

Appendix Test Data for RLAN(5G). (Conducted Measurement)

Product Name: Cyber Light

Trade Mark: Cyberdrone

Test Model: Cyber Light

FCC ID: 2BN3D-CYBERLIGHT

Environmental Conditions

Temperature:	22.5
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Tony lu
Supervised by:	Max zhang
NOTE	N/A

1. Duty Cycle

1.1 Test Result

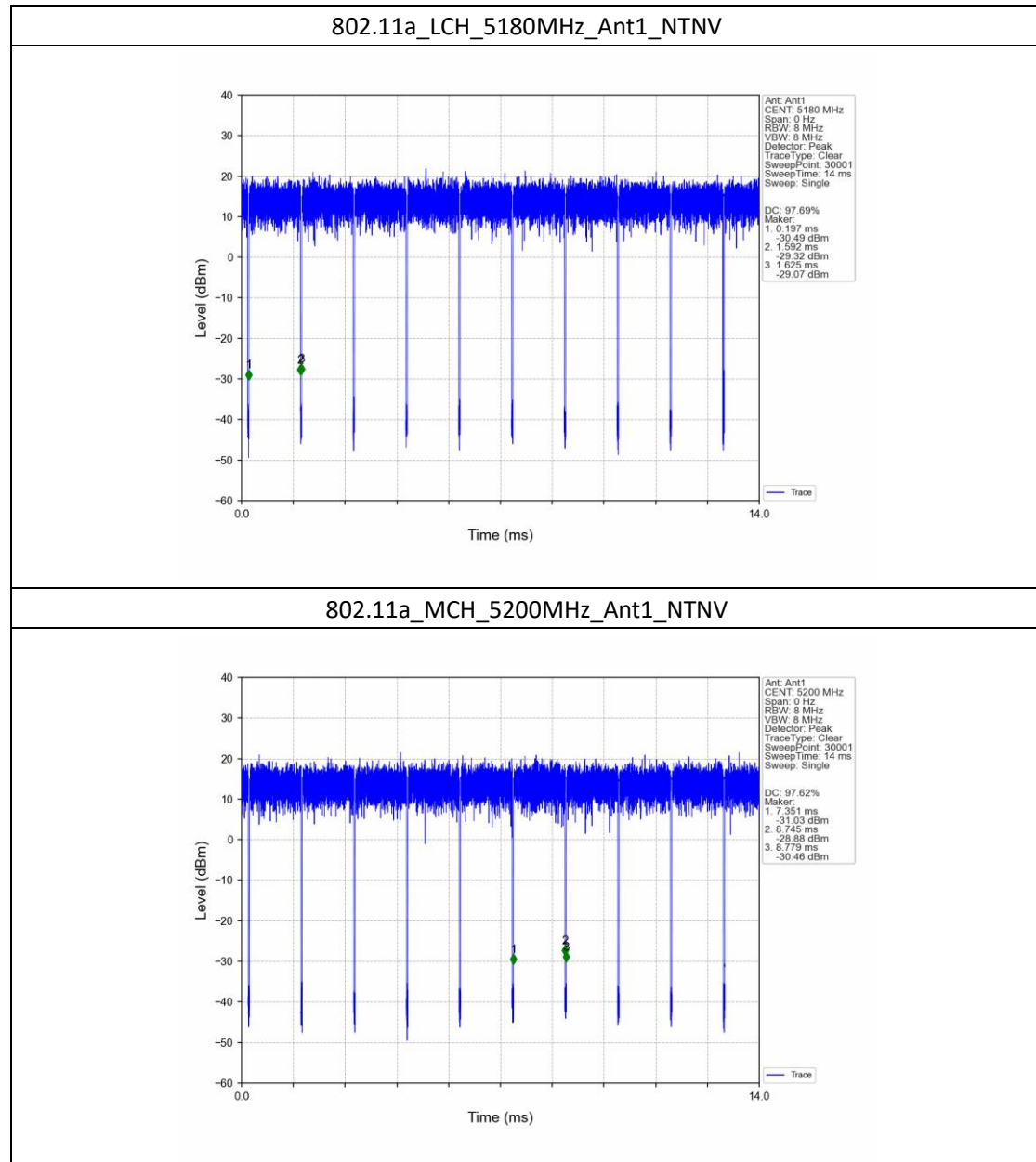
1.1.1 Ant1

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	1.395	1.428	97.69	0.10	0.03
		5200	1.394	1.428	97.62	0.10	0.03
		5240	1.395	1.429	97.62	0.10	0.06
		5260	1.393	1.428	97.55	0.11	0.07
		5300	1.394	1.427	97.69	0.10	0.03
		5320	1.393	1.428	97.55	0.11	0.13
		5500	1.394	1.428	97.62	0.10	0.03
		5580	1.394	1.427	97.69	0.10	0.03
		5700	1.392	1.428	97.48	0.11	0.03
		5745	1.394	1.428	97.62	0.10	0.03
		5785	1.393	1.428	97.55	0.11	0.03
		5825	1.393	1.428	97.55	0.11	0.07
802.11n (HT20)	SISO	5180	1.302	1.336	97.46	0.11	0.07
		5200	1.301	1.336	97.38	0.12	0.07
		5240	1.302	1.336	97.46	0.11	0.04
		5260	1.300	1.336	97.31	0.12	0.07
		5300	1.301	1.336	97.38	0.12	0.03
		5320	1.302	1.336	97.46	0.11	0.07
		5500	1.301	1.336	97.38	0.12	0.03
		5580	1.301	1.335	97.45	0.11	0.07
		5700	1.300	1.335	97.38	0.12	0.04
		5745	1.302	1.336	97.46	0.11	0.07
		5785	1.301	1.336	97.38	0.12	0.07

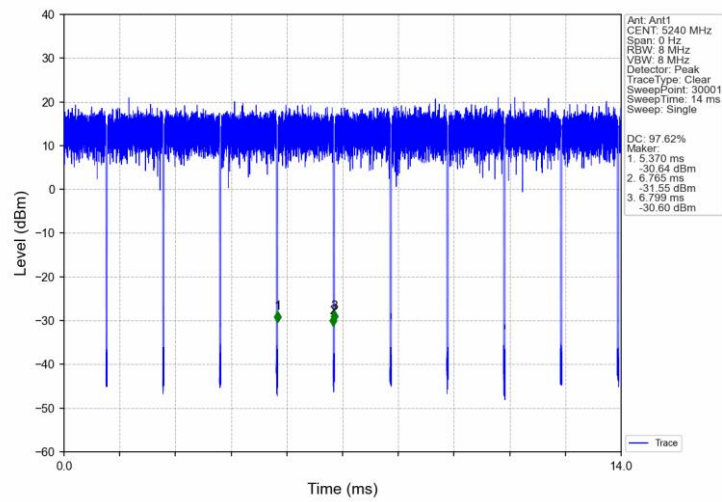
		5825	1.301	1.336	97.38	0.12	0.03
802.11n (HT40)	SISO	5190	0.648	0.683	94.88	0.23	0.03
		5230	0.648	0.683	94.88	0.23	0.07
		5270	0.649	0.683	95.02	0.22	0.07
		5310	0.648	0.683	94.88	0.23	0.07
		5510	0.648	0.683	94.88	0.23	0.03
		5550	0.649	0.683	95.02	0.22	0.03
		5670	0.649	0.683	95.02	0.22	0.04
		5755	0.648	0.683	94.88	0.23	0.04
		5795	0.649	0.683	95.02	0.22	0.03
802.11ac (VHT20)	SISO	5180	1.314	1.348	97.48	0.11	0.03
		5200	1.312	1.348	97.33	0.12	0.04
		5240	1.314	1.348	97.48	0.11	0.07
		5260	1.315	1.348	97.55	0.11	0.03
		5300	1.312	1.347	97.40	0.11	0.07
		5320	1.315	1.348	97.55	0.11	0.03
		5500	1.312	1.348	97.33	0.12	0.03
		5580	1.313	1.348	97.40	0.11	0.10
		5700	1.315	1.349	97.48	0.11	0.07
		5745	1.302	1.336	97.46	0.11	0.07
		5785	1.300	1.336	97.31	0.12	0.03
		5825	1.301	1.336	97.38	0.12	0.07
802.11ac (VHT40)	SISO	5190	0.653	0.687	95.05	0.22	0.03
		5230	0.652	0.687	94.91	0.23	0.03
		5270	0.652	0.687	94.91	0.23	0.07
		5310	0.654	0.688	95.06	0.22	0.07
		5510	0.652	0.687	94.91	0.23	0.07
		5550	0.653	0.687	95.05	0.22	0.03
		5670	0.654	0.687	95.20	0.21	0.03
		5755	0.648	0.683	94.88	0.23	0.03
		5795	0.649	0.683	95.02	0.22	0.07
802.11ac (VHT80)	SISO	5210	0.325	0.359	90.53	0.43	0.07
		5290	0.324	0.358	90.50	0.43	0.04
		5530	0.325	0.359	90.53	0.43	0.04
		5610	0.324	0.358	90.50	0.43	0.04
		5775	1.059	1.088	97.33	0.12	0.07

1.2 Test Graph

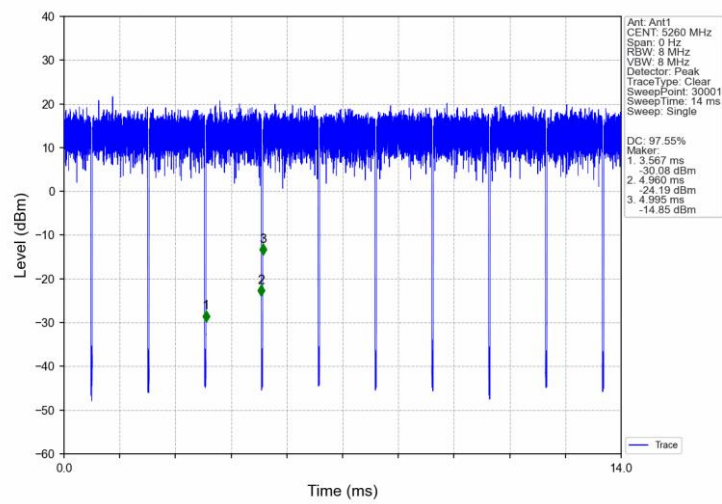
1.2.1 Ant1



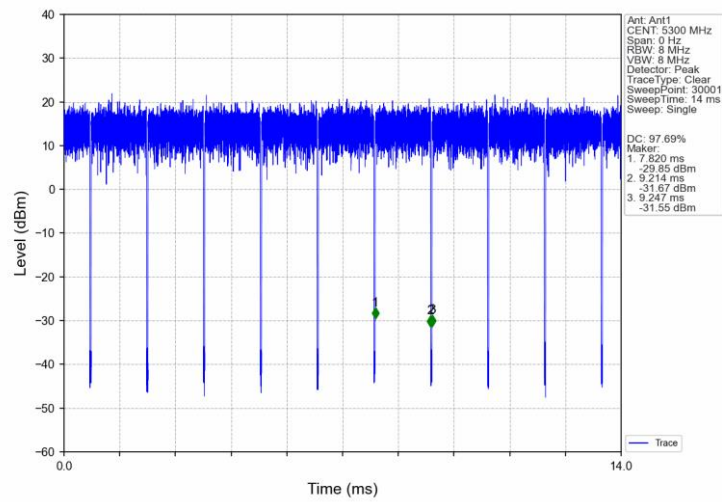
802.11a_HCH_5240MHz_Ant1_NTNV



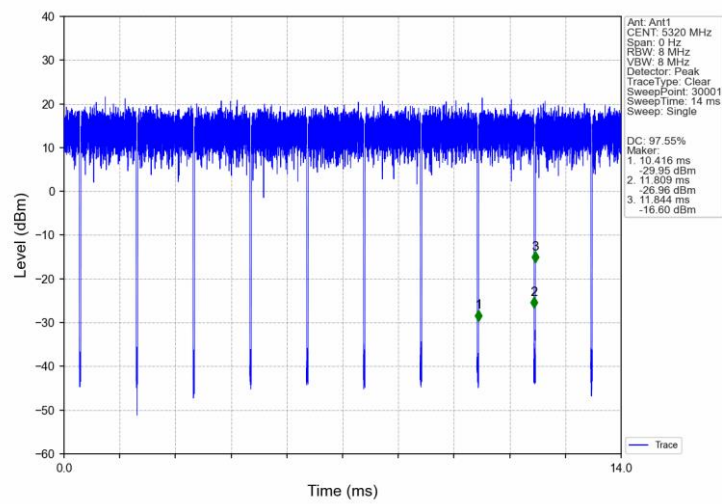
802.11a_LCH_5260MHz_Ant1_NTNV



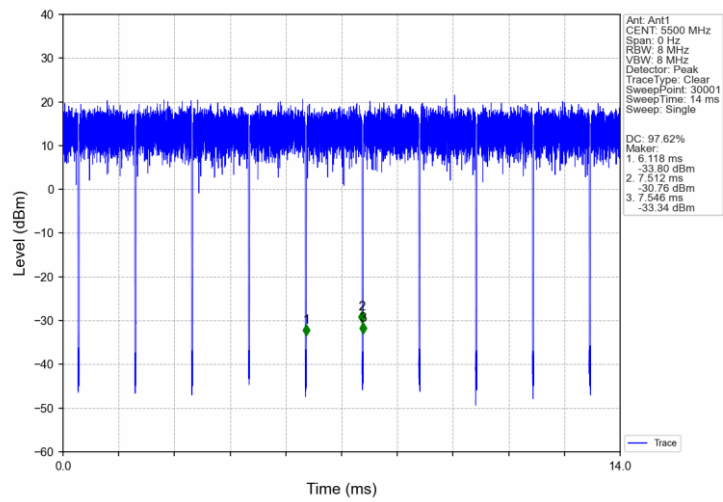
802.11a_MCH_5300MHz_Ant1_NTNV



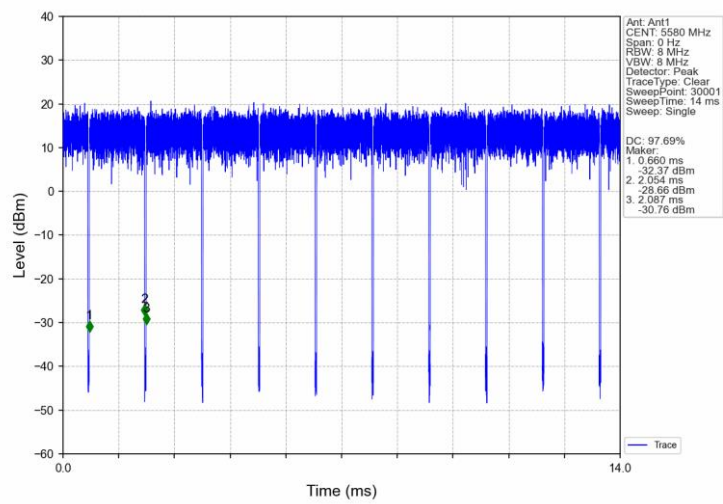
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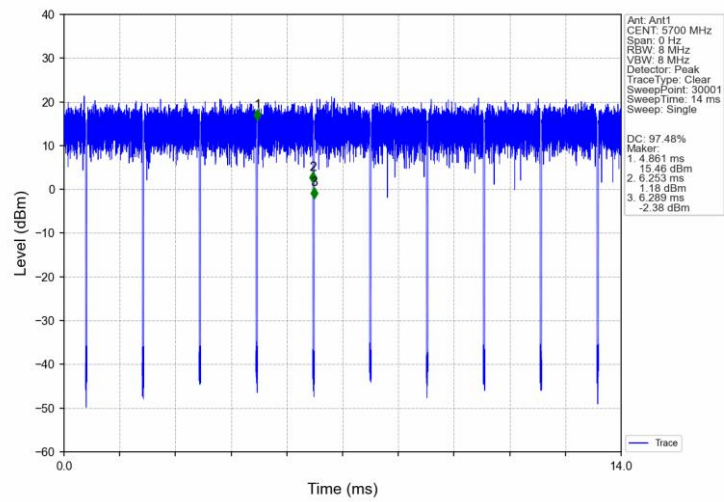
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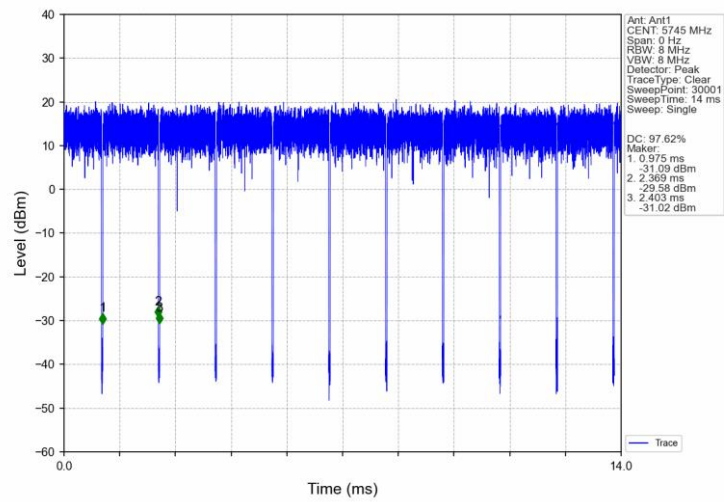
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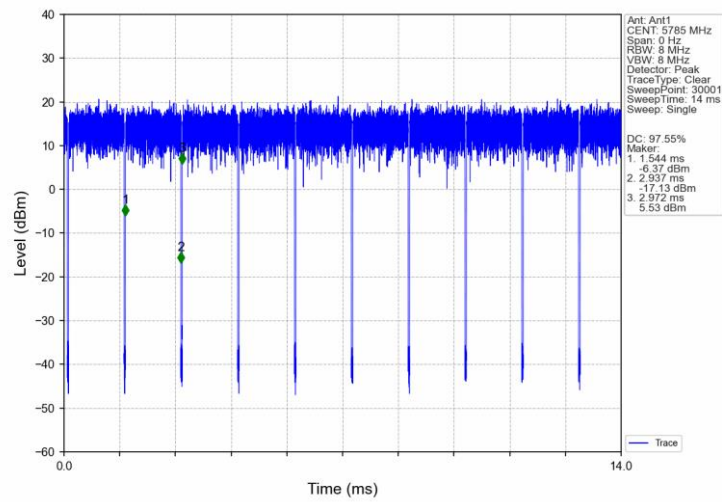
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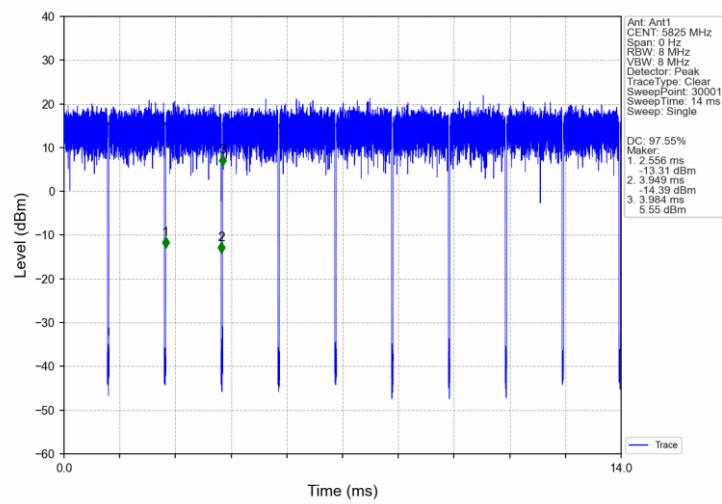
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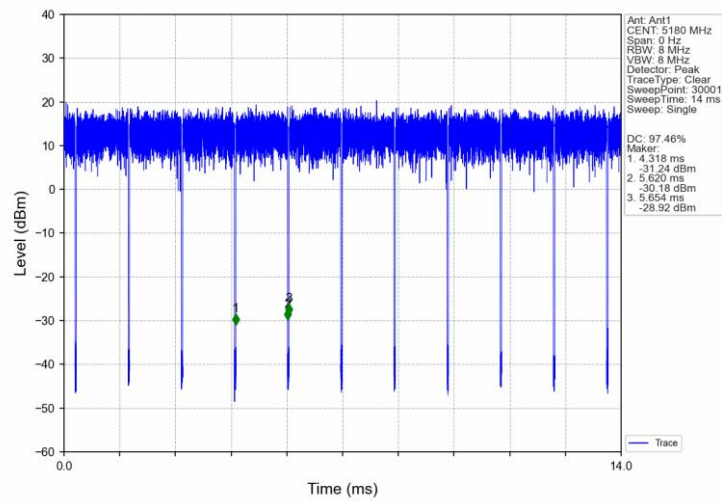
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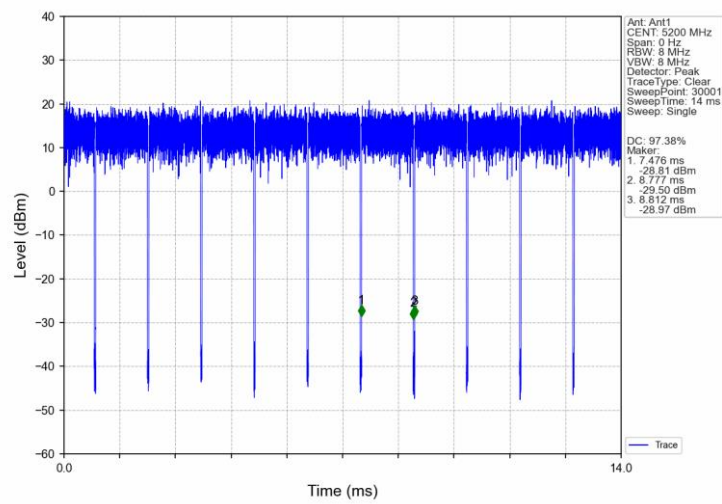
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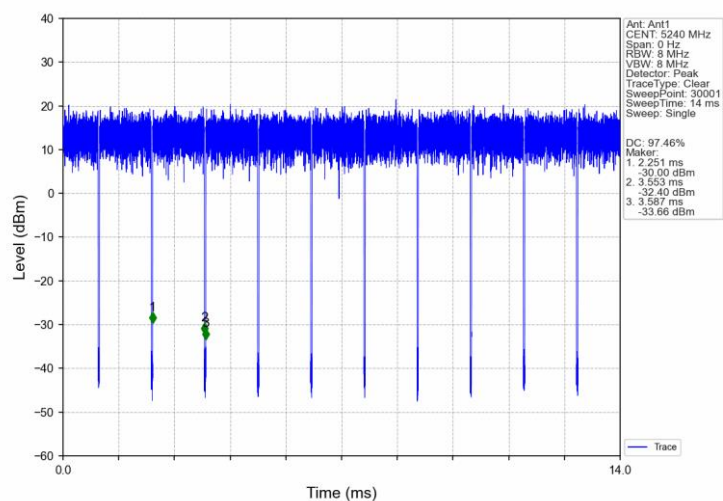
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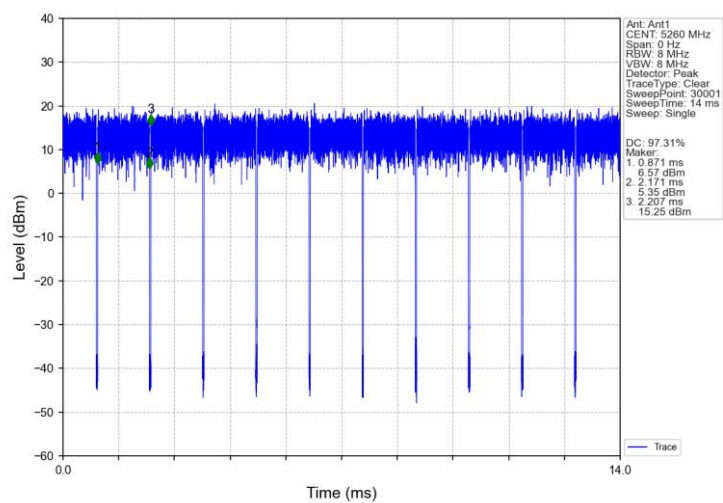
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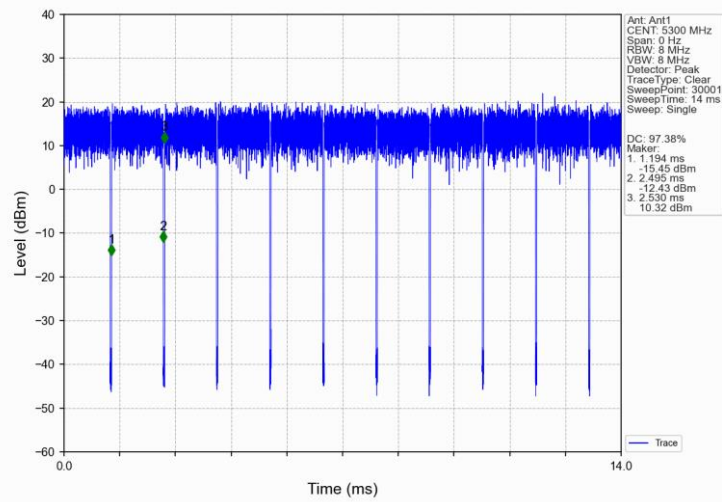
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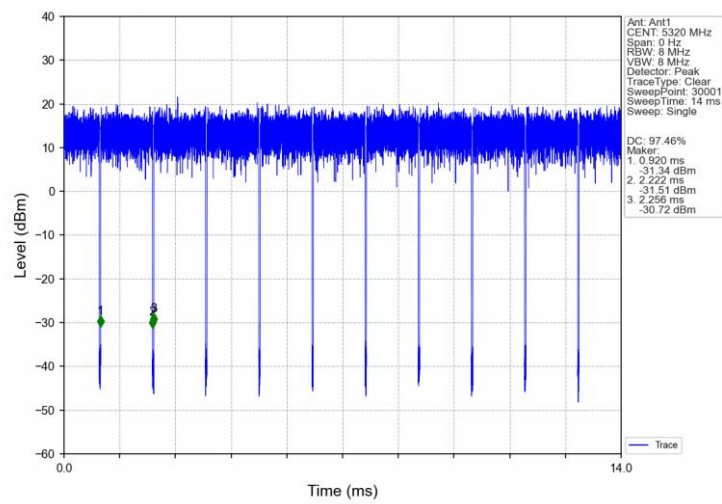
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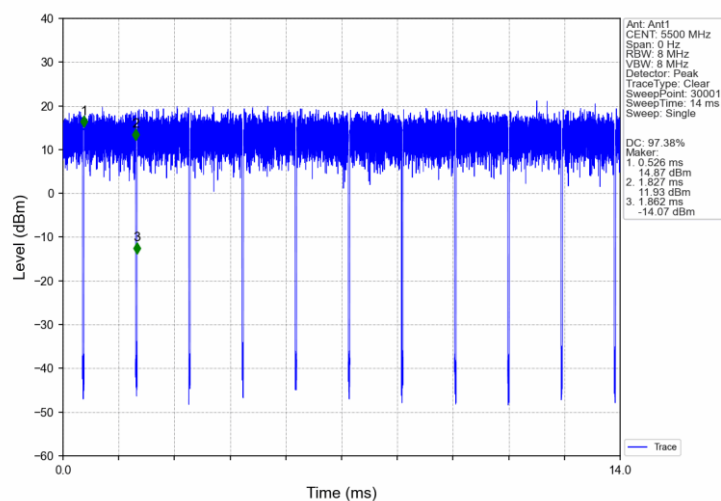
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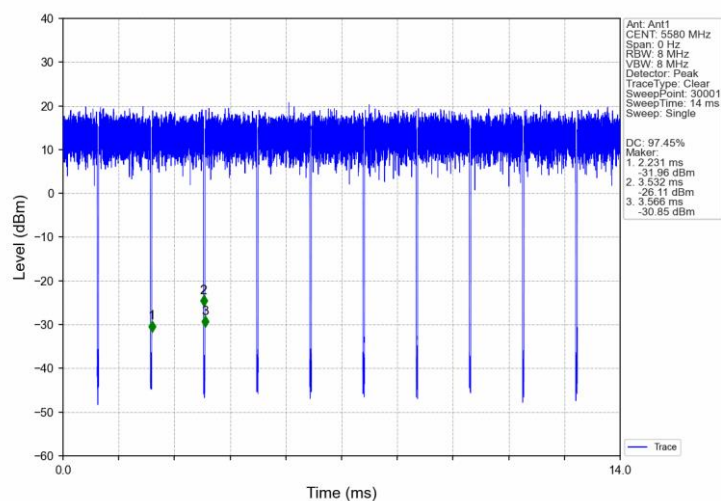
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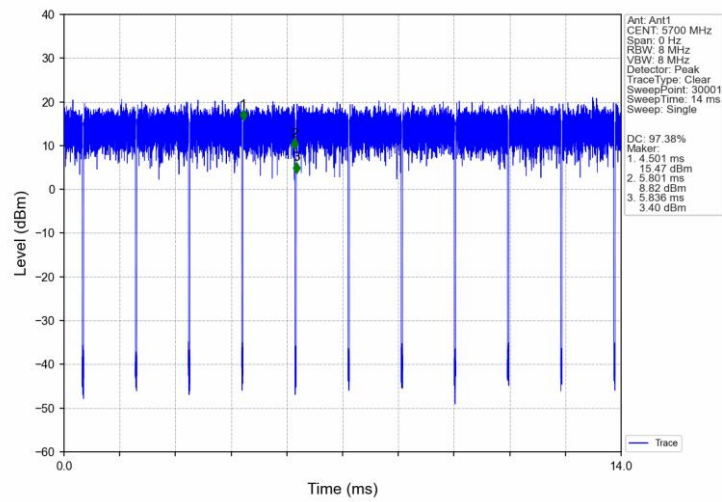
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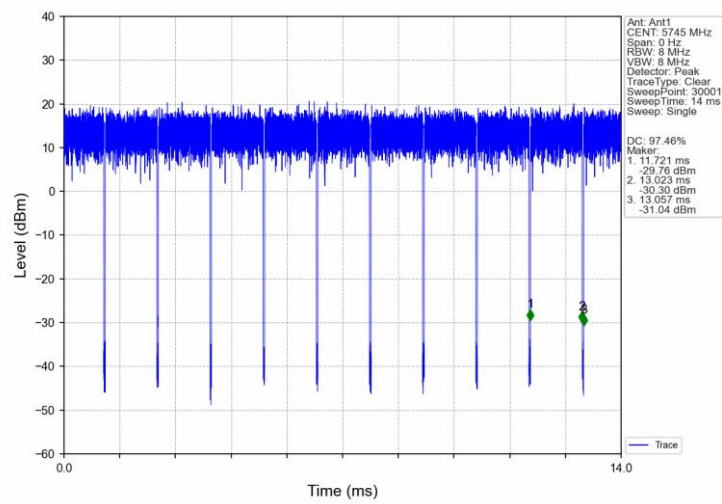
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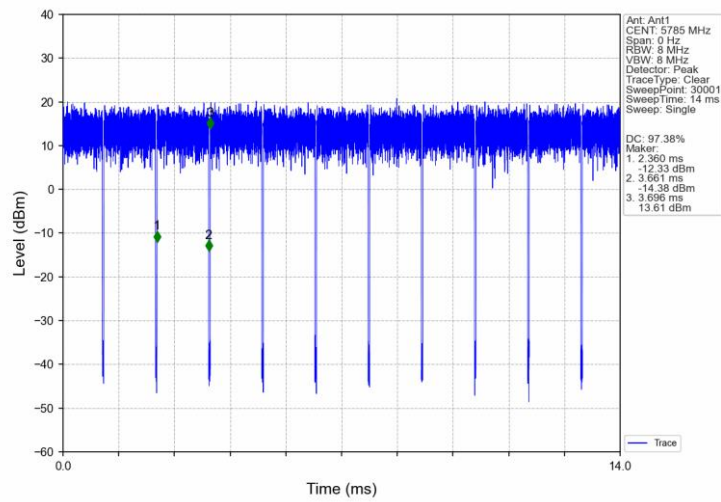
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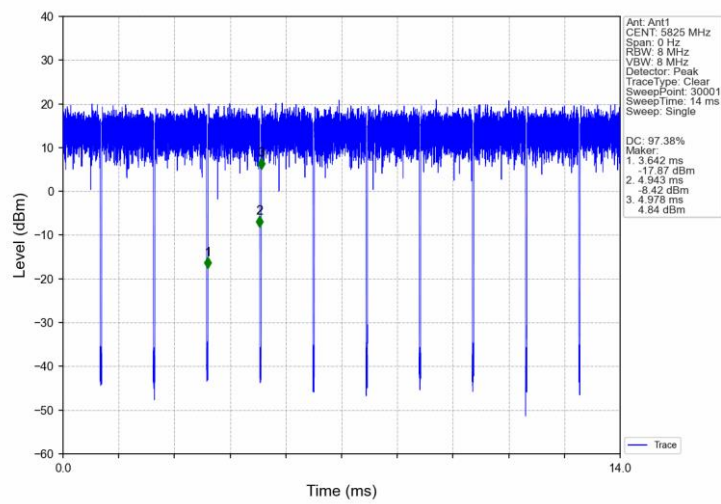
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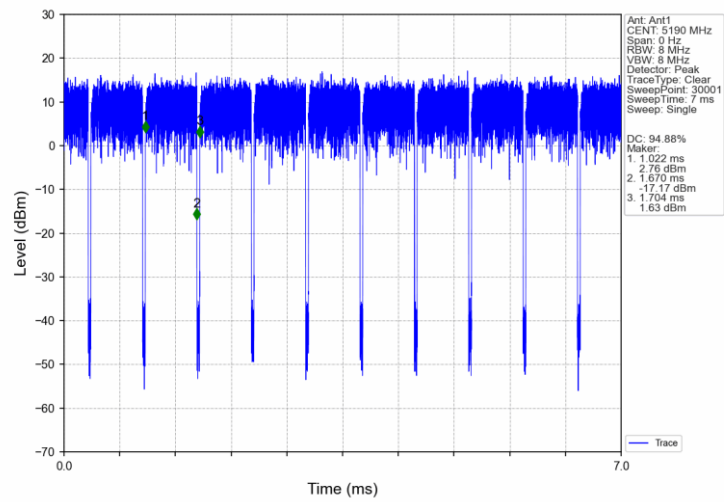
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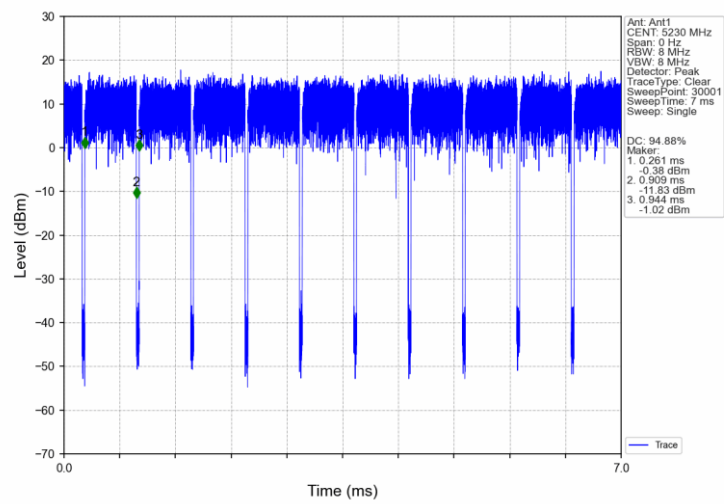
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



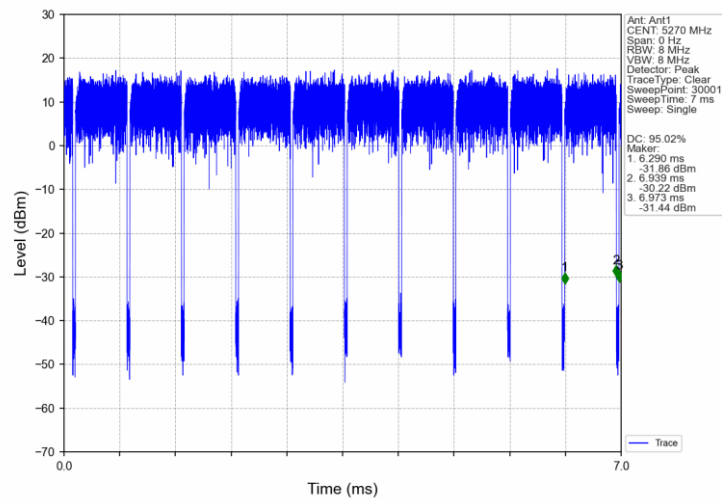
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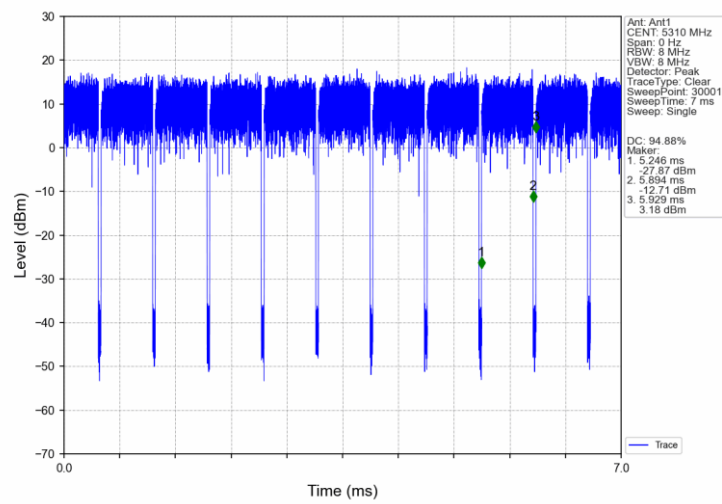
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



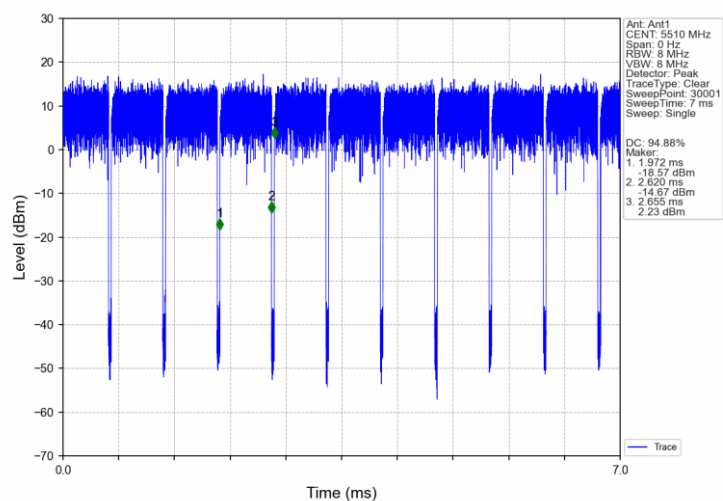
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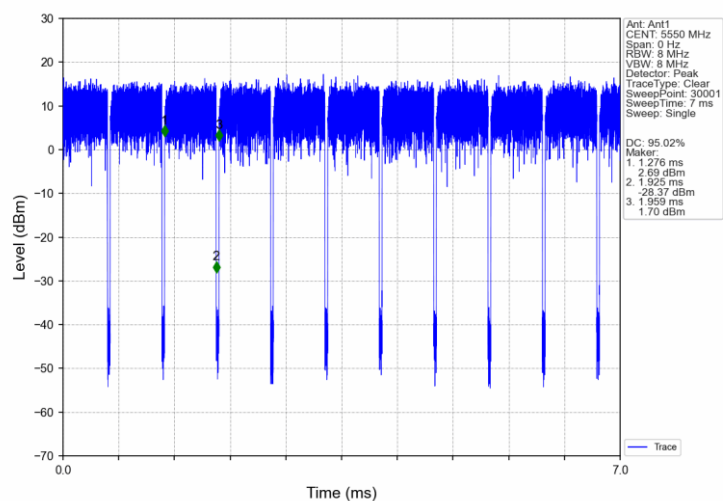
802.11n(HT40)_HCH_5310MHz_Ant1_NTNV



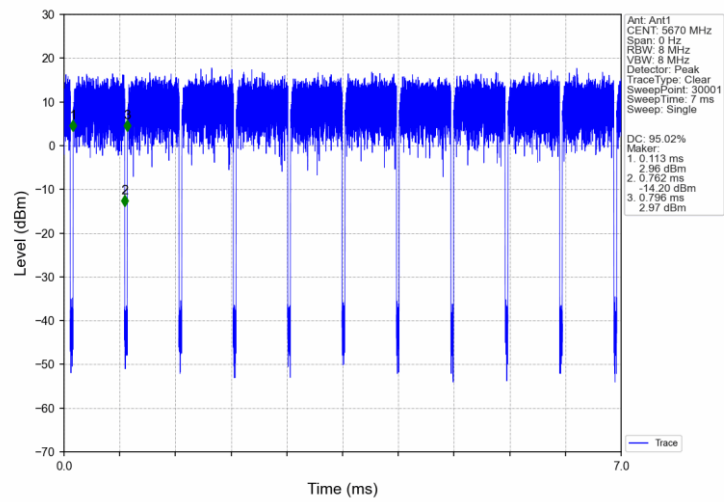
802.11n(HT40)_LCH_5510MHz_Ant1_NTNV



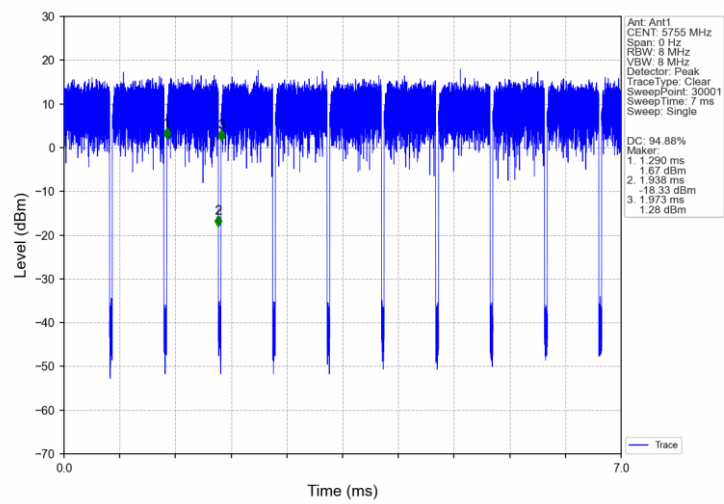
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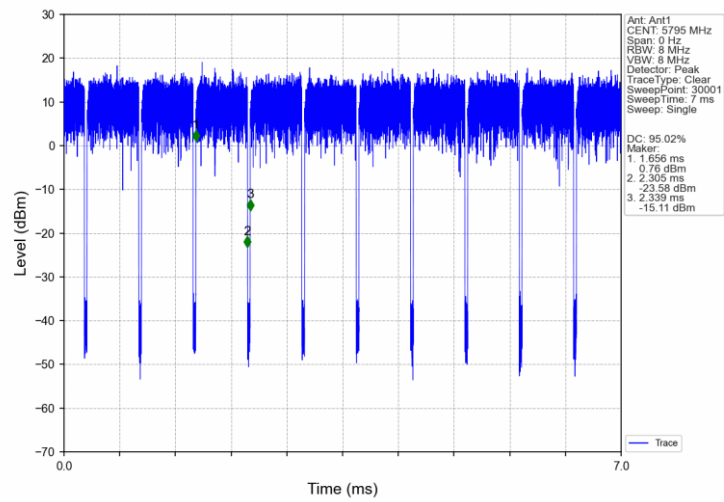
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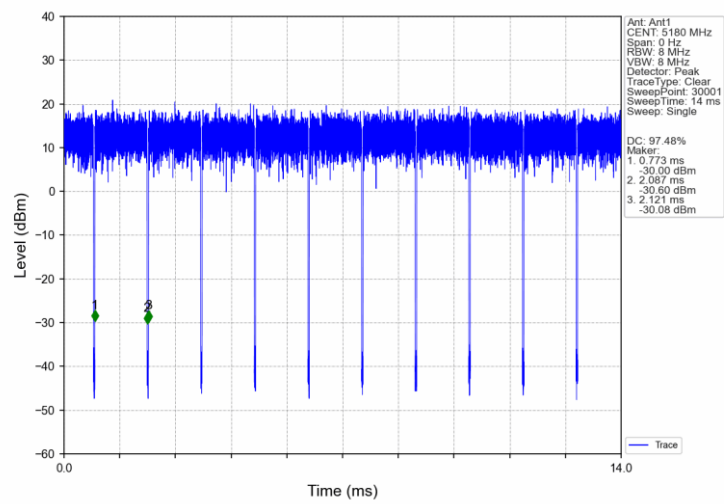
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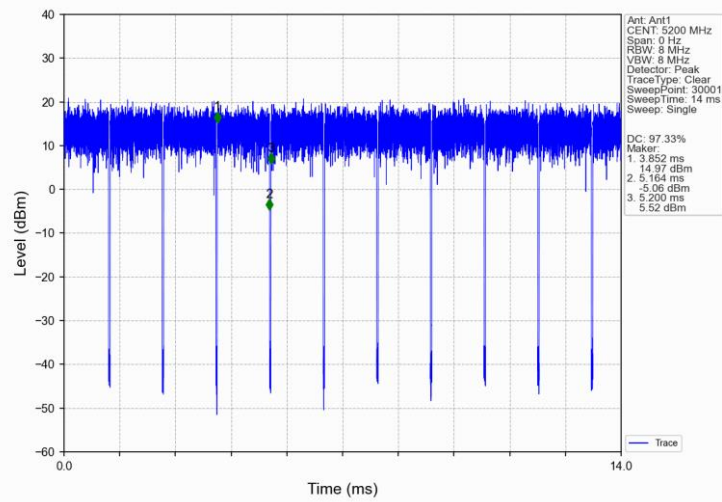
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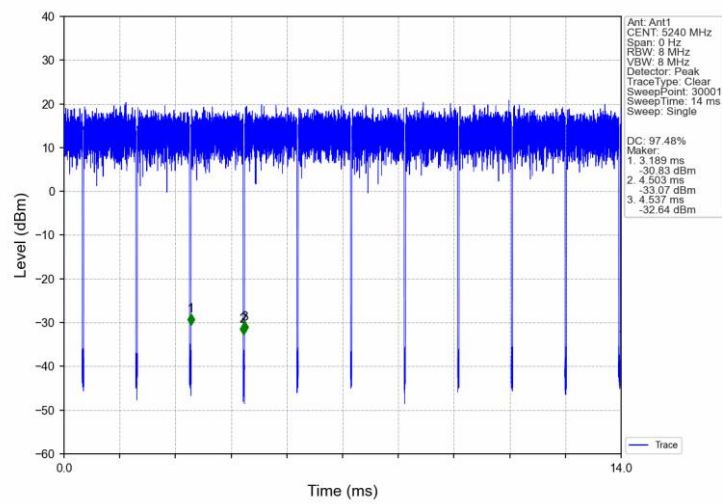
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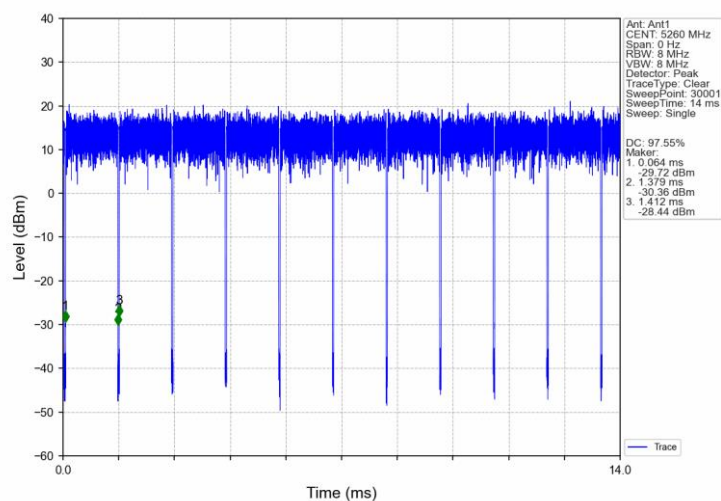
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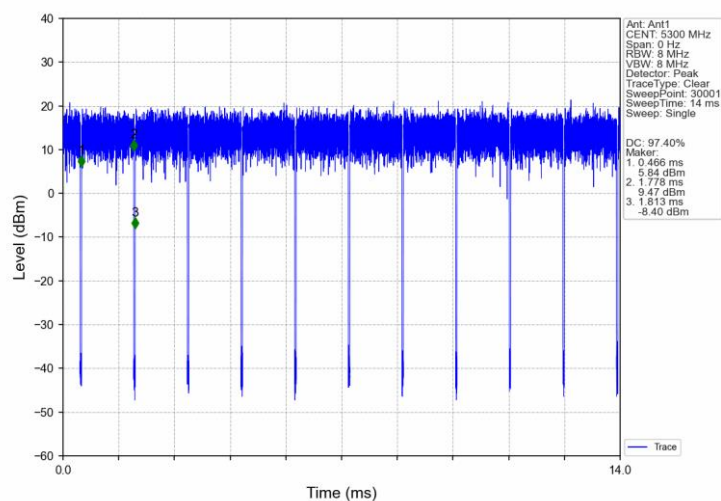
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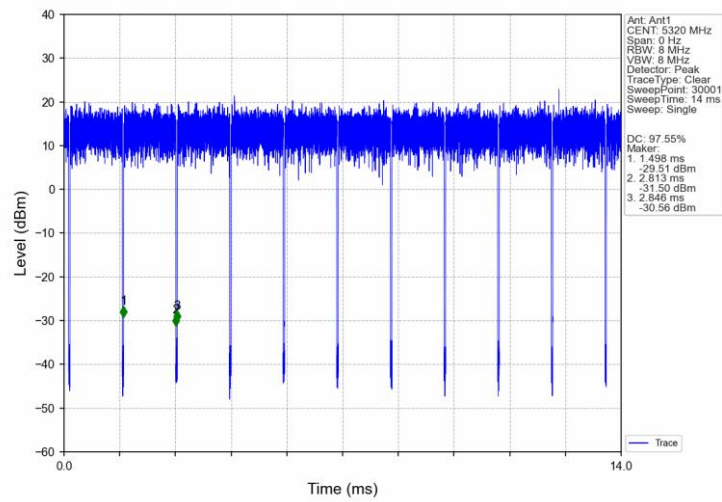
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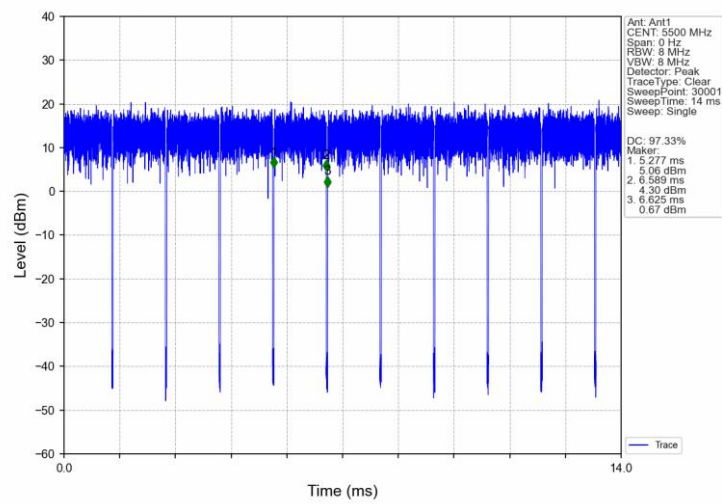
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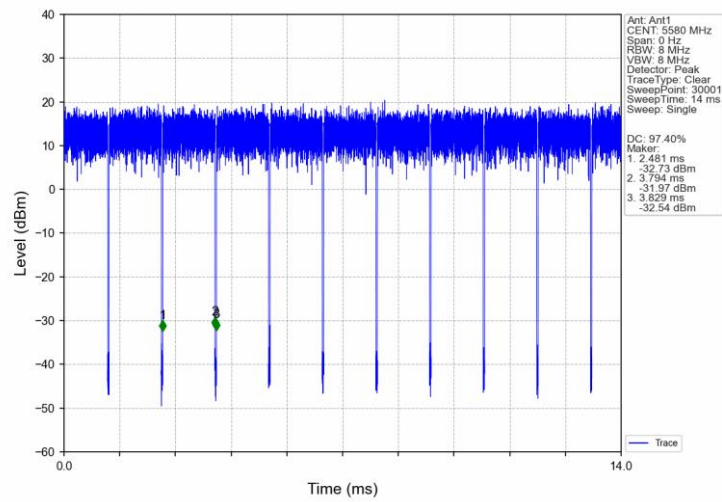
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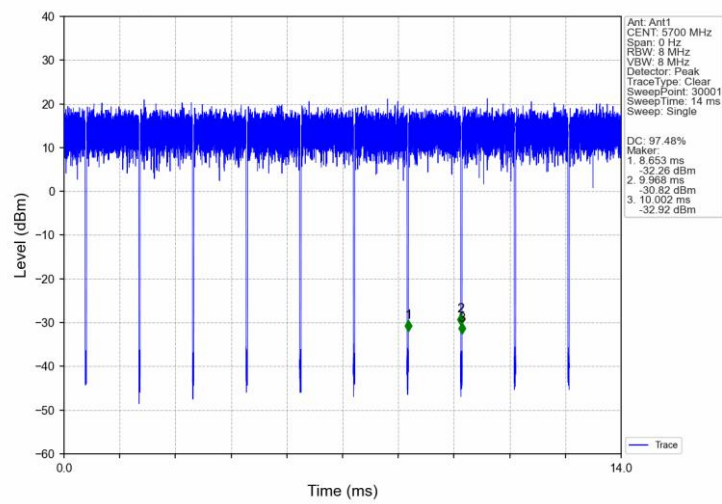
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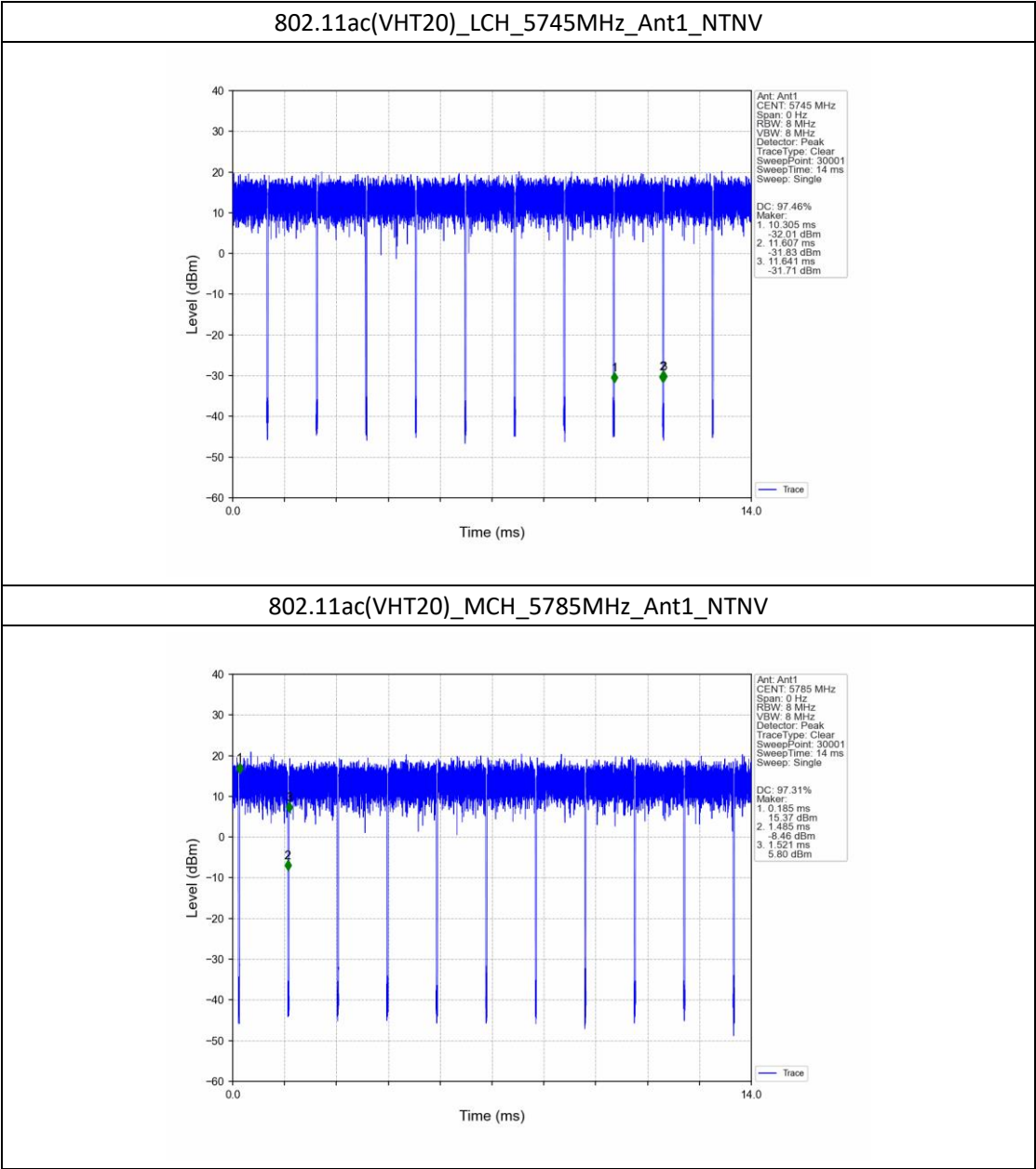


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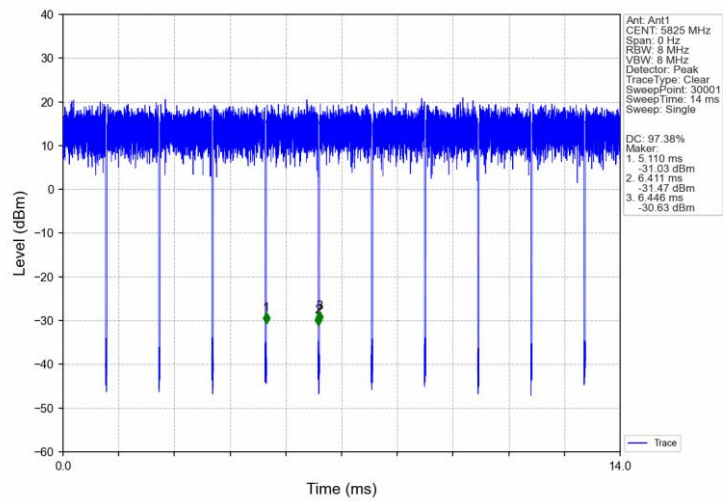
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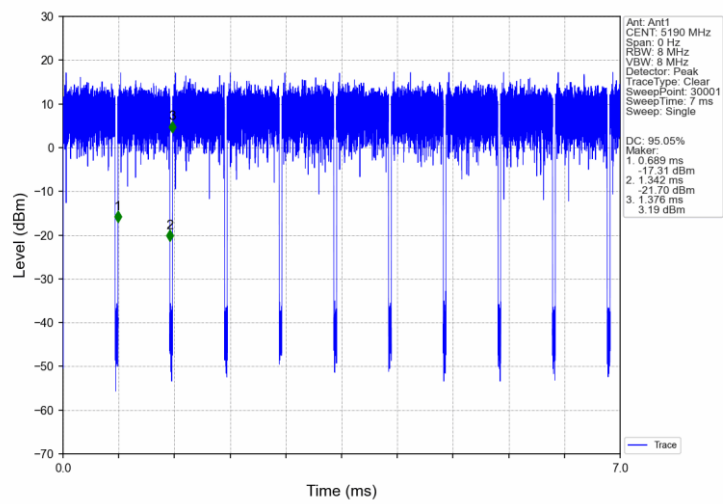


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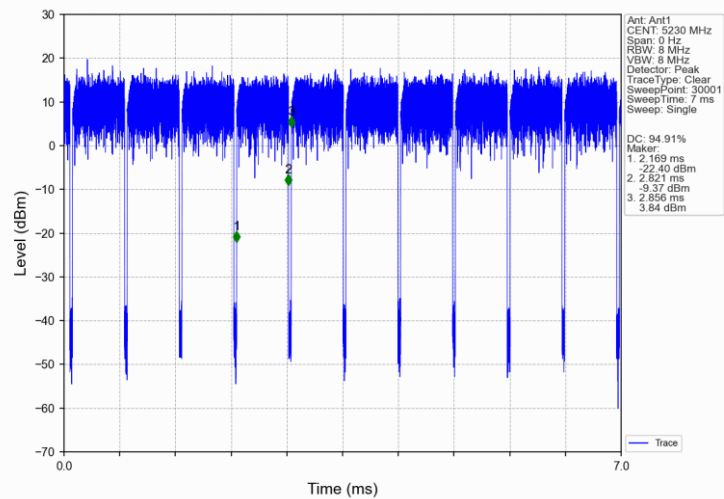
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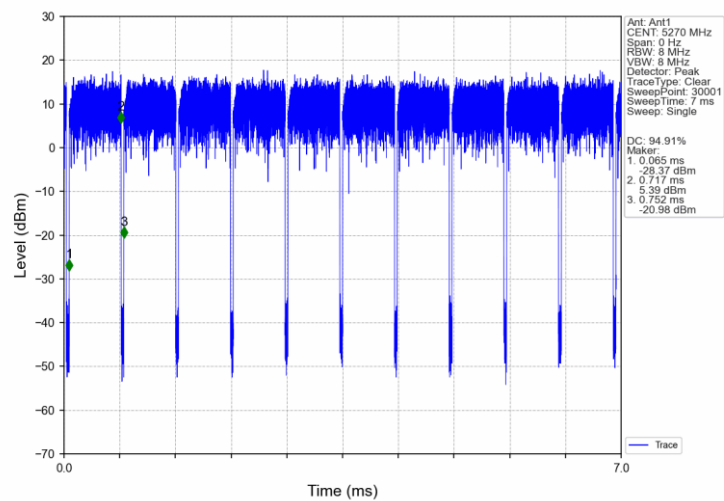
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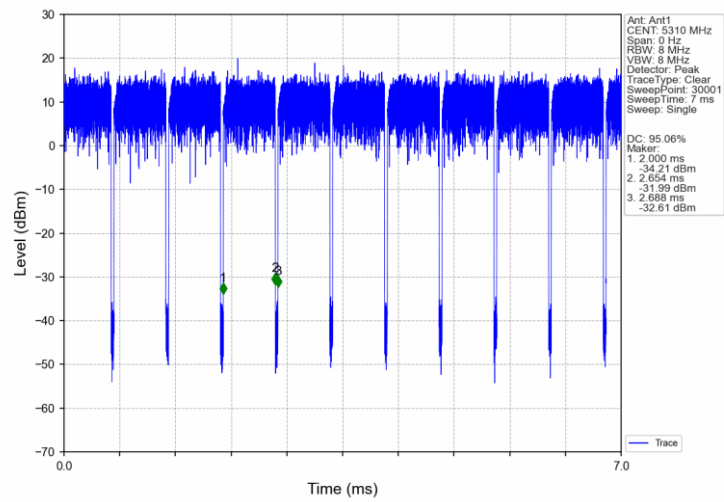
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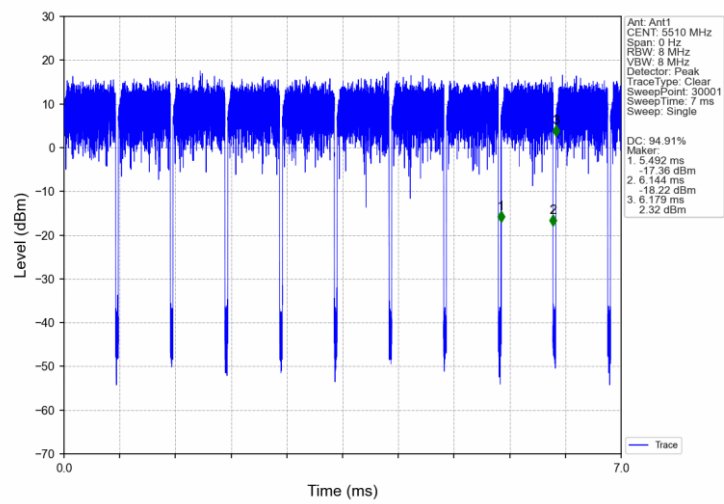
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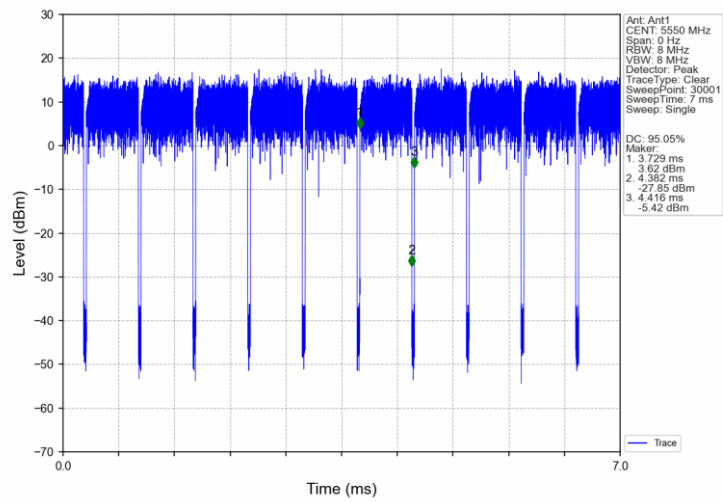
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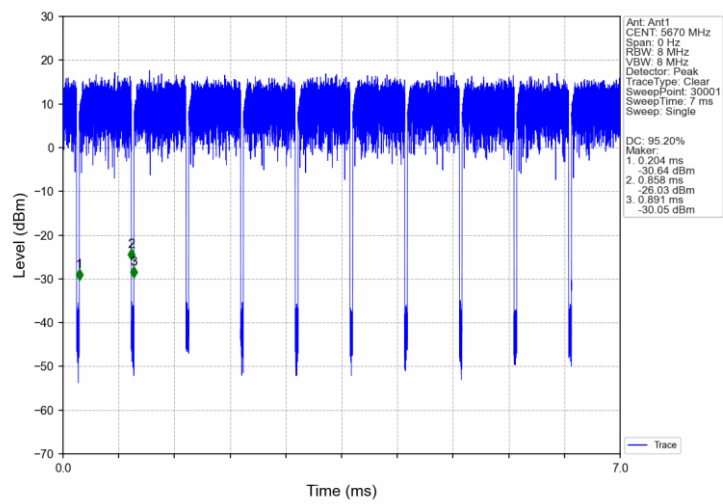
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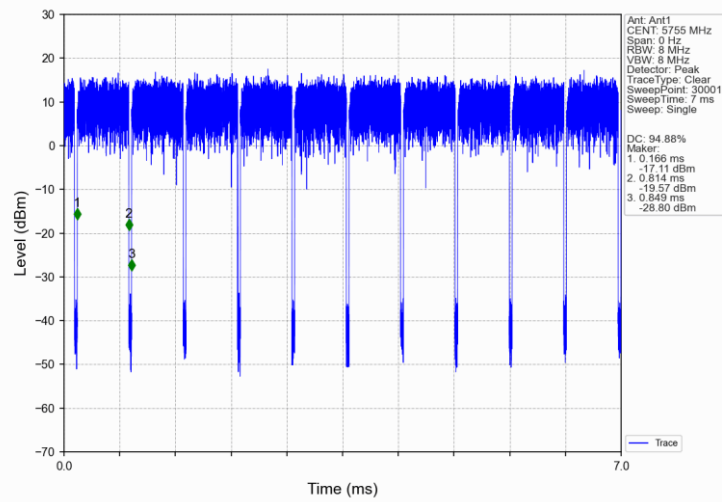
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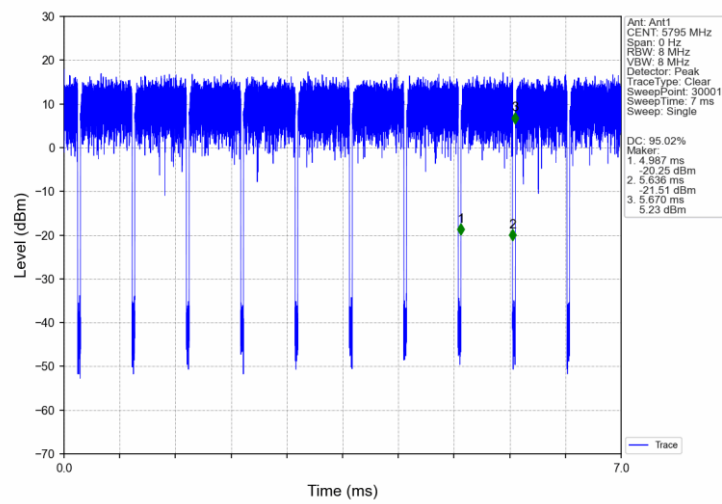
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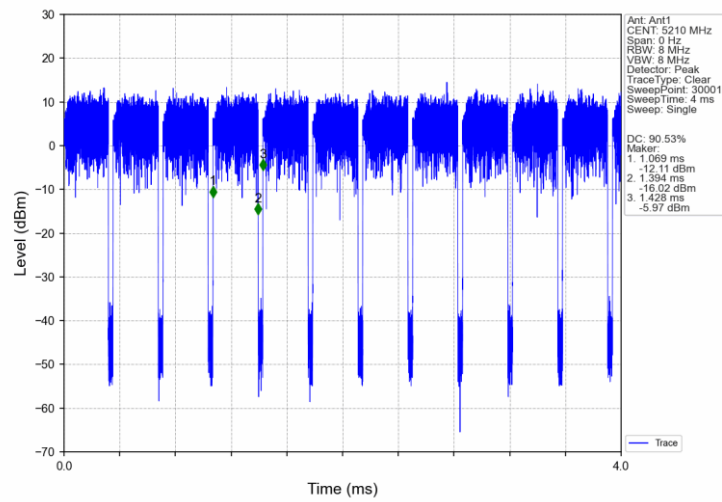
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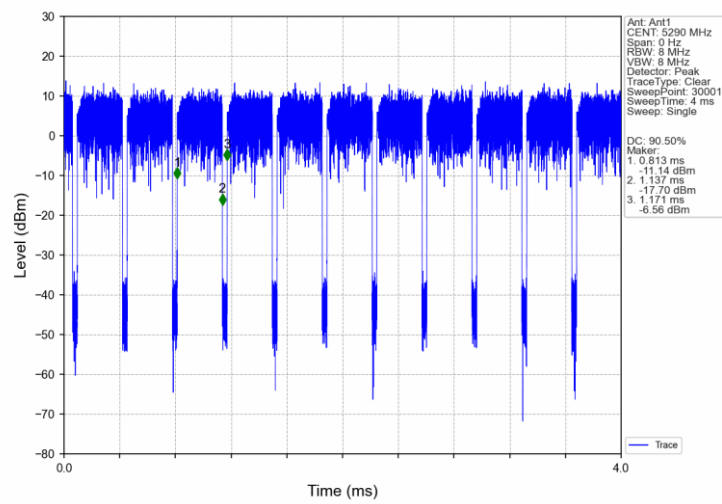
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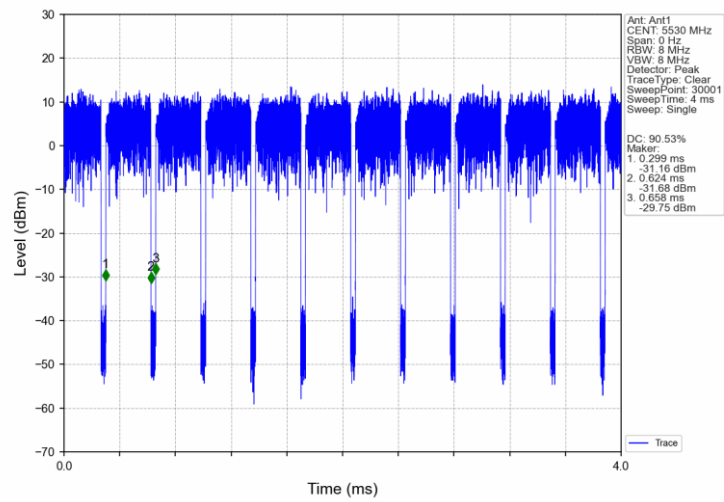
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



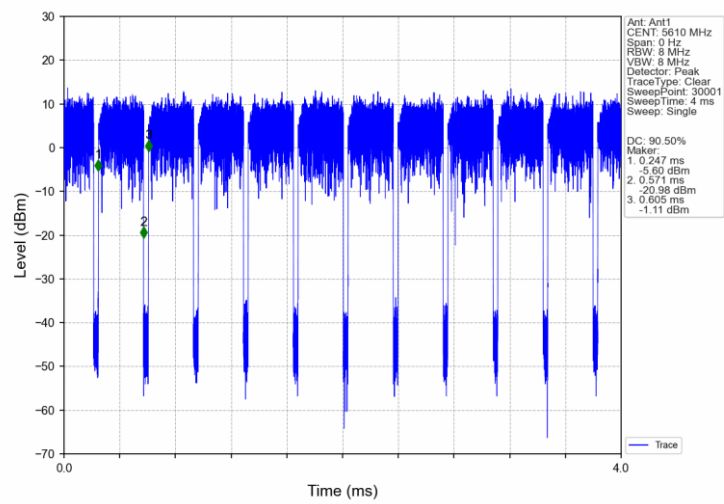
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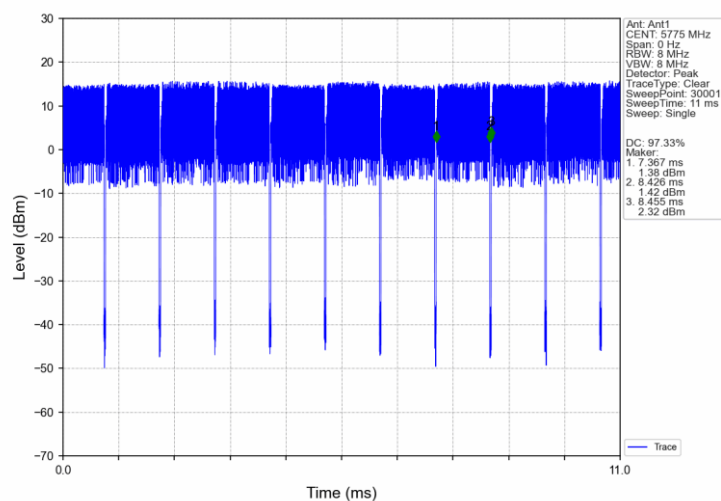
802.11ac(VHT80)_LCH_5530MHz_Ant1_NTNV



802.11ac(VHT80)_HCH_5610MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



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	17.450	/	Pass
		5200	1	17.413	/	Pass
		5240	1	17.408	/	Pass
		5260	1	17.447	/	Pass
		5300	1	17.464	/	Pass
		5320	1	17.439	/	Pass
		5500	1	17.631	/	Pass
		5580	1	17.570	/	Pass
		5700	1	17.544	/	Pass
		5745	1	17.487	/	Pass
		5785	1	17.506	/	Pass
		5825	1	17.489	/	Pass
802.11n (HT20)	SISO	5180	1	18.400	/	Pass
		5200	1	18.394	/	Pass
		5240	1	18.427	/	Pass
		5260	1	18.388	/	Pass
		5300	1	18.475	/	Pass
		5320	1	18.451	/	Pass
		5500	1	18.668	/	Pass
		5580	1	18.563	/	Pass
		5700	1	18.534	/	Pass
		5745	1	18.461	/	Pass
		5785	1	18.488	/	Pass
		5825	1	18.486	/	Pass
802.11n (HT40)	SISO	5190	1	36.787	/	Pass
		5230	1	36.837	/	Pass
		5270	1	36.819	/	Pass
		5310	1	36.597	/	Pass
		5510	1	37.171	/	Pass
		5550	1	37.066	/	Pass
		5670	1	36.990	/	Pass
		5755	1	37.100	/	Pass
		5795	1	36.940	/	Pass
802.11ac (VHT20)	SISO	5180	1	18.279	/	Pass
		5200	1	18.247	/	Pass
		5240	1	18.276	/	Pass
		5260	1	18.233	/	Pass
		5300	1	18.230	/	Pass
		5320	1	18.224	/	Pass
		5500	1	18.381	/	Pass

		5580	1	18.419	/	Pass
		5700	1	18.362	/	Pass
		5745	1	18.476	/	Pass
		5785	1	18.497	/	Pass
		5825	1	18.474	/	Pass
802.11ac (VHT40)	SISO	5190	1	36.198	/	Pass
		5230	1	36.283	/	Pass
		5270	1	36.371	/	Pass
		5310	1	36.408	/	Pass
		5510	1	36.634	/	Pass
		5550	1	36.504	/	Pass
		5670	1	36.513	/	Pass
		5755	1	37.125	/	Pass
		5795	1	36.977	/	Pass
802.11ac (VHT80)	SISO	5210	1	75.521	/	Pass
		5290	1	75.436	/	Pass
		5530	1	75.893	/	Pass
		5610	1	75.898	/	Pass
		5775	1	78.286	/	Pass

2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	15.155	>=0.5	Pass
		5785	1	15.156	>=0.5	Pass
		5825	1	15.152	>=0.5	Pass
802.11n (HT20)	SISO	5745	1	15.136	>=0.5	Pass
		5785	1	15.172	>=0.5	Pass
		5825	1	15.161	>=0.5	Pass
802.11n (HT40)	SISO	5755	1	35.156	>=0.5	Pass
		5795	1	35.150	>=0.5	Pass
802.11ac (VHT20)	SISO	5745	1	15.146	>=0.5	Pass
		5785	1	15.156	>=0.5	Pass
		5825	1	15.147	>=0.5	Pass
802.11ac (VHT40)	SISO	5755	1	35.154	>=0.5	Pass
		5795	1	35.146	>=0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.172	>=0.5	Pass

2.1.3 26dB BW

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	19.962	/	Pass
		5200	1	19.840	/	Pass
		5240	1	20.161	/	Pass
		5260	1	19.952	/	Pass
		5300	1	19.853	/	Pass

		5320	1	19.926	/	Pass
		5500	1	21.775	/	Pass
		5580	1	19.976	/	Pass
		5700	1	19.906	/	Pass
802.11n (HT20)	SISO	5180	1	20.292	/	Pass
		5200	1	20.134	/	Pass
		5240	1	20.301	/	Pass
		5260	1	20.219	/	Pass
		5300	1	20.369	/	Pass
		5320	1	20.336	/	Pass
		5500	1	20.841	/	Pass
		5580	1	20.391	/	Pass
		5700	1	20.258	/	Pass
802.11n (HT40)	SISO	5190	1	40.787	/	Pass
		5230	1	40.383	/	Pass
		5270	1	40.322	/	Pass
		5310	1	40.420	/	Pass
		5510	1	42.696	/	Pass
		5550	1	40.558	/	Pass
		5670	1	41.214	/	Pass
802.11ac (VHT20)	SISO	5180	1	20.204	/	Pass
		5200	1	20.364	/	Pass
		5240	1	20.284	/	Pass
		5260	1	20.350	/	Pass
		5300	1	20.213	/	Pass
		5320	1	20.223	/	Pass
		5500	1	20.408	/	Pass
		5580	1	20.258	/	Pass
		5700	1	20.203	/	Pass
802.11ac (VHT40)	SISO	5190	1	40.762	/	Pass
		5230	1	40.262	/	Pass
		5270	1	40.164	/	Pass
		5310	1	40.435	/	Pass
		5510	1	43.779	/	Pass
		5550	1	40.555	/	Pass
		5670	1	40.589	/	Pass
802.11ac (VHT80)	SISO	5210	1	80.788	/	Pass
		5290	1	80.932	/	Pass
		5530	1	81.090	/	Pass
		5610	1	82.871	/	Pass