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Annex for 5G Wi-Fi BAND 2C

Test Report No.: CTL2412319011-WF03

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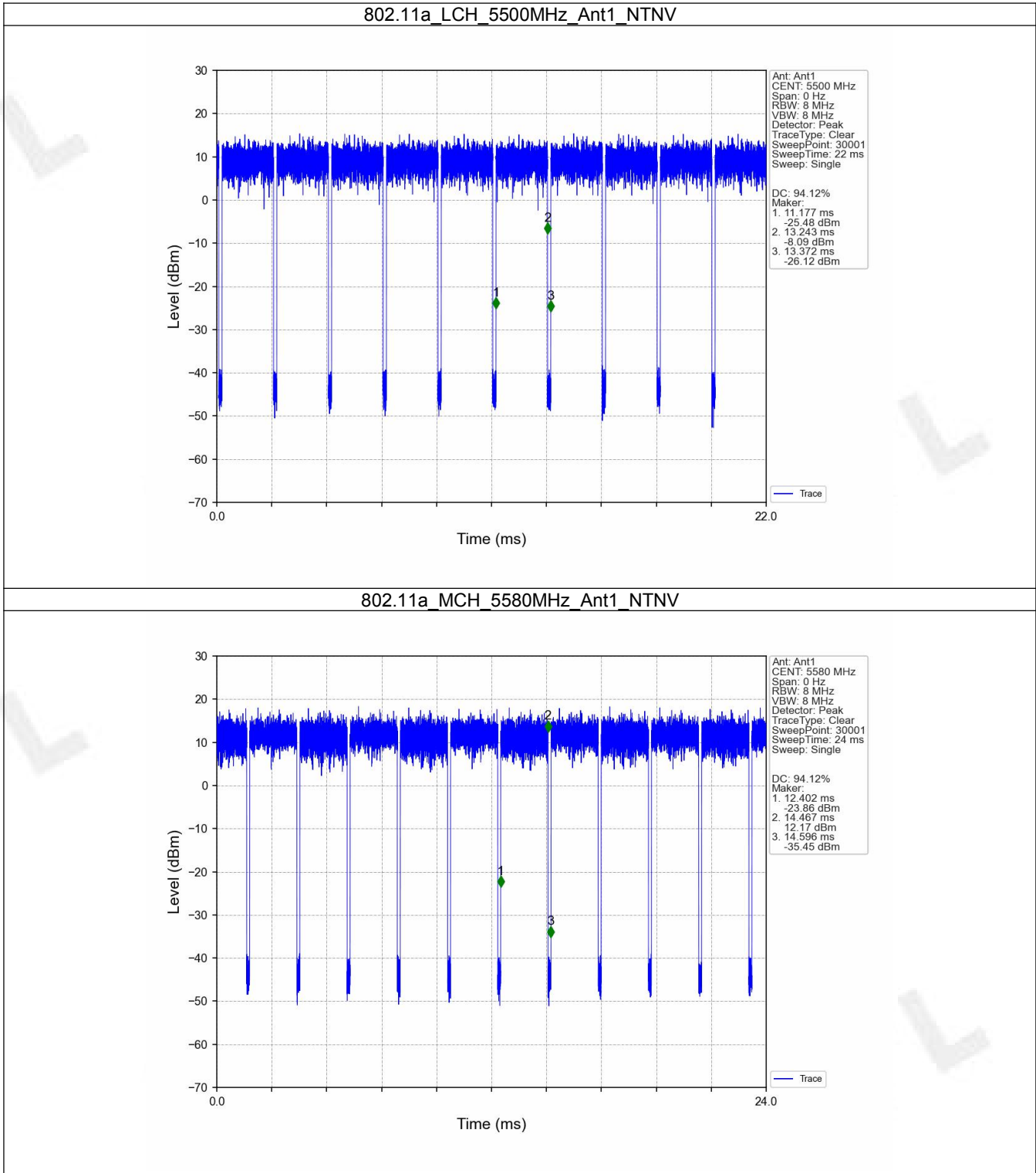
1. Duty Cycle**1.1 Test Result****1.1.1 Ant1**

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5500	2.066	2.195	94.12	0.26	0.03
		5580	2.065	2.194	94.12	0.26	0.04
		5700	2.065	2.194	94.12	0.26	0.06
802.11n (HT20)	SISO	5500	1.921	2.050	93.71	0.28	0.04
		5580	1.921	2.049	93.75	0.28	0.04
		5700	1.921	2.051	93.66	0.28	0.07
802.11n (HT40)	SISO	5510	0.945	1.074	87.99	0.56	0.03
		5550	0.944	1.074	87.90	0.56	0.03
		5670	0.944	1.074	87.90	0.56	0.03

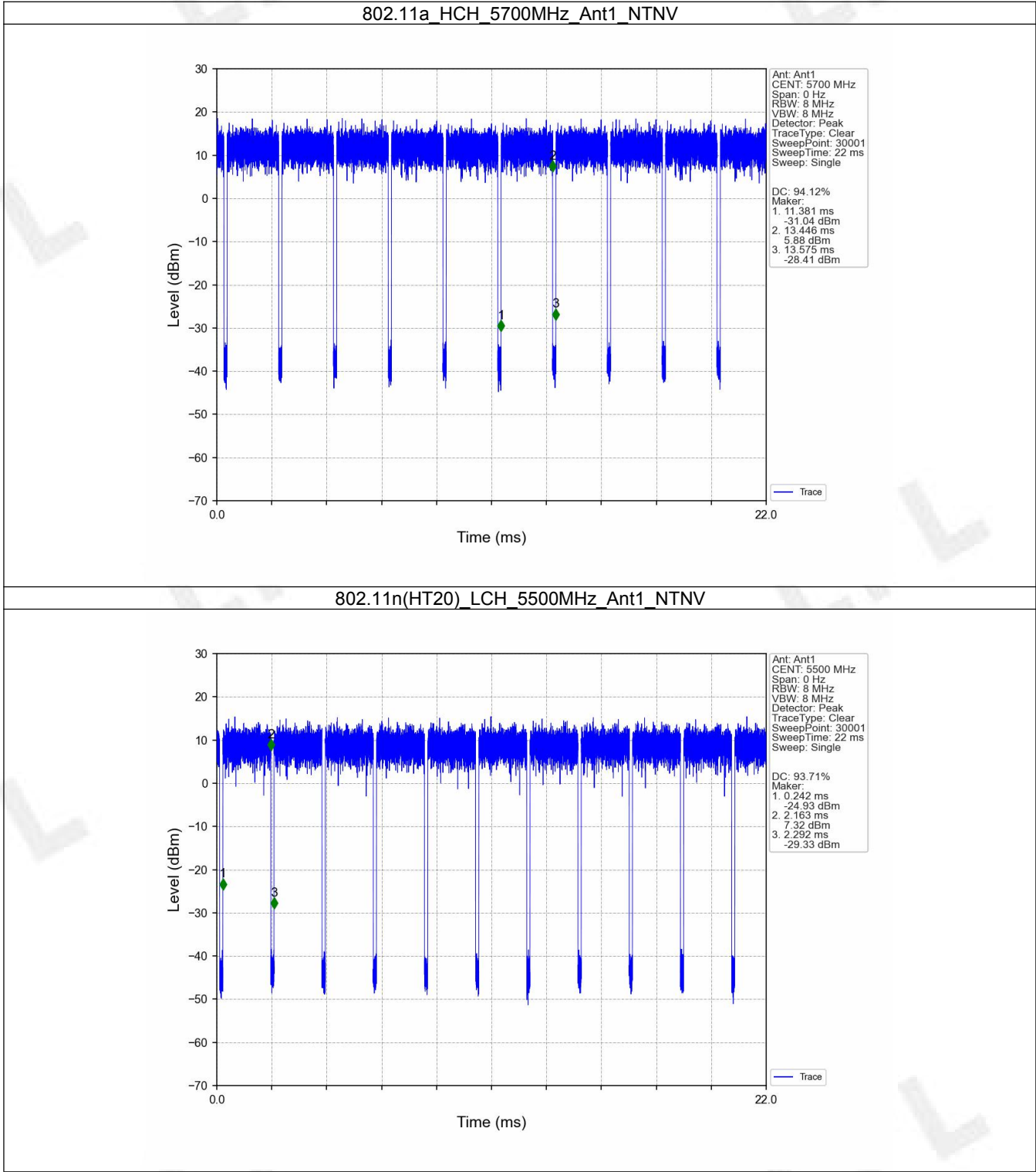
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1.2 Test Graph

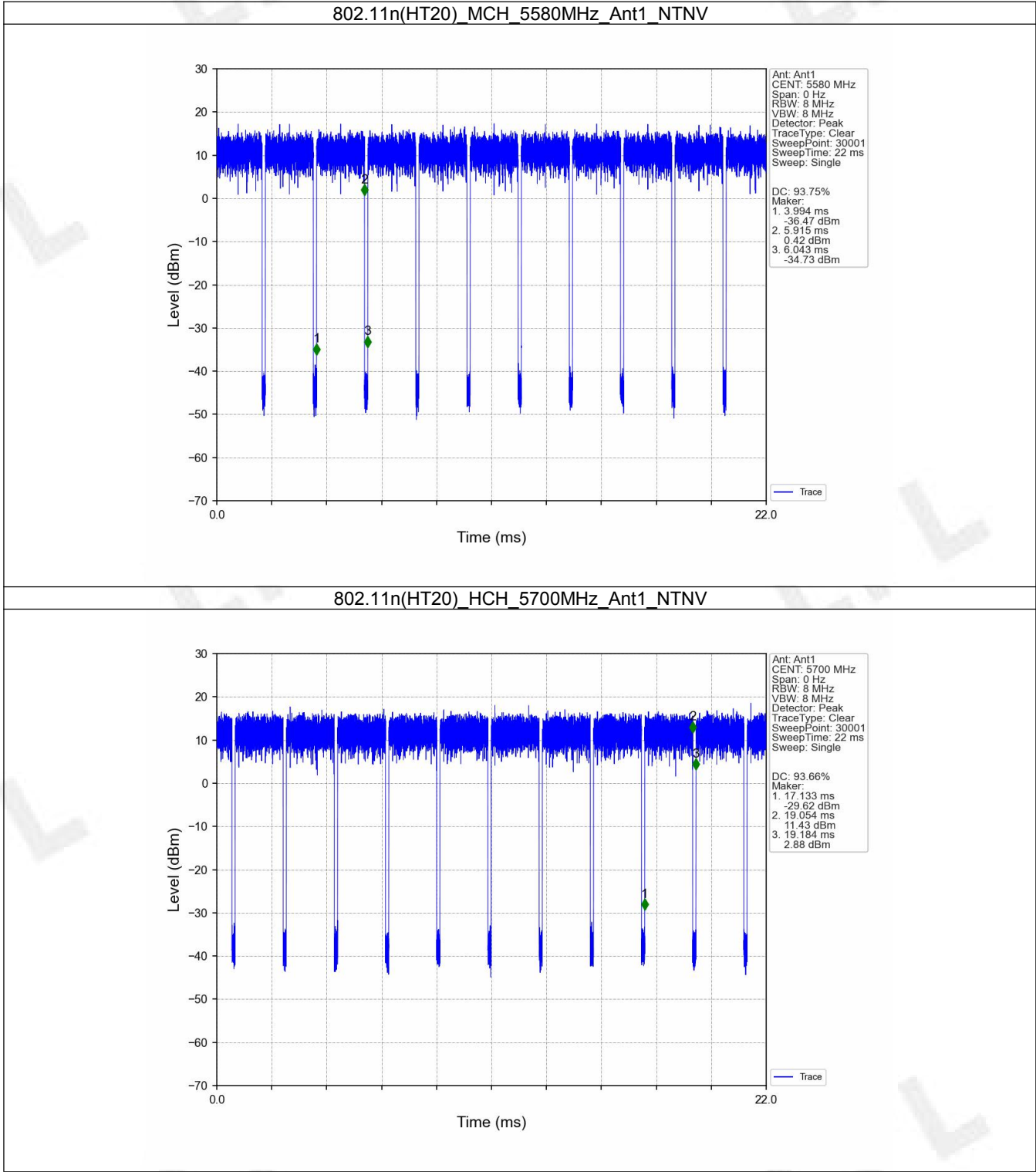
1.2.1 Ant1



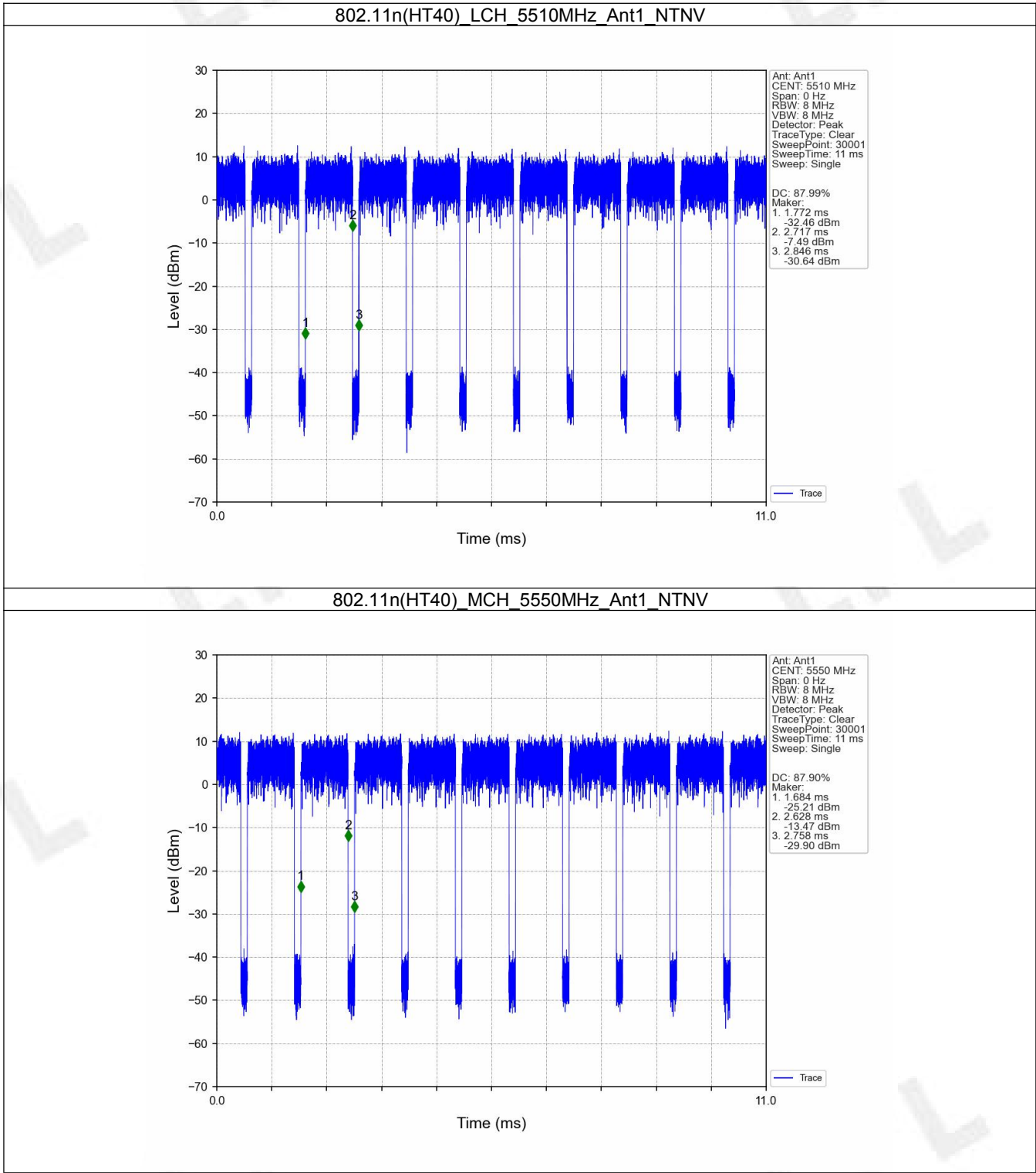
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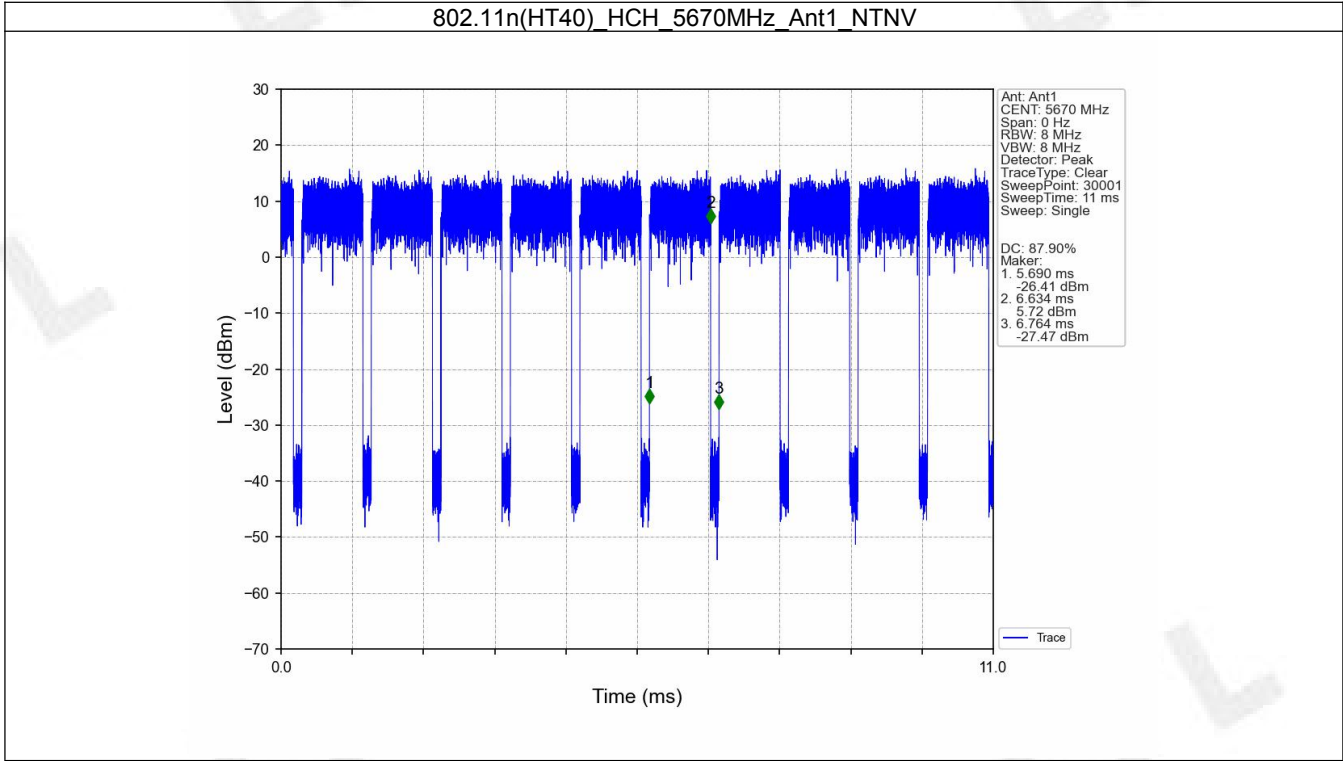
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2. Bandwidth**2.1 Test Result****2.1.1 OBW**

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5500	1	17.418	/	Pass
		5580	1	17.410	/	Pass
		5700	1	17.567	/	Pass
802.11n (HT20)	SISO	5500	1	18.312	/	Pass
		5580	1	18.320	/	Pass
		5700	1	18.443	/	Pass
802.11n (HT40)	SISO	5510	1	36.132	/	Pass
		5550	1	35.946	/	Pass
		5670	1	36.066	/	Pass

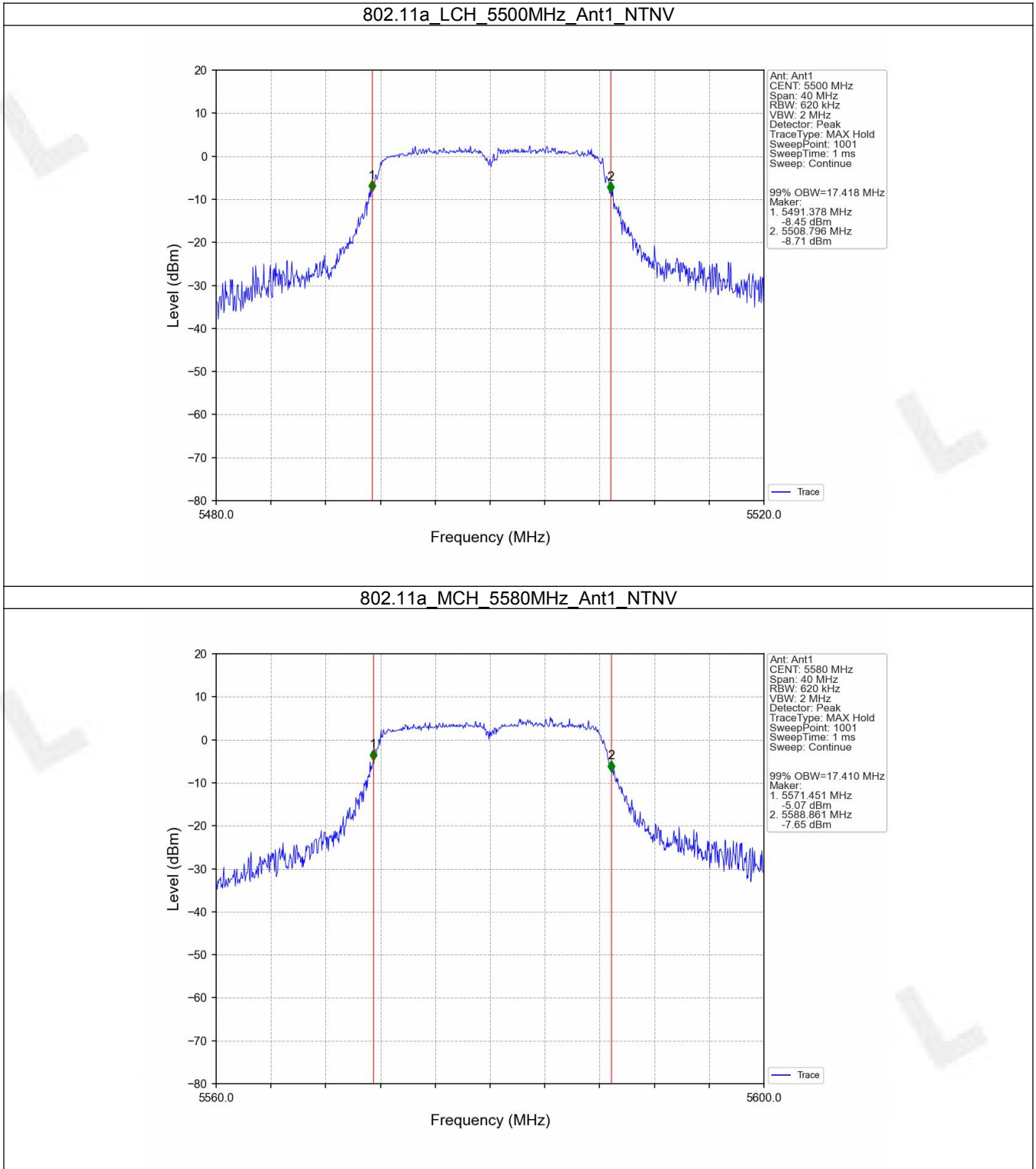
2.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5500	1	22.929	/	Pass
		5580	1	22.493	/	Pass
		5700	1	25.365	/	Pass
802.11n (HT20)	SISO	5500	1	24.412	/	Pass
		5580	1	22.294	/	Pass
		5700	1	22.441	/	Pass
802.11n (HT40)	SISO	5510	1	40.133	/	Pass
		5550	1	38.836	/	Pass
		5670	1	48.725	/	Pass

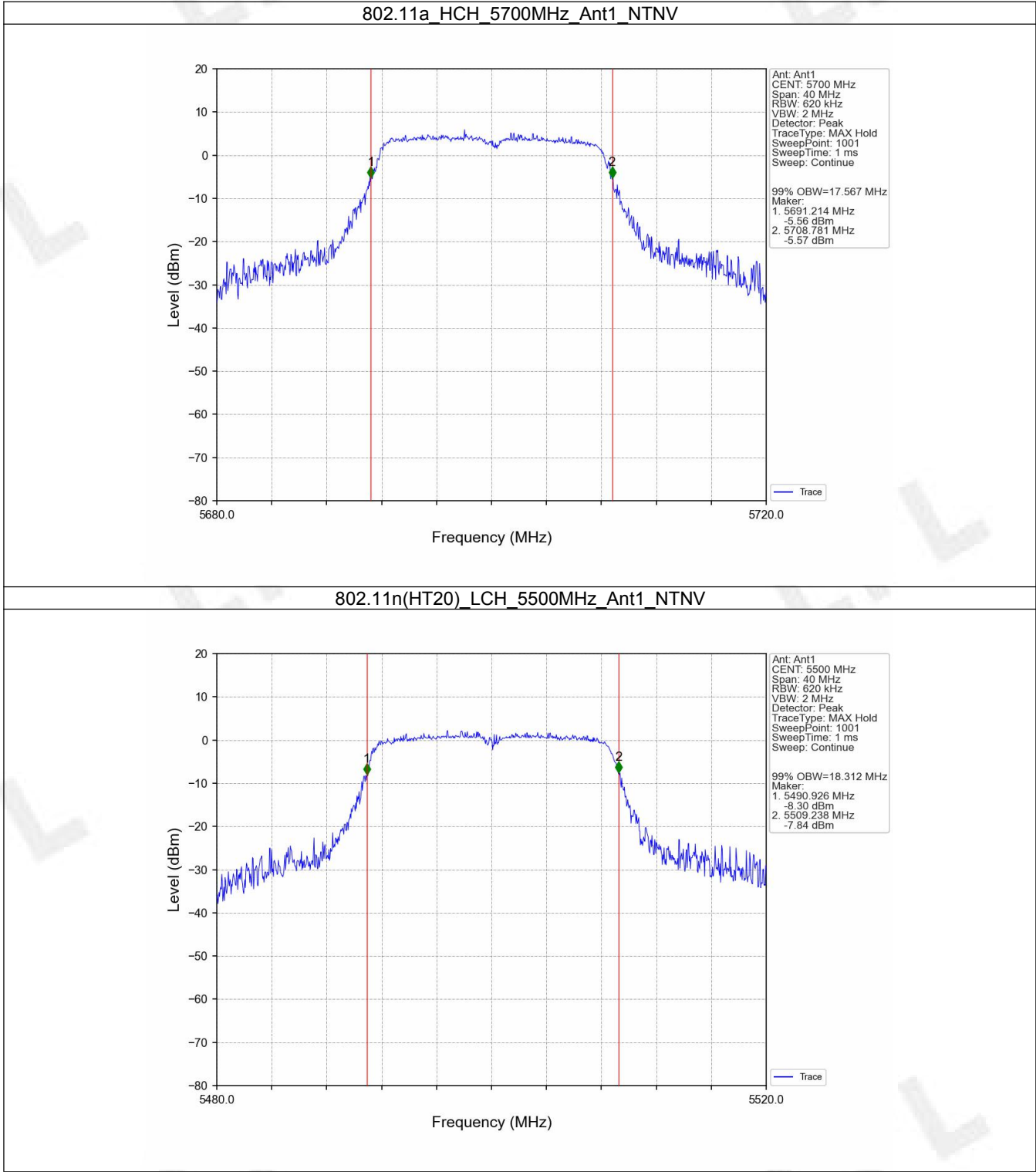
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2.2 Test Graph

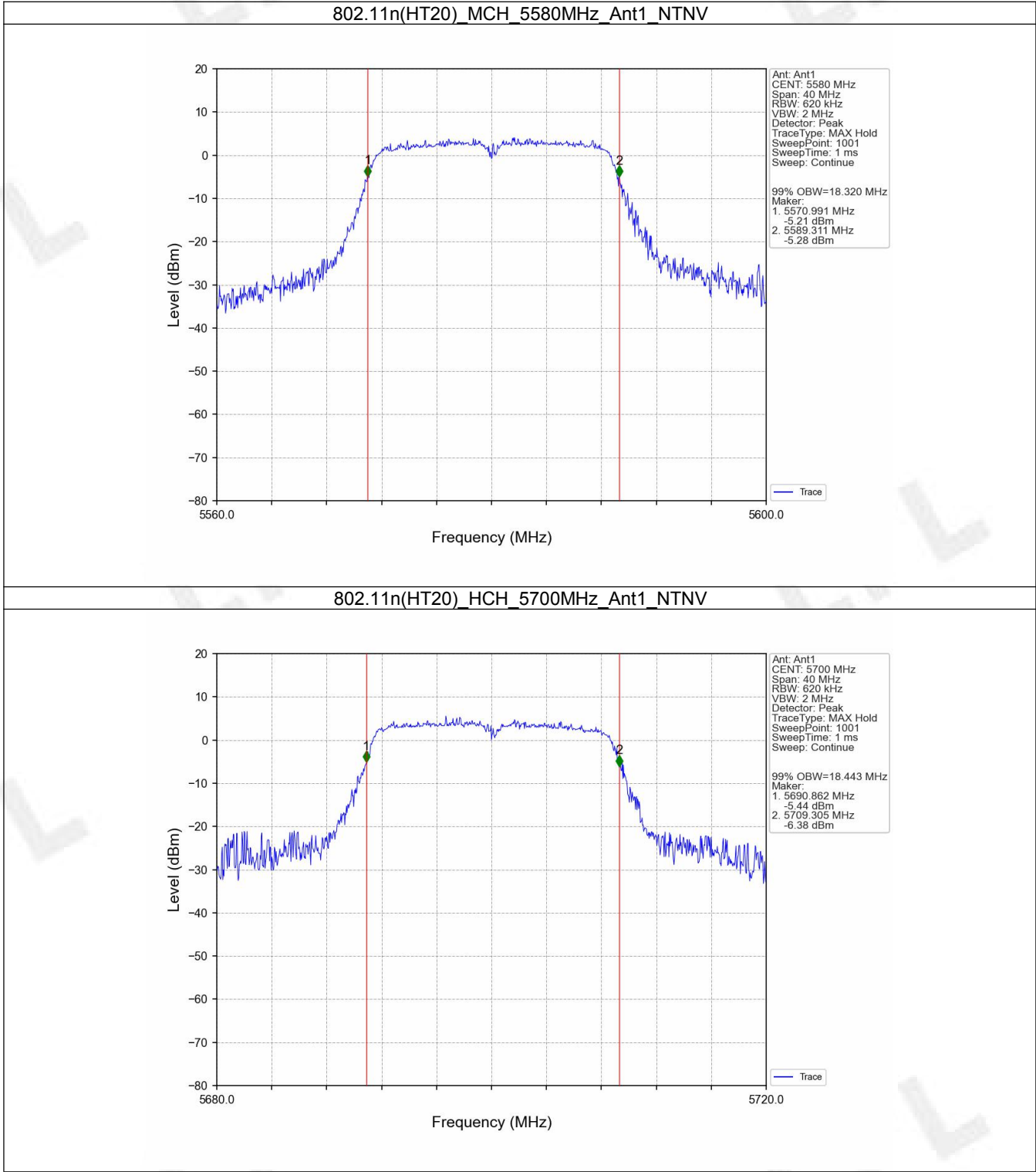
2.2.1 OBW



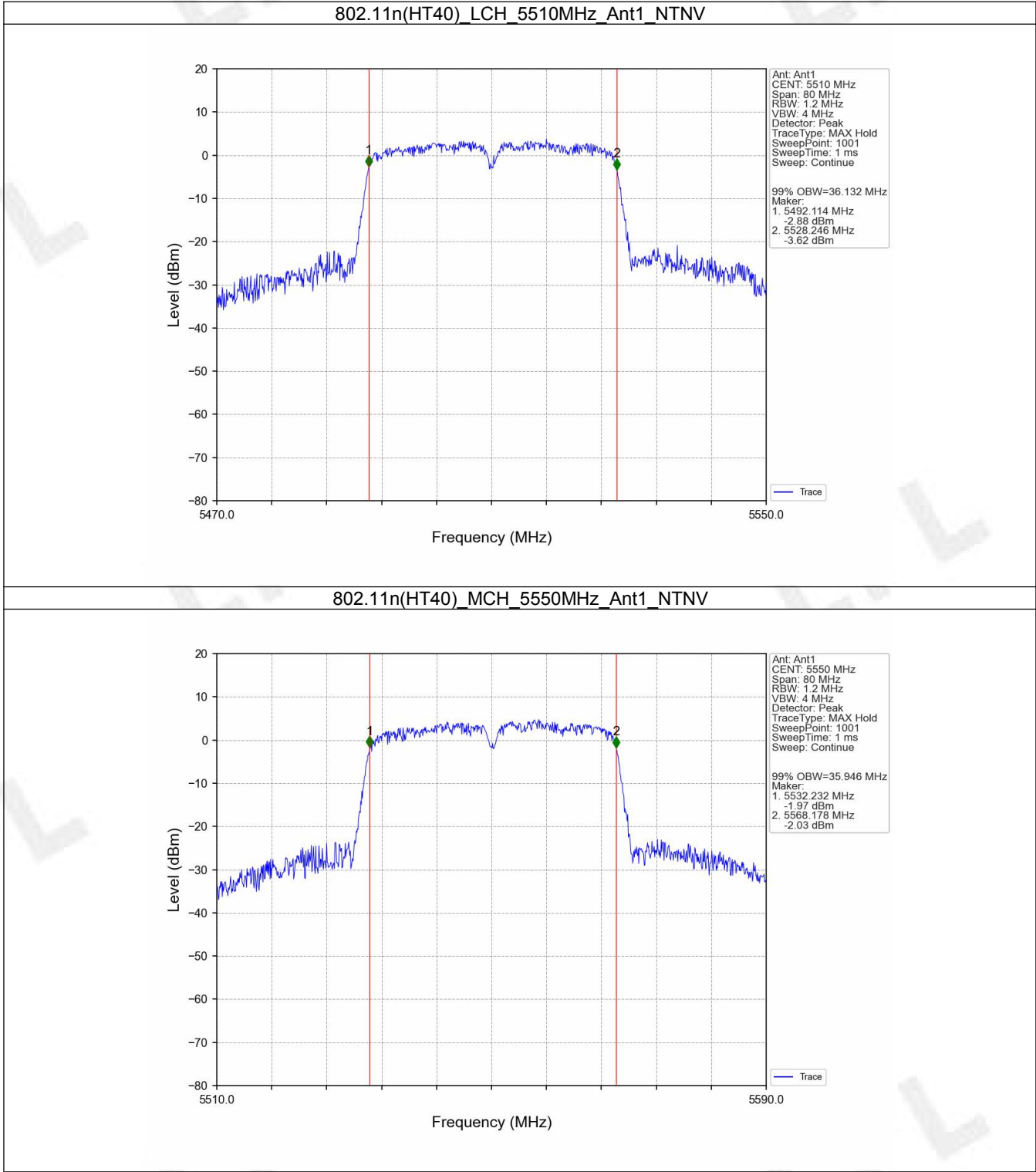
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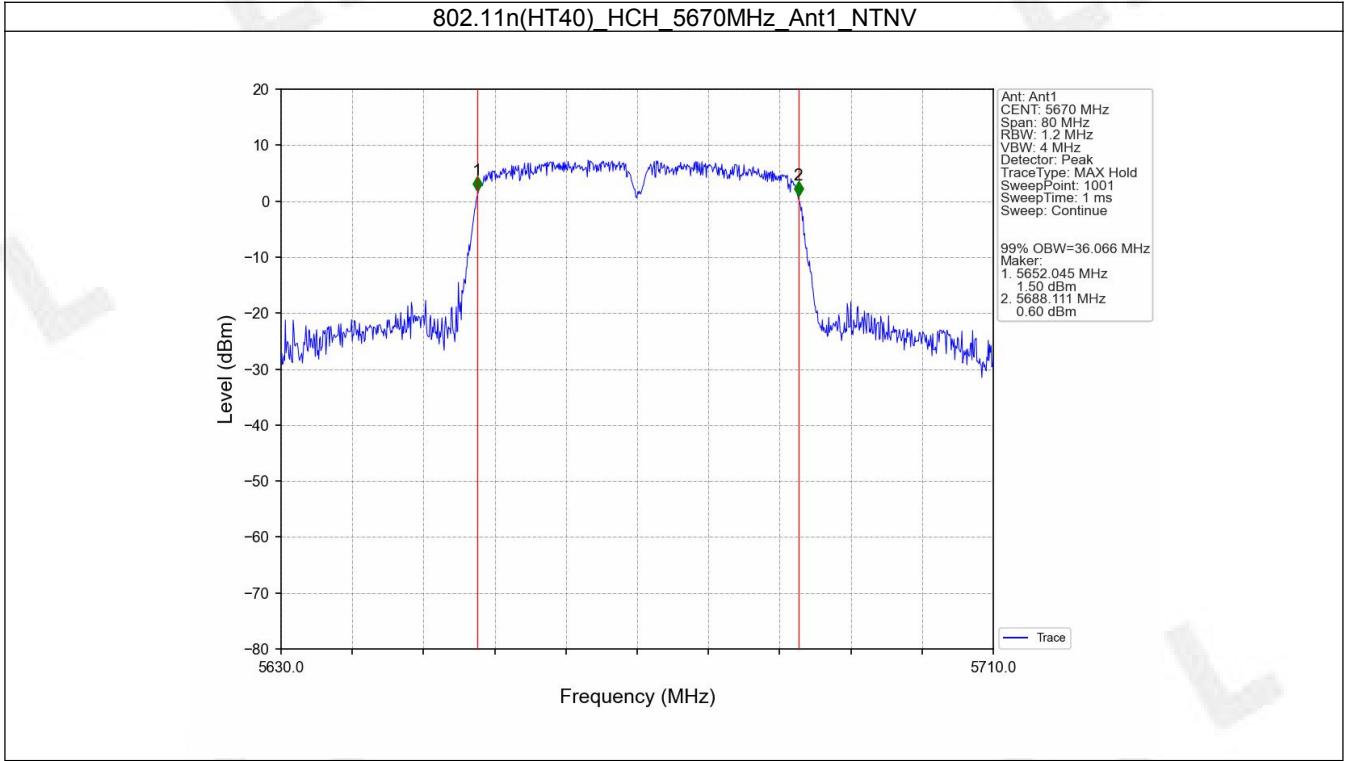
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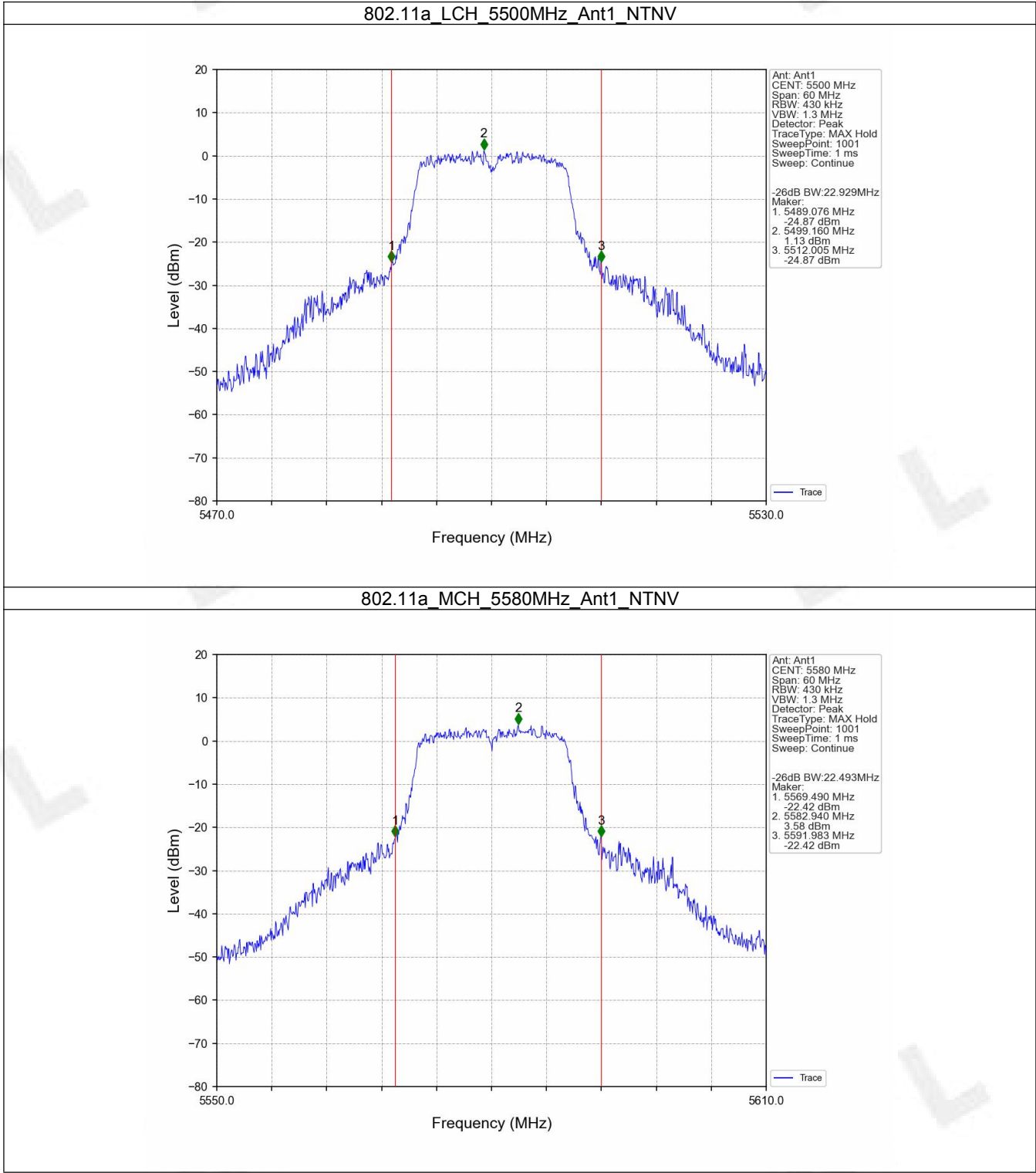


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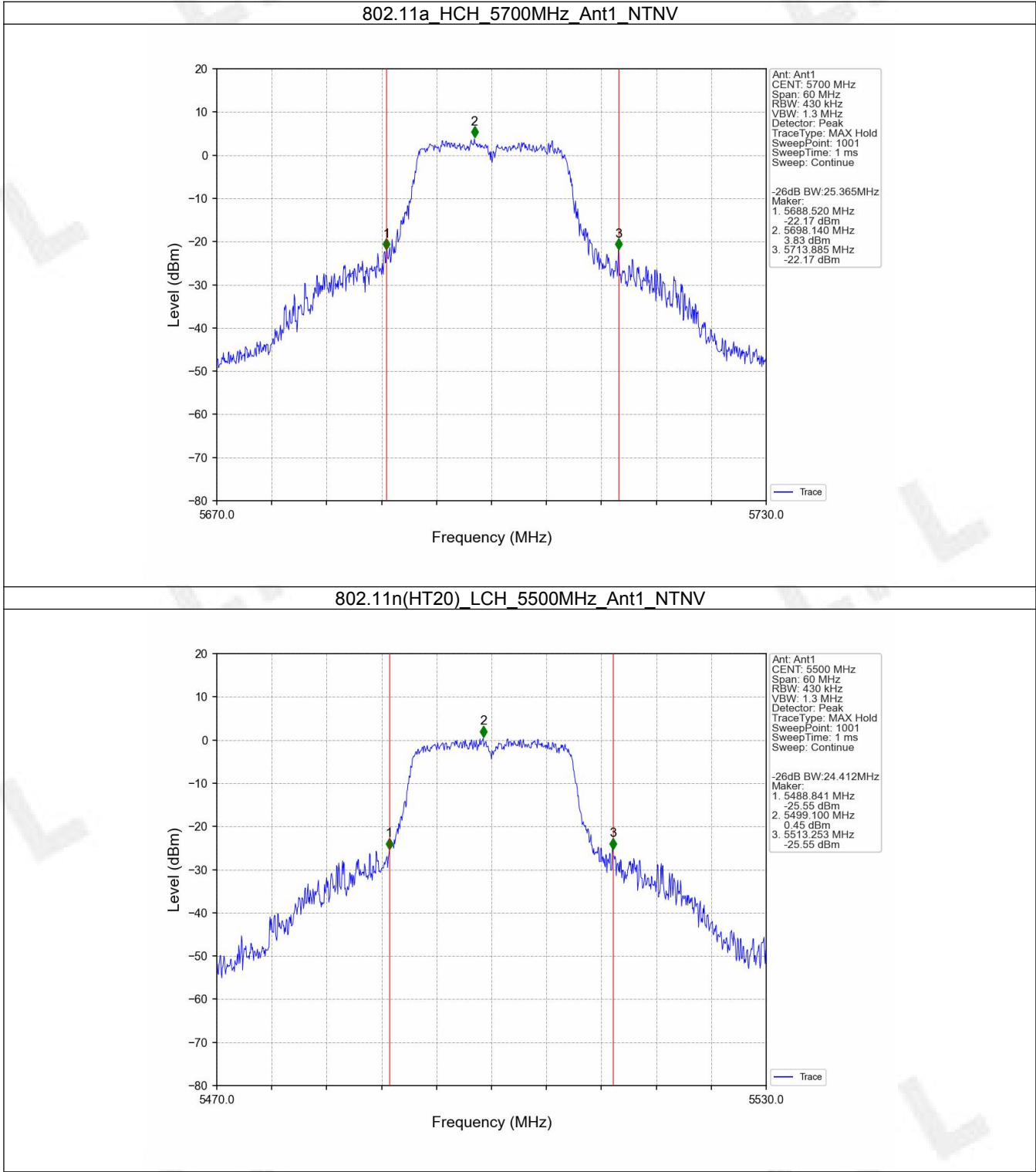


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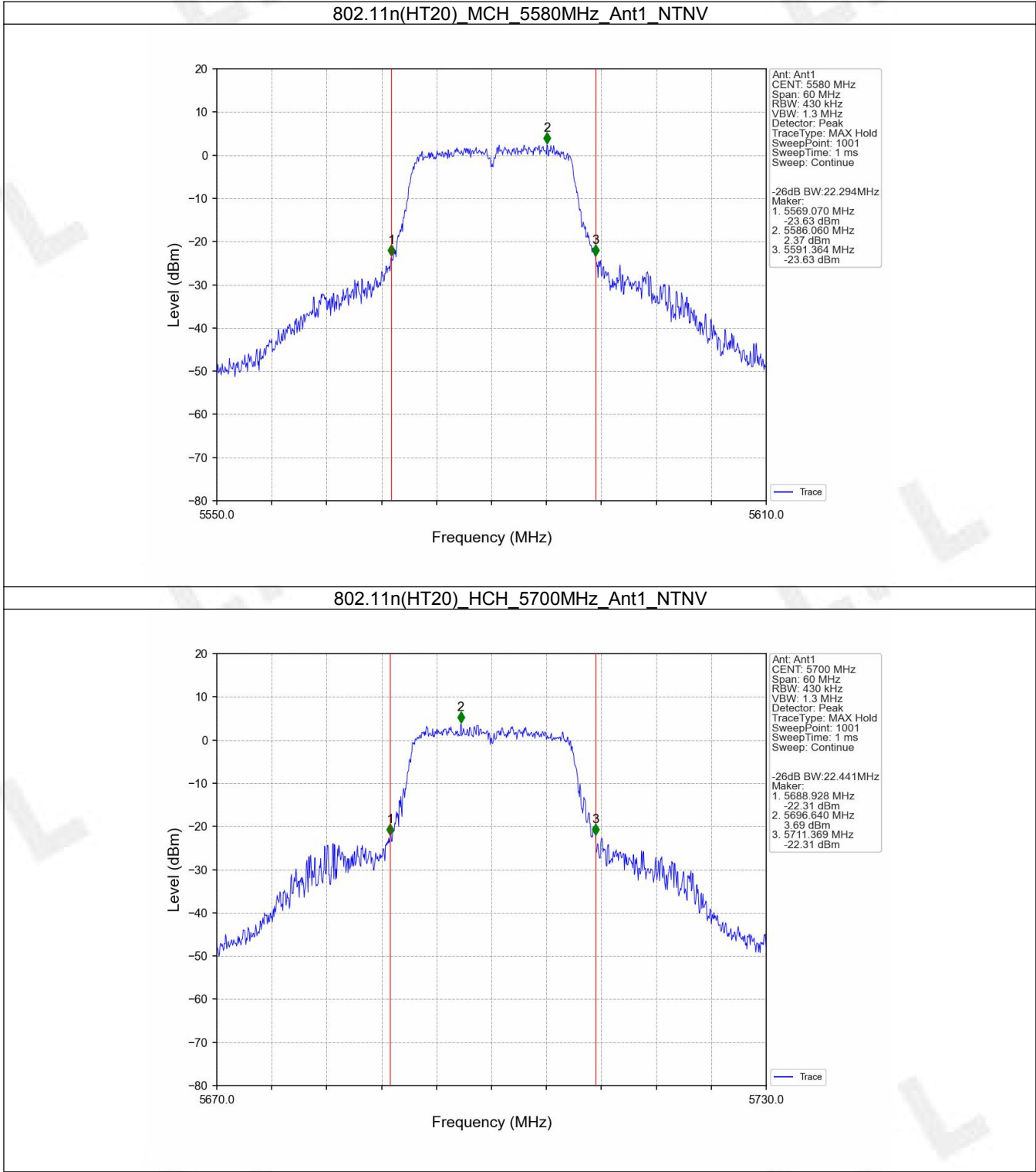
2.2.2 26dB BW



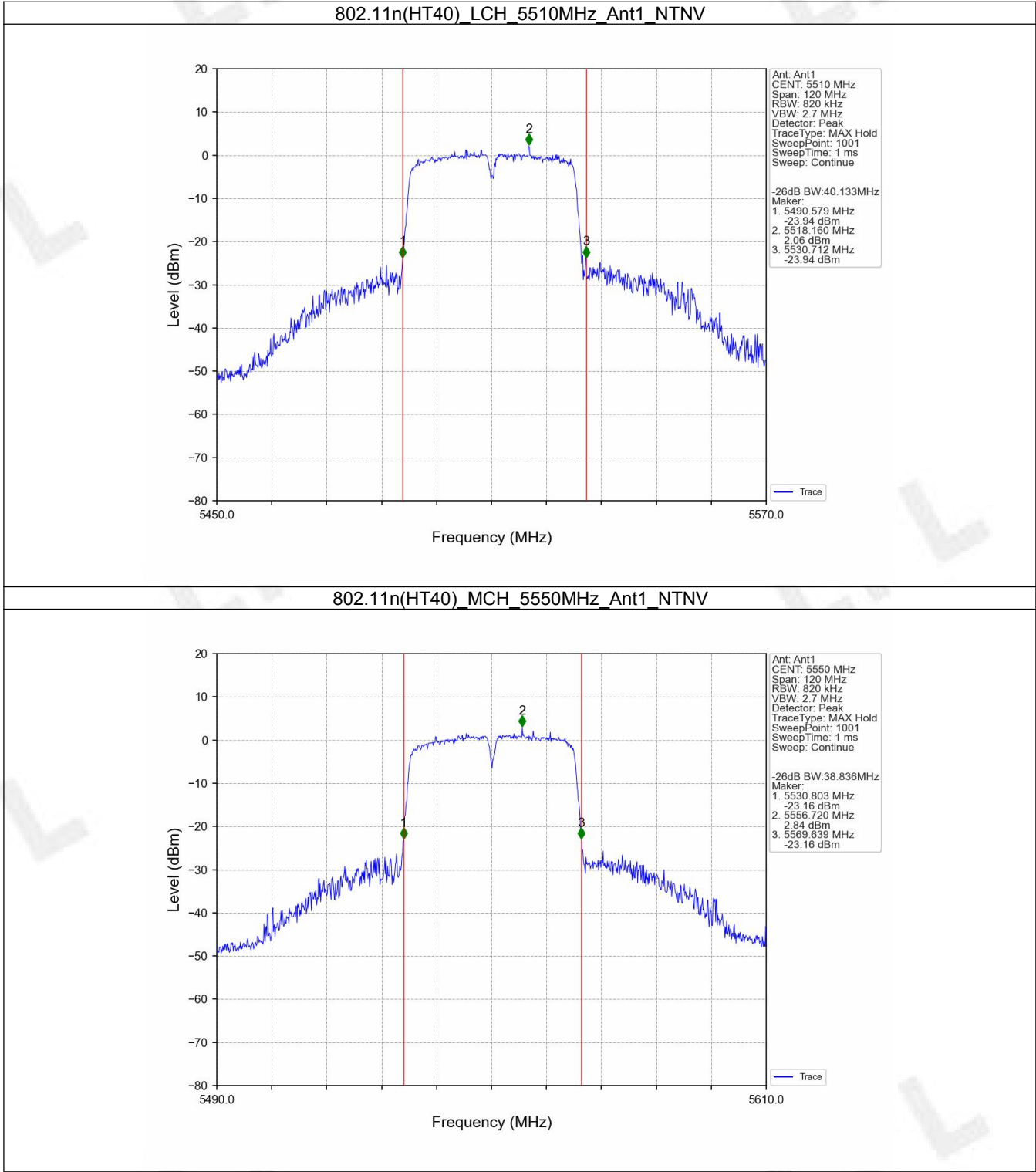
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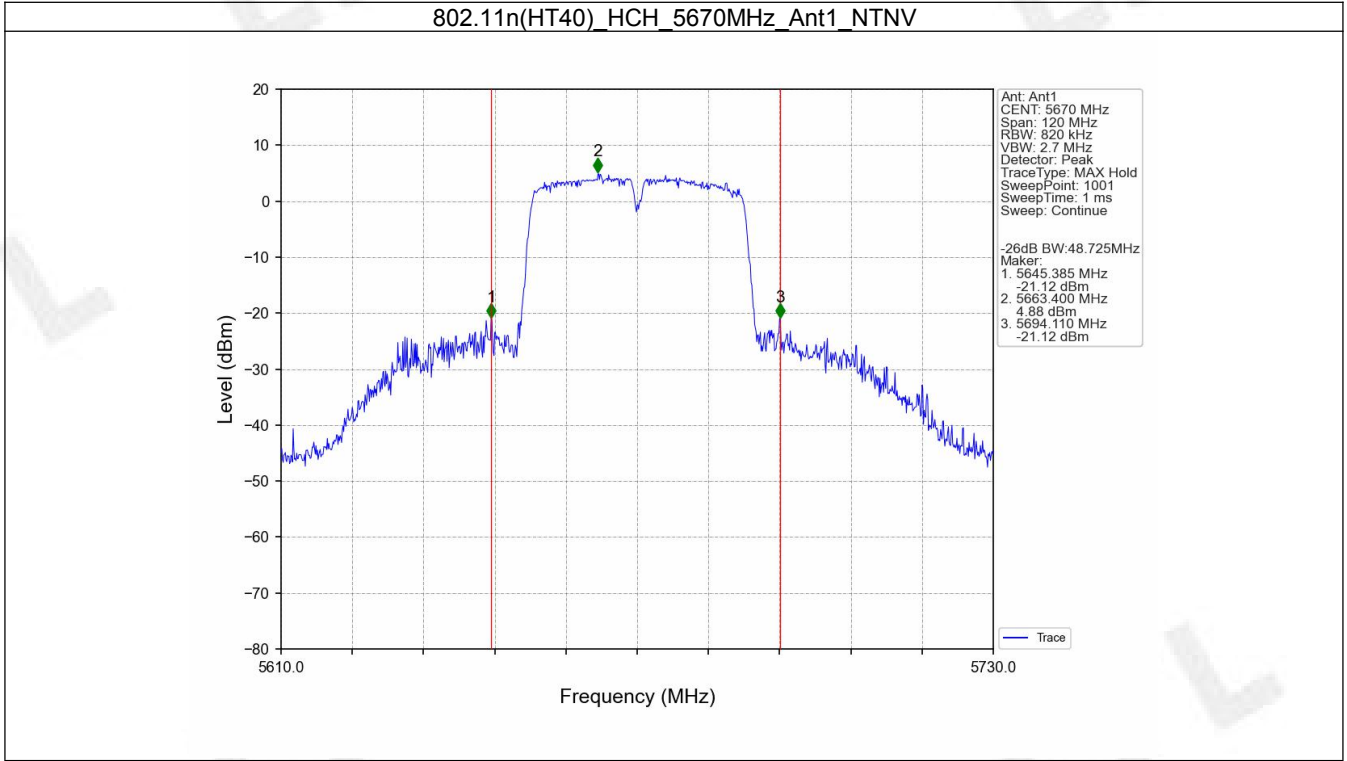
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3. Maximum Conducted Output Power**3.1 Test Result****3.1.1 Power**

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)			Verdict
			Duty Cycle Correction Factor (dB)	ANT1	Limit	
802.11a	SISO	5500	0.26	8.49	<=23.98	Pass
		5580	0.26	10.68	<=23.98	Pass
		5700	0.26	11.18	<=23.98	Pass
802.11n (HT20)	SISO	5500	0.28	8.30	<=23.98	Pass
		5580	0.28	10.24	<=23.98	Pass
		5700	0.28	11.00	<=23.98	Pass
802.11n (HT40)	SISO	5510	0.56	8.42	<=23.98	Pass
		5550	0.56	9.10	<=23.98	Pass
		5670	0.56	12.28	<=23.98	Pass
Note1: Antenna Gain: Ant1: 3.37dBi;						
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

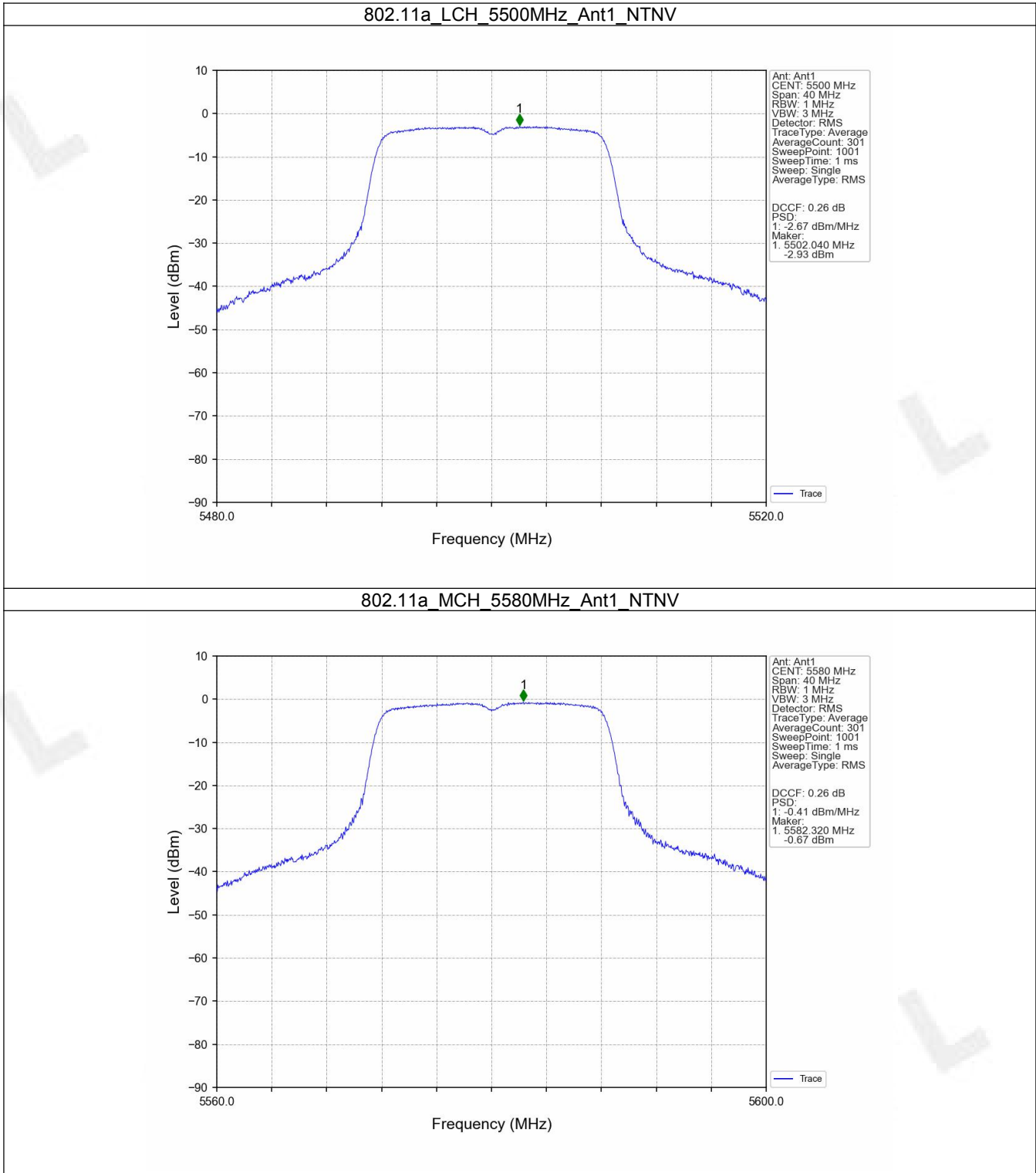
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5500	-2.67	<=11	Pass
		5580	-0.41	<=11	Pass
		5700	1.23	<=11	Pass
802.11n (HT20)	SISO	5500	-2.91	<=11	Pass
		5580	-1.10	<=11	Pass
		5700	-0.32	<=11	Pass
802.11n (HT40)	SISO	5510	-5.85	<=11	Pass
		5550	-4.87	<=11	Pass
		5670	-1.83	<=11	Pass

Note1: Antenna Gain: Ant1: 3.37dBi;

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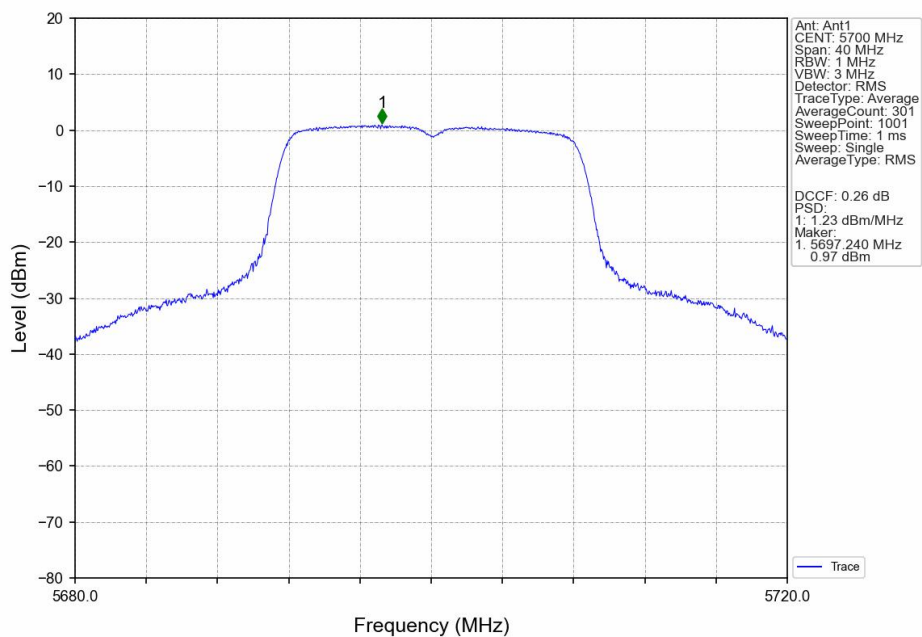
4.2 Test Graph

4.2.1 PSD

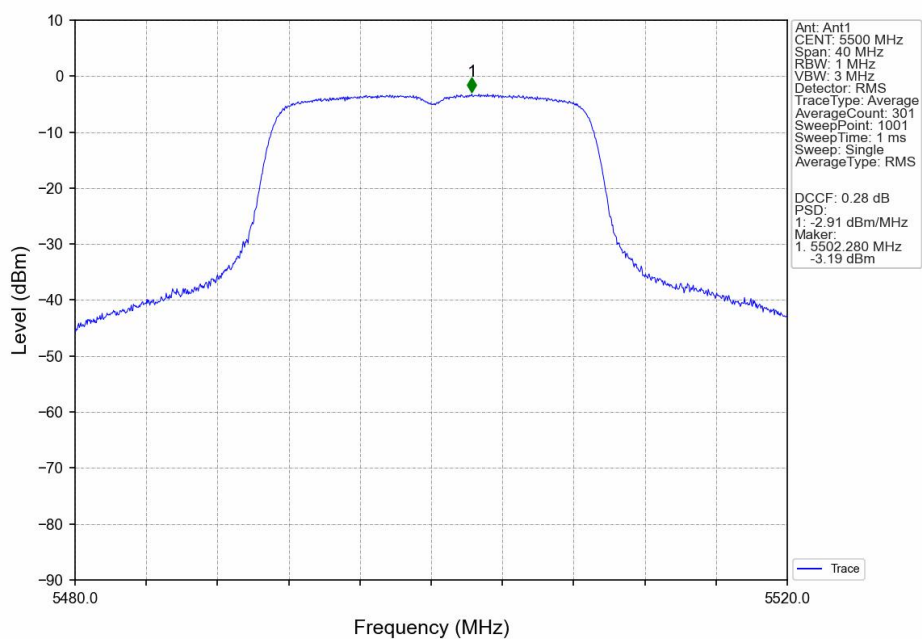


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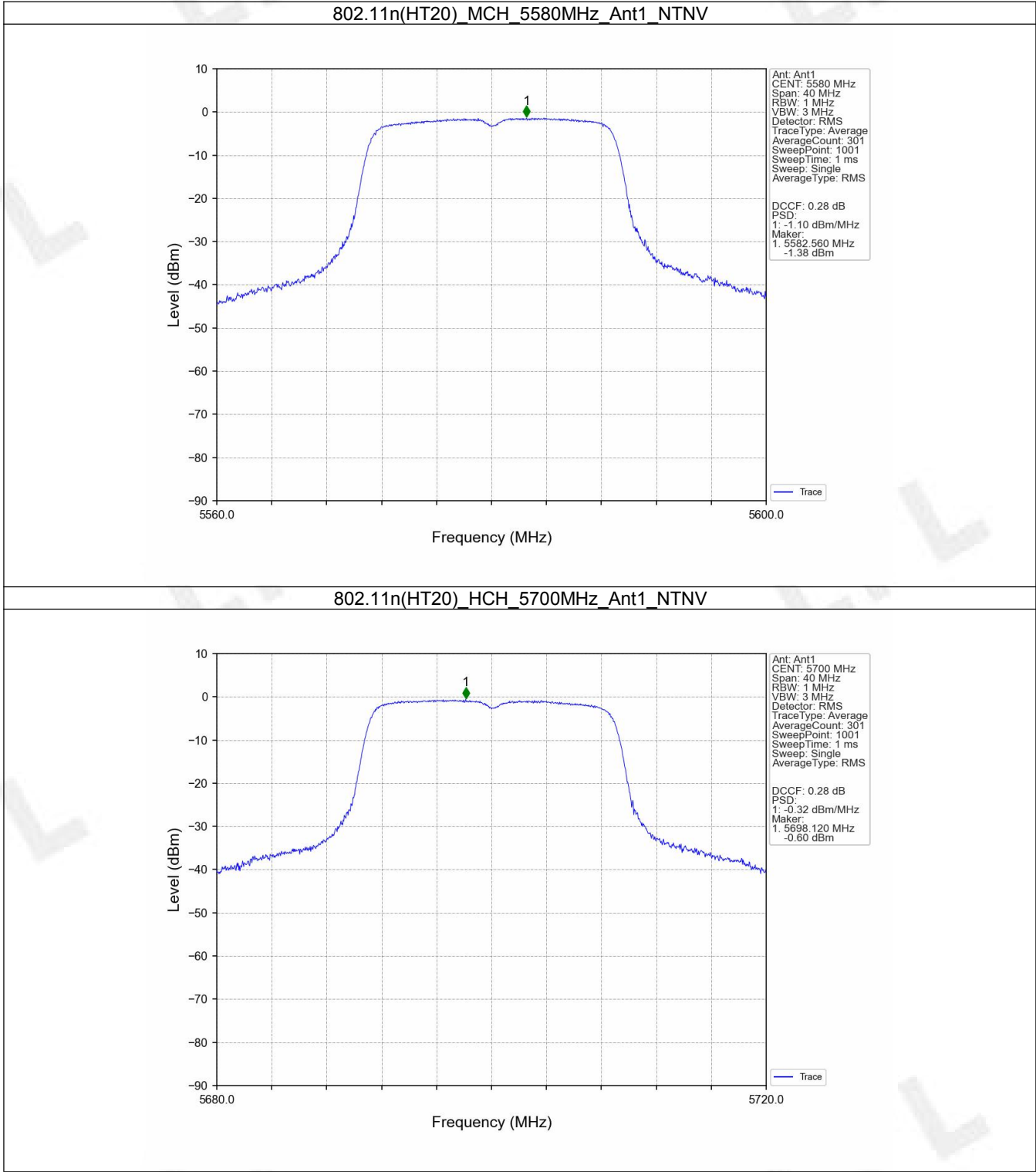
802.11a_HCH_5700MHz_Ant1_NTNV



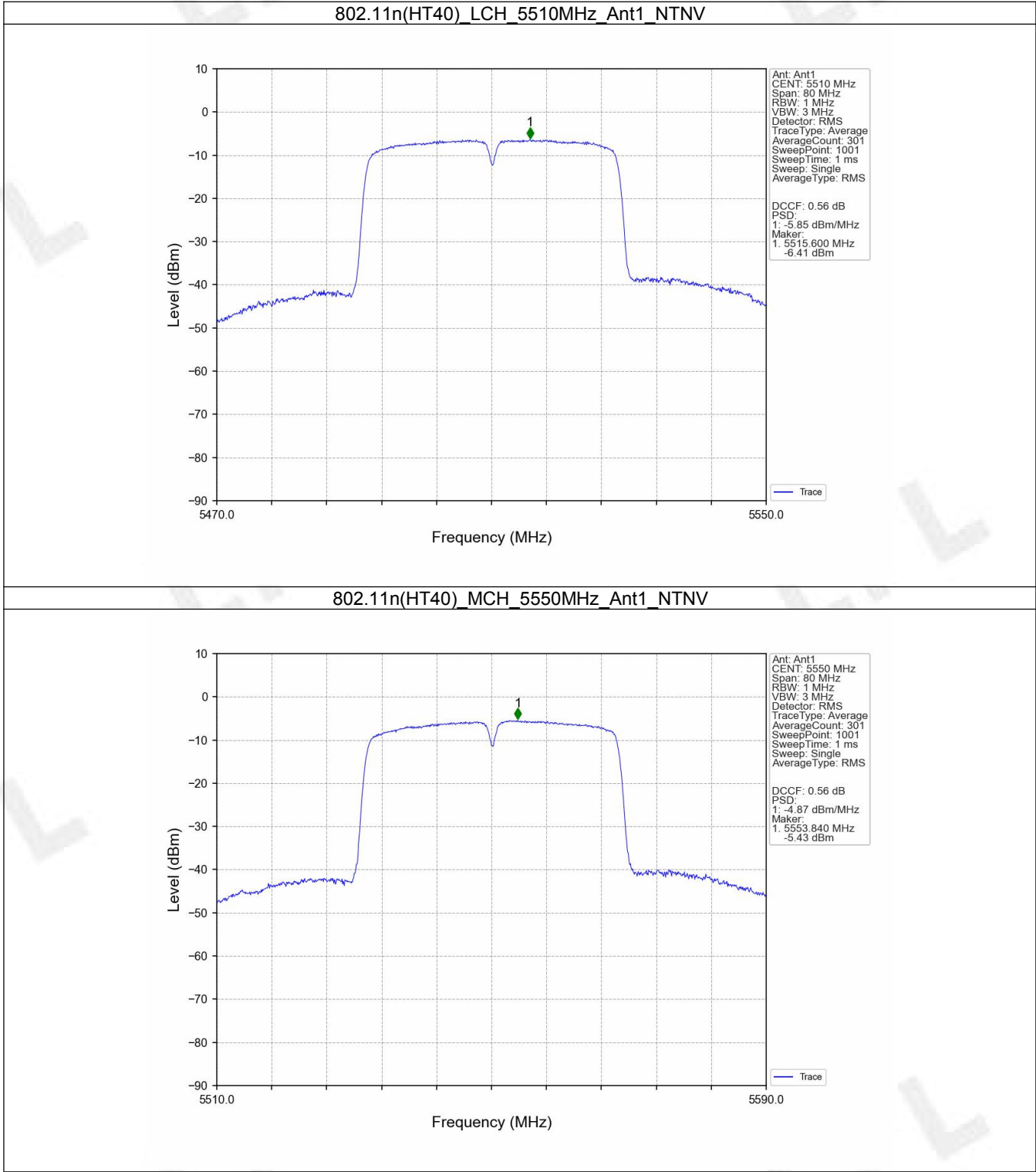
802.11n(HT20)_LCH_5500MHz_Ant1_NTNV



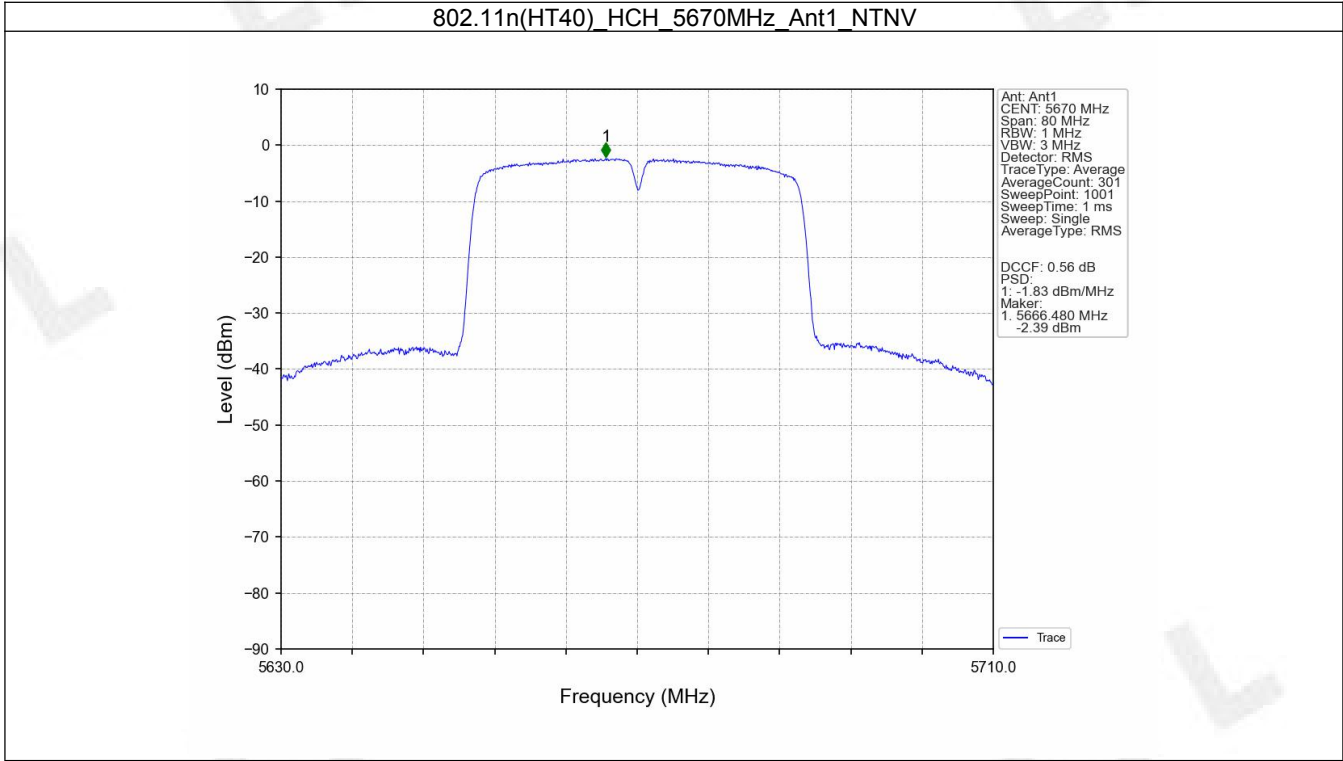
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5. Frequency Stability**5.1 Test Result****5.1.1 Ant1**

Ant1							
Mode	Tx Type	Frequency (MHz)	Temperature (°C)	Voltage (VDC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
Carrier Wave	SISO	5500	20	3.42	5500.015	5470 to 5725	Pass
				3.8	5500.012	5470 to 5725	Pass
				4.18	5500.011	5470 to 5725	Pass
			-30	3.8	5500.010	5470 to 5725	Pass
			-20	3.8	5500.009	5470 to 5725	Pass
			-10	3.8	5500.008	5470 to 5725	Pass
			0	3.8	5500.008	5470 to 5725	Pass
			10	3.8	5500.007	5470 to 5725	Pass
			30	3.8	5500.007	5470 to 5725	Pass
			40	3.8	5500.007	5470 to 5725	Pass
			50	3.8	5500.006	5470 to 5725	Pass
		5580	20	3.42	5580.010	5470 to 5725	Pass
				3.8	5580.010	5470 to 5725	Pass
				4.18	5580.010	5470 to 5725	Pass
			-30	3.8	5580.010	5470 to 5725	Pass
			-20	3.8	5580.010	5470 to 5725	Pass
			-10	3.8	5580.009	5470 to 5725	Pass
			0	3.8	5580.009	5470 to 5725	Pass
			10	3.8	5580.009	5470 to 5725	Pass
			30	3.8	5580.009	5470 to 5725	Pass
			40	3.8	5580.009	5470 to 5725	Pass
			50	3.8	5580.009	5470 to 5725	Pass
		5700	20	3.42	5700.012	5470 to 5725	Pass
				3.8	5700.011	5470 to 5725	Pass
				4.18	5700.010	5470 to 5725	Pass
			-30	3.8	5700.009	5470 to 5725	Pass
			-20	3.8	5700.009	5470 to 5725	Pass
			-10	3.8	5700.009	5470 to 5725	Pass
			0	3.8	5700.008	5470 to 5725	Pass
			10	3.8	5700.008	5470 to 5725	Pass
			30	3.8	5700.008	5470 to 5725	Pass
			40	3.8	5700.008	5470 to 5725	Pass
			50	3.8	5700.008	5470 to 5725	Pass
		5510	20	3.42	5510.011	5470 to 5725	Pass
				3.8	5510.010	5470 to 5725	Pass
				4.18	5510.009	5470 to 5725	Pass
			-30	3.8	5510.008	5470 to 5725	Pass
			-20	3.8	5510.007	5470 to 5725	Pass
			-10	3.8	5510.007	5470 to 5725	Pass
			0	3.8	5510.007	5470 to 5725	Pass
			10	3.8	5510.007	5470 to 5725	Pass
			30	3.8	5510.006	5470 to 5725	Pass
			40	3.8	5510.006	5470 to 5725	Pass
			50	3.8	5510.006	5470 to 5725	Pass
		5550	20	3.42	5550.012	5470 to 5725	Pass
				3.8	5550.011	5470 to 5725	Pass
				4.18	5550.010	5470 to 5725	Pass
			-30	3.8	5550.010	5470 to 5725	Pass
			-20	3.8	5550.010	5470 to 5725	Pass

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			-10	3.8	5550.010	5470 to 5725	Pass
			0	3.8	5550.010	5470 to 5725	Pass
			10	3.8	5550.010	5470 to 5725	Pass
			30	3.8	5550.010	5470 to 5725	Pass
			40	3.8	5550.010	5470 to 5725	Pass
			50	3.8	5550.009	5470 to 5725	Pass
		5670	20	Voltage (VDC)	5670.014	5470 to 5725	Pass
				3.42	5670.012	5470 to 5725	Pass
				3.8	5670.011	5470 to 5725	Pass
			-30	4.18	5670.011	5470 to 5725	Pass
			-20	3.8	5670.010	5470 to 5725	Pass
			-10	3.8	5670.010	5470 to 5725	Pass
			0	3.8	5670.010	5470 to 5725	Pass
			10	3.8	5670.009	5470 to 5725	Pass
			30	3.8	5670.009	5470 to 5725	Pass
			40	3.8	5670.009	5470 to 5725	Pass
			50	3.8	5670.009	5470 to 5725	Pass