

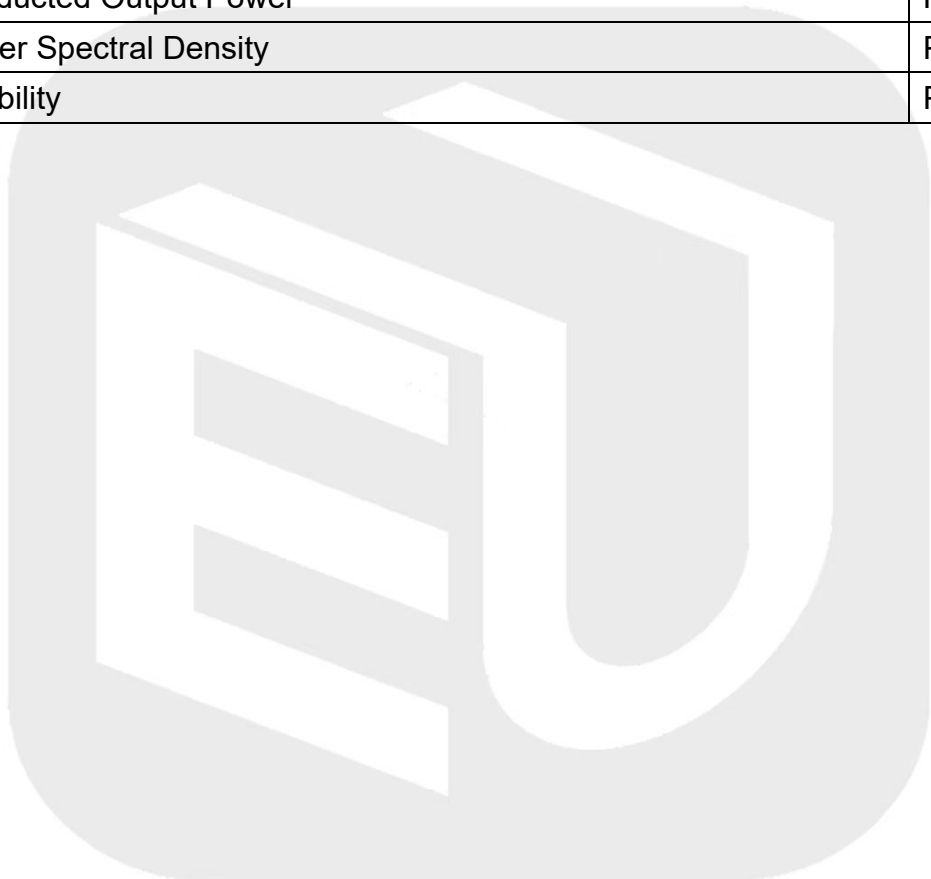
ANNEX F TEST DATA

For

Project No.:	8236EU011102W
Client:	Shenzhen Qianhai Runway Technology Co., LTD
Product Description:	Smart Pet Feeder
Model No.:	F11-C-PRO
FCC ID:	2AU2C-F11CPRO
Technology:	WiFi 5G
Test Engineer:	<i>Mikoy zhu</i>
Test Date:	2024-12-20

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

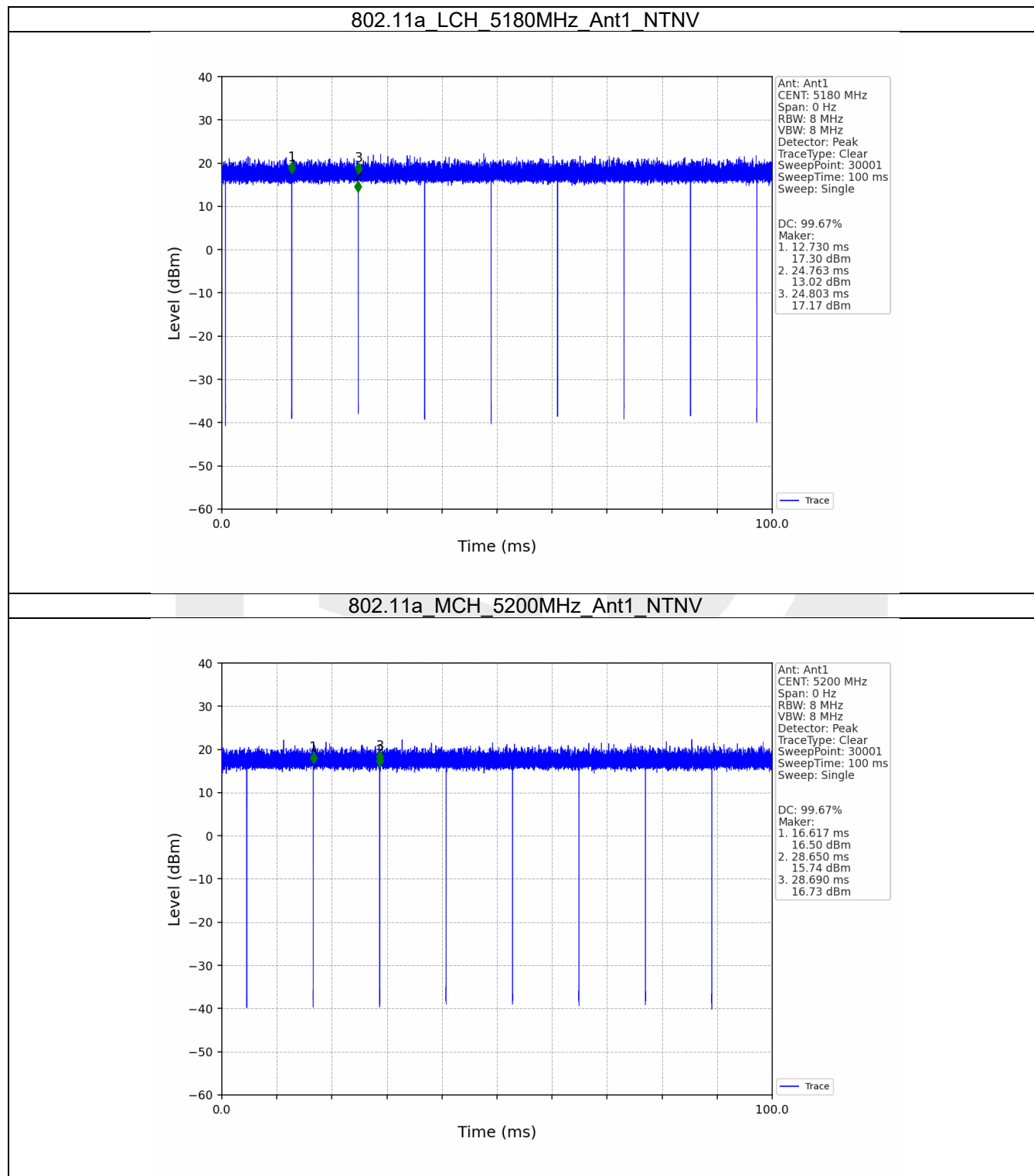
1.1 Test Result

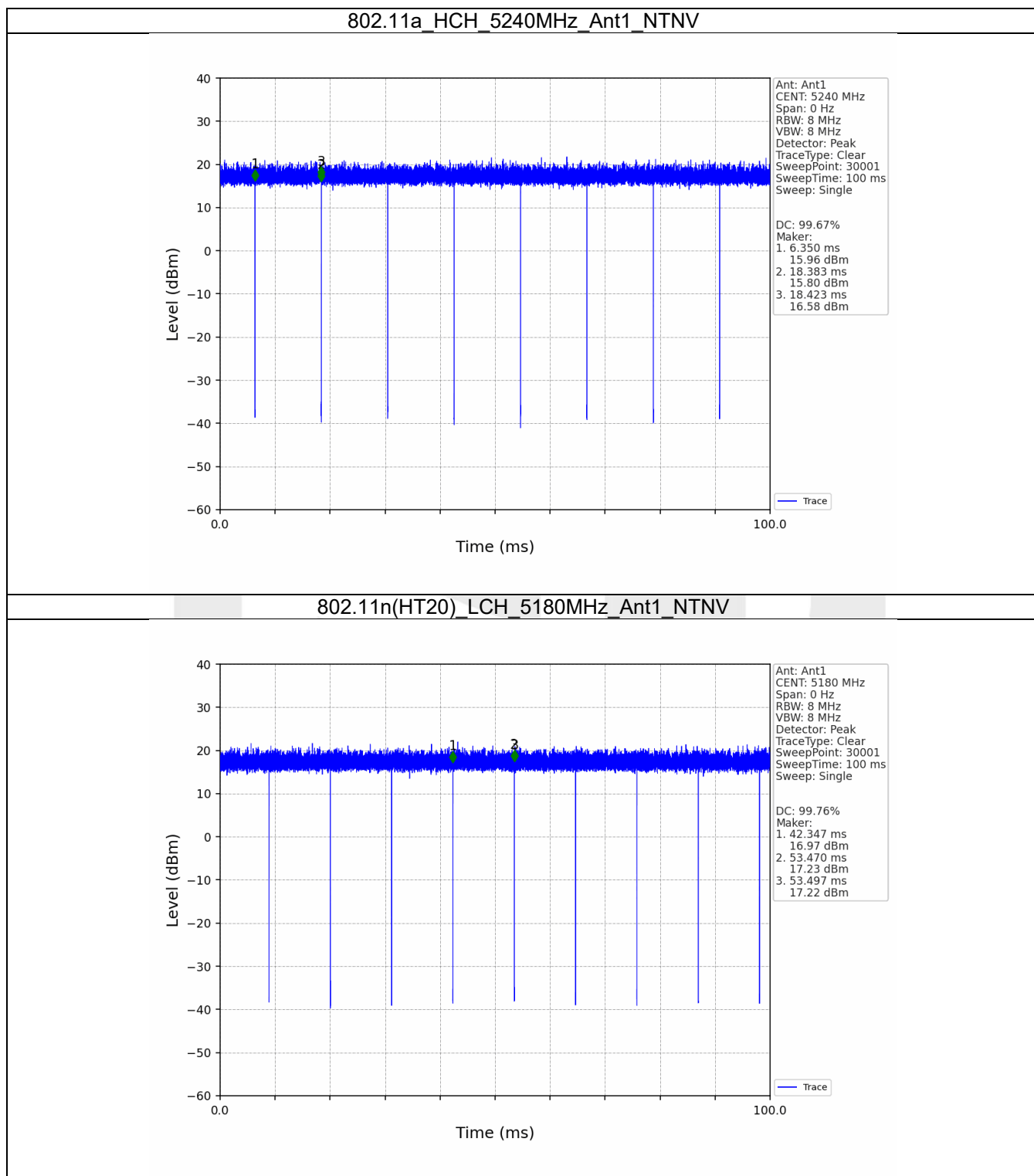
1.1.1 Ant1

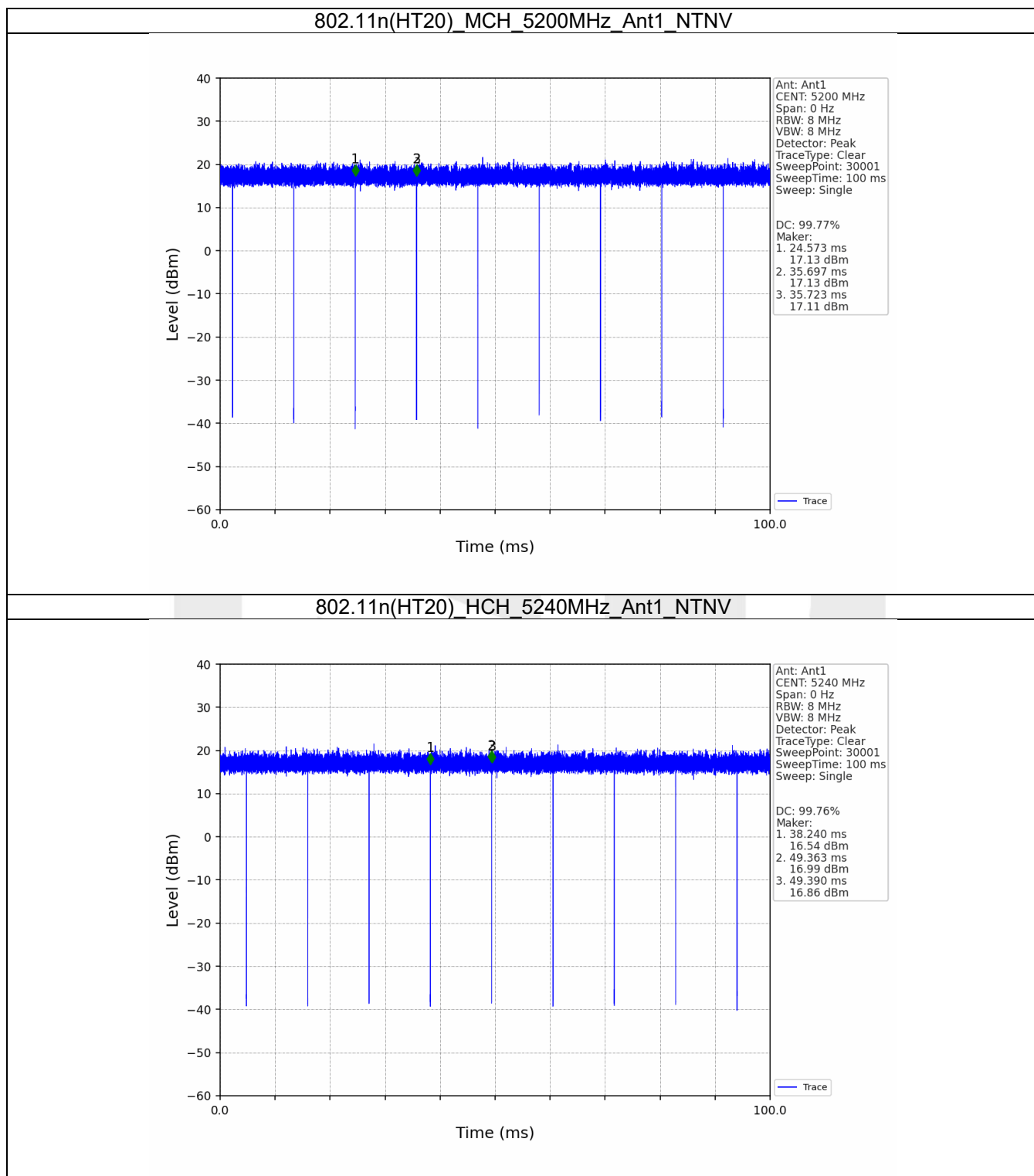
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	12.033	12.073	99.67	0.01	0.06
		5200	12.033	12.073	99.67	0.01	0.06
		5240	12.033	12.073	99.67	0.01	0.03
802.11n (HT20)	SISO	5180	11.123	11.150	99.76	0.01	0.03
		5200	11.124	11.150	99.77	0.01	0.03
		5240	11.123	11.150	99.76	0.01	0.03

1.2 Test Graph

1.2.1 Ant1







2. Bandwidth

2.1 Test Result

2.1.1 OBW

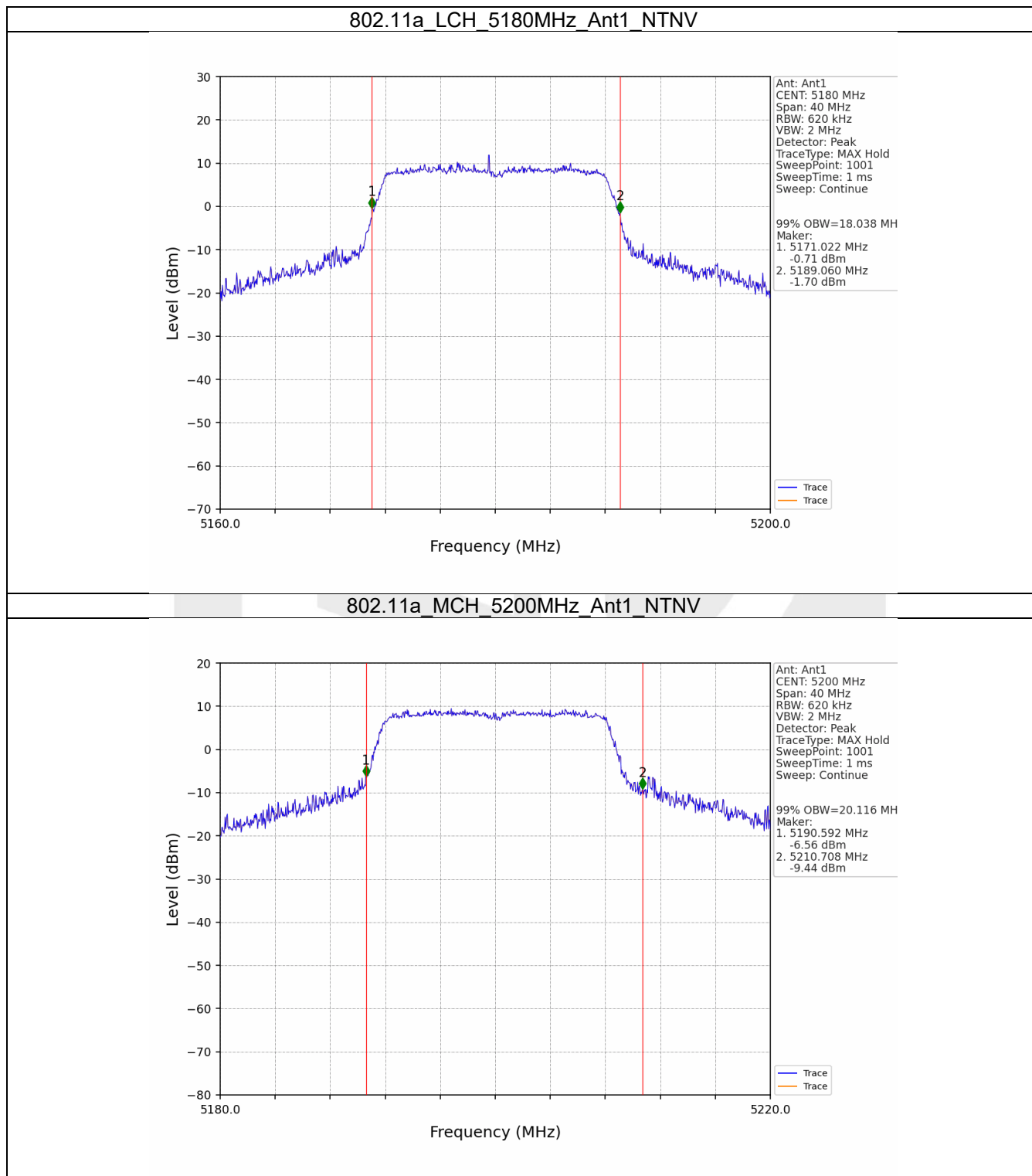
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	18.038	/	Pass
		5200	1	20.116	/	Pass
		5240	1	17.551	/	Pass
802.11n (HT20)	SISO	5180	1	18.712	/	Pass
		5200	1	18.623	/	Pass
		5240	1	18.376	/	Pass

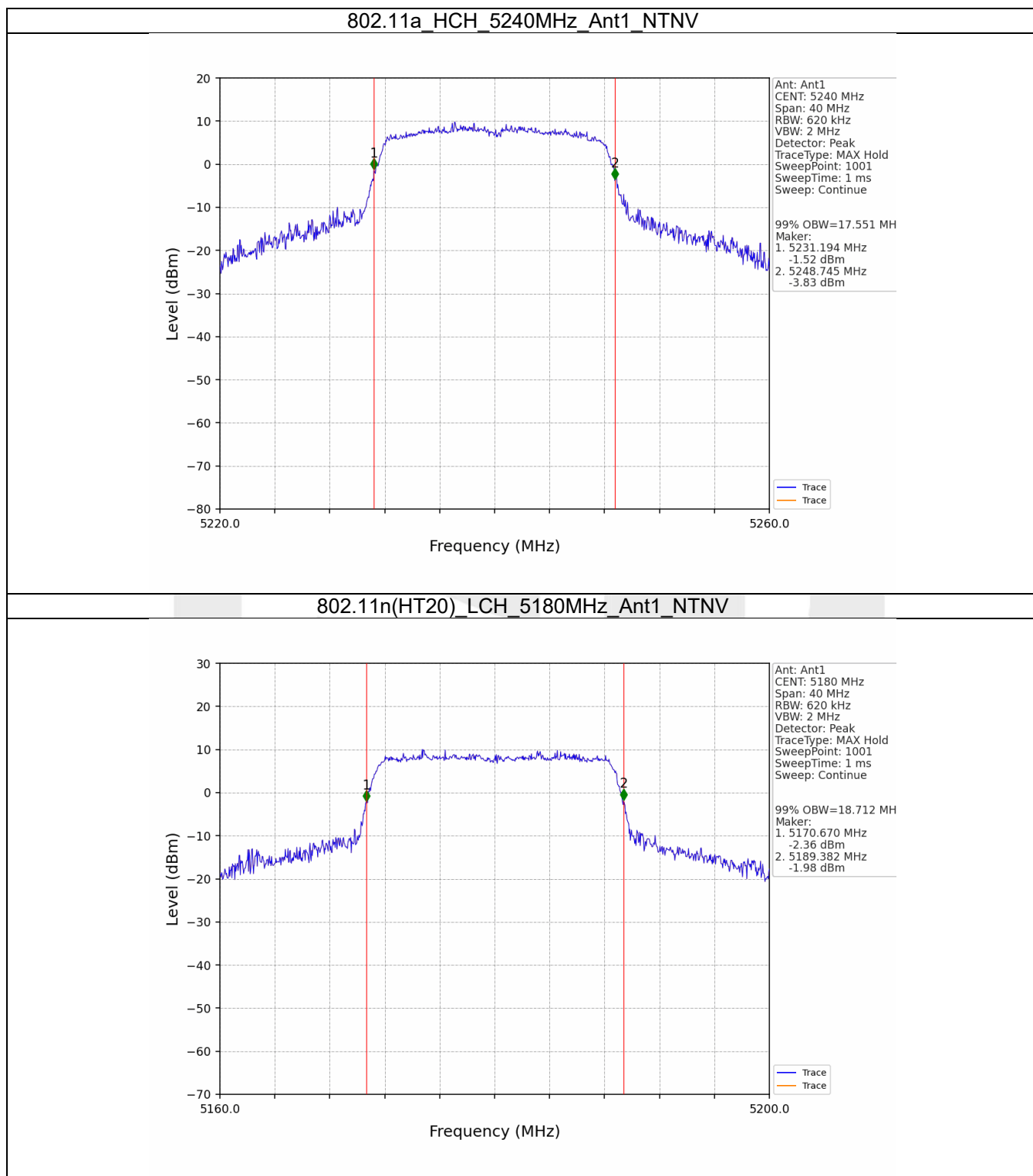
2.1.2 26dB BW

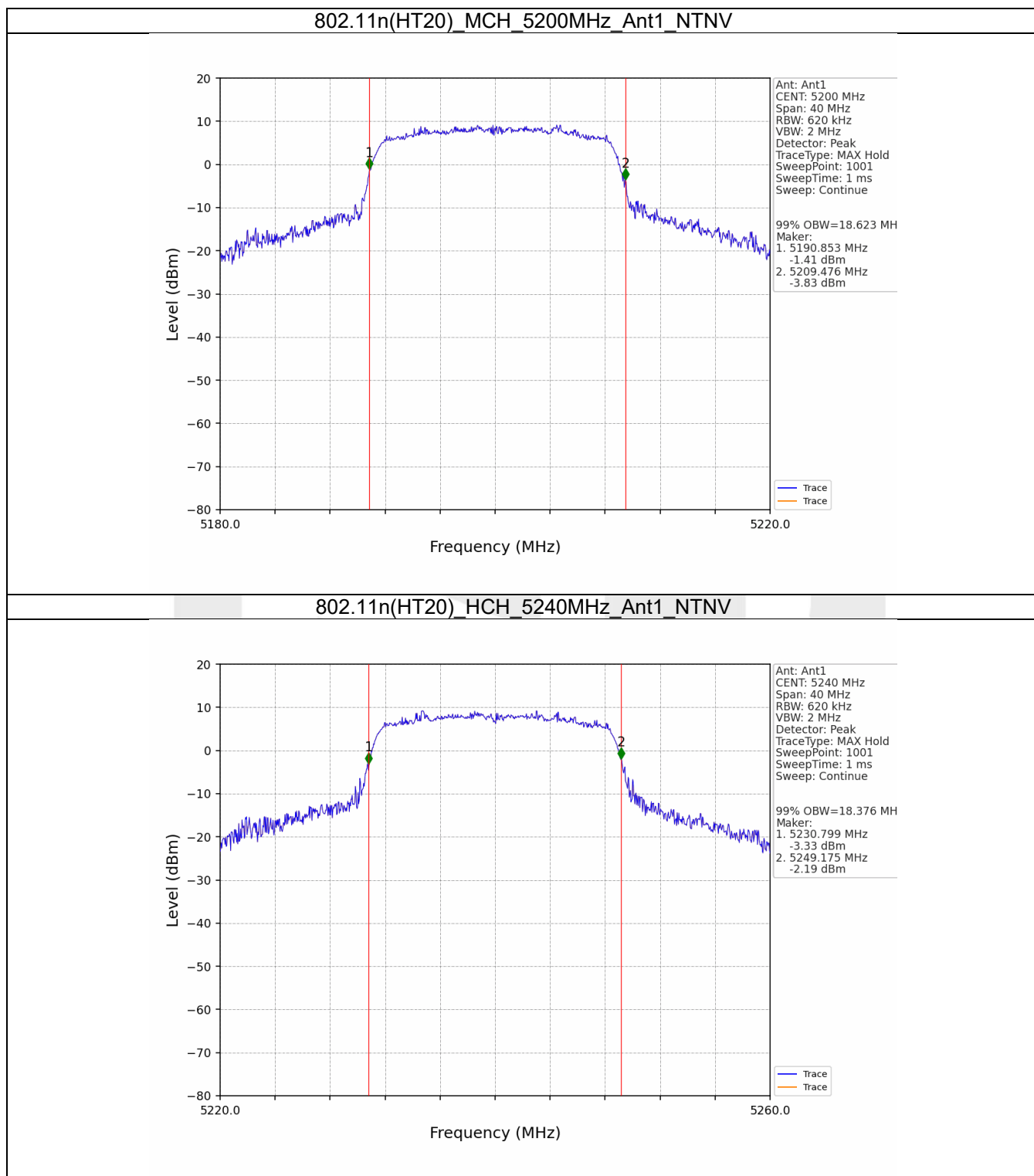
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	30.778	/	Pass
		5200	1	33.254	/	Pass
		5240	1	26.917	/	Pass
802.11n (HT20)	SISO	5180	1	28.942	/	Pass
		5200	1	29.823	/	Pass
		5240	1	25.620	/	Pass

2.2 Test Graph

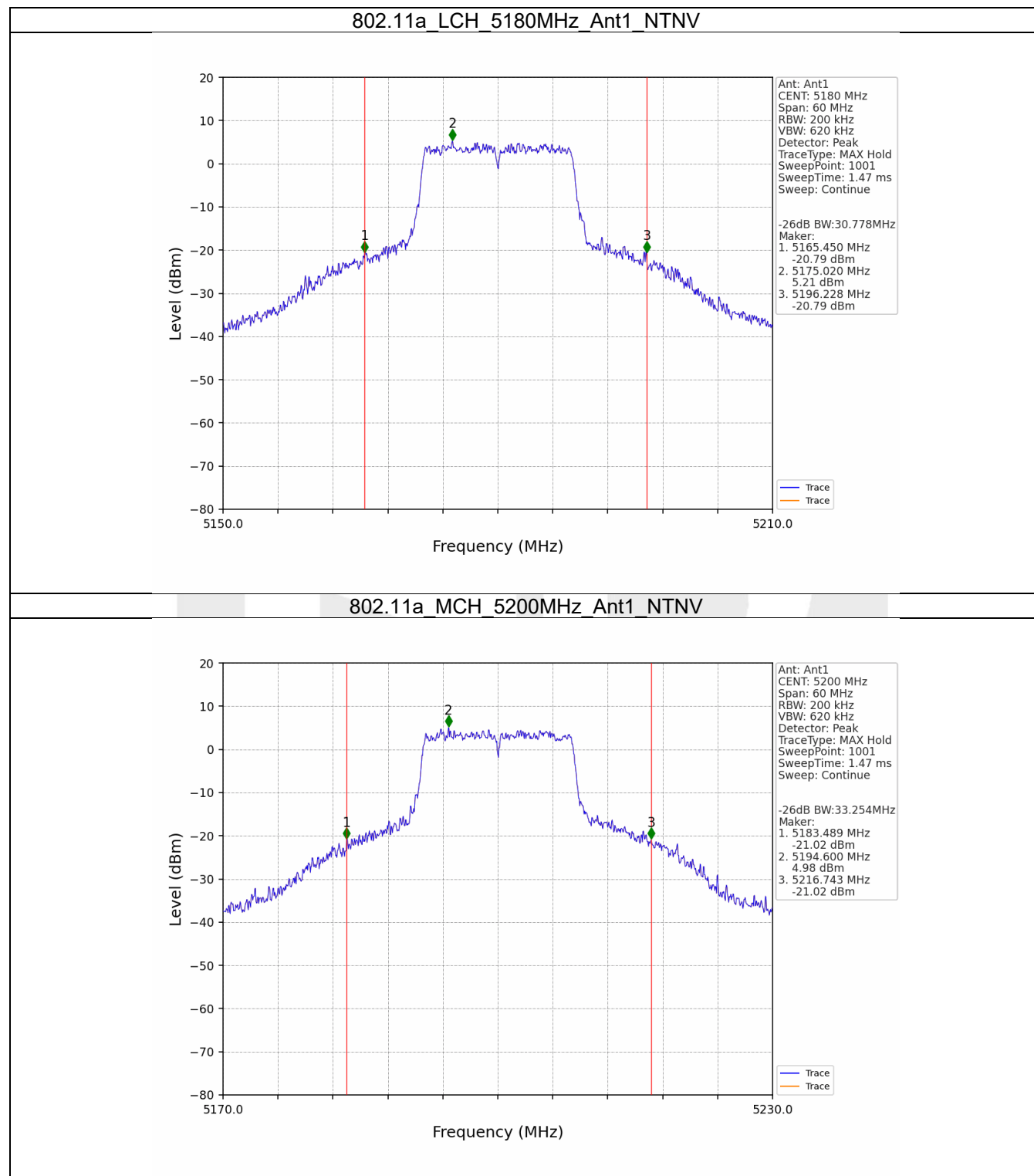
2.2.1 OBW

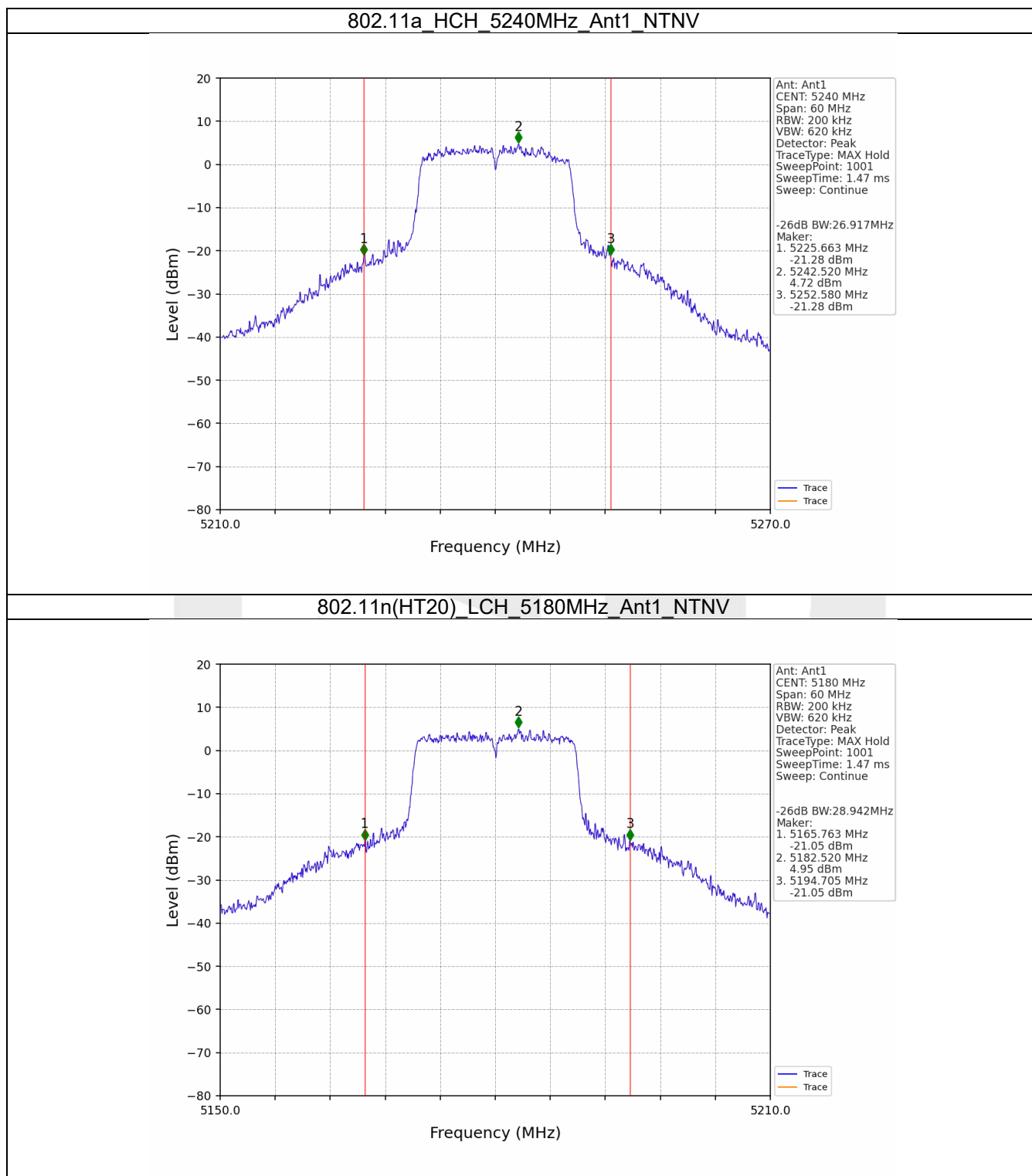


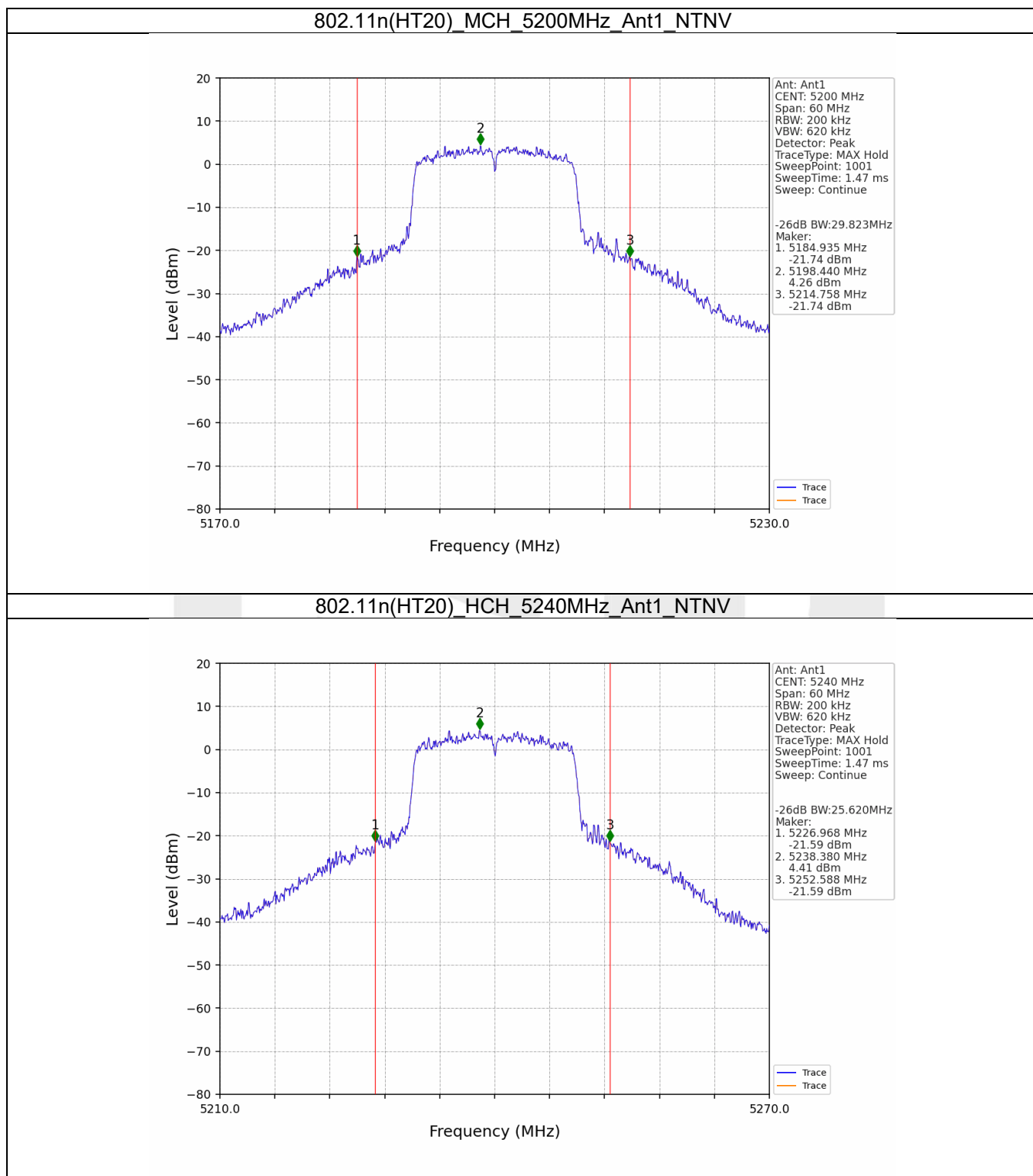




2.2.2 26dB BW







3. Maximum Conducted Output Power

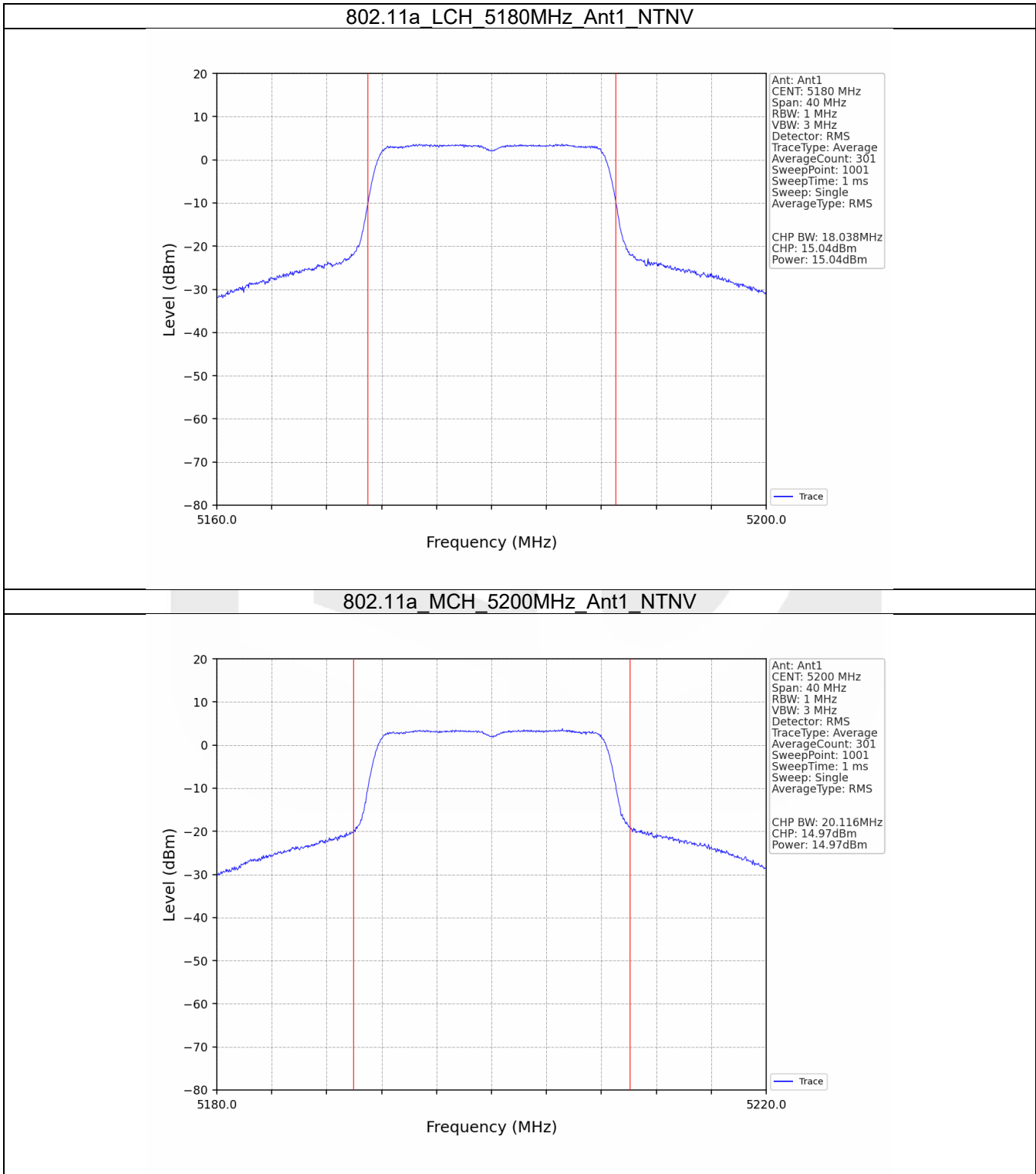
3.1 Test Result

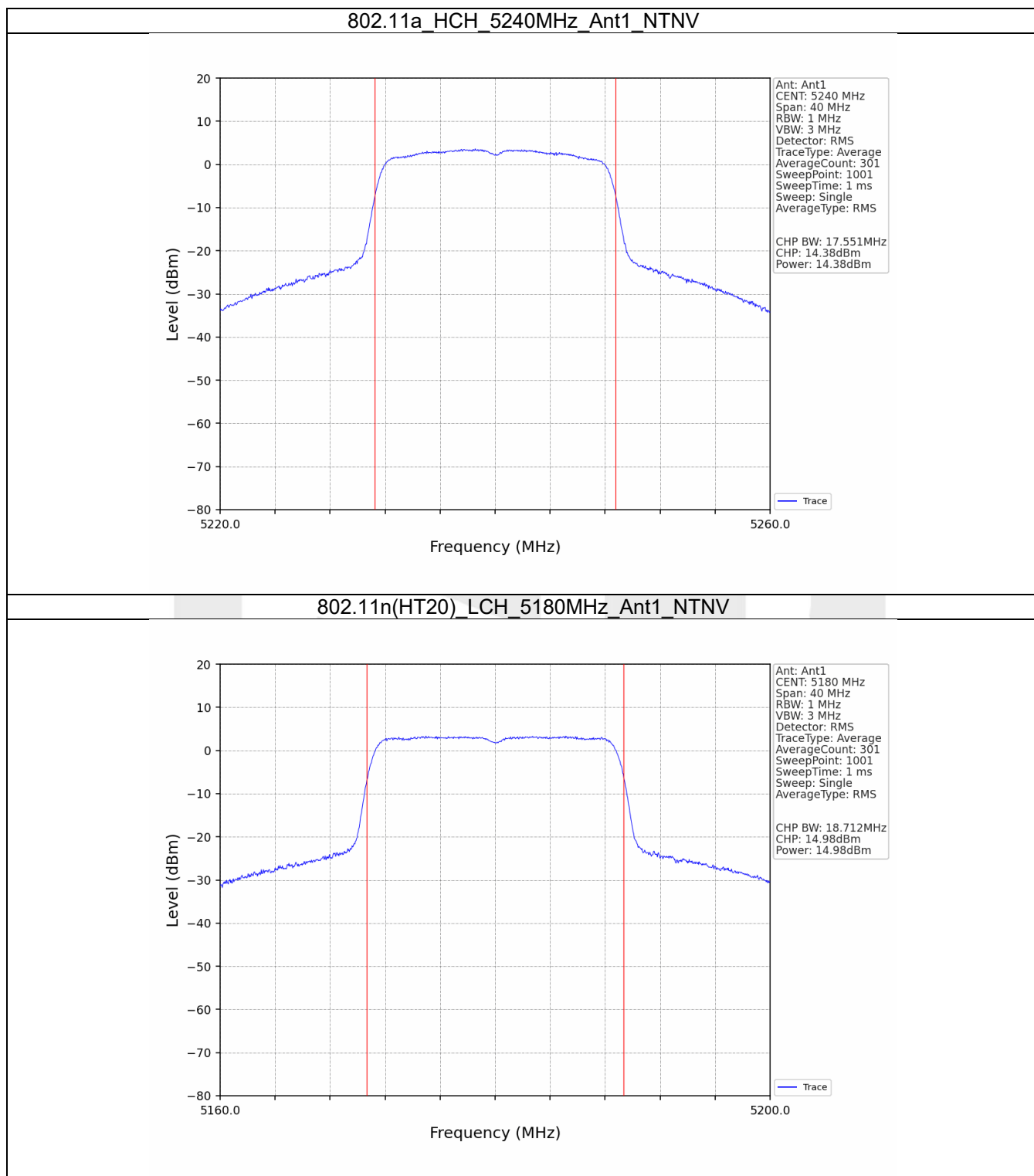
3.1.1 Power

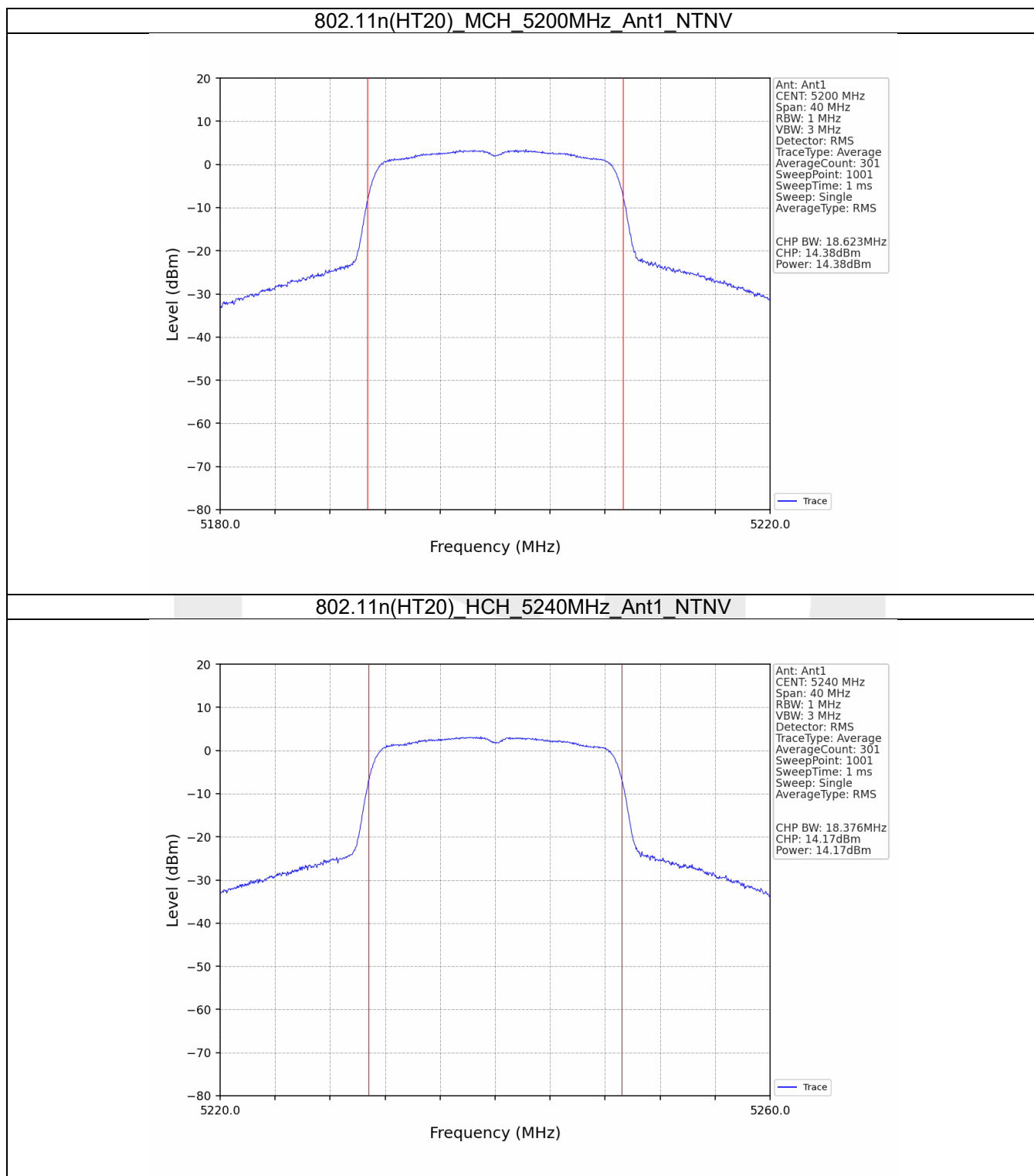
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	15.04	≤ 23.98	Pass
		5200	14.97	≤ 23.98	Pass
		5240	14.38	≤ 23.98	Pass
802.11n (HT20)	SISO	5180	14.98	≤ 23.98	Pass
		5200	14.38	≤ 23.98	Pass
		5240	14.17	≤ 23.98	Pass

3.2 Test Graph

3.2.1 Power







4. Maximum Power Spectral Density

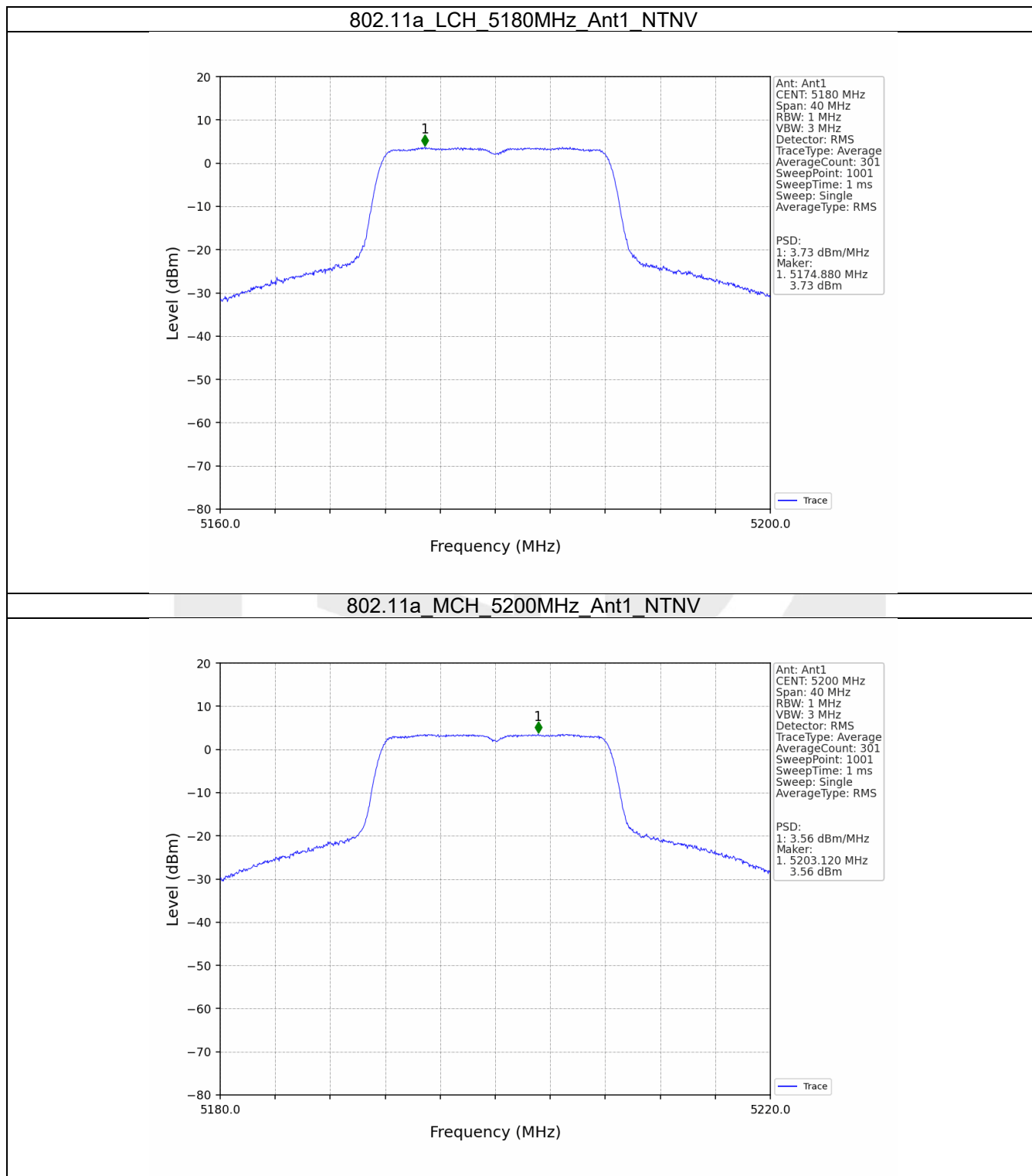
4.1 Test Result

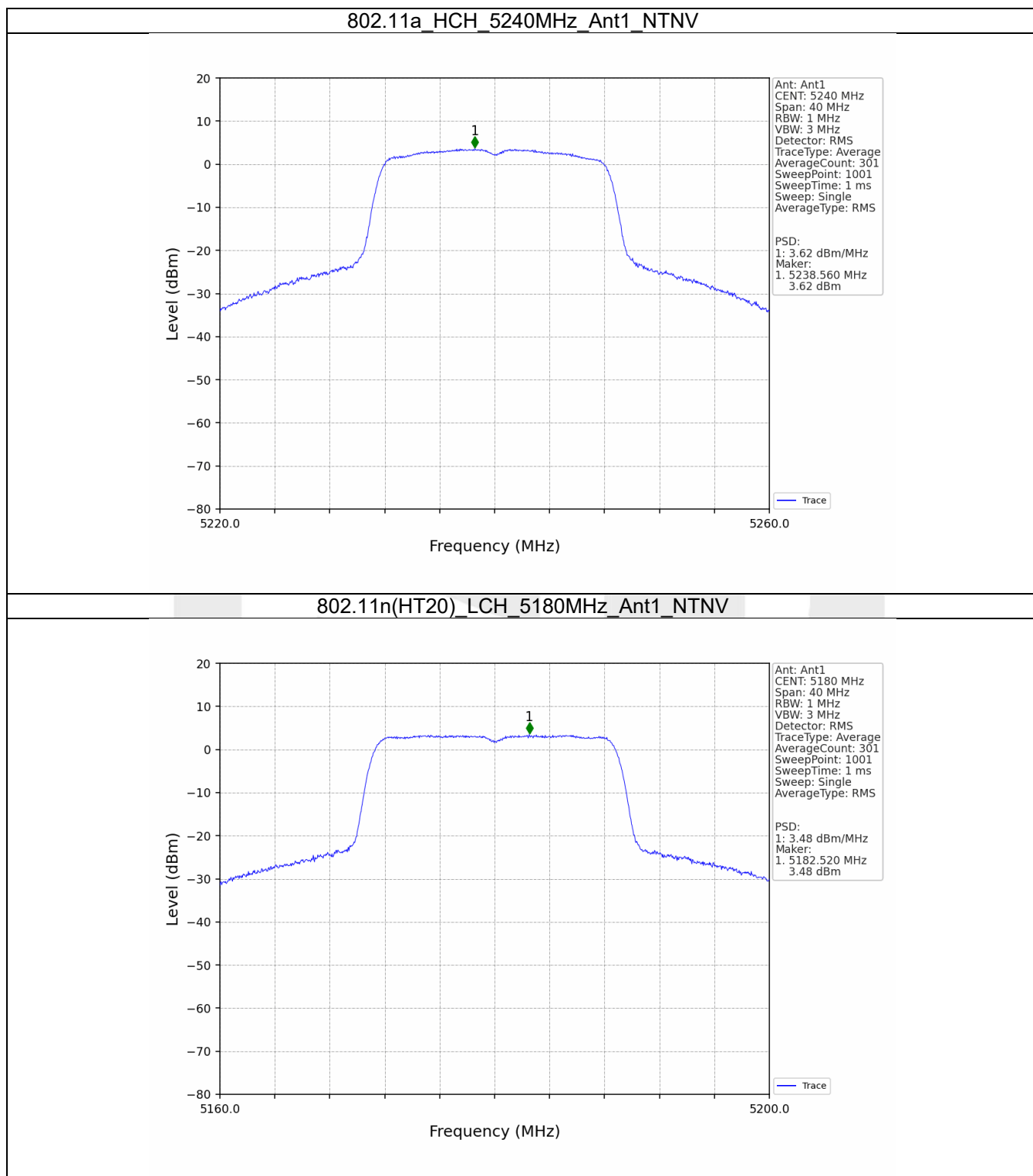
4.1.1 PSD

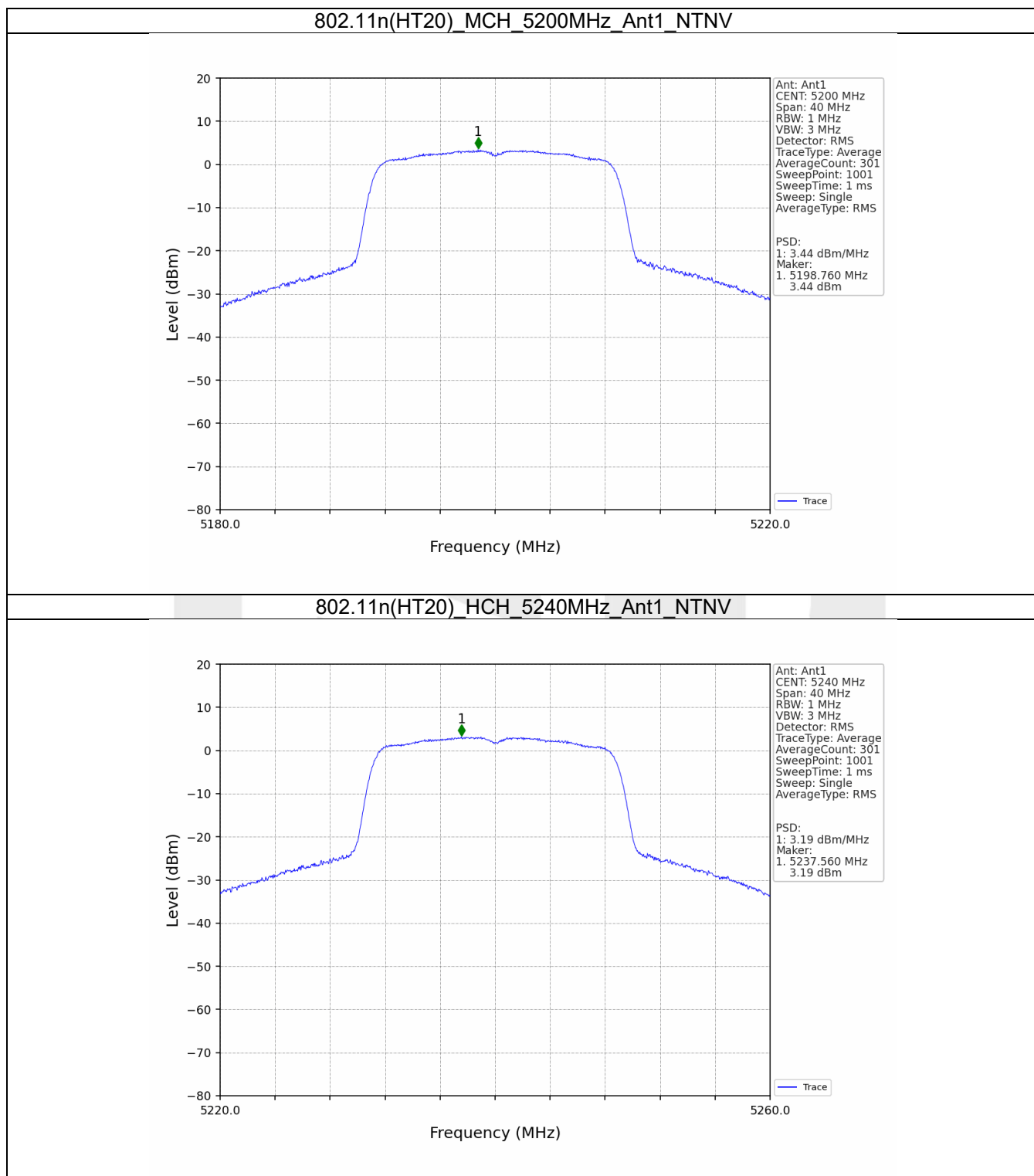
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	3.73	<=11	Pass
		5200	3.56	<=11	Pass
		5240	3.62	<=11	Pass
802.11n (HT20)	SISO	5180	3.48	<=11	Pass
		5200	3.44	<=11	Pass
		5240	3.19	<=11	Pass
Note1: Antenna Gain: Ant1: 2.96dBi;					

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
Carrier Wave	SISO	5180	20	102	5179.987	5150 to 5250	Pass
				120	5179.985	5150 to 5250	Pass
				138	5179.984	5150 to 5250	Pass
			-30	120	5179.982	5150 to 5250	Pass
			-20	120	5179.981	5150 to 5250	Pass
			-10	120	5179.981	5150 to 5250	Pass
			0	120	5179.980	5150 to 5250	Pass
			10	120	5179.980	5150 to 5250	Pass
			30	120	5179.979	5150 to 5250	Pass
			40	120	5179.979	5150 to 5250	Pass
			50	120	5179.979	5150 to 5250	Pass
		5200	20	102	5199.978	5150 to 5250	Pass
				120	5199.978	5150 to 5250	Pass
				138	5199.978	5150 to 5250	Pass
			-30	120	5199.979	5150 to 5250	Pass
			-20	120	5199.979	5150 to 5250	Pass
			-10	120	5199.979	5150 to 5250	Pass
			0	120	5199.979	5150 to 5250	Pass
			10	120	5199.979	5150 to 5250	Pass
			30	120	5199.979	5150 to 5250	Pass
			40	120	5199.979	5150 to 5250	Pass
			50	120	5199.979	5150 to 5250	Pass
		5240	20	102	5239.979	5150 to 5250	Pass
				120	5239.979	5150 to 5250	Pass
				138	5239.980	5150 to 5250	Pass
			-30	120	5239.980	5150 to 5250	Pass
			-20	120	5239.980	5150 to 5250	Pass
			-10	120	5239.980	5150 to 5250	Pass
			0	120	5239.980	5150 to 5250	Pass
			10	120	5239.981	5150 to 5250	Pass
			30	120	5239.981	5150 to 5250	Pass
			40	120	5239.981	5150 to 5250	Pass
			50	120	5239.981	5150 to 5250	Pass

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