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Annex for 5G Wi-Fi BAND3

Test Report No.: CTL2506093036-WF04

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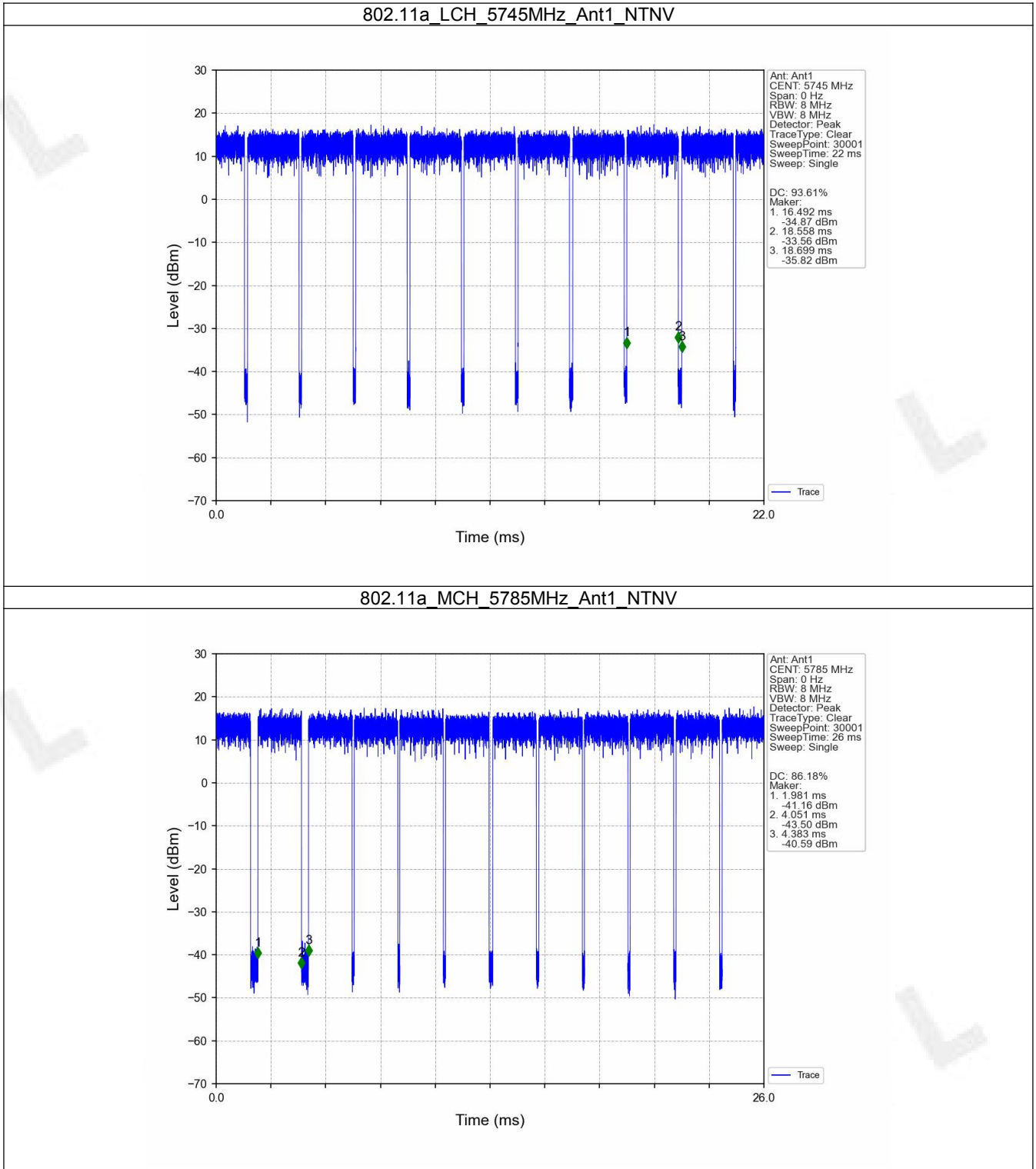
1. Duty Cycle**1.1 Test Result****1.1.1 Ant1**

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5745	2.066	2.207	93.61	0.29	1.58
		5785	2.070	2.402	86.18	0.65	9.58
		5825	2.065	2.233	92.48	0.34	2.69
802.11n (HT20)	SISO	5745	1.925	2.275	84.62	0.73	10.18
		5785	1.926	2.049	94.00	0.27	1.30
		5825	1.925	2.093	91.97	0.36	2.89
802.11n (HT40)	SISO	5755	0.949	1.126	84.28	0.74	6.53
		5795	0.949	1.487	63.82	1.95	26.97
802.11ac (VHT20)	SISO	5745	1.934	2.423	79.82	0.98	15.06
		5785	1.933	2.101	92.00	0.36	3.29
		5825	1.933	2.110	91.61	0.38	3.26
802.11ac (VHT40)	SISO	5755	0.953	2.441	39.04	4.08	51.02
		5795	0.954	1.113	85.71	0.67	5.15
802.11ac (VHT80)	SISO	5775	0.465	0.642	72.43	1.40	9.14

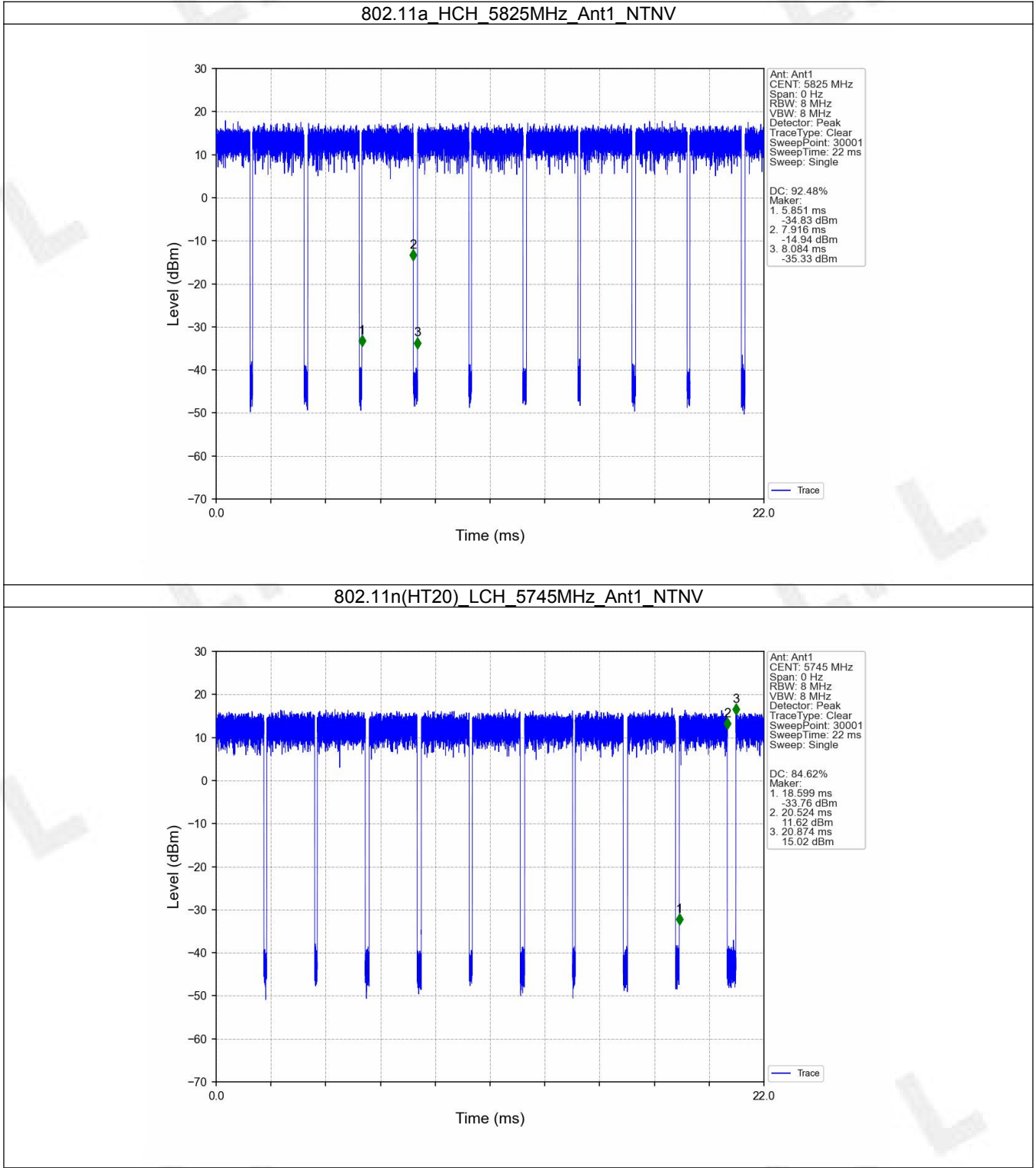
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1.2 Test Graph

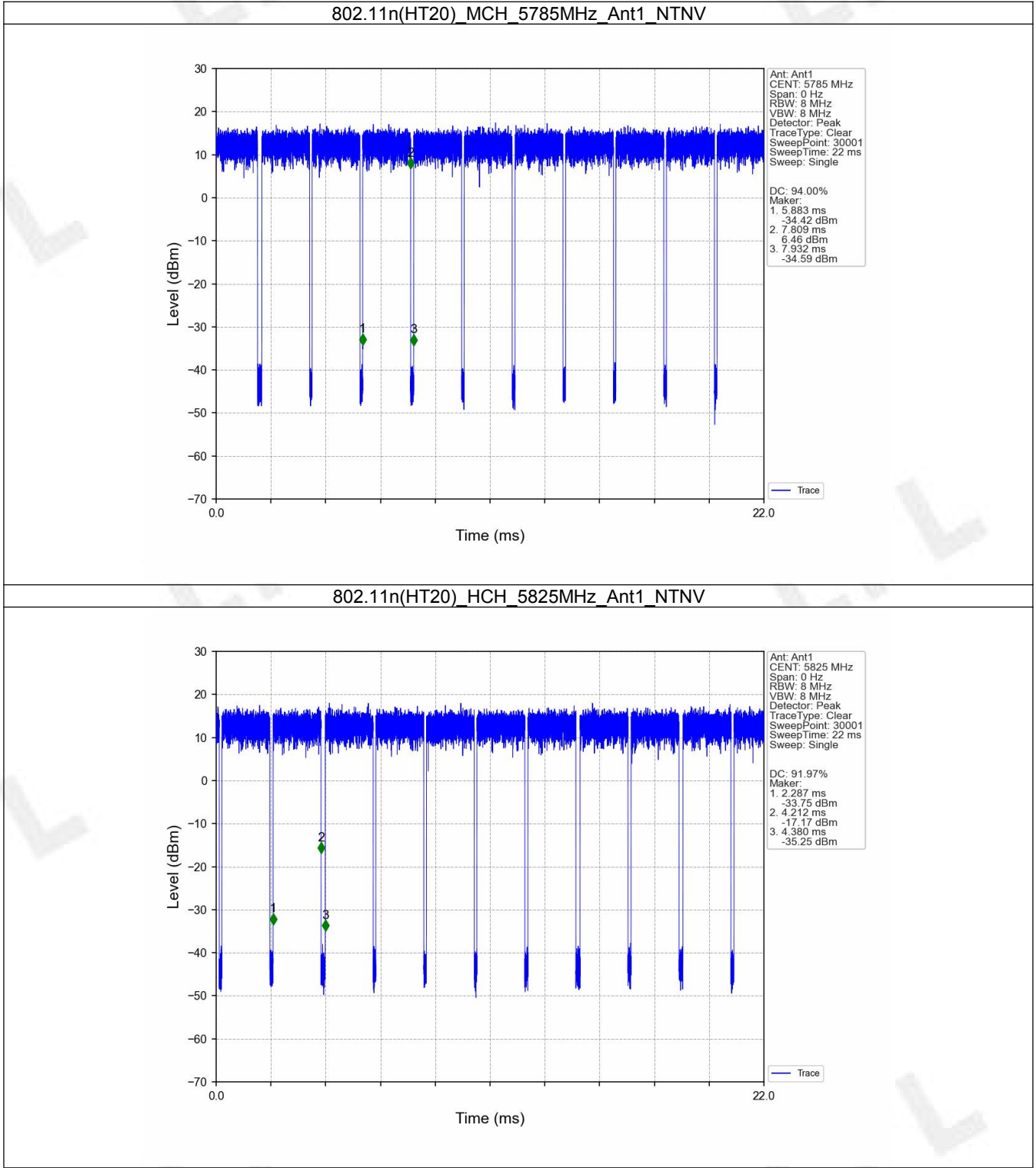
1.2.1 Ant1



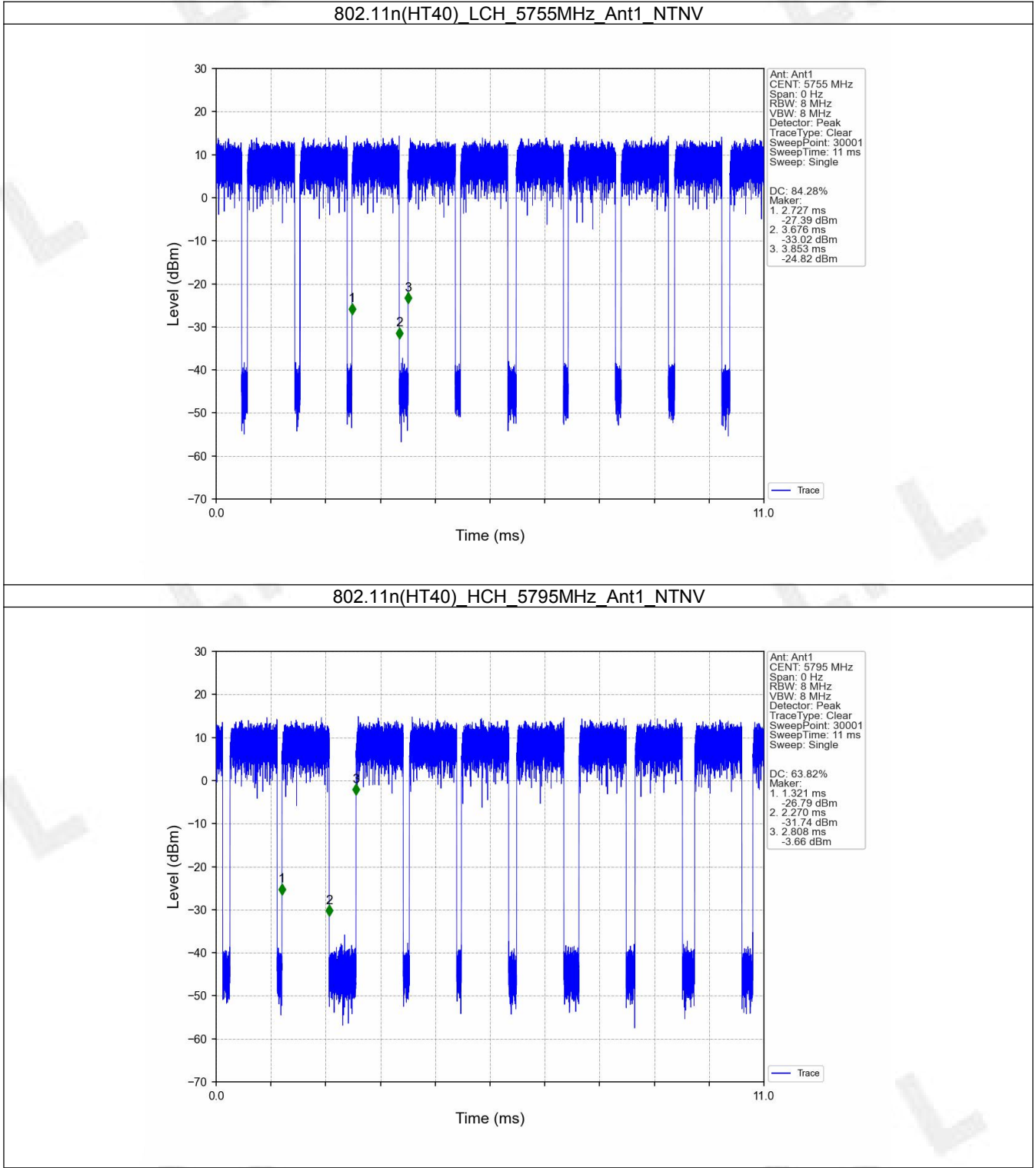
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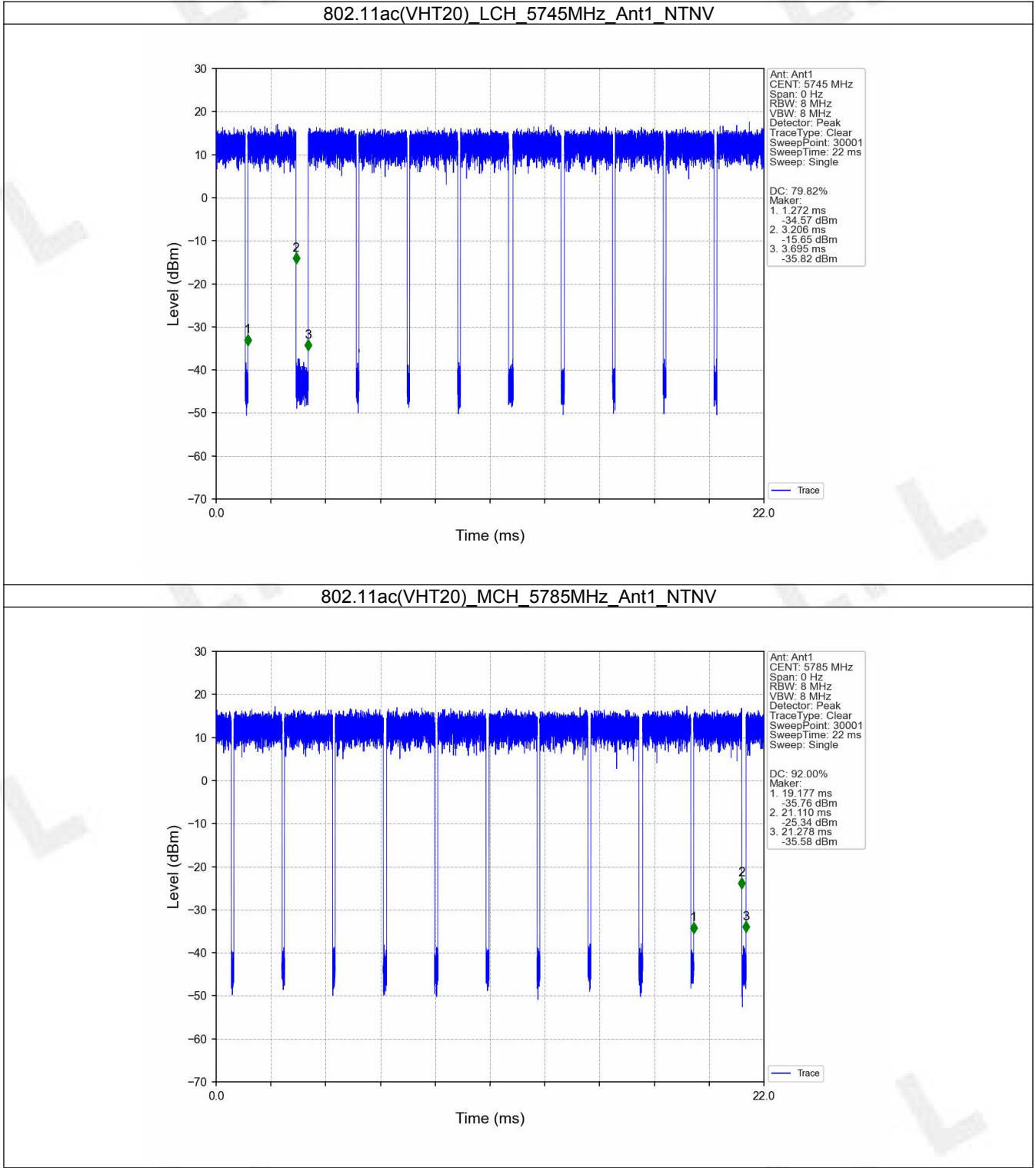
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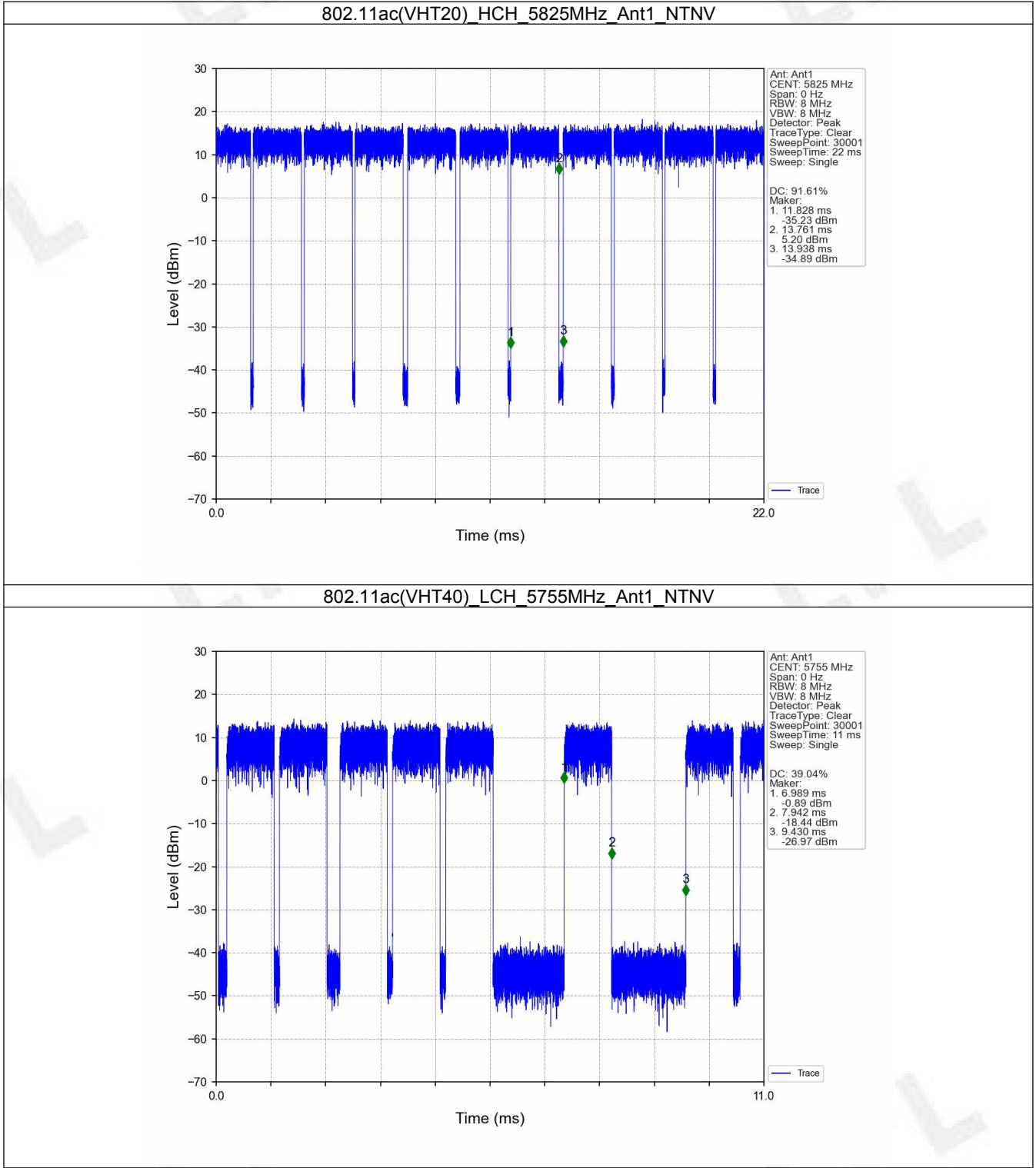
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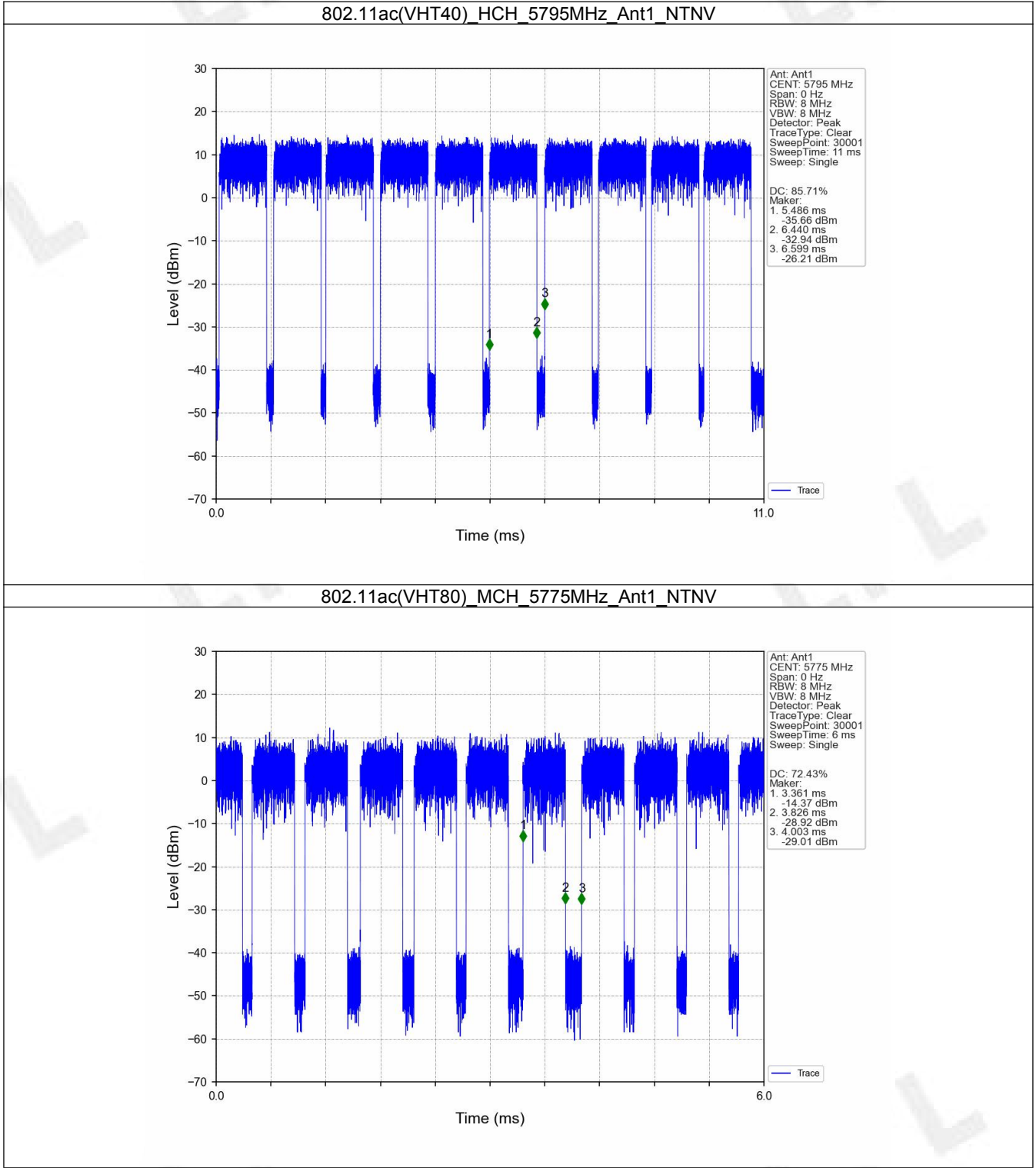
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2. Bandwidth**2.1 Test Result****2.1.1 OBW**

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	16.860	/	Pass
		5785	1	16.704	/	Pass
		5825	1	16.654	/	Pass
802.11n (HT20)	SISO	5745	1	17.859	/	Pass
		5785	1	17.766	/	Pass
		5825	1	17.721	/	Pass
802.11n (HT40)	SISO	5755	1	36.762	/	Pass
		5795	1	36.516	/	Pass
802.11ac (VHT20)	SISO	5745	1	17.906	/	Pass
		5785	1	17.775	/	Pass
		5825	1	17.758	/	Pass
802.11ac (VHT40)	SISO	5755	1	36.741	/	Pass
		5795	1	36.483	/	Pass
802.11ac (VHT80)	SISO	5775	1	75.799	/	Pass

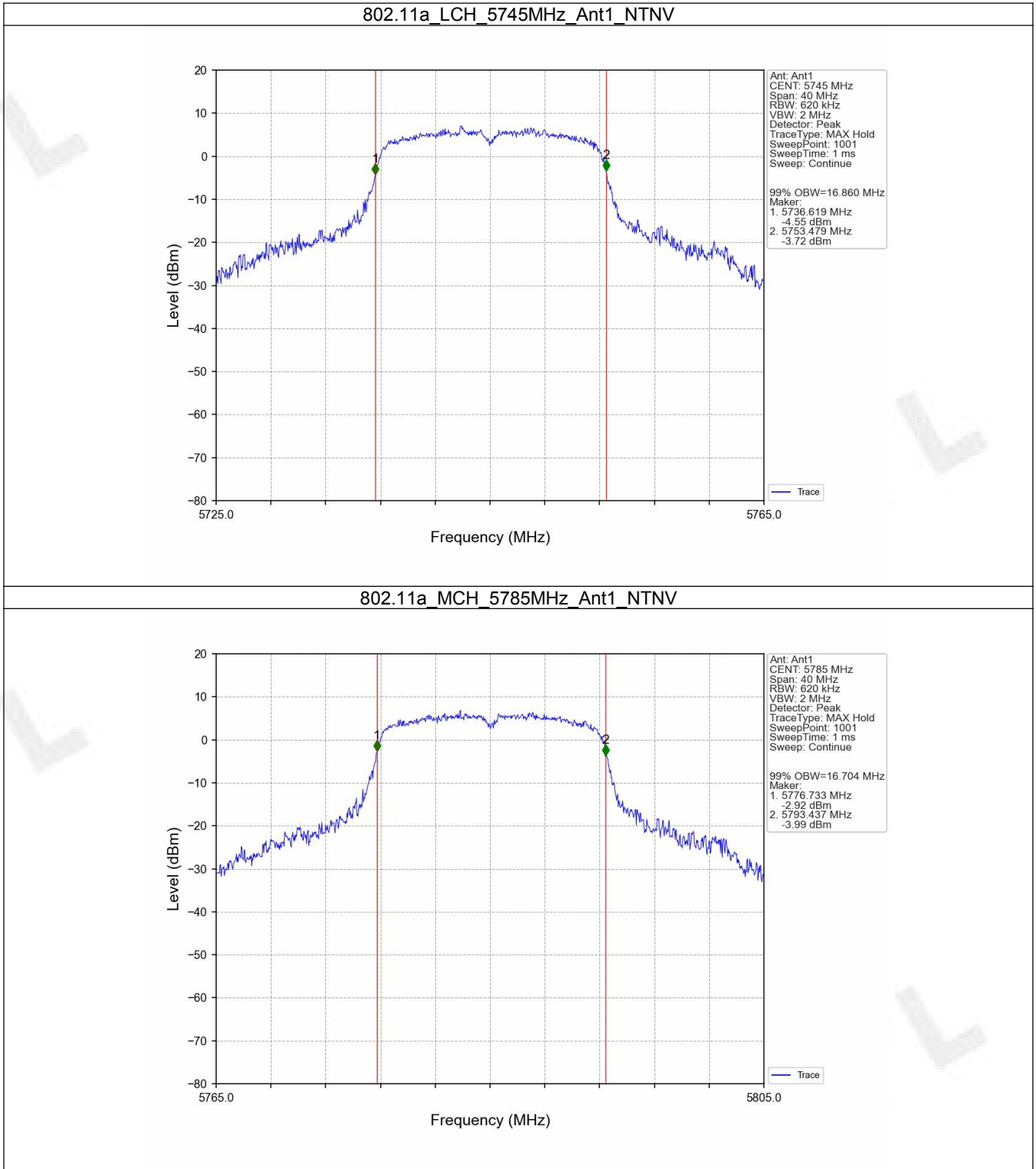
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	15.109	≥ 0.5	Pass
		5785	1	14.522	≥ 0.5	Pass
		5825	1	15.329	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	15.171	≥ 0.5	Pass
		5785	1	15.027	≥ 0.5	Pass
		5825	1	15.176	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	35.128	≥ 0.5	Pass
		5795	1	32.668	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	14.025	≥ 0.5	Pass
		5785	1	15.109	≥ 0.5	Pass
		5825	1	14.180	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	33.860	≥ 0.5	Pass
		5795	1	35.078	≥ 0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.081	≥ 0.5	Pass

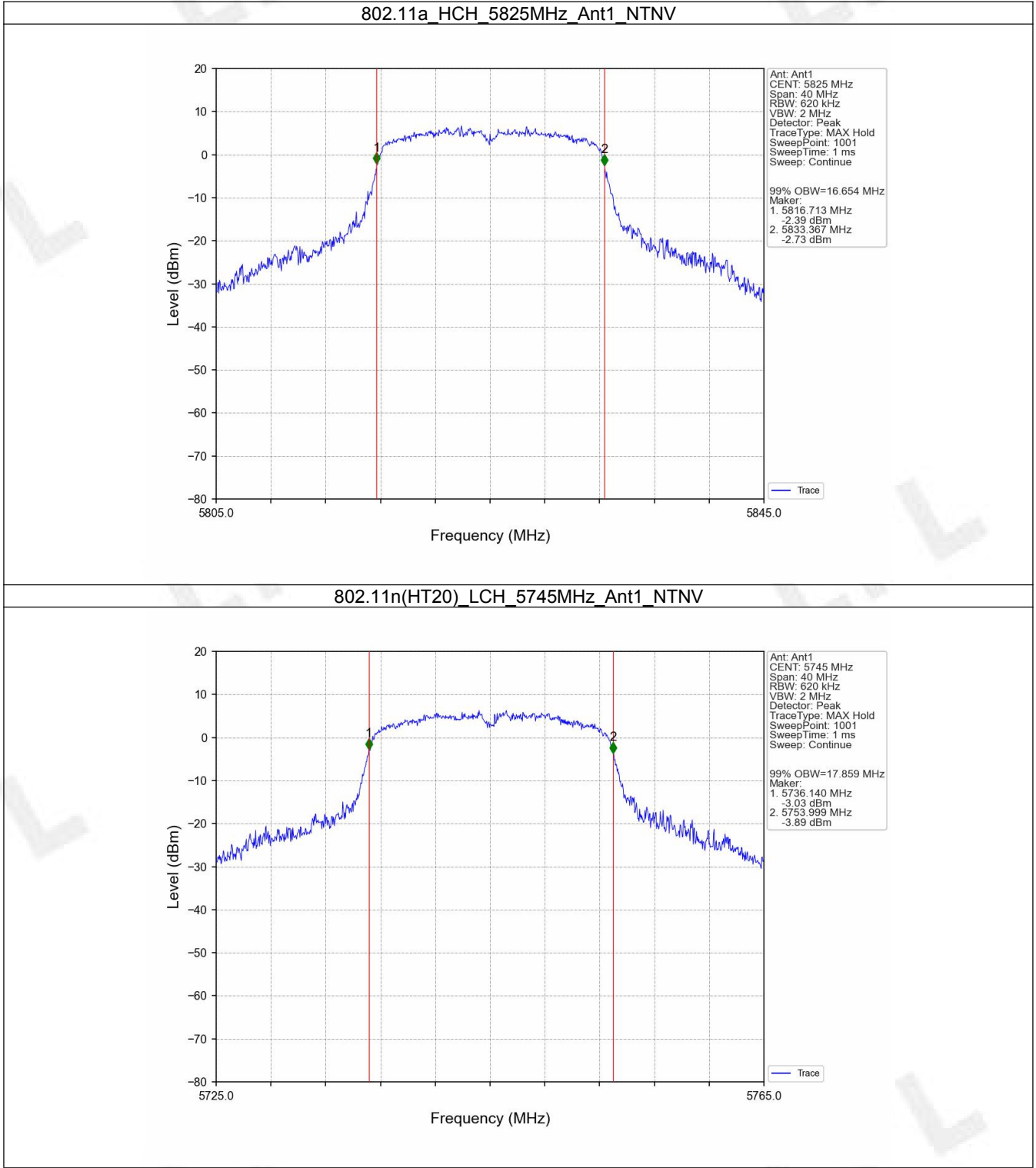
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2.2 Test Graph

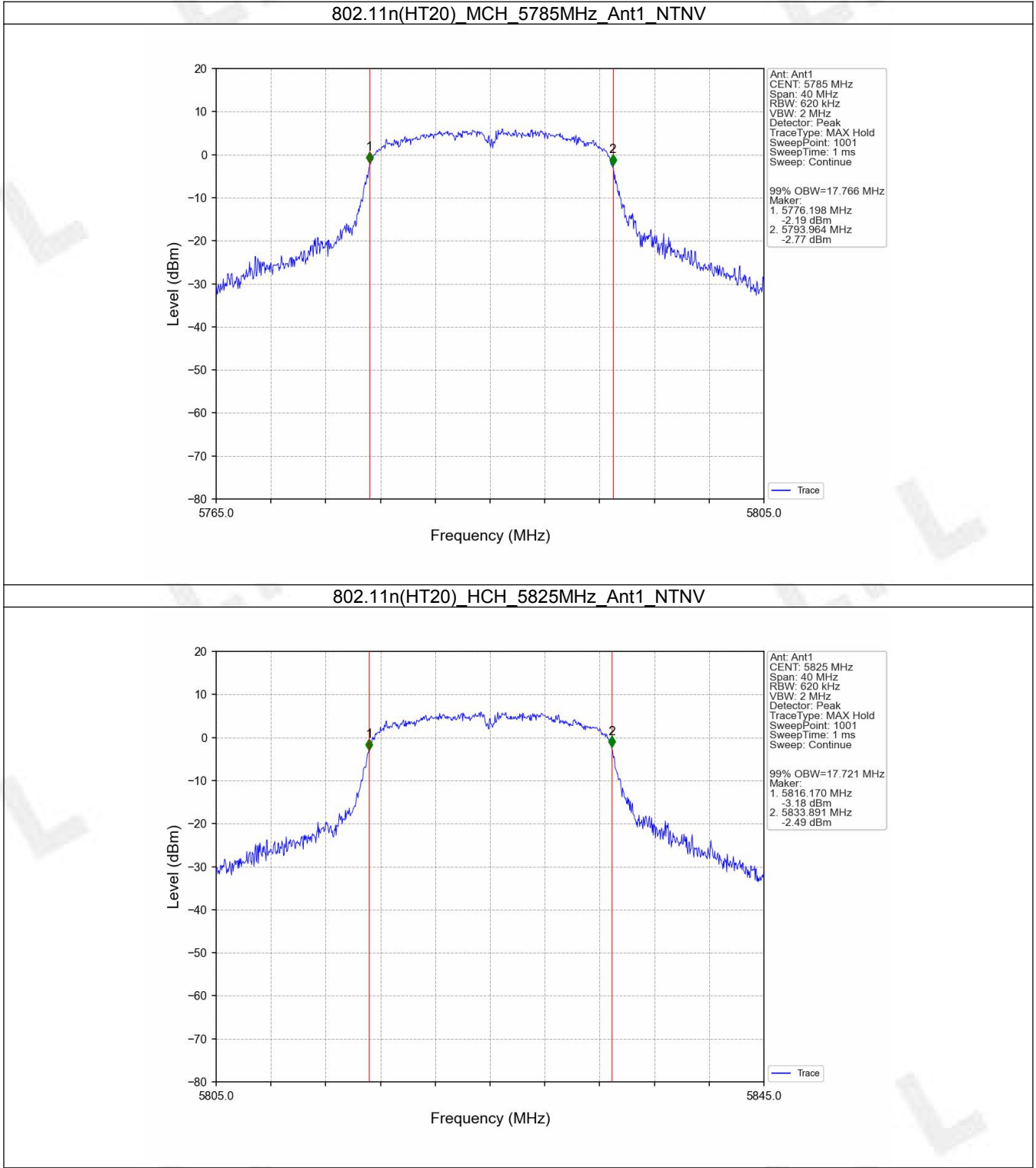
2.2.1 OBW



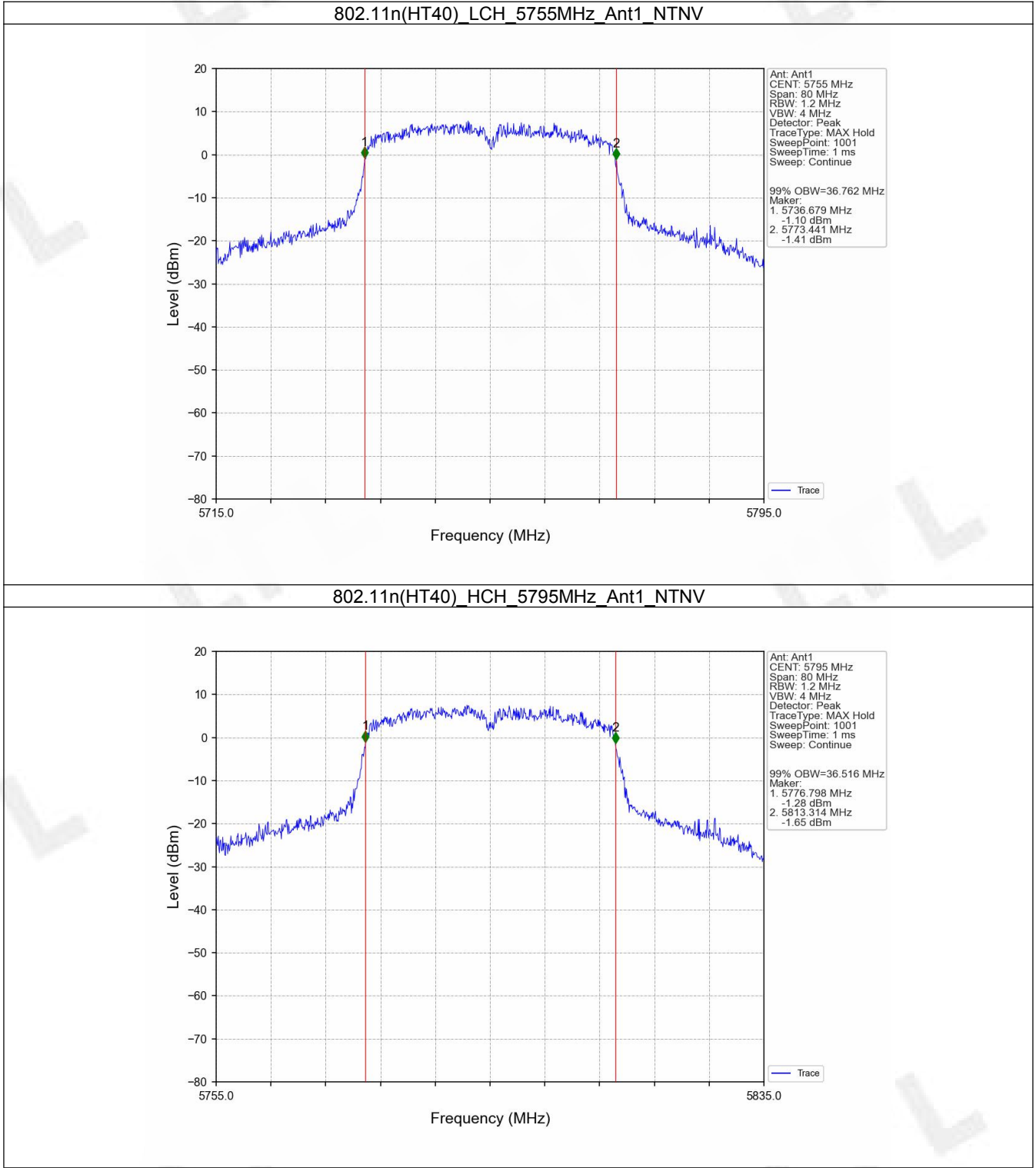
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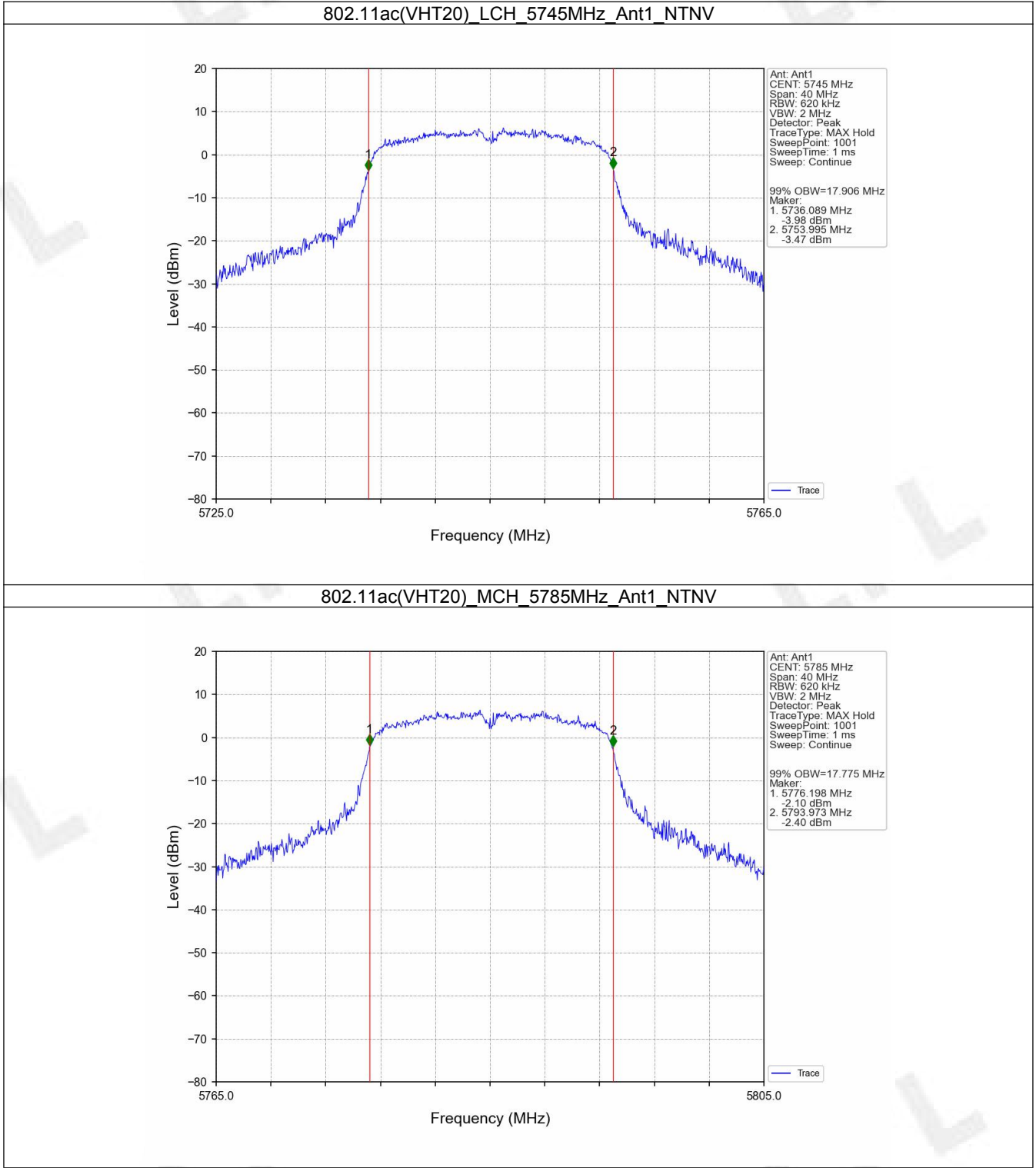
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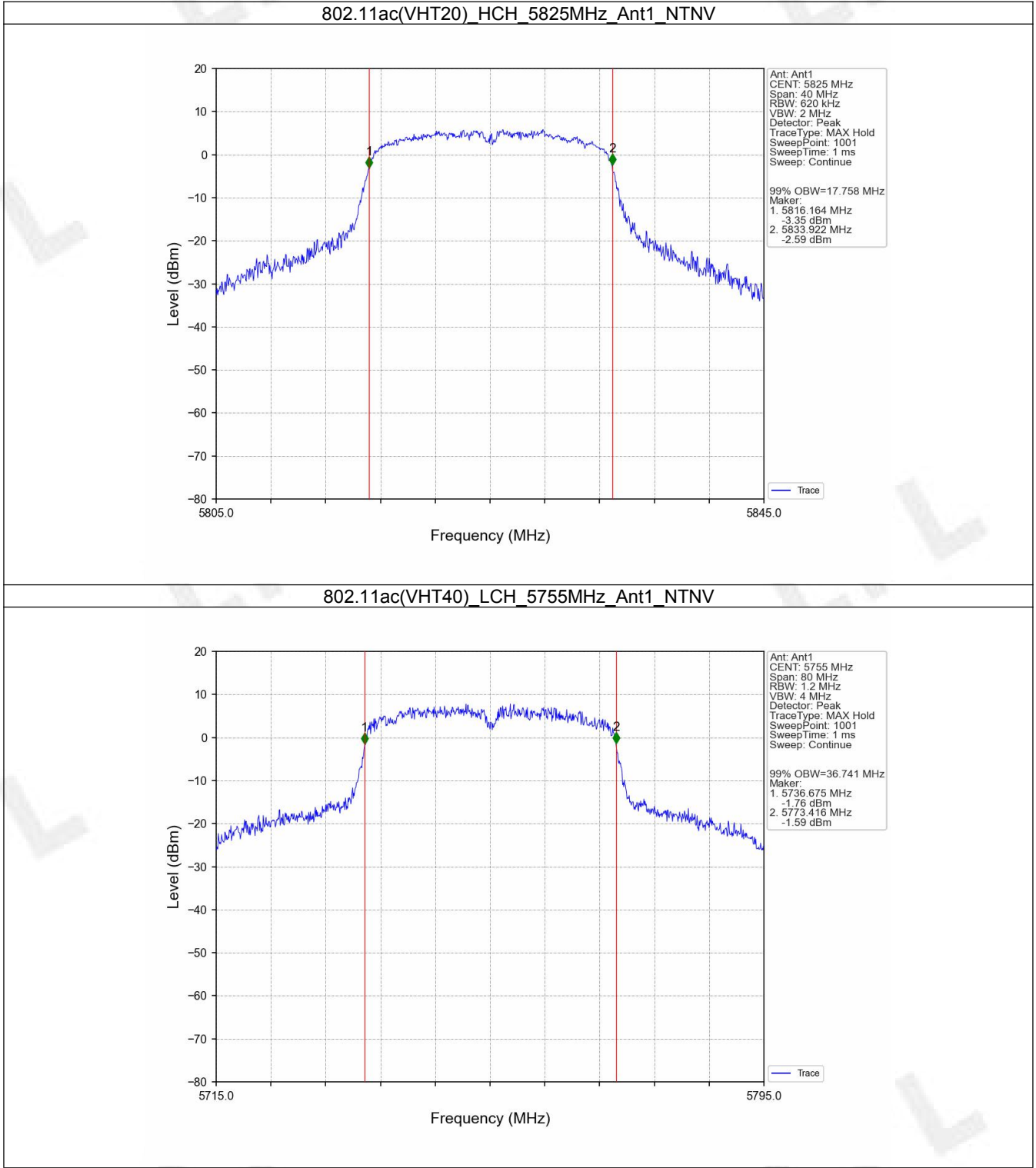
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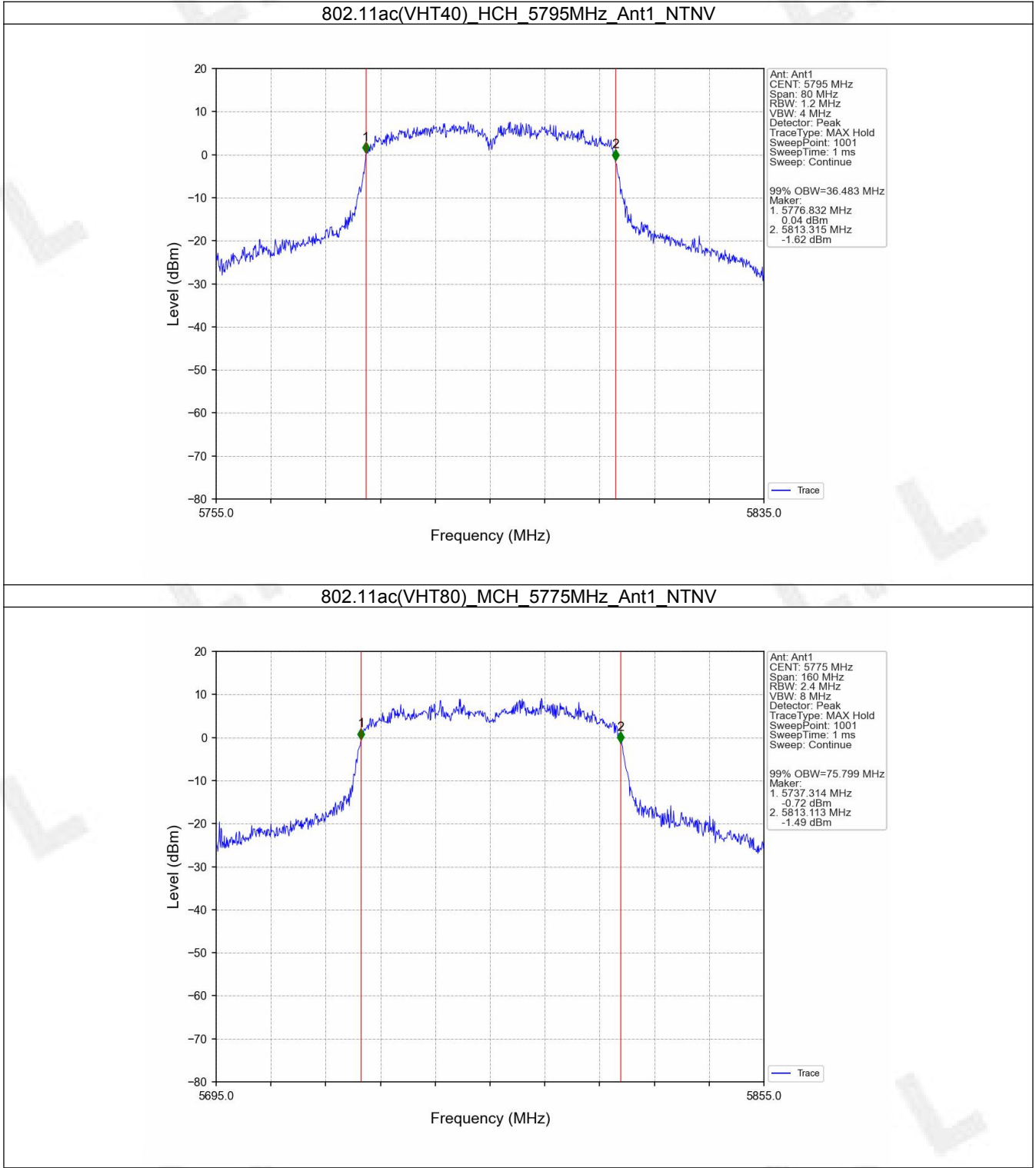
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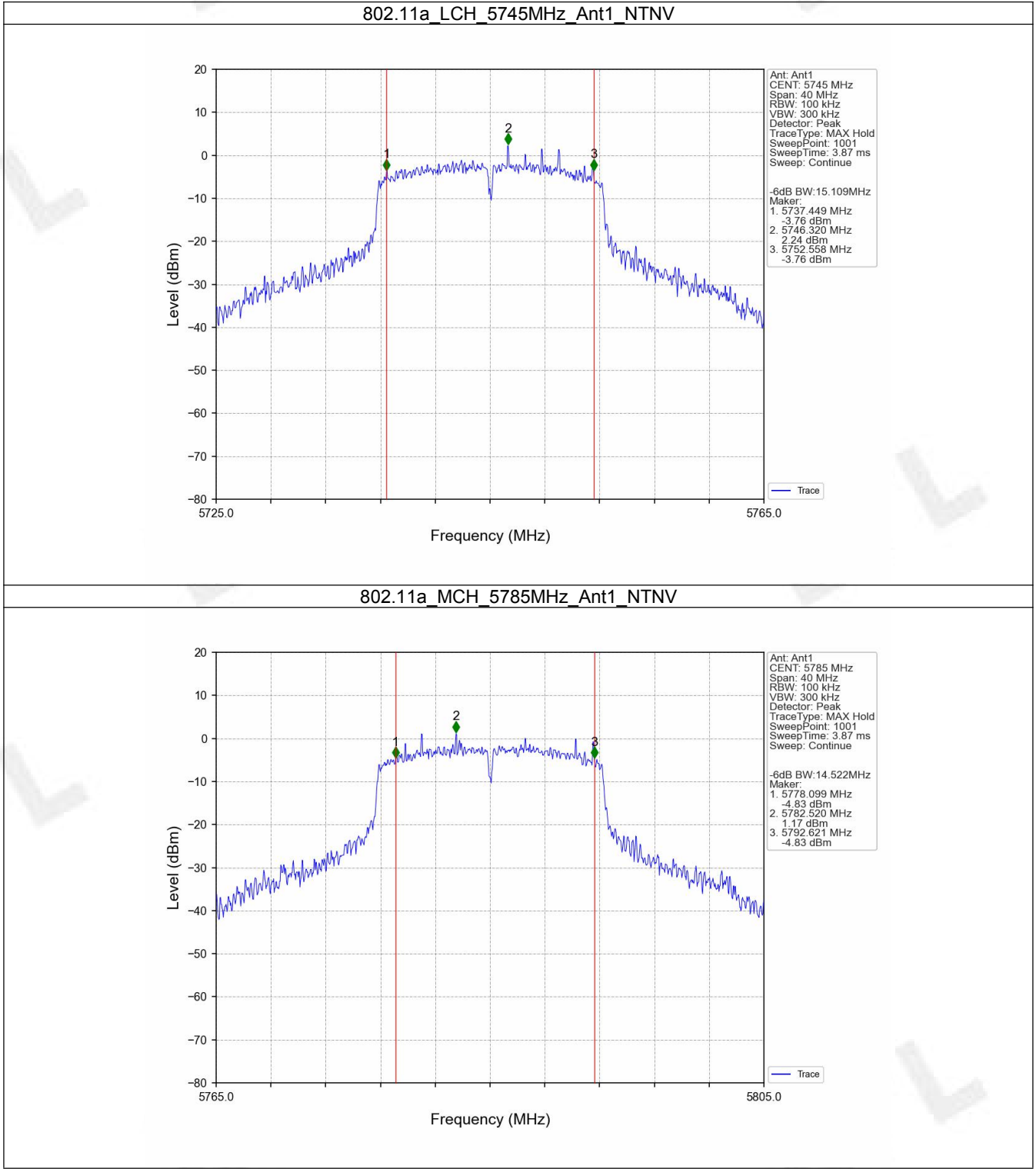


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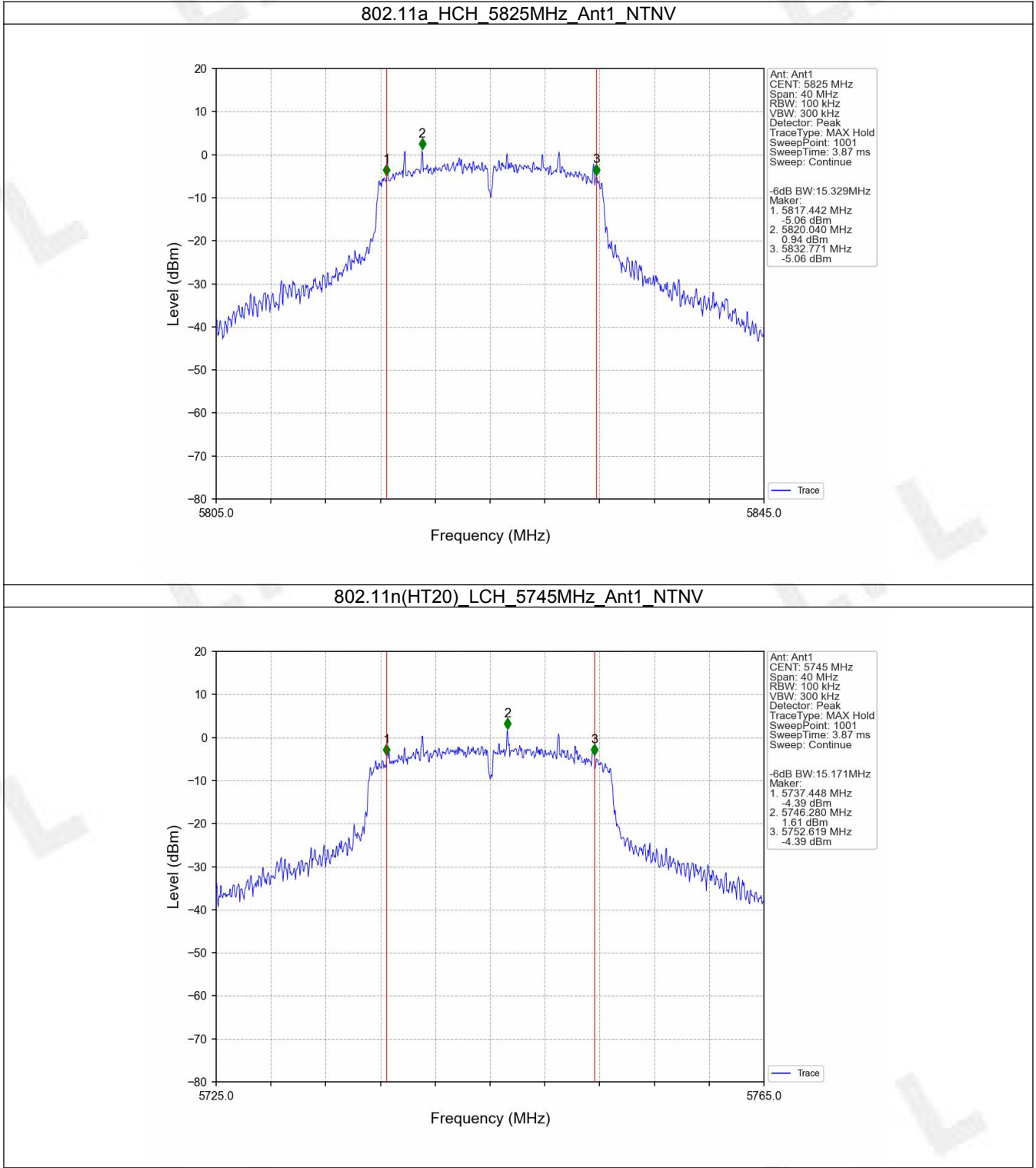


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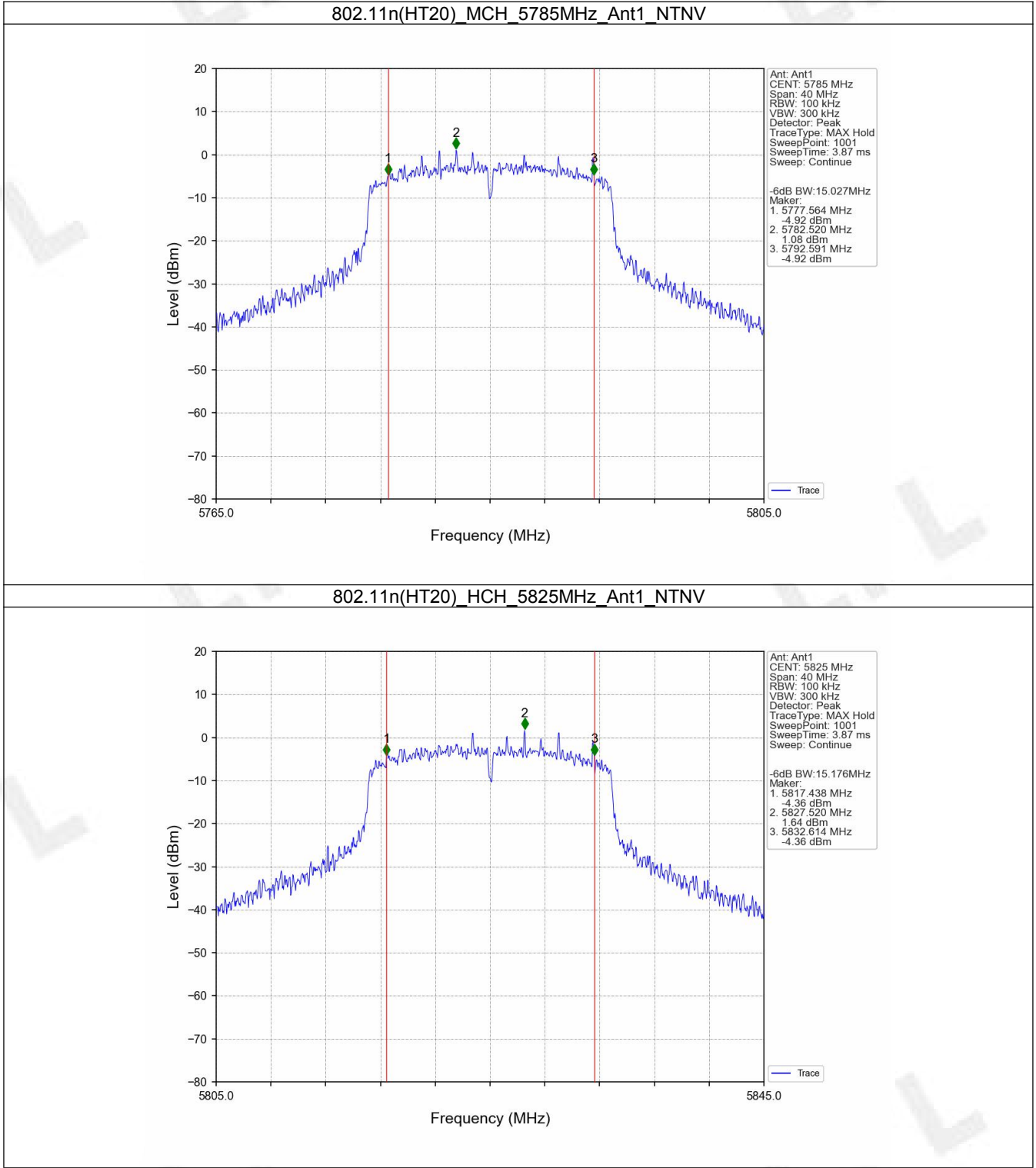
2.2.2 6dB BW



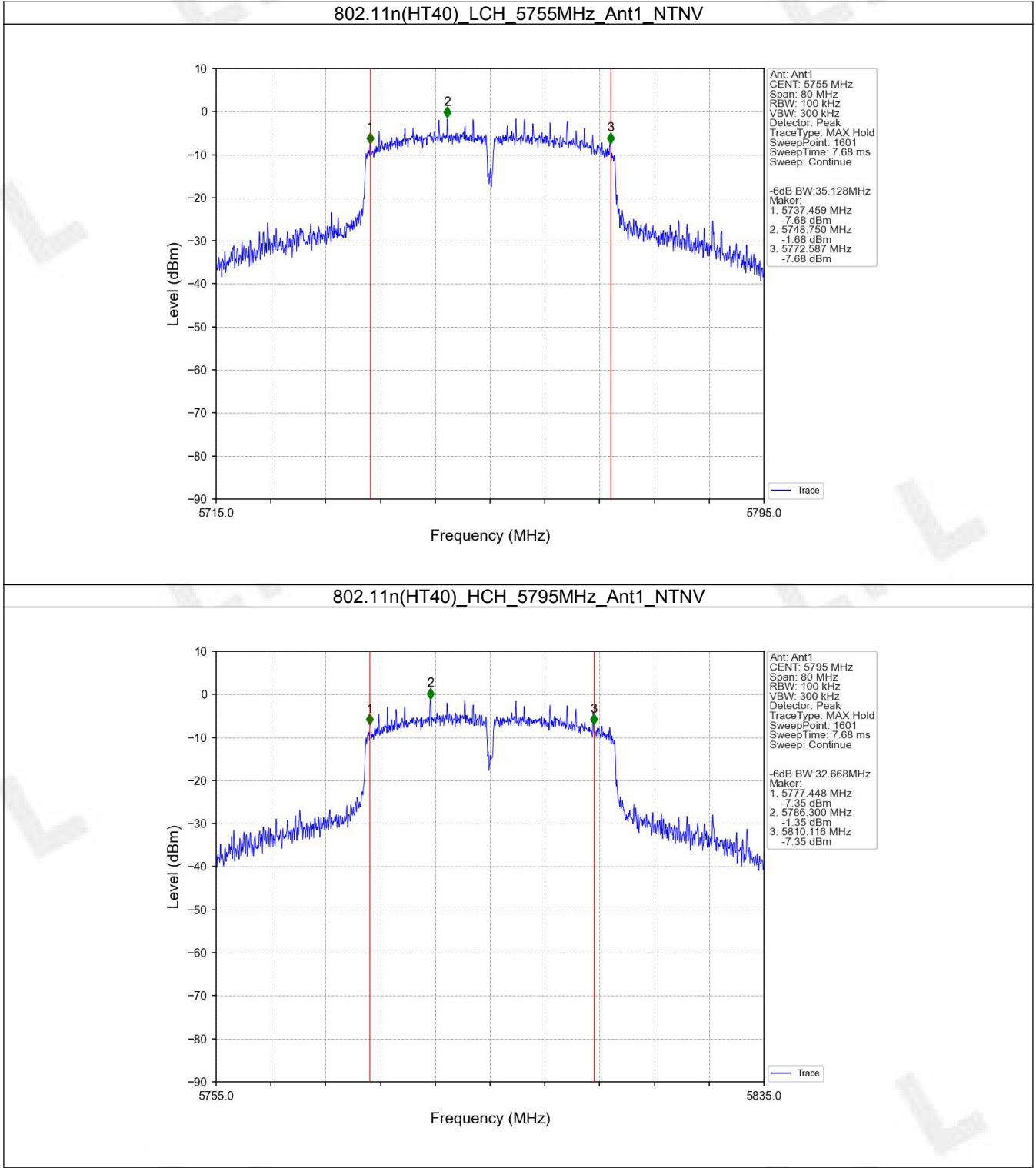
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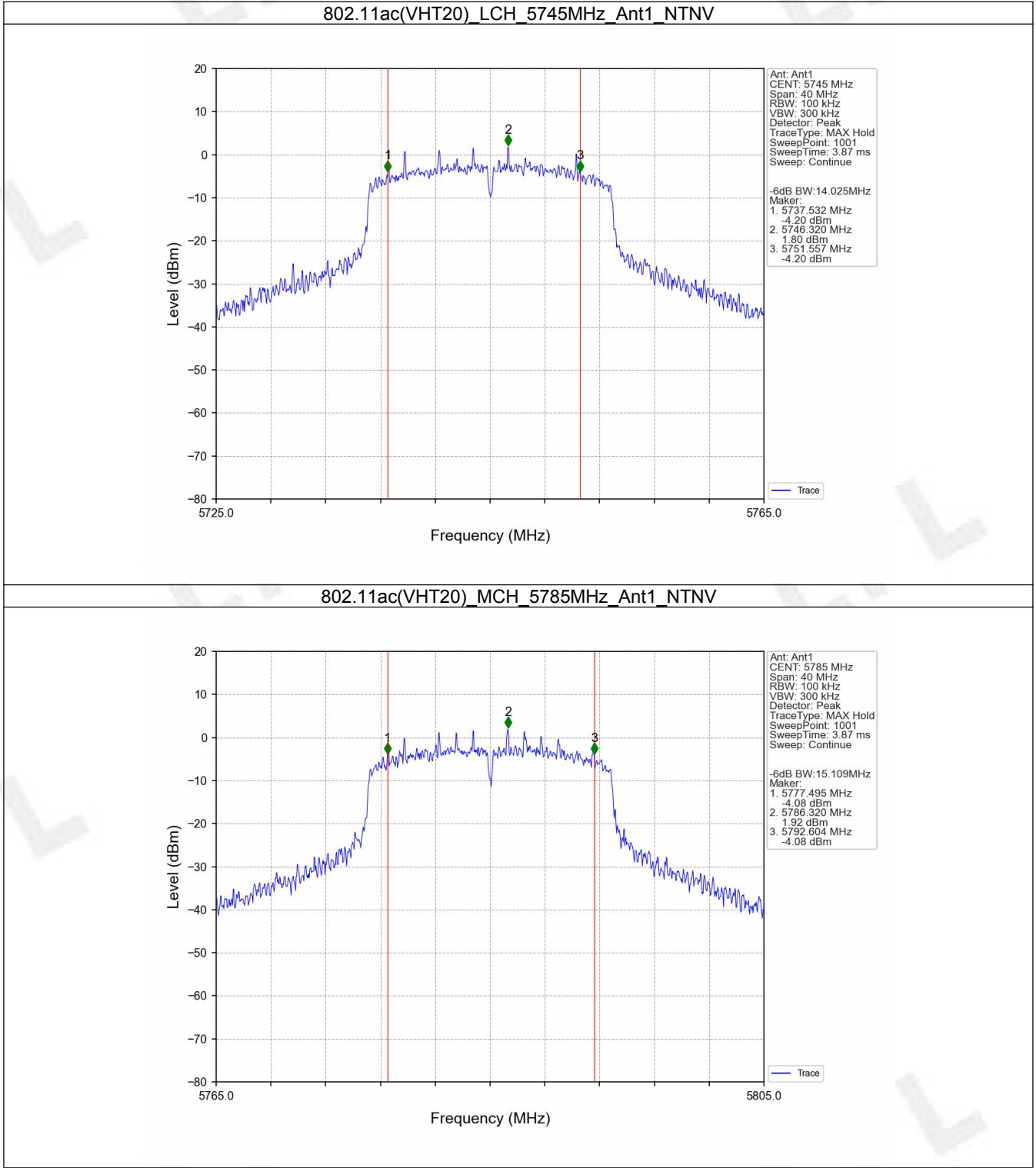
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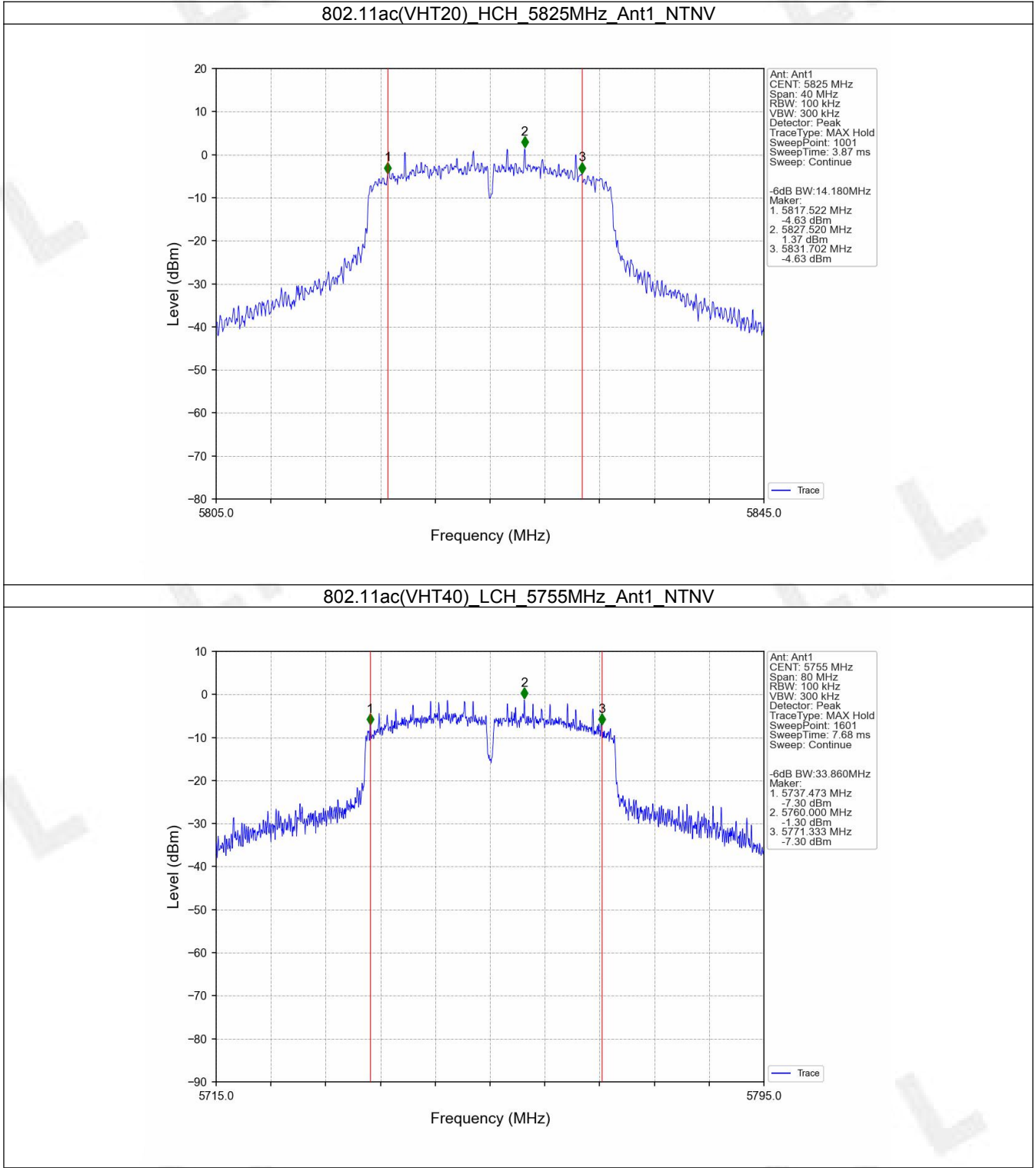
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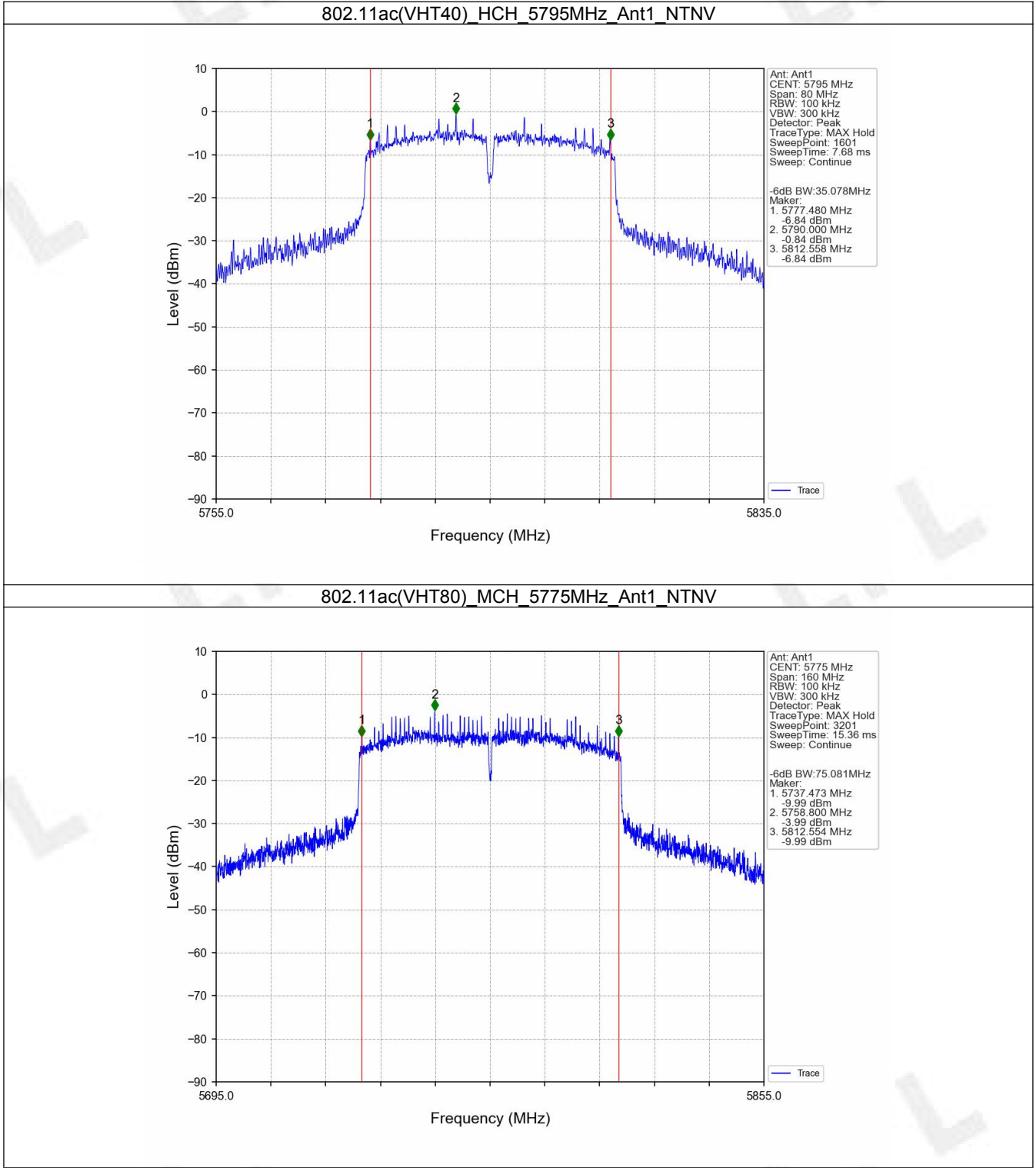
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FCCID: 2BQV3-AL16



FCCID: 2BQV3-AL16

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	5745	11.63	<=30	Pass
		5785	11.62	<=30	Pass
		5825	12.14	<=30	Pass
802.11n (HT20)	SISO	5745	11.25	<=30	Pass
		5785	11.56	<=30	Pass
		5825	11.96	<=30	Pass
802.11n (HT40)	SISO	5755	11.64	<=30	Pass
		5795	12.13	<=30	Pass
802.11ac (VHT20)	SISO	5745	11.18	<=30	Pass
		5785	11.40	<=30	Pass
		5825	12.06	<=30	Pass
802.11ac (VHT40)	SISO	5755	11.85	<=30	Pass
		5795	12.15	<=30	Pass
802.11ac (VHT80)	SISO	5775	11.42	<=30	Pass

Note1: Antenna Gain: Ant1: 5.30dBi;

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4. Maximum Power Spectral Density**4.1 Test Result****4.1.1 PSD-Band3**

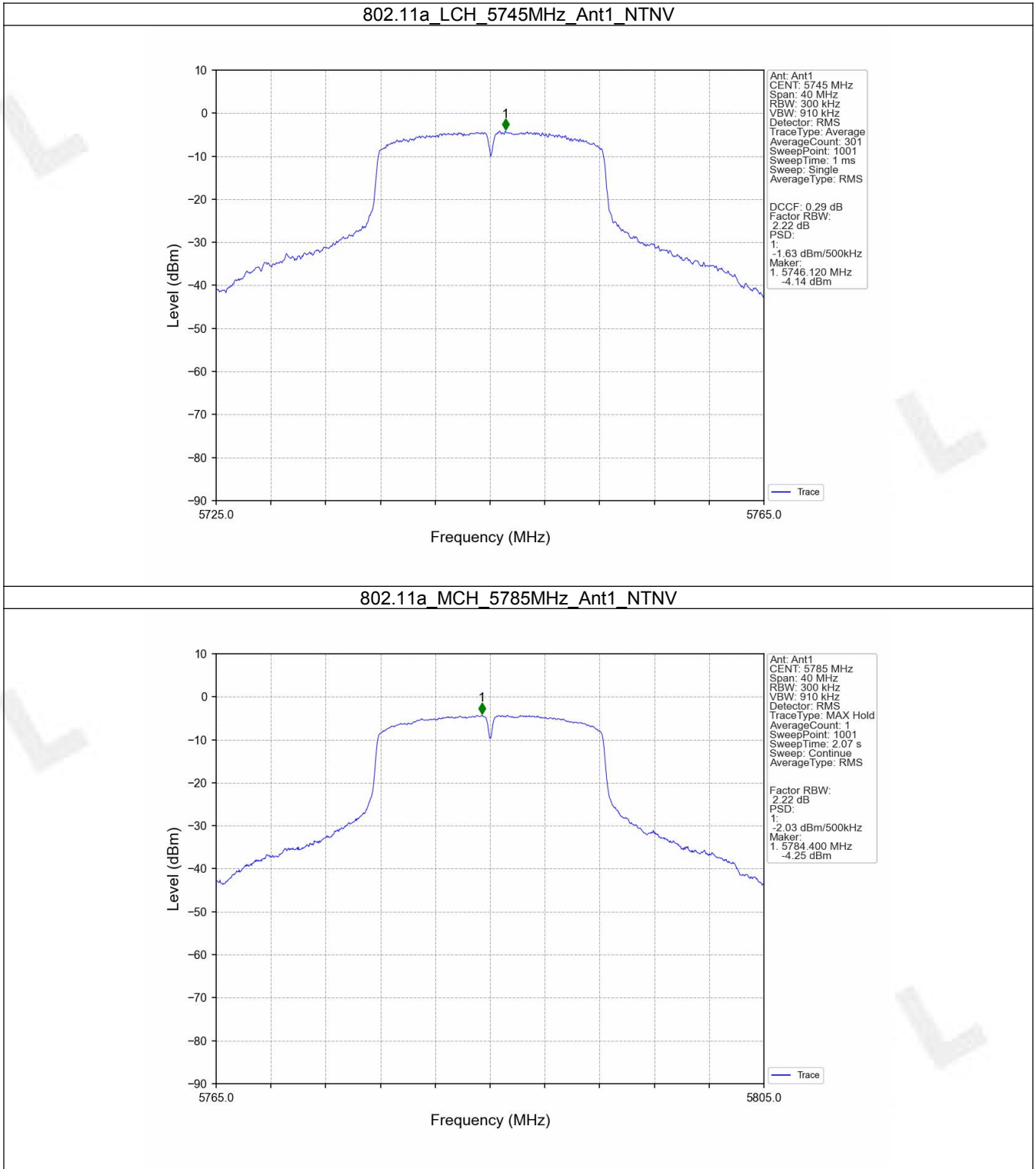
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	-1.63	<=30	Pass
		5785	-2.03	<=30	Pass
		5825	-1.53	<=30	Pass
802.11n (HT20)	SISO	5745	-2.69	<=30	Pass
		5785	-2.19	<=30	Pass
		5825	-1.97	<=30	Pass
802.11n (HT40)	SISO	5755	-5.29	<=30	Pass
		5795	-4.94	<=30	Pass
802.11ac (VHT20)	SISO	5745	-2.76	<=30	Pass
		5785	-2.45	<=30	Pass
		5825	-1.91	<=30	Pass
802.11ac (VHT40)	SISO	5755	-5.24	<=30	Pass
		5795	-4.90	<=30	Pass
802.11ac (VHT80)	SISO	5775	-8.55	<=30	Pass

Note1: Antenna Gain: Ant1: 5.30dBi;

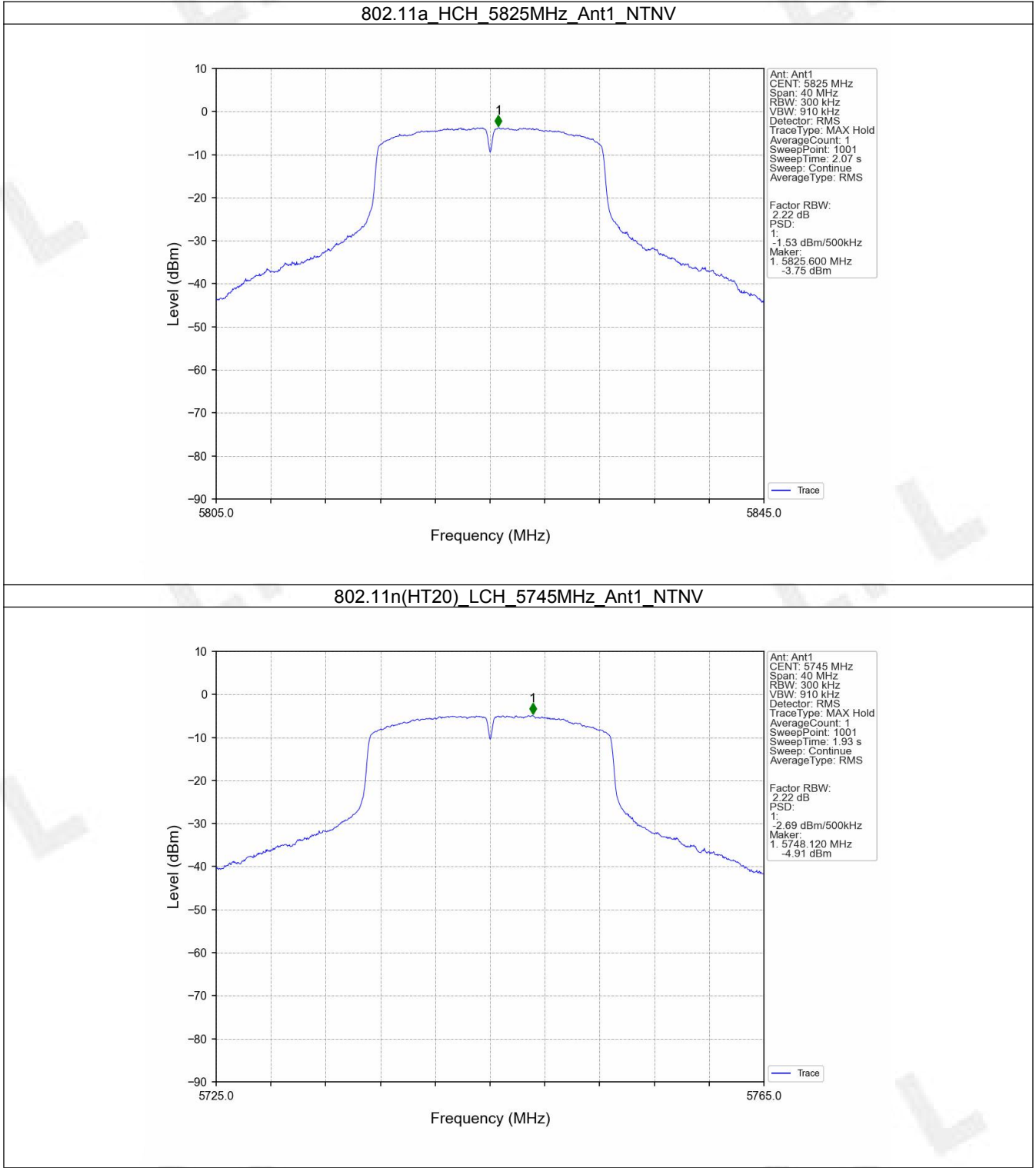
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4.2 Test Graph

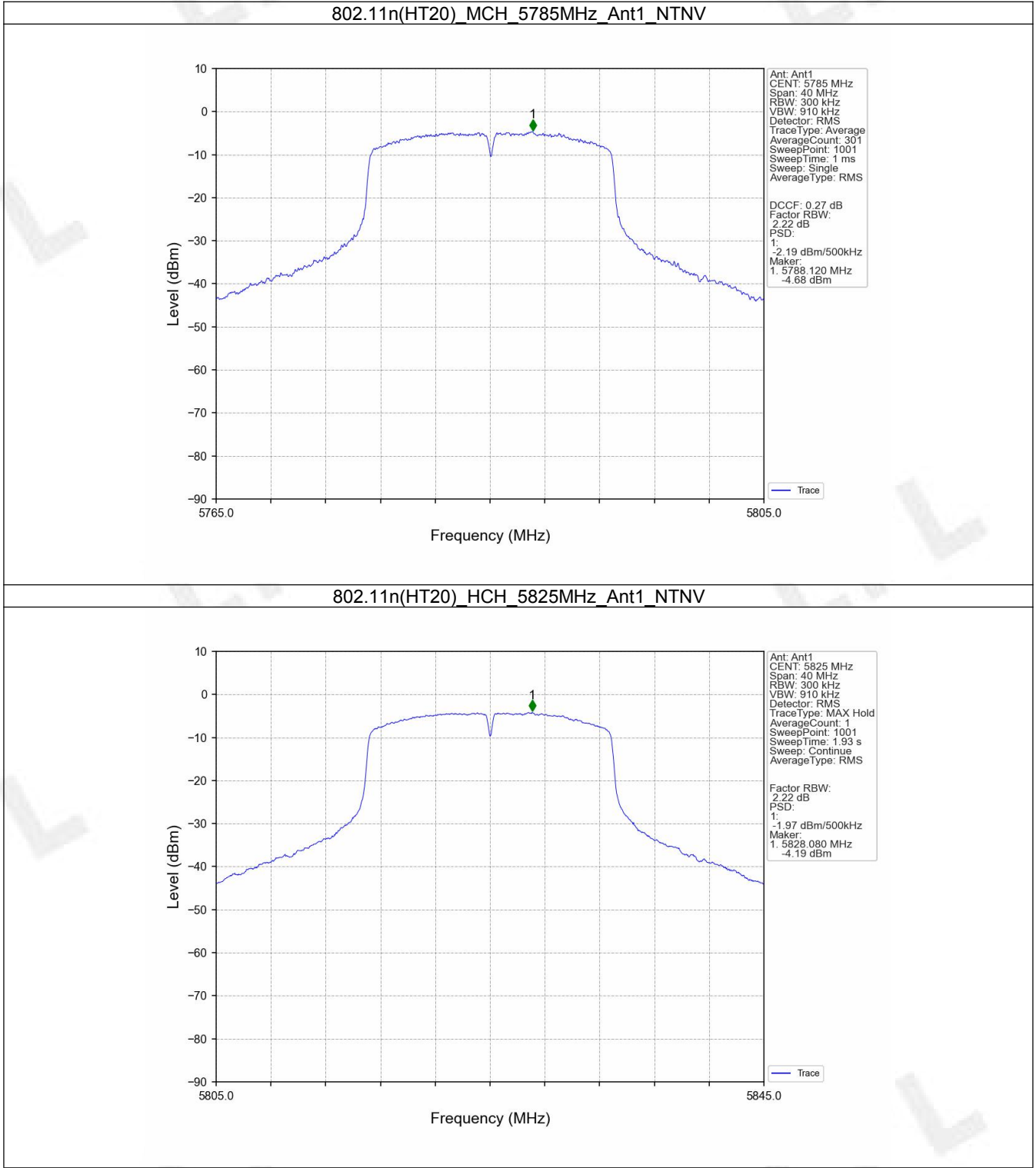
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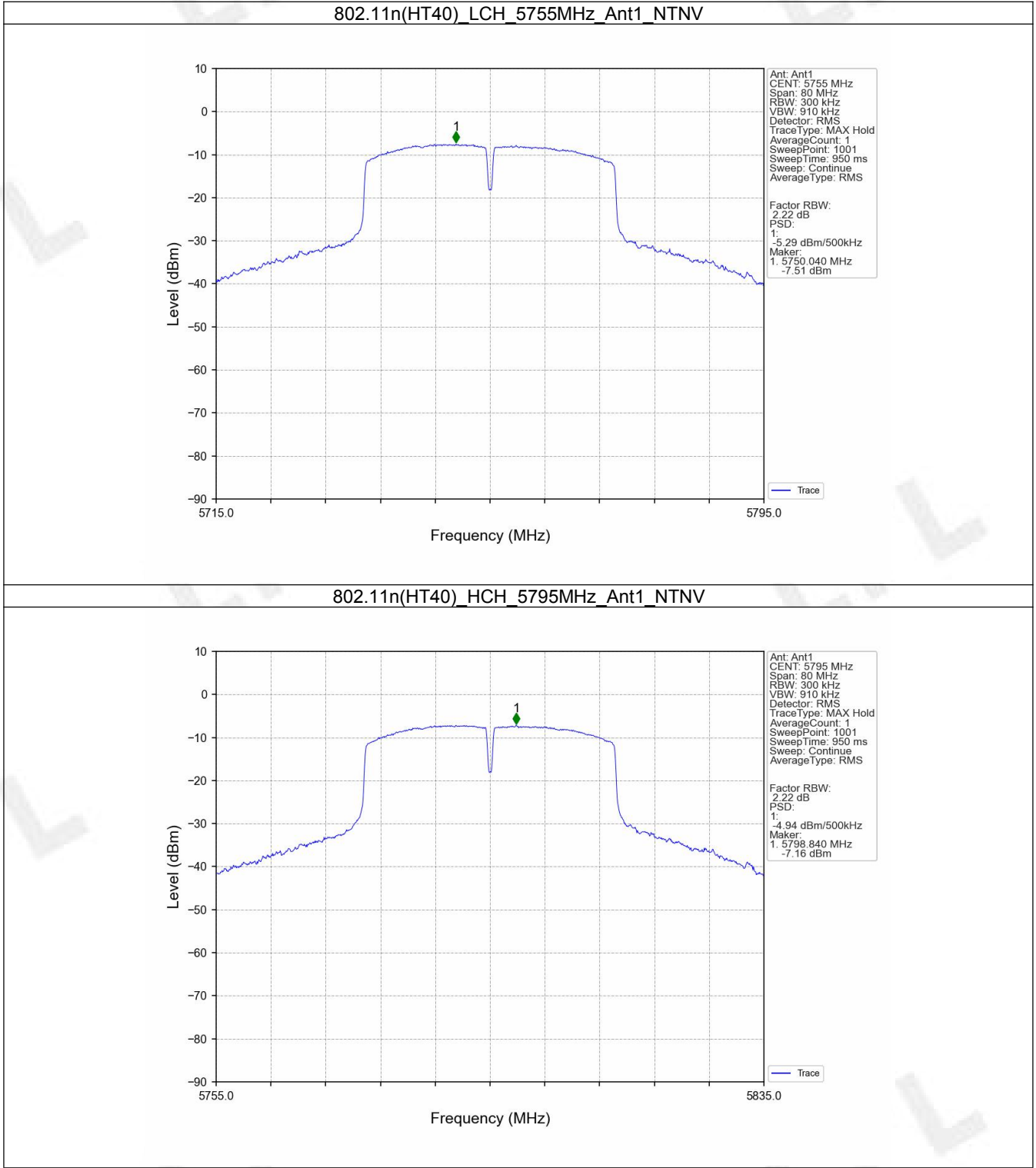
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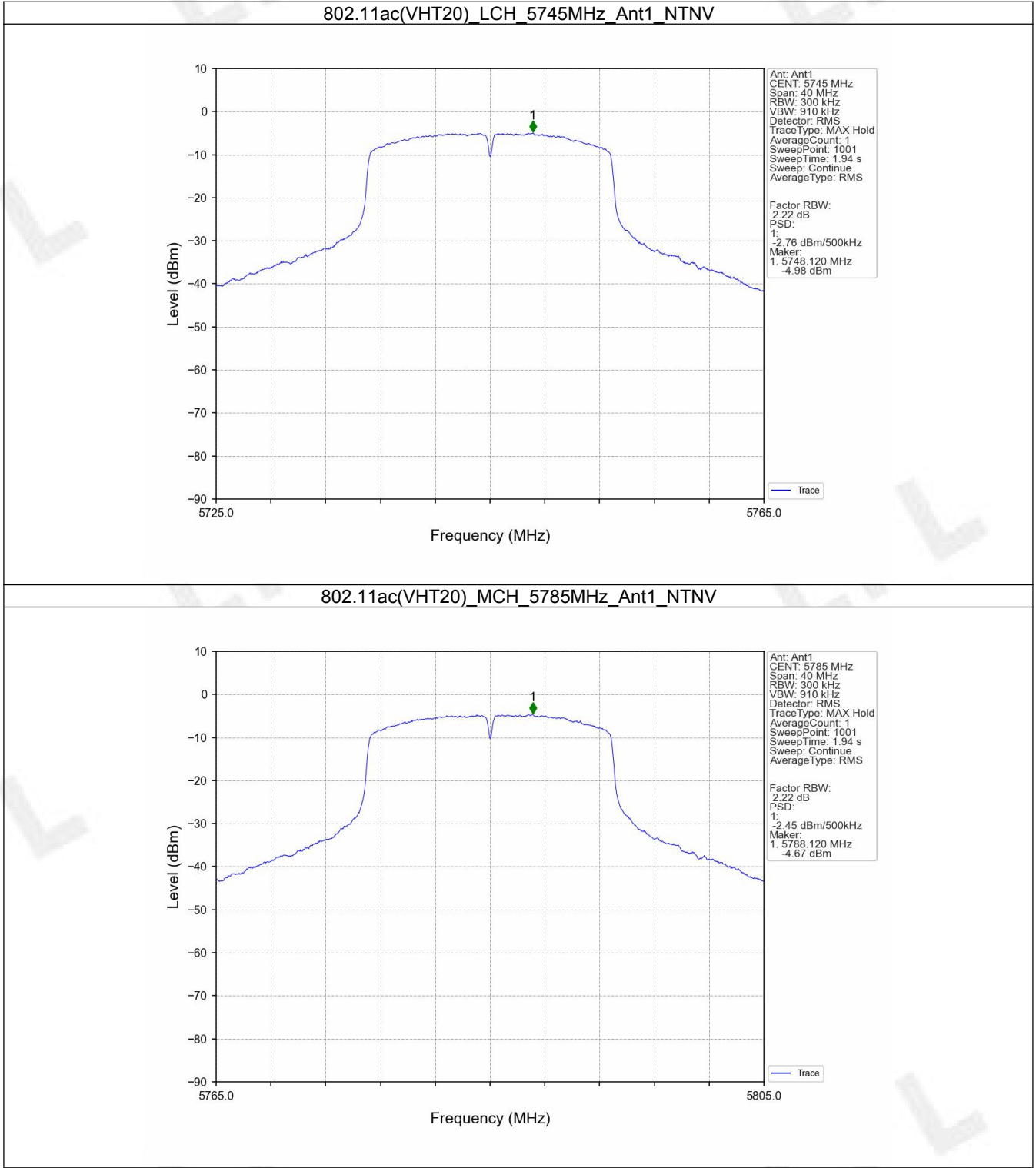
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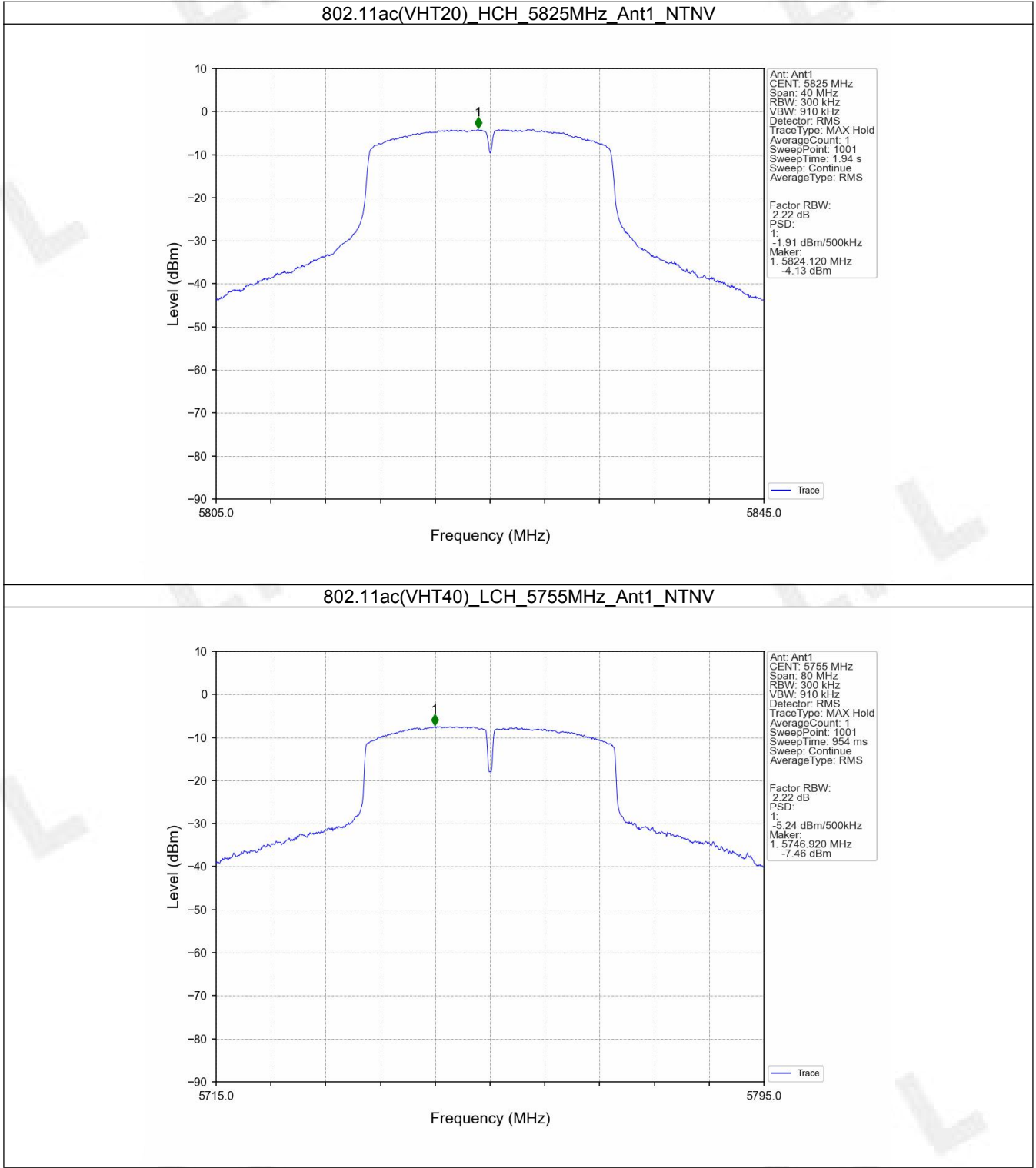
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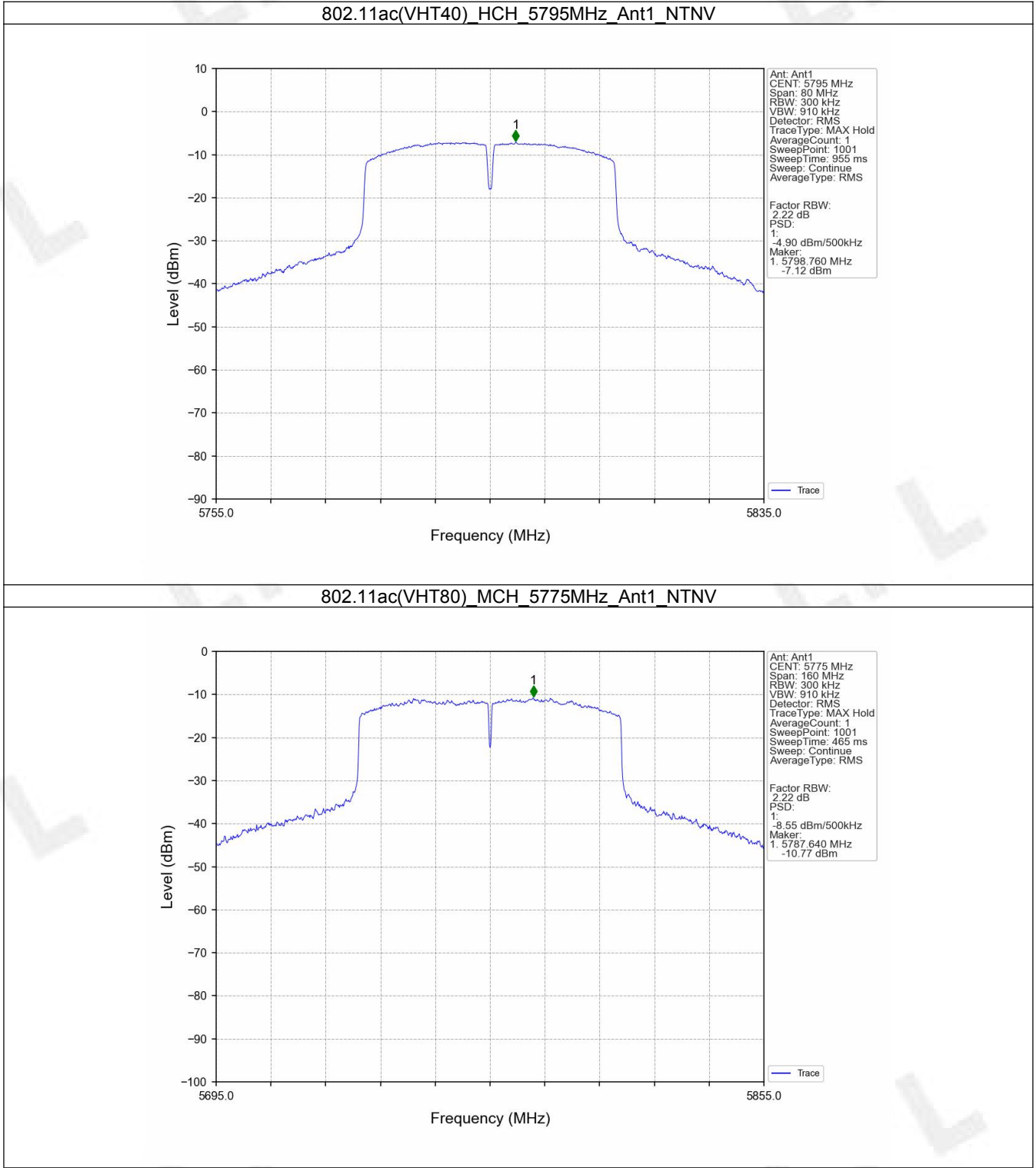
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5. Frequency Stability**5.1 Test Result****5.1.1 Ant1**

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
Carrier Wave	SISO	5745	20	102	5745.023	5725 to 5850	Pass
				120	5745.023	5725 to 5850	Pass
				138	5745.023	5725 to 5850	Pass
			-30	120	5745.023	5725 to 5850	Pass
			-20	120	5745.023	5725 to 5850	Pass
			-10	120	5745.023	5725 to 5850	Pass
			0	120	5745.023	5725 to 5850	Pass
			10	120	5745.023	5725 to 5850	Pass
			30	120	5745.023	5725 to 5850	Pass
			40	120	5745.023	5725 to 5850	Pass
			50	120	5745.023	5725 to 5850	Pass
		5785	20	102	5785.022	5725 to 5850	Pass
				120	5785.022	5725 to 5850	Pass
				138	5785.022	5725 to 5850	Pass
			-30	120	5785.022	5725 to 5850	Pass
			-20	120	5785.022	5725 to 5850	Pass
			-10	120	5785.022	5725 to 5850	Pass
			0	120	5785.022	5725 to 5850	Pass
			10	120	5785.022	5725 to 5850	Pass
			30	120	5785.022	5725 to 5850	Pass
			40	120	5785.022	5725 to 5850	Pass
			50	120	5785.022	5725 to 5850	Pass
		5825	20	102	5825.021	5725 to 5850	Pass
				120	5825.021	5725 to 5850	Pass
				138	5825.021	5725 to 5850	Pass
			-30	120	5825.021	5725 to 5850	Pass
			-20	120	5825.021	5725 to 5850	Pass
			-10	120	5825.021	5725 to 5850	Pass
			0	120	5825.021	5725 to 5850	Pass
			10	120	5825.021	5725 to 5850	Pass
			30	120	5825.021	5725 to 5850	Pass
			40	120	5825.021	5725 to 5850	Pass
			50	120	5825.021	5725 to 5850	Pass
		5755	20	102	5755.022	5725 to 5850	Pass
				120	5755.022	5725 to 5850	Pass
				138	5755.022	5725 to 5850	Pass
			-30	120	5755.022	5725 to 5850	Pass
			-20	120	5755.022	5725 to 5850	Pass
			-10	120	5755.022	5725 to 5850	Pass
			0	120	5755.022	5725 to 5850	Pass
			10	120	5755.022	5725 to 5850	Pass
			30	120	5755.022	5725 to 5850	Pass
			40	120	5755.022	5725 to 5850	Pass
			50	120	5755.022	5725 to 5850	Pass
		5795	20	102	5795.022	5725 to 5850	Pass
				120	5795.022	5725 to 5850	Pass
				138	5795.022	5725 to 5850	Pass
			-30	120	5795.022	5725 to 5850	Pass
			-20	120	5795.021	5725 to 5850	Pass

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			-10	120	5795.021	5725 to 5850	Pass
			0	120	5795.021	5725 to 5850	Pass
			10	120	5795.021	5725 to 5850	Pass
			30	120	5795.021	5725 to 5850	Pass
			40	120	5795.021	5725 to 5850	Pass
			50	120	5795.021	5725 to 5850	Pass
		5775	20	102	5775.022	5725 to 5850	Pass
				120	5775.022	5725 to 5850	Pass
				138	5775.022	5725 to 5850	Pass
			-30	120	5775.022	5725 to 5850	Pass
			-20	120	5775.022	5725 to 5850	Pass
			-10	120	5775.022	5725 to 5850	Pass
			0	120	5775.022	5725 to 5850	Pass
			10	120	5775.022	5725 to 5850	Pass
			30	120	5775.022	5725 to 5850	Pass
			40	120	5775.021	5725 to 5850	Pass
			50	120	5775.022	5725 to 5850	Pass