

Appendix - 5G WIFI

1. Duty Cycle

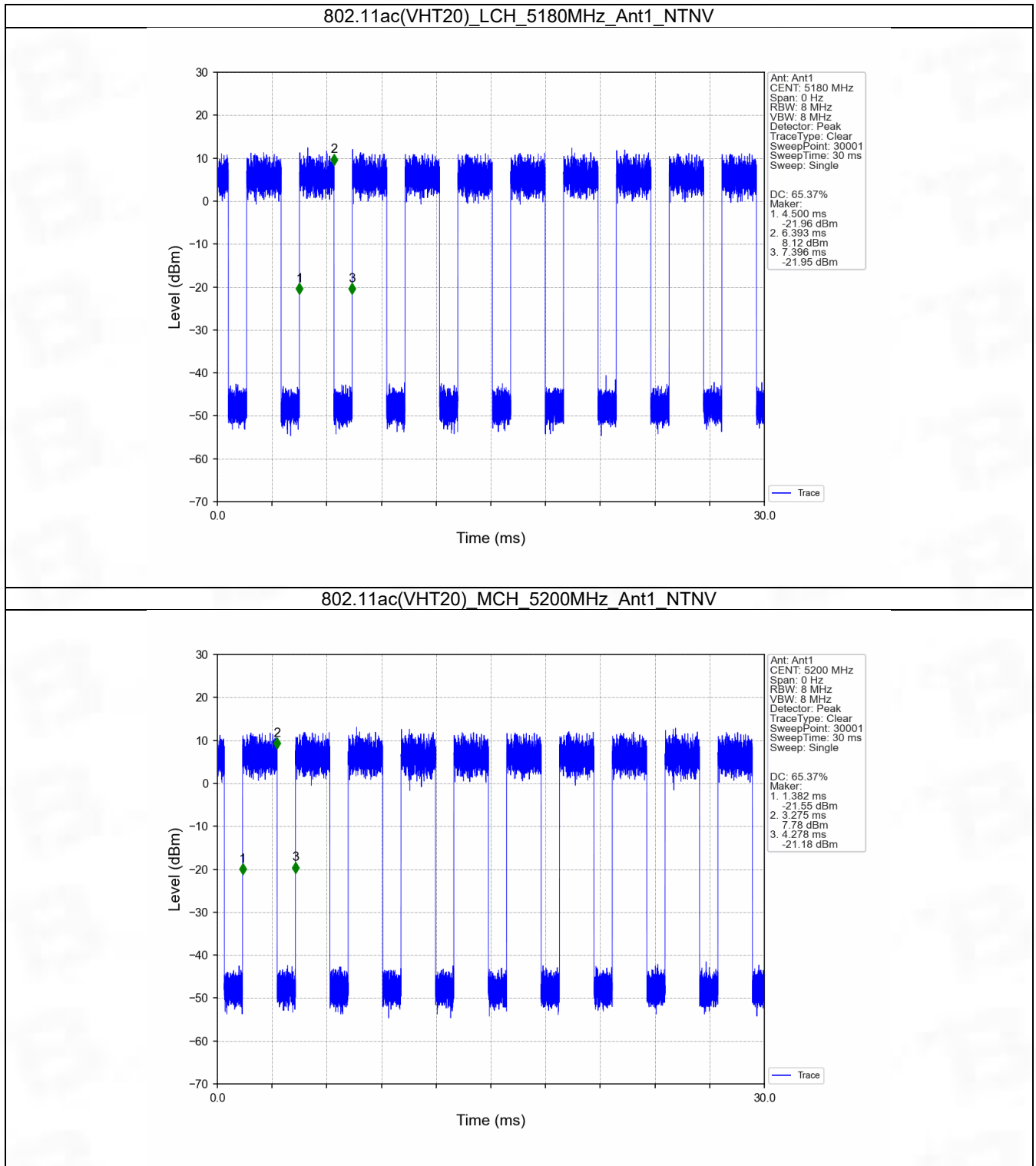
1.1 Test Result

1.1.1 Ant1

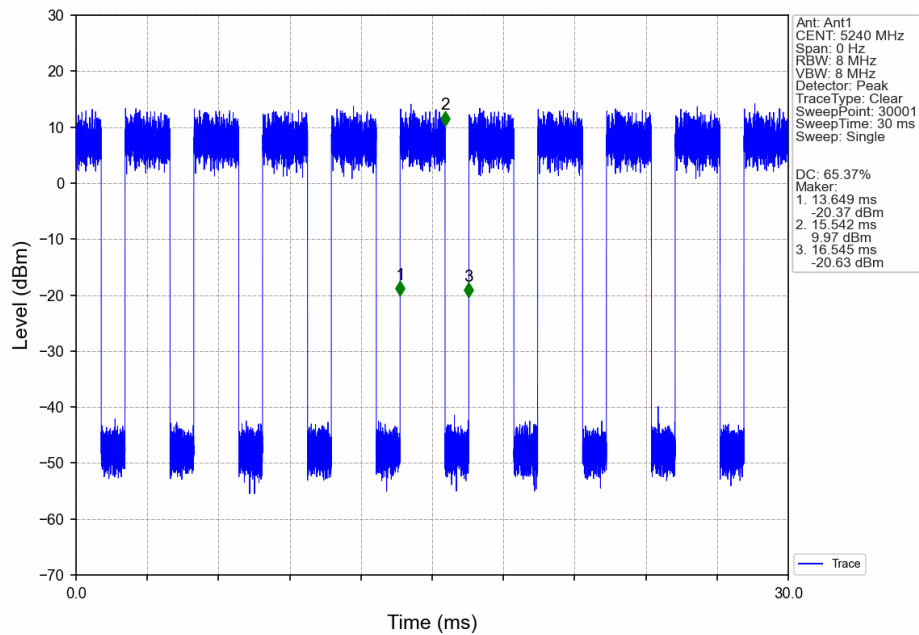
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11ac (VHT20)	SISO	5180	1.893	2.896	65.37	1.85	0.03
		5200	1.893	2.896	65.37	1.85	0.03
		5240	1.893	2.896	65.37	1.85	0.03
		5745	1.893	2.896	65.37	1.85	0.03
		5785	1.893	2.896	65.37	1.85	0.03
		5825	1.893	2.896	65.37	1.85	0.01
802.11ac (VHT80)	SISO	5210	0.453	1.456	31.11	5.07	0.03
		5775	0.453	1.456	31.11	5.07	0.02

1.2 Test Graph

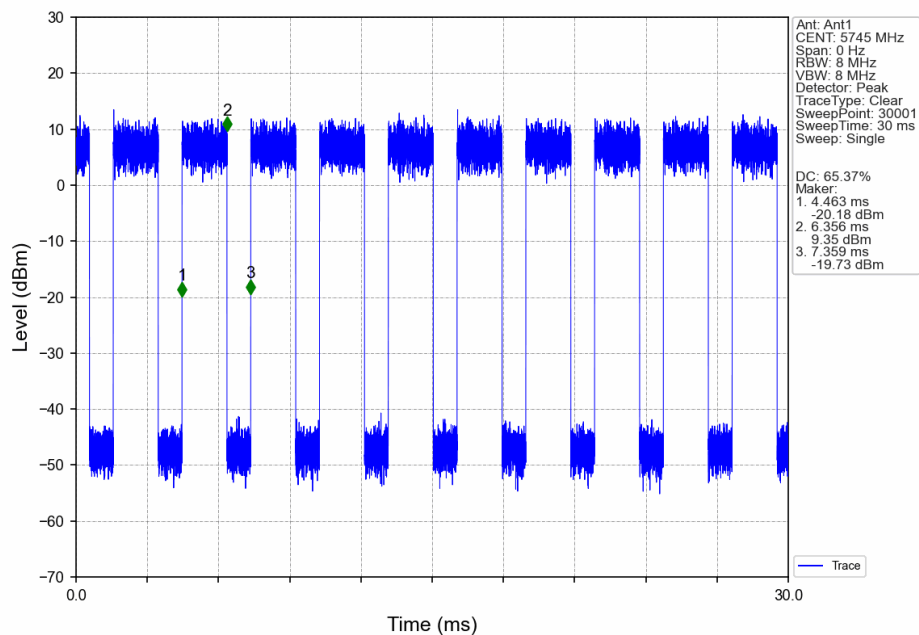
1.2.1 Ant1



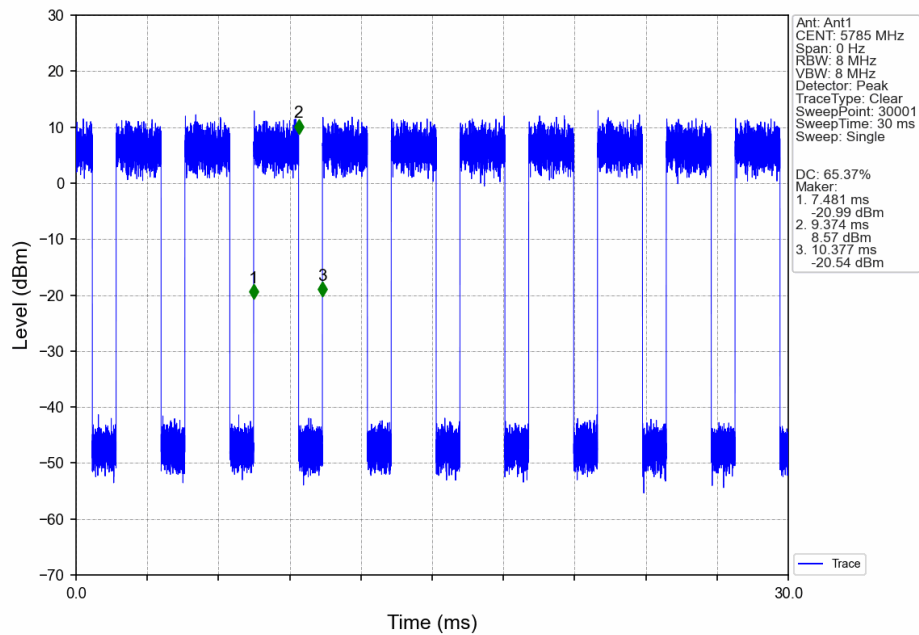
802.11ac(VHT20) HCH_5240MHz_Ant1_NTNV



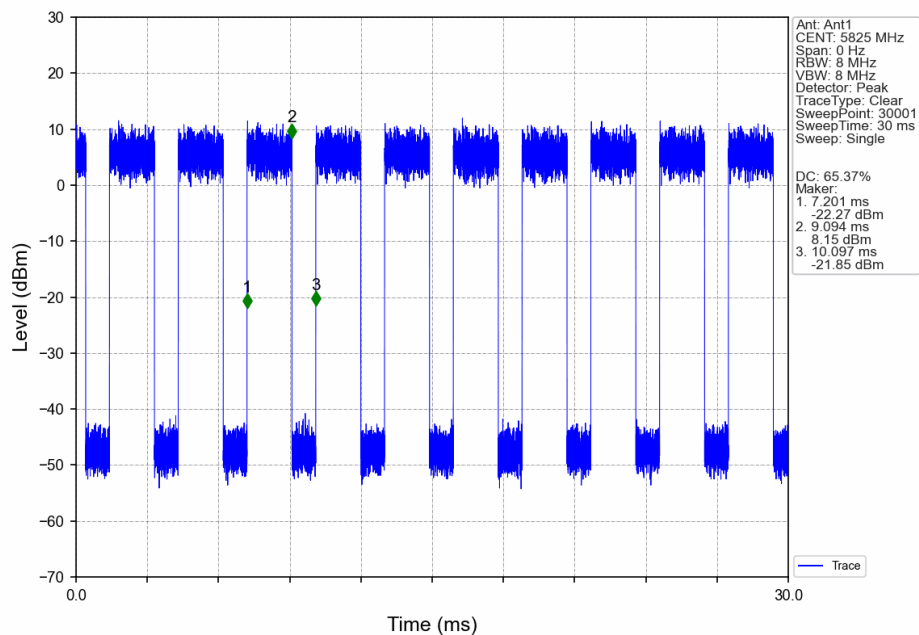
802.11ac(VHT20) LCH_5745MHz_Ant1_NTNV



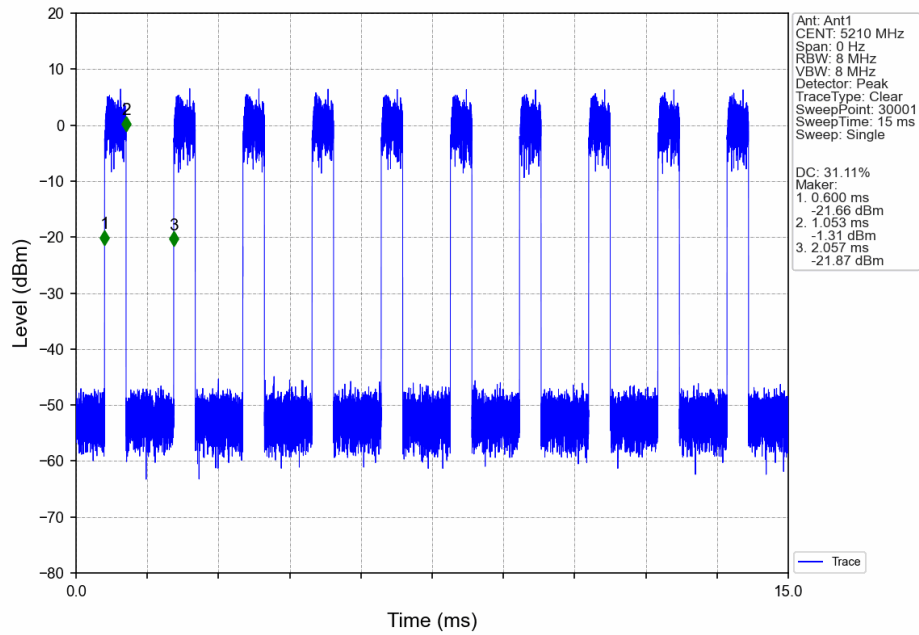
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



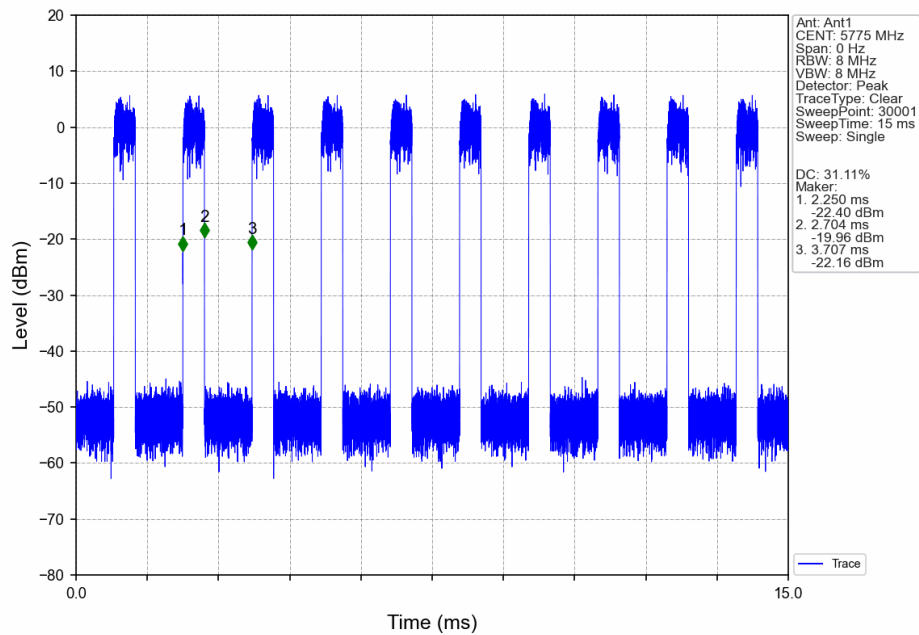
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



802.11ac(VHT80) MCH_5210MHz_Ant1_NTNV



802.11ac(VHT80) MCH_5775MHz_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	
802.11ac (VHT20)	SISO	5180	1	18.196	/	Pass
		5200	1	18.301	/	Pass
		5240	1	18.444	/	Pass
		5745	1	18.127	/	Pass
		5785	1	17.978	/	Pass
		5825	1	18.109	/	Pass
802.11ac (VHT80)	SISO	5210	1	77.708	/	Pass
		5775	1	75.861	/	Pass

2.1.2 26dB BW

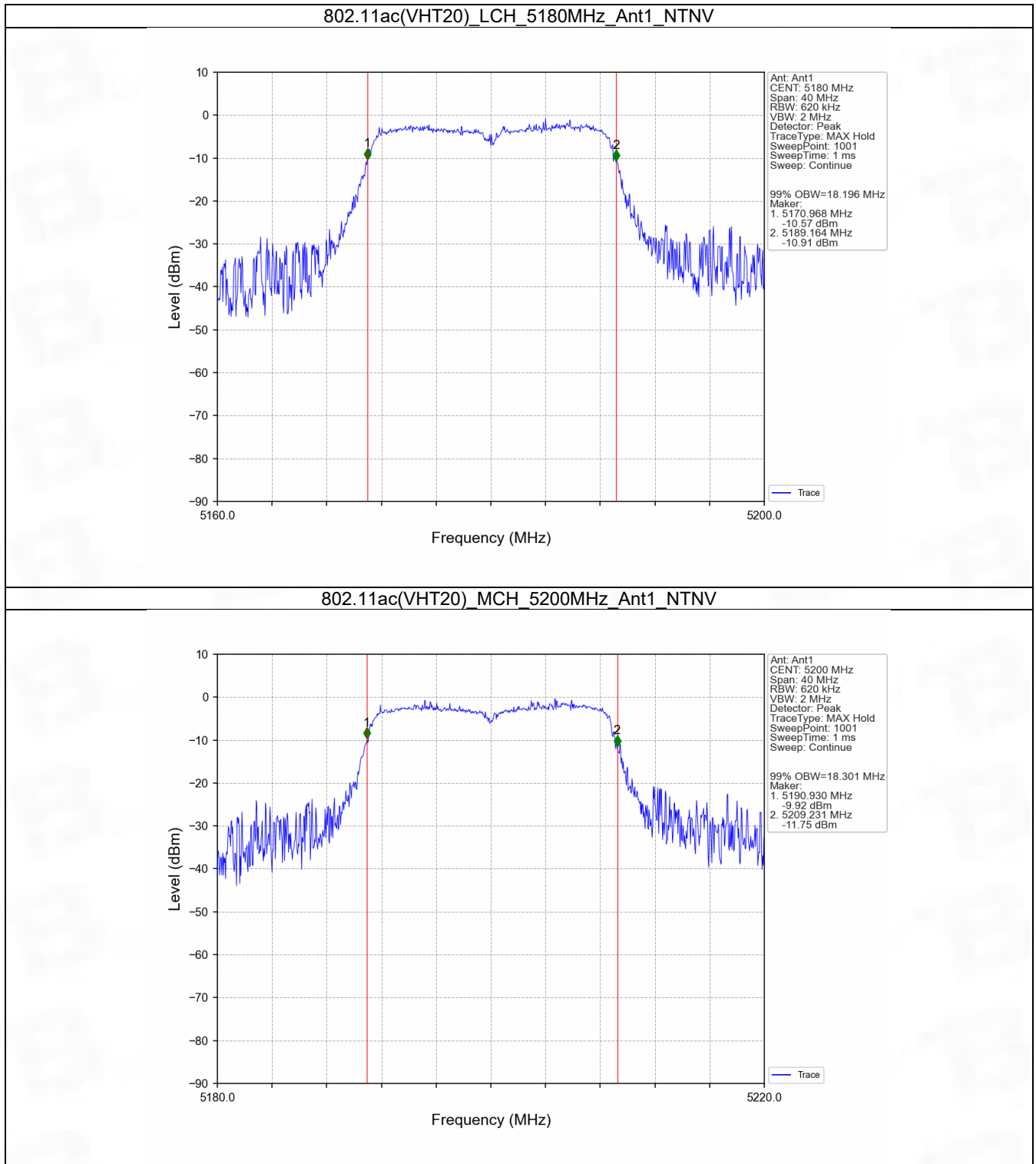
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11ac (VHT20)	SISO	5180	1	20.314	/	Pass
		5200	1	21.500	/	Pass
		5240	1	20.666	/	Pass
802.11ac (VHT80)	SISO	5210	1	116.356	/	Pass

2.1.3 6dB BW

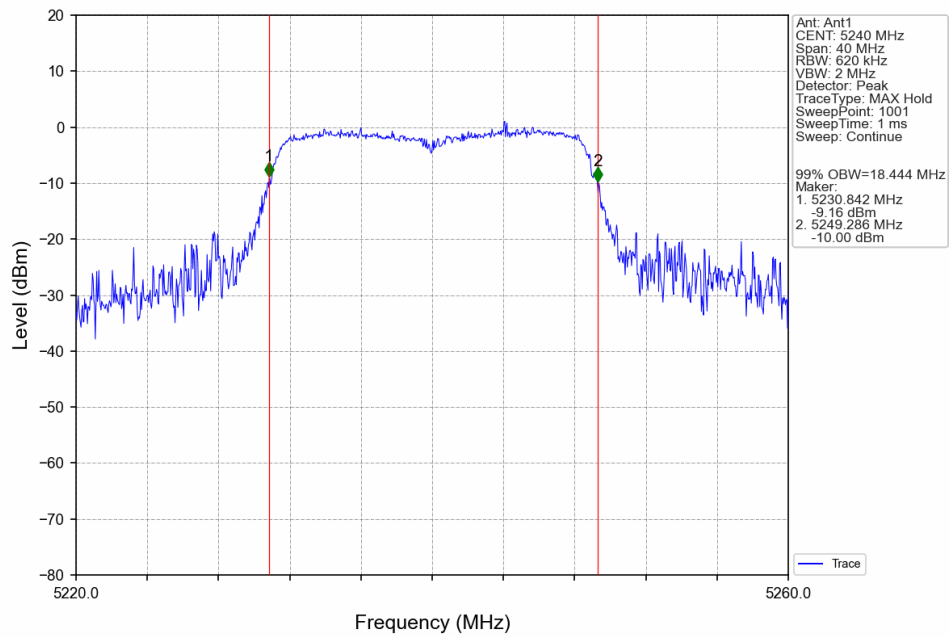
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11ac (VHT20)	SISO	5745	1	16.682	≥ 0.5	Pass
		5785	1	16.708	≥ 0.5	Pass
		5825	1	16.977	≥ 0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.161	≥ 0.5	Pass

2.2 Test Graph

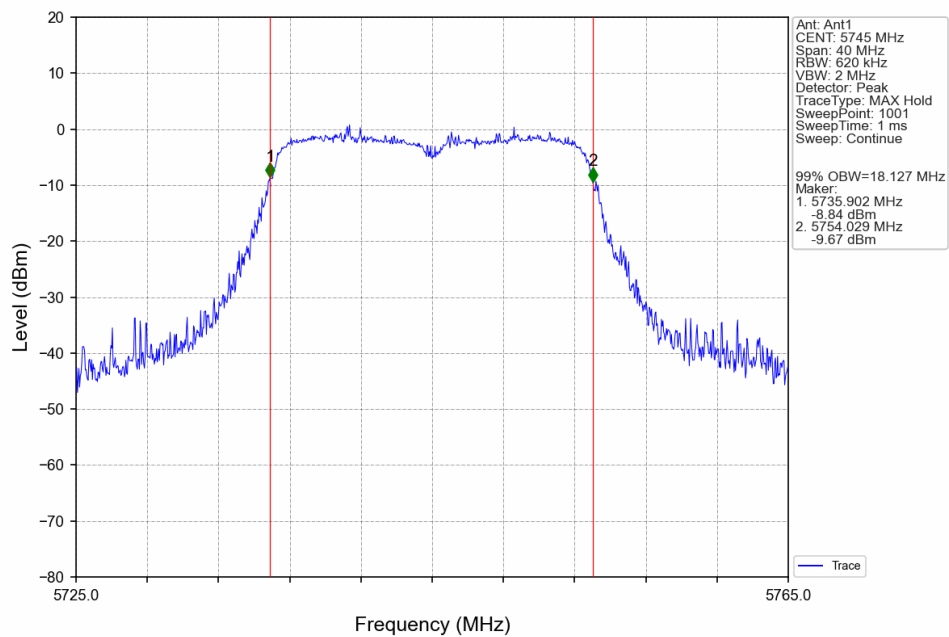
2.2.1 OBW



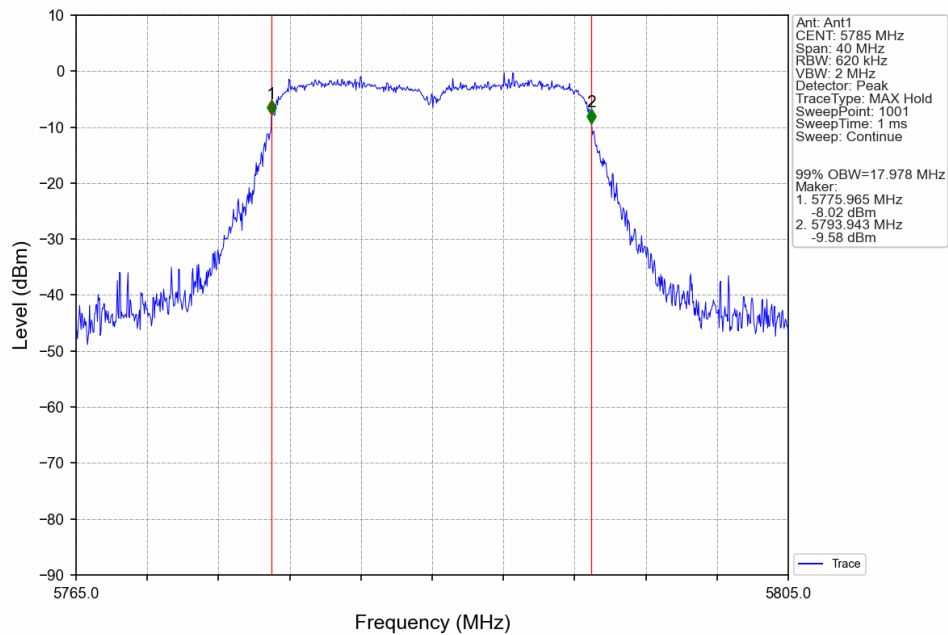
802.11ac(VHT20) HCH_5240MHz_Ant1_NTNV



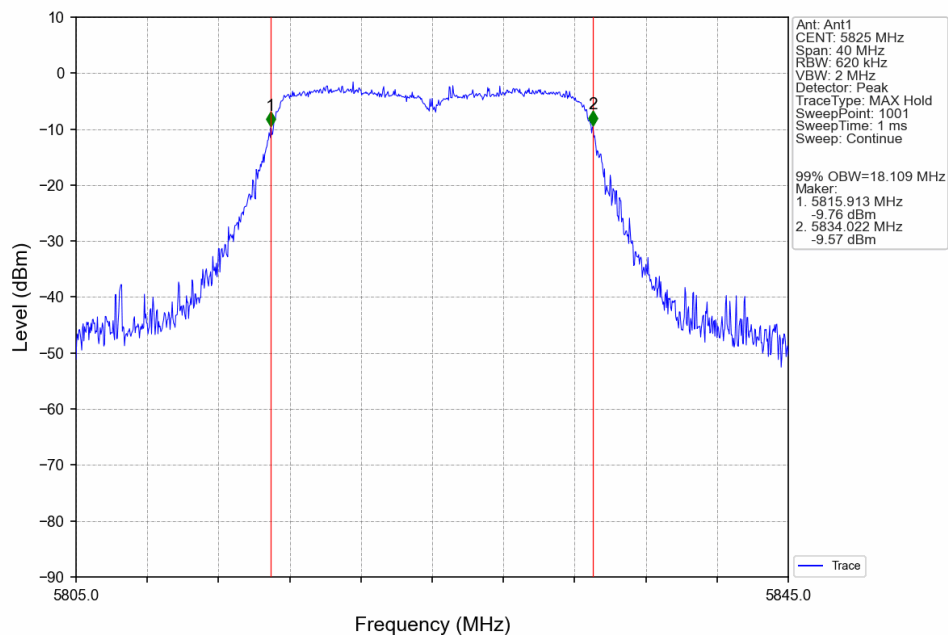
802.11ac(VHT20) LCH_5745MHz_Ant1_NTNV



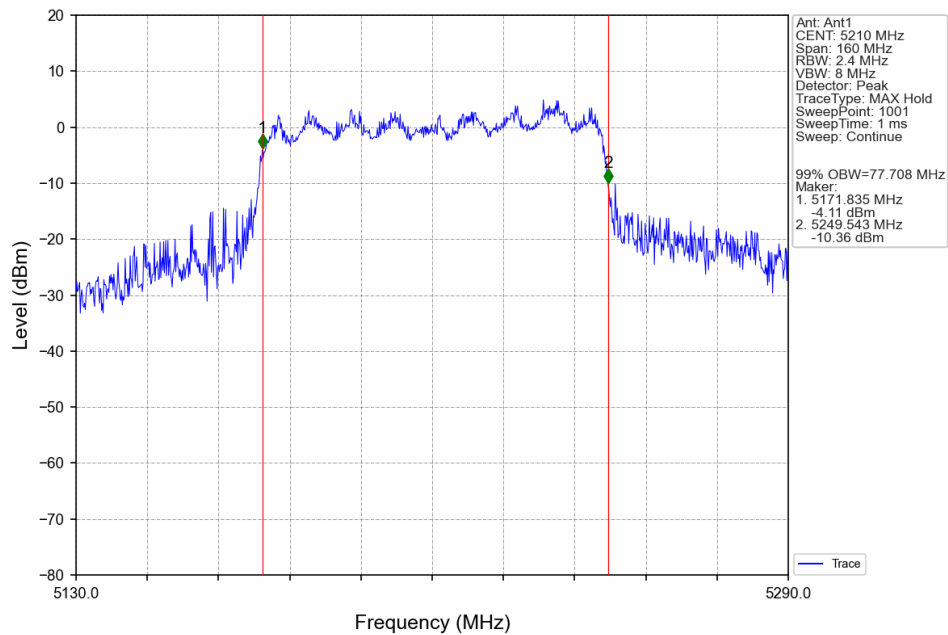
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



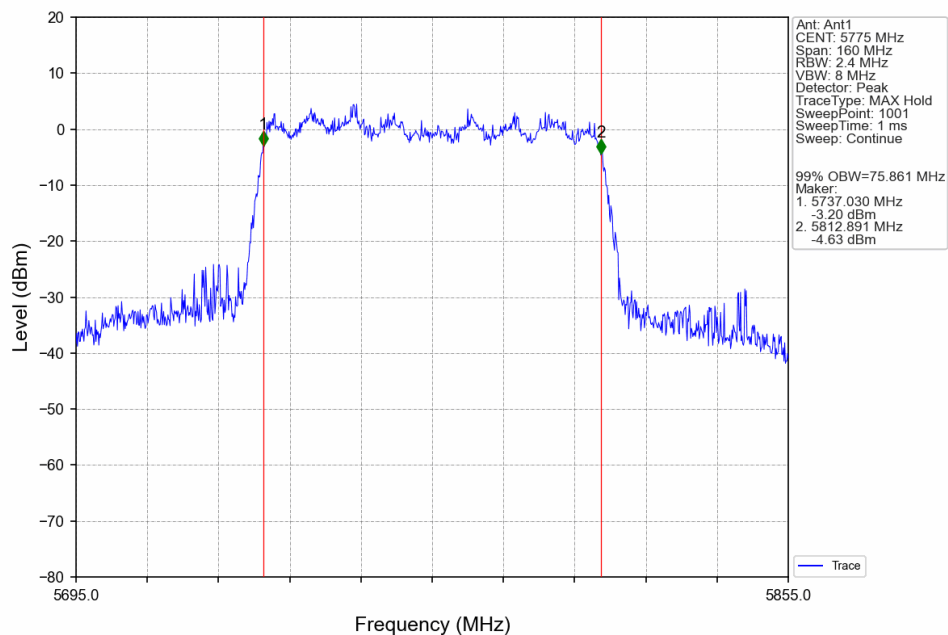
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



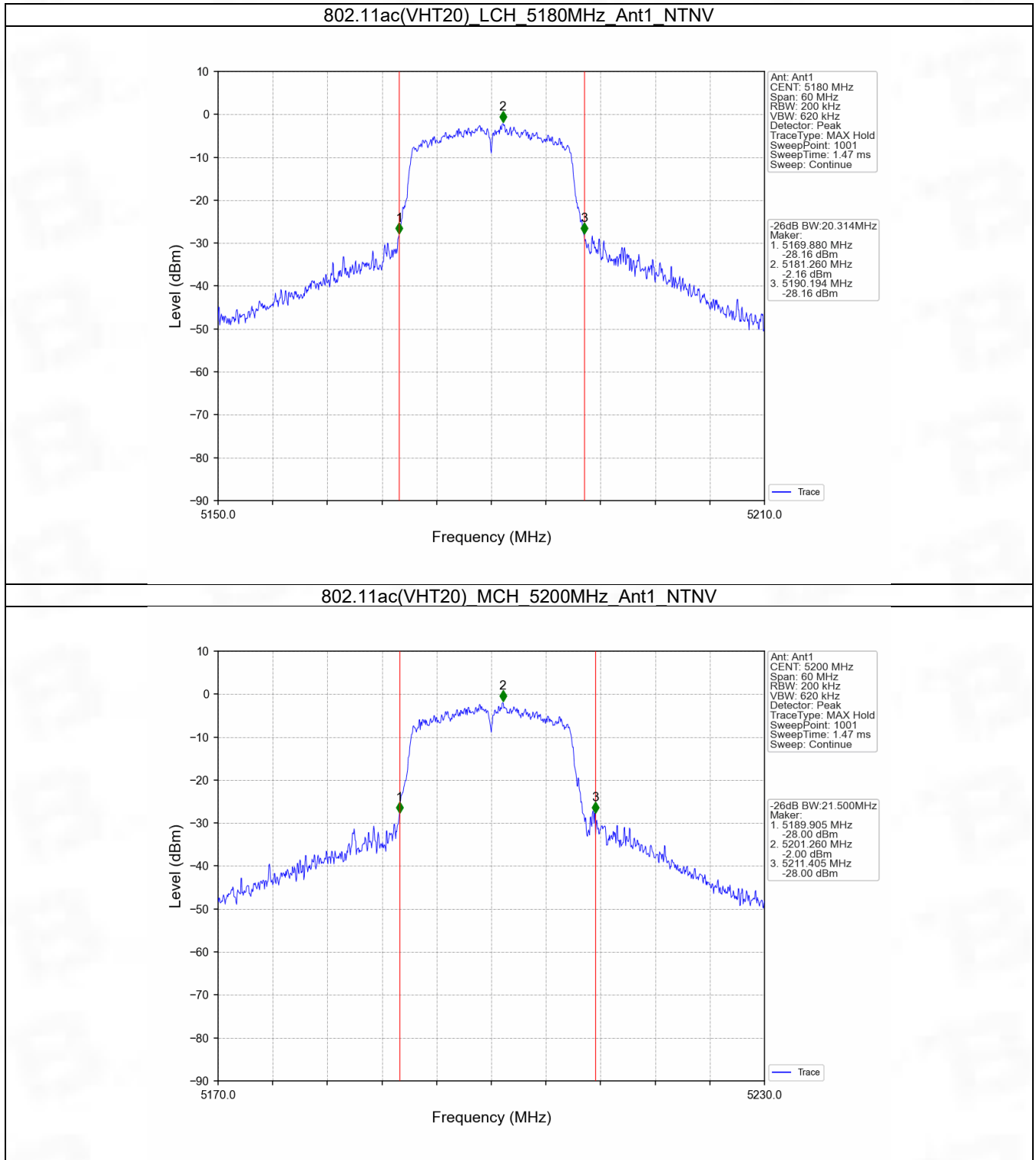
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



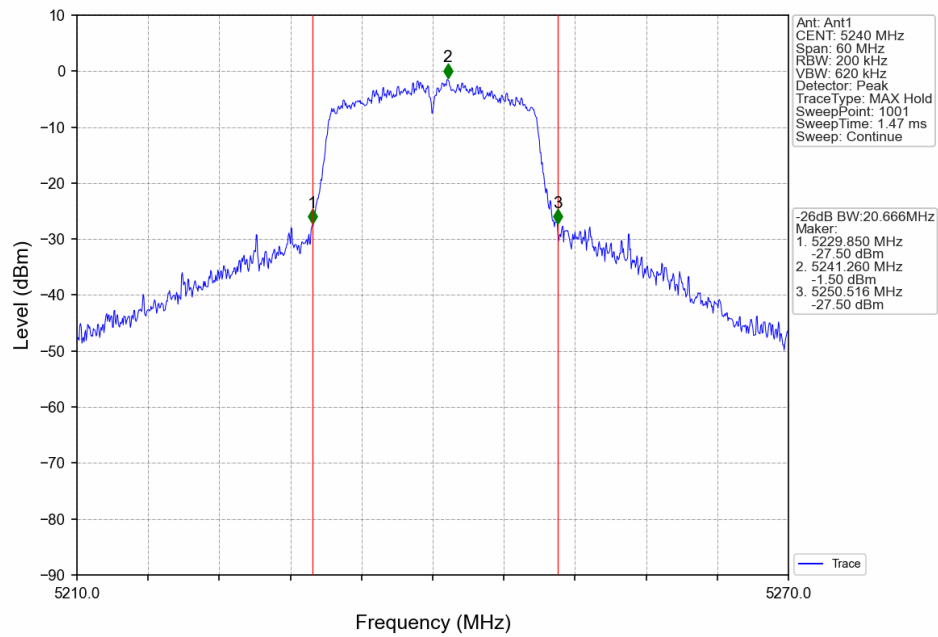
802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



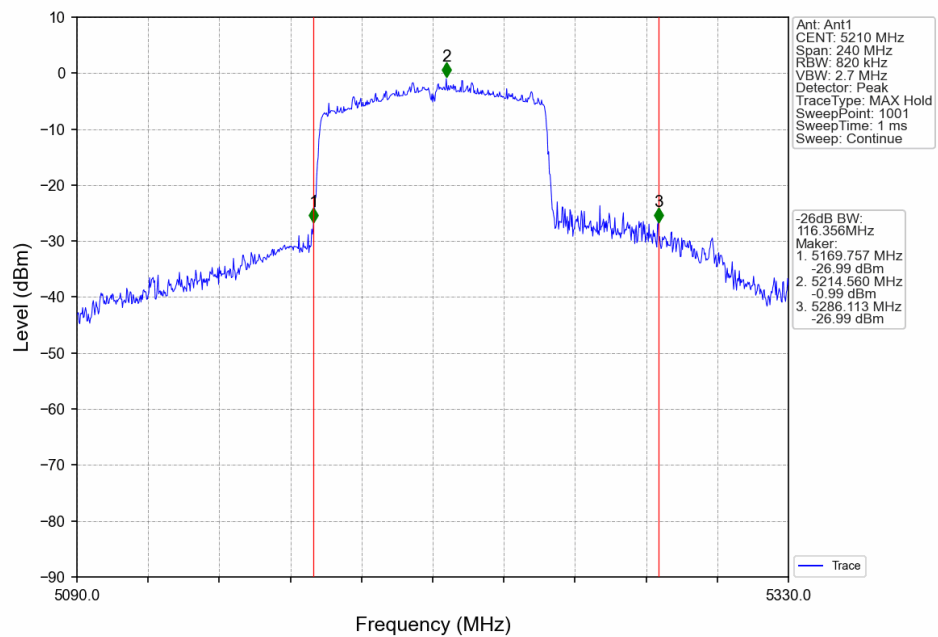
2.2.2 26dB BW



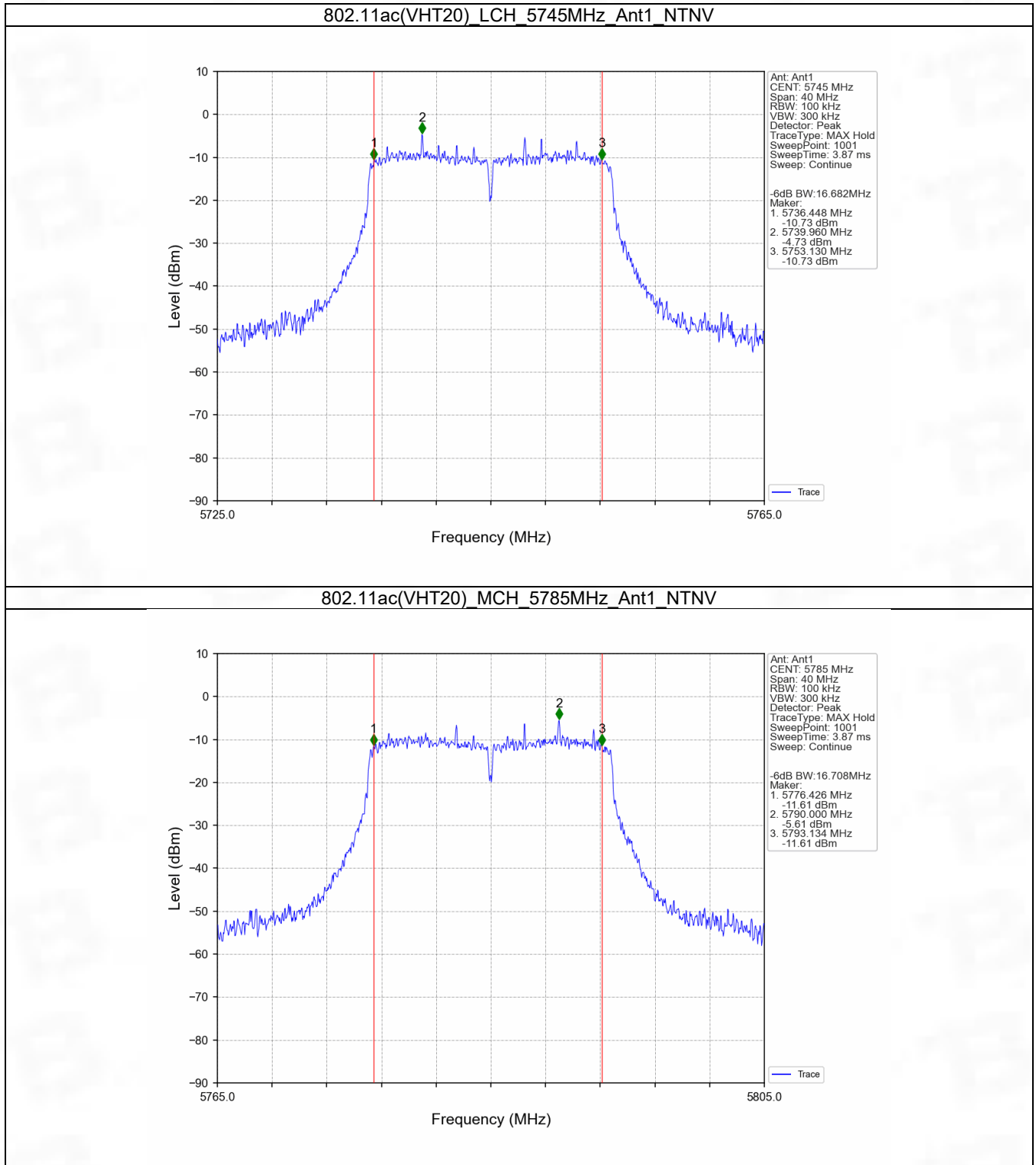
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



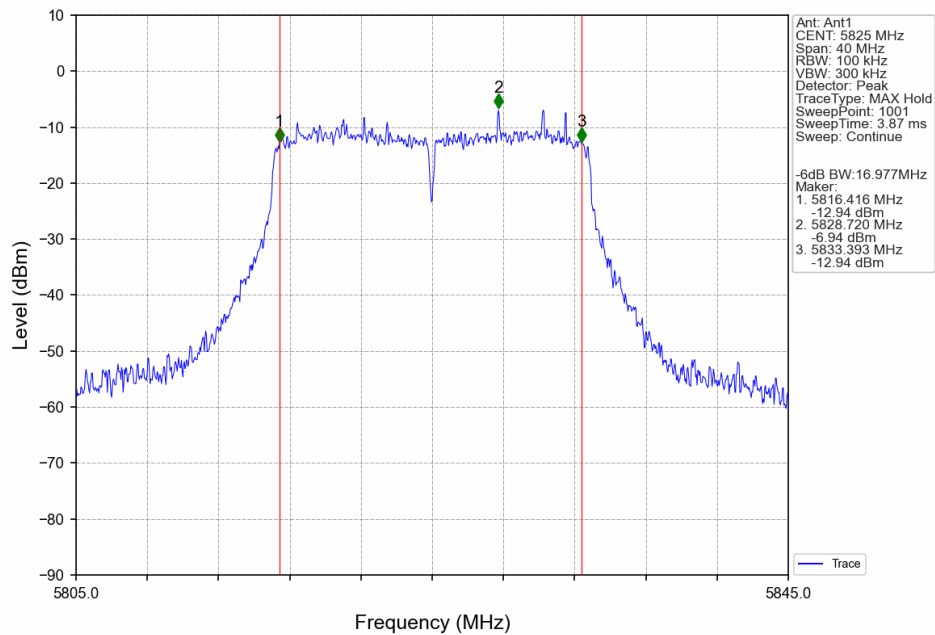
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



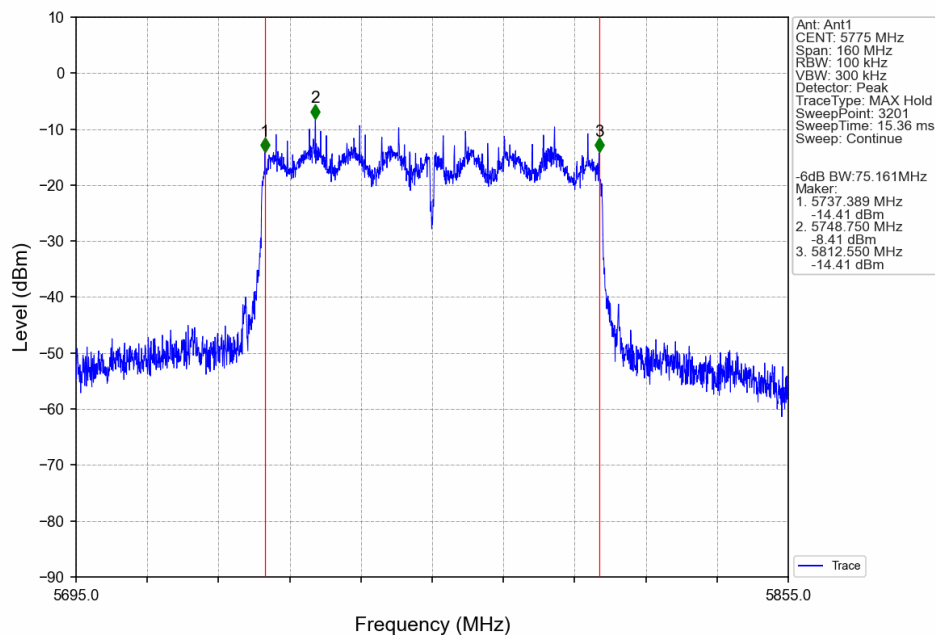
2.2.3 6dB BW



802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



3. Maximum Conducted Output Power

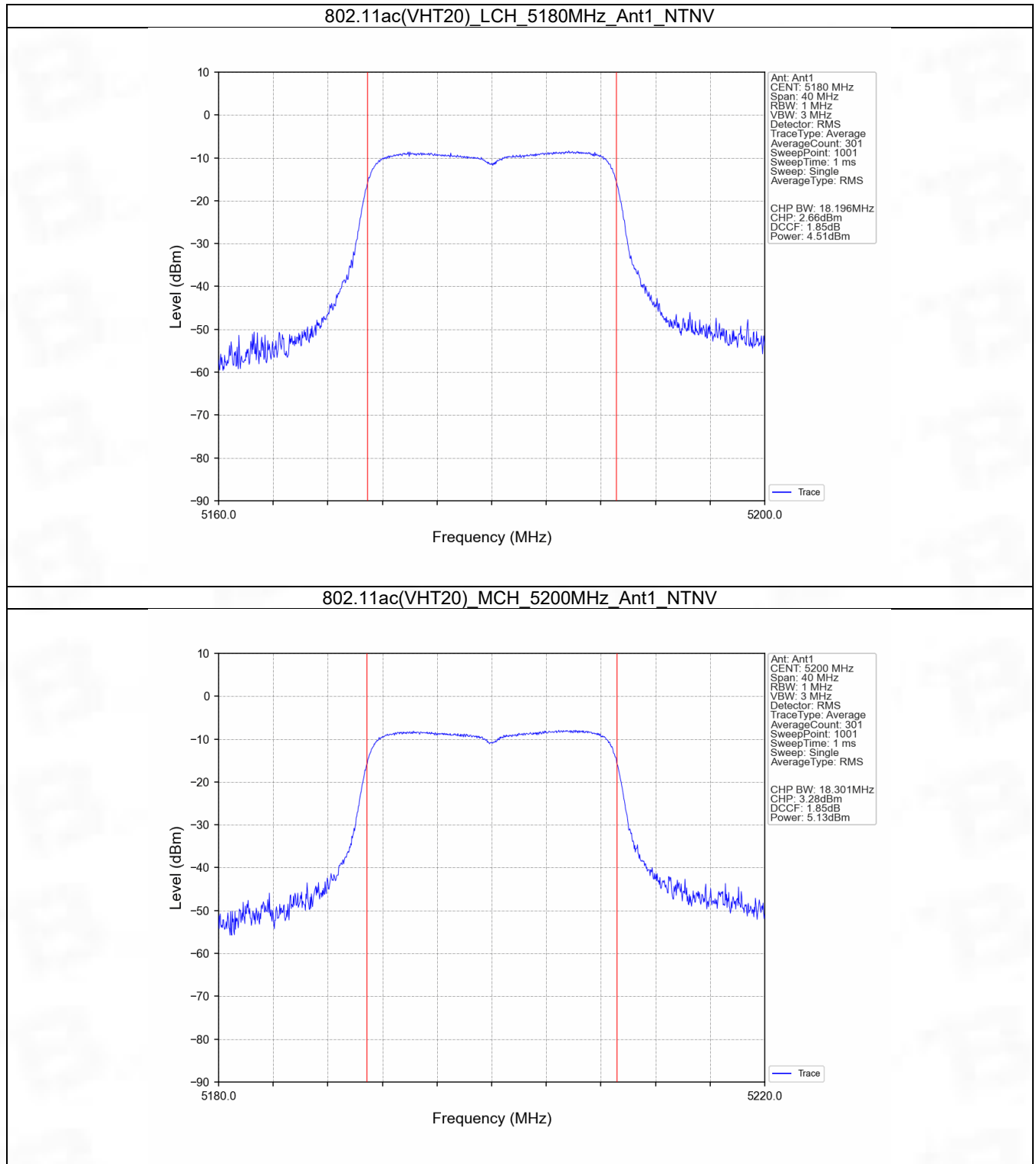
3.1 Test Result

3.1.1 Power

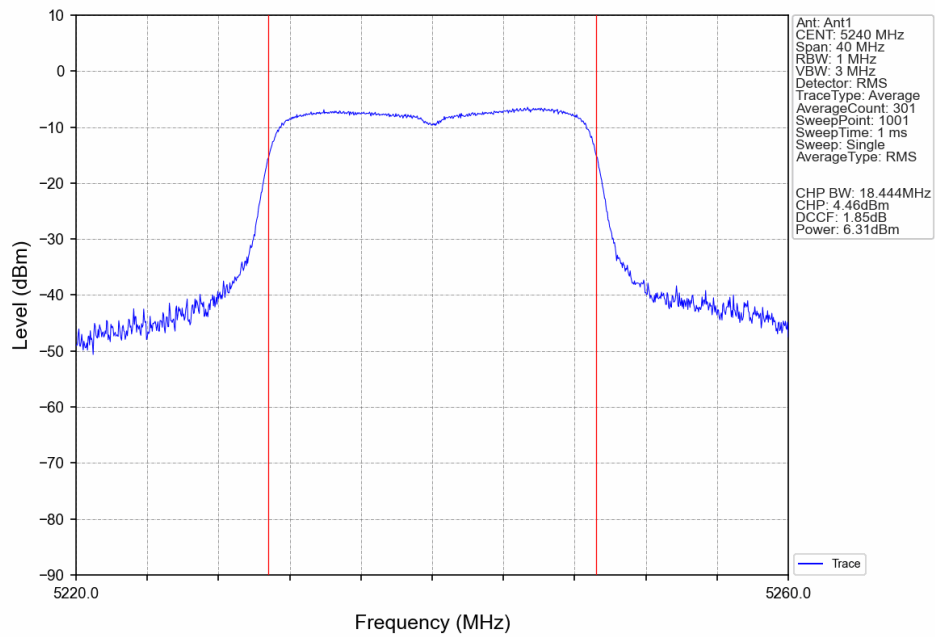
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11ac (VHT20)	SISO	5180	4.51	<=23.98	Pass
		5200	5.13	<=23.98	Pass
		5240	6.31	<=23.98	Pass
		5745	5.97	<=30	Pass
		5785	5.12	<=30	Pass
		5825	4.09	<=30	Pass
802.11ac (VHT80)	SISO	5210	7.71	<=23.98	Pass
		5775	7.79	<=30	Pass
Note1: Antenna Gain: - Band: 1 Ant1: 3.58dBi; - Band: 3 Ant1: 3.91dBi;					

3.2 Test Graph

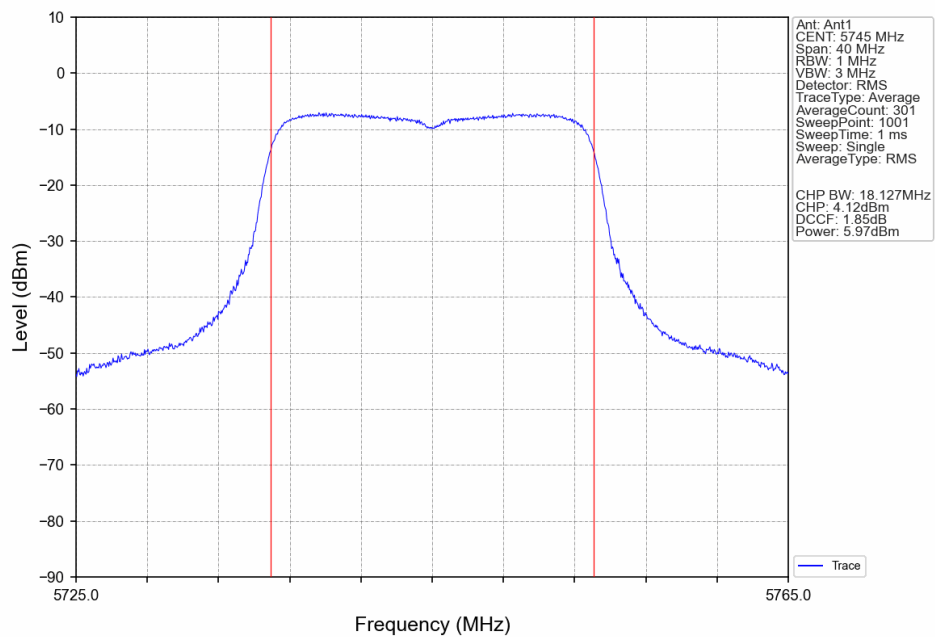
3.2.1 Power



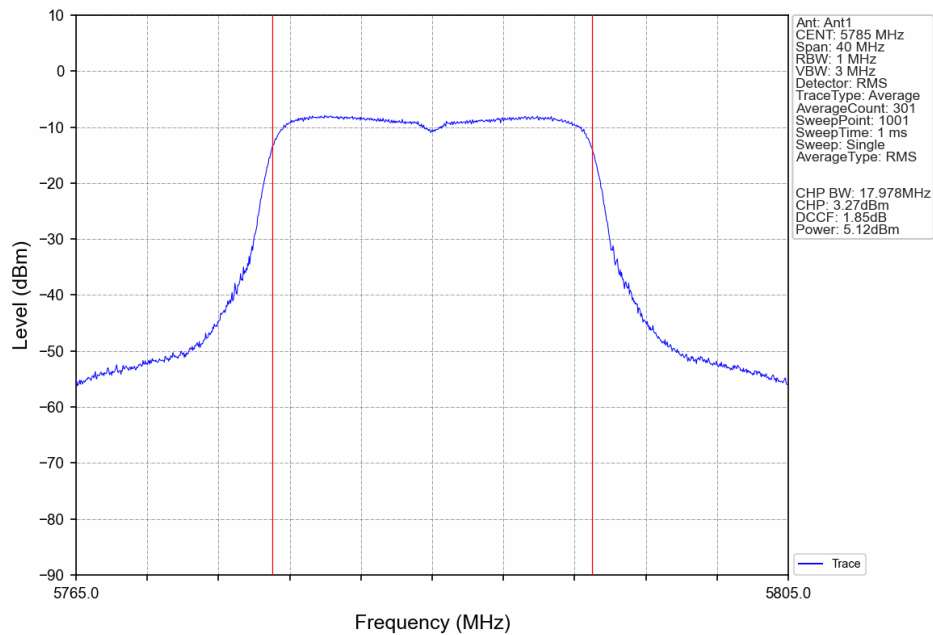
802.11ac(VHT20) HCH_5240MHz_Ant1_NTNV



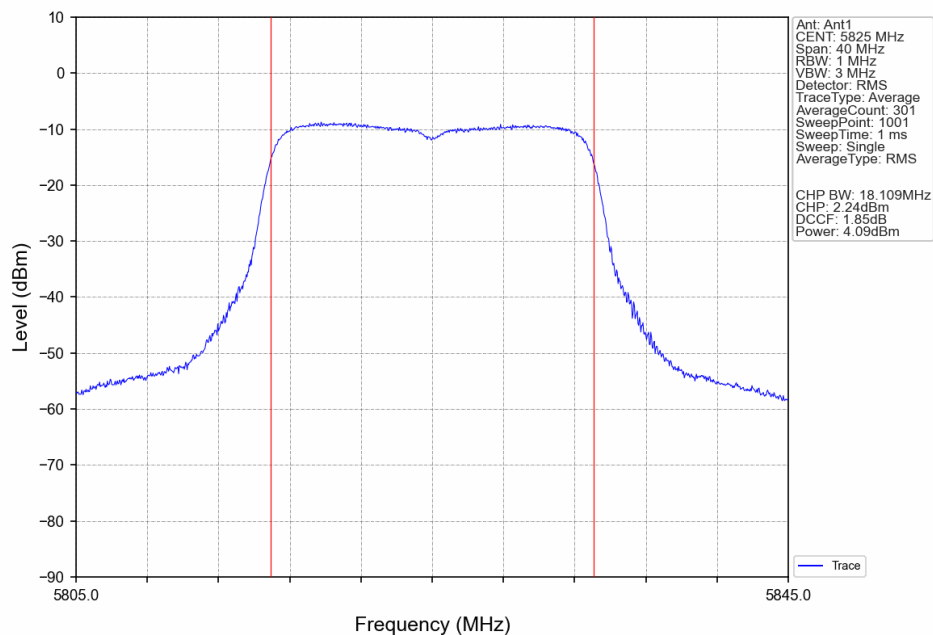
802.11ac(VHT20) LCH_5745MHz_Ant1_NTNV



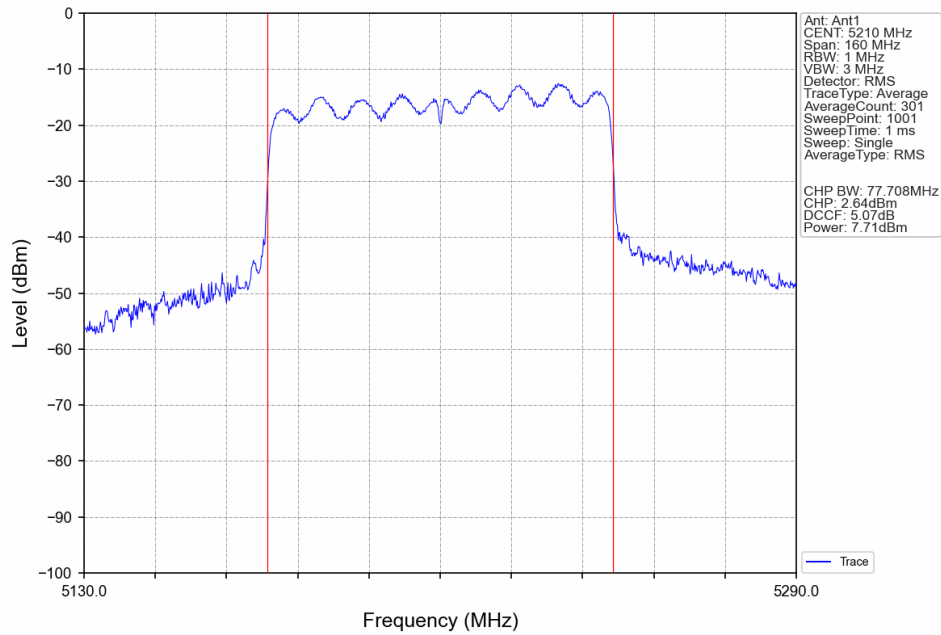
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



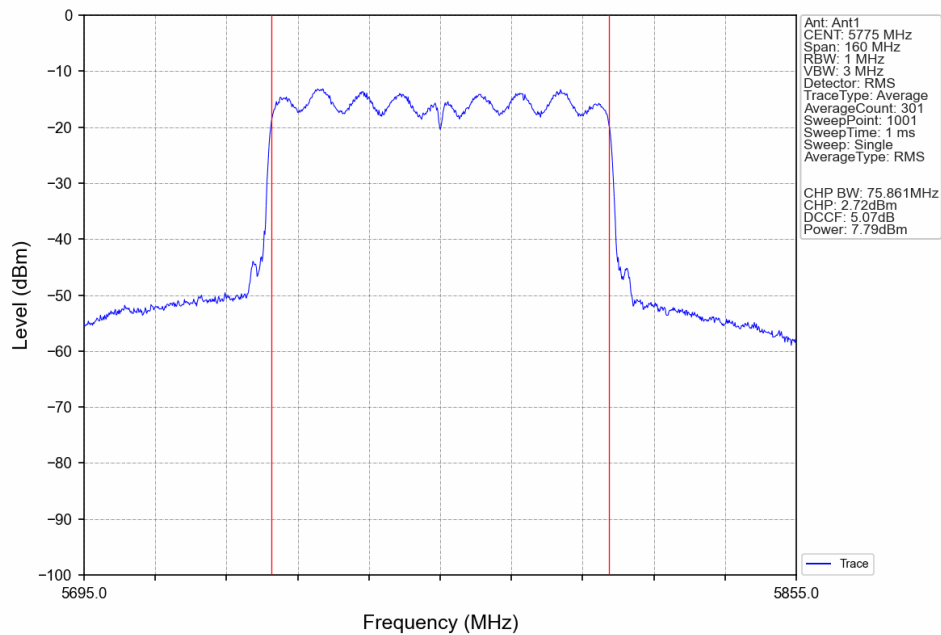
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



802.11ac(VHT80) MCH_5210MHz_Ant1_NTNV



802.11ac(VHT80) MCH_5775MHz_Ant1_NTNV



4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

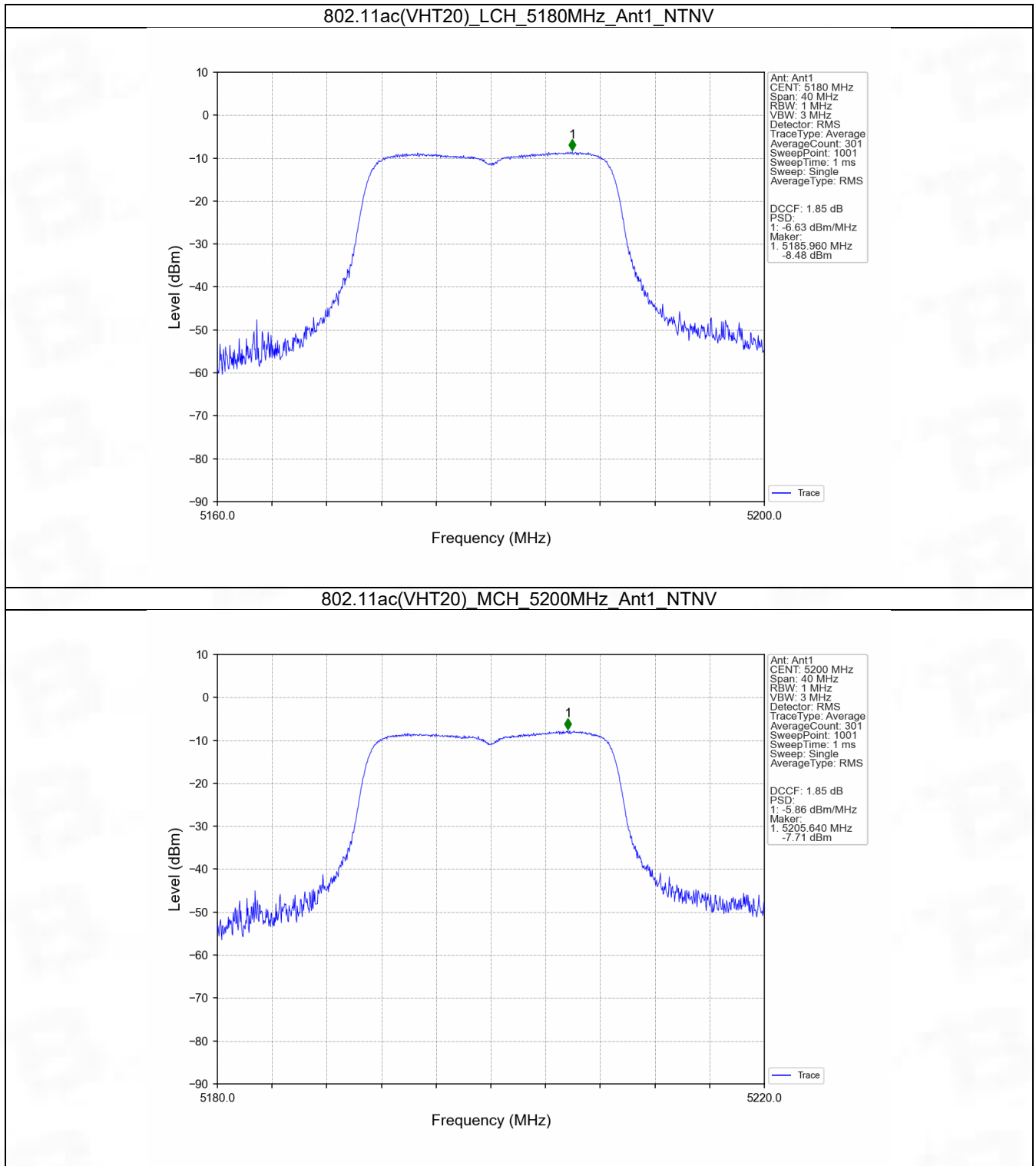
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11ac (VHT20)	SISO	5180	-6.63	<=11	Pass
		5200	-5.86	<=11	Pass
		5240	-4.66	<=11	Pass
802.11ac (VHT80)	SISO	5210	-7.31	<=11	Pass
Note1: Antenna Gain: - Band: 1 Ant1: 3.58dBi; - Band: 3 Ant1: 3.91dBi;					

4.1.2 PSD-Band3

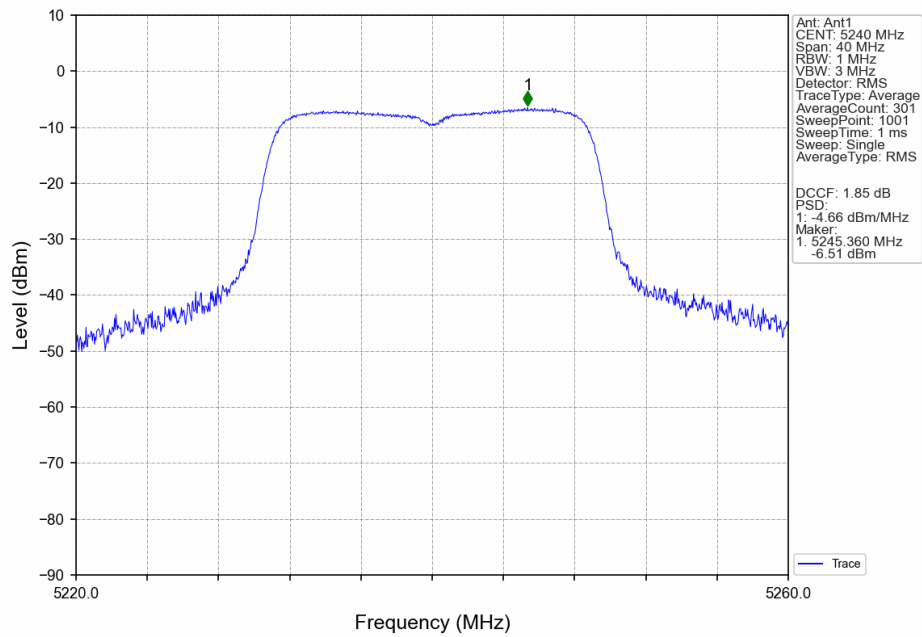
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)		Verdict
			ANT1	Limit	
802.11ac (VHT20)	SISO	5745	-7.95	<=30	Pass
		5785	-8.97	<=30	Pass
		5825	-9.87	<=30	Pass
802.11ac (VHT80)	SISO	5775	-11.85	<=30	Pass
Note1: Antenna Gain: - Band: 1 Ant1: 3.58dBi; - Band: 3 Ant1: 3.91dBi;					

4.2 Test Graph

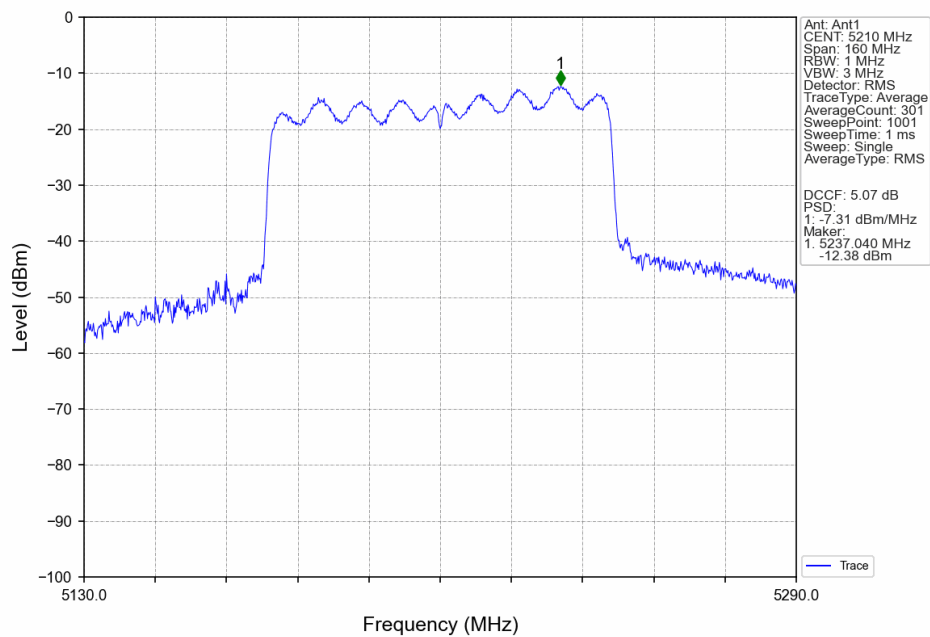
4.2.1 PSD



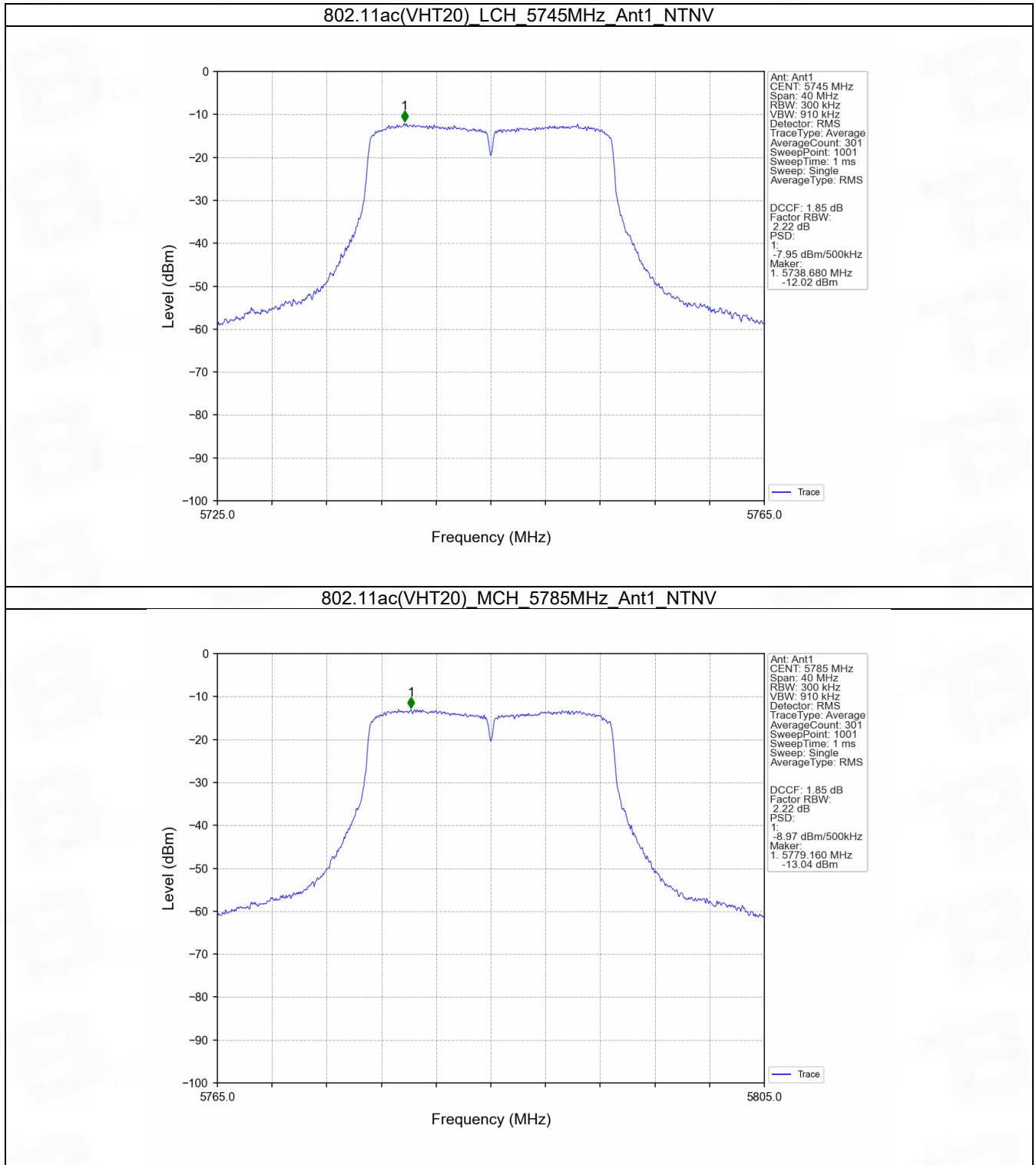
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



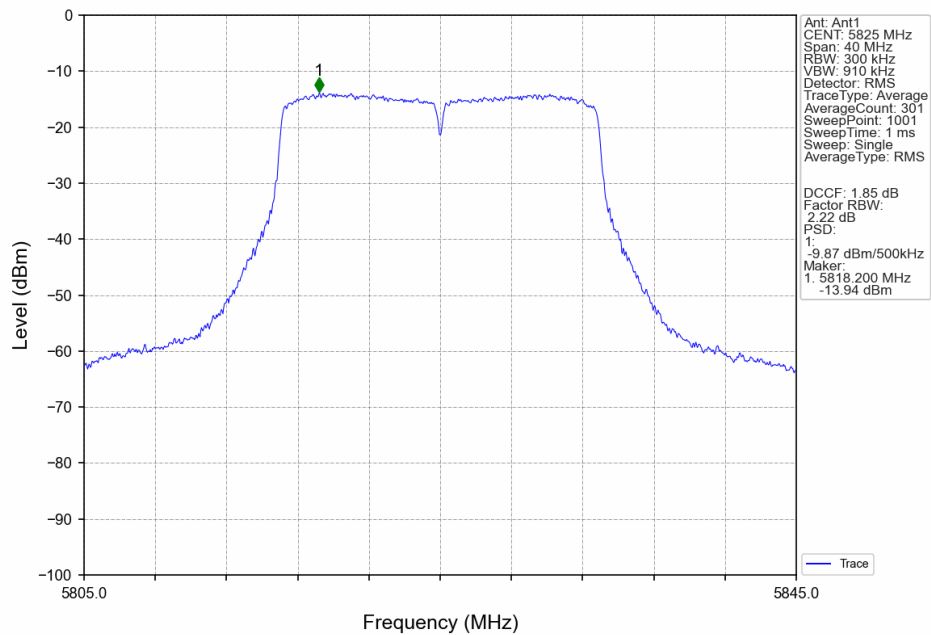
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



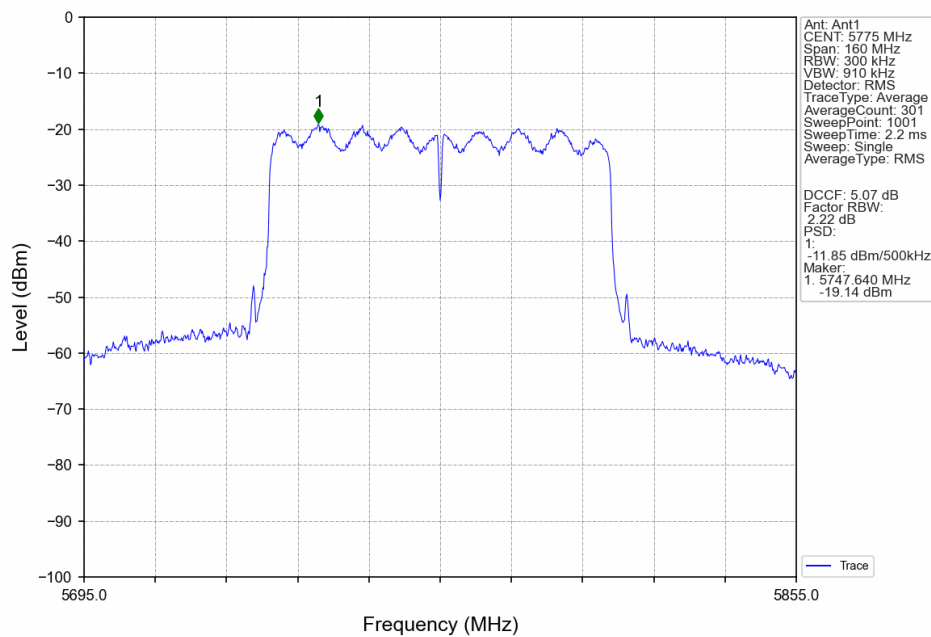
4.2.2 PSD-Band3



802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



5. Frequency Stability

5.1 Test Result

5.1.1 Ant1

Mode	TX Type	Frequency (MHz)	Temperature (°C)	Ant1		Limit (MHz)	Verdict
				Voltage (VAC)	Measured Frequency (MHz)		
802.11ac (VHT20)	SISO	5180	20	102	5180.060	5150 to 5250	Pass
				120	5180.040	5150 to 5250	Pass
				138	5180.060	5150 to 5250	Pass
			-30	120	5180.000	5150 to 5250	Pass
			-20	120	5179.960	5150 to 5250	Pass
			-10	120	5179.980	5150 to 5250	Pass
			0	120	5179.980	5150 to 5250	Pass
			10	120	5180.000	5150 to 5250	Pass
			30	120	5180.080	5150 to 5250	Pass
			40	120	5180.020	5150 to 5250	Pass
			50	120	5180.020	5150 to 5250	Pass
		5200	20	102	5200.020	5150 to 5250	Pass
				120	5199.980	5150 to 5250	Pass
				138	5200.080	5150 to 5250	Pass
			-30	120	5200.060	5150 to 5250	Pass
			-20	120	5200.040	5150 to 5250	Pass
			-10	120	5199.940	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	5200.040	5150 to 5250	Pass
			50	120	5200.040	5150 to 5250	Pass
		5240	20	102	5240.060	5150 to 5250	Pass
				120	5240.080	5150 to 5250	Pass
				138	5239.980	5150 to 5250	Pass
			-30	120	5239.980	5150 to 5250	Pass
			-20	120	5240.000	5150 to 5250	Pass
			-10	120	5240.000	5150 to 5250	Pass
			0	120	5240.000	5150 to 5250	Pass
			10	120	5240.020	5150 to 5250	Pass
			30	120	5240.080	5150 to 5250	Pass
			40	120	5239.960	5150 to 5250	Pass
			50	120	5239.940	5150 to 5250	Pass
		5745	20	102	5745.000	5725 to 5850	Pass
				120	5745.040	5725 to 5850	Pass
				138	5744.960	5725 to 5850	Pass
			-30	120	5744.980	5725 to 5850	Pass
			-20	120	5745.020	5725 to 5850	Pass
			-10	120	5744.980	5725 to 5850	Pass
			0	120	5745.020	5725 to 5850	Pass
			10	120	5744.980	5725 to 5850	Pass
			30	120	5744.920	5725 to 5850	Pass
			40	120	5744.940	5725 to 5850	Pass
			50	120	5744.960	5725 to 5850	Pass
		5785	20	102	5785.000	5725 to 5850	Pass
				120	5785.020	5725 to 5850	Pass
				138	5785.000	5725 to 5850	Pass

			-30	120	5785.000	5725 to 5850	Pass
			-20	120	5785.040	5725 to 5850	Pass
			-10	120	5785.000	5725 to 5850	Pass
			0	120	5785.040	5725 to 5850	Pass
			10	120	5784.960	5725 to 5850	Pass
			30	120	5785.020	5725 to 5850	Pass
			40	120	5785.040	5725 to 5850	Pass
			50	120	5784.980	5725 to 5850	Pass
		5825	20	102	5824.920	5725 to 5850	Pass
				120	5824.980	5725 to 5850	Pass
				138	5824.960	5725 to 5850	Pass
			-30	120	5824.900	5725 to 5850	Pass
			-20	120	5825.020	5725 to 5850	Pass
			-10	120	5824.960	5725 to 5850	Pass
			0	120	5824.980	5725 to 5850	Pass
			10	120	5824.940	5725 to 5850	Pass
			30	120	5824.980	5725 to 5850	Pass
			40	120	5825.020	5725 to 5850	Pass
			50	120	5825.000	5725 to 5850	Pass
802.11ac (VHT80)	SISO	5210	20	102	5210.150	5150 to 5250	Pass
				120	5210.075	5150 to 5250	Pass
				138	5210.075	5150 to 5250	Pass
			-30	120	5210.075	5150 to 5250	Pass
			-20	120	5210.075	5150 to 5250	Pass
			-10	120	5210.150	5150 to 5250	Pass
			0	120	5210.225	5150 to 5250	Pass
			10	120	5210.150	5150 to 5250	Pass
			30	120	5210.000	5150 to 5250	Pass
			40	120	5210.150	5150 to 5250	Pass
			50	120	5209.925	5150 to 5250	Pass
		5775	20	102	5774.850	5725 to 5850	Pass
				120	5775.000	5725 to 5850	Pass
				138	5774.925	5725 to 5850	Pass
			-30	120	5775.000	5725 to 5850	Pass
			-20	120	5774.925	5725 to 5850	Pass
			-10	120	5774.925	5725 to 5850	Pass
			0	120	5774.925	5725 to 5850	Pass
			10	120	5774.925	5725 to 5850	Pass
			30	120	5774.850	5725 to 5850	Pass
			40	120	5774.925	5725 to 5850	Pass
			50	120	5774.850	5725 to 5850	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	0.0043	6.31
5745	5825	0.0040	5.97
5210	5210	0.0059	7.71