1. Bandwidth

1.1 OBW

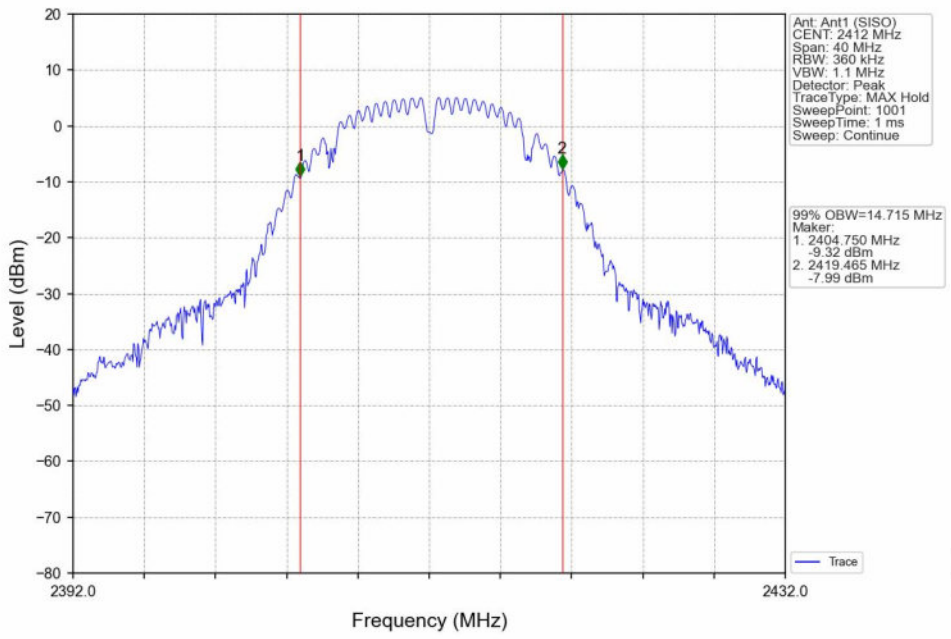
1.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz) Result	Verdict
802.11b	SISO	2412	1	14.715	Pass
		2437	1	14.899	Pass
		2462	1	14.770	Pass
802.11g	SISO	2412	1	17.240	Pass
		2437	1	17.345	Pass
		2462	1	17.191	Pass
802.11n (HT20)	SISO	2412	1	18.331	Pass
		2437	1	18.349	Pass
		2462	1	18.427	Pass
802.11n (HT40)	SISO	2422	1	36.408	Pass
		2437	1	36.652	Pass
		2452	1	36.474	Pass

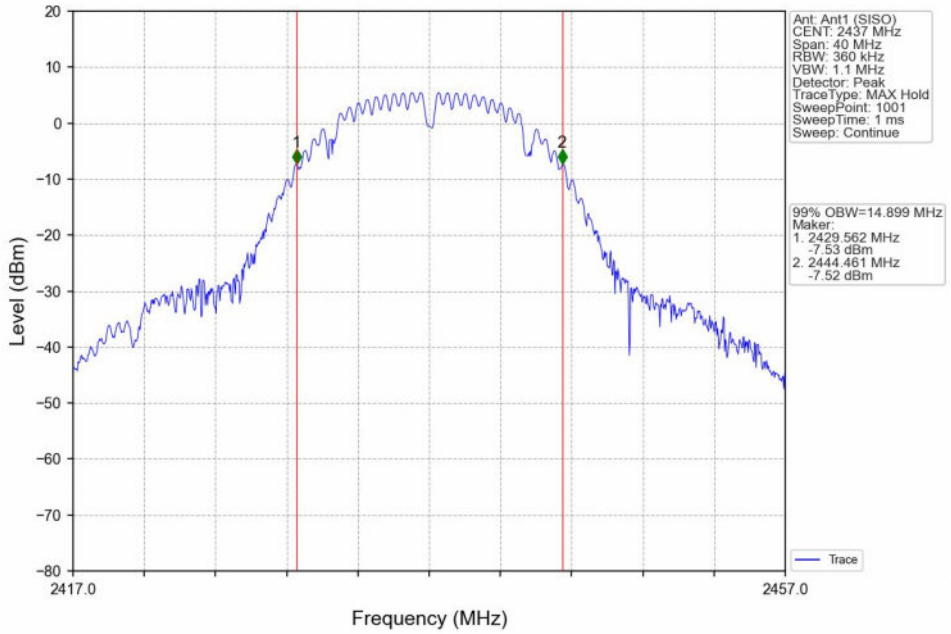
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz) Result	Verdict
802.11b	SISO	2412	2	14.710	Pass
		2437	2	14.750	Pass
		2462	2	14.647	Pass
802.11g	SISO	2412	2	17.130	Pass
		2437	2	17.271	Pass
		2462	2	16.972	Pass
802.11n (HT20)	SISO	2412	2	18.445	Pass
		2437	2	18.364	Pass
		2462	2	18.165	Pass
802.11n (HT40)	SISO	2422	2	36.319	Pass
		2437	2	36.443	Pass
		2452	2	36.569	Pass

1.1.2 Test Graph

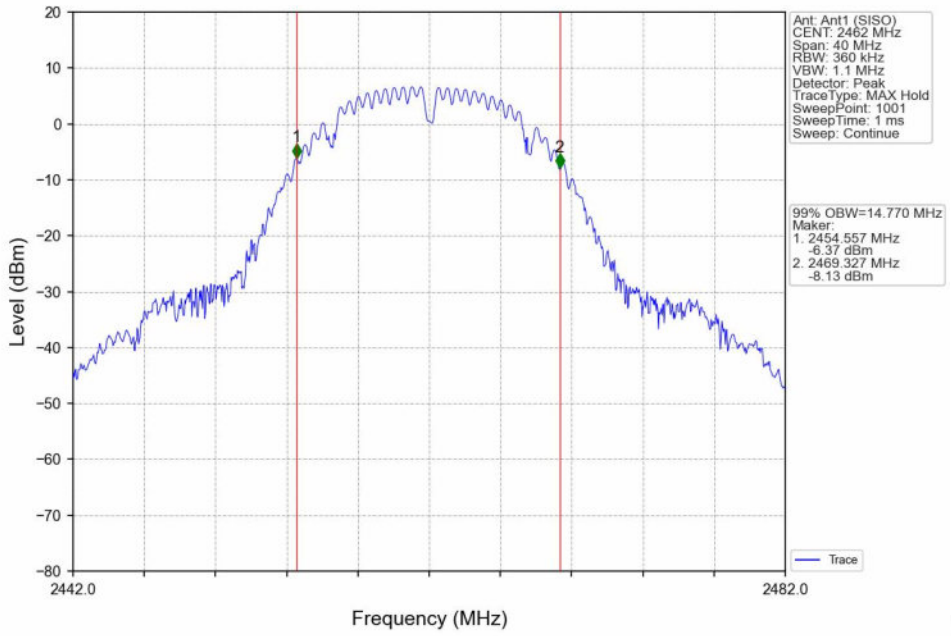
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



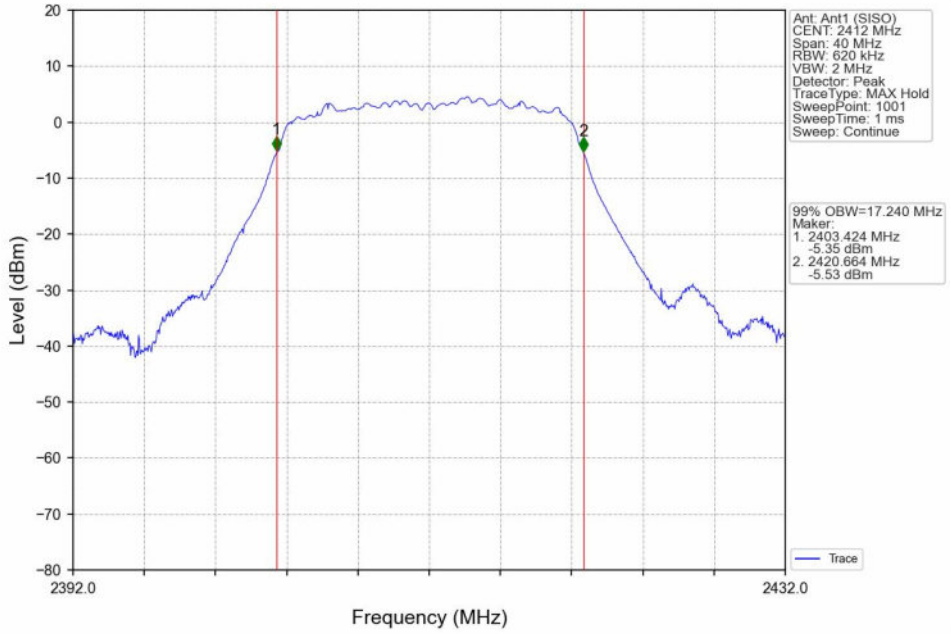
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



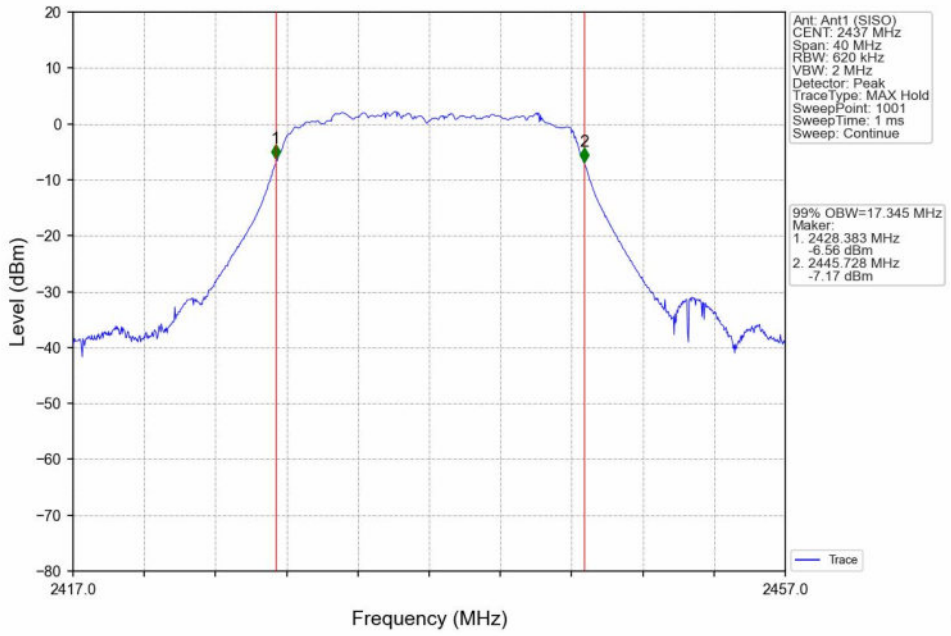
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



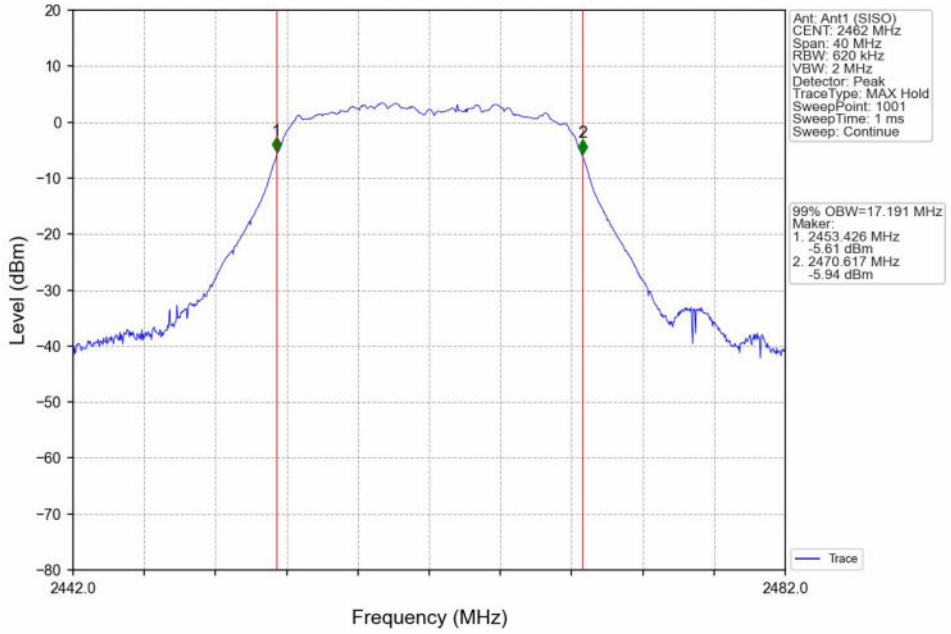
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



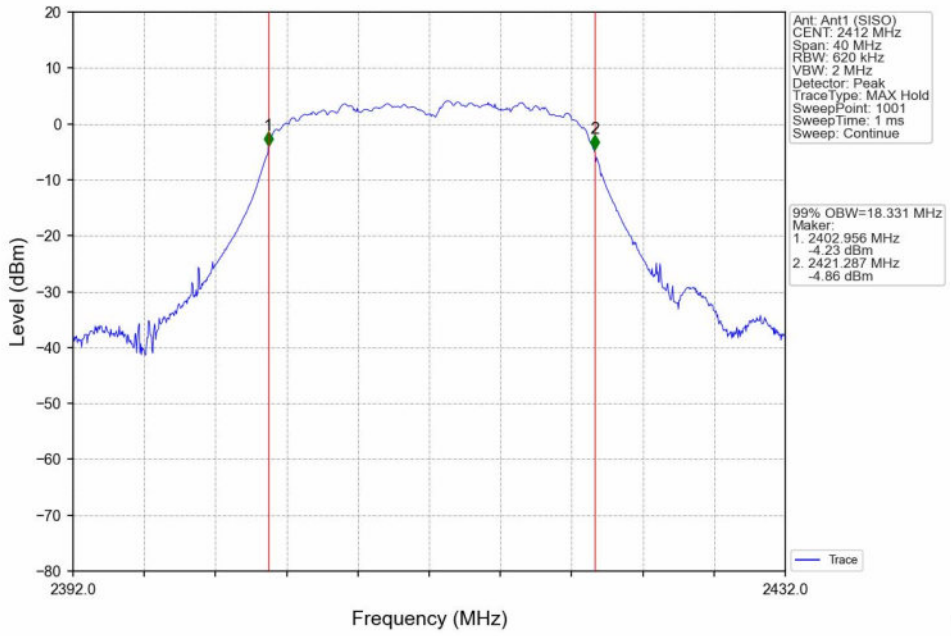
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



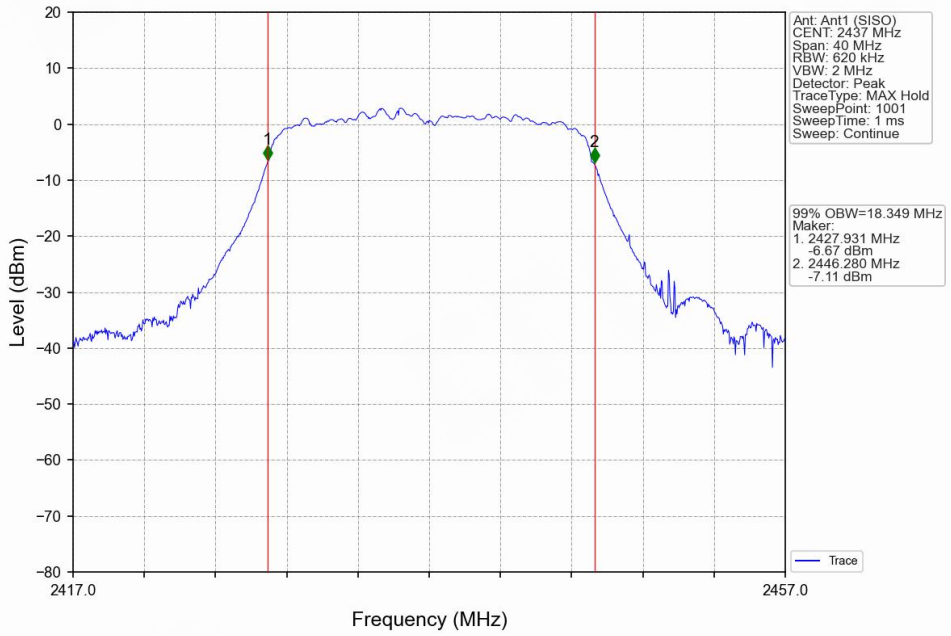
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



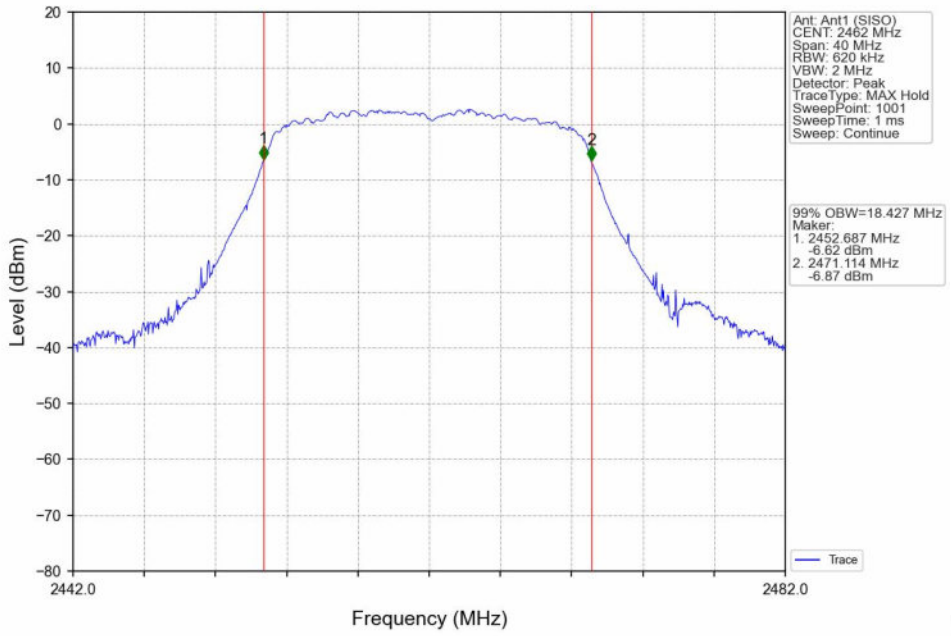
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



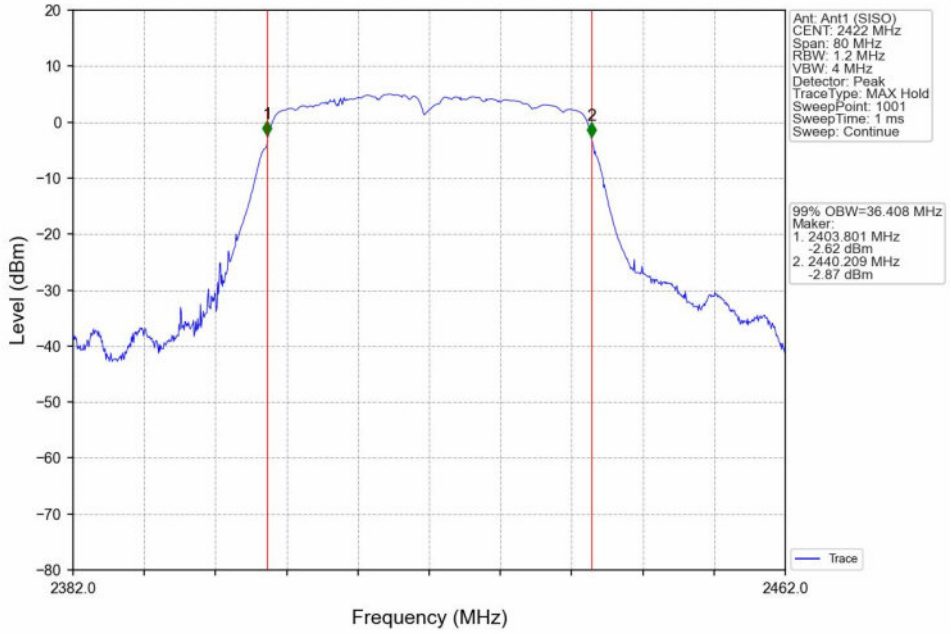
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



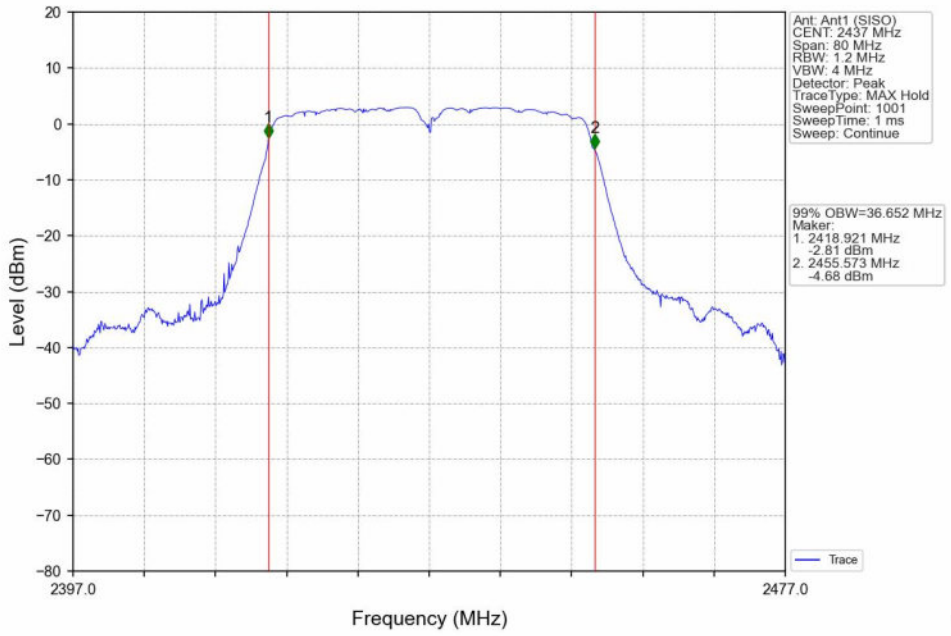
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



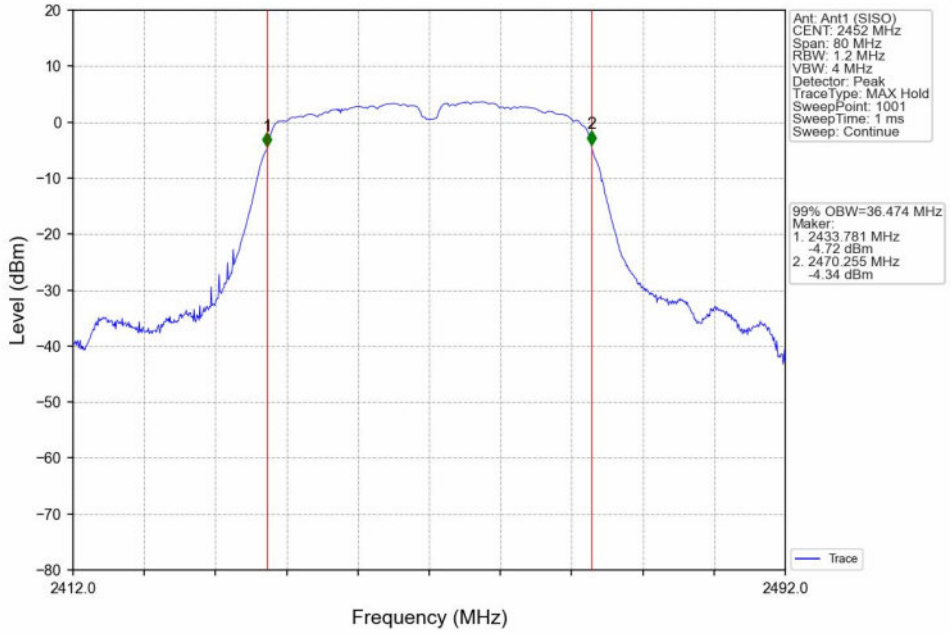
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



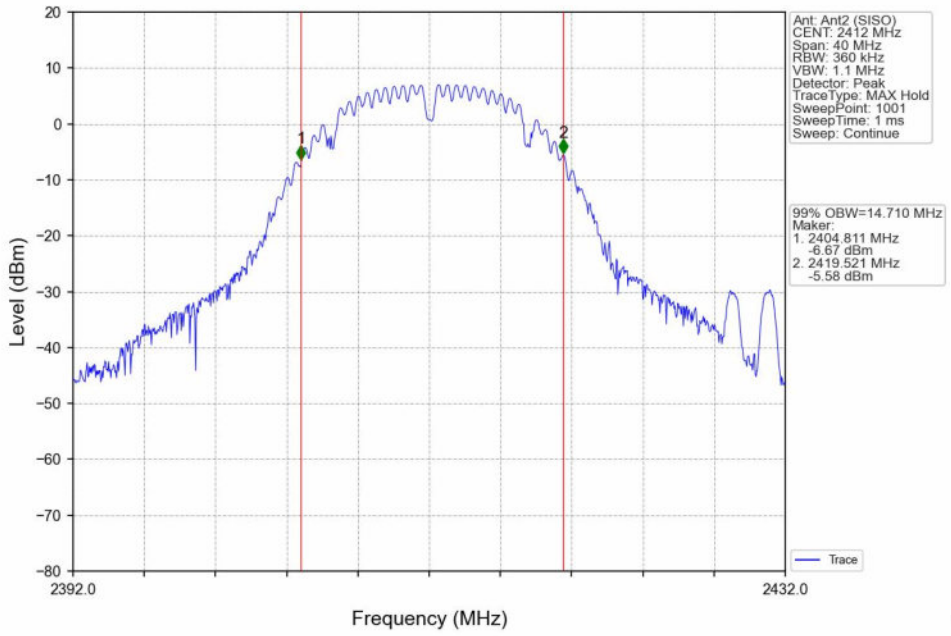
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



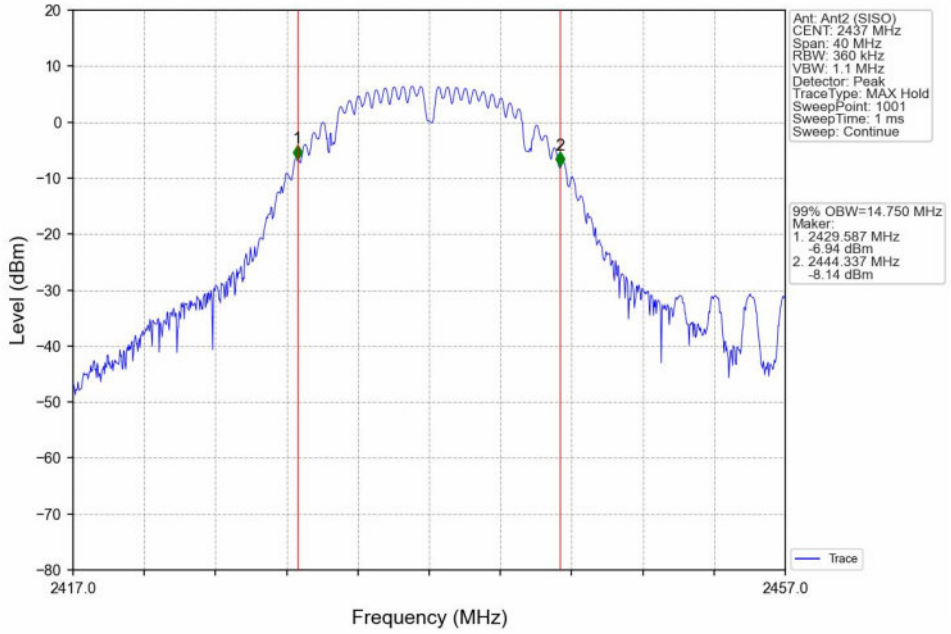
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



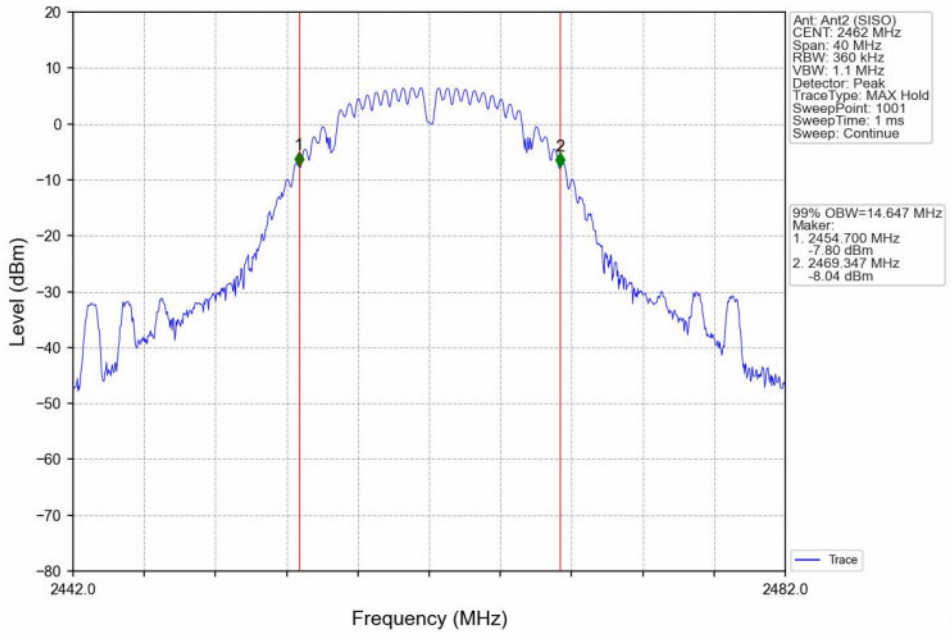
802.11b_LCH_2412MHz_Ant2 (SISO)_NTNV



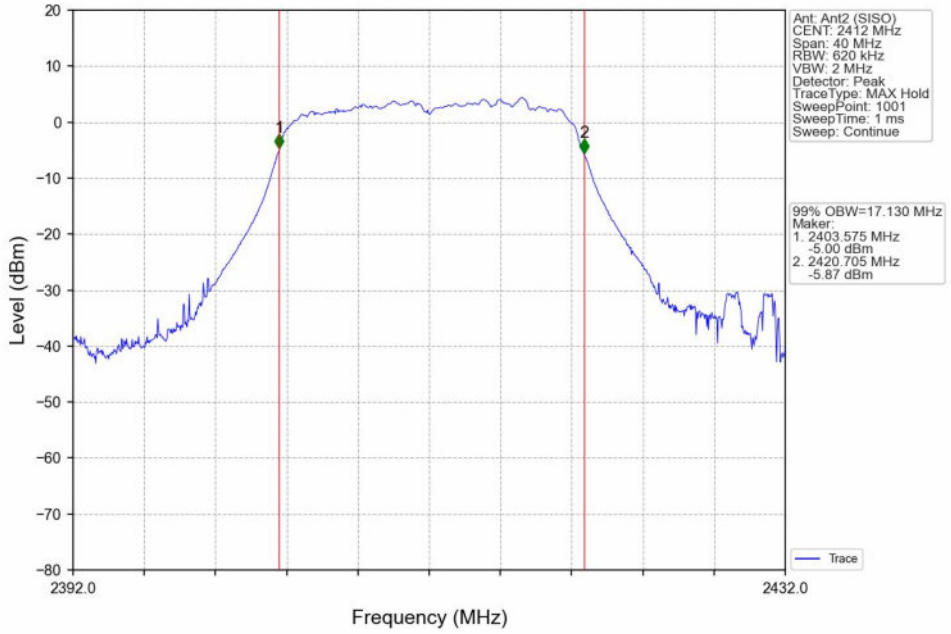
802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



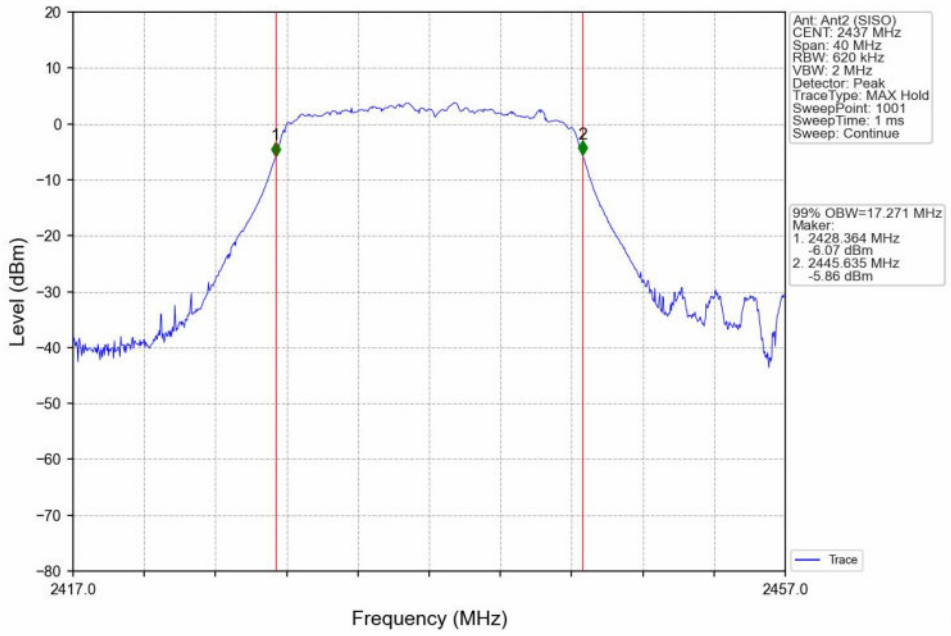
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



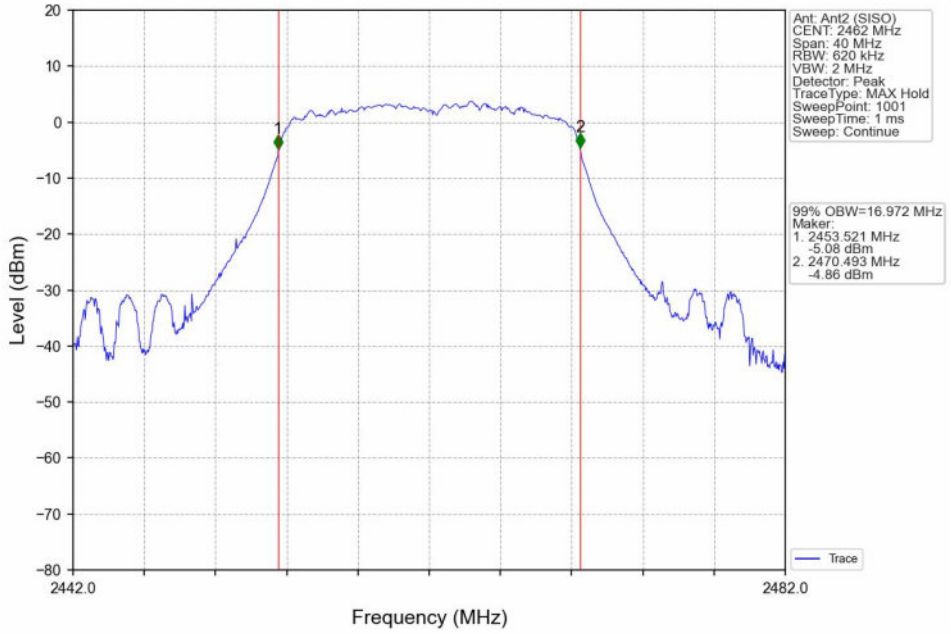
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



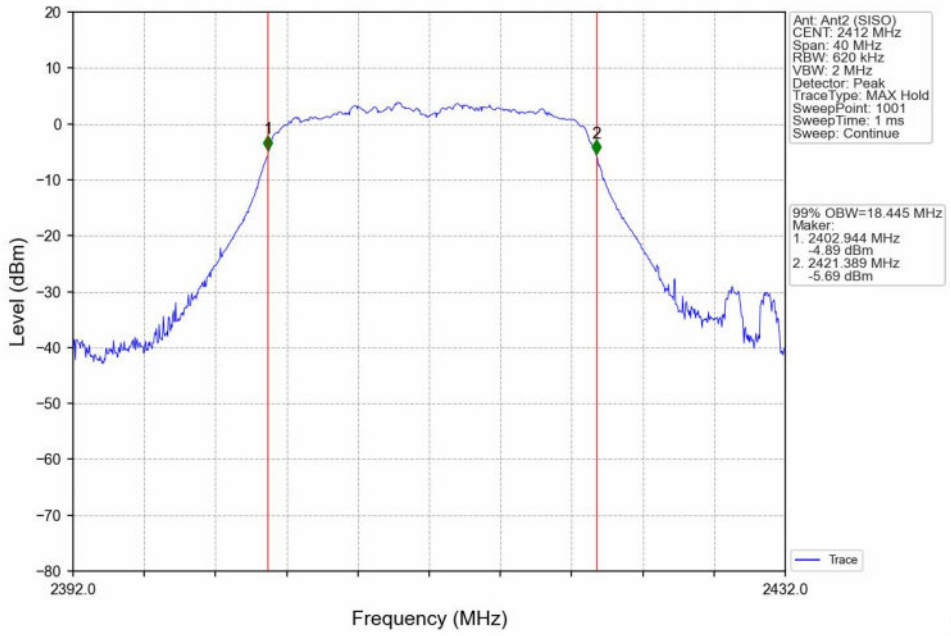
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



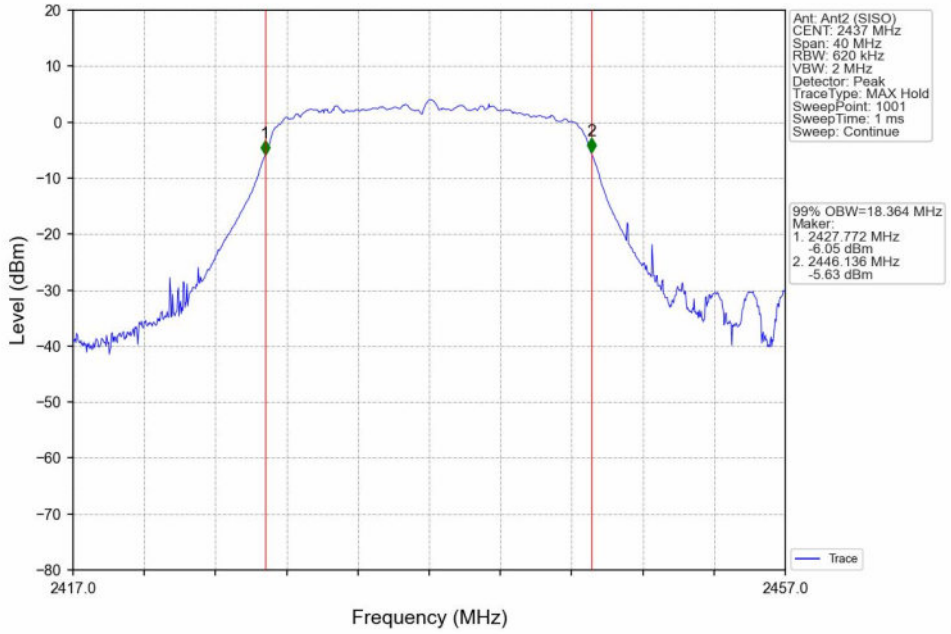
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



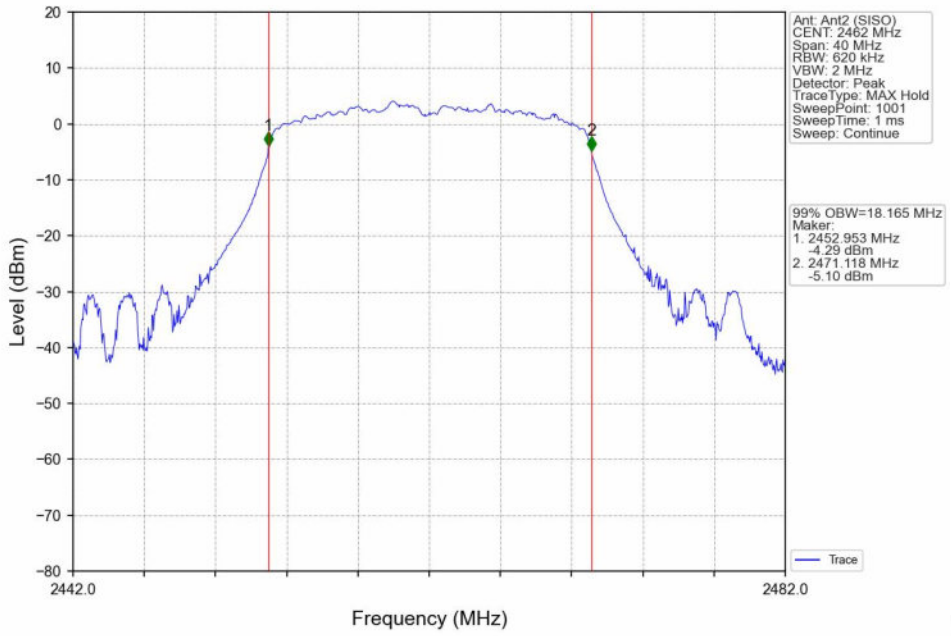
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



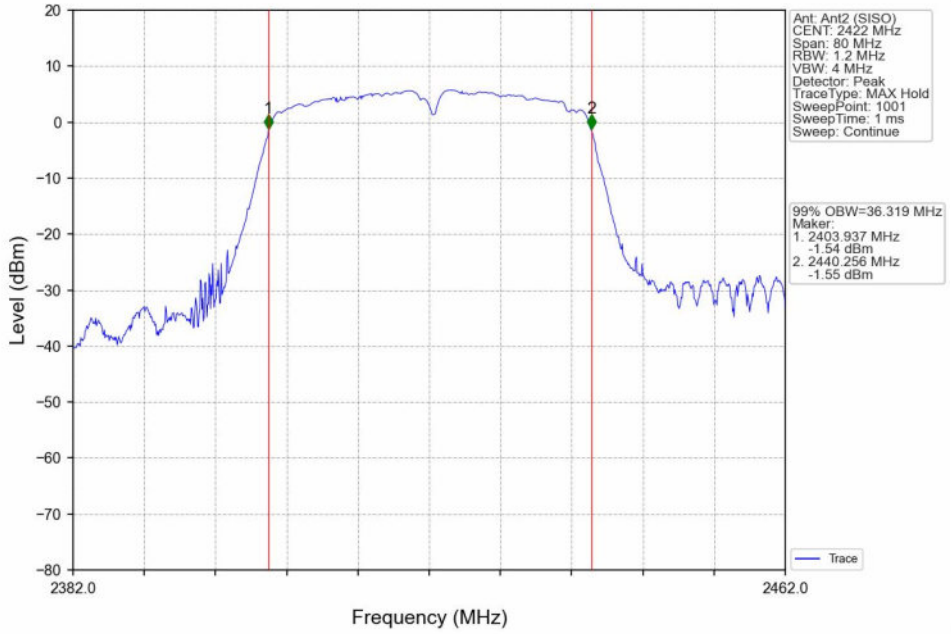
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



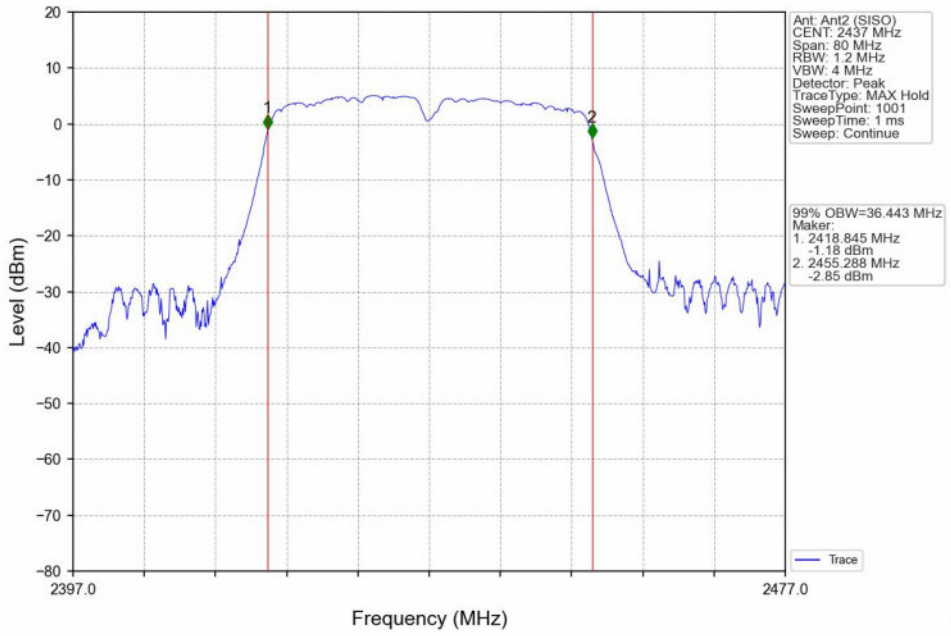
802.11n(HT20)_HCH_2462MHz_Ant2 (SISO)_NTNV



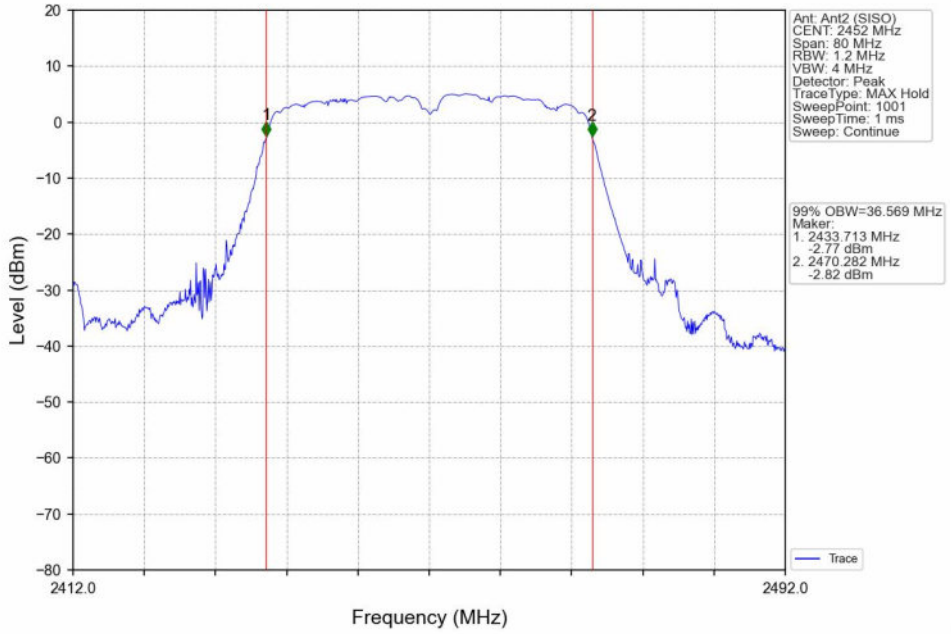
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV



1.2 6dB BW

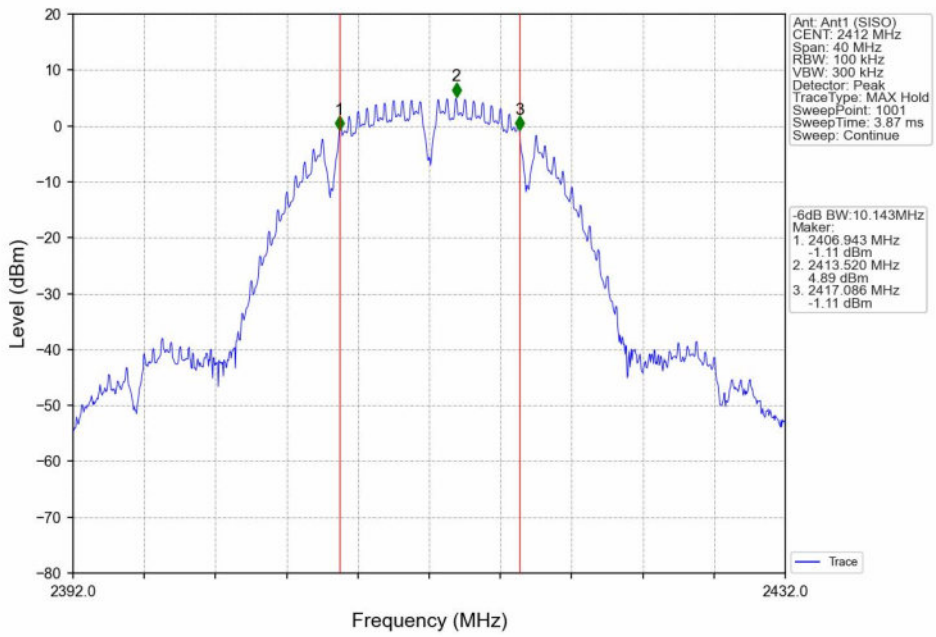
1.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	10.143	>=0.5	Pass
		2437	1	10.156	>=0.5	Pass
		2462	1	10.142	>=0.5	Pass
802.11g	SISO	2412	1	15.504	>=0.5	Pass
		2437	1	15.809	>=0.5	Pass
		2462	1	15.651	>=0.5	Pass
802.11n (HT20)	SISO	2412	1	15.508	>=0.5	Pass
		2437	1	16.888	>=0.5	Pass
		2462	1	15.729	>=0.5	Pass
802.11n (HT40)	SISO	2422	1	35.168	>=0.5	Pass
		2437	1	35.587	>=0.5	Pass
		2452	1	35.161	>=0.5	Pass

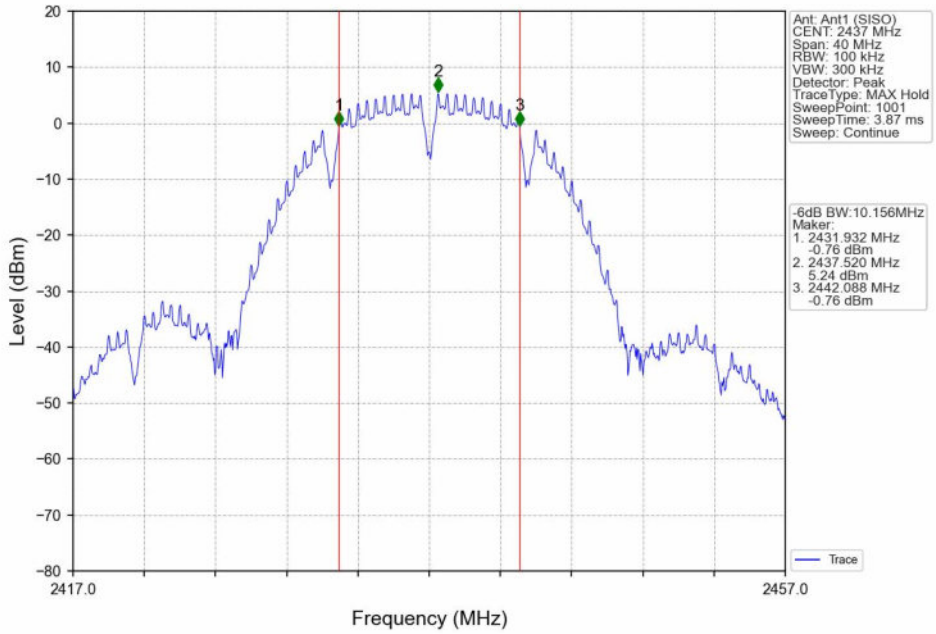
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	2	10.152	>=0.5	Pass
		2437	2	10.148	>=0.5	Pass
		2462	2	10.144	>=0.5	Pass
802.11g	SISO	2412	2	15.929	>=0.5	Pass
		2437	2	15.967	>=0.5	Pass
		2462	2	15.853	>=0.5	Pass
802.11n (HT20)	SISO	2412	2	15.478	>=0.5	Pass
		2437	2	16.157	>=0.5	Pass
		2462	2	15.184	>=0.5	Pass
802.11n (HT40)	SISO	2422	2	35.145	>=0.5	Pass
		2437	2	35.195	>=0.5	Pass
		2452	2	35.195	>=0.5	Pass

1.2.2 Test Graph

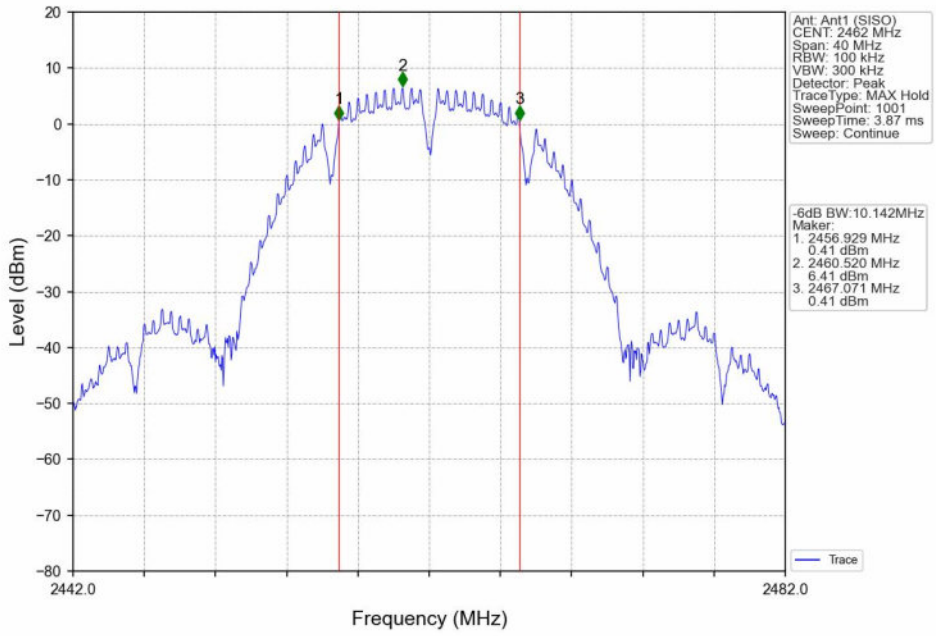
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



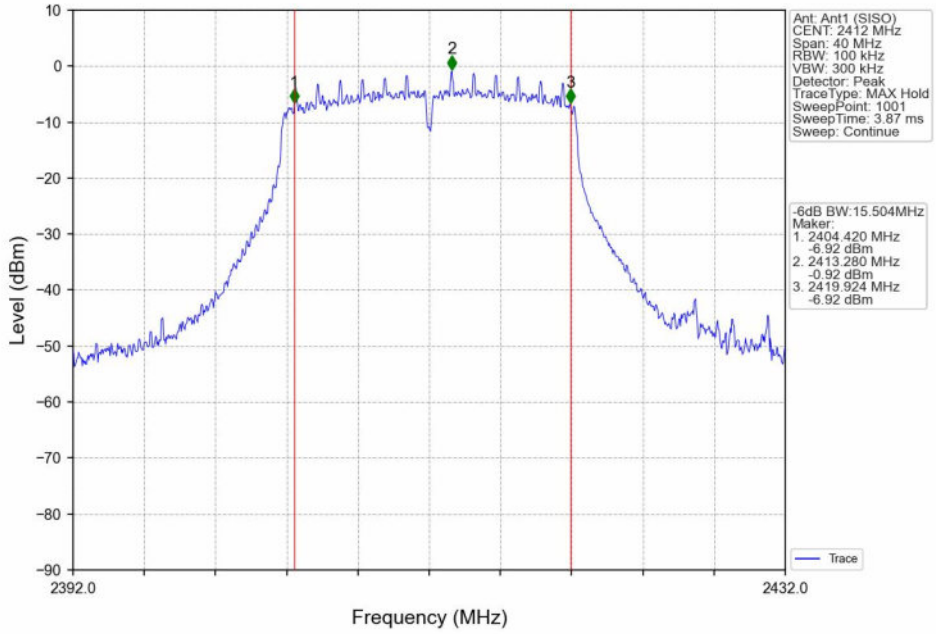
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



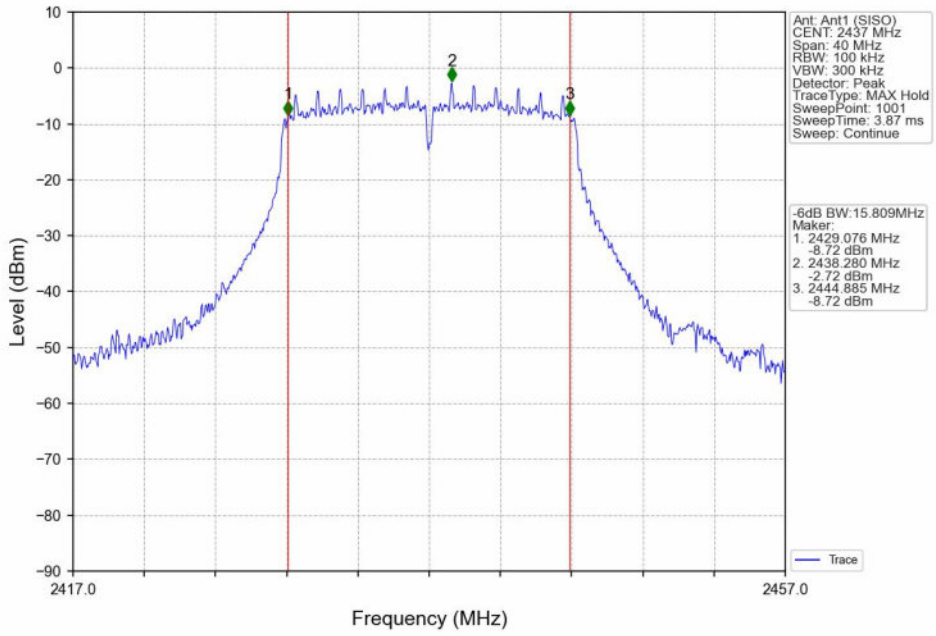
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



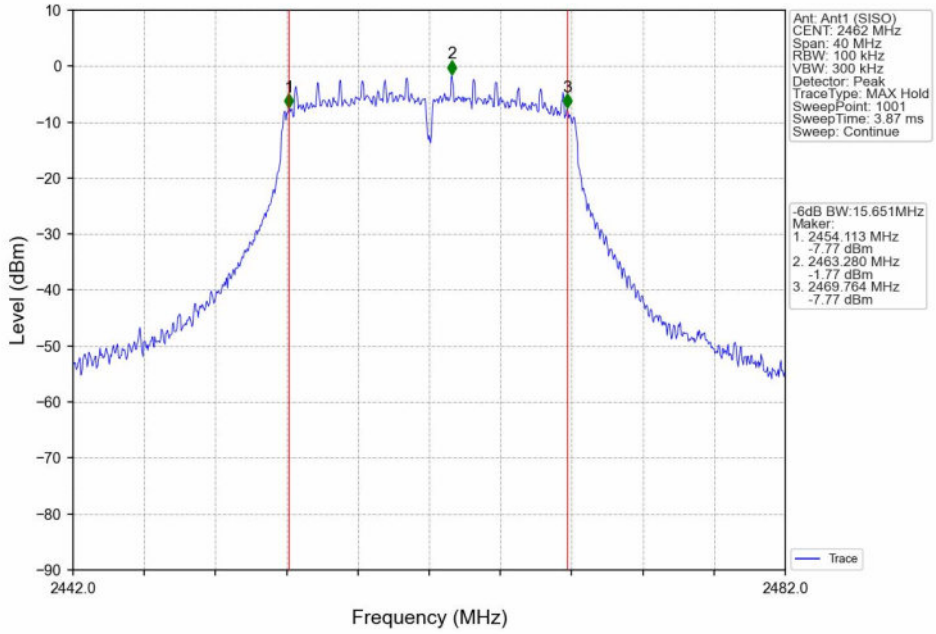
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



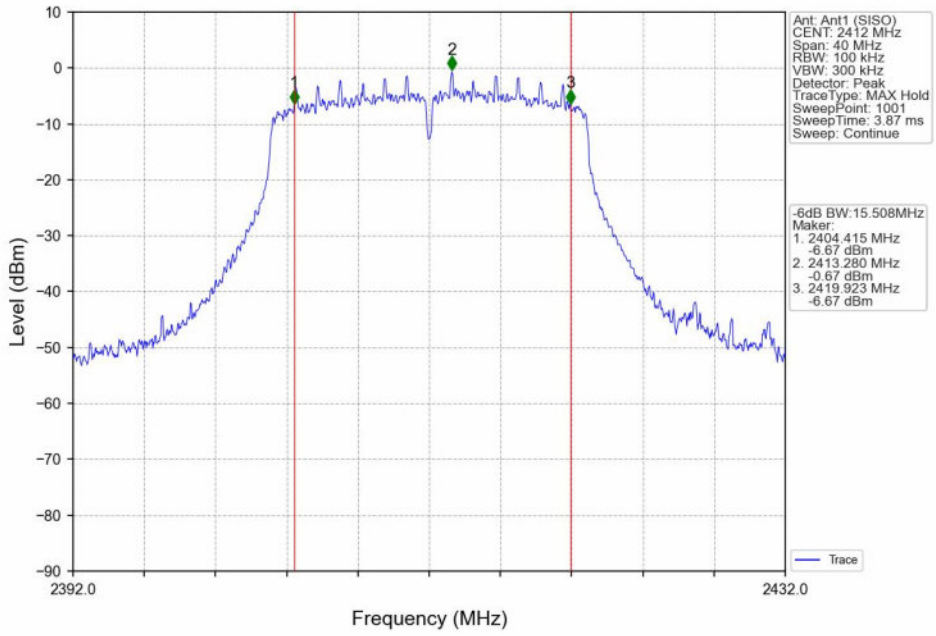
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



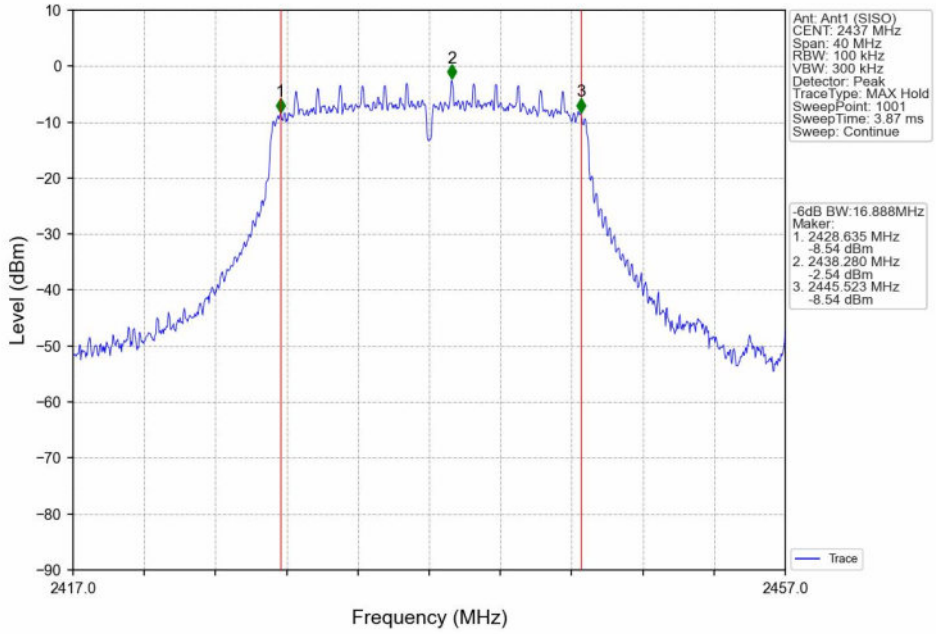
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



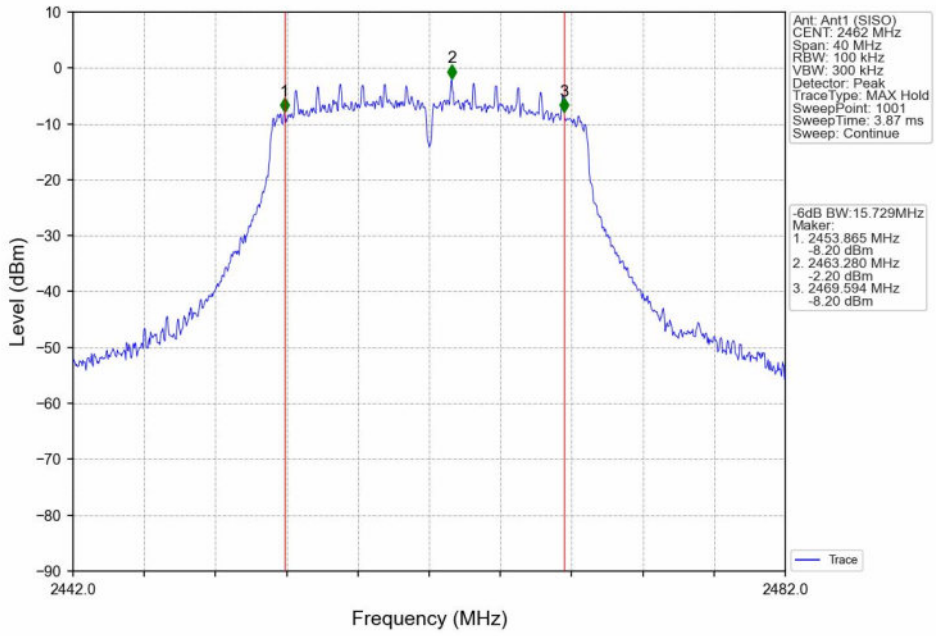
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



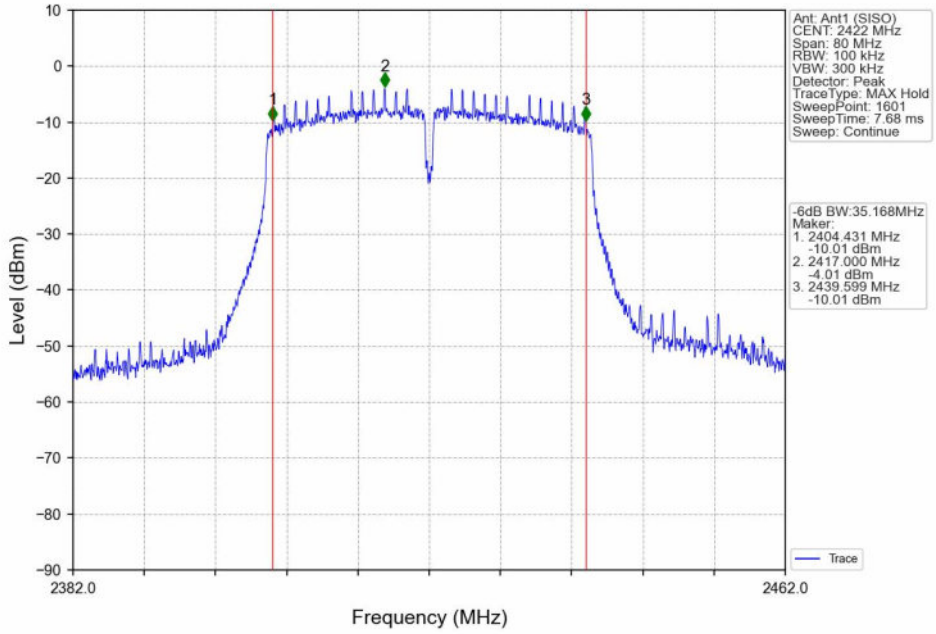
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



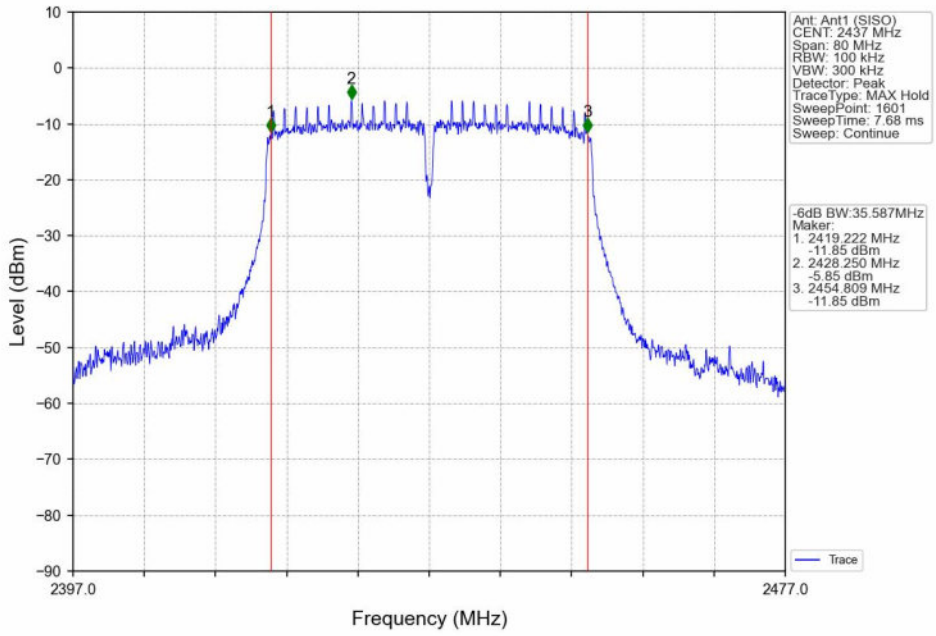
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



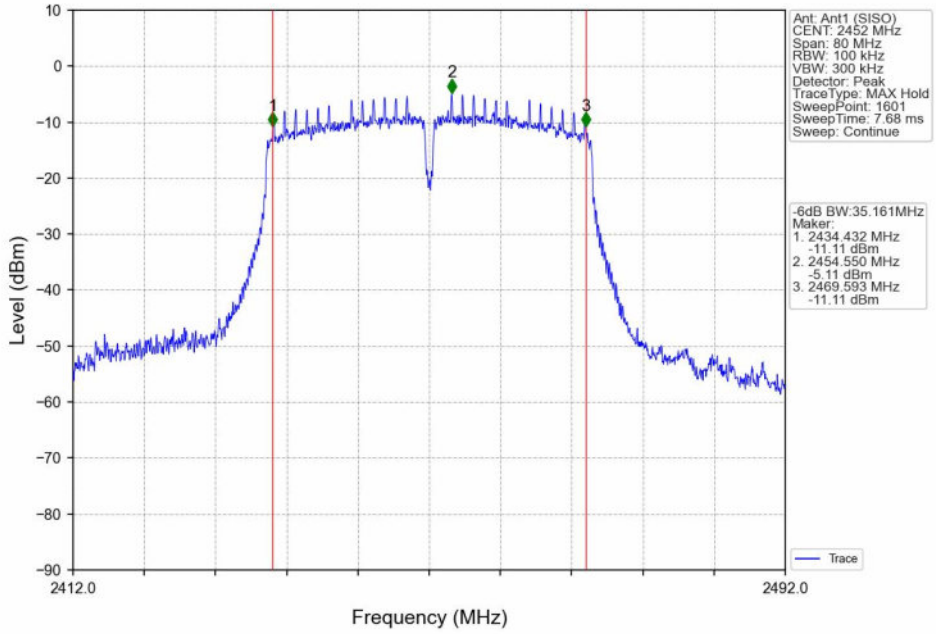
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



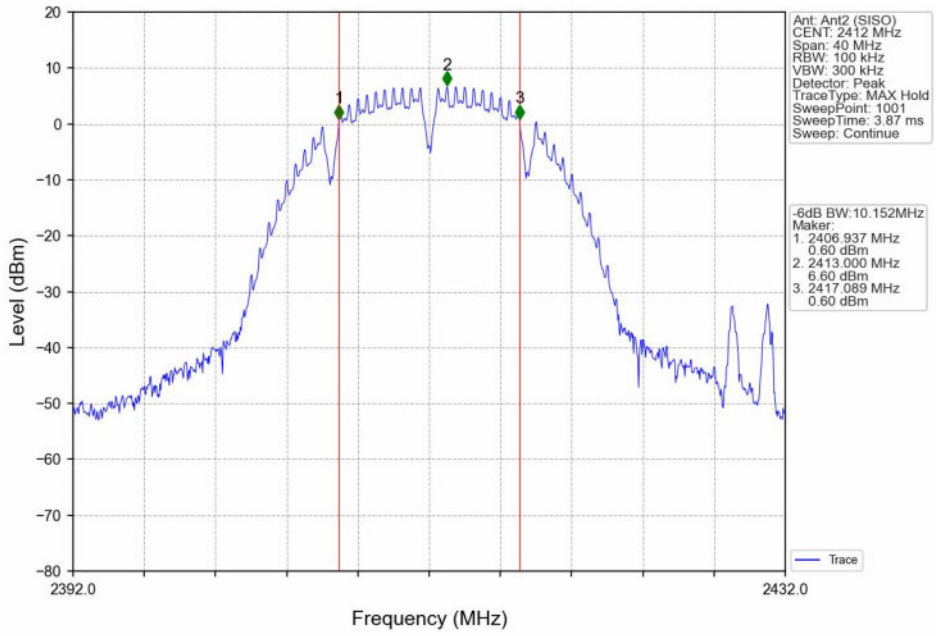
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



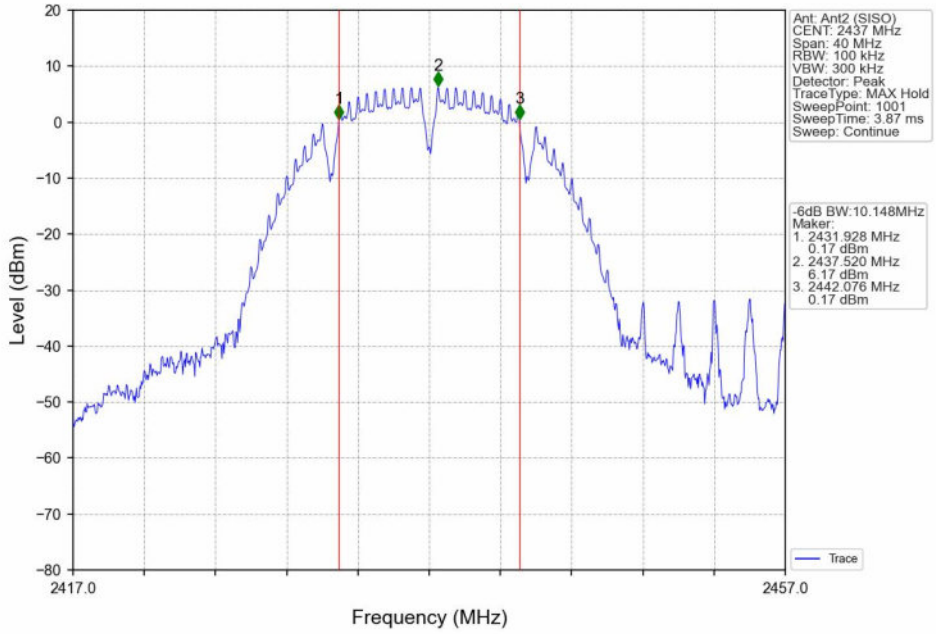
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



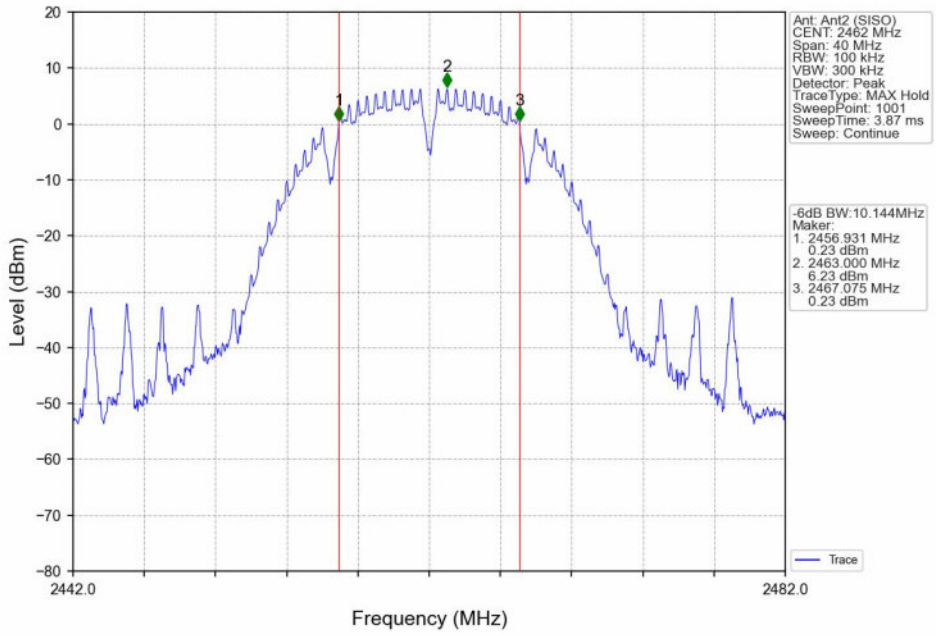
802.11b_LCH_2412MHz_Ant2 (SISO)_NTNV



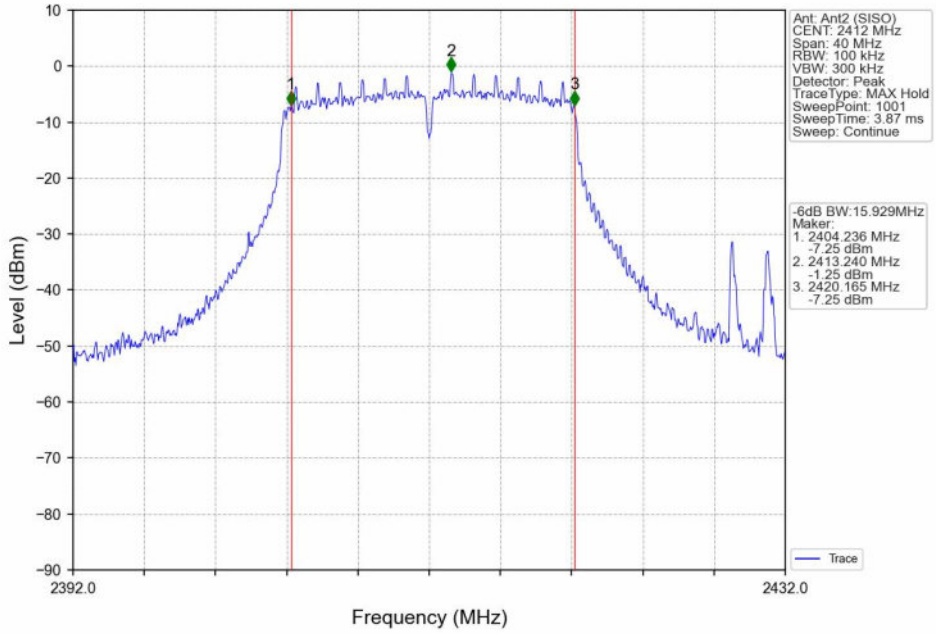
802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



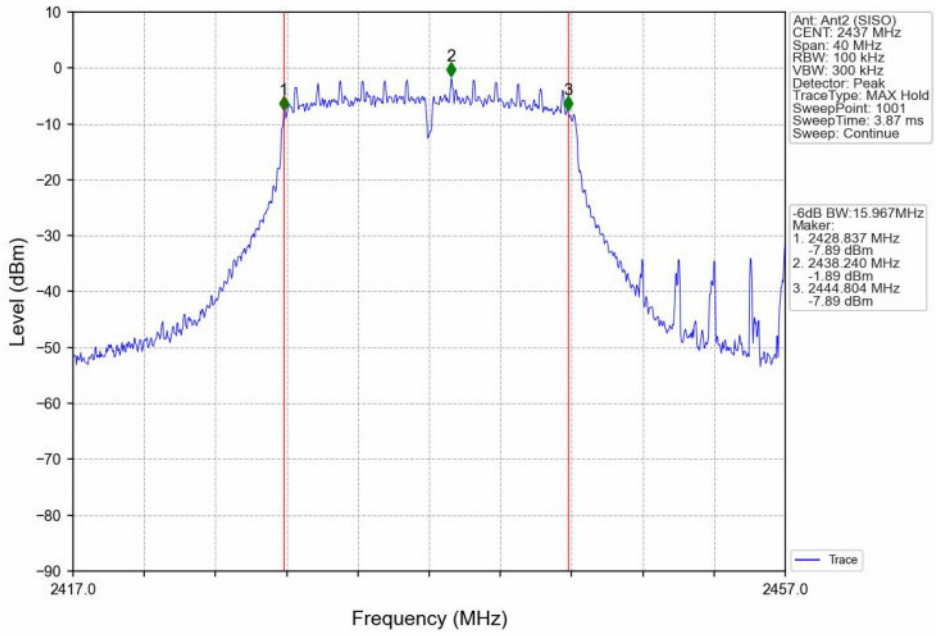
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



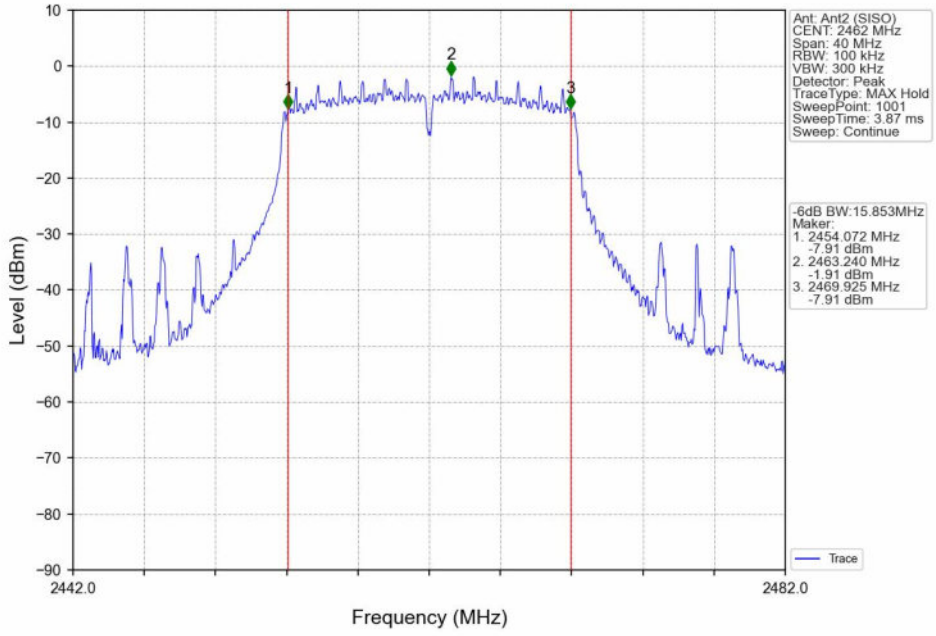
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



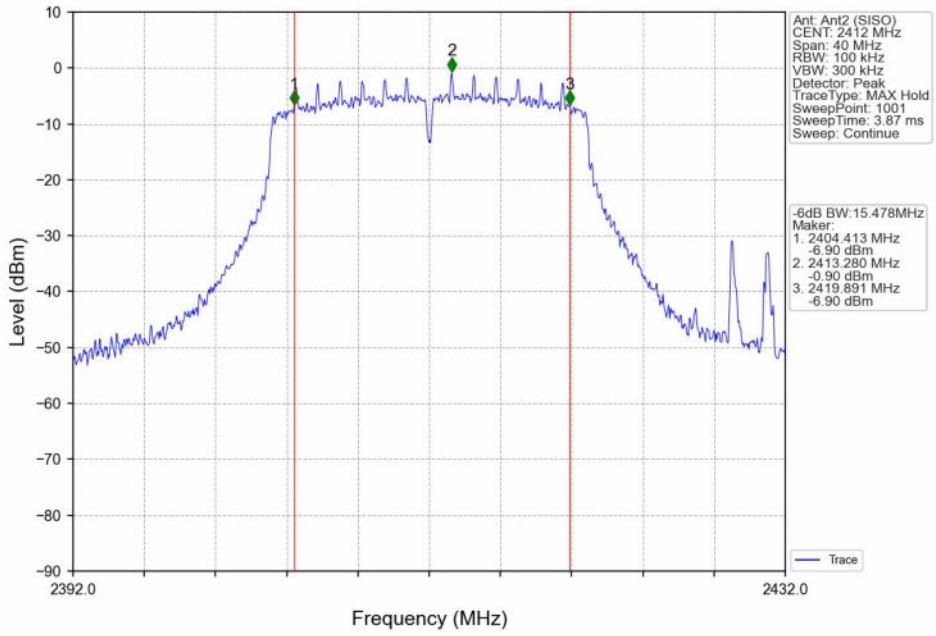
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



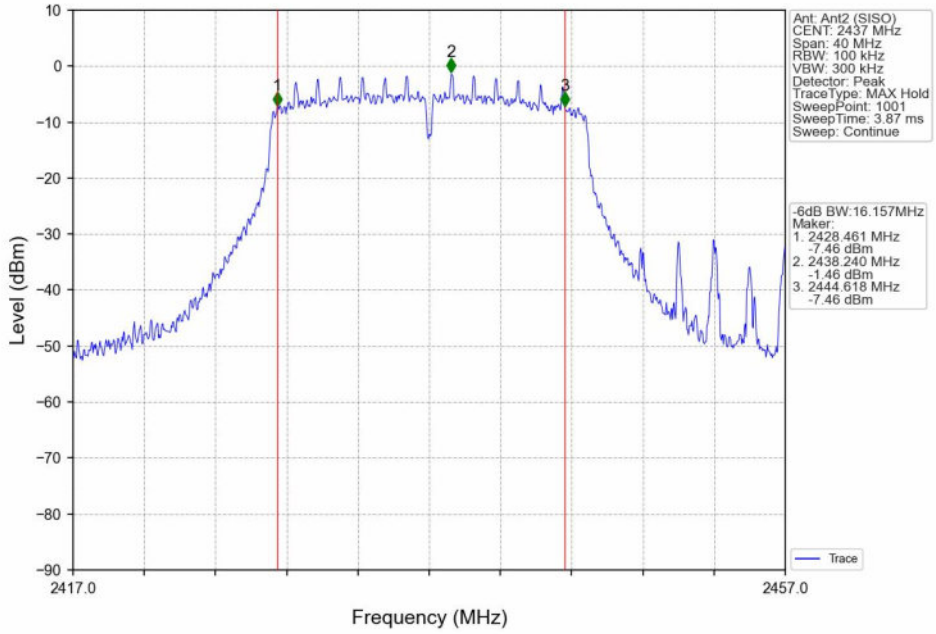
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



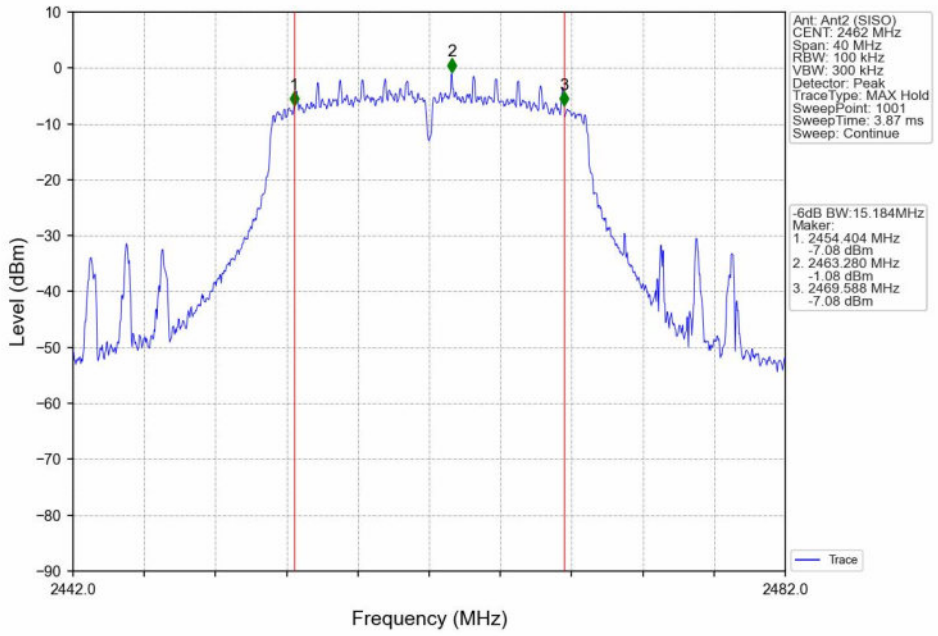
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



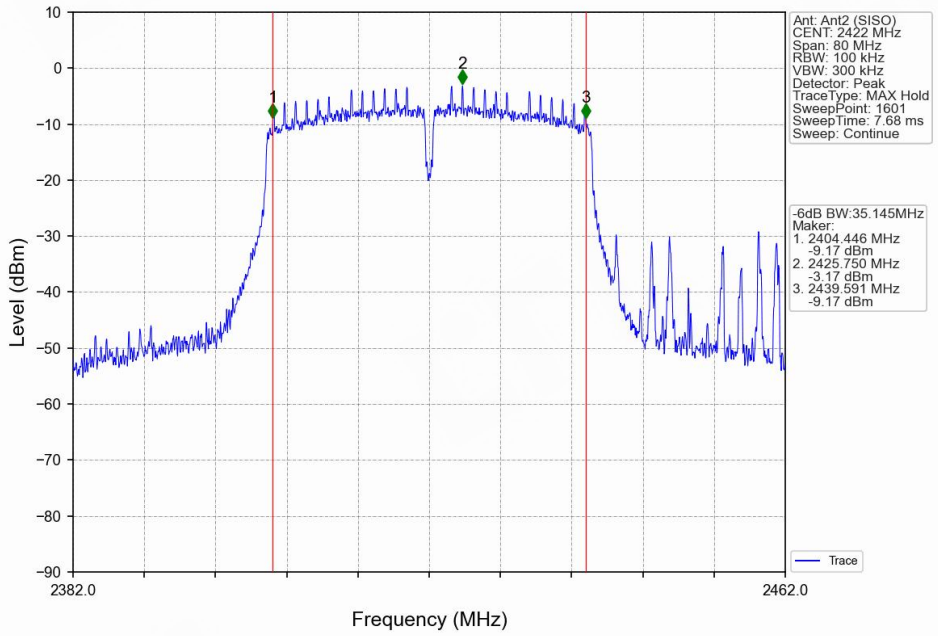
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



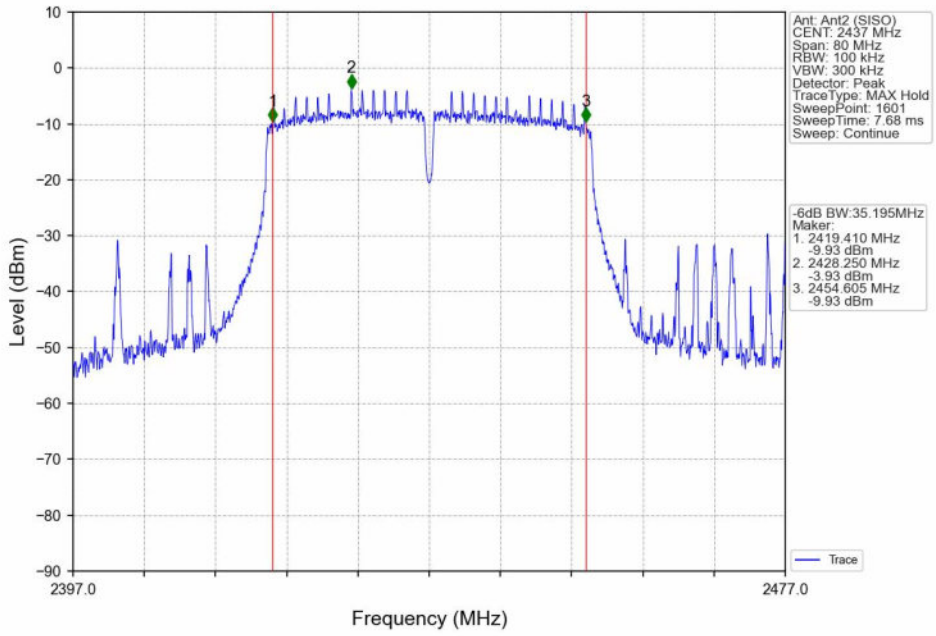
802.11n(HT20)_HCH_2462MHz_Ant2 (SISO)_NTNV



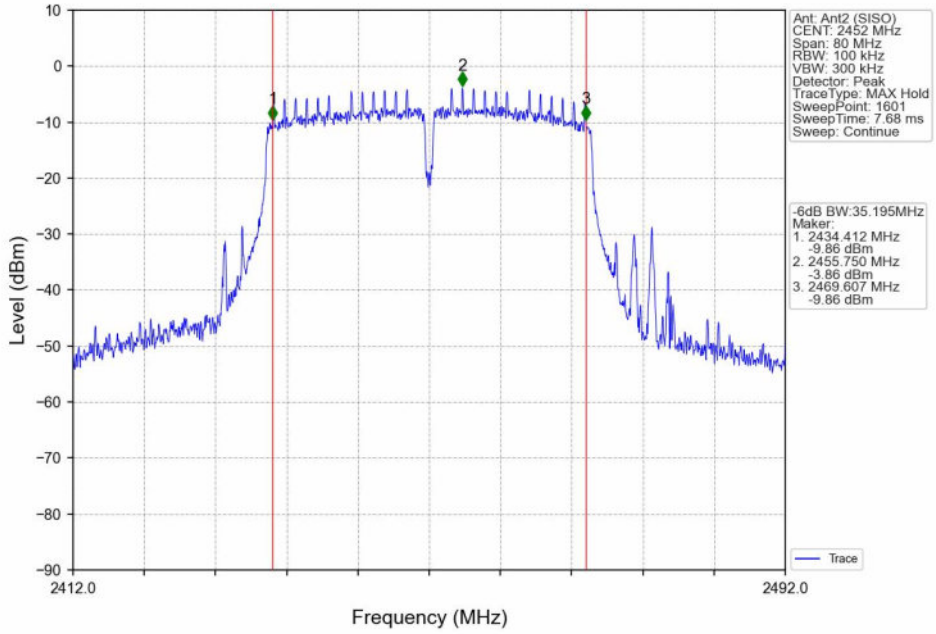
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV



2. Maximum Conducted Output Power

2.1 Power

2.1.1 Test Result

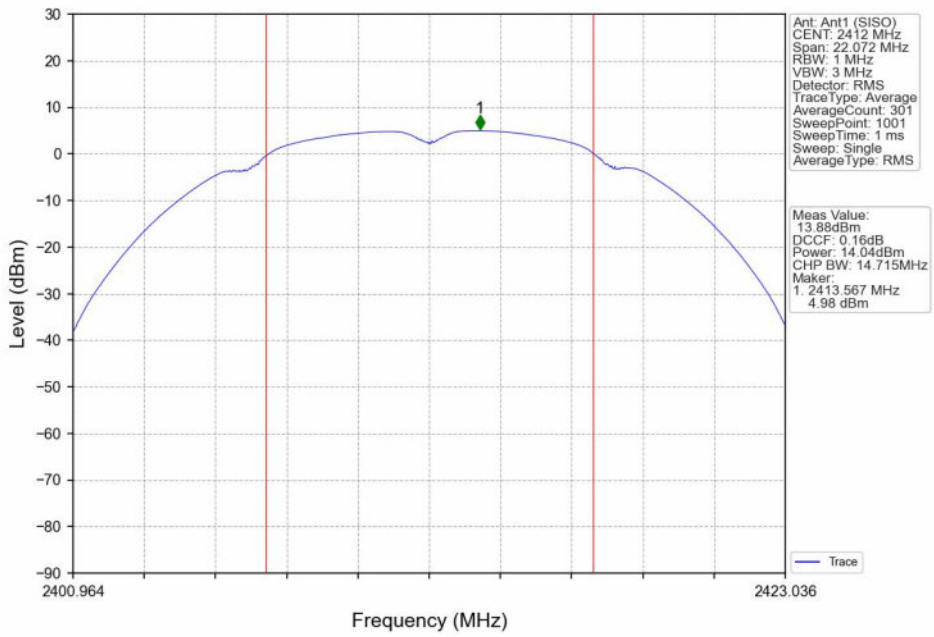
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)				Verdict
			ANT1	ANT2	MIMO	Limit	
802.11b	SISO	2412	14.04	15.51	/	<=30	Pass
		2437	14.52	14.70	/	<=30	Pass
		2462	15.51	14.86	/	<=30	Pass
802.11g	SISO	2412	9.17	8.52	/	<=30	Pass
		2437	7.75	8.52	/	<=30	Pass
		2462	8.64	8.50	/	<=30	Pass
802.11n (HT20)	SISO	2412	9.71	9.15	/	<=30	Pass
		2437	8.02	8.86	/	<=30	Pass
		2462	8.31	8.68	/	<=30	Pass
802.11n (HT40)	SISO	2422	9.41	9.12	/	<=30	Pass
		2437	8.05	8.68	/	<=30	Pass
		2452	8.12	8.48	/	<=30	Pass
802.11n (HT20)	MIMO	2412	9.52	8.38	12.00	<=30	Pass
		2437	7.80	8.12	10.97	<=30	Pass
		2462	7.63	8.00	10.83	<=30	Pass
802.11n (HT40)	MIMO	2422	9.00	8.72	11.87	<=30	Pass
		2437	7.54	8.33	10.96	<=30	Pass
		2452	7.55	8.07	10.83	<=30	Pass

Note1: Antenna Gain: Ant1: 2.43dBi; Ant2: 0.45dBi;

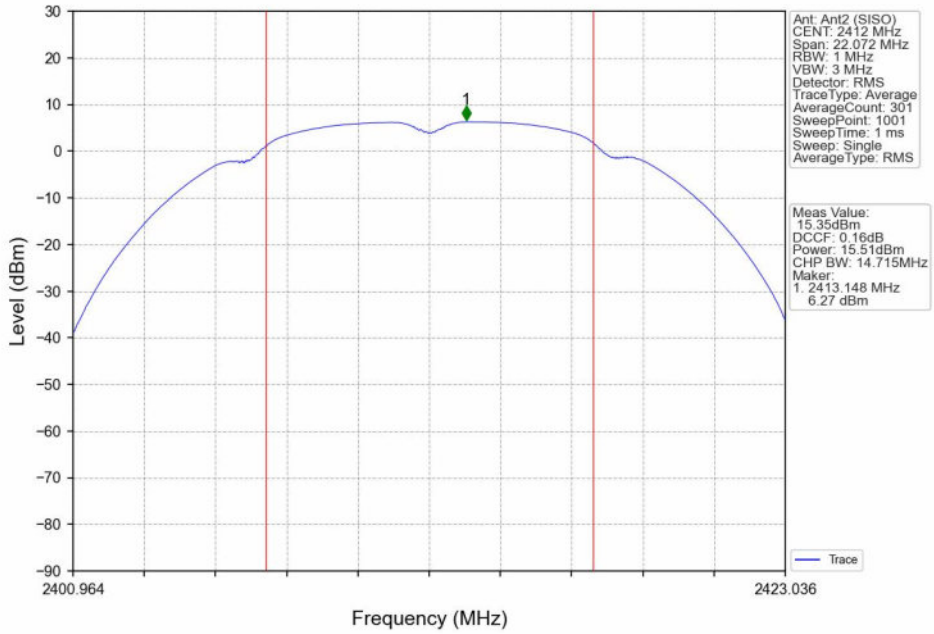
Note2: Directional gain=10log[$(10^{G1/20}+10^{G2/20}+\cdots+10^{GN/20})^2/N_{ANT}$] dBi [Note the “20” s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

2.1.2 Test Graph

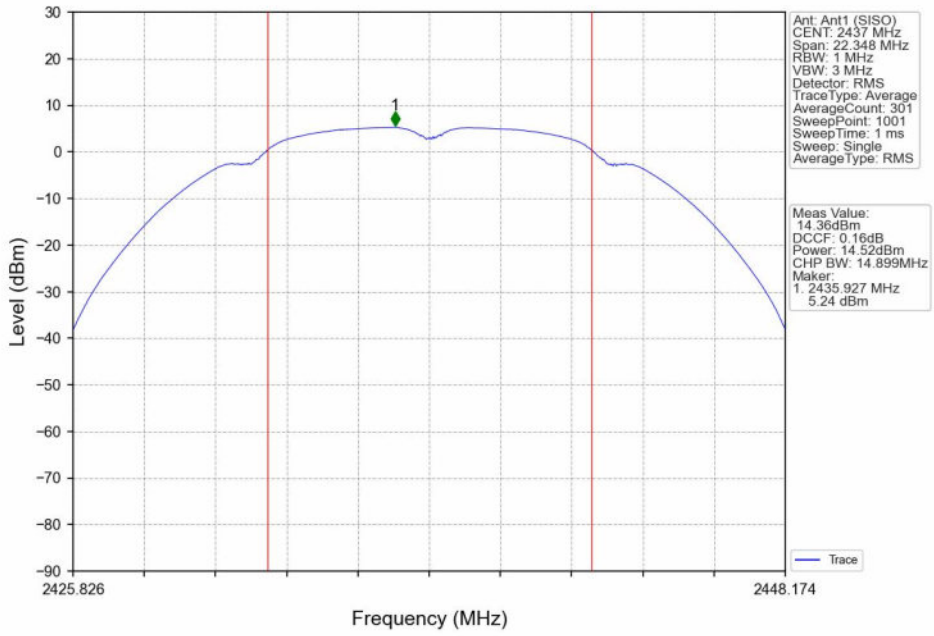
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



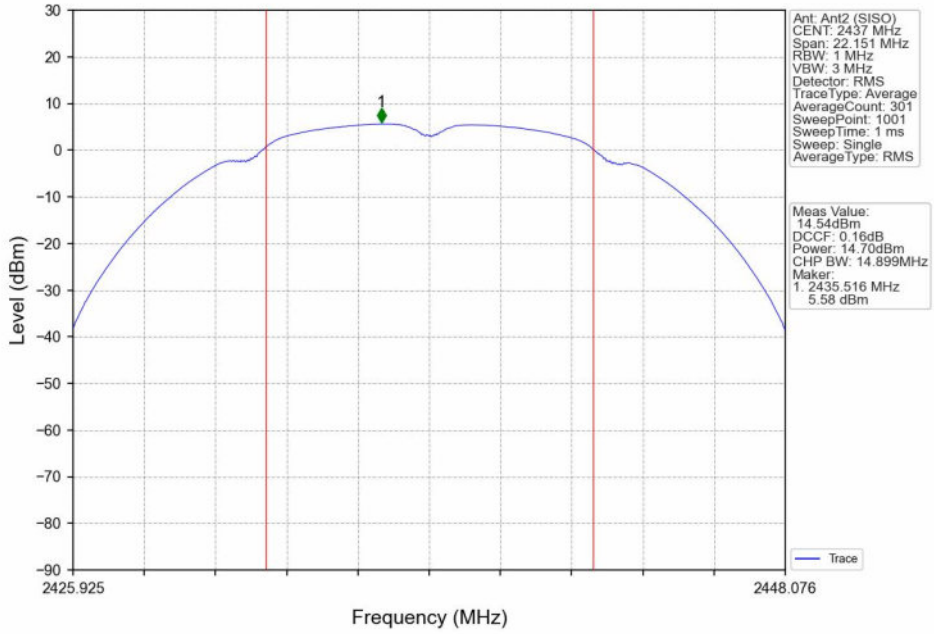
802.11b_LCH_2412MHz_Ant2 (SISO)_NTNV



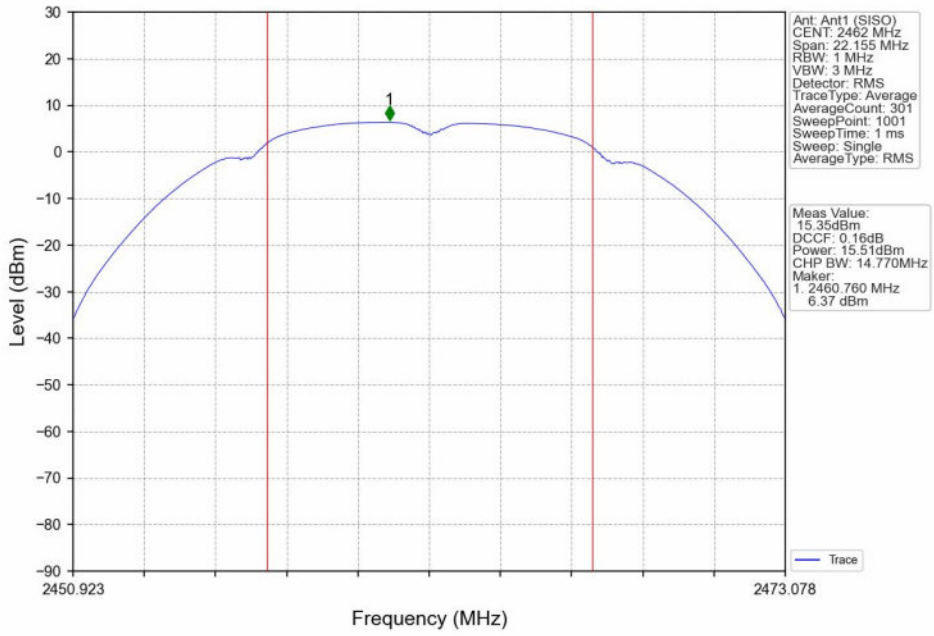
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



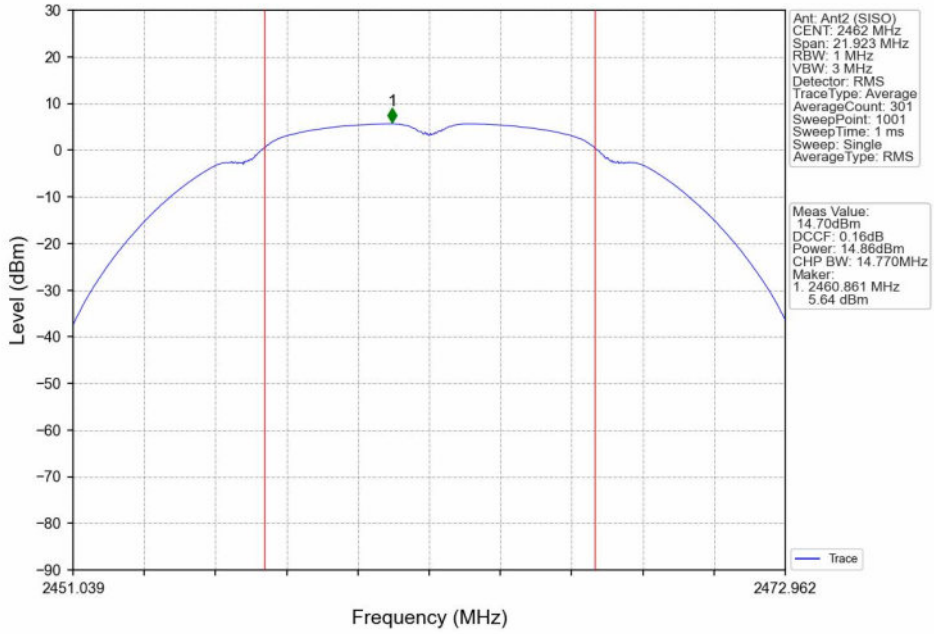
802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



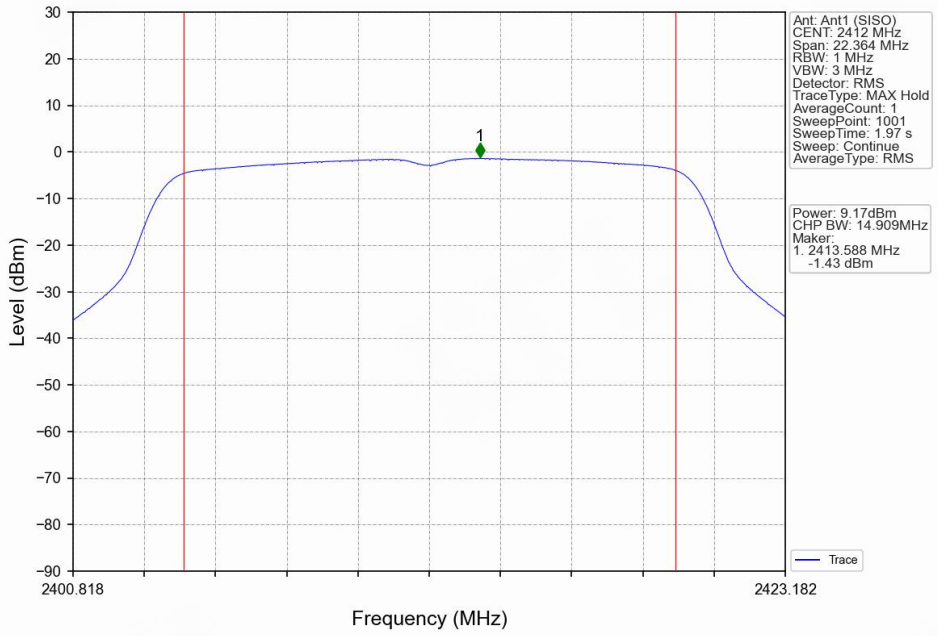
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



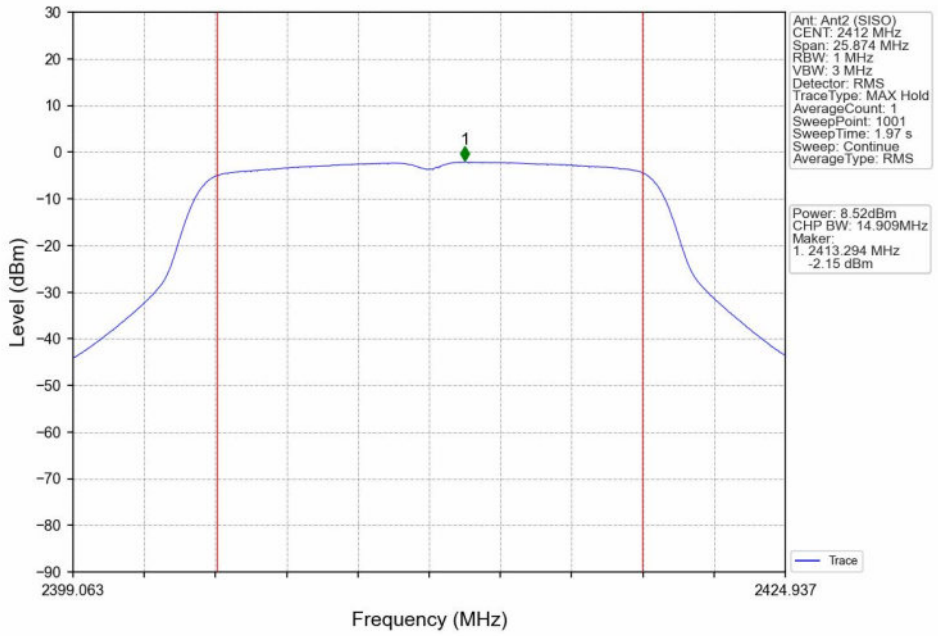
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



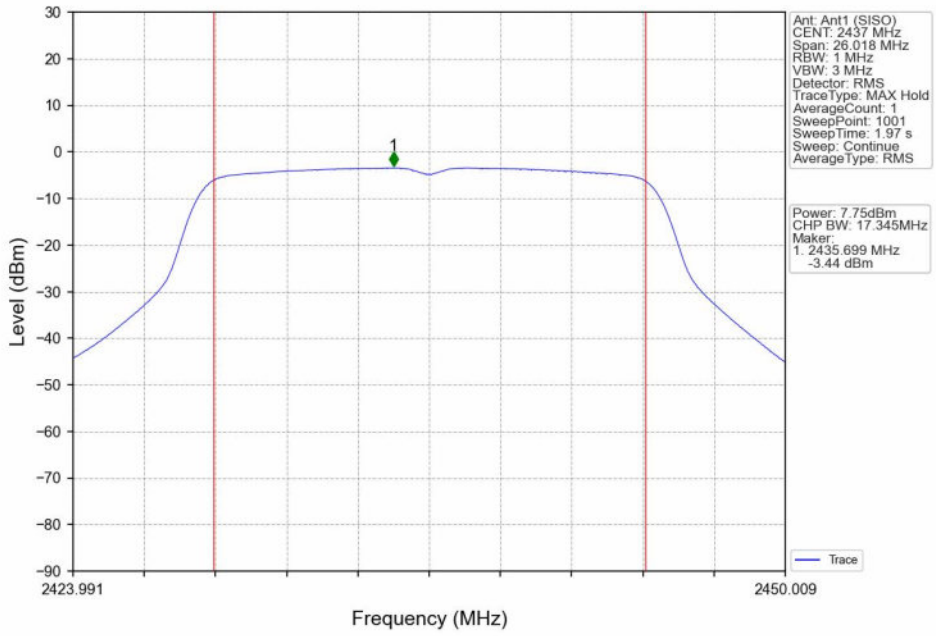
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



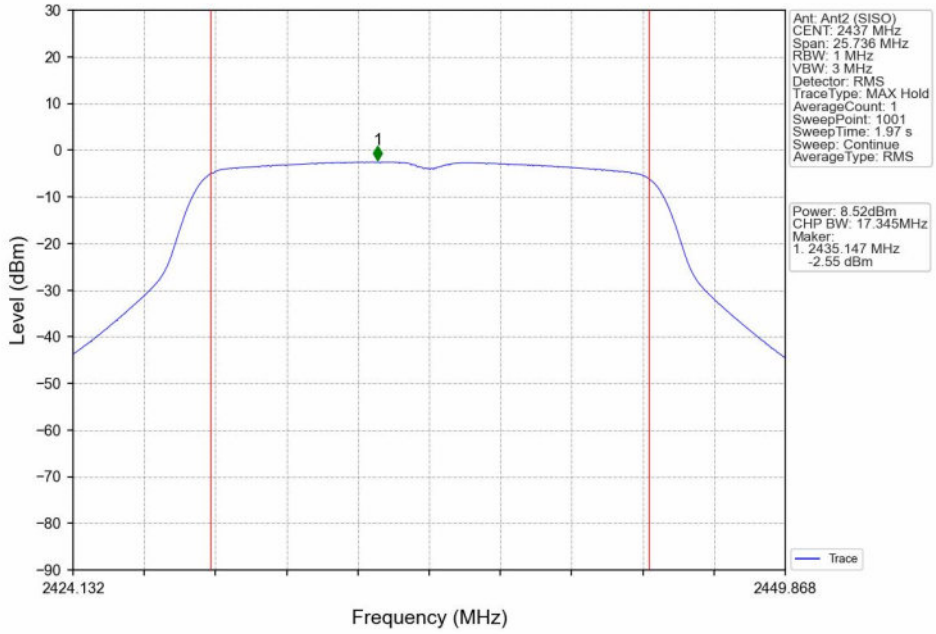
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



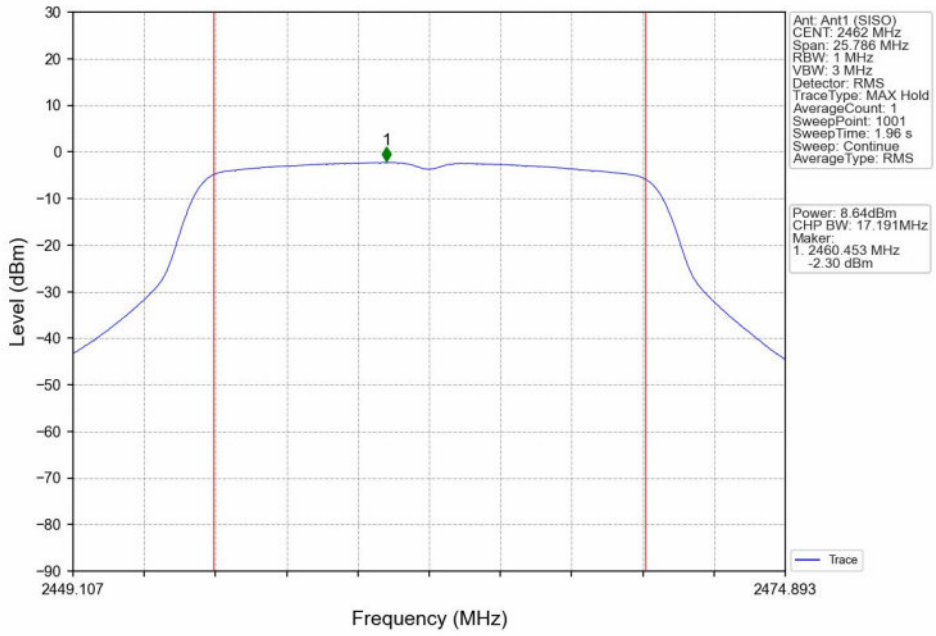
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



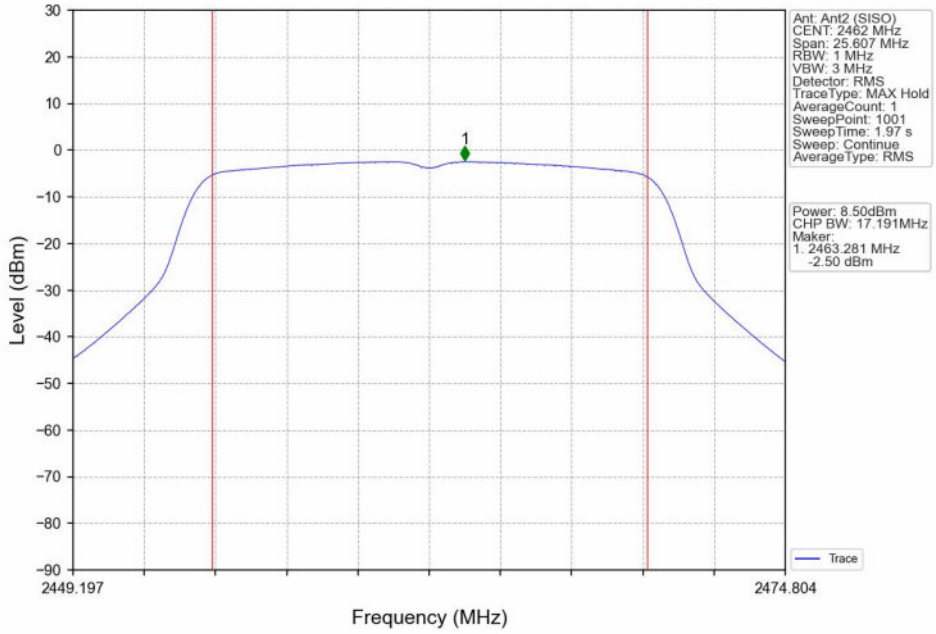
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



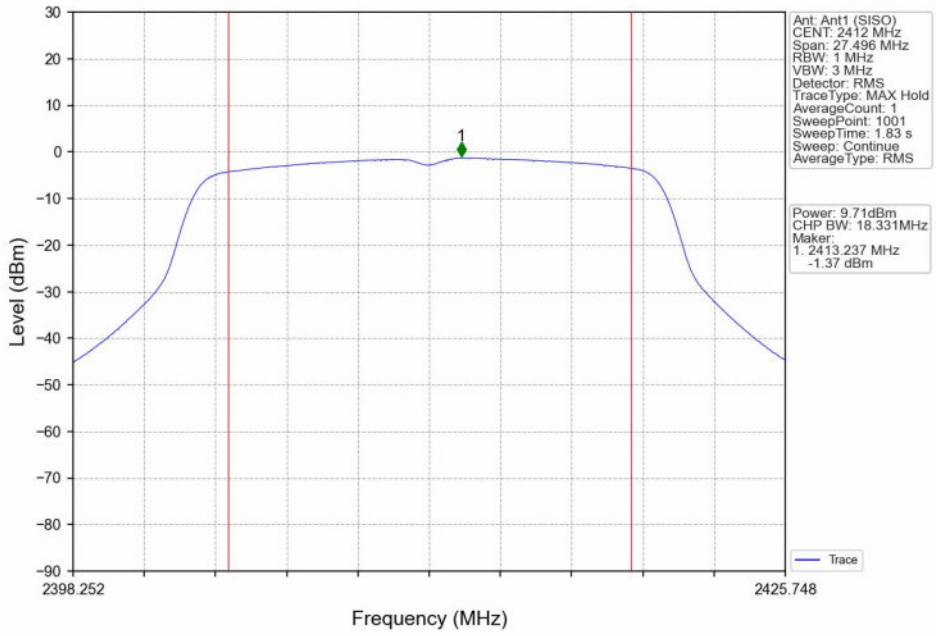
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



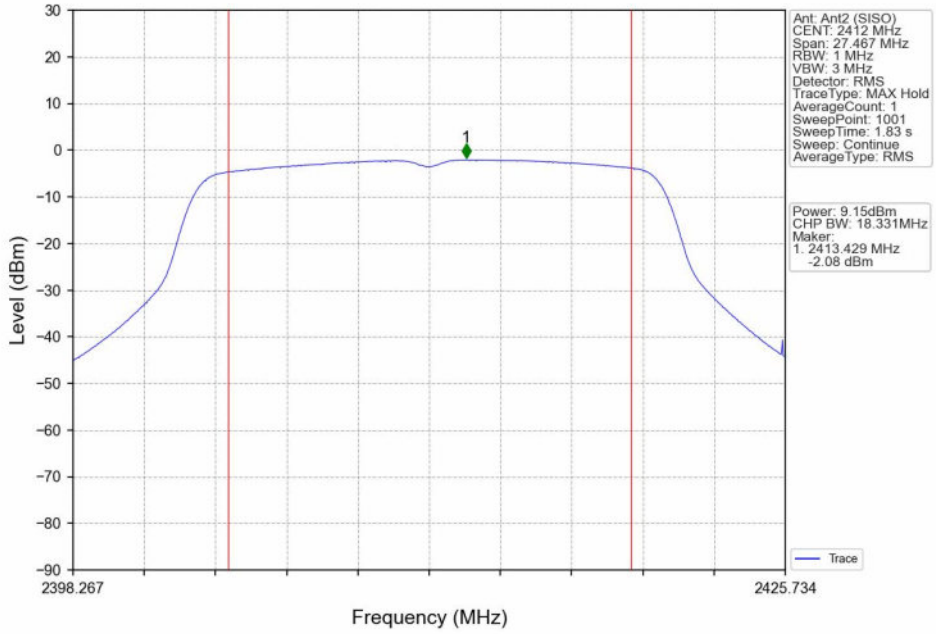
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



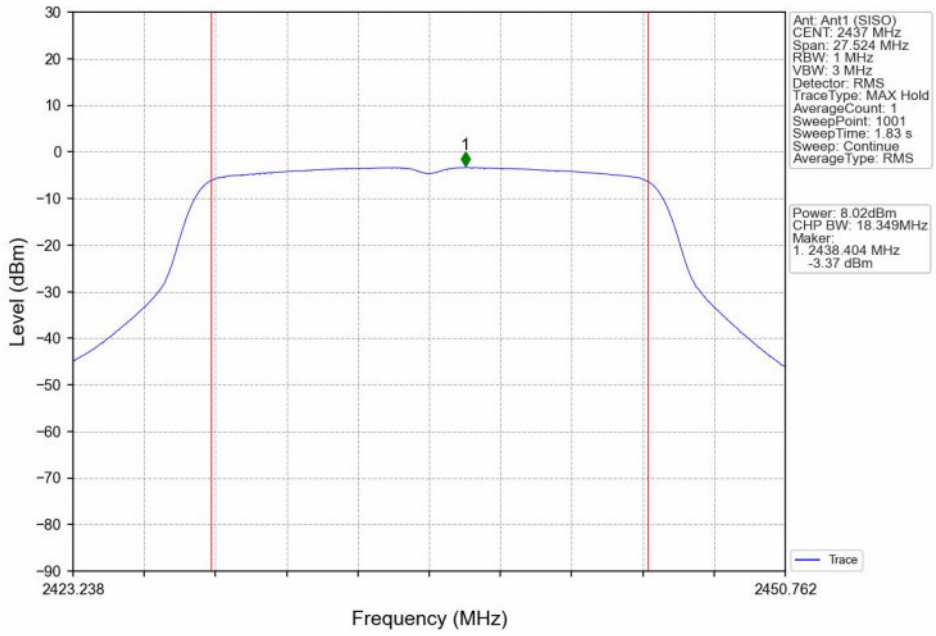
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



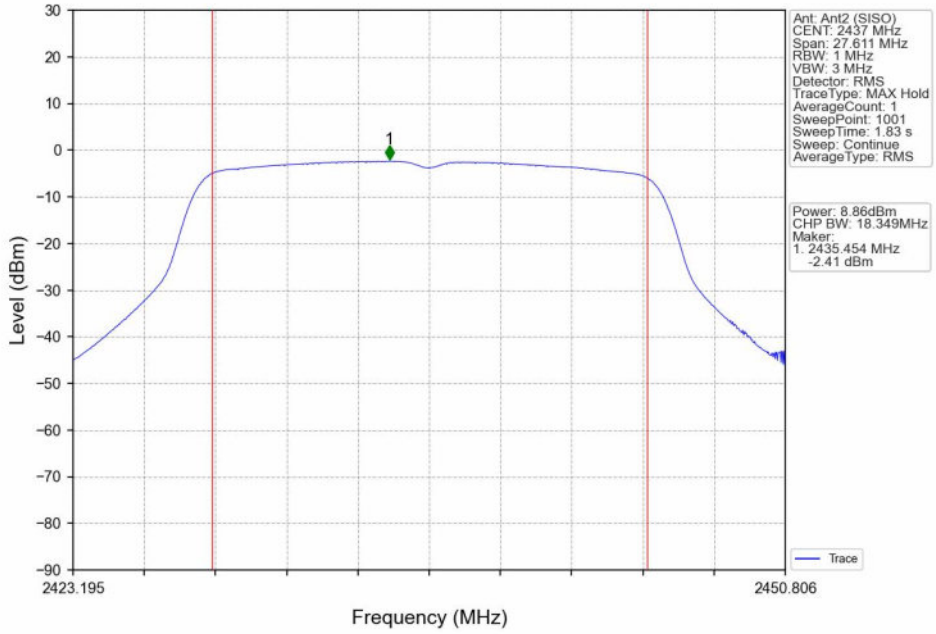
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



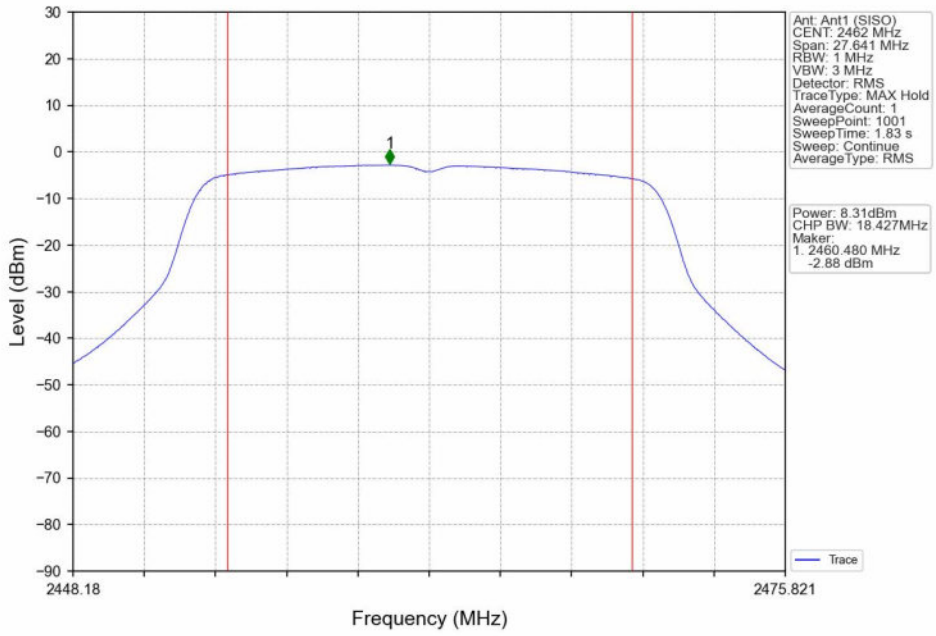
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



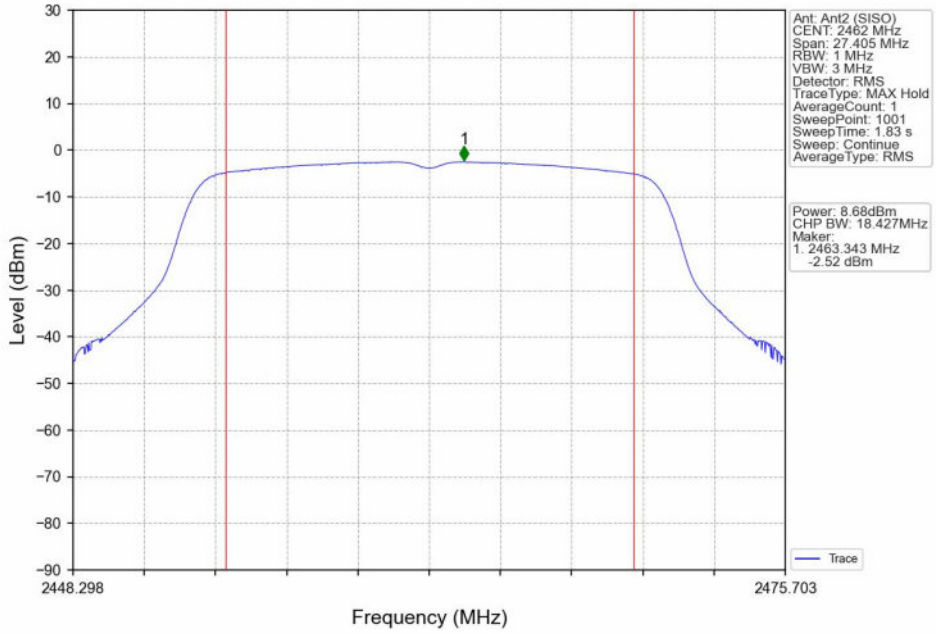
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



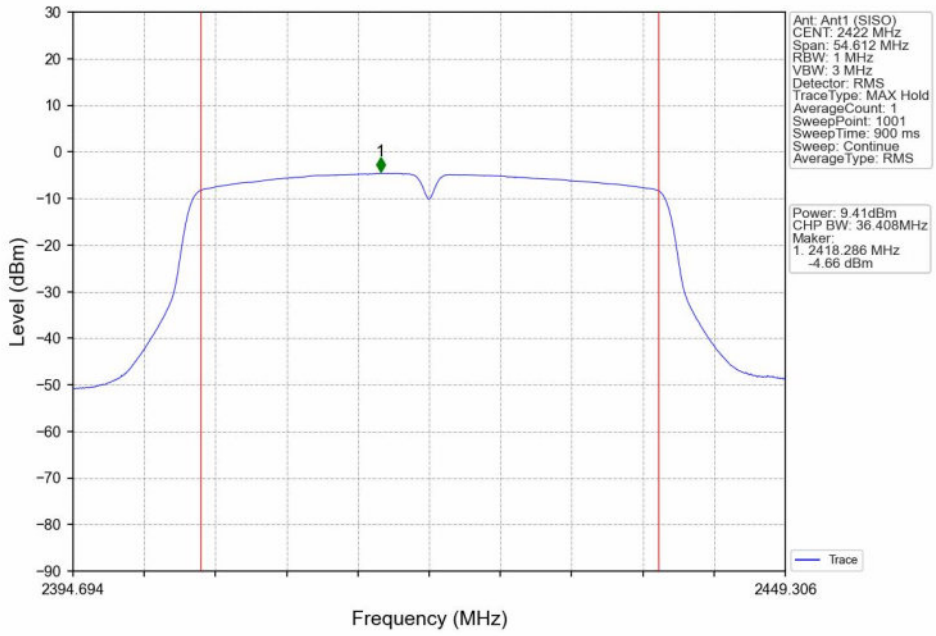
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



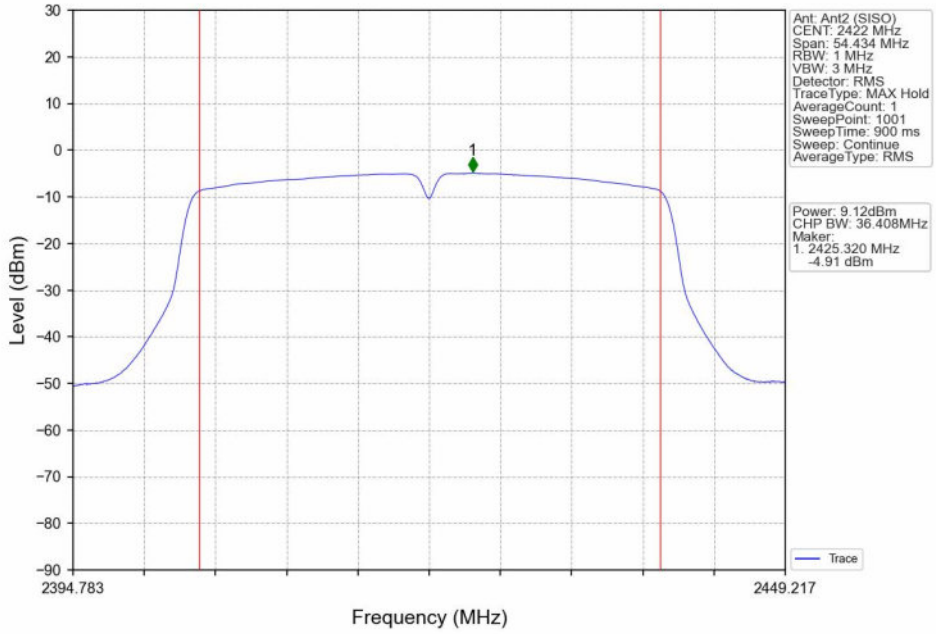
802.11n(HT20)_HCH_2462MHz_Ant2 (SISO)_NTNV



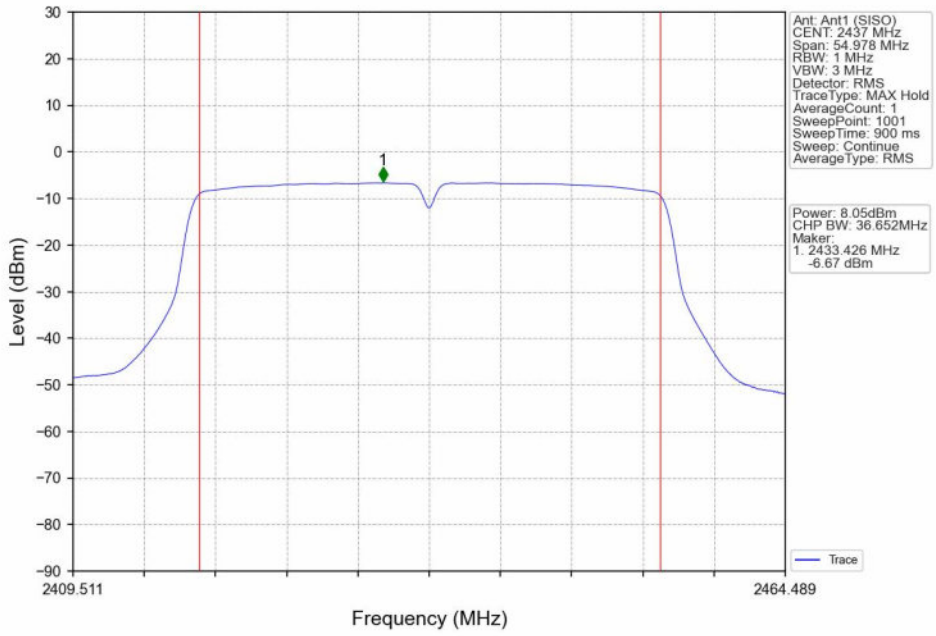
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



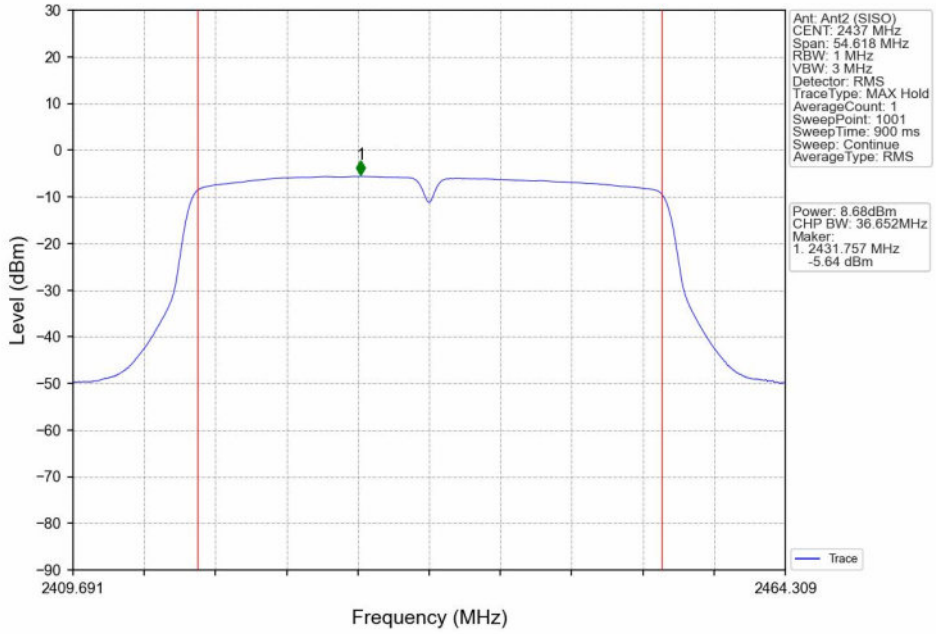
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



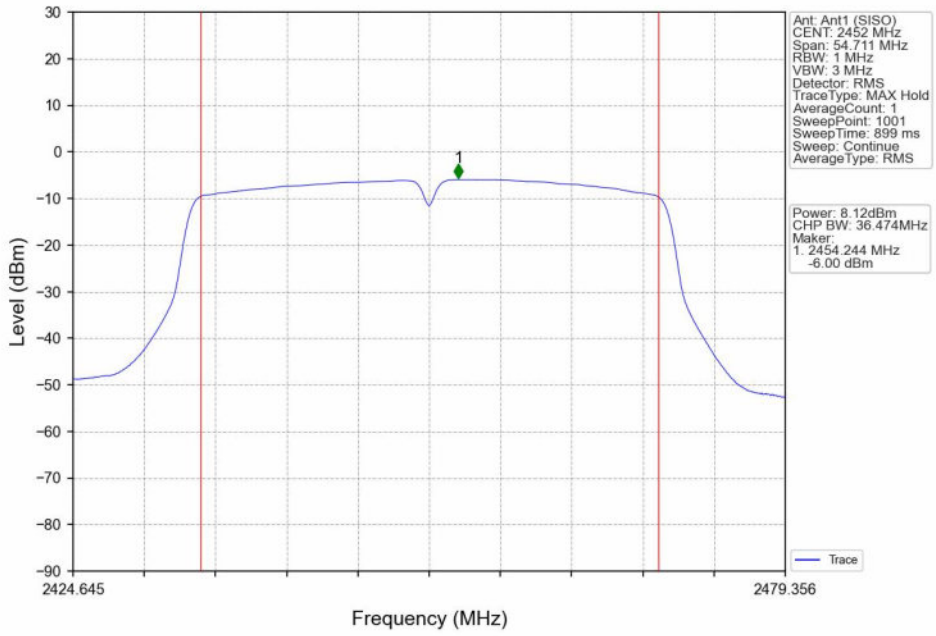
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



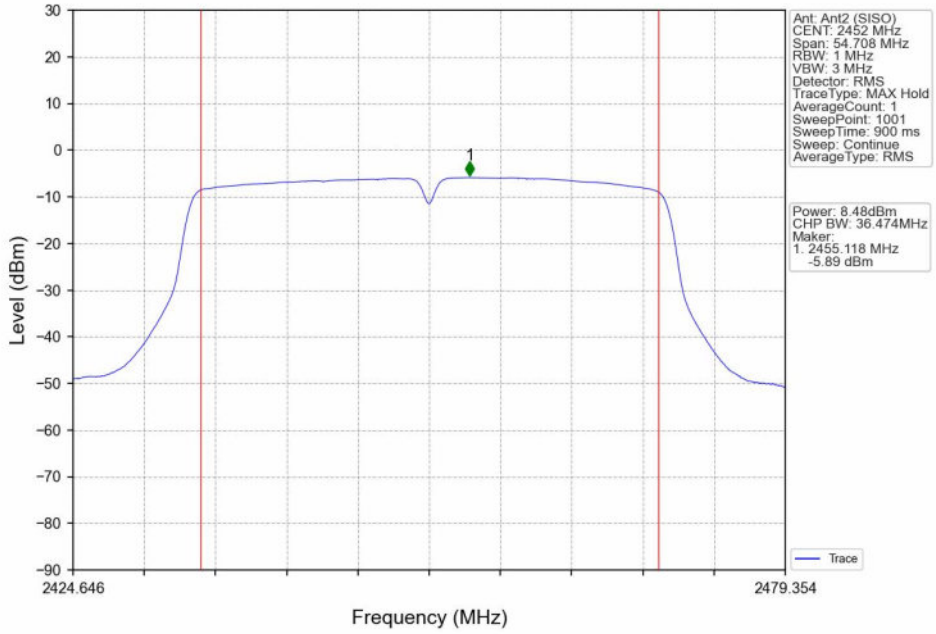
802.11n(HT40)_MCH_2437MHz_Ant2 (SISO)_NTNV



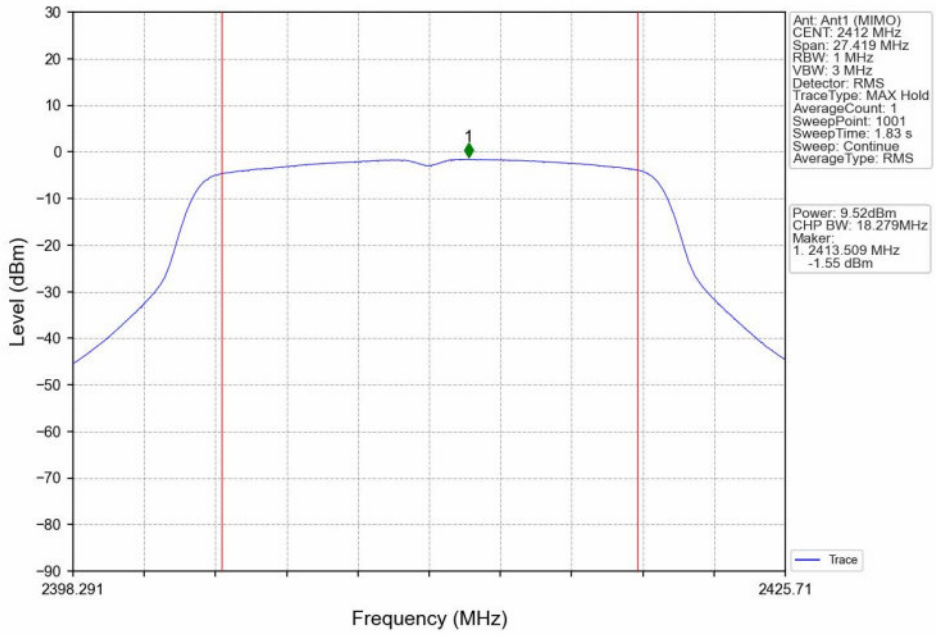
802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



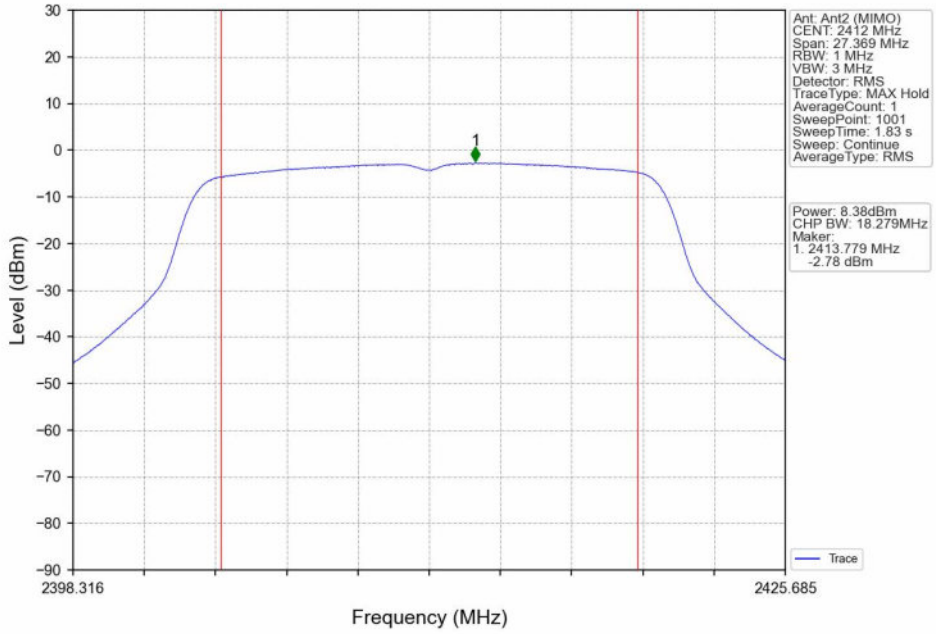
802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV



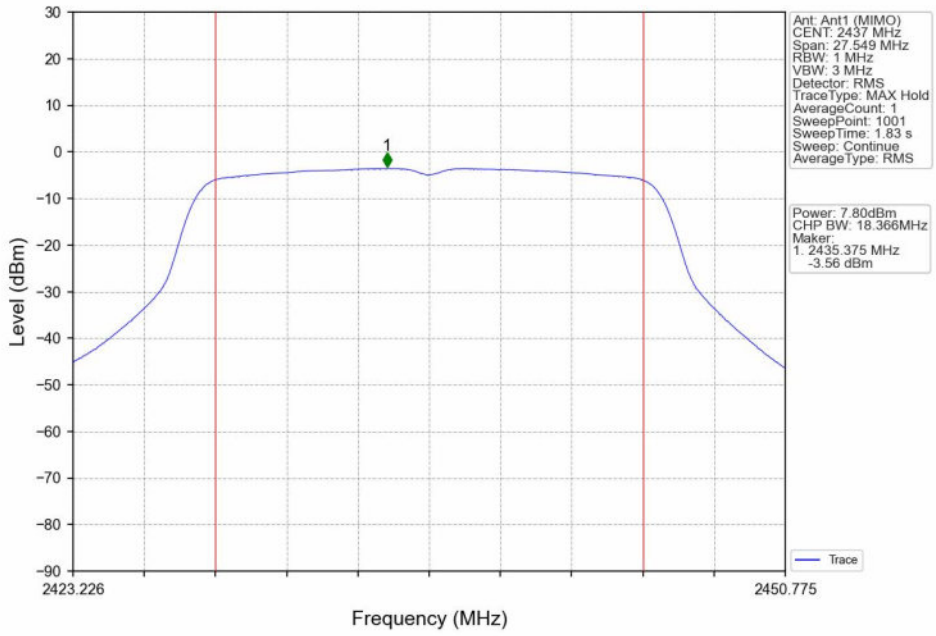
802.11n(HT20)_LCH_2412MHz_Ant1 (MIMO)_NTNV



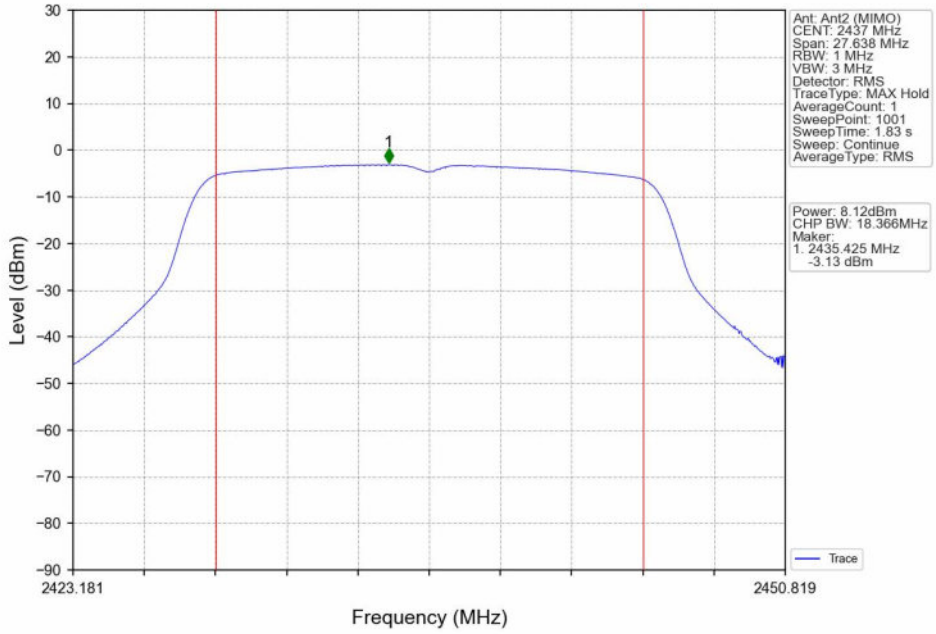
802.11n(HT20)_LCH_2412MHz_Ant2 (MIMO)_NTNV



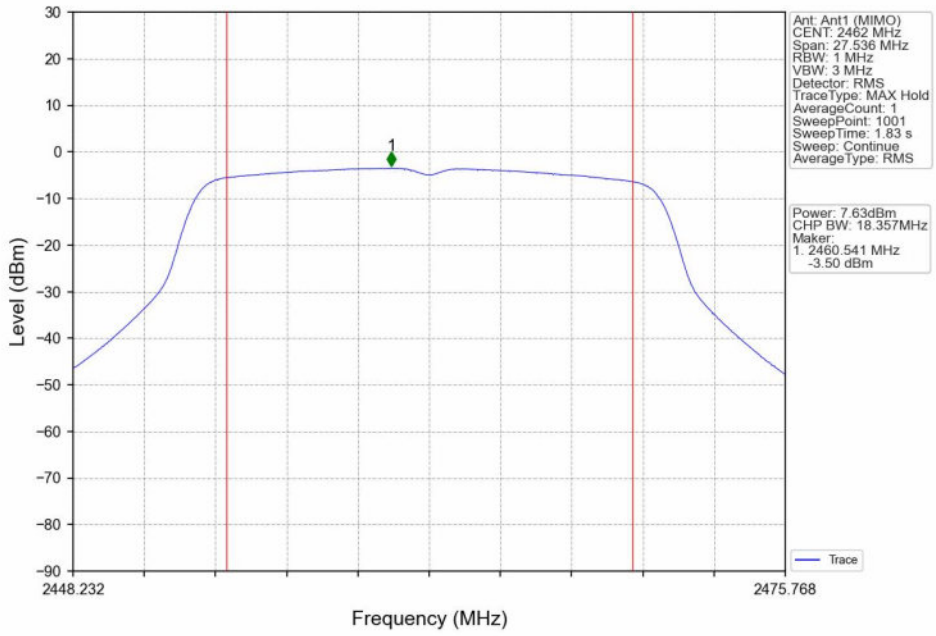
802.11n(HT20)_MCH_2437MHz_Ant1 (MIMO)_NTNV



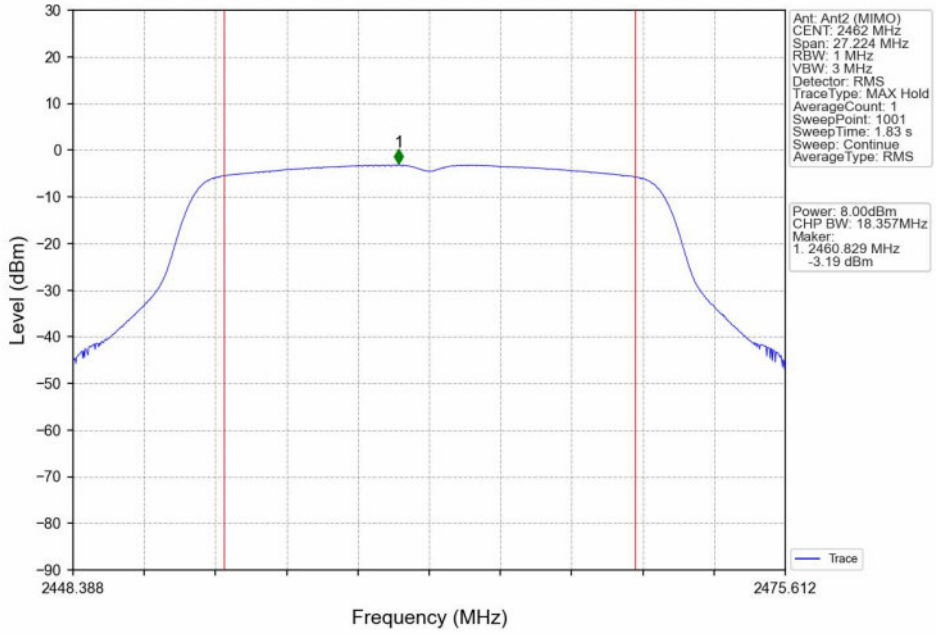
802.11n(HT20)_MCH_2437MHz_Ant2 (MIMO)_NTNV



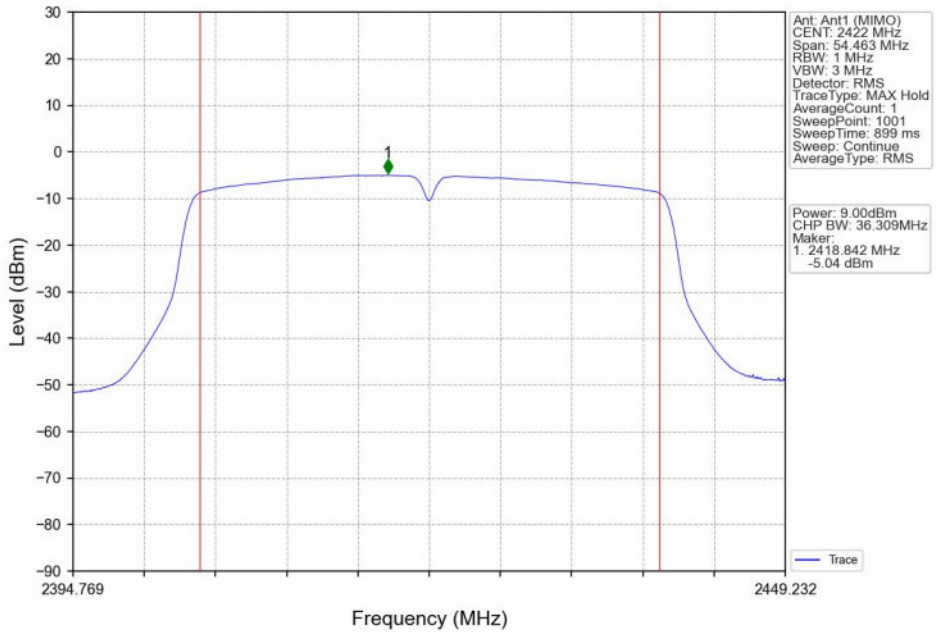
802.11n(HT20)_HCH_2462MHz_Ant1 (MIMO)_NTNV



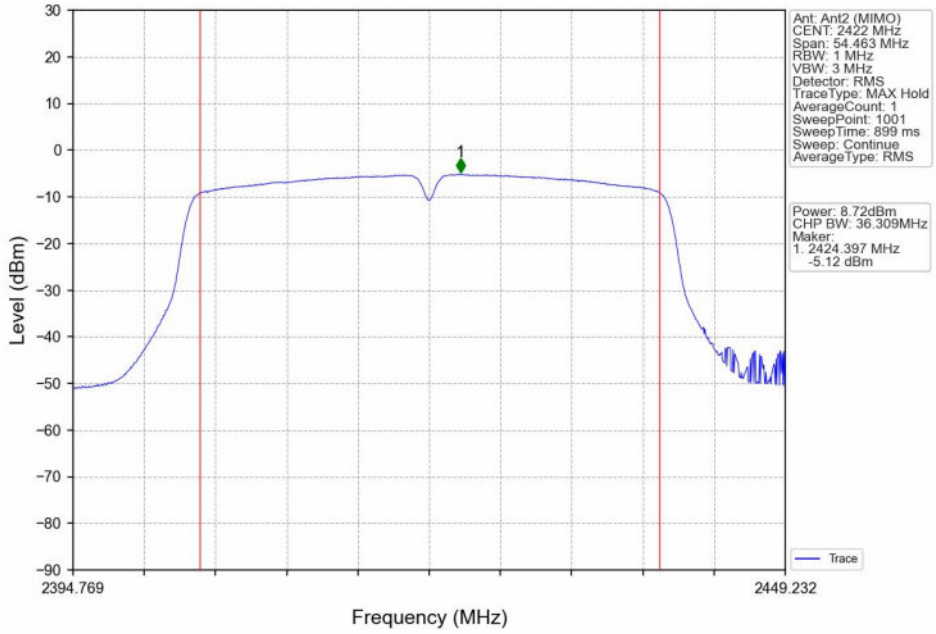
802.11n(HT20)_HCH_2462MHz_Ant2 (MIMO)_NTNV



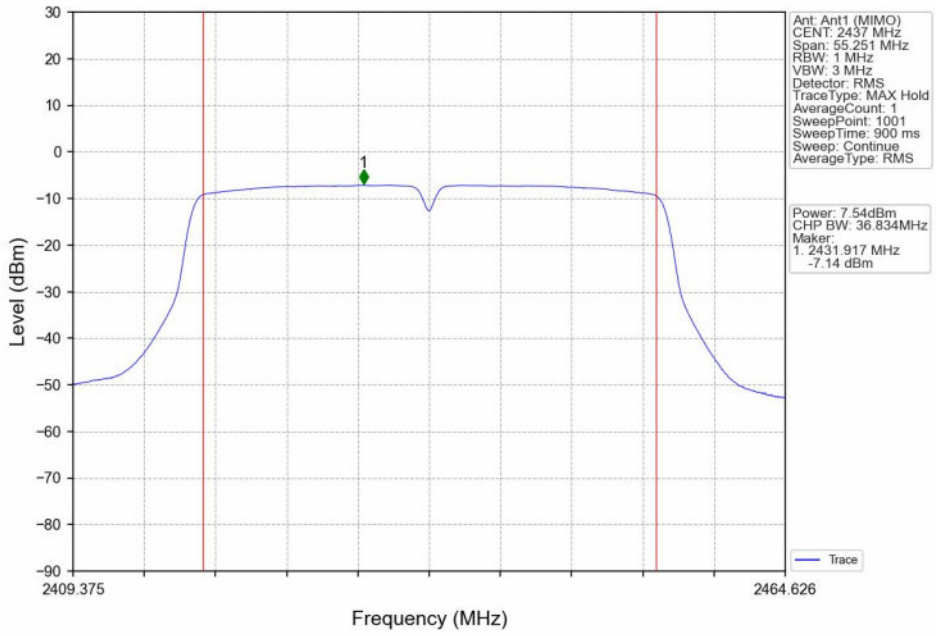
802.11n(HT40)_LCH_2422MHz_Ant1 (MIMO)_NTNV



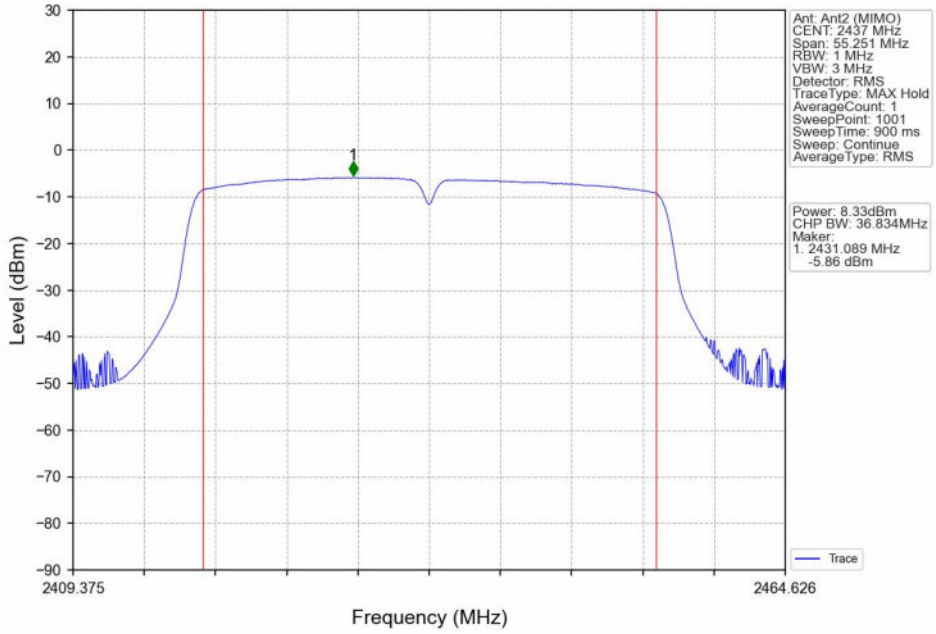
802.11n(HT40)_LCH_2422MHz_Ant2 (MIMO)_NTNV



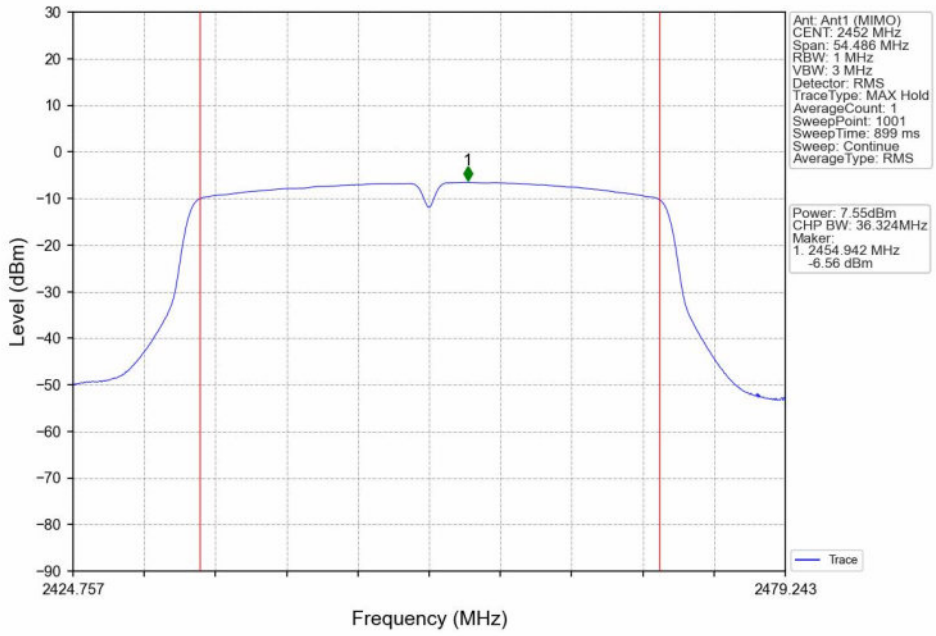
802.11n(HT40)_MCH_2437MHz_Ant1 (MIMO)_NTNV



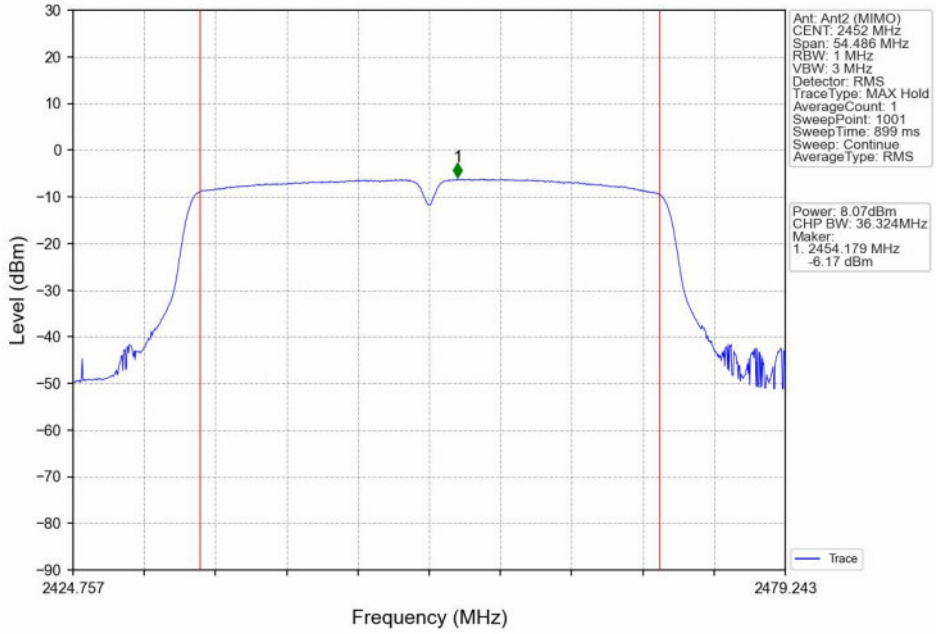
802.11n(HT40)_MCH_2437MHz_Ant2 (MIMO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (MIMO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (MIMO)_NTNV



3. Maximum Power Spectral Density

3.1 PSD

3.1.1 Test Result

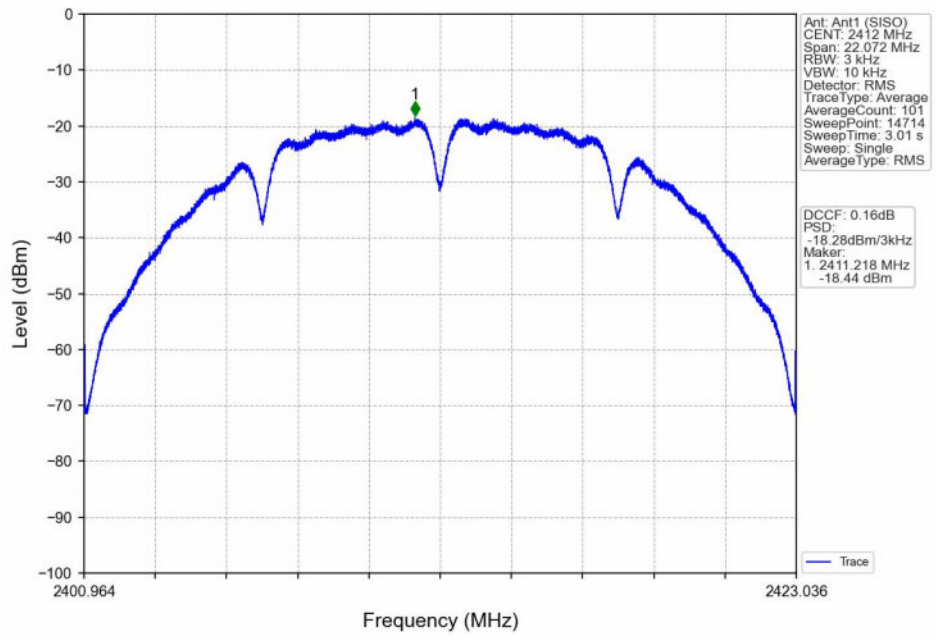
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)				Verdict
			ANT1	ANT2	MIMO	Limit	
802.11b	SISO	2412	-18.28	-16.95	/	<=8	Pass
		2437	-17.88	-16.94	/	<=8	Pass
		2462	-16.97	-16.63	/	<=8	Pass
802.11g	SISO	2412	-21.65	-21.72	/	<=8	Pass
		2437	-23.46	-22.05	/	<=8	Pass
		2462	-22.61	-22.75	/	<=8	Pass
802.11n (HT20)	SISO	2412	-20.85	-21.34	/	<=8	Pass
		2437	-22.45	-21.52	/	<=8	Pass
		2462	-22.31	-22.25	/	<=8	Pass
802.11n (HT40)	SISO	2422	-23.58	-23.76	/	<=8	Pass
		2437	-25.73	-24.59	/	<=8	Pass
		2452	-25.25	-24.91	/	<=8	Pass
802.11n (HT20)	MIMO	2412	-21.63	-22.43	-19.00	<=8	Pass
		2437	-23.66	-23.16	-21.34	<=8	Pass
		2462	-22.68	-22.69	-20.74	<=8	Pass
802.11n (HT40)	MIMO	2422	-24.12	-24.21	-23.42	<=8	Pass
		2437	-25.69	-25.50	-24.05	<=8	Pass
		2452	-25.88	-25.75	-24.30	<=8	Pass

Note1: Antenna Gain: Ant1: 2.43dBi; Ant2: 0.45dBi;

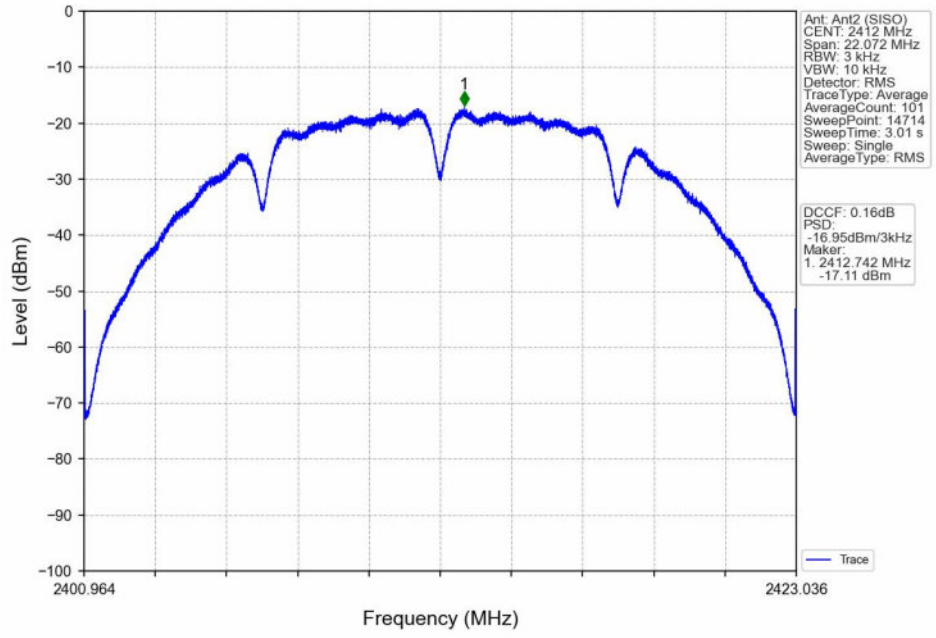
Note2: Directional gain=10log[$(10^{G1/20}+10^{G2/20}+\cdots+10^{GN/20})^2/N_{ANT}$] dBi [Note the “20” s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

3.1.2 Test Graph

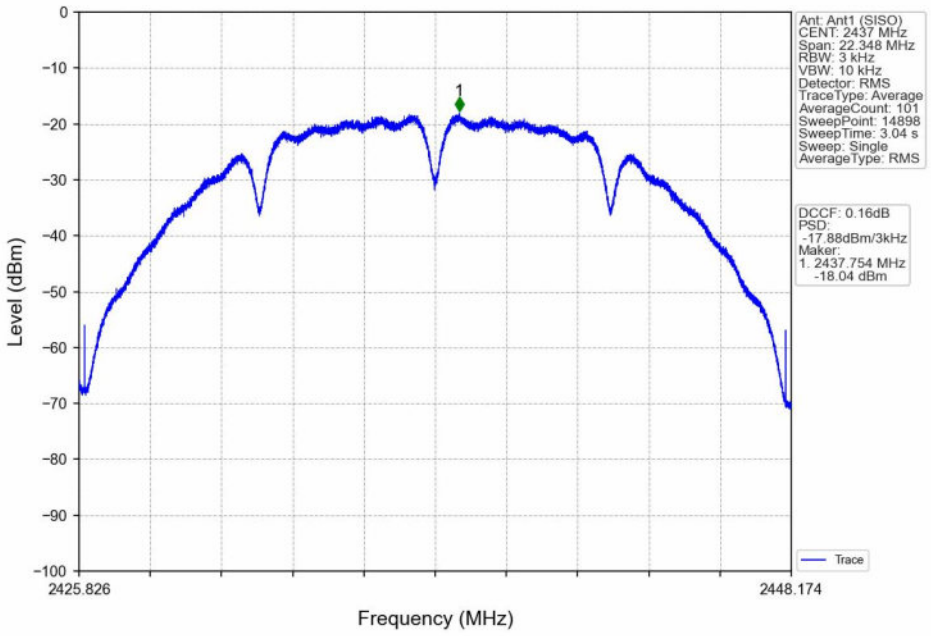
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



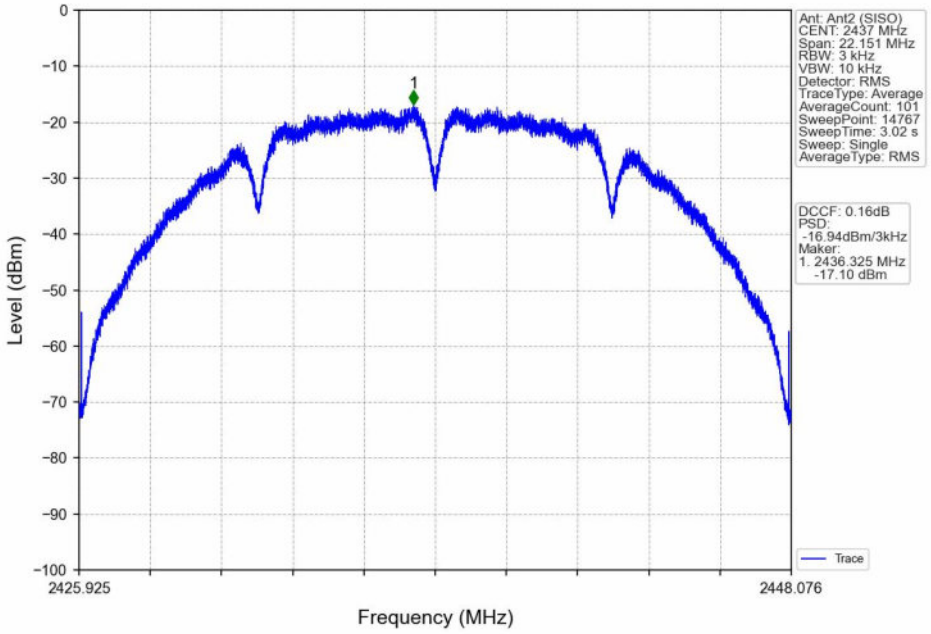
802.11b_LCH_2412MHz_Ant2 (SISO)_NTNV



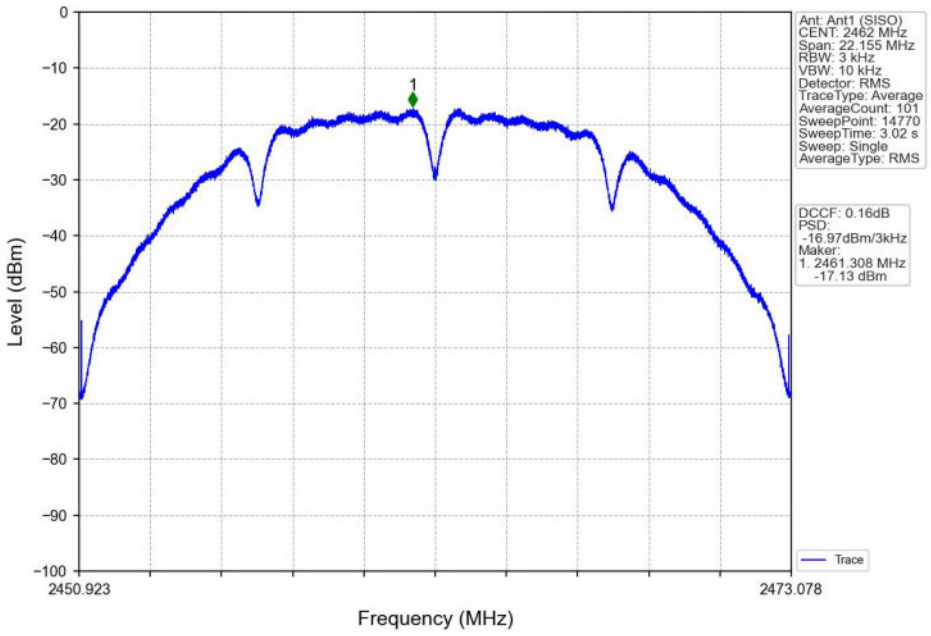
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



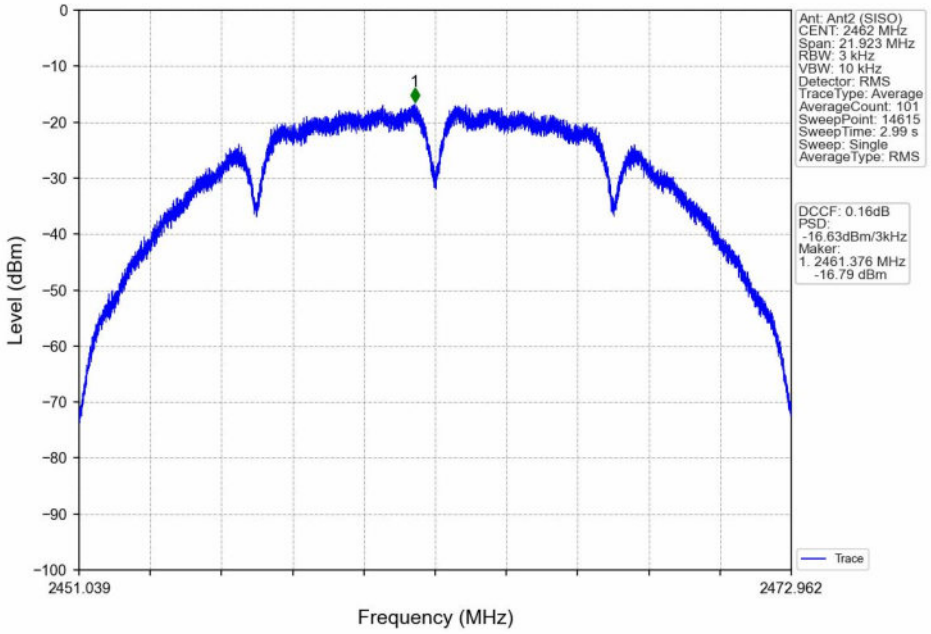
802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



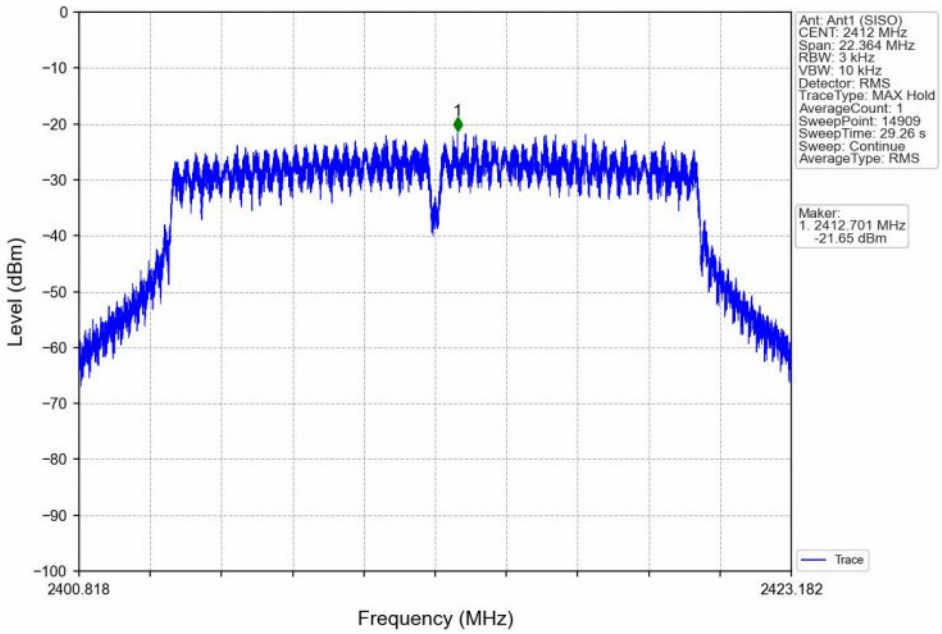
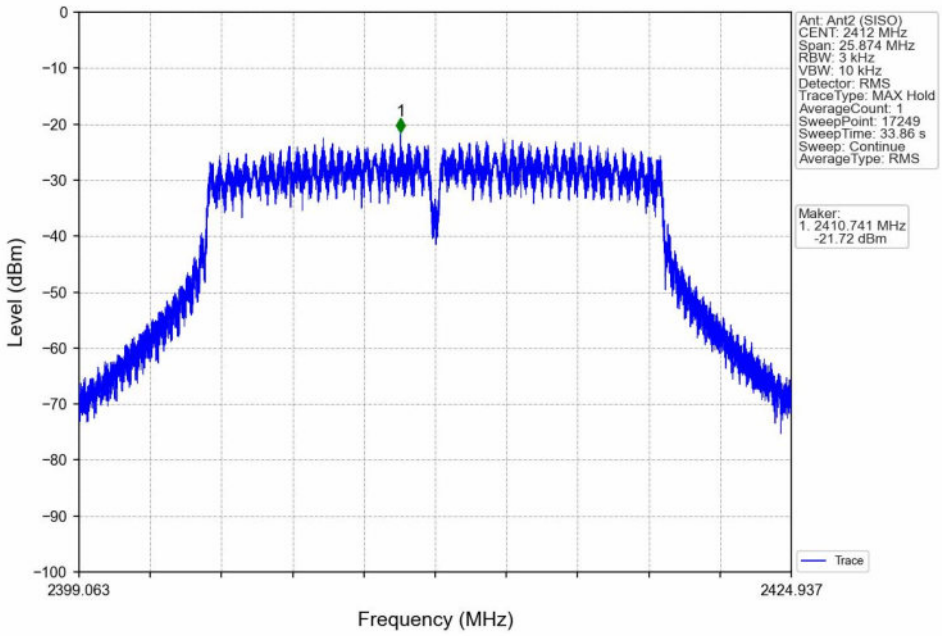
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV