

Appendix - 5G WiFi

1. Duty Cycle

1.1 Test Result

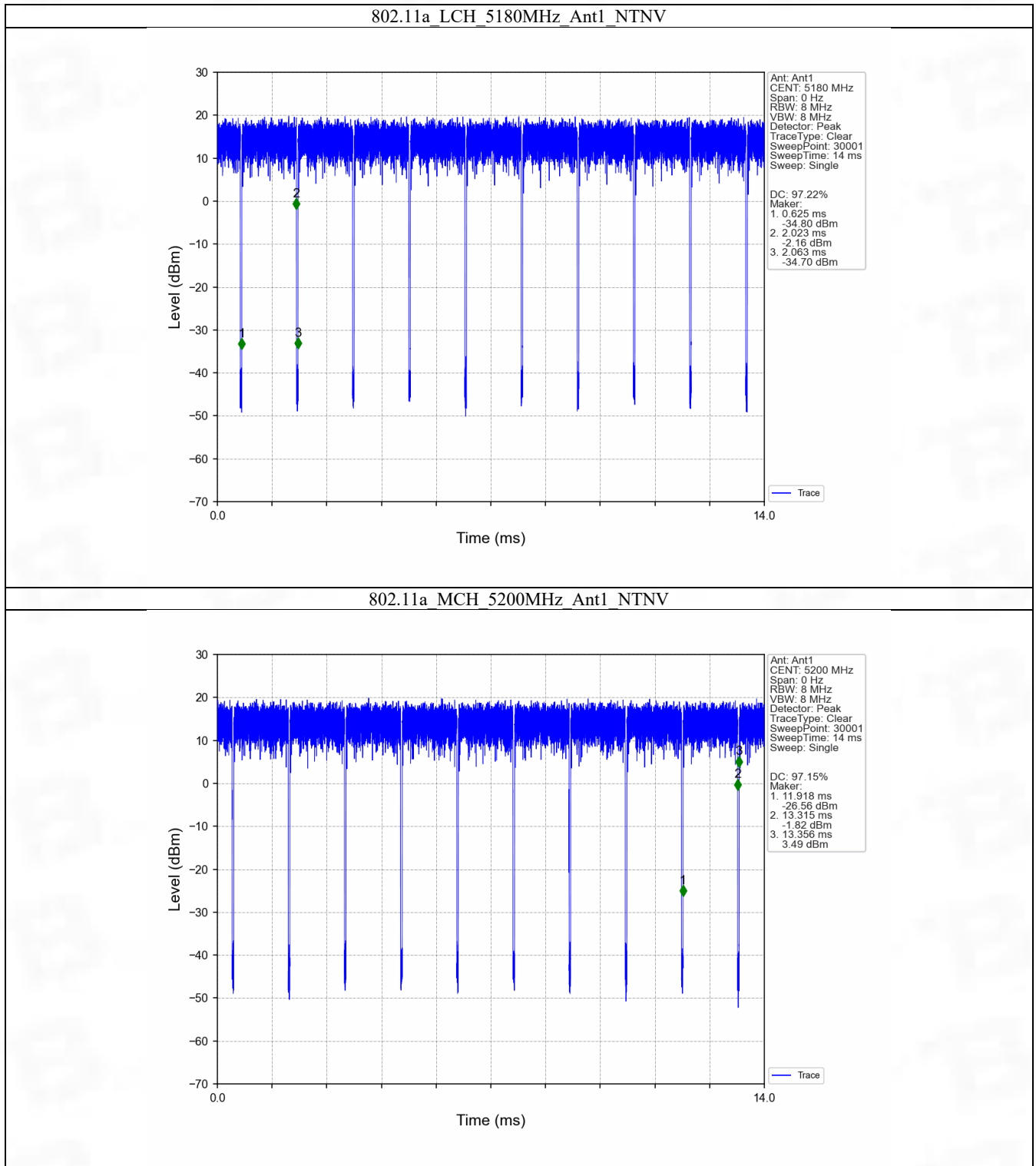
1.1.1 Ant1

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	1.398	1.438	97.22	0.12	0.00
		5200	1.397	1.438	97.15	0.13	0.06
		5240	1.397	1.438	97.15	0.13	0.06
		5260	1.397	1.438	97.15	0.13	0.06
		5300	1.397	1.437	97.22	0.12	0.07
		5320	1.397	1.438	97.15	0.13	0.03
		5500	1.397	1.438	97.15	0.13	0.03
		5580	1.397	1.437	97.22	0.12	0.07
		5700	1.397	1.438	97.15	0.13	0.03
		5745	1.396	1.437	97.15	0.13	0.03
		5785	1.399	1.439	97.22	0.12	0.06
		5825	1.397	1.437	97.22	0.12	0.07
802.11n (HT20)	SISO	5180	1.309	1.350	96.96	0.13	0.00
		5200	1.309	1.350	96.96	0.13	0.03
		5240	1.309	1.350	96.96	0.13	0.03
		5260	1.309	1.350	96.96	0.13	0.03
		5300	1.309	1.350	96.96	0.13	0.07
		5320	1.309	1.349	97.03	0.13	0.03
		5500	1.310	1.349	97.11	0.13	0.00
		5580	1.310	1.350	97.04	0.13	0.00
		5700	1.309	1.350	96.96	0.13	0.03
		5745	1.309	1.349	97.03	0.13	0.03
		5785	1.309	1.349	97.03	0.13	0.03
		5825	1.310	1.349	97.11	0.13	0.00
802.11n (HT40)	SISO	5190	0.651	0.690	94.35	0.25	0.00
		5230	0.651	0.690	94.35	0.25	0.07
		5270	0.651	0.690	94.35	0.25	0.06
		5310	0.652	0.690	94.49	0.25	0.06
		5510	0.652	0.690	94.49	0.25	0.07
		5550	0.650	0.689	94.34	0.25	0.04
		5670	0.650	0.689	94.34	0.25	0.03
		5755	0.652	0.690	94.49	0.25	0.03
		5795	0.652	0.690	94.49	0.25	0.07
		5795	0.652	0.690	94.49	0.25	0.07
802.11ac (VHT20)	SISO	5180	1.317	1.358	96.98	0.13	0.00
		5200	1.318	1.358	97.05	0.13	0.00
		5240	1.317	1.358	96.98	0.13	0.00
		5260	1.317	1.357	97.05	0.13	0.00
		5300	1.317	1.358	96.98	0.13	0.07
		5320	1.317	1.357	97.05	0.13	0.03
		5500	1.318	1.358	97.05	0.13	0.07
		5580	1.317	1.357	97.05	0.13	0.03
		5700	1.319	1.358	97.13	0.13	0.03
		5745	1.318	1.357	97.13	0.13	0.03
		5785	1.318	1.358	97.05	0.13	0.00
		5825	1.318	1.358	97.05	0.13	0.00
802.11ac (VHT40)	SISO	5190	0.659	0.698	94.41	0.25	0.03
		5230	0.660	0.697	94.69	0.24	0.03
		5270	0.658	0.697	94.40	0.25	0.03

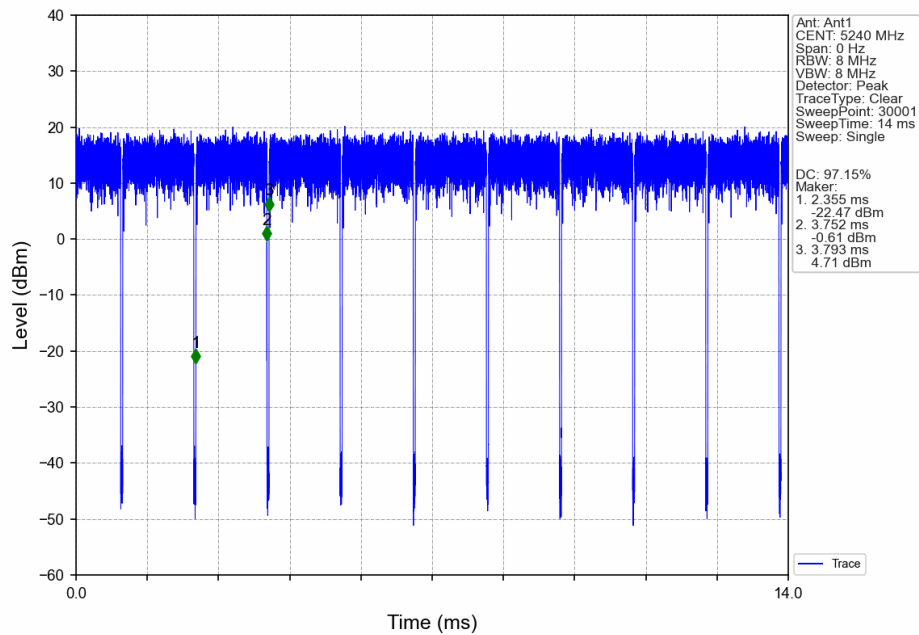
		5310	0.660	0.698	94.56	0.24	0.09
		5510	0.659	0.697	94.55	0.24	0.03
		5550	0.660	0.697	94.69	0.24	0.03
		5670	0.658	0.698	94.27	0.26	0.03
		5755	0.660	0.697	94.69	0.24	0.07
		5795	0.660	0.698	94.56	0.24	0.03
802.11ac (VHT80)	SISO	5210	0.326	0.365	89.32	0.49	0.04
		5290	0.326	0.366	89.07	0.50	0.08
		5530	0.328	0.366	89.62	0.48	0.03
		5610	0.328	0.366	89.62	0.48	0.11
		5775	0.328	0.366	89.62	0.48	0.07

1.2 Test Graph

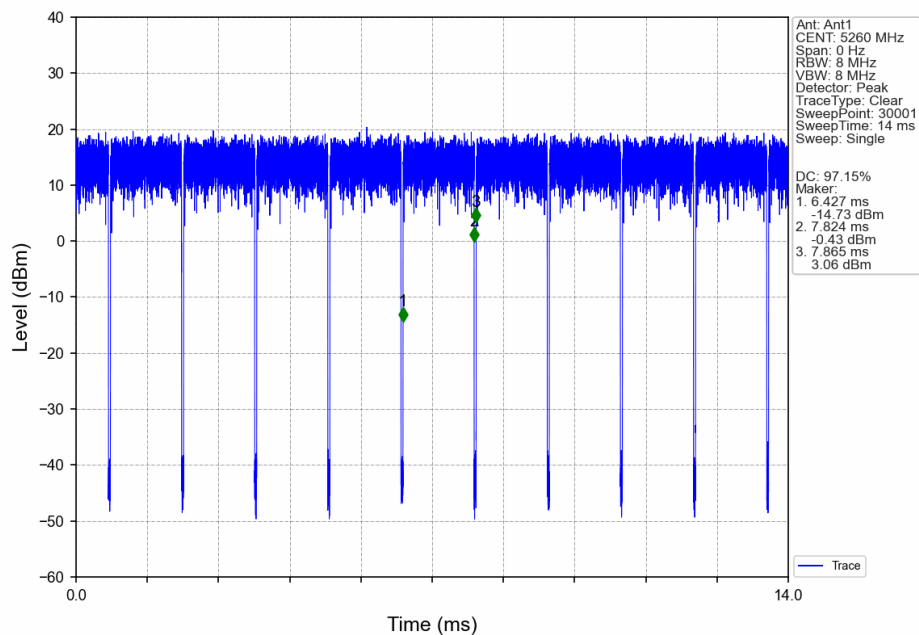
1.2.1 Ant1



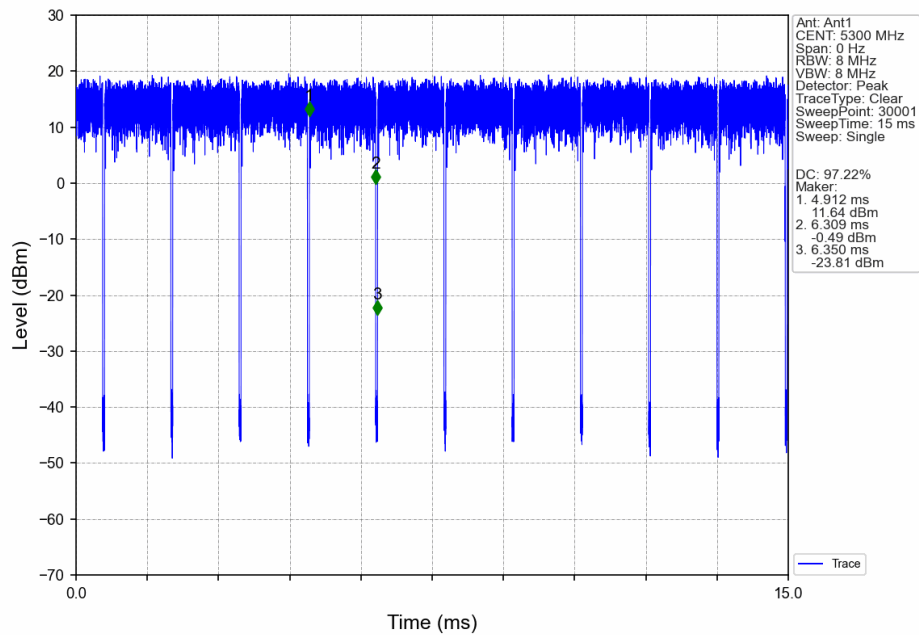
802.11a HCH 5240MHz Ant1 NTN



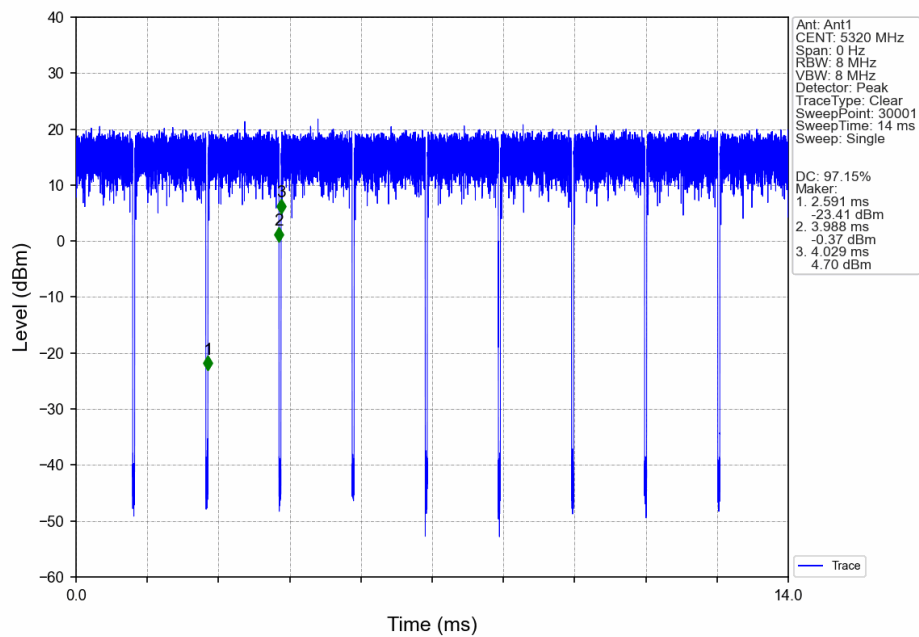
802.11a LCH 5260MHz Ant1 NTN



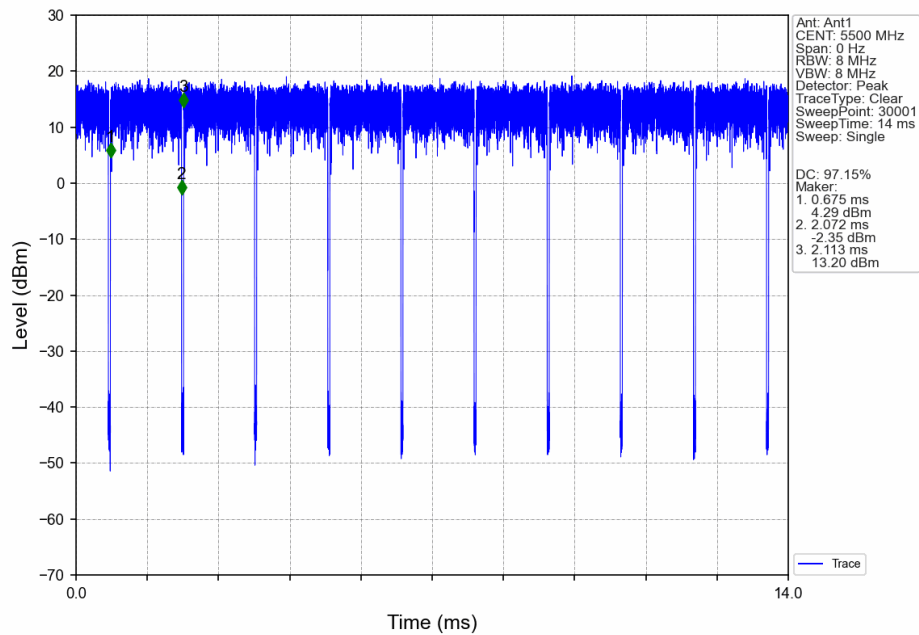
802.11a MCH 5300MHz Ant1 NTN



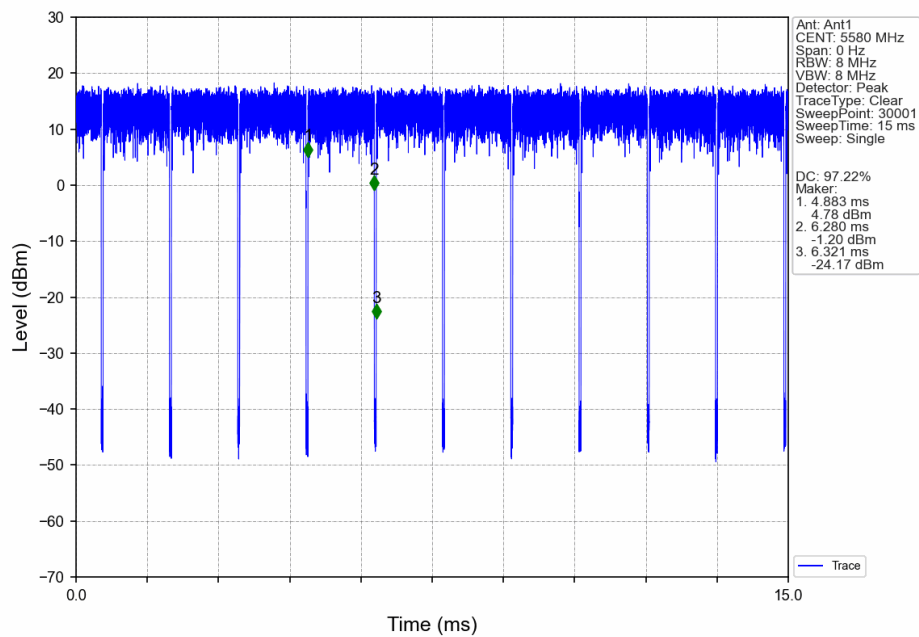
802.11a HCH 5320MHz Ant1 NTN



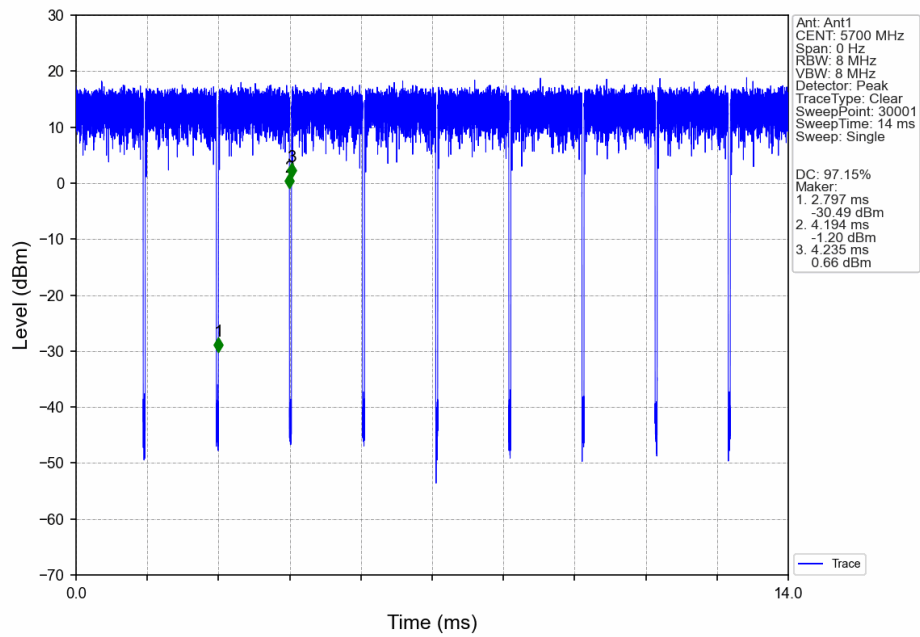
802.11a LCH 5500MHz Ant1 NTN



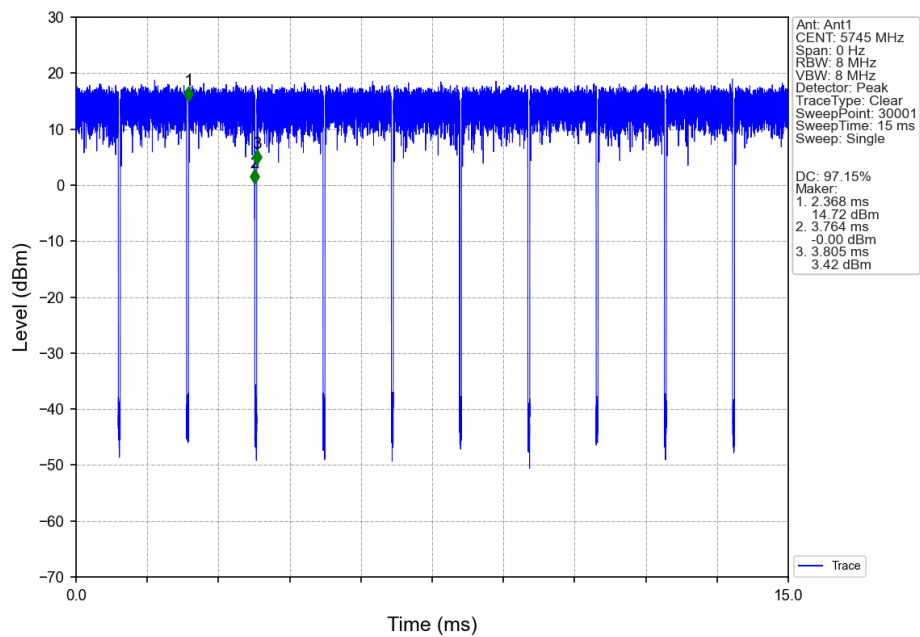
802.11a MCH 5580MHz Ant1 NTN



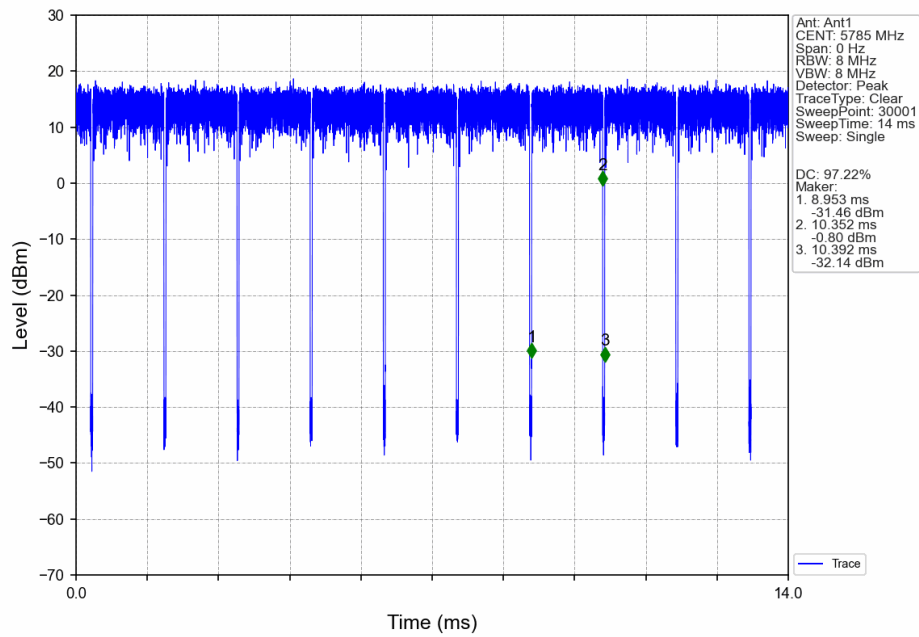
802.11a HCH 5700MHz Ant1 NTN



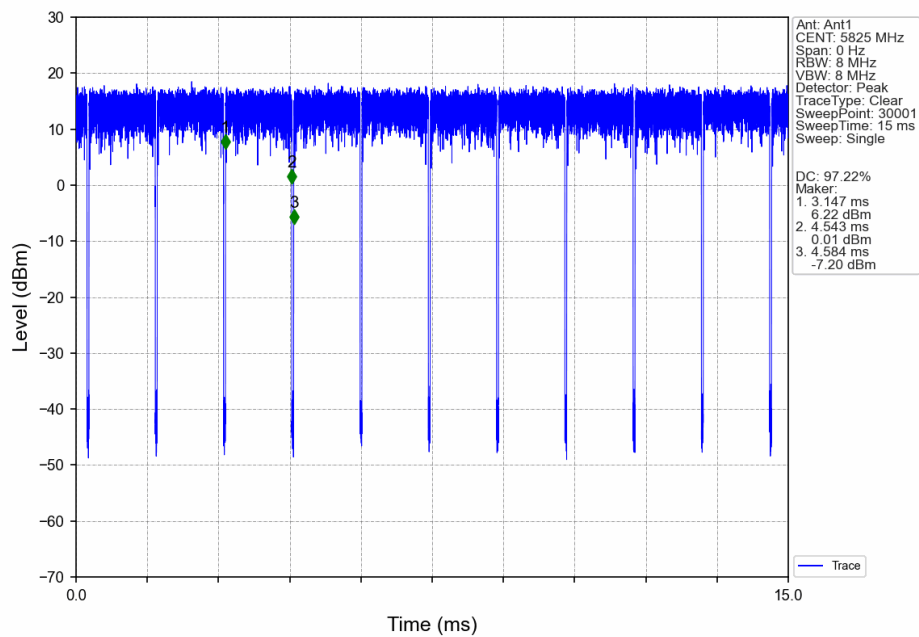
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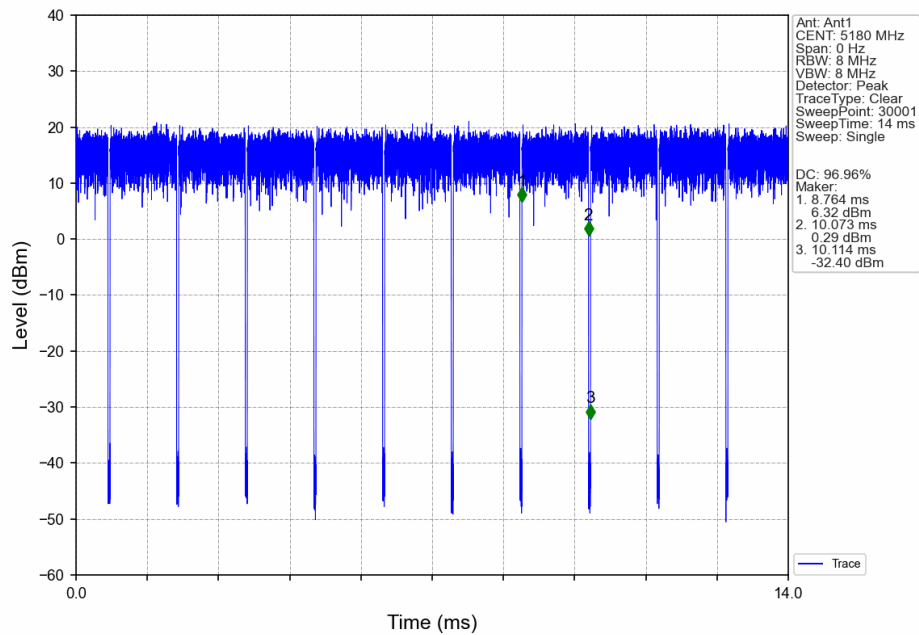
802.11a MCH 5785MHz Ant1 NTNV



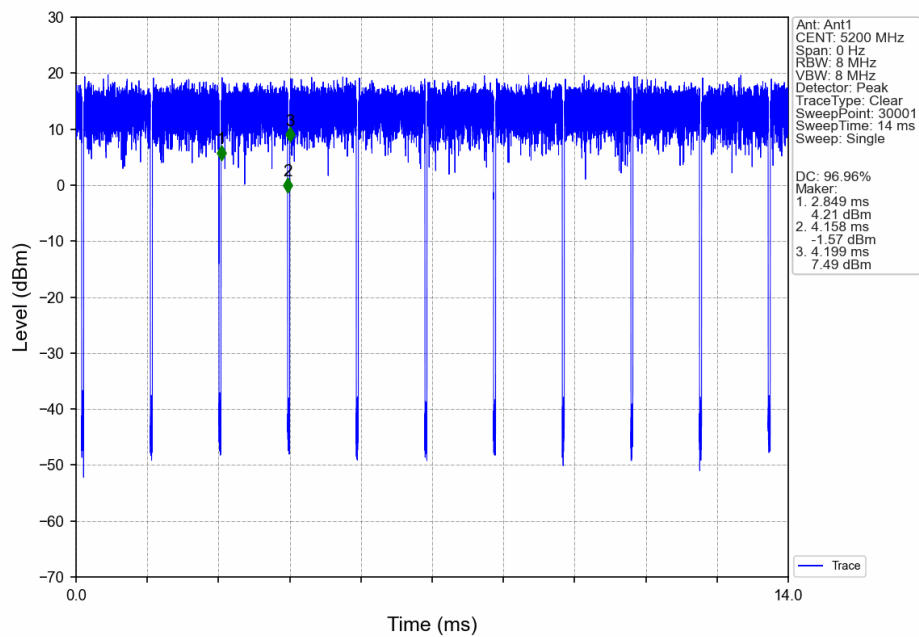
802.11a HCH 5825MHz Ant1 NTNV



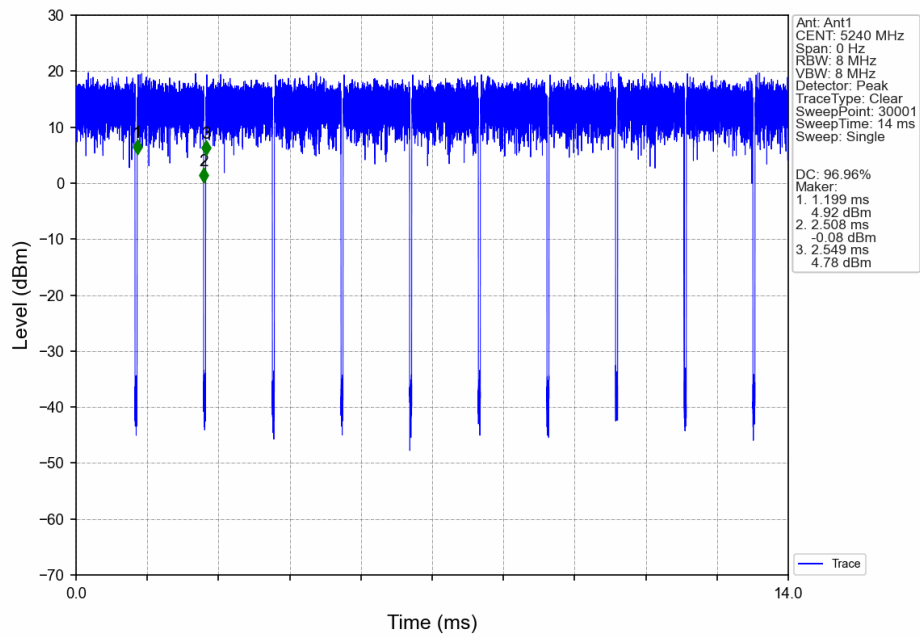
802.11n(HT20) LCH 5180MHz Ant1 NTN



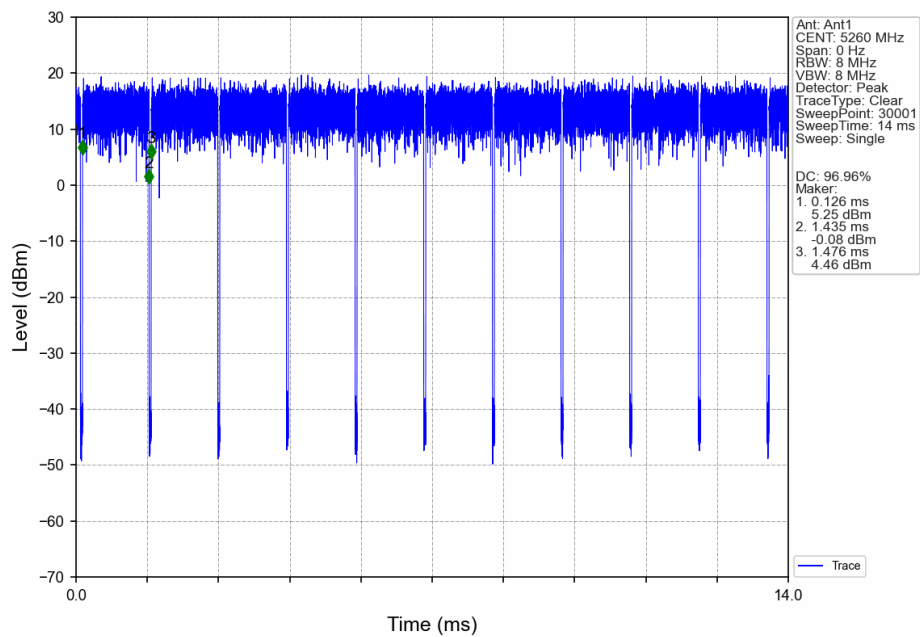
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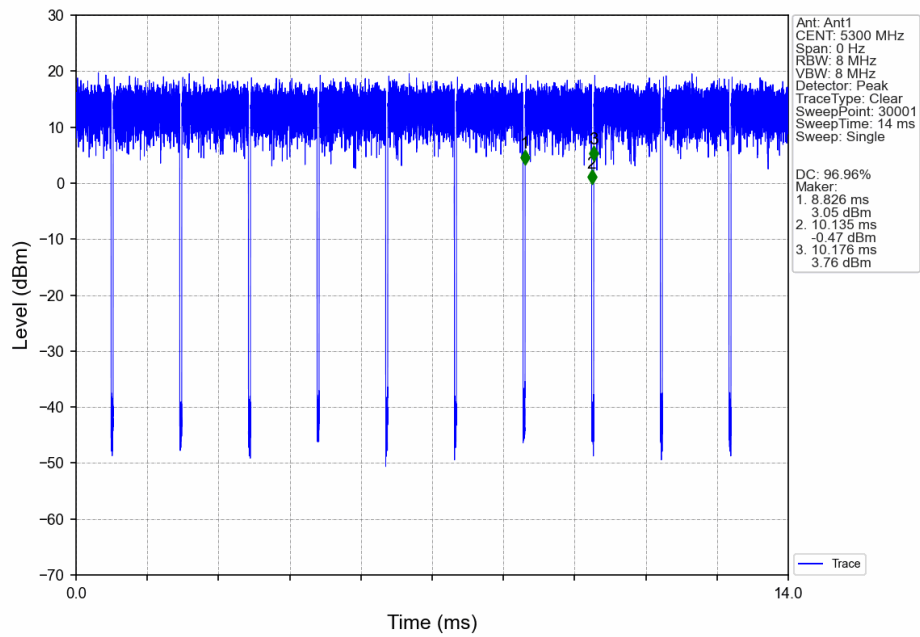
802.11n(HT20) HCH 5240MHz Ant1 NTN



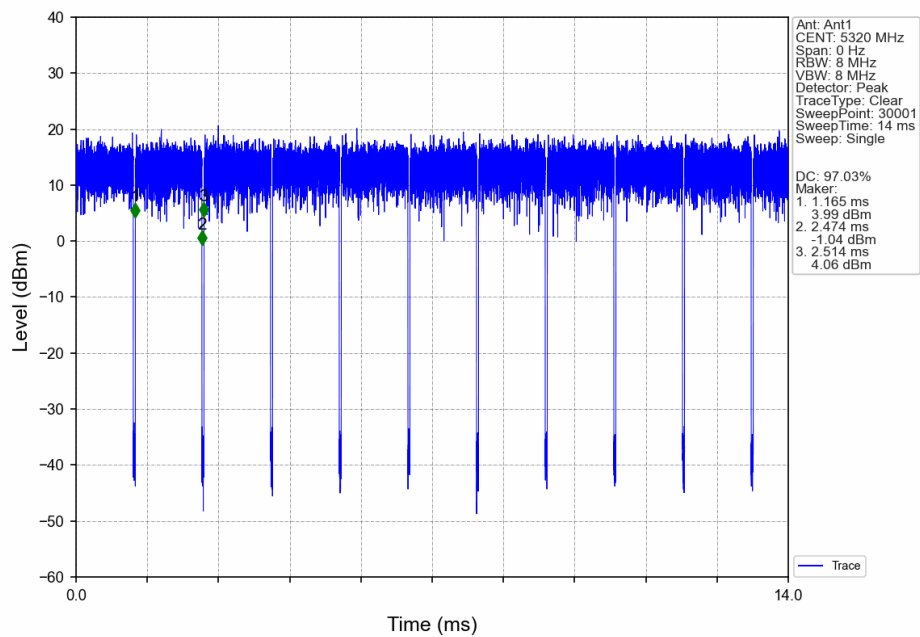
802.11n(HT20) LCH 5260MHz Ant1 NTN



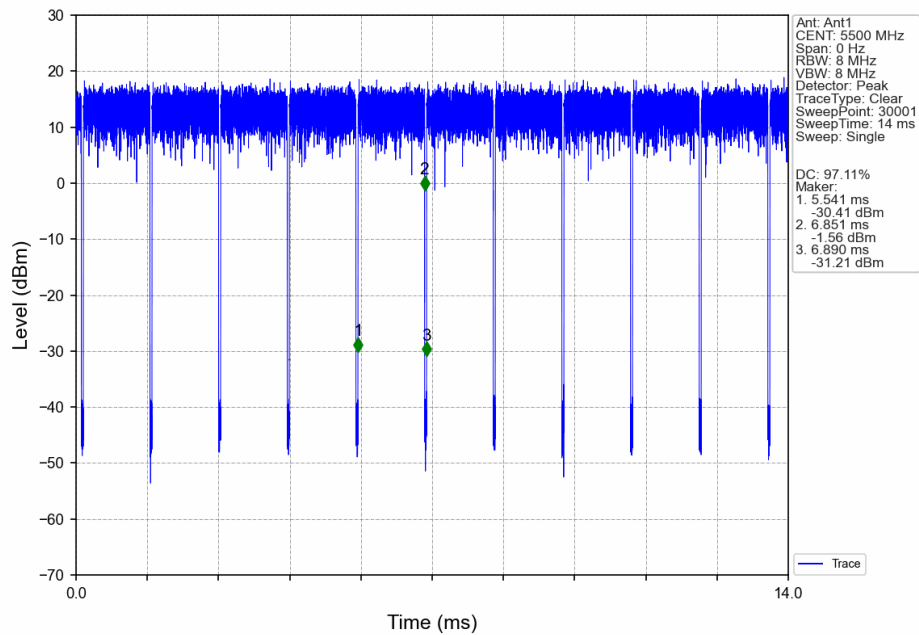
802.11n(HT20) MCH 5300MHz Ant1 NTNV



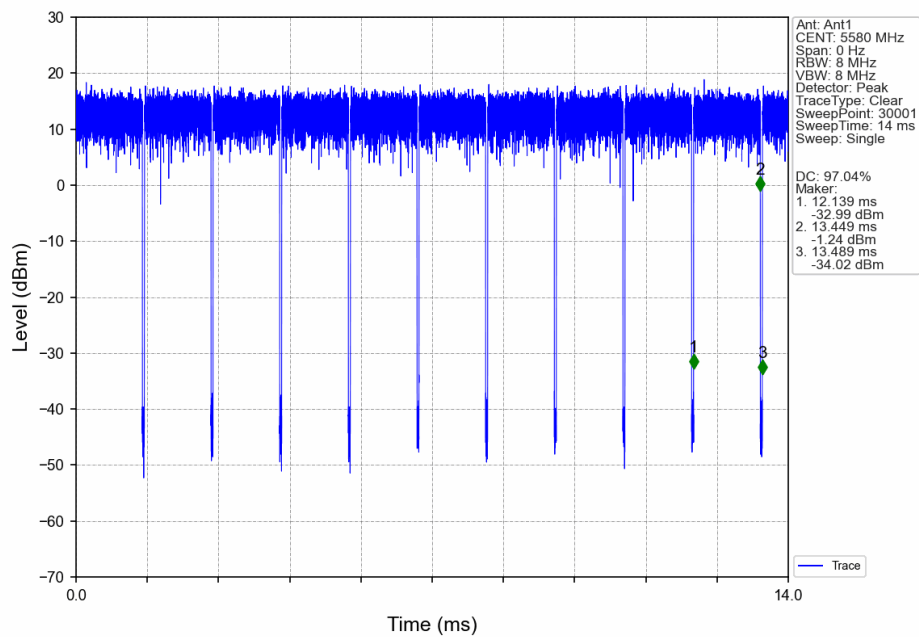
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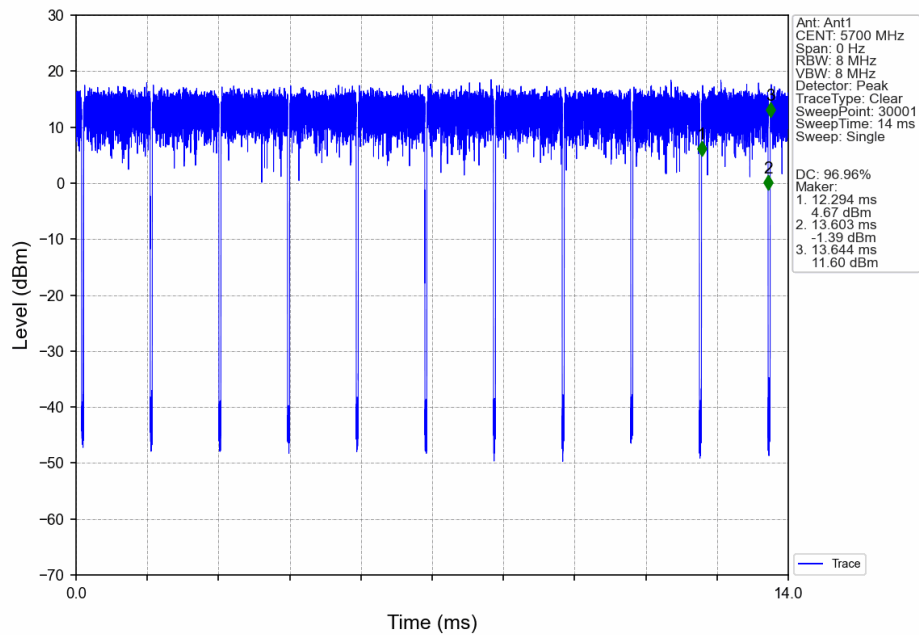
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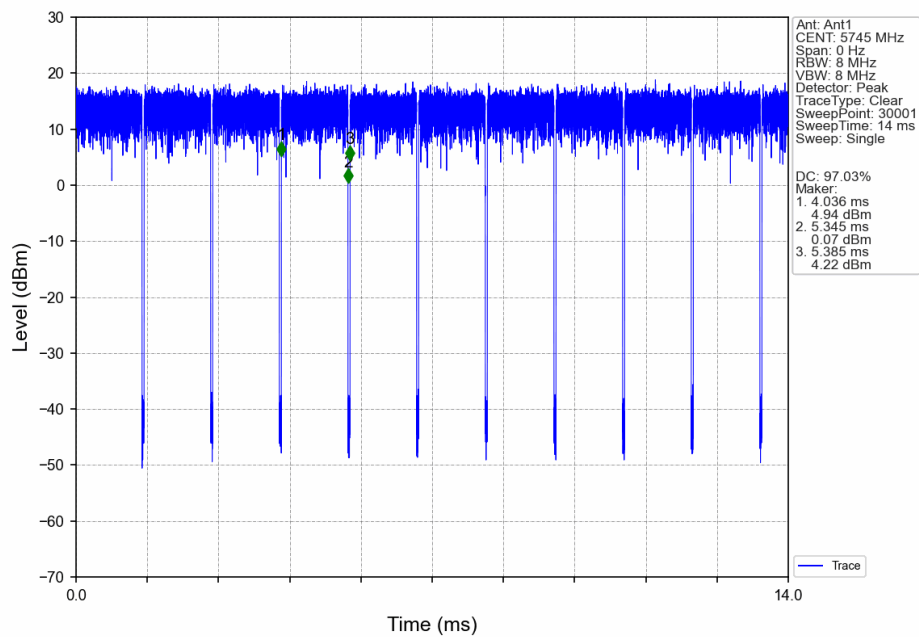
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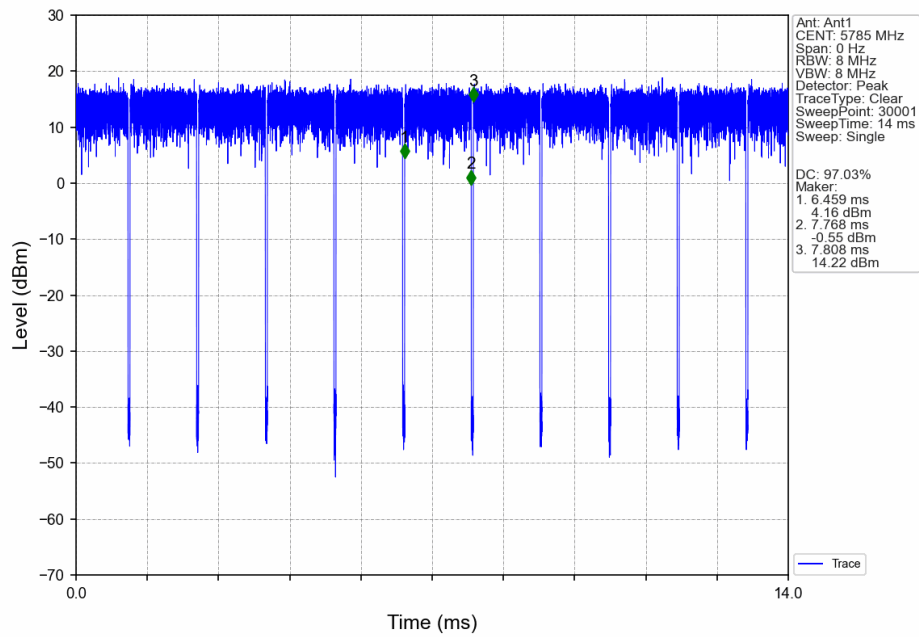
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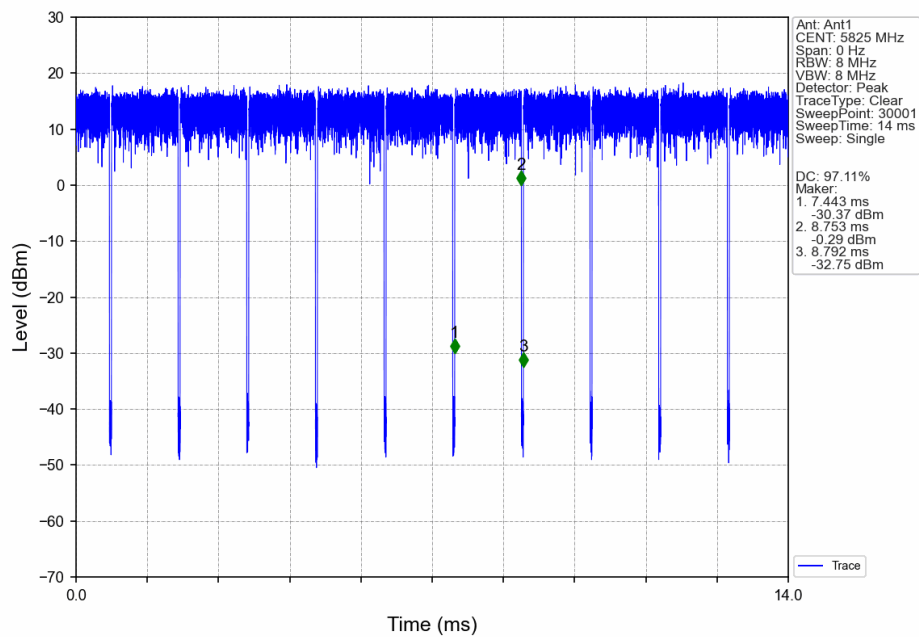
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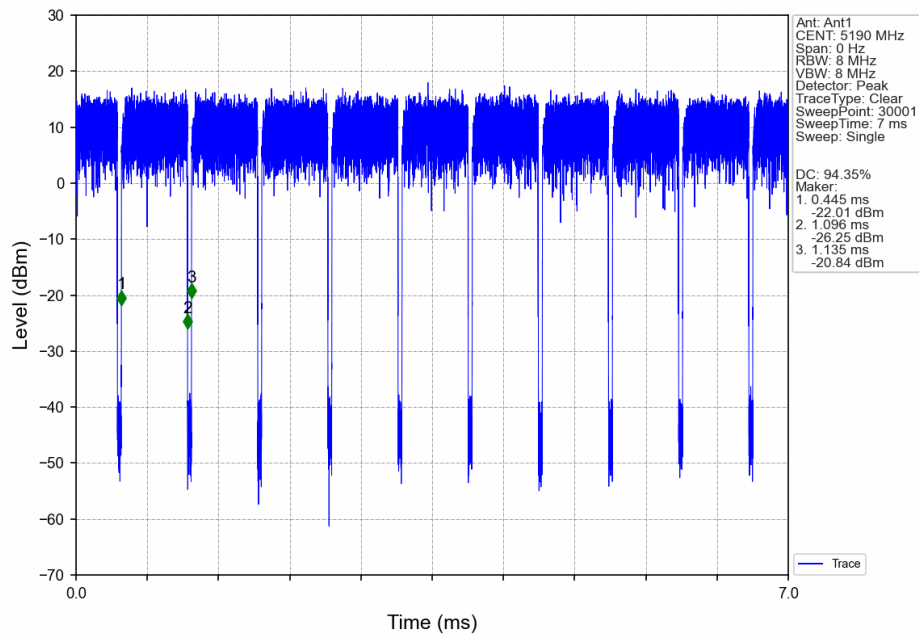
802.11n(HT20) MCH 5785MHz Ant1 NTNV



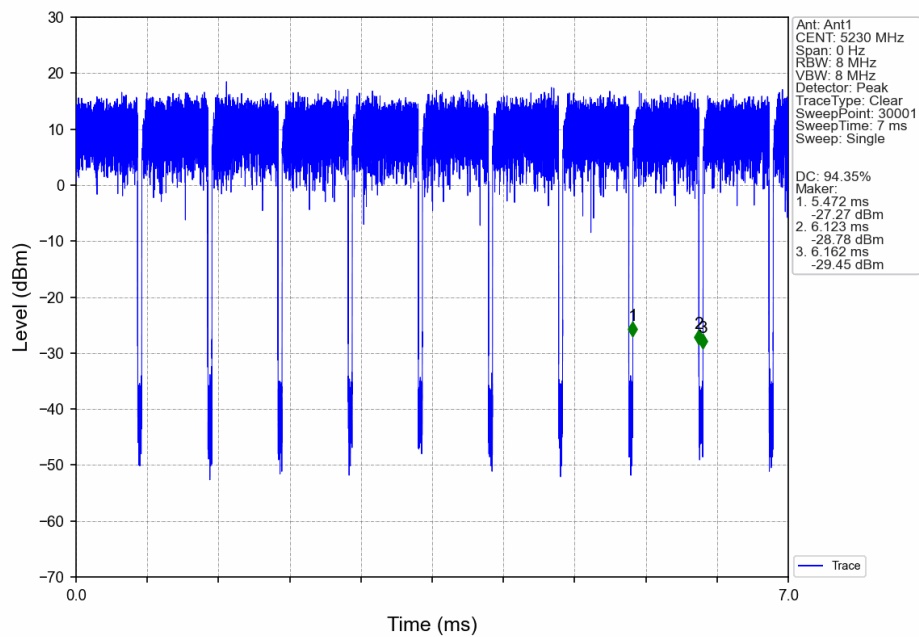
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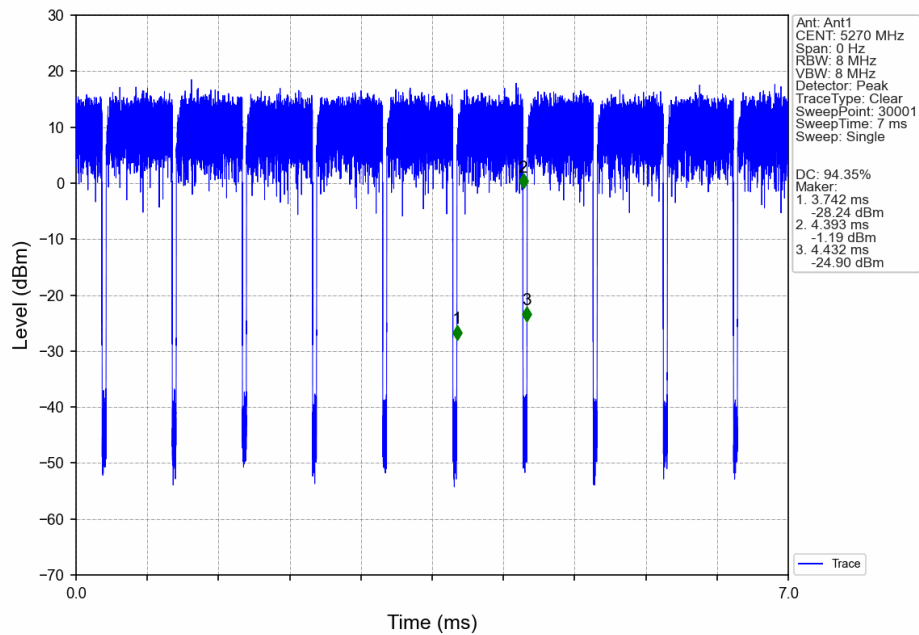
802.11n(HT40) LCH 5190MHz Ant1 NTN



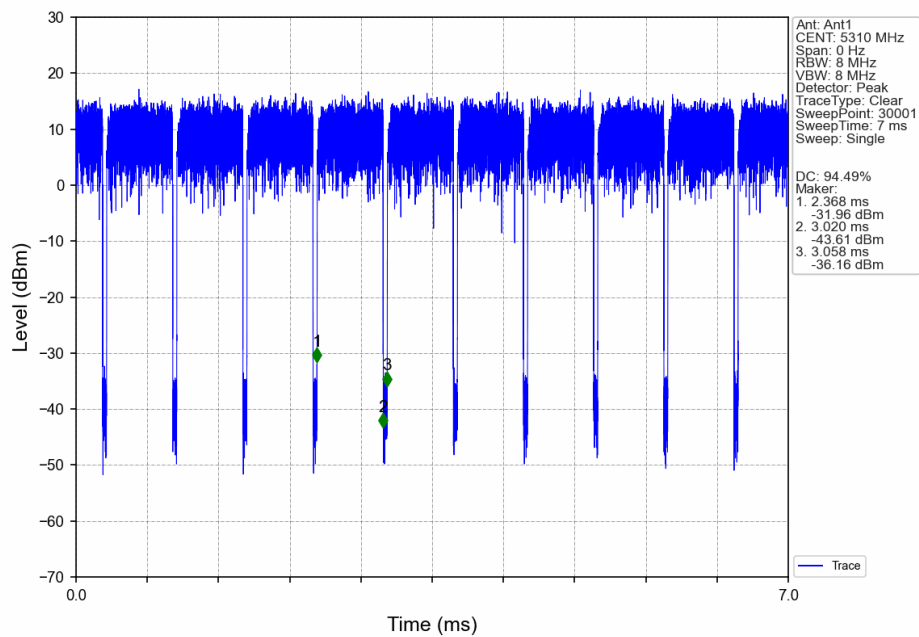
802.11n(HT40) HCH 5230MHz Ant1 NTN



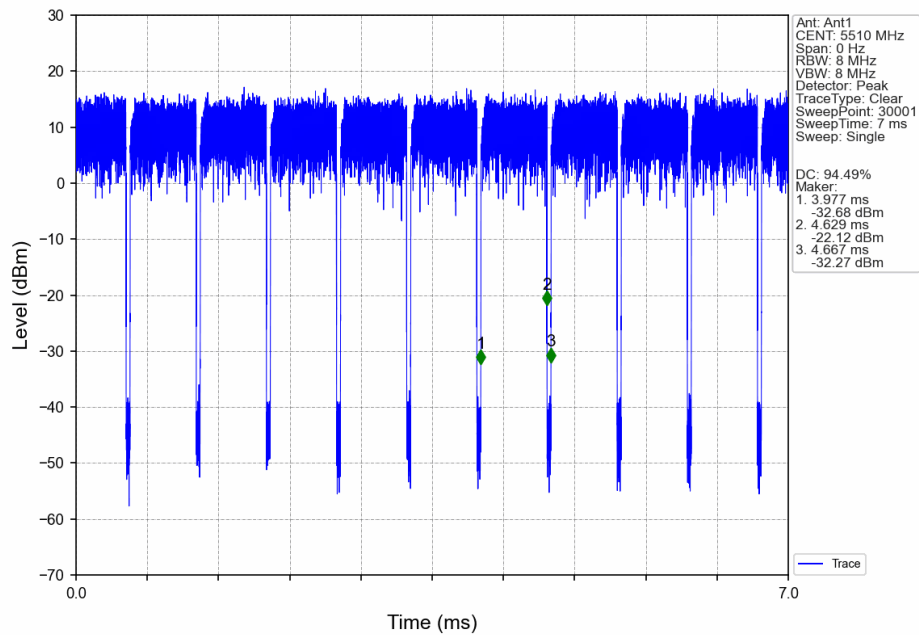
802.11n(HT40) LCH 5270MHz Ant1 NTN



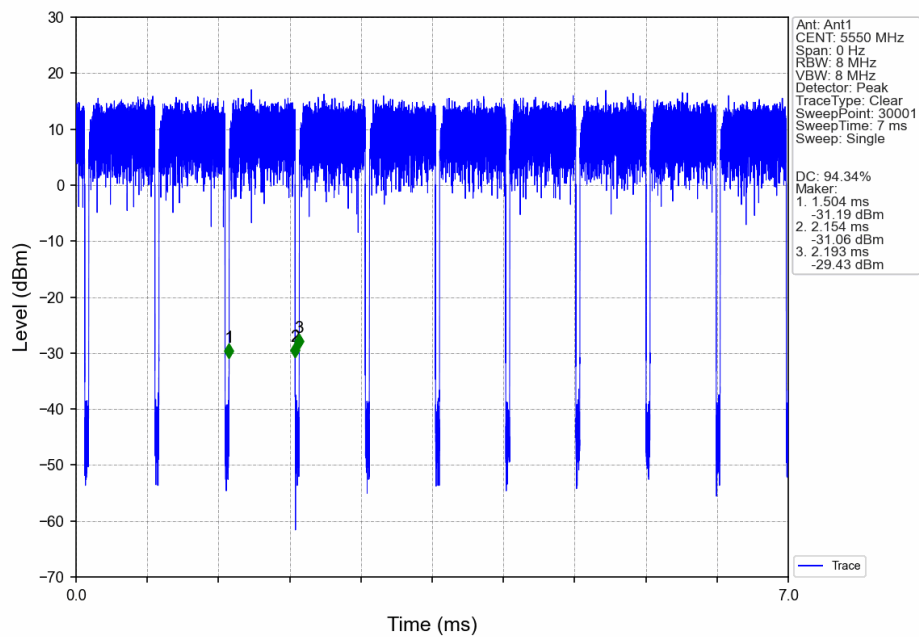
802.11n(HT40) HCH 5310MHz Ant1 NTN



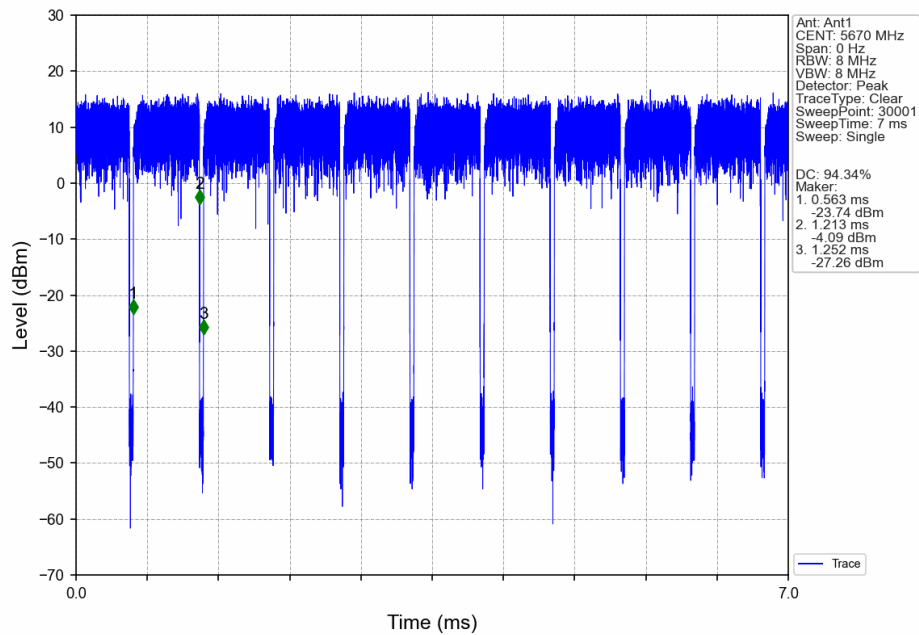
802.11n(HT40) LCH 5510MHz Ant1 NTNV



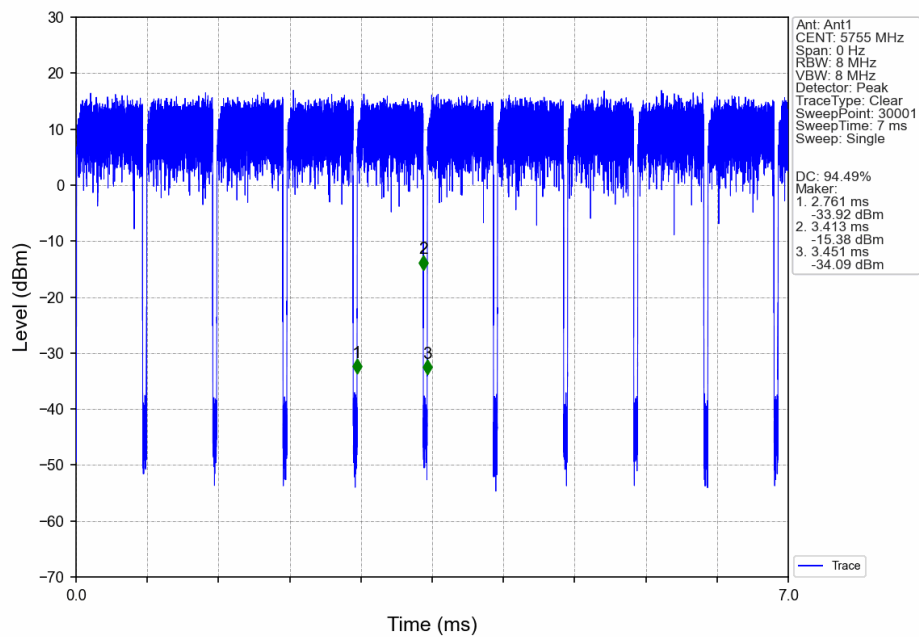
802.11n(HT40) MCH 5550MHz Ant1 NTNV



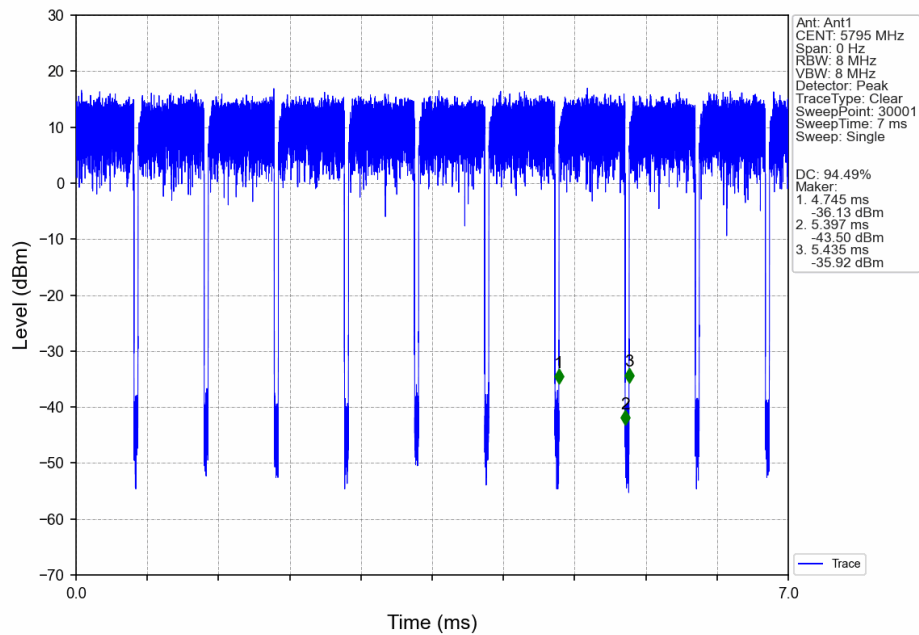
802.11n(HT40) HCH 5670MHz Ant1 NTN



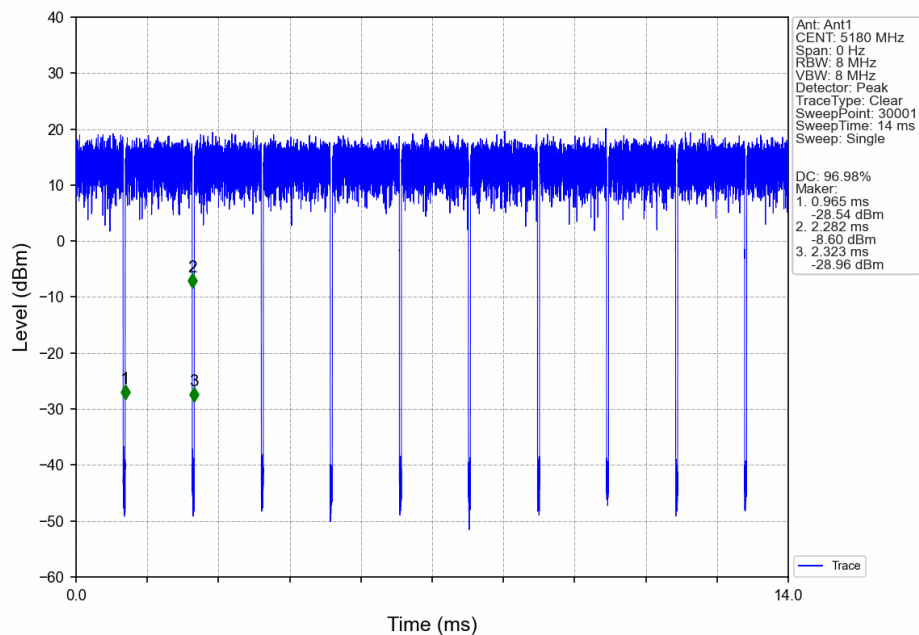
802.11n(HT40) LCH 5755MHz Ant1 NTN



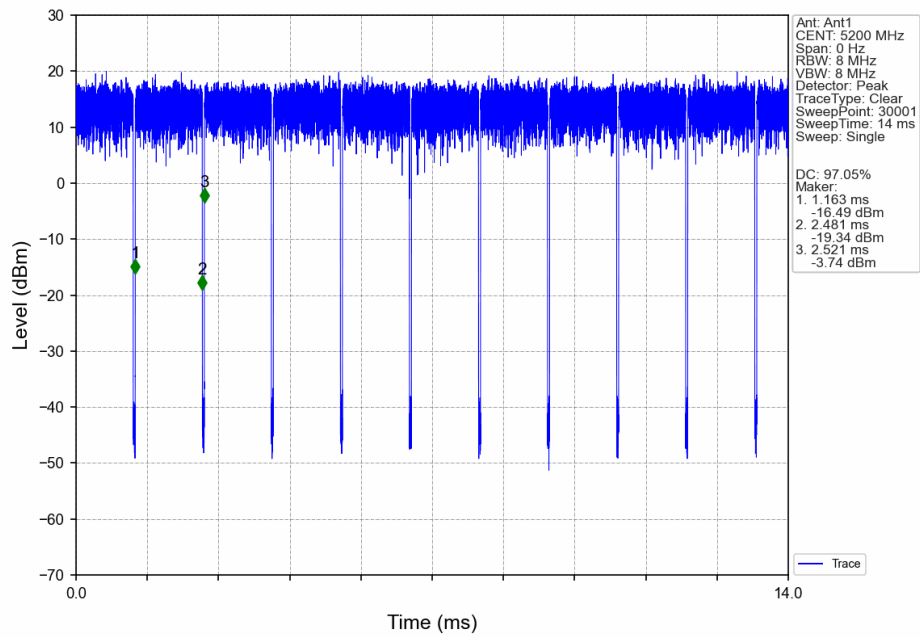
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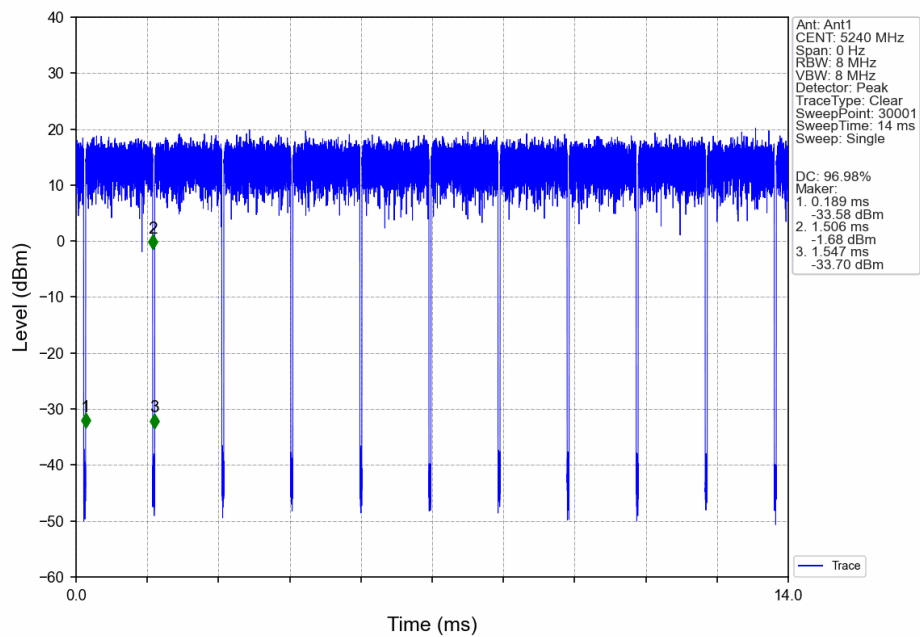
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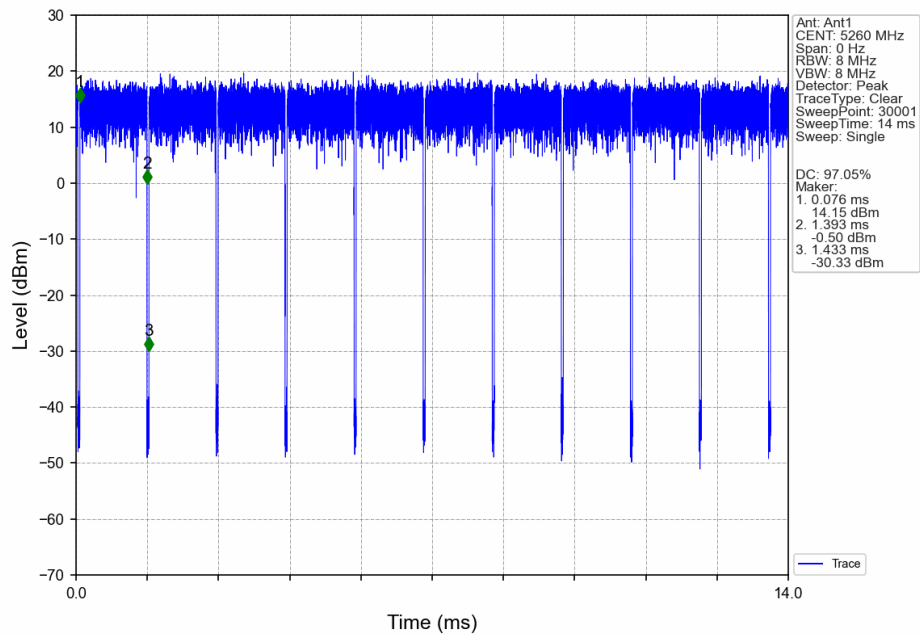
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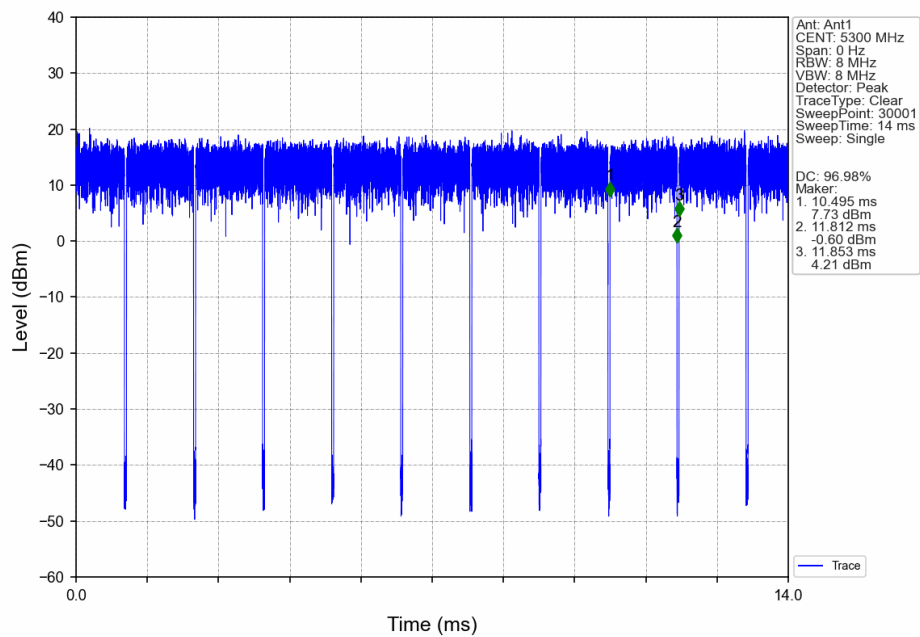
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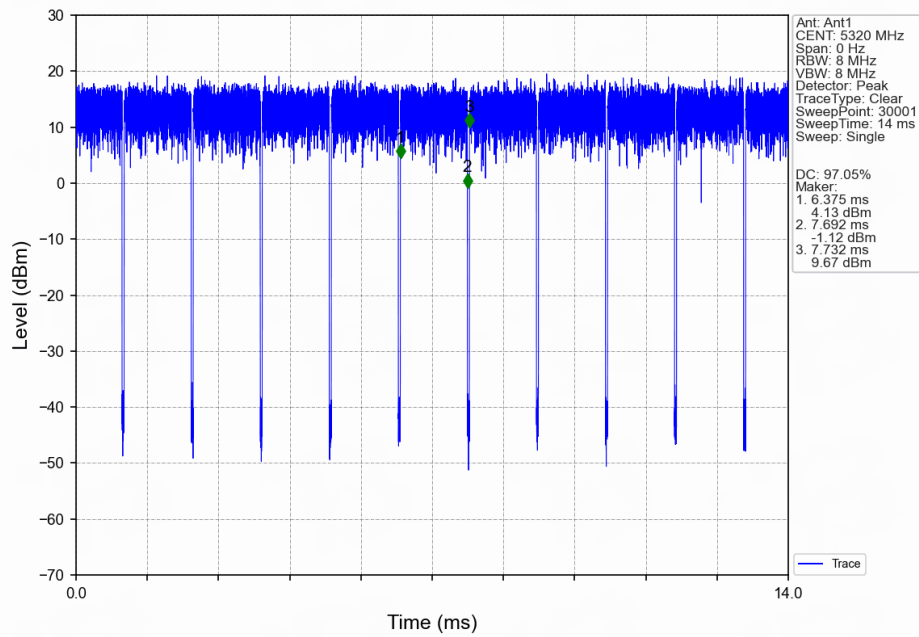
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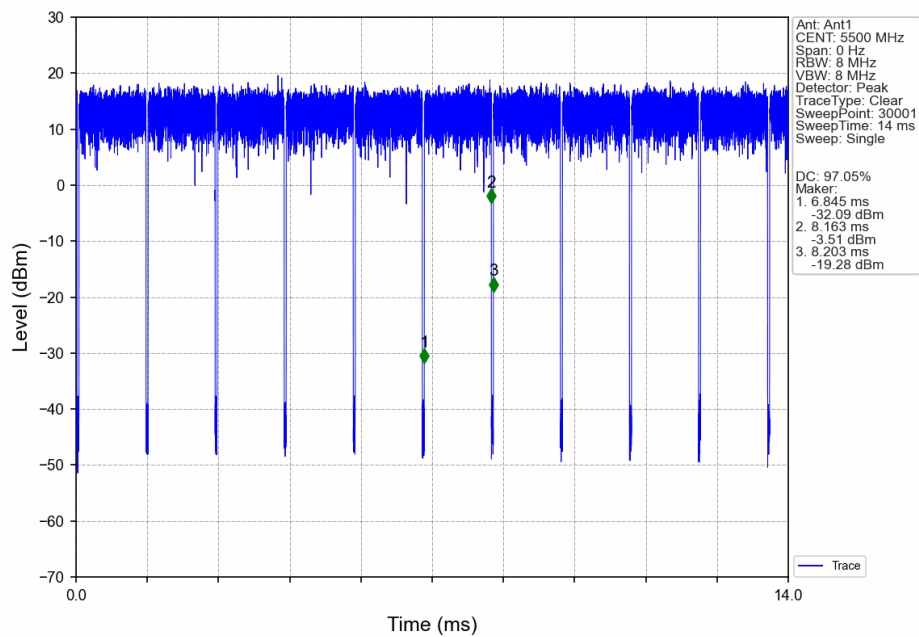
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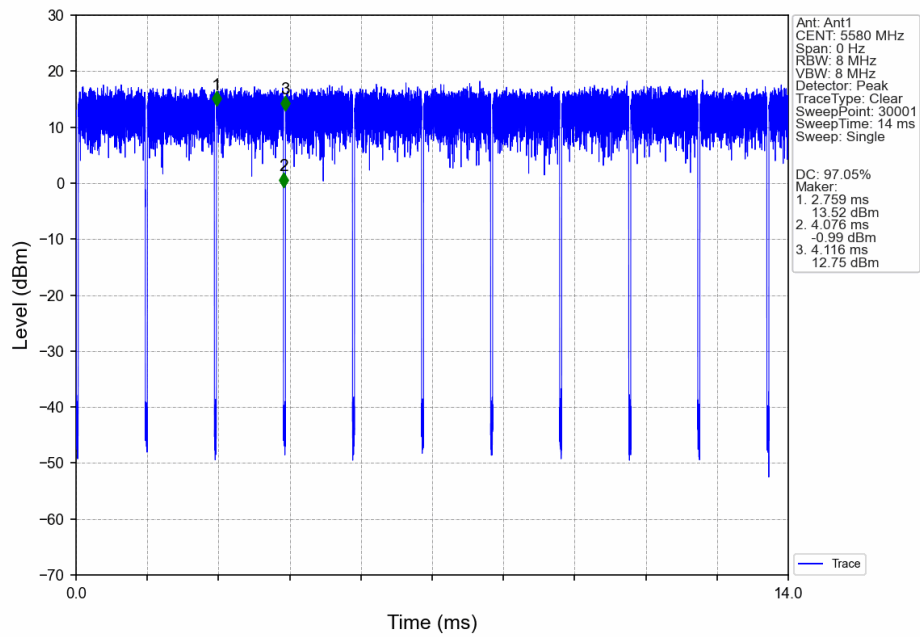
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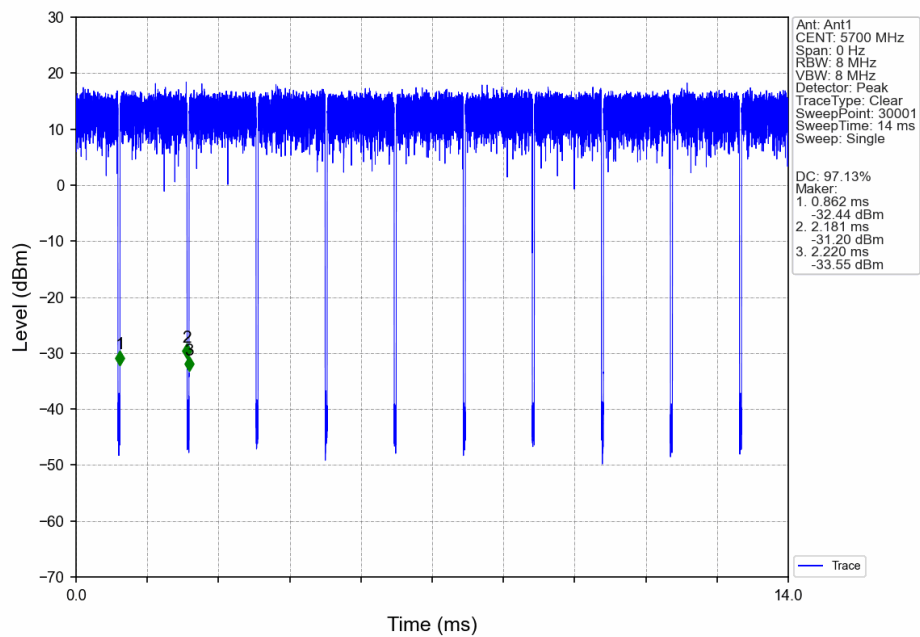
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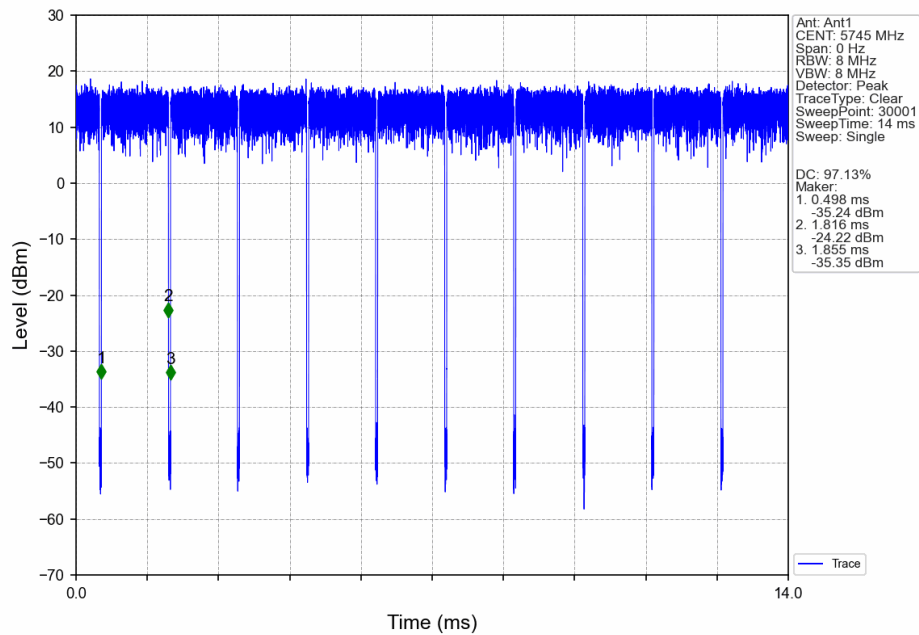
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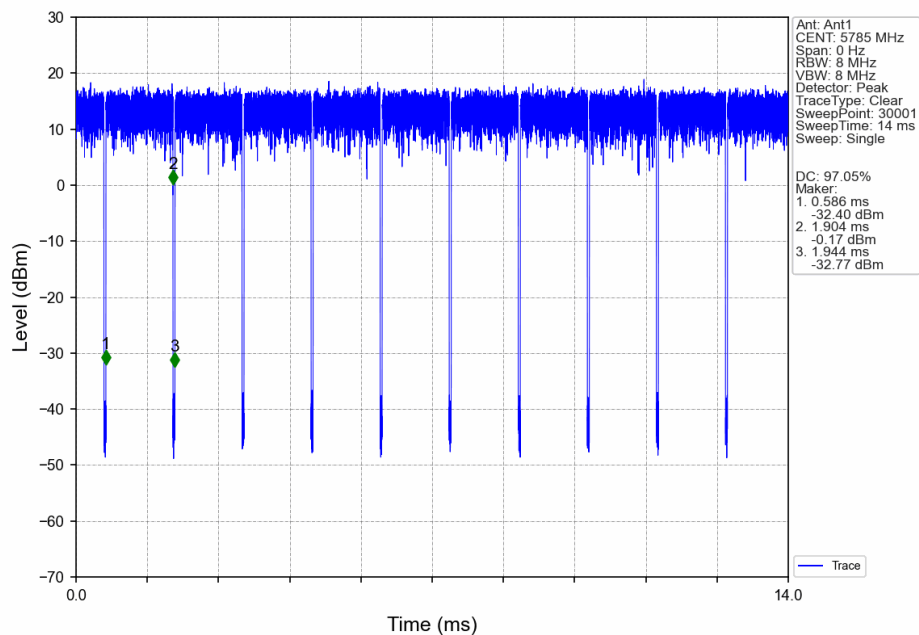
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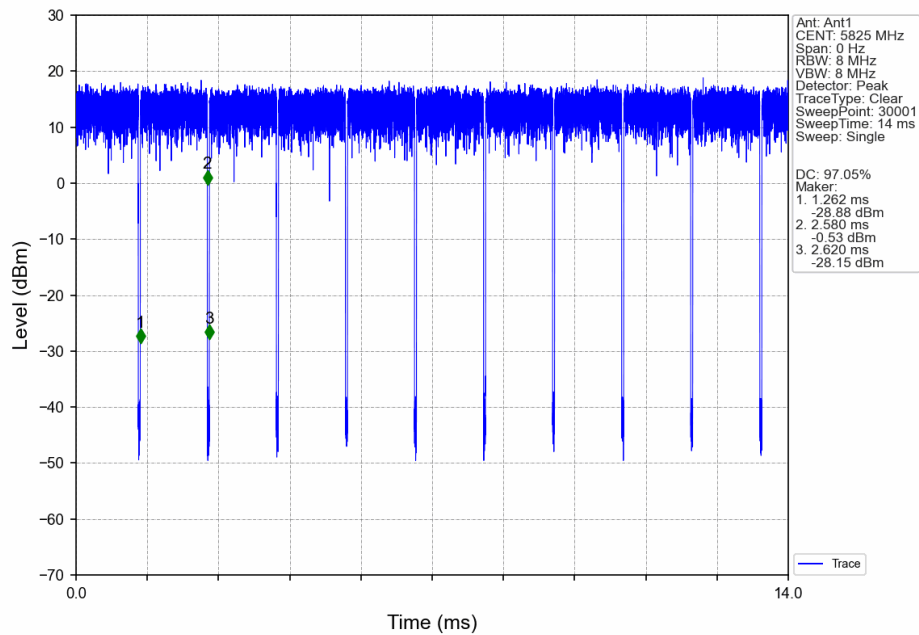
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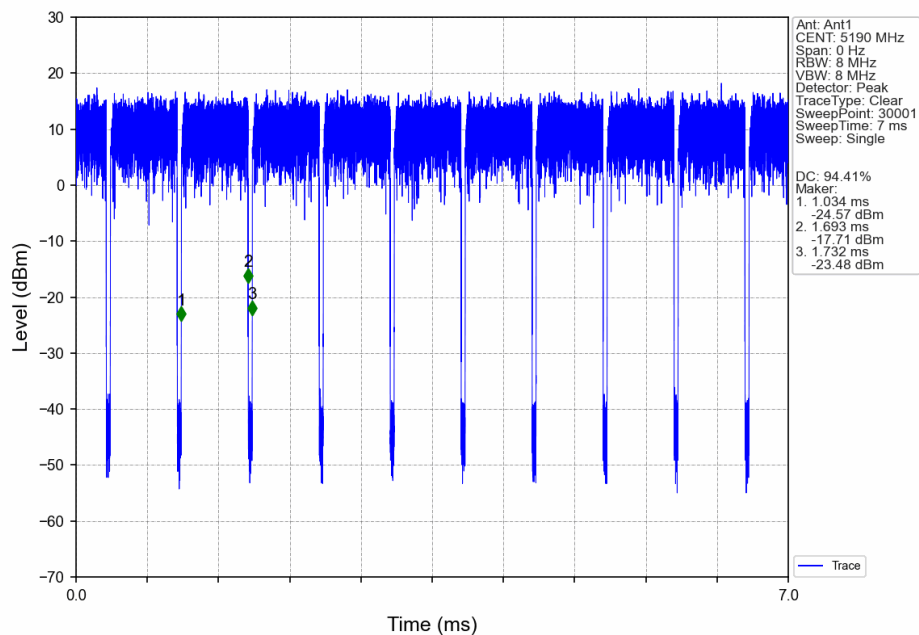
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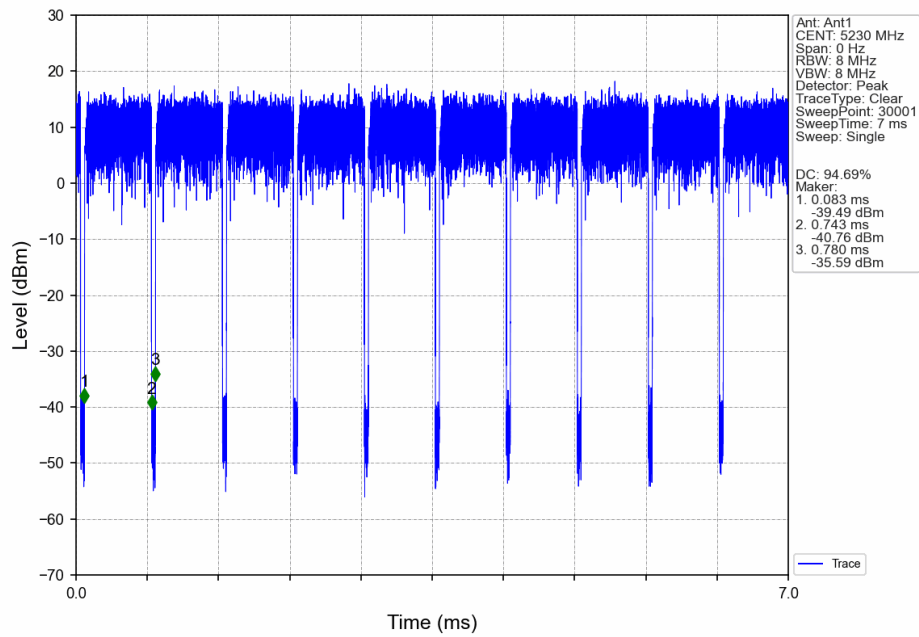
802.11ac(VHT20) HCH 5825MHz Ant1 NTN



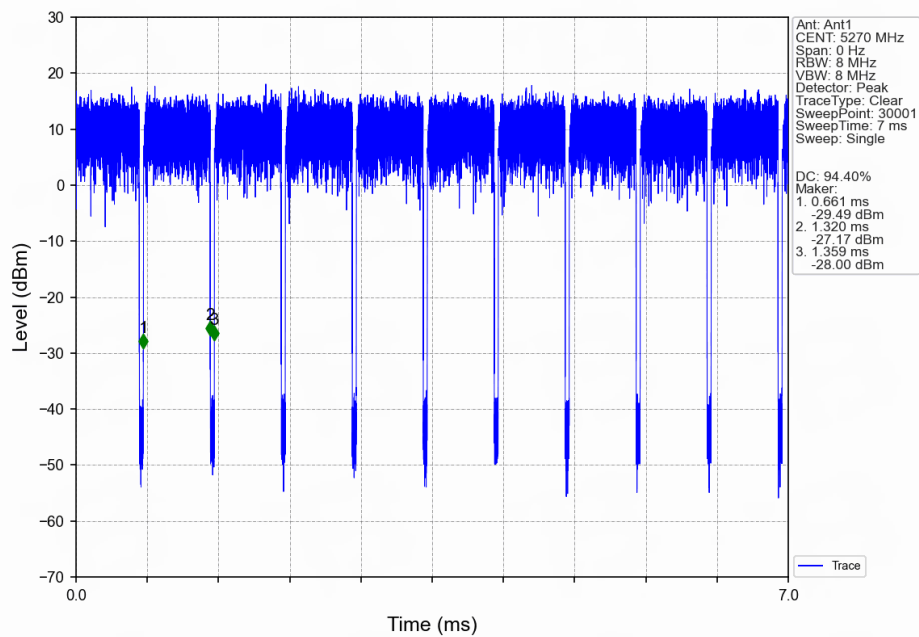
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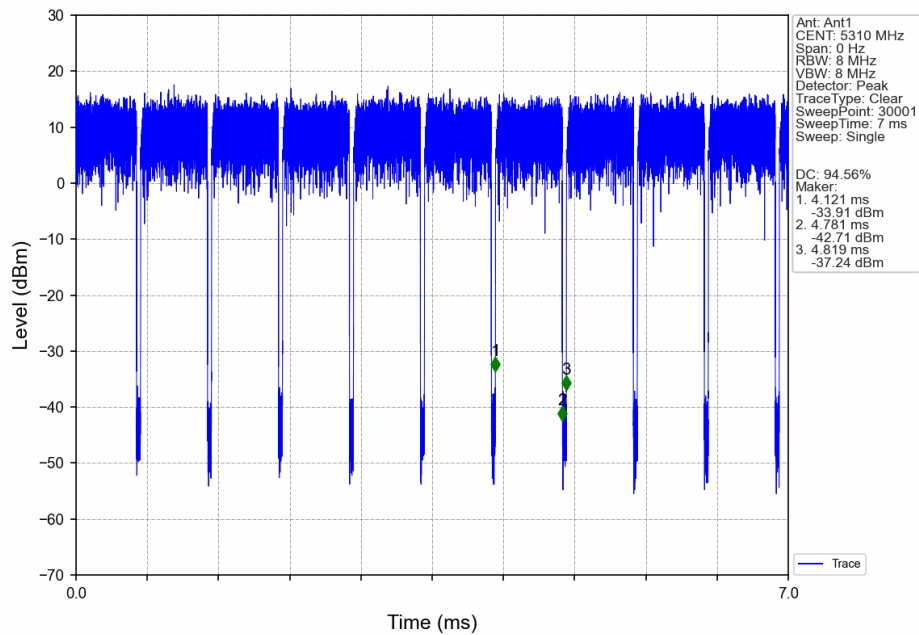
802.11ac(VHT40) HCH 5230MHz Ant1 NTN



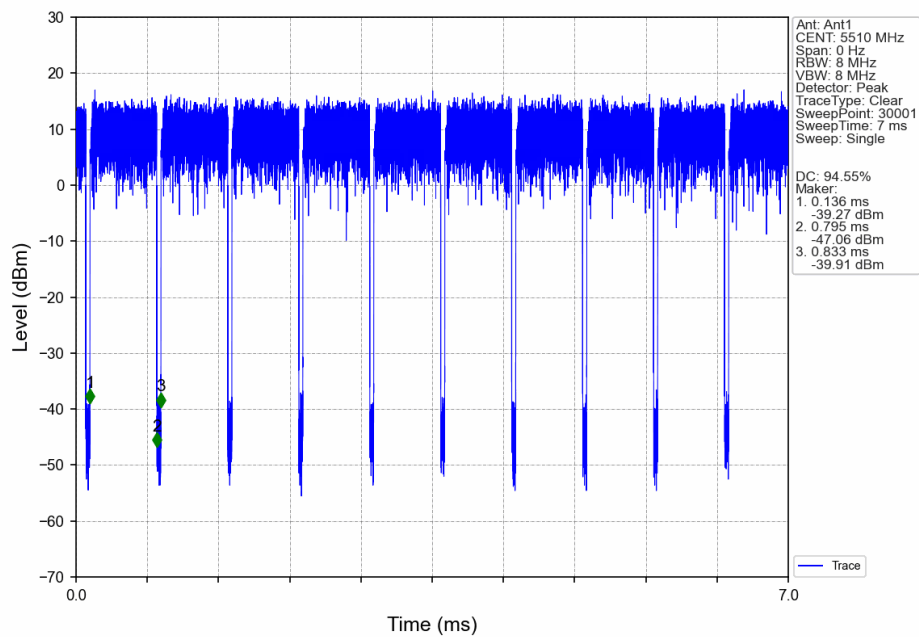
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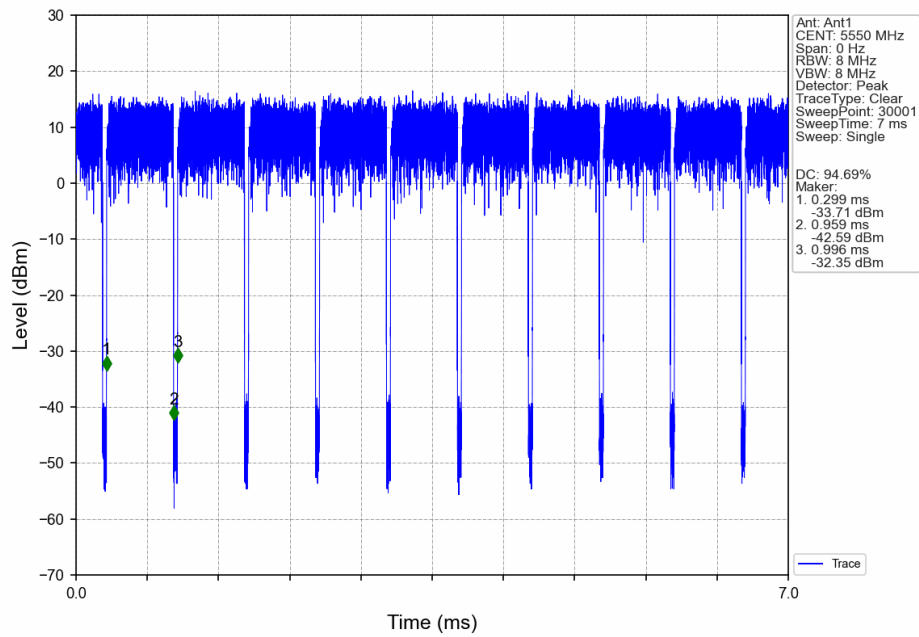
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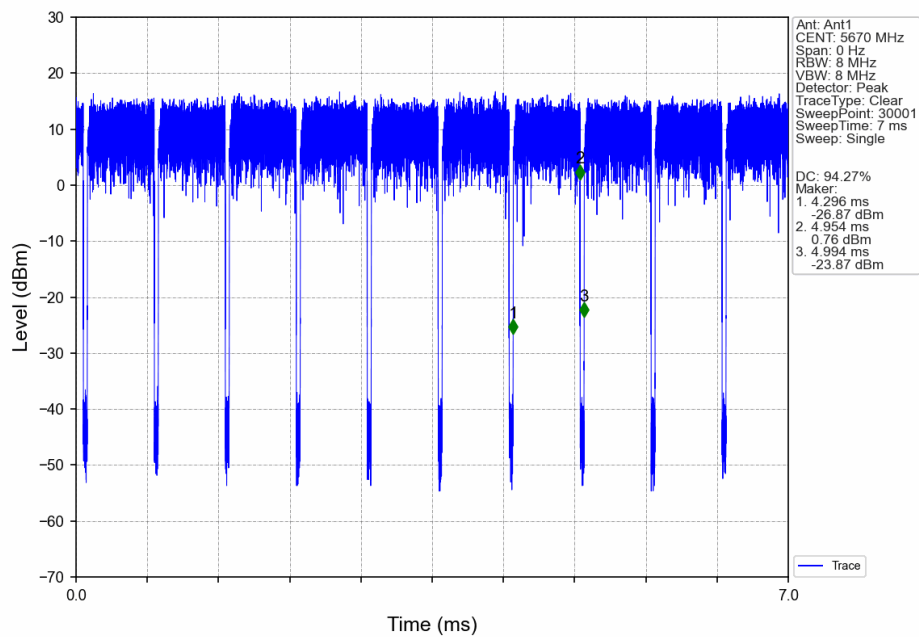
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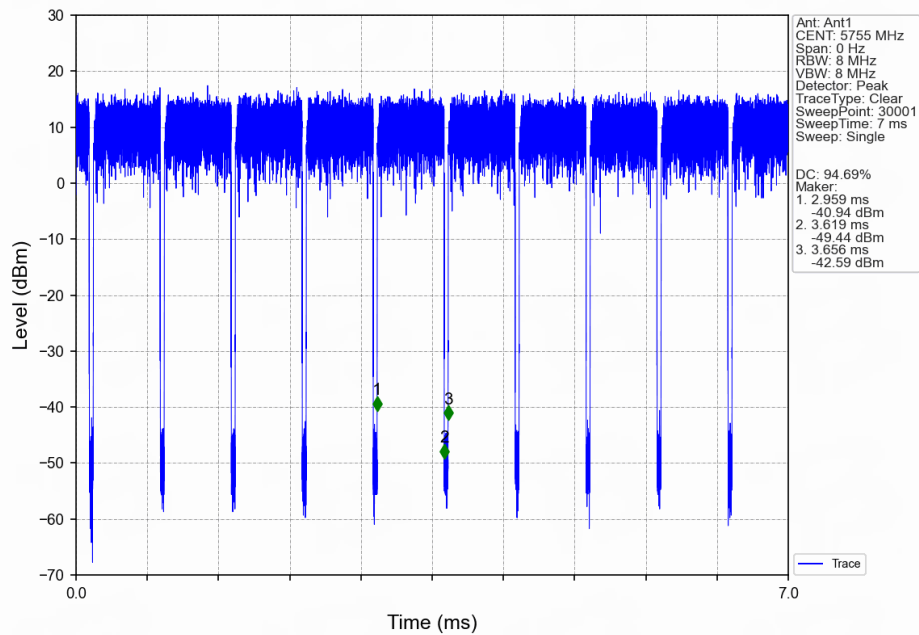
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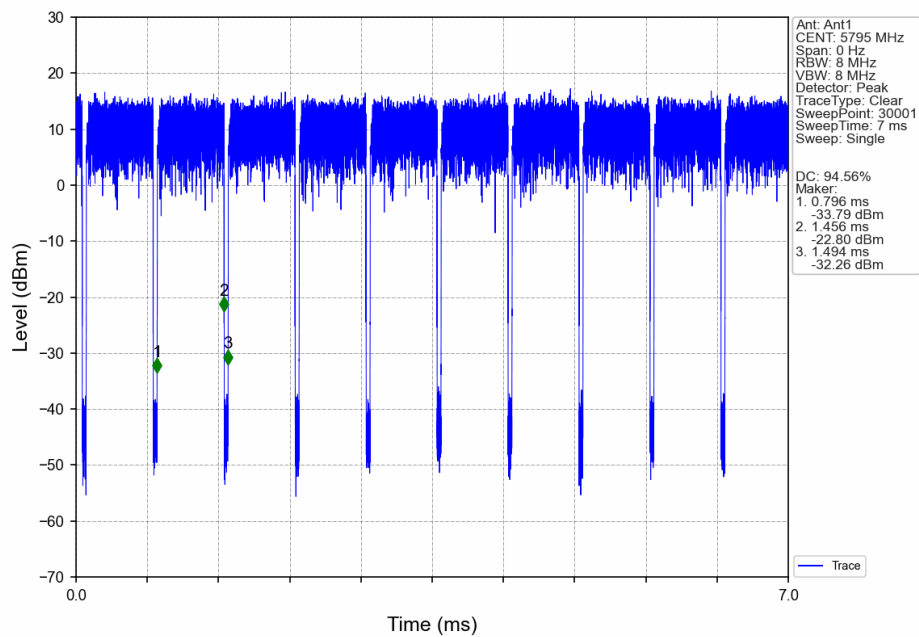
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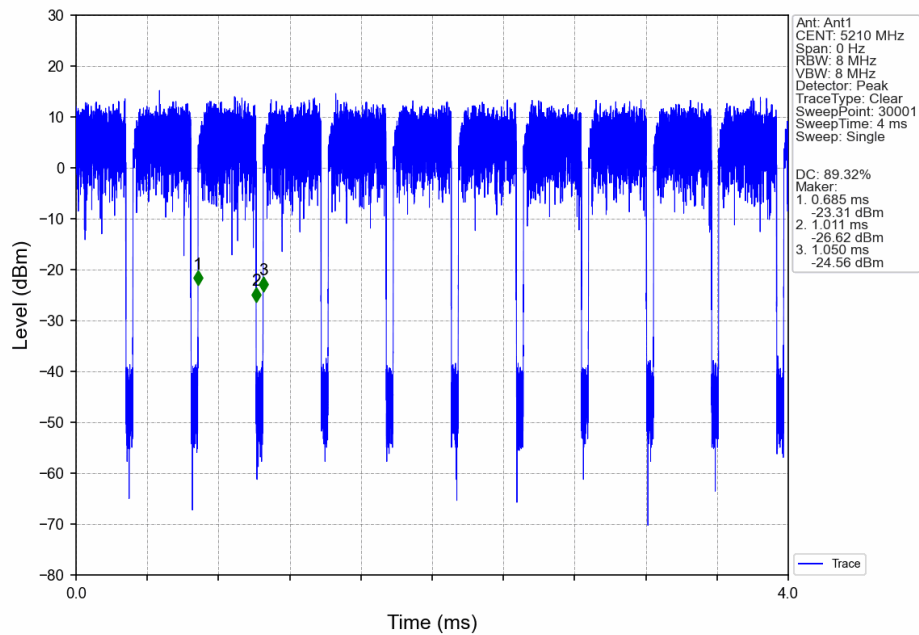
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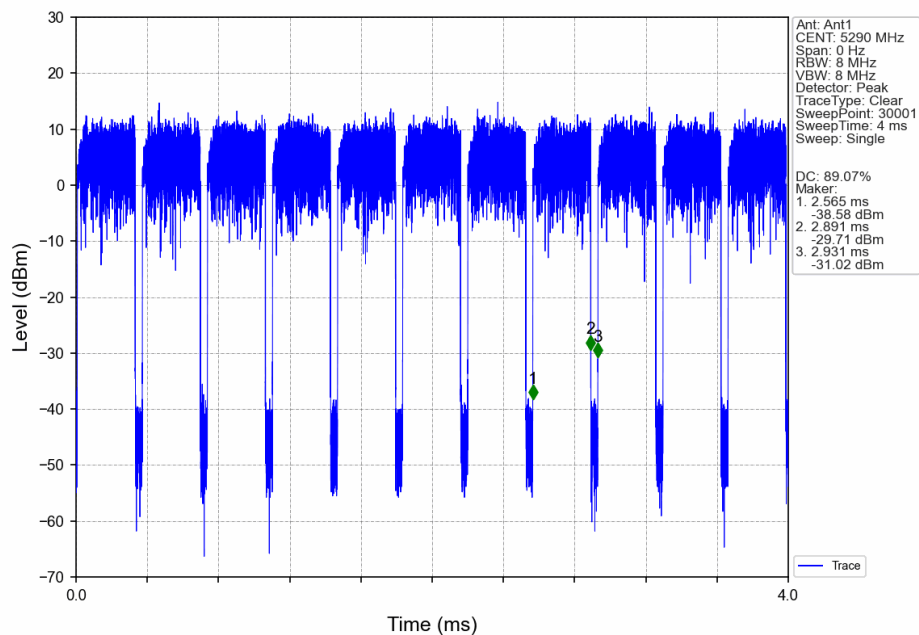
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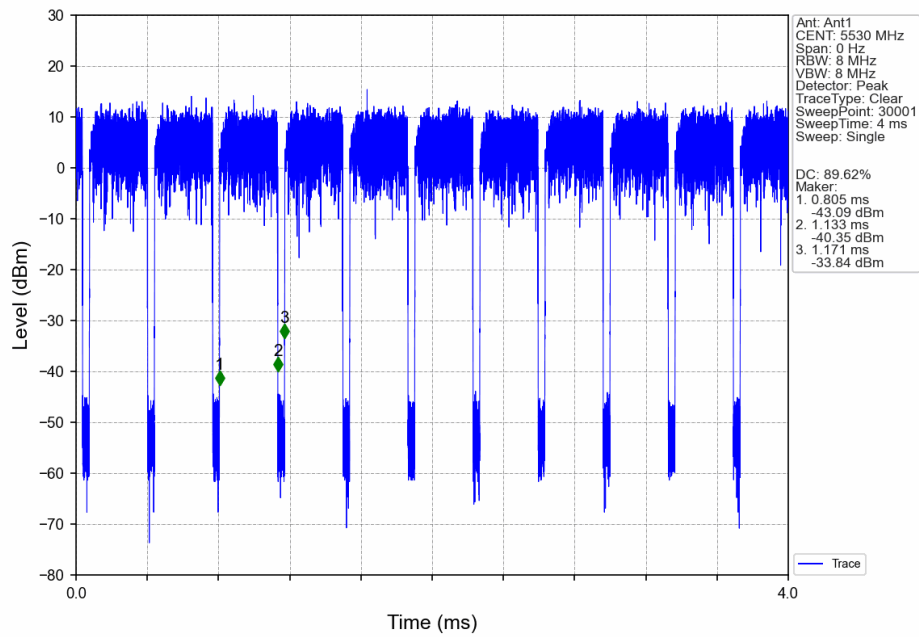
802.11ac(VHT80) MCH 5210MHz Ant1 NTNV



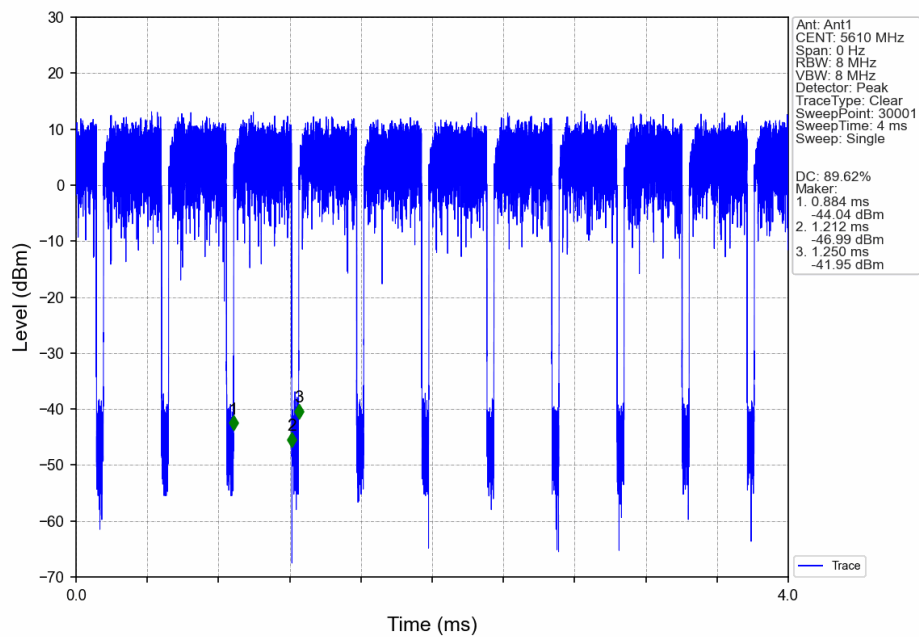
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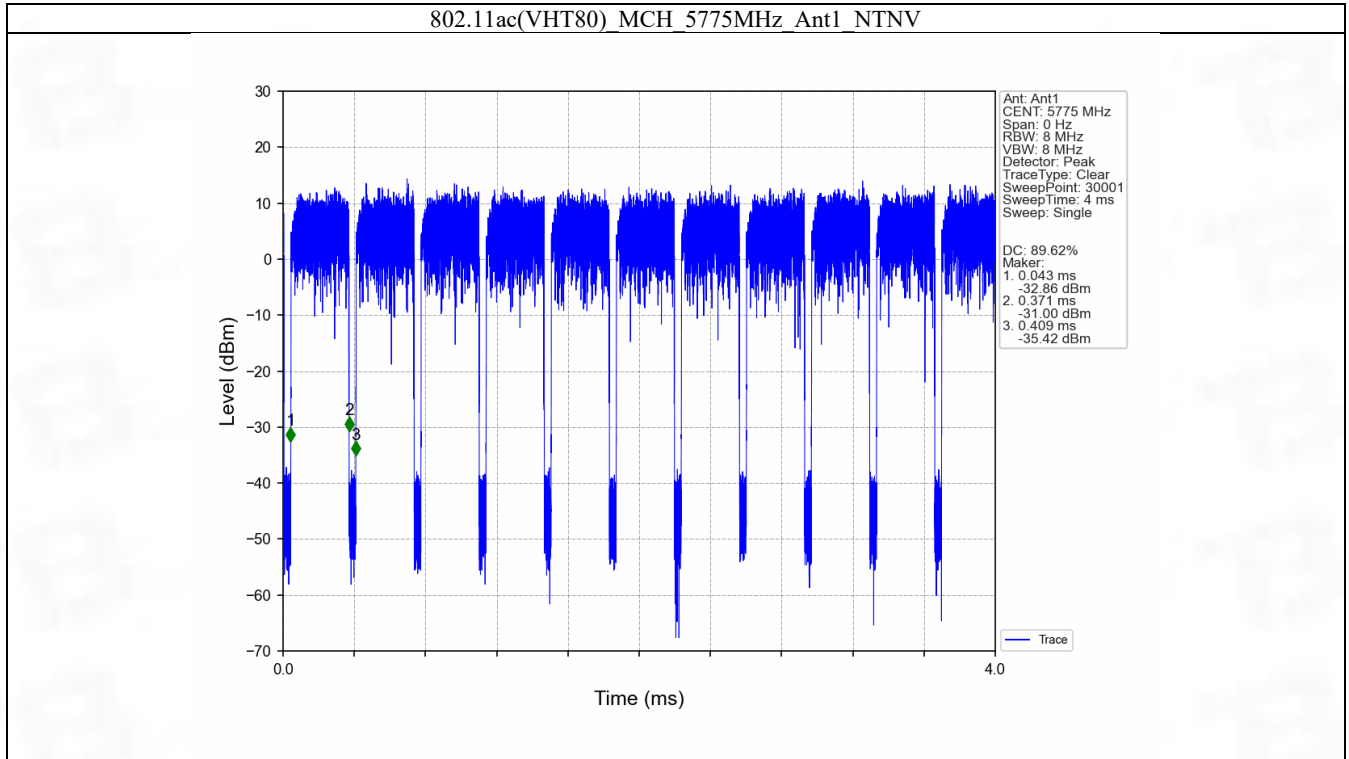


802.11ac(VHT80) LCH 5530MHz Ant1 NTN



802.11ac(VHT80) HCH 5610MHz Ant1 NTN





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	17.682	/	Pass
		5200	1	17.655	/	Pass
		5240	1	17.643	/	Pass
		5260	1	17.742	/	Pass
		5300	1	17.690	/	Pass
		5320	1	18.019	/	Pass
		5500	1	18.039	/	Pass
		5580	1	18.204	/	Pass
		5700	1	18.432	/	Pass
		5745	1	18.677	/	Pass
		5785	1	18.491	/	Pass
802.11n (HT20)	SISO	5825	1	18.626	/	Pass
		5180	1	18.740	/	Pass
		5200	1	18.552	/	Pass
		5240	1	18.541	/	Pass
		5260	1	18.582	/	Pass
		5300	1	18.575	/	Pass
		5320	1	18.495	/	Pass
		5500	1	18.712	/	Pass
		5580	1	18.822	/	Pass
		5700	1	18.882	/	Pass
		5745	1	19.089	/	Pass
802.11n (HT40)	SISO	5785	1	19.125	/	Pass
		5825	1	19.070	/	Pass
		5190	1	36.504	/	Pass
		5230	1	36.419	/	Pass
		5270	1	36.367	/	Pass
		5310	1	36.438	/	Pass
		5510	1	36.865	/	Pass
		5550	1	36.849	/	Pass
		5670	1	37.020	/	Pass
		5755	1	36.941	/	Pass
		5795	1	37.085	/	Pass
802.11ac (VHT20)	SISO	5180	1	18.561	/	Pass
		5200	1	18.610	/	Pass
		5240	1	18.531	/	Pass
		5260	1	18.523	/	Pass
		5300	1	18.591	/	Pass
		5320	1	18.546	/	Pass
		5500	1	18.783	/	Pass
		5580	1	18.732	/	Pass
		5700	1	18.886	/	Pass
		5745	1	19.066	/	Pass
		5785	1	19.053	/	Pass
802.11ac (VHT40)	SISO	5825	1	18.992	/	Pass
		5190	1	36.465	/	Pass
		5230	1	36.509	/	Pass
		5270	1	36.414	/	Pass
		5310	1	36.487	/	Pass
		5510	1	36.679	/	Pass

		5550	1	36.953	/	Pass
		5670	1	36.891	/	Pass
		5755	1	37.097	/	Pass
		5795	1	37.096	/	Pass
802.11ac (VHT80)	SISO	5210	1	75.739	/	Pass
		5290	1	75.719	/	Pass
		5530	1	76.551	/	Pass
		5610	1	76.658	/	Pass
		5775	1	76.636	/	Pass

2.1.2 26dB BW

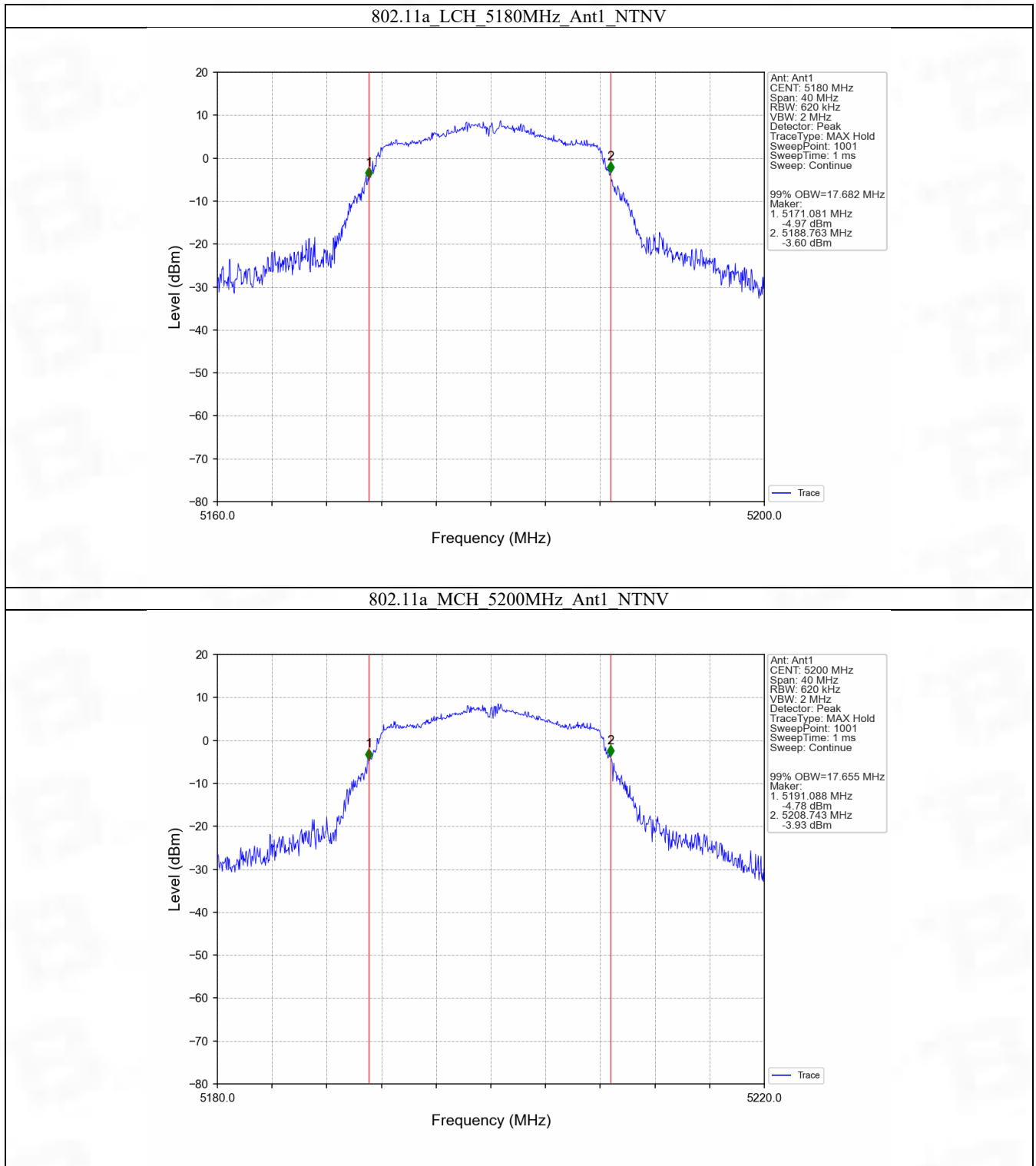
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	21.007	/	Pass
		5200	1	21.071	/	Pass
		5240	1	21.043	/	Pass
		5260	1	21.054	/	Pass
		5300	1	20.979	/	Pass
		5320	1	21.624	/	Pass
		5500	1	23.733	/	Pass
		5580	1	23.284	/	Pass
802.11n (HT20)	SISO	5700	1	28.517	/	Pass
		5180	1	24.009	/	Pass
		5200	1	21.219	/	Pass
		5240	1	21.509	/	Pass
		5260	1	21.139	/	Pass
		5300	1	21.408	/	Pass
		5320	1	21.281	/	Pass
		5500	1	22.766	/	Pass
802.11n (HT40)	SISO	5580	1	25.412	/	Pass
		5700	1	25.694	/	Pass
		5190	1	39.983	/	Pass
		5230	1	39.541	/	Pass
		5270	1	39.352	/	Pass
		5310	1	41.358	/	Pass
		5510	1	51.875	/	Pass
		5550	1	49.997	/	Pass
802.11ac (VHT20)	SISO	5670	1	54.652	/	Pass
		5180	1	21.272	/	Pass
		5200	1	22.215	/	Pass
		5240	1	21.008	/	Pass
		5260	1	21.908	/	Pass
		5300	1	21.248	/	Pass
		5320	1	21.771	/	Pass
		5500	1	25.093	/	Pass
802.11ac (VHT40)	SISO	5580	1	23.056	/	Pass
		5700	1	24.865	/	Pass
		5190	1	41.583	/	Pass
		5230	1	39.751	/	Pass
		5270	1	39.720	/	Pass
		5310	1	44.403	/	Pass
		5510	1	49.838	/	Pass
		5550	1	50.313	/	Pass
802.11ac (VHT80)	SISO	5670	1	51.628	/	Pass
		5210	1	87.197	/	Pass
		5290	1	82.871	/	Pass
		5530	1	105.135	/	Pass
		5610	1	101.909	/	Pass

2.1.3 6dB BW

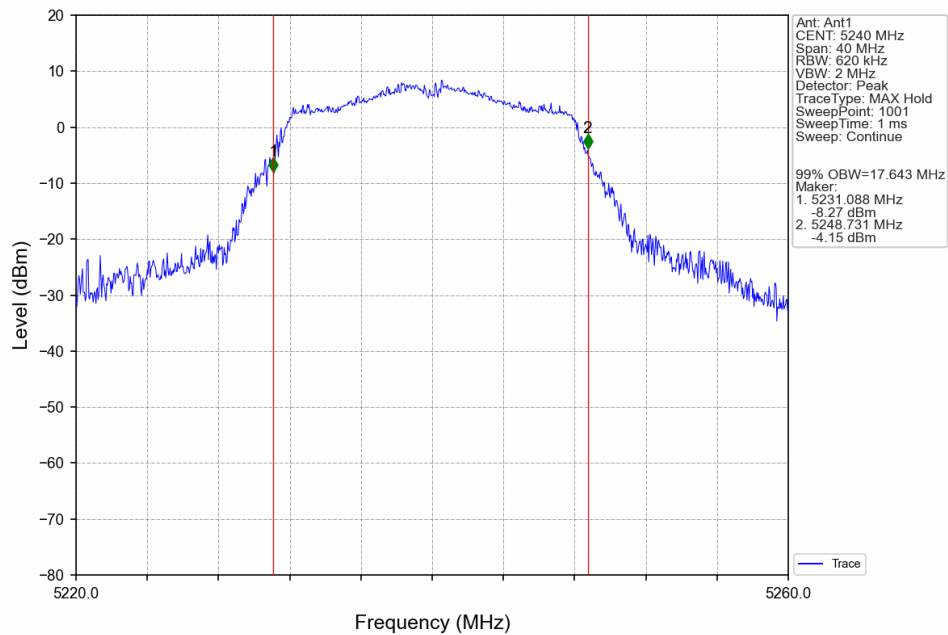
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	15.907	≥ 0.5	Pass
		5785	1	15.764	≥ 0.5	Pass
		5825	1	15.849	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	15.328	≥ 0.5	Pass
		5785	1	16.659	≥ 0.5	Pass
		5825	1	15.201	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	35.194	≥ 0.5	Pass
		5795	1	35.228	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	15.236	≥ 0.5	Pass
		5785	1	16.006	≥ 0.5	Pass
		5825	1	15.173	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	35.237	≥ 0.5	Pass
		5795	1	35.427	≥ 0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.213	≥ 0.5	Pass

2.2 Test Graph

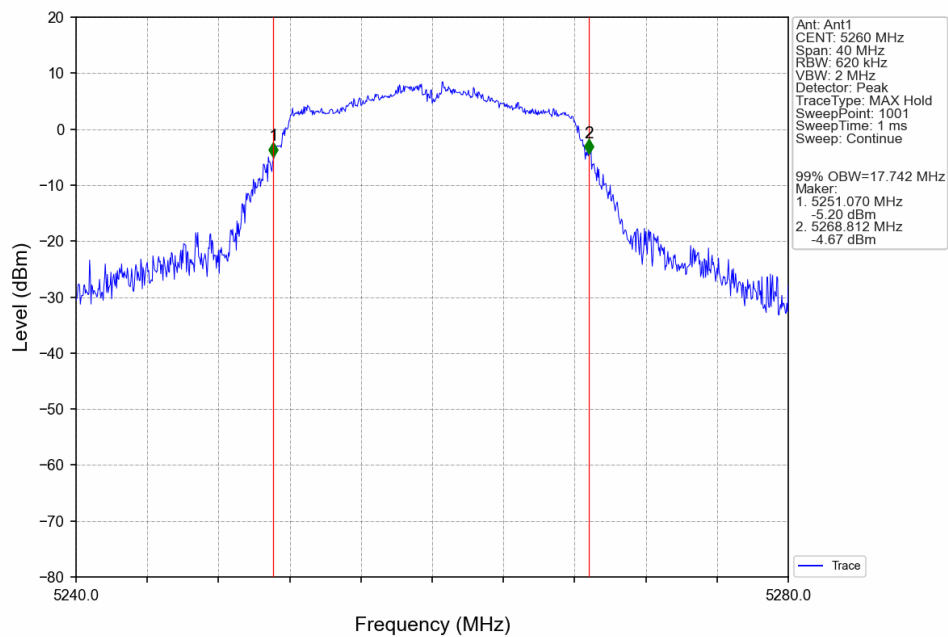
2.2.1 OBW



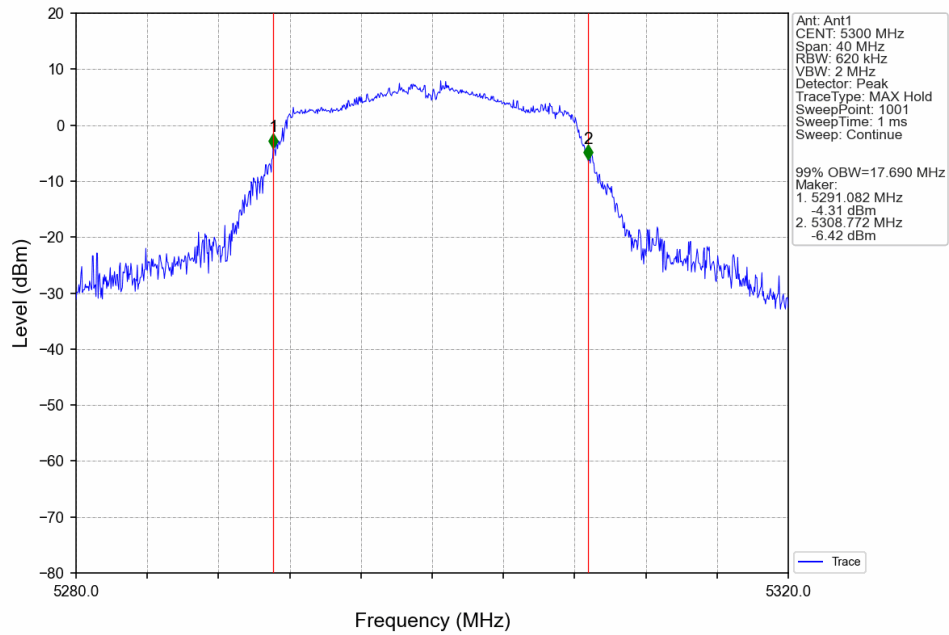
802.11a HCH 5240MHz Ant1 NTN



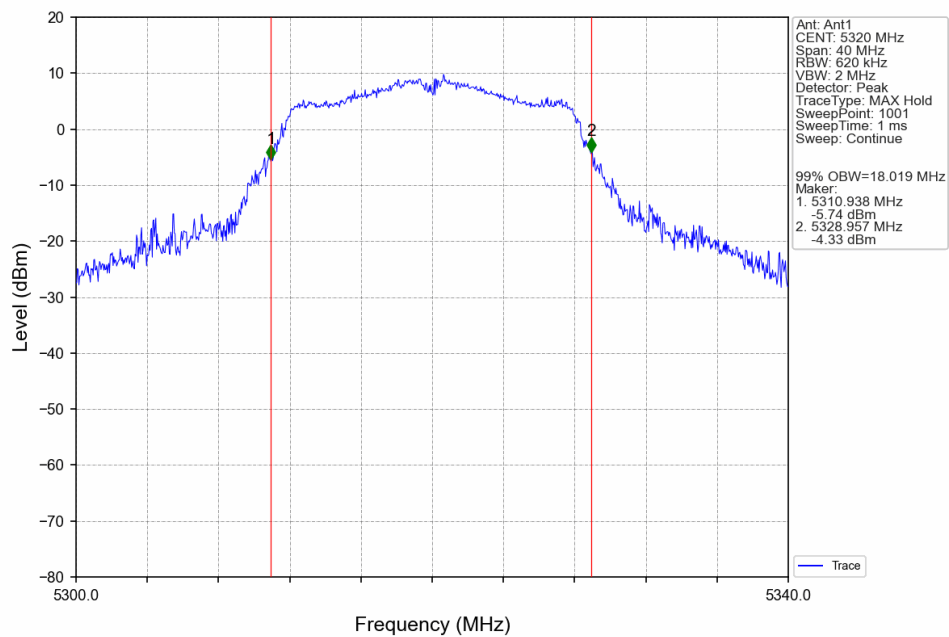
802.11a LCH 5260MHz Ant1 NTN



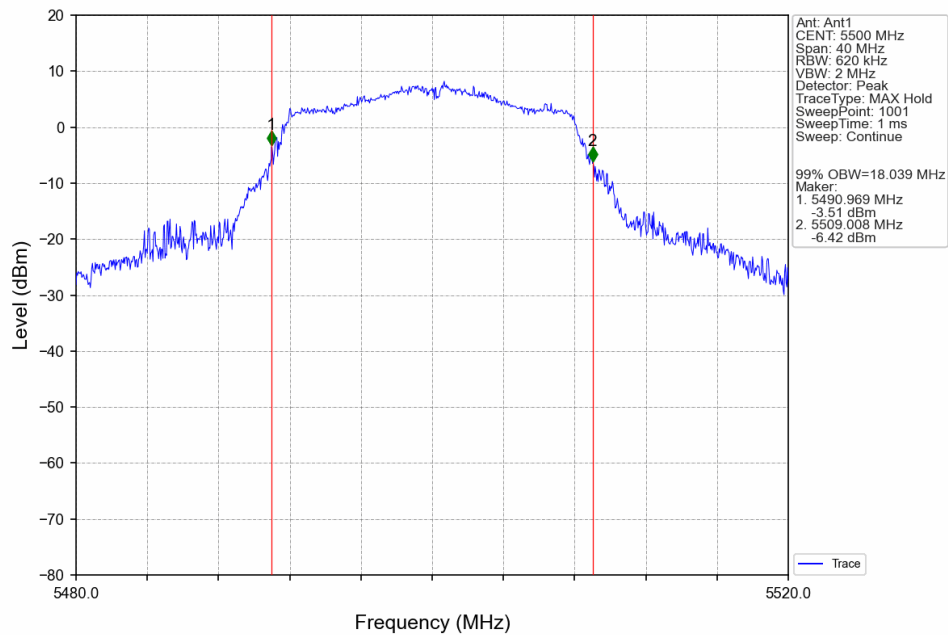
802.11a MCH 5300MHz Ant1 NTN



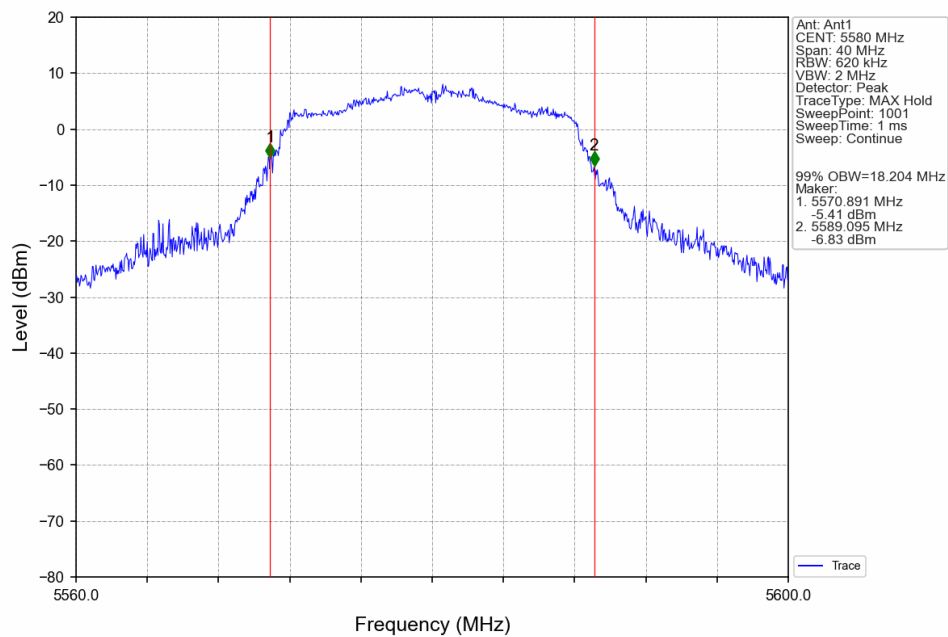
802.11a HCH 5320MHz Ant1 NTN



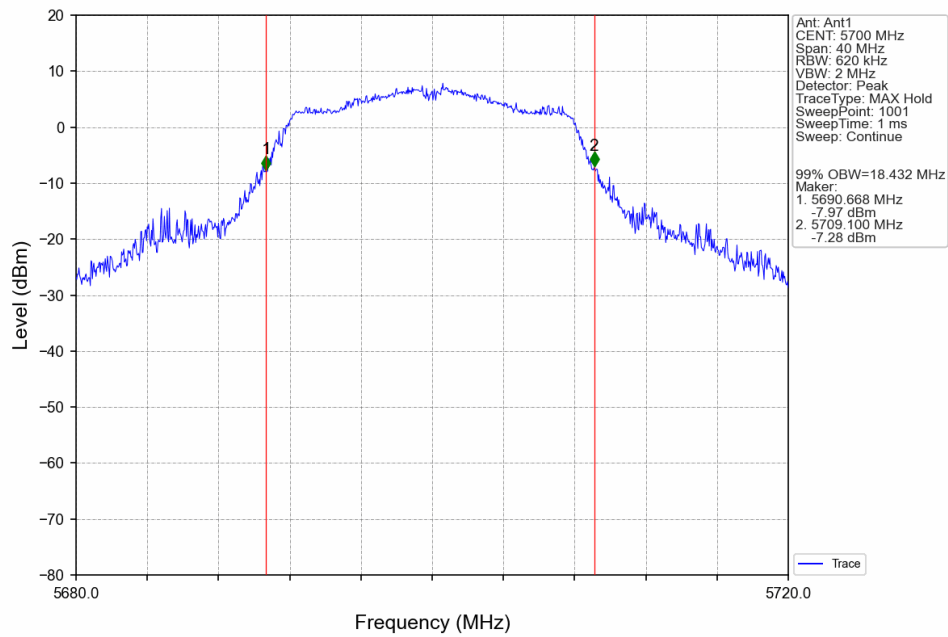
802.11a LCH 5500MHz Ant1 NTN



802.11a MCH 5580MHz Ant1 NTN



802.11a HCH 5700MHz Ant1 NTNV



802.11a LCH 5745MHz Ant1 NTNV

