

1. Bandwidth

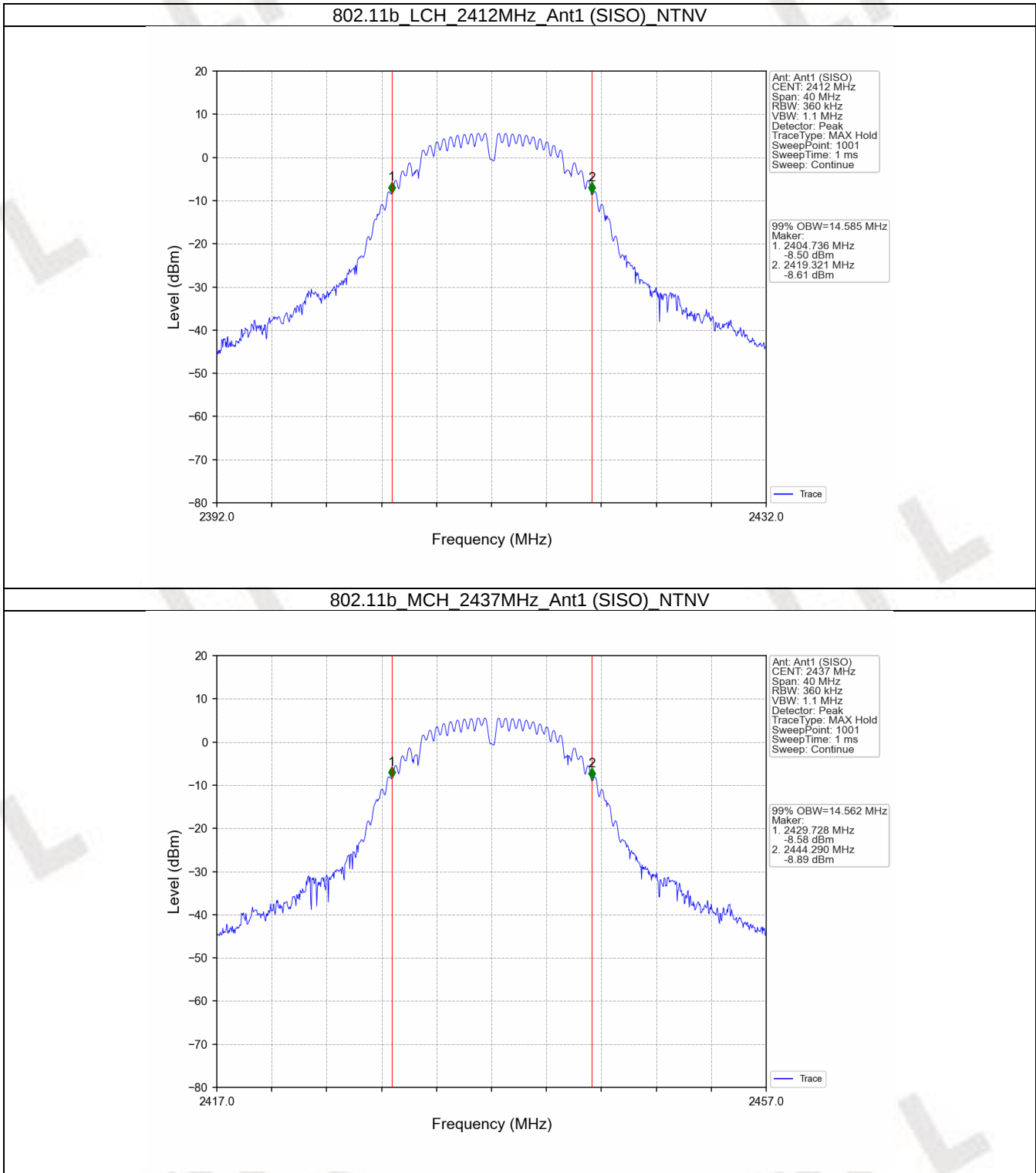
1.1 OBW

1.1.1 Test Result

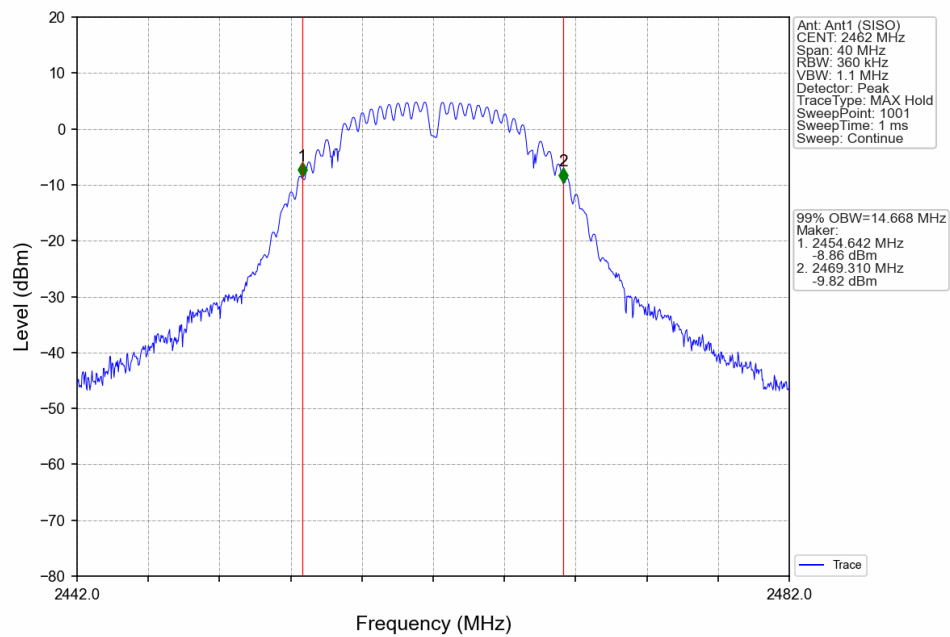
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11b	SISO	2412	1	14.585	Pass
		2437	1	14.562	Pass
		2462	1	14.668	Pass
802.11g	SISO	2412	1	17.262	Pass
		2437	1	17.252	Pass
		2462	1	17.242	Pass
802.11n (HT20)	SISO	2412	1	18.394	Pass
		2437	1	18.421	Pass
		2462	1	18.403	Pass
802.11n (HT40)	SISO	2422	1	36.554	Pass
		2437	1	36.652	Pass
		2452	1	36.581	Pass

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11b	SISO	2412	2	14.551	Pass
		2437	2	14.533	Pass
		2462	2	14.622	Pass
802.11g	SISO	2412	2	17.287	Pass
		2437	2	17.283	Pass
		2462	2	17.206	Pass
802.11n (HT20)	SISO	2412	2	18.405	Pass
		2437	2	18.450	Pass
		2462	2	18.357	Pass
802.11n (HT40)	SISO	2422	2	36.427	Pass
		2437	2	36.815	Pass
		2452	2	36.745	Pass

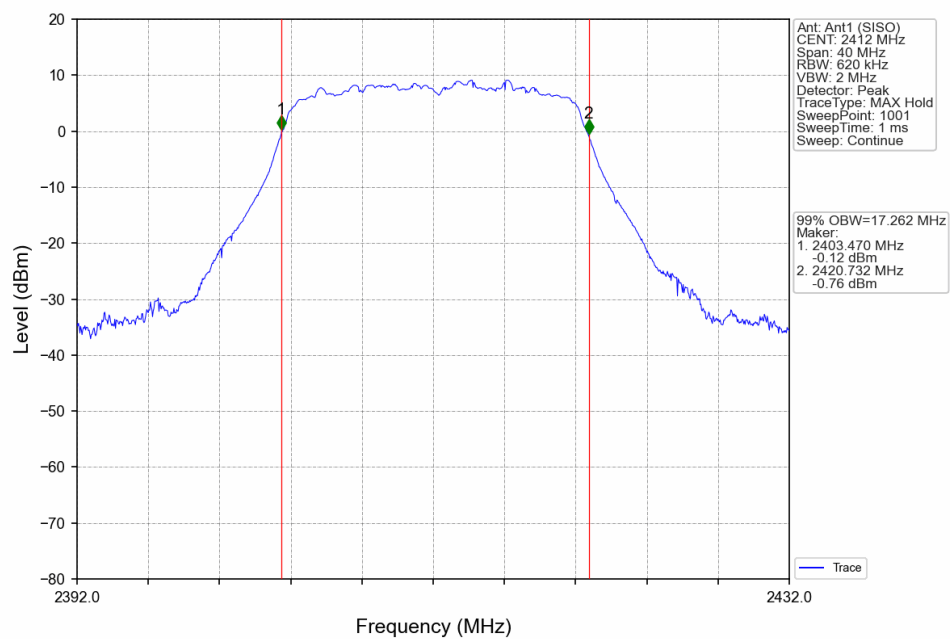
1.1.2 Test Graph



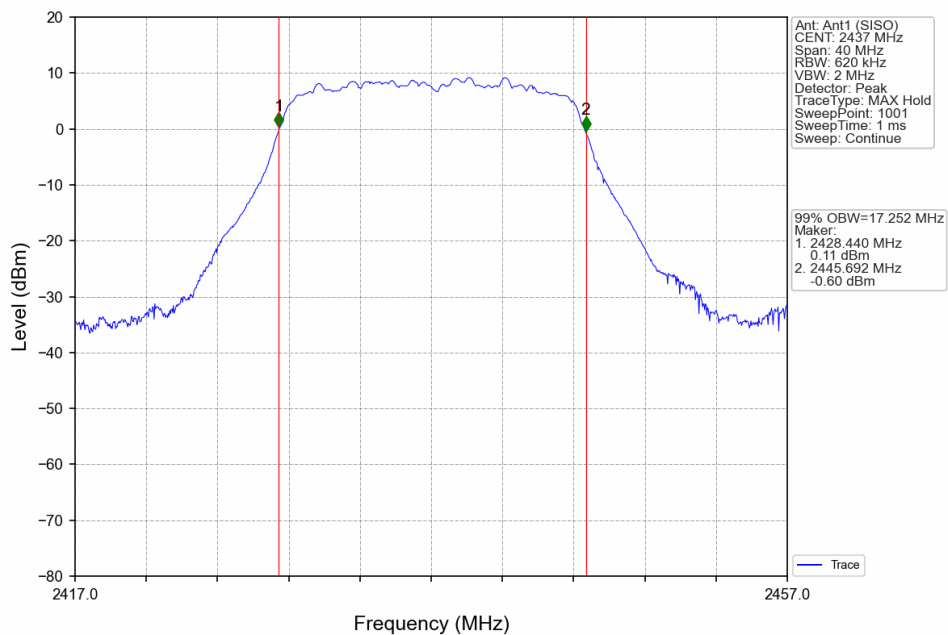
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



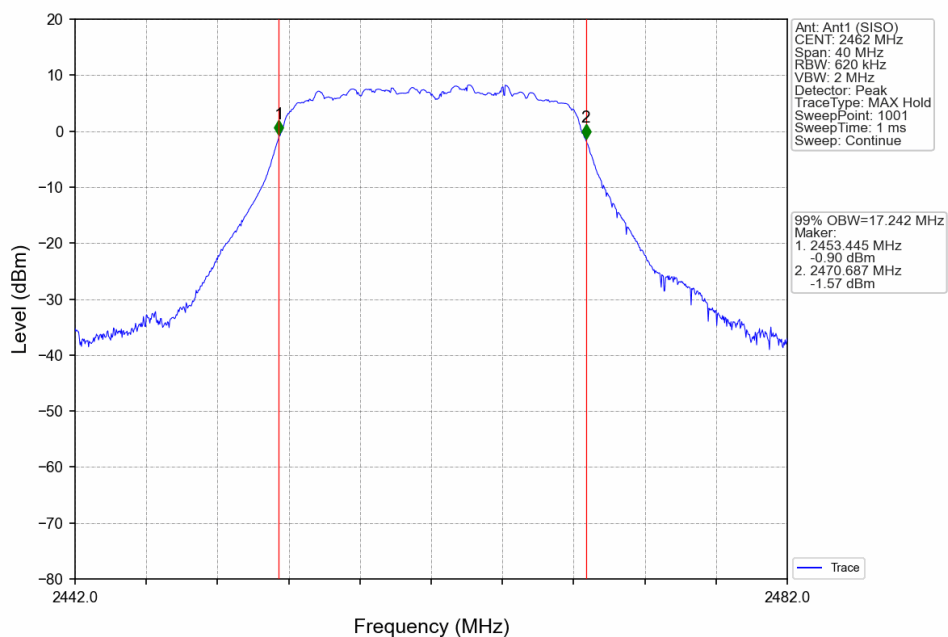
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



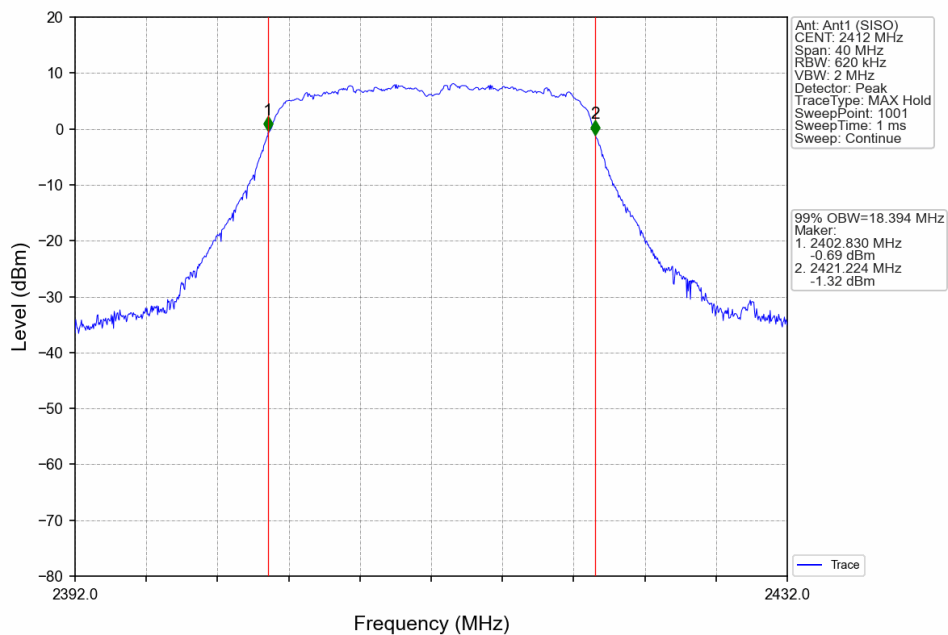
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



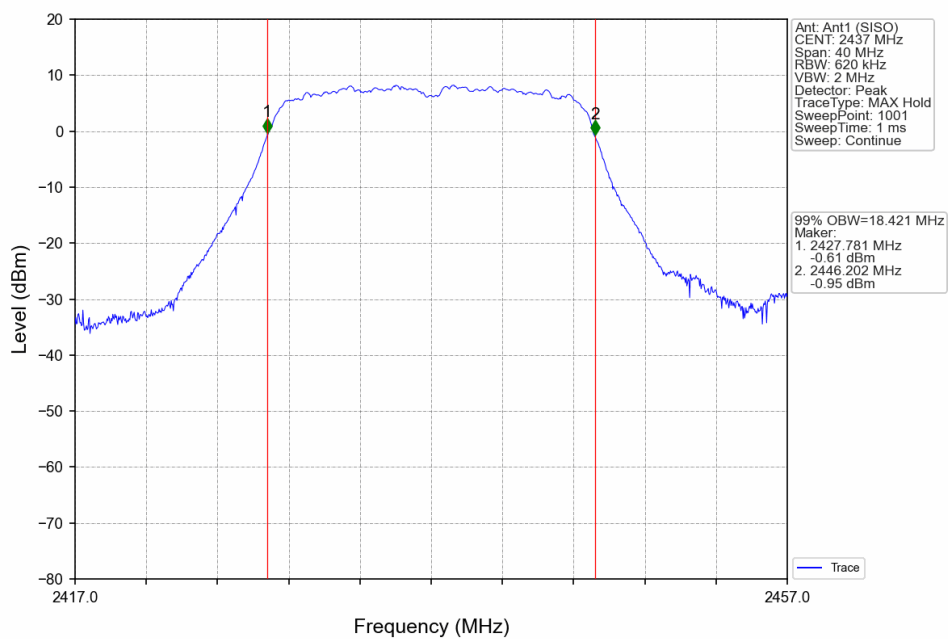
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



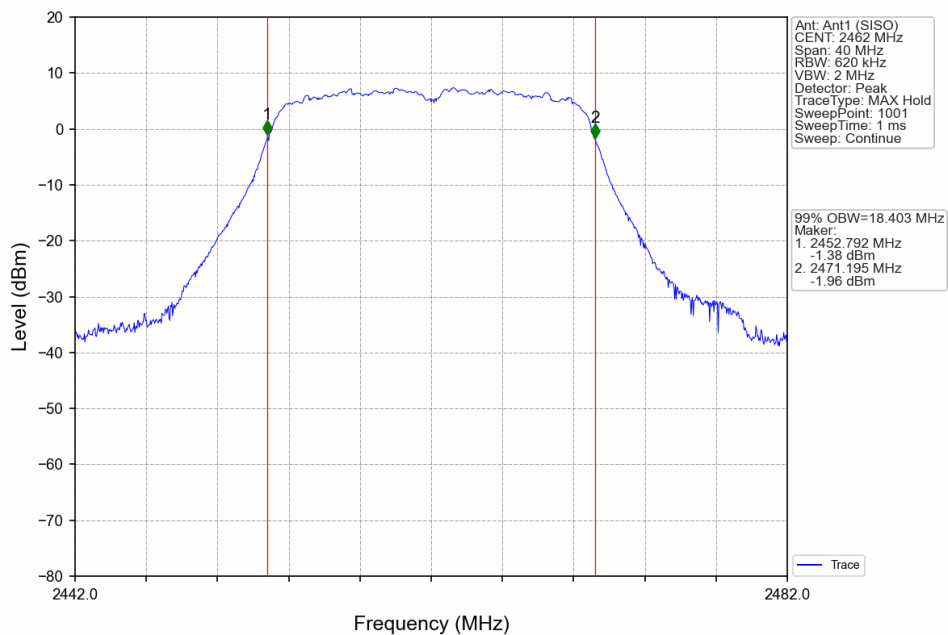
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



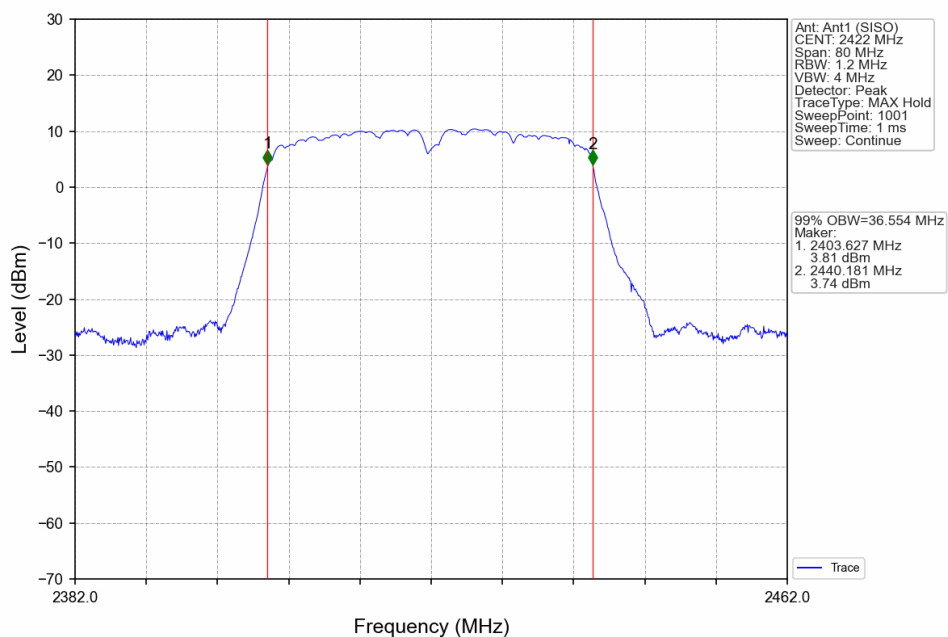
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



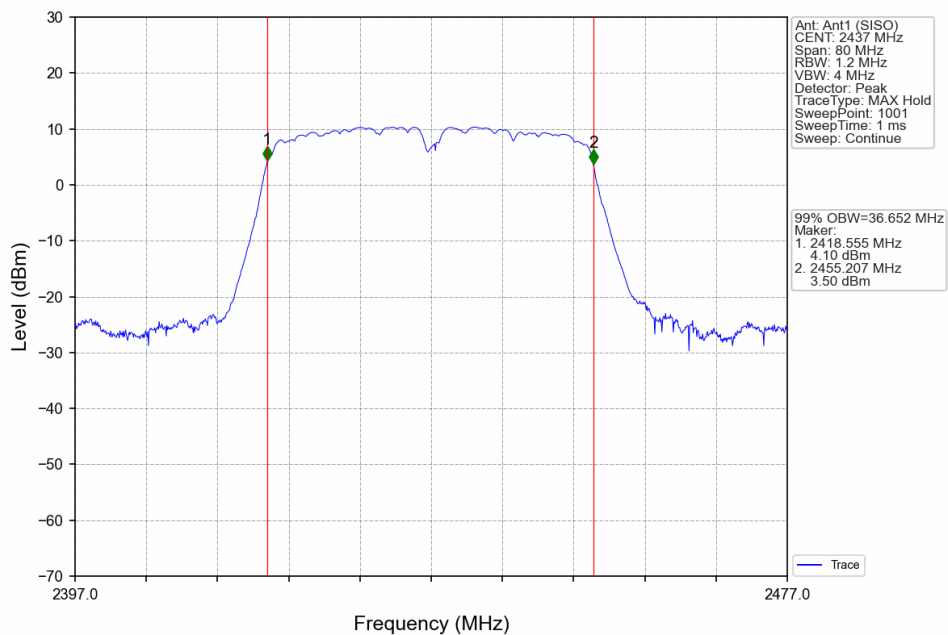
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



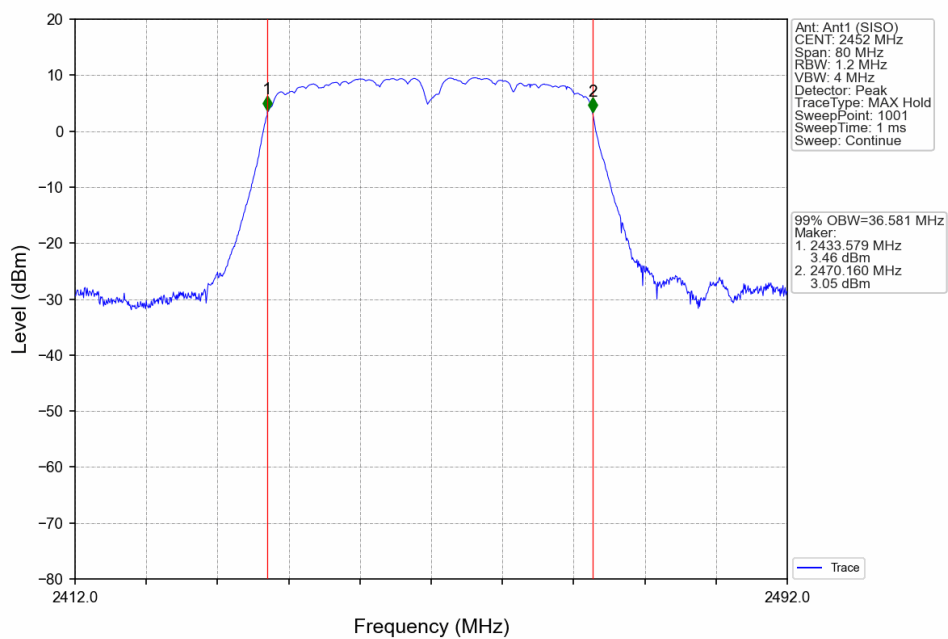
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



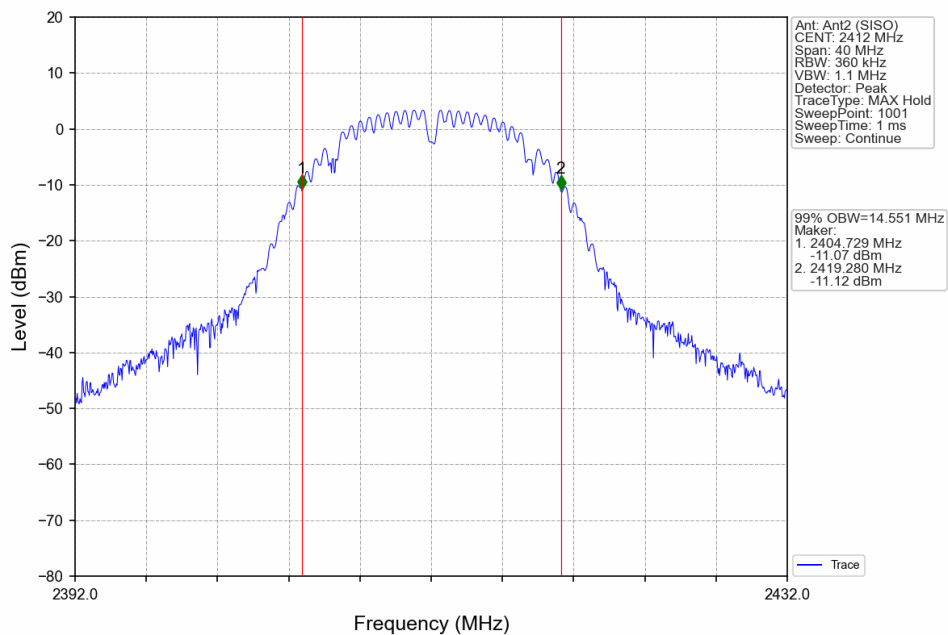
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



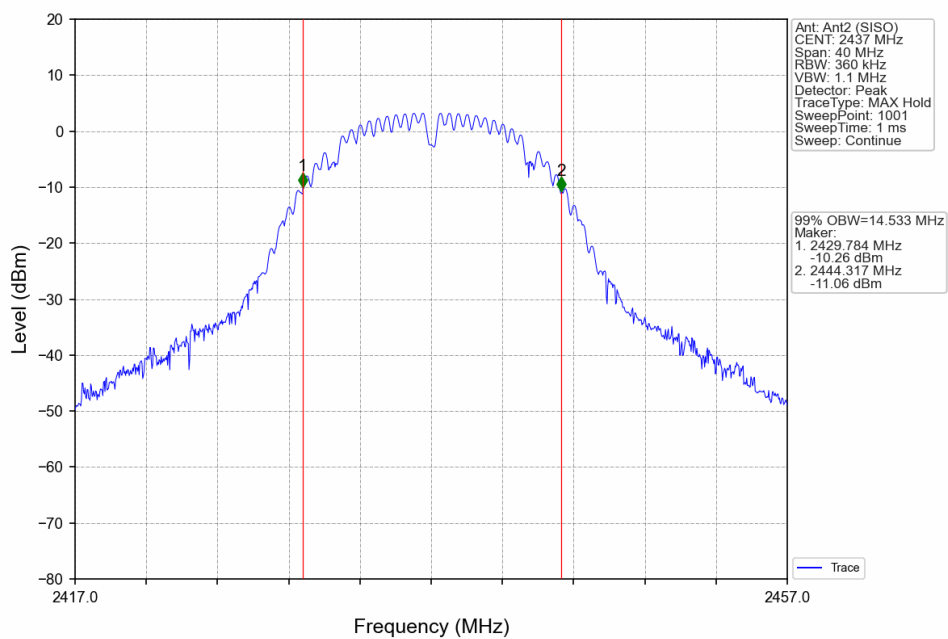
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



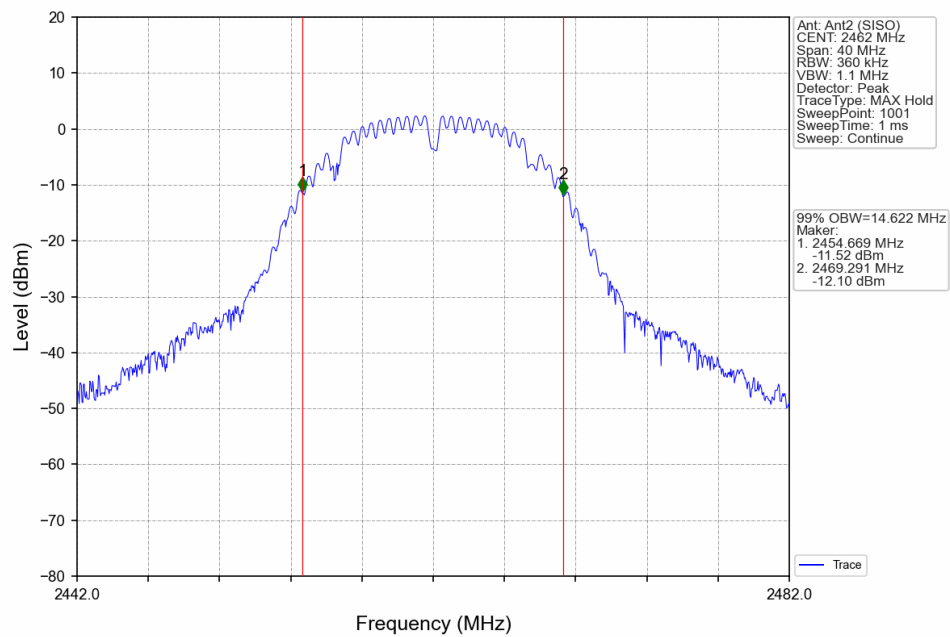
802.11b_LCH_2412MHz_Ant2 (SISO)_NTNV



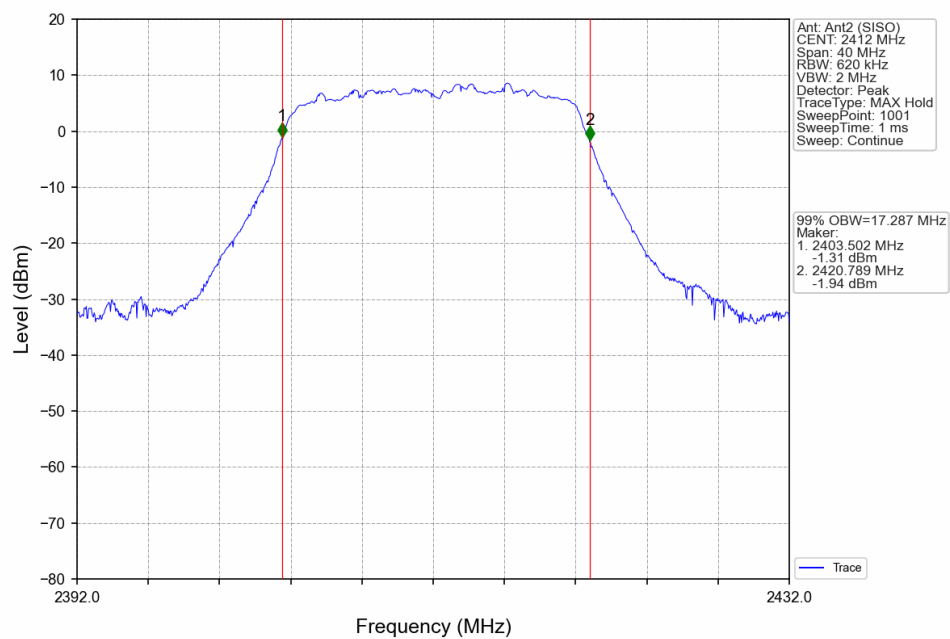
802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



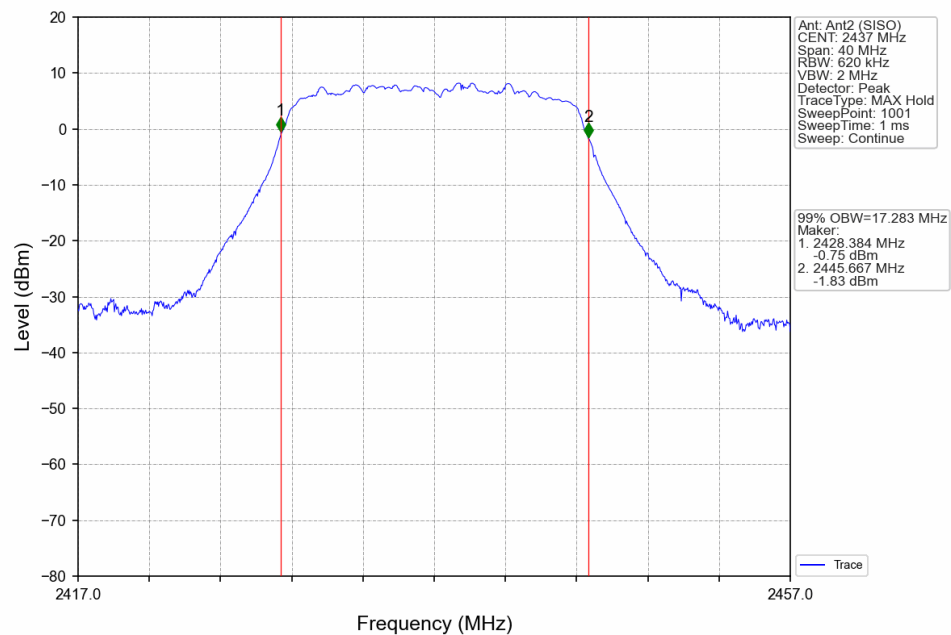
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



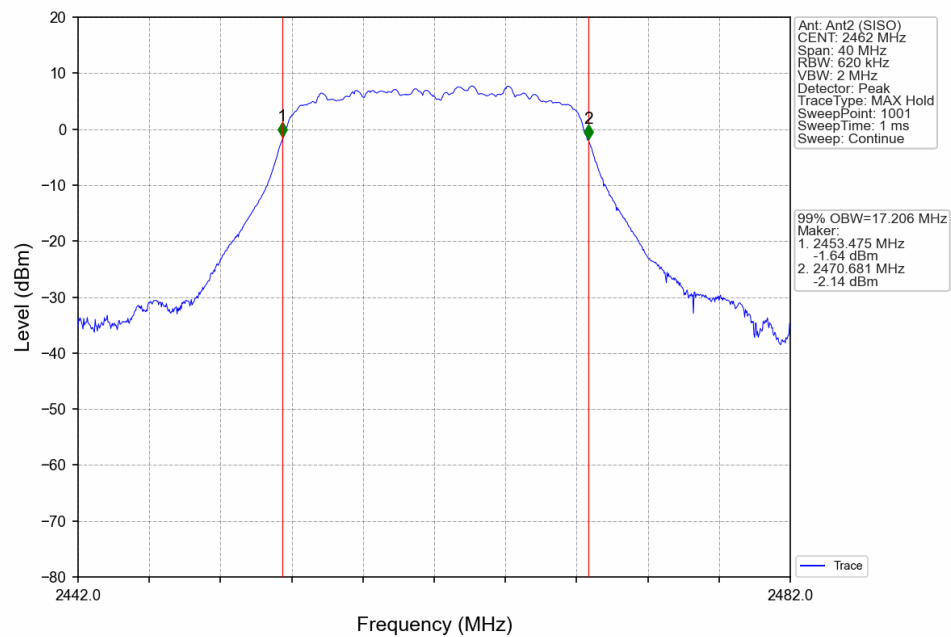
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



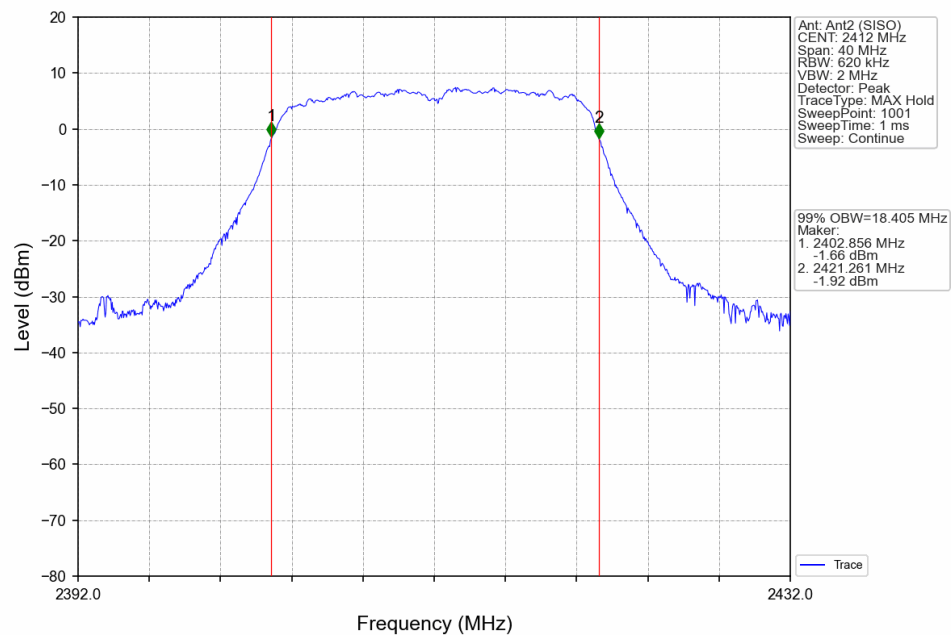
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



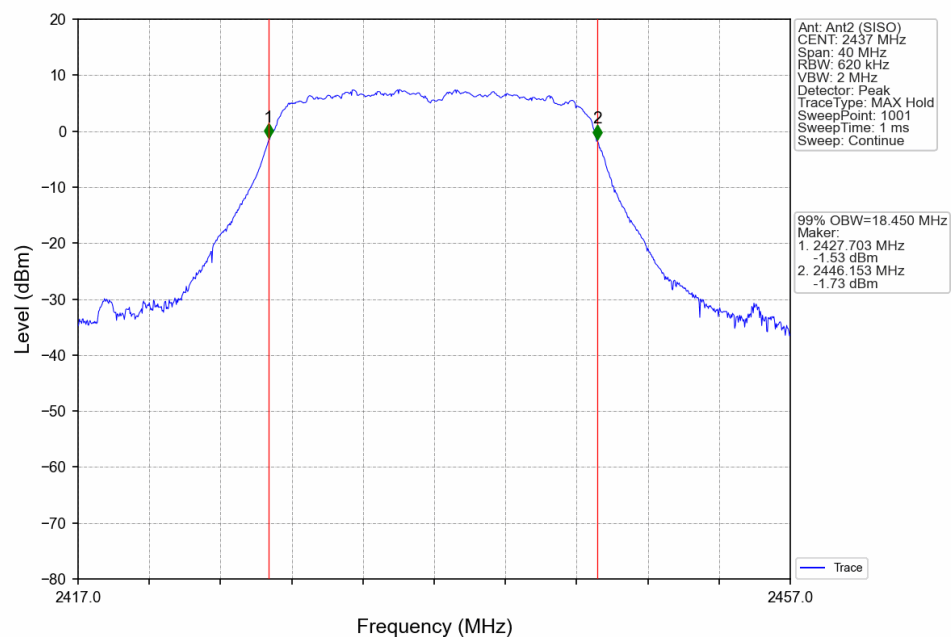
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



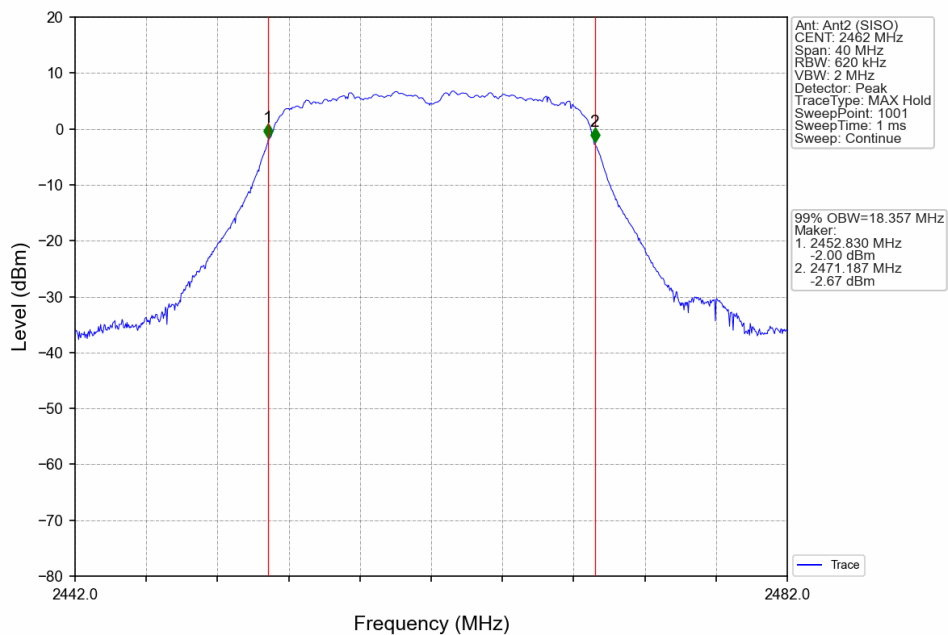
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



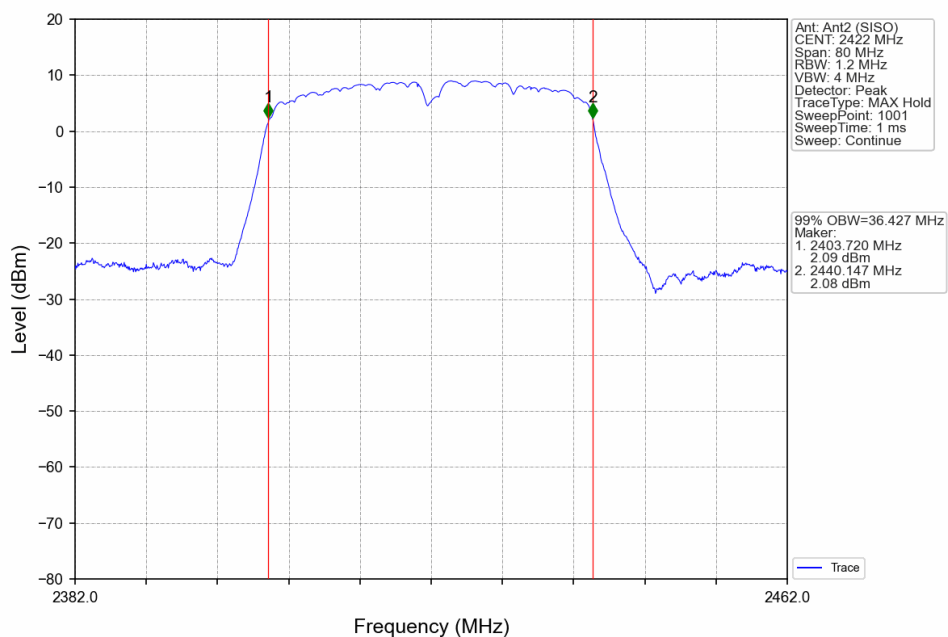
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



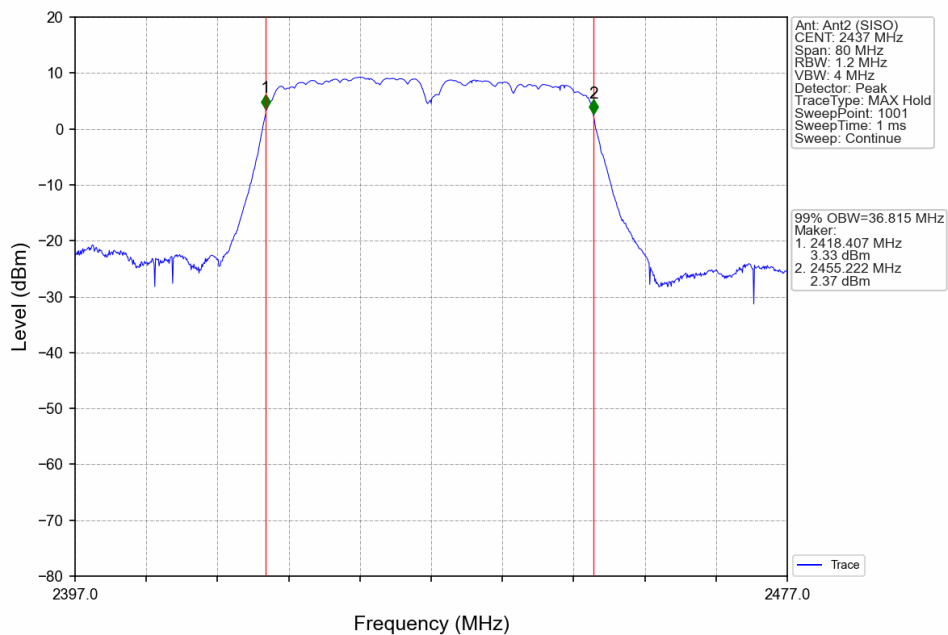
802.11n(HT20)_HCH_2462MHz_Ant2 (SISO)_NTNV



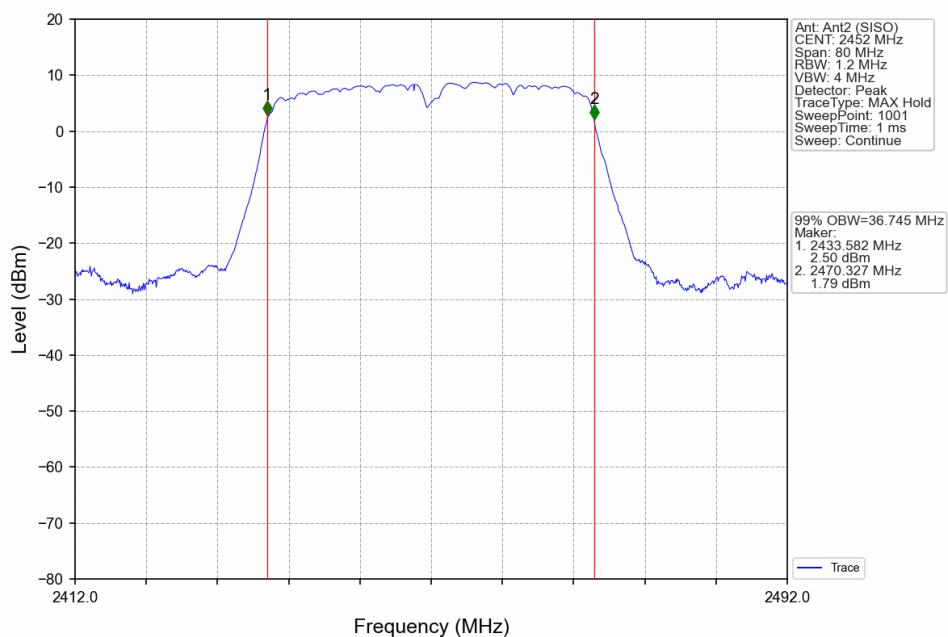
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV



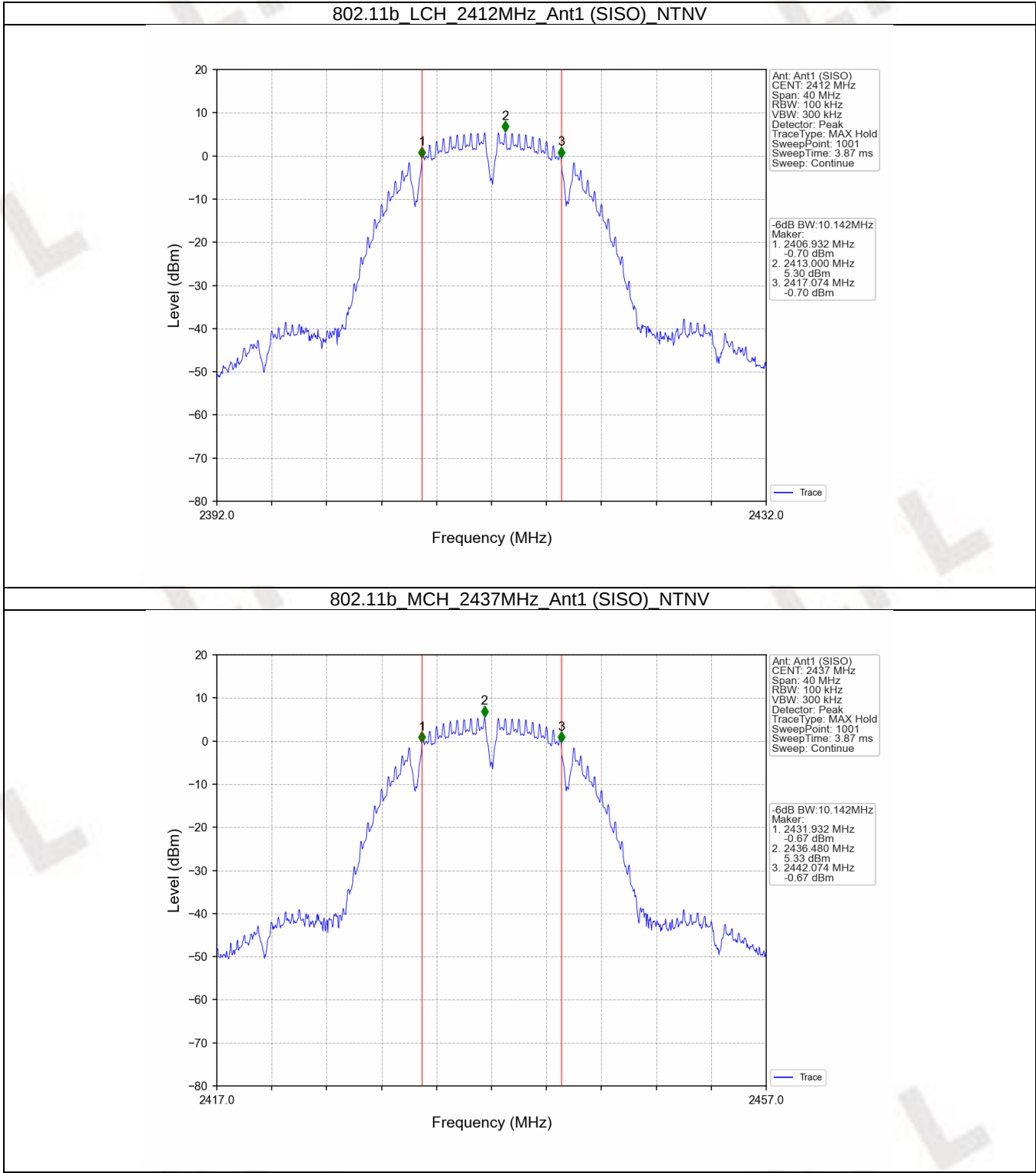
1.2 6dB BW

1.2.1 Test Result

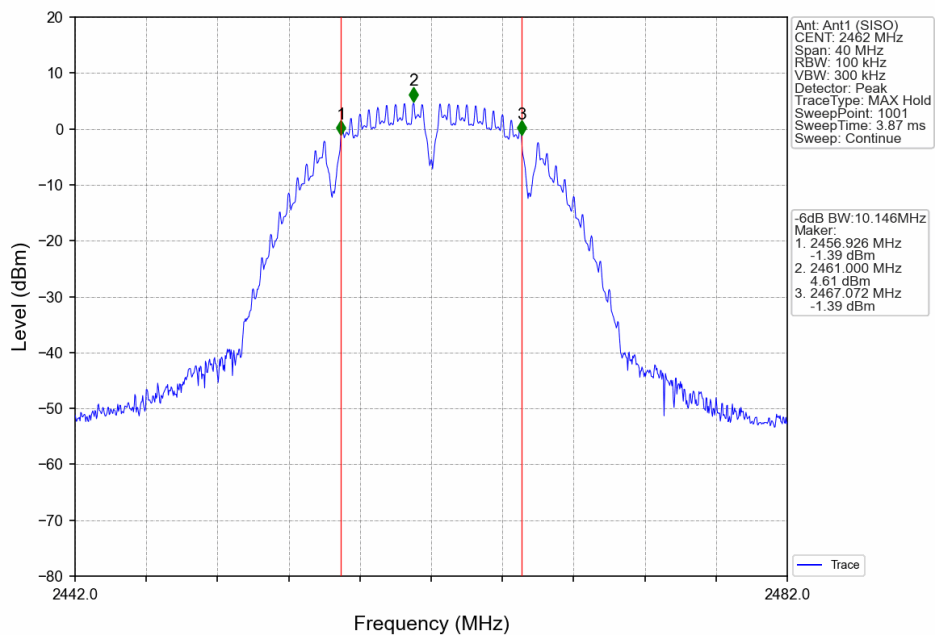
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	10.142	≥ 0.5	Pass
		2437	1	10.142	≥ 0.5	Pass
		2462	1	10.146	≥ 0.5	Pass
802.11g	SISO	2412	1	15.820	≥ 0.5	Pass
		2437	1	15.718	≥ 0.5	Pass
		2462	1	15.655	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	16.303	≥ 0.5	Pass
		2437	1	16.958	≥ 0.5	Pass
		2462	1	16.448	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	35.193	≥ 0.5	Pass
		2437	1	35.503	≥ 0.5	Pass
		2452	1	35.505	≥ 0.5	Pass

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	2	10.141	≥ 0.5	Pass
		2437	2	10.137	≥ 0.5	Pass
		2462	2	10.146	≥ 0.5	Pass
802.11g	SISO	2412	2	15.474	≥ 0.5	Pass
		2437	2	15.698	≥ 0.5	Pass
		2462	2	15.550	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	2	16.397	≥ 0.5	Pass
		2437	2	16.459	≥ 0.5	Pass
		2462	2	15.388	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	2	35.166	≥ 0.5	Pass
		2437	2	35.527	≥ 0.5	Pass
		2452	2	35.398	≥ 0.5	Pass

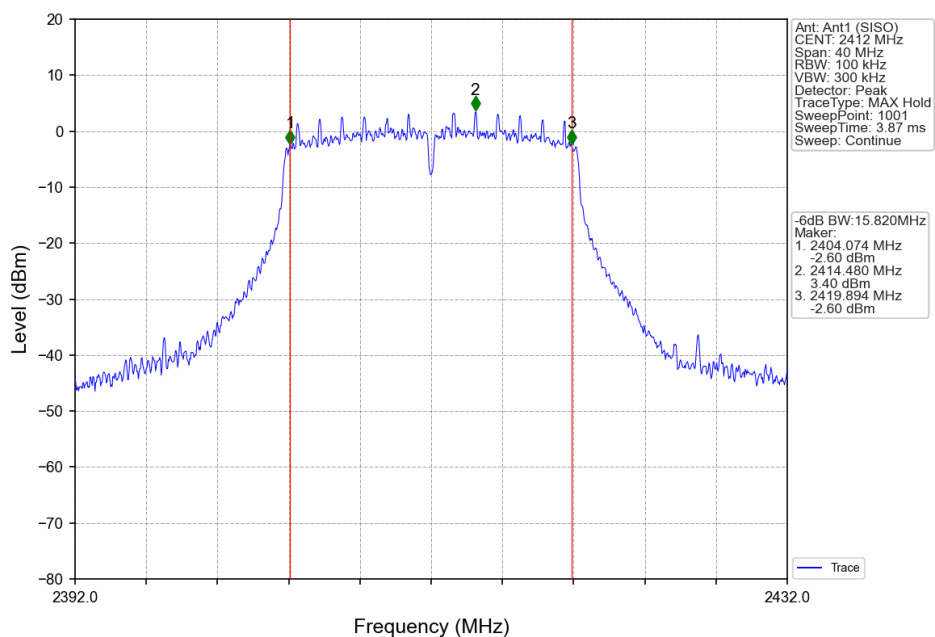
1.2.2 Test Graph



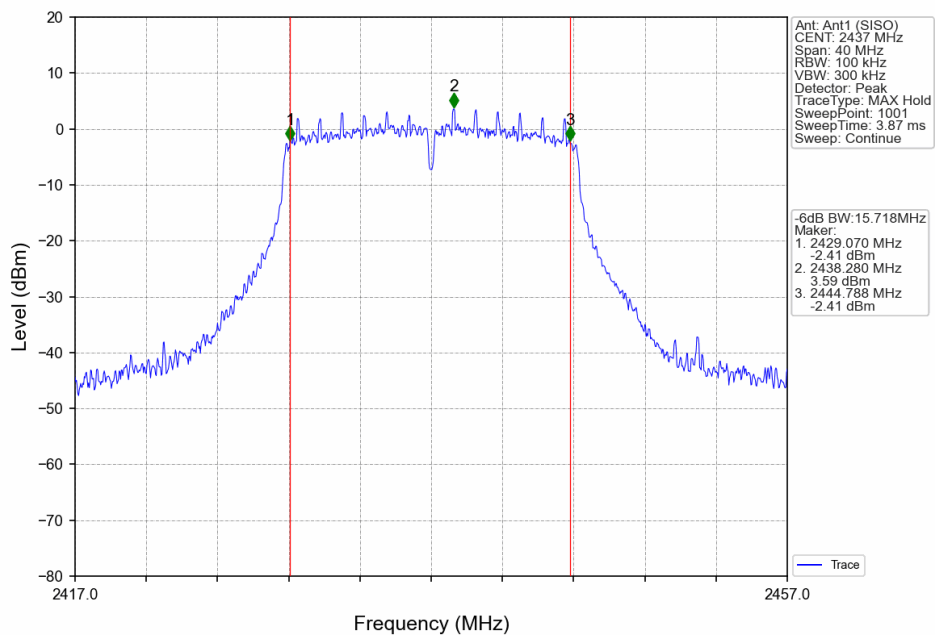
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



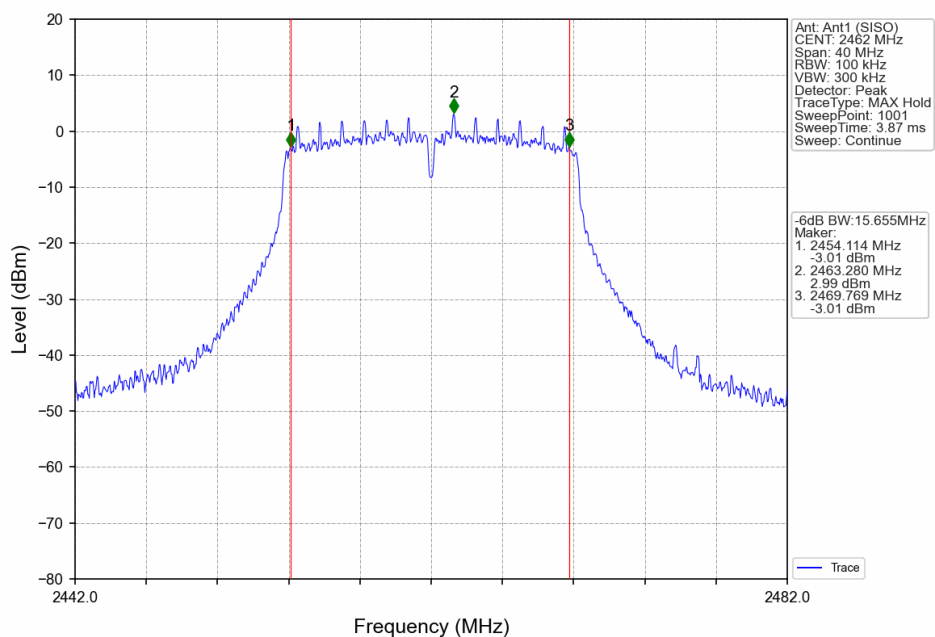
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



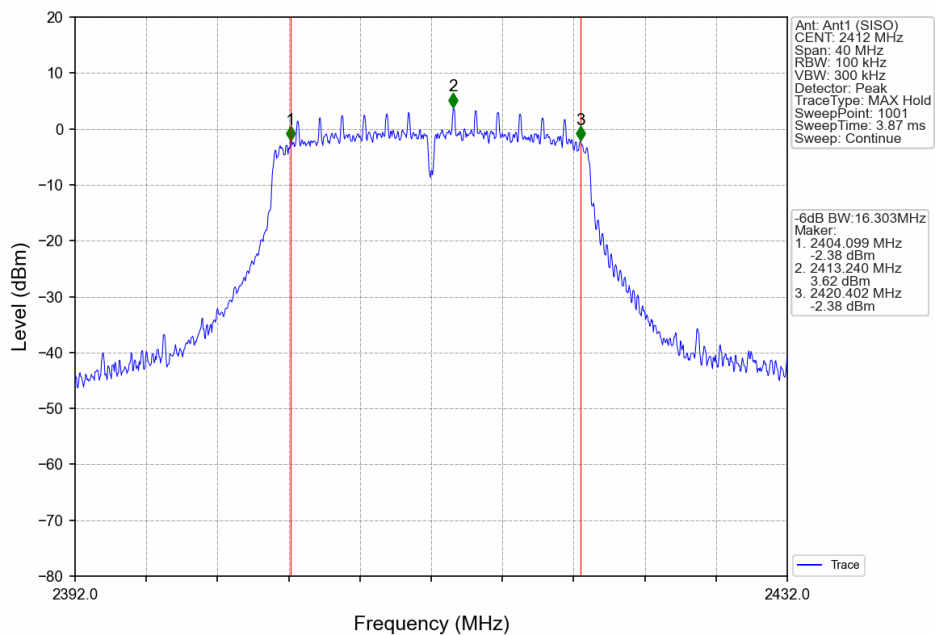
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



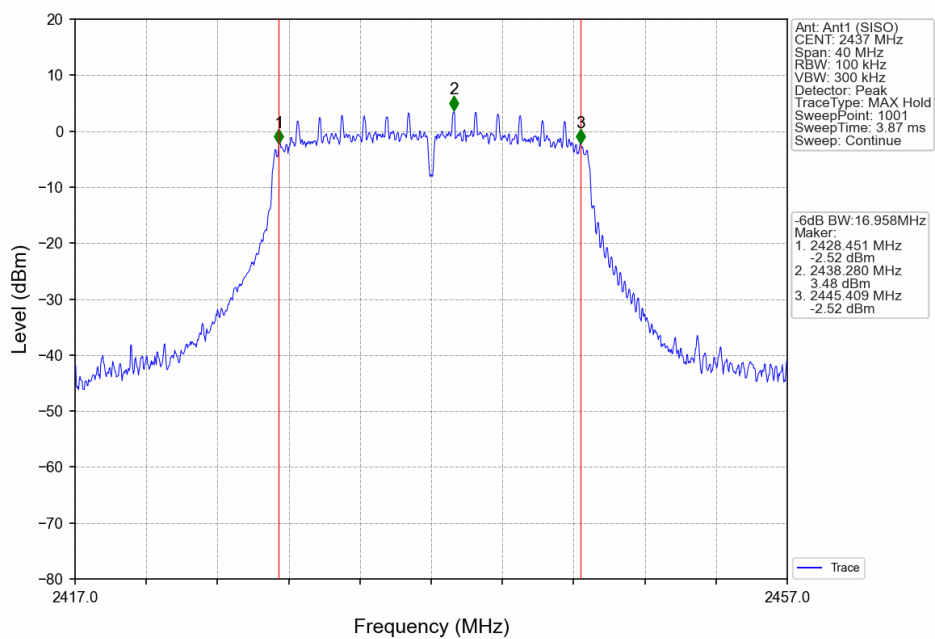
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



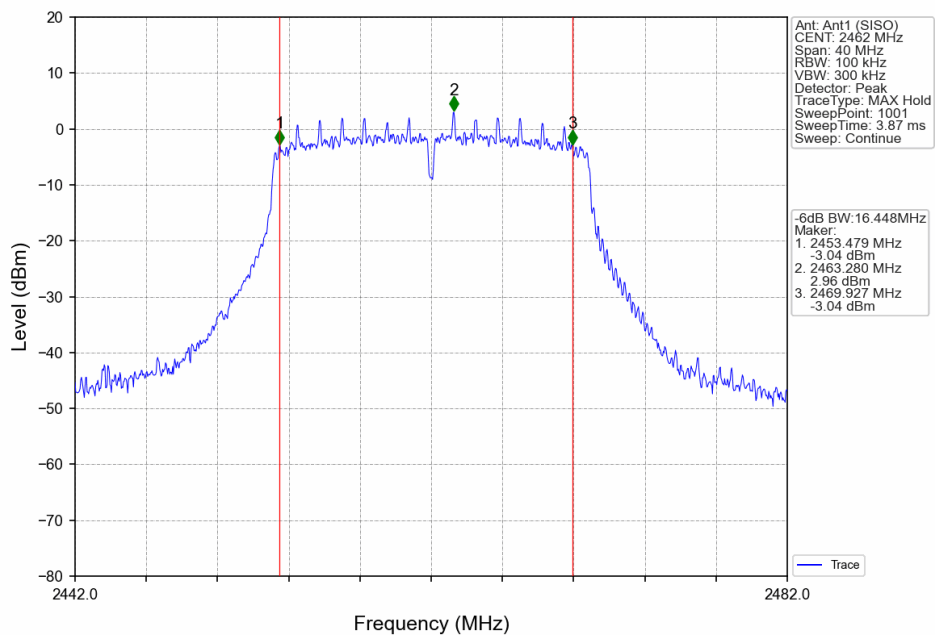
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



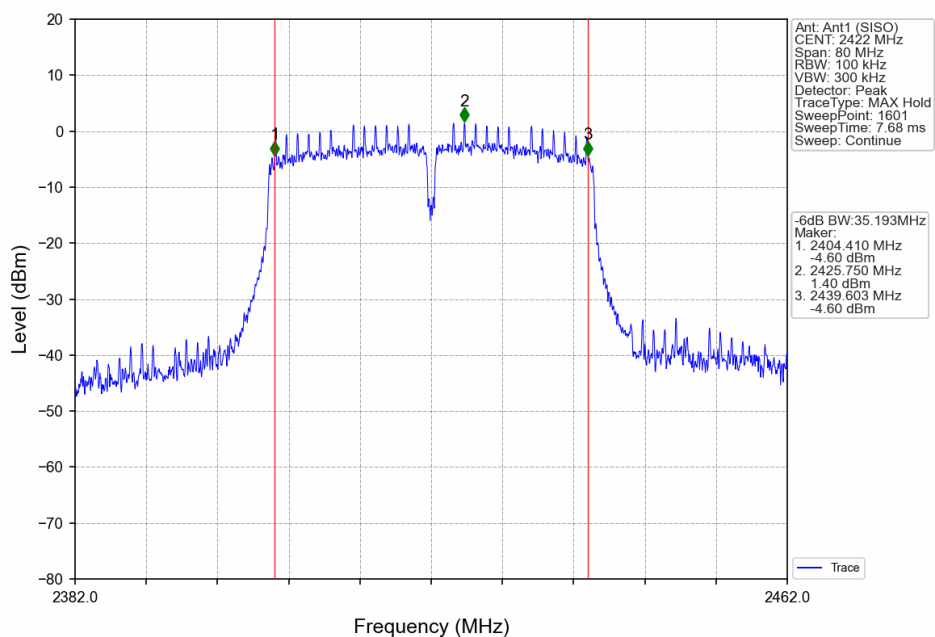
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



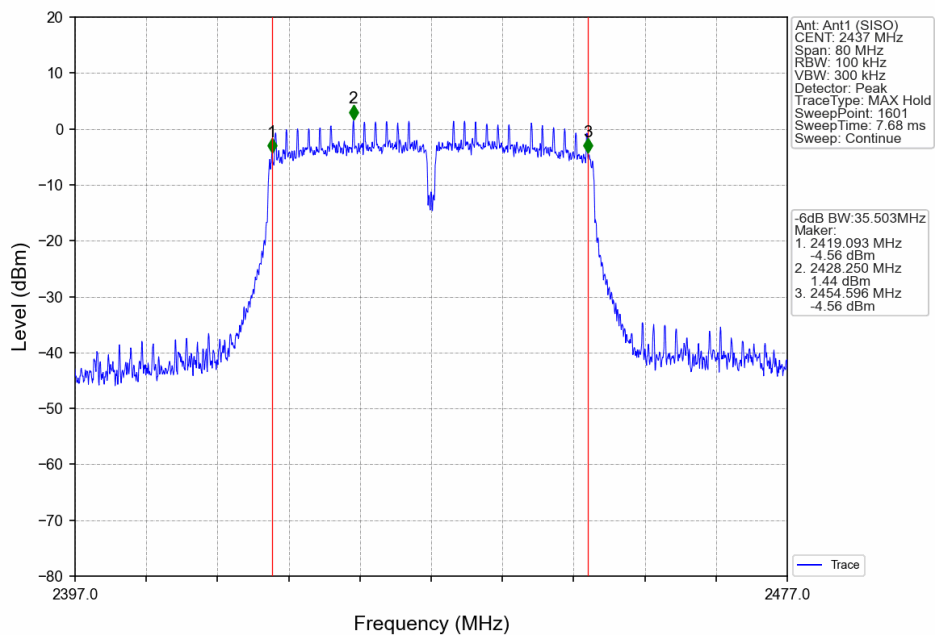
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



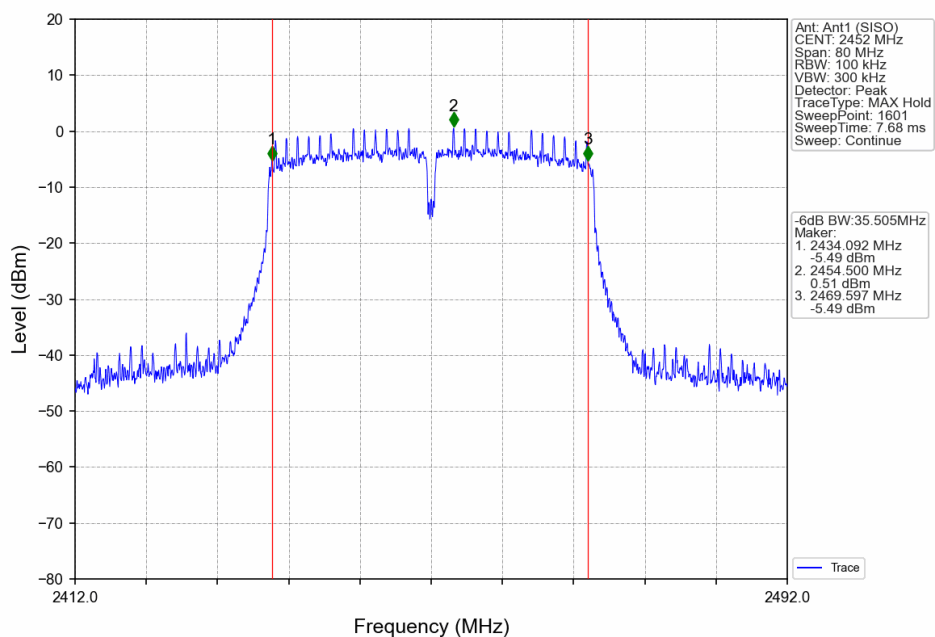
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



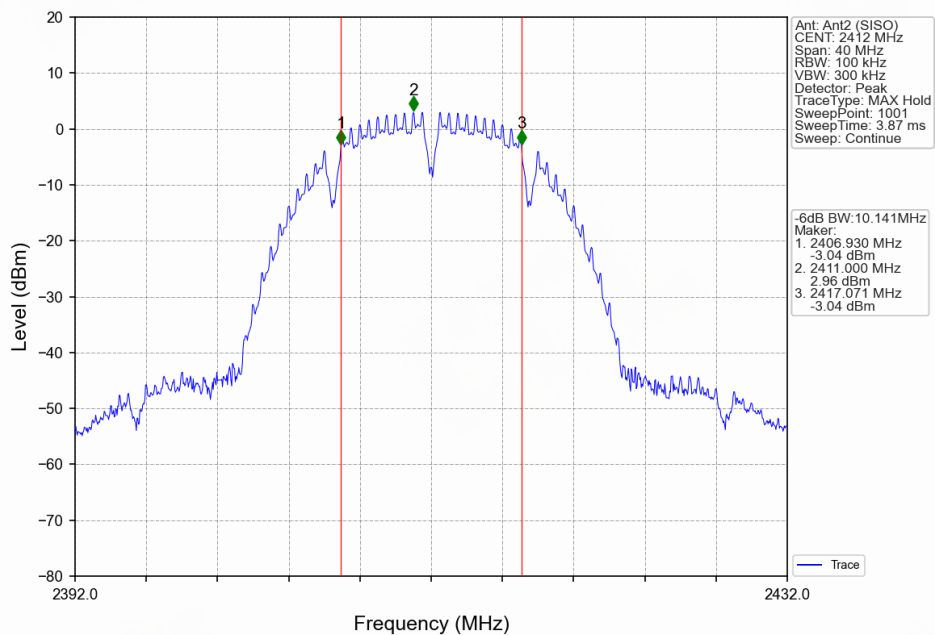
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



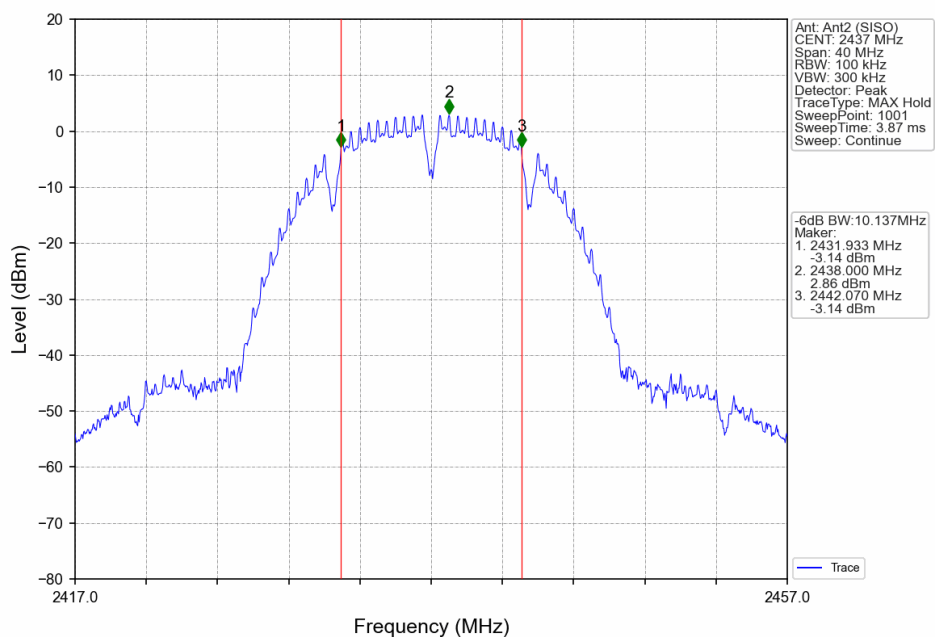
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV

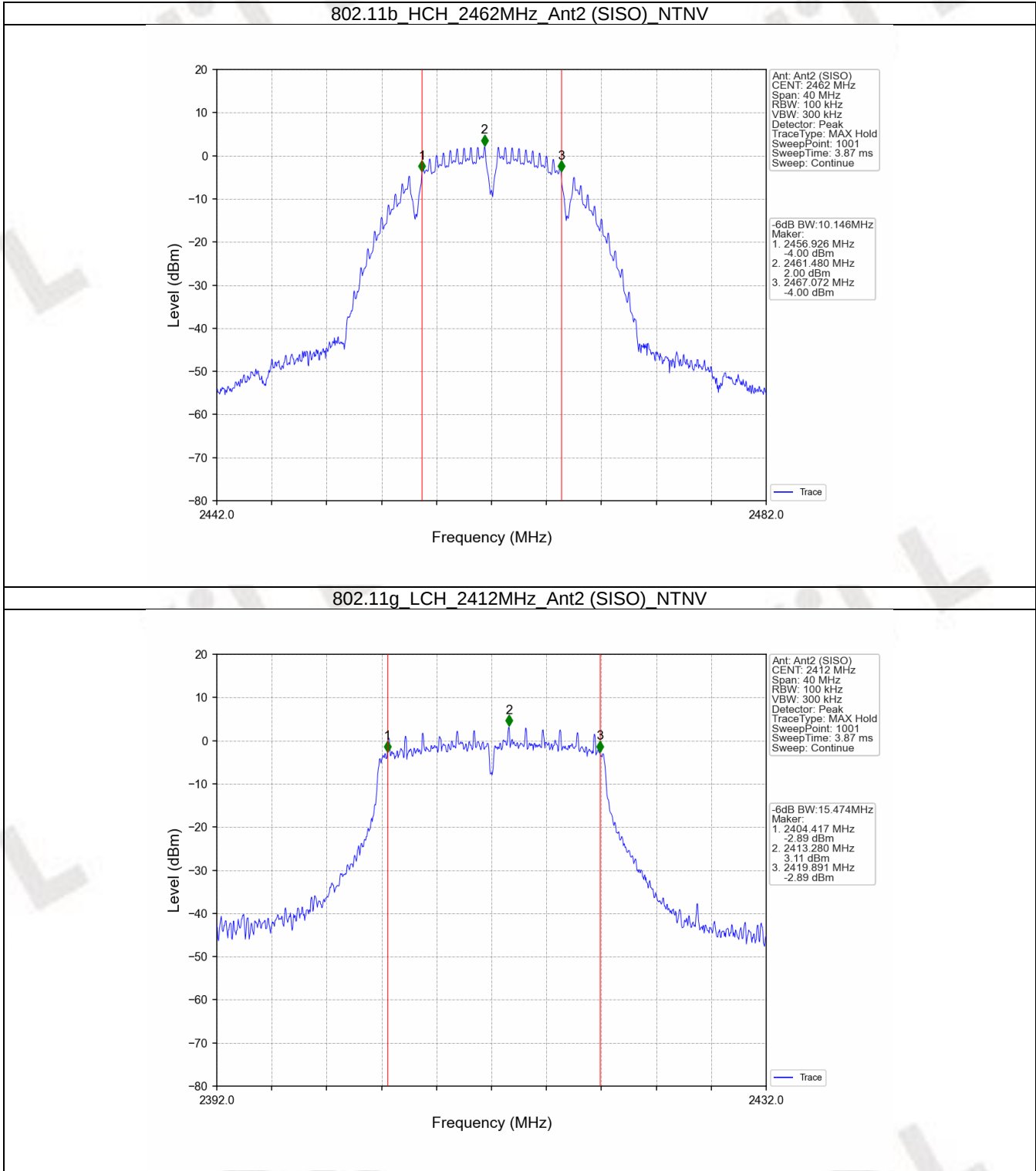


802.11b_LCH_2412MHz_Ant2 (SISO)_NTNV

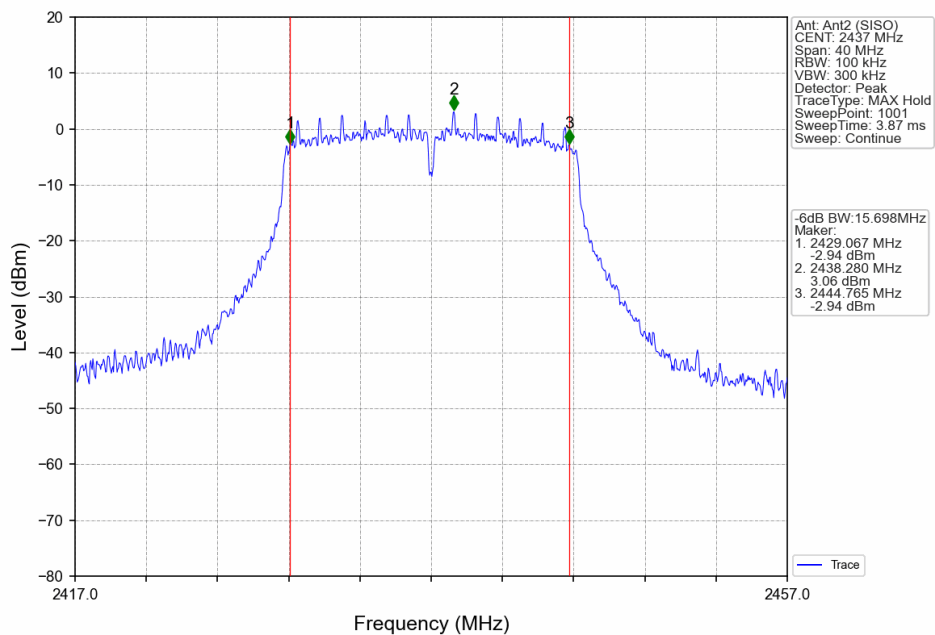


802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV

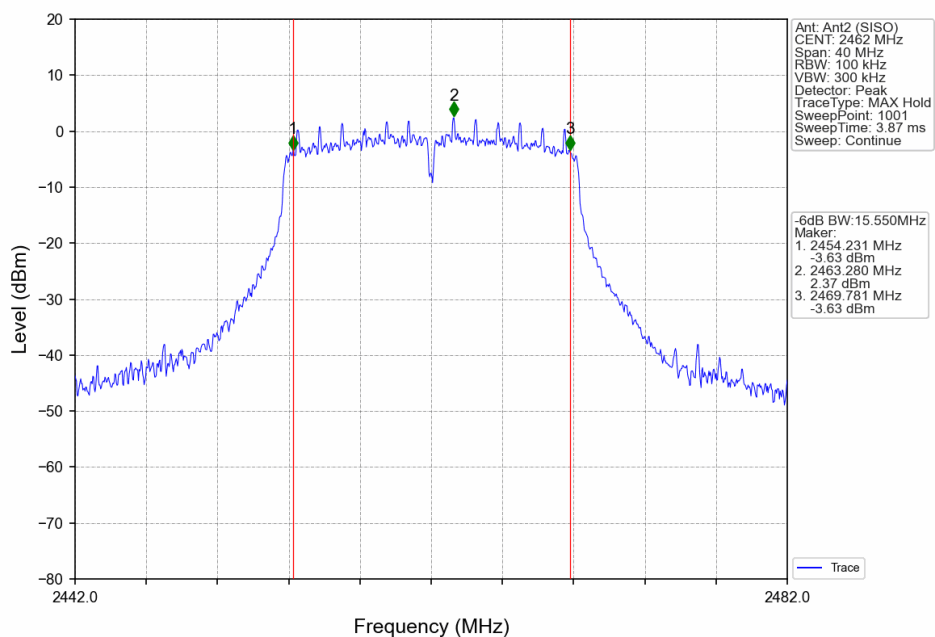




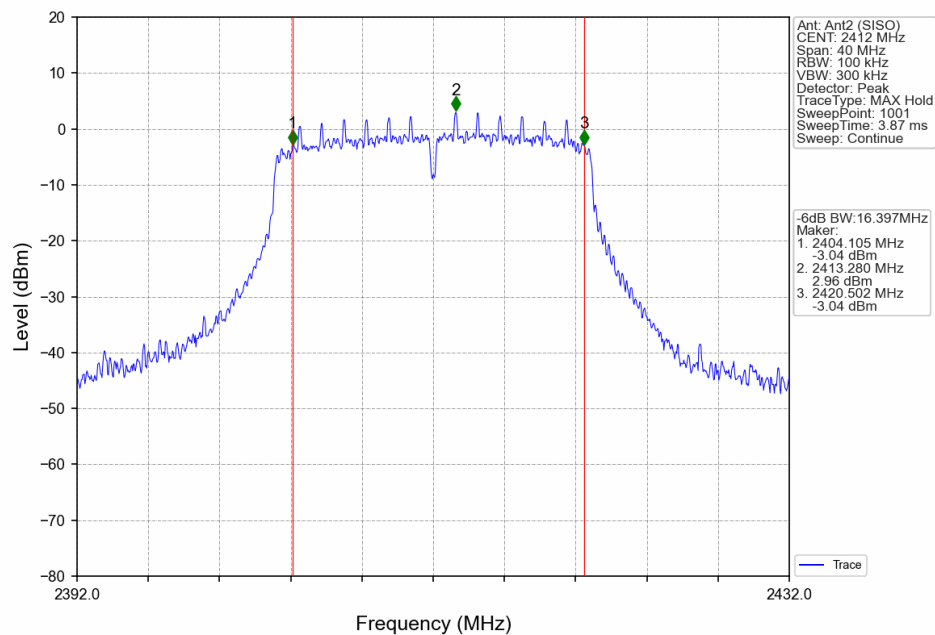
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



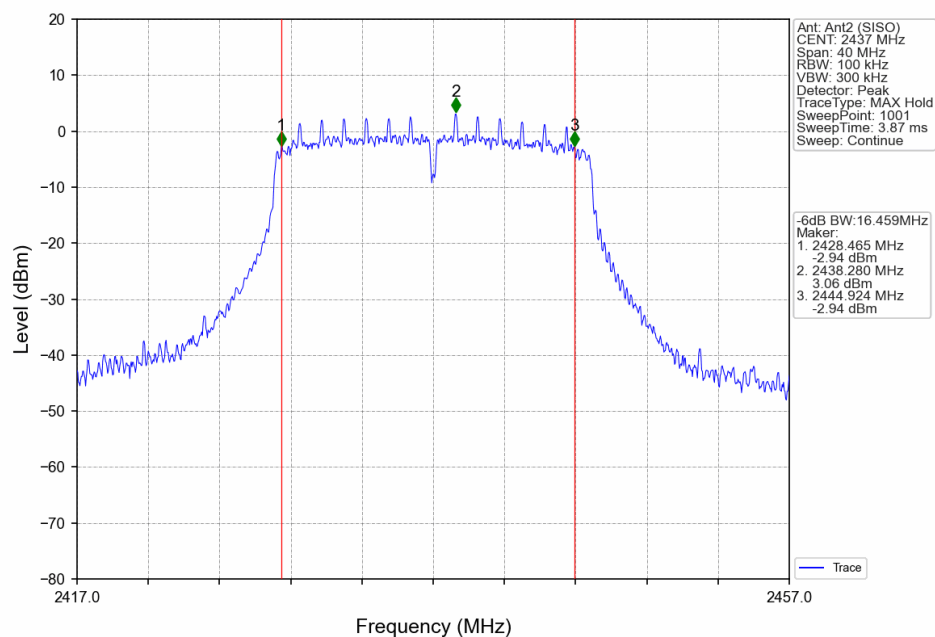
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



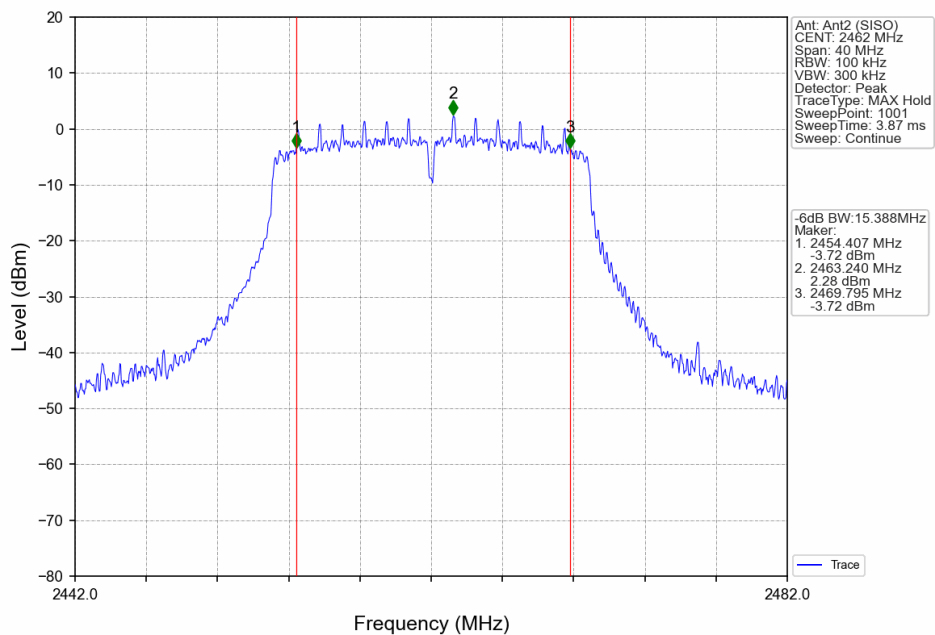
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



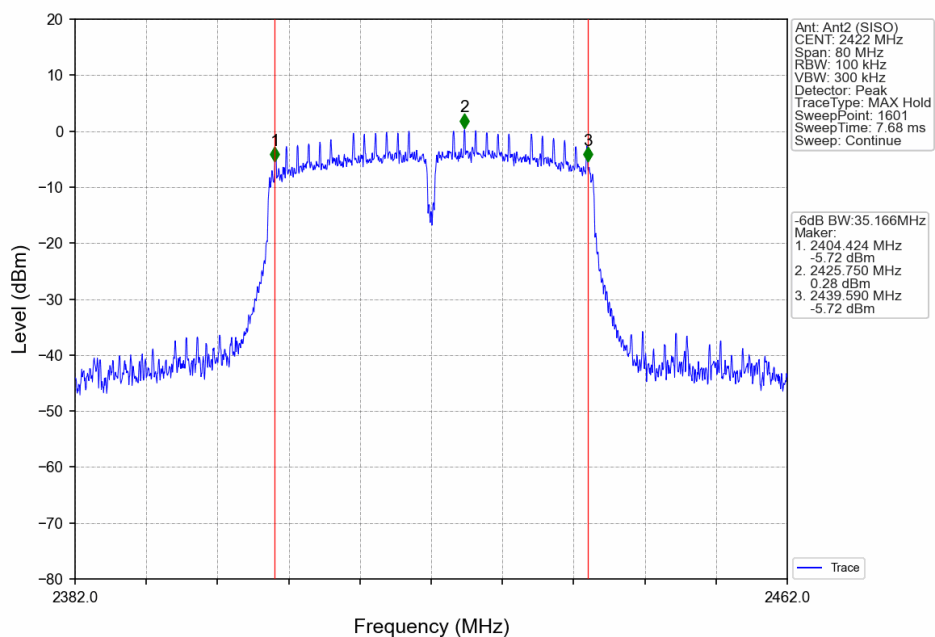
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



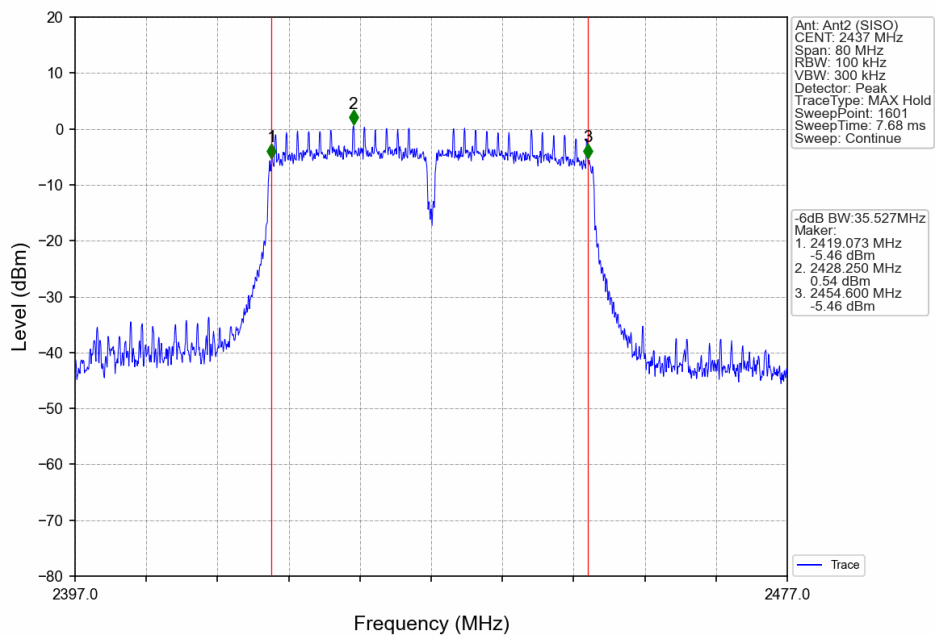
802.11n(HT20)_HCH_2462MHz_Ant2 (SISO)_NTNV



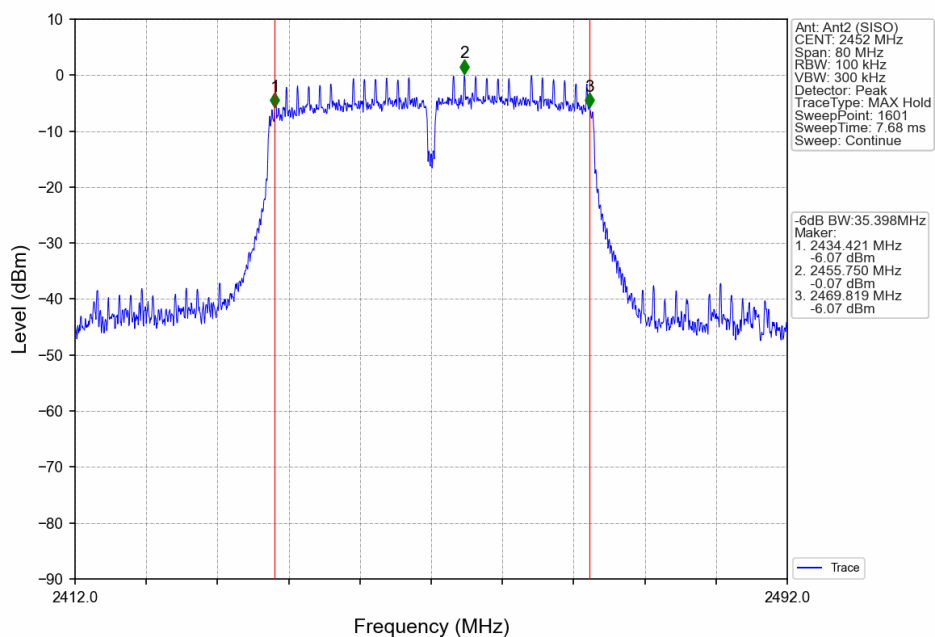
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV



2.1 Power

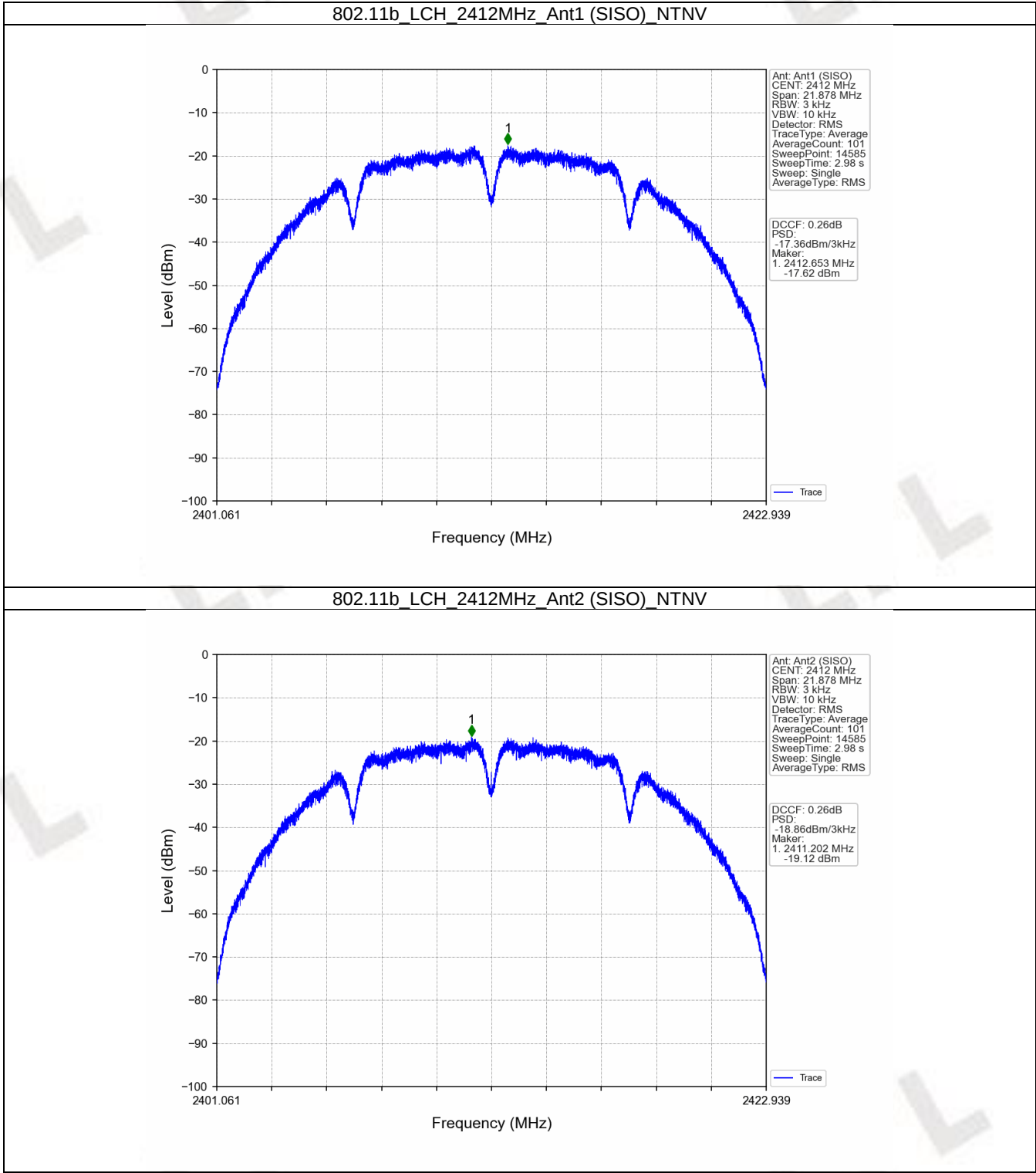
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)				Verdict
			ANT1	ANT2	MIMO	Limit	
802.11b	SISO	2412	14.46	12.82	/	<=30	Pass
		2437	14.63	12.39	/	<=30	Pass
		2462	13.91	11.82	/	<=30	Pass
802.11g	SISO	2412	14.36	14.24	/	<=30	Pass
		2437	14.51	14.18	/	<=30	Pass
		2462	13.51	13.47	/	<=30	Pass
802.11n (HT20)	SISO	2412	14.04	15.57	/	<=30	Pass
		2437	14.35	14.72	/	<=30	Pass
		2462	13.49	14.03	/	<=30	Pass
802.11n (HT40)	SISO	2422	15.13	14.78	/	<=30	Pass
		2437	15.32	15.05	/	<=30	Pass
		2452	14.41	14.40	/	<=30	Pass
802.11n (HT20)	MIMO	2412	10.28	9.54	12.94	<=30	Pass
		2437	10.40	9.67	13.06	<=30	Pass
		2462	9.76	8.73	12.29	<=30	Pass
802.11n (HT40)	MIMO	2422	9.19	8.33	11.79	<=30	Pass
		2437	9.41	8.32	11.91	<=30	Pass
		2452	9.04	8.08	11.60	<=30	Pass
Note1: Antenna Gain: Ant1: 2.29dBi; Ant2: 2.29dBi; Note2: Directional Gain: 5.3dBi							

3.1 PSD

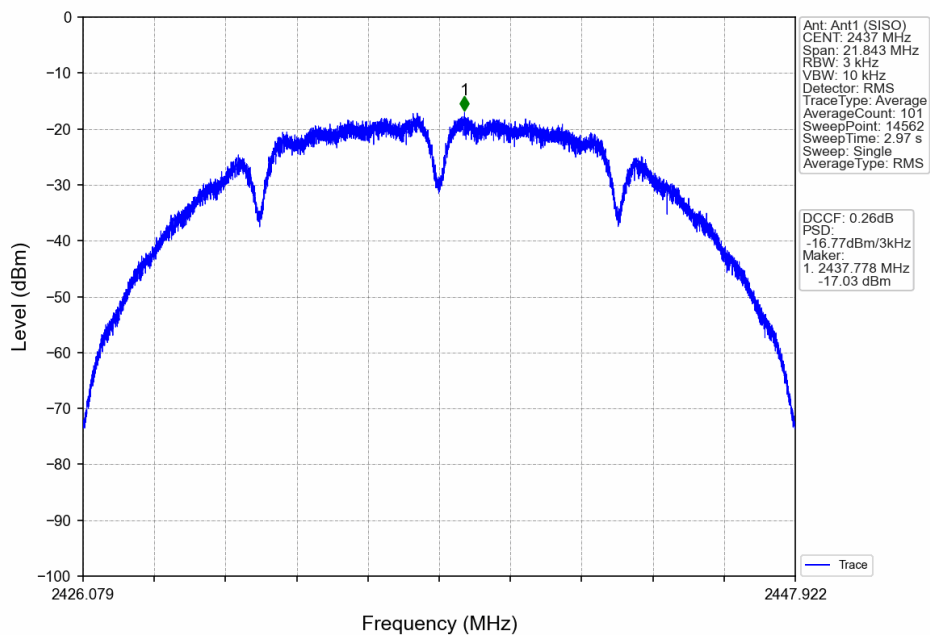
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)				Verdict
			ANT1	ANT2	MIMO	Limit	
802.11b	SISO	2412	-17.36	-18.86	/	<=8	Pass
		2437	-16.77	-19.09	/	<=8	Pass
		2462	-17.40	-19.49	/	<=8	Pass
802.11g	SISO	2412	-16.82	-16.96	/	<=8	Pass
		2437	-16.74	-16.77	/	<=8	Pass
		2462	-17.38	-17.80	/	<=8	Pass
802.11n (HT20)	SISO	2412	-16.69	-16.75	/	<=8	Pass
		2437	-16.49	-15.71	/	<=8	Pass
		2462	-16.93	-16.66	/	<=8	Pass
802.11n (HT40)	SISO	2422	-16.82	-17.22	/	<=8	Pass
		2437	-16.54	-16.74	/	<=8	Pass
		2452	-17.57	-17.32	/	<=8	Pass
802.11n (HT20)	MIMO	2412	-20.64	-21.65	-18.27	<=8	Pass
		2437	-20.26	-21.23	-17.79	<=8	Pass
		2462	-21.02	-22.10	-18.60	<=8	Pass
802.11n (HT40)	MIMO	2422	-22.67	-23.58	-20.09	<=8	Pass
		2437	-22.55	-23.91	-20.16	<=8	Pass
		2452	-22.40	-23.57	-19.93	<=8	Pass

Note1: Antenna Gain: Ant1: 2.29dBi; Ant2: 2.29dBi;
Note2: Directional Gain: 5.3dBi

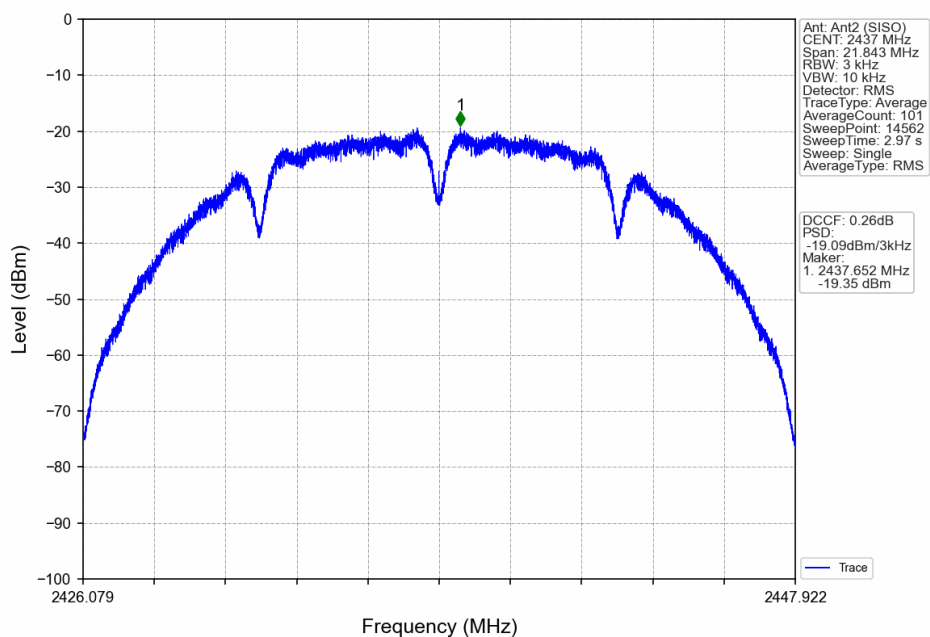
3.1.2 Test Graph



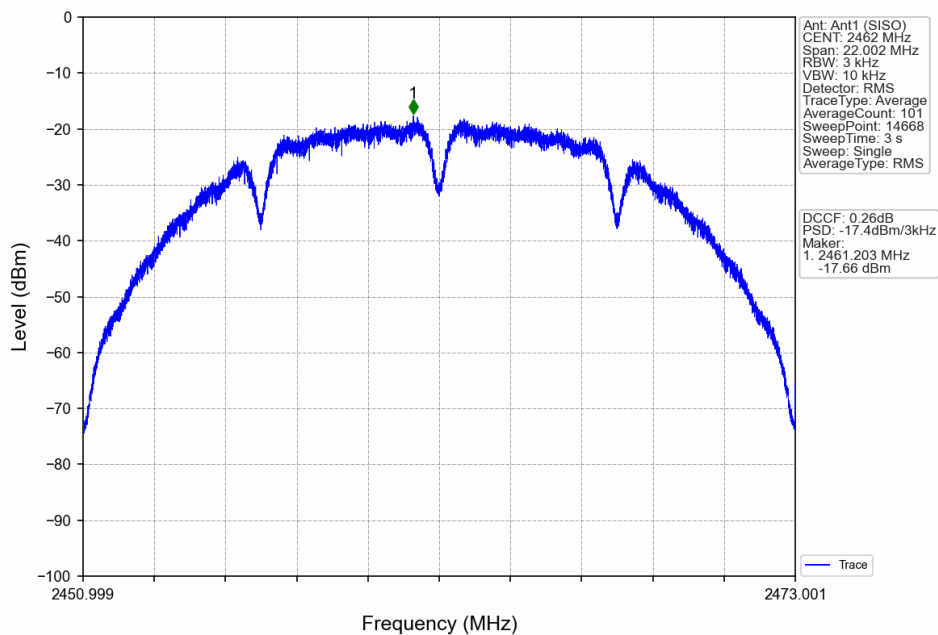
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



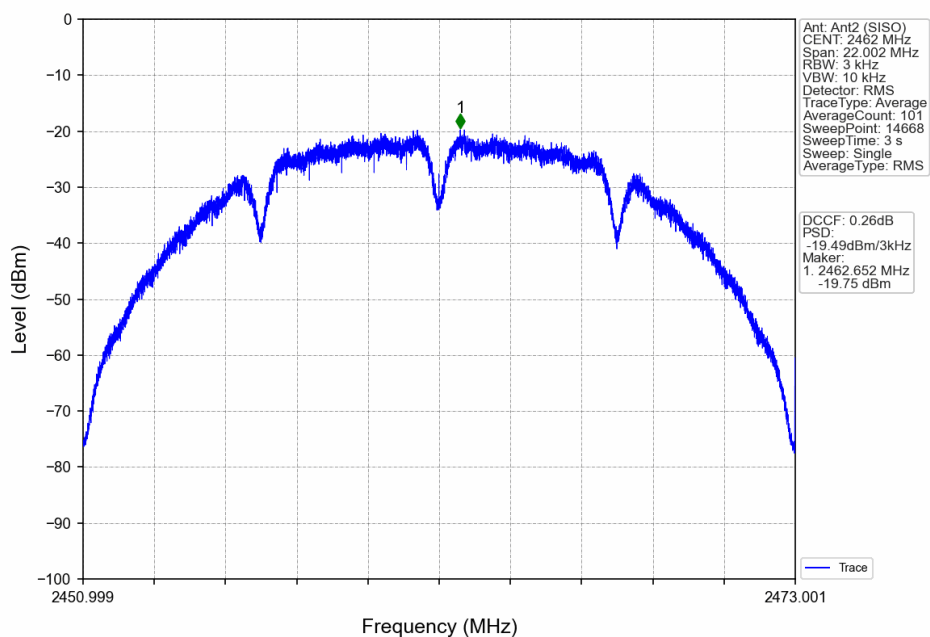
802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



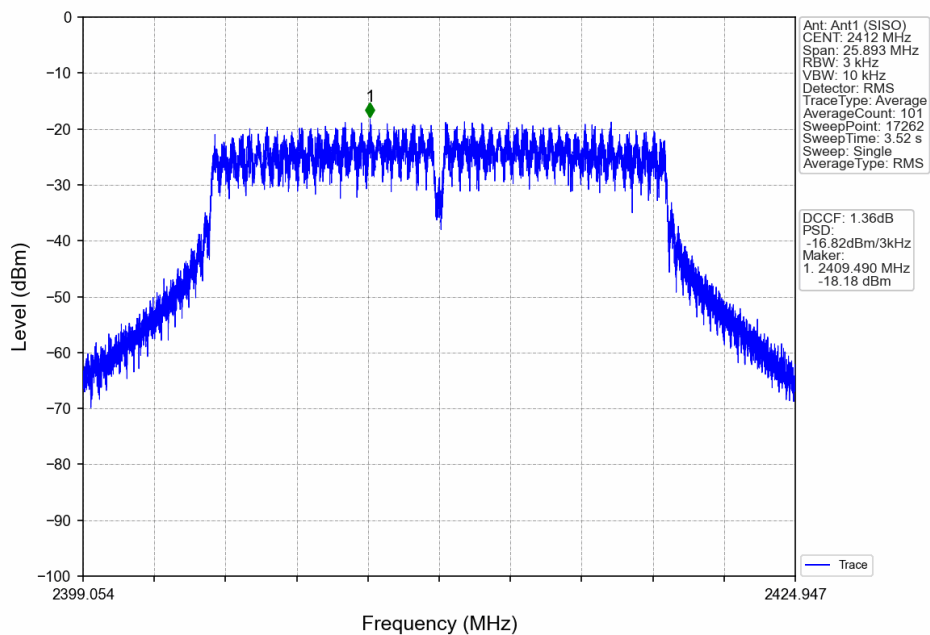
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



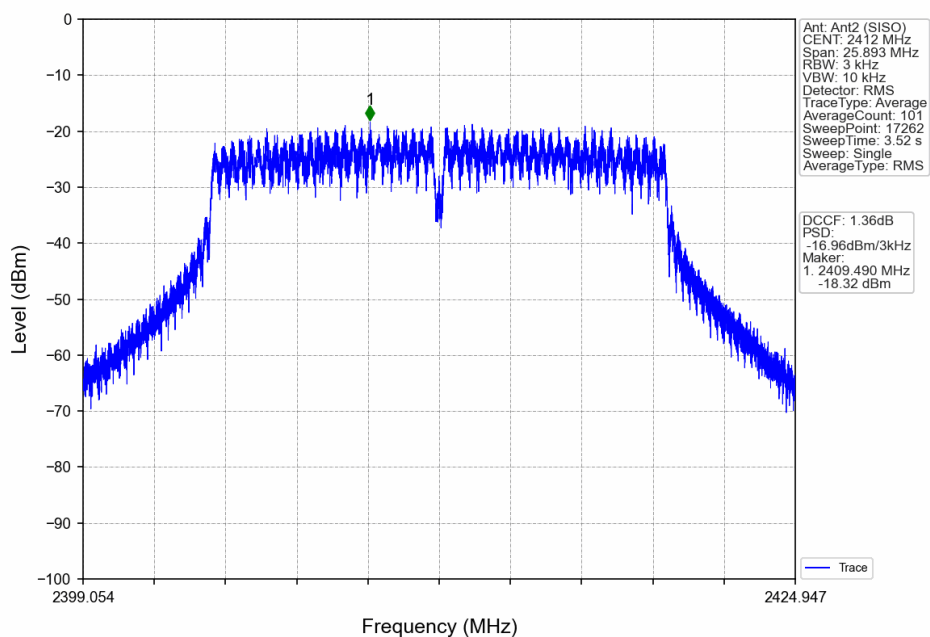
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



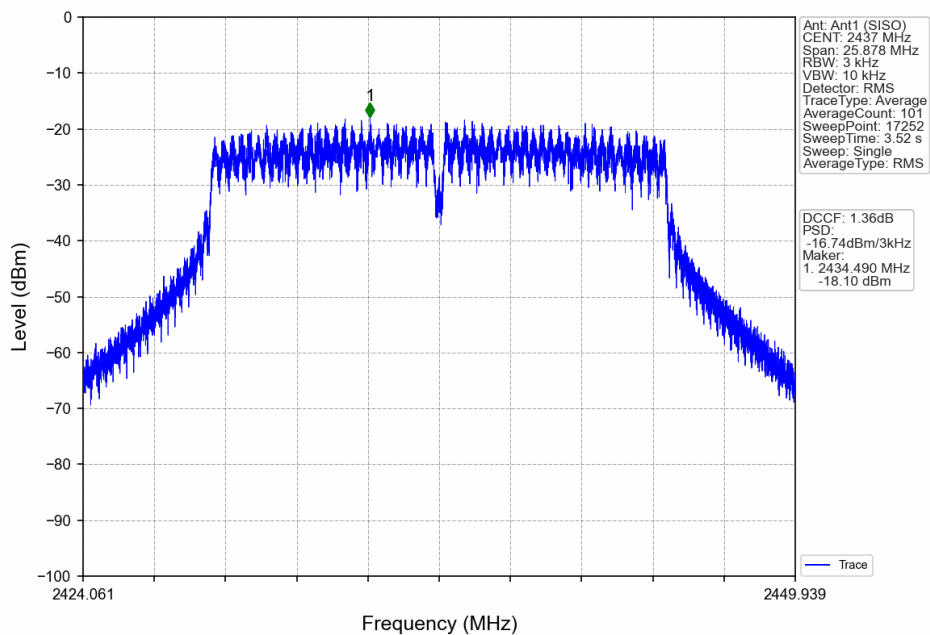
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



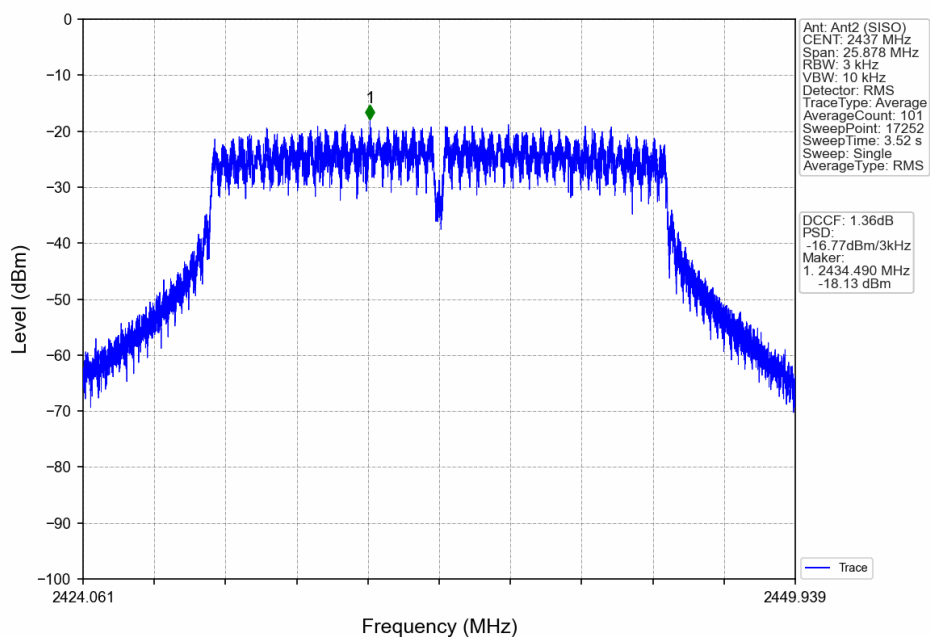
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



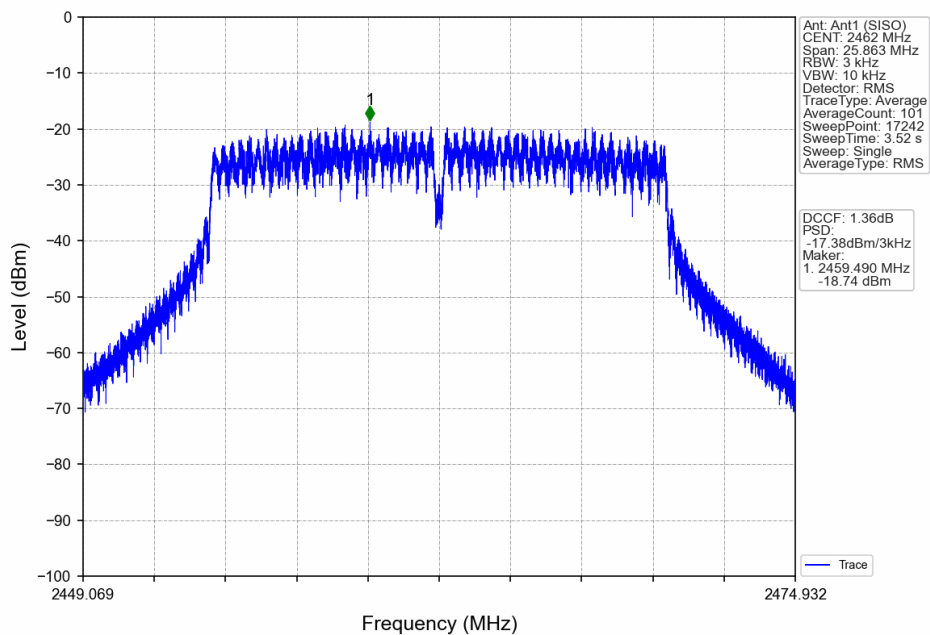
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



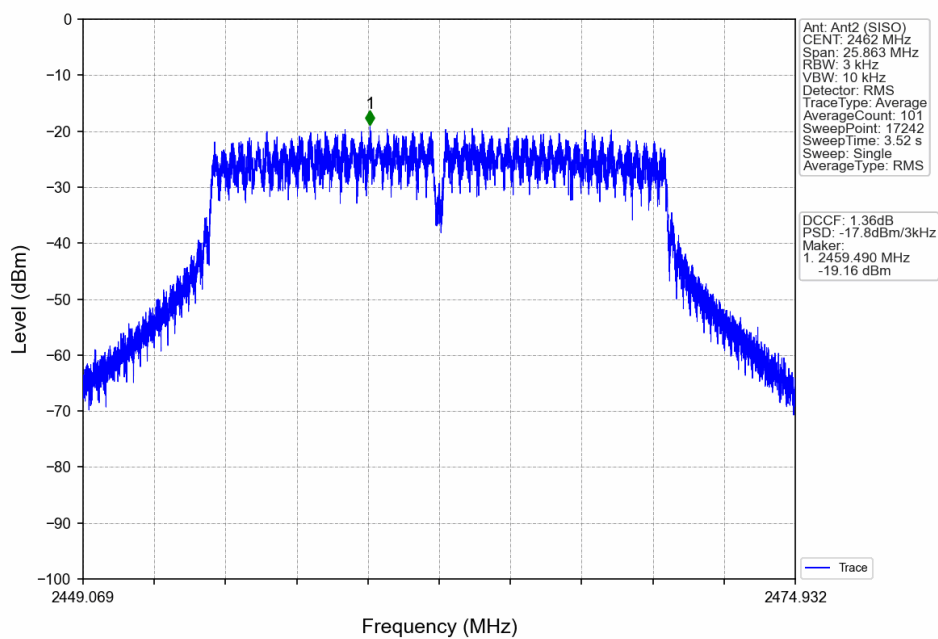
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



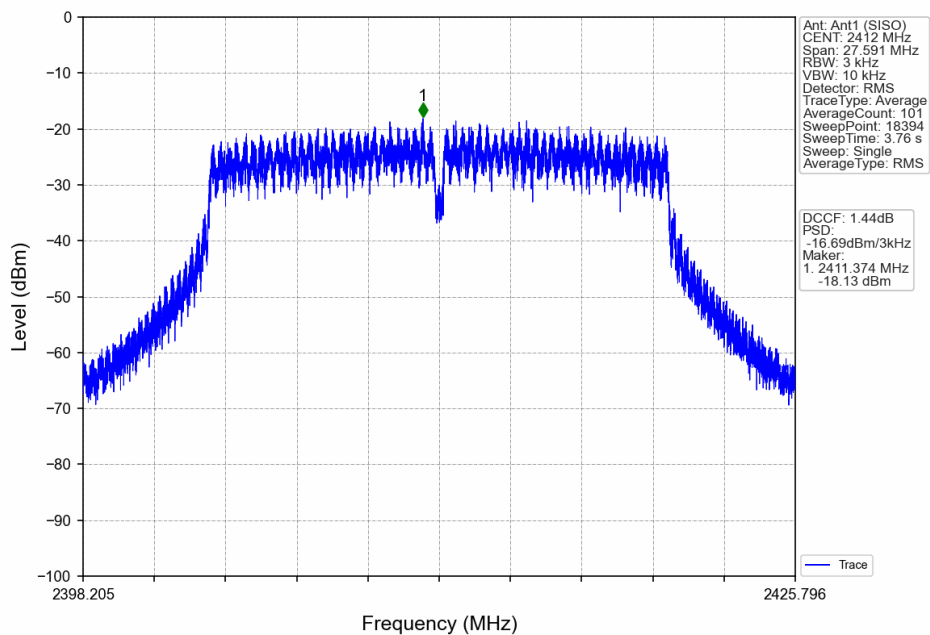
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



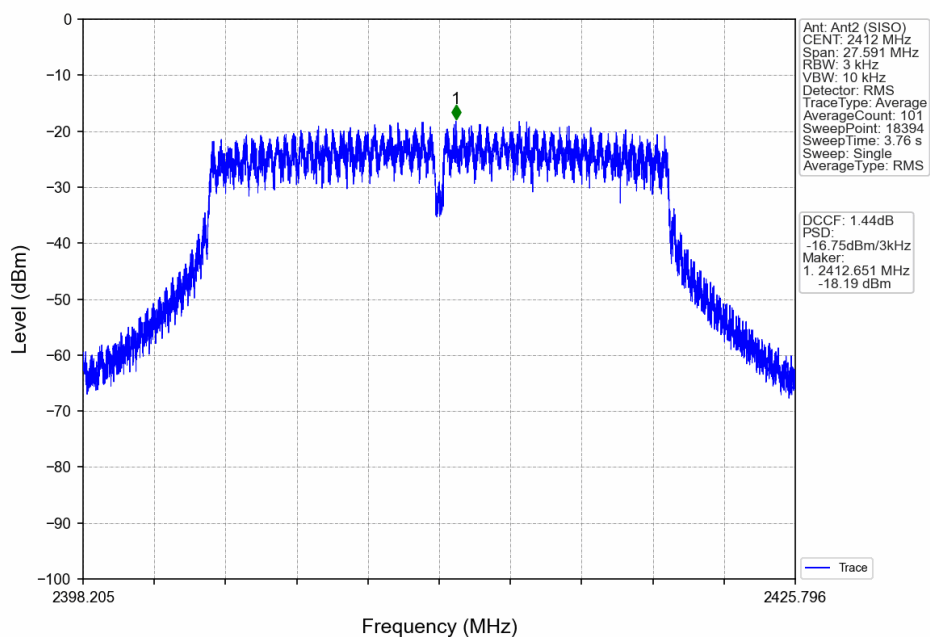
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



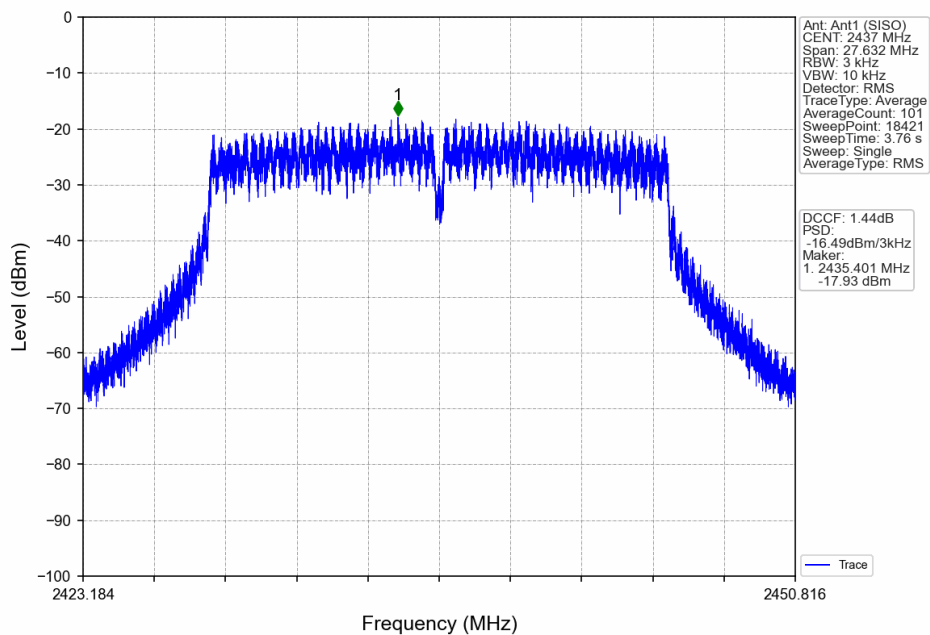
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



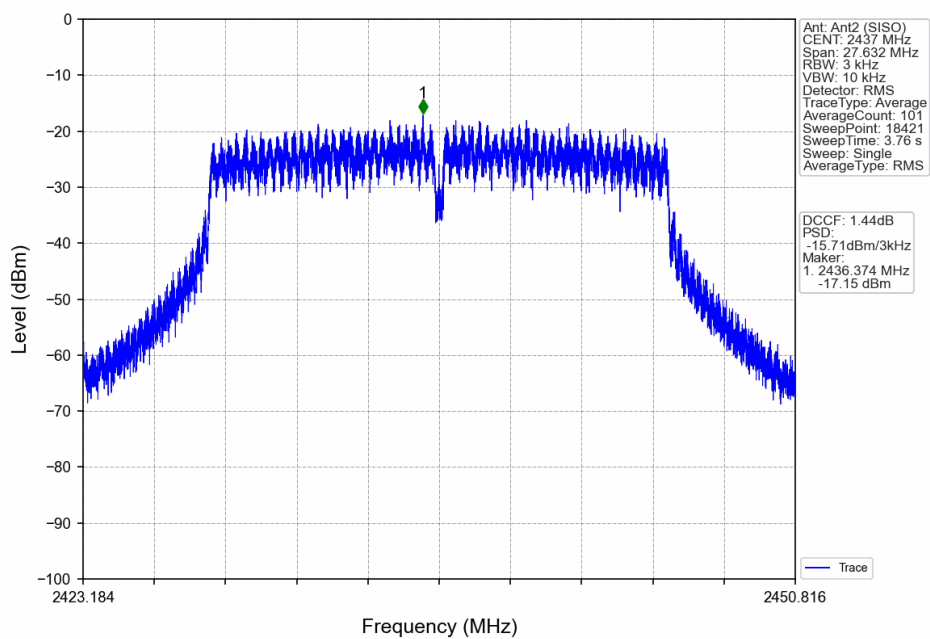
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



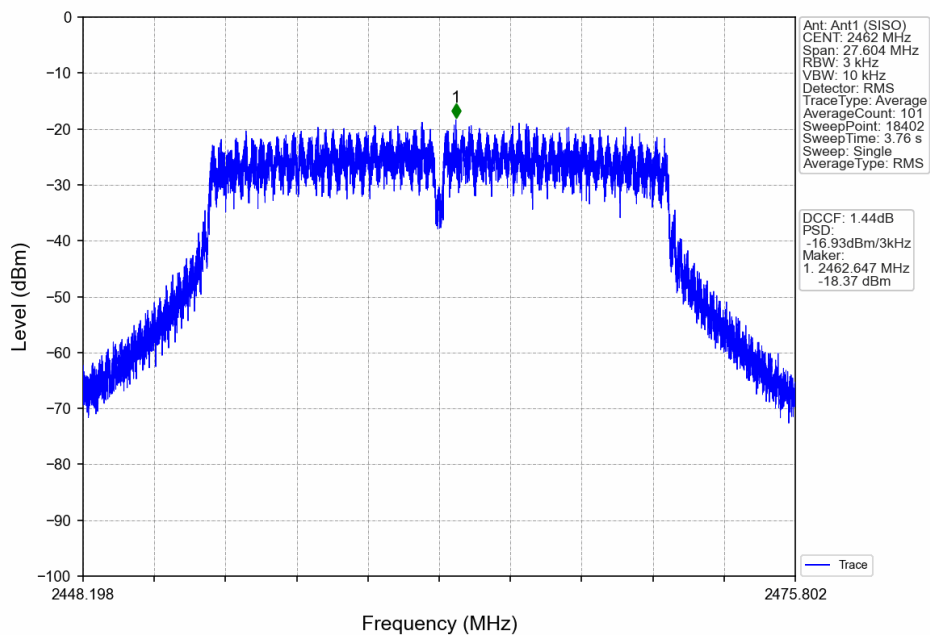
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



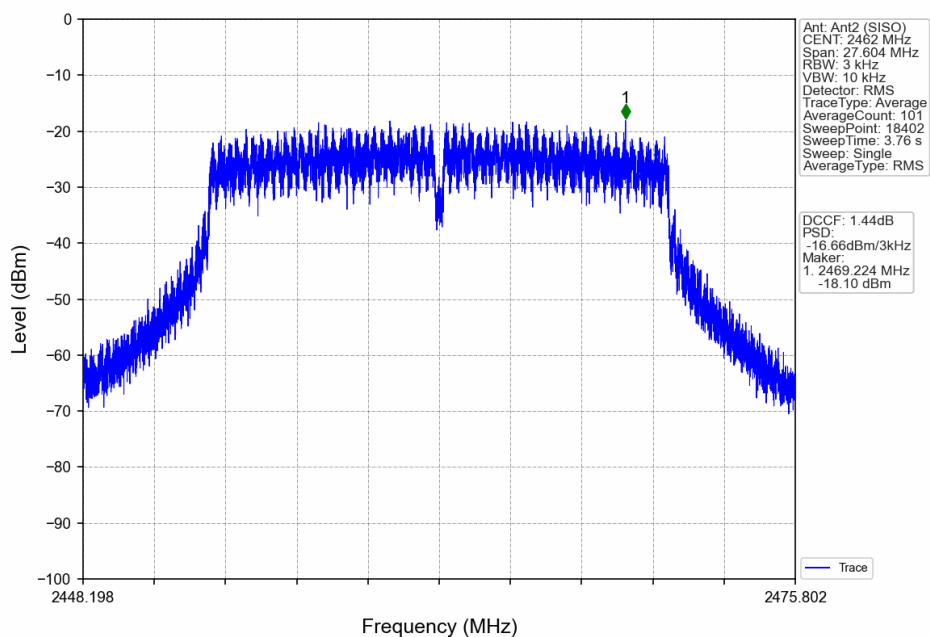
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



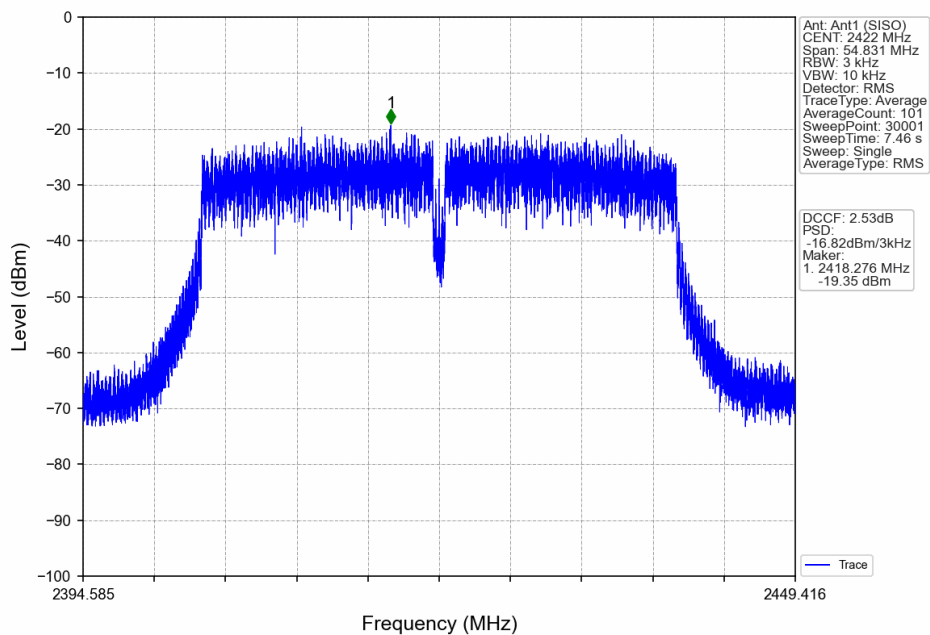
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



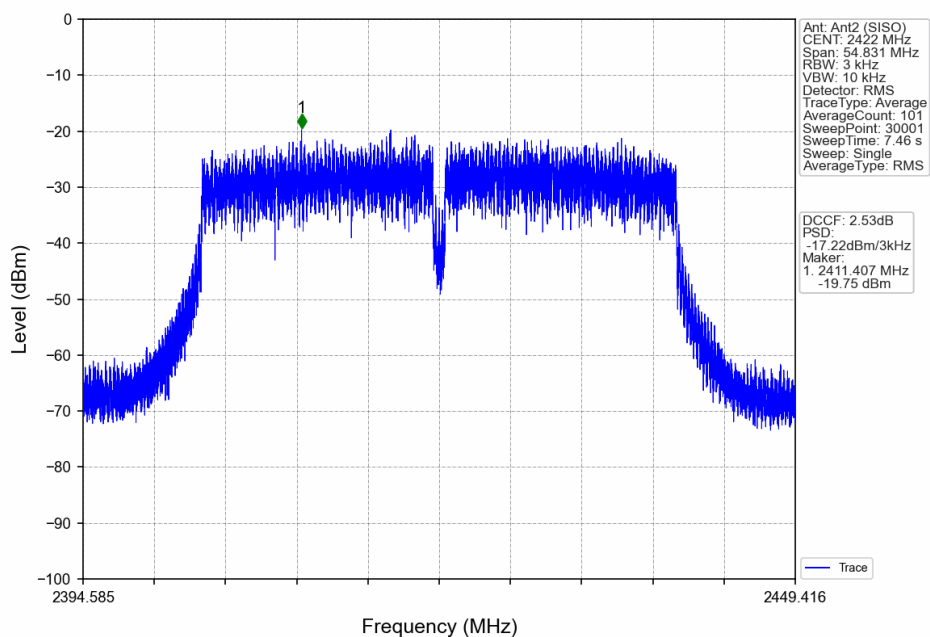
802.11n(HT20)_HCH_2462MHz_Ant2 (SISO)_NTNV



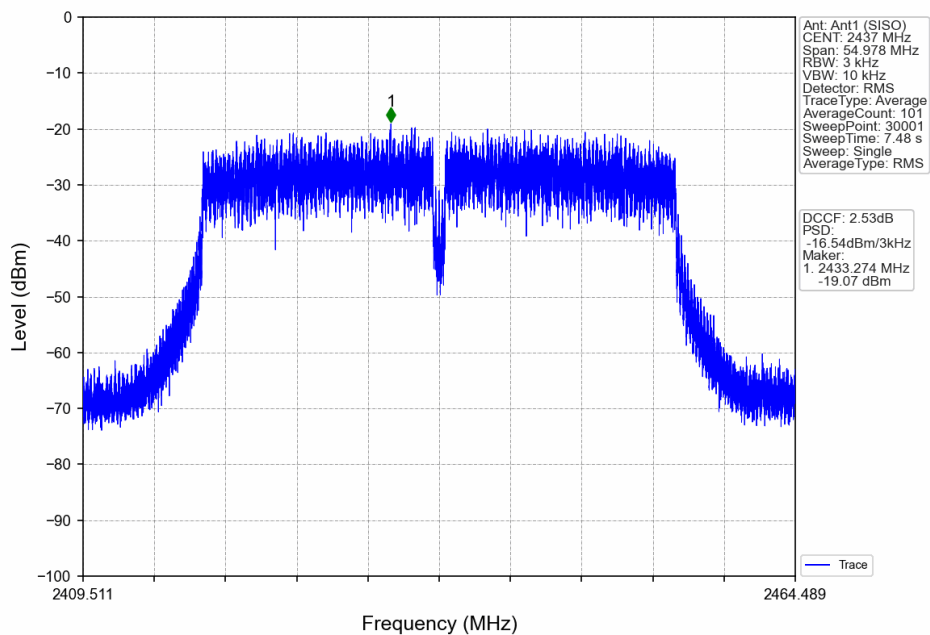
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



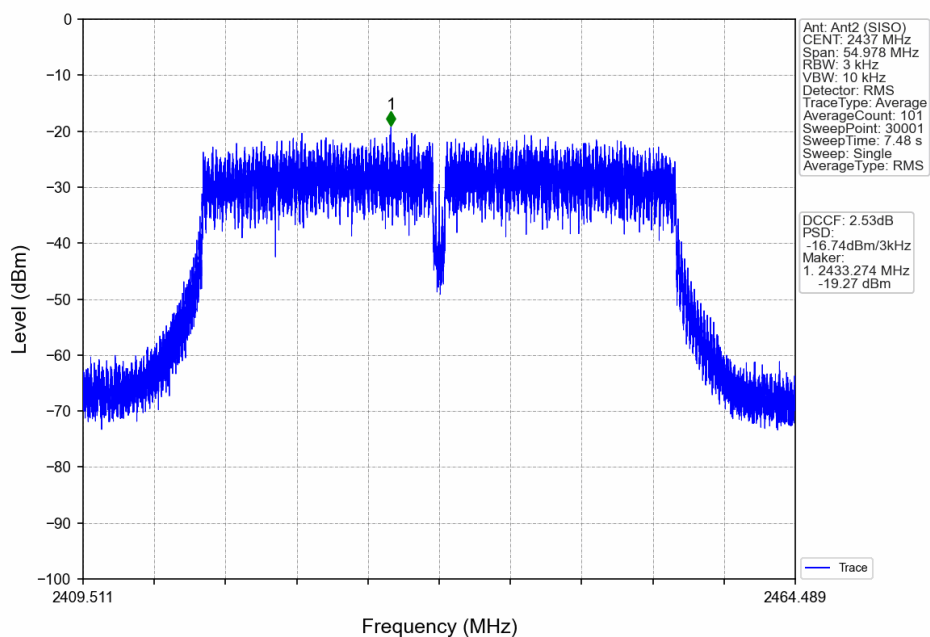
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



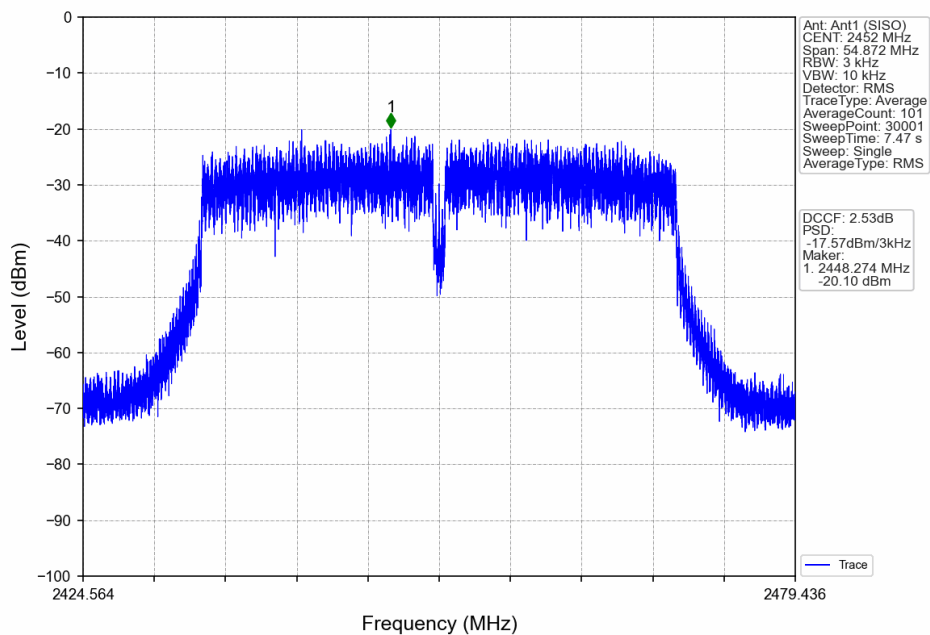
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



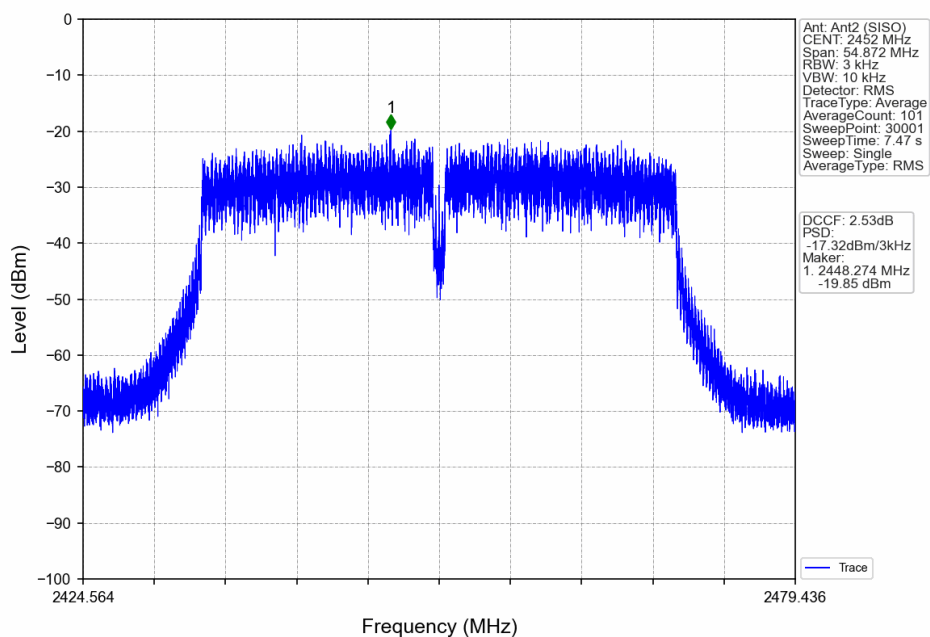
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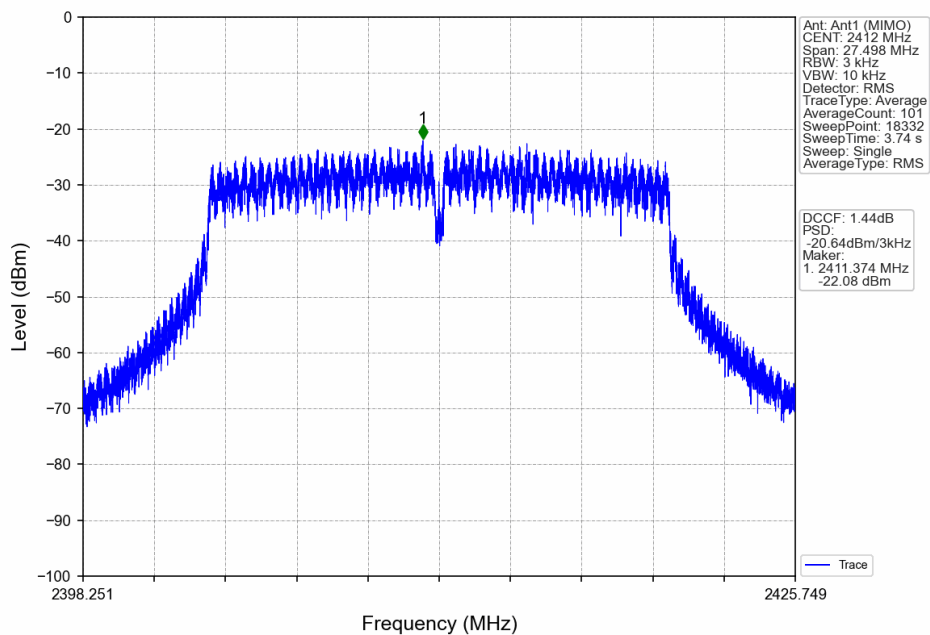
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



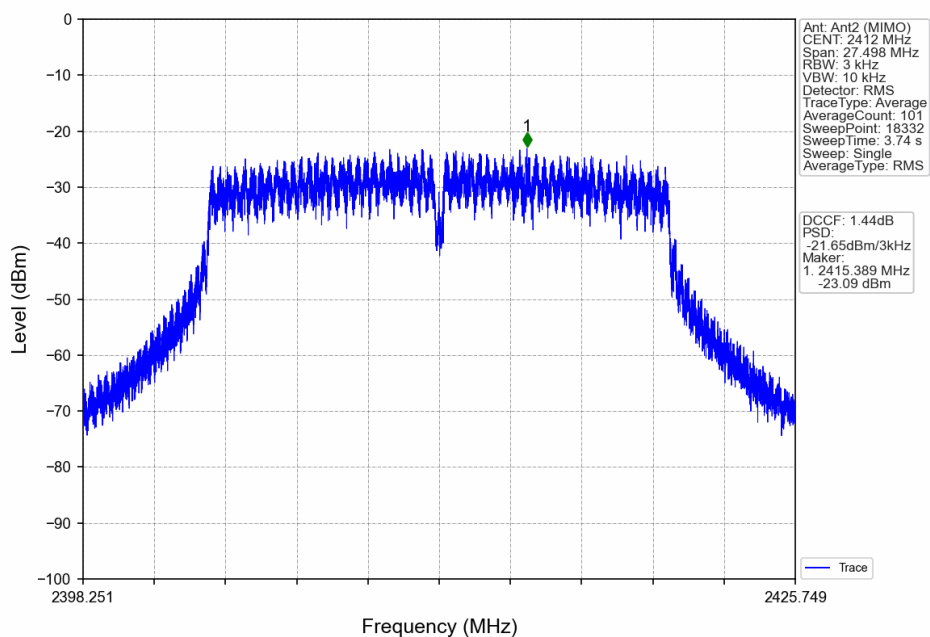
802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV



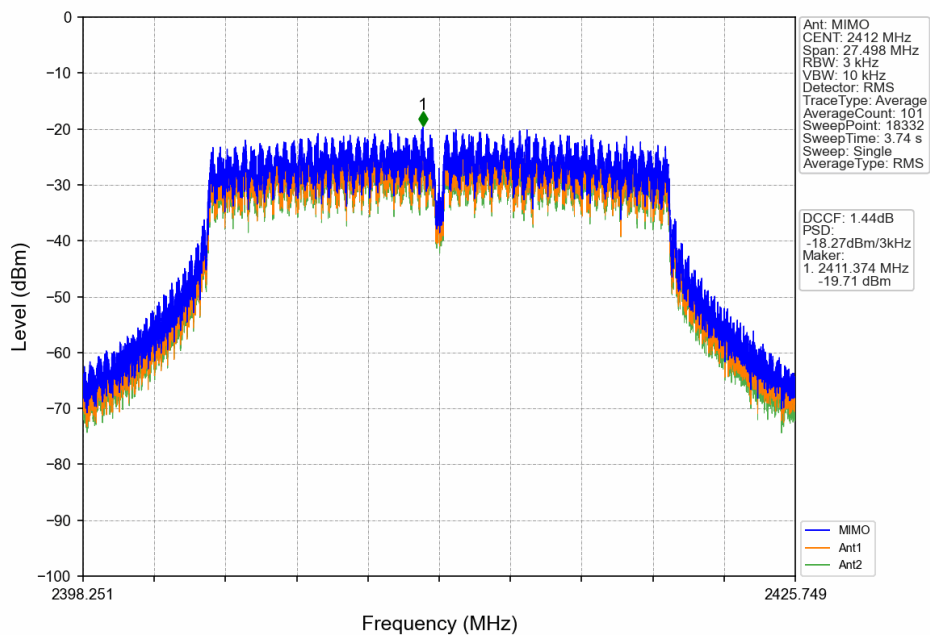
802.11n(HT20)_LCH_2412MHz_Ant1 (MIMO)_NTNV



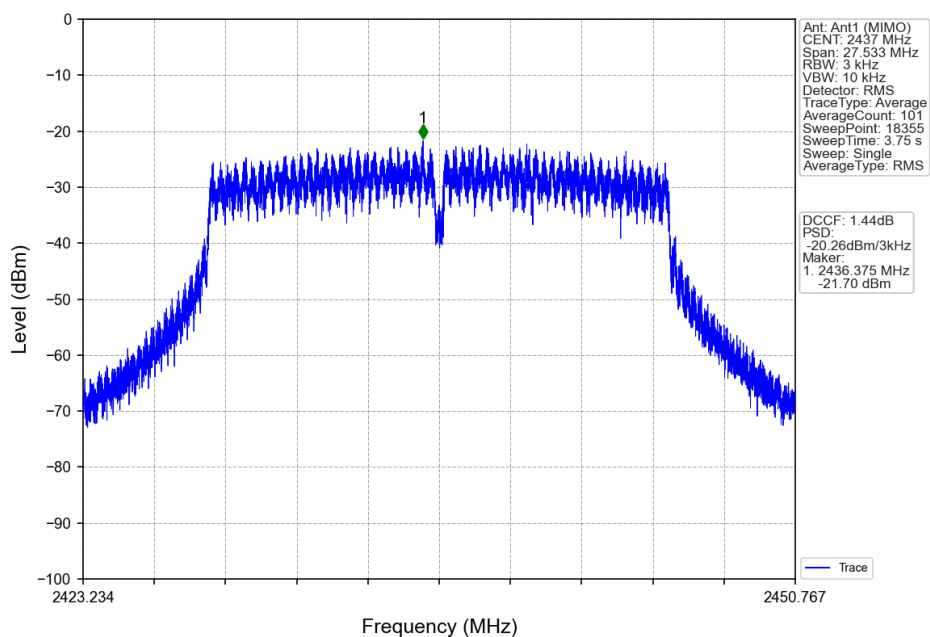
802.11n(HT20)_LCH_2412MHz_Ant2 (MIMO)_NTNV



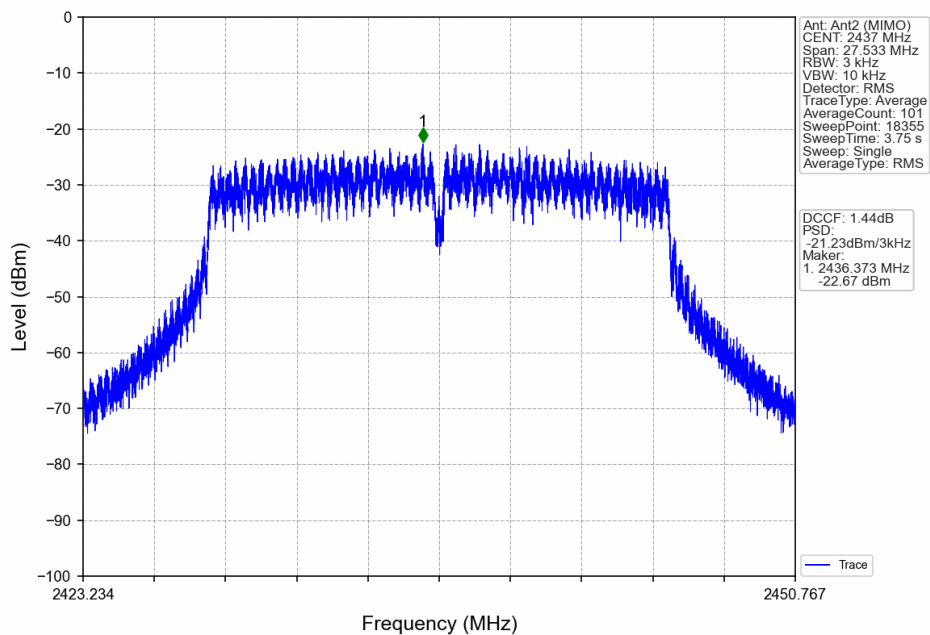
802.11n(HT20)_LCH_2412MHz_MIMO_NTNV



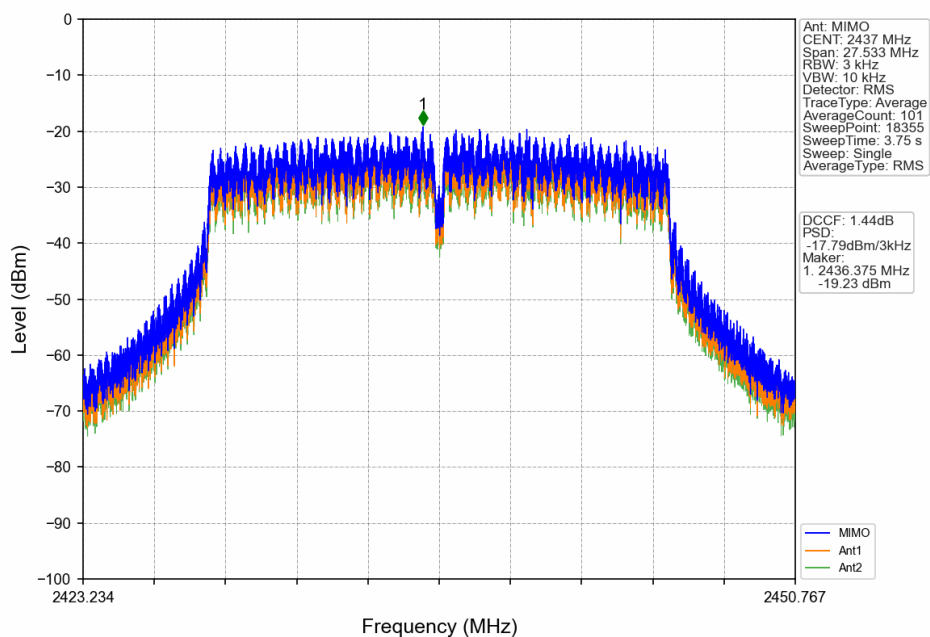
802.11n(HT20)_MCH_2437MHz_Ant1 (MIMO)_NTNV



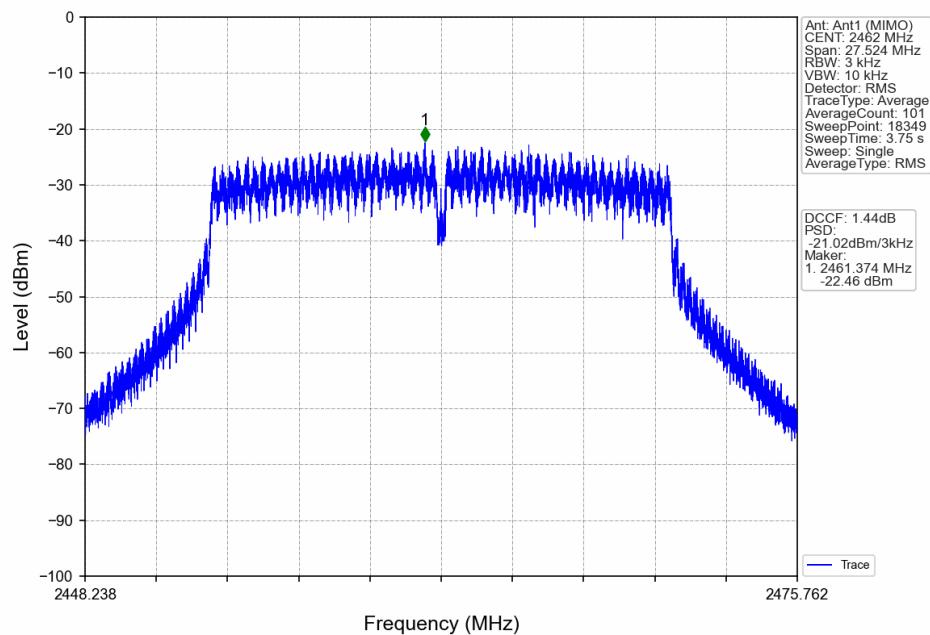
802.11n(HT20)_MCH_2437MHz_Ant2 (MIMO)_NTNV



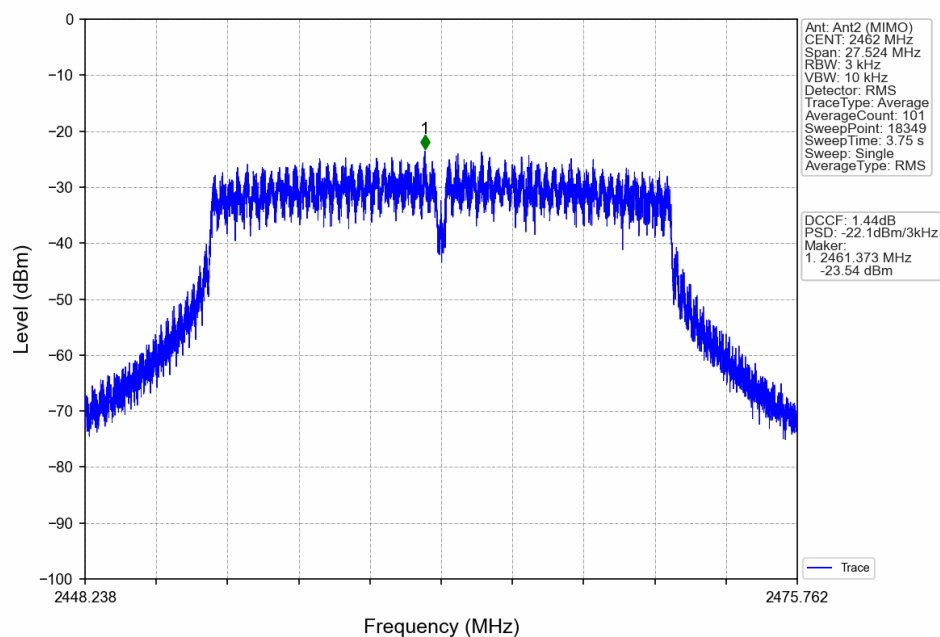
802.11n(HT20)_MCH_2437MHz_MIMO_NTNV



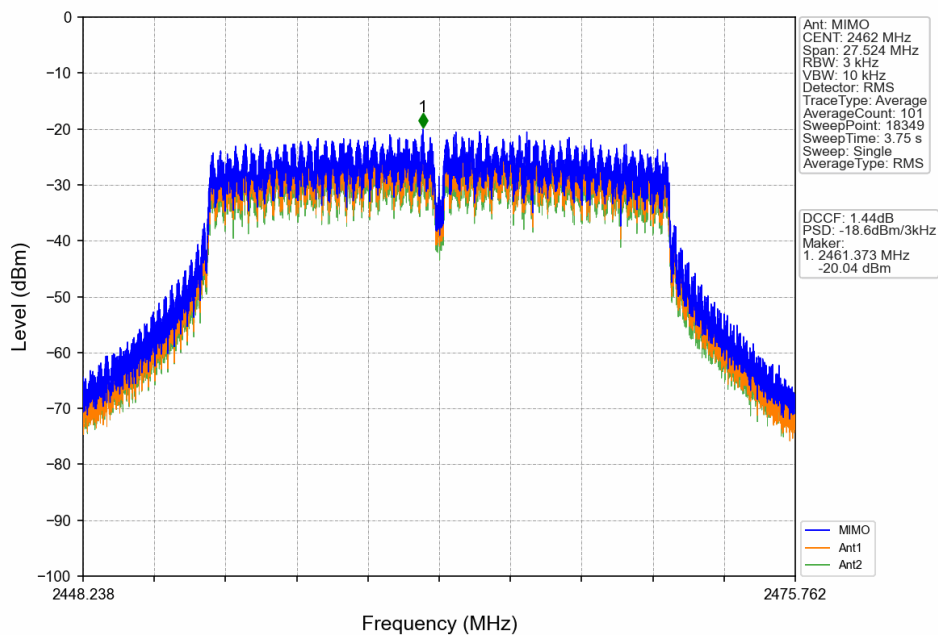
802.11n(HT20)_HCH_2462MHz_Ant1 (MIMO)_NTNV



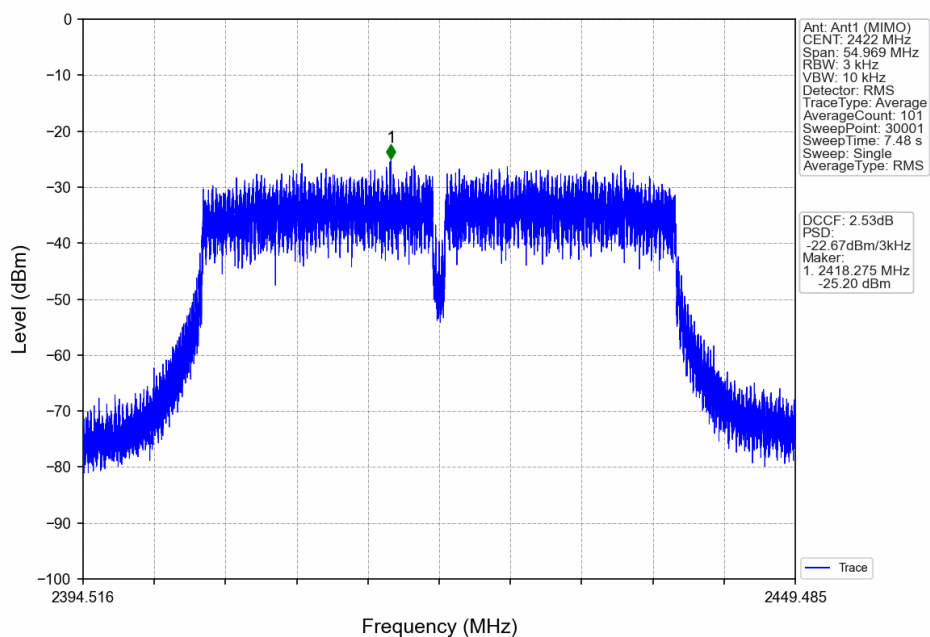
802.11n(HT20)_HCH_2462MHz_Ant2 (MIMO)_NTNV

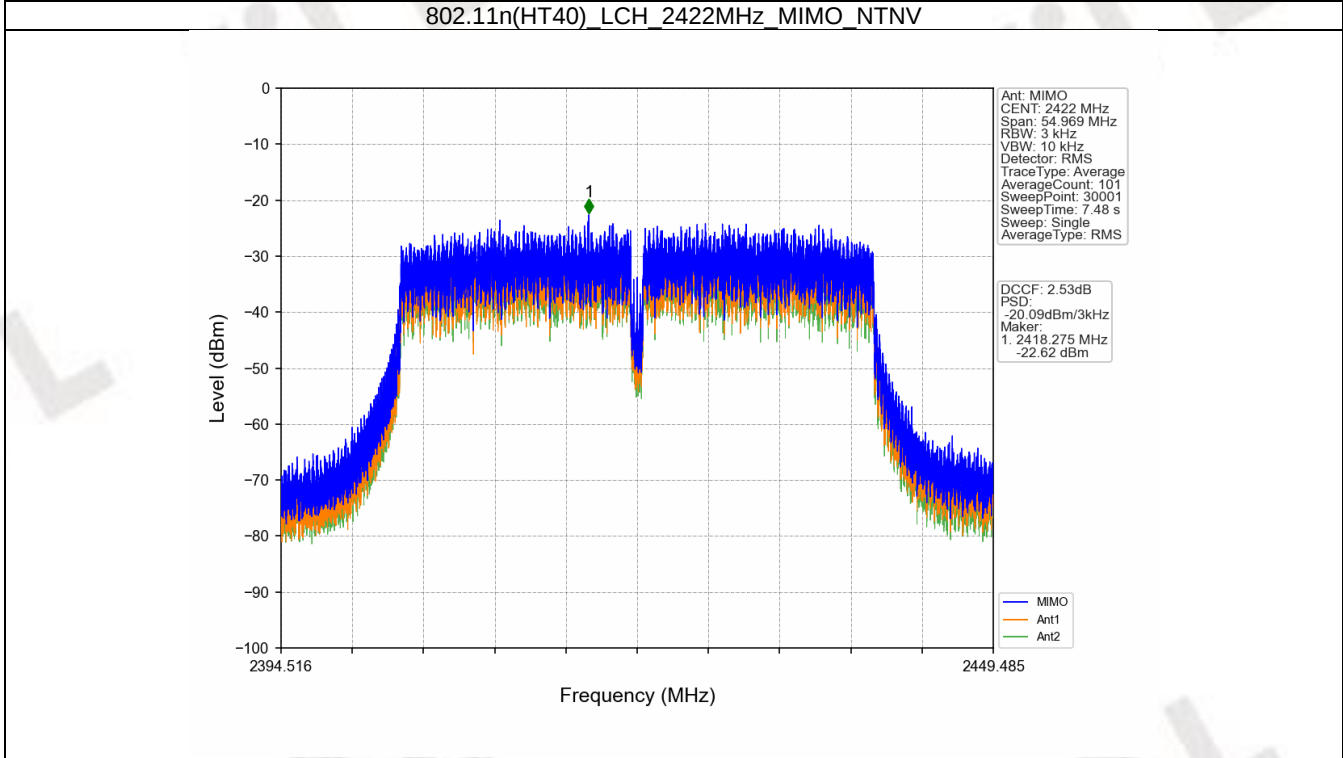
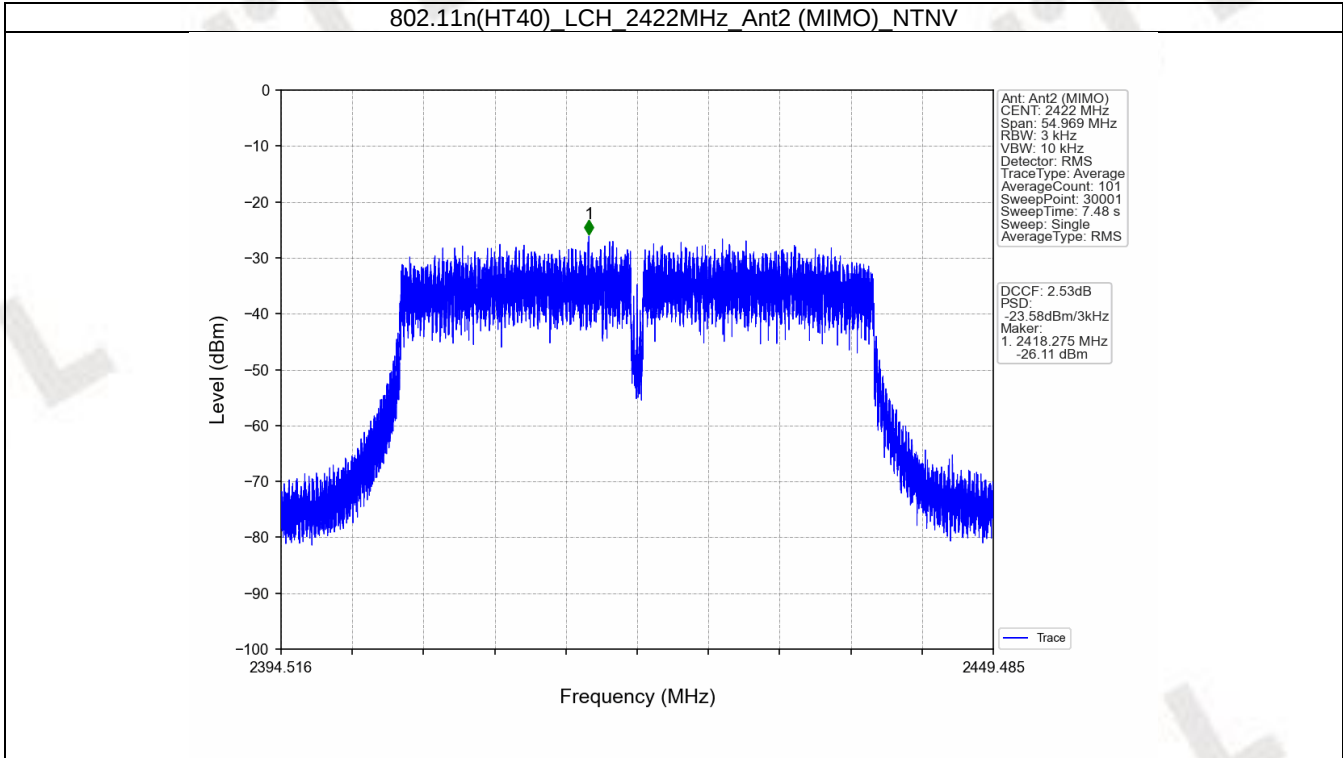


802.11n(HT20)_HCH_2462MHz_MIMO_NTNV

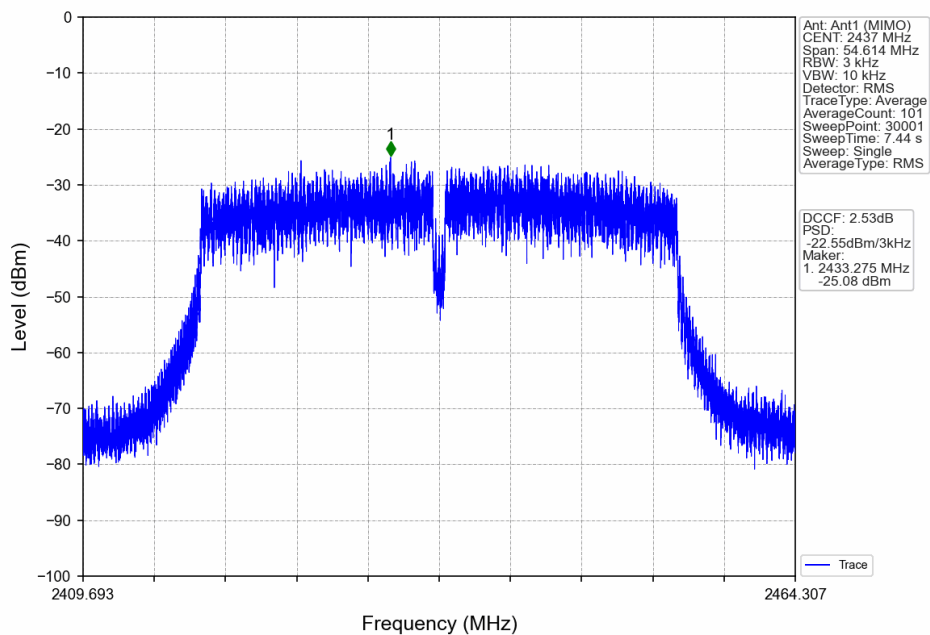


802.11n(HT40)_LCH_2422MHz_Ant1 (MIMO)_NTNV

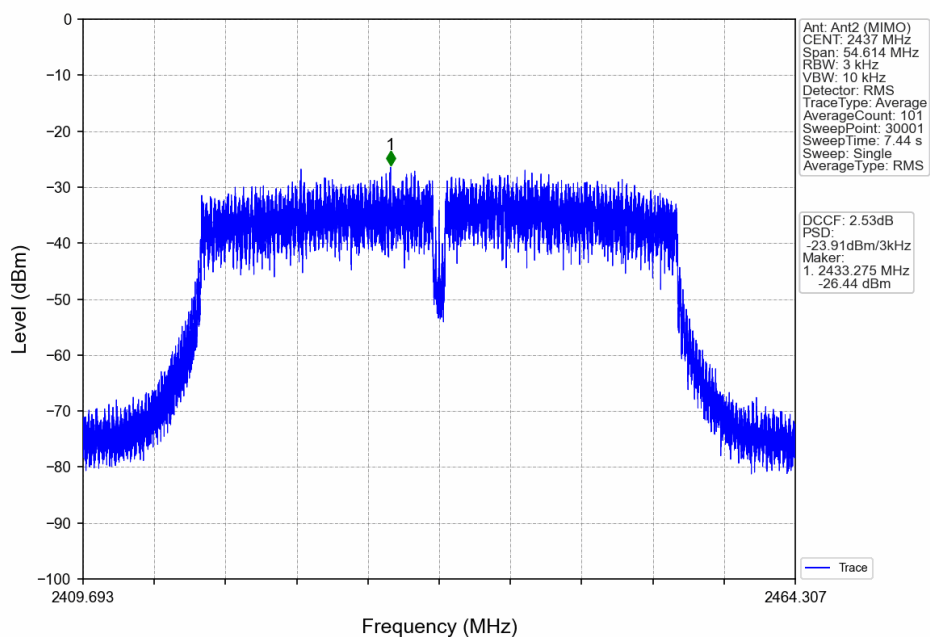




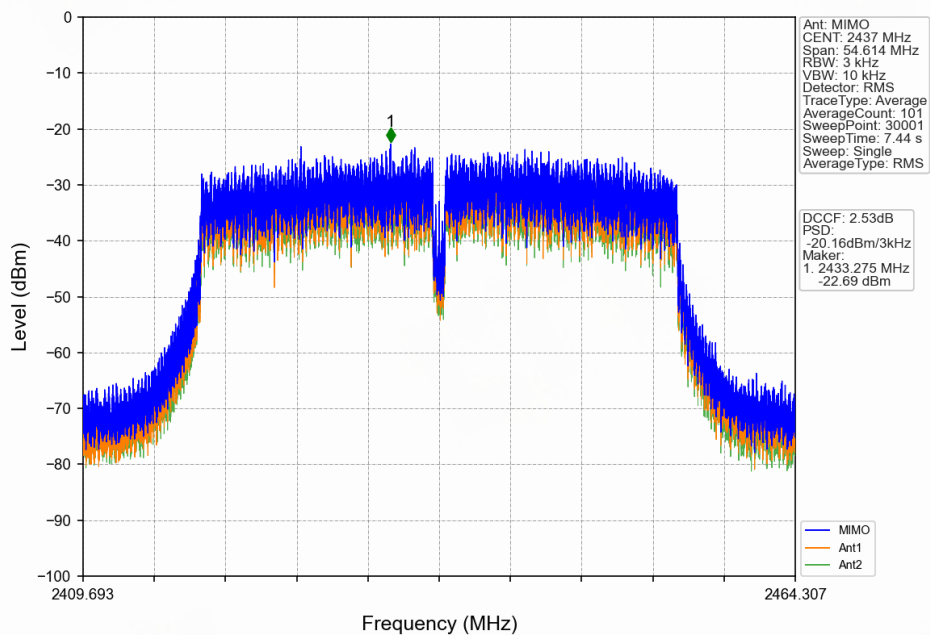
802.11n(HT40)_MCH_2437MHz_Ant1 (MIMO)_NTNV



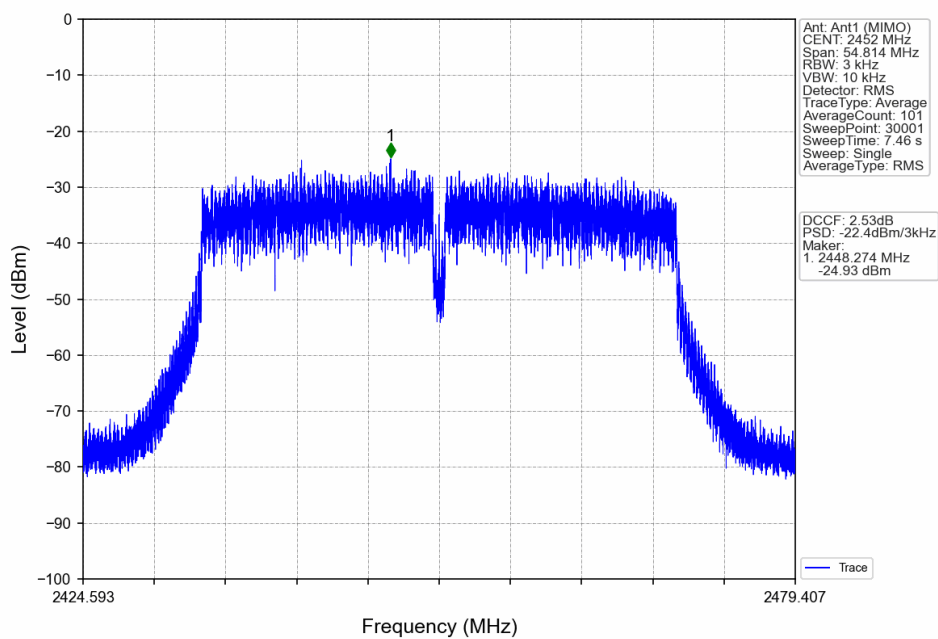
802.11n(HT40)_MCH_2437MHz_Ant2 (MIMO)_NTNV



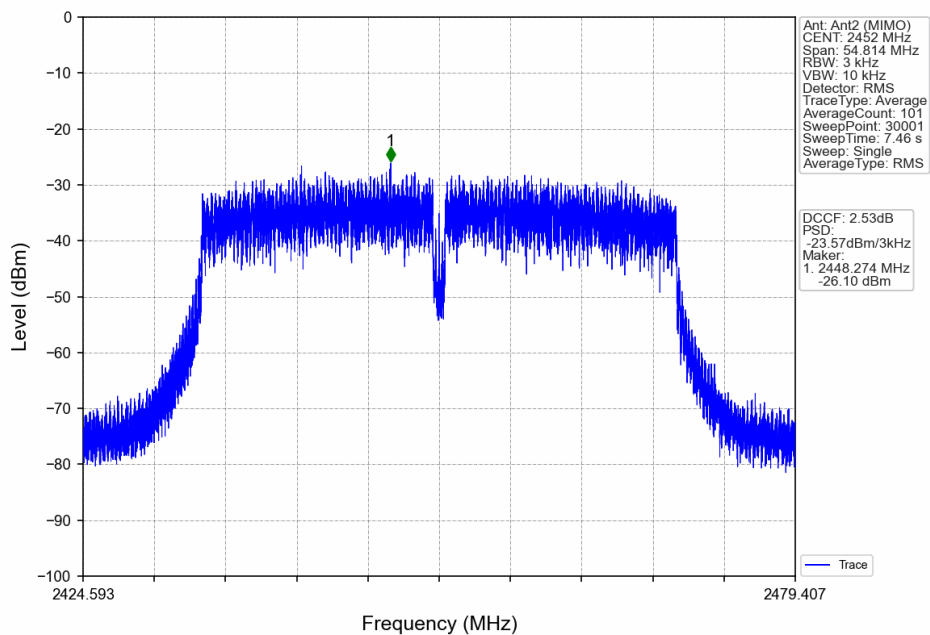
802.11n(HT40)_MCH_2437MHz_MIMO_NTNV



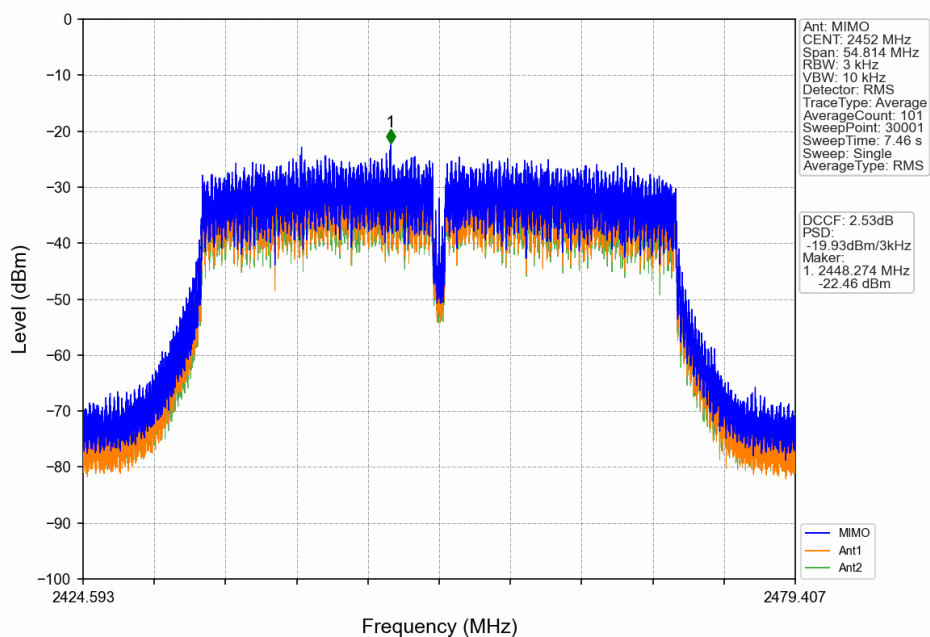
802.11n(HT40)_HCH_2452MHz_Ant1 (MIMO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (MIMO)_NTNV



802.11n(HT40)_HCH_2452MHz_MIMO_NTNV



4. Unwanted Emissions In Non-restricted Frequency Bands

4.1 Ref

4.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	4.96
			2	3.29
		2437	1	5.33
			2	2.97
		2462	1	4.63
			2	2.41
802.11g	SISO	2412	1	3.67
			2	3.62
		2437	1	3.93
			2	3.50
		2462	1	2.99
			2	2.66
802.11n (HT20)	SISO	2412	1	3.56
			2	4.24
		2437	1	3.76
			2	4.27
		2462	1	2.80
			2	3.41
802.11n (HT40)	SISO	2422	1	1.40
			2	1.10
		2437	1	1.23
			2	1.15
		2452	1	0.59
			2	0.67
802.11n (HT20)	MIMO	2412	1	-0.83
			2	-1.12
		2437	1	-0.67
			2	-1.54
		2462	1	-0.84
			2	-2.05
802.11n (HT40)	MIMO	2422	1	-3.21
			2	-3.71
		2437	1	-2.95
			2	-3.69
		2452	1	-3.38
			2	-4.32

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

4.1.2 Test Graph

