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Annex for 5GHz Wi-Fi Band III

Test Report No.: CTL2604012071-WF03

FCCID: 2APQC-TIDE16

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1. Bandwidth

1.1 Test Result

1.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	16.540	/	Pass
		5785	1	16.561	/	Pass
		5825	1	16.559	/	Pass
802.11n (HT20)	SISO	5745	1	17.650	/	Pass
		5785	1	17.681	/	Pass
		5825	1	17.712	/	Pass
802.11n (HT40)	SISO	5755	1	36.553	/	Pass
		5795	1	36.593	/	Pass
802.11ac (VHT20)	SISO	5745	1	17.723	/	Pass
		5785	1	17.666	/	Pass
		5825	1	17.681	/	Pass
802.11ac (VHT40)	SISO	5755	1	36.614	/	Pass
		5795	1	36.733	/	Pass
802.11ac (VHT80)	SISO	5775	1	76.404	/	Pass

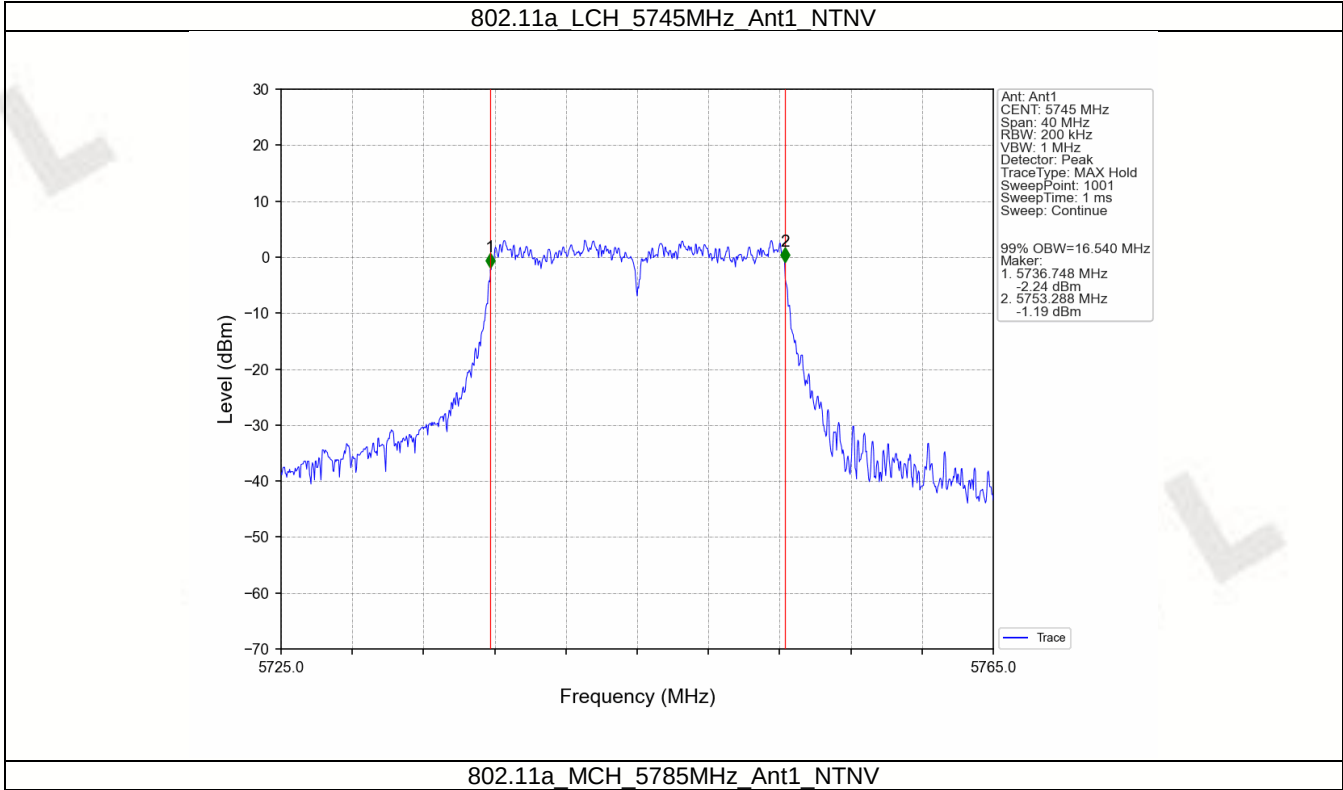
1.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	16.512	≥ 0.5	Pass
		5785	1	16.488	≥ 0.5	Pass
		5825	1	16.489	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	17.712	≥ 0.5	Pass
		5785	1	17.716	≥ 0.5	Pass
		5825	1	17.699	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	36.344	≥ 0.5	Pass
		5795	1	36.395	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	17.724	≥ 0.5	Pass
		5785	1	17.660	≥ 0.5	Pass
		5825	1	17.718	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	36.431	≥ 0.5	Pass
		5795	1	36.033	≥ 0.5	Pass
802.11ac (VHT80)	SISO	5775	1	76.222	≥ 0.5	Pass

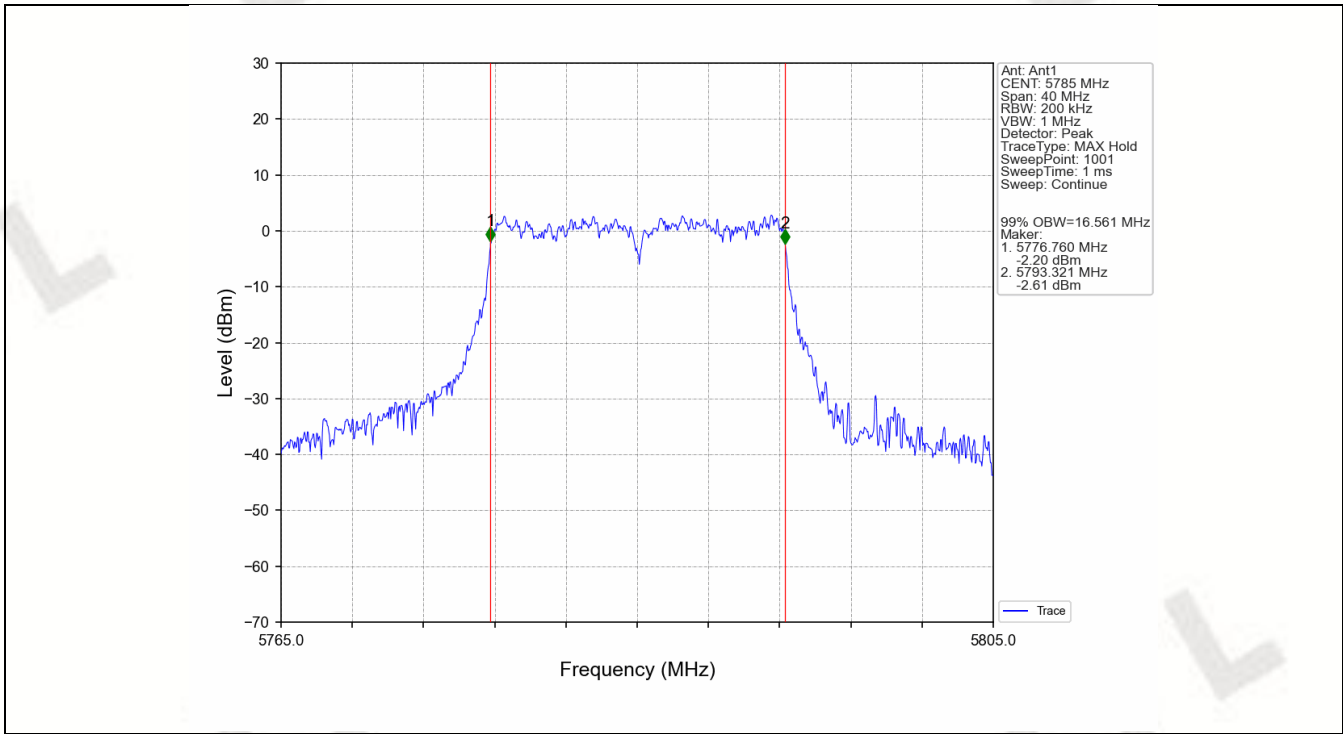
FCCID: 2APQC-TIDE16

1.2 Test Graph

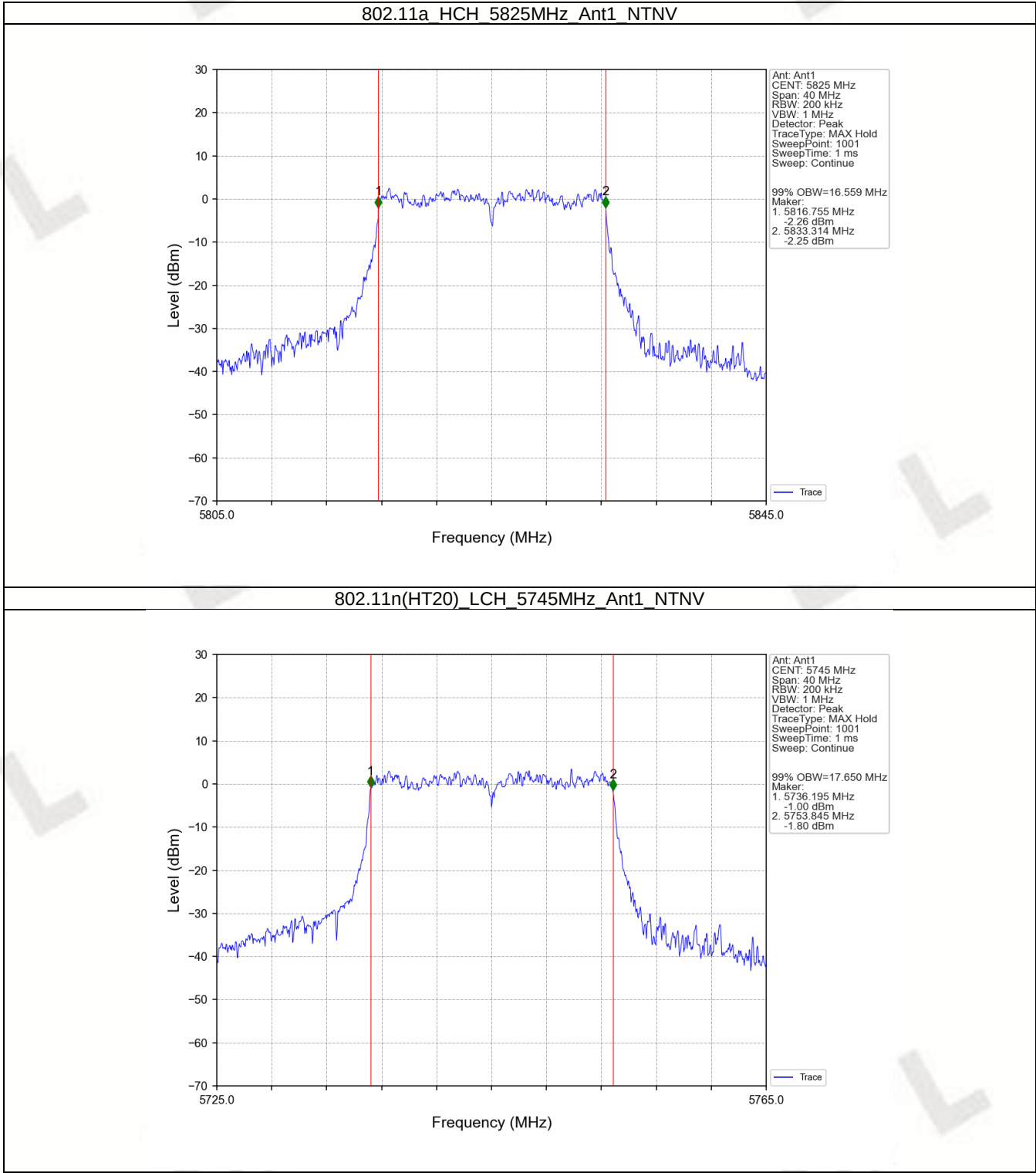
1.2.1 OBW



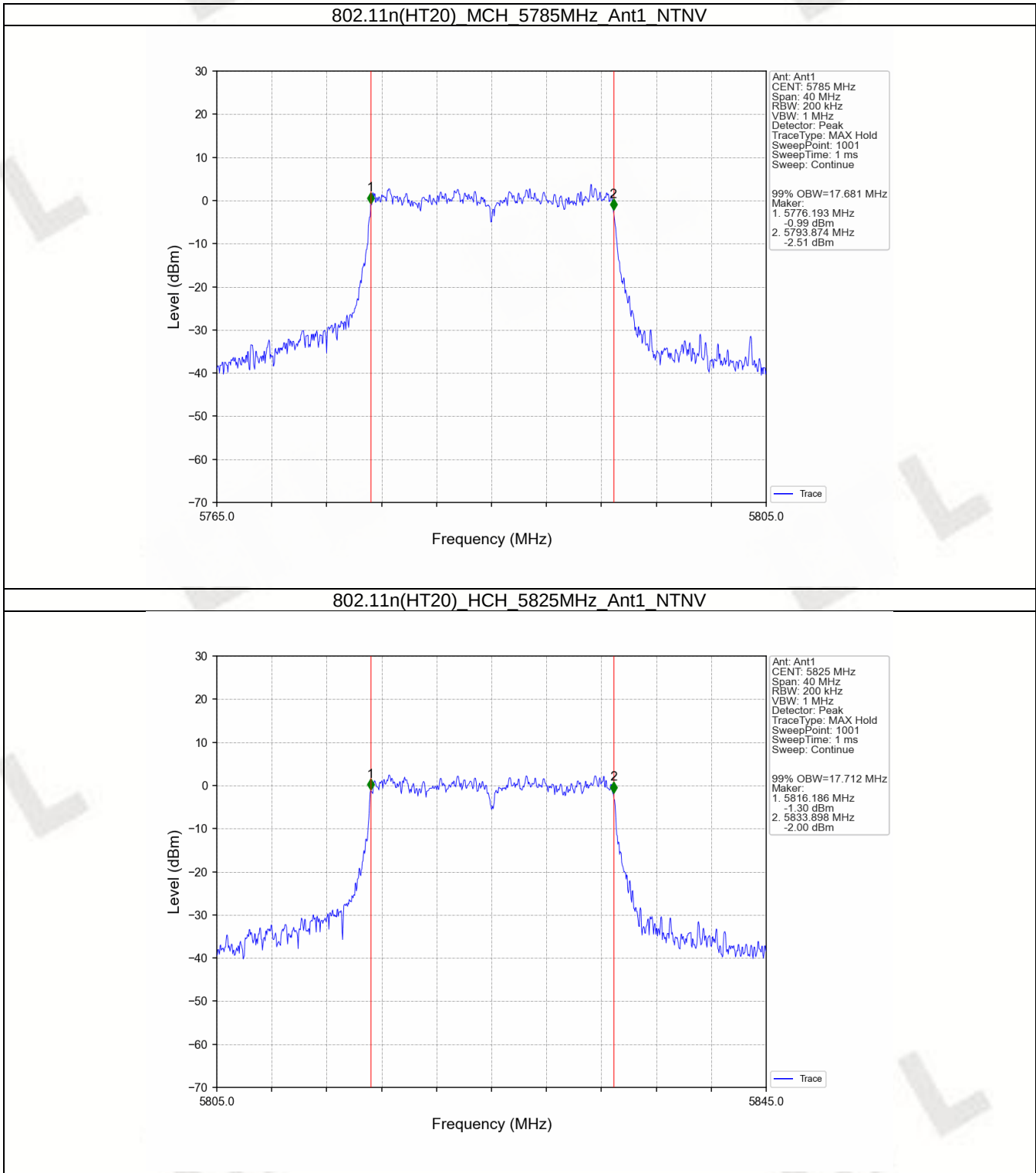
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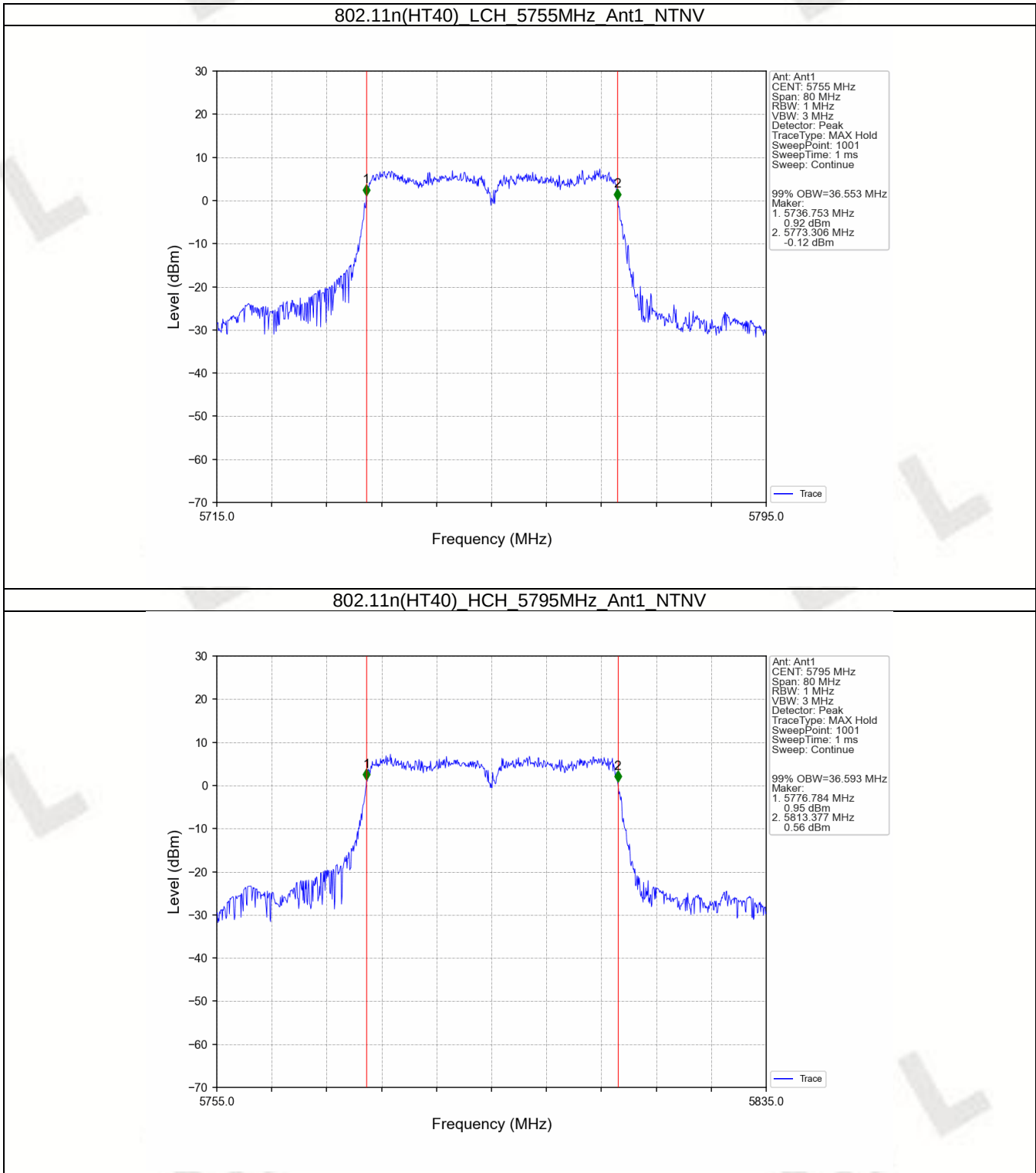
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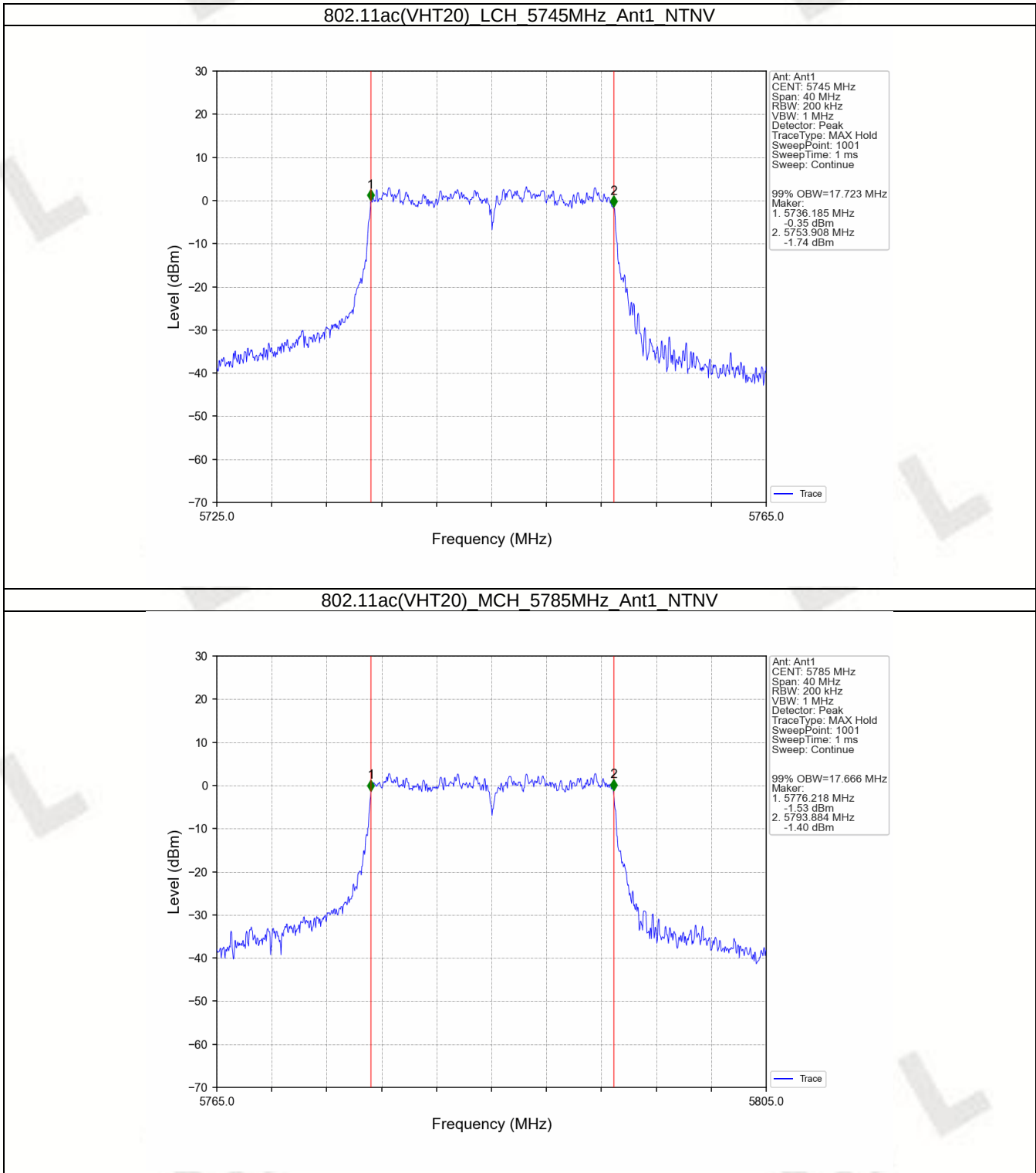
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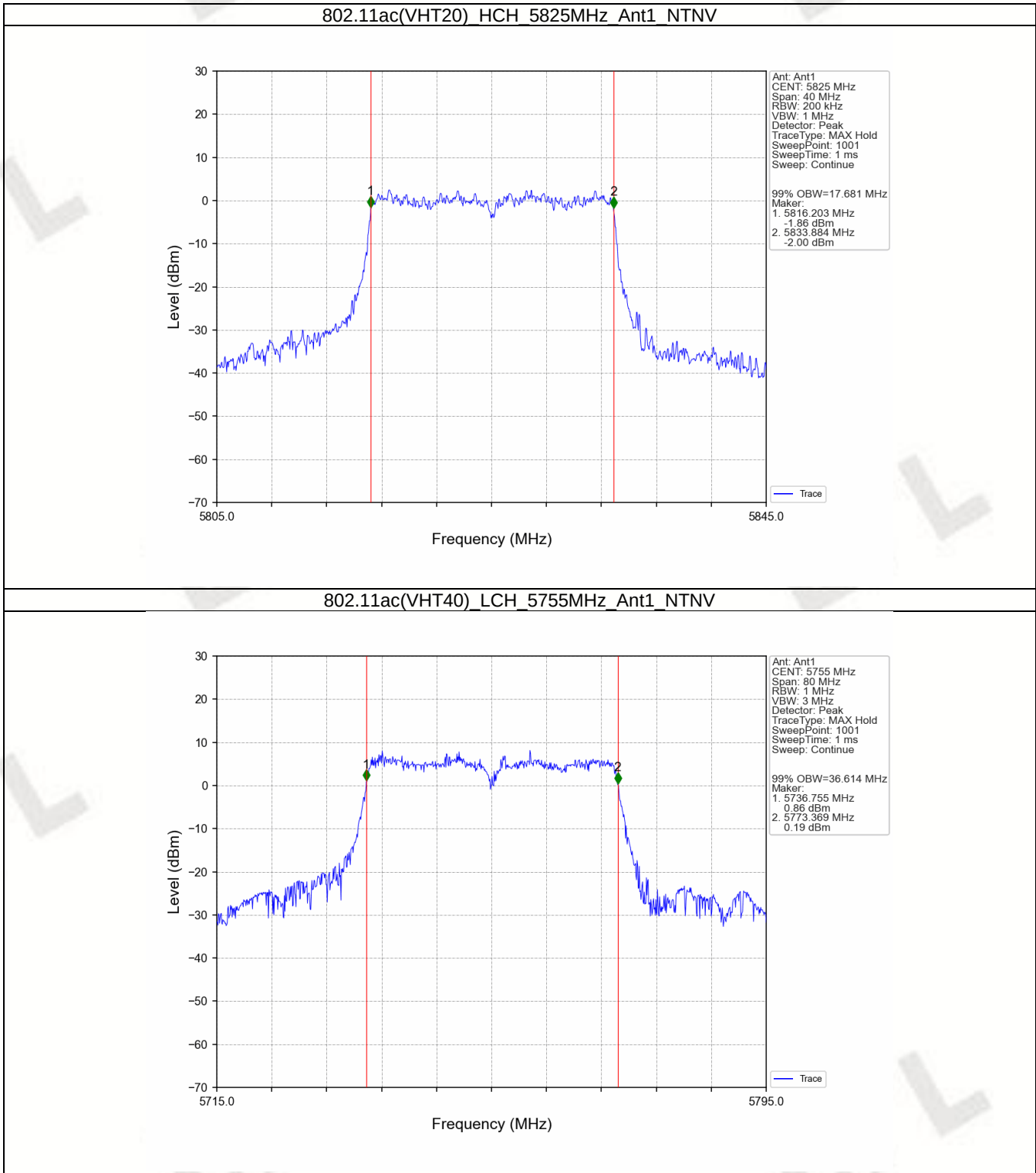
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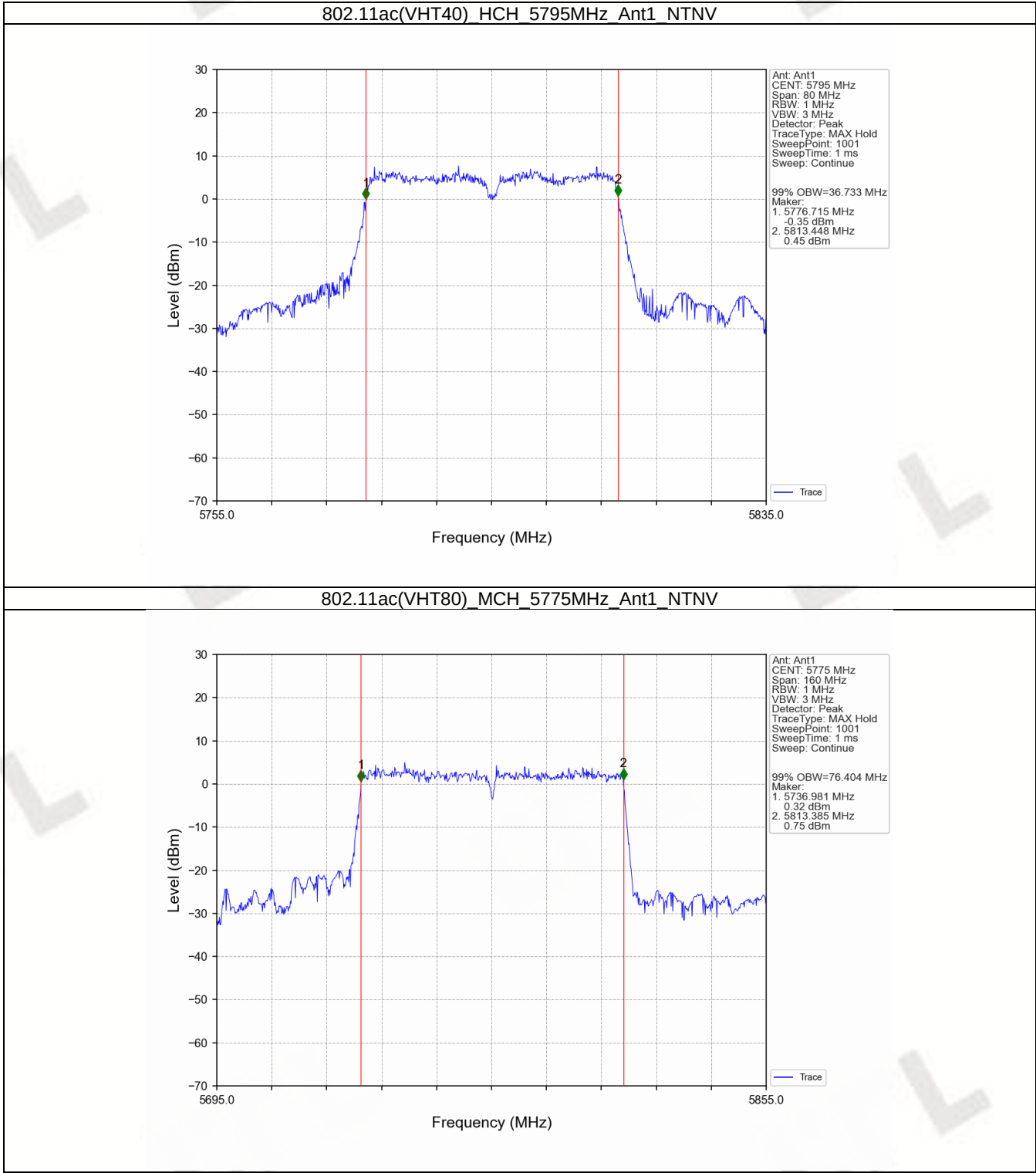
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FCCID: 2APQC-TIDE16

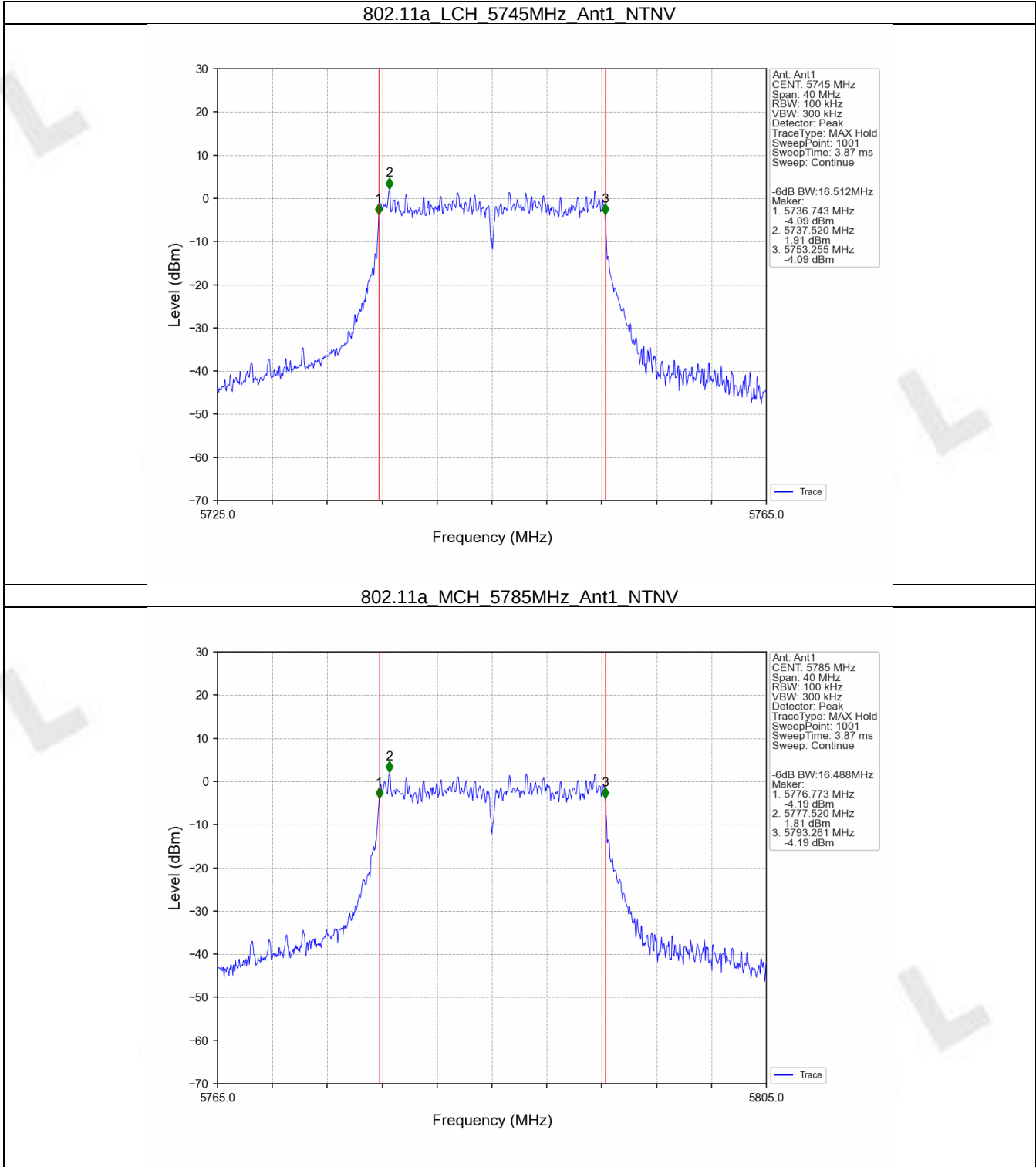


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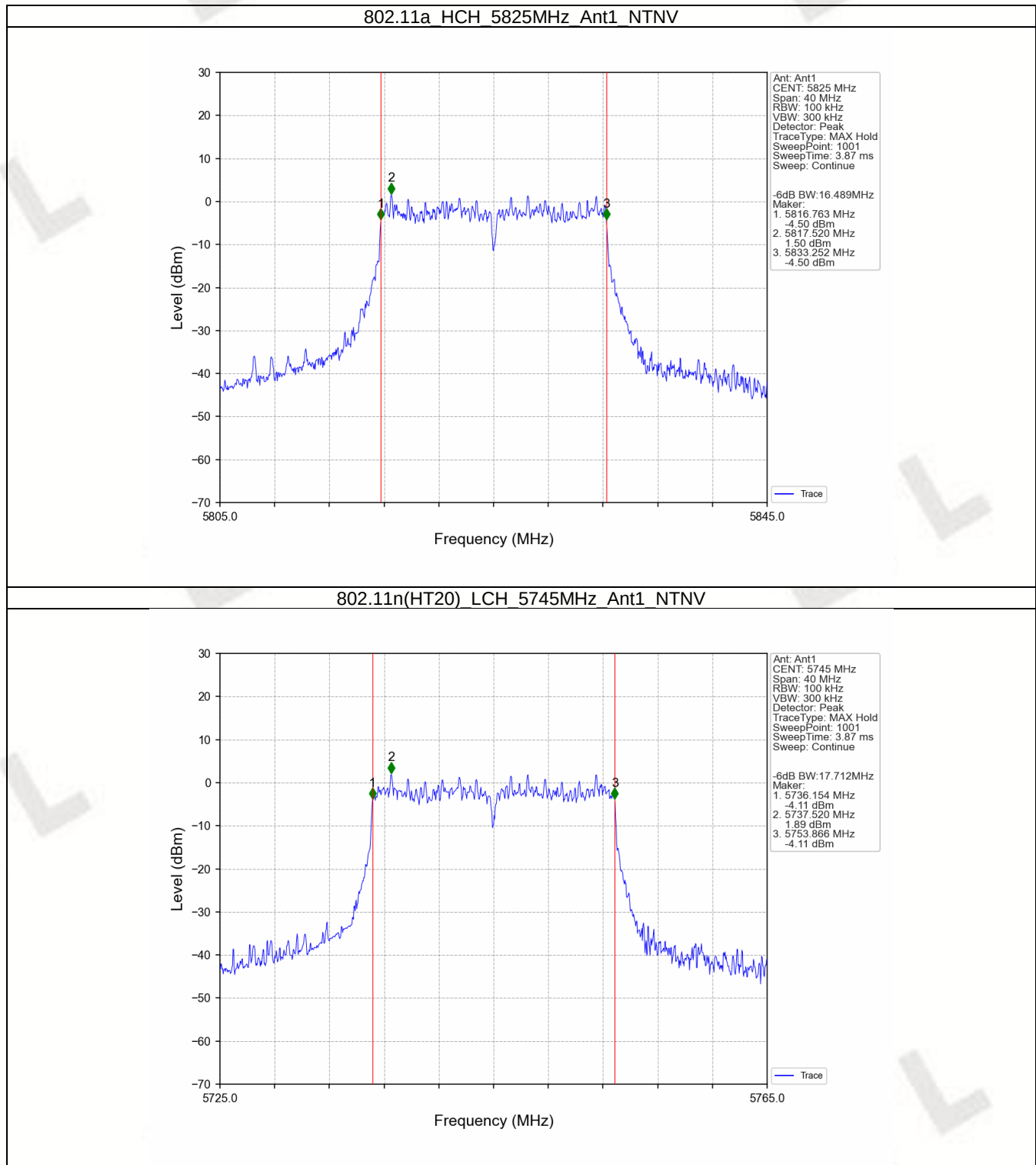
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1.2.2 6dB BW

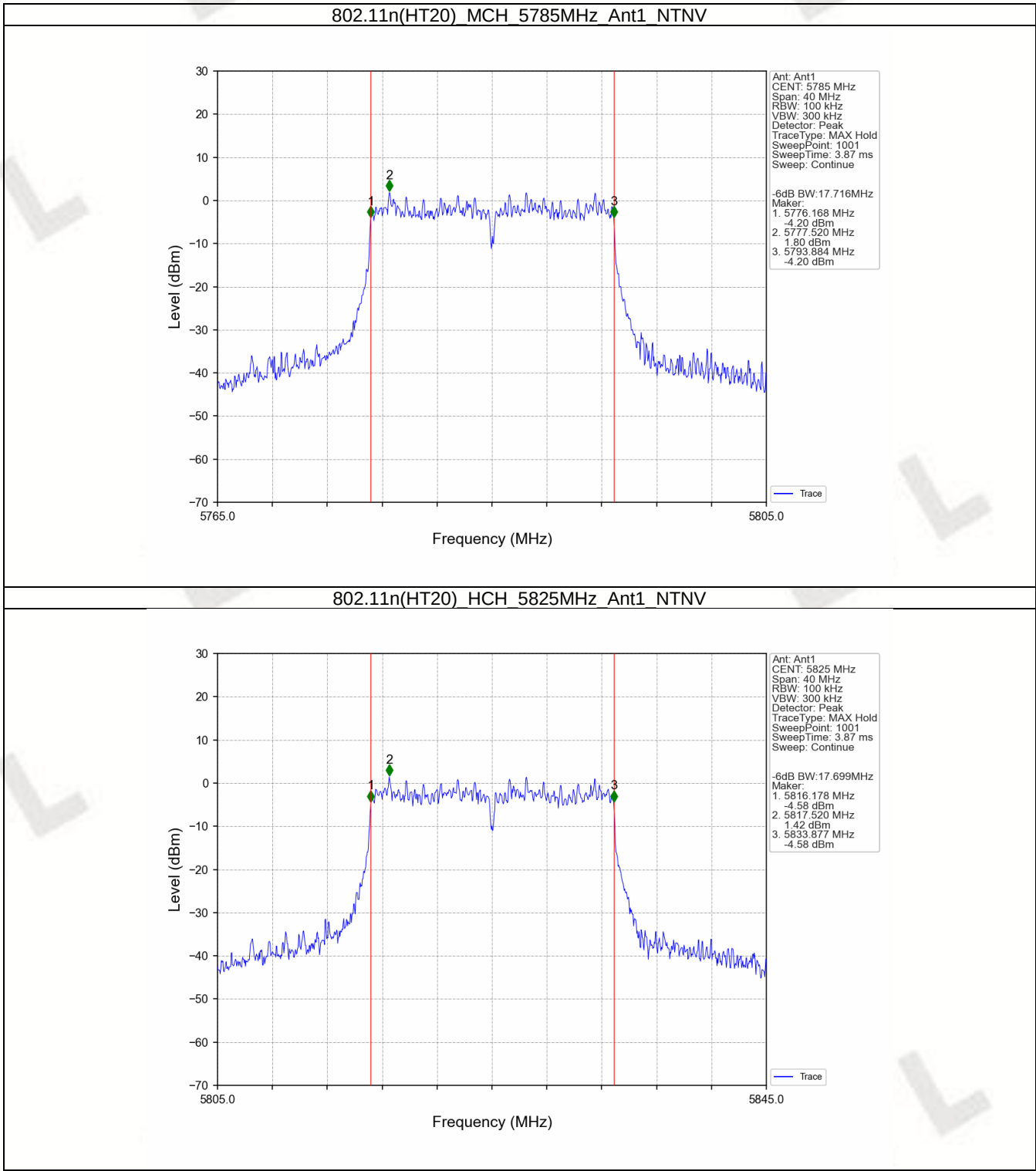


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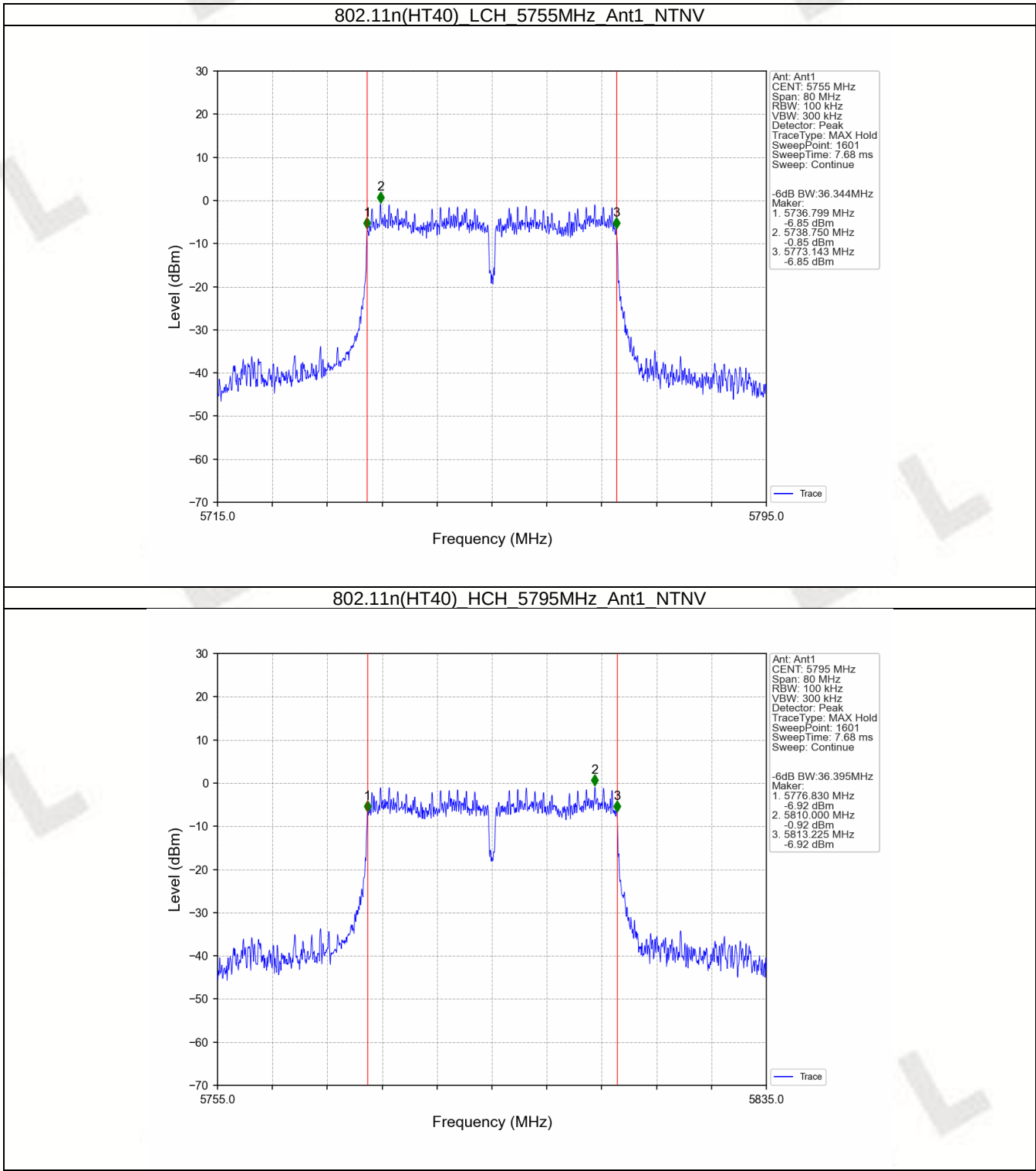
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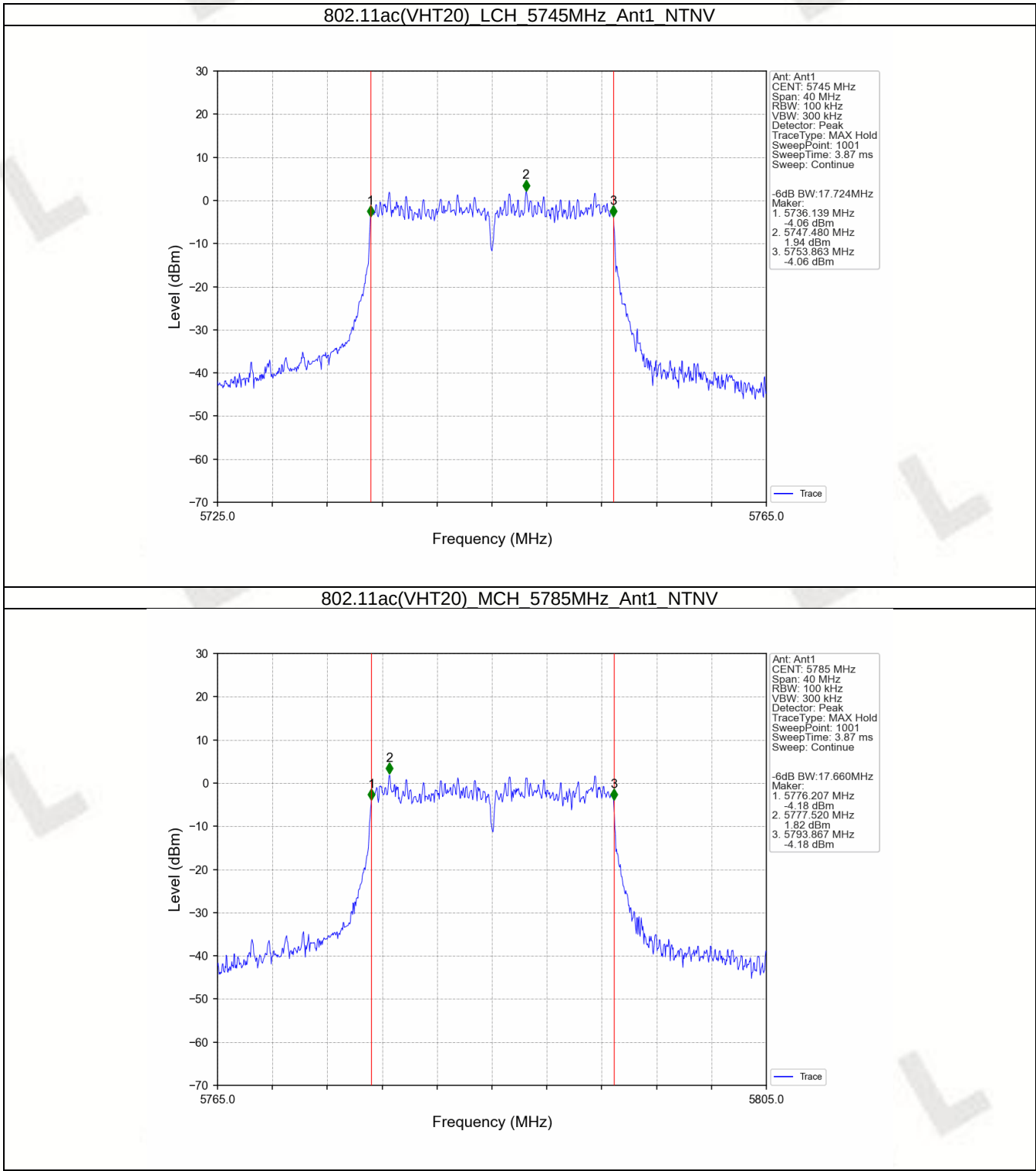
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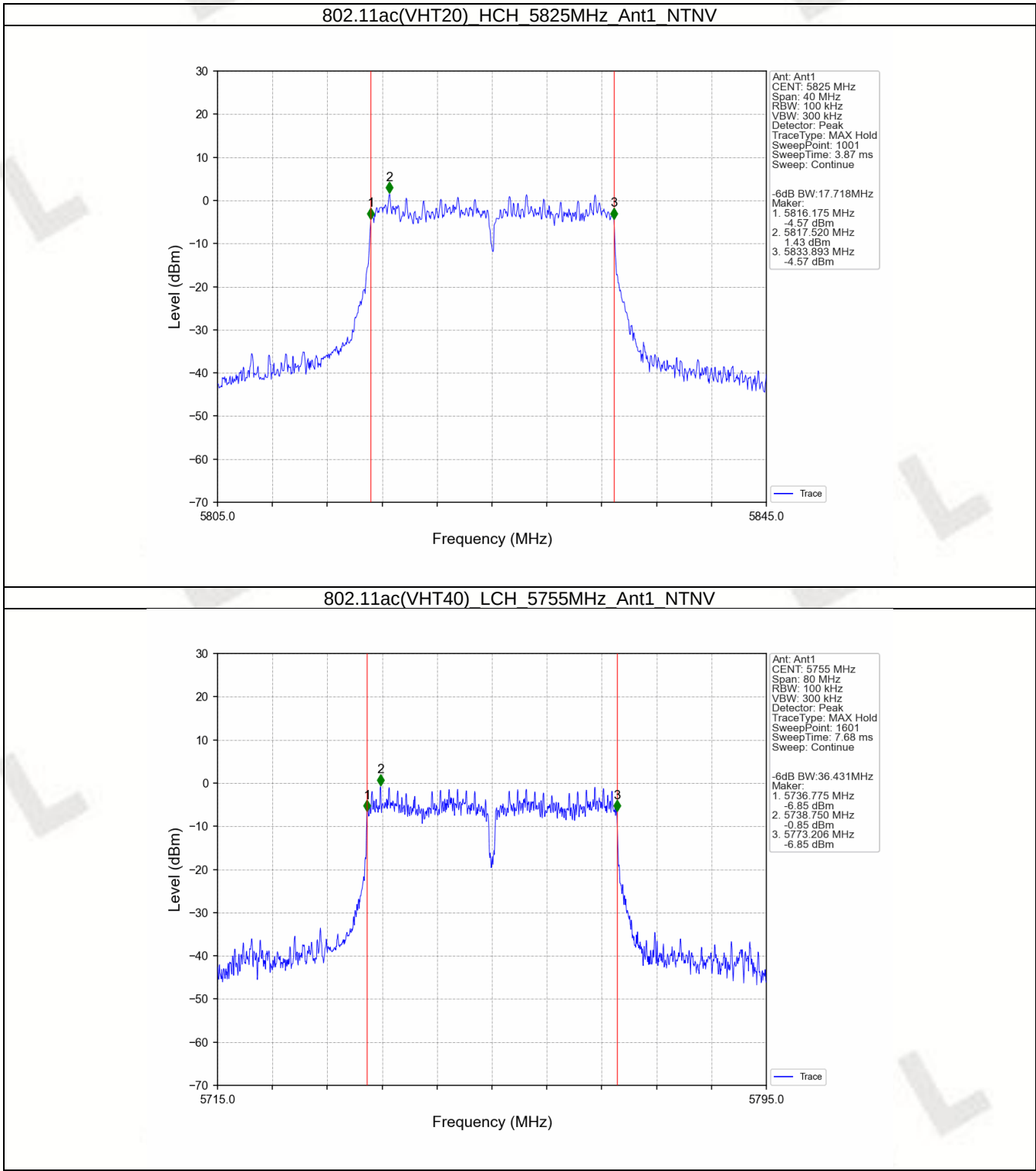
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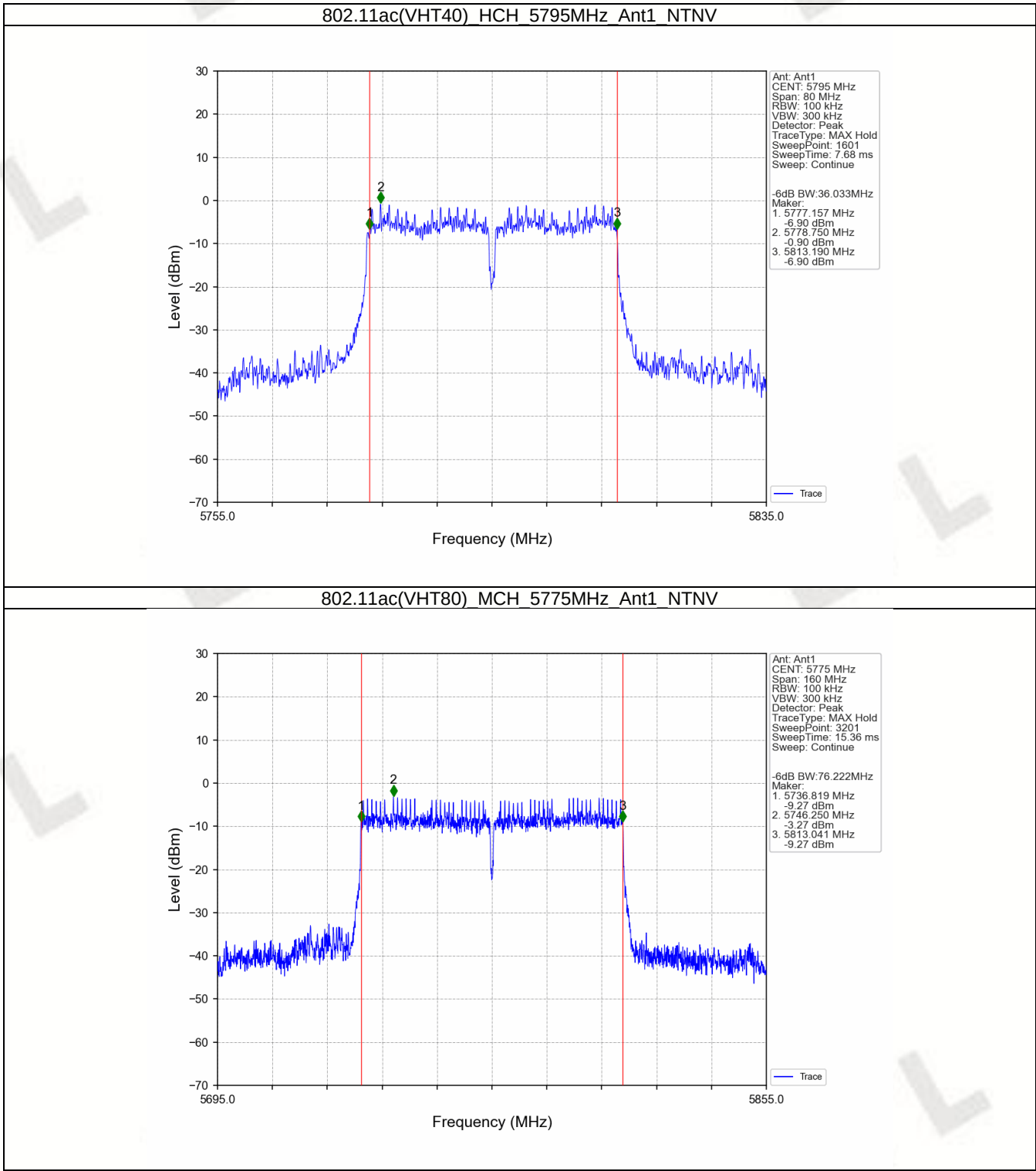
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FCCID: 2APQC-TIDE16

2. Maximum Conducted Output Power

2.1 Test Result

2.1.1 Power

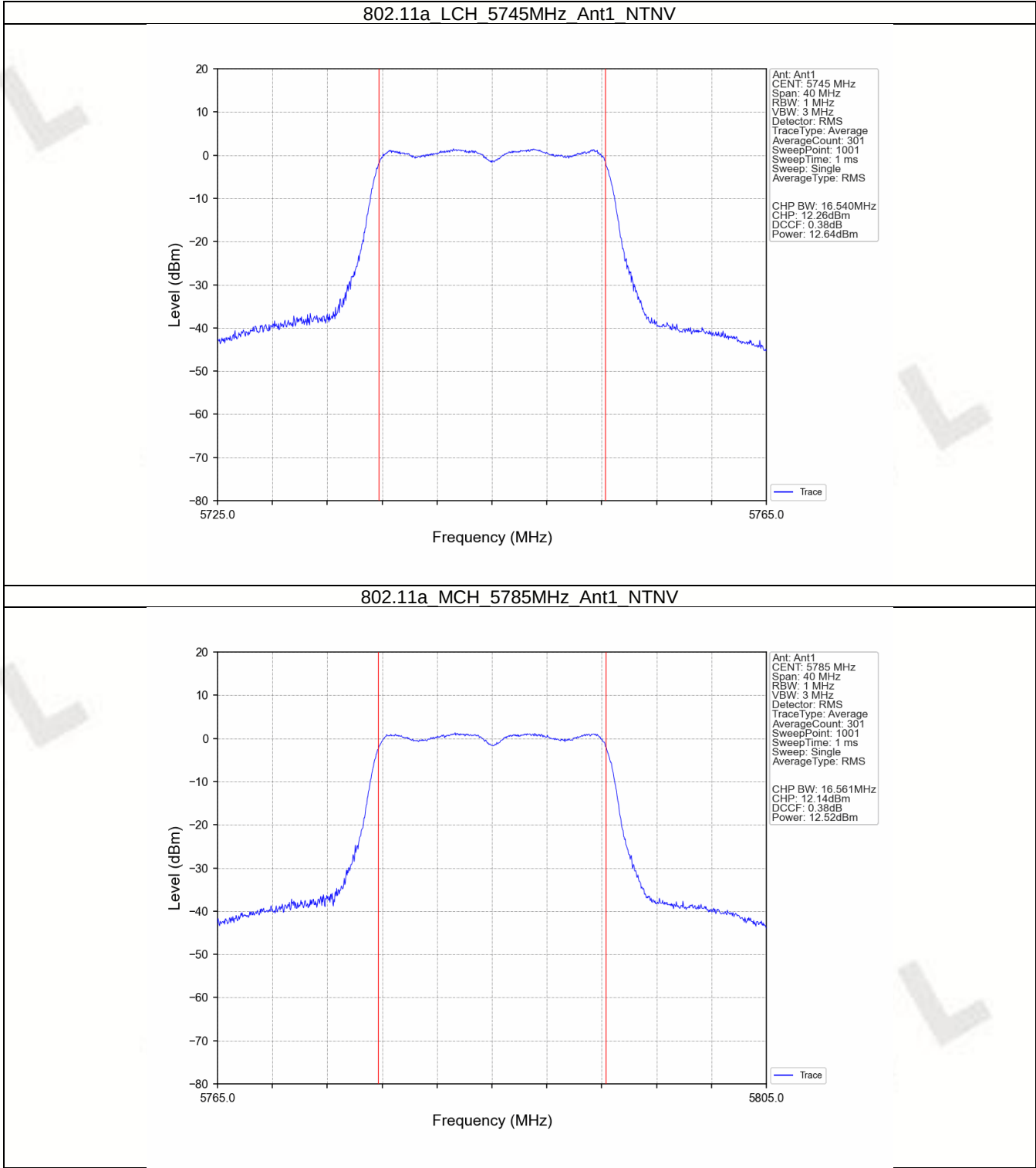
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	12.64	<=30	Pass
		5785	12.52	<=30	Pass
		5825	12.10	<=30	Pass
802.11n (HT20)	SISO	5745	12.82	<=30	Pass
		5785	12.66	<=30	Pass
		5825	12.29	<=30	Pass
802.11n (HT40)	SISO	5755	12.68	<=30	Pass
		5795	12.67	<=30	Pass
802.11ac (VHT20)	SISO	5745	12.83	<=30	Pass
		5785	12.69	<=30	Pass
		5825	12.28	<=30	Pass
802.11ac (VHT40)	SISO	5755	12.65	<=30	Pass
		5795	12.67	<=30	Pass
802.11ac (VHT80)	SISO	5775	13.18	<=30	Pass

Note1: Antenna Gain: Ant1: 3.00dBi;

FCCID: 2APQC-TIDE16

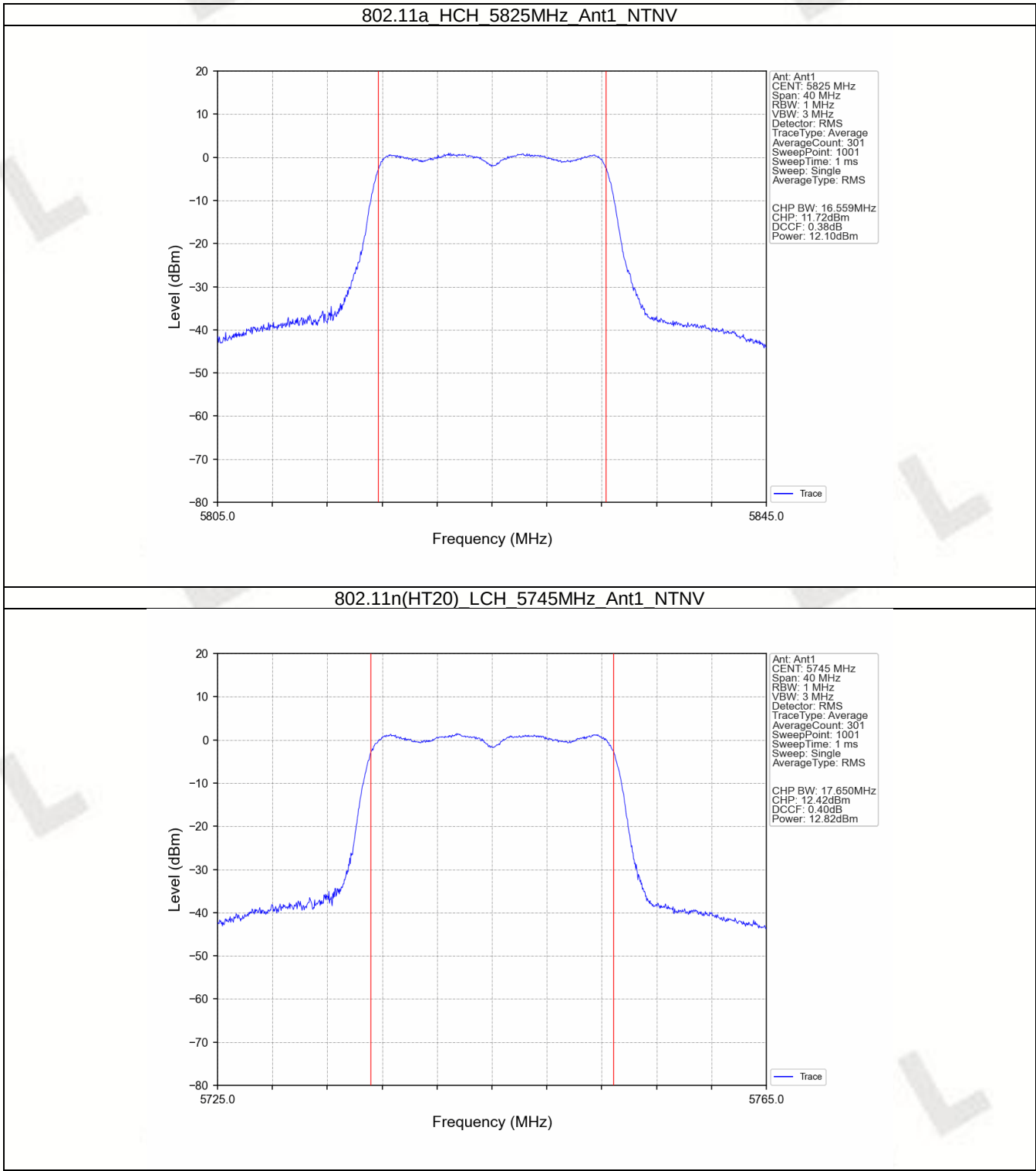
2.2 Test Graph

2.2.1 Power

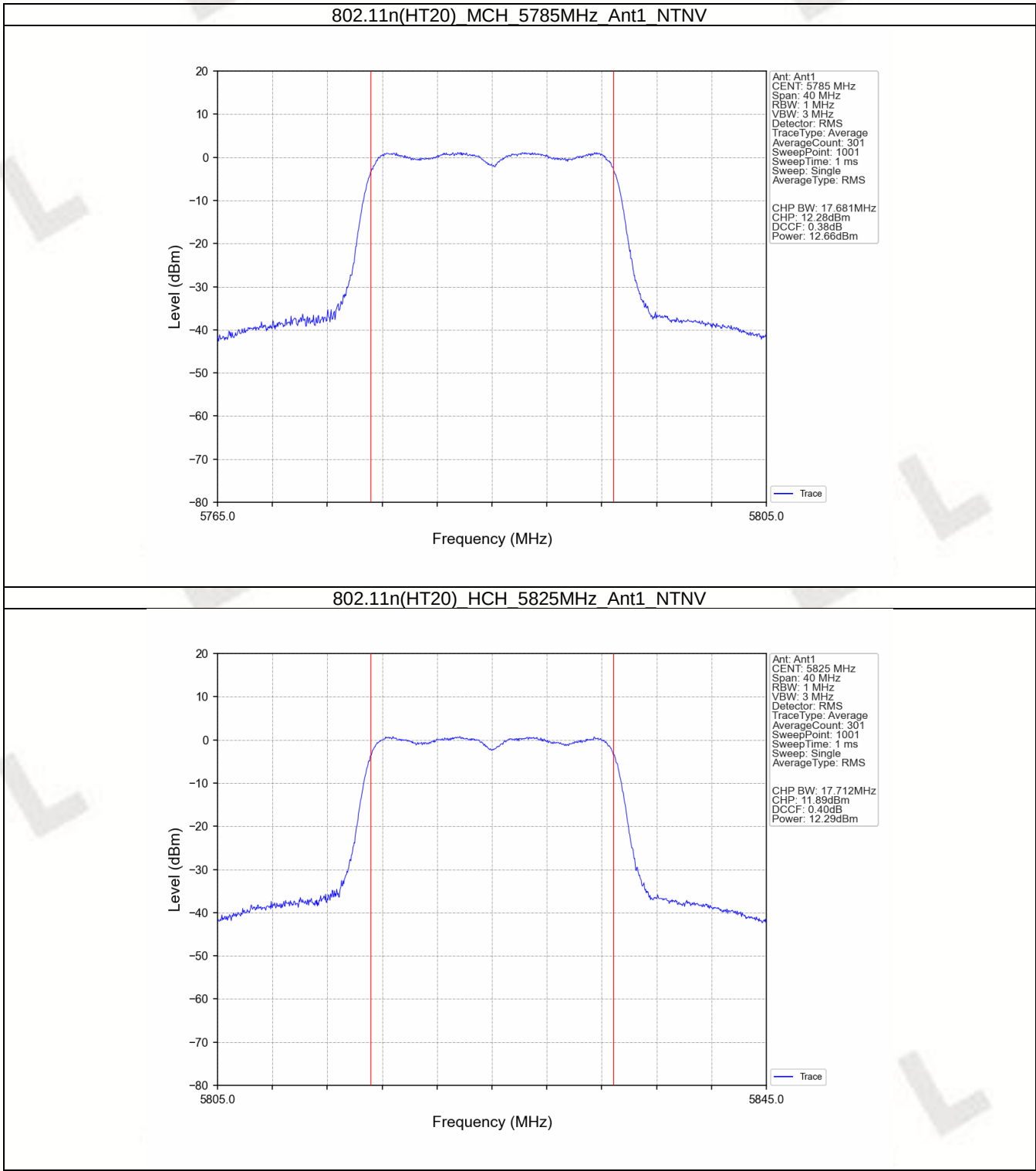


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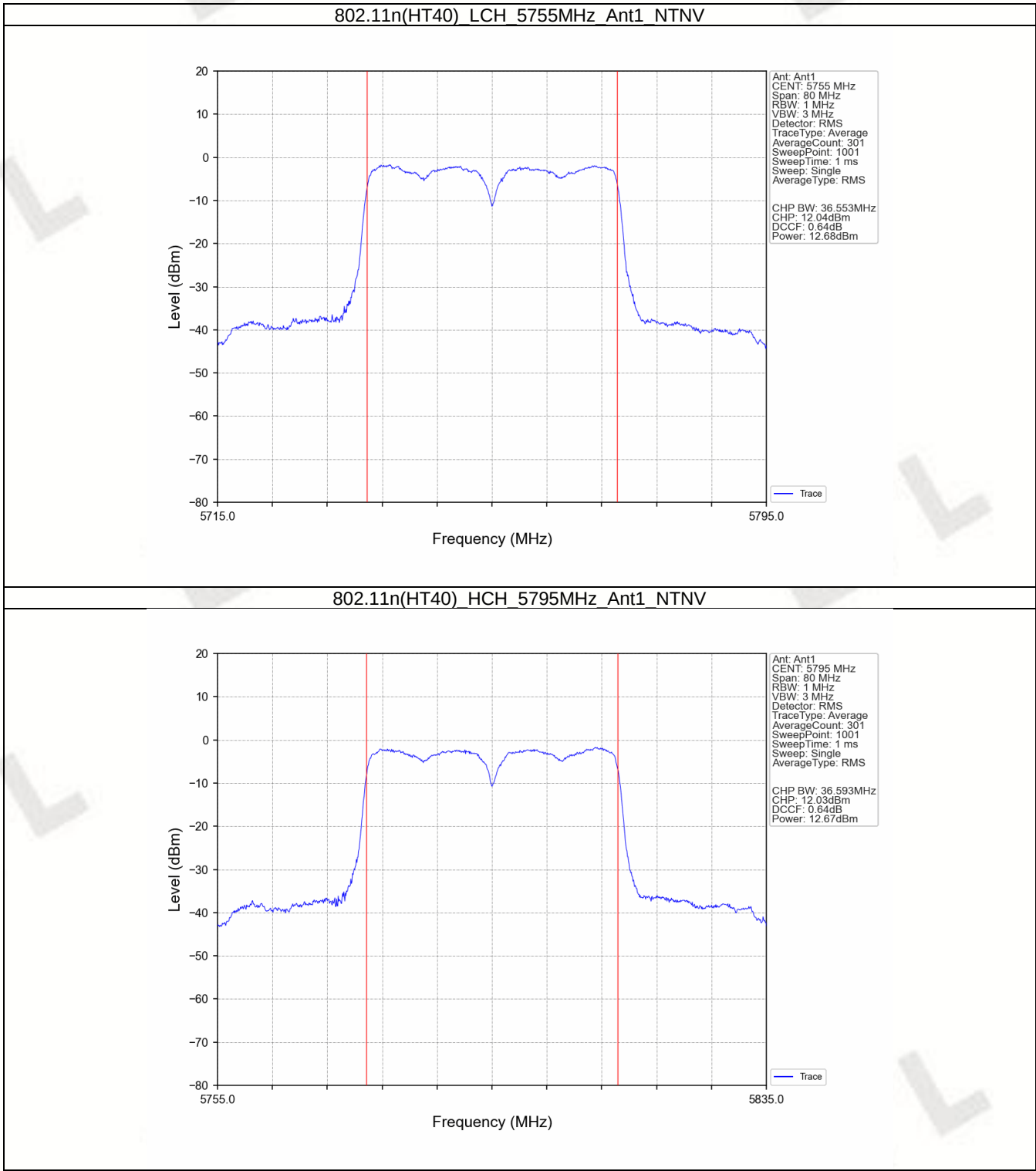
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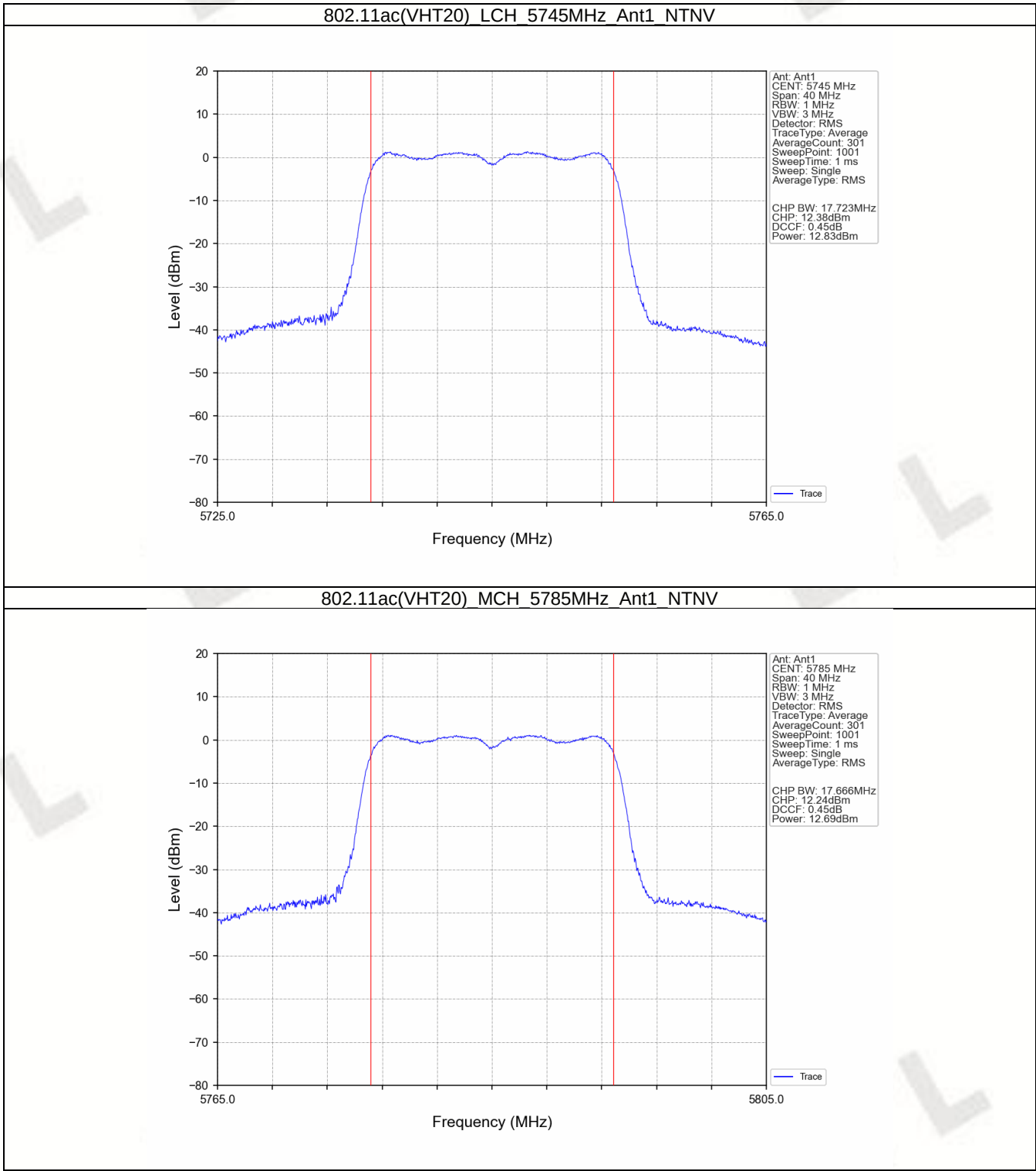
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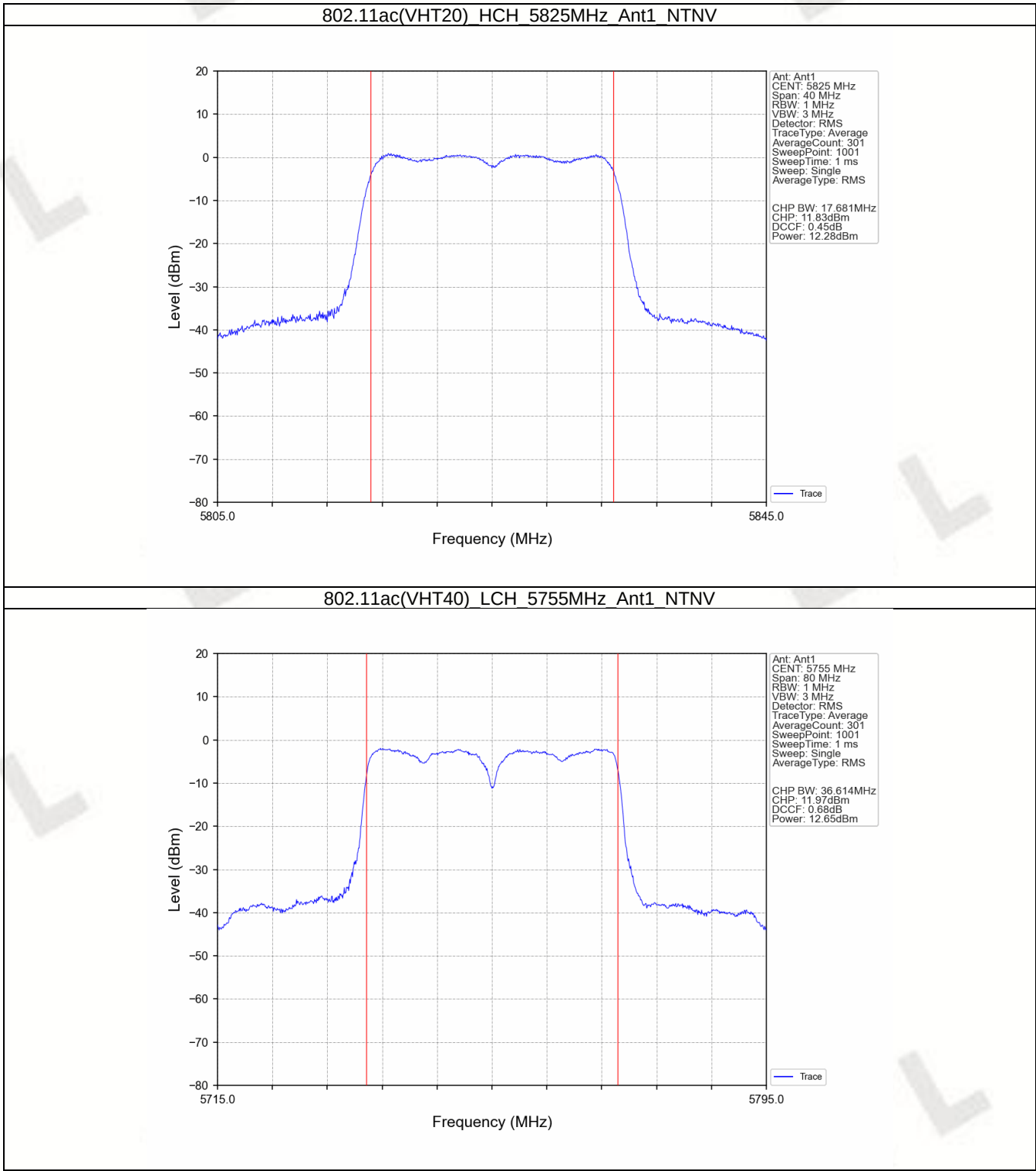
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FCCID: 2APQC-TIDE16

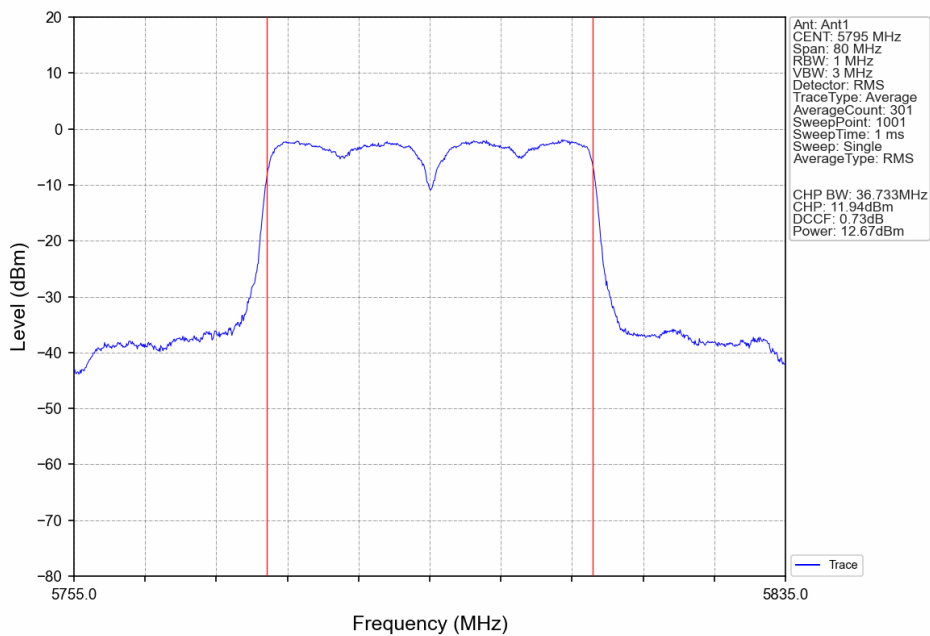


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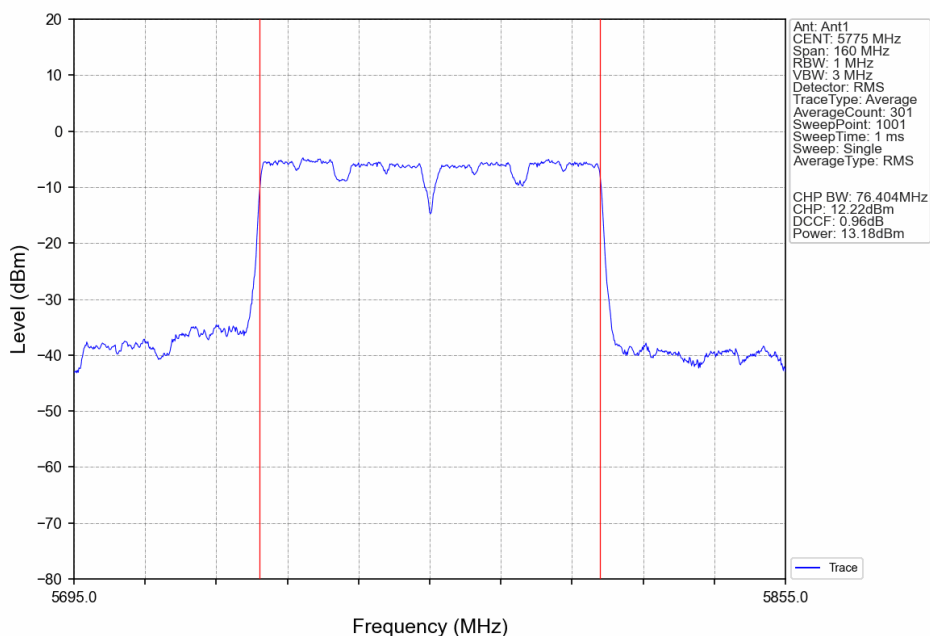


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802.11ac(VHT40) HCH 5795MHz Ant1 NTNV



802.11ac(VHT80) MCH 5775MHz Ant1 NTNV



FCCID: 2APQC-TIDE16

3. Maximum Power Spectral Density

3.1 Test Result

3.1.1 PSD-Band3

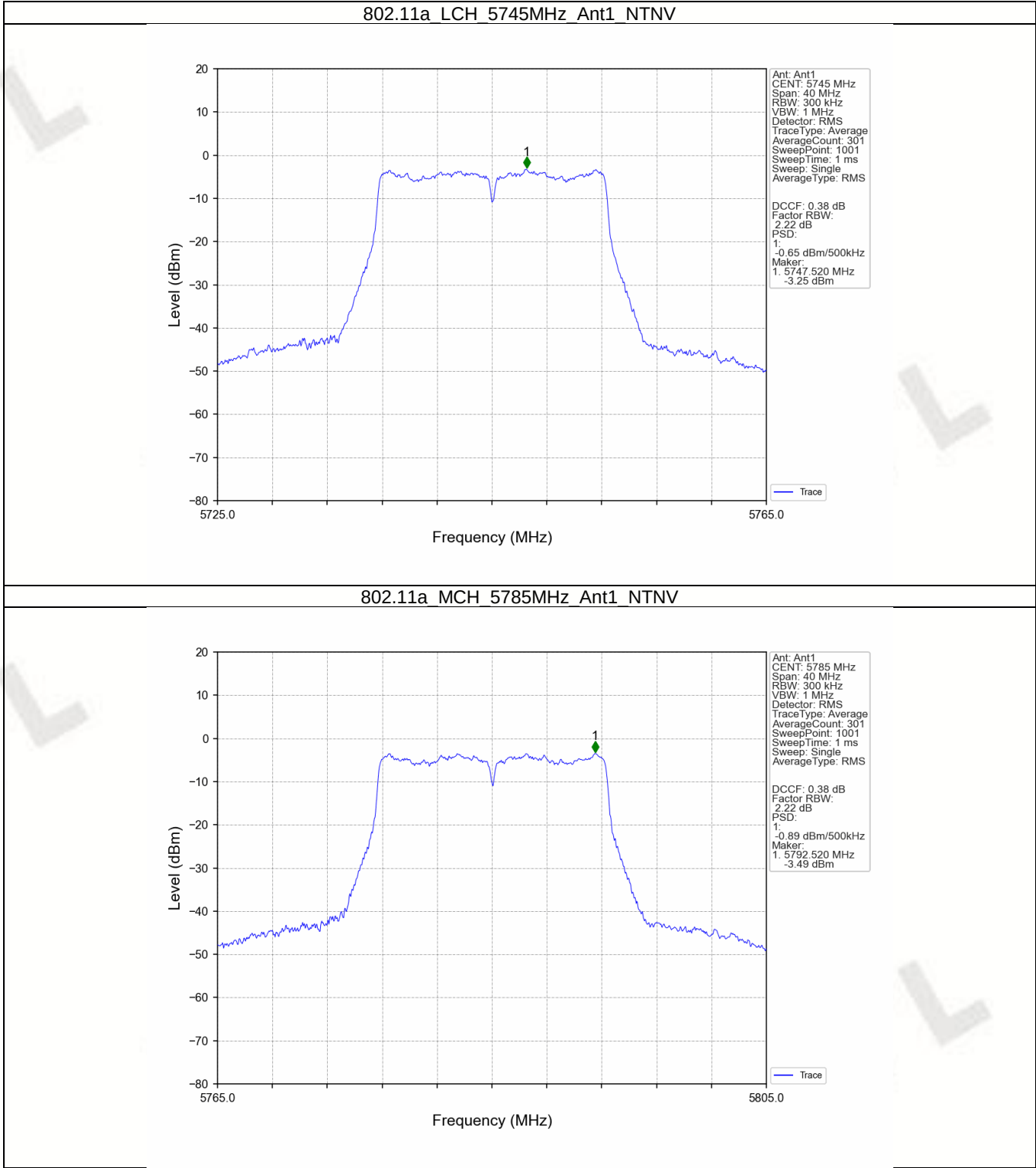
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	-0.65	<=30	Pass
		5785	-0.89	<=30	Pass
		5825	-1.32	<=30	Pass
802.11n (HT20)	SISO	5745	-0.51	<=30	Pass
		5785	-0.67	<=30	Pass
		5825	-0.92	<=30	Pass
802.11n (HT40)	SISO	5755	-3.09	<=30	Pass
		5795	-3.20	<=30	Pass
802.11ac (VHT20)	SISO	5745	-0.58	<=30	Pass
		5785	-0.54	<=30	Pass
		5825	-1.00	<=30	Pass
802.11ac (VHT40)	SISO	5755	-3.03	<=30	Pass
		5795	-2.79	<=30	Pass
802.11ac (VHT80)	SISO	5775	-5.31	<=30	Pass

Note1: Antenna Gain: Ant1: 3.00dBi;

FCCID: 2APQC-TIDE16

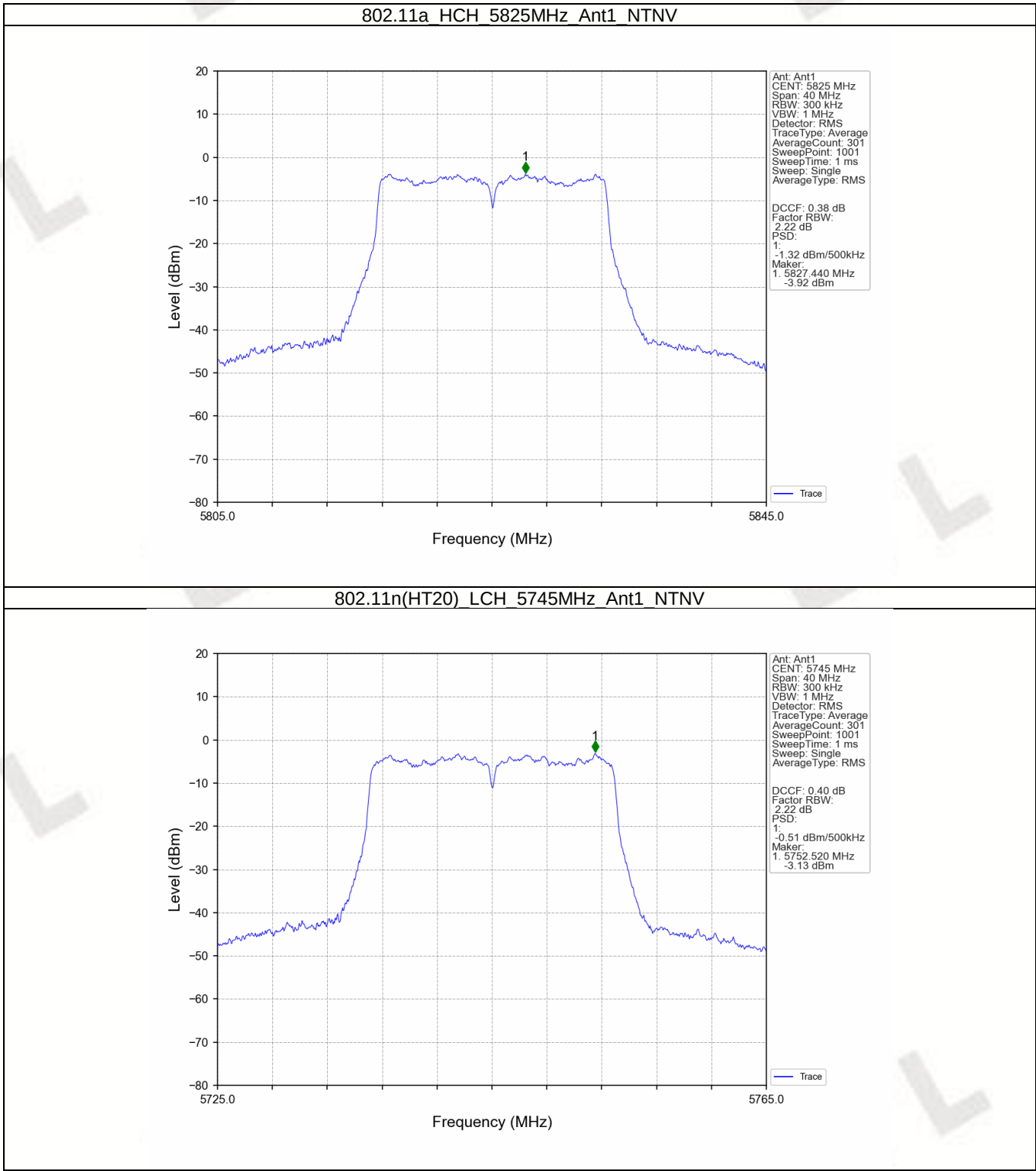
3.2 Test Graph

3.2.1 PSD-Band3

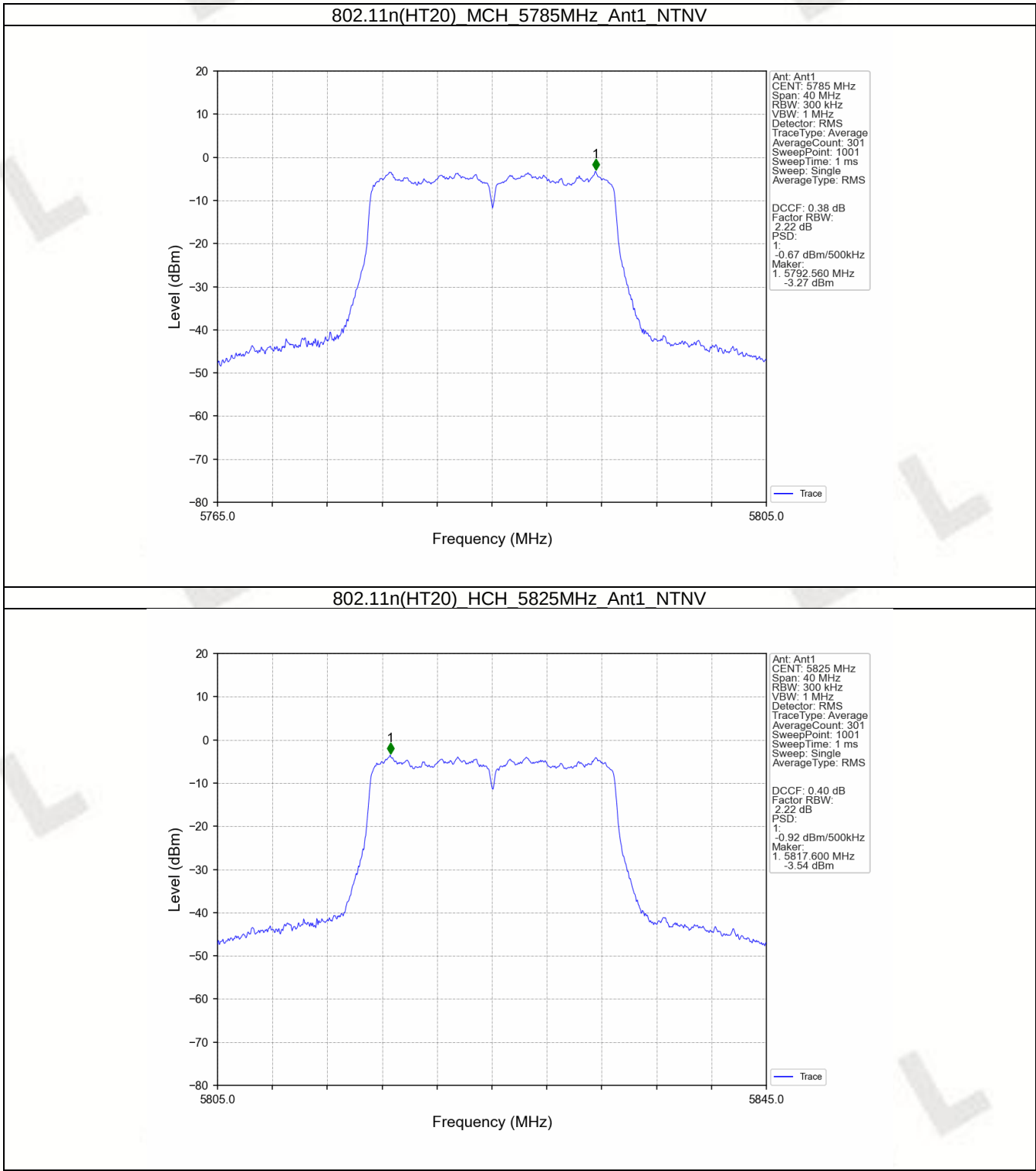


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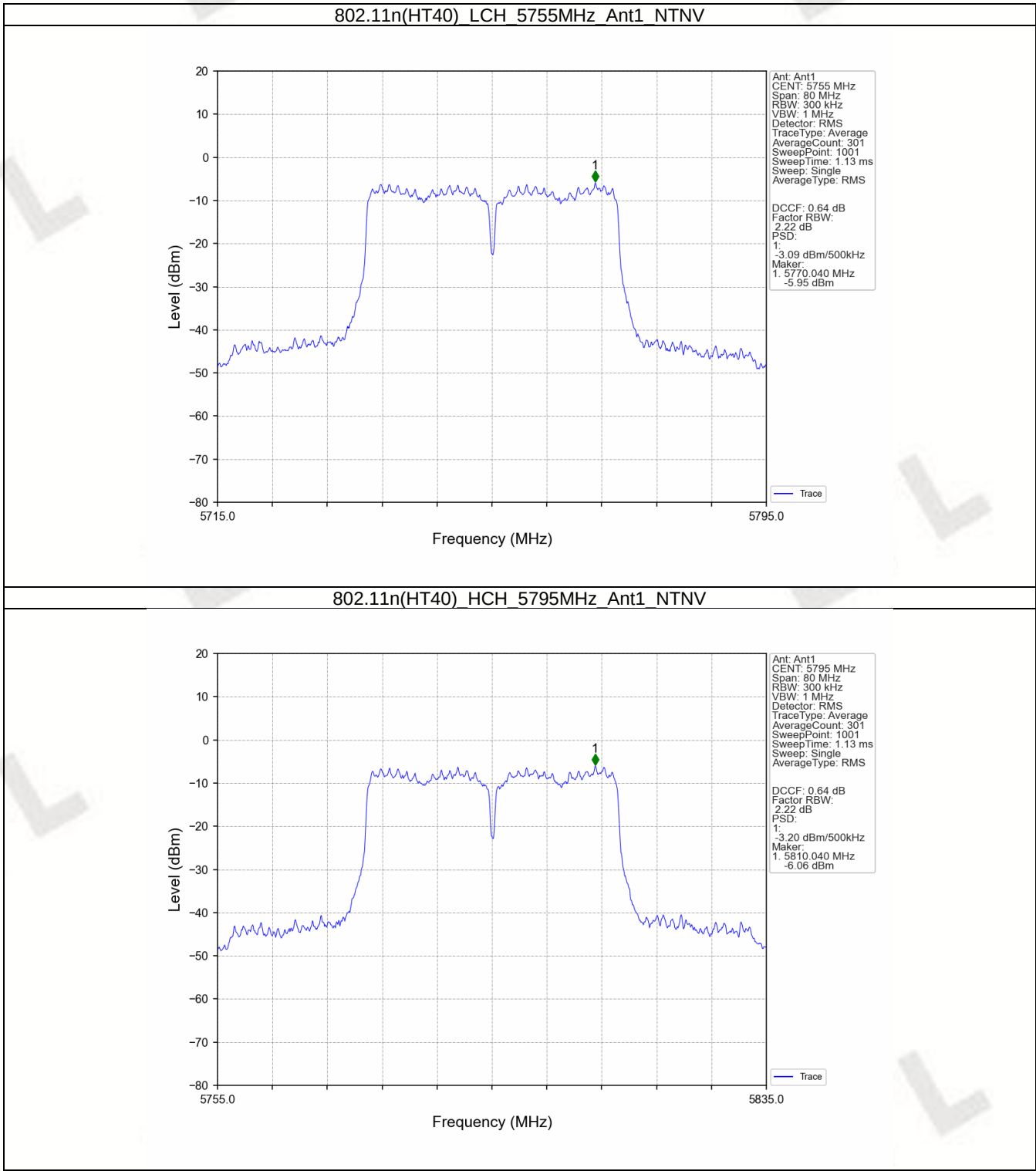
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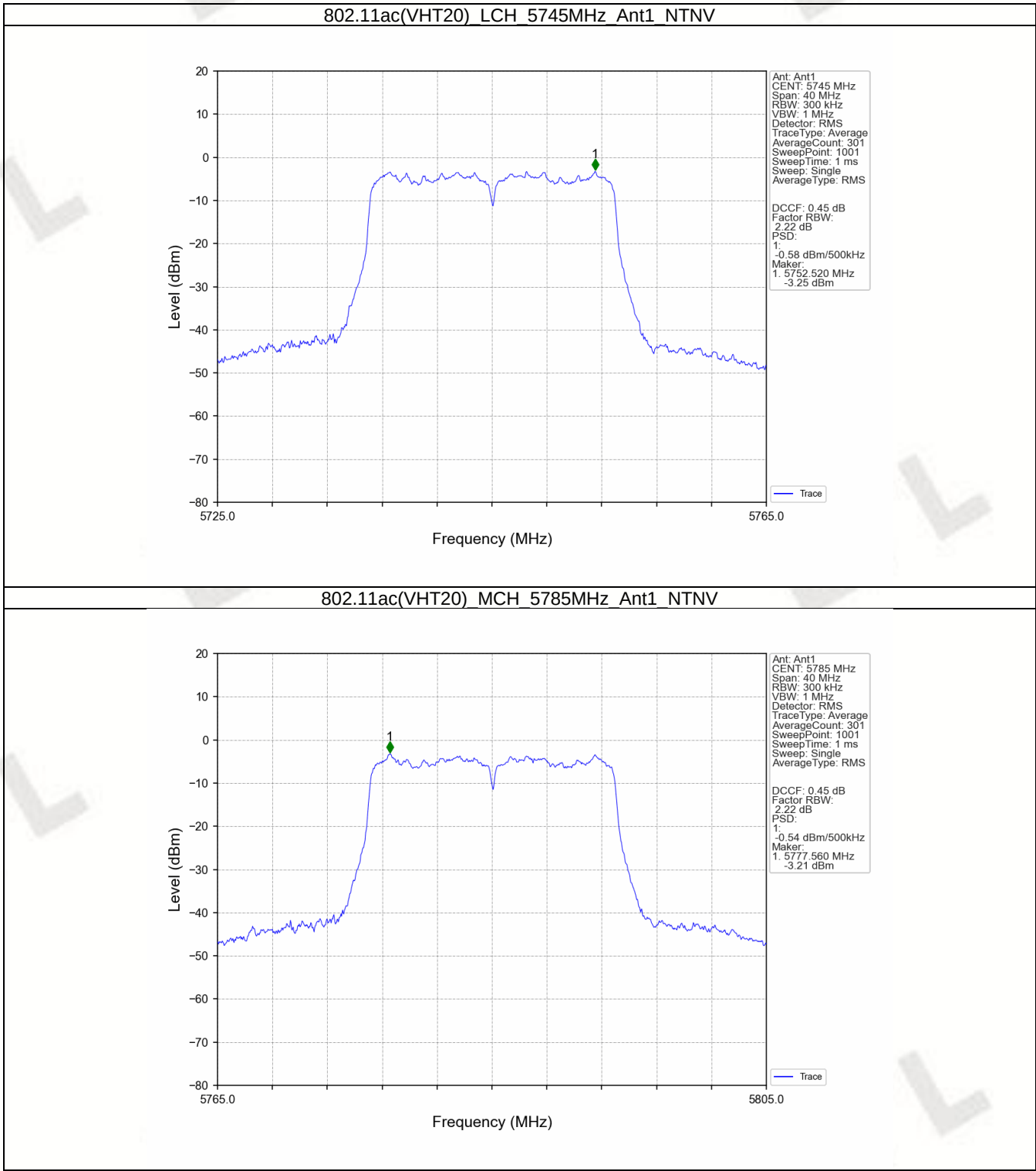
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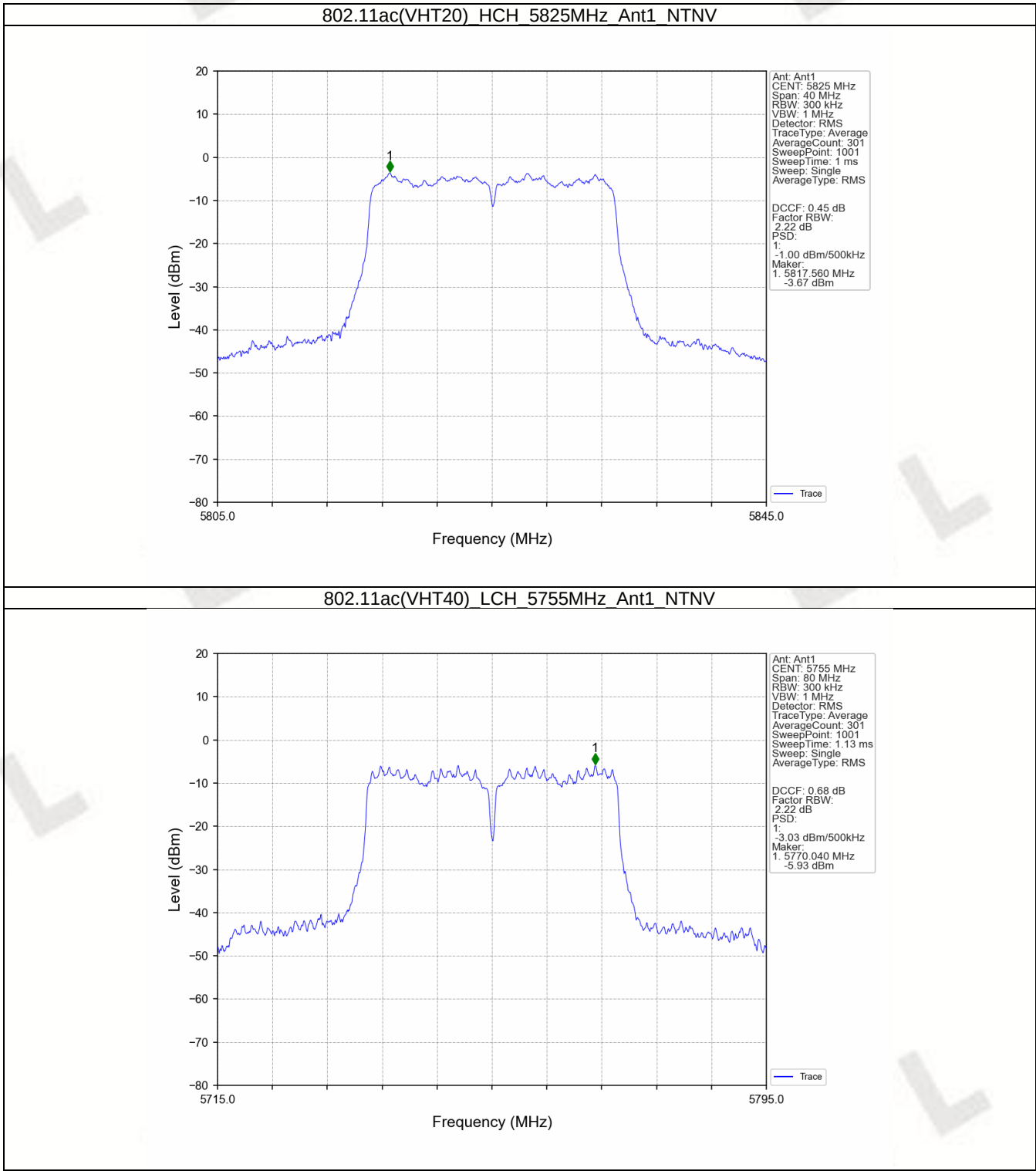
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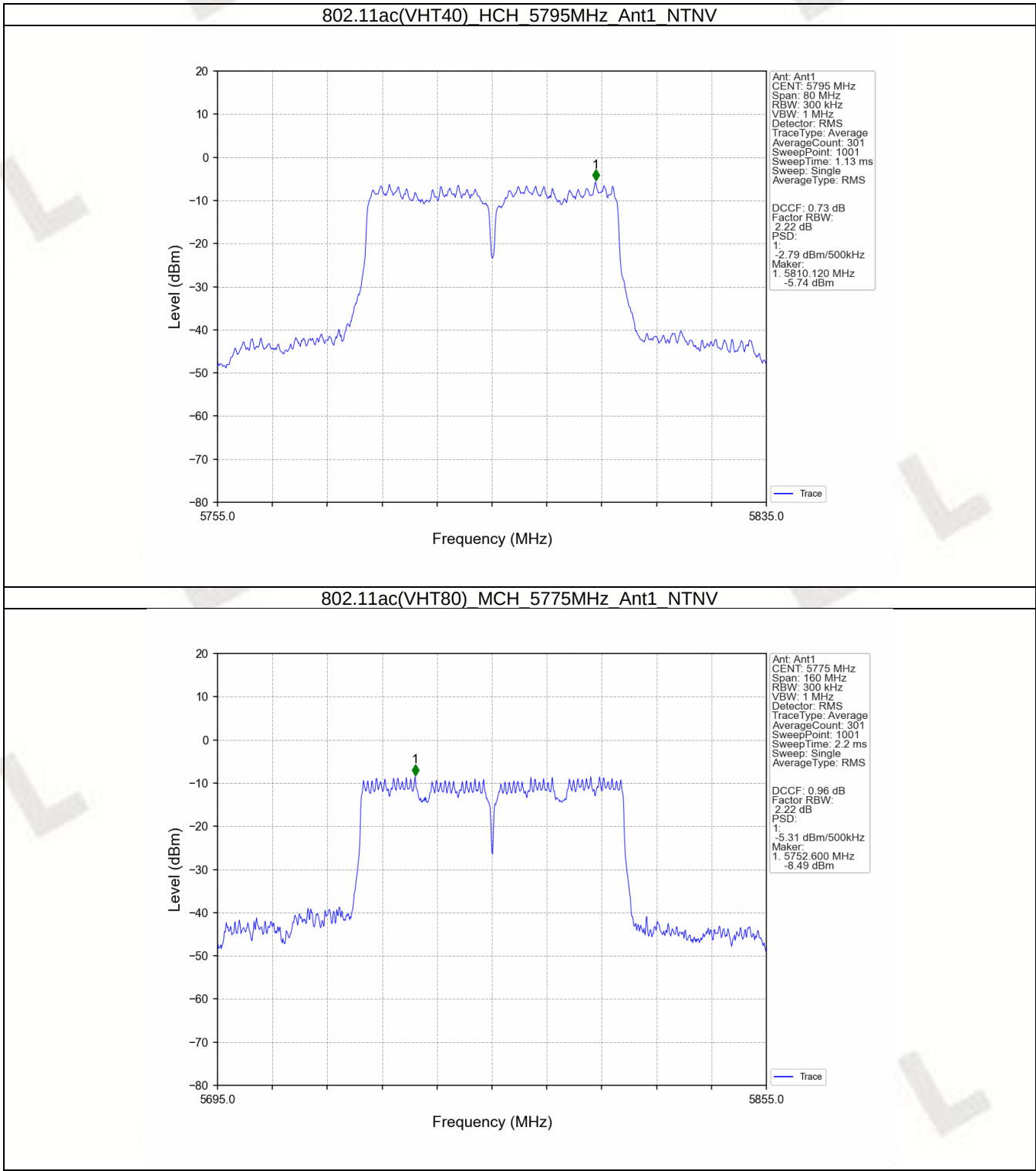
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FCCID: 2APQC-TIDE16

4. Frequency Stability

4.1 Test Result

4.1.1 Ant1

Ant1							
Mode	Tx Type	Frequency (MHz)	Temperature (°C)	Voltage	Measured Frequency (MHz)	Limit (MHz)	Verdict
Carrier Wave	SISO	5745	20	LV	5745.010	5725 to 5850	Pass
				NV	5745.010	5725 to 5850	Pass
				HV	5745.010	5725 to 5850	Pass
			-30	NV	5745.010	5725 to 5850	Pass
			-20	NV	5745.011	5725 to 5850	Pass
			-10	NV	5745.010	5725 to 5850	Pass
			0	NV	5745.010	5725 to 5850	Pass
			10	NV	5745.011	5725 to 5850	Pass
			30	NV	5745.011	5725 to 5850	Pass
			40	NV	5745.011	5725 to 5850	Pass
			50	NV	5745.011	5725 to 5850	Pass
		5785	20	LV	5785.011	5725 to 5850	Pass
				NV	5785.011	5725 to 5850	Pass
				HV	5785.011	5725 to 5850	Pass
			-30	NV	5785.011	5725 to 5850	Pass
			-20	NV	5785.011	5725 to 5850	Pass
			-10	NV	5785.011	5725 to 5850	Pass
			0	NV	5785.011	5725 to 5850	Pass
			10	NV	5785.011	5725 to 5850	Pass
			30	NV	5785.011	5725 to 5850	Pass
			40	NV	5785.011	5725 to 5850	Pass
			50	NV	5785.011	5725 to 5850	Pass
		5825	20	LV	5825.011	5725 to 5850	Pass
				NV	5825.011	5725 to 5850	Pass
				HV	5825.011	5725 to 5850	Pass
			-30	NV	5825.011	5725 to 5850	Pass
			-20	NV	5825.011	5725 to 5850	Pass
			-10	NV	5825.011	5725 to 5850	Pass
			0	NV	5825.011	5725 to 5850	Pass
			10	NV	5825.011	5725 to 5850	Pass
			30	NV	5825.011	5725 to 5850	Pass
			40	NV	5825.011	5725 to 5850	Pass
			50	NV	5825.011	5725 to 5850	Pass
		5755	20	LV	5755.011	5725 to 5850	Pass
				NV	5755.011	5725 to 5850	Pass
				HV	5755.011	5725 to 5850	Pass
			-30	NV	5755.011	5725 to 5850	Pass
			-20	NV	5755.011	5725 to 5850	Pass
			-10	NV	5755.012	5725 to 5850	Pass
			0	NV	5755.012	5725 to 5850	Pass
			10	NV	5755.012	5725 to 5850	Pass
			30	NV	5755.012	5725 to 5850	Pass
			40	NV	5755.012	5725 to 5850	Pass

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		5795	50	NV	5755.012	5725 to 5850	Pass
			20	LV	5795.480	5725 to 5850	Pass
				NV	5795.480	5725 to 5850	Pass
				HV	5795.480	5725 to 5850	Pass
			-30	NV	5795.480	5725 to 5850	Pass
			-20	NV	5795.482	5725 to 5850	Pass
			-10	NV	5795.480	5725 to 5850	Pass
			0	NV	5795.480	5725 to 5850	Pass
			10	NV	5795.479	5725 to 5850	Pass
			30	NV	5795.482	5725 to 5850	Pass
			40	NV	5795.480	5725 to 5850	Pass
			50	NV	5795.478	5725 to 5850	Pass
		5775	20	LV	5774.943	5725 to 5850	Pass
				NV	5775.331	5725 to 5850	Pass
				HV	5775.500	5725 to 5850	Pass
			-30	NV	5774.682	5725 to 5850	Pass
			-20	NV	5775.462	5725 to 5850	Pass
			-10	NV	5775.176	5725 to 5850	Pass
			0	NV	5775.200	5725 to 5850	Pass
			10	NV	5775.271	5725 to 5850	Pass
			30	NV	5775.163	5725 to 5850	Pass
			40	NV	5775.392	5725 to 5850	Pass
			50	NV	5774.862	5725 to 5850	Pass