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Annex for 5G Wi-Fi BAND 1

Test Report No.: CTL2412319011-WF03

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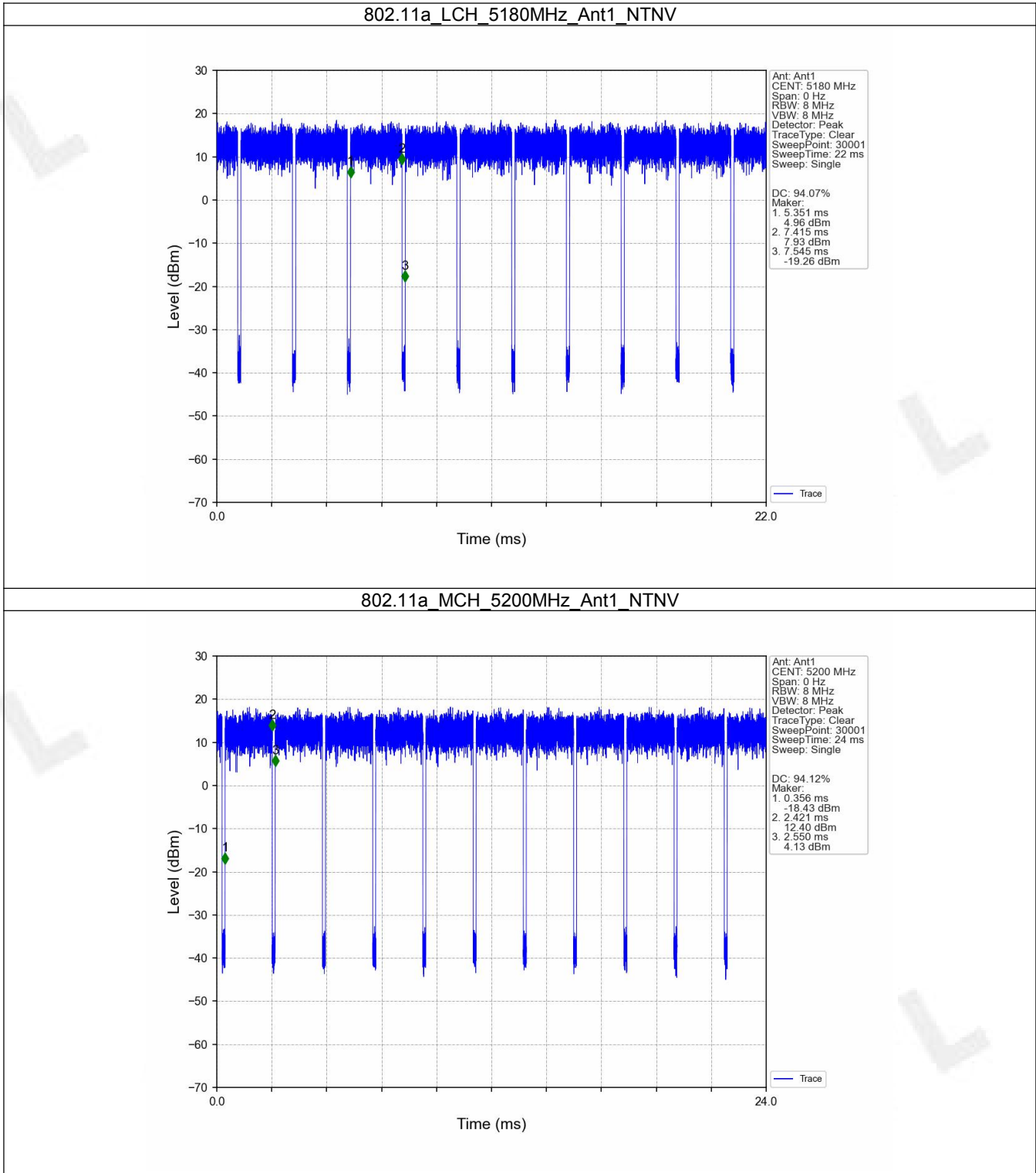
1. Duty Cycle**1.1 Test Result****1.1.1 Ant1**

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	2.064	2.194	94.07	0.27	0.00
		5200	2.065	2.194	94.12	0.26	0.07
		5240	2.065	2.194	94.12	0.26	0.04
802.11n (HT20)	SISO	5180	1.920	2.049	93.70	0.28	0.04
		5200	1.921	2.050	93.71	0.28	0.00
		5240	1.922	2.051	93.71	0.28	0.07
802.11n (HT40)	SISO	5190	0.945	1.074	87.99	0.56	0.03
		5230	0.945	1.074	87.99	0.56	0.03

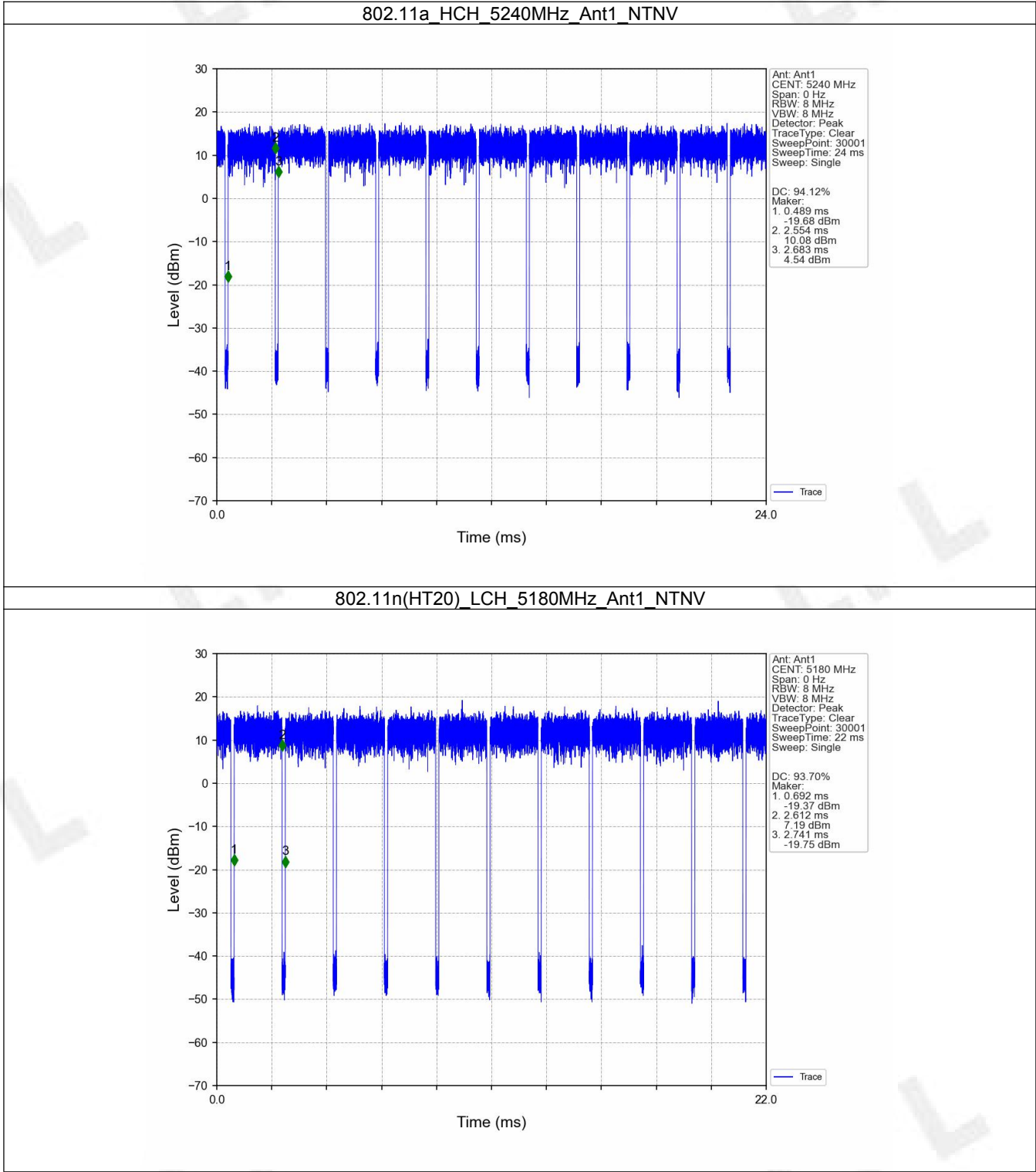
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1.2 Test Graph

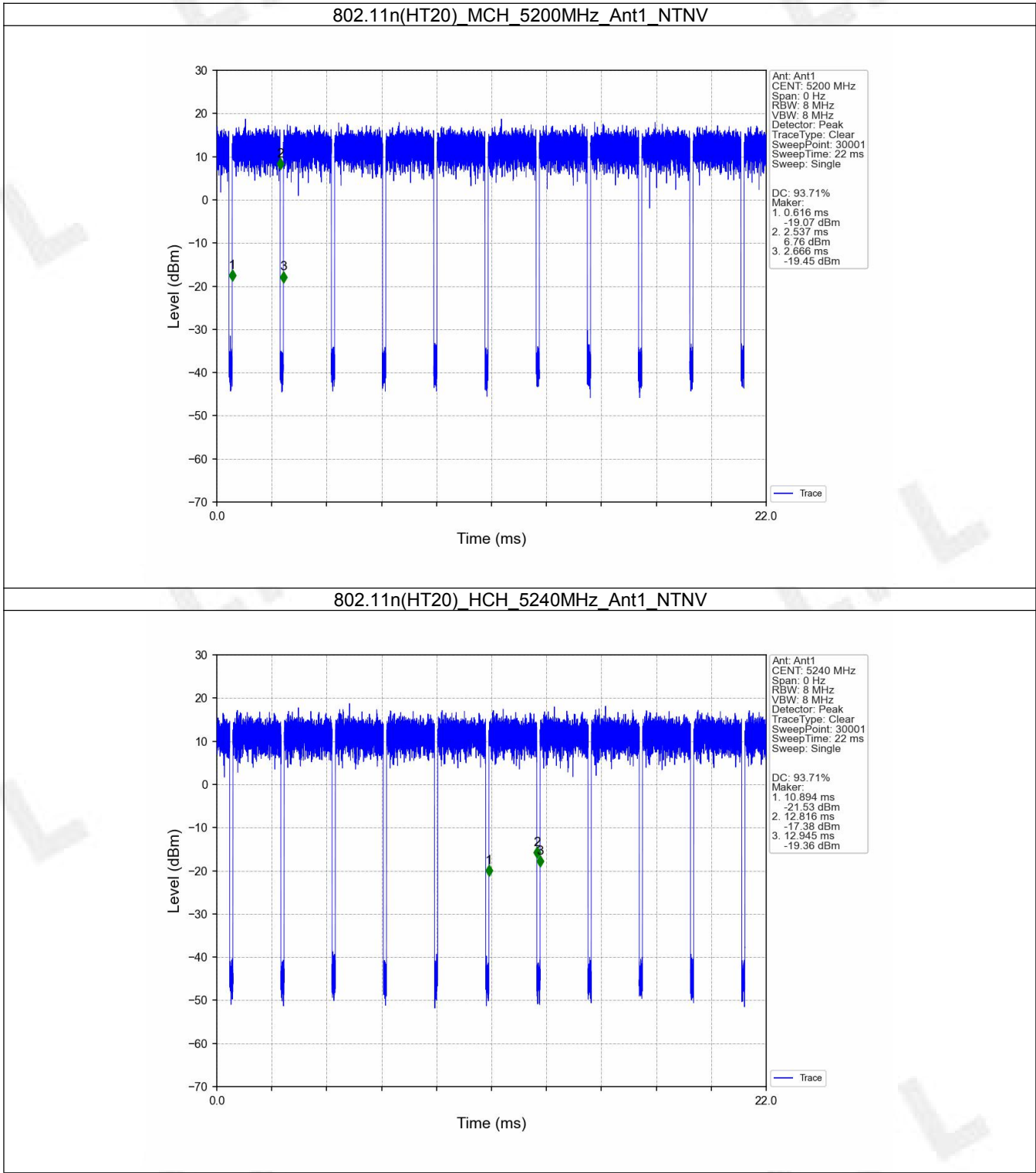
1.2.1 Ant1



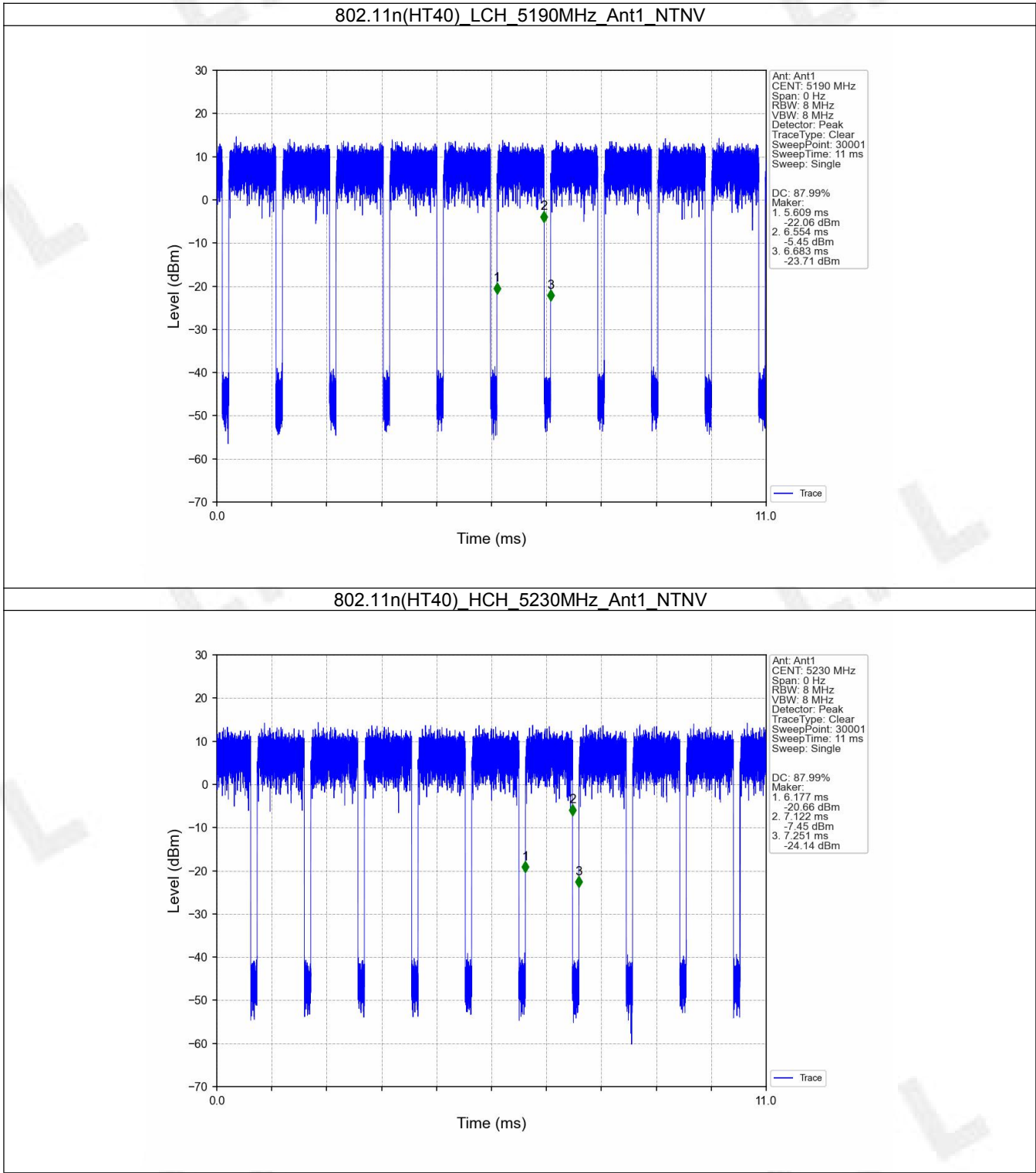
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2. Bandwidth**2.1 Test Result****2.1.1 OBW**

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	17.384	/	Pass
		5200	1	17.295	/	Pass
		5240	1	17.425	/	Pass
802.11n (HT20)	SISO	5180	1	18.258	/	Pass
		5200	1	18.269	/	Pass
		5240	1	18.228	/	Pass
802.11n (HT40)	SISO	5190	1	35.922	/	Pass
		5230	1	35.883	/	Pass

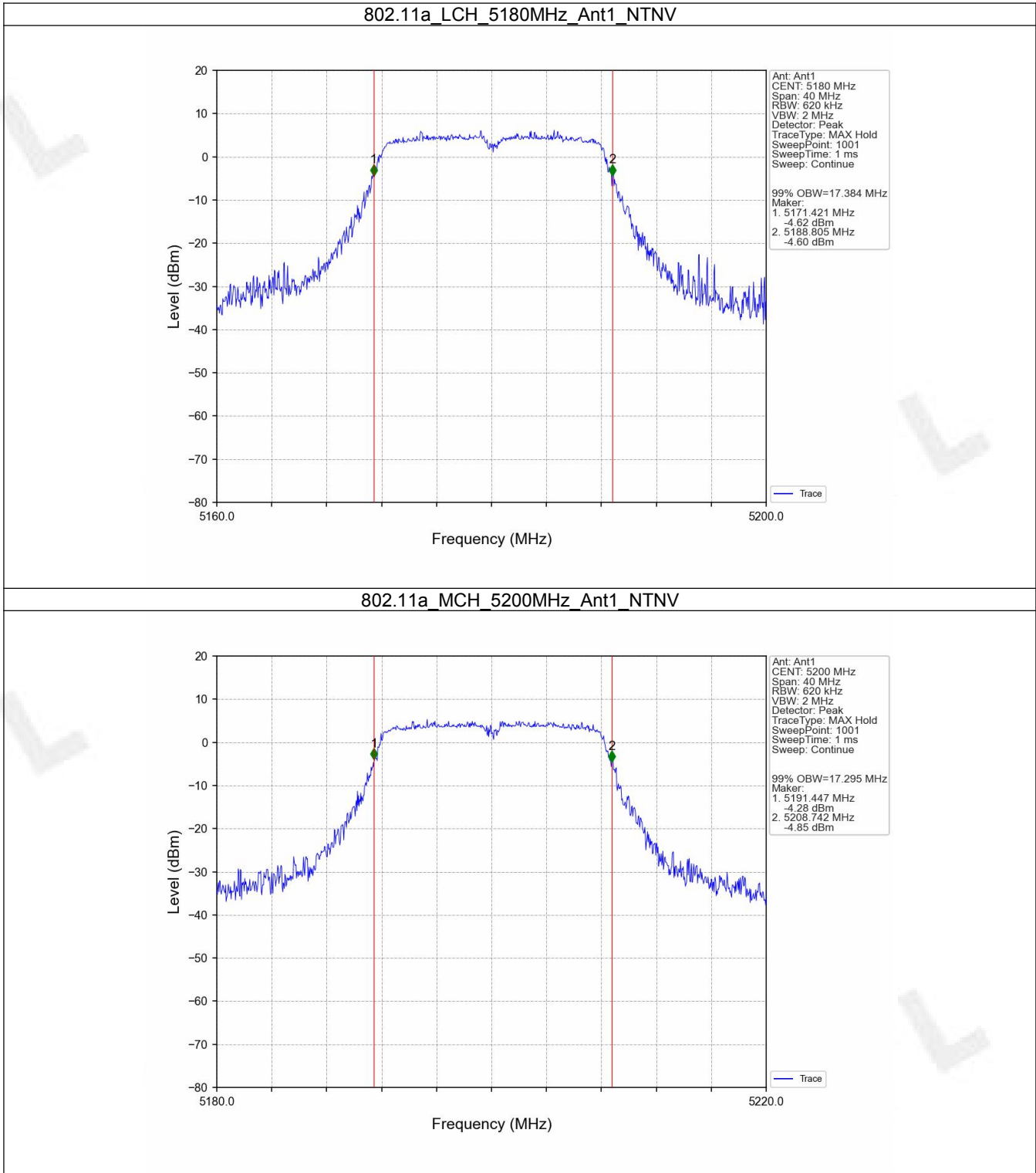
2.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	21.738	/	Pass
		5200	1	21.469	/	Pass
		5240	1	21.892	/	Pass
802.11n (HT20)	SISO	5180	1	22.112	/	Pass
		5200	1	22.237	/	Pass
		5240	1	22.944	/	Pass
802.11n (HT40)	SISO	5190	1	38.928	/	Pass
		5230	1	39.325	/	Pass

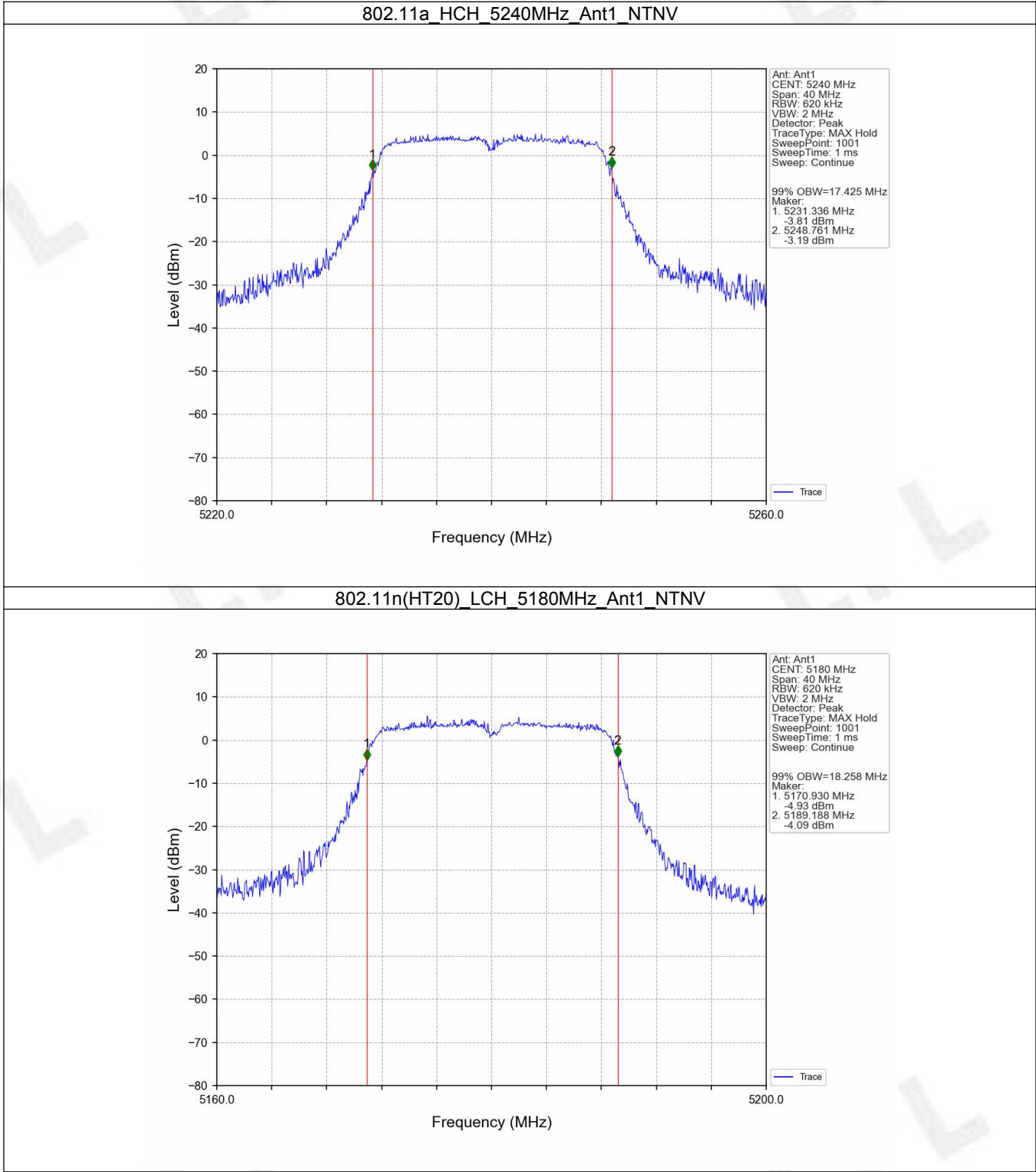
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2.2 Test Graph

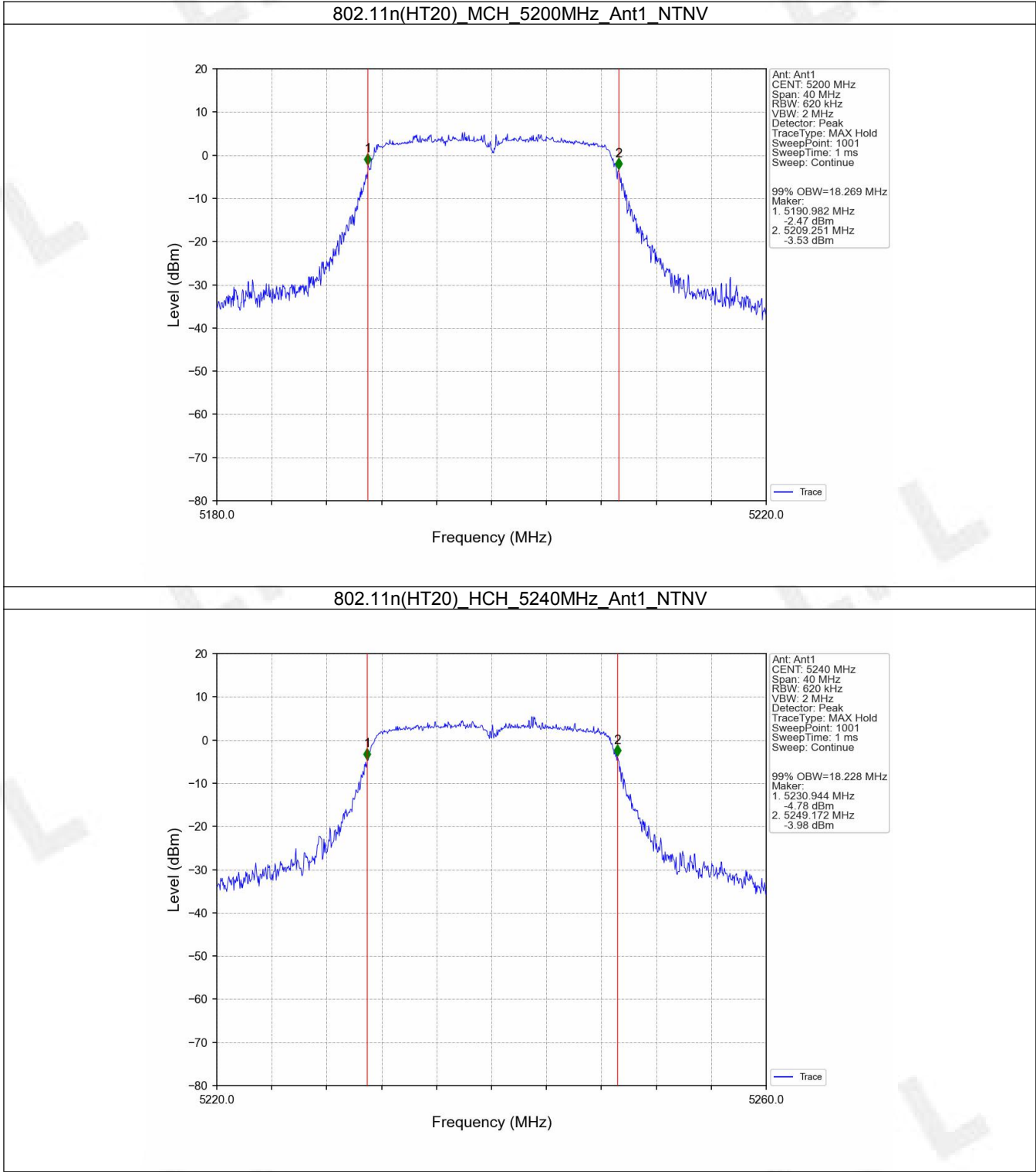
2.2.1 OBW



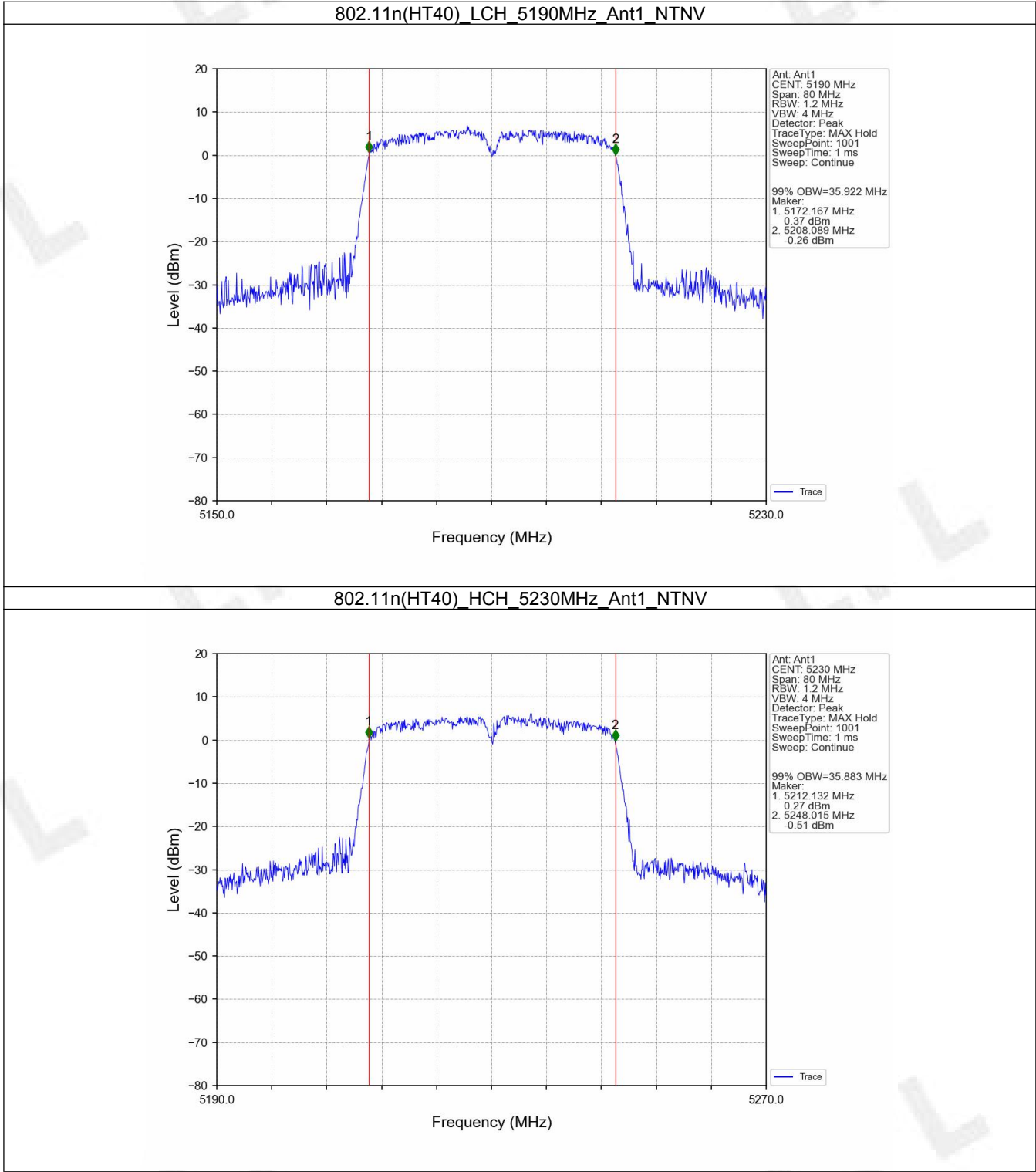
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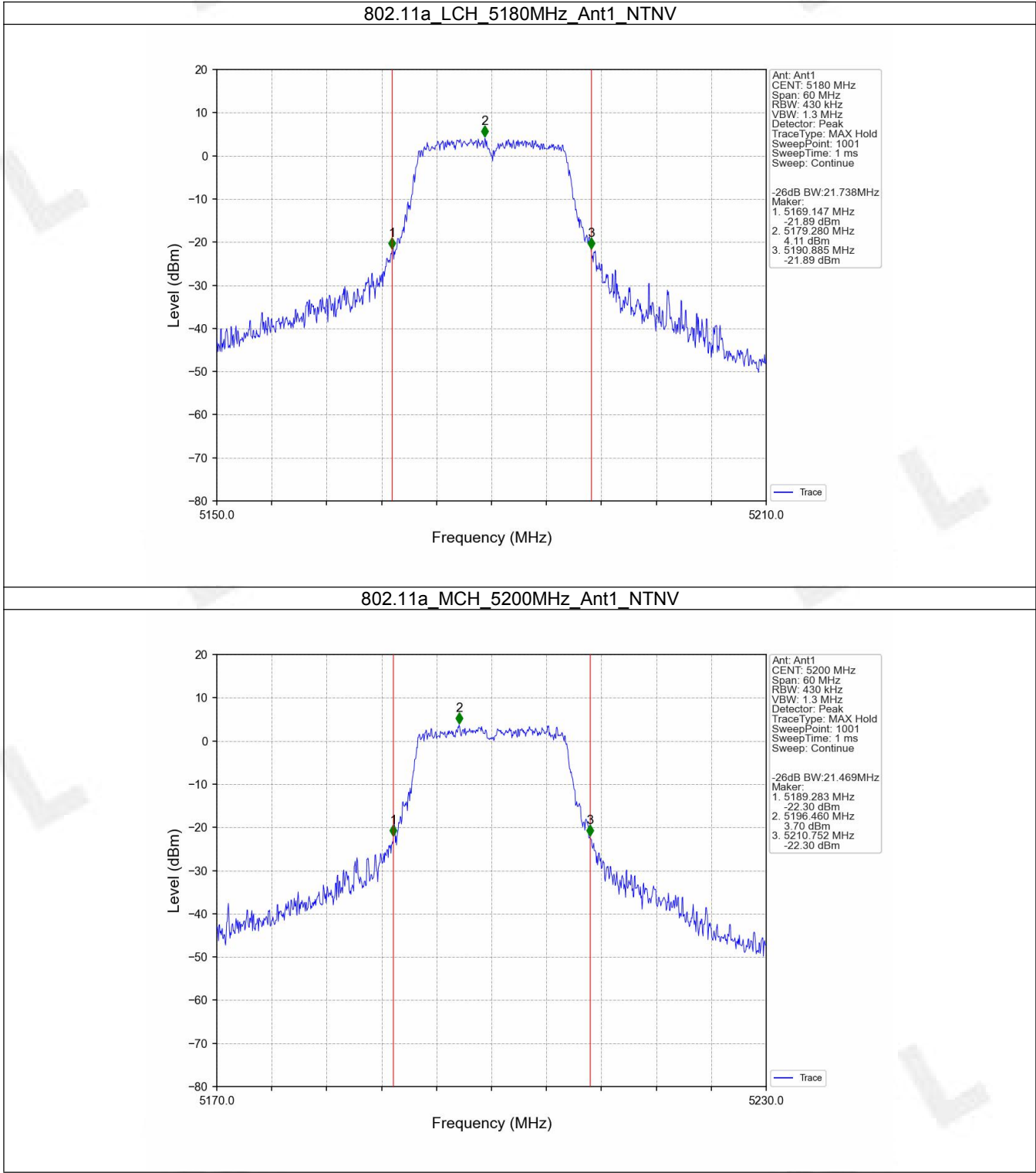


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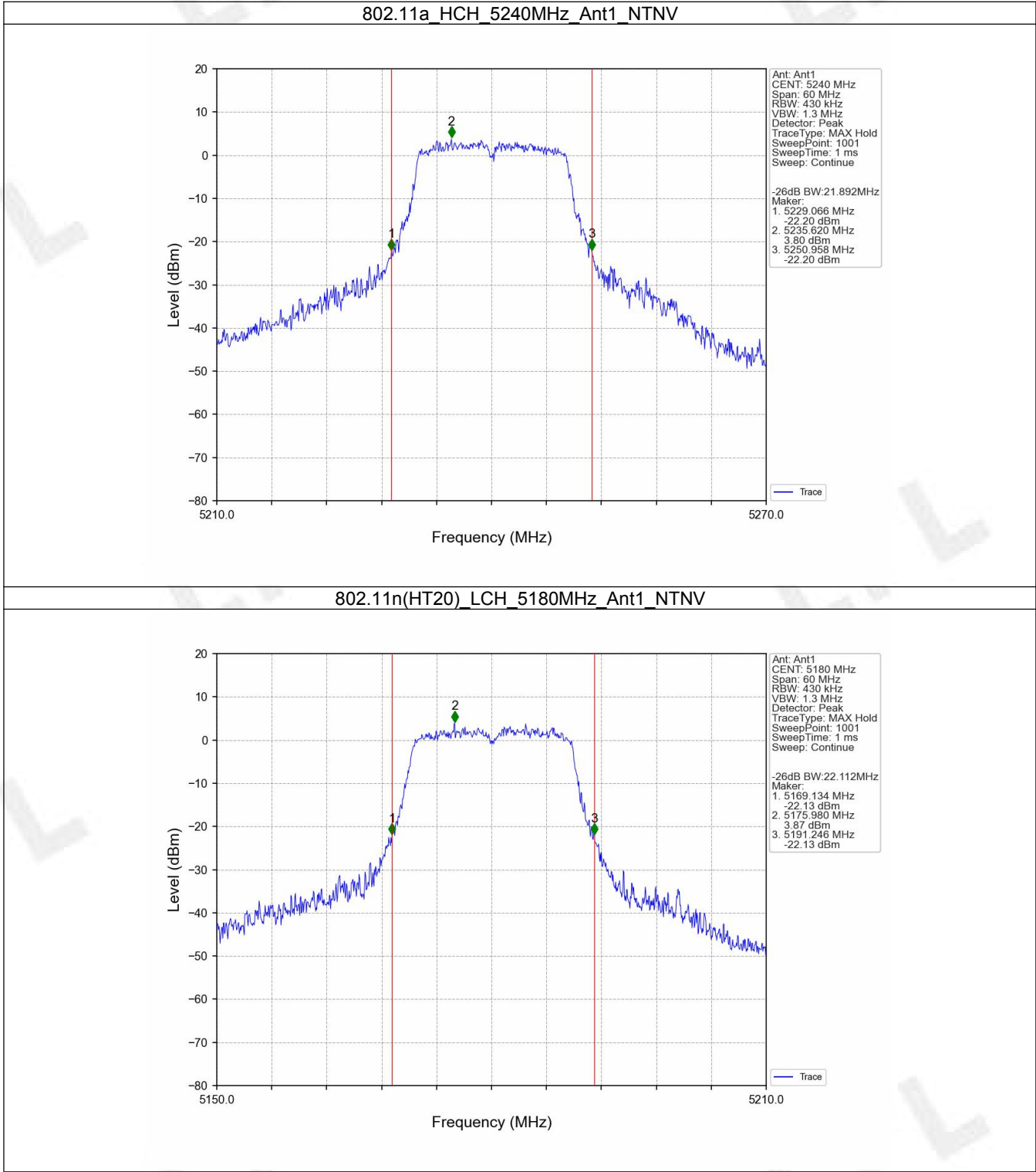


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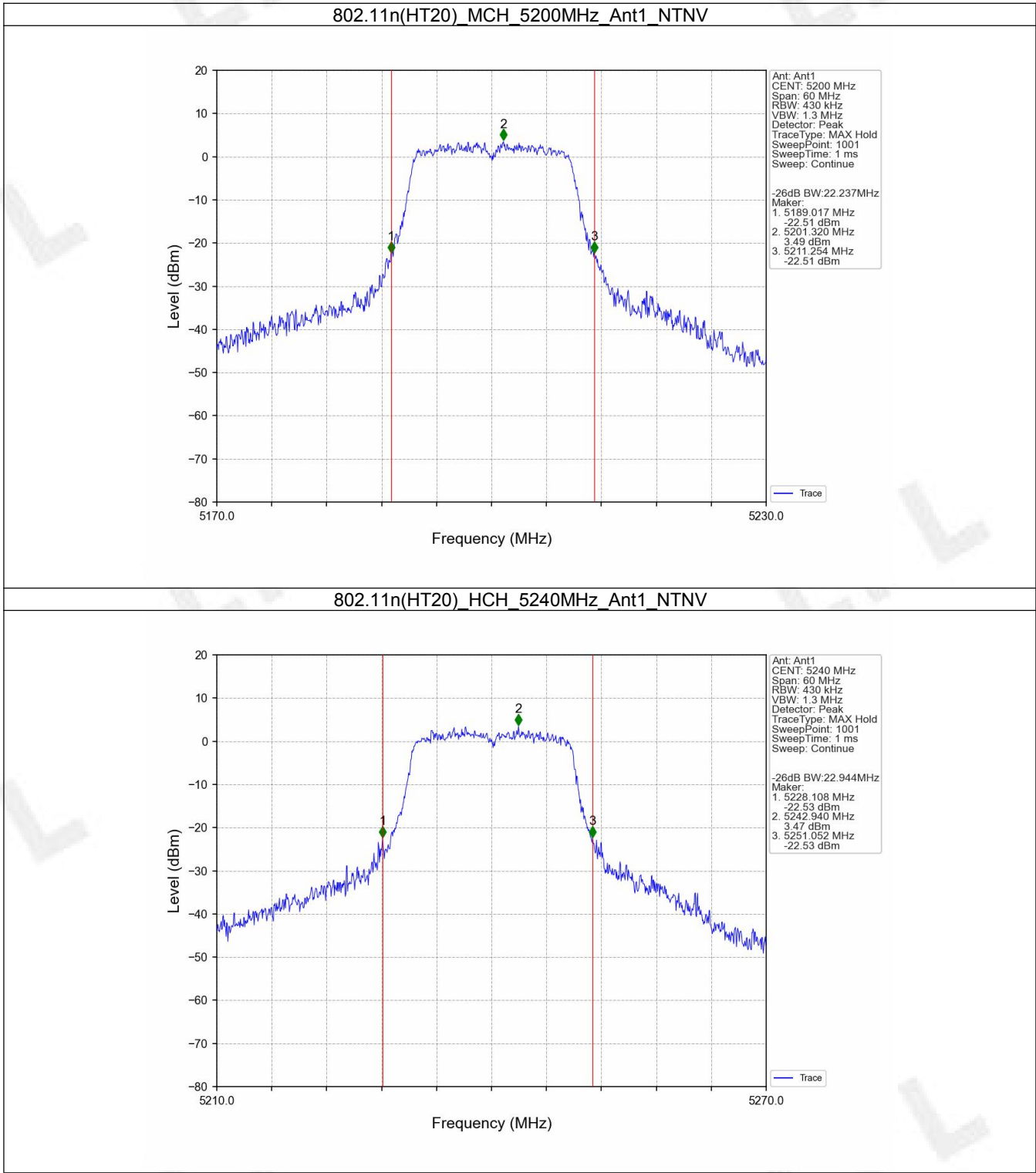
2.2.2 26dB BW



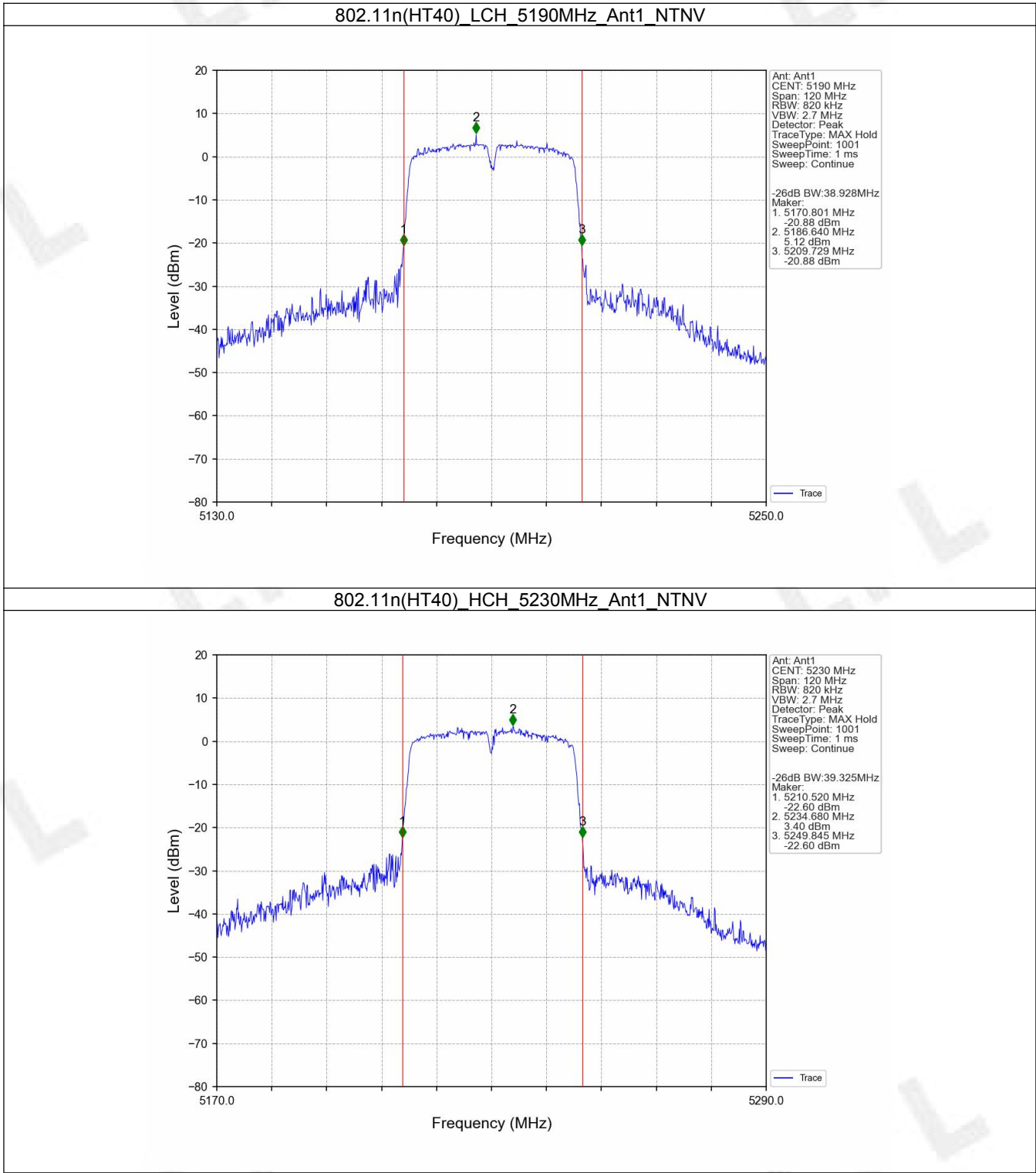
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3. Maximum Conducted Output Power**3.1 Test Result****3.1.1 Power**

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)			Verdict
			Duty Cycle Correction Factor (dB)	ANT1	Limit	
802.11a	SISO	5180	0.27	11.69	<=23.98	Pass
		5200	0.26	11.18	<=23.98	Pass
		5240	0.26	10.86	<=23.98	Pass
802.11n (HT20)	SISO	5180	0.28	11.05	<=23.98	Pass
		5200	0.28	11.12	<=23.98	Pass
		5240	0.28	10.67	<=23.98	Pass
802.11n (HT40)	SISO	5190	0.56	10.86	<=23.98	Pass
		5230	0.56	10.41	<=23.98	Pass

Note1: Antenna Gain: Ant1: 1.97dBi;

Note 2: Maximum Average Conducted Output Power=DCCF+Maker;

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4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

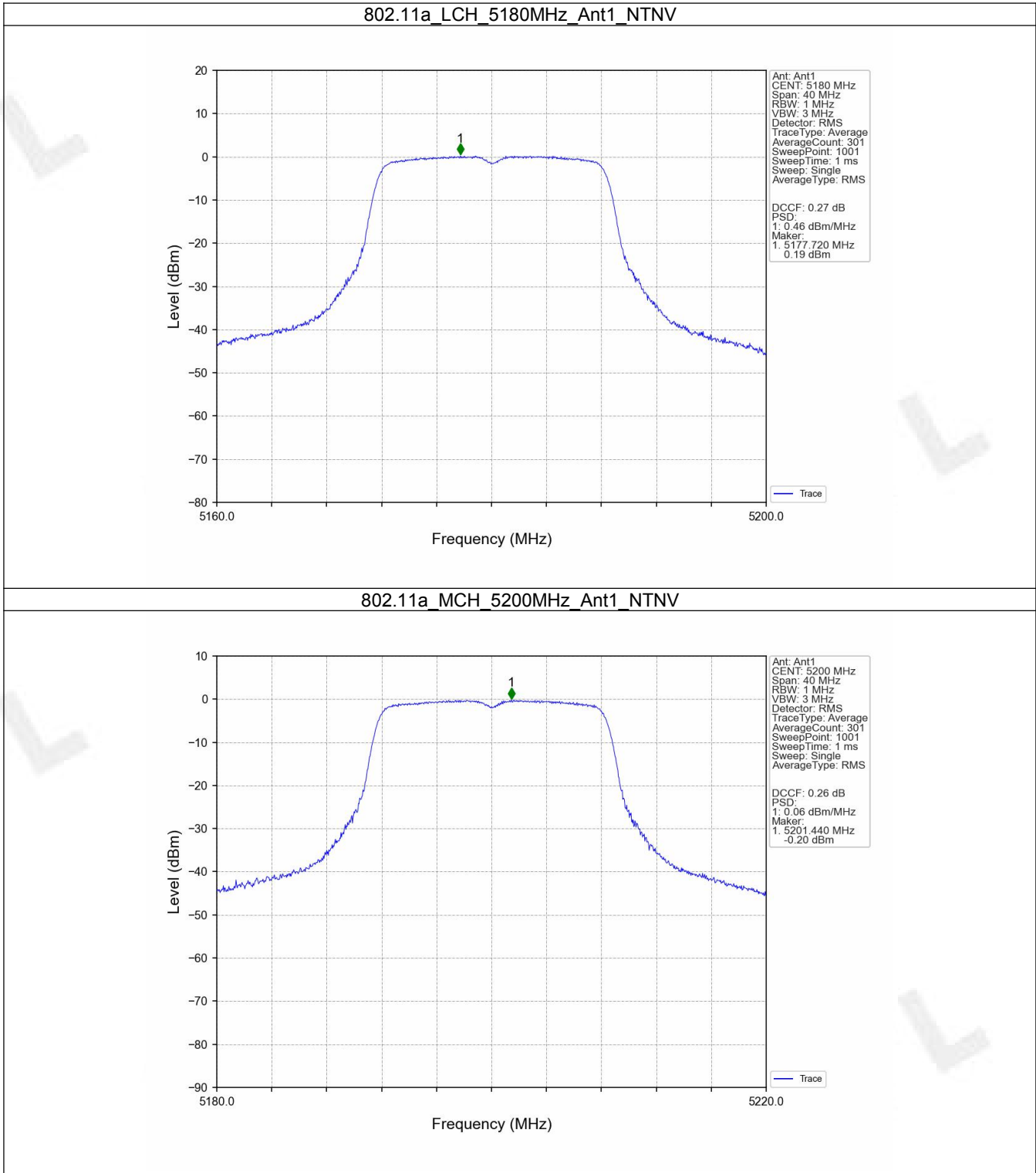
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	0.46	<=11	Pass
		5200	0.06	<=11	Pass
		5240	-0.22	<=11	Pass
802.11n (HT20)	SISO	5180	-0.39	<=11	Pass
		5200	-0.24	<=11	Pass
		5240	-0.47	<=11	Pass
802.11n (HT40)	SISO	5190	-3.33	<=11	Pass
		5230	-3.83	<=11	Pass

Note1: Antenna Gain: Ant1: 1.97dBi;

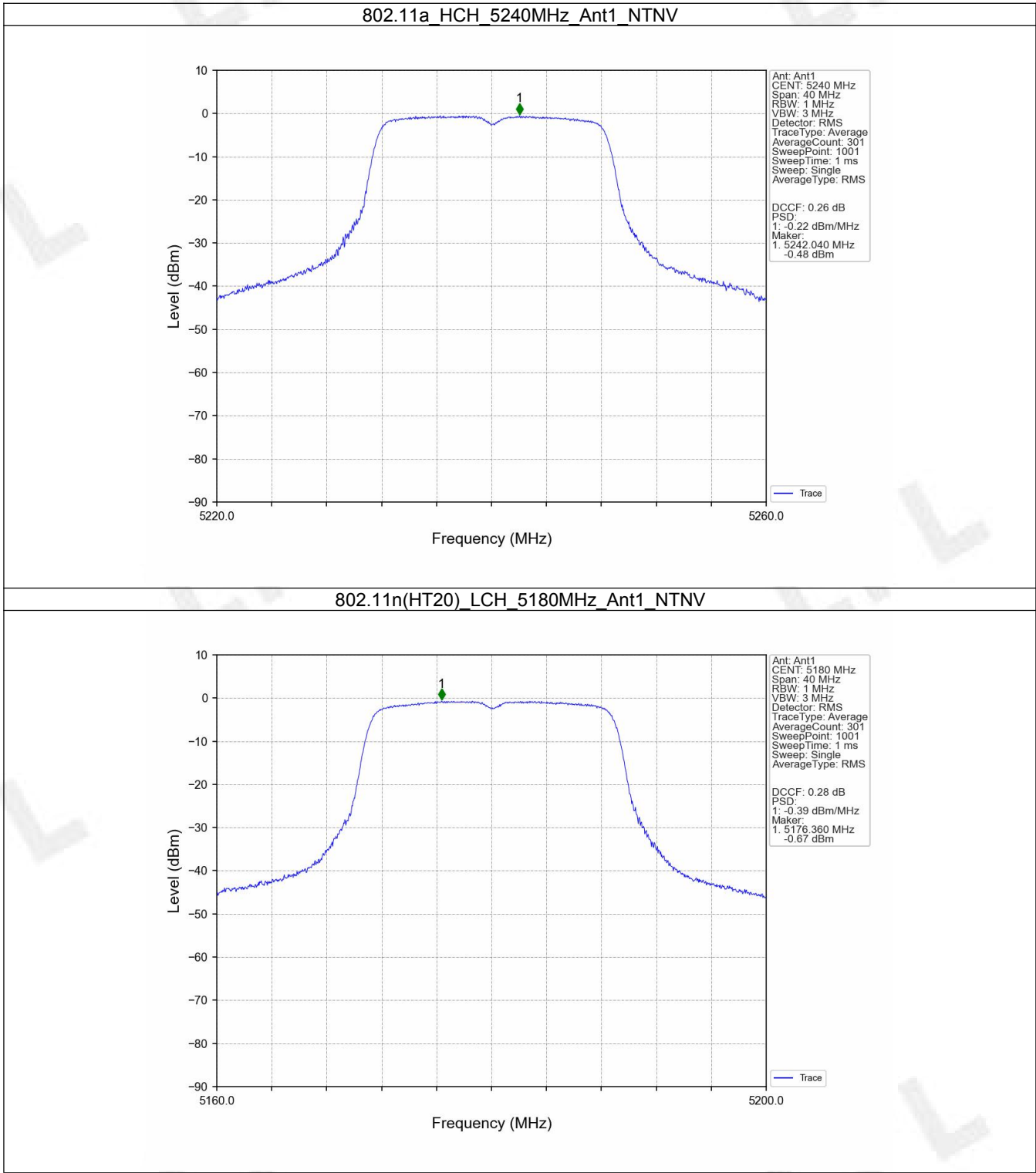
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4.2 Test Graph

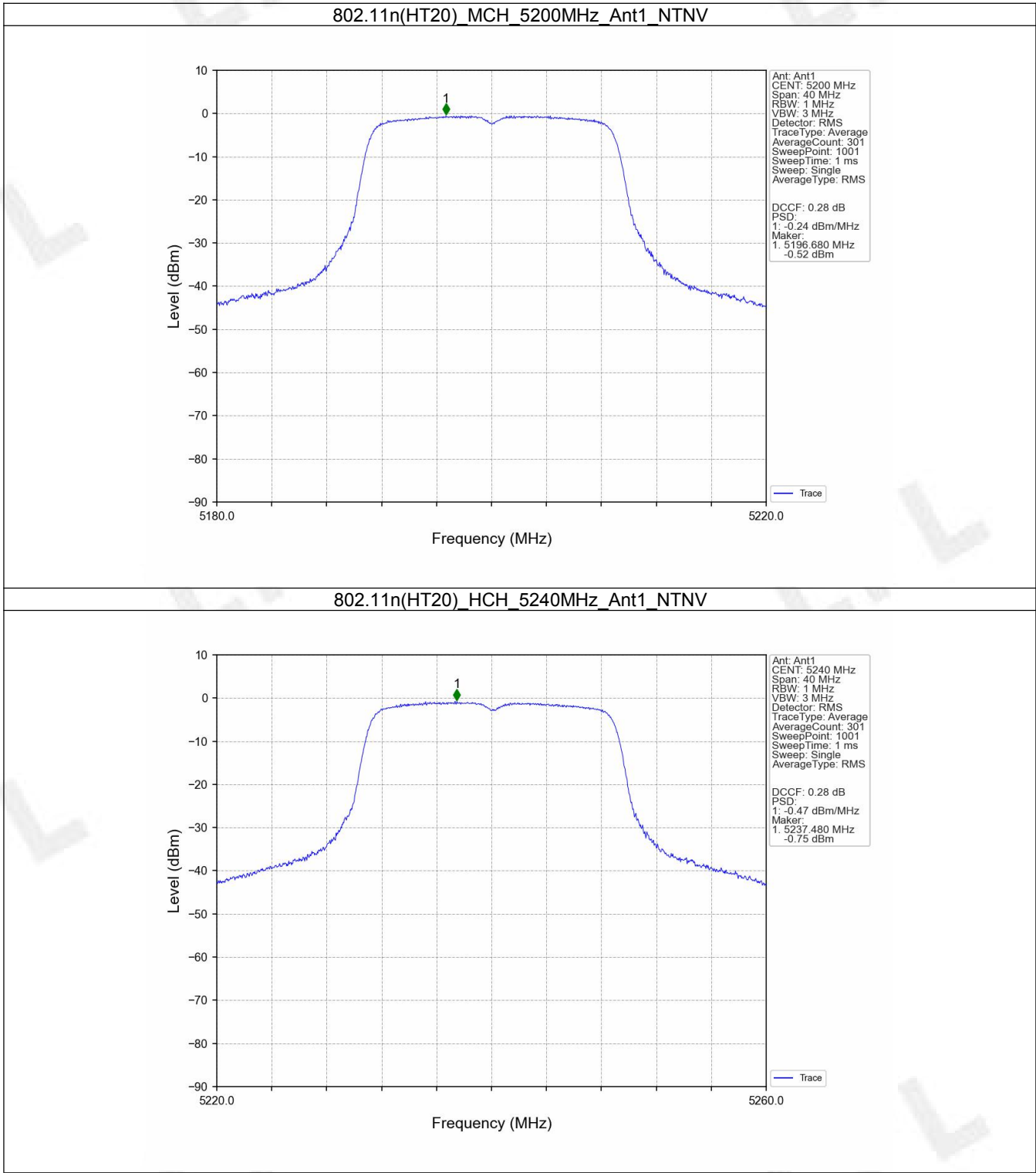
4.2.1 PSD



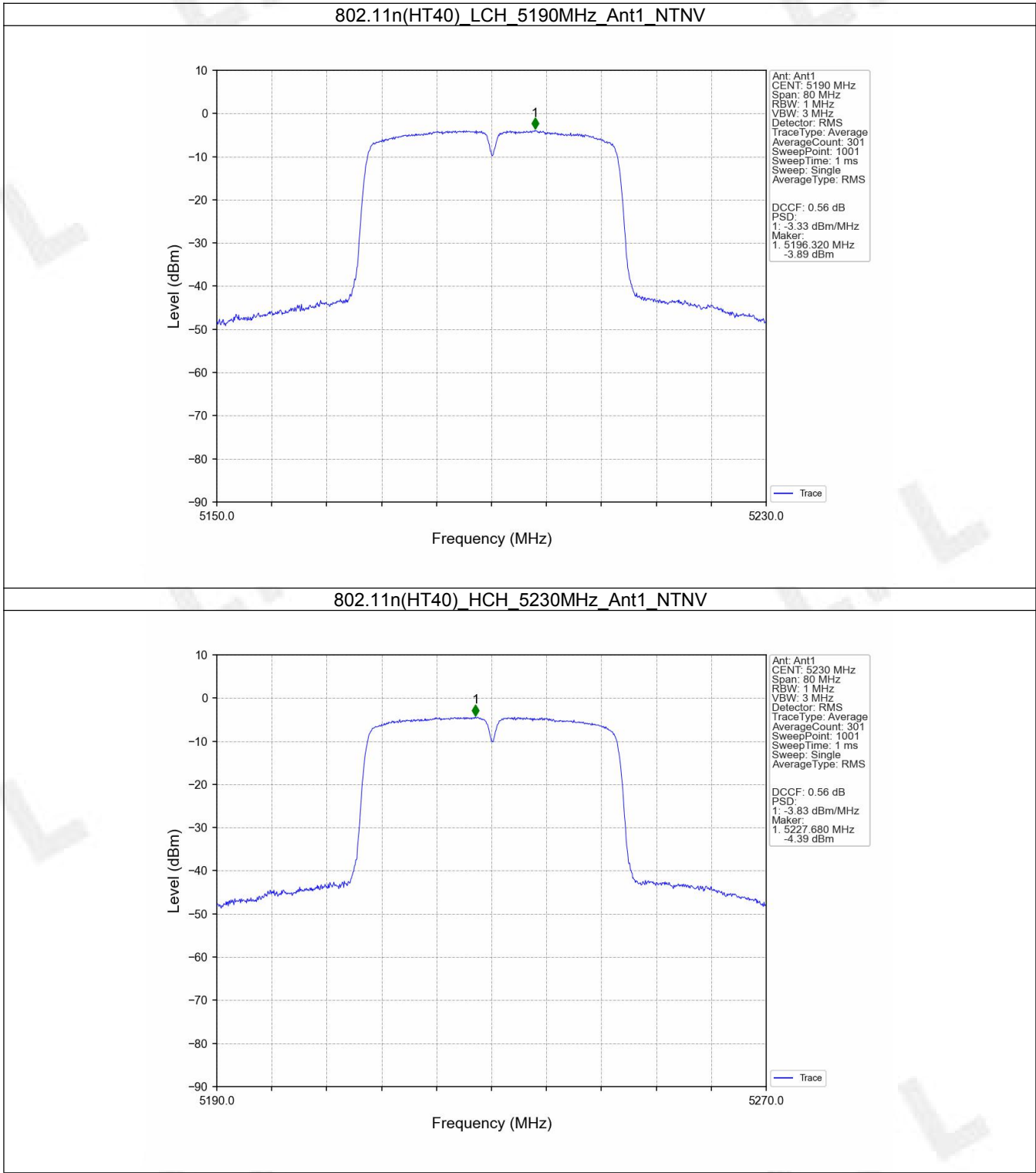
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5. Frequency Stability**5.1 Test Result****5.1.1 Ant1**

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VDC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
Carrier Wave	SISO	5180	20	3.42	5180.020	5150 to 5250	Pass
				3.8	5180.018	5150 to 5250	Pass
				4.18	5180.017	5150 to 5250	Pass
			-30	3.8	5180.016	5150 to 5250	Pass
			-20	3.8	5180.016	5150 to 5250	Pass
			-10	3.8	5180.015	5150 to 5250	Pass
			0	3.8	5180.015	5150 to 5250	Pass
			10	3.8	5180.015	5150 to 5250	Pass
			30	3.8	5180.015	5150 to 5250	Pass
			40	3.8	5180.015	5150 to 5250	Pass
			50	3.8	5180.014	5150 to 5250	Pass
		5200	20	3.42	5200.014	5150 to 5250	Pass
				3.8	5200.013	5150 to 5250	Pass
				4.18	5200.013	5150 to 5250	Pass
			-30	3.8	5200.013	5150 to 5250	Pass
			-20	3.8	5200.013	5150 to 5250	Pass
			-10	3.8	5200.013	5150 to 5250	Pass
			0	3.8	5200.013	5150 to 5250	Pass
			10	3.8	5200.012	5150 to 5250	Pass
			30	3.8	5200.013	5150 to 5250	Pass
			40	3.8	5200.013	5150 to 5250	Pass
			50	3.8	5200.013	5150 to 5250	Pass
		5240	20	3.42	5240.017	5150 to 5250	Pass
				3.8	5240.016	5150 to 5250	Pass
				4.18	5240.016	5150 to 5250	Pass
			-30	3.8	5240.016	5150 to 5250	Pass
			-20	3.8	5240.016	5150 to 5250	Pass
			-10	3.8	5240.016	5150 to 5250	Pass
			0	3.8	5240.016	5150 to 5250	Pass
			10	3.8	5240.016	5150 to 5250	Pass
			30	3.8	5240.016	5150 to 5250	Pass
			40	3.8	5240.016	5150 to 5250	Pass
			50	3.8	5240.016	5150 to 5250	Pass
		5190	20	3.42	5190.018	5150 to 5250	Pass
				3.8	5190.017	5150 to 5250	Pass
				4.18	5190.016	5150 to 5250	Pass
			-30	3.8	5190.015	5150 to 5250	Pass
			-20	3.8	5190.015	5150 to 5250	Pass
			-10	3.8	5190.015	5150 to 5250	Pass
			0	3.8	5190.014	5150 to 5250	Pass
			10	3.8	5190.014	5150 to 5250	Pass
			30	3.8	5190.014	5150 to 5250	Pass
			40	3.8	5190.014	5150 to 5250	Pass
			50	3.8	5190.013	5150 to 5250	Pass
		5230	20	3.42	5230.017	5150 to 5250	Pass
				3.8	5230.016	5150 to 5250	Pass
				4.18	5230.016	5150 to 5250	Pass
			-30	3.8	5230.016	5150 to 5250	Pass
			-20	3.8	5230.016	5150 to 5250	Pass

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			-10	3.8	5230.016	5150 to 5250	Pass
			0	3.8	5230.016	5150 to 5250	Pass
			10	3.8	5230.015	5150 to 5250	Pass
			30	3.8	5230.015	5150 to 5250	Pass
			40	3.8	5230.015	5150 to 5250	Pass
			50	3.8	5230.015	5150 to 5250	Pass