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Annex for 5G Wi-Fi Band 2C

Test Report No.: CTL2509126021-WF02

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FCC ID: SMQ-UWM1

1. Duty Cycle

1.1 Test Result

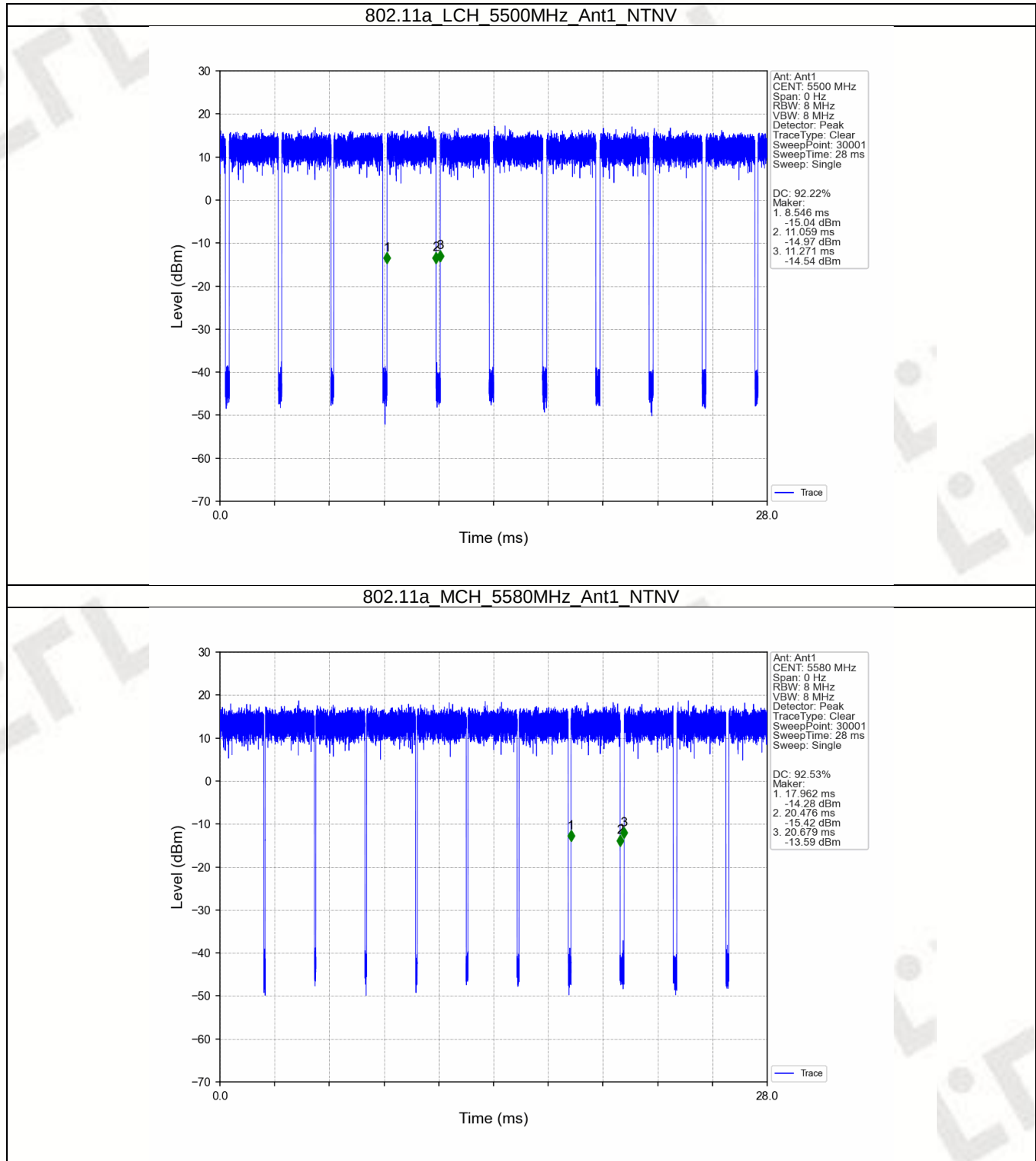
1.1.1 Ant1

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	5500	/	/	2.513	2.725	92.22	0.35	2.53
		5580	/	/	2.514	2.717	92.53	0.34	4.50
		5700	/	/	2.702	2.914	92.72	0.33	4.23
802.11n (HT20)	SISO	5500	/	/	2.513	2.708	92.80	0.32	3.56
		5580	/	/	2.513	2.717	92.49	0.34	3.84
		5700	/	/	2.513	2.707	92.83	0.32	4.22
802.11n (HT40)	SISO	5510	/	/	1.232	1.434	85.91	0.66	8.27
		5550	/	/	1.232	1.435	85.85	0.66	5.15
		5670	/	/	1.232	1.398	88.13	0.55	6.07
802.11ac (VHT20)	SISO	5500	/	/	2.522	2.725	92.55	0.34	4.18
		5580	/	/	2.522	2.725	92.55	0.34	3.49
		5700	/	/	2.521	2.733	92.24	0.35	3.81
802.11ac (VHT40)	SISO	5510	/	/	1.236	1.420	87.04	0.60	7.15
		5550	/	/	1.236	1.448	85.36	0.69	6.90
		5670	/	/	1.236	1.448	85.36	0.69	7.49
802.11ac (VHT80)	SISO	5530	/	/	0.595	0.798	74.56	1.27	10.59
		5610	/	/	0.596	0.807	73.85	1.32	11.43
802.11ax (HEW20)	SISO	5500	SU	/	1.916	2.134	89.78	0.47	3.53
		5580	SU	/	1.917	2.126	90.17	0.45	5.27
		5700	SU	/	1.917	2.147	89.29	0.49	3.52
802.11ax (HEW40)	SISO	5510	SU	/	0.979	1.176	83.25	0.80	7.65
		5550	SU	/	0.979	1.167	83.89	0.76	7.03
		5670	SU	/	0.979	1.167	83.89	0.76	6.26
802.11ax (HEW80)	SISO	5530	SU	/	0.489	0.695	70.36	1.53	15.61
		5610	SU	/	0.489	0.677	72.23	1.41	12.42

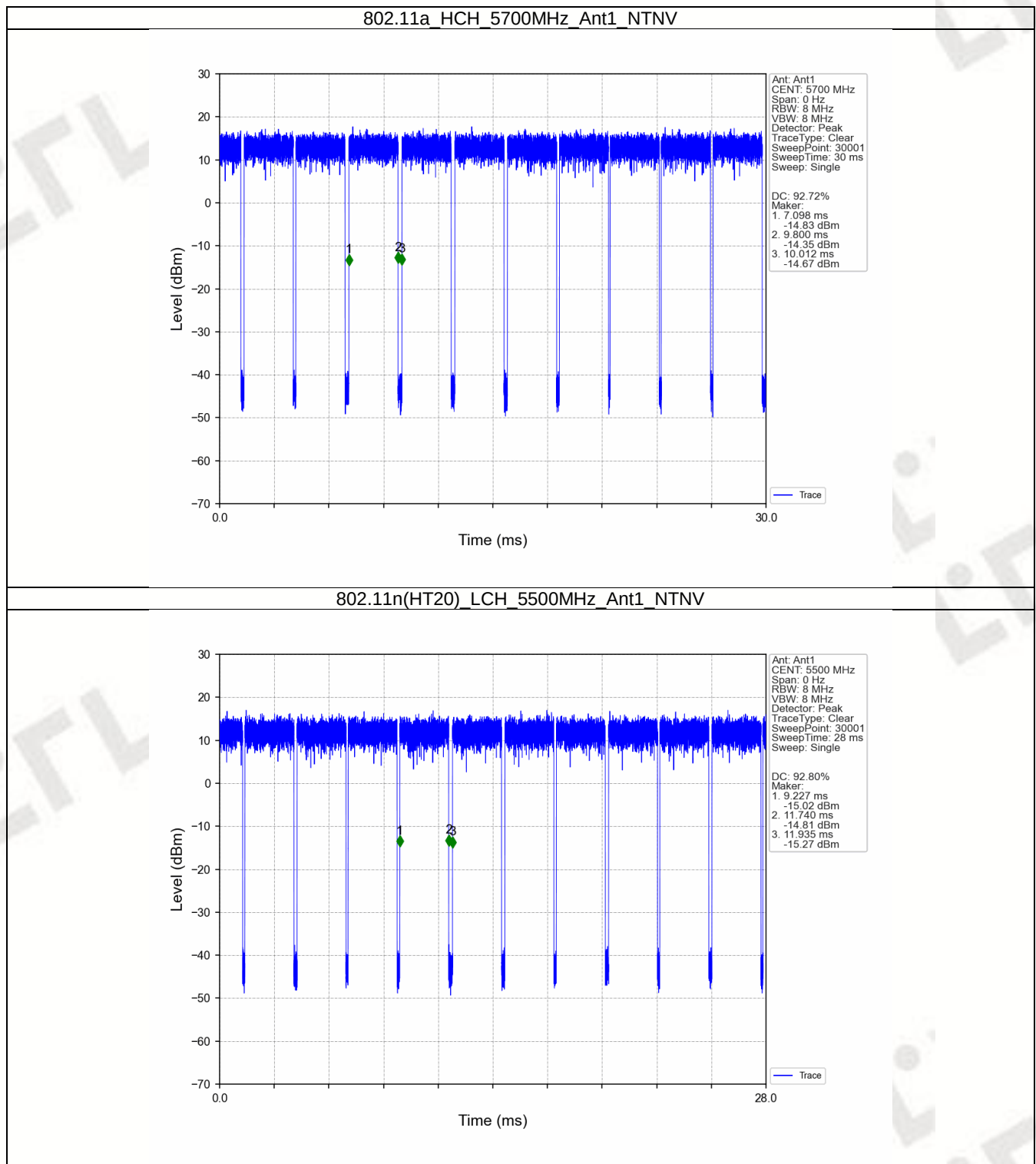
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1.2 Test Graph

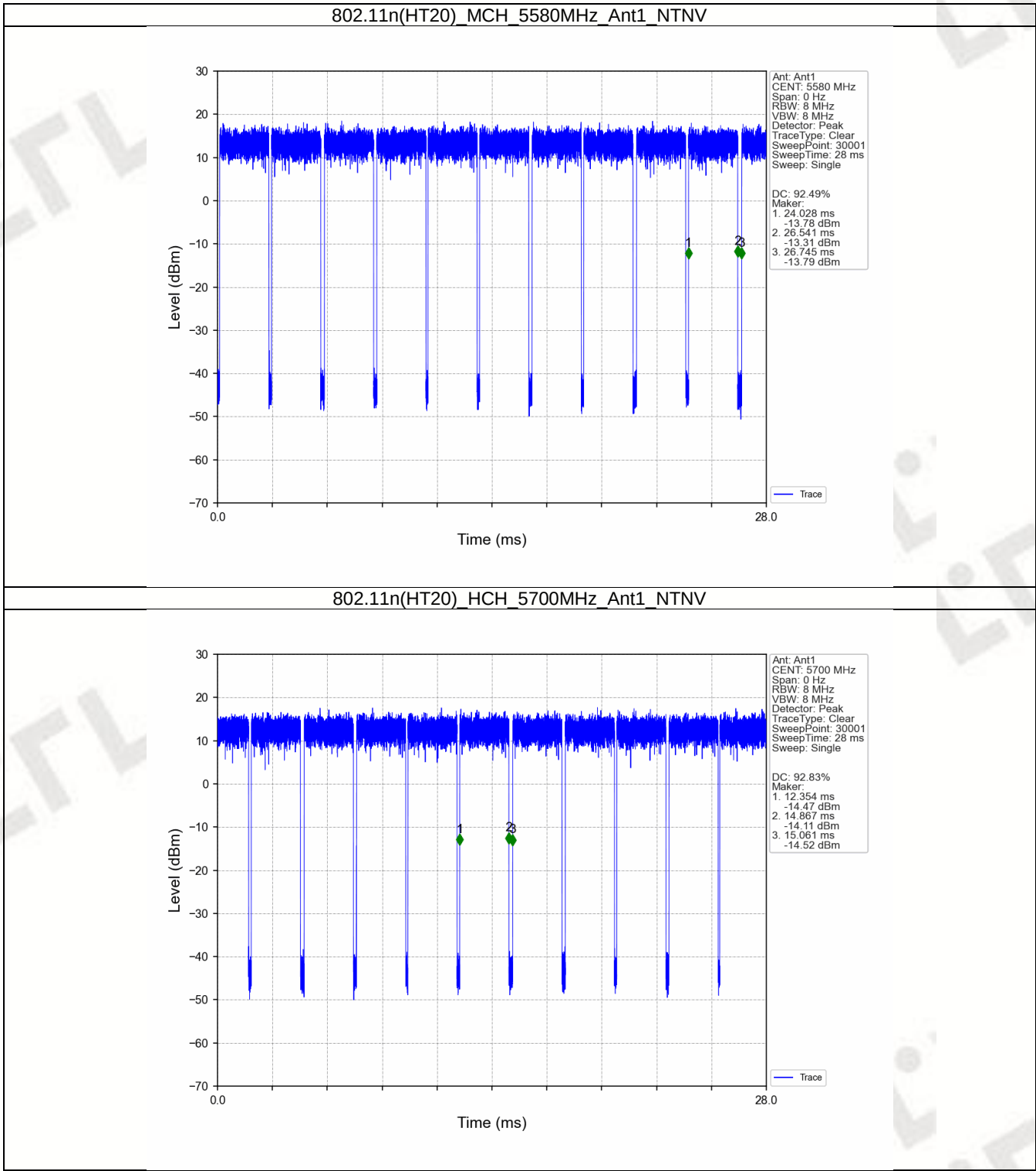
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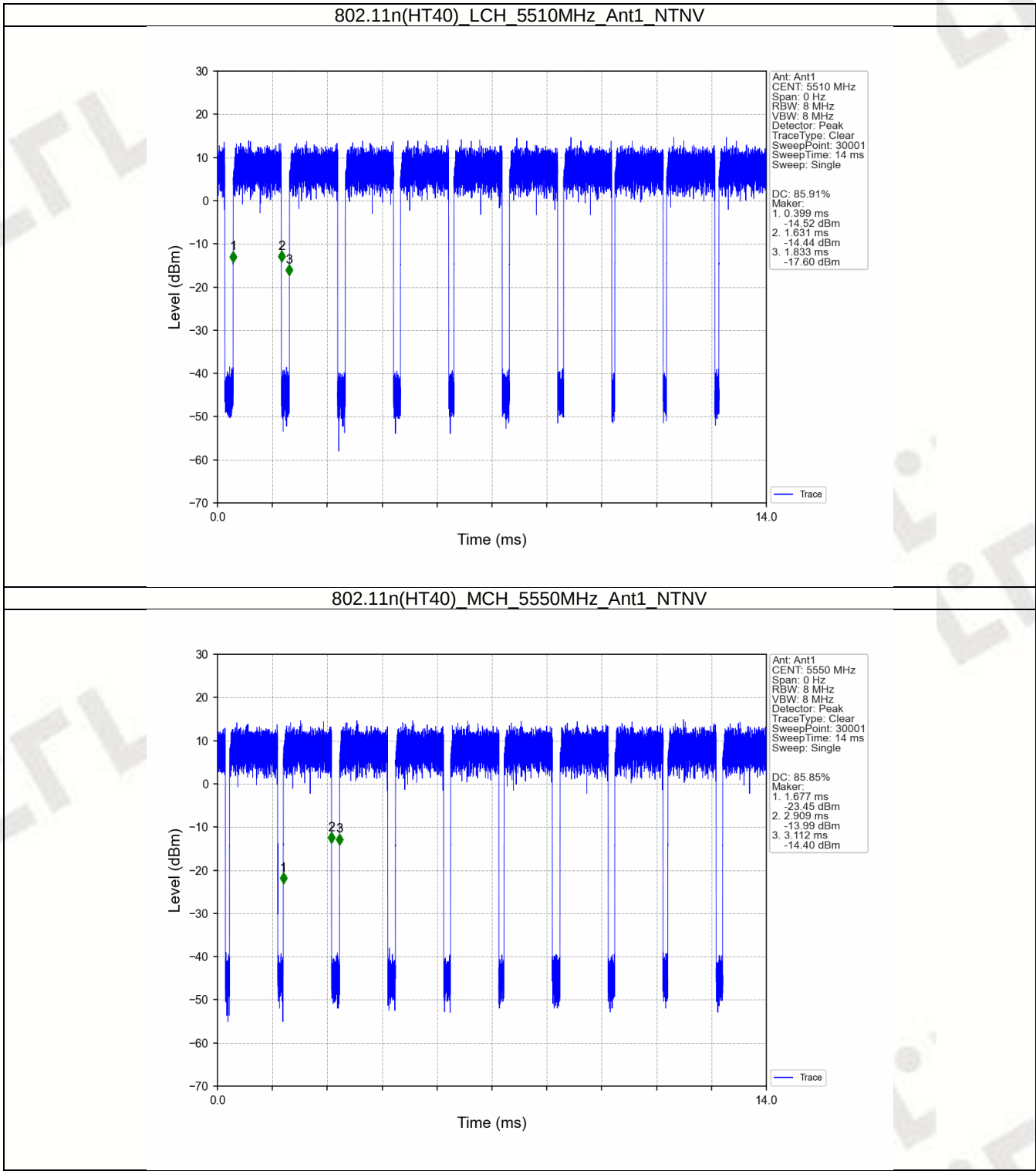
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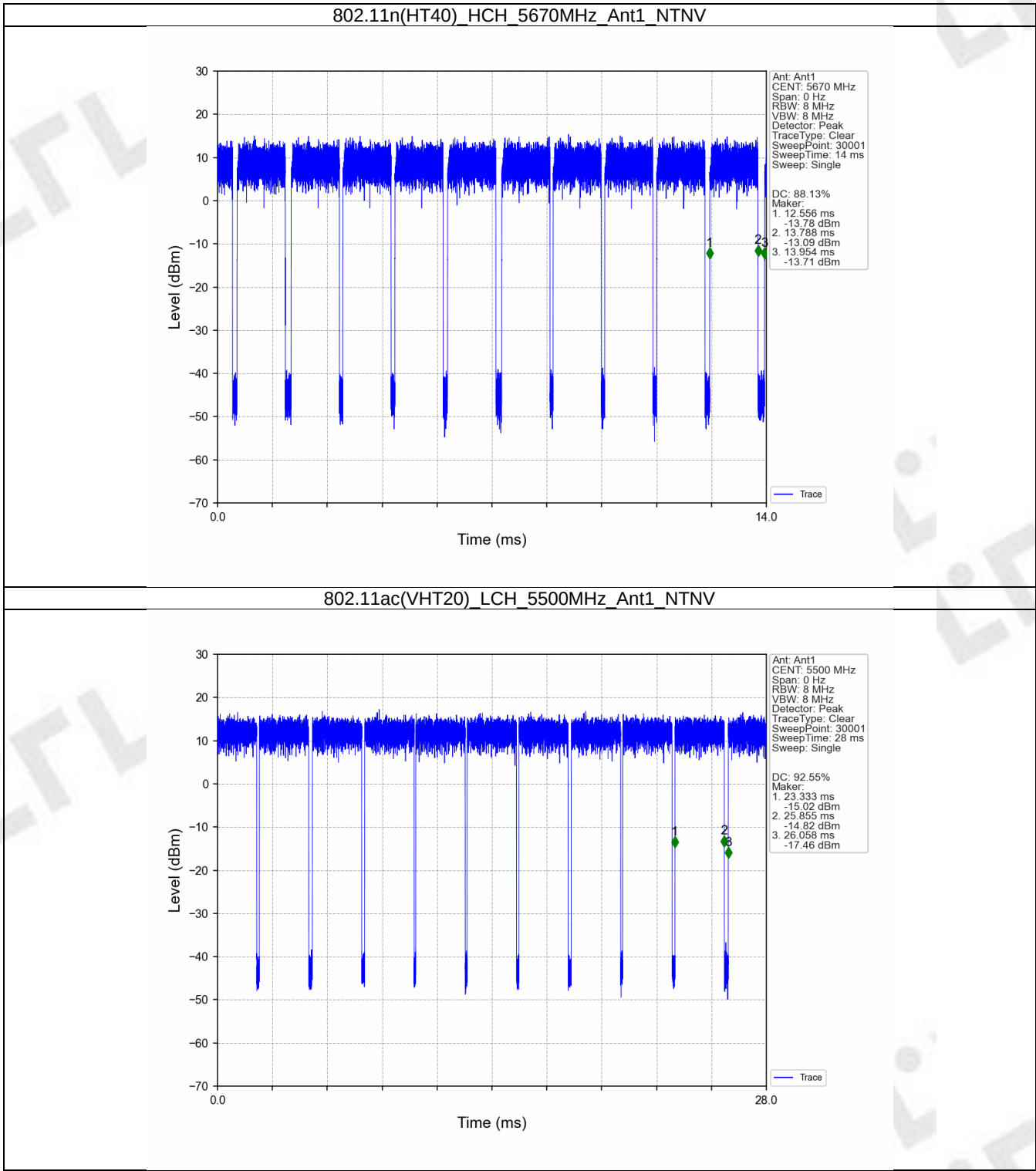
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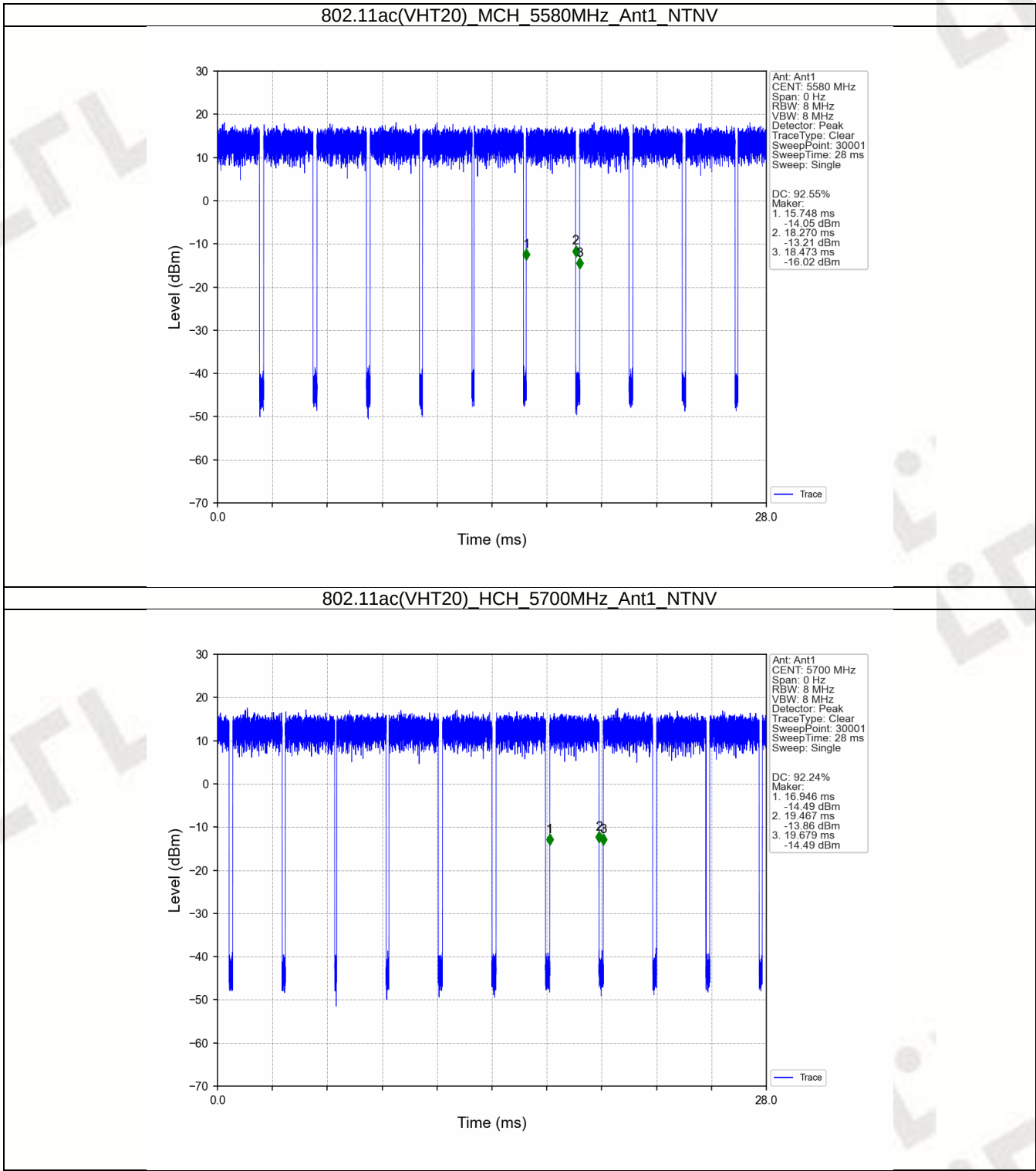
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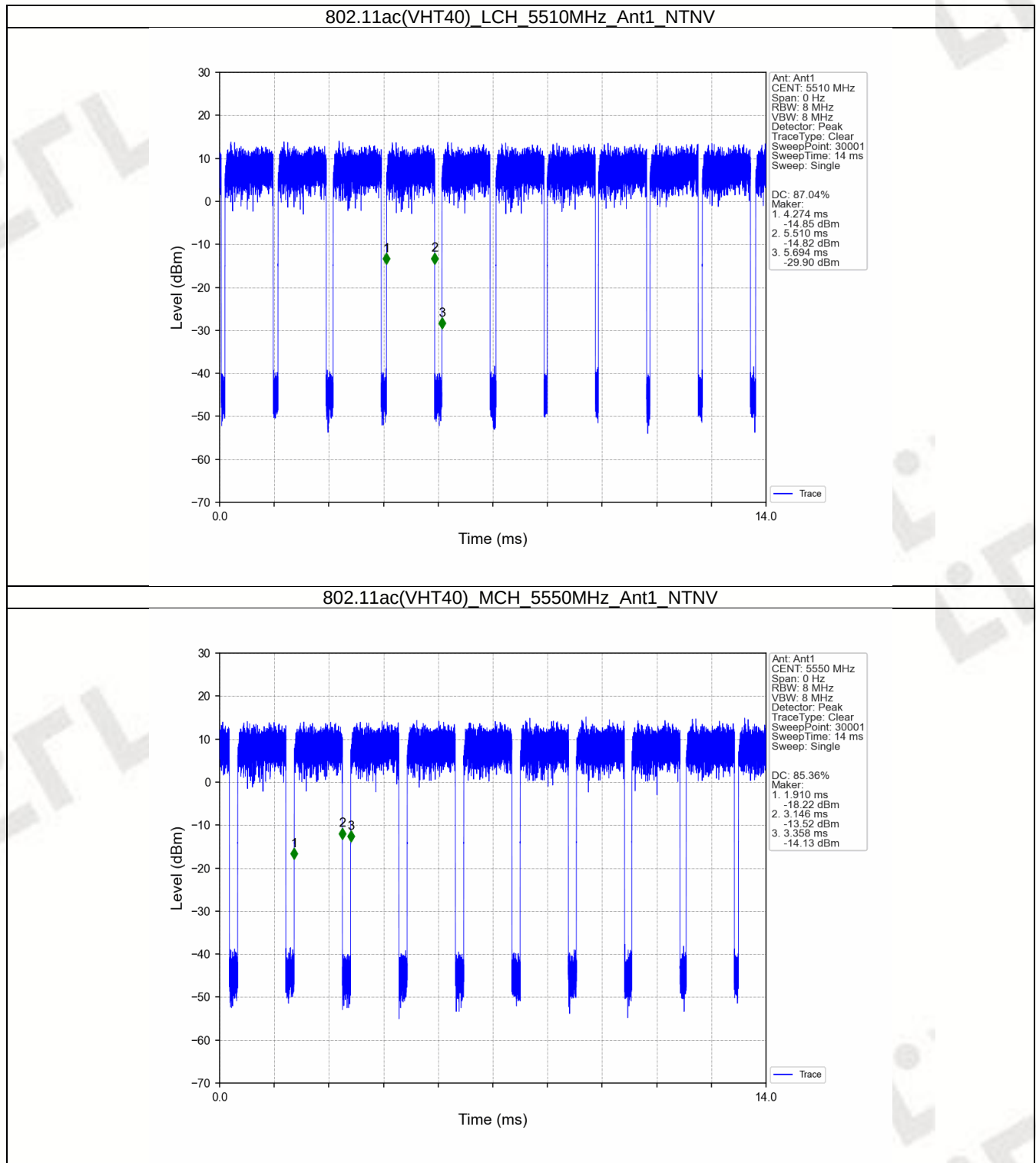
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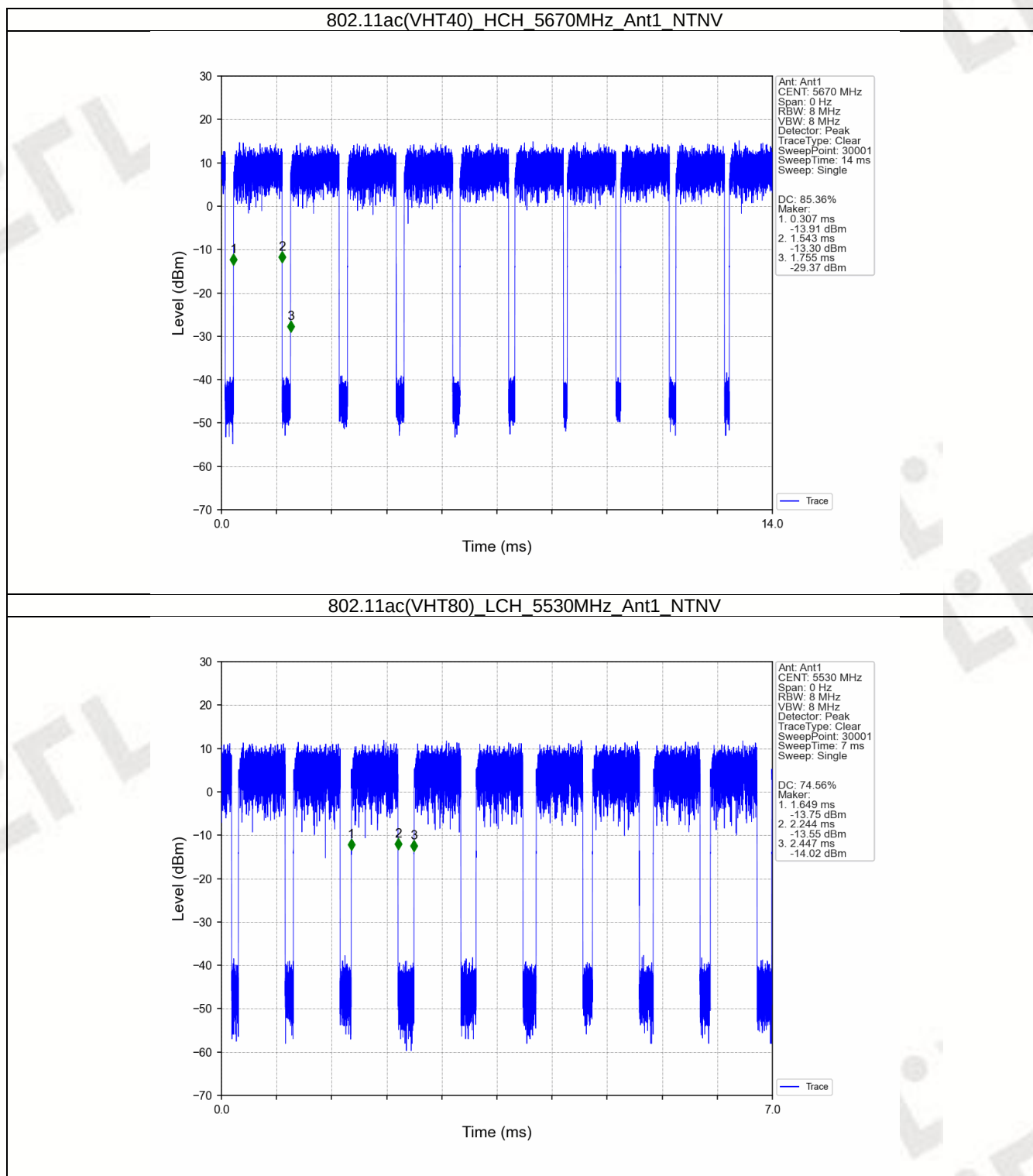
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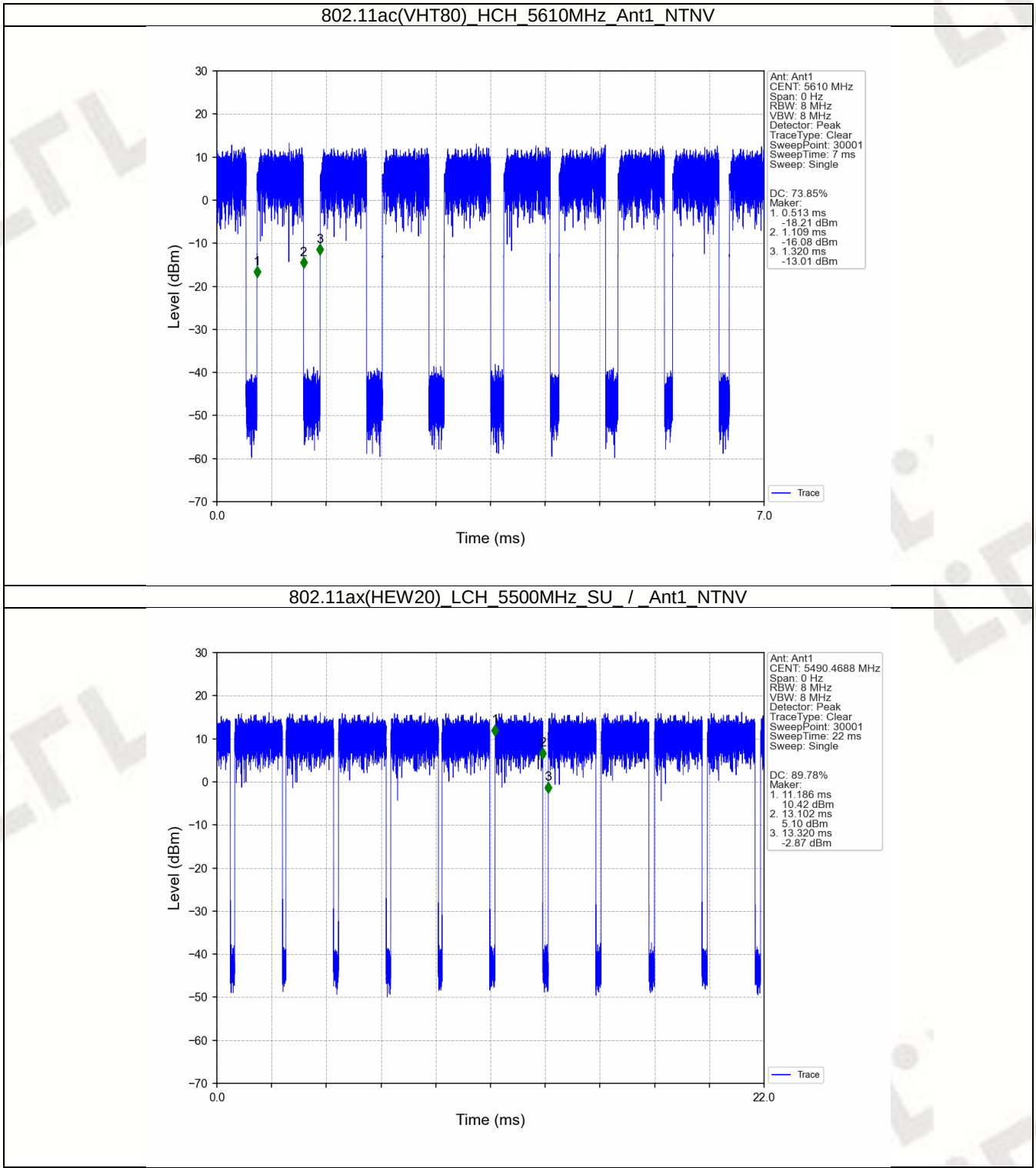
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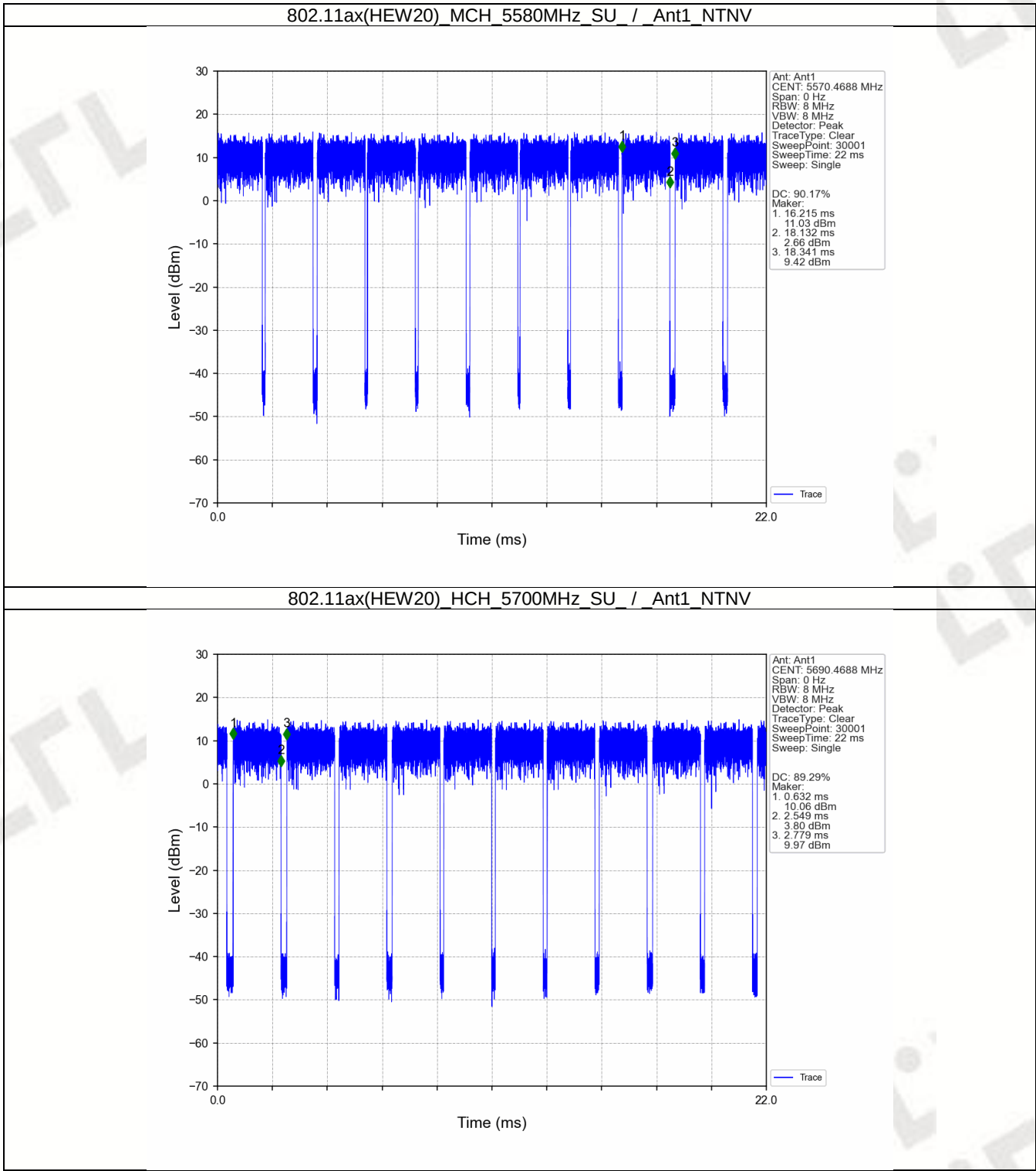
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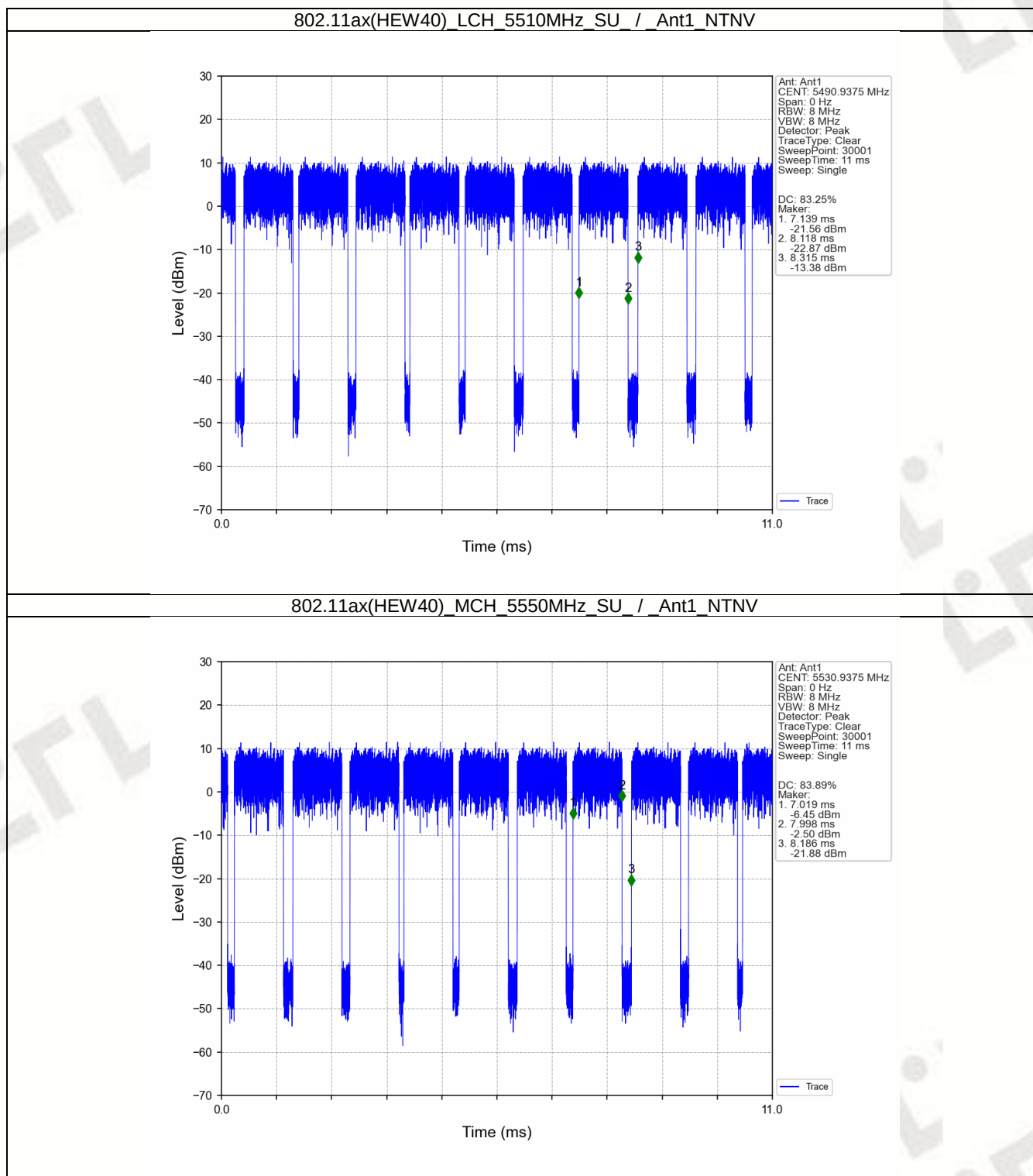
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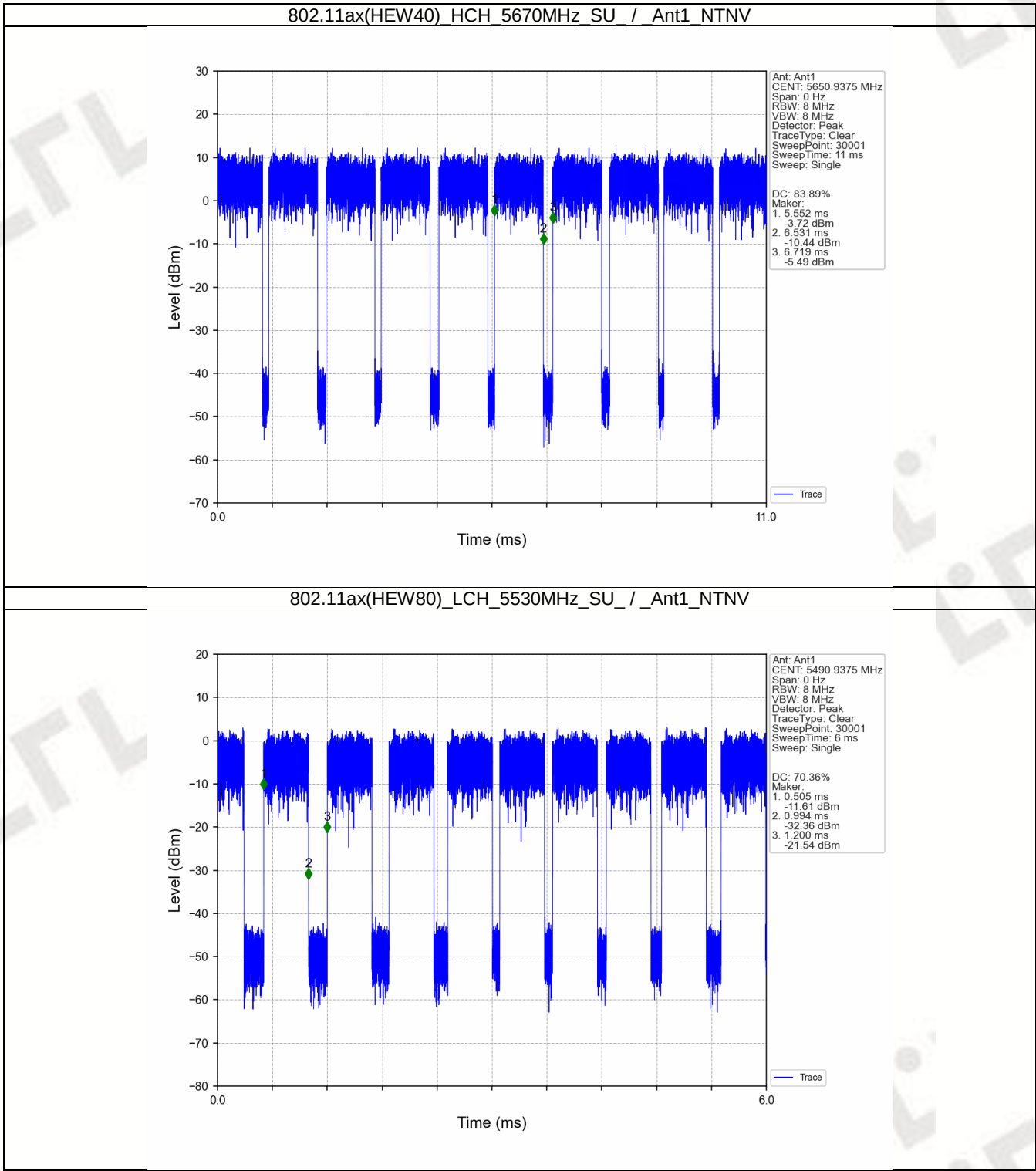
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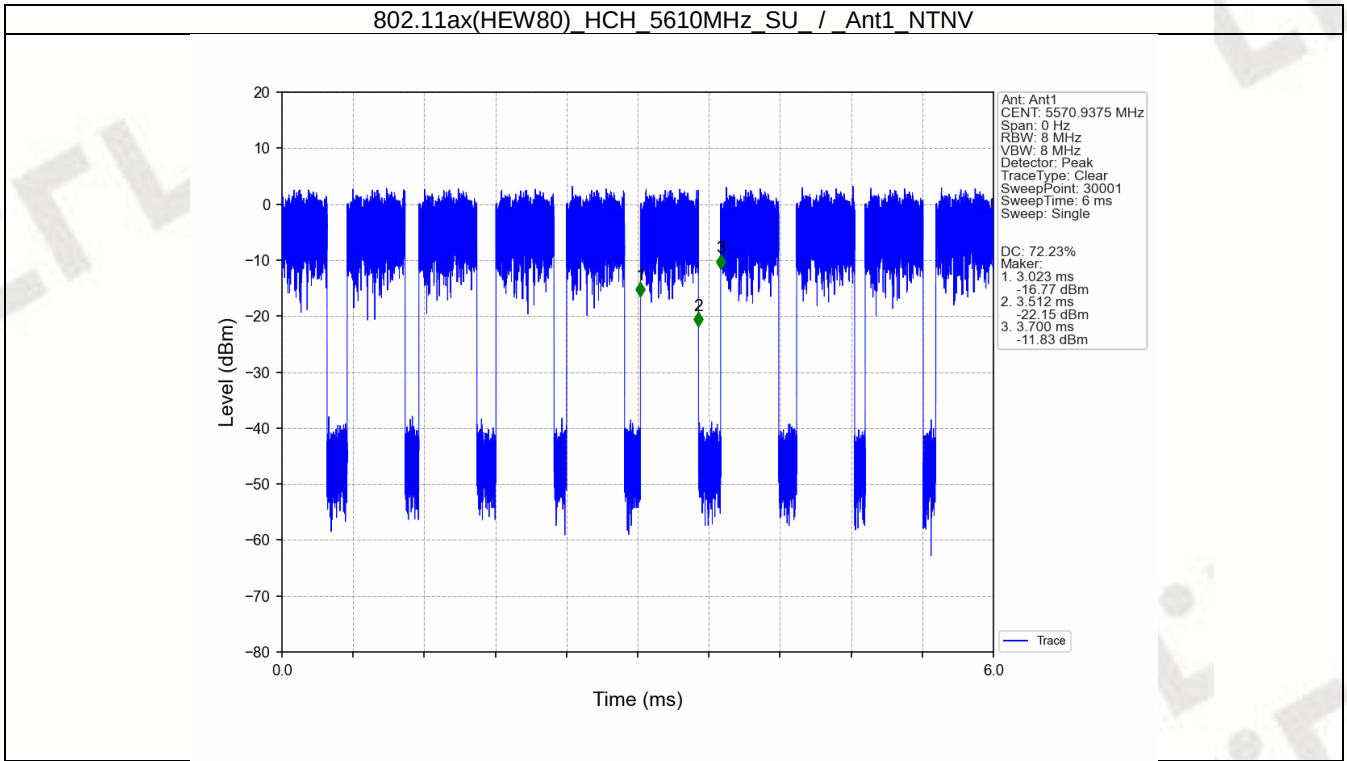
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FCC ID: SMQ-UWM1



FCC ID: SMQ-UWM1



FCC ID: SMQ-UWM1

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	5500	/	/	1	18.496	/	Pass
		5580	/	/	1	18.469	/	Pass
		5700	/	/	1	17.590	/	Pass
802.11n (HT20)	SISO	5500	/	/	1	18.510	/	Pass
		5580	/	/	1	18.508	/	Pass
		5700	/	/	1	18.523	/	Pass
802.11n (HT40)	SISO	5510	/	/	1	37.253	/	Pass
		5550	/	/	1	37.126	/	Pass
		5670	/	/	1	37.314	/	Pass
802.11ac (VHT20)	SISO	5500	/	/	1	18.501	/	Pass
		5580	/	/	1	18.455	/	Pass
		5700	/	/	1	18.469	/	Pass
802.11ac (VHT40)	SISO	5510	/	/	1	37.316	/	Pass
		5550	/	/	1	37.201	/	Pass
		5670	/	/	1	37.349	/	Pass
802.11ac (VHT80)	SISO	5530	/	/	1	75.522	/	Pass
		5610	/	/	1	75.360	/	Pass
802.11ax (HEW20)	SISO	5500	SU	/	1	19.277	/	Pass
		5580	SU	/	1	19.311	/	Pass
		5700	SU	/	1	19.273	/	Pass
802.11ax (HEW40)	SISO	5510	SU	/	1	38.200	/	Pass
		5550	SU	/	1	38.239	/	Pass
		5670	SU	/	1	38.335	/	Pass
802.11ax (HEW80)	SISO	5530	SU	/	1	77.013	/	Pass
		5610	SU	/	1	76.875	/	Pass

2.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	26dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5500	/	/	1	22.723	/	Pass
		5580	/	/	1	22.785	/	Pass
		5700	/	/	1	22.117	/	Pass
802.11n (HT20)	SISO	5500	/	/	1	22.914	/	Pass
		5580	/	/	1	23.075	/	Pass
		5700	/	/	1	22.911	/	Pass
802.11n (HT40)	SISO	5510	/	/	1	42.875	/	Pass
		5550	/	/	1	42.631	/	Pass
		5670	/	/	1	42.986	/	Pass
802.11ac (VHT20)	SISO	5500	/	/	1	22.649	/	Pass
		5580	/	/	1	22.471	/	Pass
		5700	/	/	1	22.722	/	Pass
802.11ac (VHT40)	SISO	5510	/	/	1	42.982	/	Pass
		5550	/	/	1	42.674	/	Pass

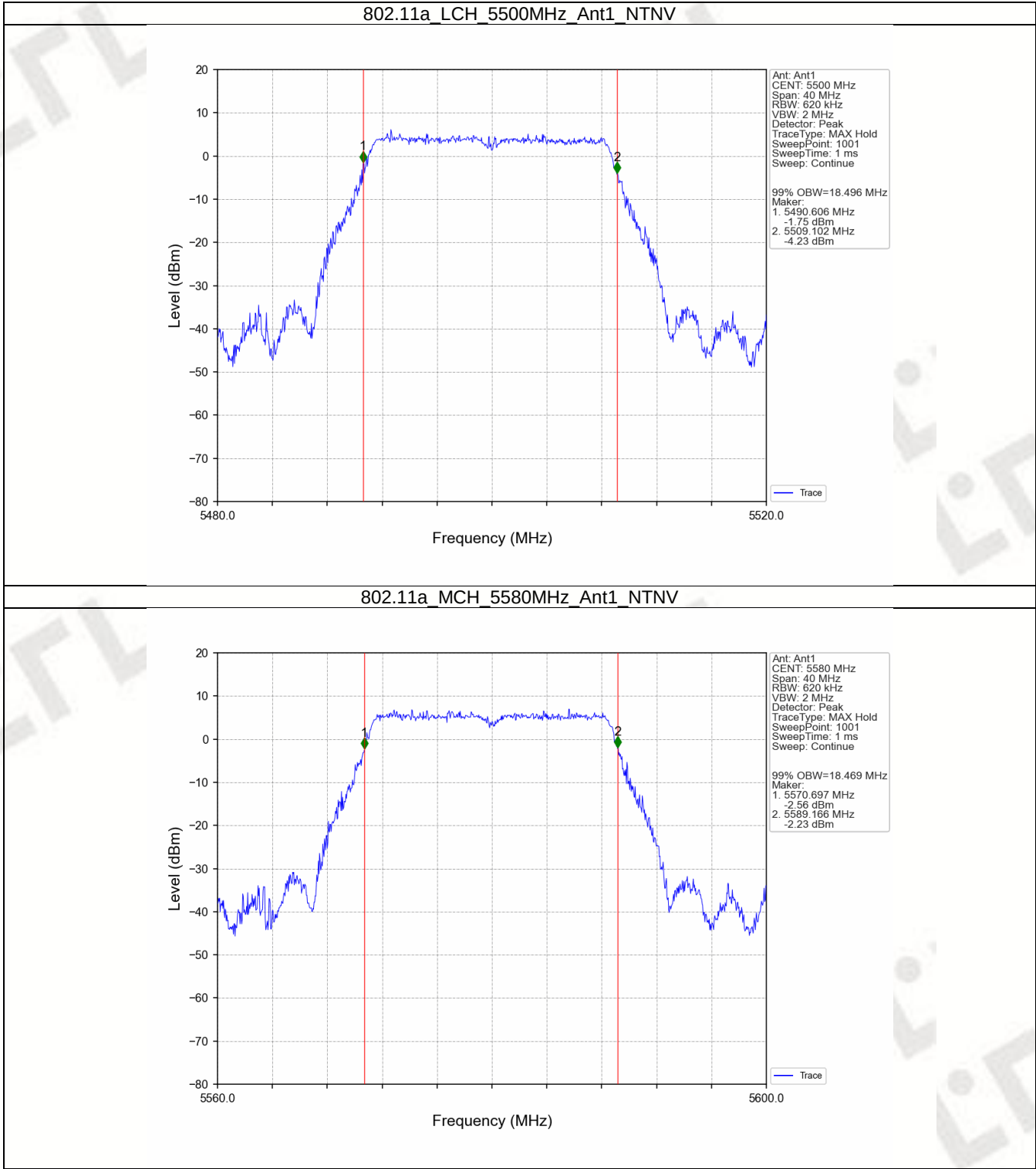
FCC ID: SMQ-UWM1

		5670	/	/	1	43.004	/	Pass
802.11ac (VHT80)	SISO	5530	/	/	1	81.248	/	Pass
		5610	/	/	1	81.485	/	Pass
		5500	SU	/	1	22.032	/	Pass
802.11ax (HEW20)	SISO	5580	SU	/	1	22.456	/	Pass
		5700	SU	/	1	22.295	/	Pass
		5510	SU	/	1	42.280	/	Pass
802.11ax (HEW40)	SISO	5550	SU	/	1	42.256	/	Pass
		5670	SU	/	1	41.721	/	Pass
		5530	SU	/	1	81.849	/	Pass
802.11ax (HEW80)	SISO	5610	SU	/	1	81.996	/	Pass

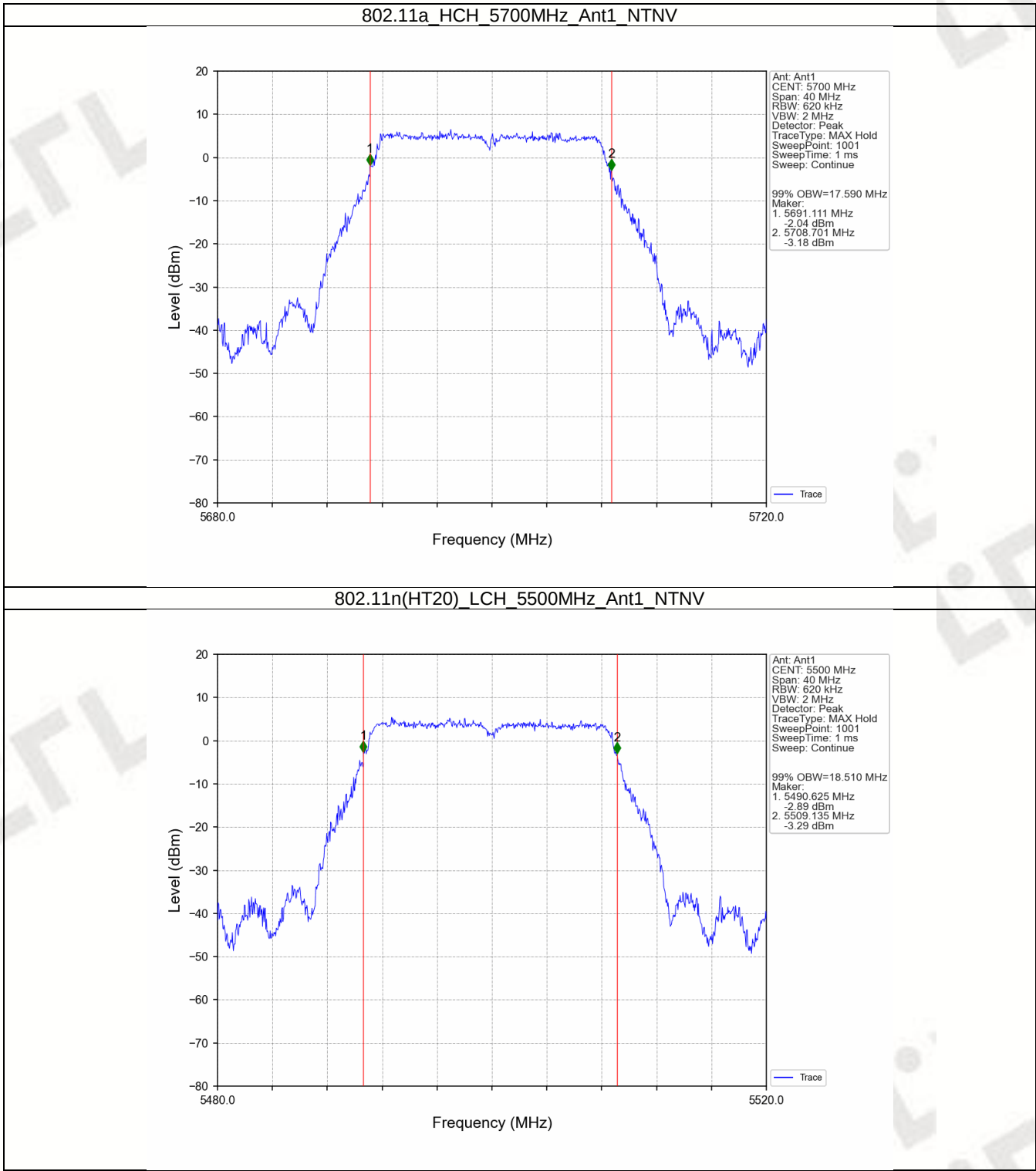
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2.2 Test Graph

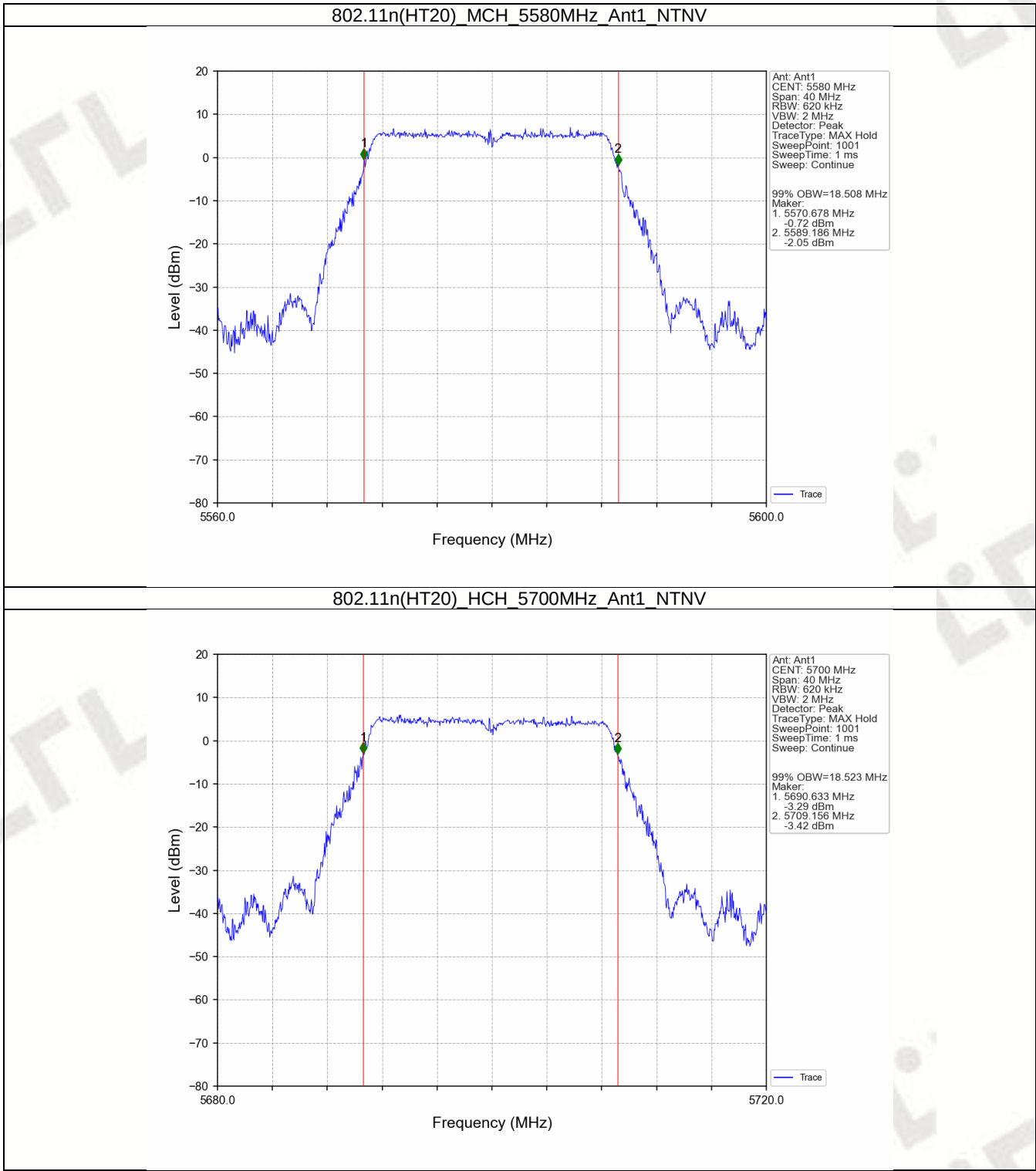
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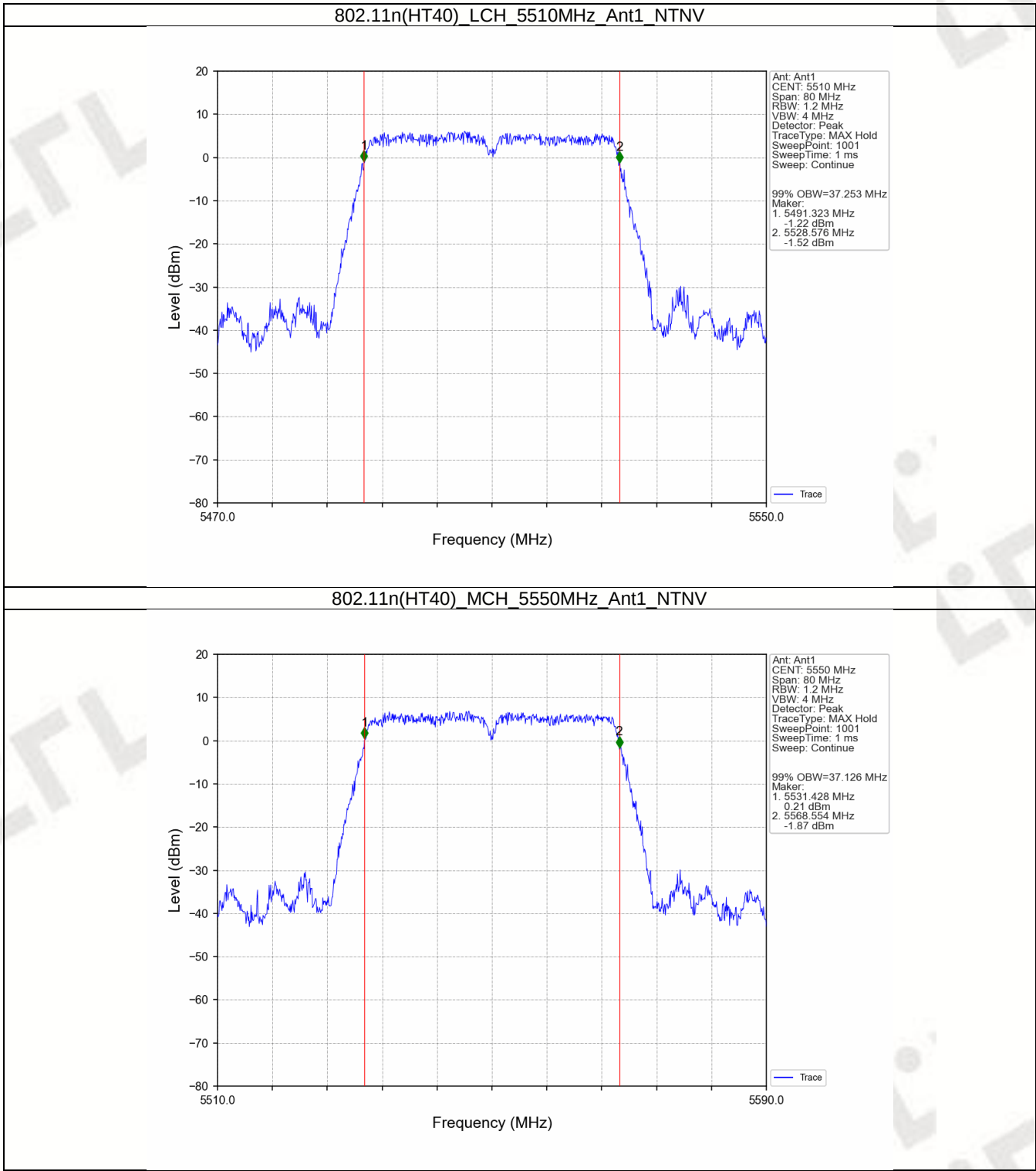
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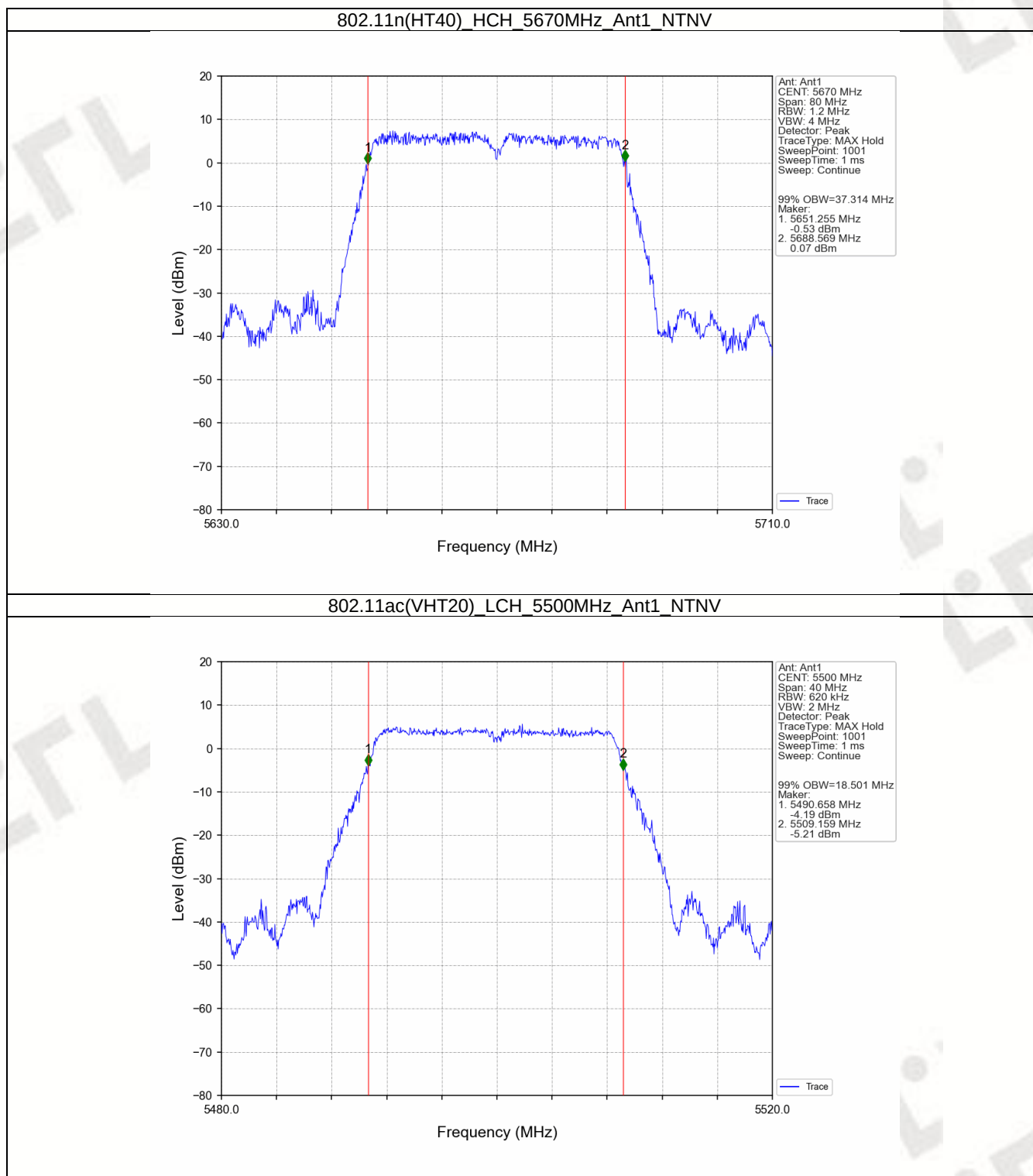
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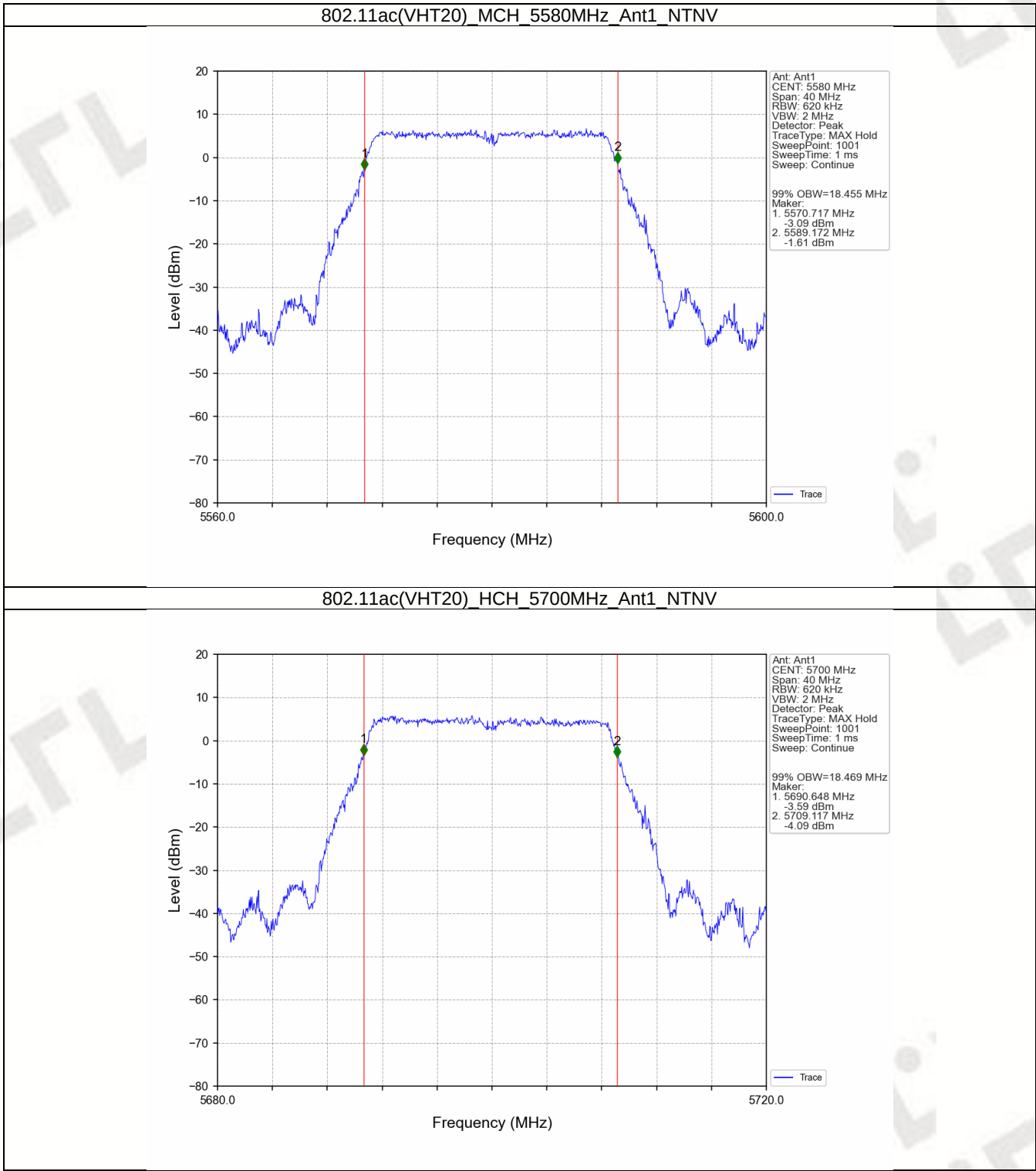
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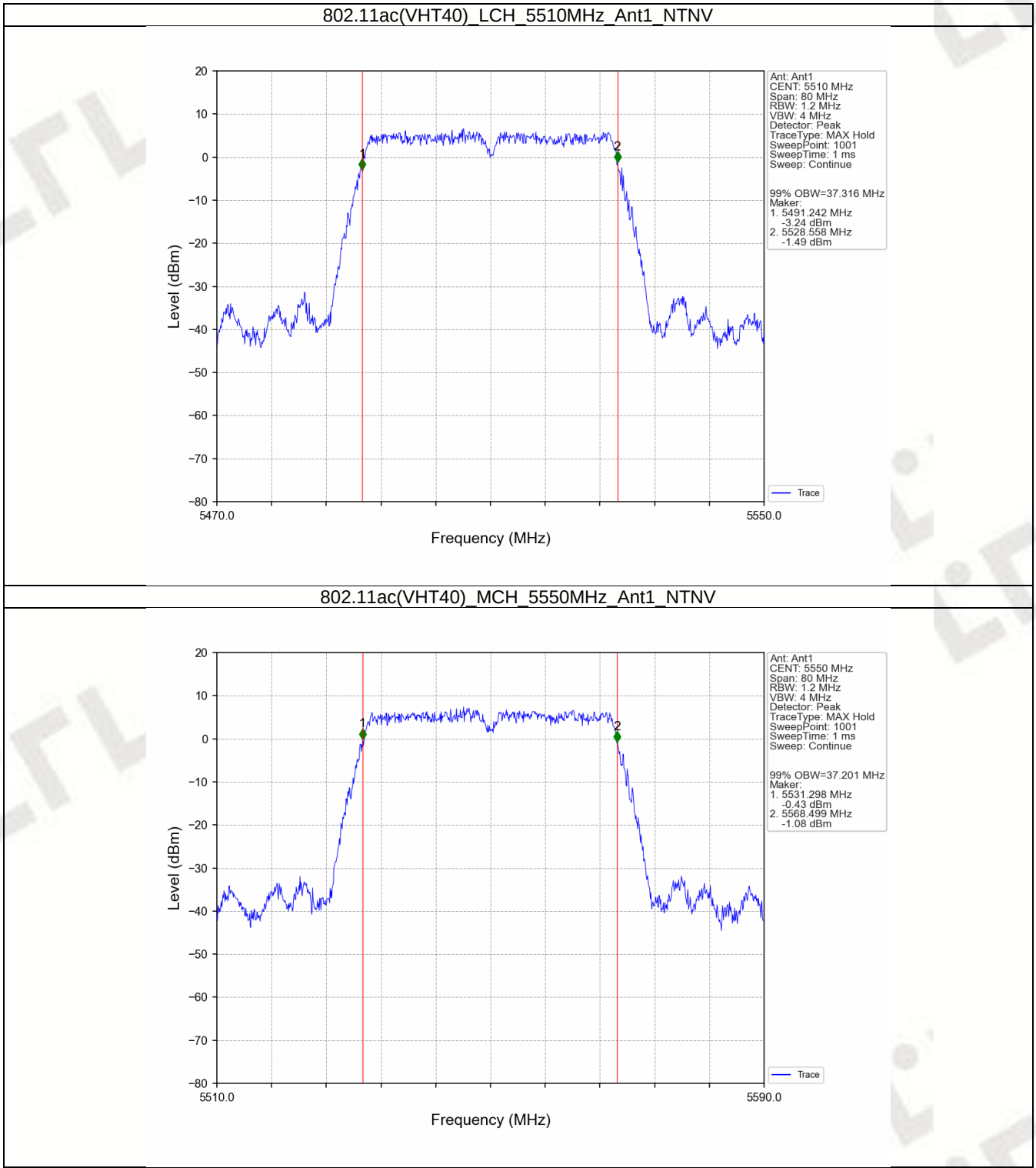
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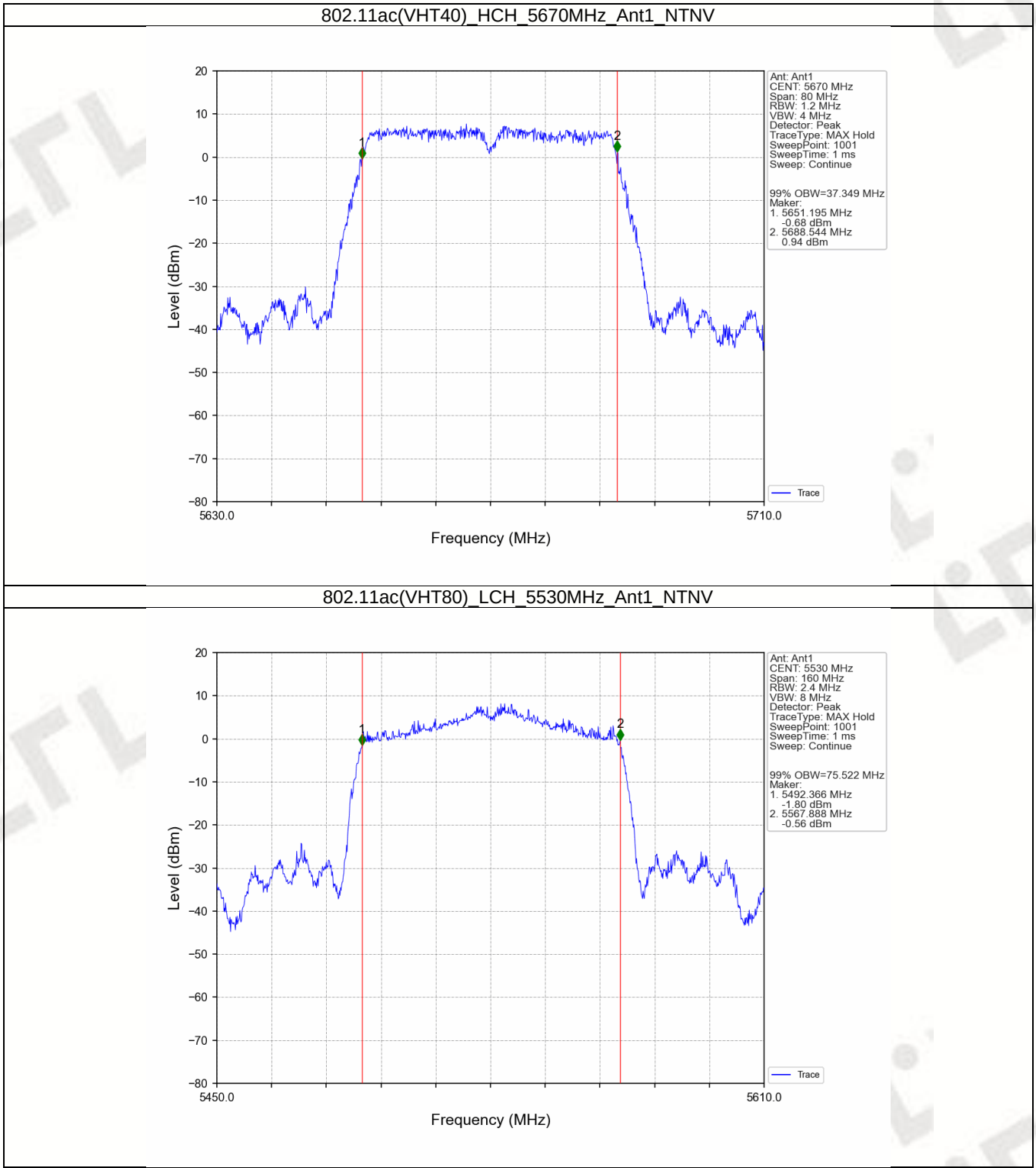
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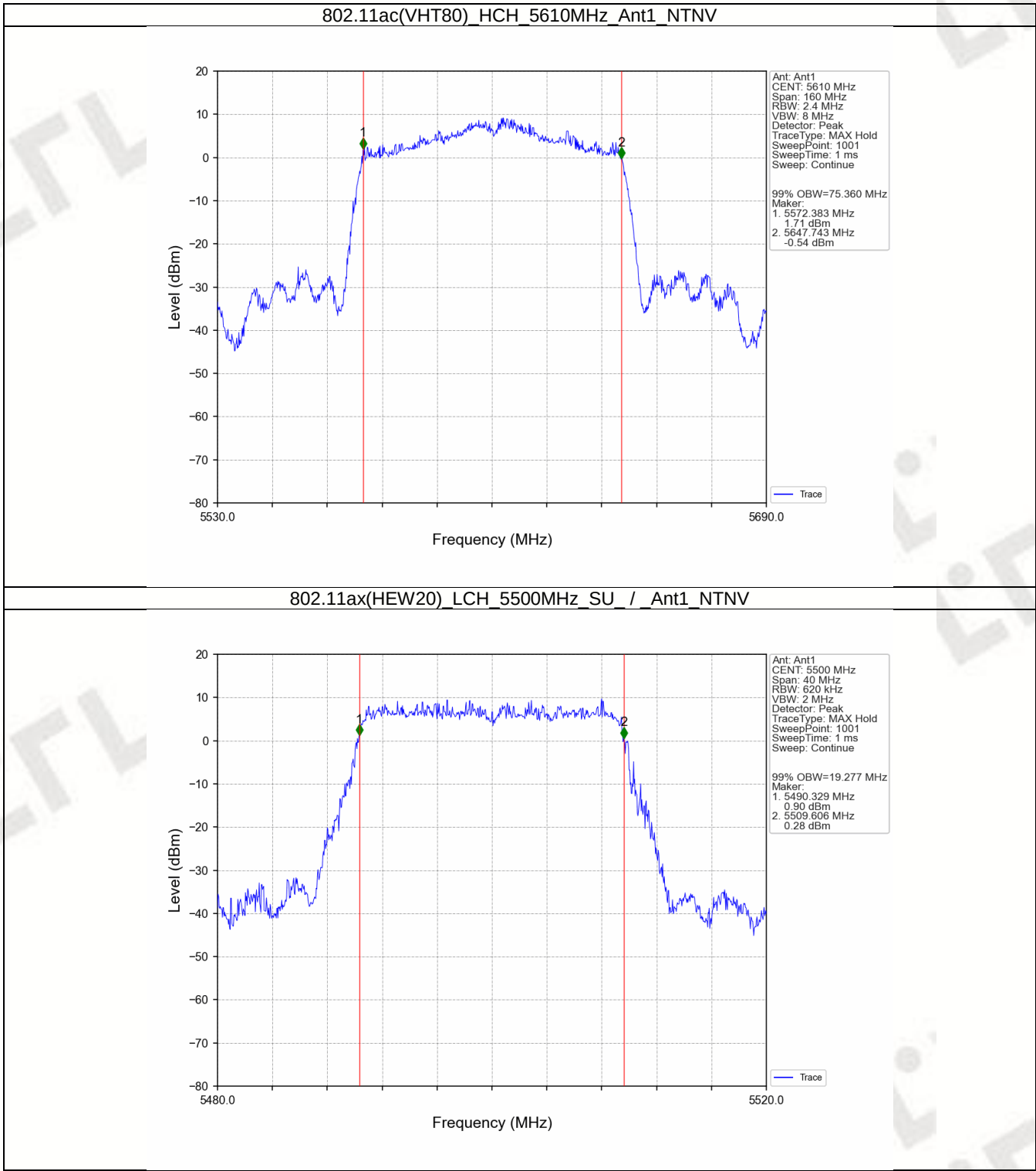
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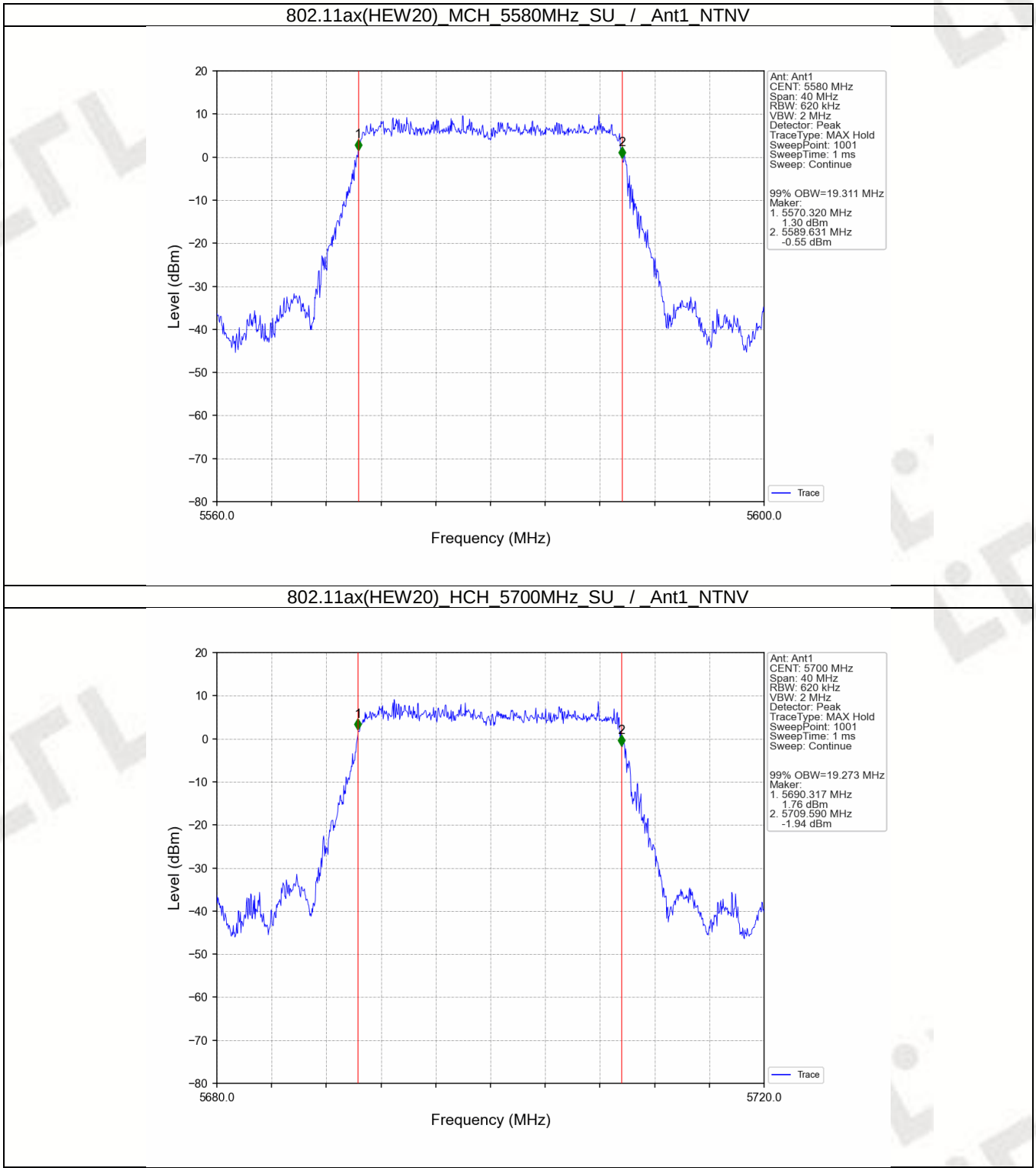
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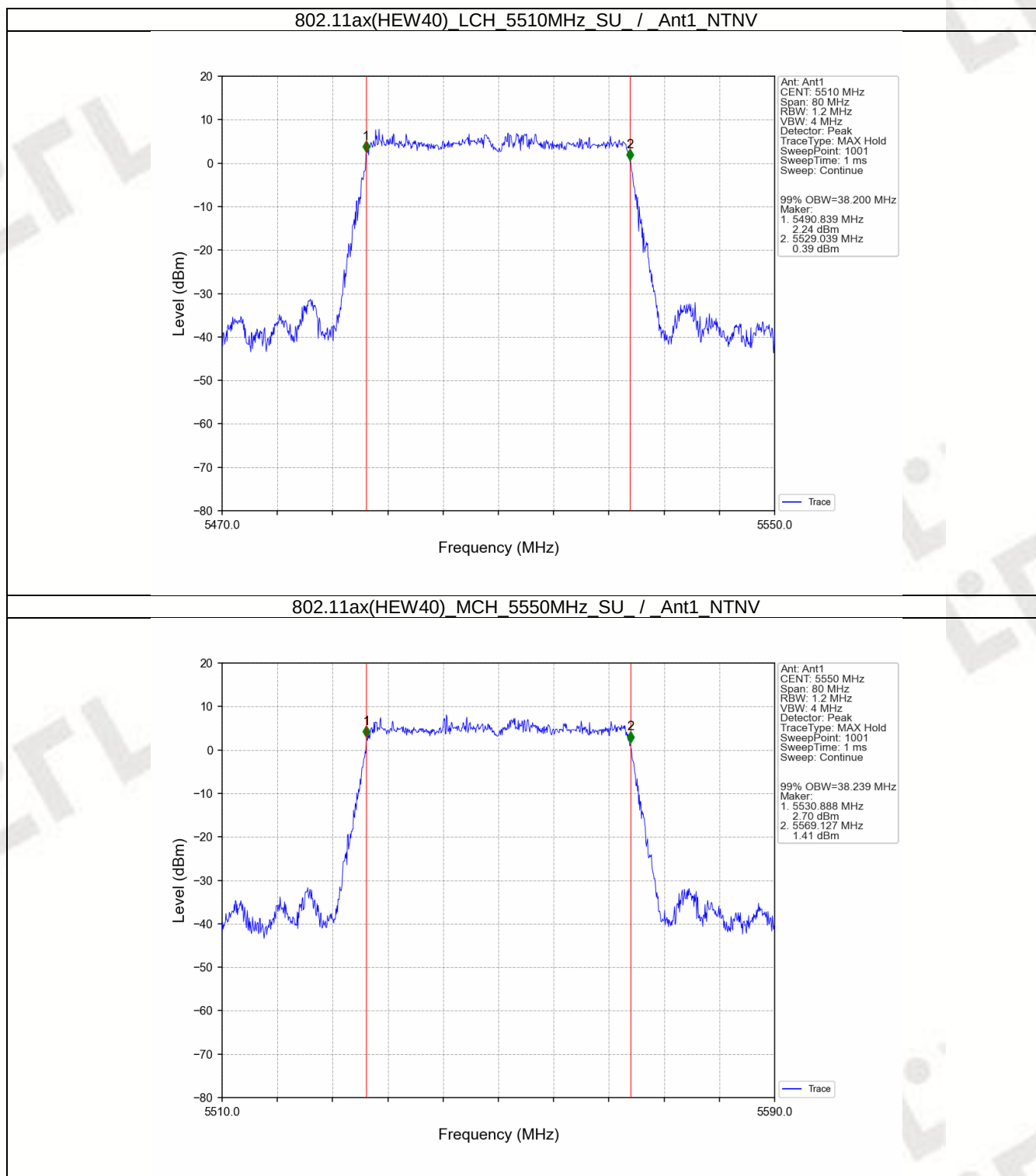
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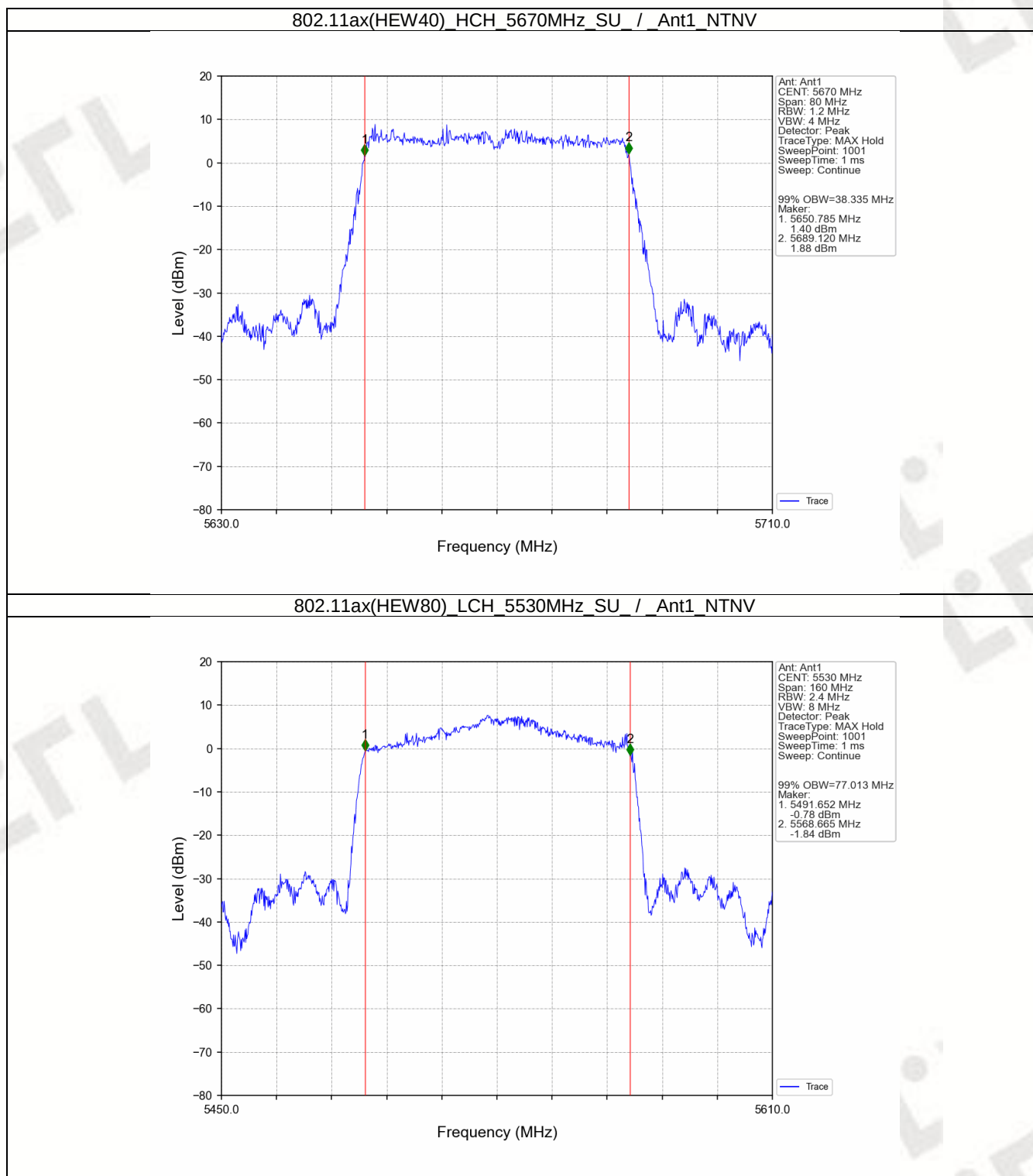
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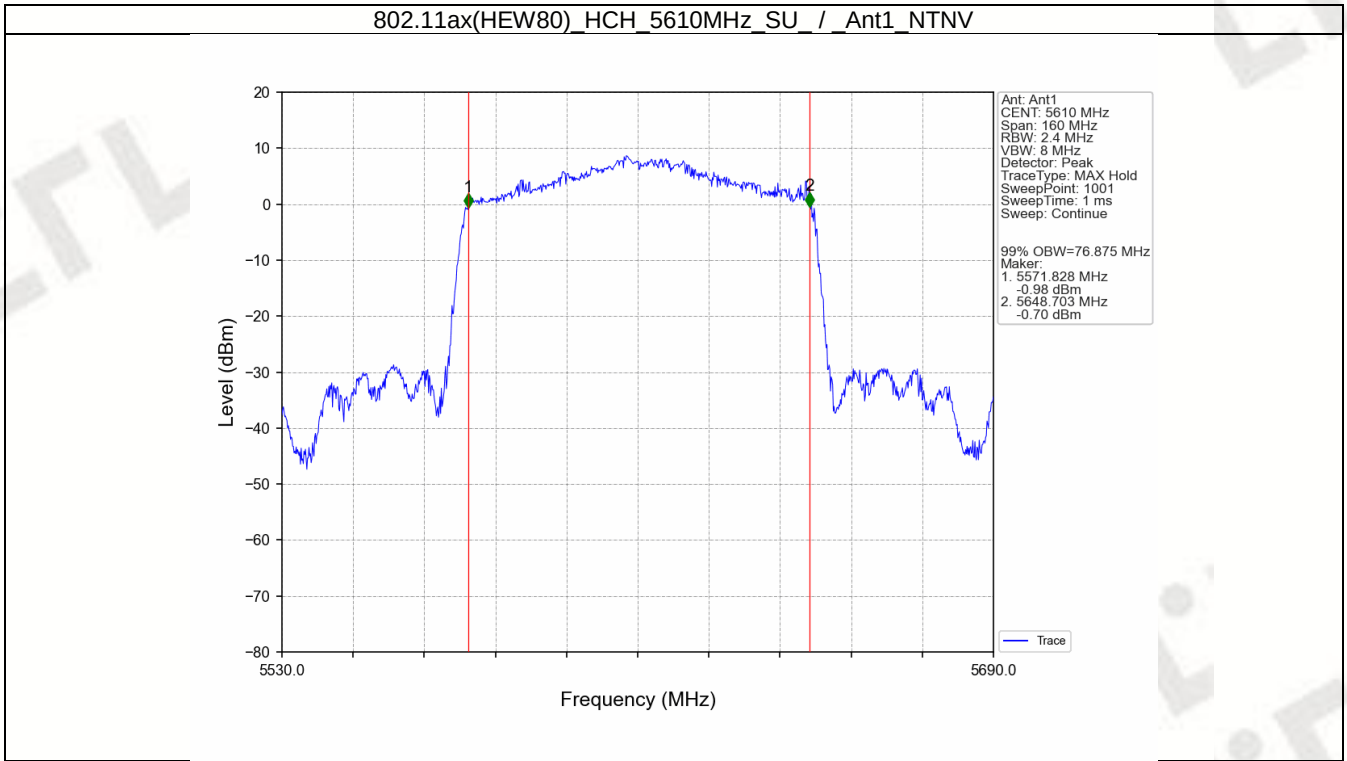
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FCC ID: SMQ-UWM1

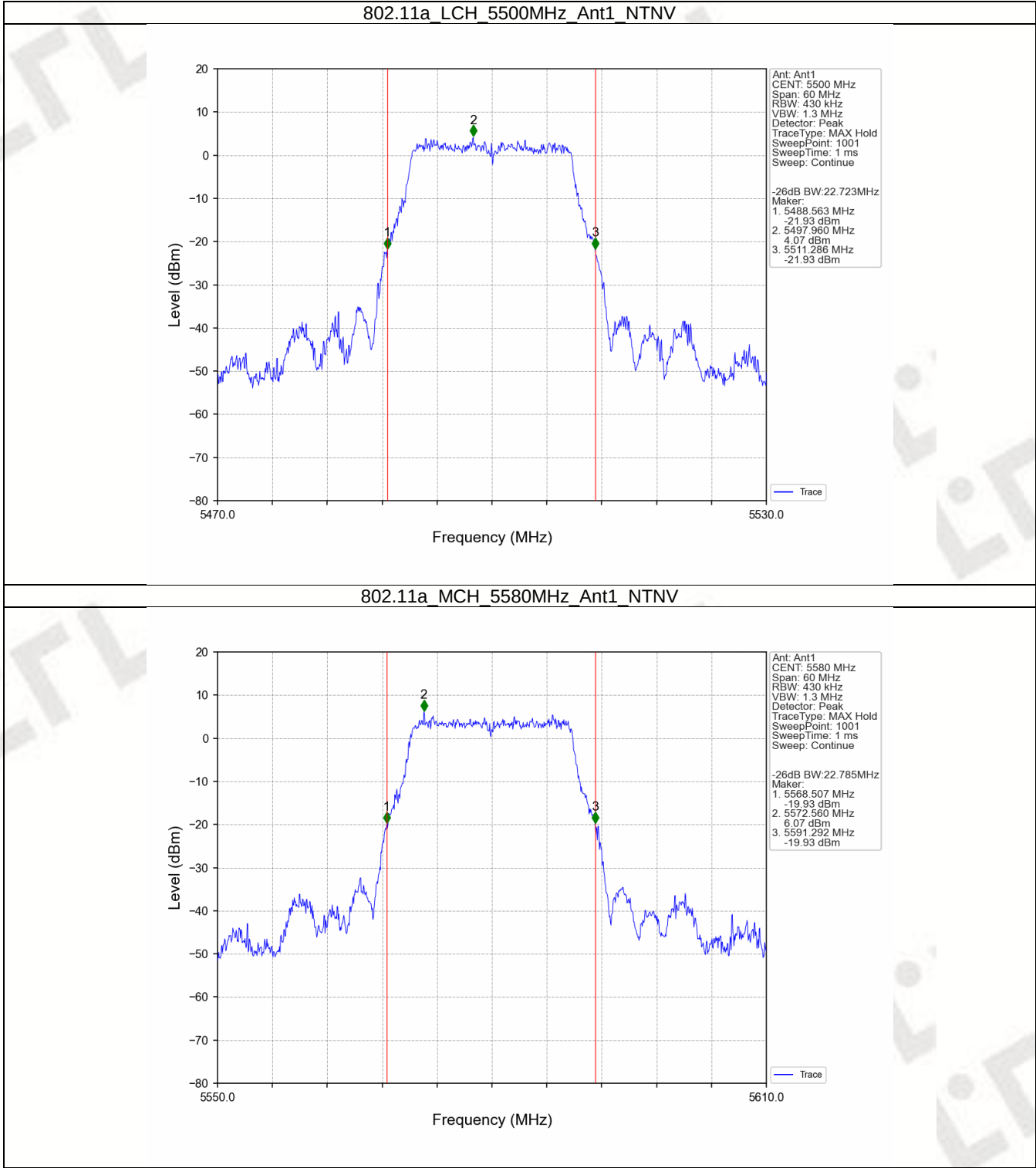


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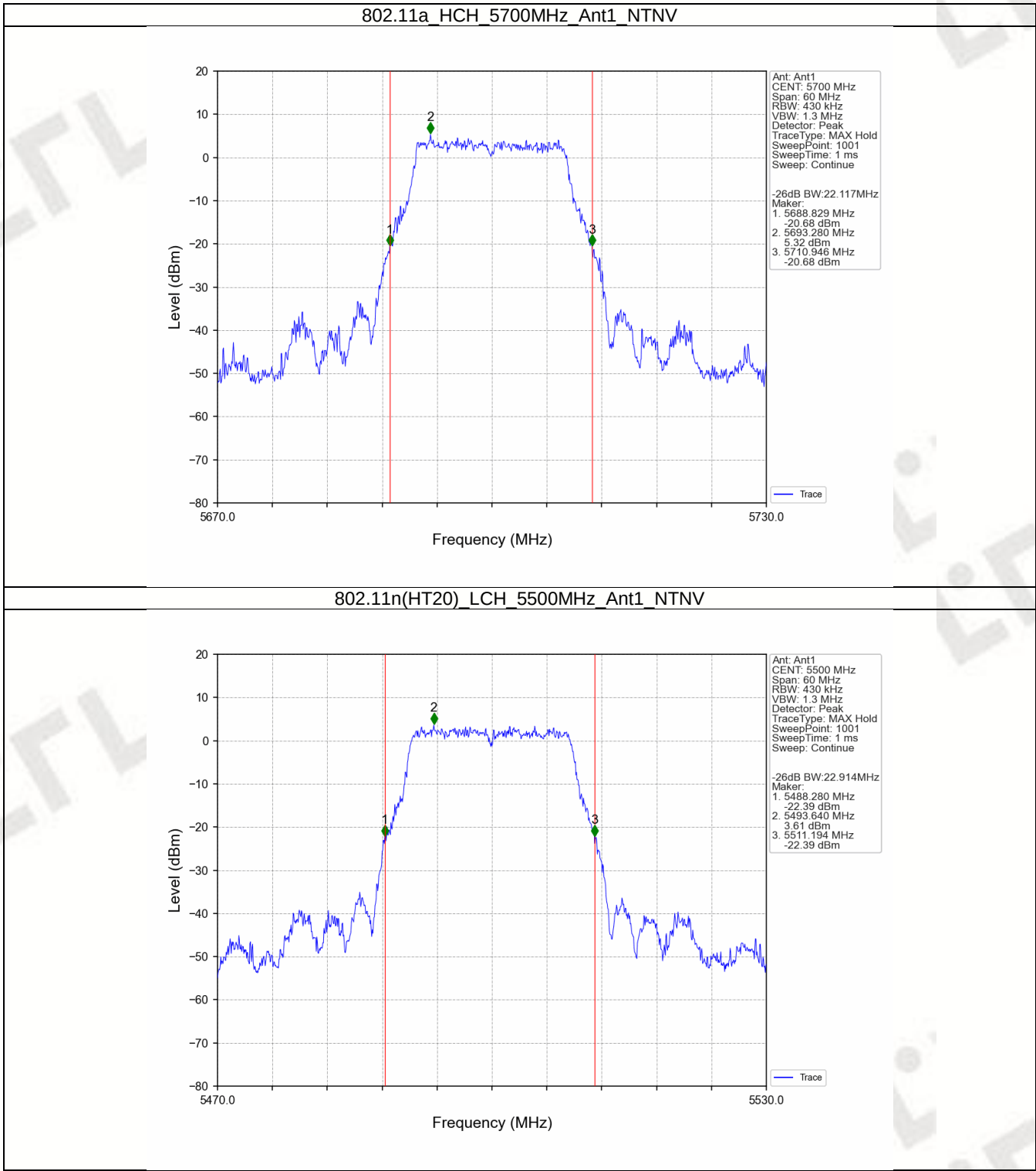


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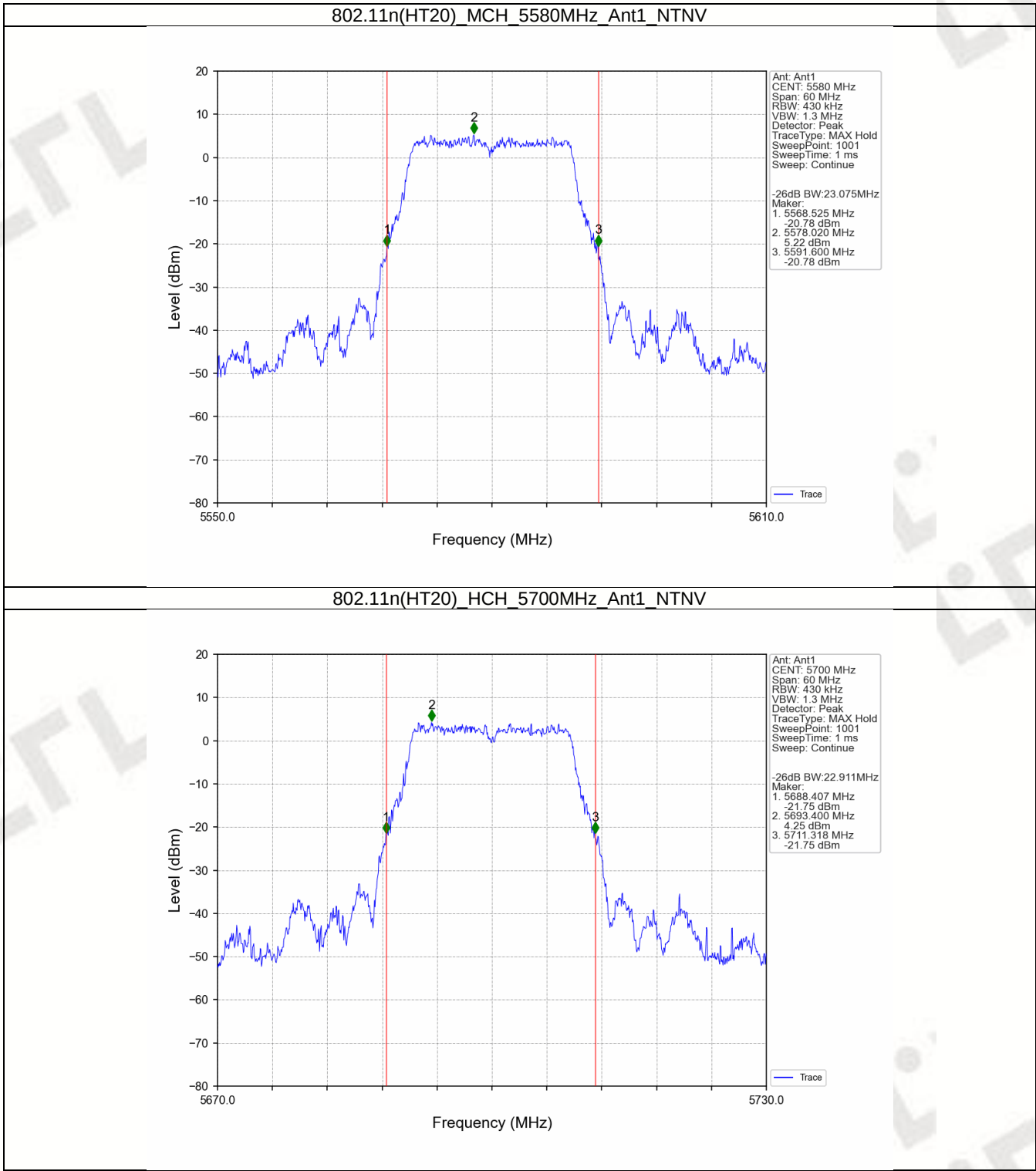
2.2.2 26dB BW



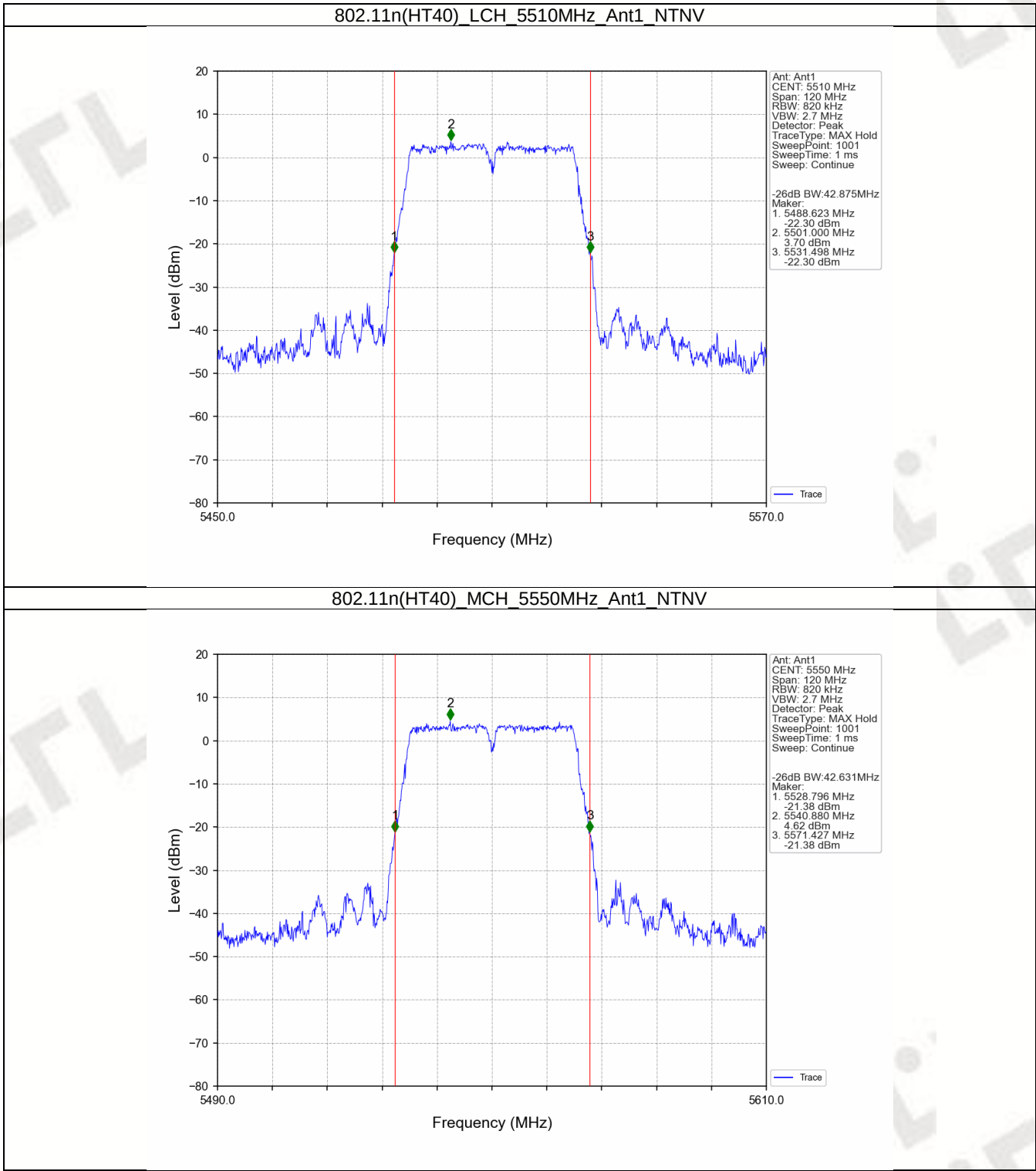
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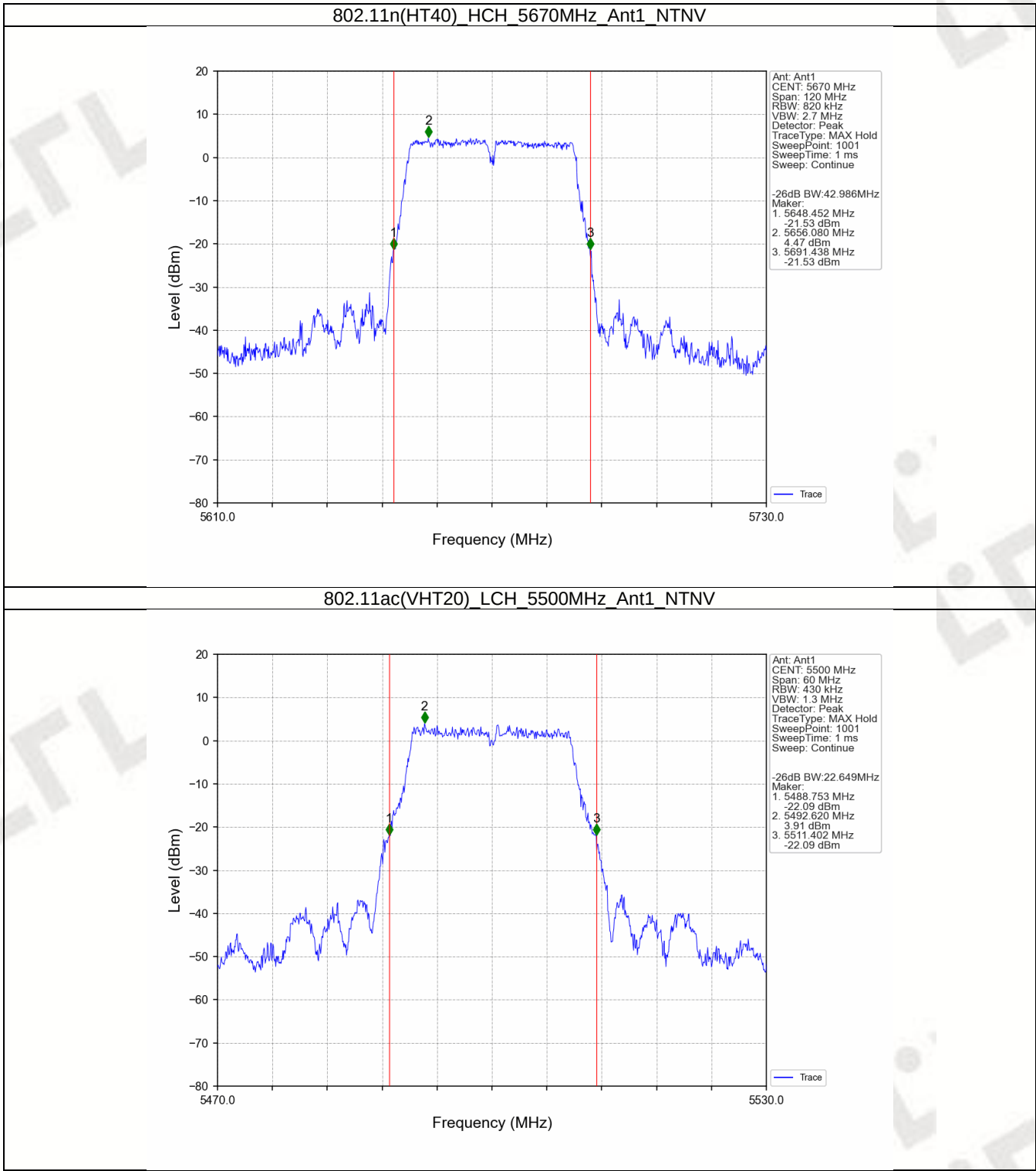
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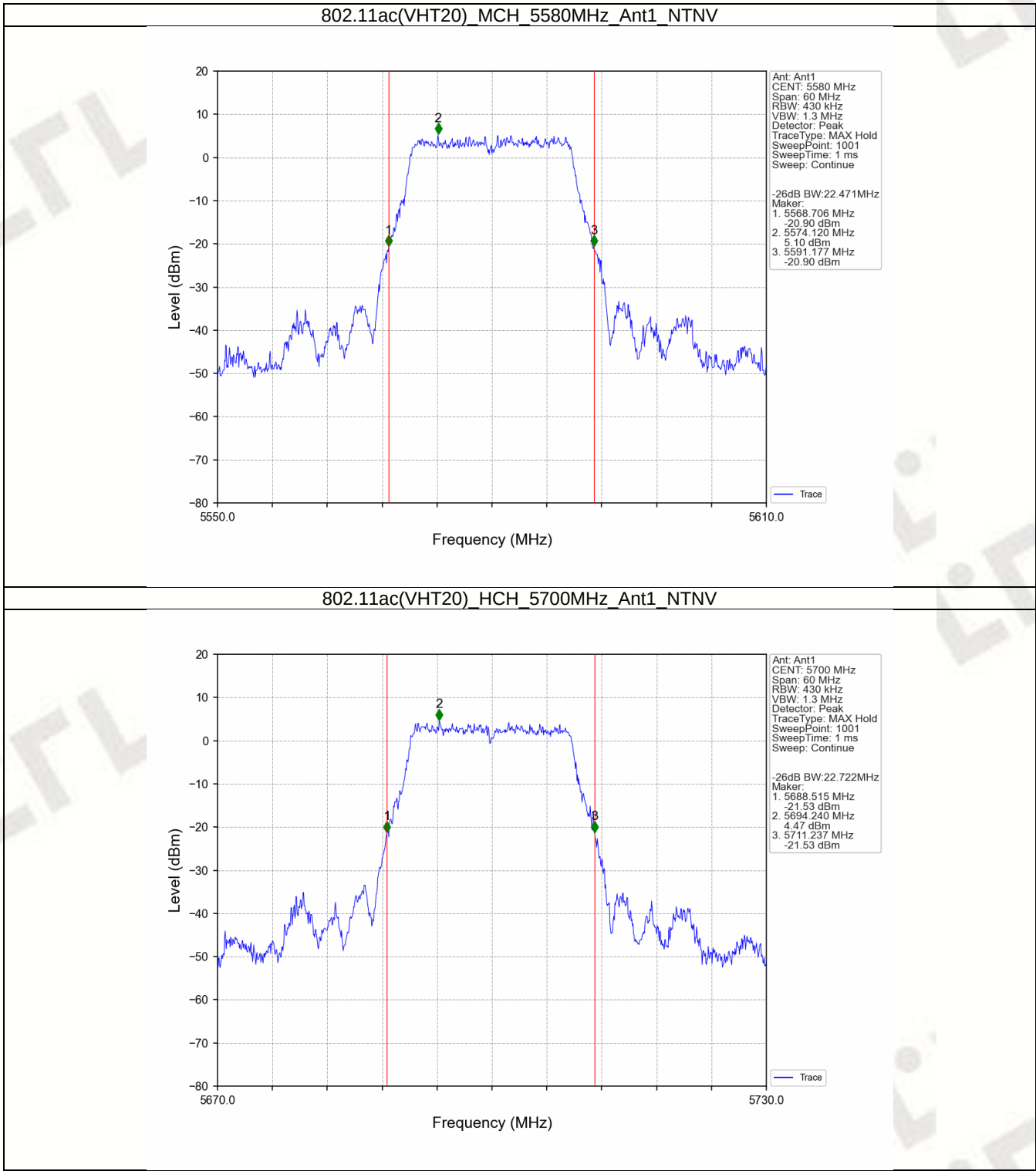
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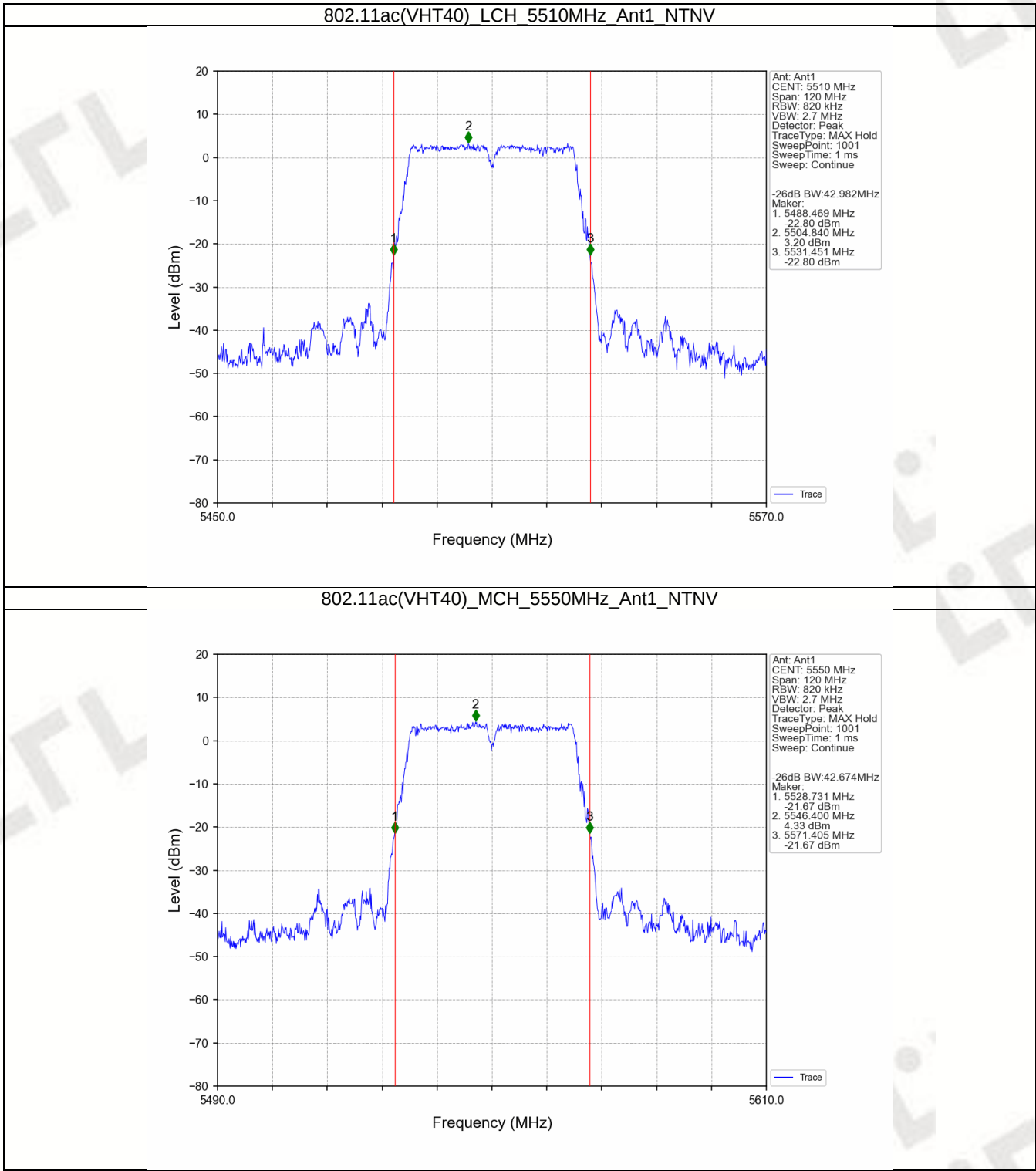
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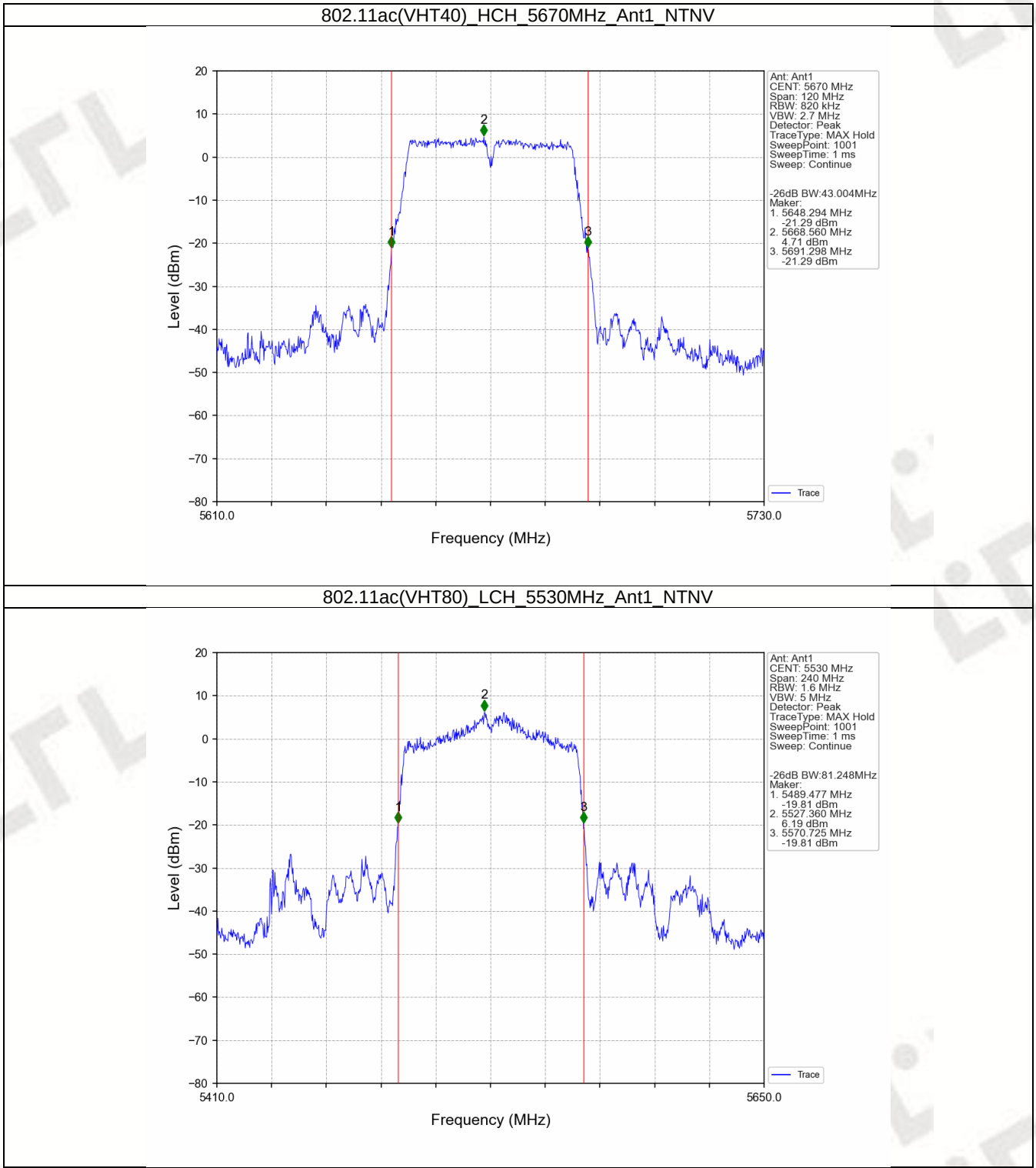
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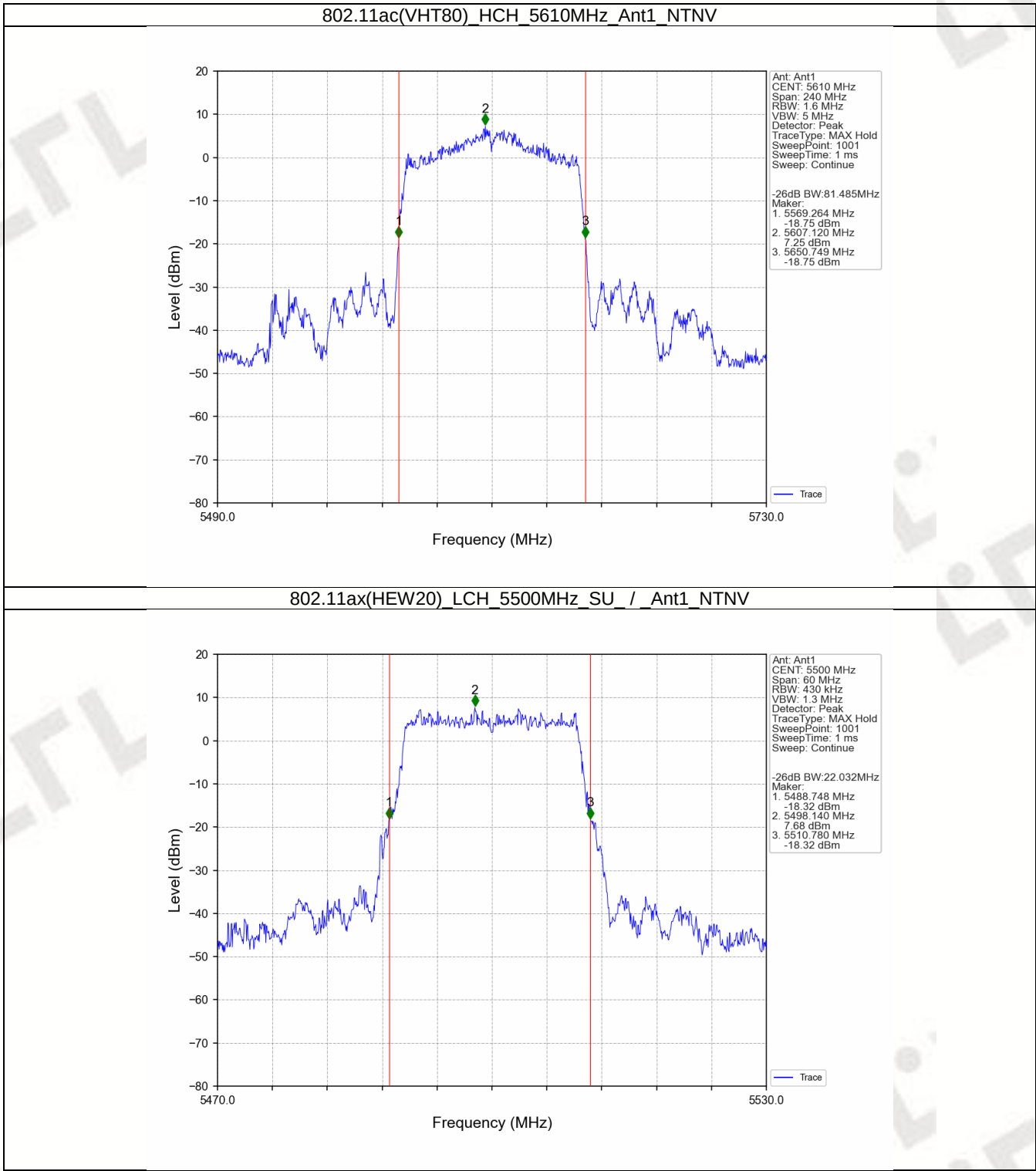
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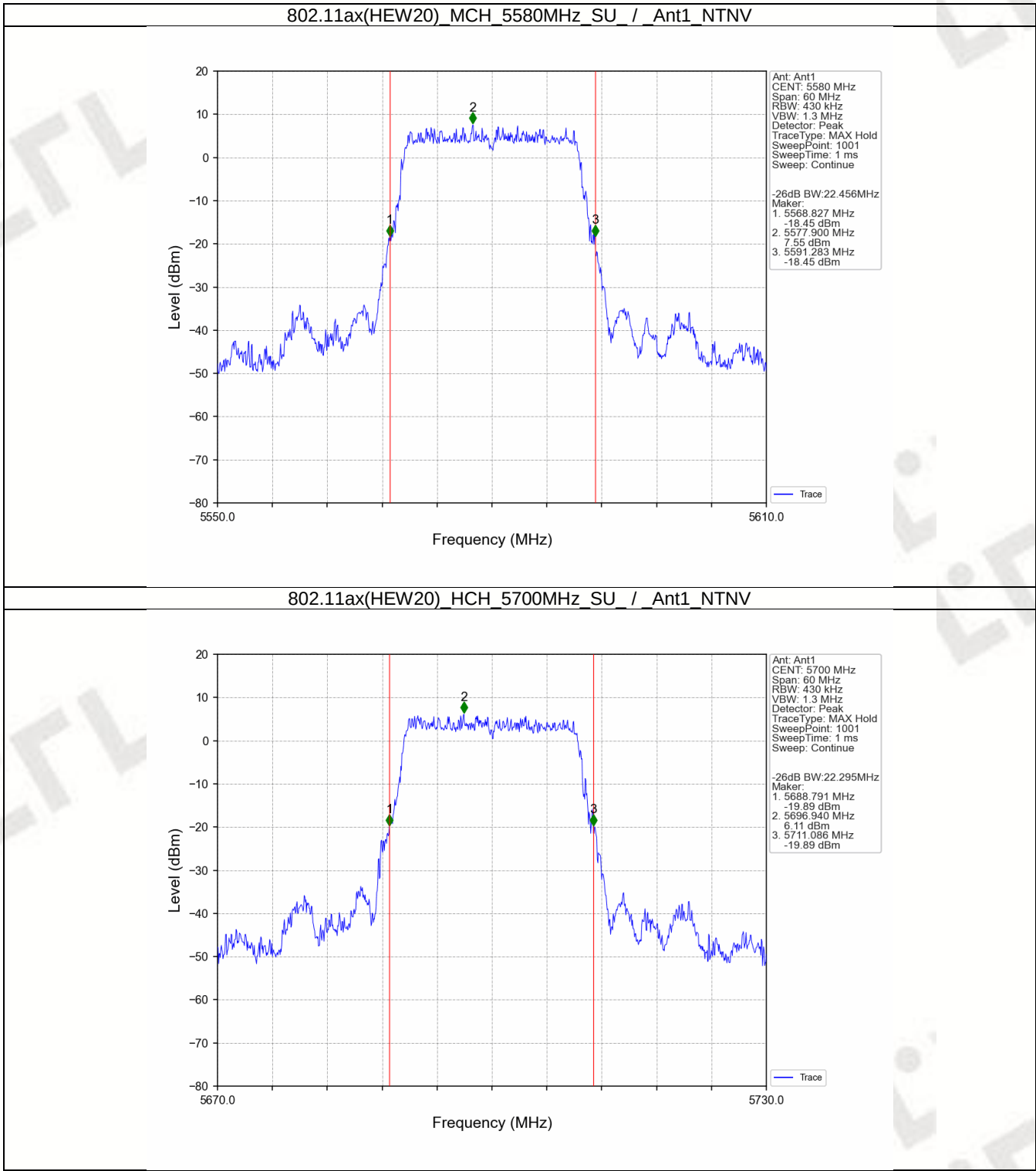
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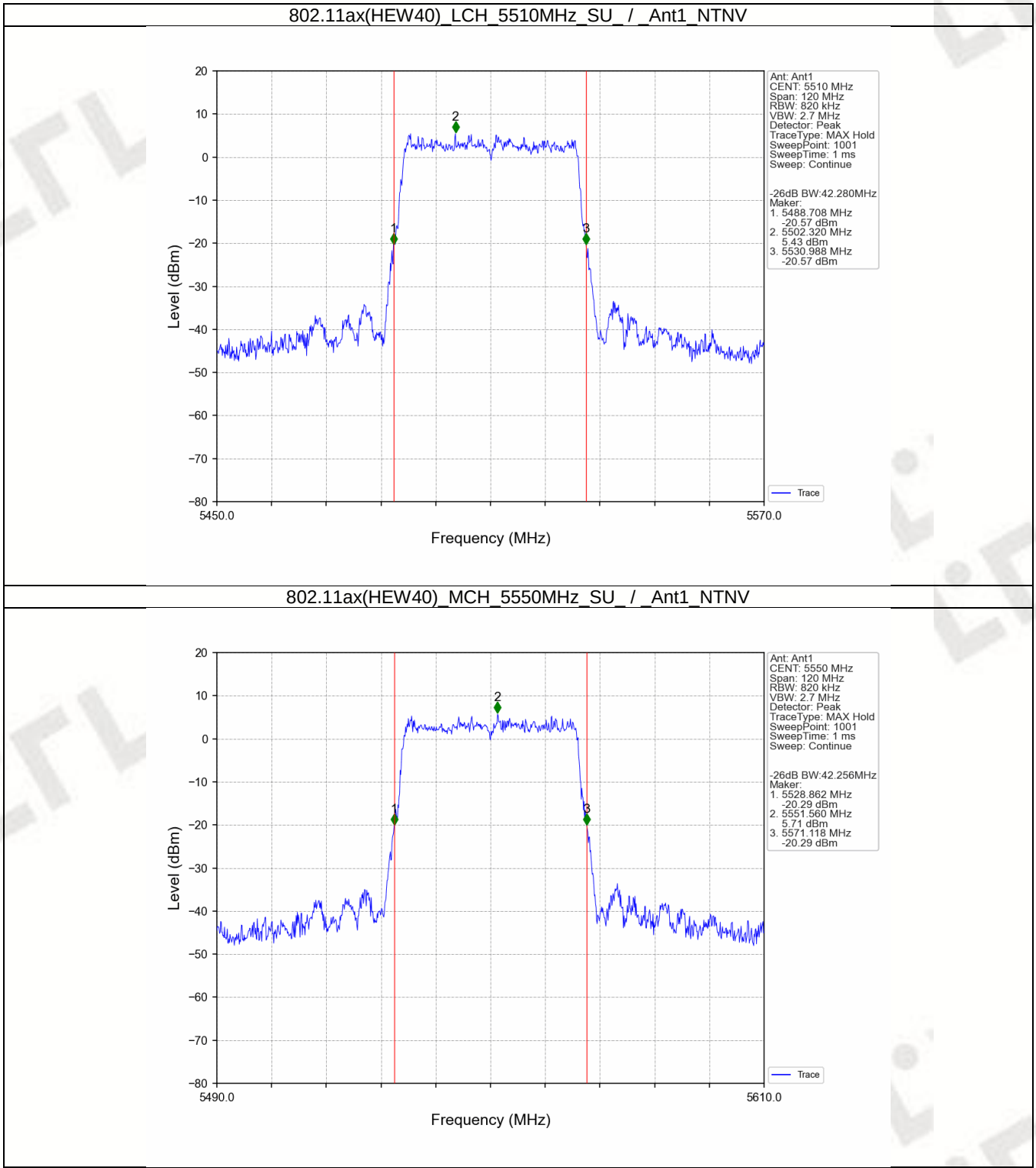
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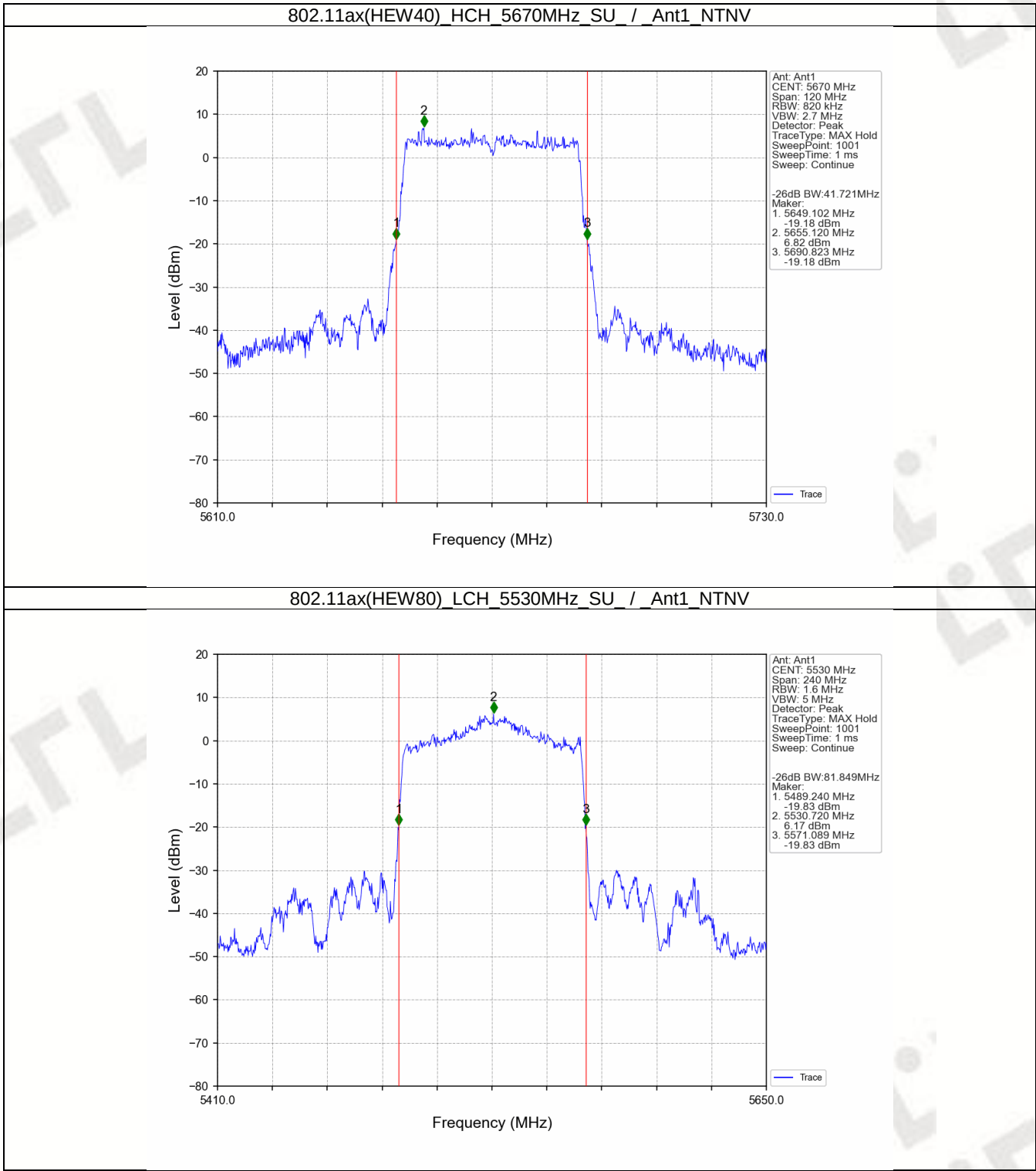
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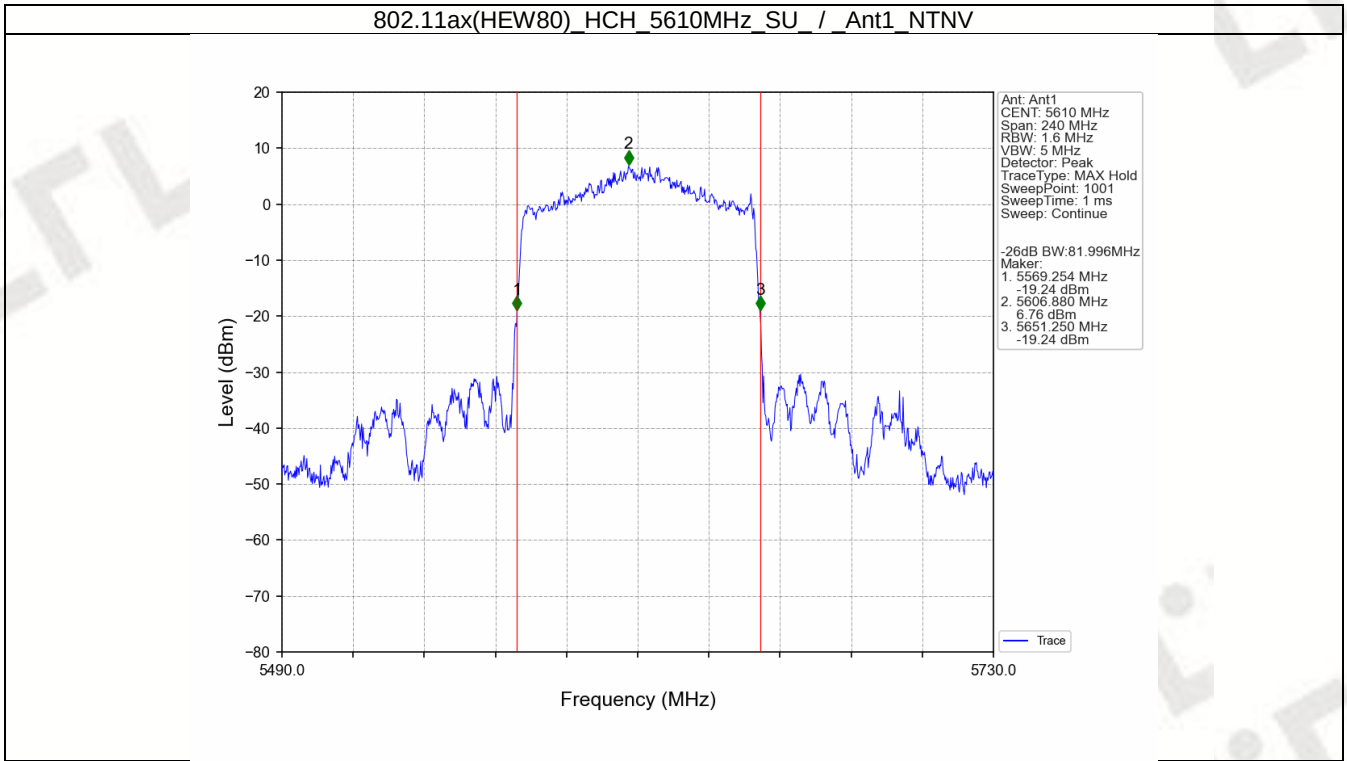
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FCC ID: SMQ-UWM1



FCC ID: SMQ-UWM1



3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

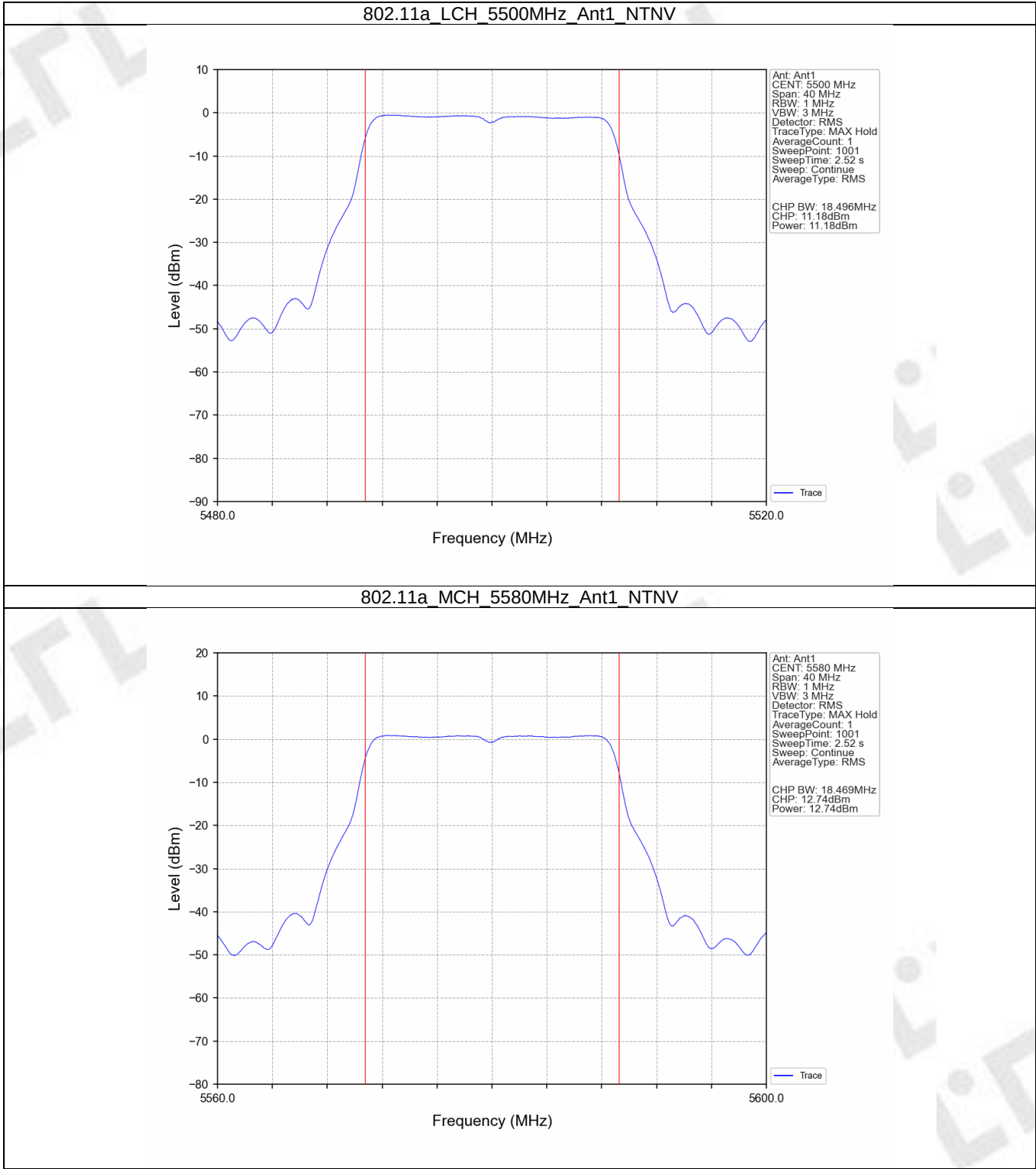
Mode	TX Type	Frequency (MHz)	RU	RU Pos	Maximum Average Conducted Output Power (dBm)		Verdict
					ANT1	Limit	
802.11a	SISO	5500	/	/	11.18	<=23.98	Pass
		5580	/	/	12.74	<=23.98	Pass
		5700	/	/	11.90	<=23.98	Pass
802.11n (HT20)	SISO	5500	/	/	11.15	<=23.98	Pass
		5580	/	/	12.73	<=23.98	Pass
		5700	/	/	11.86	<=23.98	Pass
802.11n (HT40)	SISO	5510	/	/	11.19	<=23.98	Pass
		5550	/	/	11.90	<=23.98	Pass
		5670	/	/	12.18	<=23.98	Pass
802.11ac (VHT20)	SISO	5500	/	/	11.19	<=23.98	Pass
		5580	/	/	12.79	<=23.98	Pass
		5700	/	/	11.88	<=23.98	Pass
802.11ac (VHT40)	SISO	5510	/	/	11.18	<=23.98	Pass
		5550	/	/	11.94	<=23.98	Pass
		5670	/	/	12.14	<=23.98	Pass
802.11ac (VHT80)	SISO	5530	/	/	10.05	<=23.98	Pass
		5610	/	/	11.05	<=23.98	Pass
802.11ax (HEW20)	SISO	5500	SU	/	12.99	<=23.98	Pass
		5580	SU	/	13.06	<=23.98	Pass
		5700	SU	/	12.20	<=23.98	Pass
802.11ax (HEW40)	SISO	5510	SU	/	11.16	<=23.98	Pass
		5550	SU	/	11.50	<=23.98	Pass
		5670	SU	/	12.08	<=23.98	Pass
802.11ax (HEW80)	SISO	5530	SU	/	10.16	<=23.98	Pass
		5610	SU	/	11.03	<=23.98	Pass

Note1: Antenna Gain: Ant1: 2.91dBi;

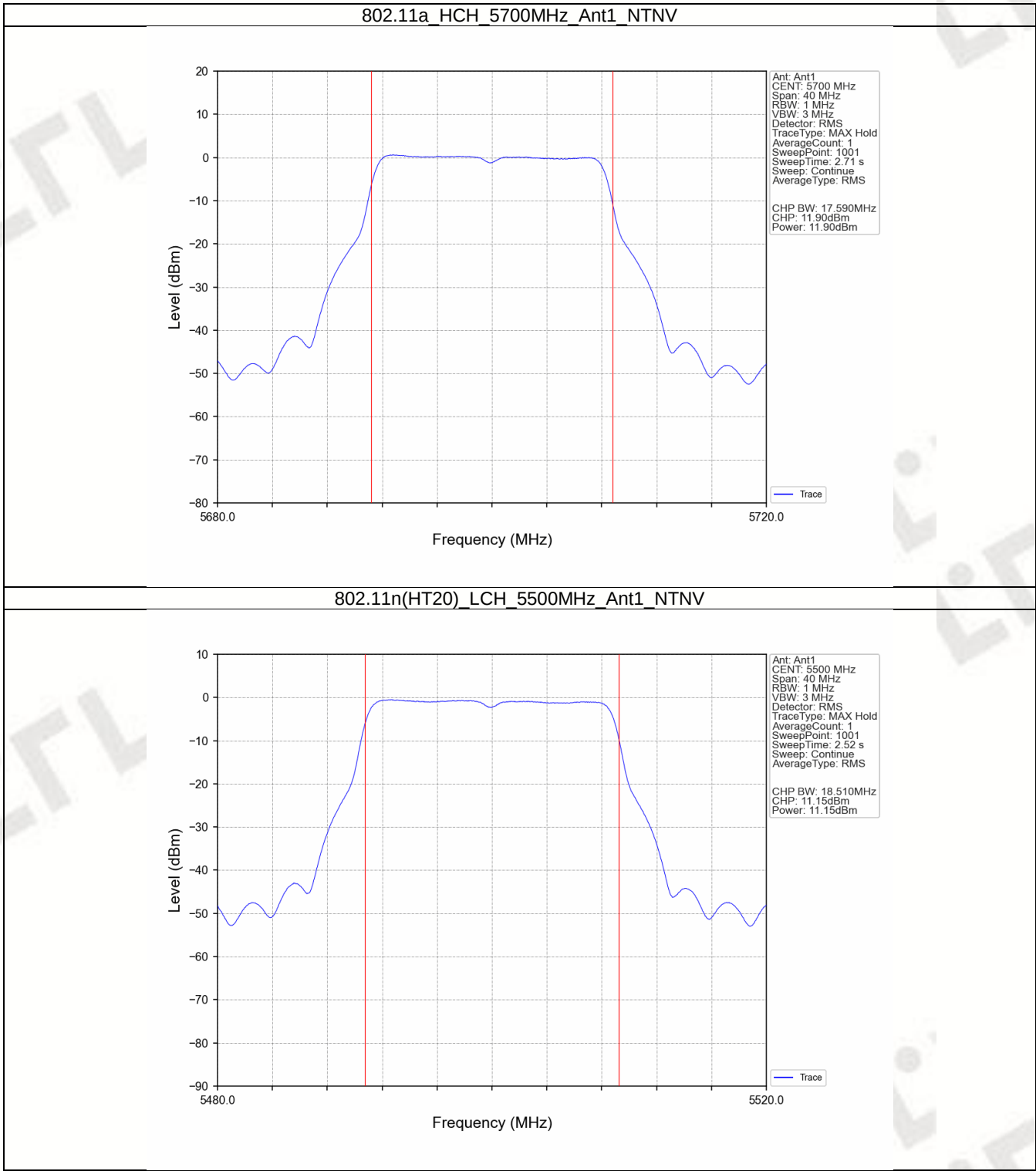
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3.2 Test Graph

3.2.1 Power



FCC ID: SMQ-UWM1



FCC ID: SMQ-UWM1

