



1. Duty Cycle

1.1 Test Result

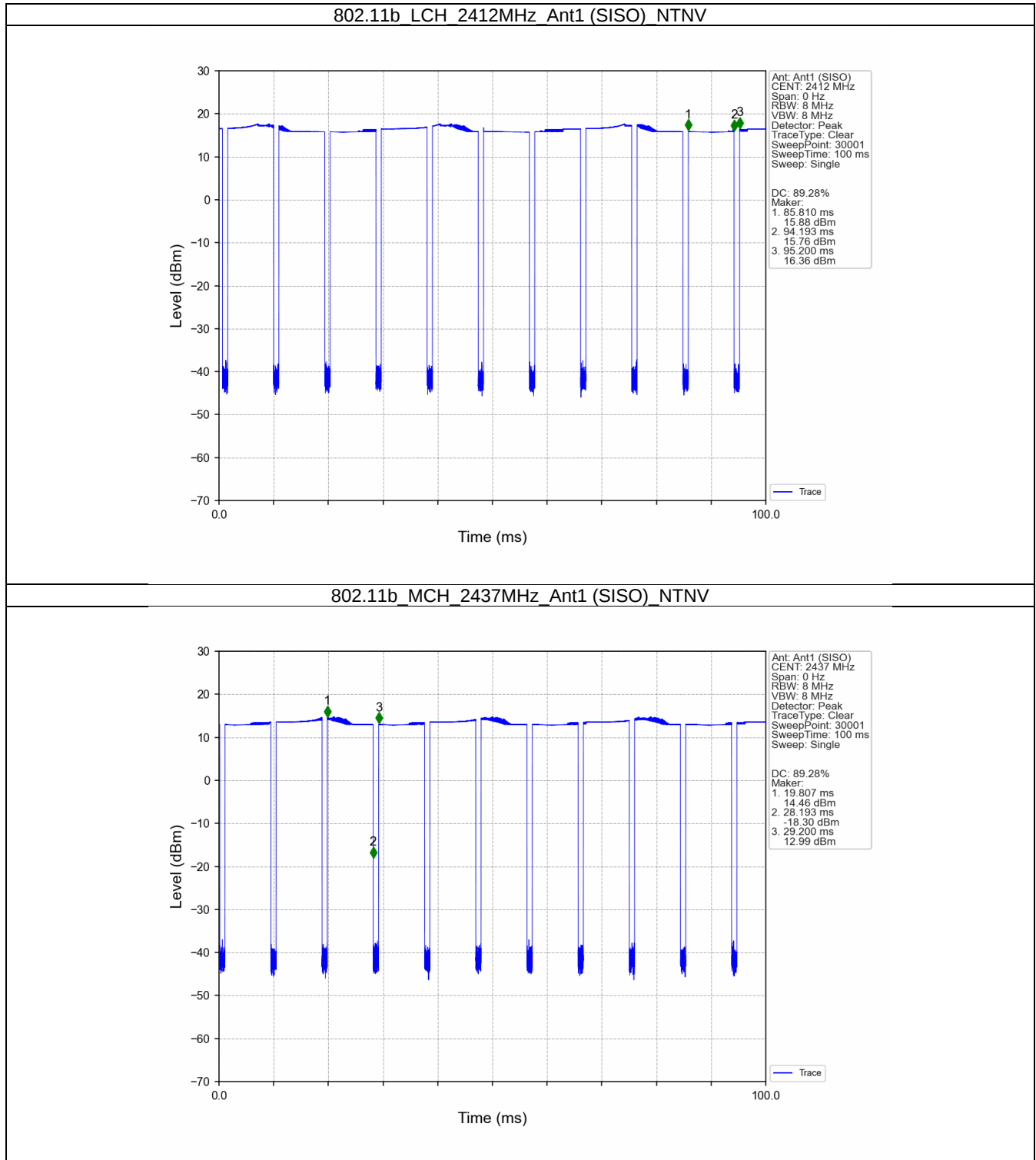
1.1.1 Ant1

Ant1							
Mode	Tx Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	8.383	9.390	89.28	0.49	0.35
		2437	8.386	9.393	89.28	0.49	0.35
		2462	8.387	9.394	89.28	0.49	0.35
802.11g	SISO	2412	1.394	2.372	58.77	2.31	1.84
		2437	1.395	2.372	58.81	2.31	0.24
		2462	1.393	2.362	58.98	2.29	1.40
802.11n (HT20)	SISO	2412	1.394	2.372	58.77	2.31	0.24
		2437	1.291	2.268	56.92	2.45	0.22
		2462	1.291	2.269	56.90	2.45	0.26
802.11n (HT40)	SISO	2422	0.634	1.603	39.55	4.03	0.03
		2437	0.634	1.603	39.55	4.03	17.68
		2452	0.634	1.738	36.48	4.38	3.10



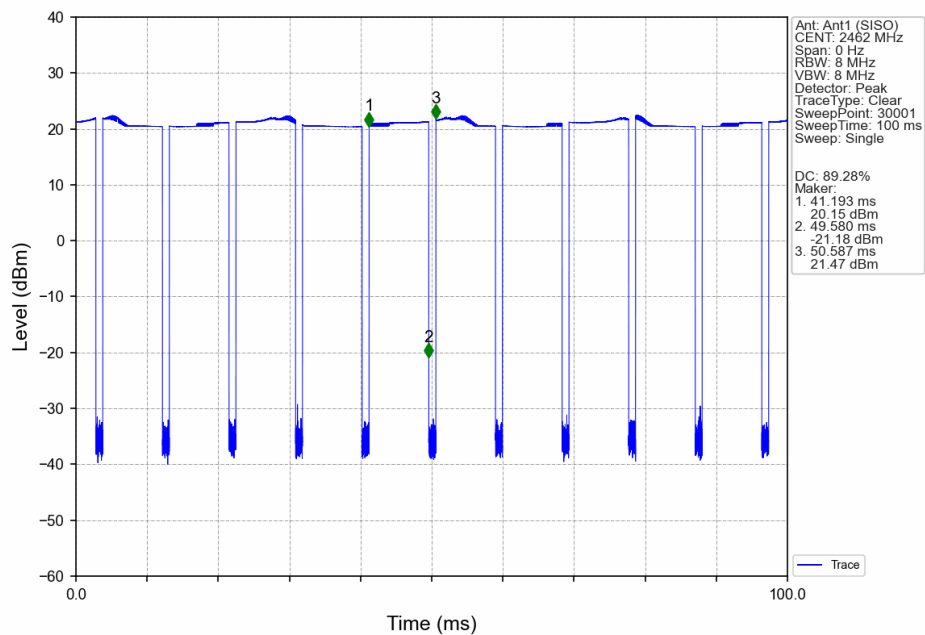
1.2 Test Graph

1.2.1 Ant1

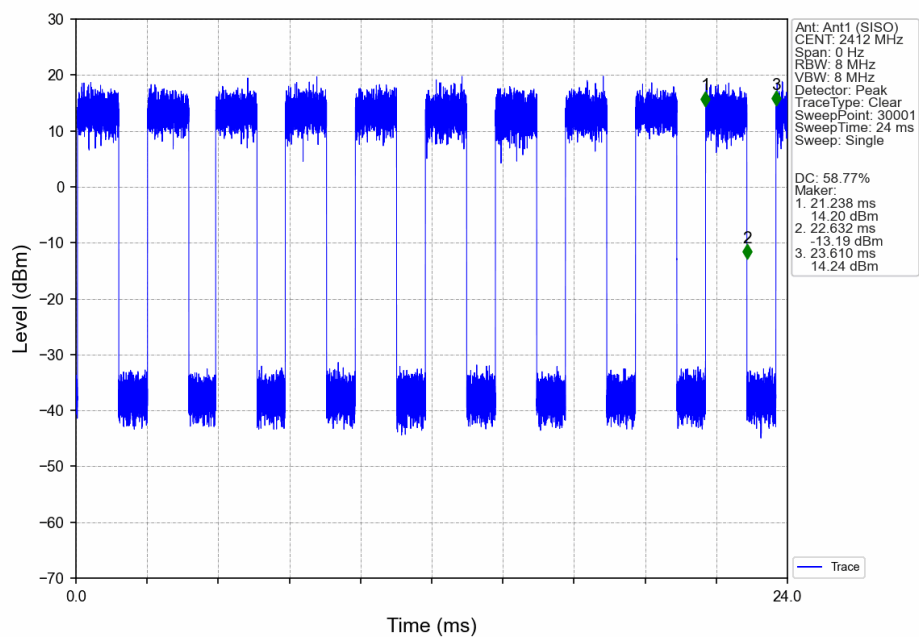




802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

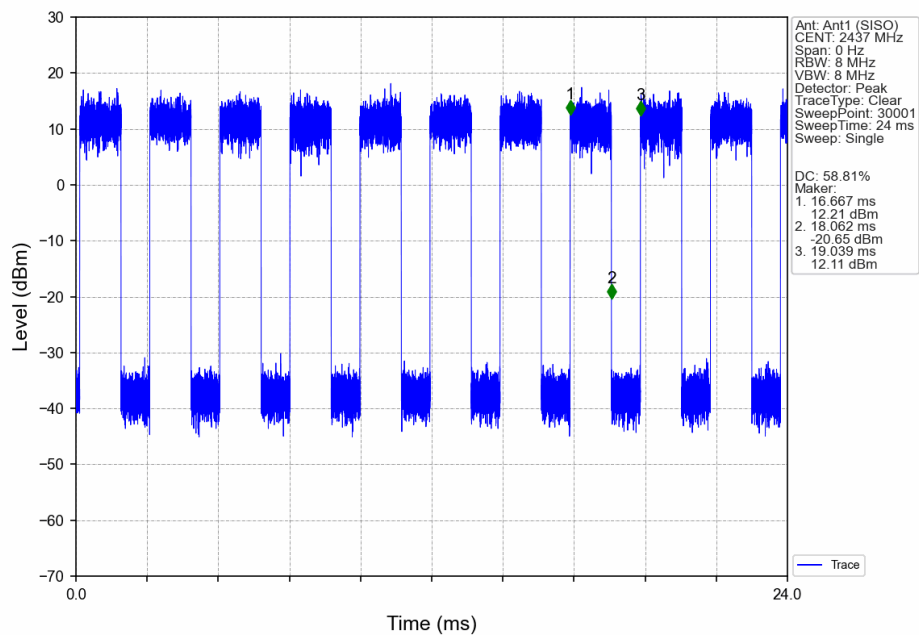


802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

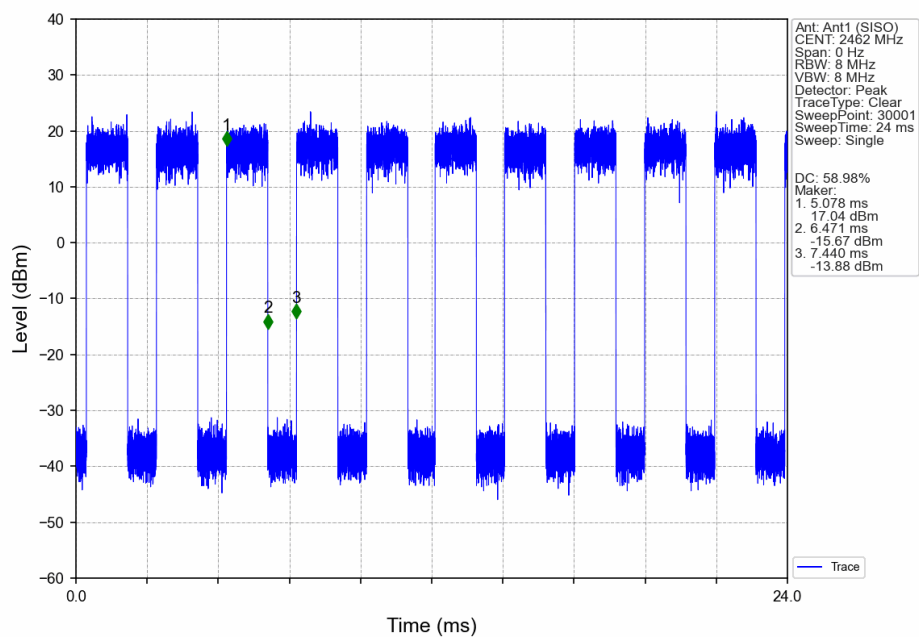




802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV

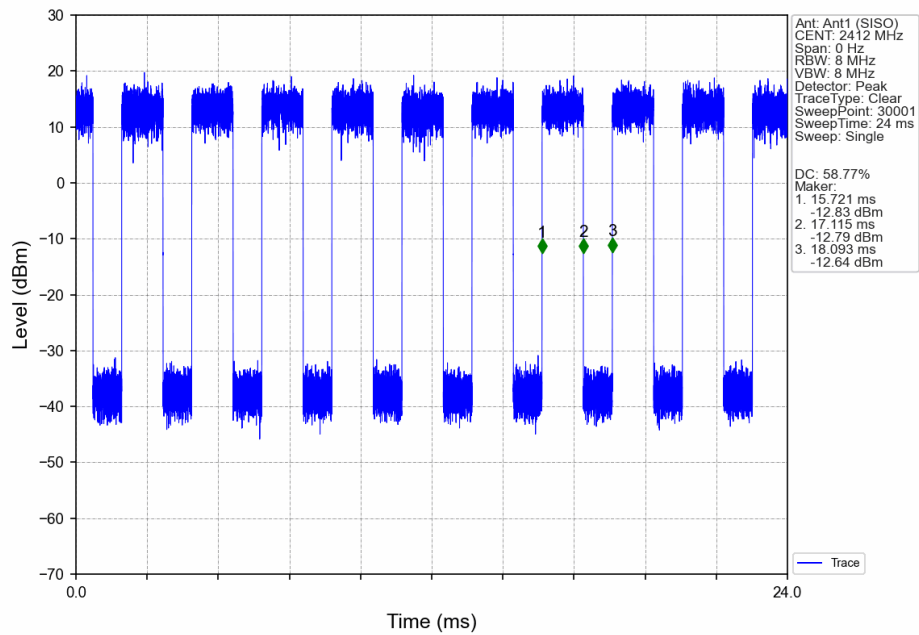


802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

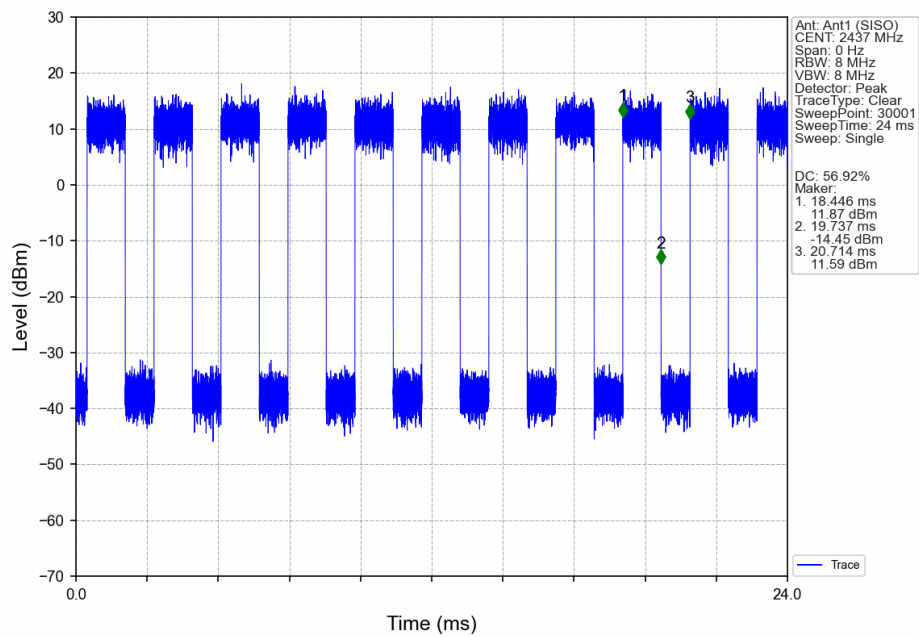




802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

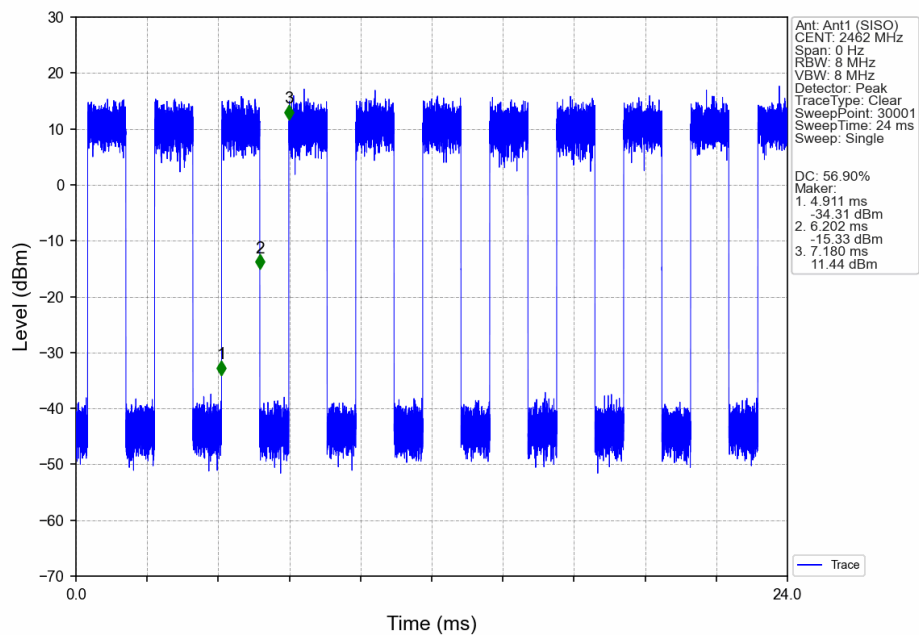


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

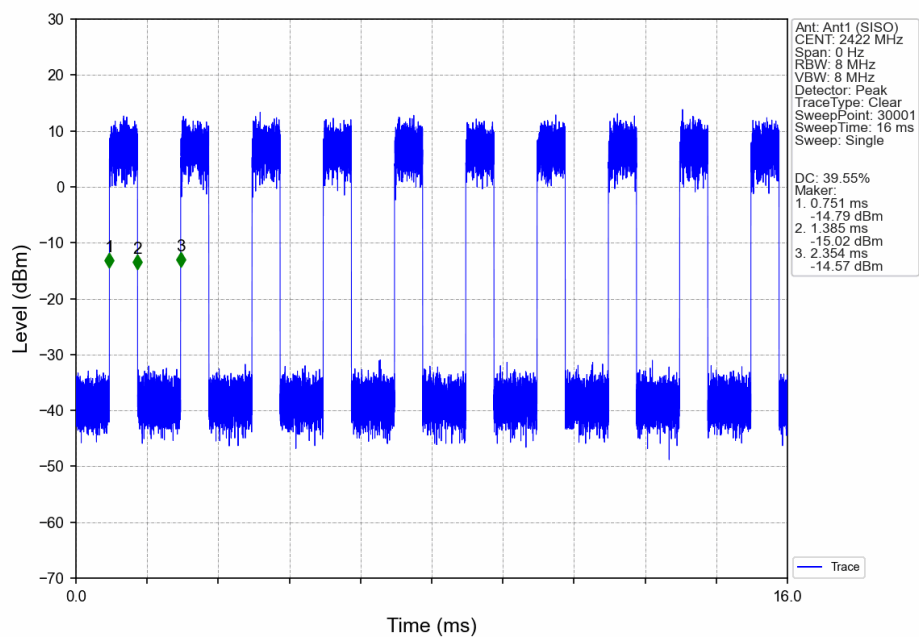




802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

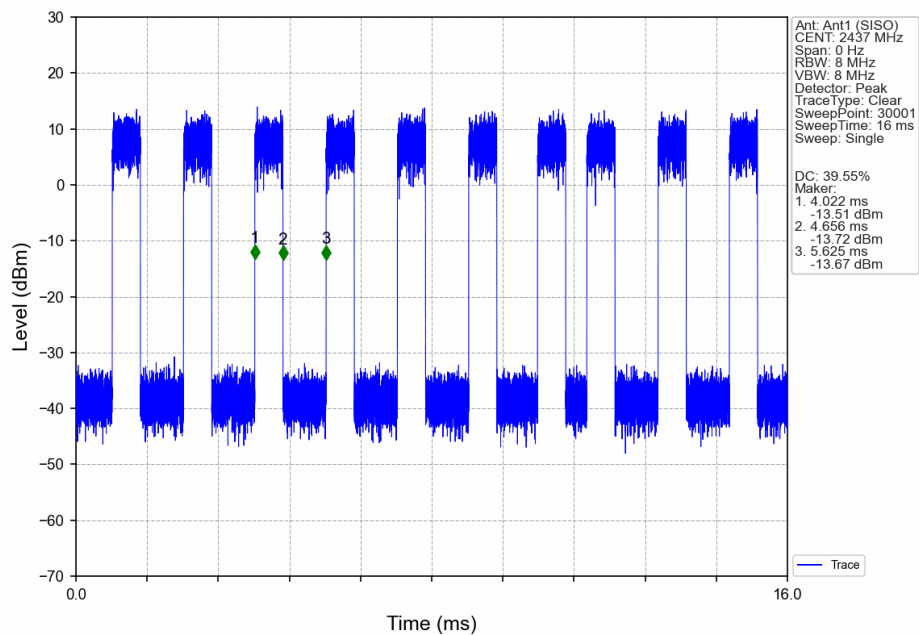


802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

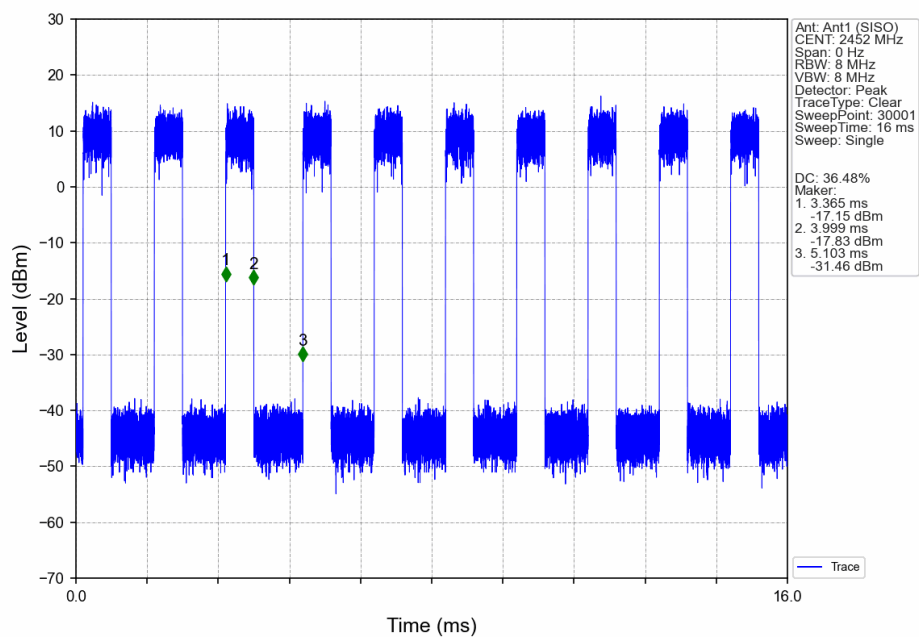




802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	12.750	/	Pass
		2437	1	12.749	/	Pass
		2462	1	12.794	/	Pass
802.11g	SISO	2412	1	17.253	/	Pass
		2437	1	17.268	/	Pass
		2462	1	17.509	/	Pass
802.11n (HT20)	SISO	2412	1	18.560	/	Pass
		2437	1	18.077	/	Pass
		2462	1	18.157	/	Pass
802.11n (HT40)	SISO	2422	1	36.399	/	Pass
		2437	1	36.152	/	Pass
		2452	1	36.263	/	Pass

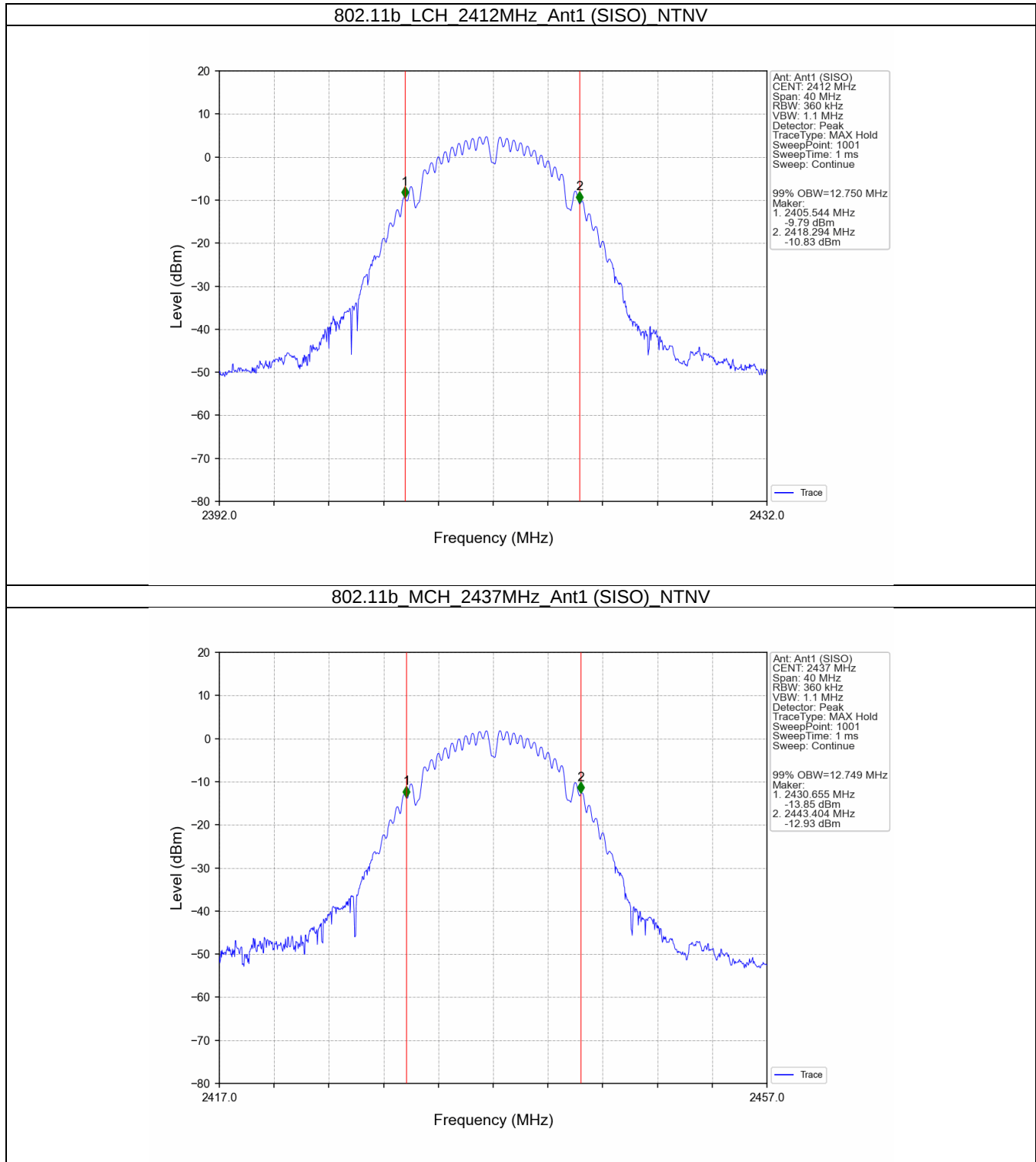
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	8.093	≥ 0.5	Pass
		2437	1	8.098	≥ 0.5	Pass
		2462	1	8.101	≥ 0.5	Pass
802.11g	SISO	2412	1	15.352	≥ 0.5	Pass
		2437	1	15.149	≥ 0.5	Pass
		2462	1	15.158	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	15.355	≥ 0.5	Pass
		2437	1	15.132	≥ 0.5	Pass
		2462	1	15.148	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	35.158	≥ 0.5	Pass
		2437	1	35.080	≥ 0.5	Pass
		2452	1	35.126	≥ 0.5	Pass



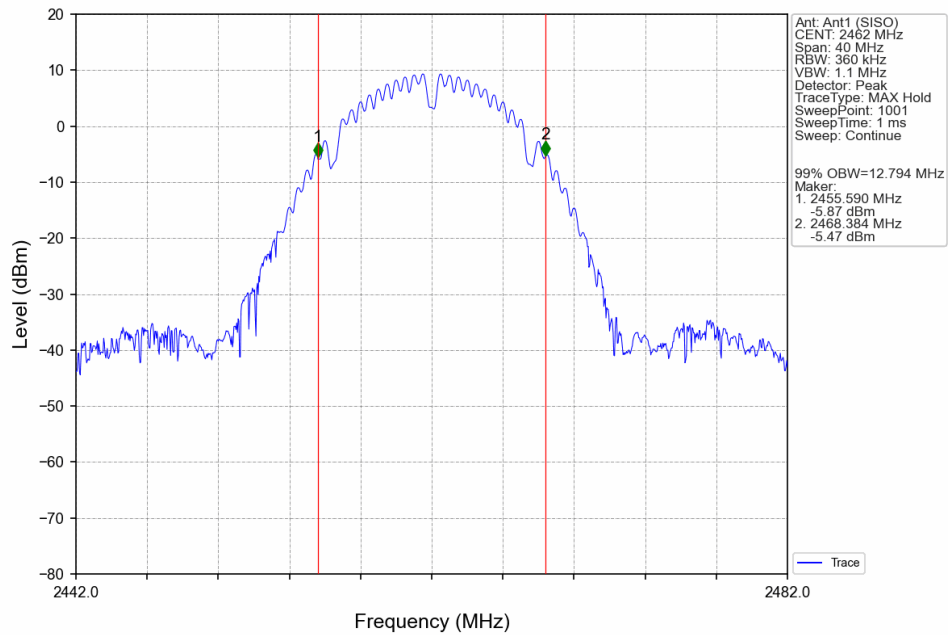
2.2 Test Graph

2.2.1 OBW

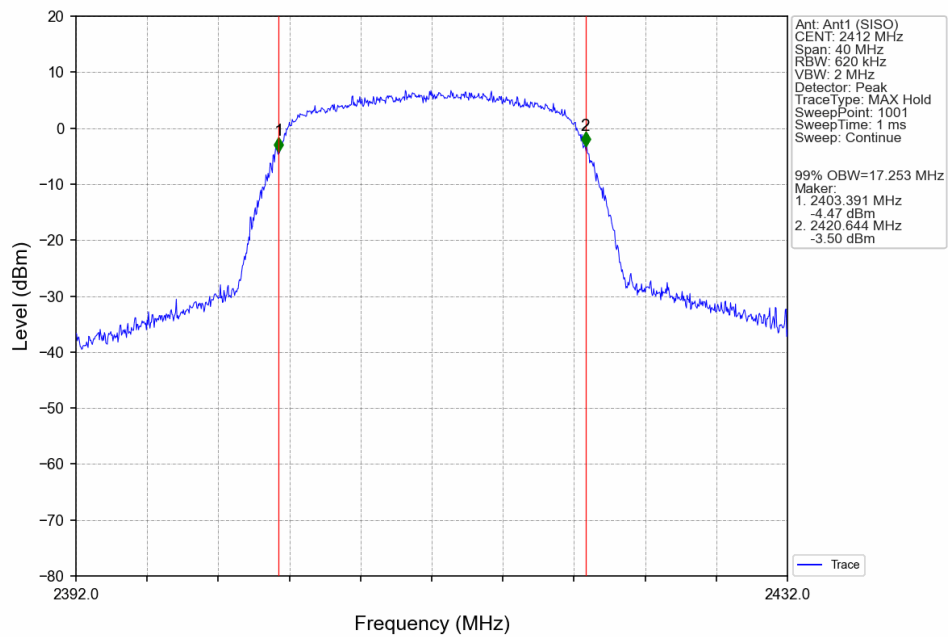




802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

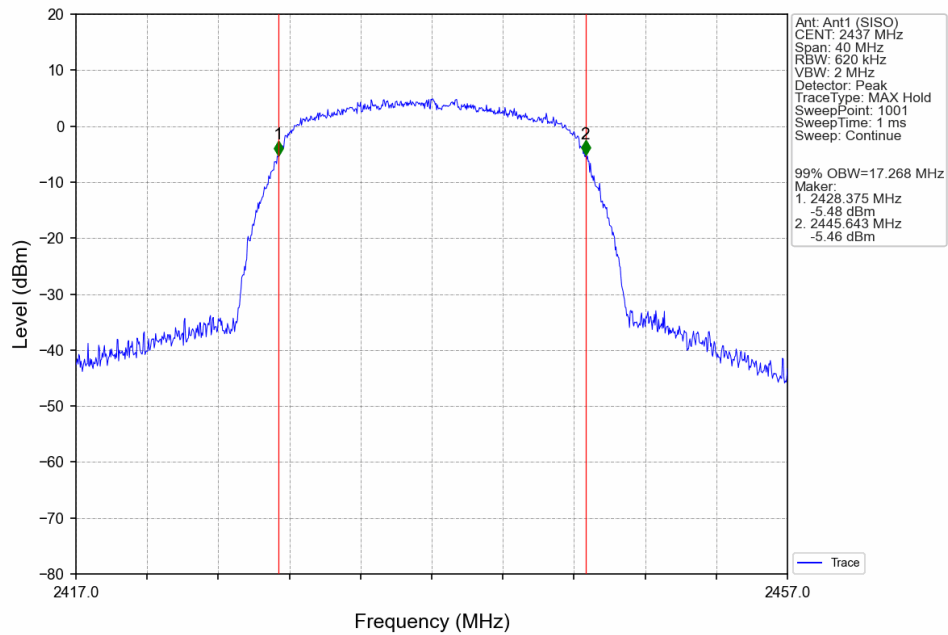


802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

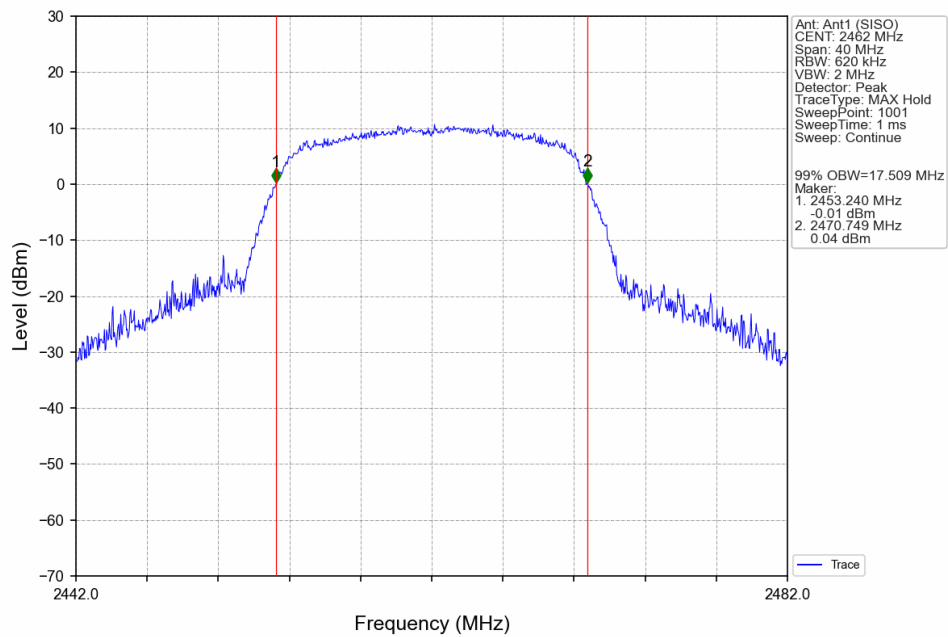




802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV

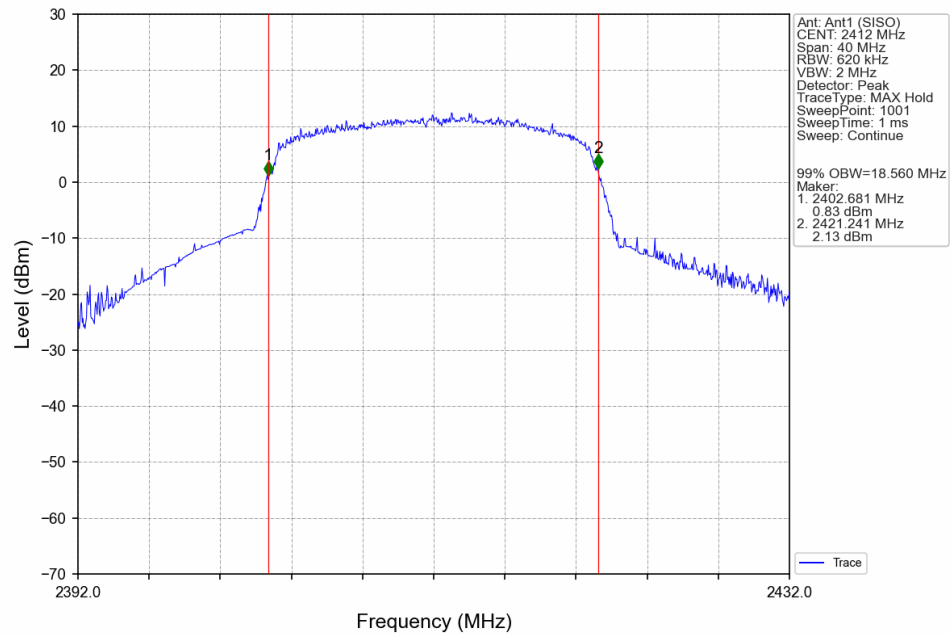


802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

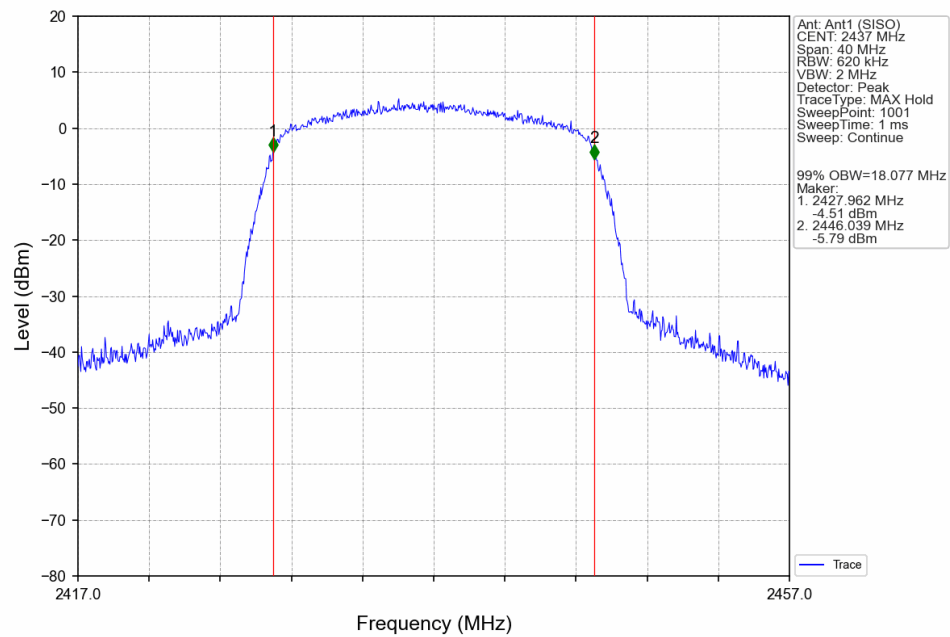




802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

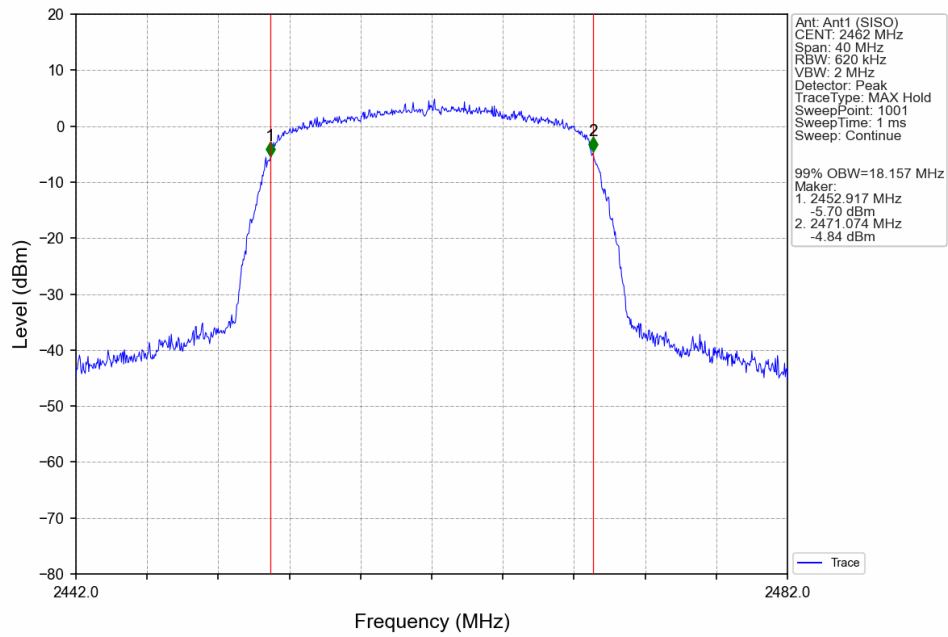


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

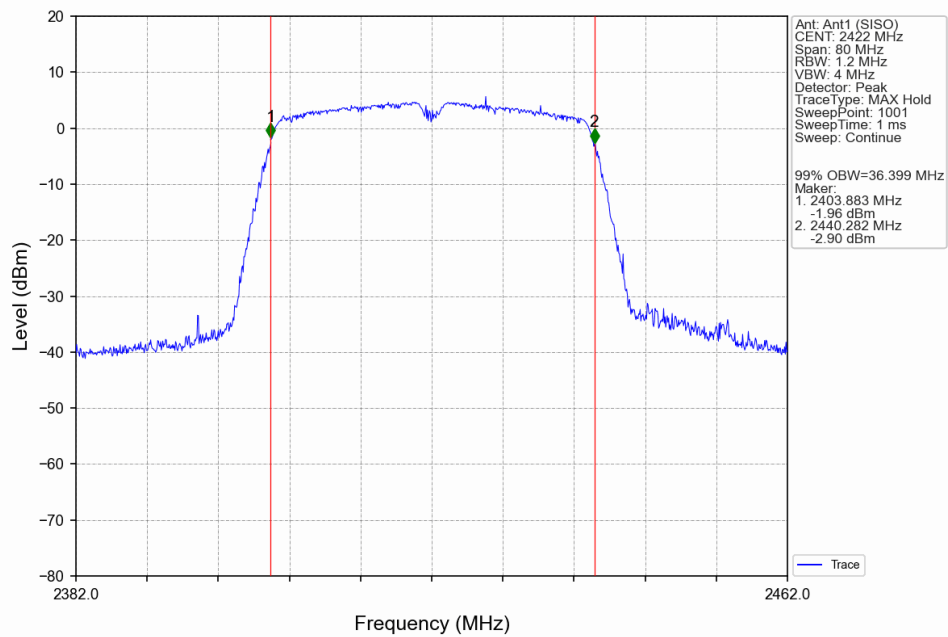




802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

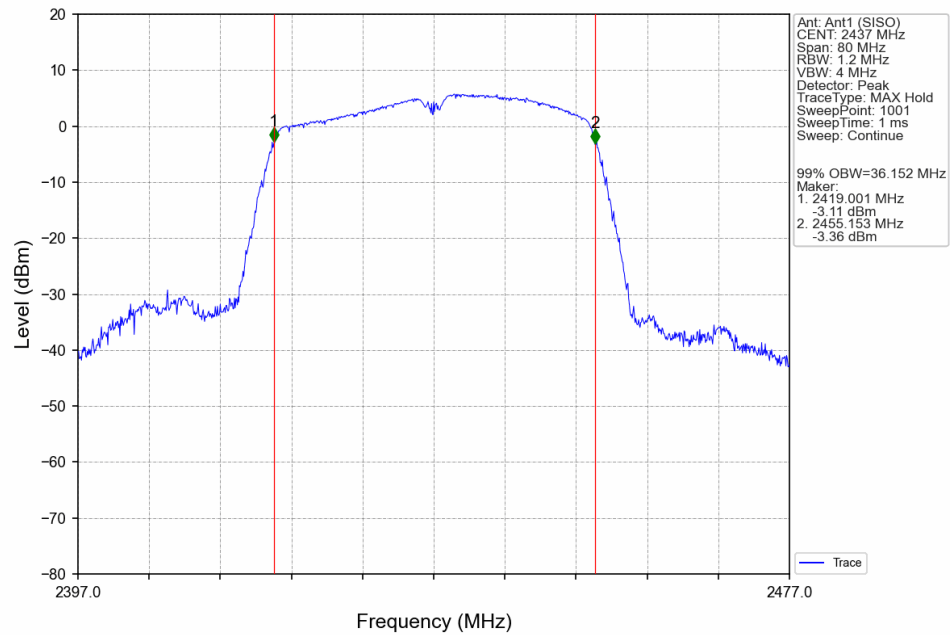


802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

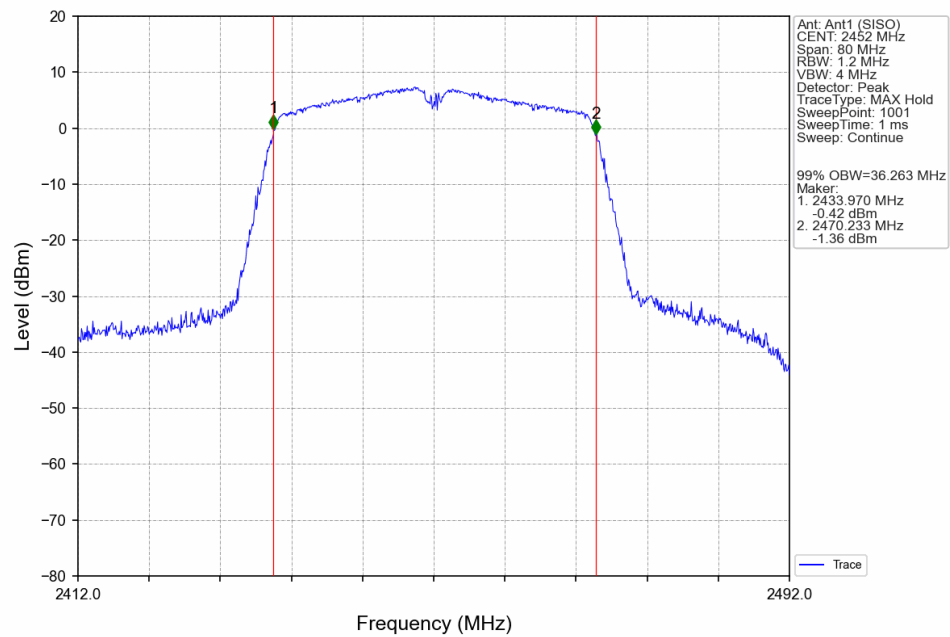




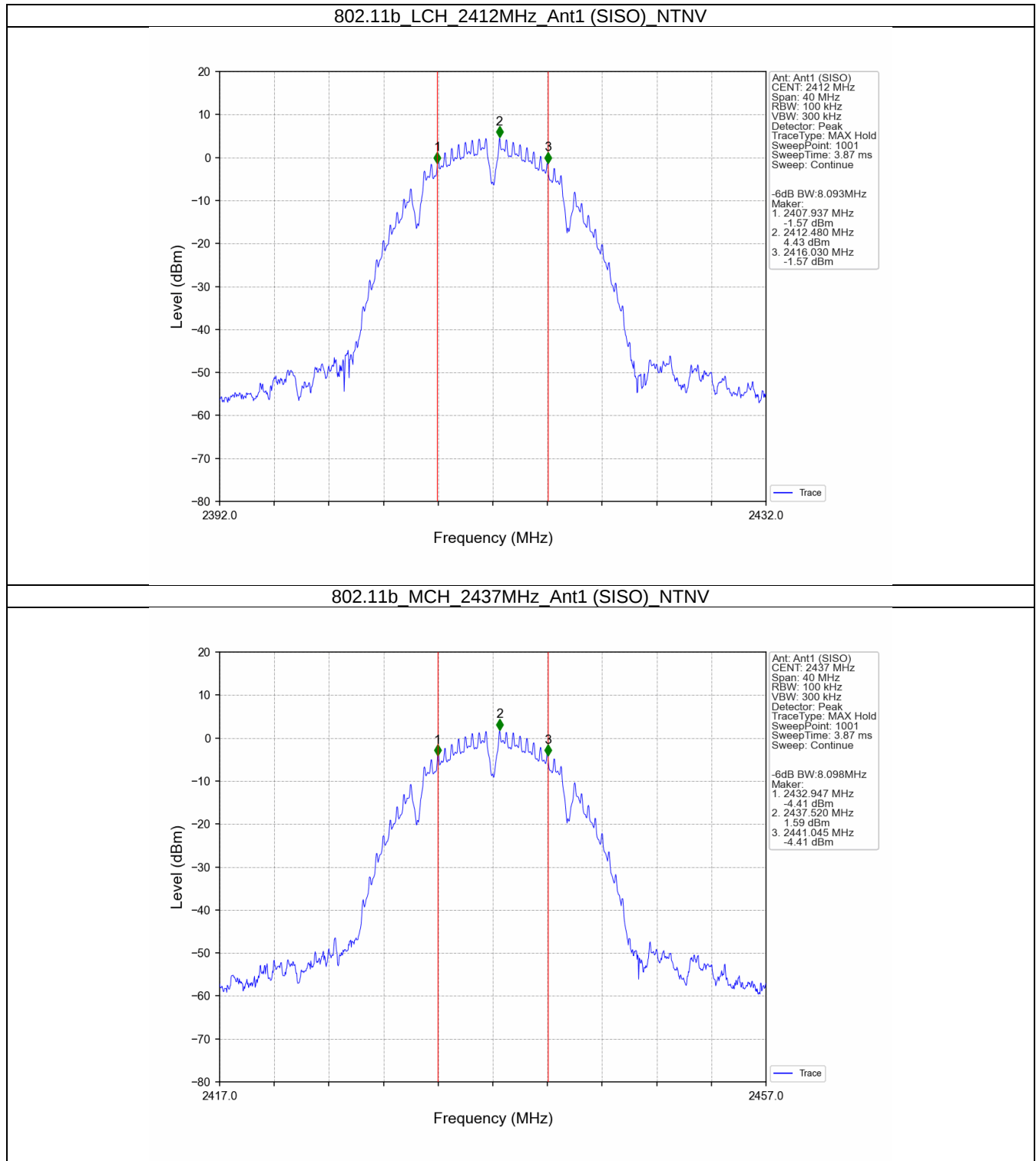
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV

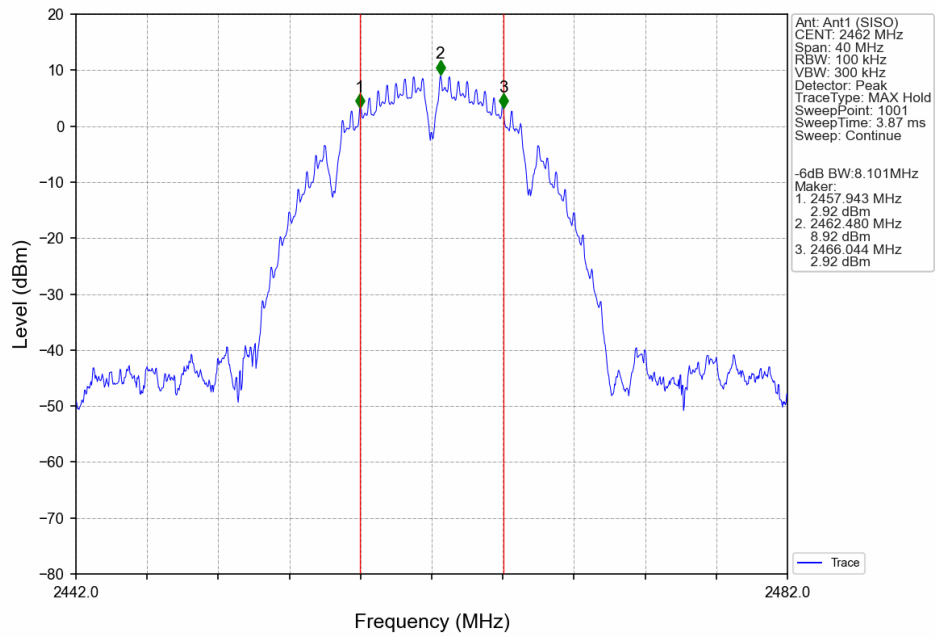


2.2.2 6dB BW

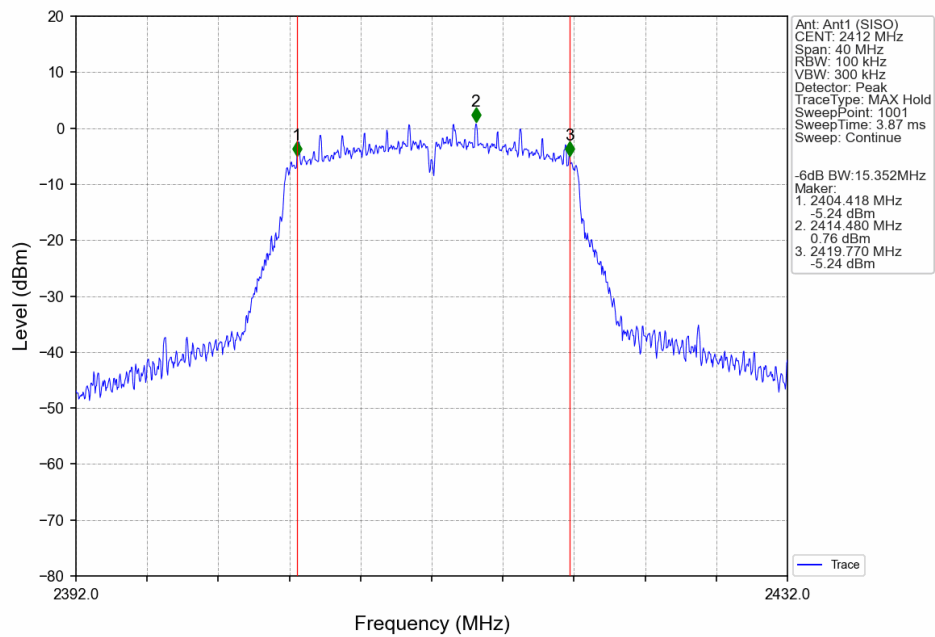




802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

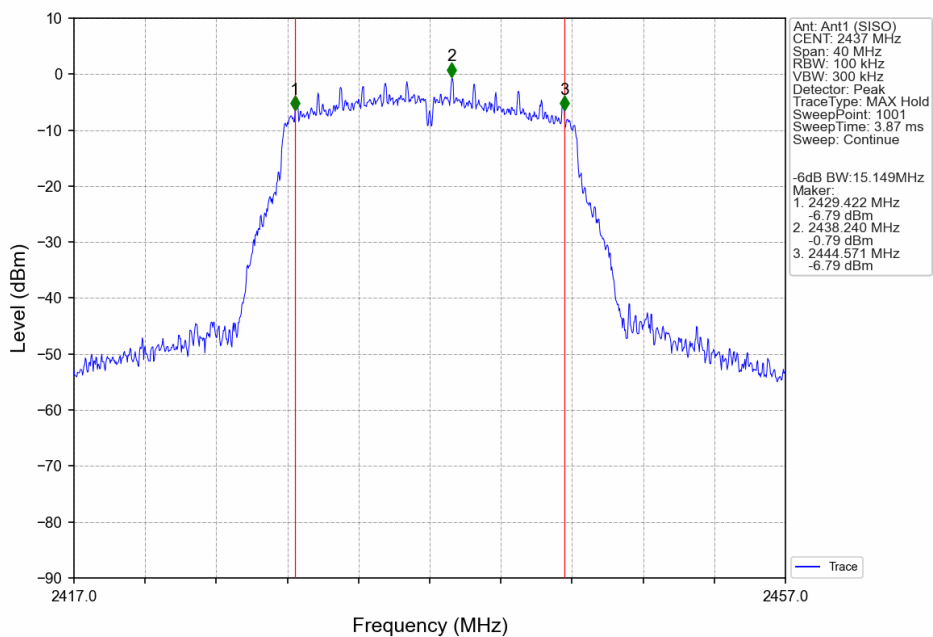


802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

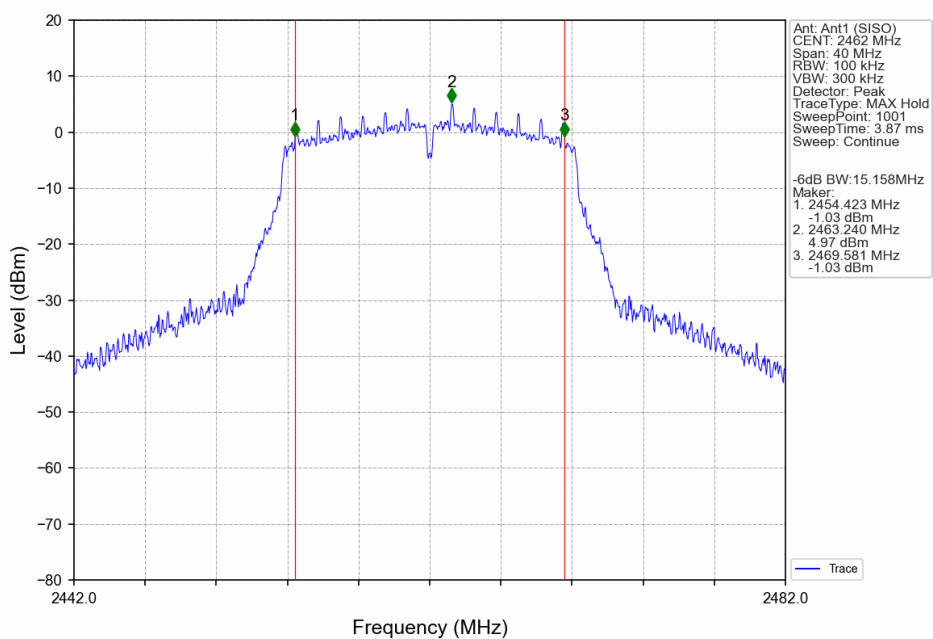




802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV

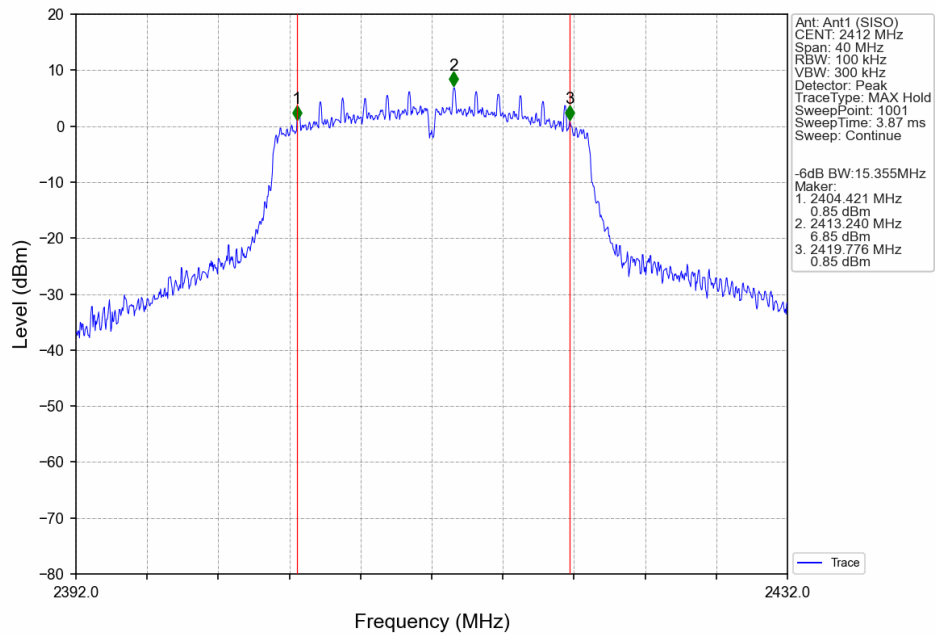


802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

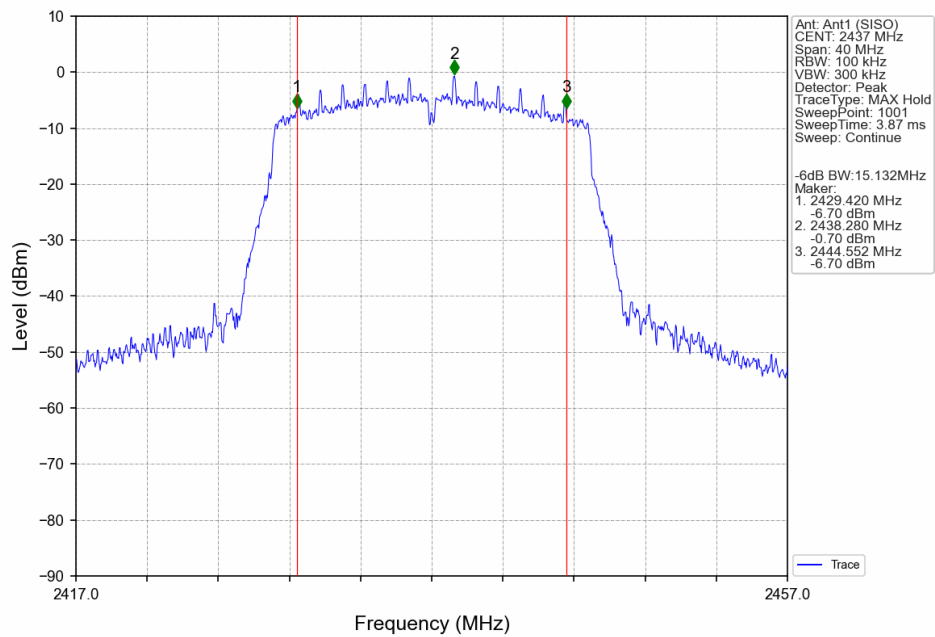




802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

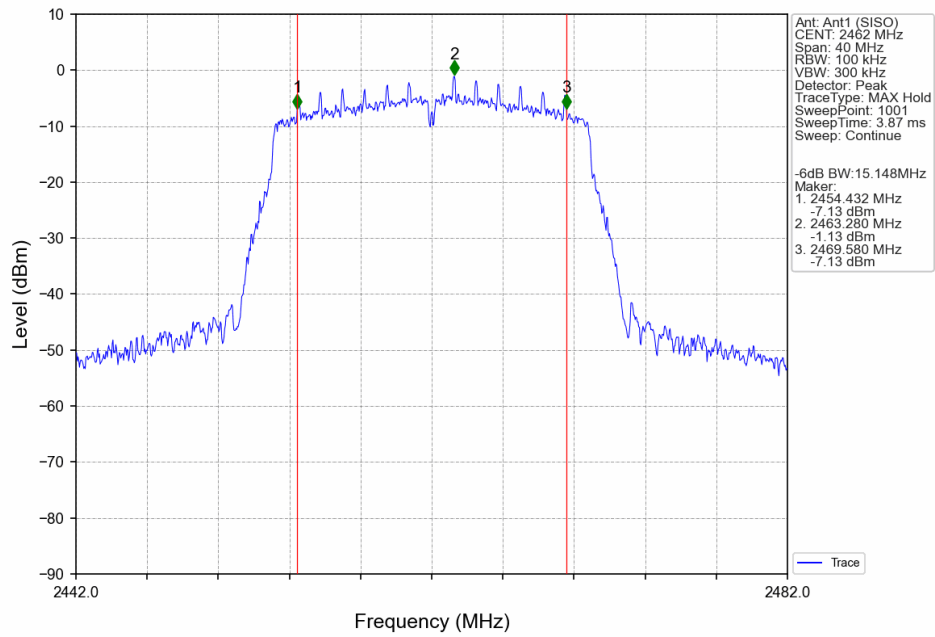


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

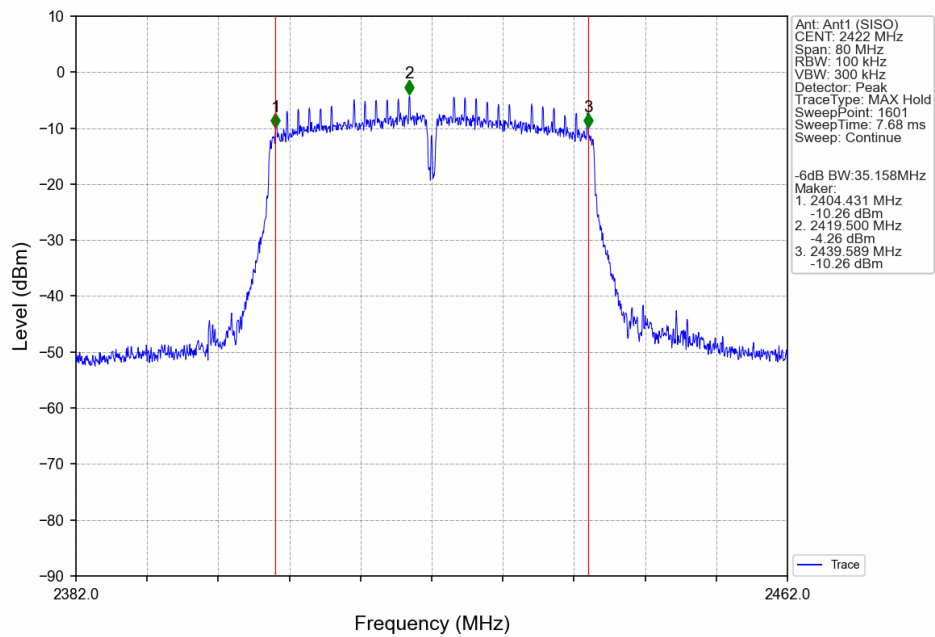




802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

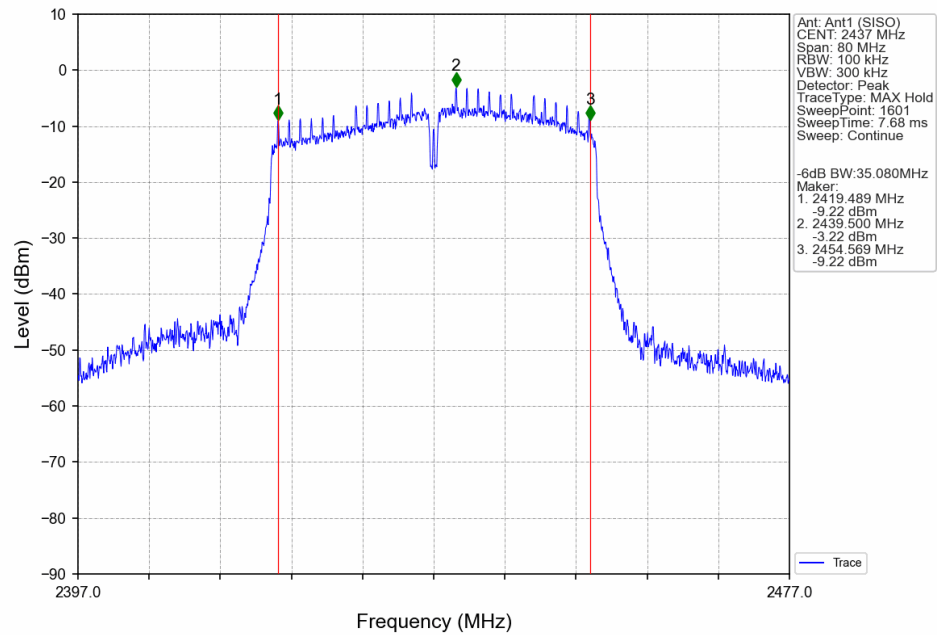


802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

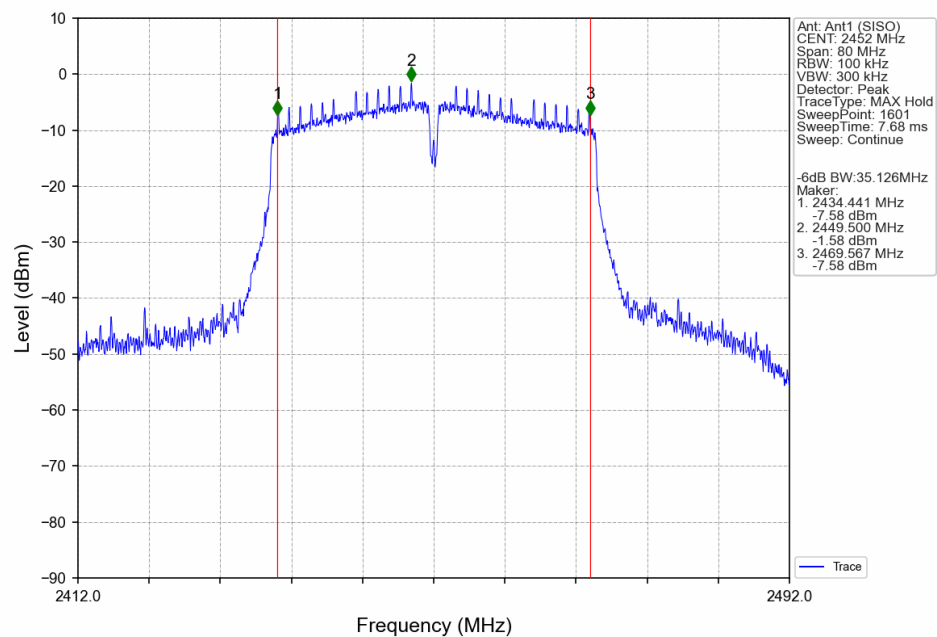




802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV





3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	14.81	<=30	Pass
		2437	12.08	<=30	Pass
		2462	11.82	<=30	Pass
802.11g	SISO	2412	18.84	<=30	Pass
		2437	17.85	<=30	Pass
		2462	16.39	<=30	Pass
802.11n (HT20)	SISO	2412	18.63	<=30	Pass
		2437	16.52	<=30	Pass
		2462	19.84	<=30	Pass
802.11n (HT40)	SISO	2422	16.58	<=30	Pass
		2437	16.02	<=30	Pass
		2452	19.48	<=30	Pass

Note1: Antenna Gain: Ant1: 4.10dBi;

3.1.2 EIRP

Mode	TX Type	Frequency (MHz)	E.I.R.P (dBm)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	18.91	<=36.02	Pass
		2437	16.18	<=36.02	Pass
		2462	15.92	<=36.02	Pass
802.11g	SISO	2412	17.94	<=36.02	Pass
		2437	26.95	<=36.02	Pass
		2462	20.49	<=36.02	Pass
802.11n (HT20)	SISO	2412	22.73	<=36.02	Pass
		2437	20.62	<=36.02	Pass
		2462	25.94	<=36.02	Pass
802.11n (HT40)	SISO	2422	20.68	<=36.02	Pass
		2437	20.12	<=36.02	Pass
		2452	23.58	<=36.02	Pass

Note1: Antenna Gain: Ant1: 4.10dBi;
Note2: E.I.R.P = Measured Power + Antenna Gain



4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

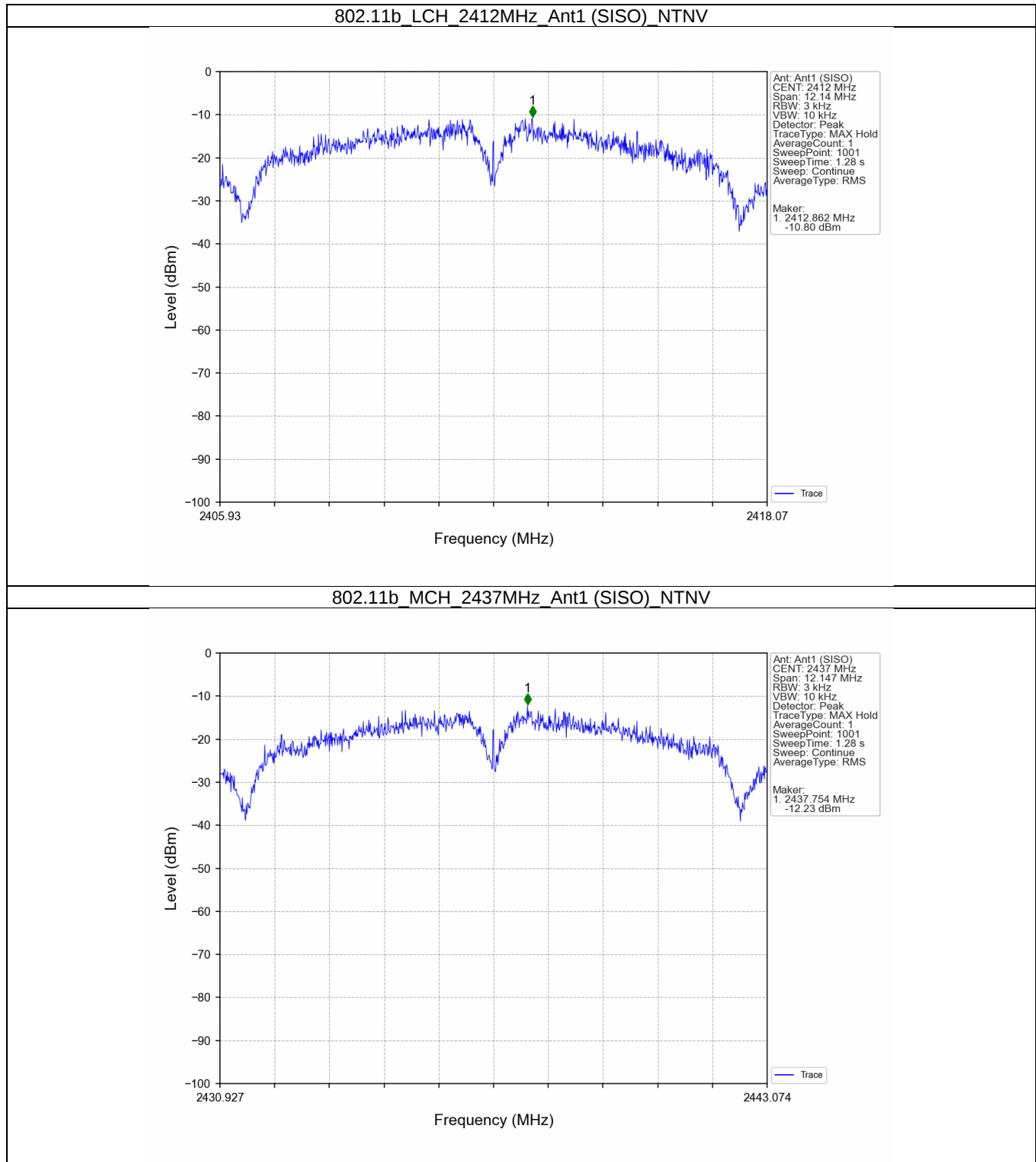
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	-10.80	<=8	Pass
		2437	-12.23	<=8	Pass
		2462	-12.70	<=8	Pass
802.11g	SISO	2412	-13.74	<=8	Pass
		2437	-10.18	<=8	Pass
		2462	-14.30	<=8	Pass
802.11n (HT20)	SISO	2412	-13.07	<=8	Pass
		2437	-13.67	<=8	Pass
		2462	-10.52	<=8	Pass
802.11n (HT40)	SISO	2422	-19.30	<=8	Pass
		2437	-17.42	<=8	Pass
		2452	-15.68	<=8	Pass

Note1: Antenna Gain: Ant1: 4.10dBi;



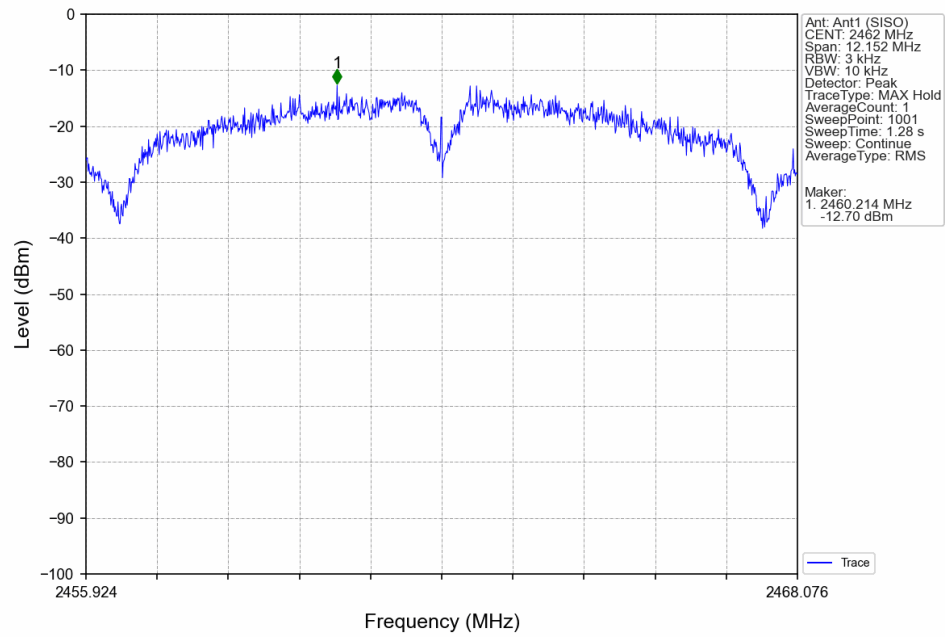
4.2 Test Graph

4.2.1 PSD

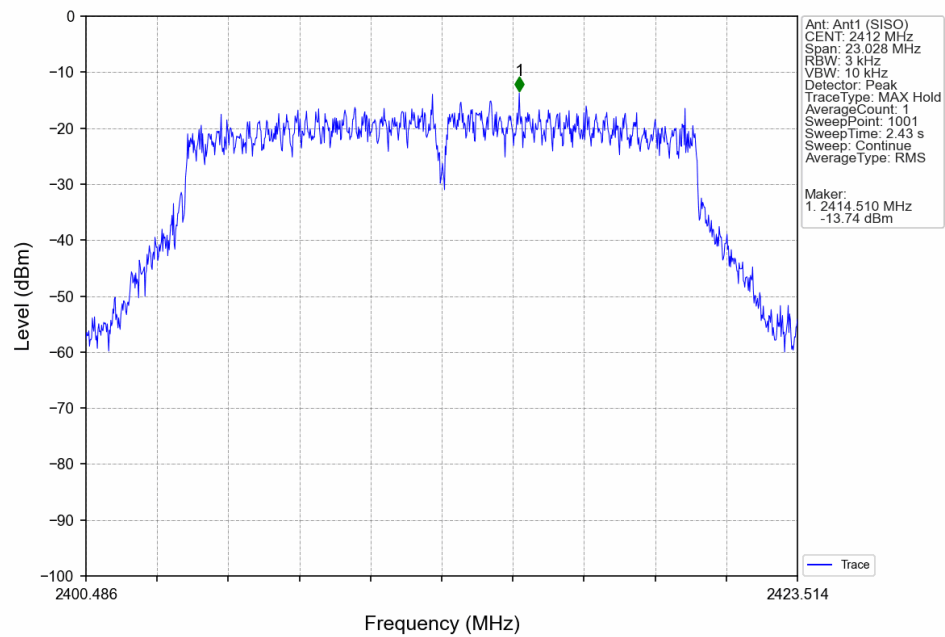




802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

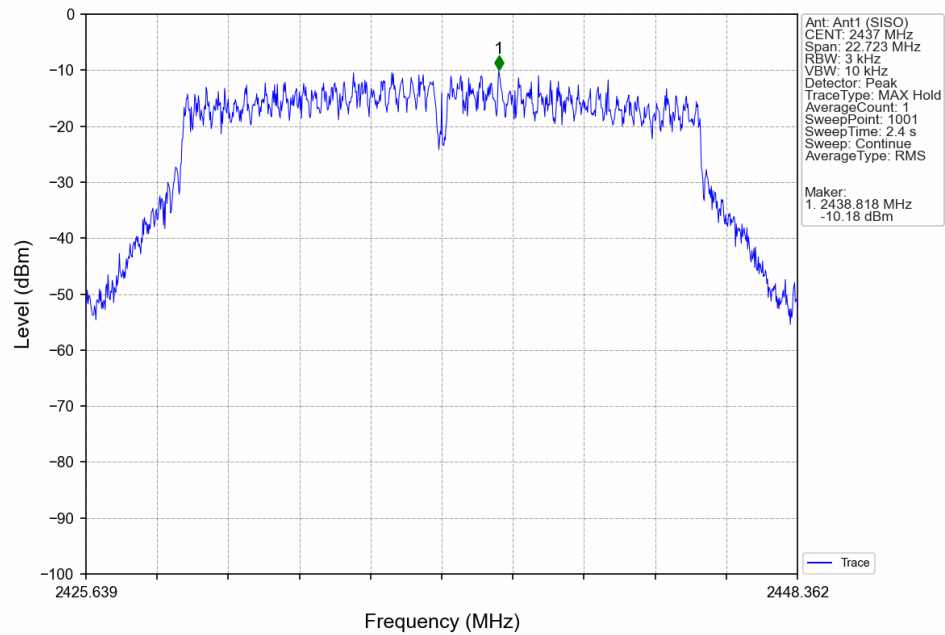


802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

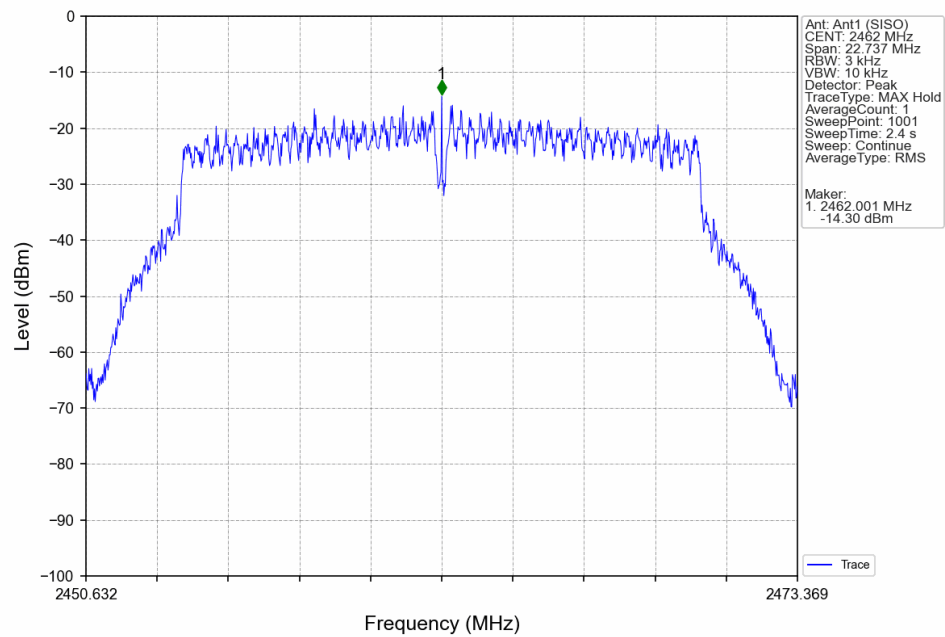




802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV

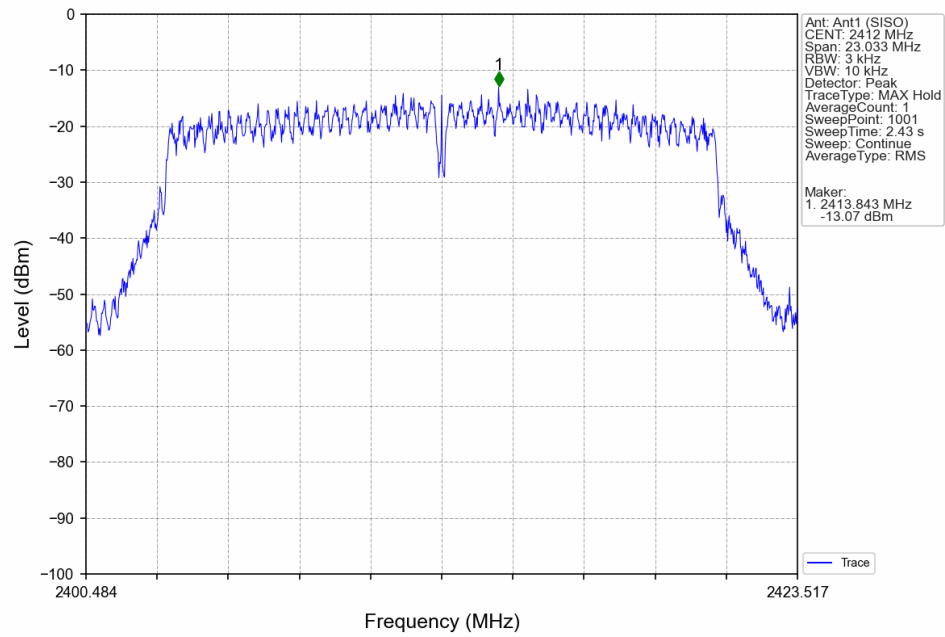


802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

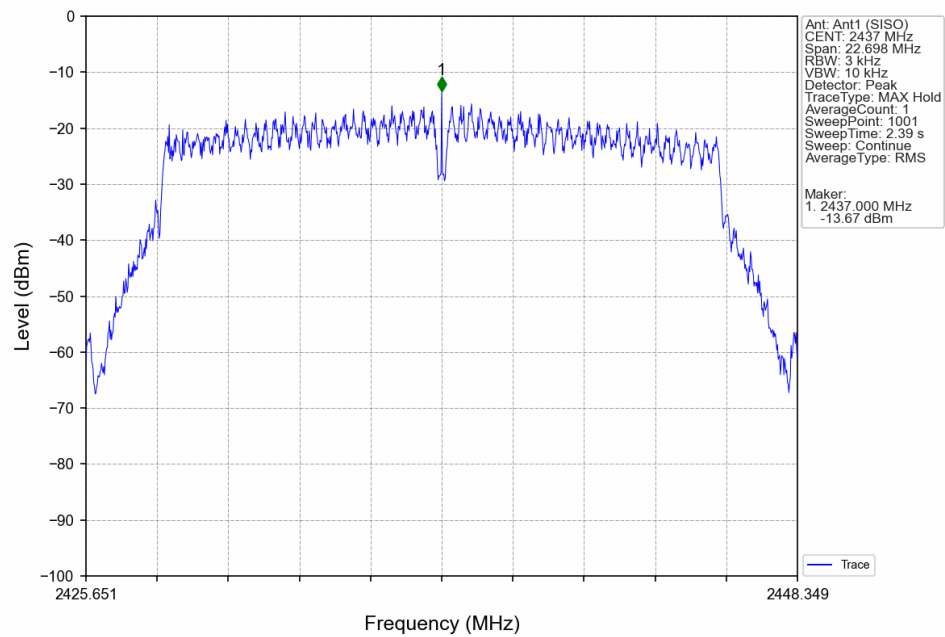




802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

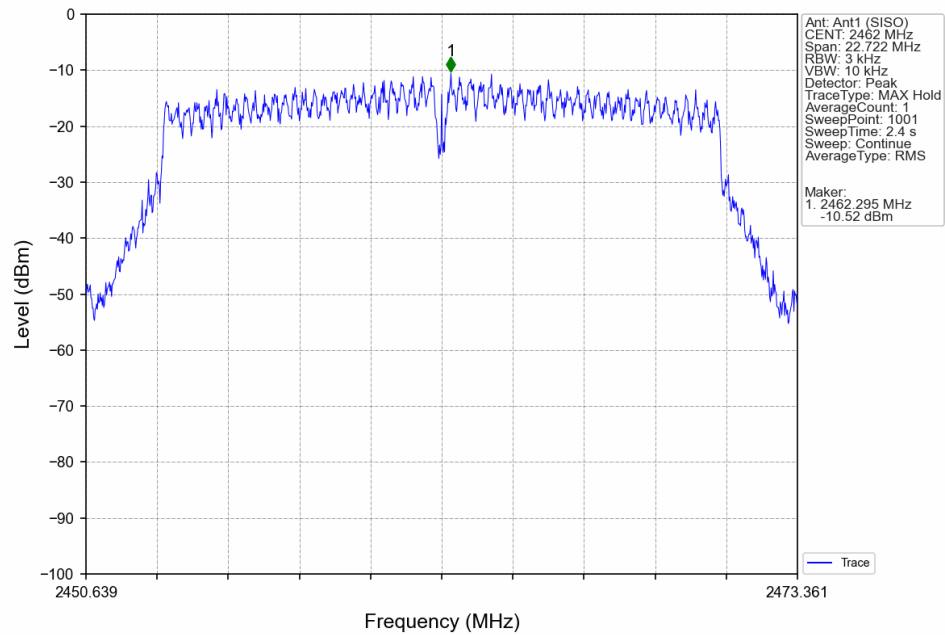


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

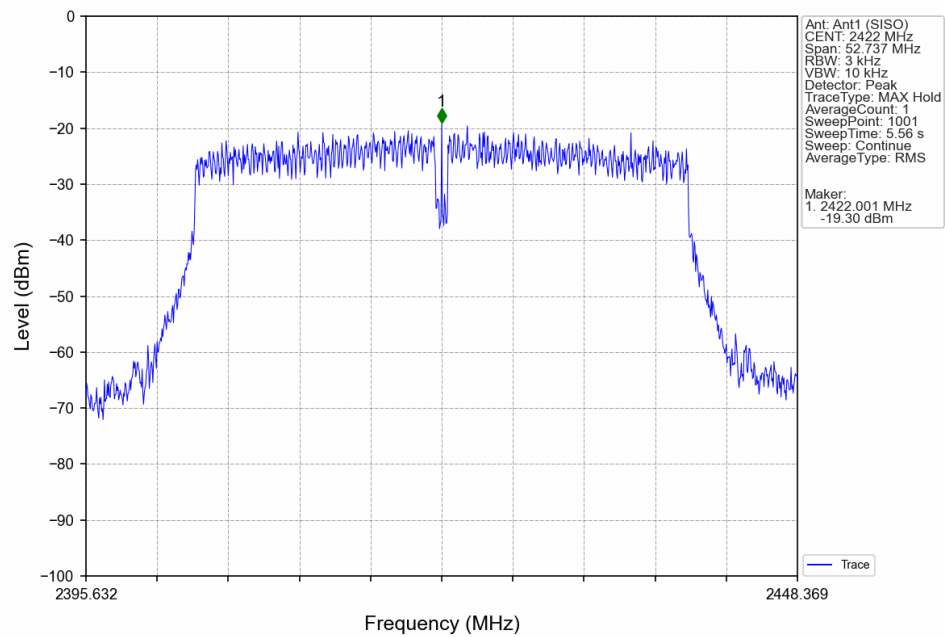




802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

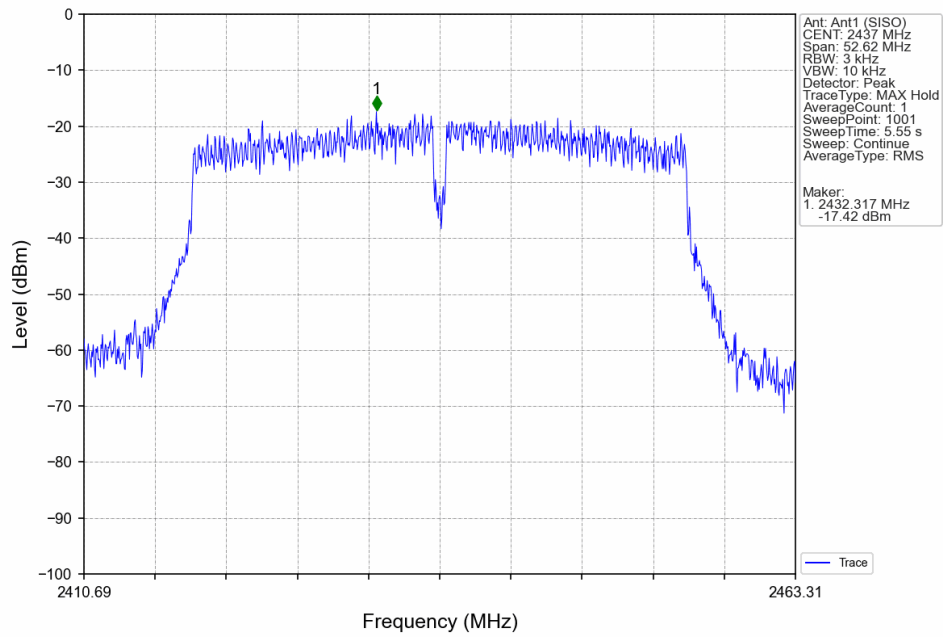


802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

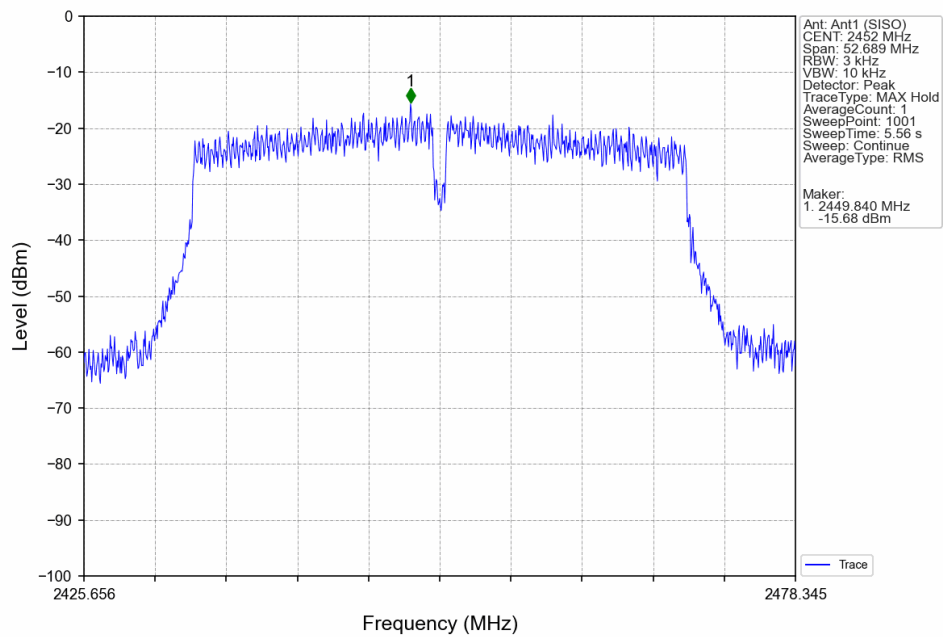




802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Test Result

5.1.1 Ref

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	4.46
		2437	1	1.64
		2462	1	0.96
802.11g	SISO	2412	1	13.56
		2437	1	4.97
		2462	1	-1.15
802.11n (HT20)	SISO	2412	1	1.15
		2437	1	-0.86
		2462	1	4.47
802.11n (HT40)	SISO	2422	1	-4.42
		2437	1	15.40
		2452	1	9.86

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.

5.1.2 CSE

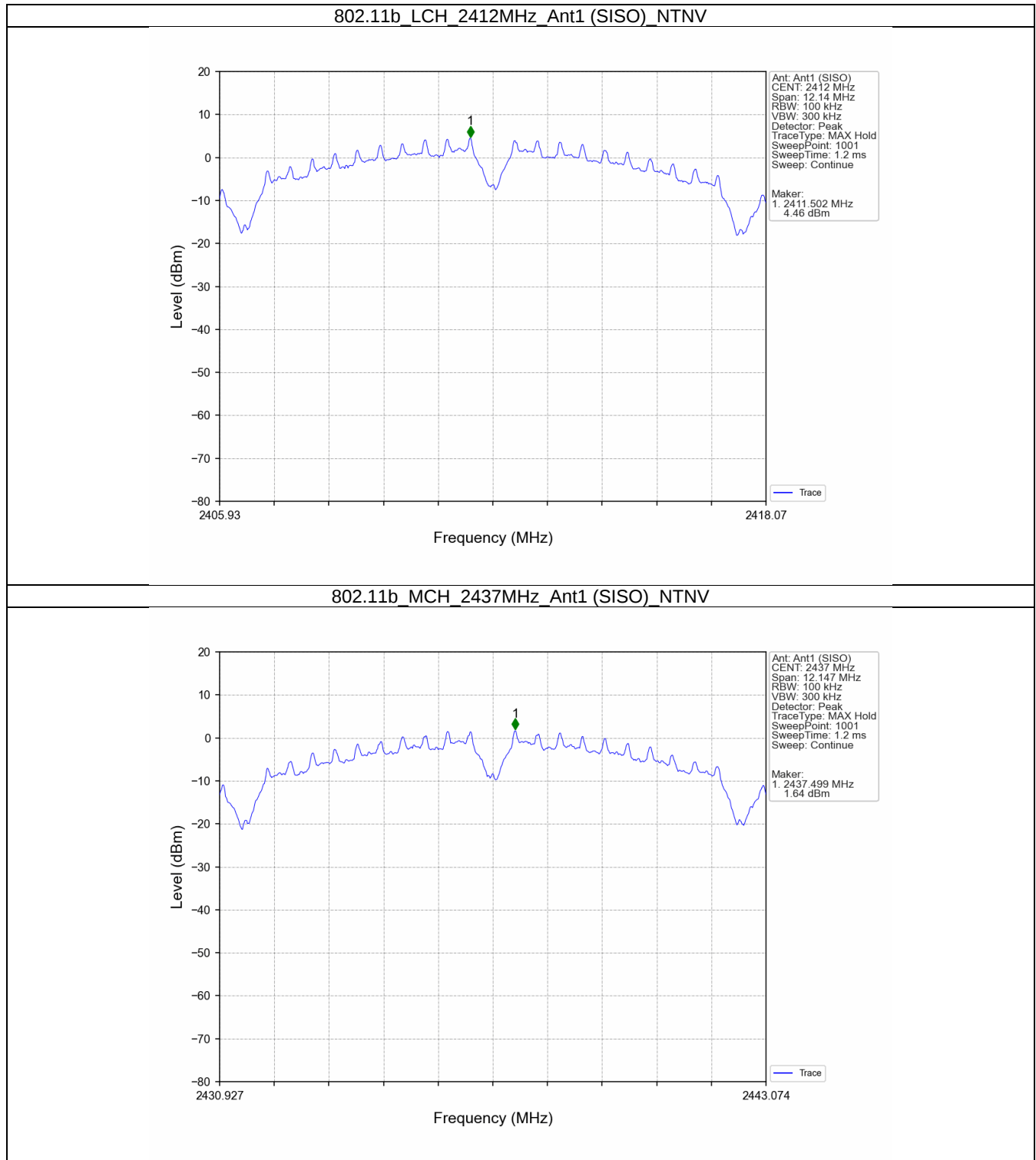
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	4.46	-15.54	Pass
		2437	1	1.64	-18.36	Pass
		2462	1	0.96	-19.04	Pass
802.11g	SISO	2412	1	13.56	-6.44	Pass
		2437	1	4.97	-15.03	Pass
		2462	1	-1.15	-21.15	Pass
802.11n (HT20)	SISO	2412	1	1.15	-18.85	Pass
		2437	1	-0.86	-20.86	Pass
		2462	1	4.47	-15.53	Pass
802.11n (HT40)	SISO	2422	1	-4.42	-24.42	Pass
		2437	1	15.40	-4.60	Pass
		2452	1	9.86	-10.14	Pass

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.



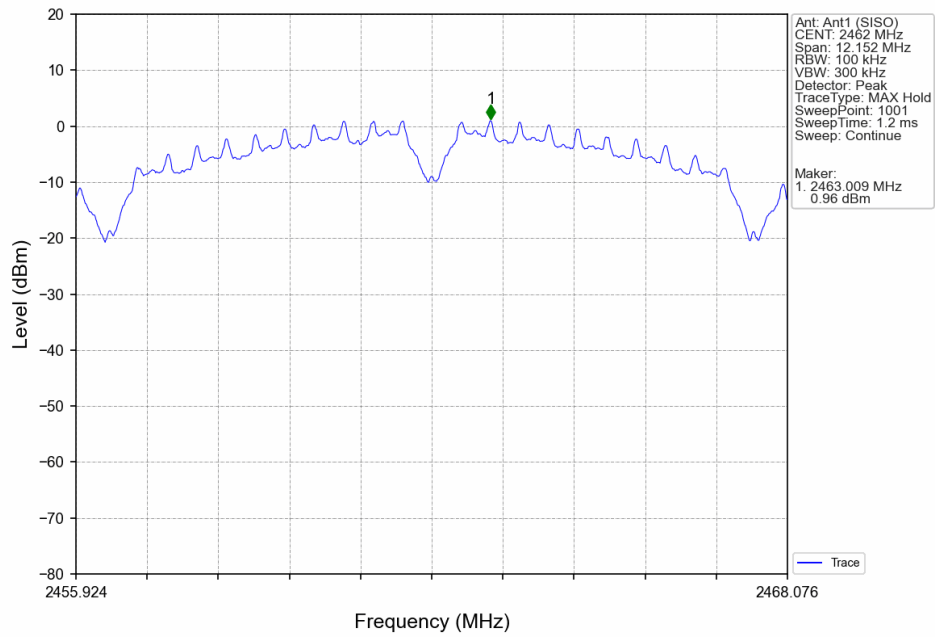
5.2 Test Graph

5.2.1 Ref

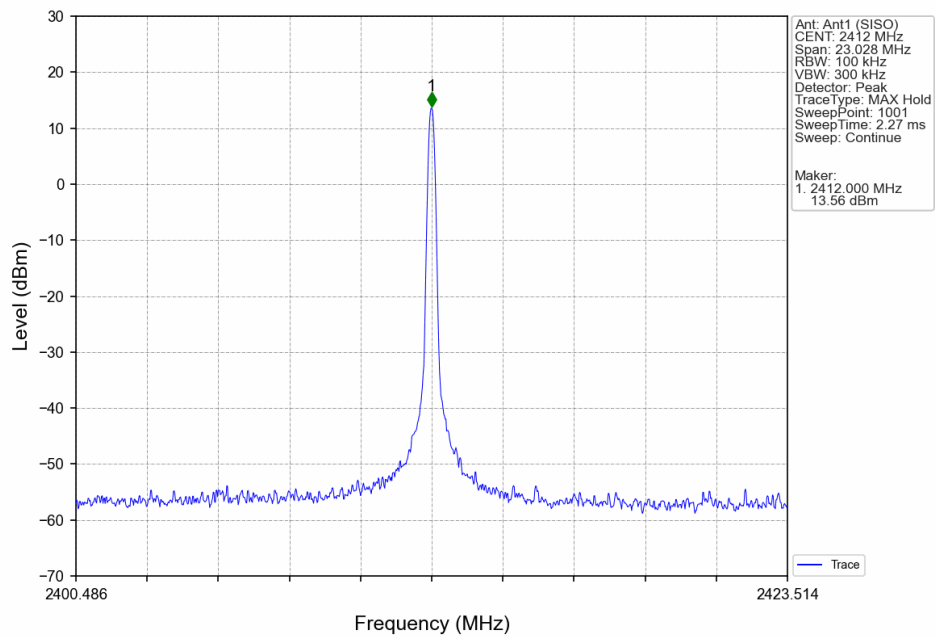




802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

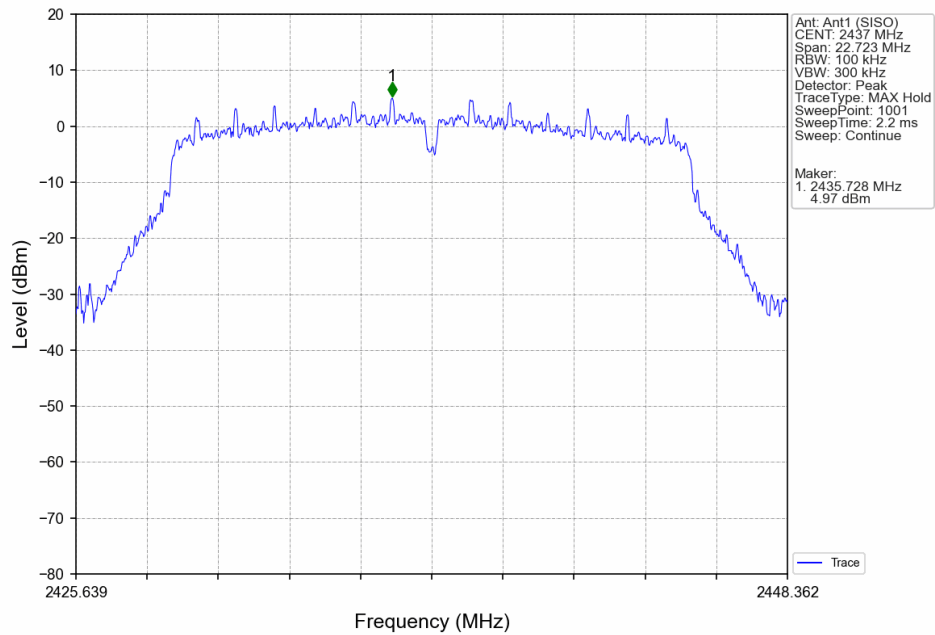


802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

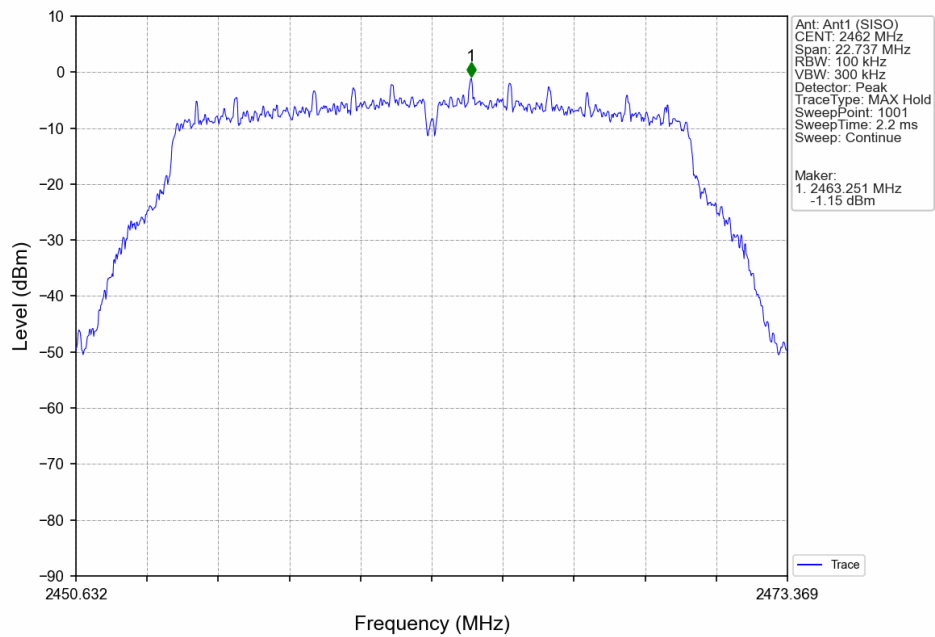




802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV

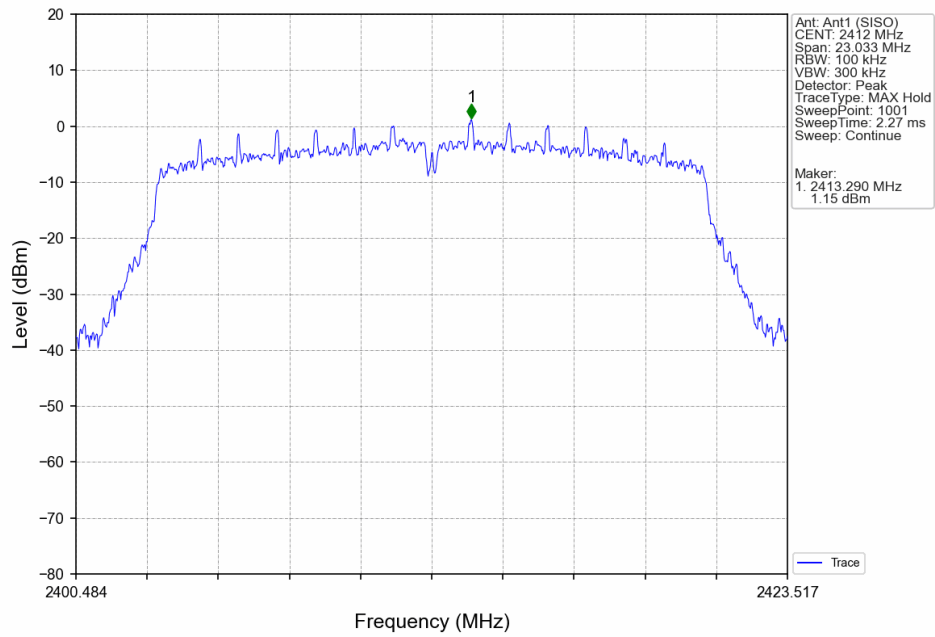


802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

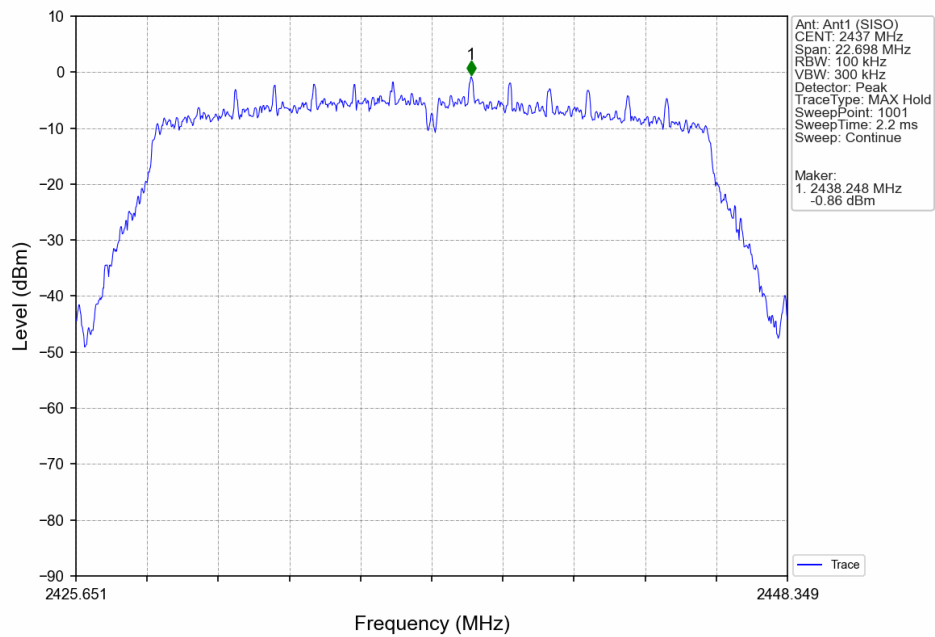




802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

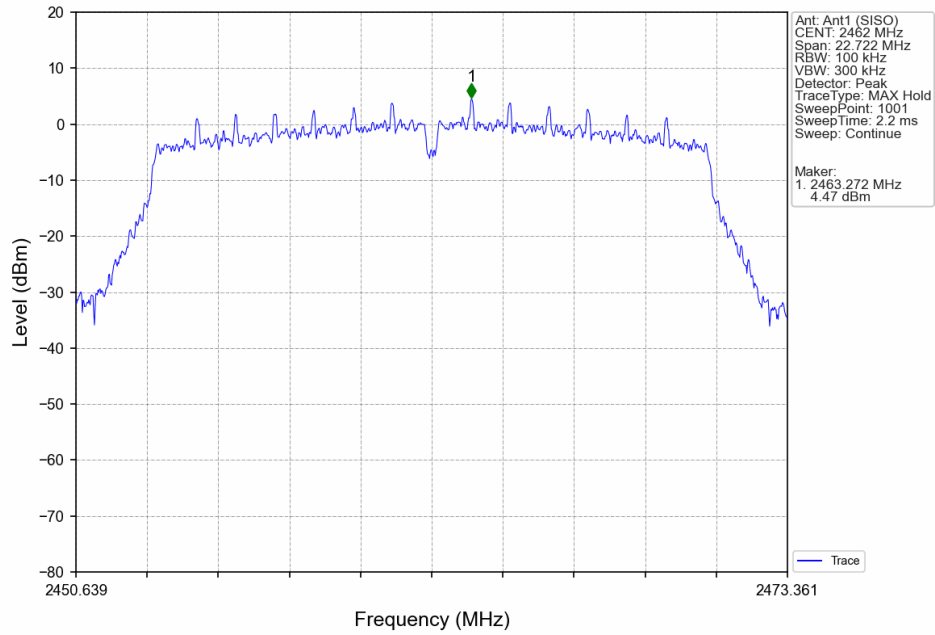


802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

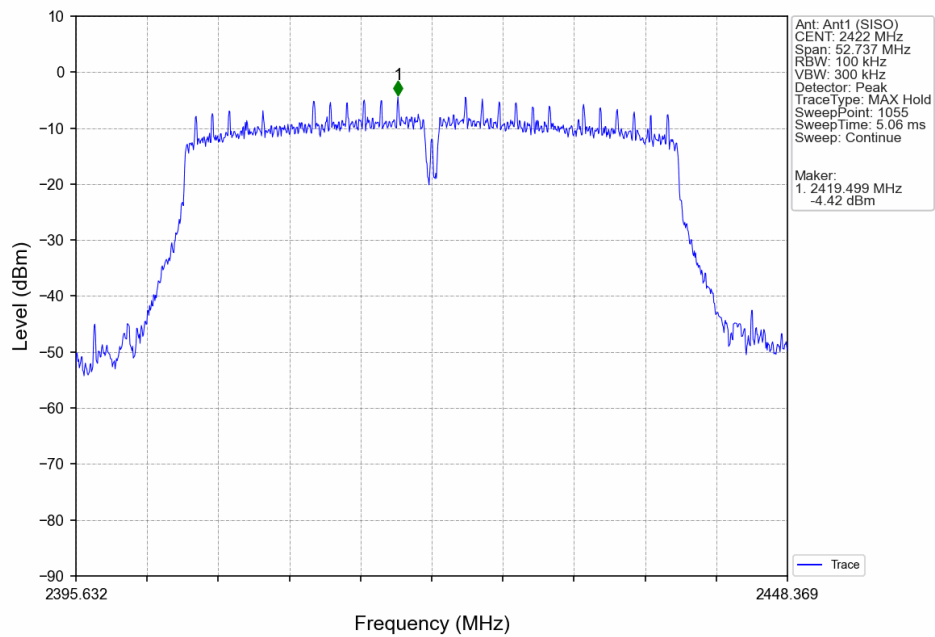




802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

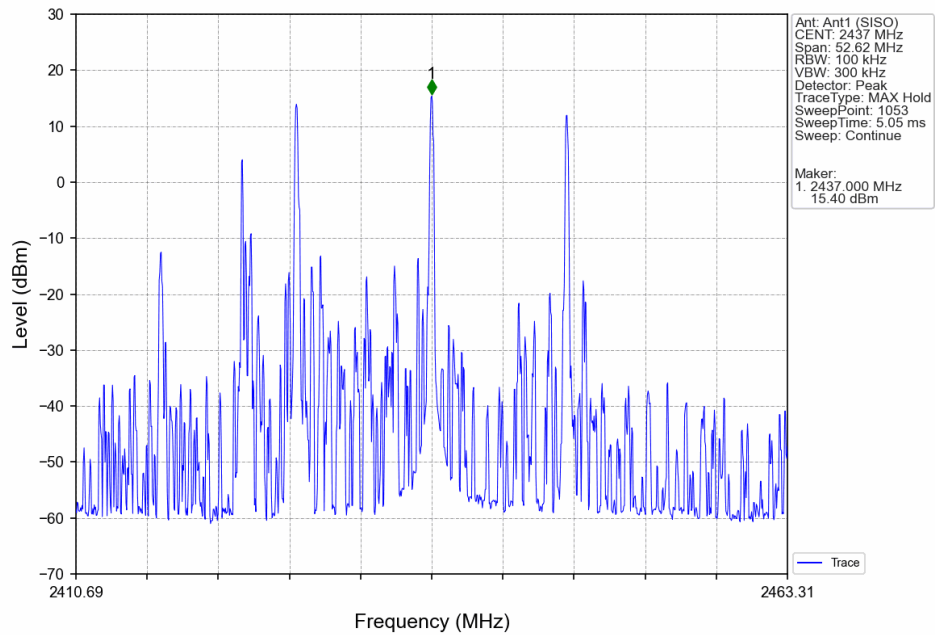


802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

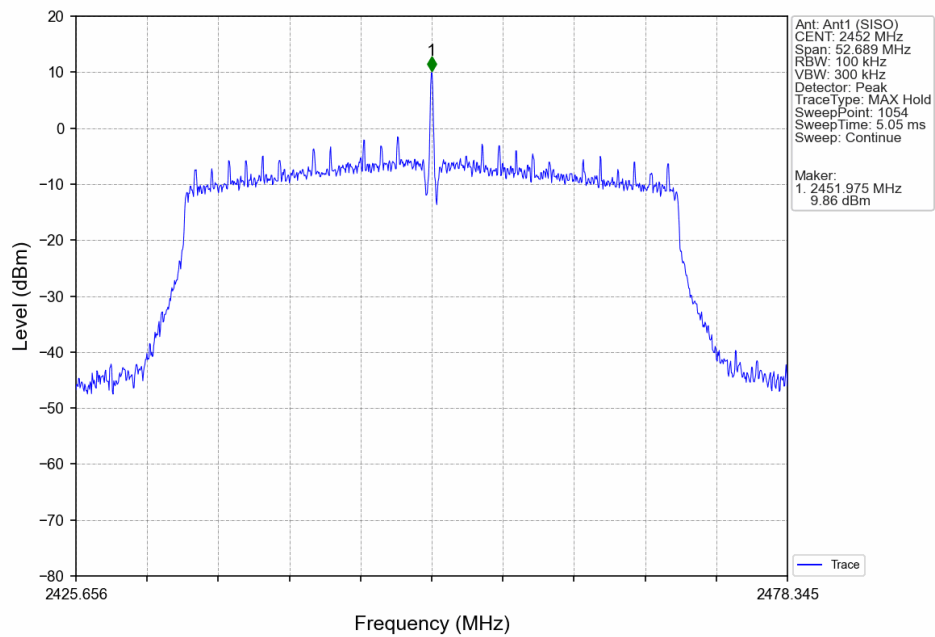




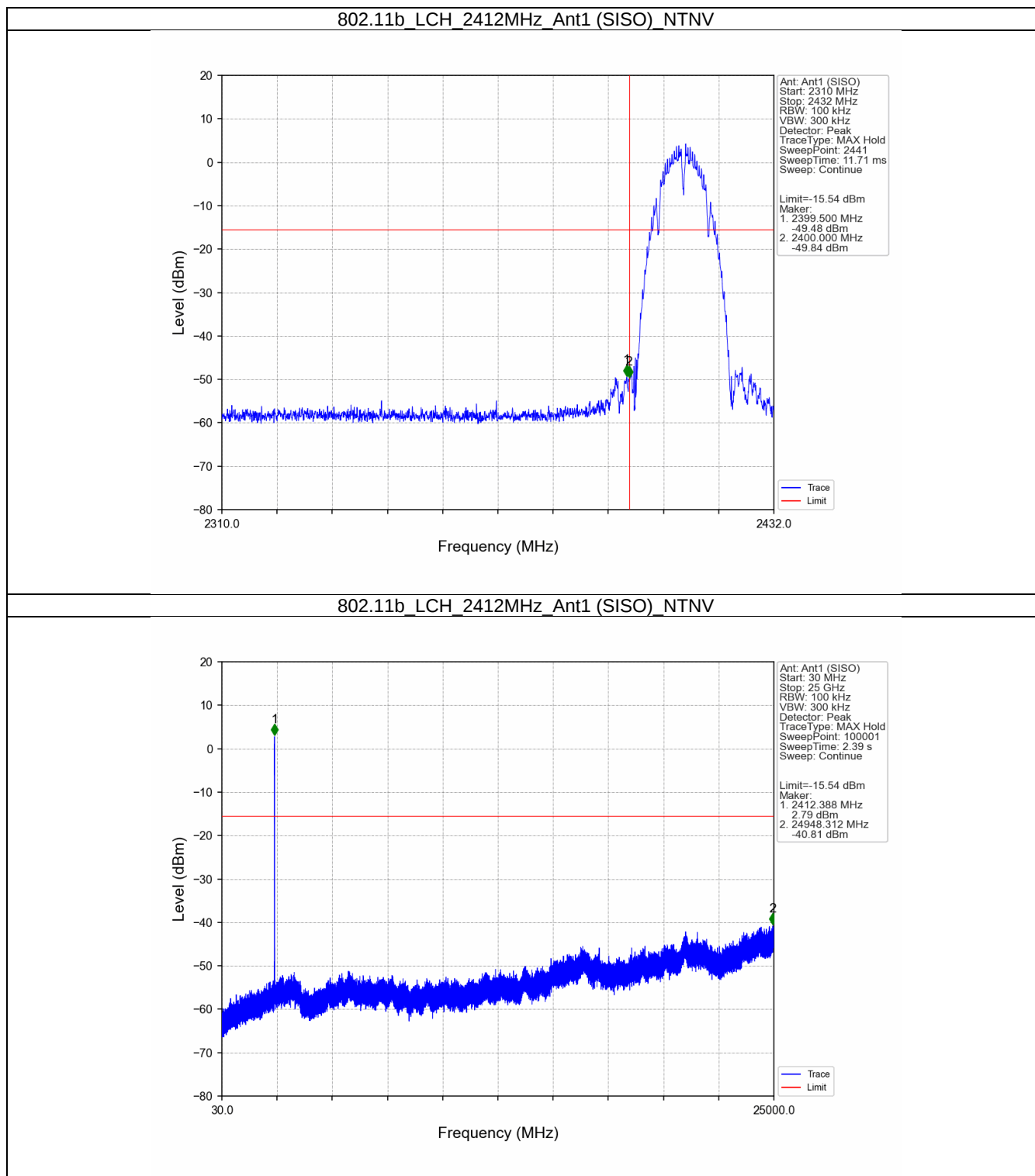
802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV

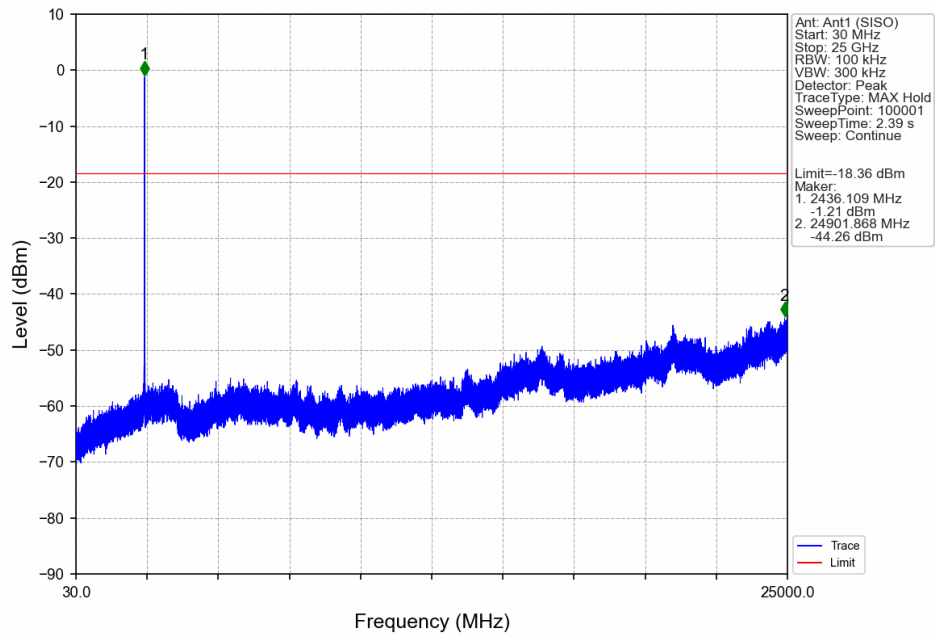


5.2.2 CSE

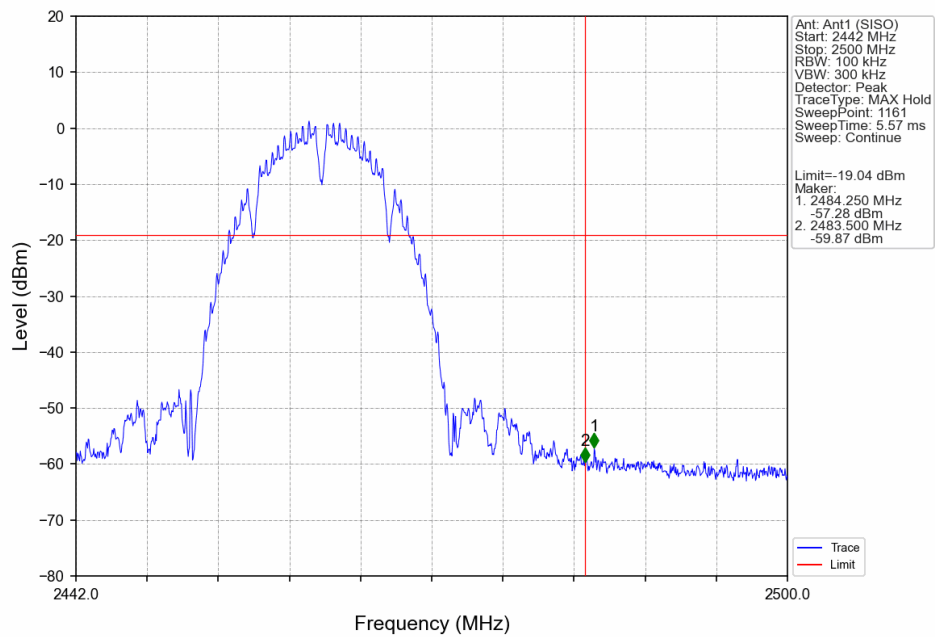




802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV

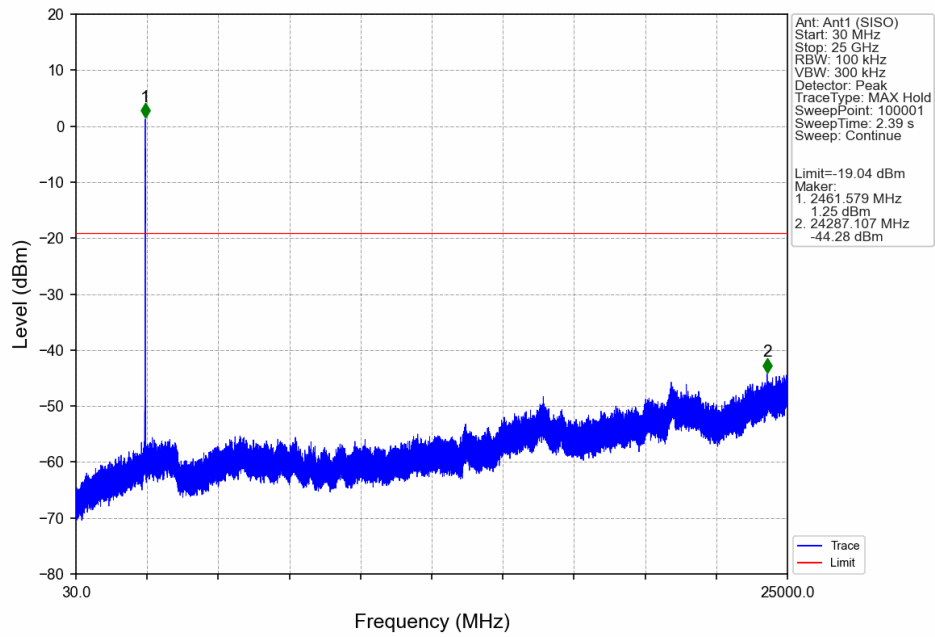


802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

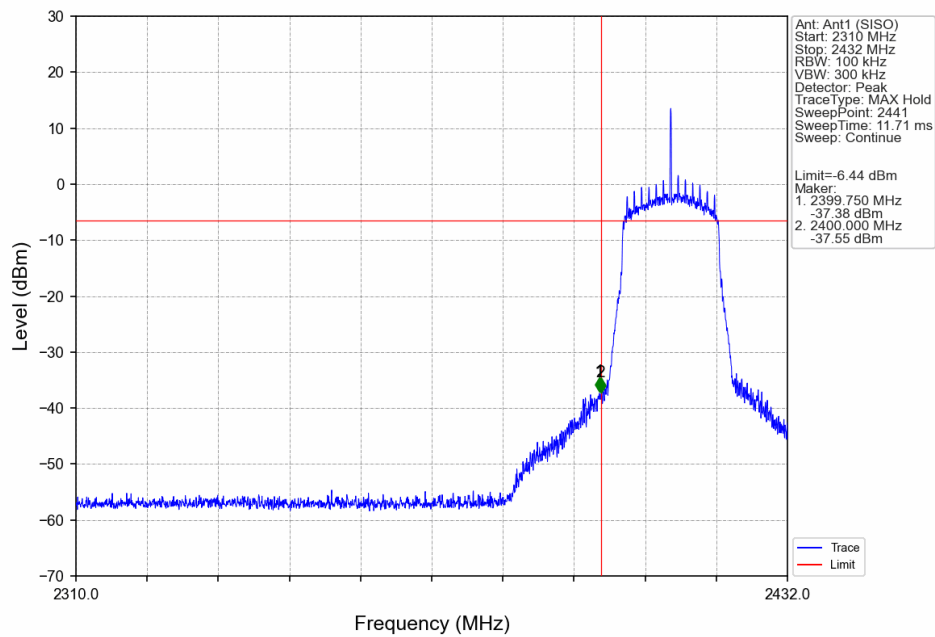




802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

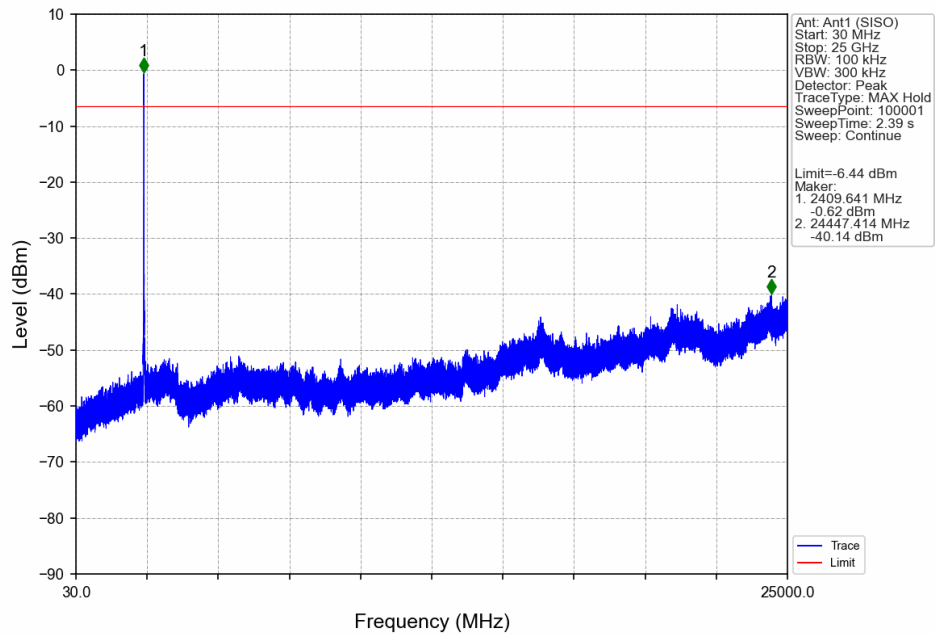


802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV

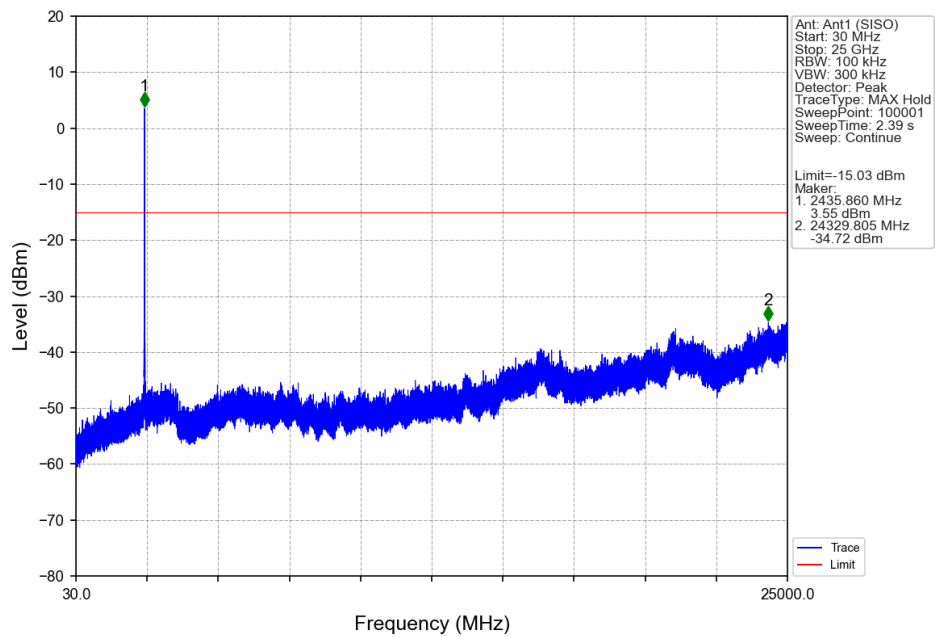




802.11g_LCH_2412MHz_Ant1 (SISO) NTN

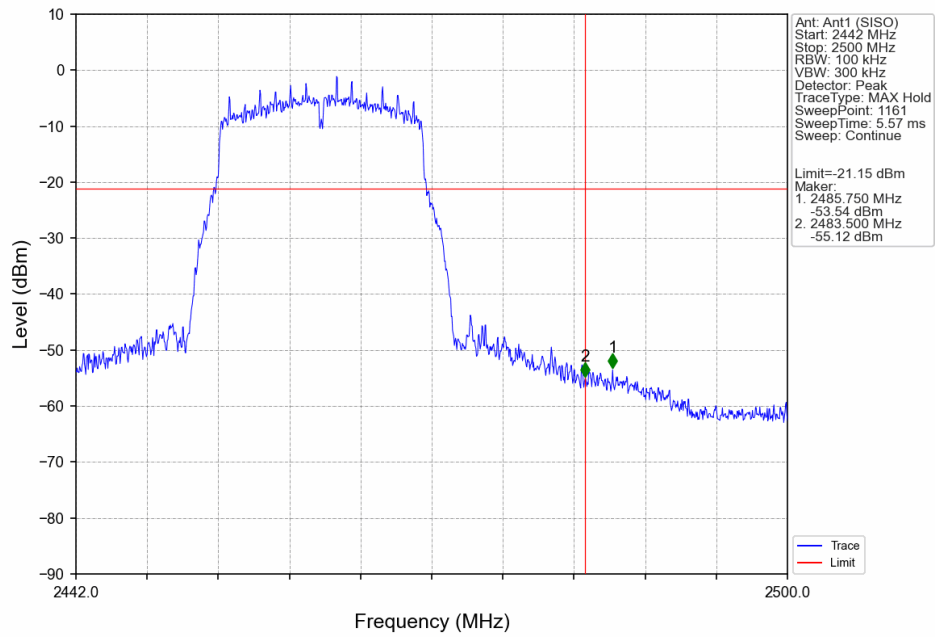


802.11g_MCH_2437MHz_Ant1 (SISO) NTN

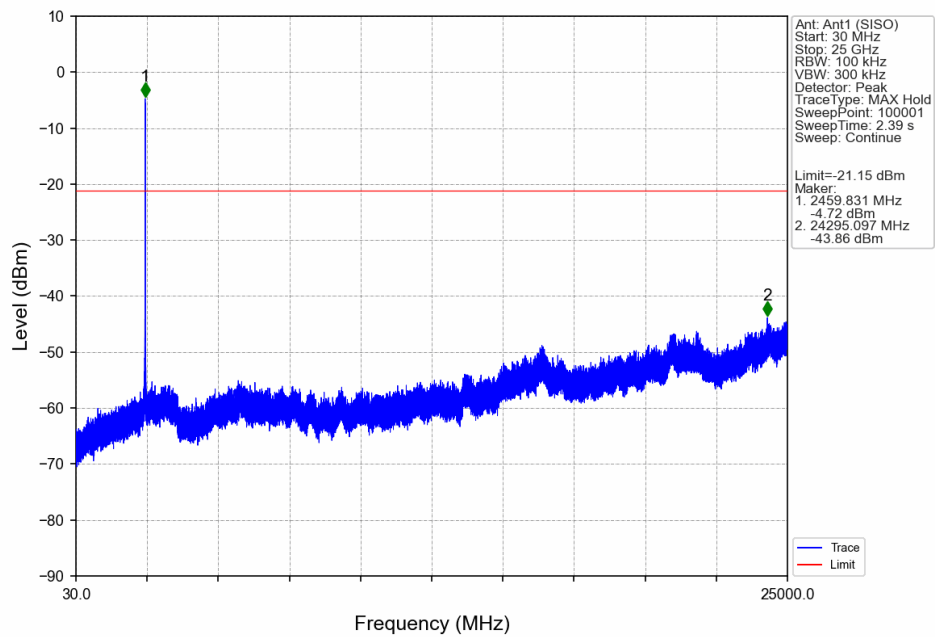




802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

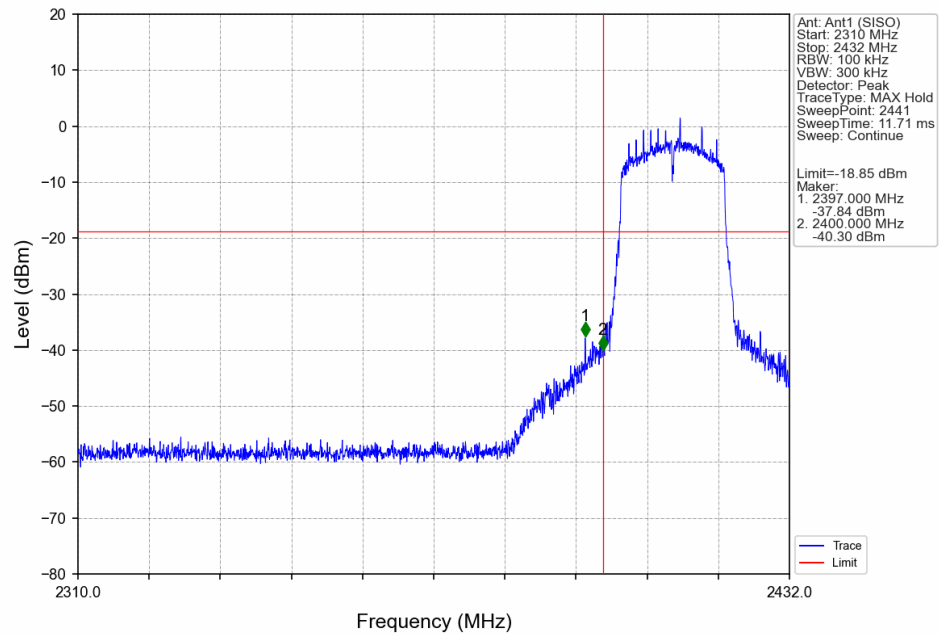


802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

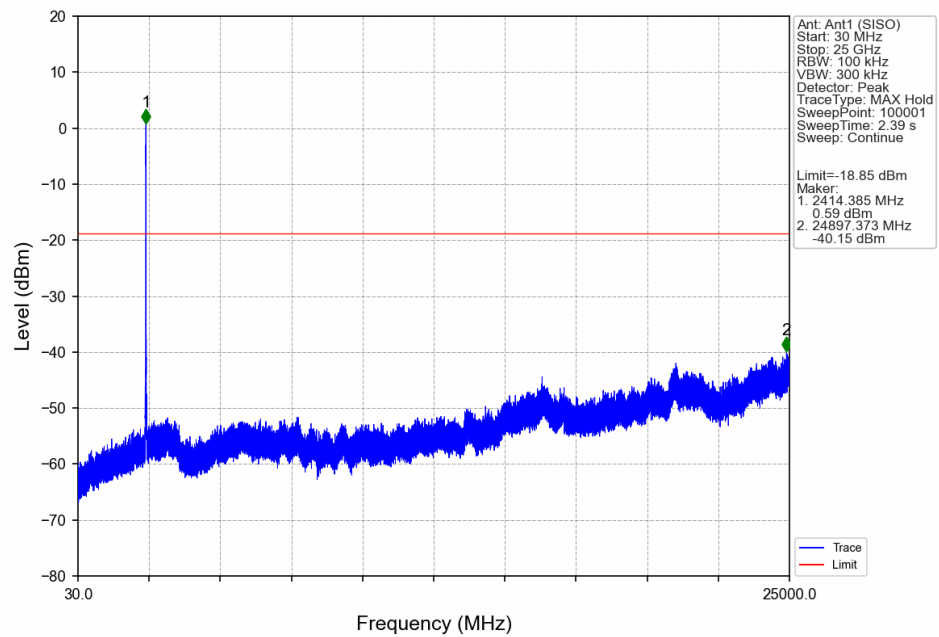




802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

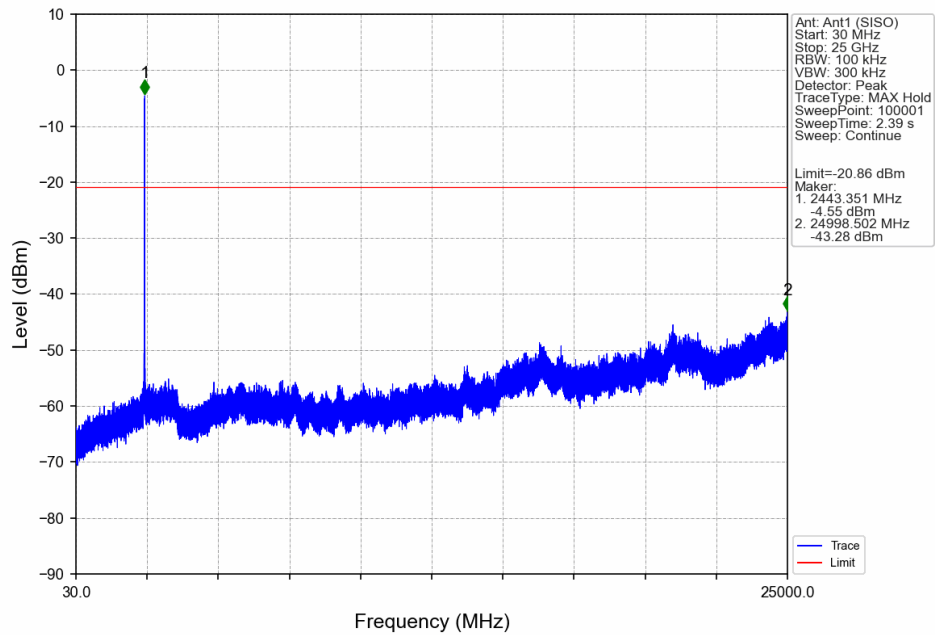


802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

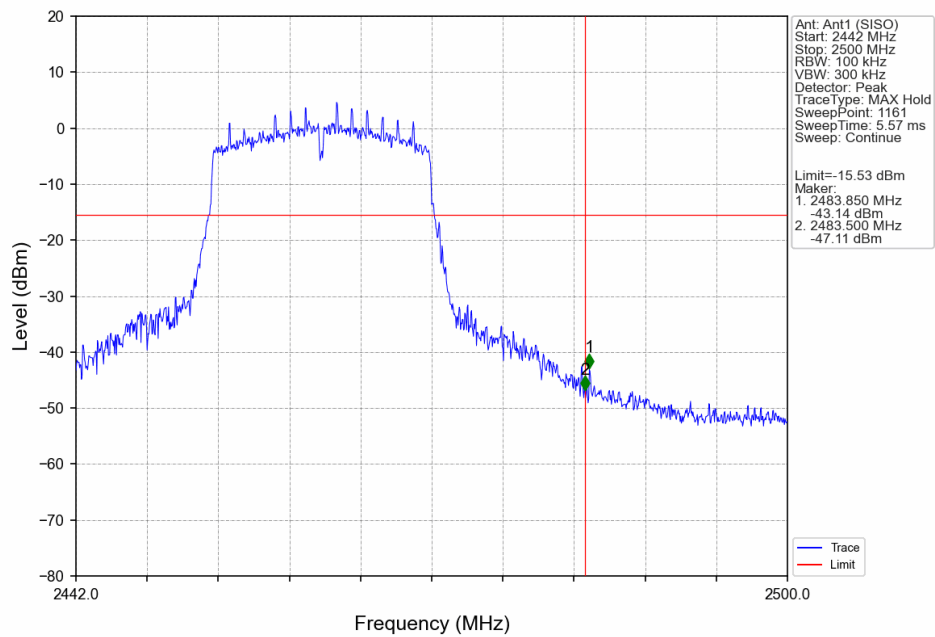




802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

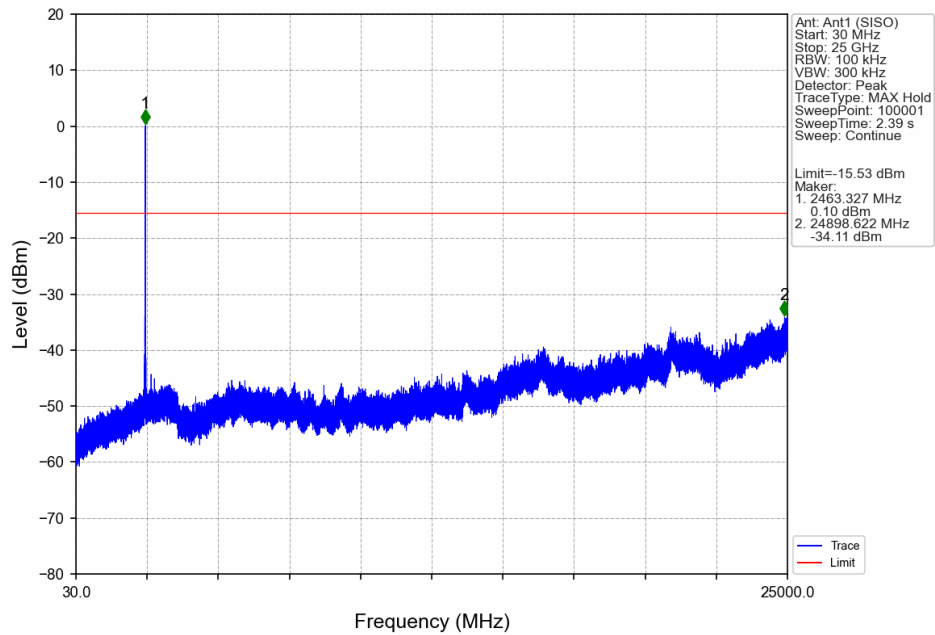


802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

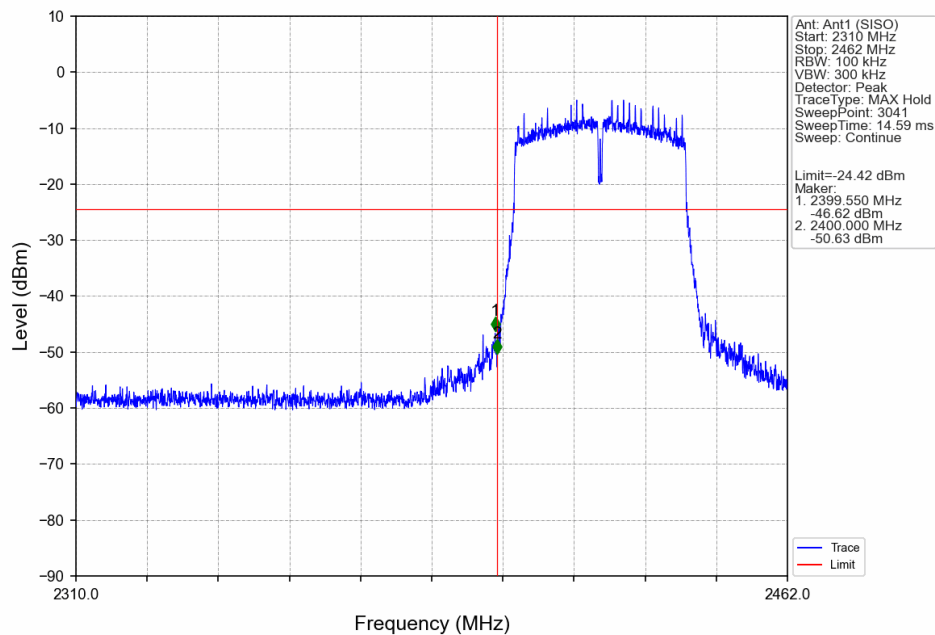




802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

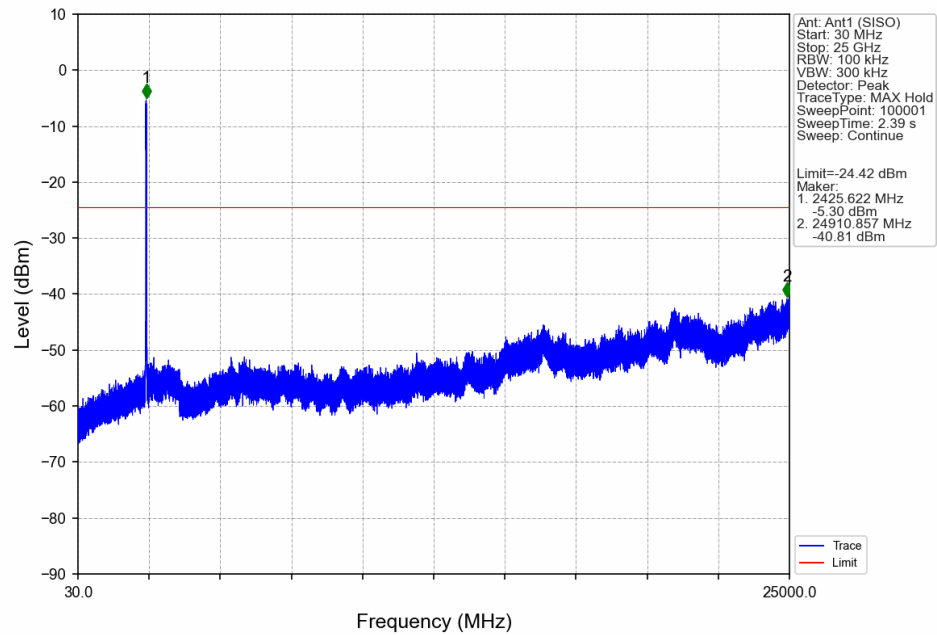


802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

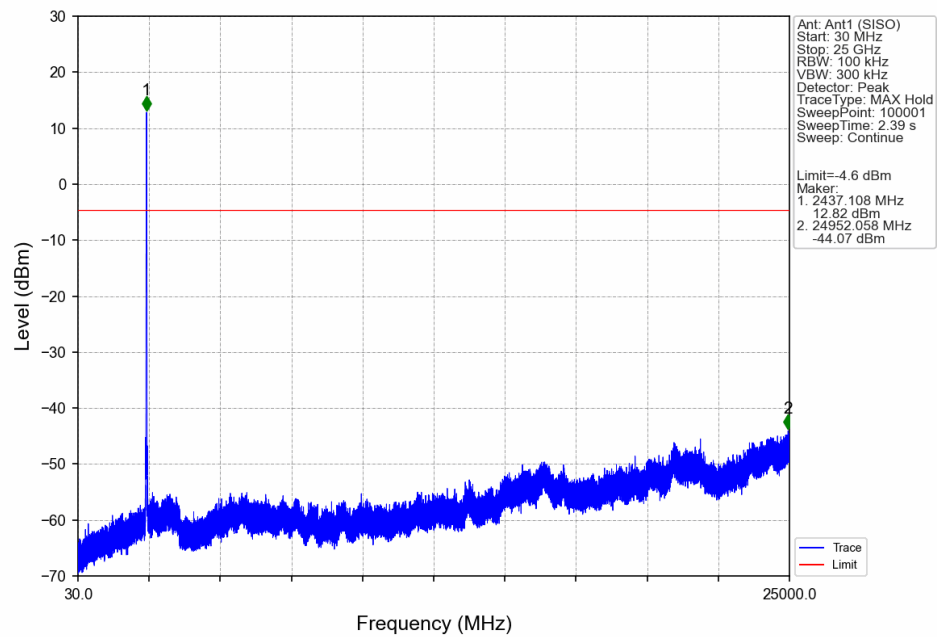




802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV

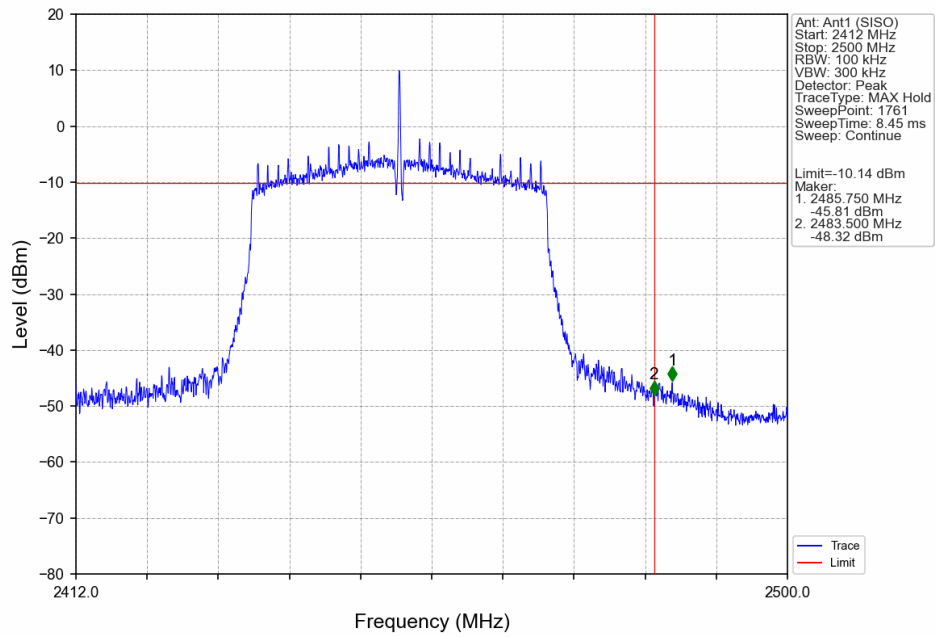


802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV

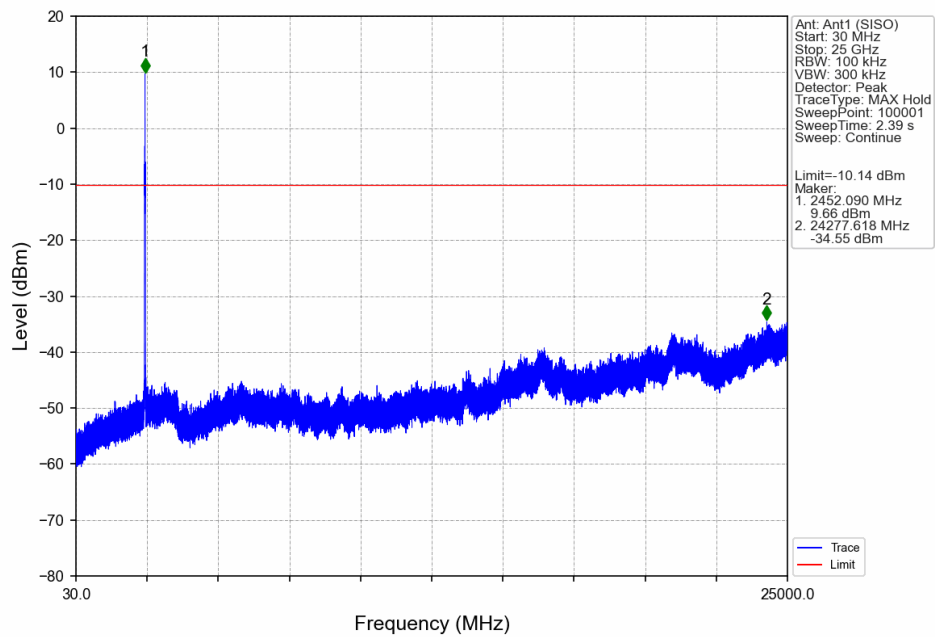




802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



6. Form731

6.1 Test Result

6.1.1 Form731

For FCC

Lower Freq (MHz)	High Freq (MHz)	MAX Power (W)	MAX Power (dBm)
2412	2462	0.1928	22.85
2422	2452	0.0887	19.48

For ISSED

Mode	Lower Freq. (MHz)	High Freq. (MHz)	MAX Power (W)	MAX Power (dBm)	MIN Power (W)	MIN Power (dBm)	Emission Designator	MAX OBW (MHz)
802.11b	2412	2462	0.0303	14.81	0.0152	11.82	12M8G1D	12.794
802.11g	2412	2462	0.1928	22.85	0.0242	13.84	17M5D1D	17.509
802.11n (HT20)	2412	2462	0.1528	21.84	0.0449	16.52	18M6D1D	18.56
802.11n (HT40)	2422	2452	0.0887	19.48	0.0400	16.02	36M4D1D	36.399