

1. Bandwidth

1.1 Test Result

1.1.1 OBW

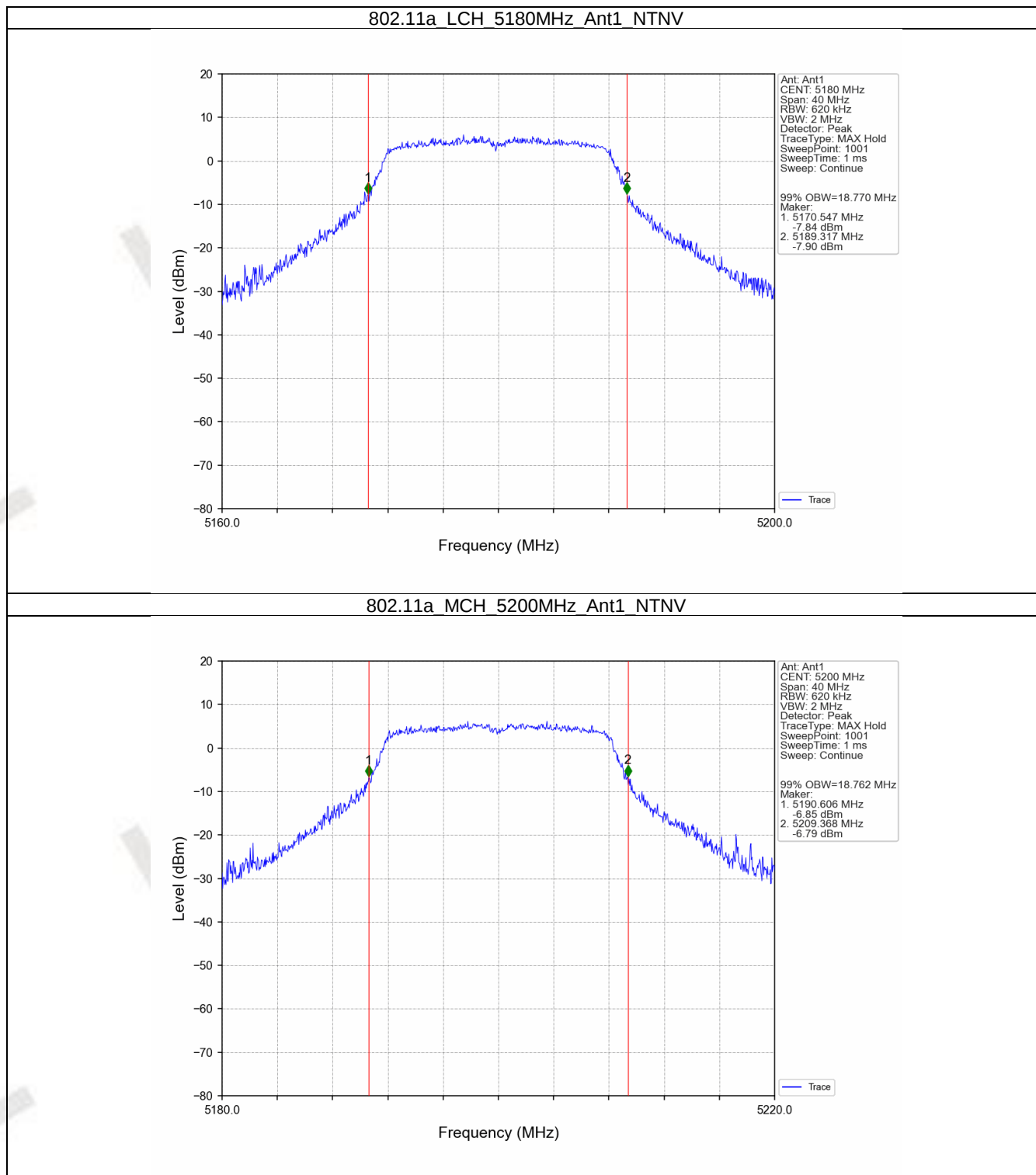
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	18.770	/	Pass
		5200	1	18.762	/	Pass
		5240	1	18.711	/	Pass
802.11n (HT20)	SISO	5180	1	19.639	/	Pass
		5200	1	19.776	/	Pass
		5240	1	19.771	/	Pass
802.11n (HT40)	SISO	5190	1	37.769	/	Pass
		5230	1	37.746	/	Pass
802.11ac (VHT20)	SISO	5180	1	19.688	/	Pass
		5200	1	19.727	/	Pass
		5240	1	19.760	/	Pass
802.11ac (VHT40)	SISO	5190	1	37.796	/	Pass
		5230	1	37.806	/	Pass

1.1.2 26dB BW

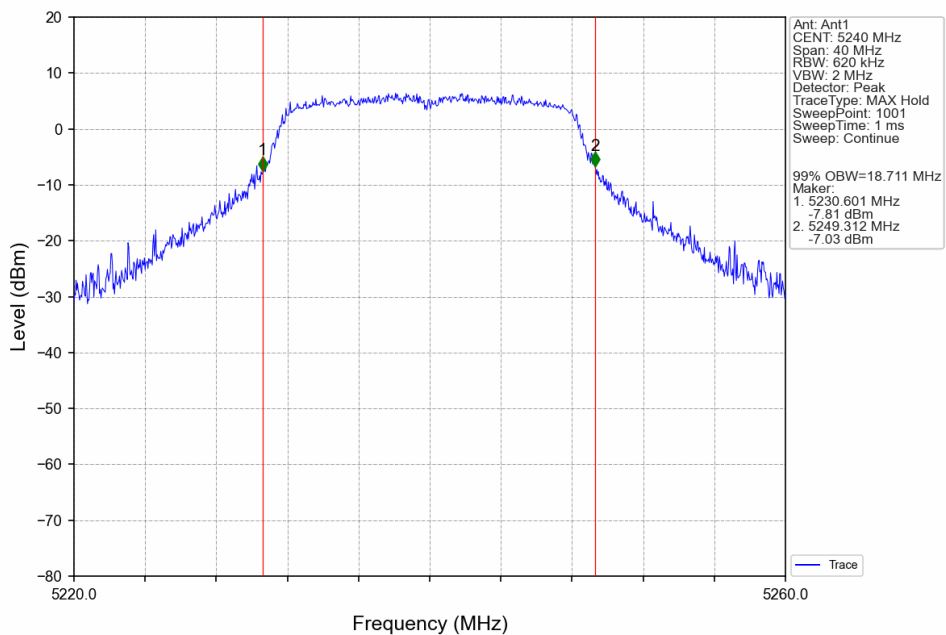
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	24.784	/	Pass
		5200	1	24.225	/	Pass
		5240	1	24.270	/	Pass
802.11n (HT20)	SISO	5180	1	25.164	/	Pass
		5200	1	24.592	/	Pass
		5240	1	25.214	/	Pass
802.11n (HT40)	SISO	5190	1	45.755	/	Pass
		5230	1	46.920	/	Pass
802.11ac (VHT20)	SISO	5180	1	25.156	/	Pass
		5200	1	25.067	/	Pass
		5240	1	24.343	/	Pass
802.11ac (VHT40)	SISO	5190	1	45.892	/	Pass
		5230	1	46.355	/	Pass

1.2 Test Graph

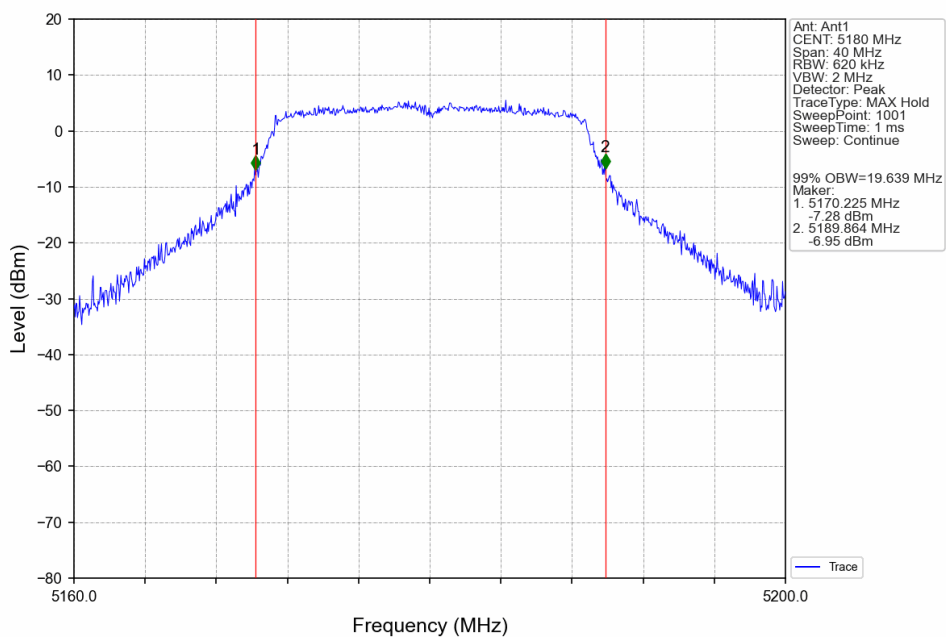
1.2.1 OBW



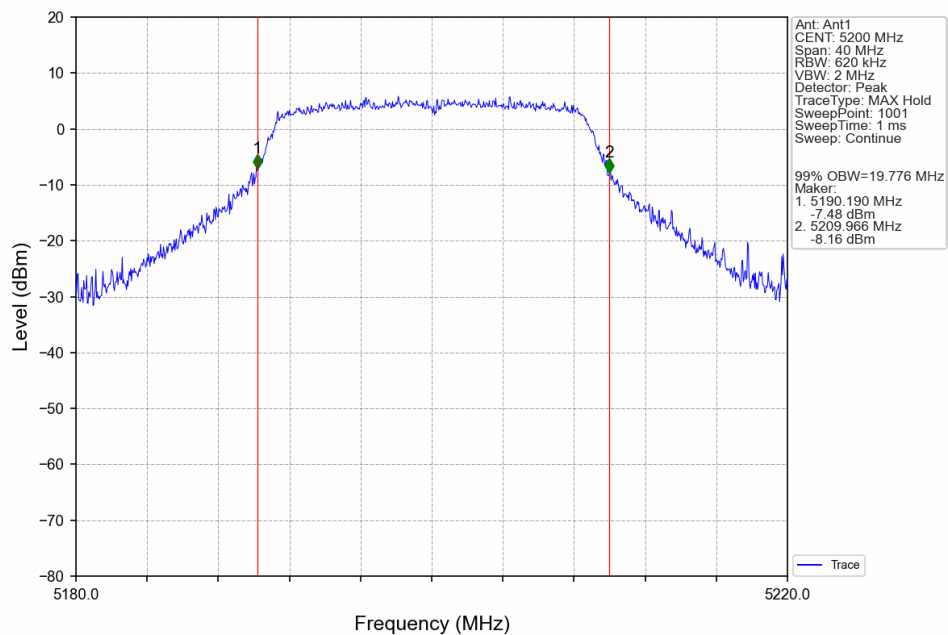
802.11a HCH 5240MHz Ant1 NTV



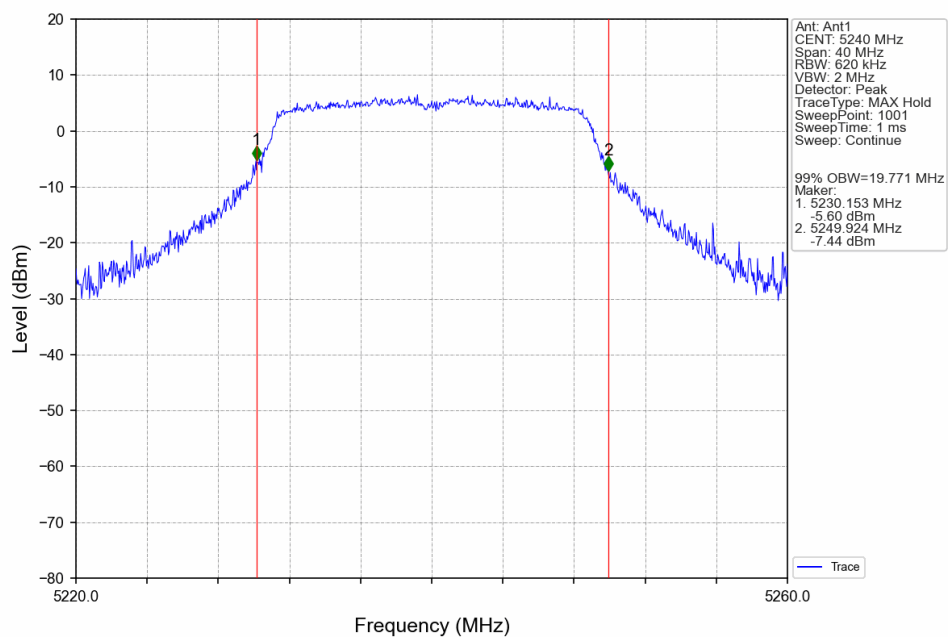
802.11n(HT20) LCH 5180MHz Ant1 NTV



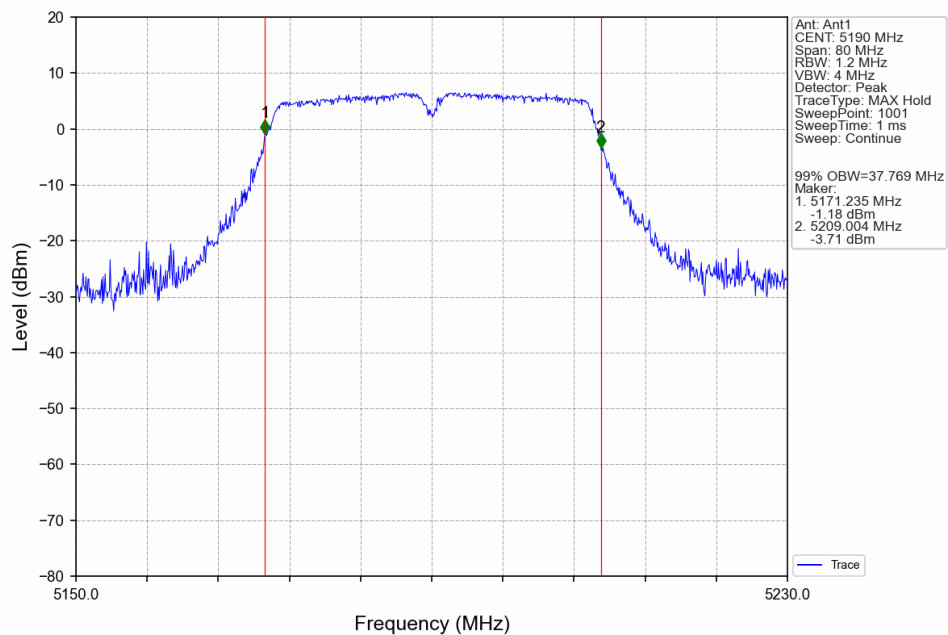
802.11n(HT20) MCH 5200MHz Ant1 NTN



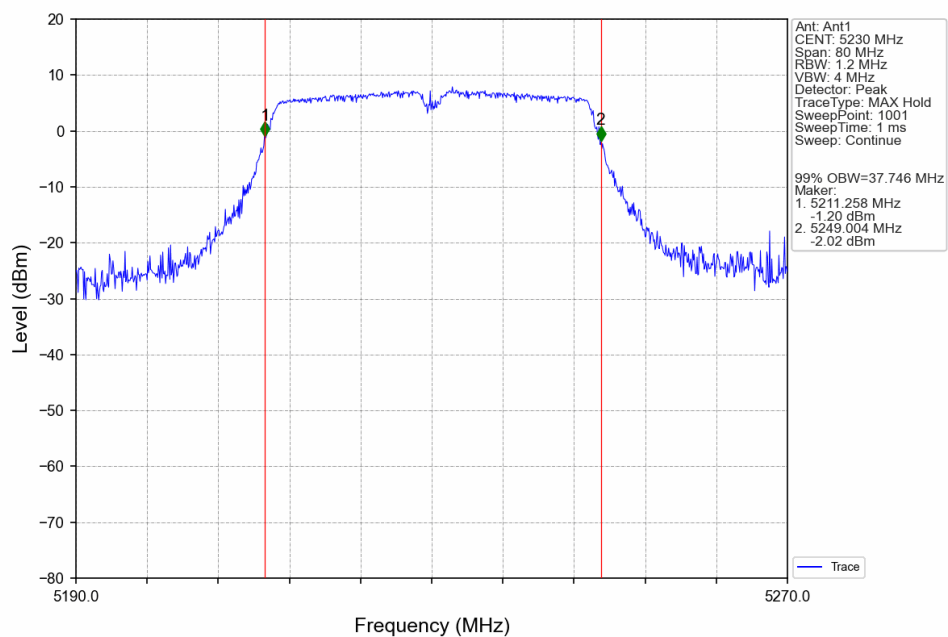
802.11n(HT20) HCH 5240MHz Ant1 NTN



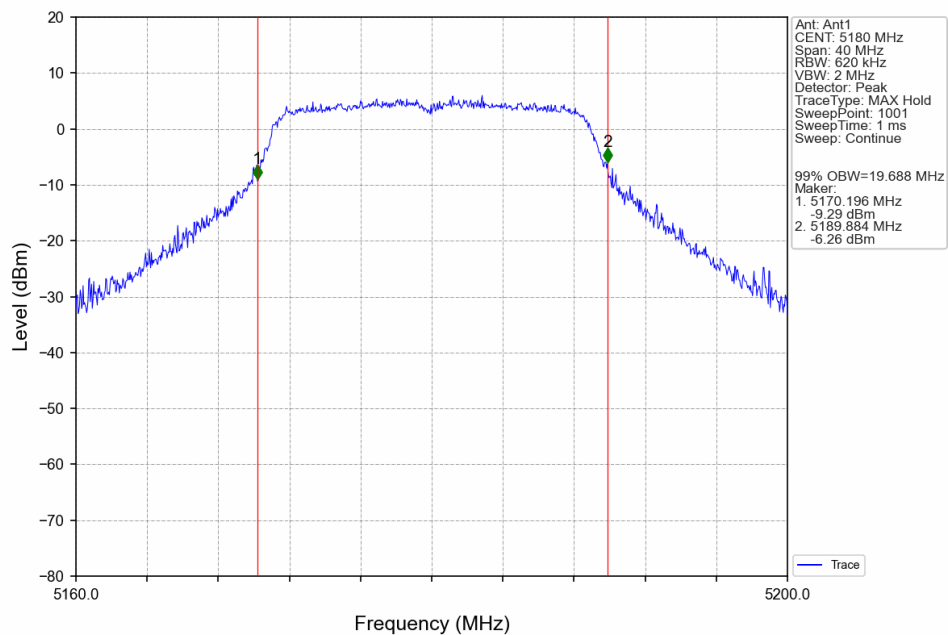
802.11n(HT40) LCH 5190MHz Ant1 NTV



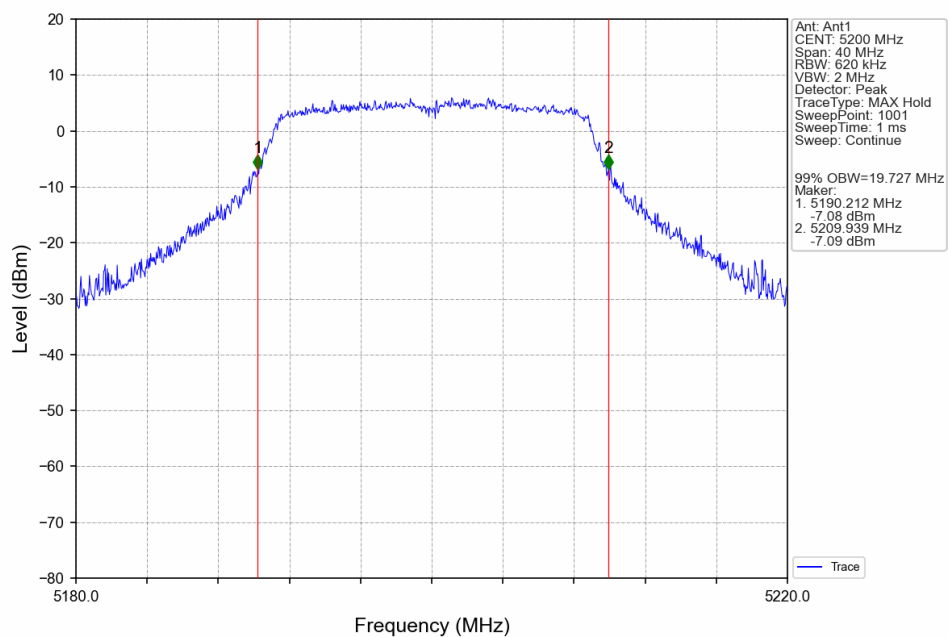
802.11n(HT40) HCH 5230MHz Ant1 NTV



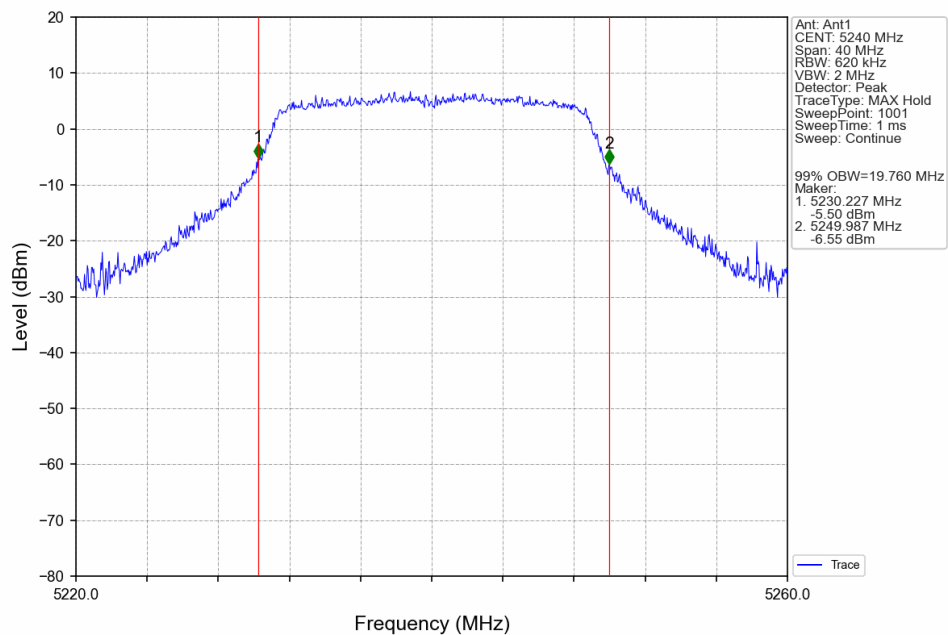
802.11ac(VHT20) LCH 5180MHz Ant1 NTN



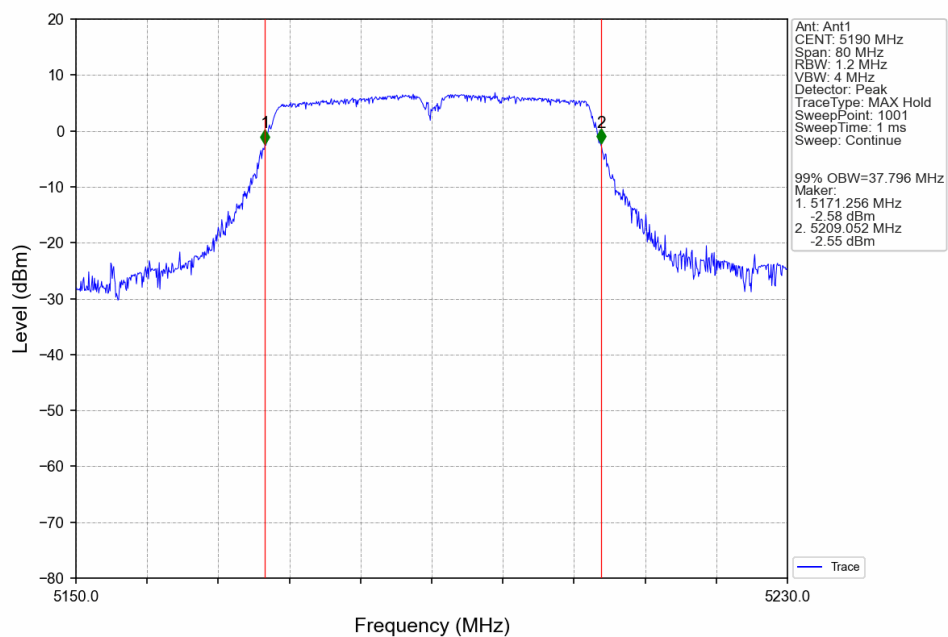
802.11ac(VHT20) MCH 5200MHz Ant1 NTN

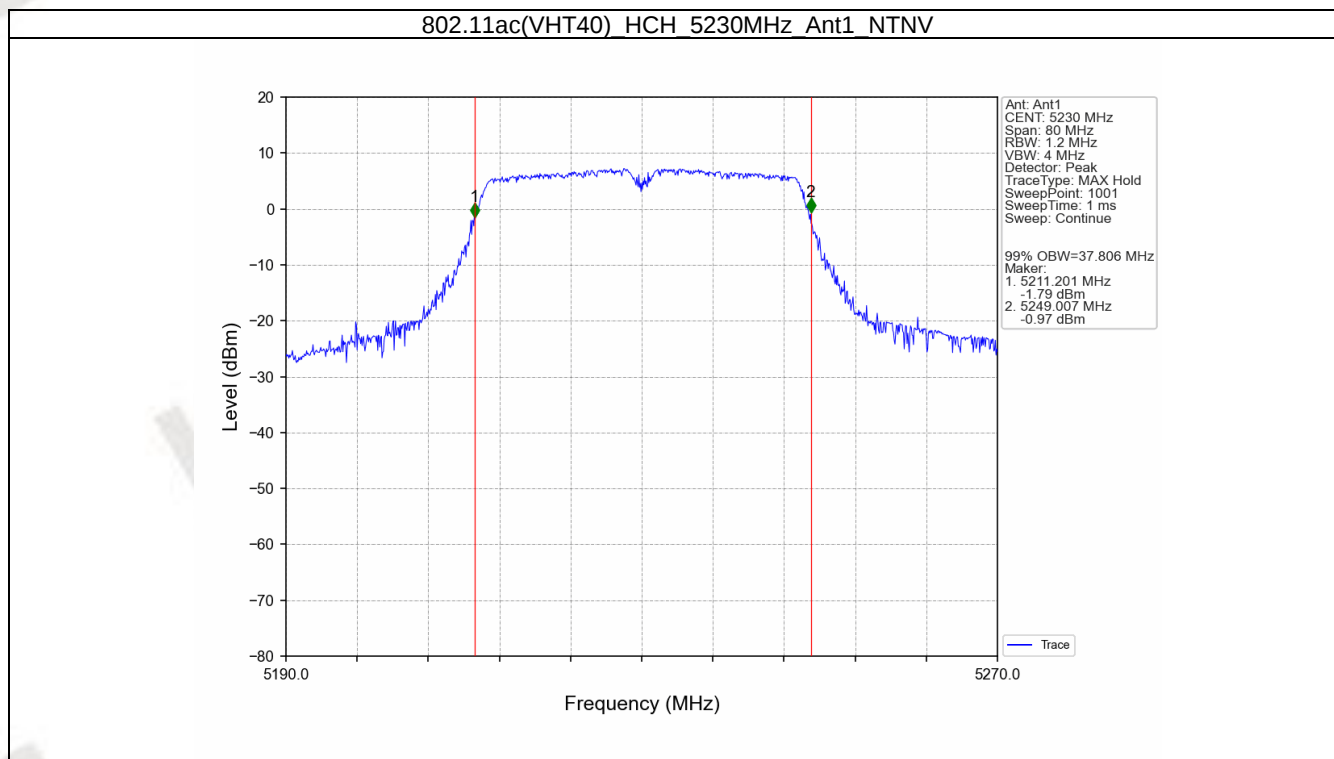


802.11ac(VHT20) HCH 5240MHz Ant1 NTNV

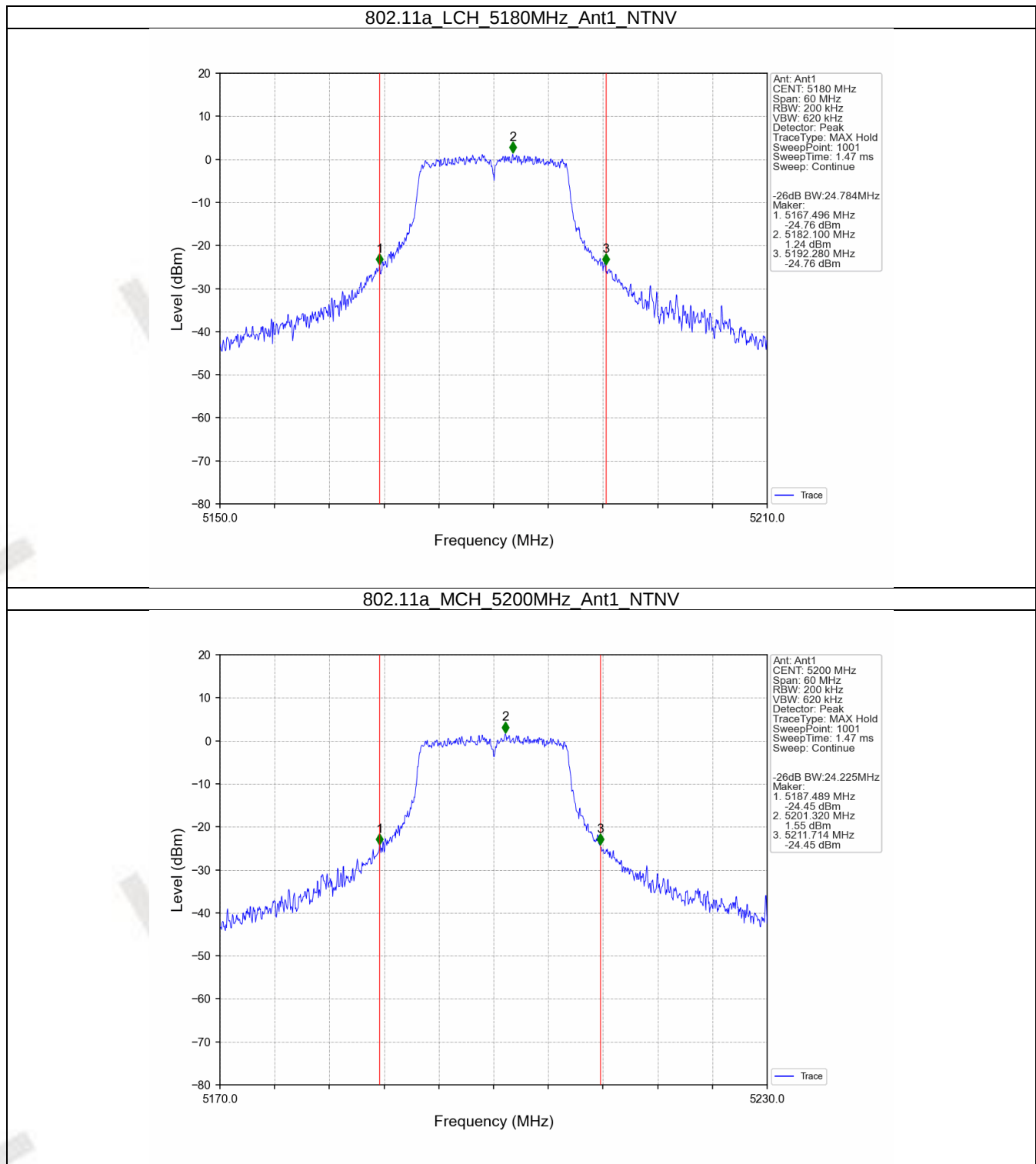


802.11ac(VHT40) LCH 5190MHz Ant1 NTNV

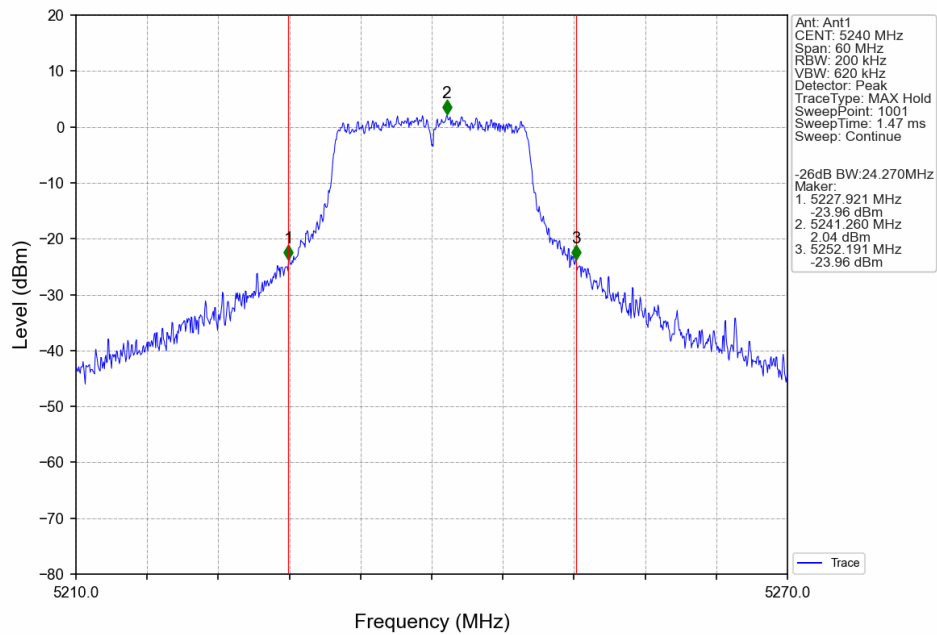




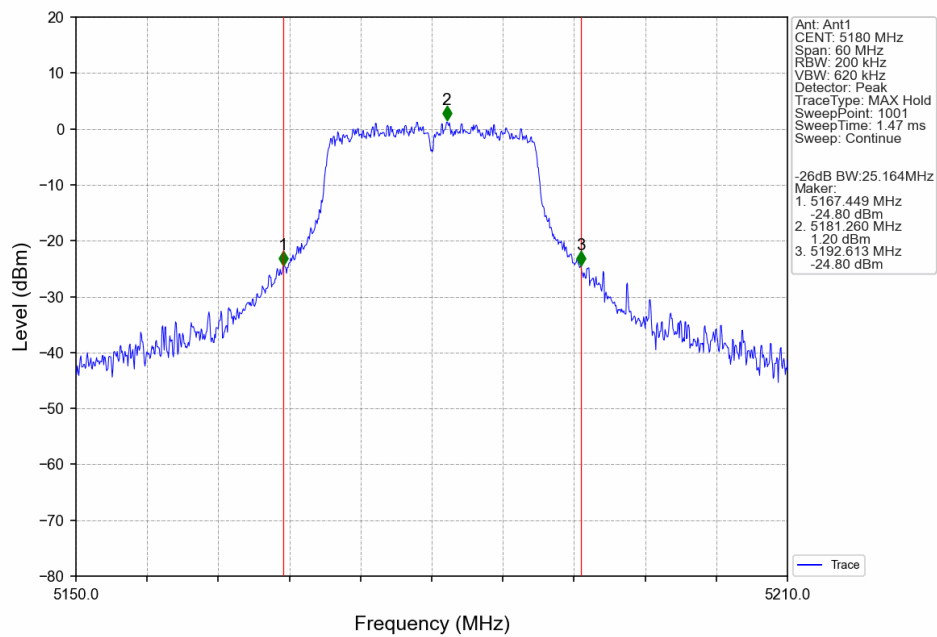
1.2.2 26dB BW



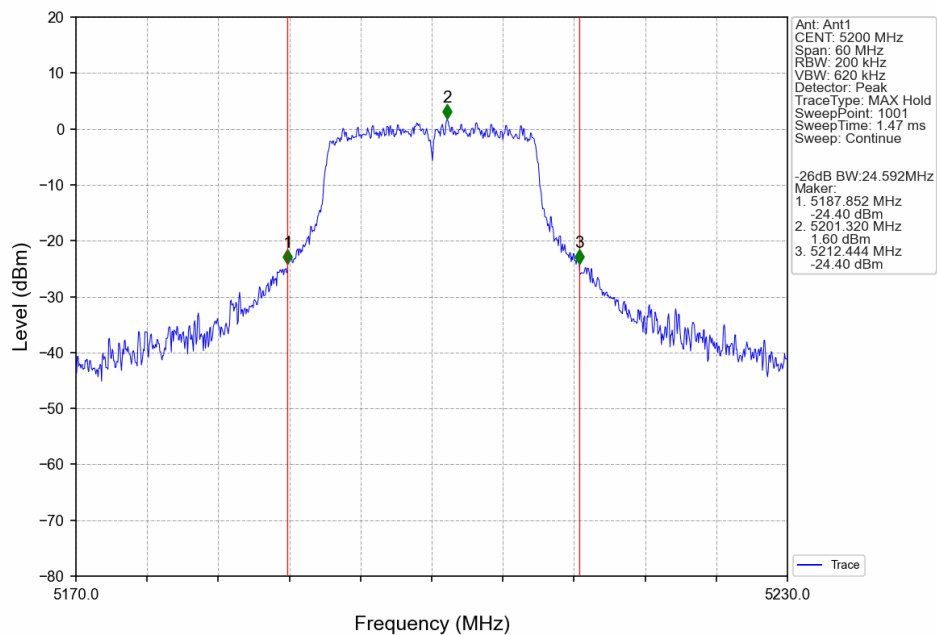
802.11a HCH 5240MHz Ant1 NTN



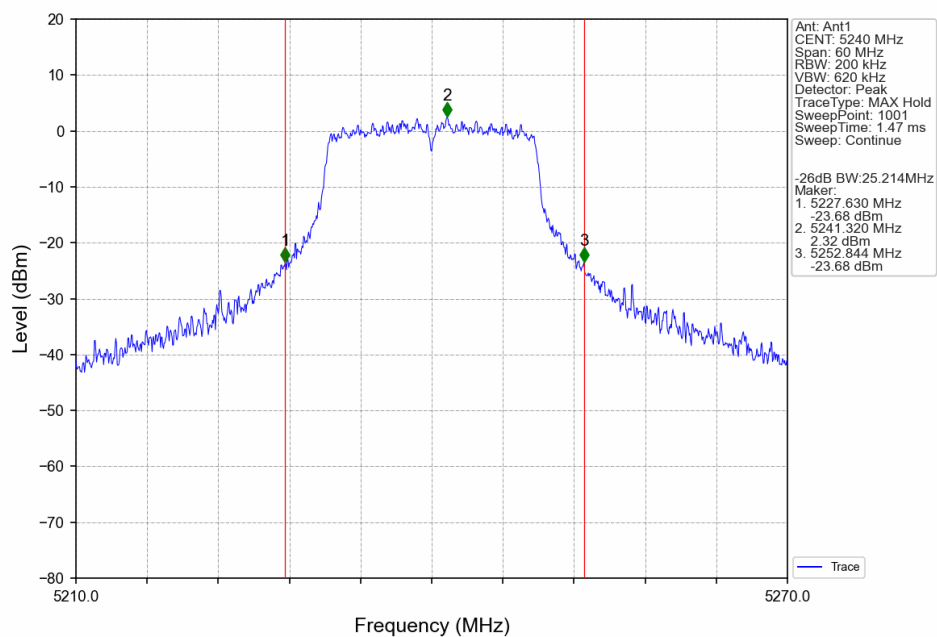
802.11n(HT20) LCH 5180MHz Ant1 NTN



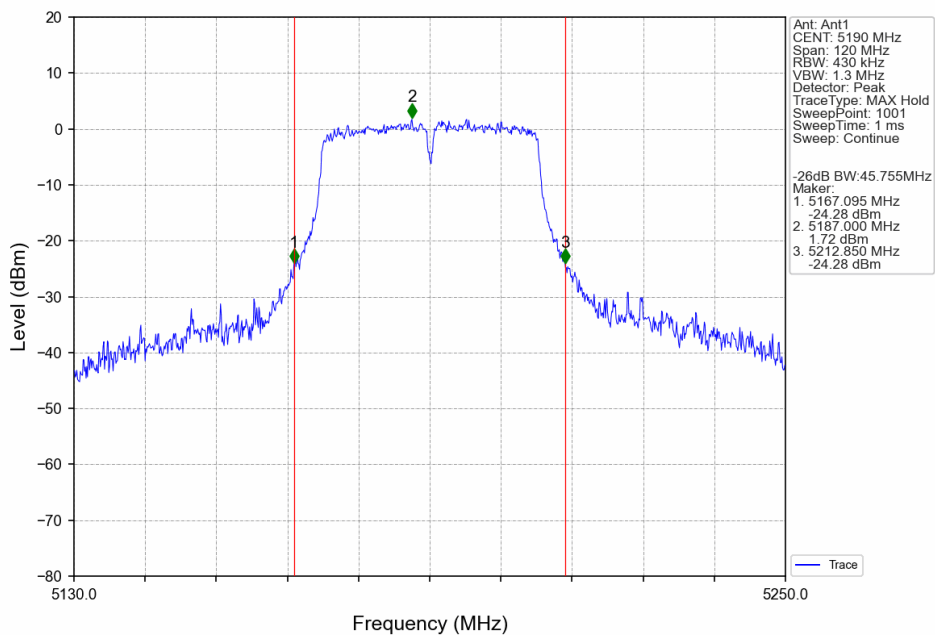
802.11n(HT20) MCH 5200MHz Ant1 NTV



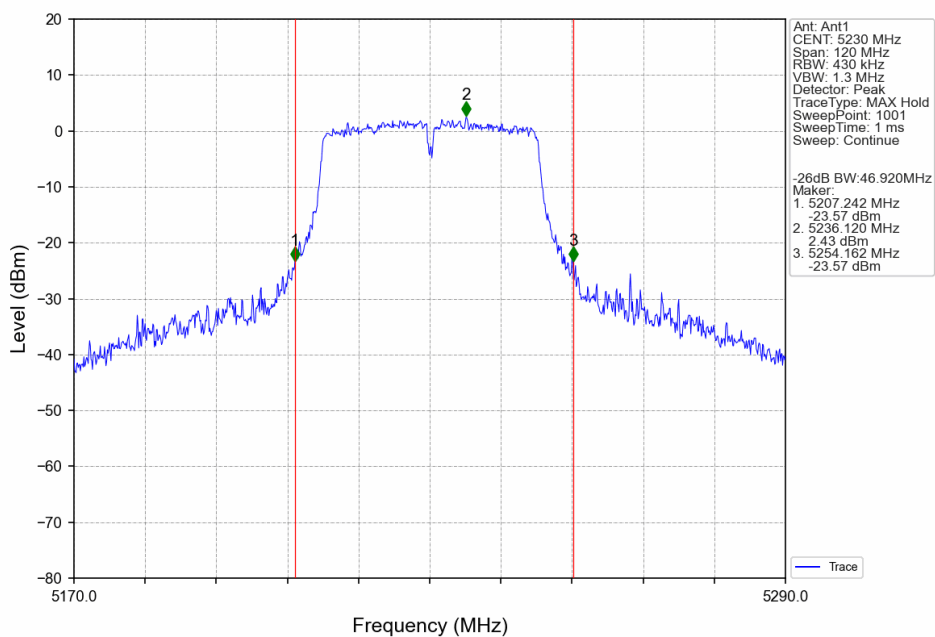
802.11n(HT20) HCH 5240MHz Ant1 NTV



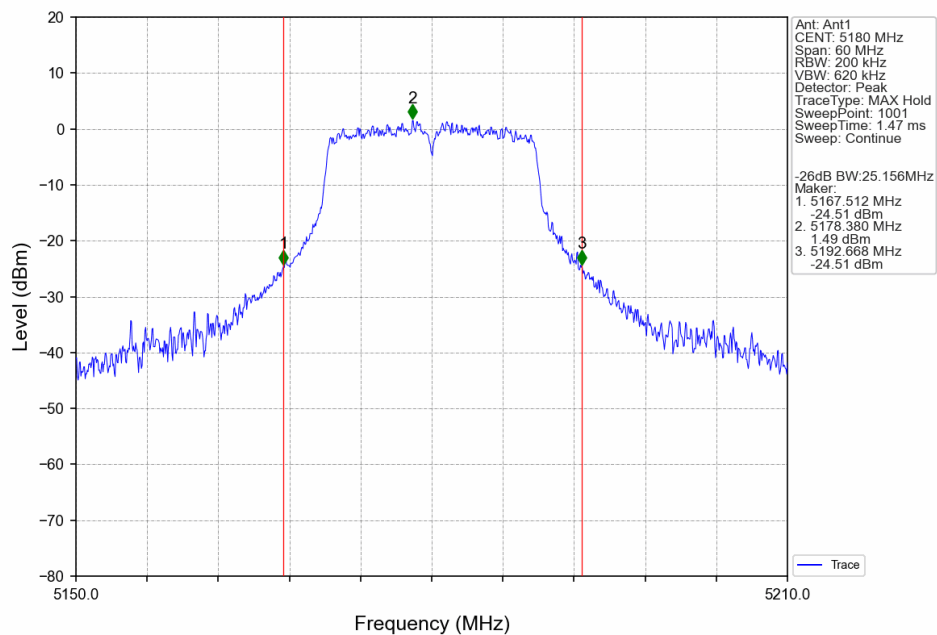
802.11n(HT40) LCH 5190MHz Ant1 NTV



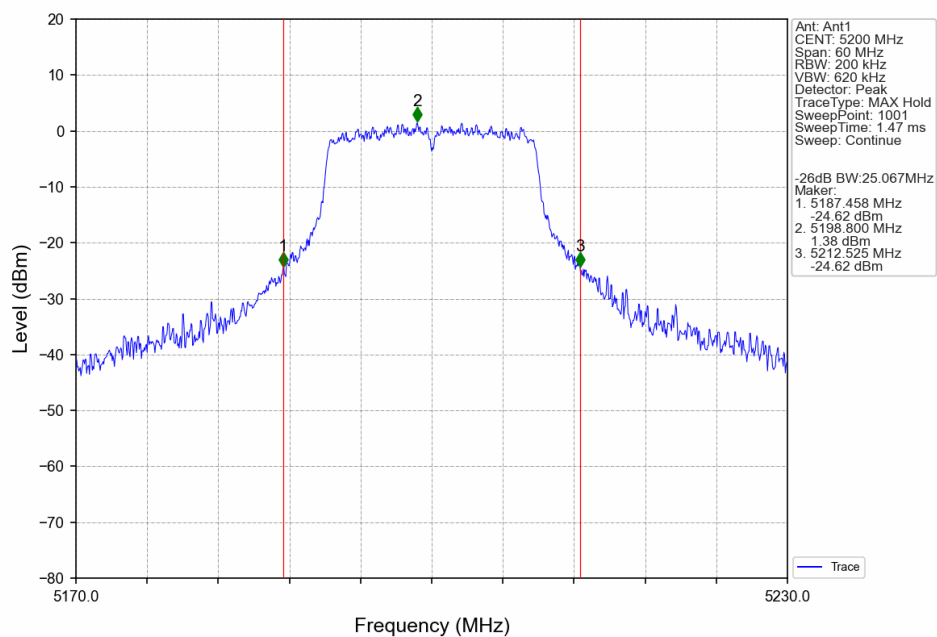
802.11n(HT40) HCH 5230MHz Ant1 NTV



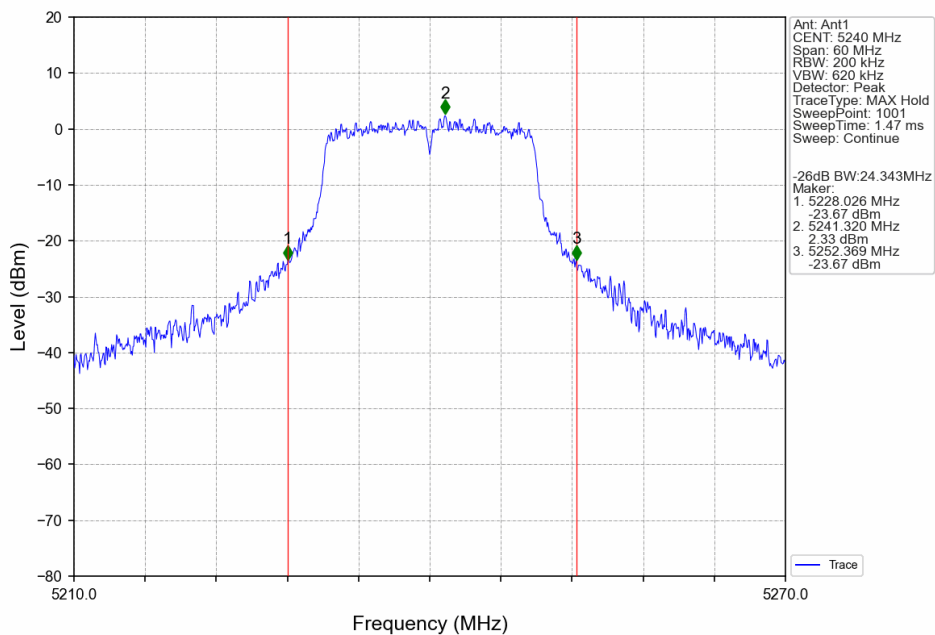
802.11ac(VHT20) LCH 5180MHz Ant1 NTNV



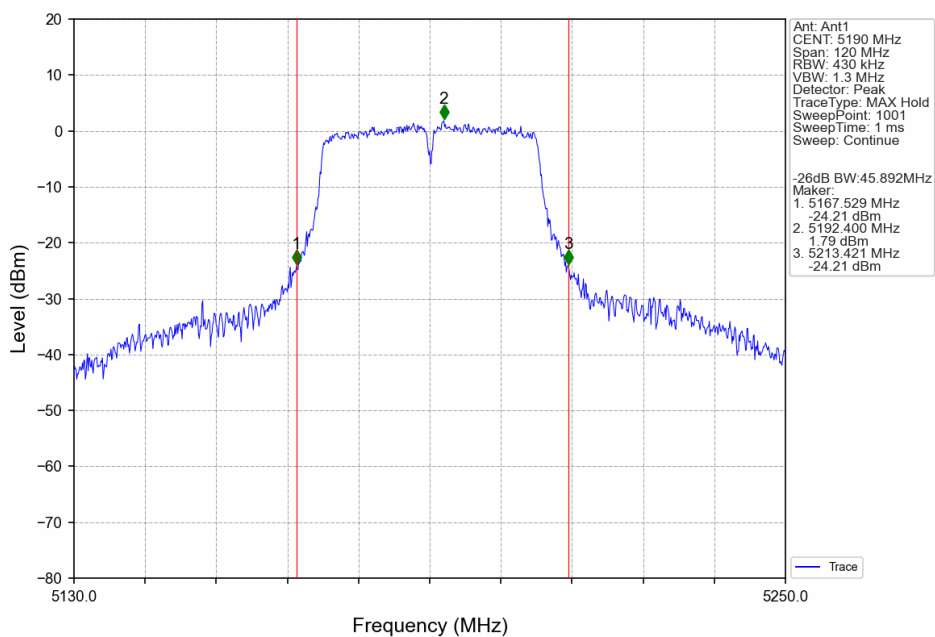
802.11ac(VHT20) MCH 5200MHz Ant1 NTNV

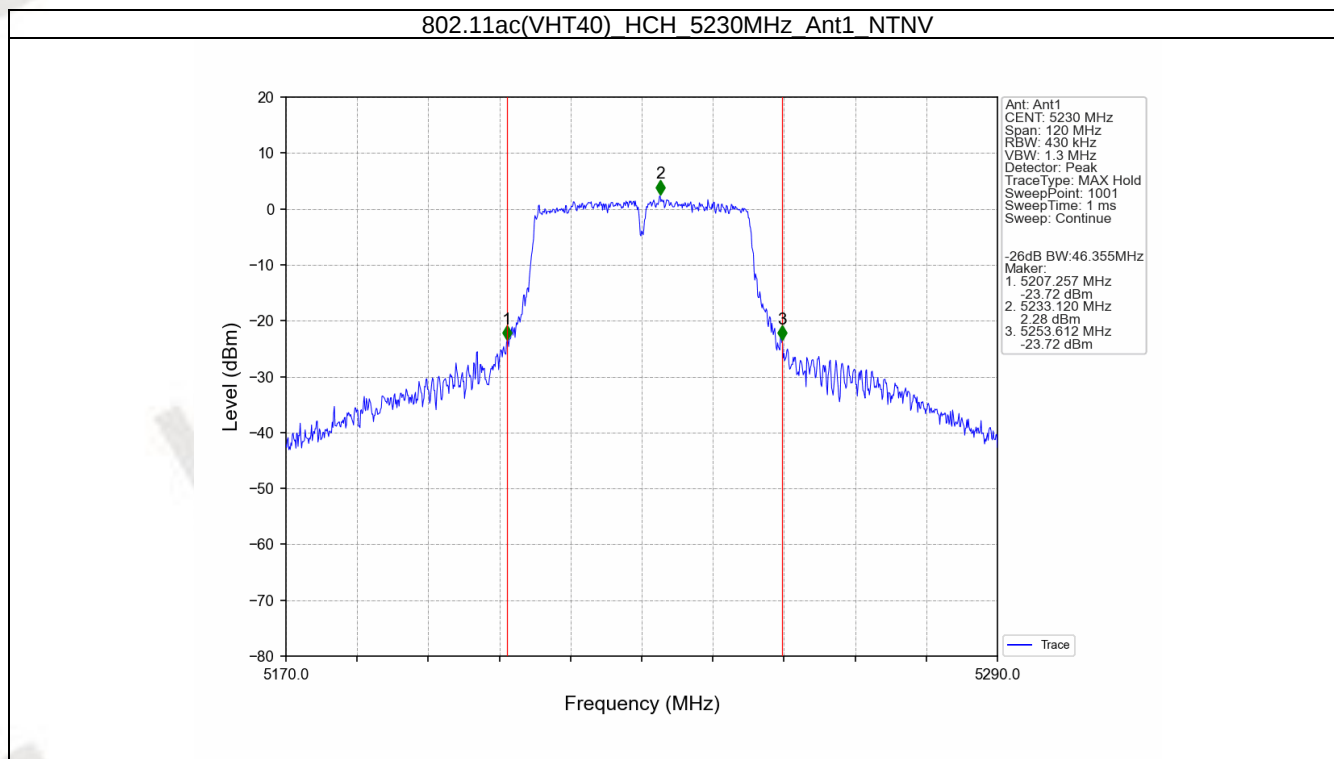


802.11ac(VHT20) HCH 5240MHz Ant1 NTN



802.11ac(VHT40) LCH 5190MHz Ant1 NTN





2. Maximum Conducted Output Power

2.1 Test Result

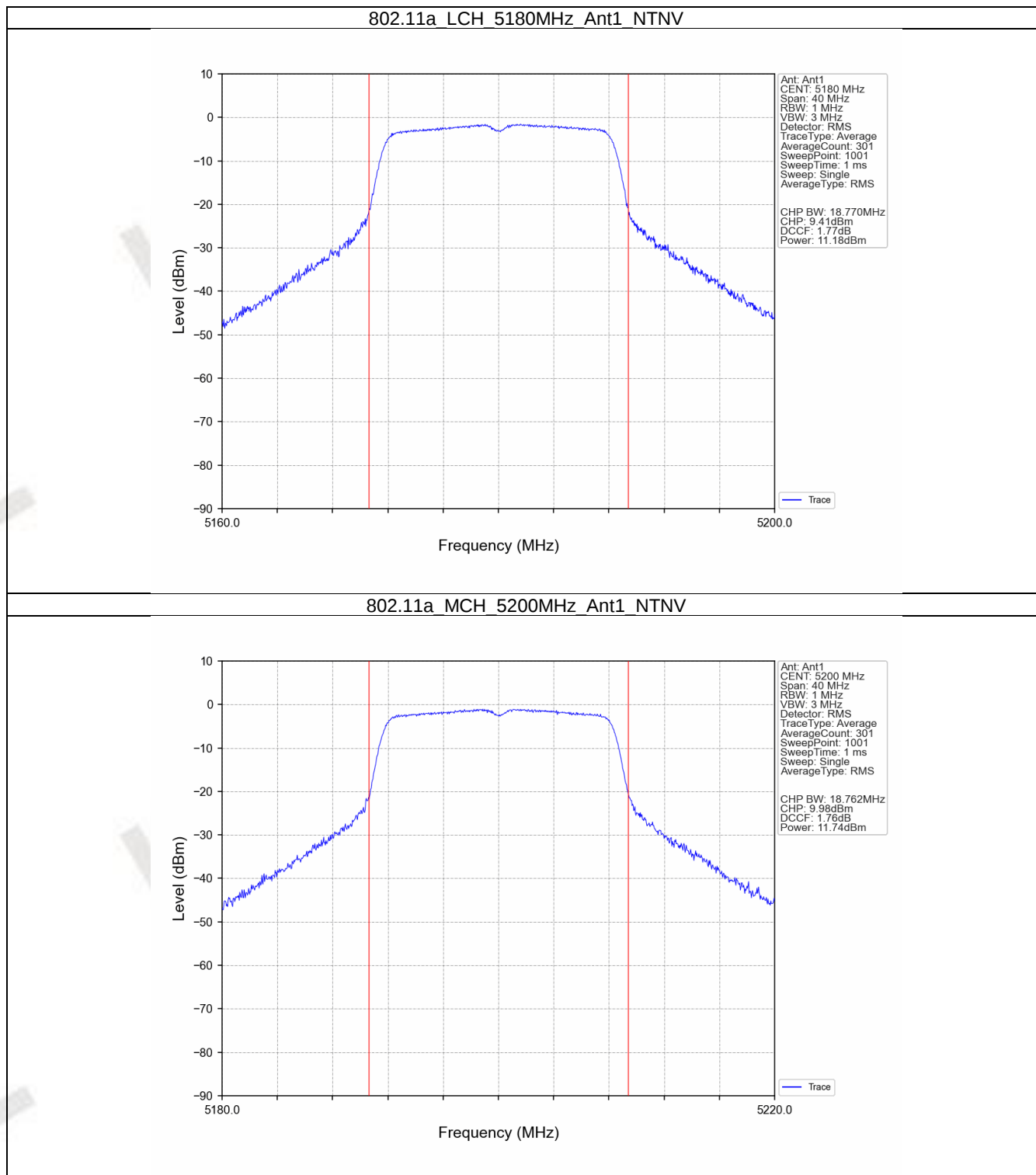
2.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	11.18	<=23.98	Pass
		5200	11.74	<=23.98	Pass
		5240	12.02	<=23.98	Pass
802.11n (HT20)	SISO	5180	11.01	<=23.98	Pass
		5200	11.36	<=23.98	Pass
		5240	12.04	<=23.98	Pass
802.11n (HT40)	SISO	5190	11.33	<=23.98	Pass
		5230	12.13	<=23.98	Pass
802.11ac (VHT20)	SISO	5180	11.26	<=23.98	Pass
		5200	11.44	<=23.98	Pass
		5240	11.98	<=23.98	Pass
802.11ac (VHT40)	SISO	5190	11.59	<=23.98	Pass
		5230	11.96	<=23.98	Pass

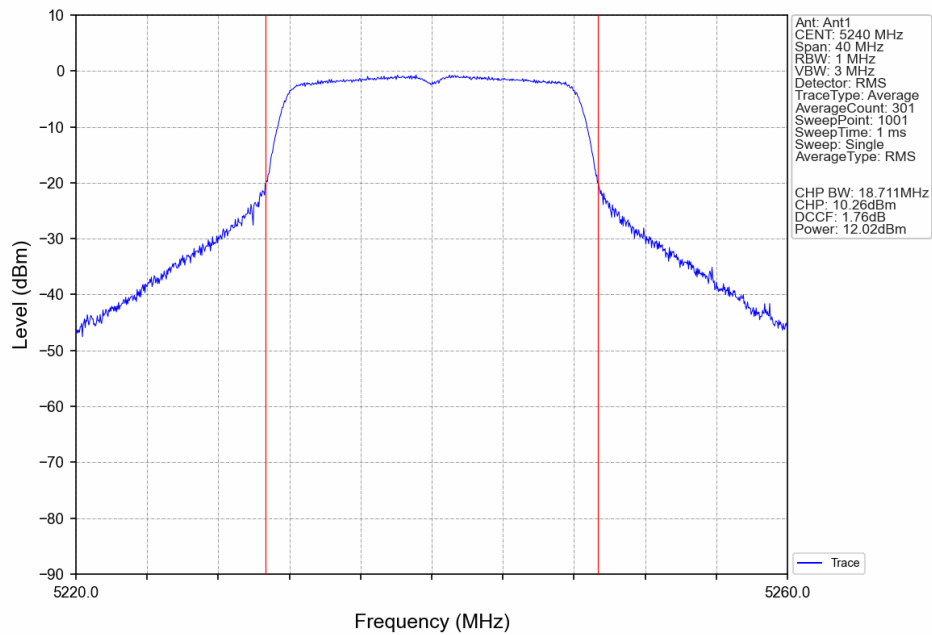
Note1: Antenna Gain: Ant1: 2.25dBi;

2.2 Test Graph

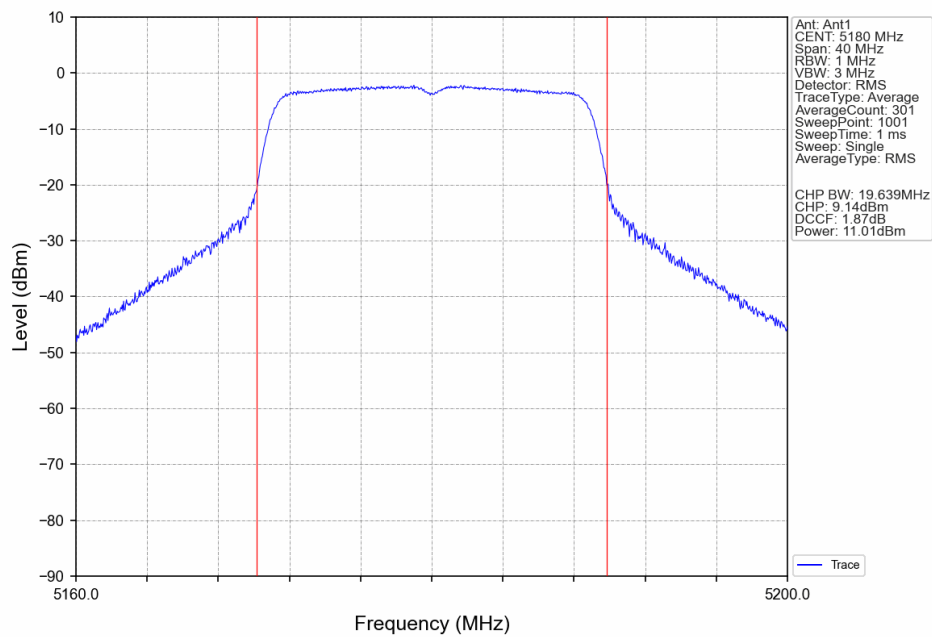
2.2.1 Power



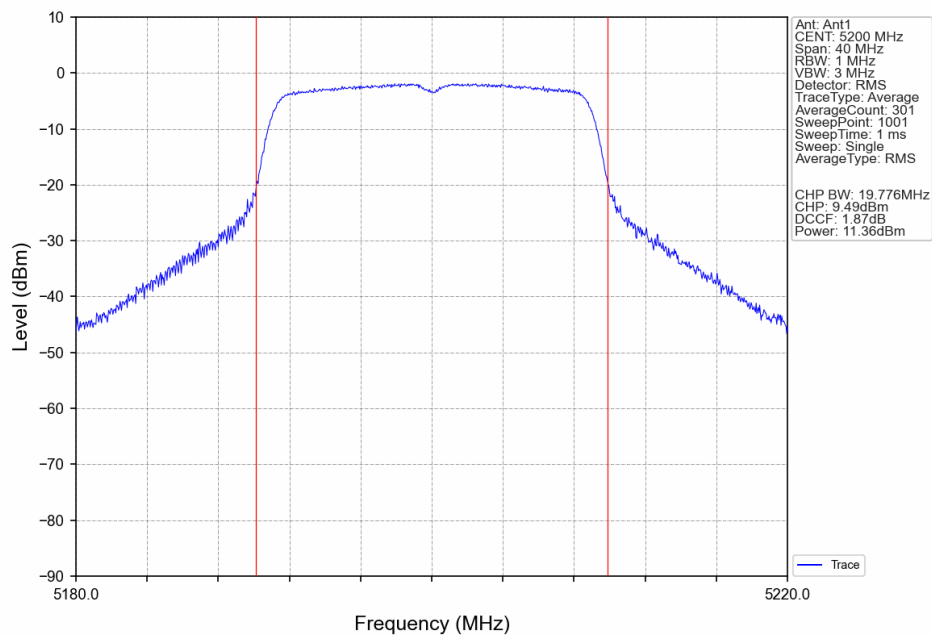
802.11a HCH 5240MHz Ant1 NTV



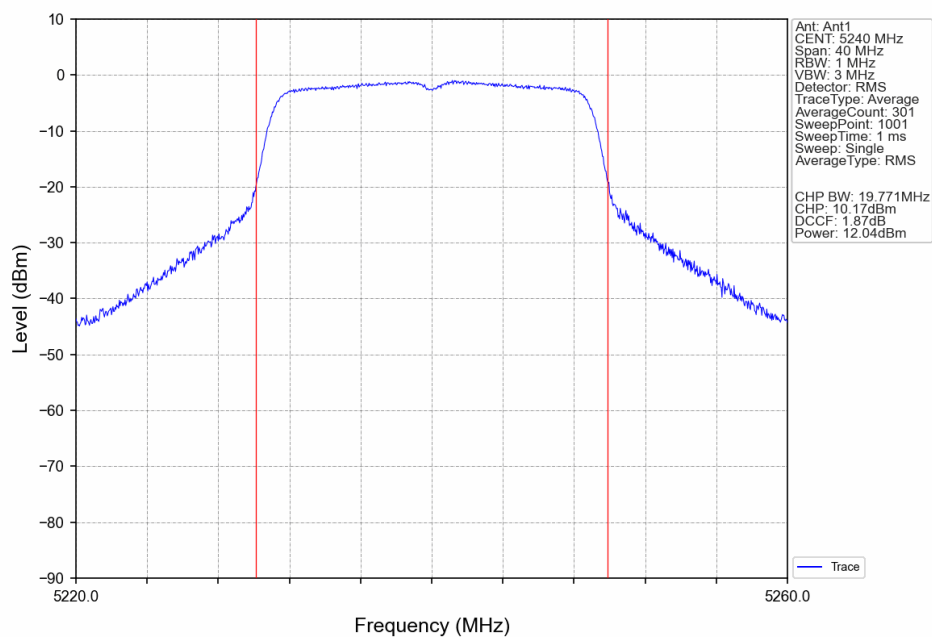
802.11n(HT20) LCH 5180MHz Ant1 NTV



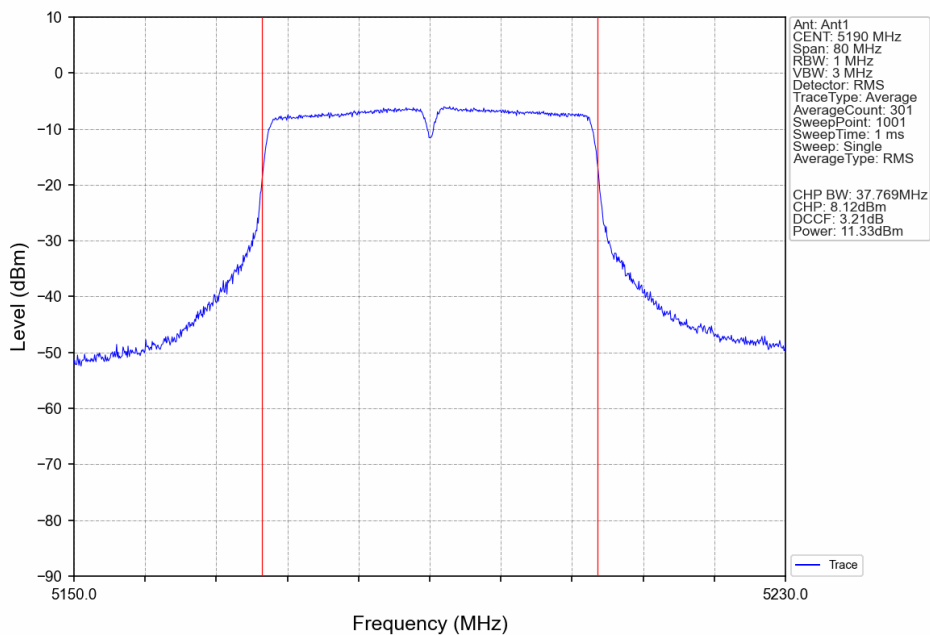
802.11n(HT20) MCH 5200MHz Ant1 NTN



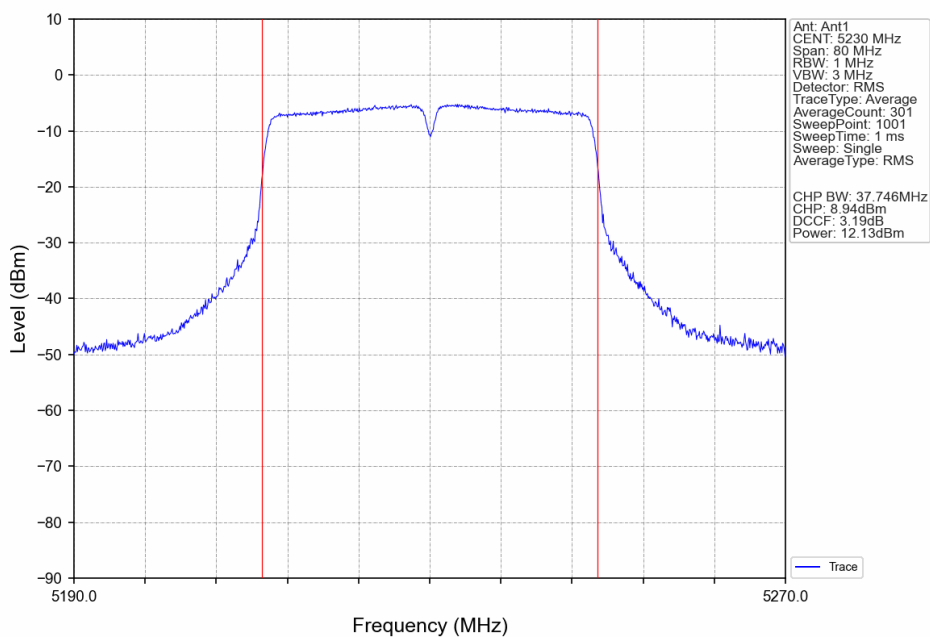
802.11n(HT20) HCH 5240MHz Ant1 NTN



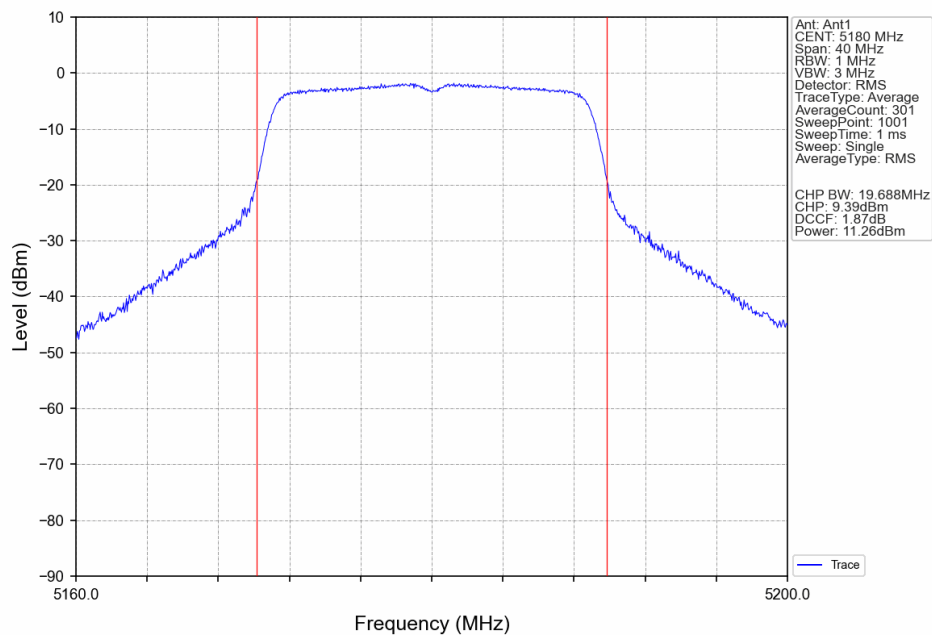
802.11n(HT40) LCH 5190MHz Ant1 NTN



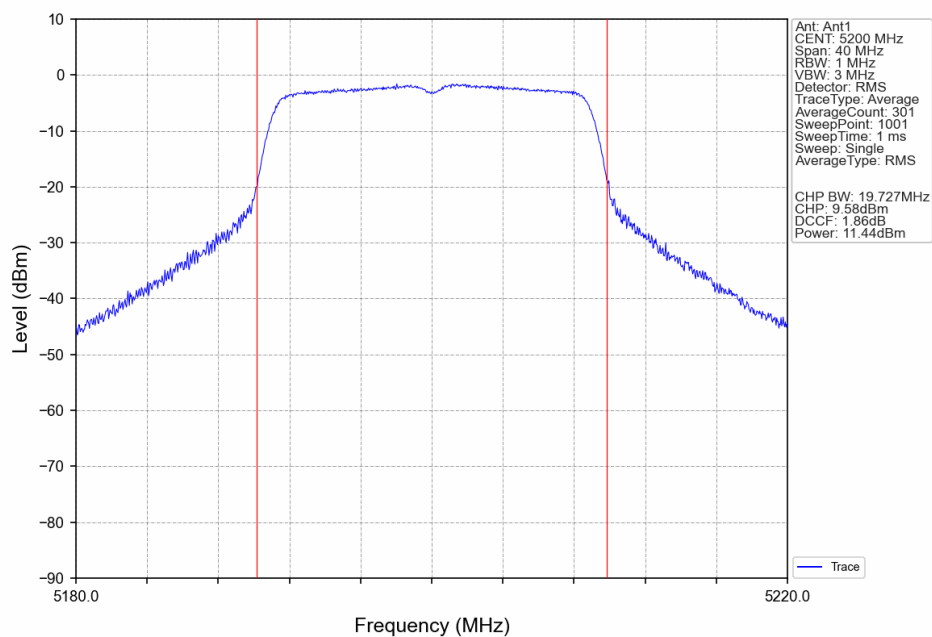
802.11n(HT40) HCH 5230MHz Ant1 NTN



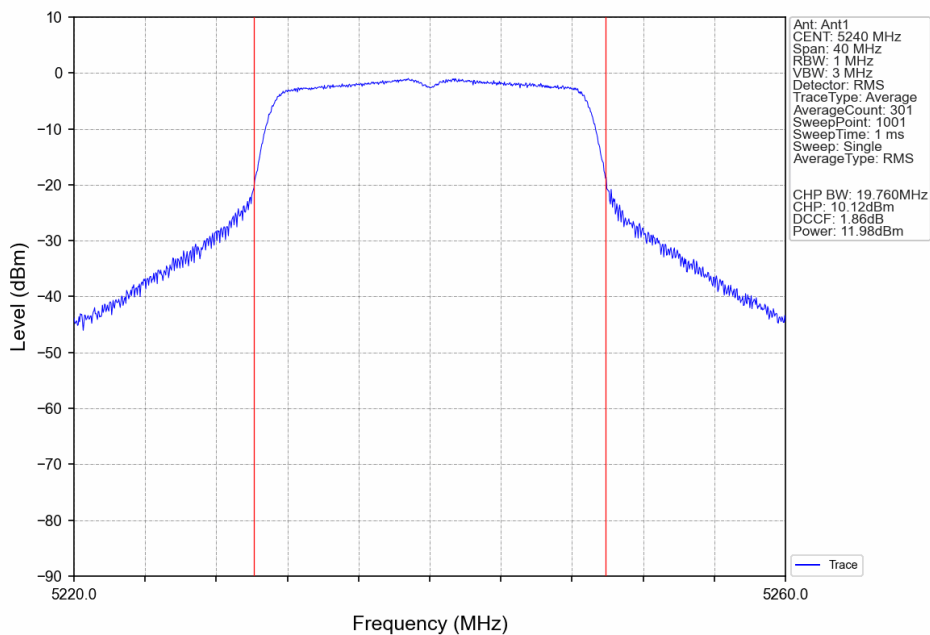
802.11ac(VHT20) LCH 5180MHz Ant1 NTV



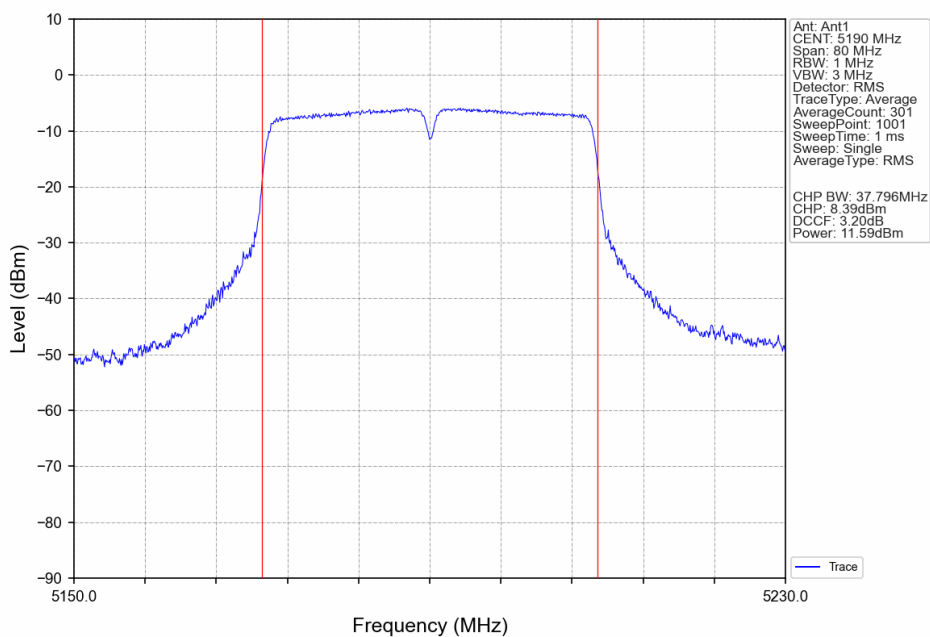
802.11ac(VHT20) MCH 5200MHz Ant1 NTV



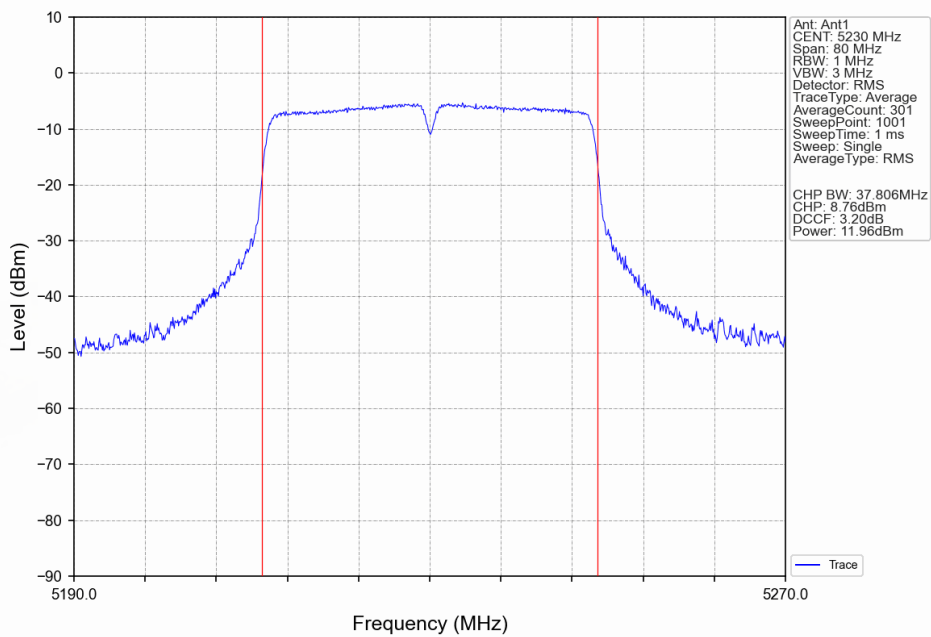
802.11ac(VHT20) HCH 5240MHz Ant1 NTN



802.11ac(VHT40) LCH 5190MHz Ant1 NTN



802.11ac(VHT40) HCH 5230MHz Ant1 NTN



3. Maximum Power Spectral Density

3.1 Test Result

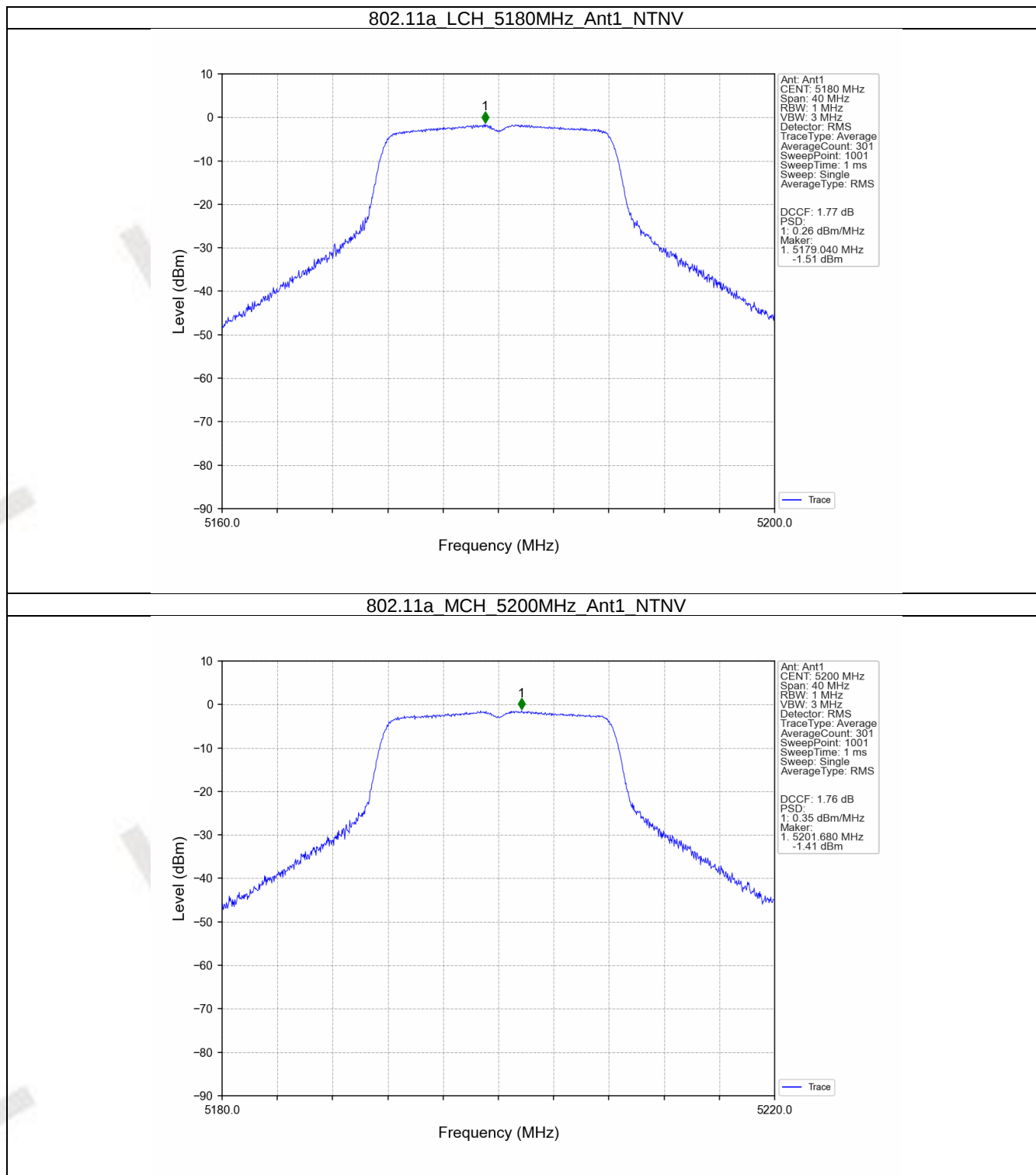
3.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	0.26	<=11	Pass
		5200	0.35	<=11	Pass
		5240	1.20	<=11	Pass
802.11n (HT20)	SISO	5180	-0.15	<=11	Pass
		5200	0.16	<=11	Pass
		5240	0.96	<=11	Pass
802.11n (HT40)	SISO	5190	-2.98	<=11	Pass
		5230	-2.09	<=11	Pass
802.11ac (VHT20)	SISO	5180	0.21	<=11	Pass
		5200	0.03	<=11	Pass
		5240	0.98	<=11	Pass
802.11ac (VHT40)	SISO	5190	-2.67	<=11	Pass
		5230	-2.00	<=11	Pass

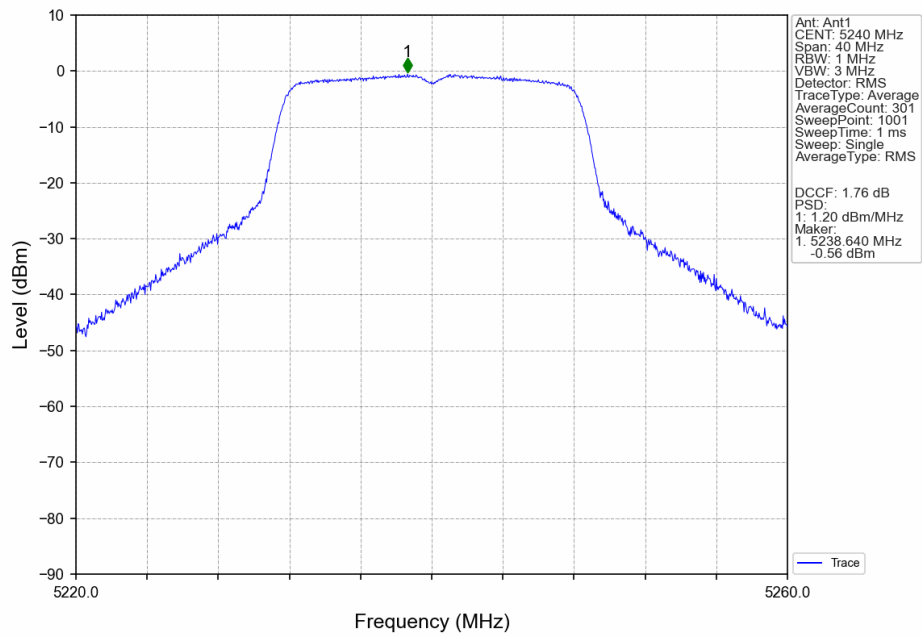
Note1: Antenna Gain: Ant1: 2.25dBi;

3.2 Test Graph

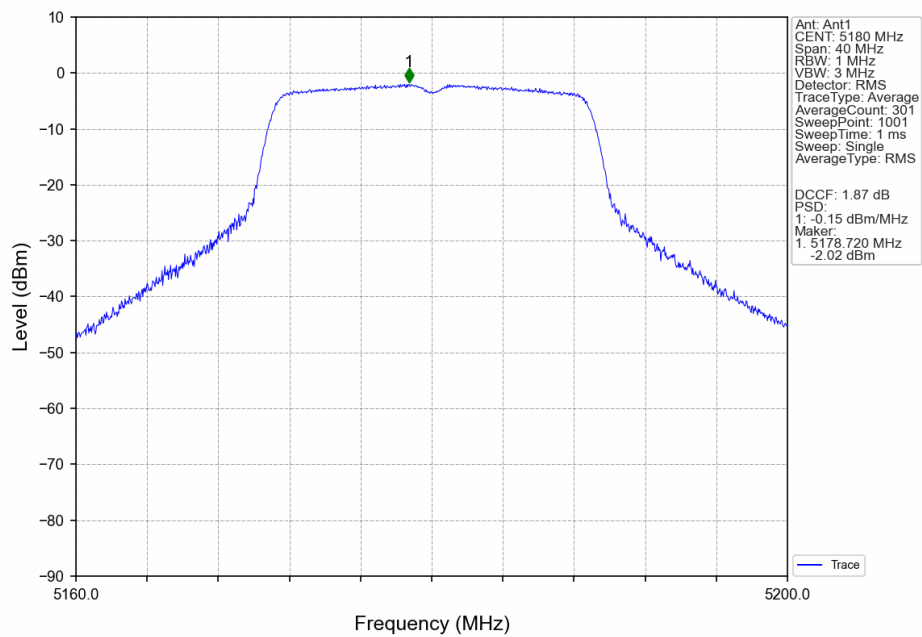
3.2.1 PSD



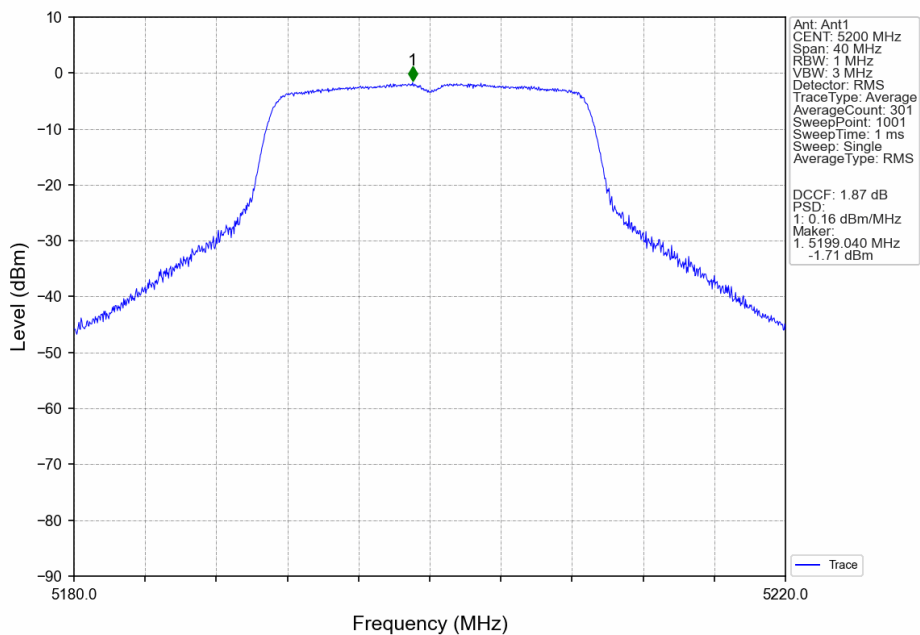
802.11a HCH 5240MHz Ant1 NTV



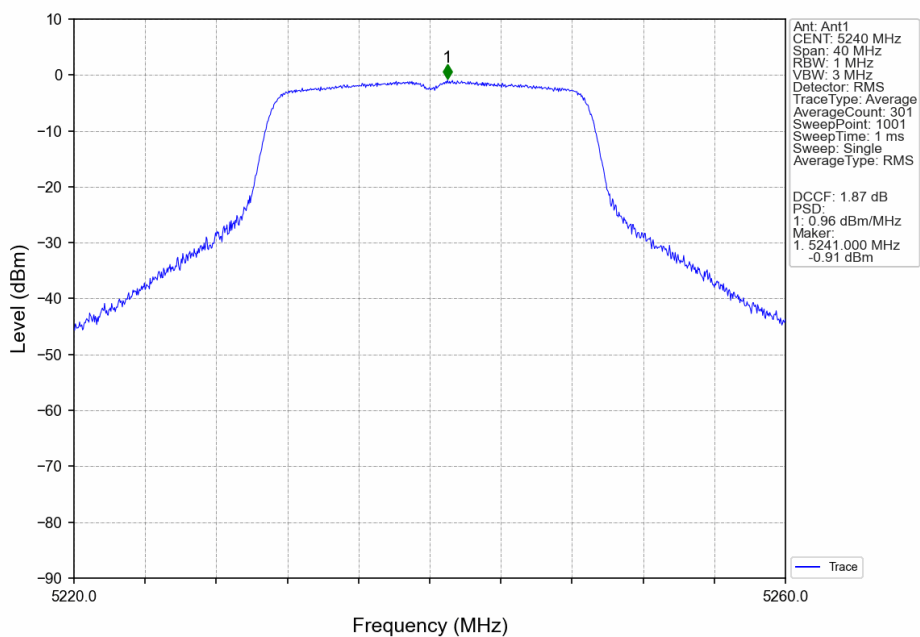
802.11n(HT20) LCH 5180MHz Ant1 NTV



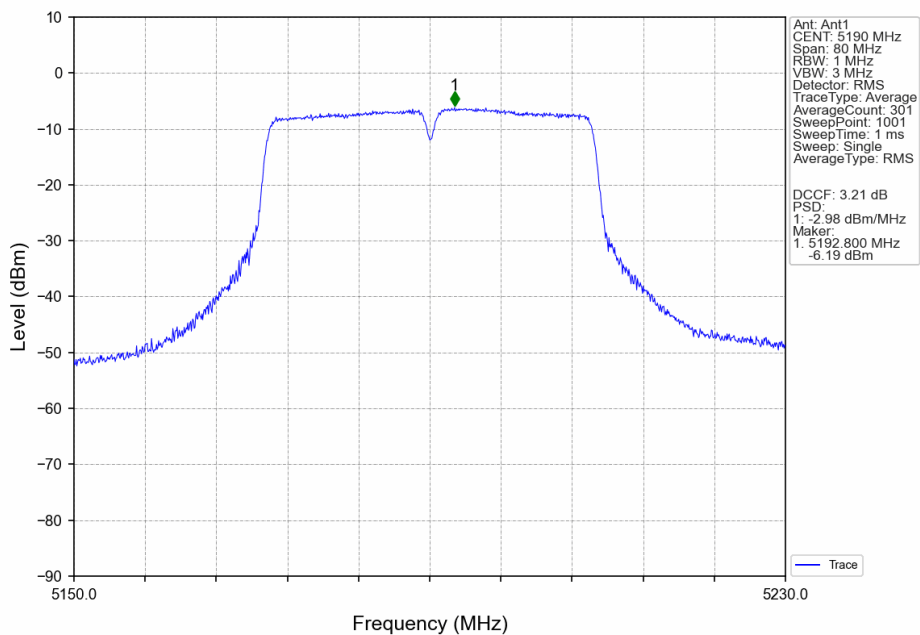
802.11n(HT20) MCH 5200MHz Ant1 NTNV



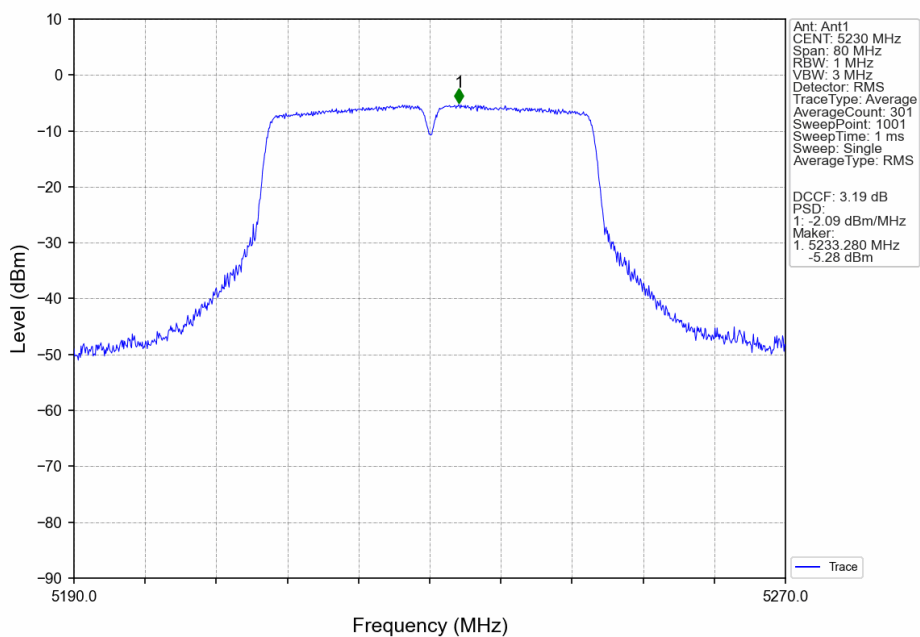
802.11n(HT20) HCH 5240MHz Ant1 NTNV



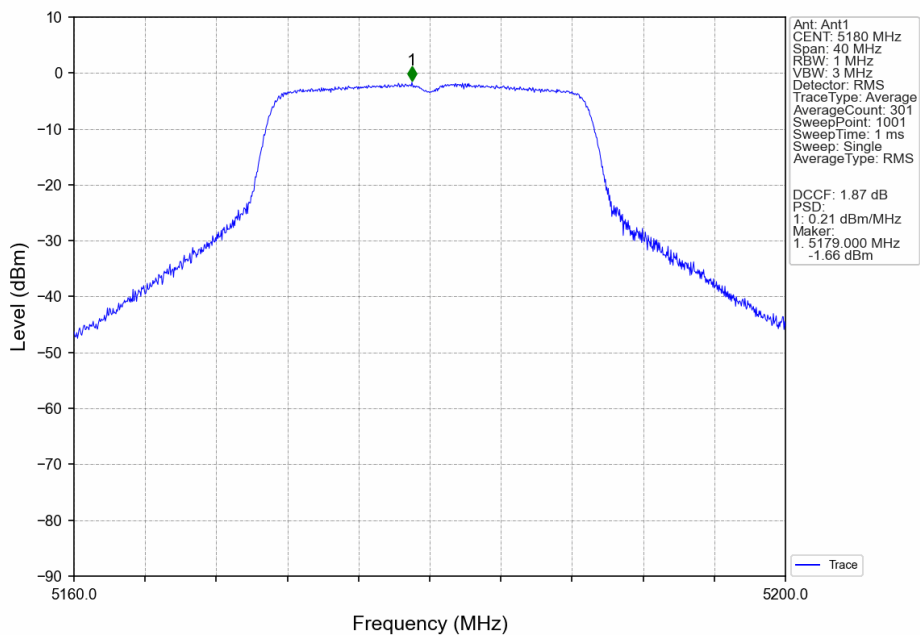
802.11n(HT40) LCH 5190MHz Ant1 NTN



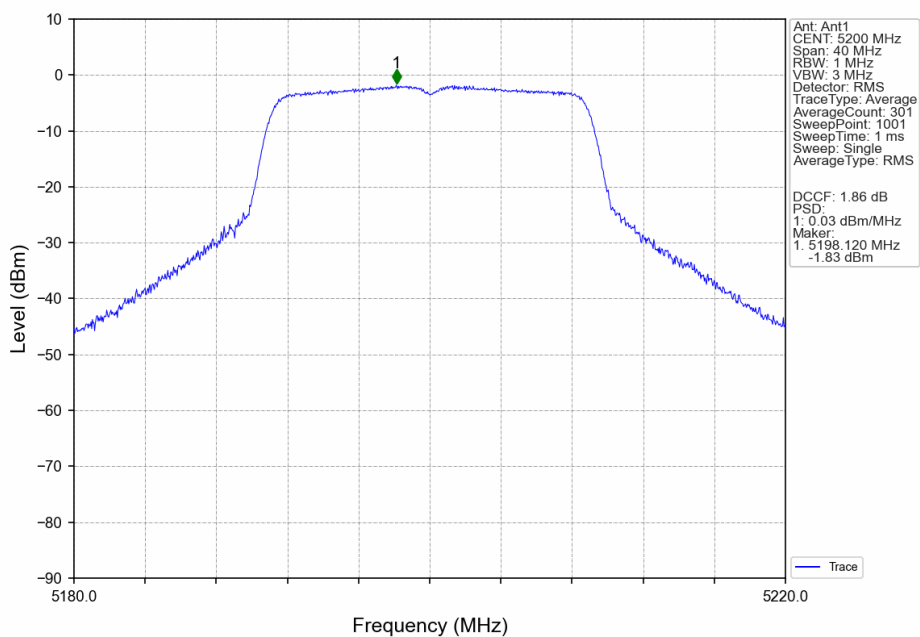
802.11n(HT40) HCH 5230MHz Ant1 NTN



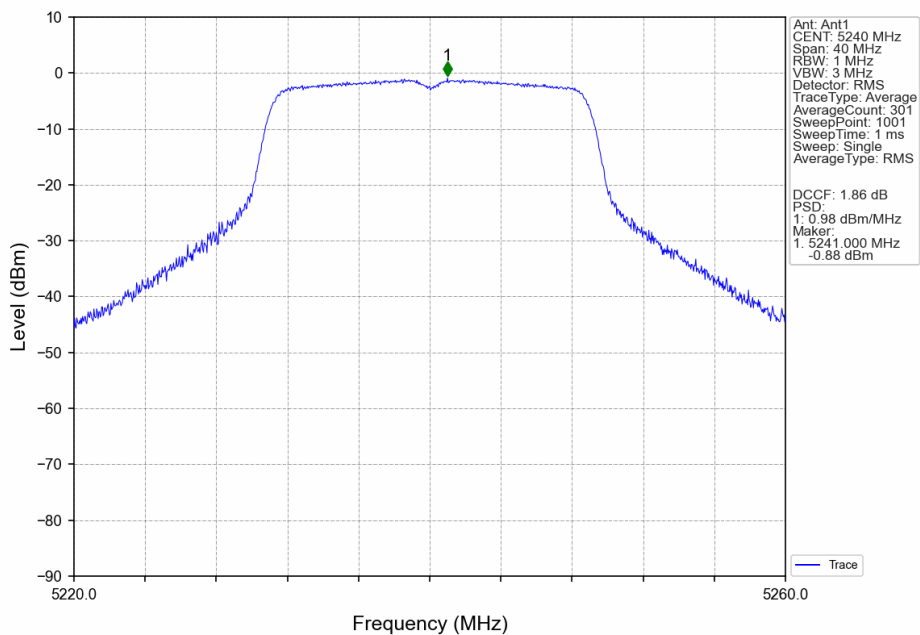
802.11ac(VHT20) LCH 5180MHz Ant1 NTNV



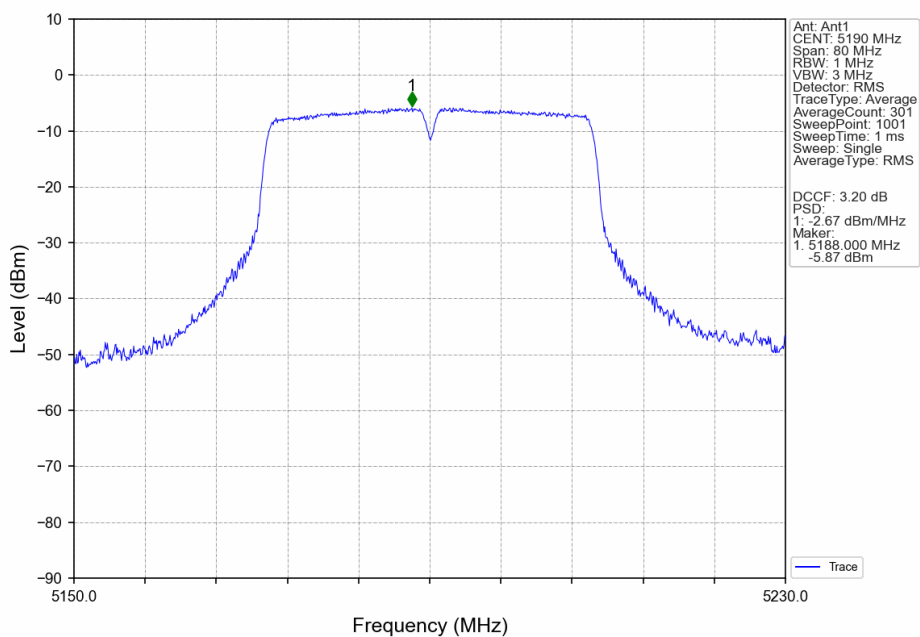
802.11ac(VHT20) MCH 5200MHz Ant1 NTNV

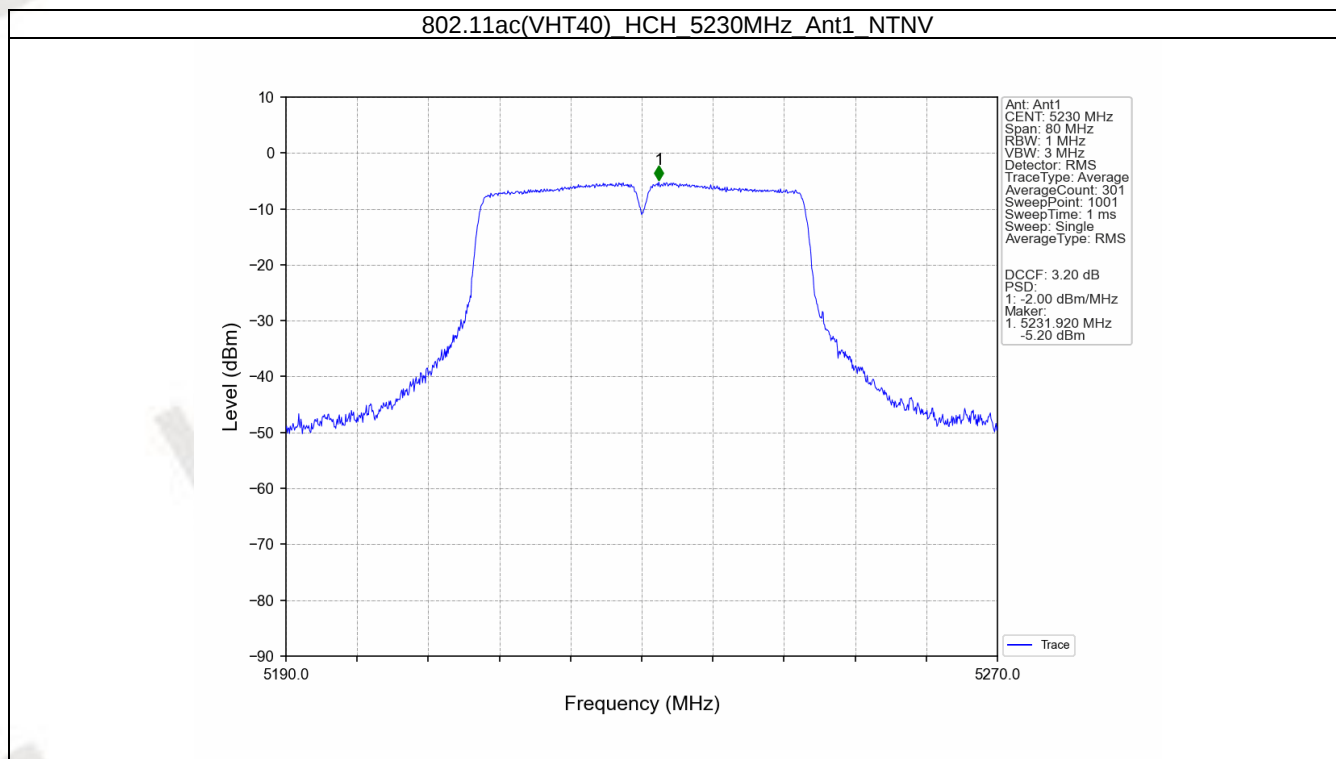


802.11ac(VHT20) HCH 5240MHz Ant1 NTN



802.11ac(VHT40) LCH 5190MHz Ant1 NTN





4. Frequency Stability

4.1 Test Result

4.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
Carrier Wave	SISO	5180	20	102	5179.998	5150 to 5250	Pass
				120	5179.998	5150 to 5250	Pass
				138	5179.998	5150 to 5250	Pass
			-30	120	5179.998	5150 to 5250	Pass
			-20	120	5179.998	5150 to 5250	Pass
			-10	120	5179.998	5150 to 5250	Pass
			0	120	5179.998	5150 to 5250	Pass
			10	120	5179.998	5150 to 5250	Pass
			30	120	5179.998	5150 to 5250	Pass
			40	120	5179.998	5150 to 5250	Pass
			50	120	5179.998	5150 to 5250	Pass
		5200	20	102	5199.998	5150 to 5250	Pass
				120	5199.998	5150 to 5250	Pass
				138	5199.998	5150 to 5250	Pass
			-30	120	5199.998	5150 to 5250	Pass
			-20	120	5199.998	5150 to 5250	Pass
			-10	120	5199.998	5150 to 5250	Pass
			0	120	5199.998	5150 to 5250	Pass
			10	120	5199.998	5150 to 5250	Pass
			30	120	5199.998	5150 to 5250	Pass
			40	120	5199.998	5150 to 5250	Pass
			50	120	5199.998	5150 to 5250	Pass
		5240	20	102	5239.998	5150 to 5250	Pass
				120	5239.998	5150 to 5250	Pass
				138	5239.998	5150 to 5250	Pass
			-30	120	5239.998	5150 to 5250	Pass
			-20	120	5239.998	5150 to 5250	Pass
			-10	120	5239.998	5150 to 5250	Pass
			0	120	5239.998	5150 to 5250	Pass
			10	120	5239.998	5150 to 5250	Pass
			30	120	5239.998	5150 to 5250	Pass
			40	120	5239.998	5150 to 5250	Pass
			50	120	5239.998	5150 to 5250	Pass
		5190	20	102	5189.998	5150 to 5250	Pass
				120	5189.998	5150 to 5250	Pass
				138	5189.998	5150 to 5250	Pass
			-30	120	5189.998	5150 to 5250	Pass
			-20	120	5189.998	5150 to 5250	Pass
			-10	120	5189.998	5150 to 5250	Pass
			0	120	5189.998	5150 to 5250	Pass
			10	120	5189.998	5150 to 5250	Pass
			30	120	5189.998	5150 to 5250	Pass
			40	120	5189.998	5150 to 5250	Pass
			50	120	5189.998	5150 to 5250	Pass
		5230	20	102	5229.998	5150 to 5250	Pass
				120	5229.998	5150 to 5250	Pass
				138	5229.998	5150 to 5250	Pass
			-30	120	5229.998	5150 to 5250	Pass
			-20	120	5229.998	5150 to 5250	Pass
			-10	120	5229.998	5150 to 5250	Pass

			0	120	5229.998	5150 to 5250	Pass
			10	120	5229.998	5150 to 5250	Pass
			30	120	5229.998	5150 to 5250	Pass
			40	120	5229.998	5150 to 5250	Pass
			50	120	5229.998	5150 to 5250	Pass