

ANNEX G TEST DATA

For

Project No.:	8330EU010615W
Client:	Chengdu Hotack Technology Co., Ltd.
Product Description:	Projector
Model No.:	X1BQ
FCC ID:	2BFIZ-X1
Technology:	WiFi 5G
Test Engineer:	<i>Mikoy zhu</i>
Test Date:	2025-05-09

Test Summary

Item	Result
Duty Cycle	Pass
Bandwidth	Pass
Maximum Conducted Output Power	Pass
Maximum Power Spectral Density	Pass
Unwanted Emissions In Non-restricted Frequency Bands	Pass
Frequency Stability	Pass

1. Duty Cycle

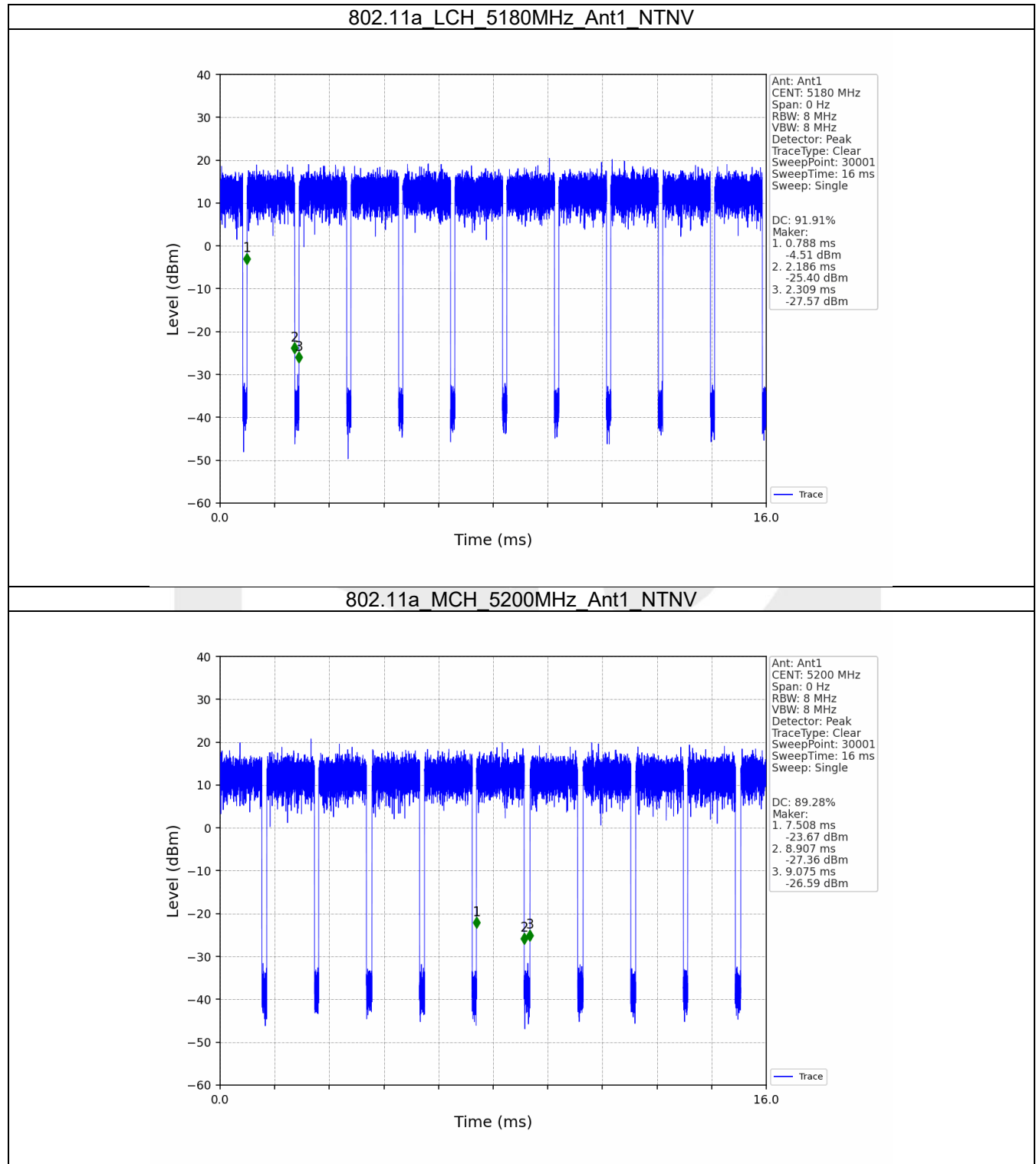
1.1 Test Result

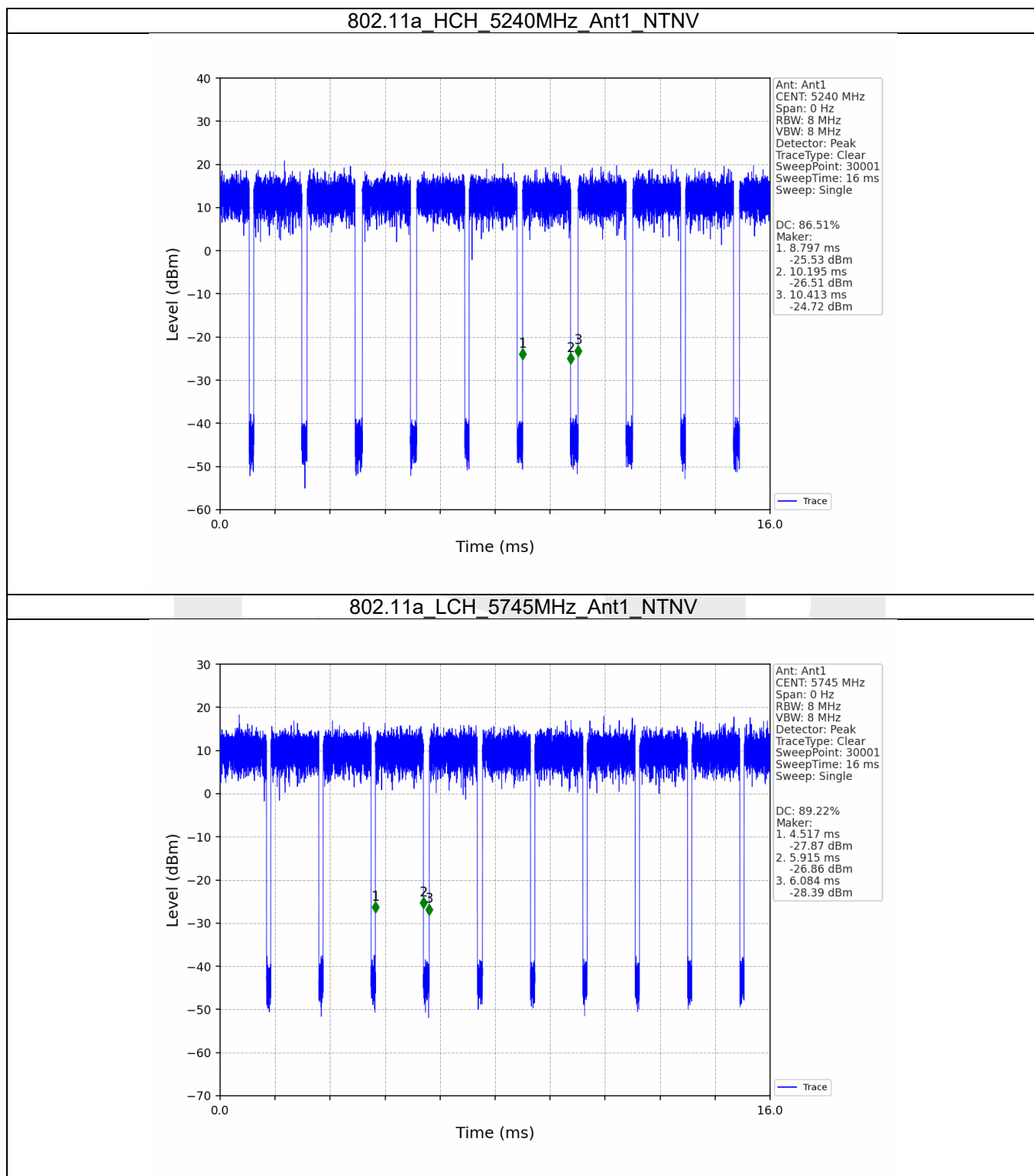
1.1.1 Ant1

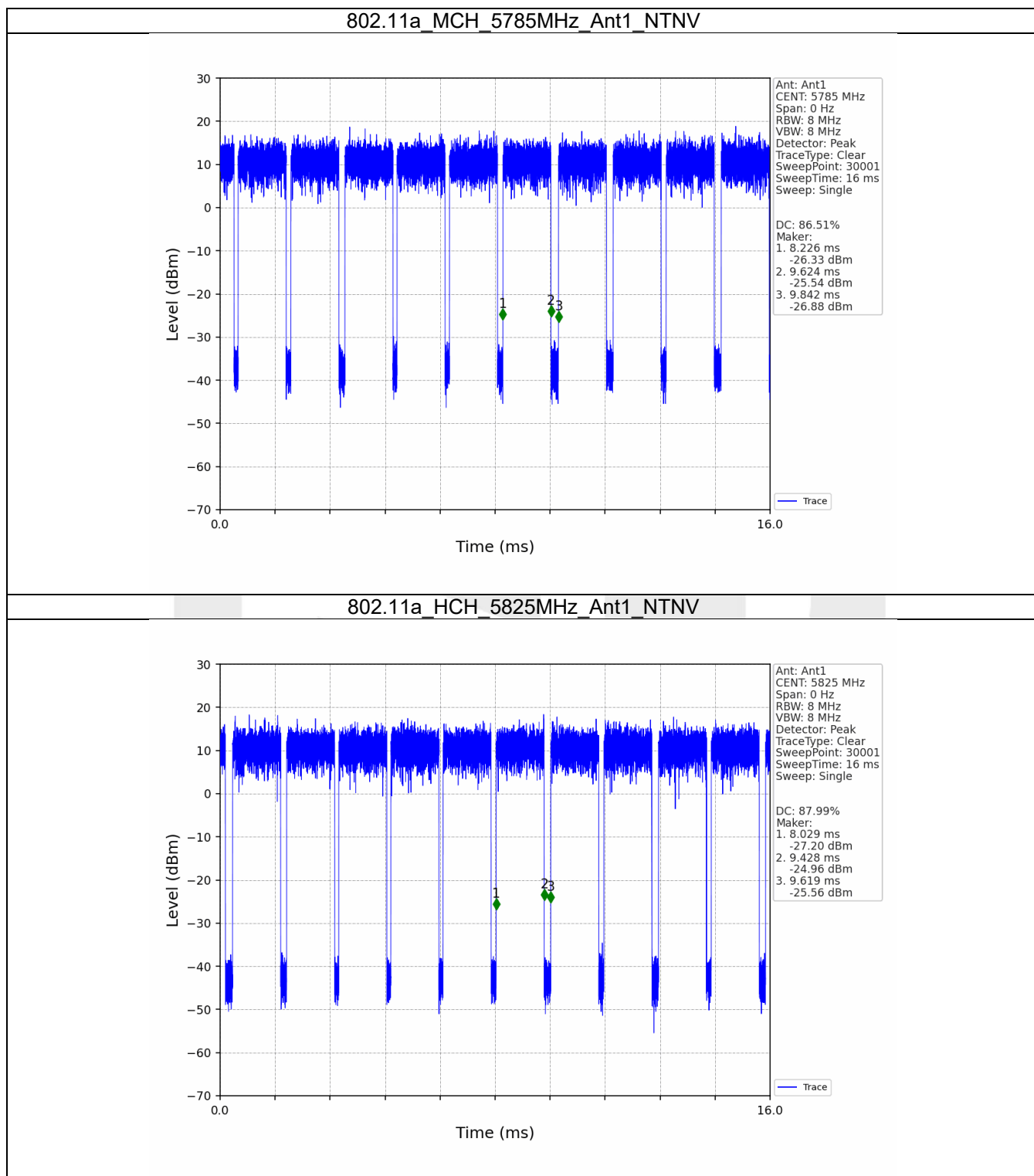
Ant1									
Mode	Tx Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	/	/	1.398	1.521	91.91	0.37	0.01
		5200	/	/	1.399	1.567	89.28	0.49	2.63
		5240	/	/	1.398	1.616	86.51	0.63	5.12
		5745	/	/	1.398	1.567	89.22	0.50	2.63
		5785	/	/	1.398	1.616	86.51	0.63	5.63
		5825	/	/	1.399	1.590	87.99	0.56	4.21
802.11n (HT20)	SISO	5180	/	/	5.090	5.267	96.64	0.15	1.00
		5200	/	/	5.090	5.223	97.45	0.11	0.18
		5240	/	/	5.090	5.316	95.75	0.19	1.99
		5745	/	/	5.091	5.261	96.77	0.14	0.87
		5785	/	/	5.090	5.282	96.37	0.16	1.38
		5825	/	/	5.103	5.271	96.81	0.14	1.22
802.11n (HT40)	SISO	5190	/	/	4.909	5.049	97.23	0.12	0.56
		5230	/	/	4.898	5.076	96.49	0.16	1.07
		5755	/	/	4.898	5.115	95.76	0.19	1.82
		5795	/	/	4.896	5.074	96.49	0.16	1.07
802.11ac (VHT20)	SISO	5180	/	/	5.098	5.335	95.56	0.20	1.49
		5200	/	/	5.105	5.249	97.26	0.12	0.52
		5240	/	/	5.099	5.232	97.46	0.11	0.17
		5745	/	/	5.100	5.307	96.10	0.17	1.65
		5785	/	/	5.107	5.268	96.94	0.13	0.87
		5825	/	/	5.100	5.326	95.76	0.19	1.99
802.11ac (VHT40)	SISO	5190	/	/	4.905	5.381	91.15	0.40	6.47
		5230	/	/	4.905	5.066	96.82	0.14	0.72
		5755	/	/	4.906	5.031	97.52	0.11	0.04
		5795	/	/	4.905	5.142	95.39	0.20	2.27
802.11ax (HEW20)	SISO	5180	SU	/	3.878	4.088	94.86	0.23	2.16
		5200	SU	/	3.895	4.049	96.20	0.17	1.13
		5240	SU	/	3.894	4.040	96.39	0.16	0.91
		5745	SU	/	3.876	4.028	96.23	0.17	0.71
		5785	SU	/	3.876	4.114	94.21	0.26	2.81
		5825	SU	/	3.879	4.088	94.89	0.23	2.09
802.11ax (HEW40)	SISO	5190	SU	/	3.872	4.043	95.77	0.19	1.11
		5230	SU	/	3.874	4.043	95.82	0.19	1.11
		5755	SU	/	3.873	4.052	95.58	0.20	1.30
		5795	SU	/	3.874	4.101	94.46	0.25	2.35

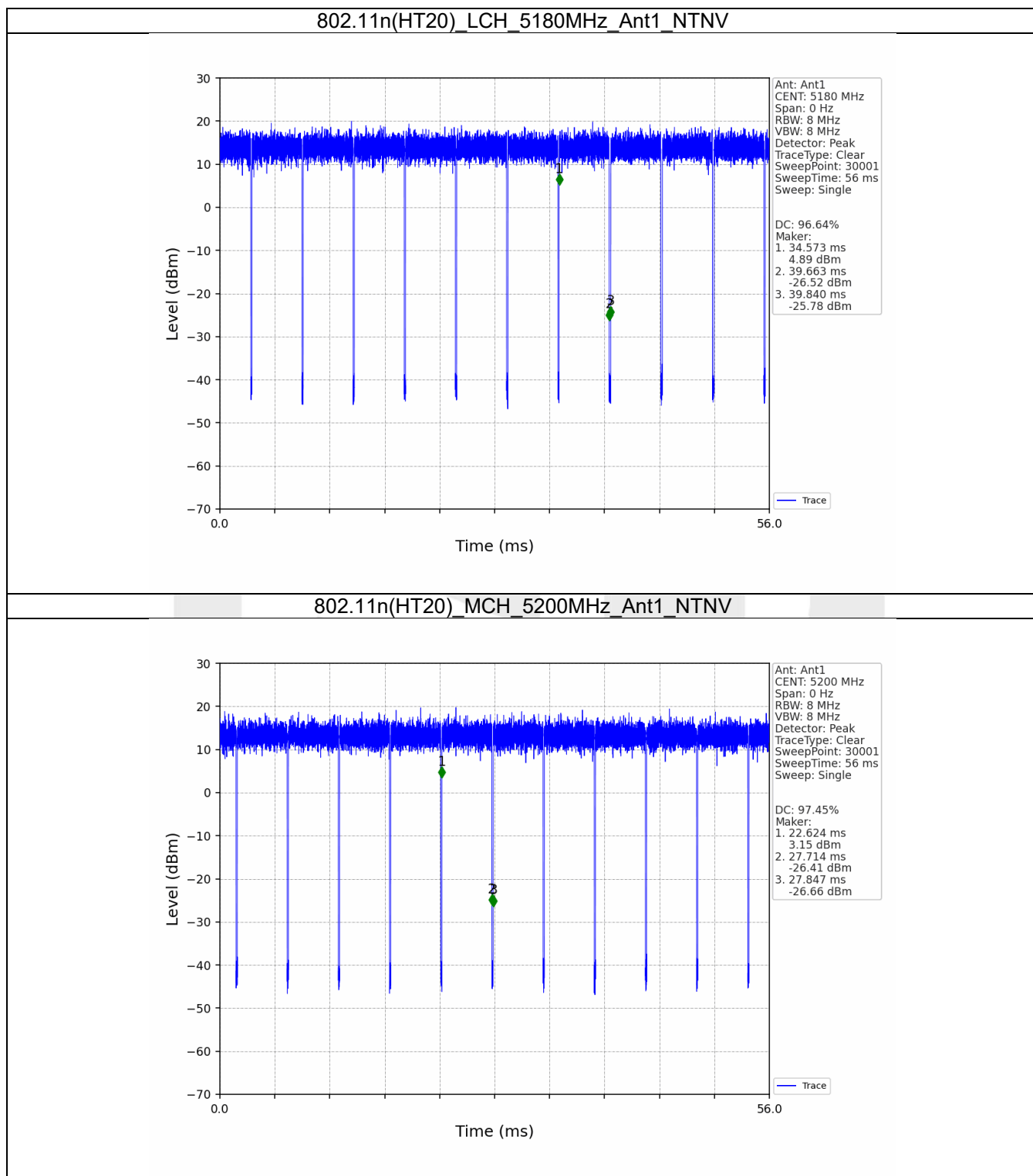
1.2 Test Graph

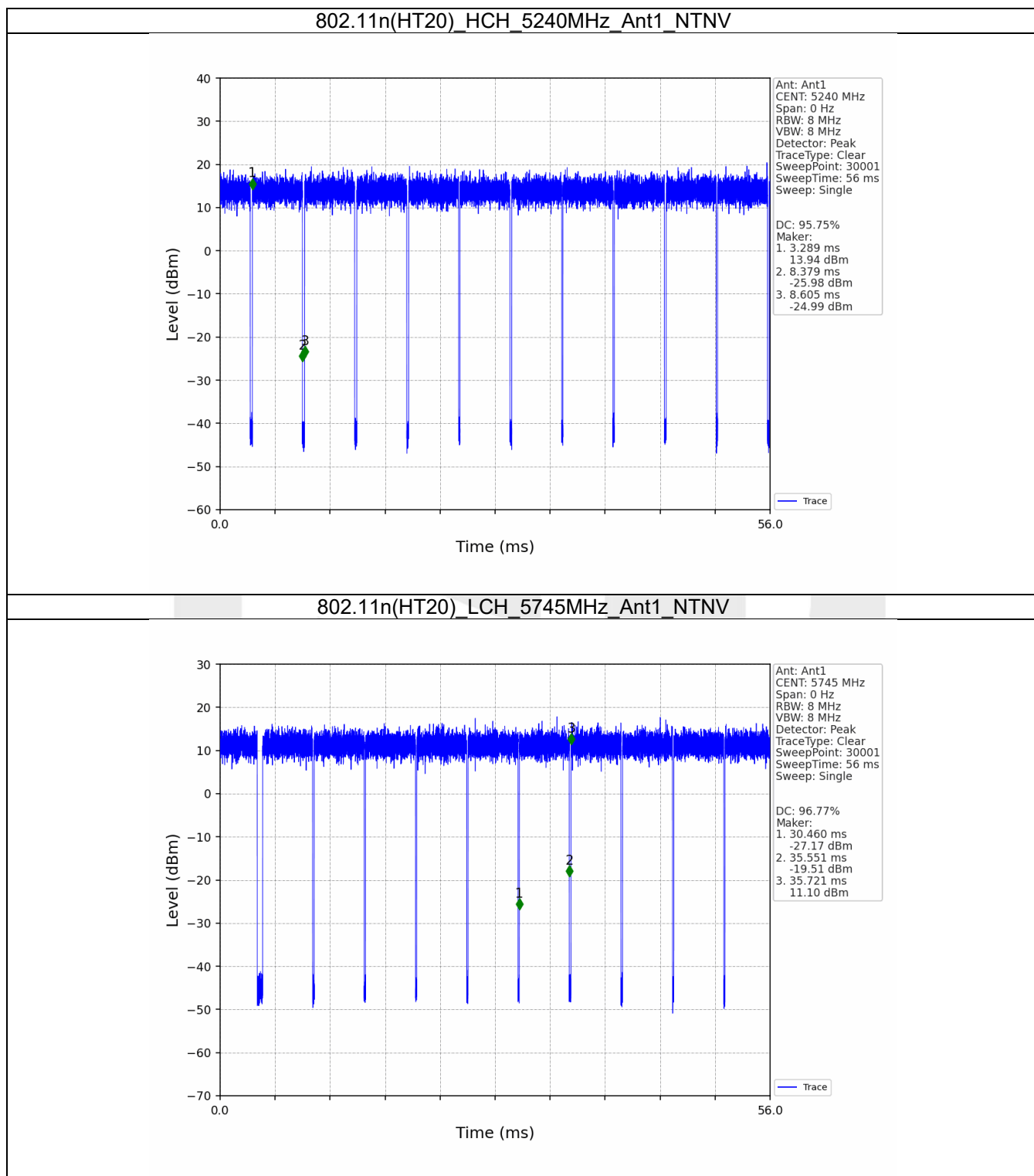
1.2.1 Ant1

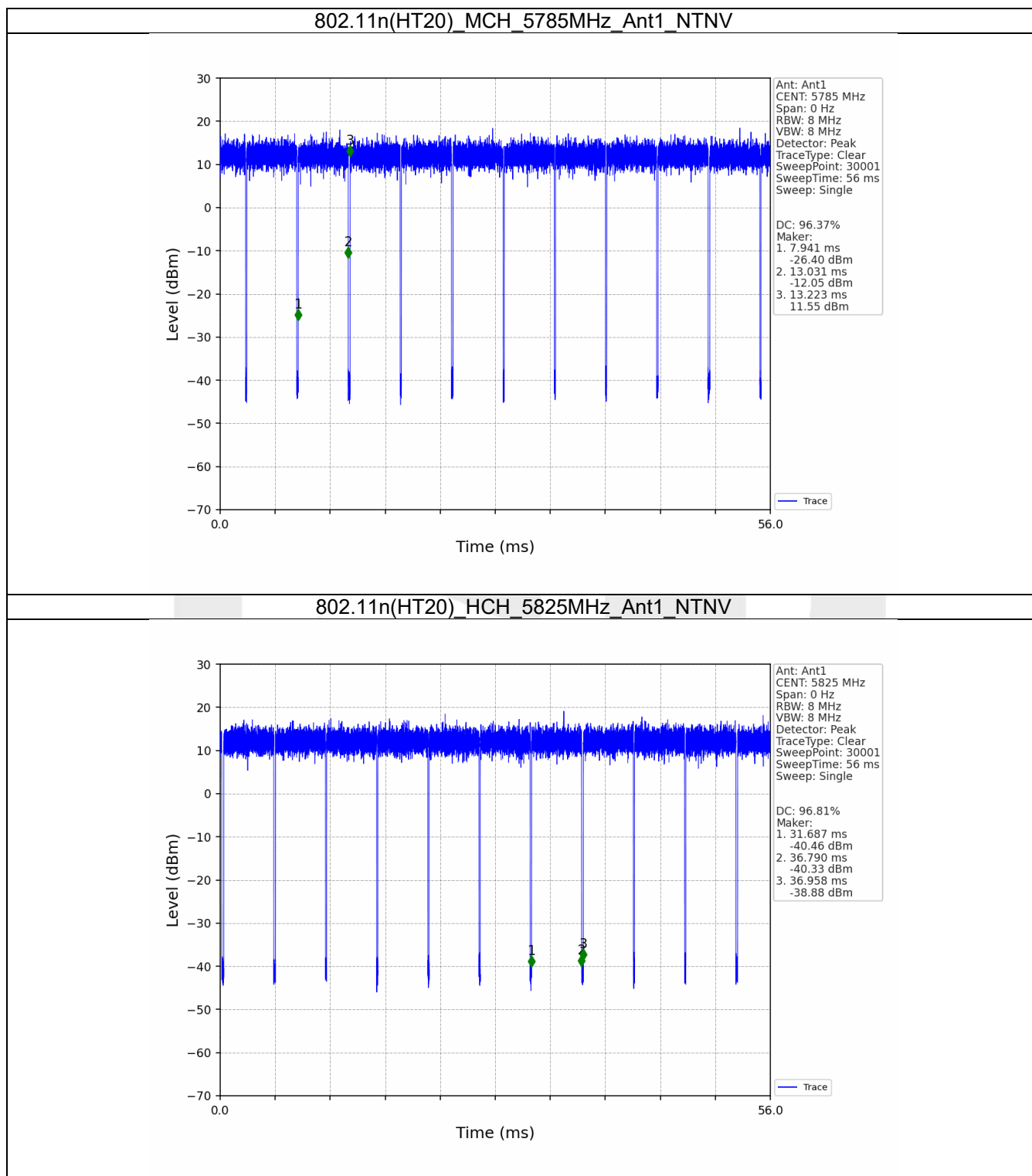


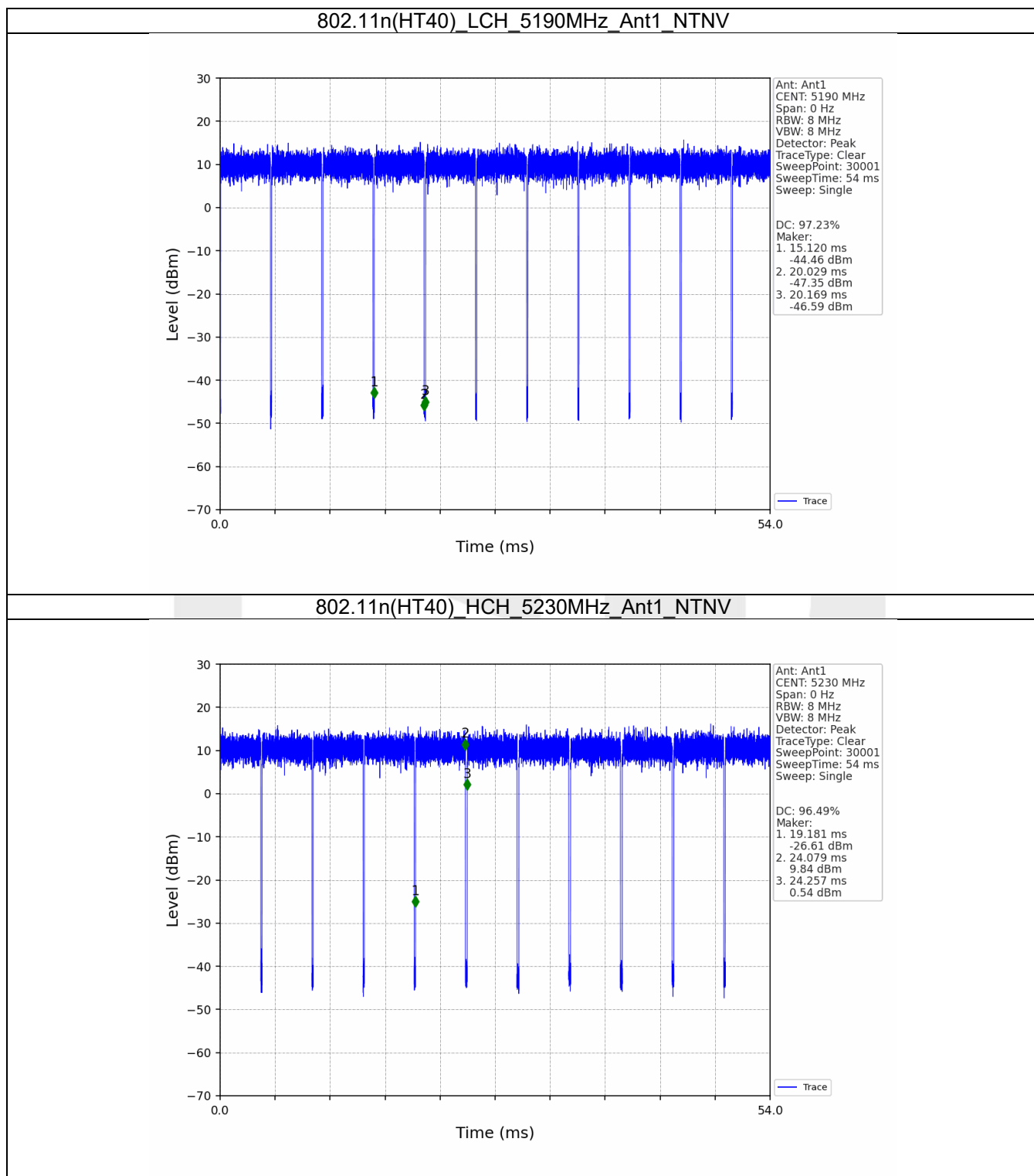


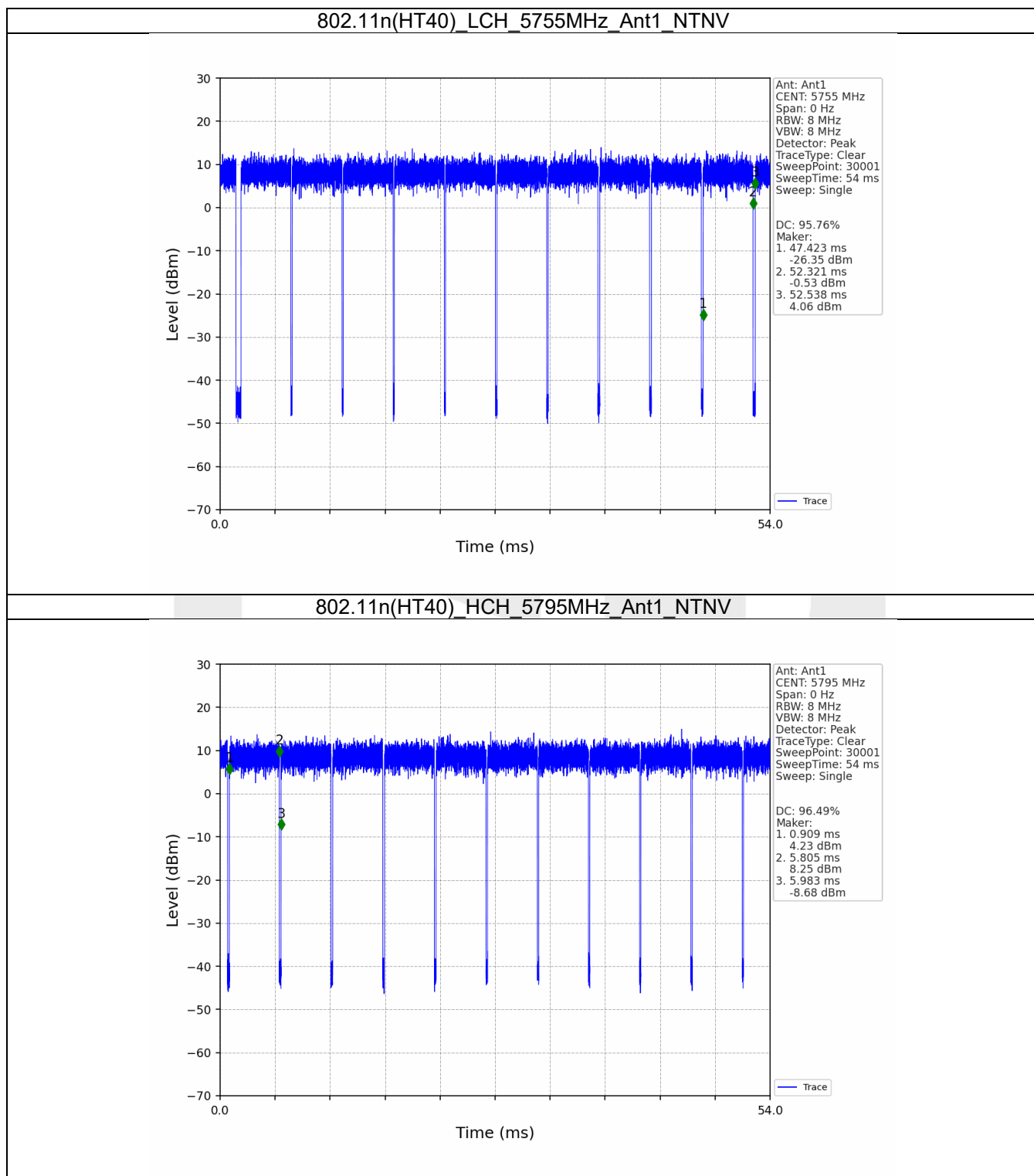


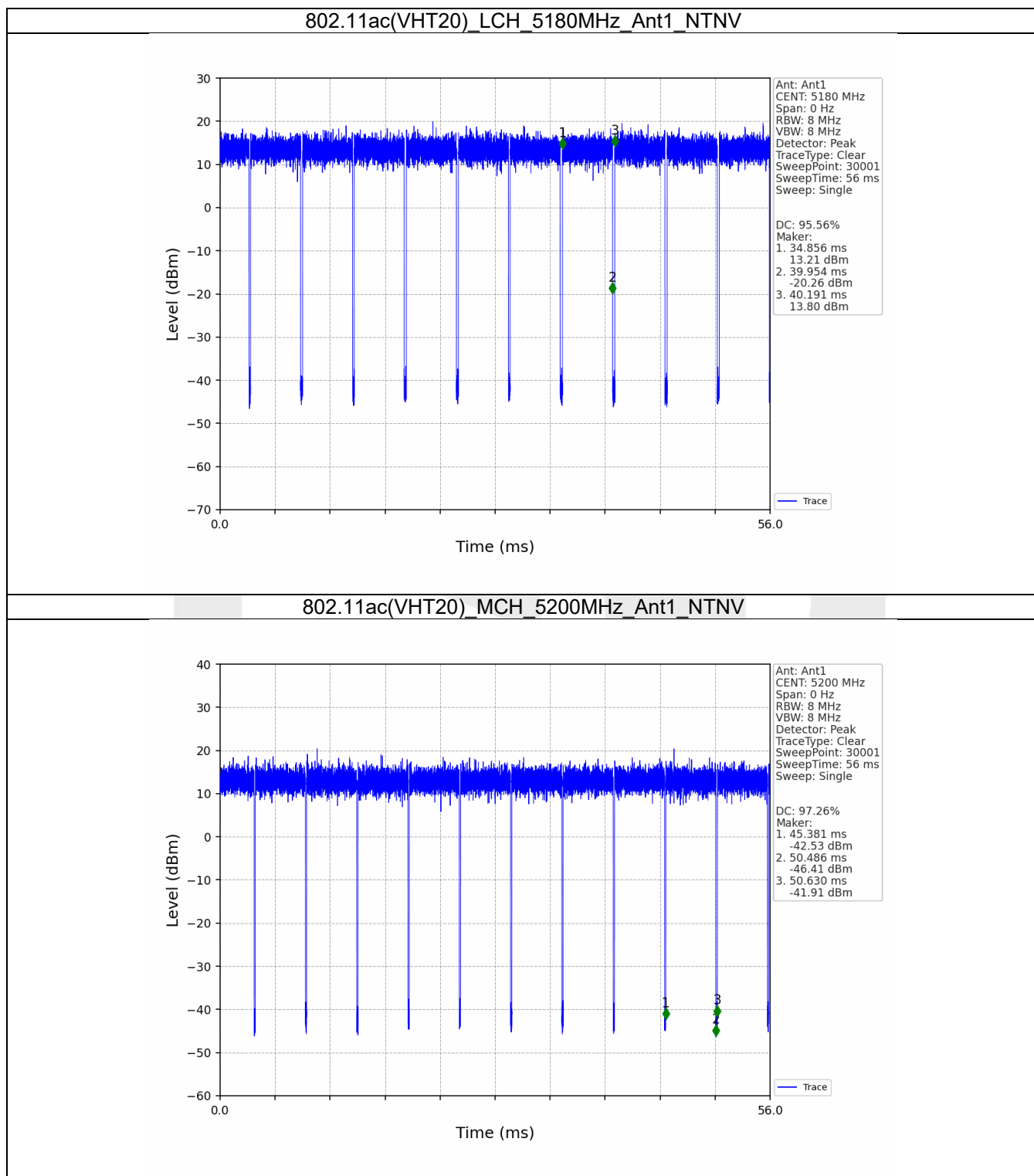


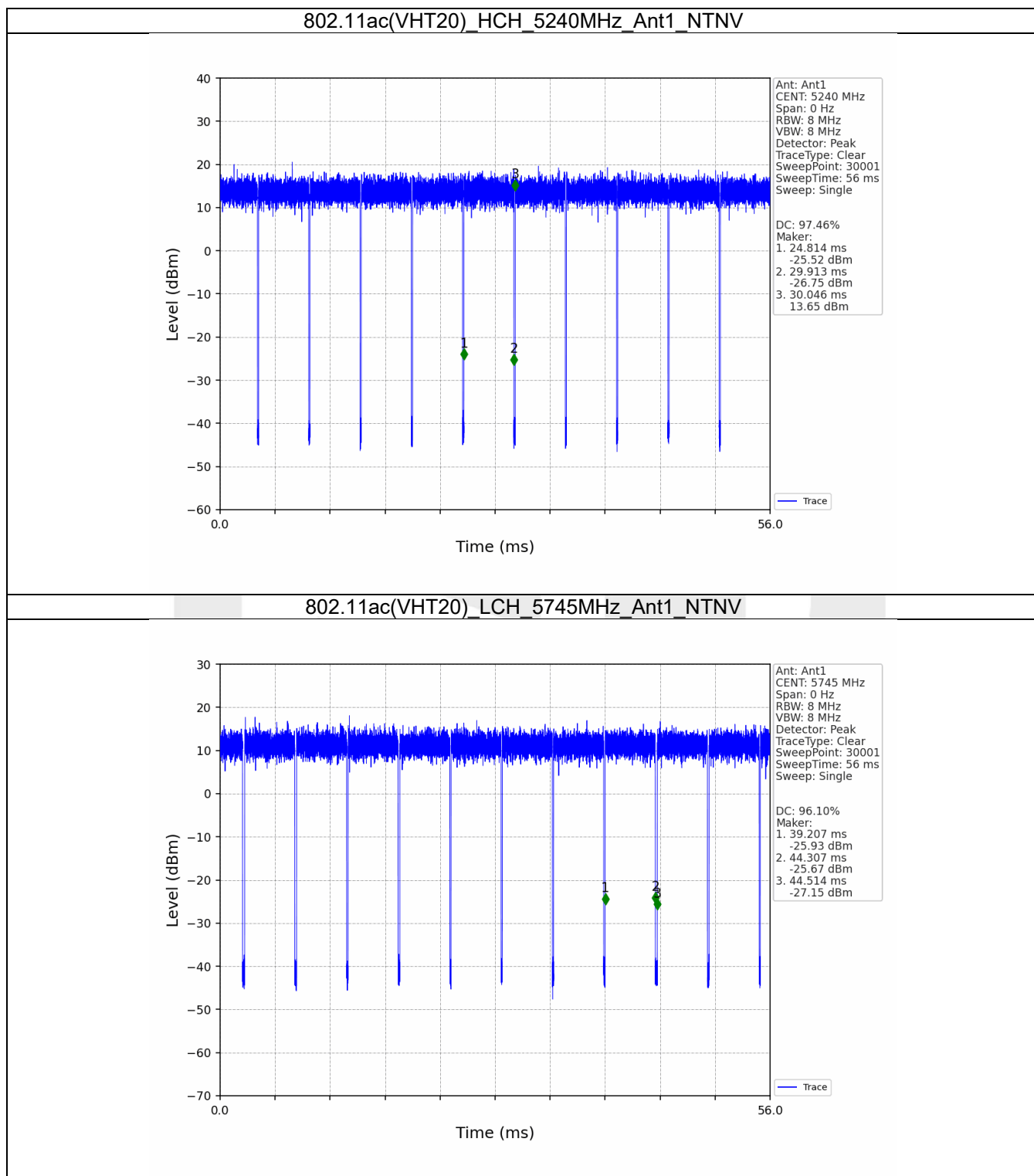


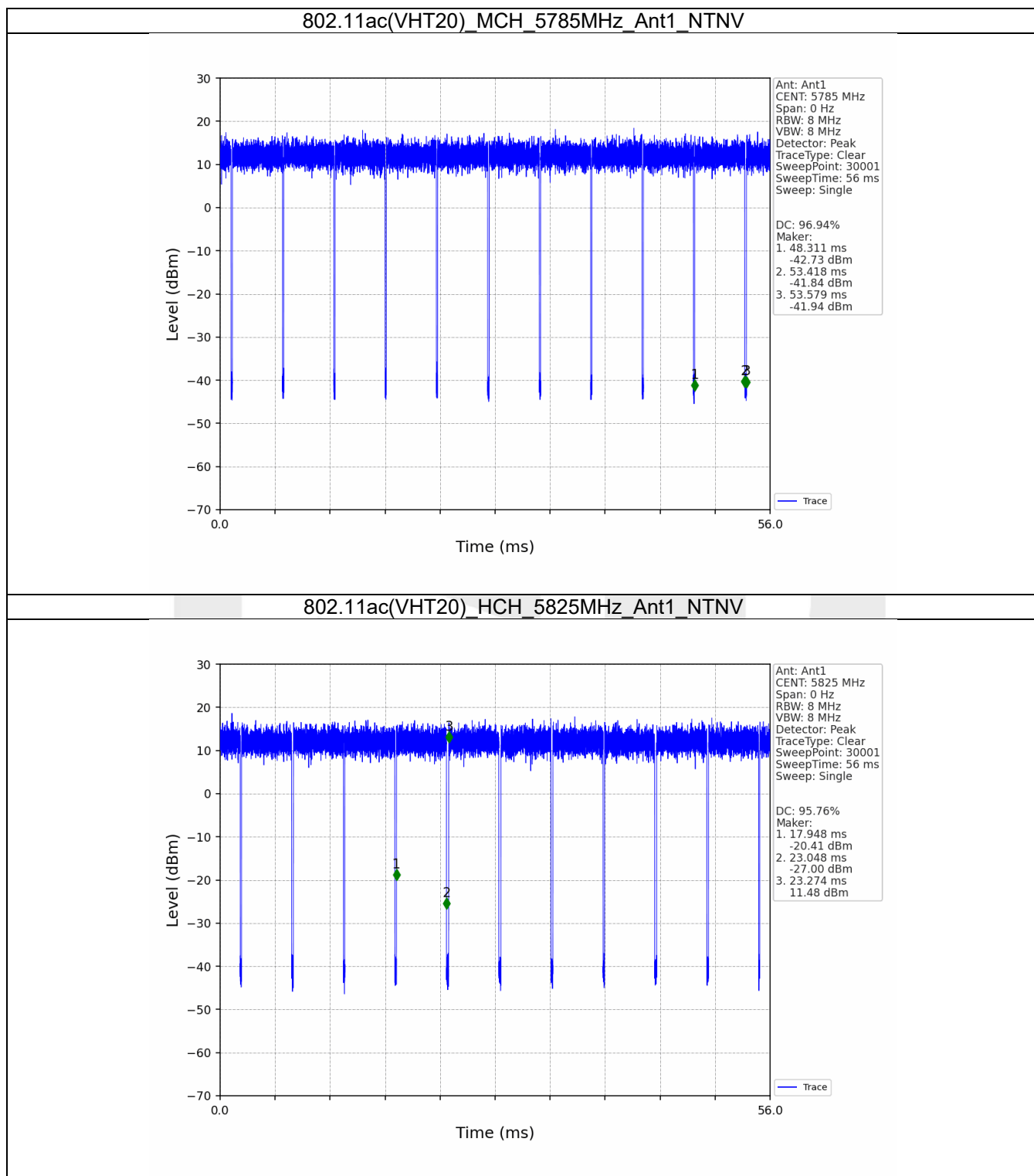


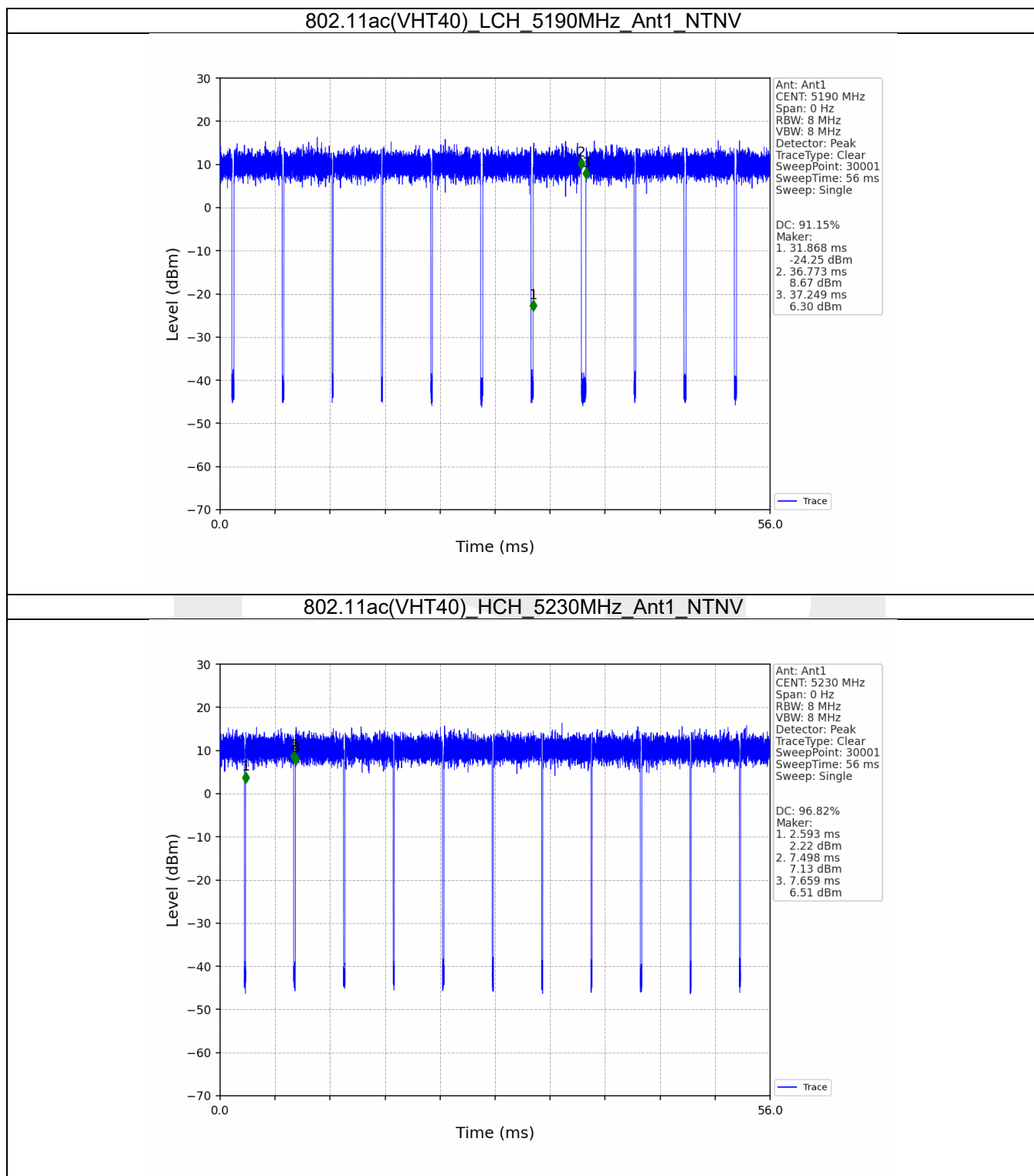


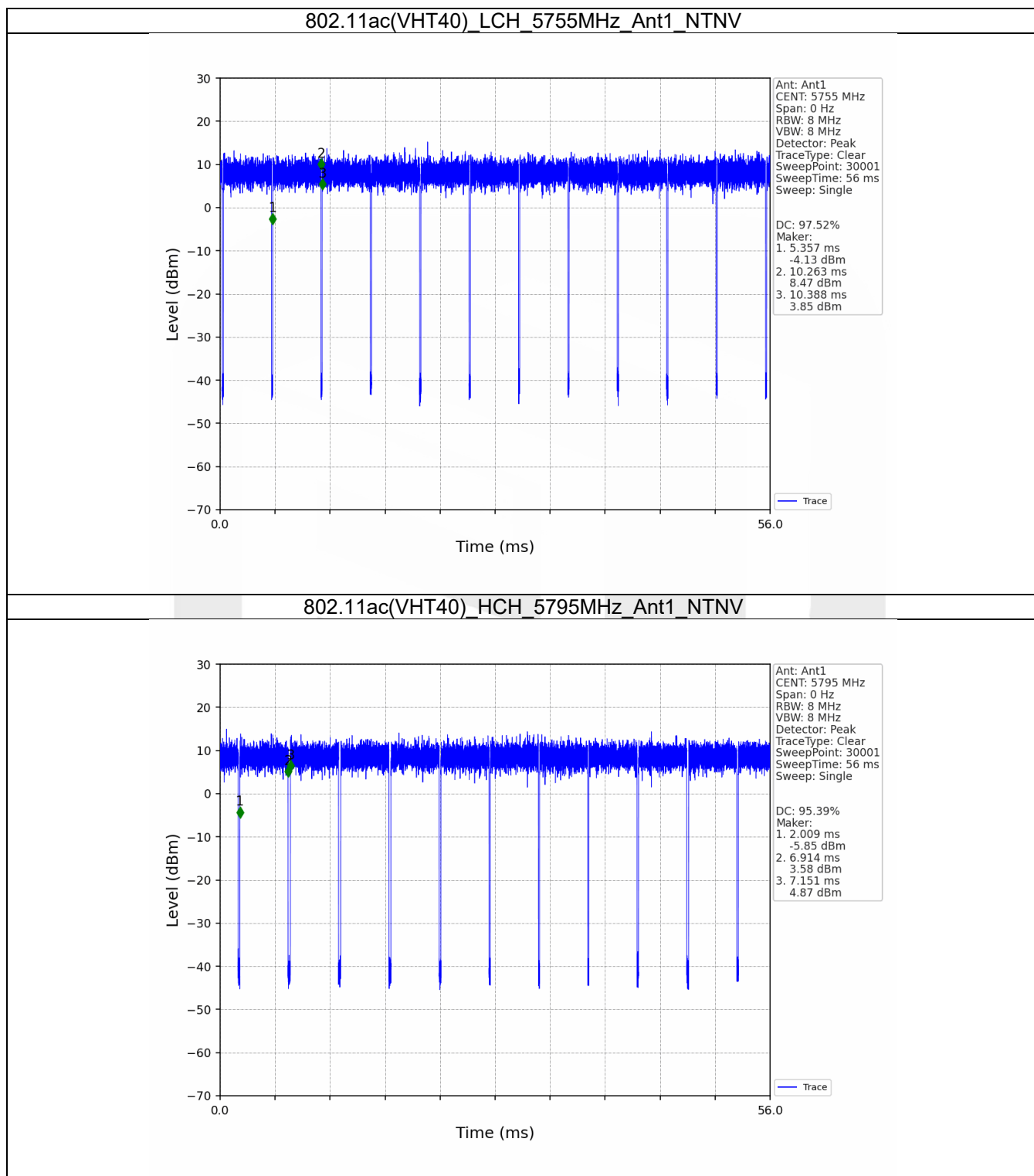


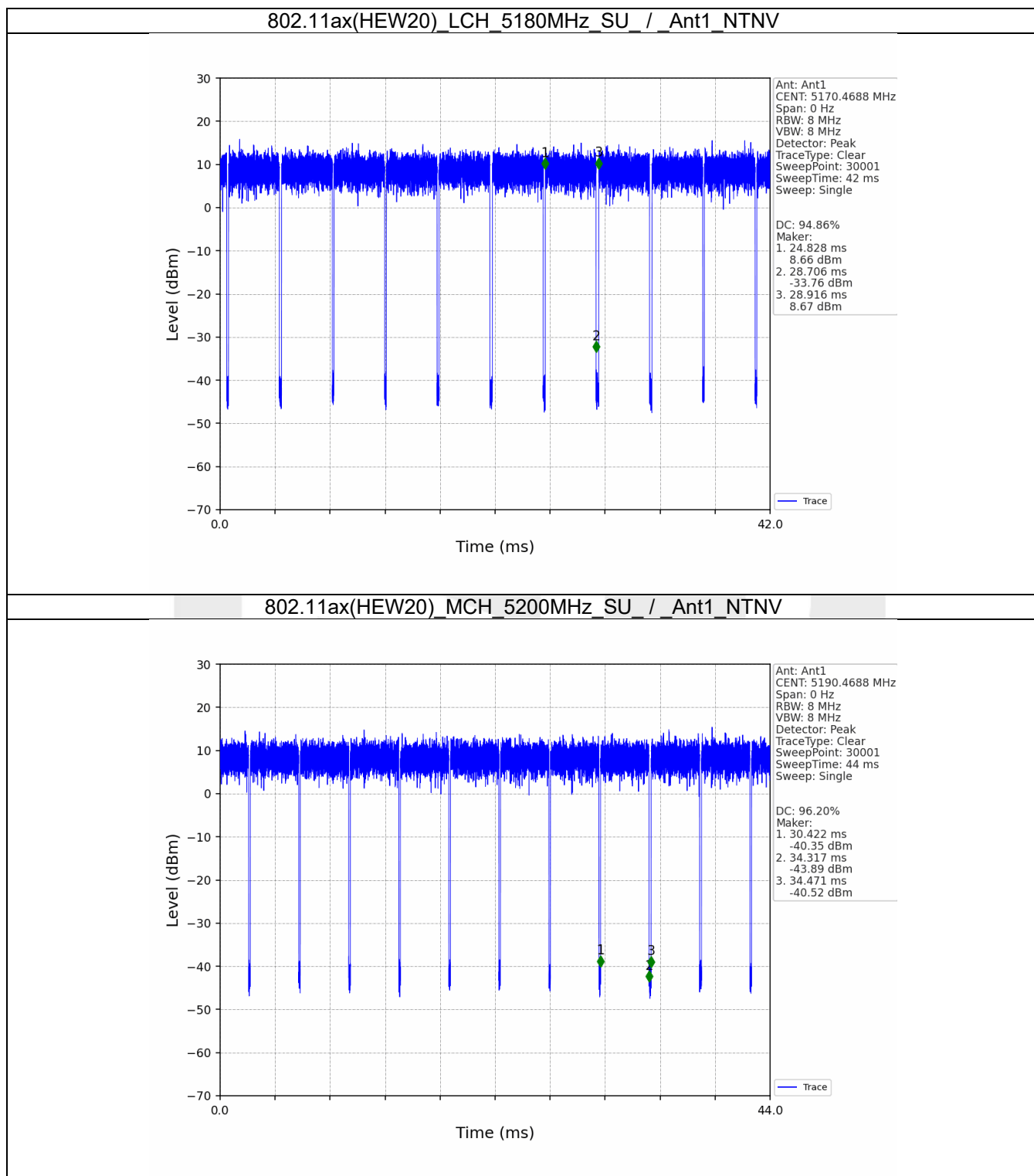


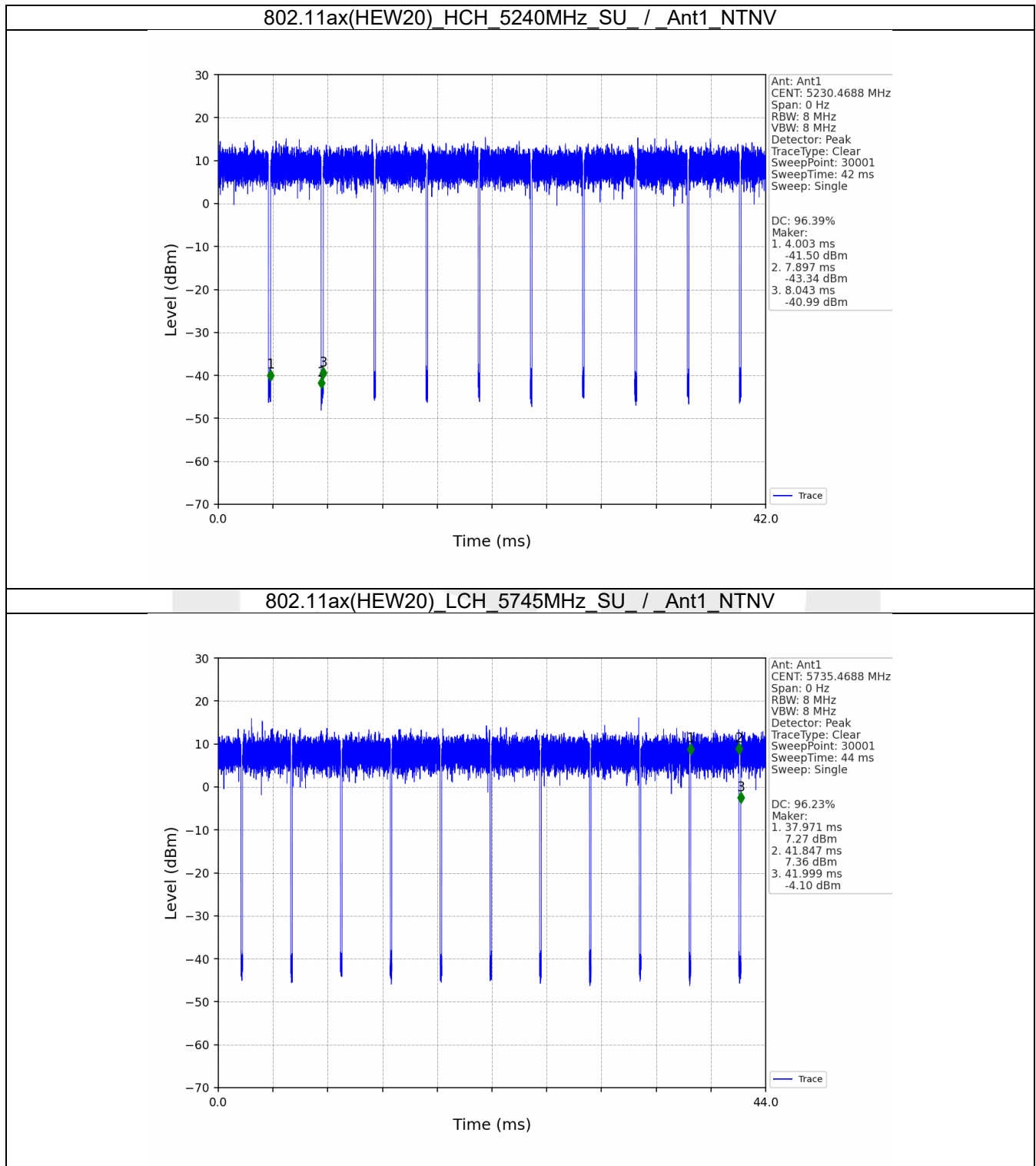


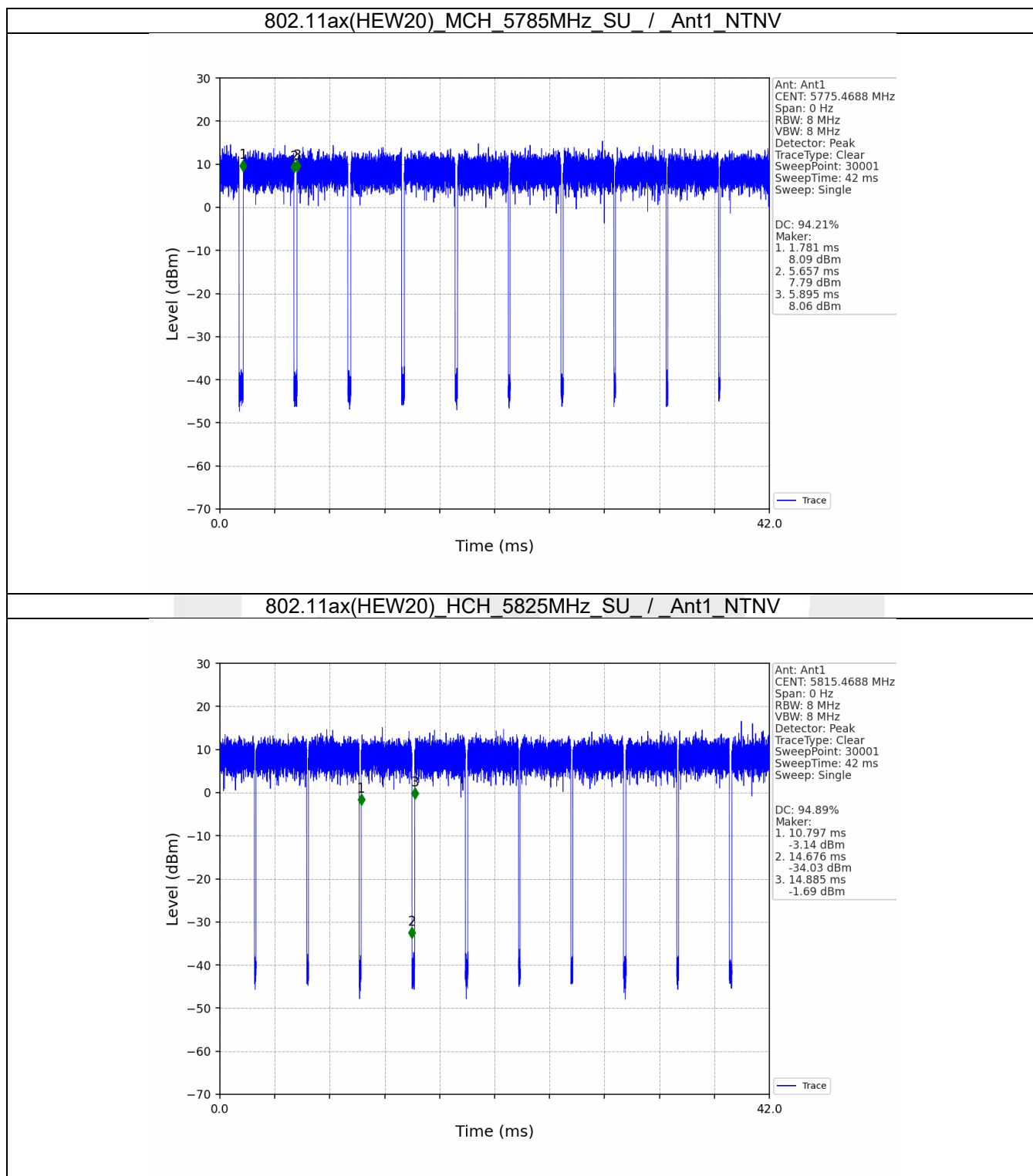


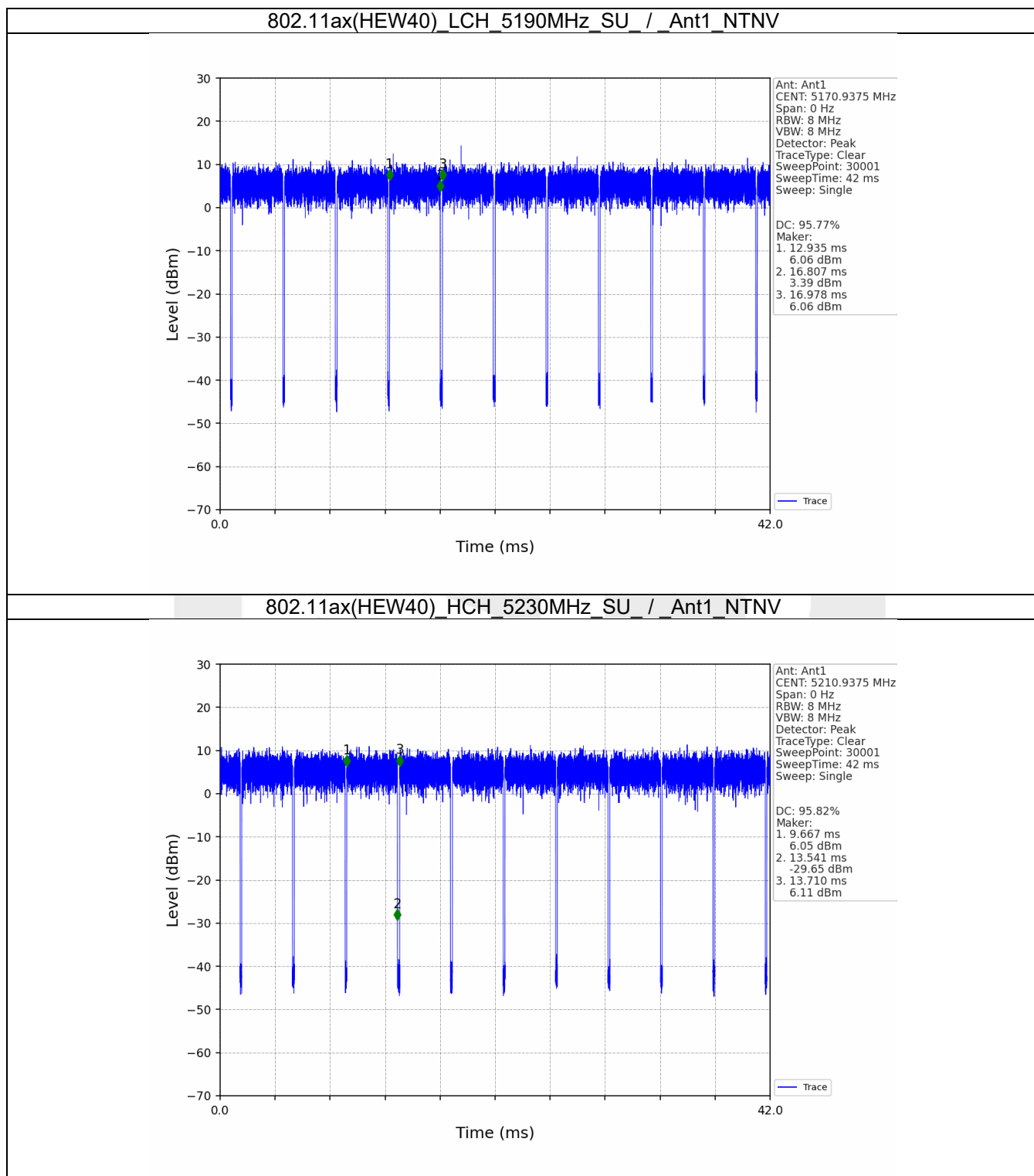


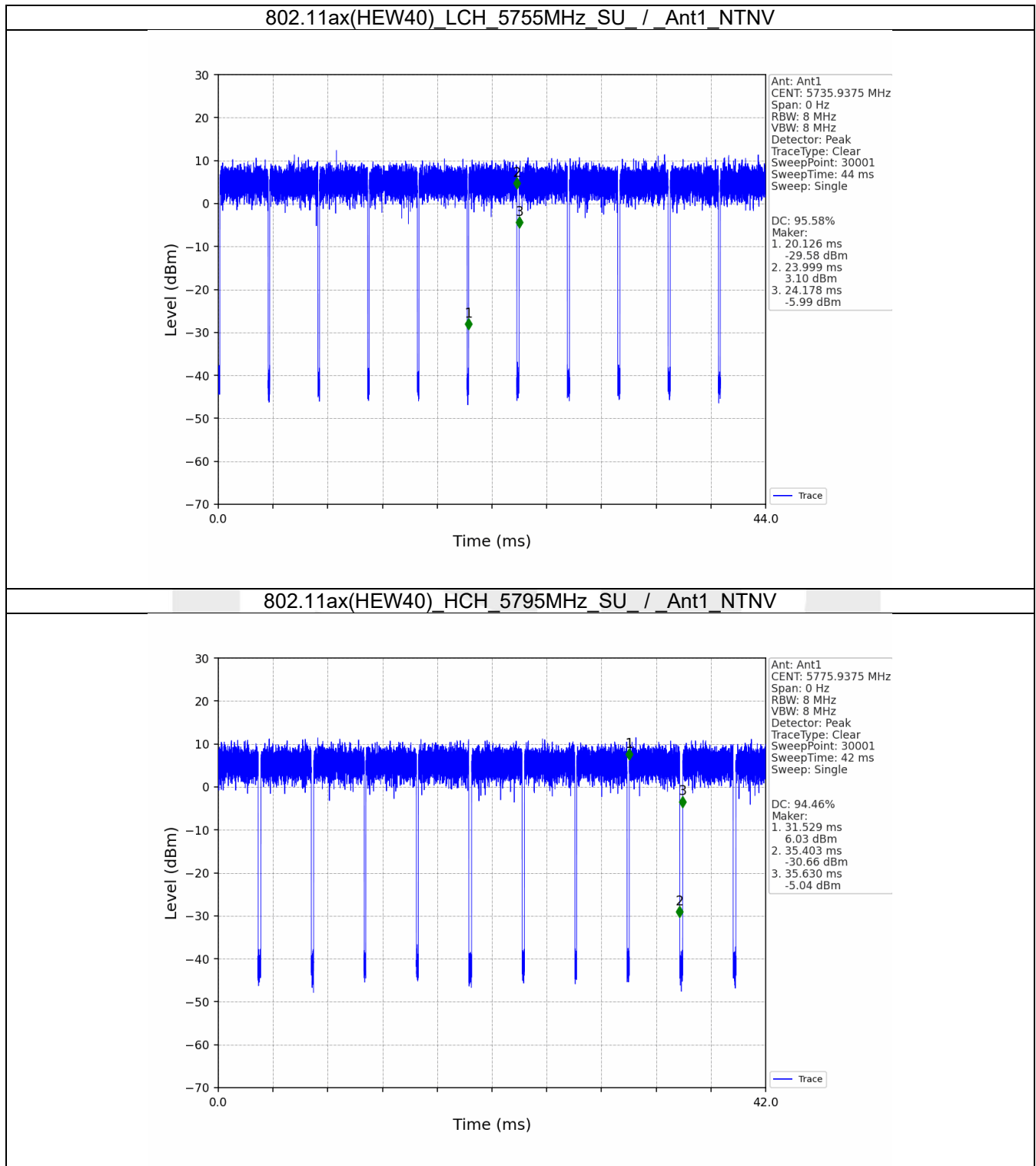












2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	1	18.072	/	Pass
		5200	/	/	1	18.312	/	Pass
		5240	/	/	1	18.127	/	Pass
		5745	/	/	1	18.511	/	Pass
		5785	/	/	1	18.410	/	Pass
		5825	/	/	1	18.537	/	Pass
802.11n (HT20)	SISO	5180	/	/	1	19.336	/	Pass
		5200	/	/	1	19.266	/	Pass
		5240	/	/	1	19.303	/	Pass
		5745	/	/	1	19.605	/	Pass
		5785	/	/	1	19.457	/	Pass
		5825	/	/	1	19.634	/	Pass
802.11n (HT40)	SISO	5190	/	/	1	37.426	/	Pass
		5230	/	/	1	37.431	/	Pass
		5755	/	/	1	37.948	/	Pass
		5795	/	/	1	37.797	/	Pass
802.11ac (VHT20)	SISO	5180	/	/	1	19.253	/	Pass
		5200	/	/	1	19.365	/	Pass
		5240	/	/	1	19.279	/	Pass
		5745	/	/	1	19.529	/	Pass
		5785	/	/	1	19.597	/	Pass
		5825	/	/	1	19.611	/	Pass
802.11ac (VHT40)	SISO	5190	/	/	1	37.491	/	Pass
		5230	/	/	1	37.405	/	Pass
		5755	/	/	1	37.908	/	Pass
		5795	/	/	1	37.777	/	Pass
802.11ax (HEW20)	SISO	5180	SU	/	1	19.573	/	Pass
		5200	SU	/	1	19.779	/	Pass
		5240	SU	/	1	19.673	/	Pass
		5745	SU	/	1	19.817	/	Pass
		5785	SU	/	1	19.795	/	Pass
		5825	SU	/	1	19.895	/	Pass
802.11ax (HEW40)	SISO	5190	SU	/	1	38.380	/	Pass
		5230	SU	/	1	38.456	/	Pass
		5755	SU	/	1	38.878	/	Pass
		5795	SU	/	1	38.700	/	Pass

2.1.2 26dB BW

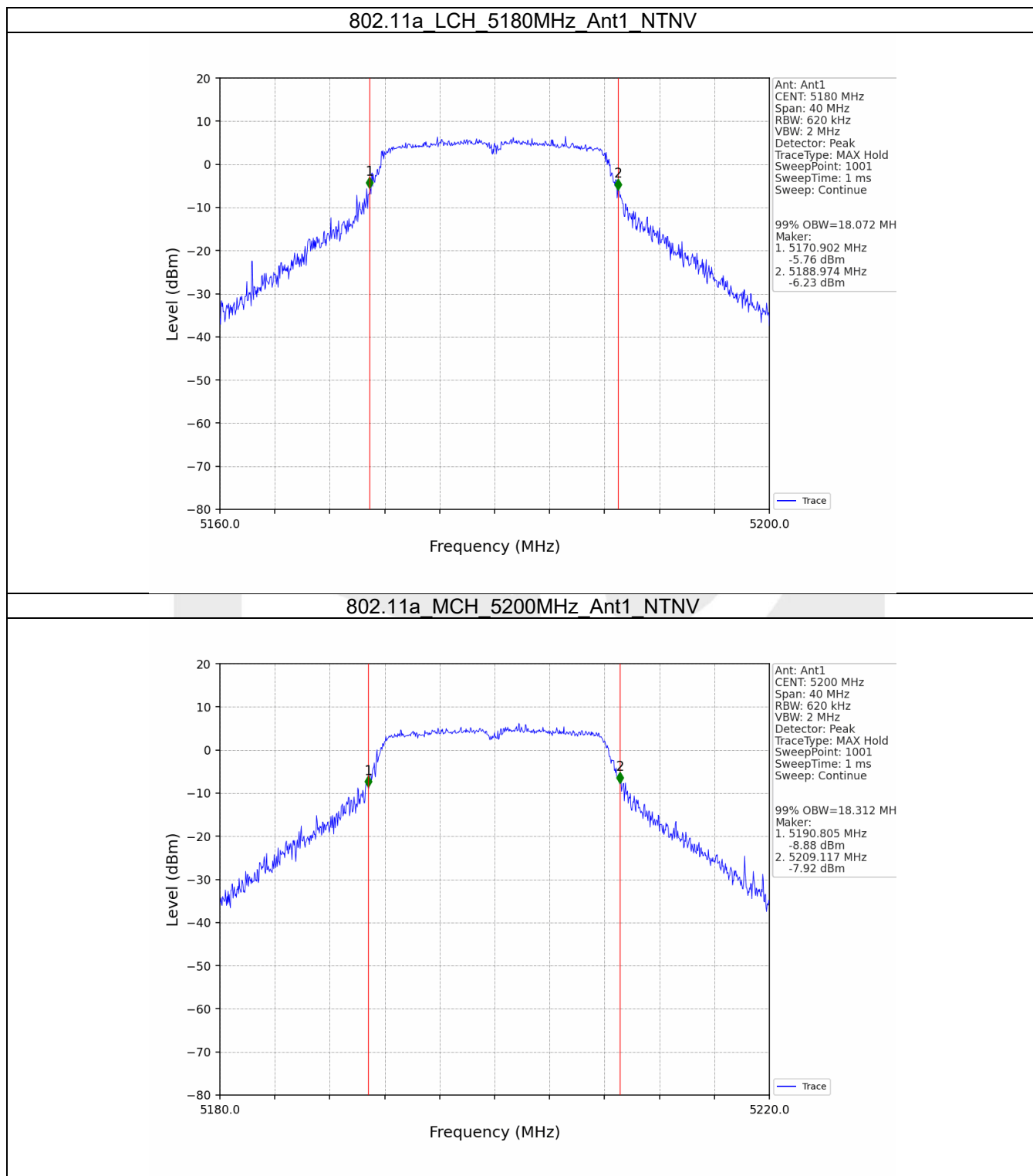
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	26dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	1	23.191	/	Pass
		5200	/	/	1	23.521	/	Pass
		5240	/	/	1	23.212	/	Pass
802.11n (HT20)	SISO	5180	/	/	1	24.213	/	Pass
		5200	/	/	1	24.985	/	Pass
		5240	/	/	1	23.793	/	Pass
802.11n (HT40)	SISO	5190	/	/	1	44.963	/	Pass
		5230	/	/	1	44.813	/	Pass
802.11ac (VHT20)	SISO	5180	/	/	1	23.749	/	Pass
		5200	/	/	1	23.975	/	Pass
		5240	/	/	1	24.472	/	Pass
802.11ac (VHT40)	SISO	5190	/	/	1	44.407	/	Pass
		5230	/	/	1	45.921	/	Pass
802.11ax (HEW20)	SISO	5180	SU	/	1	24.202	/	Pass
		5200	SU	/	1	24.895	/	Pass
		5240	SU	/	1	24.628	/	Pass
802.11ax (HEW40)	SISO	5190	SU	/	1	43.701	/	Pass
		5230	SU	/	1	43.099	/	Pass

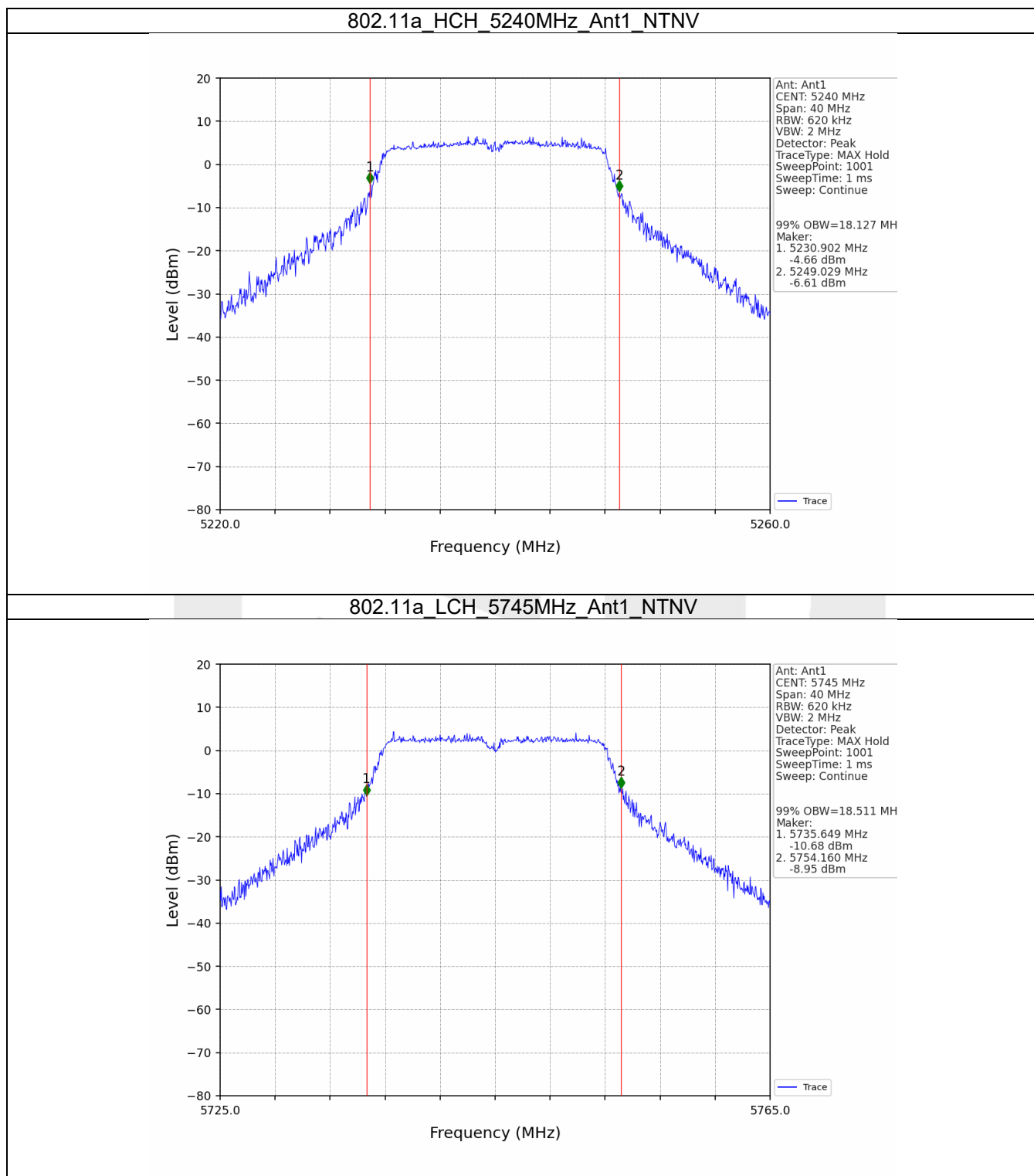
2.1.3 6dB BW

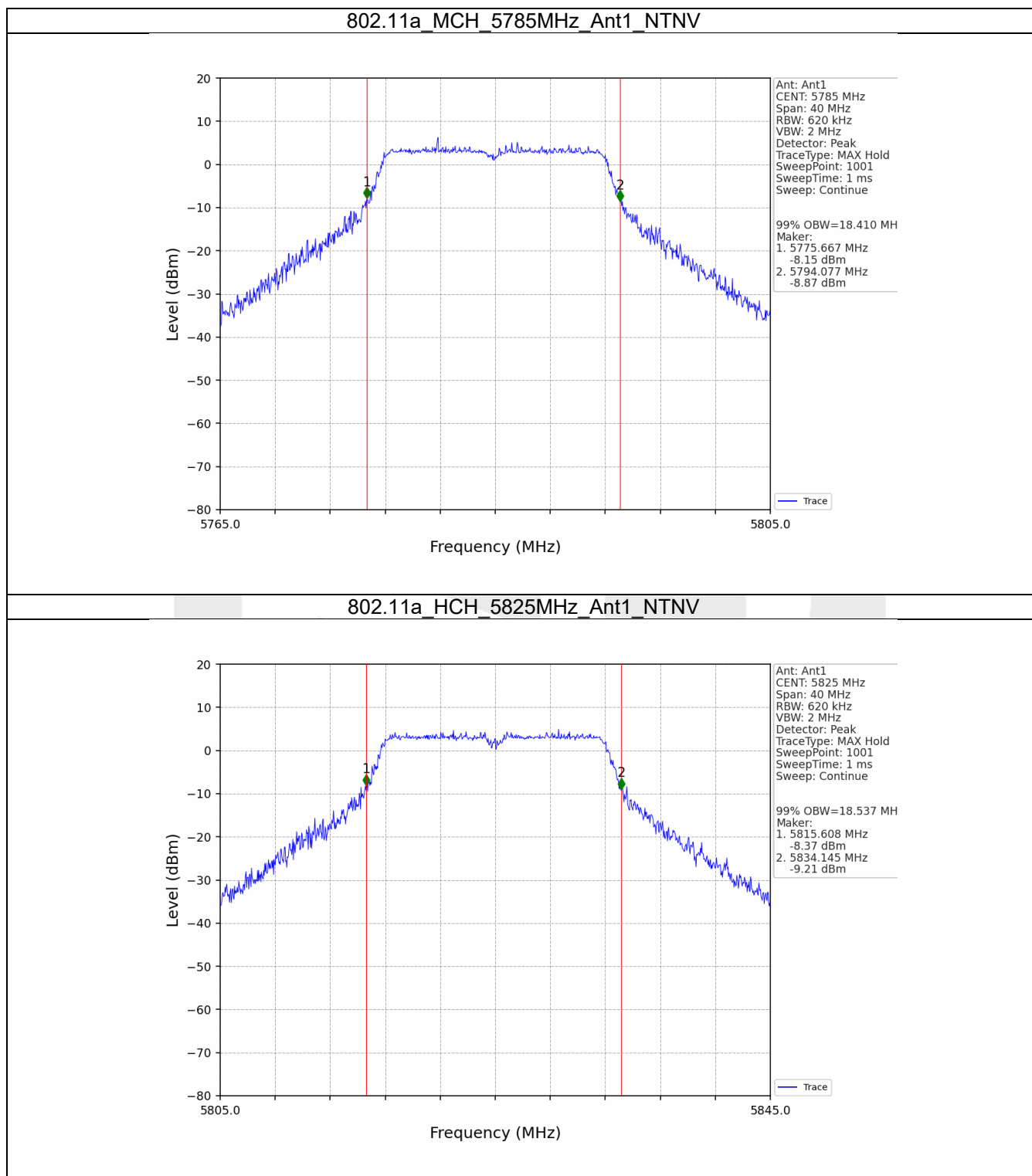
Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5745	/	/	1	16.433	≥ 0.5	Pass
		5785	/	/	1	16.411	≥ 0.5	Pass
		5825	/	/	1	16.407	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	/	/	1	17.658	≥ 0.5	Pass
		5785	/	/	1	17.751	≥ 0.5	Pass
		5825	/	/	1	17.693	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	/	/	1	36.389	≥ 0.5	Pass
		5795	/	/	1	36.406	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	/	/	1	17.650	≥ 0.5	Pass
		5785	/	/	1	17.666	≥ 0.5	Pass
		5825	/	/	1	17.639	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	/	/	1	36.415	≥ 0.5	Pass
		5795	/	/	1	36.396	≥ 0.5	Pass
802.11ax (HEW20)	SISO	5745	SU	/	1	18.903	≥ 0.5	Pass
		5785	SU	/	1	18.988	≥ 0.5	Pass
		5825	SU	/	1	19.048	≥ 0.5	Pass
802.11ax (HEW40)	SISO	5755	SU	/	1	38.042	≥ 0.5	Pass
		5795	SU	/	1	38.091	≥ 0.5	Pass

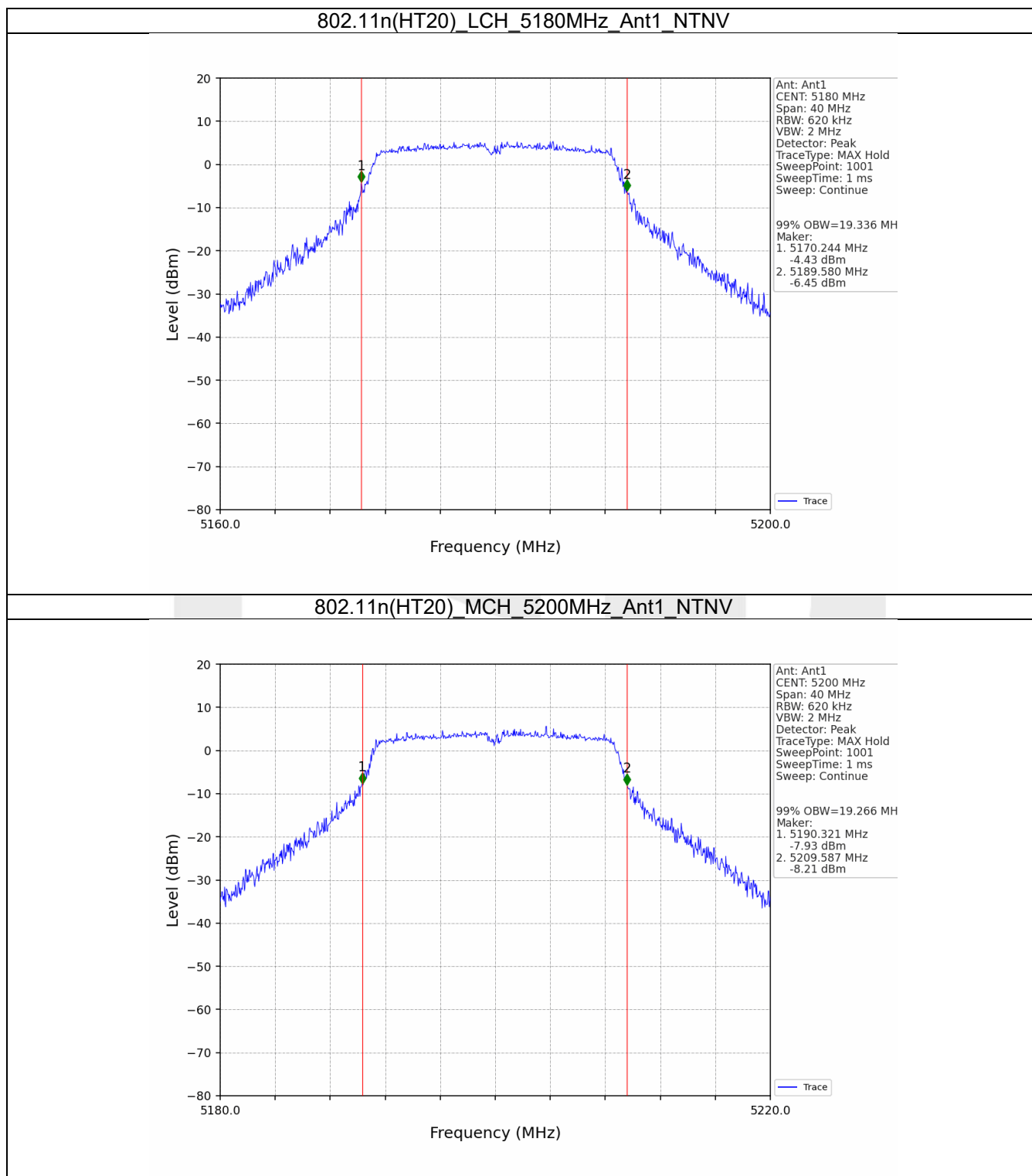
2.2 Test Graph

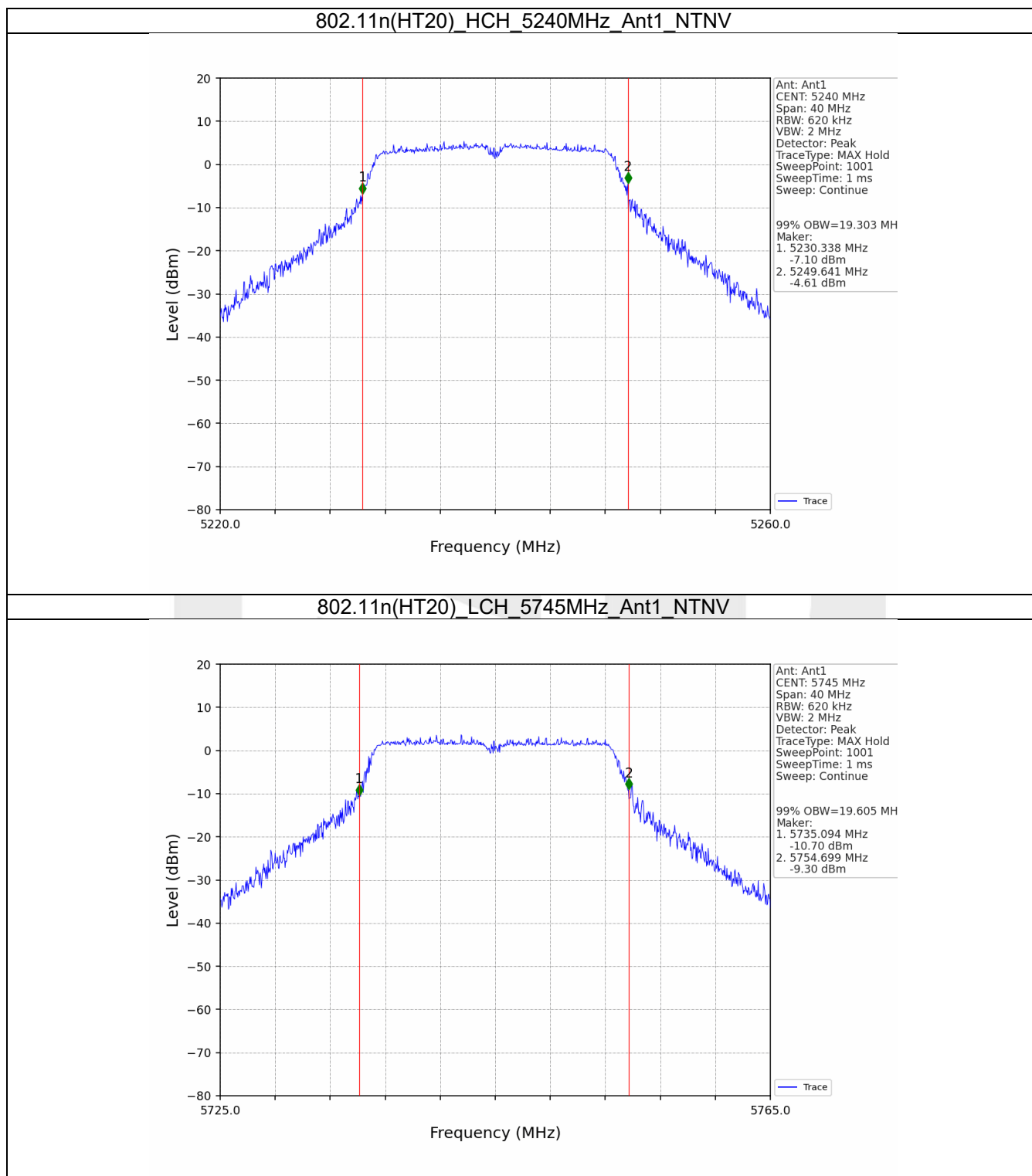
2.2.1 OBW

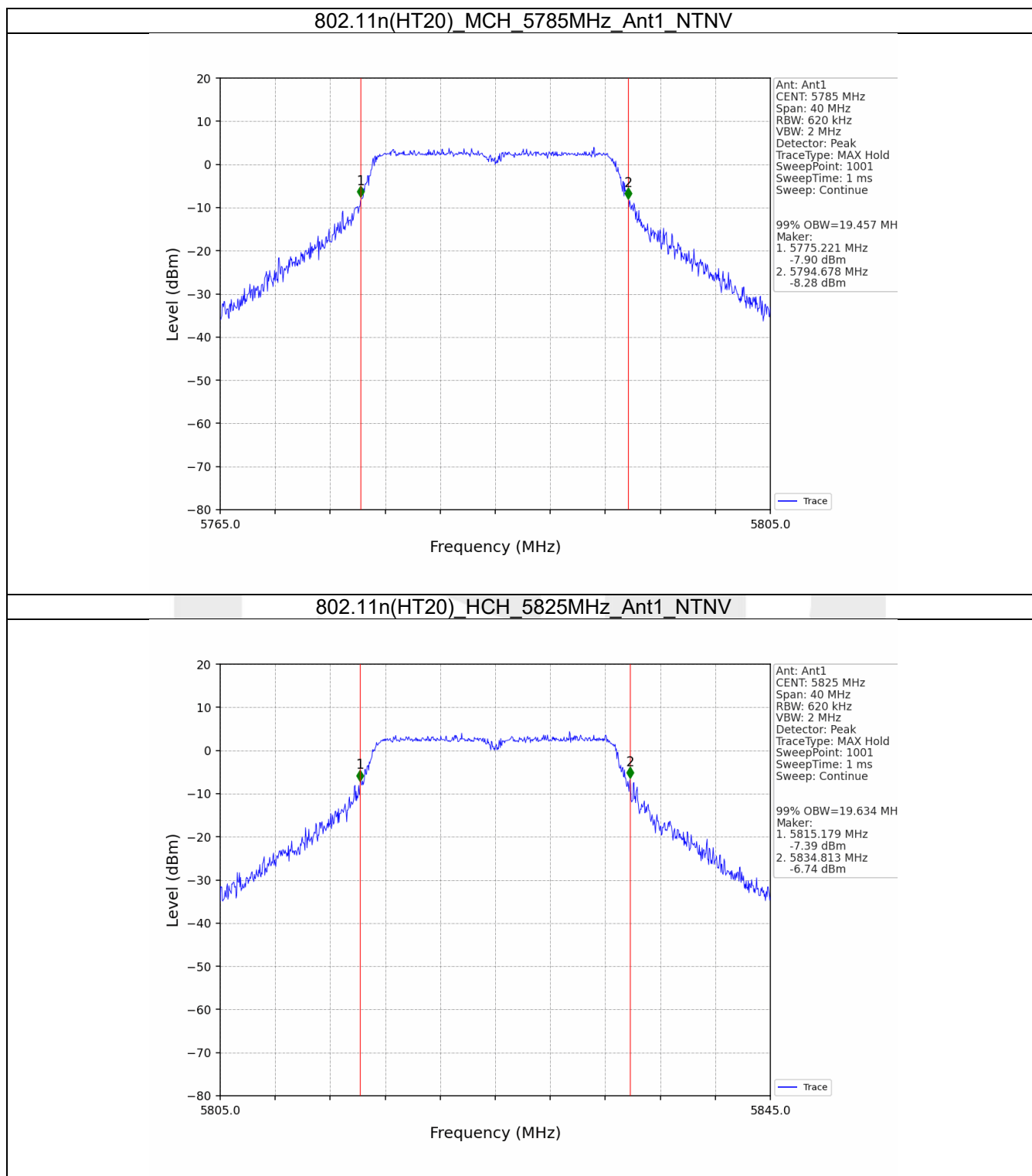


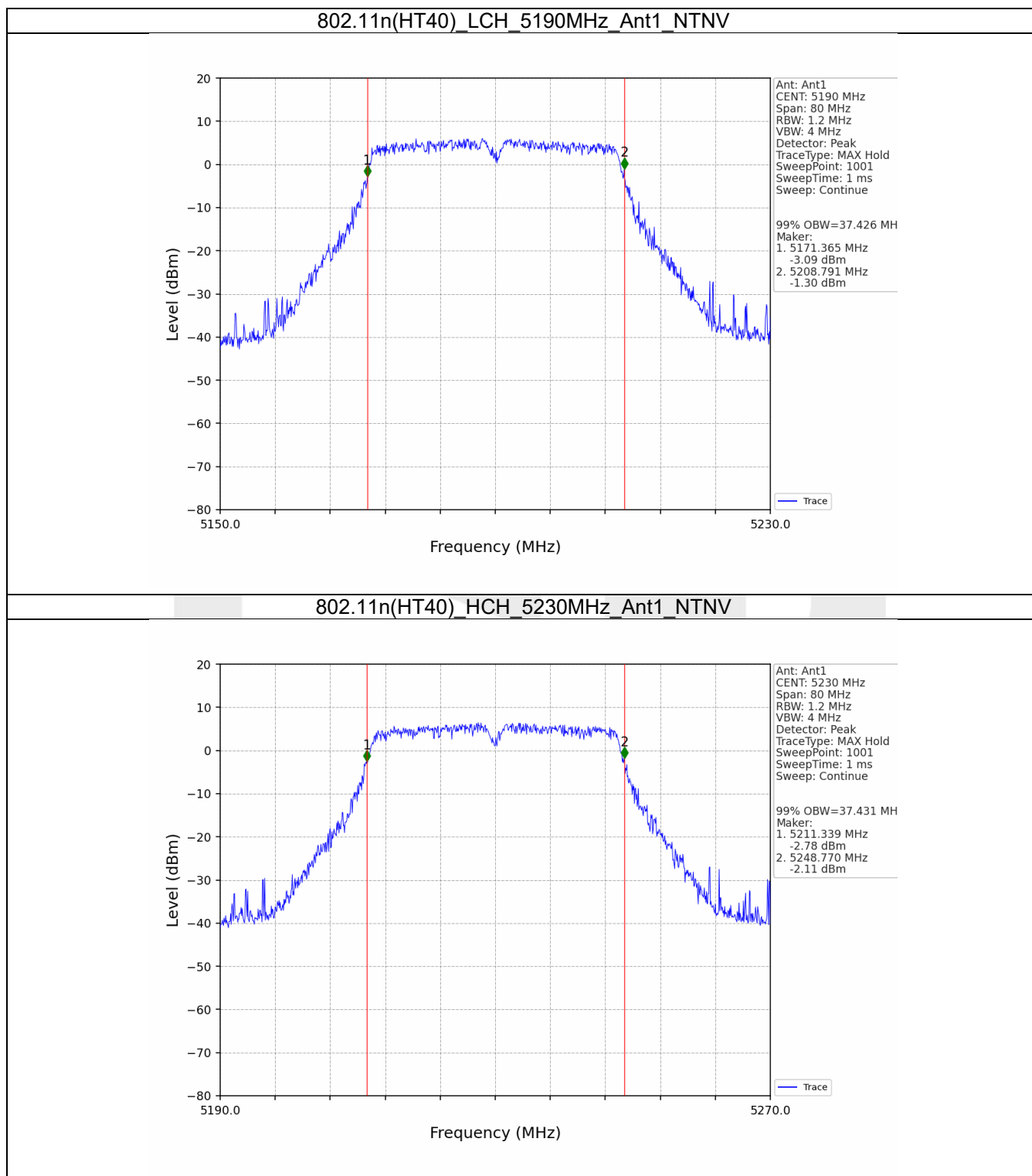




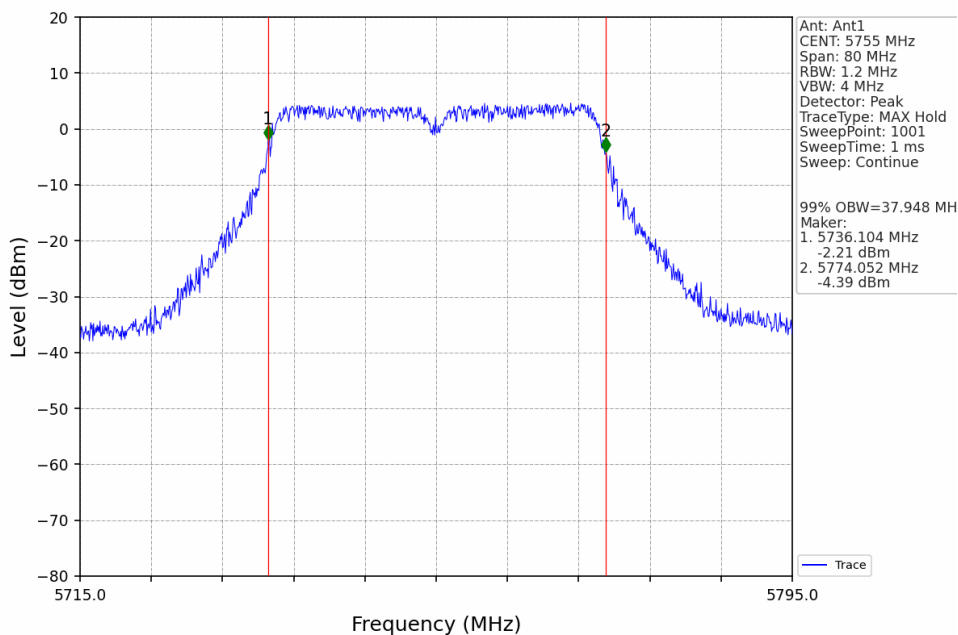




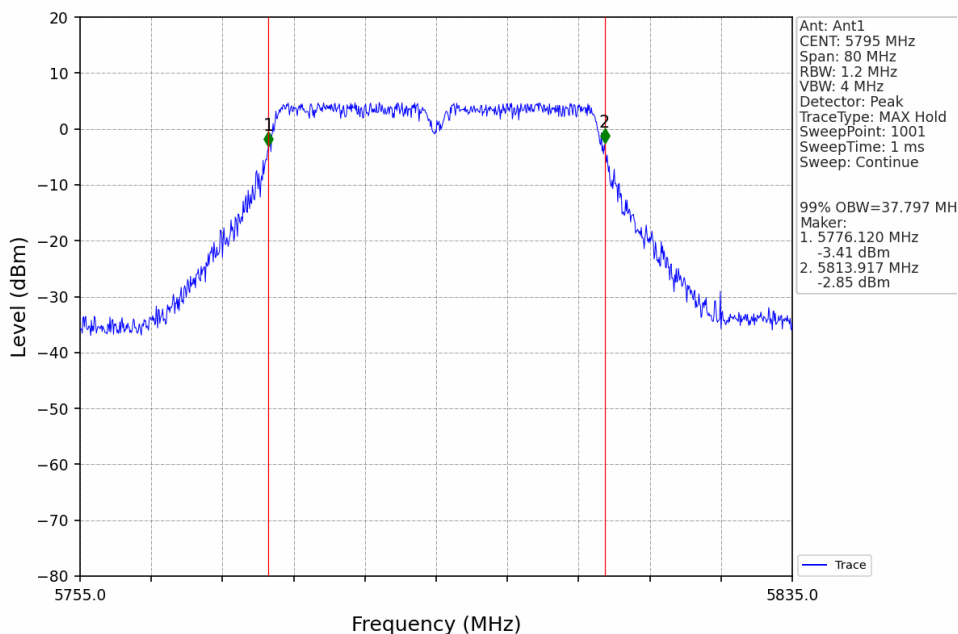


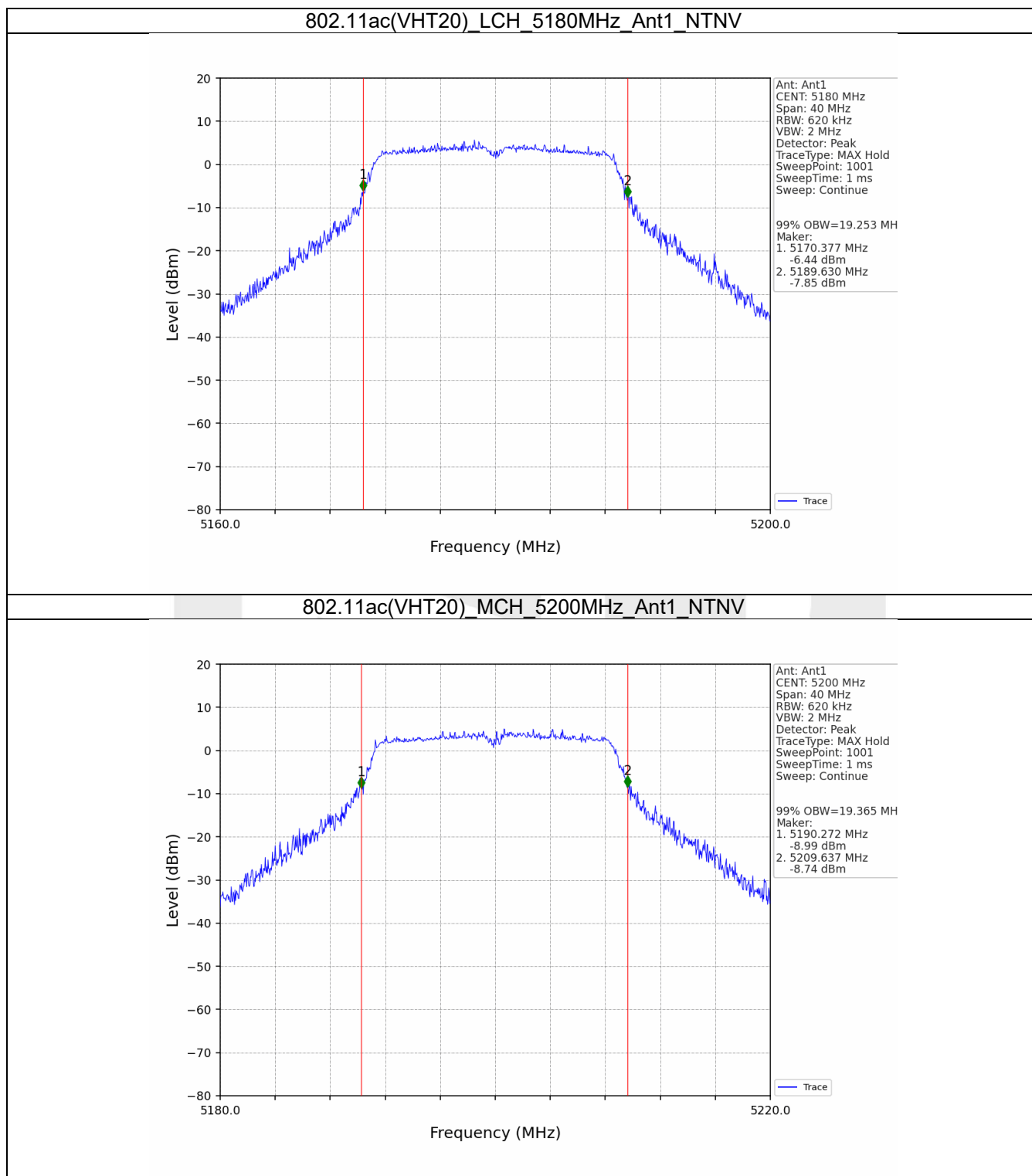


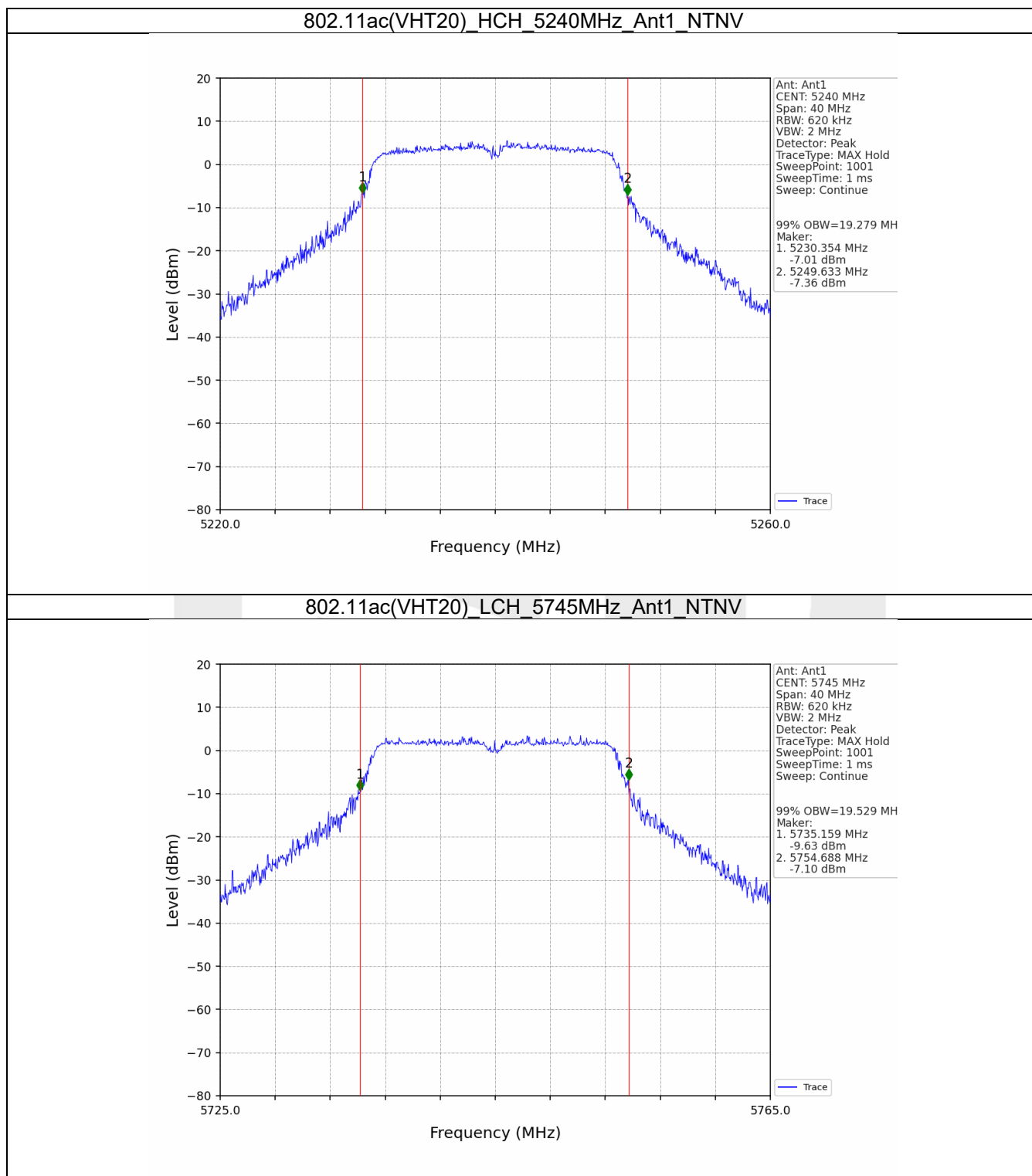
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV

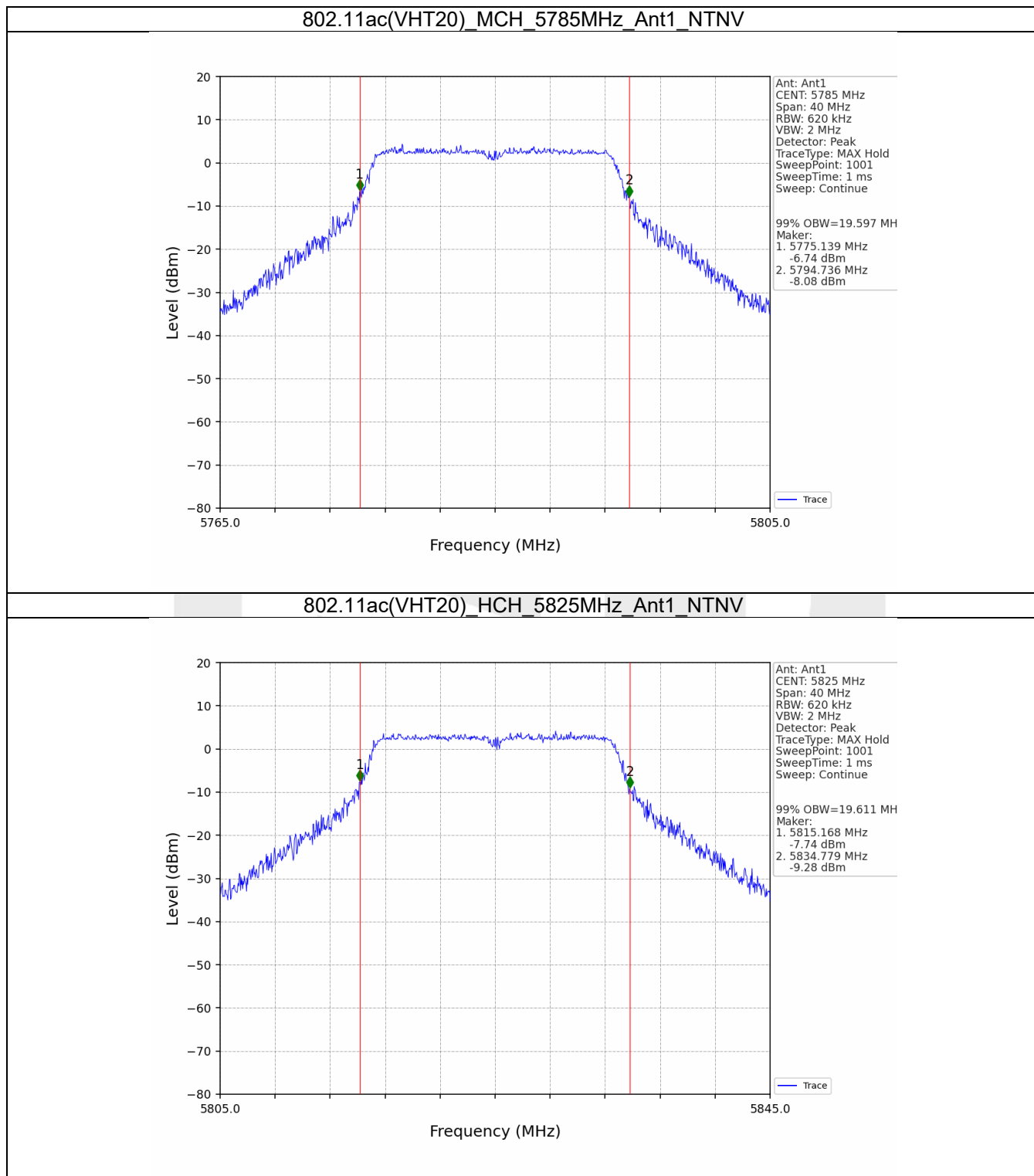


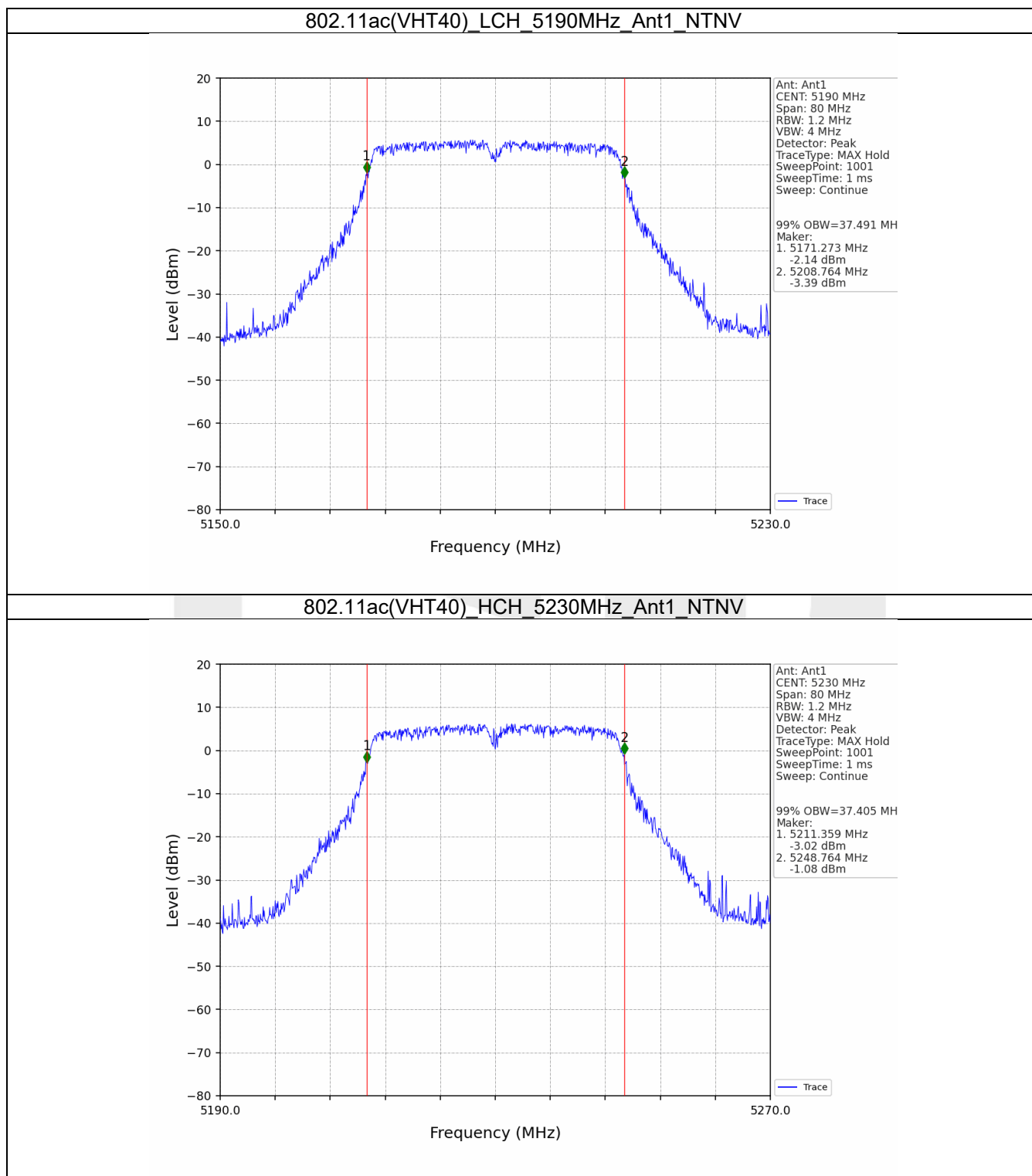
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV

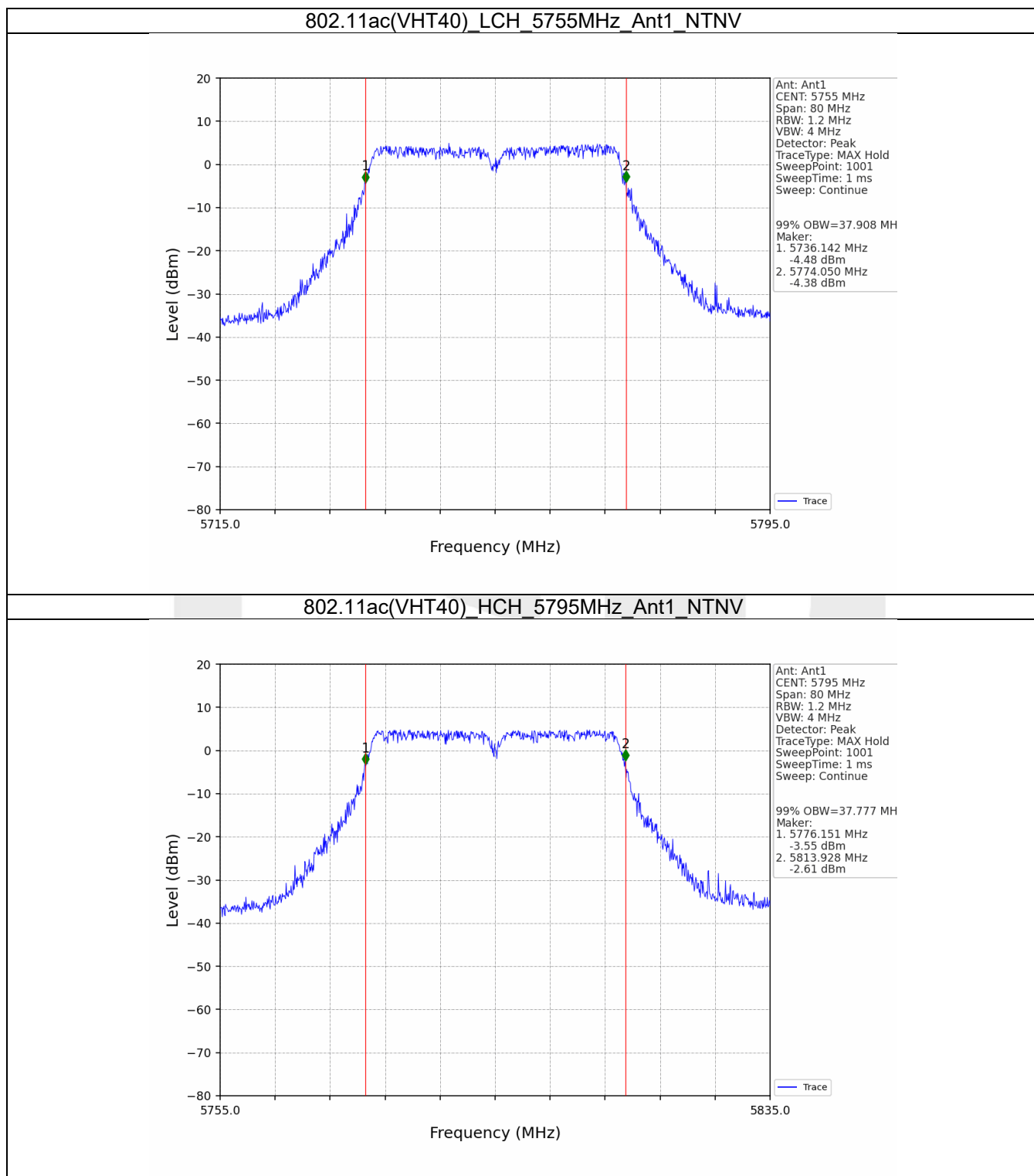


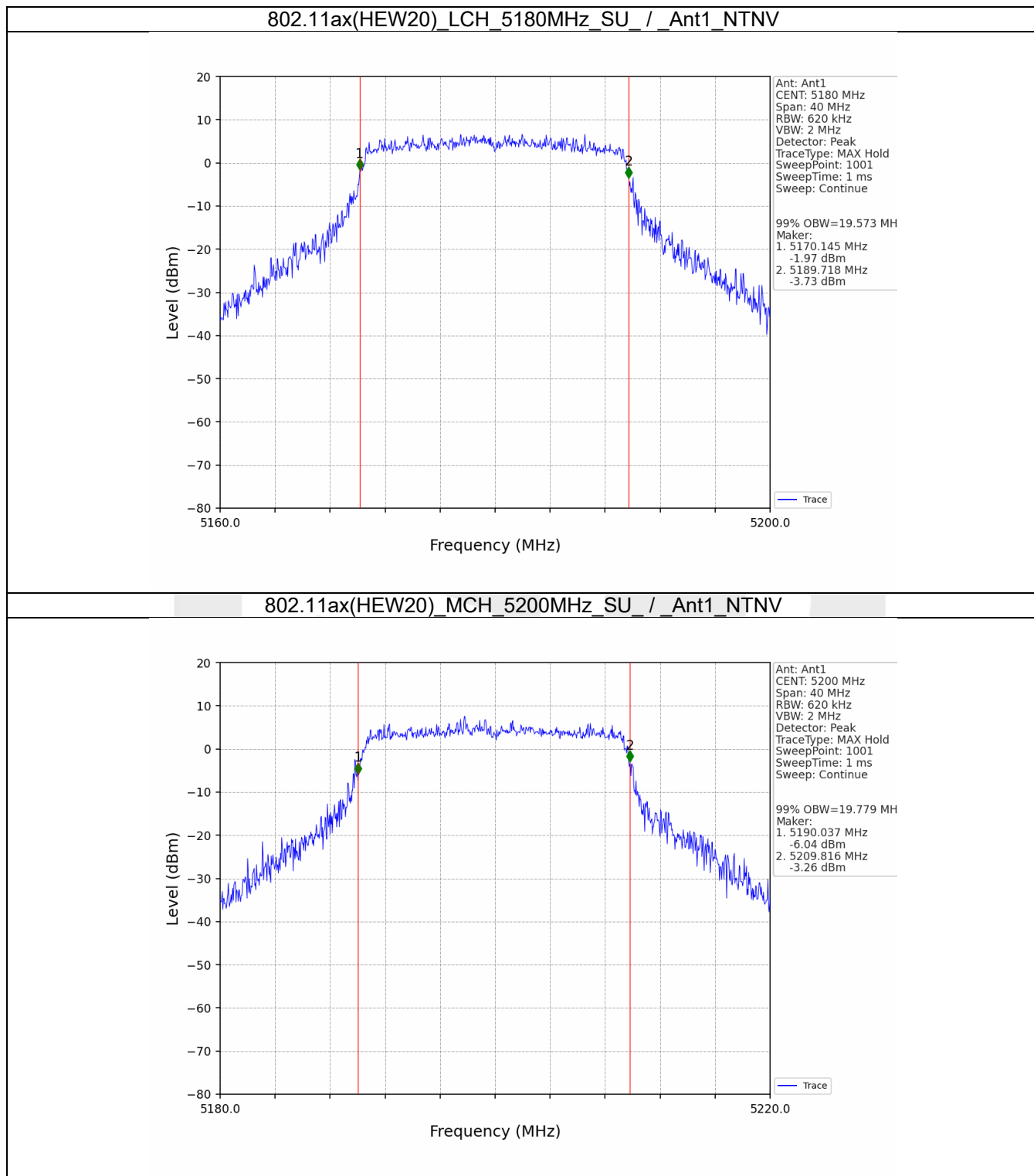


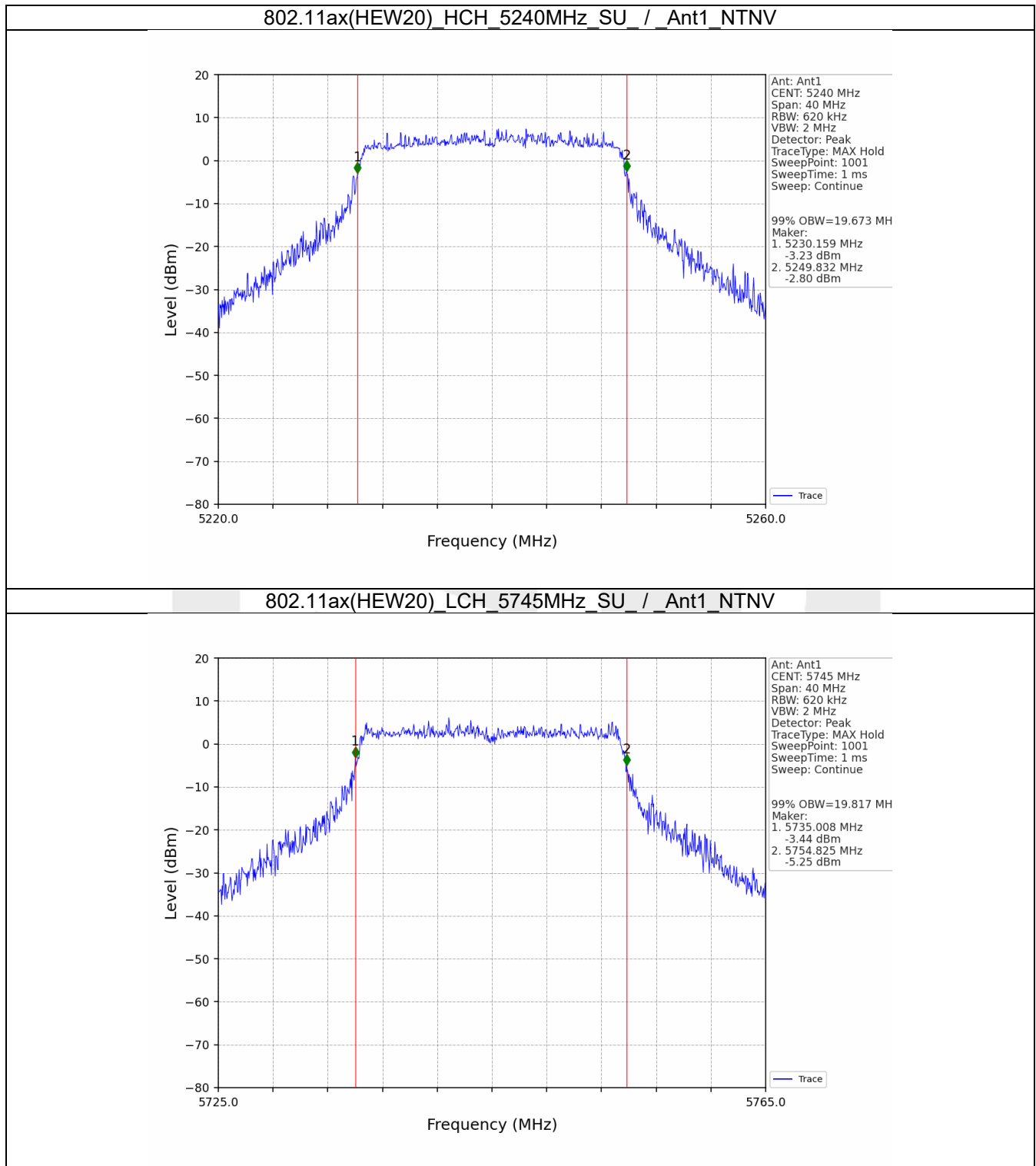


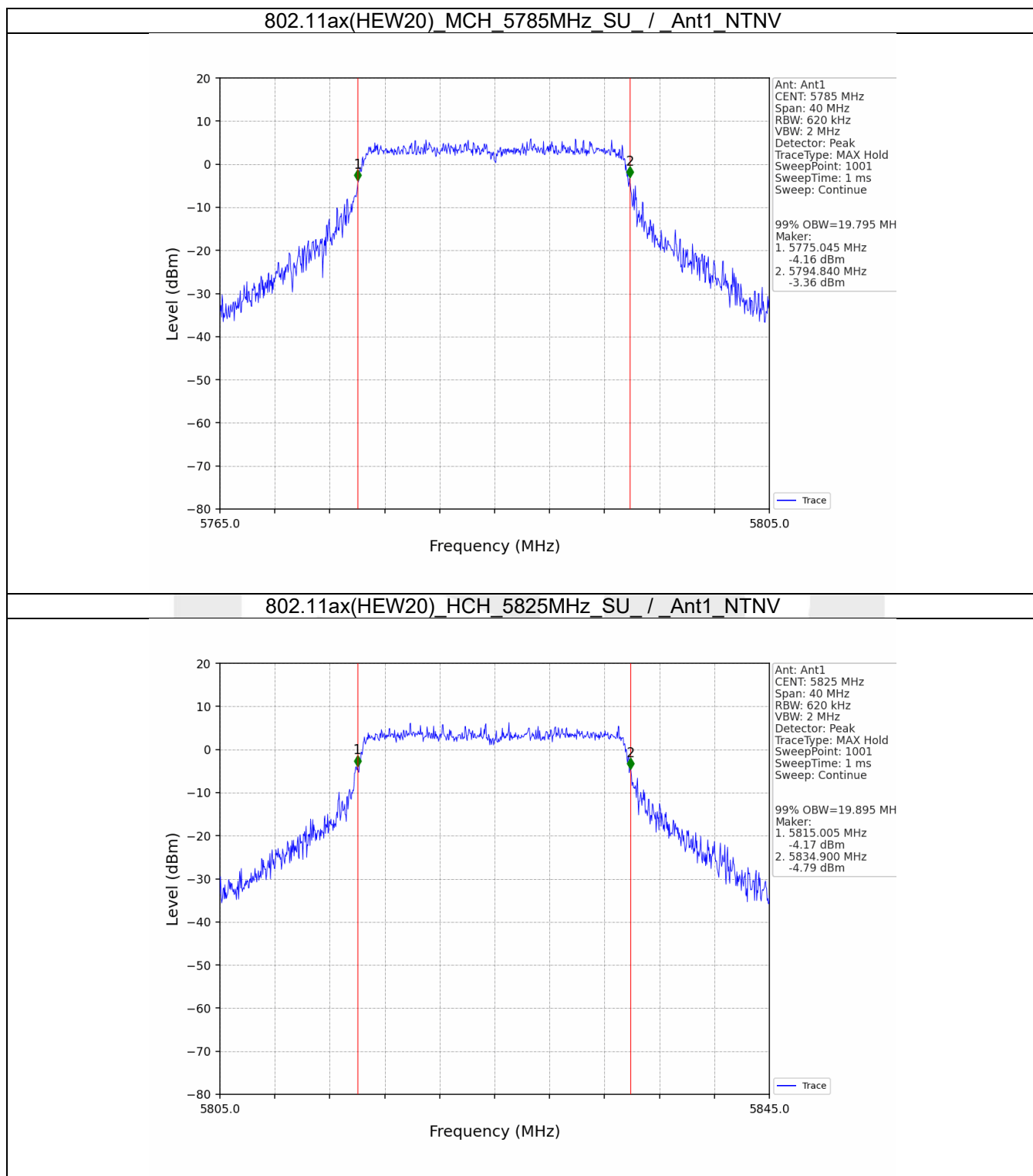


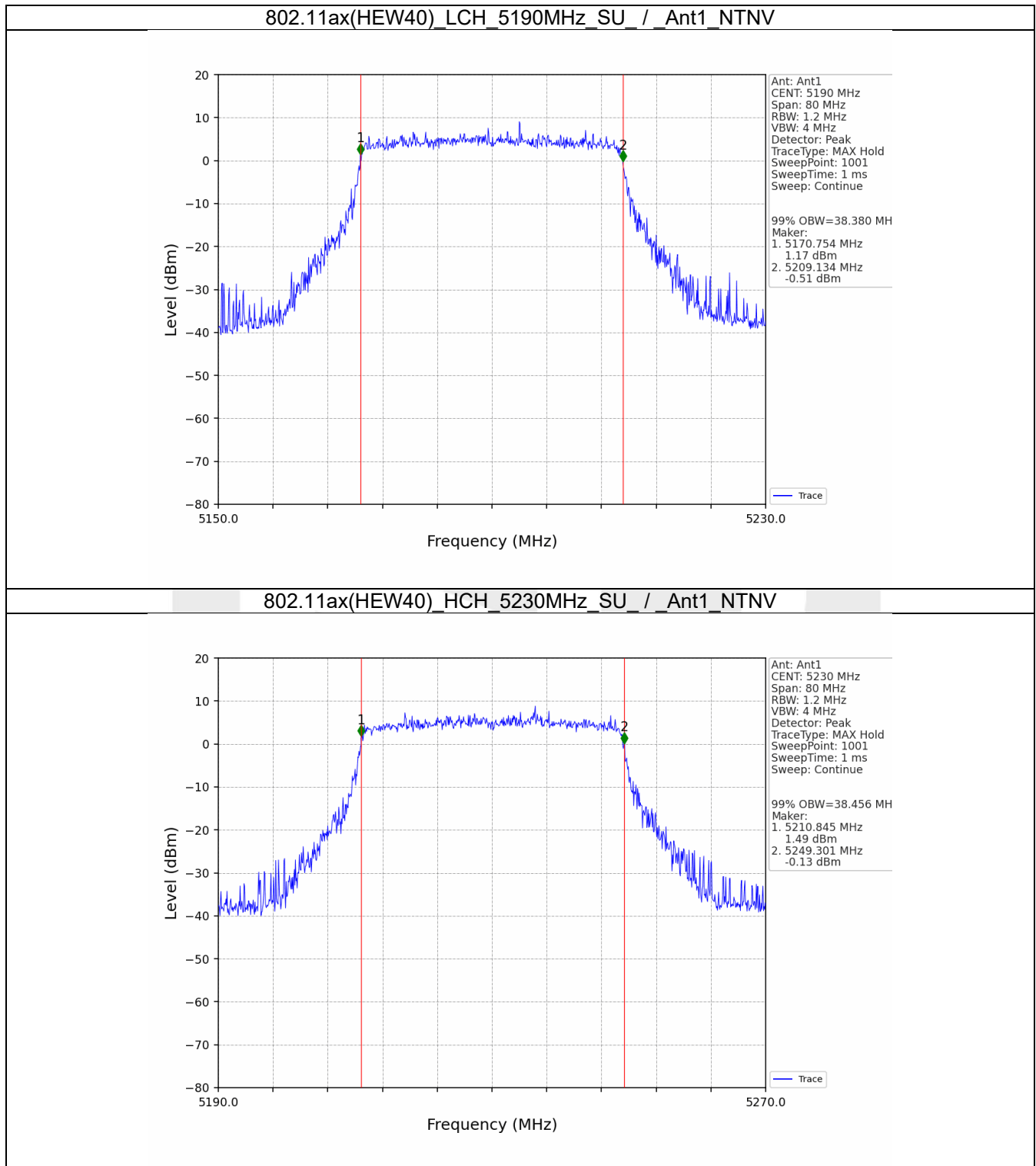


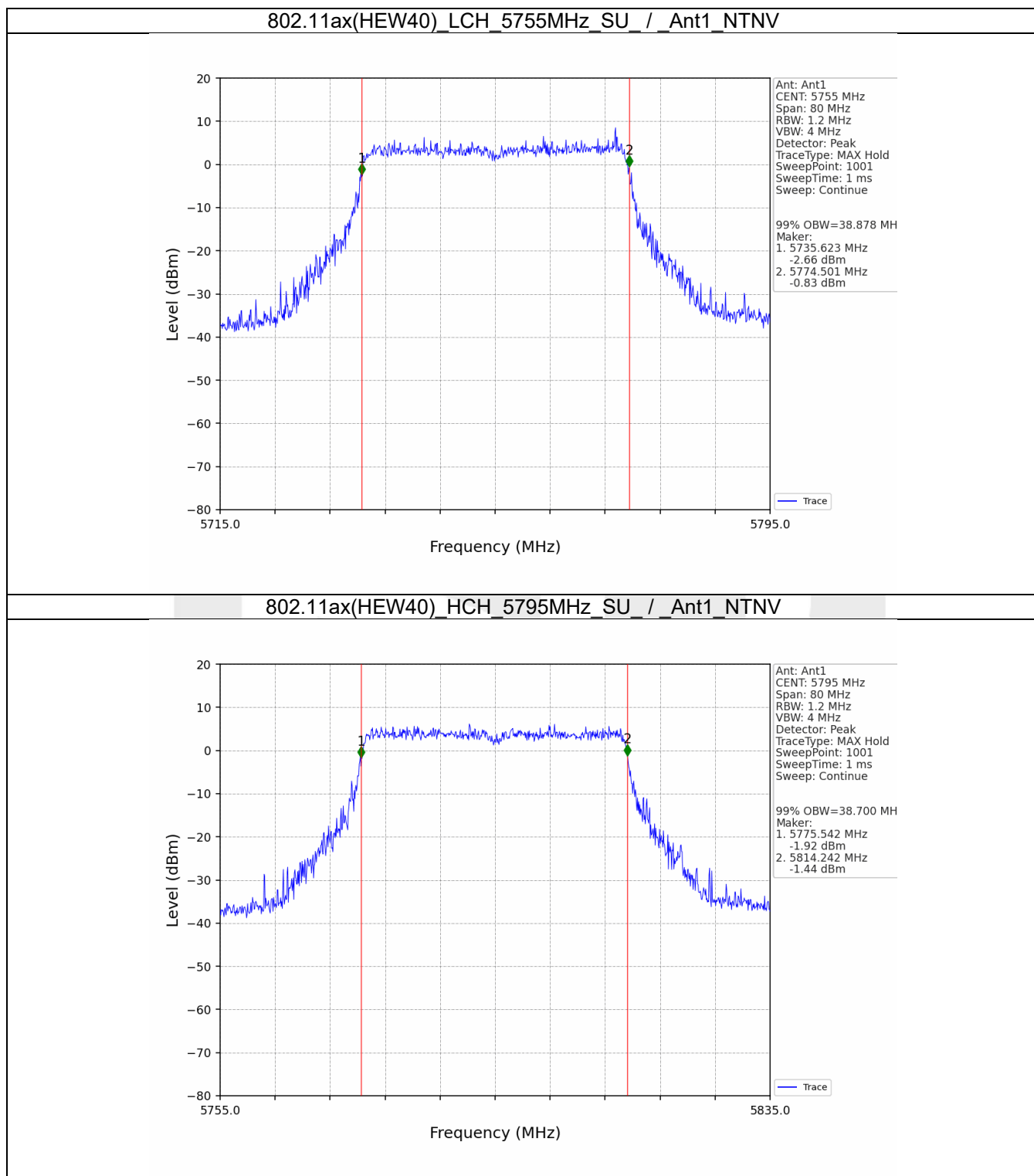




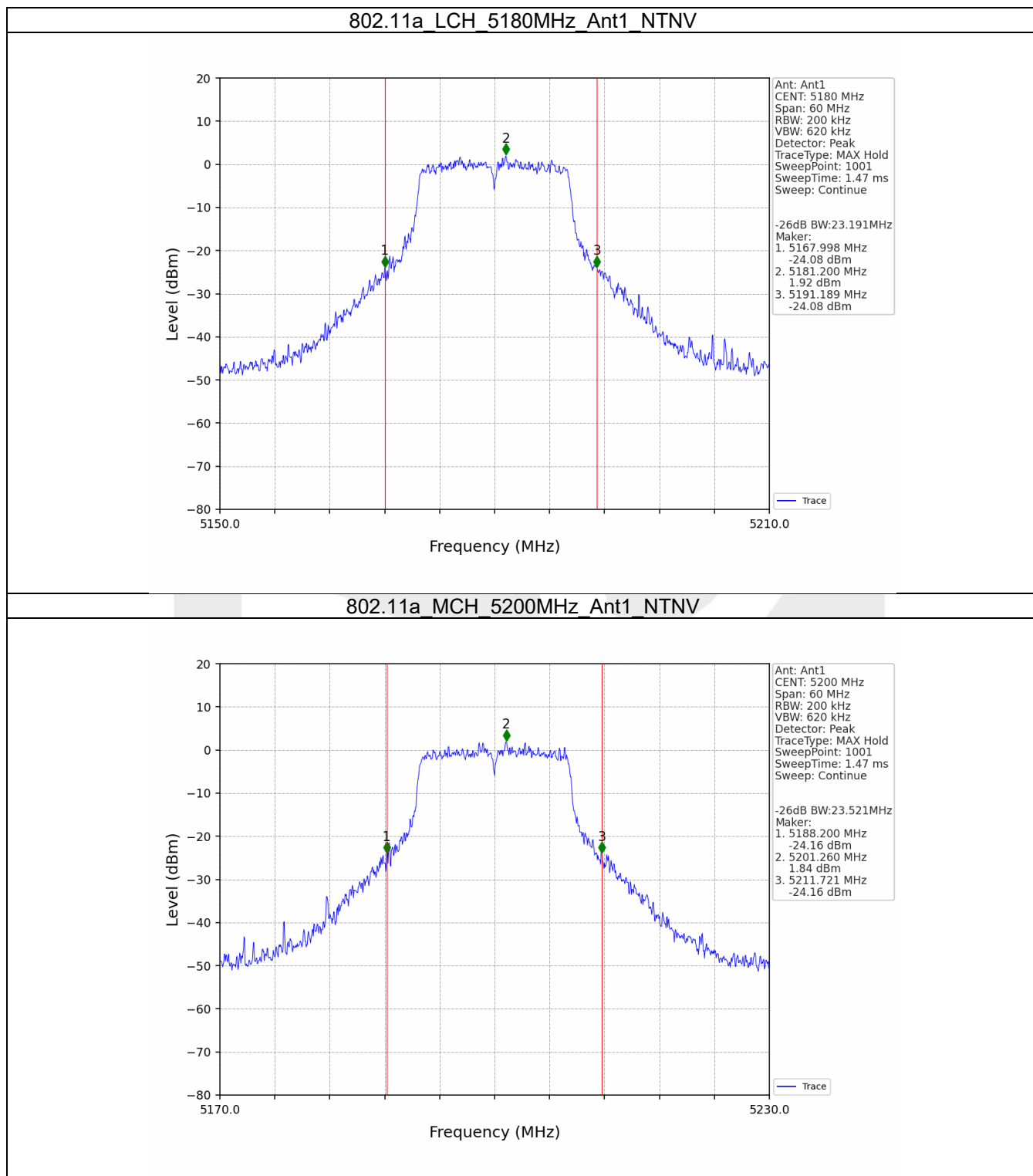


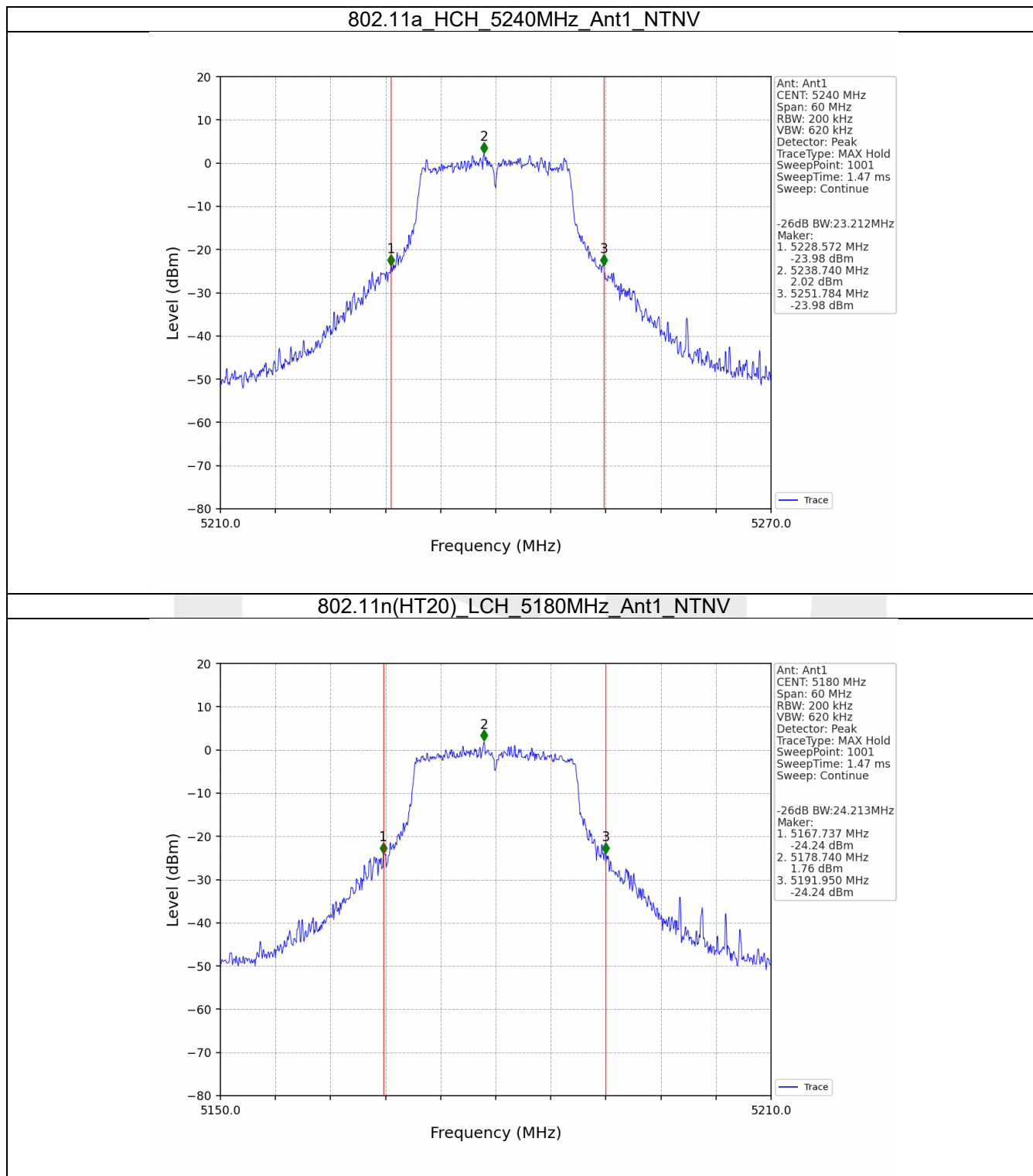


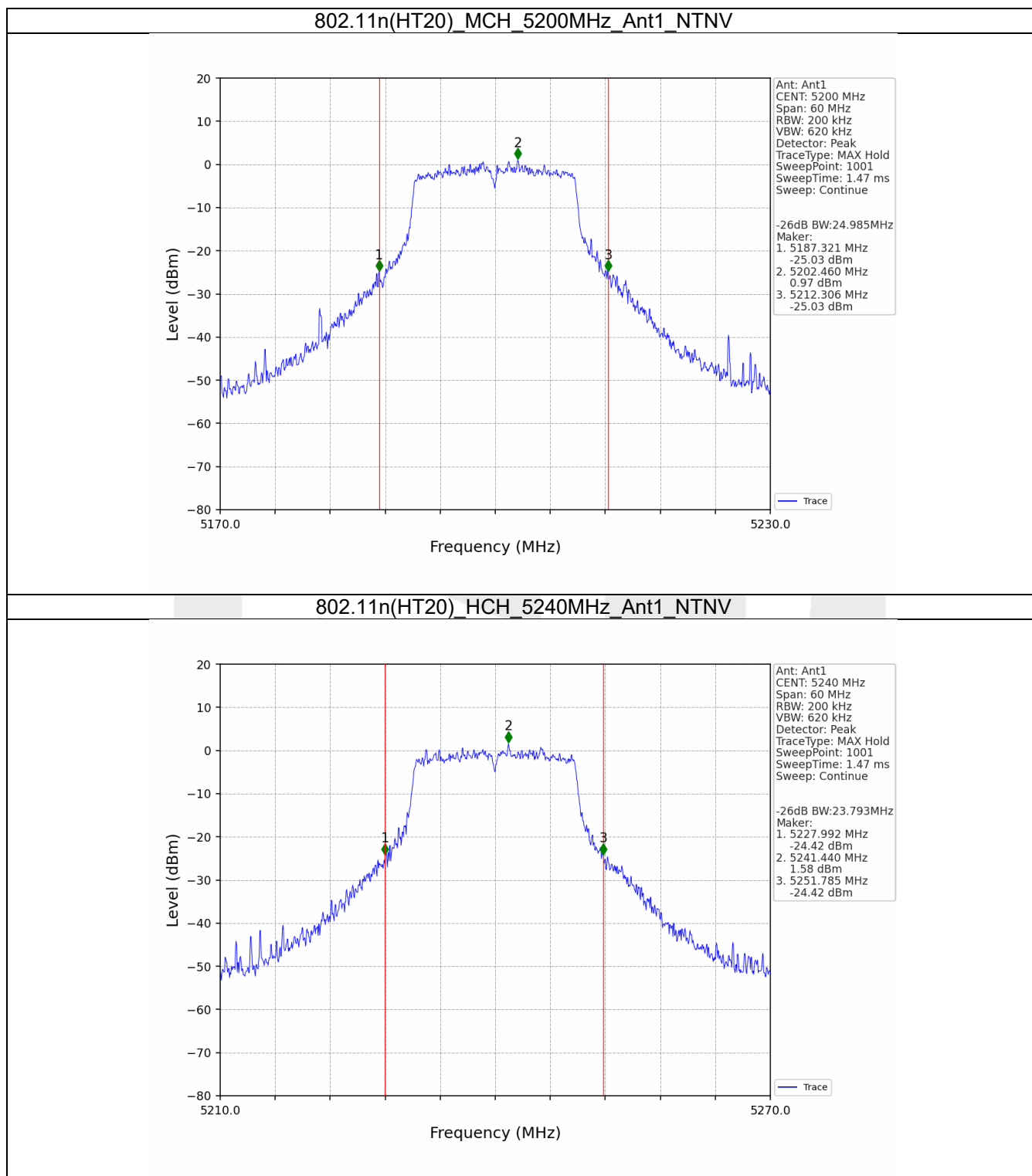




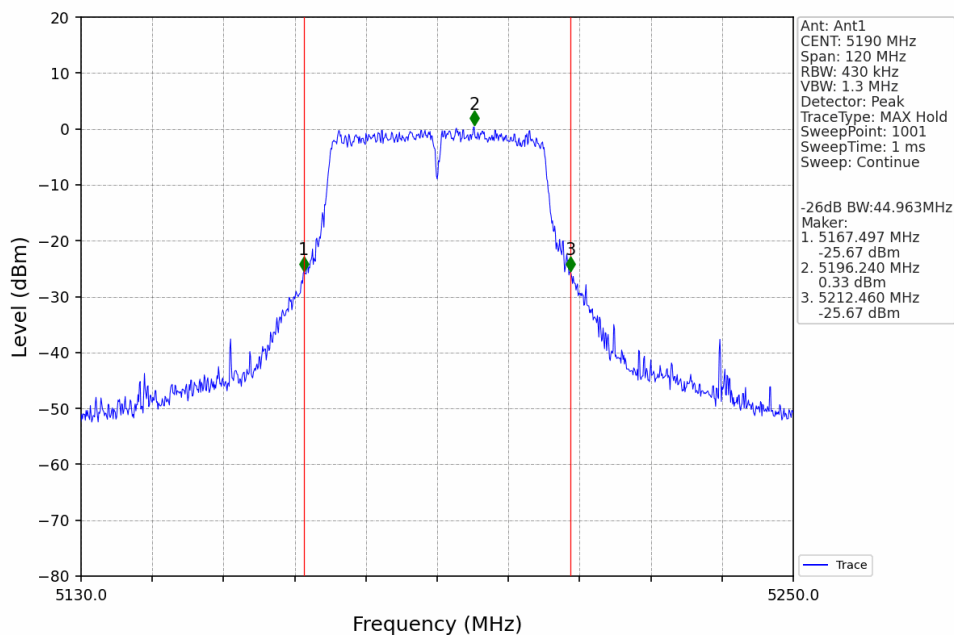
2.2.2 26dB BW



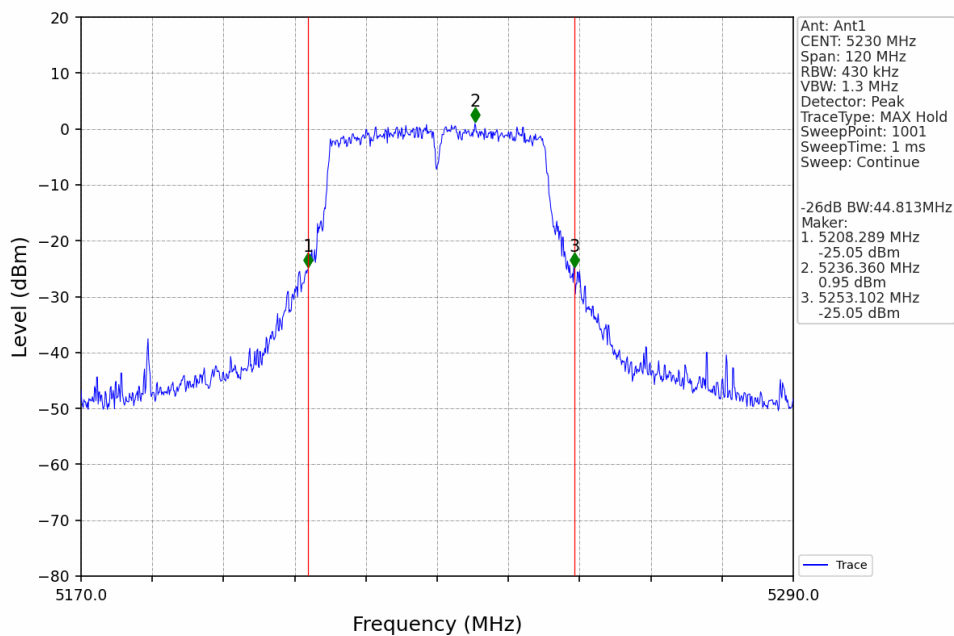


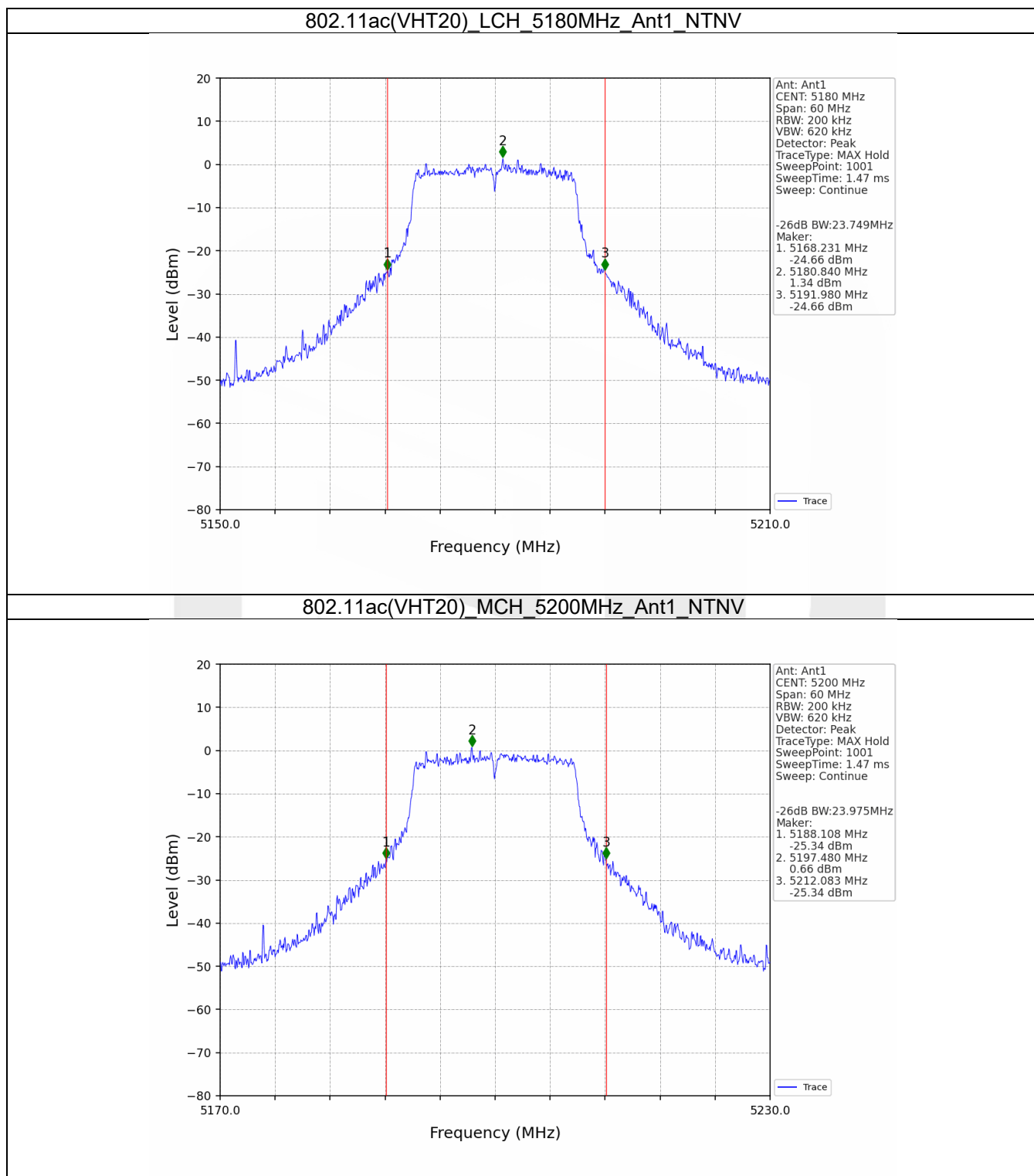


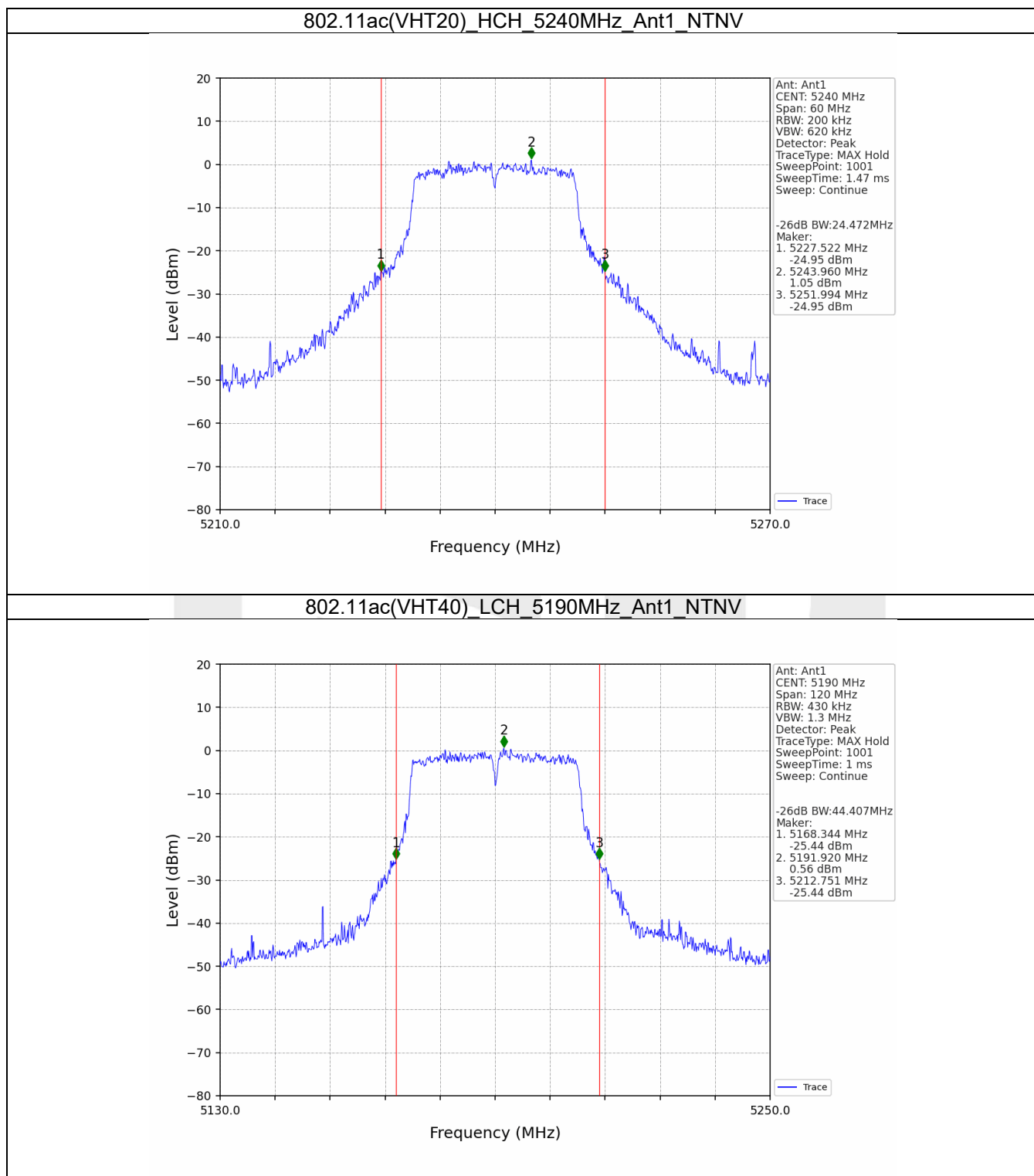
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV

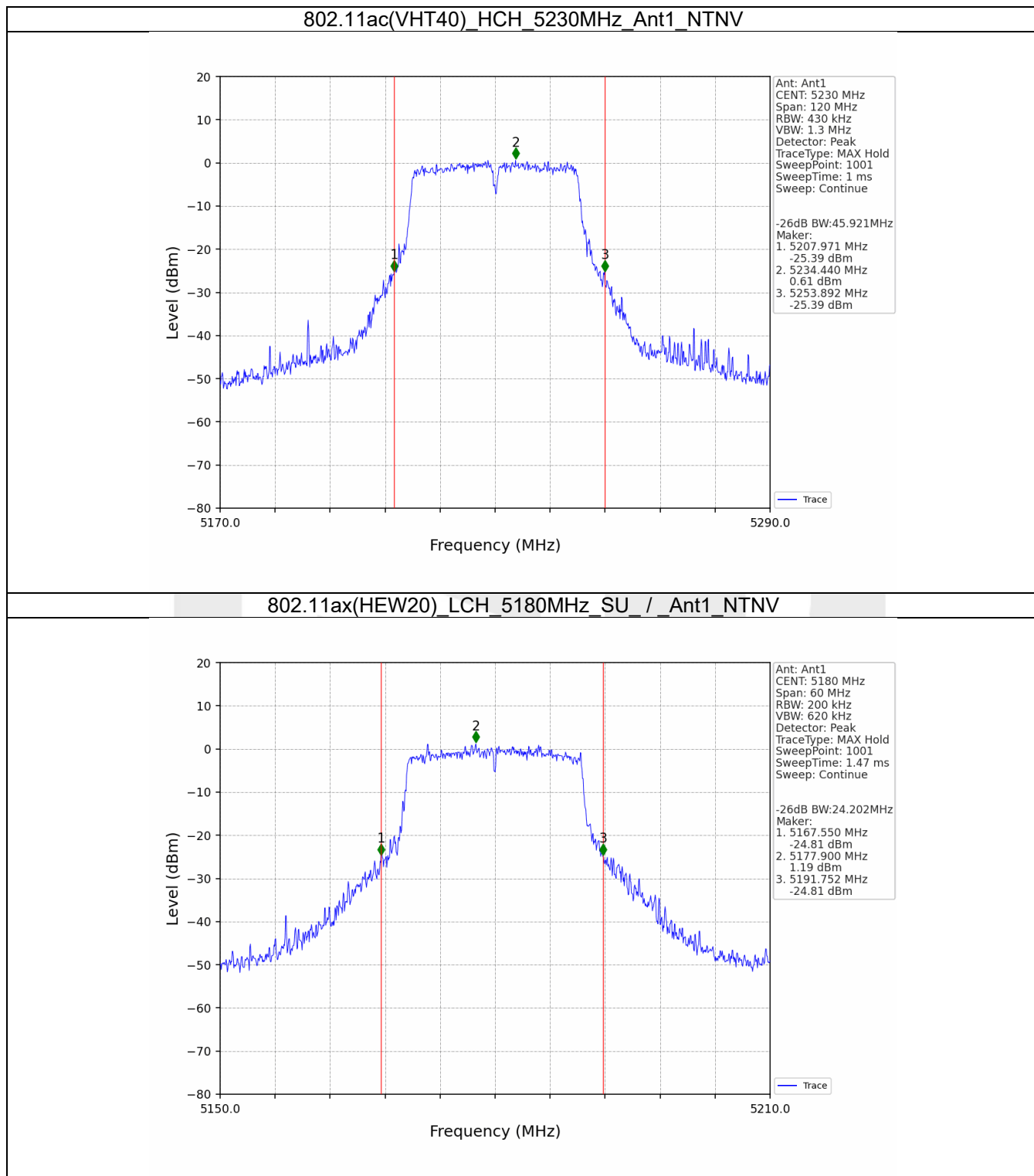


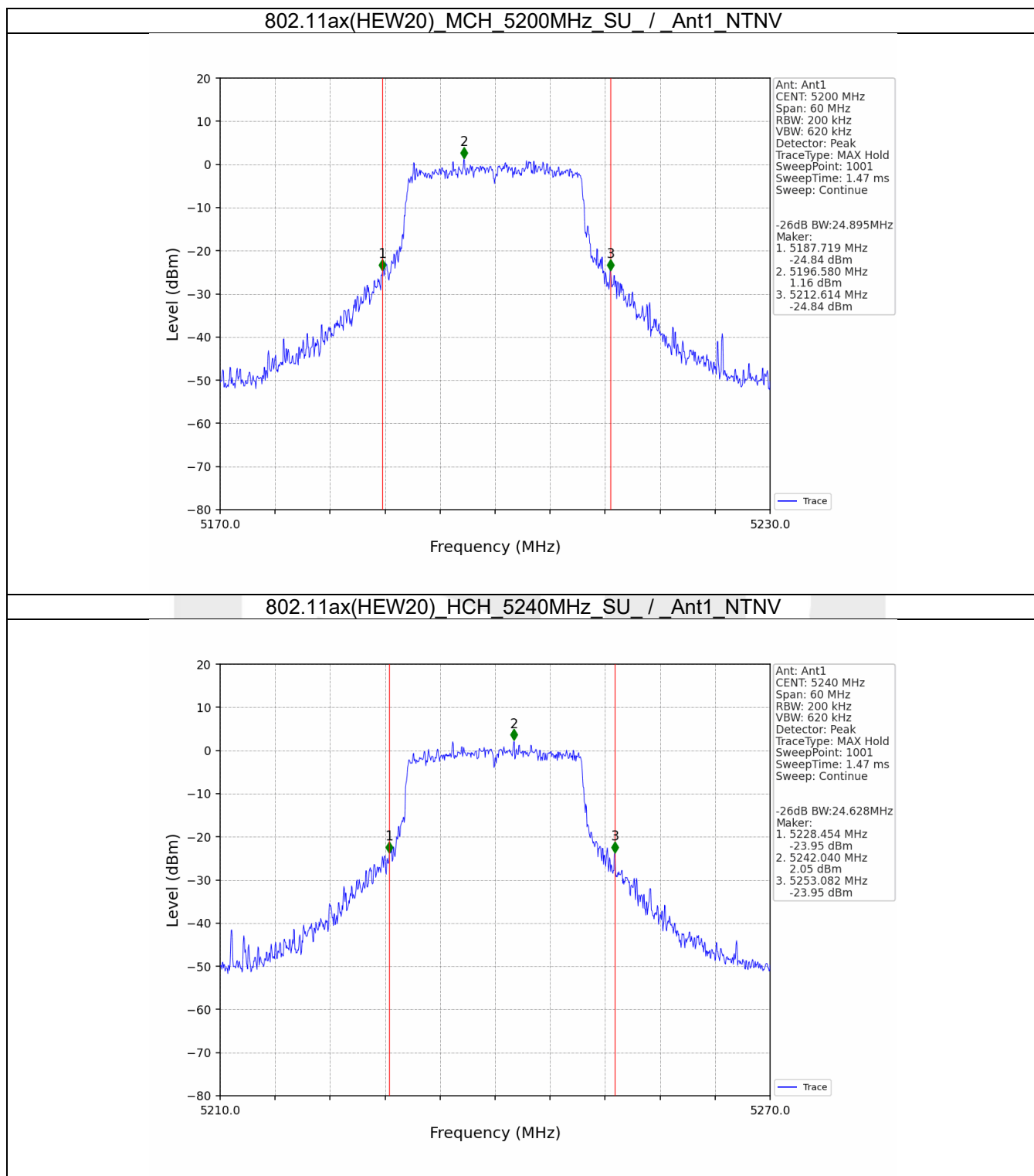
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV

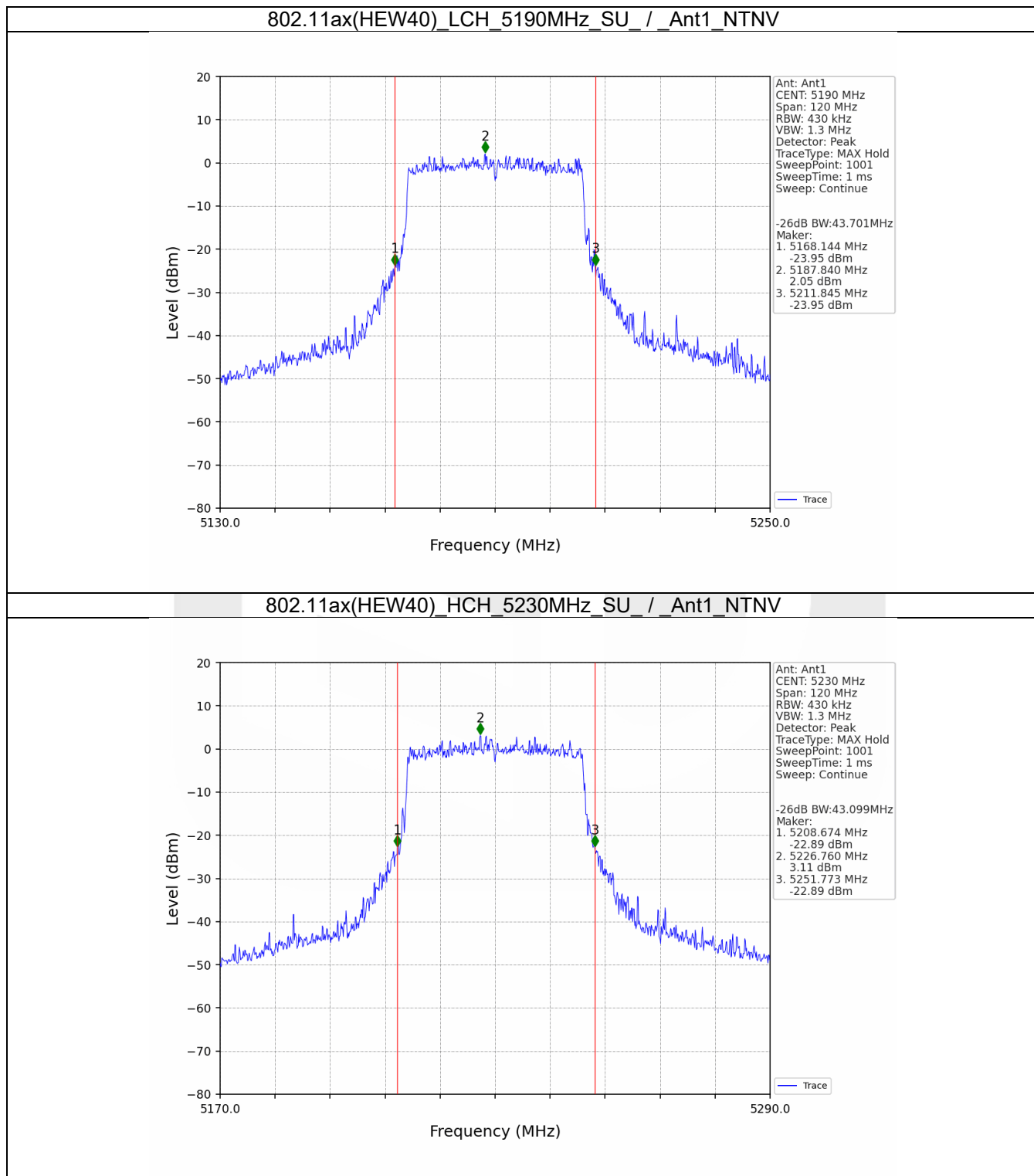




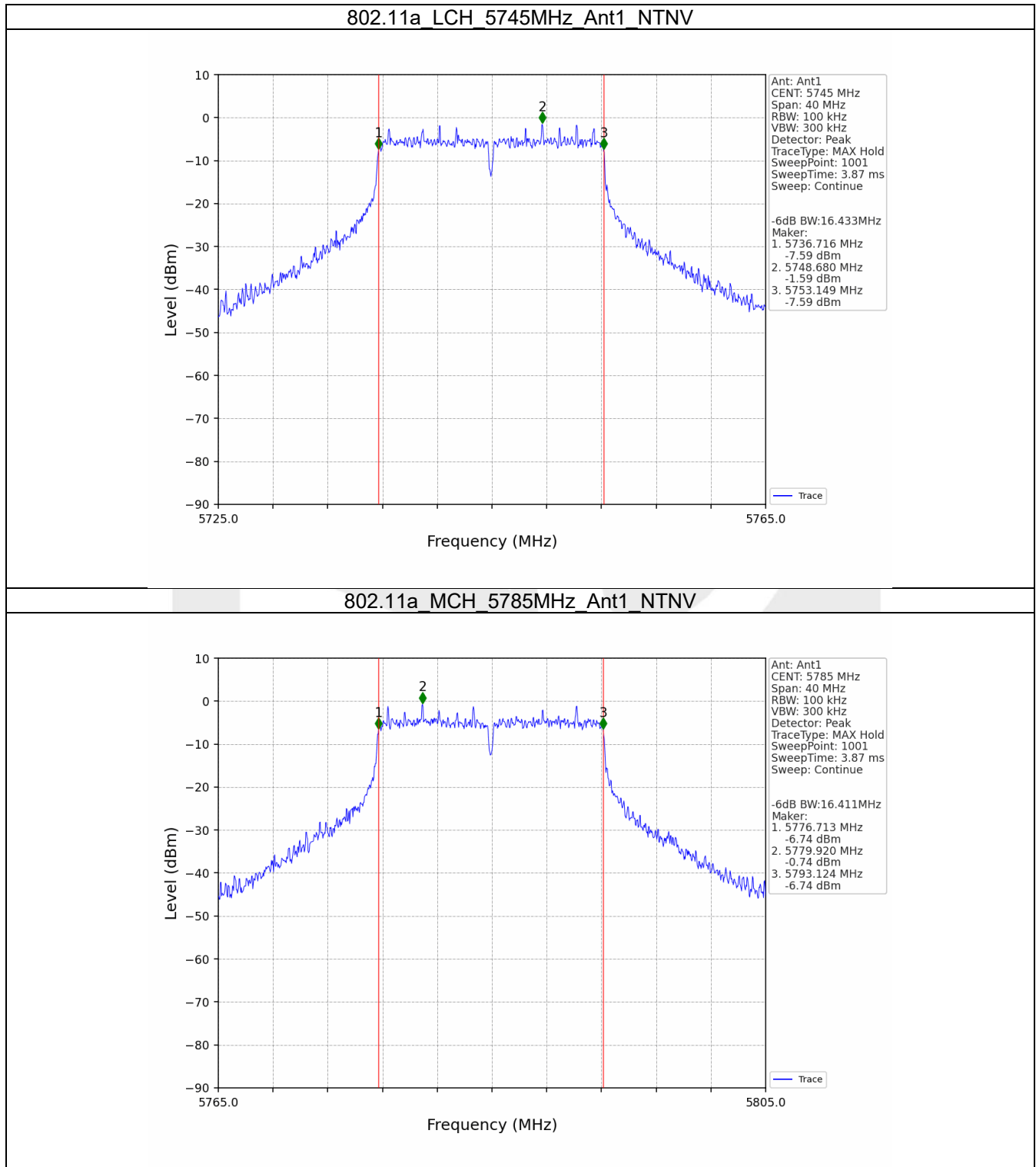


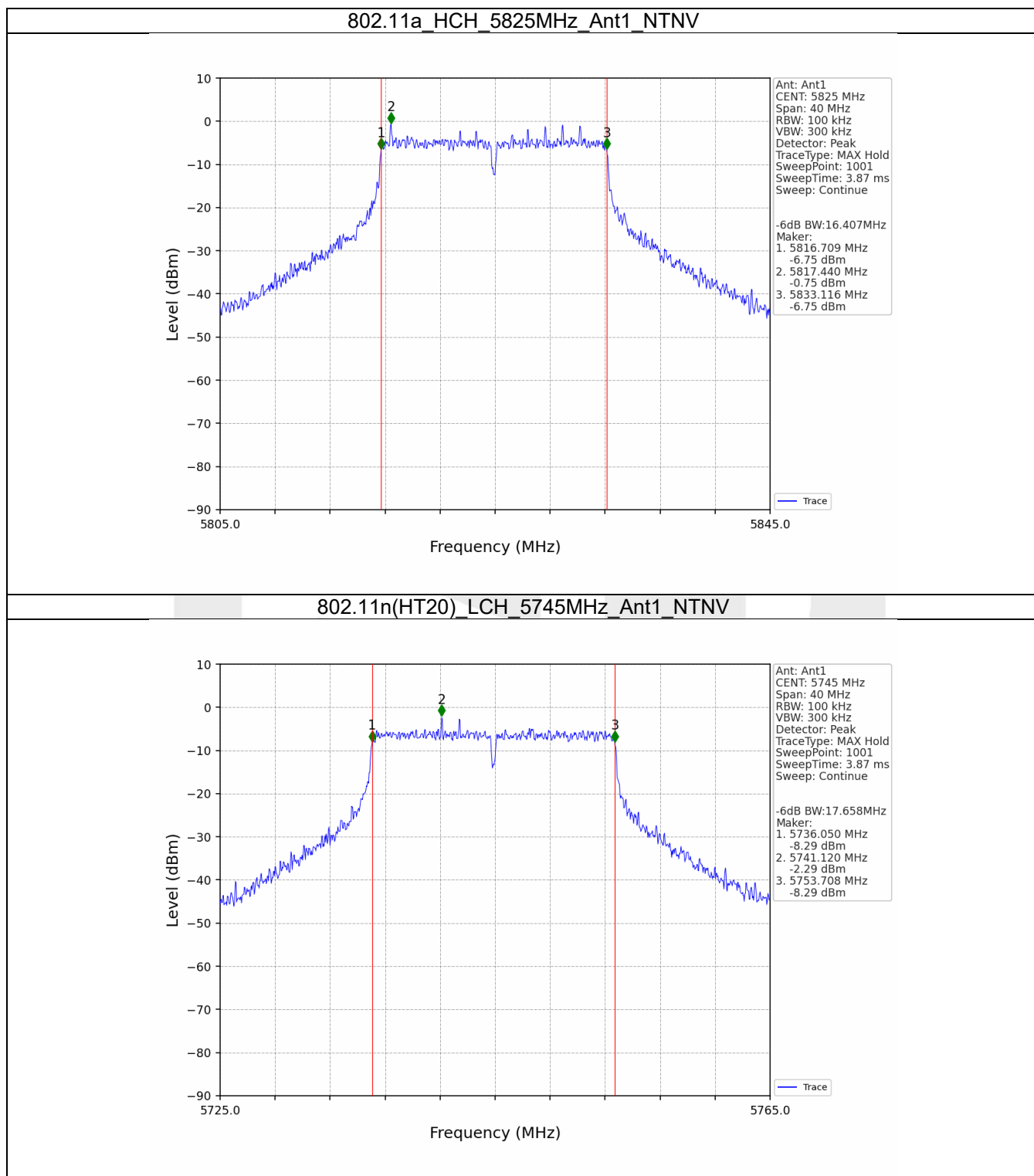


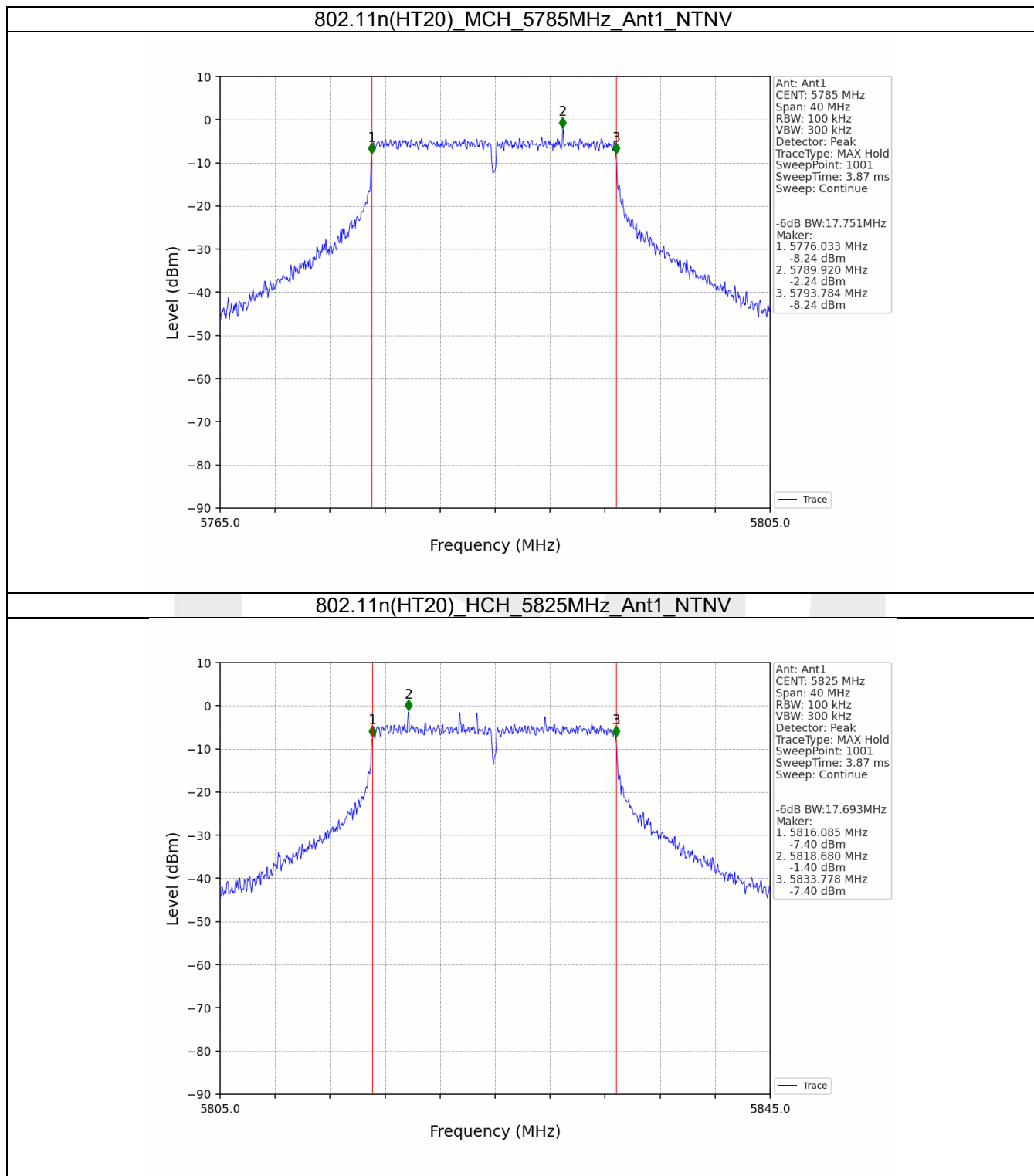


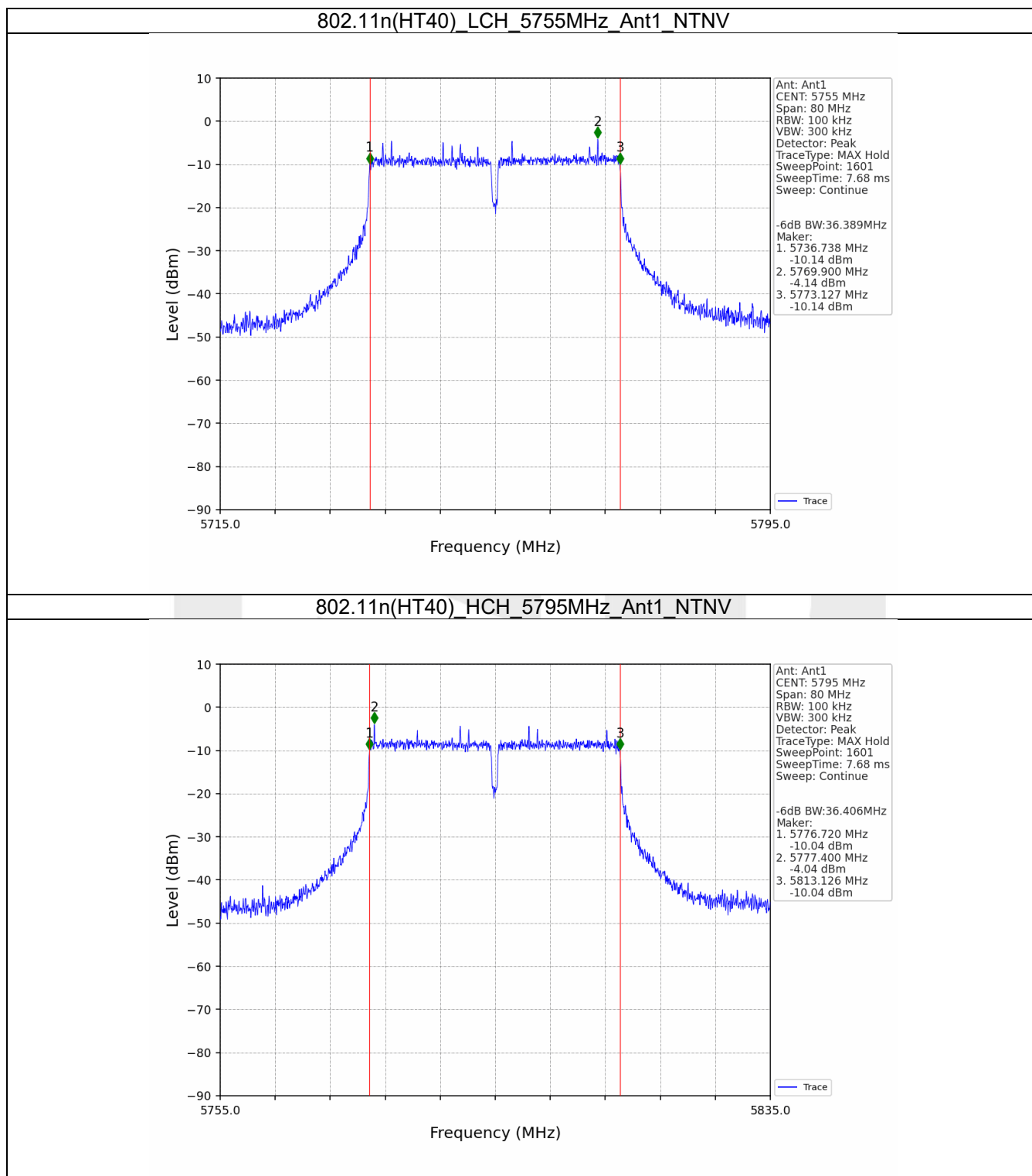


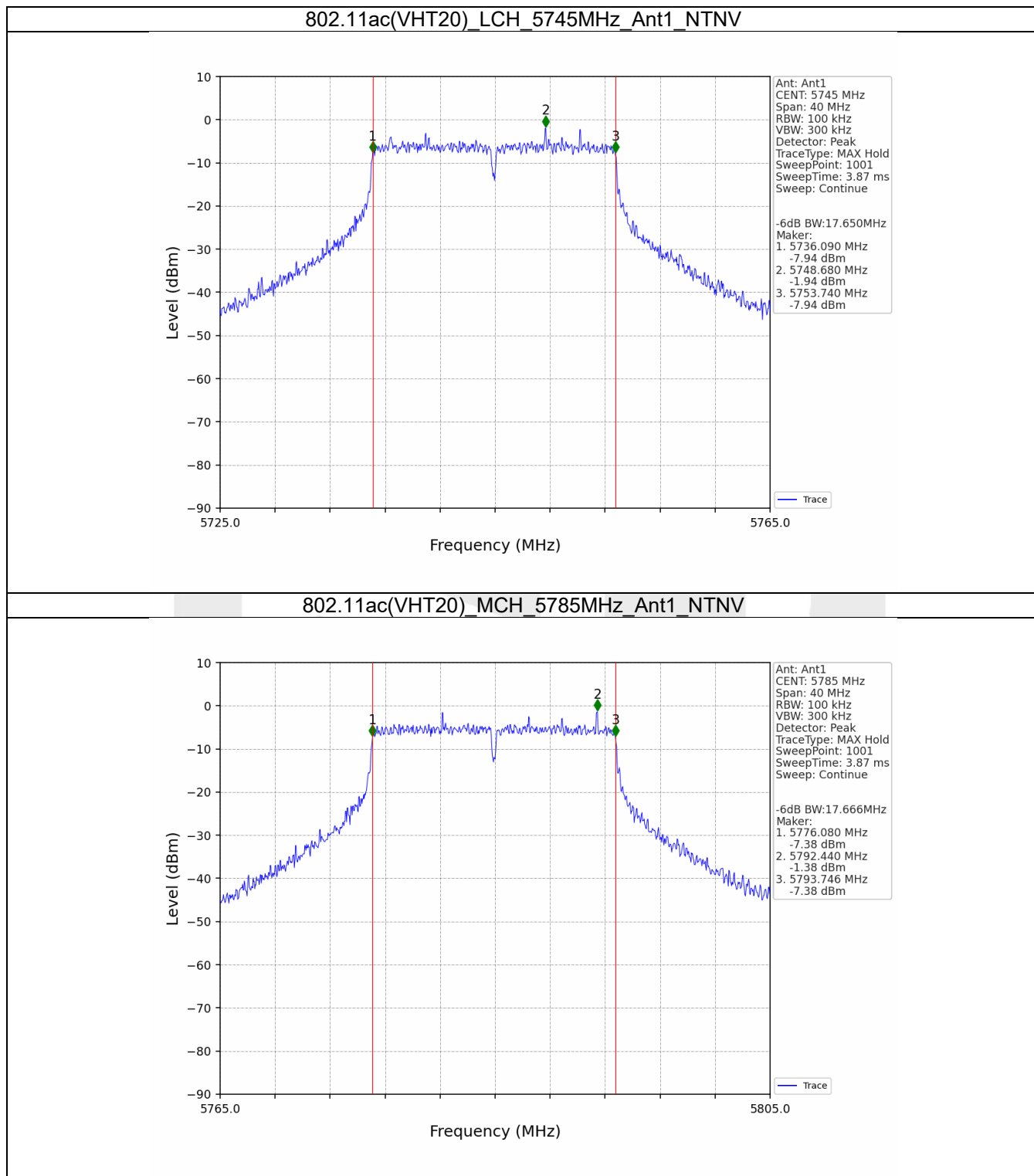
2.2.3 6dB BW

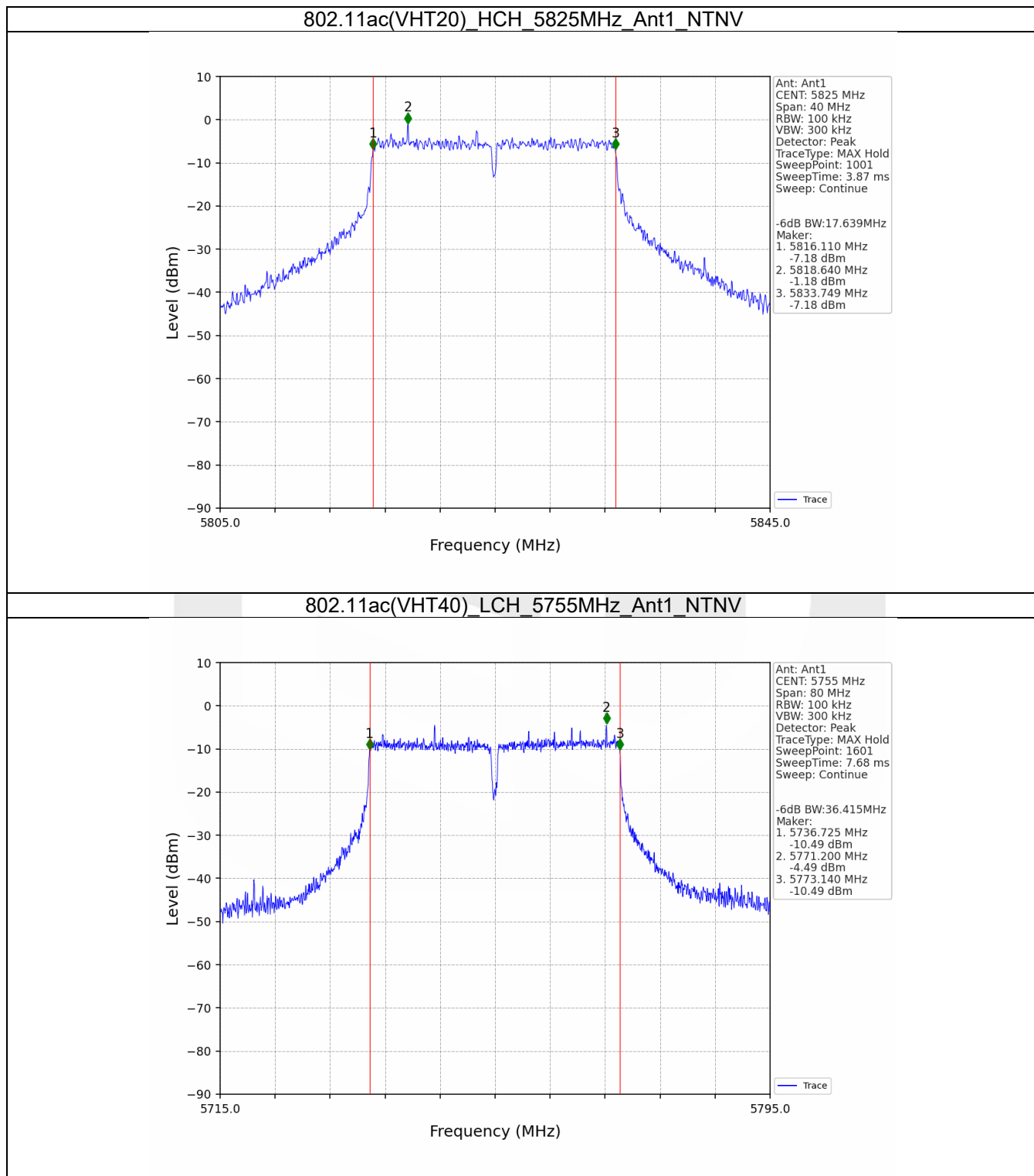


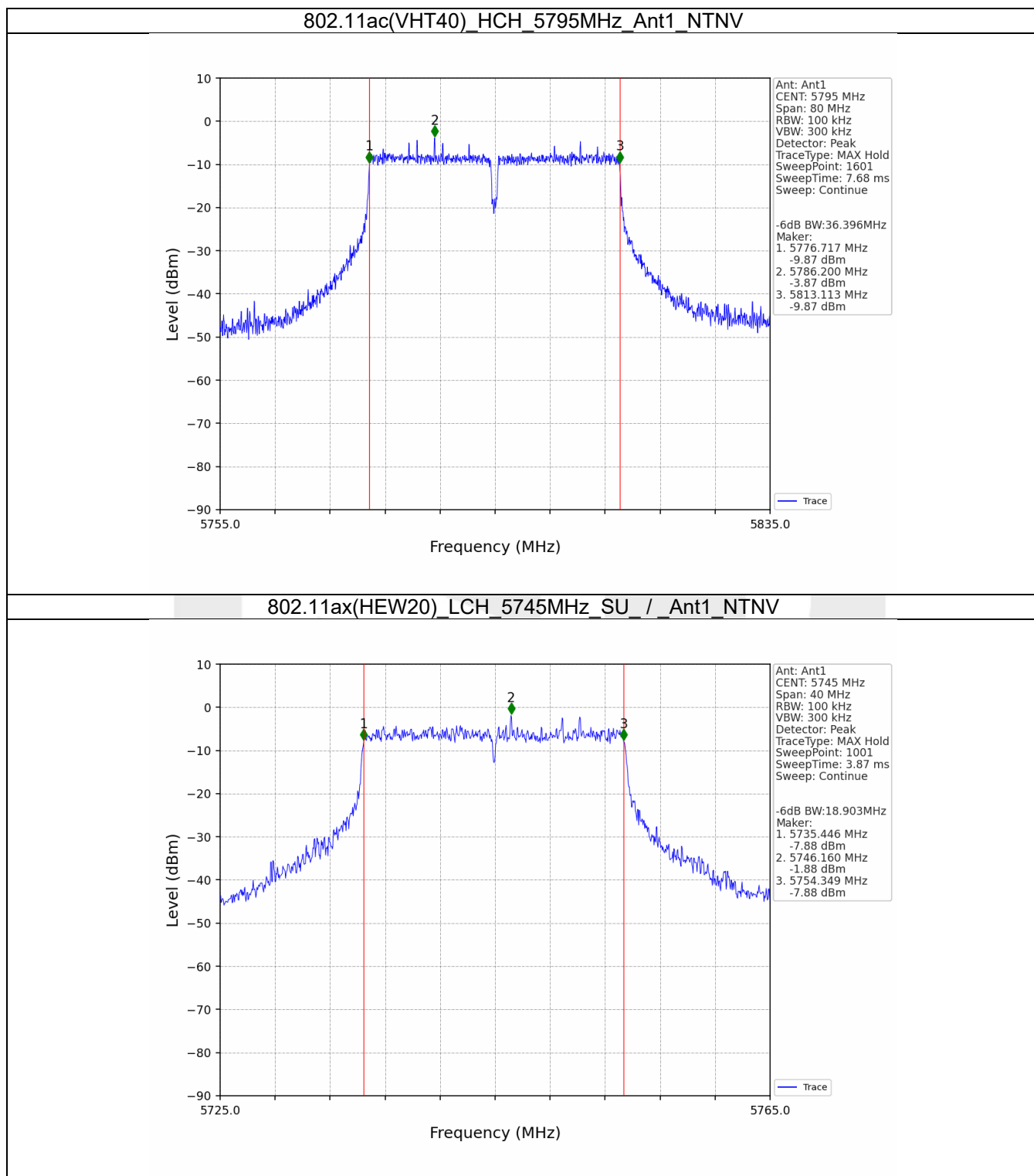


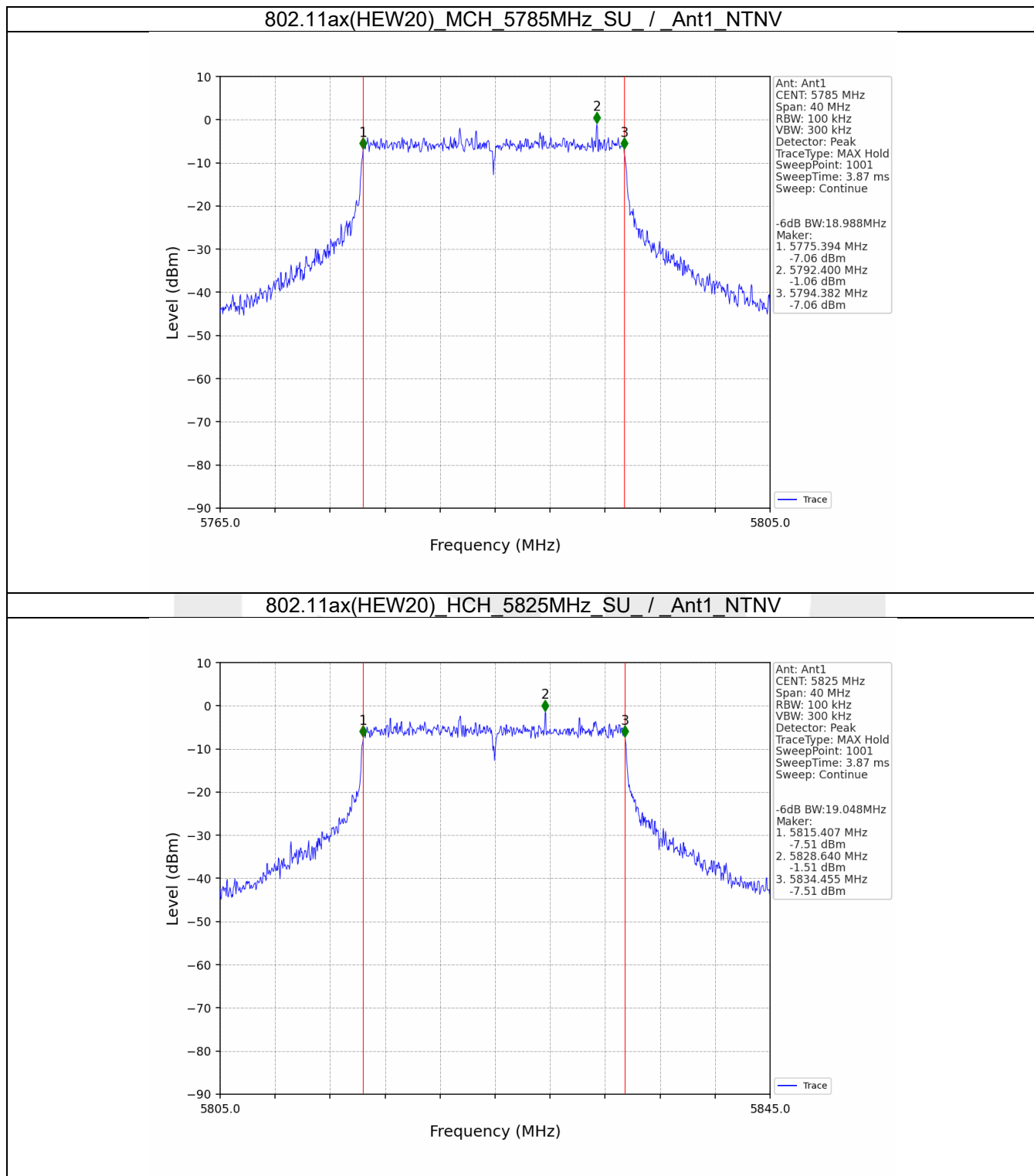


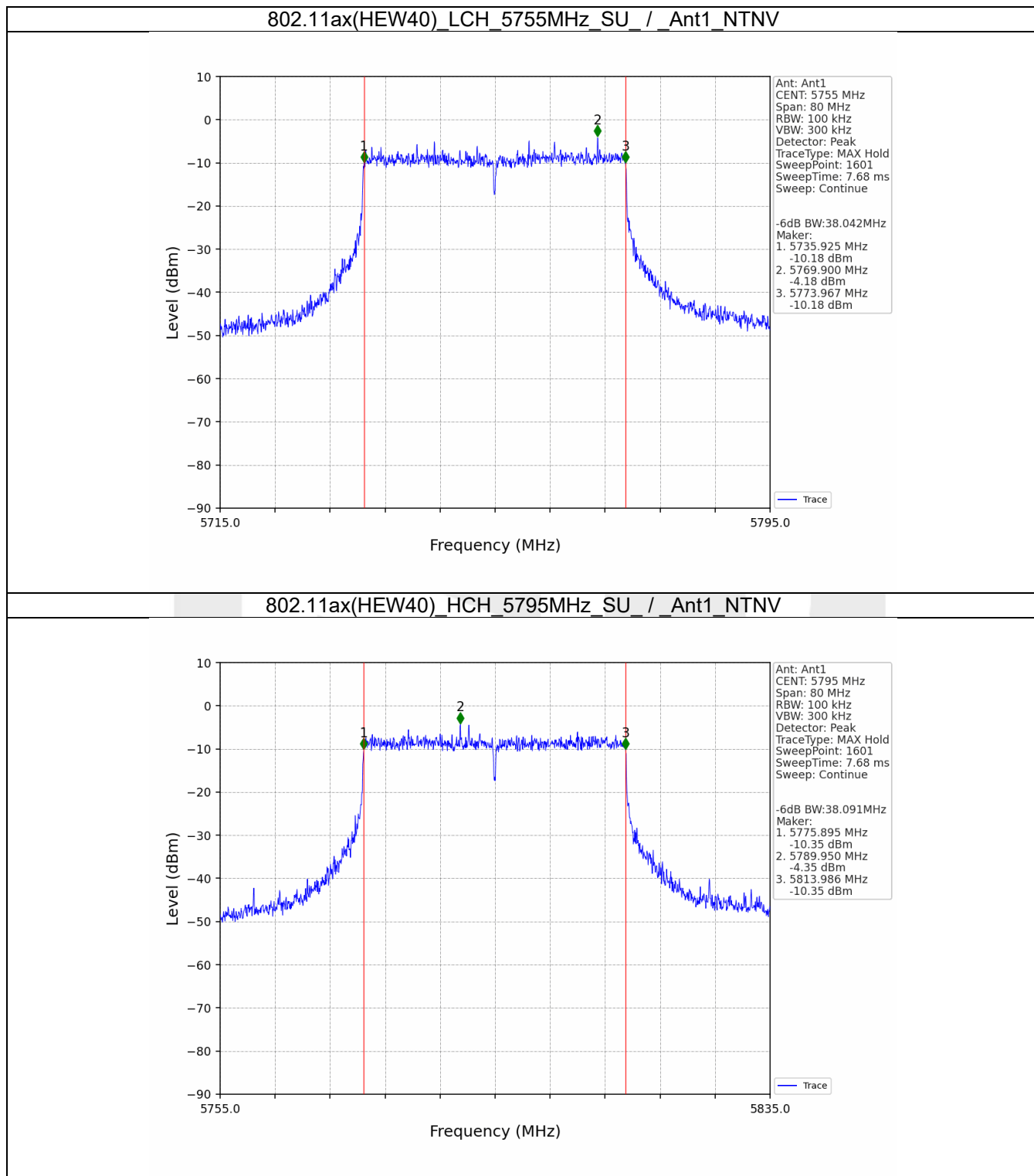












3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Average Conducted Output Power (dBm)		Verdict
					ANT1	Limit	
802.11a	SISO	5180	/	/	11.82	<=23.98	Pass
		5200	/	/	11.61	<=23.98	Pass
		5240	/	/	12.03	<=23.98	Pass
		5745	/	/	9.92	<=30	Pass
		5785	/	/	10.58	<=30	Pass
		5825	/	/	10.58	<=30	Pass
802.11n (HT20)	SISO	5180	/	/	11.52	<=23.98	Pass
		5200	/	/	11.04	<=23.98	Pass
		5240	/	/	11.64	<=23.98	Pass
		5745	/	/	9.57	<=30	Pass
		5785	/	/	10.36	<=30	Pass
		5825	/	/	10.38	<=30	Pass
802.11n (HT40)	SISO	5190	/	/	10.91	<=23.98	Pass
		5230	/	/	11.40	<=23.98	Pass
		5755	/	/	9.77	<=30	Pass
		5795	/	/	10.28	<=30	Pass
802.11ac (VHT20)	SISO	5180	/	/	11.23	<=23.98	Pass
		5200	/	/	10.80	<=23.98	Pass
		5240	/	/	11.43	<=23.98	Pass
		5745	/	/	9.66	<=30	Pass
		5785	/	/	10.42	<=30	Pass
		5825	/	/	10.50	<=30	Pass
802.11ac (VHT40)	SISO	5190	/	/	10.81	<=23.98	Pass
		5230	/	/	11.25	<=23.98	Pass
		5755	/	/	9.77	<=30	Pass
		5795	/	/	10.29	<=30	Pass
802.11ax (HEW20)	SISO	5180	SU	/	10.94	<=23.98	Pass
		5200	SU	/	10.77	<=23.98	Pass
		5240	SU	/	11.31	<=23.98	Pass
		5745	SU	/	9.60	<=30	Pass
		5785	SU	/	10.18	<=30	Pass
		5825	SU	/	10.22	<=30	Pass
802.11ax (HEW40)	SISO	5190	SU	/	10.75	<=23.98	Pass
		5230	SU	/	11.28	<=23.98	Pass
		5755	SU	/	9.83	<=30	Pass
		5795	SU	/	10.30	<=30	Pass

3.2 Test Graph

3.2.1 Power

