



Annex for 5G Wi-Fi BAND1

Test Report No.: CTL2505272071-WF04

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FCCID: 2AUARHDY9S

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	5180	1	16.716	/	Pass
		5200	1	16.824	/	Pass
		5240	1	17.068	/	Pass
802.11n (HT20)	SISO	5180	1	17.803	/	Pass
		5200	1	17.861	/	Pass
		5240	1	17.999	/	Pass
802.11n (HT40)	SISO	5190	1	36.502	/	Pass
		5230	1	36.735	/	Pass
802.11ac (VHT20)	SISO	5180	1	17.783	/	Pass
		5200	1	17.850	/	Pass
		5240	1	17.974	/	Pass
802.11ac (VHT40)	SISO	5190	1	36.417	/	Pass
		5230	1	36.605	/	Pass
802.11ac (VHT80)	SISO	5210	1	75.449	/	Pass

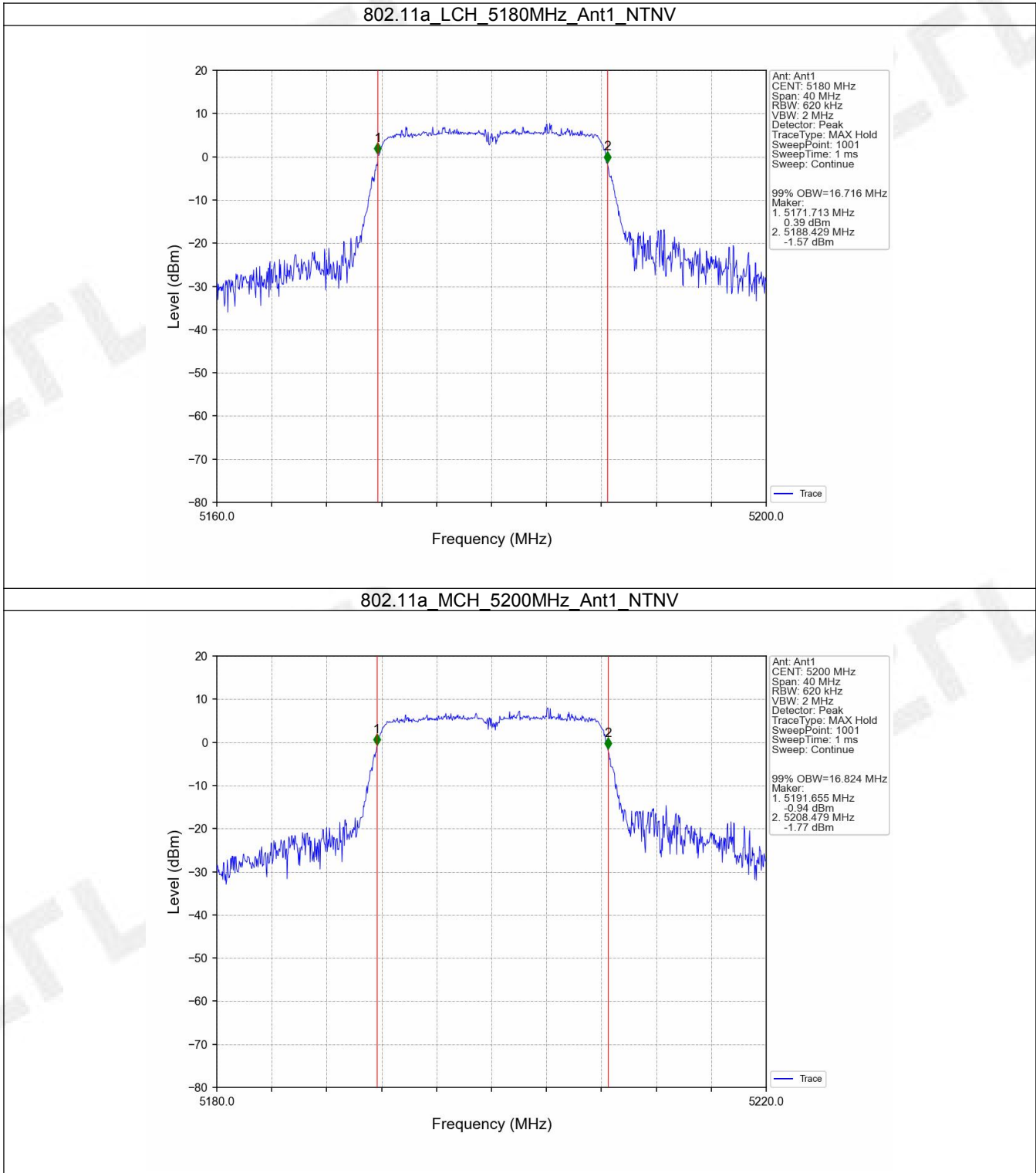
1.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	18.950	/	Pass
		5200	1	19.036	/	Pass
		5240	1	22.438	/	Pass
802.11n (HT20)	SISO	5180	1	19.302	/	Pass
		5200	1	19.583	/	Pass
		5240	1	21.056	/	Pass
802.11n (HT40)	SISO	5190	1	41.421	/	Pass
		5230	1	42.847	/	Pass
802.11ac (VHT20)	SISO	5180	1	19.243	/	Pass
		5200	1	19.438	/	Pass
		5240	1	25.311	/	Pass
802.11ac (VHT40)	SISO	5190	1	40.733	/	Pass
		5230	1	46.514	/	Pass
802.11ac (VHT80)	SISO	5210	1	83.629	/	Pass

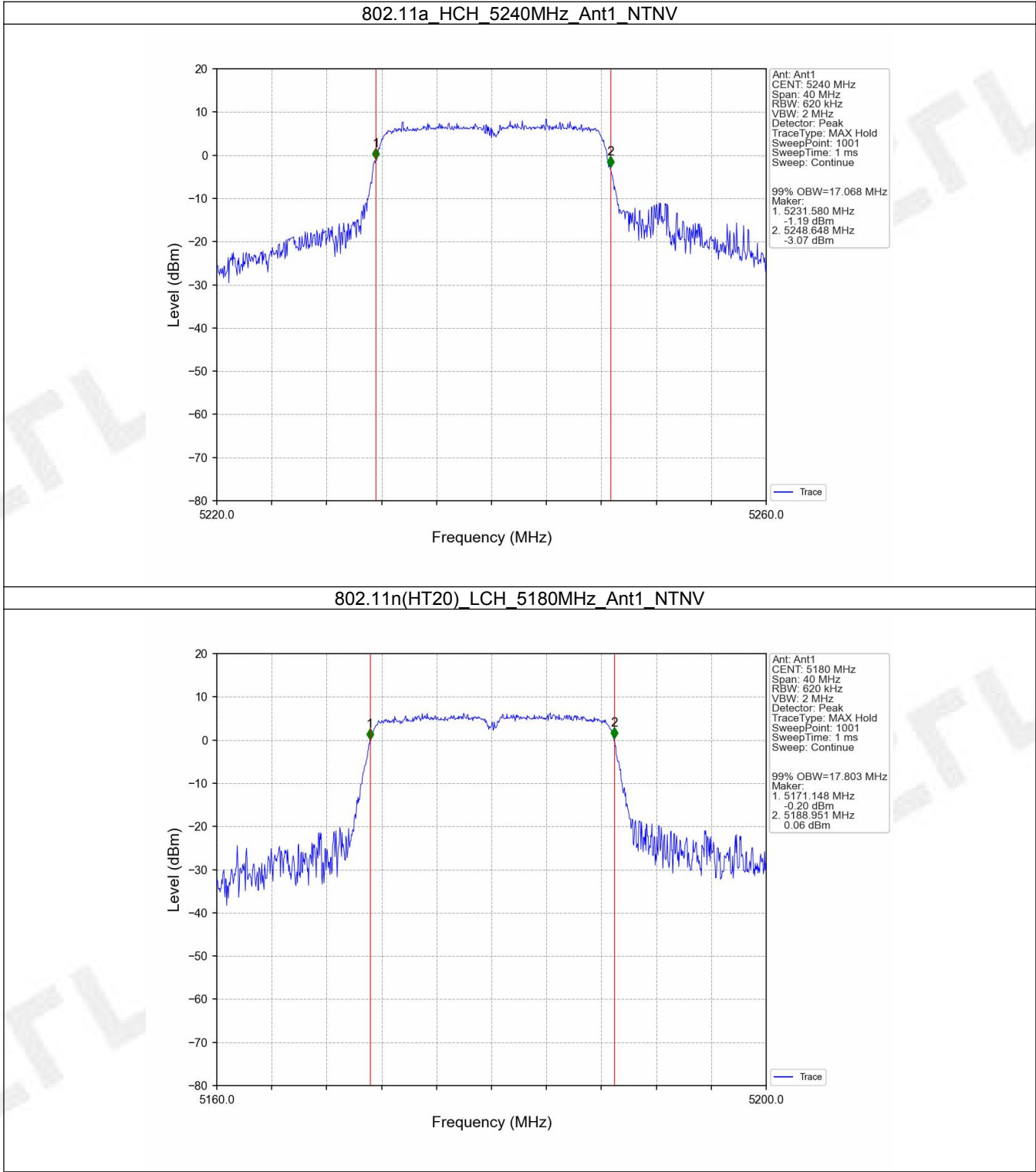
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1.2 Test Graph

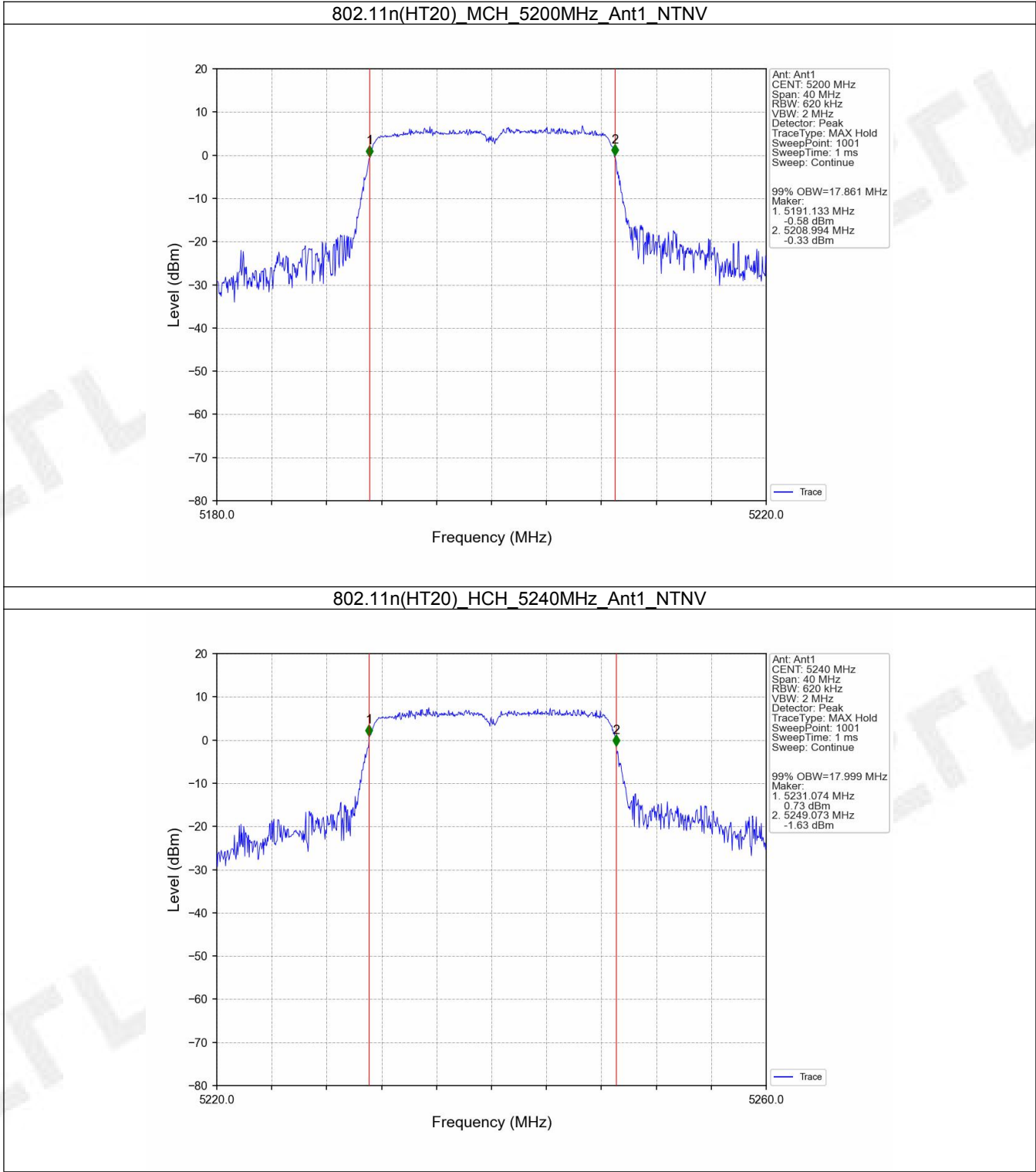
1.2.1 OBW



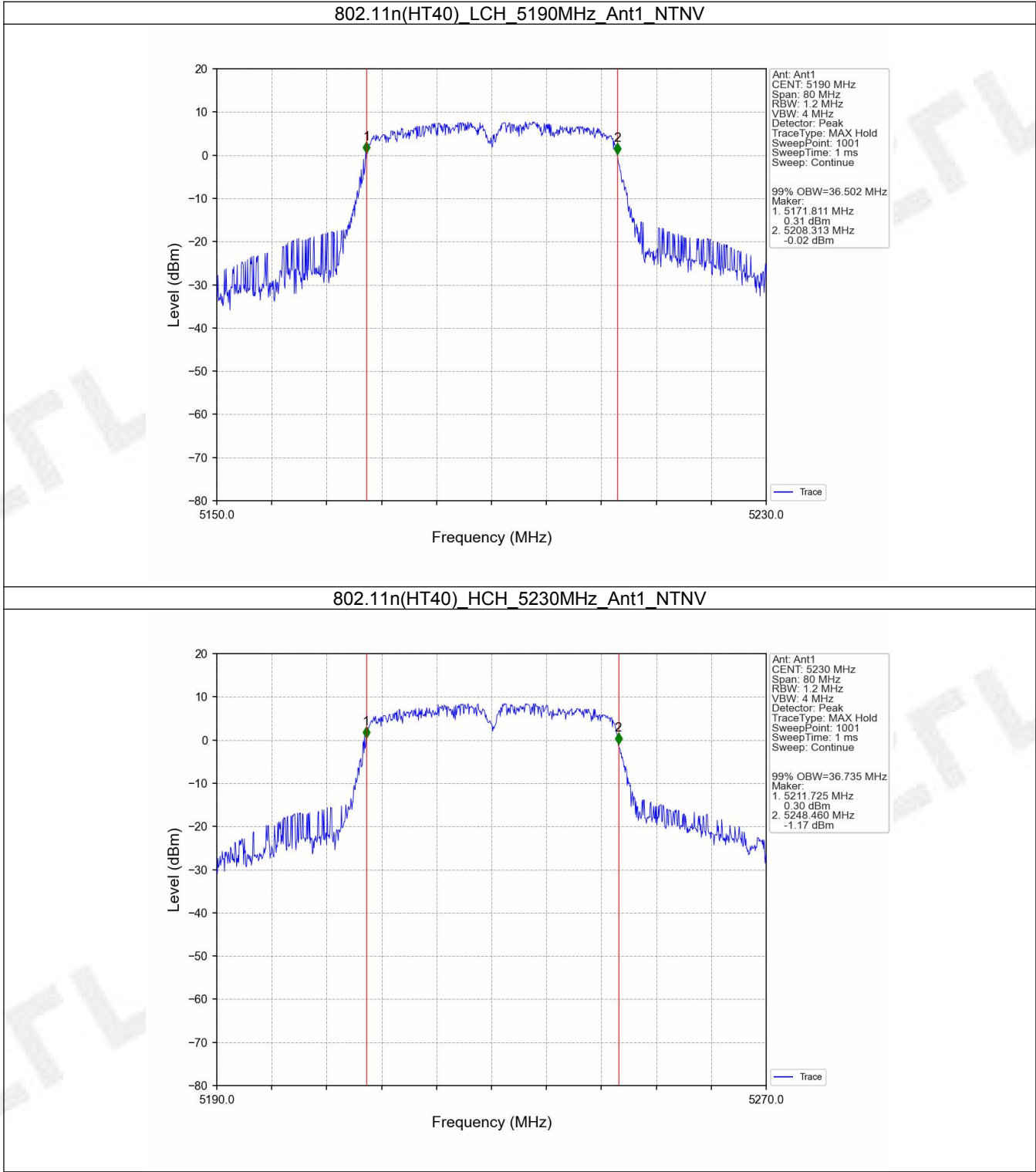
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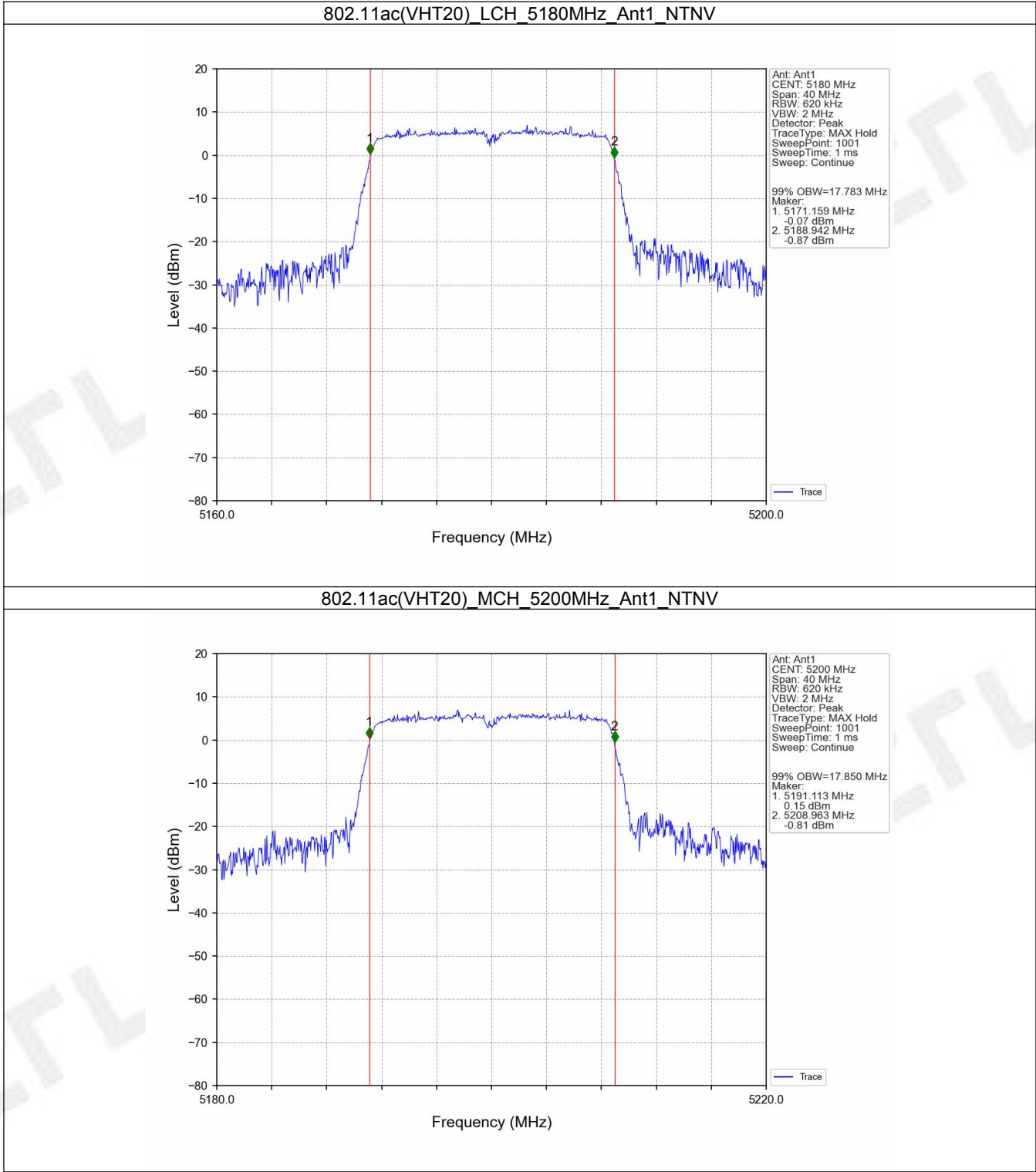
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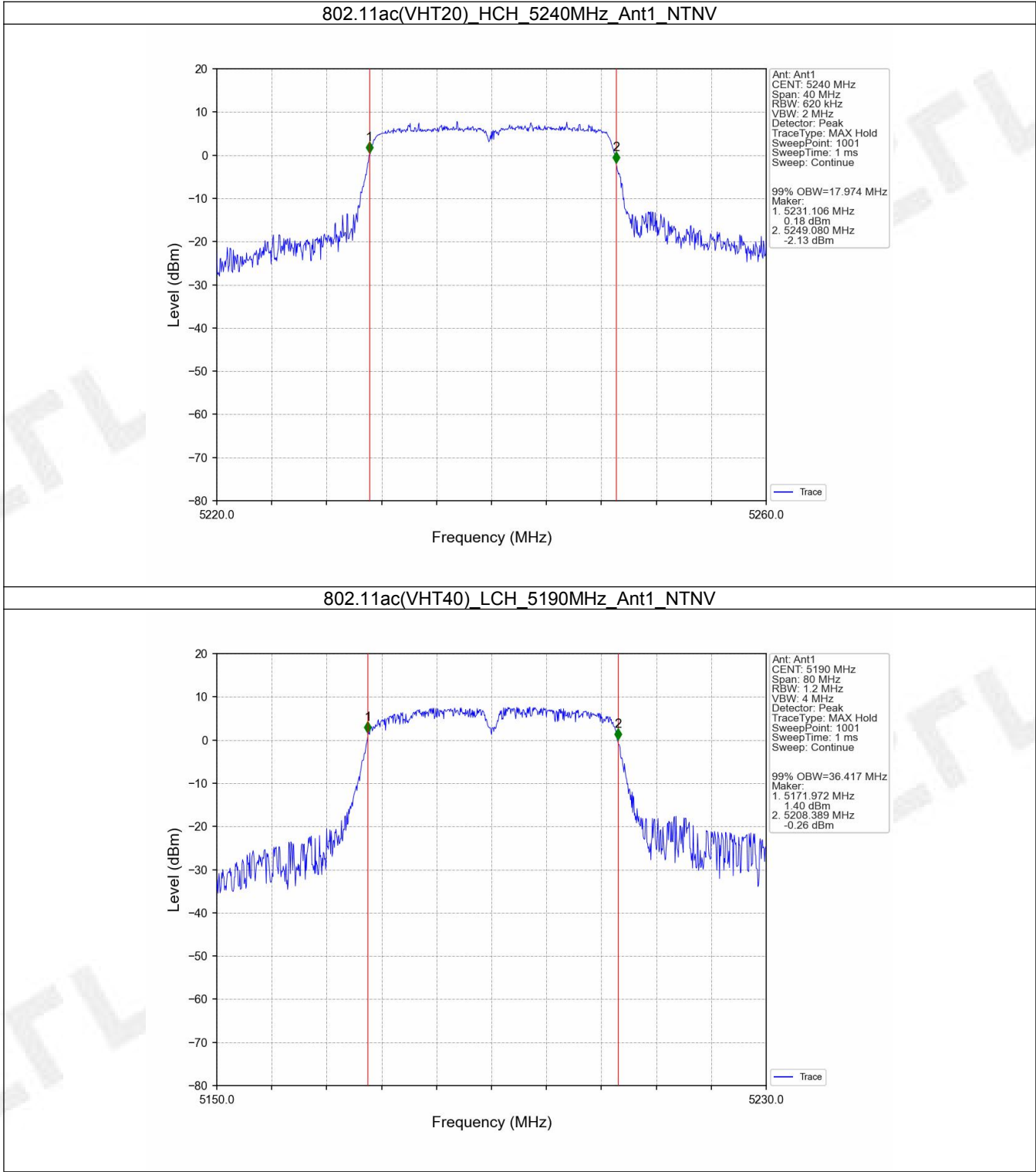
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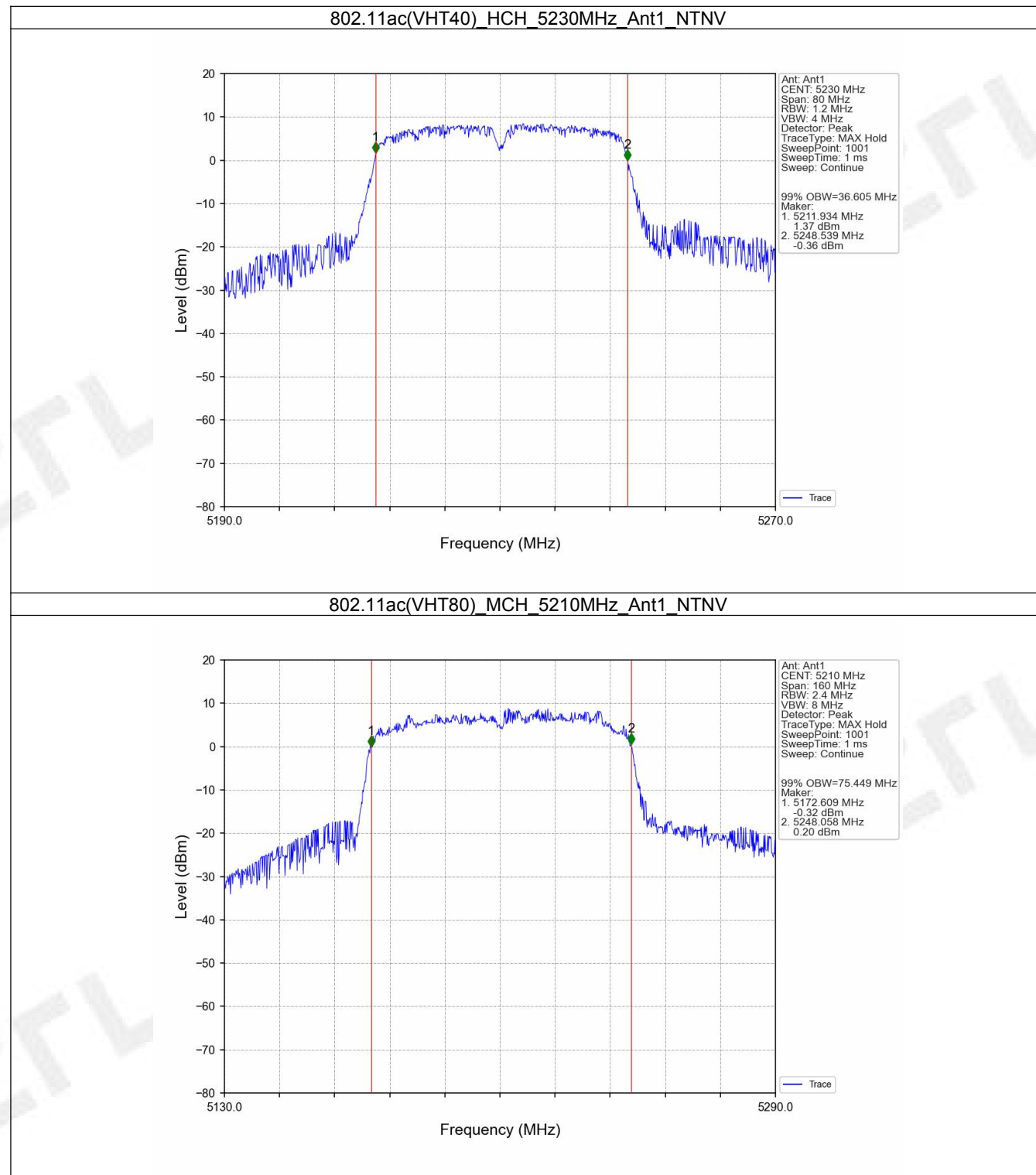
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FCCID: 2AUARHDY9S

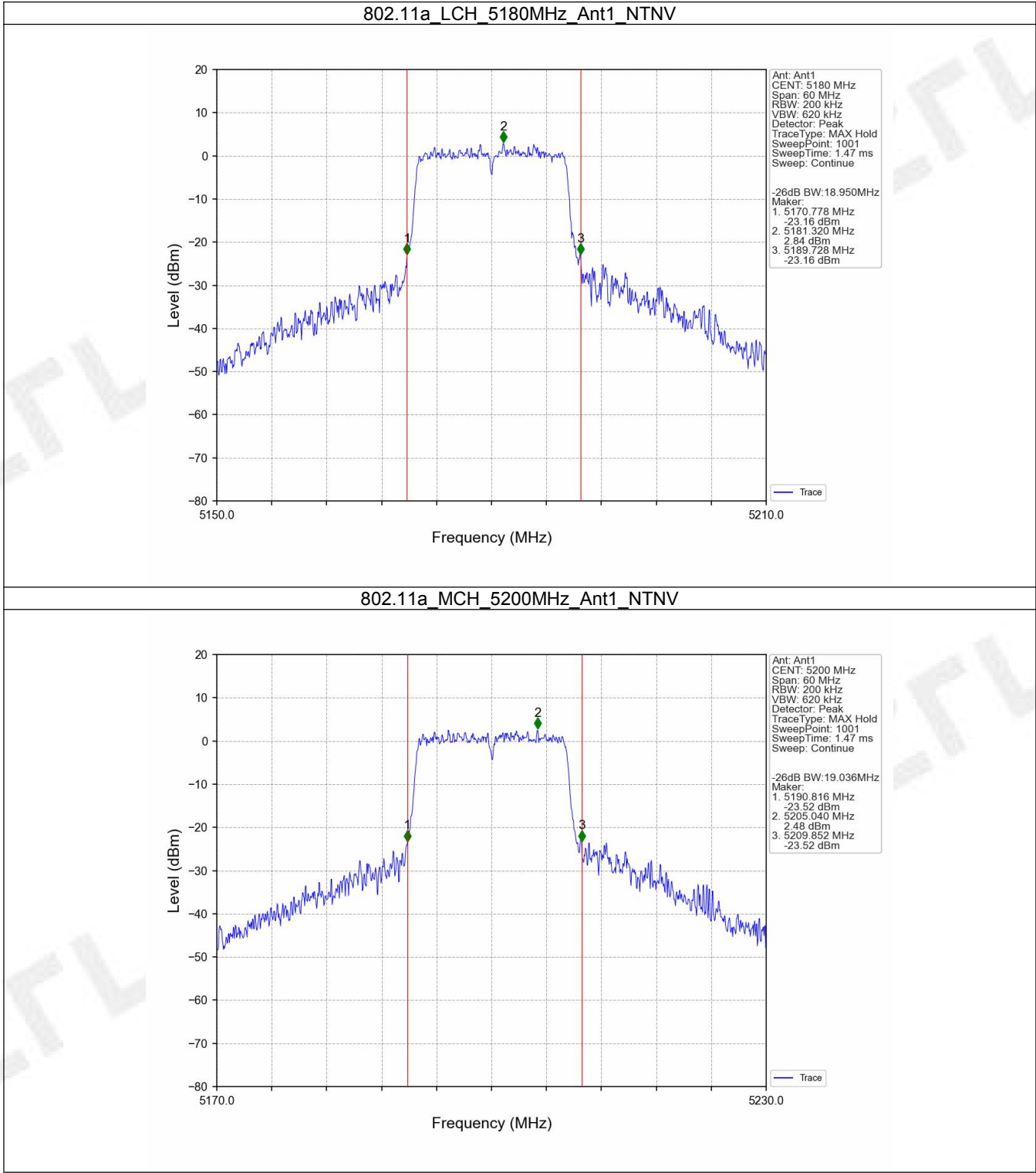


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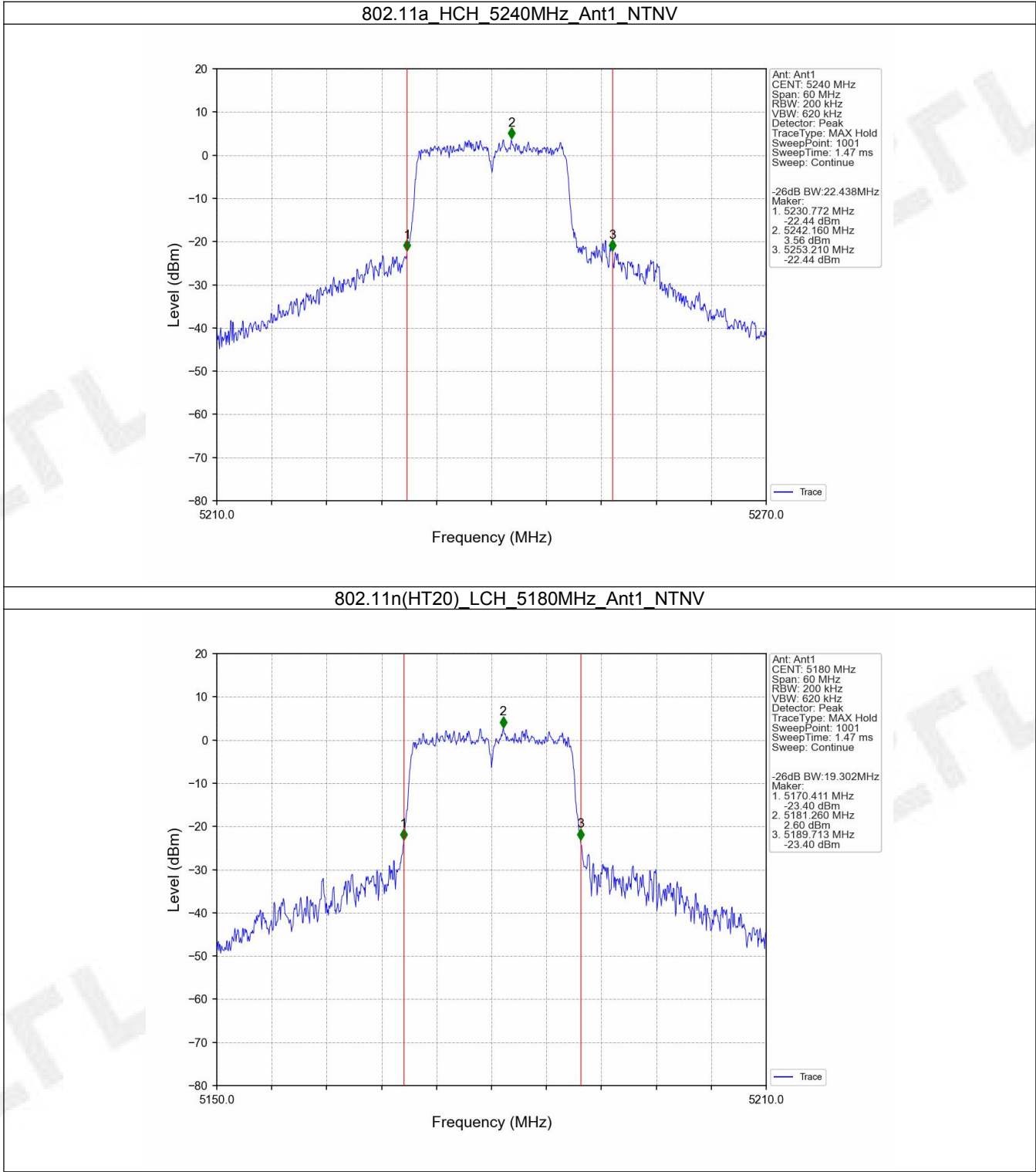


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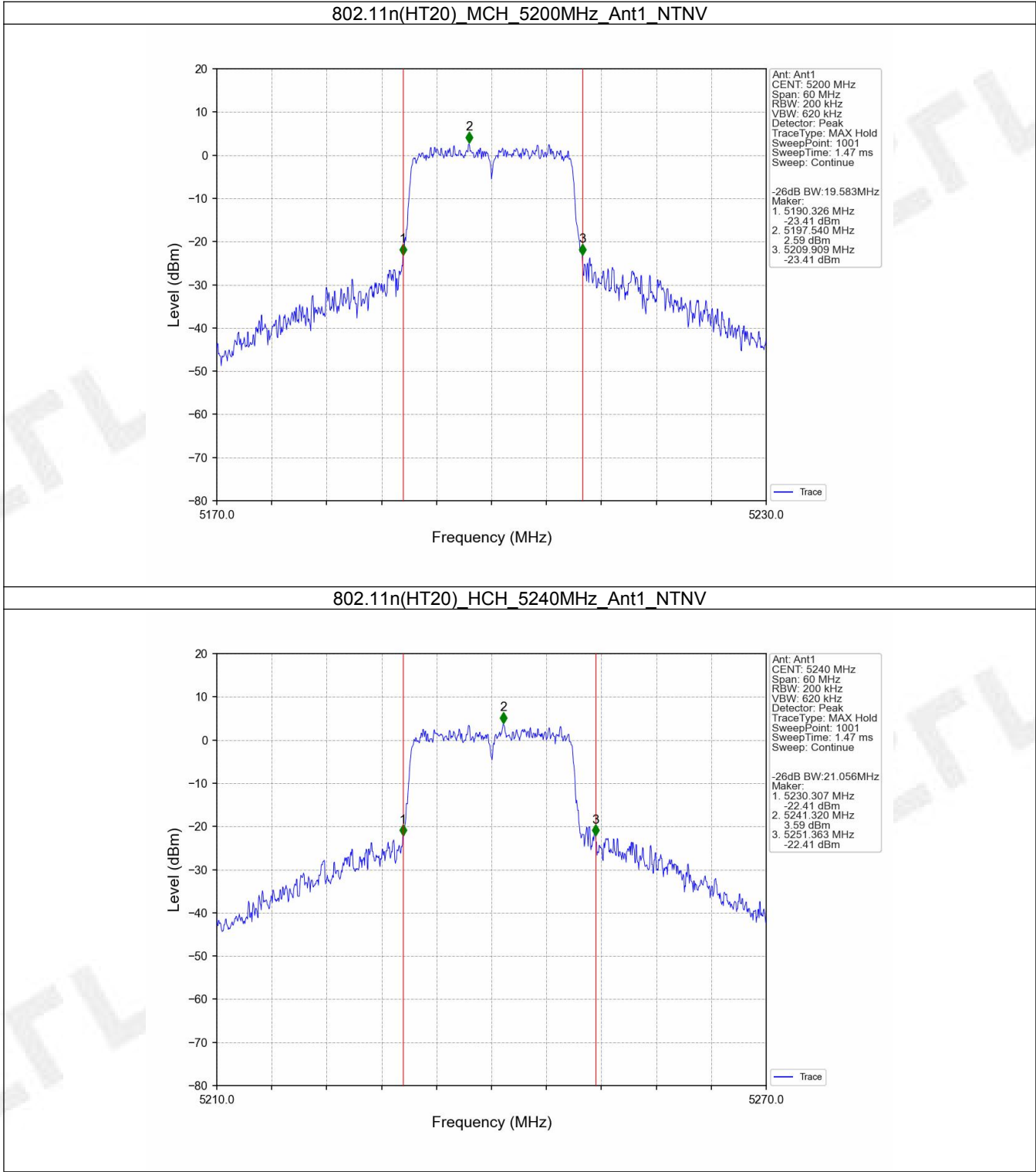
1.2.2 26dB BW



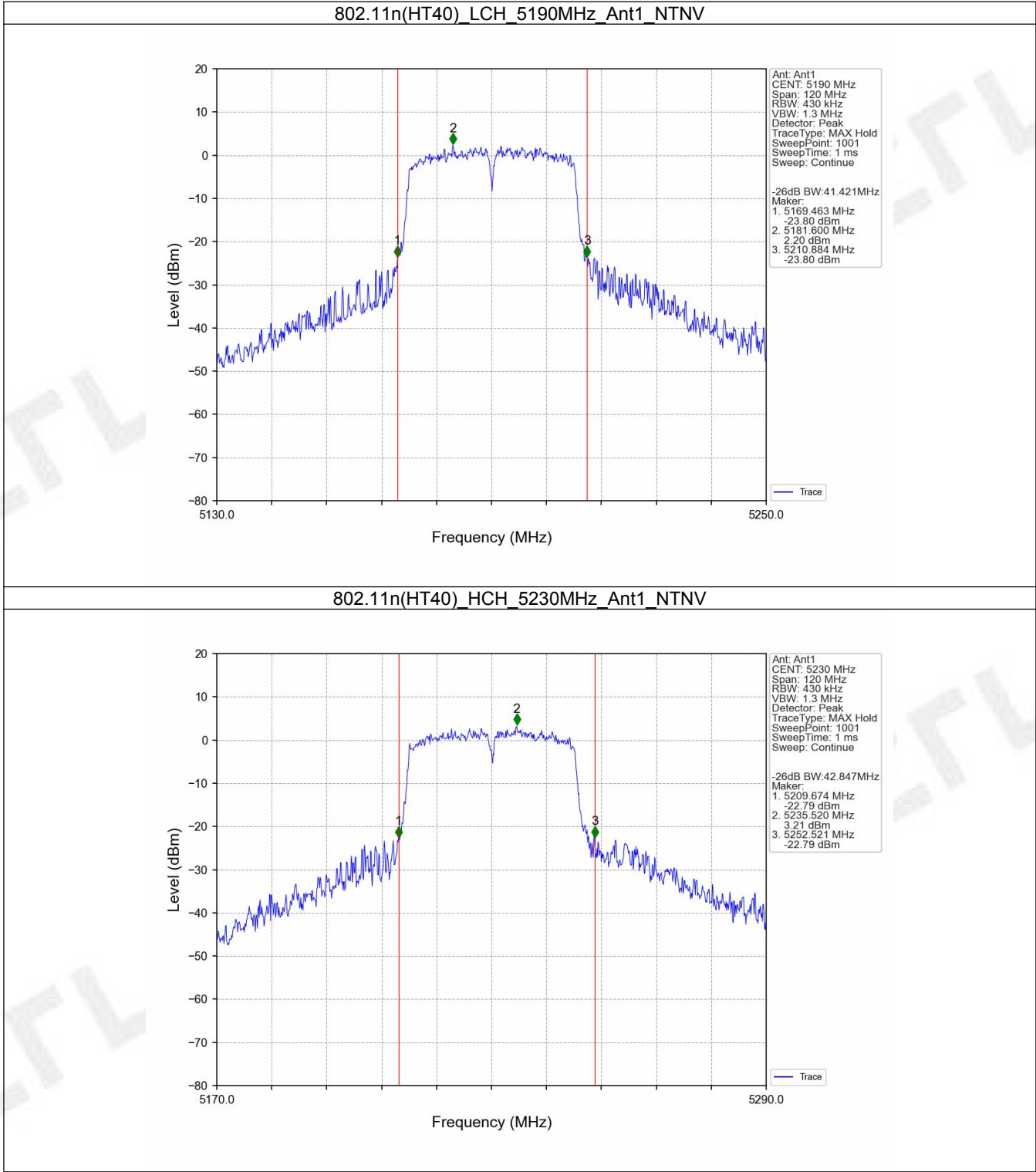
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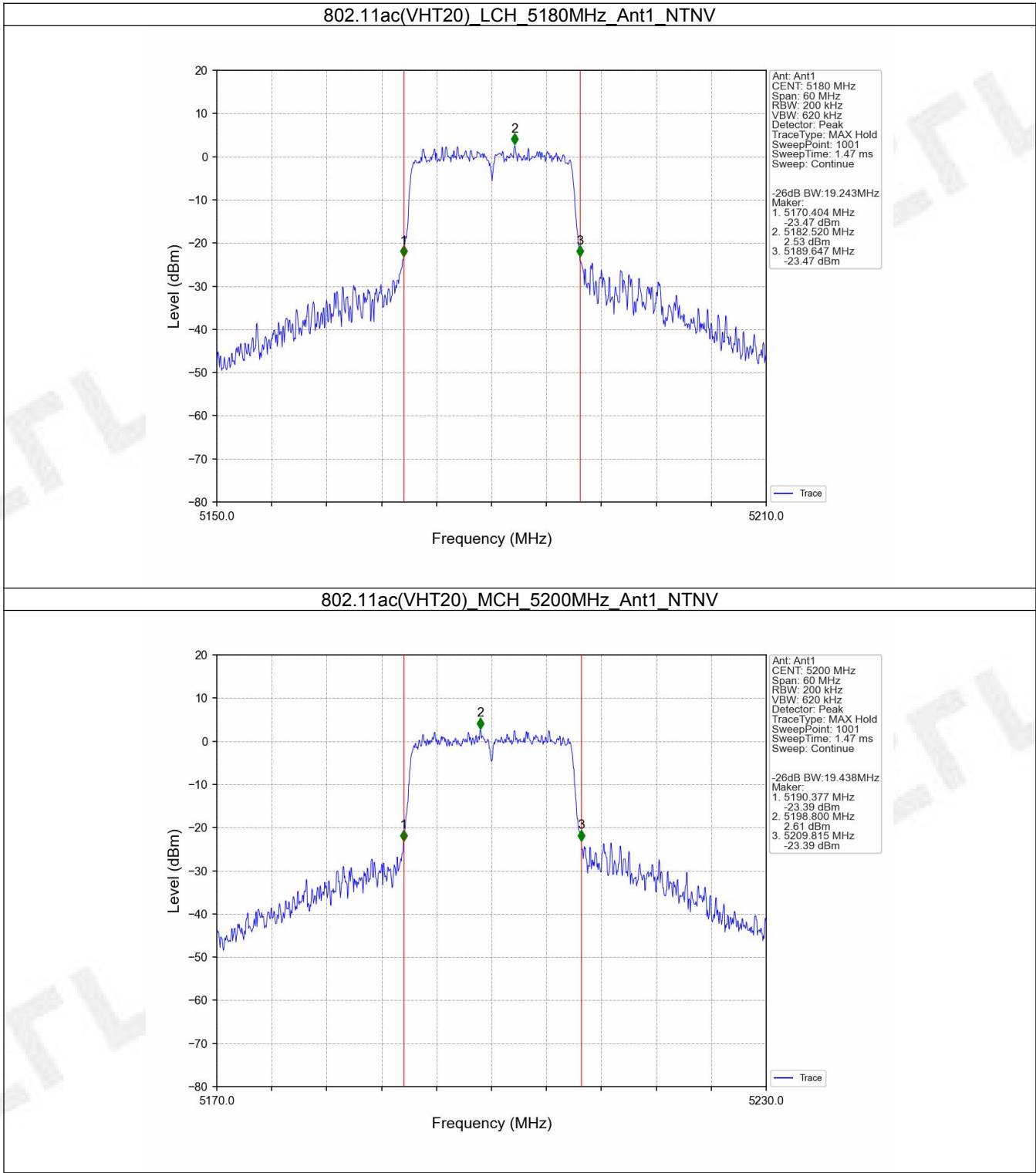
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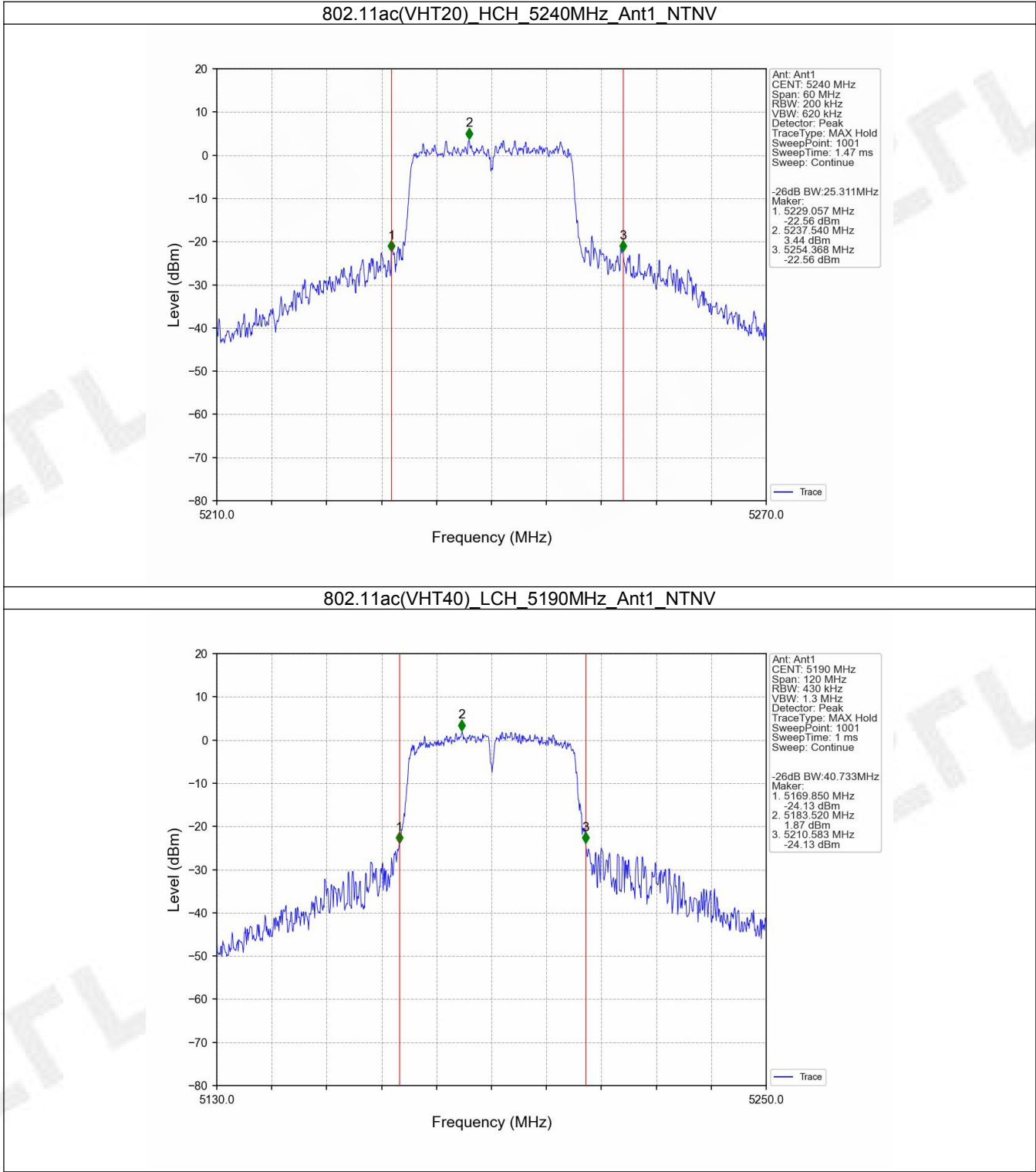
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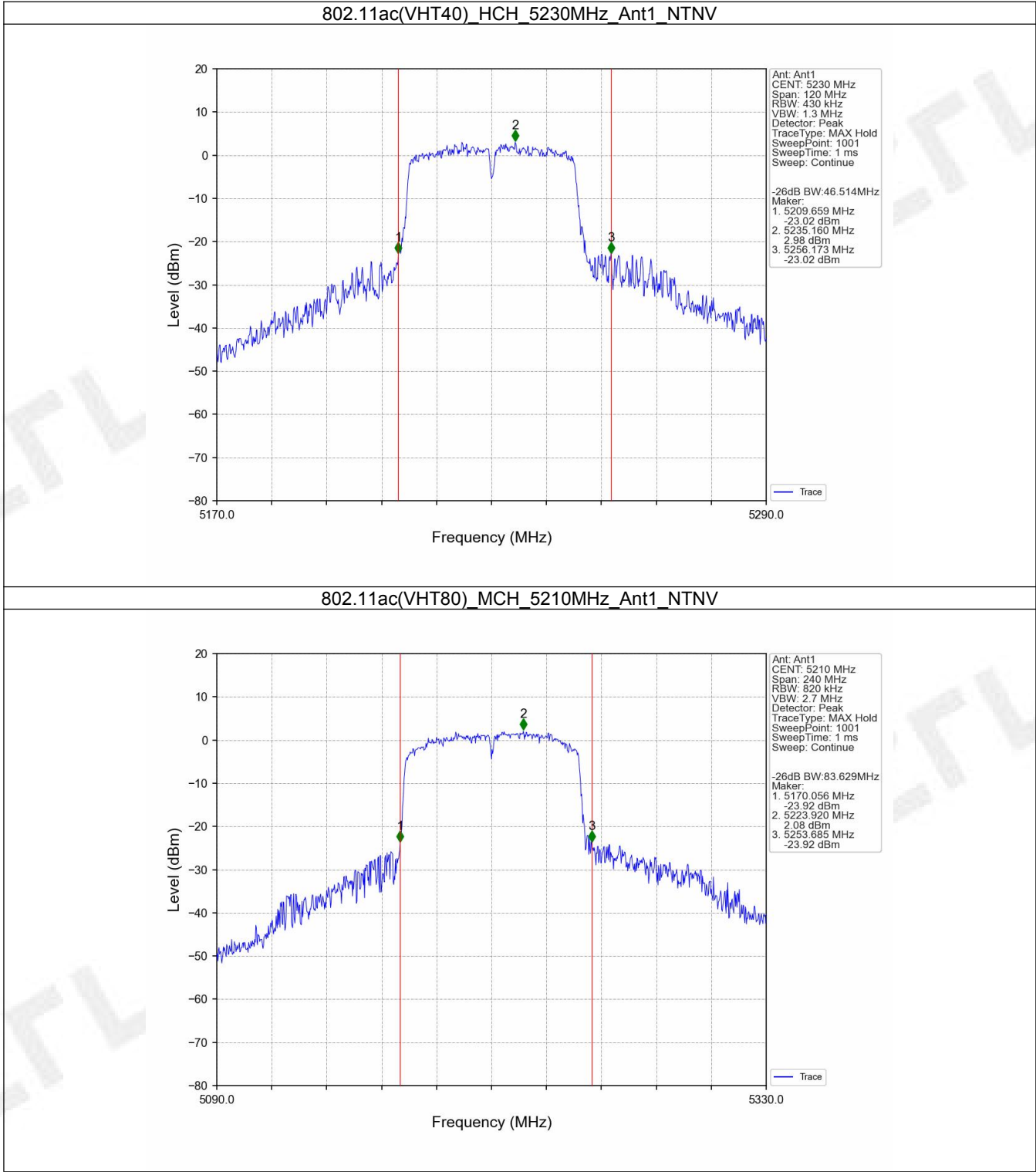
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2. Maximum Conducted Output Power**2.1 Test Result****2.1.1 Power**

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	12.88	<=23.98	Pass
		5200	13.05	<=23.98	Pass
		5240	13.87	<=23.98	Pass
802.11n (HT20)	SISO	5180	12.78	<=23.98	Pass
		5200	12.97	<=23.98	Pass
		5240	13.80	<=23.98	Pass
802.11n (HT40)	SISO	5190	12.62	<=23.98	Pass
		5230	13.37	<=23.98	Pass
802.11ac (VHT20)	SISO	5180	12.78	<=23.98	Pass
		5200	12.96	<=23.98	Pass
		5240	13.80	<=23.98	Pass
802.11ac (VHT40)	SISO	5190	12.60	<=23.98	Pass
		5230	13.39	<=23.98	Pass
802.11ac (VHT80)	SISO	5210	12.36	<=23.98	Pass

Note1: Antenna Gain: Ant1: 0.84dBi;

FCCID: 2AUARHDY9S

3. Maximum Power Spectral Density**3.1 Test Result****3.1.1 PSD**

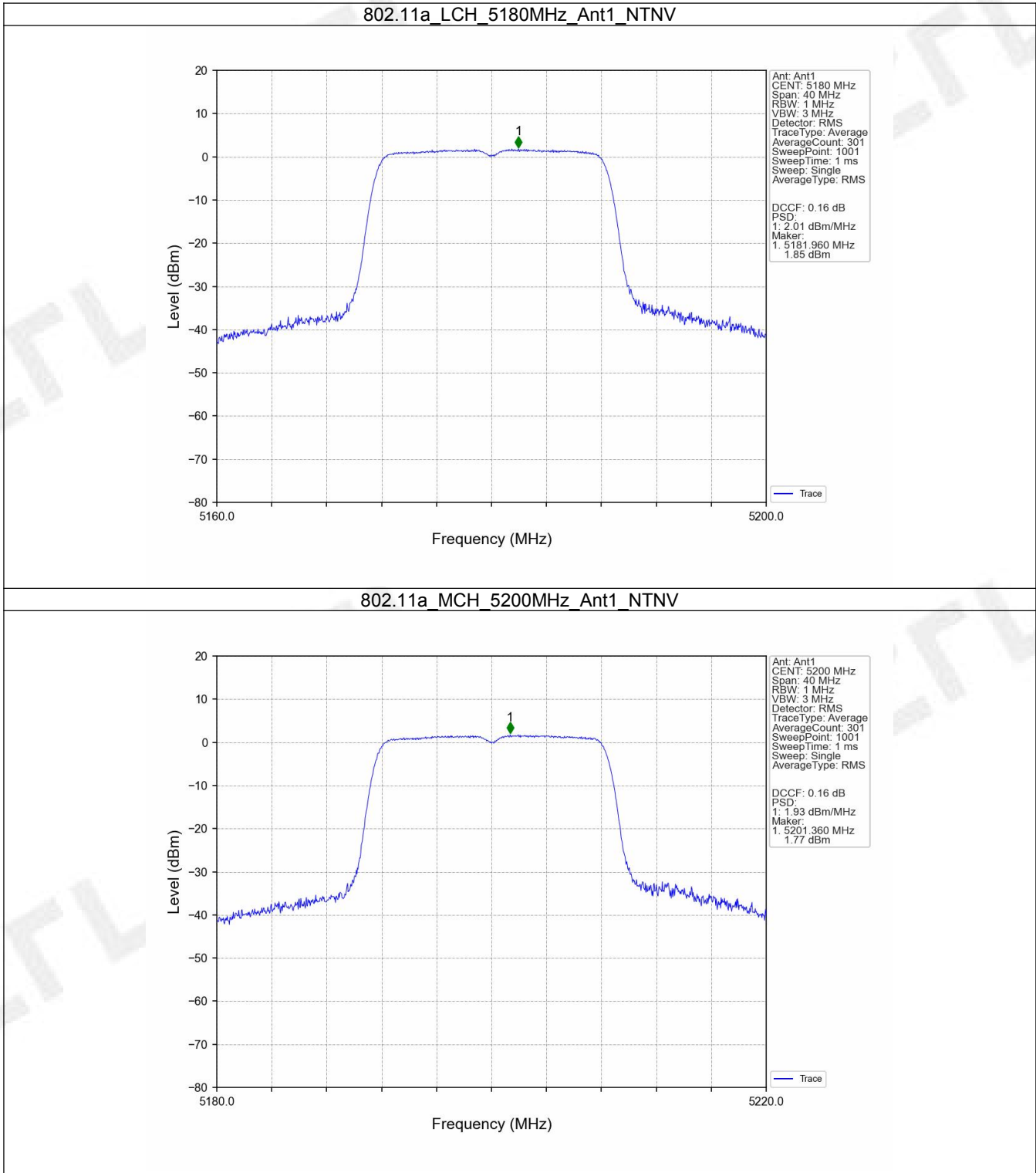
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	2.01	<=11	Pass
		5200	1.93	<=11	Pass
		5240	2.64	<=11	Pass
802.11n (HT20)	SISO	5180	1.41	<=11	Pass
		5200	1.51	<=11	Pass
		5240	2.32	<=11	Pass
802.11n (HT40)	SISO	5190	-1.50	<=11	Pass
		5230	-0.73	<=11	Pass
802.11ac (VHT20)	SISO	5180	1.39	<=11	Pass
		5200	1.51	<=11	Pass
		5240	2.35	<=11	Pass
802.11ac (VHT40)	SISO	5190	-1.53	<=11	Pass
		5230	-0.77	<=11	Pass
802.11ac (VHT80)	SISO	5210	-4.66	<=11	Pass

Note1: Antenna Gain: Ant1: 0.84dBi;

FCCID: 2AUARHDY9S

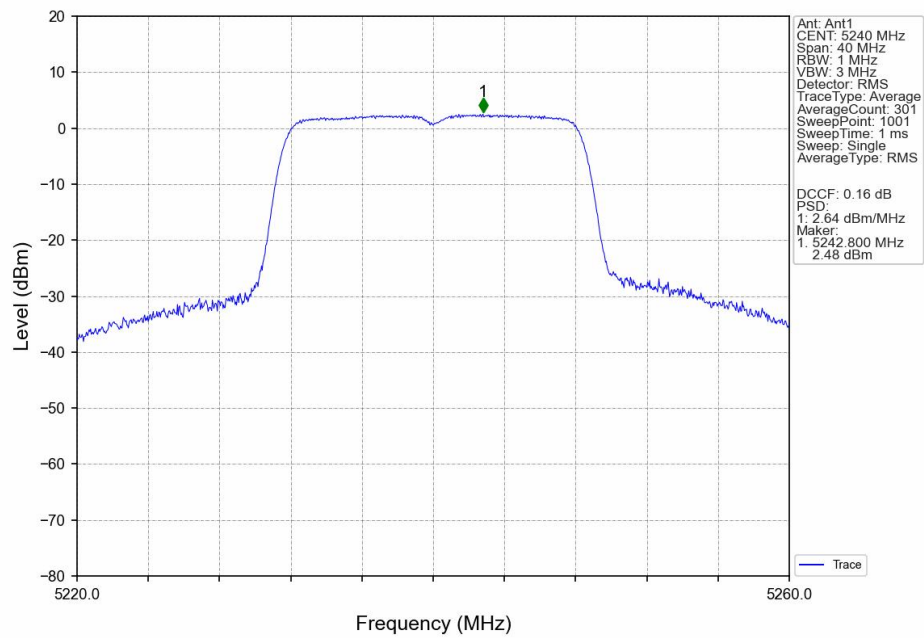
3.2 Test Graph

3.2.1 PSD

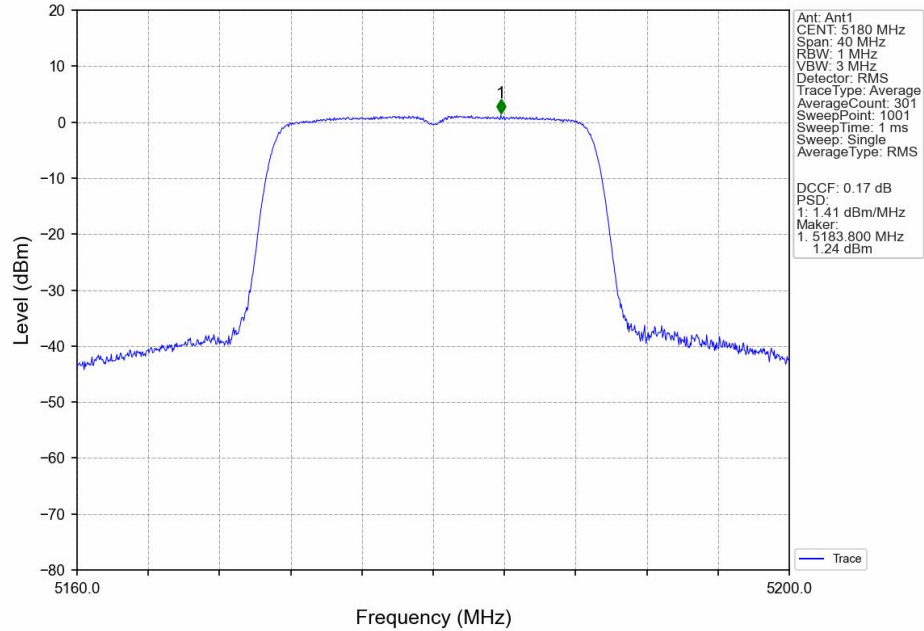


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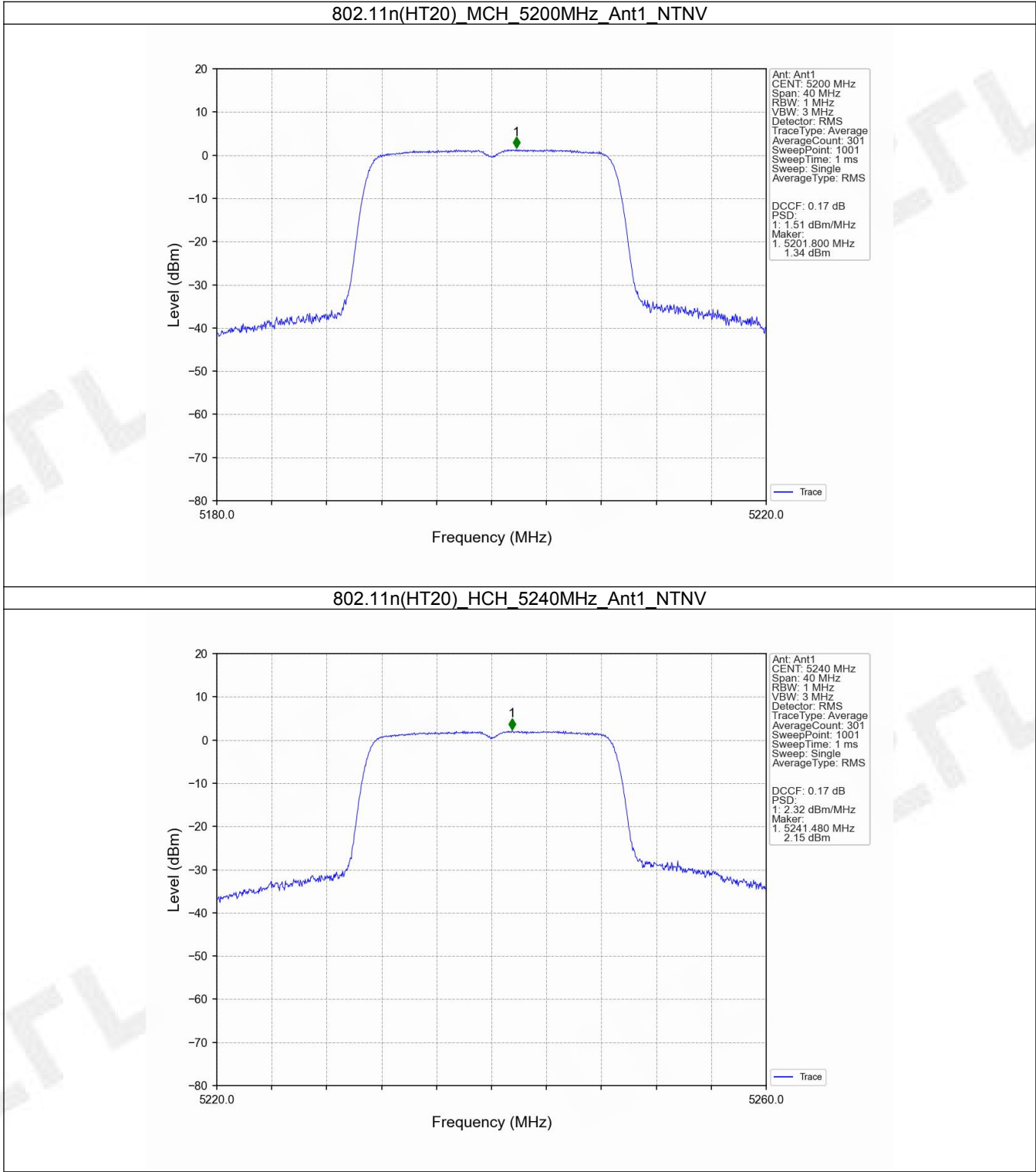
802.11a_HCH_5240MHz_Ant1_NTNV



802.11n(HT20)_LCH_5180MHz_Ant1_NTNV

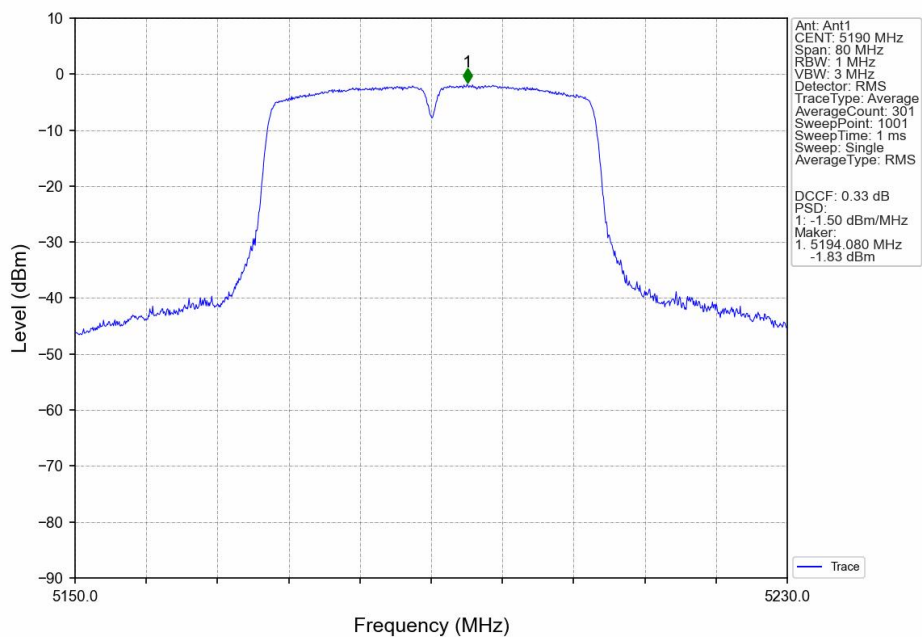


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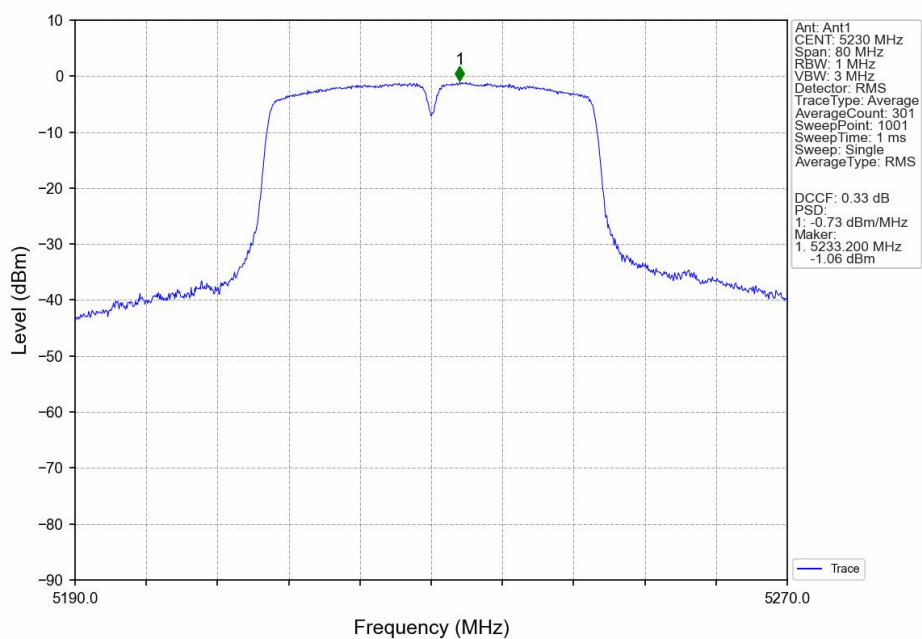


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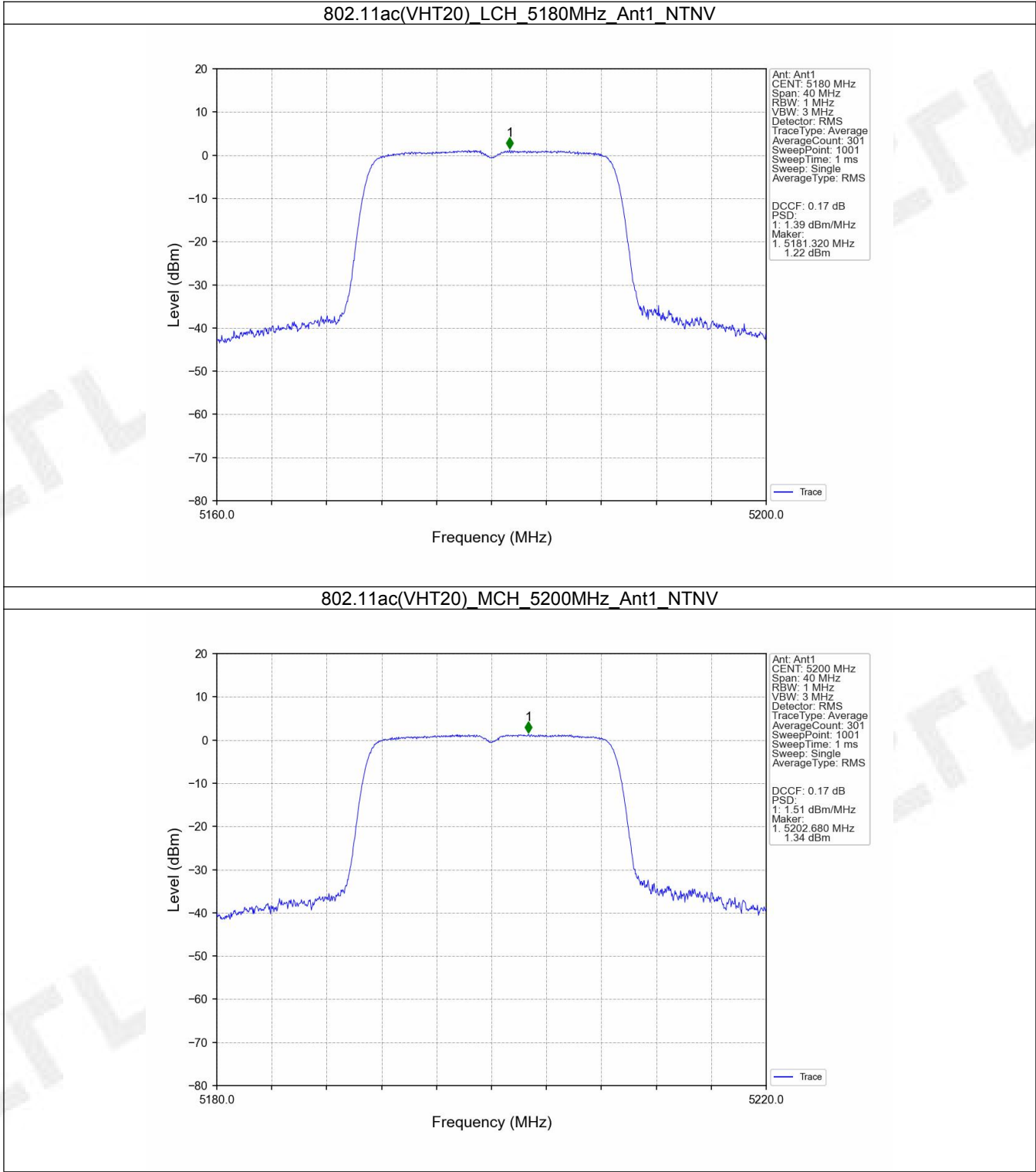
802.11n(HT40) LCH 5190MHz Ant1 NTN



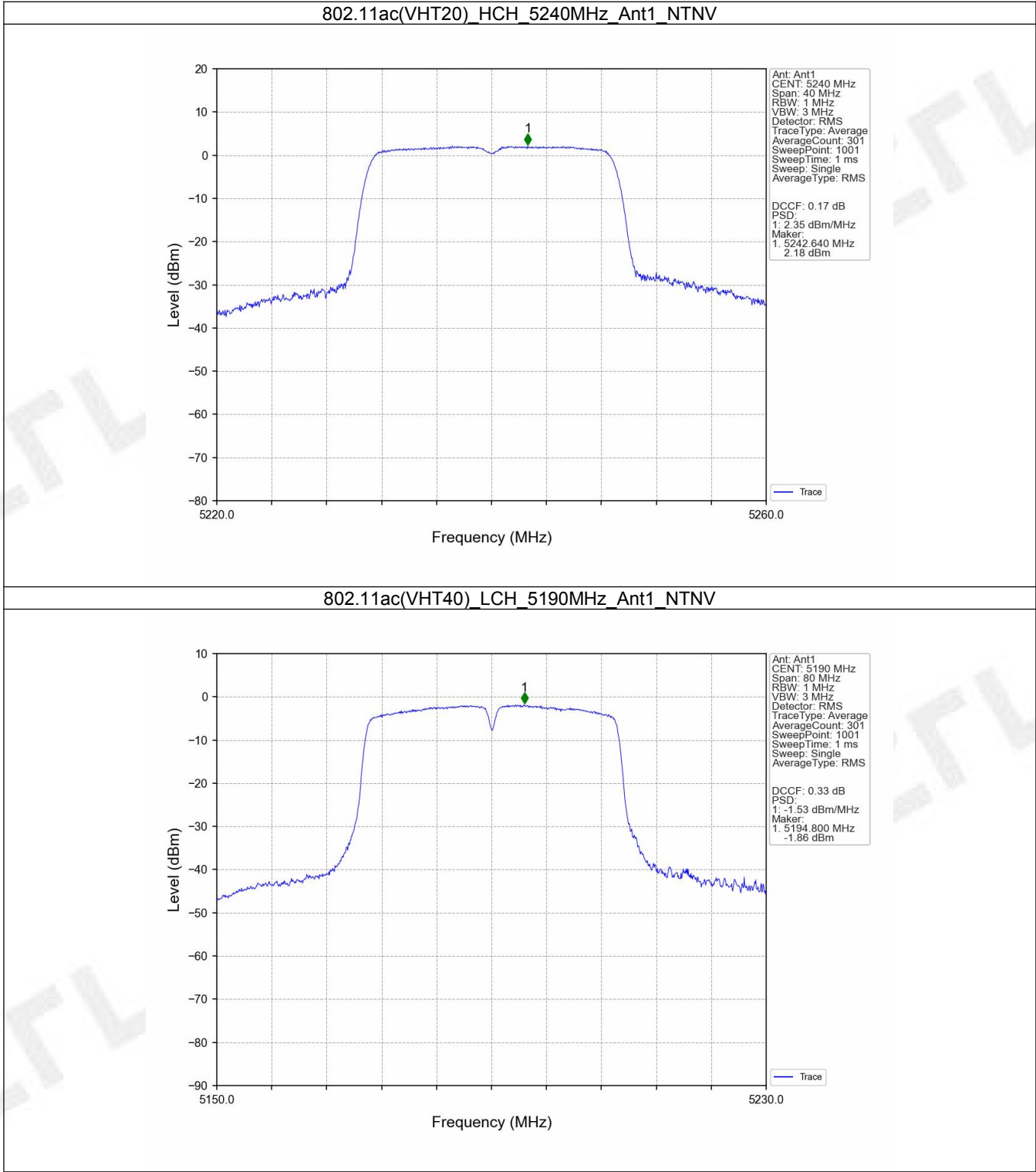
802.11n(HT40) HCH 5230MHz Ant1 NTN



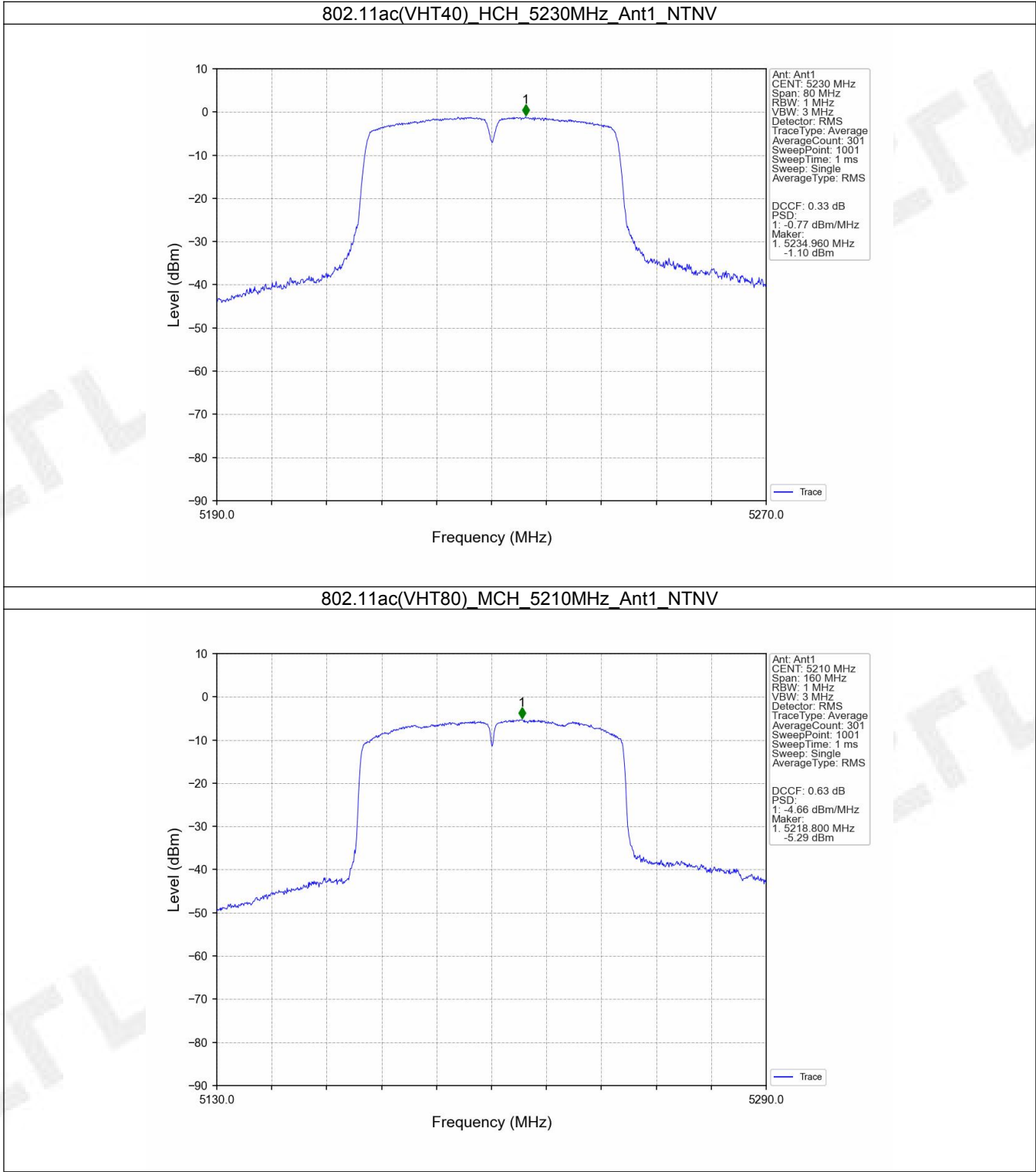
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4. Frequency Stability**4.1 Test Result****4.1.1 Ant1**

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
Carrier Wave	SISO	5180	20	102	5179.988	5150 to 5250	Pass
				120	5179.988	5150 to 5250	Pass
				138	5179.988	5150 to 5250	Pass
			-30	120	5179.988	5150 to 5250	Pass
			-20	120	5179.988	5150 to 5250	Pass
			-10	120	5179.988	5150 to 5250	Pass
			0	120	5179.988	5150 to 5250	Pass
			10	120	5179.988	5150 to 5250	Pass
			30	120	5179.988	5150 to 5250	Pass
			40	120	5179.988	5150 to 5250	Pass
			50	120	5179.988	5150 to 5250	Pass
		5200	20	102	5199.989	5150 to 5250	Pass
				120	5199.989	5150 to 5250	Pass
				138	5199.989	5150 to 5250	Pass
			-30	120	5199.989	5150 to 5250	Pass
			-20	120	5199.989	5150 to 5250	Pass
			-10	120	5199.989	5150 to 5250	Pass
			0	120	5199.989	5150 to 5250	Pass
			10	120	5199.989	5150 to 5250	Pass
			30	120	5199.989	5150 to 5250	Pass
			40	120	5199.989	5150 to 5250	Pass
			50	120	5199.989	5150 to 5250	Pass
		5240	20	102	5239.989	5150 to 5250	Pass
				120	5239.989	5150 to 5250	Pass
				138	5239.989	5150 to 5250	Pass
			-30	120	5239.989	5150 to 5250	Pass
			-20	120	5239.989	5150 to 5250	Pass
			-10	120	5239.989	5150 to 5250	Pass
			0	120	5239.988	5150 to 5250	Pass
			10	120	5239.989	5150 to 5250	Pass
			30	120	5239.989	5150 to 5250	Pass
			40	120	5239.988	5150 to 5250	Pass
			50	120	5239.989	5150 to 5250	Pass
		5190	20	102	5189.989	5150 to 5250	Pass
				120	5189.989	5150 to 5250	Pass
				138	5189.989	5150 to 5250	Pass
			-30	120	5189.989	5150 to 5250	Pass
			-20	120	5189.989	5150 to 5250	Pass
			-10	120	5189.989	5150 to 5250	Pass
			0	120	5189.989	5150 to 5250	Pass
			10	120	5189.989	5150 to 5250	Pass
			30	120	5189.989	5150 to 5250	Pass
			40	120	5189.989	5150 to 5250	Pass
			50	120	5189.989	5150 to 5250	Pass
		5230	20	102	5229.989	5150 to 5250	Pass
				120	5229.989	5150 to 5250	Pass
				138	5229.989	5150 to 5250	Pass
			-30	120	5229.989	5150 to 5250	Pass
			-20	120	5229.989	5150 to 5250	Pass

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			-10	120	5229.989	5150 to 5250	Pass
			0	120	5229.989	5150 to 5250	Pass
			10	120	5229.989	5150 to 5250	Pass
			30	120	5229.989	5150 to 5250	Pass
			40	120	5229.989	5150 to 5250	Pass
			50	120	5229.989	5150 to 5250	Pass
		5210	20	102	5210.007	5150 to 5250	Pass
				120	5210.008	5150 to 5250	Pass
				138	5210.007	5150 to 5250	Pass
			-30	120	5210.008	5150 to 5250	Pass
			-20	120	5210.008	5150 to 5250	Pass
			-10	120	5210.008	5150 to 5250	Pass
			0	120	5210.008	5150 to 5250	Pass
			10	120	5210.008	5150 to 5250	Pass
			30	120	5210.008	5150 to 5250	Pass
			40	120	5210.008	5150 to 5250	Pass
			50	120	5210.008	5150 to 5250	Pass

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5. Form731

5.1 Test Result

5.1.1 Form731

Lower Freq (MHz)	High Freq (MHz)	MAX Power (W)	MAX Power (dBm)
5180	5240	0.0244	13.87
5190	5230	0.0218	13.39
5210	5210	0.0172	12.36