

Appendix RF test data for WIFI5G

1. Duty Cycle

1.1 Test Result

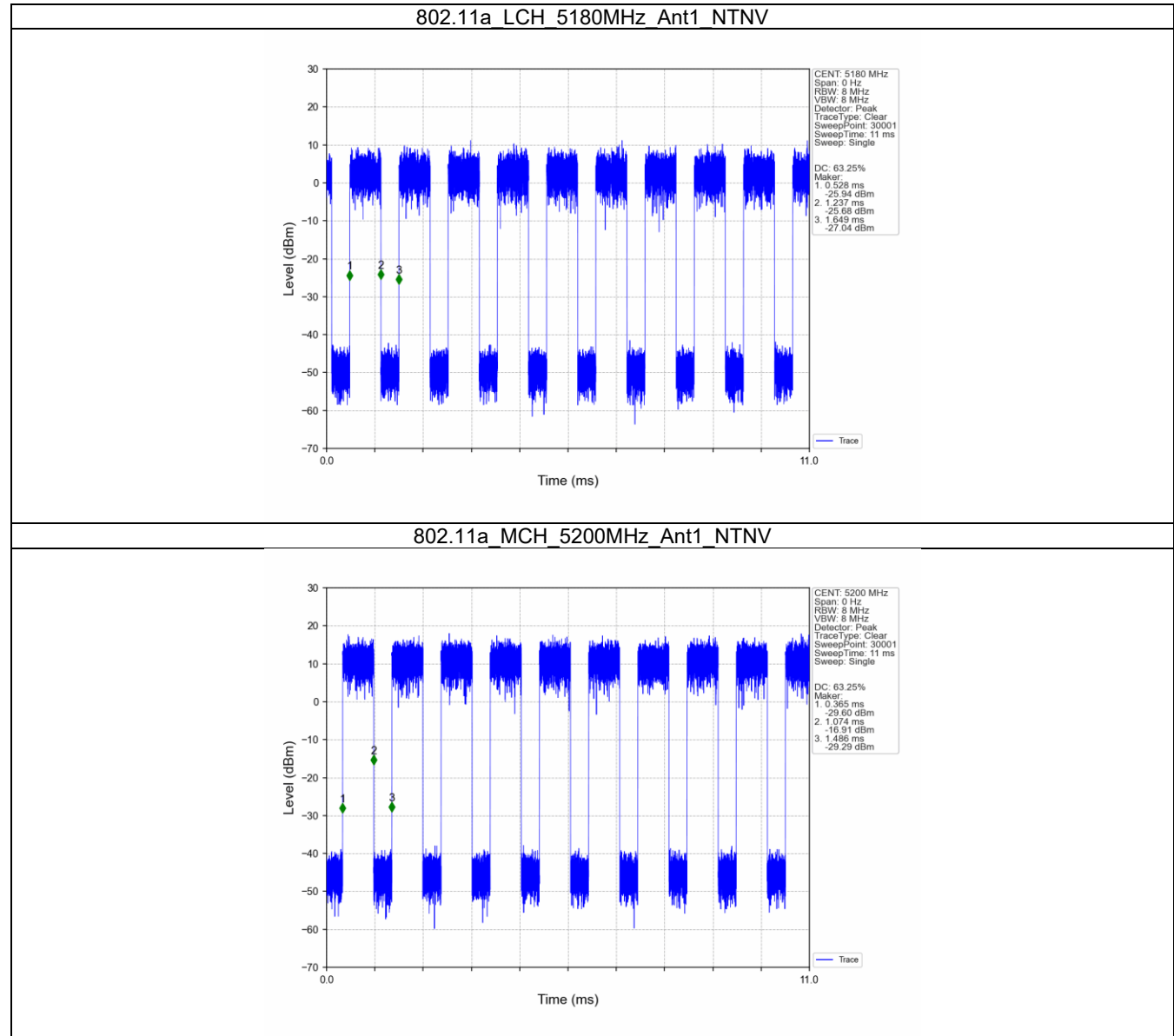
1.1.1 Ant1

Ant1									
Mode	Tx Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	/	/	0.709	1.121	63.25	1.99	0.03
		5200	/	/	0.709	1.121	63.25	1.99	0.03
		5240	/	/	0.709	1.121	63.25	1.99	0.05
		5745	/	/	0.709	1.121	63.25	1.99	0.03
		5785	/	/	0.709	1.121	63.25	1.99	0.03
		5825	/	/	0.709	1.122	63.19	1.99	0.05
802.11n (HT20)	MIMO	5180	/	/	0.106	0.518	20.46	6.89	0.07
		5200	/	/	0.105	0.528	19.89	7.01	0.46
		5240	/	/	0.105	0.518	20.27	6.93	0.05
		5745	/	/	0.106	0.518	20.46	6.89	0.06
		5785	/	/	0.105	0.518	20.27	6.93	0.06
		5825	/	/	0.105	0.517	20.31	6.92	0.04
802.11n (HT40)	MIMO	5190	/	/	0.163	0.576	28.30	5.48	0.04
		5230	/	/	0.163	0.576	28.30	5.48	0.03
		5755	/	/	0.163	0.575	28.35	5.47	0.04
		5795	/	/	0.163	0.576	28.30	5.48	0.06
802.11ac (VHT20)	MIMO	5180	/	/	0.117	0.131	89.31	0.49	0.18
		5200	/	/	0.117	0.131	89.31	0.49	0.10
		5240	/	/	0.116	0.131	88.55	0.53	0.16
		5745	/	/	0.117	0.132	88.64	0.52	0.08
		5785	/	/	0.118	0.132	89.39	0.49	0.23
		5825	/	/	0.117	0.132	88.64	0.52	0.08
802.11ac (VHT40)	MIMO	5190	/	/	0.180	0.195	92.31	0.35	0.07
		5230	/	/	0.181	0.195	92.82	0.32	0.19
		5755	/	/	0.180	0.195	92.31	0.35	0.07
		5795	/	/	0.181	0.196	92.35	0.35	0.07
802.11ac (VHT80)	MIMO	5210	/	/	0.109	0.123	88.62	0.52	0.08
		5775	/	/	0.109	0.123	88.62	0.52	0.03
802.11ax (HEW20)	MIMO	5180	SU	/	0.325	0.737	44.10	3.56	0.04
		5200	SU	/	0.324	0.742	43.67	3.60	0.32
		5240	SU	/	0.324	0.737	43.96	3.57	0.03
		5745	SU	/	0.324	0.737	43.96	3.57	0.03
		5785	SU	/	0.325	0.737	44.10	3.56	0.03
		5825	SU	/	0.324	0.737	43.96	3.57	0.03
802.11ax (HEW40)	MIMO	5190	SU	/	0.324	0.737	43.96	3.57	0.04
		5230	SU	/	0.325	0.737	44.10	3.56	0.03
		5755	SU	/	0.324	0.737	43.96	3.57	0.04
		5795	SU	/	0.324	0.737	43.96	3.57	0.03
802.11ax (HEW80)	MIMO	5210	SU	/	0.260	1.201	21.65	6.65	17.05
		5775	SU	/	0.260	0.673	38.63	4.13	0.05

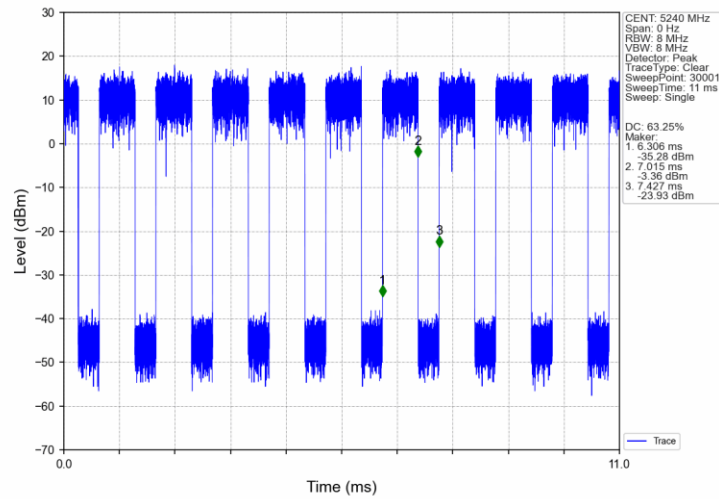
Note: This project only tests the worst mode

1.2 Test Graph

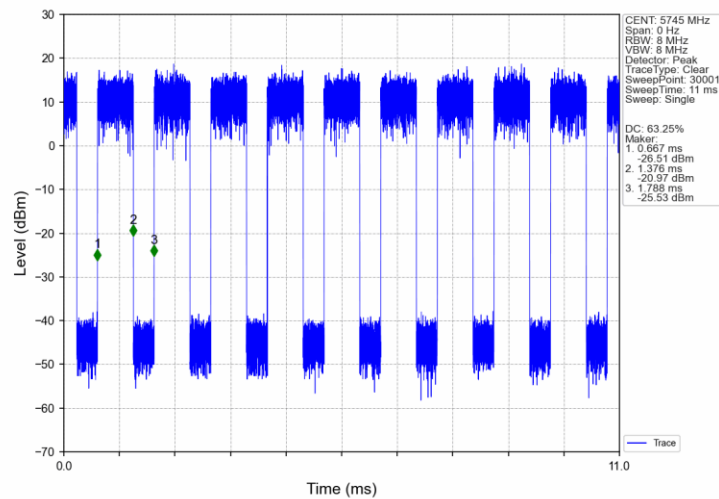
1.2.1 Ant1



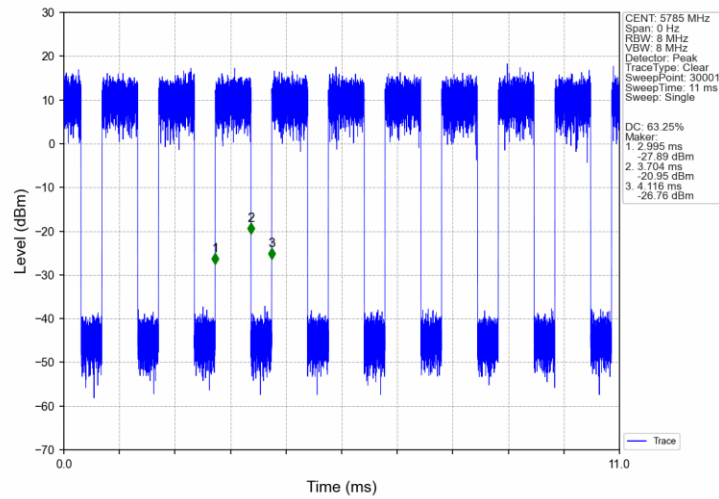
802.11a_HCH_5240MHz_Ant1_NTNV



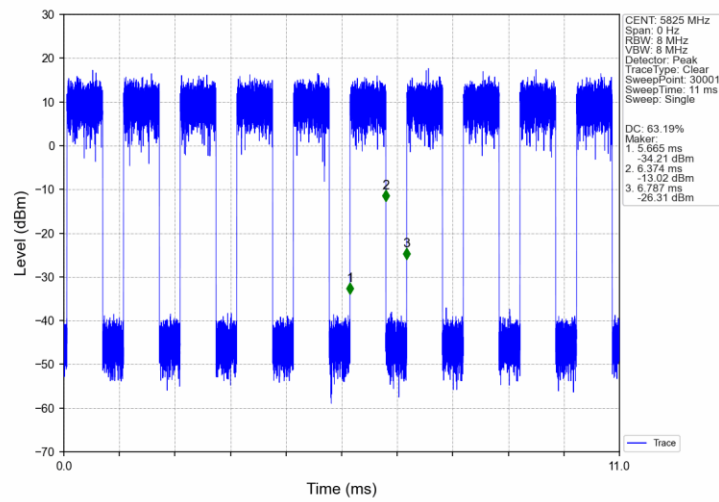
802.11a_LCH_5745MHz_Ant1_NTNV



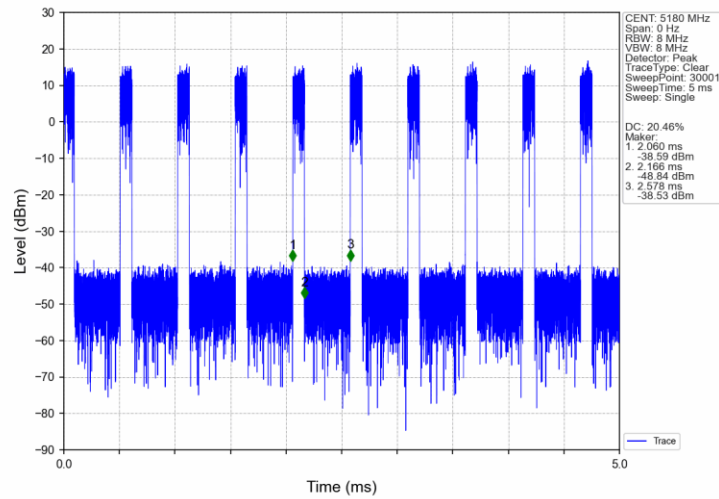
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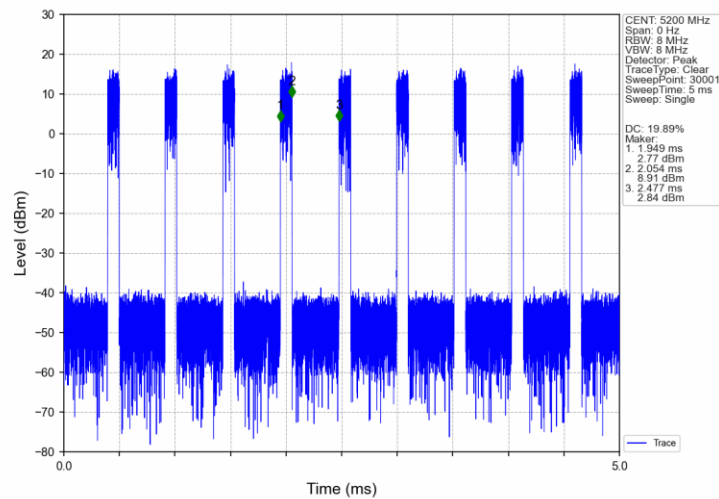
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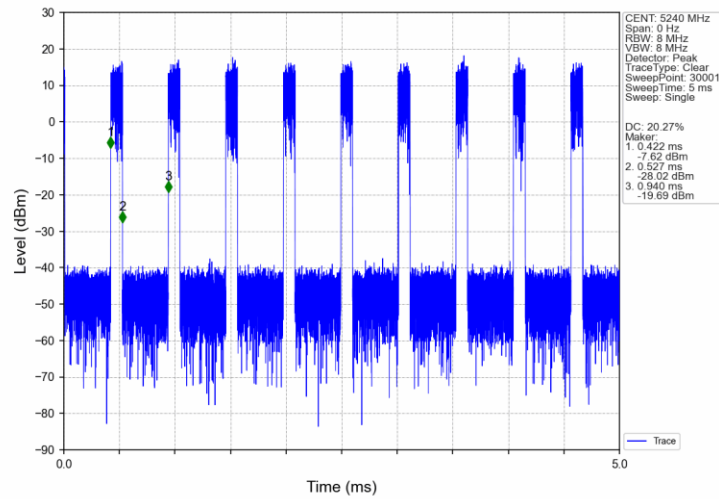
802.11n(HT20) LCH 5180MHz Ant1 NTN



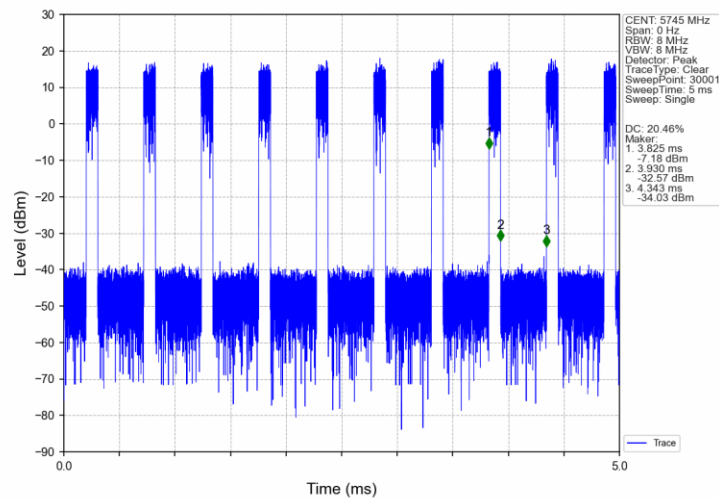
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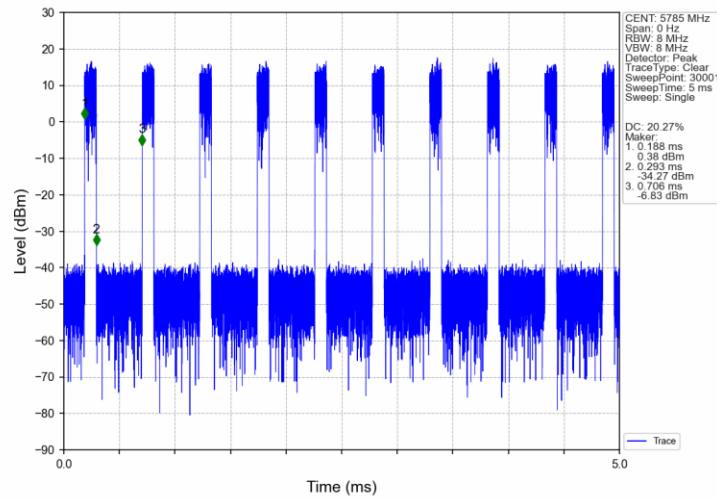
802.11n(HT20) HCH 5240MHz Ant1 NTNv



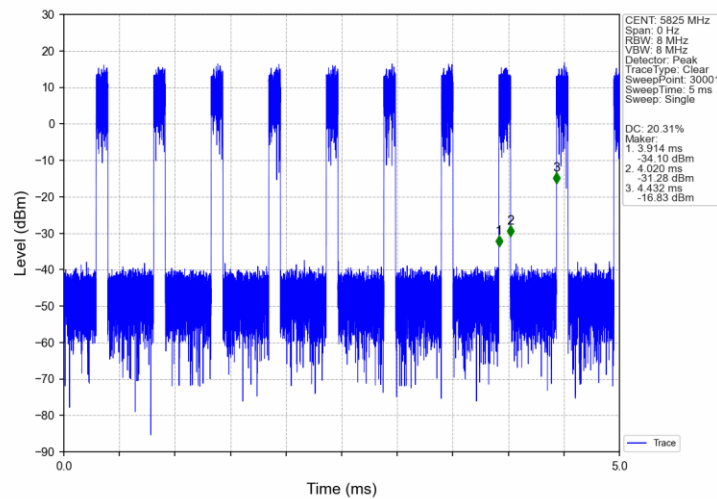
802.11n(HT20) LCH 5745MHz Ant1 NTNv



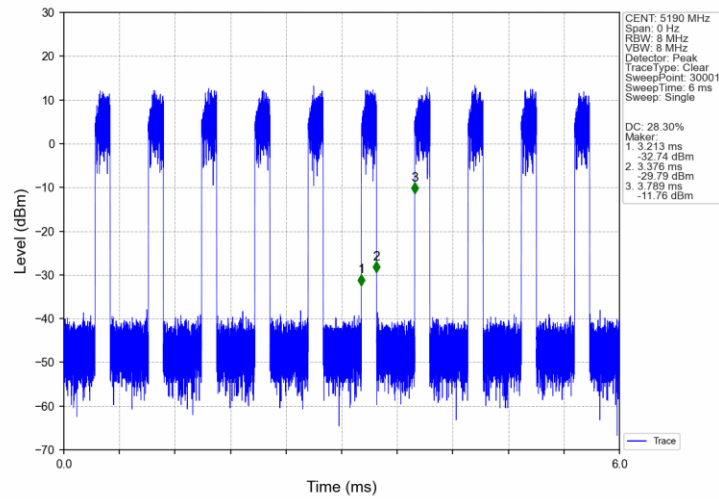
802.11n(HT20) MCH 5785MHz Ant1 NTV



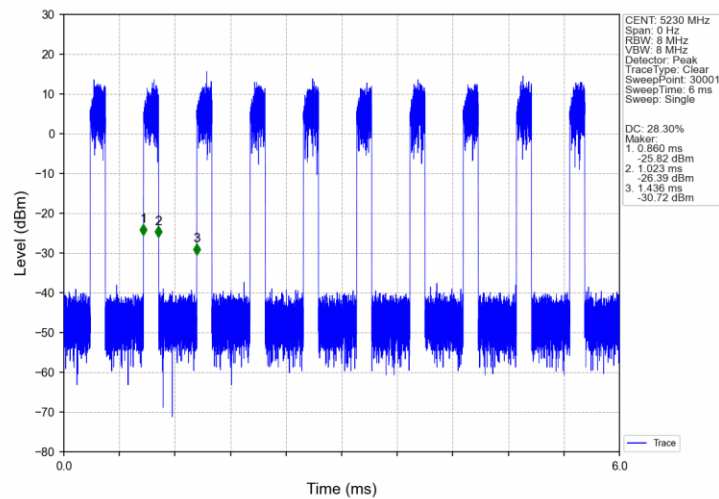
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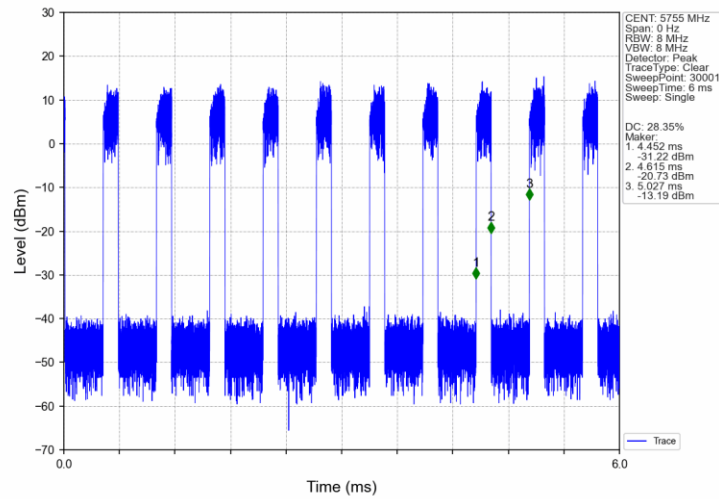
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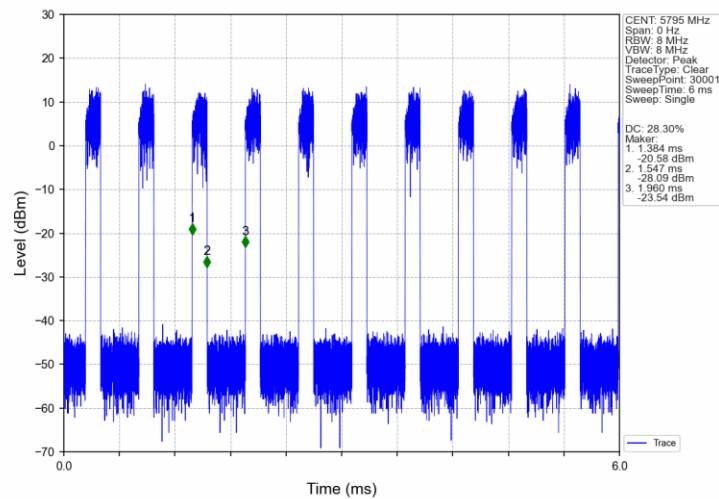
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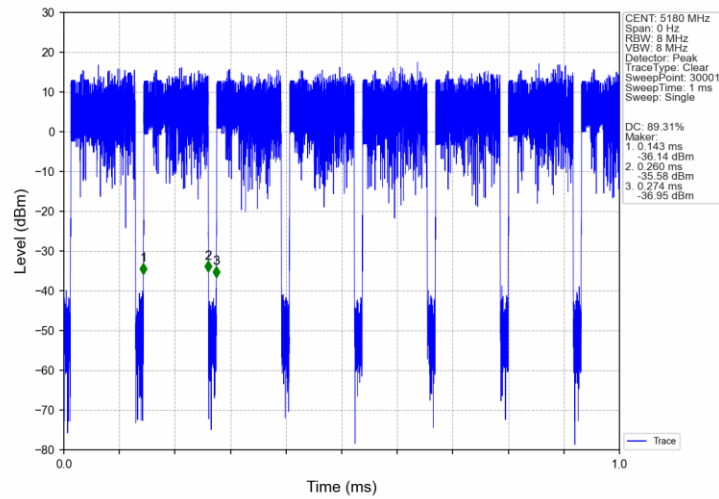
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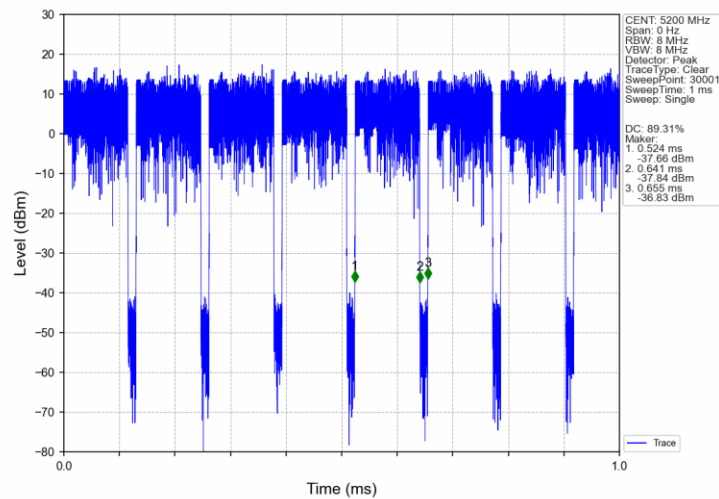
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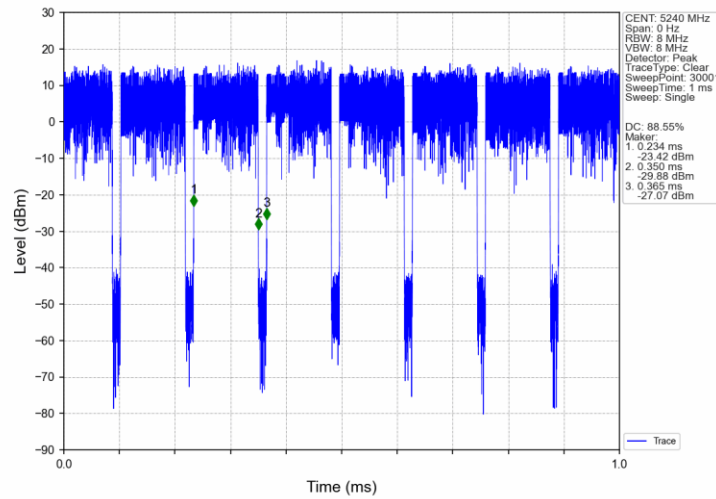
802.11ac(VHT20) LCH 5180MHz Ant1 NTN



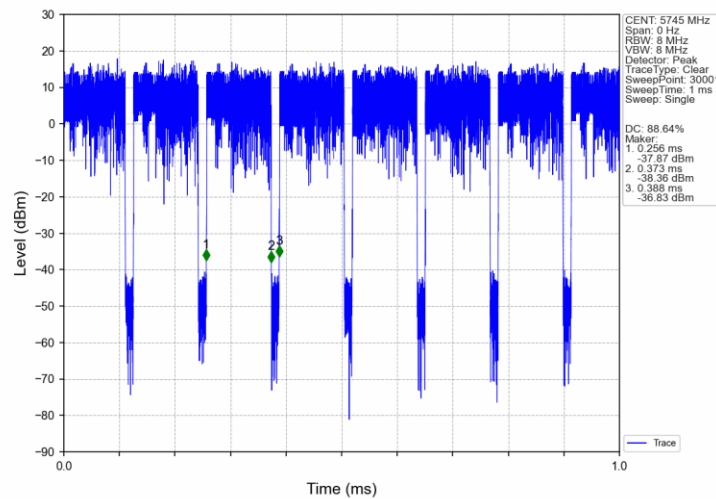
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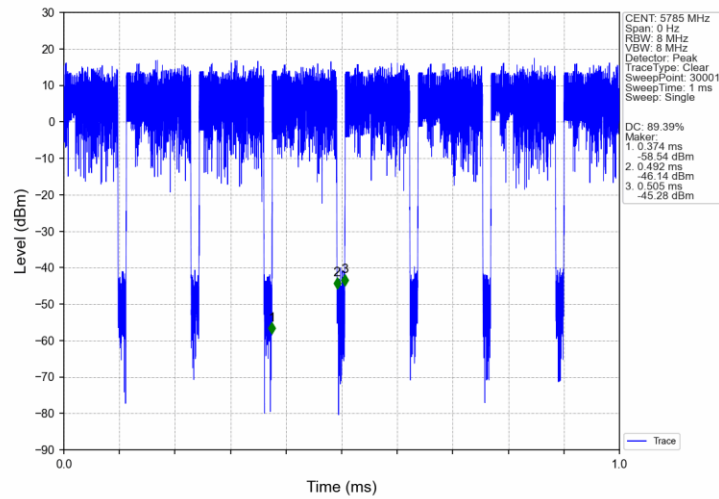
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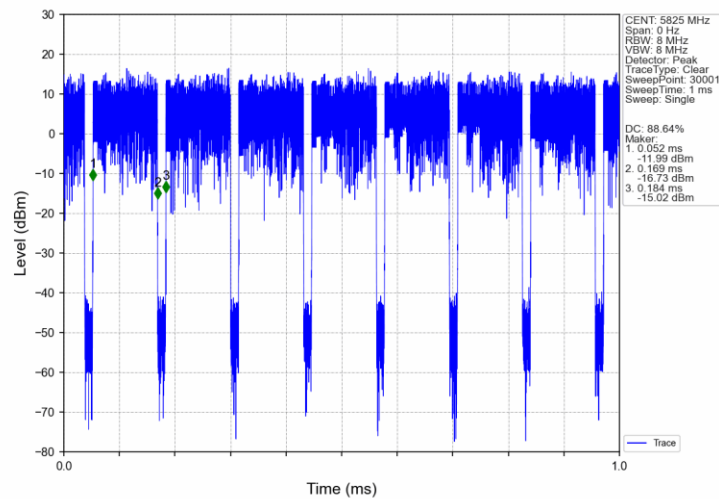
802.11ac(VHT20) LCH 5745MHz Ant1 NTN



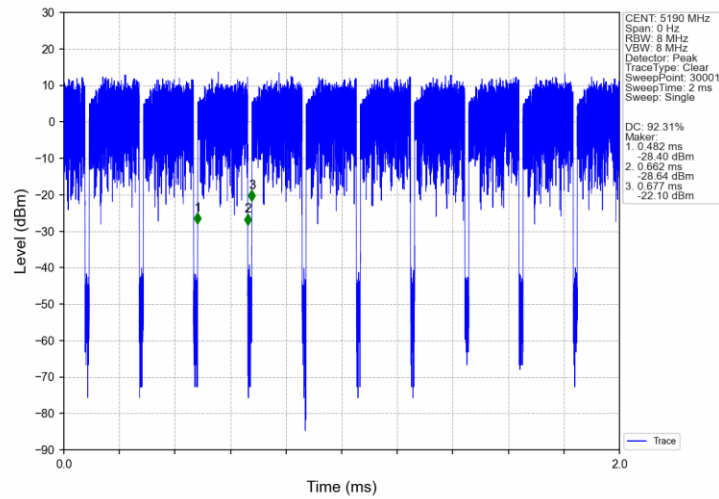
802.11ac(VHT20) MCH 5785MHz Ant1 NTN



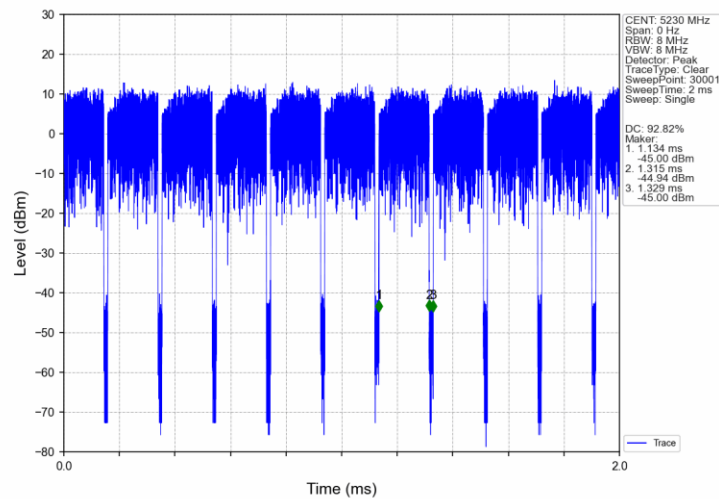
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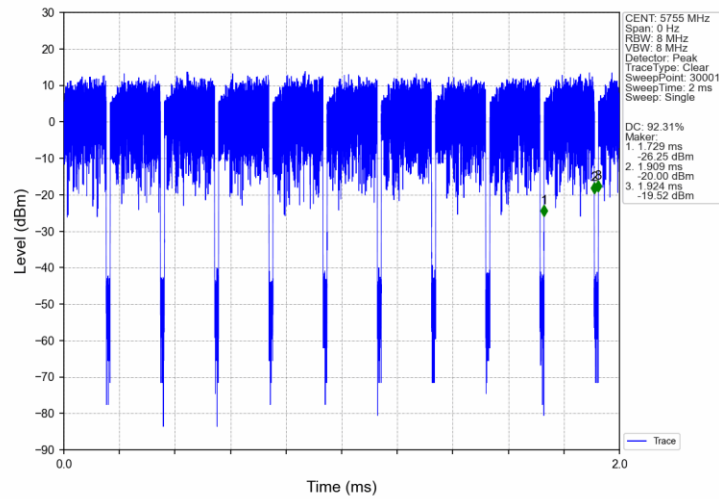
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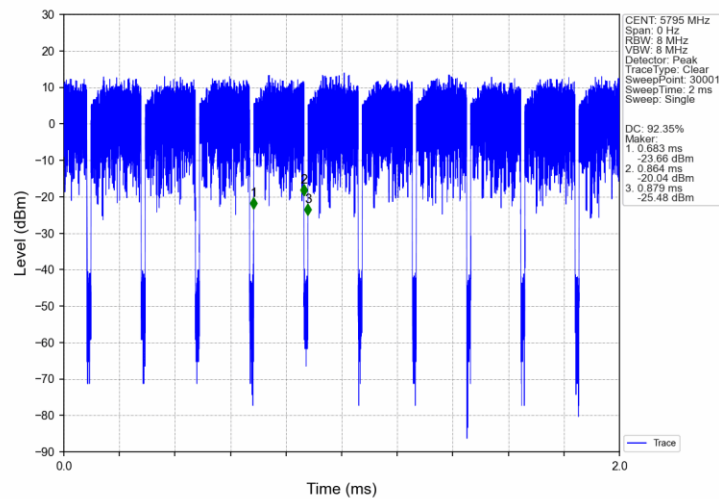
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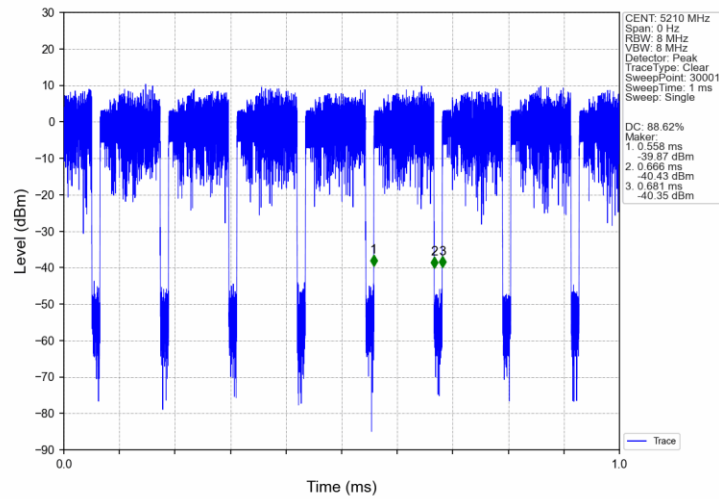
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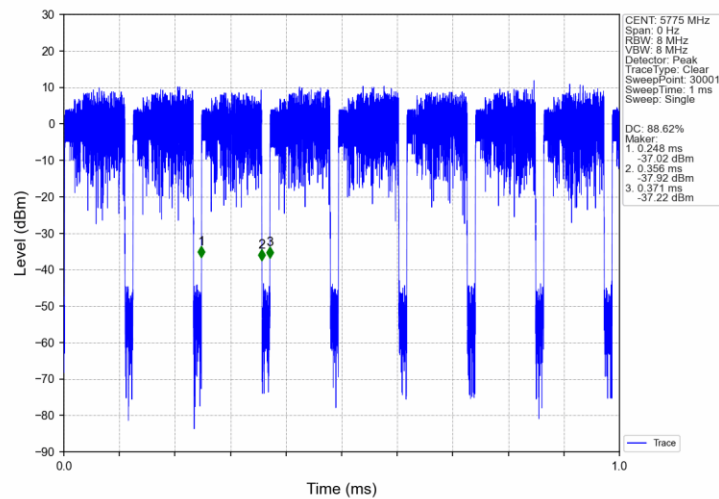
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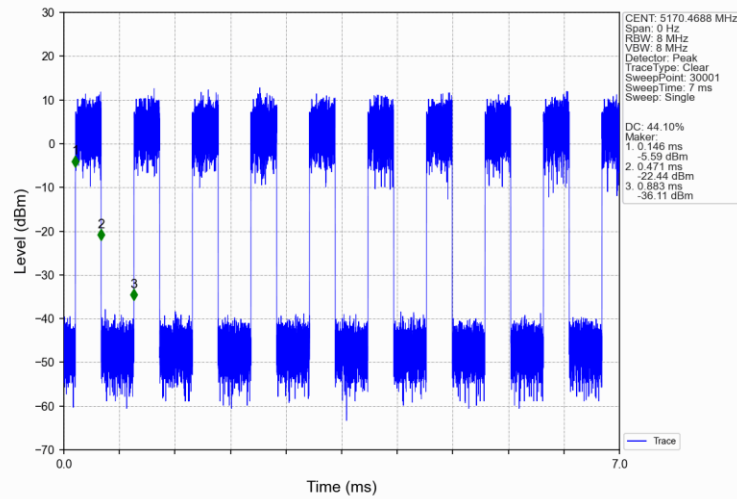
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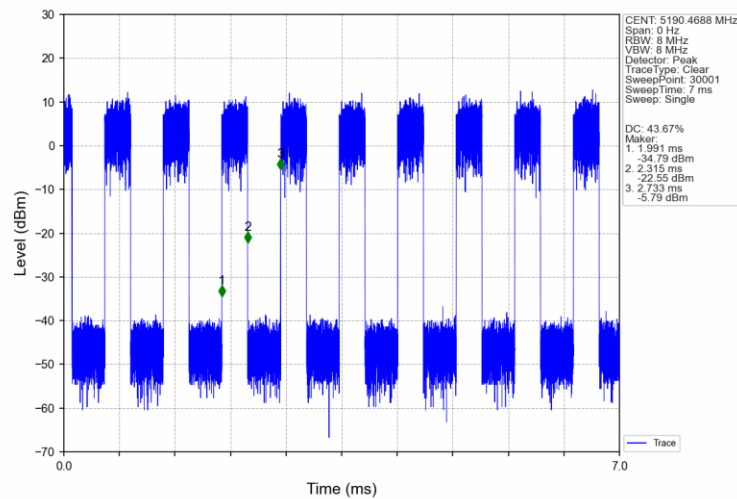
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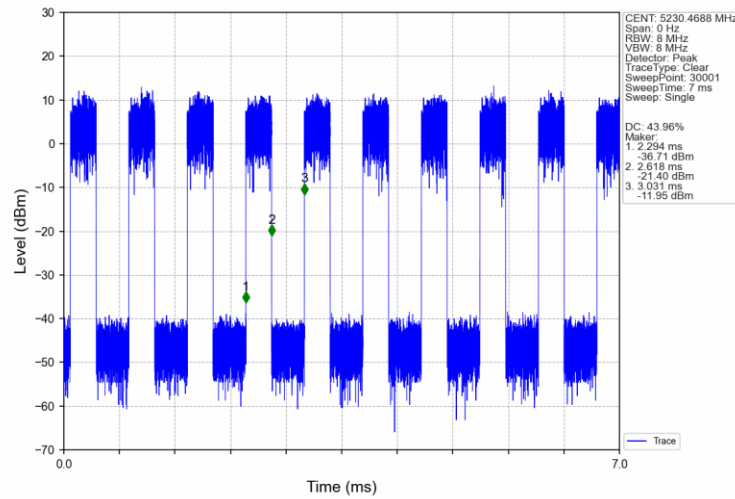
802.11ax(HEW20) LCH 5180MHz SU / Ant1 NTN



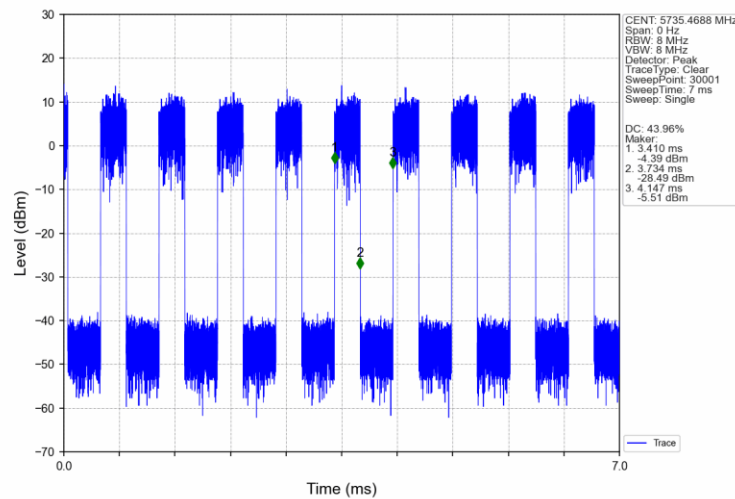
802.11ax(HEW20) MCH 5200MHz SU / Ant1 NTN



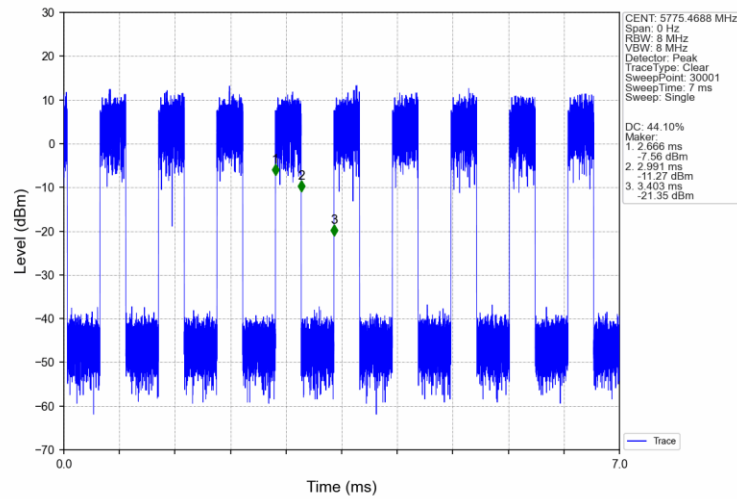
802.11ax(HEW20) HCH 5240MHz SU / Ant1 NTNv



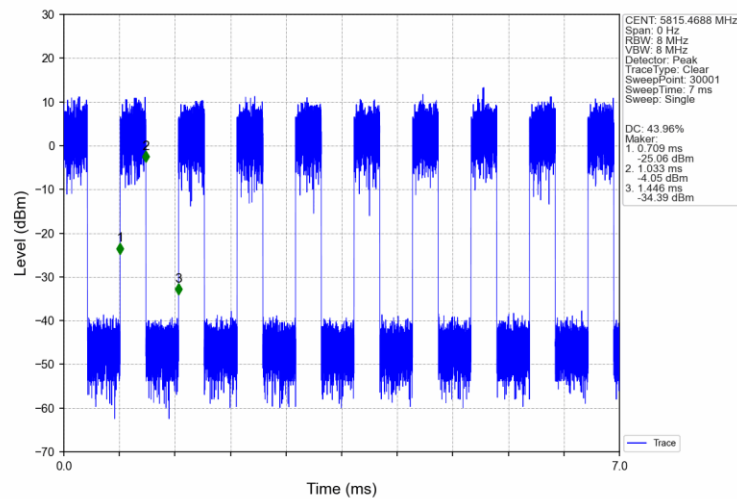
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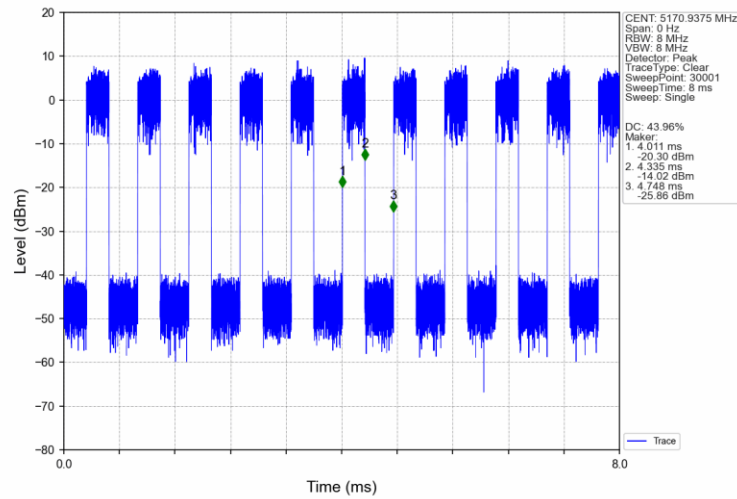
802.11ax(HEW20) MCH 5785MHz SU / Ant1 NTNv



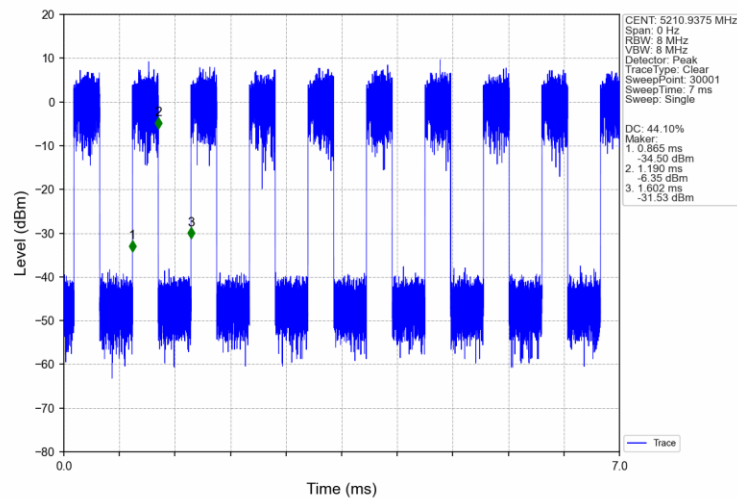
802.11ax(HEW20) HCH 5825MHz SU / Ant1 NTNv



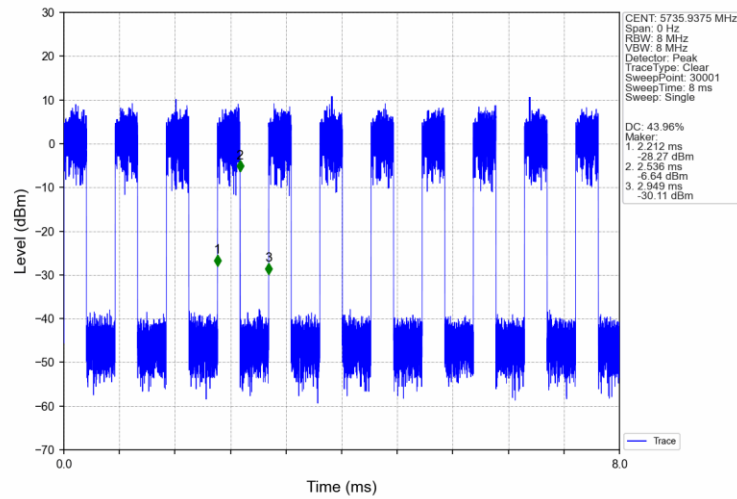
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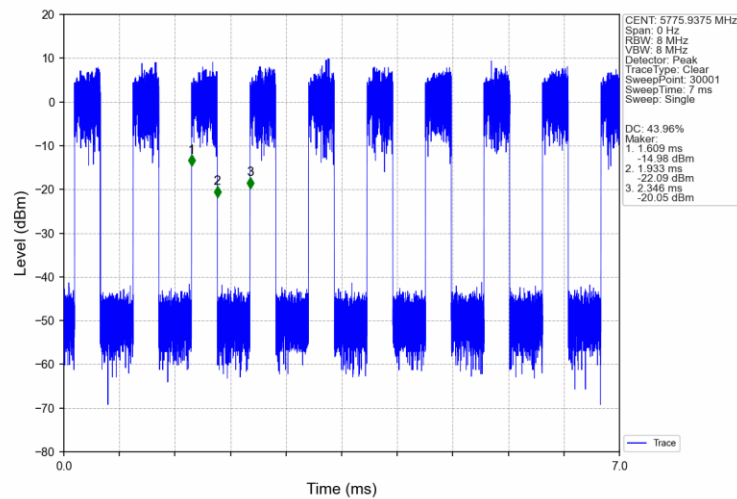
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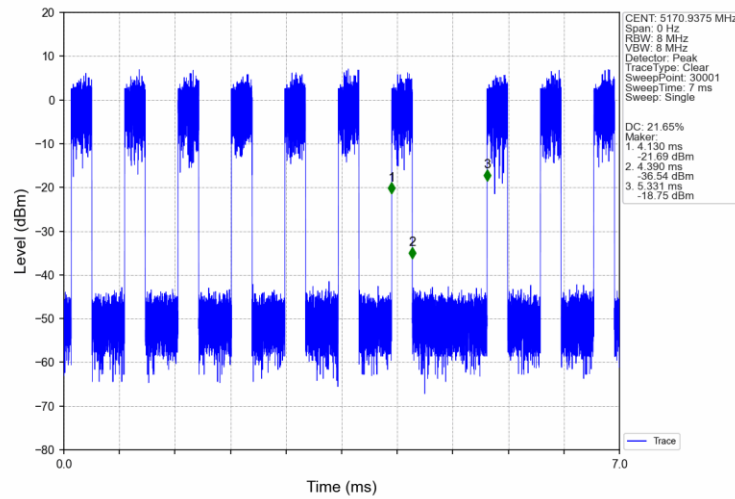
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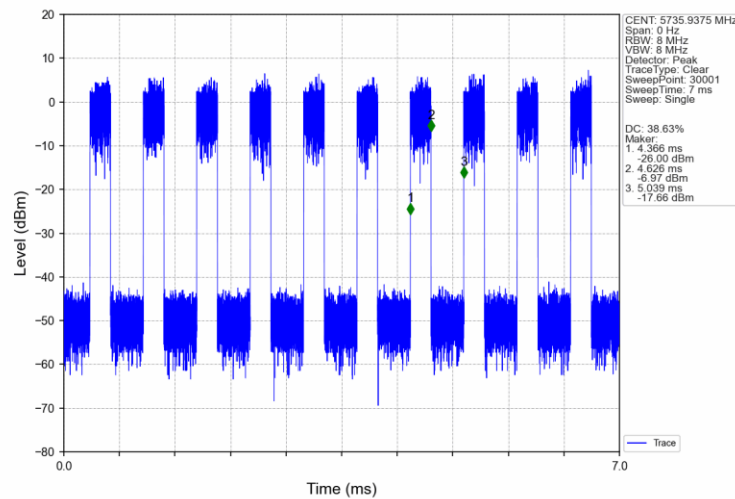
802.11ax(HEW40) HCH 5795MHz SU / Ant1 NTN



802.11ax(HEW80) MCH_5210MHz_SU / Ant1 NTNv



802.11ax(HEW80) MCH_5775MHz_SU / Ant1 NTNv



2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	1	17.921	/	Pass
		5200	/	/	1	17.163	/	Pass
		5240	/	/	1	17.264	/	Pass
		5745	/	/	1	17.084	/	Pass
		5785	/	/	1	17.139	/	Pass
		5825	/	/	1	17.189	/	Pass
802.11n (HT20)	MIMO	5180	/	/	1	17.759	/	Pass
		5200	/	/	1	17.852	/	Pass
		5240	/	/	1	17.920	/	Pass
		5745	/	/	1	17.953	/	Pass
		5785	/	/	1	17.957	/	Pass
		5825	/	/	1	17.975	/	Pass
802.11n (HT40)	MIMO	5190	/	/	1	36.724	/	Pass
		5230	/	/	1	36.541	/	Pass
		5755	/	/	1	36.543	/	Pass
		5795	/	/	1	36.718	/	Pass
802.11ac (VHT20)	MIMO	5180	/	/	1	18.080	/	Pass
		5200	/	/	1	18.073	/	Pass
		5240	/	/	1	18.062	/	Pass
		5745	/	/	1	18.061	/	Pass
		5785	/	/	1	18.059	/	Pass
		5825	/	/	1	18.050	/	Pass
802.11ac (VHT40)	MIMO	5190	/	/	1	36.739	/	Pass
		5230	/	/	1	37.461	/	Pass
		5755	/	/	1	36.759	/	Pass
		5795	/	/	1	36.776	/	Pass
802.11ac (VHT80)	MIMO	5210	/	/	1	76.868	/	Pass
		5775	/	/	1	76.785	/	Pass
802.11ax (HEW20)	MIMO	5180	SU	/	1	19.018	/	Pass
		5200	SU	/	1	18.991	/	Pass
		5240	SU	/	1	18.963	/	Pass
		5745	SU	/	1	18.995	/	Pass
		5785	SU	/	1	18.952	/	Pass
		5825	SU	/	1	18.999	/	Pass
802.11ax (HEW40)	MIMO	5190	SU	/	1	37.803	/	Pass
		5230	SU	/	1	38.021	/	Pass
		5755	SU	/	1	37.901	/	Pass
		5795	SU	/	1	37.915	/	Pass
802.11ax (HEW80)	MIMO	5210	SU	/	1	77.936	/	Pass
		5775	SU	/	1	77.762	/	Pass

Note: This project only tests the worst mode

2.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	26dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	1	25.916	/	Pass
		5200	/	/	1	22.536	/	Pass
		5240	/	/	1	23.550	/	Pass
802.11n (HT20)	MIMO	5180	/	/	1	22.073	/	Pass
		5200	/	/	1	22.609	/	Pass
		5240	/	/	1	23.430	/	Pass
802.11n (HT40)	MIMO	5190	/	/	1	43.705	/	Pass
		5230	/	/	1	44.425	/	Pass
802.11ac (VHT20)	MIMO	5180	/	/	1	22.991	/	Pass
		5200	/	/	1	22.059	/	Pass
		5240	/	/	1	26.974	/	Pass
802.11ac (VHT40)	MIMO	5190	/	/	1	44.306	/	Pass
		5230	/	/	1	54.592	/	Pass
802.11ac (VHT80)	MIMO	5210	/	/	1	86.012	/	Pass
802.11ax (HEW20)	MIMO	5180	SU	/	1	22.526	/	Pass
		5200	SU	/	1	22.122	/	Pass
		5240	SU	/	1	21.822	/	Pass
802.11ax (HEW40)	MIMO	5190	SU	/	1	44.546	/	Pass
		5230	SU	/	1	43.353	/	Pass
802.11ax (HEW80)	MIMO	5210	SU	/	1	85.351	/	Pass

Note: This project only tests the worst mode

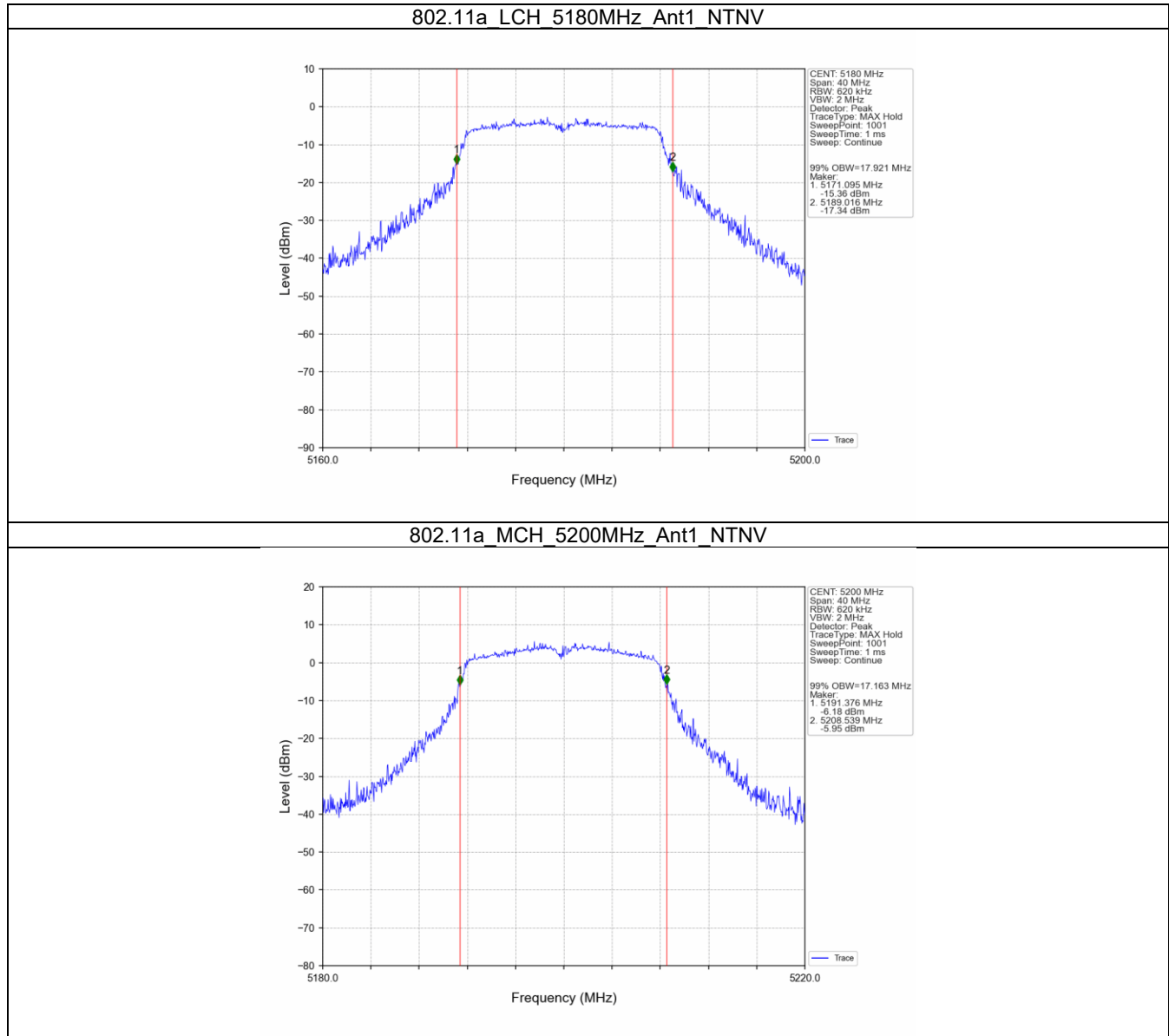
2.1.3 6dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5745	/	/	1	14.929	>=0.5	Pass
		5785	/	/	1	15.064	>=0.5	Pass
		5825	/	/	1	15.144	>=0.5	Pass
802.11n (HT20)	MIMO	5745	/	/	1	16.799	>=0.5	Pass
		5785	/	/	1	16.775	>=0.5	Pass
		5825	/	/	1	16.310	>=0.5	Pass
802.11n (HT40)	MIMO	5755	/	/	1	35.123	>=0.5	Pass
		5795	/	/	1	35.171	>=0.5	Pass
802.11ac (VHT20)	MIMO	5745	/	/	1	16.264	>=0.5	Pass
		5785	/	/	1	16.383	>=0.5	Pass
		5825	/	/	1	15.779	>=0.5	Pass
802.11ac (VHT40)	MIMO	5755	/	/	1	35.435	>=0.5	Pass
		5795	/	/	1	35.141	>=0.5	Pass
802.11ac (VHT80)	MIMO	5775	/	/	1	75.152	>=0.5	Pass
802.11ax (HEW20)	MIMO	5745	SU	/	1	16.638	>=0.5	Pass
		5785	SU	/	1	16.401	>=0.5	Pass
		5825	SU	/	1	17.465	>=0.5	Pass
802.11ax (HEW40)	MIMO	5755	SU	/	1	33.922	>=0.5	Pass
		5795	SU	/	1	35.133	>=0.5	Pass
802.11ax (HEW80)	MIMO	5775	SU	/	1	76.395	>=0.5	Pass

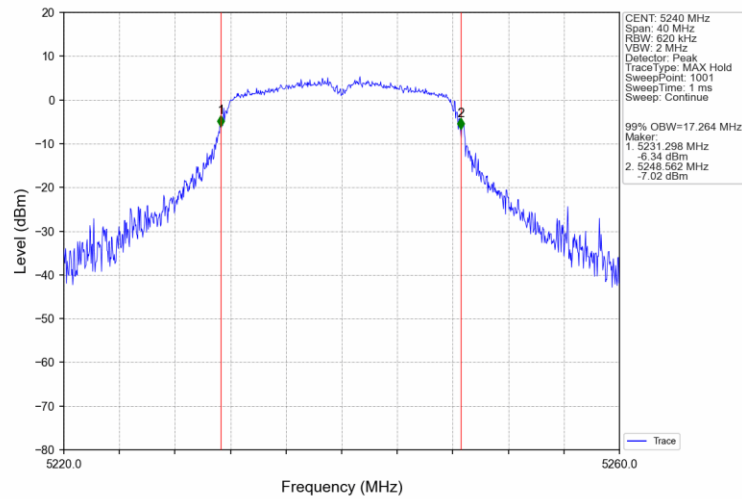
Note: This project only tests the worst mode

2.2 Test Graph

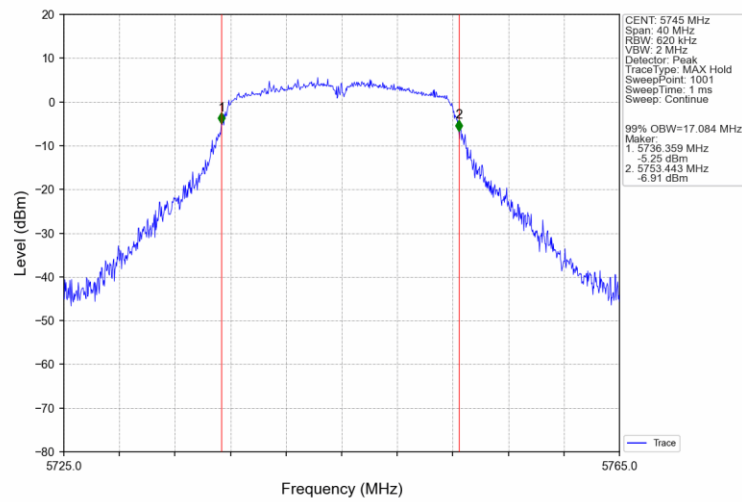
2.2.1 OBW



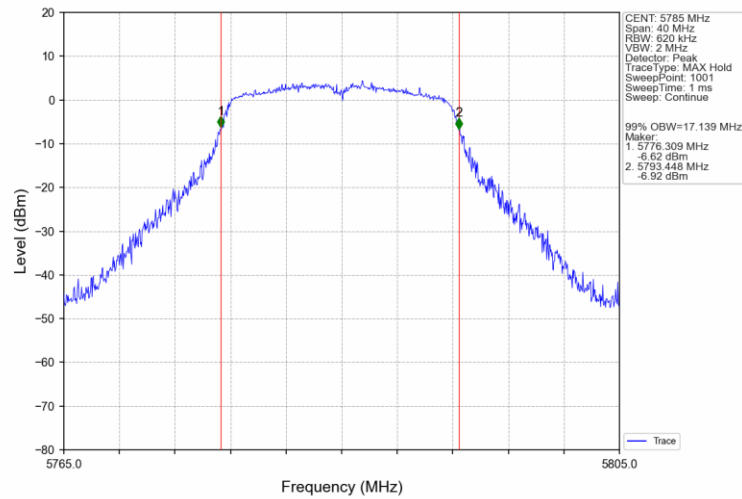
802.11a_HCH_5240MHz_Ant1_NTNV



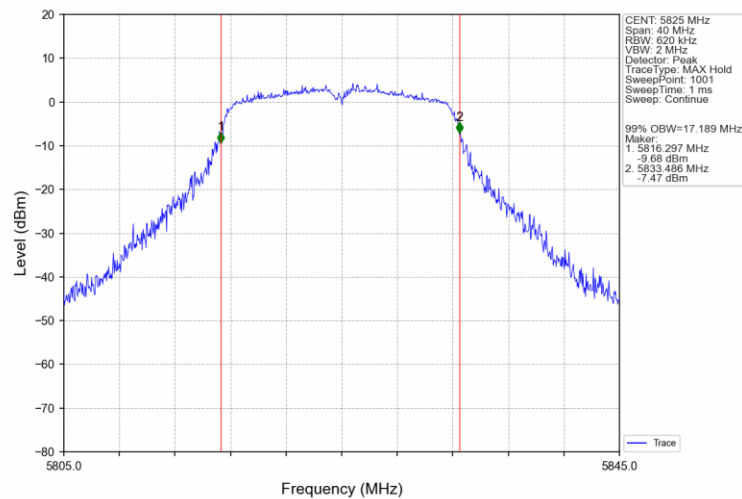
802.11a_LCH_5745MHz_Ant1_NTNV



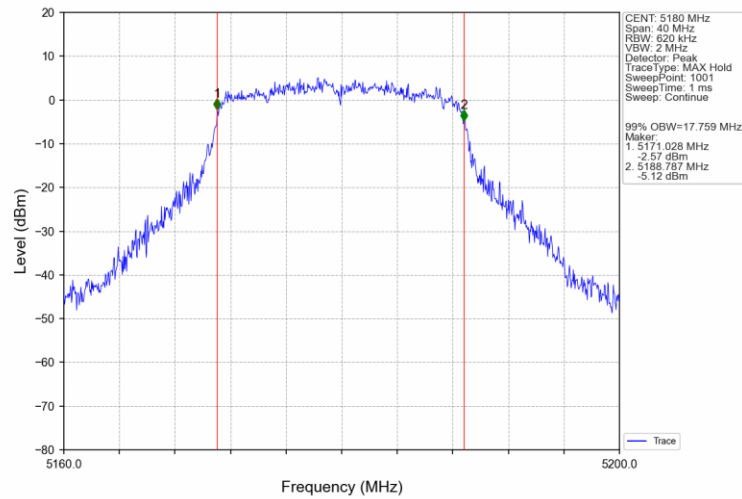
802.11a_MCH_5785MHz_Ant1_NTNV



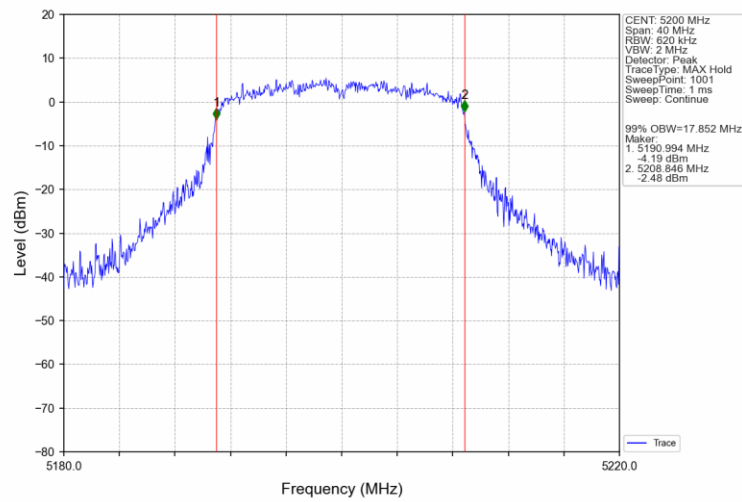
802.11a_HCH_5825MHz_Ant1_NTNV



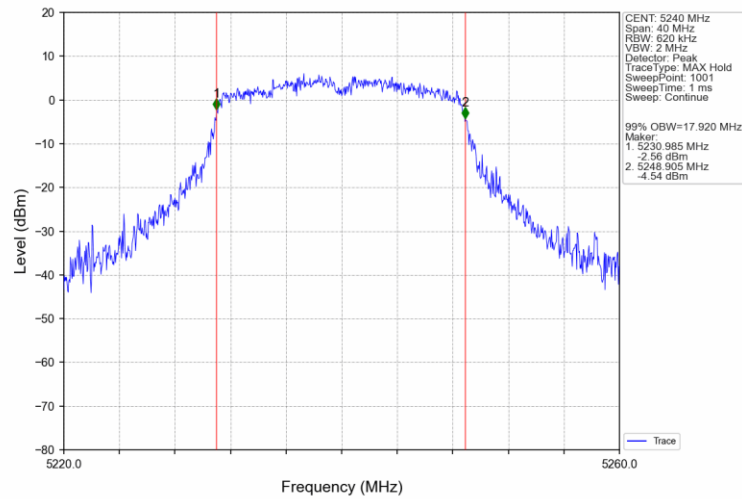
802.11n(HT20) LCH 5180MHz Ant1 NTN



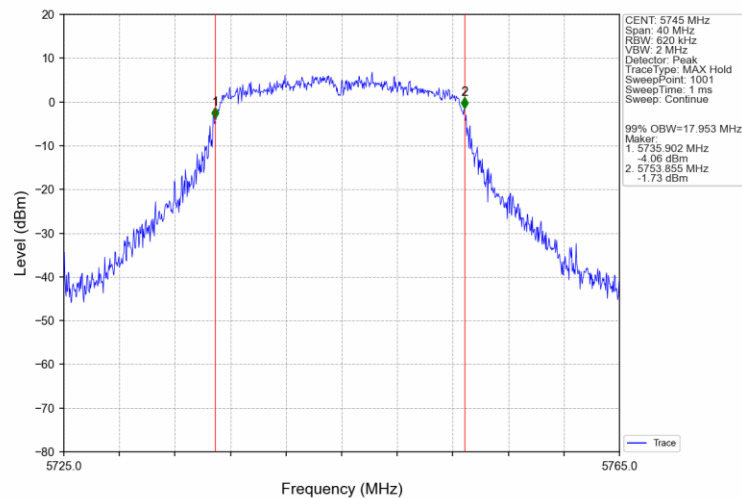
802.11n(HT20) MCH 5200MHz Ant1 NTN



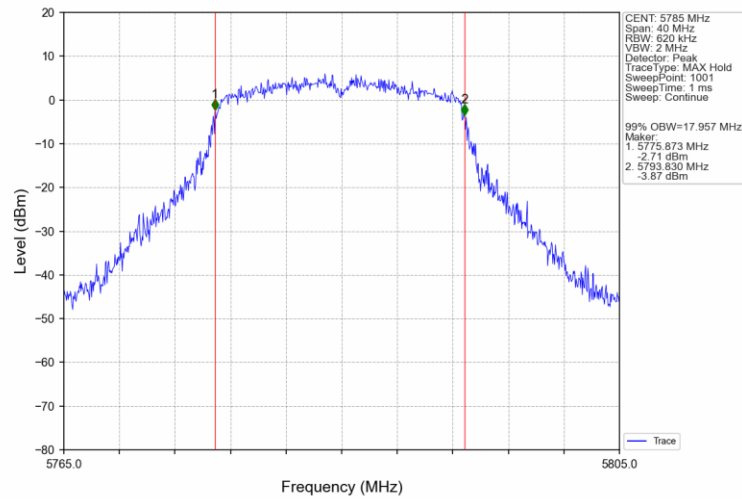
802.11n(HT20) HCH 5240MHz Ant1 NTNv



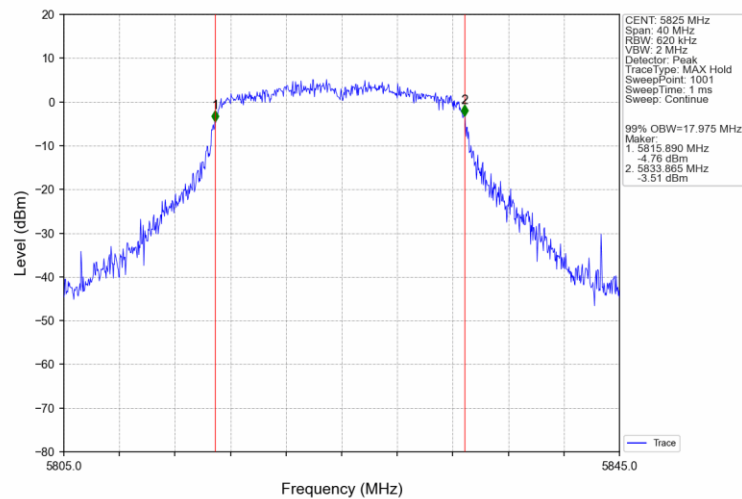
802.11n(HT20) LCH 5745MHz Ant1 NTNv



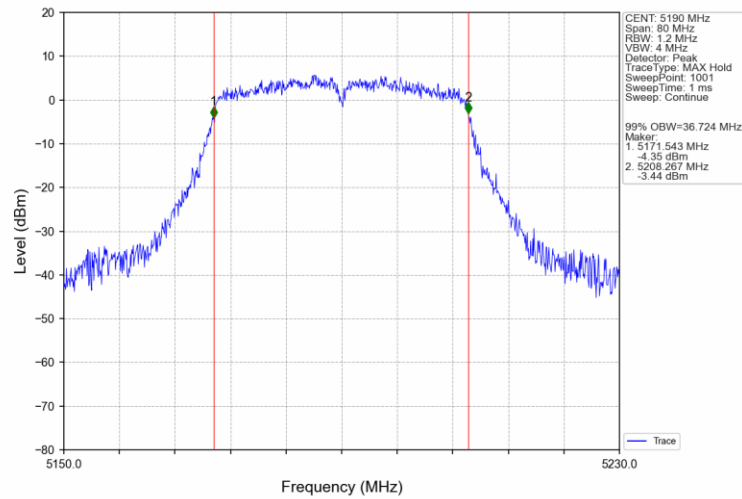
802.11n(HT20) MCH 5785MHz Ant1 NTN



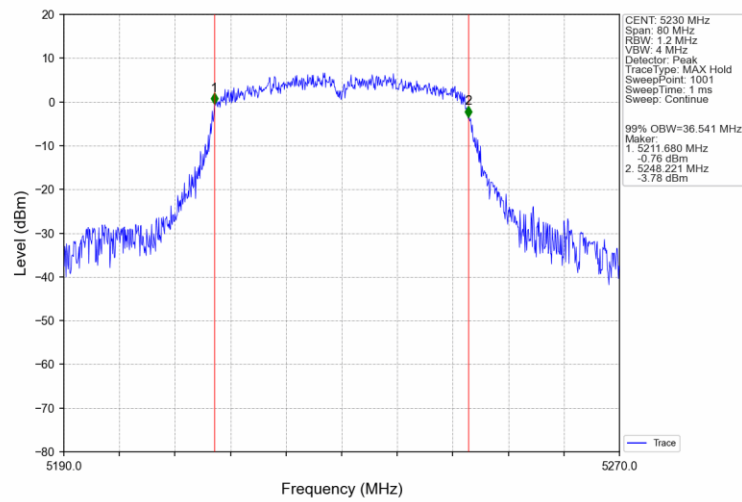
802.11n(HT20) HCH 5825MHz Ant1 NTN



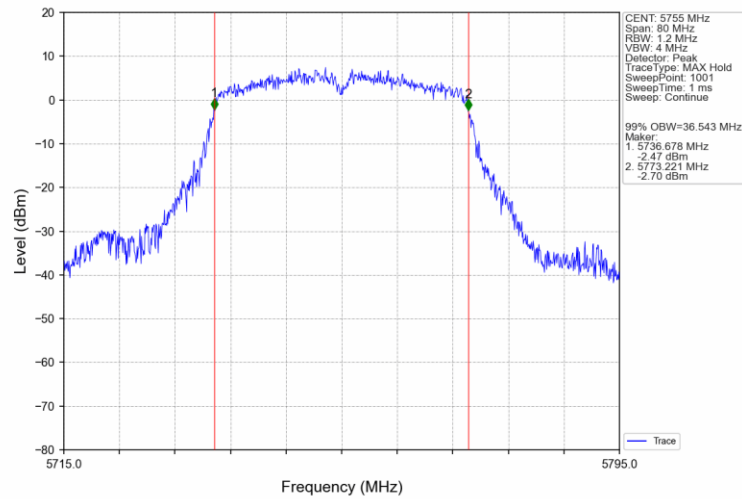
802.11n(HT40) LCH 5190MHz Ant1 NTN



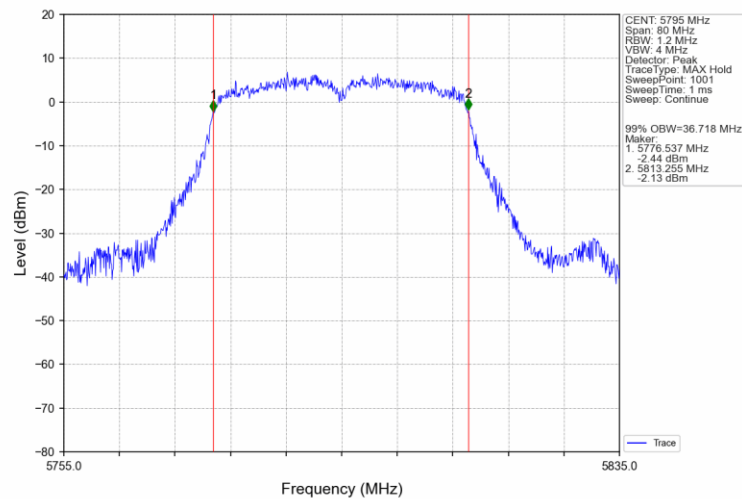
802.11n(HT40) HCH 5230MHz Ant1 NTN



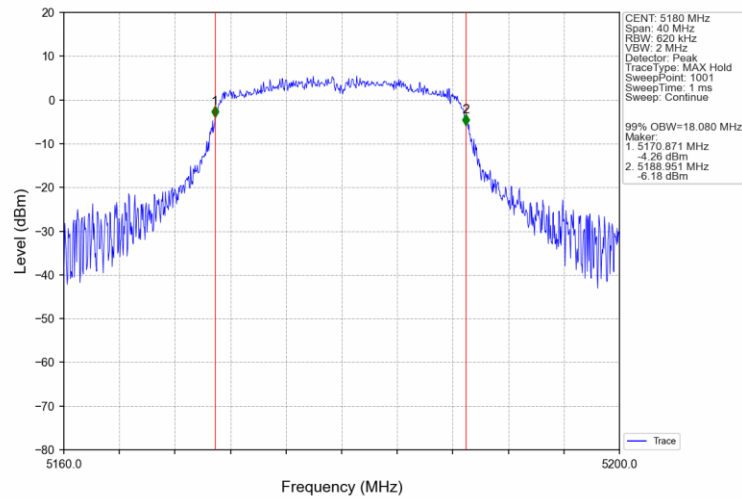
802.11n(HT40) LCH 5755MHz Ant1 NTN



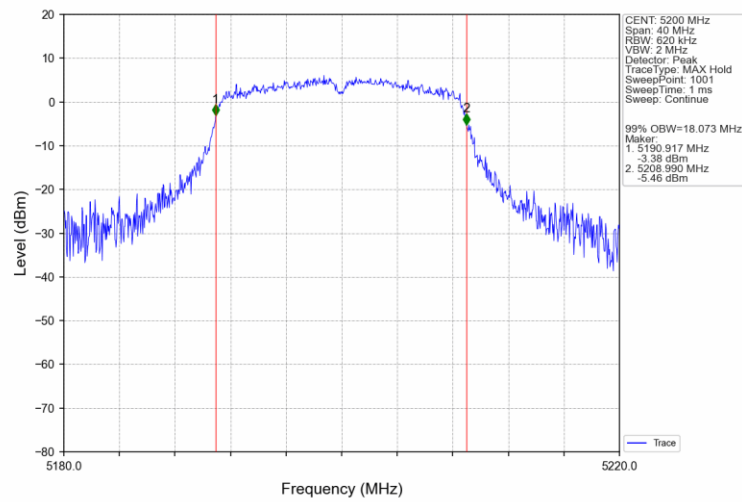
802.11n(HT40) HCH 5795MHz Ant1 NTN



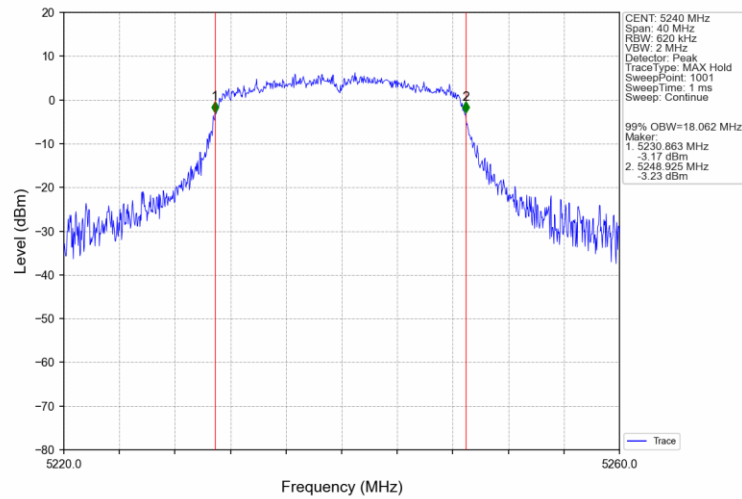
802.11ac(VHT20) LCH 5180MHz Ant1 NTN



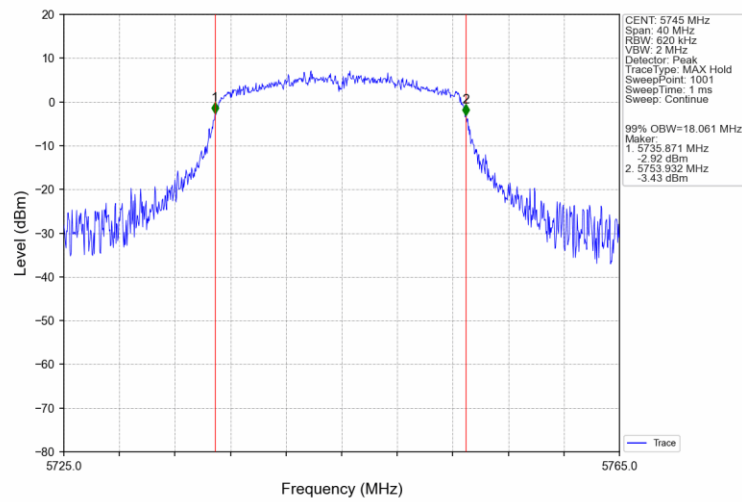
802.11ac(VHT20) MCH 5200MHz Ant1 NTN



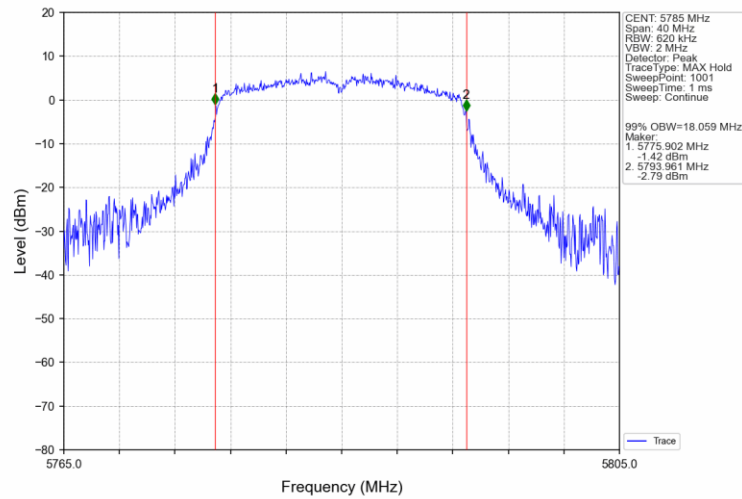
802.11ac(VHT20) HCH 5240MHz Ant1 NTN



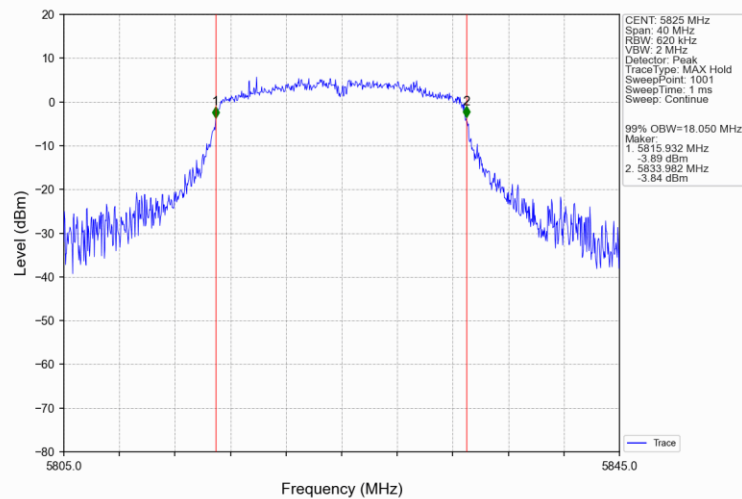
802.11ac(VHT20) LCH 5745MHz Ant1 NTN



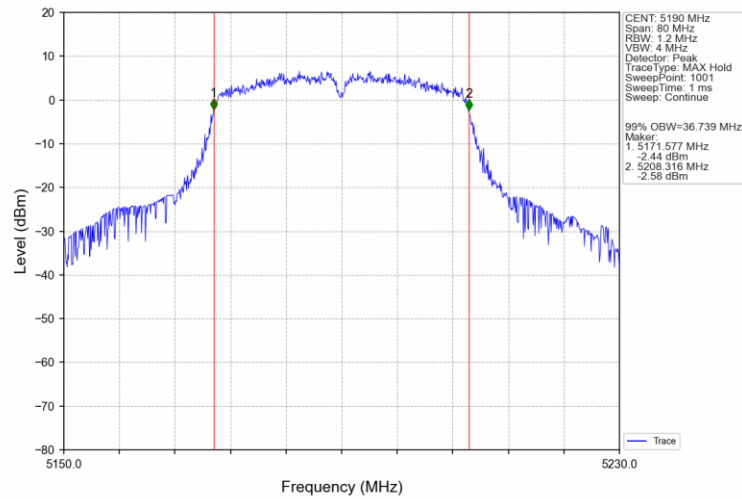
802.11ac(VHT20) MCH 5785MHz Ant1 NTN



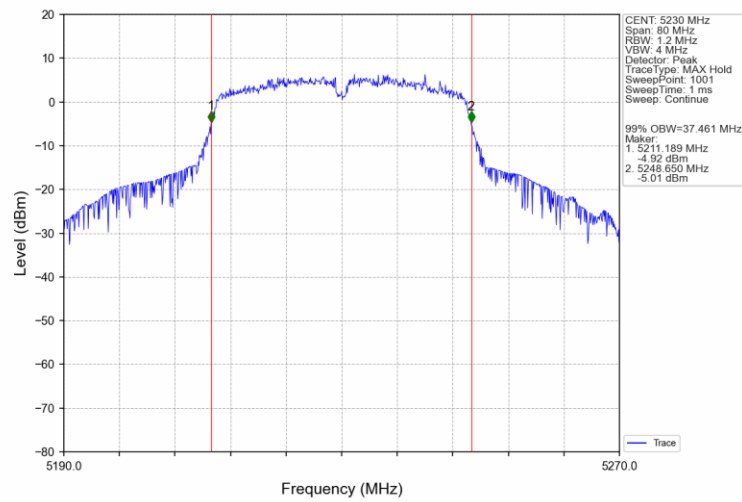
802.11ac(VHT20) HCH 5825MHz Ant1 NTN



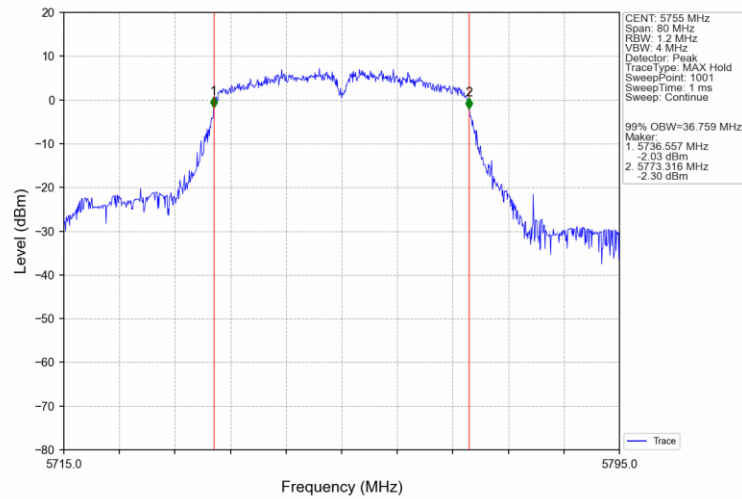
802.11ac(VHT40) LCH 5190MHz Ant1 NTN



802.11ac(VHT40) HCH 5230MHz Ant1 NTN



802.11ac(VHT40) LCH 5755MHz Ant1 NTN



802.11ac(VHT40) HCH 5795MHz Ant1 NTN

