

Appendix for 15.407

Product Name: TT1001 10.1 inch Tablet

Test Model: TT1001V3

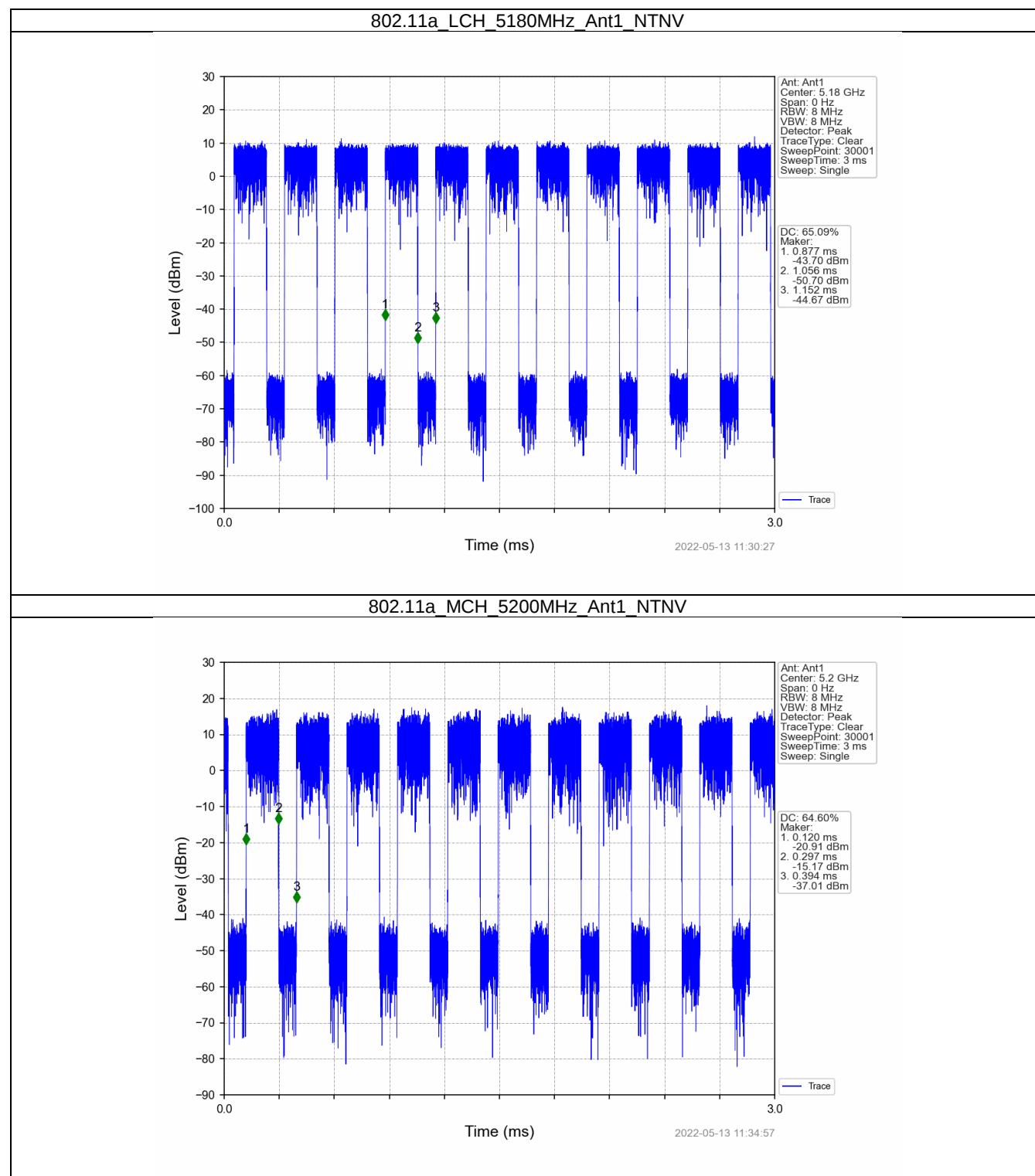
1. Duty Cycle

1.1 Ant1

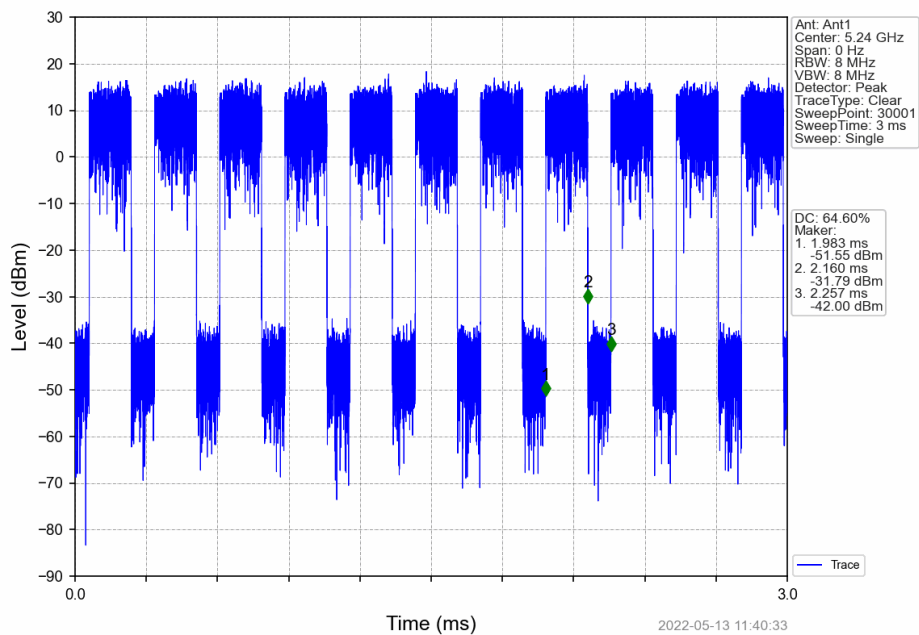
1.1.1 Test Result

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	0.179	0.275	65.09	1.86	0.04
		5200	0.177	0.274	64.60	1.90	20.99
		5240	0.177	0.274	64.60	1.90	0.13
802.11n (HT20)	SISO	5180	0.165	0.262	62.98	2.01	0.05
		5200	0.165	0.263	62.74	2.02	0.17
		5240	0.165	0.263	62.74	2.02	0.09
802.11n (HT40)	SISO	5190	0.102	0.199	51.26	2.90	0.08
		5230	0.100	0.199	50.25	2.99	0.08
802.11ac (VHT20)	SISO	5180	0.365	0.459	79.52	1.00	0.09
		5200	0.360	0.459	78.43	1.06	0.07
		5240	0.366	0.459	79.74	0.98	0.09
802.11ac (VHT40)	SISO	5190	0.088	0.187	47.06	3.27	0.09
		5230	0.091	0.187	48.66	3.13	0.27
802.11ac (VHT80)	SISO	5210	0.068	0.163	41.72	3.80	0.30

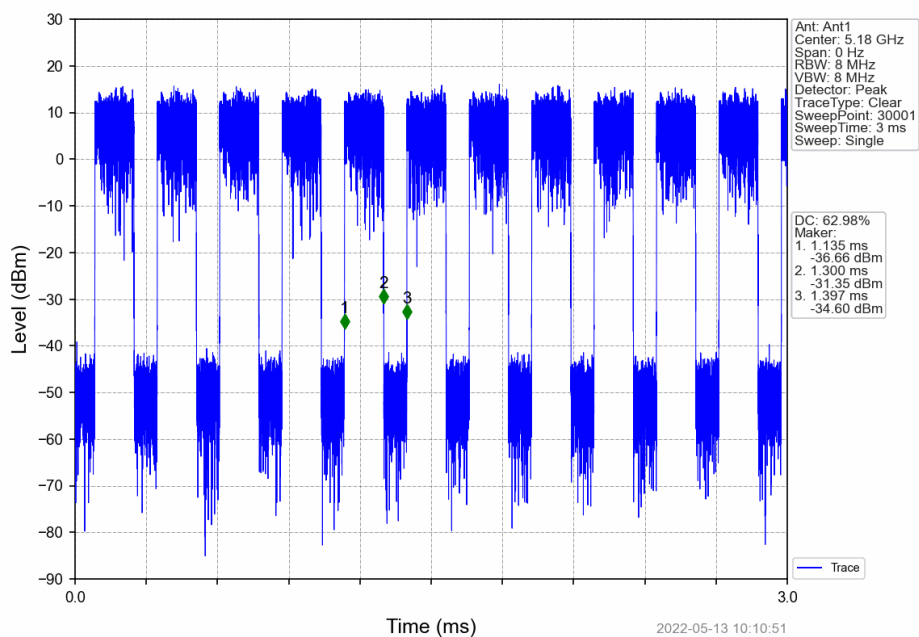
1.1.2 Test Graph



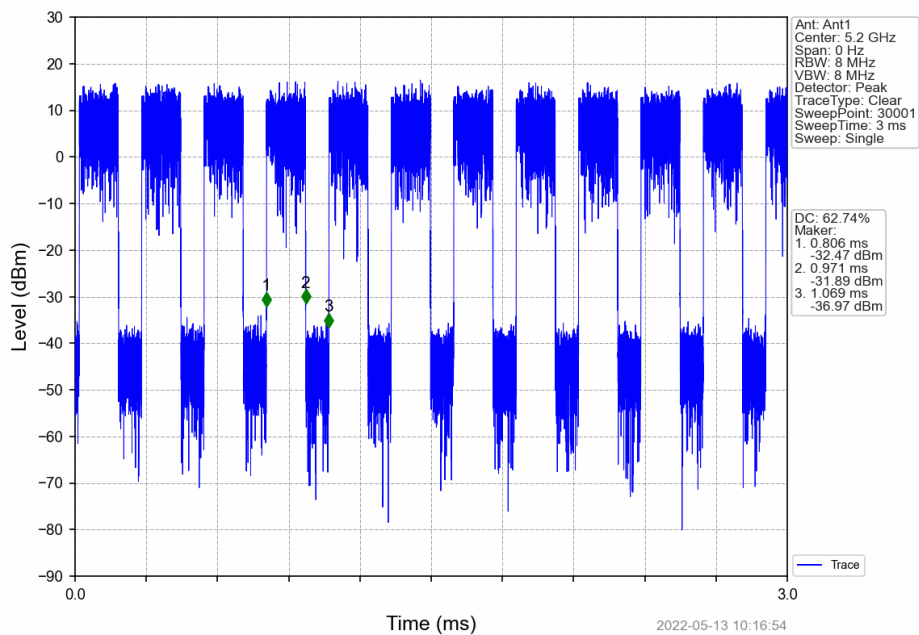
802.11a HCH 5240MHz Ant1 NTNV



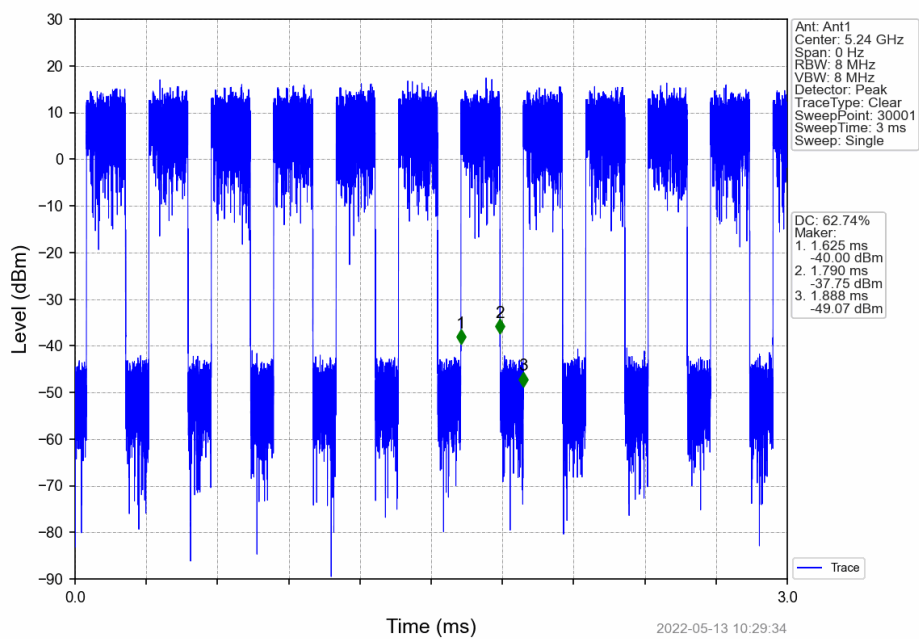
802.11n(HT20) LCH 5180MHz Ant1 NTNV



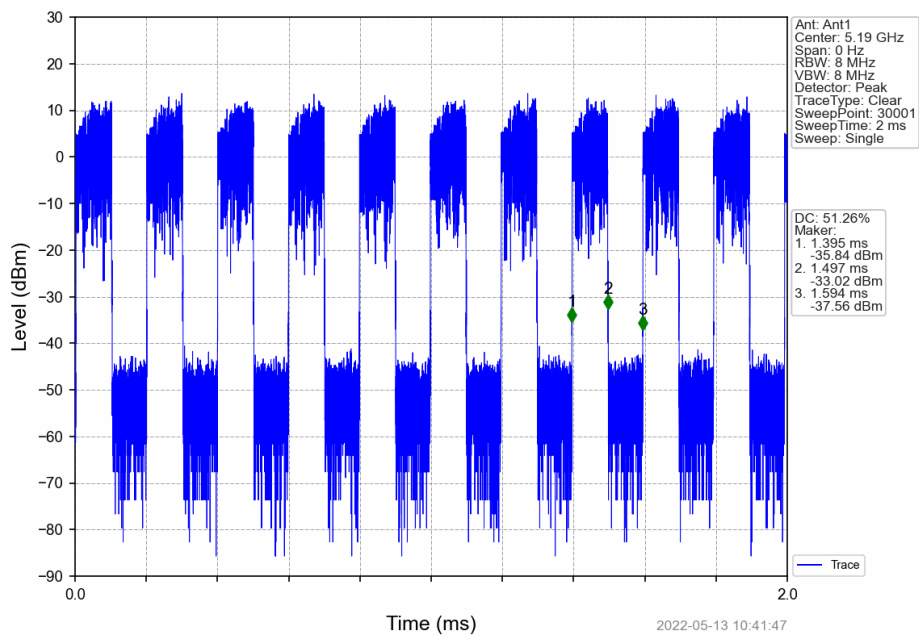
802.11n(HT20) MCH 5200MHz Ant1 NTN



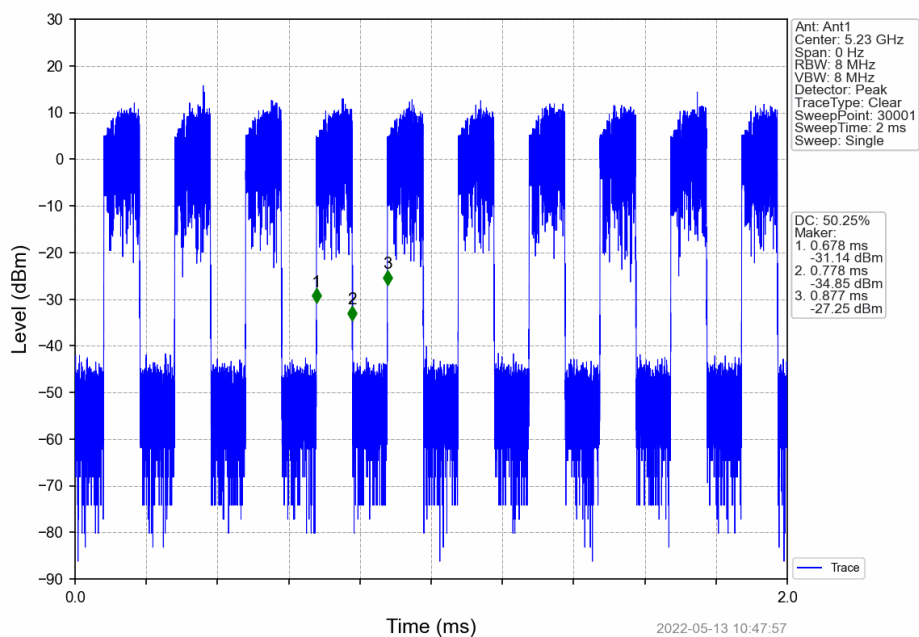
802.11n(HT20)_HCH_5240MHz_Ant1_NTN



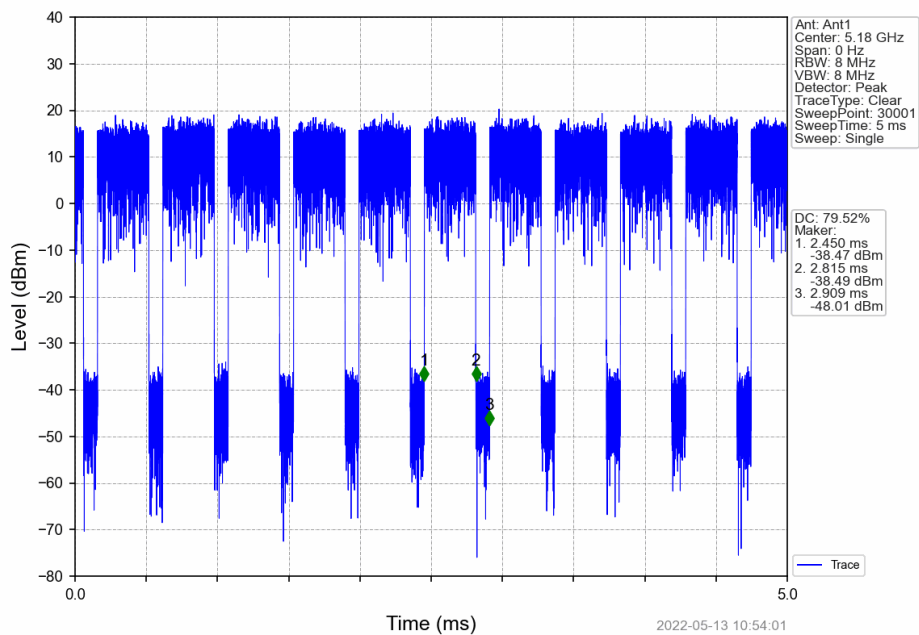
802.11n(HT40) LCH 5190MHz Ant1 NTV



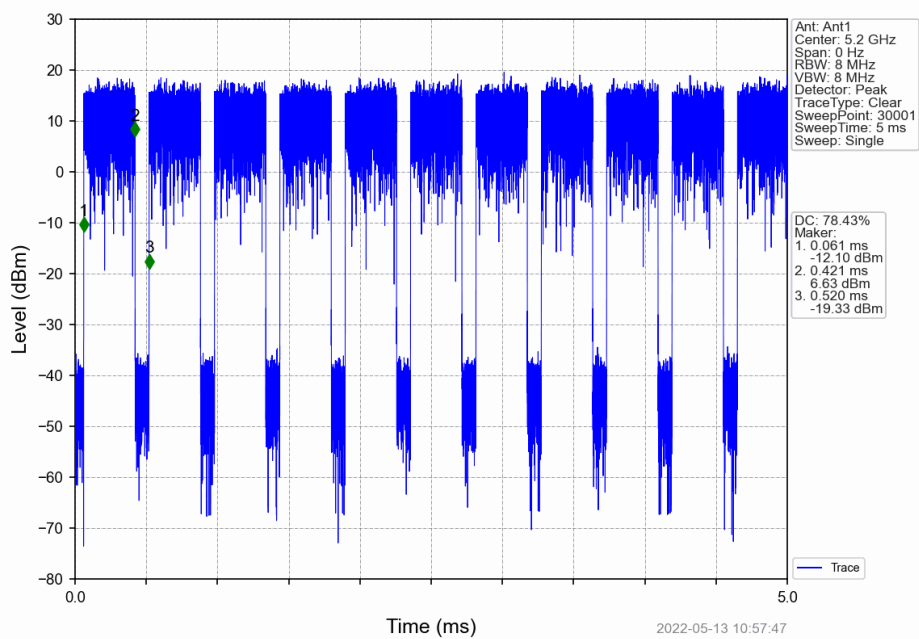
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



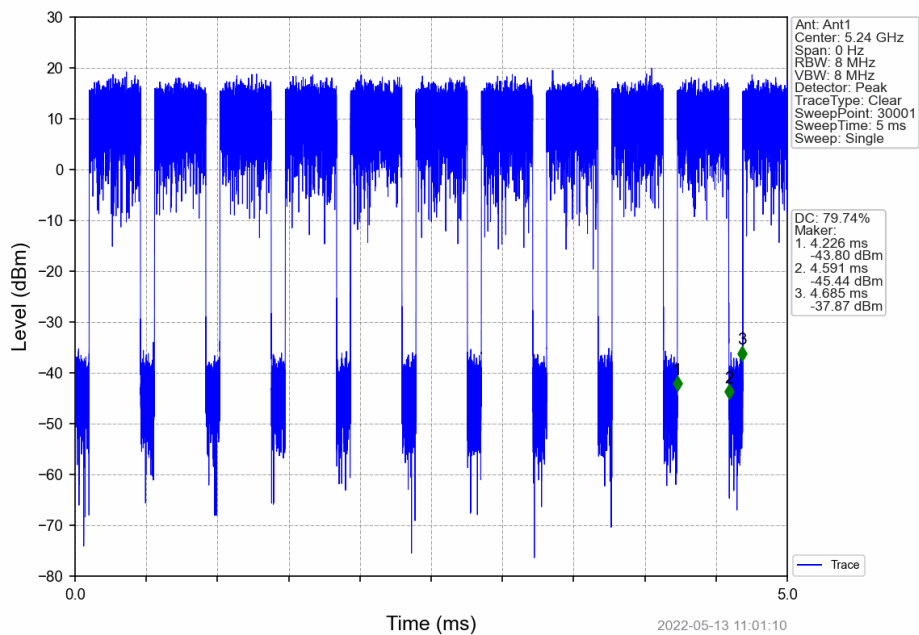
802.11ac(VHT20) LCH 5180MHz Ant1 NTN



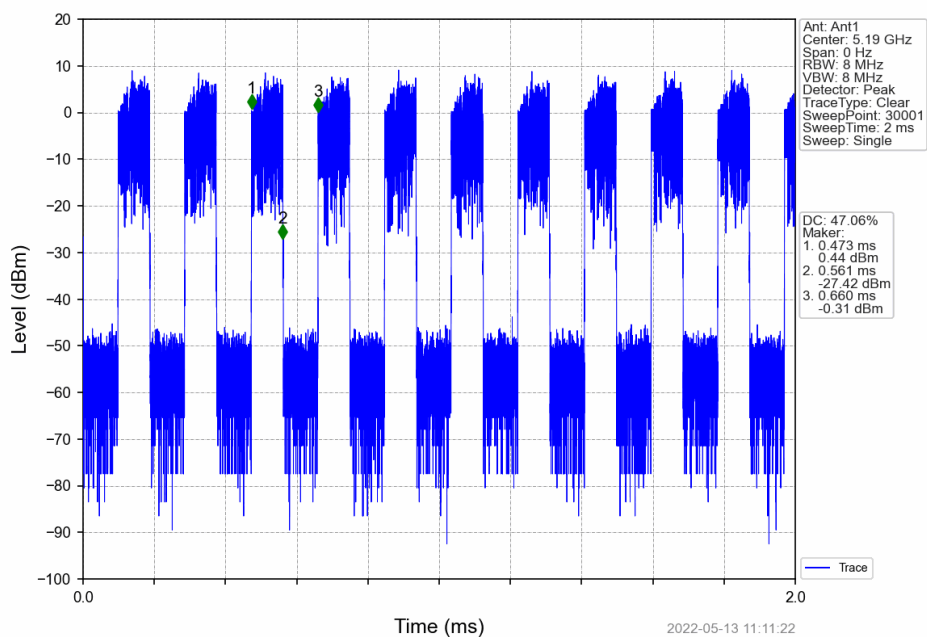
802.11ac(VHT20) MCH 5200MHz Ant1 NTN



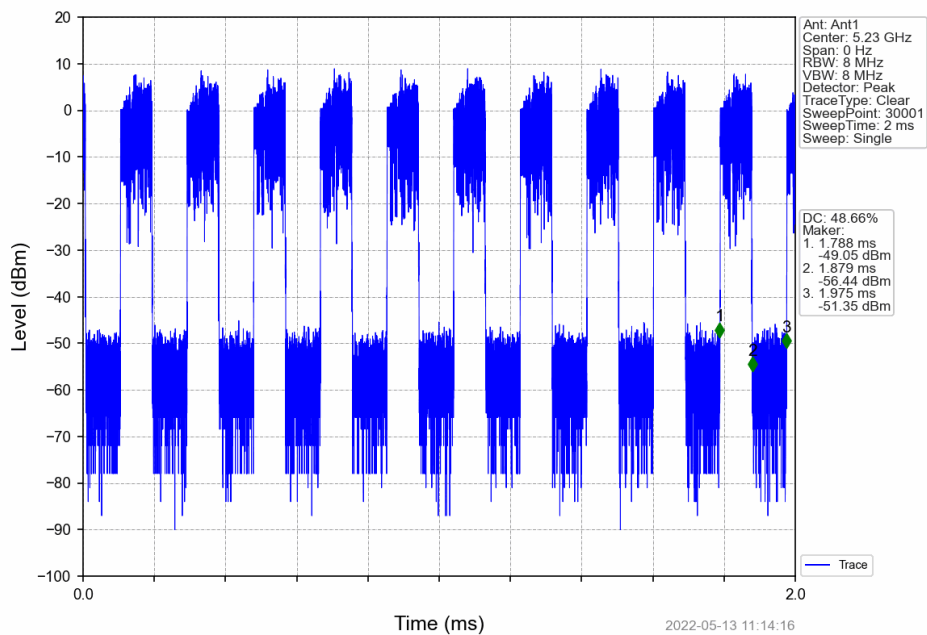
802.11ac(VHT20) HCH 5240MHz Ant1 NTN



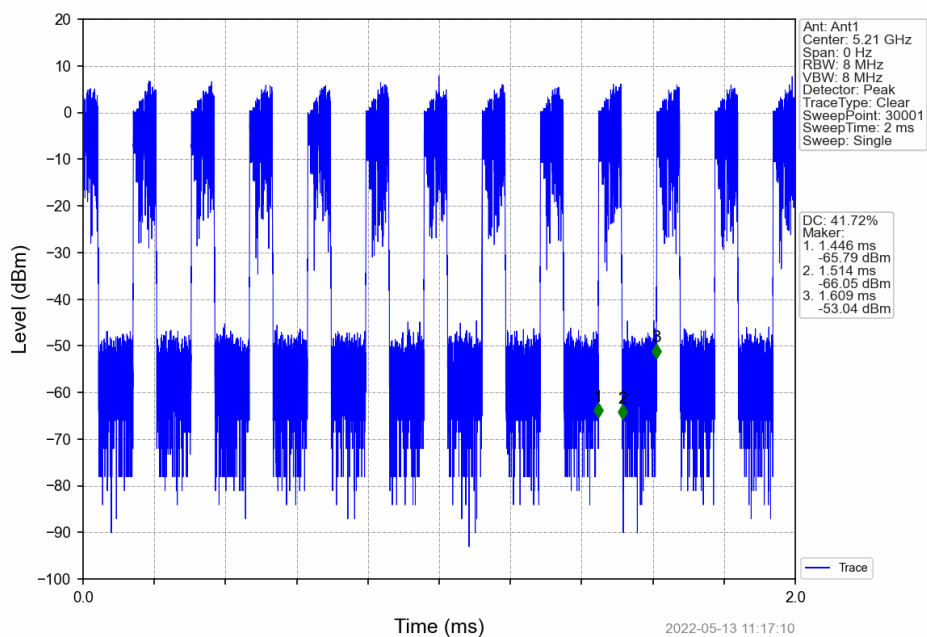
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTN



802.11ac(VHT40) HCH 5230MHz Ant1 NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



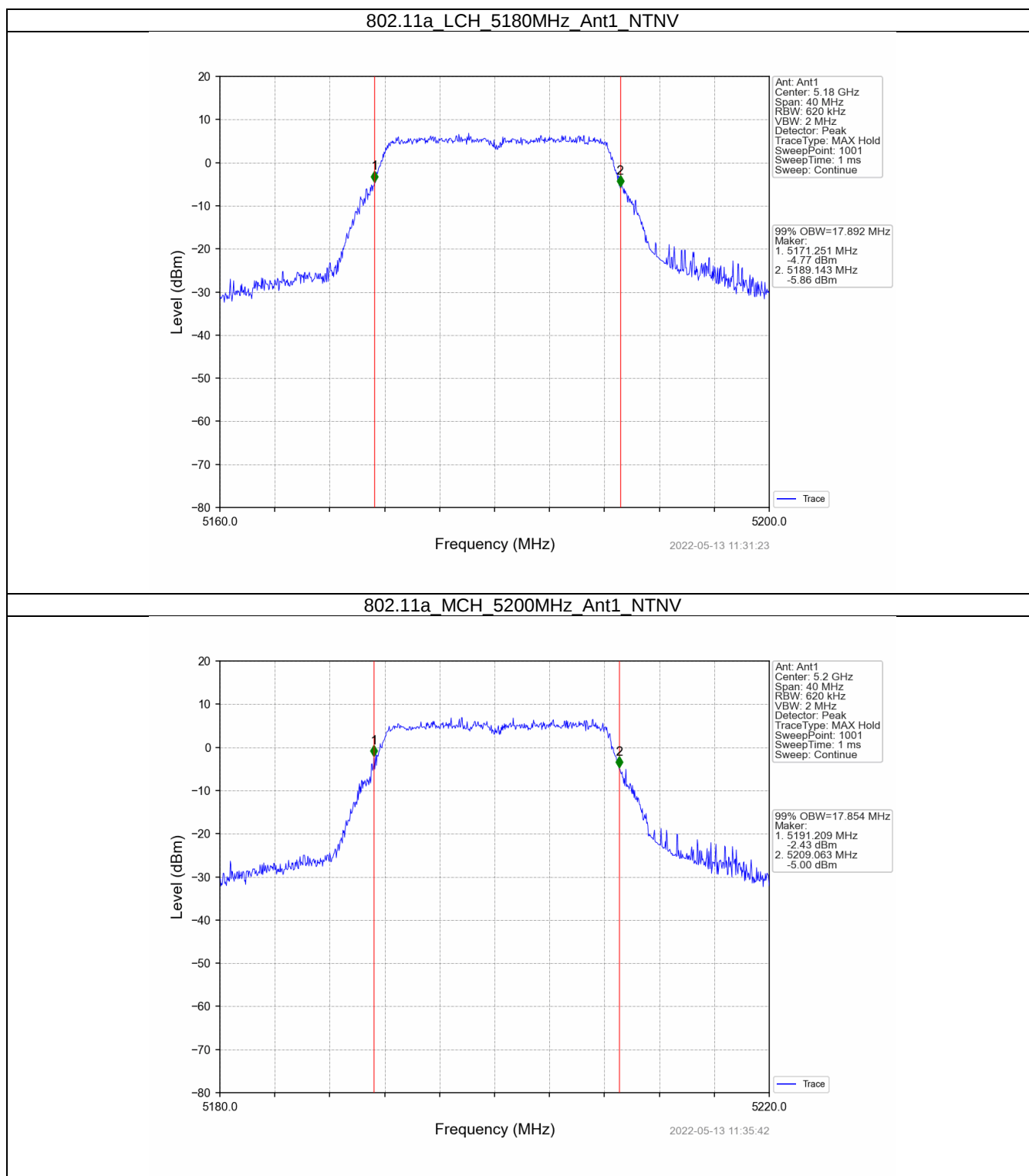
2. Bandwidth

2.1 OBW

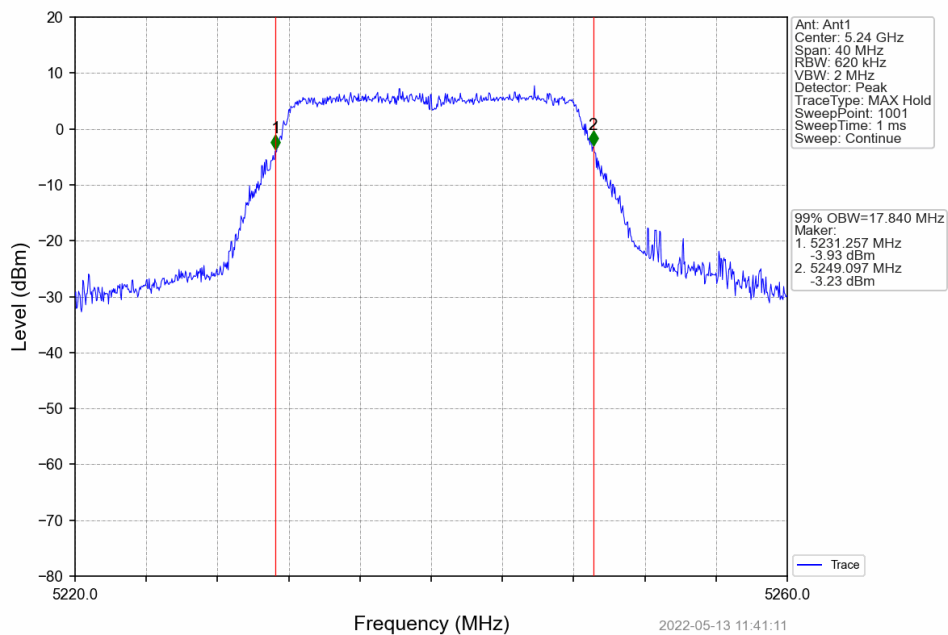
2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5180	1	17.892	Pass
		5200	1	17.854	Pass
		5240	1	17.840	Pass
802.11n (HT20)	SISO	5180	1	18.635	Pass
		5200	1	18.627	Pass
		5240	1	18.691	Pass
802.11n (HT40)	SISO	5190	1	37.088	Pass
		5230	1	36.986	Pass
802.11ac (VHT20)	SISO	5180	1	18.996	Pass
		5200	1	18.929	Pass
		5240	1	18.965	Pass
802.11ac (VHT40)	SISO	5190	1	37.149	Pass
		5230	1	37.114	Pass
802.11ac (VHT80)	SISO	5210	1	76.753	Pass

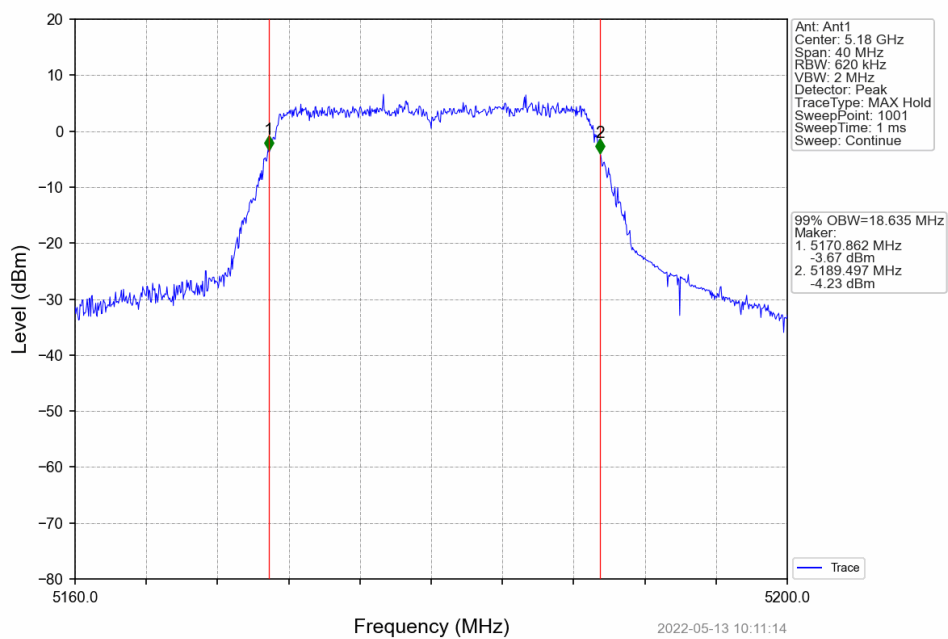
2.1.2 Test Graph



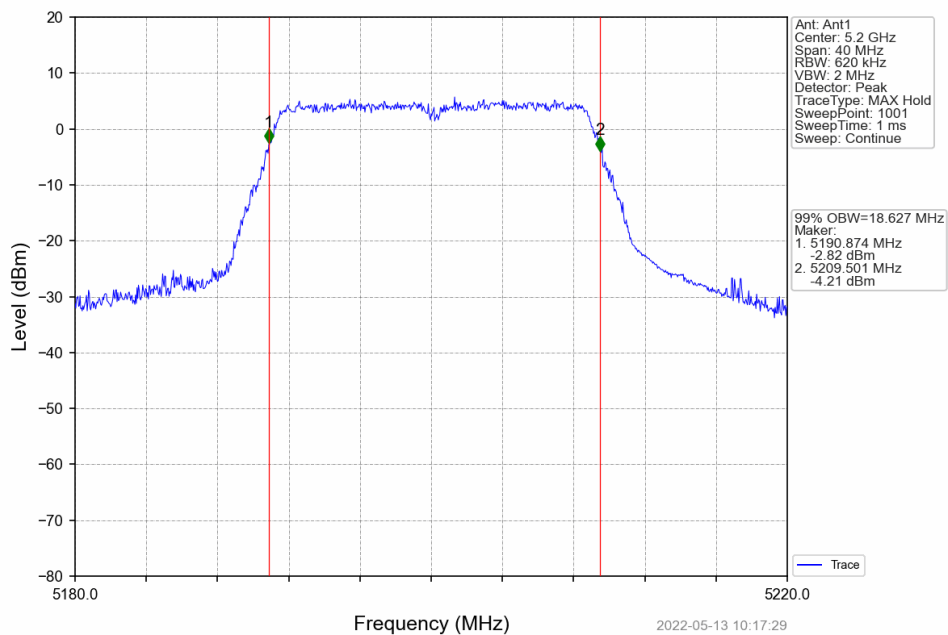
802.11a HCH 5240MHz Ant1 NTN



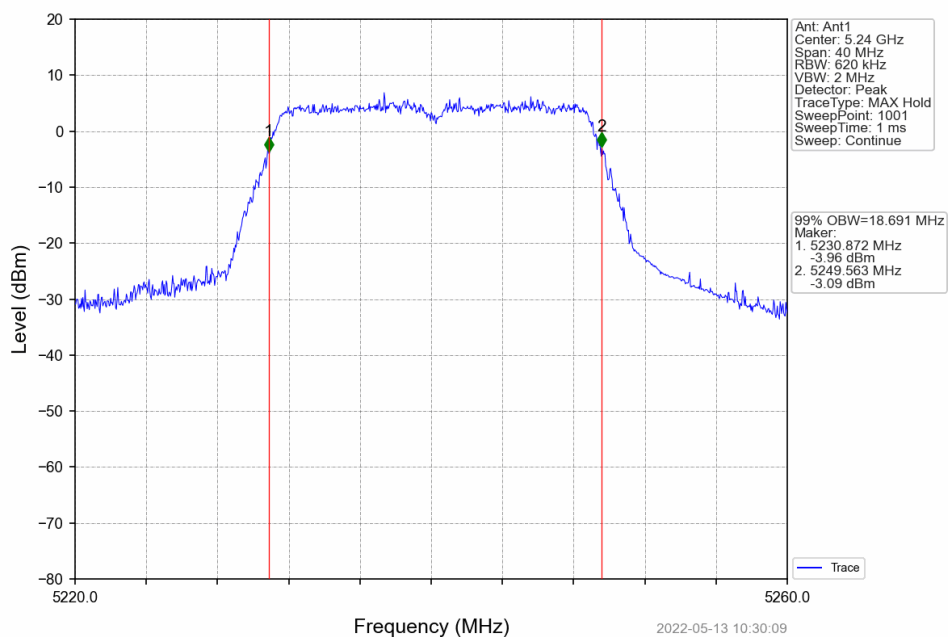
802.11n(HT20) LCH 5180MHz Ant1 NTN



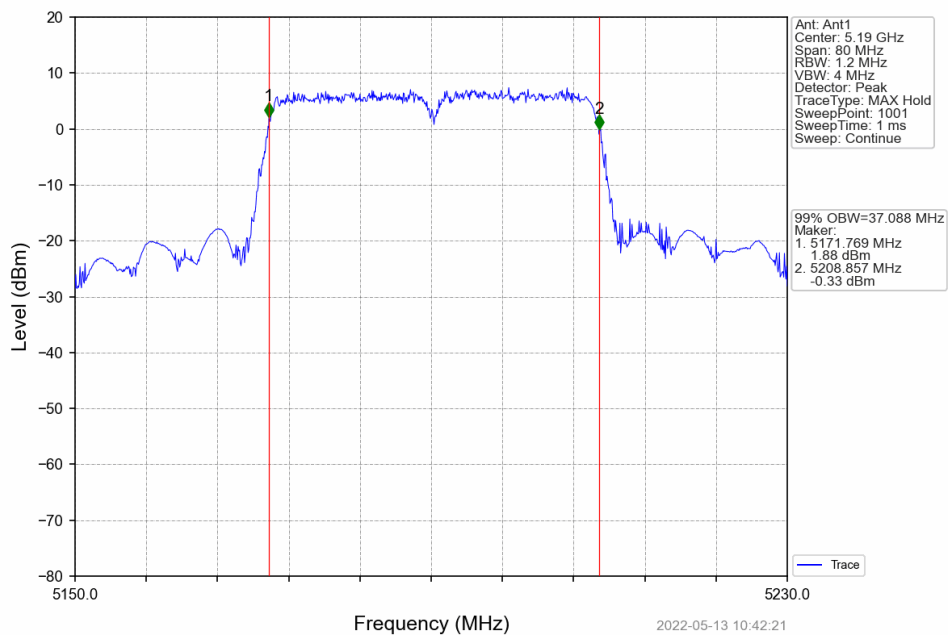
802.11n(HT20) MCH 5200MHz Ant1 NTN



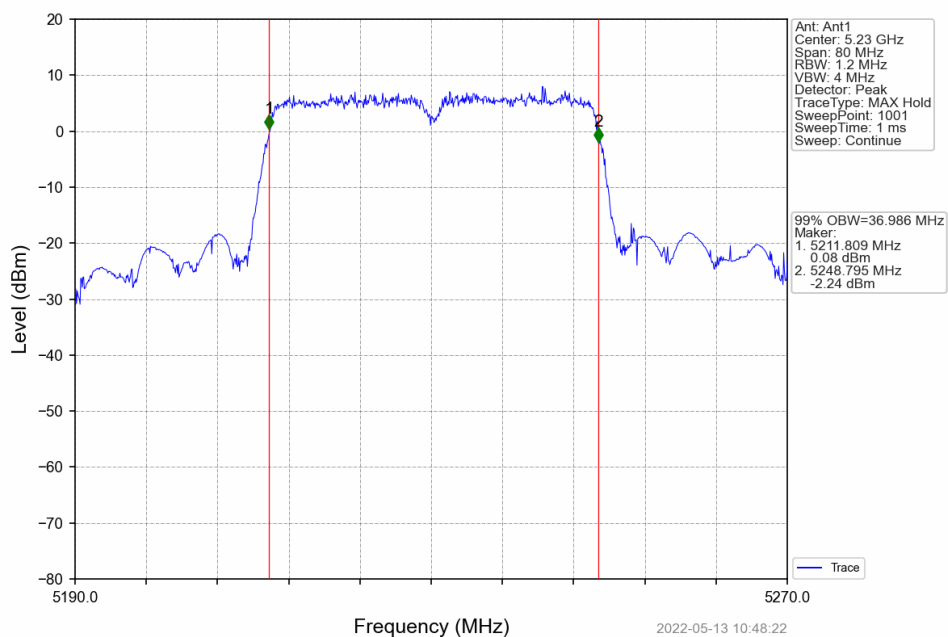
802.11n(HT20)_HCH_5240MHz_Ant1 NTN



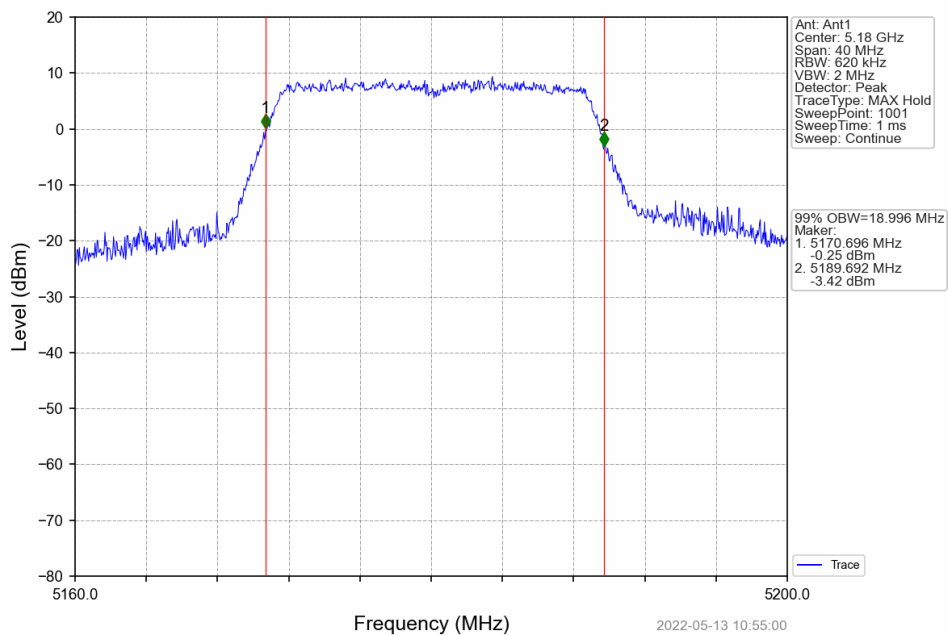
802.11n(HT40) LCH 5190MHz Ant1 NTN



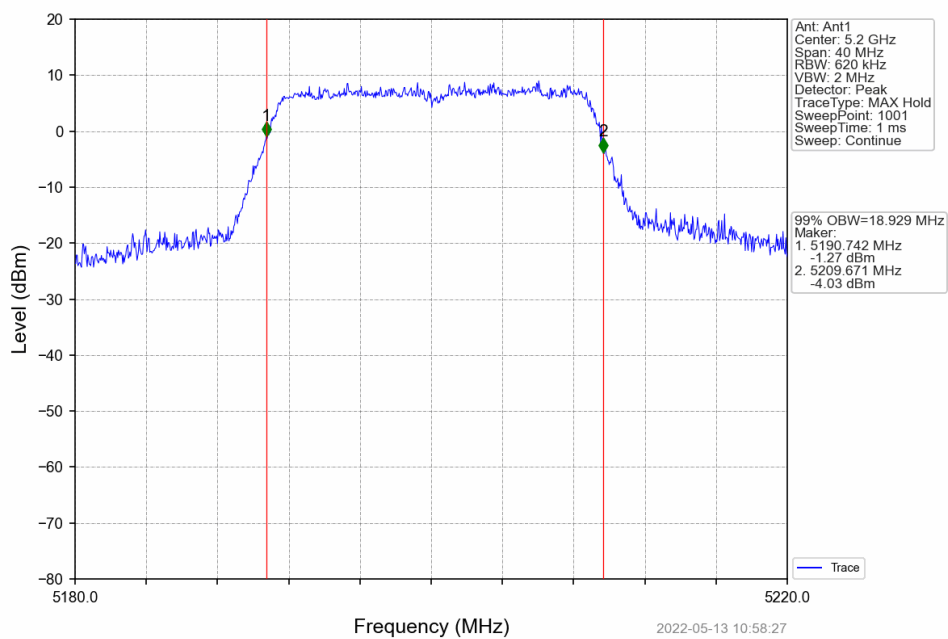
802.11n(HT40)_HCH_5230MHz_Ant1_NTN



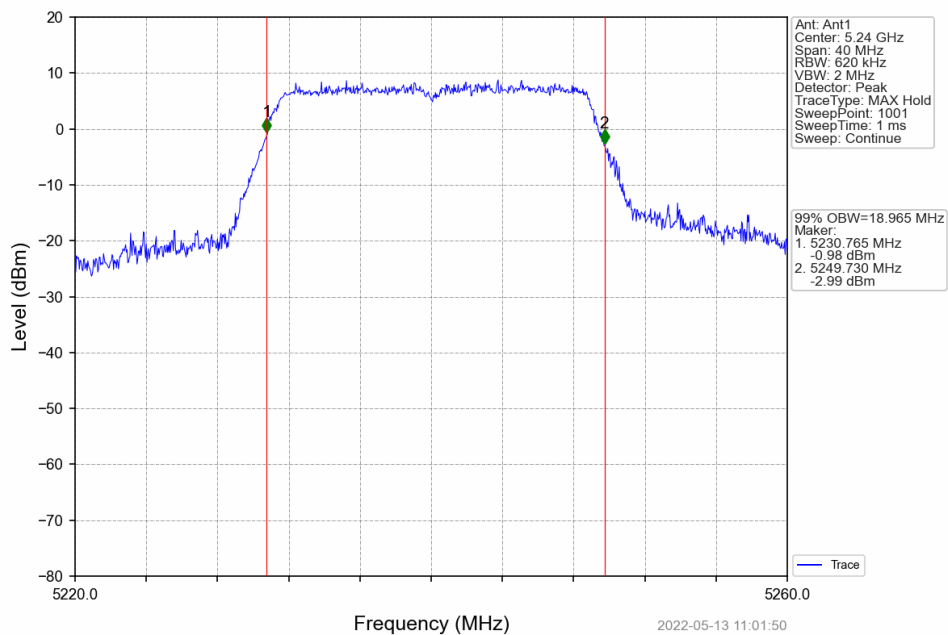
802.11ac(VHT20) LCH 5180MHz Ant1 NTN



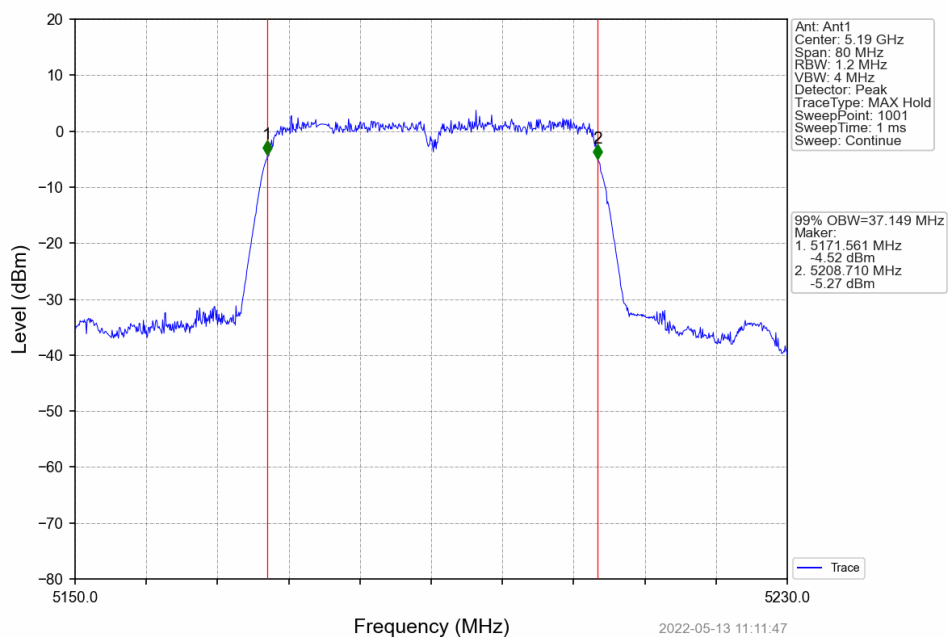
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTN



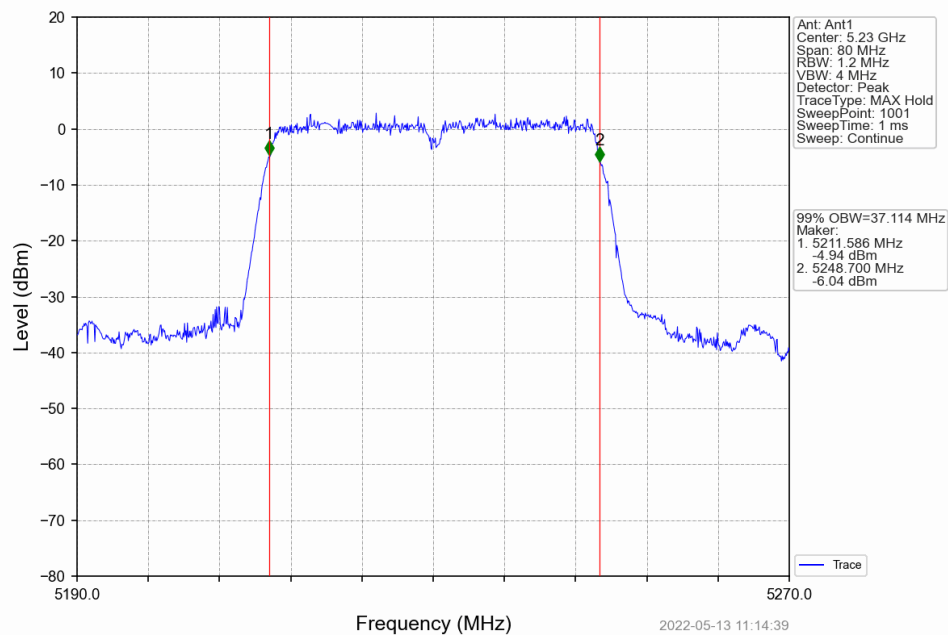
802.11ac(VHT20) HCH 5240MHz Ant1 NTN



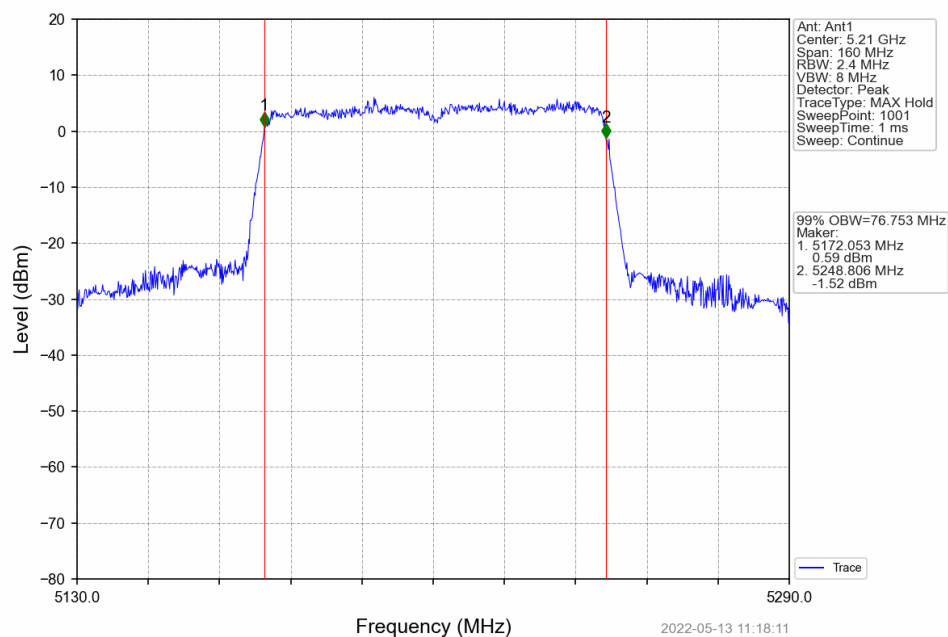
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTN



802.11ac(VHT40) HCH 5230MHz Ant1 NTN



802.11ac(VHT80) MCH 5210MHz Ant1 NTN

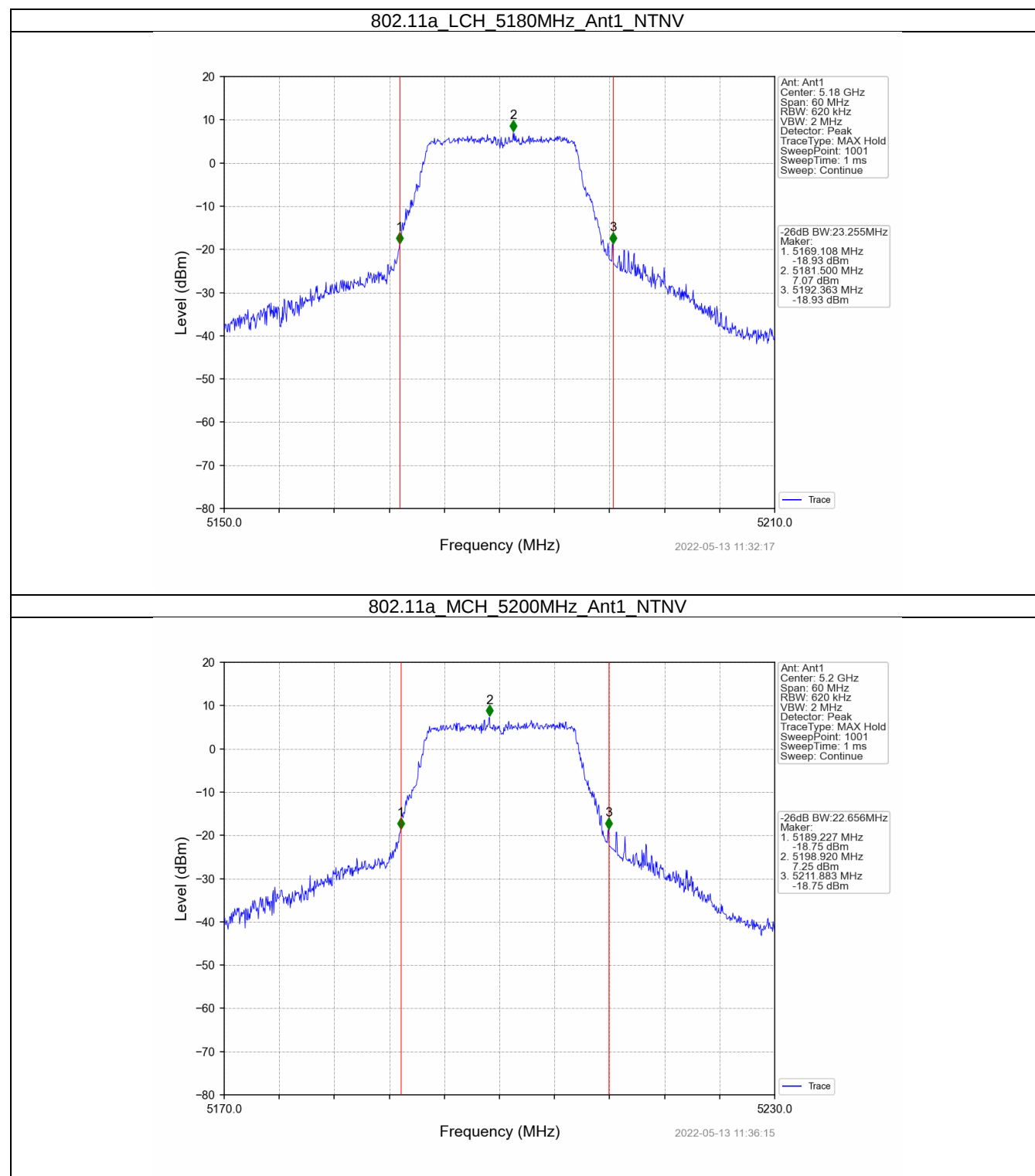


2.2 26dB BW

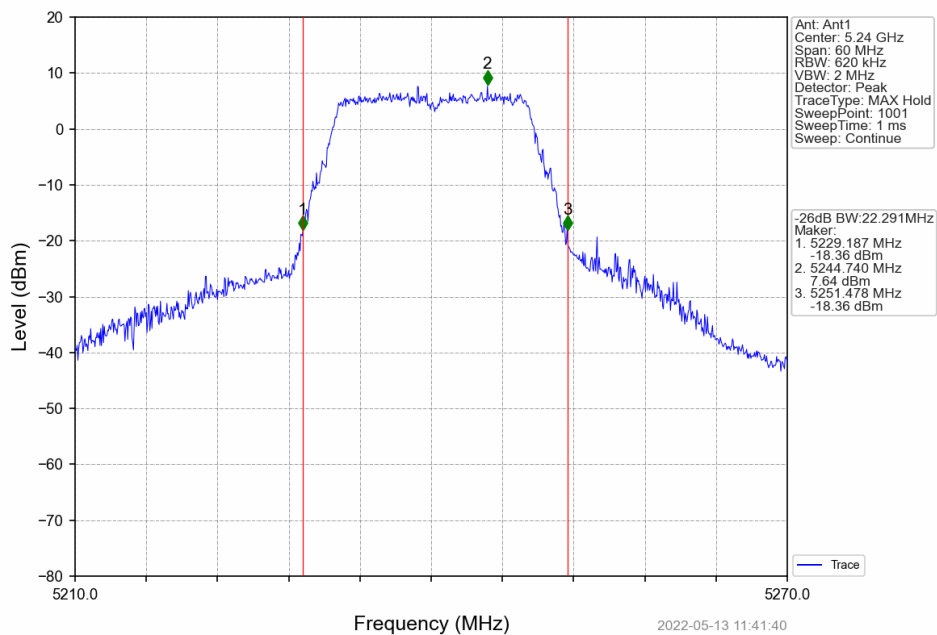
2.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5180	1	23.255	Pass
		5200	1	22.656	Pass
		5240	1	22.291	Pass
802.11n (HT20)	SISO	5180	1	22.313	Pass
		5200	1	22.339	Pass
		5240	1	22.091	Pass
802.11n (HT40)	SISO	5190	1	54.382	Pass
		5230	1	45.799	Pass
802.11ac (VHT20)	SISO	5180	1	31.077	Pass
		5200	1	26.308	Pass
		5240	1	28.660	Pass
802.11ac (VHT40)	SISO	5190	1	41.298	Pass
		5230	1	41.469	Pass
802.11ac (VHT80)	SISO	5210	1	83.664	Pass

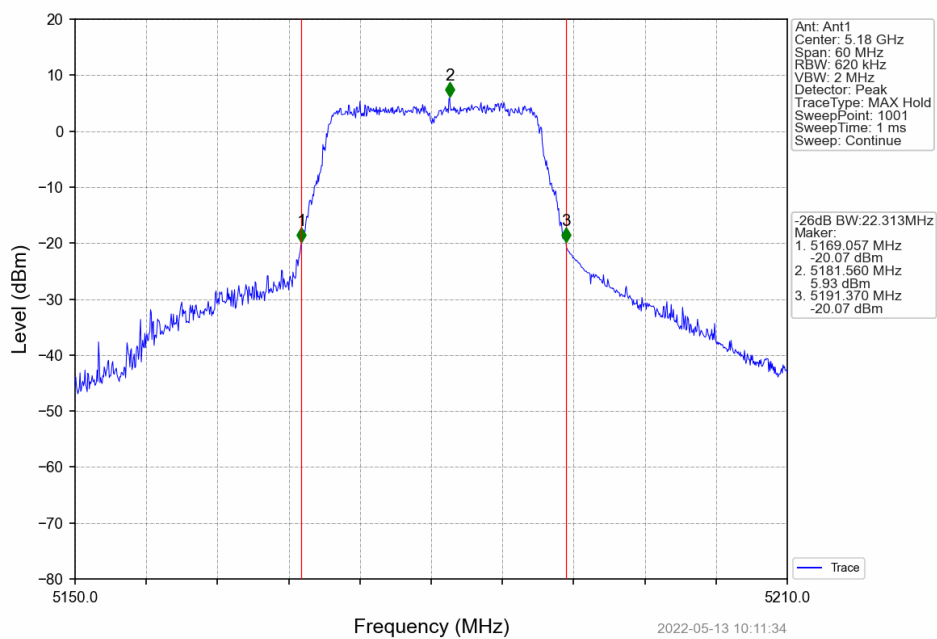
2.2.2 Test Graph



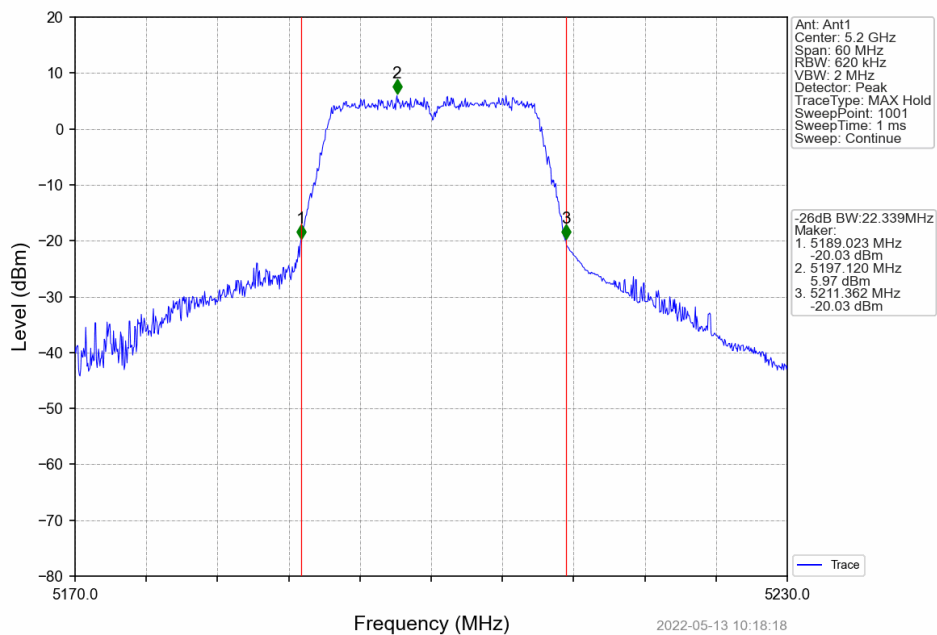
802.11a HCH 5240MHz Ant1 NTN



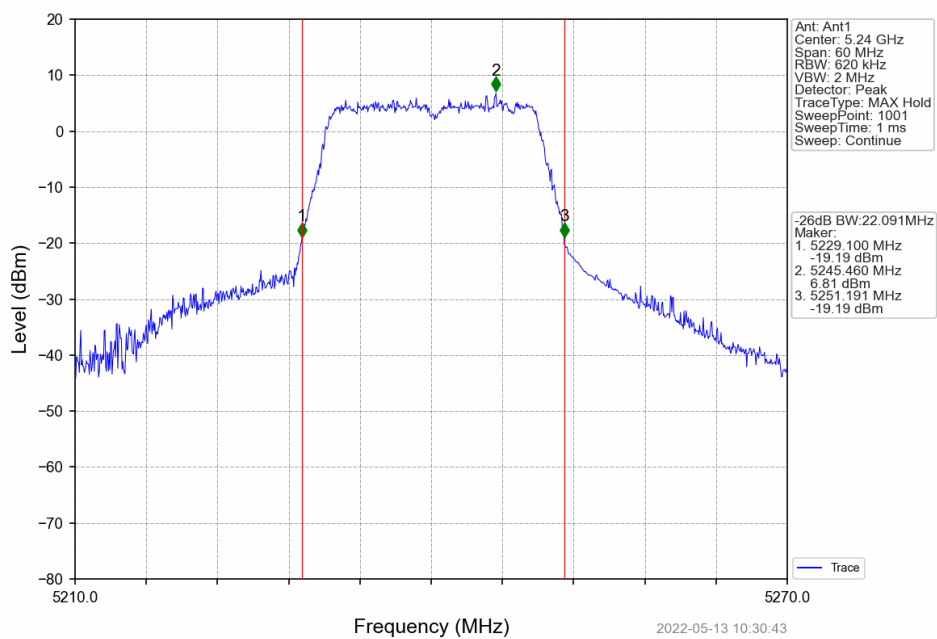
802.11n(HT20) LCH 5180MHz Ant1 NTN



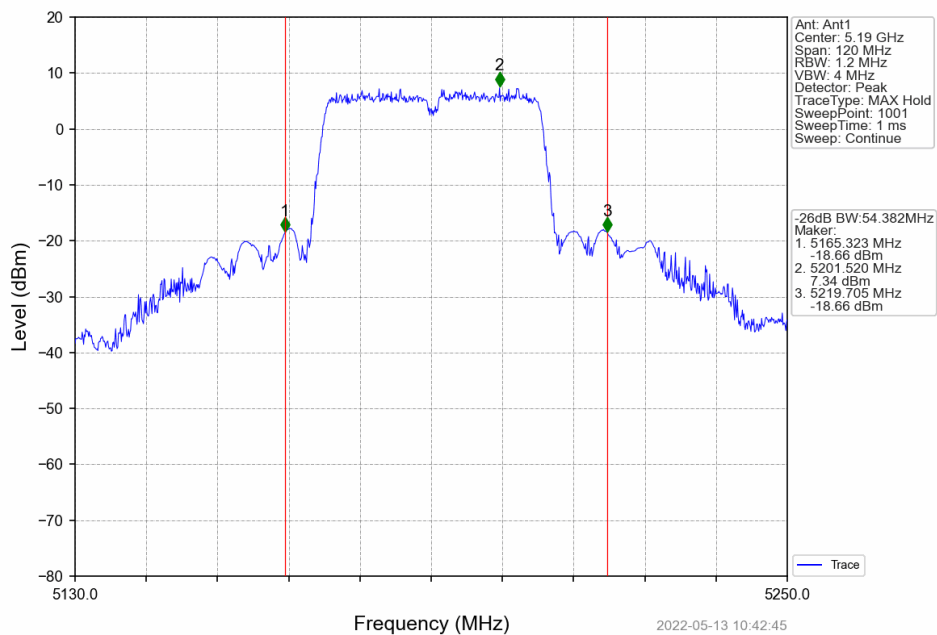
802.11n(HT20) MCH 5200MHz Ant1 NTN



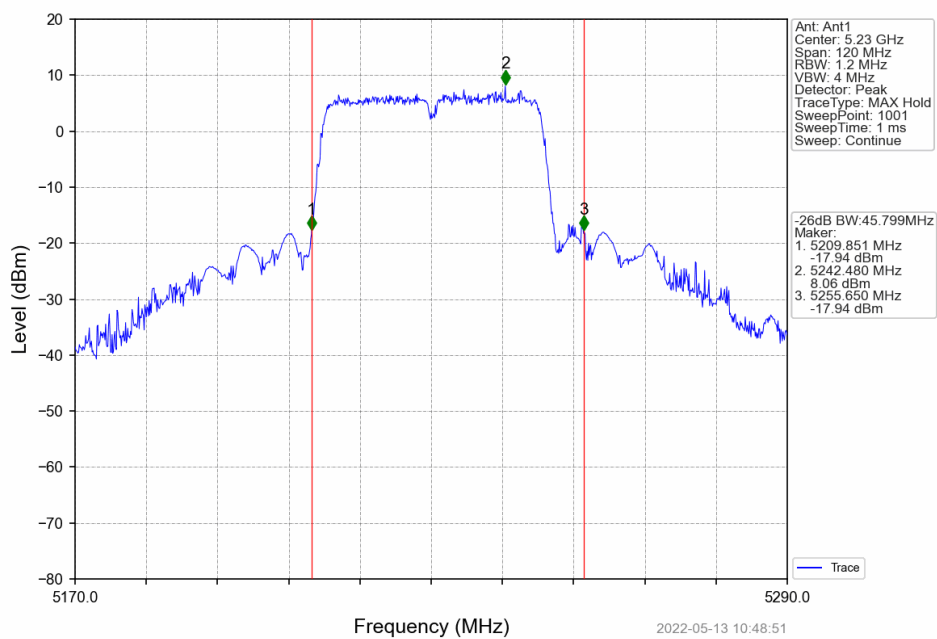
802.11n(HT20)_HCH_5240MHz_Ant1_NTN



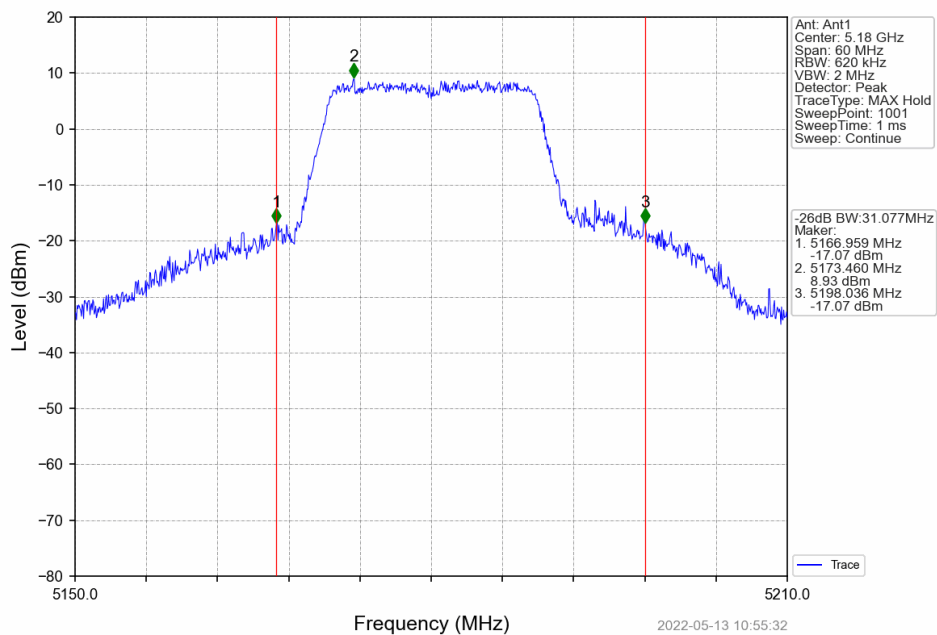
802.11n(HT40) LCH 5190MHz Ant1 NTN



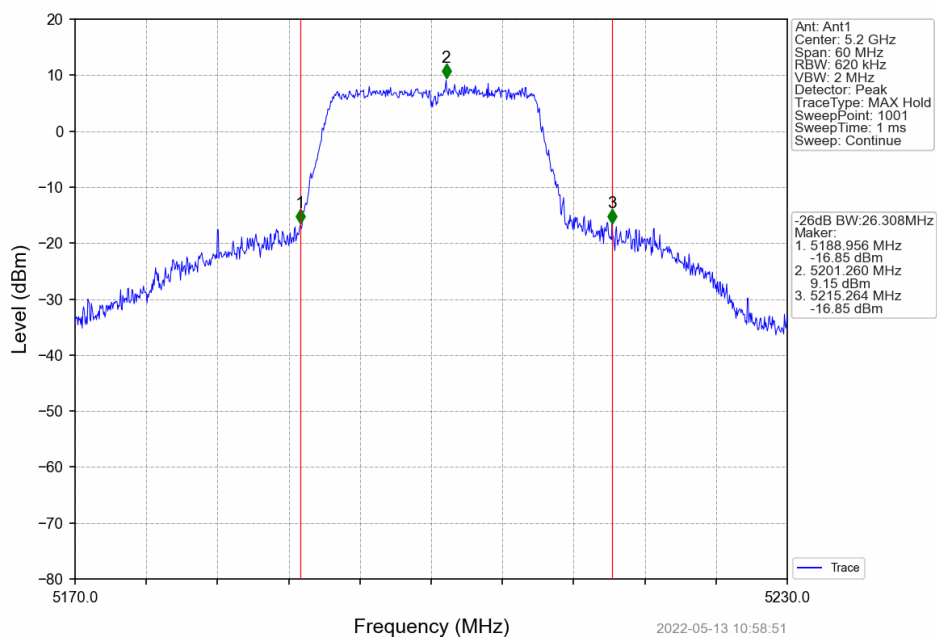
802.11n(HT40)_HCH_5230MHz_Ant1_NTN



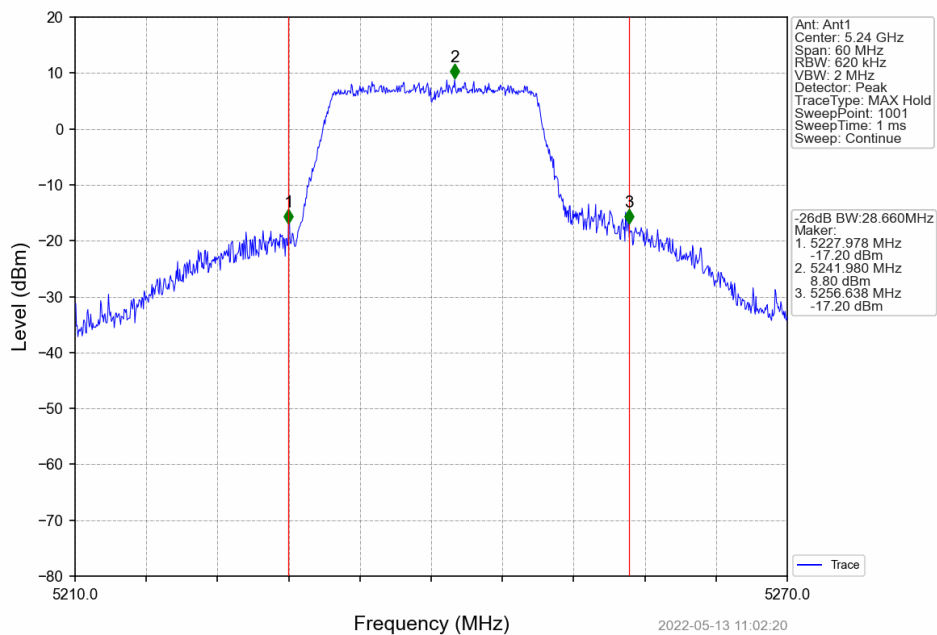
802.11ac(VHT20) LCH 5180MHz Ant1 NTN



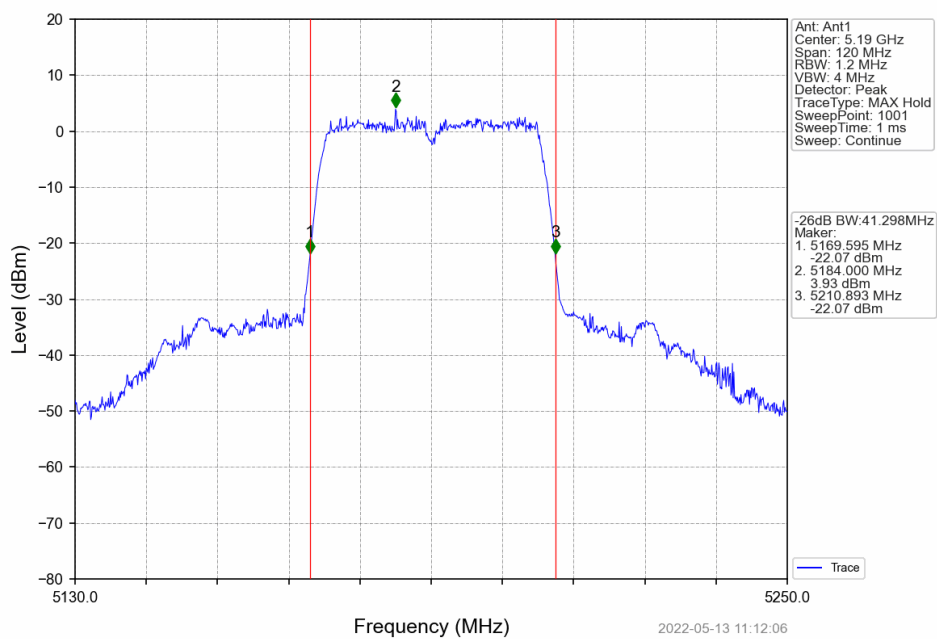
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTN



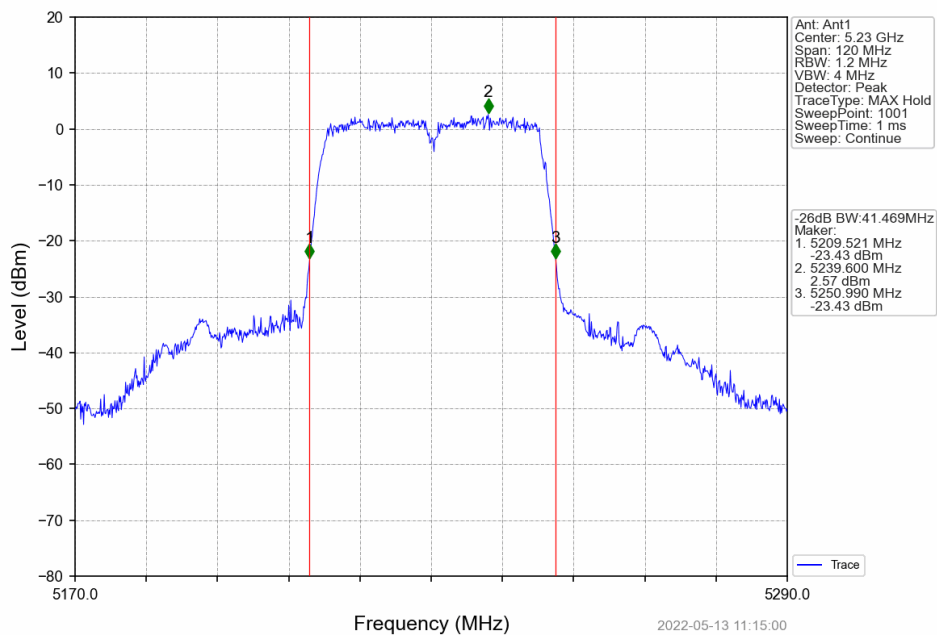
802.11ac(VHT20) HCH 5240MHz Ant1_NTNV



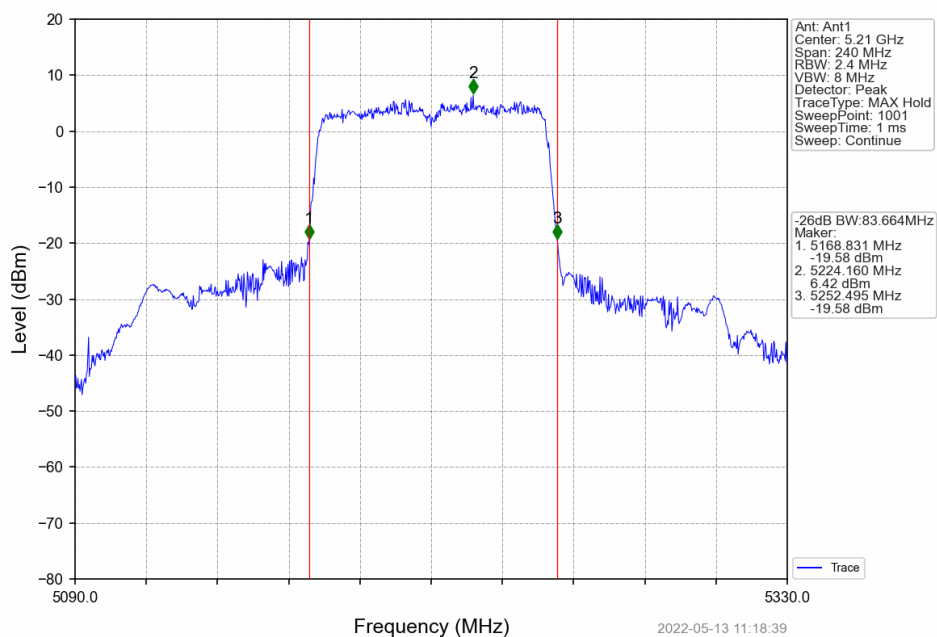
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40) HCH 5230MHz Ant1 NTN



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTN



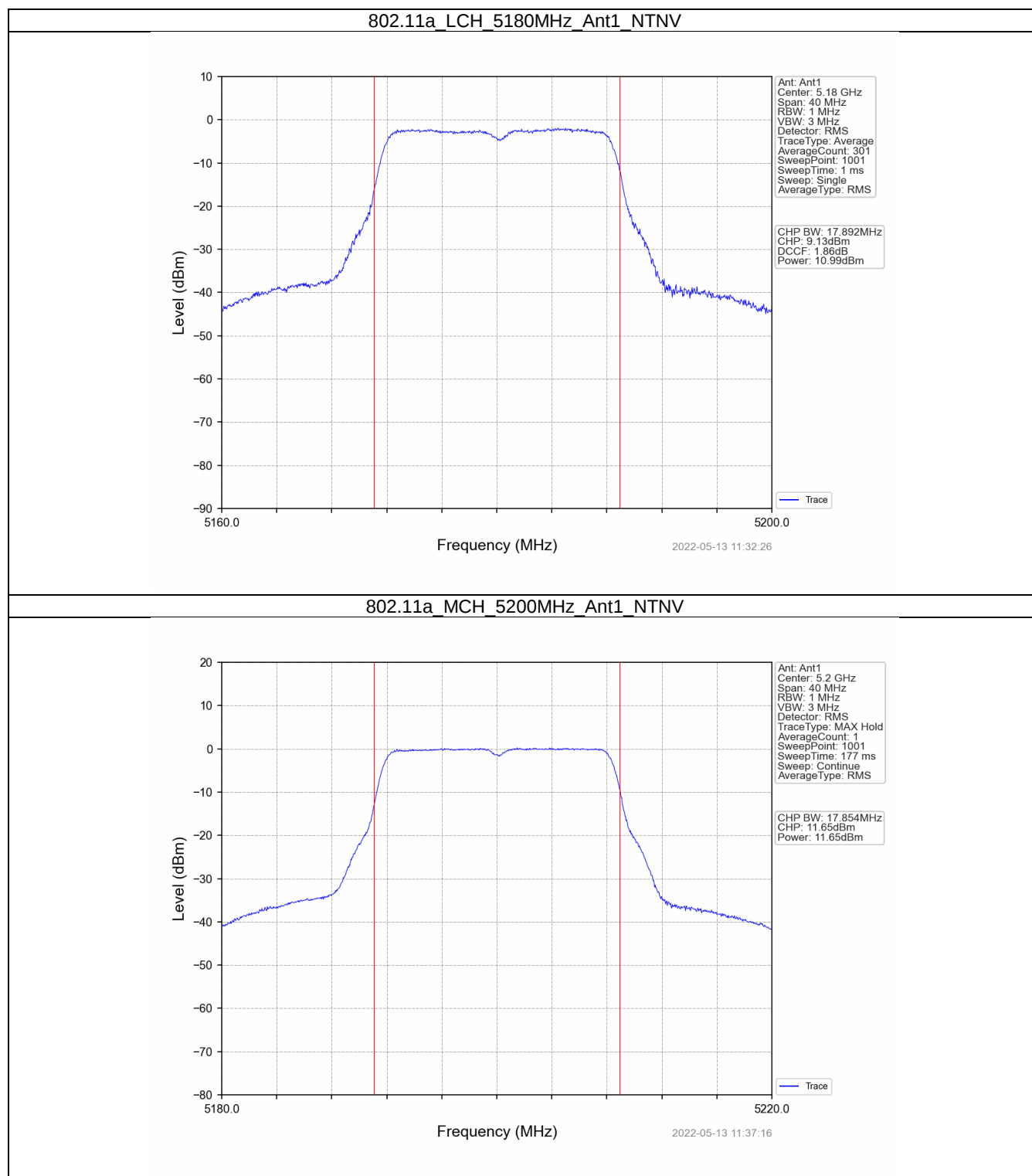
3. Maximum Conducted Output Power

3.1 Power

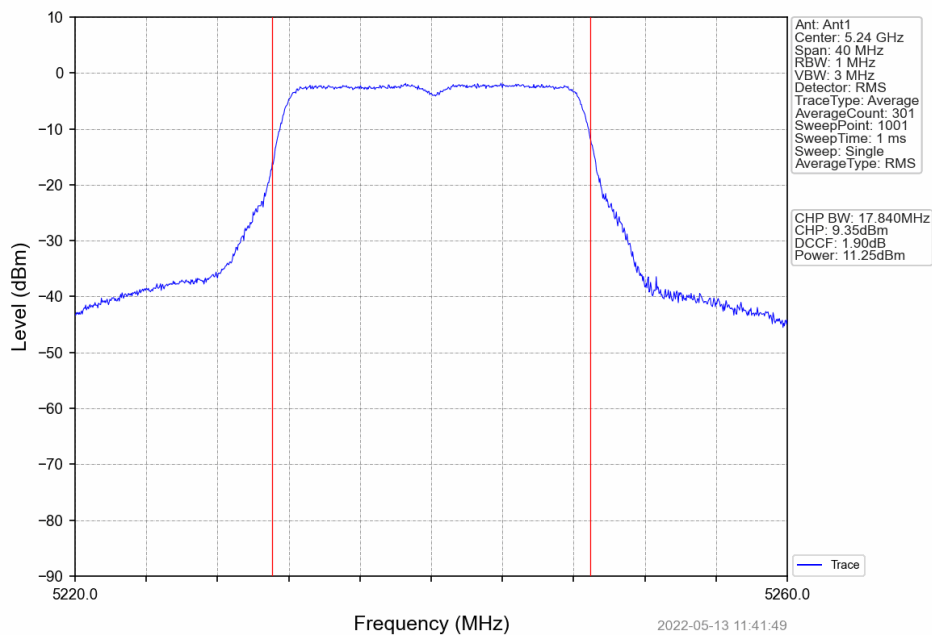
3.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	10.99	<=23.98	Pass
		5200	11.65	<=23.98	Pass
		5240	11.25	<=23.98	Pass
802.11n (HT20)	SISO	5180	10.32	<=23.98	Pass
		5200	10.43	<=23.98	Pass
		5240	10.58	<=23.98	Pass
802.11n (HT40)	SISO	5190	11.67	<=23.98	Pass
		5230	11.58	<=23.98	Pass
802.11ac (VHT20)	SISO	5180	13.61	<=23.98	Pass
		5200	13.15	<=23.98	Pass
		5240	13.23	<=23.98	Pass
802.11ac (VHT40)	SISO	5190	7.08	<=23.98	Pass
		5230	6.77	<=23.98	Pass
802.11ac (VHT80)	SISO	5210	9.19	<=23.98	Pass

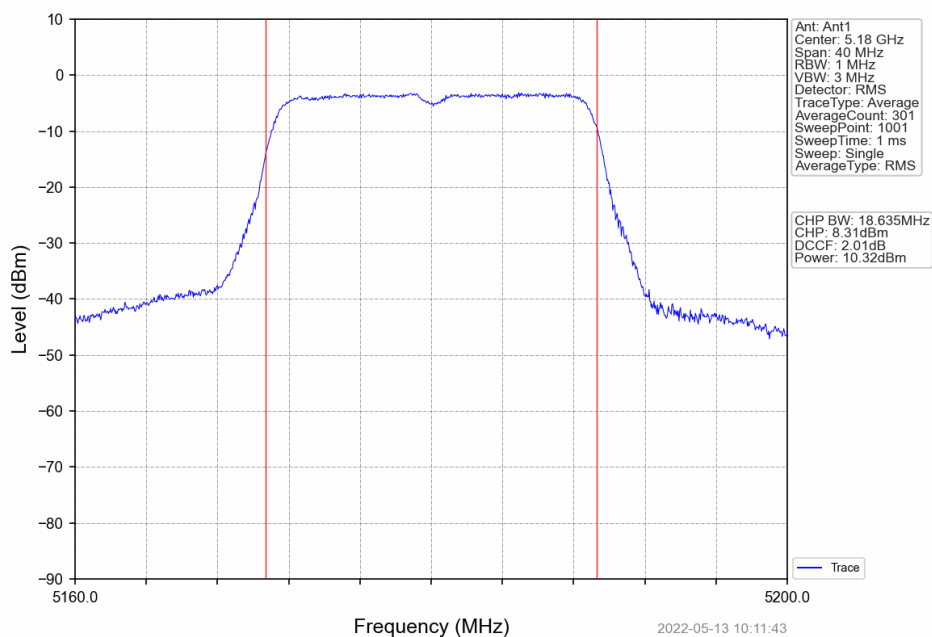
3.1.2 Test Graph



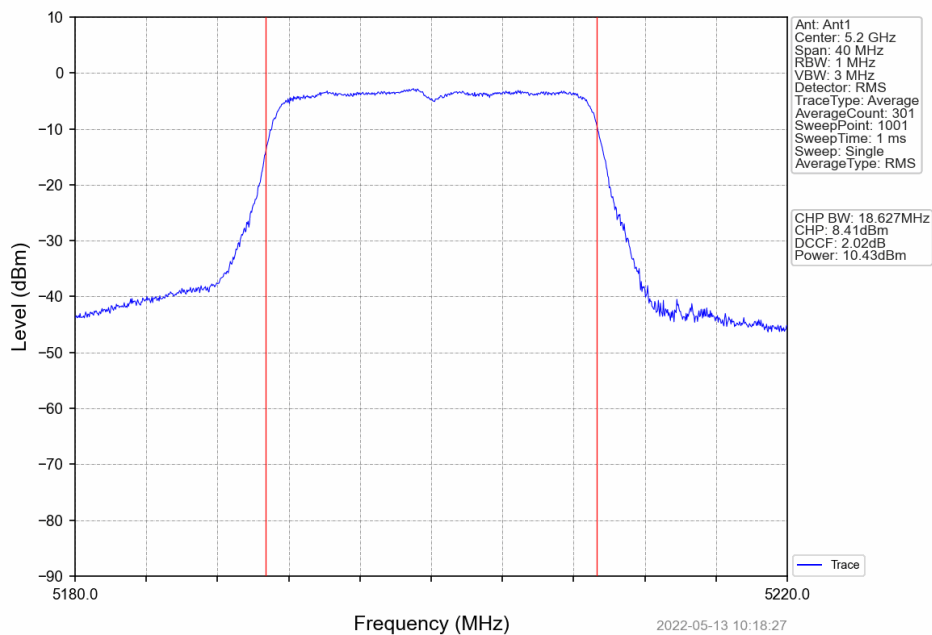
802.11a HCH 5240MHz Ant1 NTN



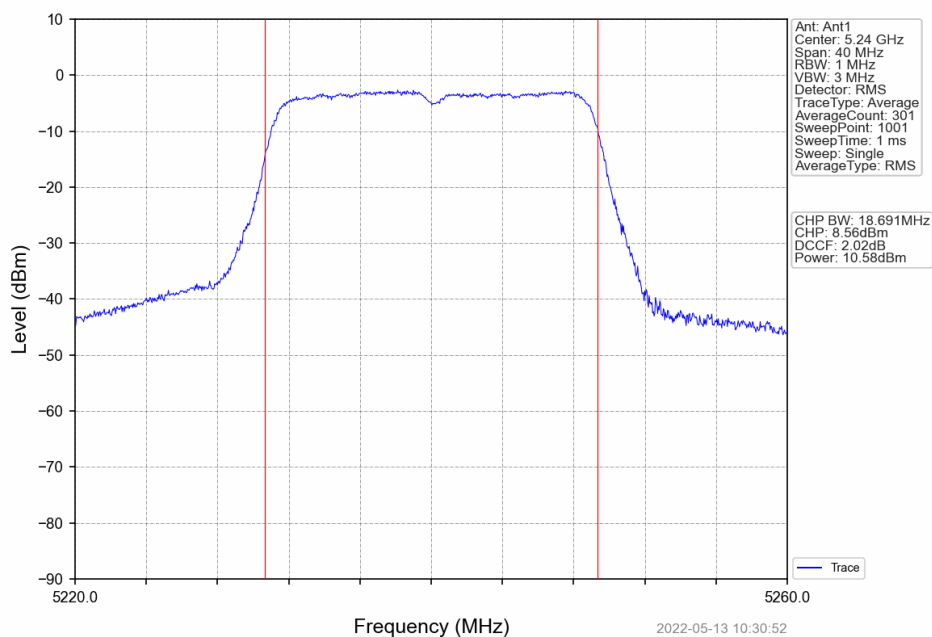
802.11n(HT20) LCH 5180MHz Ant1 NTN



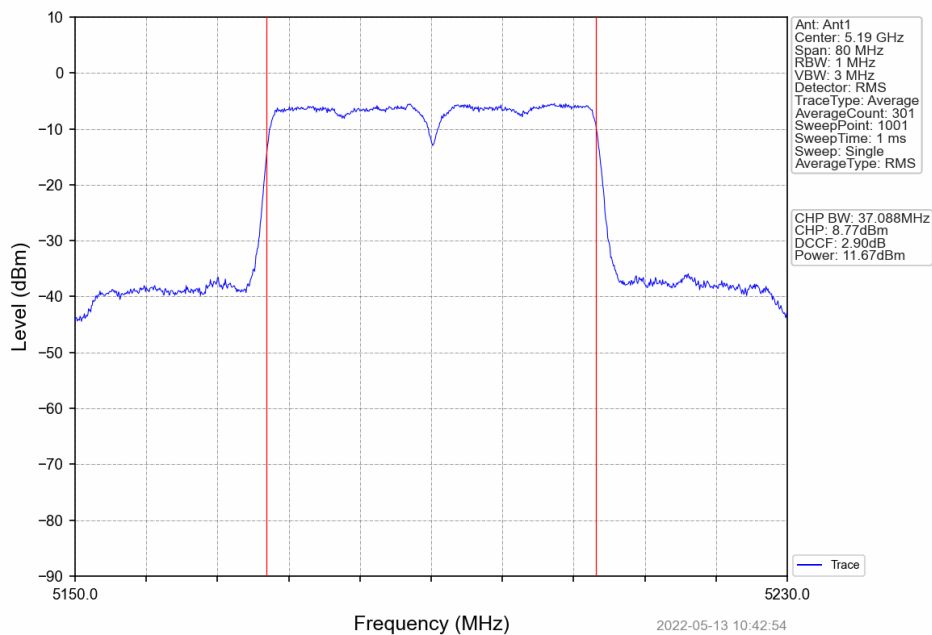
802.11n(HT20) MCH 5200MHz Ant1 NTN



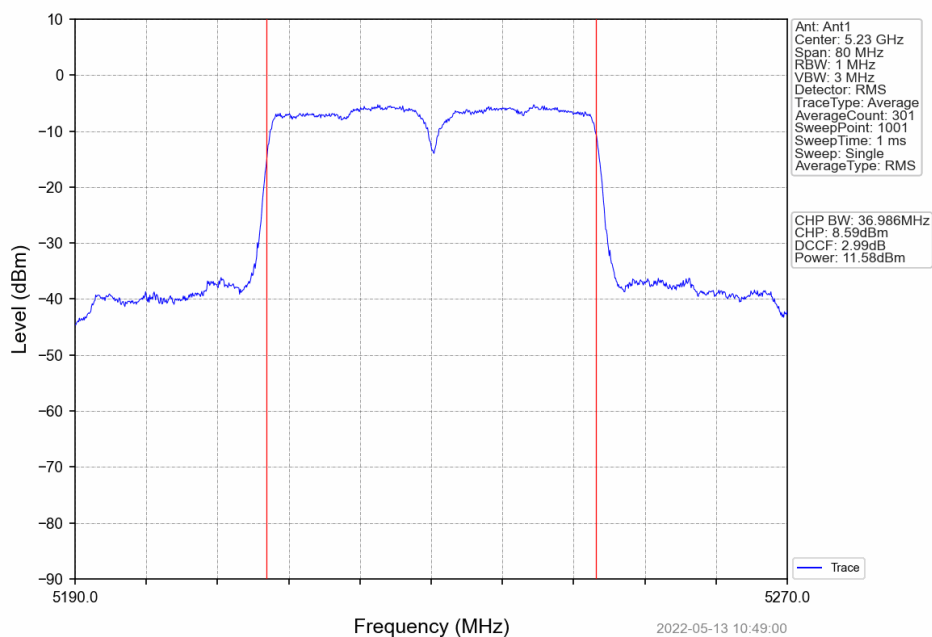
802.11n(HT20)_HCH_5240MHz_Ant1_NTN



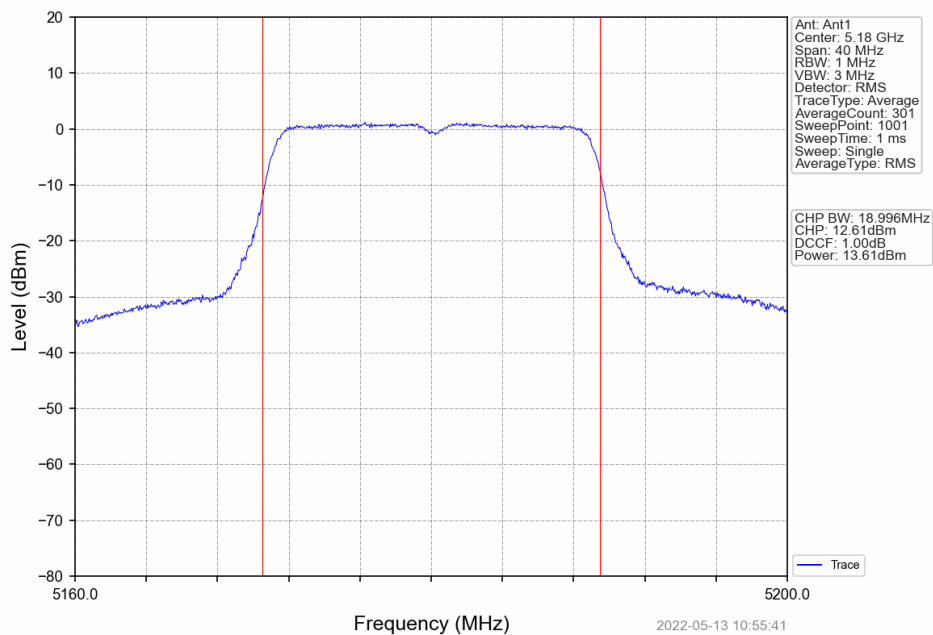
802.11n(HT40) LCH 5190MHz Ant1 NTN



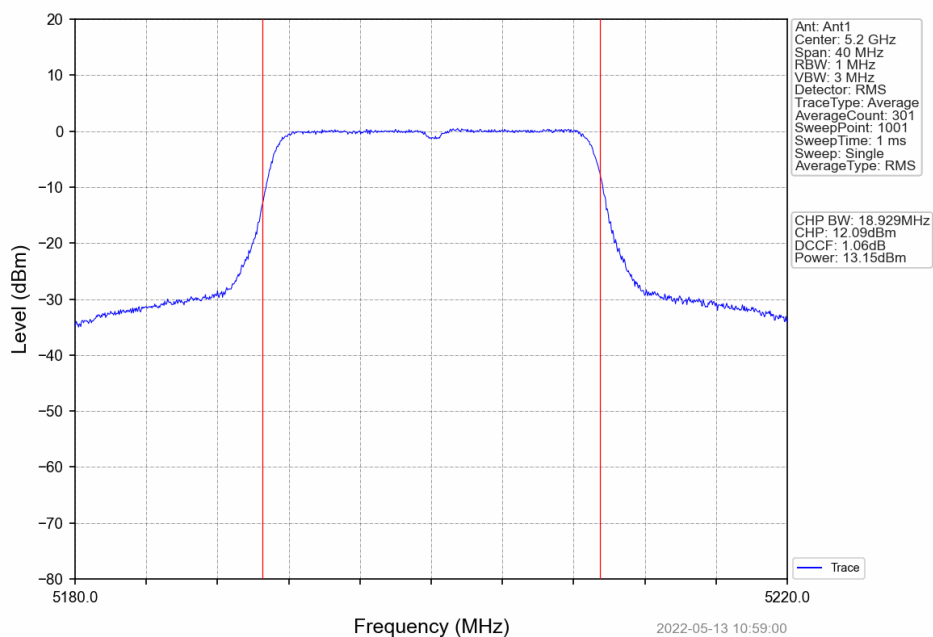
802.11n(HT40)_HCH_5230MHz_Ant1_NTN



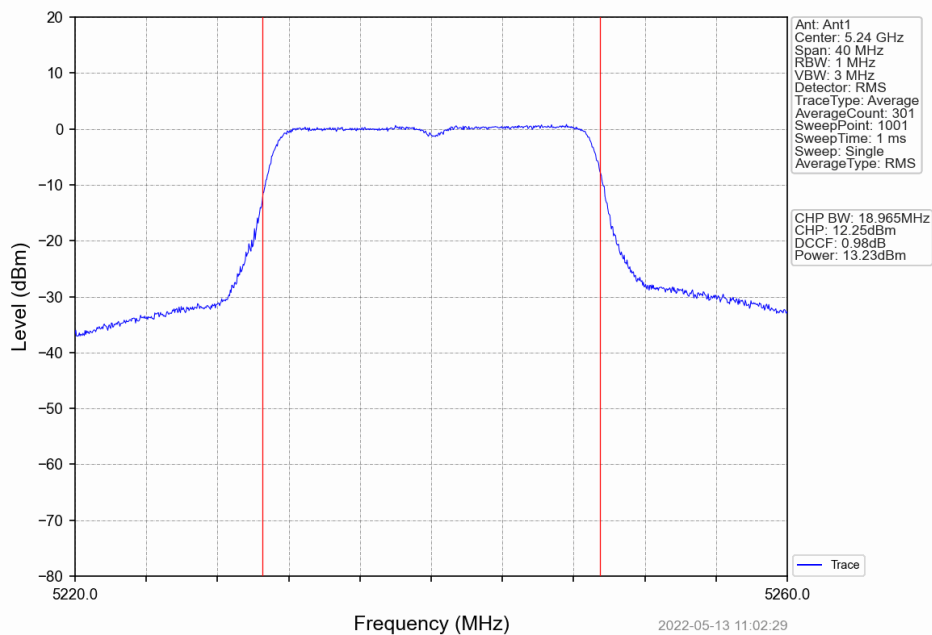
802.11ac(VHT20) LCH 5180MHz Ant1 NTN



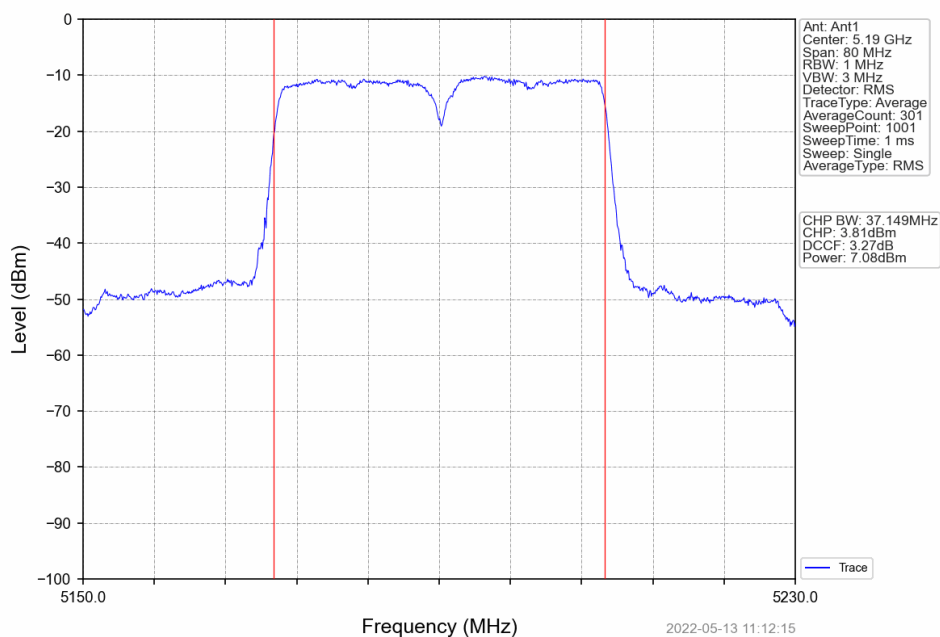
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTN



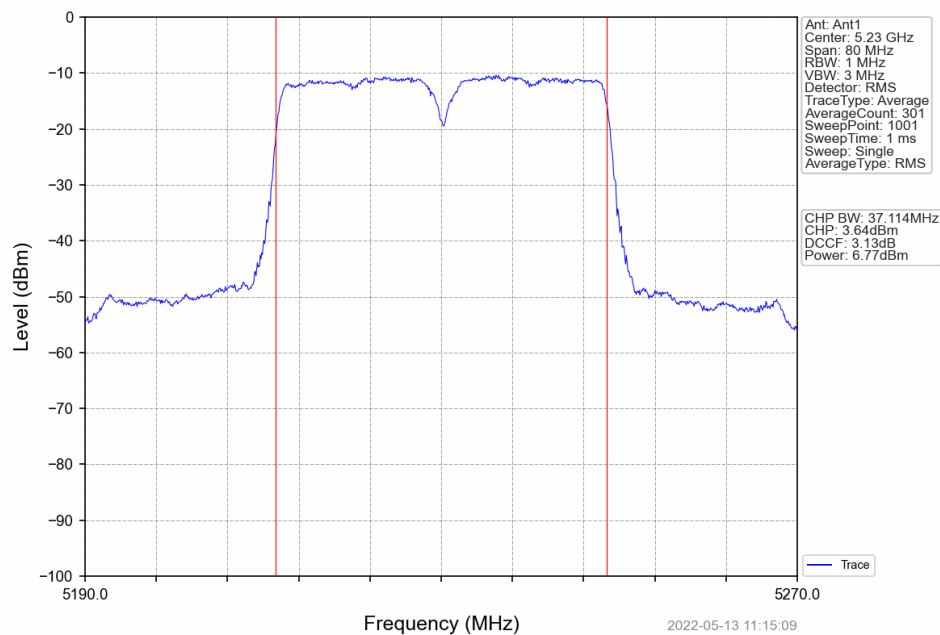
802.11ac(VHT20) HCH 5240MHz Ant1 NTN



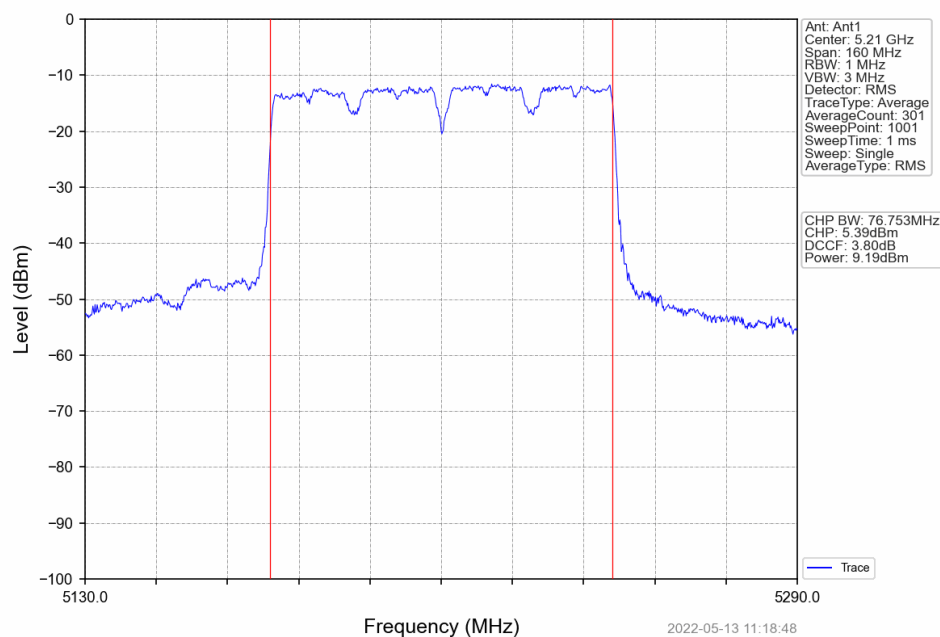
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTN



802.11ac(VHT40) HCH 5230MHz Ant1 NTN



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTN



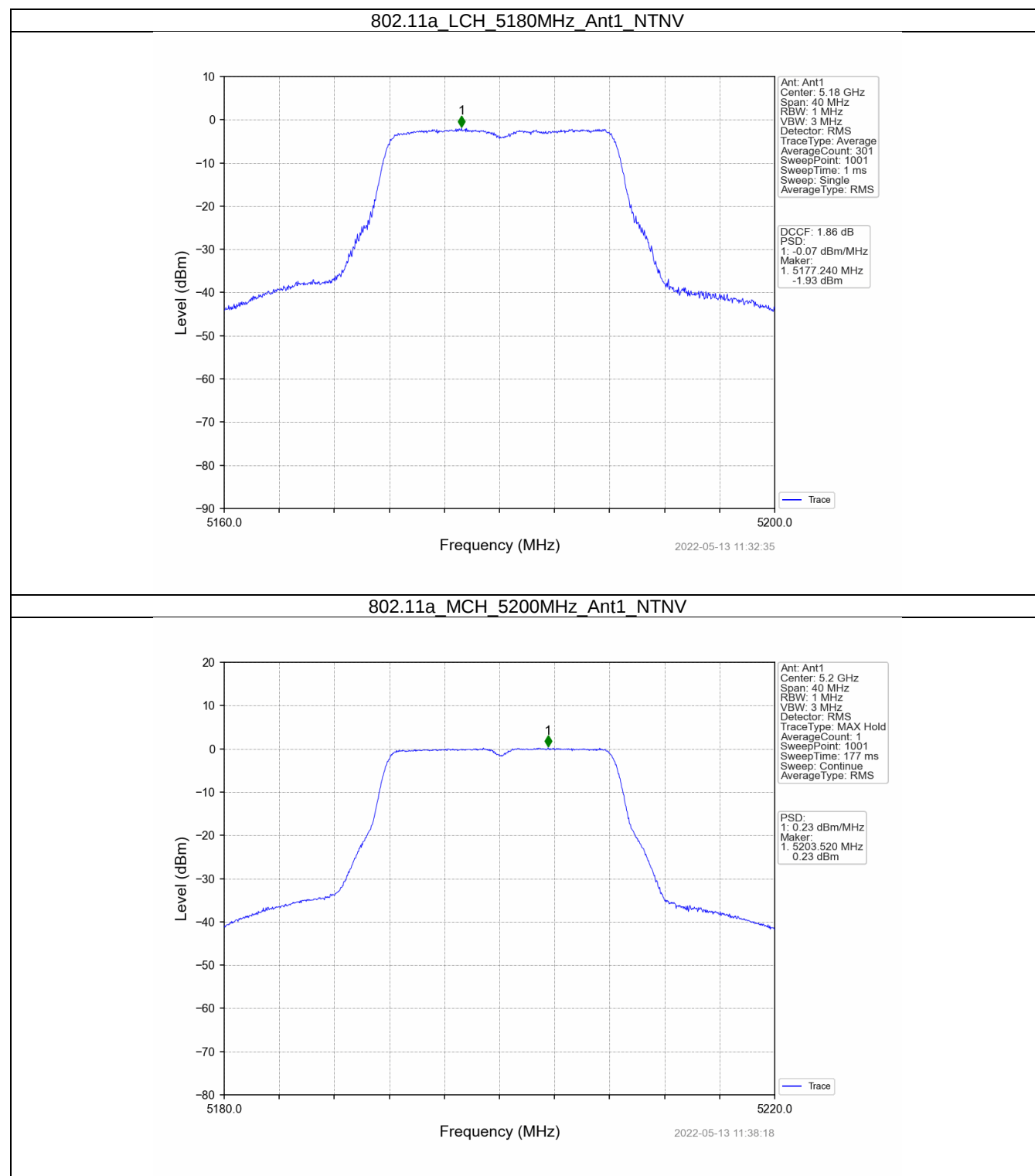
4. Maximum Power Spectral Density

4.1 PSD

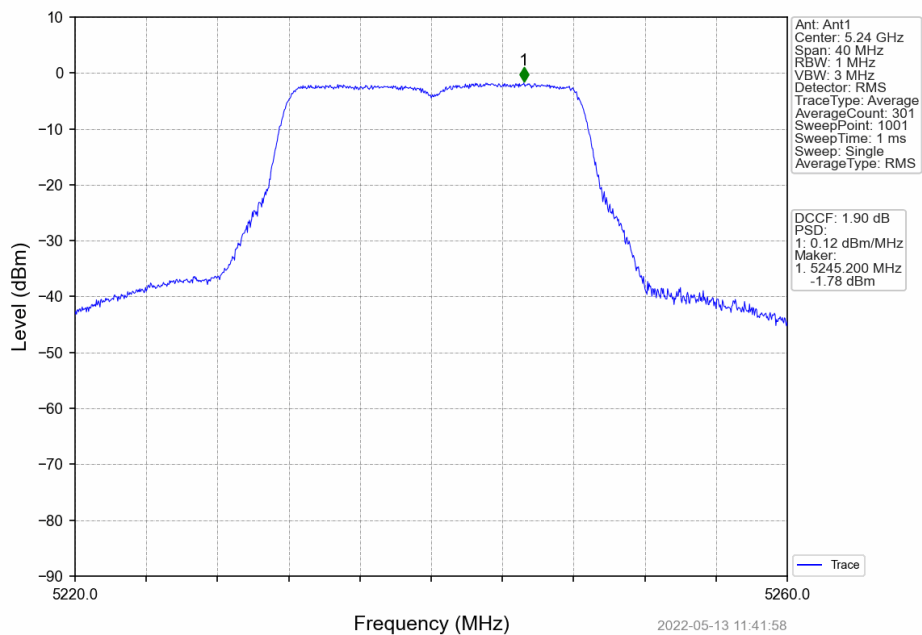
4.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	-0.07	<=11	Pass
		5200	0.23	<=11	Pass
		5240	0.12	<=11	Pass
802.11n (HT20)	SISO	5180	-1.02	<=11	Pass
		5200	-0.91	<=11	Pass
		5240	-0.84	<=11	Pass
802.11n (HT40)	SISO	5190	-2.56	<=11	Pass
		5230	-2.68	<=11	Pass
802.11ac (VHT20)	SISO	5180	2.07	<=11	Pass
		5200	1.76	<=11	Pass
		5240	1.56	<=11	Pass
802.11ac (VHT40)	SISO	5190	-6.79	<=11	Pass
		5230	-7.42	<=11	Pass
802.11ac (VHT80)	SISO	5210	-7.16	<=11	Pass

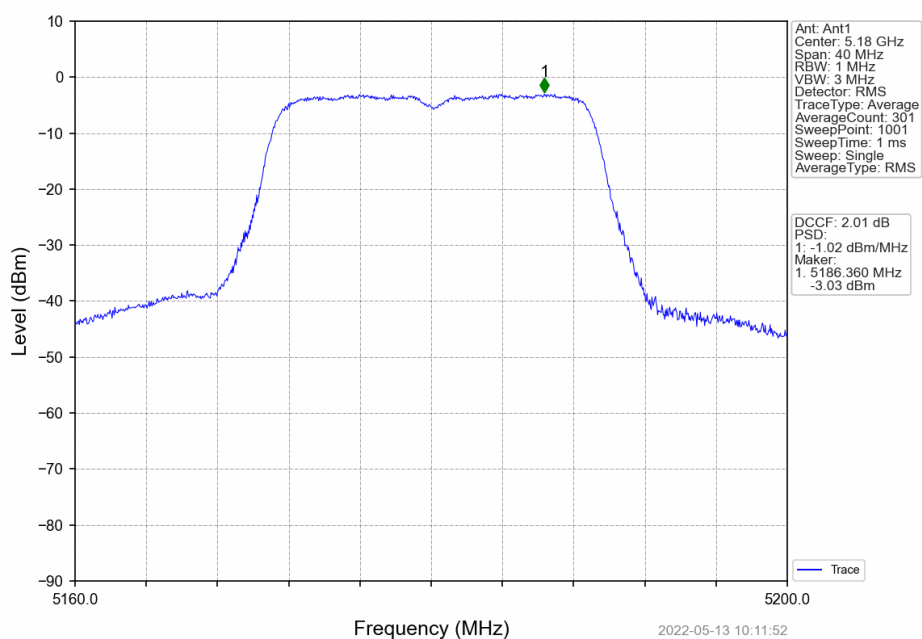
4.1.2 Test Graph



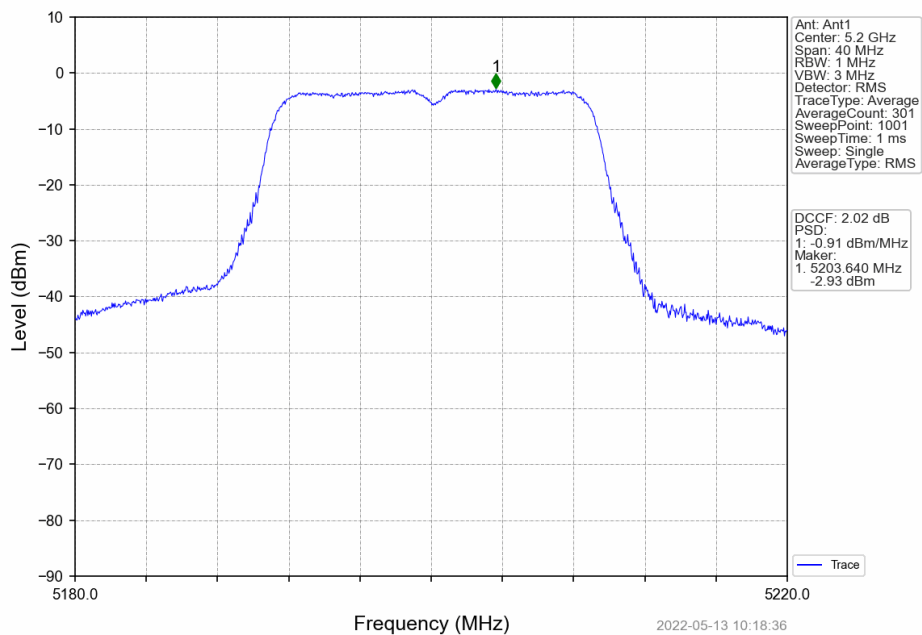
802.11a HCH 5240MHz Ant1 NTN



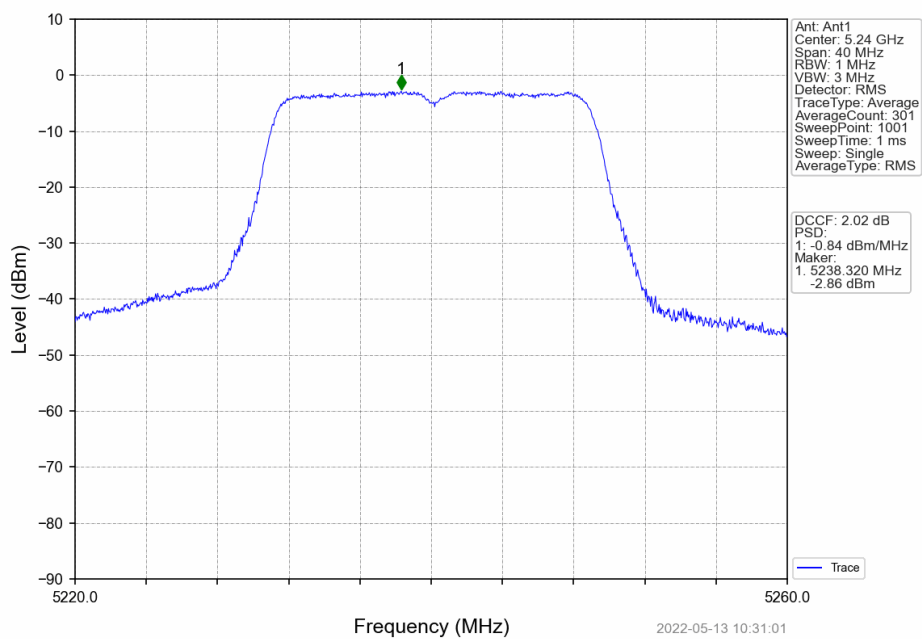
802.11n(HT20) LCH 5180MHz Ant1 NTN



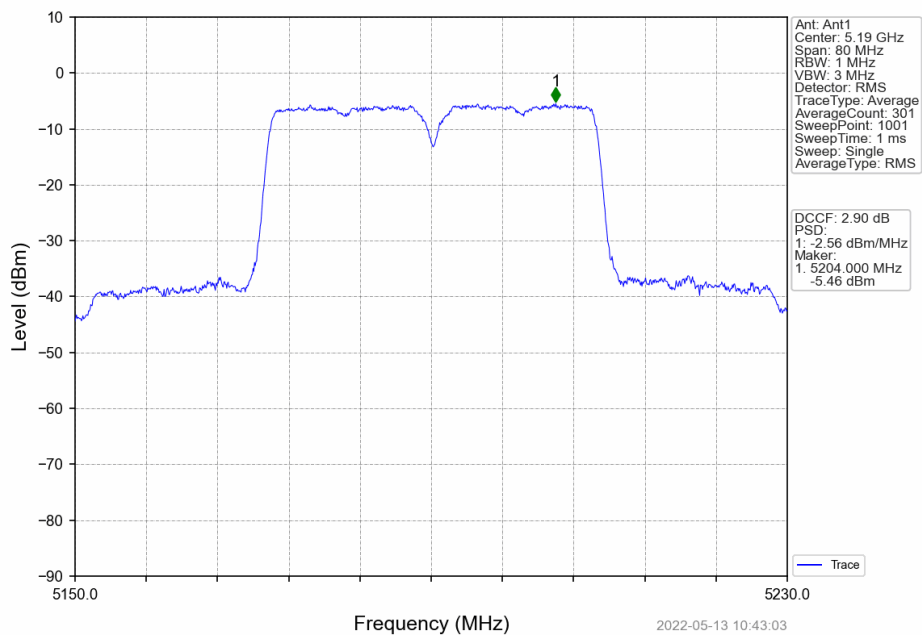
802.11n(HT20) MCH 5200MHz Ant1 NTN



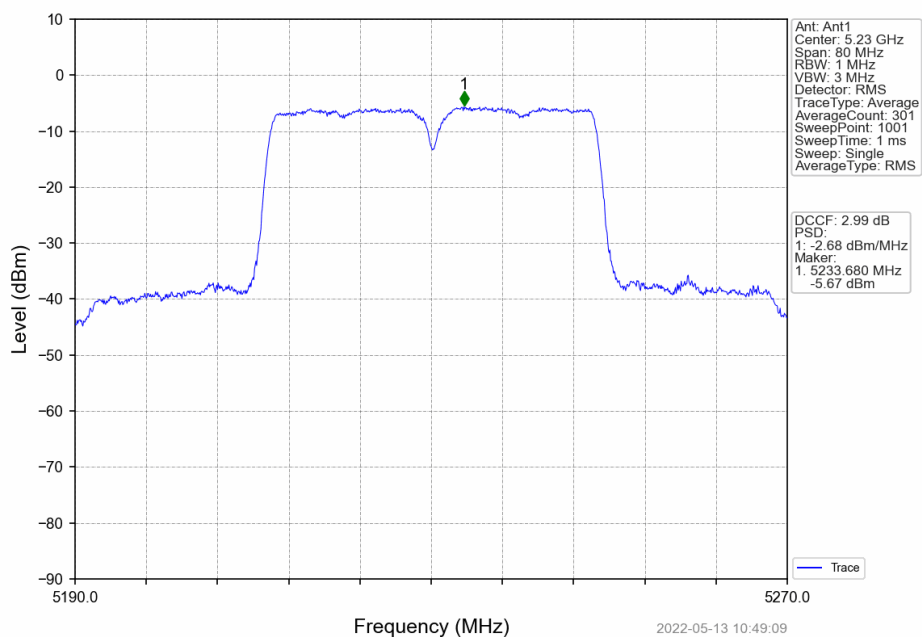
802.11n(HT20)_HCH_5240MHz_Ant1_NTN



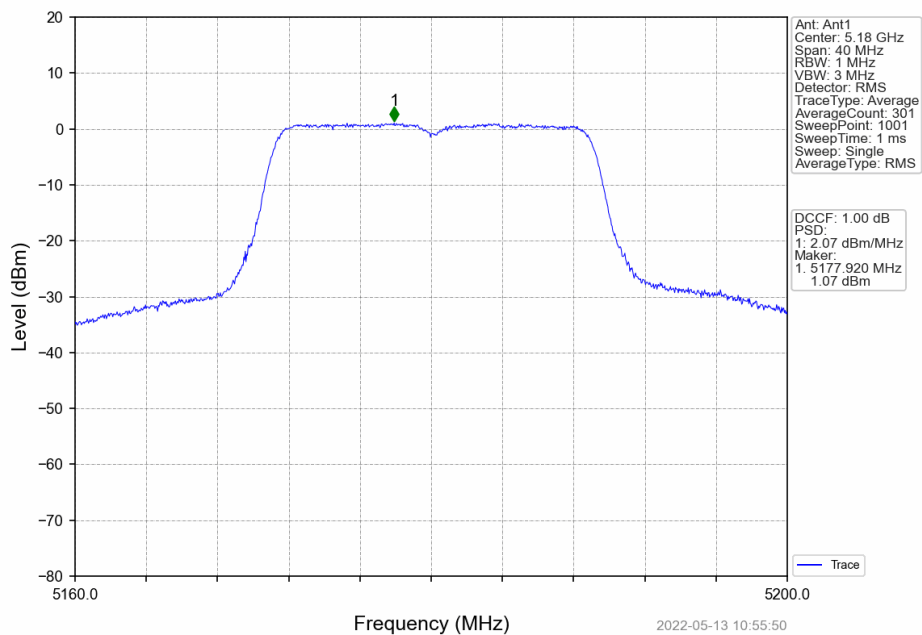
802.11n(HT40) LCH 5190MHz Ant1 NTN



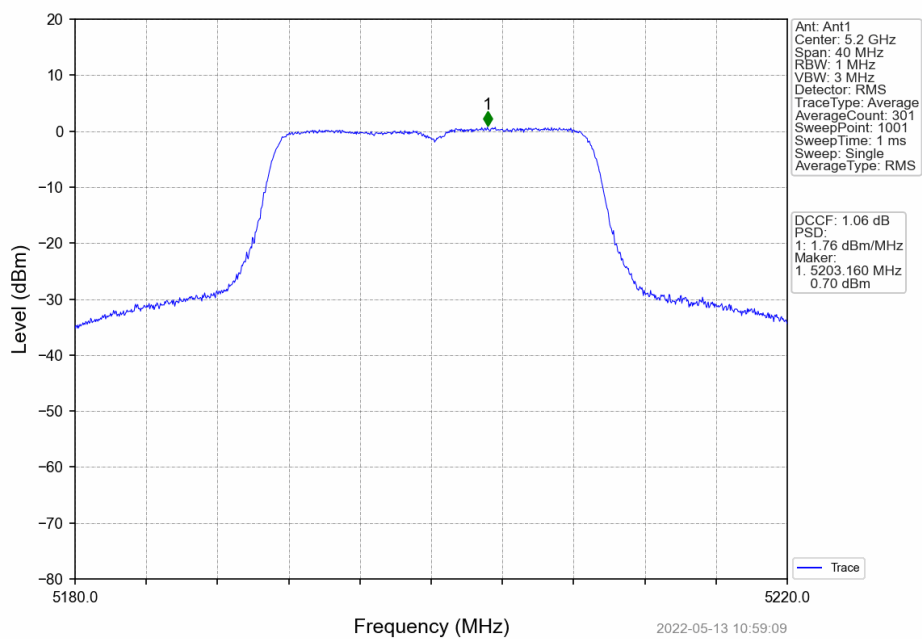
802.11n(HT40)_HCH_5230MHz_Ant1_NTN



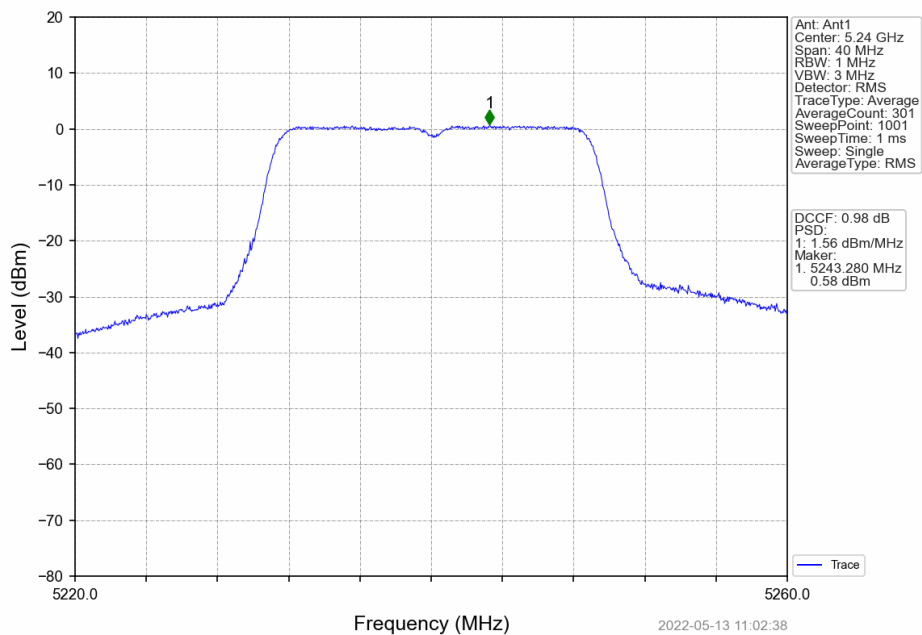
802.11ac(VHT20) LCH 5180MHz Ant1 NTN



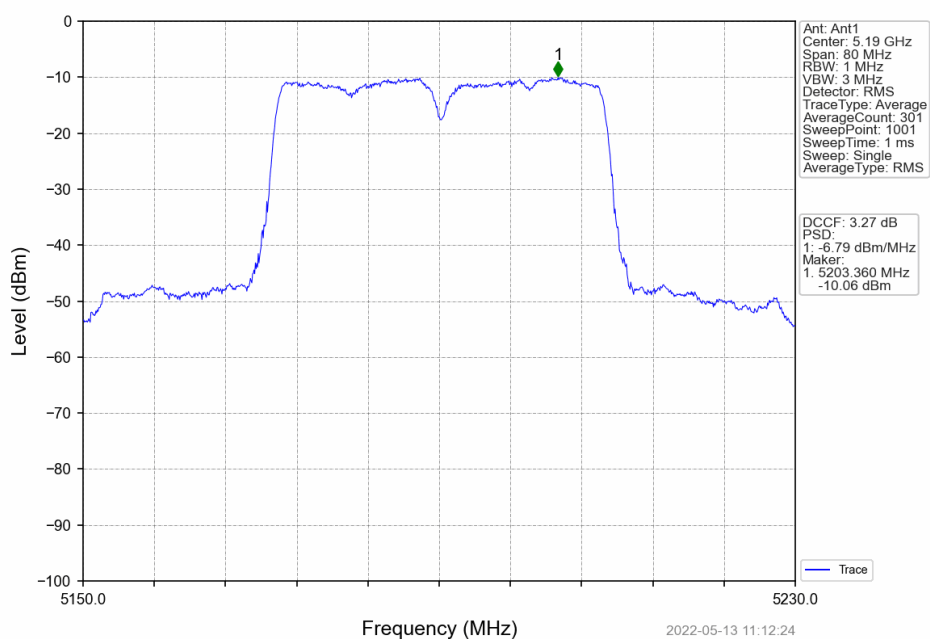
802.11ac(VHT20) MCH 5200MHz Ant1 NTN



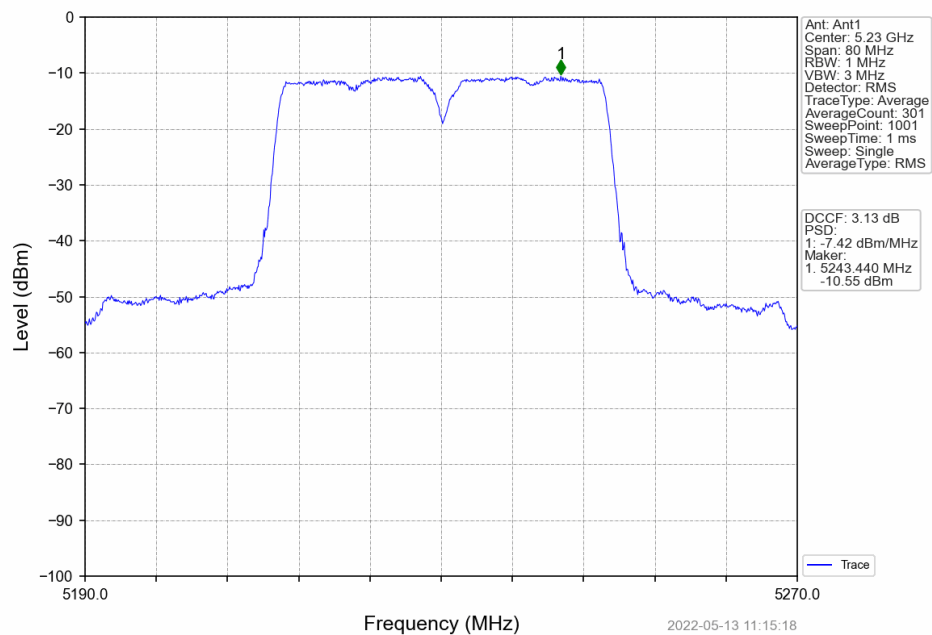
802.11ac(VHT20) HCH 5240MHz Ant1 NTN



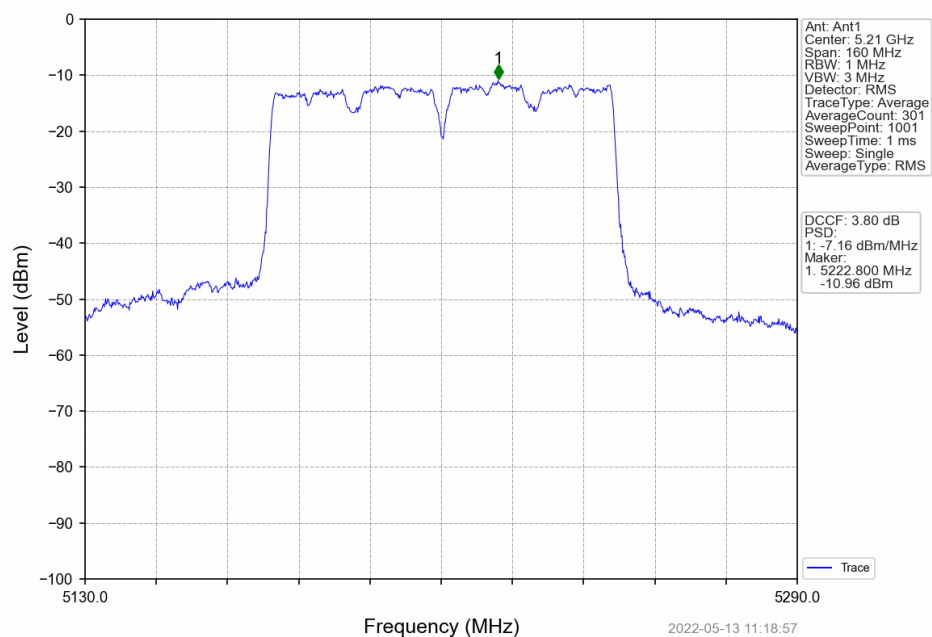
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTN



802.11ac(VHT40) HCH 5230MHz Ant1 NTN



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTN



5. Frequency Stability

5.1 Ant1

5.1.1 Test Result

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
802.11a	SISO	5180	20	102	5180.160	5150 to 5250	Pass
				120	5180.180	5150 to 5250	Pass
				138	5180.100	5150 to 5250	Pass
			-30	120	5180.140	5150 to 5250	Pass
			-20	120	5180.160	5150 to 5250	Pass
			-10	120	5180.140	5150 to 5250	Pass
			0	120	5180.100	5150 to 5250	Pass
			10	120	5180.140	5150 to 5250	Pass
			30	120	5180.120	5150 to 5250	Pass
			40	120	5180.160	5150 to 5250	Pass
			50	120	5180.120	5150 to 5250	Pass
		5200	20	102	5200.140	5150 to 5250	Pass
				120	5200.160	5150 to 5250	Pass
				138	5200.220	5150 to 5250	Pass
			-30	120	5200.180	5150 to 5250	Pass
			-20	120	5200.180	5150 to 5250	Pass
			-10	120	5200.160	5150 to 5250	Pass
			0	120	5200.180	5150 to 5250	Pass
			10	120	5200.120	5150 to 5250	Pass
			30	120	5200.120	5150 to 5250	Pass
			40	120	5200.100	5150 to 5250	Pass
			50	120	5200.280	5150 to 5250	Pass
		5240	20	102	5240.180	5150 to 5250	Pass
				120	5240.160	5150 to 5250	Pass
				138	5240.140	5150 to 5250	Pass
			-30	120	5240.200	5150 to 5250	Pass
			-20	120	5240.120	5150 to 5250	Pass
			-10	120	5240.260	5150 to 5250	Pass
			0	120	5240.120	5150 to 5250	Pass
			10	120	5240.160	5150 to 5250	Pass
			30	120	5240.180	5150 to 5250	Pass
			40	120	5240.140	5150 to 5250	Pass
			50	120	5240.200	5150 to 5250	Pass
802.11n (HT20)	SISO	5180	20	102	5180.140	5150 to 5250	Pass
				120	5180.160	5150 to 5250	Pass
				138	5180.180	5150 to 5250	Pass
			-30	120	5180.160	5150 to 5250	Pass
			-20	120	5180.160	5150 to 5250	Pass
			-10	120	5180.180	5150 to 5250	Pass
			0	120	5180.160	5150 to 5250	Pass
			10	120	5180.120	5150 to 5250	Pass
			30	120	5180.140	5150 to 5250	Pass
			40	120	5180.180	5150 to 5250	Pass
			50	120	5180.160	5150 to 5250	Pass
		5200	20	102	5200.200	5150 to 5250	Pass
				120	5200.160	5150 to 5250	Pass
				138	5200.160	5150 to 5250	Pass
			-30	120	5200.160	5150 to 5250	Pass
			-20	120	5200.220	5150 to 5250	Pass

			-10	120	5200.140	5150 to 5250	Pass
			0	120	5200.160	5150 to 5250	Pass
			10	120	5200.140	5150 to 5250	Pass
			30	120	5200.140	5150 to 5250	Pass
			40	120	5200.140	5150 to 5250	Pass
			50	120	5200.120	5150 to 5250	Pass
		5240	20	102	5240.160	5150 to 5250	Pass
				120	5240.160	5150 to 5250	Pass
				138	5240.100	5150 to 5250	Pass
			-30	120	5240.140	5150 to 5250	Pass
			-20	120	5240.140	5150 to 5250	Pass
			-10	120	5240.180	5150 to 5250	Pass
			0	120	5240.160	5150 to 5250	Pass
			10	120	5240.160	5150 to 5250	Pass
			30	120	5240.120	5150 to 5250	Pass
			40	120	5240.200	5150 to 5250	Pass
			50	120	5240.160	5150 to 5250	Pass
802.11n (HT40)	SISO	5190	20	102	5190.240	5150 to 5250	Pass
				120	5190.240	5150 to 5250	Pass
				138	5190.280	5150 to 5250	Pass
			-30	120	5190.200	5150 to 5250	Pass
			-20	120	5190.280	5150 to 5250	Pass
			-10	120	5190.200	5150 to 5250	Pass
			0	120	5190.200	5150 to 5250	Pass
			10	120	5190.200	5150 to 5250	Pass
			30	120	5190.240	5150 to 5250	Pass
			40	120	5190.200	5150 to 5250	Pass
			50	120	5190.200	5150 to 5250	Pass
		5230	20	102	5230.200	5150 to 5250	Pass
				120	5230.200	5150 to 5250	Pass
				138	5230.200	5150 to 5250	Pass
			-30	120	5230.160	5150 to 5250	Pass
			-20	120	5230.240	5150 to 5250	Pass
			-10	120	5230.200	5150 to 5250	Pass
			0	120	5230.200	5150 to 5250	Pass
			10	120	5230.240	5150 to 5250	Pass
			30	120	5230.200	5150 to 5250	Pass
802.11ac (VHT20)	SISO	5180	20	102	5180.120	5150 to 5250	Pass
				120	5180.140	5150 to 5250	Pass
				138	5180.140	5150 to 5250	Pass
			-30	120	5180.120	5150 to 5250	Pass
			-20	120	5180.160	5150 to 5250	Pass
			-10	120	5180.120	5150 to 5250	Pass
			0	120	5180.140	5150 to 5250	Pass
			10	120	5180.100	5150 to 5250	Pass
			30	120	5180.140	5150 to 5250	Pass
			40	120	5180.160	5150 to 5250	Pass
			50	120	5180.120	5150 to 5250	Pass
		5200	20	102	5200.120	5150 to 5250	Pass
				120	5200.140	5150 to 5250	Pass
				138	5200.120	5150 to 5250	Pass
			-30	120	5200.140	5150 to 5250	Pass
			-20	120	5200.180	5150 to 5250	Pass
			-10	120	5200.120	5150 to 5250	Pass
			0	120	5200.160	5150 to 5250	Pass
			10	120	5200.180	5150 to 5250	Pass
			30	120	5200.140	5150 to 5250	Pass

			40	120	5200.140	5150 to 5250	Pass
			50	120	5200.160	5150 to 5250	Pass
		5240	20	102	5240.180	5150 to 5250	Pass
				120	5240.140	5150 to 5250	Pass
				138	5240.160	5150 to 5250	Pass
			-30	120	5240.140	5150 to 5250	Pass
			-20	120	5240.120	5150 to 5250	Pass
			-10	120	5240.140	5150 to 5250	Pass
			0	120	5240.120	5150 to 5250	Pass
			10	120	5240.140	5150 to 5250	Pass
			30	120	5240.160	5150 to 5250	Pass
			40	120	5240.220	5150 to 5250	Pass
			50	120	5240.160	5150 to 5250	Pass
802.11ac (VHT40)	SISO	5190	20	102	5190.200	5150 to 5250	Pass
				120	5190.200	5150 to 5250	Pass
				138	5190.280	5150 to 5250	Pass
			-30	120	5190.200	5150 to 5250	Pass
			-20	120	5190.200	5150 to 5250	Pass
			-10	120	5190.240	5150 to 5250	Pass
			0	120	5190.200	5150 to 5250	Pass
			10	120	5190.240	5150 to 5250	Pass
			30	120	5190.200	5150 to 5250	Pass
			40	120	5190.200	5150 to 5250	Pass
			50	120	5190.280	5150 to 5250	Pass
		5230	20	102	5230.200	5150 to 5250	Pass
				120	5230.200	5150 to 5250	Pass
				138	5230.200	5150 to 5250	Pass
			-30	120	5230.200	5150 to 5250	Pass
			-20	120	5230.200	5150 to 5250	Pass
			-10	120	5230.200	5150 to 5250	Pass
			0	120	5230.240	5150 to 5250	Pass
			10	120	5230.200	5150 to 5250	Pass
			30	120	5230.200	5150 to 5250	Pass
			40	120	5230.240	5150 to 5250	Pass
			50	120	5230.240	5150 to 5250	Pass
802.11ac (VHT80)	SISO	5210	20	102	5210.225	5150 to 5250	Pass
				120	5210.300	5150 to 5250	Pass
				138	5210.225	5150 to 5250	Pass
			-30	120	5210.225	5150 to 5250	Pass
			-20	120	5210.225	5150 to 5250	Pass
			-10	120	5210.225	5150 to 5250	Pass
			0	120	5210.300	5150 to 5250	Pass
			10	120	5210.225	5150 to 5250	Pass
			30	120	5210.225	5150 to 5250	Pass
			40	120	5210.300	5150 to 5250	Pass
			50	120	5210.225	5150 to 5250	Pass