

Appendix Test Data for 5.2G WIFI

1. Duty Cycle

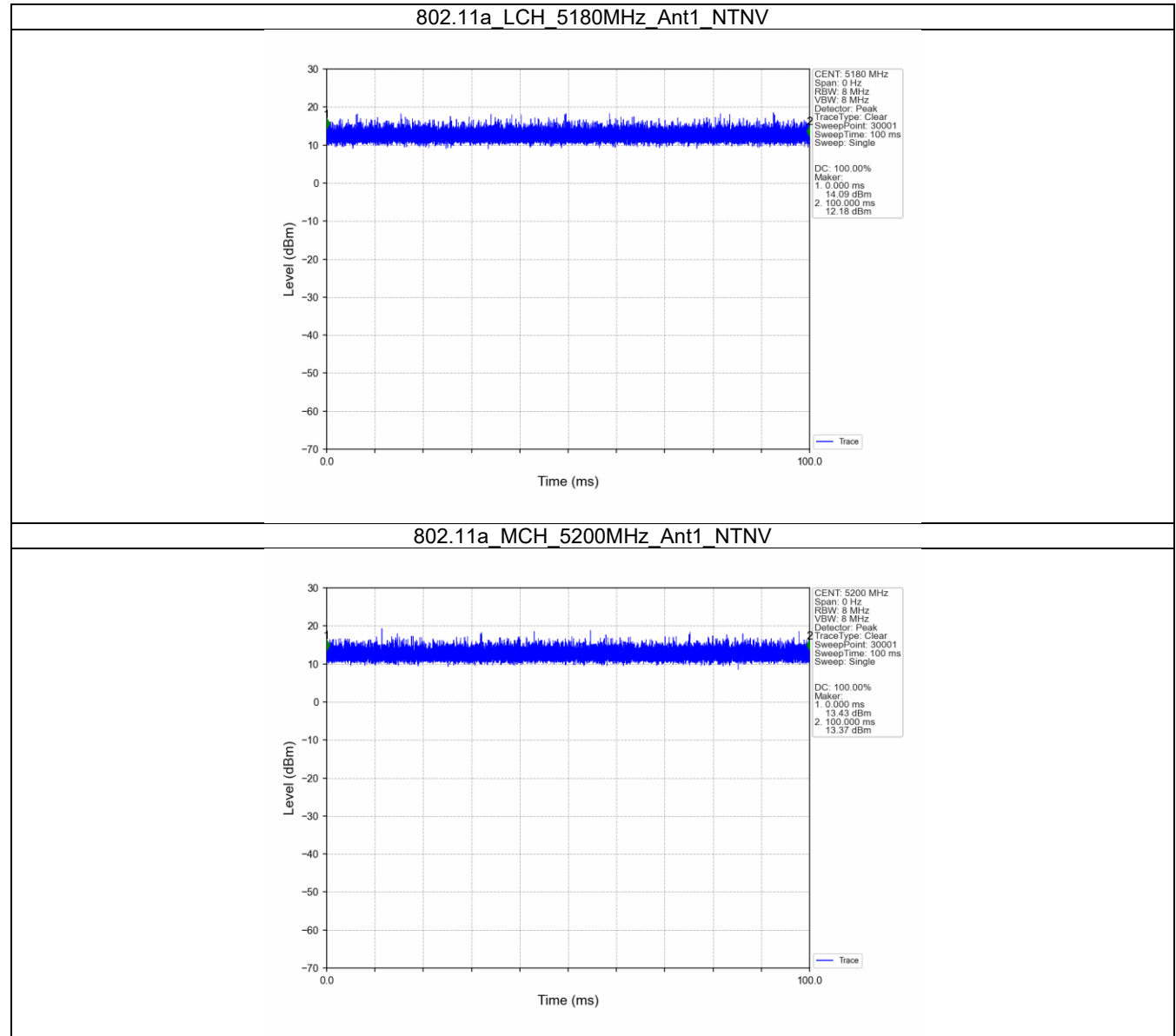
1.1 Test Result

1.1.1 Ant1

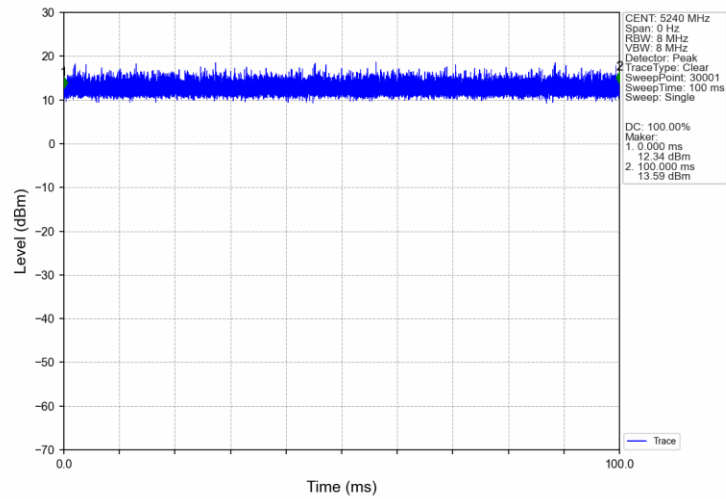
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	100.000	100.000	100.00	0.00	0.00
		5200	100.000	100.000	100.00	0.00	0.00
		5240	100.000	100.000	100.00	0.00	0.00
802.11n (HT20)	SISO	5180	100.000	100.000	100.00	0.00	0.00
		5200	100.000	100.000	100.00	0.00	0.00
		5240	100.000	100.000	100.00	0.00	0.00
802.11n (HT40)	SISO	5190	100.000	100.000	100.00	0.00	0.00
		5230	100.000	100.000	100.00	0.00	0.00

1.2 Test Graph

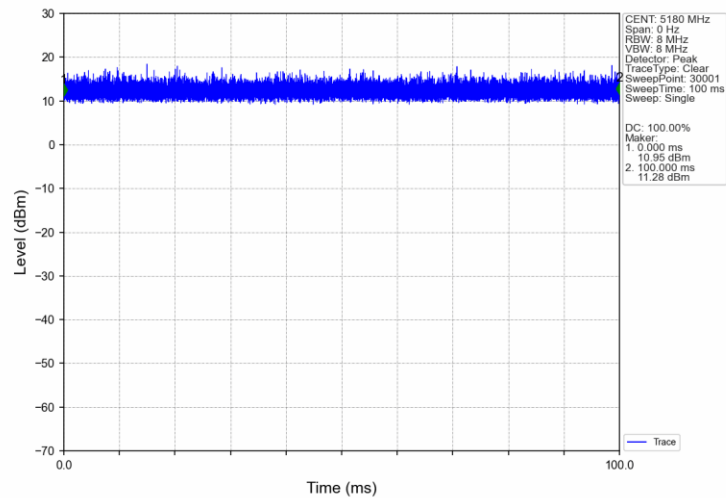
1.2.1 Ant1



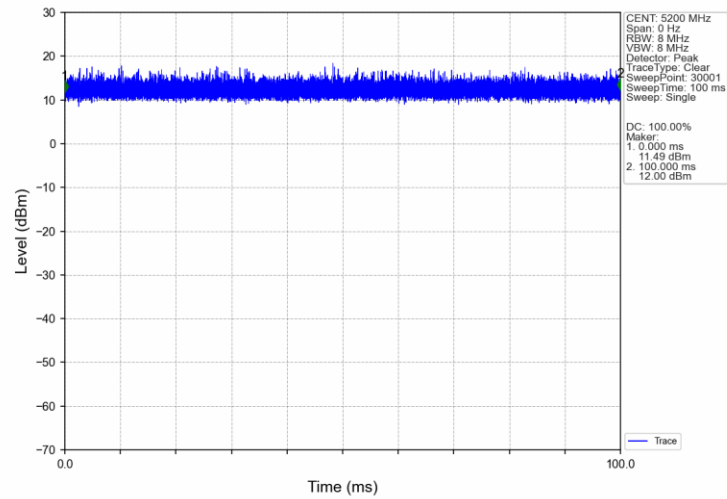
802.11a_HCH_5240MHz_Ant1_NTNV



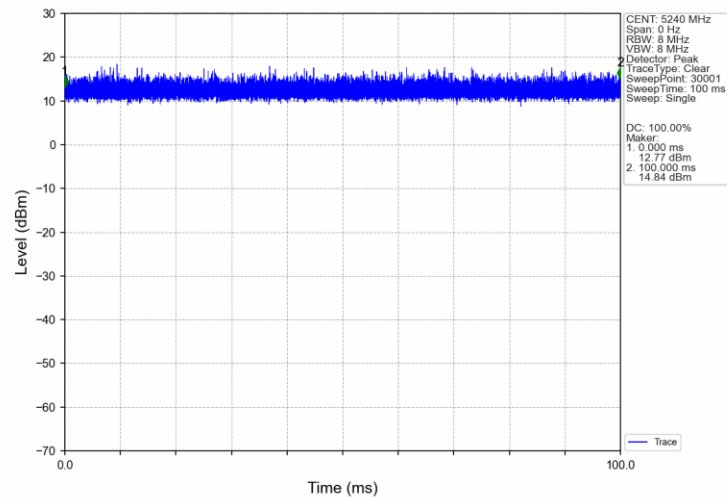
802.11n(HT20) LCH_5180MHz_Ant1_NTNV



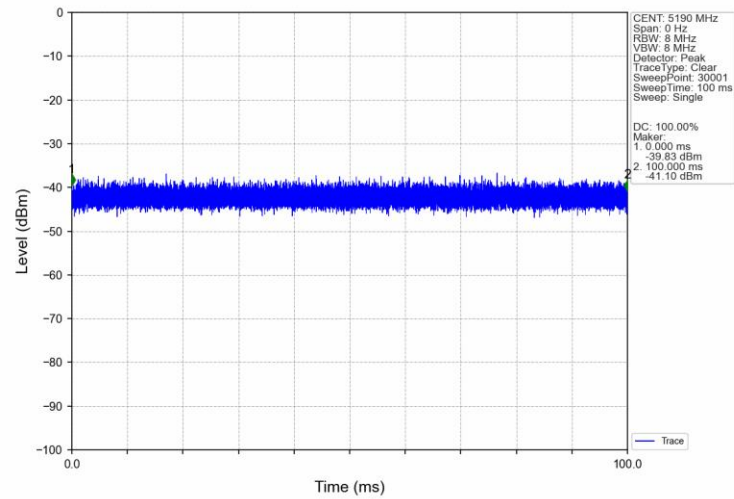
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



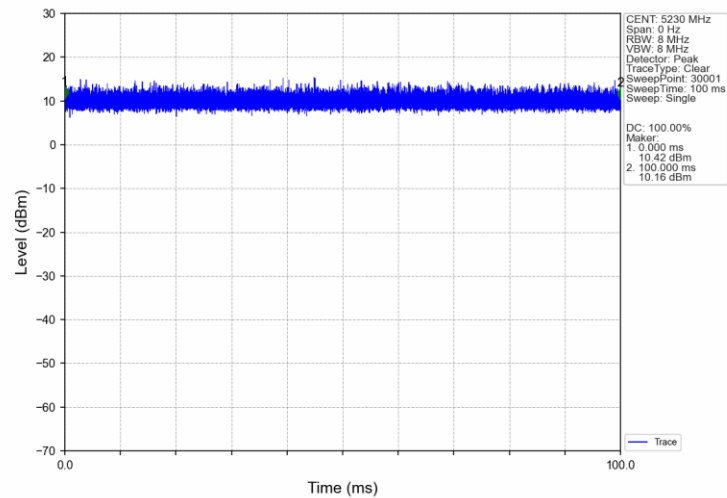
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

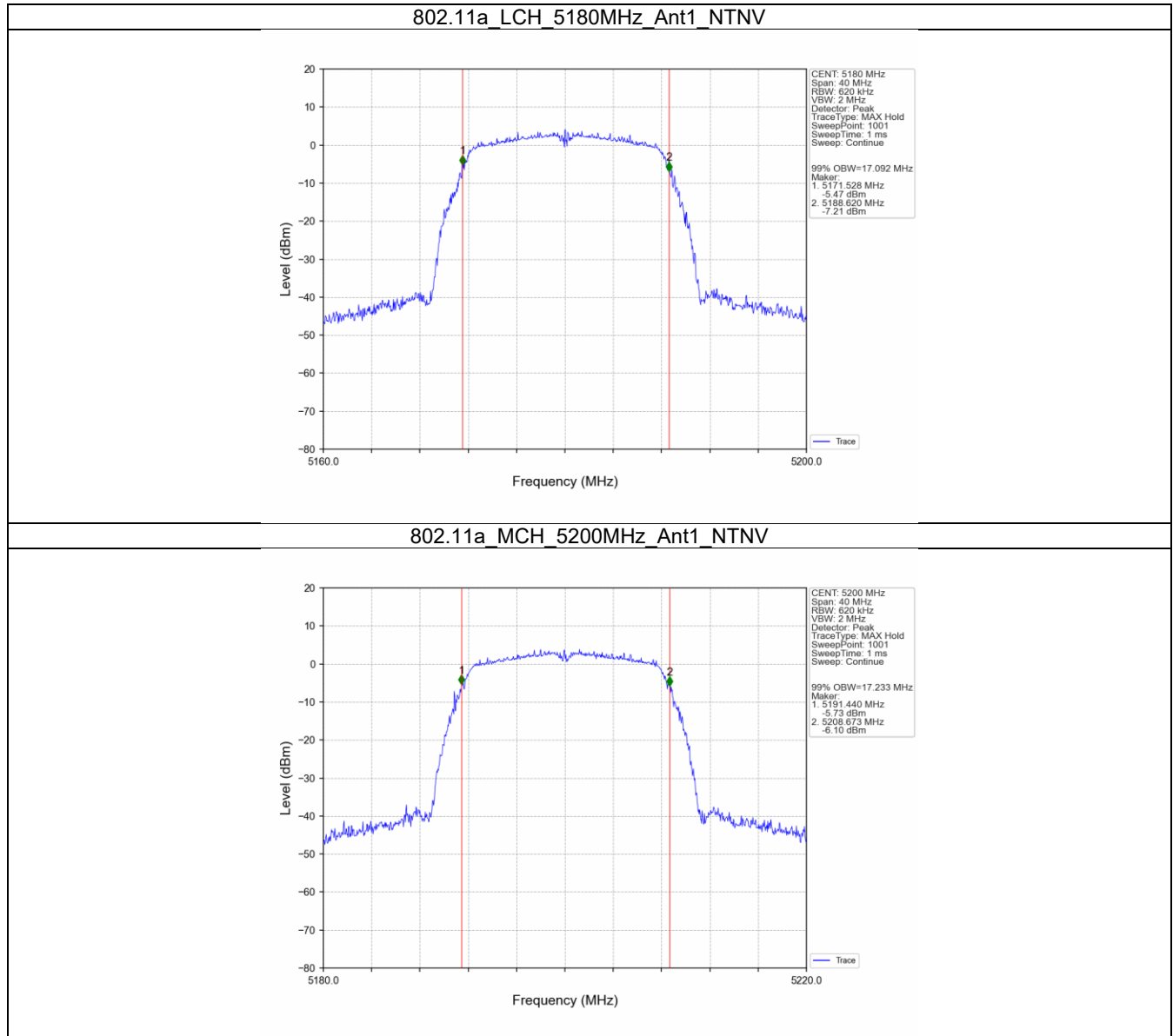
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	17.092	/	Pass
		5200	1	17.233	/	Pass
		5240	1	17.068	/	Pass
802.11n (HT20)	SISO	5180	1	18.038	/	Pass
		5200	1	18.056	/	Pass
		5240	1	17.979	/	Pass
802.11n (HT40)	SISO	5190	1	36.038	/	Pass
		5230	1	36.168	/	Pass

2.1.2 26dB BW

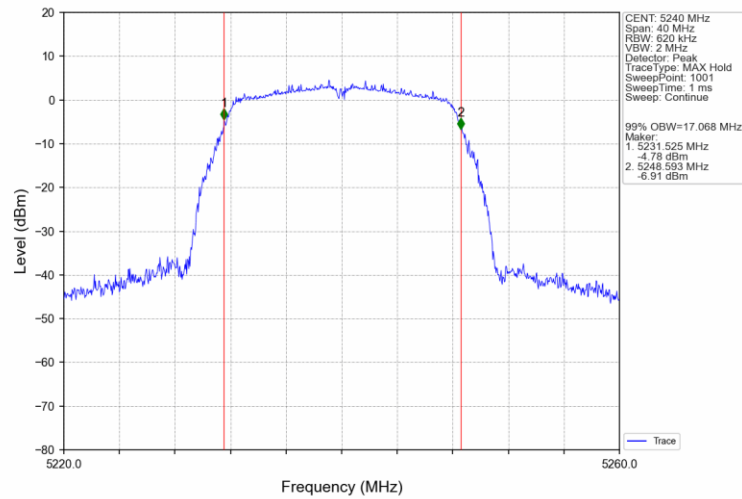
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	20.047	/	Pass
		5200	1	20.229	/	Pass
		5240	1	20.483	/	Pass
802.11n (HT20)	SISO	5180	1	20.461	/	Pass
		5200	1	20.361	/	Pass
		5240	1	20.564	/	Pass
802.11n (HT40)	SISO	5190	1	40.713	/	Pass
		5230	1	41.206	/	Pass

2.2 Test Graph

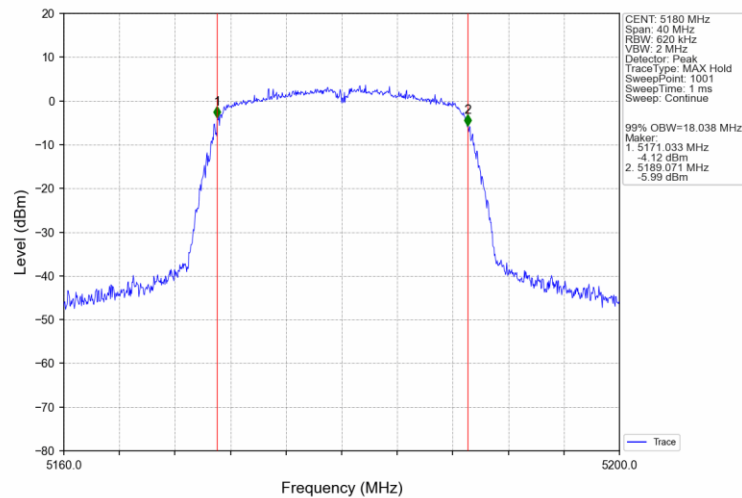
2.2.1 OBW



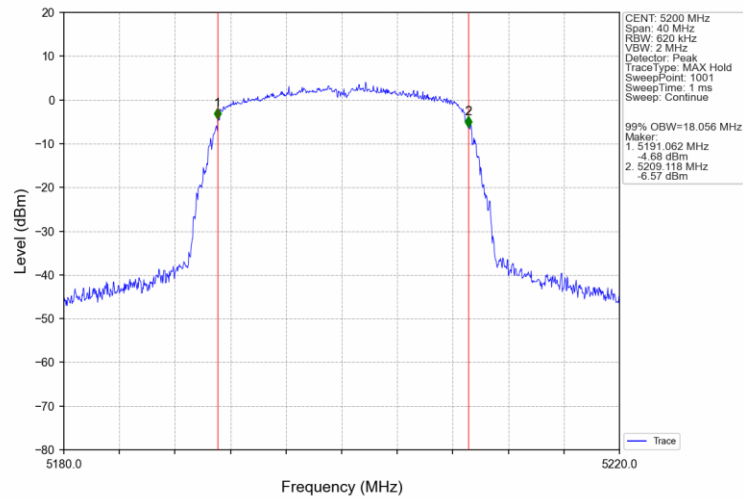
802.11a_HCH_5240MHz_Ant1_NTNV



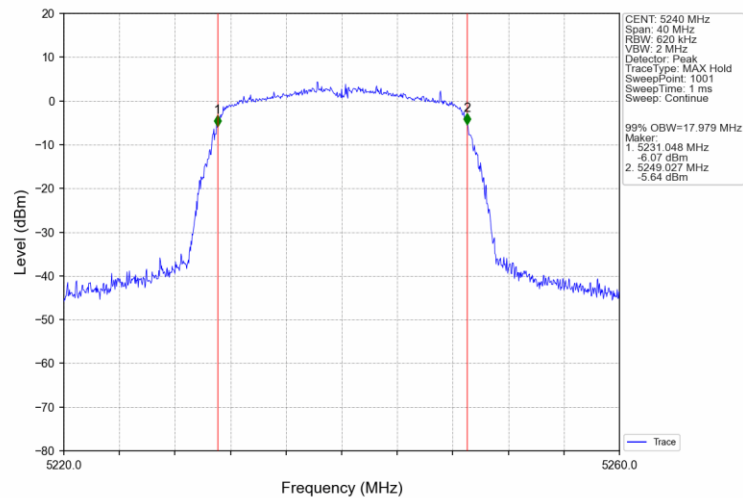
802.11n(HT20) LCH_5180MHz_Ant1_NTNV



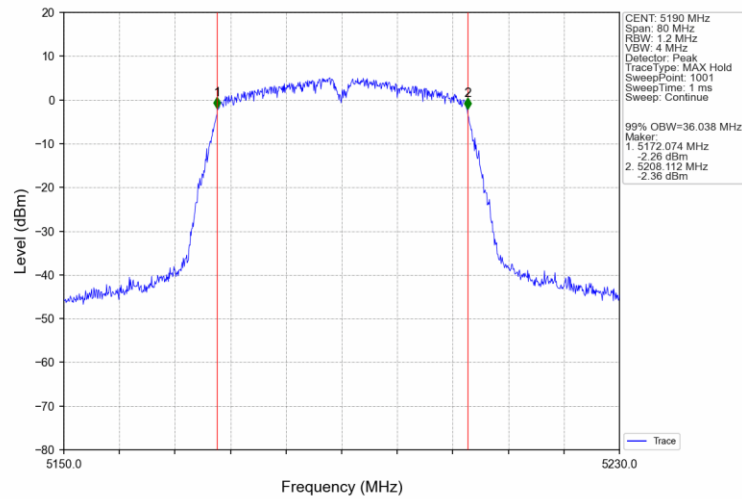
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



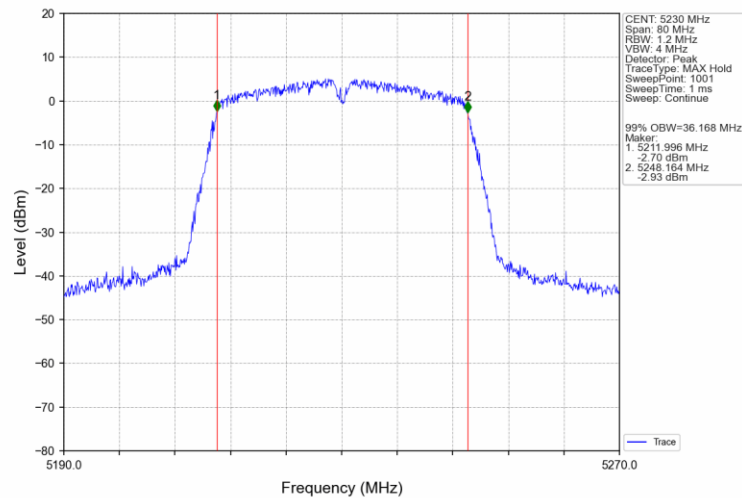
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



802.11n(HT40)_LCH_5190MHz_Ant1_NTNV

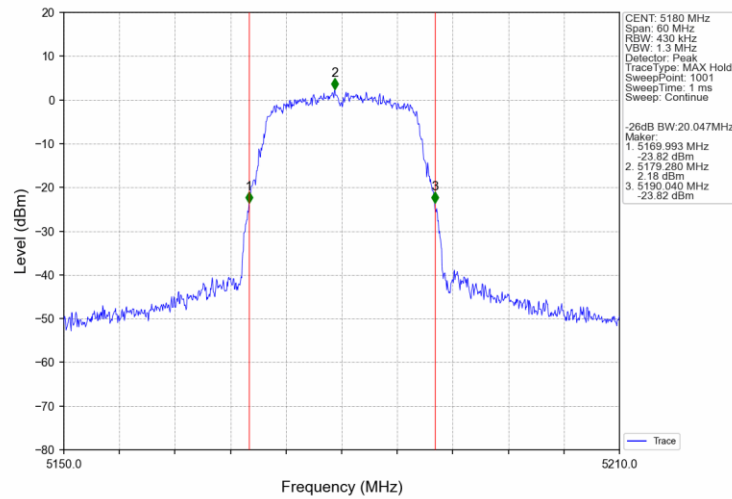


802.11n(HT40)_HCH_5230MHz_Ant1_NTNV

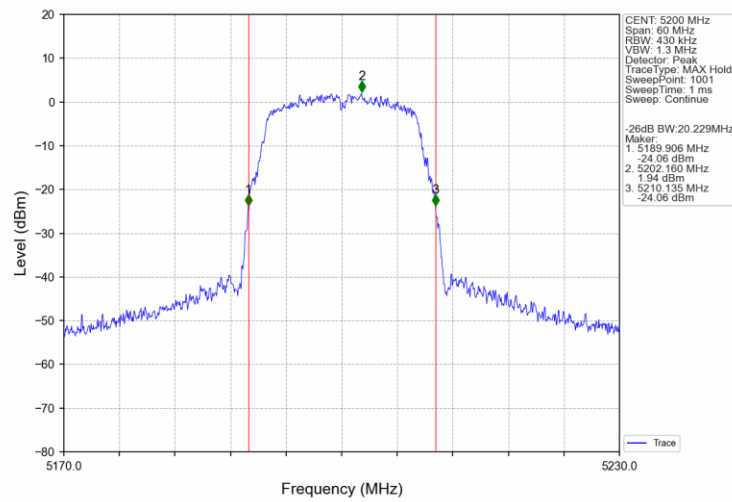


2.2.2 26dB BW

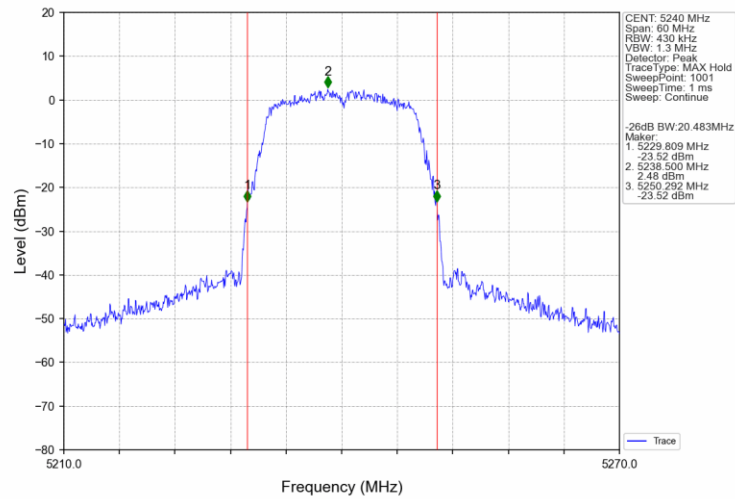
802.11a_LCH_5180MHz_Ant1_NTNV



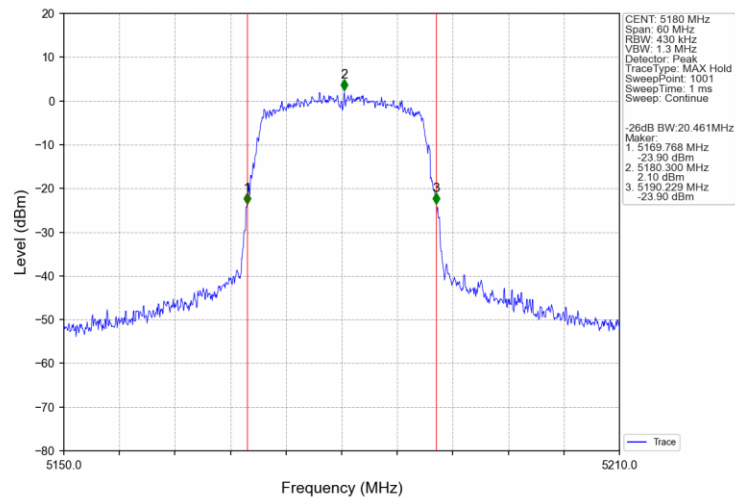
802.11a_MCH_5200MHz_Ant1_NTNV



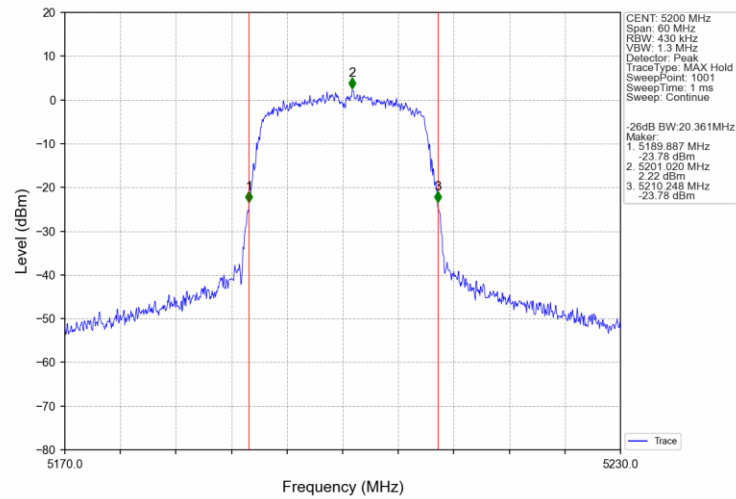
802.11a_HCH_5240MHz_Ant1_NTNV



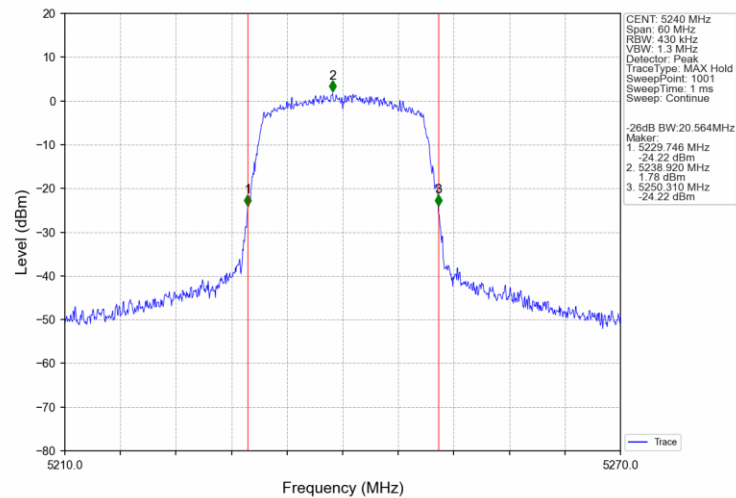
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



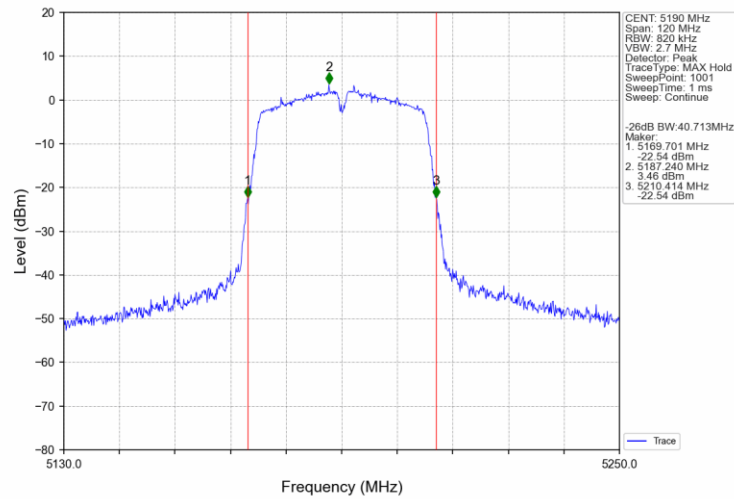
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



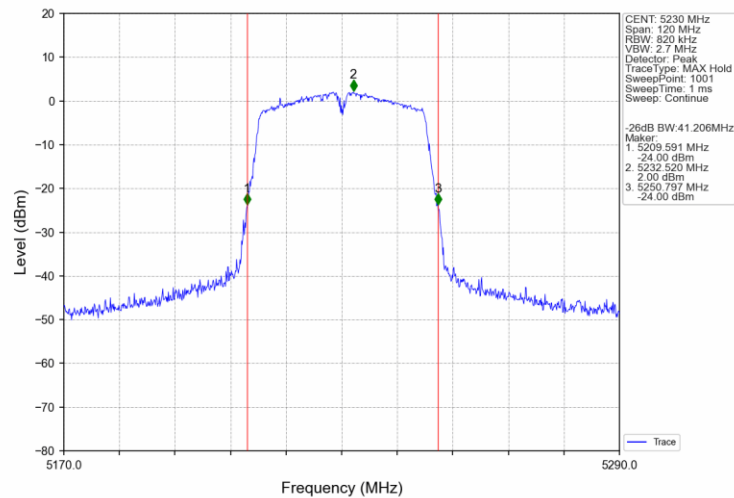
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



3. Maximum Conducted Output Power

3.1 Test Result

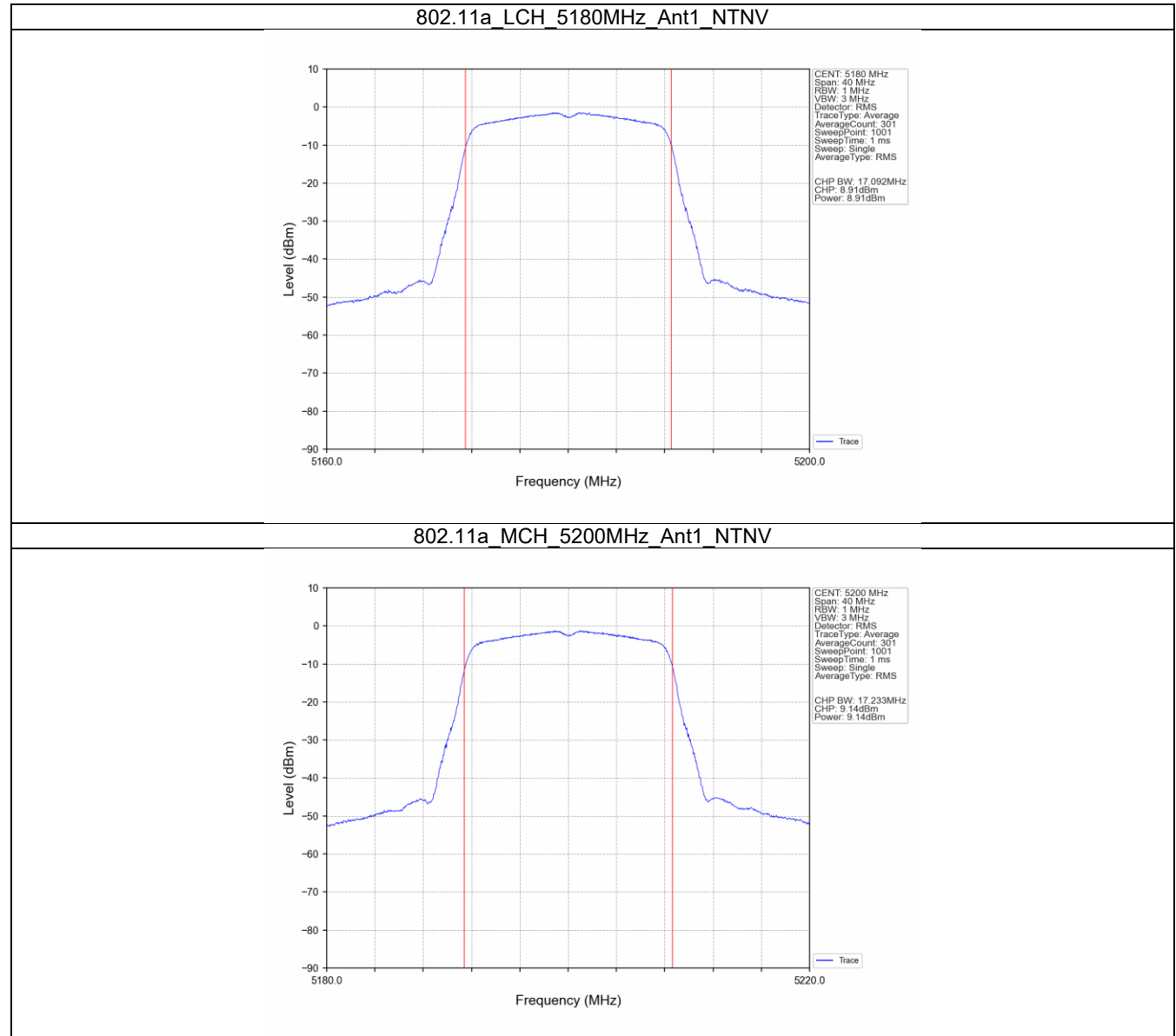
3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	8.91	≤ 23.98	Pass
		5200	9.14	≤ 23.98	Pass
		5240	9.23	≤ 23.98	Pass
802.11n (HT20)	SISO	5180	8.85	≤ 23.98	Pass
		5200	8.99	≤ 23.98	Pass
		5240	8.99	≤ 23.98	Pass
802.11n (HT40)	SISO	5190	9.02	≤ 23.98	Pass
		5230	9.13	≤ 23.98	Pass

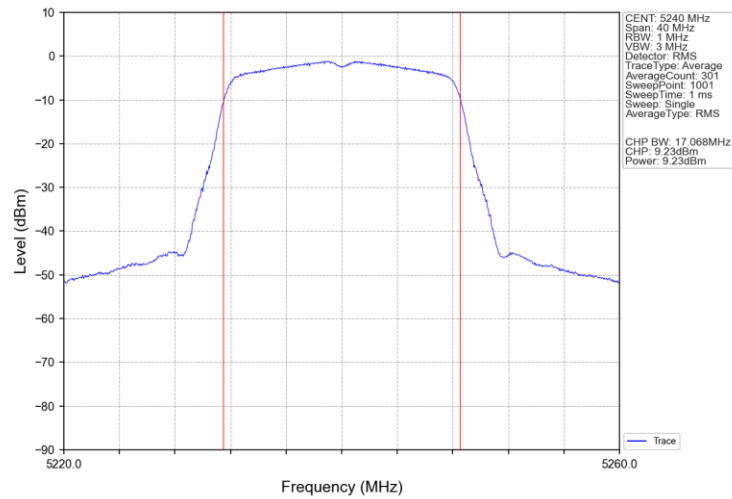
Note1: Antenna Gain: Ant1: 0.96dBi;

3.2 Test Graph

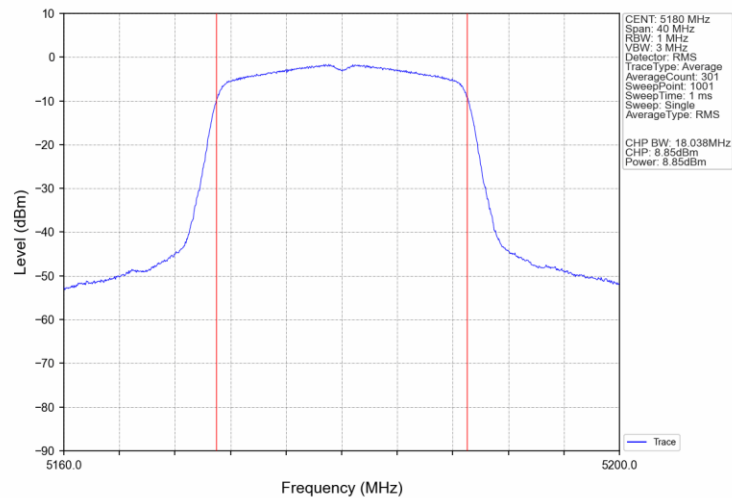
3.2.1 Power



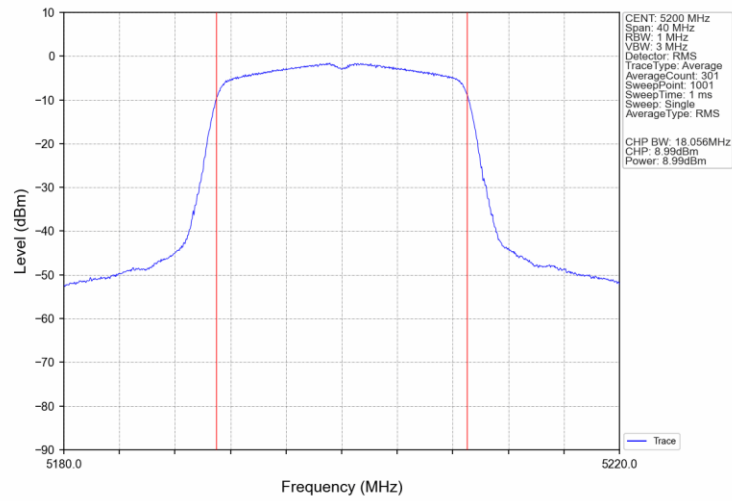
802.11a_HCH_5240MHz_Ant1_NTNV



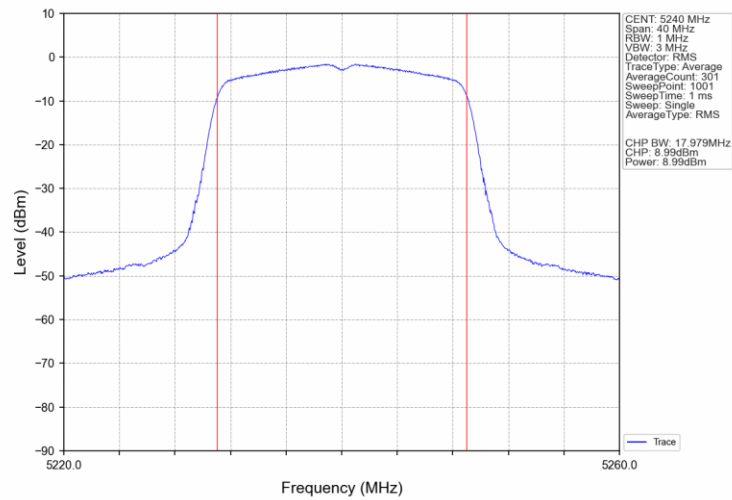
802.11n(HT20) LCH_5180MHz_Ant1_NTNV



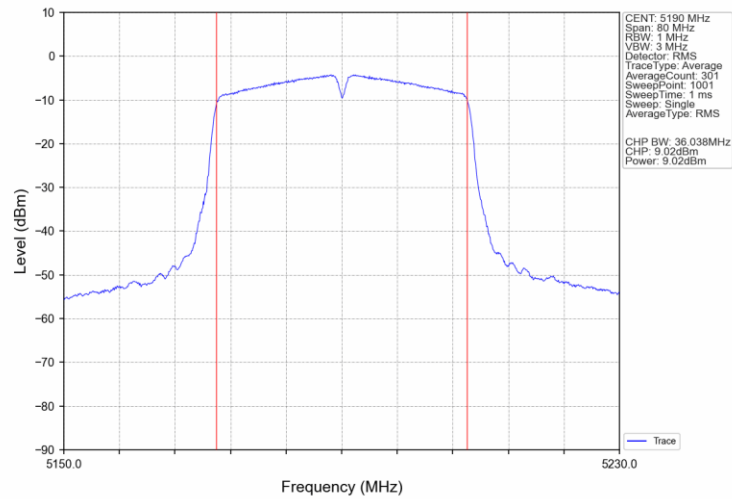
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



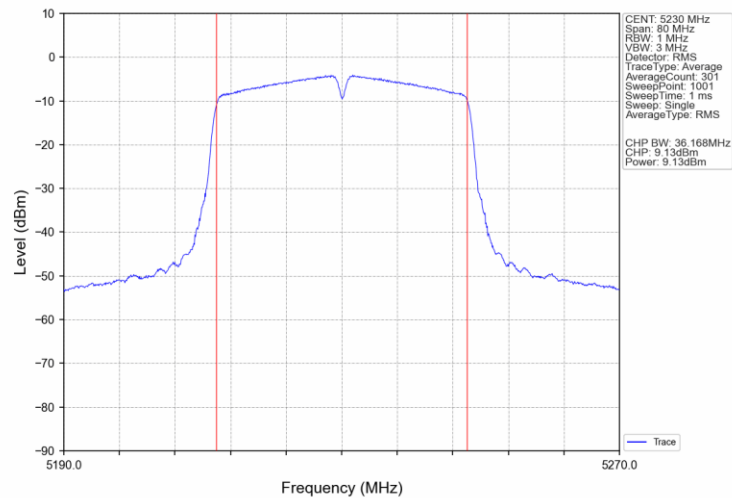
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



4. Maximum Power Spectral Density

4.1 Test Result

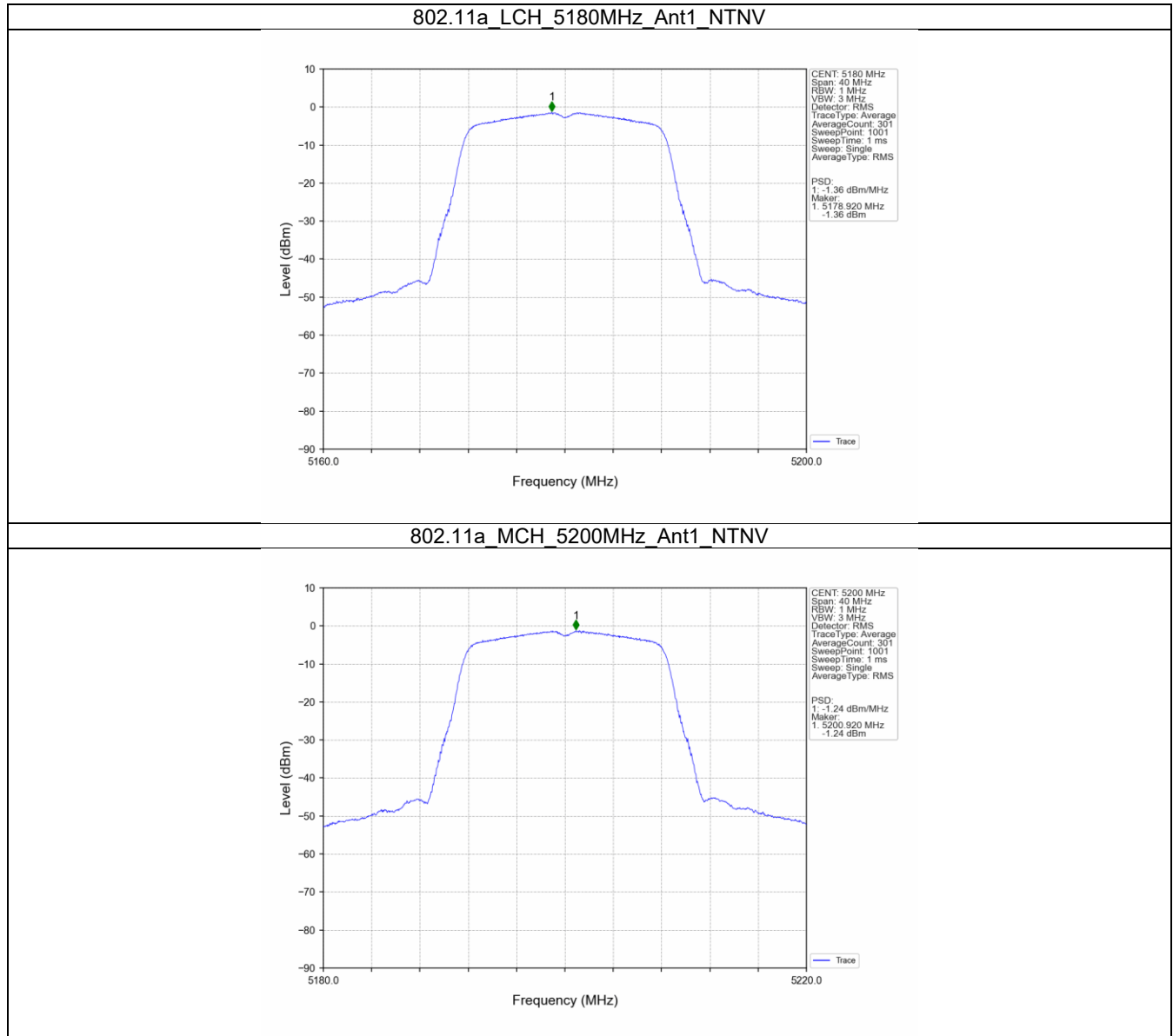
4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	-1.36	<=11	Pass
		5200	-1.24	<=11	Pass
		5240	-1.05	<=11	Pass
802.11n (HT20)	SISO	5180	-1.72	<=11	Pass
		5200	-1.54	<=11	Pass
		5240	-1.35	<=11	Pass
802.11n (HT40)	SISO	5190	-4.12	<=11	Pass
		5230	-4.19	<=11	Pass

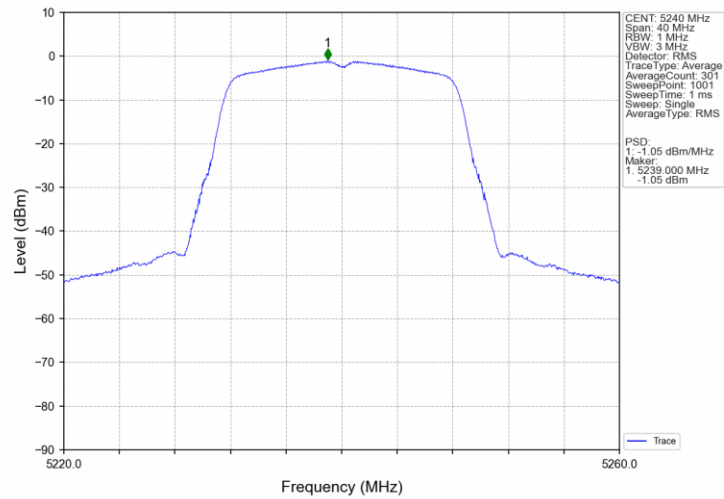
Note1: Antenna Gain: Ant1: 0.96dBi;

4.2 Test Graph

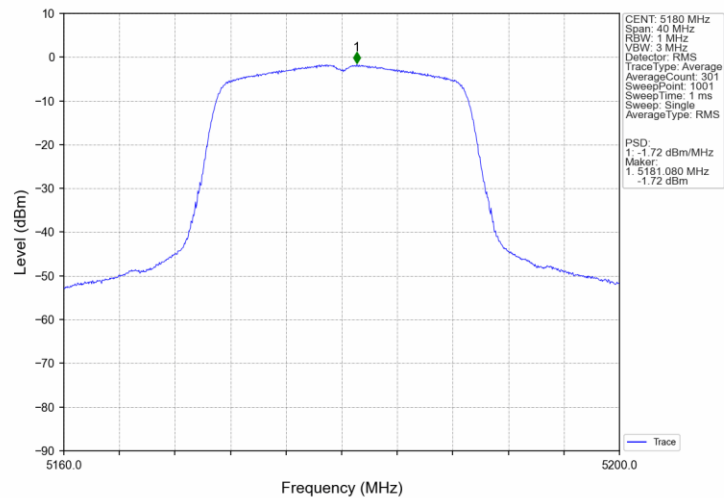
4.2.1 PSD



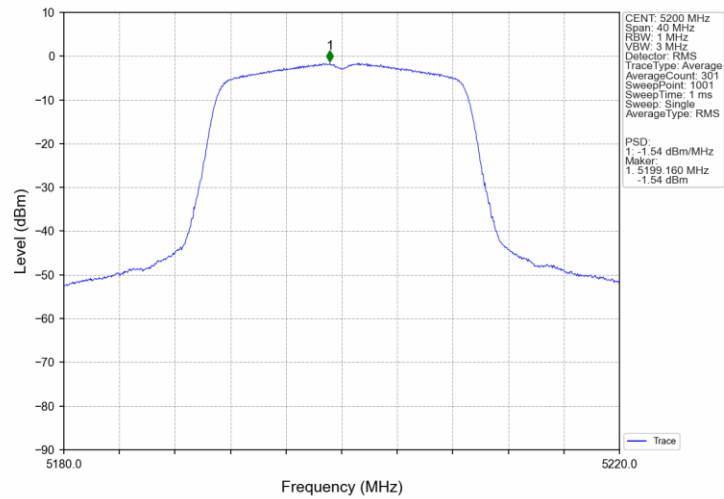
802.11a_HCH_5240MHz_Ant1_NTNV



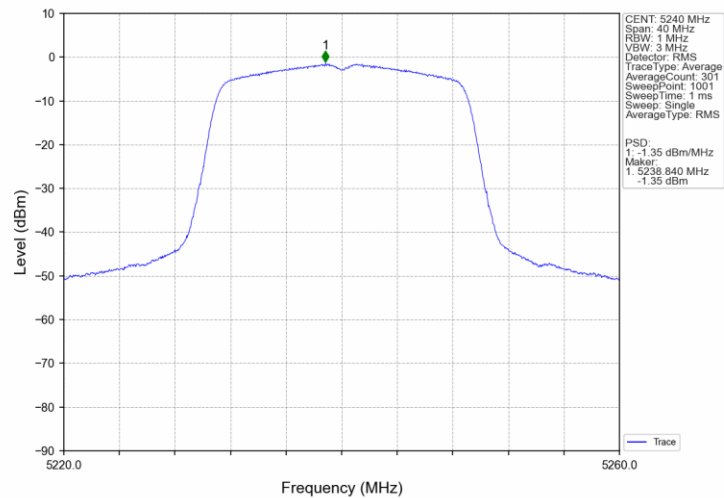
802.11n(HT20) LCH_5180MHz_Ant1_NTNV



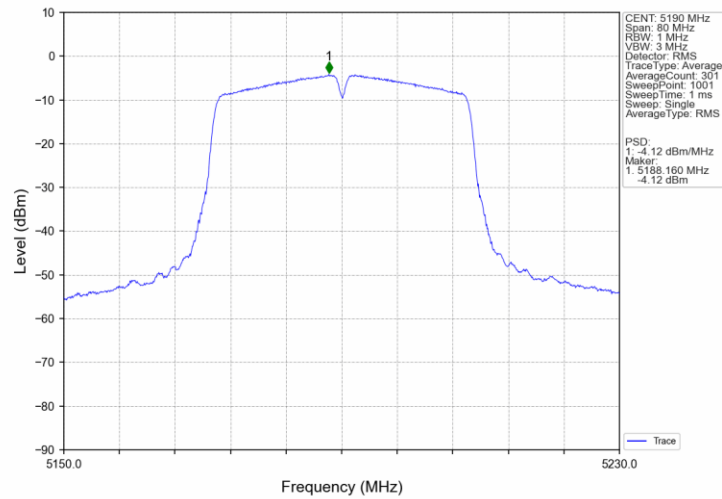
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



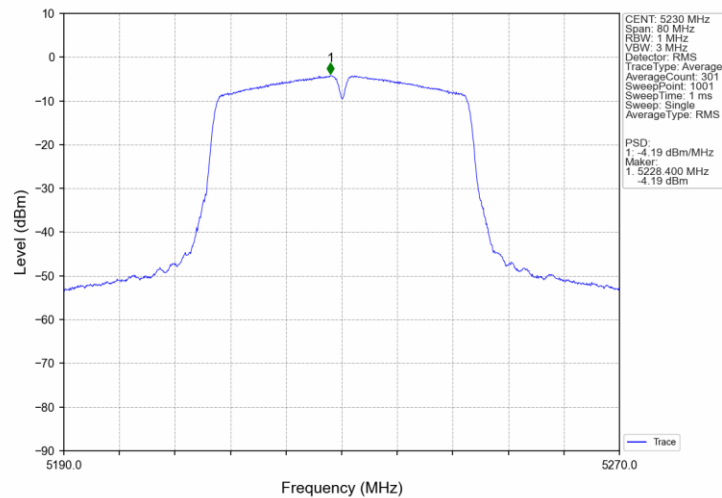
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



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	5179.990	5150 to 5250	Pass
				120	5179.990	5150 to 5250	Pass
				138	5179.989	5150 to 5250	Pass
			-30	120	5179.989	5150 to 5250	Pass
			-20	120	5179.989	5150 to 5250	Pass
			-10	120	5179.989	5150 to 5250	Pass
			0	120	5179.989	5150 to 5250	Pass
			10	120	5179.989	5150 to 5250	Pass
			30	120	5179.989	5150 to 5250	Pass
			40	120	5179.988	5150 to 5250	Pass
			50	120	5179.988	5150 to 5250	Pass
		5200	20	102	5199.988	5150 to 5250	Pass
				120	5199.988	5150 to 5250	Pass
				138	5199.988	5150 to 5250	Pass
			-30	120	5199.988	5150 to 5250	Pass
			-20	120	5199.988	5150 to 5250	Pass
			-10	120	5199.988	5150 to 5250	Pass
			0	120	5199.988	5150 to 5250	Pass
			10	120	5199.988	5150 to 5250	Pass
			30	120	5199.988	5150 to 5250	Pass
			40	120	5199.987	5150 to 5250	Pass
			50	120	5199.987	5150 to 5250	Pass
		5240	20	102	5239.987	5150 to 5250	Pass
				120	5239.987	5150 to 5250	Pass
				138	5239.987	5150 to 5250	Pass
			-30	120	5239.987	5150 to 5250	Pass
			-20	120	5239.987	5150 to 5250	Pass
			-10	120	5239.987	5150 to 5250	Pass
			0	120	5239.987	5150 to 5250	Pass
			10	120	5239.987	5150 to 5250	Pass
			30	120	5239.987	5150 to 5250	Pass
			40	120	5239.987	5150 to 5250	Pass
			50	120	5239.987	5150 to 5250	Pass
		5190	20	102	5189.987	5150 to 5250	Pass
				120	5189.987	5150 to 5250	Pass
				138	5189.987	5150 to 5250	Pass
			-30	120	5189.987	5150 to 5250	Pass
			-20	120	5189.987	5150 to 5250	Pass
			-10	120	5189.987	5150 to 5250	Pass
			0	120	5189.987	5150 to 5250	Pass
			10	120	5189.987	5150 to 5250	Pass
			30	120	5189.987	5150 to 5250	Pass
			40	120	5189.987	5150 to 5250	Pass
			50	120	5189.987	5150 to 5250	Pass
		5230	20	102	5229.987	5150 to 5250	Pass

				120	5229.987	5150 to 5250	Pass
				138	5229.987	5150 to 5250	Pass
			-30	120	5229.987	5150 to 5250	Pass
			-20	120	5229.987	5150 to 5250	Pass
			-10	120	5229.987	5150 to 5250	Pass
			0	120	5229.987	5150 to 5250	Pass
			10	120	5229.987	5150 to 5250	Pass
			30	120	5229.987	5150 to 5250	Pass
			40	120	5229.987	5150 to 5250	Pass
			50	120	5229.987	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	0.0084	9.23
5190	5230	0.0082	9.13

***** End of Report *****