

RF Test Data

For

Project No.:	DLE-250919023R
Client:	Zhuhai Bigway Electronic Co.,Ltd.
Manufacturer:	Zhuhai Bigway Electronic Co.,Ltd.
Product Description:	Wireless HDMI Transmitter and Receiver
Model Number:	GT-HDWL500D
Test Engineer:	Alisa Song
Test Date:	2025-09-22

Test Summary

Item	Result
Duty Cycle	Pass
Bandwidth	Pass
Maximum Conducted Output Power	Pass
Maximum Power Spectral Density	Pass
Frequency Stability	Pass

1. Duty Cycle

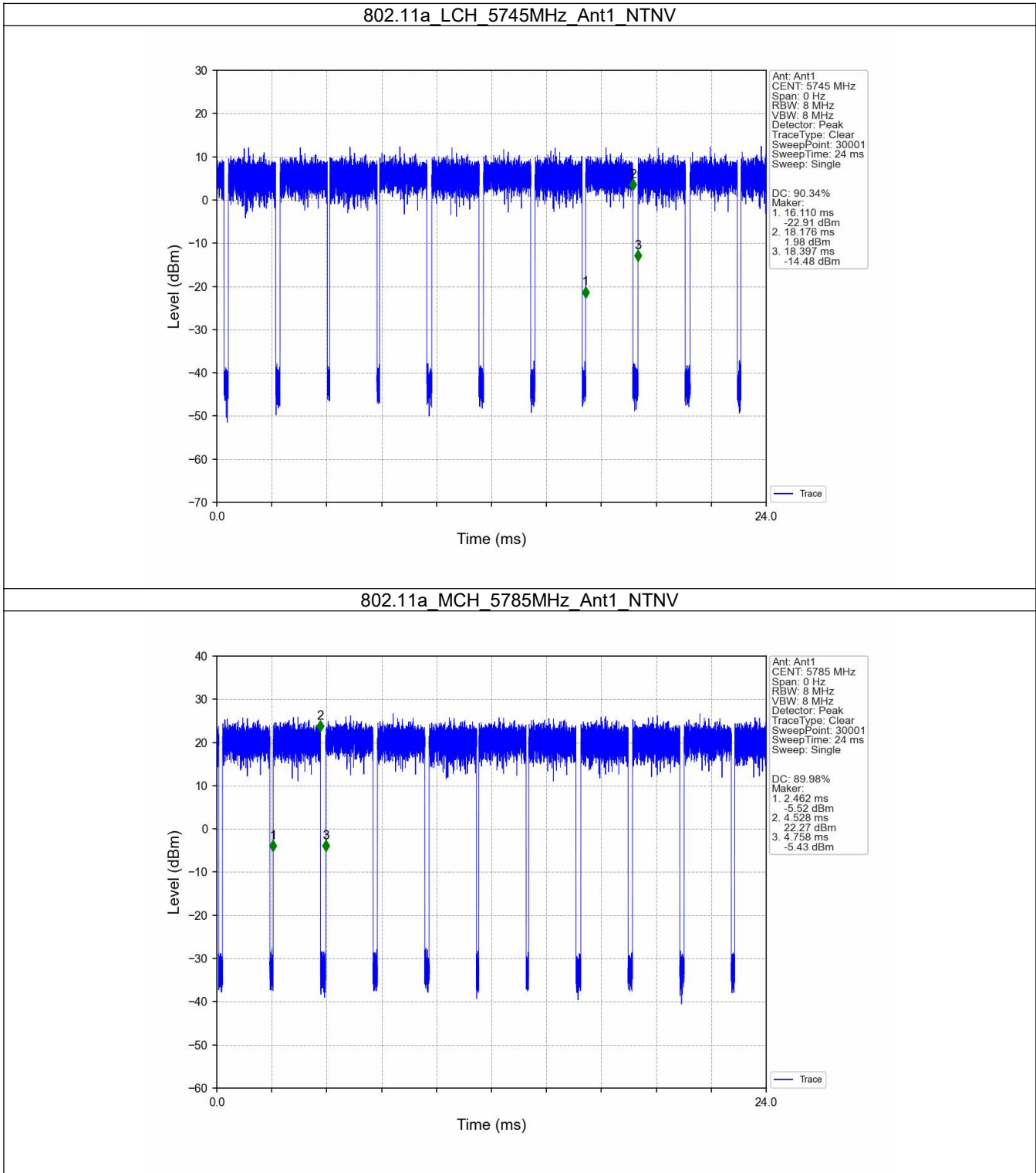
1.1 Test Result

1.1.1 Ant1

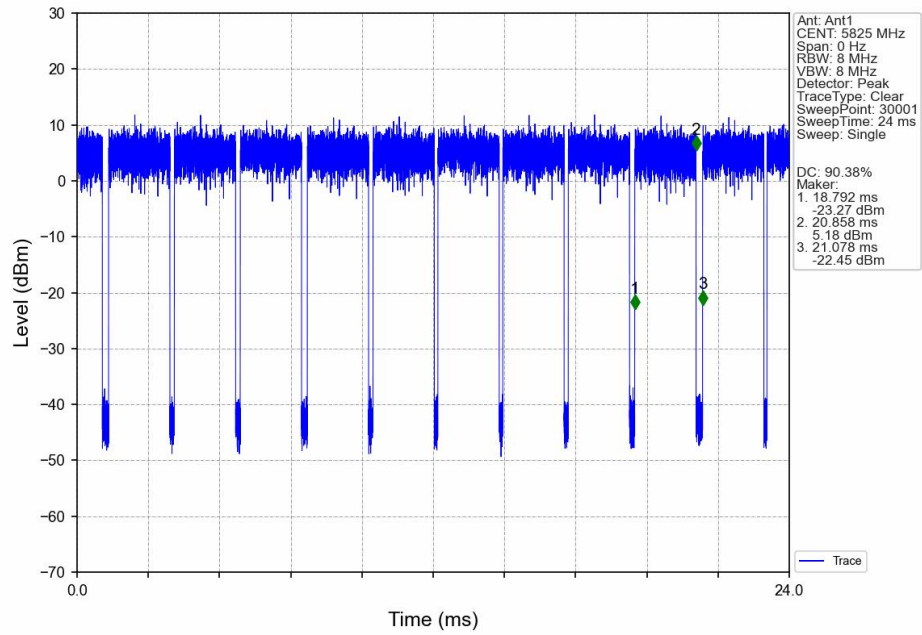
Ant1							
Mode	Tx Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	MIMO	5745	2.066	2.287	90.34	0.44	4.87
		5785	2.066	2.296	89.98	0.46	5.25
		5825	2.066	2.286	90.38	0.44	4.90
802.11n (HT20)	MIMO	5745	1.922	2.125	90.45	0.44	4.01
		5785	1.922	2.142	89.73	0.47	3.51
		5825	1.922	2.142	89.73	0.47	5.58
802.11n (HT40)	MIMO	5755	0.946	1.166	81.13	0.91	9.07
		5795	0.946	1.175	80.51	0.94	7.38

1.2 Test Graph

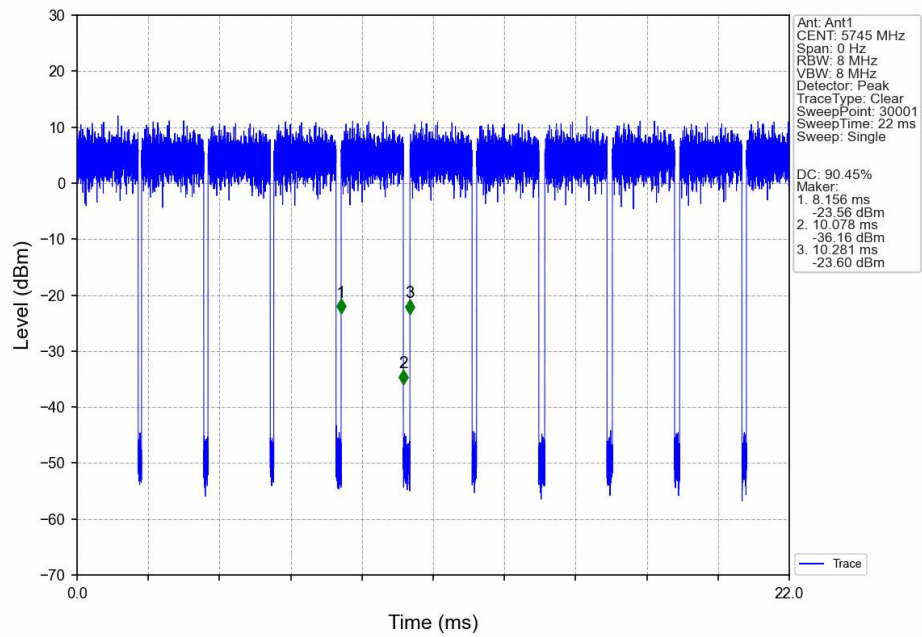
1.2.1 Ant1



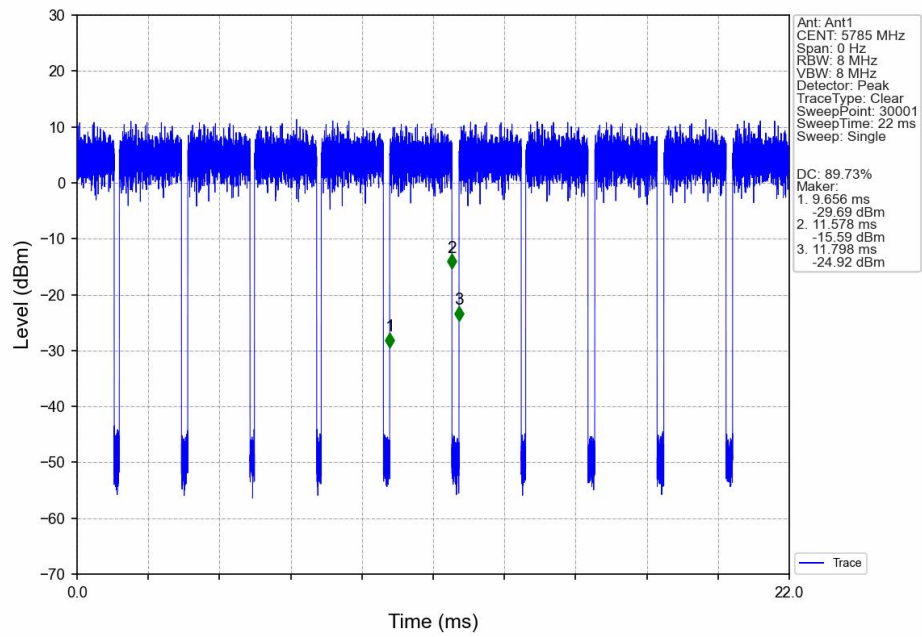
802.11a_HCH_5825MHz_Ant1_NTNV



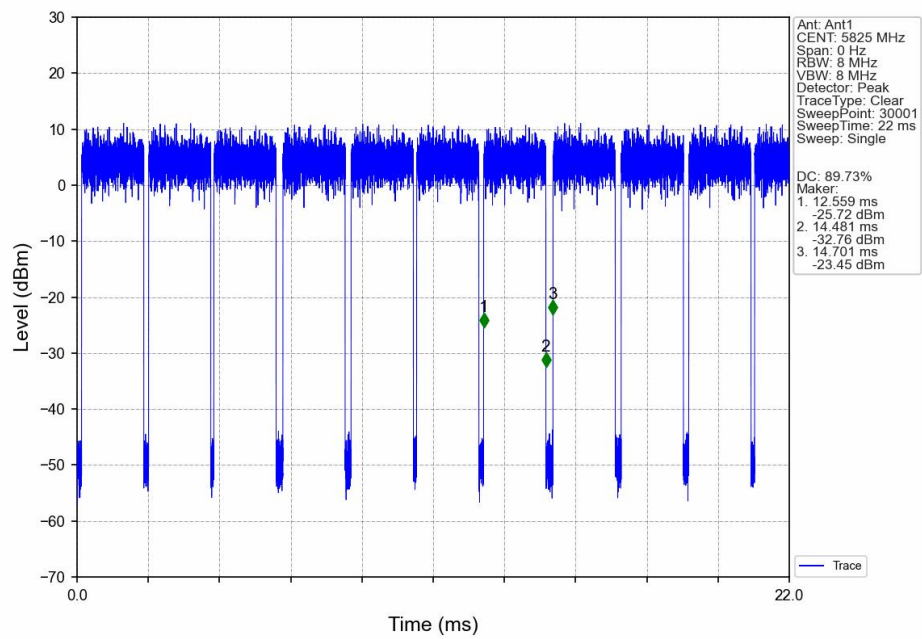
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



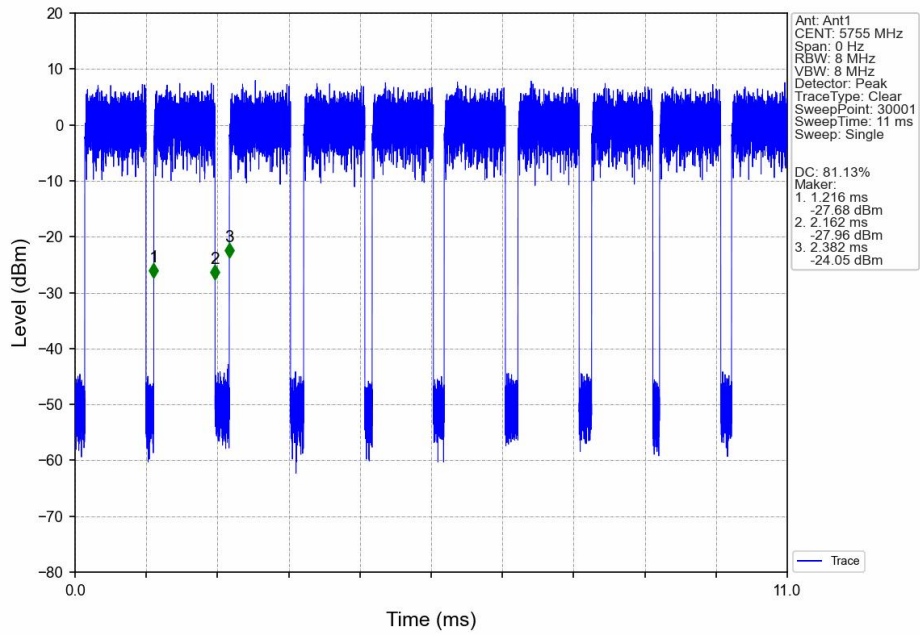
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



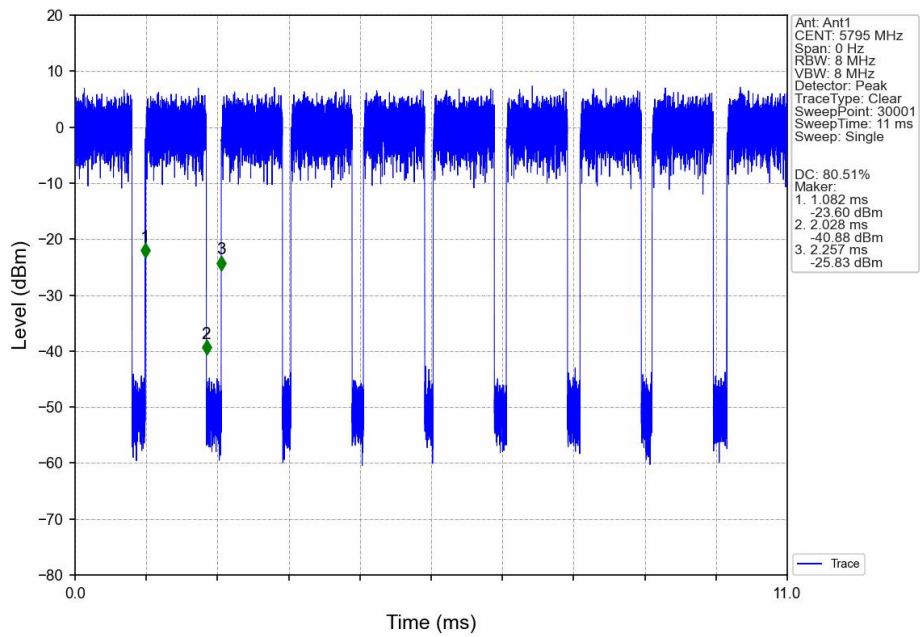
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

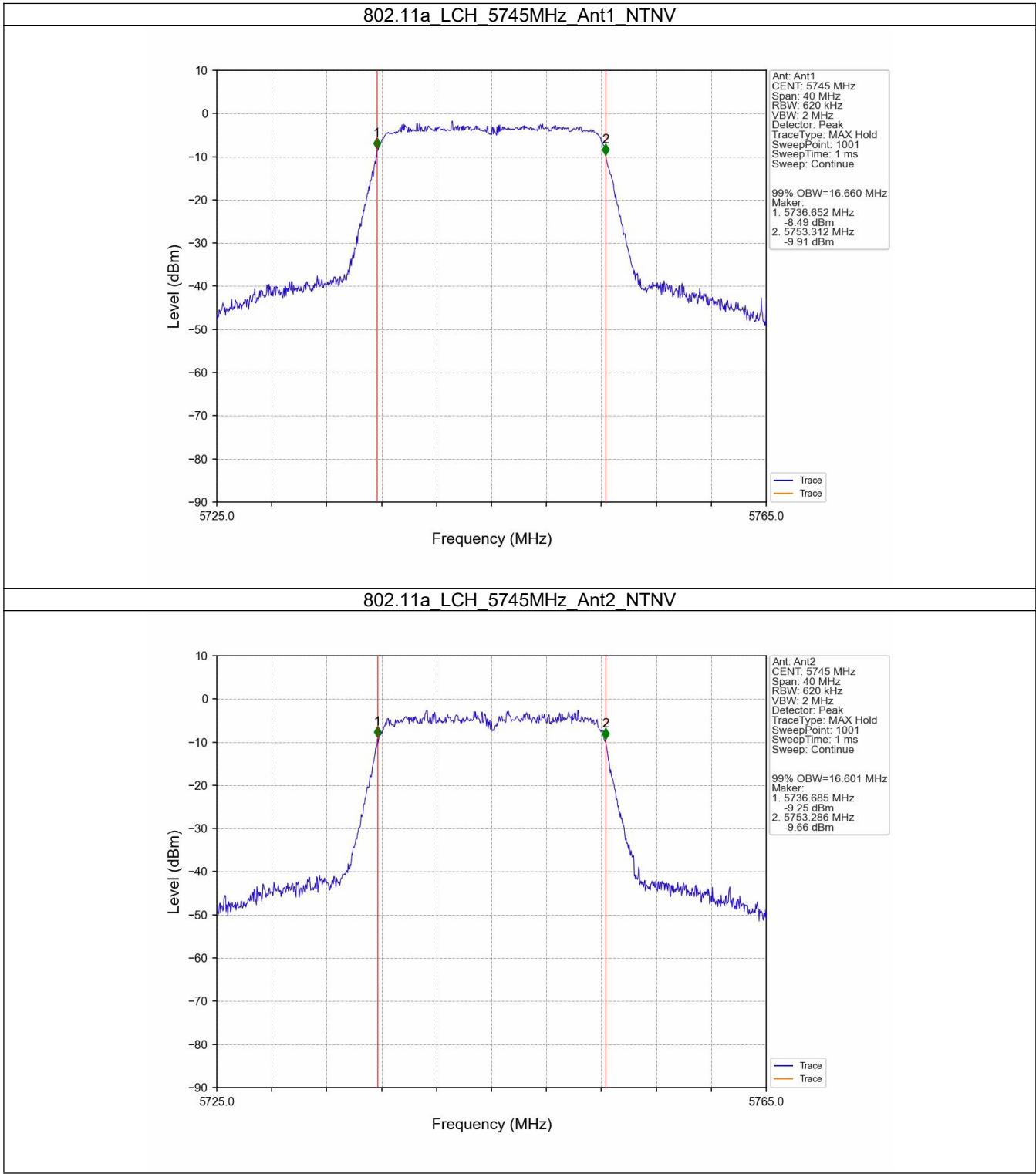
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	MIMO	5745	1	16.660	/	Pass
			2	16.601	/	Pass
		5785	1	16.996	/	Pass
			2	16.598	/	Pass
		5825	1	16.661	/	Pass
			2	16.594	/	Pass
802.11n (HT20)	MIMO	5745	1	17.767	/	Pass
			2	17.810	/	Pass
		5785	1	17.805	/	Pass
			2	17.773	/	Pass
		5825	1	17.813	/	Pass
			2	17.791	/	Pass
802.11n (HT40)	MIMO	5755	1	36.443	/	Pass
			2	36.490	/	Pass
		5795	1	36.444	/	Pass
			2	36.632	/	Pass

2.1.2 6dB BW

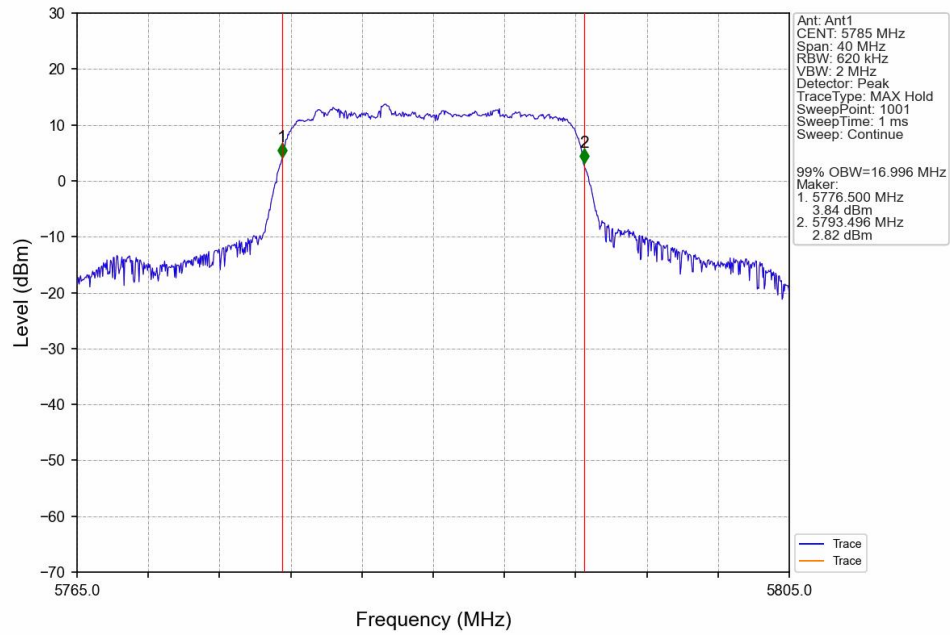
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	MIMO	5745	1	16.359	≥ 0.5	Pass
			2	16.389	≥ 0.5	Pass
		5785	1	16.349	≥ 0.5	Pass
			2	16.370	≥ 0.5	Pass
		5825	1	16.347	≥ 0.5	Pass
			2	16.380	≥ 0.5	Pass
802.11n (HT20)	MIMO	5745	1	17.602	≥ 0.5	Pass
			2	17.583	≥ 0.5	Pass
		5785	1	17.574	≥ 0.5	Pass
			2	17.577	≥ 0.5	Pass
		5825	1	17.575	≥ 0.5	Pass
			2	17.584	≥ 0.5	Pass
802.11n (HT40)	MIMO	5755	1	35.168	≥ 0.5	Pass
			2	35.167	≥ 0.5	Pass
		5795	1	35.178	≥ 0.5	Pass
			2	35.186	≥ 0.5	Pass

2.2 Test Graph

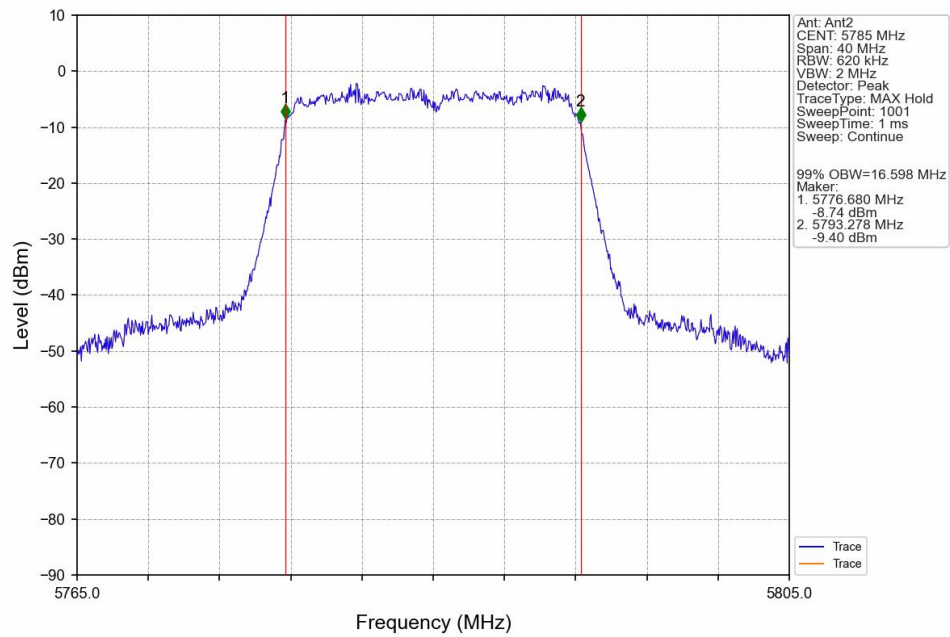
2.2.1 OBW



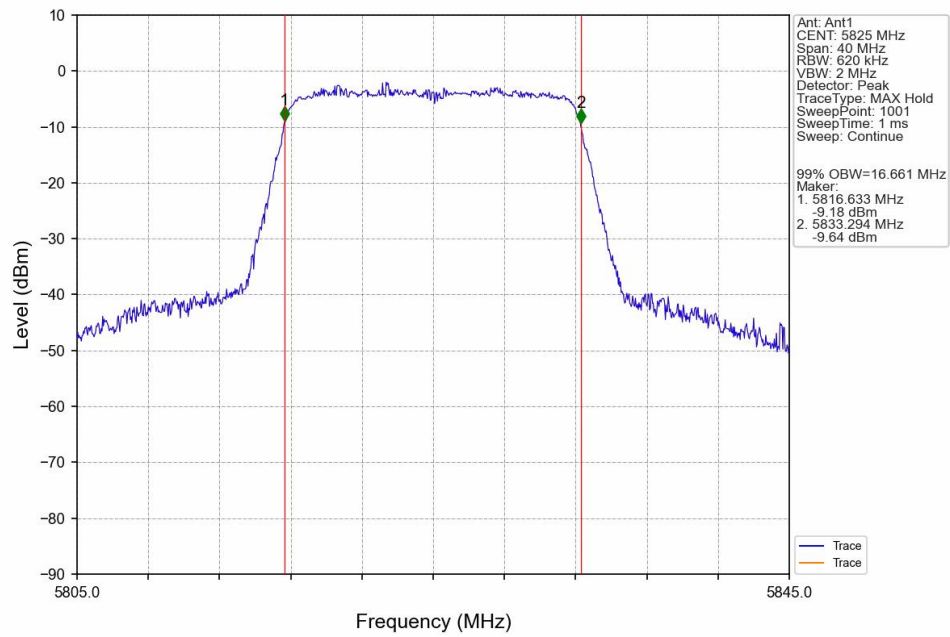
802.11a_MCH_5785MHz_Ant1_NTNV



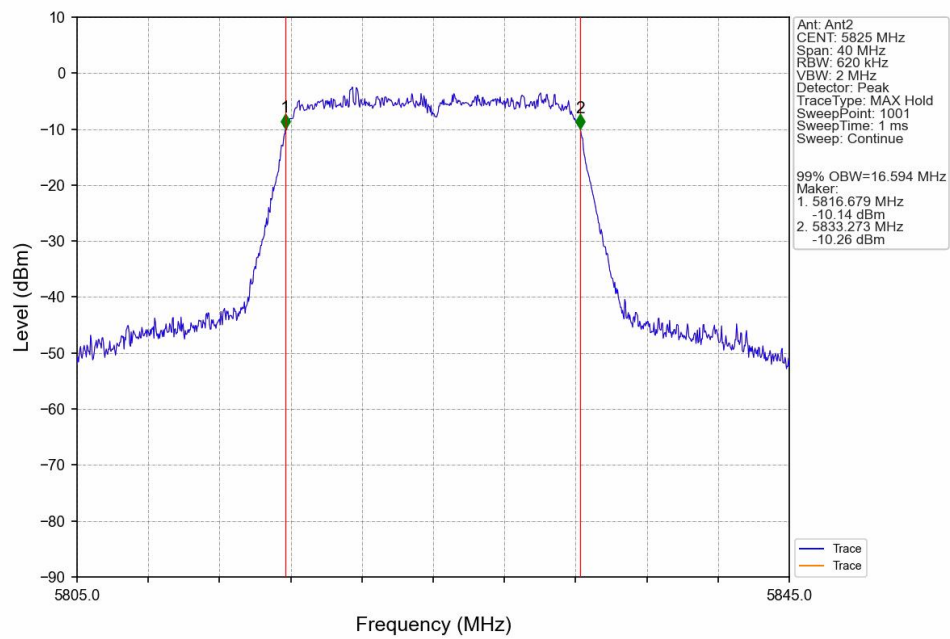
802.11a_MCH_5785MHz_Ant2_NTNV



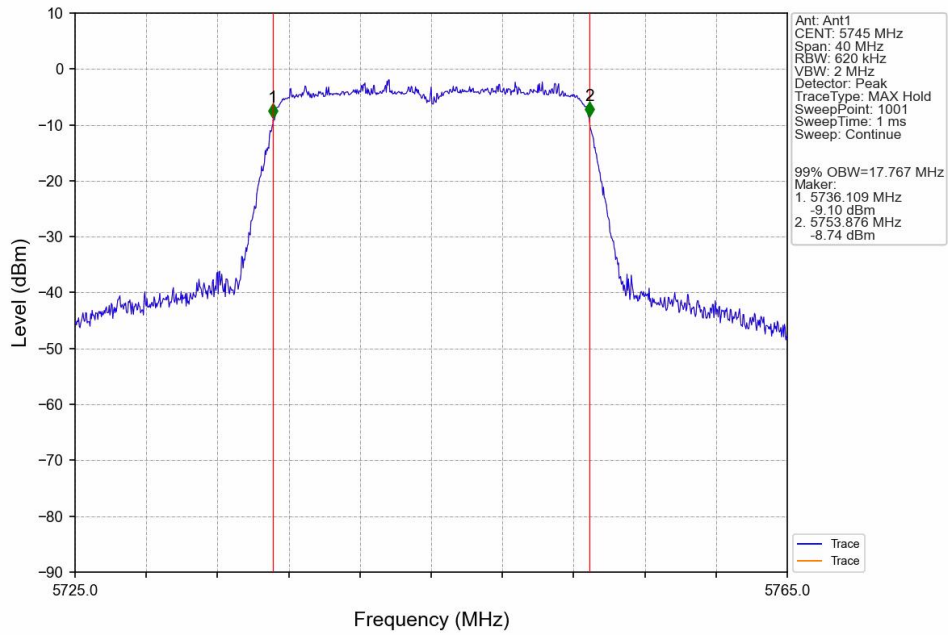
802.11a_HCH_5825MHz_Ant1_NTNV



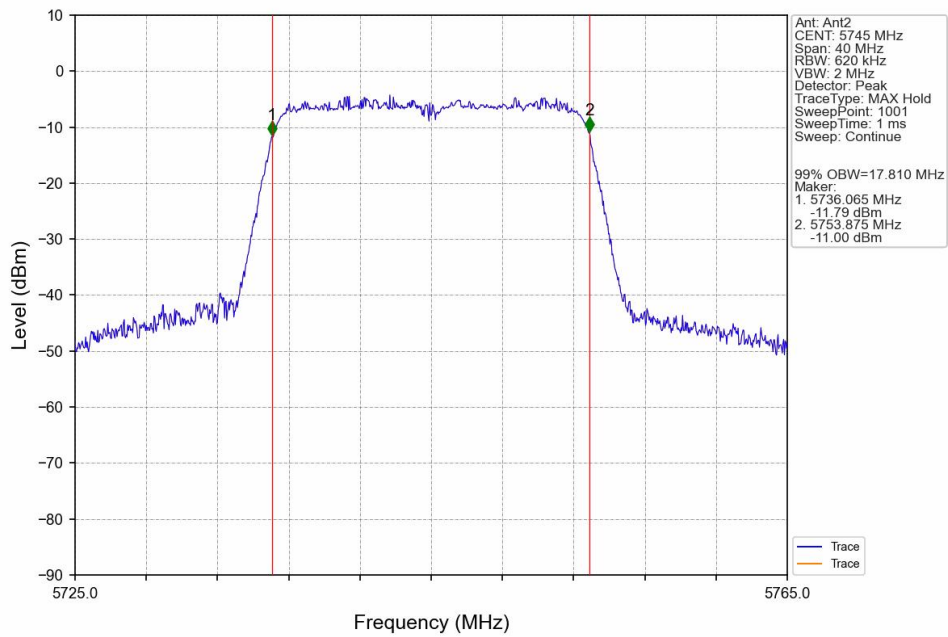
802.11a_HCH_5825MHz_Ant2_NTNV



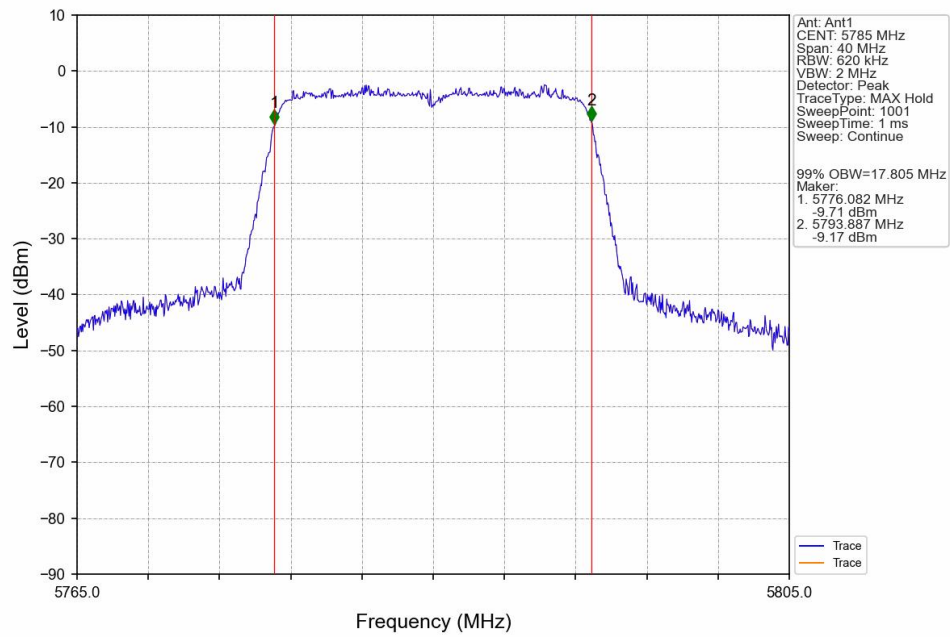
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



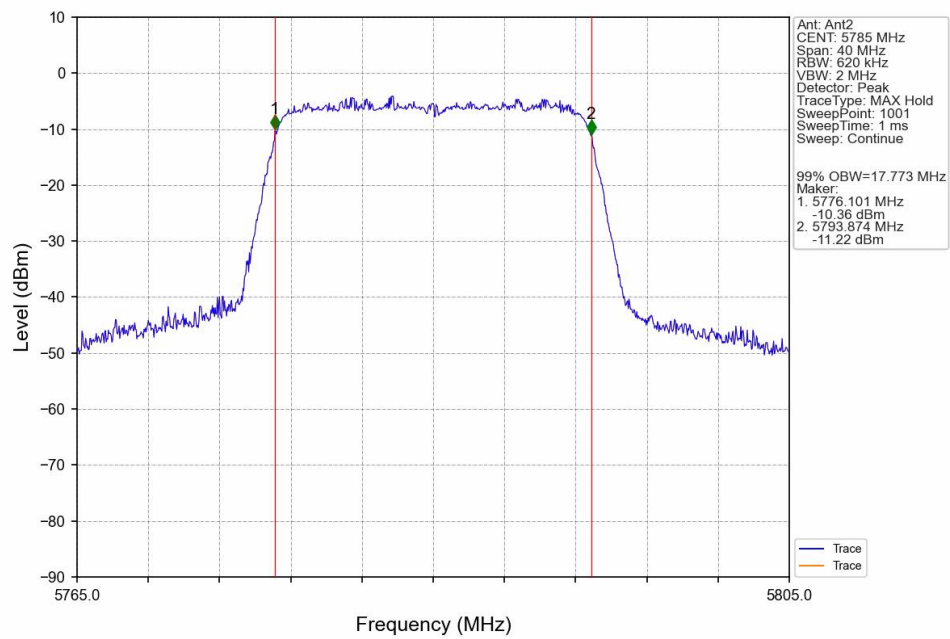
802.11n(HT20)_LCH_5745MHz_Ant2_NTNV



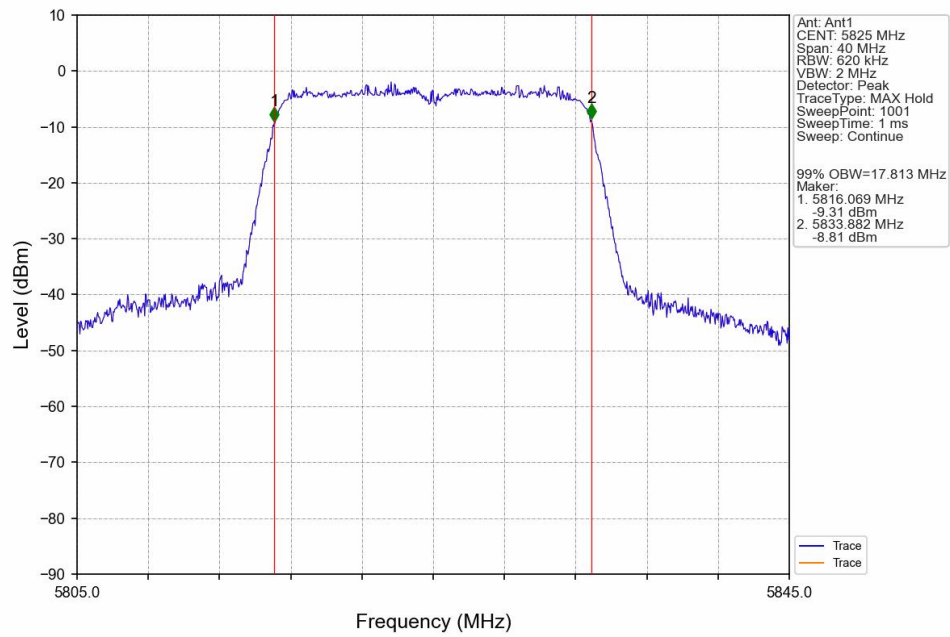
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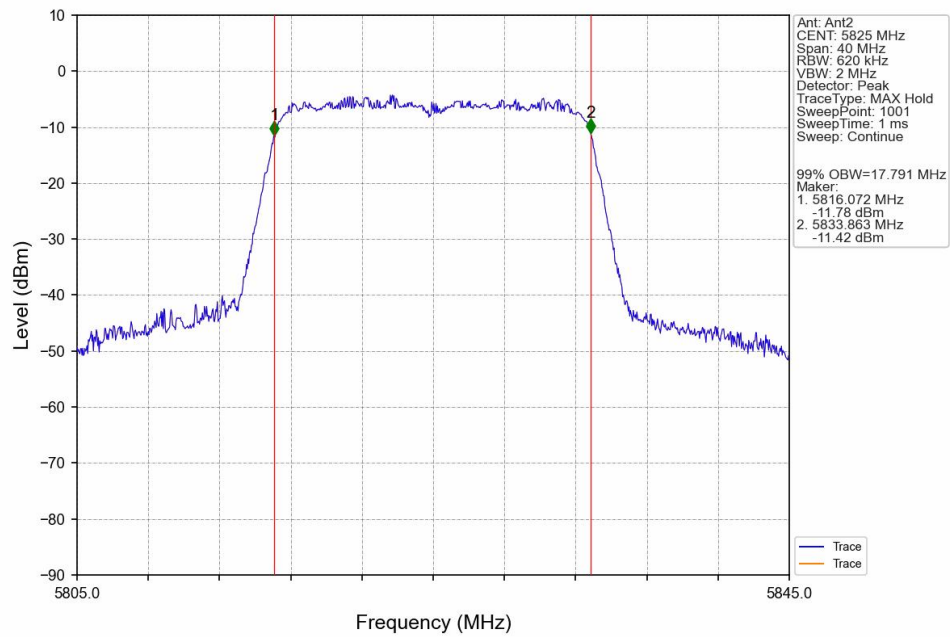
802.11n(HT20)_MCH_5785MHz_Ant2_NTNV



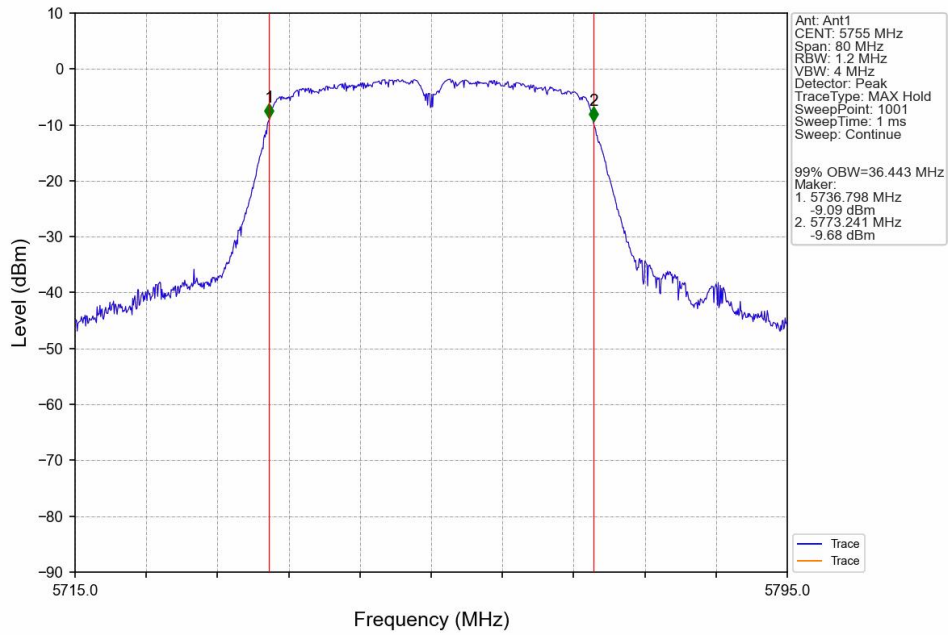
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



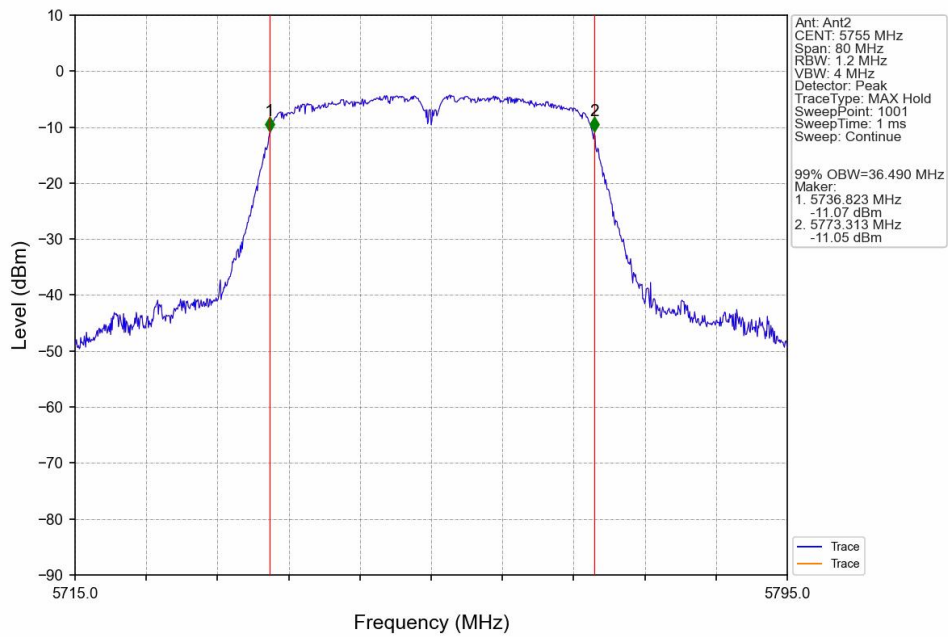
802.11n(HT20)_HCH_5825MHz_Ant2_NTNV



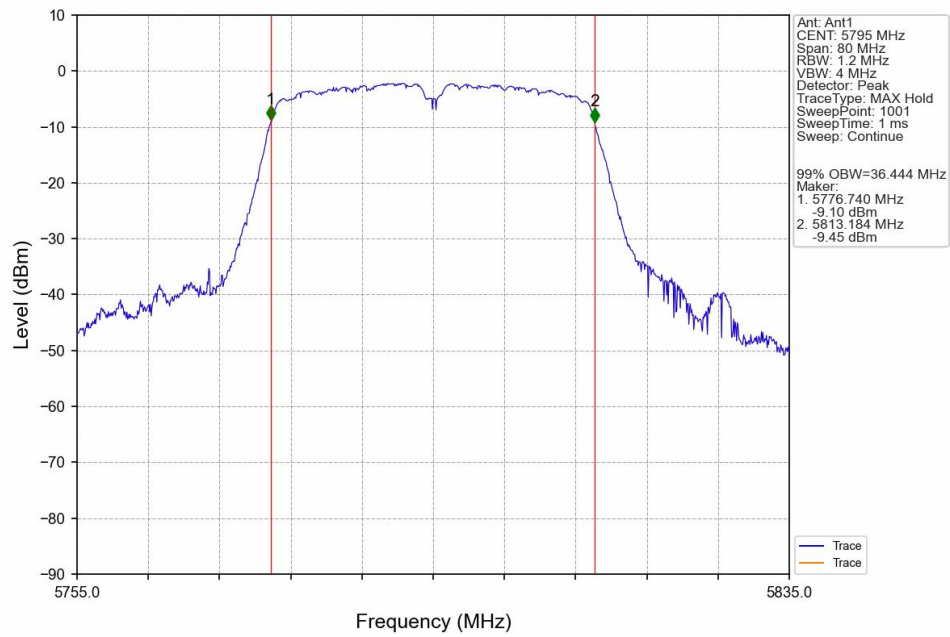
802.11n(HT40) LCH_5755MHz_Ant1_NTNV



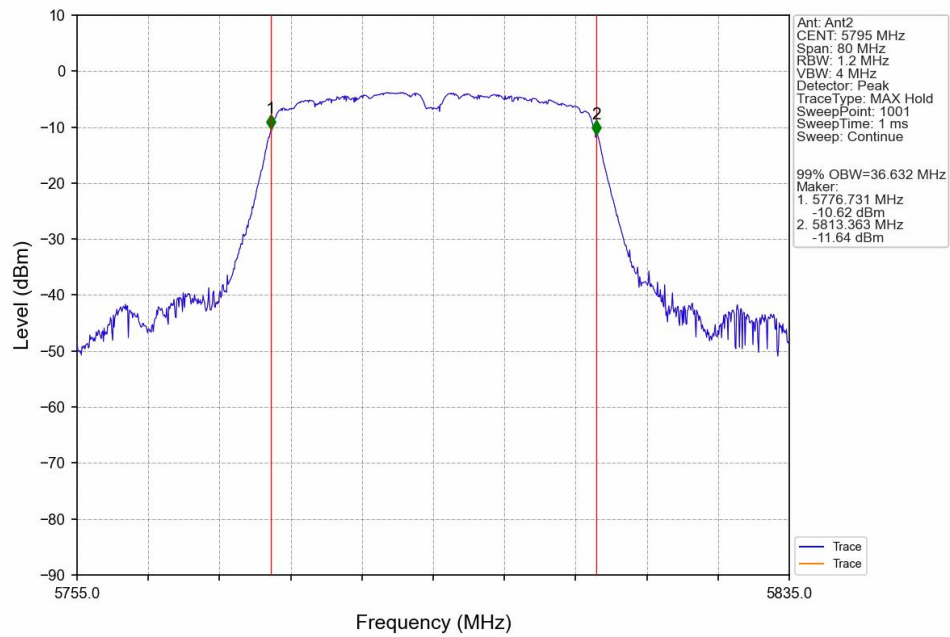
802.11n(HT40) LCH_5755MHz_Ant2_NTNV



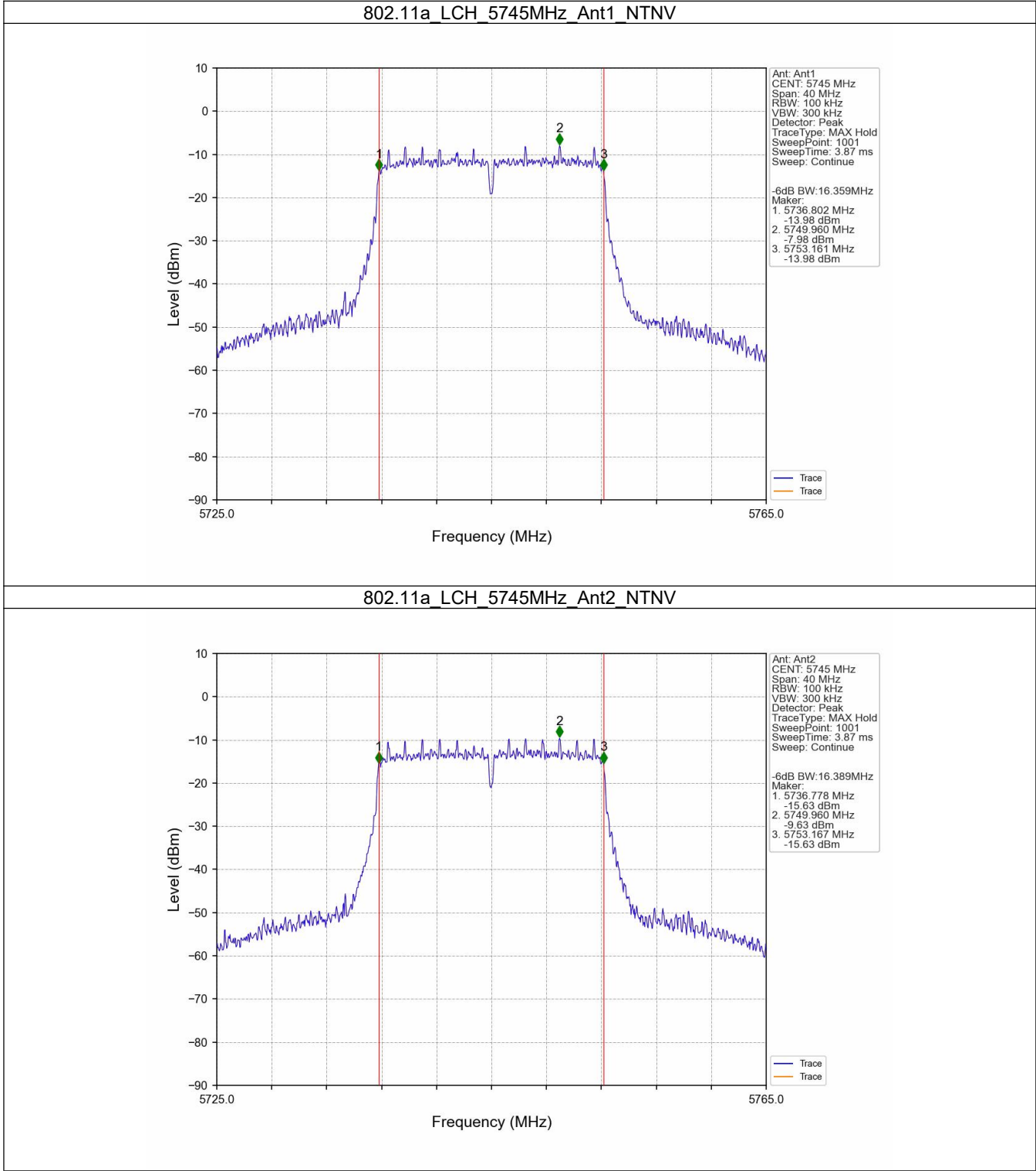
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



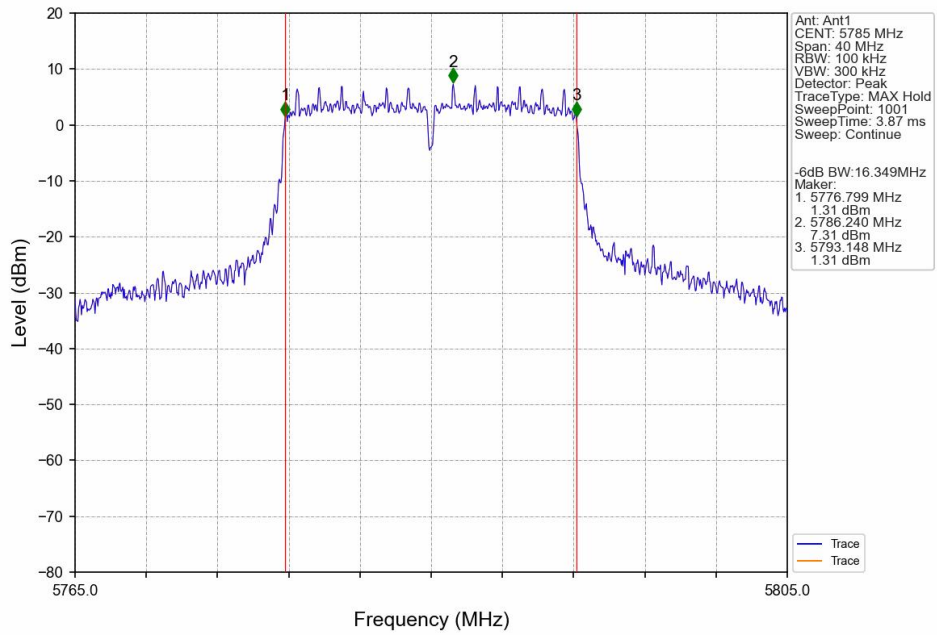
802.11n(HT40)_HCH_5795MHz_Ant2_NTNV



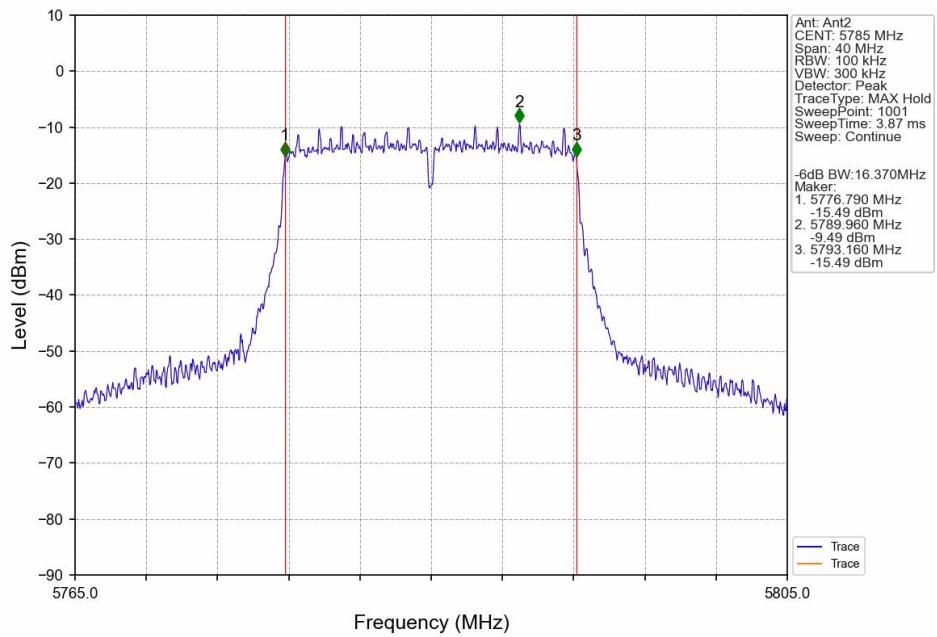
2.2.2 6dB BW



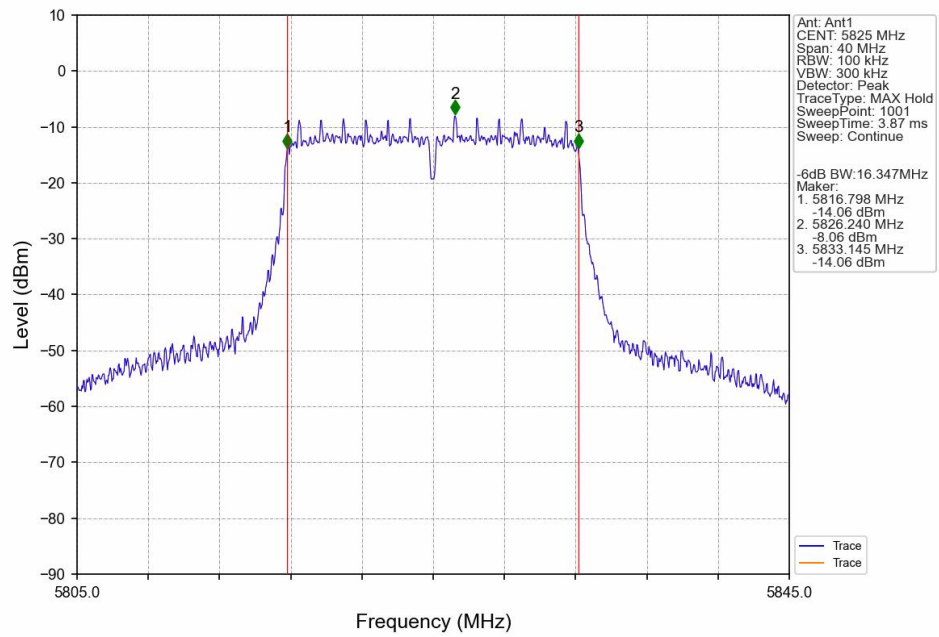
802.11a_MCH_5785MHz_Ant1_NTNV



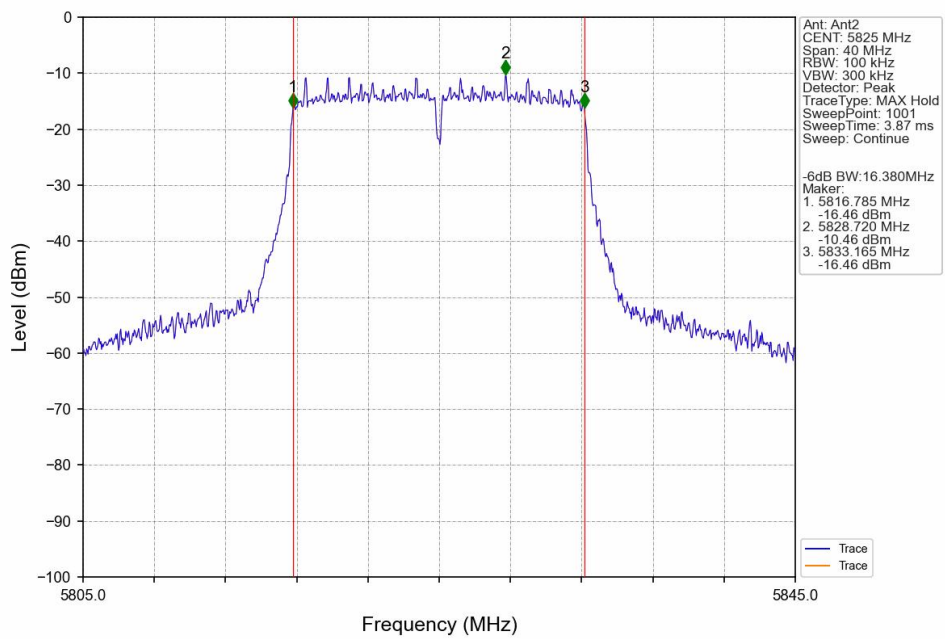
802.11a_MCH_5785MHz_Ant2_NTNV



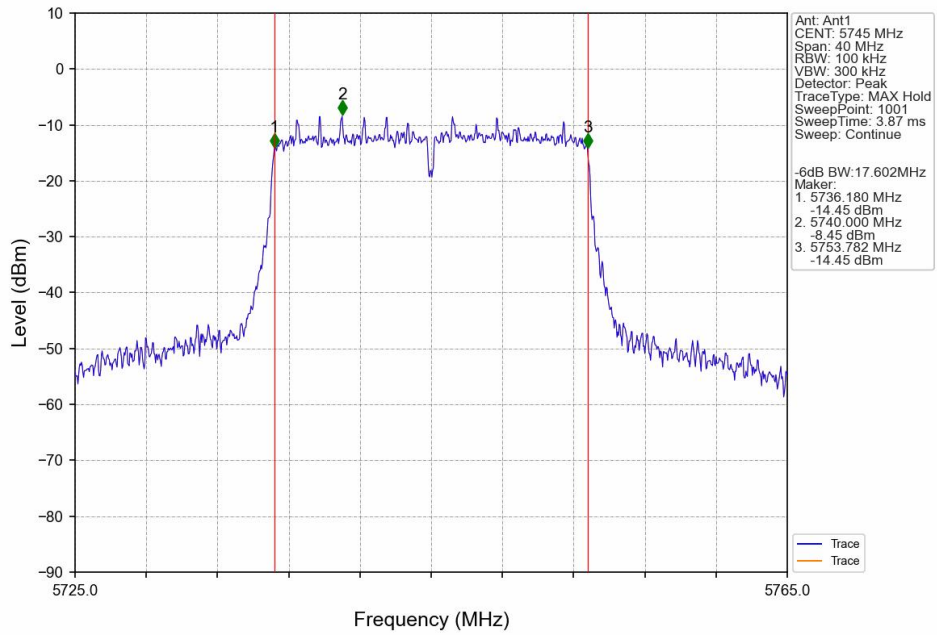
802.11a_HCH_5825MHz_Ant1_NTNV



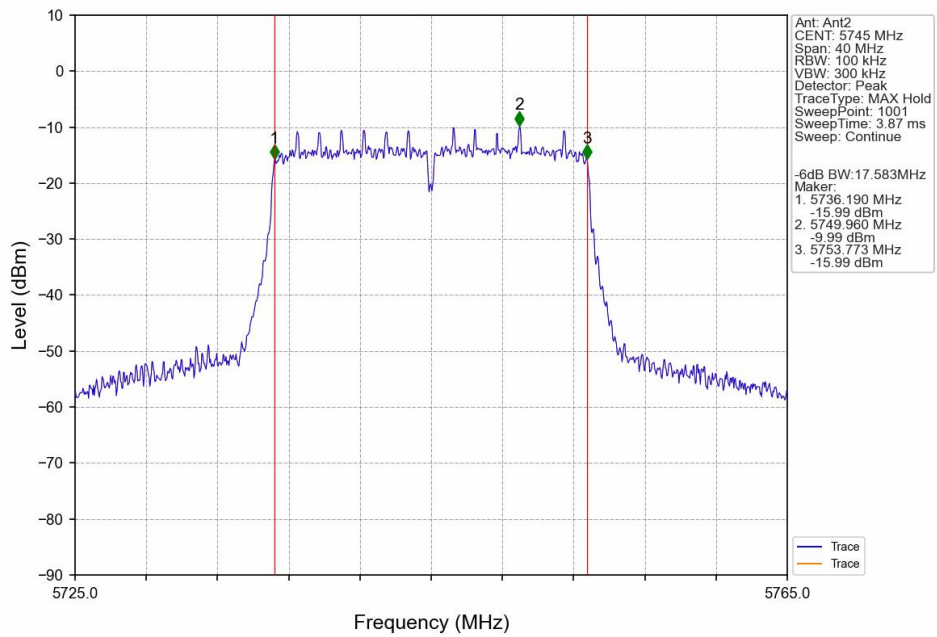
802.11a_HCH_5825MHz_Ant2_NTNV



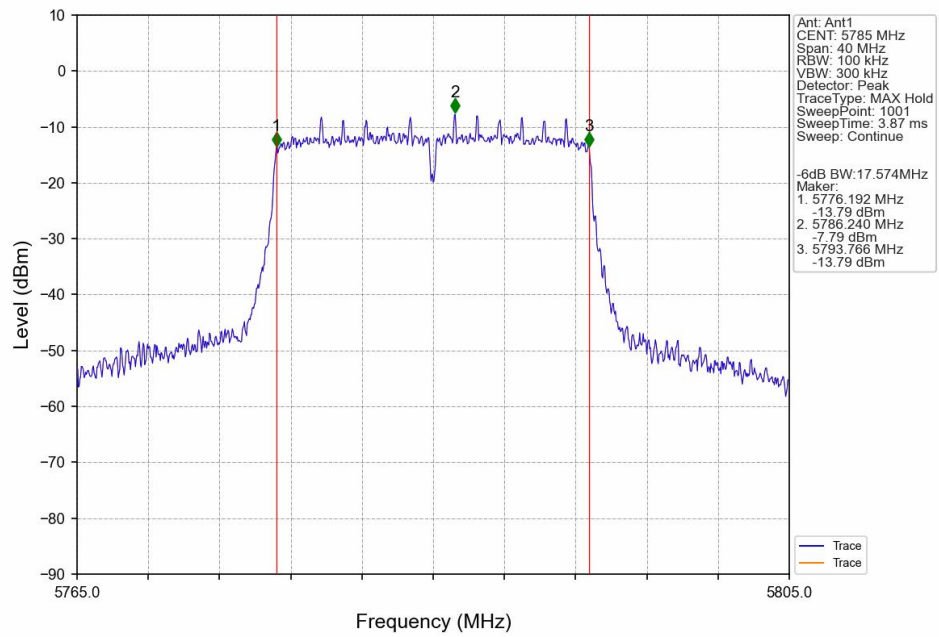
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



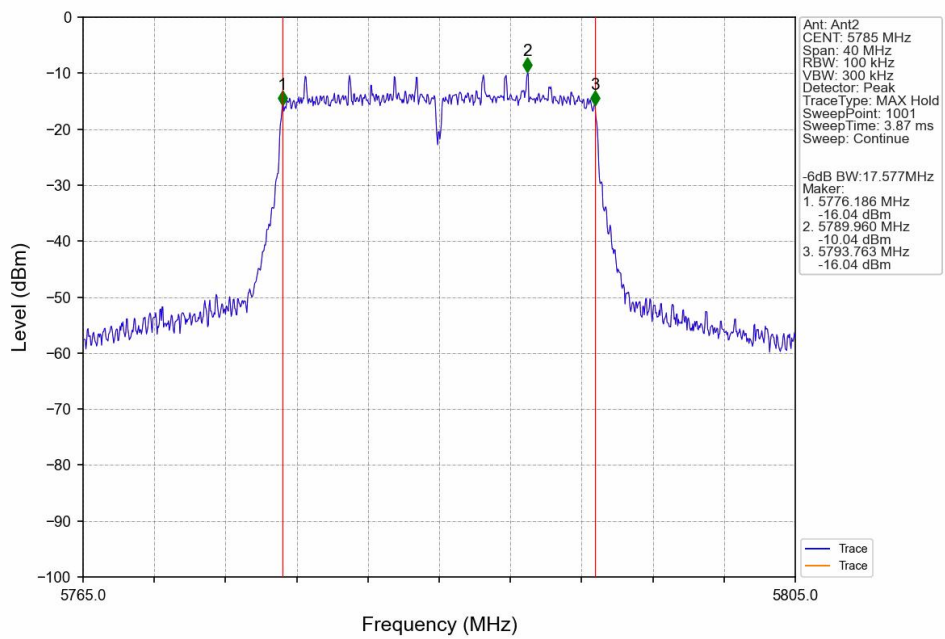
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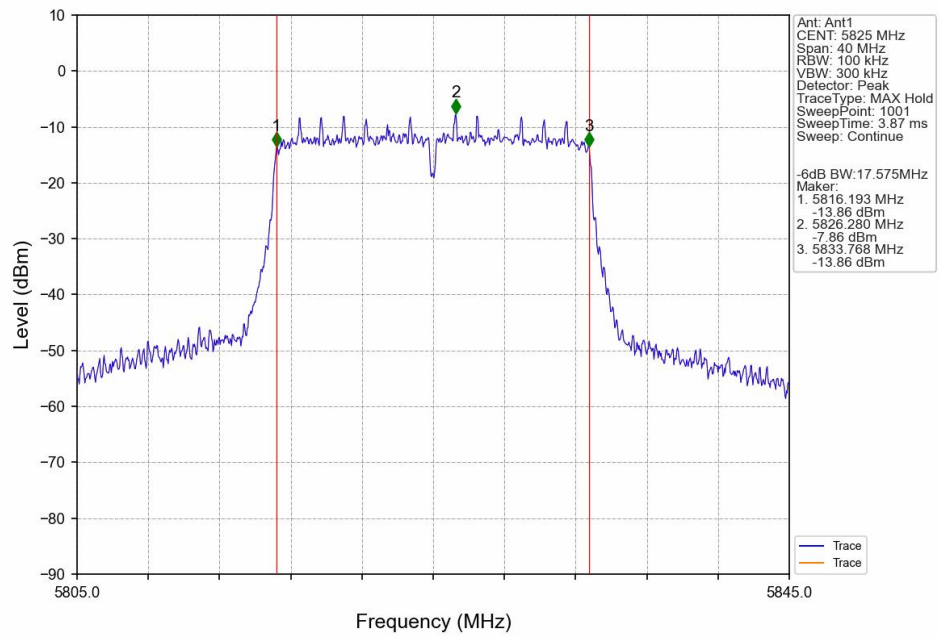
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



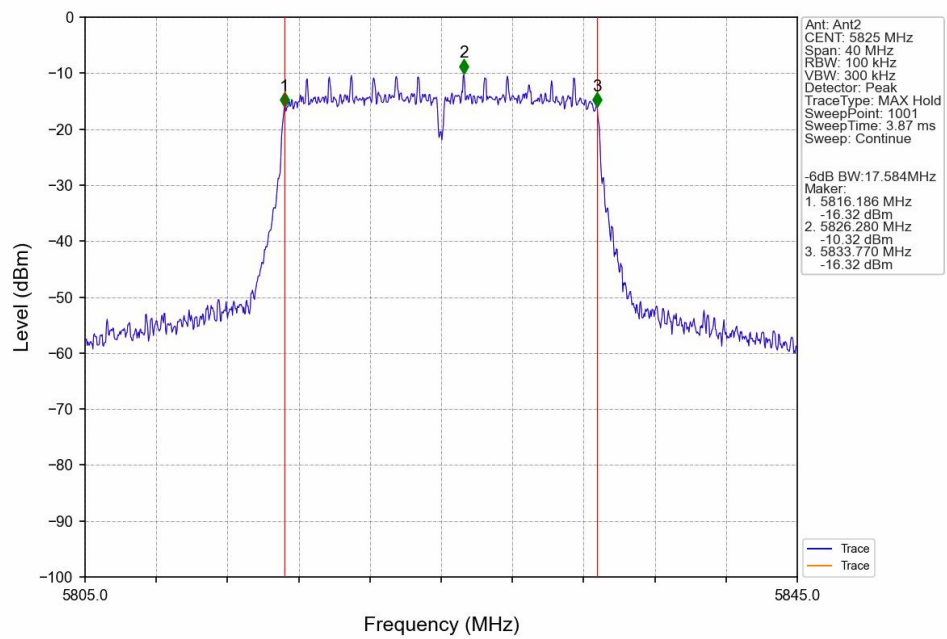
802.11n(HT20)_MCH_5785MHz_Ant2_NTNV



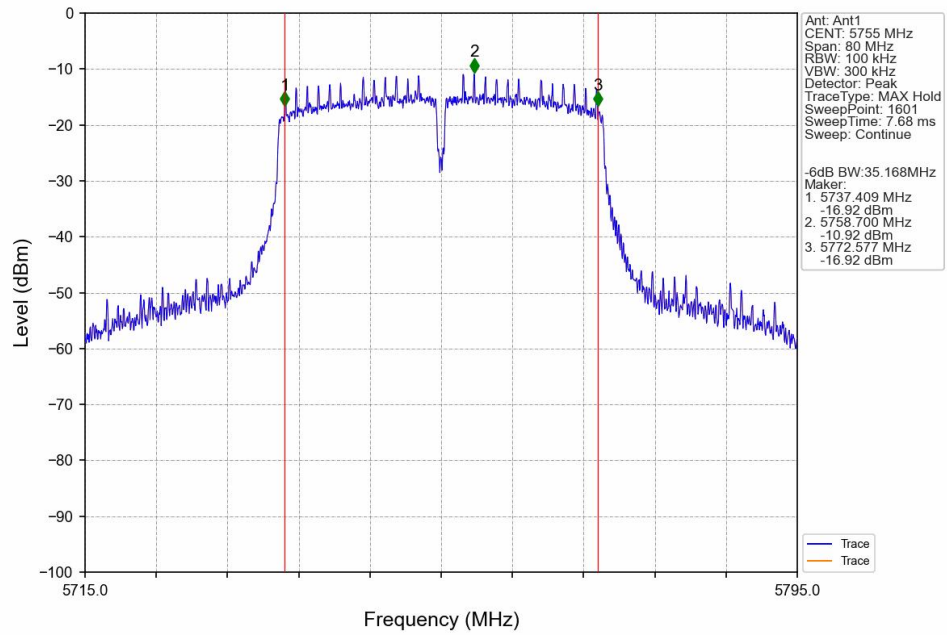
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



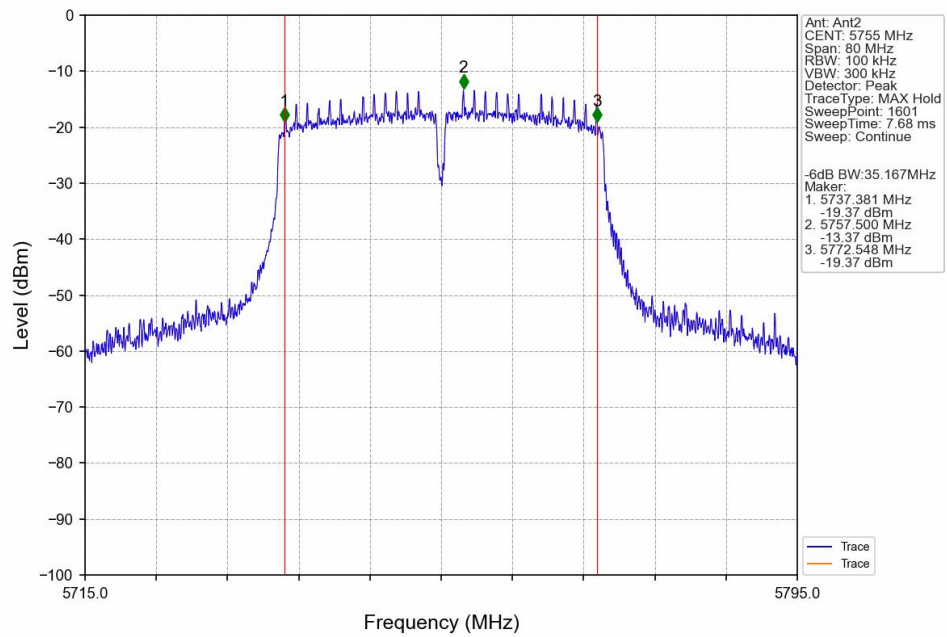
802.11n(HT20)_HCH_5825MHz_Ant2_NTNV



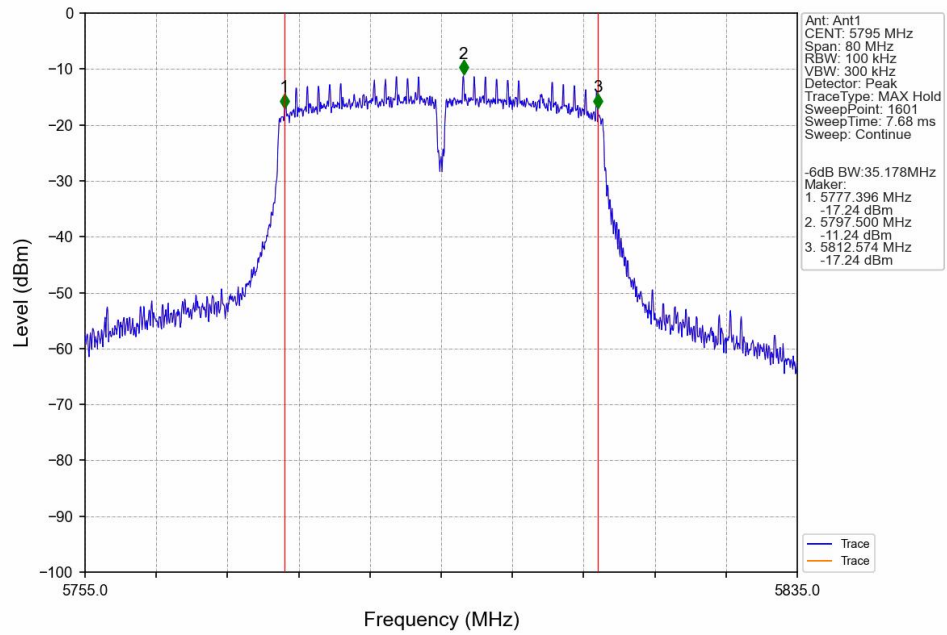
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



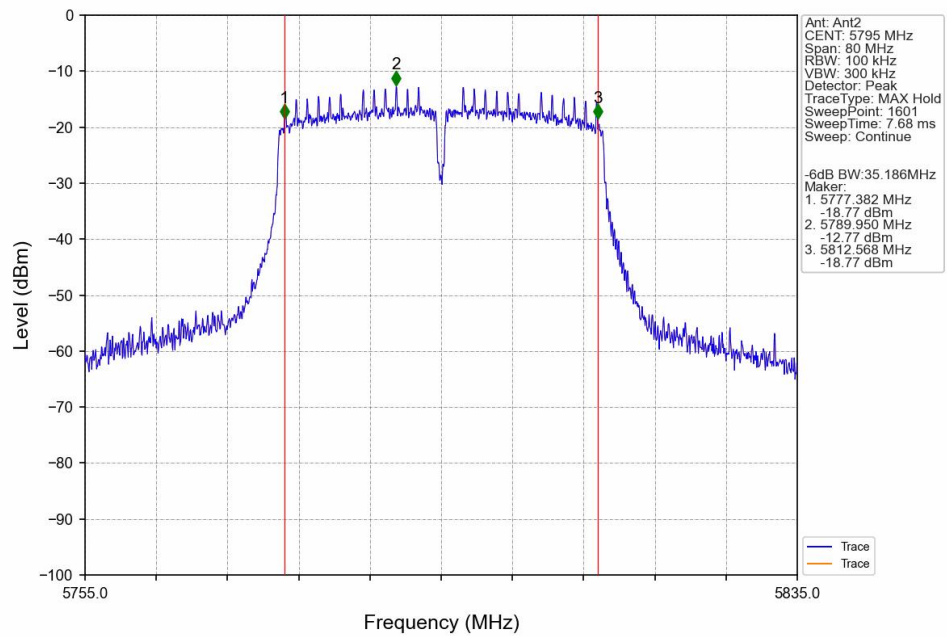
802.11n(HT40)_LCH_5755MHz_Ant2_NTNV



802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



802.11n(HT40)_HCH_5795MHz_Ant2_NTNV



3. Maximum Conducted Output Power

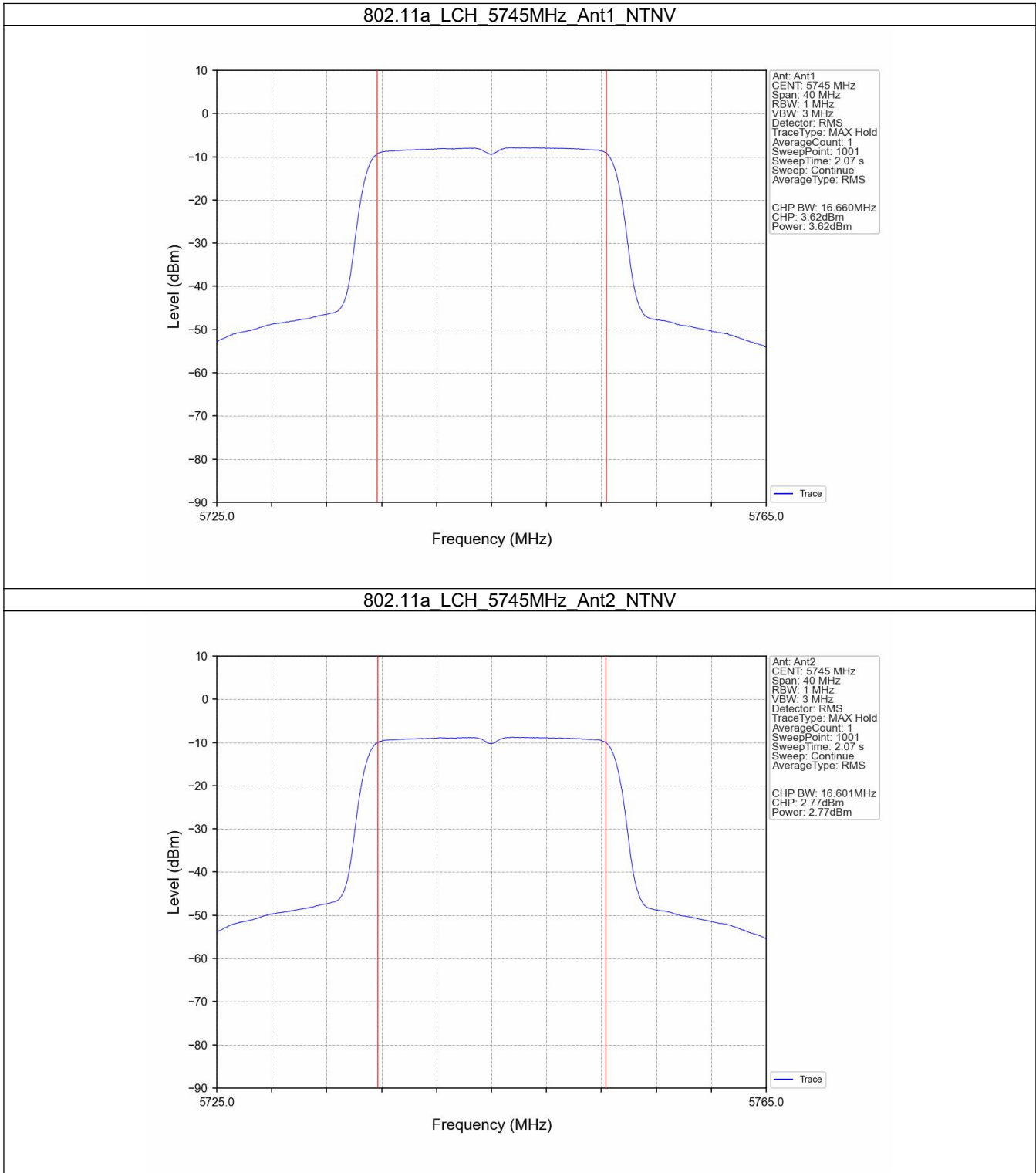
3.1 Test Result

3.1.1 Power

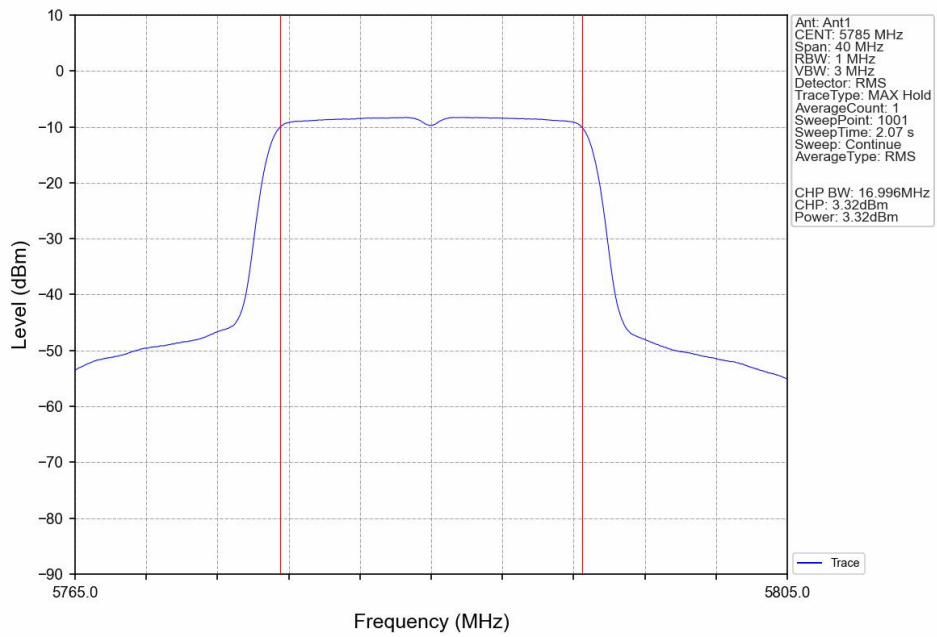
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)				Maximum Average Power (dBm)	Limit	Verdict
			ANT1	ANT2	Duty Cycle Correction Factor (dB)	MIMO			
802.11a	MIMO	5745	3.62	2.77	0.44	6.23	6.67	<=28.14	Pass
		5785	3.32	3.68	0.46	6.51	6.97	<=28.14	Pass
		5825	3.30	2.68	0.44	6.01	6.45	<=28.14	Pass
802.11n (HT20)	MIMO	5745	3.80	2.96	0.44	6.41	6.85	<=28.14	Pass
		5785	3.43	3.35	0.47	6.40	6.87	<=28.14	Pass
		5825	3.54	3.68	0.47	6.62	7.09	<=28.14	Pass
802.11n (HT40)	MIMO	5755	3.92	2.74	0.91	6.38	7.29	<=28.14	Pass
		5795	2.96	2.42	0.94	5.71	6.65	<=28.14	Pass
Note1: Antenna Gain: Ant1: 4.85dBi; Ant2: 4.85dBi; Note2: Directional Gain: 7.86dBi Note1: Maximum Average= Conducted Measured power+ Duty Cycle Correction Factor									

3.2 Test Graph

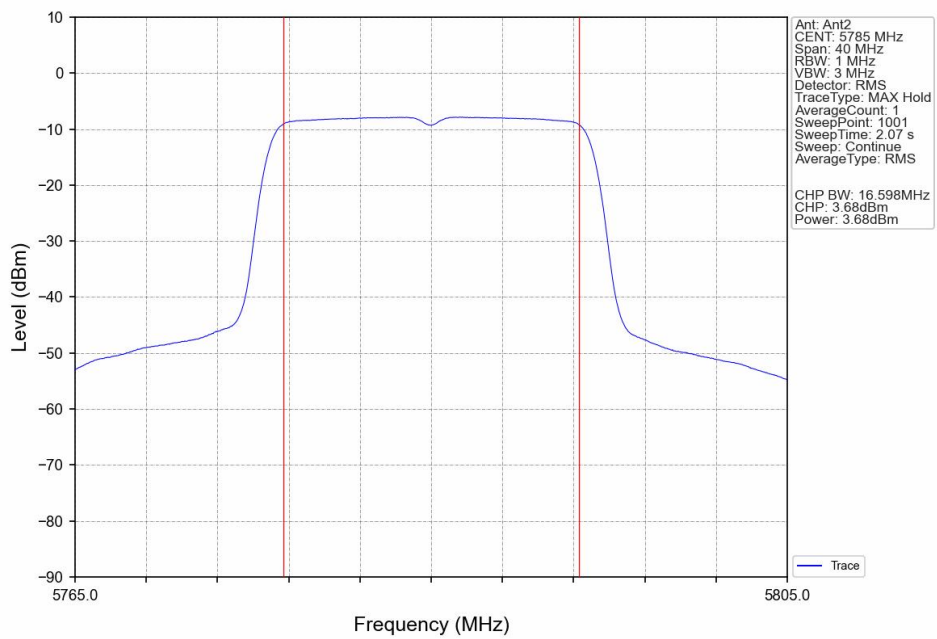
3.2.1 Power



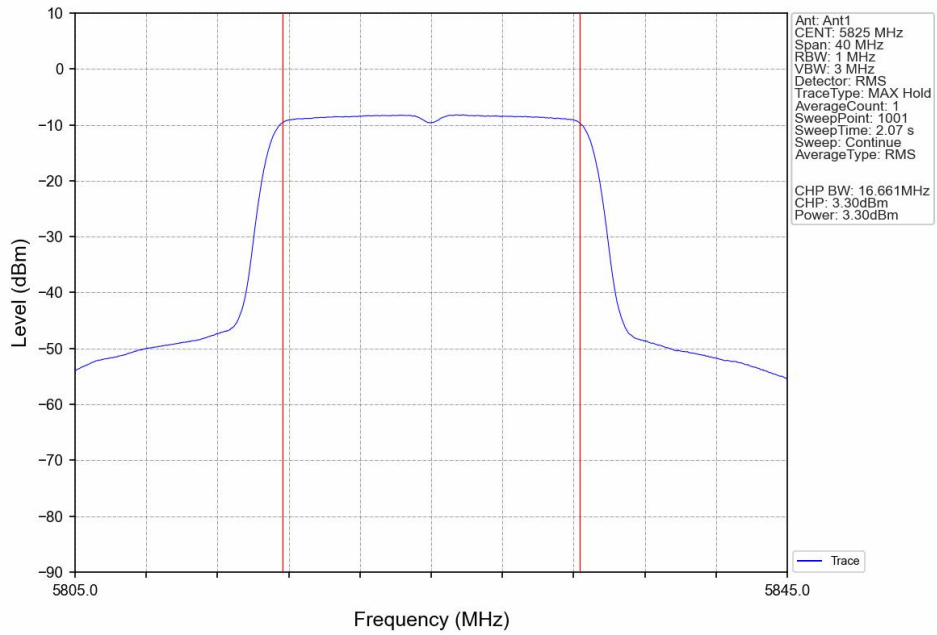
802.11a_MCH_5785MHz_Ant1_NTNV



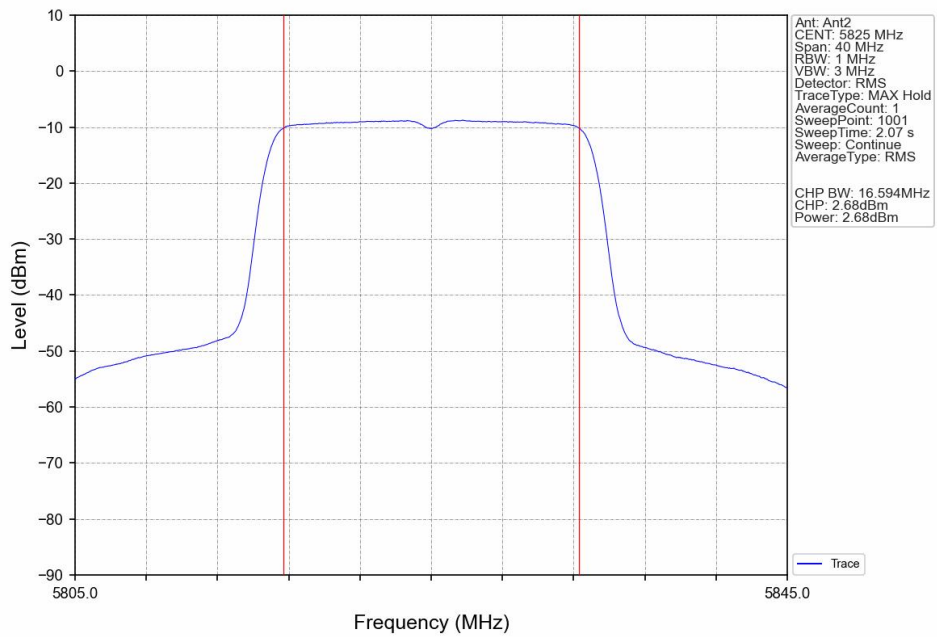
802.11a_MCH_5785MHz_Ant2_NTNV



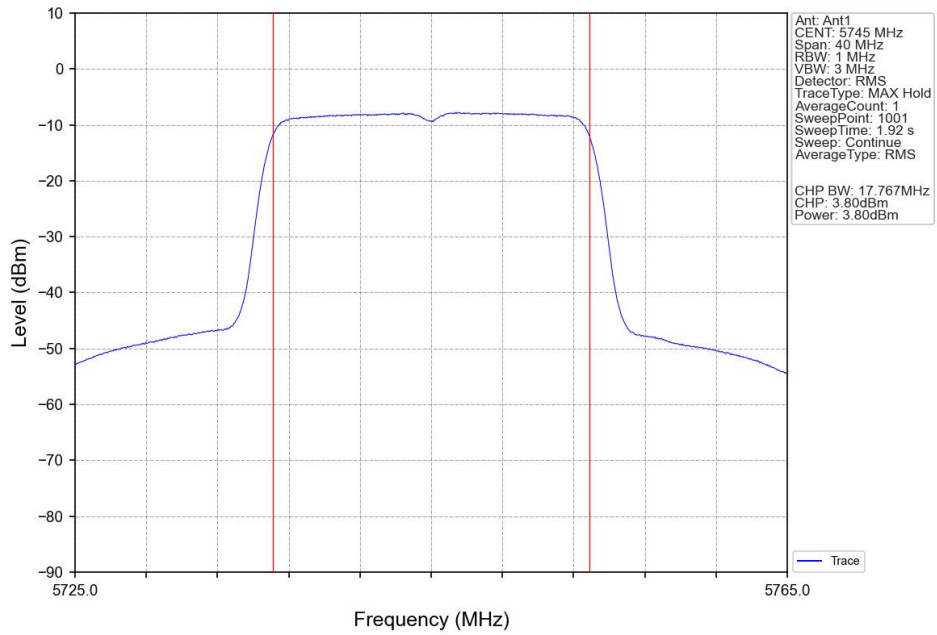
802.11a_HCH_5825MHz_Ant1_NTNV



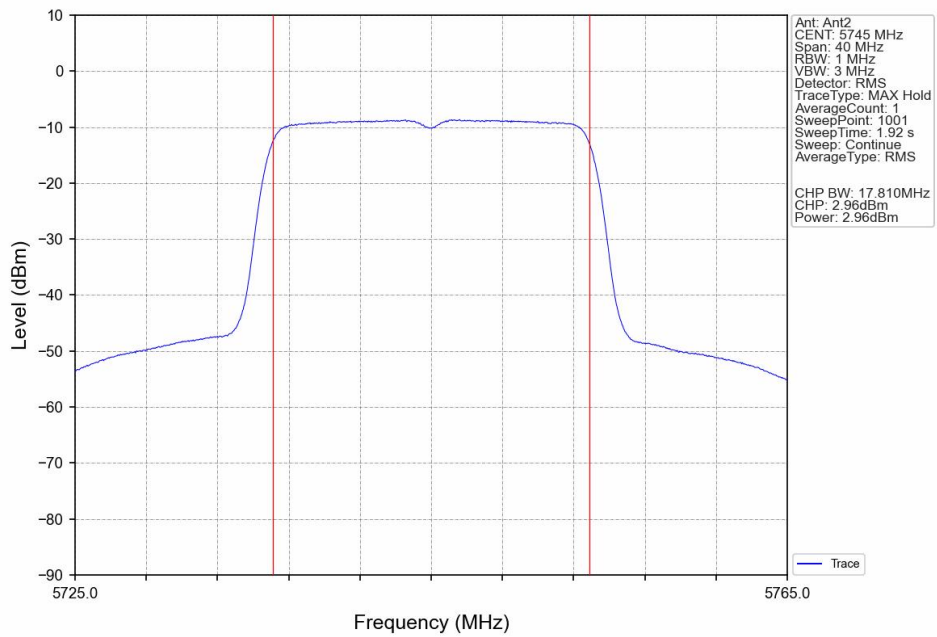
802.11a_HCH_5825MHz_Ant2_NTNV



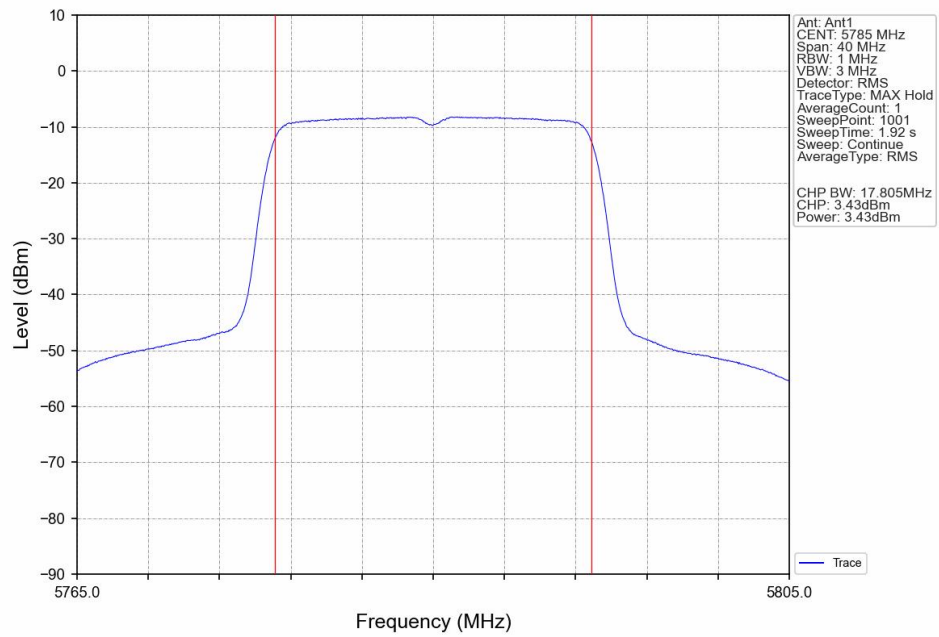
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



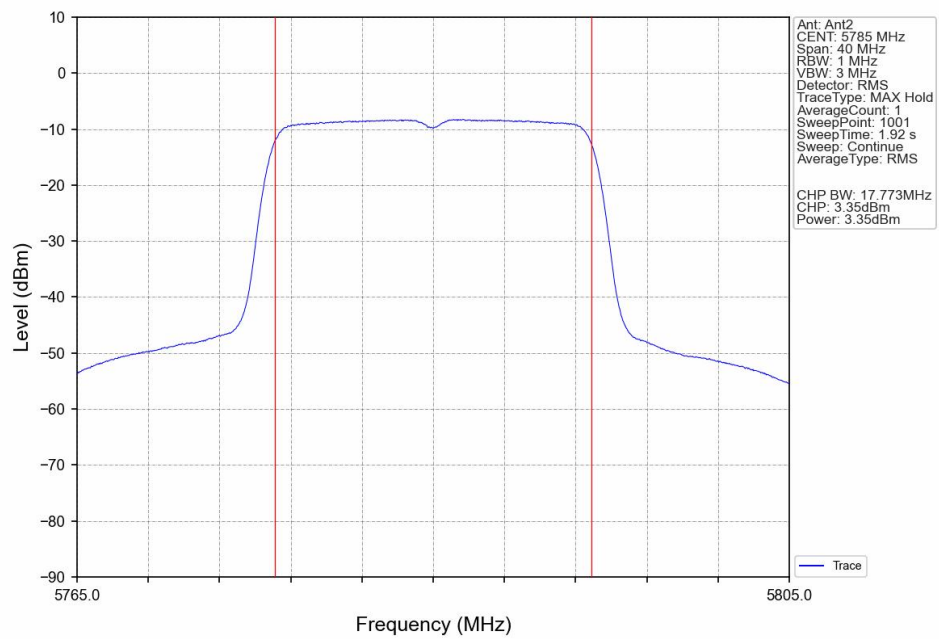
802.11n(HT20)_LCH_5745MHz_Ant2_NTNV



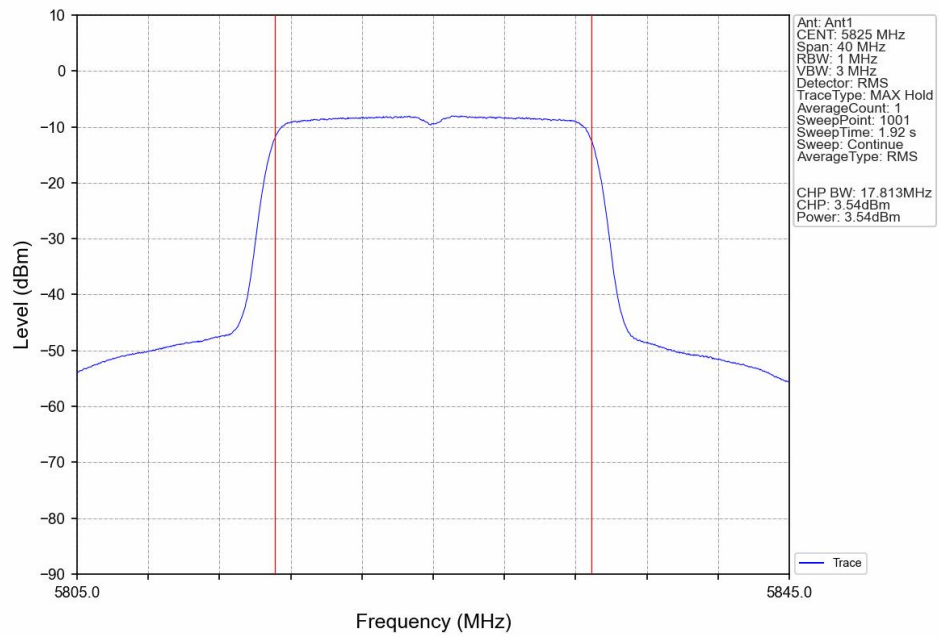
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



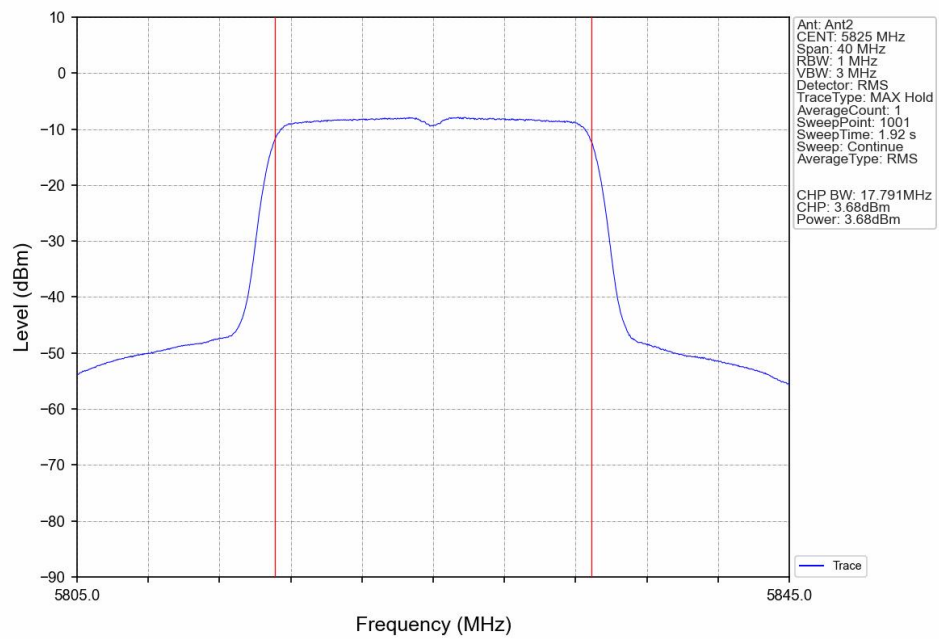
802.11n(HT20)_MCH_5785MHz_Ant2_NTNV



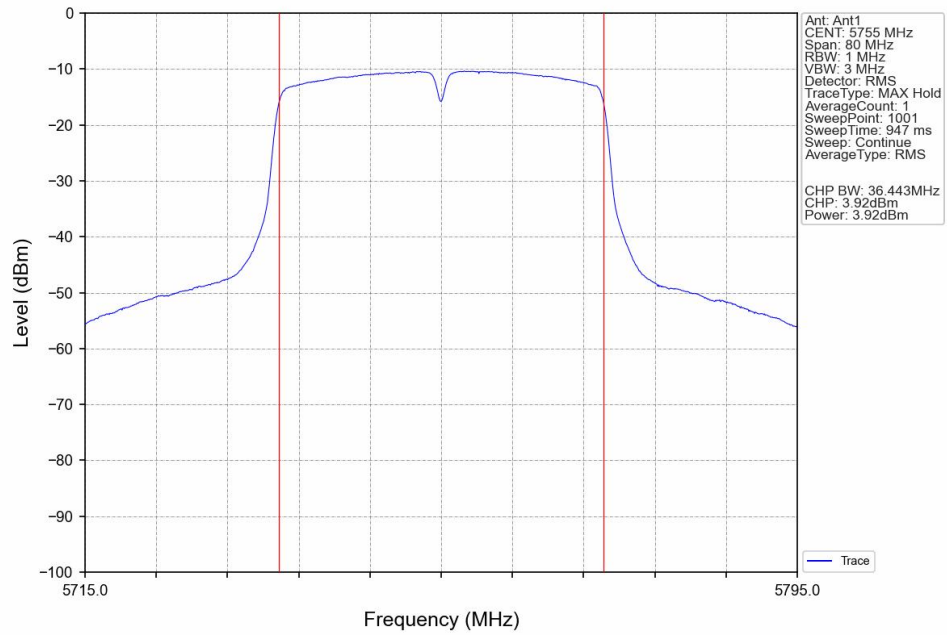
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



802.11n(HT20)_HCH_5825MHz_Ant2_NTNV



802.11n(HT40) LCH_5755MHz_Ant1_NTNV



802.11n(HT40) LCH_5755MHz_Ant2_NTNV

