



Annex for 5G Wi-Fi Band 1

Test Report No.: CTL2506042031-WF02

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FCCID: 2AYHD-SR01

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	1.399	1.458	95.95	0.18	0.03
		5200	1.399	1.457	96.02	0.18	0.03
		5240	1.399	1.457	96.02	0.18	0.03
802.11n (HT20)	SISO	5180	1.311	1.368	95.83	0.18	0.03
		5200	1.311	1.369	95.76	0.19	0.03
		5240	1.311	1.369	95.76	0.19	0.03
802.11n (HT40)	SISO	5190	0.636	0.696	91.38	0.39	0.03
		5230	0.638	0.696	91.67	0.38	0.00
802.11n (HT20)	MIMO	5180	1.311	1.369	95.76	0.19	0.03
		5200	1.311	1.369	95.76	0.19	0.03
		5240	1.311	1.369	95.76	0.19	0.03
802.11n (HT40)	MIMO	5190	0.650	0.708	91.81	0.37	0.03
		5230	0.650	0.708	91.81	0.37	0.03
802.11ac (VHT20)	SISO	5180	0.687	0.745	92.21	0.35	0.04
		5200	0.687	0.745	92.21	0.35	0.03
		5240	0.687	0.745	92.21	0.35	0.03
802.11ac (VHT40)	SISO	5190	0.355	0.412	86.17	0.65	0.00
		5230	0.354	0.412	85.92	0.66	0.00
802.11ac (VHT80)	SISO	5210	0.190	0.248	76.61	1.16	0.10
802.11ac (VHT20)	MIMO	5180	0.687	0.745	92.21	0.35	0.03
		5200	0.687	0.745	92.21	0.35	0.04
		5240	0.687	0.745	92.21	0.35	0.03
802.11ac (VHT40)	MIMO	5190	0.354	0.412	85.92	0.66	0.00
		5230	0.354	0.412	85.92	0.66	0.00
802.11ac (VHT80)	MIMO	5210	0.190	0.247	76.92	1.14	0.05

1.1.2 Ant2

Ant2							
Mode	Tx Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	1.399	1.458	95.95	0.18	0.03
		5200	1.399	1.457	96.02	0.18	0.03
		5240	1.399	1.457	96.02	0.18	0.03
802.11n (HT20)	SISO	5180	1.311	1.368	95.83	0.18	0.03
		5200	1.310	1.368	95.76	0.19	0.03
		5240	1.311	1.369	95.76	0.19	0.03
802.11n (HT40)	SISO	5190	0.650	0.708	91.81	0.37	0.03
		5230	0.650	0.708	91.81	0.37	0.04
802.11ac (VHT20)	SISO	5180	0.687	0.745	92.21	0.35	0.03
		5200	0.687	0.745	92.21	0.35	0.04
		5240	0.687	0.745	92.21	0.35	0.04
802.11ac (VHT40)	SISO	5190	0.355	0.412	86.17	0.65	0.00
		5230	0.355	0.412	86.17	0.65	0.00

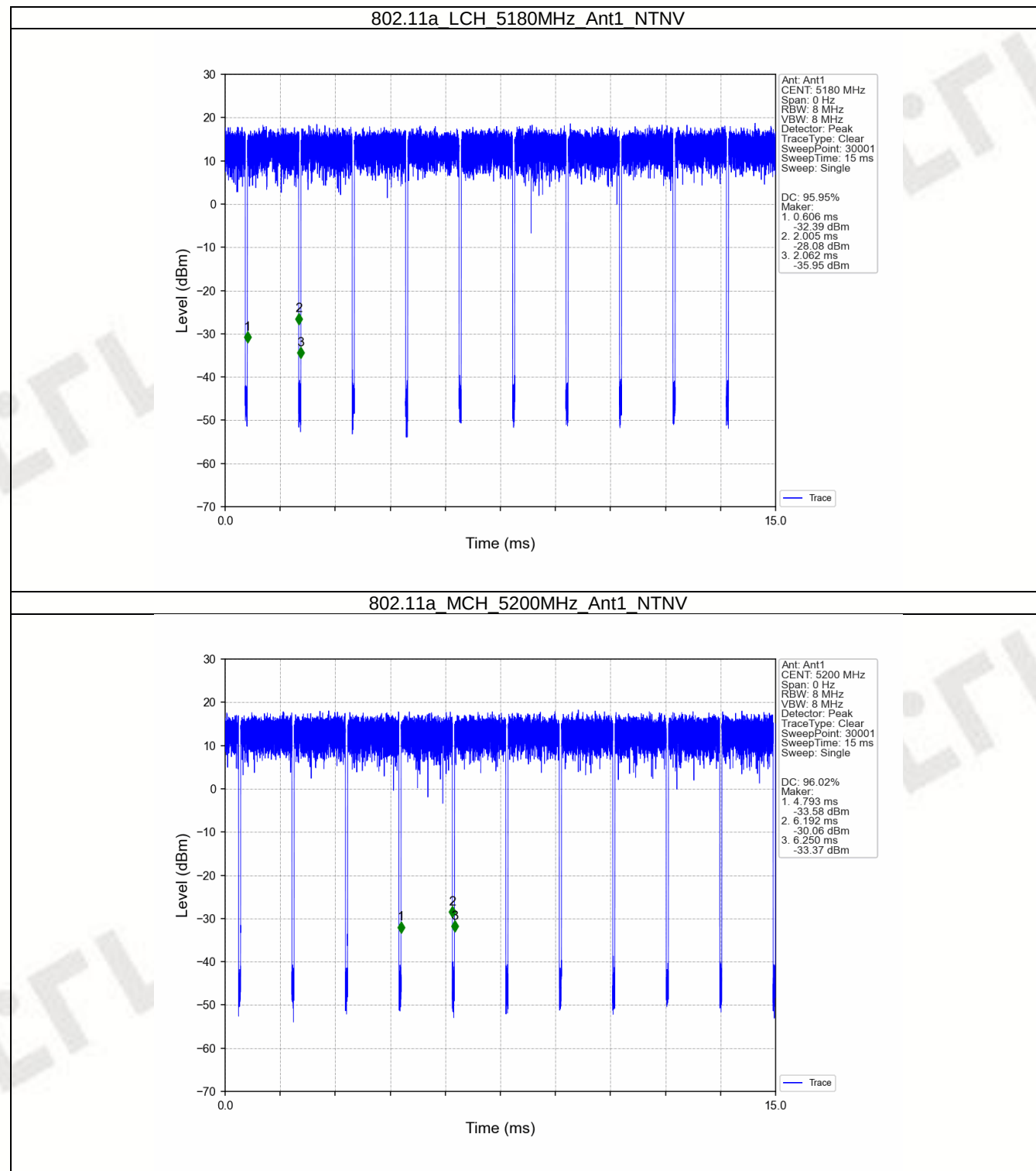
FCCID: 2AYHD-SR01

802.11ac (VHT80)	SISO	5210	0.189	0.247	76.52	1.16	0.09
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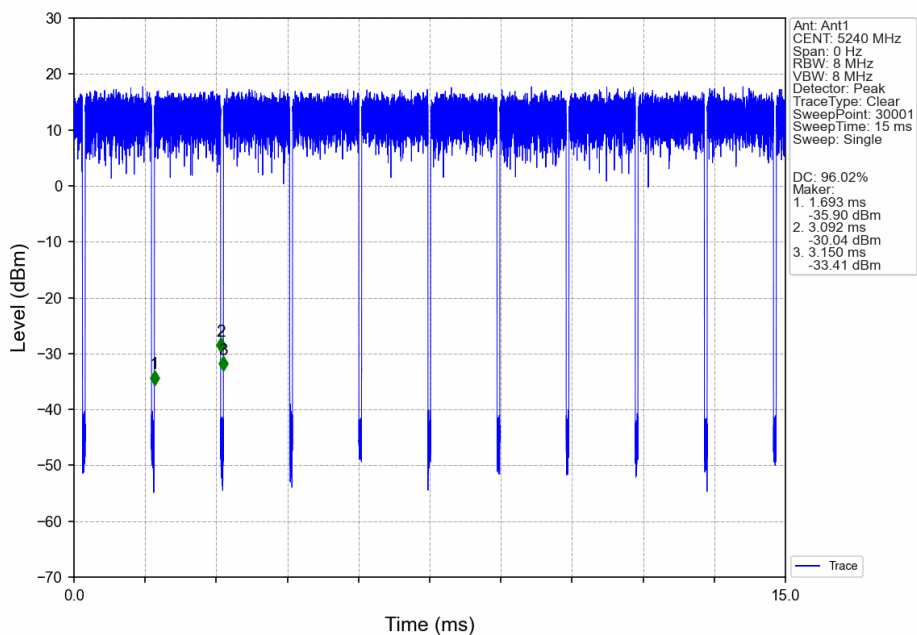
1.2 Test Graph

1.2.1 Ant1

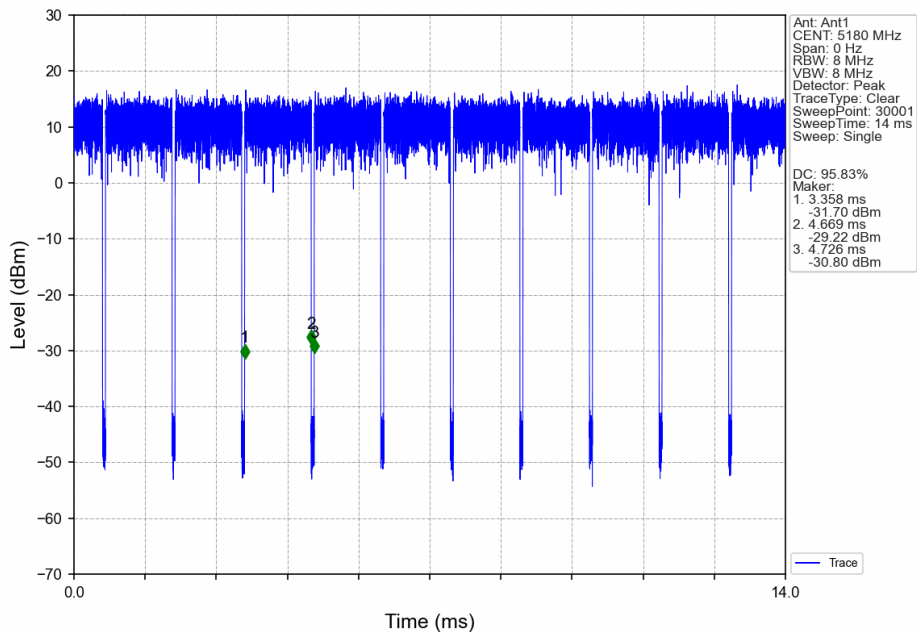


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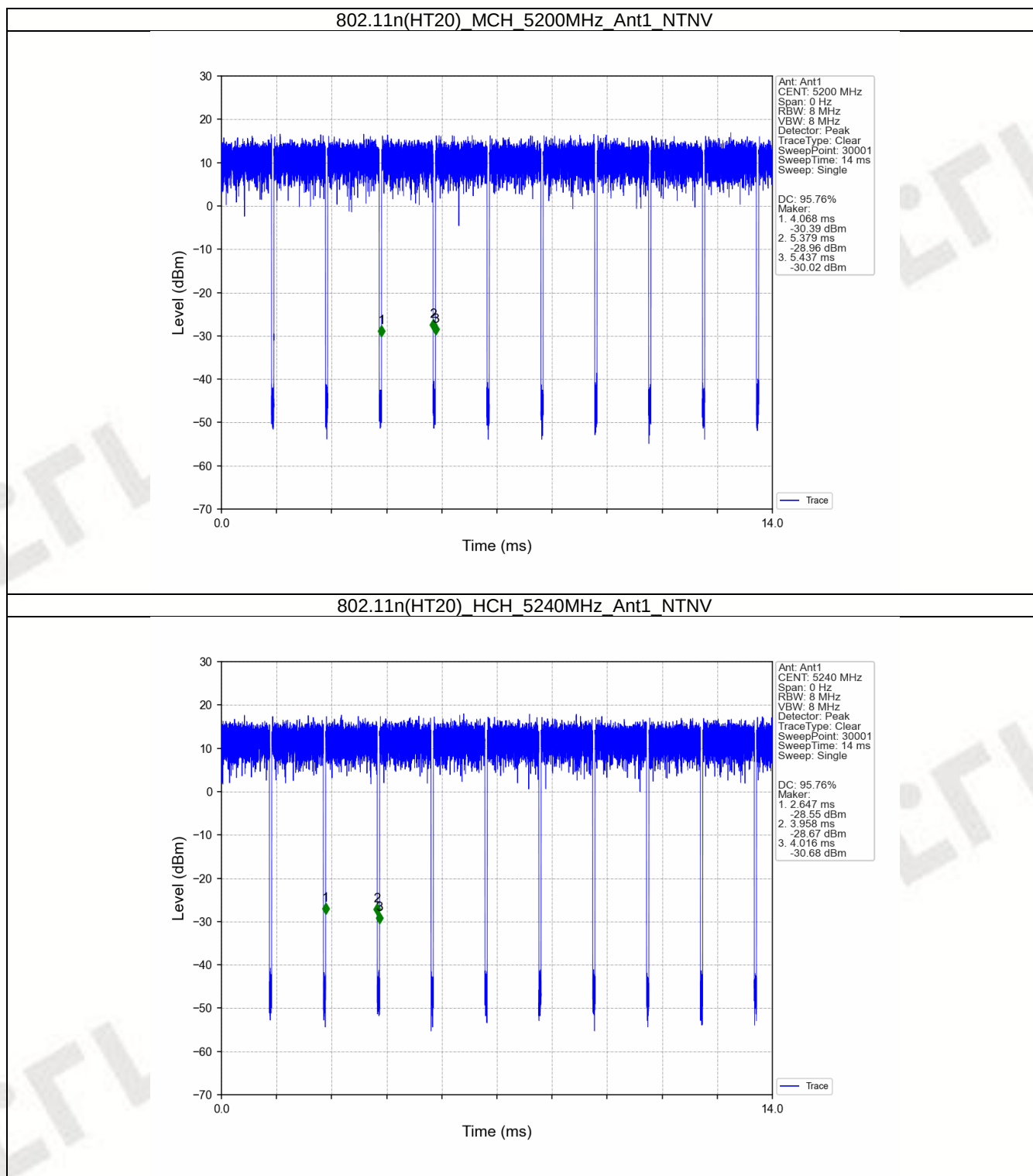
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802.11n(HT20)_LCH_5180MHz_Ant1_NTNV

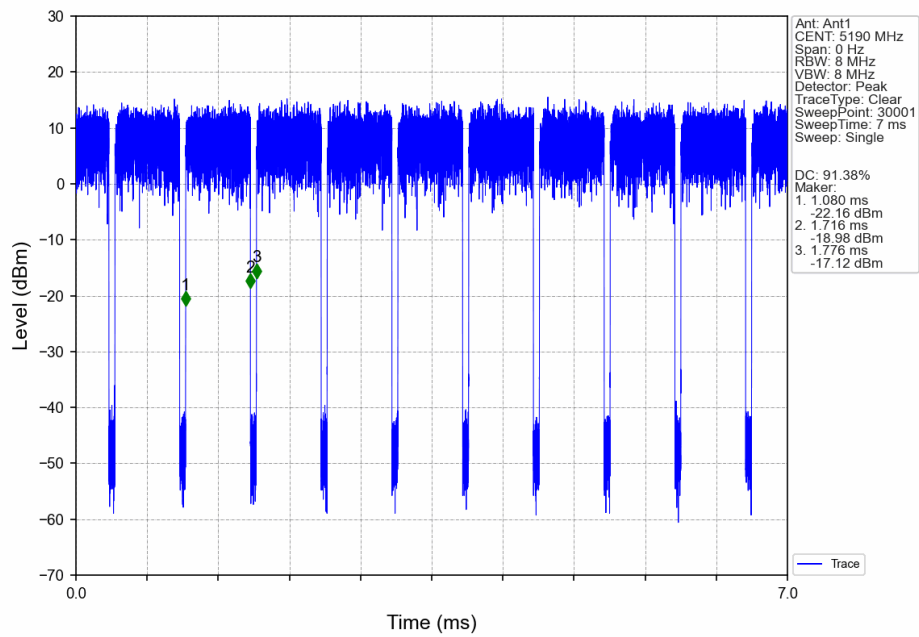


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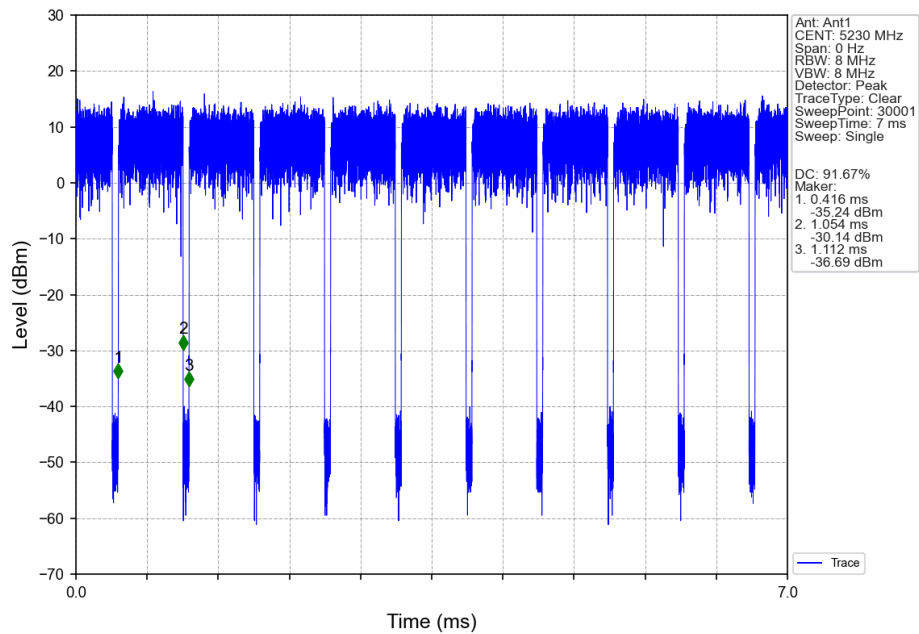


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802.11n(HT40)_LCH_5190MHz_Ant1_NTNV

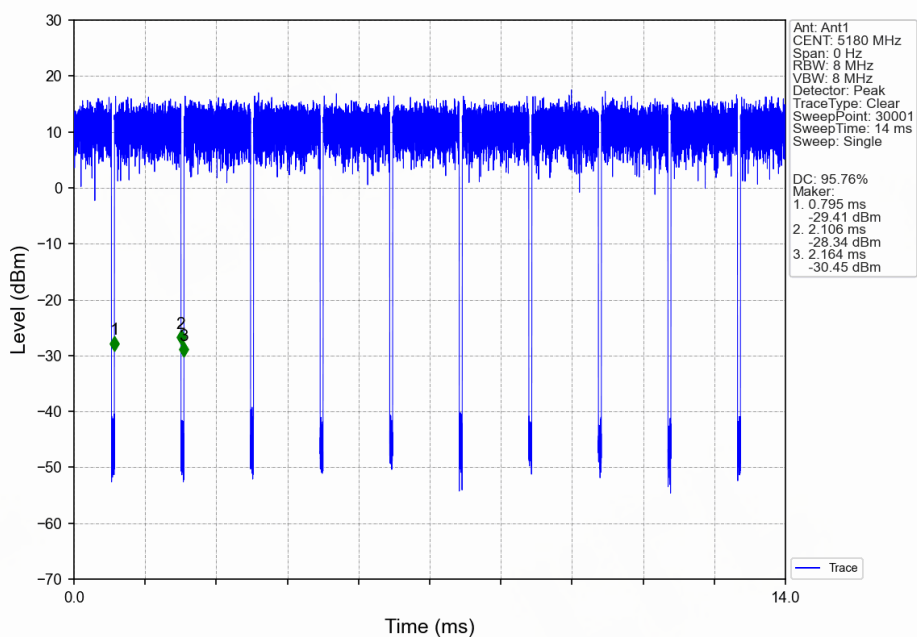


802.11n(HT40)_HCH_5230MHz_Ant1_NTNV

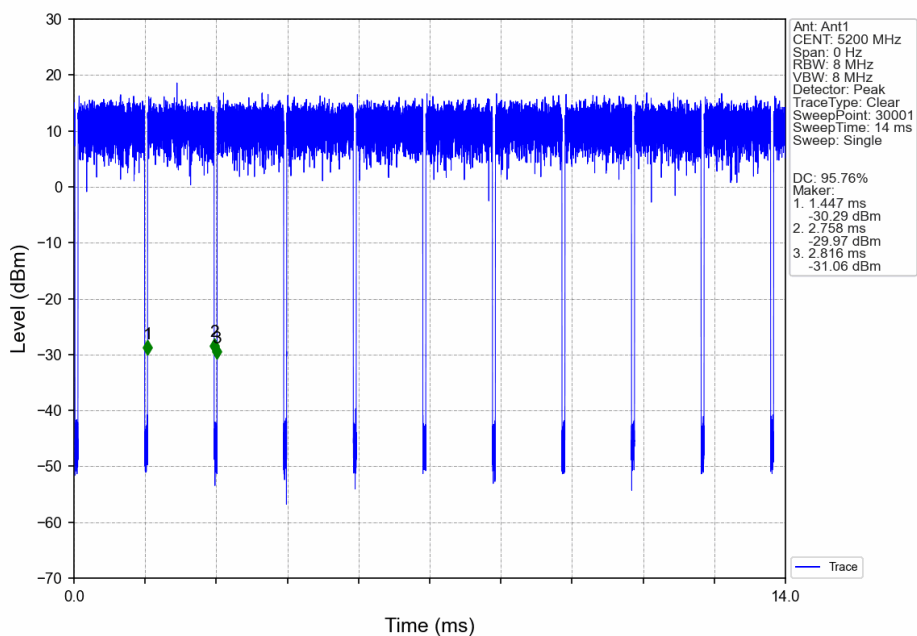


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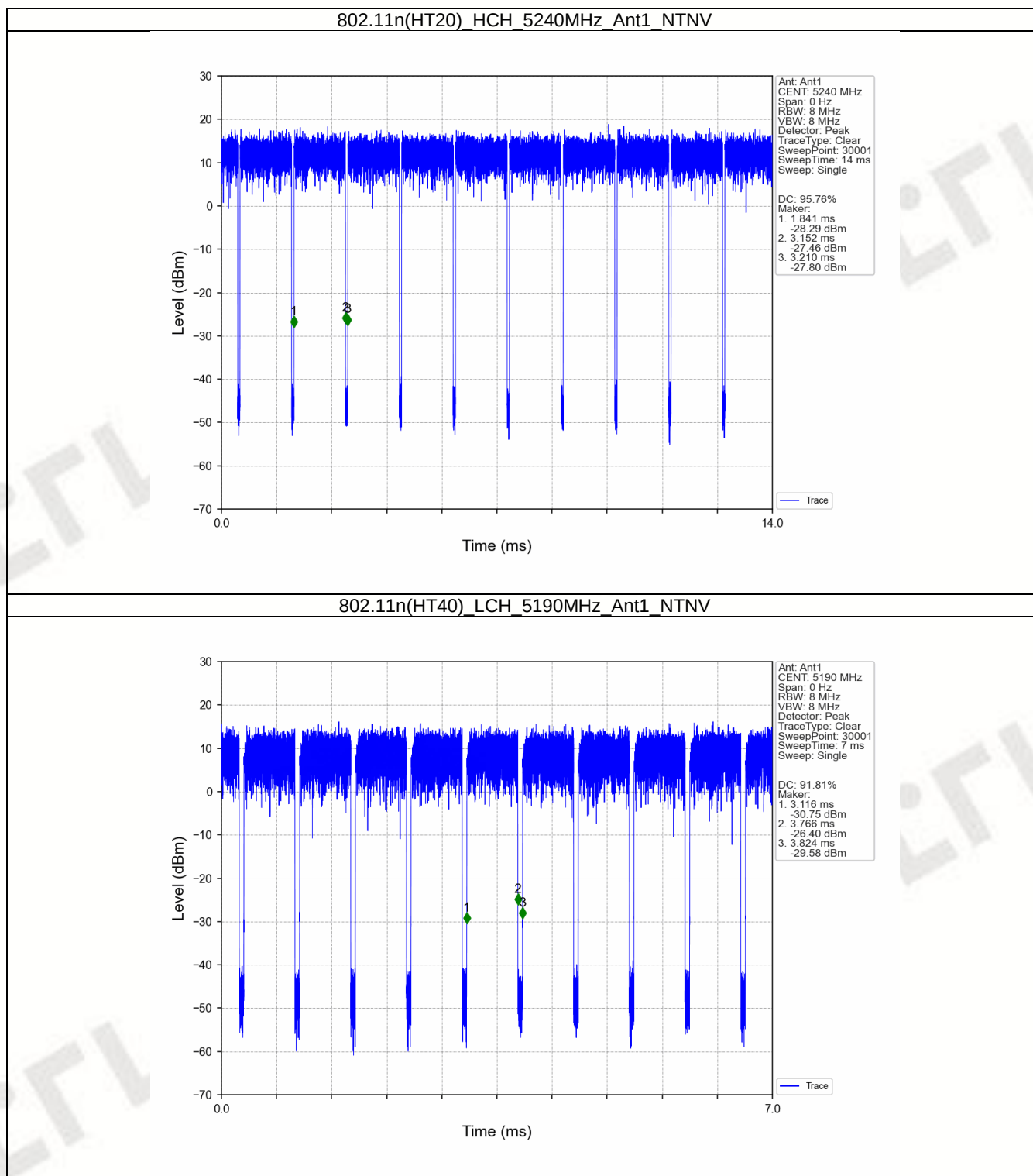
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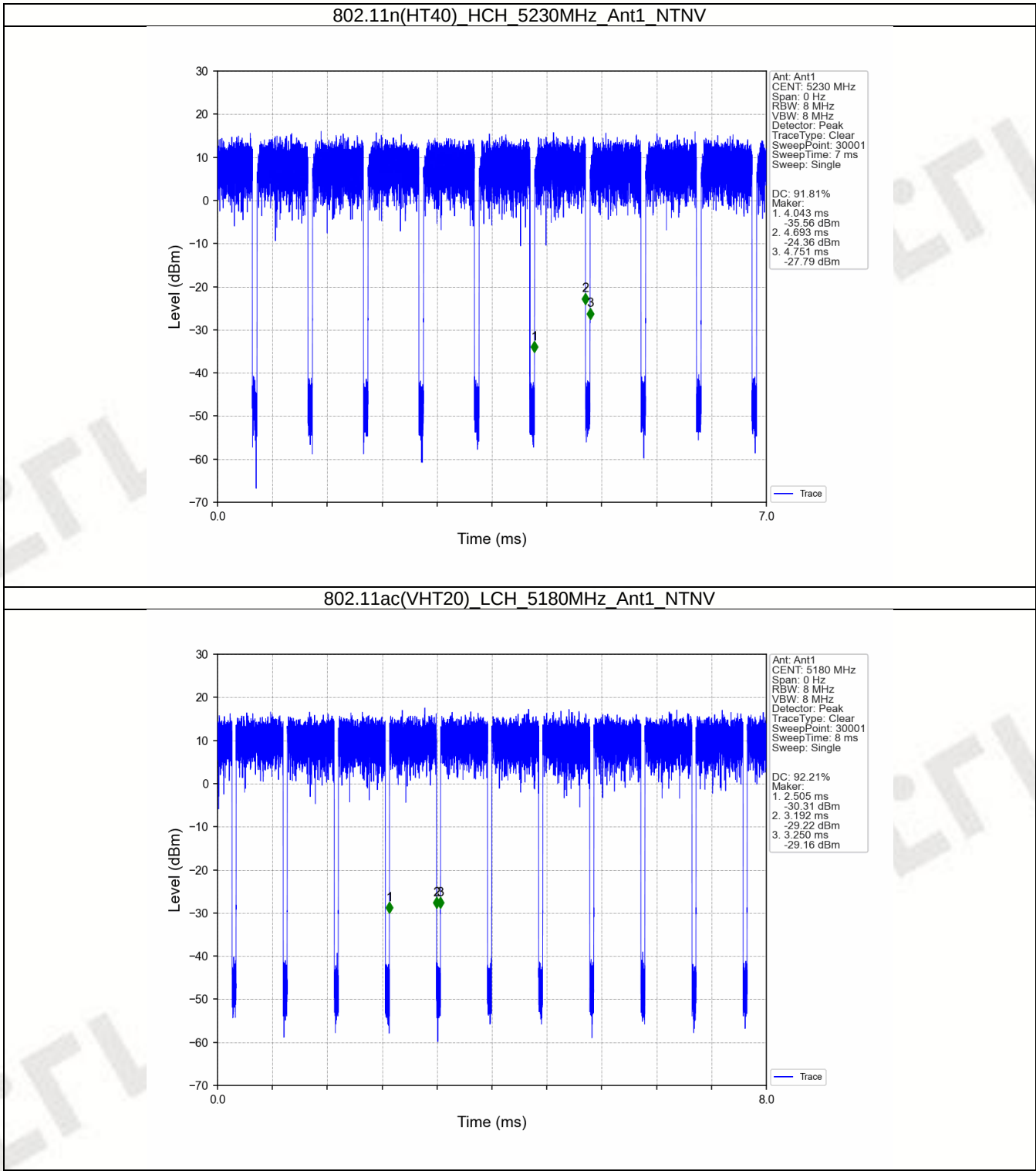
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



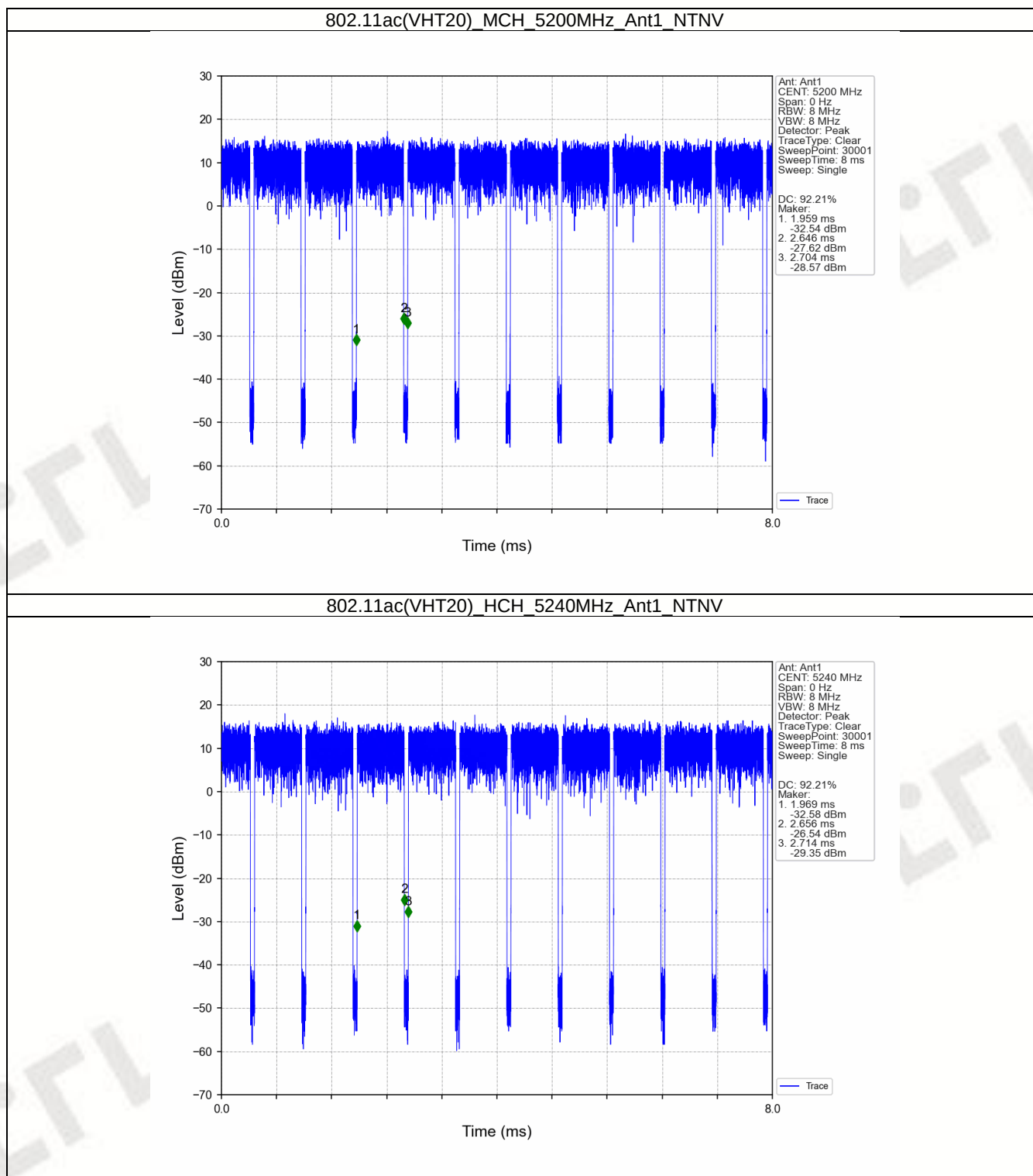
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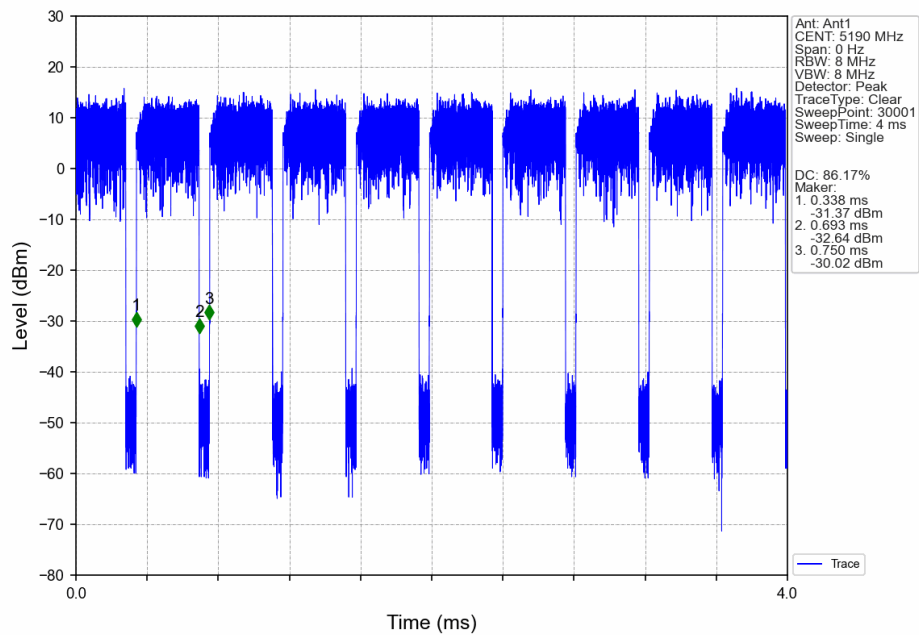


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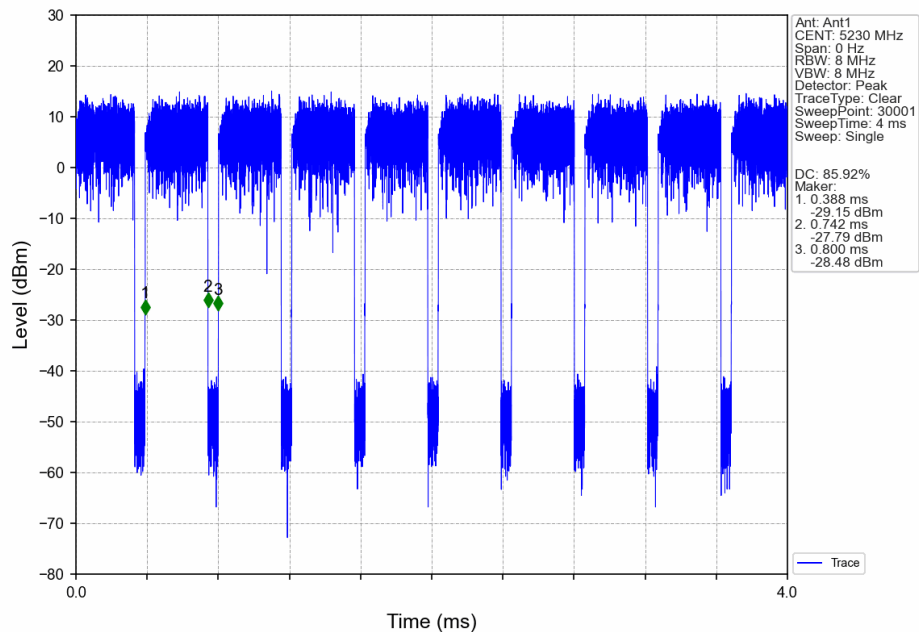


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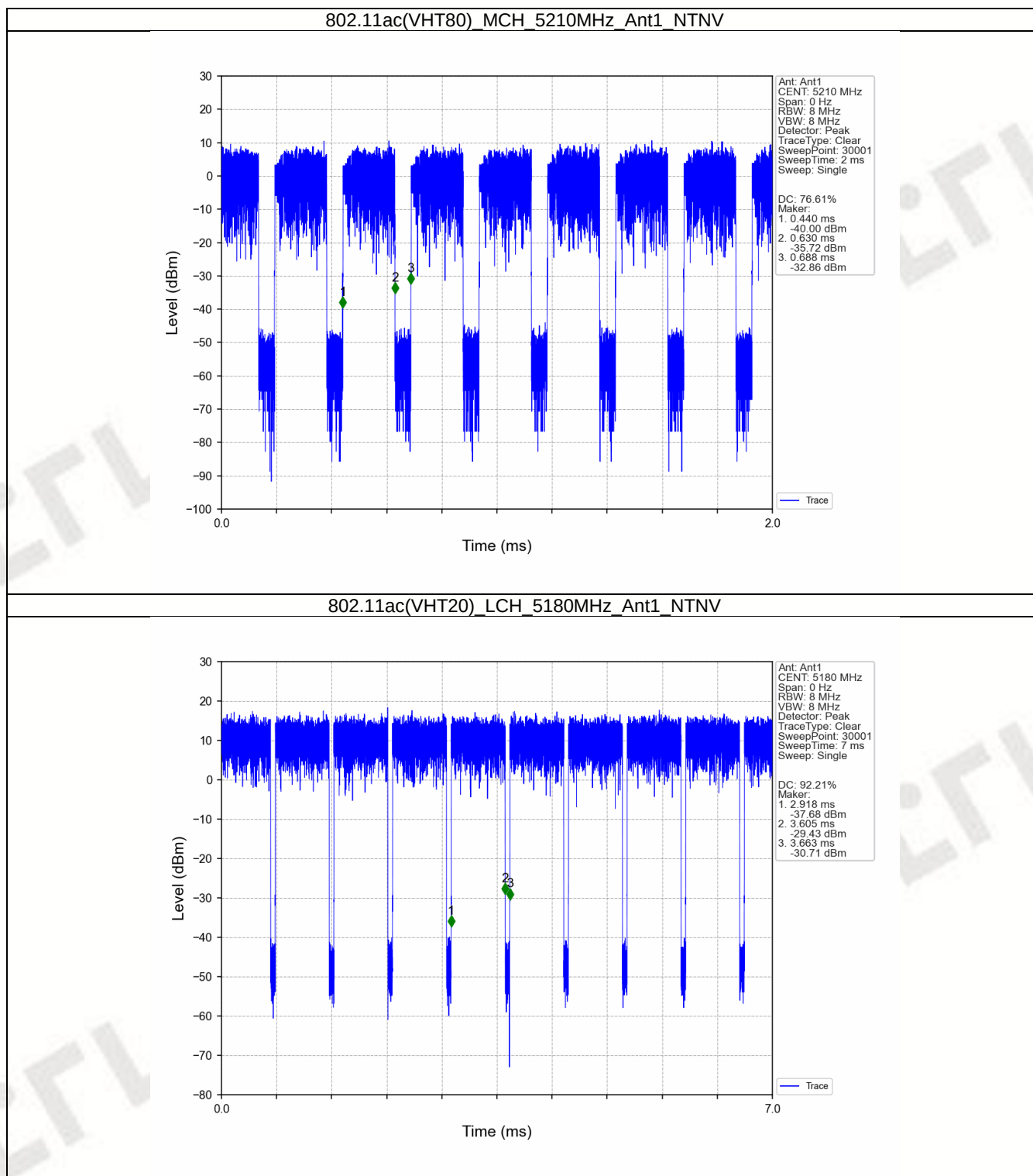
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



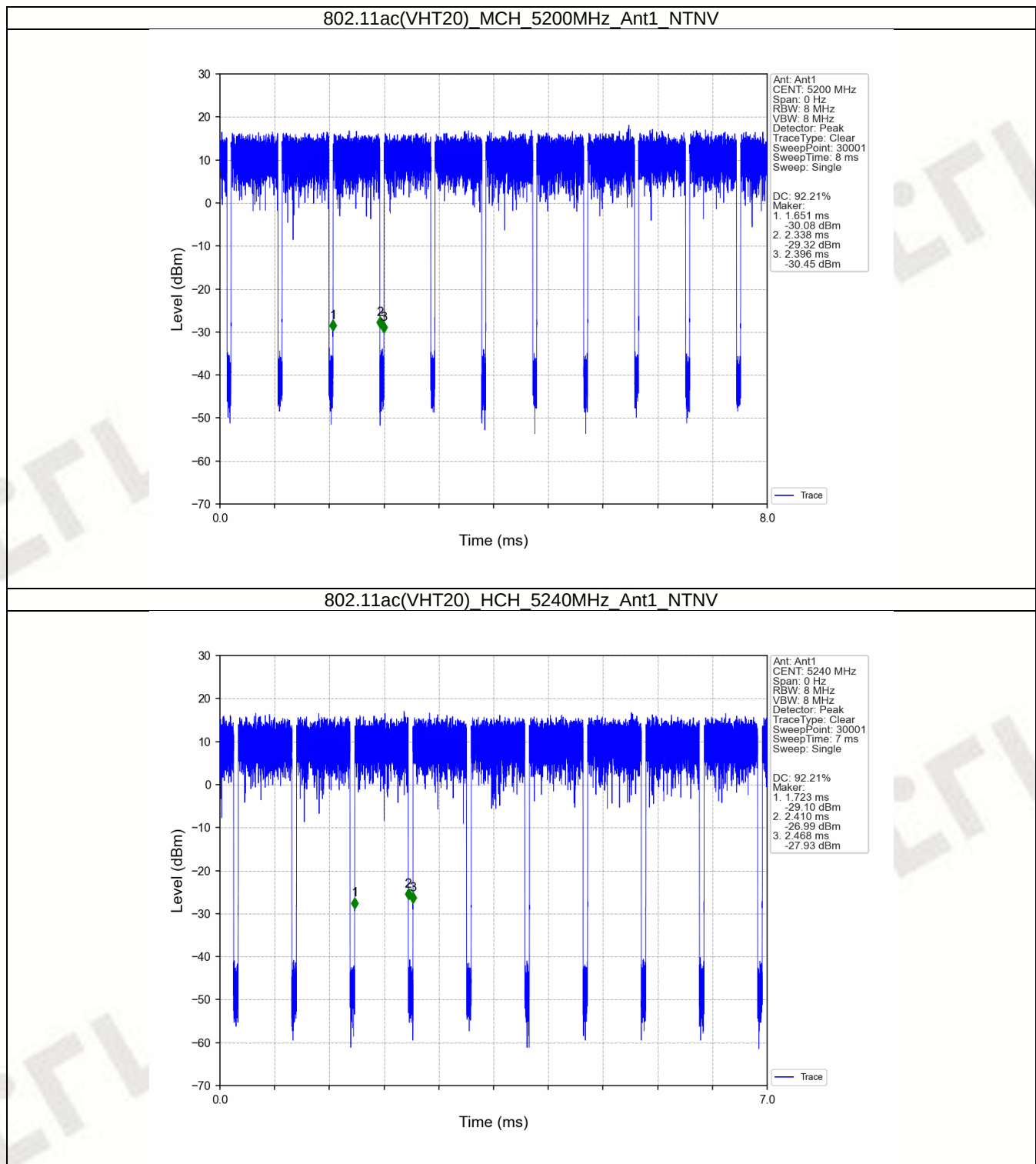
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



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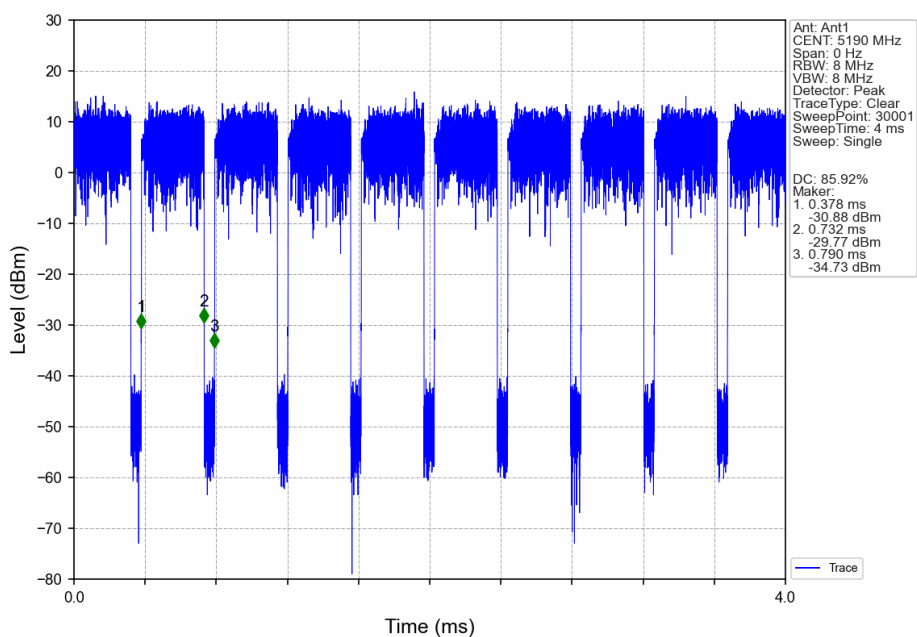


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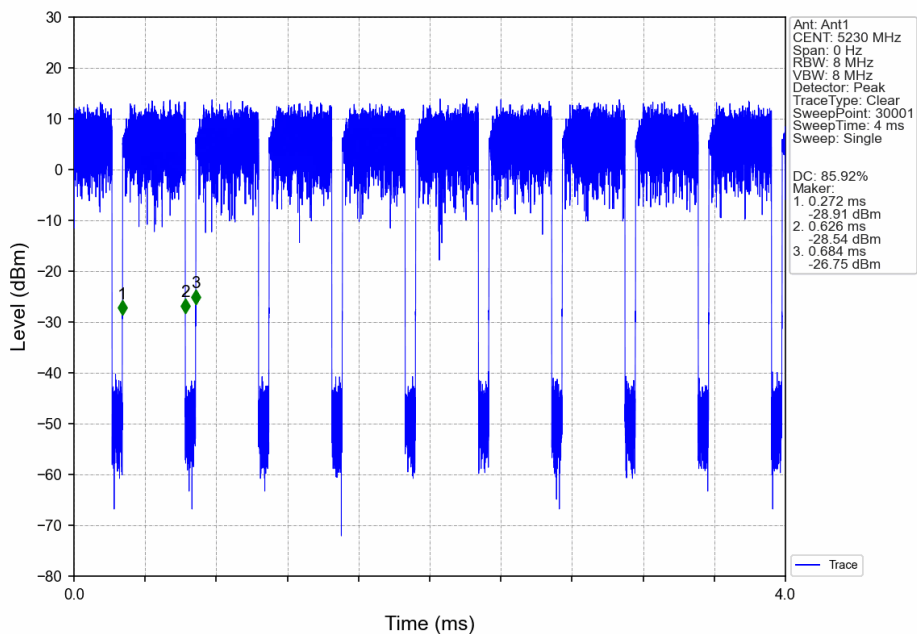


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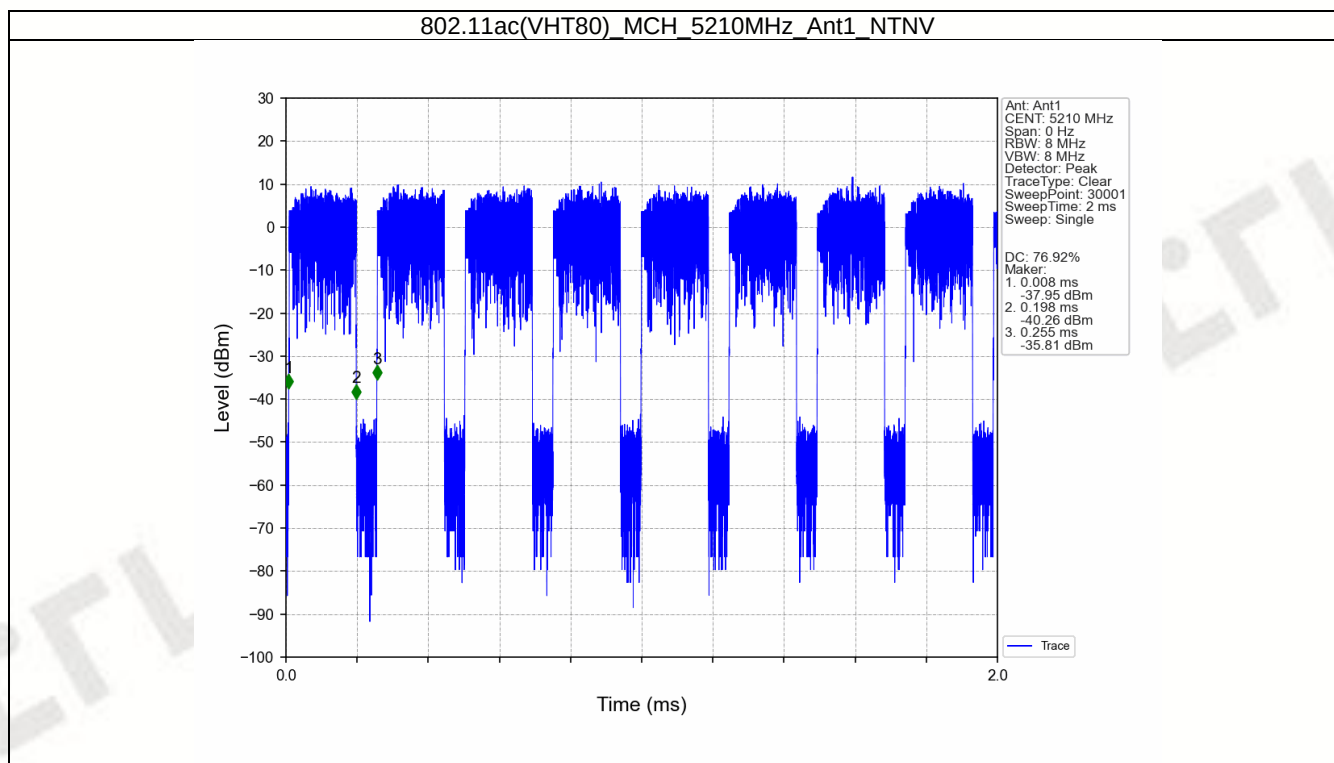
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



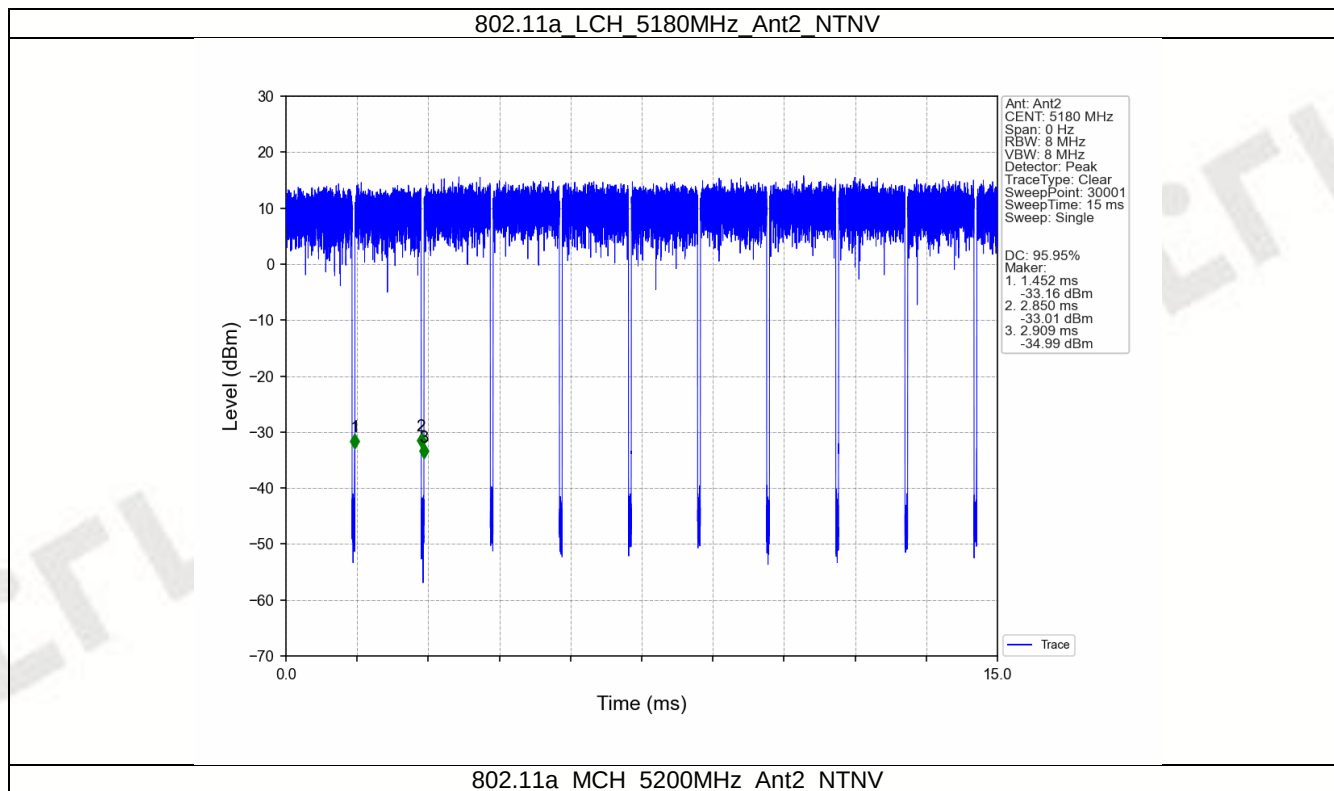
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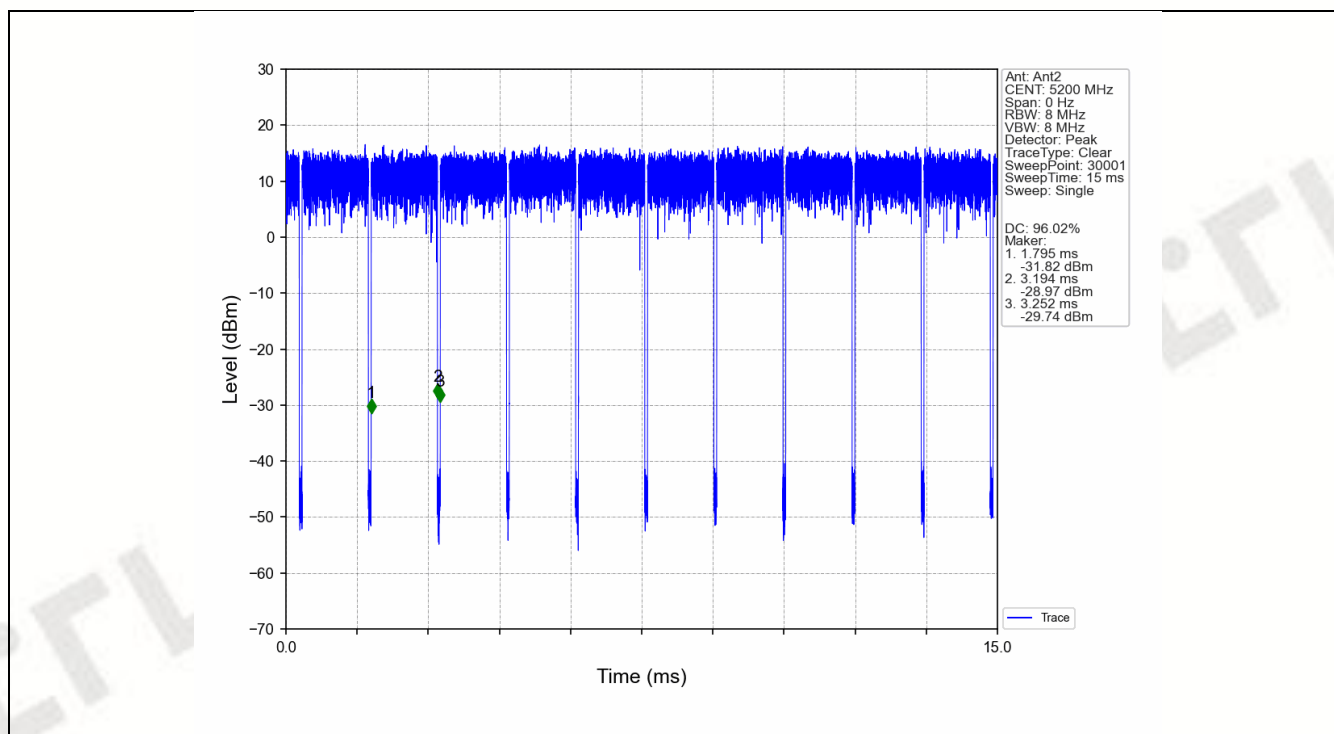
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1.2.2 Ant2

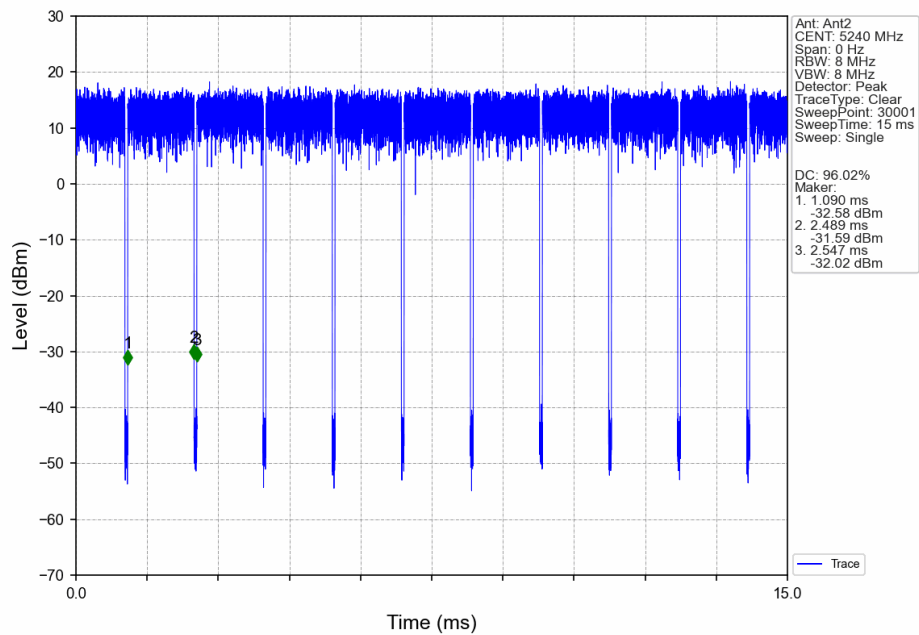


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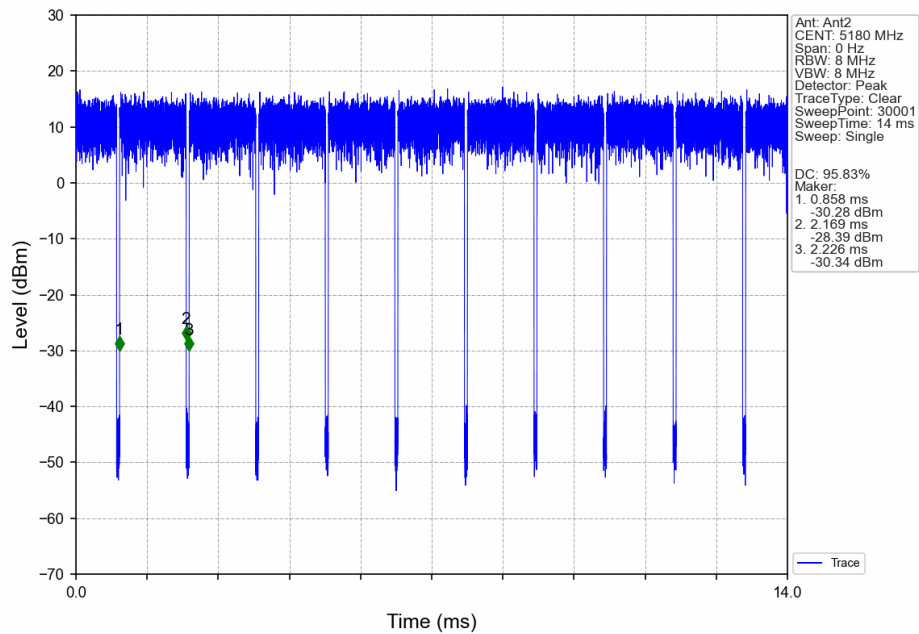


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802.11a_HCH_5240MHz_Ant2_NTNV

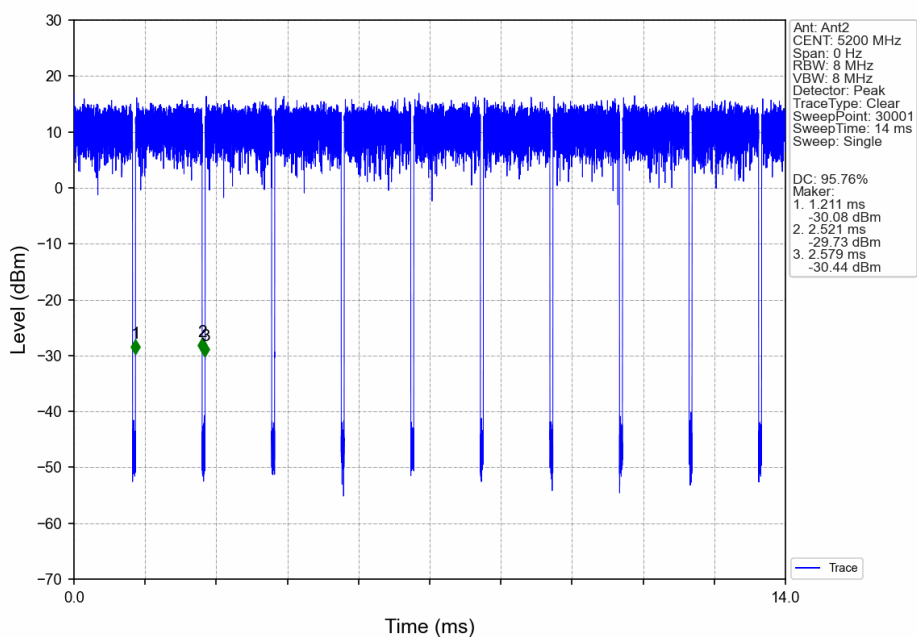


802.11n(HT20)_LCH_5180MHz_Ant2_NTNV

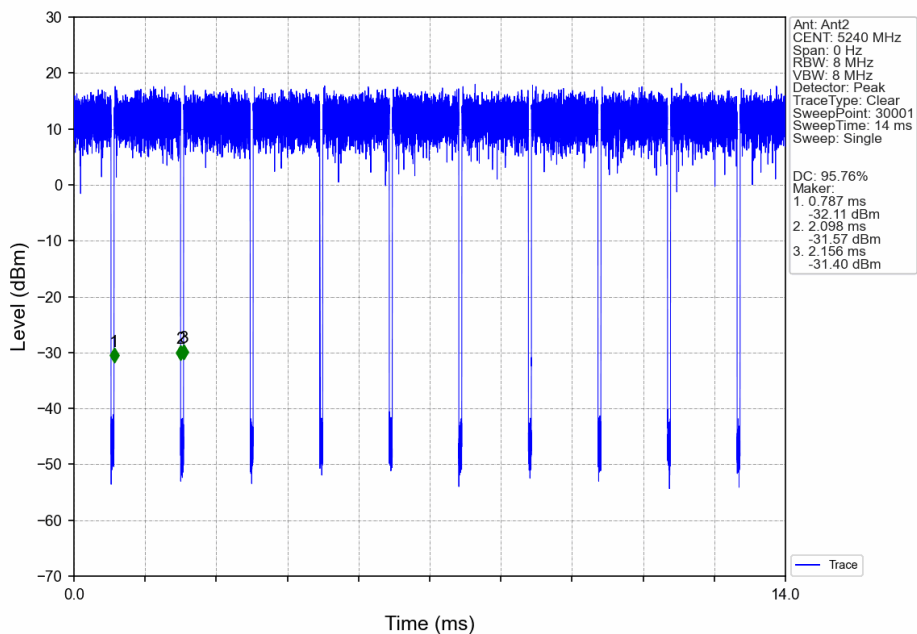


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802.11n(HT20) MCH 5200MHz_Ant2_NTNV

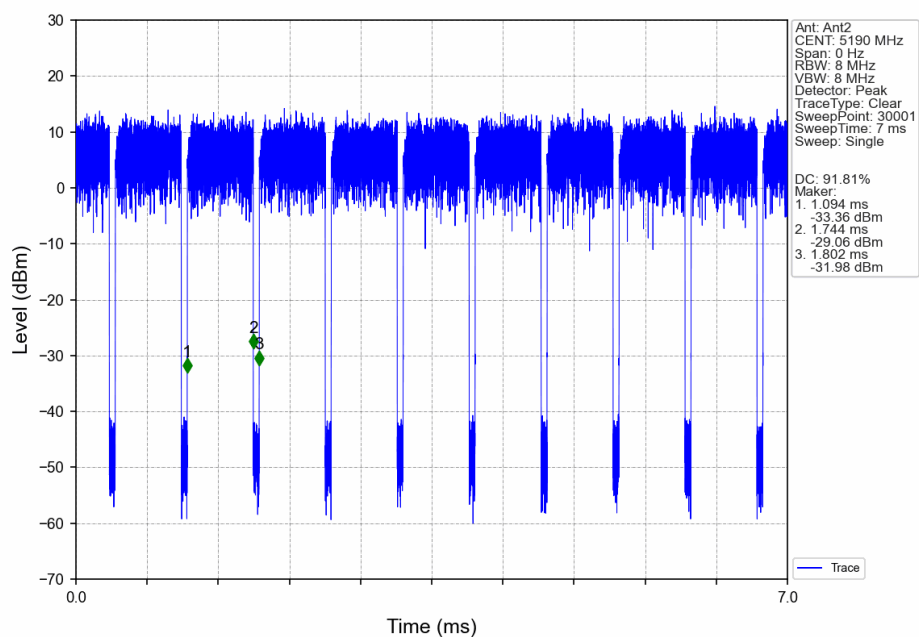


802.11n(HT20) HCH 5240MHz_Ant2_NTNV

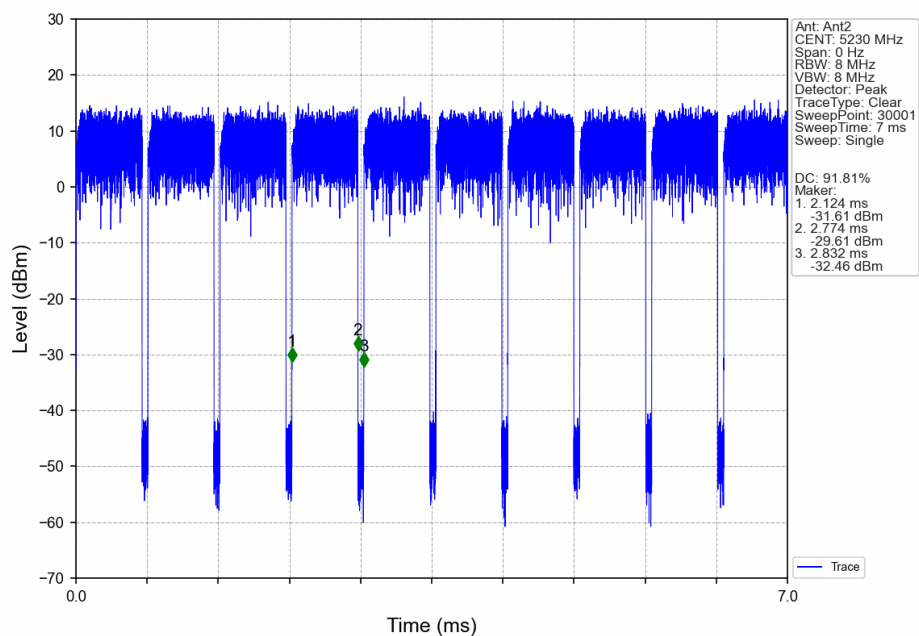


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802.11n(HT40)_LCH_5190MHz_Ant2_NTNV

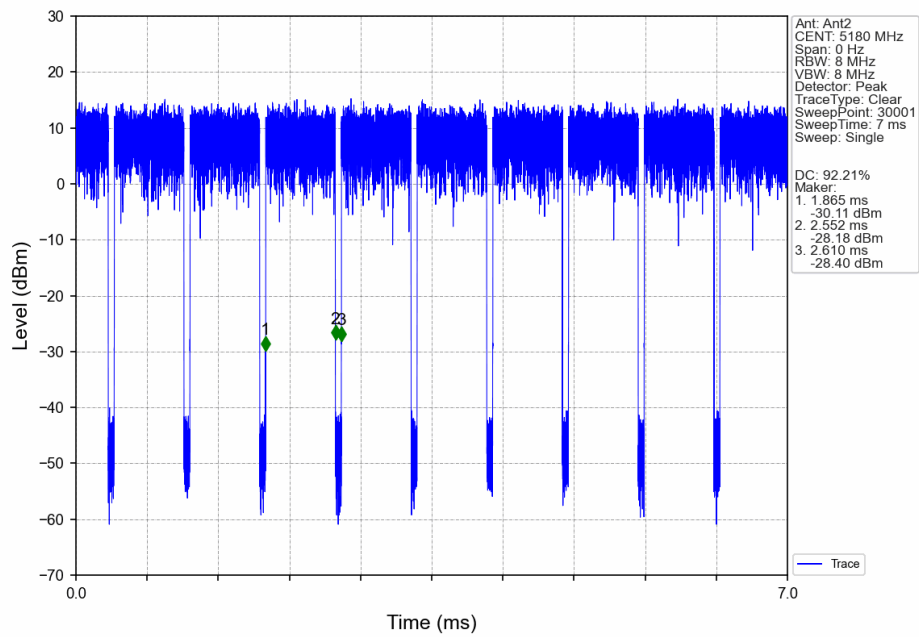


802.11n(HT40)_HCH_5230MHz_Ant2_NTNV

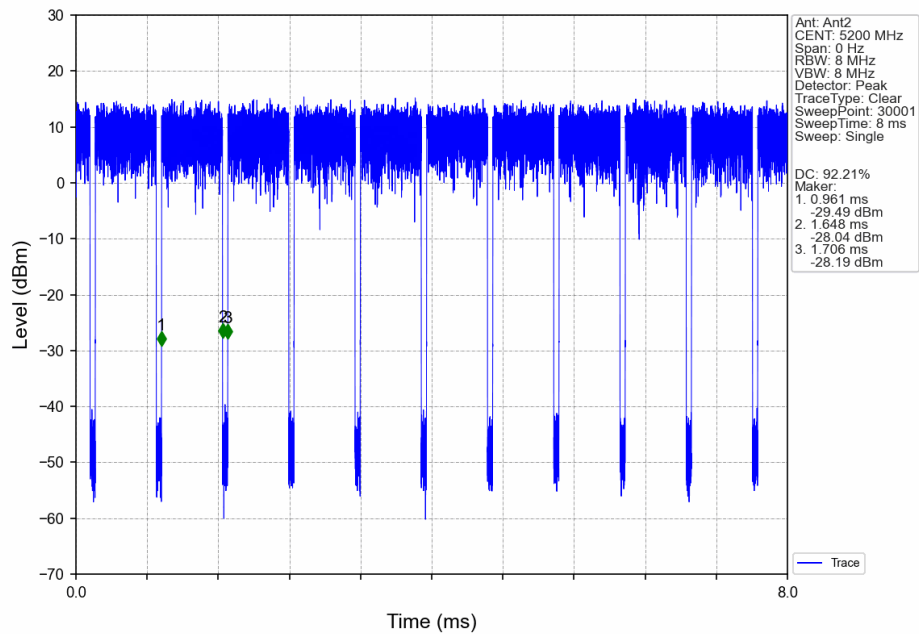


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802.11ac(VHT20)_LCH_5180MHz_Ant2_NTNV

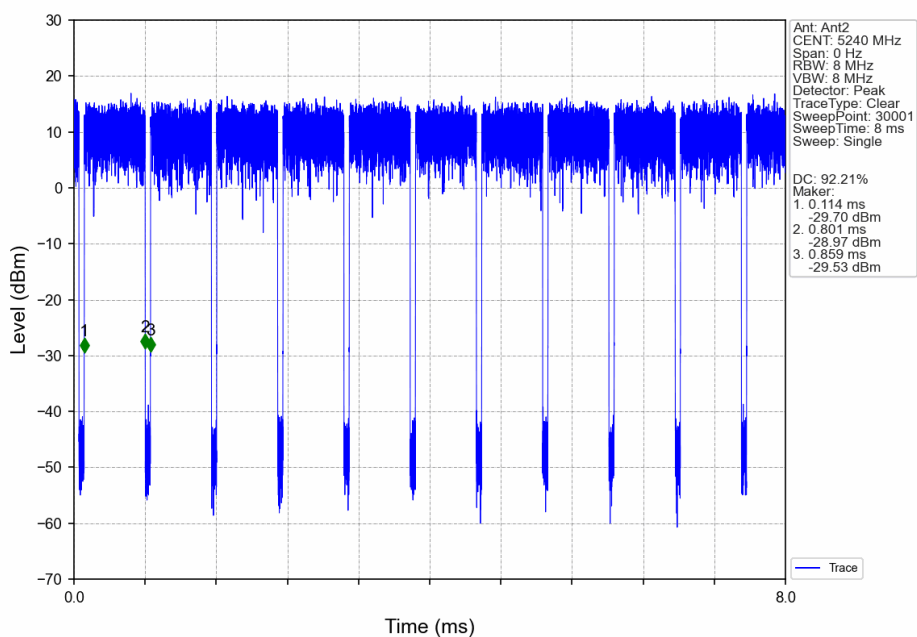


802.11ac(VHT20)_MCH_5200MHz_Ant2_NTNV

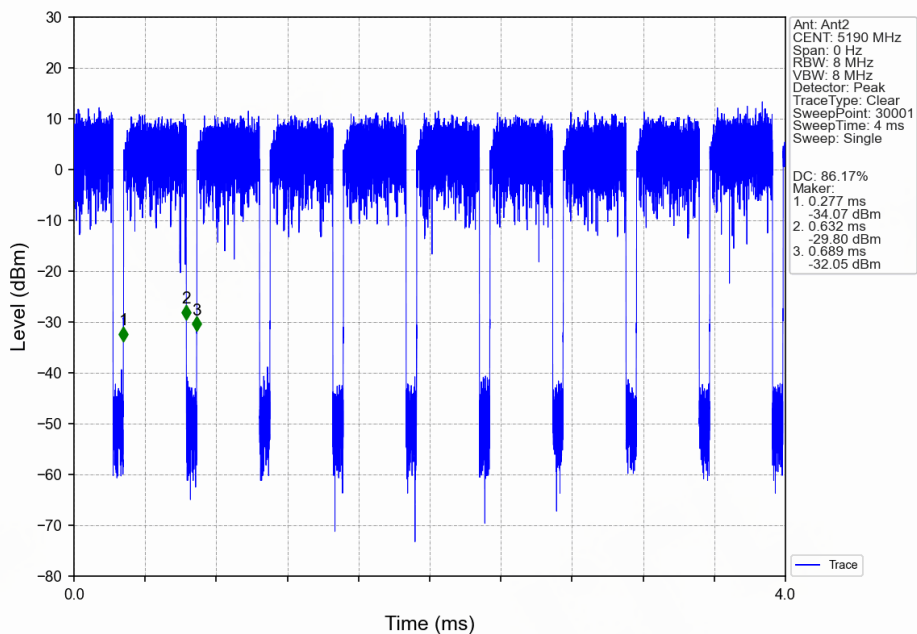


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802.11ac(VHT20) HCH 5240MHz Ant2_NTNV

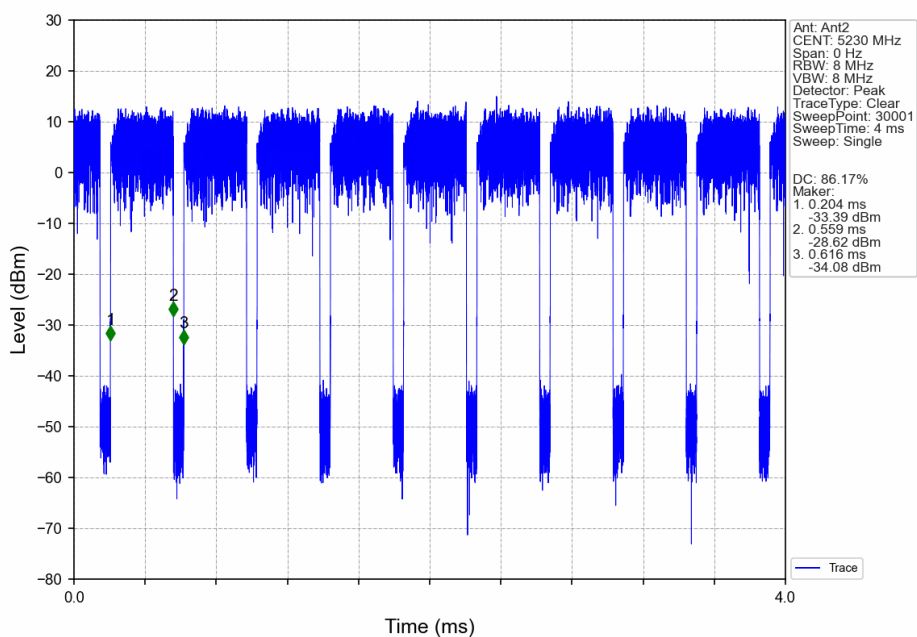


802.11ac(VHT40) LCH 5190MHz Ant2_NTNV

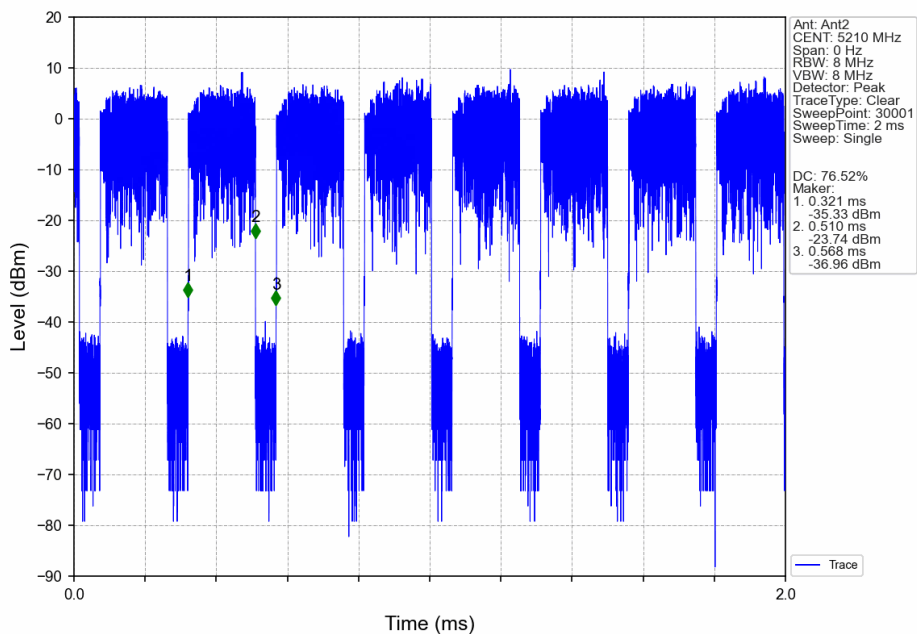


FCCID: 2AYHD-SR01

802.11ac(VHT40) HCH 5230MHz_Ant2_NTNV



802.11ac(VHT80) MCH 5210MHz_Ant2_NTNV



FCCID: 2AYHD-SR01

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	17.165	/	Pass
		5200	1	17.249	/	Pass
		5240	1	17.064	/	Pass
802.11n (HT20)	SISO	5180	1	17.980	/	Pass
		5200	1	18.067	/	Pass
		5240	1	17.998	/	Pass
802.11n (HT40)	SISO	5190	1	36.332	/	Pass
		5230	1	36.287	/	Pass
802.11n (HT20)	MIMO	5180	1	17.995	/	Pass
		5200	1	18.020	/	Pass
		5240	1	17.992	/	Pass
802.11n (HT40)	MIMO	5190	1	36.463	/	Pass
		5230	1	36.251	/	Pass
802.11ac (VHT20)	SISO	5180	1	17.963	/	Pass
		5200	1	18.001	/	Pass
		5240	1	17.972	/	Pass
802.11ac (VHT40)	SISO	5190	1	36.315	/	Pass
		5230	1	36.314	/	Pass
802.11ac (VHT80)	SISO	5210	1	75.704	/	Pass
802.11ac (VHT20)	MIMO	5180	1	18.007	/	Pass
		5200	1	18.014	/	Pass
		5240	1	18.010	/	Pass
802.11ac (VHT40)	MIMO	5190	1	36.262	/	Pass
		5230	1	36.305	/	Pass
802.11ac (VHT80)	MIMO	5210	1	75.651	/	Pass

2.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	20.442	/	Pass
		5200	1	20.581	/	Pass
		5240	1	20.171	/	Pass
802.11n (HT20)	SISO	5180	1	20.593	/	Pass
		5200	1	20.580	/	Pass
		5240	1	20.715	/	Pass
802.11n (HT40)	SISO	5190	1	41.122	/	Pass
		5230	1	41.242	/	Pass
802.11n (HT20)	MIMO	5180	1	20.494	/	Pass
		5200	1	20.689	/	Pass

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		5240	1	20.562	/	Pass
802.11n (HT40)	MIMO	5190	1	41.113	/	Pass
		5230	1	41.854	/	Pass
		5180	1	20.592	/	Pass
802.11ac (VHT20)	SISO	5200	1	20.461	/	Pass
		5240	1	20.424	/	Pass
		5190	1	41.133	/	Pass
802.11ac (VHT40)	SISO	5230	1	41.371	/	Pass
		5210	1	81.831	/	Pass
802.11ac (VHT80)	MIMO	5180	1	20.488	/	Pass
		5200	1	20.451	/	Pass
		5240	1	20.539	/	Pass
802.11ac (VHT40)	MIMO	5190	1	41.154	/	Pass
		5230	1	40.612	/	Pass
802.11ac (VHT80)	MIMO	5210	1	81.872	/	Pass

2.1.3 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	2	17.133	/	Pass
		5200	2	17.130	/	Pass
		5240	2	17.059	/	Pass
802.11n (HT20)	SISO	5180	2	18.030	/	Pass
		5200	2	18.002	/	Pass
		5240	2	17.956	/	Pass
802.11n (HT40)	SISO	5190	2	36.314	/	Pass
		5230	2	36.161	/	Pass
802.11ac (VHT20)	SISO	5180	2	17.873	/	Pass
		5200	2	17.869	/	Pass
		5240	2	17.844	/	Pass
802.11ac (VHT40)	SISO	5190	2	36.342	/	Pass
		5230	2	36.259	/	Pass
802.11ac (VHT80)	SISO	5210	2	75.642	/	Pass

2.1.4 26dB BW

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	2	20.512	/	Pass
		5200	2	20.394	/	Pass
		5240	2	20.301	/	Pass
802.11n (HT20)	SISO	5180	2	20.501	/	Pass
		5200	2	20.645	/	Pass
		5240	2	20.641	/	Pass
802.11n (HT40)	SISO	5190	2	41.235	/	Pass
		5230	2	41.246	/	Pass
802.11ac (VHT20)	SISO	5180	2	20.372	/	Pass
		5200	2	20.303	/	Pass
		5240	2	20.300	/	Pass
802.11ac (VHT40)	SISO	5190	2	41.083	/	Pass
		5230	2	40.760	/	Pass
802.11ac	SISO	5210	2	80.937	/	Pass

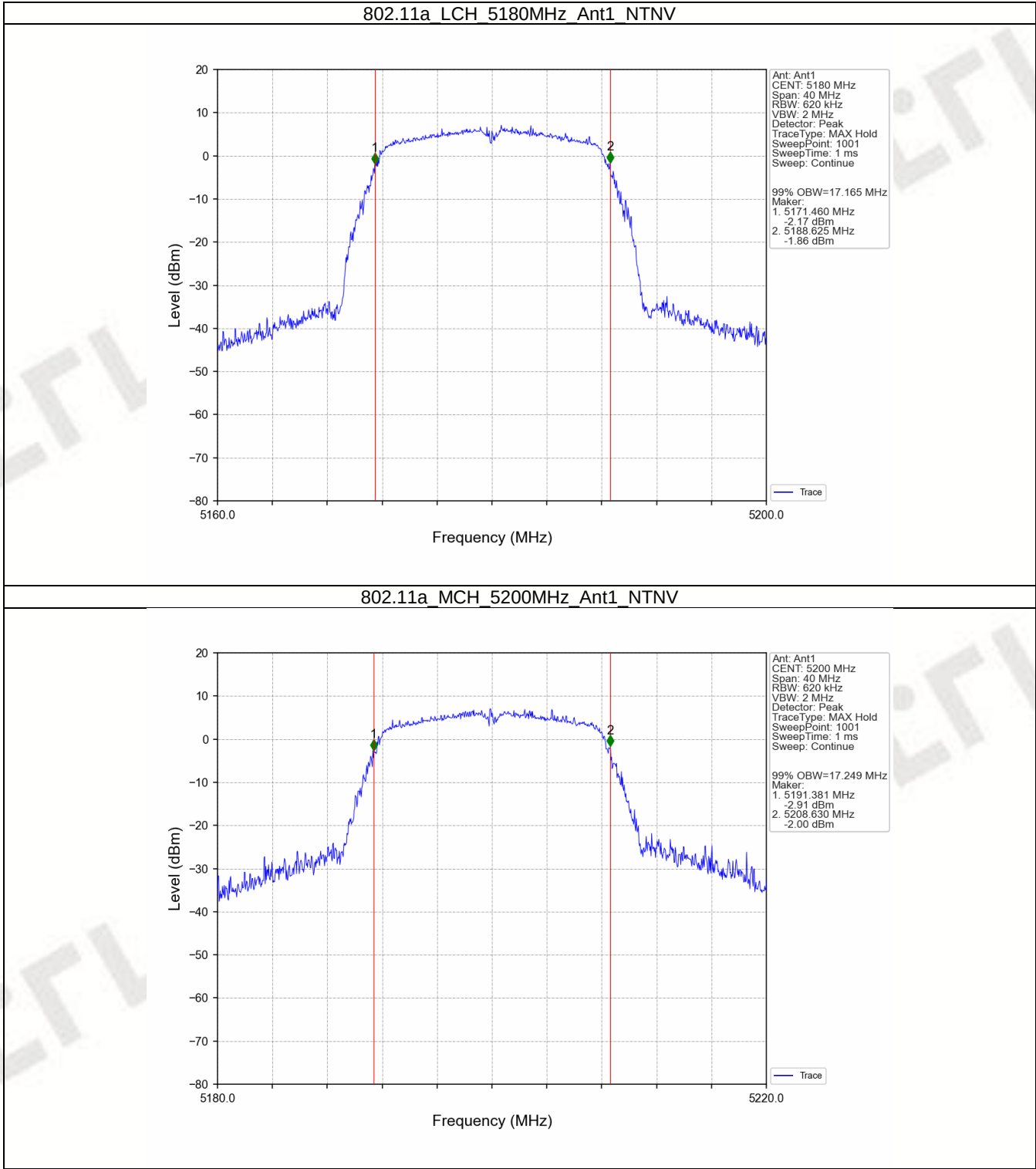
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(VHT80)						
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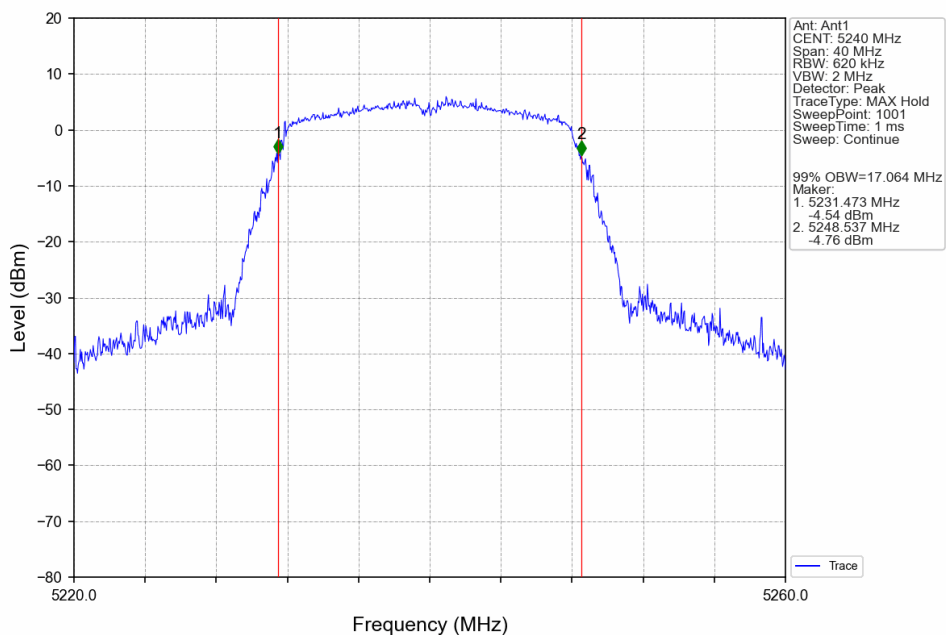
2.2 Test Graph

2.2.1 OBW

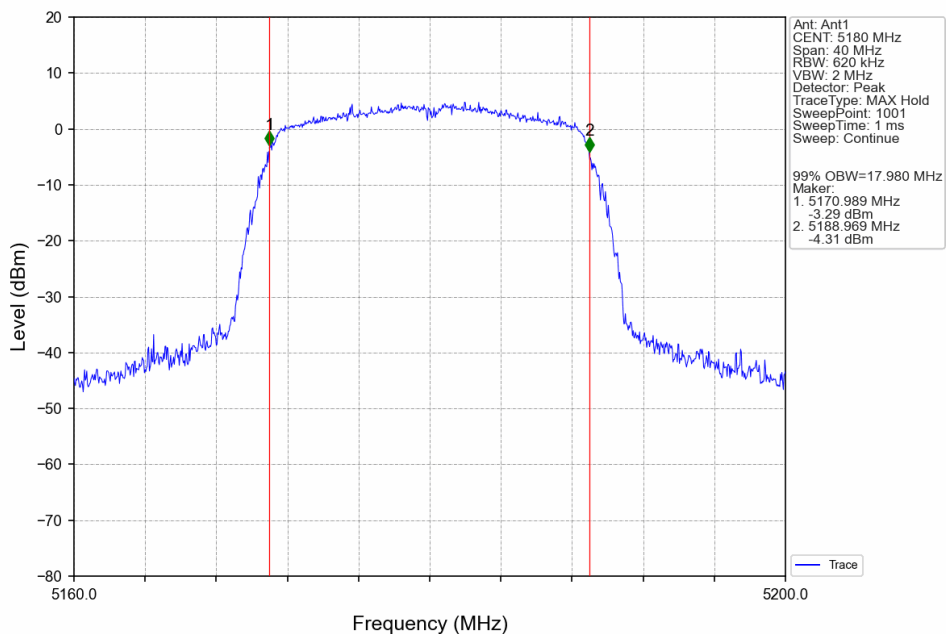


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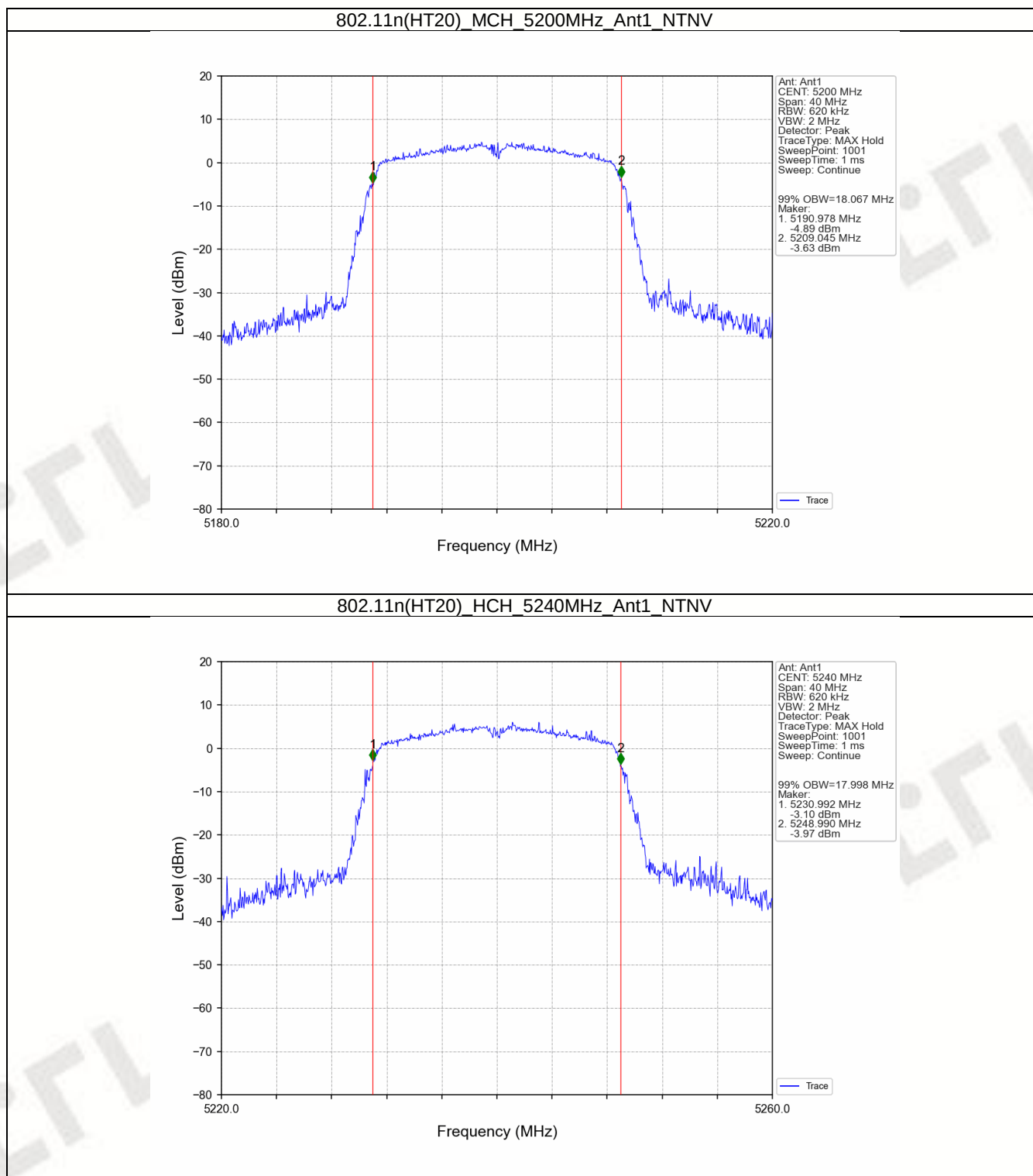
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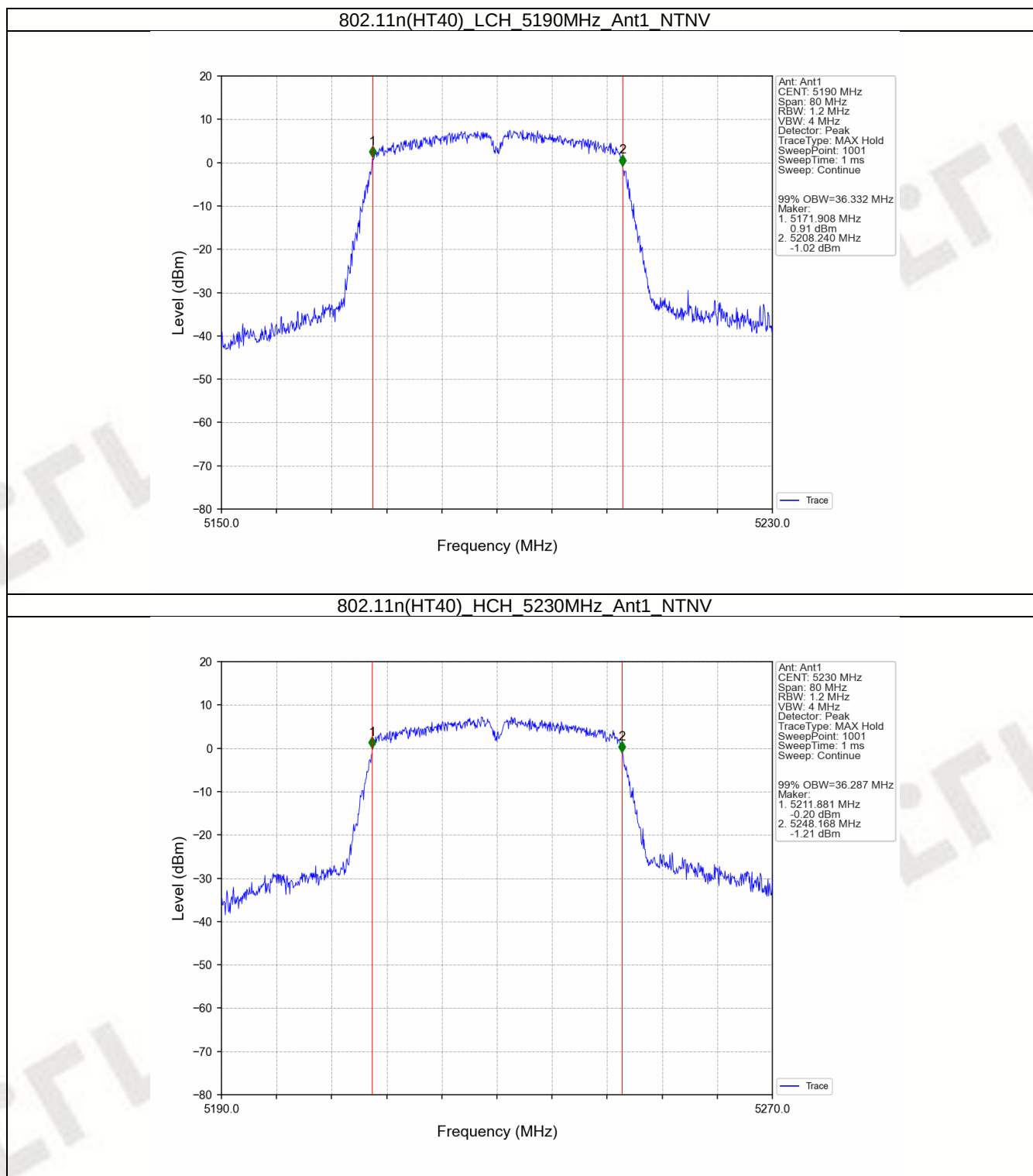
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



FCCID: 2AYHD-SR01

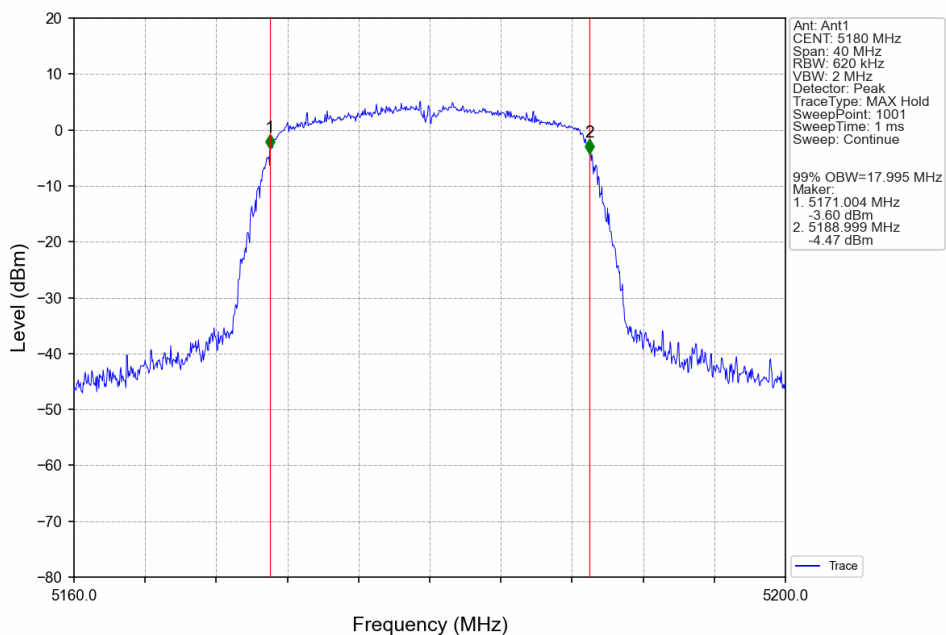


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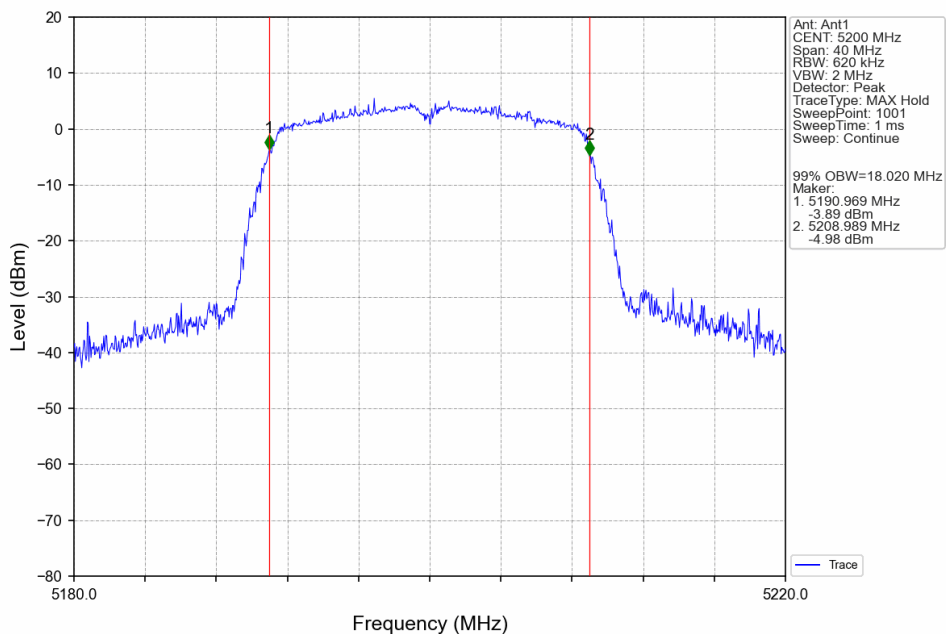


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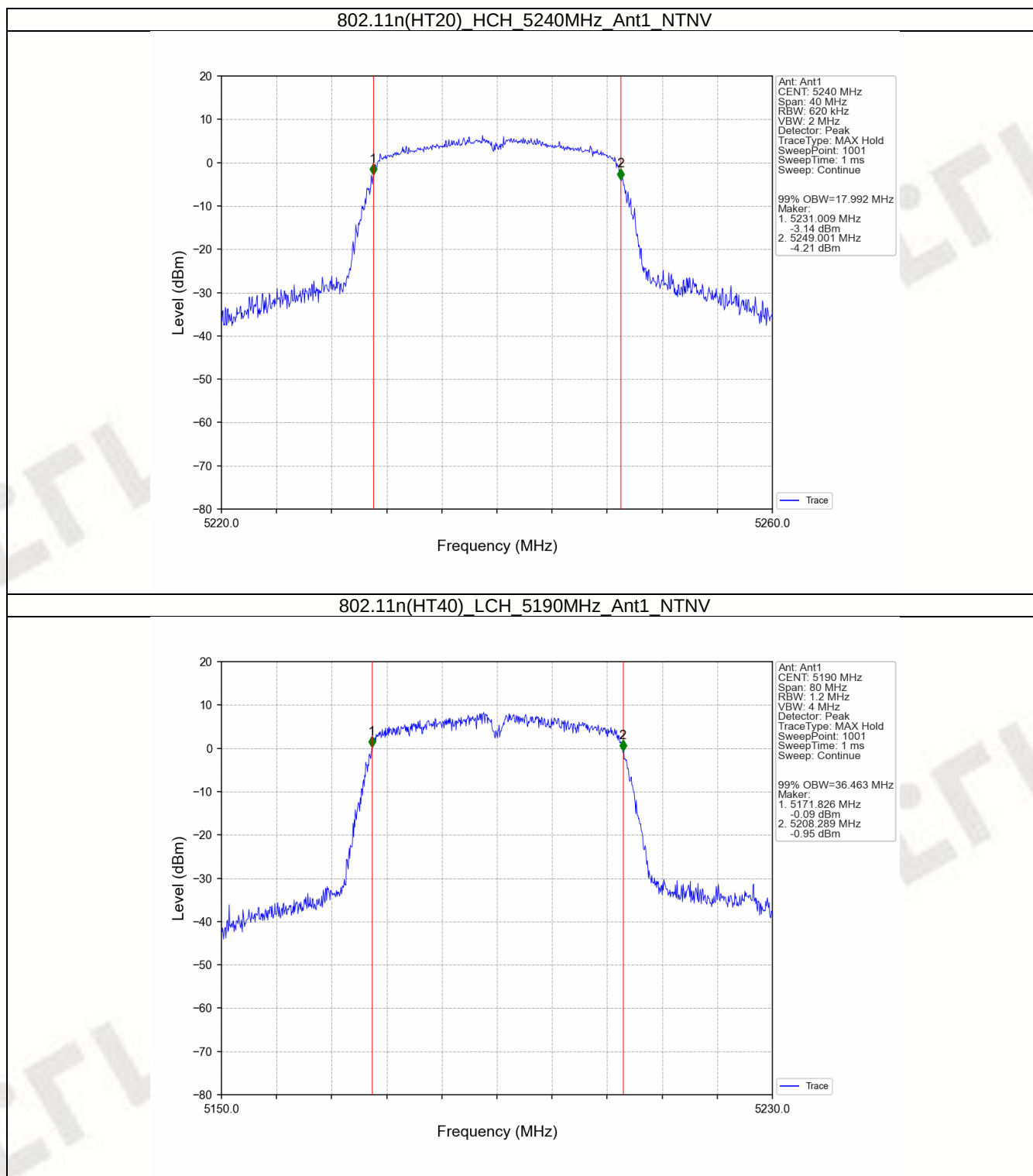
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



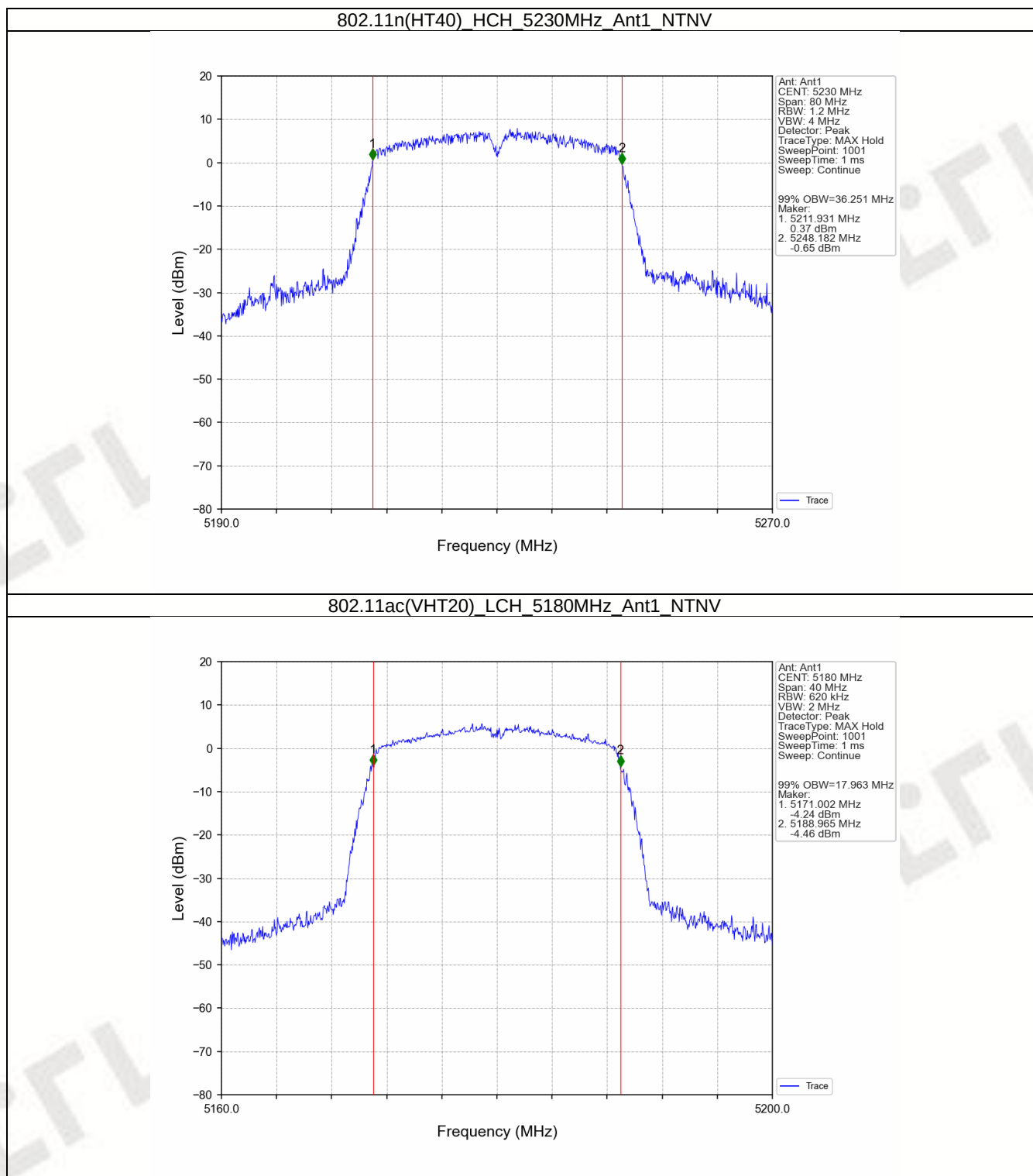
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



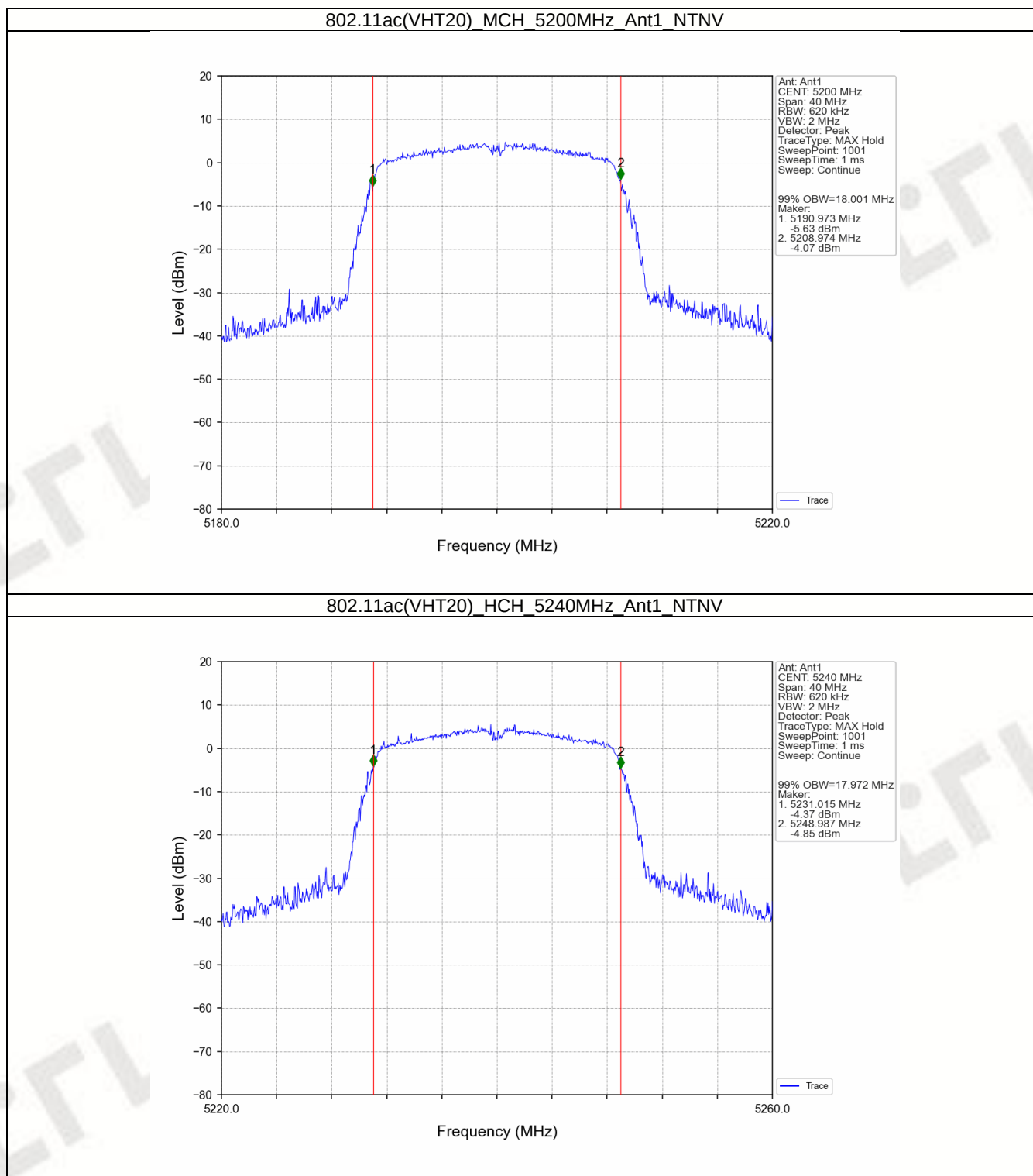
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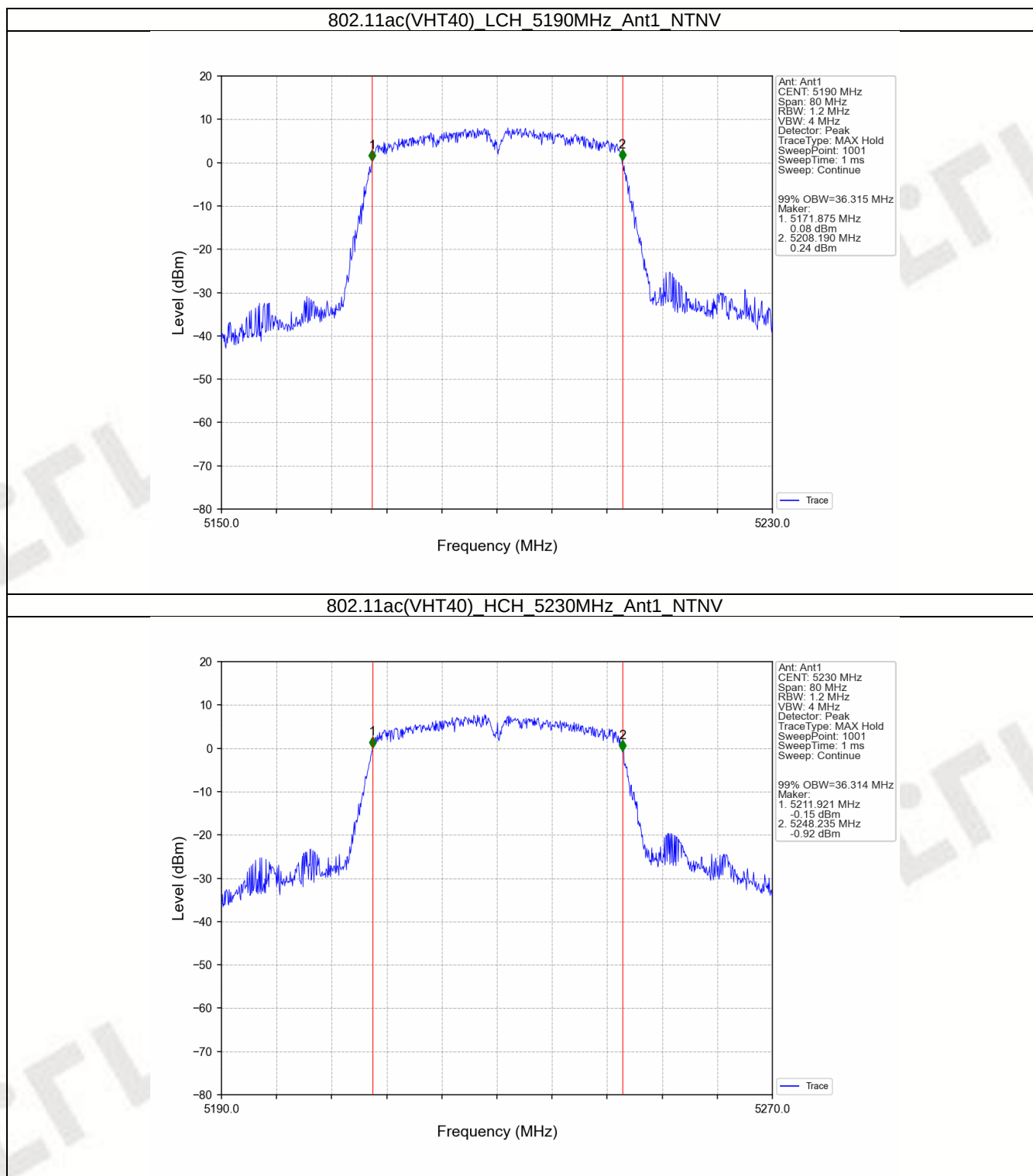
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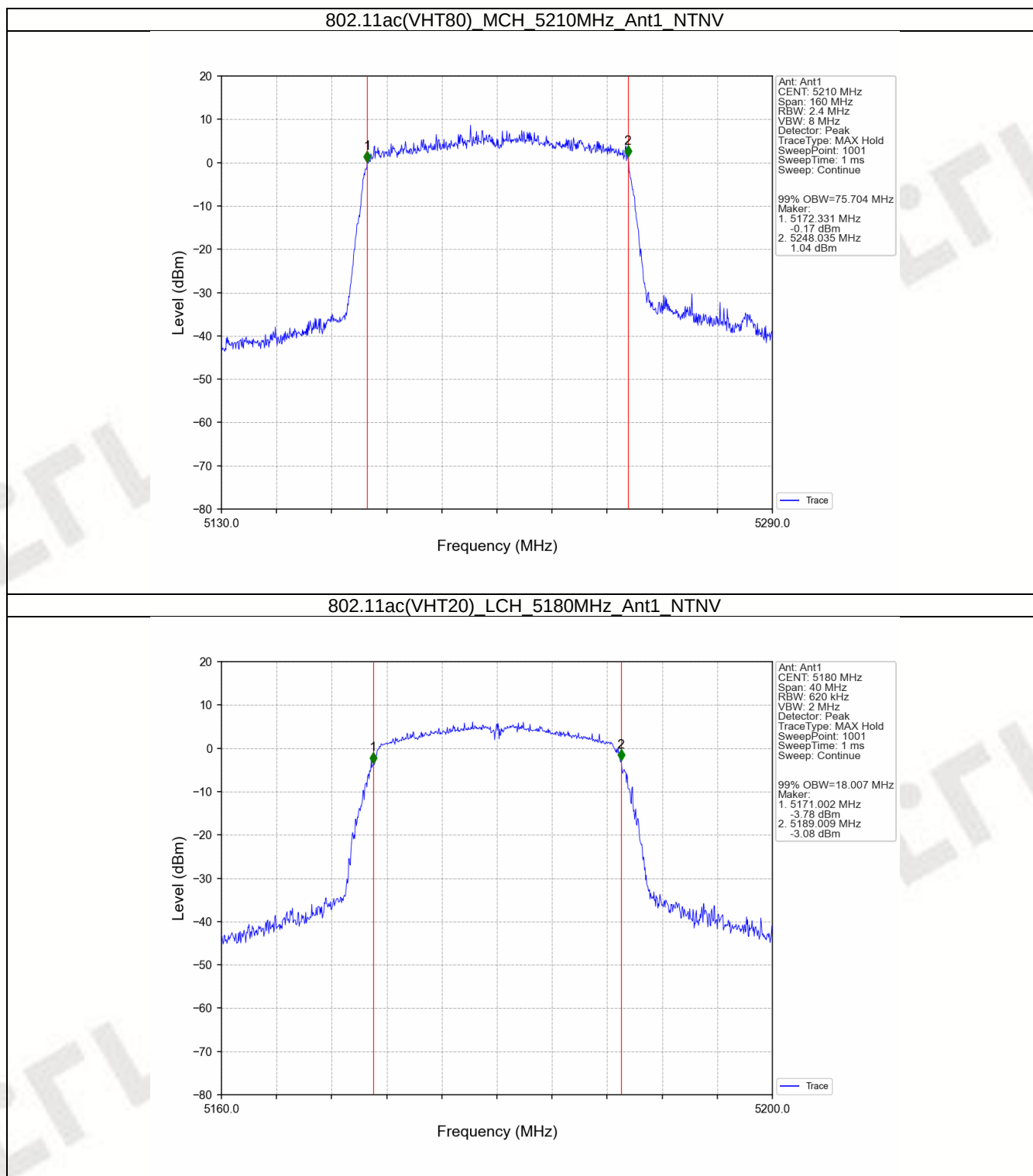
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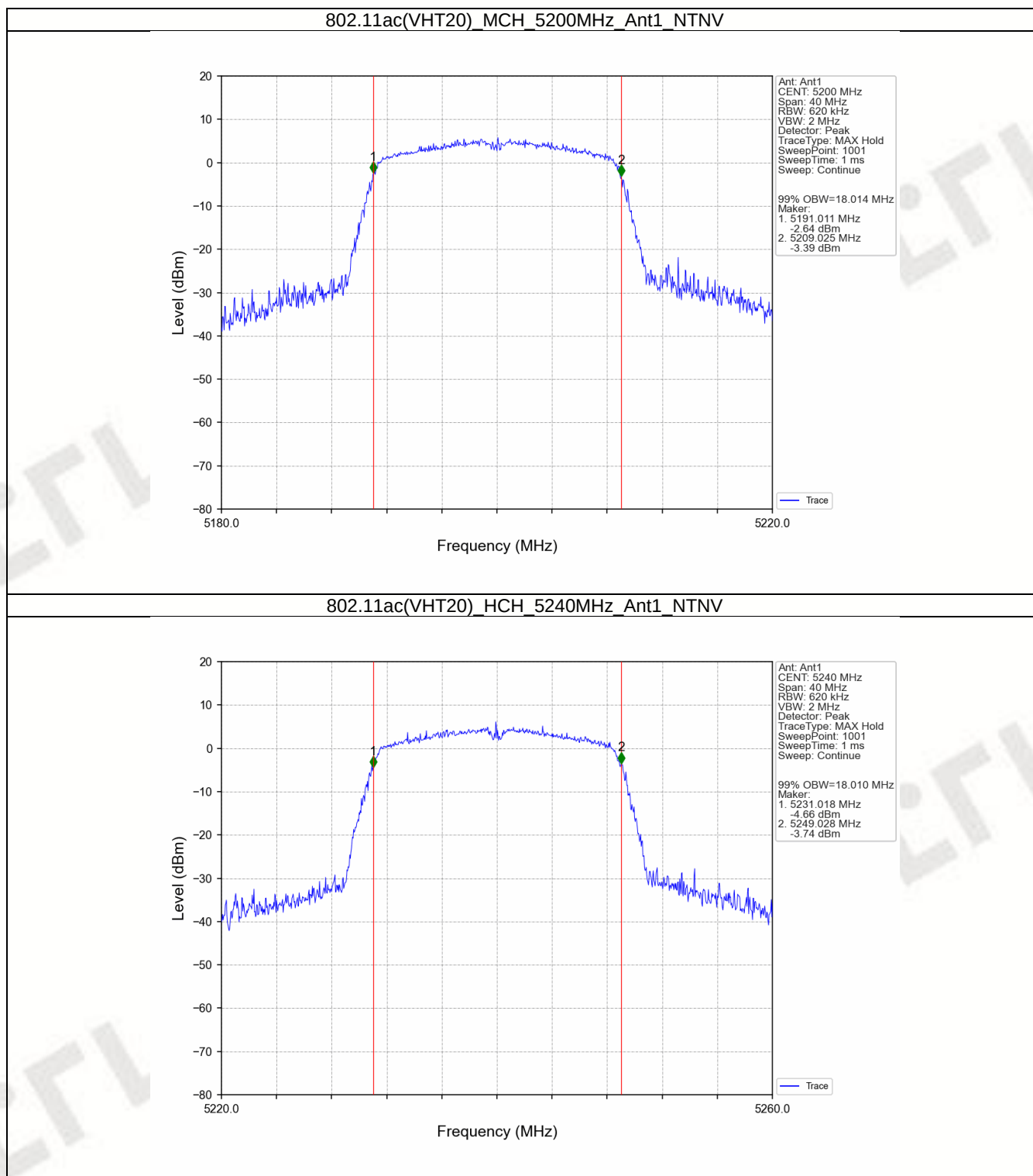
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FCCID: 2AYHD-SR01

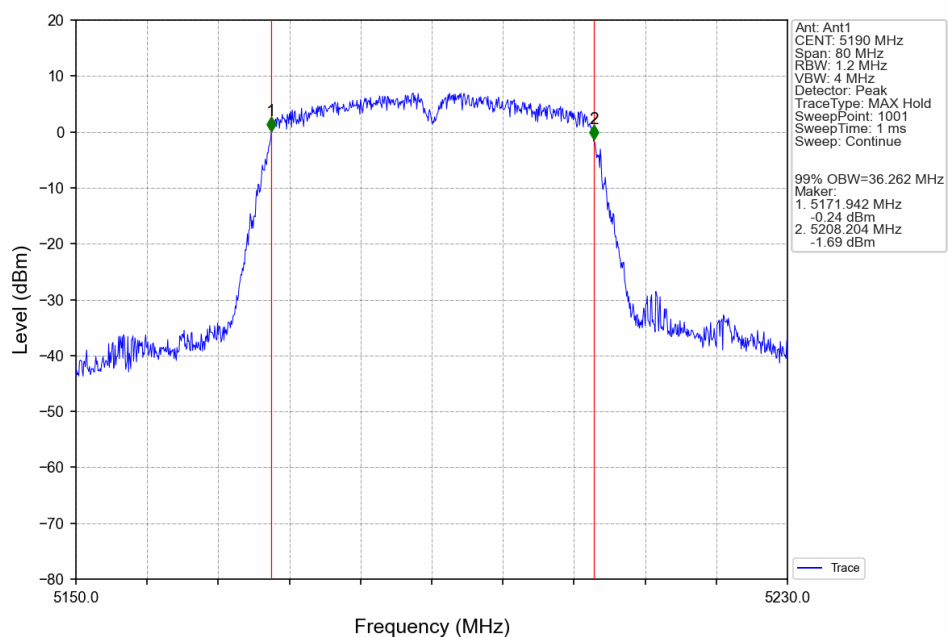


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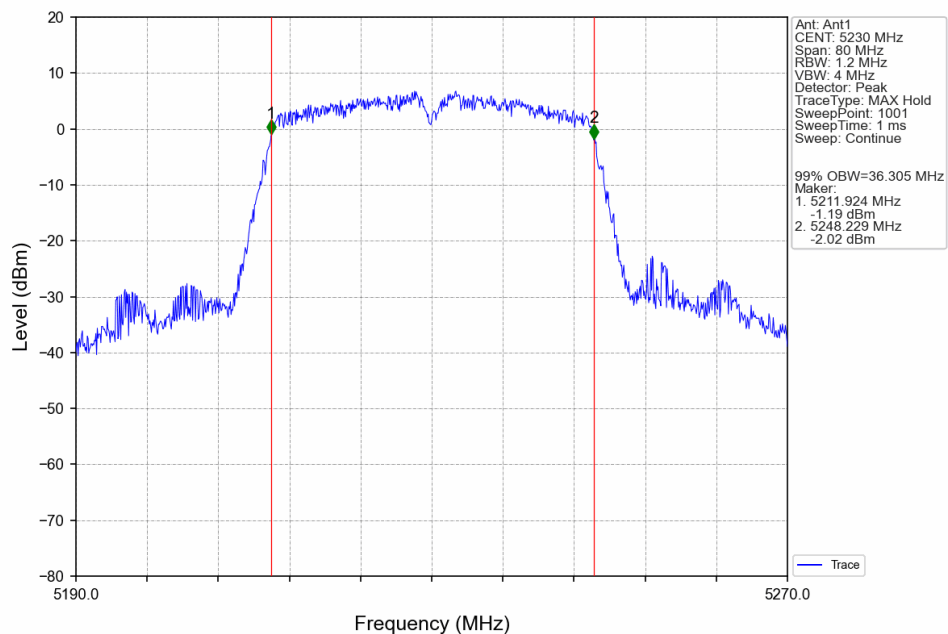


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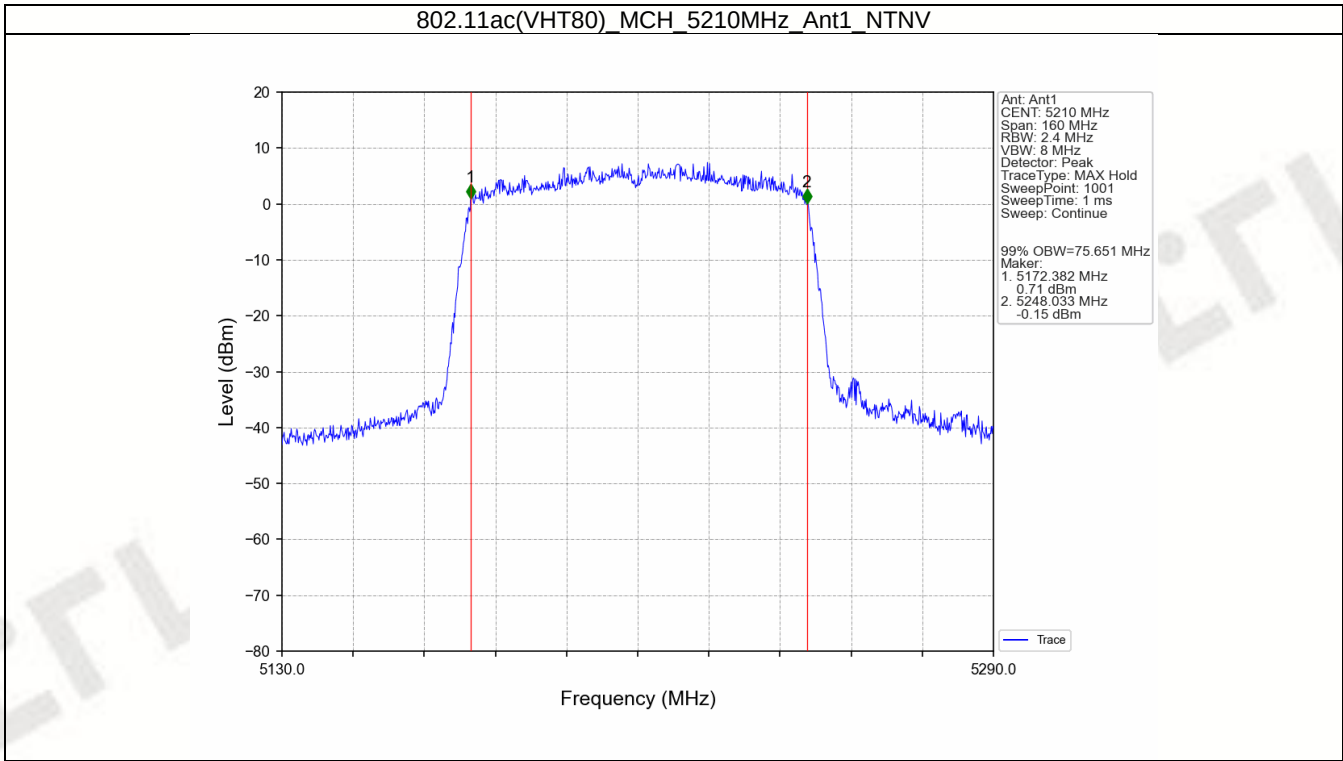
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



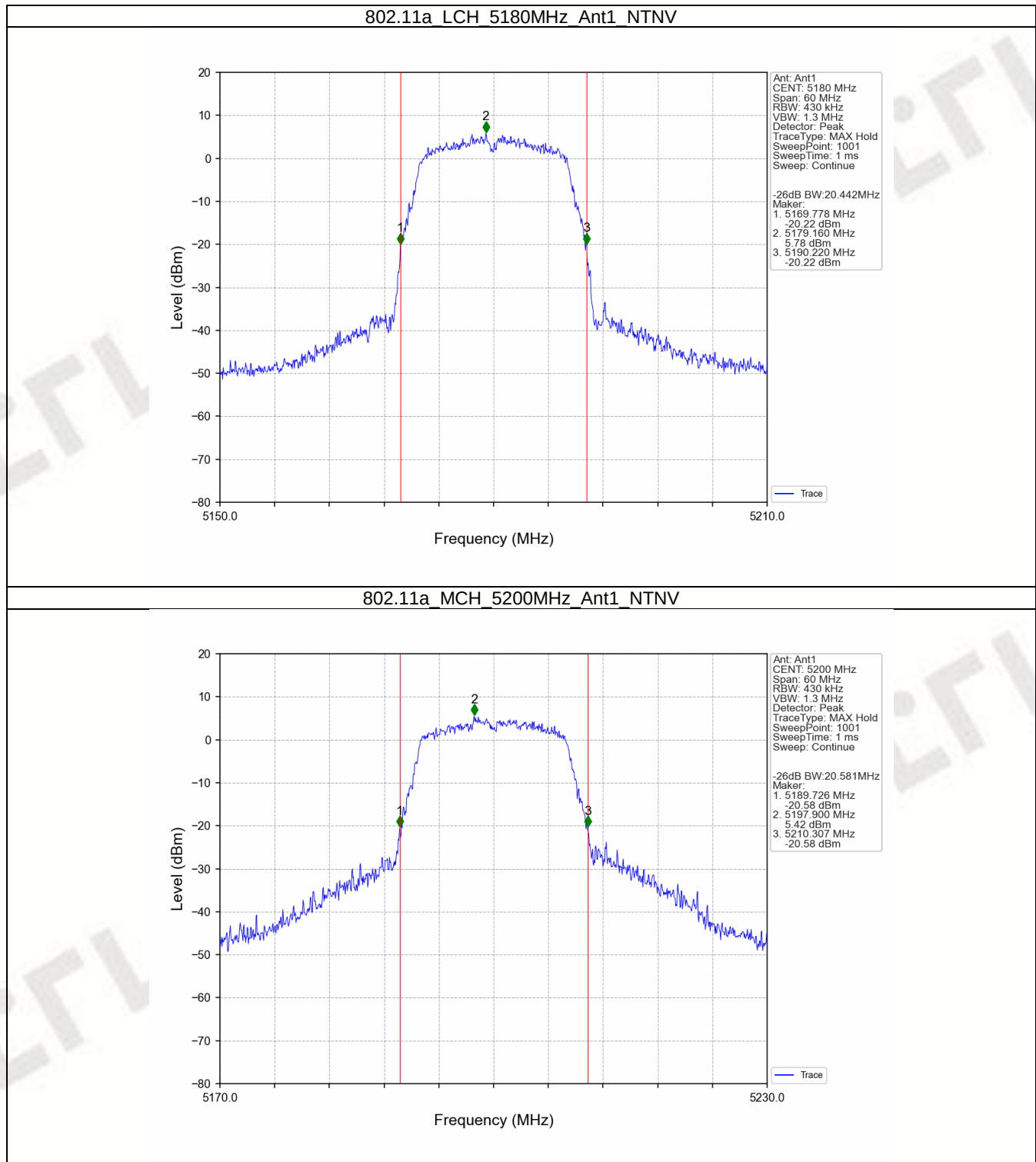
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



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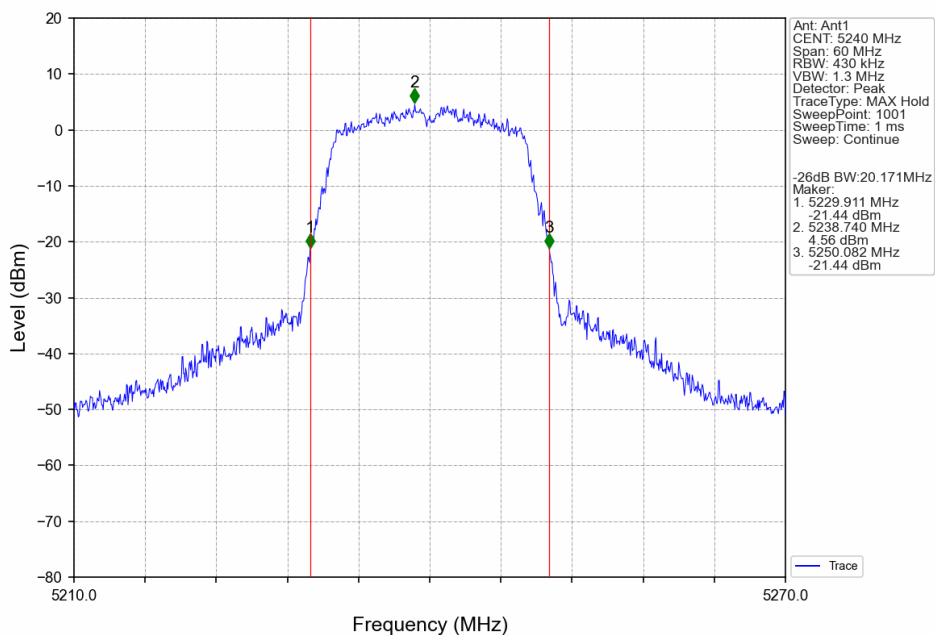


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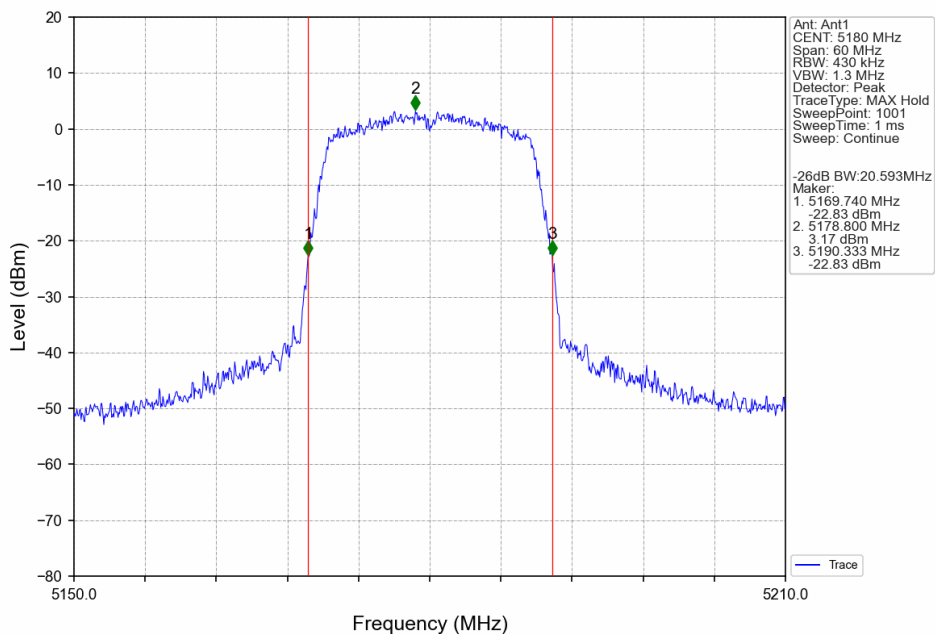
2.2.2 26dB BW

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802.11a_HCH_5240MHz_Ant1_NTNV

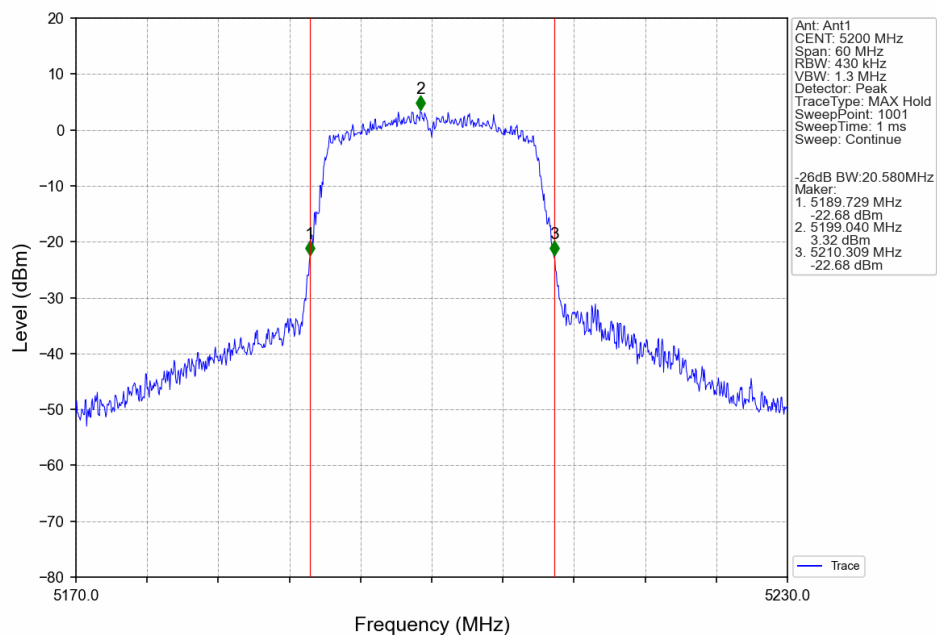


802.11n(HT20)_LCH_5180MHz_Ant1_NTNV

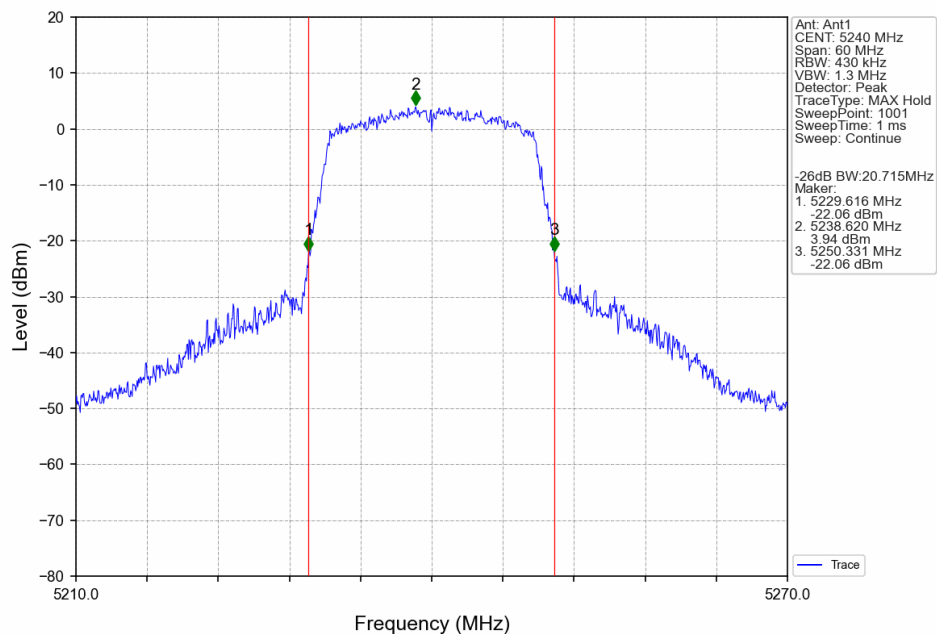


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802.11n(HT20) MCH 5200MHz_Ant1_NTNV

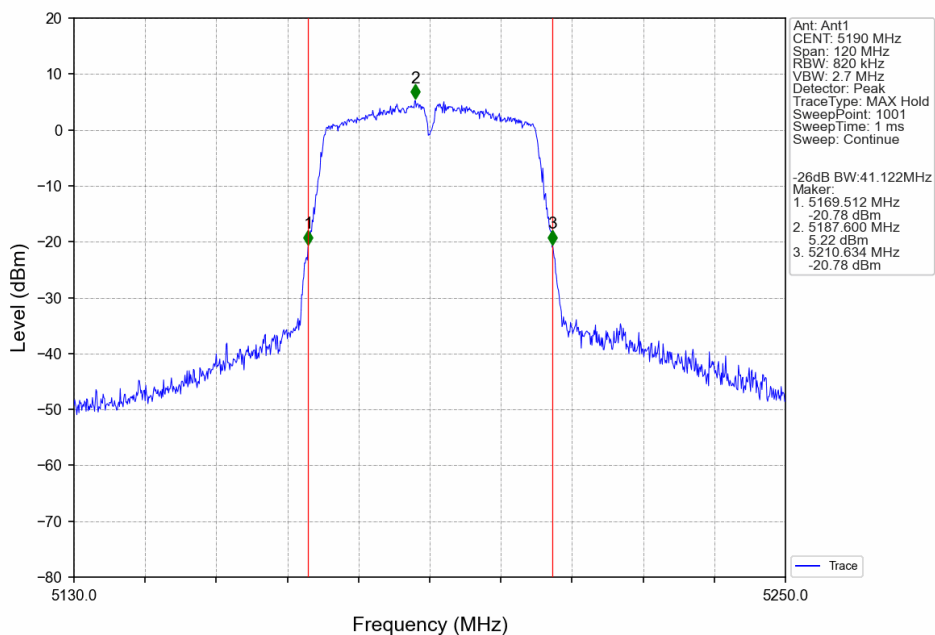


802.11n(HT20) HCH 5240MHz_Ant1_NTNV

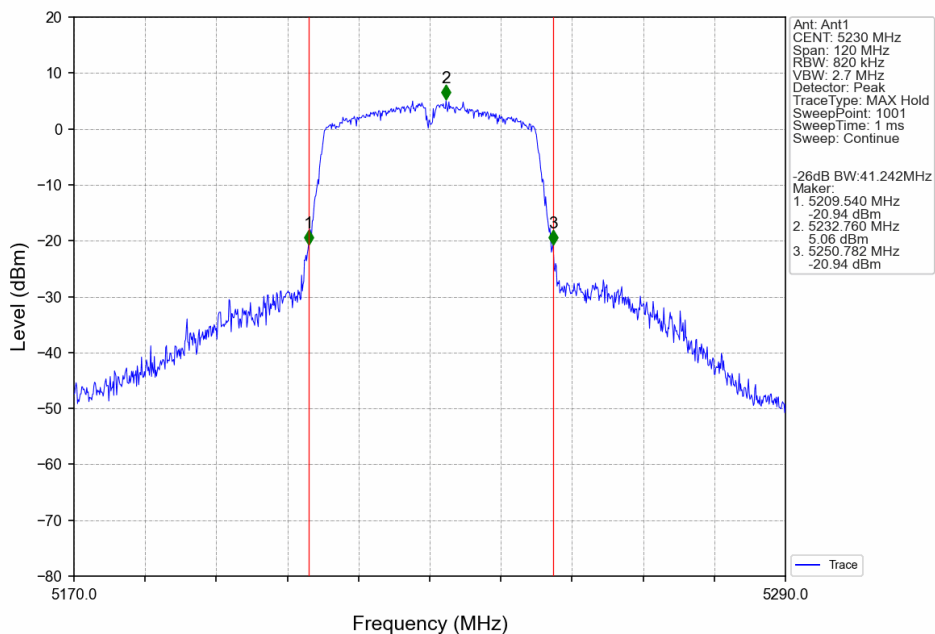


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802.11n(HT40)_LCH_5190MHz_Ant1_NTNV

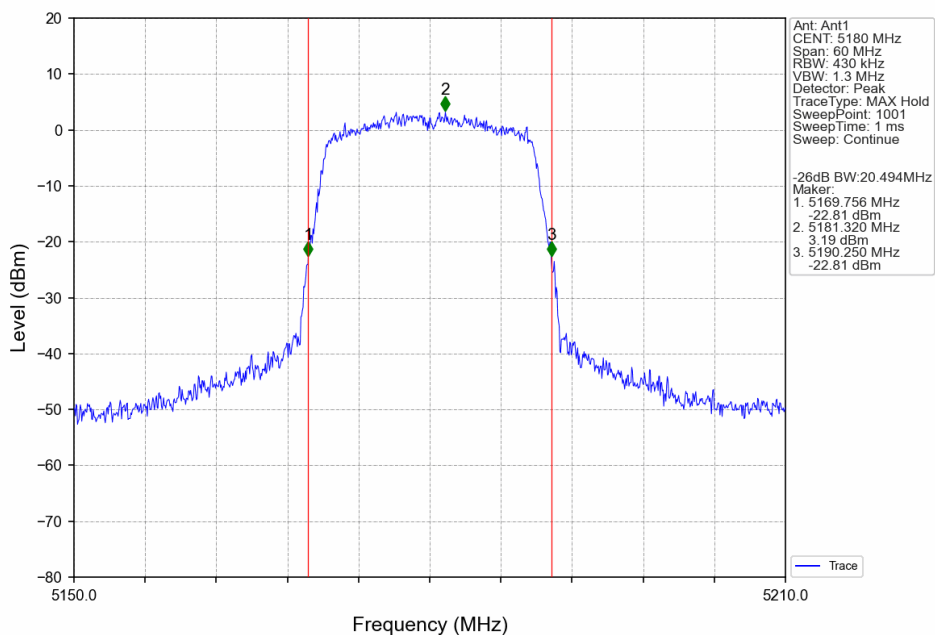


802.11n(HT40)_HCH_5230MHz_Ant1_NTNV

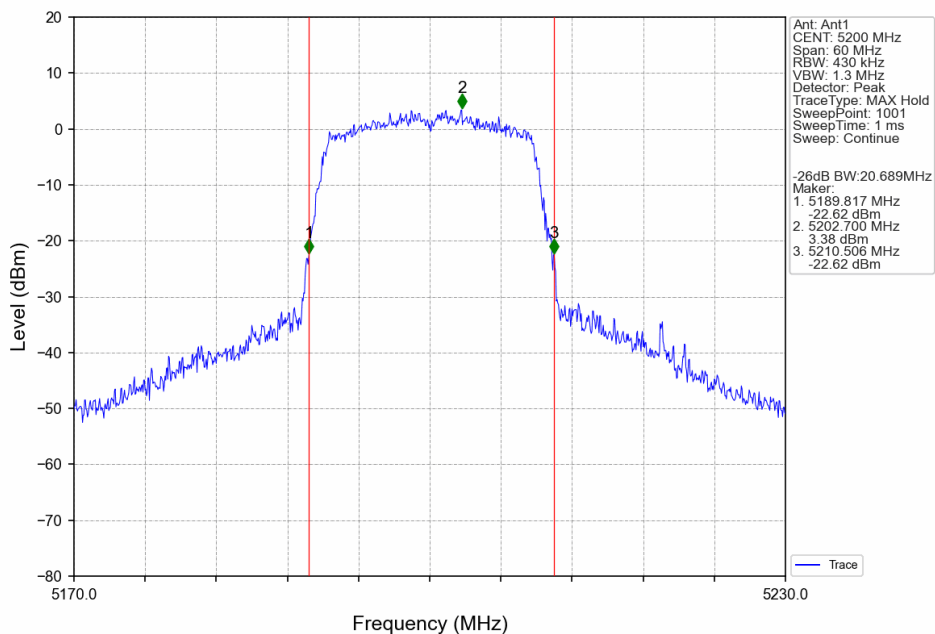


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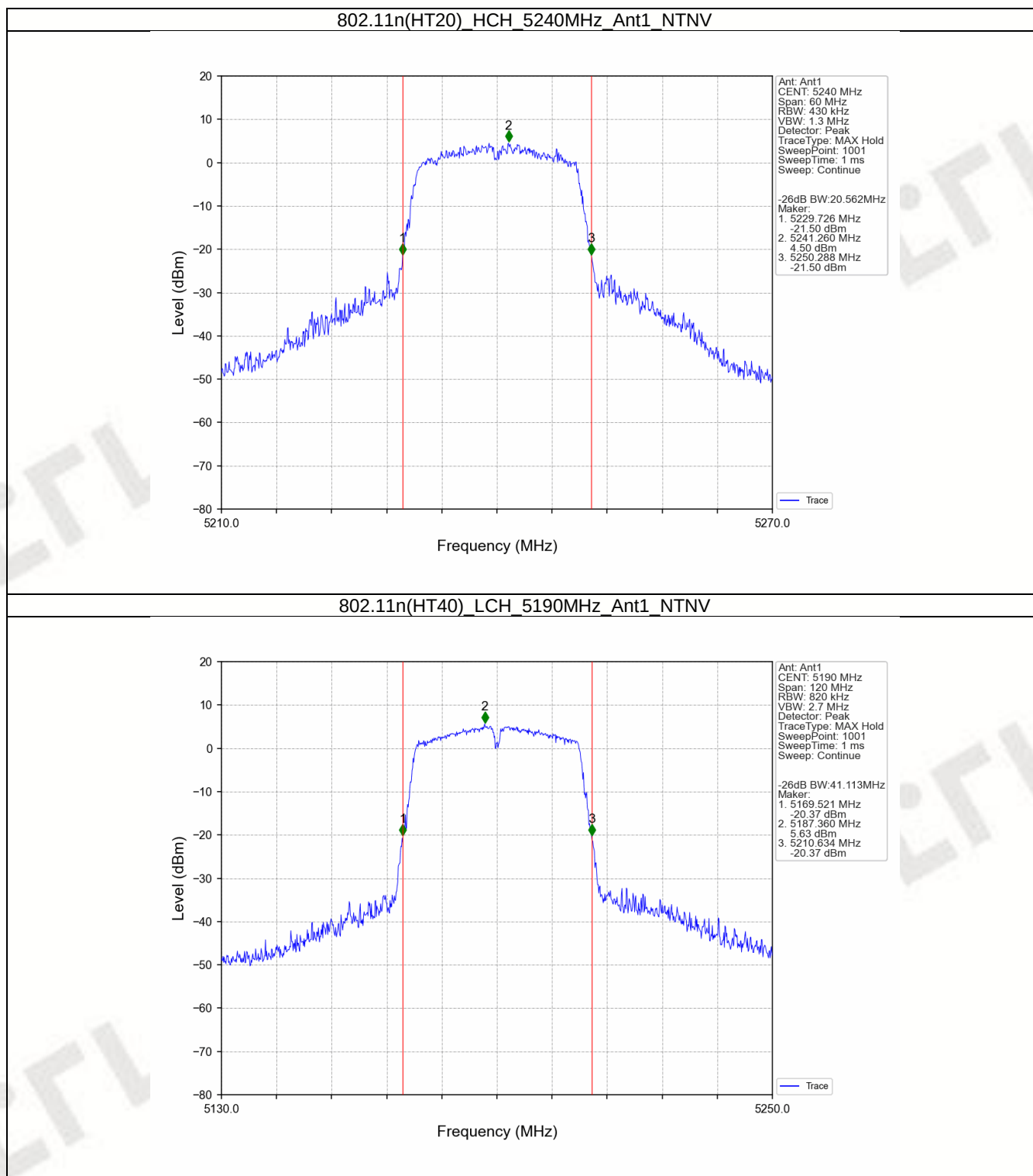
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



802.11n(HT20)_MCH_5200MHz_Ant1_NTNV

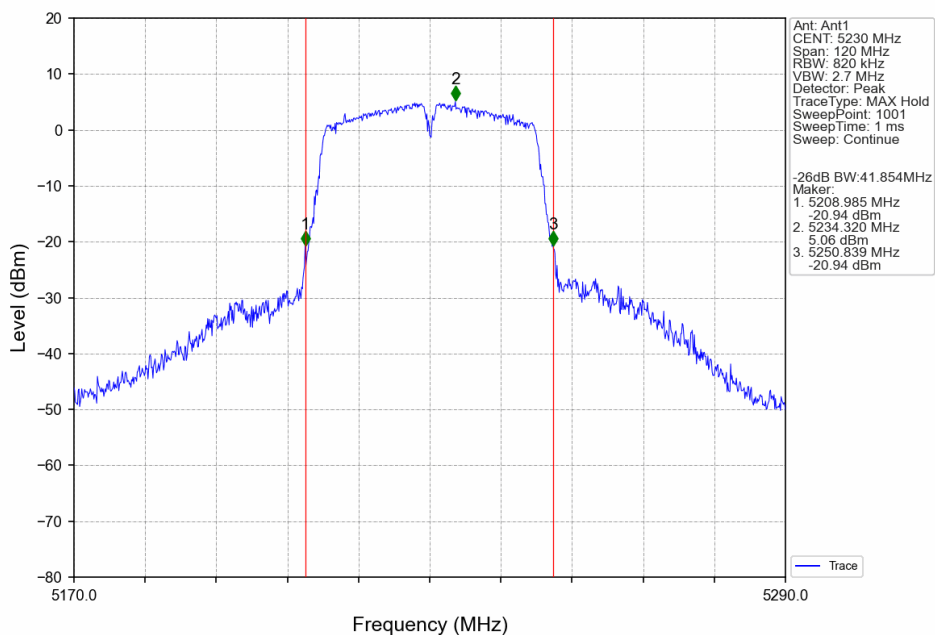


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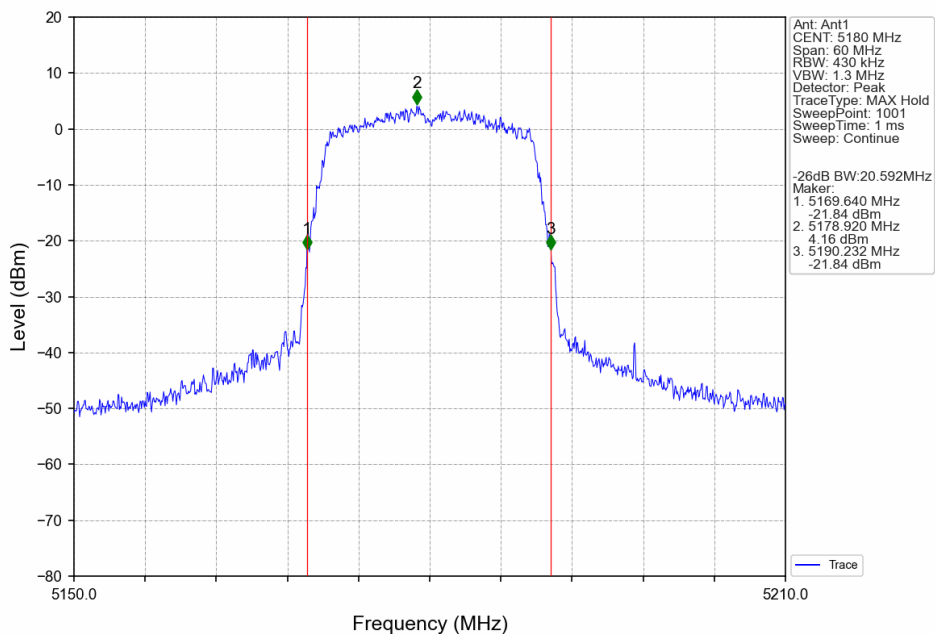


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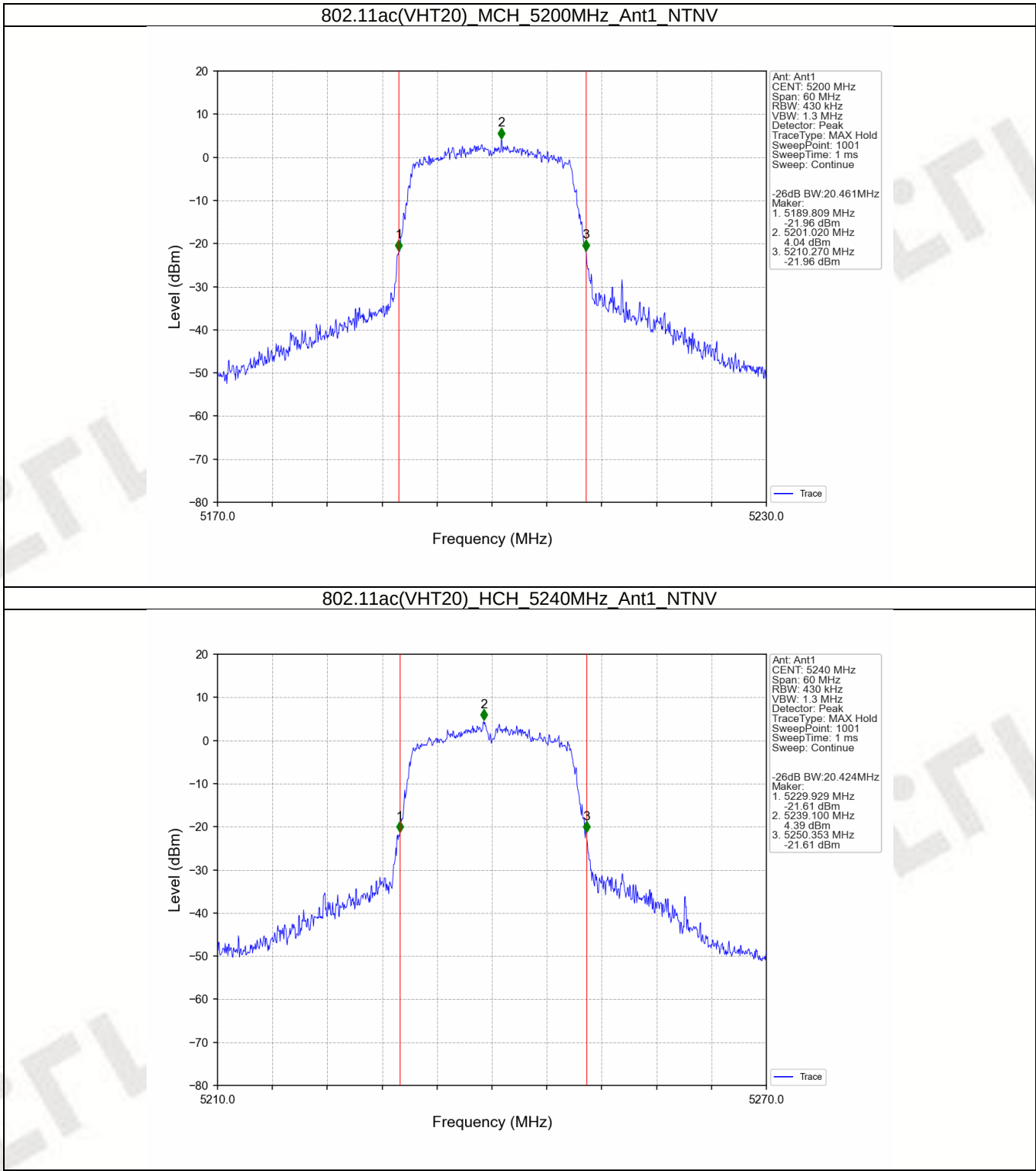
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV

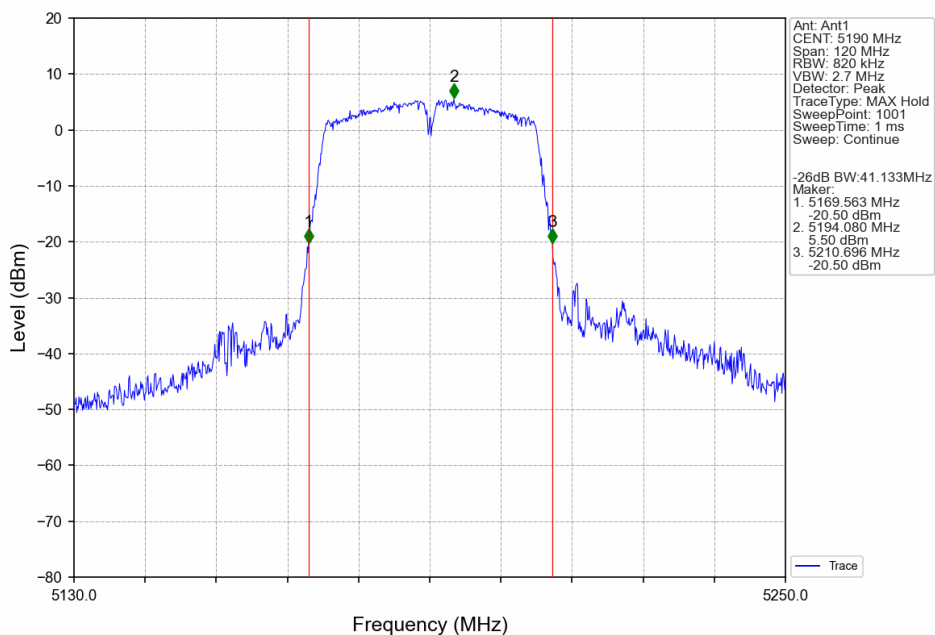


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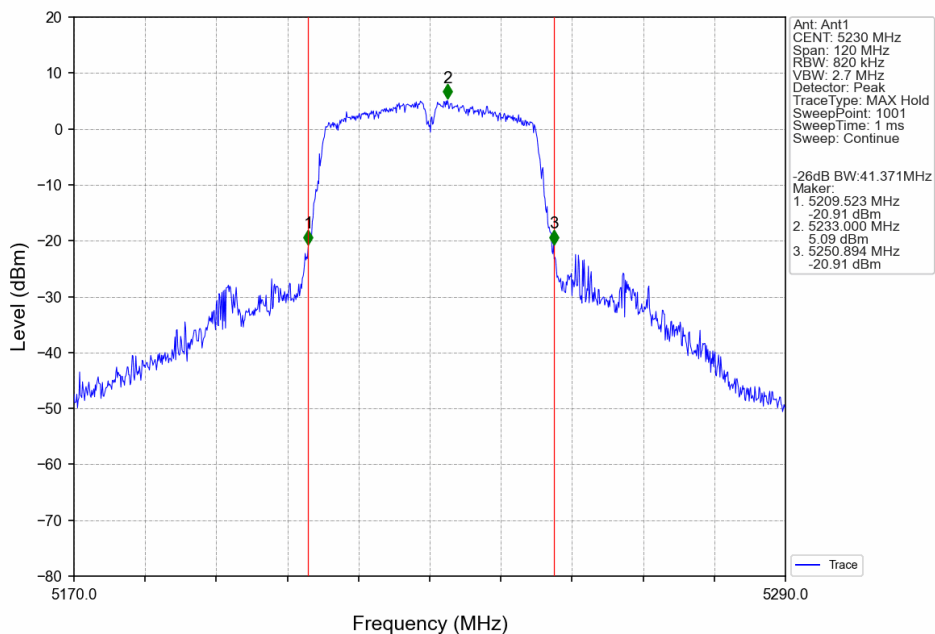


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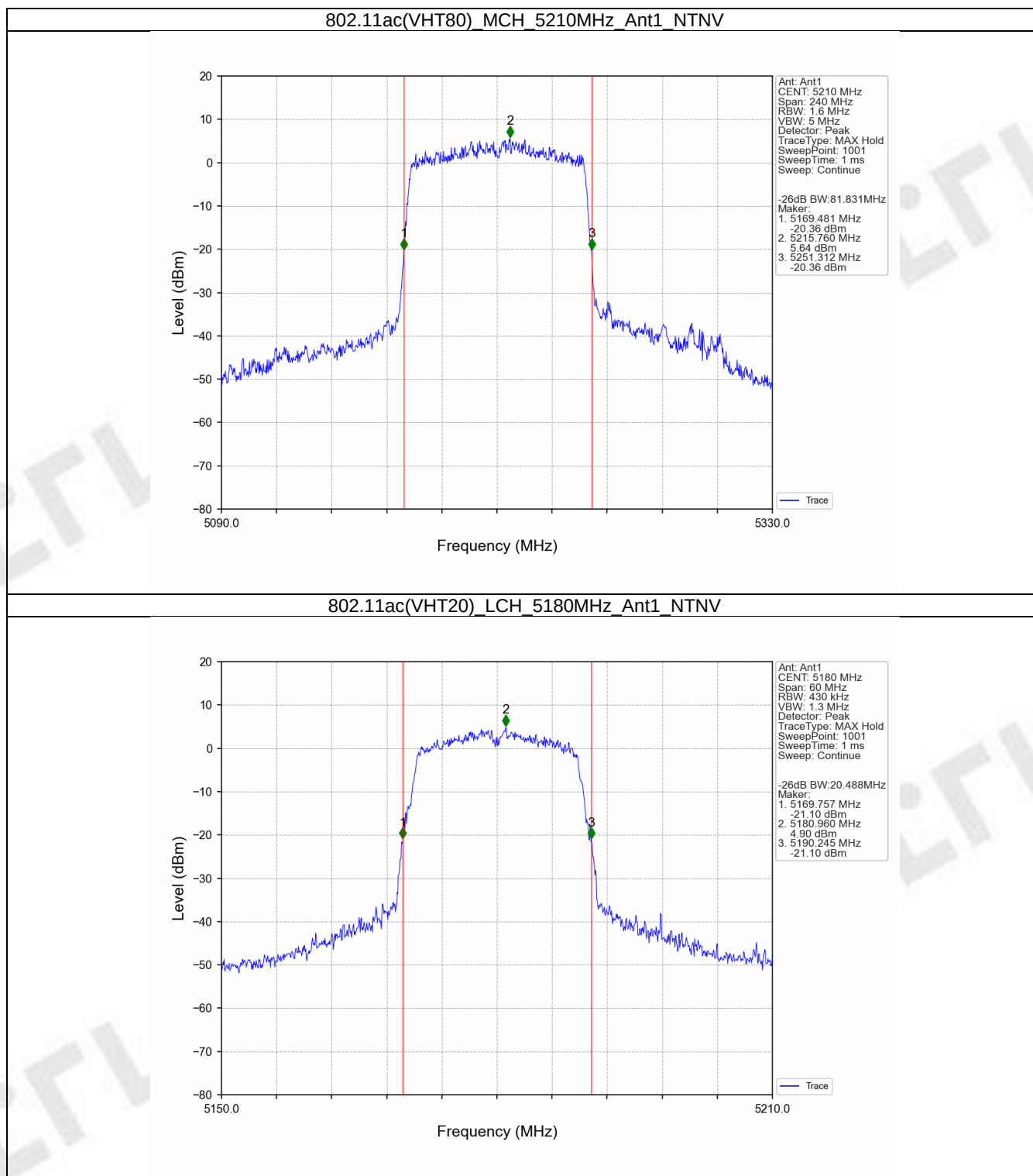
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



FCCID: 2AYHD-SR01



FCCID: 2AYHD-SR01

