

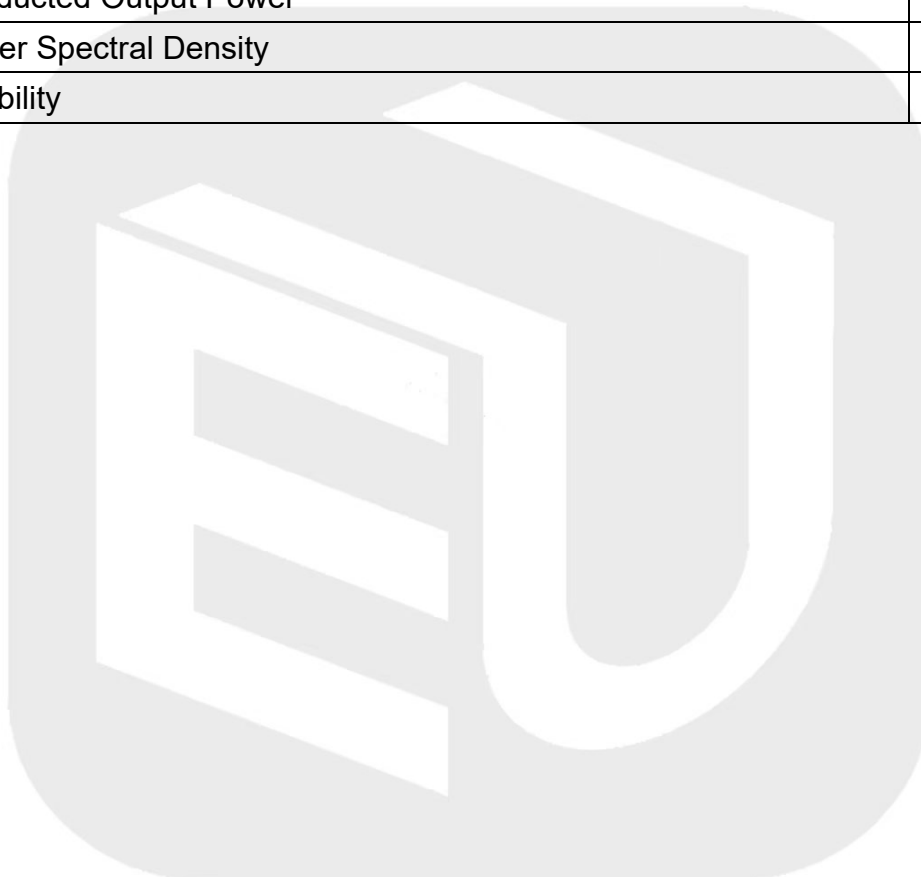
ANNEX F TEST DATA

For

Project No.:	8235EU010505W
Client:	Shenzhen Qianhai Runway Technology Co., LTD
Product Description:	Smart Pet Feeder
Model No.:	F18-C
FCC ID:	2AU2C-F18-C
Technology:	WiFi 5G
Test Engineer:	<i>Mikoy zhu</i>
Test Date:	2024-11-16

Test Summary

Item	Result
Duty Cycle	Pass
Bandwidth	Pass
Maximum Conducted Output Power	Pass
Maximum Power Spectral Density	Pass
Frequency Stability	Pass



1. Duty Cycle

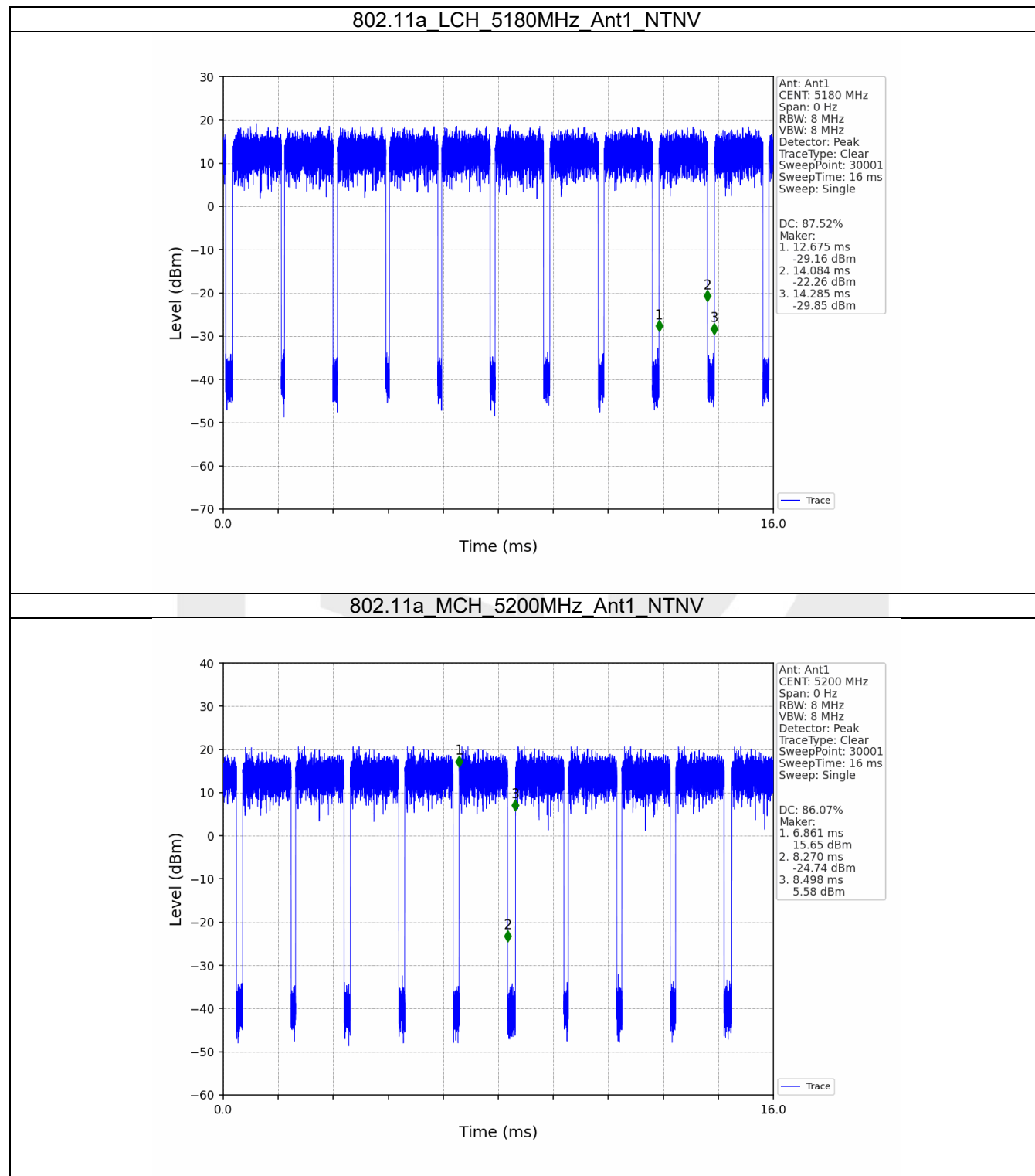
1.1 Test Result

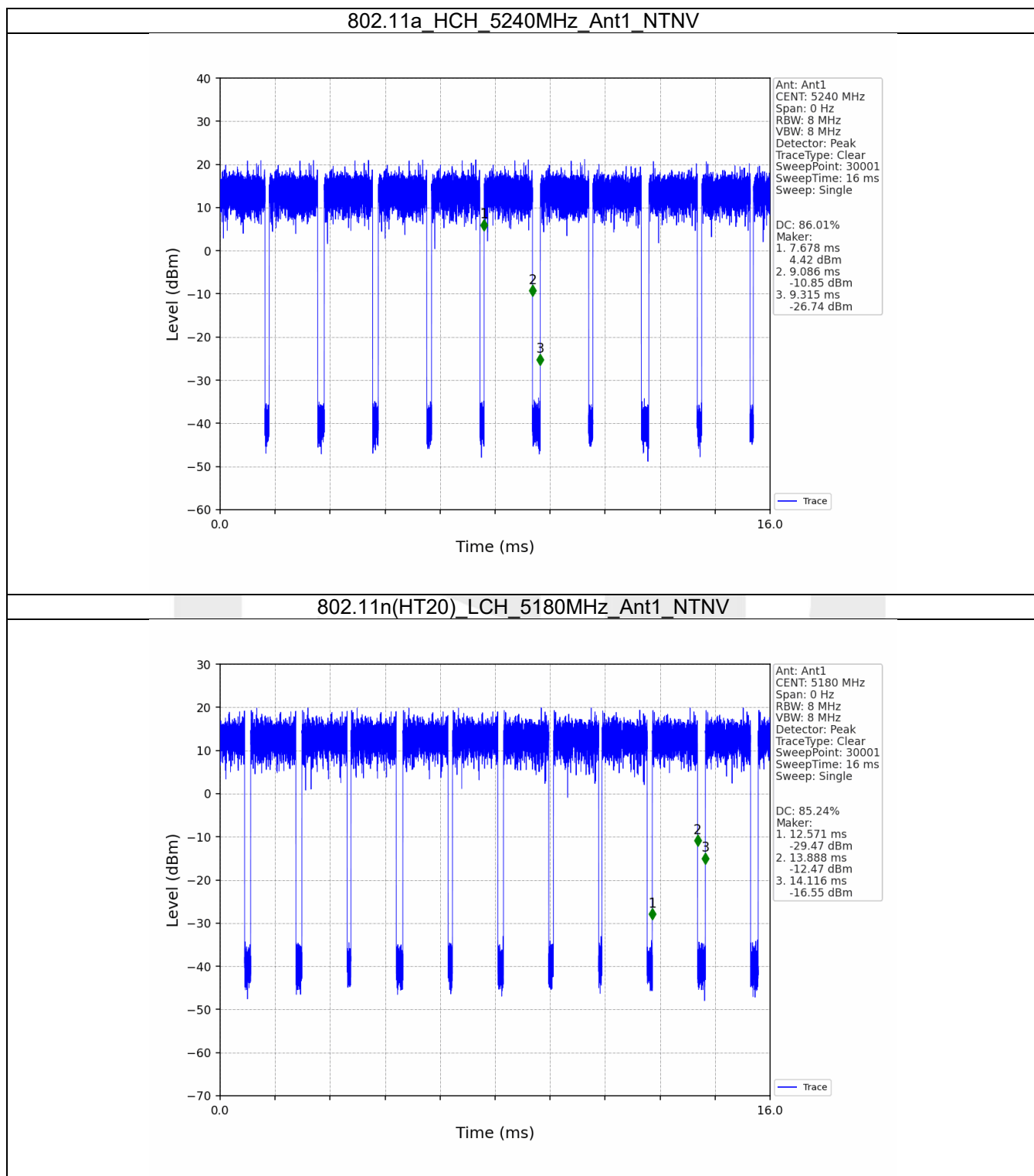
1.1.1 Ant1

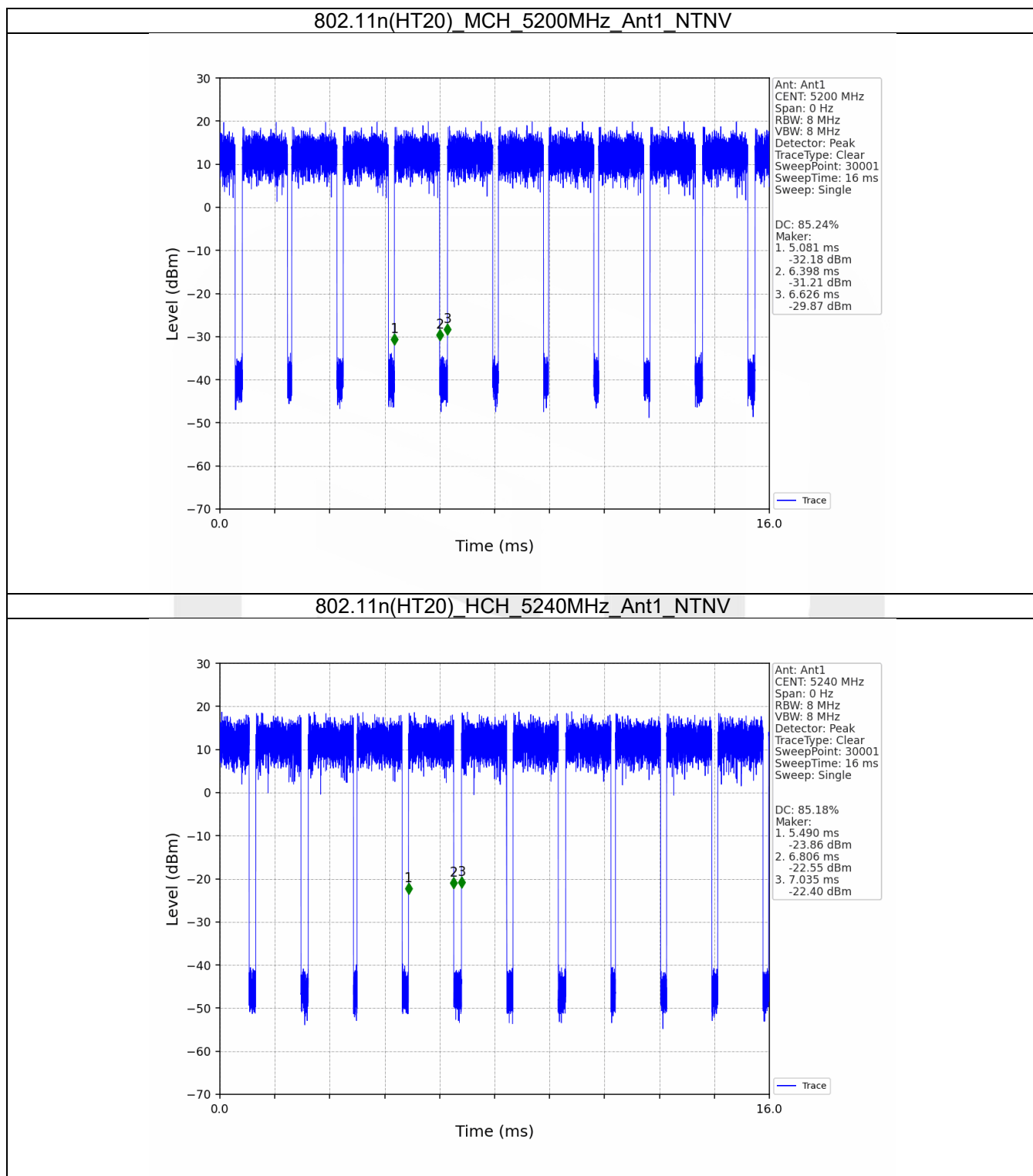
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	1.409	1.610	87.52	0.58	6.28
		5200	1.409	1.637	86.07	0.65	5.56
		5240	1.408	1.637	86.01	0.65	7.73
802.11n (HT20)	SISO	5180	1.317	1.545	85.24	0.69	8.16
		5200	1.317	1.545	85.24	0.69	6.39
		5240	1.316	1.545	85.18	0.70	7.56

1.2 Test Graph

1.2.1 Ant1







2. Bandwidth

2.1 Test Result

2.1.1 OBW

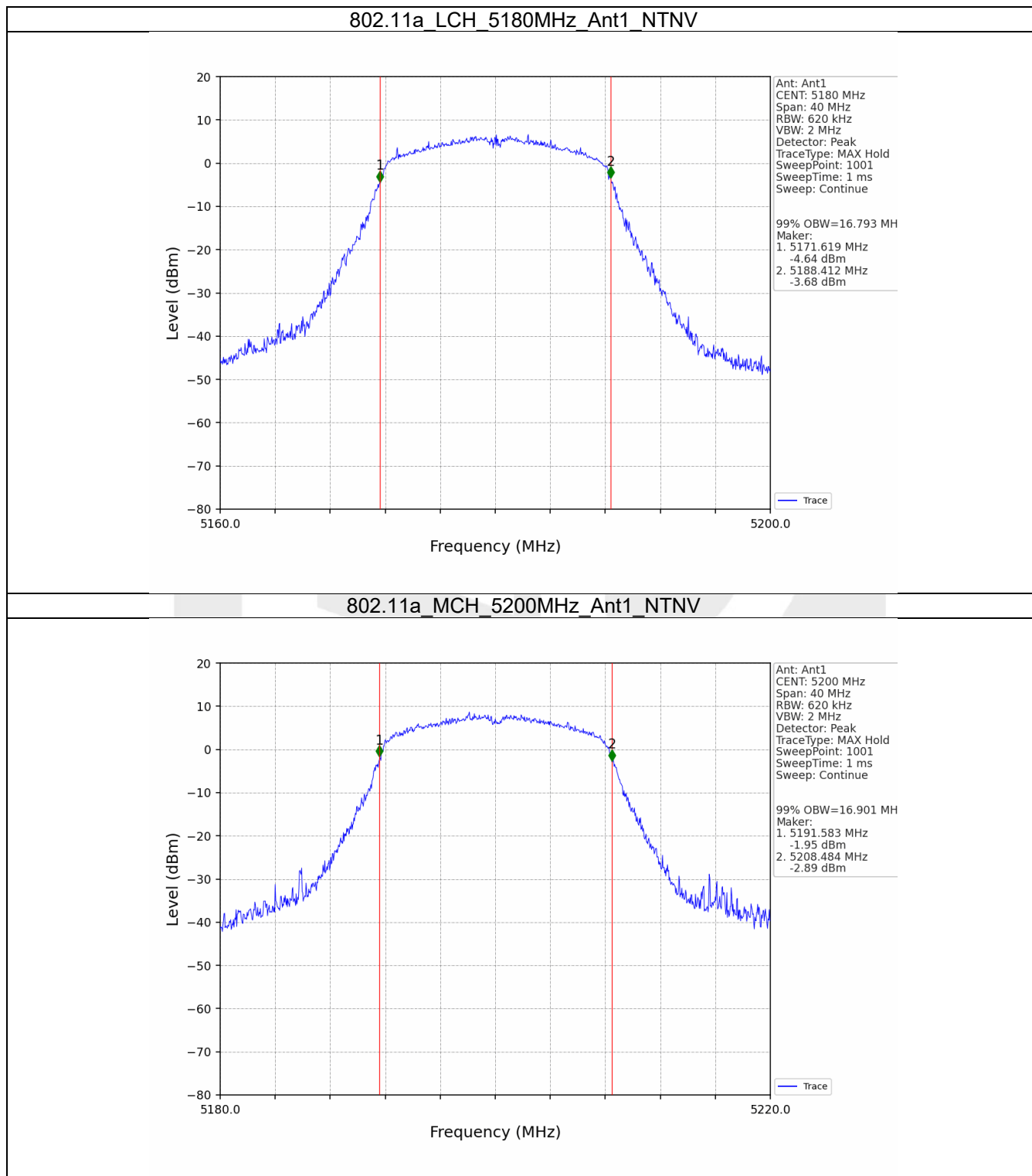
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	16.793	/	Pass
		5200	1	16.901	/	Pass
		5240	1	16.862	/	Pass
802.11n (HT20)	SISO	5180	1	17.768	/	Pass
		5200	1	17.711	/	Pass
		5240	1	17.783	/	Pass

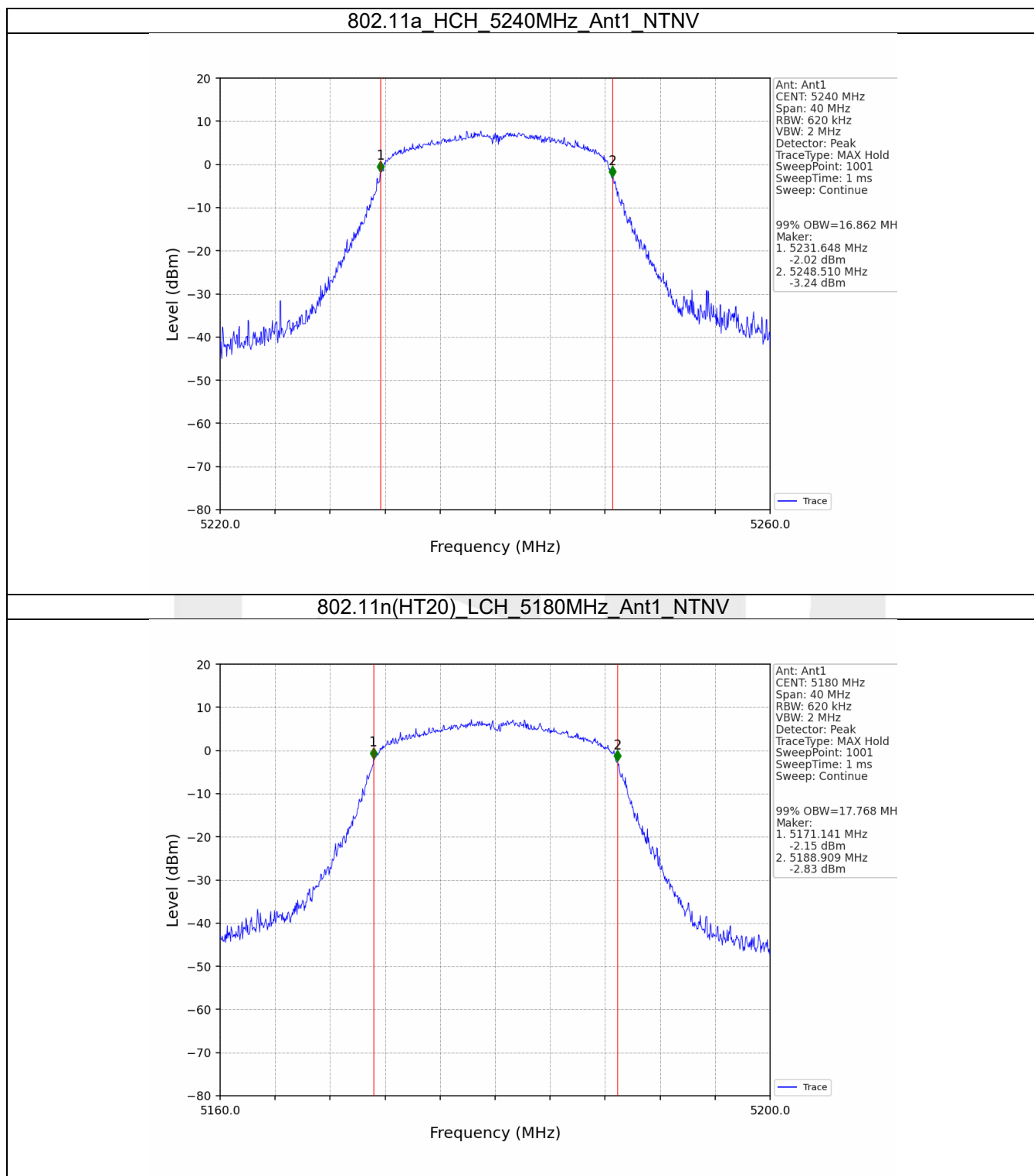
2.1.2 26dB BW

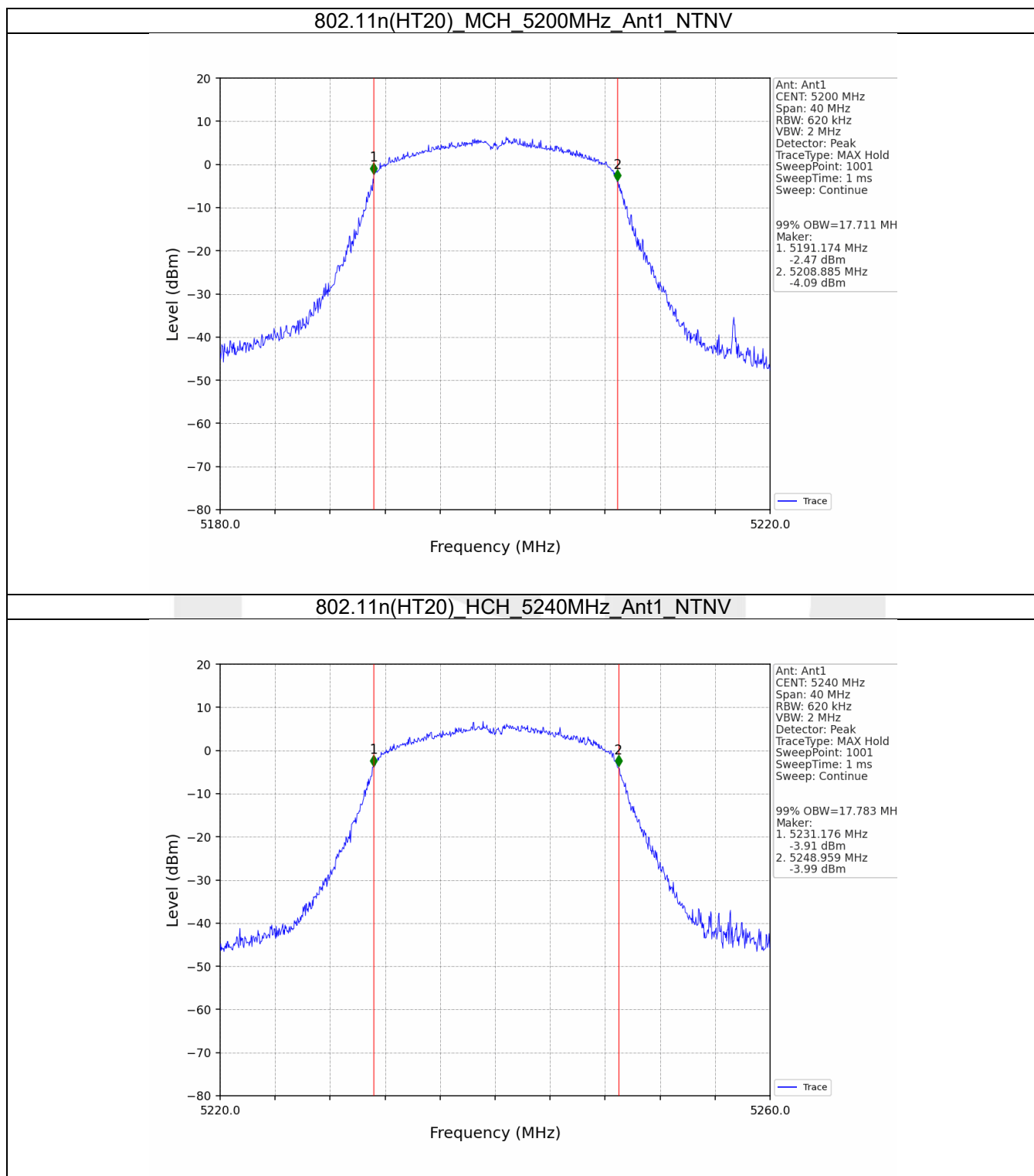
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	18.959	/	Pass
		5200	1	19.344	/	Pass
		5240	1	19.272	/	Pass
802.11n (HT20)	SISO	5180	1	19.817	/	Pass
		5200	1	19.954	/	Pass
		5240	1	19.808	/	Pass

2.2 Test Graph

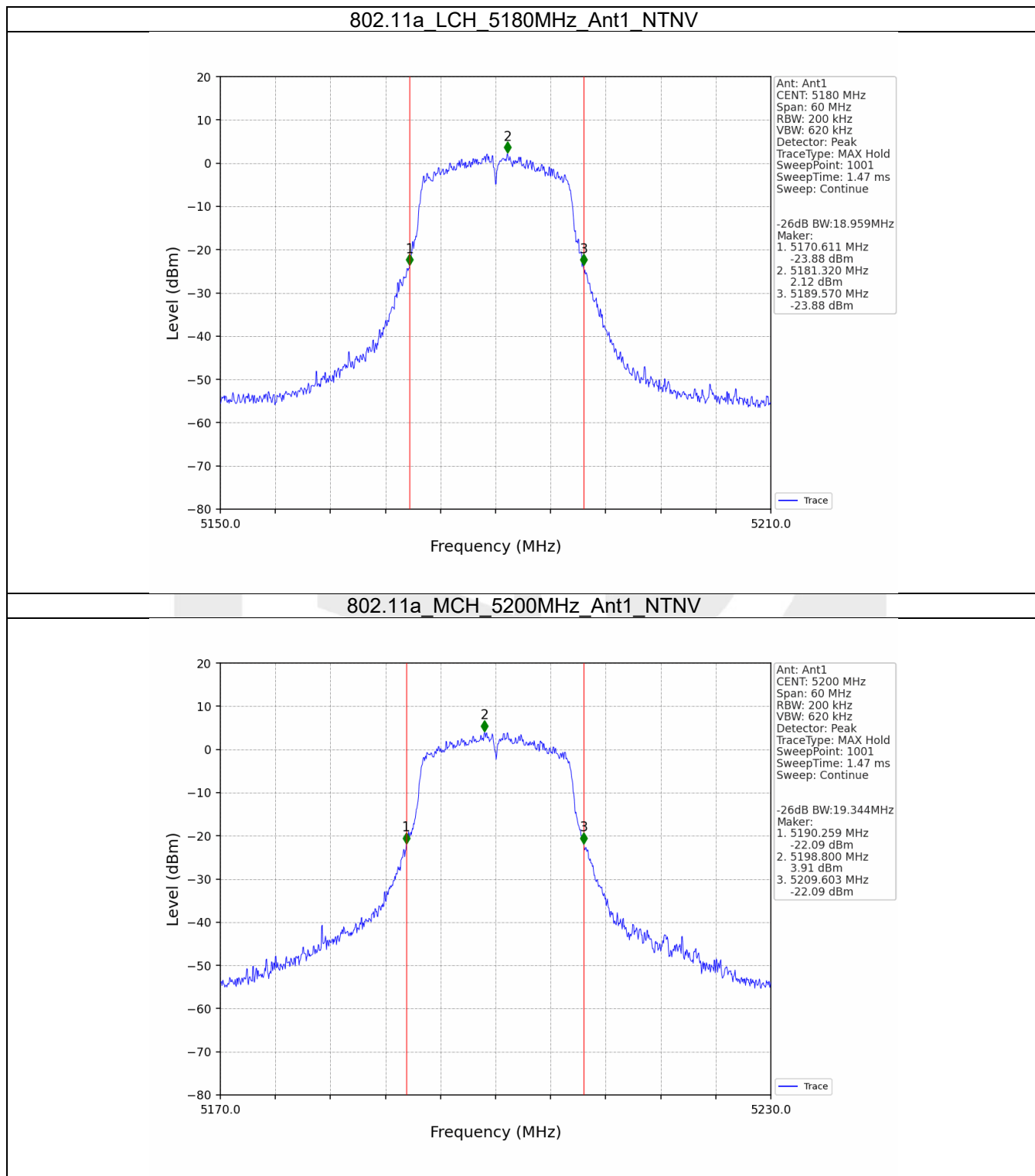
2.2.1 OBW

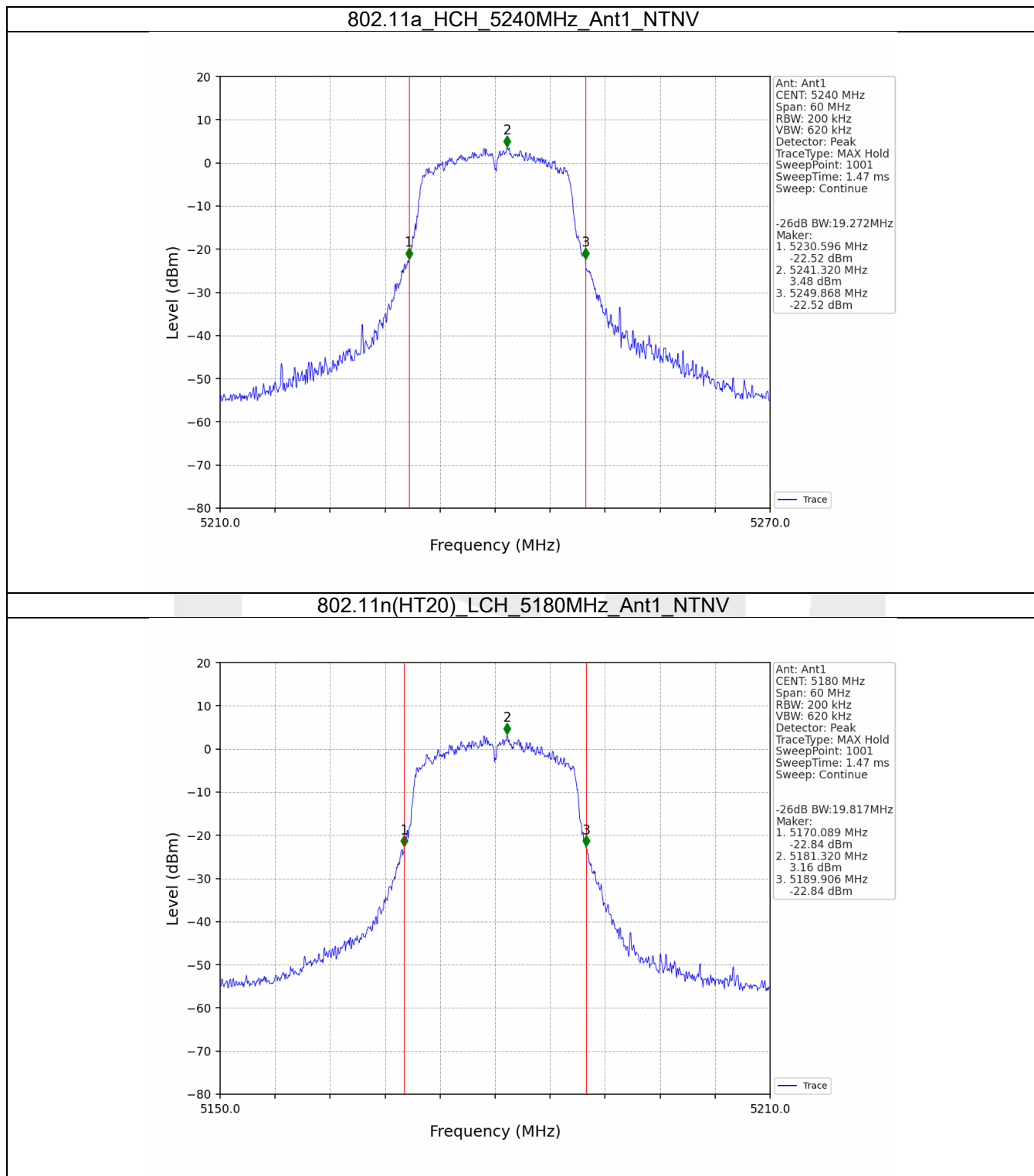


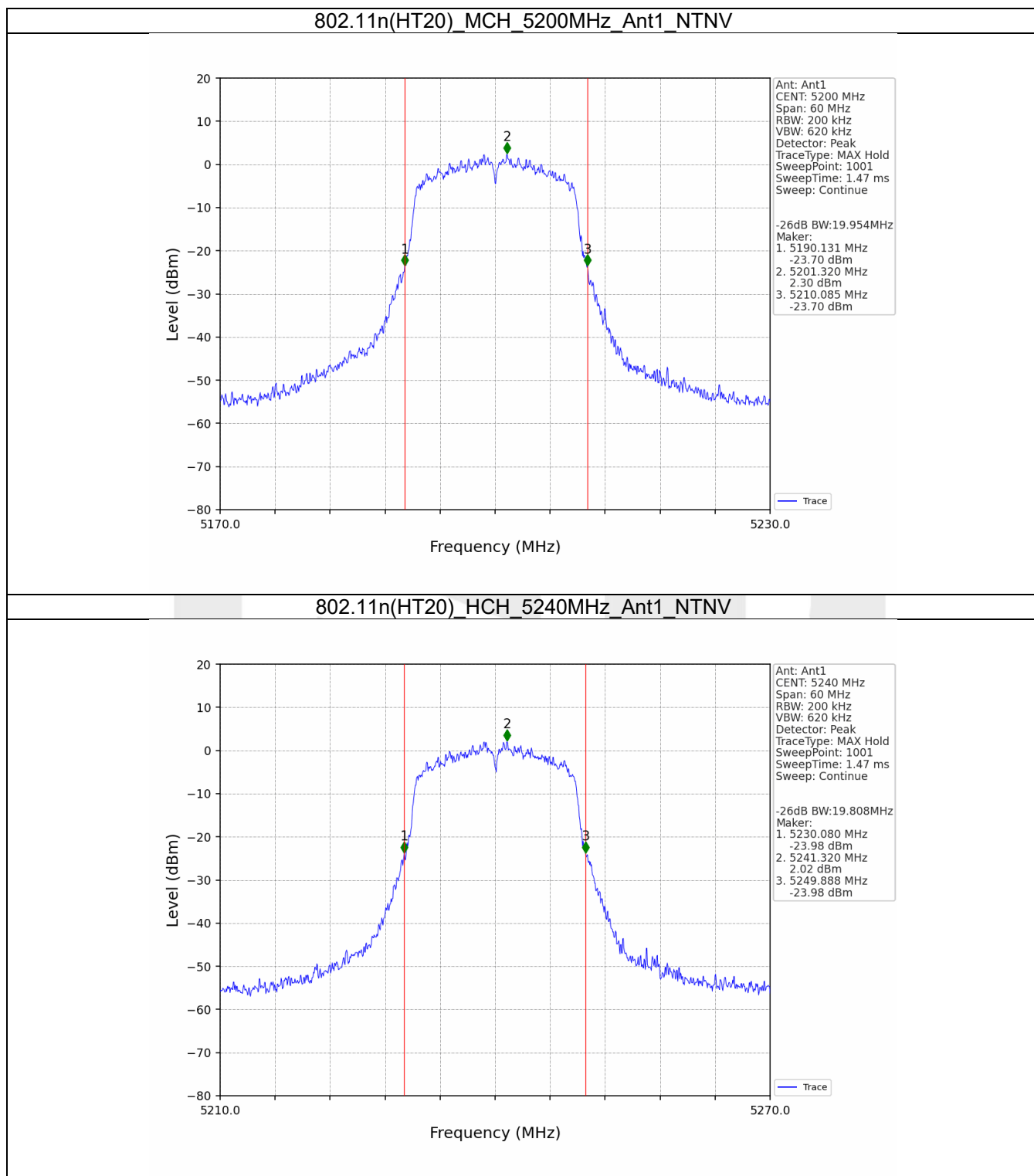




2.2.2 26dB BW







3. Maximum Conducted Output Power

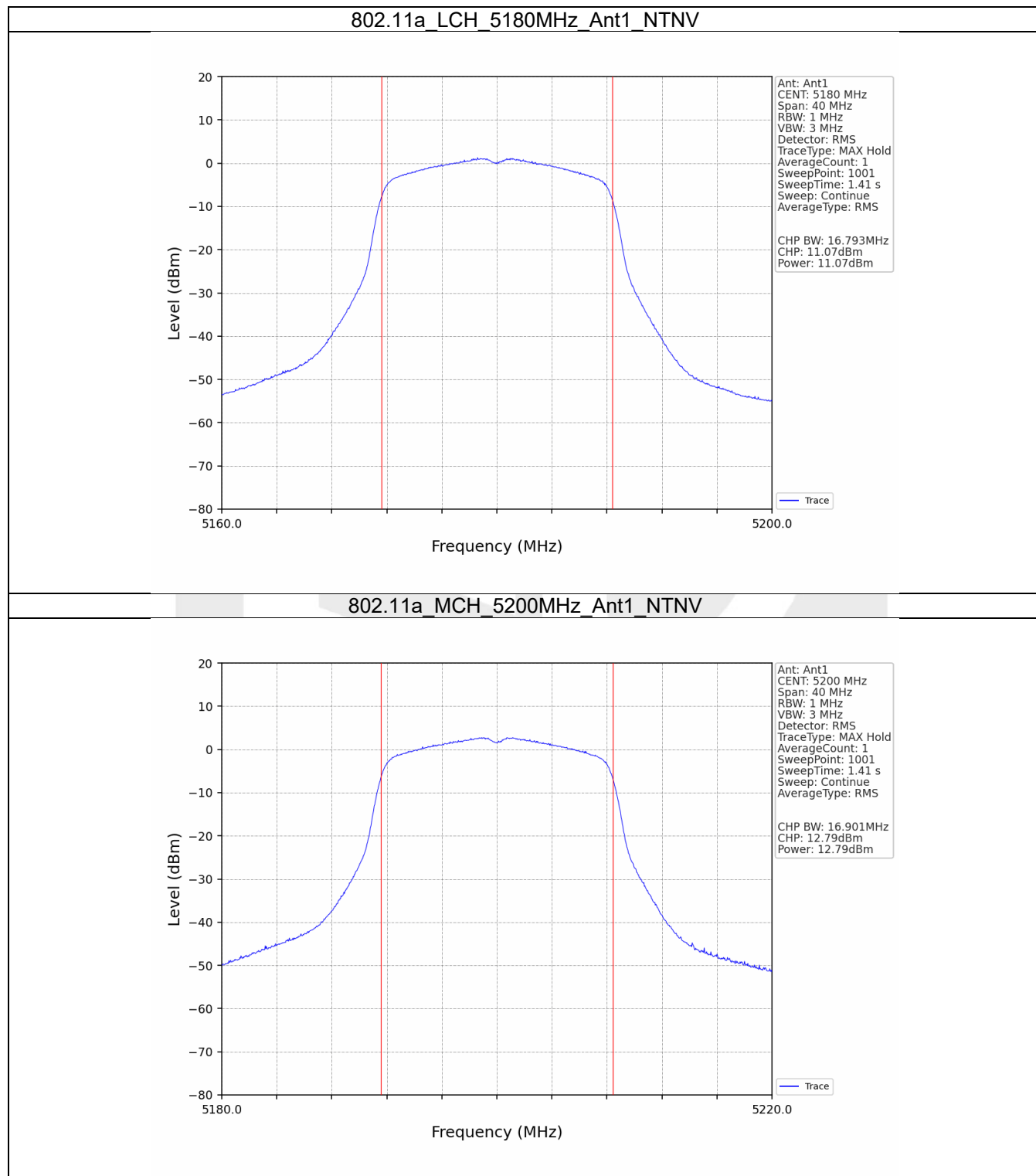
3.1 Test Result

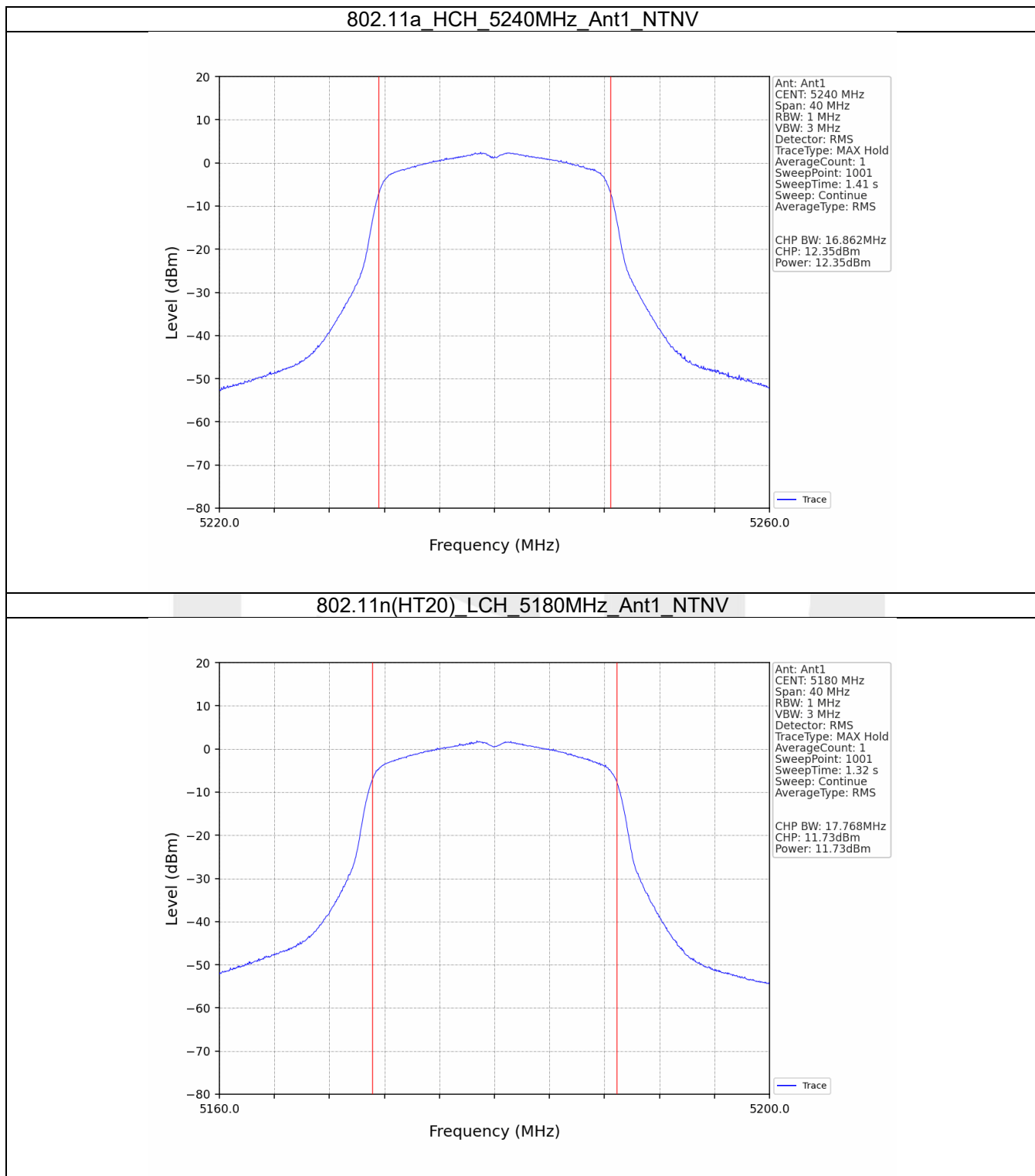
3.1.1 Power

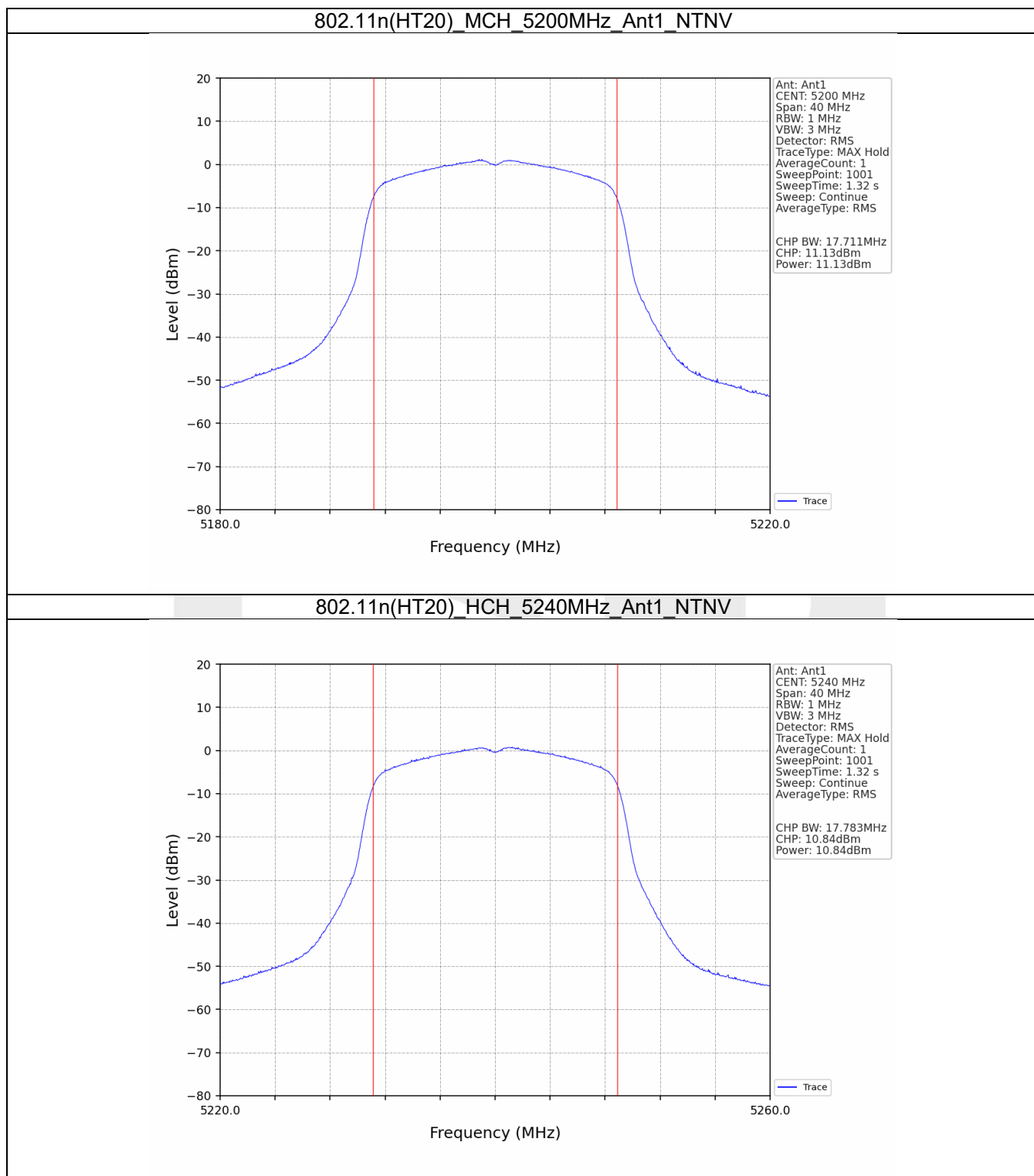
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	11.07	≤ 23.98	Pass
		5200	12.79	≤ 23.98	Pass
		5240	12.35	≤ 23.98	Pass
802.11n (HT20)	SISO	5180	11.73	≤ 23.98	Pass
		5200	11.13	≤ 23.98	Pass
		5240	10.84	≤ 23.98	Pass

3.2 Test Graph

3.2.1 Power







4. Maximum Power Spectral Density

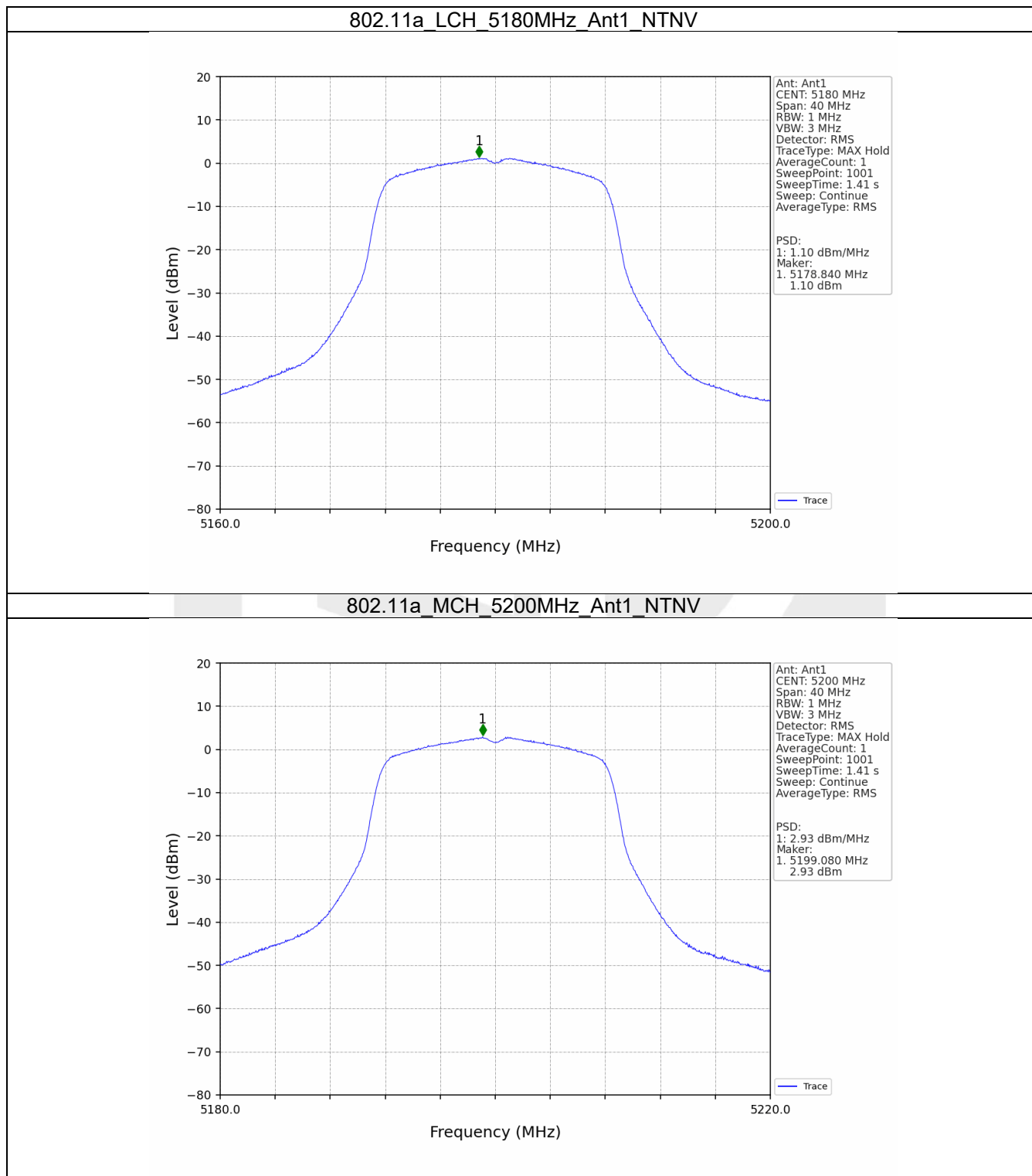
4.1 Test Result

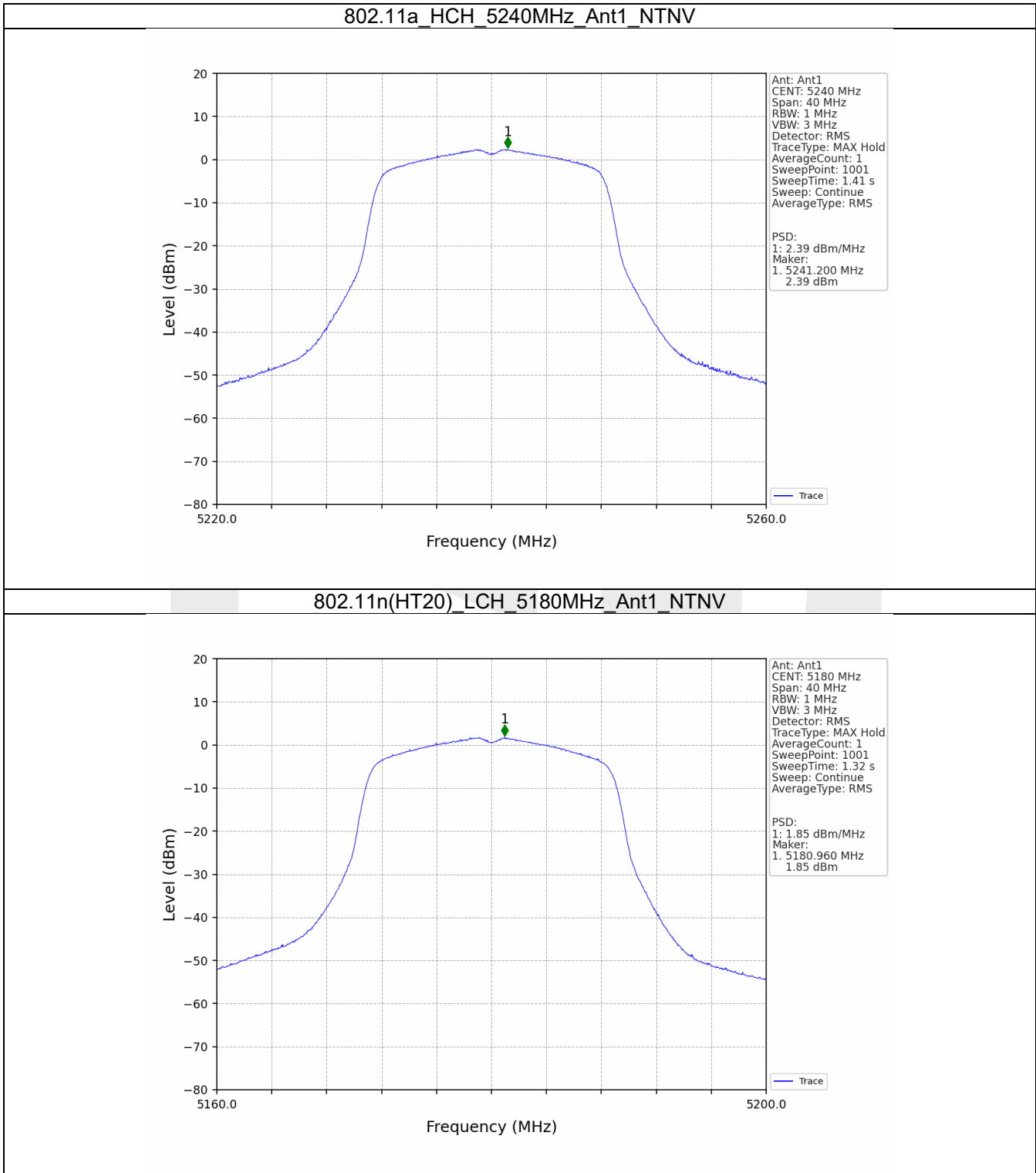
4.1.1 PSD

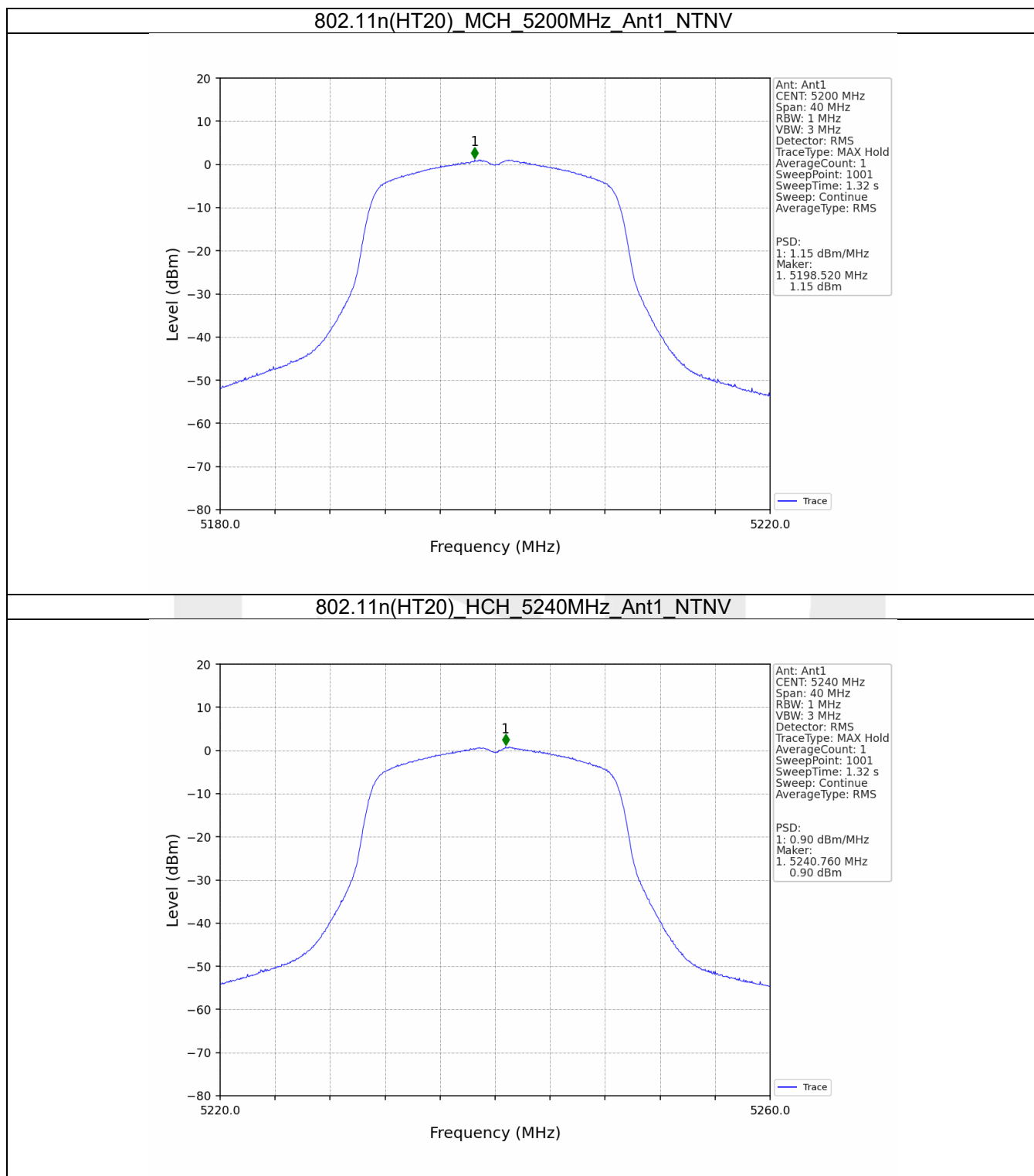
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	1.10	≤ 11	Pass
		5200	2.93	≤ 11	Pass
		5240	2.39	≤ 11	Pass
802.11n (HT20)	SISO	5180	1.85	≤ 11	Pass
		5200	1.15	≤ 11	Pass
		5240	0.90	≤ 11	Pass

4.2 Test Graph

4.2.1 PSD







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
802.11a	SISO	5180	20	102	5180.020	5150 to 5250	Pass
				120	5180.040	5150 to 5250	Pass
				138	5180.040	5150 to 5250	Pass
			-30	120	5180.020	5150 to 5250	Pass
			-20	120	5180.040	5150 to 5250	Pass
			-10	120	5180.040	5150 to 5250	Pass
			0	120	5180.020	5150 to 5250	Pass
			10	120	5180.040	5150 to 5250	Pass
			30	120	5180.040	5150 to 5250	Pass
			40	120	5180.040	5150 to 5250	Pass
			50	120	5180.060	5150 to 5250	Pass
		5200	20	102	5200.020	5150 to 5250	Pass
				120	5200.060	5150 to 5250	Pass
				138	5200.040	5150 to 5250	Pass
			-30	120	5200.060	5150 to 5250	Pass
			-20	120	5200.040	5150 to 5250	Pass
			-10	120	5200.060	5150 to 5250	Pass
			0	120	5200.020	5150 to 5250	Pass
			10	120	5200.020	5150 to 5250	Pass
			30	120	5200.060	5150 to 5250	Pass
			40	120	5200.020	5150 to 5250	Pass
			50	120	5200.020	5150 to 5250	Pass
		5240	20	102	5240.060	5150 to 5250	Pass
				120	5240.060	5150 to 5250	Pass
				138	5240.040	5150 to 5250	Pass
			-30	120	5240.040	5150 to 5250	Pass
			-20	120	5240.040	5150 to 5250	Pass
			-10	120	5240.060	5150 to 5250	Pass
			0	120	5240.040	5150 to 5250	Pass
			10	120	5240.080	5150 to 5250	Pass
			30	120	5240.040	5150 to 5250	Pass
			40	120	5240.060	5150 to 5250	Pass
			50	120	5240.080	5150 to 5250	Pass
802.11n (HT20)	SISO	5180	20	102	5180.020	5150 to 5250	Pass
				120	5180.020	5150 to 5250	Pass
				138	5180.060	5150 to 5250	Pass
			-30	120	5180.040	5150 to 5250	Pass
			-20	120	5180.020	5150 to 5250	Pass
			-10	120	5180.020	5150 to 5250	Pass
			0	120	5180.040	5150 to 5250	Pass
			10	120	5180.020	5150 to 5250	Pass

			30	120	5180.040	5150 to 5250	Pass
			40	120	5180.000	5150 to 5250	Pass
			50	120	5180.020	5150 to 5250	Pass
		5200	20	102	5200.040	5150 to 5250	Pass
				120	5200.040	5150 to 5250	Pass
				138	5200.020	5150 to 5250	Pass
			-30	120	5200.060	5150 to 5250	Pass
			-20	120	5200.040	5150 to 5250	Pass
			-10	120	5200.020	5150 to 5250	Pass
			0	120	5200.040	5150 to 5250	Pass
			10	120	5200.020	5150 to 5250	Pass
			30	120	5200.040	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	5240.060	5150 to 5250	Pass
				138	5240.060	5150 to 5250	Pass
			-30	120	5240.040	5150 to 5250	Pass
			-20	120	5240.040	5150 to 5250	Pass
			-10	120	5240.040	5150 to 5250	Pass
			0	120	5240.060	5150 to 5250	Pass
			10	120	5240.060	5150 to 5250	Pass
			30	120	5240.040	5150 to 5250	Pass
			40	120	5240.040	5150 to 5250	Pass
			50	120	5240.060	5150 to 5250	Pass

----- End of Report -----