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Annex for 5G Wi-Fi BAND 3

Test Report No.: CTL2603312051-WF04

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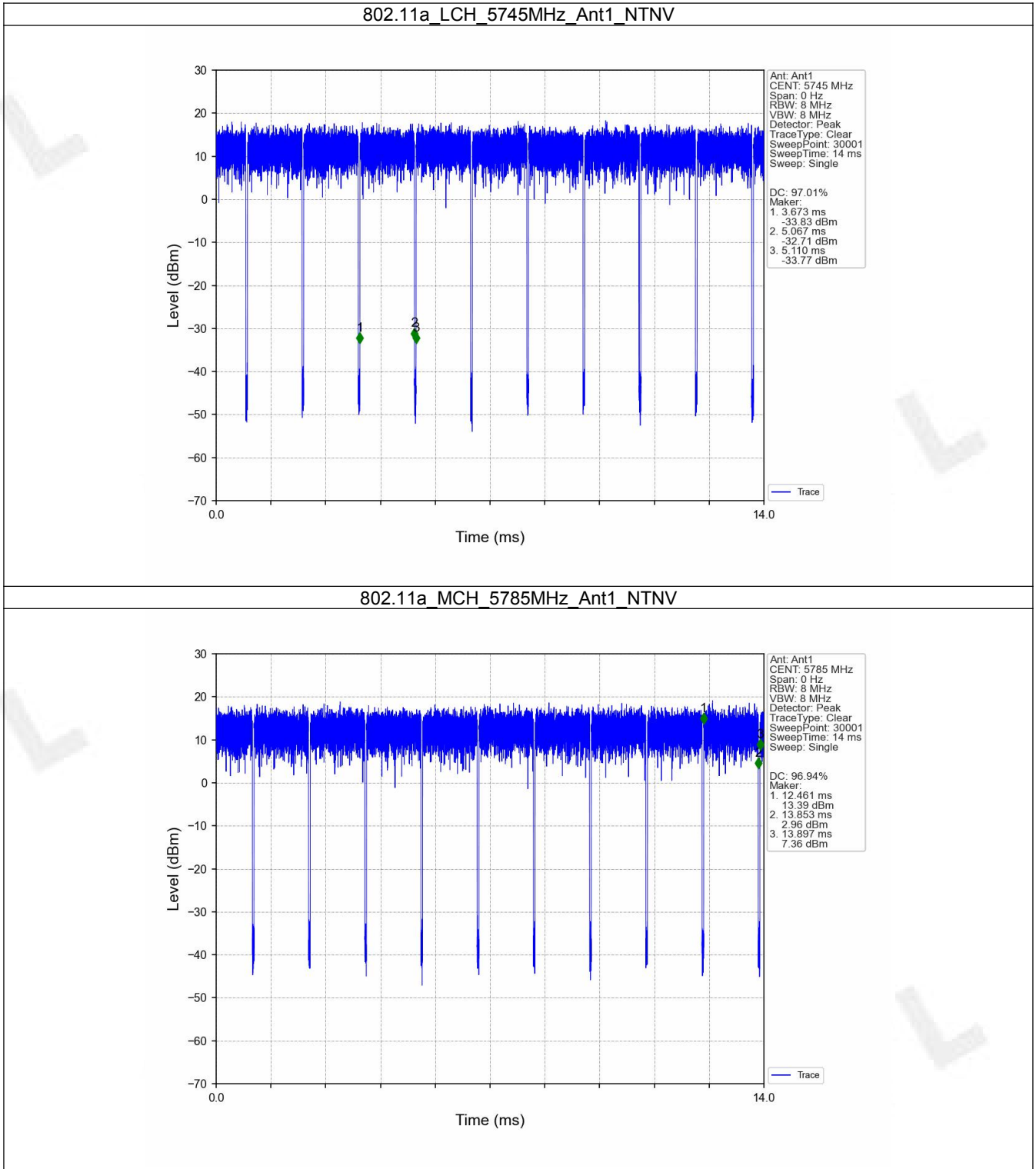
1. Duty Cycle**1.1 Test Result****1.1.1 Ant1**

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	1.394	1.437	97.01	0.13	0.03
		5785	1.392	1.436	96.94	0.14	0.06
		5825	1.393	1.437	96.94	0.14	0.03
802.11n (HT20)	SISO	5745	1.289	1.333	96.70	0.15	0.10
		5785	1.288	1.333	96.62	0.15	0.10
		5825	1.288	1.333	96.62	0.15	0.07
802.11n (HT40)	SISO	5755	0.637	0.680	93.68	0.28	0.03
		5795	0.636	0.680	93.53	0.29	0.07
802.11ac (VHT20)	SISO	5745	1.313	1.356	96.83	0.14	0.07
		5785	1.312	1.356	96.76	0.14	0.10
		5825	1.313	1.357	96.76	0.14	0.10
802.11ac (VHT40)	SISO	5755	0.653	0.696	93.82	0.28	0.03
		5795	0.652	0.696	93.68	0.28	0.07
802.11ac (VHT80)	SISO	5775	0.325	0.369	88.08	0.55	0.08

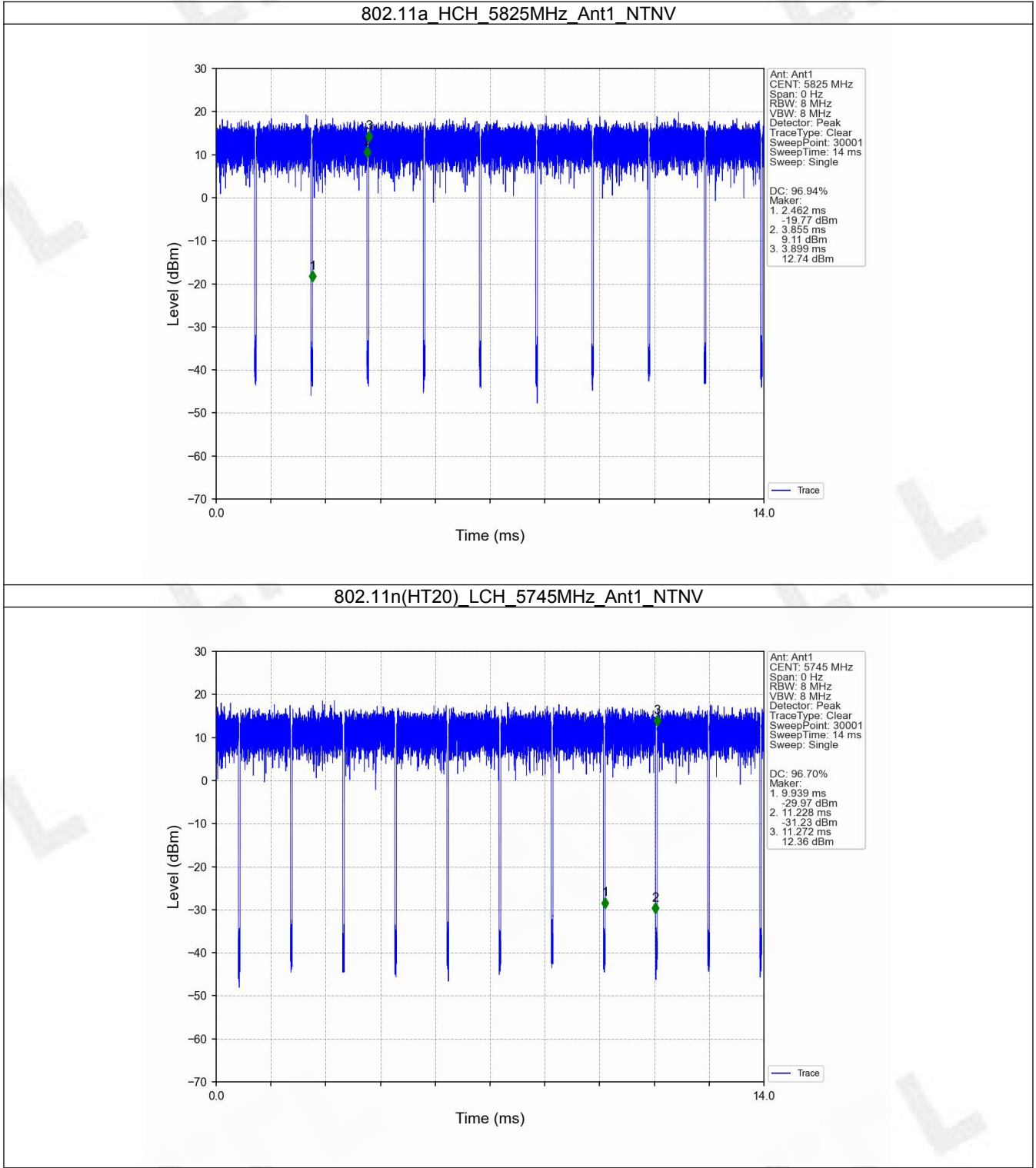
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1.2 Test Graph

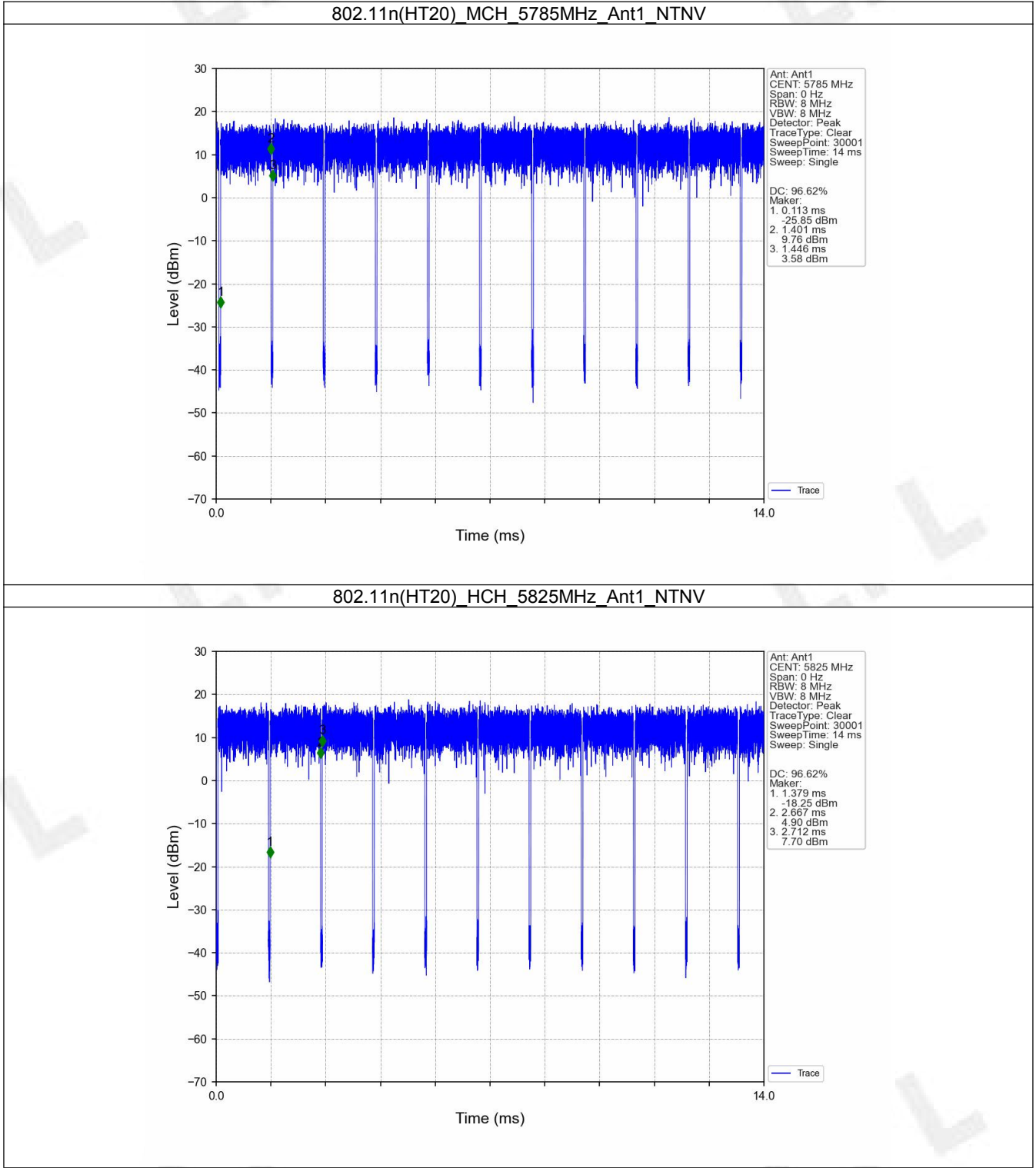
1.2.1 Ant1



FCC ID: 2BWH8-S26-UITRA

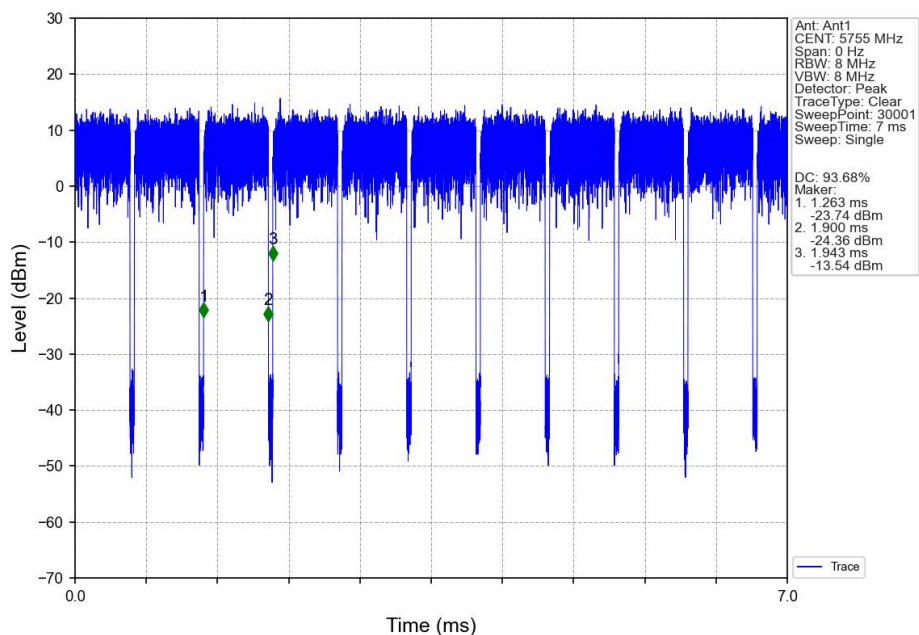


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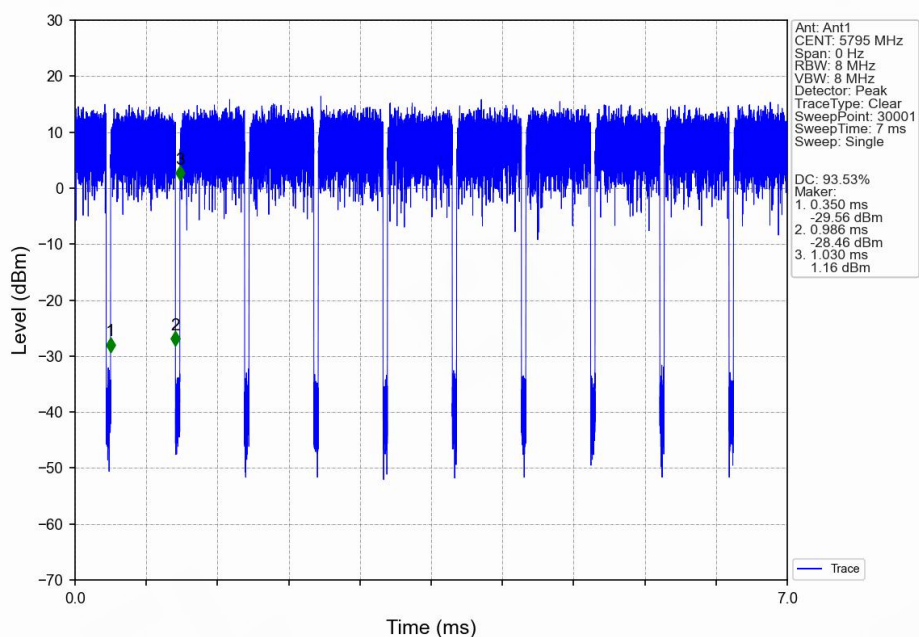


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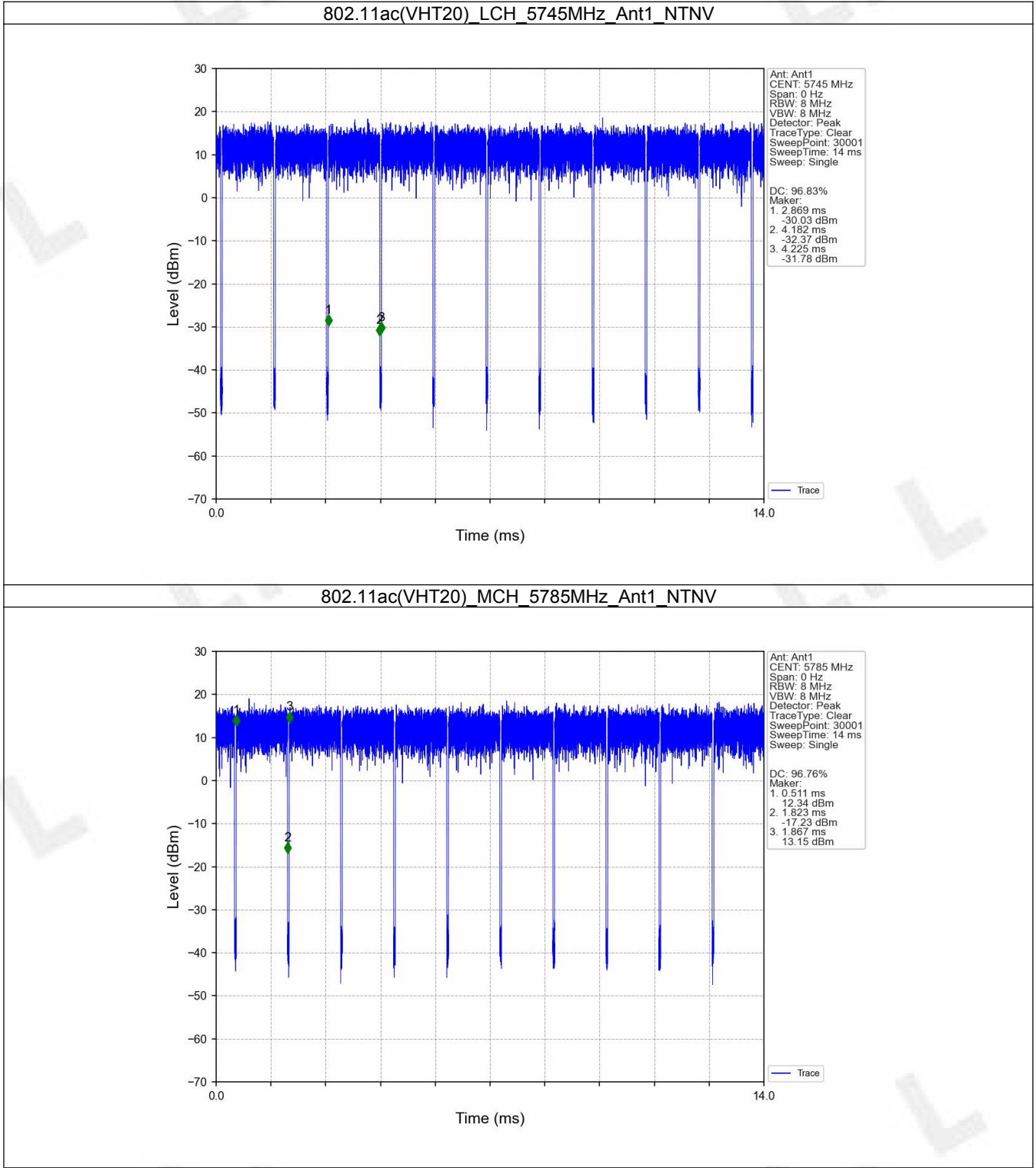
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



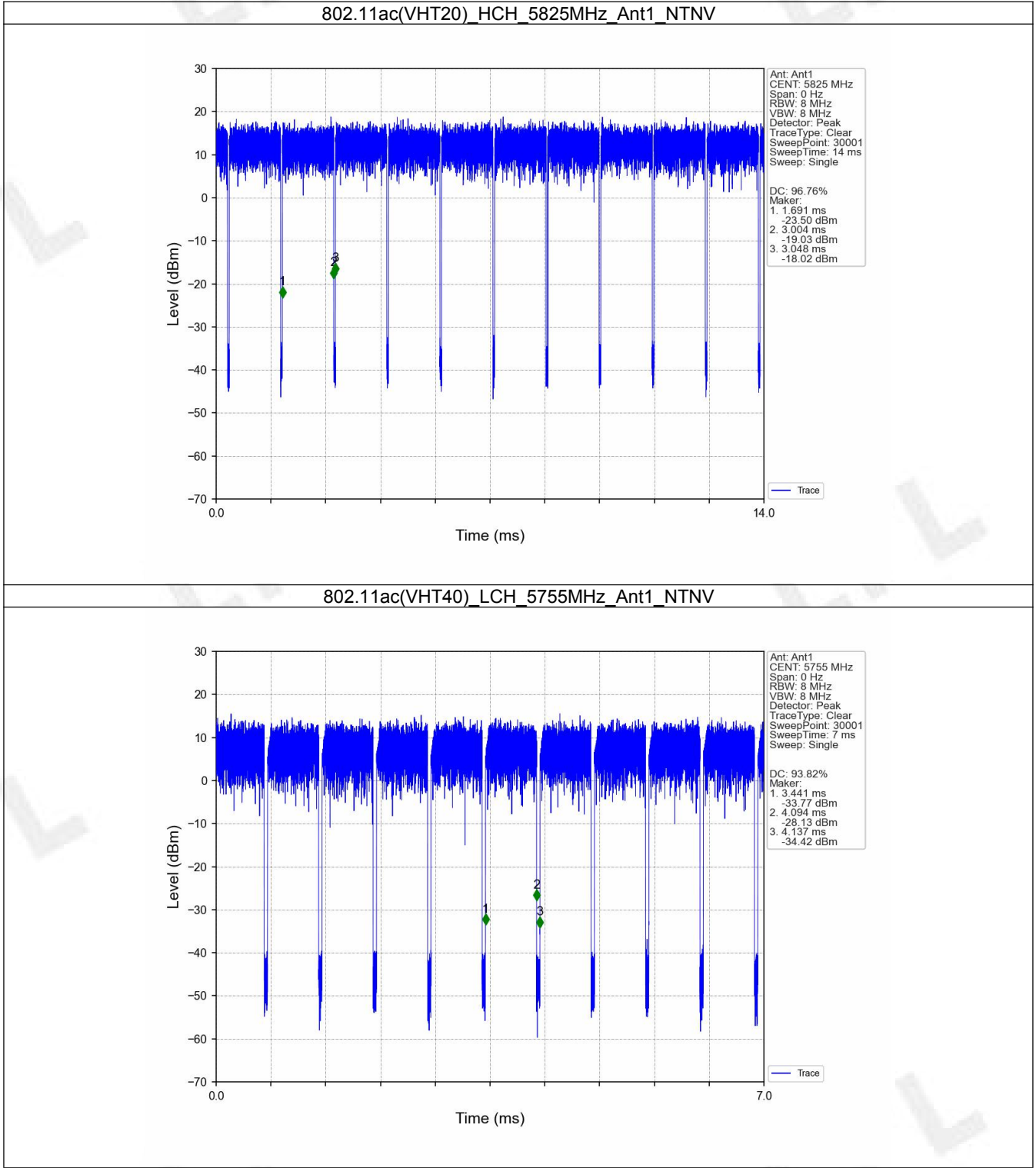
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



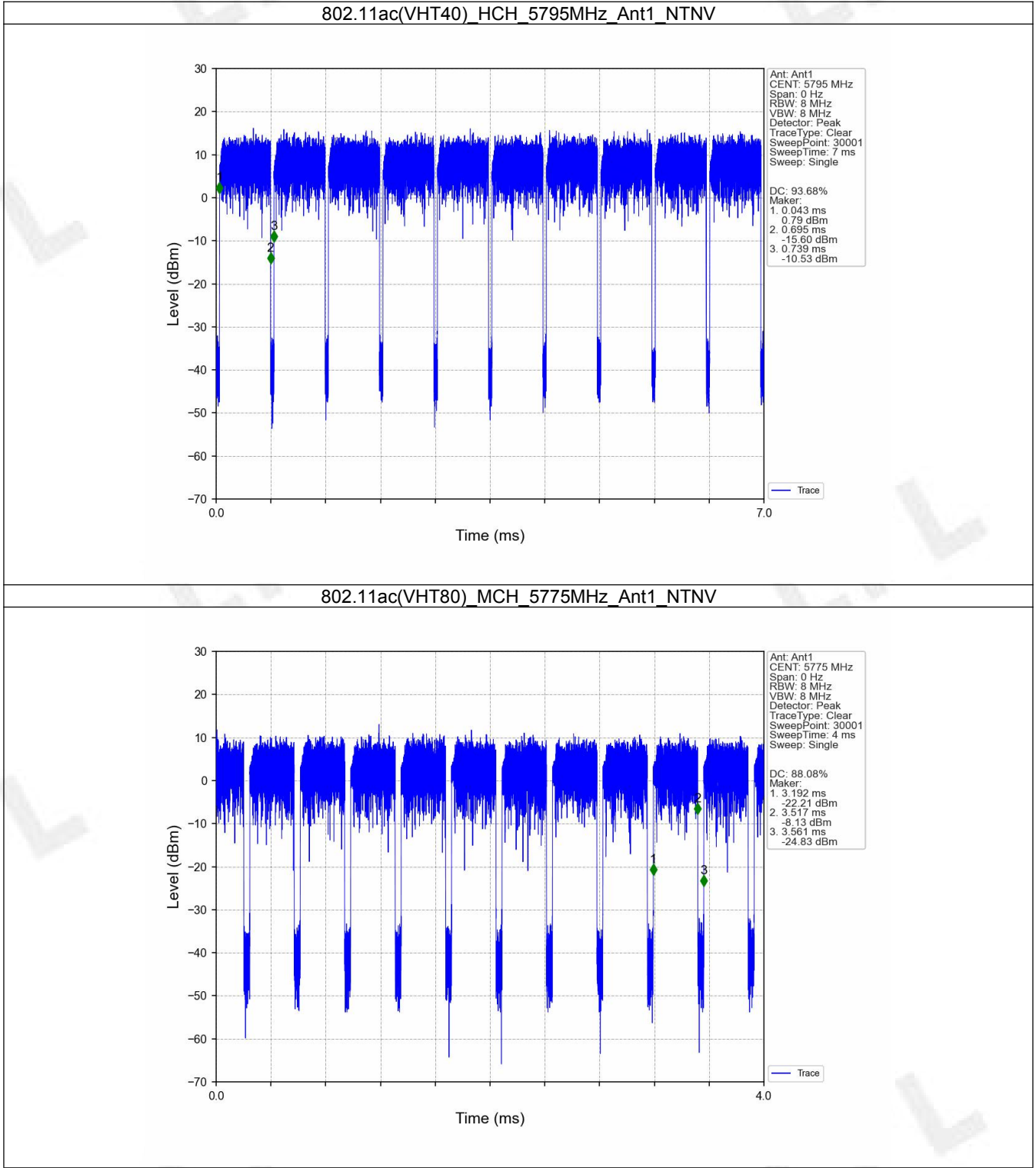
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2. Bandwidth**2.1 Test Result****2.1.1 OBW**

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	16.525	/	Pass
		5785	1	16.551	/	Pass
		5825	1	16.516	/	Pass
802.11n (HT20)	SISO	5745	1	17.701	/	Pass
		5785	1	17.654	/	Pass
		5825	1	17.677	/	Pass
802.11n (HT40)	SISO	5755	1	36.568	/	Pass
		5795	1	36.410	/	Pass
802.11ac (VHT20)	SISO	5745	1	17.640	/	Pass
		5785	1	17.590	/	Pass
		5825	1	17.634	/	Pass
802.11ac (VHT40)	SISO	5755	1	36.356	/	Pass
		5795	1	36.202	/	Pass
802.11ac (VHT80)	SISO	5775	1	75.487	/	Pass

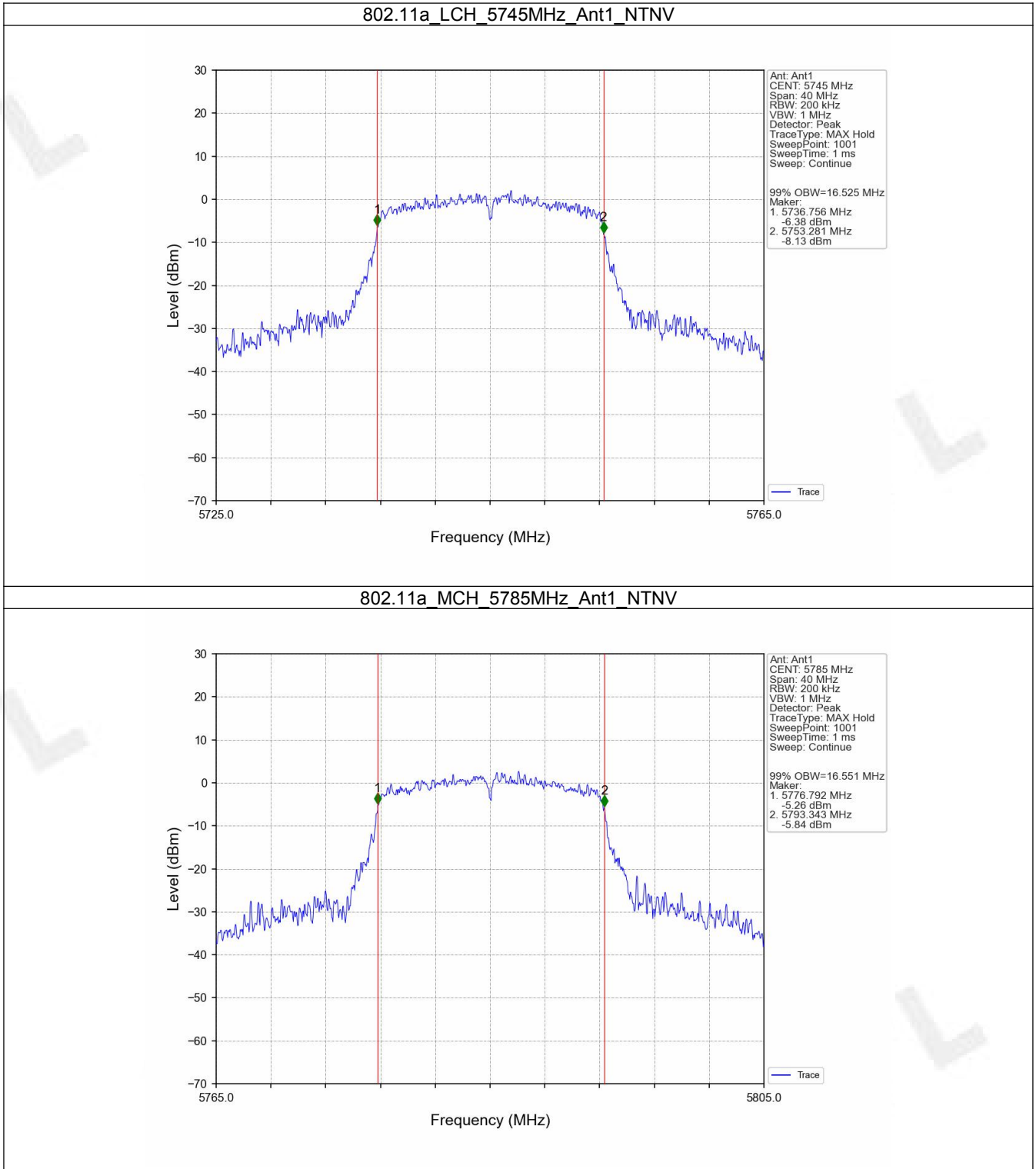
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	15.358	≥ 0.5	Pass
		5785	1	15.106	≥ 0.5	Pass
		5825	1	15.252	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	15.051	≥ 0.5	Pass
		5785	1	14.755	≥ 0.5	Pass
		5825	1	15.121	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	35.149	≥ 0.5	Pass
		5795	1	35.145	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	15.649	≥ 0.5	Pass
		5785	1	15.056	≥ 0.5	Pass
		5825	1	14.099	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	35.138	≥ 0.5	Pass
		5795	1	33.854	≥ 0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.052	≥ 0.5	Pass

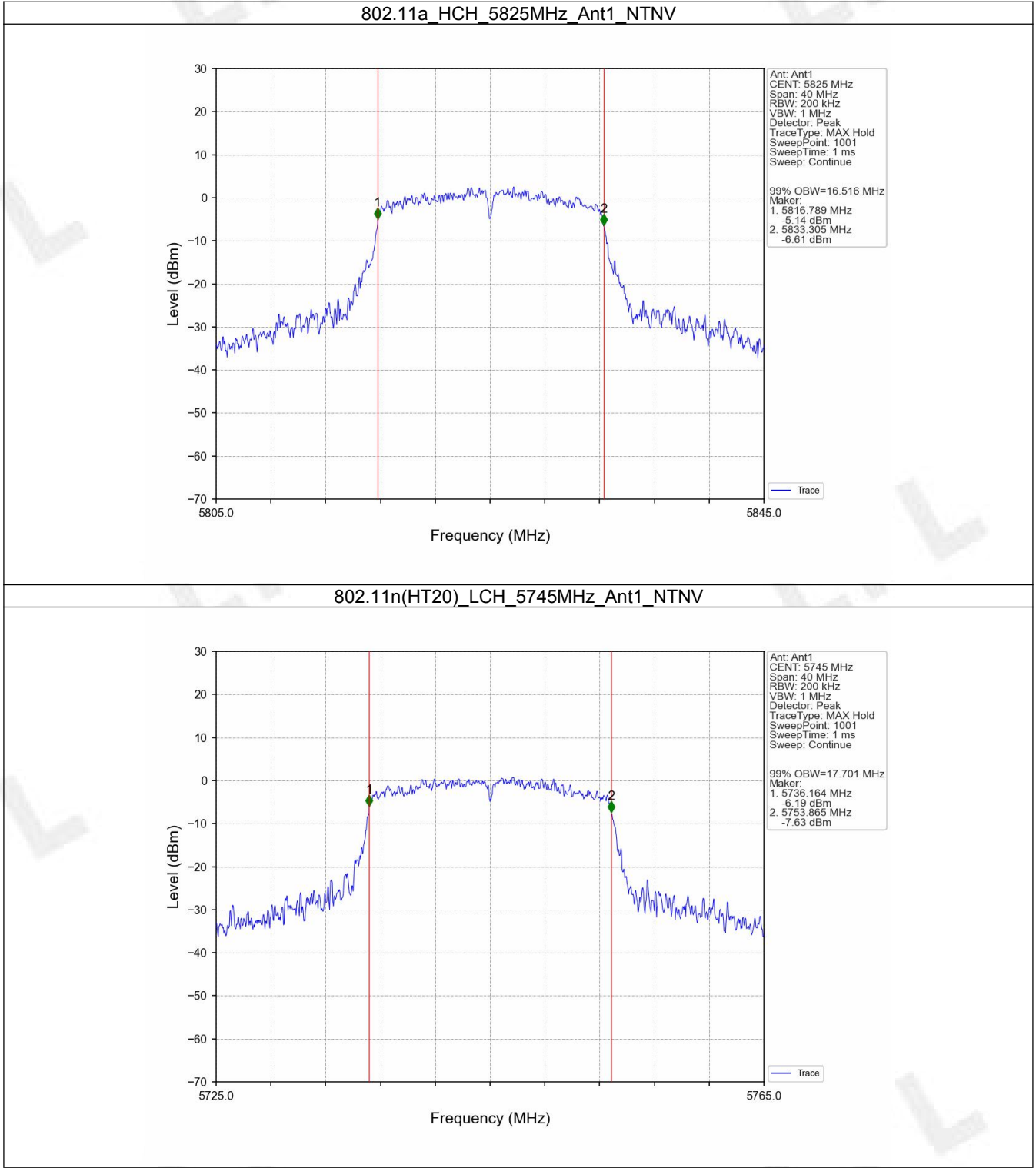
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2.2 Test Graph

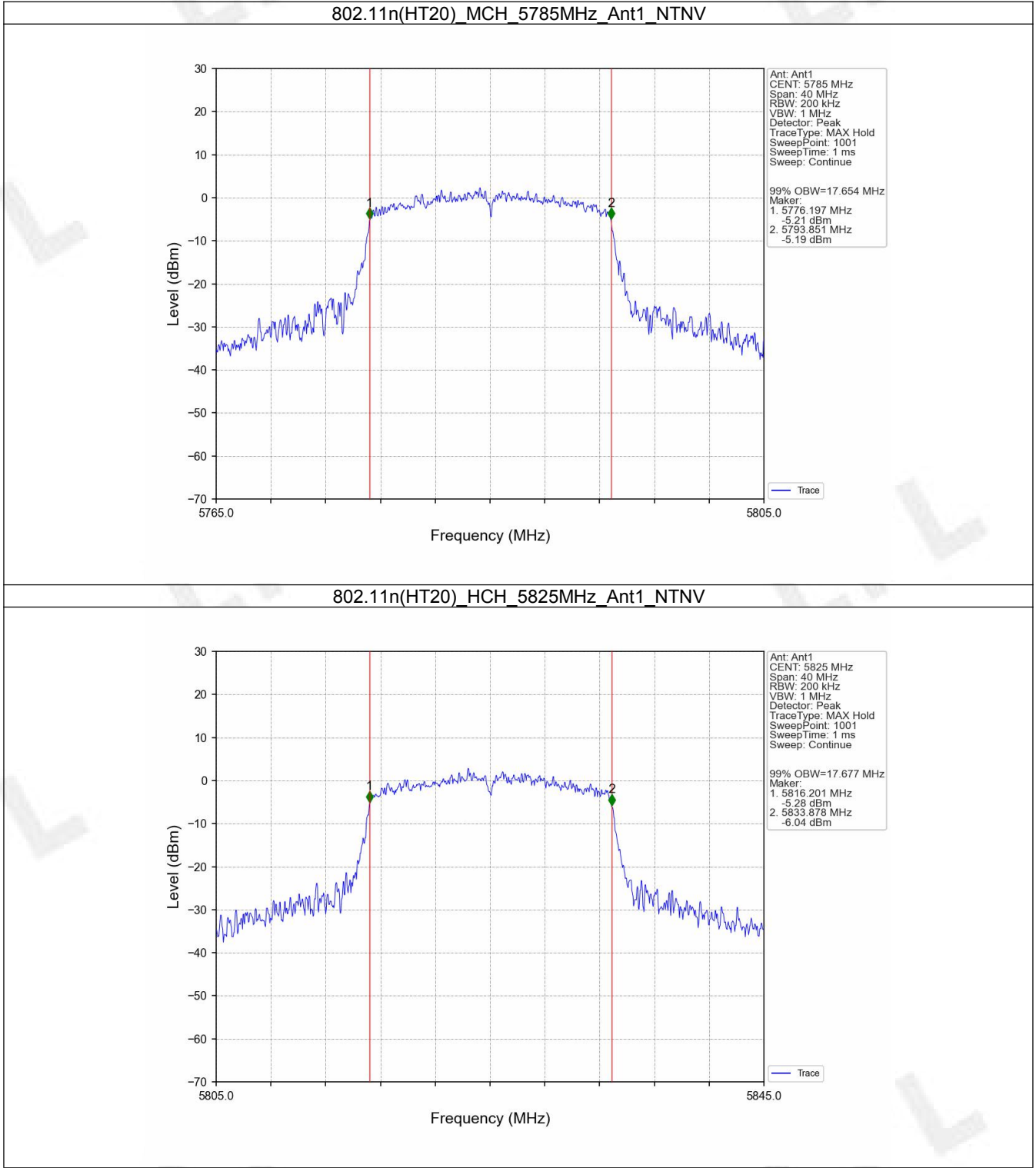
2.2.1 OBW



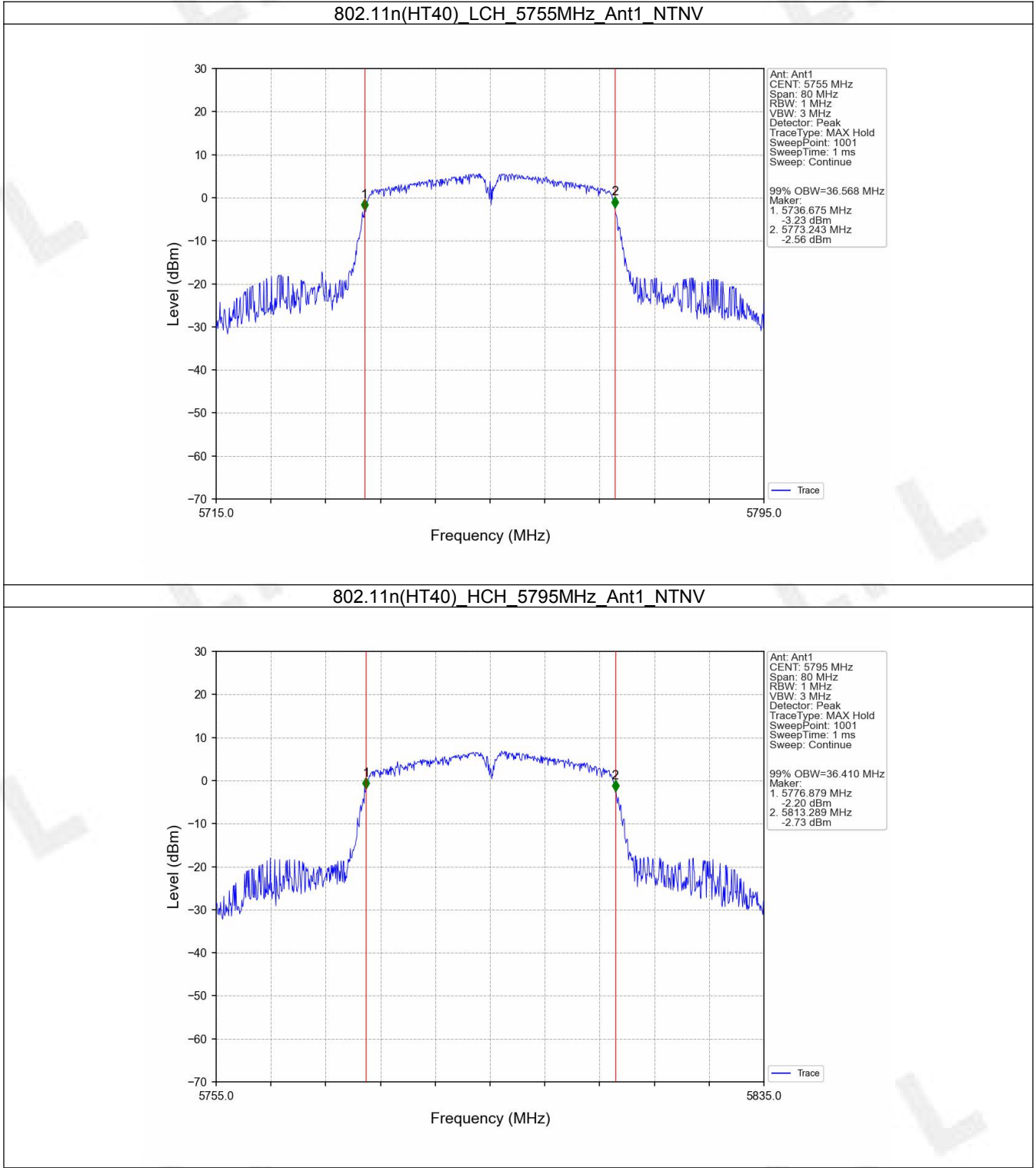
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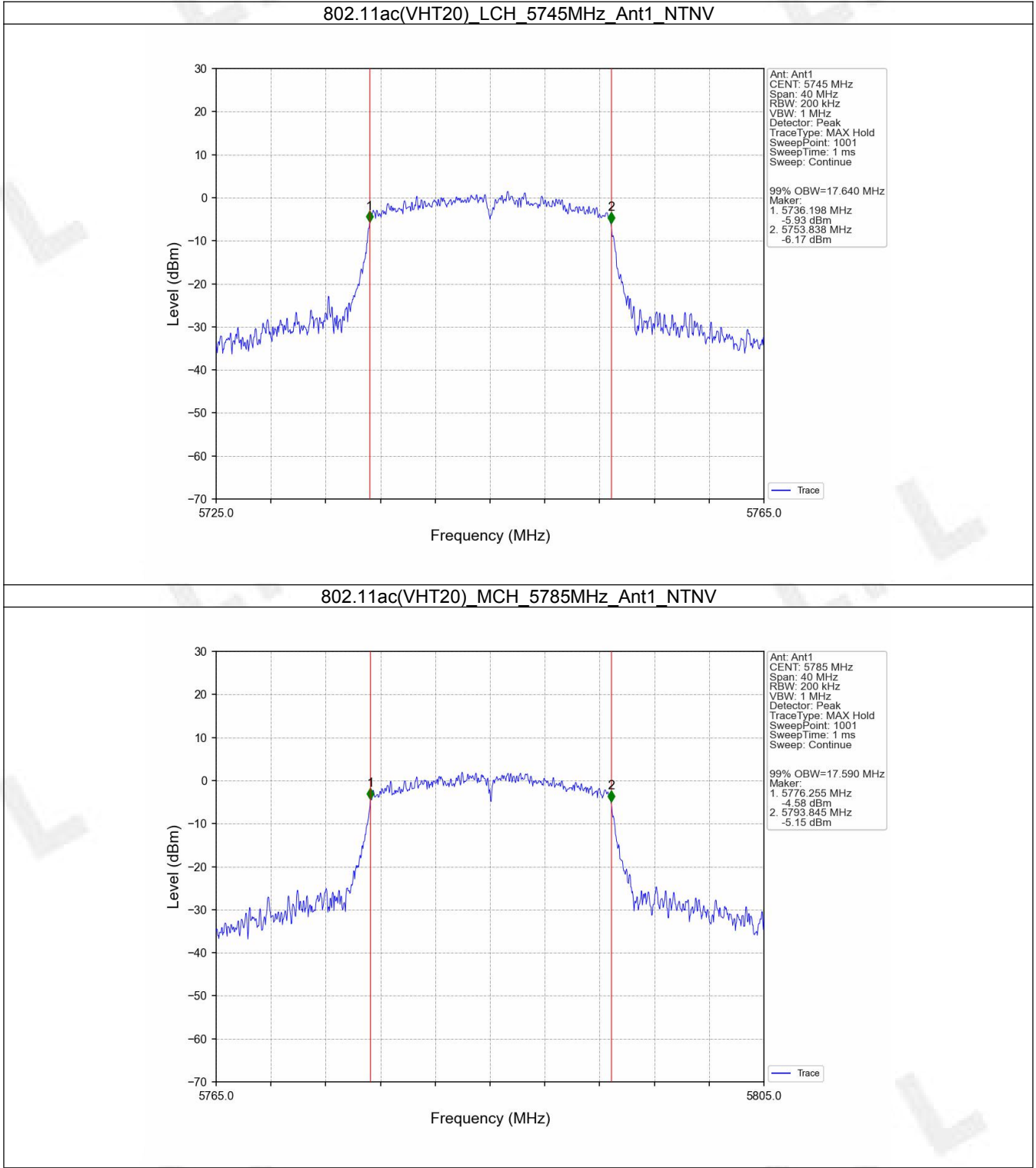
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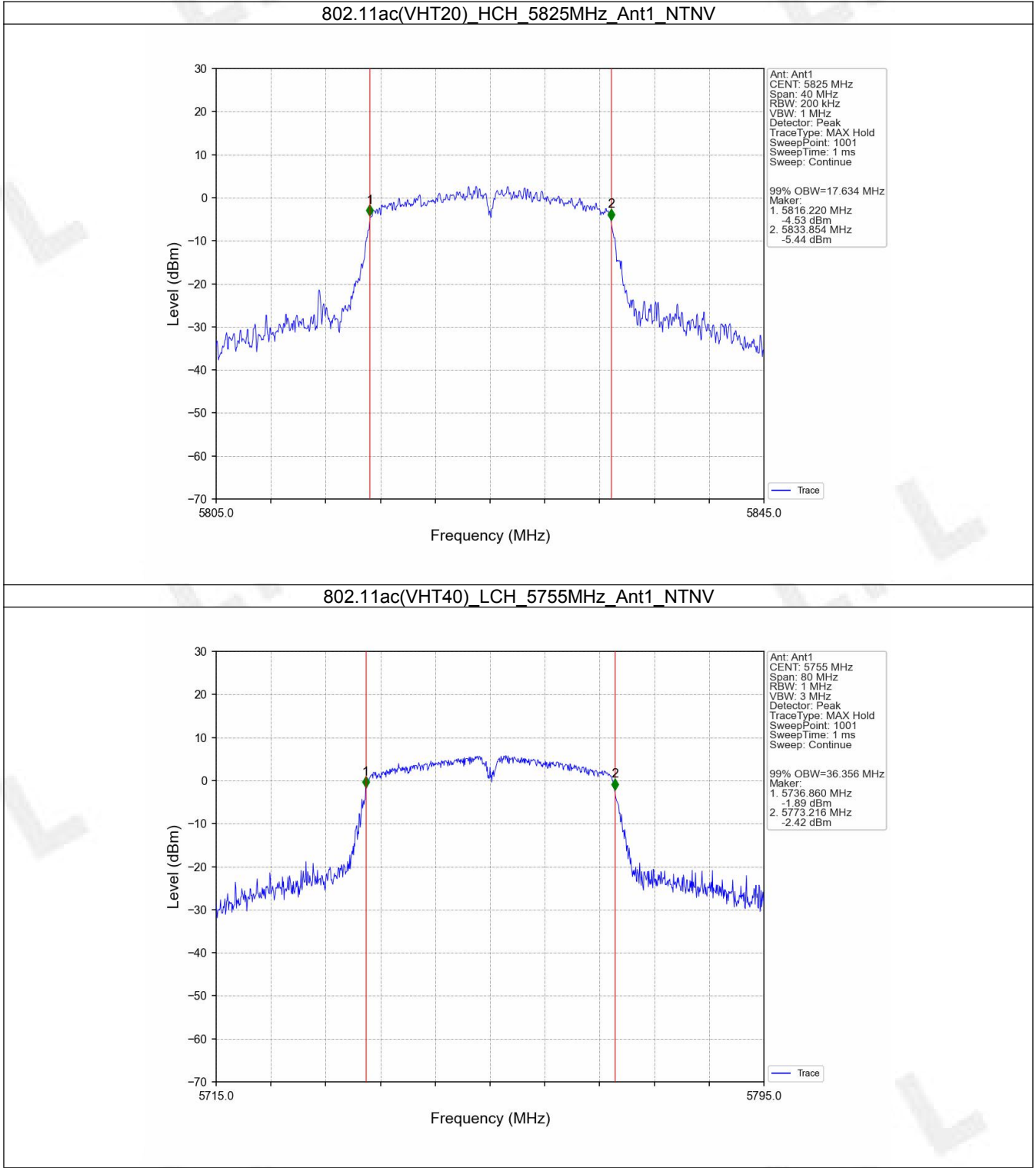
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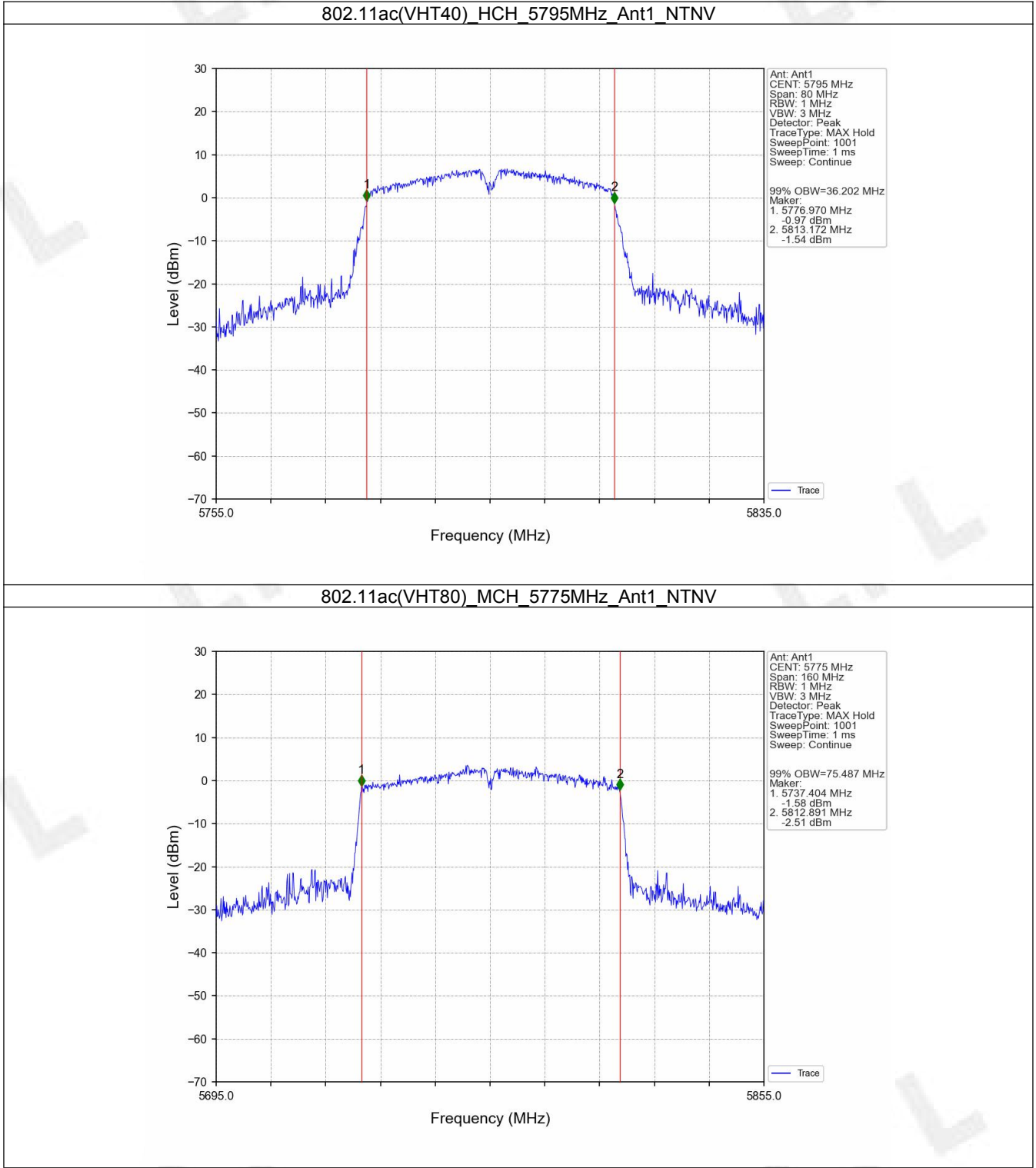
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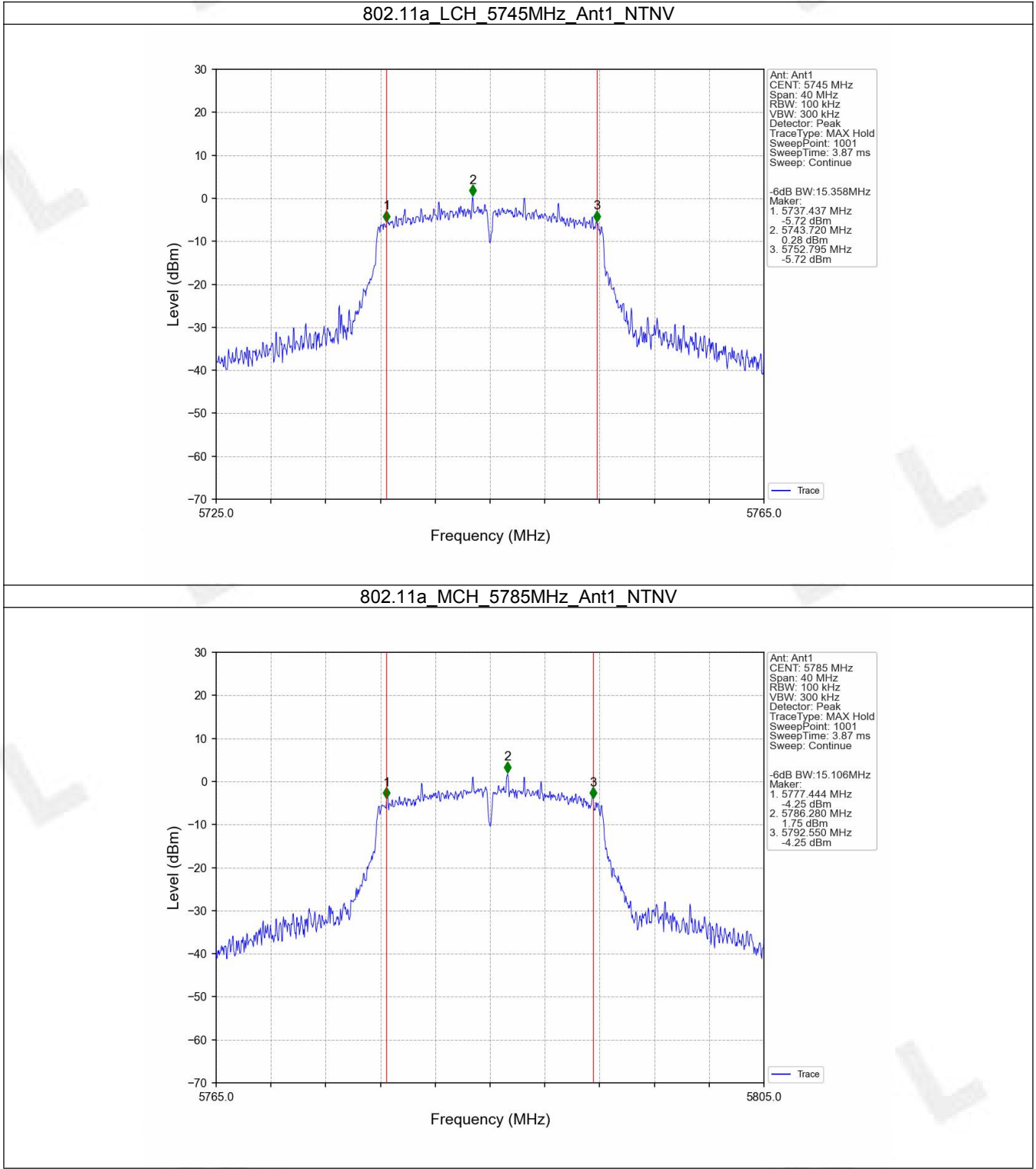


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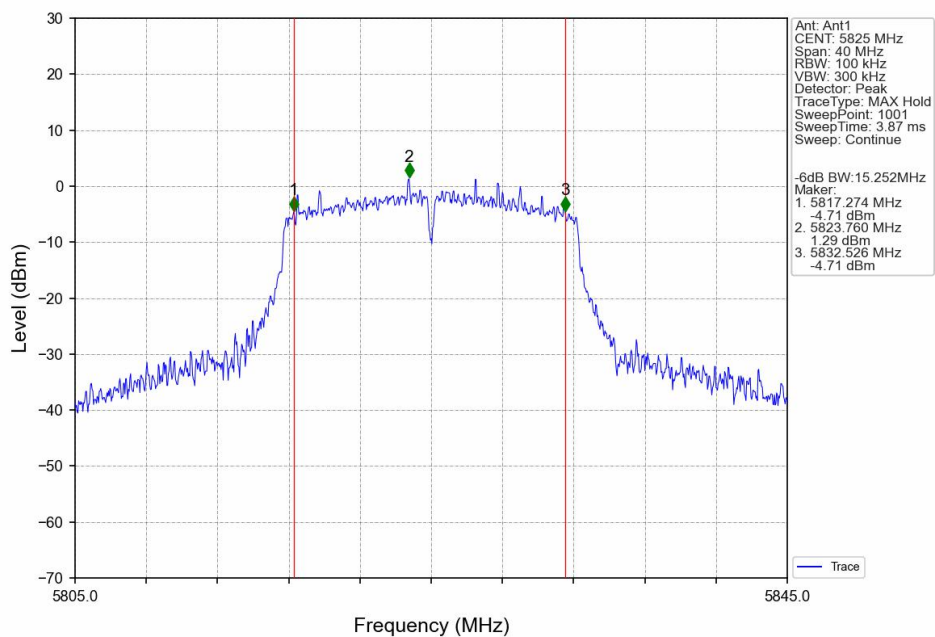
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2.2.2 6dB BW

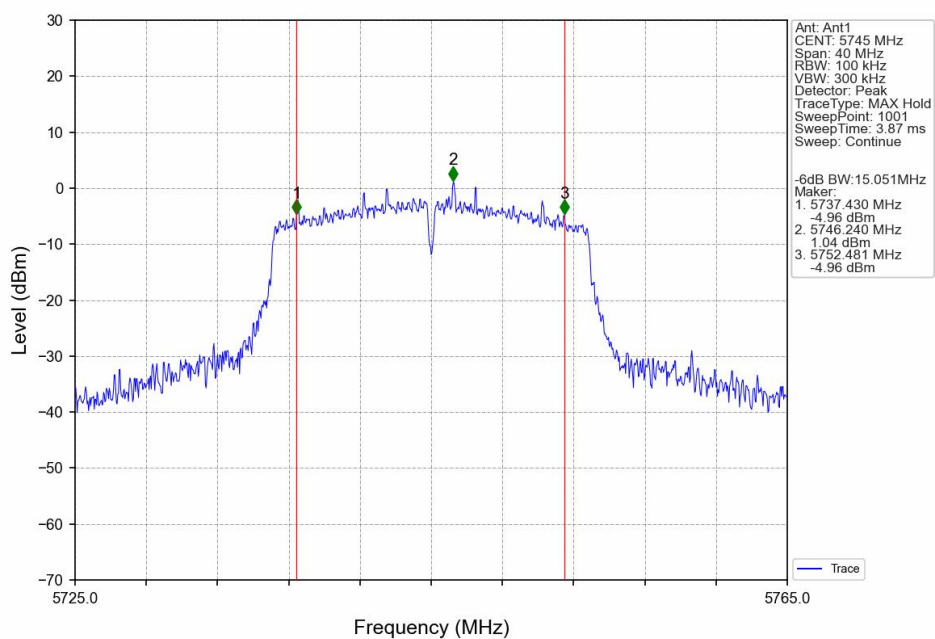


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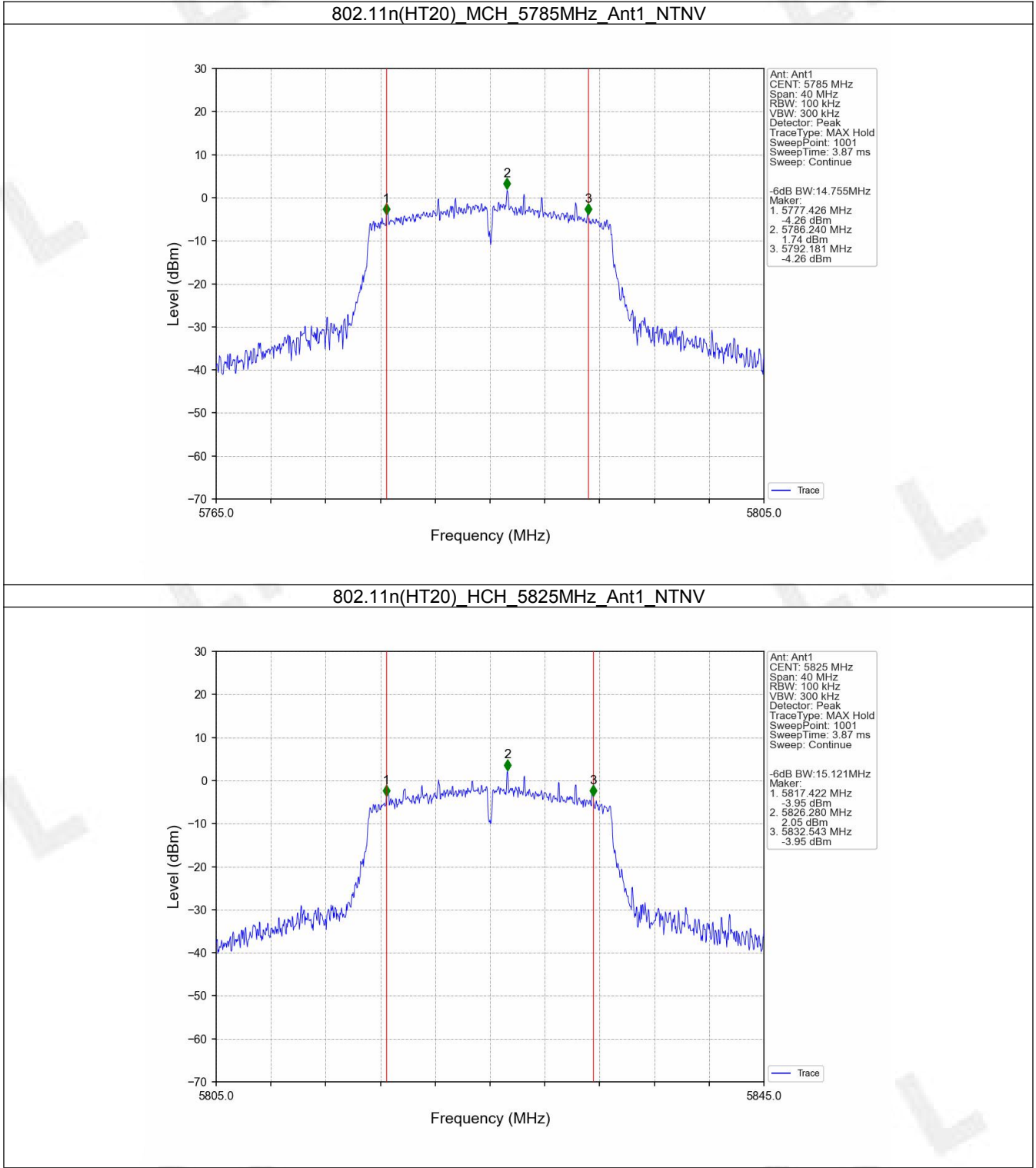
802.11a_HCH_5825MHz_Ant1_NTNV



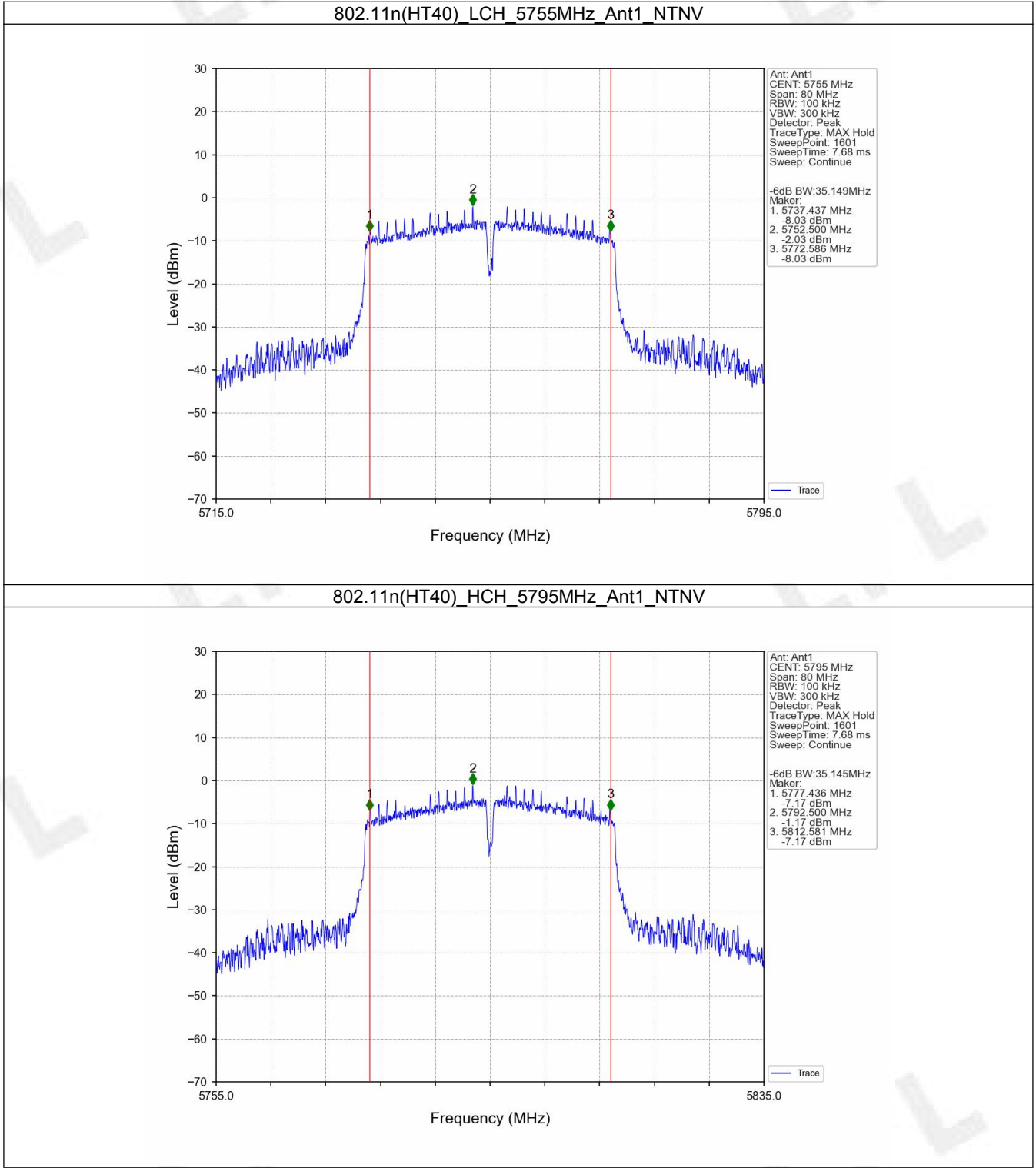
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



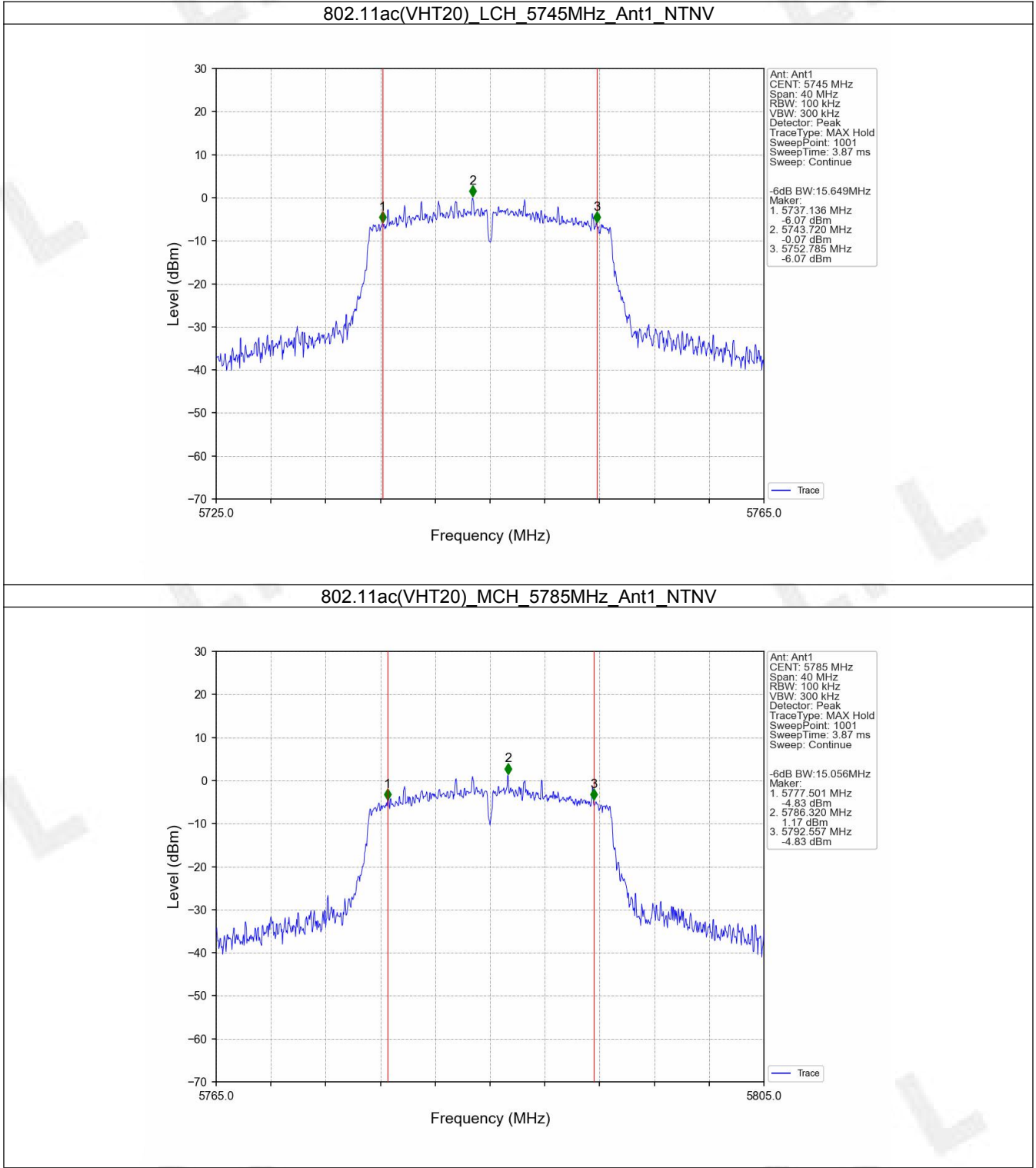
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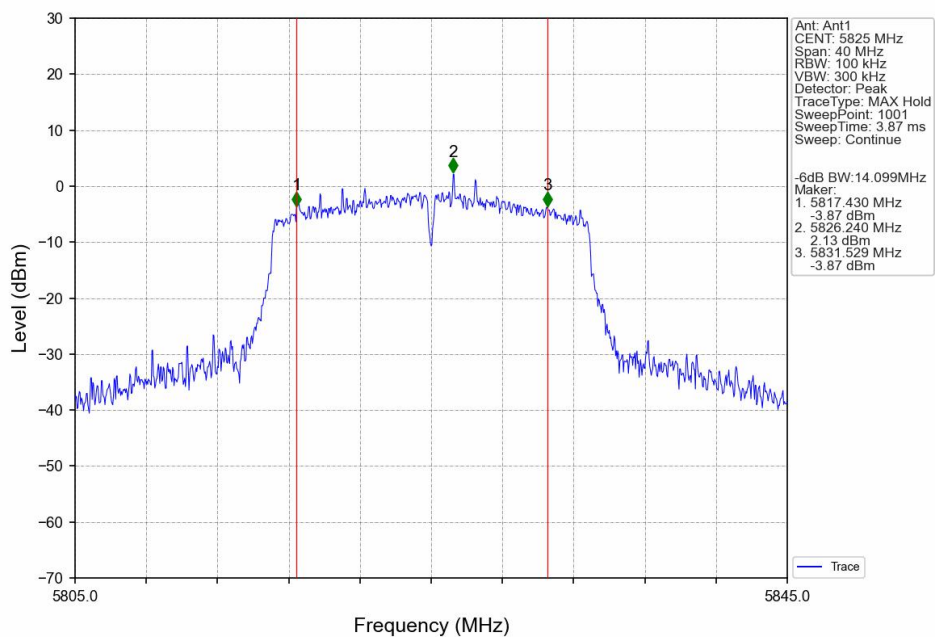


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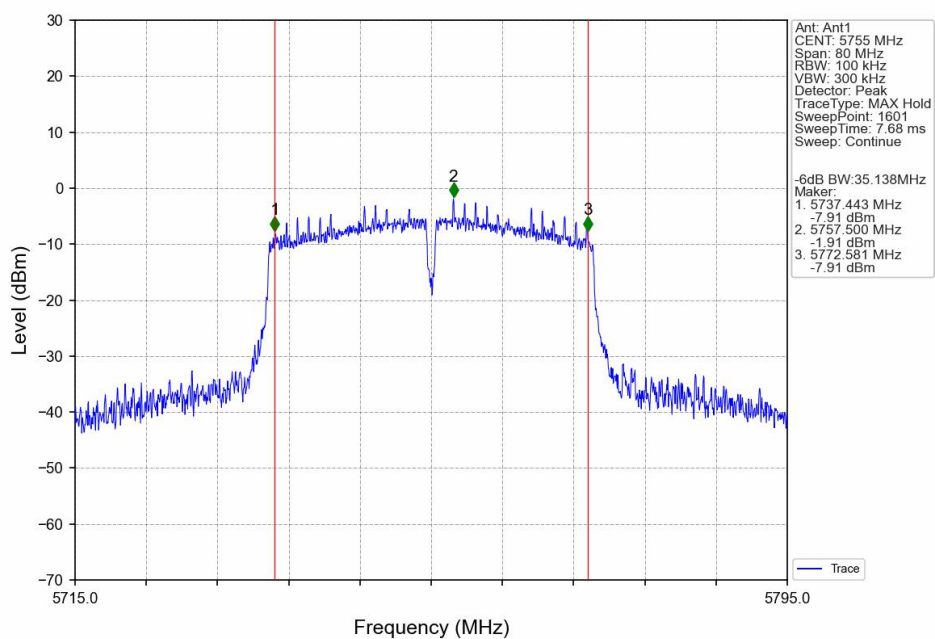


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802.11ac(VHT20) HCH 5825MHz Ant1_NTNV

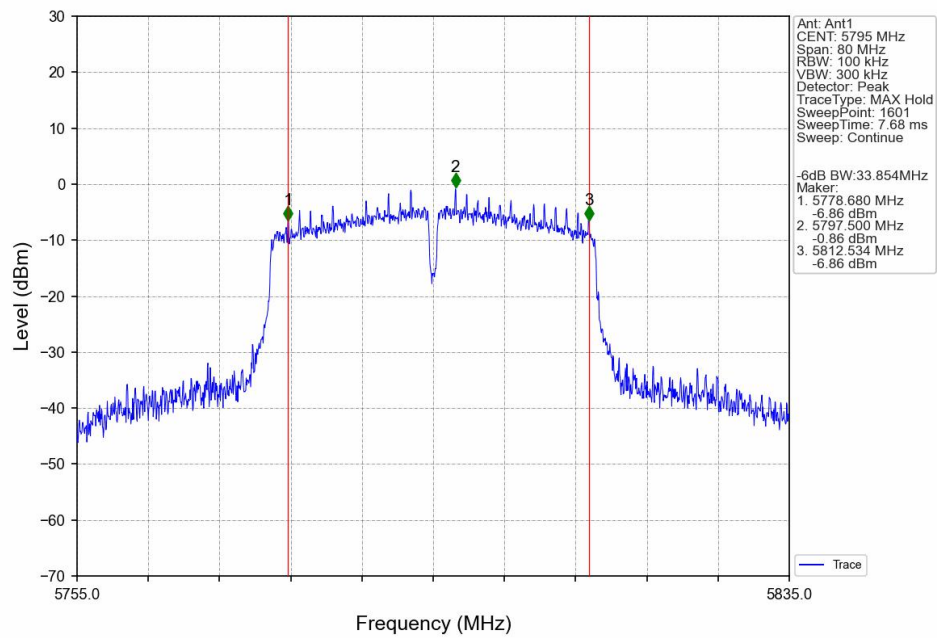


802.11ac(VHT40) LCH 5755MHz Ant1_NTNV

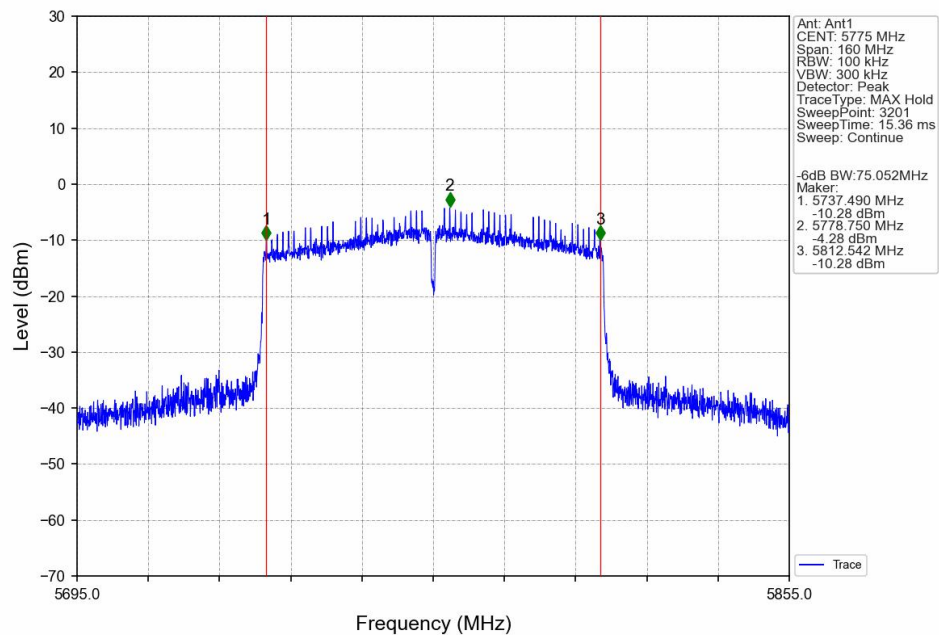


FCC ID: 2BWH8-S26-UITRA

802.11ac(VHT40) HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80) MCH_5775MHz_Ant1_NTNV



FCC ID: 2BWH8-S26-UITRA

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	11.31	<=30	Pass
		5785	12.17	<=30	Pass
		5825	12.32	<=30	Pass
802.11n (HT20)	SISO	5745	11.32	<=30	Pass
		5785	12.00	<=30	Pass
		5825	12.18	<=30	Pass
802.11n (HT40)	SISO	5755	11.23	<=30	Pass
		5795	12.17	<=30	Pass
802.11ac (VHT20)	SISO	5745	11.22	<=30	Pass
		5785	12.00	<=30	Pass
		5825	12.21	<=30	Pass
802.11ac (VHT40)	SISO	5755	11.30	<=30	Pass
		5795	12.14	<=30	Pass
802.11ac (VHT80)	SISO	5775	11.65	<=30	Pass

Note1: Antenna Gain: Ant1: 0.88dBi;
Note2: The duty factor is already compensated in the result;

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

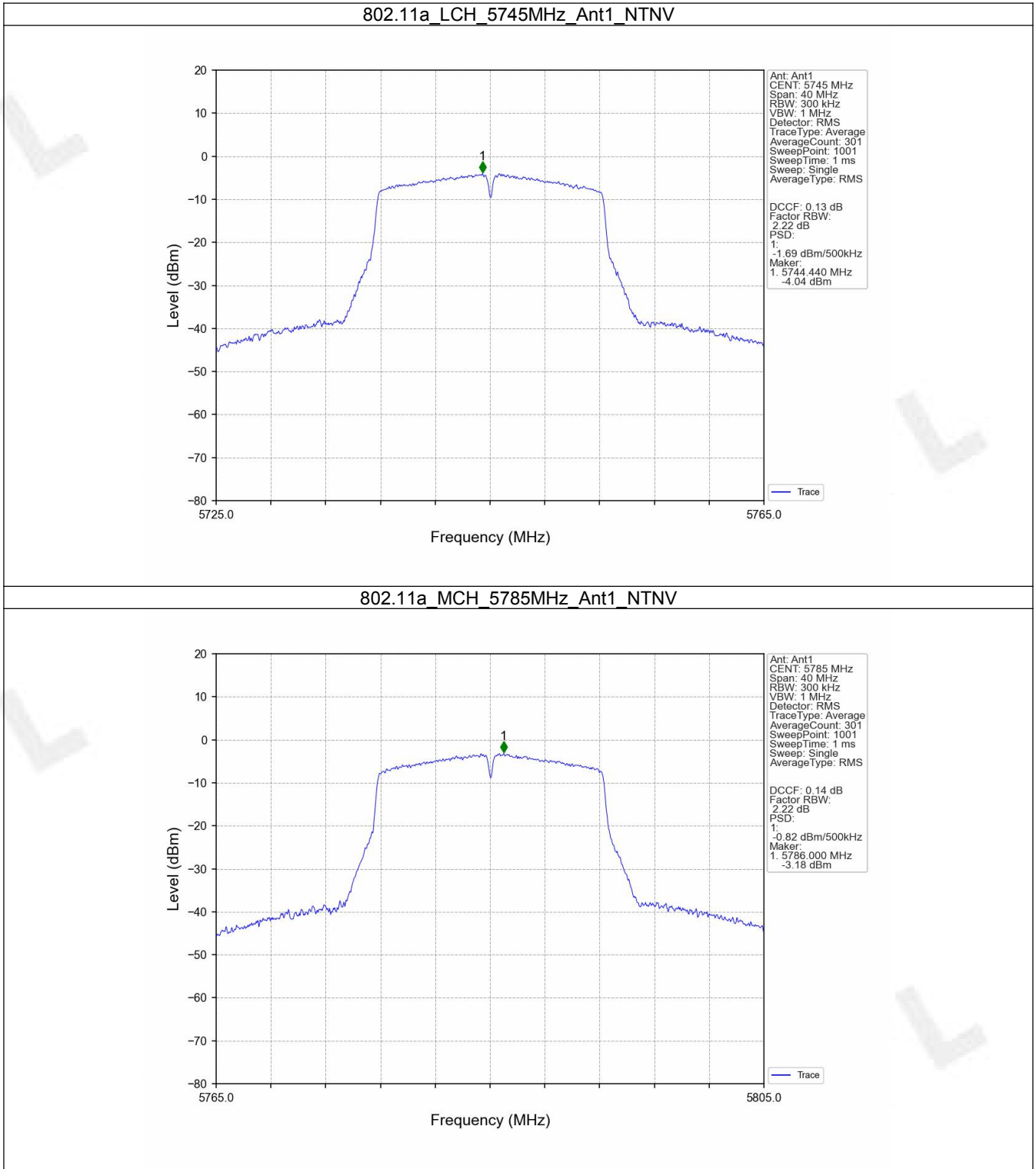
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	-1.69	<=30	Pass
		5785	-0.82	<=30	Pass
		5825	-0.75	<=30	Pass
802.11n (HT20)	SISO	5745	-1.99	<=30	Pass
		5785	-1.21	<=30	Pass
		5825	-1.09	<=30	Pass
802.11n (HT40)	SISO	5755	-5.11	<=30	Pass
		5795	-3.74	<=30	Pass
802.11ac (VHT20)	SISO	5745	-1.96	<=30	Pass
		5785	-1.29	<=30	Pass
		5825	-0.97	<=30	Pass
802.11ac (VHT40)	SISO	5755	-5.09	<=30	Pass
		5795	-3.91	<=30	Pass
802.11ac (VHT80)	SISO	5775	-7.38	<=30	Pass

Note1: Antenna Gain: Ant1: 0.88dBi;

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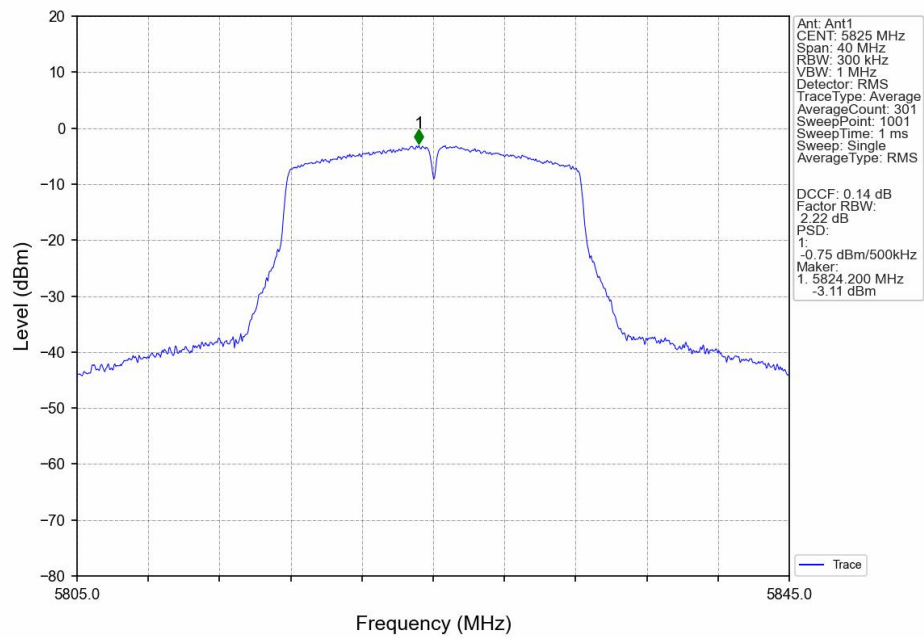
4.2 Test Graph

4.2.1 PSD-Band3

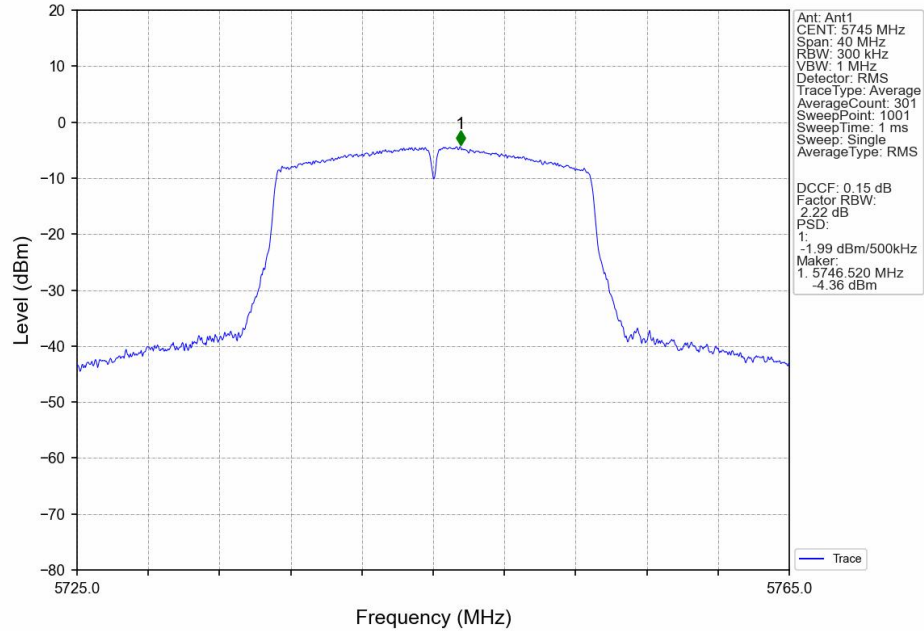


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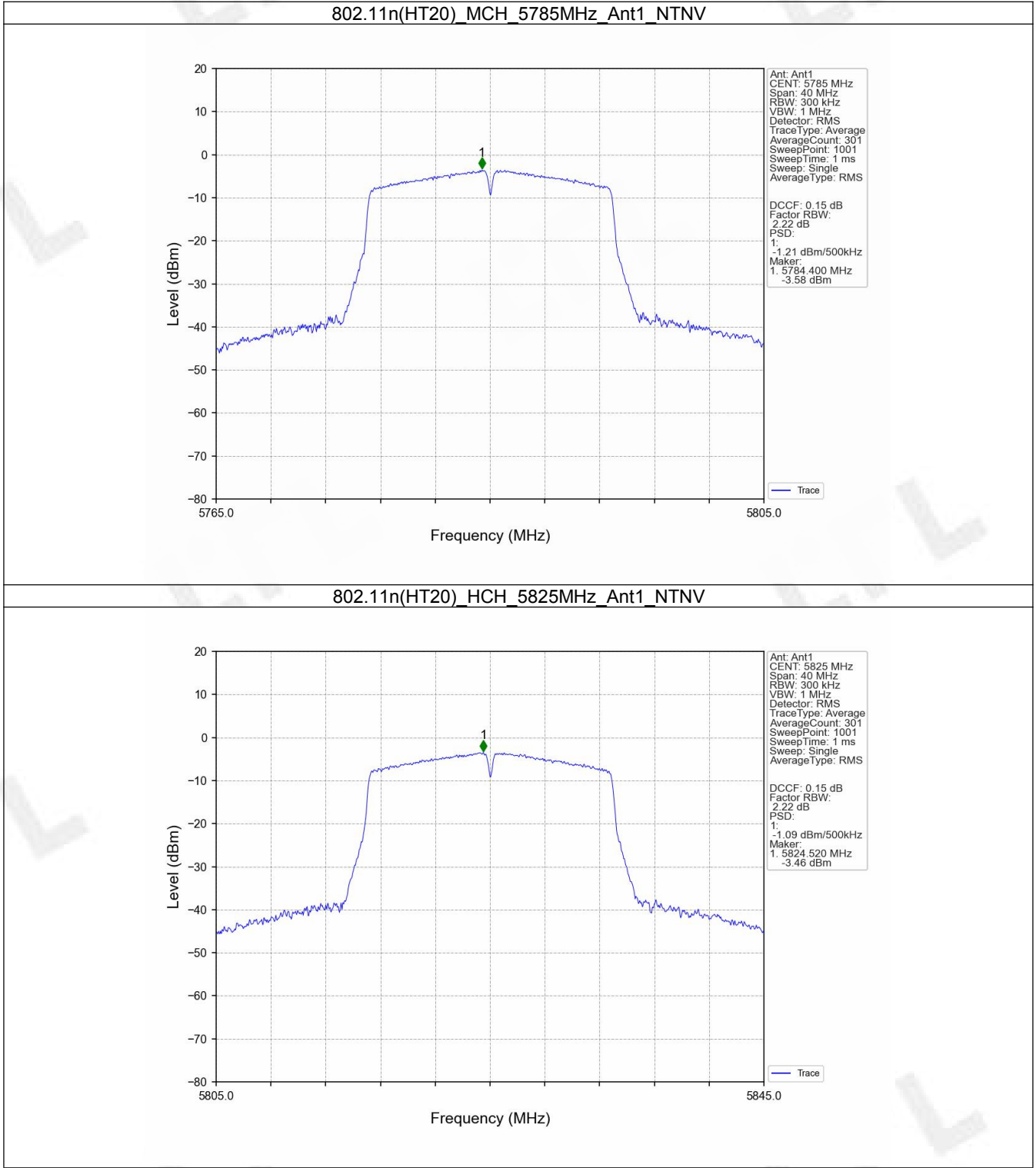
802.11a_HCH_5825MHz_Ant1_NTNV



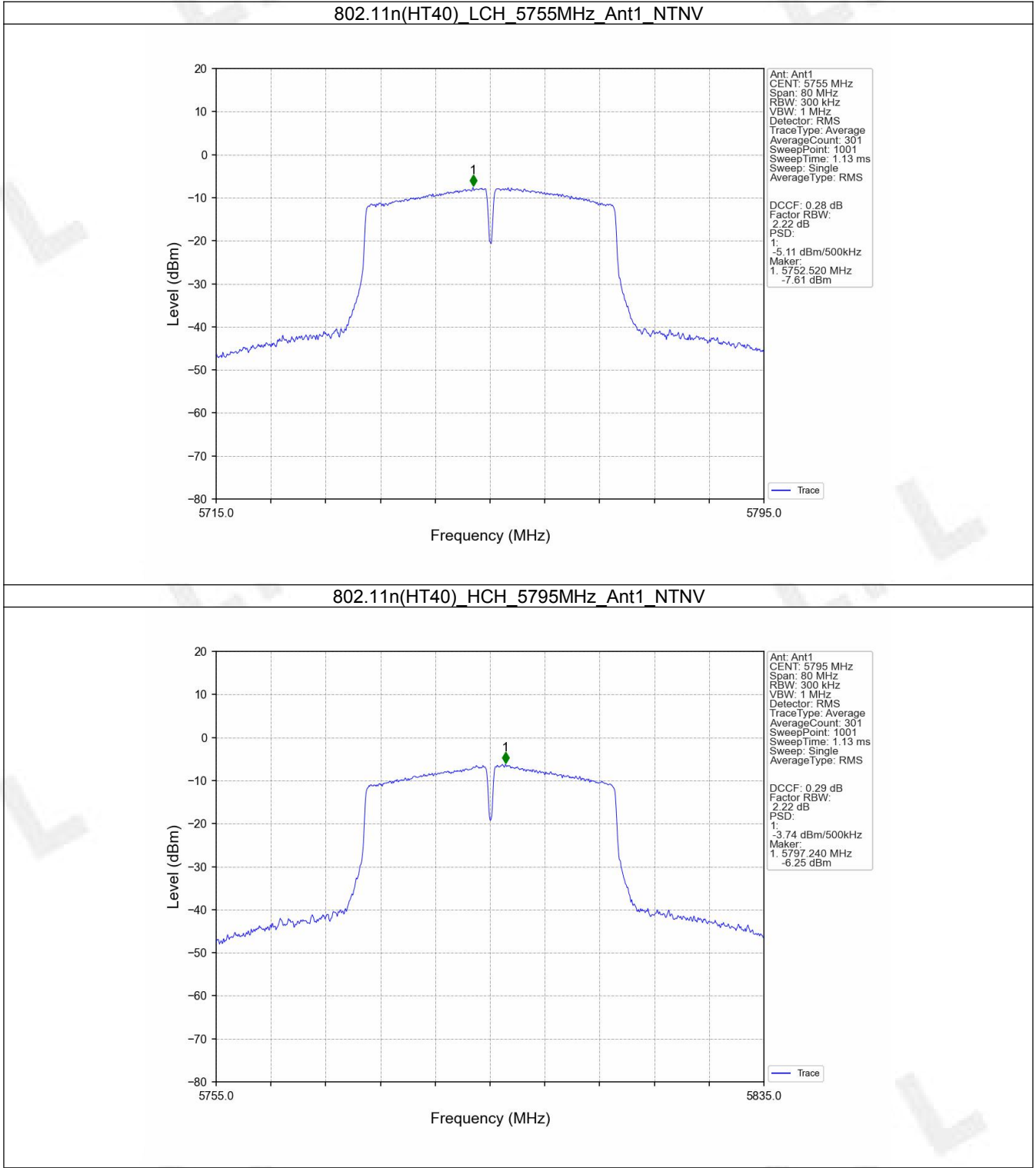
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



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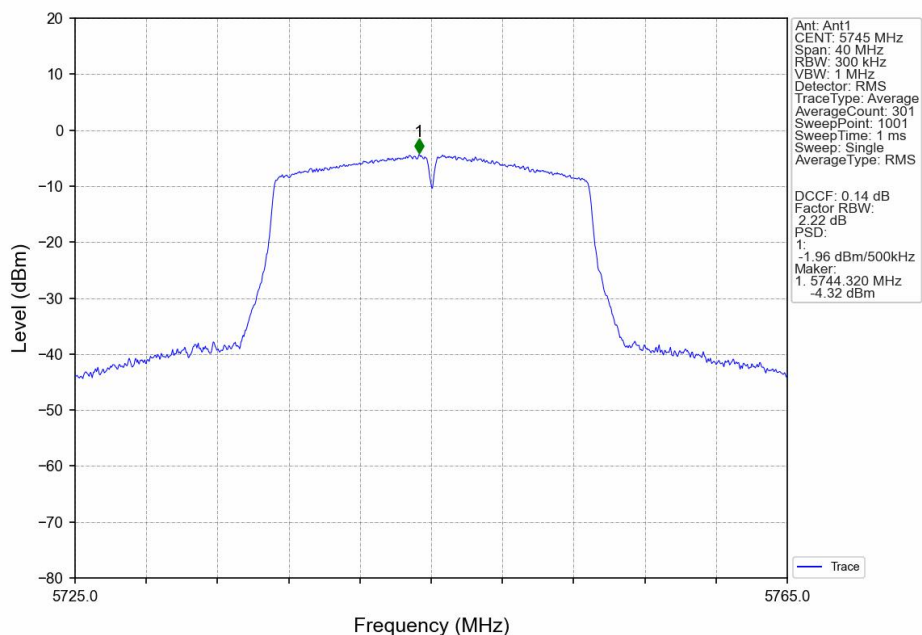


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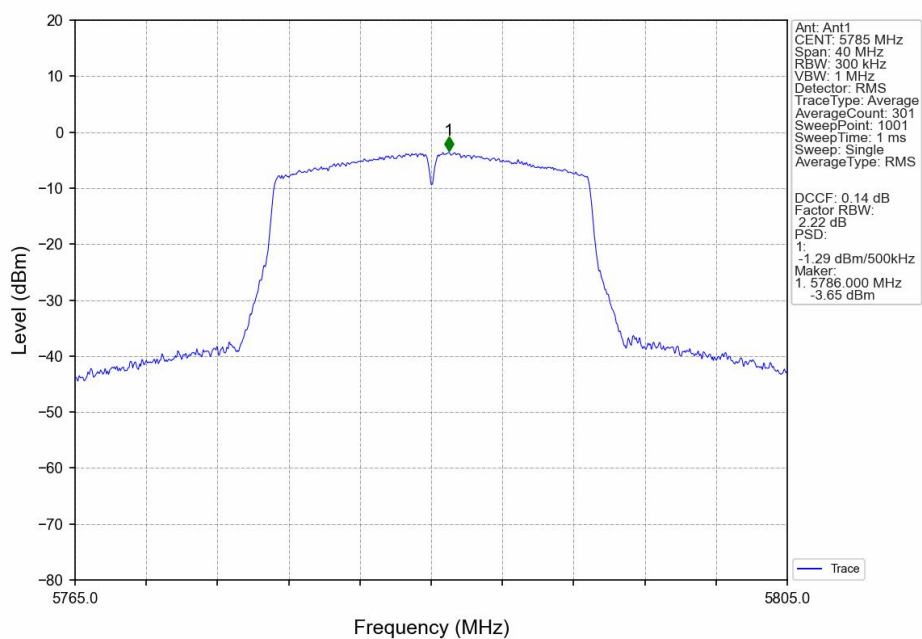


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802.11ac(VHT20) LCH_5745MHz_Ant1_NTNV

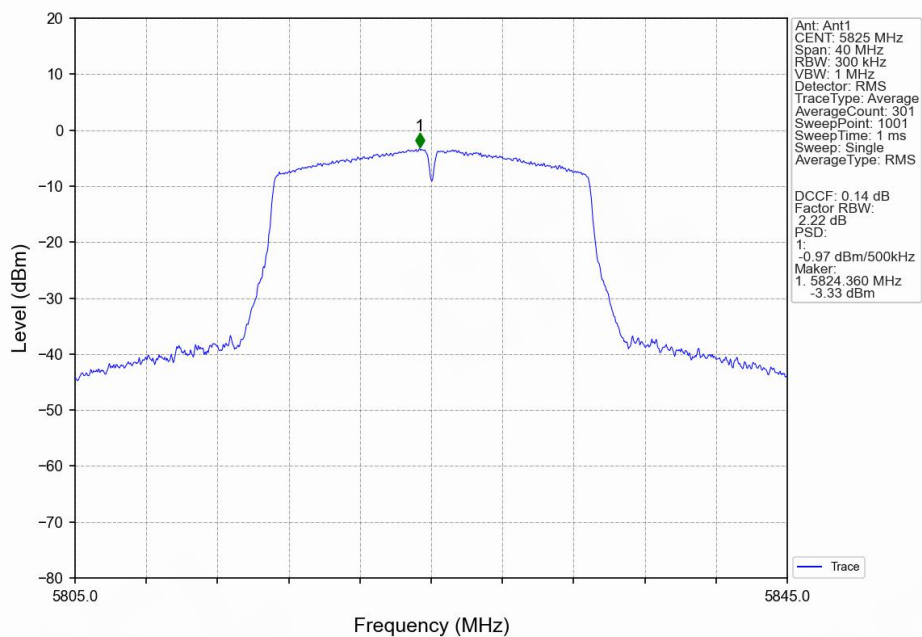


802.11ac(VHT20) MCH_5785MHz_Ant1_NTNV

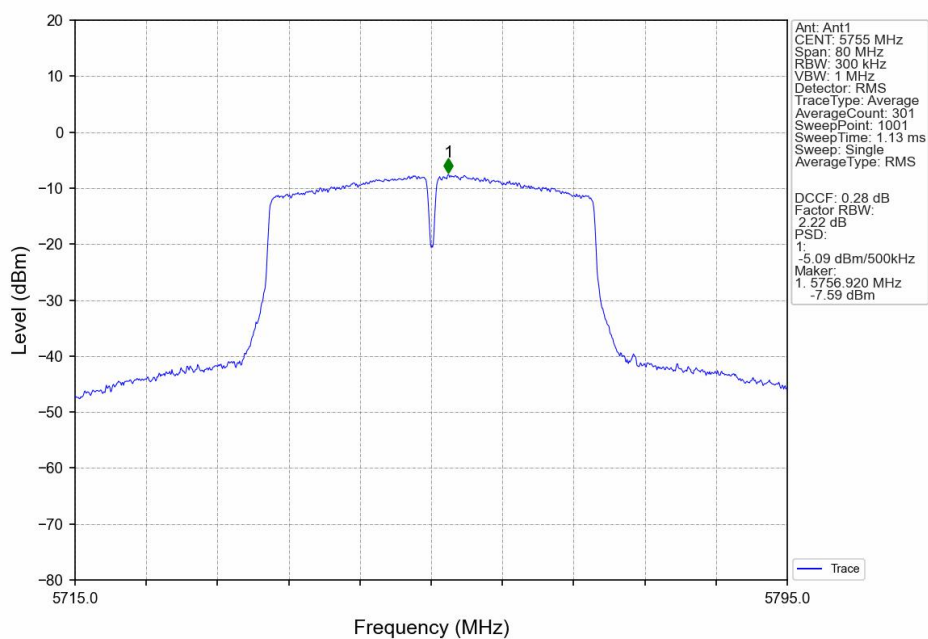


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802.11ac(VHT20) HCH_5825MHz_Ant1_NTNV

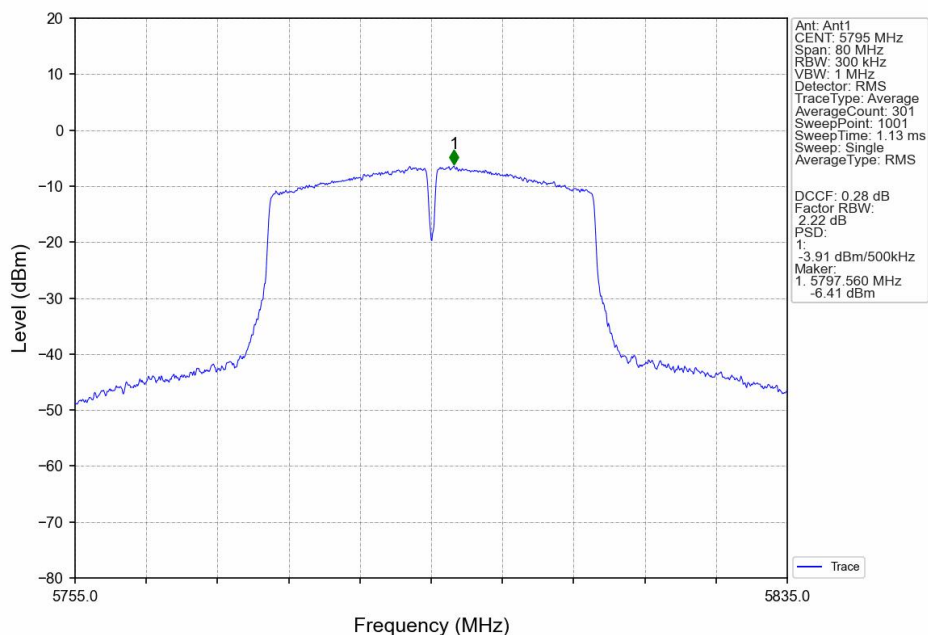


802.11ac(VHT40) LCH_5755MHz_Ant1_NTNV

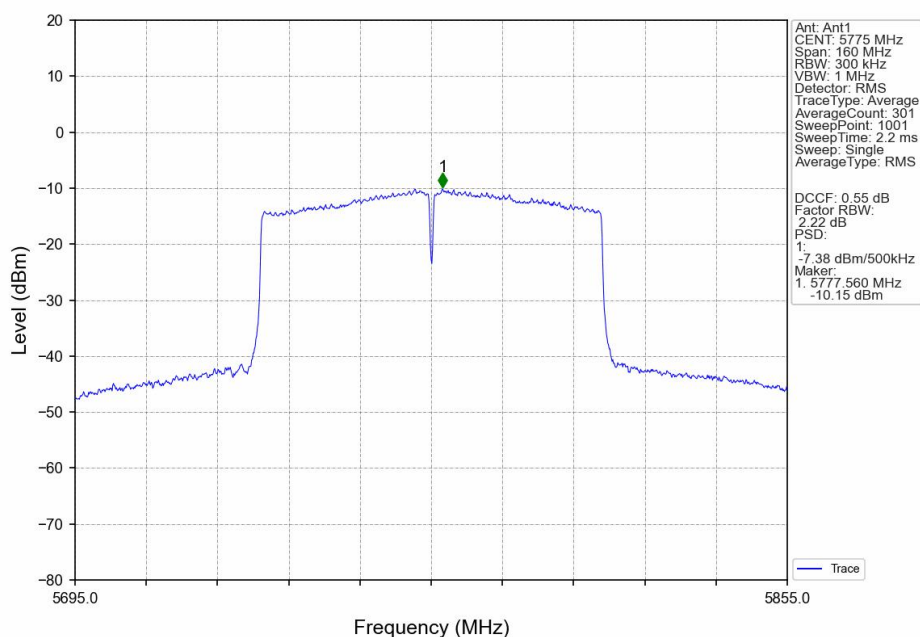


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802.11ac(VHT40) HCH 5795MHz_Ant1_NTNV



802.11ac(VHT80) MCH 5775MHz_Ant1_NTNV



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

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage	Measured Frequency (MHz)	Limit (MHz)	Verdict
Carrier Wave	SISO	5745	20	LV	5744.991	5725 to 5850	Pass
				NV	5744.990	5725 to 5850	Pass
				HV	5744.989	5725 to 5850	Pass
			-30	NV	5744.988	5725 to 5850	Pass
			-20	NV	5744.988	5725 to 5850	Pass
			-10	NV	5744.987	5725 to 5850	Pass
			0	NV	5744.987	5725 to 5850	Pass
			10	NV	5744.987	5725 to 5850	Pass
			30	NV	5744.987	5725 to 5850	Pass
			40	NV	5744.986	5725 to 5850	Pass
			50	NV	5744.986	5725 to 5850	Pass
		5785	20	LV	5784.988	5725 to 5850	Pass
				NV	5784.987	5725 to 5850	Pass
				HV	5784.987	5725 to 5850	Pass
			-30	NV	5784.986	5725 to 5850	Pass
			-20	NV	5784.986	5725 to 5850	Pass
			-10	NV	5784.986	5725 to 5850	Pass
			0	NV	5784.986	5725 to 5850	Pass
			10	NV	5784.985	5725 to 5850	Pass
			30	NV	5784.985	5725 to 5850	Pass
			40	NV	5784.985	5725 to 5850	Pass
			50	NV	5784.985	5725 to 5850	Pass
		5825	20	LV	5824.985	5725 to 5850	Pass
				NV	5824.985	5725 to 5850	Pass
				HV	5824.985	5725 to 5850	Pass
			-30	NV	5824.984	5725 to 5850	Pass
			-20	NV	5824.984	5725 to 5850	Pass
			-10	NV	5824.984	5725 to 5850	Pass
			0	NV	5824.984	5725 to 5850	Pass
			10	NV	5824.984	5725 to 5850	Pass
			30	NV	5824.984	5725 to 5850	Pass
			40	NV	5824.984	5725 to 5850	Pass
			50	NV	5824.984	5725 to 5850	Pass
		5755	20	LV	5754.987	5725 to 5850	Pass
				NV	5754.987	5725 to 5850	Pass
				HV	5754.986	5725 to 5850	Pass
			-30	NV	5754.986	5725 to 5850	Pass
			-20	NV	5754.985	5725 to 5850	Pass
			-10	NV	5754.985	5725 to 5850	Pass
			0	NV	5754.985	5725 to 5850	Pass
			10	NV	5754.985	5725 to 5850	Pass
			30	NV	5754.985	5725 to 5850	Pass
			40	NV	5754.985	5725 to 5850	Pass
			50	NV	5754.984	5725 to 5850	Pass
		5795	20	LV	5794.985	5725 to 5850	Pass
				NV	5794.984	5725 to 5850	Pass
				HV	5794.984	5725 to 5850	Pass
			-30	NV	5794.984	5725 to 5850	Pass
			-20	NV	5794.984	5725 to 5850	Pass

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			-10	NV	5794.984	5725 to 5850	Pass
			0	NV	5794.984	5725 to 5850	Pass
			10	NV	5794.984	5725 to 5850	Pass
			30	NV	5794.984	5725 to 5850	Pass
			40	NV	5794.984	5725 to 5850	Pass
			50	NV	5794.984	5725 to 5850	Pass
		5775	20	LV	5774.985	5725 to 5850	Pass
				NV	5774.985	5725 to 5850	Pass
				HV	5774.985	5725 to 5850	Pass
			-30	NV	5774.984	5725 to 5850	Pass
			-20	NV	5774.984	5725 to 5850	Pass
			-10	NV	5774.984	5725 to 5850	Pass
			0	NV	5774.984	5725 to 5850	Pass
			10	NV	5774.984	5725 to 5850	Pass
			30	NV	5774.984	5725 to 5850	Pass
			40	NV	5774.984	5725 to 5850	Pass
			50	NV	5774.984	5725 to 5850	Pass