Appendix RF test data for 5G WIFI -Module2

1. Duty Cycle

1.1 Test Result

1.1.1 Ant0

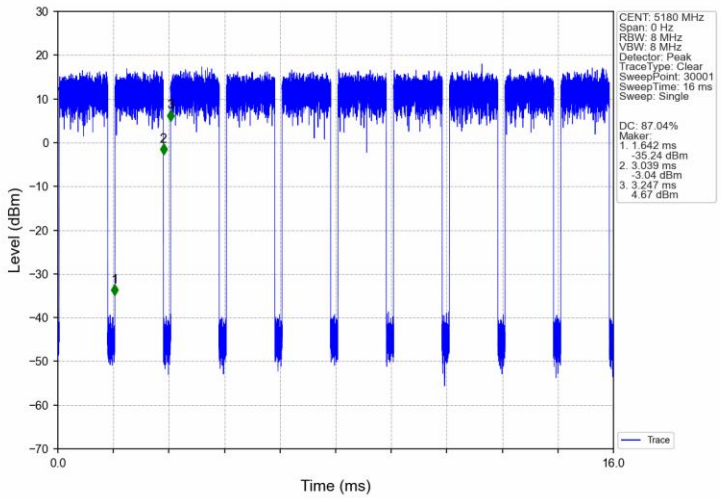
Ant0							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	1.397	1.605	87.04	0.60	0.06
		5200	1.397	1.606	86.99	0.61	0.06
		5240	1.396	1.606	86.92	0.61	0.06
		5260	1.397	1.605	87.04	0.60	0.03
		5300	1.398	1.606	87.05	0.60	0.03
		5320	1.397	1.605	87.04	0.60	0.03
		5500	1.397	1.605	87.04	0.60	0.03
		5580	1.397	1.605	87.04	0.60	0.03
		5700	1.397	1.605	87.04	0.60	0.03
		5745	1.398	1.606	87.05	0.60	0.03
		5785	1.396	1.605	86.98	0.61	0.06
		5825	1.397	1.605	87.04	0.60	0.03
802.11n (HT20)	SISO	5180	1.308	1.516	86.28	0.64	0.06
		5200	1.308	1.517	86.22	0.64	0.07
		5240	1.308	1.518	86.17	0.65	0.03
		5260	1.310	1.518	86.30	0.64	0.03
		5300	1.308	1.517	86.22	0.64	0.03
		5320	1.309	1.518	86.23	0.64	0.06
		5500	1.309	1.517	86.29	0.64	0.03
		5580	1.309	1.517	86.29	0.64	0.03
		5700	1.308	1.517	86.22	0.64	0.06
		5745	1.310	1.518	86.30	0.64	0.05
		5785	1.309	1.517	86.29	0.64	0.03
		5825	1.309	1.517	86.29	0.64	0.03
802.11n (HT40)	SISO	5190	0.649	0.858	75.64	1.21	0.08
		5230	0.649	0.857	75.73	1.21	0.06
		5270	0.649	0.857	75.73	1.21	0.04
		5310	0.649	0.857	75.73	1.21	0.01
		5510	0.649	0.857	75.73	1.21	0.04
		5550	0.650	0.857	75.85	1.20	0.01
		5670	0.649	0.857	75.73	1.21	0.04
		5755	0.649	0.857	75.73	1.21	0.03
		5795	0.649	0.857	75.73	1.21	0.04
802.11ac (VHT20)	SISO	5180	0.481	0.689	69.81	1.56	0.03
		5200	0.480	0.689	69.67	1.57	0.08
		5240	0.481	0.690	69.71	1.57	0.03
		5260	0.481	0.689	69.81	1.56	0.03
		5300	0.481	0.689	69.81	1.56	0.00
		5320	0.481	0.689	69.81	1.56	0.03
		5500	0.481	0.689	69.81	1.56	0.03
		5580	0.481	0.689	69.81	1.56	0.03
		5700	0.480	0.689	69.67	1.57	0.03
		5745	0.481	0.689	69.81	1.56	0.06
		5785	0.482	0.689	69.96	1.55	0.00
		5825	0.482	0.689	69.96	1.55	0.03
802.11ac (VHT40)	SISO	5190	0.260	0.469	55.44	2.56	0.07
		5230	0.252	0.469	53.73	2.70	0.07
		5270	0.260	0.469	55.44	2.56	0.07

		5310	0.267	0.469	56.93	2.45	0.09
		5510	0.261	0.469	55.65	2.55	0.08
		5550	0.262	0.470	55.74	2.54	0.11
		5670	0.261	0.468	55.77	2.54	0.10
		5755	0.261	0.469	55.65	2.55	0.07
		5795	0.267	0.469	56.93	2.45	0.06
802.11ac (VHT80)	SISO	5210	0.149	0.357	41.74	3.79	0.04
		5290	0.149	0.357	41.74	3.79	0.02
		5530	0.148	0.357	41.46	3.82	0.05
		5610	0.149	0.357	41.74	3.79	0.07
		5775	0.149	0.357	41.74	3.79	0.04

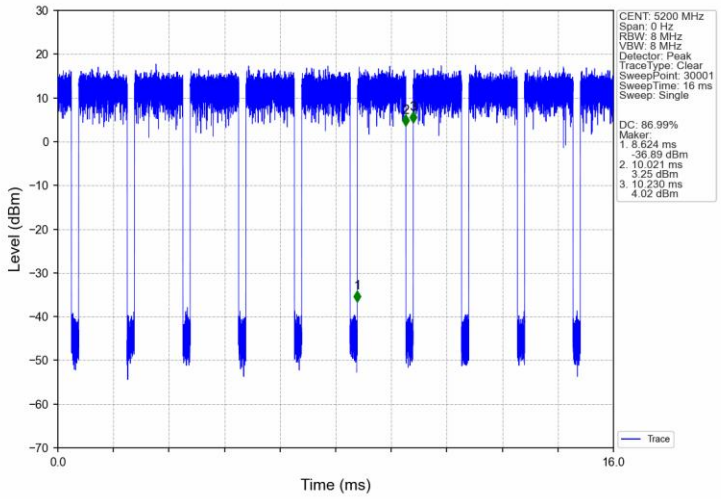
1.2 Test Graph

1.2.1 Ant0

802.11a_LCH_5180MHz_Ant0_NTNV



802.11a_MCH_5200MHz_Ant0_NTNV



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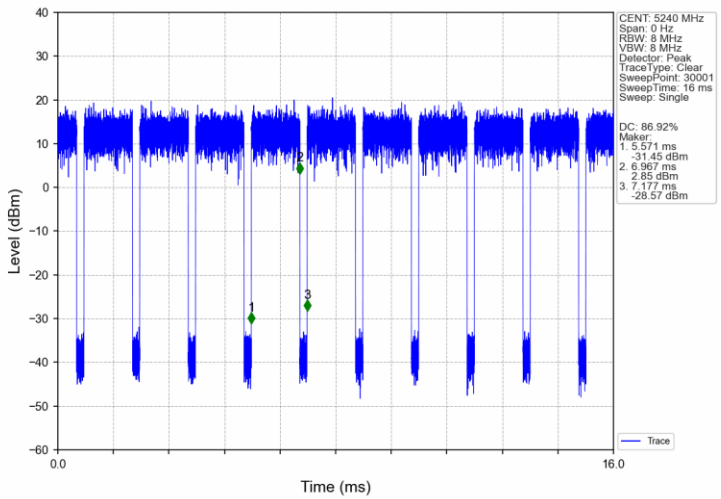
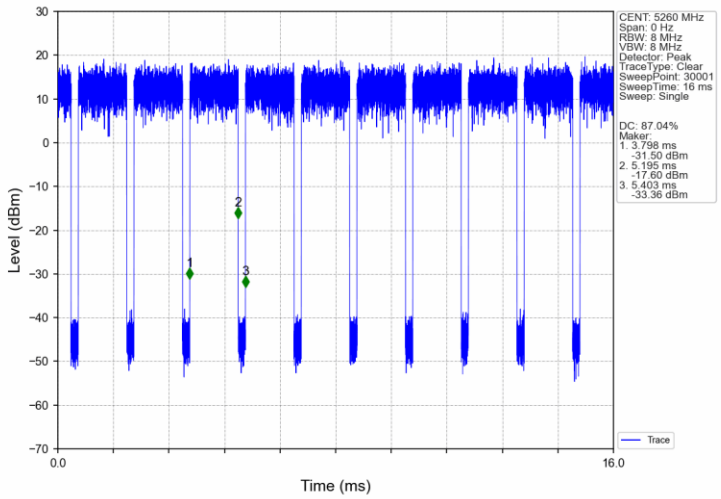
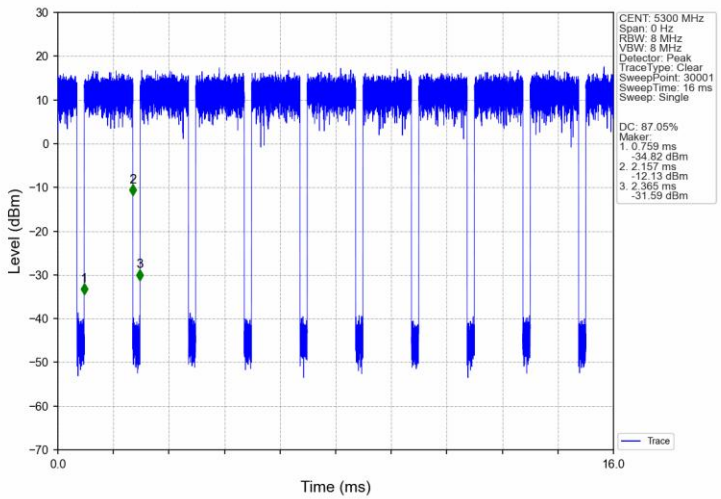


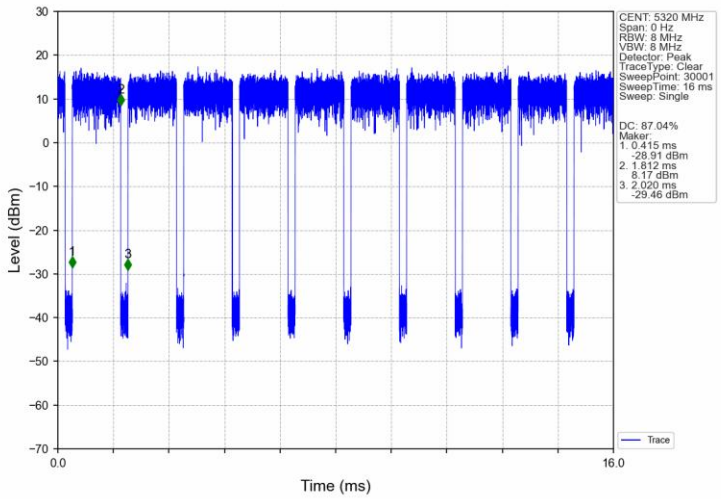
802.11a_LCH_5260MHz_Ant0_NTNV



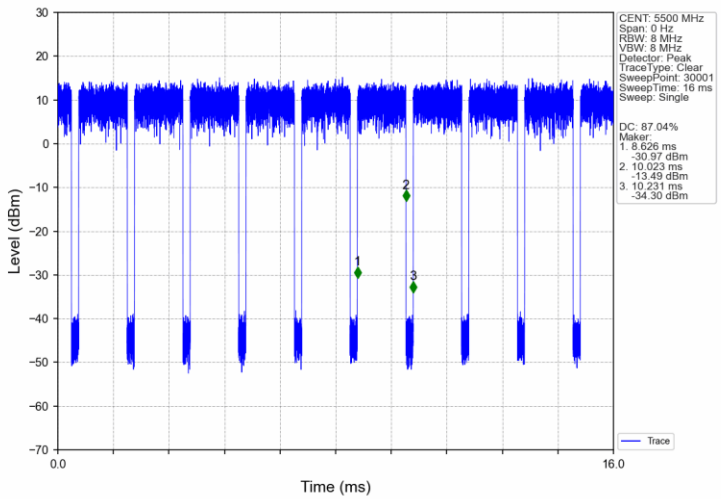
802.11a_MCH_5300MHz_Ant0_NTNV



802.11a_HCH_5320MHz_Ant0_NTNV



802.11a_LCH_5500MHz_Ant0_NTNV



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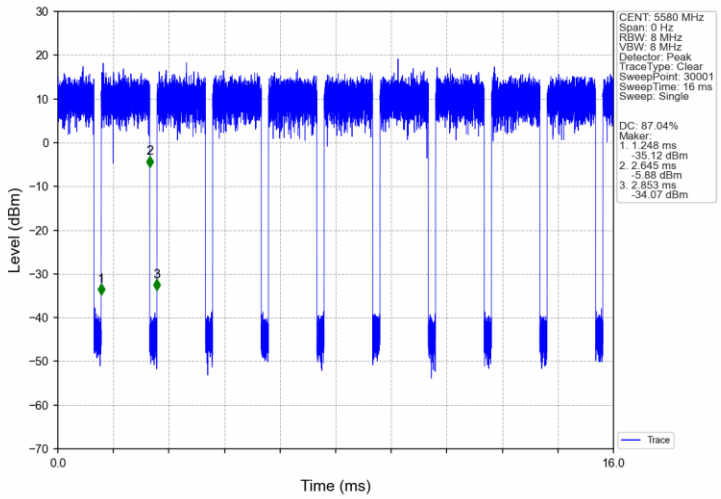
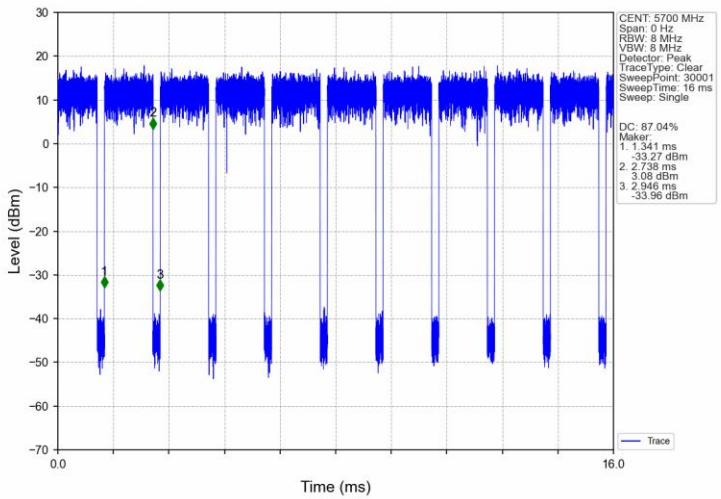


802.11a_HCH_5700MHz_Ant0_NTNV



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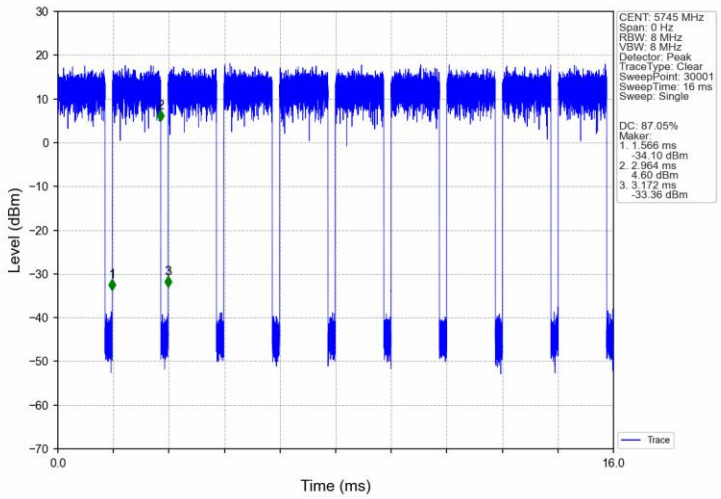

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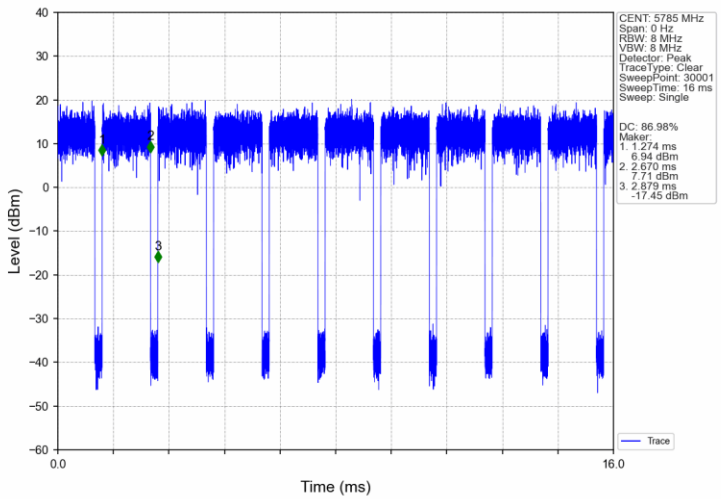
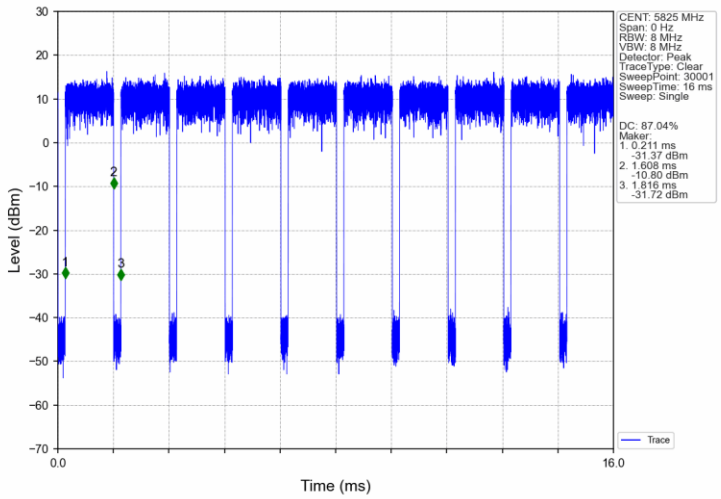
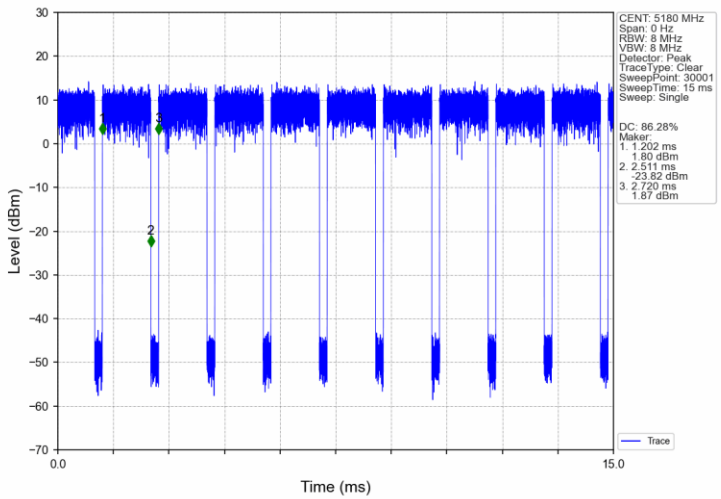


802.11a_HCH_5825MHz_Ant0_NTNV



802.11n(HT20)_LCH_5180MHz_Ant0_NTNV



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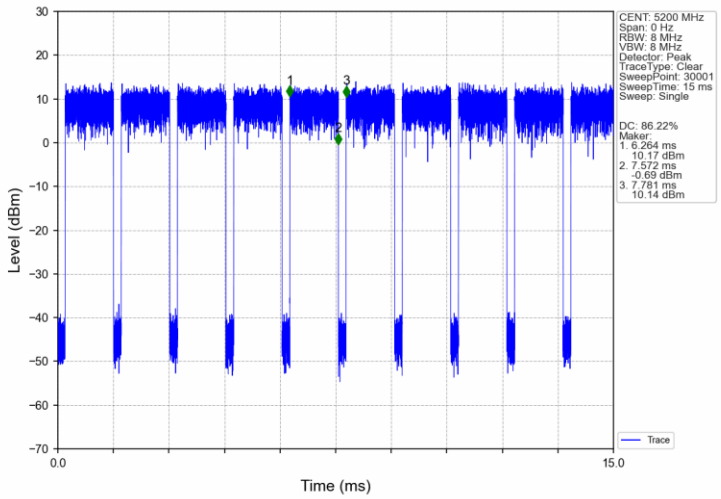

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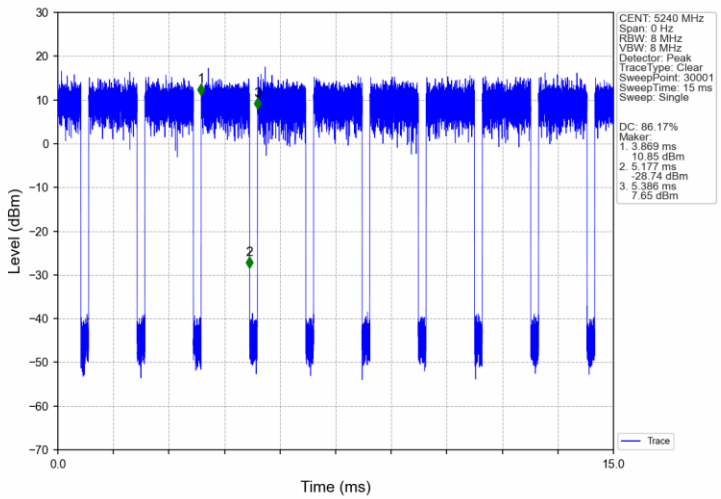

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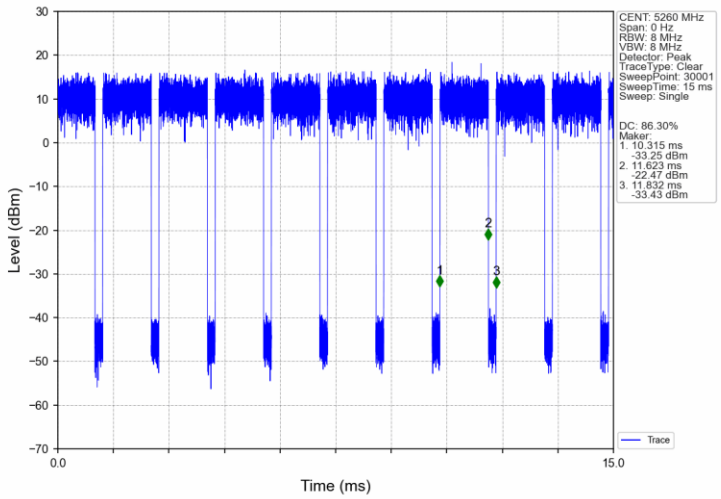
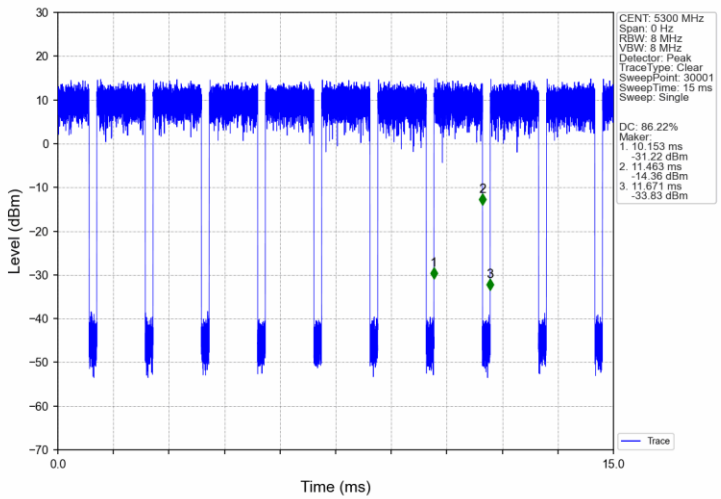


802.11n(HT20)_MCH_5300MHz_Ant0_NTNV



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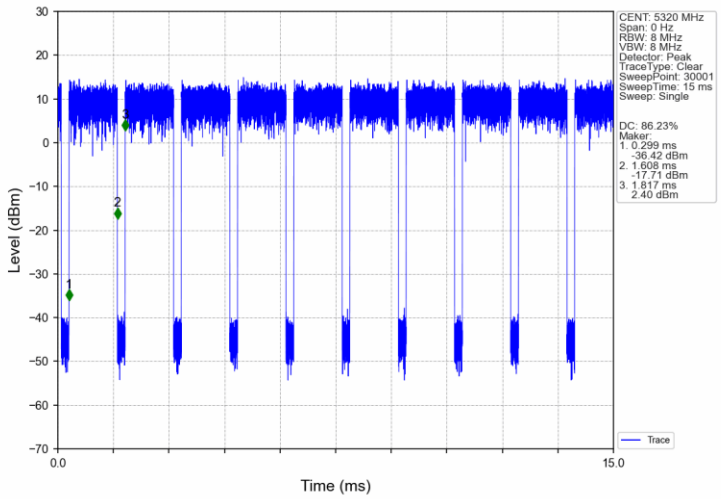

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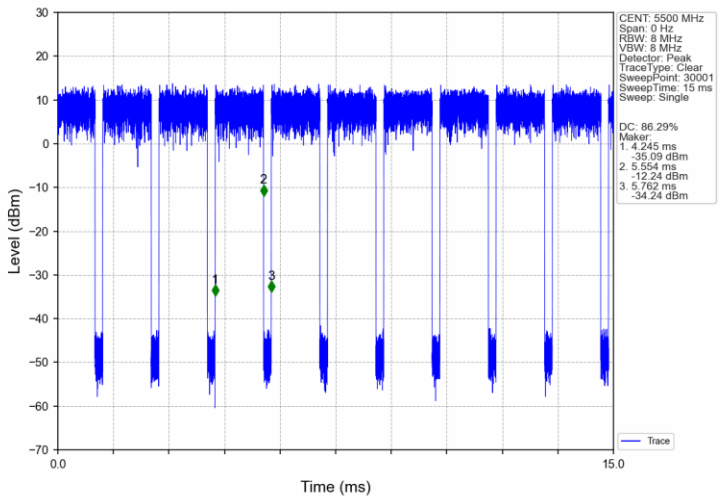

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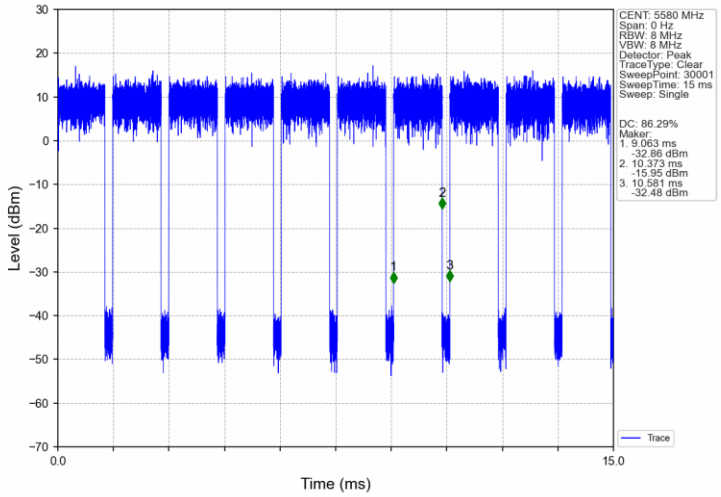
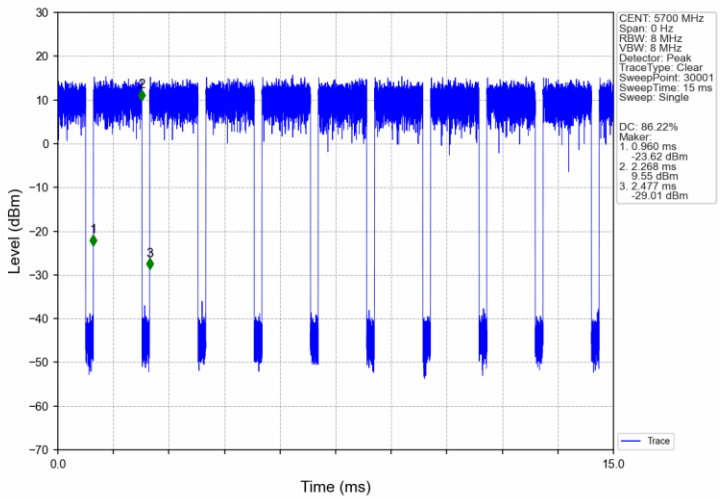


802.11n(HT20)_HCH_5700MHz_Ant0_NTNV



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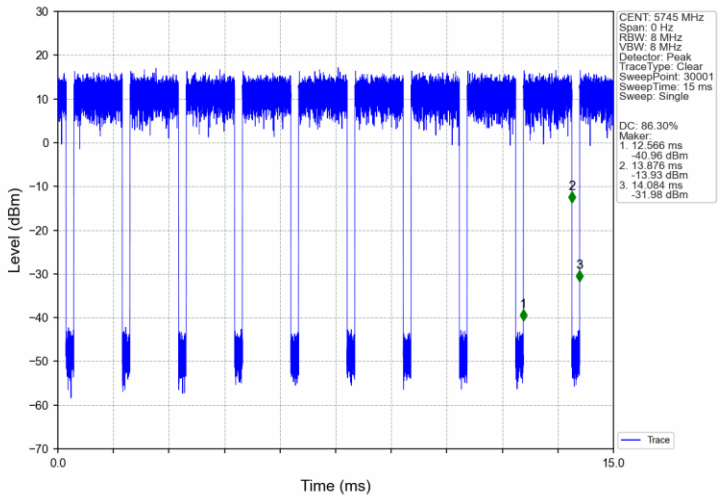

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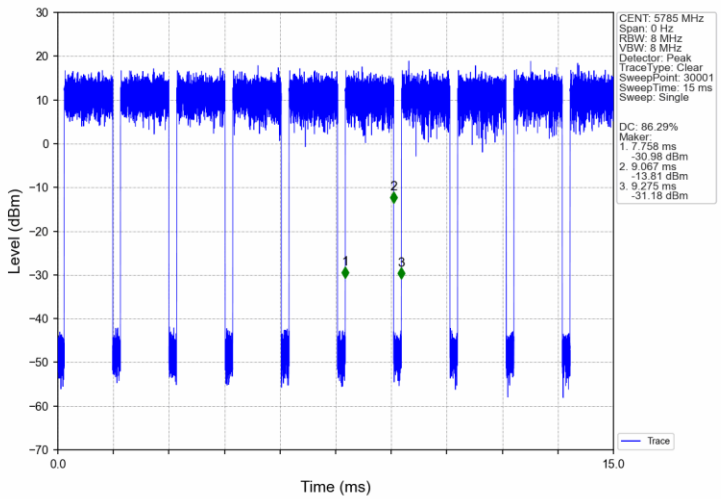

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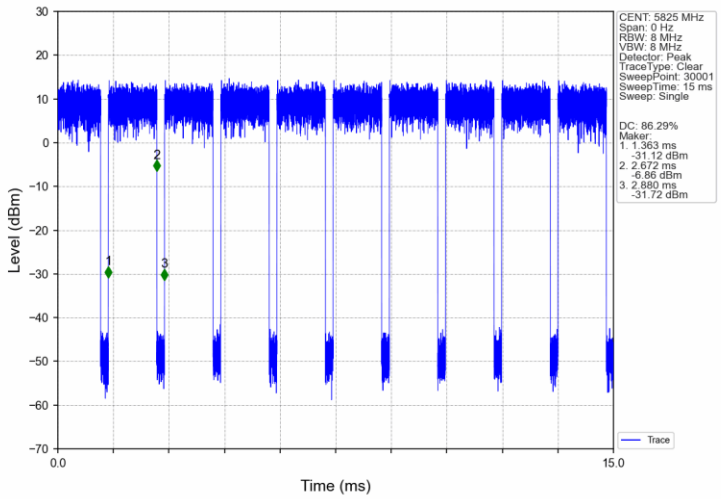

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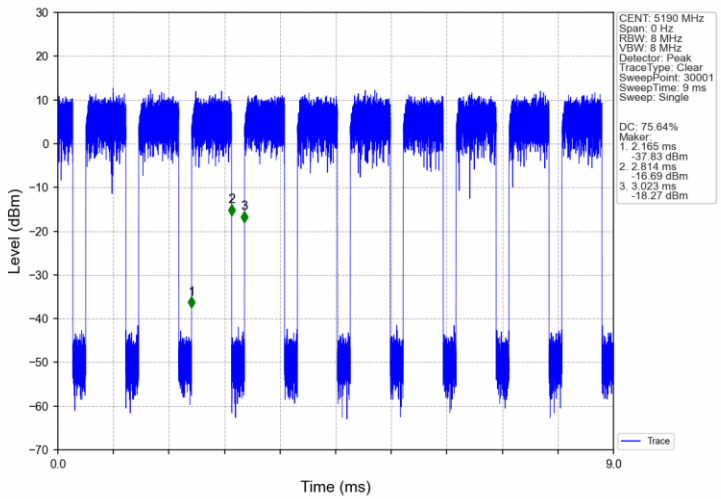

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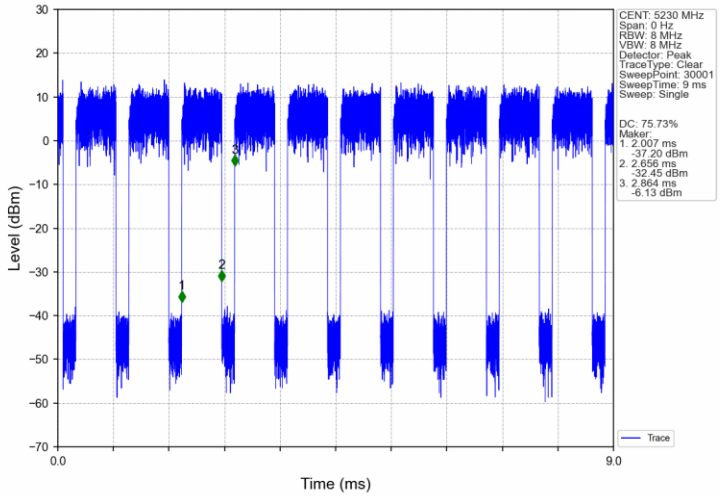

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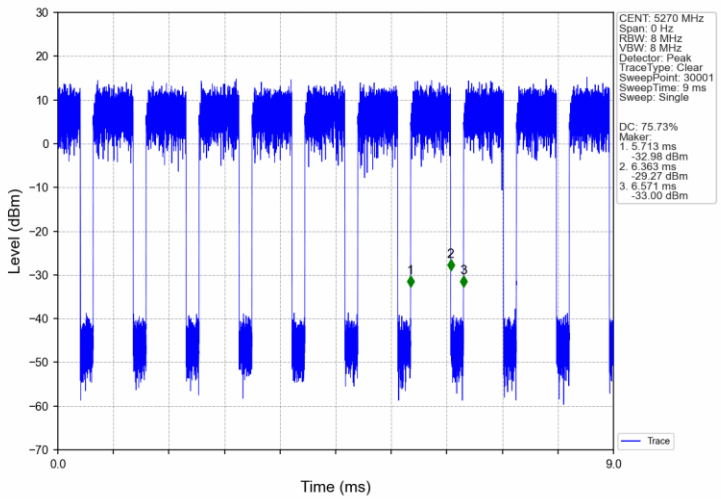

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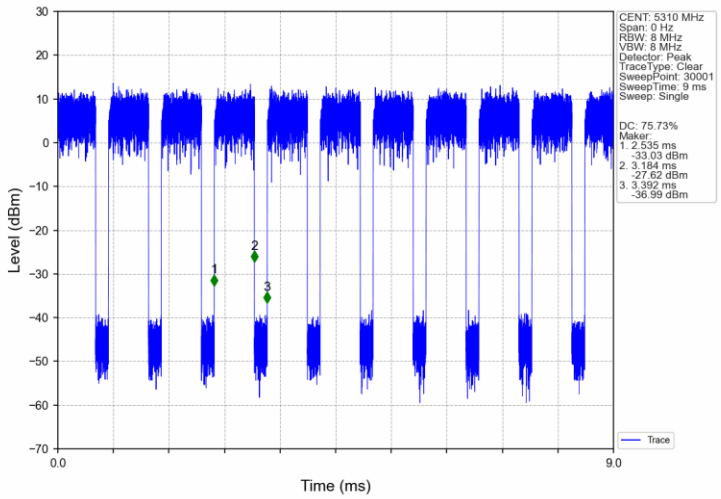

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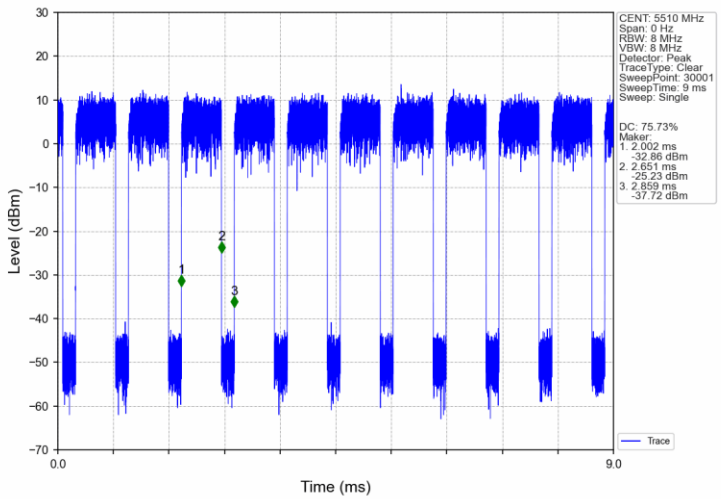

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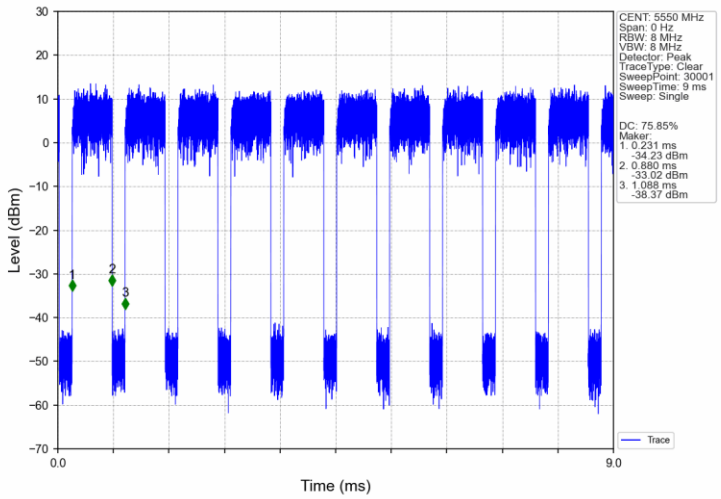

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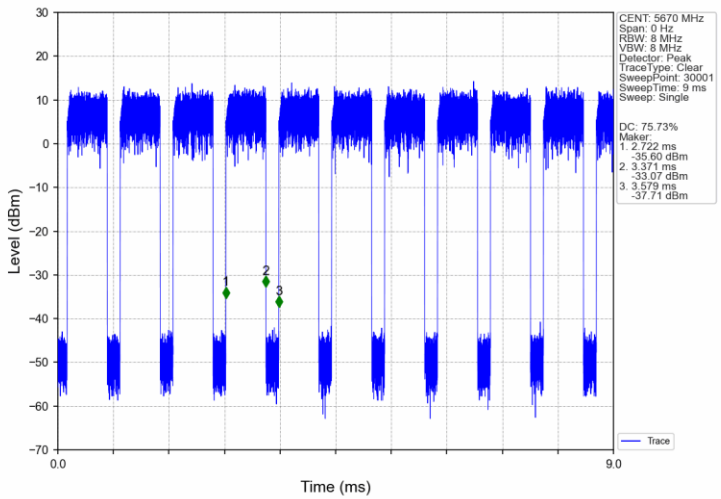

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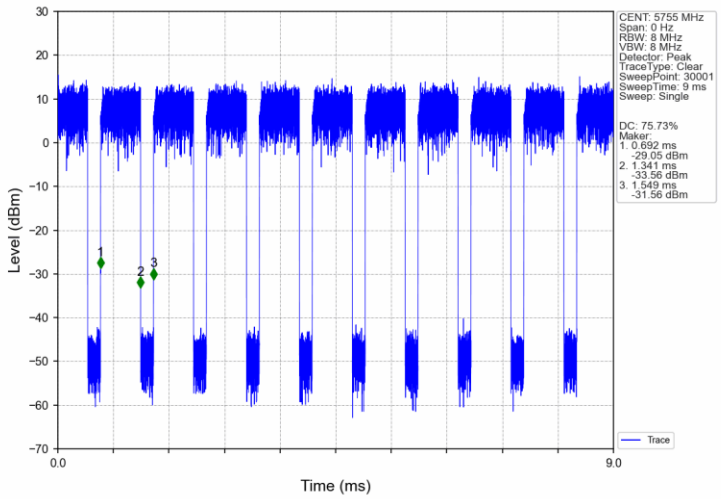

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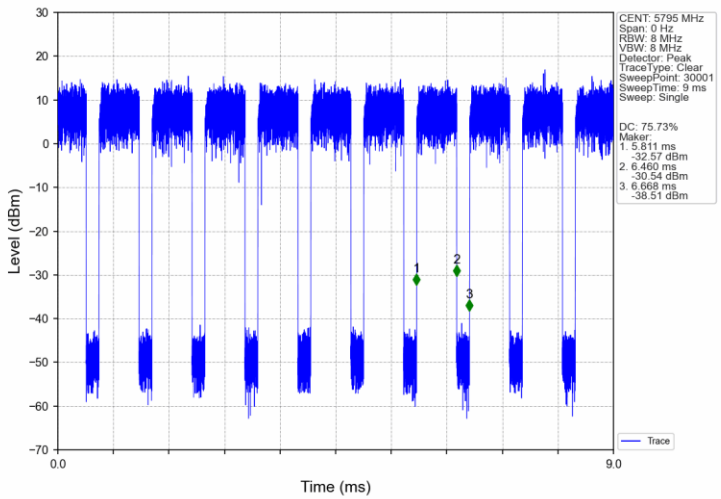
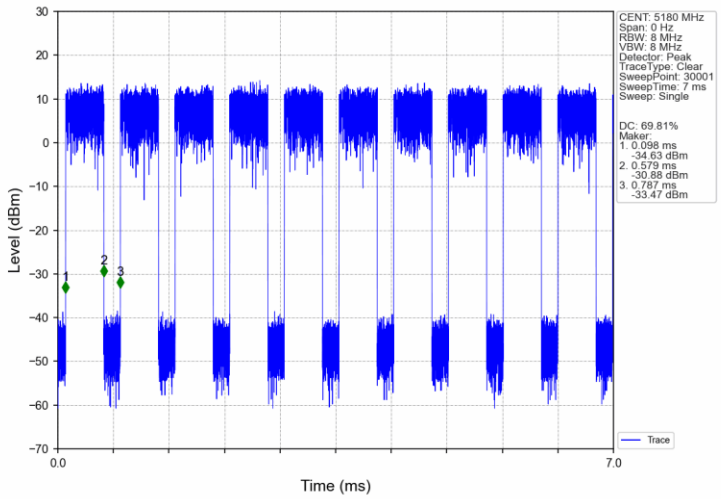


802.11ac(VHT20)_LCH_5180MHz_Ant0_NTNV



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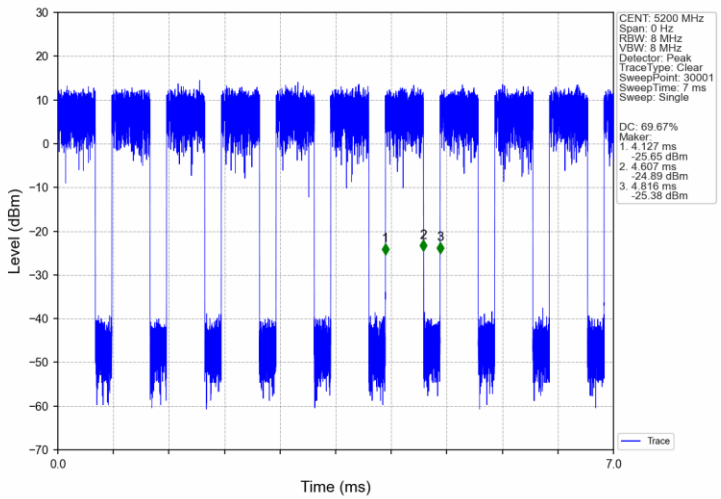

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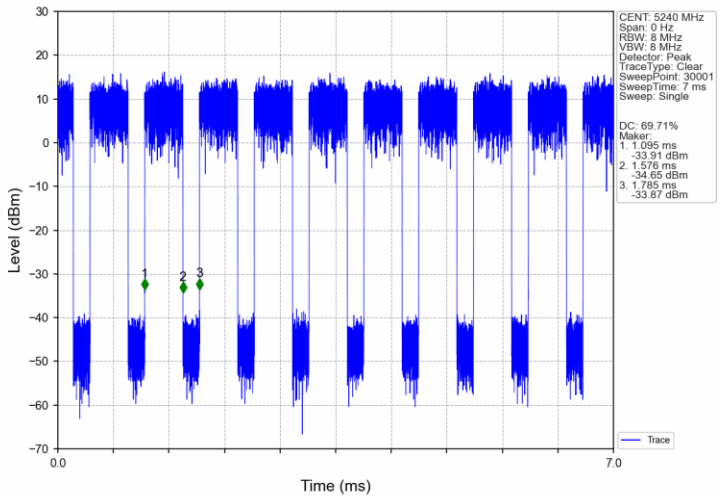

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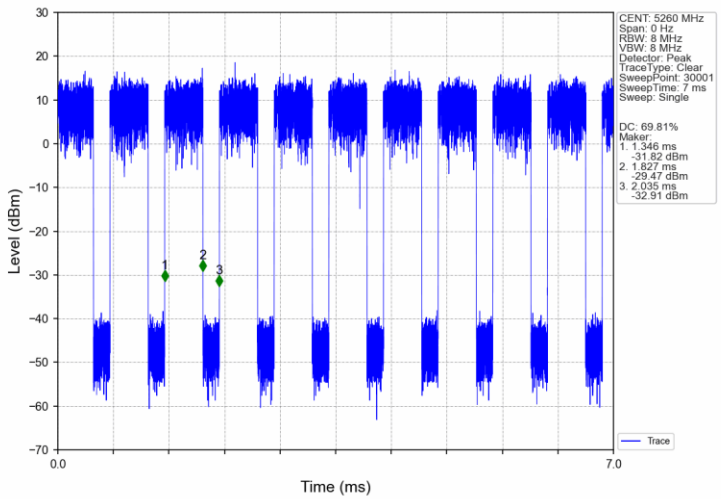
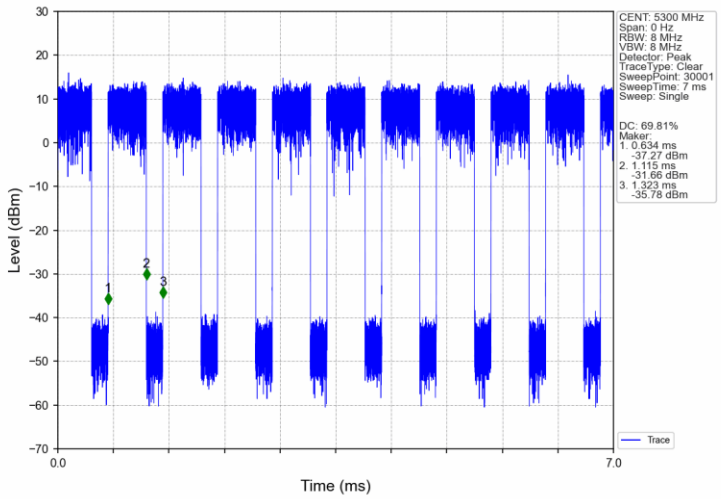


802.11ac(VHT20)_MCH_5300MHz_Ant0_NTNV



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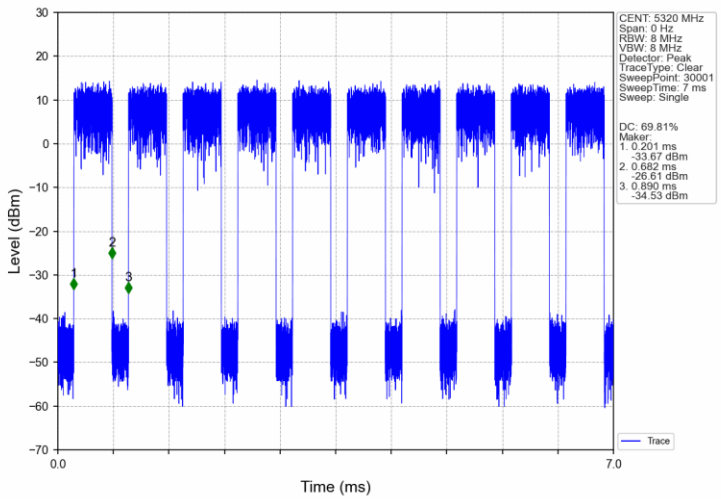
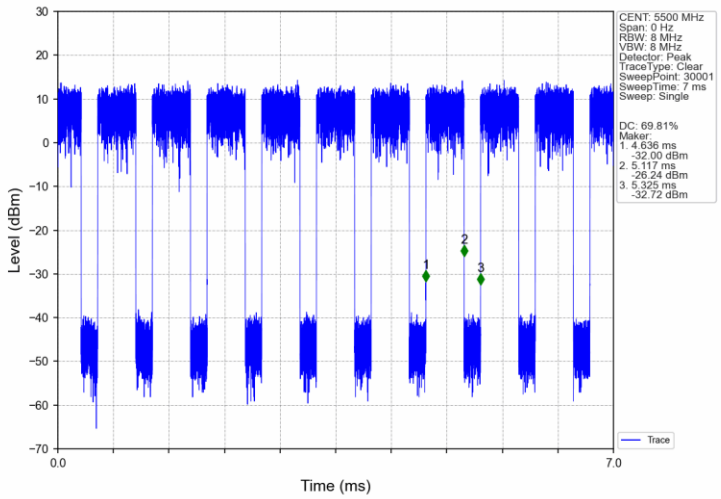
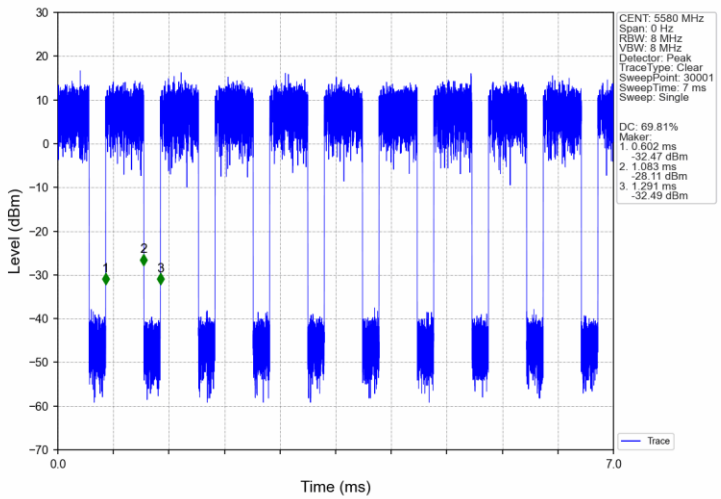


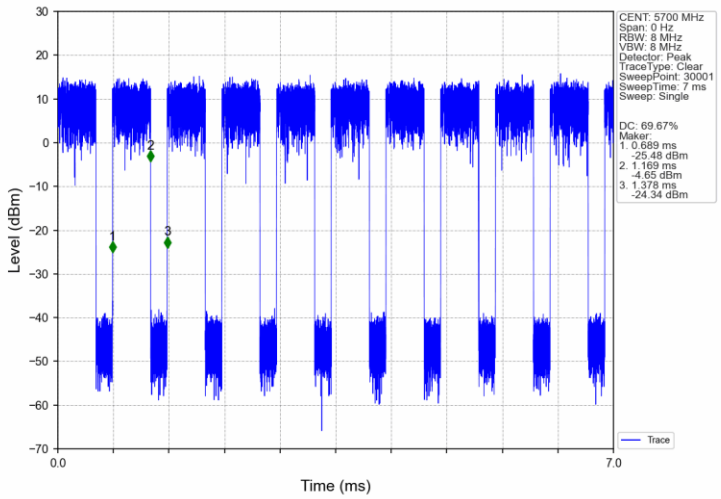
802.11ac(VHT20)_LCH_5500MHz_Ant0_NTNV



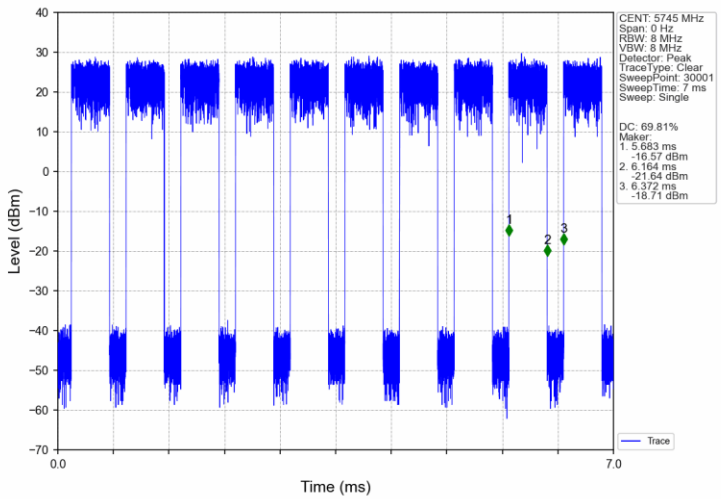
802.11ac(VHT20)_MCH_5580MHz_Ant0_NTNV



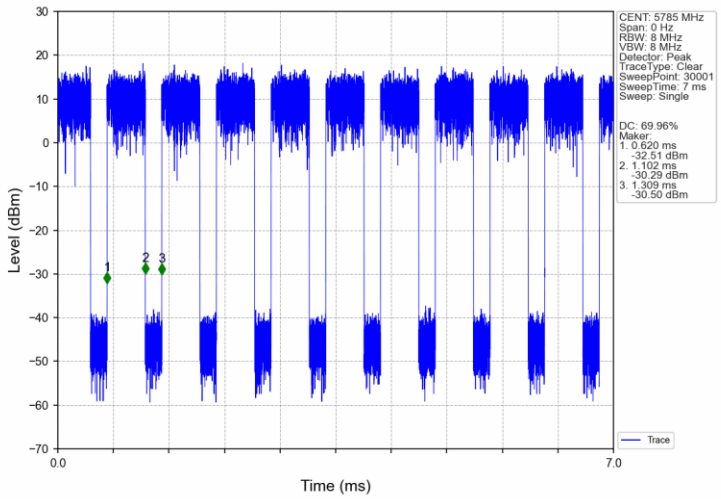
802.11ac(VHT20)_HCH_5700MHz_Ant0_NTNV



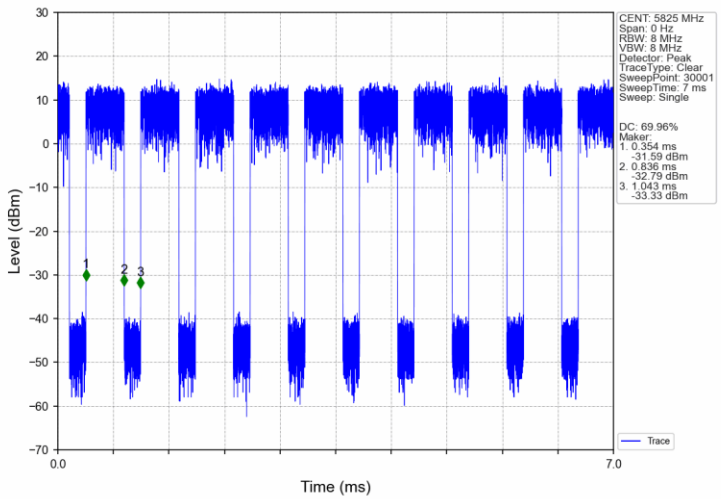
802.11ac(VHT20)_LCH_5745MHz_Ant0_NTNV



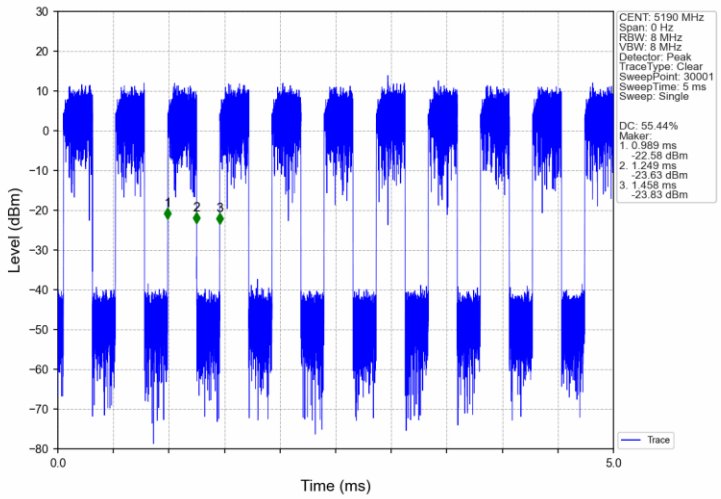
802.11ac(VHT20)_MCH_5785MHz_Ant0_NTNV



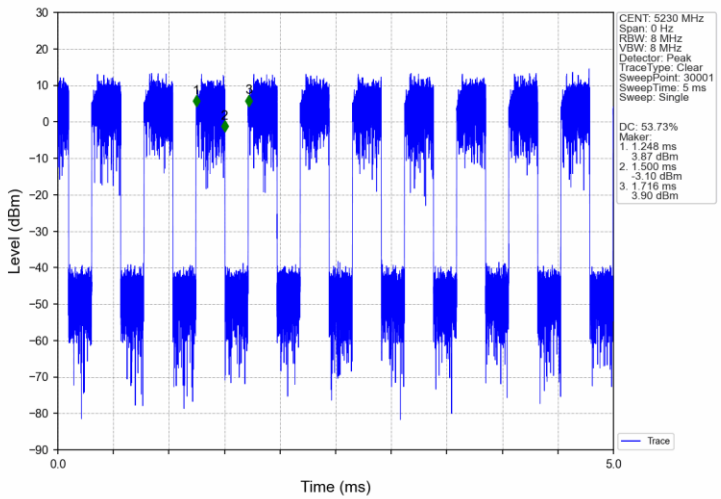
802.11ac(VHT20)_HCH_5825MHz_Ant0_NTNV



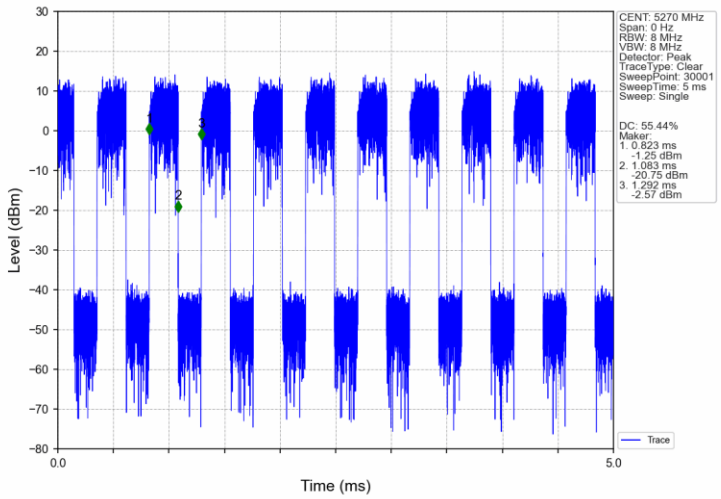
802.11ac(VHT40)_LCH_5190MHz_Ant0_NTNV



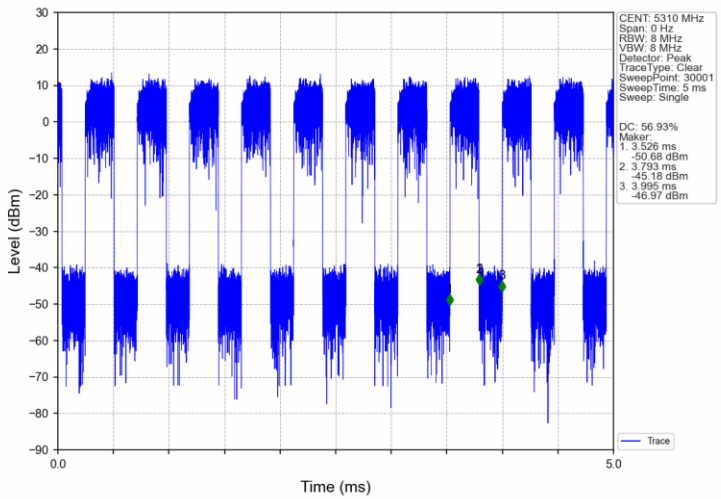
802.11ac(VHT40)_HCH_5230MHz_Ant0_NTNV



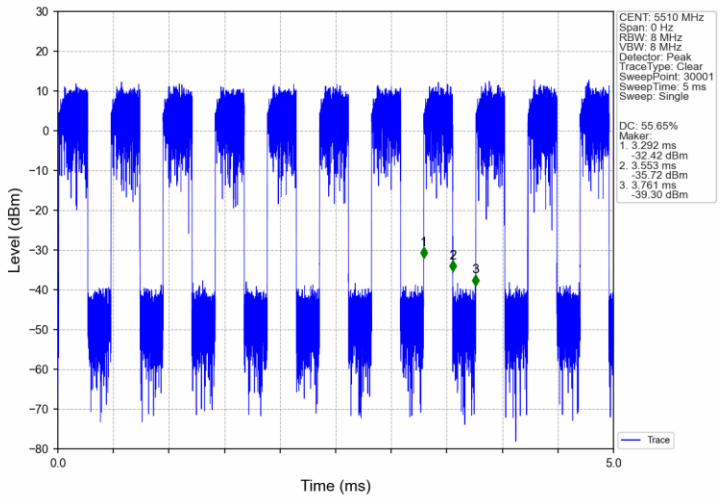
802.11ac(VHT40)_LCH_5270MHz_Ant0_NTNV



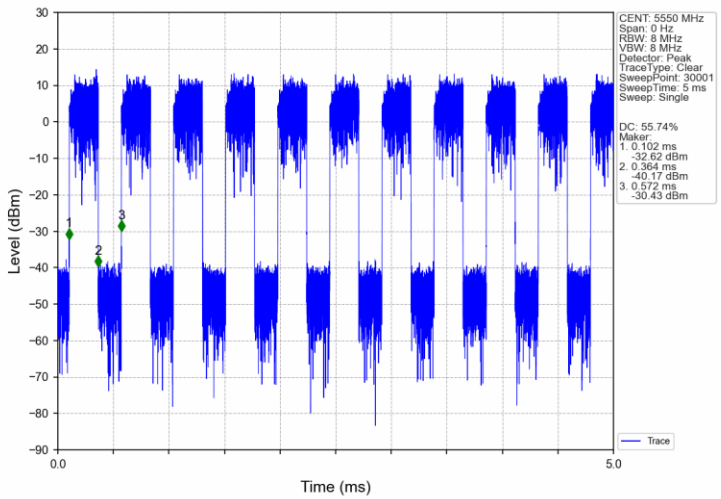
802.11ac(VHT40)_HCH_5310MHz_Ant0_NTNV



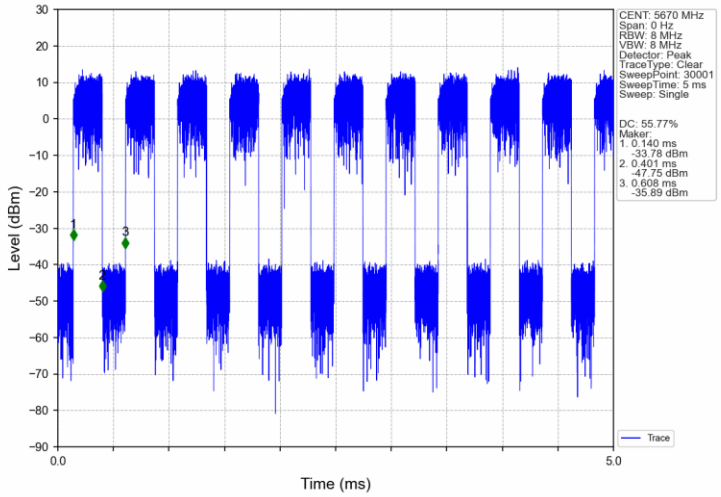
802.11ac(VHT40)_LCH_5510MHz_Ant0_NTNV



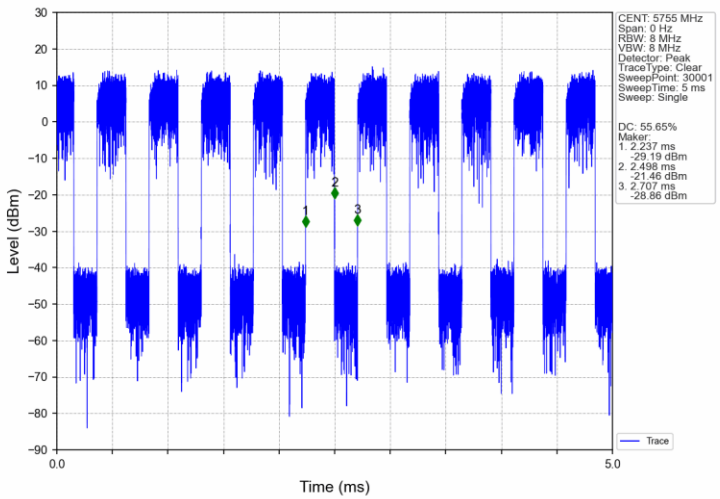
802.11ac(VHT40)_MCH_5550MHz_Ant0_NTNV



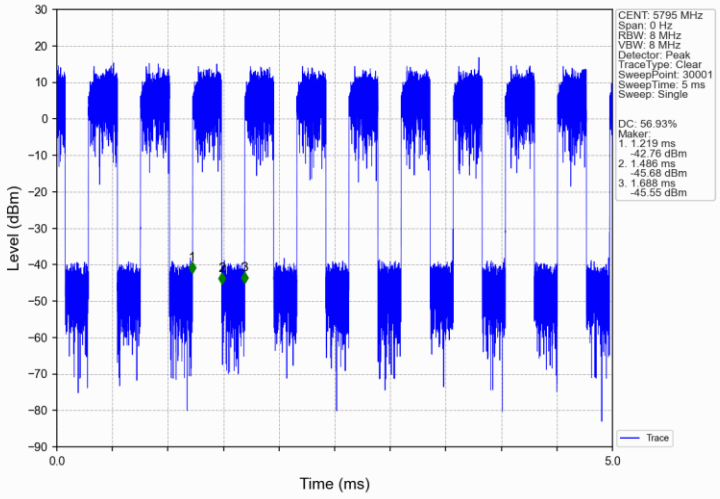
802.11ac(VHT40)_HCH_5670MHz_Ant0_NTNV



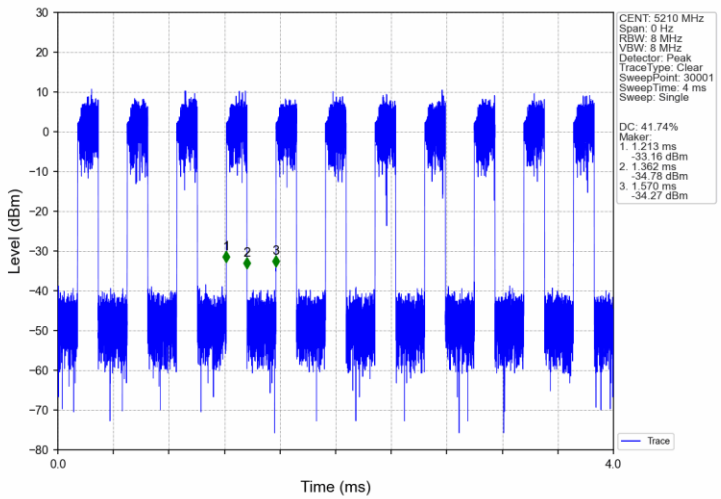
802.11ac(VHT40)_LCH_5755MHz_Ant0_NTNV



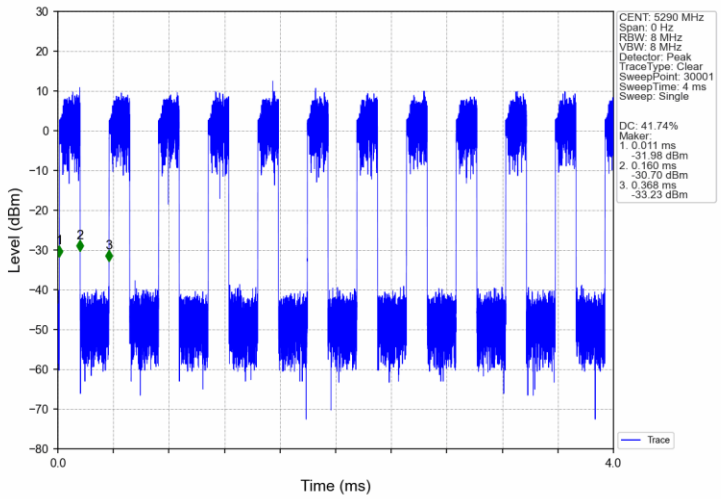
802.11ac(VHT40)_HCH_5795MHz_Ant0_NTNV



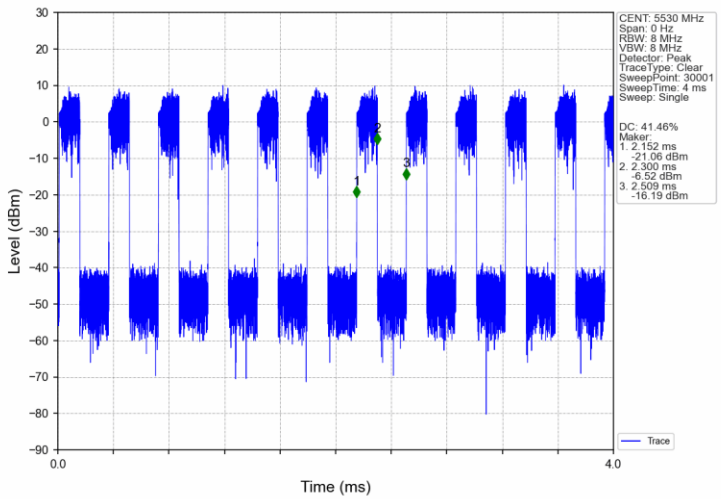
802.11ac(VHT80)_MCH_5210MHz_Ant0_NTNV



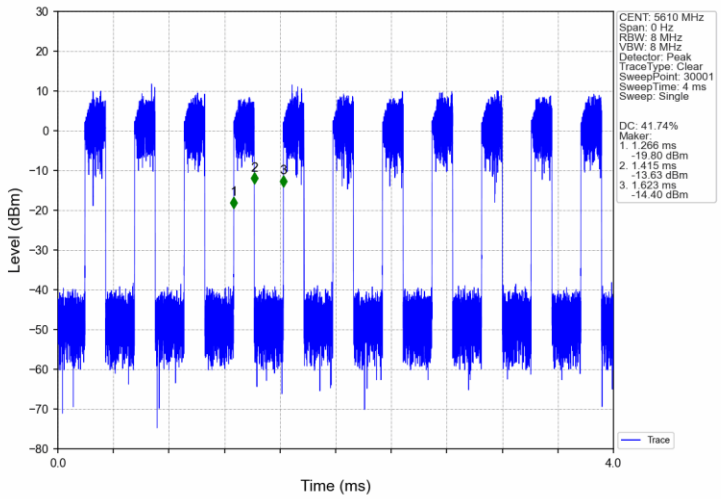
802.11ac(VHT80)_MCH_5290MHz_Ant0_NTNV



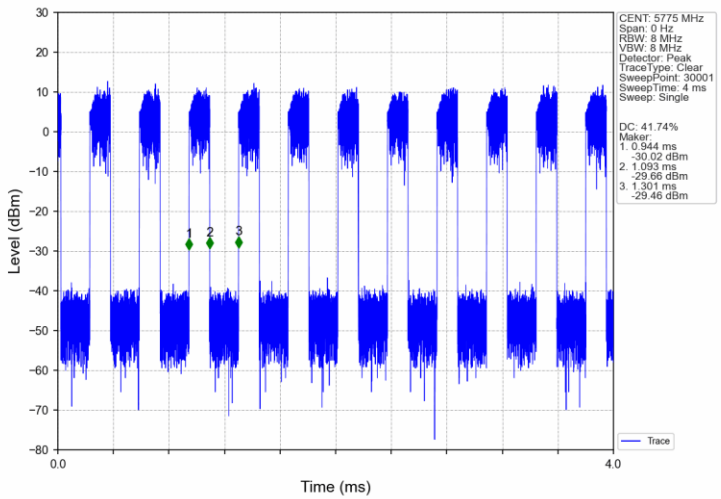
802.11ac(VHT80)_LCH_5530MHz_Ant0_NTNV



802.11ac(VHT80)_HCH_5610MHz_Ant0_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant0_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	0	17.080	/	Pass
		5200	0	17.071	/	Pass
		5240	0	16.996	/	Pass
		5260	0	16.895	/	Pass
		5300	0	17.111	/	Pass
		5320	0	17.125	/	Pass
		5500	0	17.110	/	Pass
		5580	0	16.940	/	Pass
		5700	0	17.102	/	Pass
		5745	0	17.021	/	Pass
		5785	0	16.927	/	Pass
		5825	0	17.046	/	Pass
802.11n (HT20)	SISO	5180	0	18.183	/	Pass
		5200	0	18.278	/	Pass
		5240	0	17.973	/	Pass
		5260	0	18.021	/	Pass
		5300	0	18.216	/	Pass
		5320	0	18.145	/	Pass
		5500	0	18.165	/	Pass
		5580	0	18.043	/	Pass
		5700	0	18.192	/	Pass
		5745	0	18.104	/	Pass
		5785	0	17.972	/	Pass
		5825	0	18.086	/	Pass
802.11n (HT40)	SISO	5190	0	36.135	/	Pass
		5230	0	35.865	/	Pass
		5270	0	35.925	/	Pass
		5310	0	36.132	/	Pass
		5510	0	35.951	/	Pass
		5550	0	35.934	/	Pass
		5670	0	36.261	/	Pass
		5755	0	36.057	/	Pass
		5795	0	35.888	/	Pass
802.11ac (VHT20)	SISO	5180	0	18.116	/	Pass
		5200	0	18.102	/	Pass
		5240	0	17.881	/	Pass
		5260	0	17.961	/	Pass
		5300	0	18.168	/	Pass
		5320	0	18.125	/	Pass
		5500	0	18.122	/	Pass
		5580	0	18.000	/	Pass
		5700	0	18.100	/	Pass
		5745	0	18.290	/	Pass
		5785	0	17.996	/	Pass
		5825	0	18.123	/	Pass
802.11ac	SISO	5190	0	36.290	/	Pass

(VHT40)		5230	0	35.954	/	Pass
		5270	0	35.907	/	Pass
		5310	0	36.147	/	Pass
		5510	0	36.159	/	Pass
		5550	0	35.943	/	Pass
		5670	0	36.297	/	Pass
		5755	0	36.093	/	Pass
		5795	0	35.916	/	Pass
802.11ac (VHT80)	SISO	5210	0	75.205	/	Pass
		5290	0	74.743	/	Pass
		5530	0	75.240	/	Pass
		5610	0	74.792	/	Pass
		5775	0	74.397	/	Pass

2.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	0	22.400	/	Pass
		5200	0	23.315	/	Pass
		5240	0	20.140	/	Pass
		5260	0	20.697	/	Pass
		5300	0	22.967	/	Pass
		5320	0	21.073	/	Pass
		5500	0	22.195	/	Pass
		5580	0	21.209	/	Pass
		5700	0	23.358	/	Pass
802.11n (HT20)	SISO	5180	0	25.596	/	Pass
		5200	0	26.917	/	Pass
		5240	0	20.445	/	Pass
		5260	0	21.246	/	Pass
		5300	0	23.747	/	Pass
		5320	0	25.783	/	Pass
		5500	0	25.849	/	Pass
		5580	0	21.587	/	Pass
		5700	0	22.767	/	Pass
802.11n (HT40)	SISO	5190	0	41.926	/	Pass
		5230	0	40.809	/	Pass
		5270	0	40.284	/	Pass
		5310	0	40.503	/	Pass
		5510	0	41.568	/	Pass
		5550	0	40.374	/	Pass
		5670	0	40.899	/	Pass
802.11ac (VHT20)	SISO	5180	0	24.189	/	Pass
		5200	0	24.868	/	Pass
		5240	0	20.323	/	Pass
		5260	0	21.479	/	Pass
		5300	0	24.349	/	Pass
		5320	0	25.015	/	Pass
		5500	0	23.541	/	Pass
		5580	0	21.401	/	Pass
		5700	0	22.751	/	Pass
802.11ac (VHT40)	SISO	5190	0	51.194	/	Pass
		5230	0	40.085	/	Pass
		5270	0	39.654	/	Pass
		5310	0	48.975	/	Pass
		5510	0	42.109	/	Pass

		5550	0	40.417	/	Pass
		5670	0	47.906	/	Pass
802.11ac (VHT80)	SISO	5210	0	79.875	/	Pass
		5290	0	80.851	/	Pass
		5530	0	80.156	/	Pass
		5610	0	79.710	/	Pass

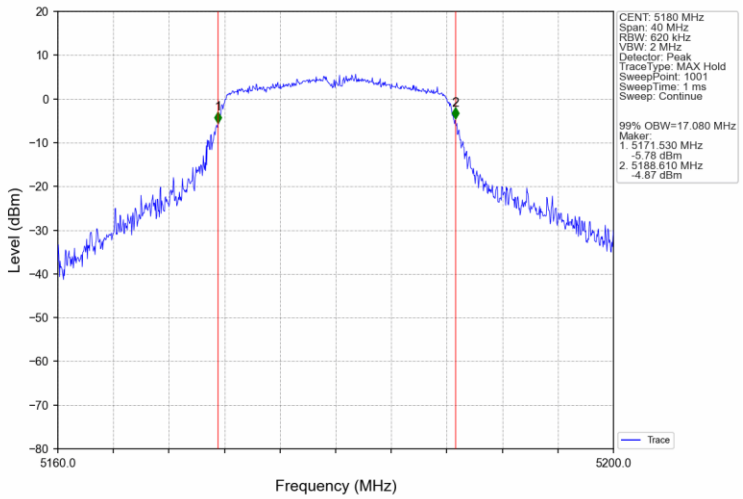
2.1.3 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	0	14.111	>=0.5	Pass
		5785	0	15.153	>=0.5	Pass
		5825	0	15.516	>=0.5	Pass
802.11n (HT20)	SISO	5745	0	15.102	>=0.5	Pass
		5785	0	15.013	>=0.5	Pass
		5825	0	16.302	>=0.5	Pass
802.11n (HT40)	SISO	5755	0	33.802	>=0.5	Pass
		5795	0	33.794	>=0.5	Pass
802.11ac (VHT20)	SISO	5745	0	13.922	>=0.5	Pass
		5785	0	15.178	>=0.5	Pass
		5825	0	15.495	>=0.5	Pass
802.11ac (VHT40)	SISO	5755	0	32.603	>=0.5	Pass
		5795	0	32.593	>=0.5	Pass
802.11ac (VHT80)	SISO	5775	0	56.328	>=0.5	Pass

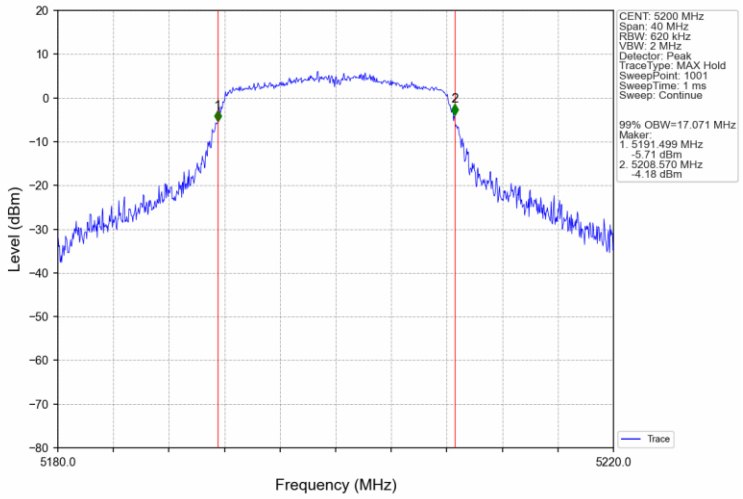
2.2 Test Graph

2.2.1 OBW

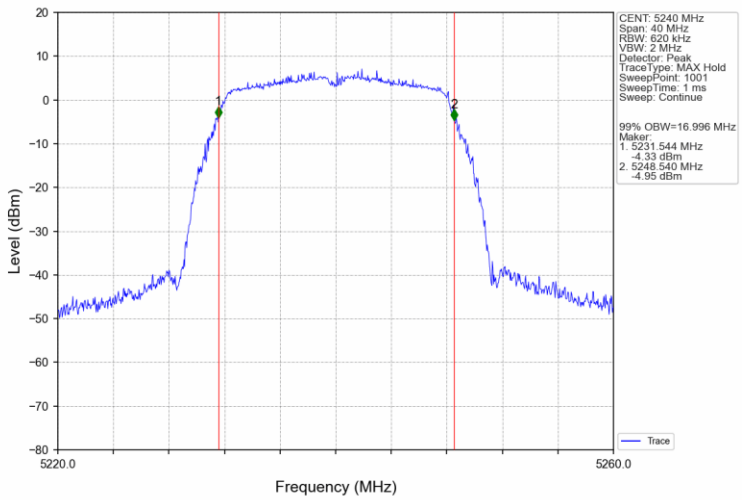
802.11a_LCH_5180MHz_Ant0_NTNV



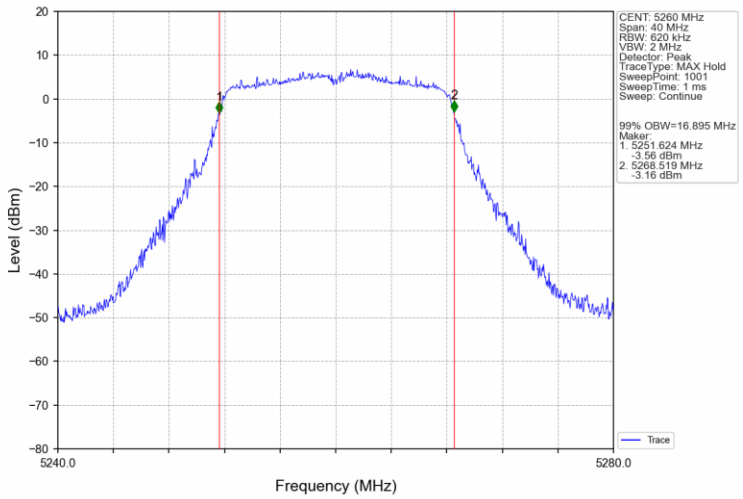
802.11a_MCH_5200MHz_Ant0_NTNV



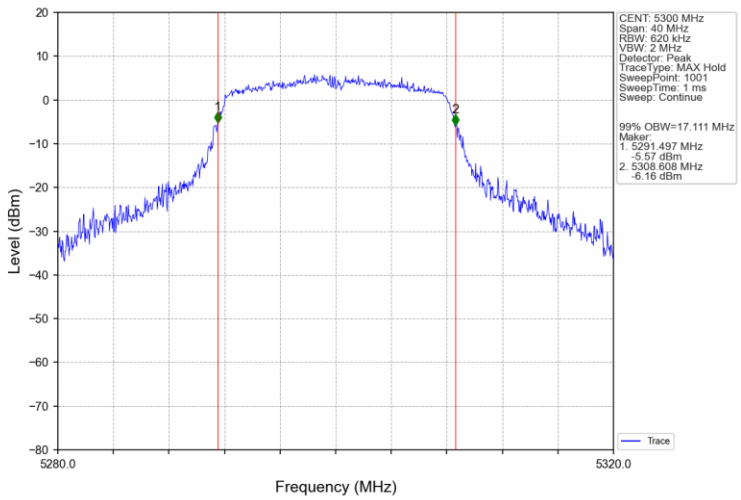
802.11a_HCH_5240MHz_Ant0_NTNV



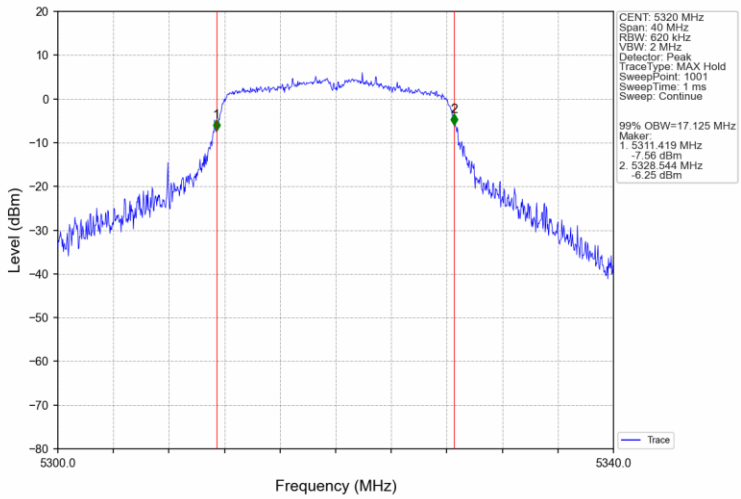
802.11a_LCH_5260MHz_Ant0_NTNV



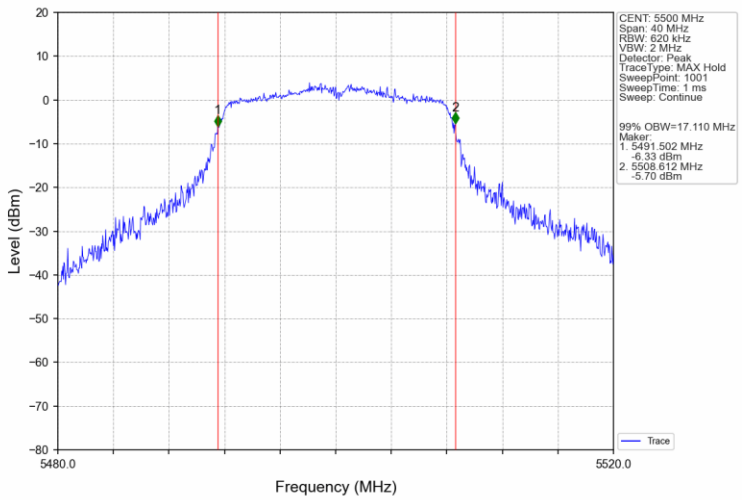
802.11a_MCH_5300MHz_Ant0_NTNV



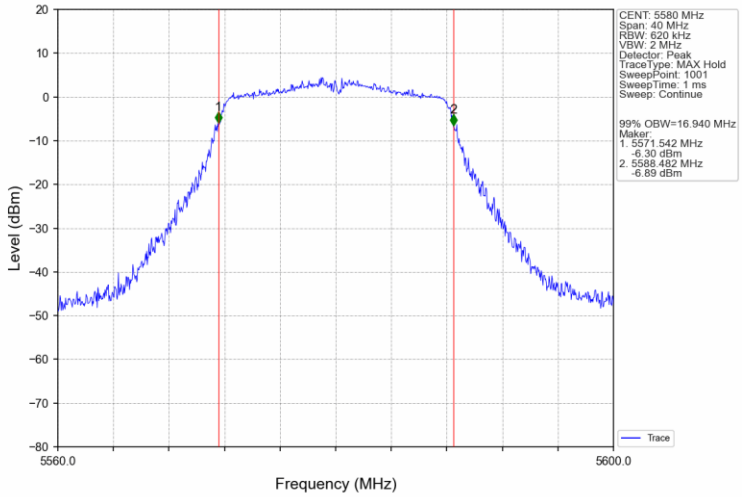
802.11a_HCH_5320MHz_Ant0_NTNV



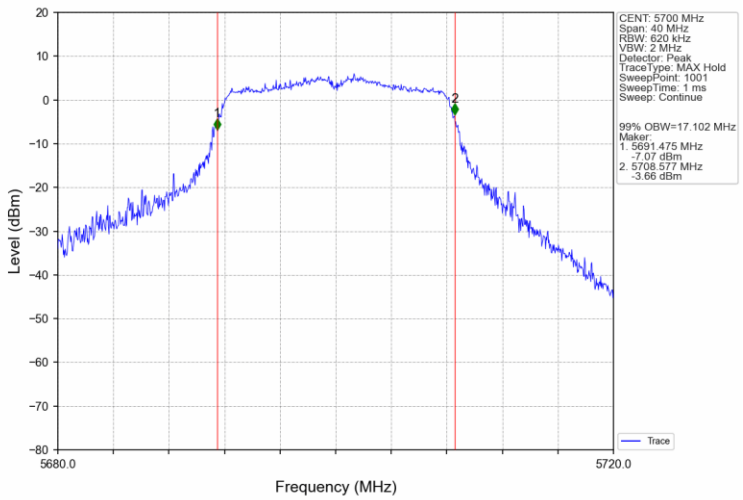
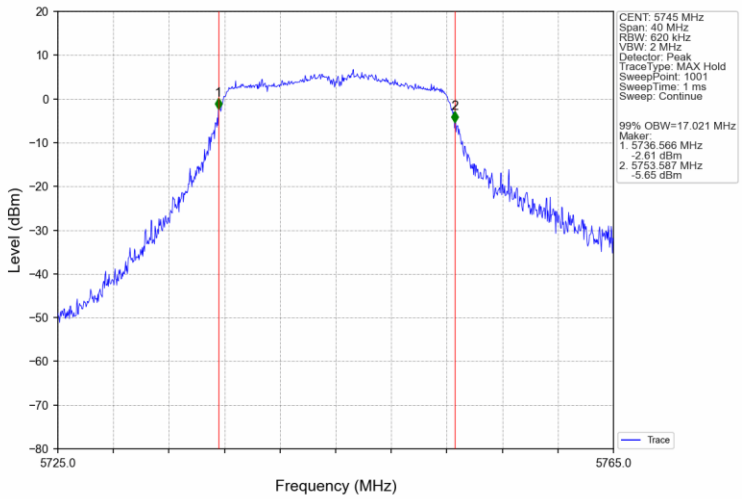
802.11a_LCH_5500MHz_Ant0_NTNV



802.11a_MCH_5580MHz_Ant0_NTNV



802.11a_HCH_5700MHz_Ant0_NTNV



802.11a_LCH_5745MHz_Ant0_NTNV