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Annex for 5G Wi-Fi BAND 3

Test Report No.: CTL2603252101-WF04

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1. Duty Cycle

1.1 Test Result

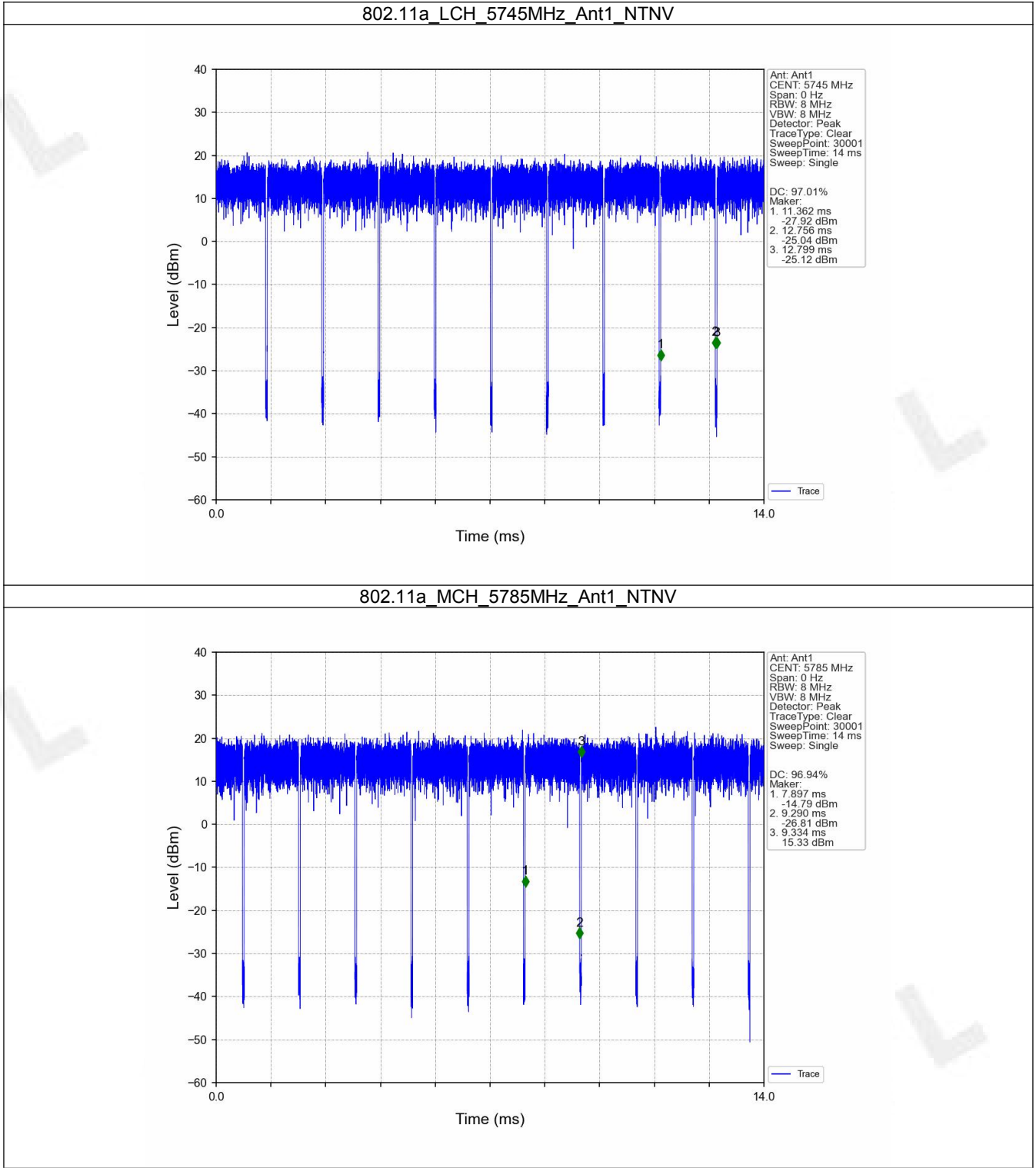
1.1.1 Ant1

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	1.393	1.437	96.94	0.14	0.10
		5825	1.393	1.437	96.94	0.14	0.04
802.11n (HT20)	SISO	5745	1.300	1.345	96.65	0.15	0.10
		5785	1.301	1.345	96.73	0.14	0.07
		5825	1.300	1.344	96.73	0.14	0.10
802.11n (HT40)	SISO	5755	0.649	0.692	93.79	0.28	0.07
		5795	0.648	0.692	93.64	0.29	0.03
802.11ac (VHT20)	SISO	5745	1.313	1.356	96.83	0.14	0.07
		5785	1.312	1.356	96.76	0.14	0.03
		5825	1.313	1.357	96.76	0.14	0.10
802.11ac (VHT40)	SISO	5755	0.653	0.697	93.69	0.28	0.06
		5795	0.652	0.696	93.68	0.28	0.07
802.11ac (VHT80)	SISO	5775	0.325	0.369	88.08	0.55	0.07

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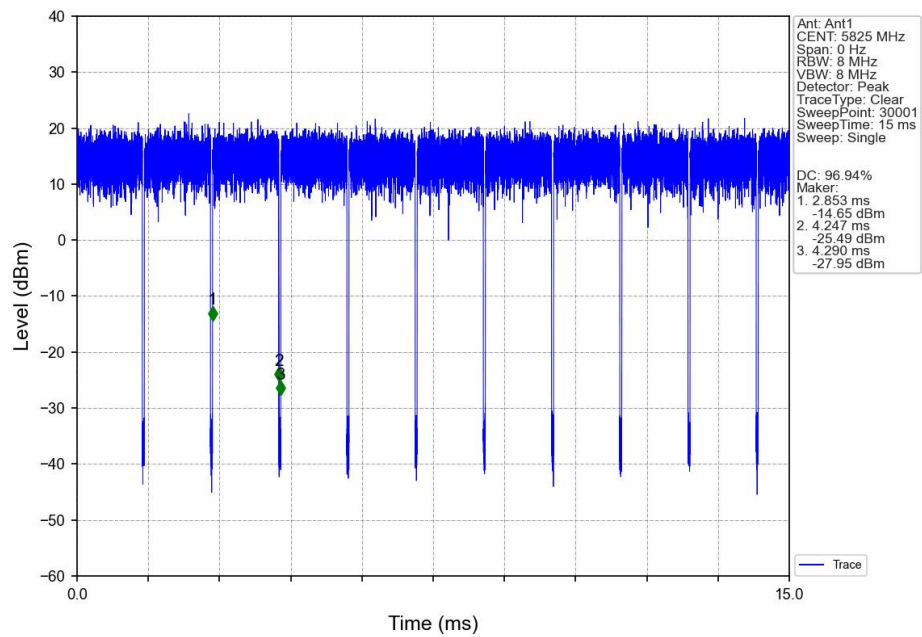
1.2 Test Graph

1.2.1 Ant1

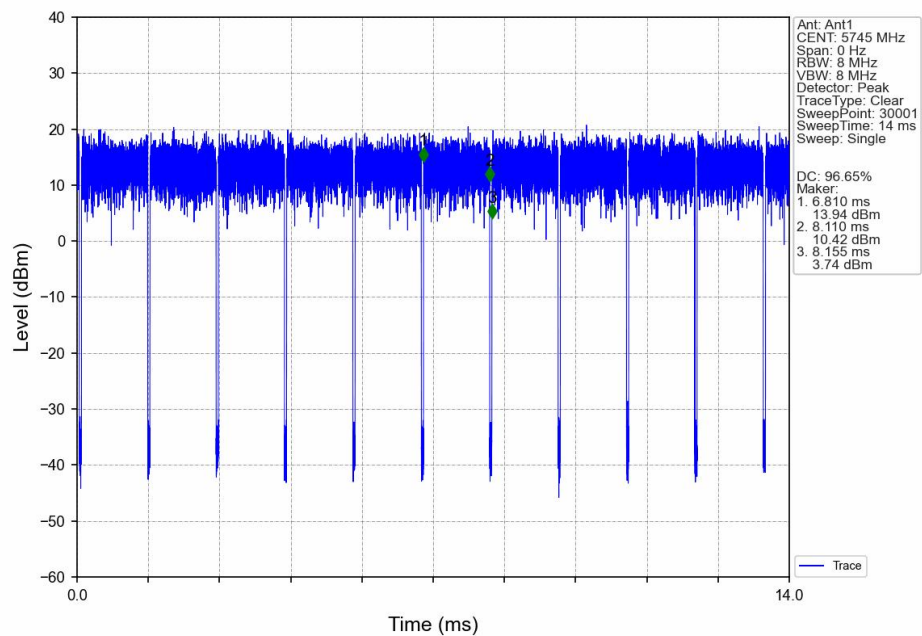


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802.11a_HCH_5825MHz_Ant1_NTNV

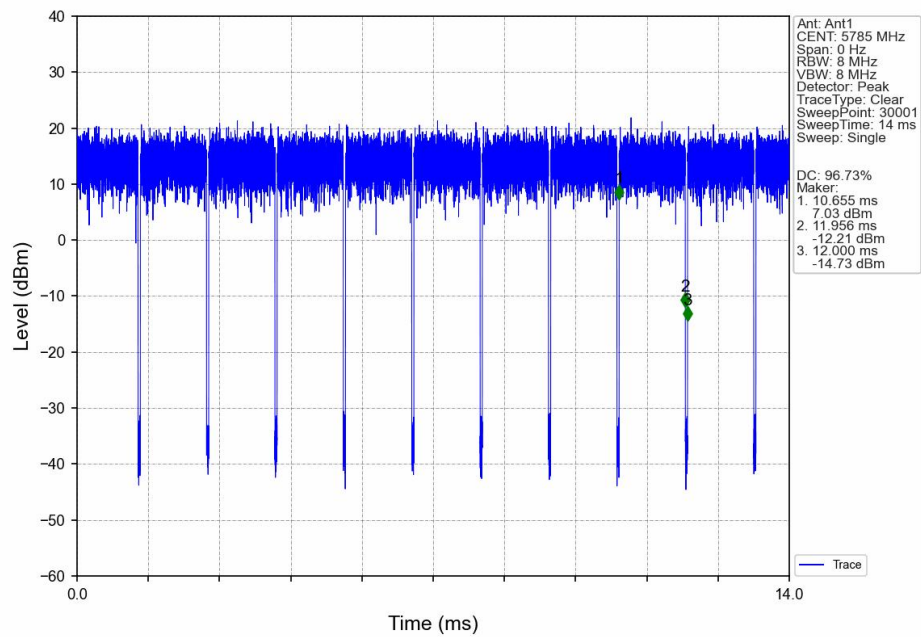


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

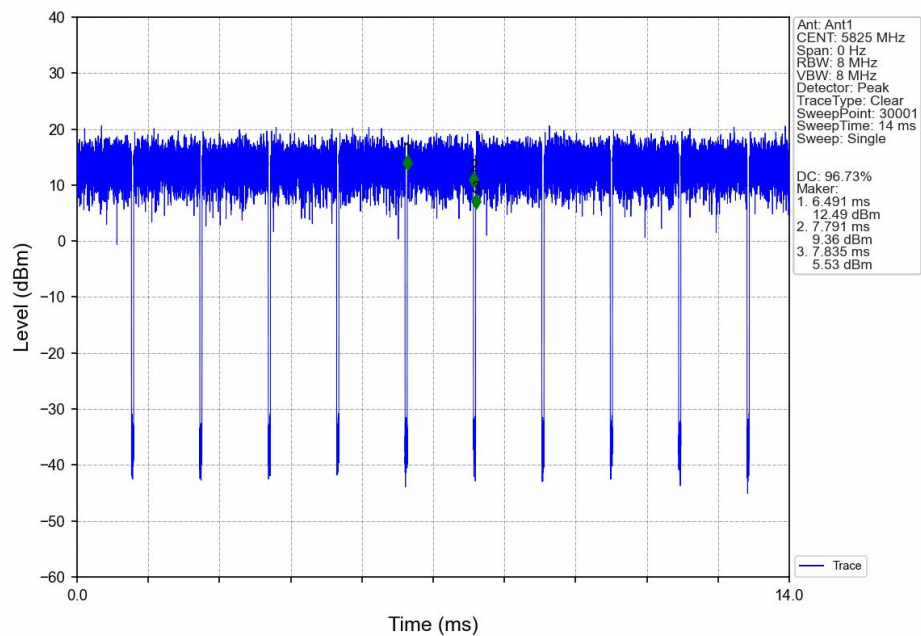


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802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

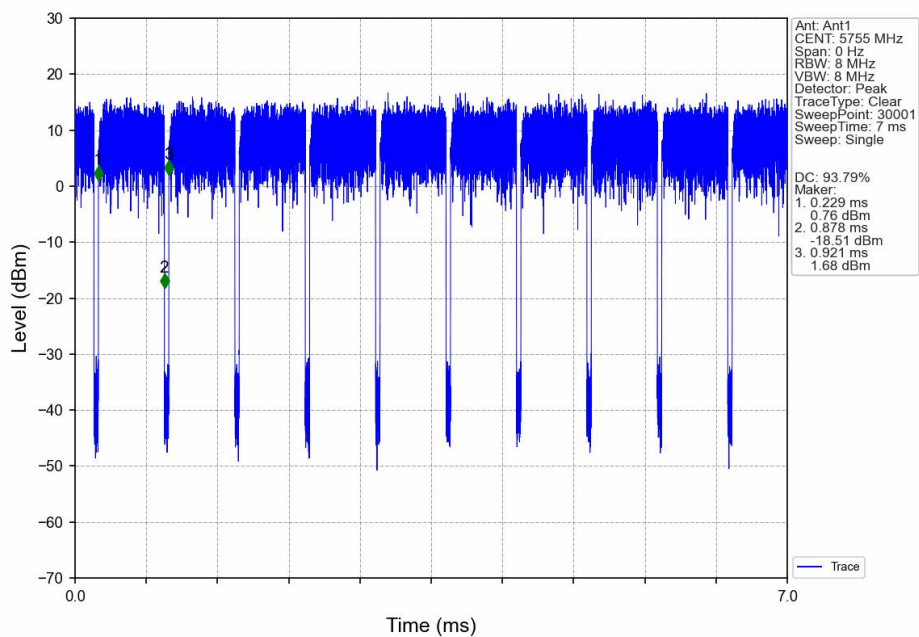


802.11n(HT20)_HCH_5825MHz_Ant1_NTNV

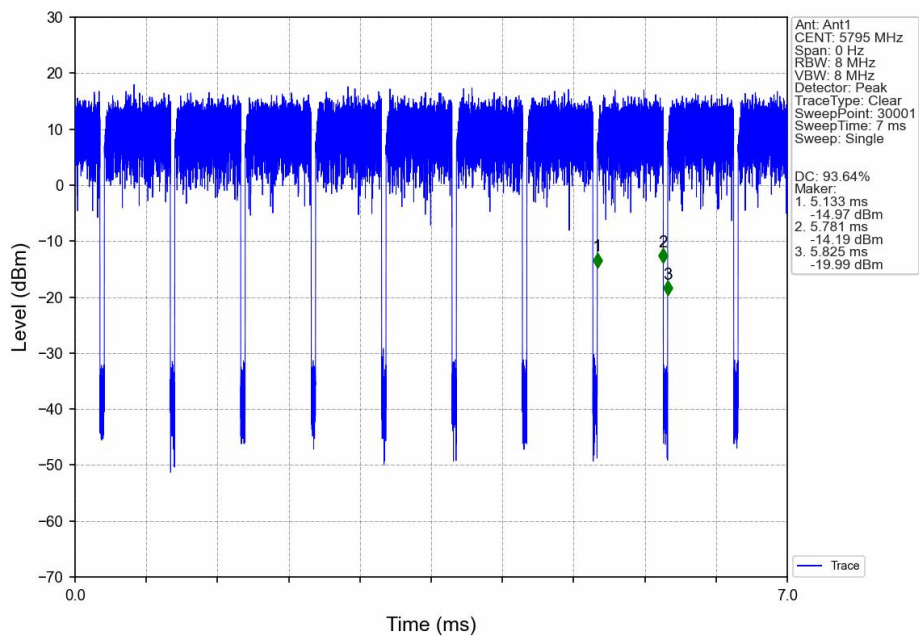


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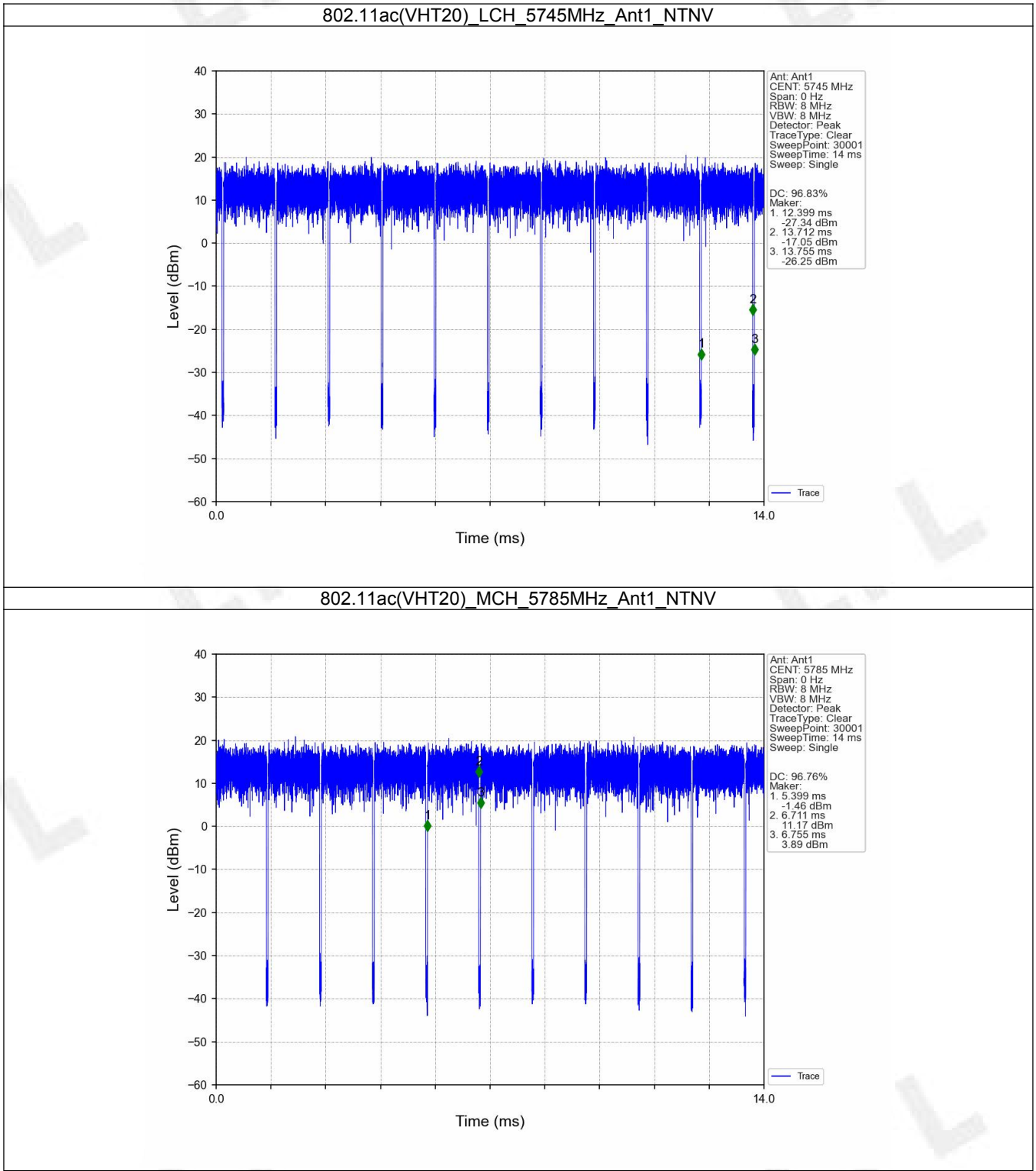
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



802.11n(HT40)_HCH_5795MHz_Ant1_NTNV

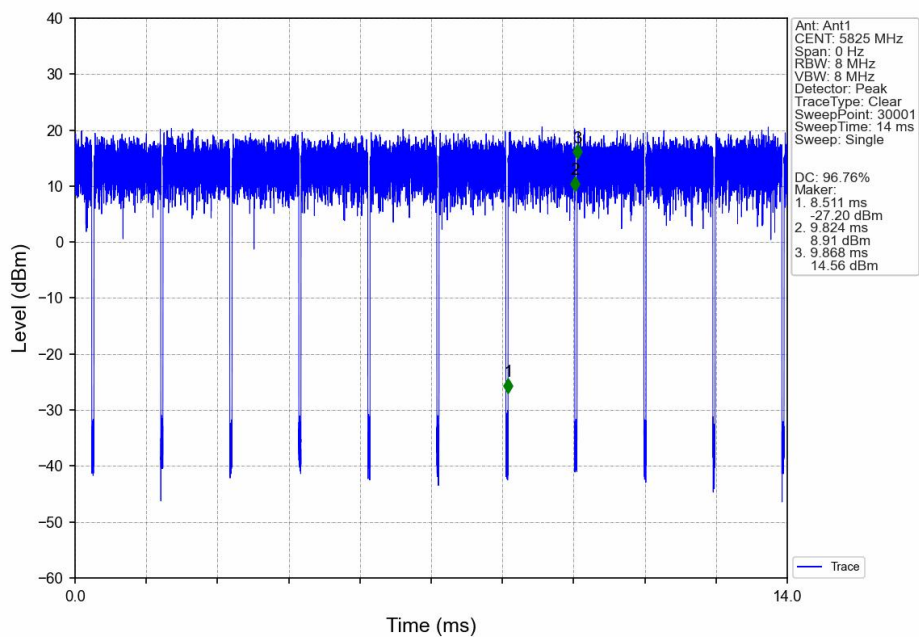


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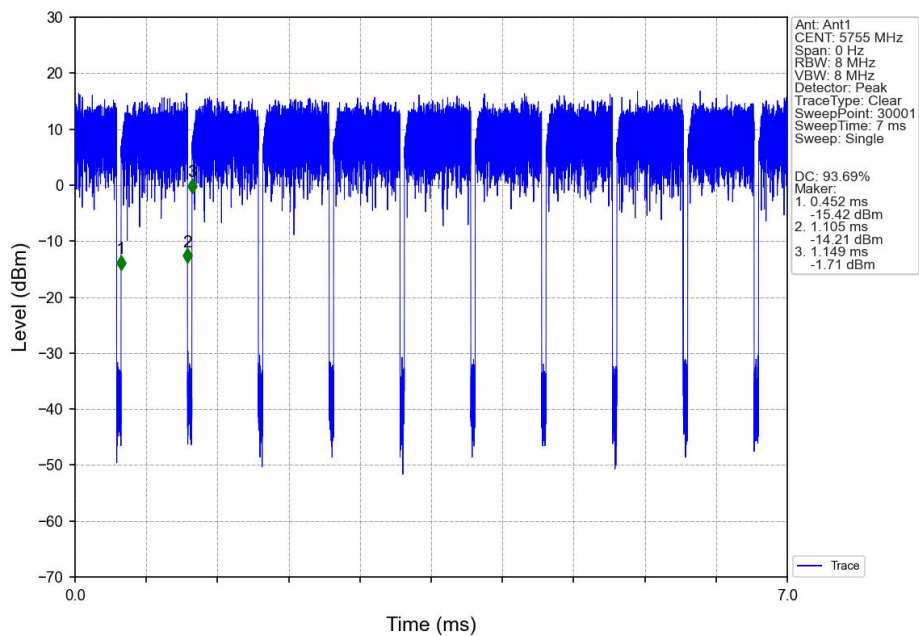


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802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV

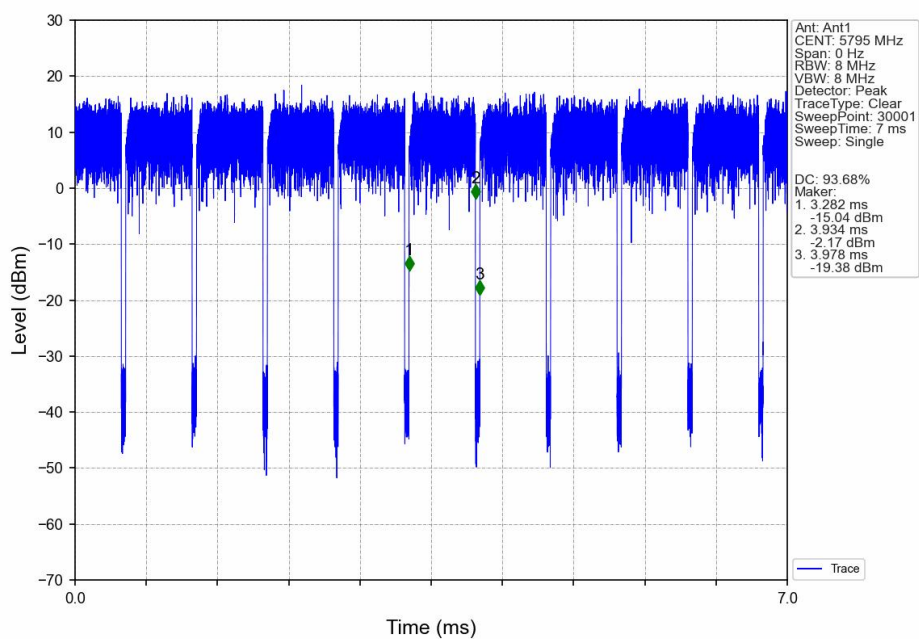


802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV

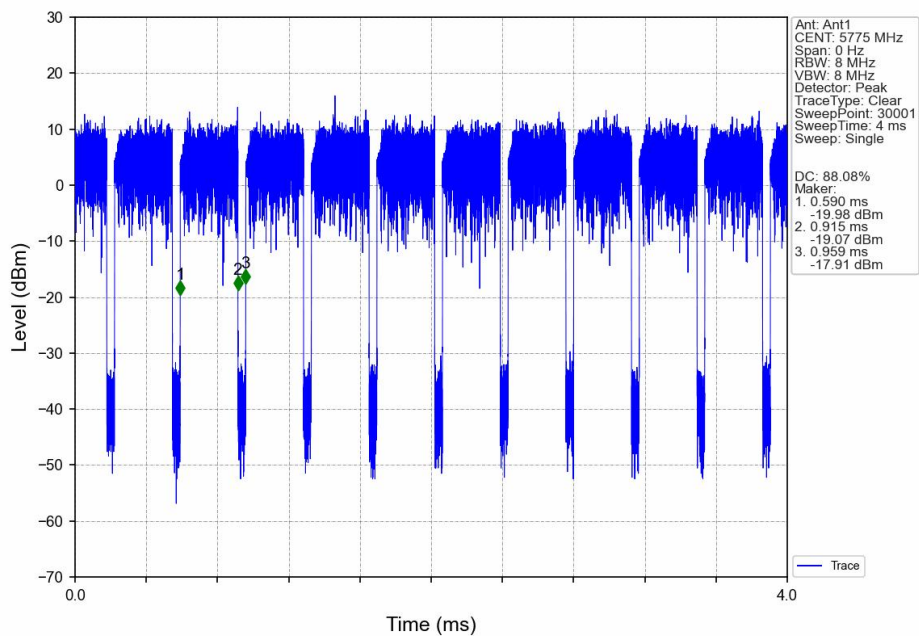


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802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



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	16.450	/	Pass
		5785	1	16.445	/	Pass
		5825	1	16.484	/	Pass
802.11n (HT20)	SISO	5745	1	17.604	/	Pass
		5785	1	17.634	/	Pass
		5825	1	17.602	/	Pass
802.11n (HT40)	SISO	5755	1	36.233	/	Pass
		5795	1	36.206	/	Pass
802.11ac (VHT20)	SISO	5745	1	17.613	/	Pass
		5785	1	17.554	/	Pass
		5825	1	17.564	/	Pass
802.11ac (VHT40)	SISO	5755	1	36.183	/	Pass
		5795	1	36.078	/	Pass
802.11ac (VHT80)	SISO	5775	1	75.172	/	Pass

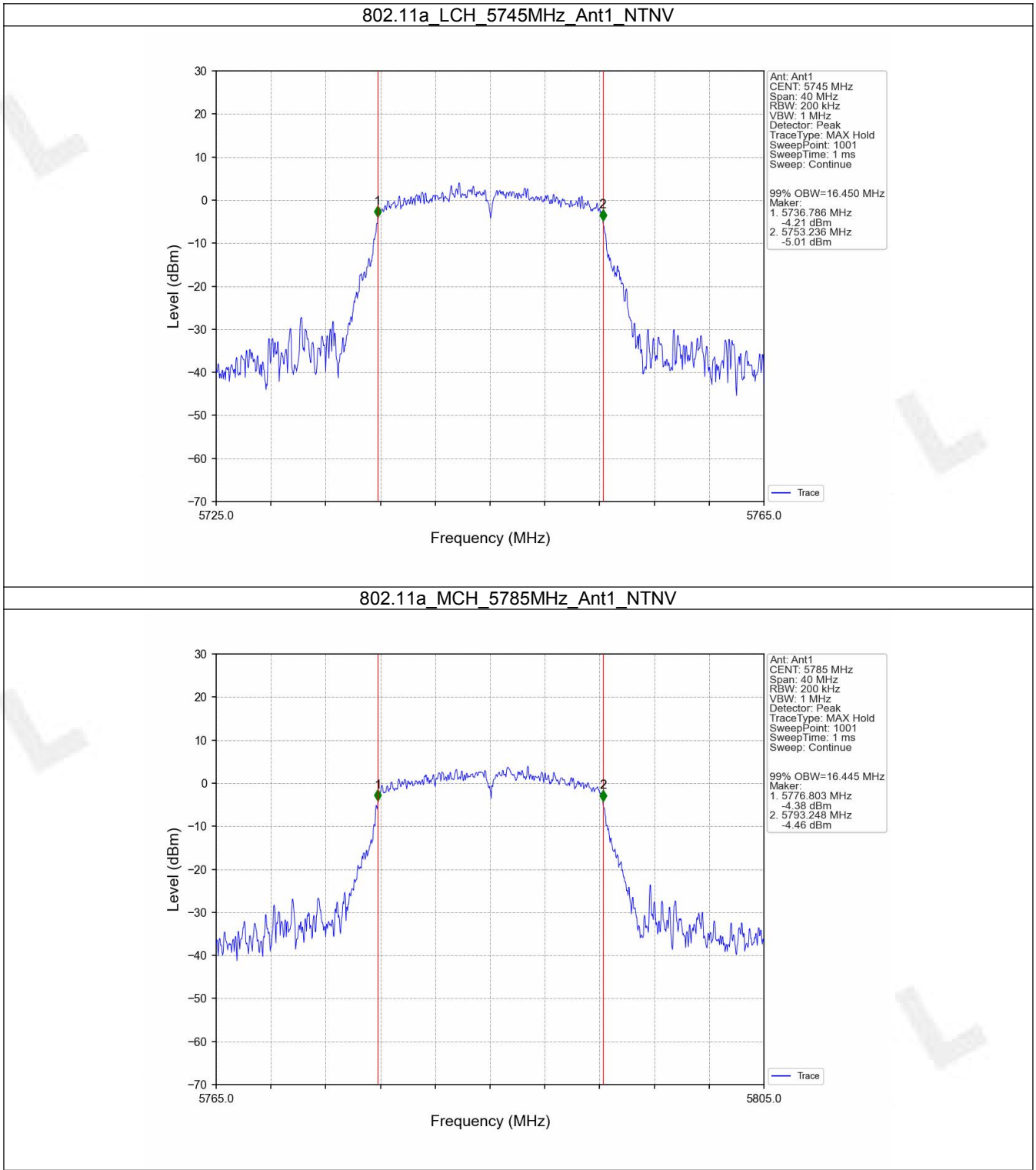
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	14.832	≥ 0.5	Pass
		5785	1	16.340	≥ 0.5	Pass
		5825	1	15.752	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	15.088	≥ 0.5	Pass
		5785	1	16.104	≥ 0.5	Pass
		5825	1	15.147	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	35.125	≥ 0.5	Pass
		5795	1	33.906	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	15.054	≥ 0.5	Pass
		5785	1	15.052	≥ 0.5	Pass
		5825	1	15.122	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	35.173	≥ 0.5	Pass
		5795	1	35.149	≥ 0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.149	≥ 0.5	Pass

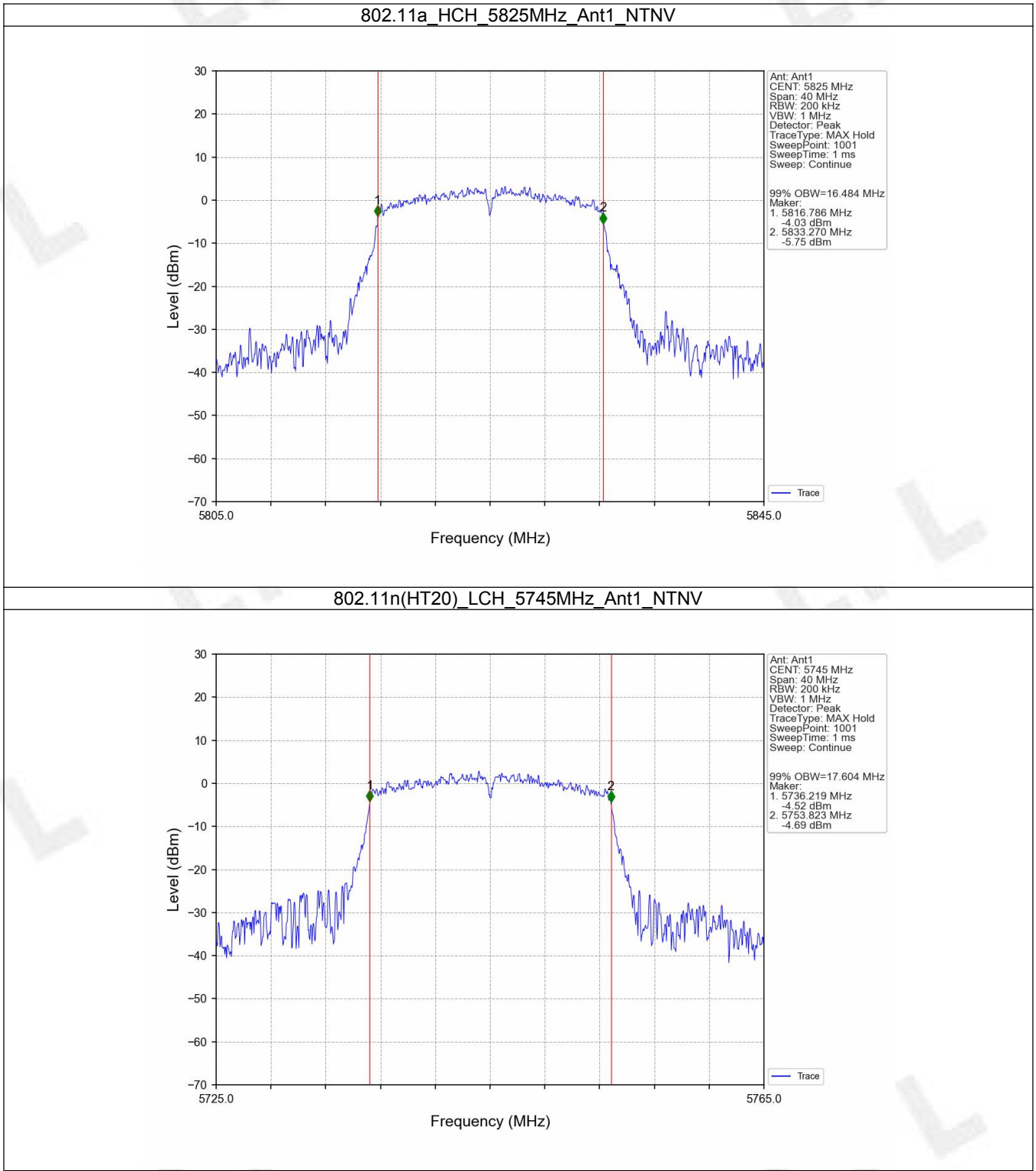
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2.2 Test Graph

2.2.1 OBW

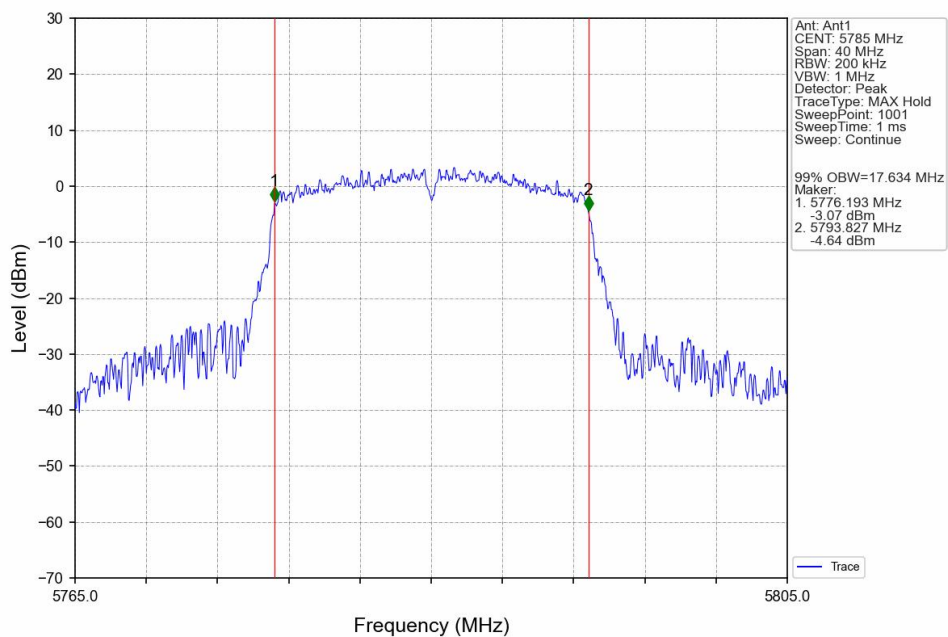


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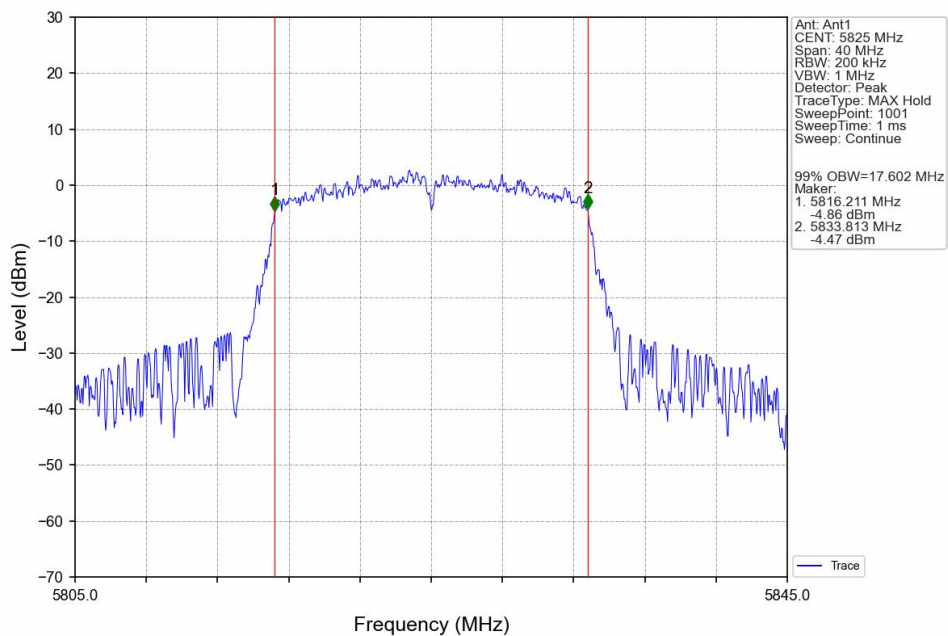


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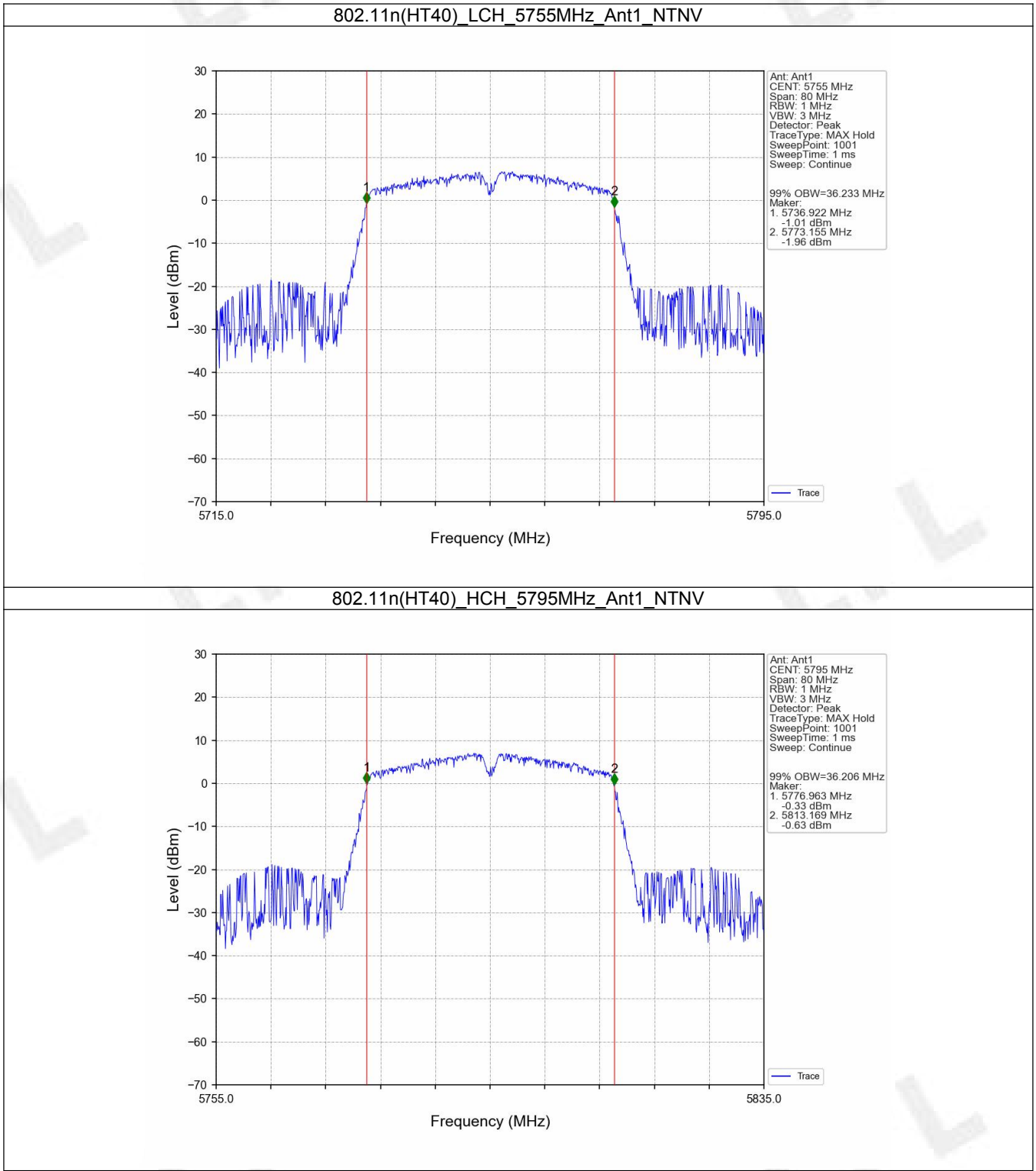
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



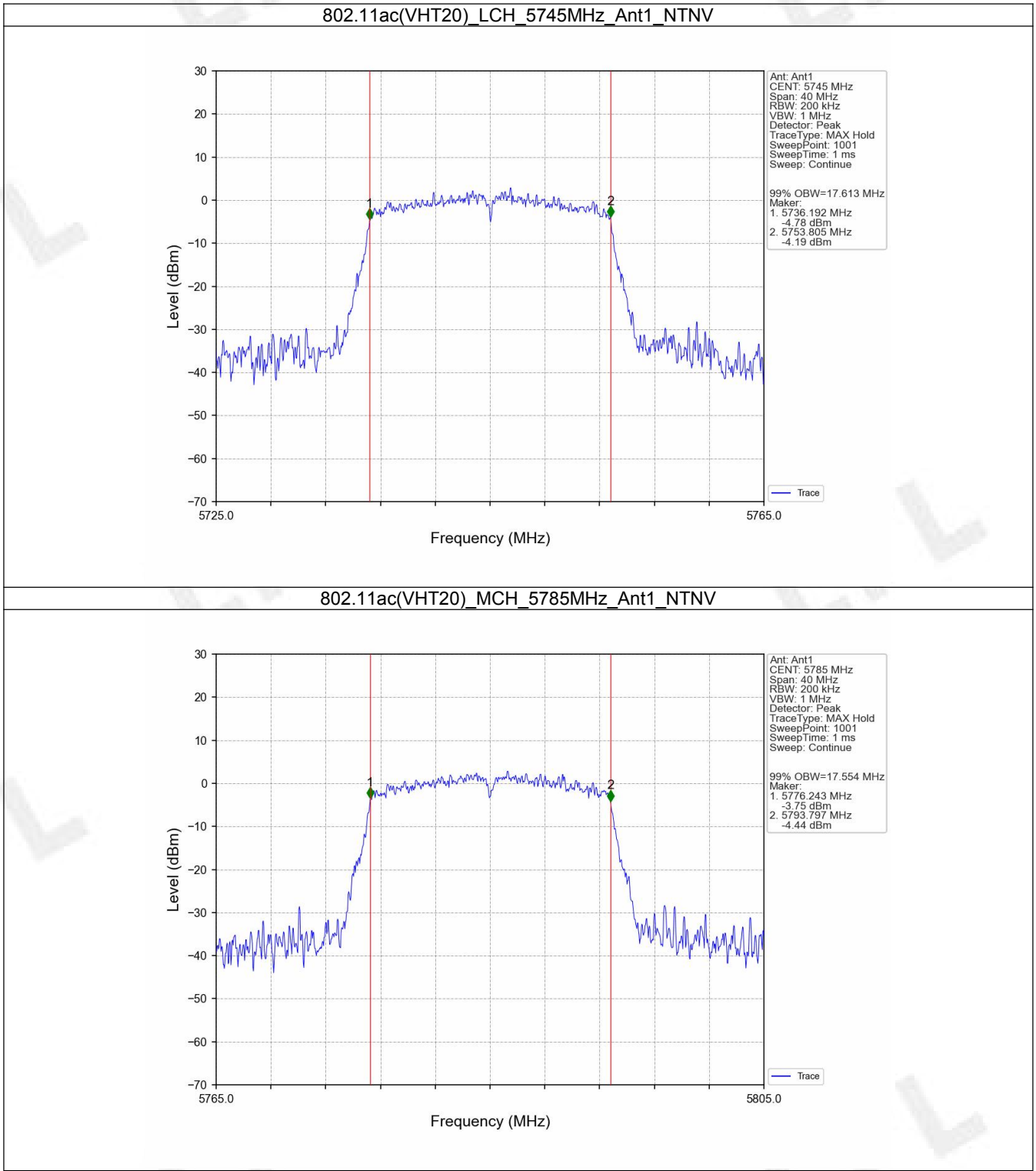
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



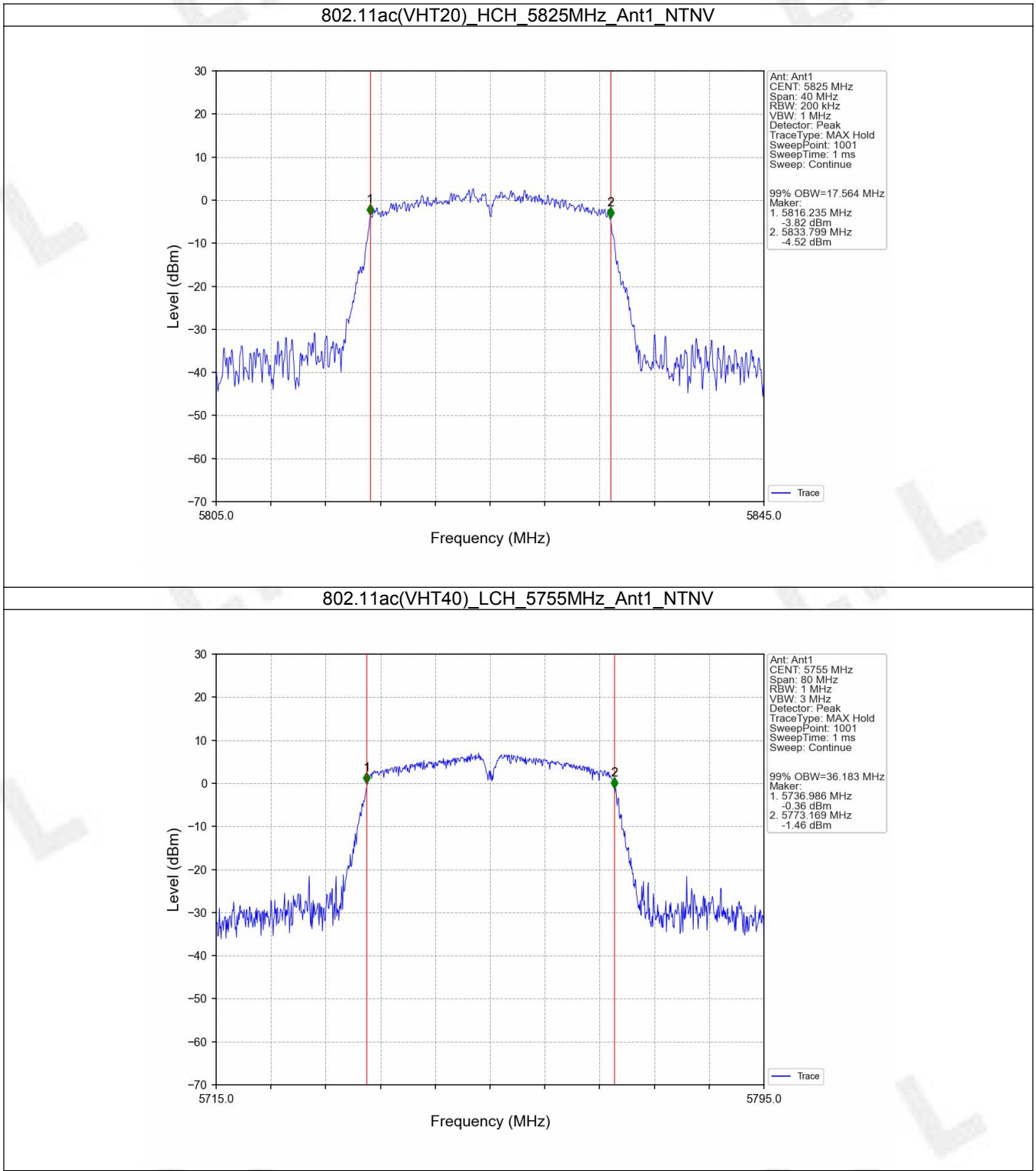
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FCC ID: 2BWH8-17PROMAX

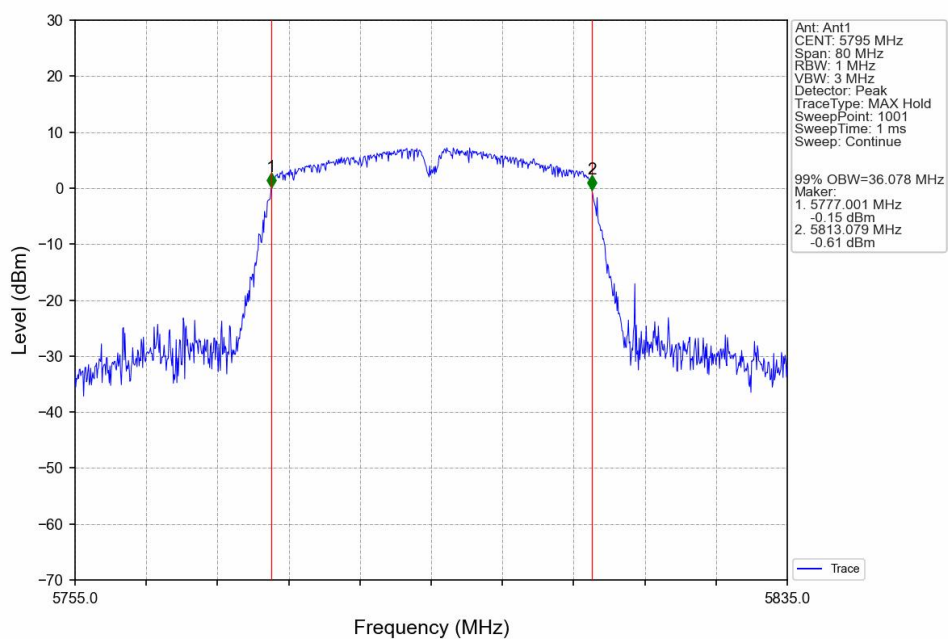


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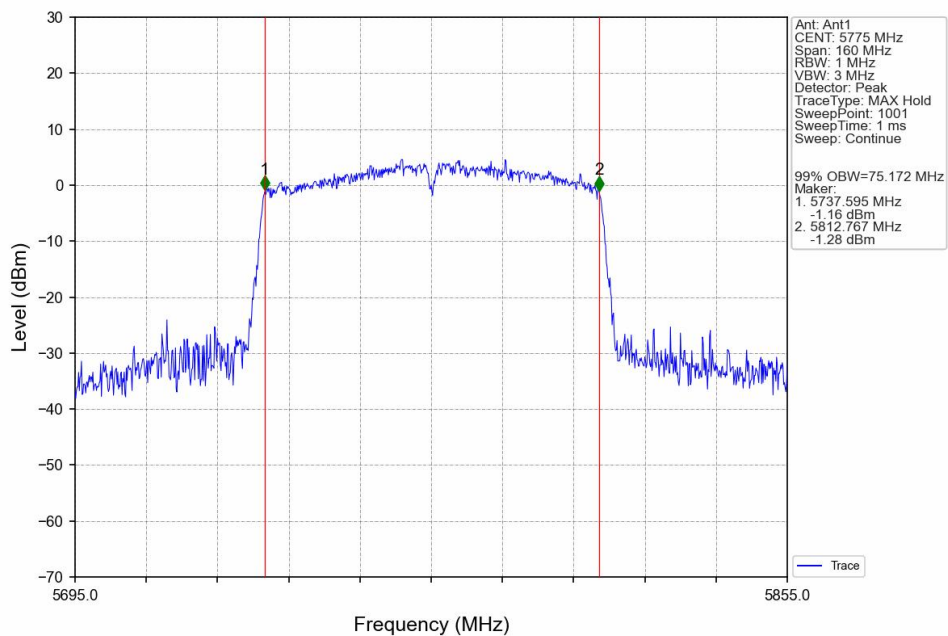


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802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV

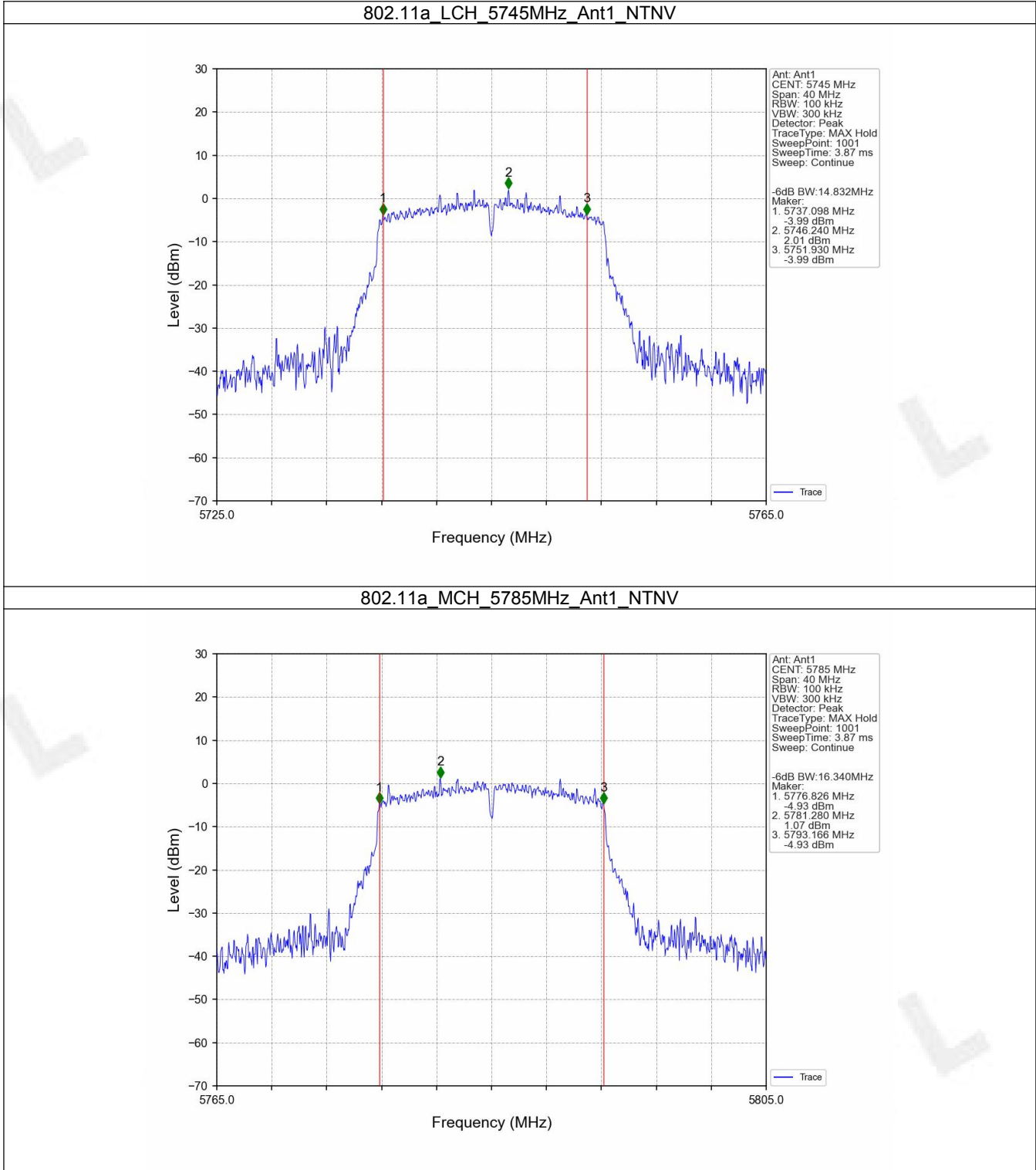


802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



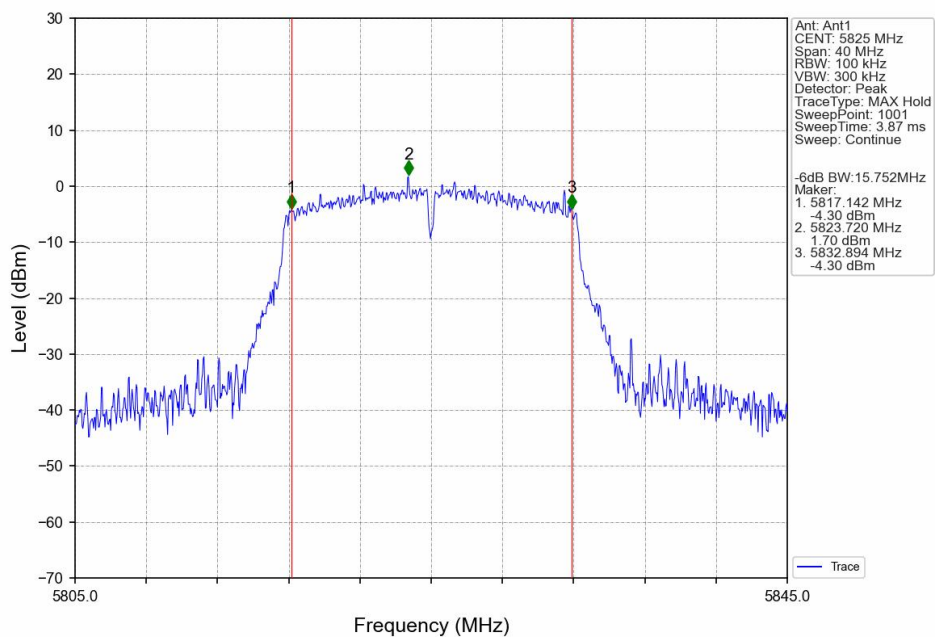
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2.2.2 6dB BW

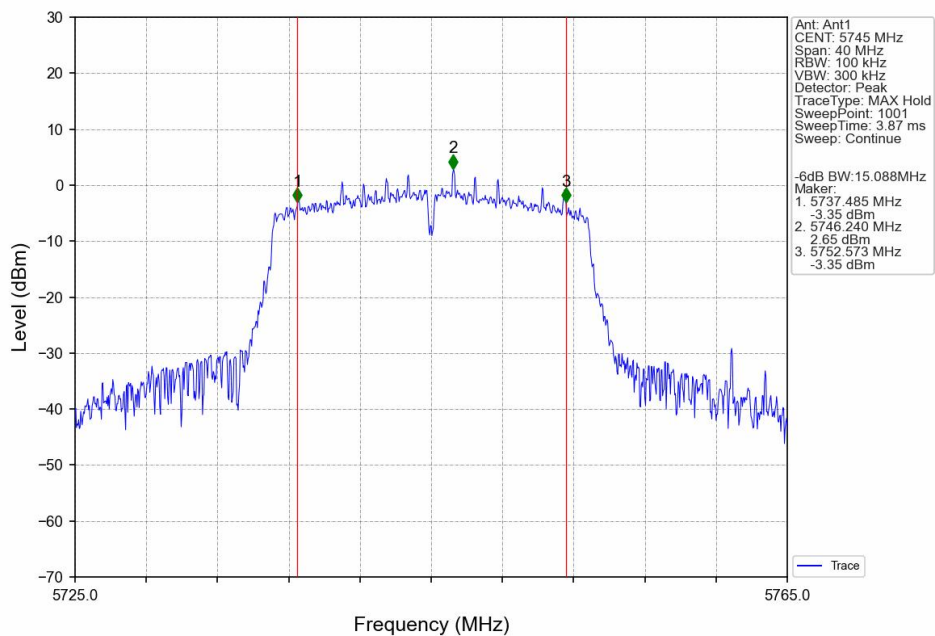


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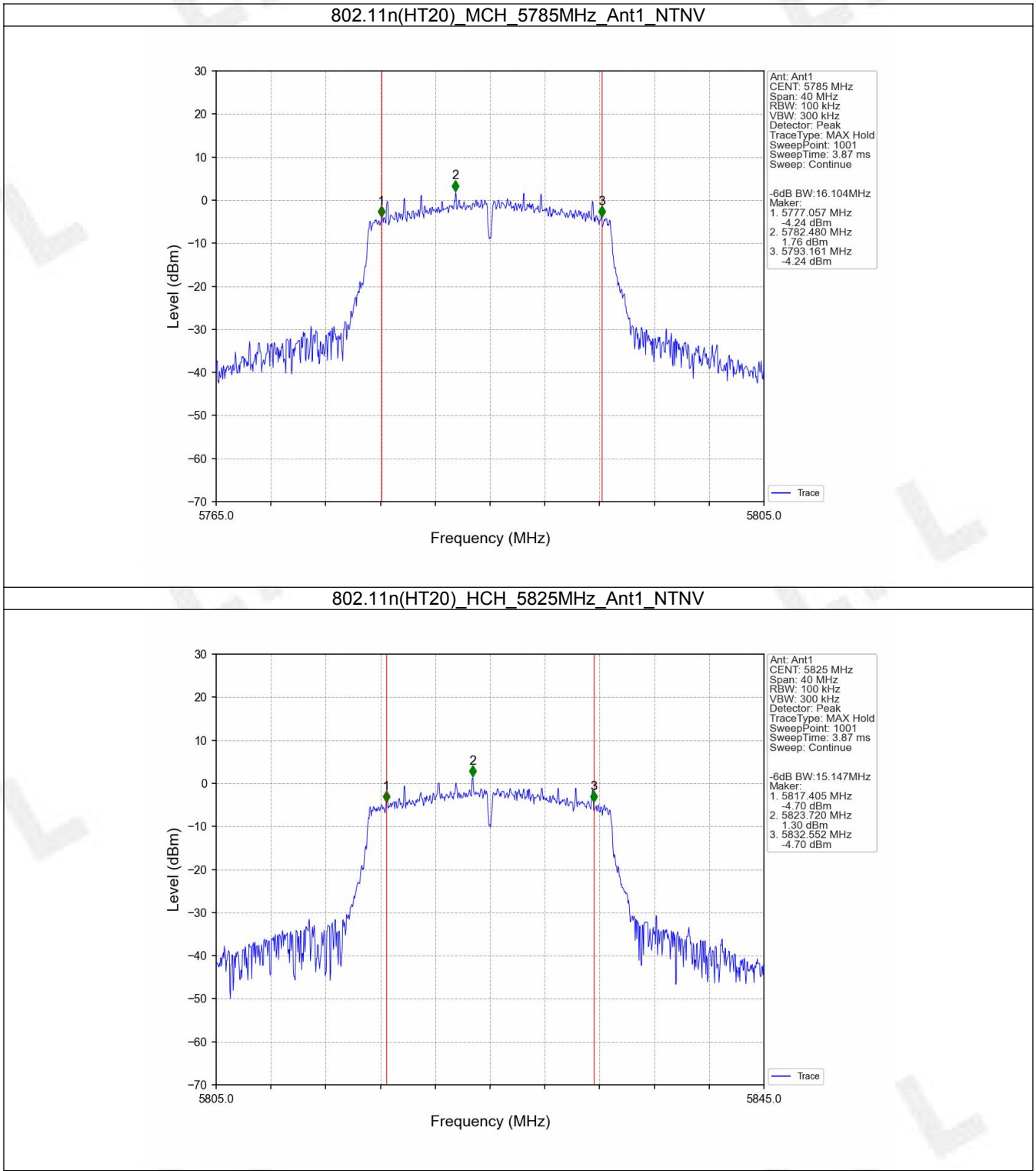
802.11a_HCH_5825MHz_Ant1_NTNV



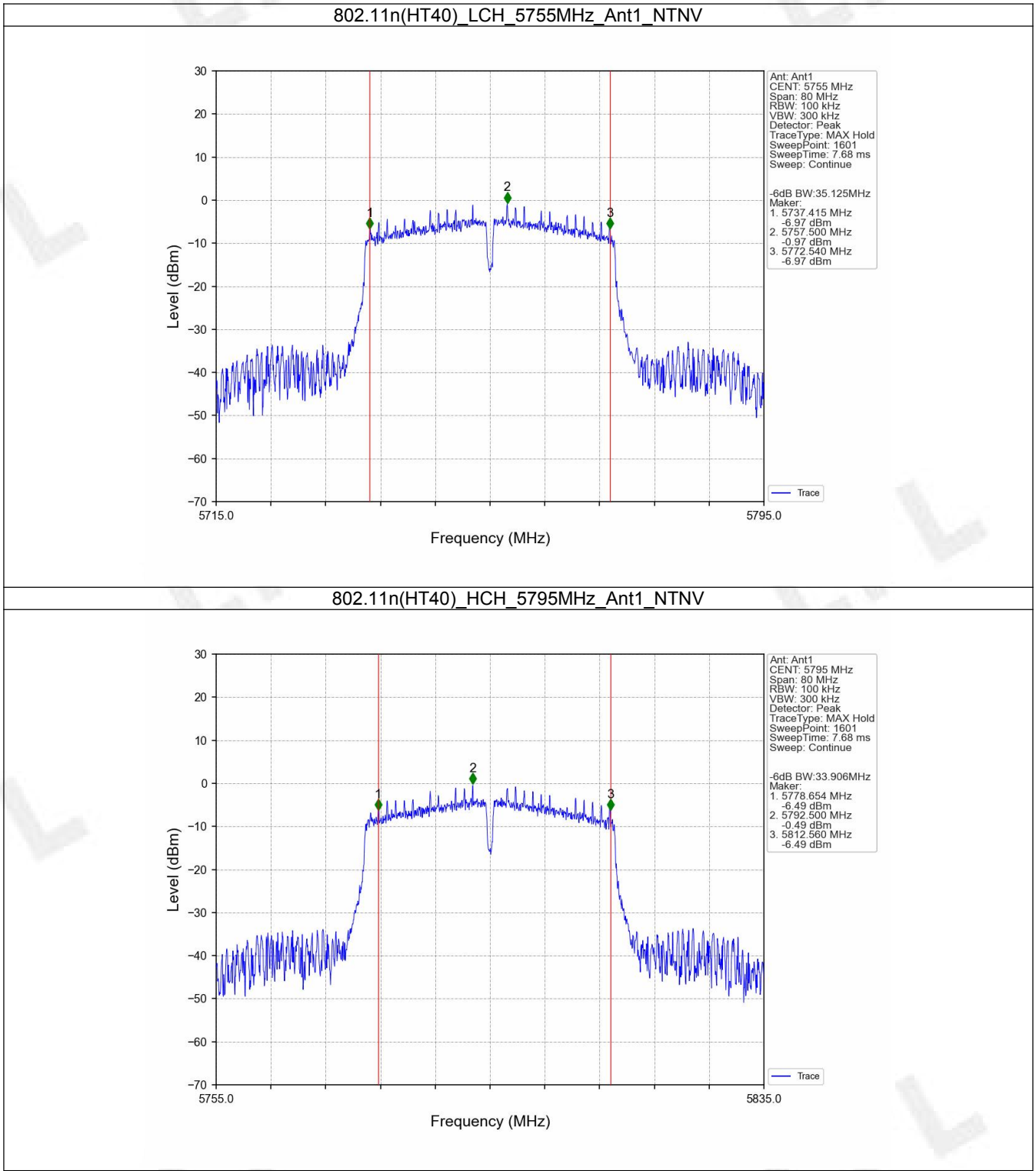
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



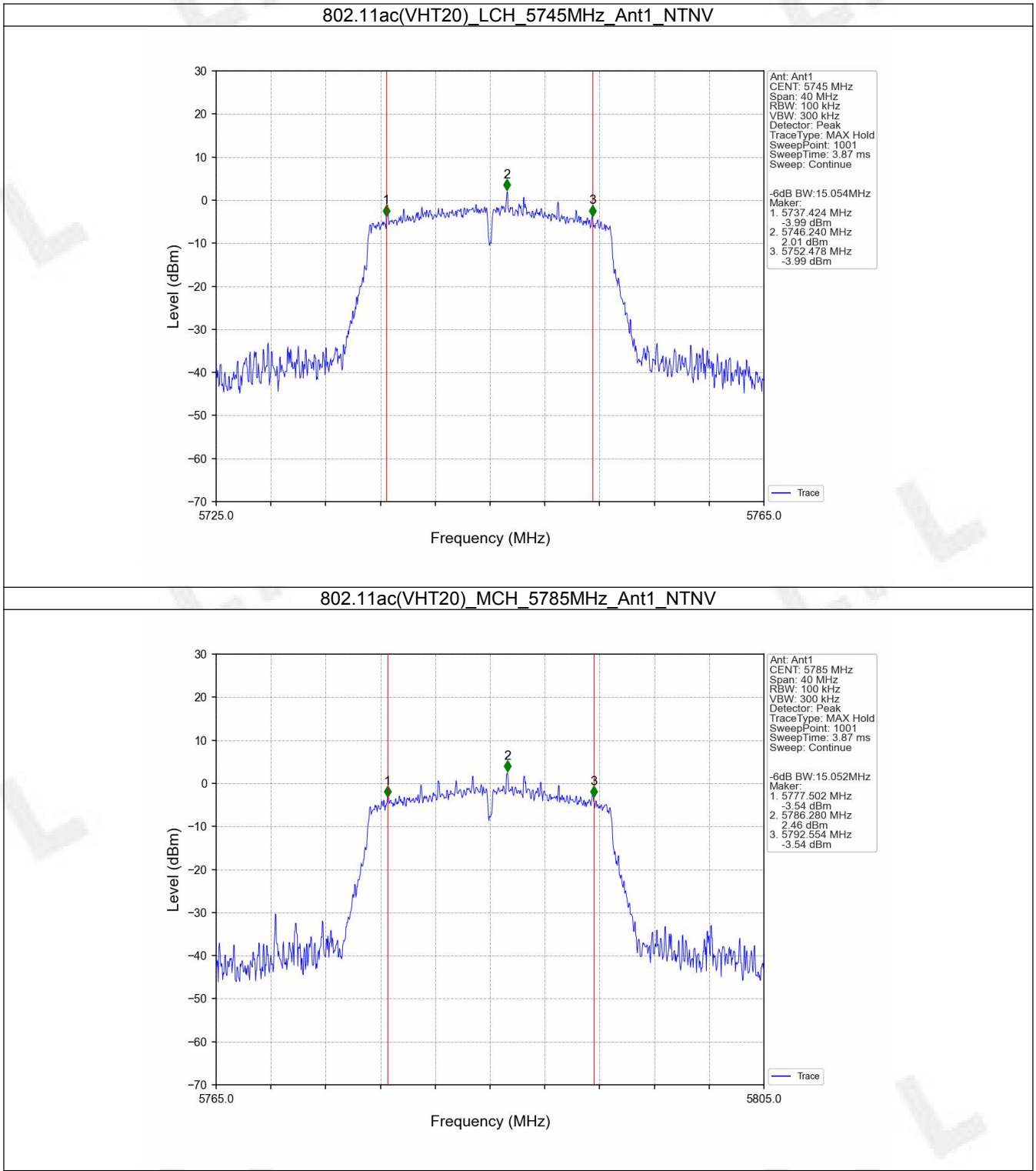
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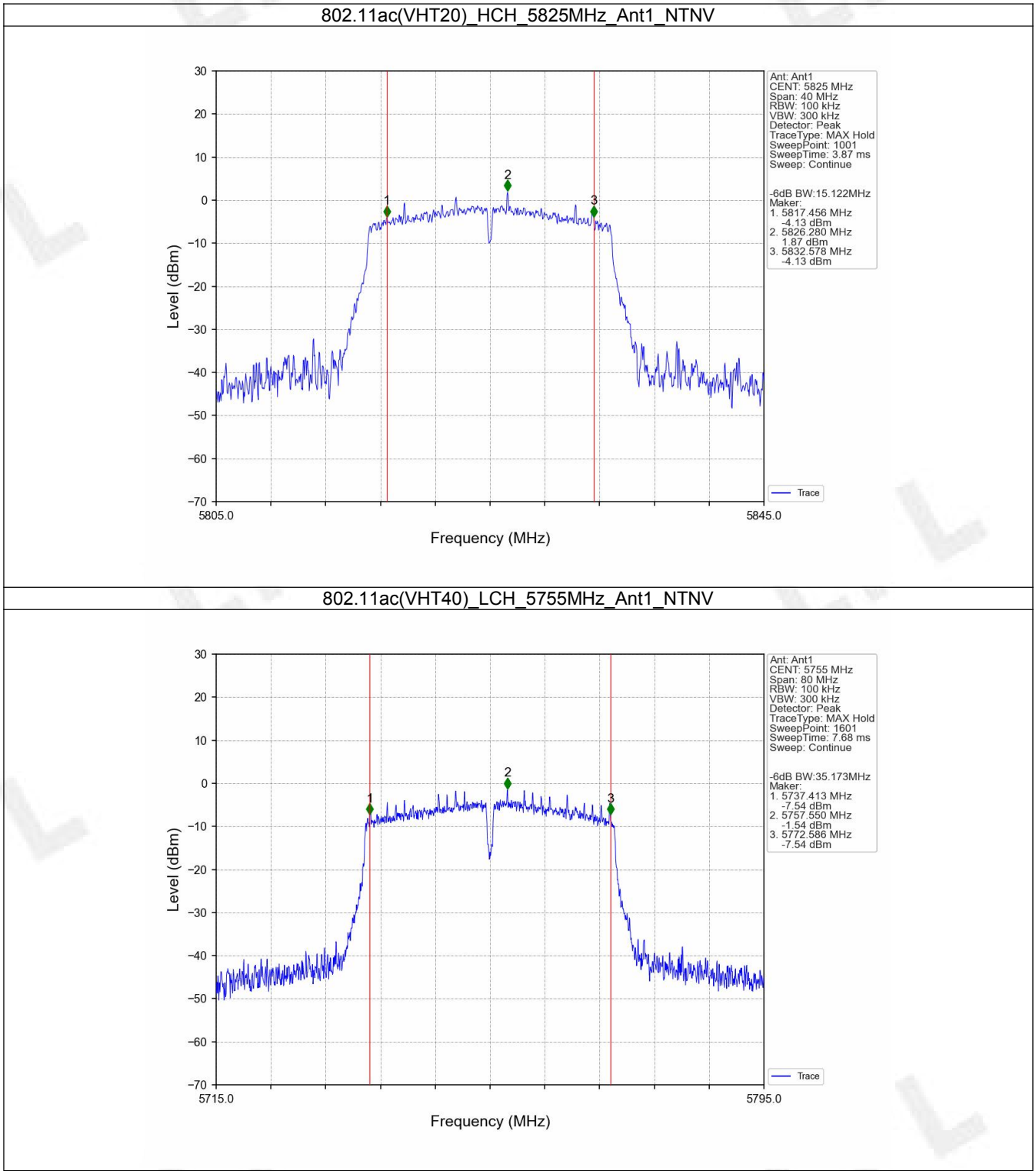
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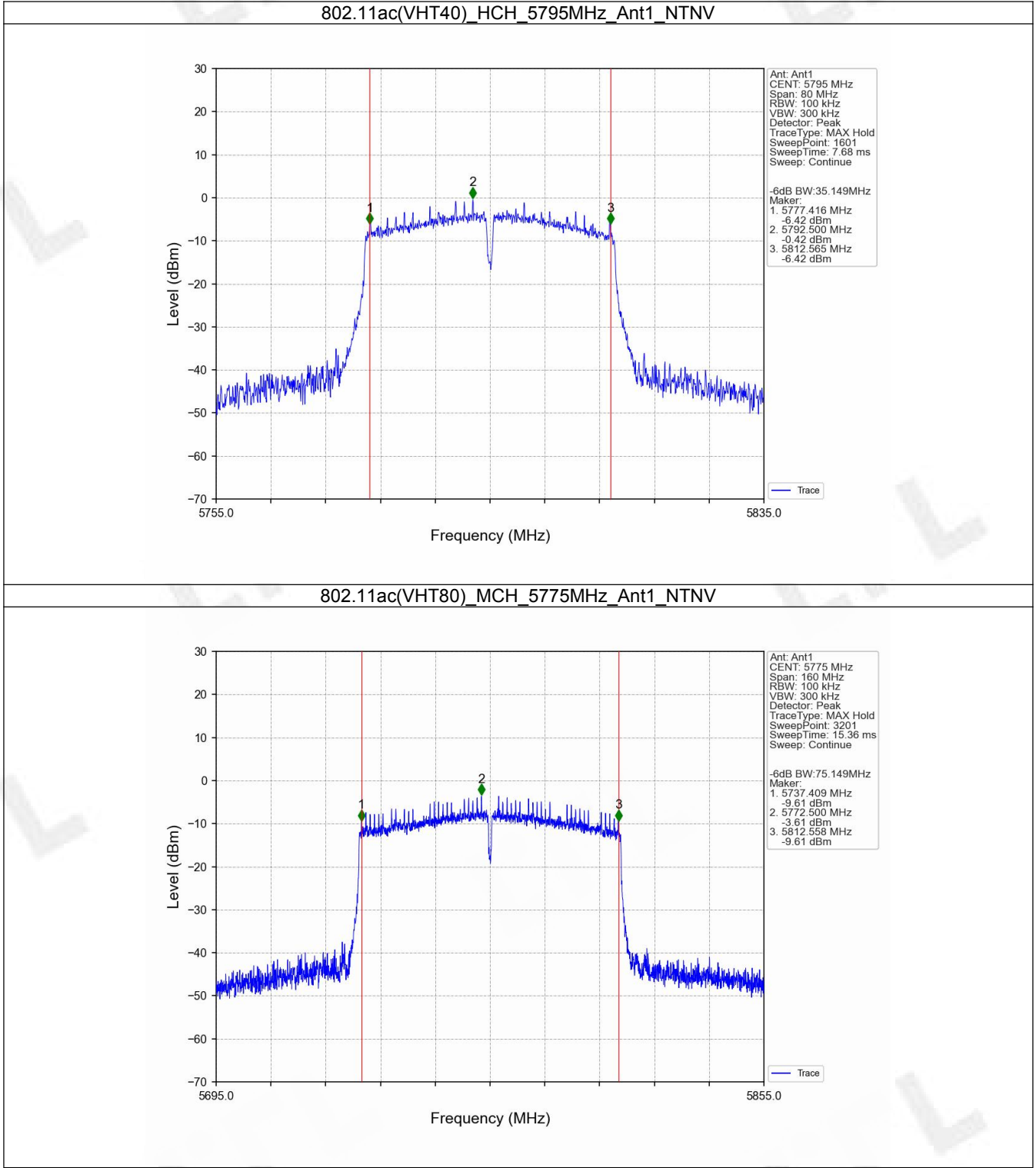
FCC ID: 2BWH8-17PROMAX



FCC ID: 2BWH8-17PROMAX



FCC ID: 2BWH8-17PROMAX



3. Maximum Conducted Output Power

3.1 Test Result

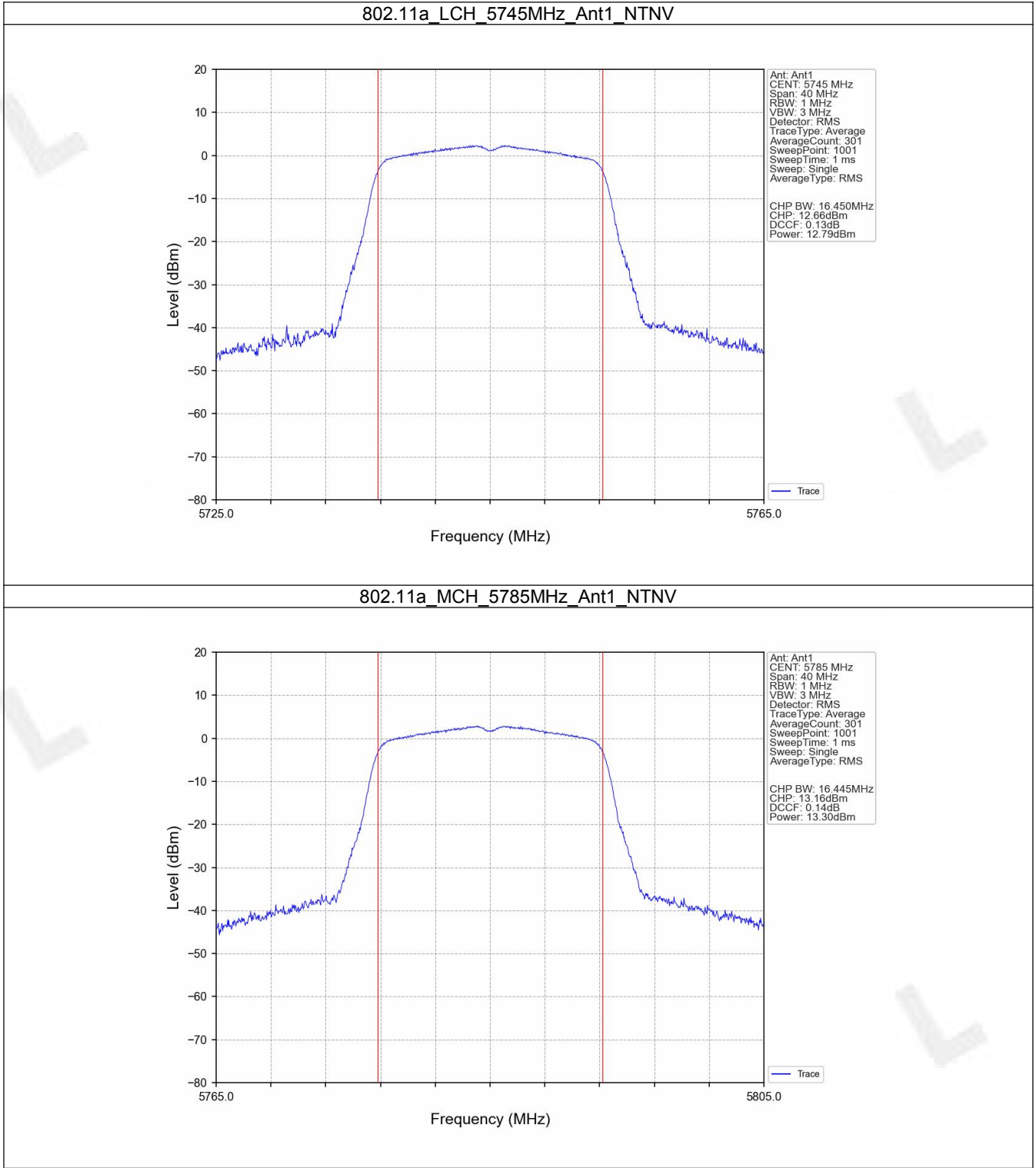
3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	12.79	<=30	Pass
		5785	13.30	<=30	Pass
		5825	13.11	<=30	Pass
802.11n (HT20)	SISO	5745	12.74	<=30	Pass
		5785	13.23	<=30	Pass
		5825	12.14	<=30	Pass
802.11n (HT40)	SISO	5755	12.03	<=30	Pass
		5795	12.37	<=30	Pass
802.11ac (VHT20)	SISO	5745	12.27	<=30	Pass
		5785	12.64	<=30	Pass
		5825	12.17	<=30	Pass
802.11ac (VHT40)	SISO	5755	12.20	<=30	Pass
		5795	12.61	<=30	Pass
802.11ac (VHT80)	SISO	5775	12.65	<=30	Pass
Note1: Antenna Gain: Ant1: 0.88dBi; Note2: RF Cable loss=0.5dB Note3: The test results include RF Cable loss.					

FCC ID: 2BWH8-17PROMAX

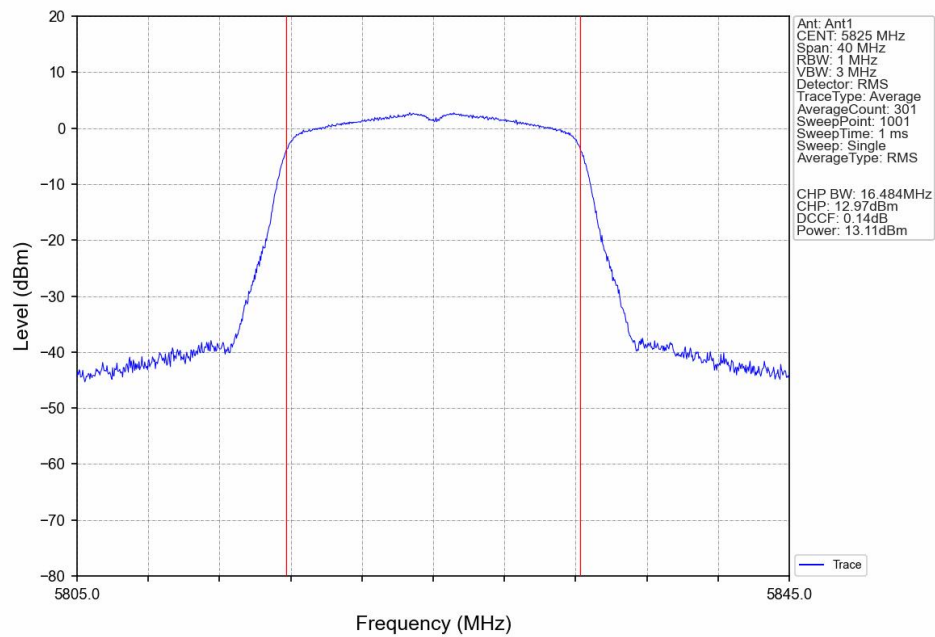
3.2 Test Graph

3.2.1 Power

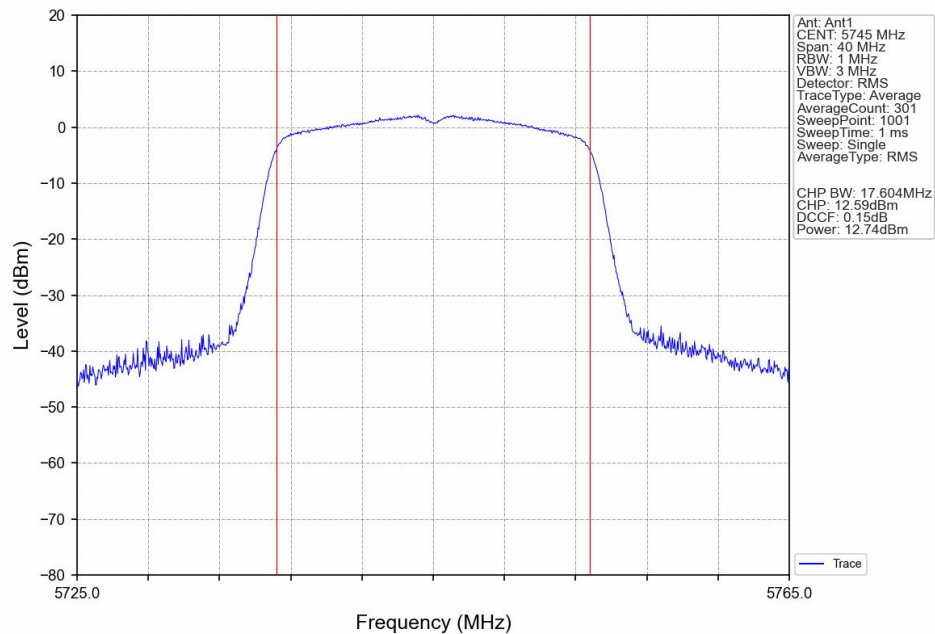


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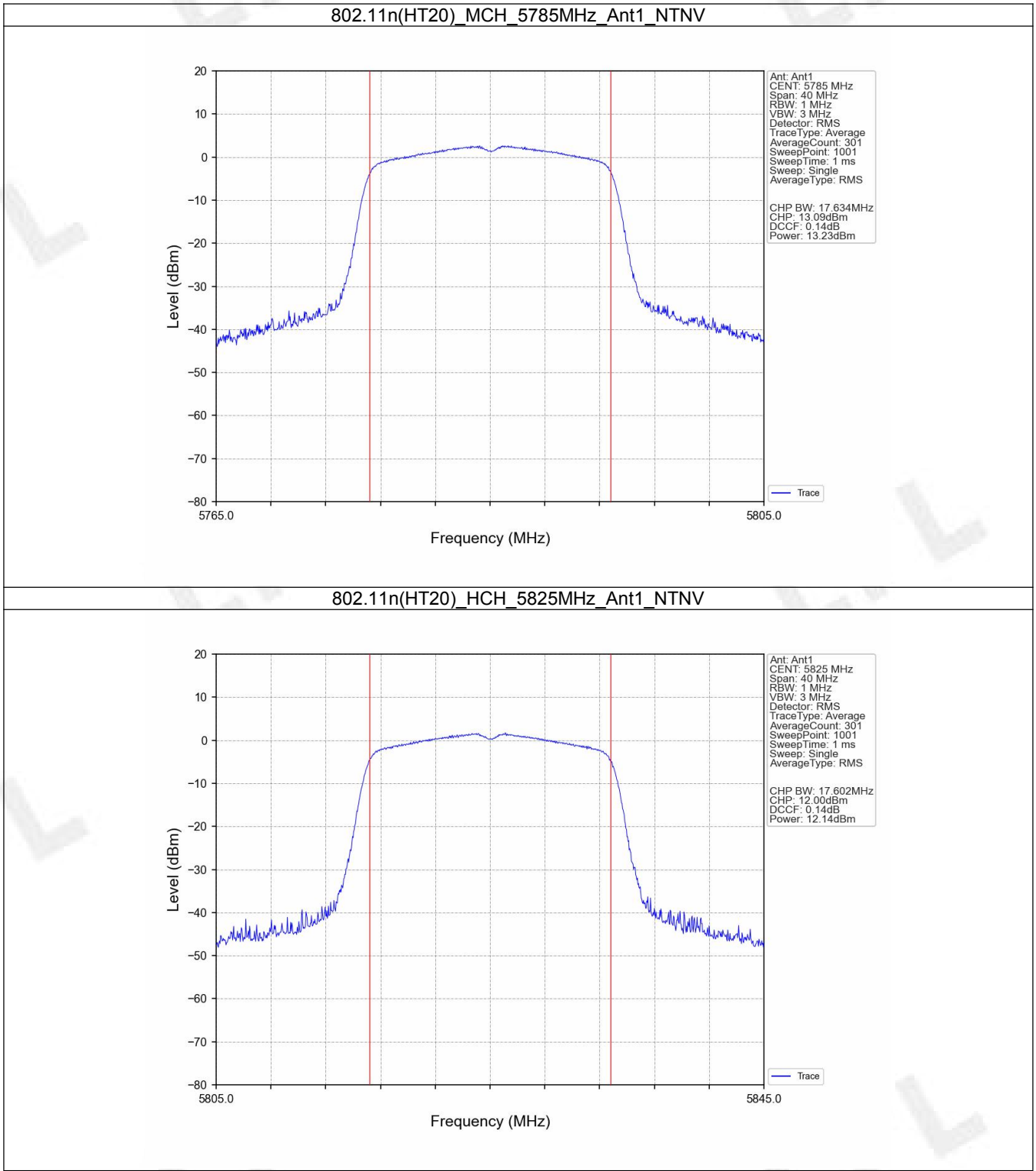
802.11a_HCH_5825MHz_Ant1_NTNV



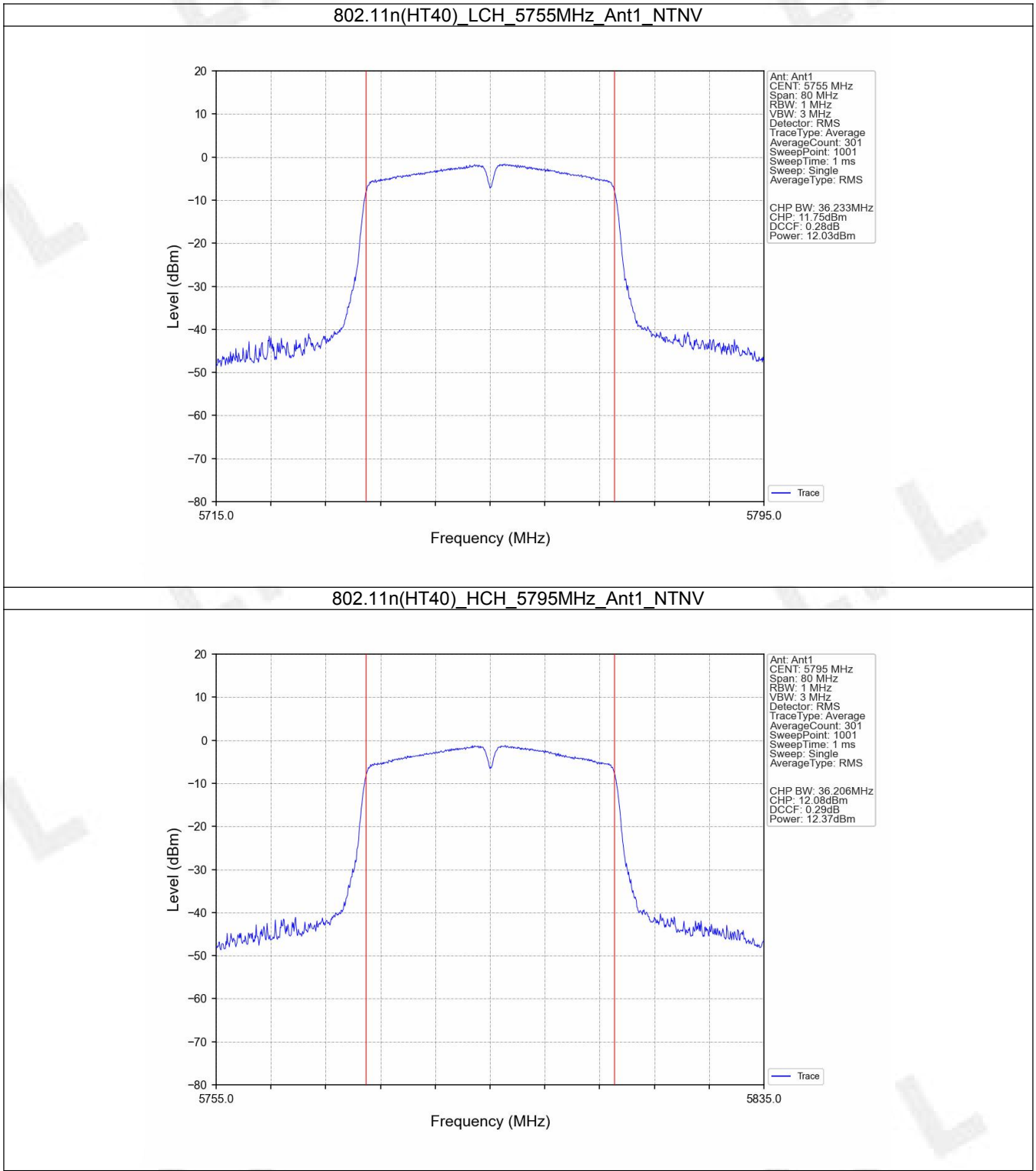
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



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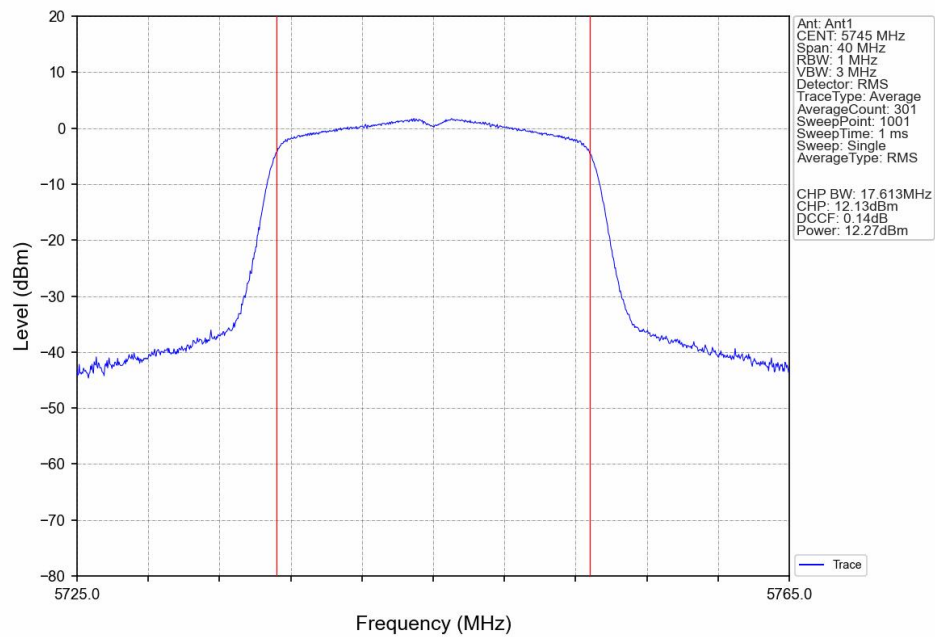


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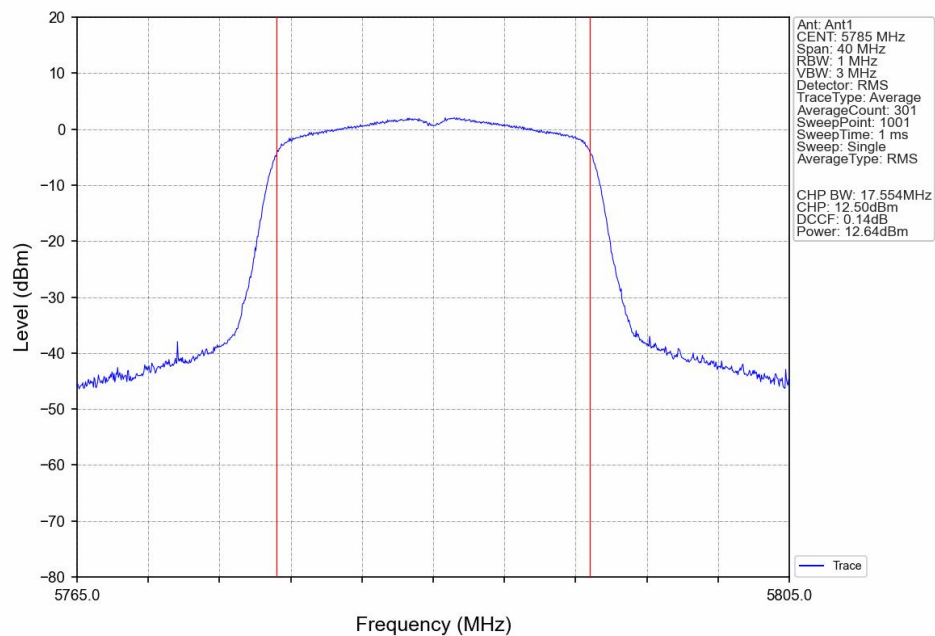


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802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV

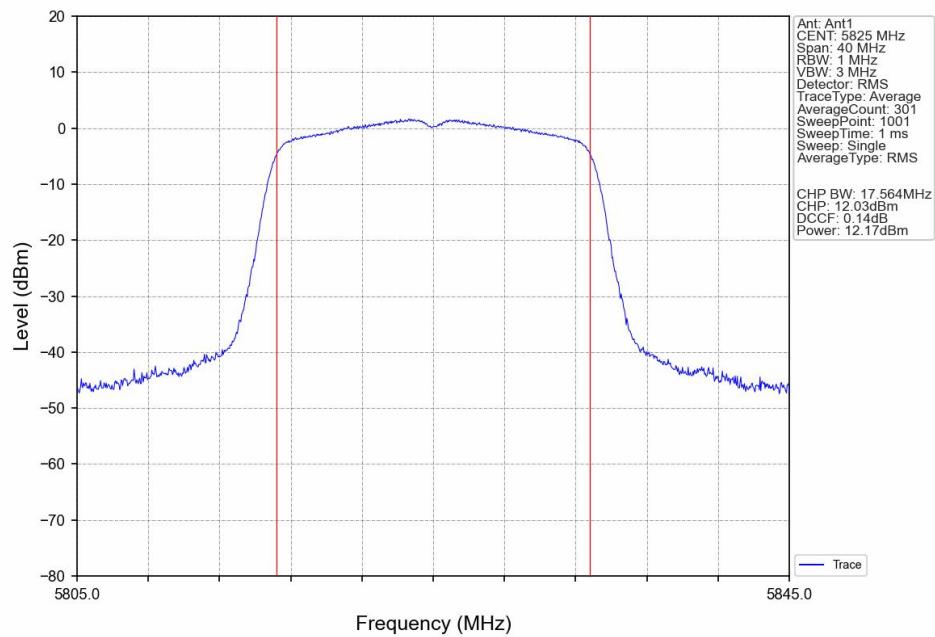


802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



FCC ID: 2BWH8-17PROMAX

802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV

