



FCC ID: 2BGEJ-50U76

RF Test Report

For

Project No.:	DLE-260720005R
Client:	Zhuhai Bigway Electronic Co.,Ltd.
Manufacturer:	Zhuhai Bigway Electronic Co.,Ltd.
Product Description:	Wireless HDMI Transmitter and Receiver
Test model:	50U76
Test Engineer:	Alisa Song
Test Date:	2026-07-10

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

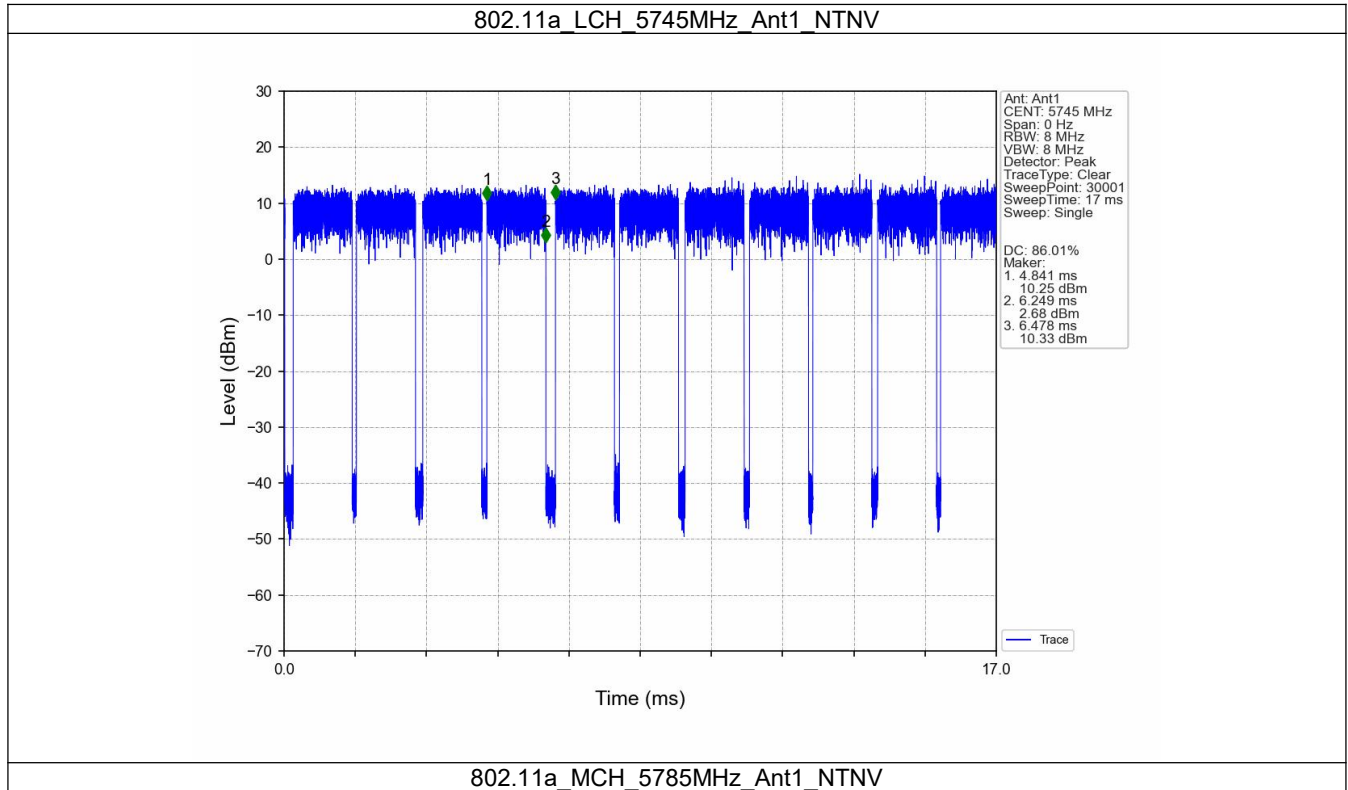
1.1.1 Ant1

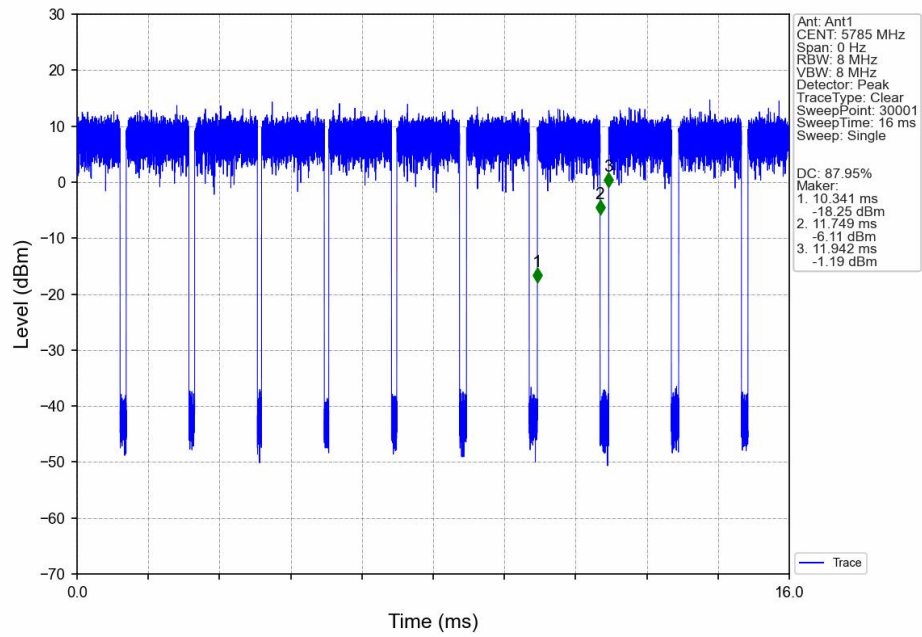
Ant1							
Mode	TX Type	Frequency (MHz)	T _{on} (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5745	1.408	1.637	86.01	0.65	7.73
		5785	1.408	1.601	87.95	0.56	5.81
		5825	1.409	1.591	88.56	0.53	5.28
802.11n (HT20)	SISO	5745	1.317	1.545	85.24	0.69	8.12
		5785	1.317	1.536	85.74	0.67	7.66
		5825	1.317	1.536	85.74	0.67	7.63
802.11n (HT40)	SISO	5755	0.652	1.311	49.73	3.03	23.09
		5795	0.652	0.906	71.96	1.43	6.76
802.11ac (VHT20)	SISO	5745	1.325	2.048	64.70	1.89	27.20
		5785	1.324	1.568	84.44	0.73	7.38
		5825	1.324	1.577	83.96	0.76	6.20
802.11ac (VHT40)	SISO	5755	0.661	0.913	72.40	1.40	12.57
		5795	0.661	0.913	72.40	1.40	12.57



1.2 Test Graph

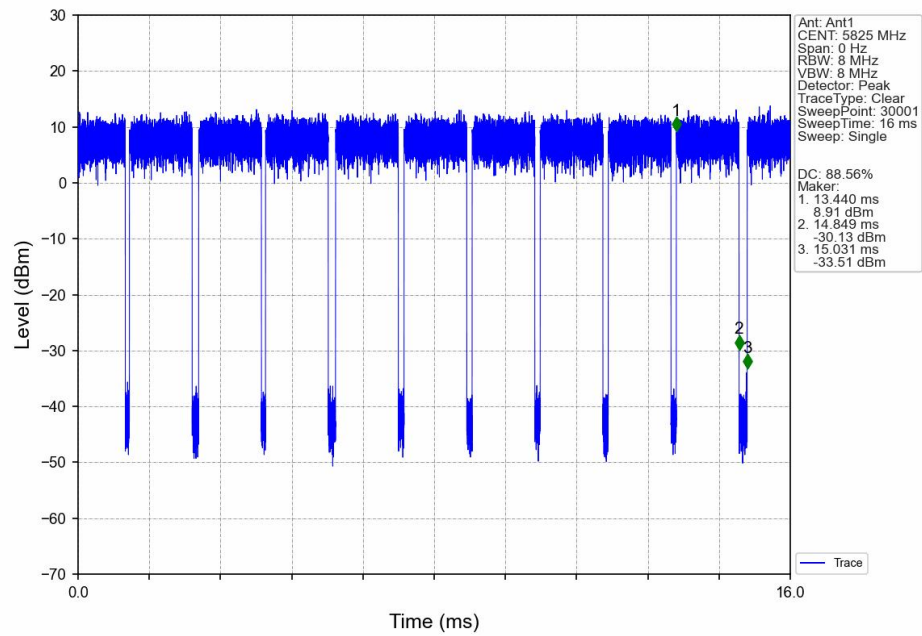
1.2.1 Ant1



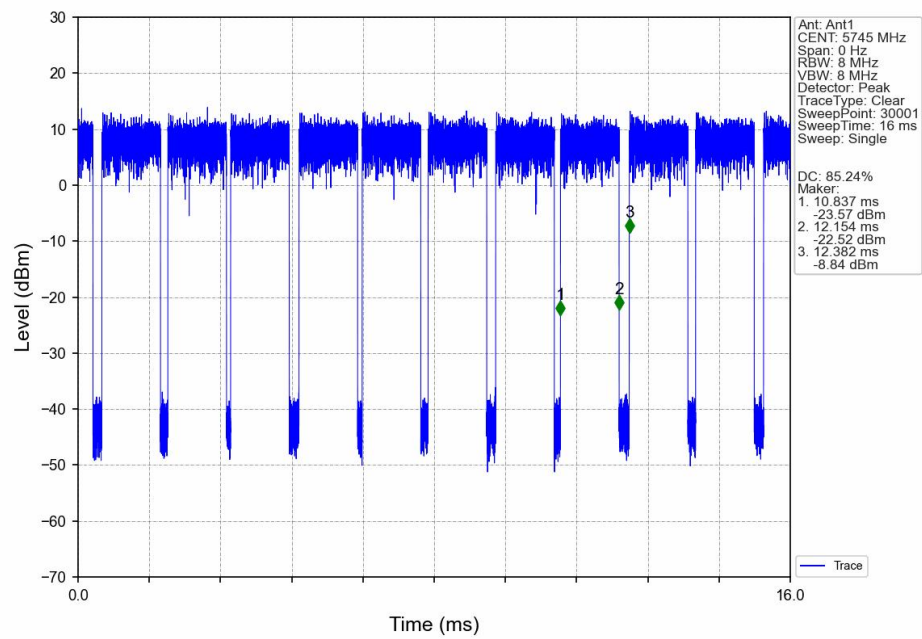




802.11a_HCH_5825MHz_Ant1_NTNV

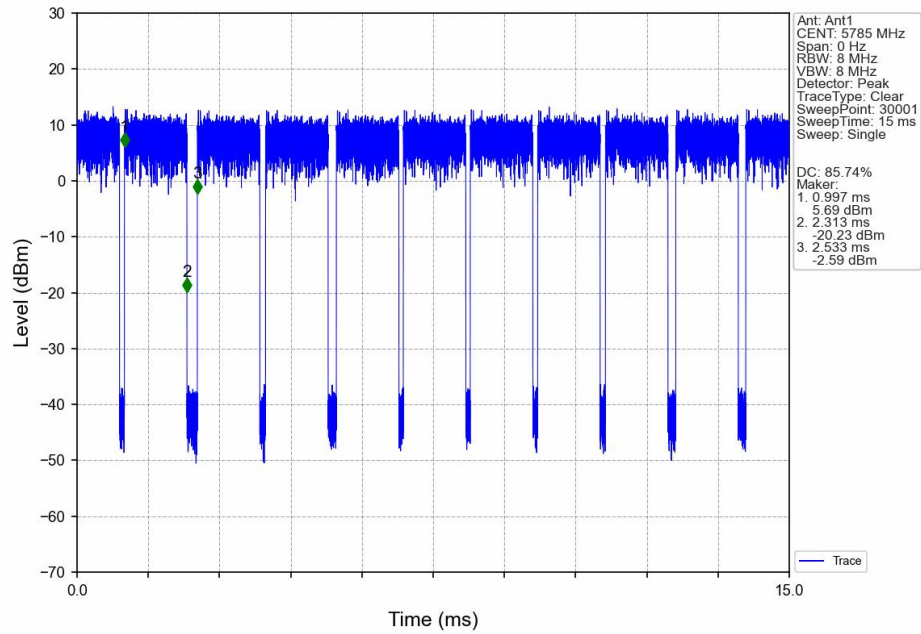


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

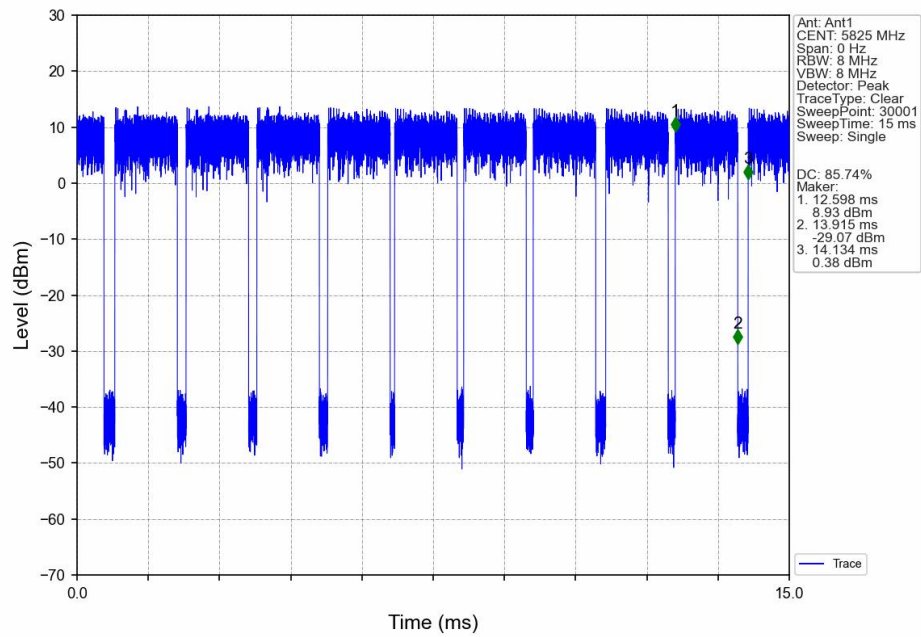




802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

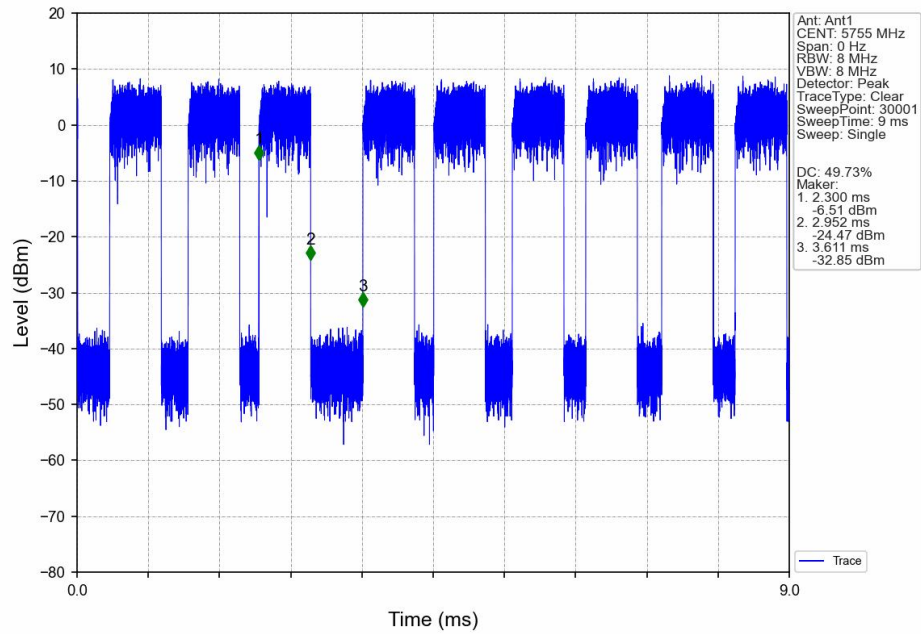


802.11n(HT20)_HCH_5825MHz_Ant1_NTNV

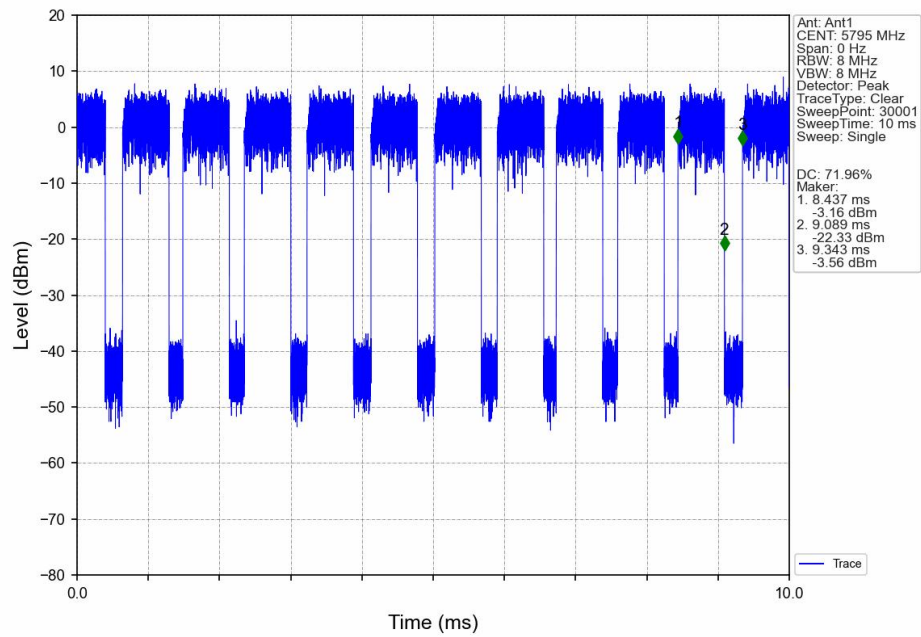




802.11n(HT40)_LCH_5755MHz_Ant1_NTNV

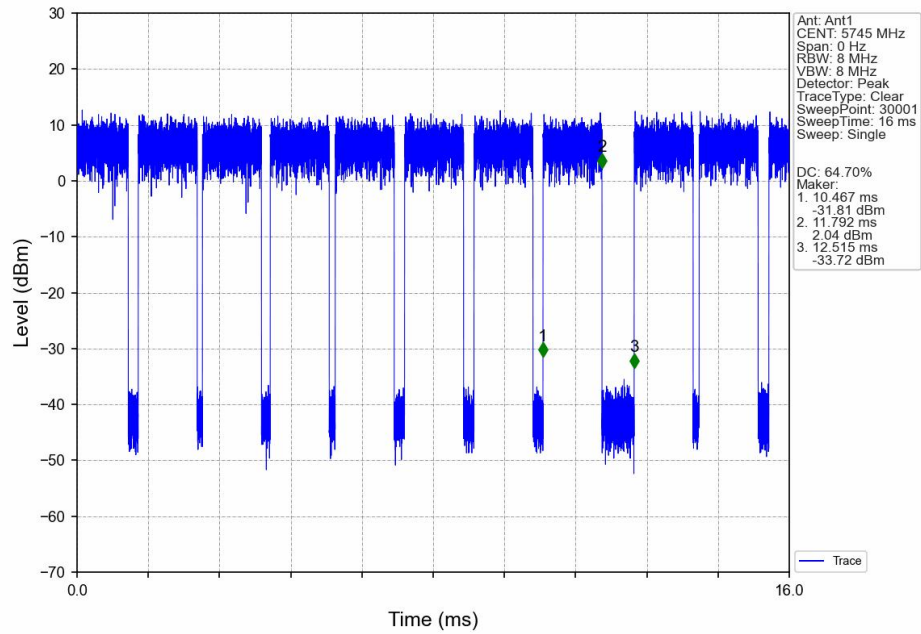


802.11n(HT40)_HCH_5795MHz_Ant1_NTNV

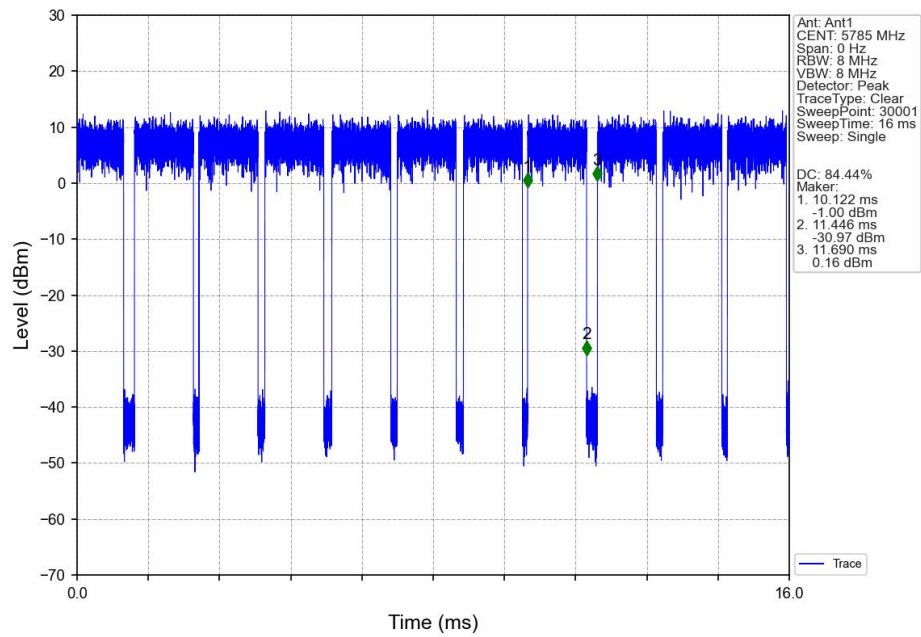




802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV

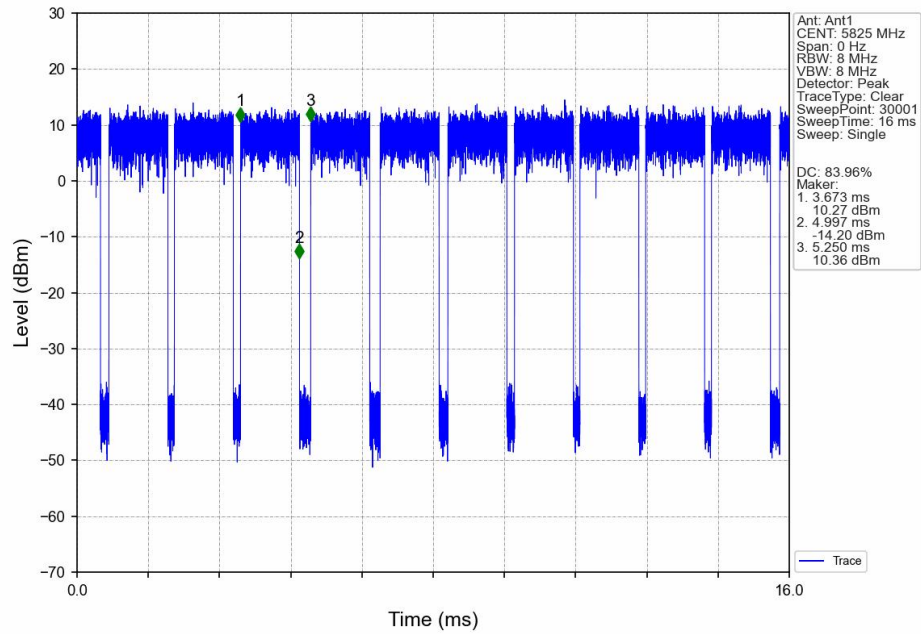


802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV

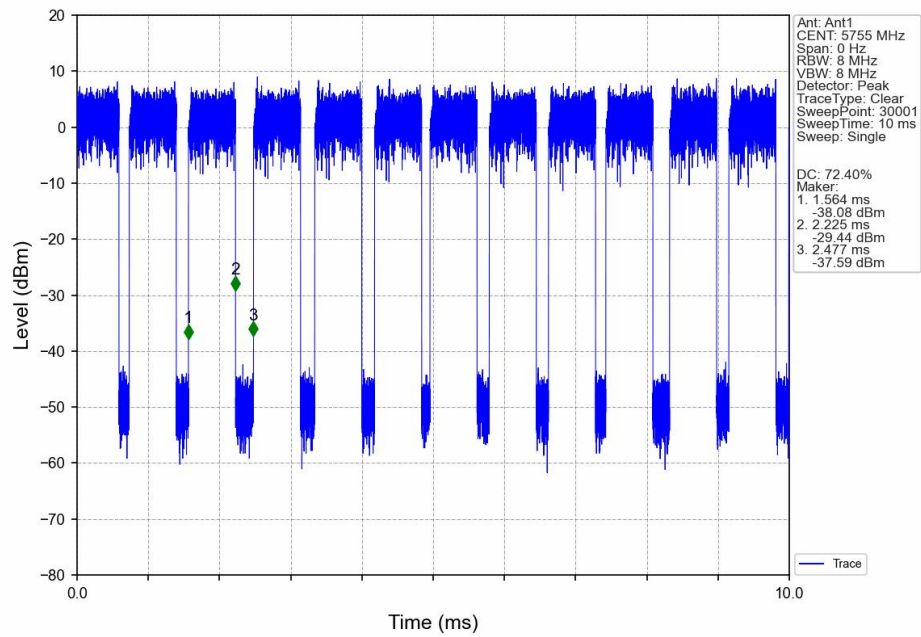




802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV

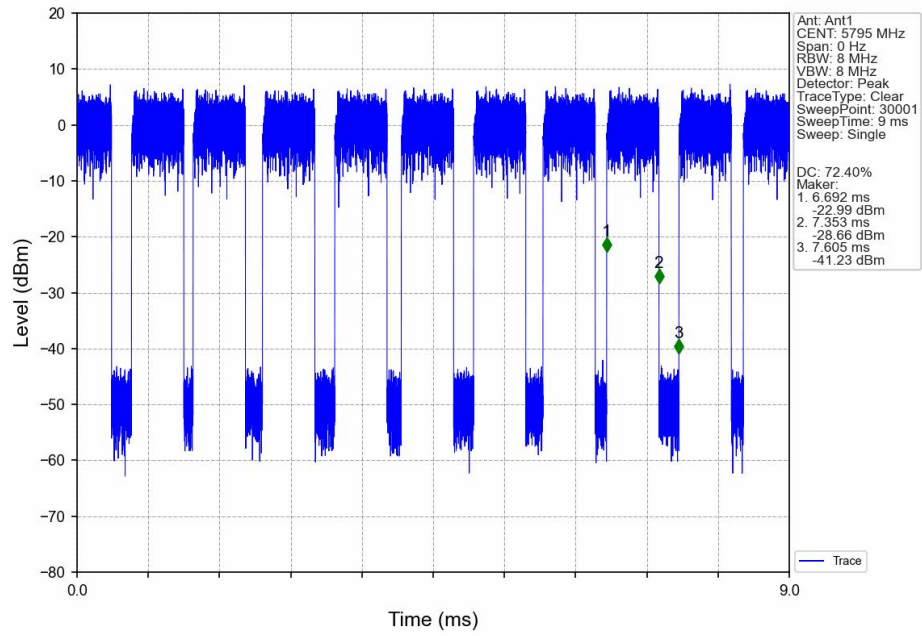


802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV





802.11ac(VHT40)_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	SISO	5745	1	16.922	/	Pass
		5785	1	16.944	/	Pass
		5825	1	16.843	/	Pass
802.11n (HT20)	SISO	5745	1	17.877	/	Pass
		5785	1	17.924	/	Pass
		5825	1	17.842	/	Pass
802.11n (HT40)	SISO	5755	1	35.332	/	Pass
		5795	1	35.496	/	Pass
802.11ac (VHT20)	SISO	5745	1	17.749	/	Pass
		5785	1	17.893	/	Pass
		5825	1	17.884	/	Pass
802.11ac (VHT40)	SISO	5755	1	35.244	/	Pass
		5795	1	35.433	/	Pass

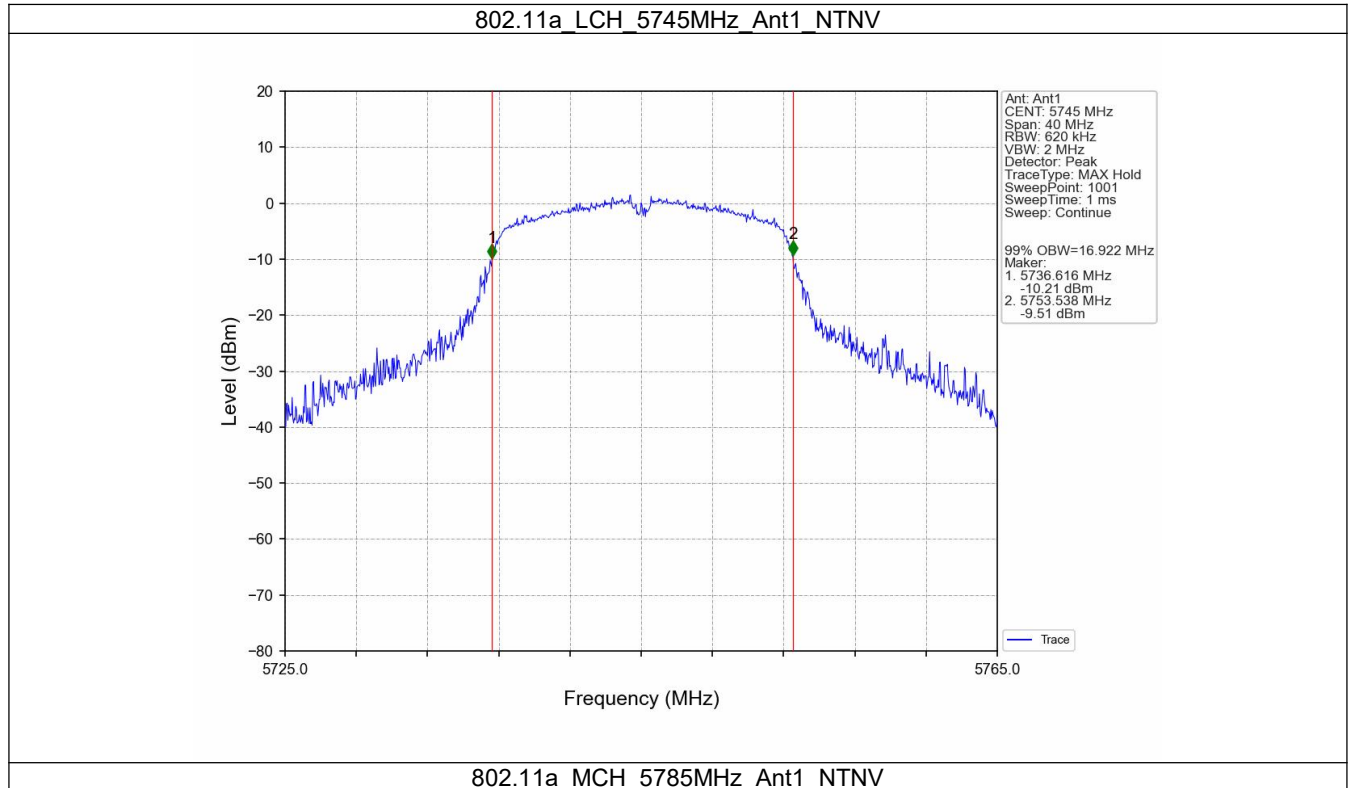
2.1.2 6dB BW

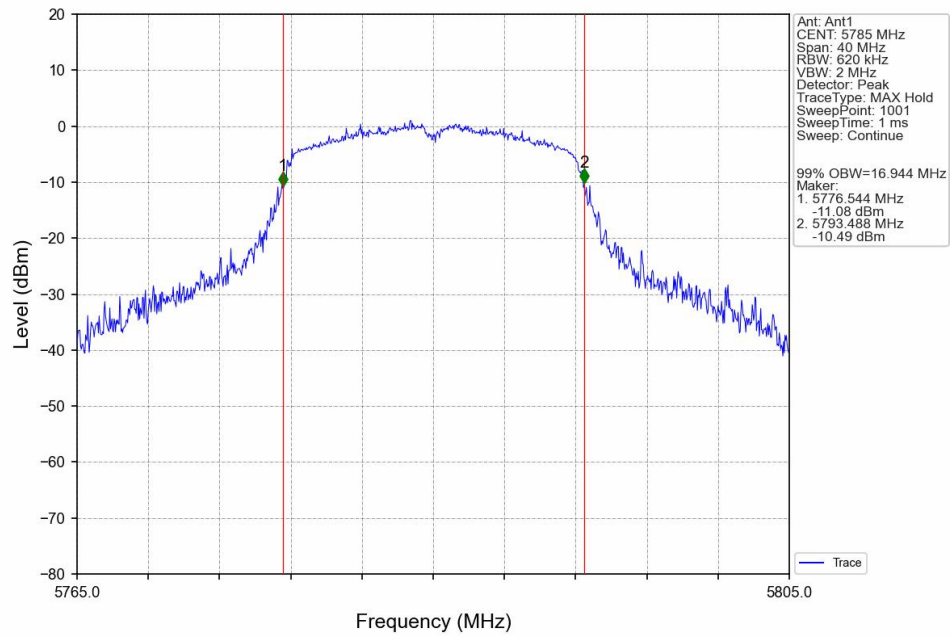
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	12.581	≥ 0.5	Pass
		5785	1	15.116	≥ 0.5	Pass
		5825	1	15.113	≥ 0.5	Pass
802.11n (HT20)	SISO	5745	1	13.928	≥ 0.5	Pass
		5785	1	15.094	≥ 0.5	Pass
		5825	1	15.092	≥ 0.5	Pass
802.11n (HT40)	SISO	5755	1	28.856	≥ 0.5	Pass
		5795	1	32.572	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	13.856	≥ 0.5	Pass
		5785	1	12.637	≥ 0.5	Pass
		5825	1	15.107	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	30.099	≥ 0.5	Pass
		5795	1	30.101	≥ 0.5	Pass



2.2 Test Graph

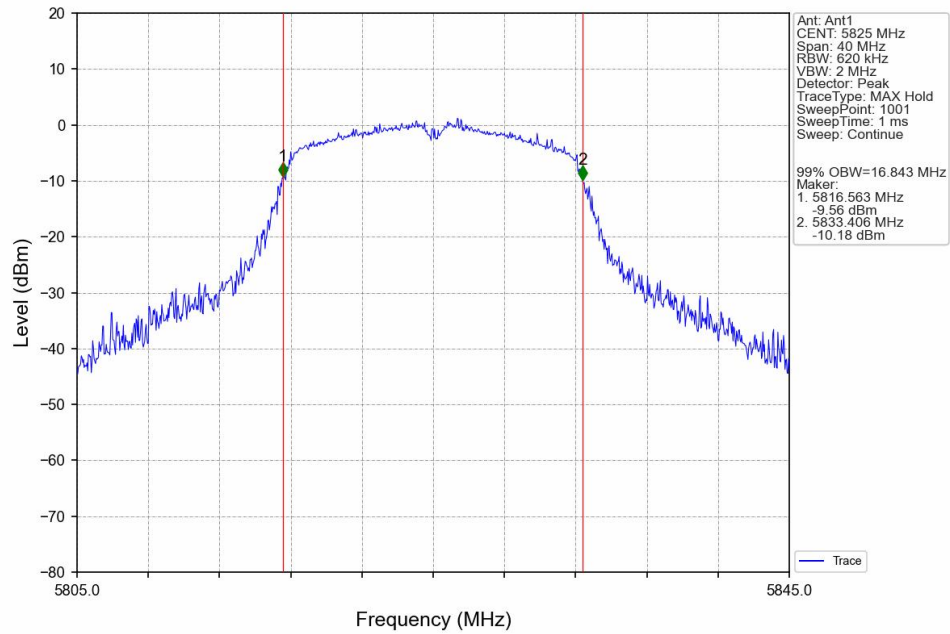
2.2.1 OBW



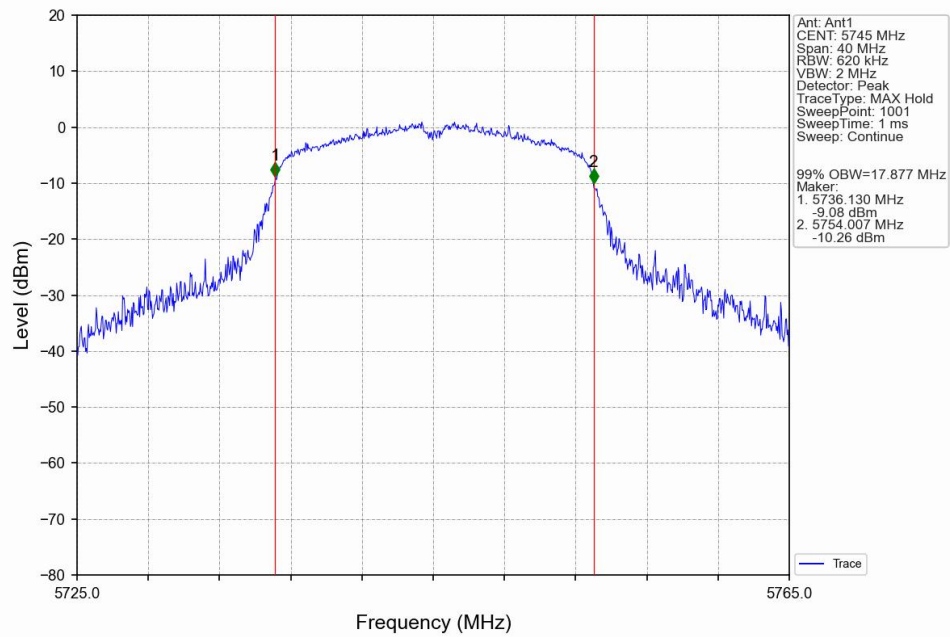




802.11a_HCH_5825MHz_Ant1_NTNV

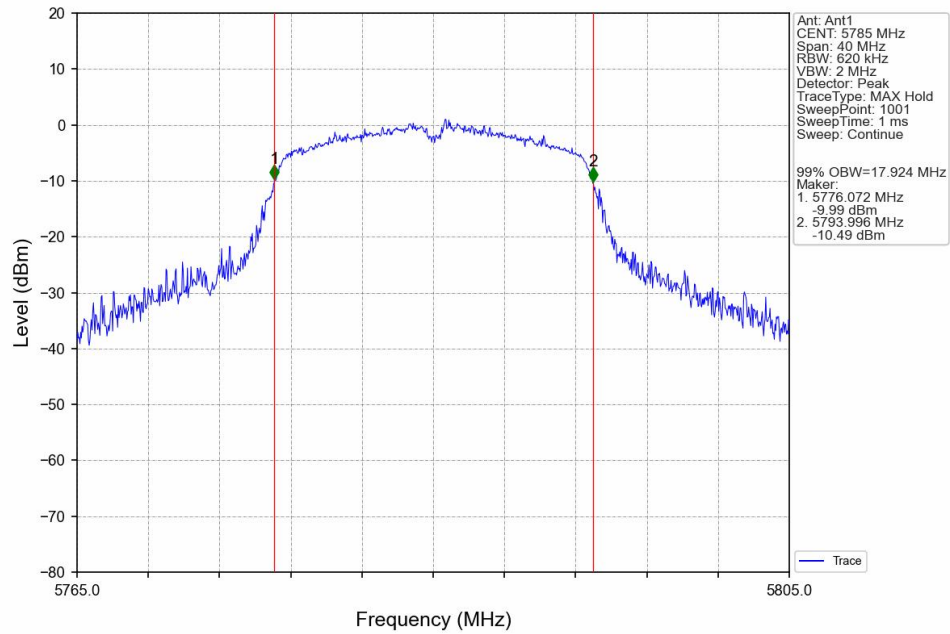


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

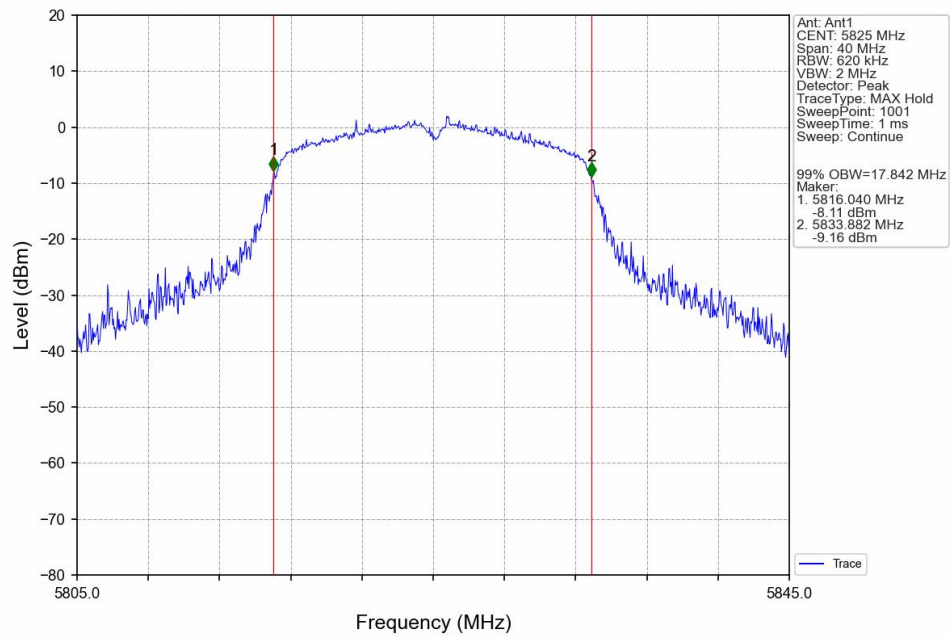




802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

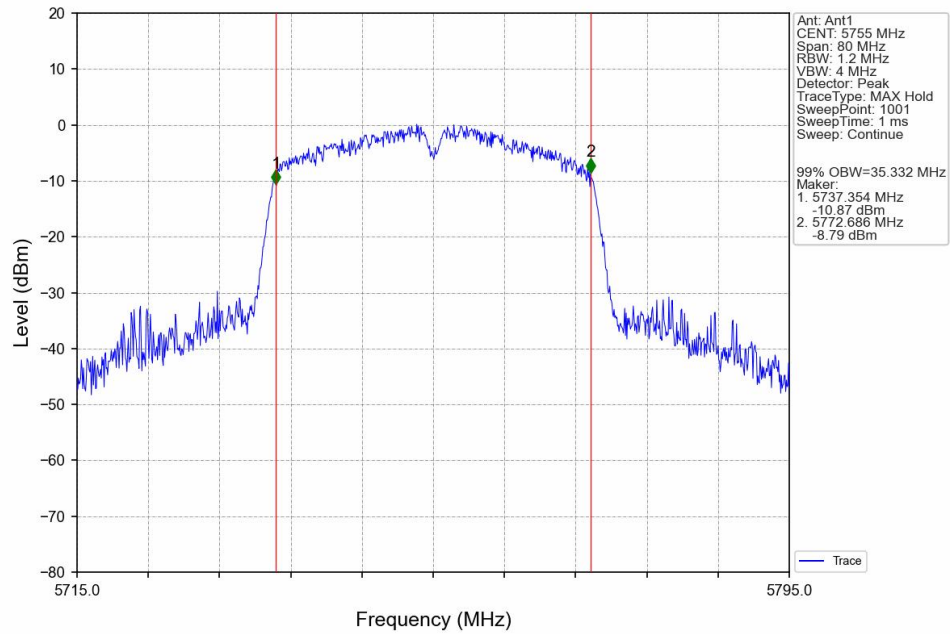


802.11n(HT20)_HCH_5825MHz_Ant1_NTNV

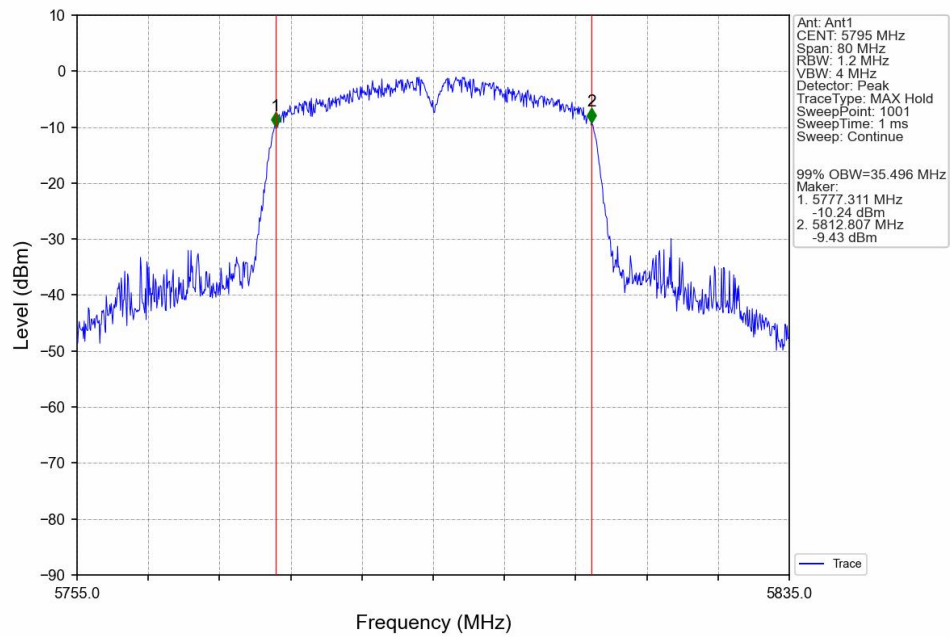




802.11n(HT40)_LCH_5755MHz_Ant1_NTNV

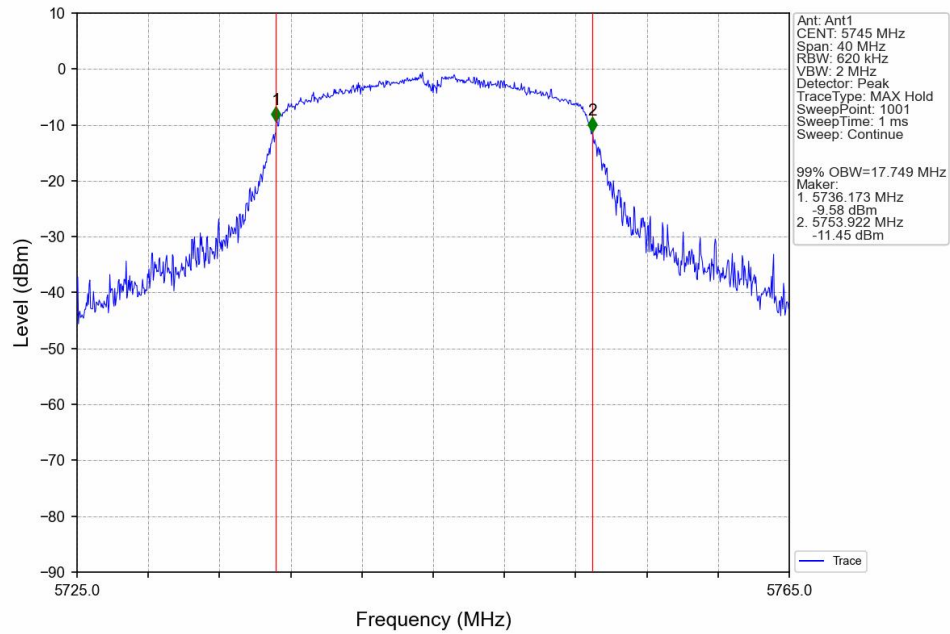


802.11n(HT40)_HCH_5795MHz_Ant1_NTNV

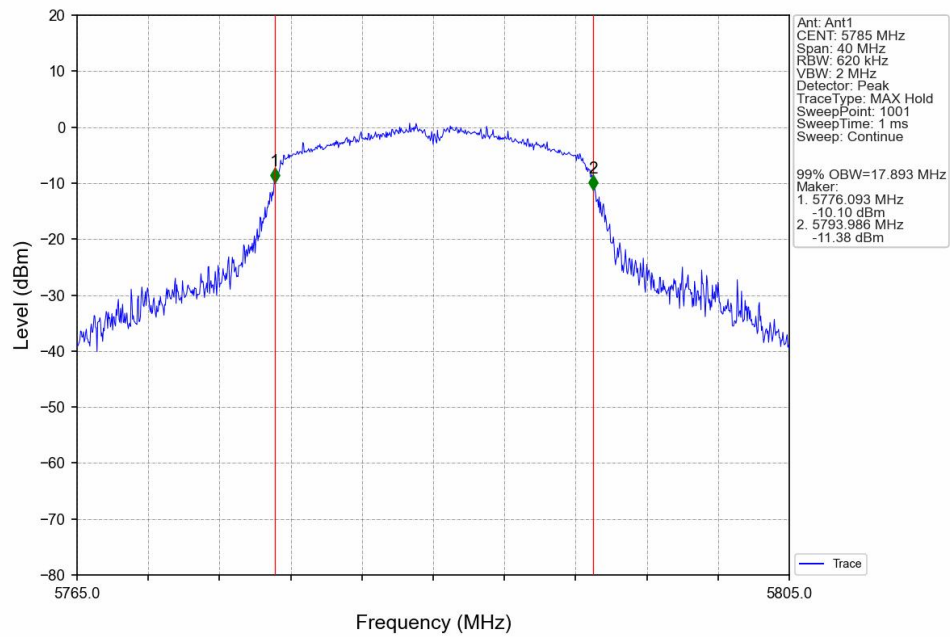




802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV

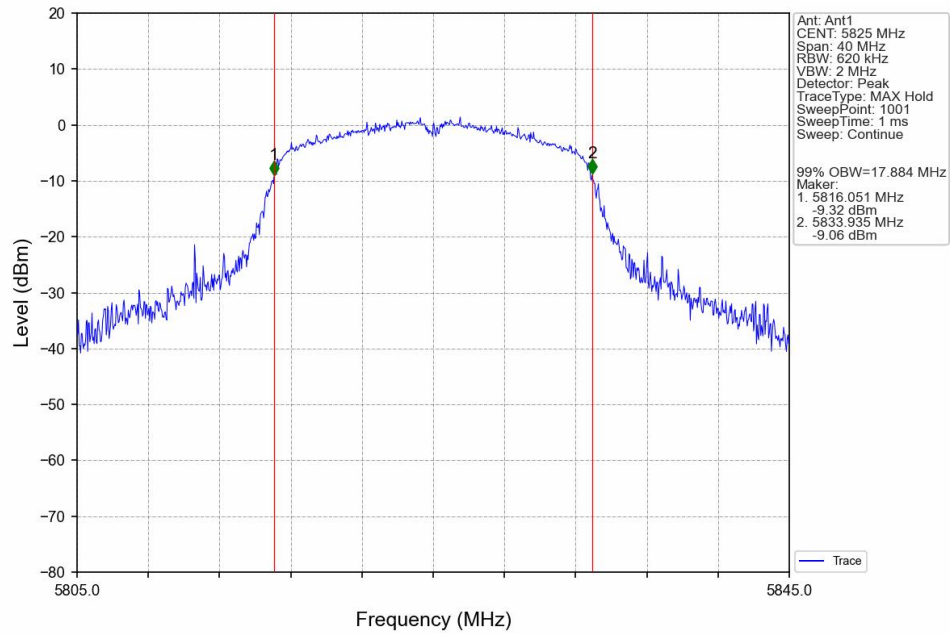


802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV

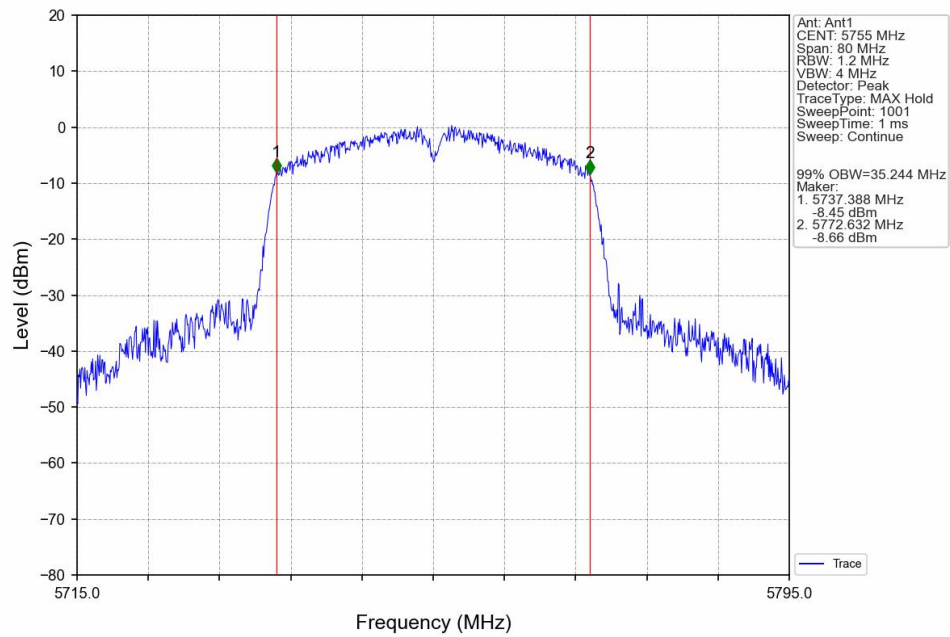




802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV

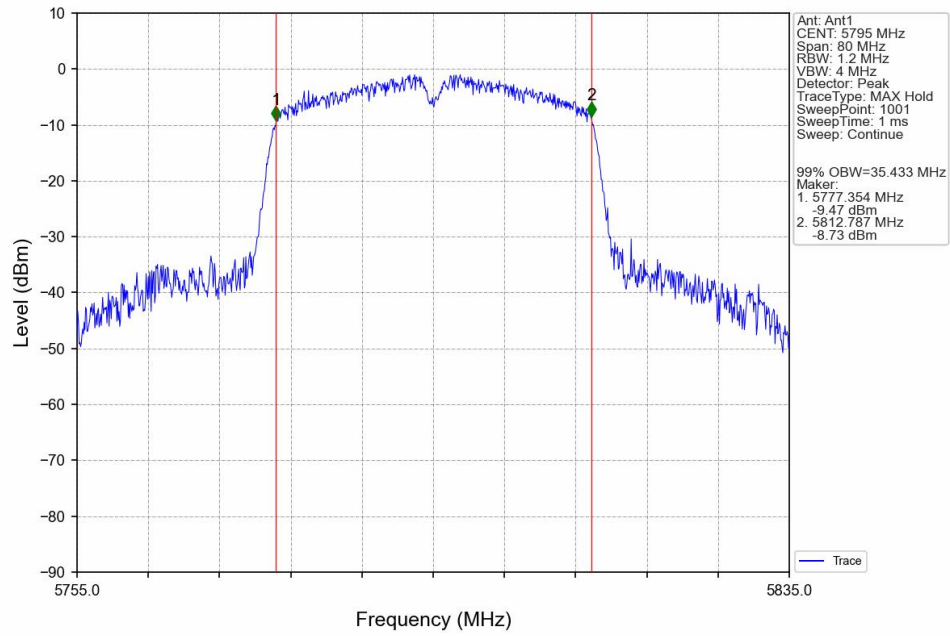


802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



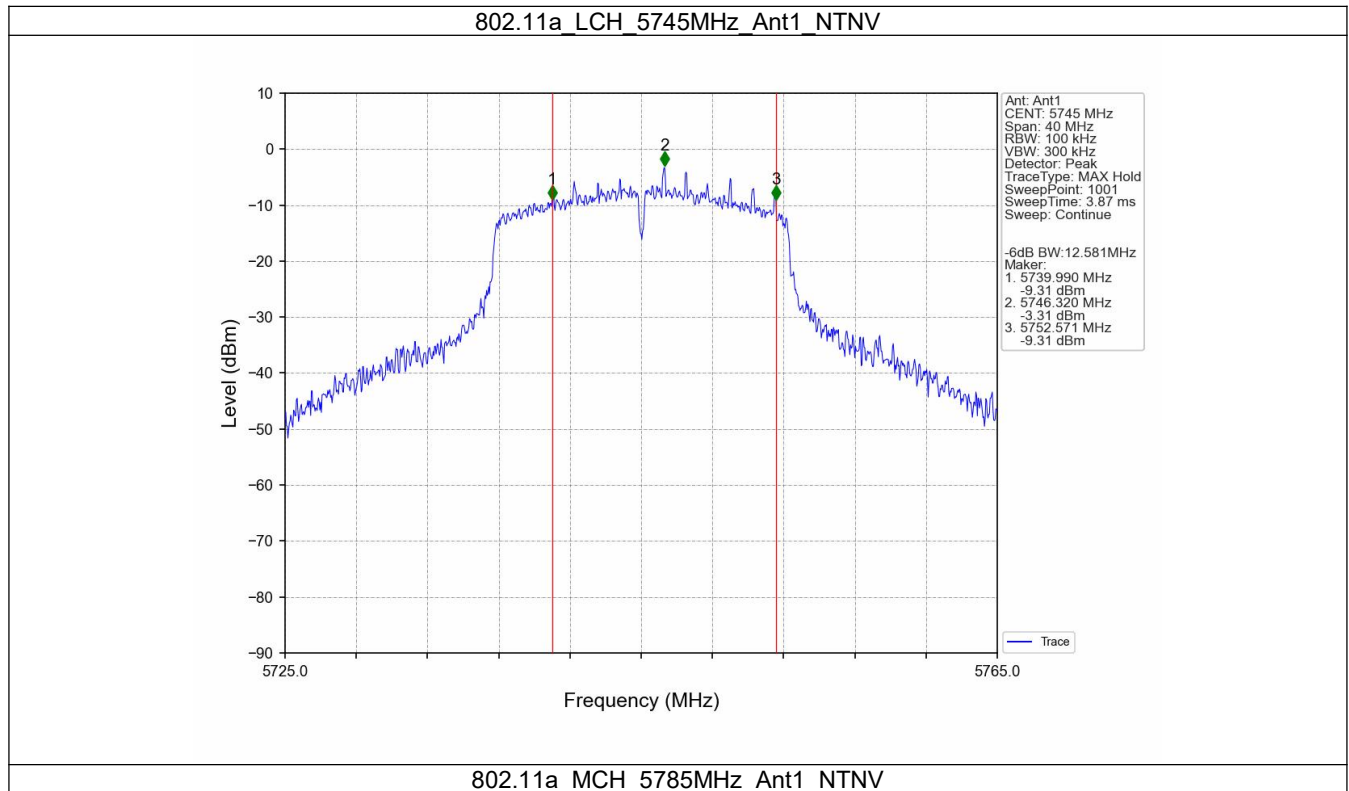


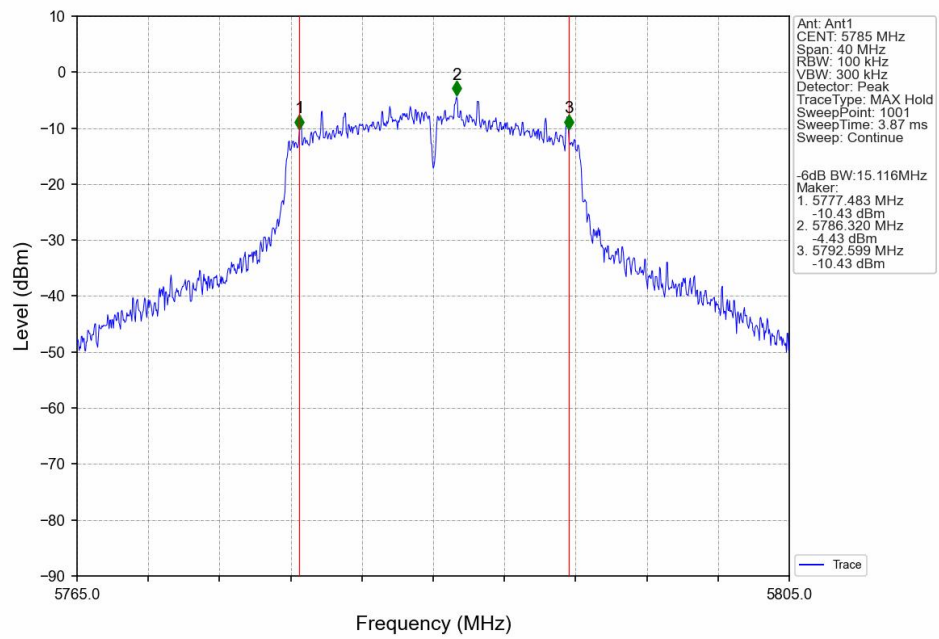
802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV





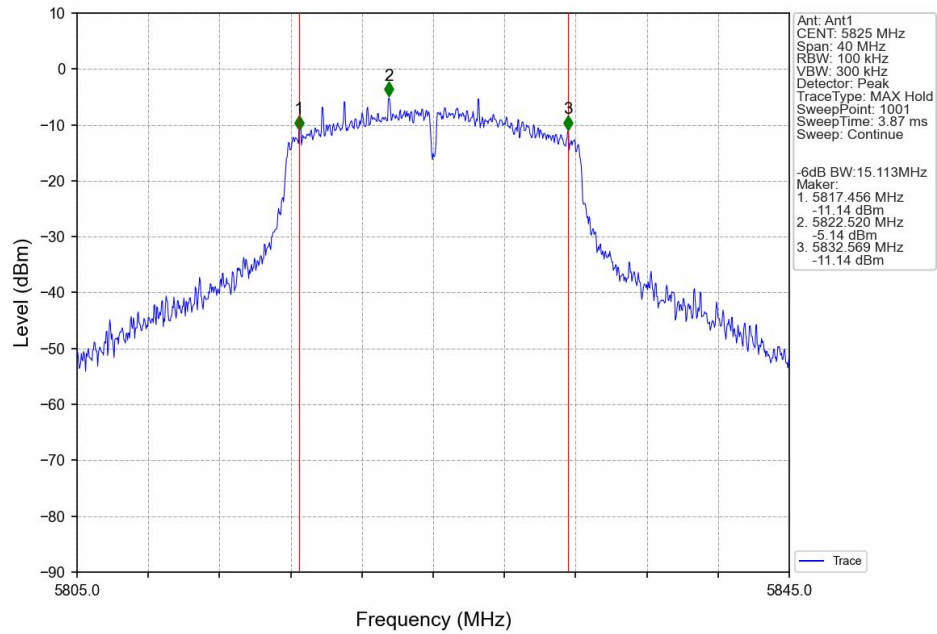
2.2.2 6dB BW



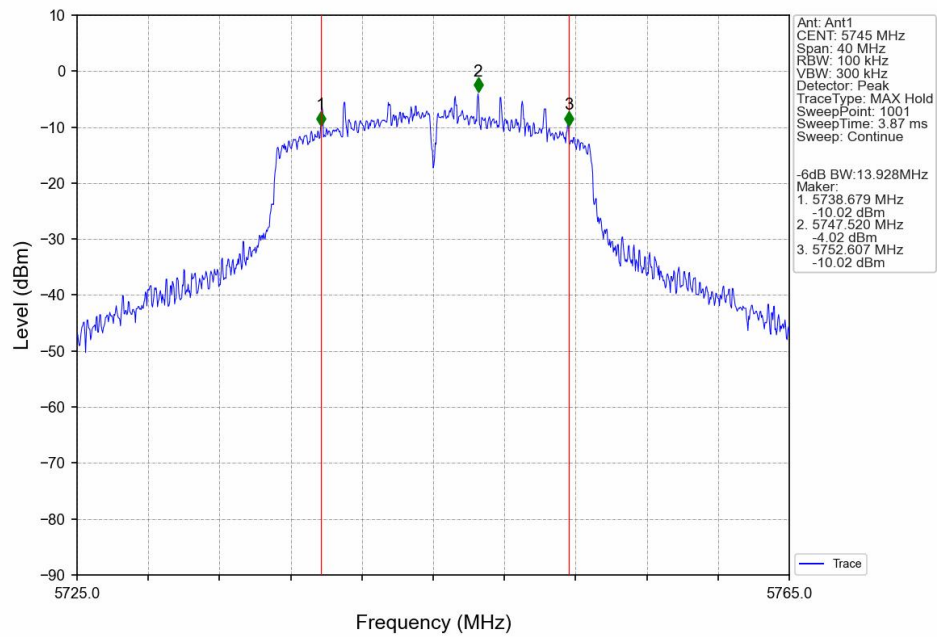




802.11a_HCH_5825MHz_Ant1_NTNV

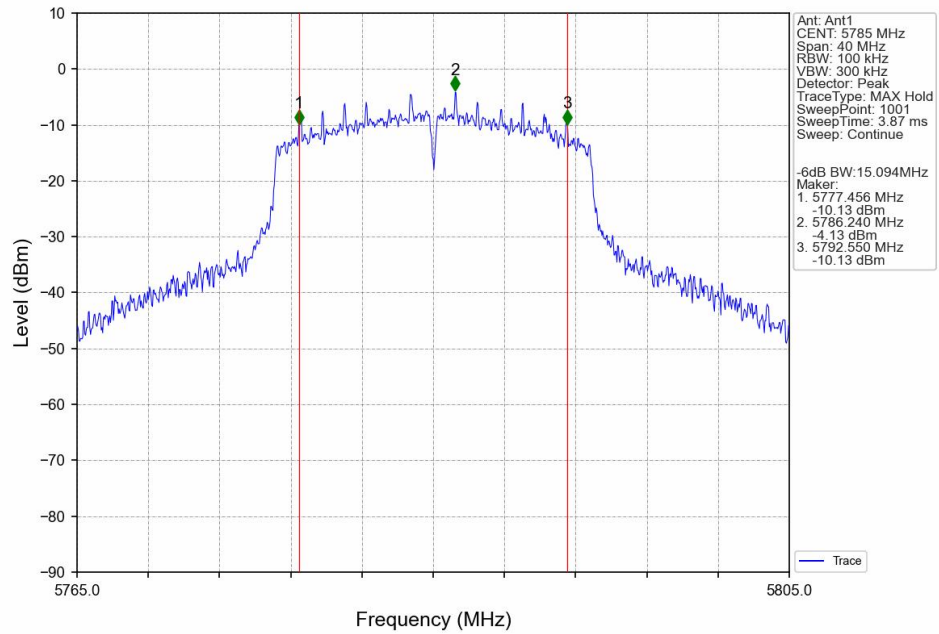


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

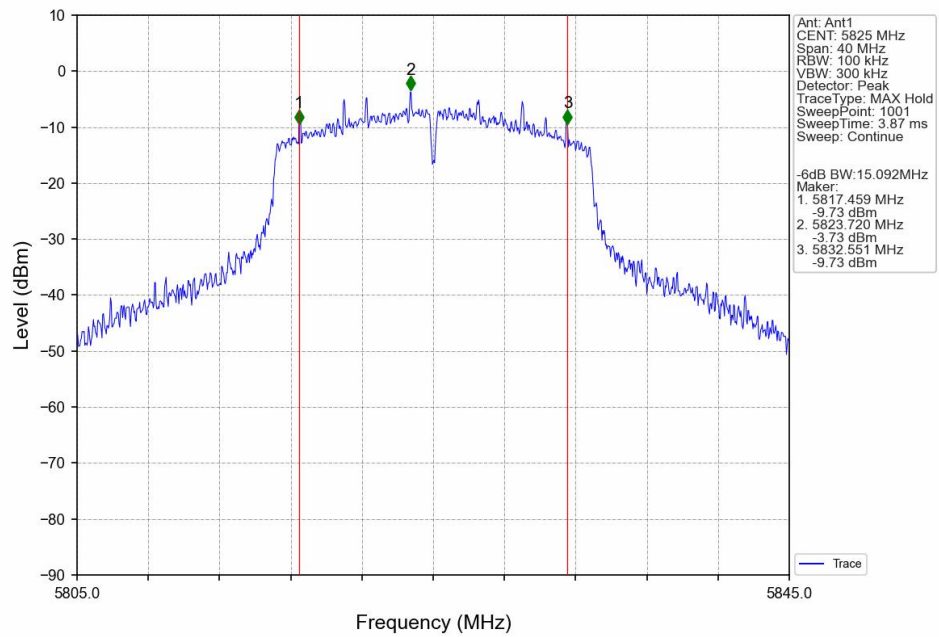




802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

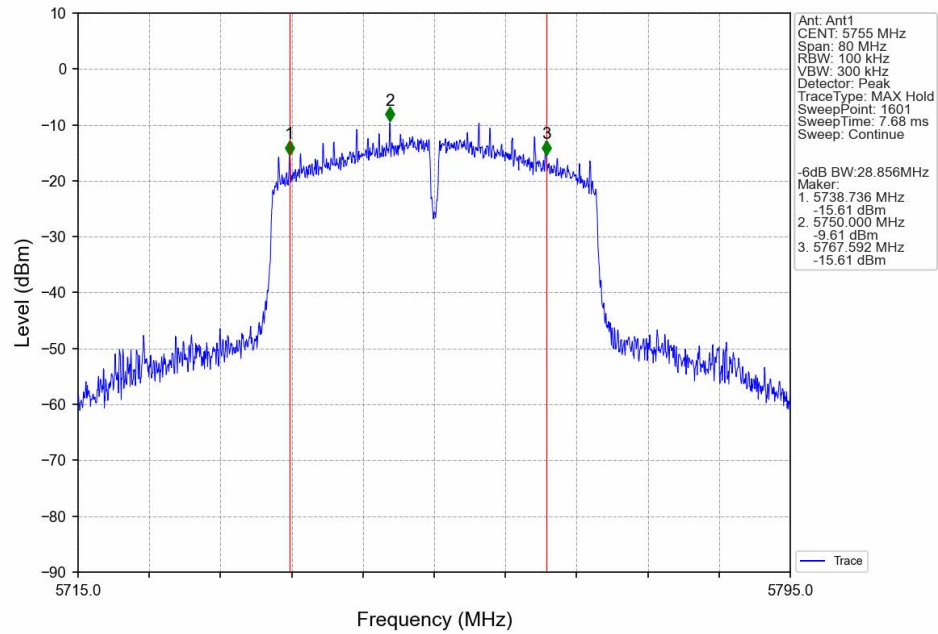


802.11n(HT20)_HCH_5825MHz_Ant1_NTNV

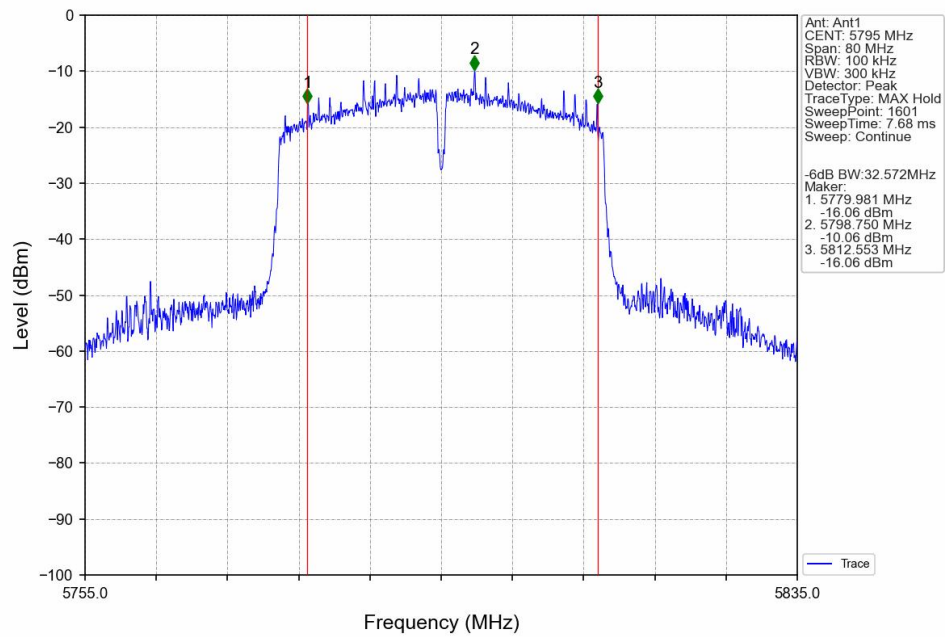




802.11n(HT40)_LCH_5755MHz_Ant1_NTNV

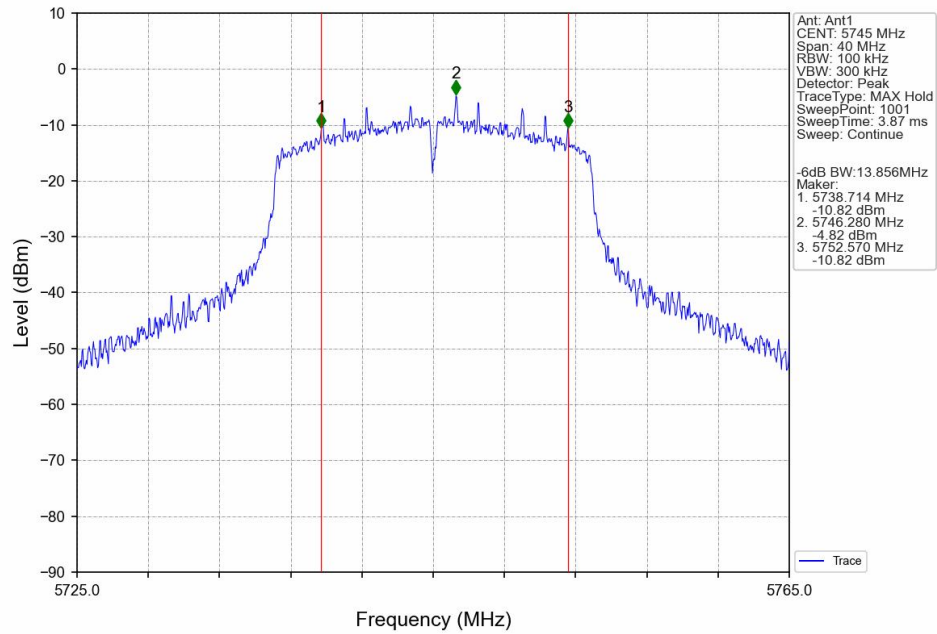


802.11n(HT40)_HCH_5795MHz_Ant1_NTNV

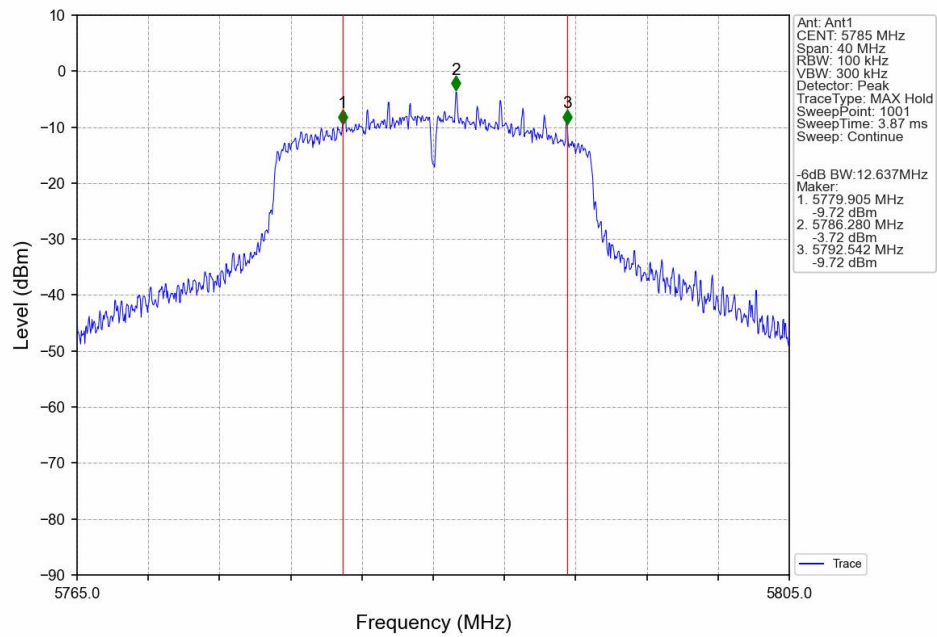




802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV

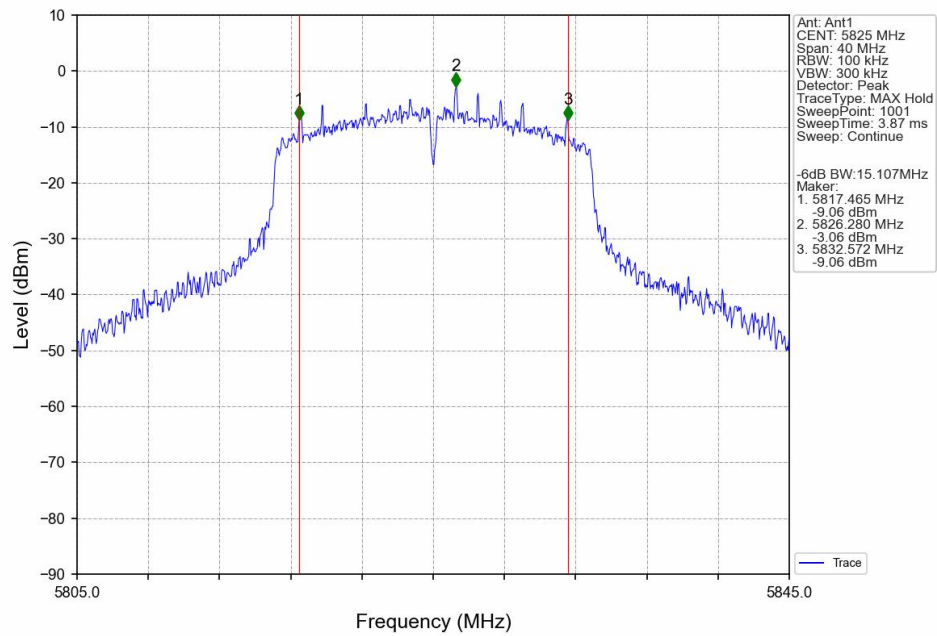


802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV

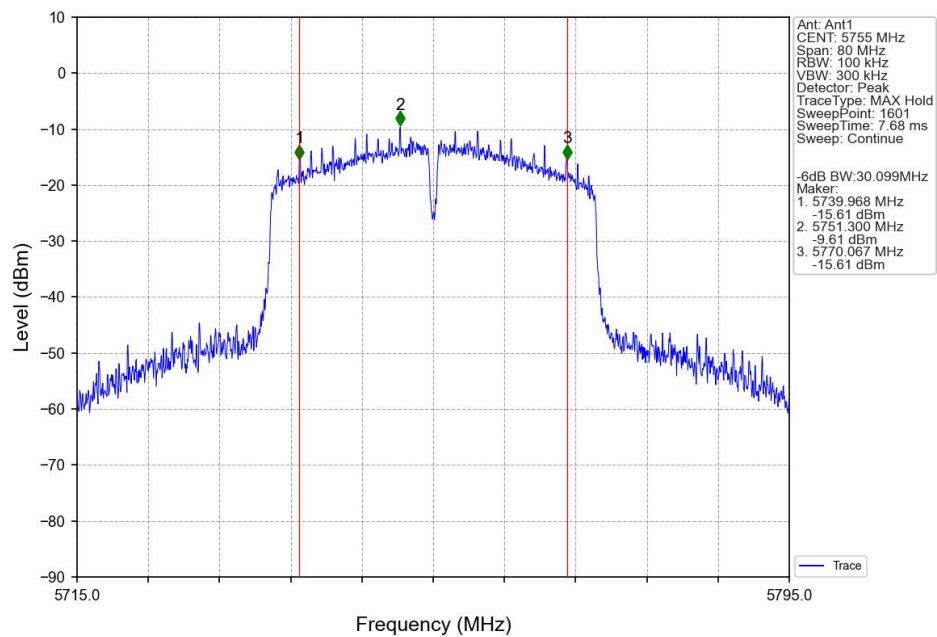




802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV

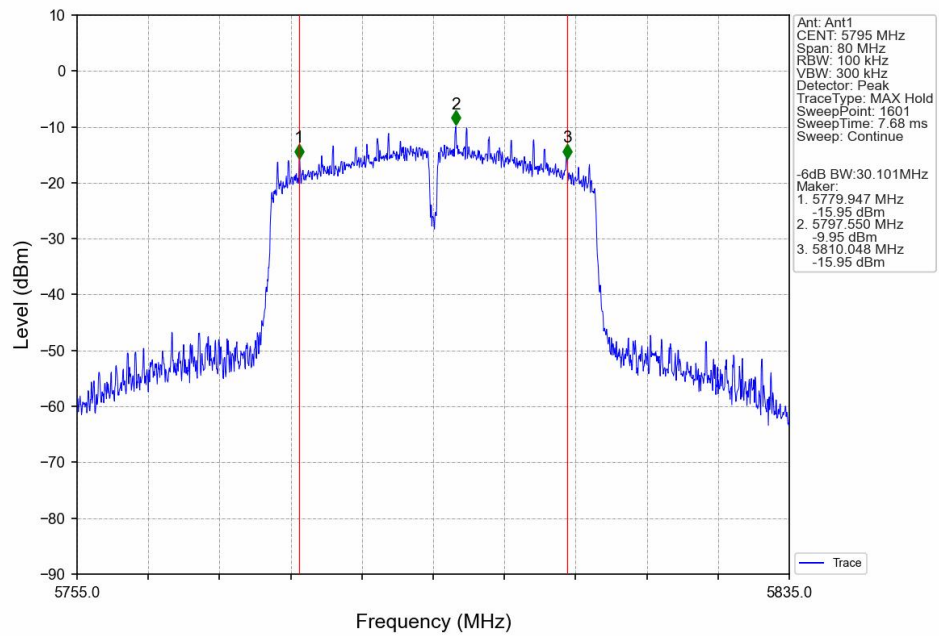


802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV





802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV





3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

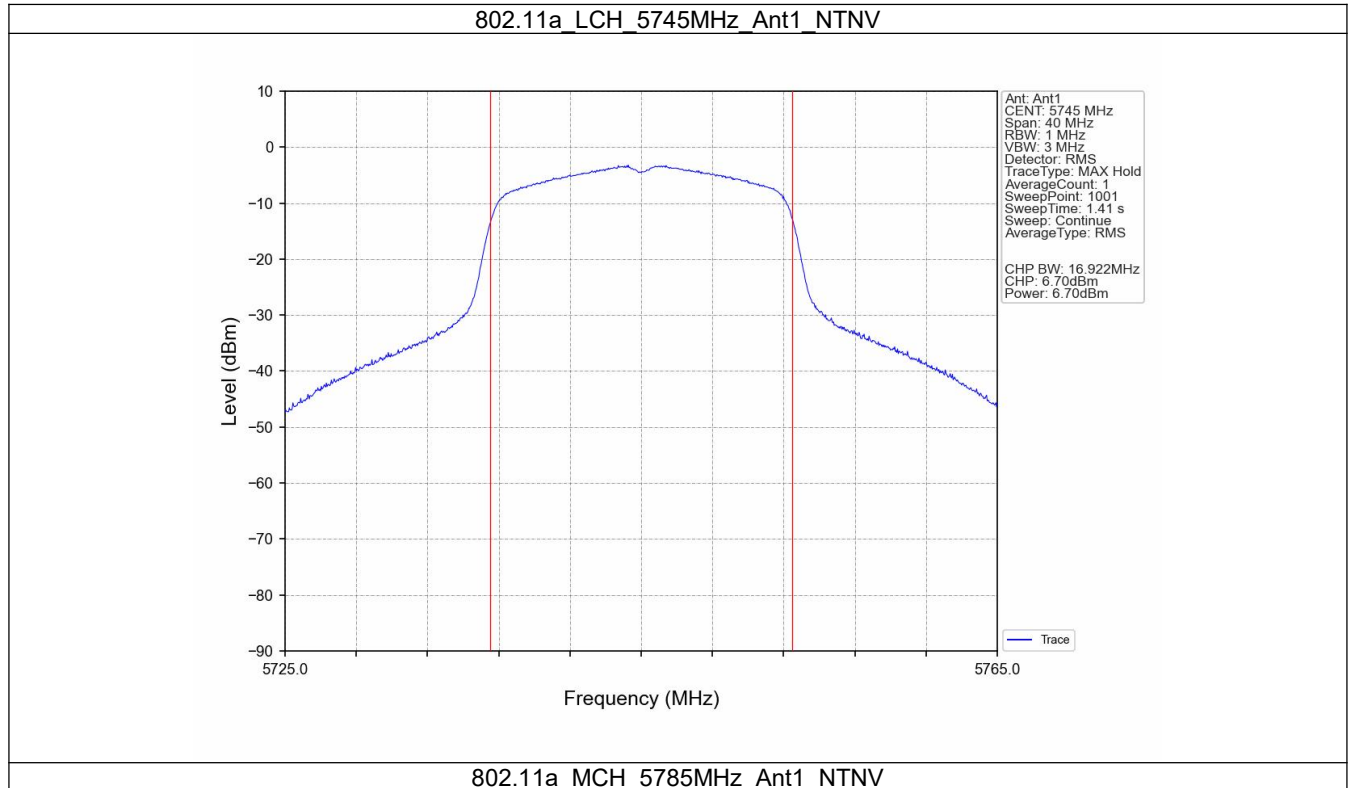
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	6.70	<=30	Pass
		5785	6.17	<=30	Pass
		5825	5.84	<=30	Pass
802.11n (HT20)	SISO	5745	6.52	<=30	Pass
		5785	6.03	<=30	Pass
		5825	6.47	<=30	Pass
802.11n (HT40)	SISO	5755	5.63	<=30	Pass
		5795	5.83	<=30	Pass
802.11ac (VHT20)	SISO	5745	5.64	<=30	Pass
		5785	6.02	<=30	Pass
		5825	6.47	<=30	Pass
802.11ac (VHT40)	SISO	5755	5.91	<=30	Pass
		5795	5.85	<=30	Pass

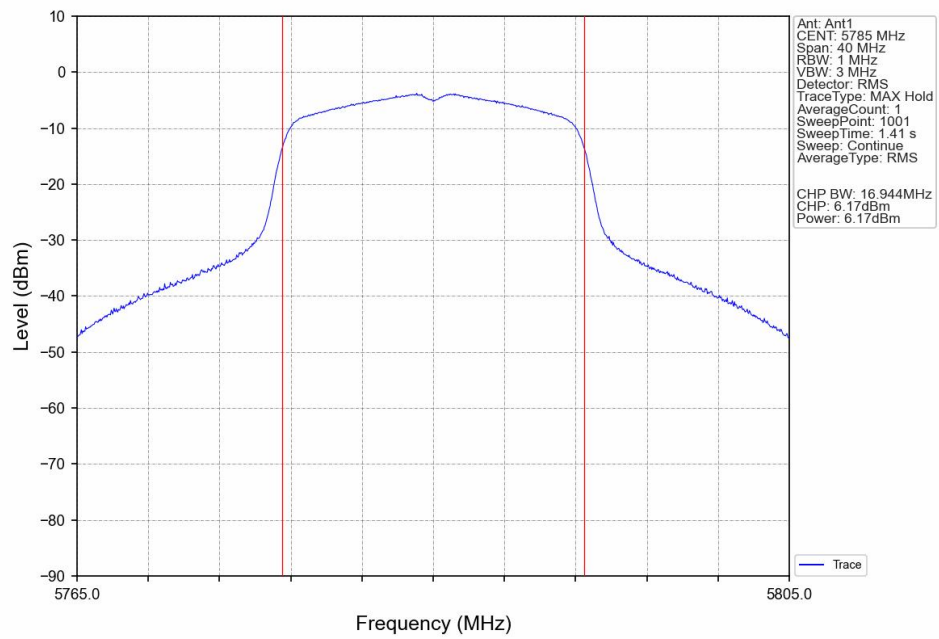
Note1: Antenna Gain: Ant1: 2.12dBi;



3.2 Test Graph

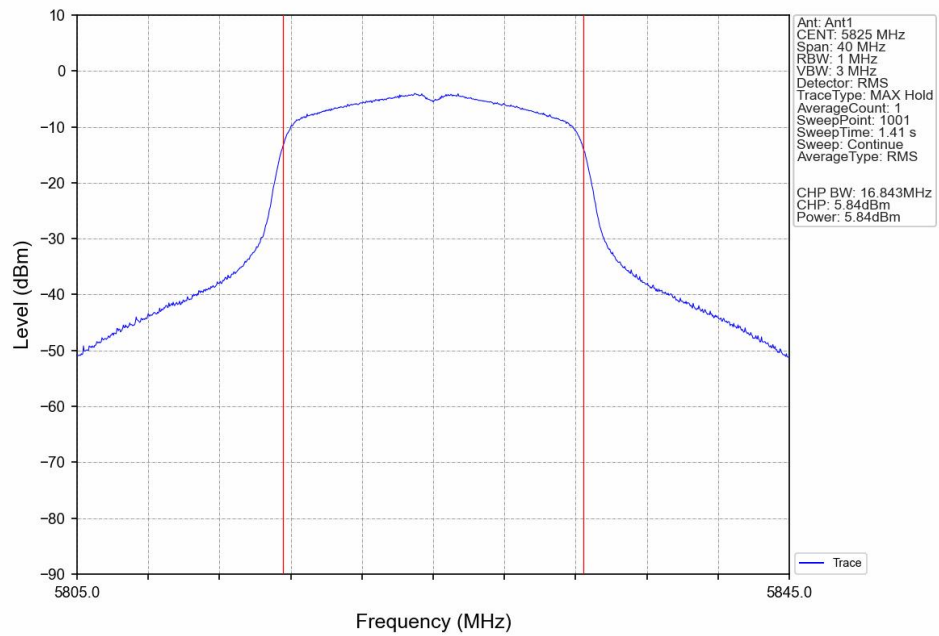
3.2.1 Power



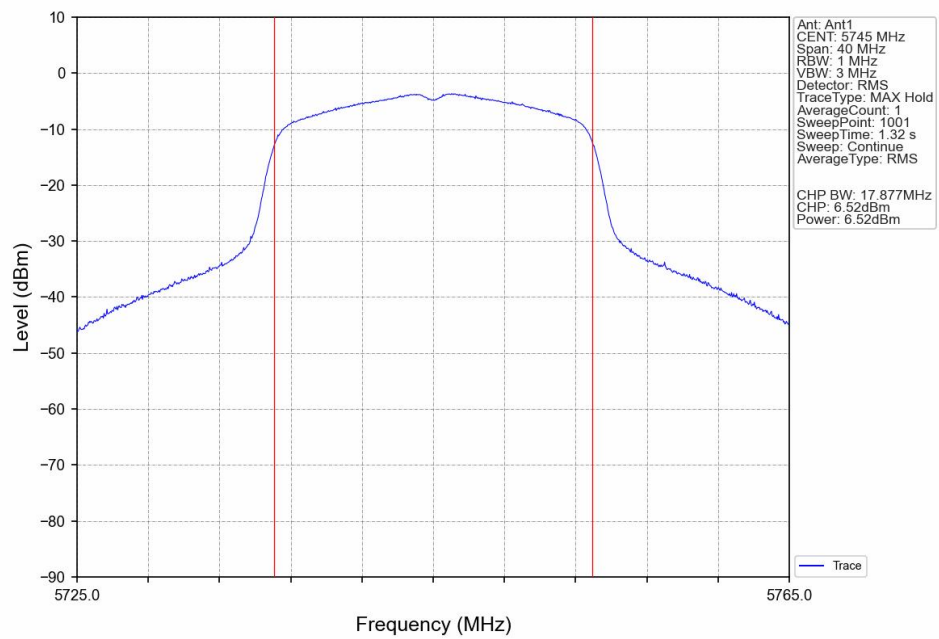




802.11a_HCH_5825MHz_Ant1_NTNV

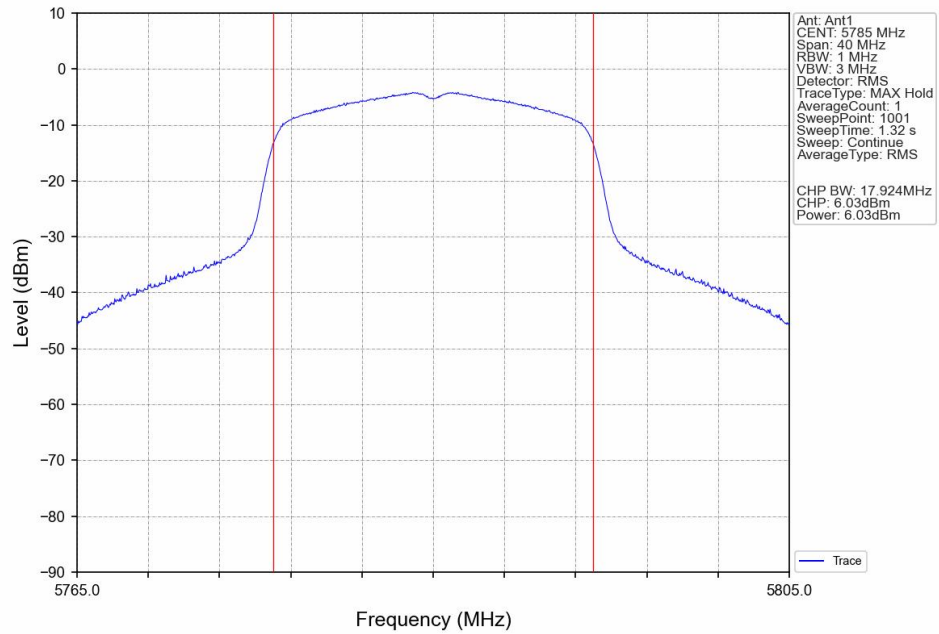


802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

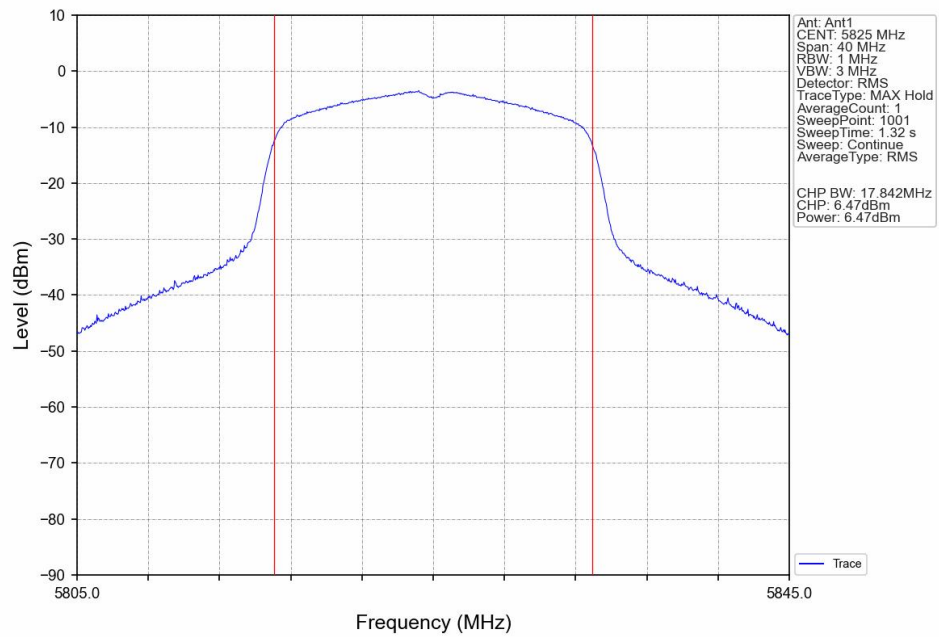




802.11n(HT20)_MCH_5785MHz_Ant1_NTNV

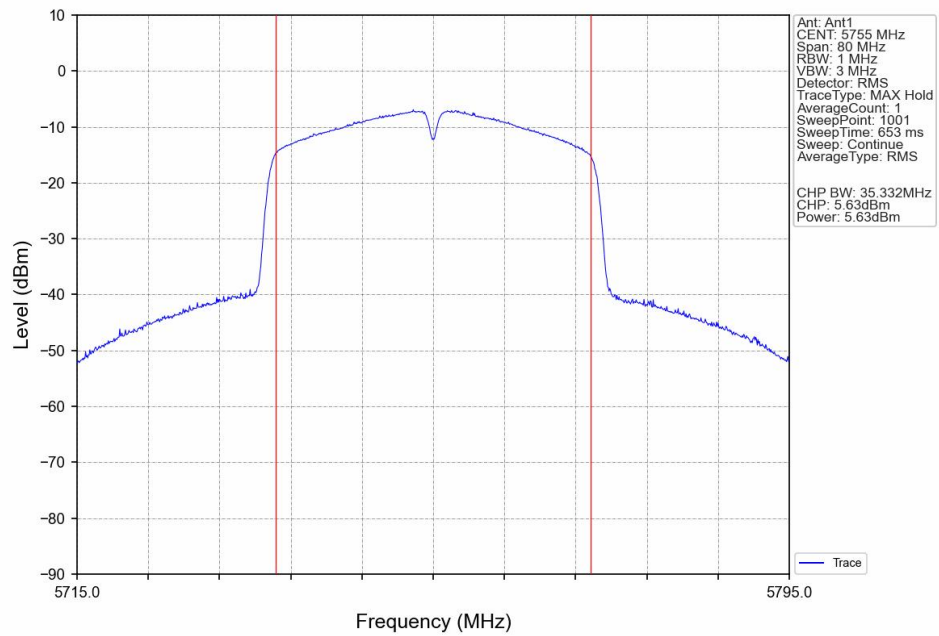


802.11n(HT20)_HCH_5825MHz_Ant1_NTNV





802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



802.11n(HT40)_HCH_5795MHz_Ant1_NTNV

