

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230700240405

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2. Bandwidth

2.1 OBW

2.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5180	1	18.499	Pass
		5200	1	18.033	Pass
		5240	1	18.250	Pass
		5260	1	18.396	Pass
		5300	1	19.456	Pass
		5320	1	19.221	Pass
		5500	1	19.688	Pass
		5580	1	18.775	Pass
		5700	1	20.086	Pass
802.11n (HT20)	MIMO	5180	1	18.414	Pass
		5200	1	18.339	Pass
		5240	1	18.339	Pass
		5260	1	18.296	Pass
		5300	1	18.347	Pass
		5320	1	18.369	Pass
		5500	1	18.787	Pass
		5580	1	18.498	Pass
		5700	1	18.584	Pass
802.11n (HT40)	MIMO	5190	1	36.951	Pass
		5230	1	36.831	Pass
		5270	1	37.112	Pass
		5310	1	37.072	Pass
		5510	1	37.582	Pass
		5550	1	37.221	Pass
		5670	1	37.070	Pass
802.11ac (VHT20)	MIMO	5180	1	18.284	Pass
		5200	1	18.267	Pass
		5240	1	18.375	Pass
		5260	1	18.498	Pass
		5300	1	18.396	Pass
		5320	1	18.477	Pass
		5500	1	18.621	Pass
		5580	1	18.532	Pass
		5700	1	18.513	Pass
802.11ac	MIMO	5190	1	37.175	Pass



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(VHT40)		5230	1	37.108	Pass
		5270	1	37.145	Pass
		5310	1	37.168	Pass
		5510	1	37.570	Pass
		5550	1	37.472	Pass
		5670	1	37.330	Pass
802.11ac (VHT80)	MIMO	5210	1	76.973	Pass
		5290	1	76.582	Pass
		5530	1	76.974	Pass



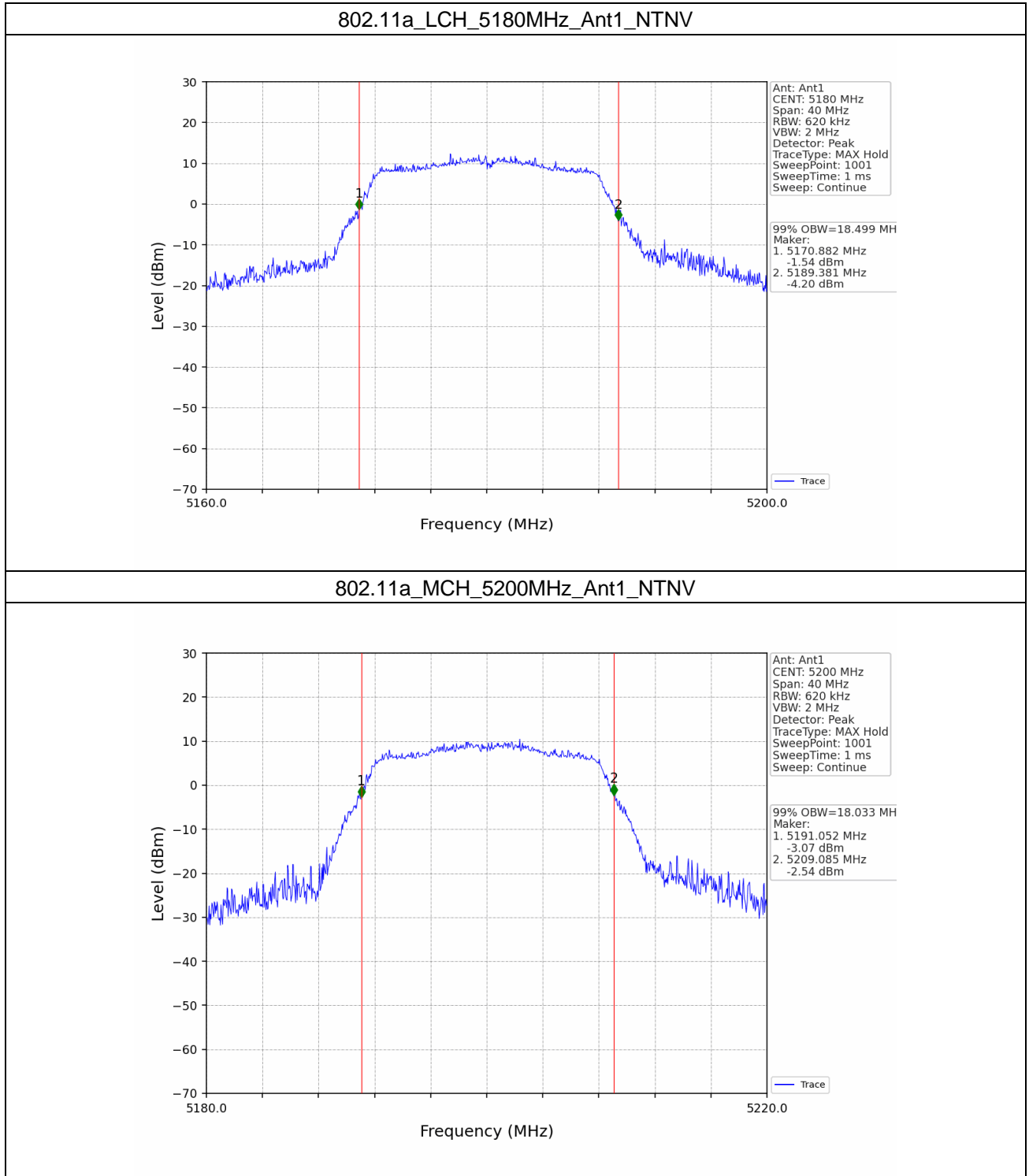
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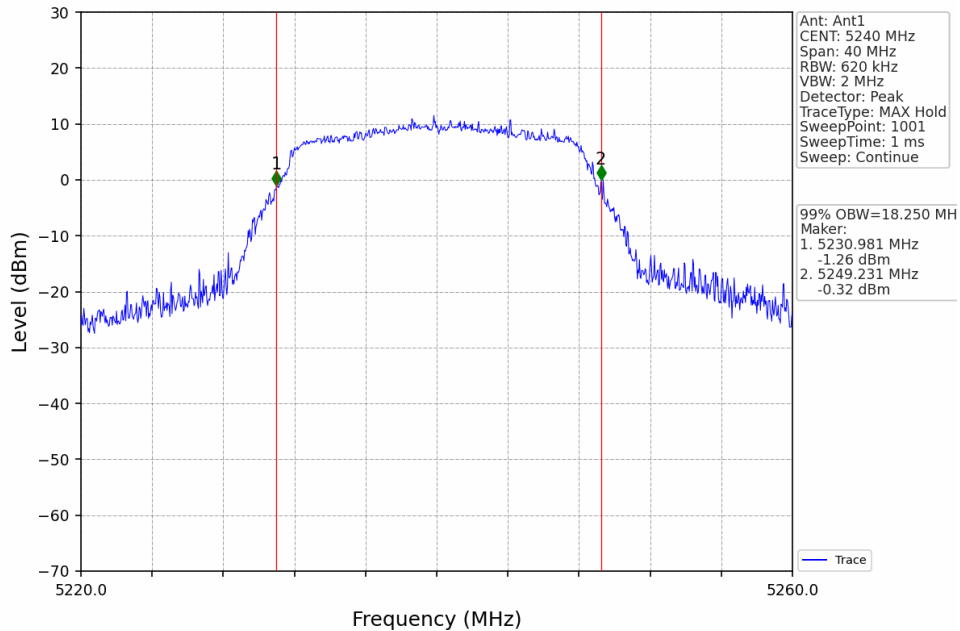
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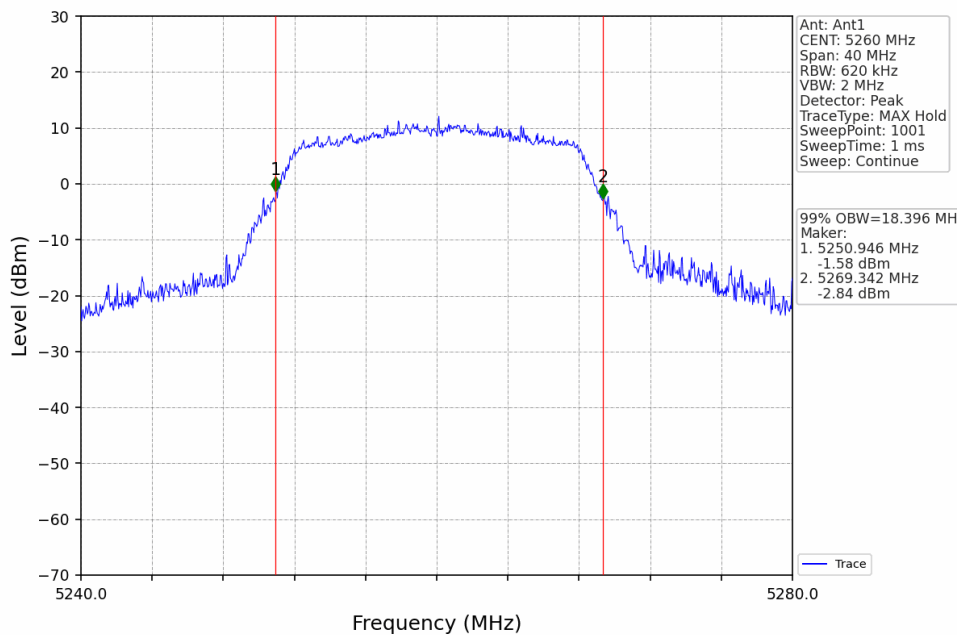
2.1.2 Test Graph



802.11a_HCH_5240MHz_Ant1_NTNV



802.11a_LCH_5260MHz_Ant1_NTNV



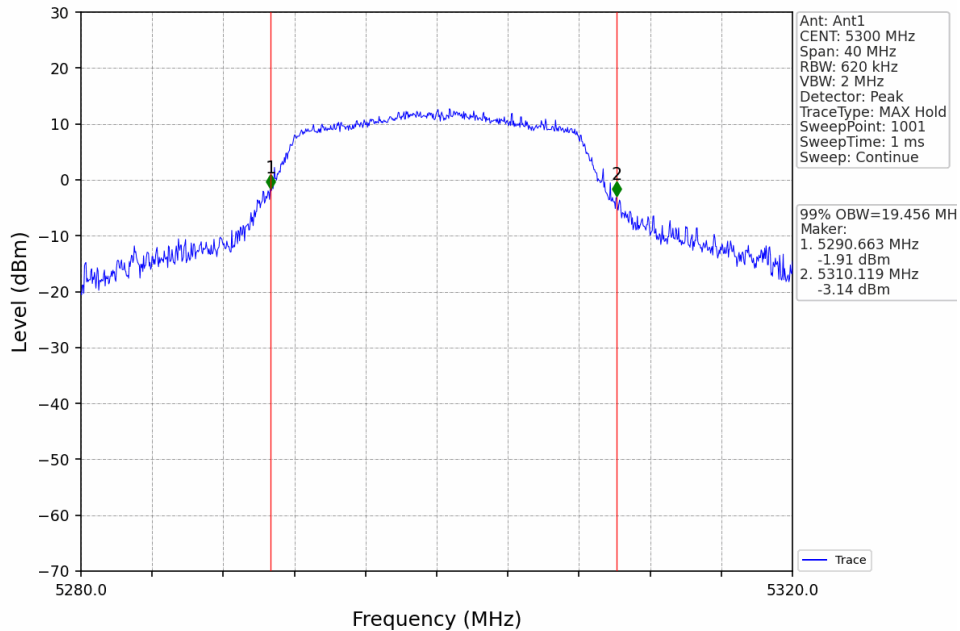
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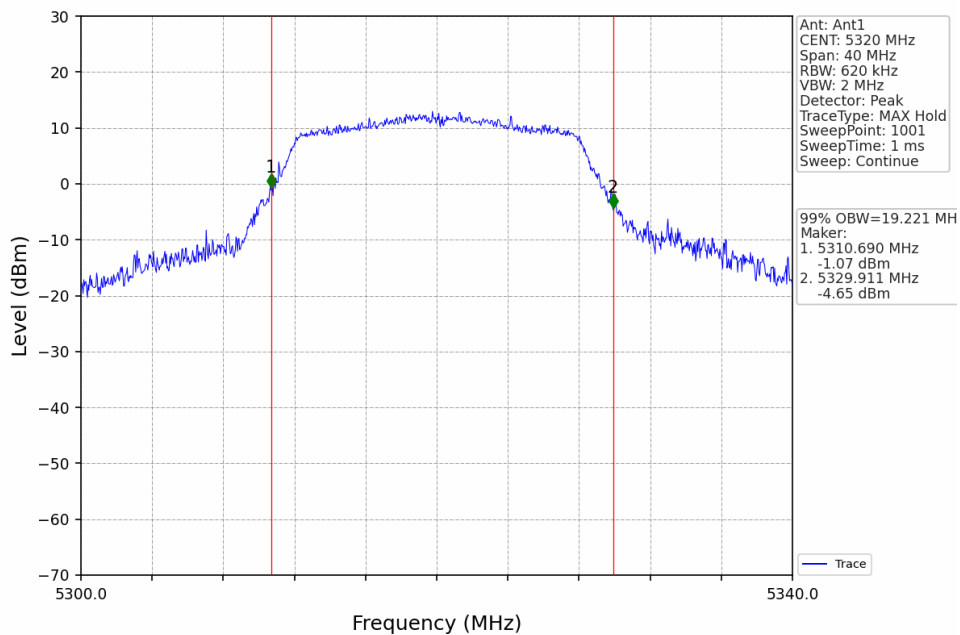
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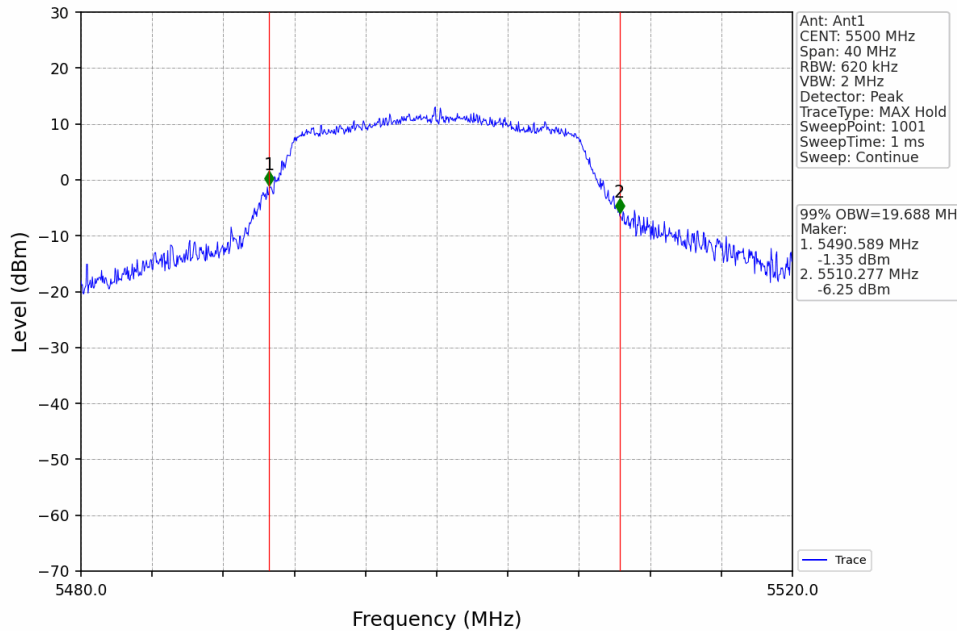
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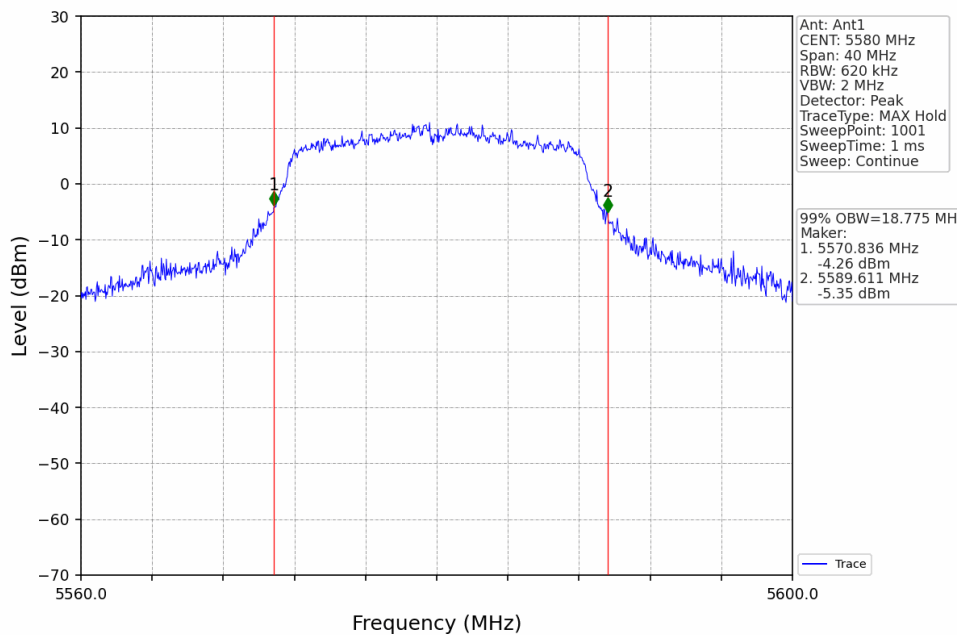
802.11a_HCH_5320MHz_Ant1_NTNV



802.11a_LCH_5500MHz_Ant1_NTNV



802.11a_MCH_5580MHz_Ant1_NTNV



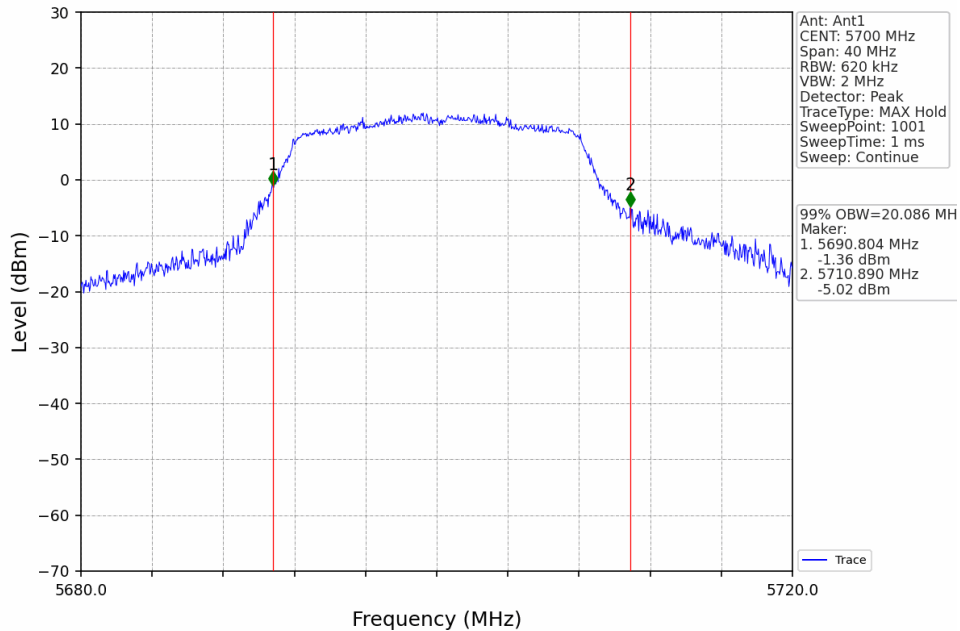
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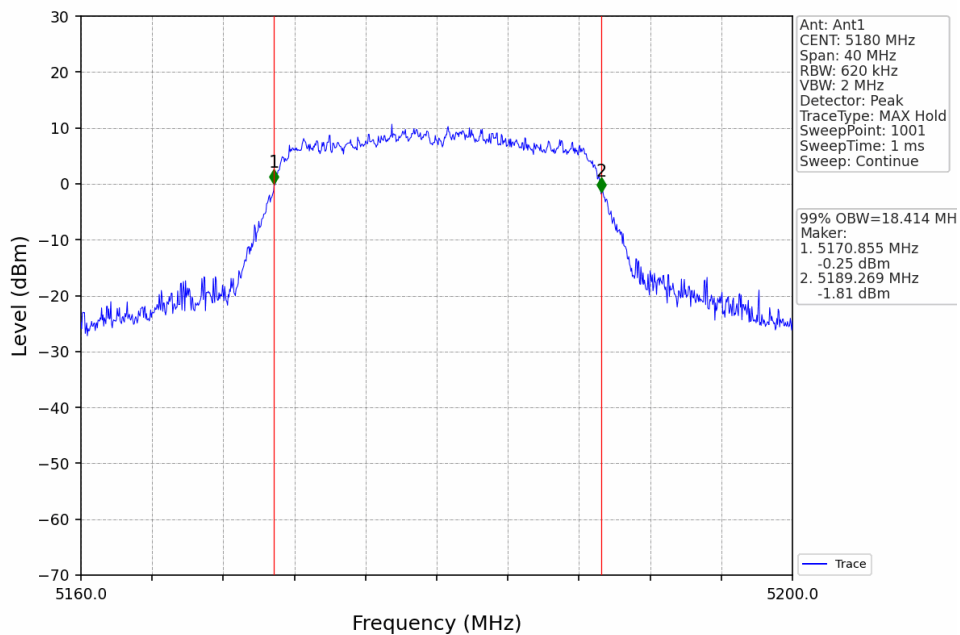
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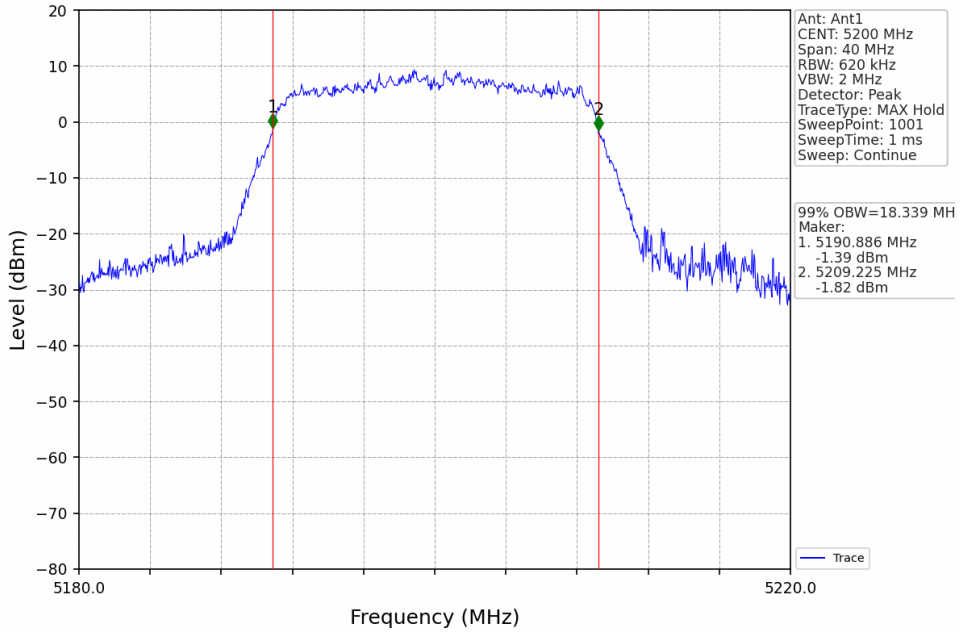
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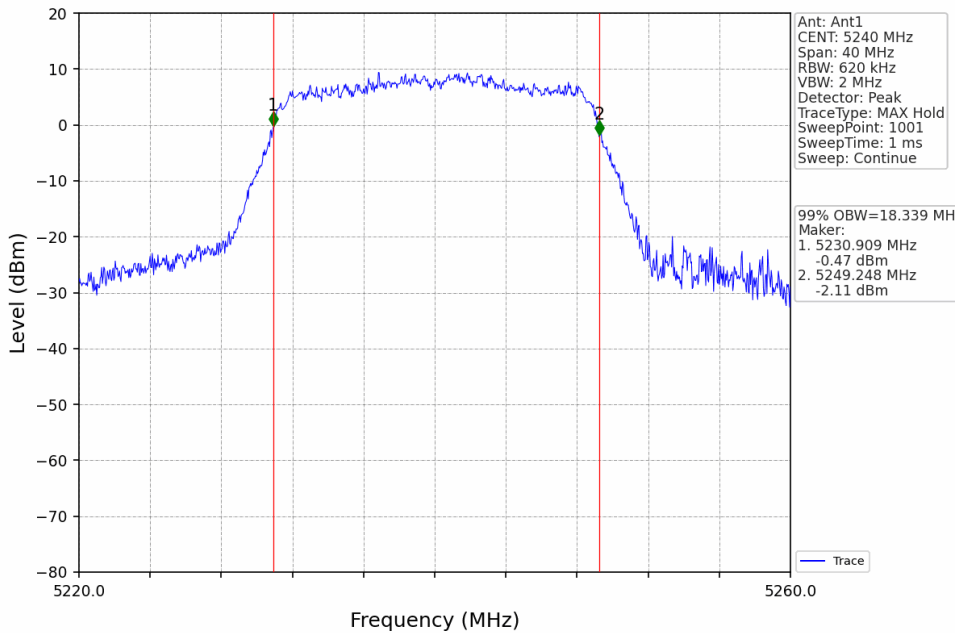
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802.11n(HT20)_MCH_5200MHz_Ant1_NTNV

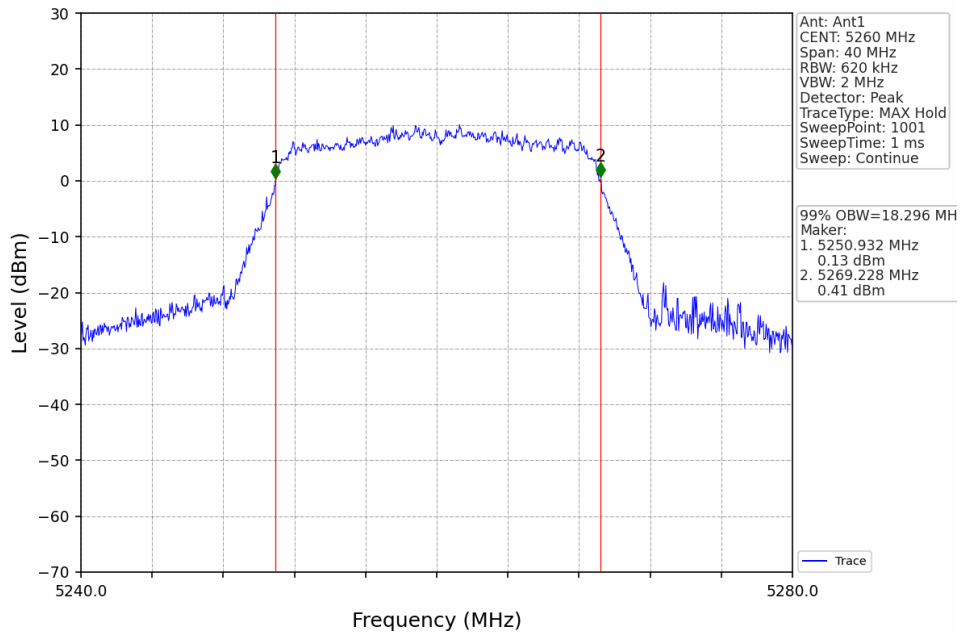


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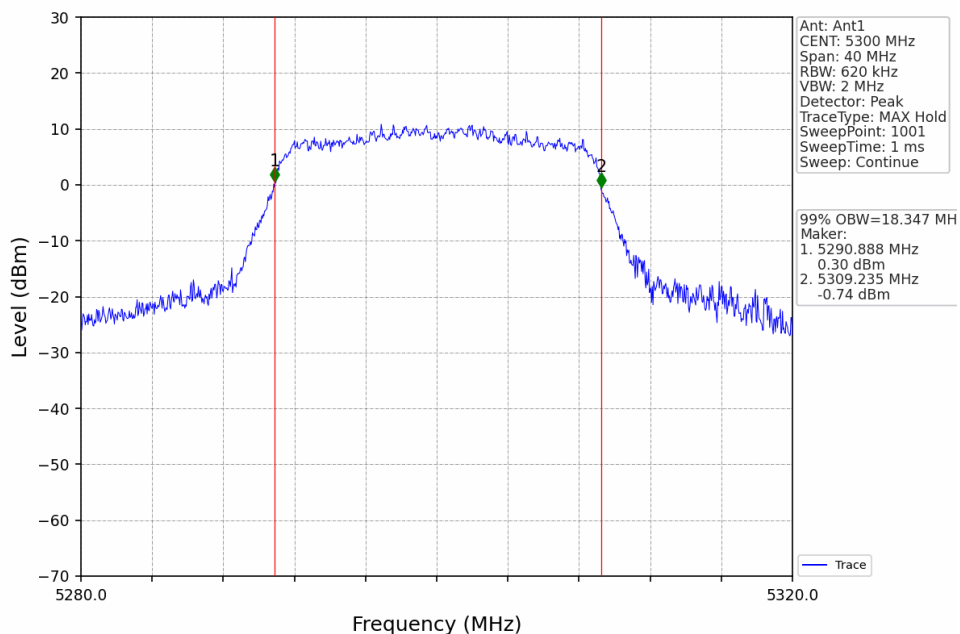


802.11n(HT20)_LCH_5260MHz_Ant1_NTNV





802.11n(HT20)_MCH_5300MHz_Ant1_NTNV



802.11n(HT20)_HCH_5320MHz_Ant1_NTNV

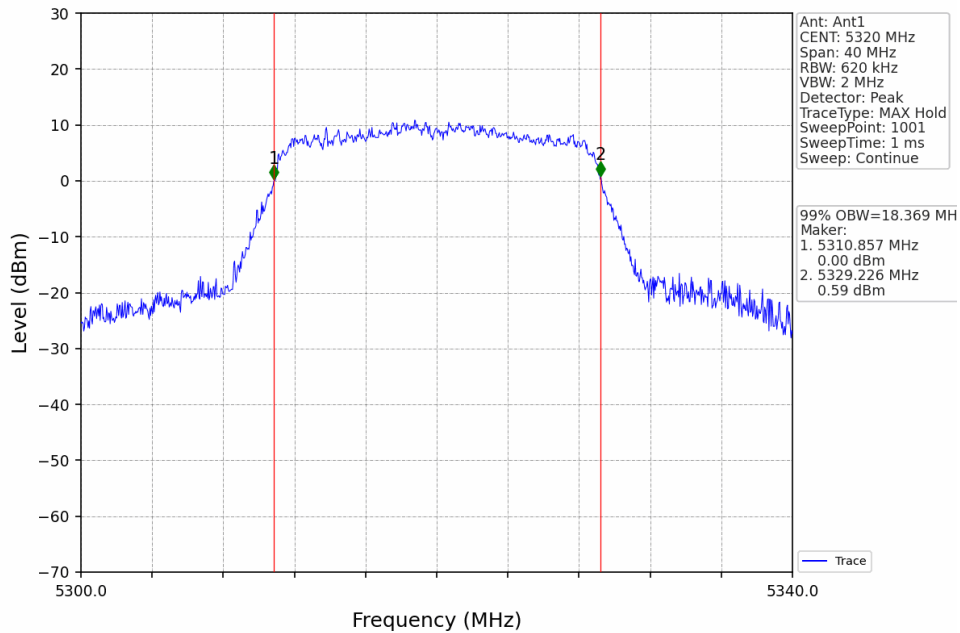


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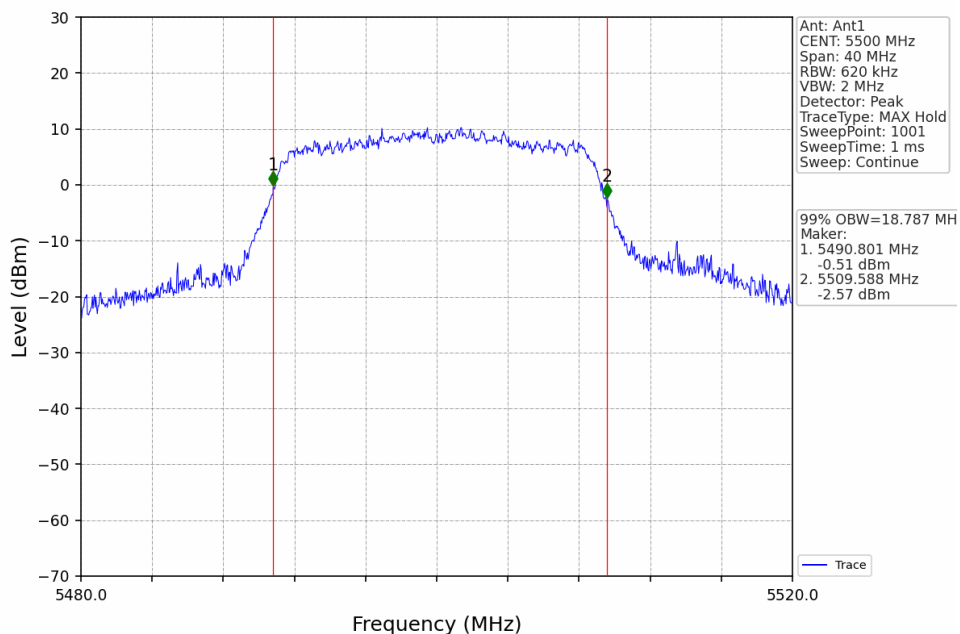
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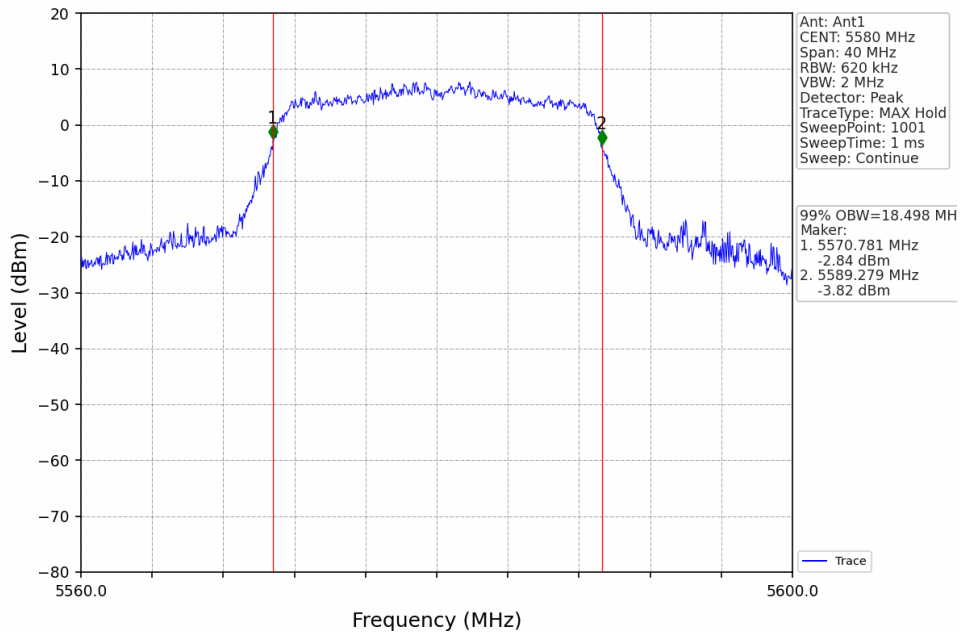


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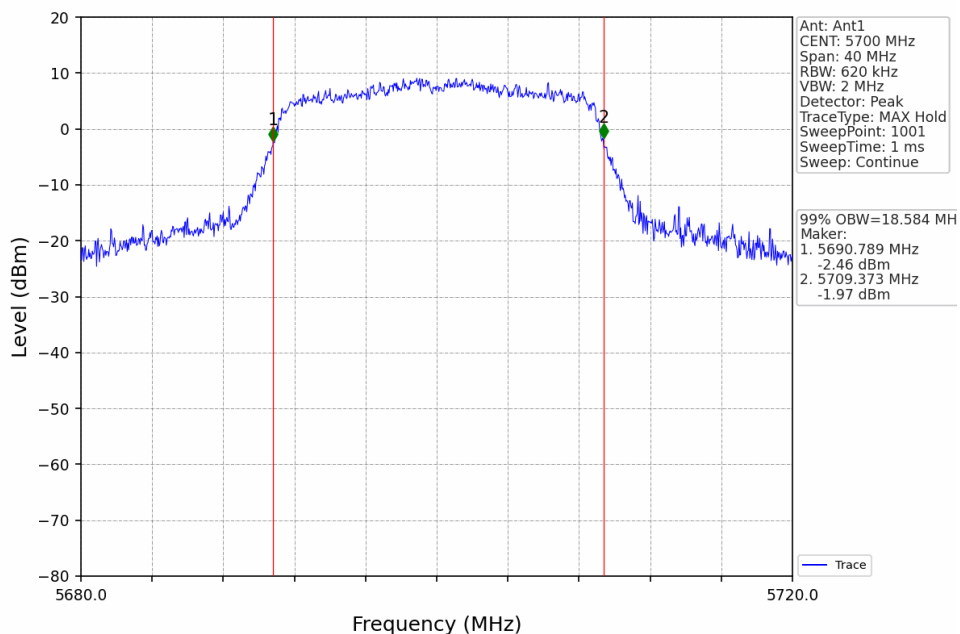


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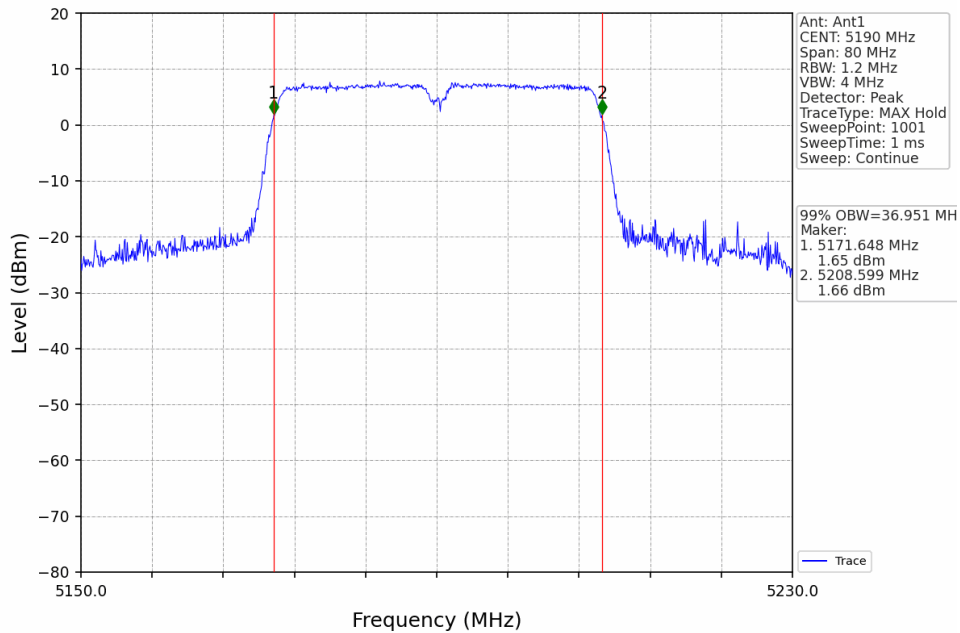


802.11n(HT20)_HCH_5700MHz_Ant1_NTNV

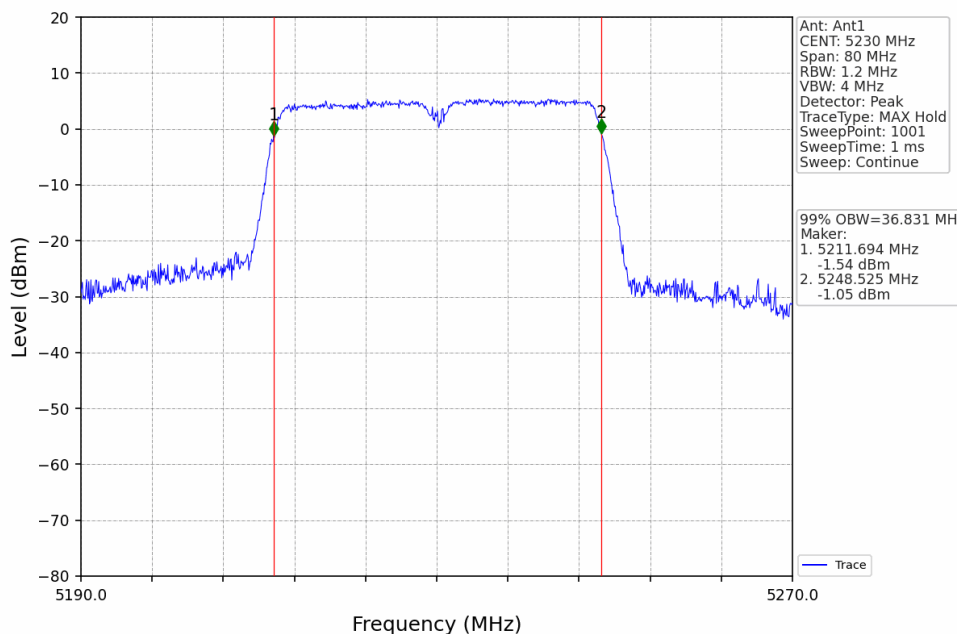


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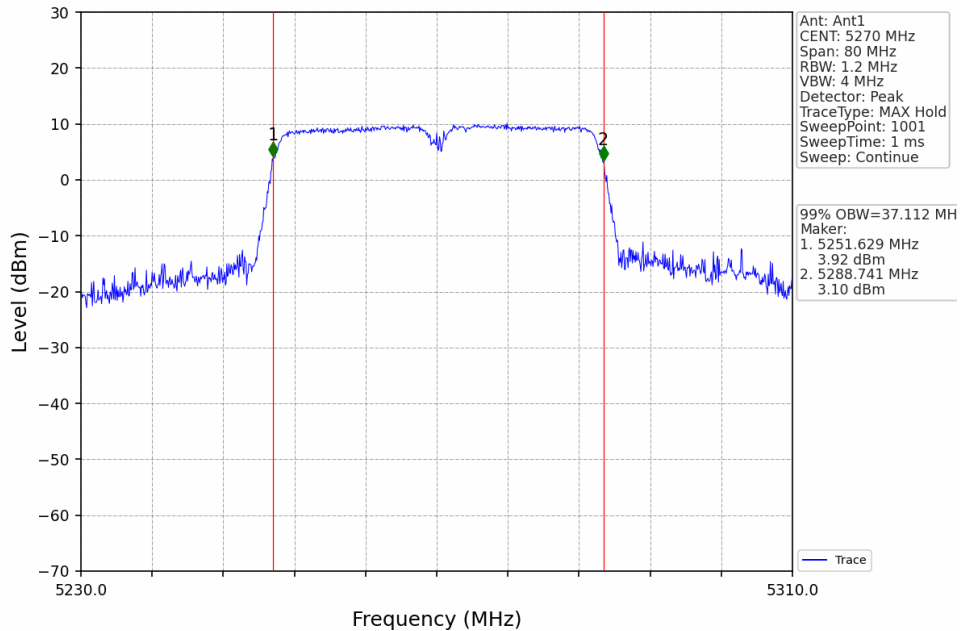




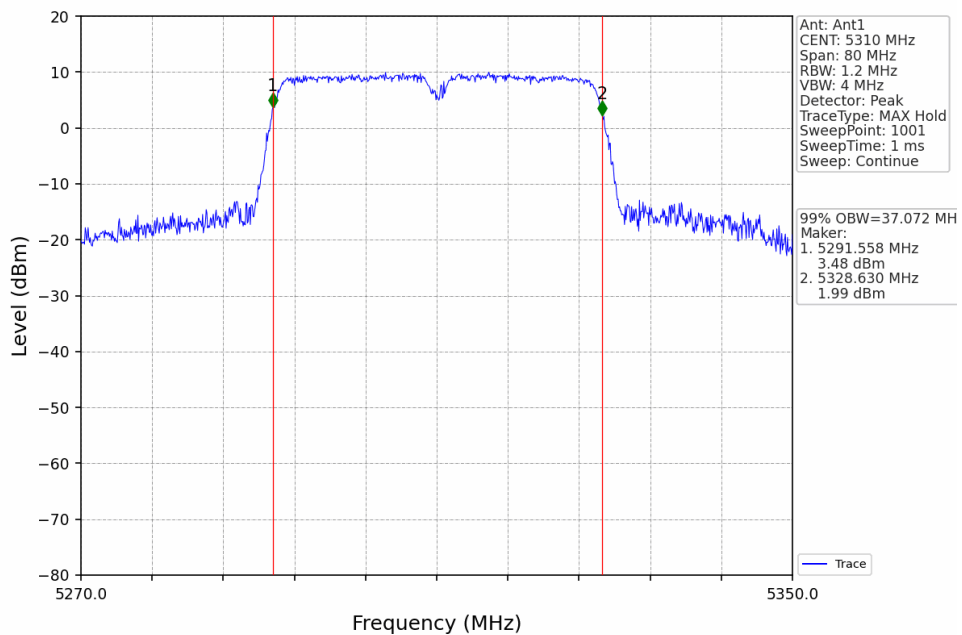
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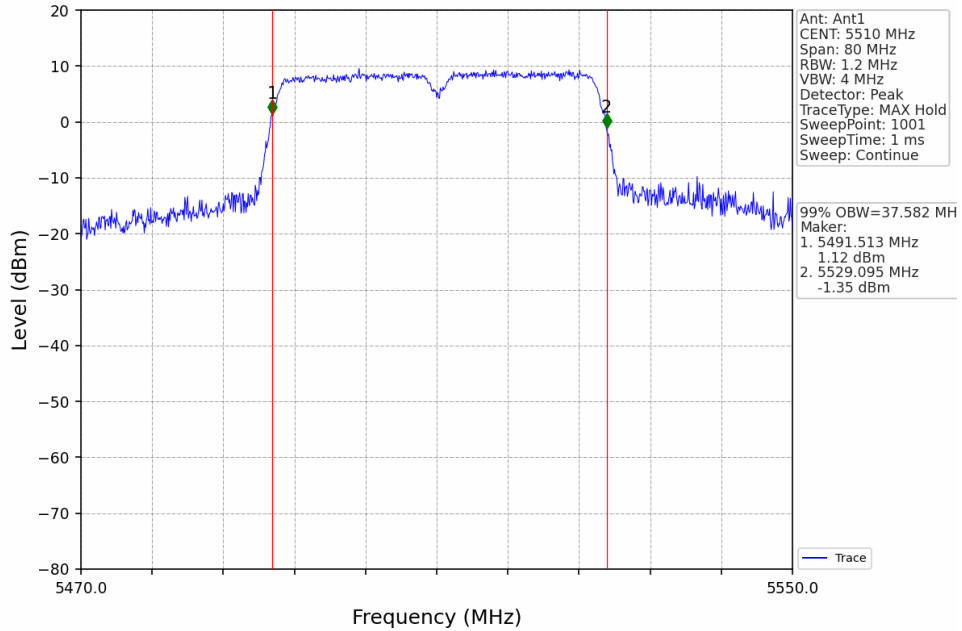
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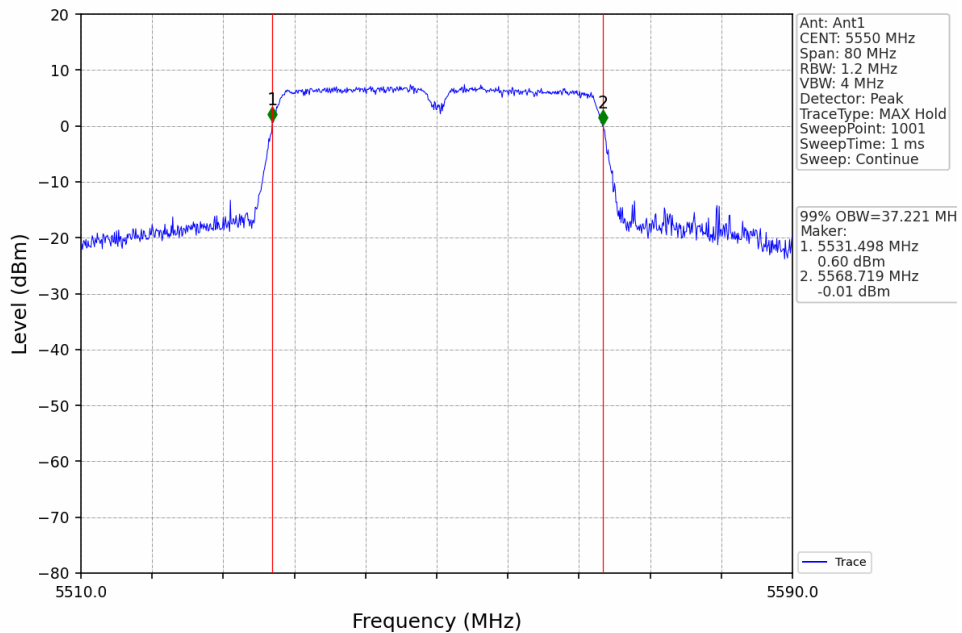
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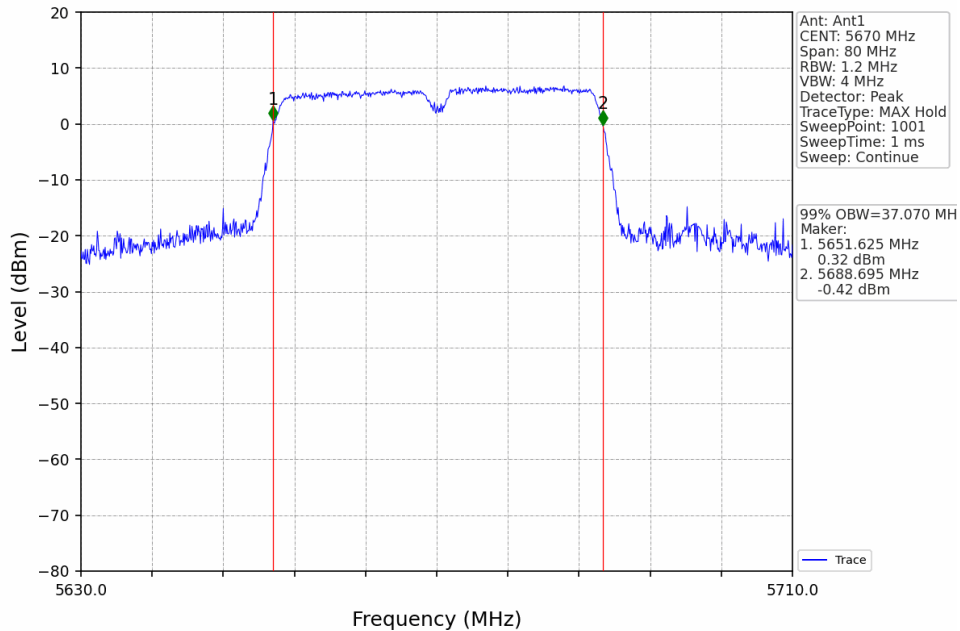
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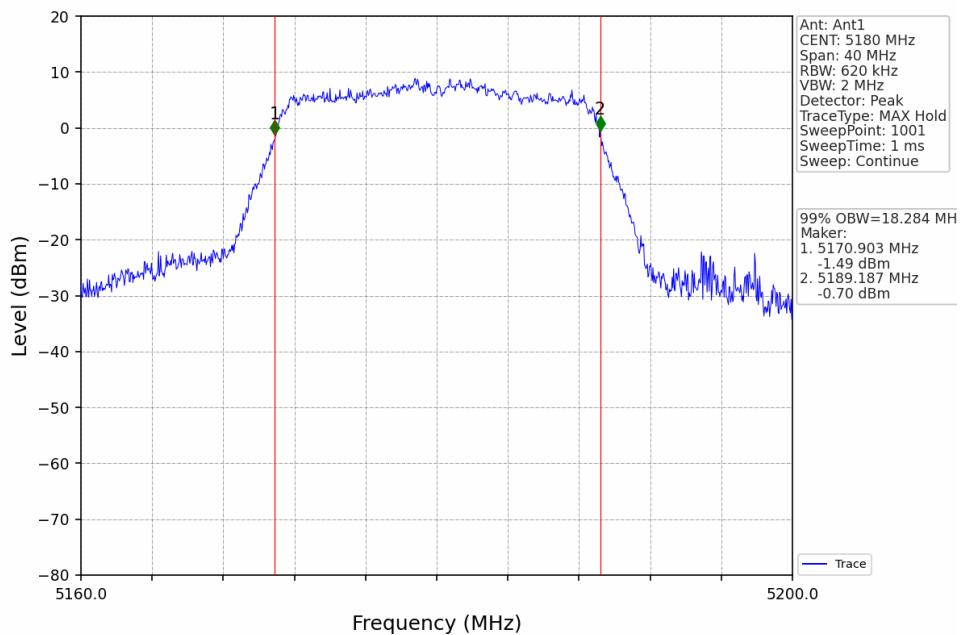
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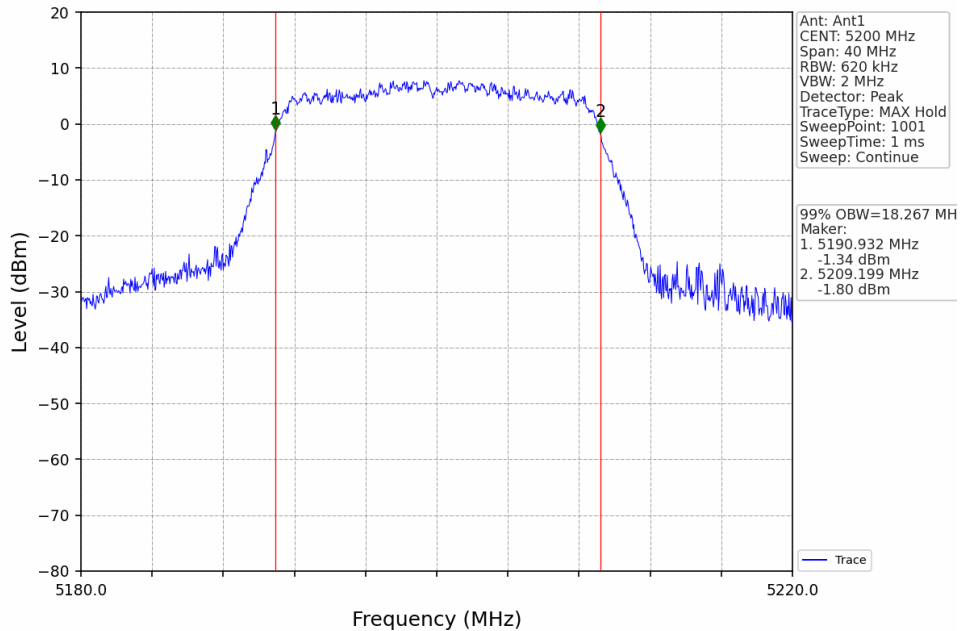
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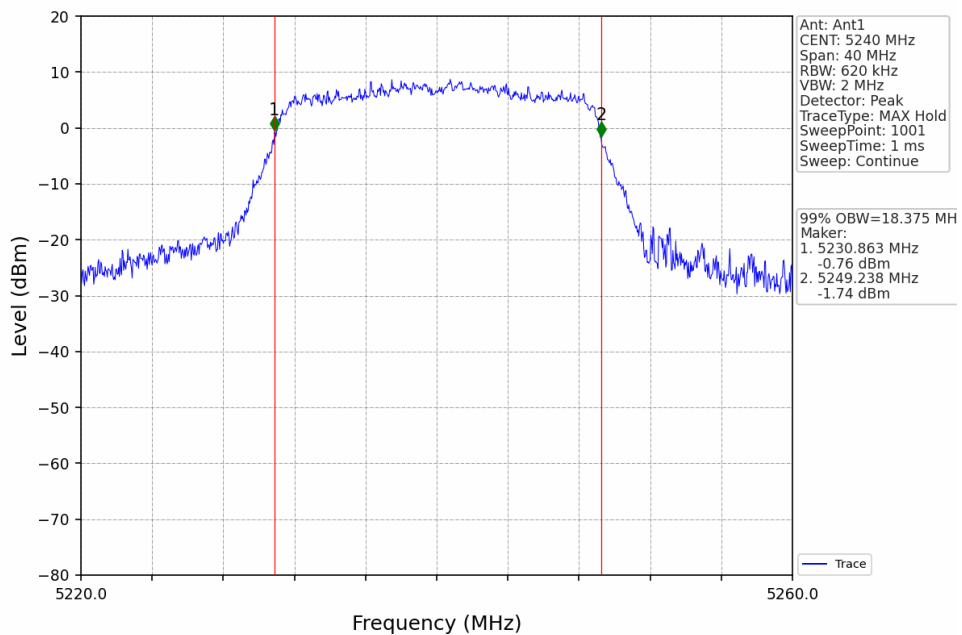
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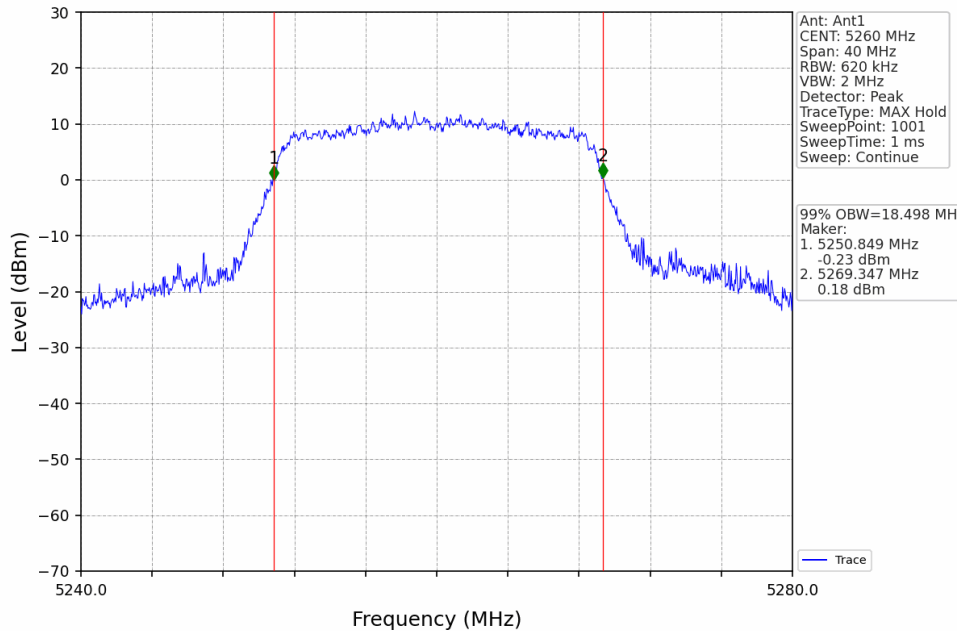
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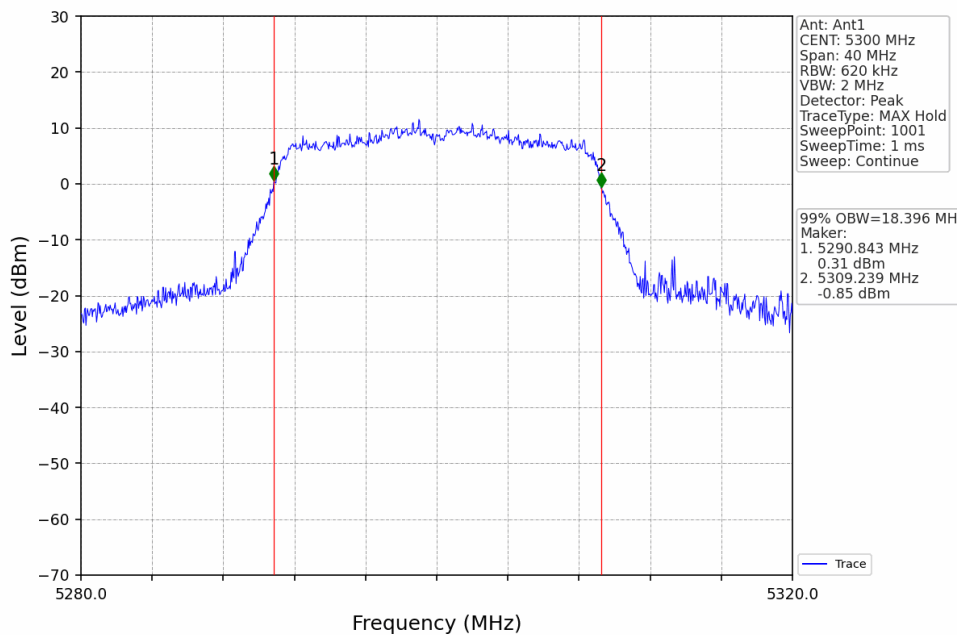
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802.11ac(VHT20)_LCH_5260MHz_Ant1_NTNV



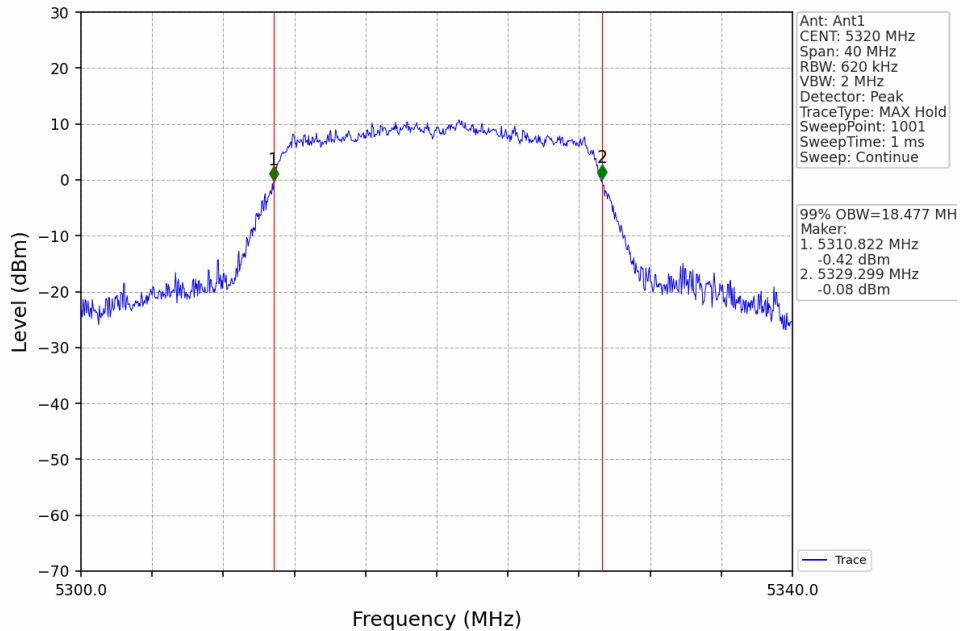
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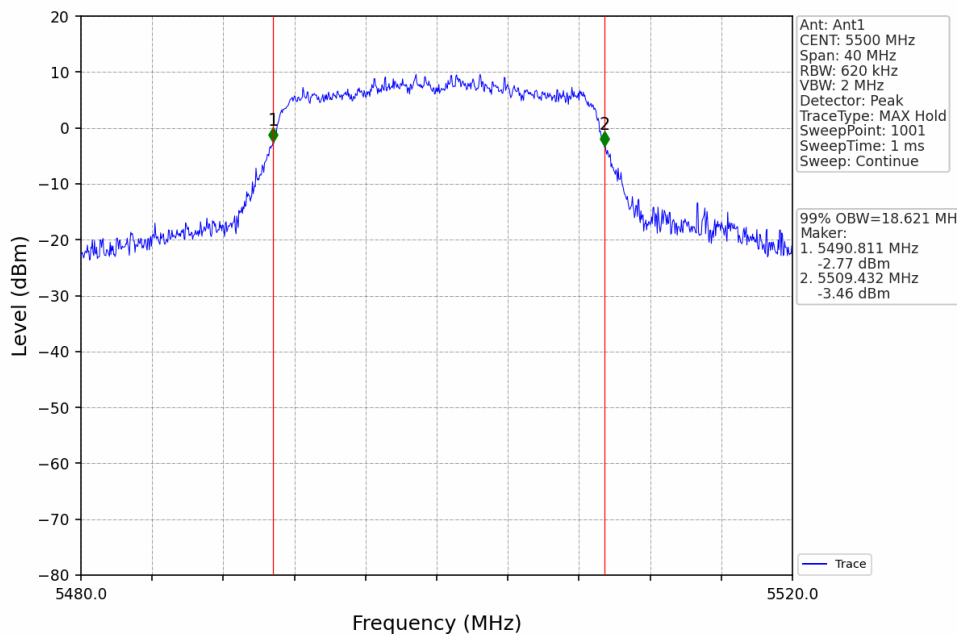
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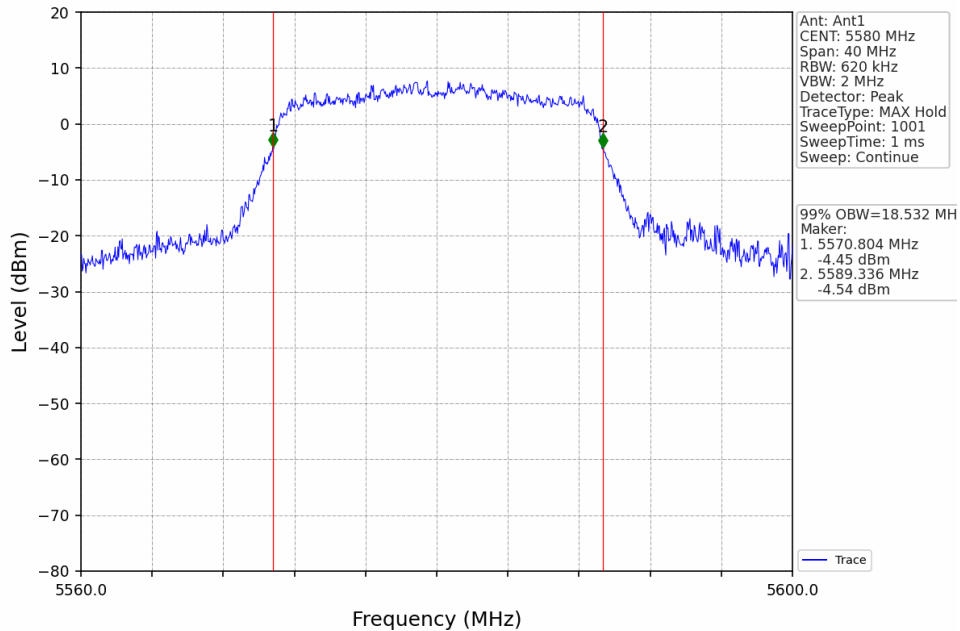
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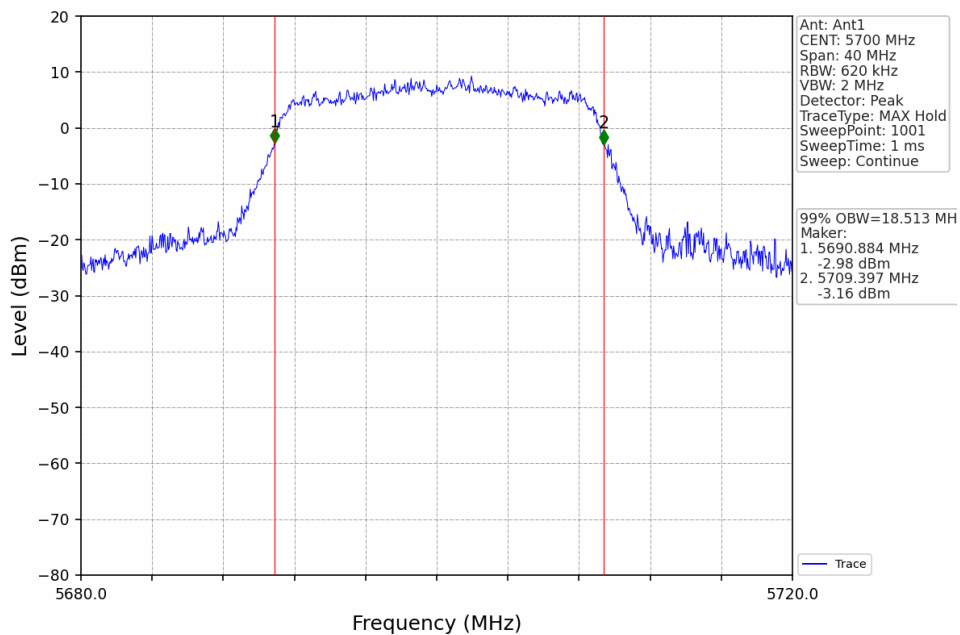
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802.11ac(VHT20)_MCH_5580MHz_Ant1_NTNV



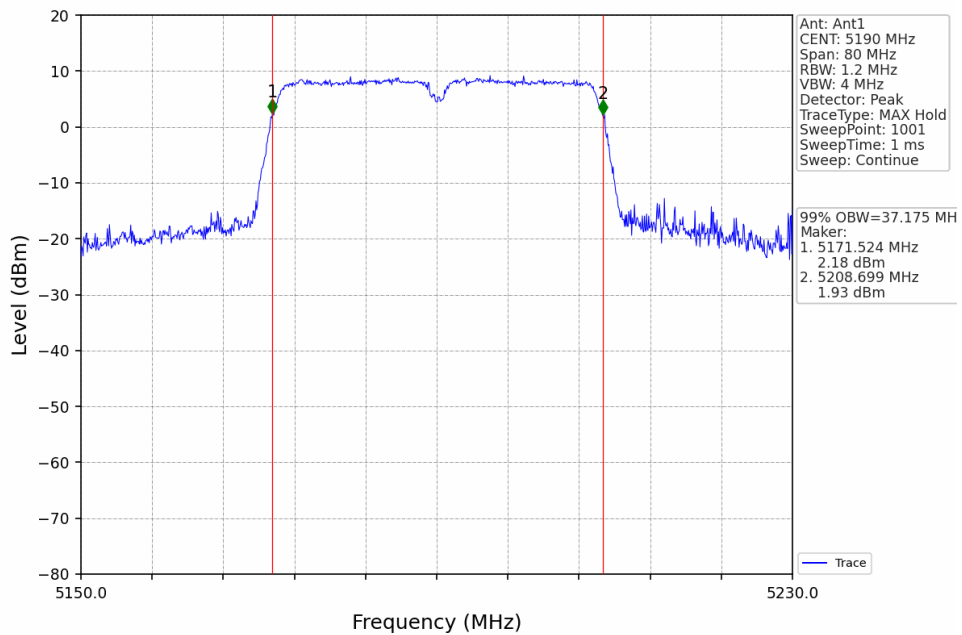
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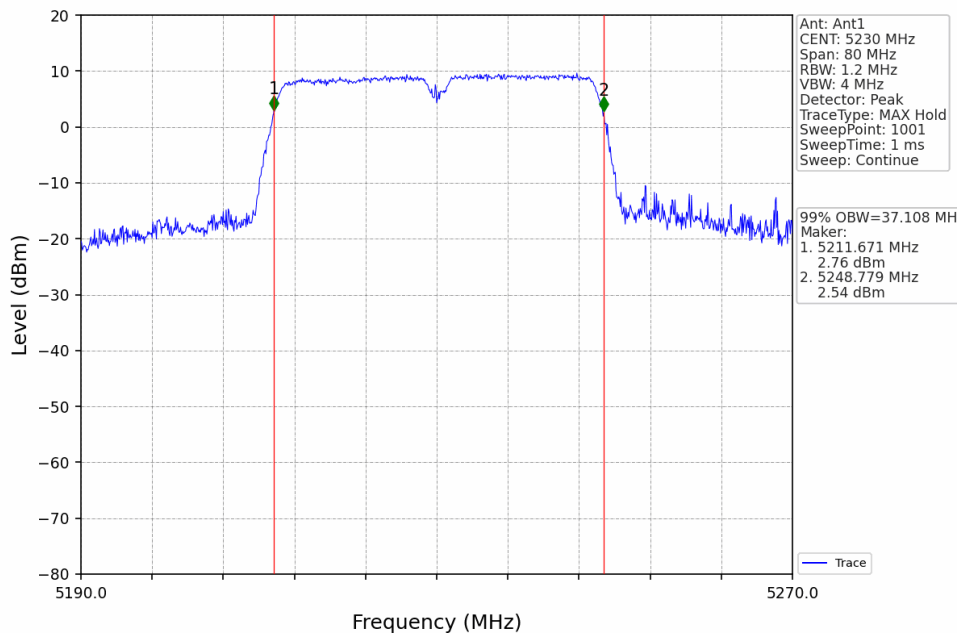
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802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV

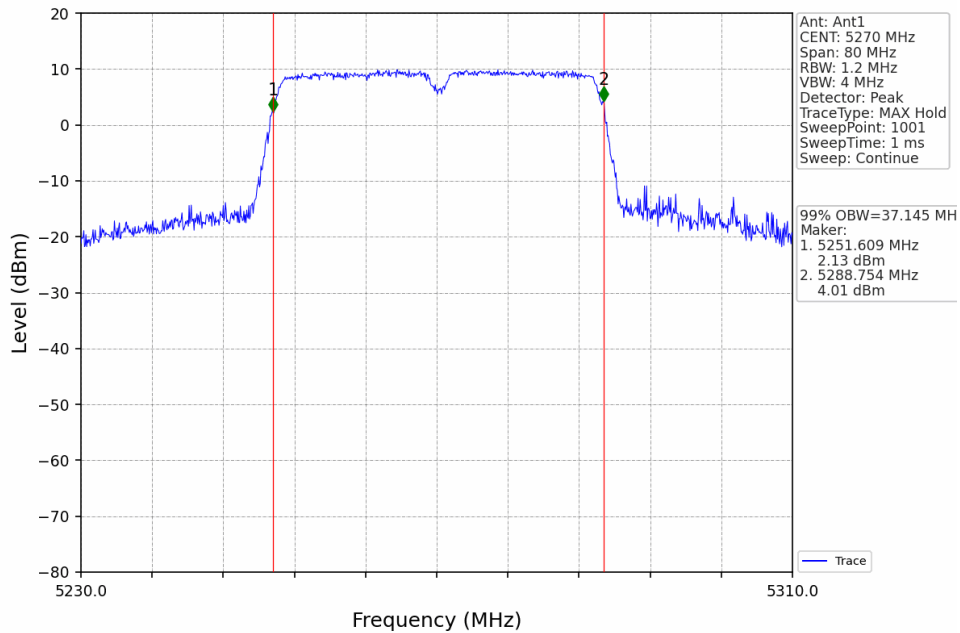


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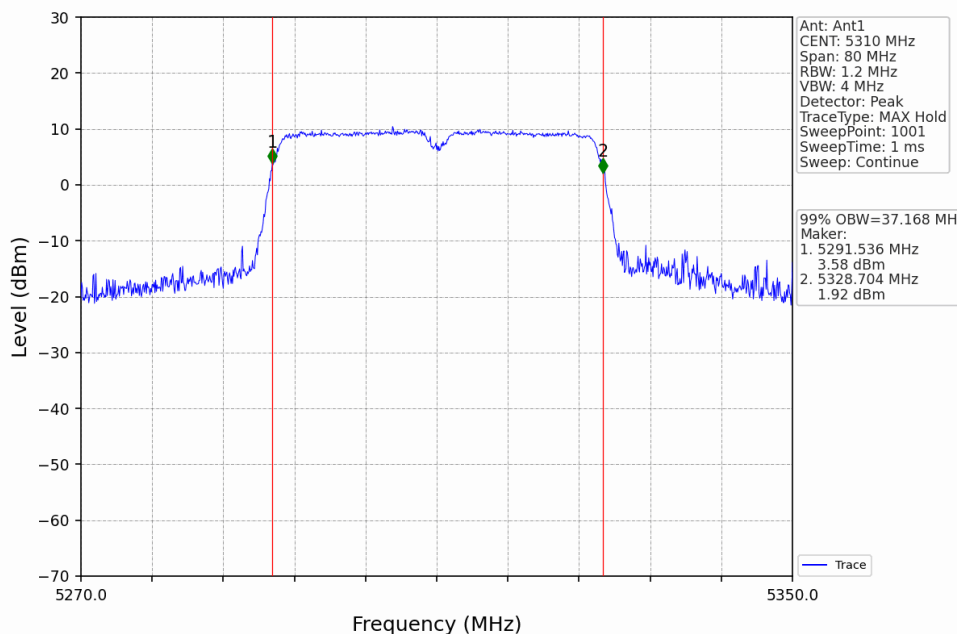


802.11ac(VHT40)_LCH_5270MHz_Ant1_NTNV



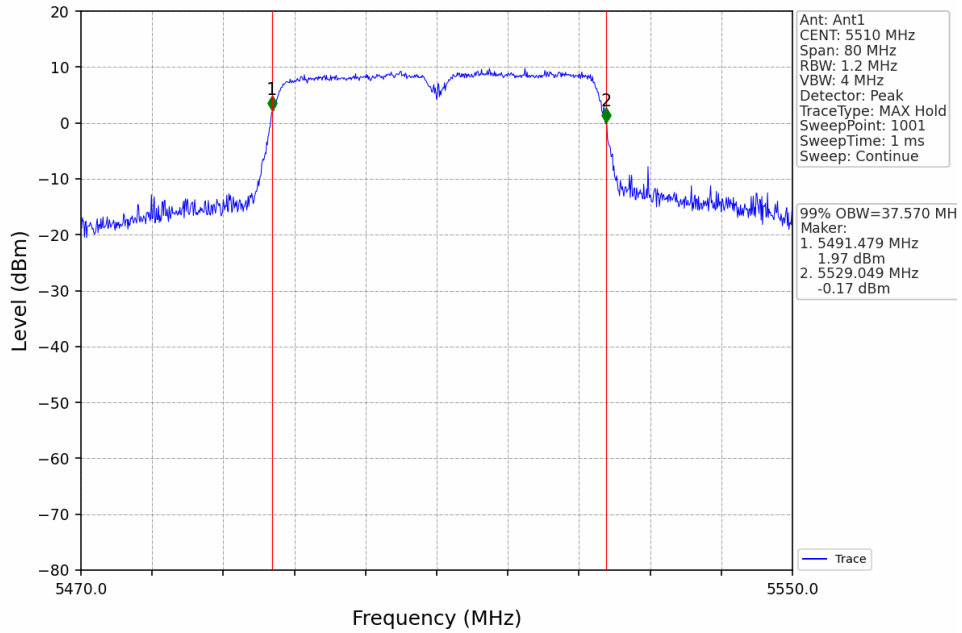


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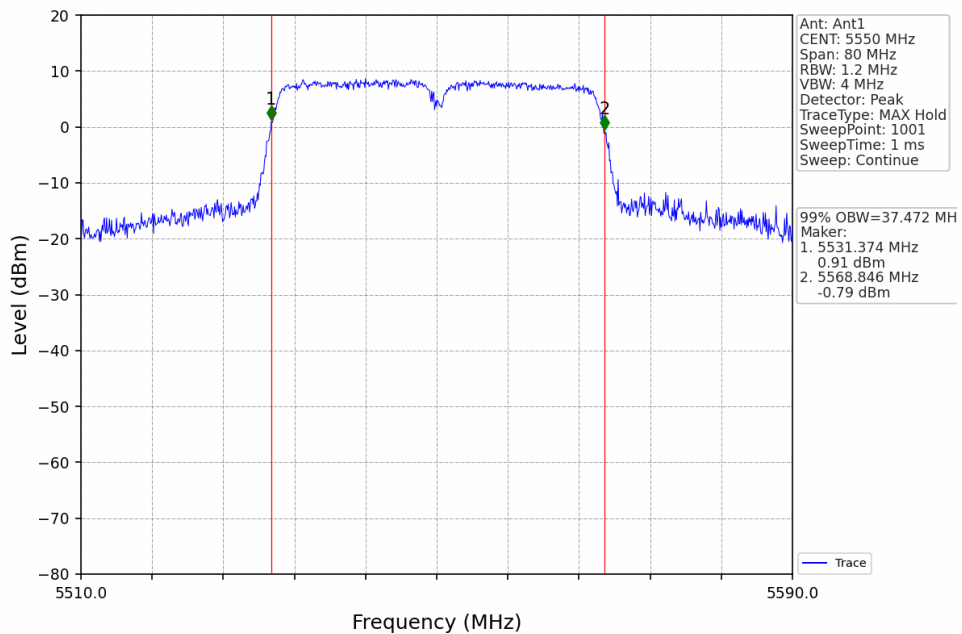


802.11ac(VHT40)_LCH_5510MHz_Ant1_NTNV



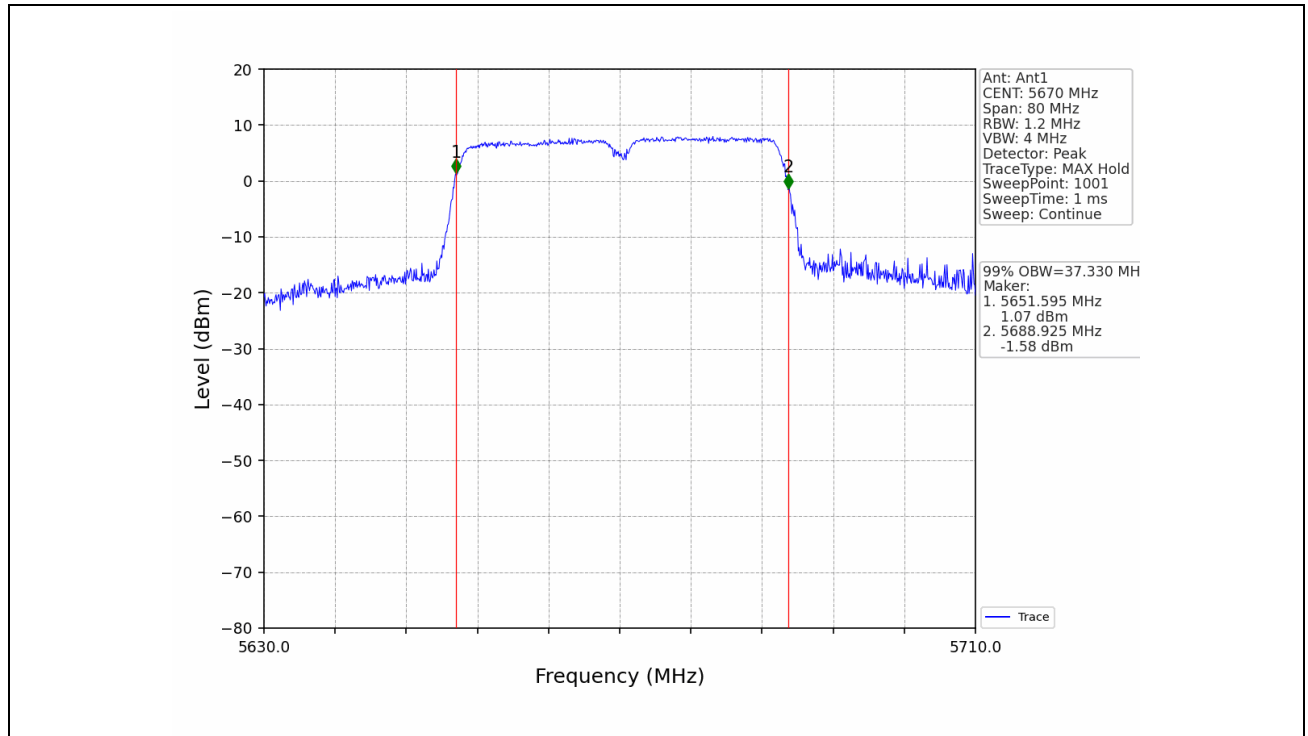


802.11ac(VHT40)_MCH_5550MHz_Ant1_NTNV

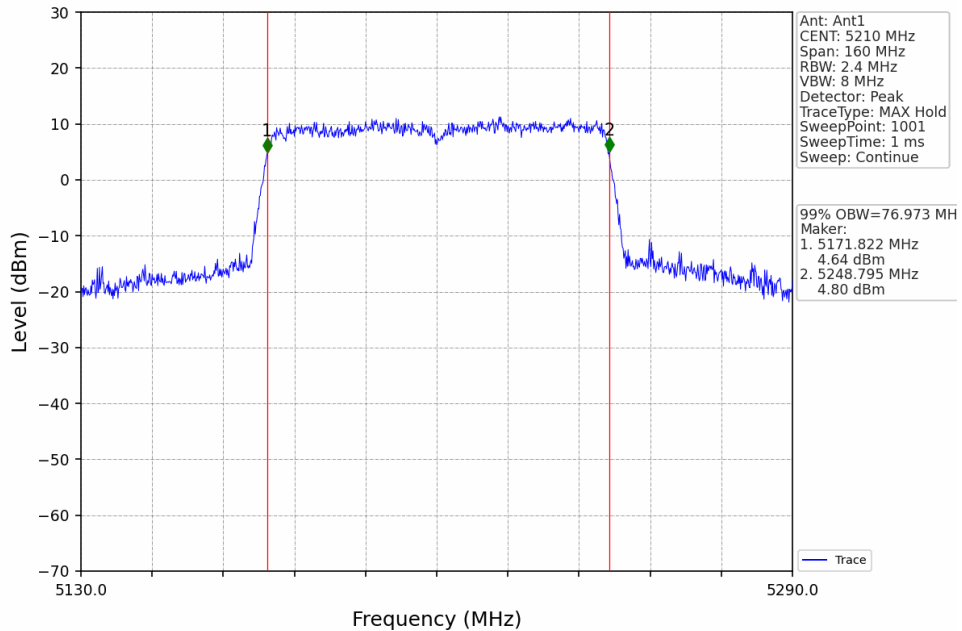


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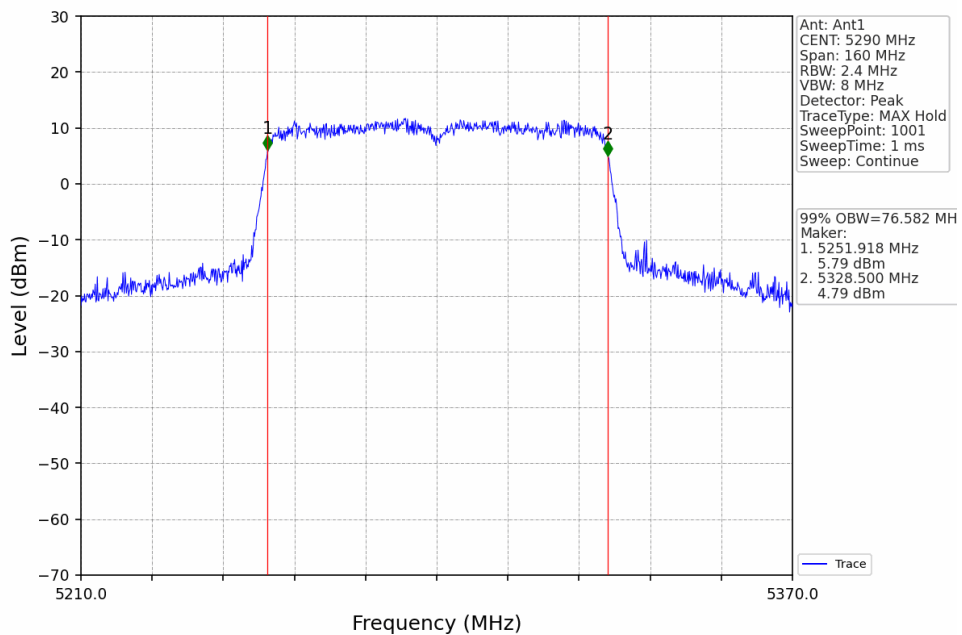




802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV

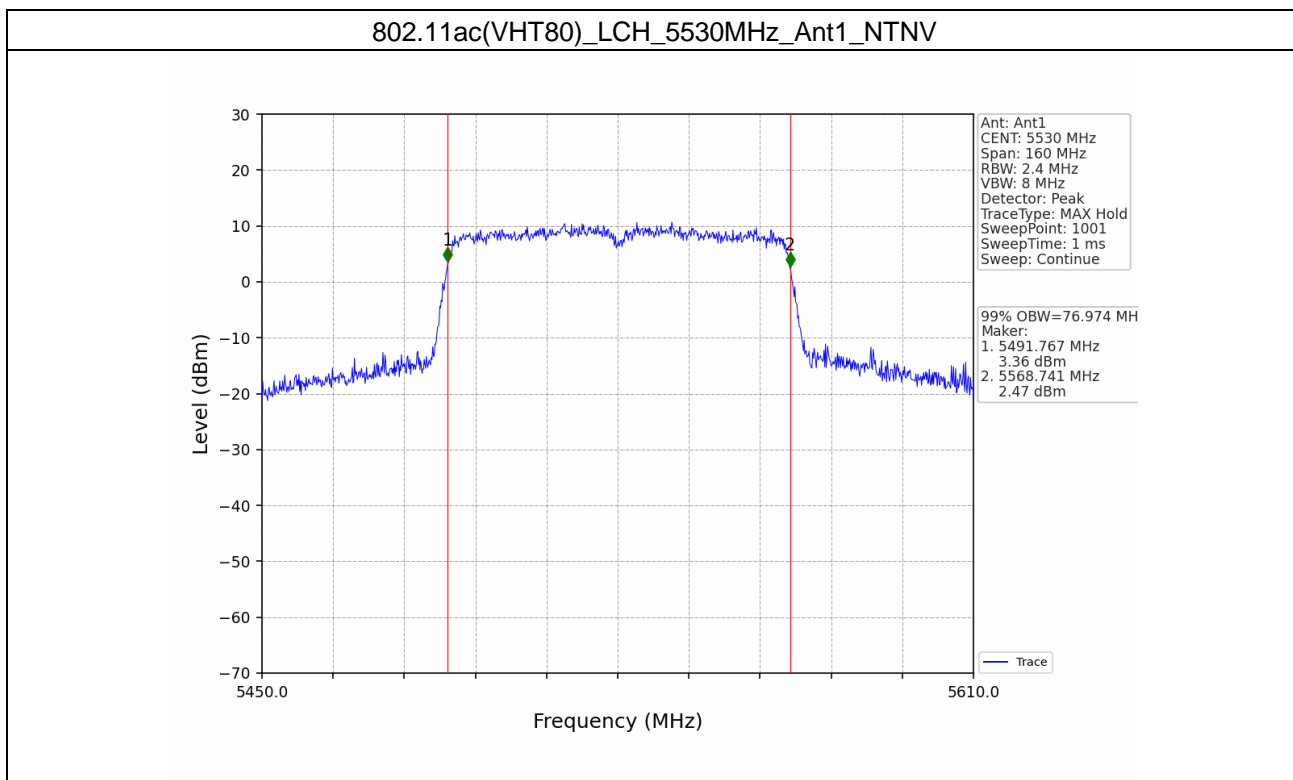


802.11ac(VHT80)_MCH_5290MHz_Ant1_NTNV



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2.3 26dB BW

2.3.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)	Verdict
				Result	
802.11a	SISO	5180	1	25.039	Pass
		5200	1	21.390	Pass
		5240	1	21.267	Pass
		5260	1	21.801	Pass
		5300	1	29.624	Pass
		5320	1	26.531	Pass
		5500	1	30.842	Pass
		5580	1	32.542	Pass
		5700	1	29.551	Pass
802.11n (HT20)	MIMO	5180	1	23.928	Pass
		5200	1	21.515	Pass
		5240	1	21.574	Pass
		5260	1	21.865	Pass
		5300	1	21.587	Pass
		5320	1	21.808	Pass

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		5500	1	26.894	Pass
		5580	1	26.065	Pass
		5700	1	28.298	Pass
802.11n (HT40)	MIMO	5190	1	39.814	Pass
		5230	1	39.859	Pass
		5270	1	46.037	Pass
		5310	1	41.863	Pass
		5510	1	64.777	Pass
		5550	1	58.647	Pass
		5670	1	42.740	Pass
802.11ac (VHT20)	MIMO	5180	1	21.670	Pass
		5200	1	21.414	Pass
		5240	1	21.748	Pass
		5260	1	21.999	Pass
		5300	1	21.934	Pass
		5320	1	22.628	Pass
		5500	1	31.099	Pass
		5580	1	26.609	Pass
802.11ac (VHT40)	MIMO	5700	1	24.080	Pass
		5190	1	39.874	Pass
		5230	1	44.363	Pass
		5270	1	41.612	Pass
		5310	1	39.854	Pass
		5510	1	64.207	Pass
		5550	1	67.618	Pass
802.11ac (VHT80)	MIMO	5670	1	56.388	Pass
		5210	1	100.838	Pass
		5290	1	95.726	Pass
		5530	1	107.774	Pass



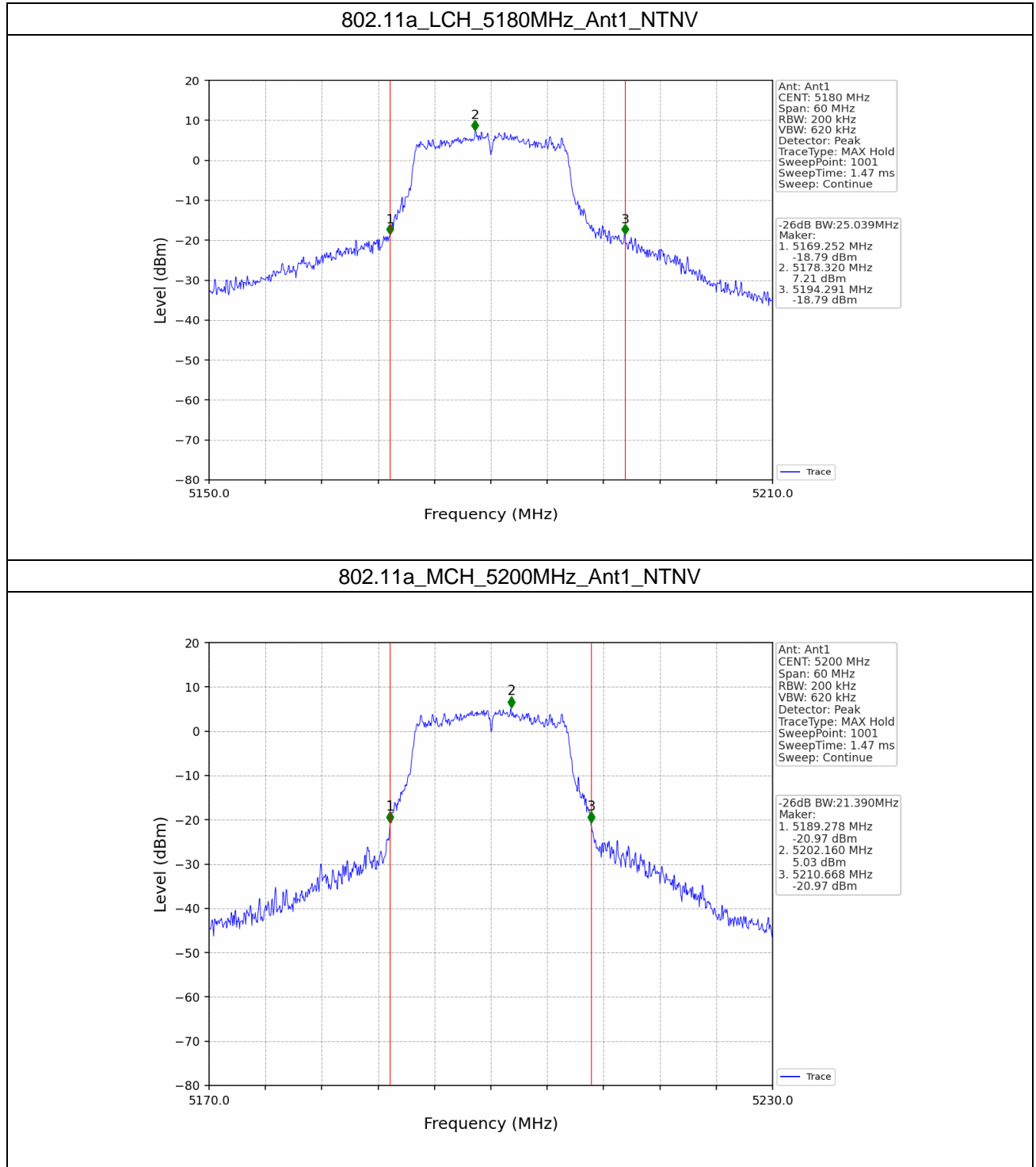
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2.3.2 Test Graph



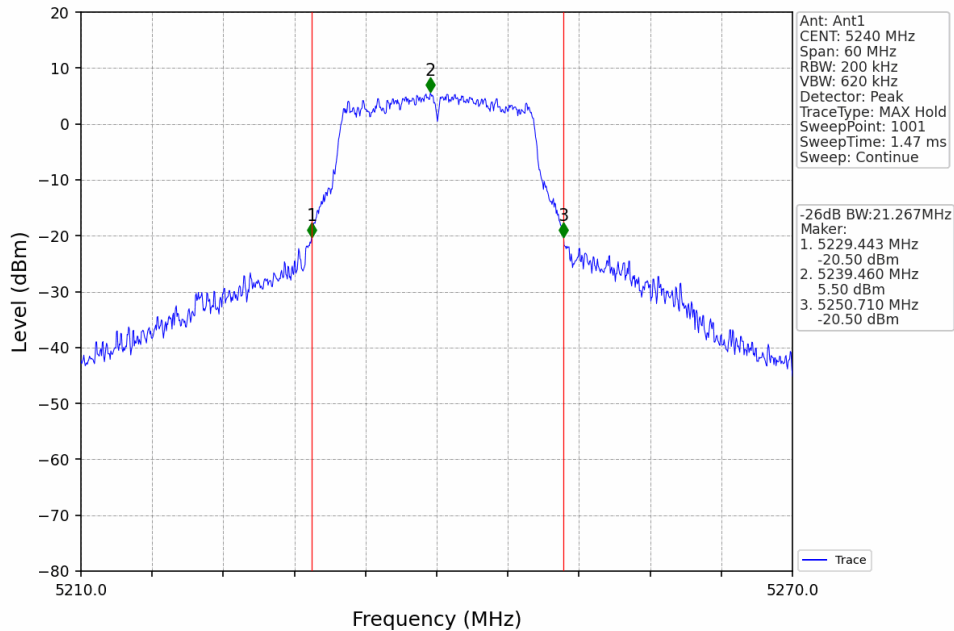
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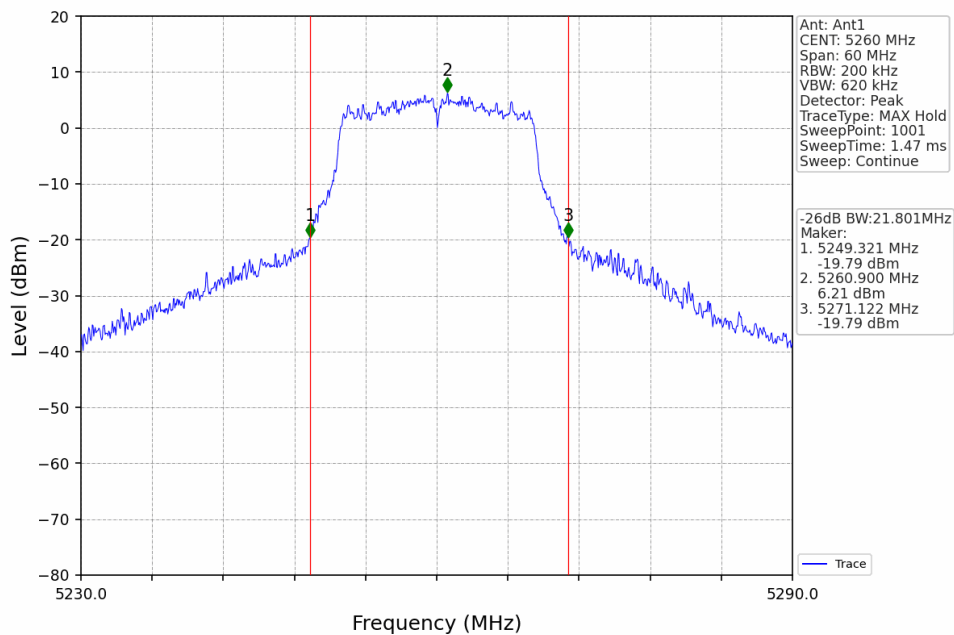
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802.11a_HCH_5240MHz_Ant1_NTNV



802.11a_LCH_5260MHz_Ant1_NTNV



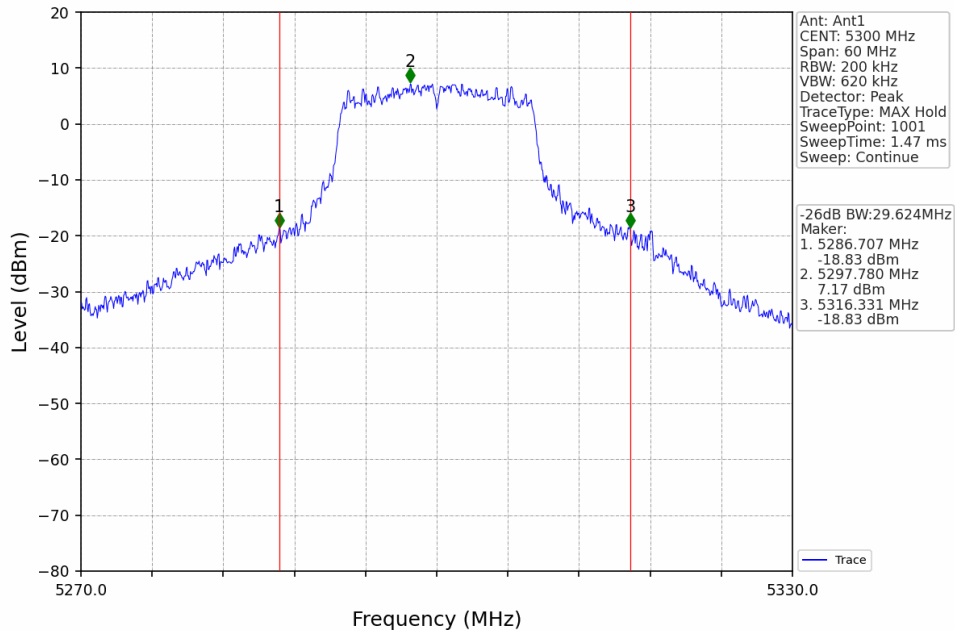
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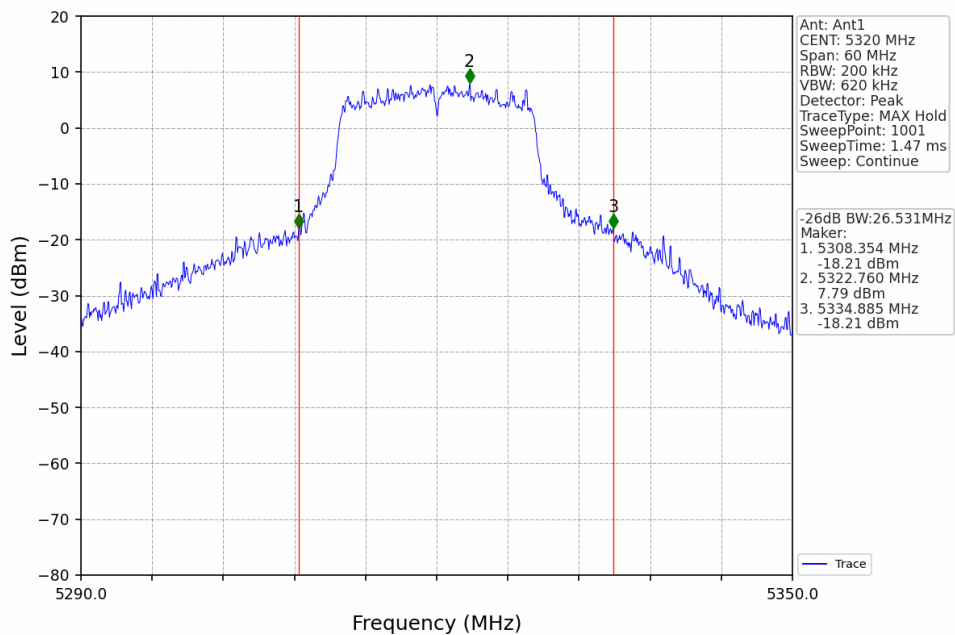
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802.11a_MCH_5300MHz_Ant1_NTNV



802.11a_HCH_5320MHz_Ant1_NTNV



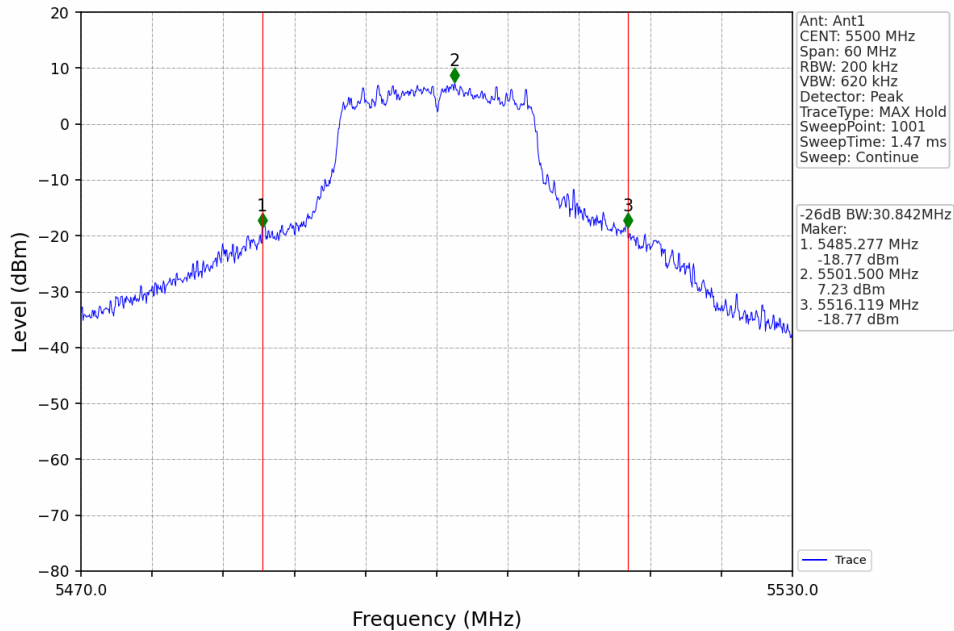
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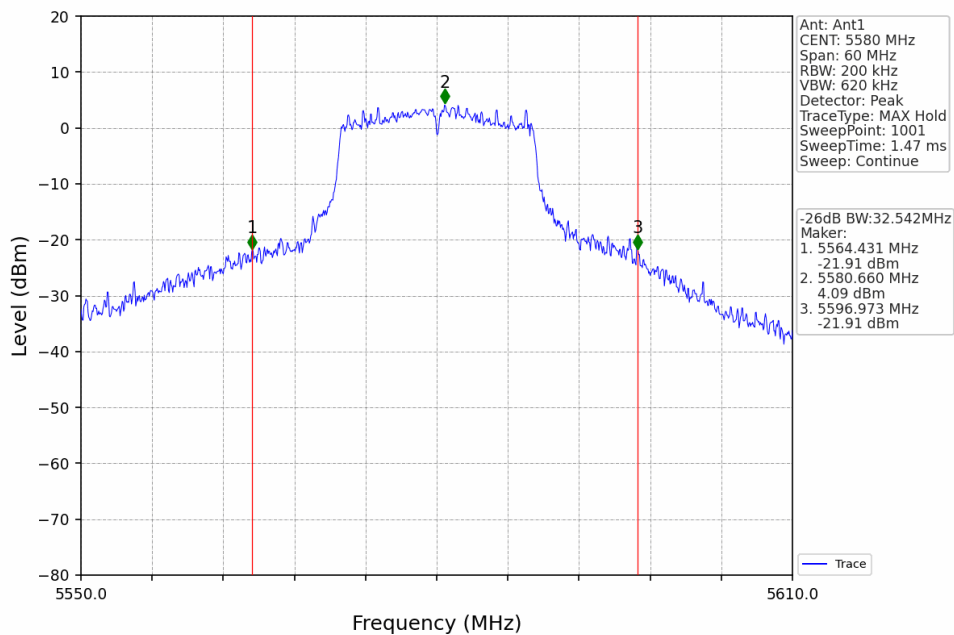
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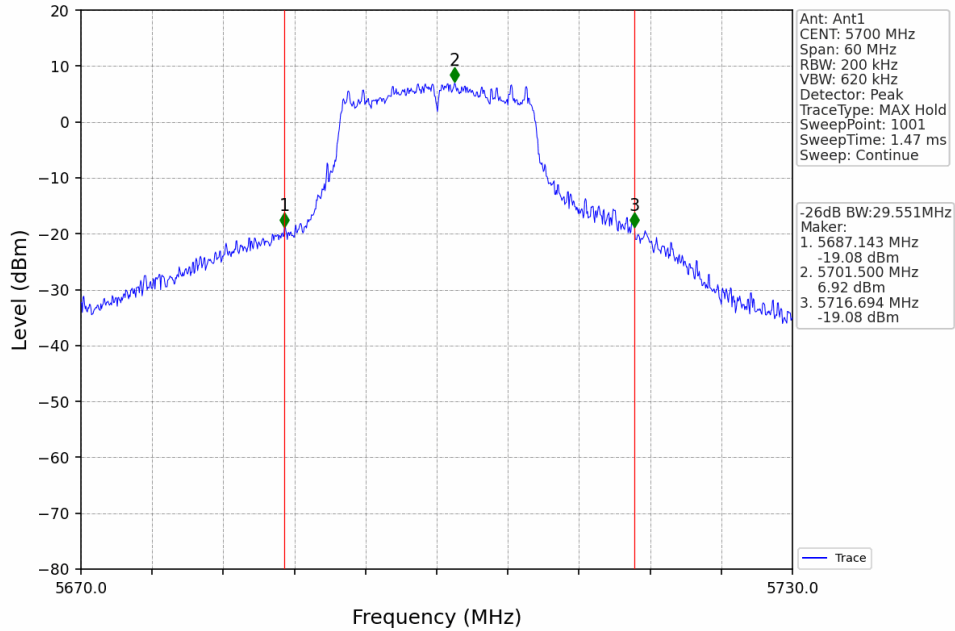
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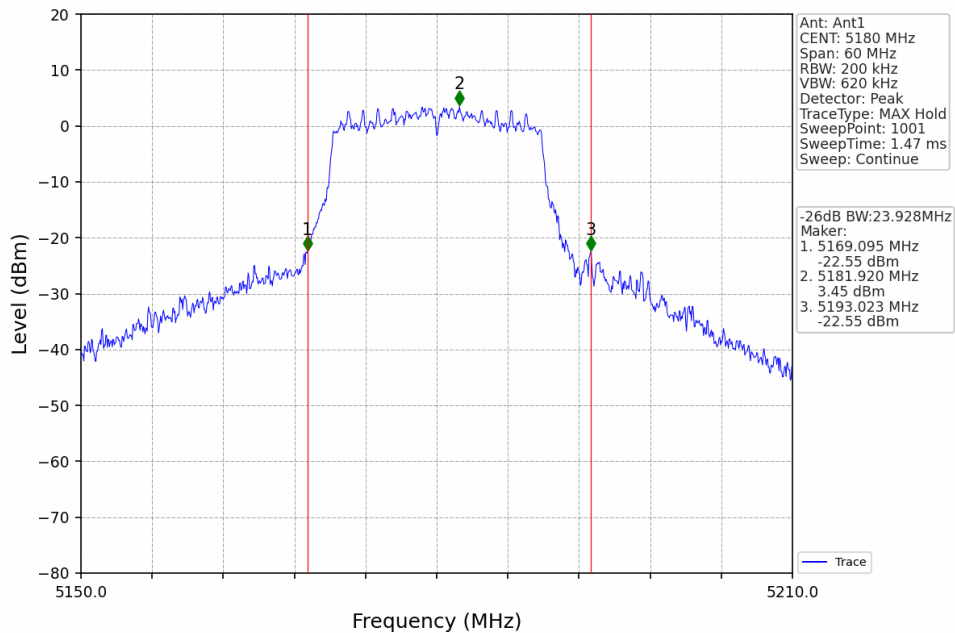
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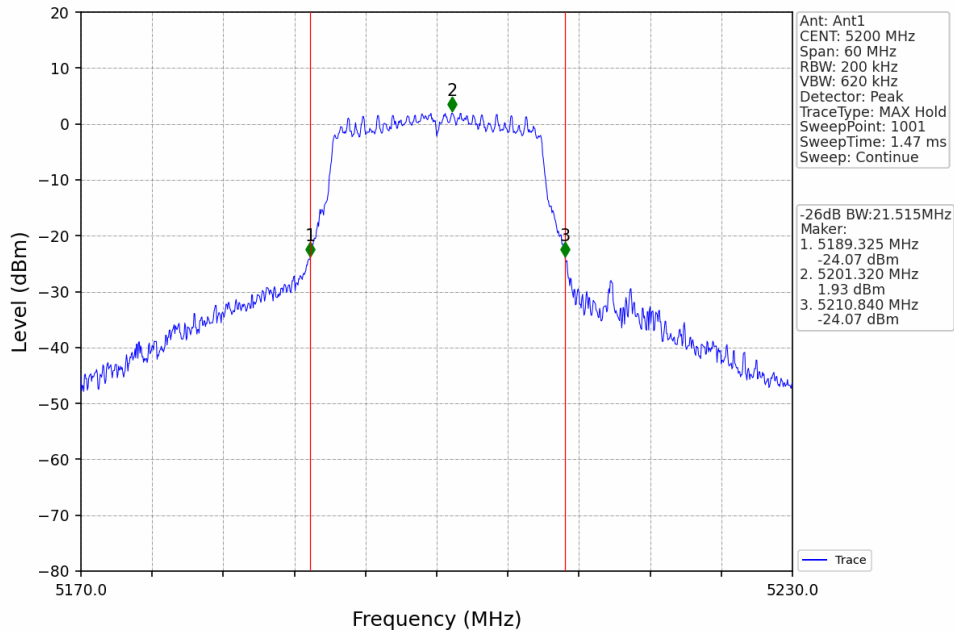
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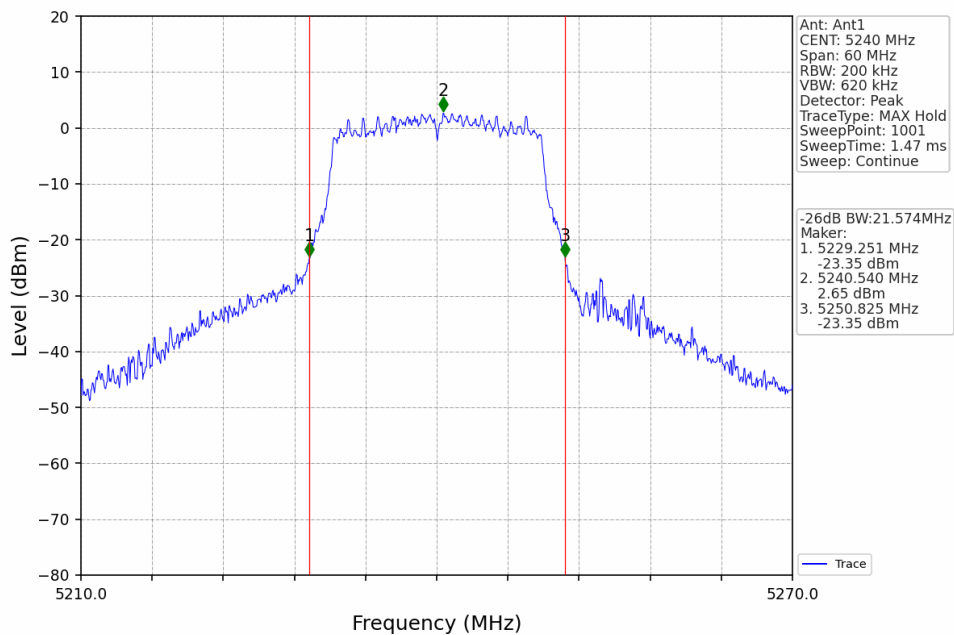
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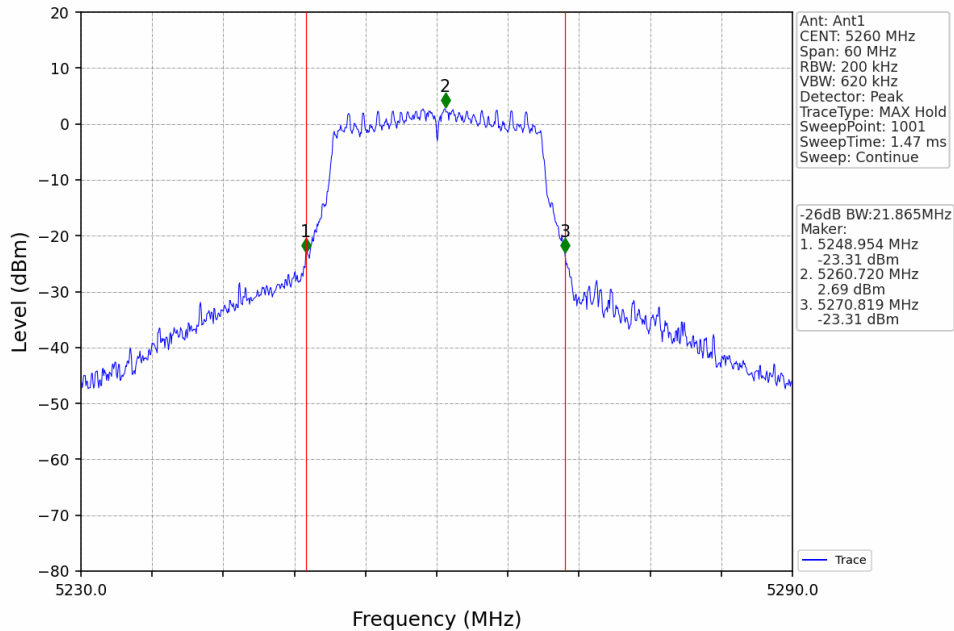
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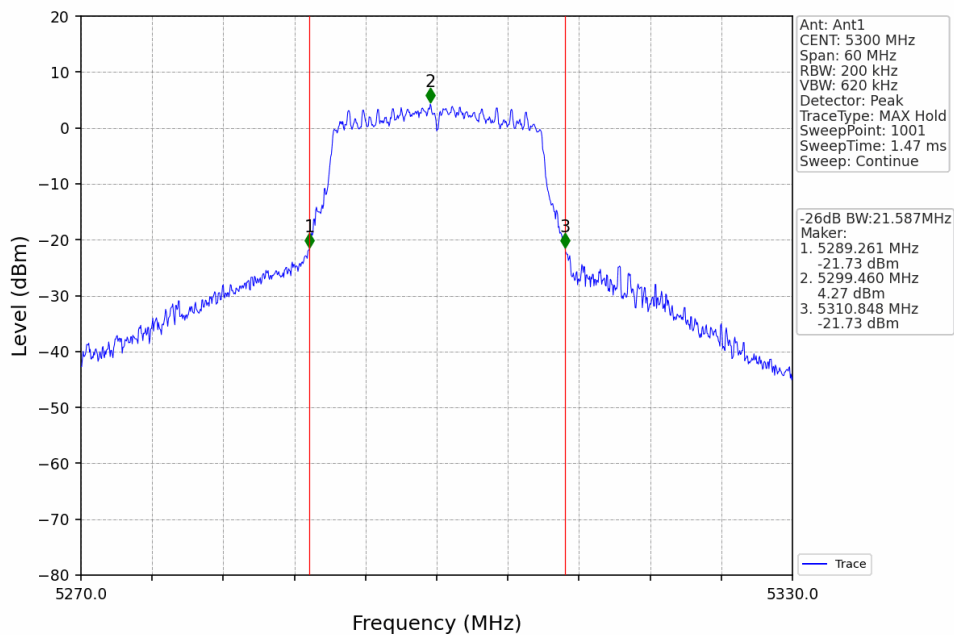
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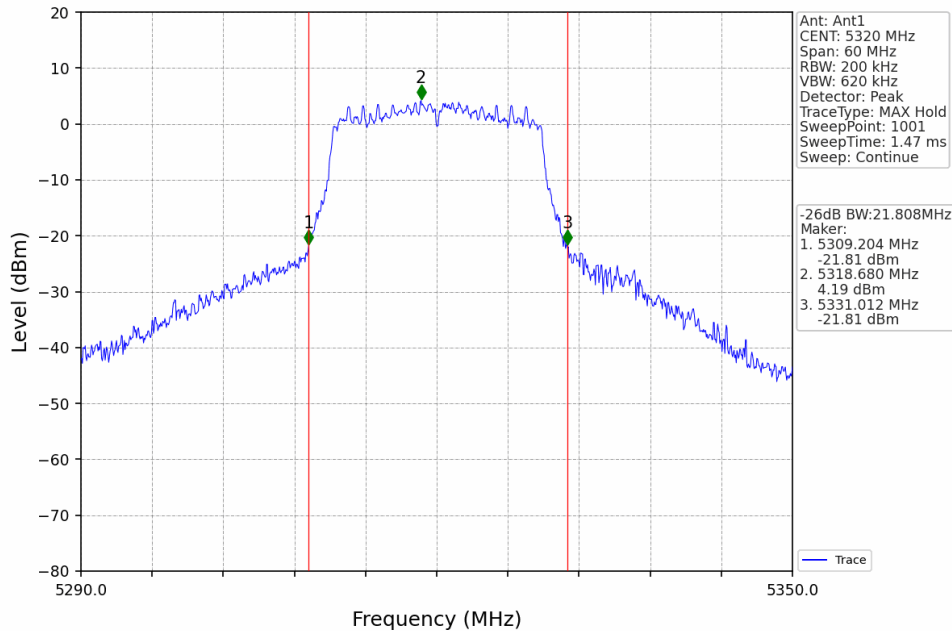
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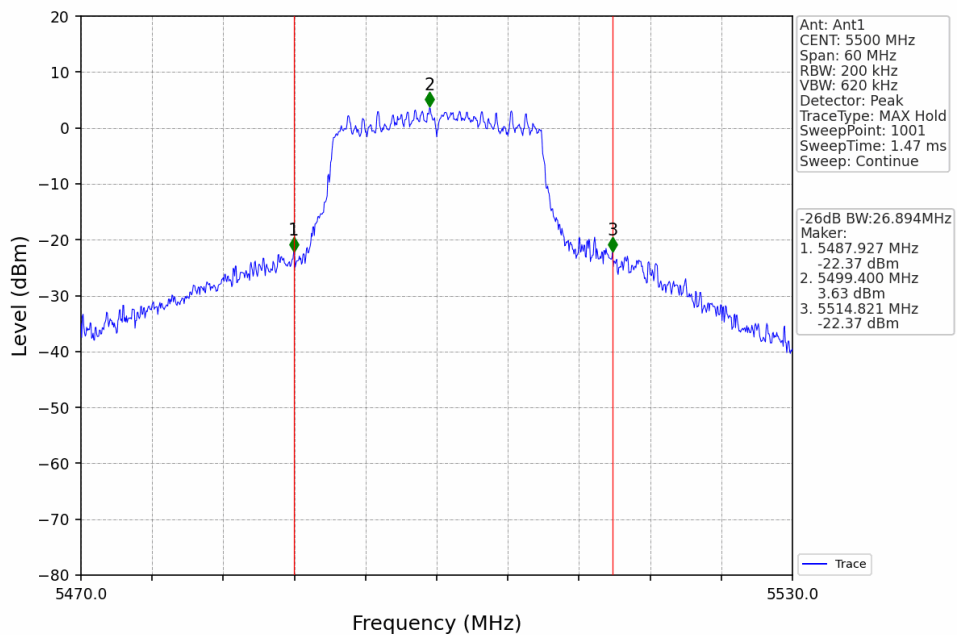
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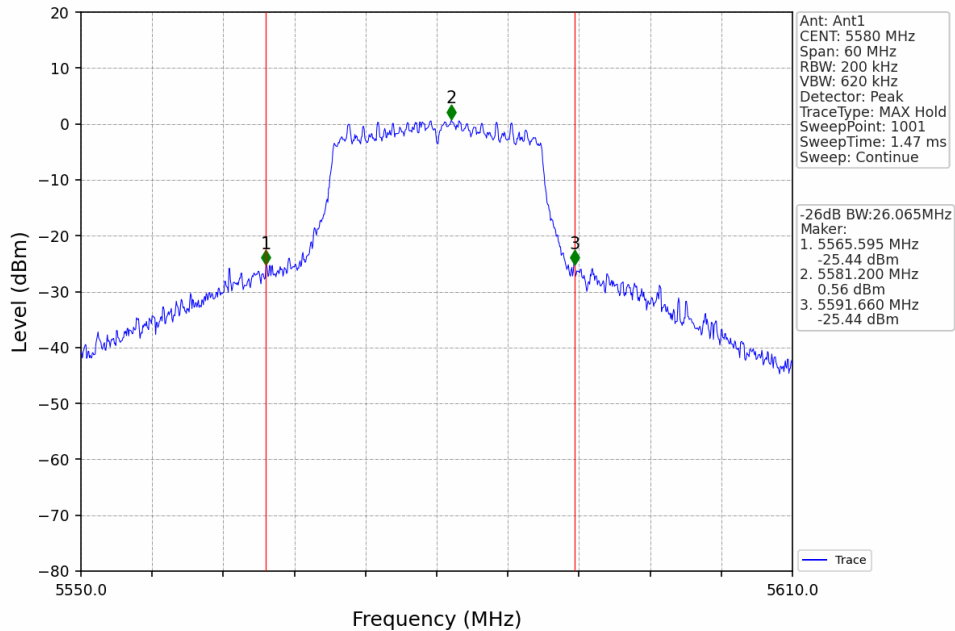
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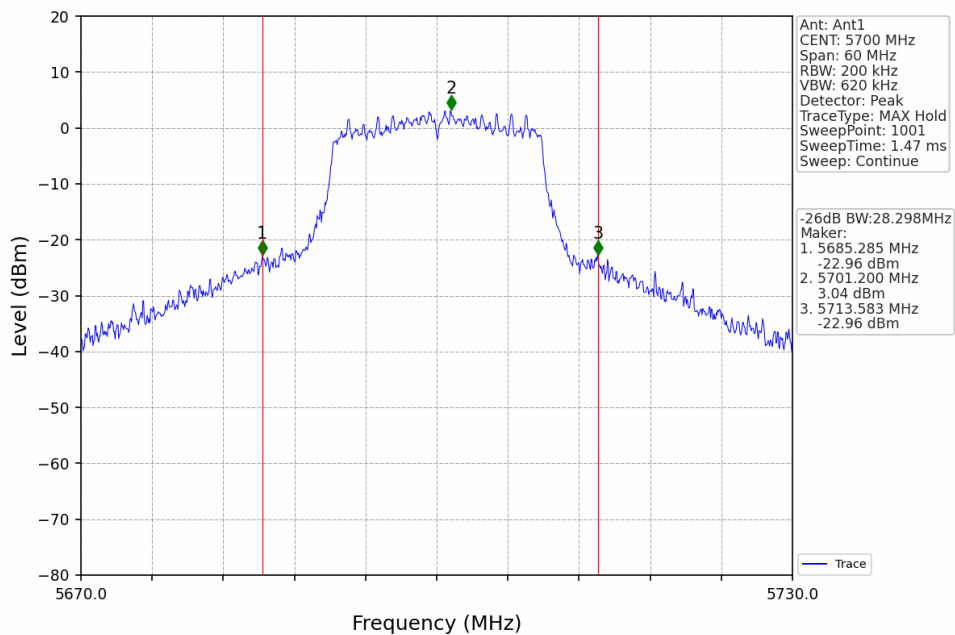
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802.11n(HT20)_MCH_5580MHz_Ant1_NTNV



802.11n(HT20)_HCH_5700MHz_Ant1_NTNV



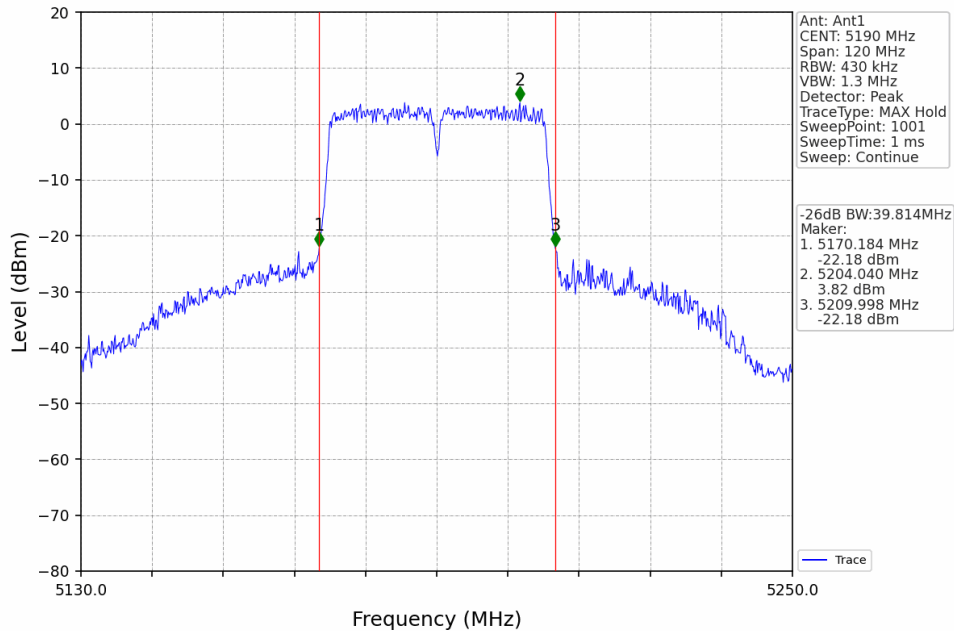
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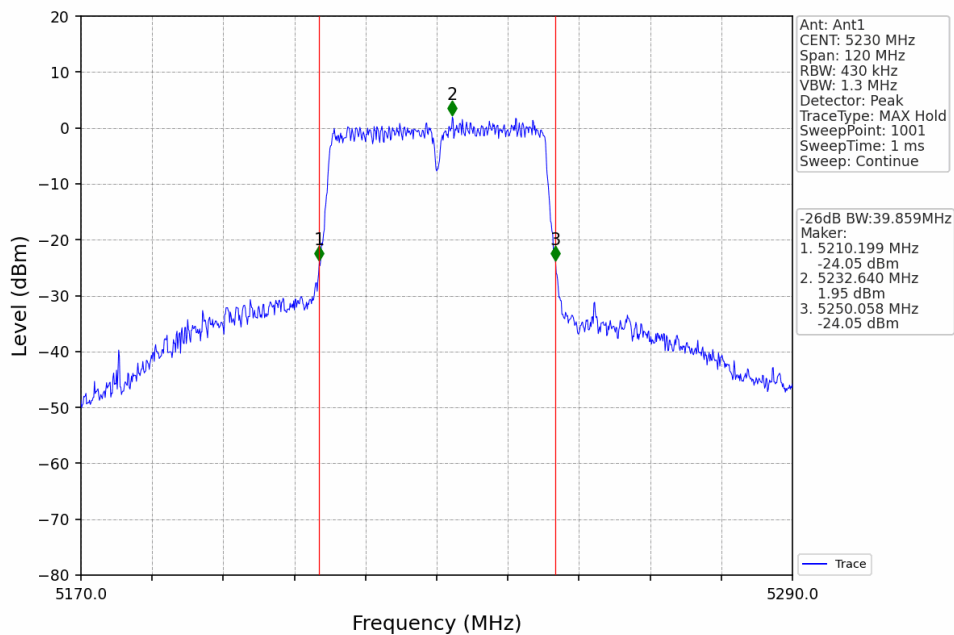
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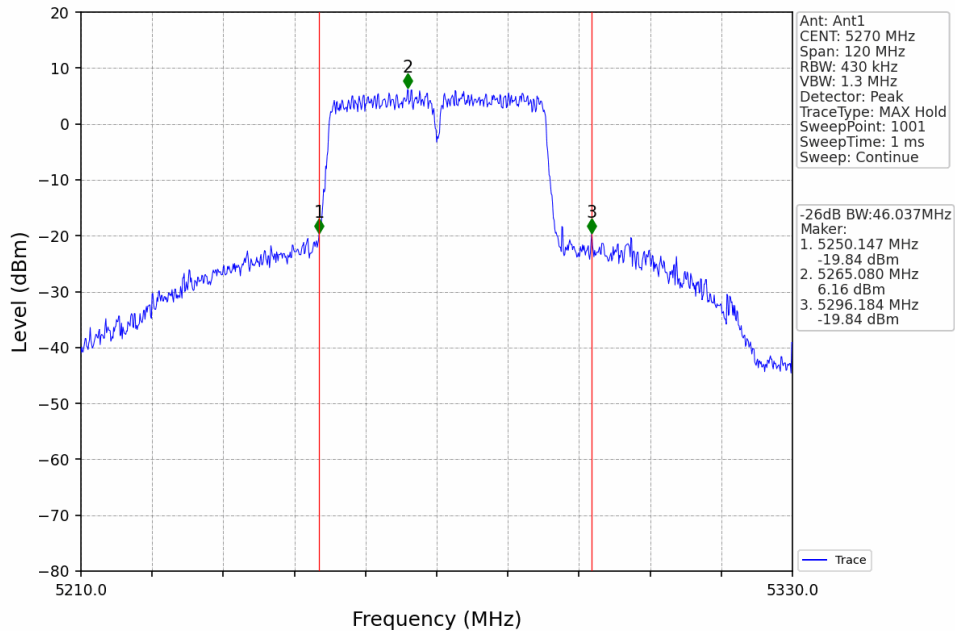
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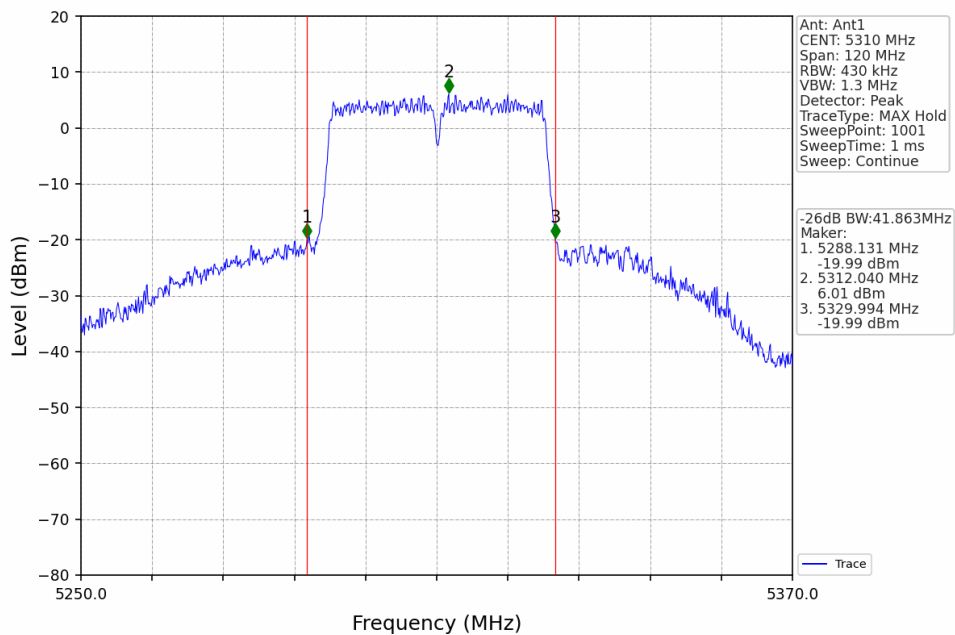
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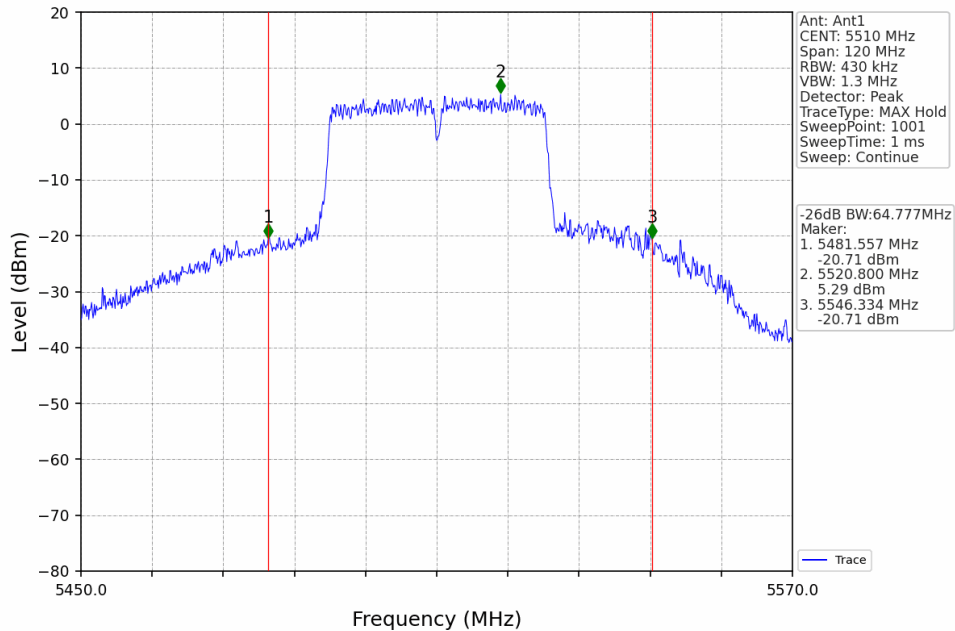
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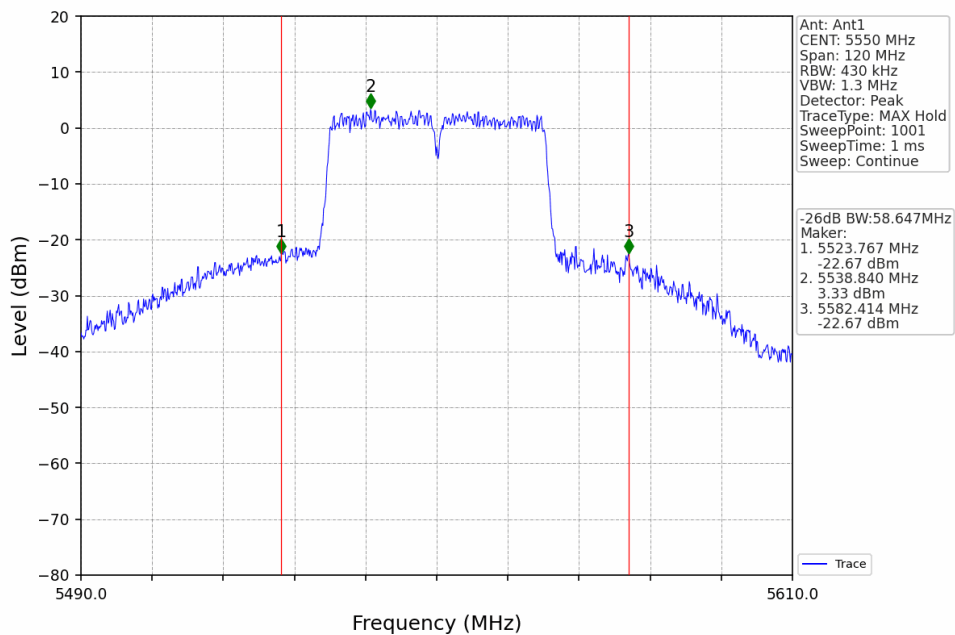
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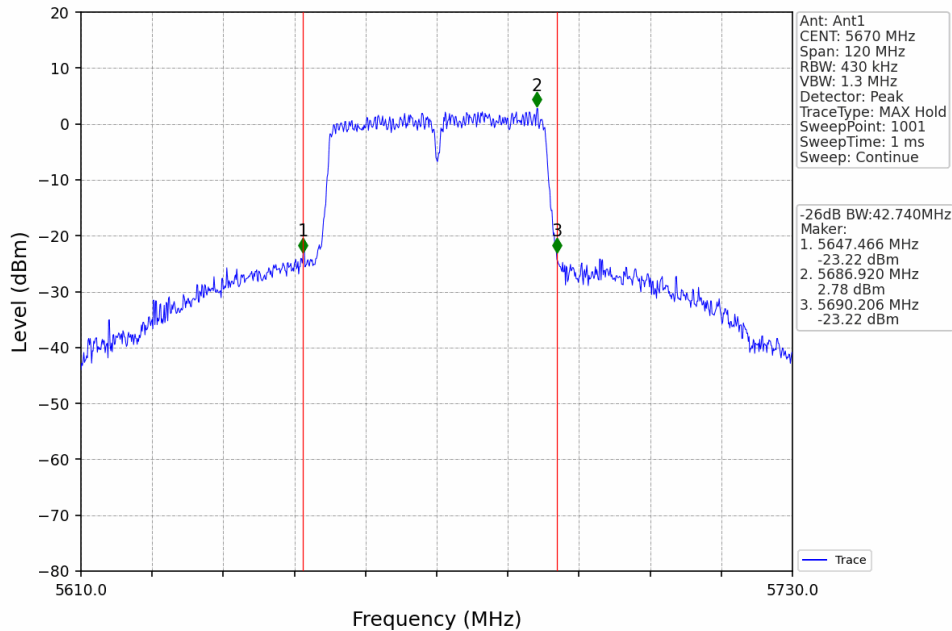
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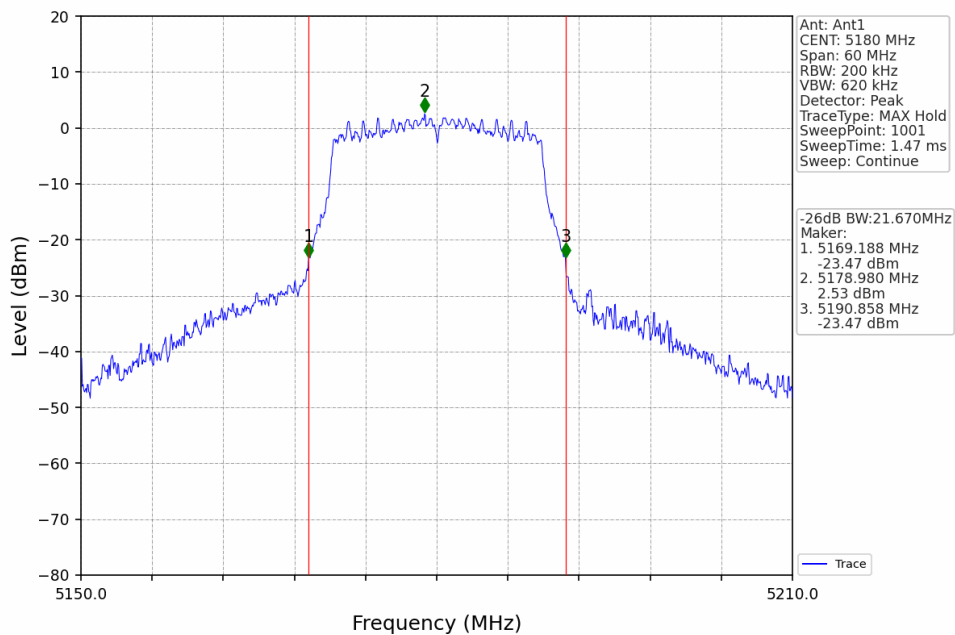
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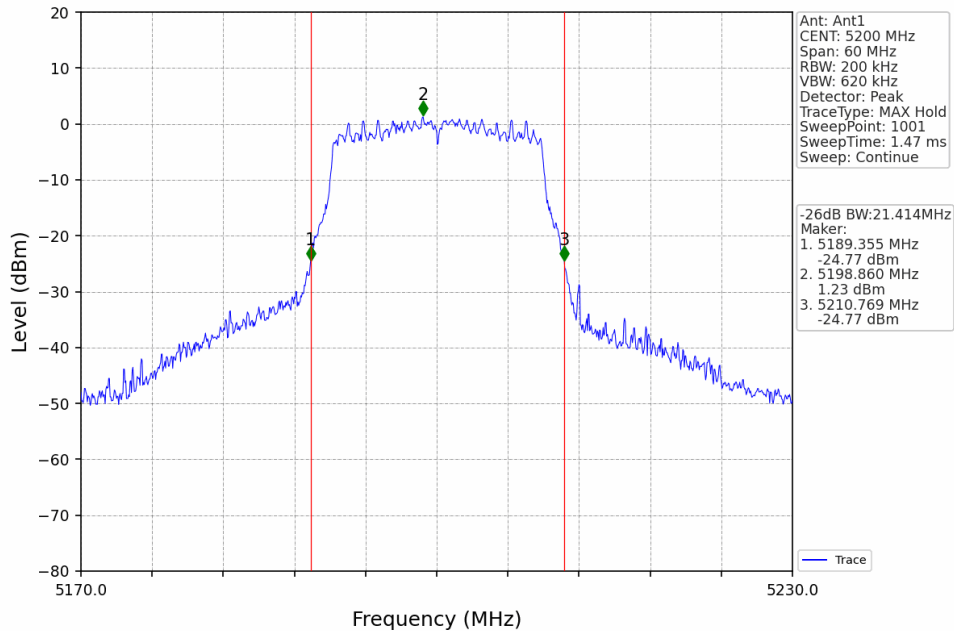
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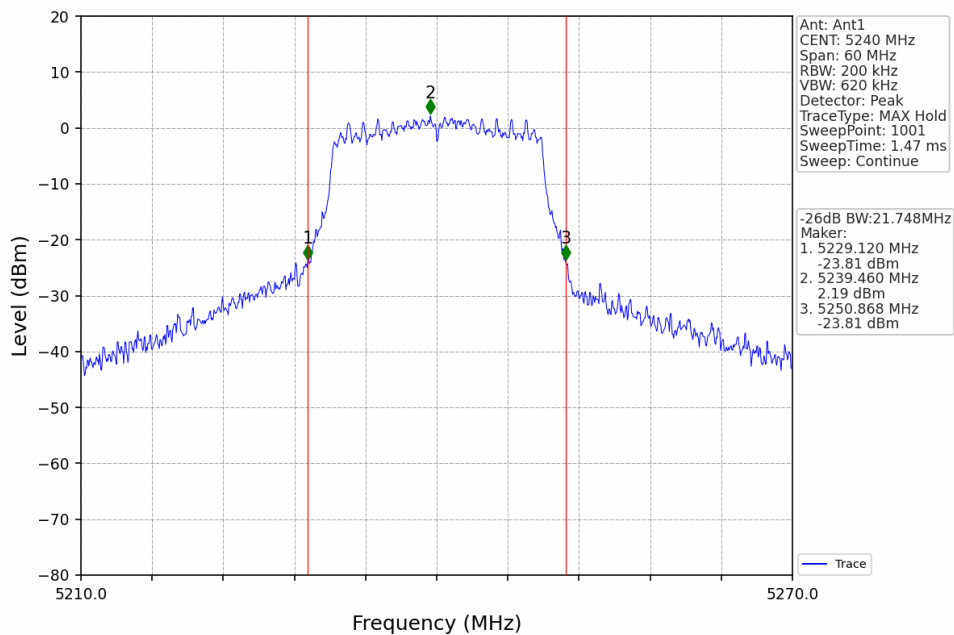
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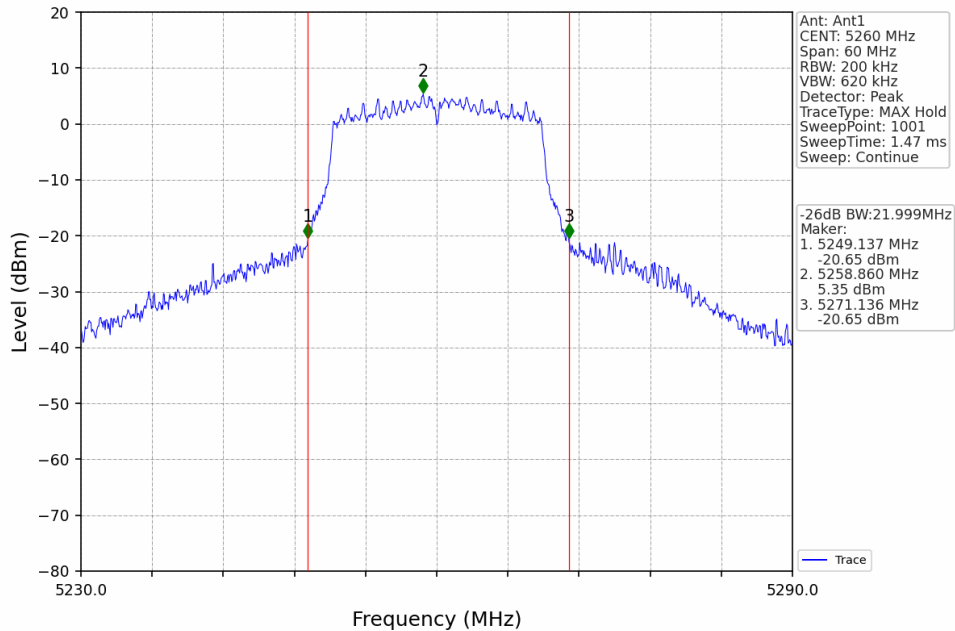
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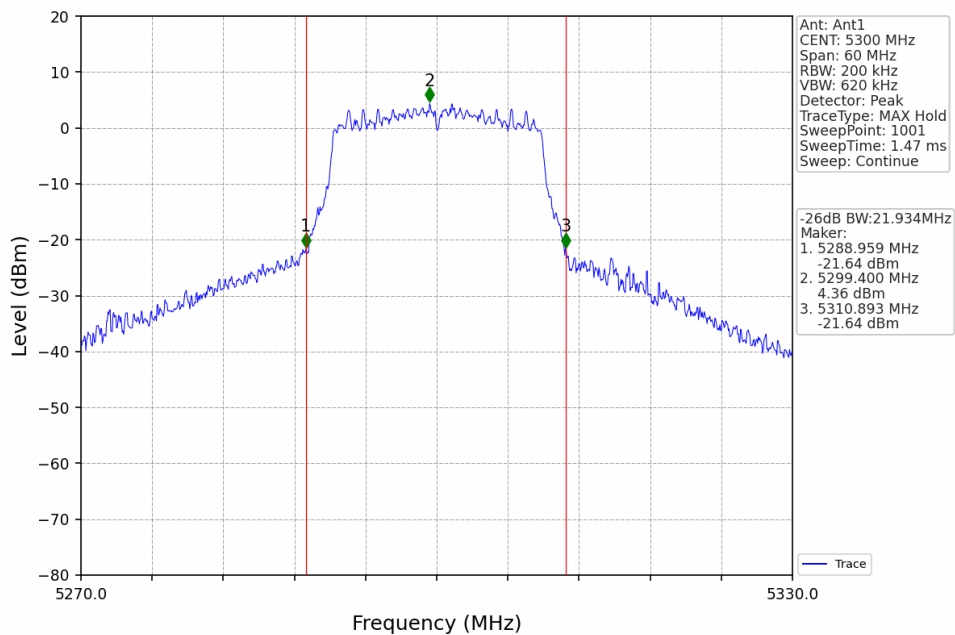
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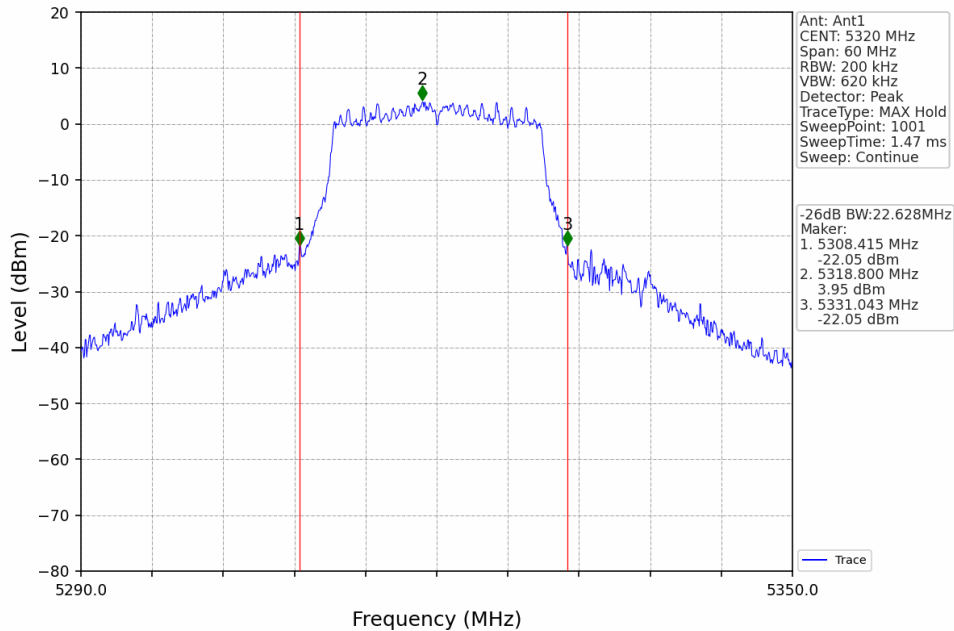
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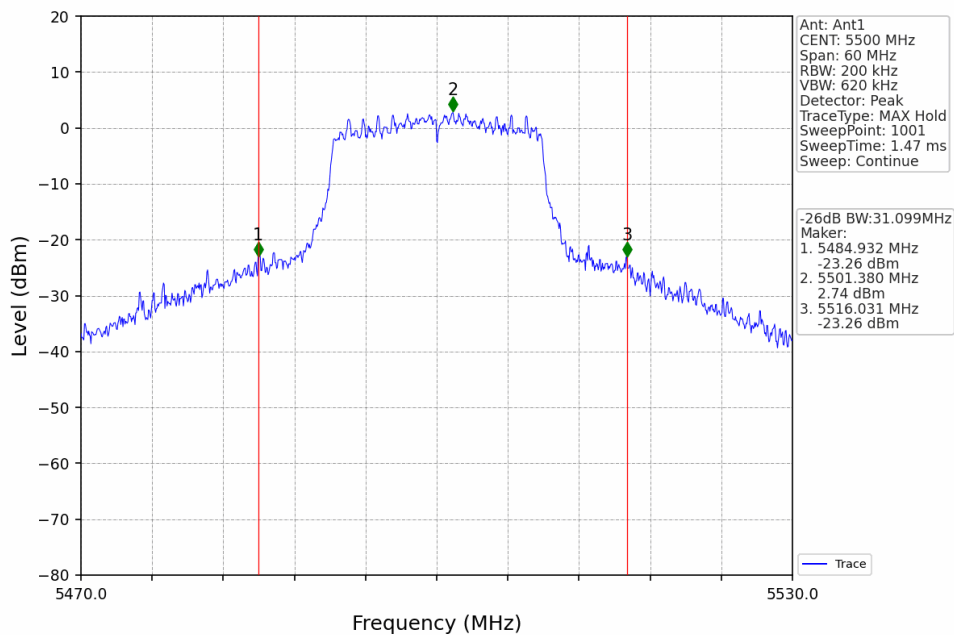
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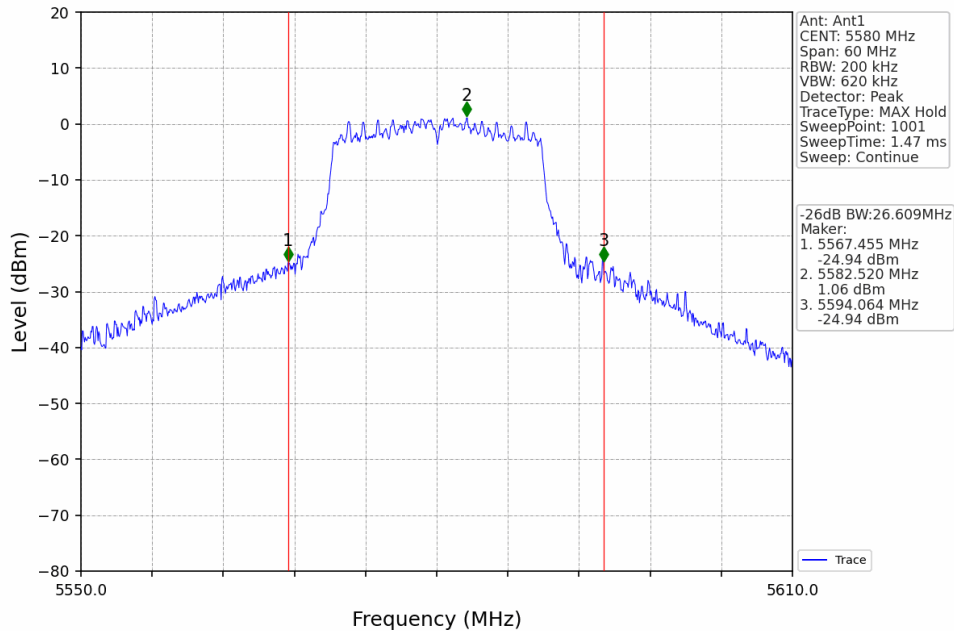
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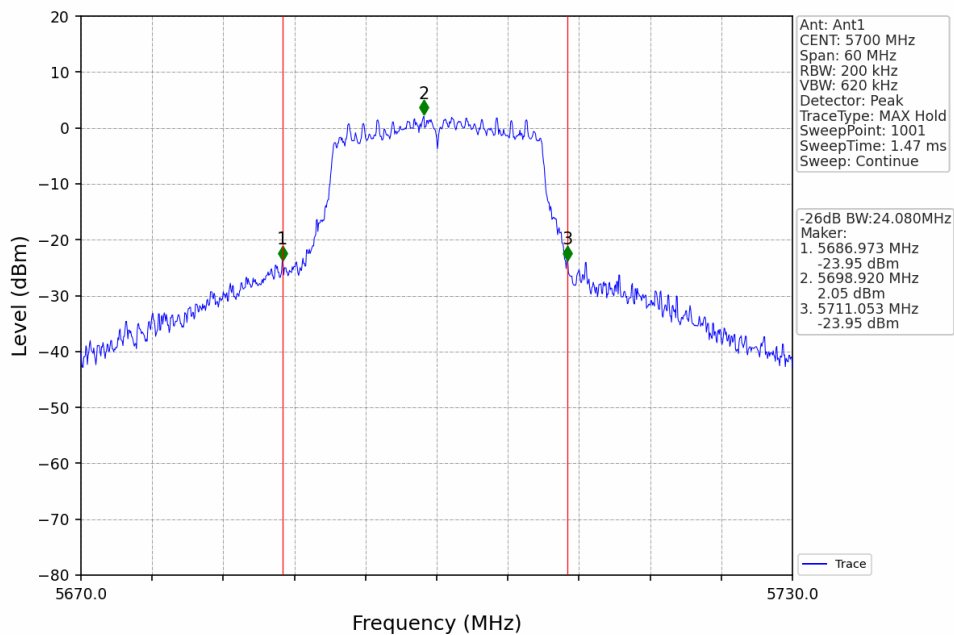
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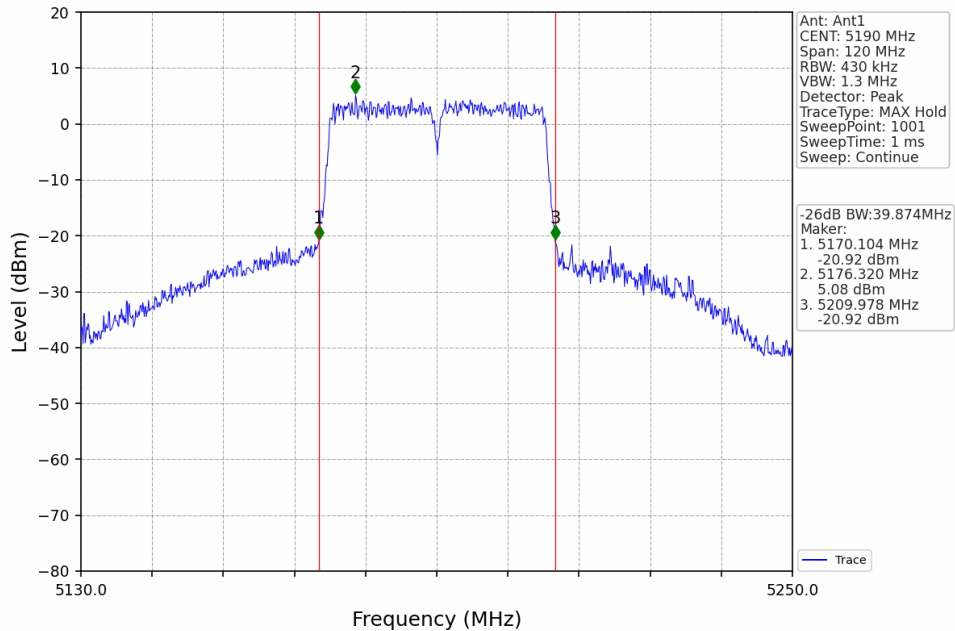
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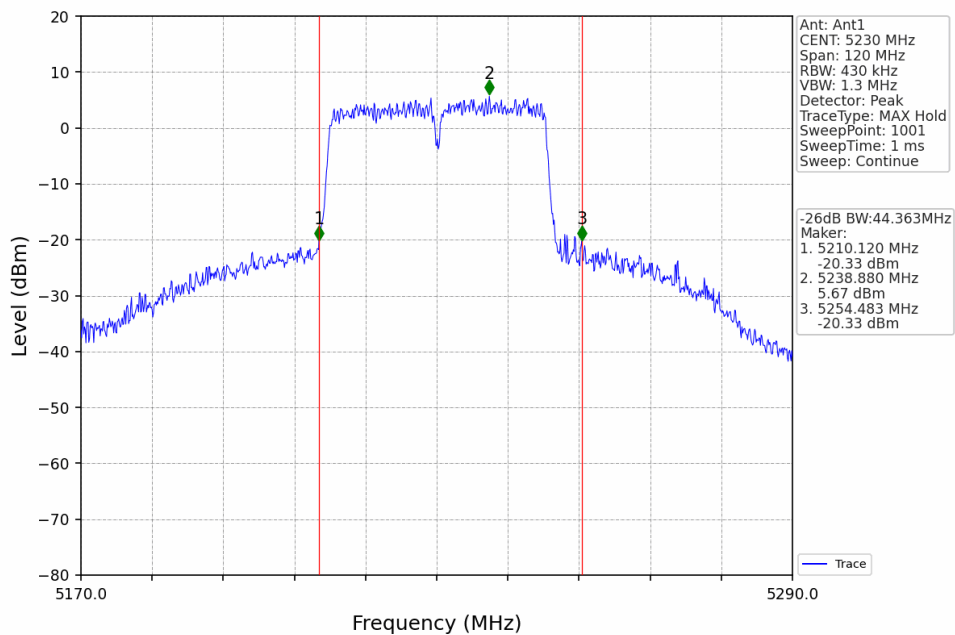
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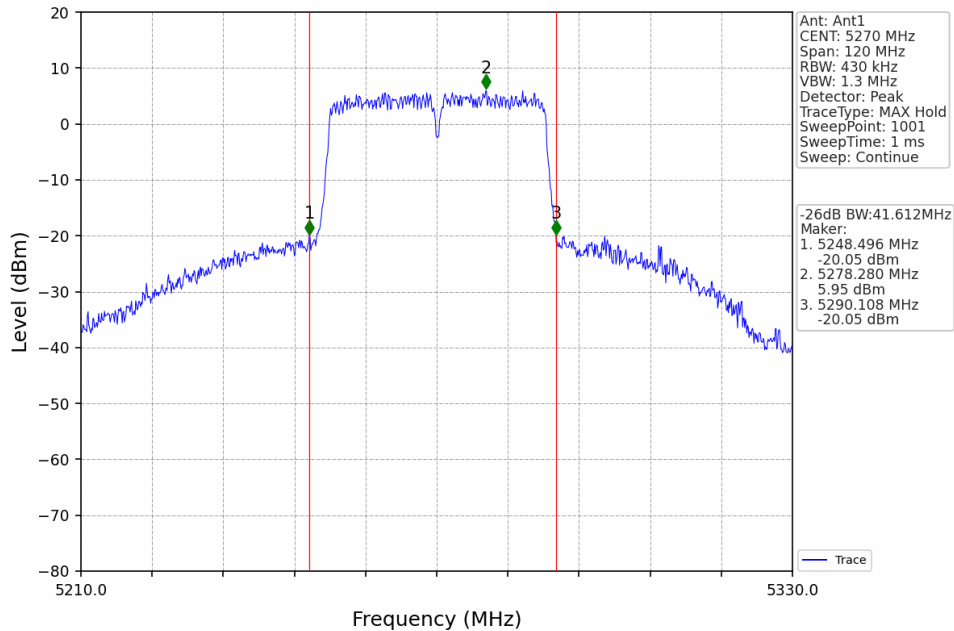
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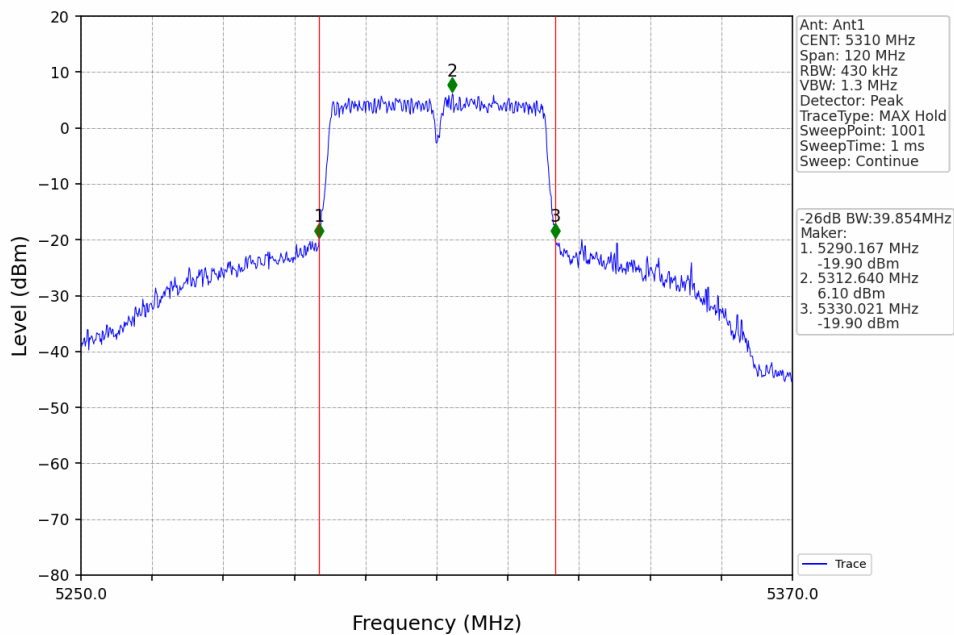
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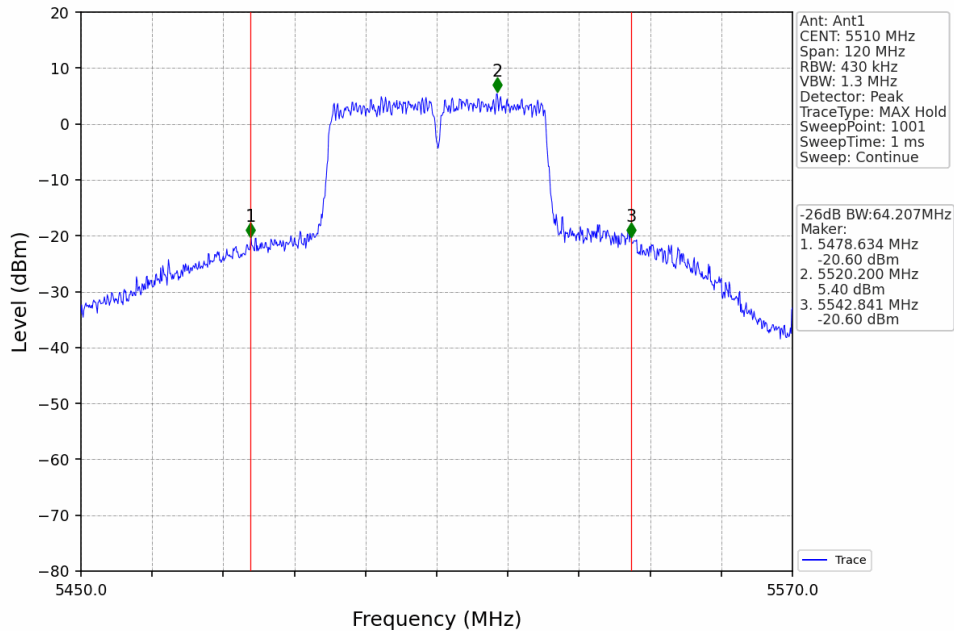
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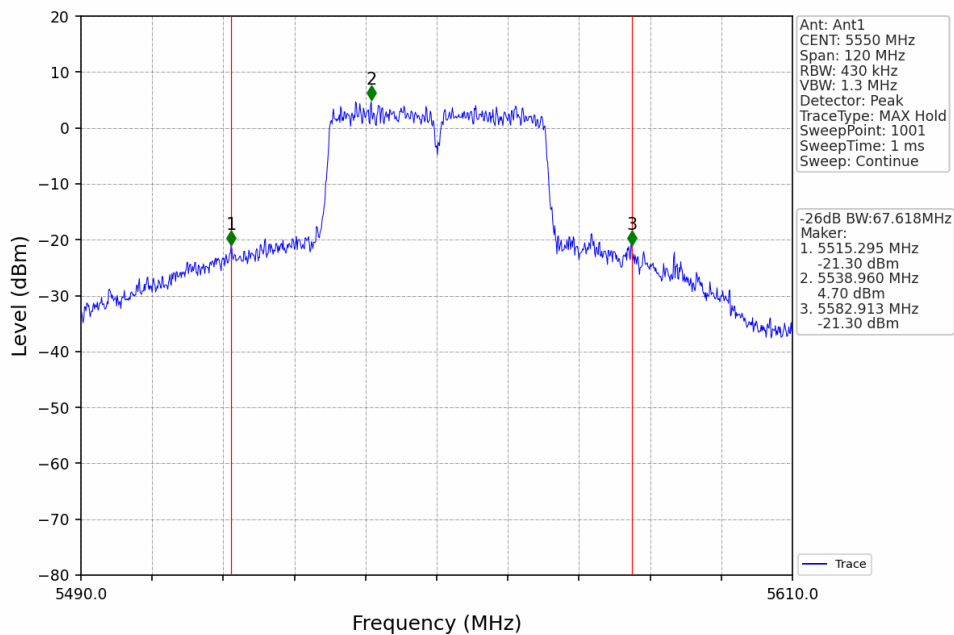
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802.11ac(VHT40)_LCH_5510MHz_Ant1_NTNV



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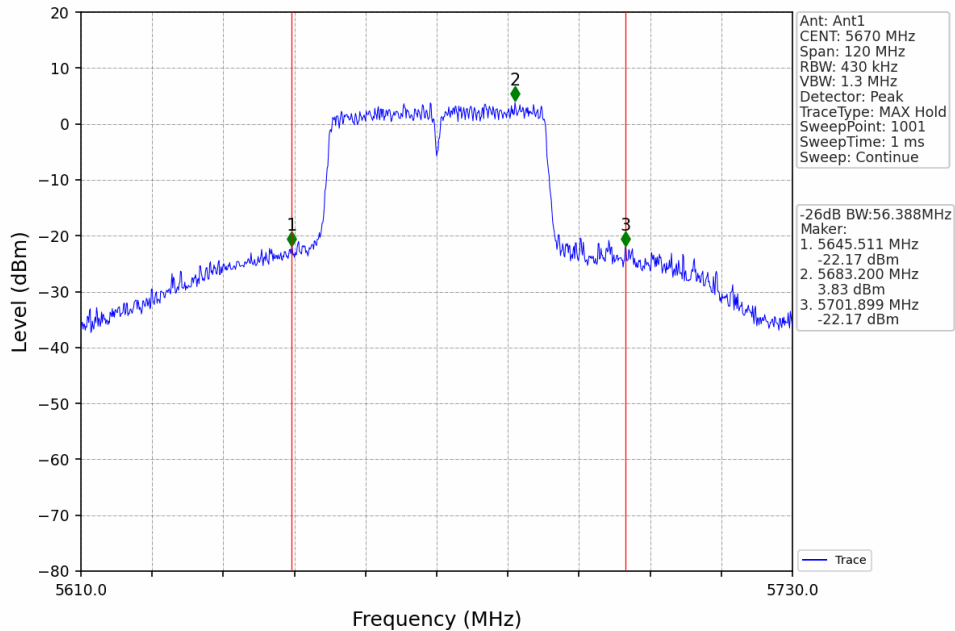
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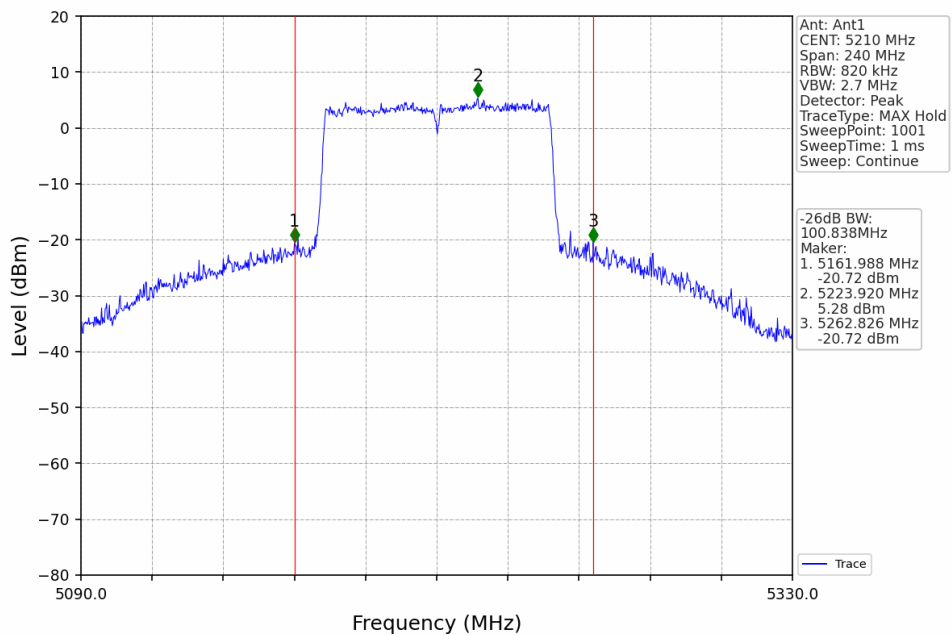
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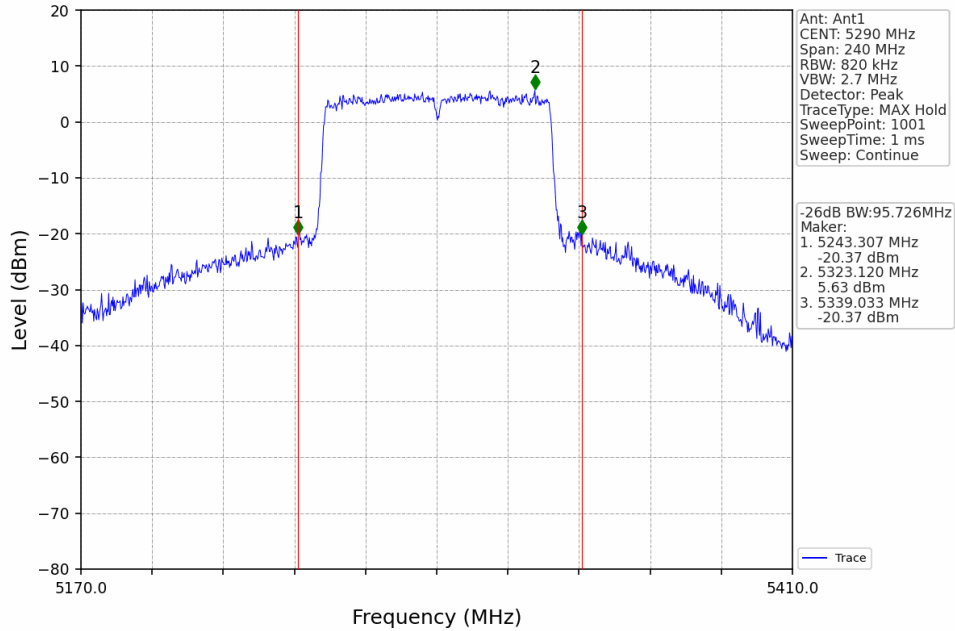
802.11ac(VHT40)_HCH_5670MHz_Ant1_NTNV



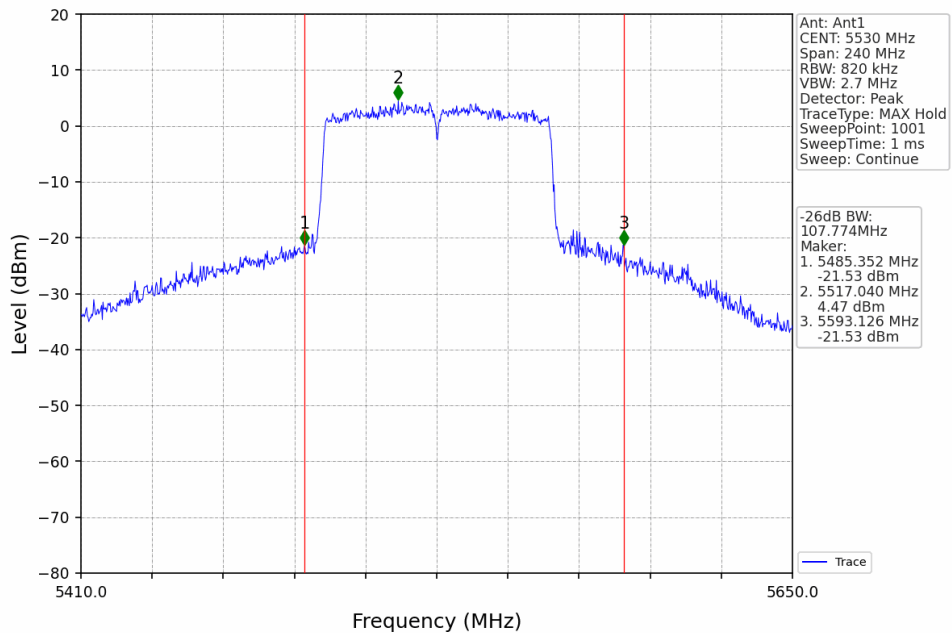
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5290MHz_Ant1_NTNV



802.11ac(VHT80)_LCH_5530MHz_Ant1_NTNV



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3. Maximum Conducted Output Power

3.1 Power

3.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)				Verdict
			ANT1	ANT2	MIMO	Limit	
802.11a	SISO	5180	13.23	14.17	/	<=23.98	Pass
		5200	13.09	13.87	/	<=23.98	Pass
		5240	13.75	13.36	/	<=23.98	Pass
		5260	16.22	15.87	/	<=23.67	Pass
		5300	17.11	15.94	/	<=23.67	Pass
		5320	16.83	15.93	/	<=23.68	Pass
		5500	15.45	16.20	/	<=23.65	Pass
		5580	15.65	16.68	/	<=23.66	Pass
		5700	16.75	14.58	/	<=23.7	Pass
802.11n (HT20)	MIMO	5180	11.77	11.52	14.66	<=21.55	Pass
		5200	12.00	11.40	14.72	<=21.55	Pass
		5240	12.41	10.85	14.71	<=21.55	Pass
		5260	13.71	12.46	16.14	<=21.24	Pass
		5300	13.83	12.66	16.29	<=21.24	Pass
		5320	13.85	12.62	16.29	<=21.24	Pass
		5500	12.61	14.22	16.50	<=21.22	Pass
		5580	10.60	14.57	16.03	<=21.23	Pass
		5700	12.63	13.97	16.36	<=21.27	Pass
802.11n (HT40)	MIMO	5190	13.37	13.33	16.36	<=21.55	Pass
		5230	14.13	13.08	16.65	<=21.55	Pass
		5270	14.59	13.43	17.06	<=21.55	Pass
		5310	14.61	13.49	17.10	<=21.55	Pass
		5510	12.55	13.99	16.34	<=21.55	Pass
		5550	11.79	14.05	16.08	<=21.55	Pass
		5670	12.36	14.51	16.58	<=21.55	Pass
802.11ac (VHT20)	MIMO	5180	11.02	11.24	14.14	<=21.55	Pass
		5200	11.18	10.95	14.08	<=21.55	Pass
		5240	11.91	10.81	14.41	<=21.55	Pass
		5260	13.85	12.71	16.33	<=21.24	Pass
		5300	13.86	12.79	16.37	<=21.24	Pass
		5320	13.84	12.76	16.34	<=21.24	Pass
		5500	12.69	14.26	16.56	<=21.22	Pass
		5580	10.63	14.65	16.10	<=21.23	Pass



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		5700	13.00	14.29	16.70	<=21.27	Pass
802.11ac (VHT40)	MIMO	5190	13.39	13.20	16.31	<=21.55	Pass
		5230	14.13	12.84	16.54	<=21.55	Pass
		5270	14.62	13.25	17.00	<=21.55	Pass
		5310	14.48	13.49	17.02	<=21.55	Pass
		5510	13.64	15.12	17.45	<=21.55	Pass
		5550	12.99	15.00	17.12	<=21.55	Pass
		5670	12.45	14.74	16.75	<=21.55	Pass
802.11ac (VHT80)	MIMO	5210	14.08	13.05	16.61	<=21.55	Pass
		5290	14.76	13.26	17.08	<=21.55	Pass
		5530	13.32	15.35	17.46	<=21.55	Pass

Remark:

MIMO limit=SISO limit- Directional gain+6dBi

Directional gain=8.43dBi