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Annex for 5G Wi-Fi BAND3

Test Report No.: CTL2507222076-WF04

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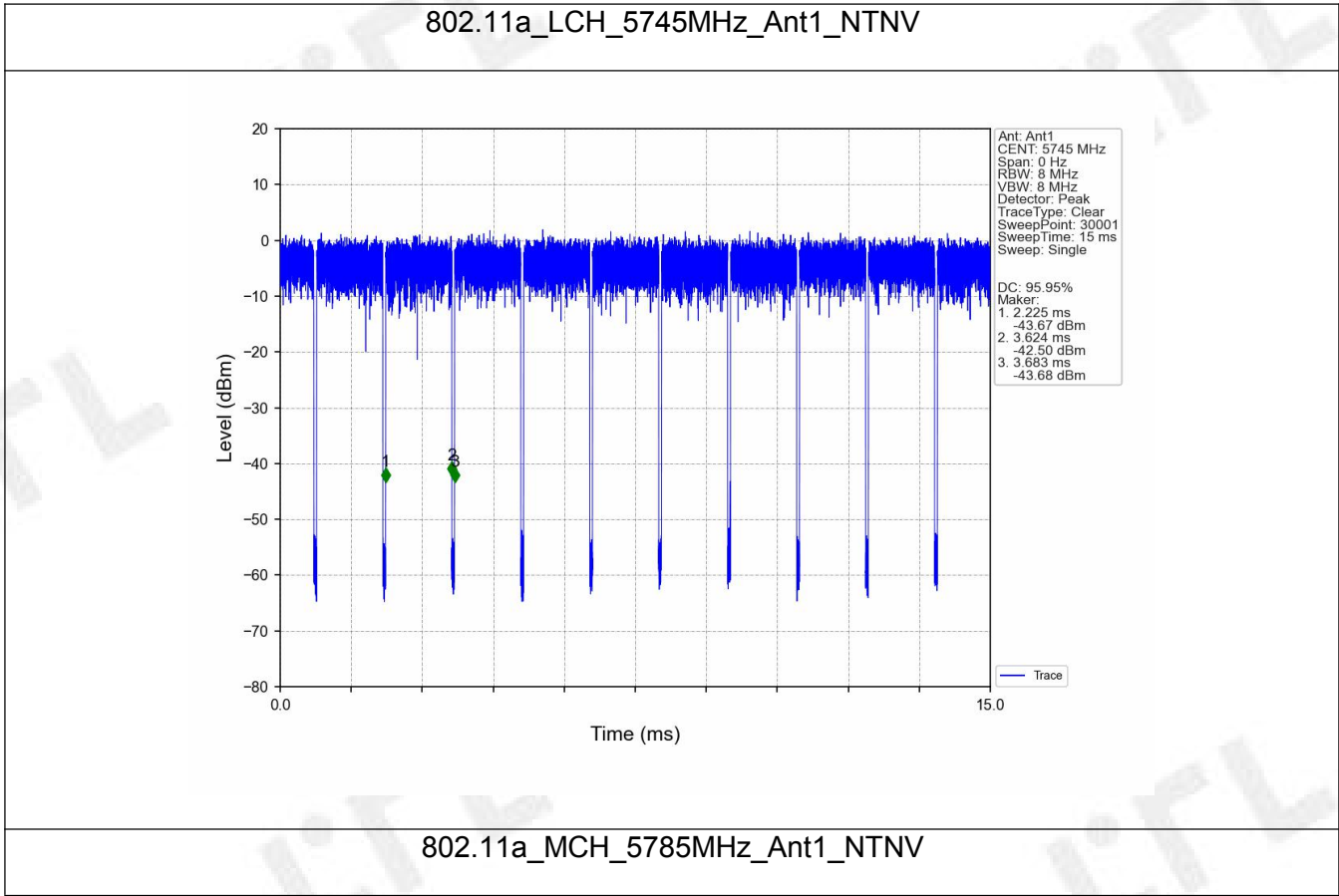
1. Duty Cycle**1.1 Test Result****1.1.1 Ant1**

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	1.398	1.457	95.95	0.18	0.03
		5785	1.400	1.458	96.02	0.18	0.03
		5825	1.399	1.457	96.02	0.18	0.03
802.11n (HT20)	SISO	5745	1.311	1.369	95.76	0.19	0.03
		5785	1.311	1.369	95.76	0.19	0.03
		5825	1.311	1.369	95.76	0.19	0.03
802.11n (HT40)	SISO	5755	0.650	0.708	91.81	0.37	0.03
		5795	0.650	0.708	91.81	0.37	0.03
802.11ac (VHT20)	SISO	5745	0.687	0.745	92.21	0.35	0.04
		5785	0.687	0.745	92.21	0.35	0.10
		5825	0.685	0.745	91.95	0.36	0.04
802.11ac (VHT40)	SISO	5755	0.354	0.412	85.92	0.66	0.03
		5795	0.354	0.412	85.92	0.66	0.06
802.11ac (VHT80)	SISO	5775	0.190	0.247	76.92	1.14	0.06

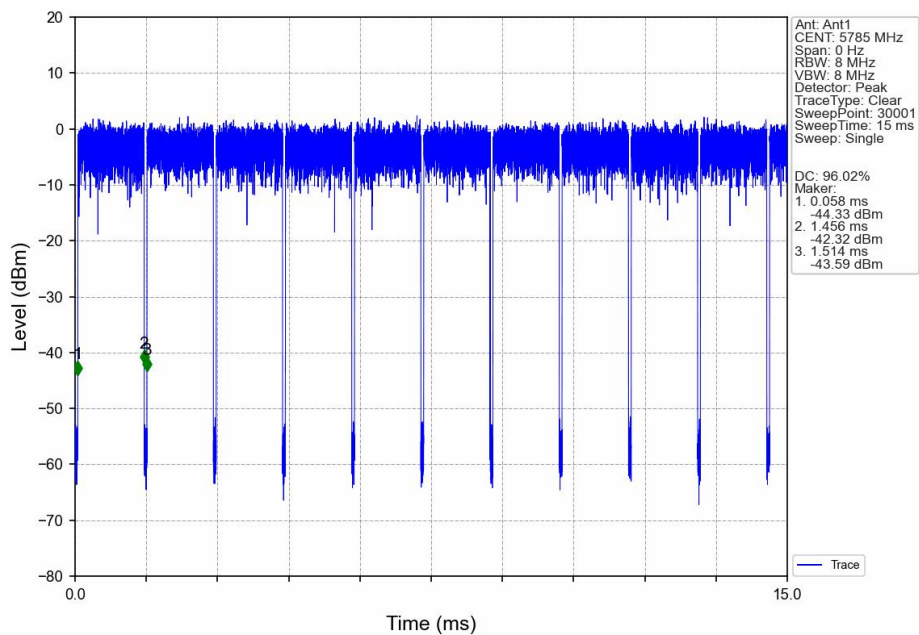
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1.2 Test Graph

1.2.1 Ant1

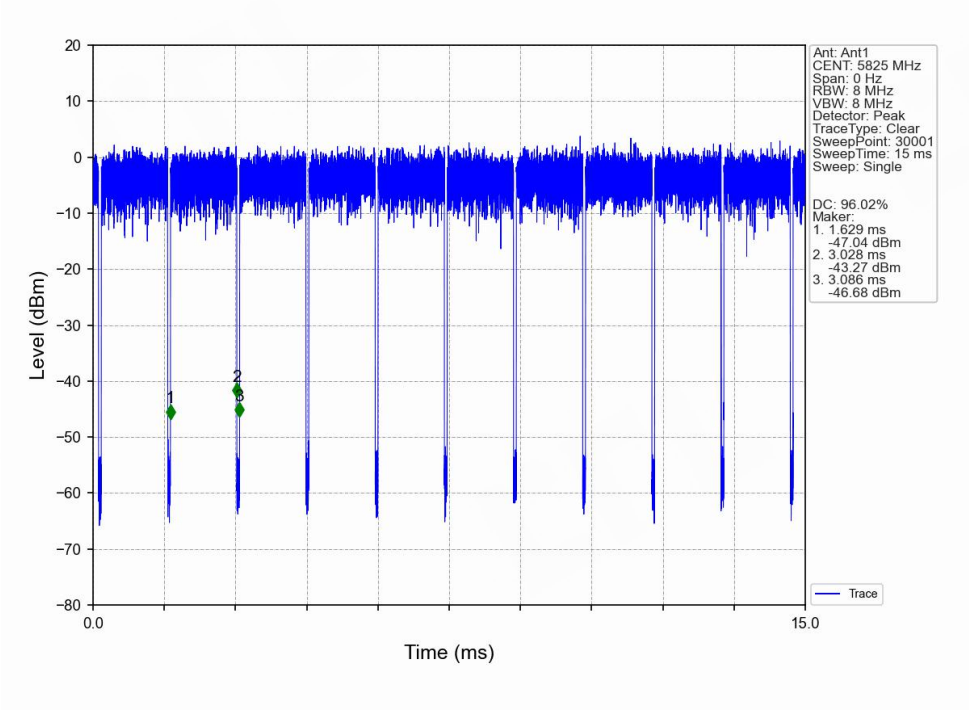


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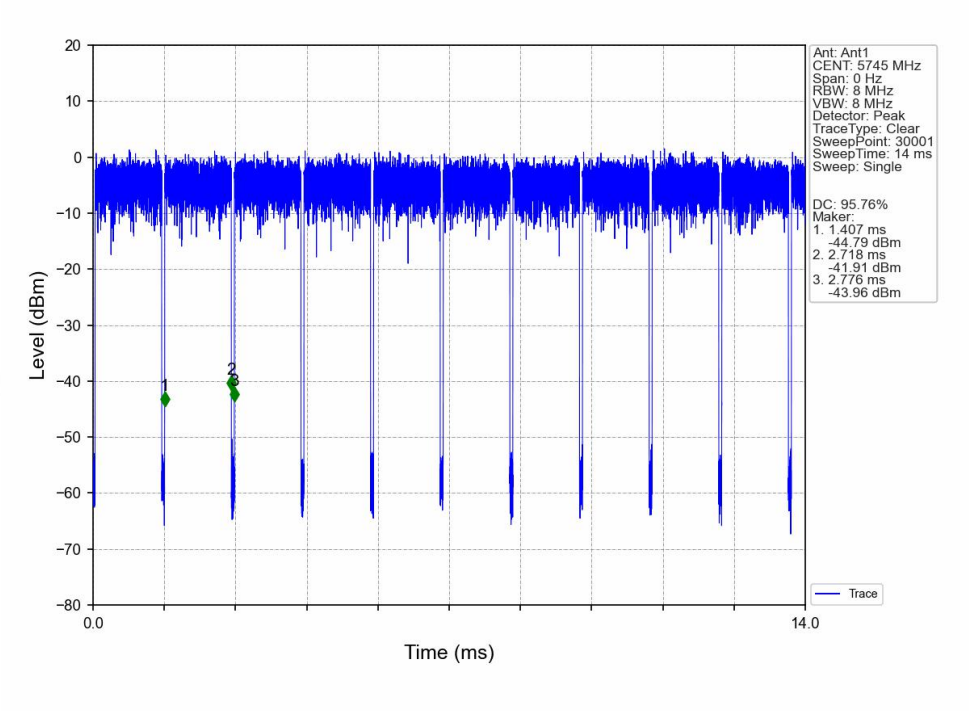


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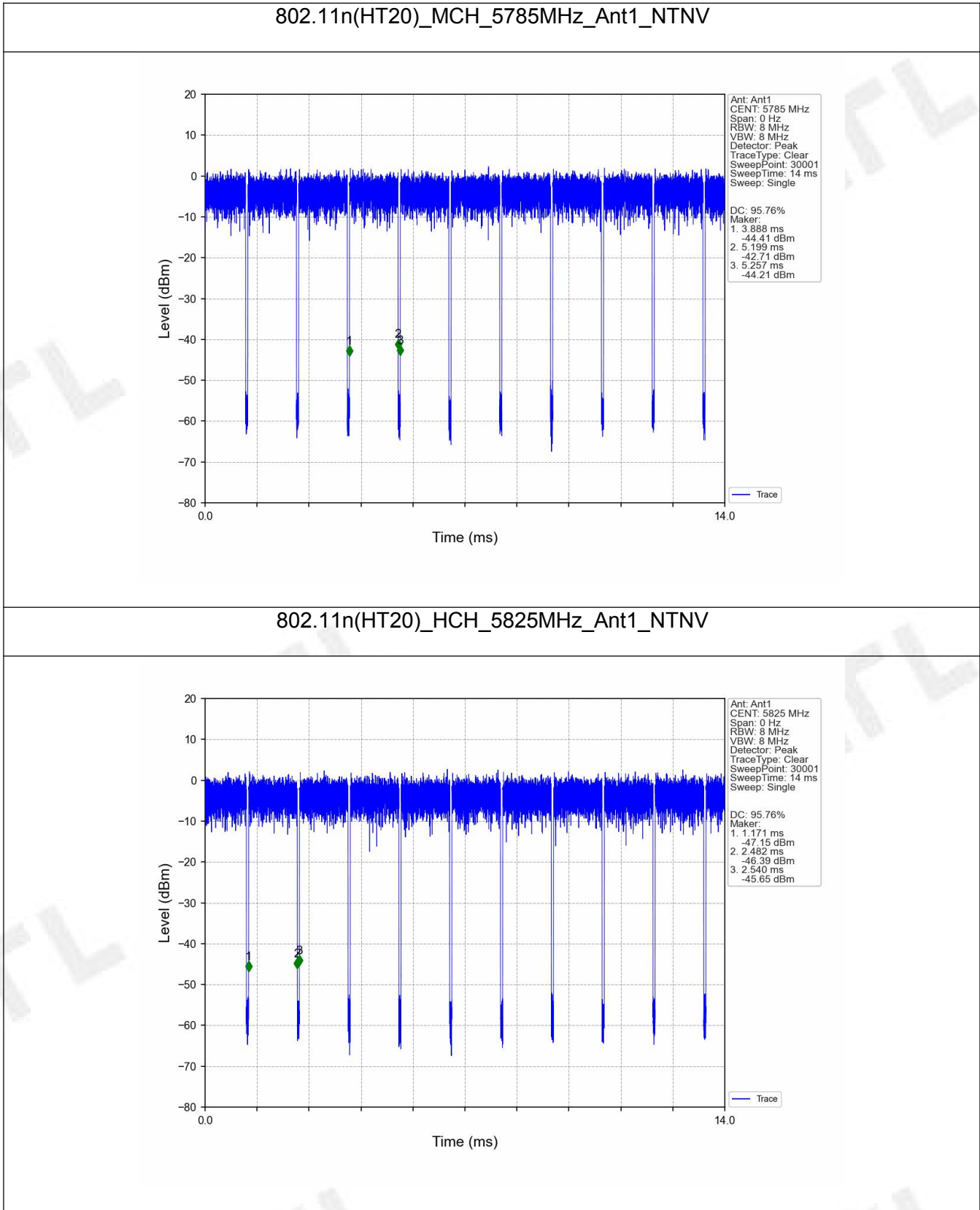
802.11a_HCH_5825MHz_Ant1_NTNV



802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

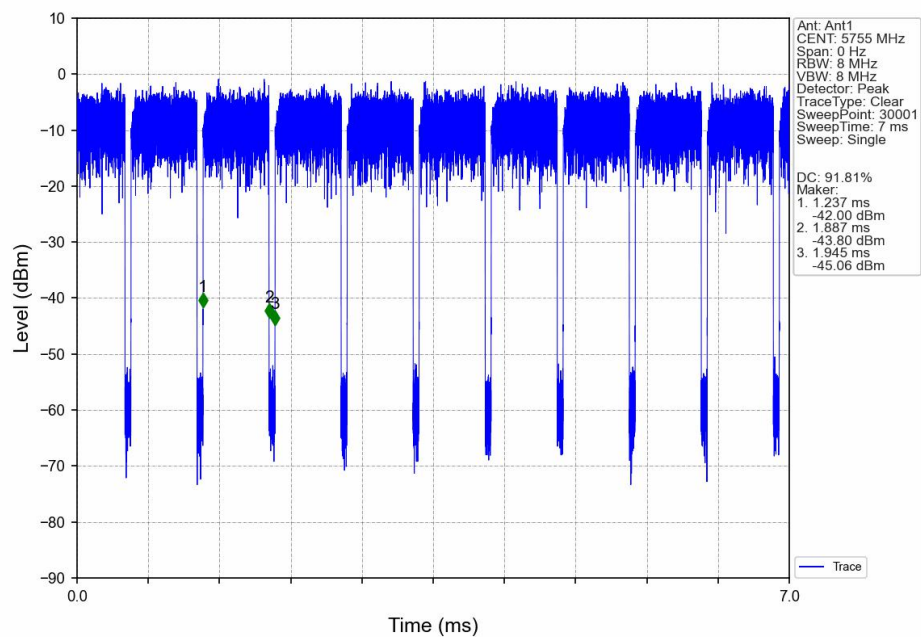


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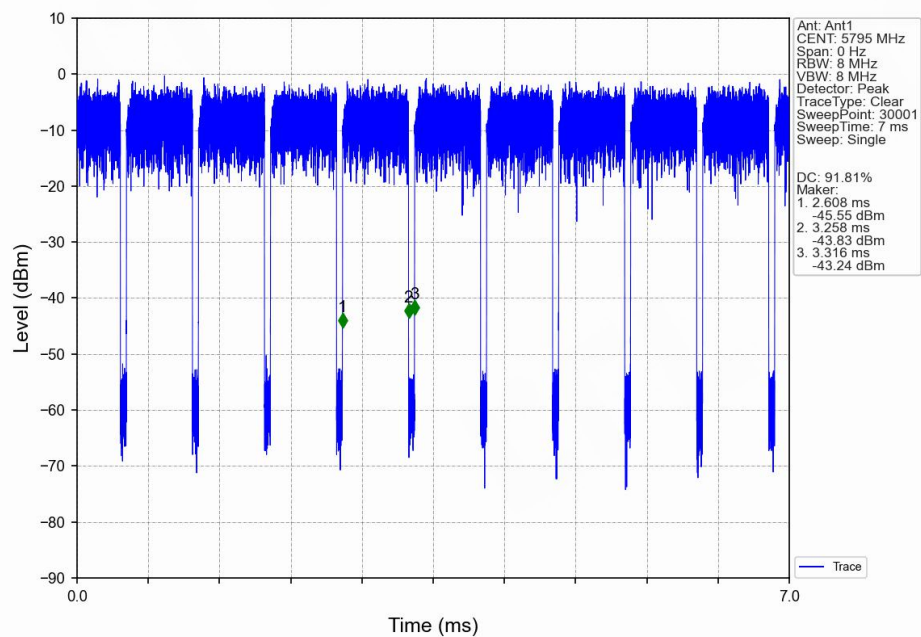


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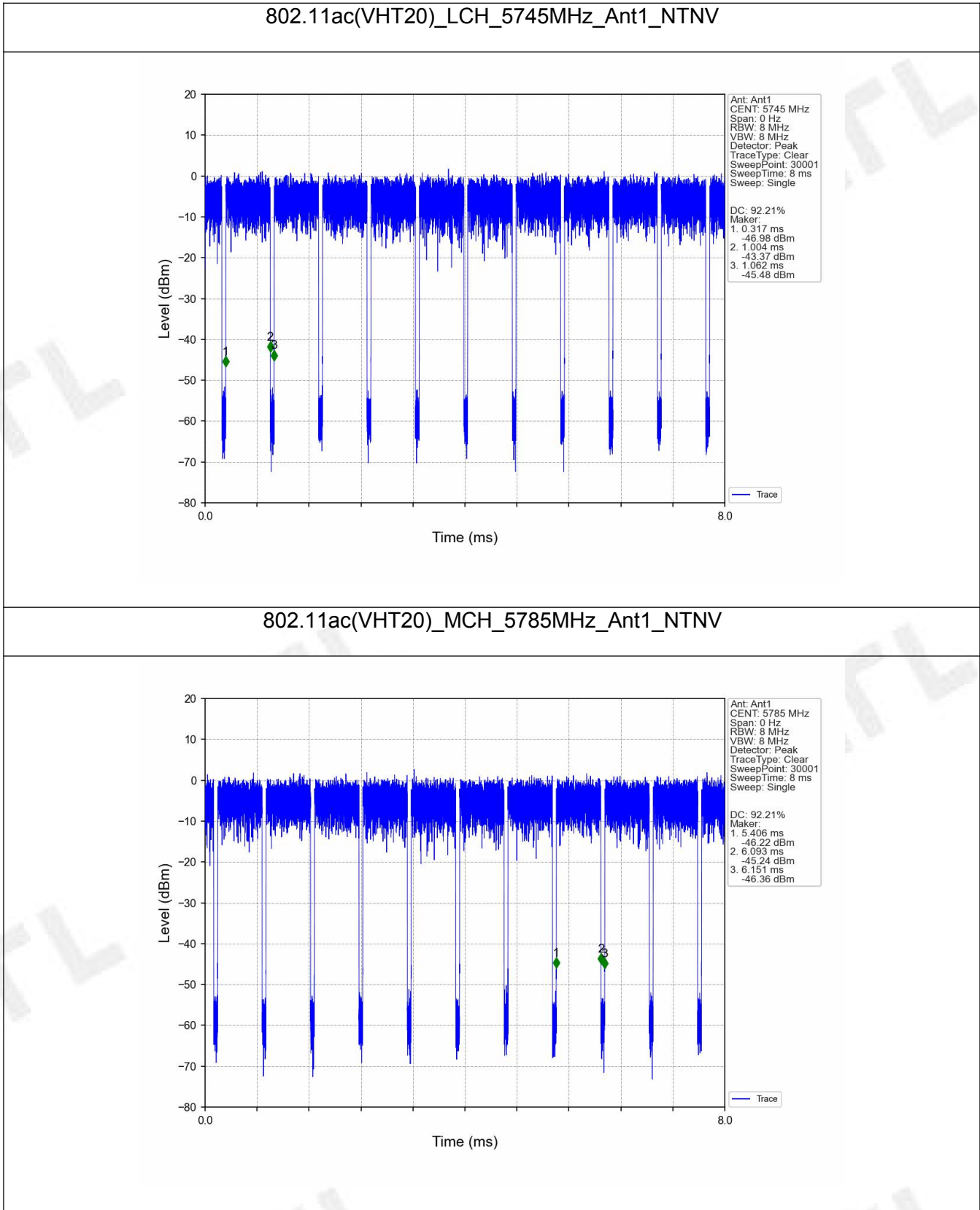
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



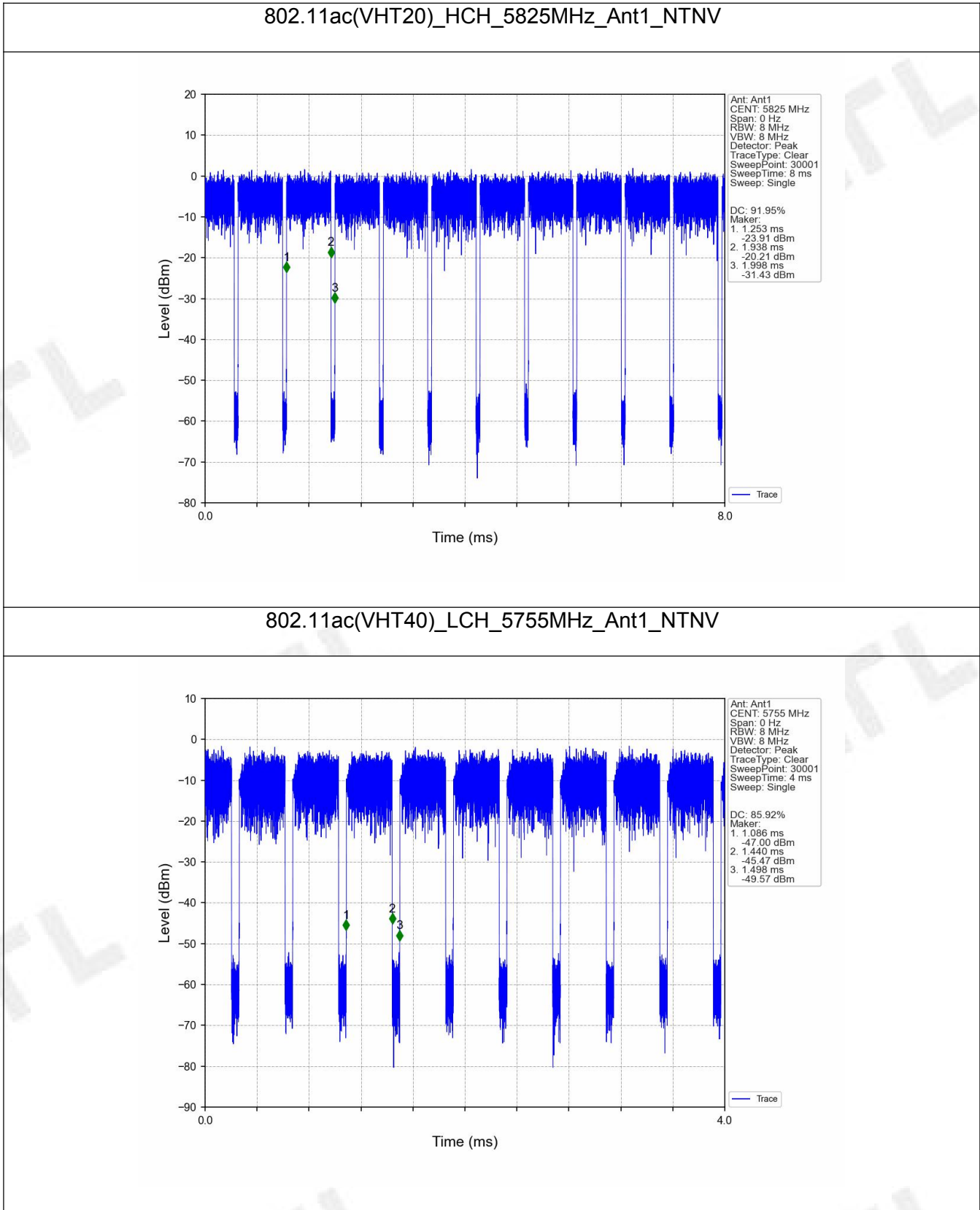
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



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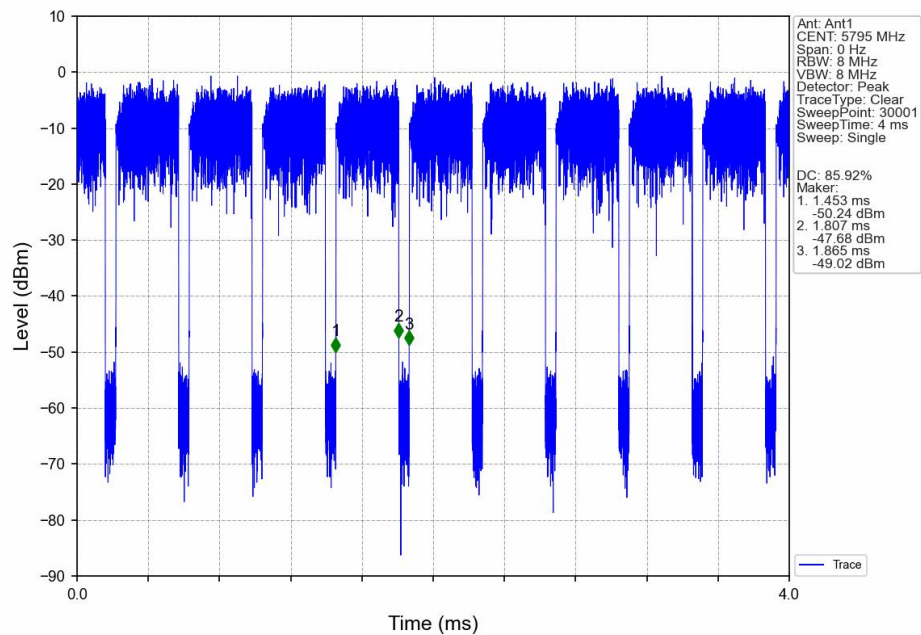


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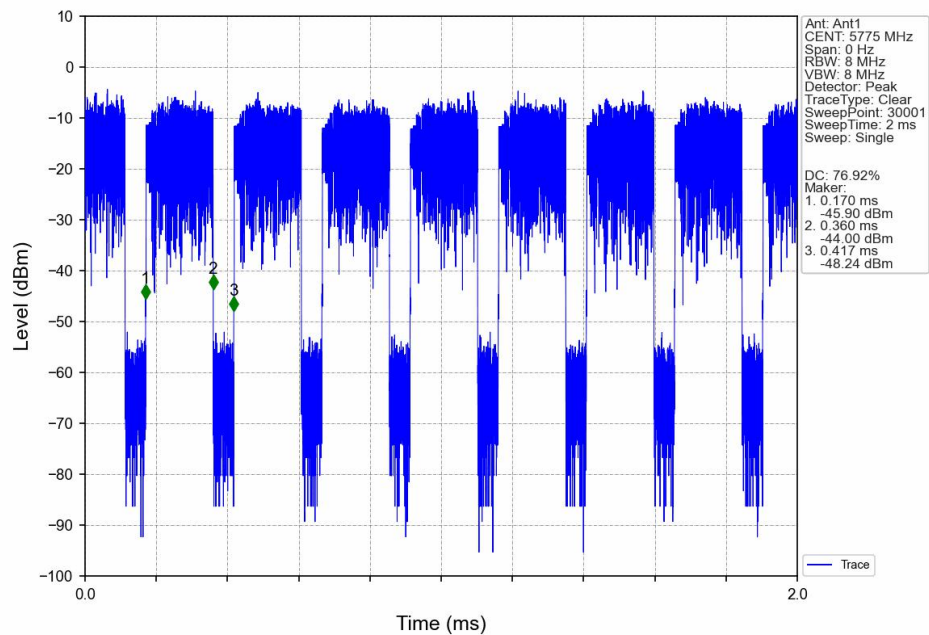


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802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



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2. 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	17.164	/	Pass
		5785	1	17.069	/	Pass
		5825	1	17.087	/	Pass
802.11n (HT20)	SISO	5745	1	18.043	/	Pass
		5785	1	18.042	/	Pass
		5825	1	17.986	/	Pass
802.11n (HT40)	SISO	5755	1	36.344	/	Pass
		5795	1	36.236	/	Pass
802.11ac (VHT20)	SISO	5745	1	18.058	/	Pass
		5785	1	17.972	/	Pass
		5825	1	18.008	/	Pass
802.11ac (VHT40)	SISO	5755	1	36.270	/	Pass
		5795	1	36.335	/	Pass
802.11ac (VHT80)	SISO	5775	1	75.559	/	Pass

2.1.2 6dB BW

Mode	TX	Frequency	ANT	6dB Bandwidth (MHz)	Verdict
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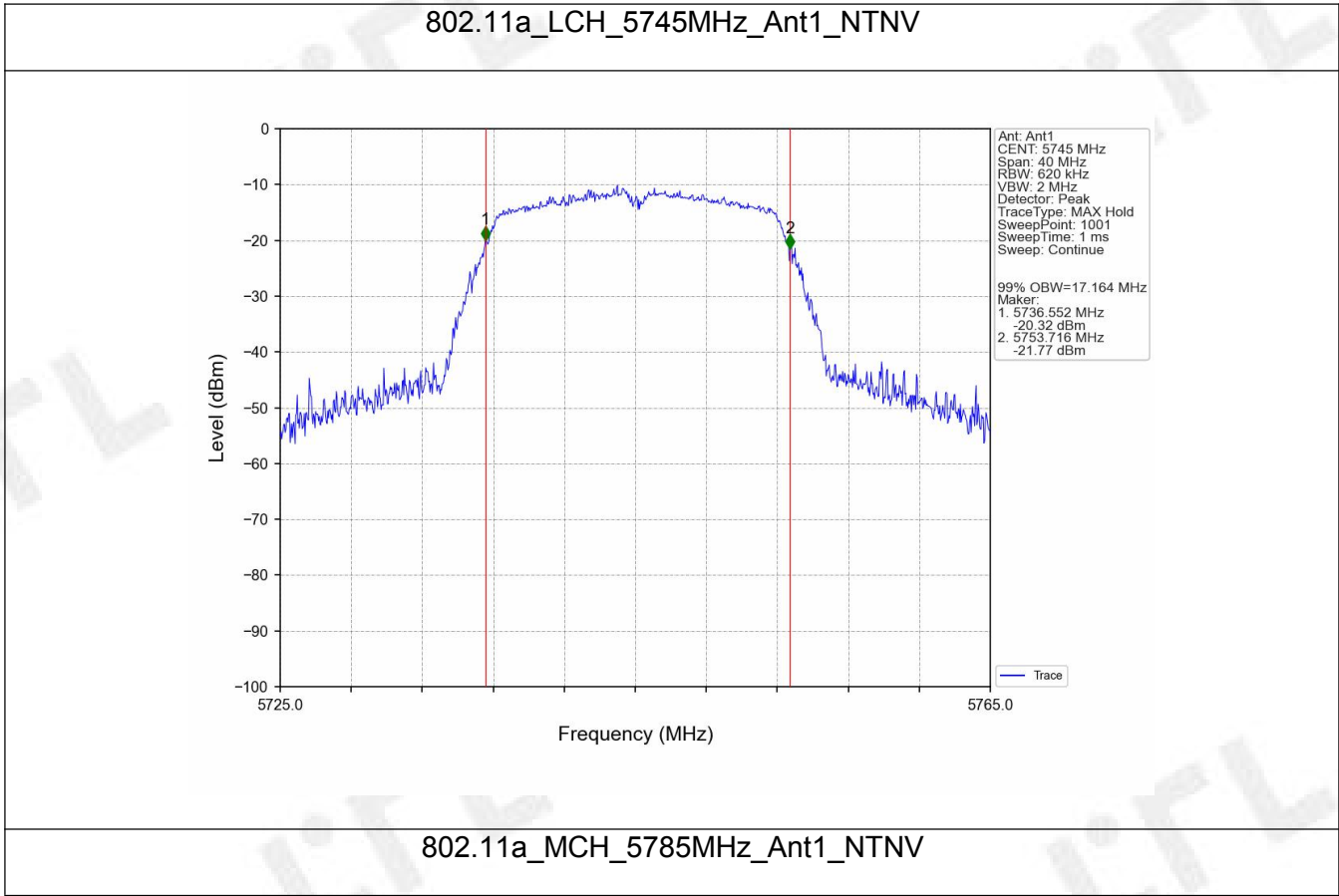
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	Type	(MHz)		Result	Limit	
802.11a	SISO	5745	1	14.540	≥ 0.5	Pass
		5785	1	15.102	≥ 0.5	Pass
		5825	1	15.076	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	15.113	≥ 0.5	Pass
		5785	1	15.051	≥ 0.5	Pass
		5825	1	13.250	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	35.115	≥ 0.5	Pass
		5795	1	35.062	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	15.078	≥ 0.5	Pass
		5785	1	15.129	≥ 0.5	Pass
		5825	1	15.134	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	35.157	≥ 0.5	Pass
		5795	1	33.906	≥ 0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.135	≥ 0.5	Pass

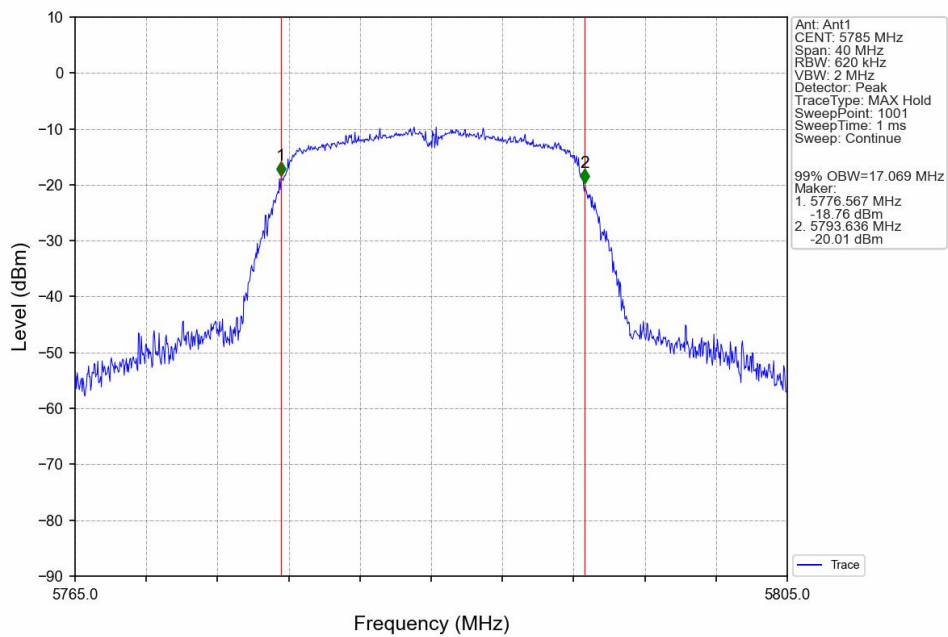
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2.2 Test Graph

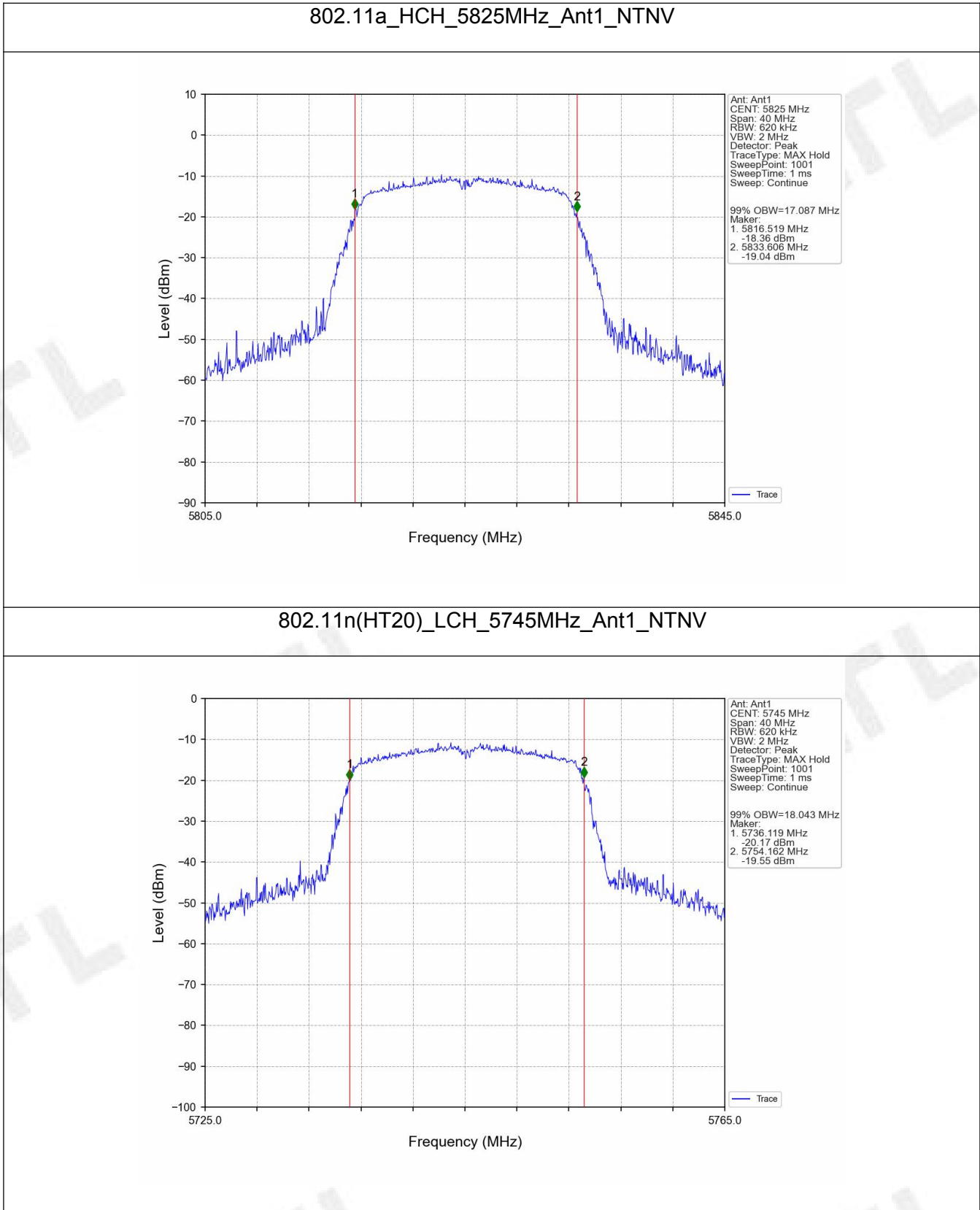
2.2.1 OBW



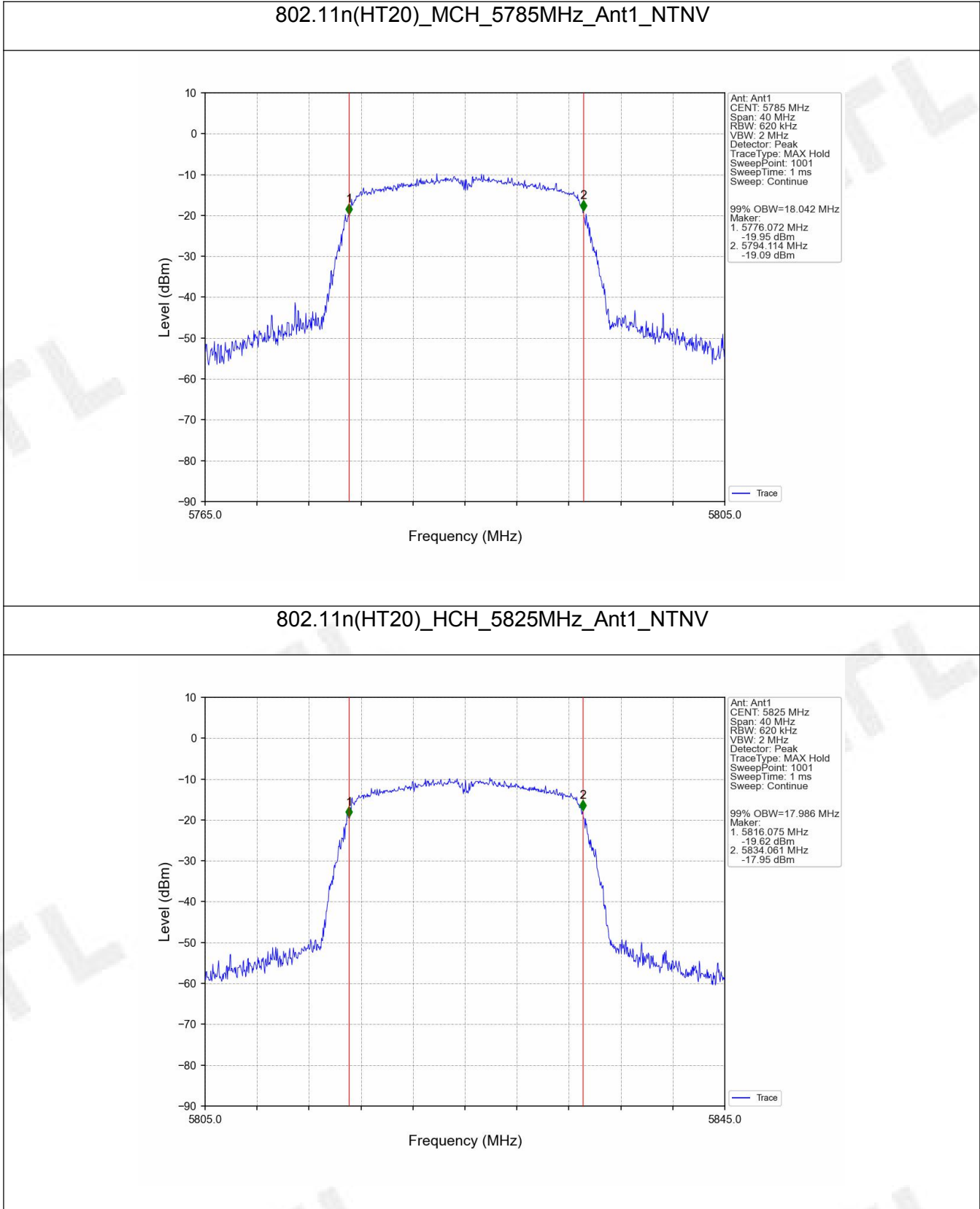
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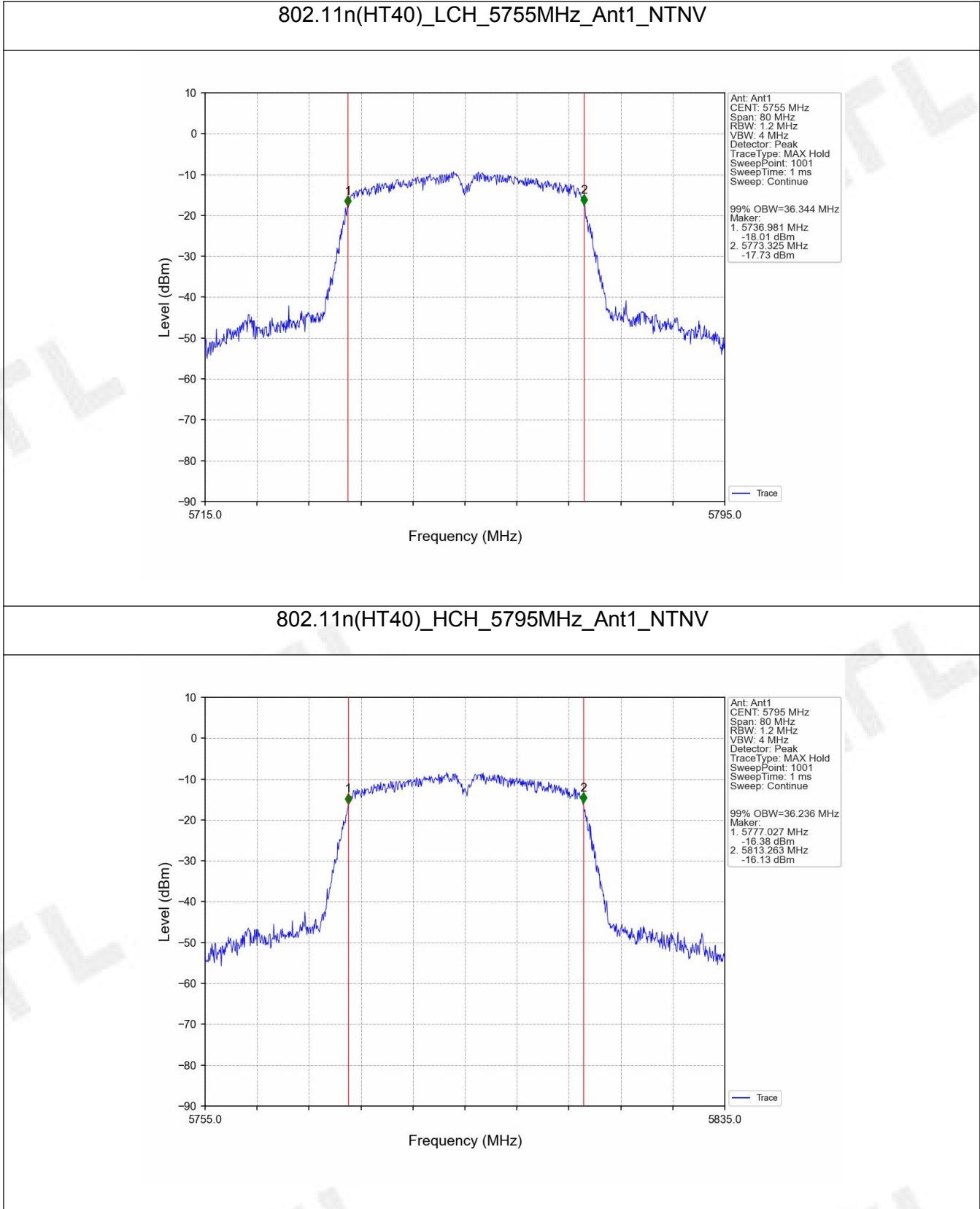
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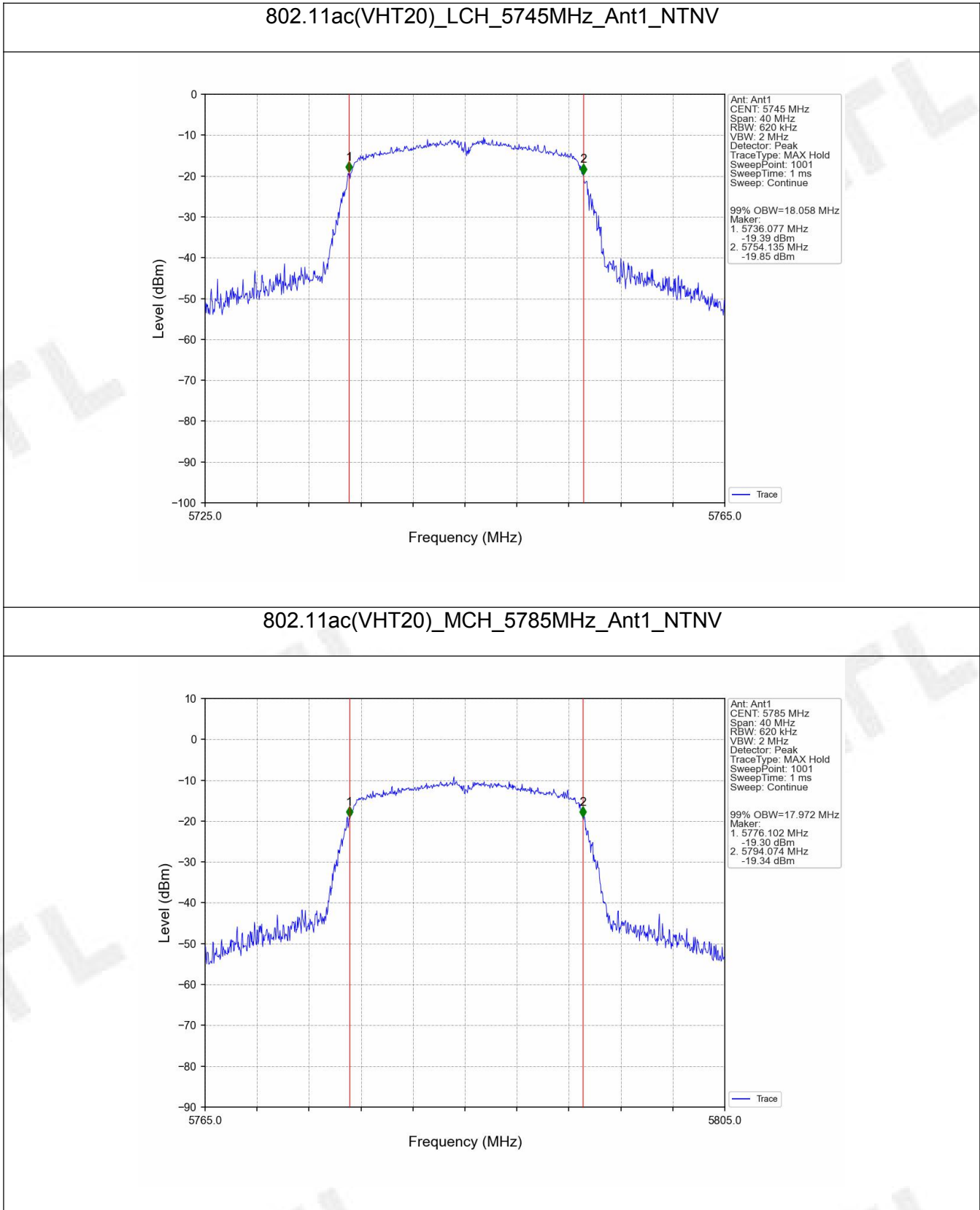
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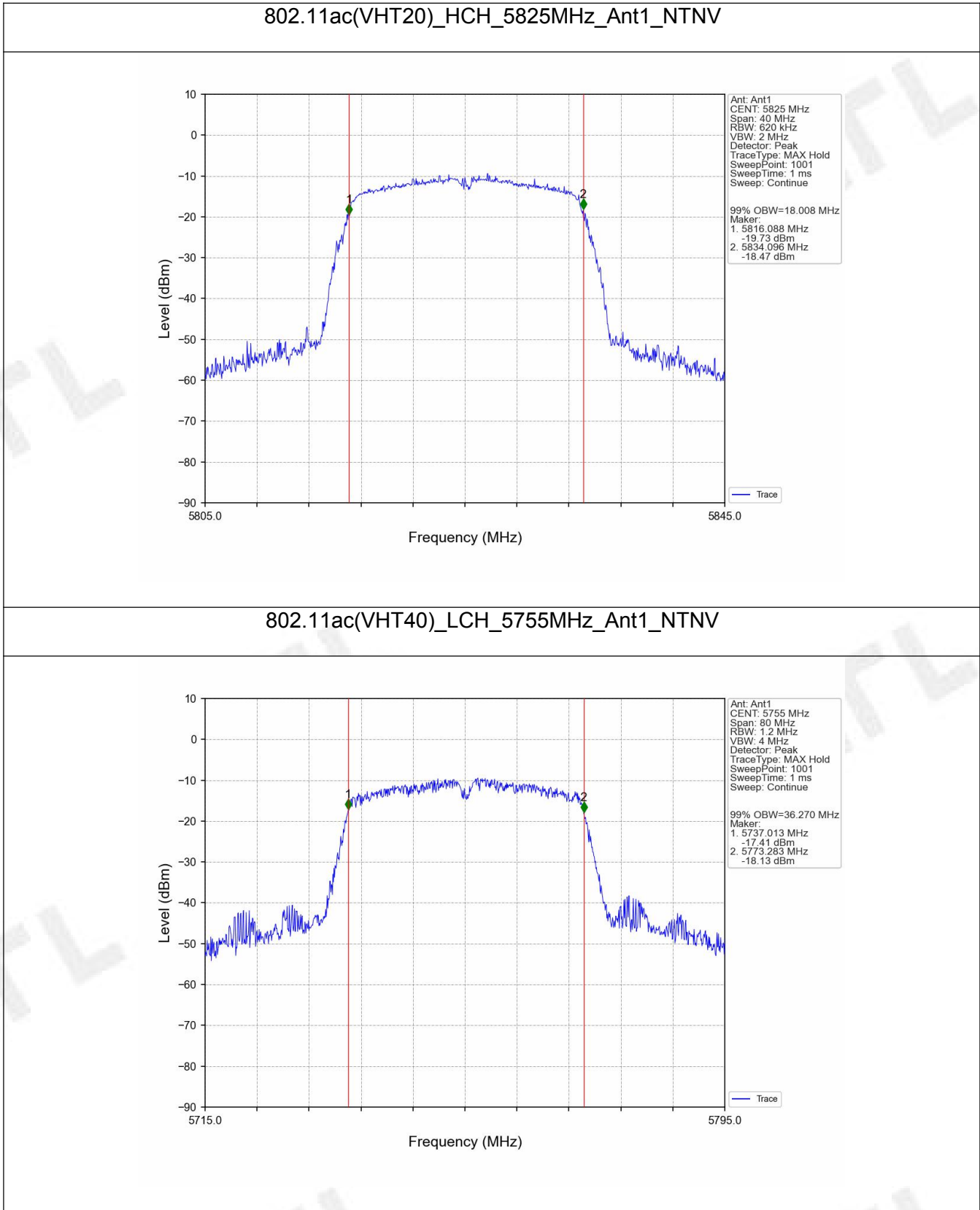
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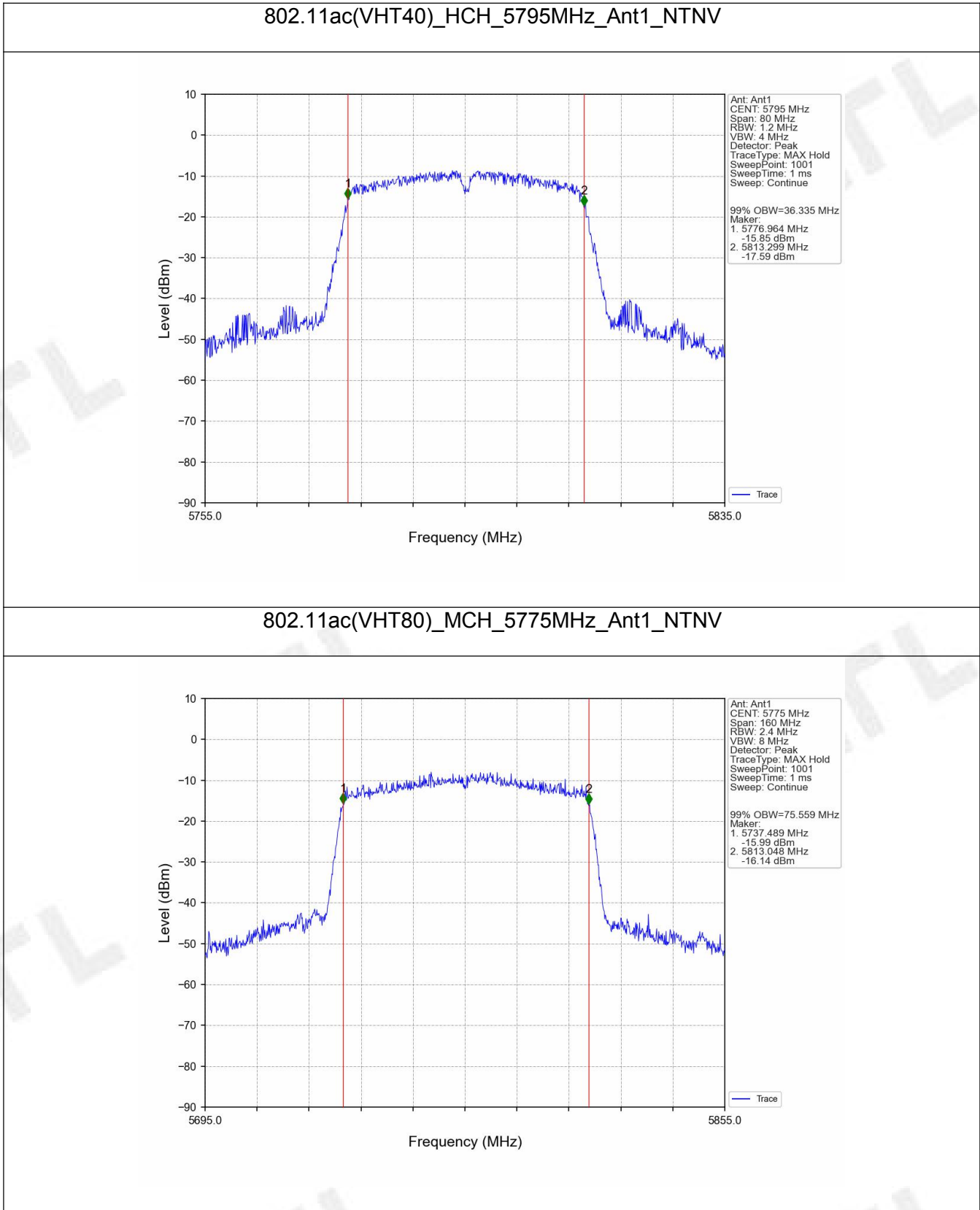
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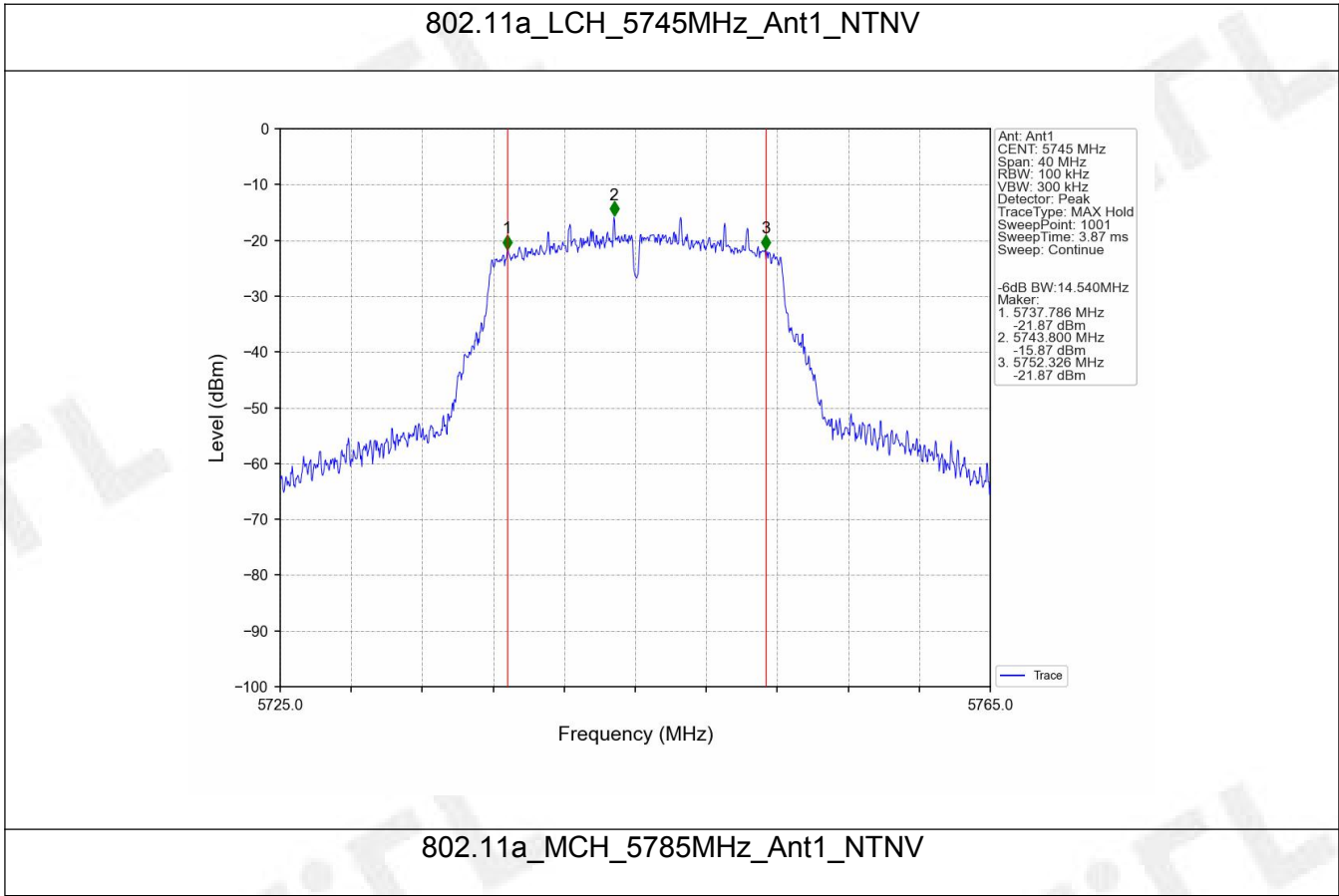


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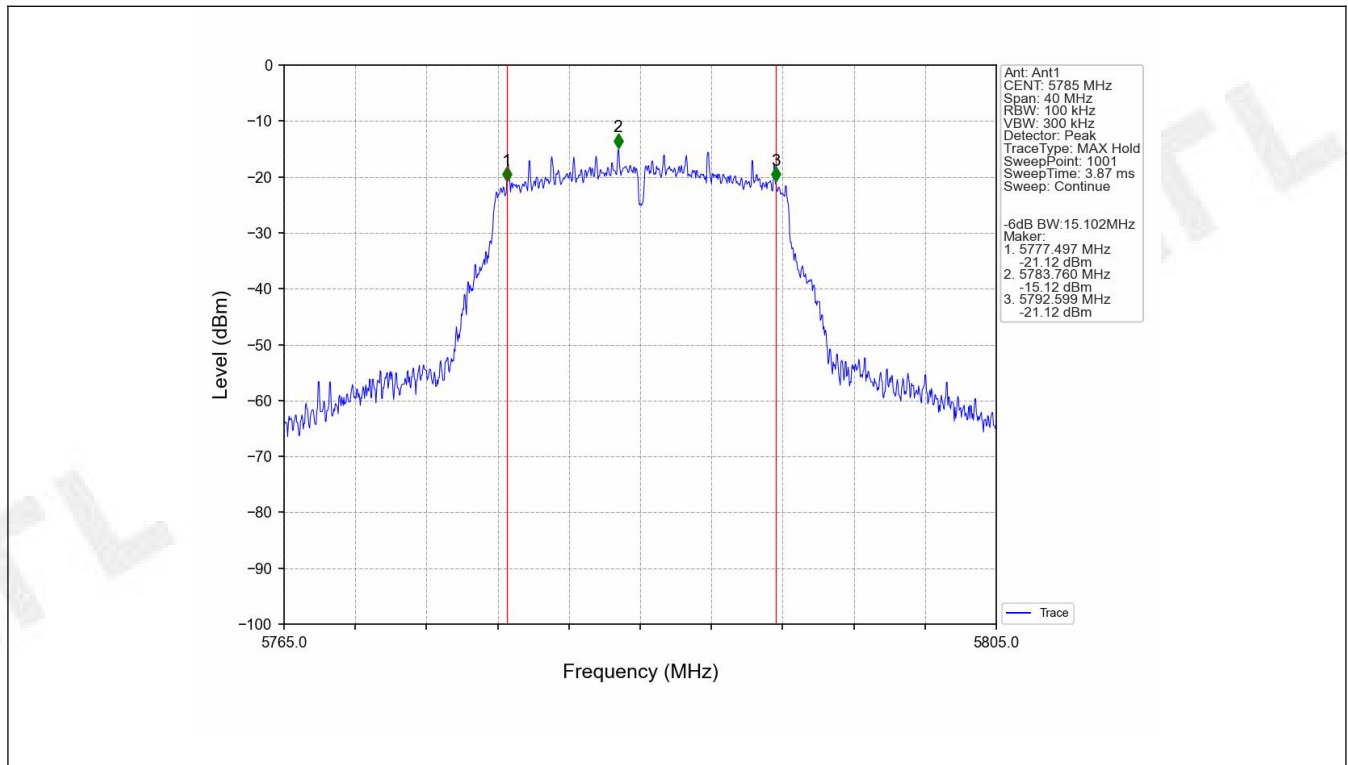


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2.2.2 6dB BW

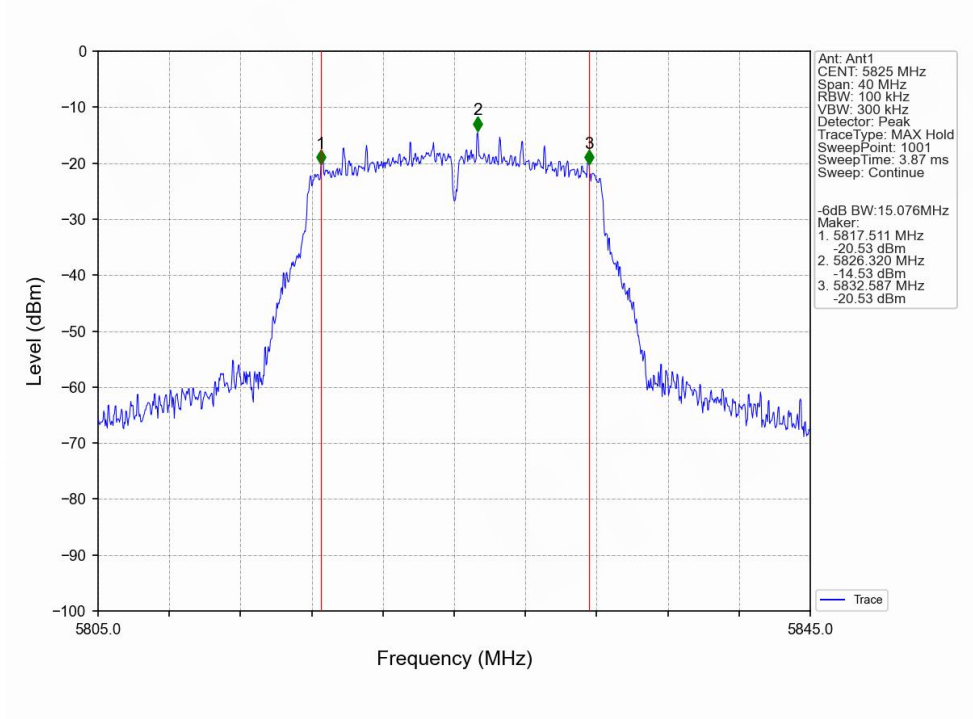


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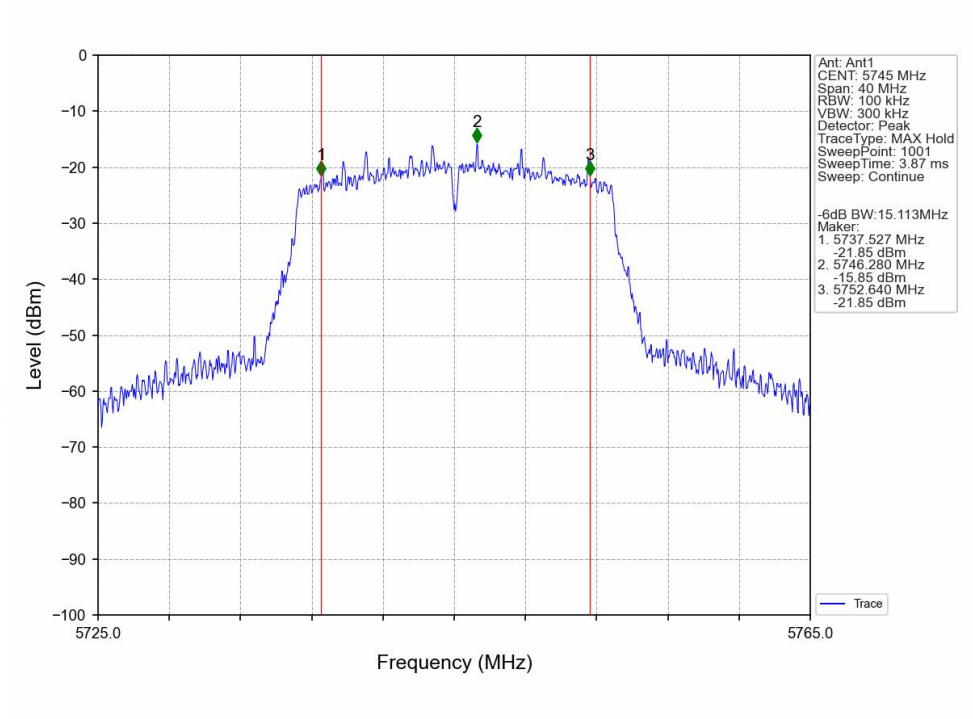


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802.11a_HCH_5825MHz_Ant1_NTNV

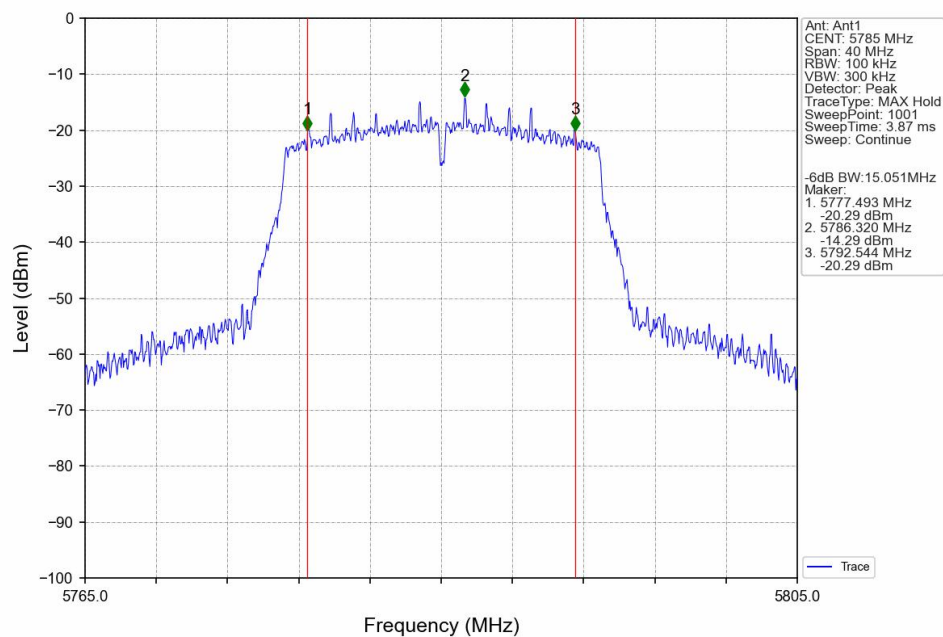


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

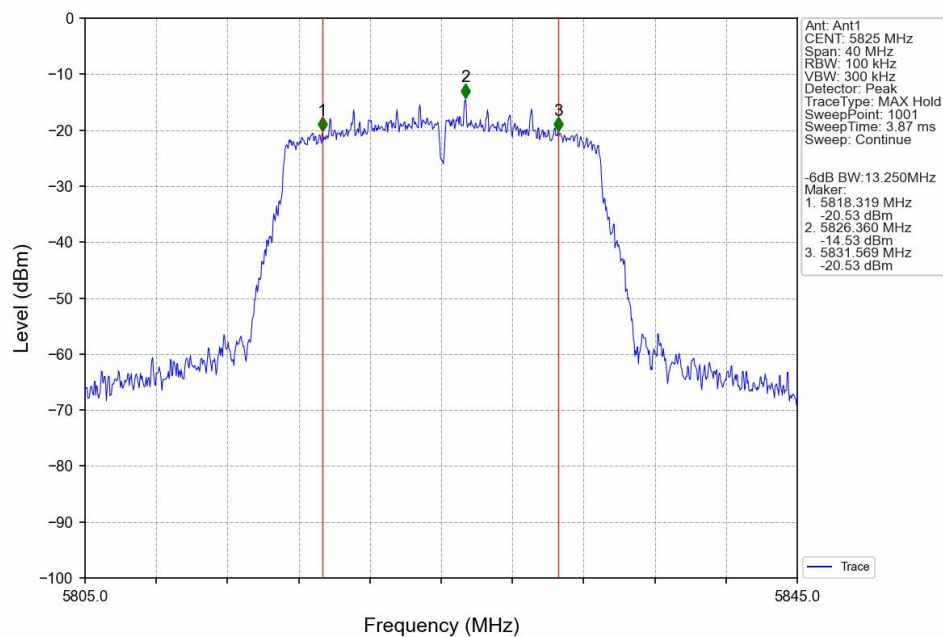


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802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

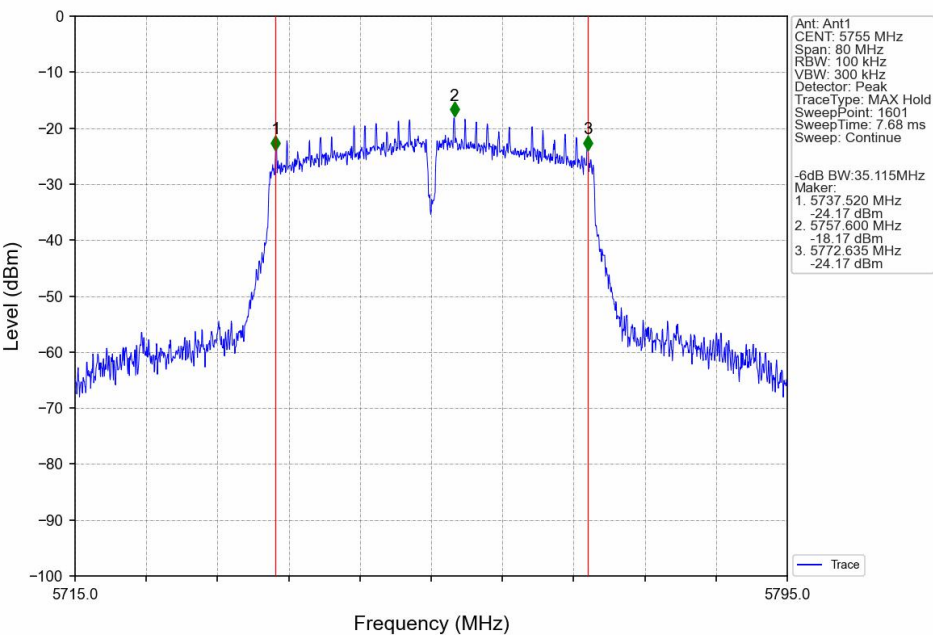


802.11n(HT20)_HCH_5825MHz_Ant1_NTNV

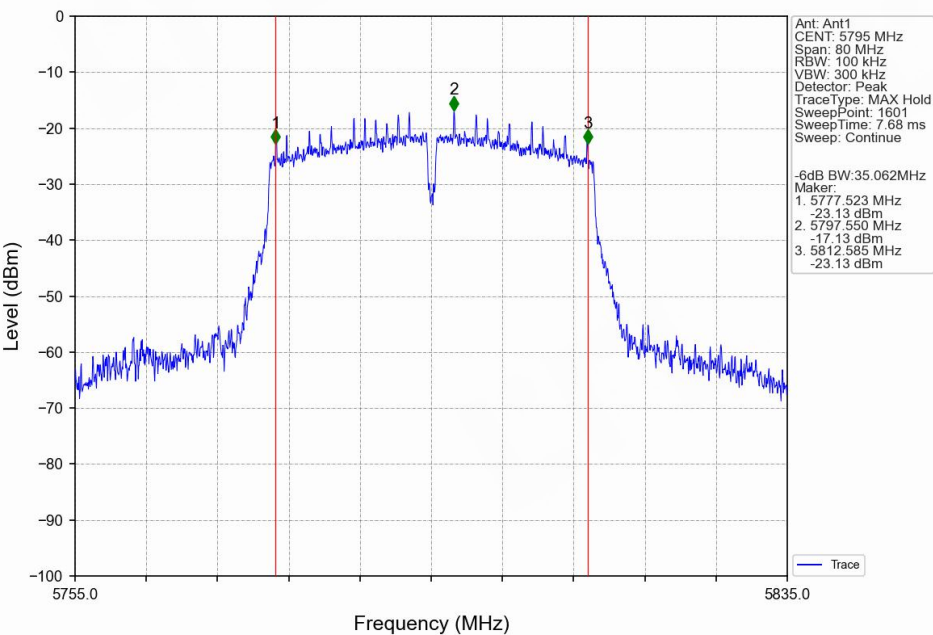


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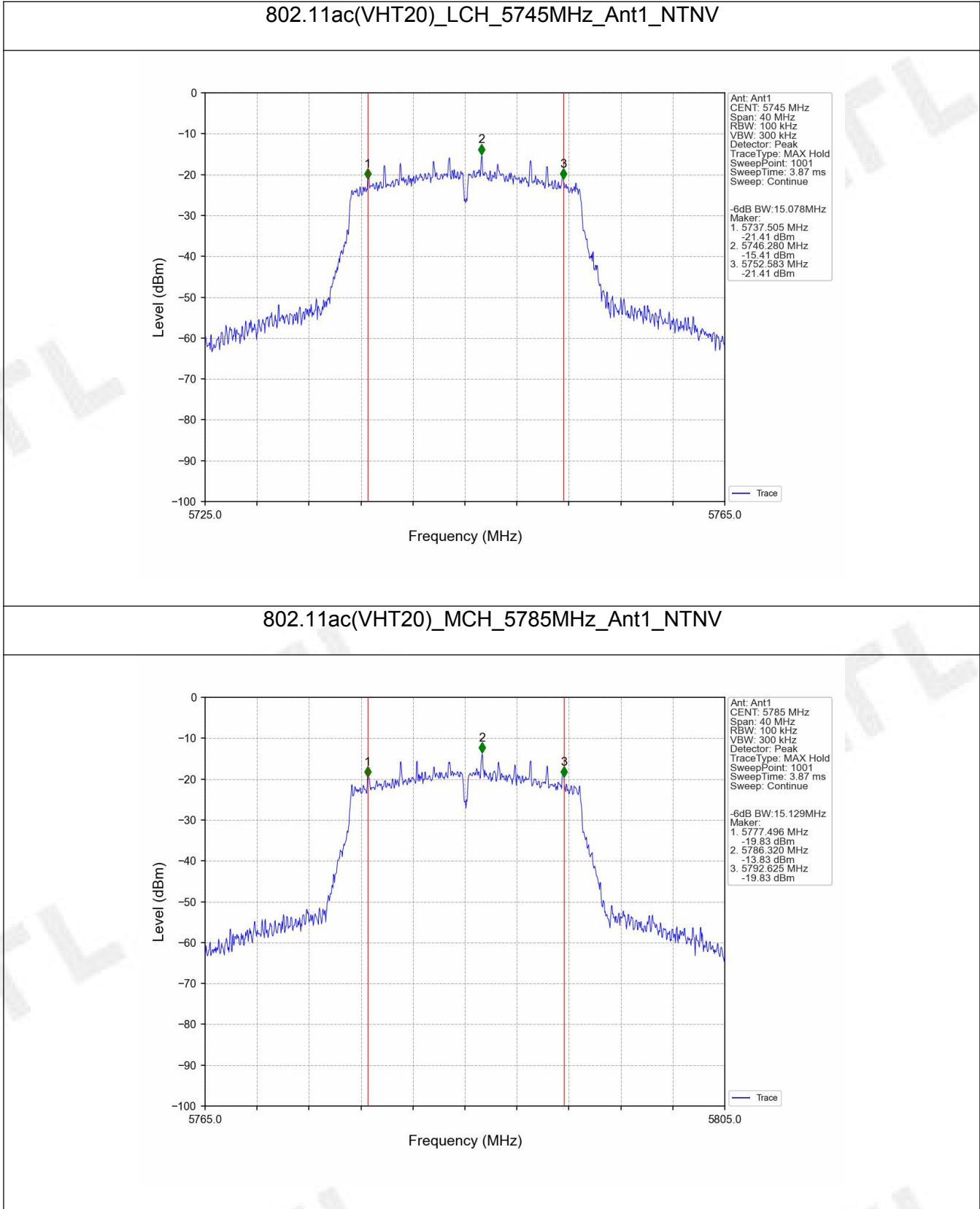
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



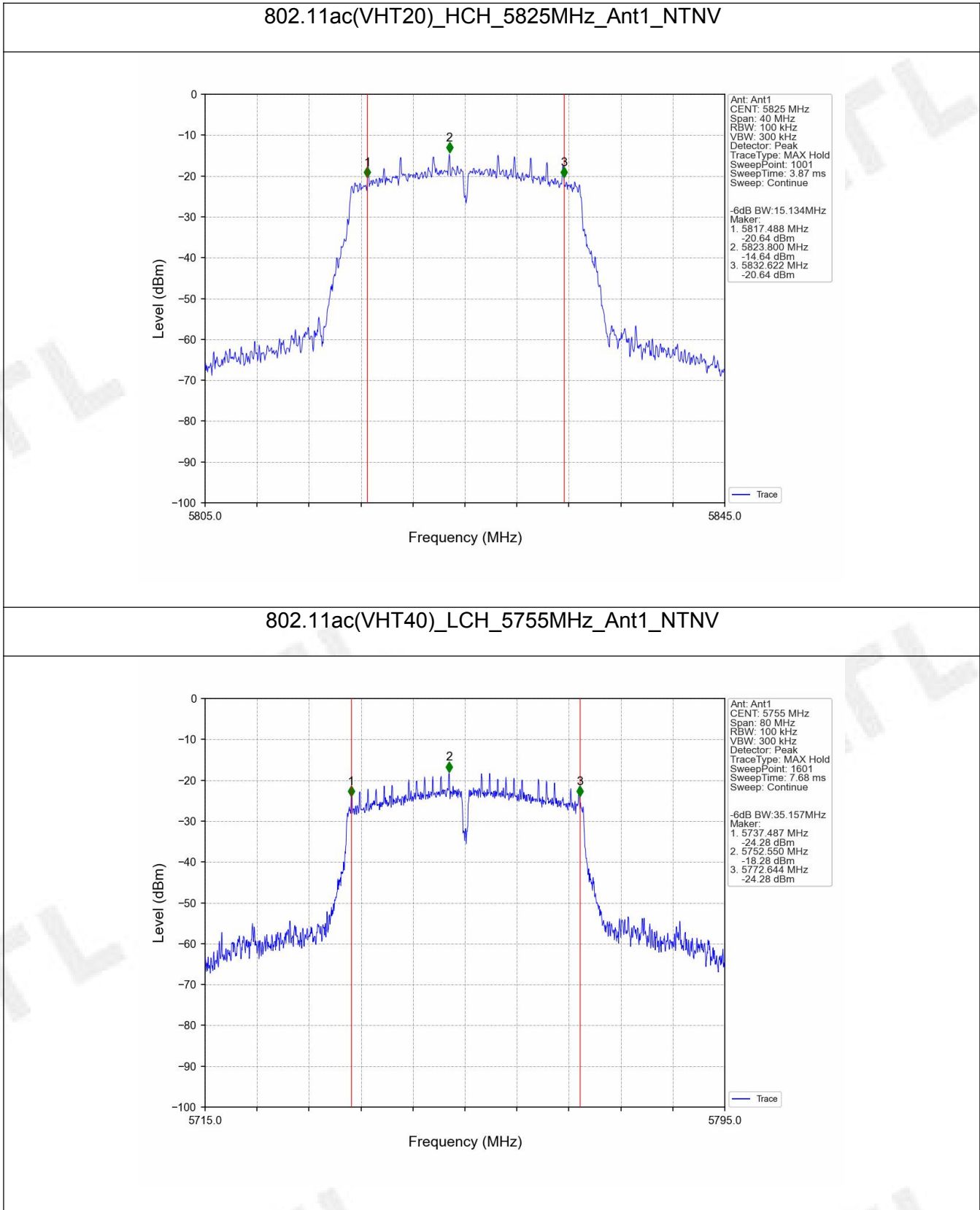
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



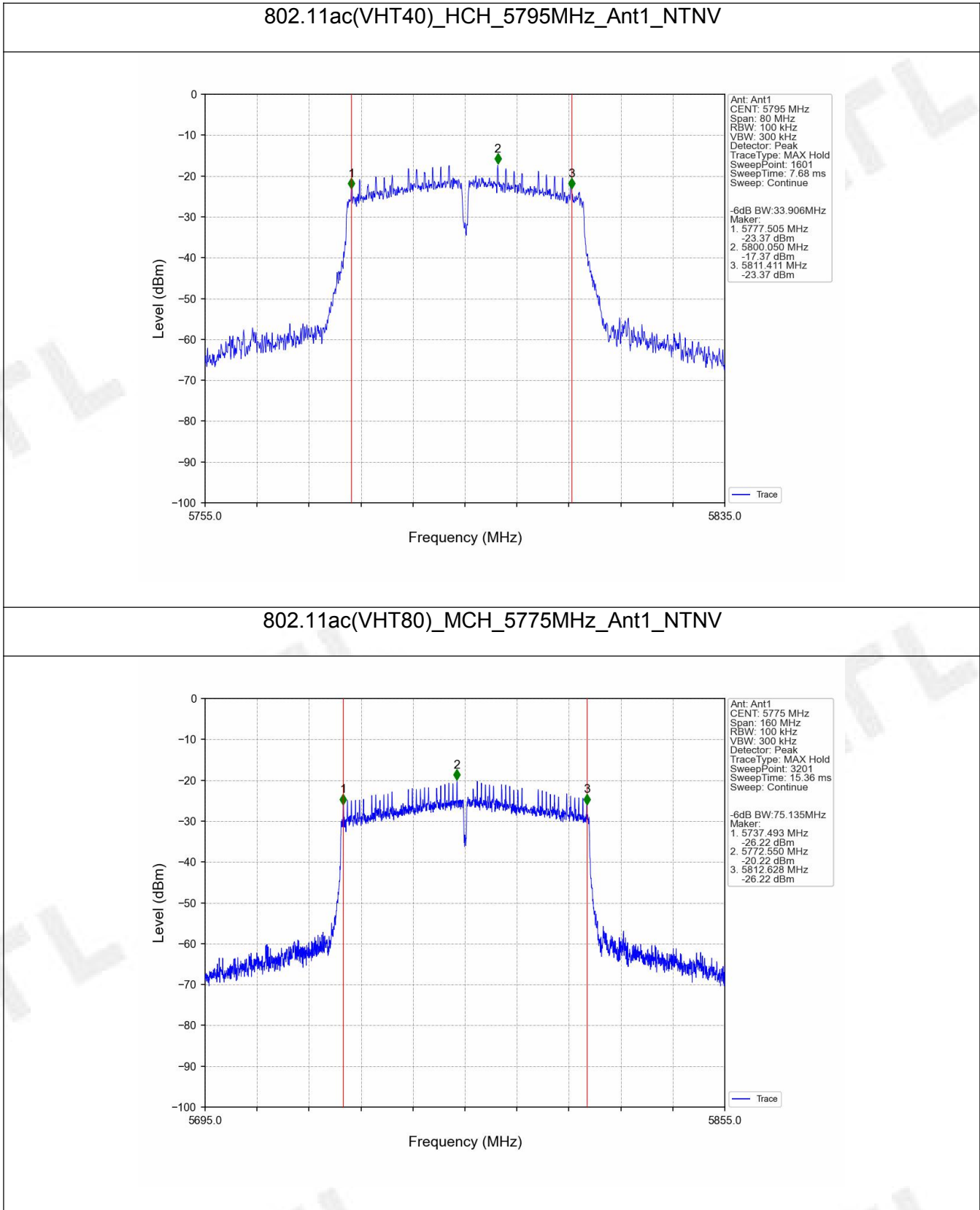
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FCC ID: 2ASC7DS600BT



FCC ID: 2ASC7DS600BT



FCC ID: 2ASC7DS600BT

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	-5.36	<=30	Pass
		5785	-4.37	<=30	Pass
		5825	-4.55	<=30	Pass
802.11n (HT20)	SISO	5745	-5.55	<=30	Pass
		5785	-4.70	<=30	Pass
		5825	-4.25	<=30	Pass
802.11n (HT40)	SISO	5755	-5.25	<=30	Pass
		5795	-4.37	<=30	Pass
802.11ac (VHT20)	SISO	5745	-5.40	<=30	Pass
		5785	-4.34	<=30	Pass
		5825	-4.22	<=30	Pass
802.11ac (VHT40)	SISO	5755	-5.27	<=30	Pass
		5795	-4.33	<=30	Pass
802.11ac (VHT80)	SISO	5775	-4.75	<=30	Pass
Note1: Antenna Gain: Ant1: 3.80dBi;					

FCC ID: 2ASC7DS600BT

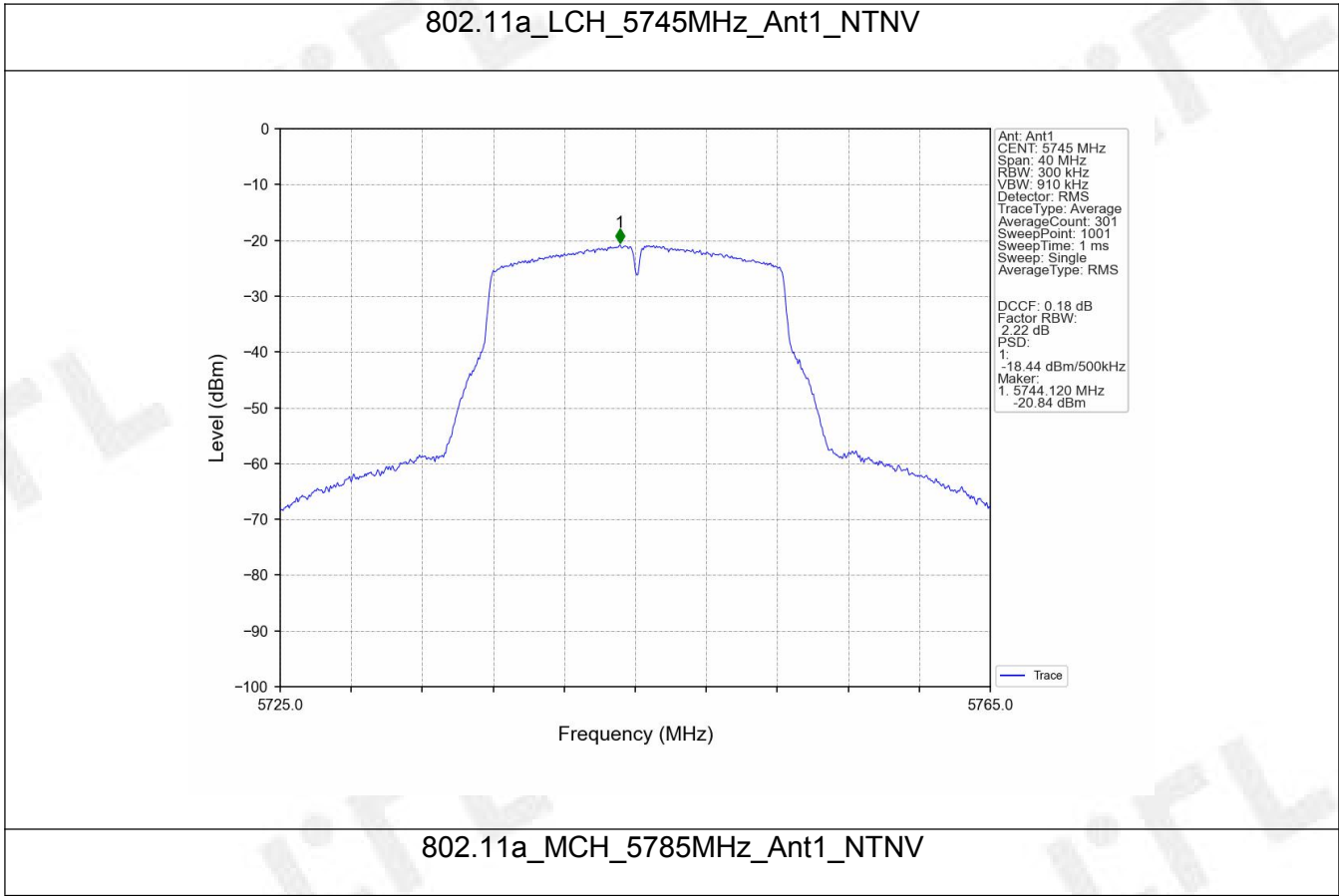
4. Maximum Power Spectral Density**4.1 Test Result****4.1.1 PSD-Band3**

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	-18.44	<=30	Pass
		5785	-17.40	<=30	Pass
		5825	-17.59	<=30	Pass
802.11n (HT20)	SISO	5745	-18.85	<=30	Pass
		5785	-17.76	<=30	Pass
		5825	-17.44	<=30	Pass
802.11n (HT40)	SISO	5755	-21.57	<=30	Pass
		5795	-20.67	<=30	Pass
802.11ac (VHT20)	SISO	5745	-18.58	<=30	Pass
		5785	-17.46	<=30	Pass
		5825	-17.20	<=30	Pass
802.11ac (VHT40)	SISO	5755	-21.26	<=30	Pass
		5795	-20.51	<=30	Pass
802.11ac (VHT80)	SISO	5775	-23.30	<=30	Pass
Note1: Antenna Gain: Ant1: 3.80dBi;					

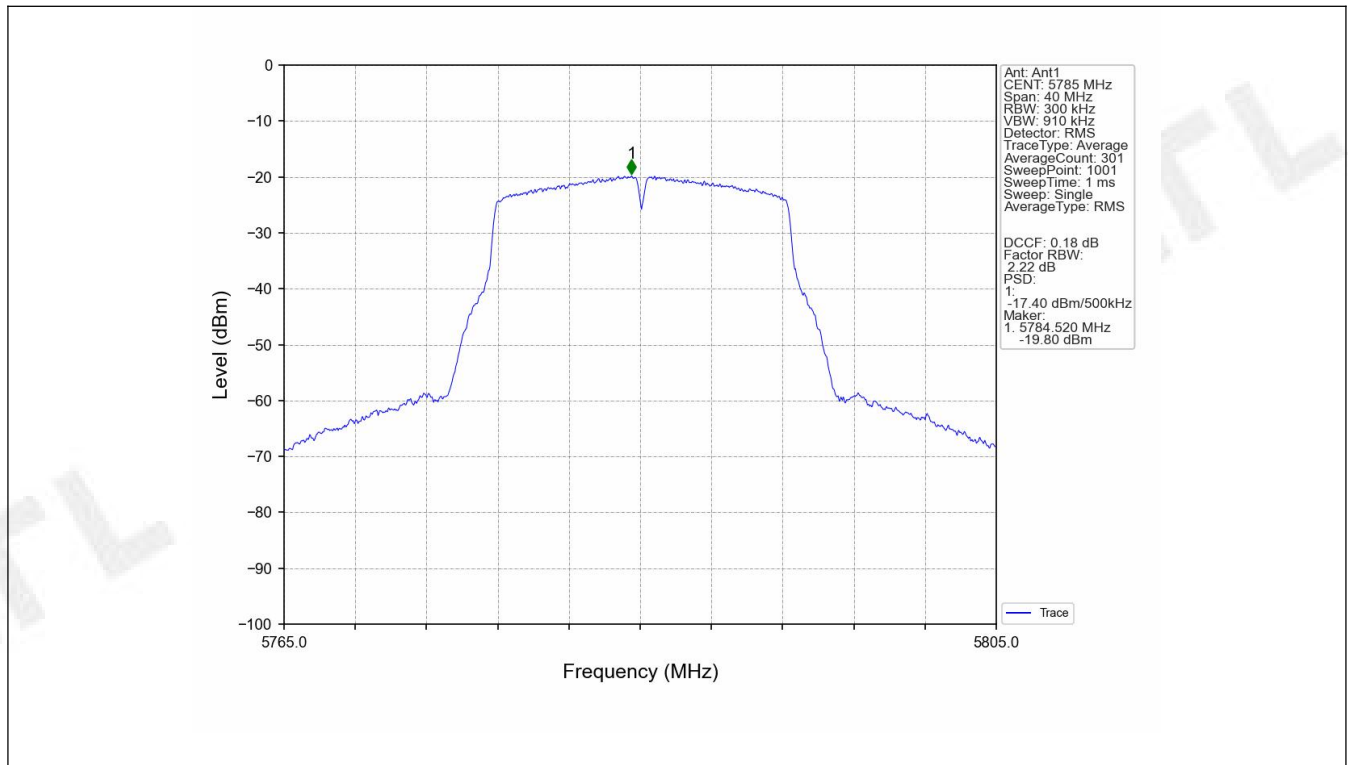
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4.2 Test Graph

4.2.1 PSD-Band3

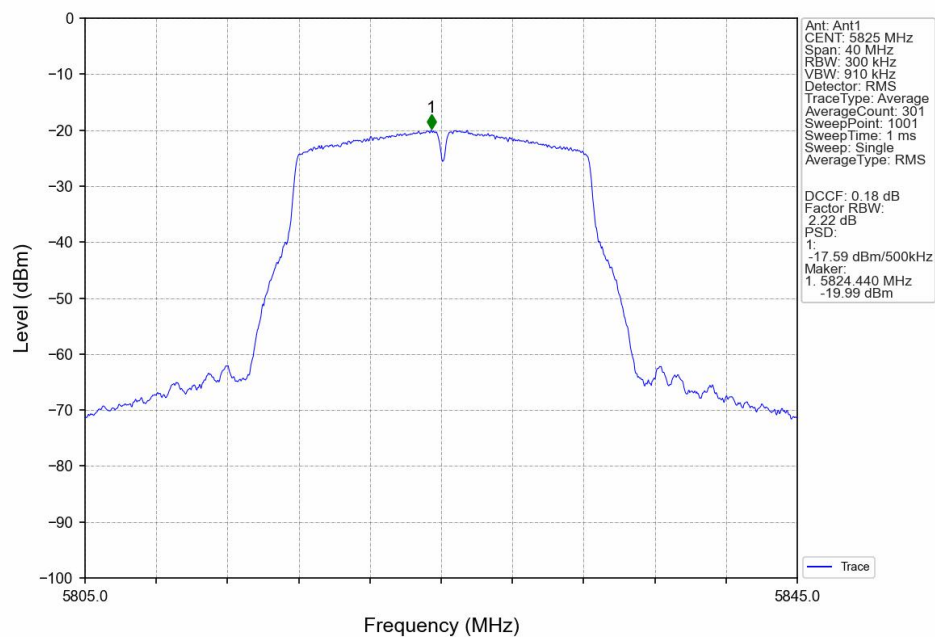


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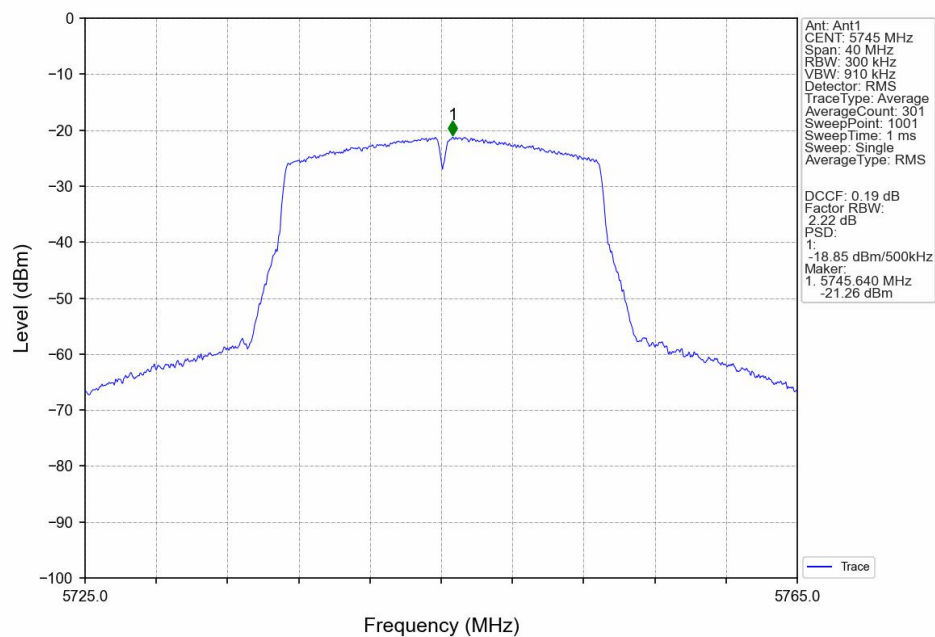


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802.11a_HCH_5825MHz_Ant1_NTNV

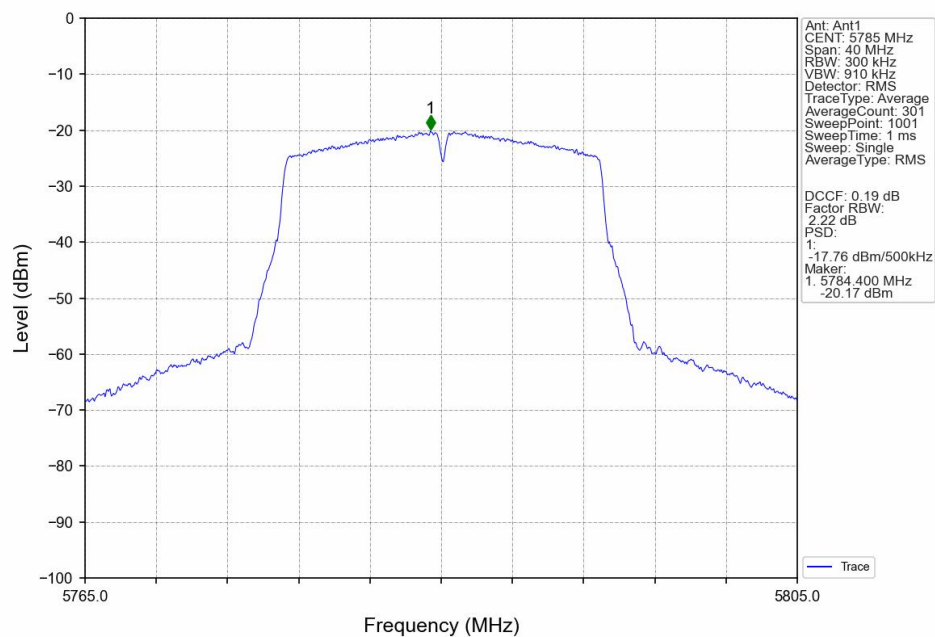


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

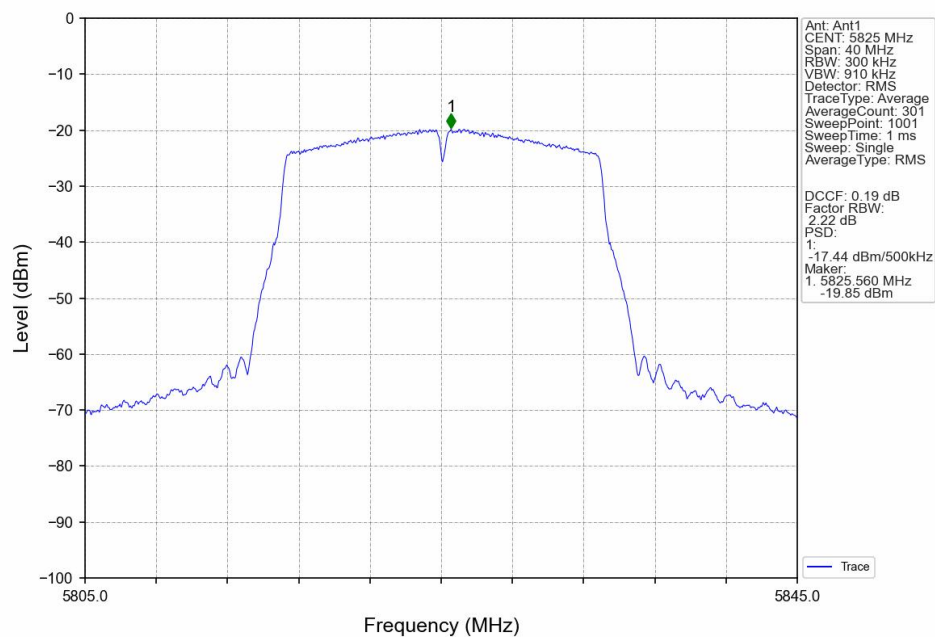


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802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

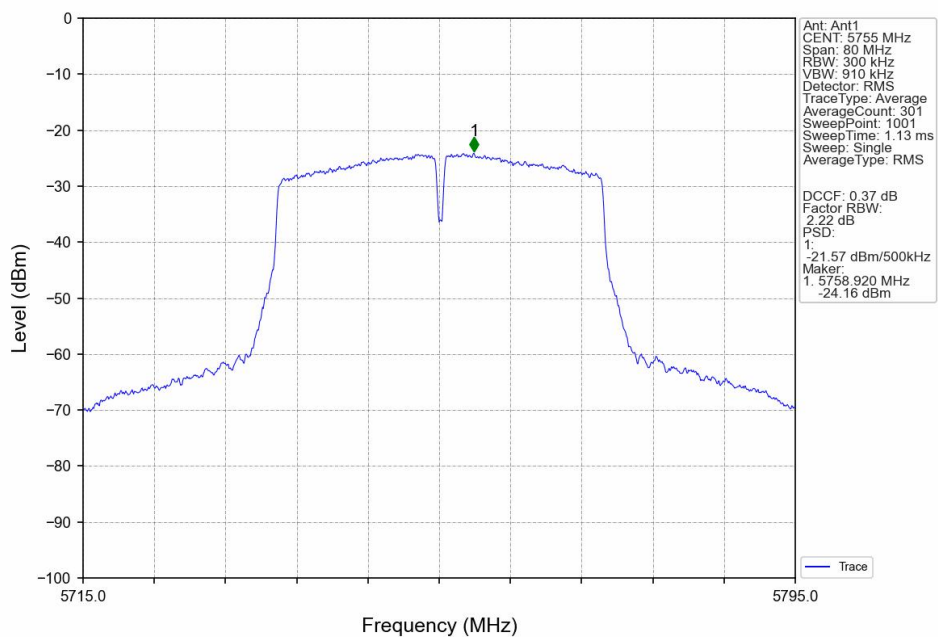


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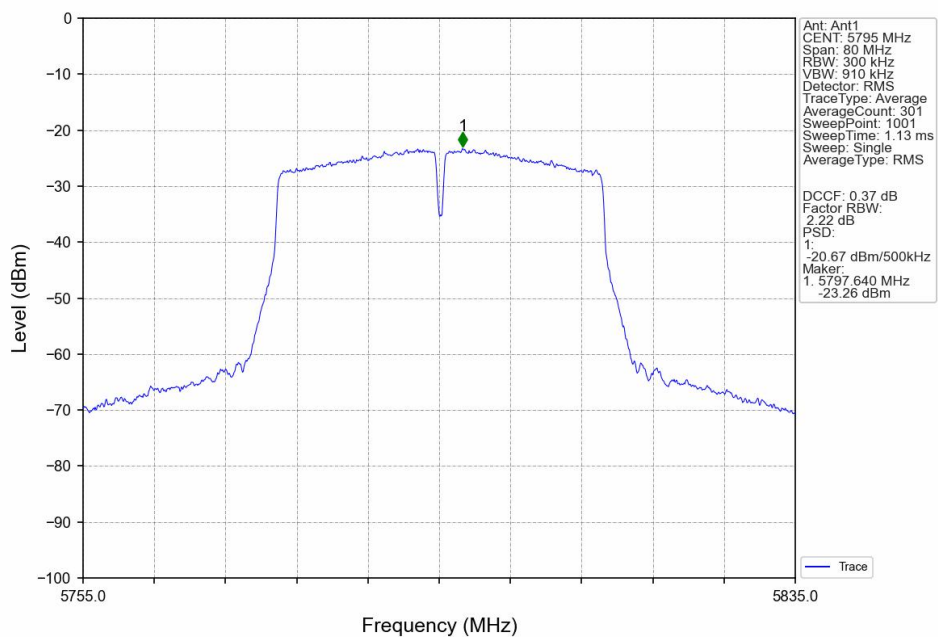


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802.11n(HT40)_LCH_5755MHz_Ant1_NTNV

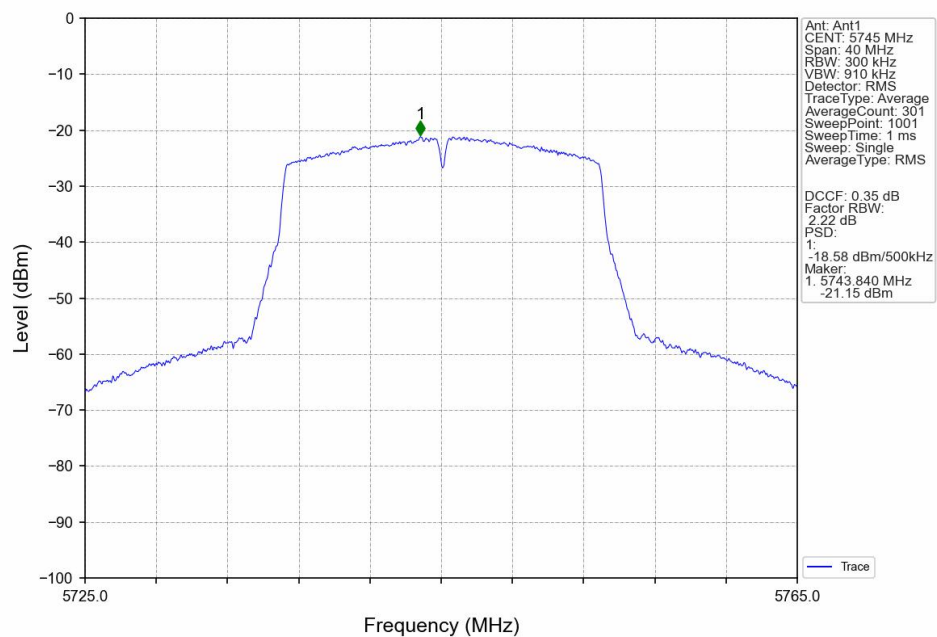


802.11n(HT40)_HCH_5795MHz_Ant1_NTNV

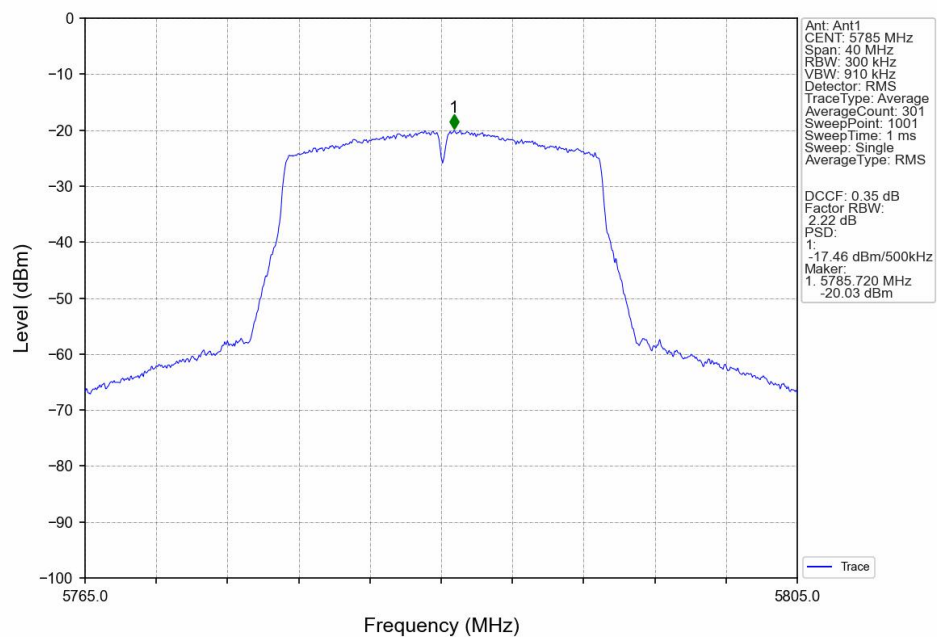


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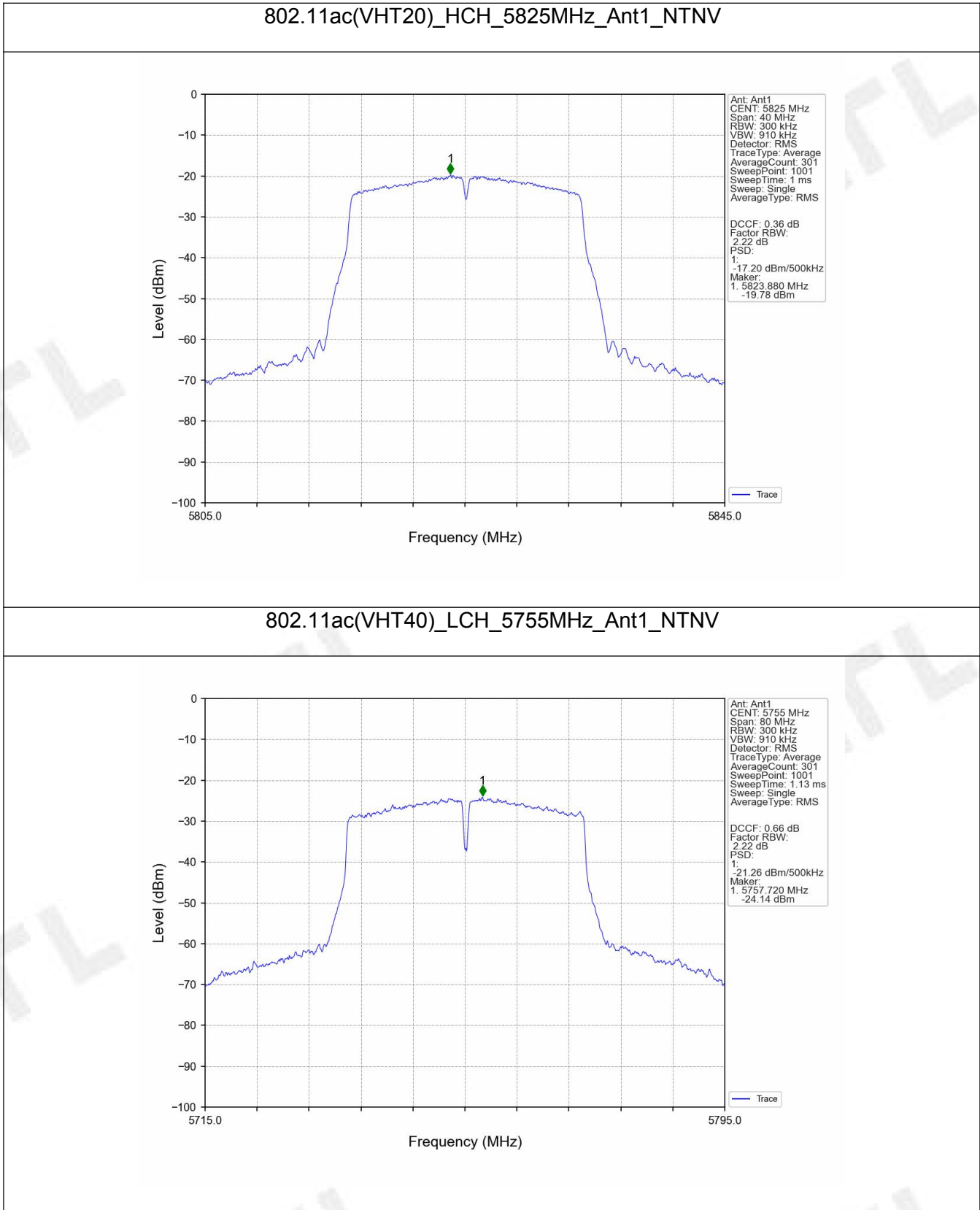
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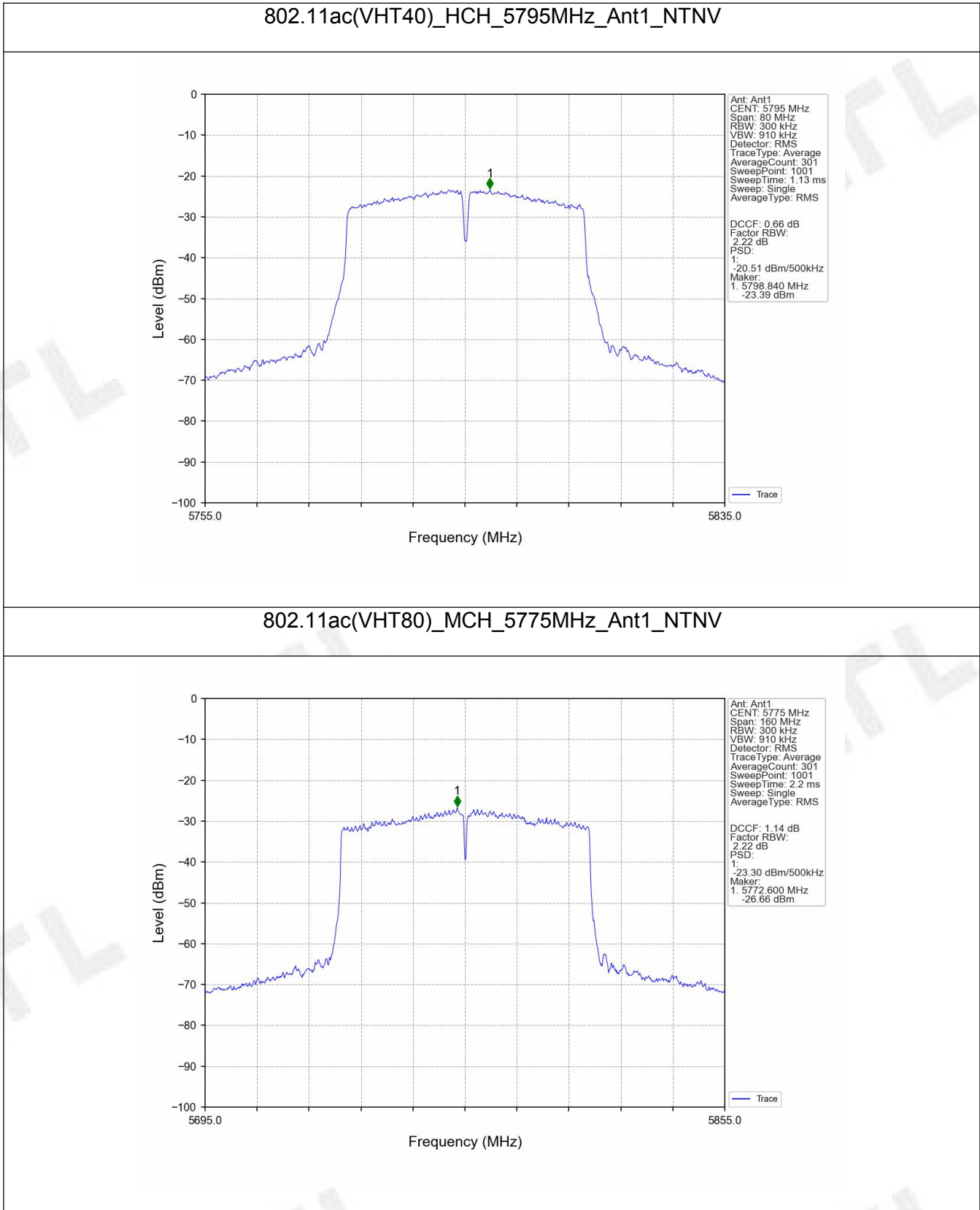
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



FCC ID: 2ASC7DS600BT



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FCC ID: 2ASC7DS600BT

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	5745.044	5738.134 to 5751.866	Pass
				120	5745.044	5738.134 to 5751.866	Pass
				138	5745.044	5738.134 to 5751.866	Pass
			-30	120	5745.044	5738.134 to 5751.866	Pass
			50	120	5745.044	5738.134 to 5751.866	Pass
		5785	20	102	5785.044	5778.172 to 5791.828	Pass
				120	5785.044	5778.172 to 5791.828	Pass
				138	5785.044	5778.172 to 5791.828	Pass
			-30	120	5785.044	5778.172 to 5791.828	Pass
			50	120	5785.044	5778.172 to 5791.828	Pass
		5825	20	102	5825.045	5818.165 to 5831.835	Pass
				120	5825.044	5818.165 to 5831.835	Pass

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				138	5825.045	5818.165 to 5831.835	Pass
			-30	120	5825.045	5818.165 to 5831.835	Pass
			50	120	5825.045	5818.165 to 5831.835	Pass
		5755	20	102	5755.044	5740.462 to 5769.538	Pass
				120	5755.044	5740.462 to 5769.538	Pass
				138	5755.044	5740.462 to 5769.538	Pass
			-30	120	5755.044	5740.462 to 5769.538	Pass
			50	120	5755.044	5740.462 to 5769.538	Pass
		5795	20	102	5795.044	5780.506 to 5809.494	Pass
				120	5795.044	5780.506 to 5809.494	Pass
				138	5795.044	5780.506 to 5809.494	Pass
			-30	120	5795.044	5780.506 to 5809.494	Pass
			50	120	5795.044	5780.506 to 5809.494	Pass
		5775	20	102	5775.044	5744.776 to 5805.224	Pass
				120	5775.044	5744.776 to 5805.224	Pass
				138	5775.044	5744.776 to 5805.224	Pass

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			-30	120	5775.044	5744.776 to 5805.224	Pass
			50	120	5775.044	5744.776 to 5805.224	Pass