

1. Duty Cycle

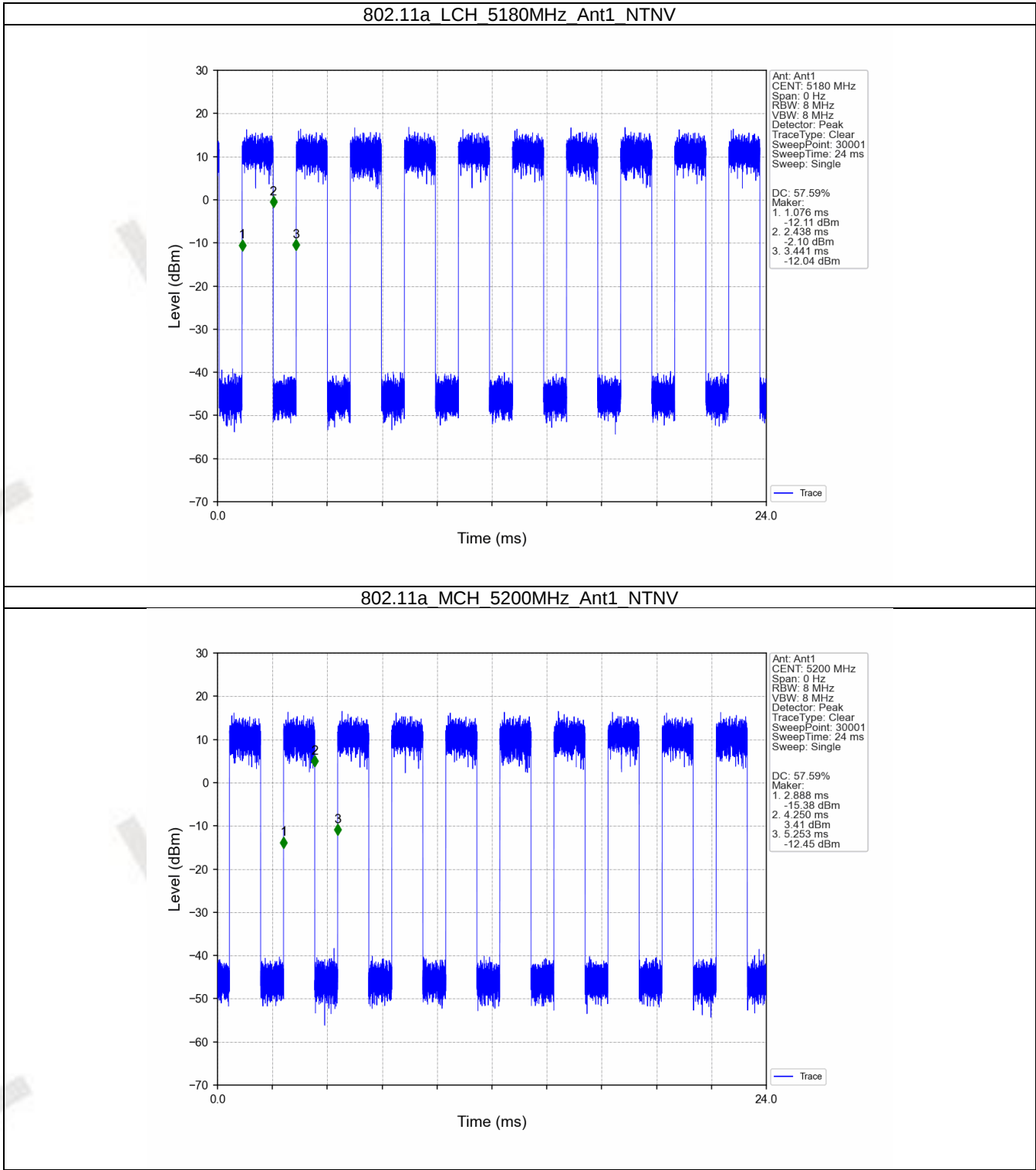
1.1 Test Result

1.1.1 Ant1

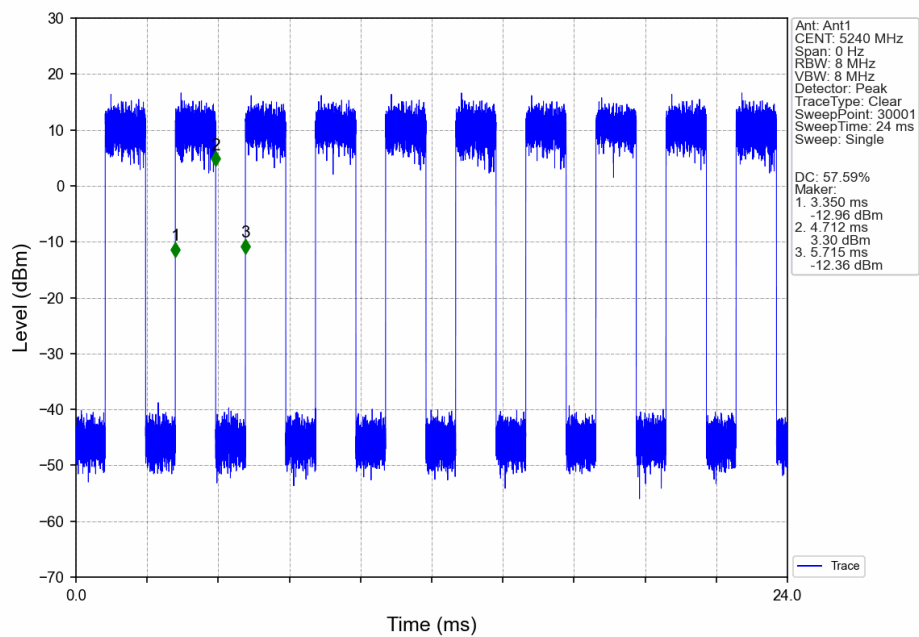
Ant1							
Mode	Tx Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	1.362	2.365	57.59	2.40	0.03
		5200	1.362	2.365	57.59	2.40	0.03
		5240	1.362	2.365	57.59	2.40	0.03
802.11n (HT20)	SISO	5180	1.273	2.277	55.91	2.53	0.04
		5200	1.274	2.277	55.95	2.52	0.04
		5240	1.274	2.277	55.95	2.52	0.04
802.11n (HT40)	SISO	5190	0.634	1.637	38.73	4.12	0.02
		5230	0.634	1.637	38.73	4.12	0.02
802.11ac (VHT20)	SISO	5180	1.278	2.281	56.03	2.52	0.04
		5200	1.277	2.280	56.01	2.52	0.04
		5240	1.278	2.281	56.03	2.52	0.04
802.11ac (VHT40)	SISO	5190	0.638	1.642	38.86	4.11	0.03
		5230	0.638	1.641	38.88	4.10	0.03

1.2 Test Graph

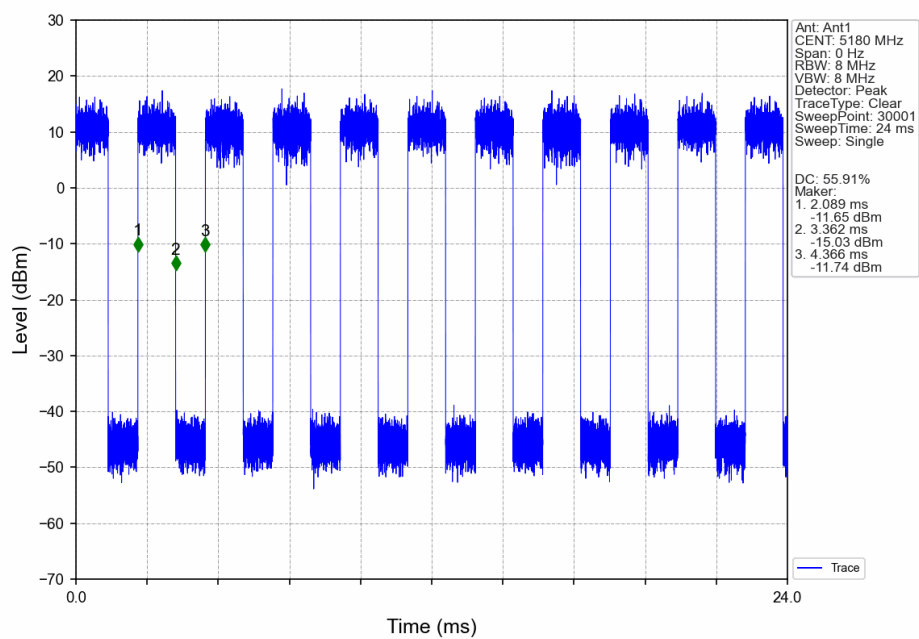
1.2.1 Ant1



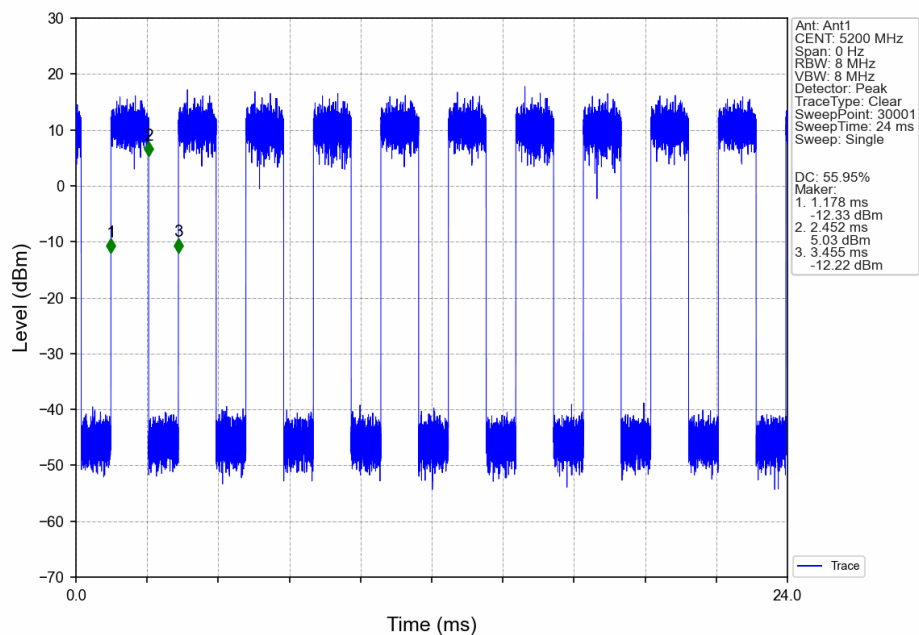
802.11a_HCH_5240MHz_Ant1_NTNV



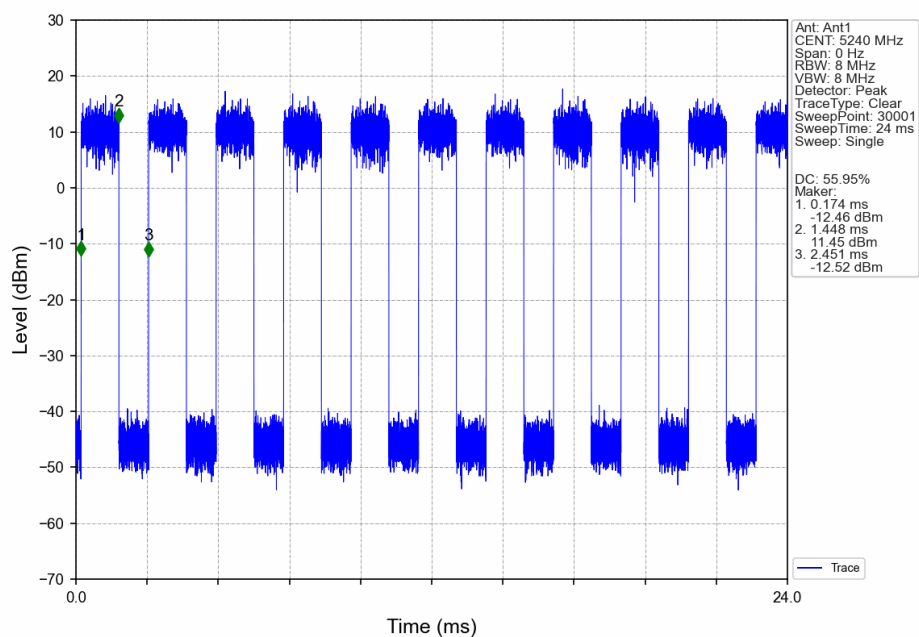
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



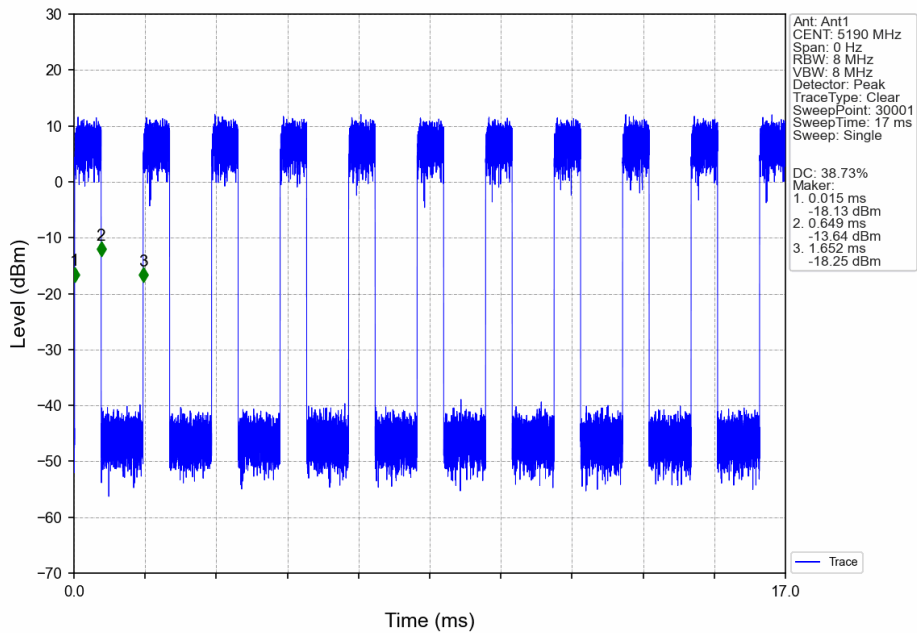
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



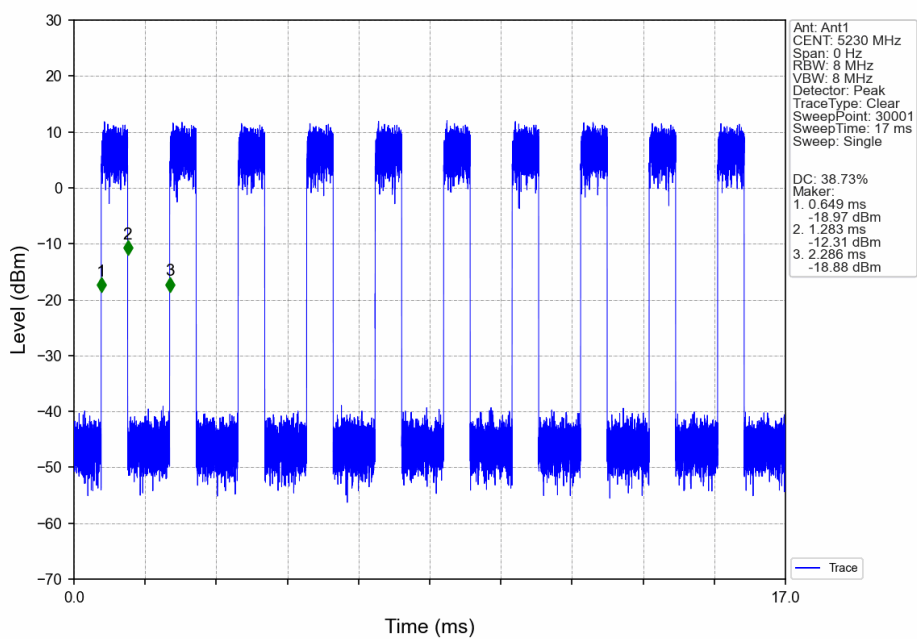
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



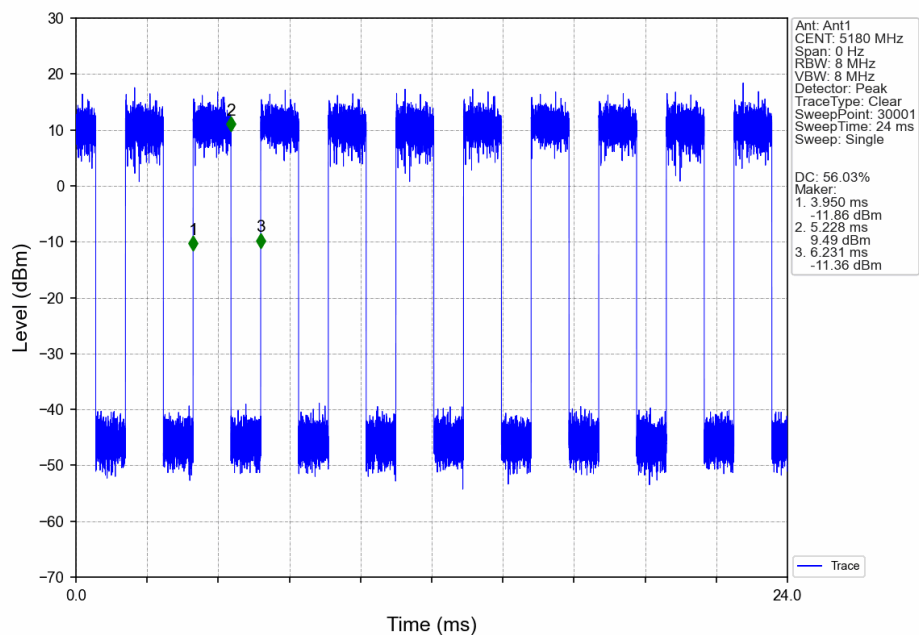
802.11n(HT40) LCH 5190MHz_Ant1_NTNV



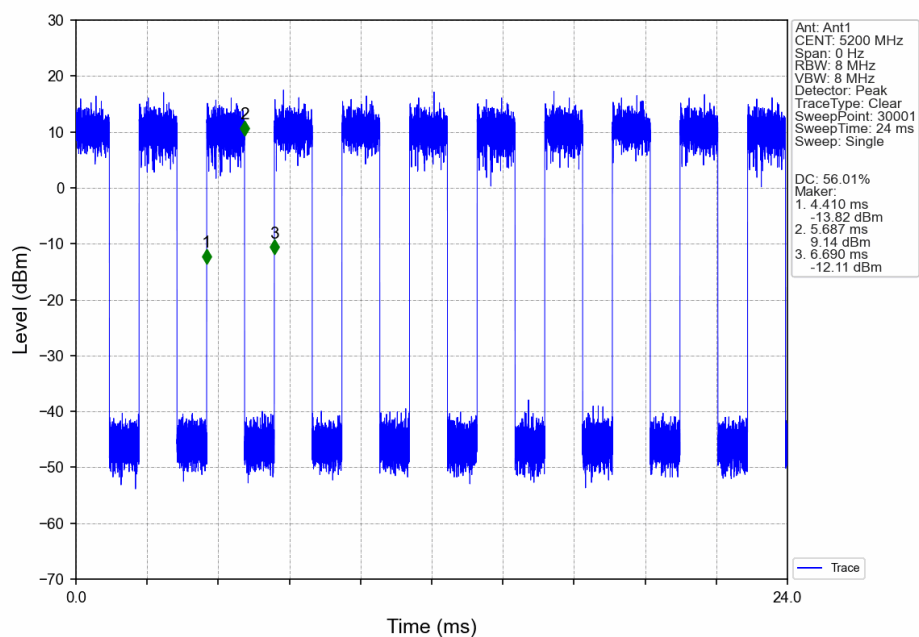
802.11n(HT40) HCH 5230MHz_Ant1_NTNV



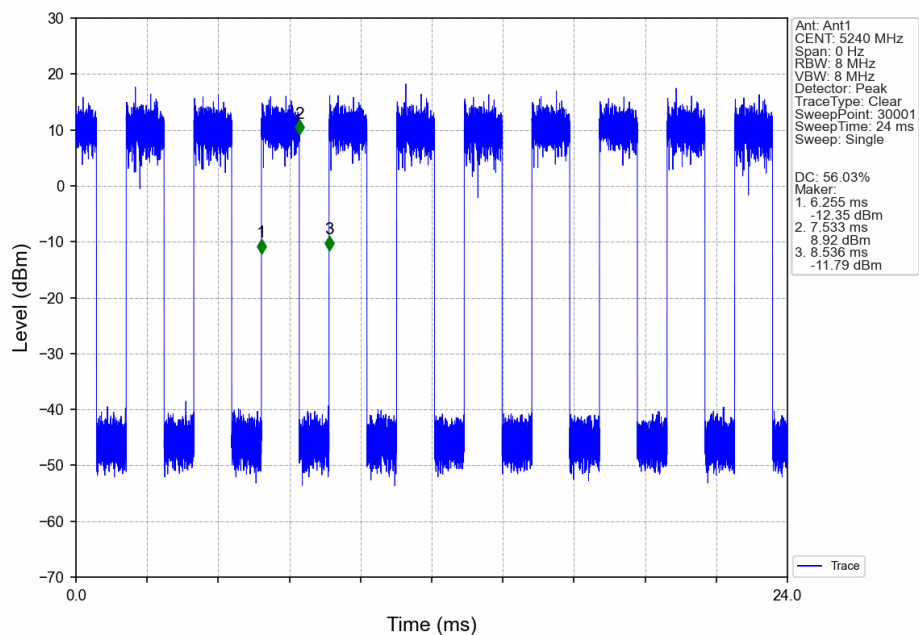
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



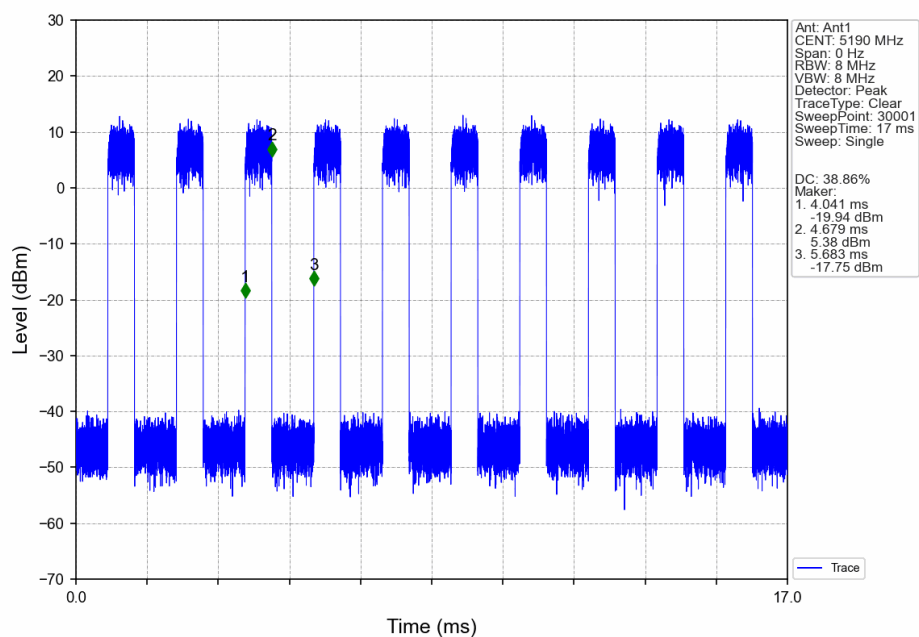
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV

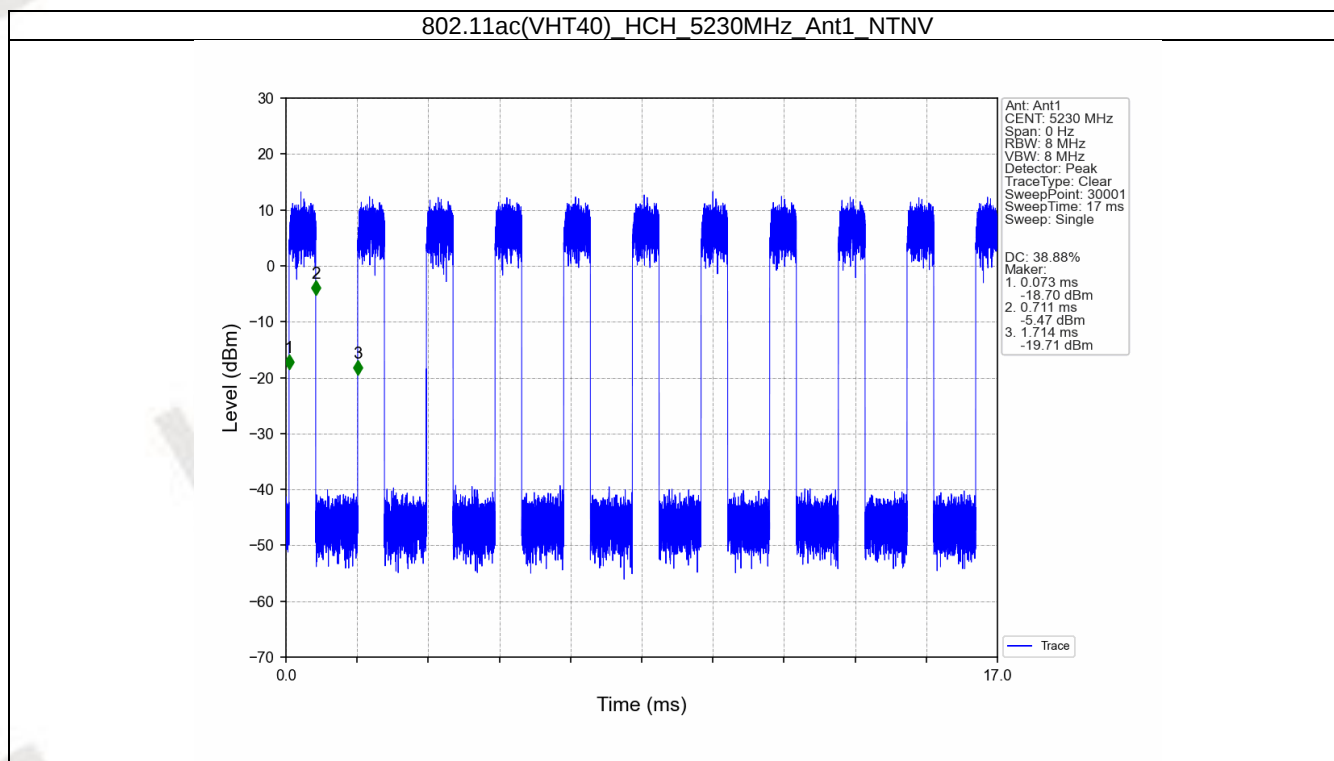


802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV





2. Bandwidth

2.1 Test Result

2.1.1 OBW

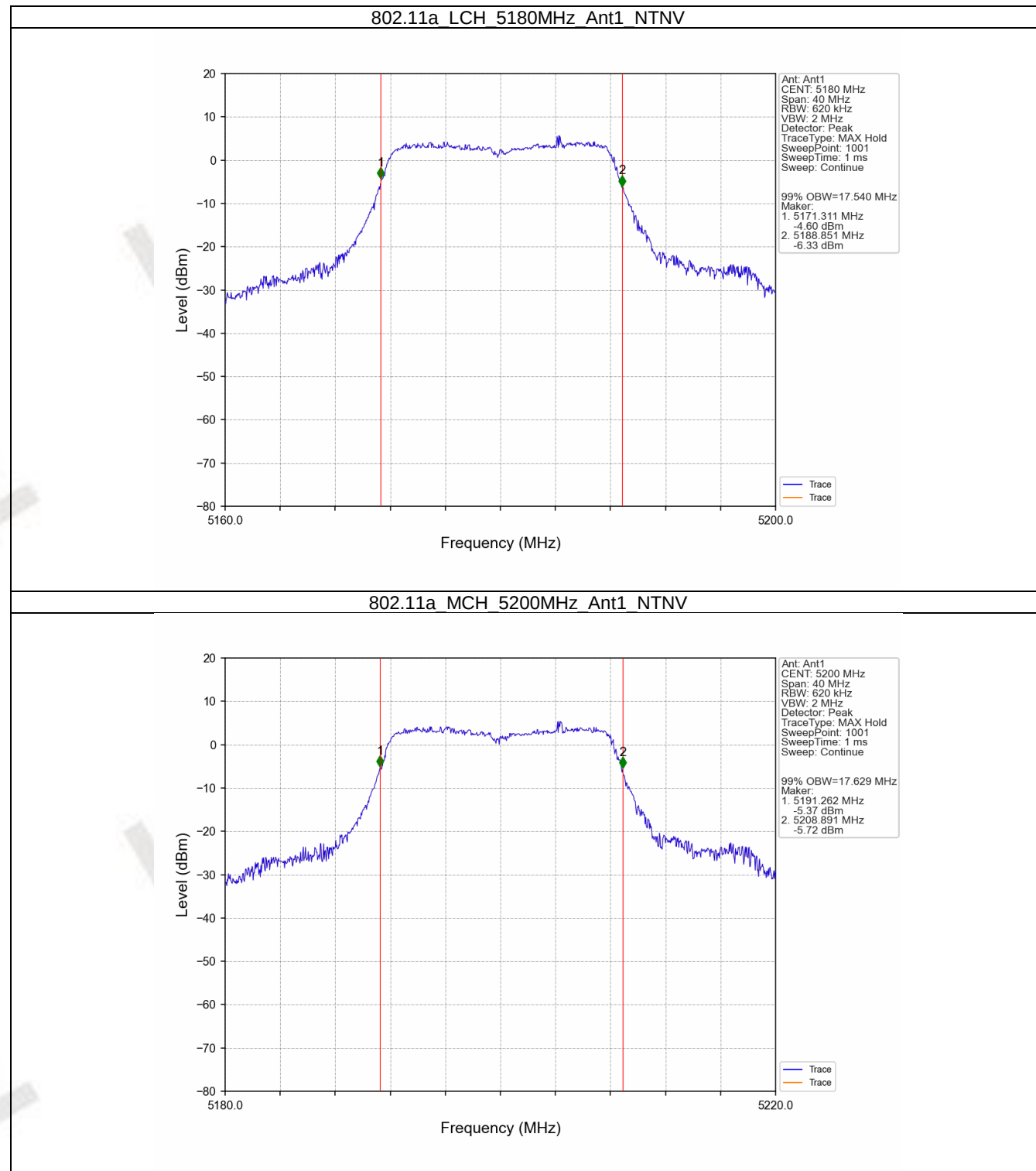
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	17.540	/	Pass
		5200	1	17.629	/	Pass
		5240	1	18.139	/	Pass
802.11n (HT20)	SISO	5180	1	18.426	/	Pass
		5200	1	18.522	/	Pass
		5240	1	18.841	/	Pass
802.11n (HT40)	SISO	5190	1	37.096	/	Pass
		5230	1	37.388	/	Pass
802.11ac (VHT20)	SISO	5180	1	18.473	/	Pass
		5200	1	18.572	/	Pass
		5240	1	18.931	/	Pass
802.11ac (VHT40)	SISO	5190	1	37.169	/	Pass
		5230	1	37.348	/	Pass

2.1.2 26dB BW

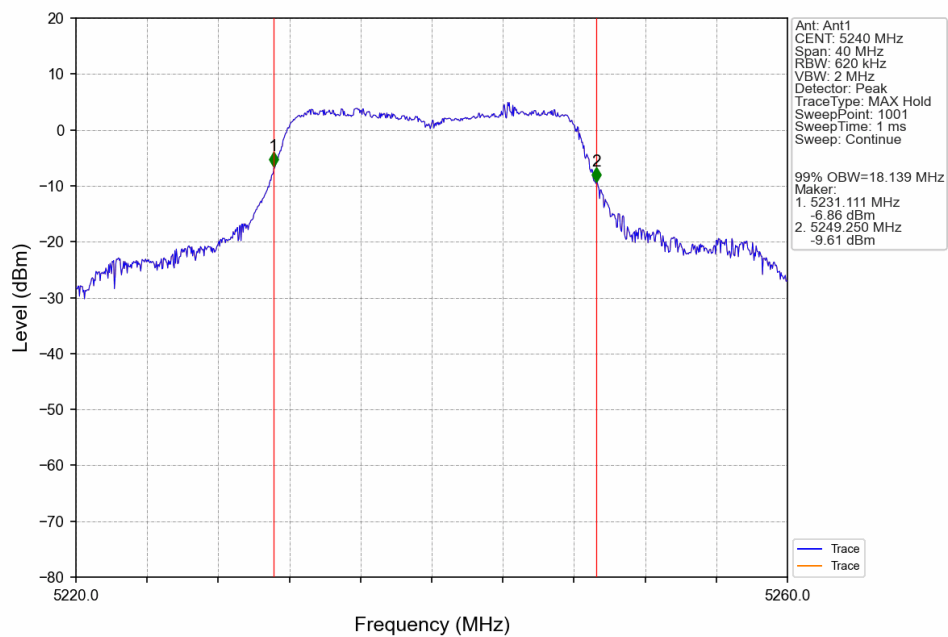
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	20.994	/	Pass
		5200	1	21.009	/	Pass
		5240	1	24.157	/	Pass
802.11n (HT20)	SISO	5180	1	20.984	/	Pass
		5200	1	21.080	/	Pass
		5240	1	24.718	/	Pass
802.11n (HT40)	SISO	5190	1	43.874	/	Pass
		5230	1	55.512	/	Pass
802.11ac (VHT20)	SISO	5180	1	21.132	/	Pass
		5200	1	21.694	/	Pass
		5240	1	26.900	/	Pass
802.11ac (VHT40)	SISO	5190	1	41.819	/	Pass
		5230	1	55.785	/	Pass

2.2 Test Graph

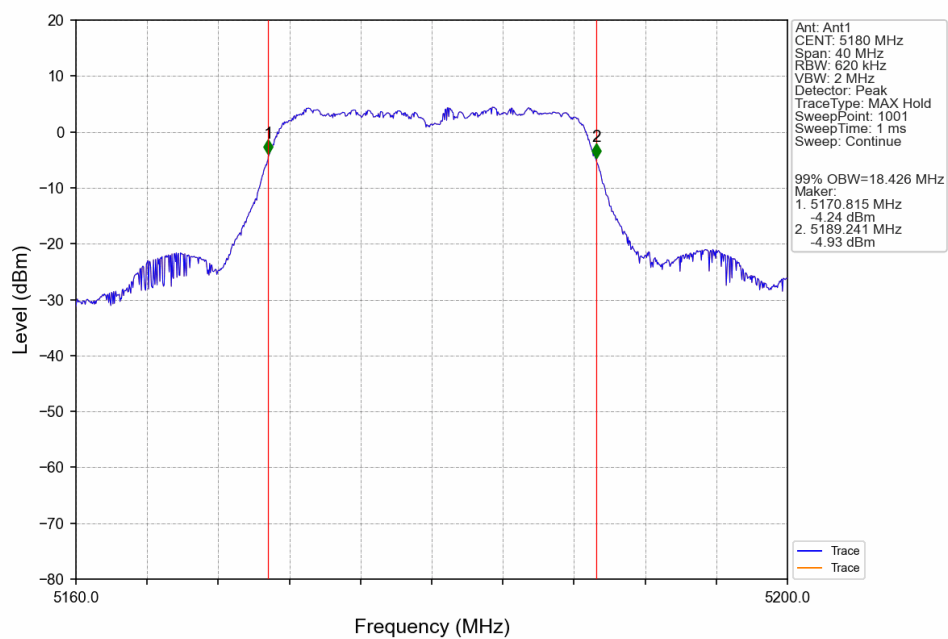
2.2.1 OBW



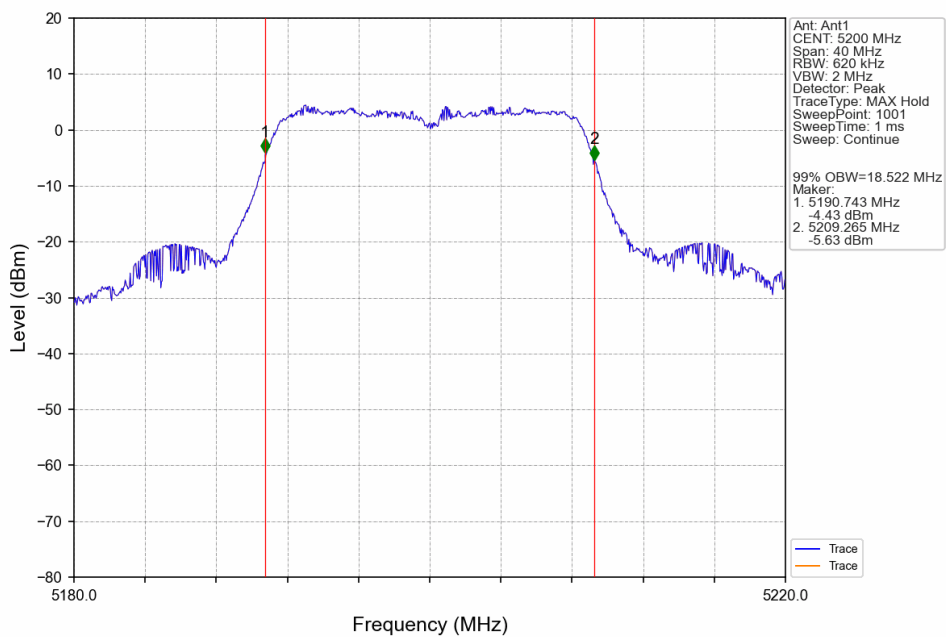
802.11a_HCH_5240MHz_Ant1_NTNV



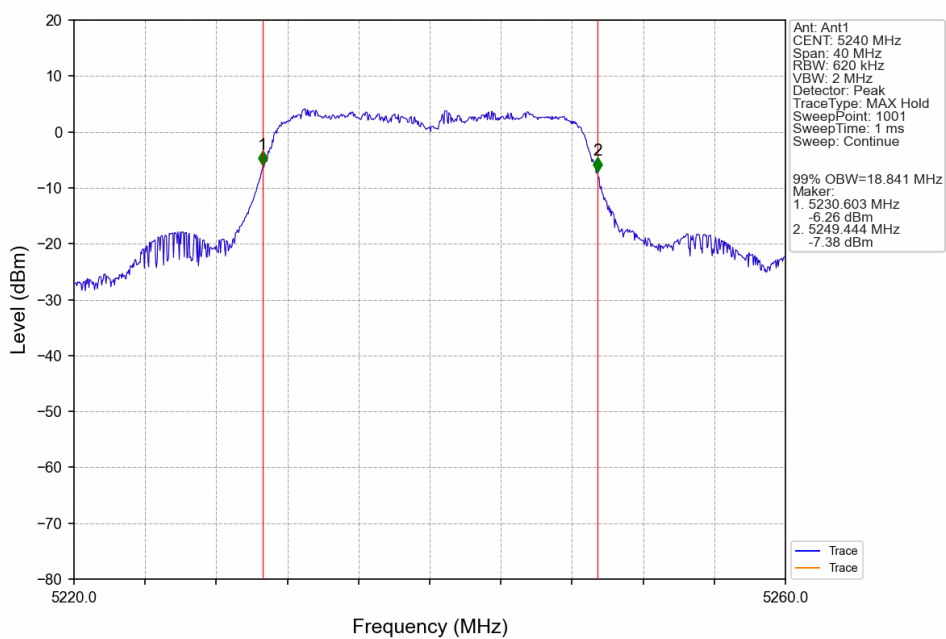
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



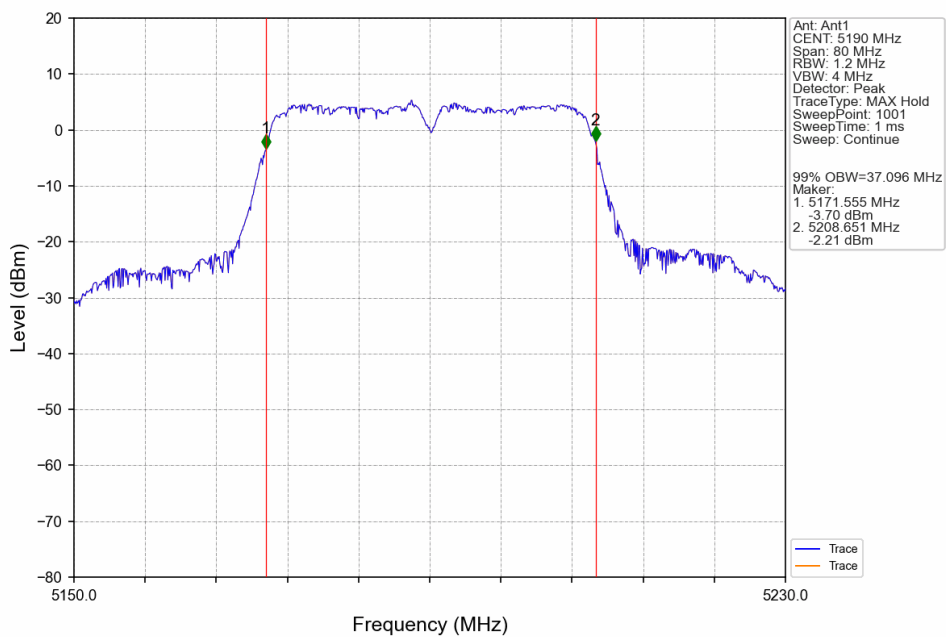
802.11n(HT20) MCH 5200MHz_Ant1_NTNV



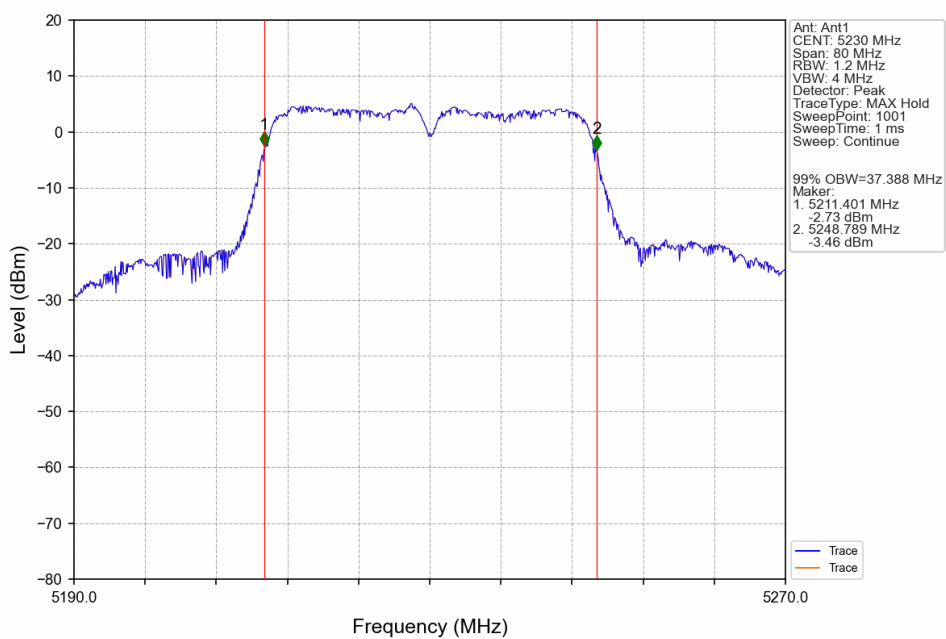
802.11n(HT20) HCH 5240MHz_Ant1_NTNV



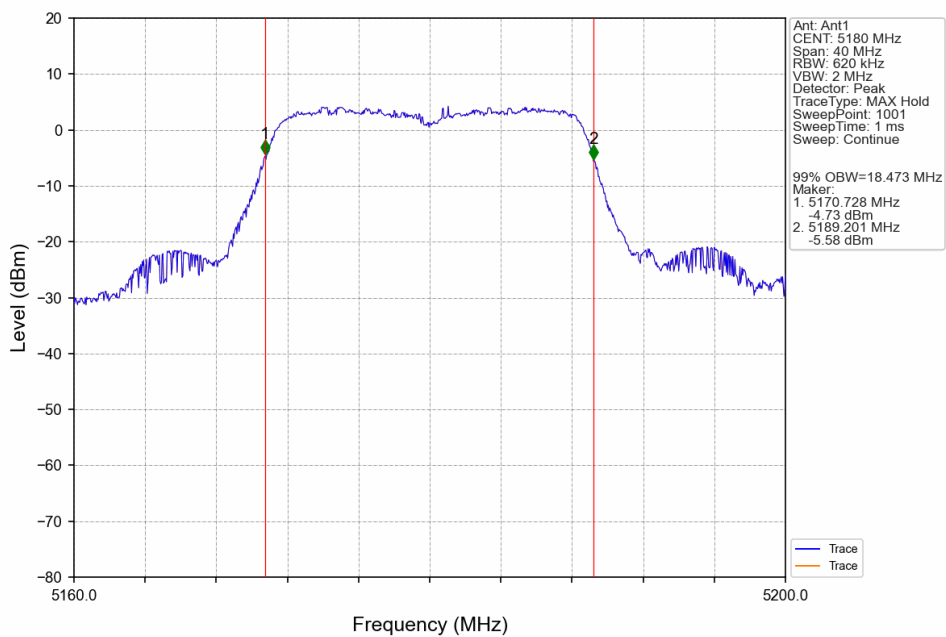
802.11n(HT40) LCH 5190MHz Ant1 NTN



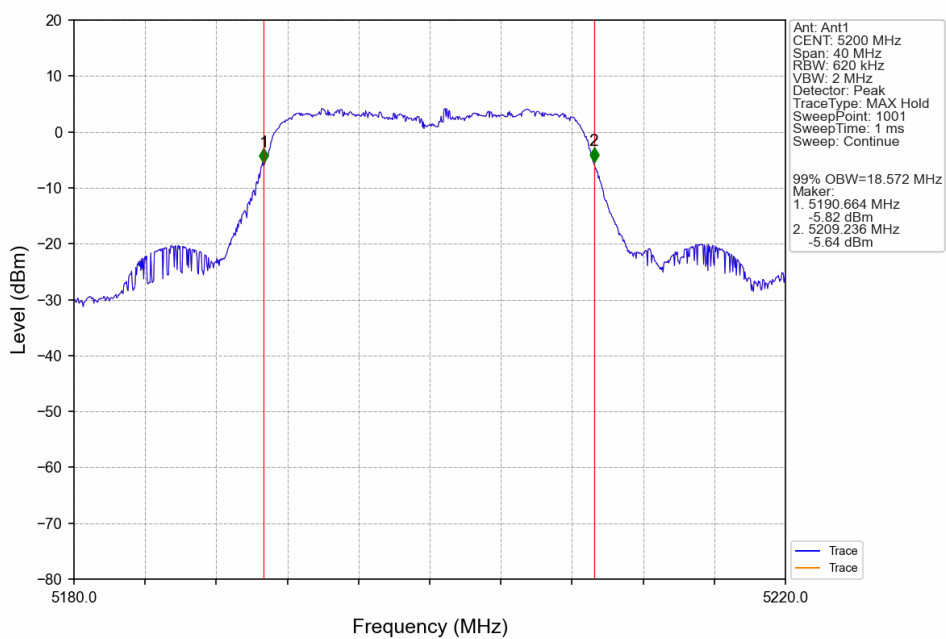
802.11n(HT40) HCH 5230MHz Ant1 NTN



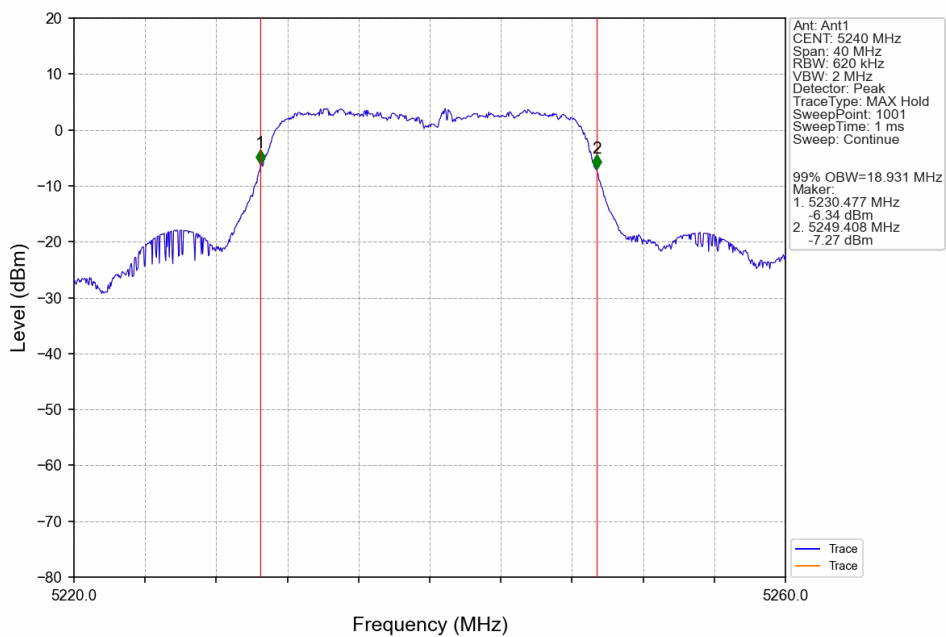
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



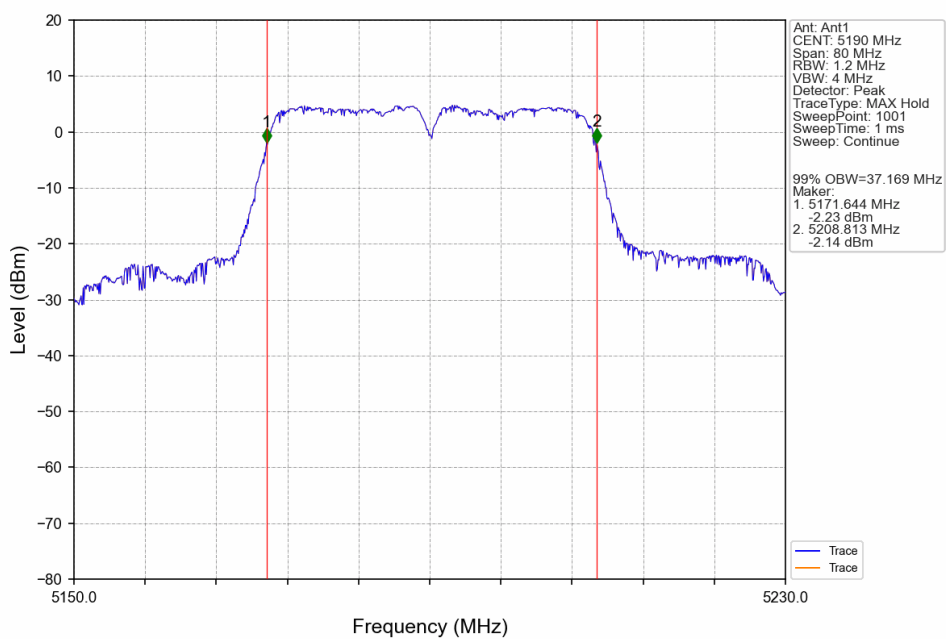
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV

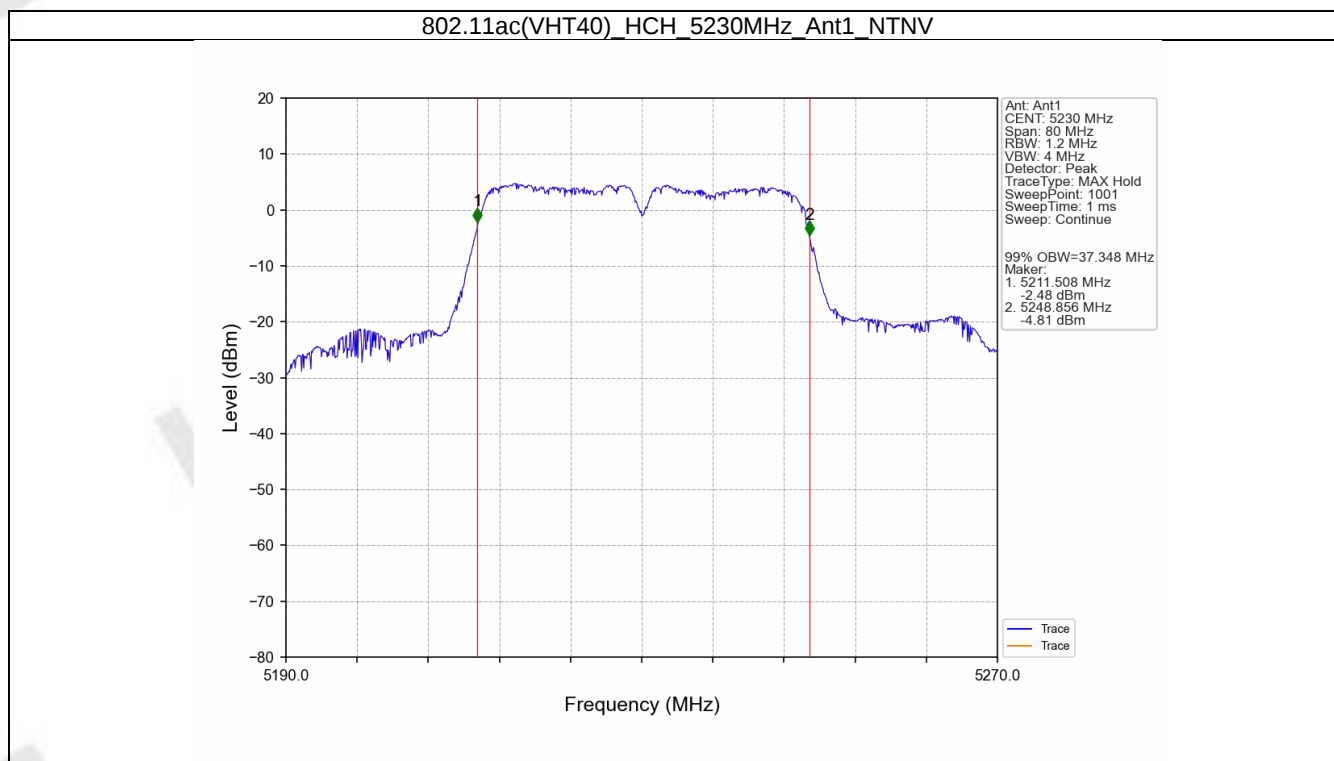


802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV

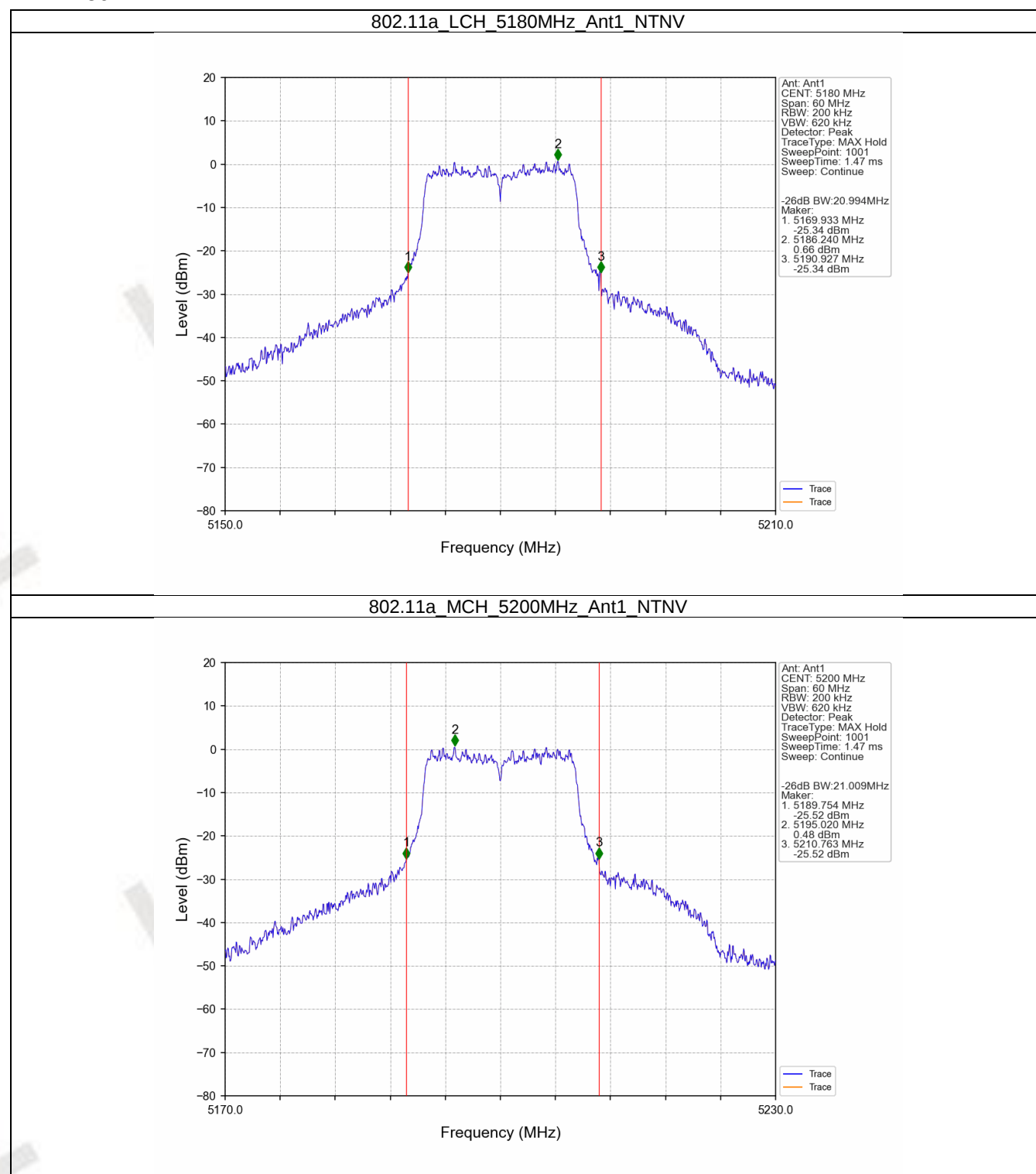


802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV

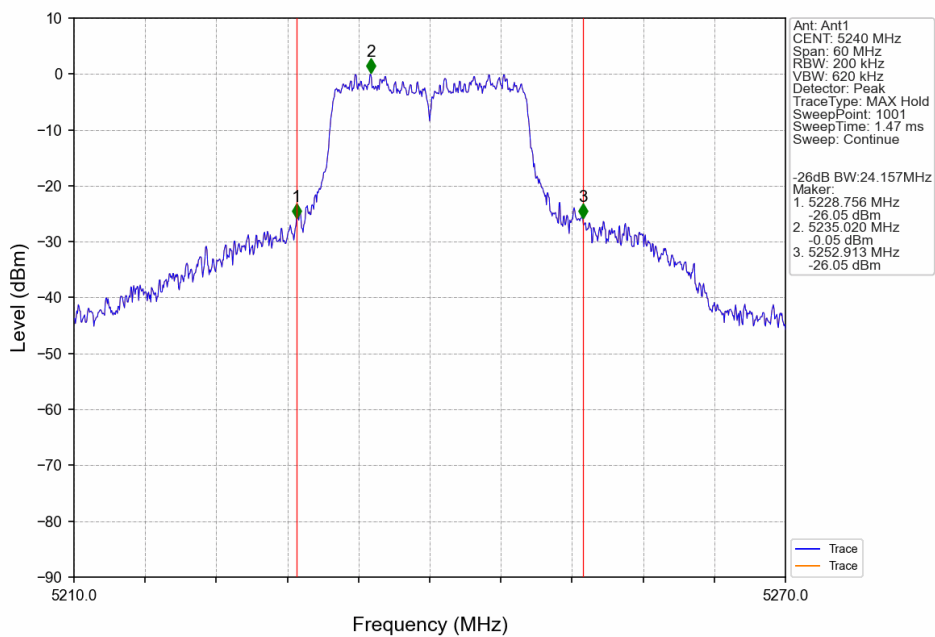




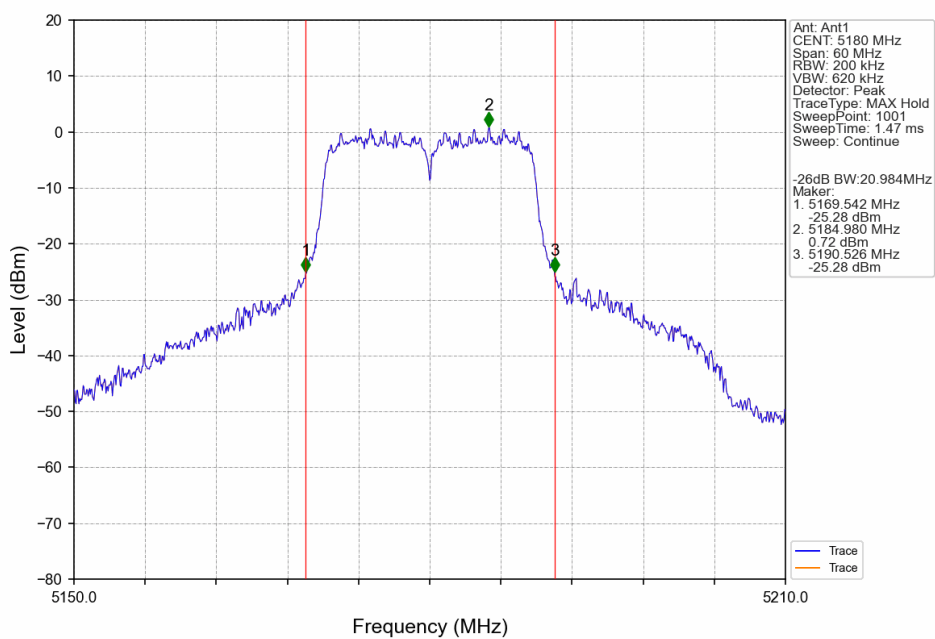
2.2.2 26dB BW



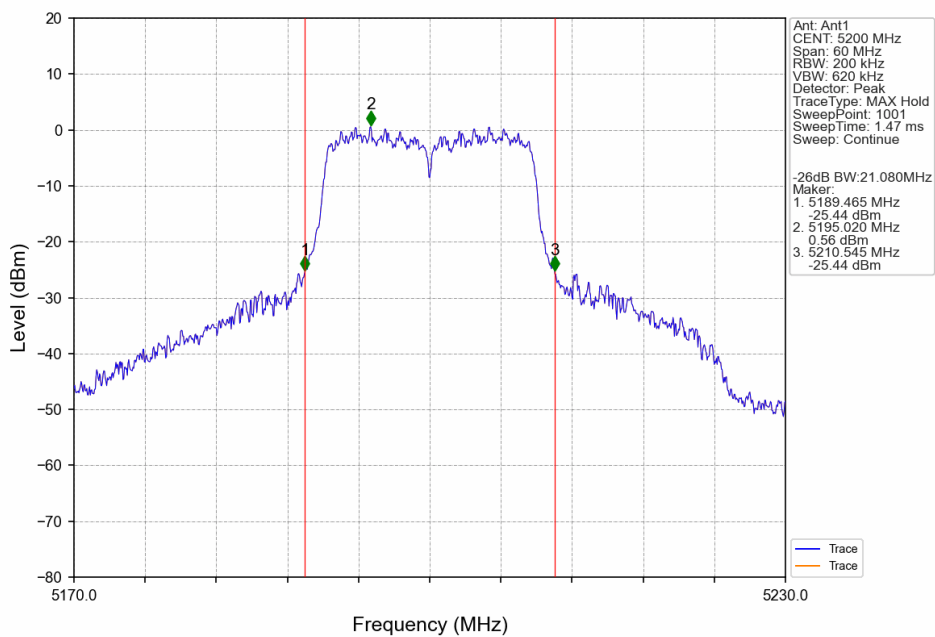
802.11a_HCH_5240MHz_Ant1_NTNV



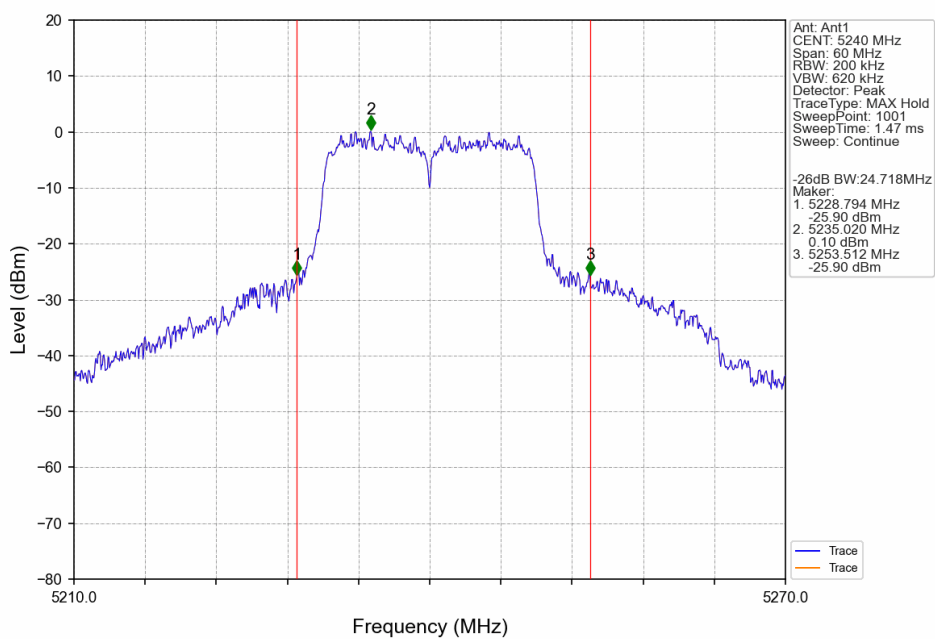
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



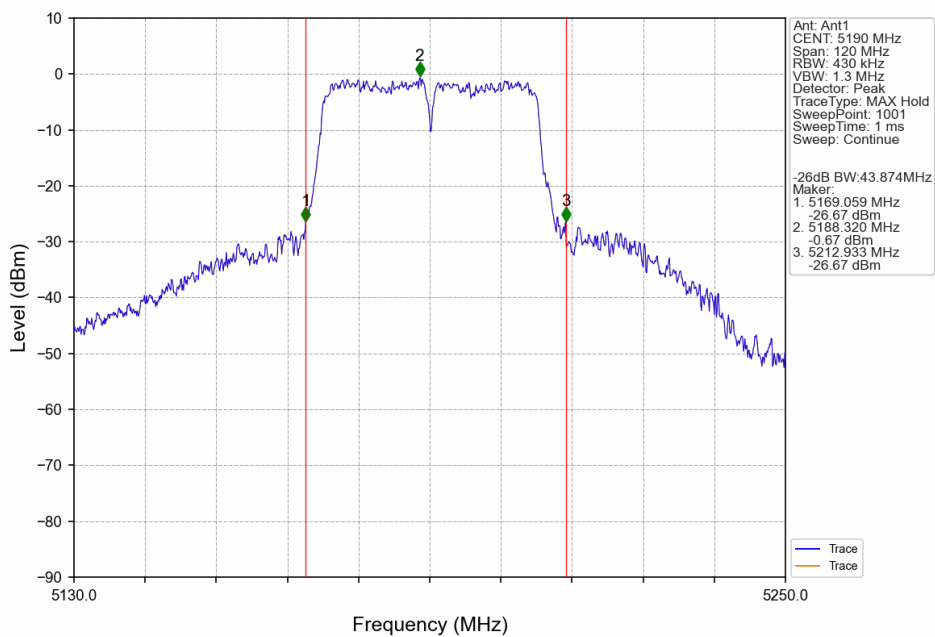
802.11n(HT20) MCH 5200MHz_Ant1_NTNV



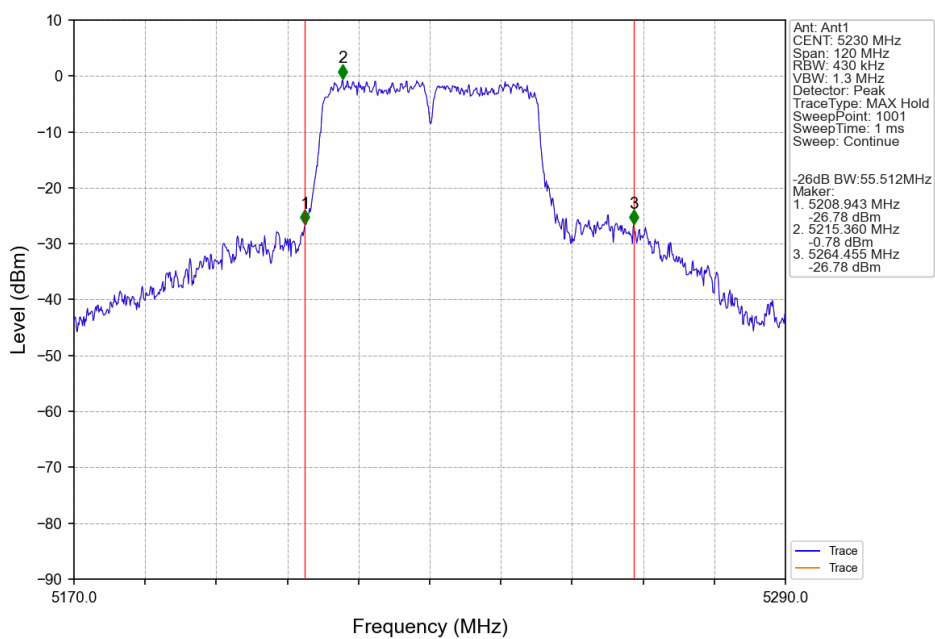
802.11n(HT20) HCH 5240MHz_Ant1_NTNV



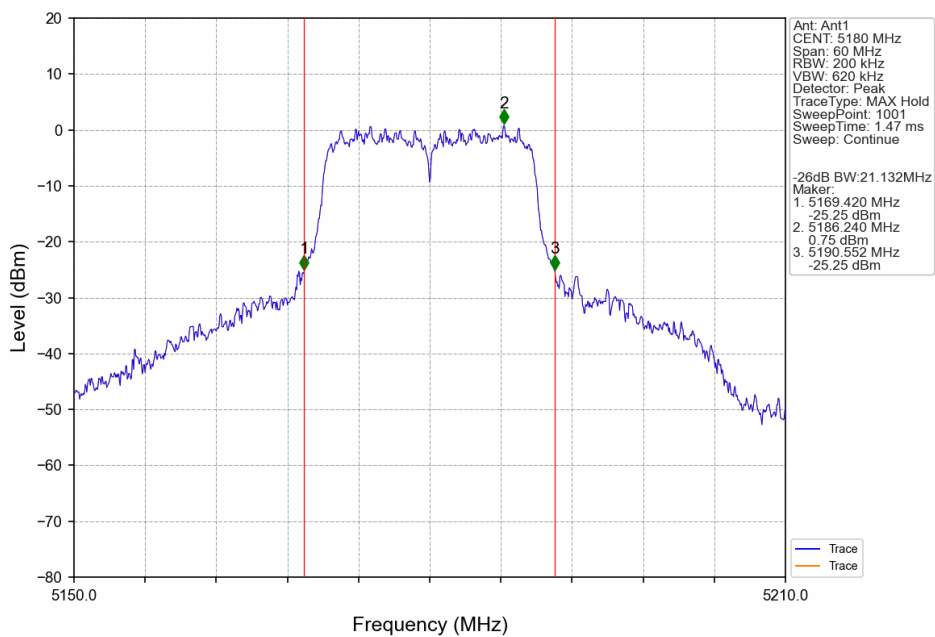
802.11n(HT40) LCH 5190MHz Ant1 NTN



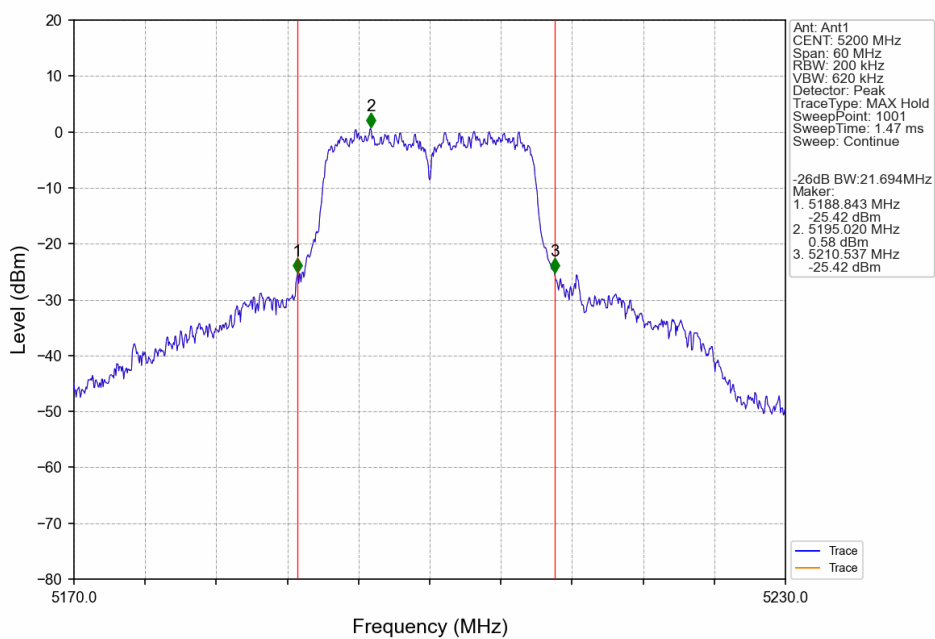
802.11n(HT40) HCH 5230MHz Ant1 NTN



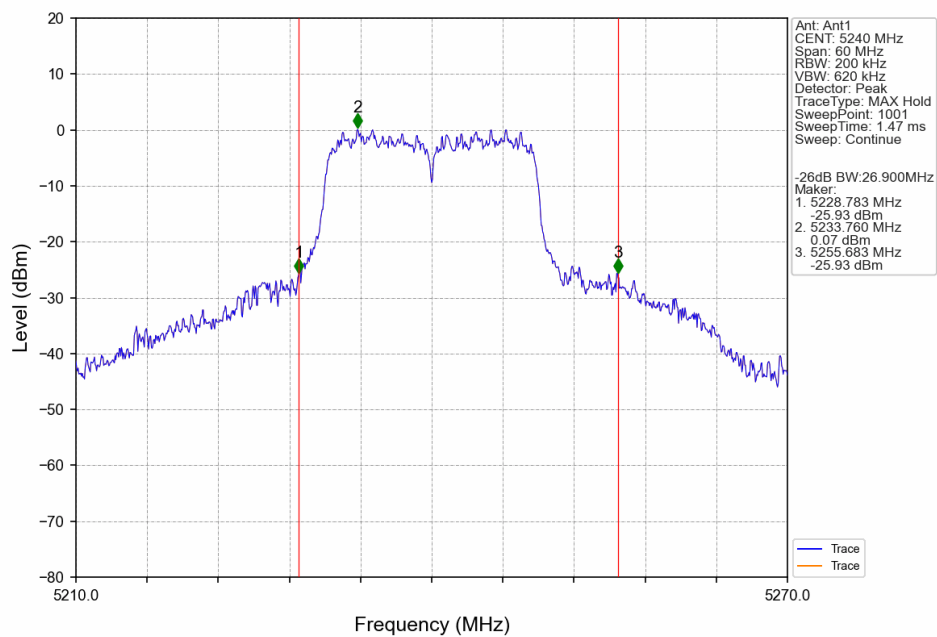
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



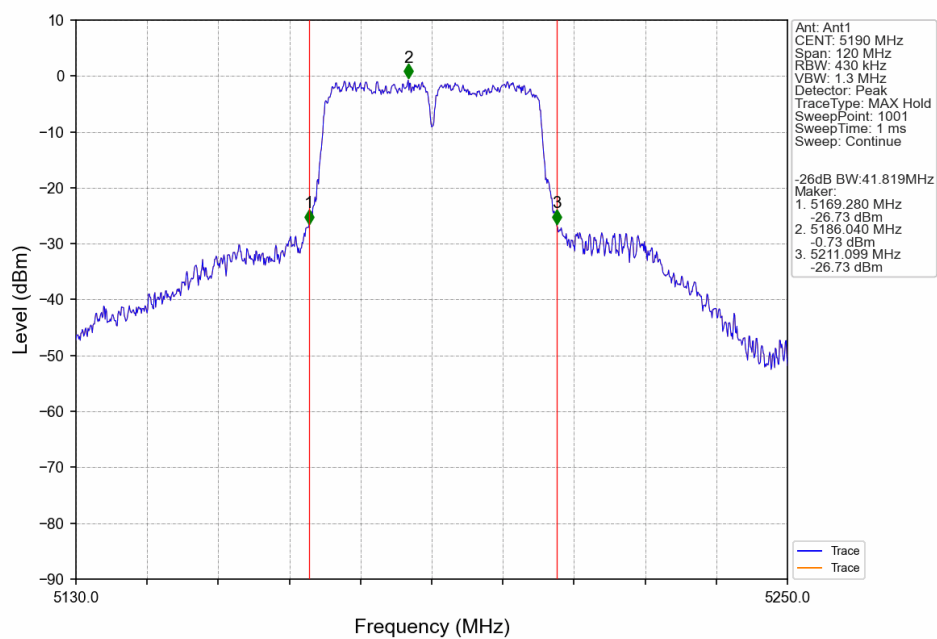
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV

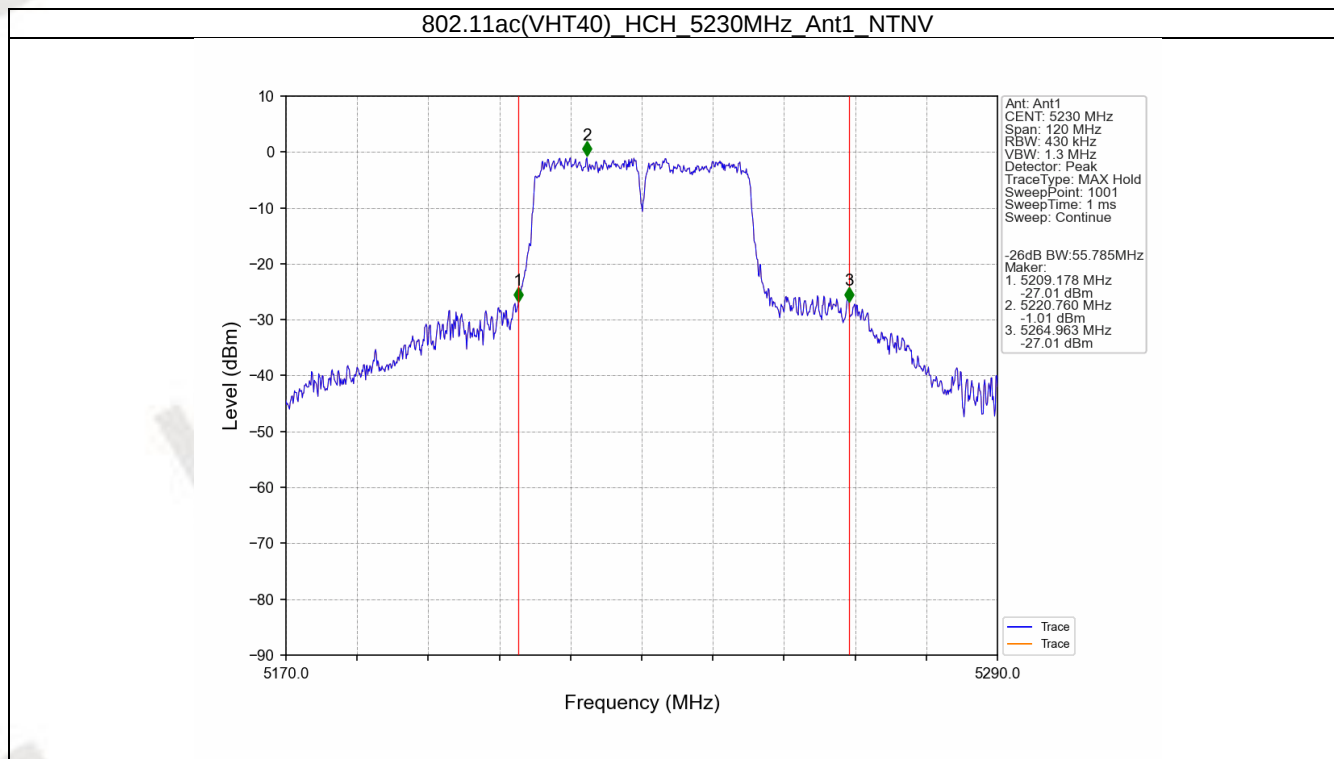


802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV





3. Maximum Conducted Output Power

3.1 Test Result

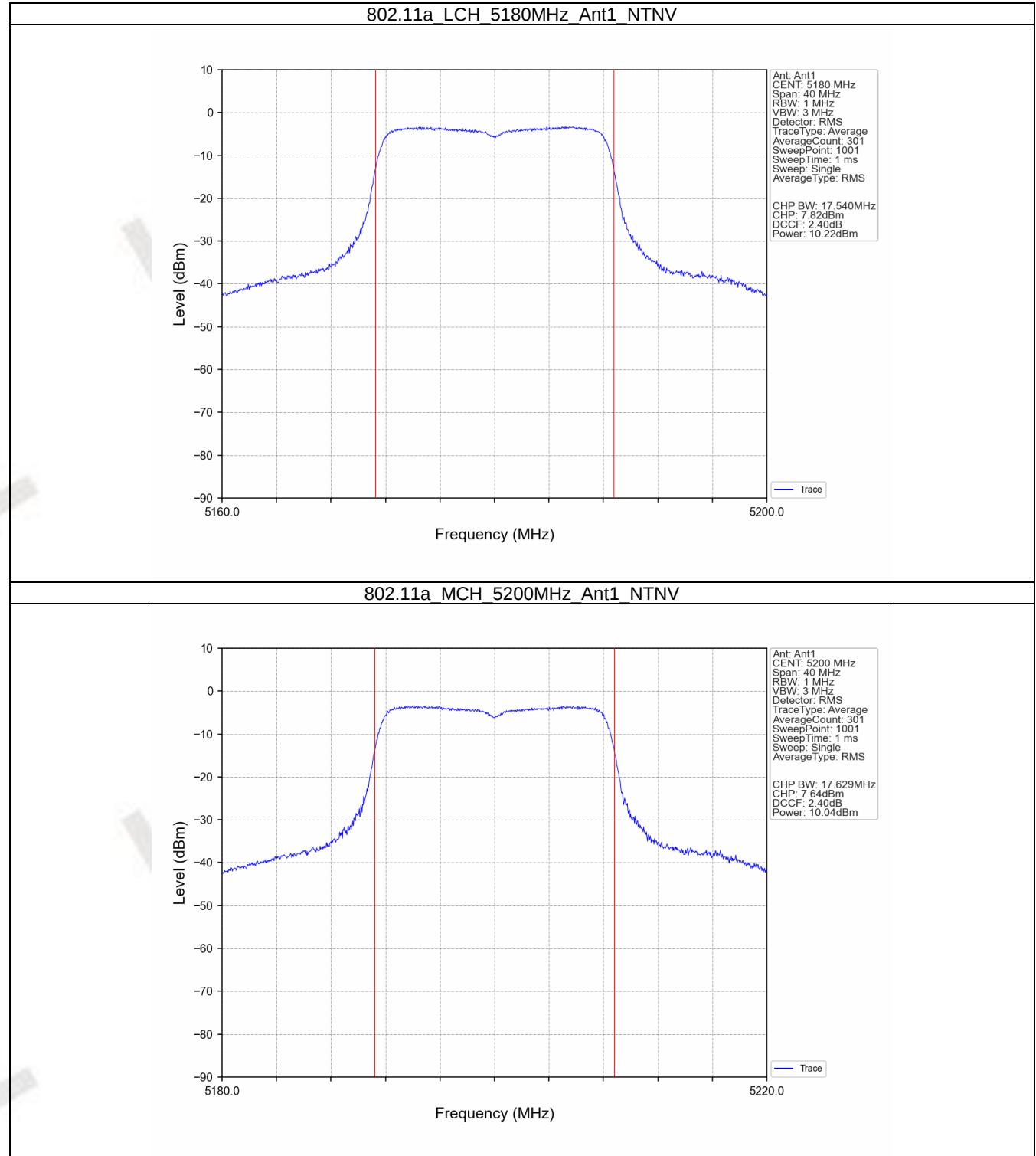
3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	10.22	<=23.98	Pass
		5200	10.04	<=23.98	Pass
		5240	9.88	<=23.98	Pass
802.11n (HT20)	SISO	5180	10.35	<=23.98	Pass
		5200	10.33	<=23.98	Pass
		5240	9.73	<=23.98	Pass
802.11n (HT40)	SISO	5190	9.92	<=23.98	Pass
		5230	9.78	<=23.98	Pass
802.11ac (VHT20)	SISO	5180	10.42	<=23.98	Pass
		5200	10.19	<=23.98	Pass
		5240	9.83	<=23.98	Pass
802.11ac (VHT40)	SISO	5190	10.05	<=23.98	Pass
		5230	9.65	<=23.98	Pass

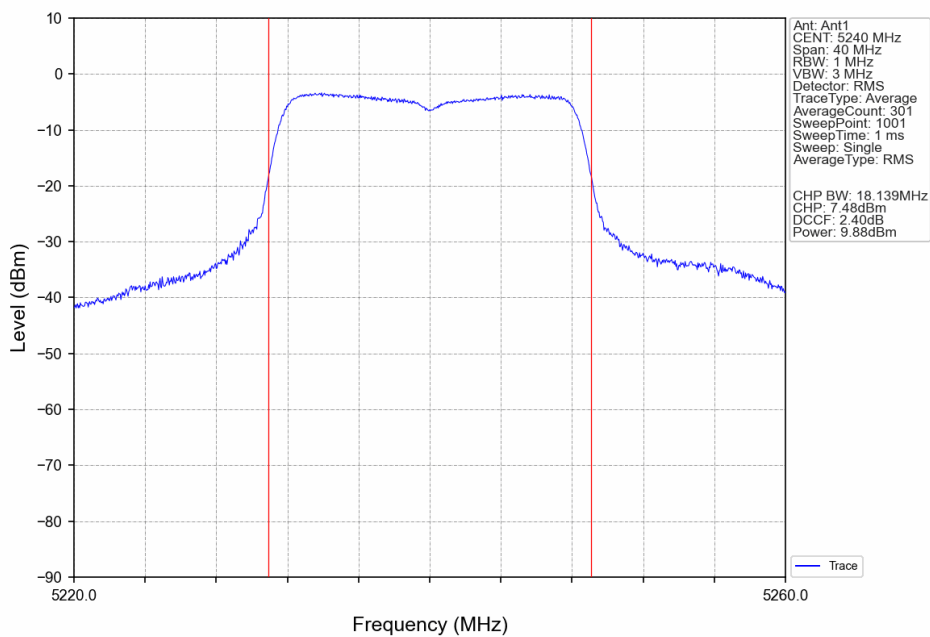
Note1: Antenna Gain: Ant1: 1.25dBi;

3.2 Test Graph

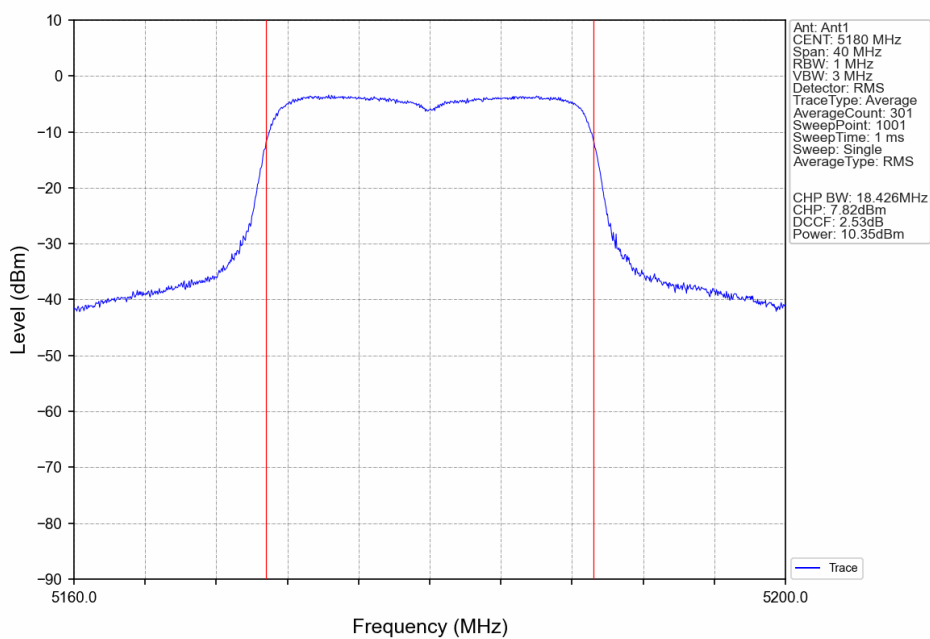
3.2.1 Power



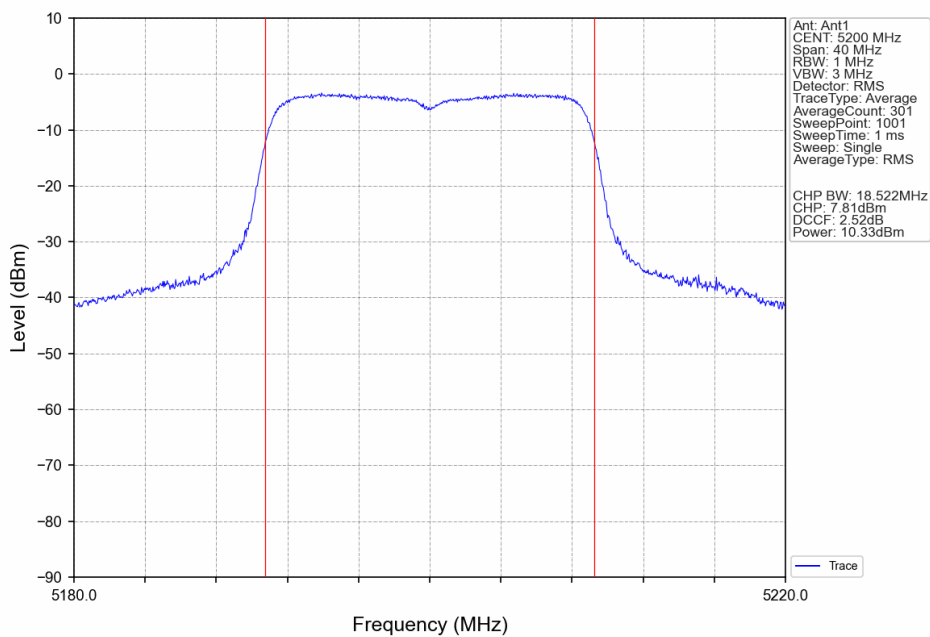
802.11a_HCH_5240MHz_Ant1_NTNV



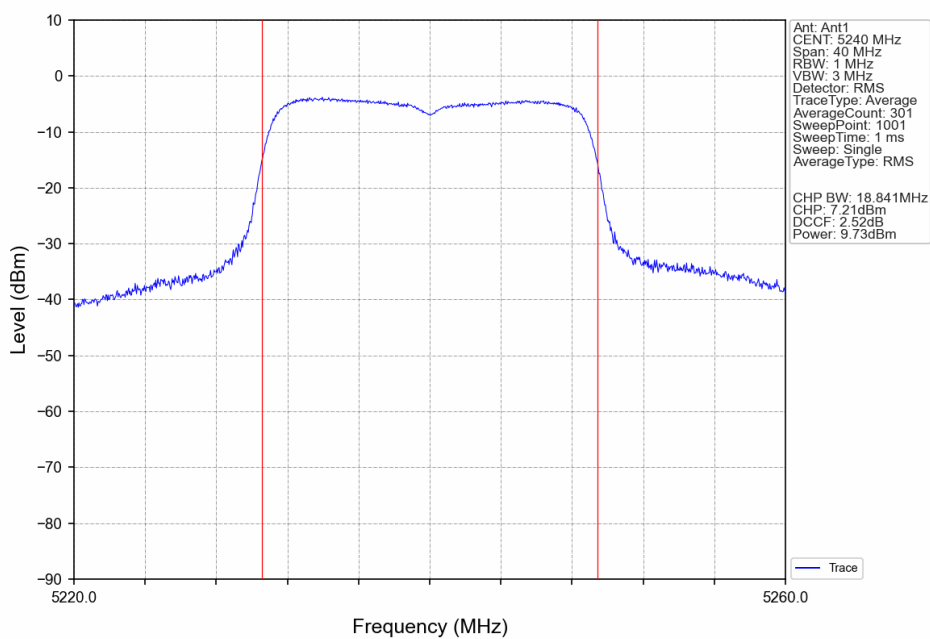
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



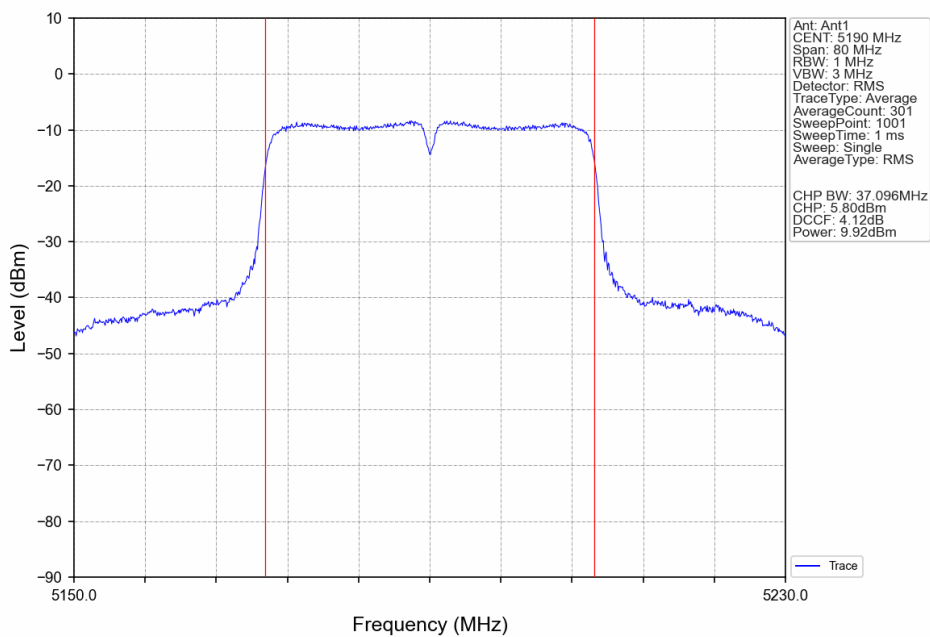
802.11n(HT20) MCH 5200MHz_Ant1_NTNV



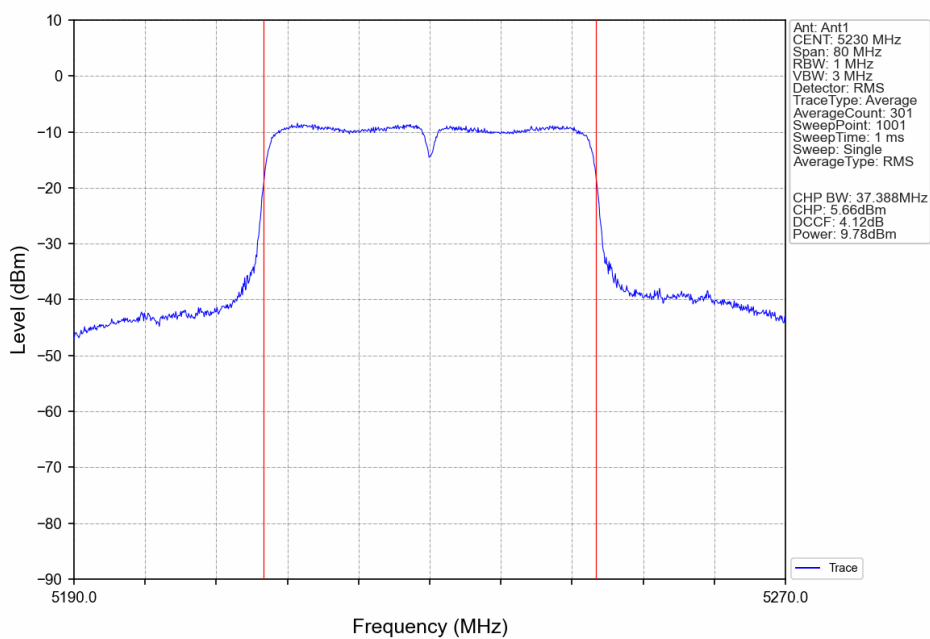
802.11n(HT20) HCH 5240MHz_Ant1_NTNV



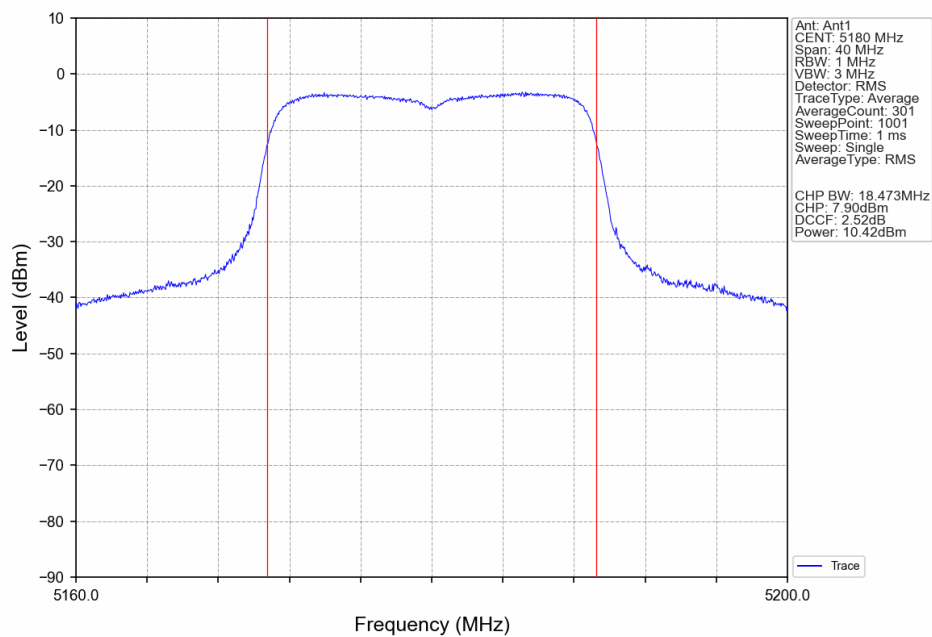
802.11n(HT40) LCH 5190MHz_Ant1_NTNV



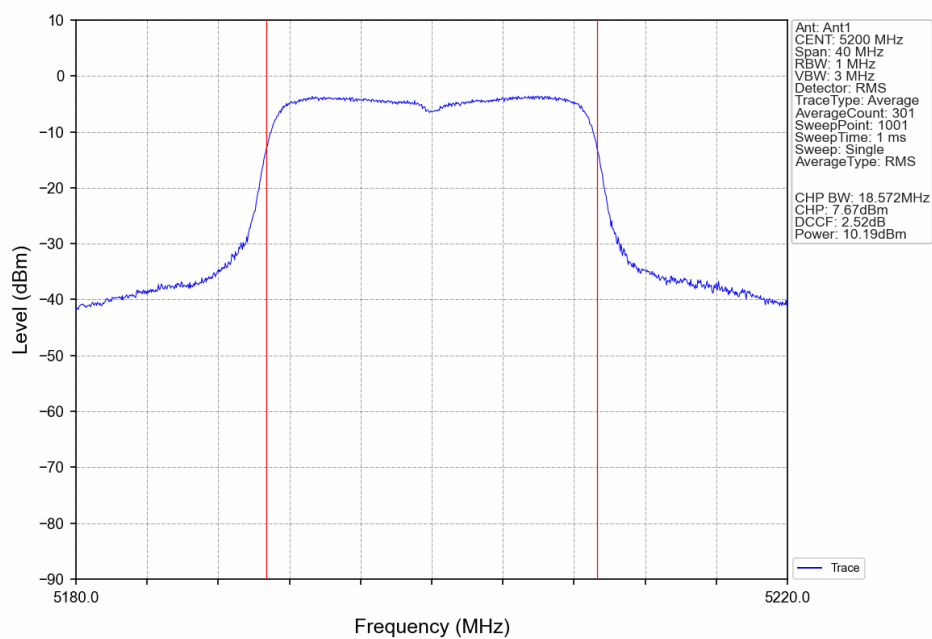
802.11n(HT40) HCH 5230MHz_Ant1_NTNV



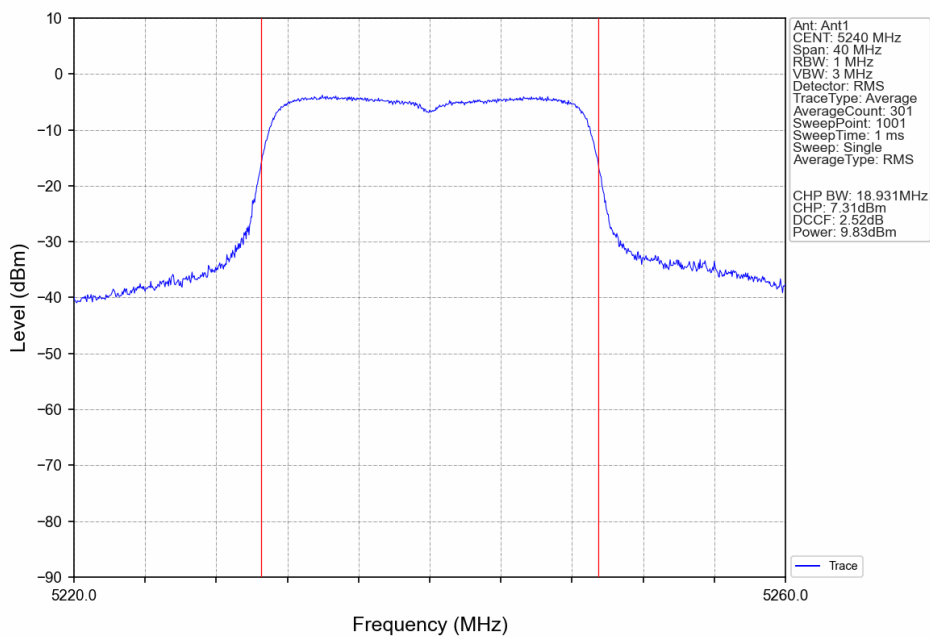
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



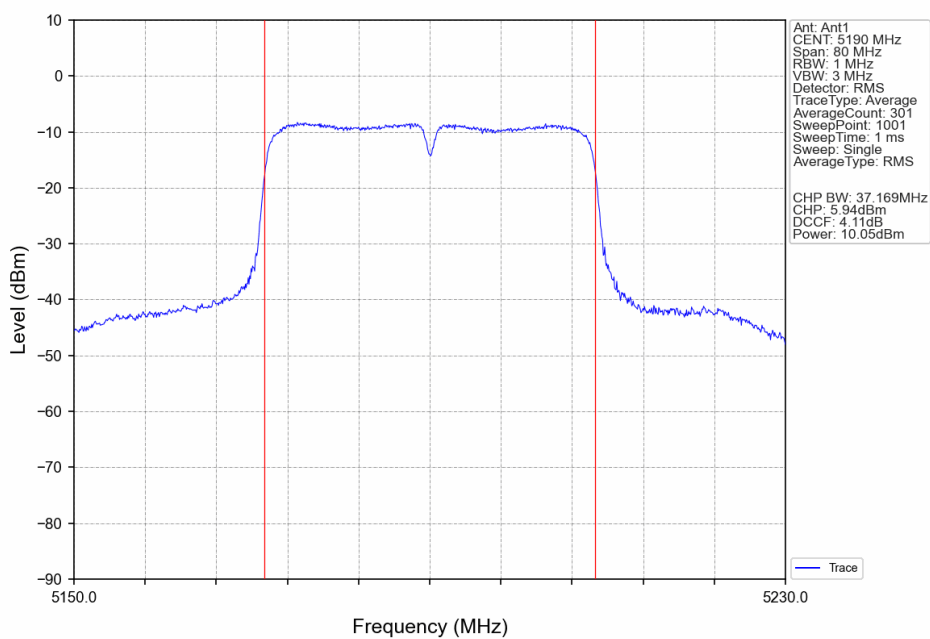
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV

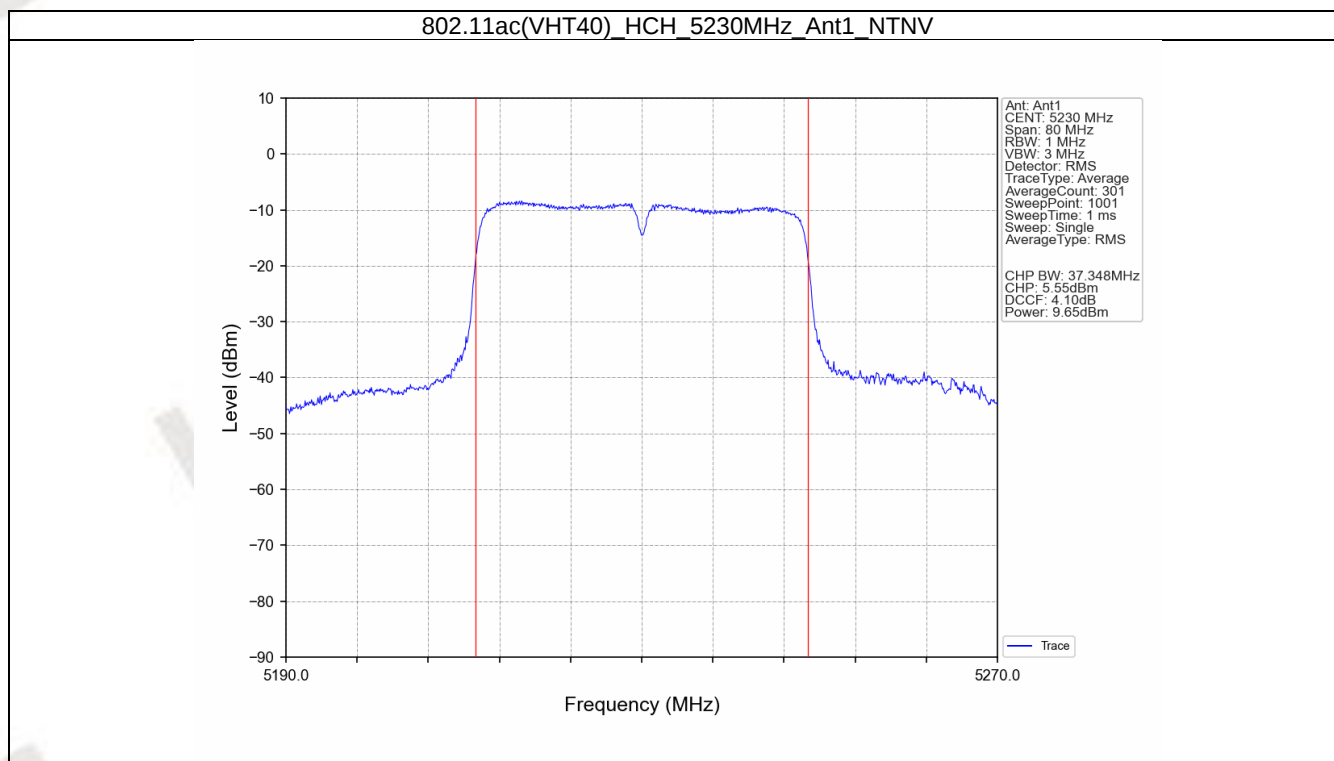


802.11ac(VHT20) HCH 5240MHz Ant1_NTNV



802.11ac(VHT40) LCH 5190MHz Ant1_NTNV





4. Maximum Power Spectral Density

4.1 Test Result

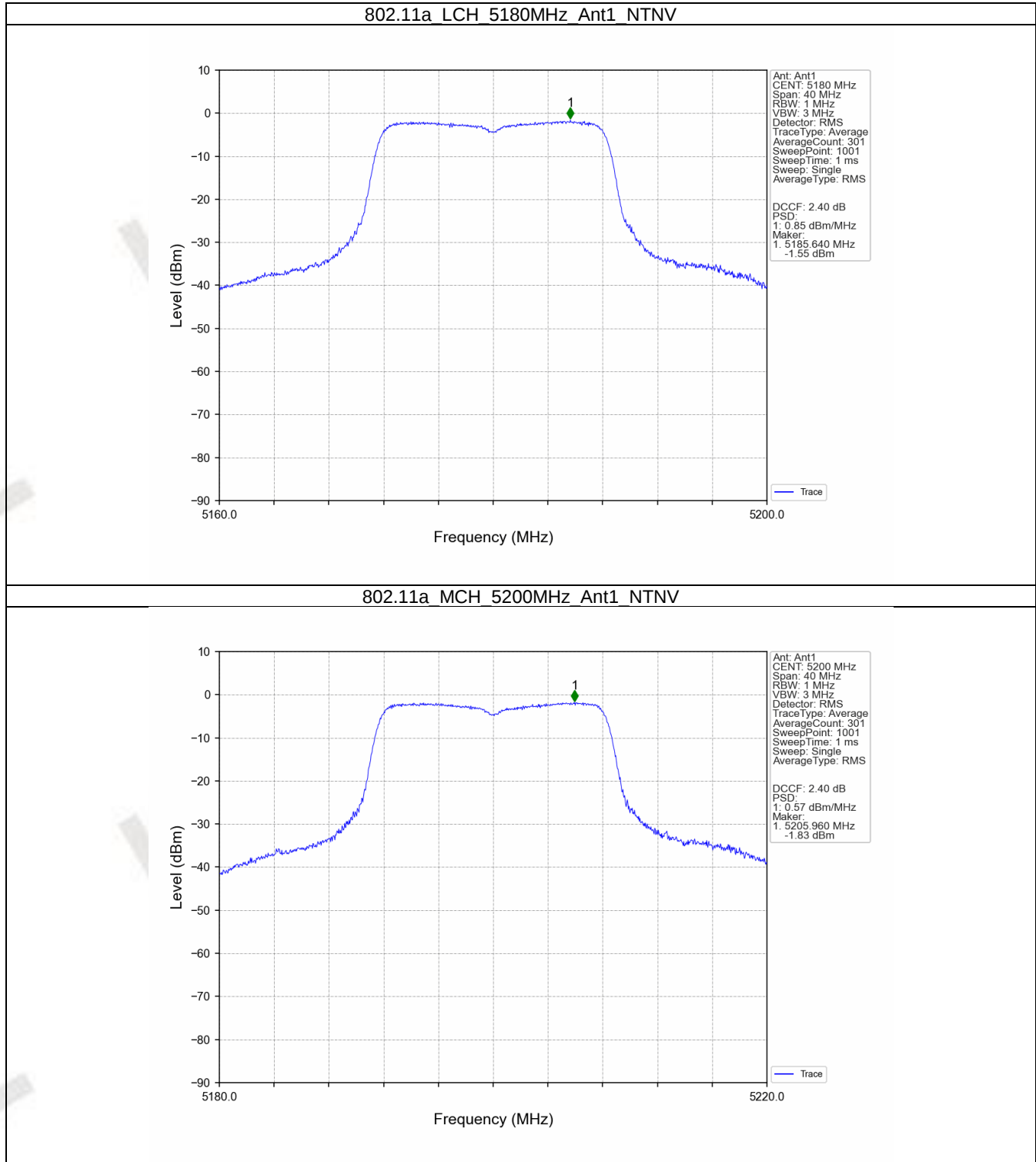
4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	0.85	<=11	Pass
		5200	0.57	<=11	Pass
		5240	0.74	<=11	Pass
802.11n (HT20)	SISO	5180	0.20	<=11	Pass
		5200	0.07	<=11	Pass
		5240	0.42	<=11	Pass
802.11n (HT40)	SISO	5190	-3.47	<=11	Pass
		5230	-3.12	<=11	Pass
802.11ac (VHT20)	SISO	5180	0.39	<=11	Pass
		5200	0.30	<=11	Pass
		5240	0.23	<=11	Pass
802.11ac (VHT40)	SISO	5190	-3.38	<=11	Pass
		5230	-2.93	<=11	Pass

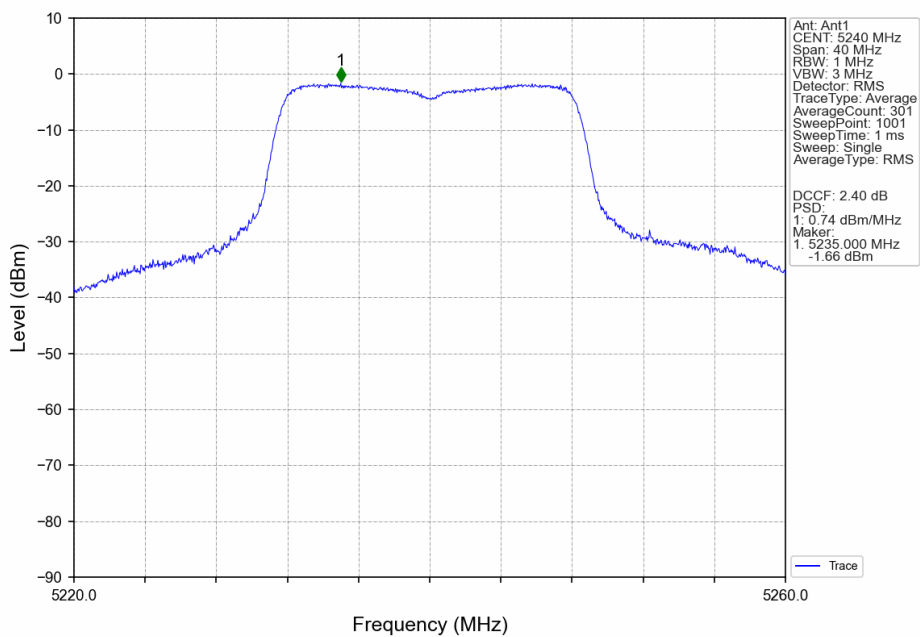
Note1: Antenna Gain: Ant1: 1.25dBi;

4.2 Test Graph

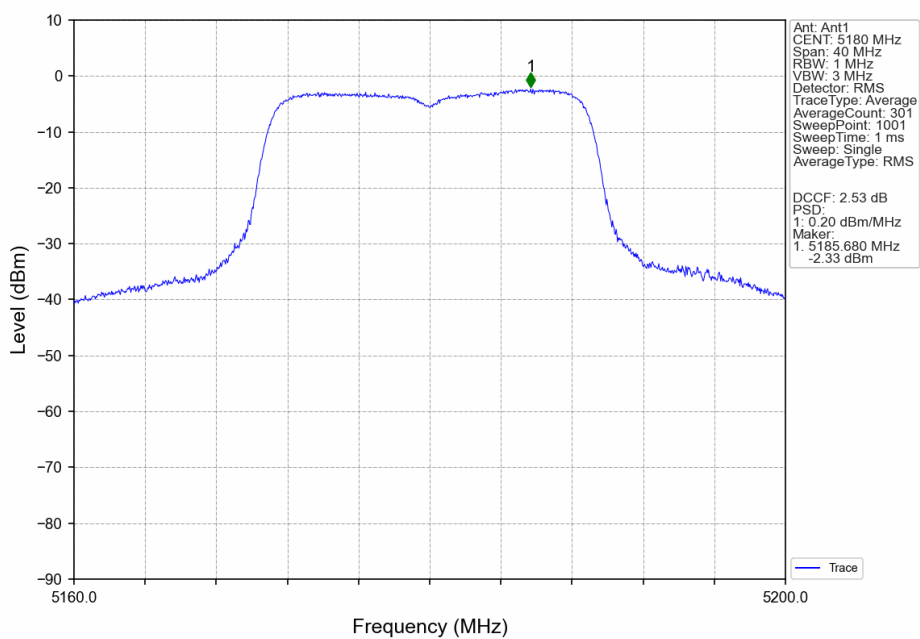
4.2.1 PSD



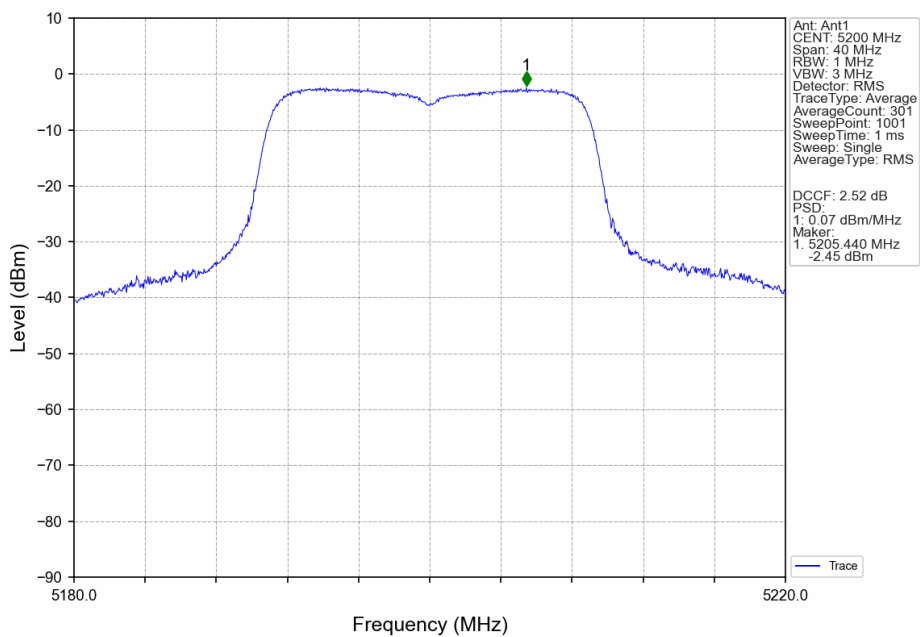
802.11a_HCH_5240MHz_Ant1_NTNV



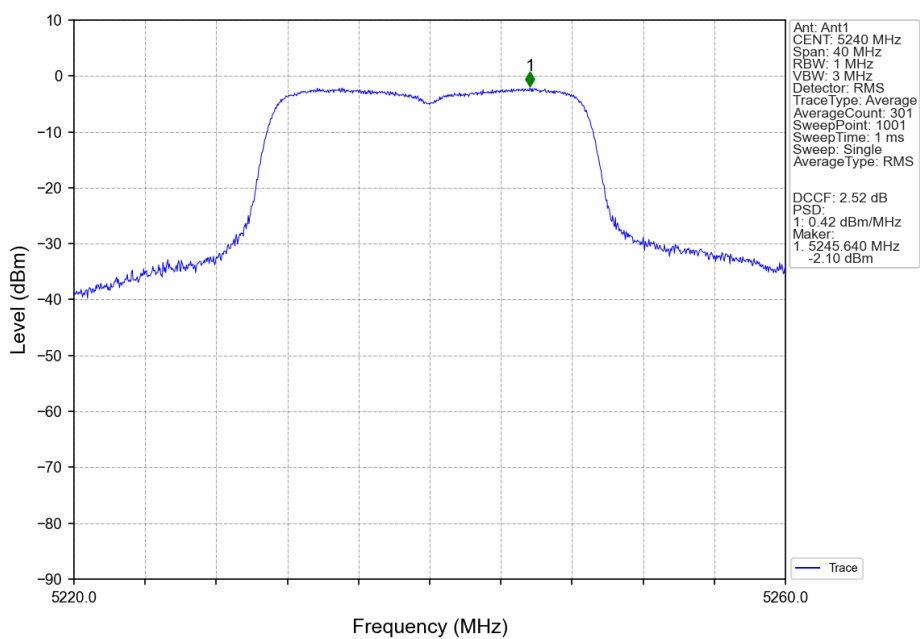
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



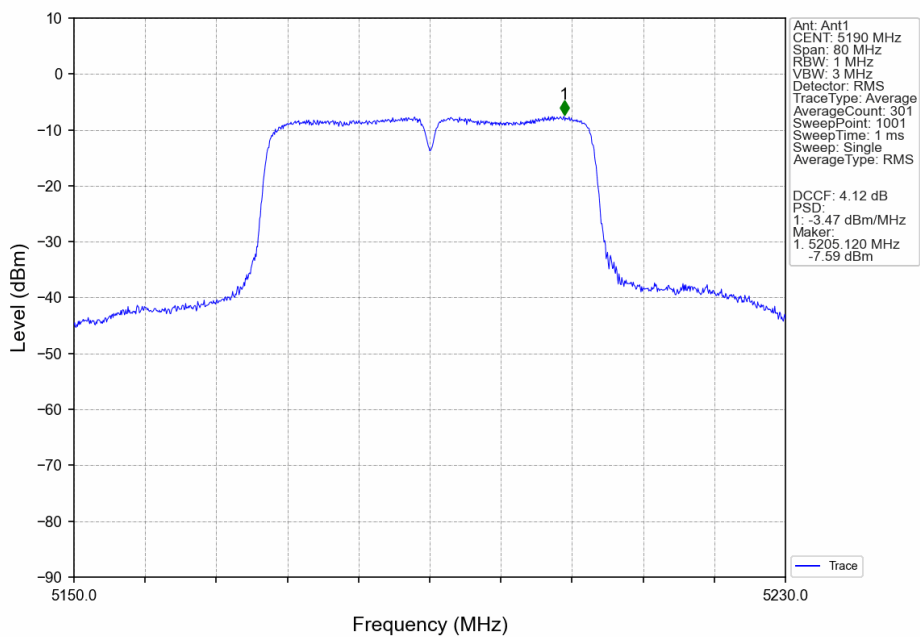
802.11n(HT20) MCH 5200MHz_Ant1_NTNV



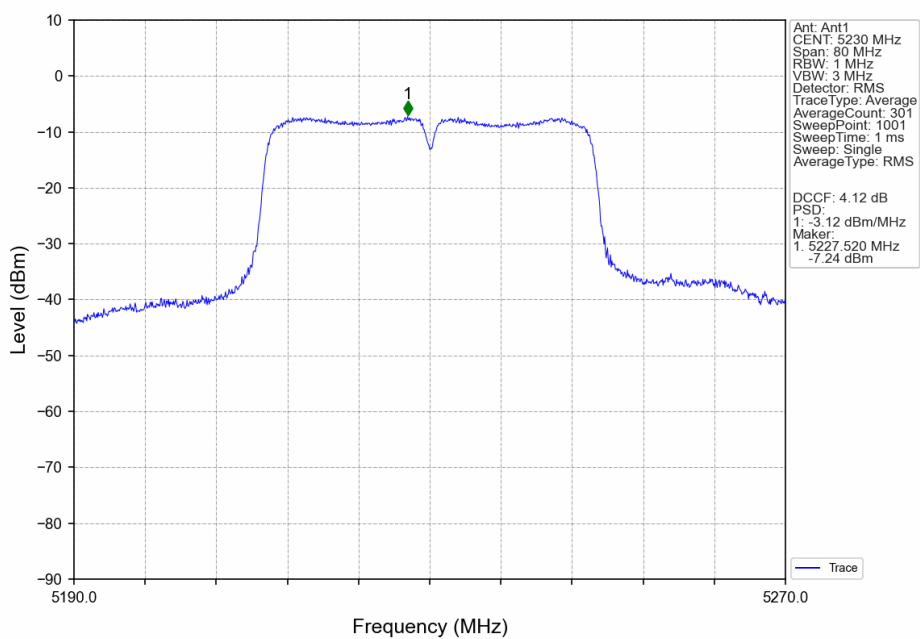
802.11n(HT20) HCH 5240MHz_Ant1_NTNV



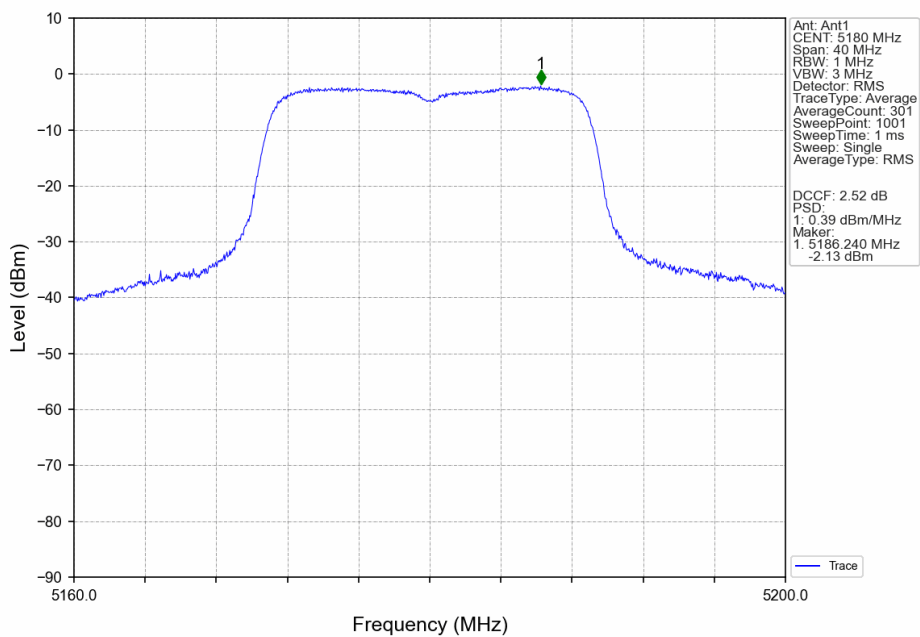
802.11n(HT40) LCH 5190MHz_Ant1_NTNV



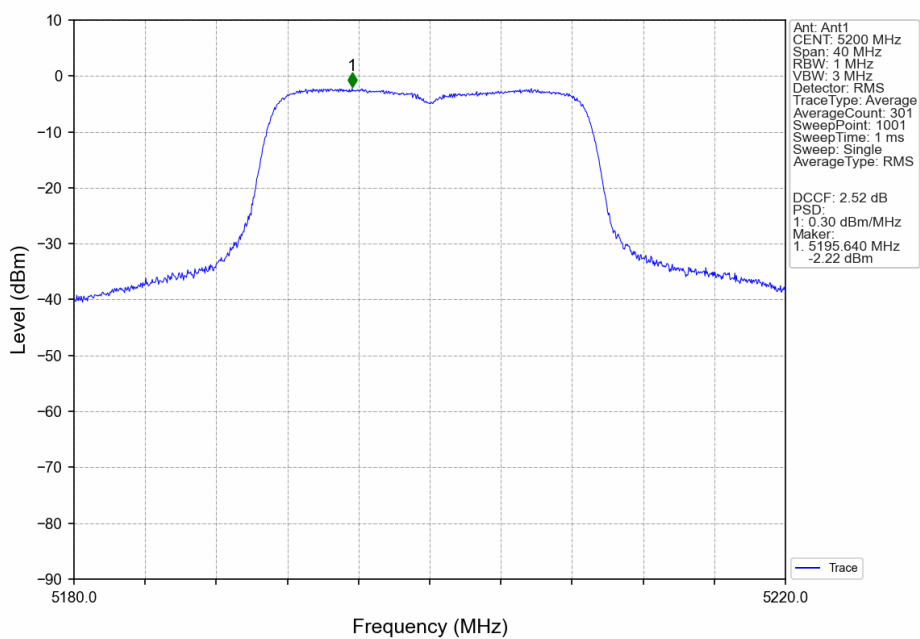
802.11n(HT40) HCH 5230MHz_Ant1_NTNV



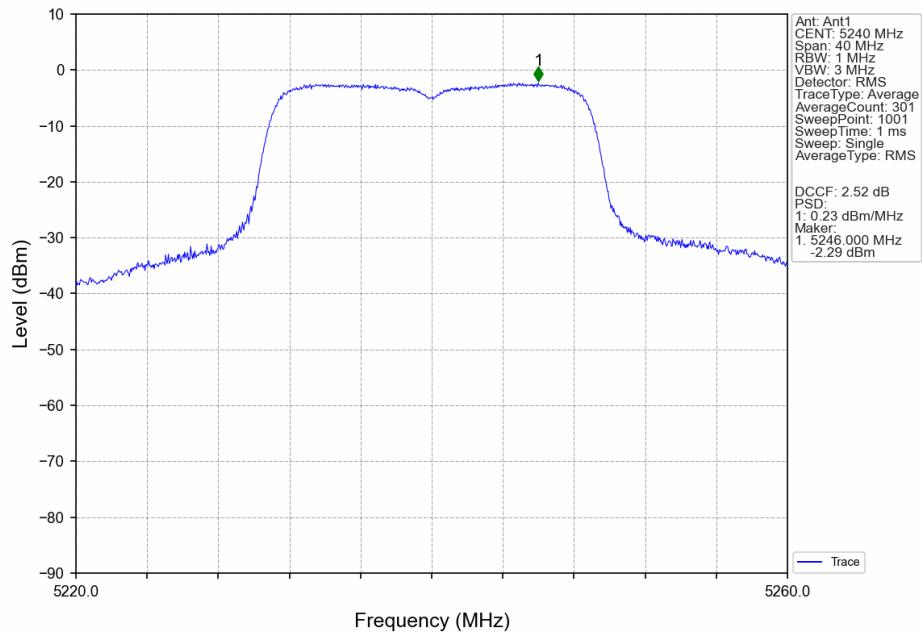
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



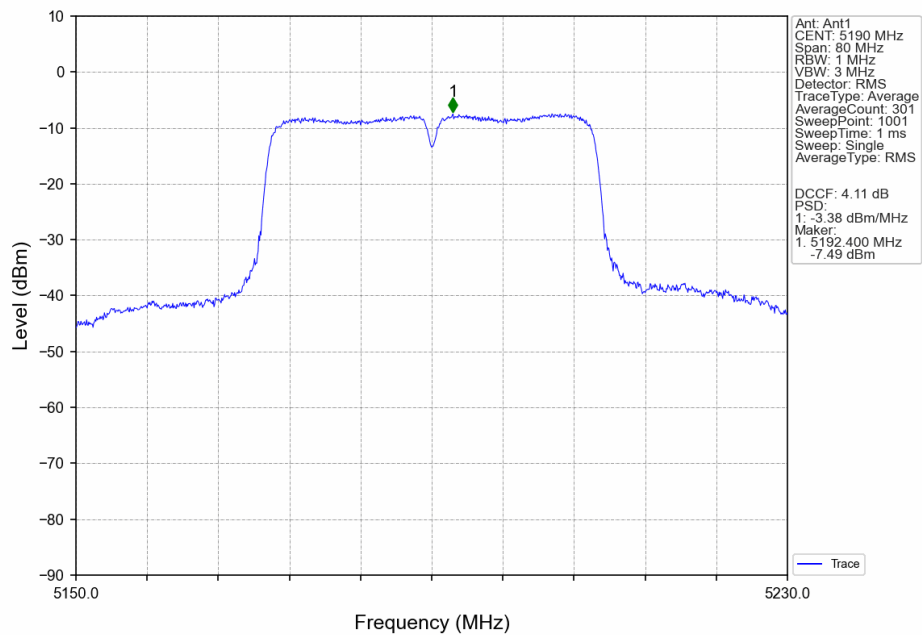
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV

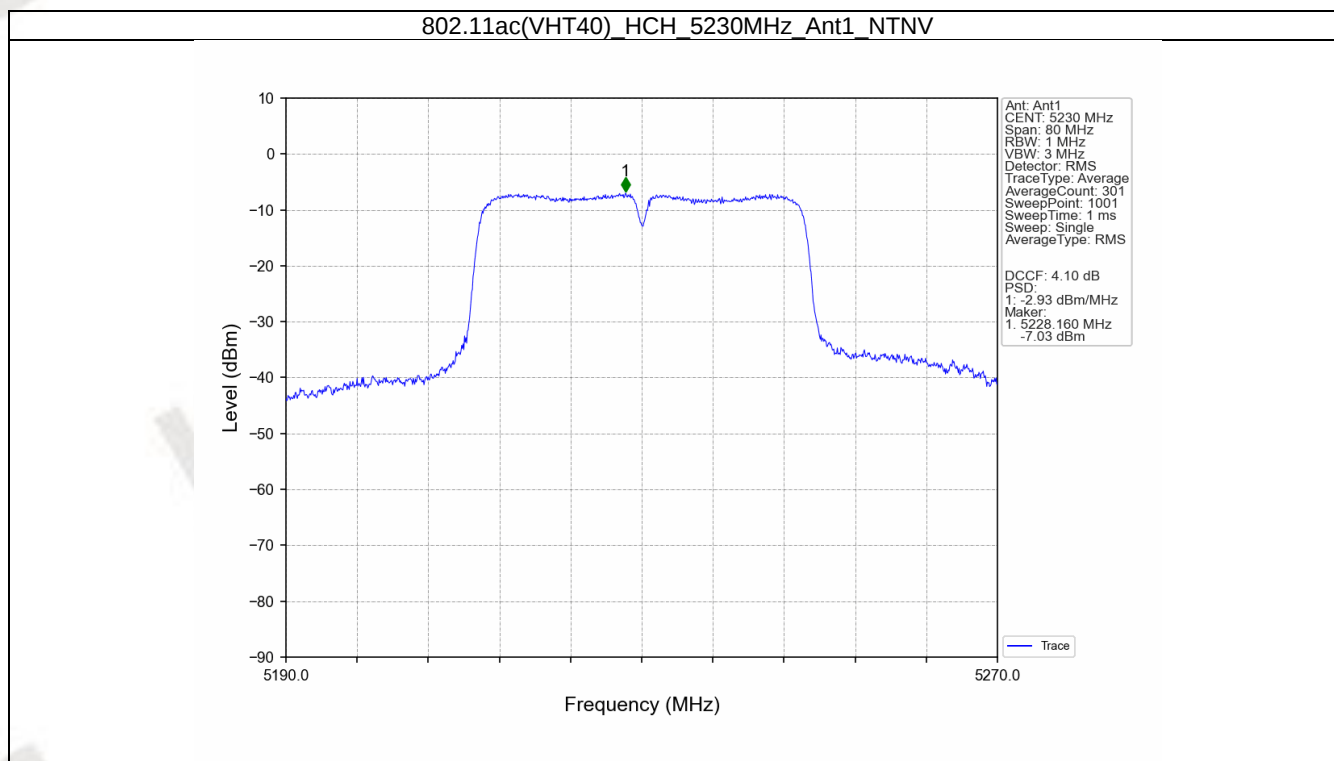


802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV





5. Frequency Stability

5.1 Test Result

5.1.1 Ant1

Ant1							
Mode	Tx Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
Carrier Wave	SISO	5180	20	102	5179.962	5150 to 5250	Pass
				120	5179.962	5150 to 5250	Pass
				138	5179.962	5150 to 5250	Pass
			-30	120	5179.962	5150 to 5250	Pass
			-20	120	5179.962	5150 to 5250	Pass
			-10	120	5179.962	5150 to 5250	Pass
			0	120	5179.962	5150 to 5250	Pass
			10	120	5179.963	5150 to 5250	Pass
			30	120	5179.963	5150 to 5250	Pass
			40	120	5179.963	5150 to 5250	Pass
			50	120	5179.963	5150 to 5250	Pass
		5200	20	102	5199.962	5150 to 5250	Pass
				120	5199.963	5150 to 5250	Pass
				138	5199.963	5150 to 5250	Pass
			-30	120	5199.963	5150 to 5250	Pass
			-20	120	5199.963	5150 to 5250	Pass
			-10	120	5199.963	5150 to 5250	Pass
			0	120	5199.963	5150 to 5250	Pass
			10	120	5199.963	5150 to 5250	Pass
			30	120	5199.963	5150 to 5250	Pass
			40	120	5199.963	5150 to 5250	Pass
			50	120	5199.963	5150 to 5250	Pass
		5240	20	102	5239.963	5150 to 5250	Pass
				120	5239.963	5150 to 5250	Pass
				138	5239.963	5150 to 5250	Pass
			-30	120	5239.963	5150 to 5250	Pass
			-20	120	5239.963	5150 to 5250	Pass
			-10	120	5239.964	5150 to 5250	Pass
			0	120	5239.964	5150 to 5250	Pass
			10	120	5239.964	5150 to 5250	Pass
			30	120	5239.964	5150 to 5250	Pass
			40	120	5239.964	5150 to 5250	Pass
			50	120	5239.964	5150 to 5250	Pass
		5190	20	102	5189.963	5150 to 5250	Pass
				120	5189.963	5150 to 5250	Pass
				138	5189.964	5150 to 5250	Pass
			-30	120	5189.964	5150 to 5250	Pass
			-20	120	5189.964	5150 to 5250	Pass
			-10	120	5189.964	5150 to 5250	Pass
			0	120	5189.964	5150 to 5250	Pass
			10	120	5189.964	5150 to 5250	Pass
			30	120	5189.964	5150 to 5250	Pass
			40	120	5189.964	5150 to 5250	Pass
			50	120	5189.964	5150 to 5250	Pass
		5230	20	102	5229.963	5150 to 5250	Pass
				120	5229.963	5150 to 5250	Pass
				138	5229.963	5150 to 5250	Pass
			-30	120	5229.964	5150 to 5250	Pass
			-20	120	5229.964	5150 to 5250	Pass
			-10	120	5229.964	5150 to 5250	Pass

			0	120	5229.964	5150 to 5250	Pass
			10	120	5229.964	5150 to 5250	Pass
			30	120	5229.964	5150 to 5250	Pass
			40	120	5229.964	5150 to 5250	Pass
			50	120	5229.964	5150 to 5250	Pass