

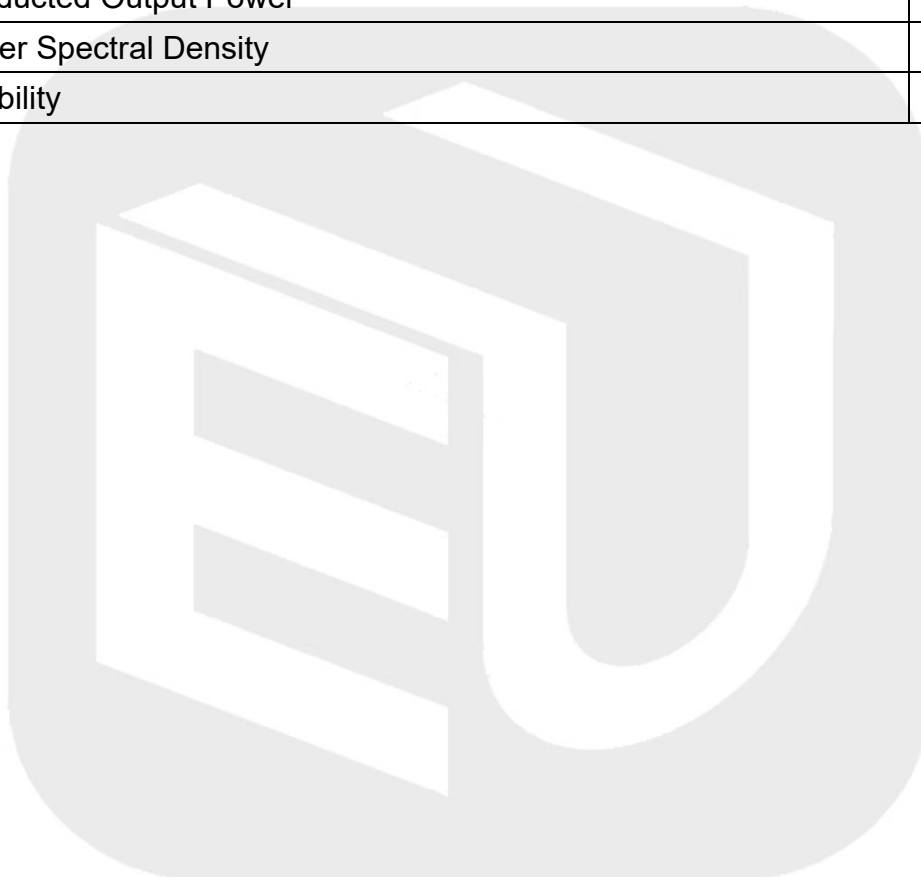
ANNEX F TEST DATA

For

Project No.:	8233EU011002W
Client:	Cheerlux (Shenzhen) Electronic Technology Co., Ltd.
Product Description:	Projector
Model No.:	E2
FCC ID:	2AYQQ-E2
Technology:	WiFi 5G
Test Engineer:	<i>Mikoy zhu</i>
Test Date:	2024-09-23

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

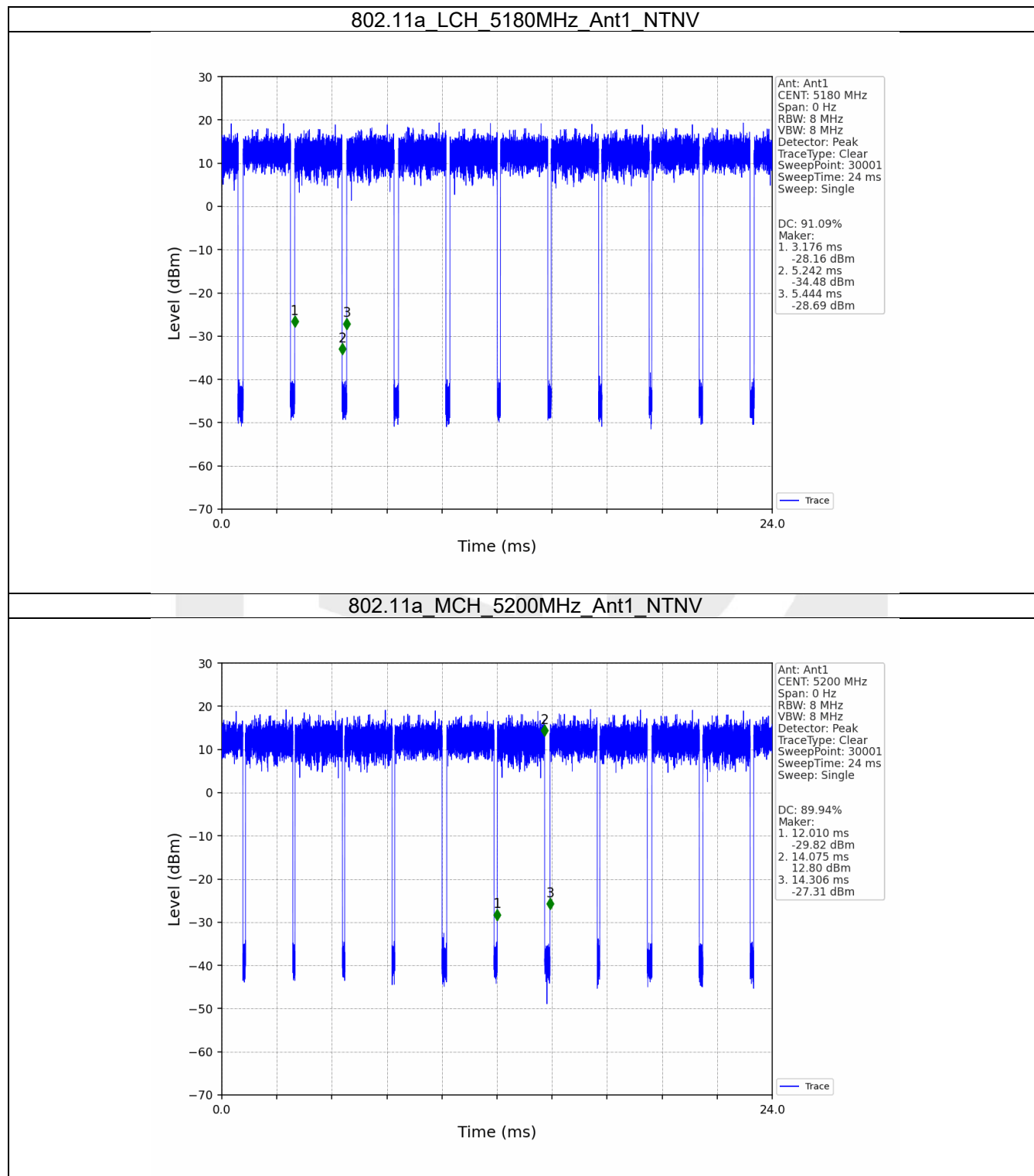
1.1 Test Result

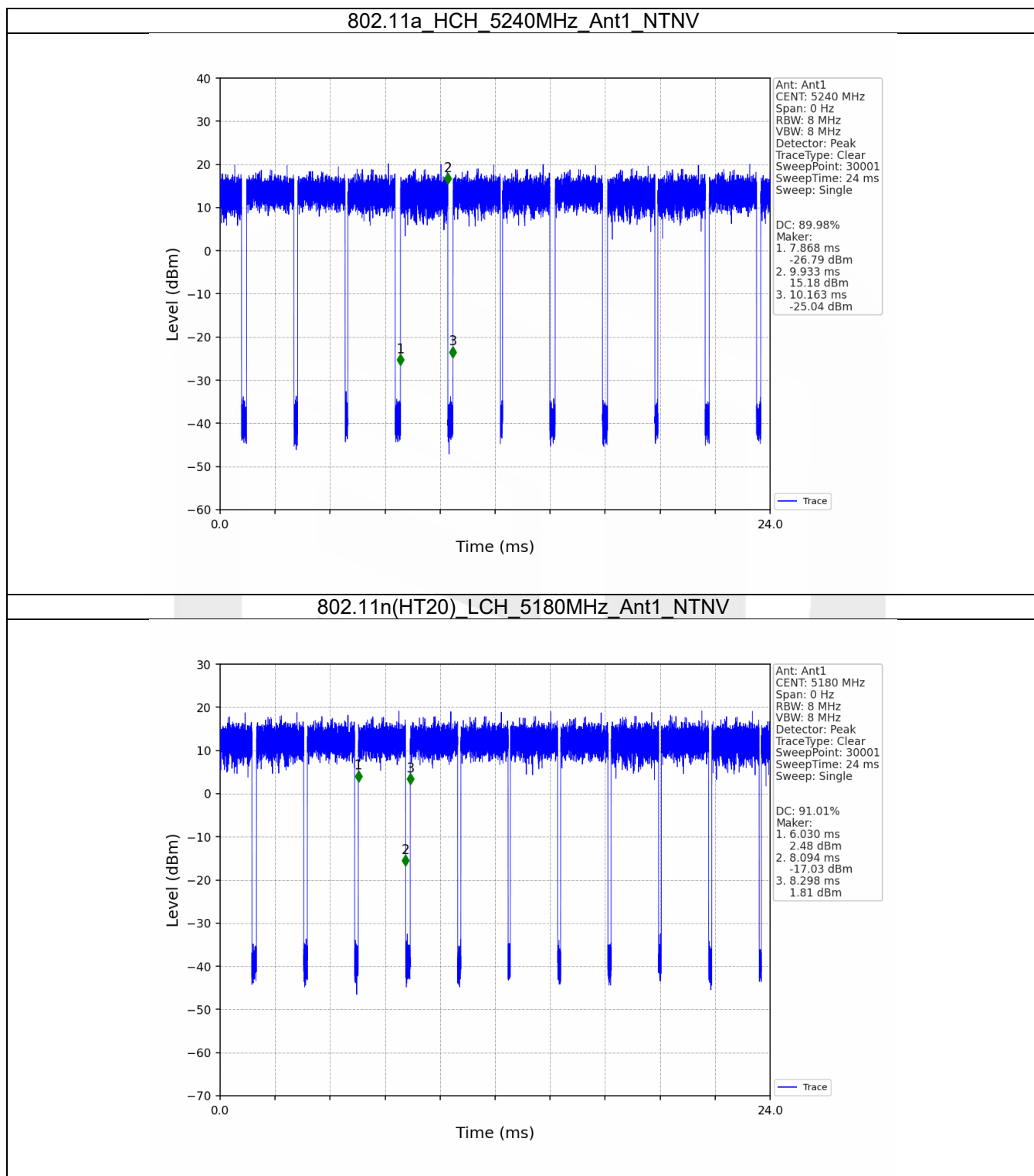
1.1.1 Ant1

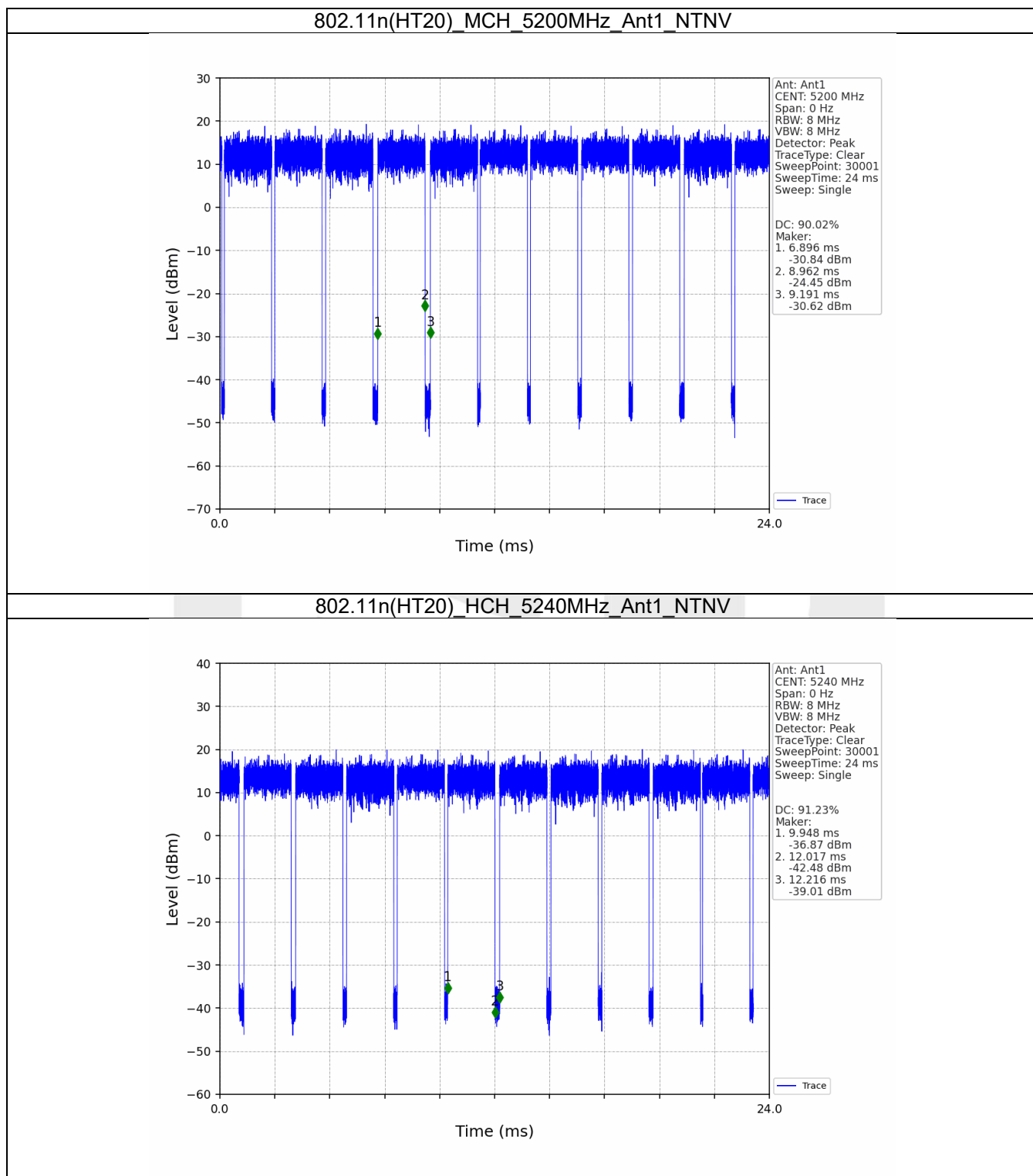
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	2.066	2.268	91.09	0.41	3.75
		5200	2.065	2.296	89.94	0.46	5.63
		5240	2.065	2.295	89.98	0.46	5.63
802.11n (HT20)	SISO	5180	2.064	2.268	91.01	0.41	4.55
		5200	2.066	2.295	90.02	0.46	4.83
		5240	2.069	2.268	91.23	0.40	4.56

1.2 Test Graph

1.2.1 Ant1







2. Bandwidth

2.1 Test Result

2.1.1 OBW

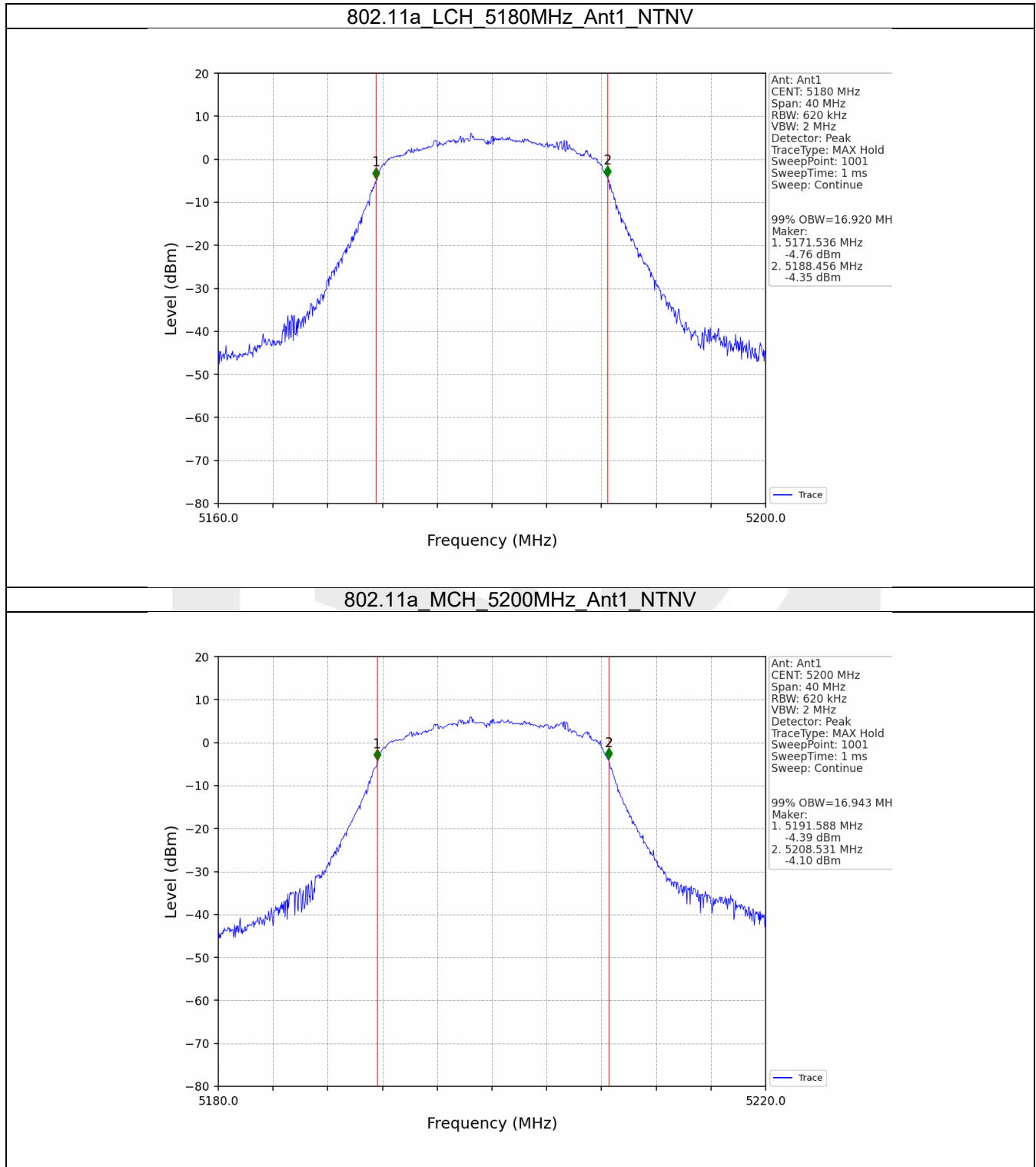
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	16.920	/	Pass
		5200	1	16.943	/	Pass
		5240	1	16.939	/	Pass
802.11n (HT20)	SISO	5180	1	16.976	/	Pass
		5200	1	16.977	/	Pass
		5240	1	16.926	/	Pass

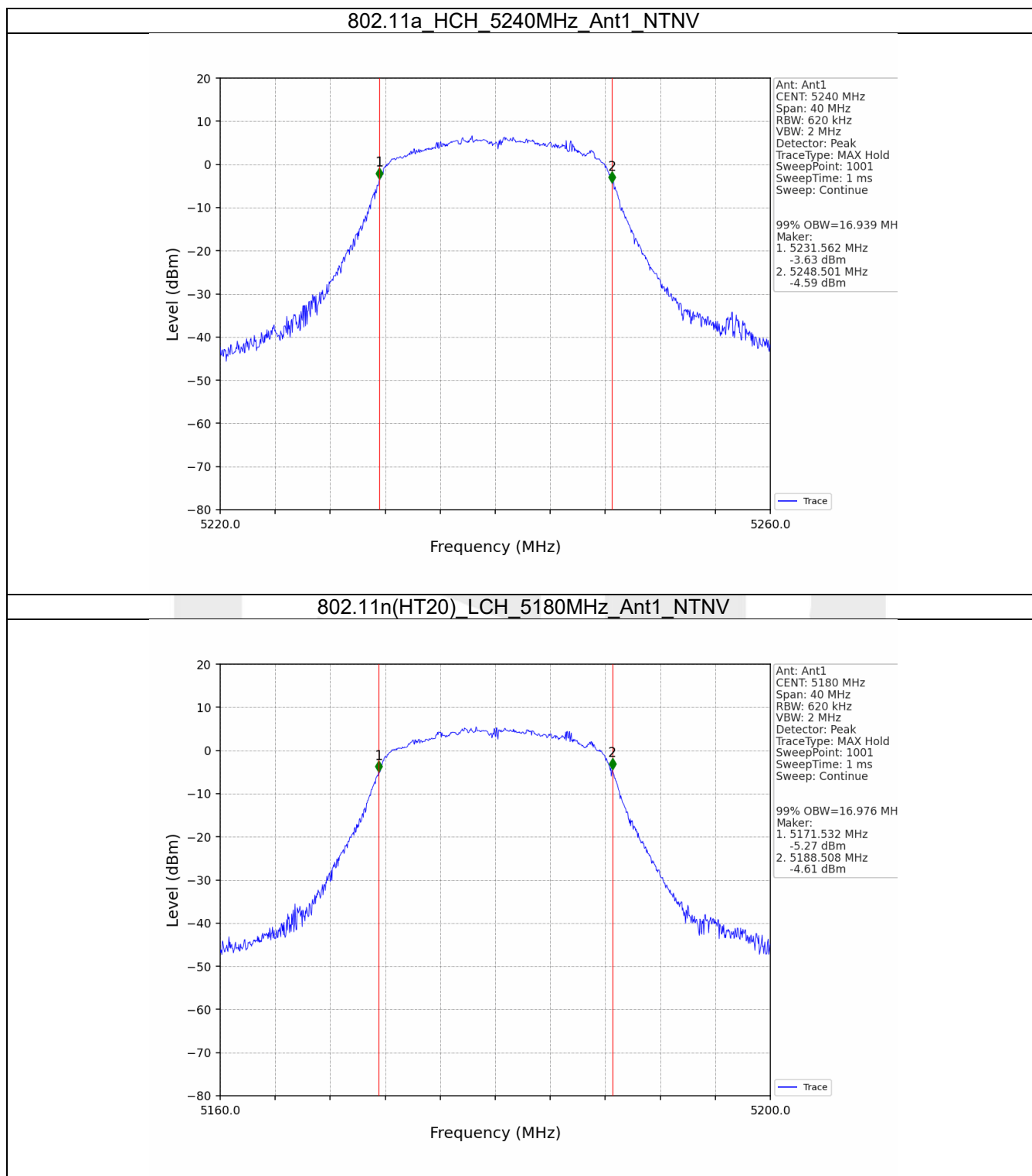
2.1.2 26dB BW

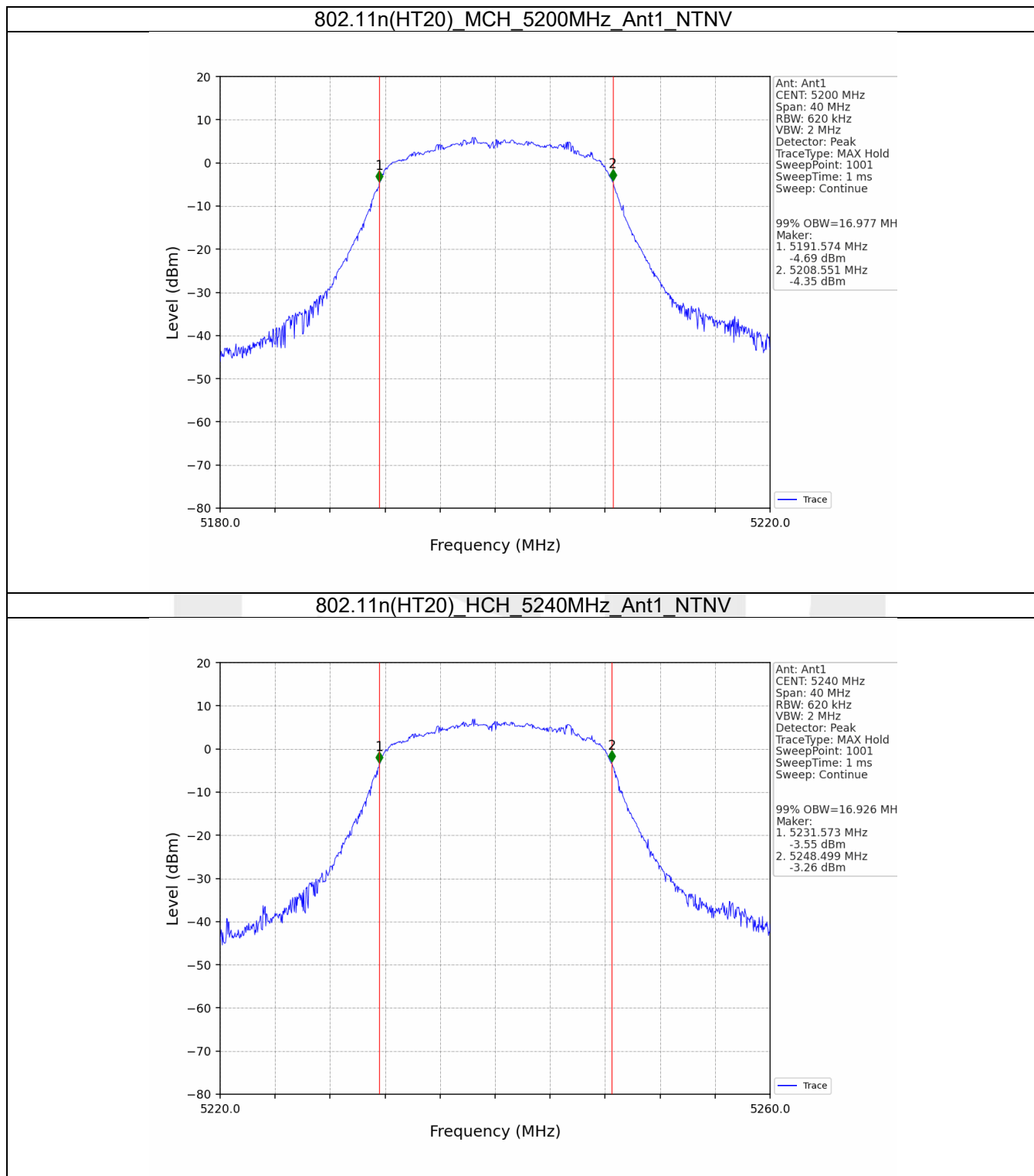
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	19.364	/	Pass
		5200	1	19.383	/	Pass
		5240	1	19.240	/	Pass
802.11n (HT20)	SISO	5180	1	19.096	/	Pass
		5200	1	19.479	/	Pass
		5240	1	19.314	/	Pass

2.2 Test Graph

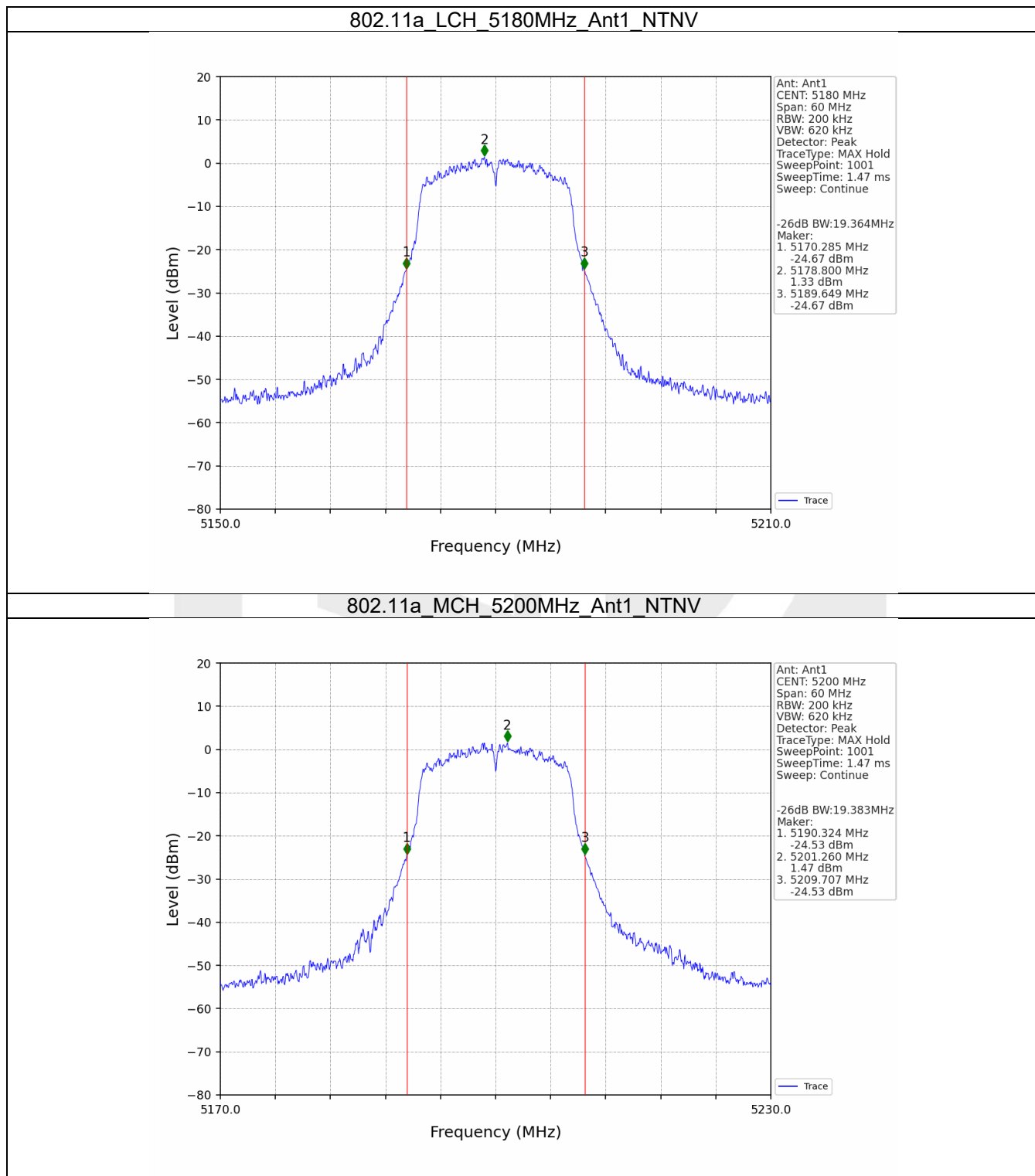
2.2.1 OBW

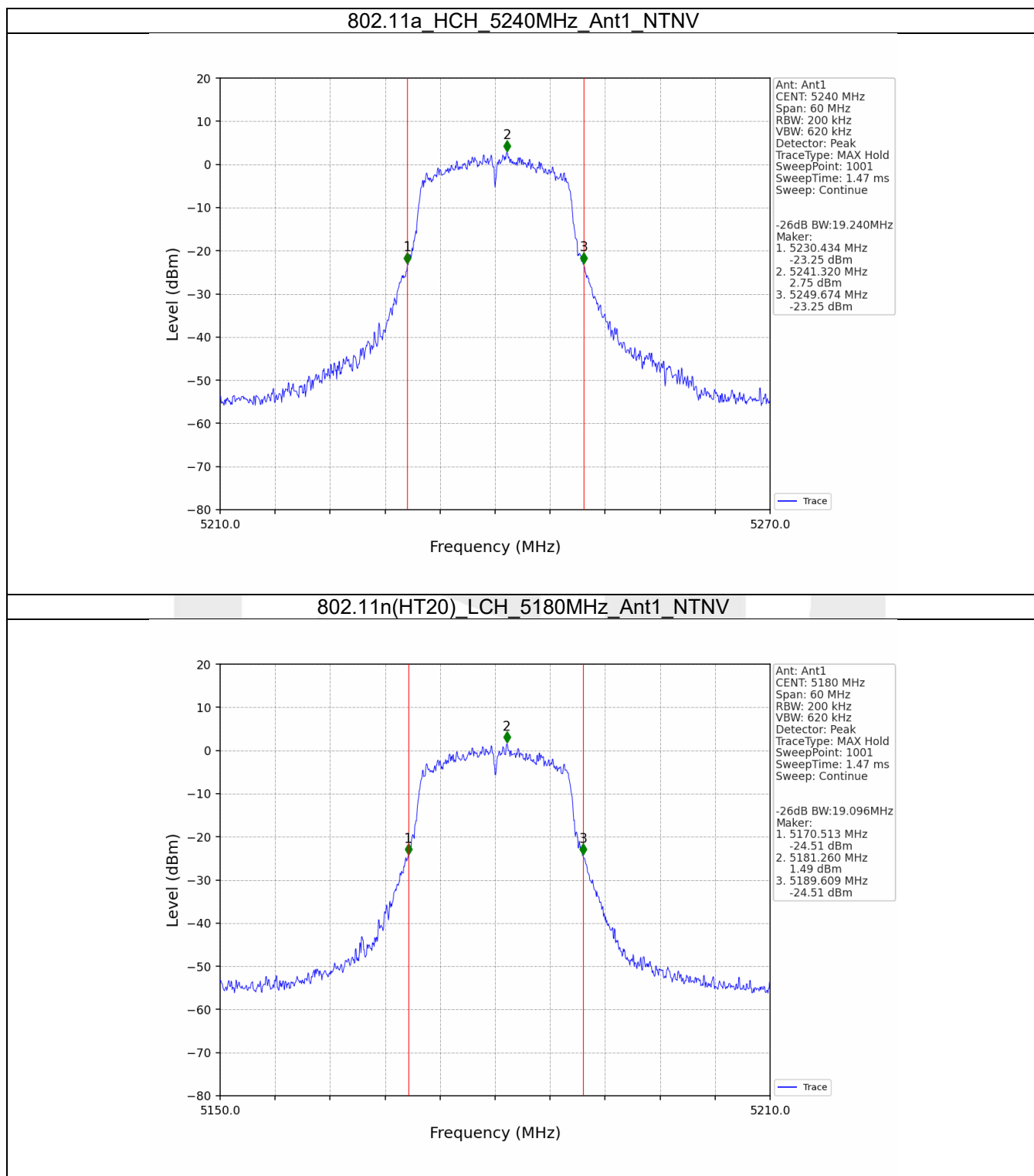


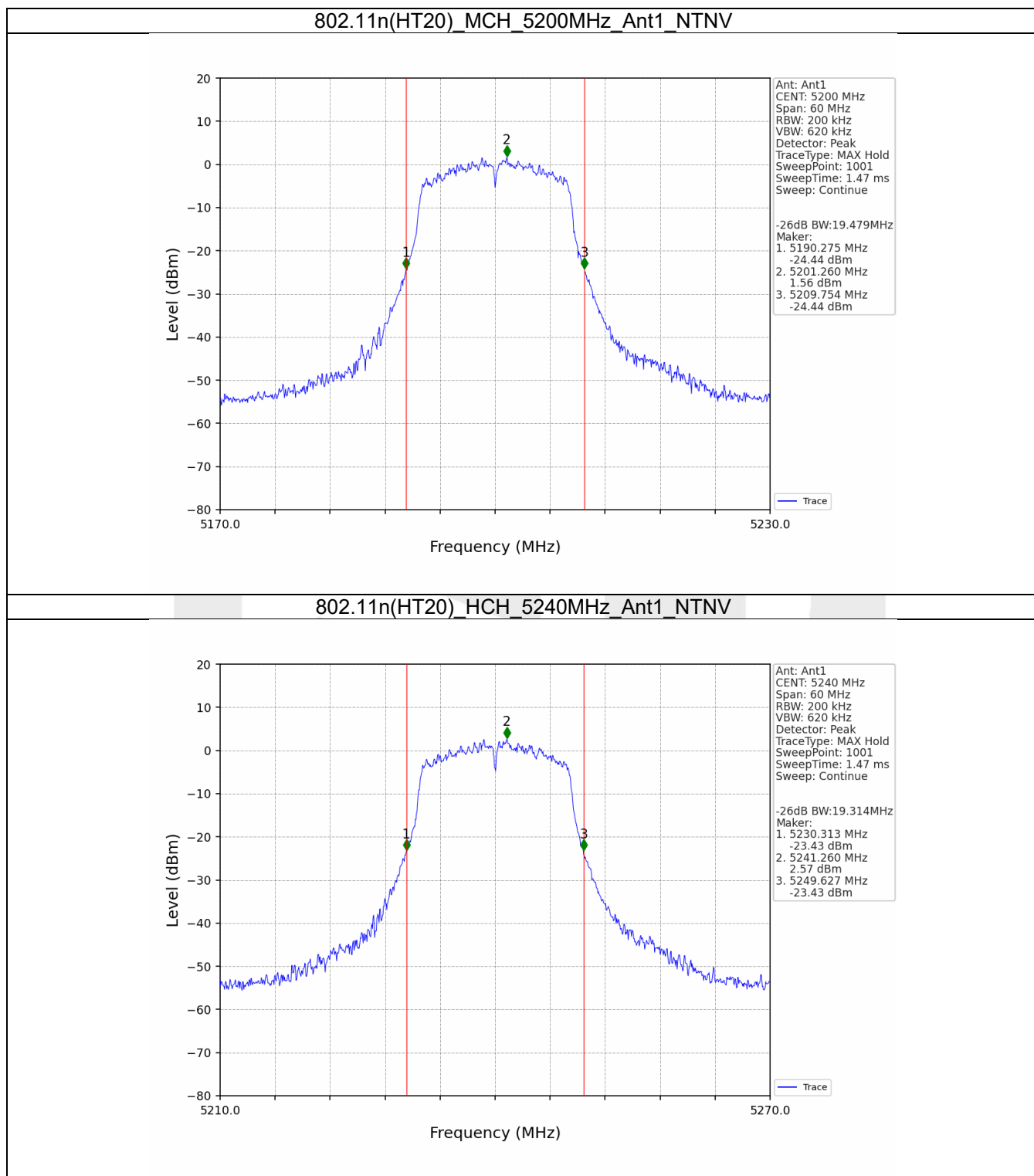




2.2.2 26dB BW







3. Maximum Conducted Output Power

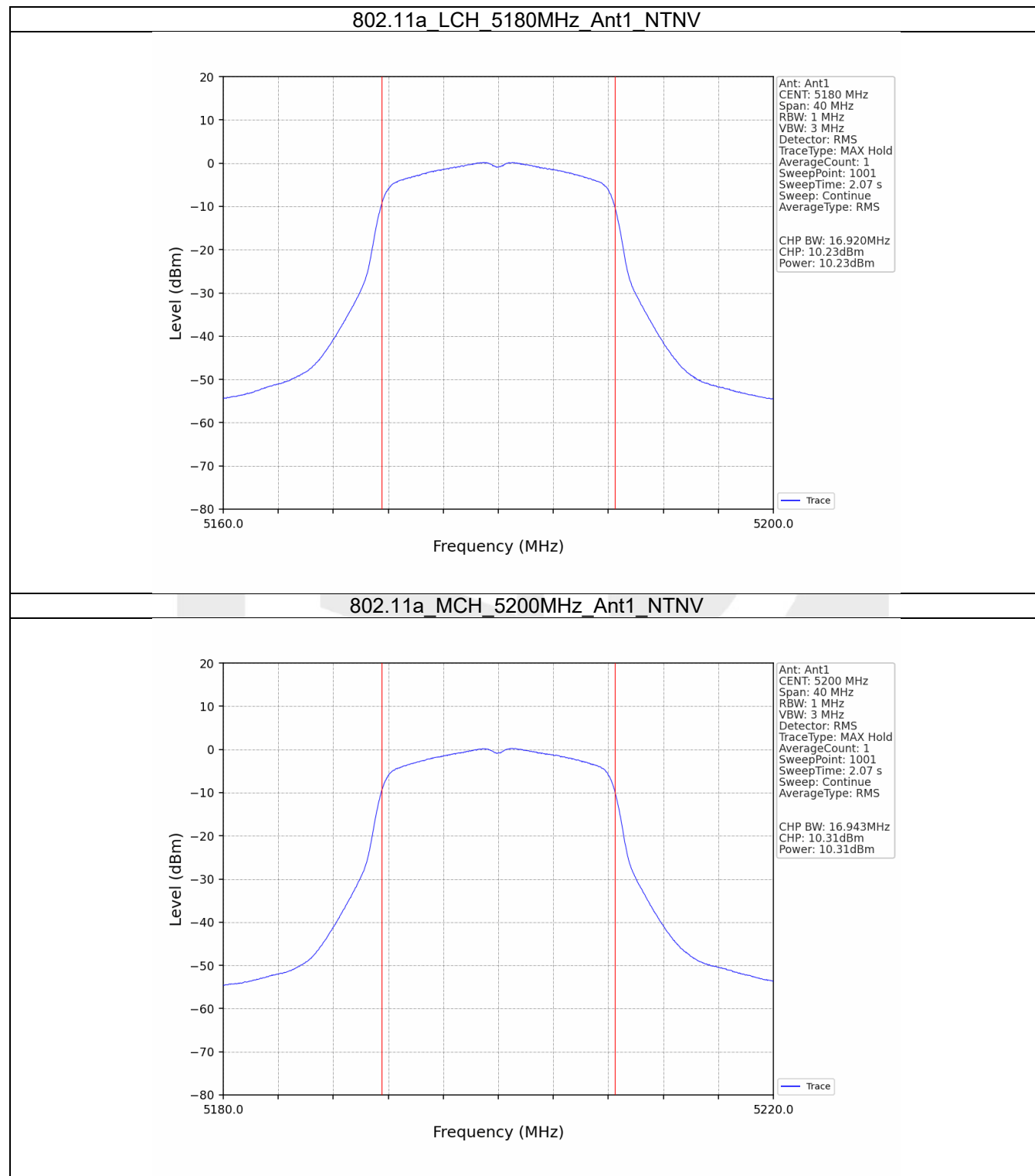
3.1 Test Result

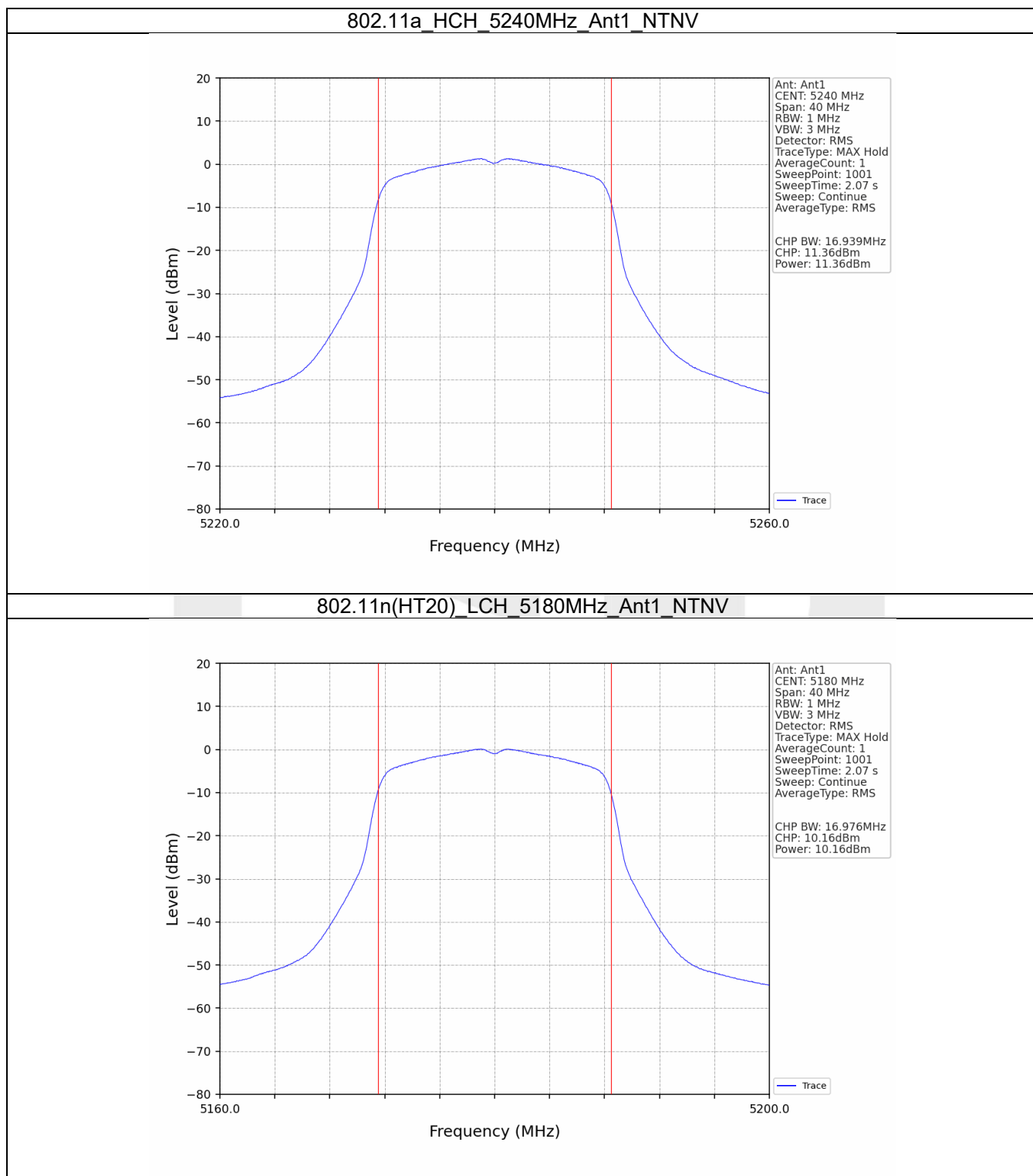
3.1.1 Power

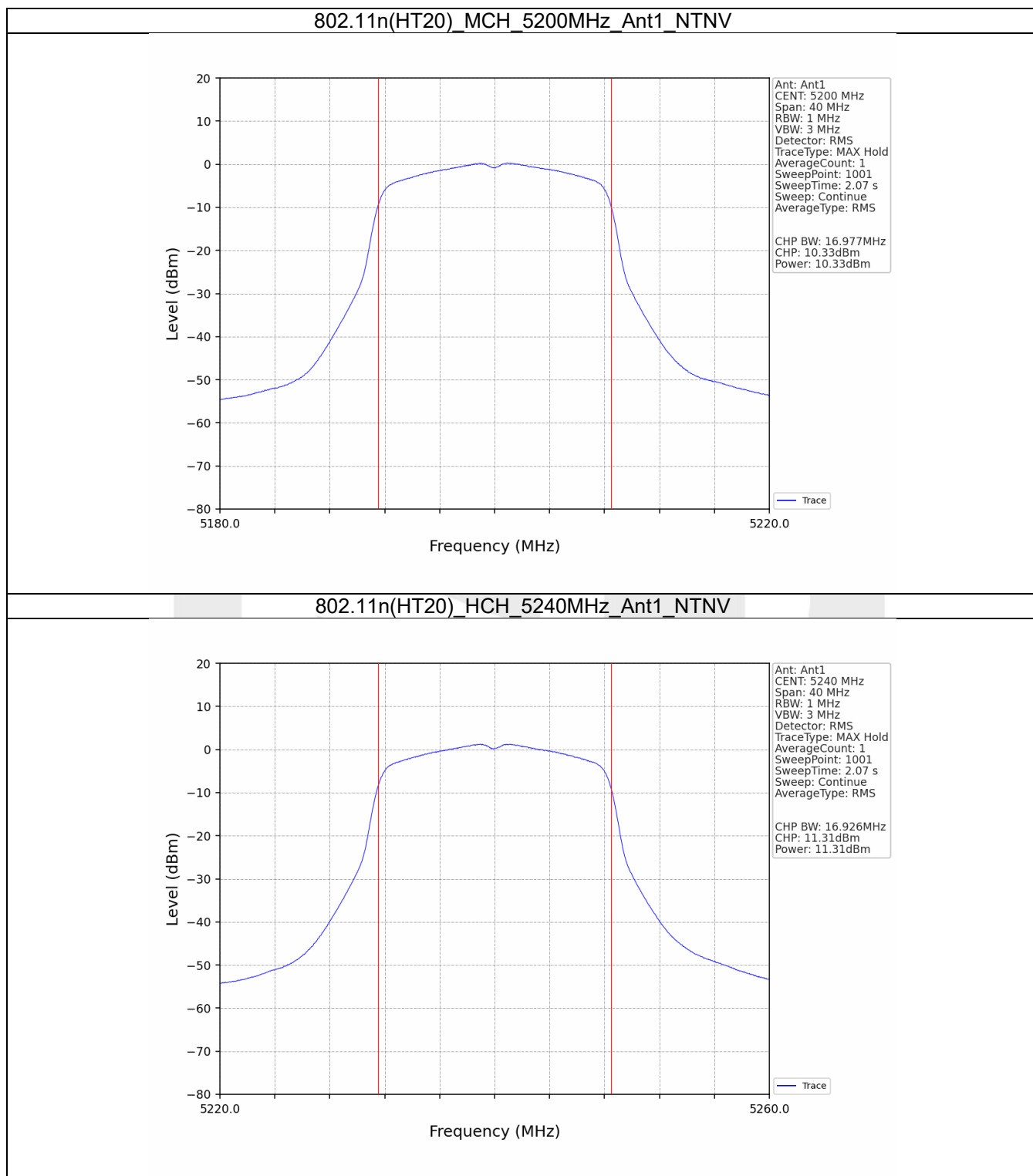
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	10.23	≤ 23.98	Pass
		5200	10.31	≤ 23.98	Pass
		5240	11.36	≤ 23.98	Pass
802.11n (HT20)	SISO	5180	10.16	≤ 23.98	Pass
		5200	10.33	≤ 23.98	Pass
		5240	11.31	≤ 23.98	Pass

3.2 Test Graph

3.2.1 Power







4. Maximum Power Spectral Density

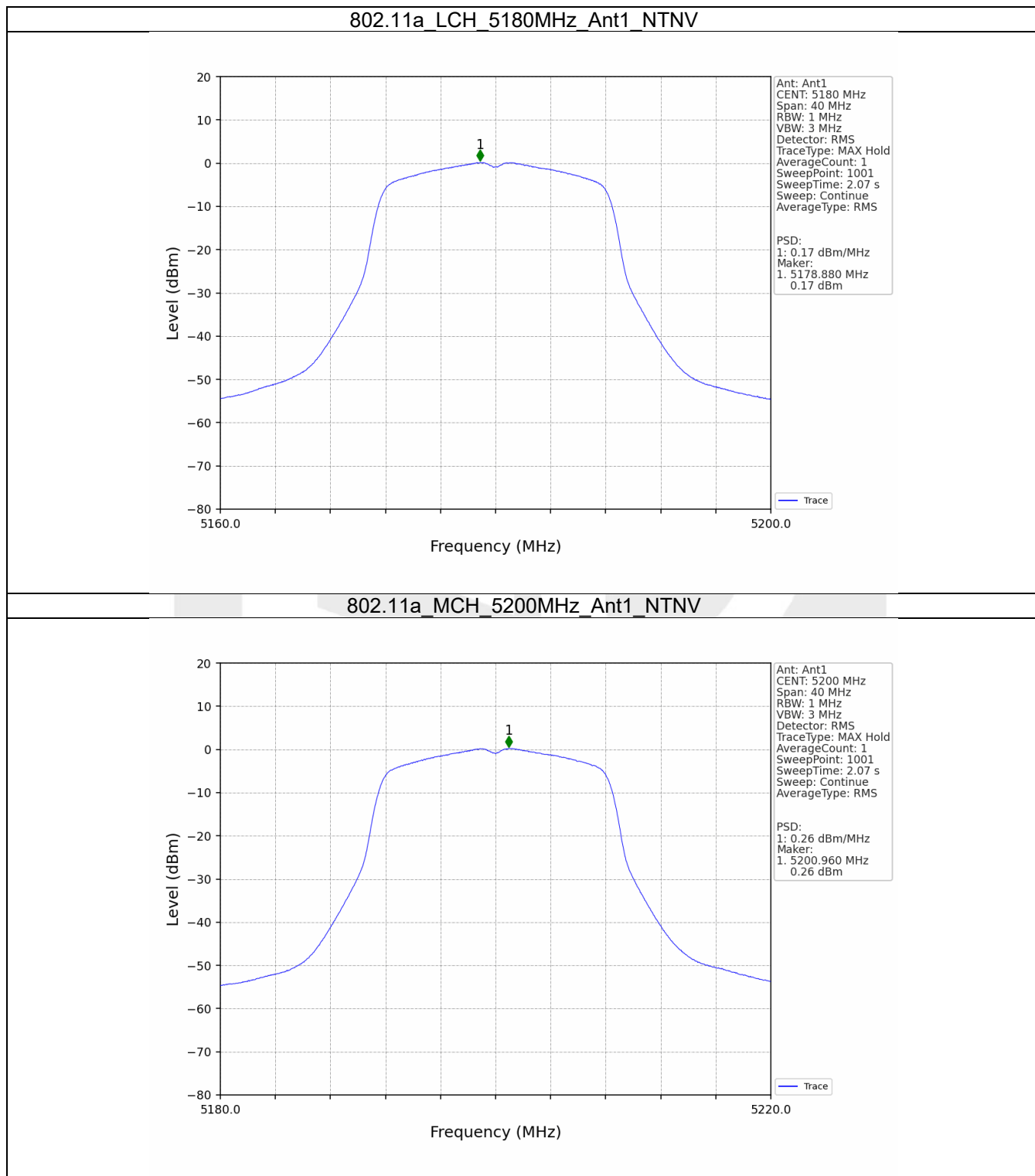
4.1 Test Result

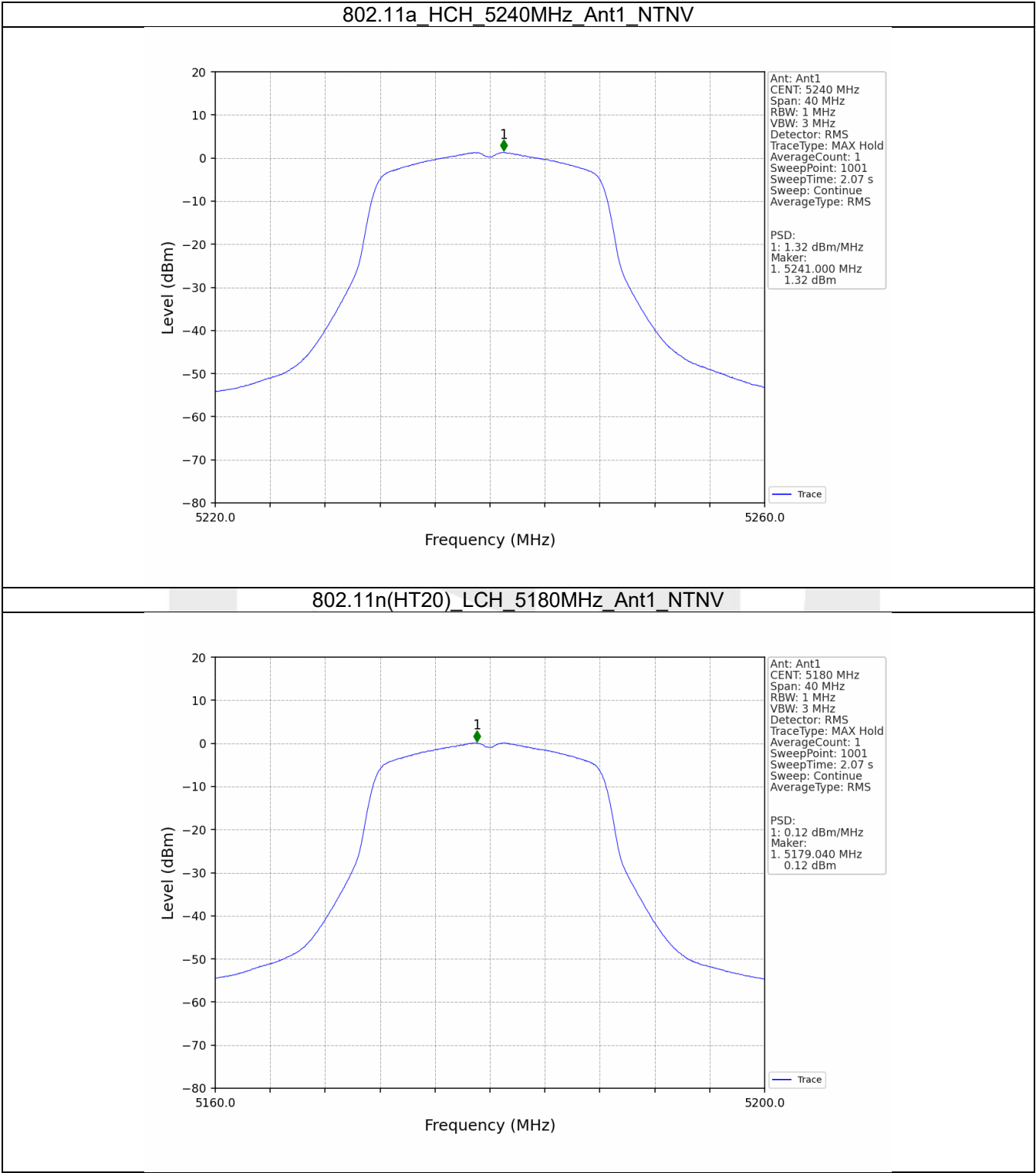
4.1.1 PSD

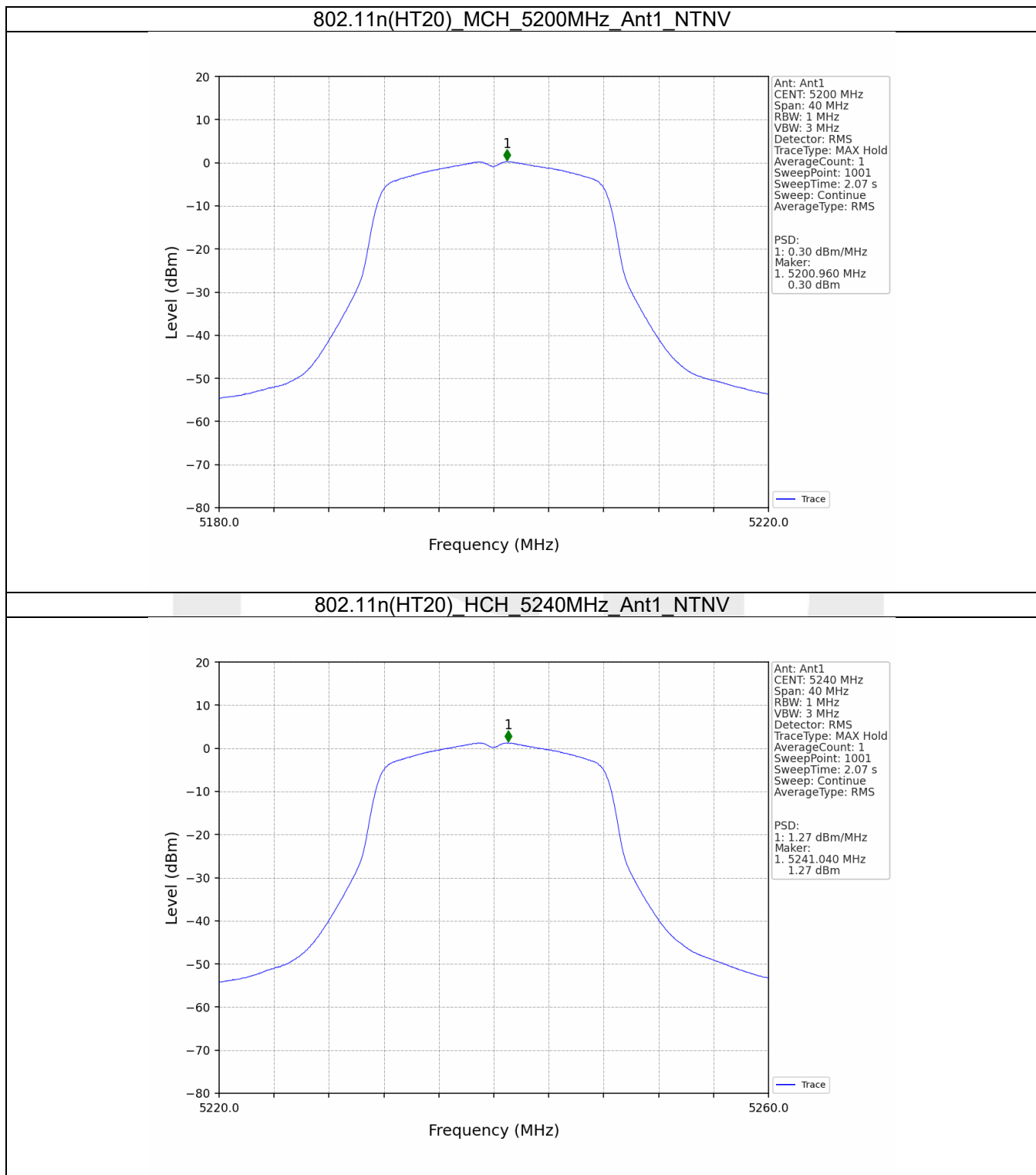
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	0.17	≤ 11	Pass
		5200	0.26	≤ 11	Pass
		5240	1.32	≤ 11	Pass
802.11n (HT20)	SISO	5180	0.12	≤ 11	Pass
		5200	0.30	≤ 11	Pass
		5240	1.27	≤ 11	Pass

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
Carrier Wave	SISO	5180	20	102	5180.160	5150 to 5250	Pass
				120	5180.155	5150 to 5250	Pass
				138	5180.149	5150 to 5250	Pass
			-30	120	5180.142	5150 to 5250	Pass
			-20	120	5180.139	5150 to 5250	Pass
			-10	120	5180.136	5150 to 5250	Pass
			0	120	5180.135	5150 to 5250	Pass
			10	120	5180.131	5150 to 5250	Pass
			30	120	5180.129	5150 to 5250	Pass
			40	120	5180.127	5150 to 5250	Pass
			50	120	5180.126	5150 to 5250	Pass
		5200	20	102	5200.114	5150 to 5250	Pass
				120	5200.114	5150 to 5250	Pass
				138	5200.115	5150 to 5250	Pass
			-30	120	5200.113	5150 to 5250	Pass
			-20	120	5200.112	5150 to 5250	Pass
			-10	120	5200.111	5150 to 5250	Pass
			0	120	5200.111	5150 to 5250	Pass
			10	120	5200.111	5150 to 5250	Pass
			30	120	5200.105	5150 to 5250	Pass
			40	120	5200.107	5150 to 5250	Pass
			50	120	5200.104	5150 to 5250	Pass
		5240	20	102	5240.105	5150 to 5250	Pass
				120	5240.105	5150 to 5250	Pass
				138	5240.105	5150 to 5250	Pass
			-30	120	5240.106	5150 to 5250	Pass
			-20	120	5240.105	5150 to 5250	Pass
			-10	120	5240.107	5150 to 5250	Pass
			0	120	5240.105	5150 to 5250	Pass
			10	120	5240.107	5150 to 5250	Pass
			30	120	5240.107	5150 to 5250	Pass
			40	120	5240.106	5150 to 5250	Pass
			50	120	5240.105	5150 to 5250	Pass

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