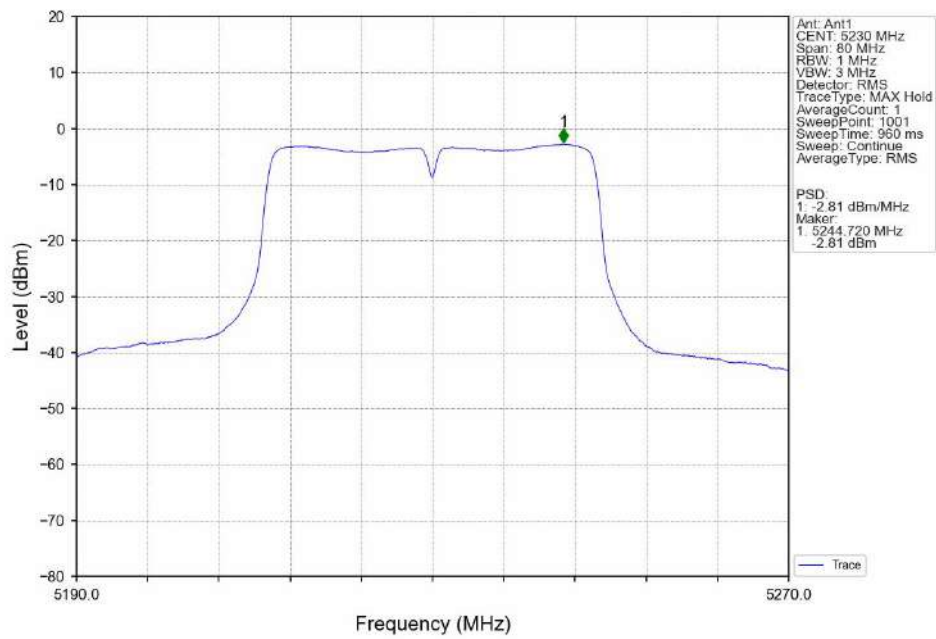
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



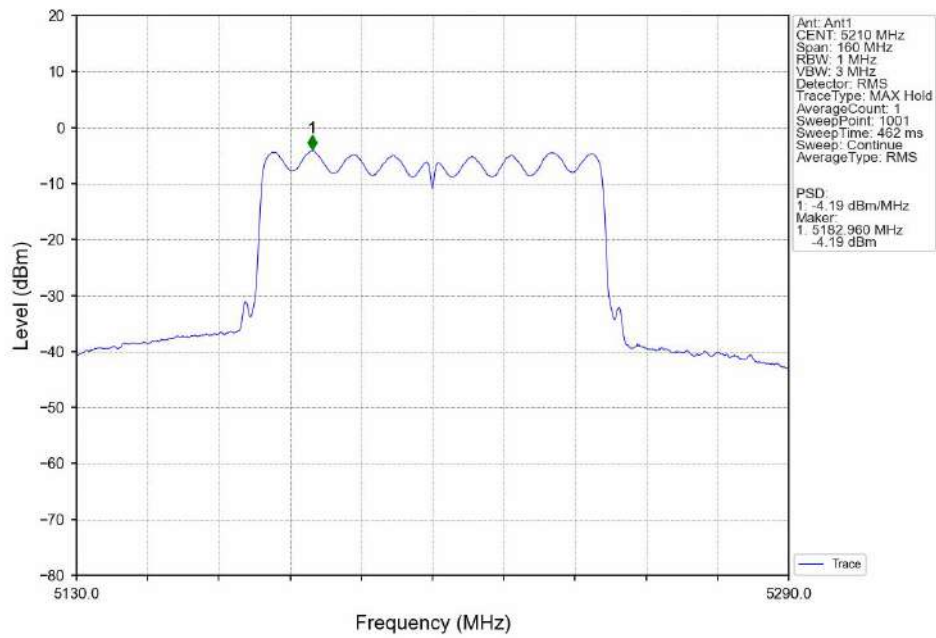
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



5. Frequency Stability

5.1 Test Result

5.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage	Measured Frequency (MHz)	Limit (MHz)	Verdict
802.11a	SISO	5180	20	10.2	5180.020	5150 to 5250	Pass
				12	5180.040	5150 to 5250	Pass
				13.8	5180.020	5150 to 5250	Pass
			-30	12	5180.020	5150 to 5250	Pass
			-20	12	5180.020	5150 to 5250	Pass
			-10	12	5180.060	5150 to 5250	Pass
			0	12	5179.980	5150 to 5250	Pass
			10	12	5180.020	5150 to 5250	Pass
			30	12	5179.940	5150 to 5250	Pass
			40	12	5180.060	5150 to 5250	Pass
			50	12	5180.020	5150 to 5250	Pass
		5200	20	10.2	5200.040	5150 to 5250	Pass
				12	5200.060	5150 to 5250	Pass
				13.8	5200.040	5150 to 5250	Pass
			-30	12	5200.020	5150 to 5250	Pass
			-20	12	5200.020	5150 to 5250	Pass
			-10	12	5200.040	5150 to 5250	Pass
			0	12	5200.000	5150 to 5250	Pass
			10	12	5200.000	5150 to 5250	Pass
			30	12	5200.040	5150 to 5250	Pass
			40	12	5200.020	5150 to 5250	Pass
			50	12	5200.040	5150 to 5250	Pass
		5240	20	10.2	5240.040	5150 to 5250	Pass
				12	5240.020	5150 to 5250	Pass
				13.8	5239.980	5150 to 5250	Pass
			-30	12	5239.980	5150 to 5250	Pass
			-20	12	5240.020	5150 to 5250	Pass
			-10	12	5239.980	5150 to 5250	Pass
			0	12	5239.960	5150 to 5250	Pass
			10	12	5239.960	5150 to 5250	Pass
			30	12	5240.000	5150 to 5250	Pass
			40	12	5240.120	5150 to 5250	Pass

			50	12	5240.060	5150 to 5250	Pass
802.11n (HT20)	SISO	5180	20	10.2	5180.000	5150 to 5250	Pass
				12	5180.020	5150 to 5250	Pass
				13.8	5179.940	5150 to 5250	Pass
			-30	12	5179.980	5150 to 5250	Pass
			-20	12	5180.000	5150 to 5250	Pass
			-10	12	5179.940	5150 to 5250	Pass
			0	12	5179.980	5150 to 5250	Pass
			10	12	5180.020	5150 to 5250	Pass
			30	12	5179.980	5150 to 5250	Pass
			40	12	5180.020	5150 to 5250	Pass
			50	12	5180.040	5150 to 5250	Pass
		5200	20	10.2	5199.960	5150 to 5250	Pass
				12	5200.000	5150 to 5250	Pass
				13.8	5200.020	5150 to 5250	Pass
			-30	12	5199.980	5150 to 5250	Pass
			-20	12	5200.000	5150 to 5250	Pass
			-10	12	5200.000	5150 to 5250	Pass
			0	12	5199.960	5150 to 5250	Pass
			10	12	5200.020	5150 to 5250	Pass
			30	12	5200.060	5150 to 5250	Pass
			40	12	5200.000	5150 to 5250	Pass
			50	12	5200.060	5150 to 5250	Pass
		5240	20	10.2	5240.000	5150 to 5250	Pass
				12	5240.020	5150 to 5250	Pass
				13.8	5240.000	5150 to 5250	Pass
			-30	12	5240.020	5150 to 5250	Pass
			-20	12	5240.060	5150 to 5250	Pass
			-10	12	5240.000	5150 to 5250	Pass
			0	12	5240.020	5150 to 5250	Pass
			10	12	5240.020	5150 to 5250	Pass
			30	12	5240.040	5150 to 5250	Pass
			40	12	5240.040	5150 to 5250	Pass
			50	12	5240.020	5150 to 5250	Pass
802.11n (HT40)	SISO	5190	20	10.2	5190.080	5150 to 5250	Pass
				12	5190.040	5150 to 5250	Pass
				13.8	5190.040	5150 to 5250	Pass
			-30	12	5190.080	5150 to 5250	Pass
			-20	12	5190.080	5150 to 5250	Pass
			-10	12	5190.080	5150 to 5250	Pass
			0	12	5190.120	5150 to 5250	Pass
			10	12	5190.080	5150 to 5250	Pass

			30	12	5190.000	5150 to 5250	Pass
			40	12	5190.160	5150 to 5250	Pass
			50	12	5190.120	5150 to 5250	Pass
		5230	20	10.2	5230.080	5150 to 5250	Pass
				12	5230.040	5150 to 5250	Pass
				13.8	5230.040	5150 to 5250	Pass
			-30	12	5230.040	5150 to 5250	Pass
			-20	12	5230.040	5150 to 5250	Pass
			-10	12	5230.080	5150 to 5250	Pass
			0	12	5230.080	5150 to 5250	Pass
			10	12	5230.040	5150 to 5250	Pass
			30	12	5230.080	5150 to 5250	Pass
			40	12	5230.080	5150 to 5250	Pass
			50	12	5230.000	5150 to 5250	Pass
802.11ac (VHT20)	SISO	5180	20	10.2	5180.060	5150 to 5250	Pass
				12	5180.020	5150 to 5250	Pass
				13.8	5179.960	5150 to 5250	Pass
			-30	12	5180.040	5150 to 5250	Pass
			-20	12	5180.060	5150 to 5250	Pass
			-10	12	5179.960	5150 to 5250	Pass
			0	12	5180.020	5150 to 5250	Pass
			10	12	5179.940	5150 to 5250	Pass
			30	12	5180.040	5150 to 5250	Pass
			40	12	5180.000	5150 to 5250	Pass
			50	12	5180.060	5150 to 5250	Pass
		5200	20	10.2	5200.000	5150 to 5250	Pass
				12	5200.040	5150 to 5250	Pass
				13.8	5200.060	5150 to 5250	Pass
			-30	12	5200.020	5150 to 5250	Pass
			-20	12	5199.980	5150 to 5250	Pass
			-10	12	5200.040	5150 to 5250	Pass
			0	12	5200.040	5150 to 5250	Pass
			10	12	5200.020	5150 to 5250	Pass
			30	12	5200.040	5150 to 5250	Pass
			40	12	5200.020	5150 to 5250	Pass
			50	12	5200.040	5150 to 5250	Pass
		5240	20	10.2	5240.020	5150 to 5250	Pass
				12	5240.020	5150 to 5250	Pass
				13.8	5240.040	5150 to 5250	Pass
			-30	12	5239.940	5150 to 5250	Pass
			-20	12	5240.100	5150 to 5250	Pass
			-10	12	5239.960	5150 to 5250	Pass

			0	12	5240.060	5150 to 5250	Pass
			10	12	5240.040	5150 to 5250	Pass
			30	12	5240.040	5150 to 5250	Pass
			40	12	5240.040	5150 to 5250	Pass
			50	12	5239.960	5150 to 5250	Pass
802.11ac (VHT40)	SISO	5190	20	10.2	5190.040	5150 to 5250	Pass
				12	5190.080	5150 to 5250	Pass
				13.8	5190.000	5150 to 5250	Pass
			-30	12	5190.040	5150 to 5250	Pass
			-20	12	5190.080	5150 to 5250	Pass
			-10	12	5189.960	5150 to 5250	Pass
			0	12	5190.000	5150 to 5250	Pass
			10	12	5190.040	5150 to 5250	Pass
			30	12	5190.120	5150 to 5250	Pass
			40	12	5190.080	5150 to 5250	Pass
			50	12	5190.040	5150 to 5250	Pass
		5230	20	10.2	5230.000	5150 to 5250	Pass
				12	5230.040	5150 to 5250	Pass
				13.8	5230.120	5150 to 5250	Pass
			-30	12	5230.000	5150 to 5250	Pass
			-20	12	5230.120	5150 to 5250	Pass
			-10	12	5230.040	5150 to 5250	Pass
			0	12	5230.040	5150 to 5250	Pass
			10	12	5230.080	5150 to 5250	Pass
			30	12	5230.040	5150 to 5250	Pass
			40	12	5230.040	5150 to 5250	Pass
			50	12	5230.080	5150 to 5250	Pass
802.11ac (VHT80)	SISO	5210	20	10.2	5210.075	5150 to 5250	Pass
				12	5210.075	5150 to 5250	Pass
				13.8	5210.150	5150 to 5250	Pass
			-30	12	5210.150	5150 to 5250	Pass
			-20	12	5210.075	5150 to 5250	Pass
			-10	12	5210.150	5150 to 5250	Pass
			0	12	5210.075	5150 to 5250	Pass
			10	12	5210.075	5150 to 5250	Pass
			30	12	5210.150	5150 to 5250	Pass
			40	12	5210.075	5150 to 5250	Pass
			50	12	5210.150	5150 to 5250	Pass

6. Form731

6.1 Test Result

6.1.1 Form731

Lower Freq (MHz)	High Freq (MHz)	MAX Power (W)	MAX Power (dBm)
5180	5240	0.0316	14.99
5190	5230	0.0173	12.37
5210	5210	0.0169	12.28