

Appendix A for KSEM210800138401

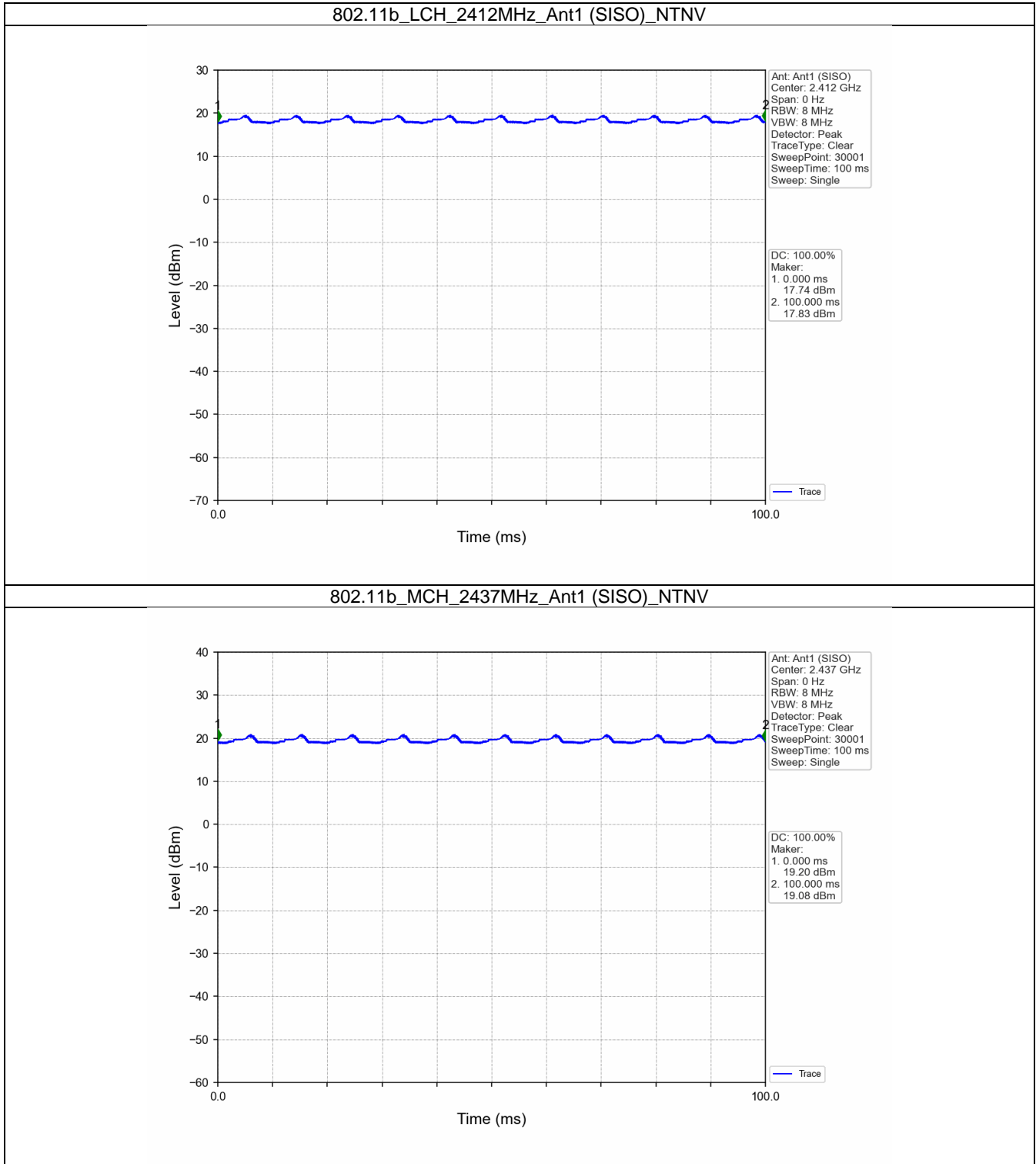
1. Duty Cycle

1.1 Ant1

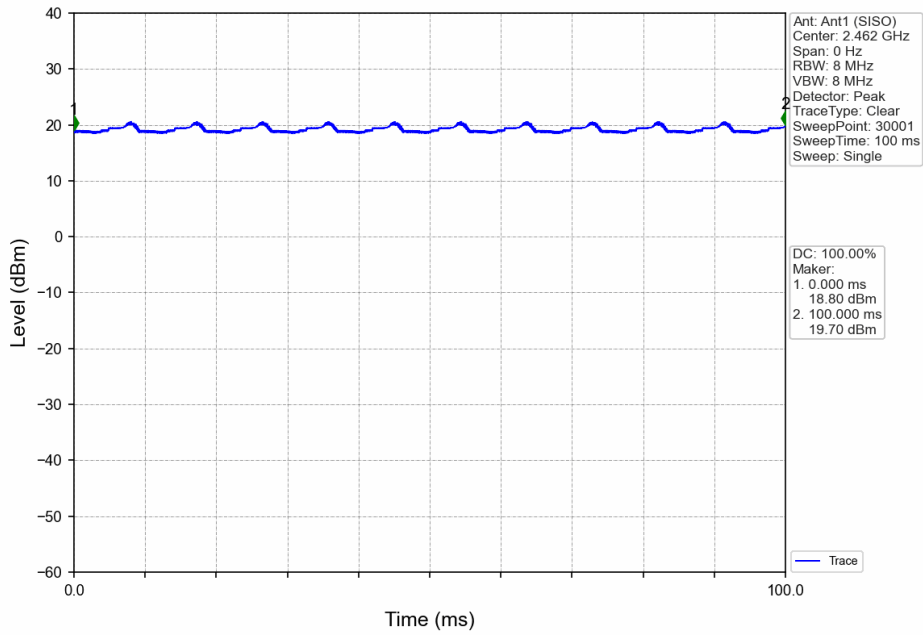
1.1.1 Test Result

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	100.000	100.000	100.00	0.00	0.00
		2437	100.000	100.000	100.00	0.00	0.00
		2462	100.000	100.000	100.00	0.00	0.00
802.11g	SISO	2412	100.000	100.000	100.00	0.00	0.00
		2437	100.000	100.000	100.00	0.00	0.00
		2462	100.000	100.000	100.00	0.00	0.00
802.11n (HT20)	SISO	2412	100.000	100.000	100.00	0.00	0.00
		2437	100.000	100.000	100.00	0.00	0.00
		2462	100.000	100.000	100.00	0.00	0.00
802.11n (HT40)	SISO	2422	100.000	100.000	100.00	0.00	0.00
		2437	100.000	100.000	100.00	0.00	0.00
		2452	100.000	100.000	100.00	0.00	0.00

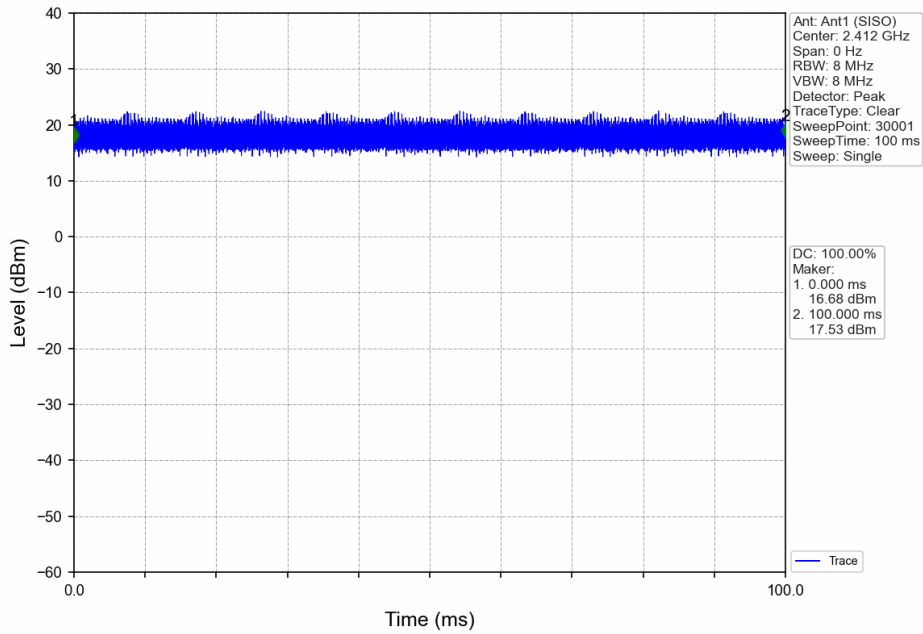
1.1.2 Test Graph



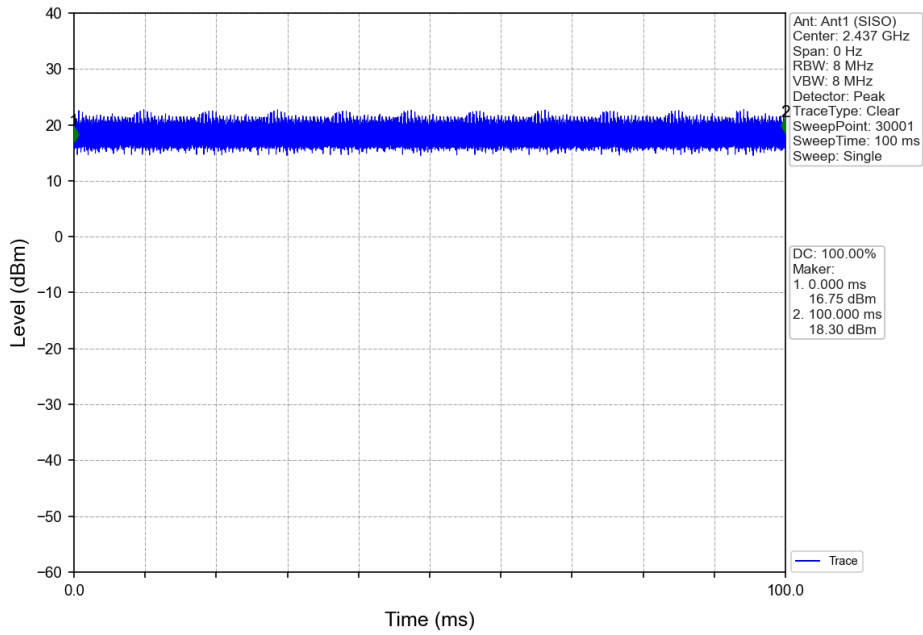
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



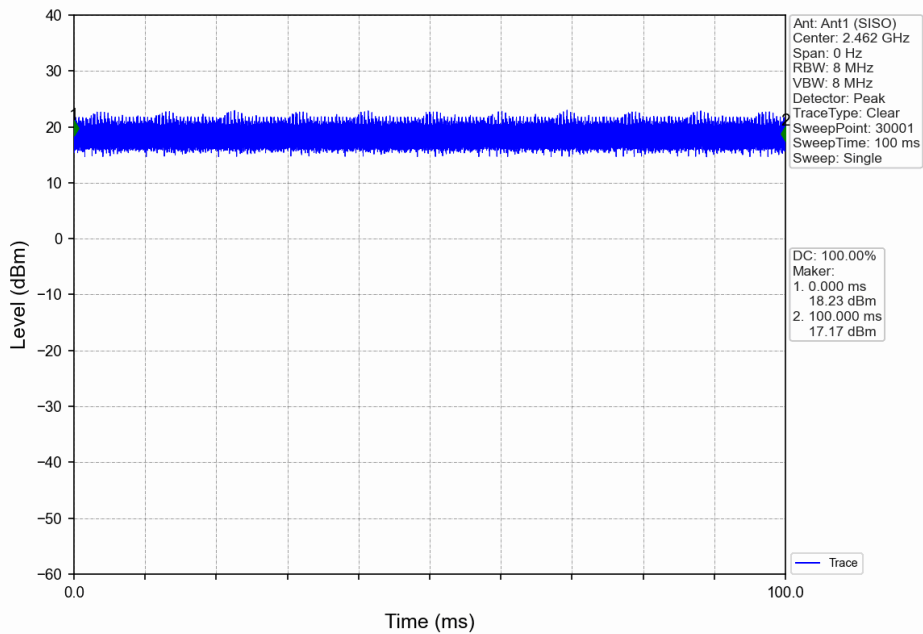
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



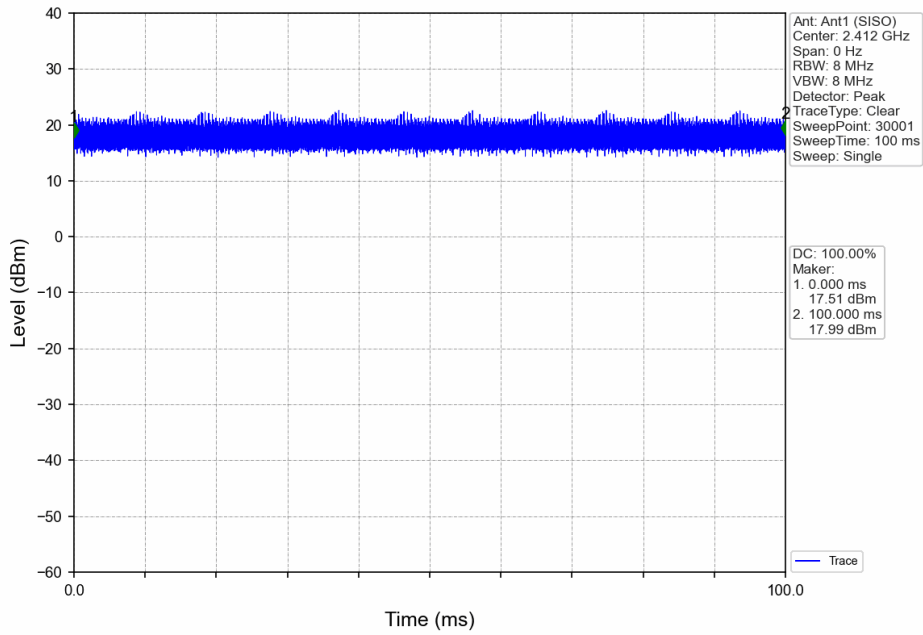
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



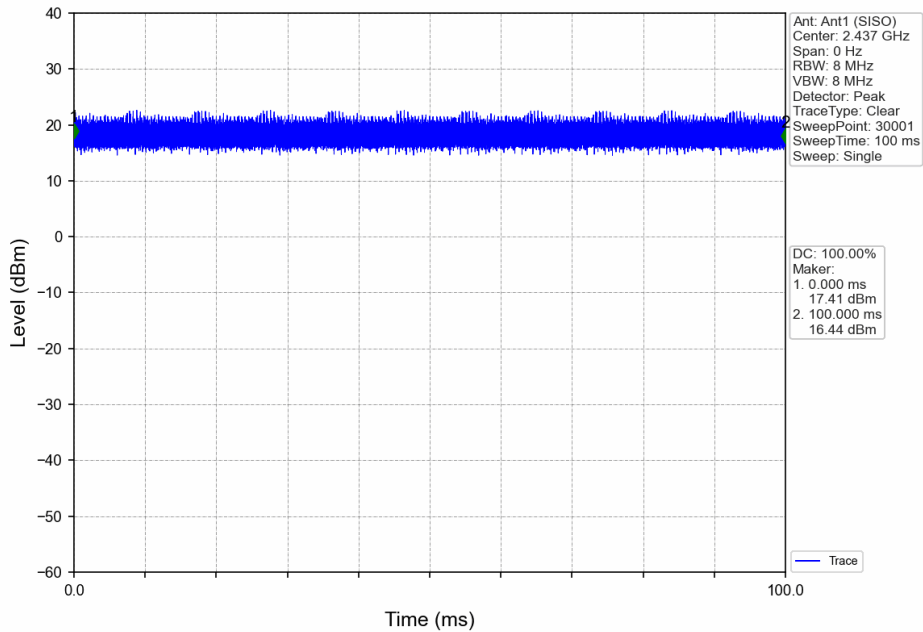
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



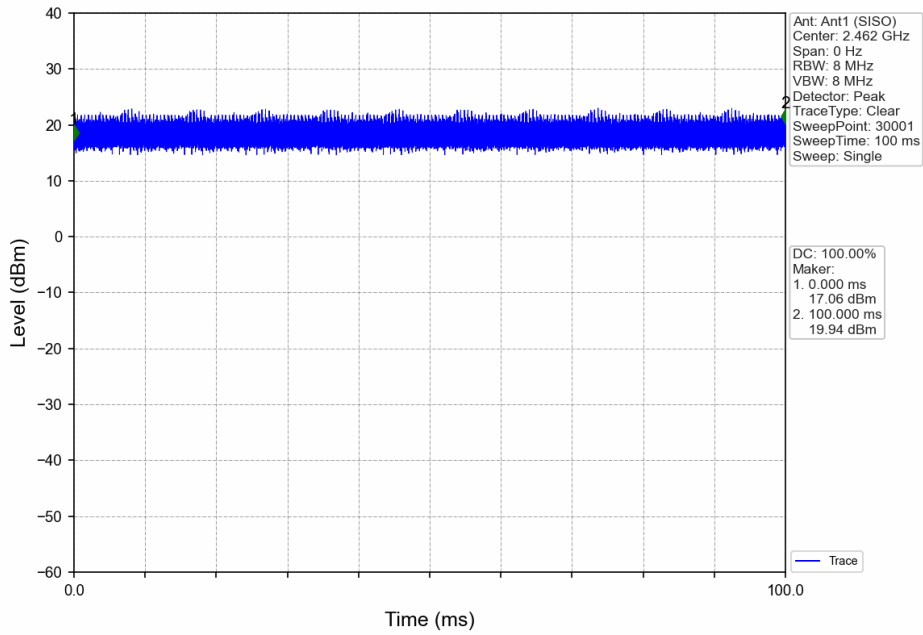
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



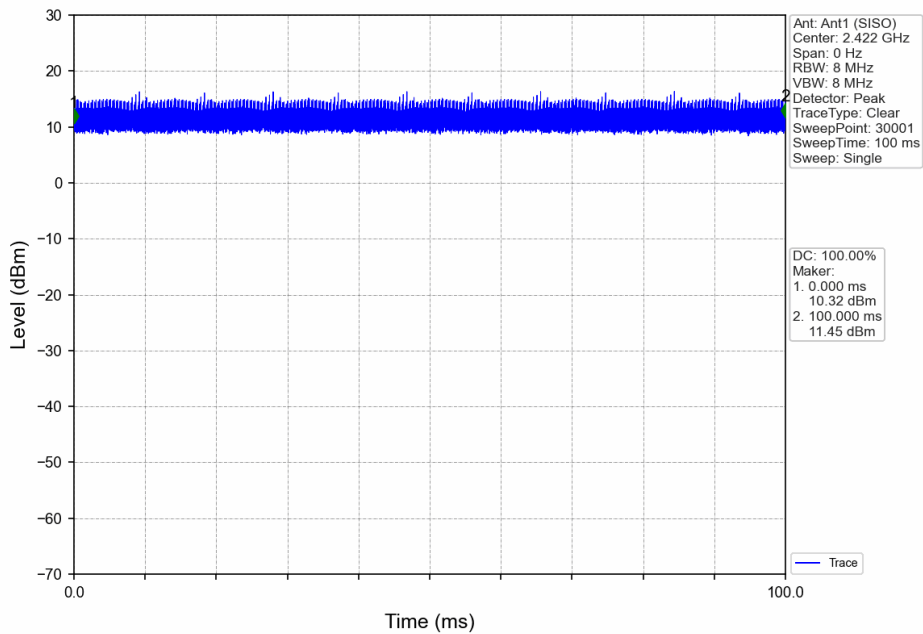
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



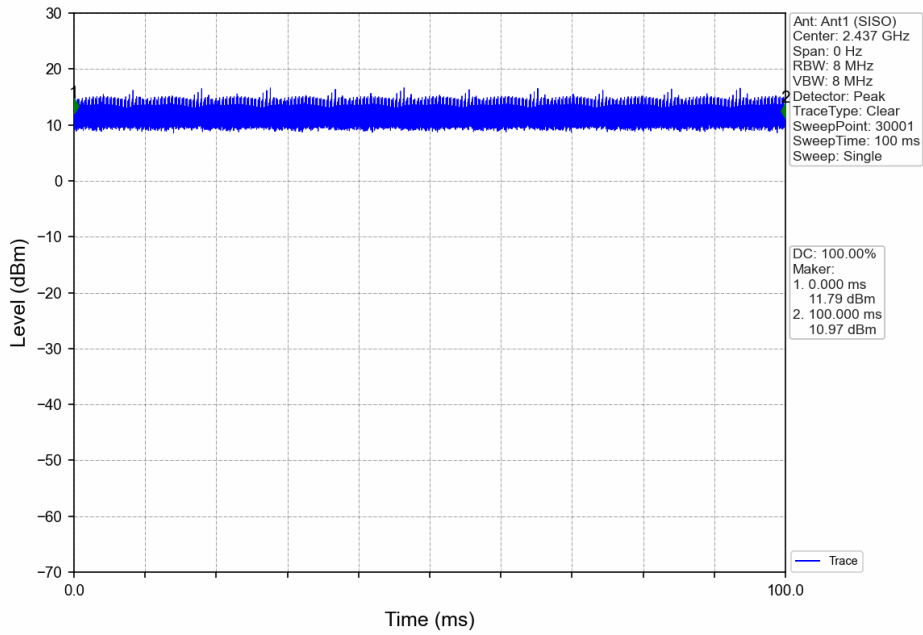
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



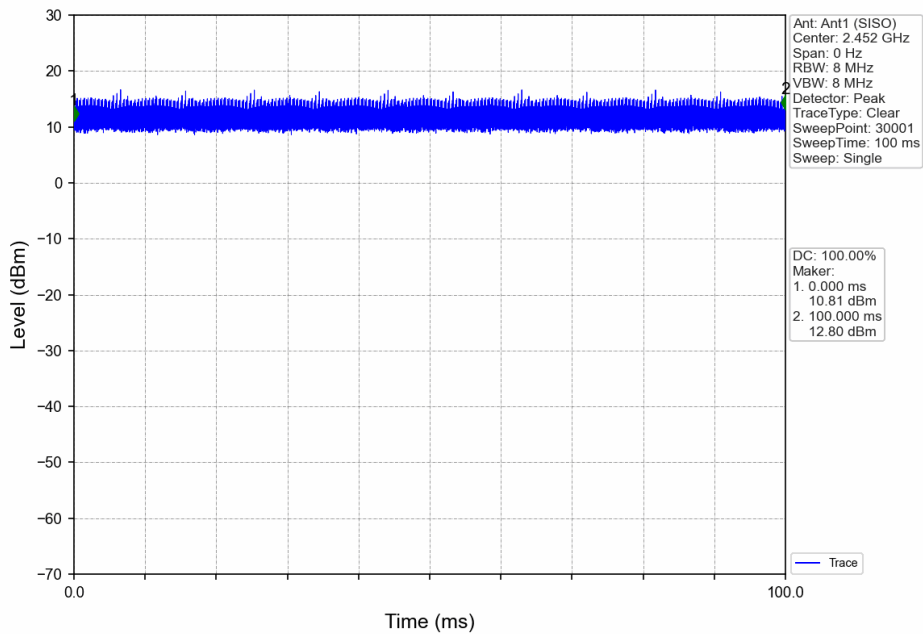
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



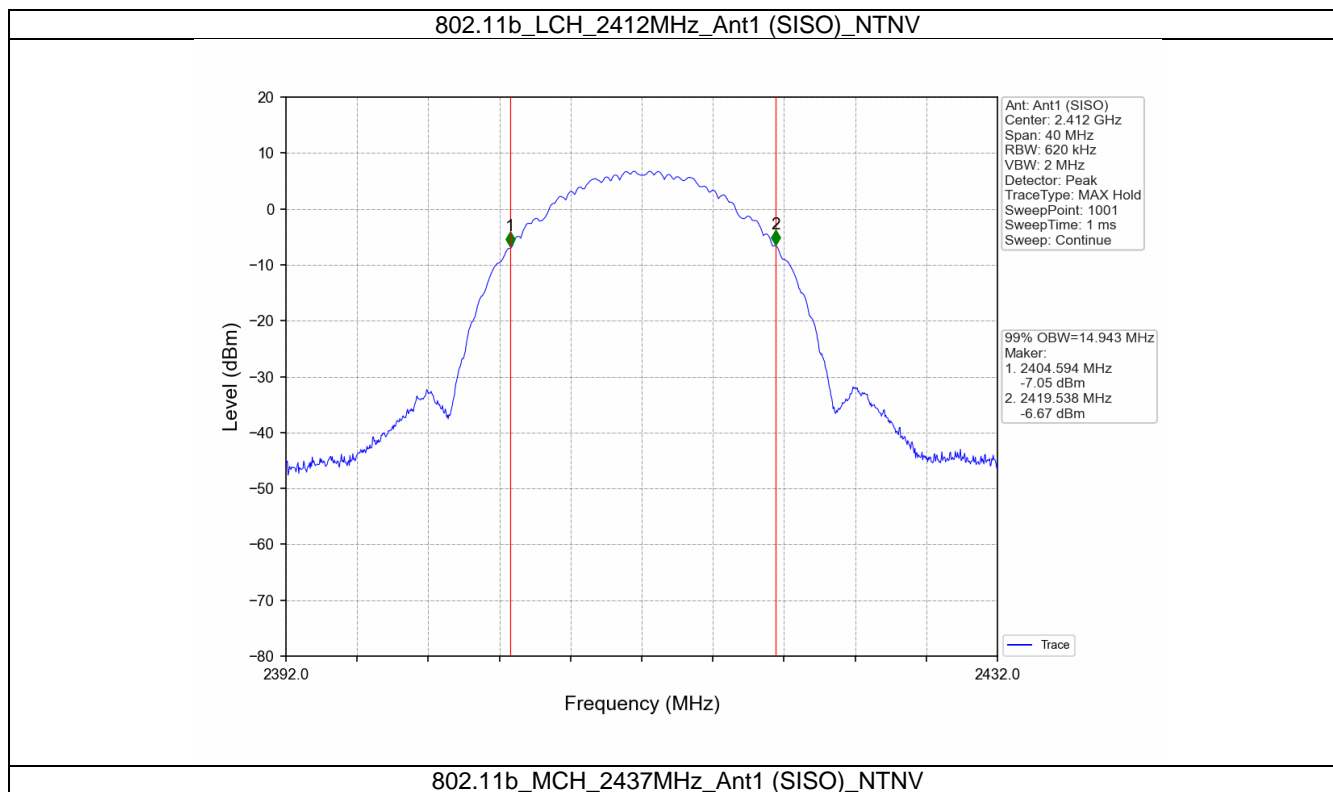
2. Bandwidth

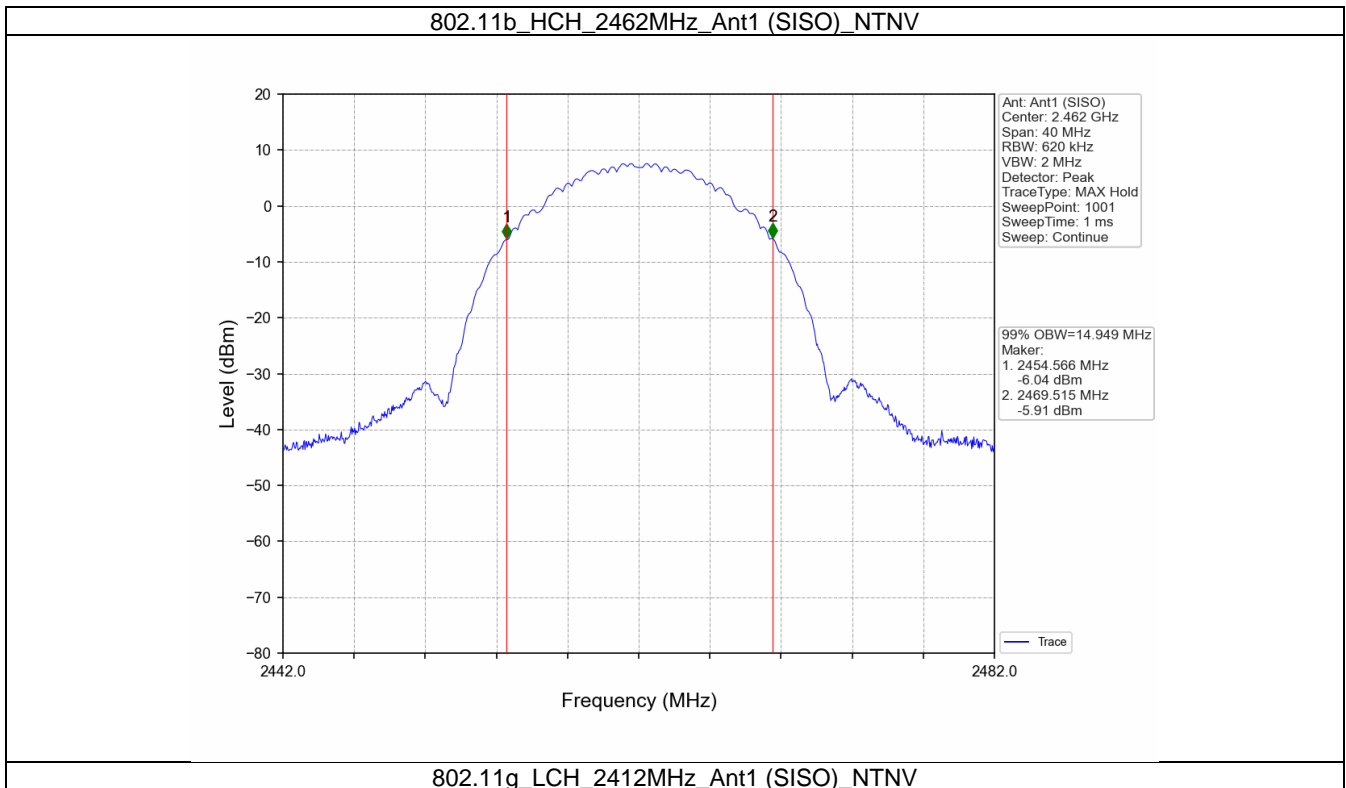
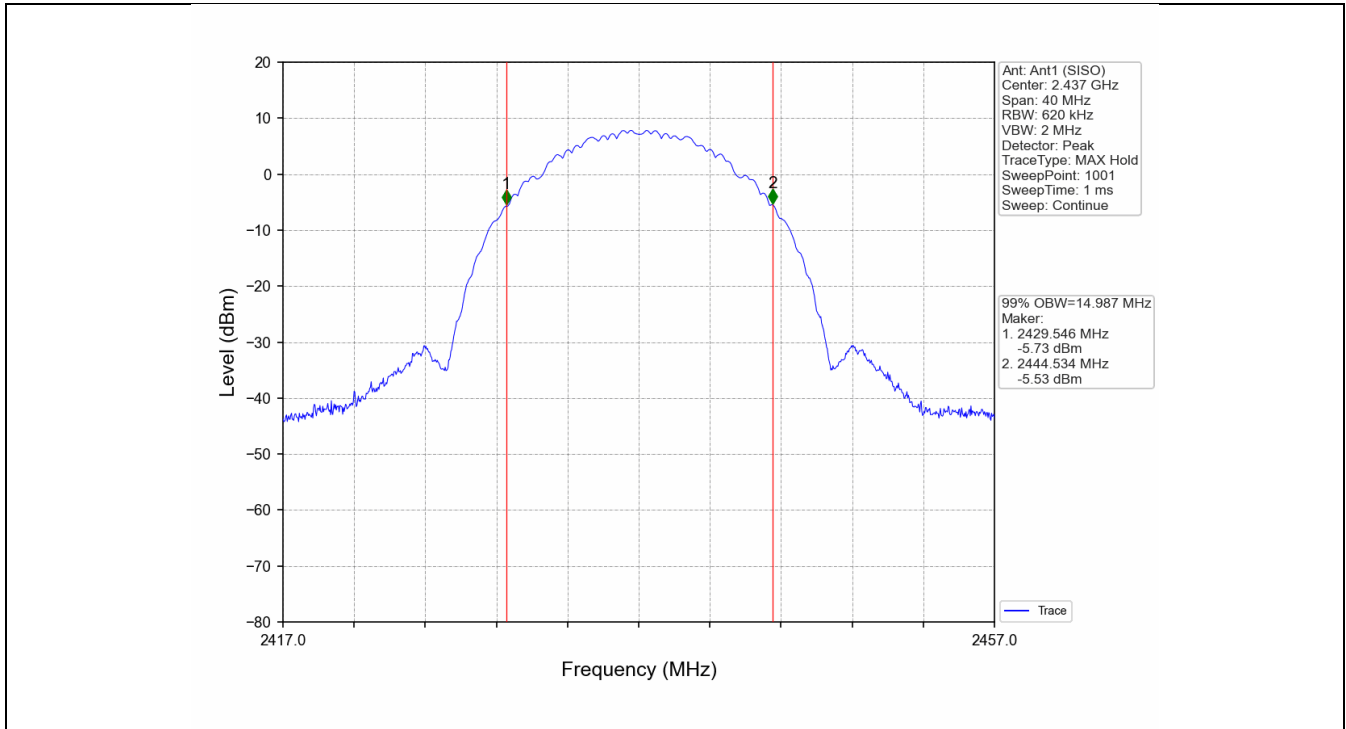
2.1 OBW

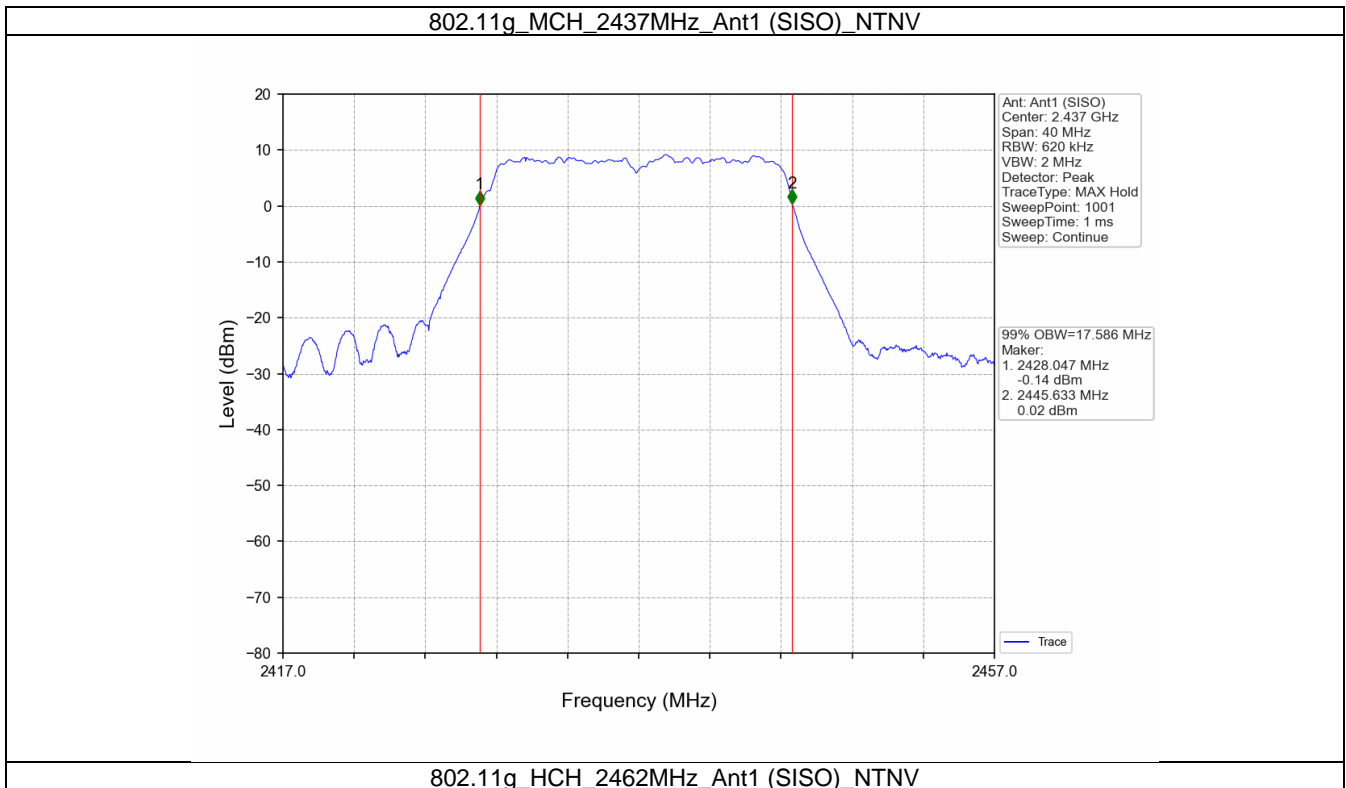
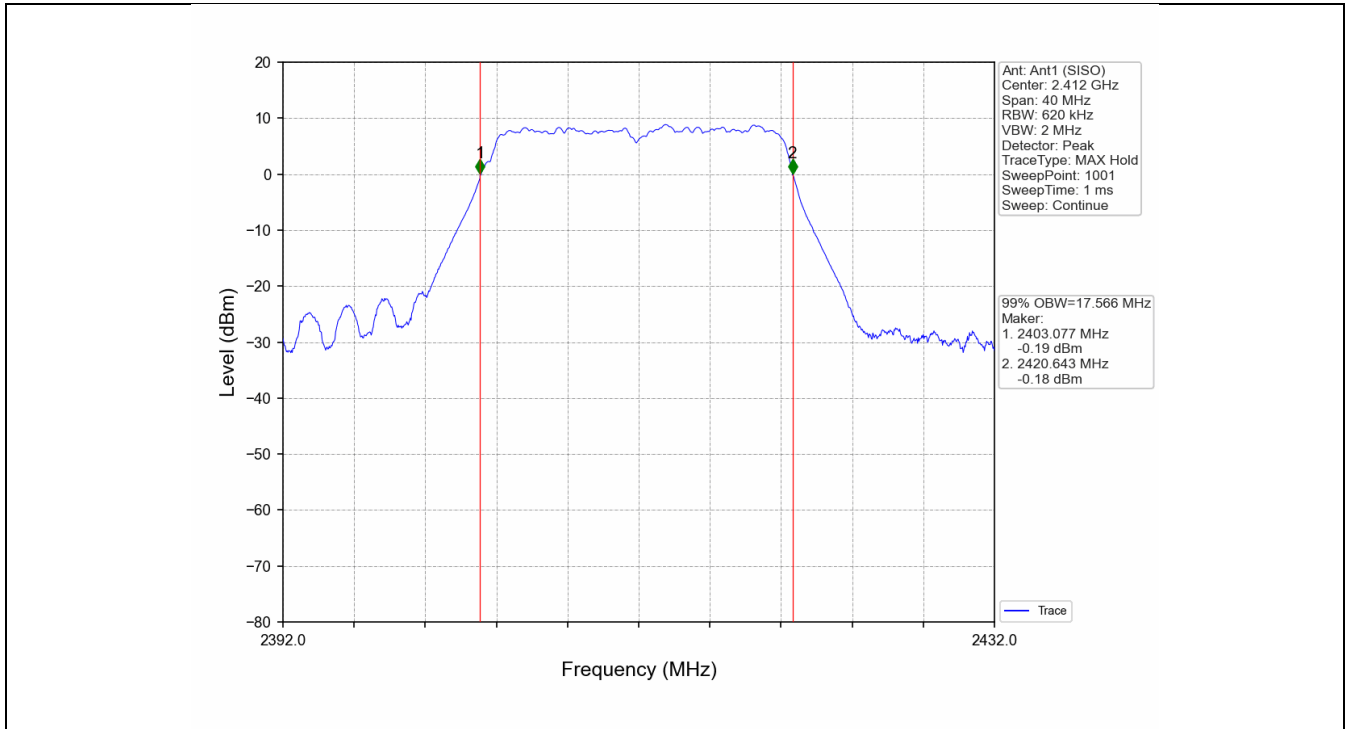
2.1.1 Test Result

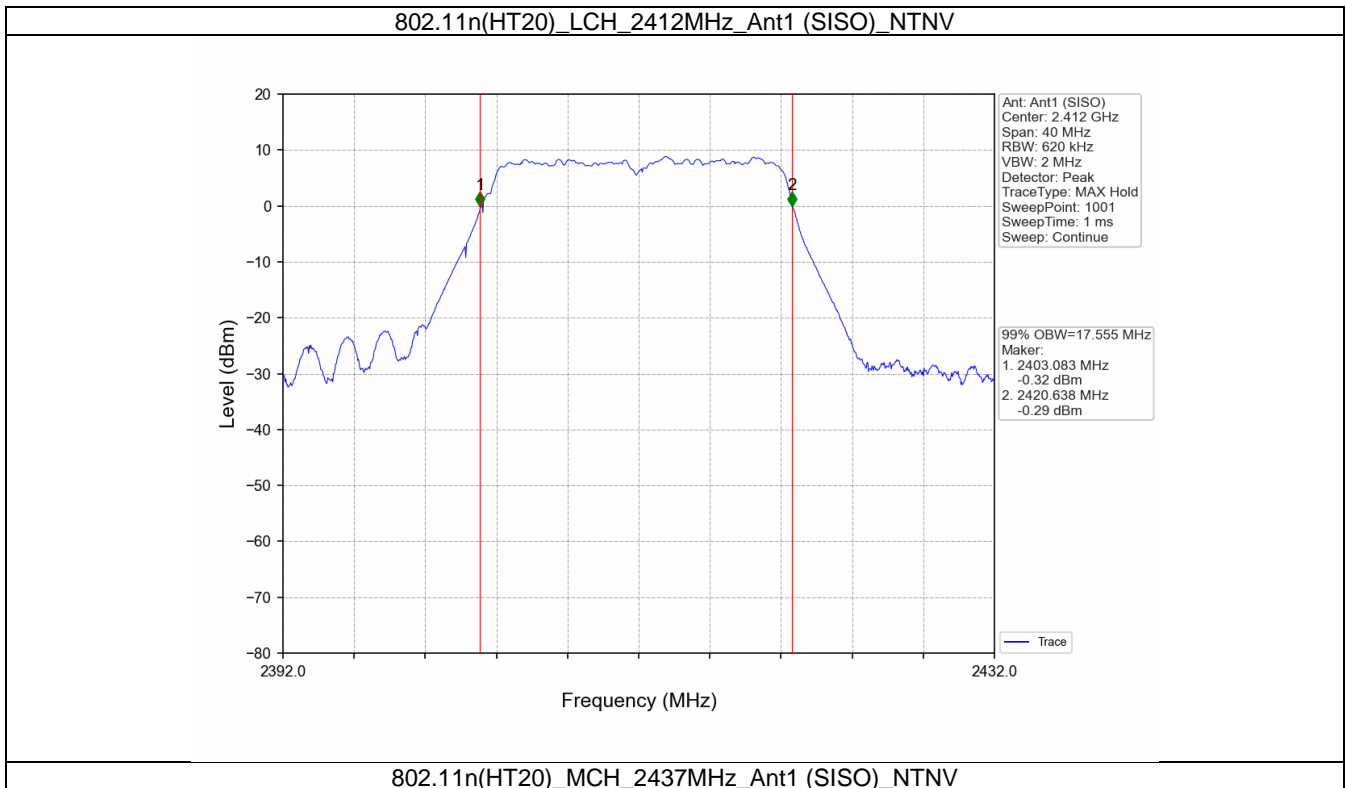
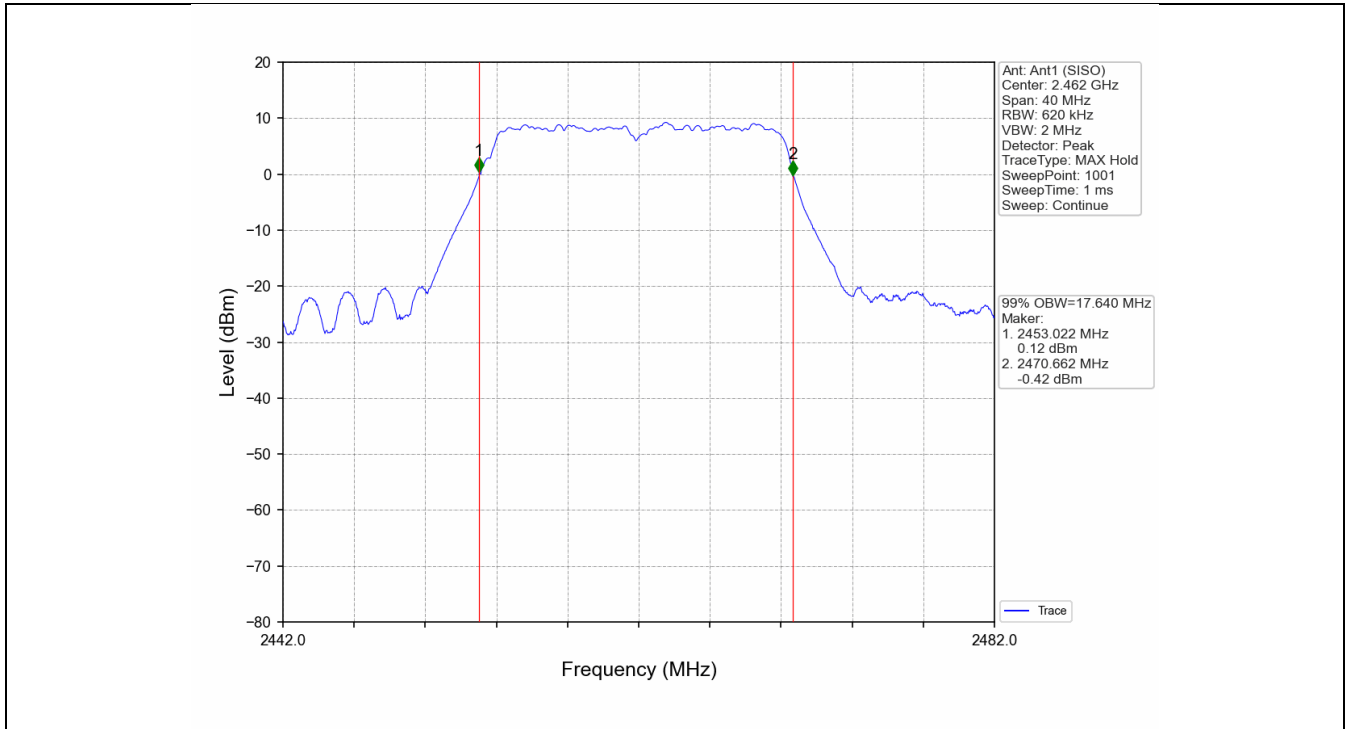
Mode	TX Type	Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11b	SISO	2412	1	14.943	Pass
		2437	1	14.987	Pass
		2462	1	14.949	Pass
802.11g	SISO	2412	1	17.566	Pass
		2437	1	17.586	Pass
		2462	1	17.640	Pass
802.11n (HT20)	SISO	2412	1	17.555	Pass
		2437	1	17.586	Pass
		2462	1	17.641	Pass
802.11n (HT40)	SISO	2422	1	36.799	Pass
		2437	1	36.849	Pass
		2452	1	36.966	Pass

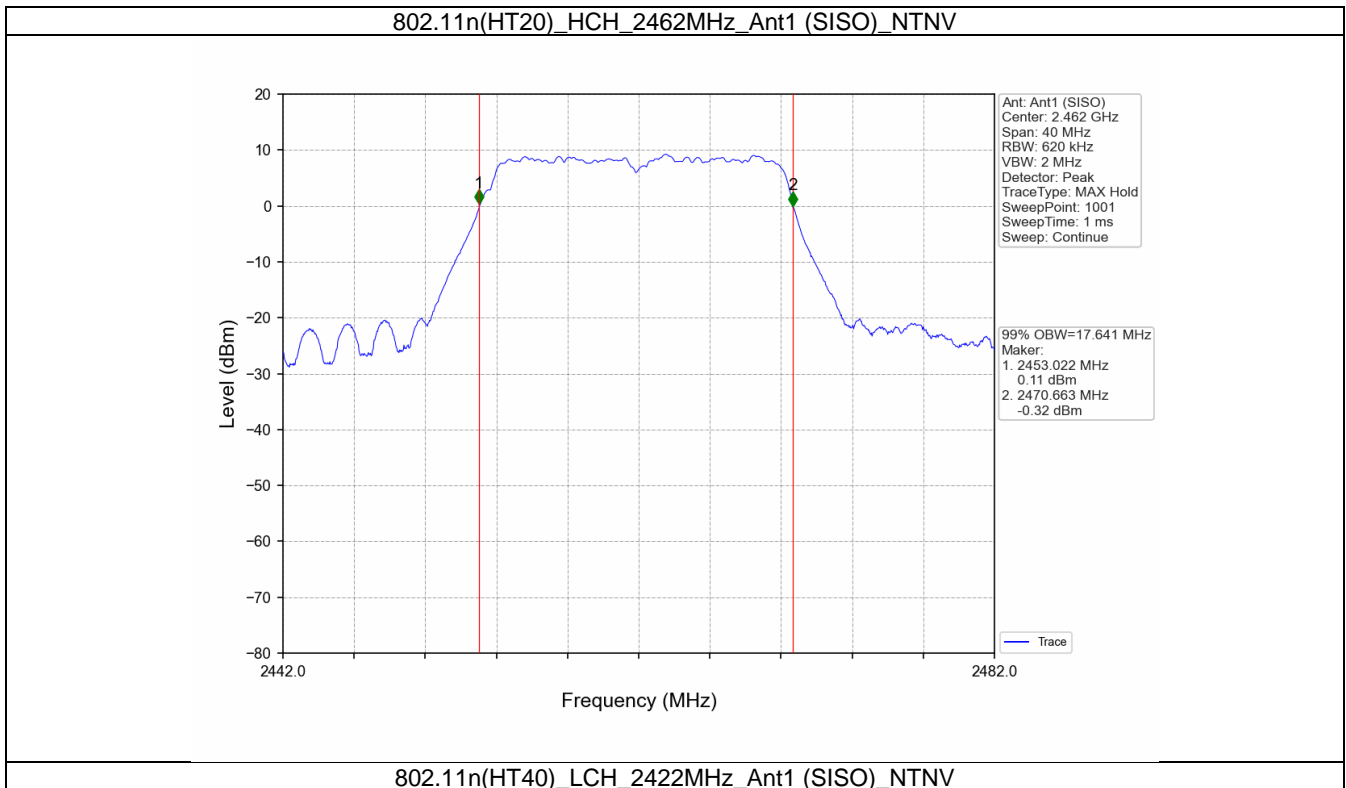
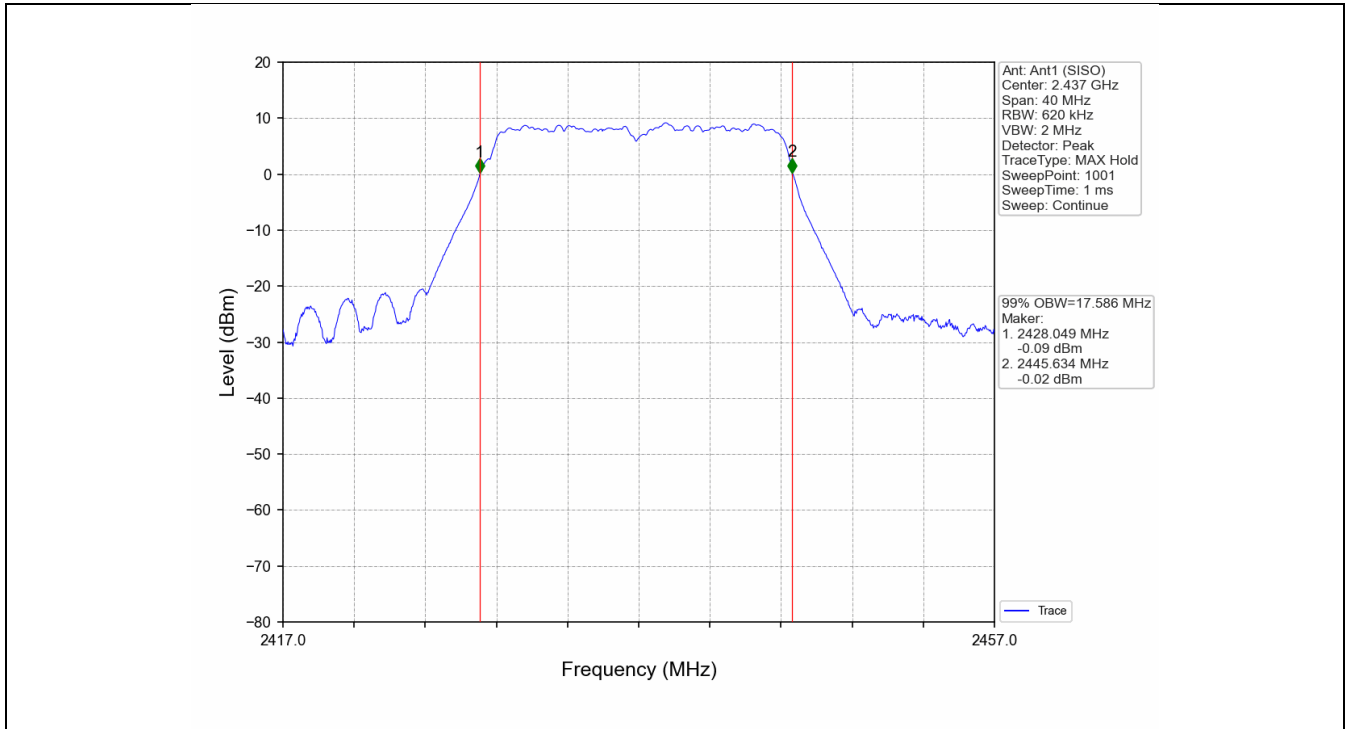
2.1.2 Test Graph

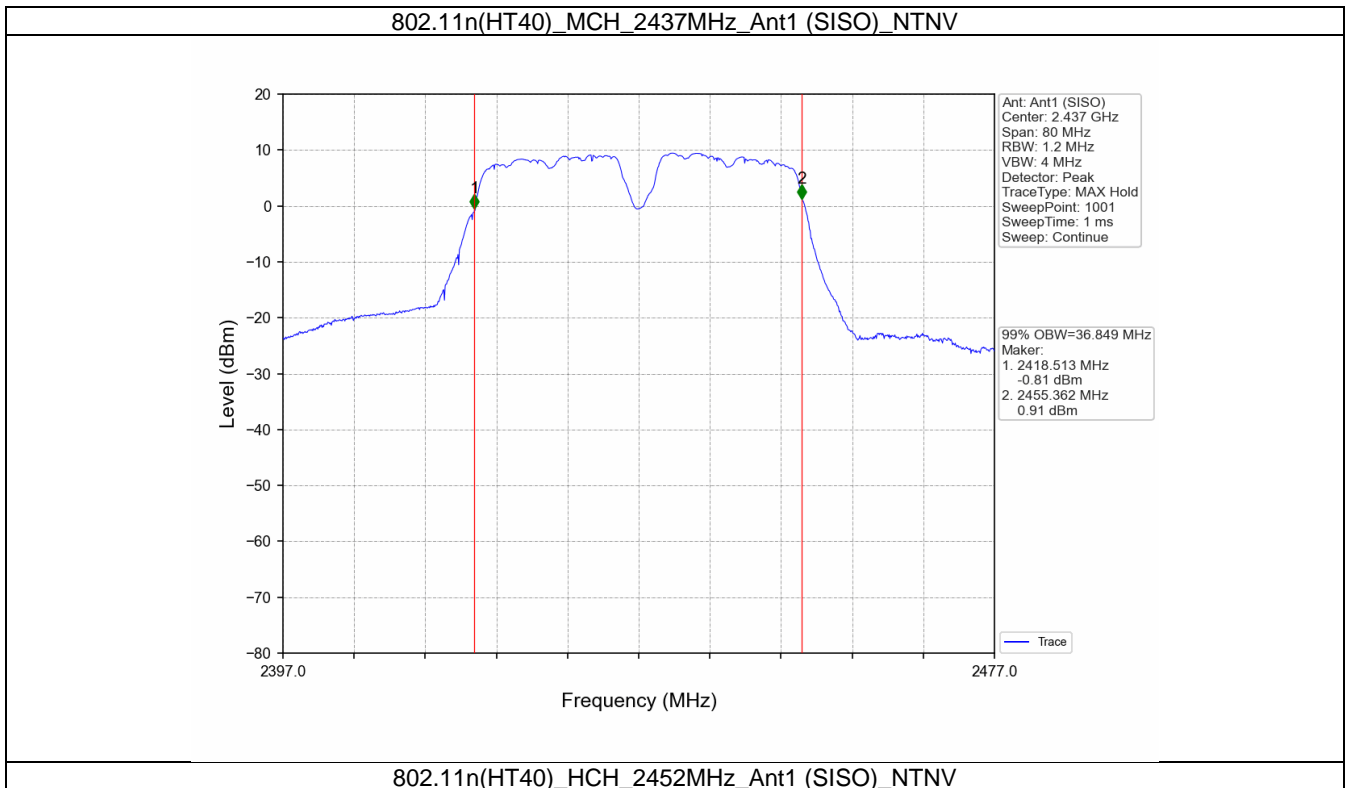
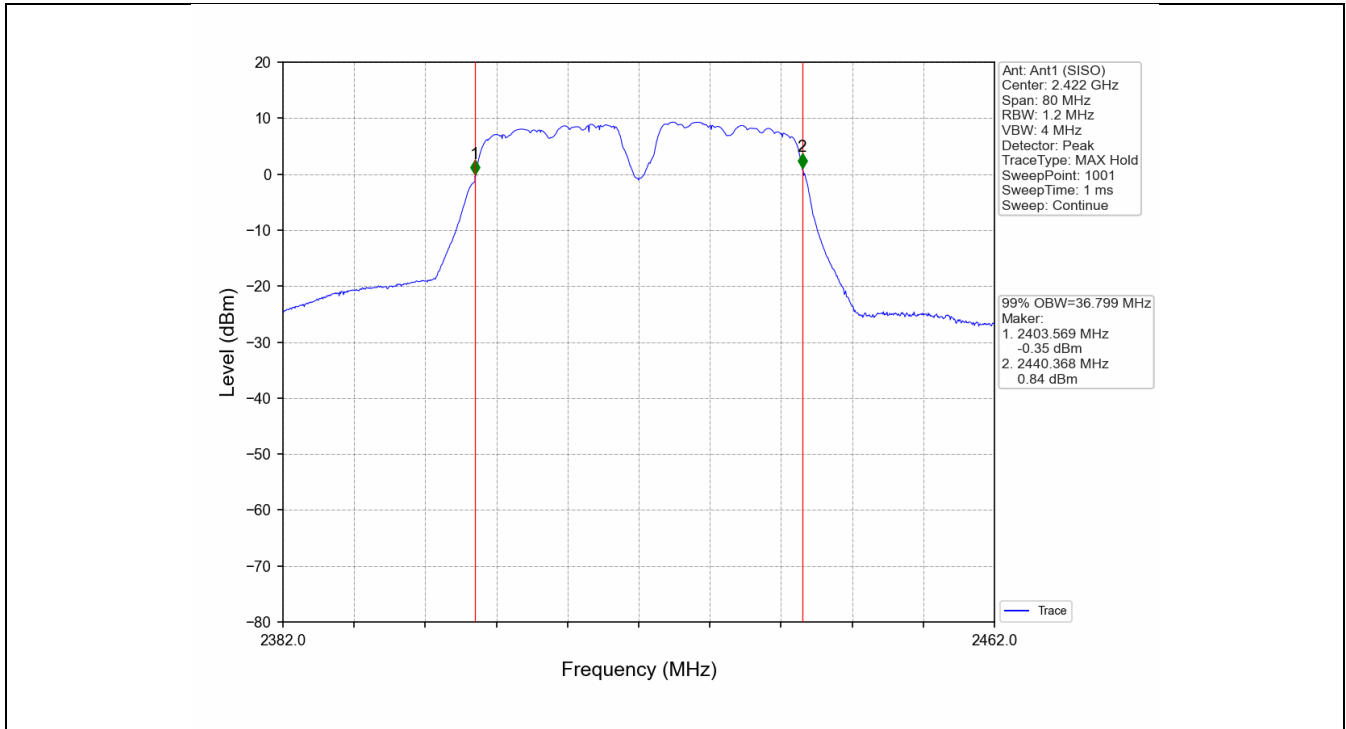


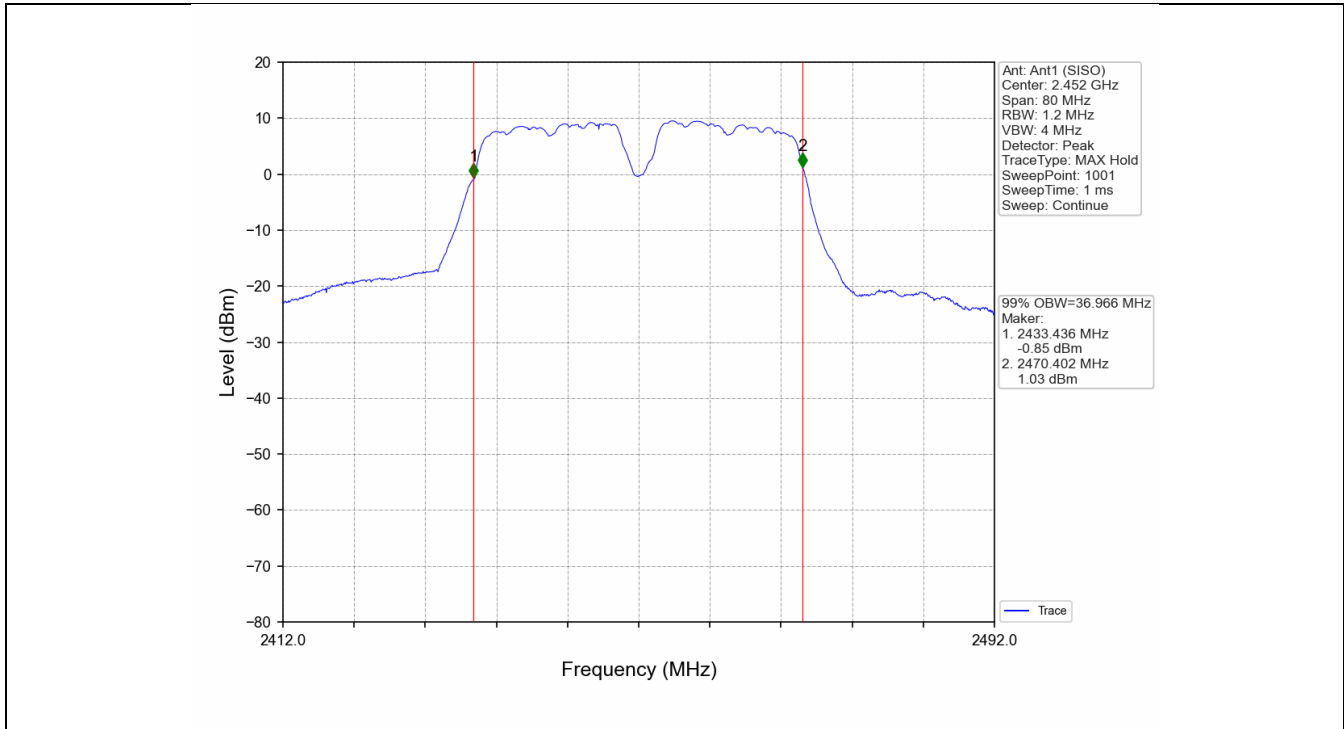










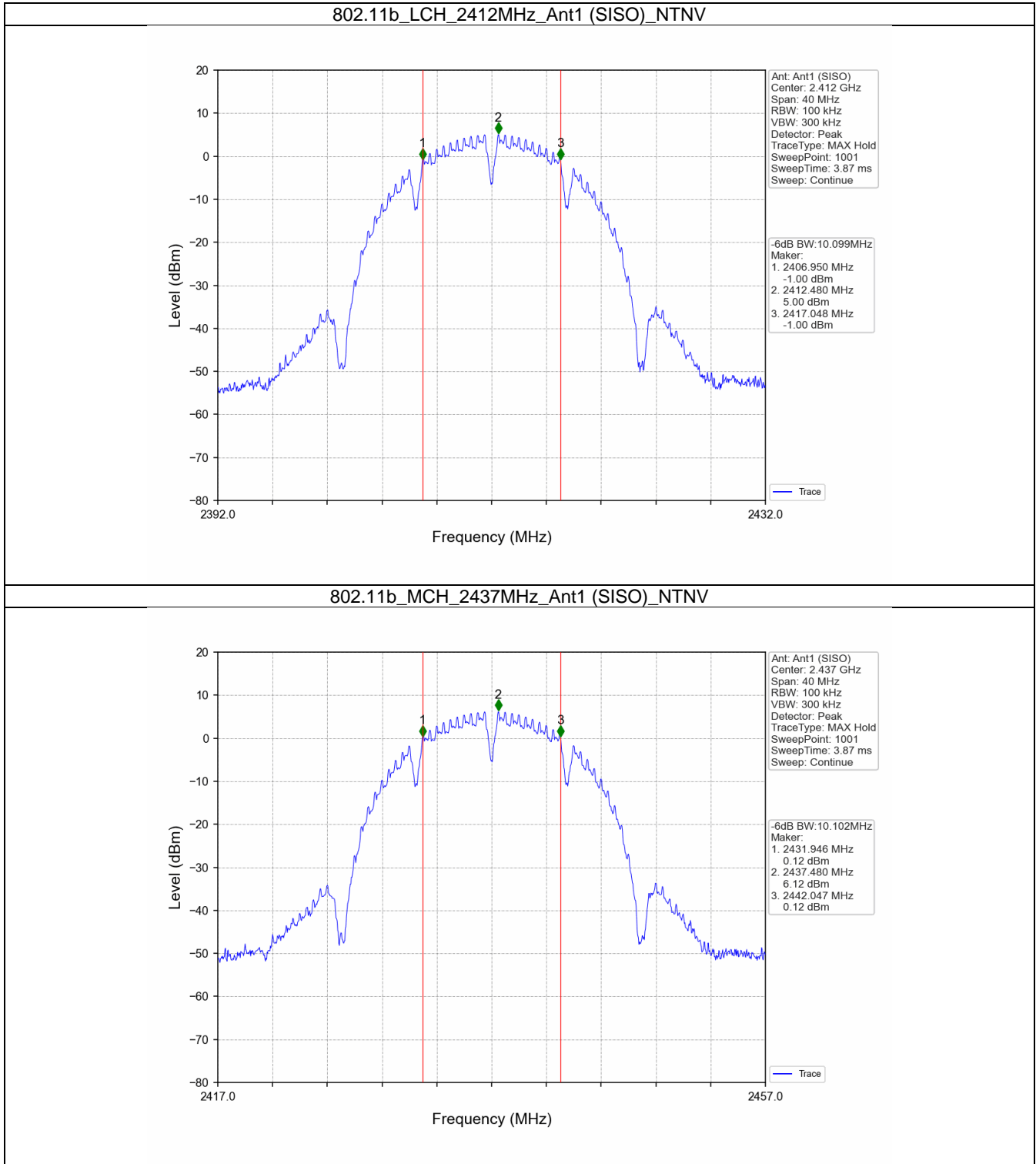


2.2 6dB BW

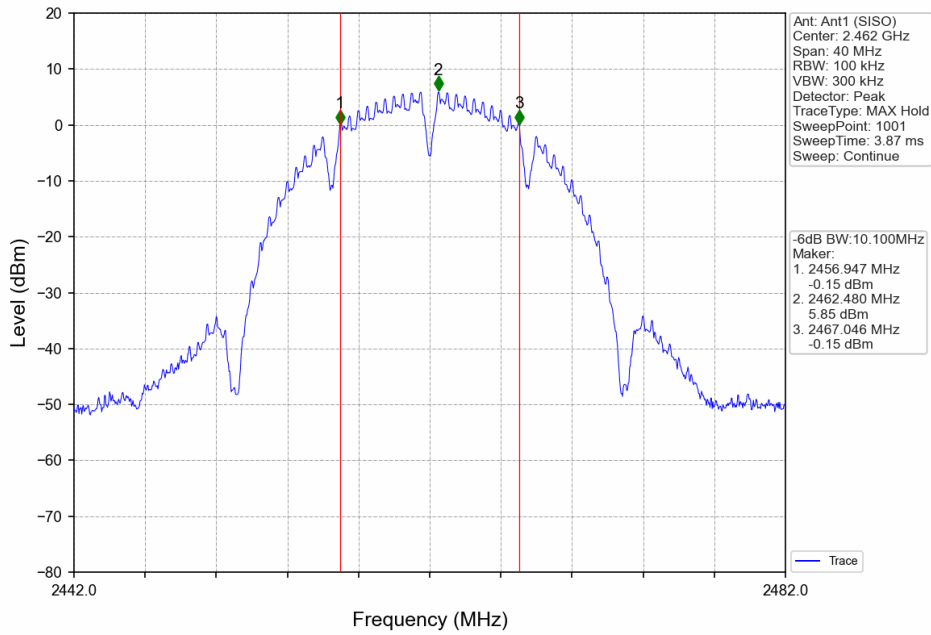
2.2.1 Test Result

Mode	TX Type	Frequency (MHz)	Ant	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	10.099	≥ 0.5	Pass
		2437	1	10.102	≥ 0.5	Pass
		2462	1	10.100	≥ 0.5	Pass
802.11g	SISO	2412	1	16.601	≥ 0.5	Pass
		2437	1	16.602	≥ 0.5	Pass
		2462	1	16.605	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	16.604	≥ 0.5	Pass
		2437	1	16.602	≥ 0.5	Pass
		2462	1	16.604	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	36.415	≥ 0.5	Pass
		2437	1	36.429	≥ 0.5	Pass
		2452	1	36.429	≥ 0.5	Pass

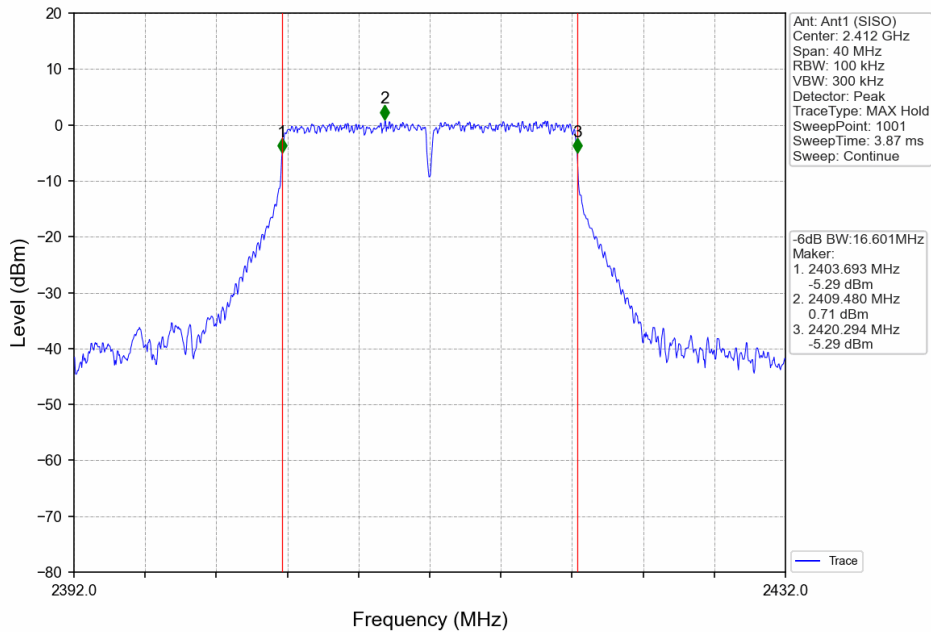
2.2.2 Test Graph



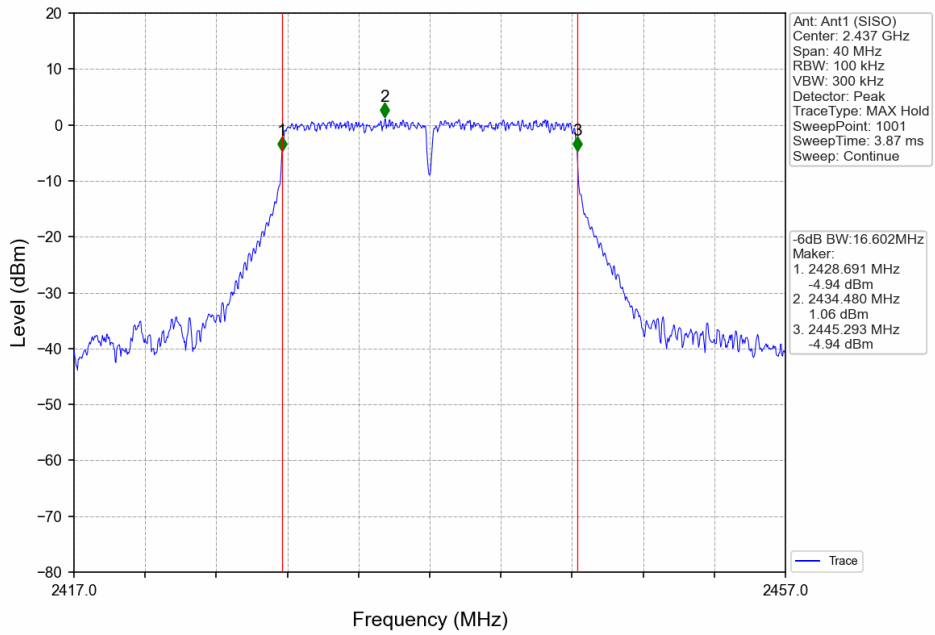
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



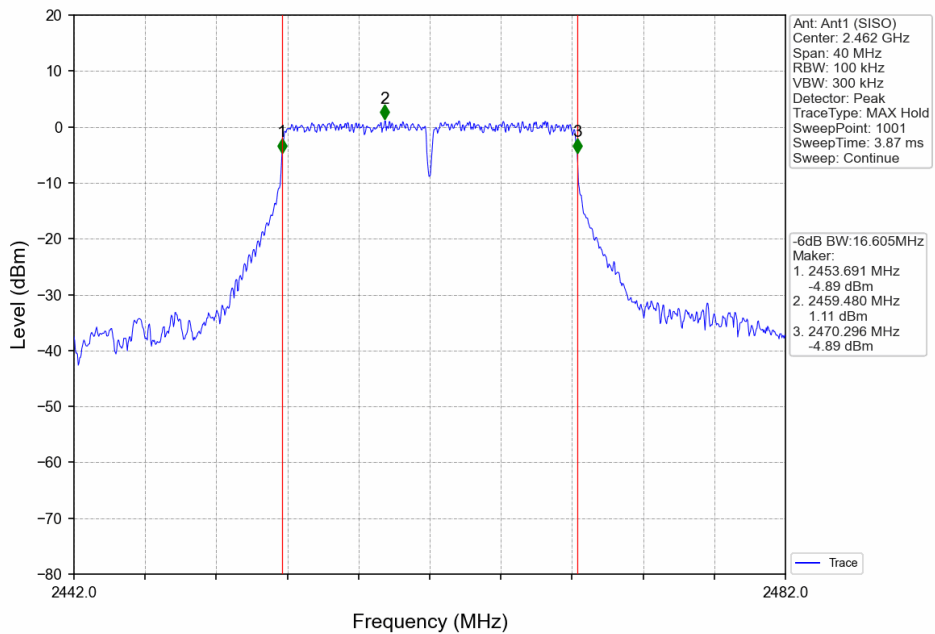
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



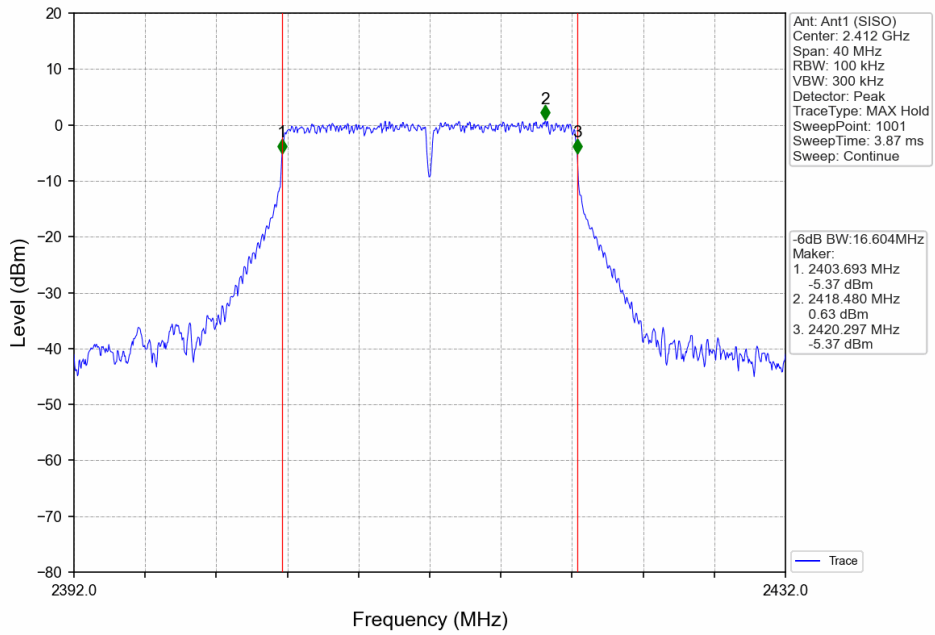
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



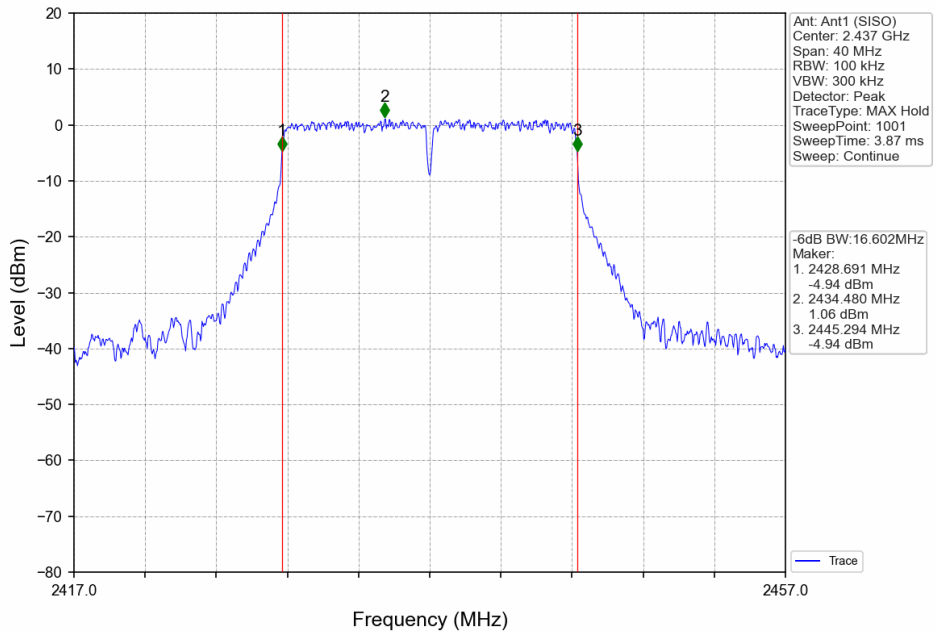
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



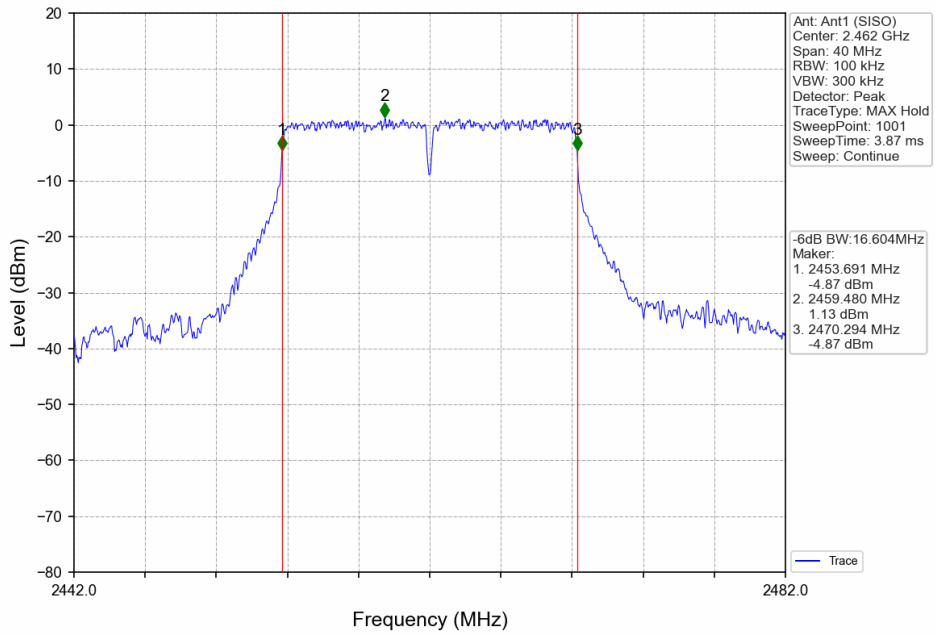
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



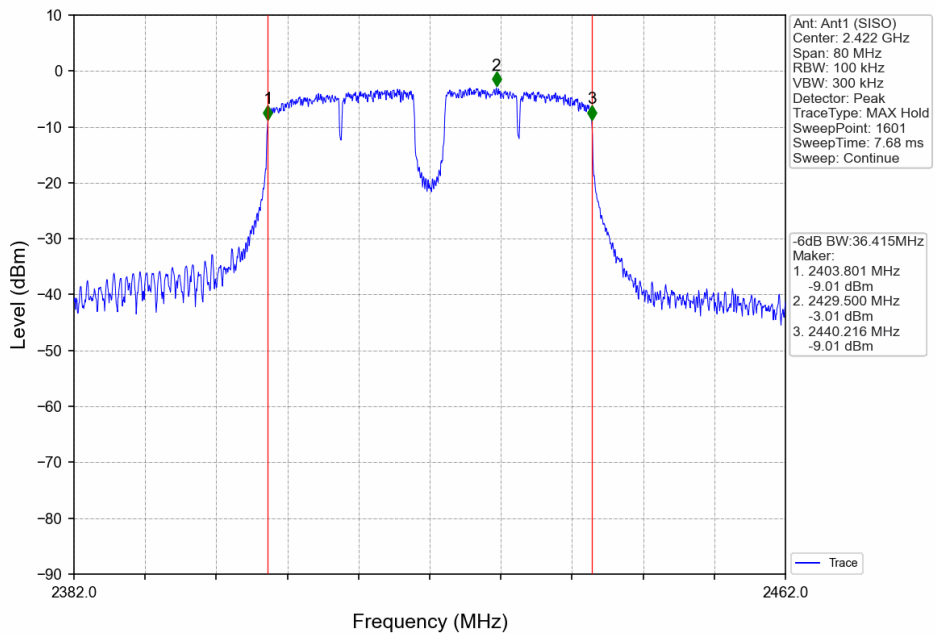
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



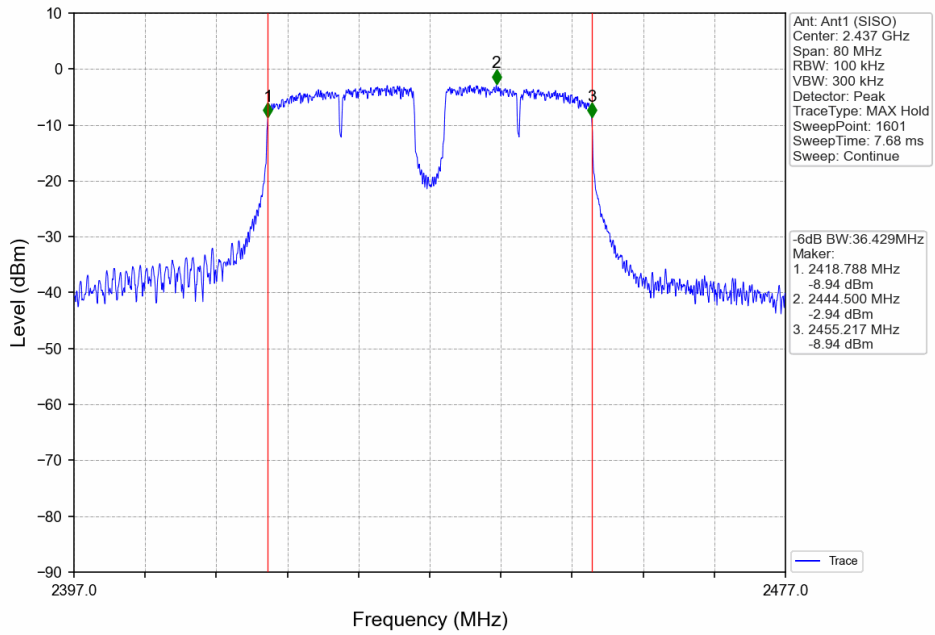
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



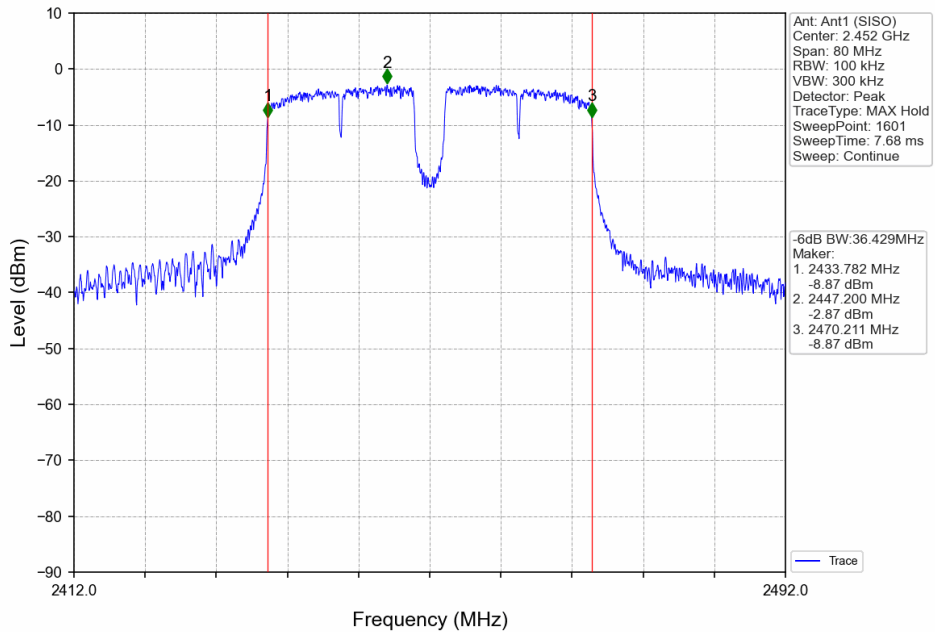
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



3. Maximum Conducted Output Power

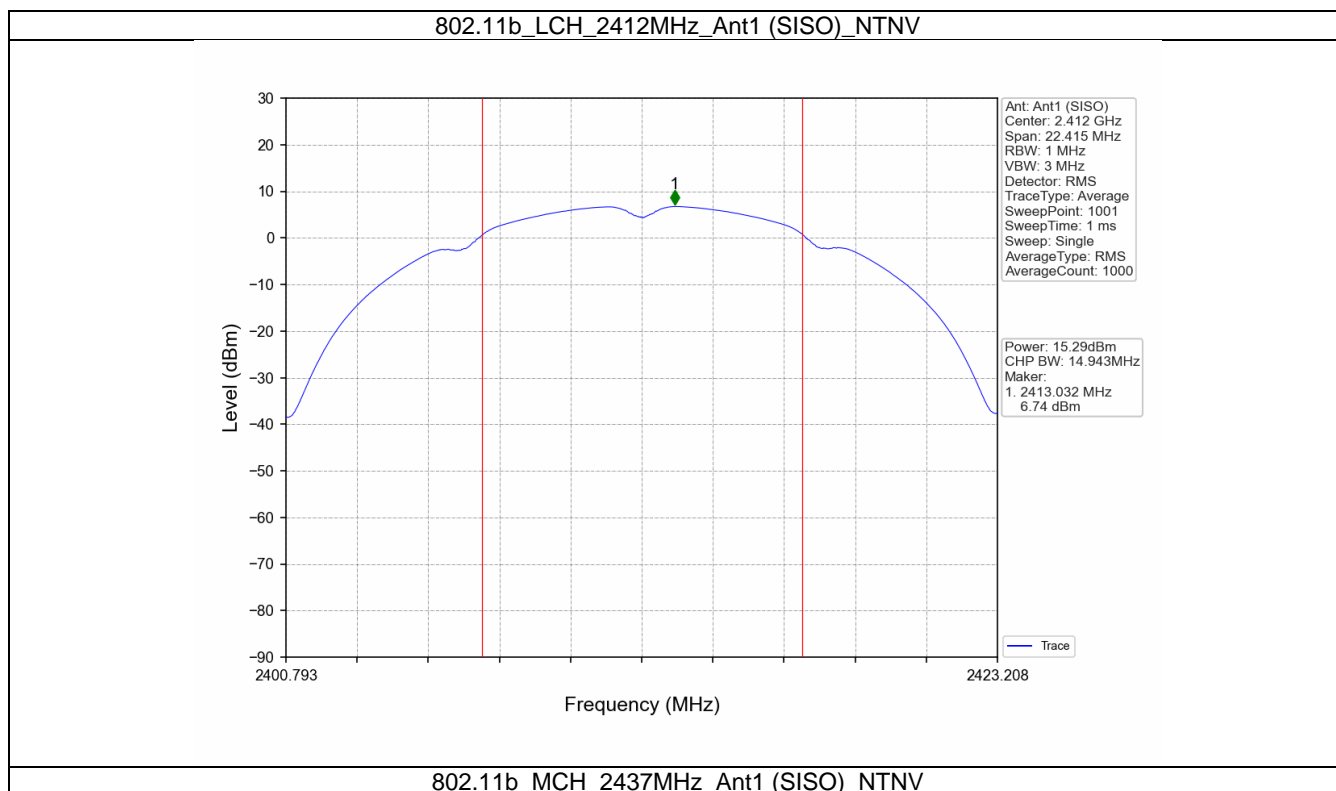
3.1 Power

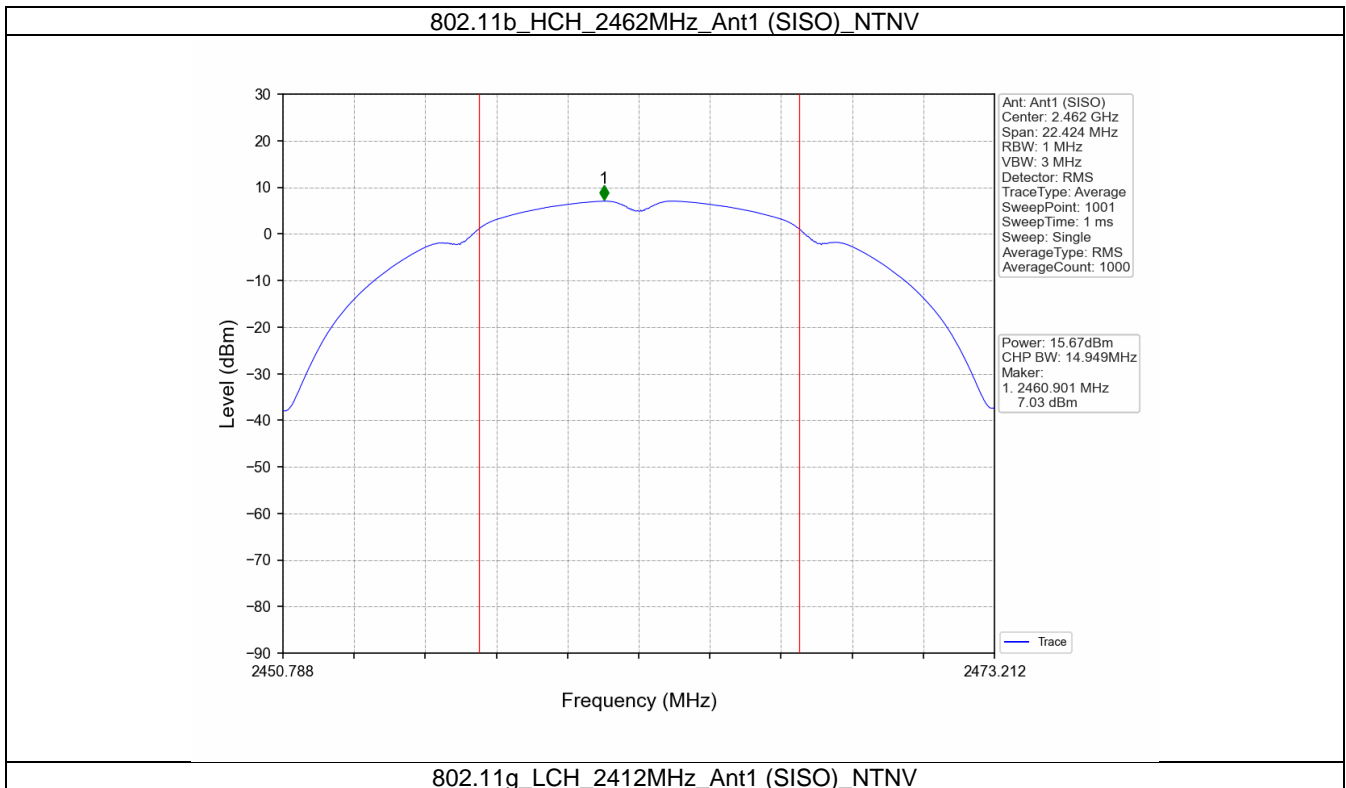
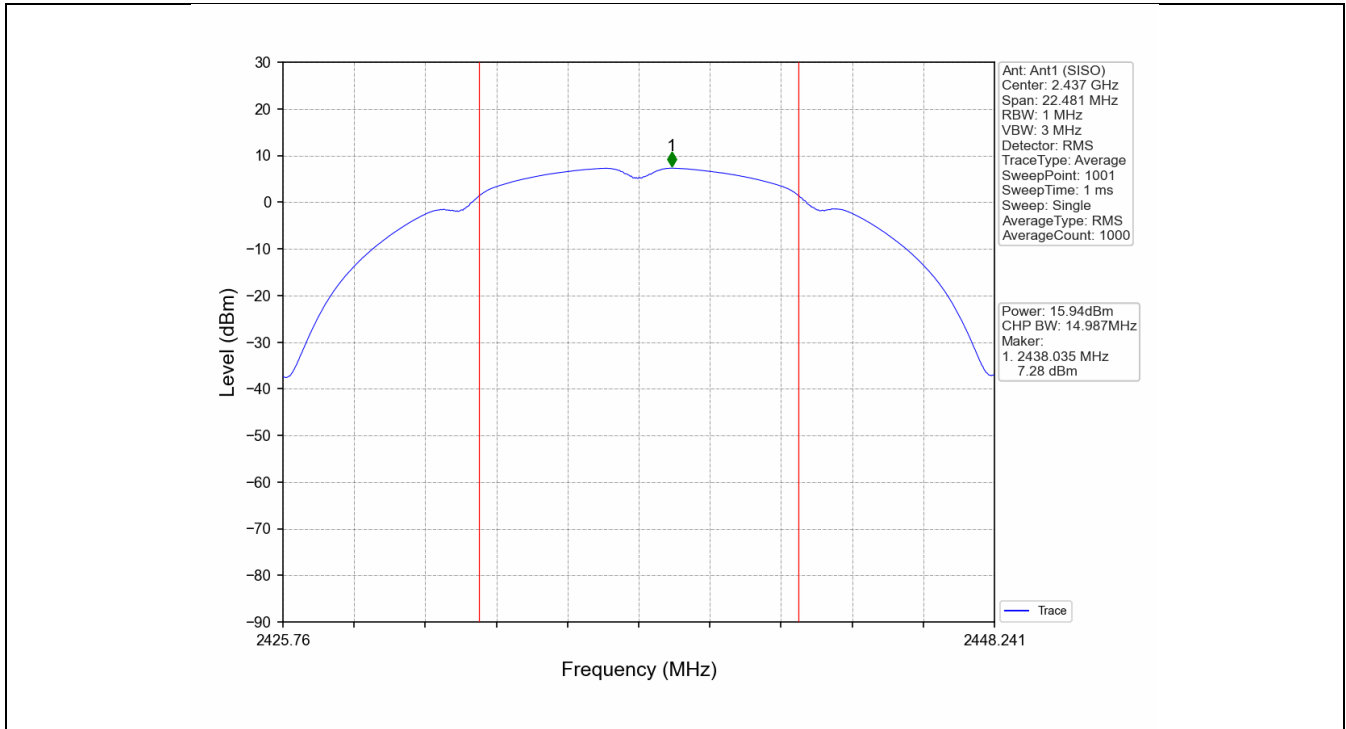
3.1.1 Test Result

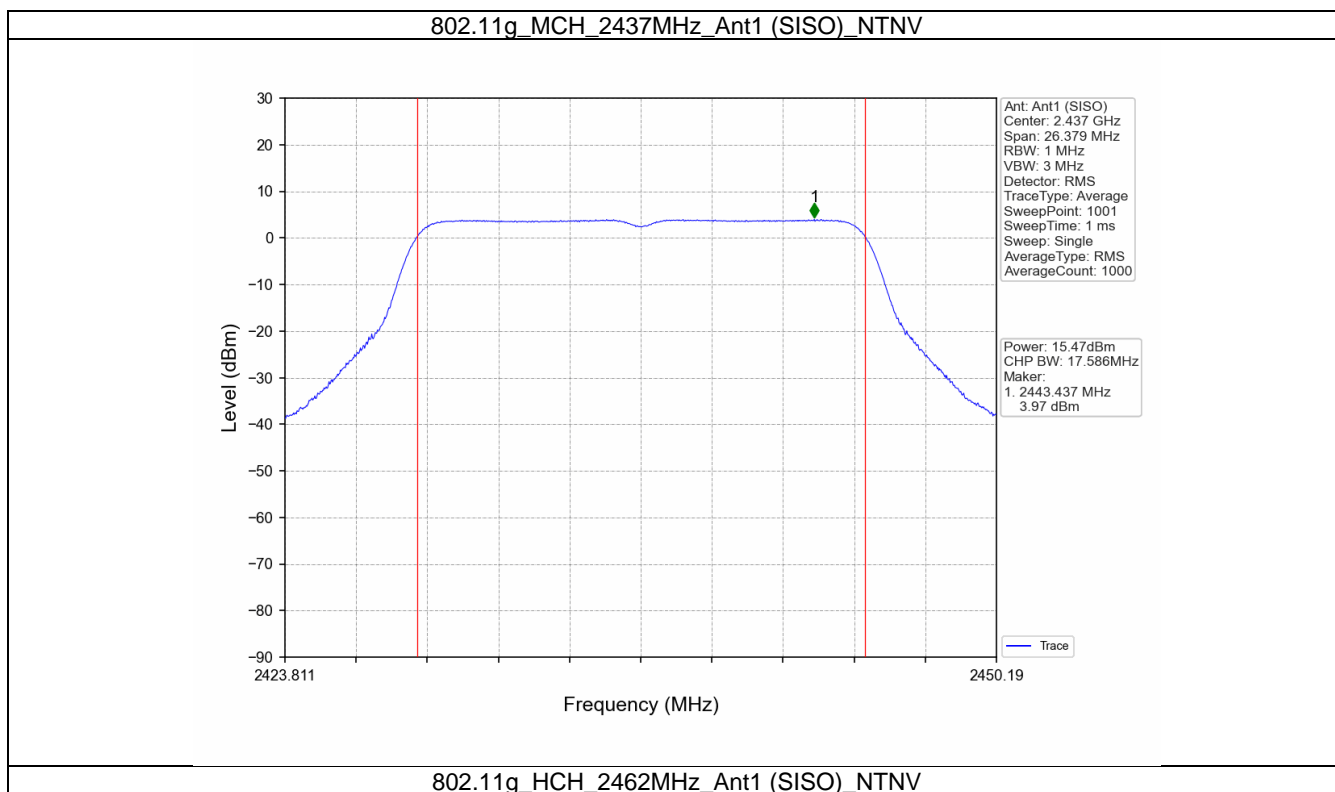
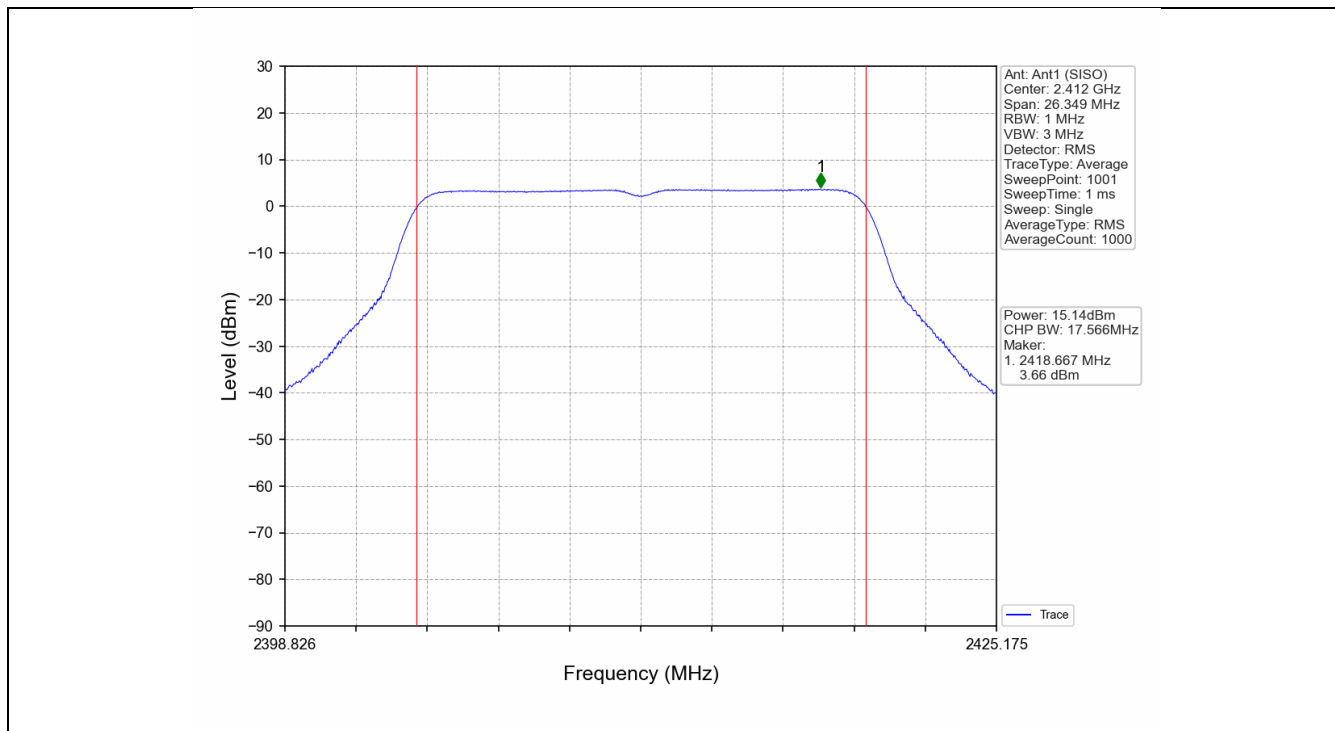
Mode	TX Type	Frequency (MHz)	Maximum Conducted Output Power (dBm)		Verdict
			Ant1	Limit	
802.11b	SISO	2412	15.29	<=30	Pass
		2437	15.94	<=30	Pass
		2462	15.67	<=30	Pass
802.11g	SISO	2412	15.14	<=30	Pass
		2437	15.47	<=30	Pass
		2462	15.55	<=30	Pass
802.11n (HT20)	SISO	2412	15.12	<=30	Pass
		2437	15.47	<=30	Pass
		2462	15.55	<=30	Pass
802.11n (HT40)	SISO	2422	12.82	<=30	Pass
		2437	14.00	<=30	Pass
		2452	14.07	<=30	Pass

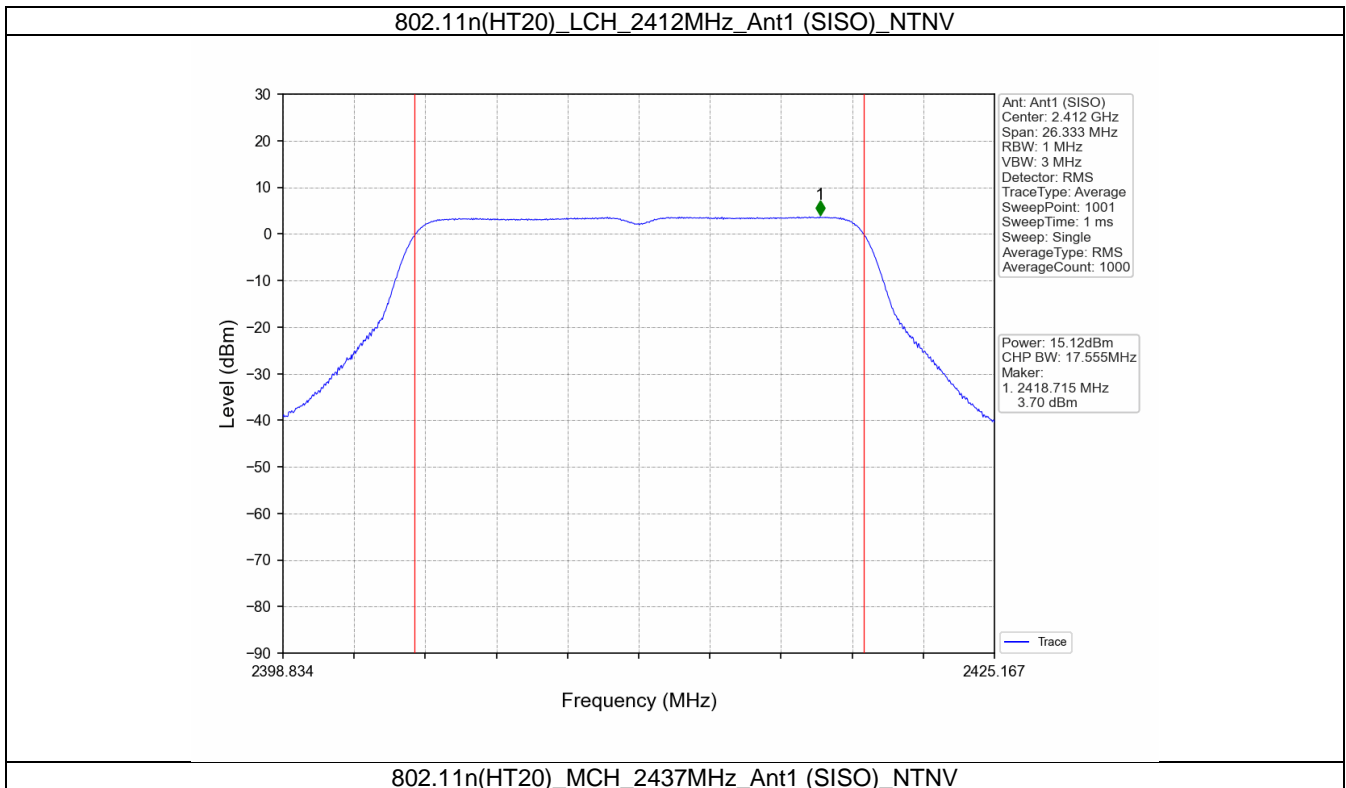
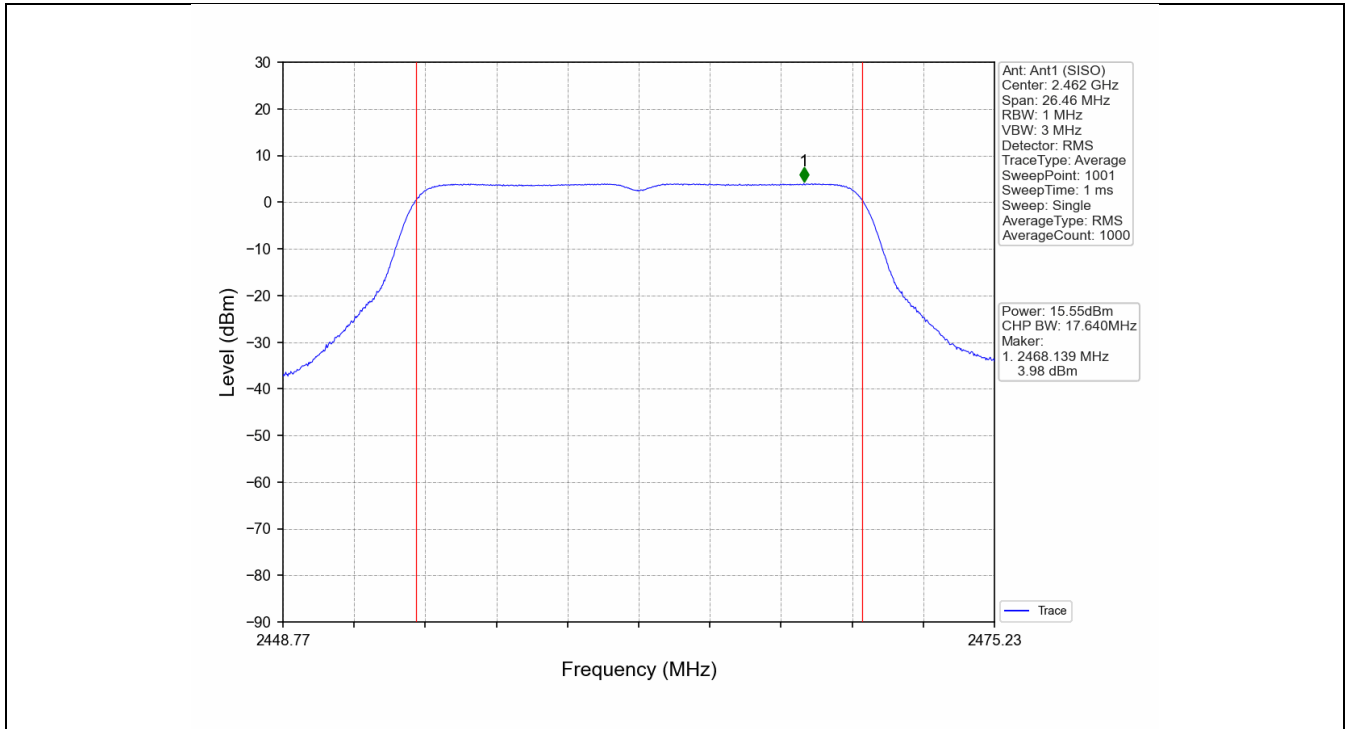
Note1: Antenna Gain: Ant1: 1.00dBi;

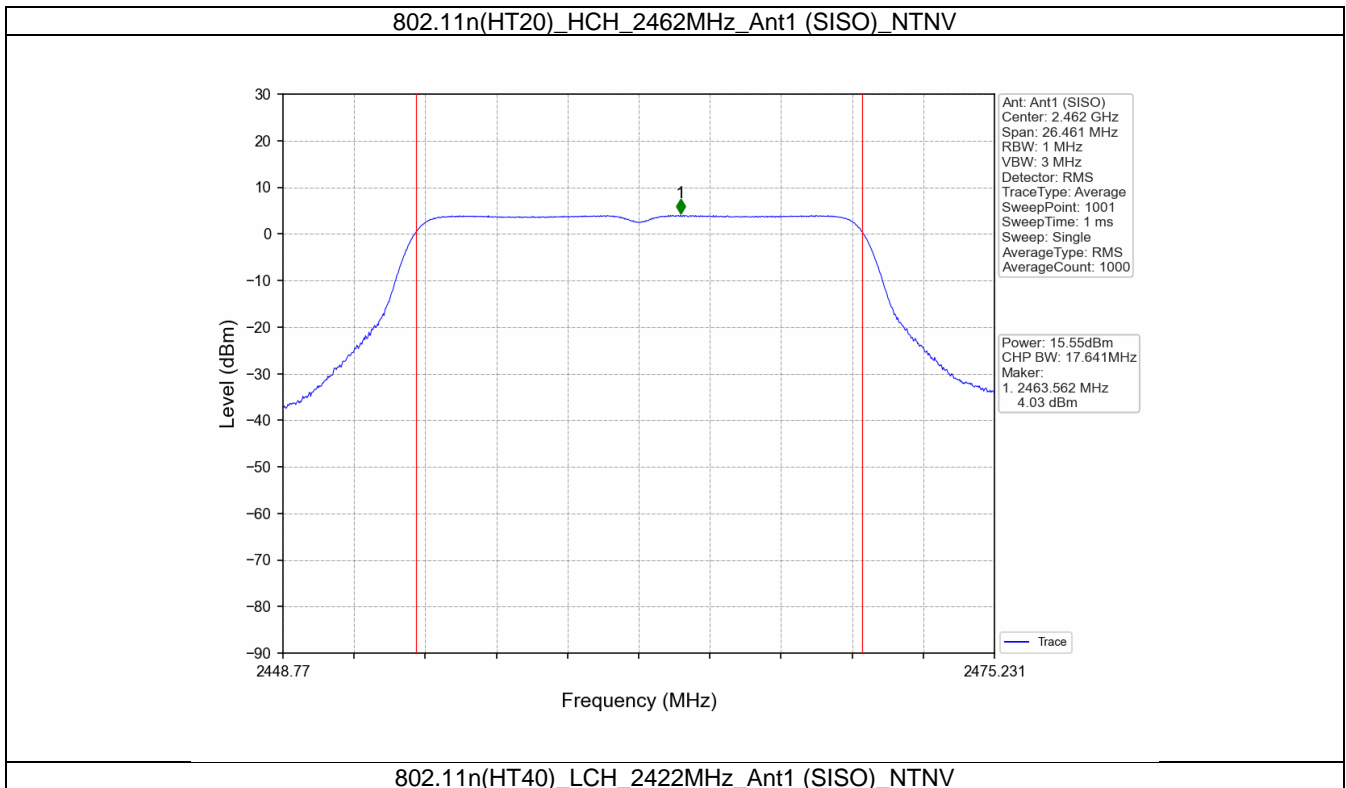
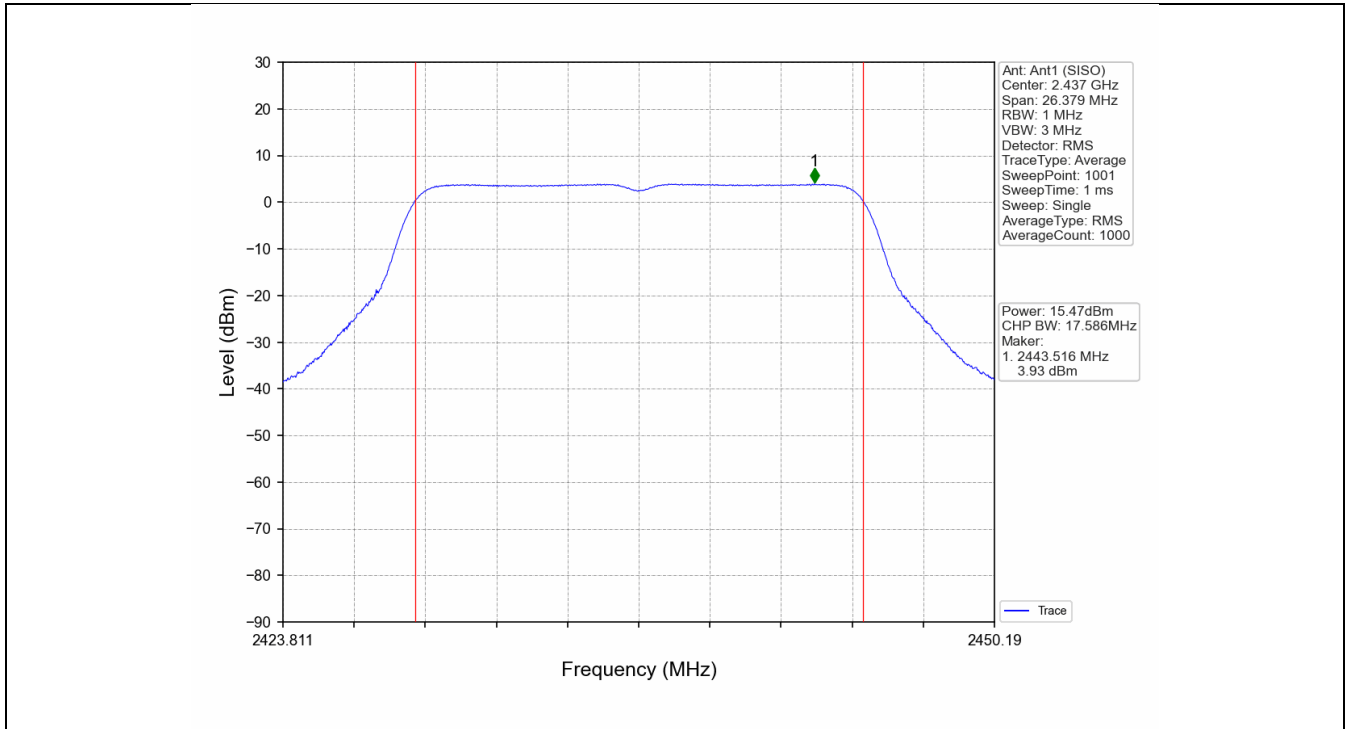
3.1.2 Test Graph

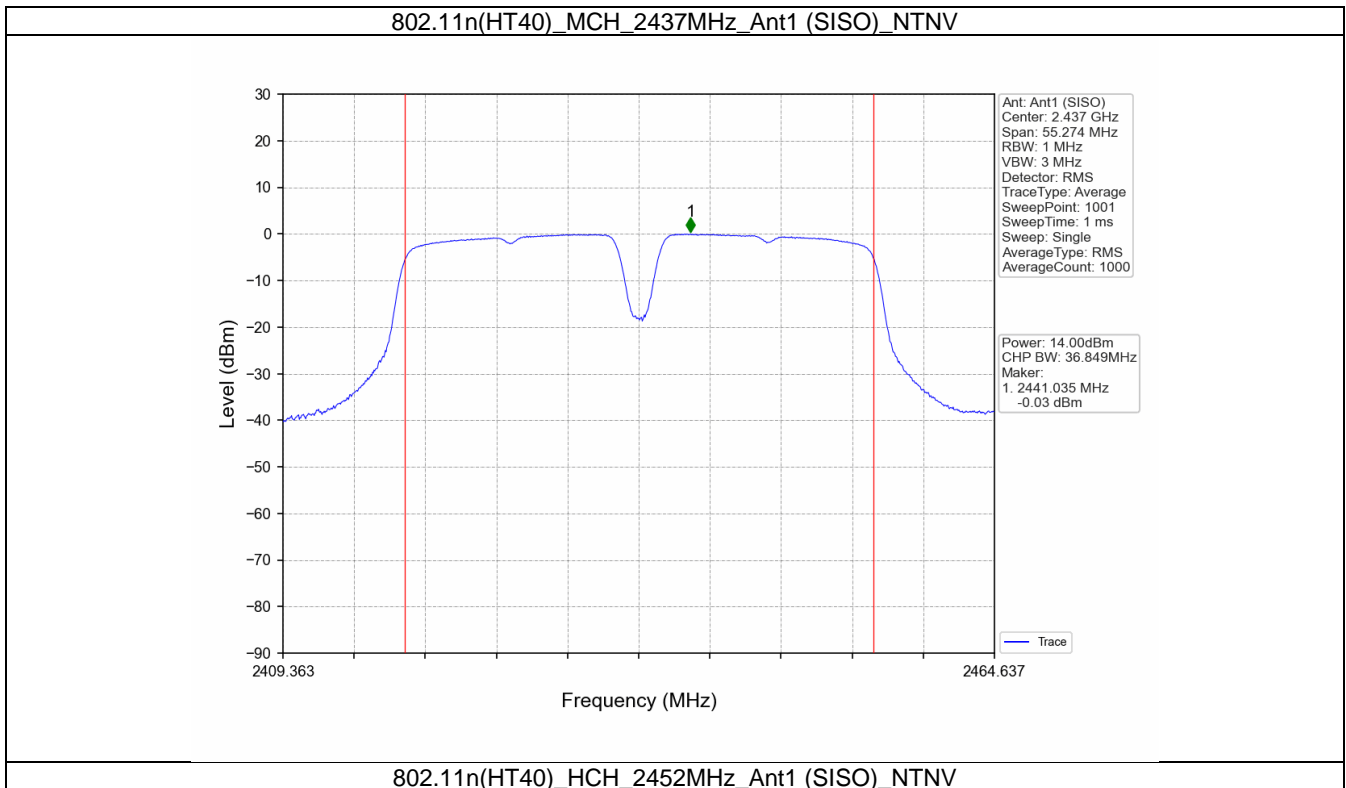
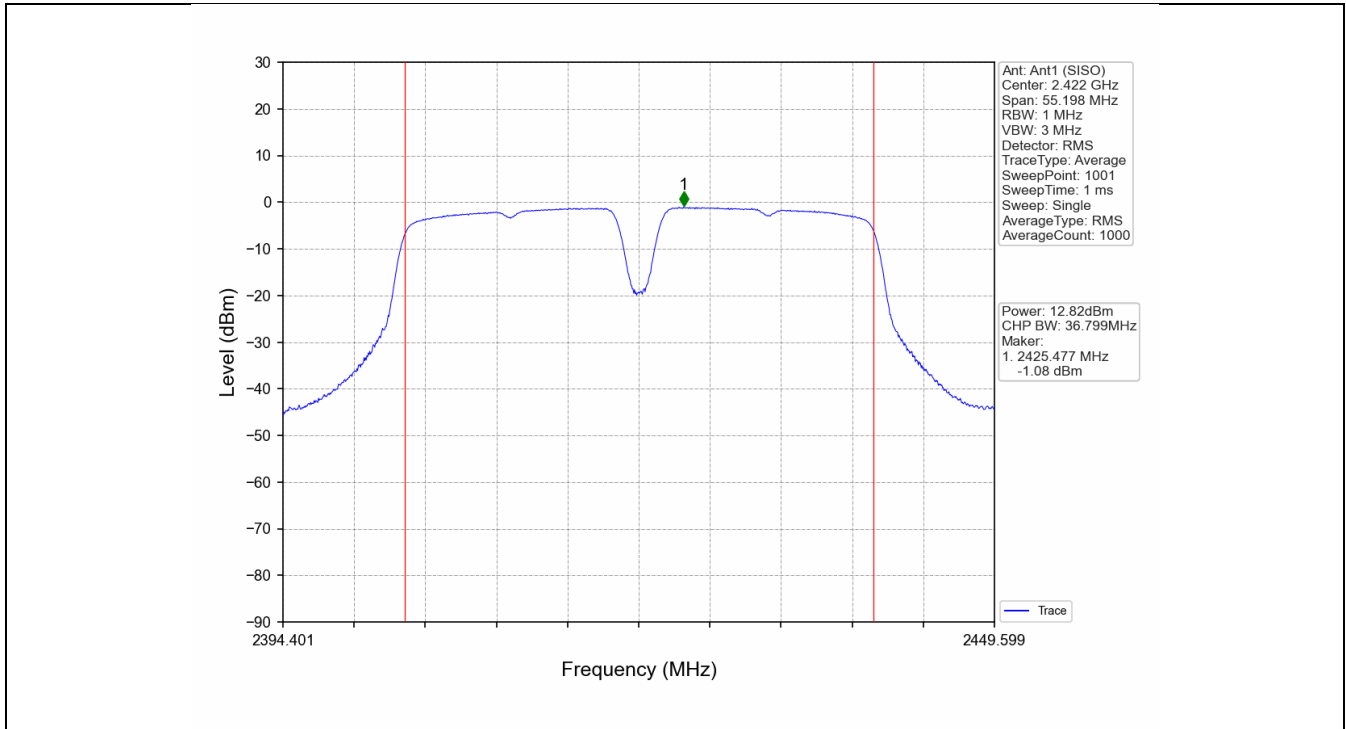


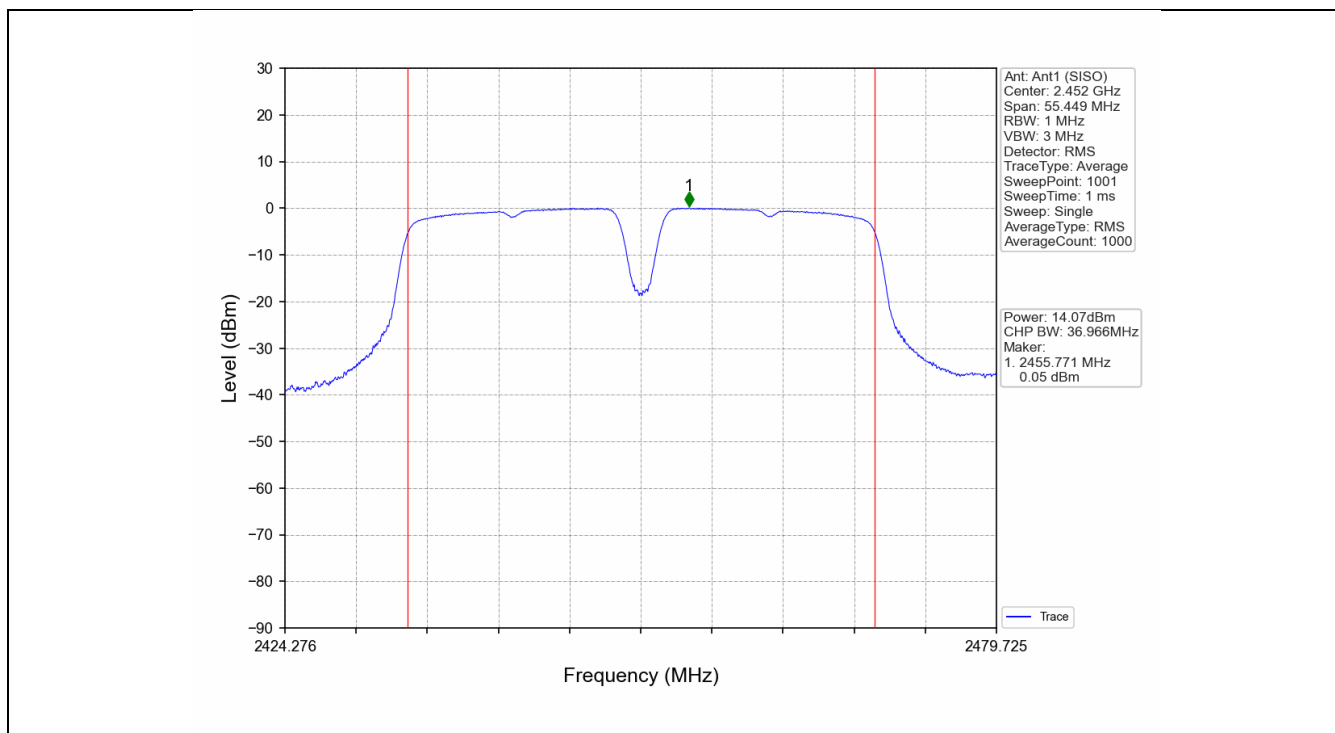












4. Maximum Power Spectral Density

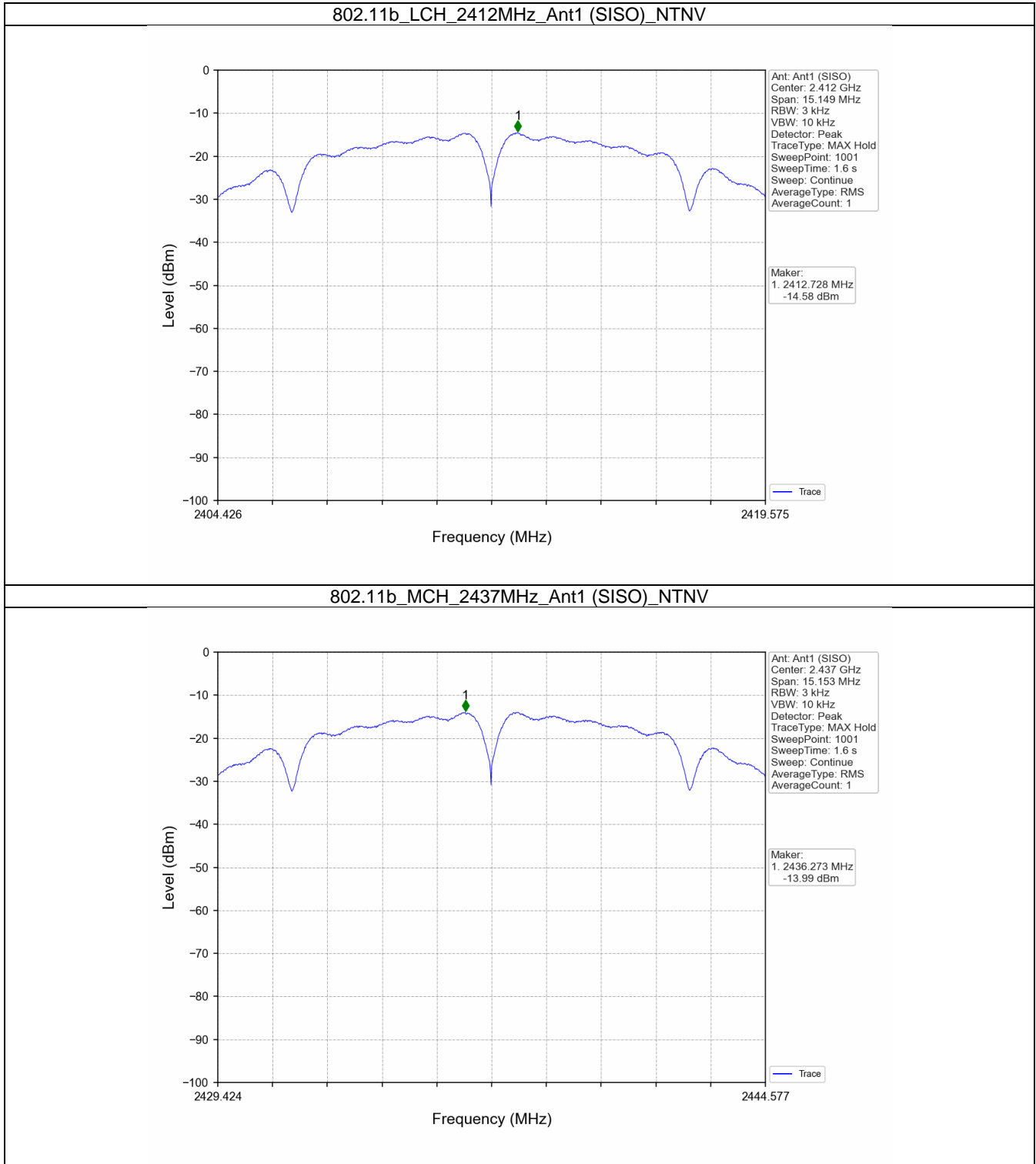
4.1 PSD

4.1.1 Test Result

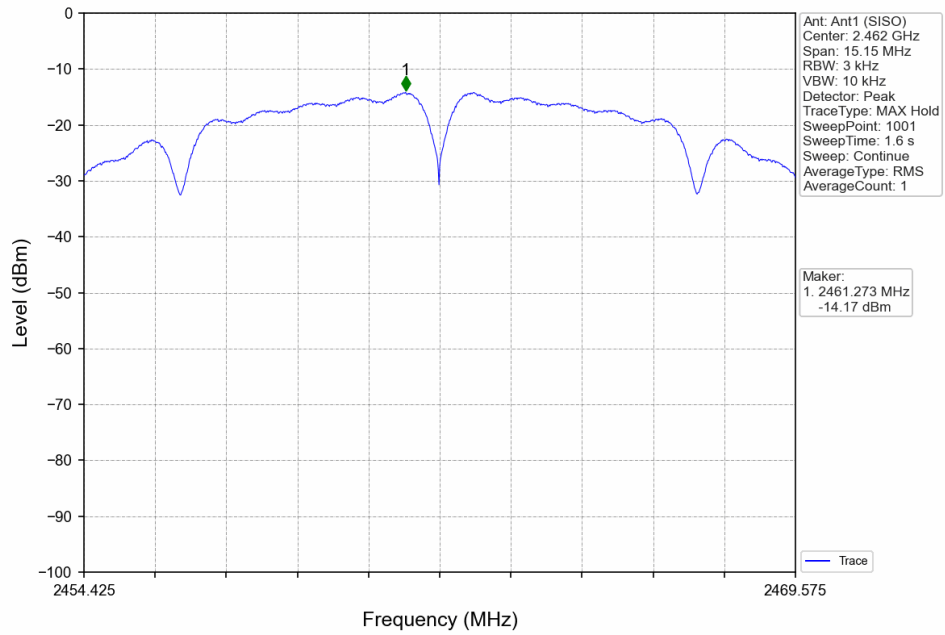
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			Ant1	Limit	
802.11b	SISO	2412	-14.58	<=8	Pass
		2437	-13.99	<=8	Pass
		2462	-14.17	<=8	Pass
802.11g	SISO	2412	-13.57	<=8	Pass
		2437	-12.87	<=8	Pass
		2462	-13.07	<=8	Pass
802.11n (HT20)	SISO	2412	-13.40	<=8	Pass
		2437	-12.89	<=8	Pass
		2462	-12.86	<=8	Pass
802.11n (HT40)	SISO	2422	-18.34	<=8	Pass
		2437	-17.26	<=8	Pass
		2452	-17.11	<=8	Pass

Note1: Antenna Gain: Ant1: 1.00dBi;

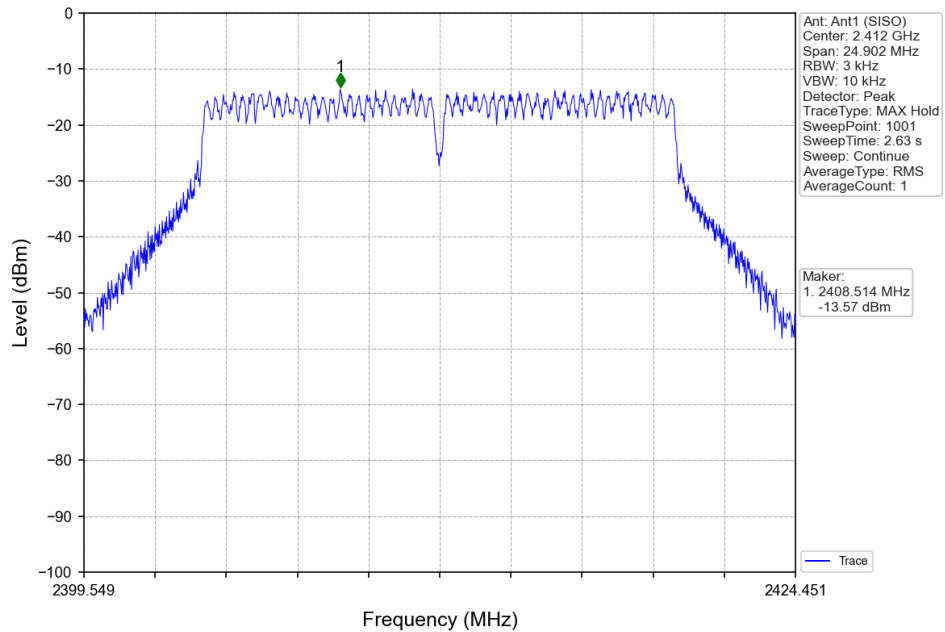
4.1.2 Test Graph



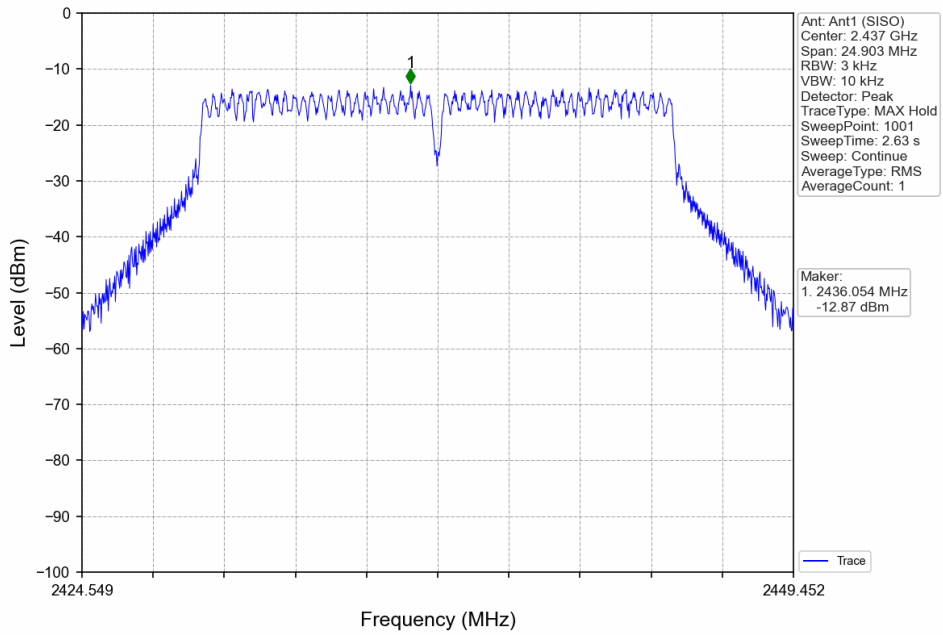
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



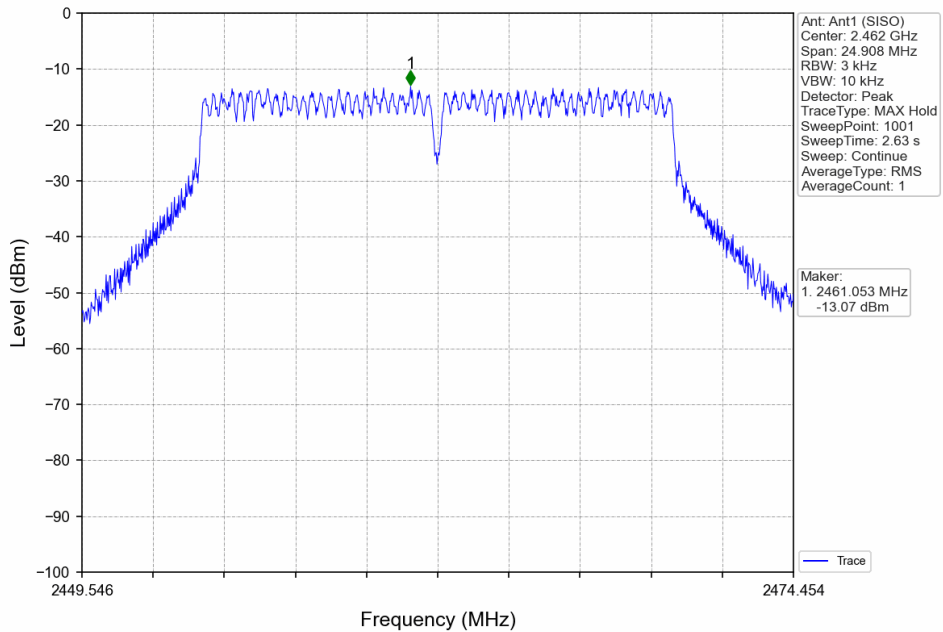
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



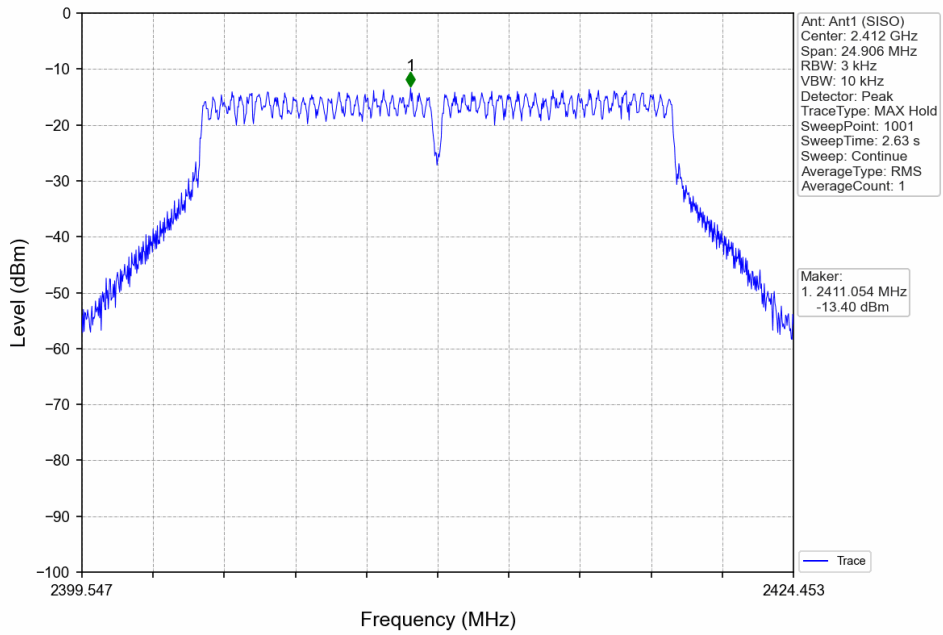
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



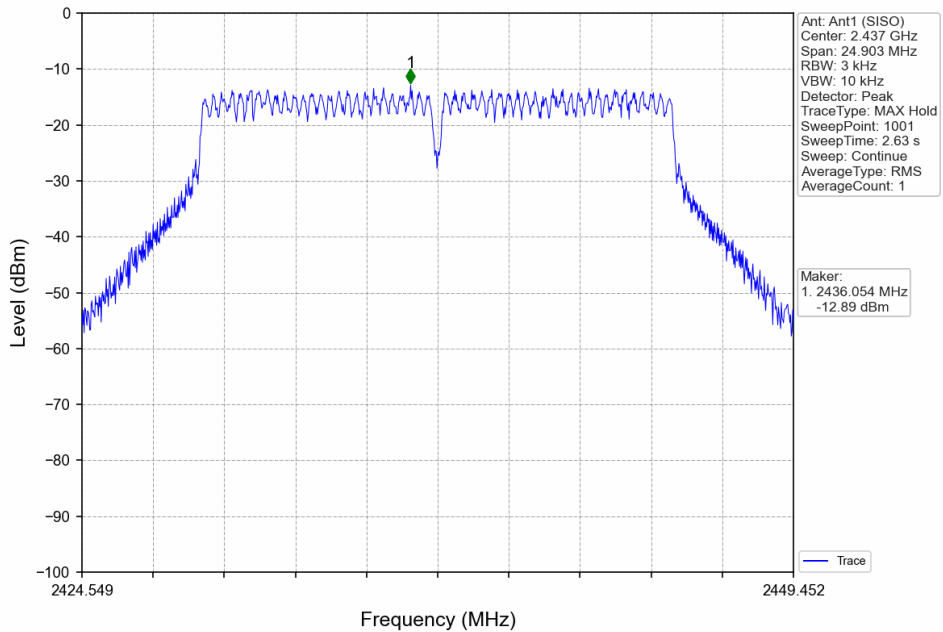
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



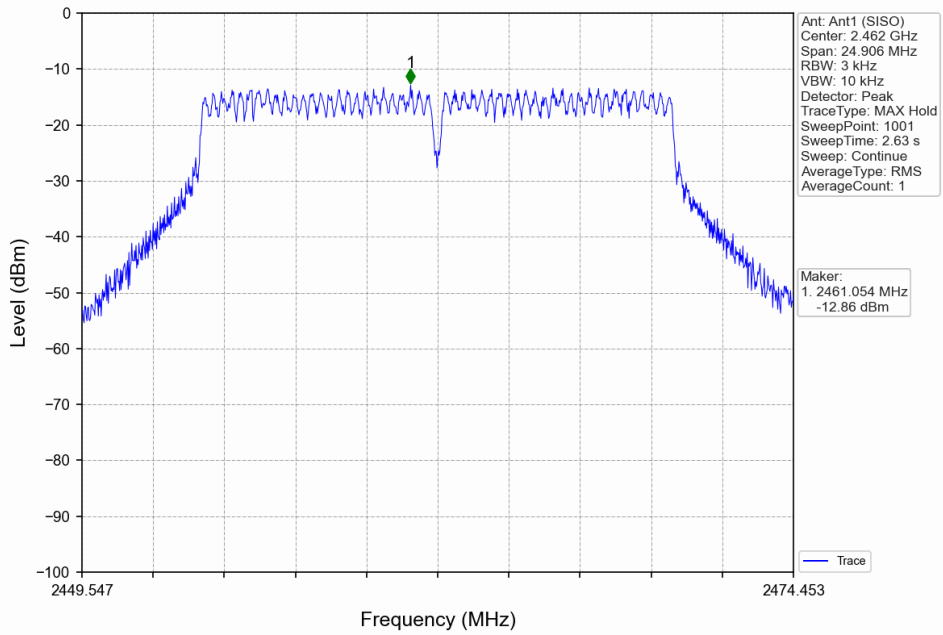
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



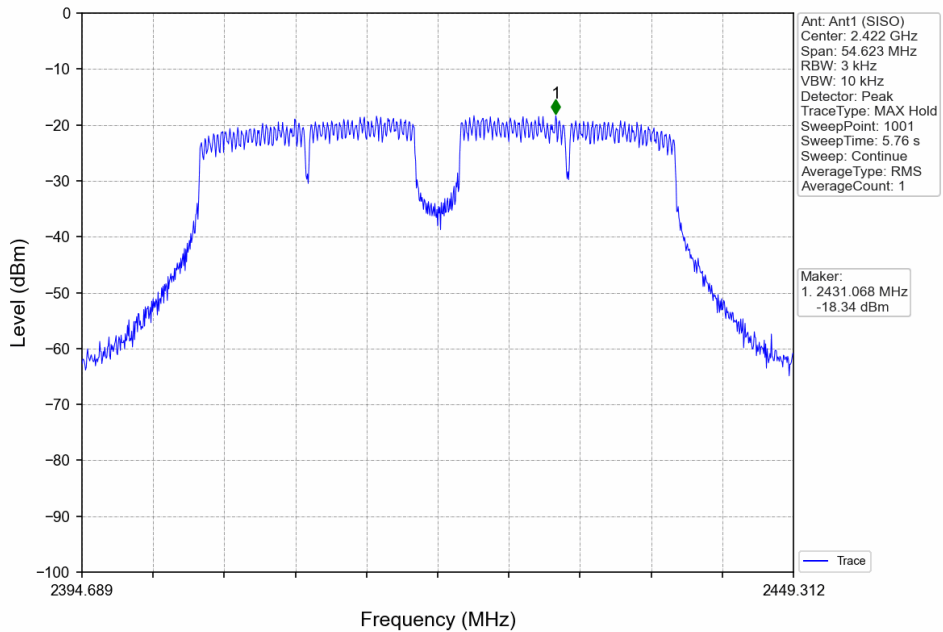
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



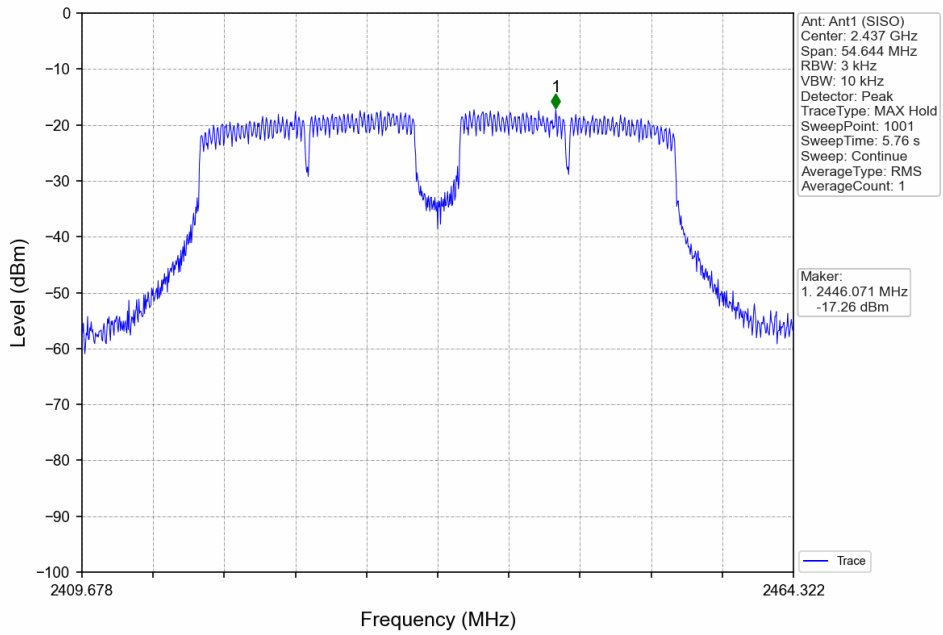
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



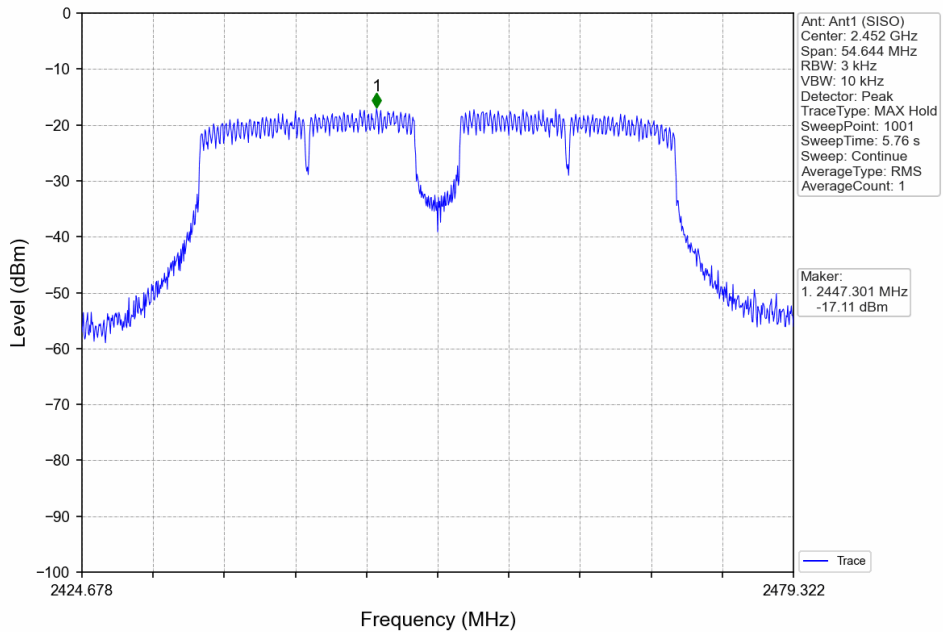
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



5. Unwanted Emissions In Non-restricted Frequency Bands

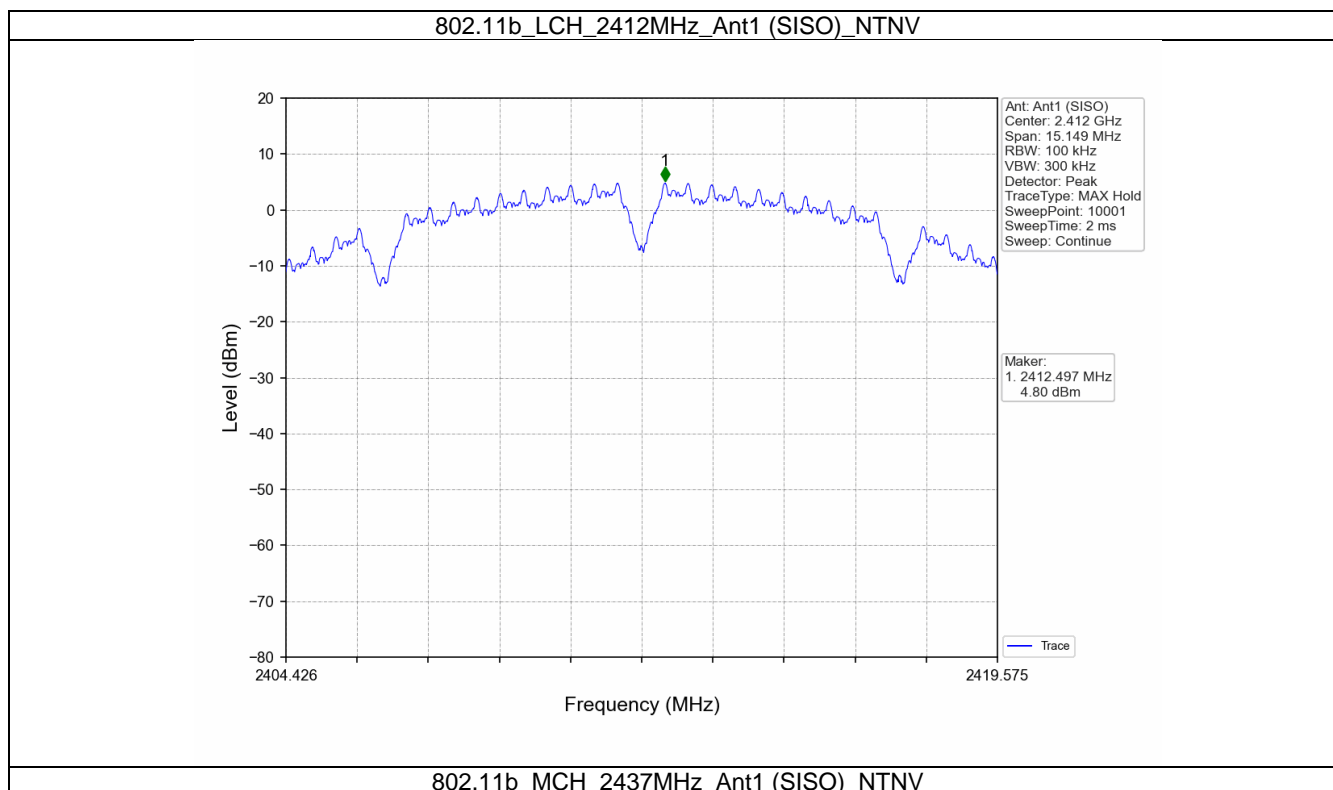
5.1 Ref

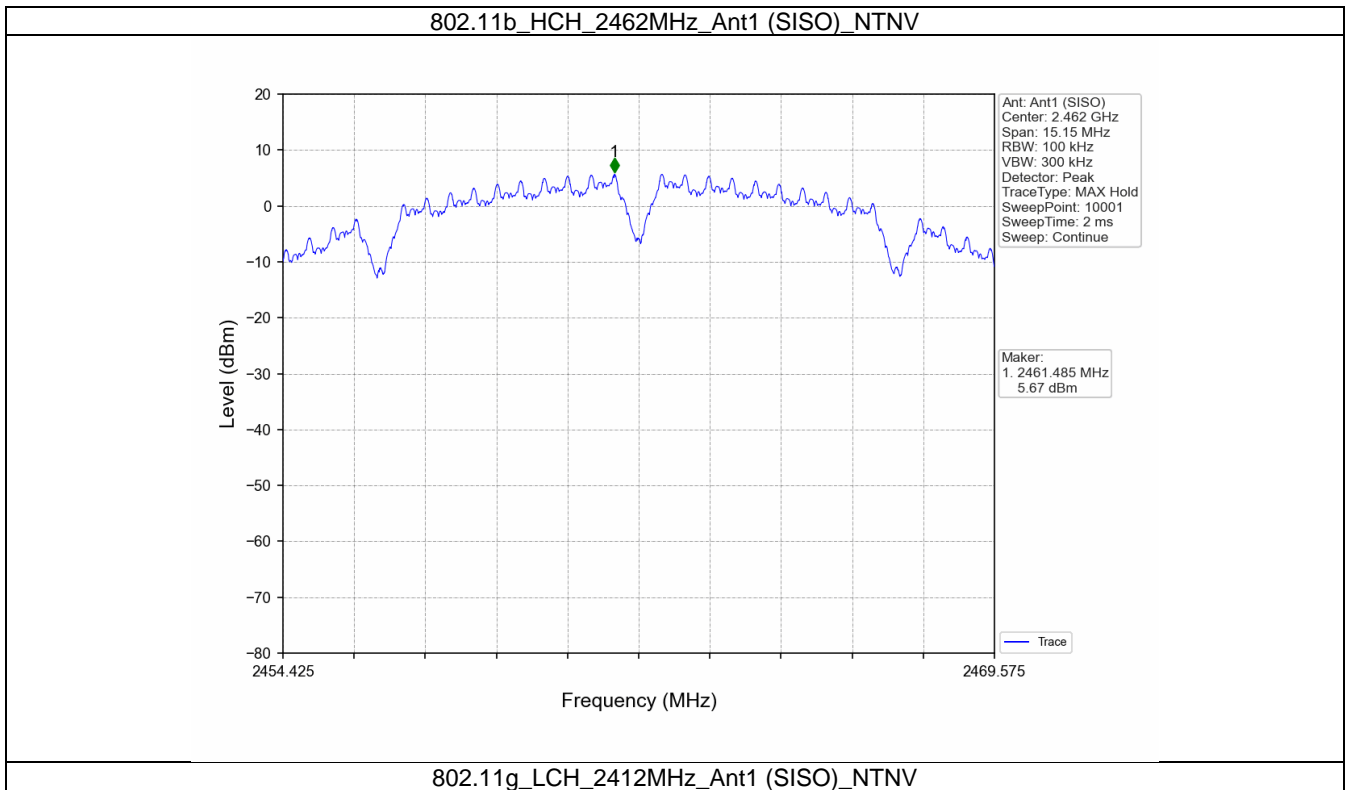
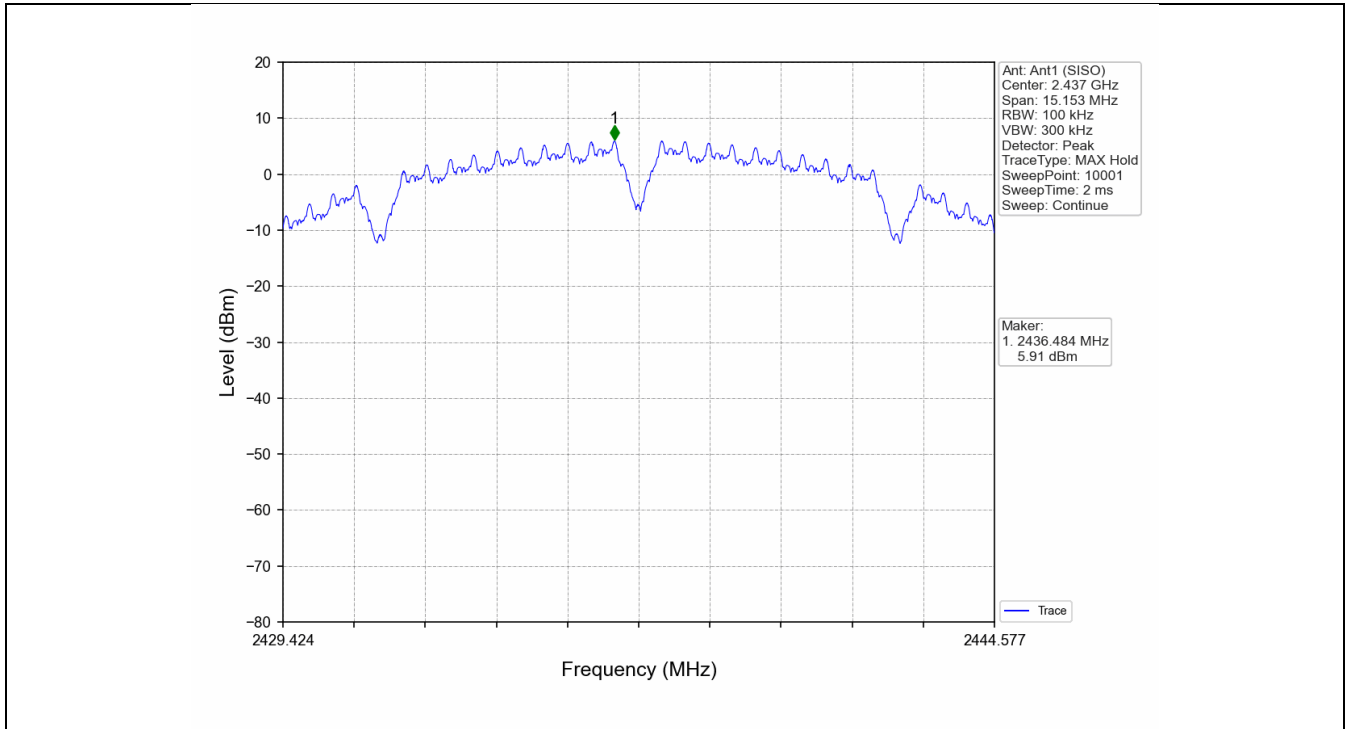
5.1.1 Test Result

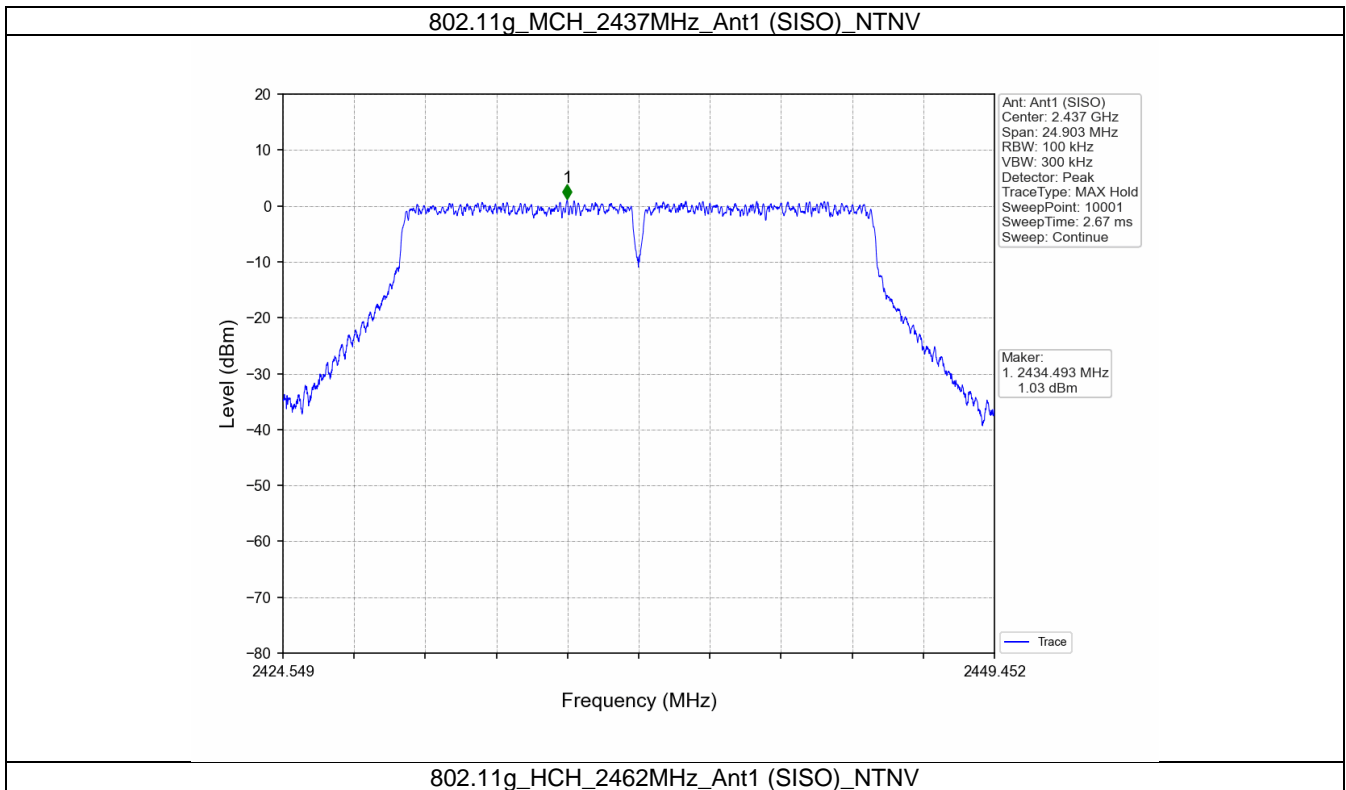
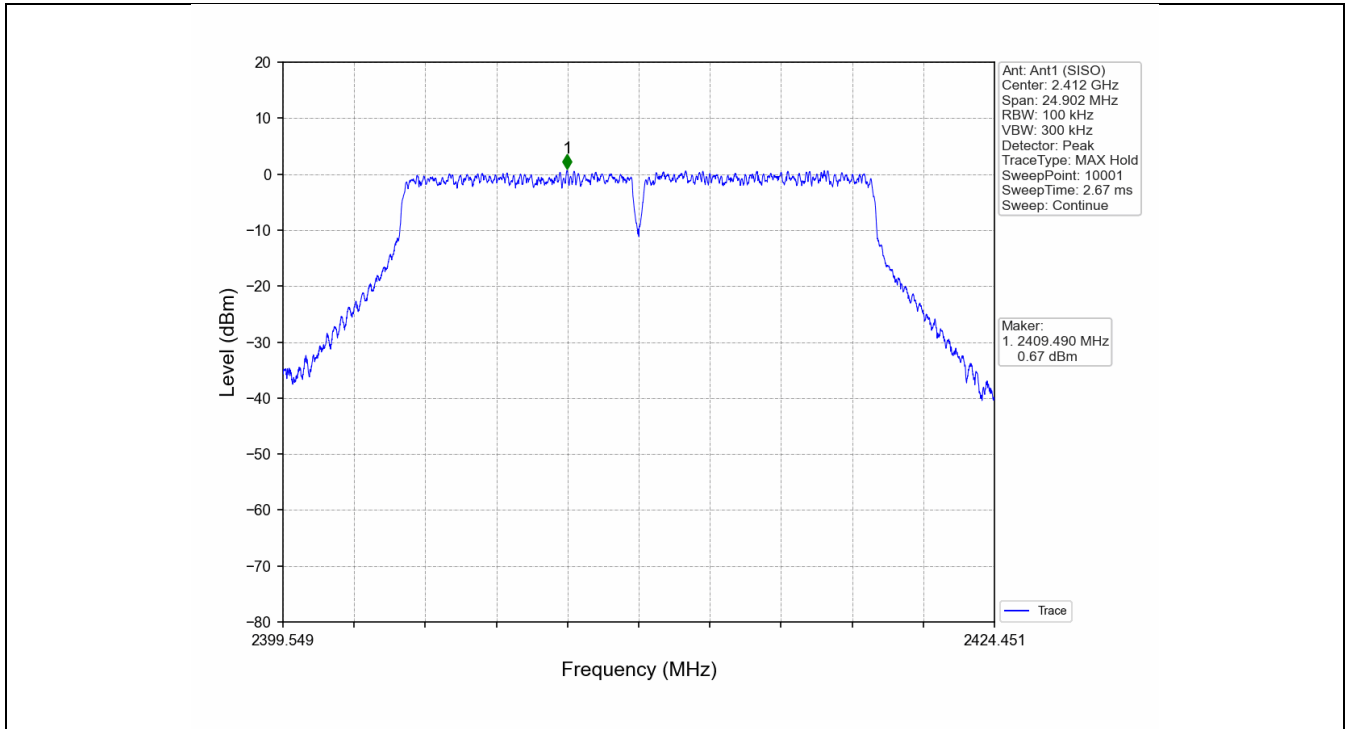
Mode	TX Type	Frequency (MHz)	Ant	Level of Reference (dBm)
802.11b	SISO	2412	1	4.80
		2437	1	5.91
		2462	1	5.67
802.11g	SISO	2412	1	0.67
		2437	1	1.03
		2462	1	1.09
802.11n (HT20)	SISO	2412	1	0.64
		2437	1	1.03
		2462	1	1.11
802.11n (HT40)	SISO	2422	1	-3.98
		2437	1	-2.96
		2452	1	-2.88

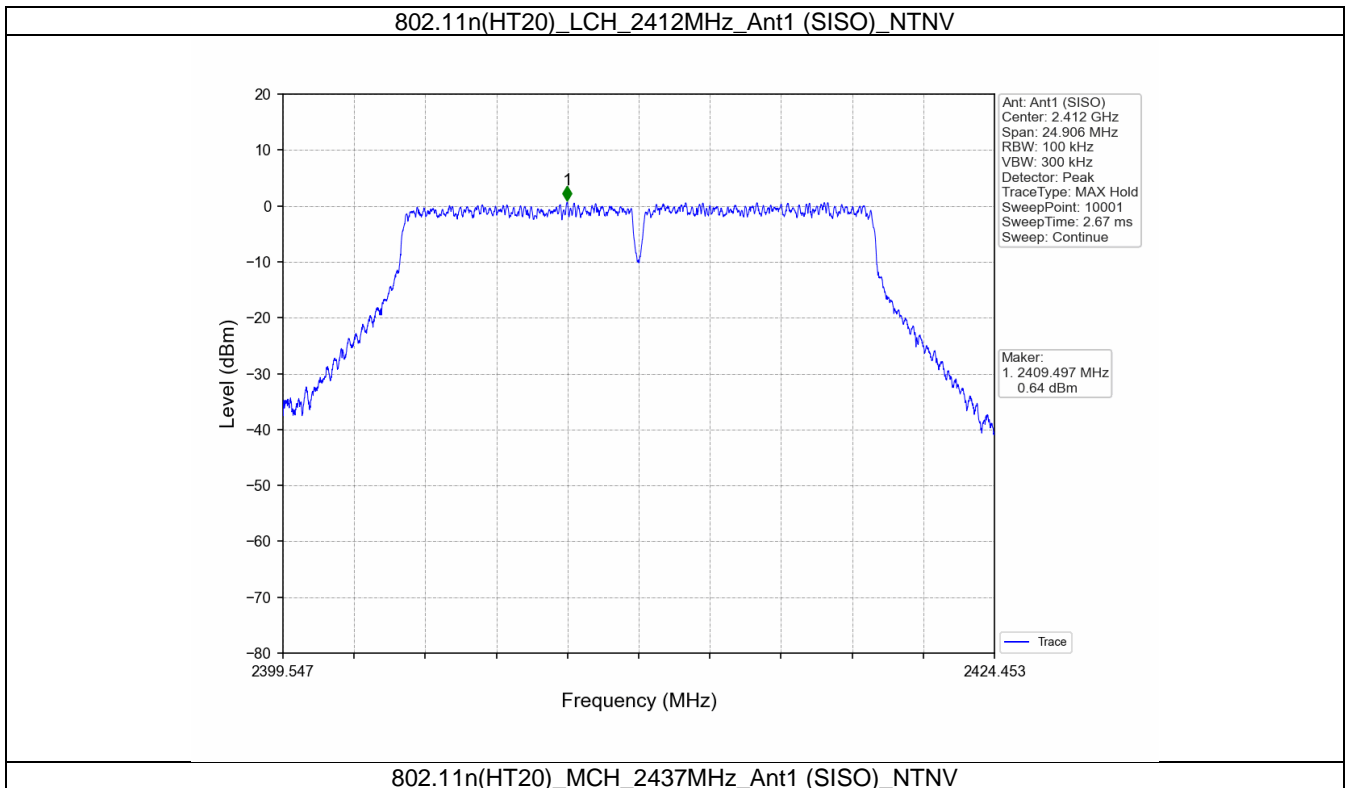
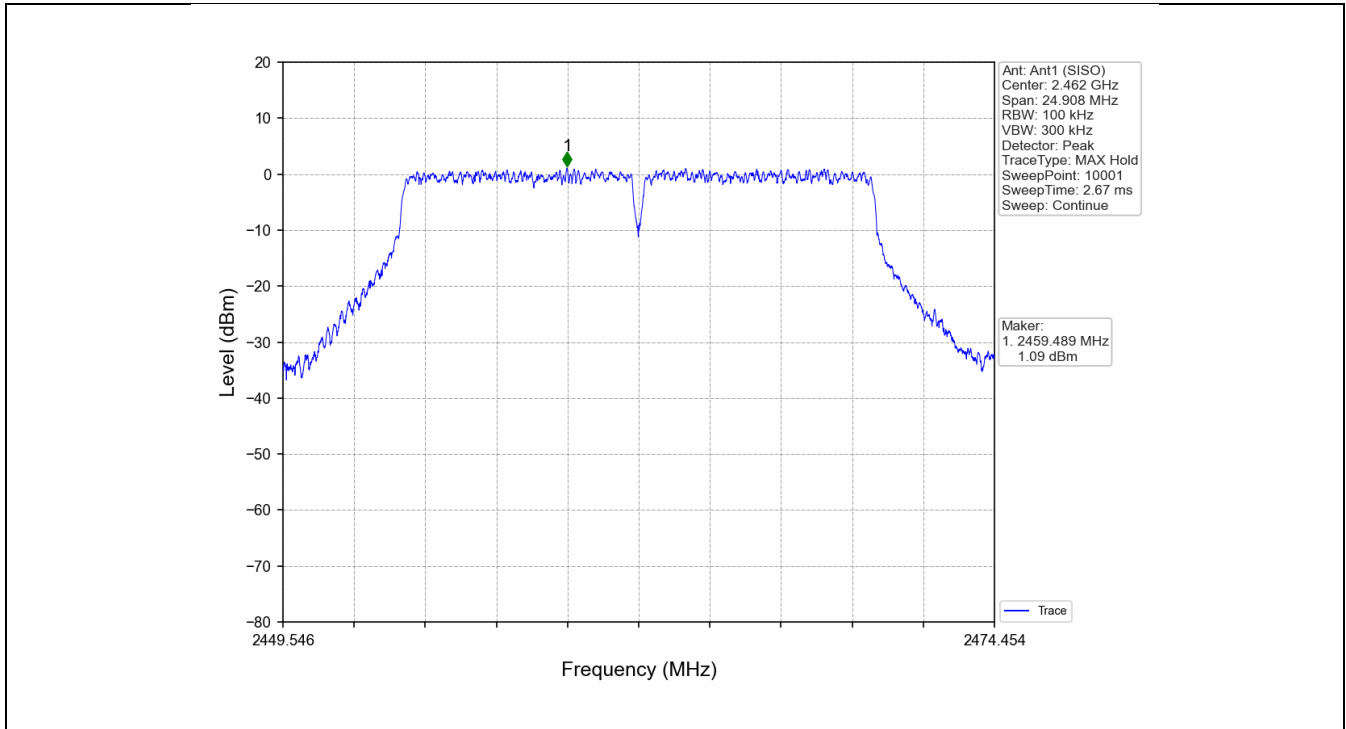
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

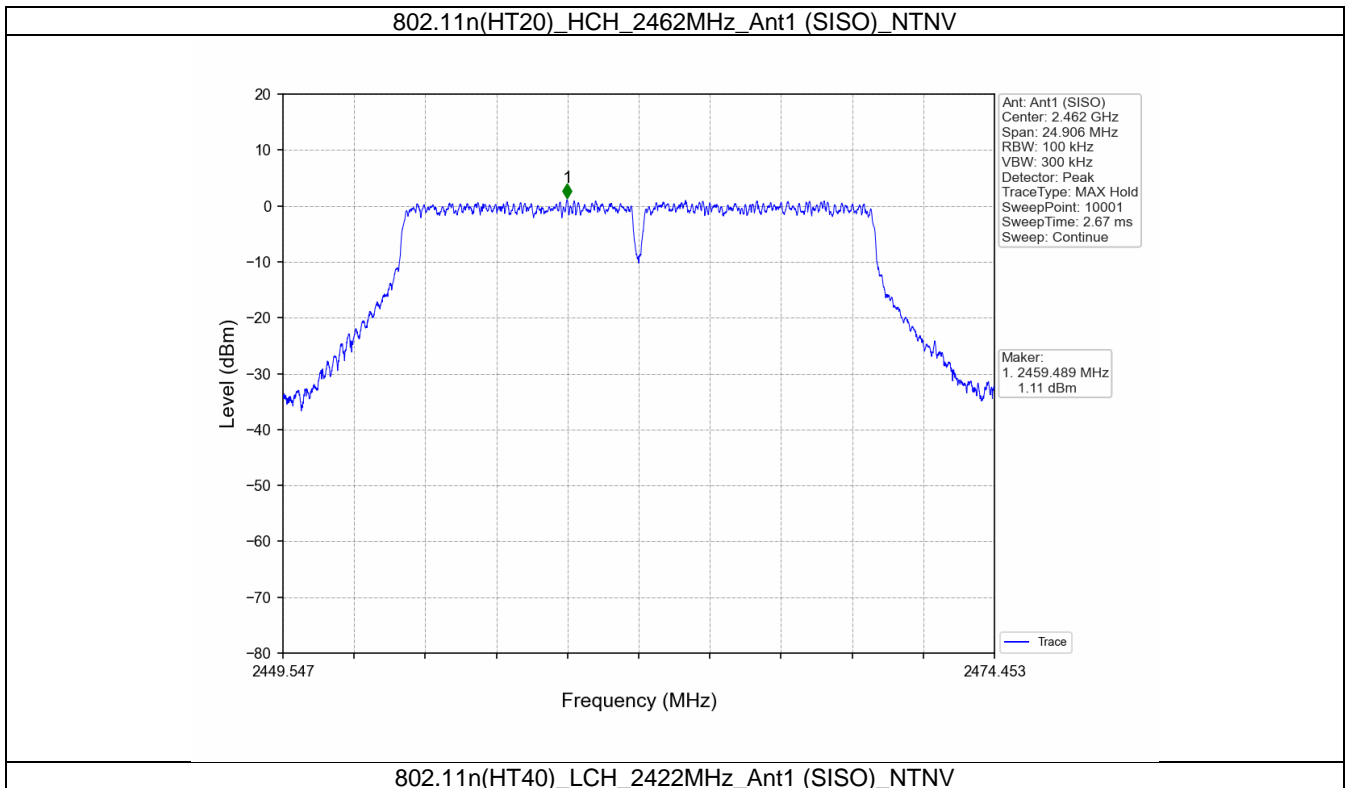
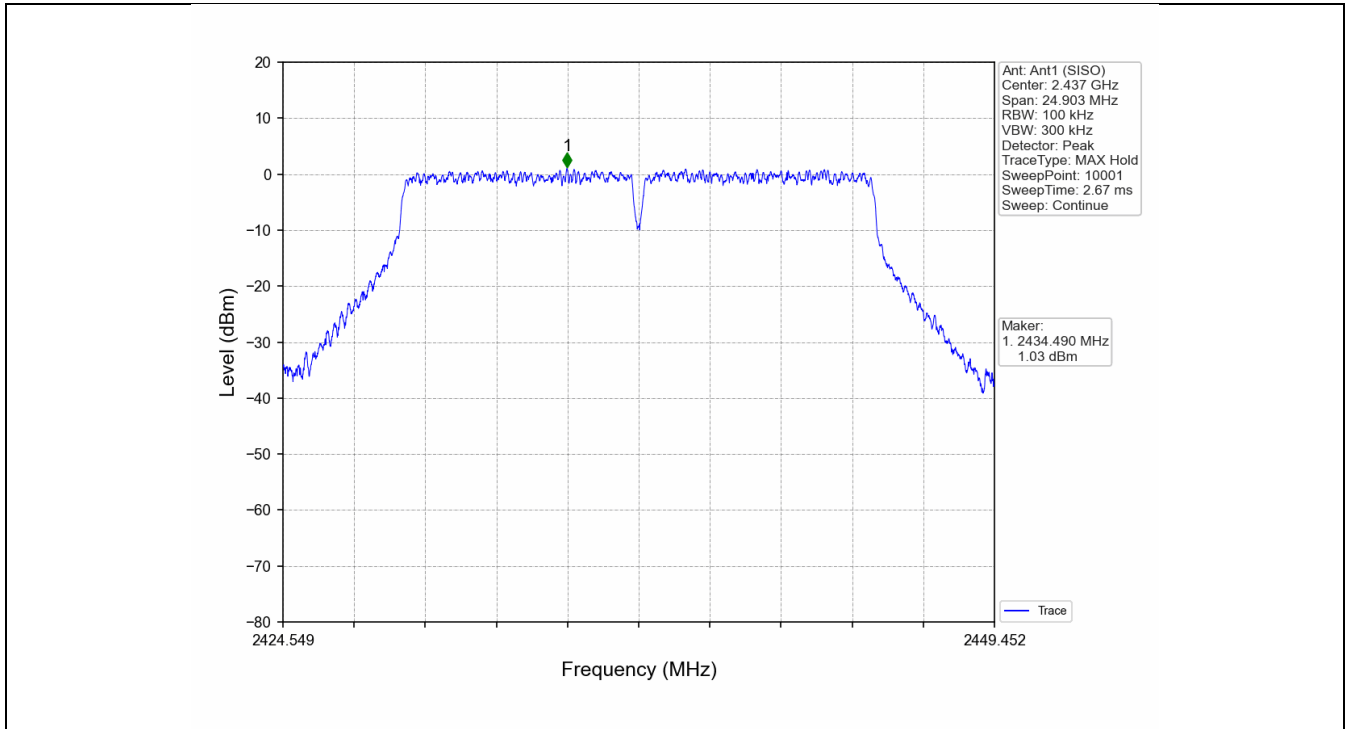
5.1.2 Test Graph

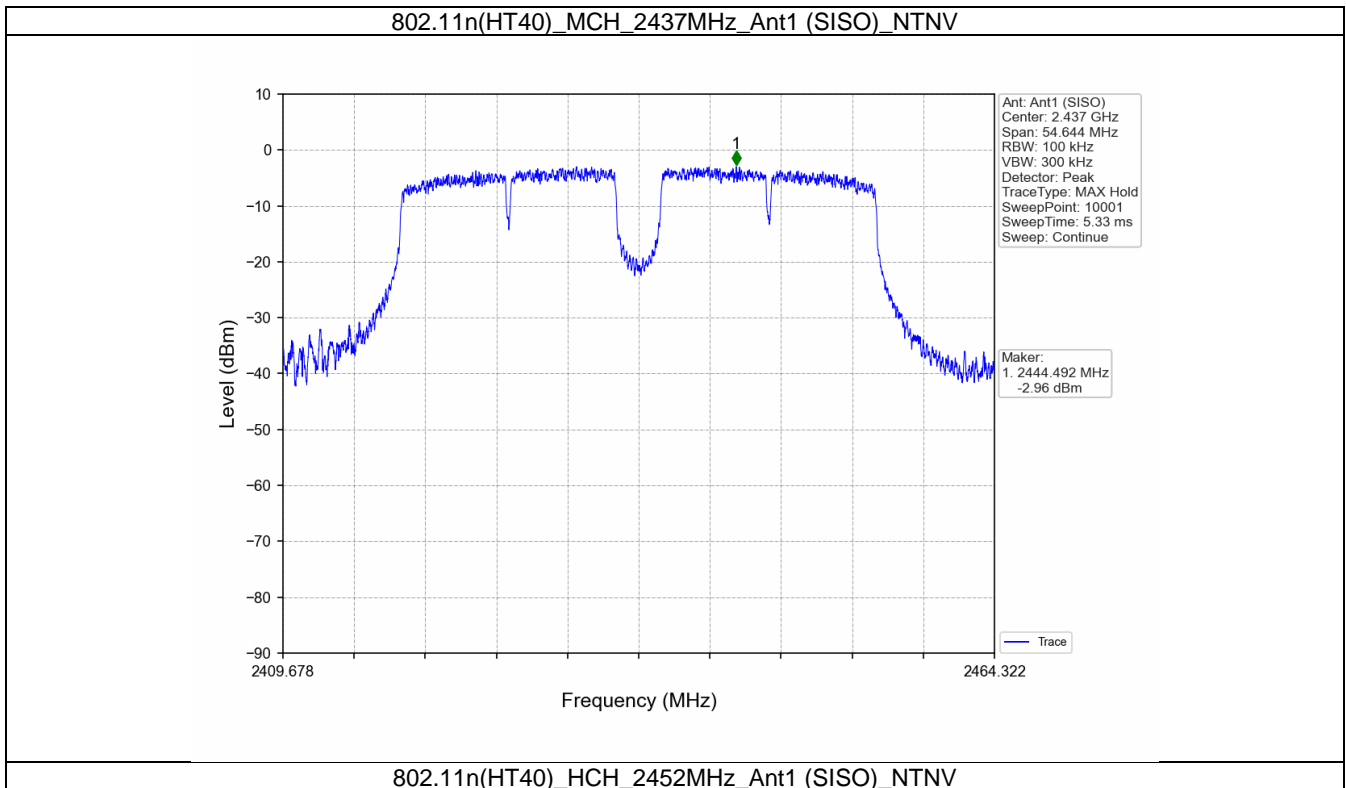
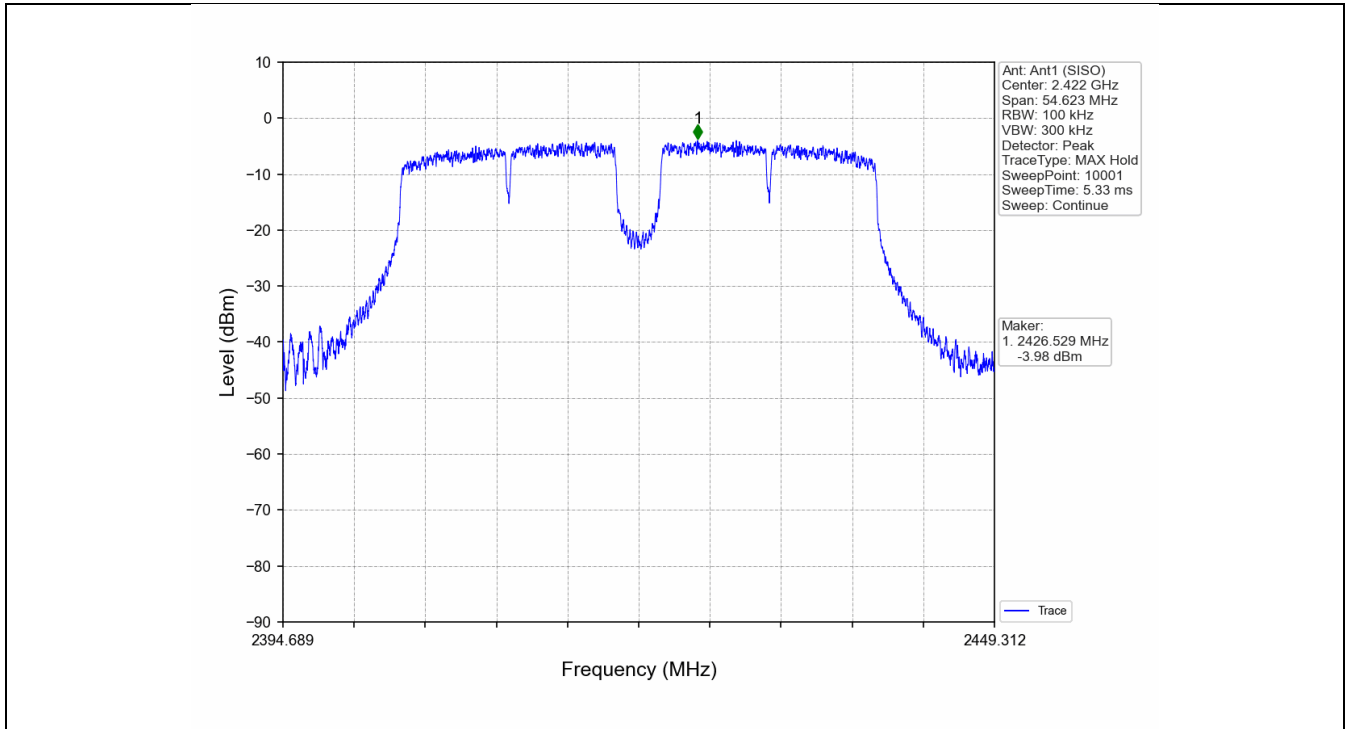


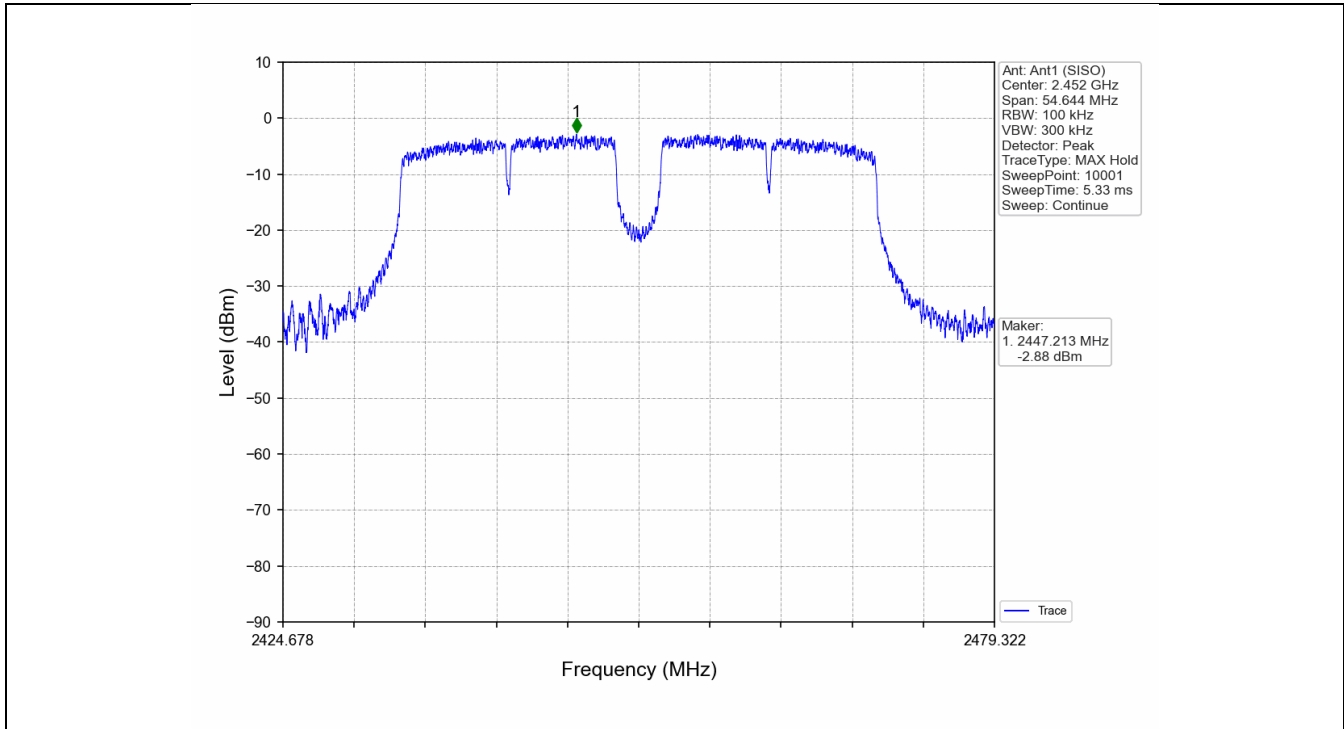












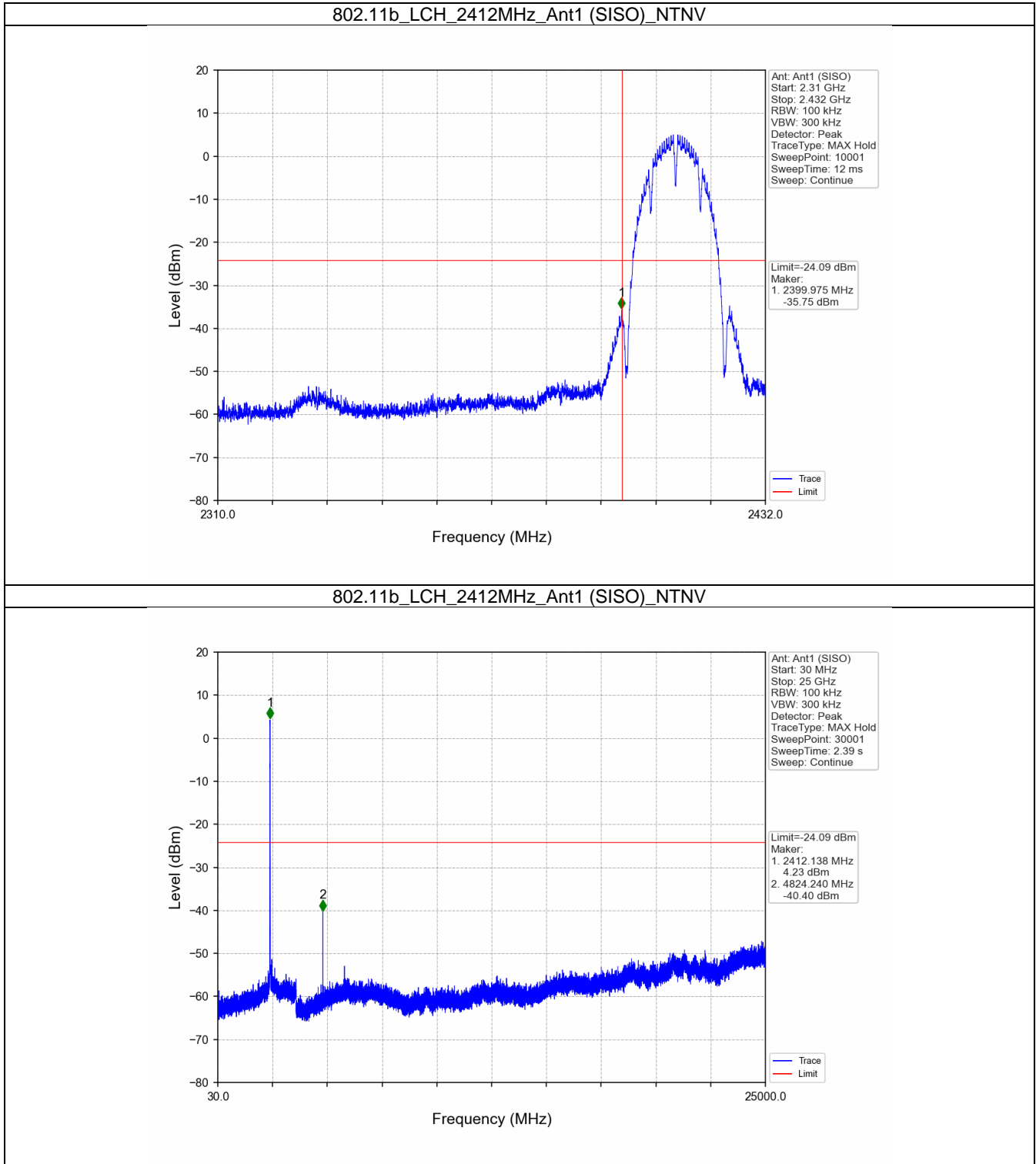
5.2 CSE

5.2.1 Test Result

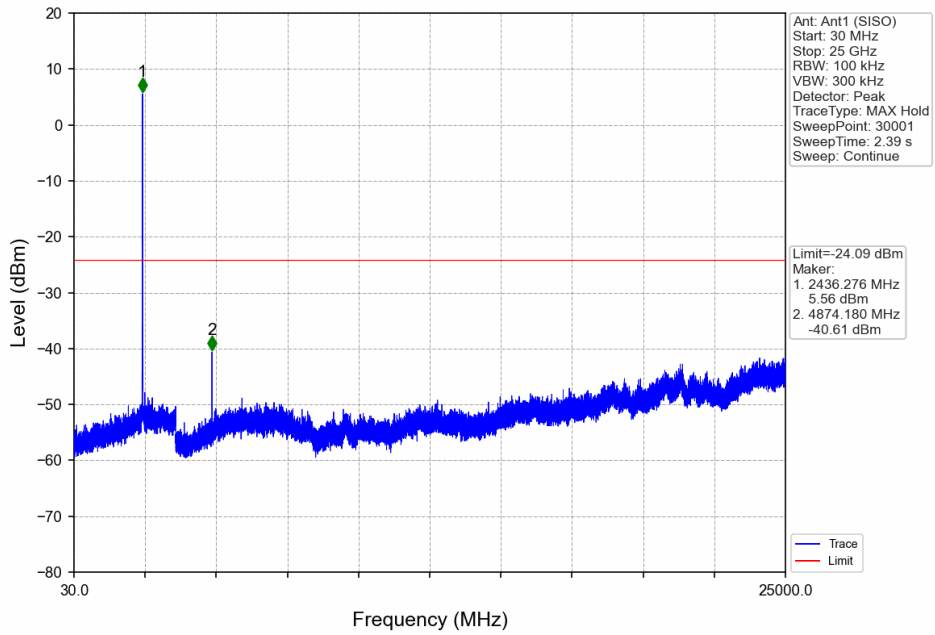
Mode	TX Type	Frequency (MHz)	Ant	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	5.91	-24.09	Pass
		2437	1	5.91	-24.09	Pass
		2462	1	5.91	-24.09	Pass
802.11g	SISO	2412	1	1.09	-28.91	Pass
		2437	1	1.09	-28.91	Pass
		2462	1	1.09	-28.91	Pass
802.11n (HT20)	SISO	2412	1	1.11	-28.89	Pass
		2437	1	1.11	-28.89	Pass
		2462	1	1.11	-28.89	Pass
802.11n (HT40)	SISO	2422	1	-2.88	-32.88	Pass
		2437	1	-2.88	-32.88	Pass
		2452	1	-2.88	-32.88	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.

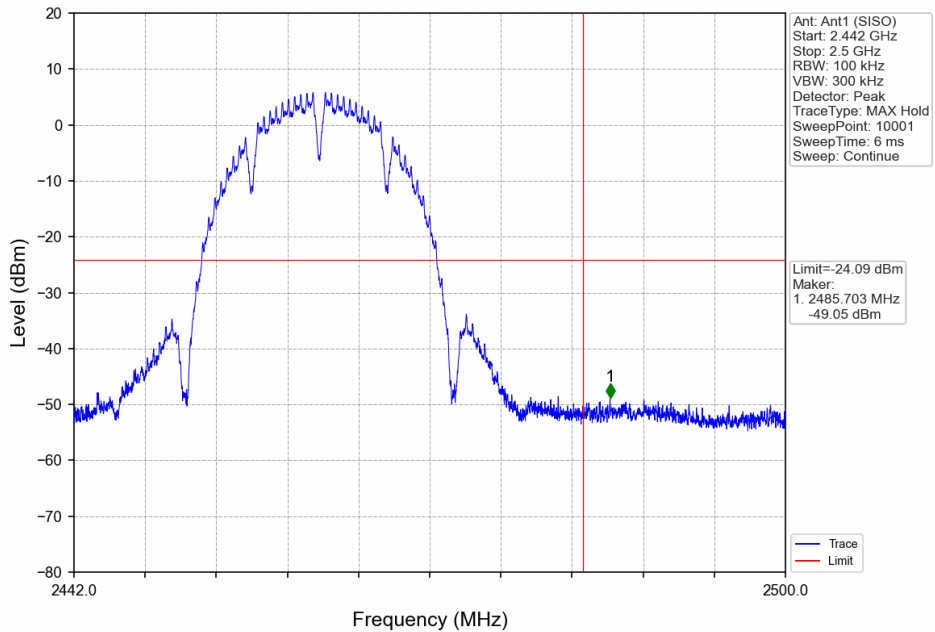
5.2.2 Test Graph



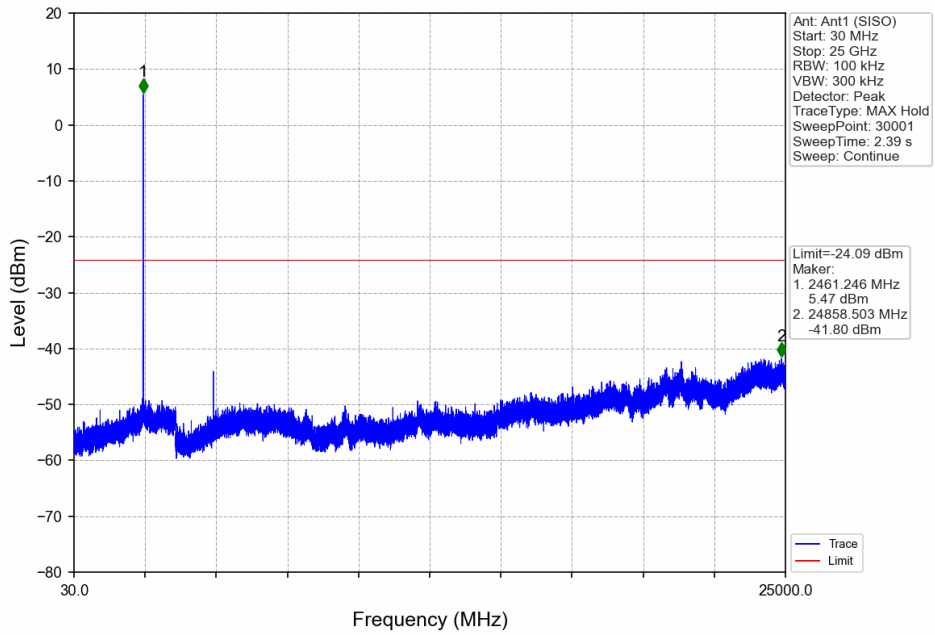
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



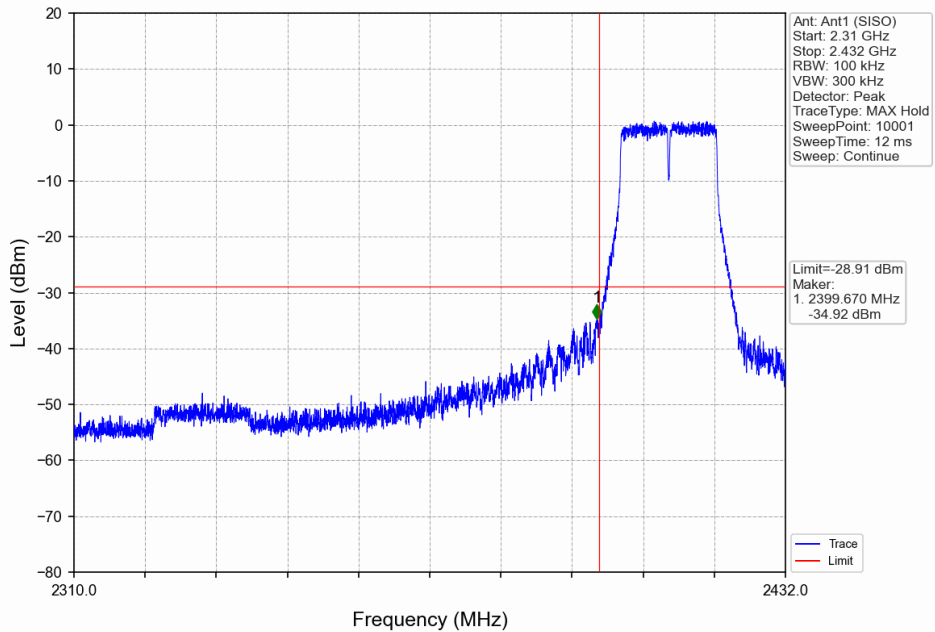
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



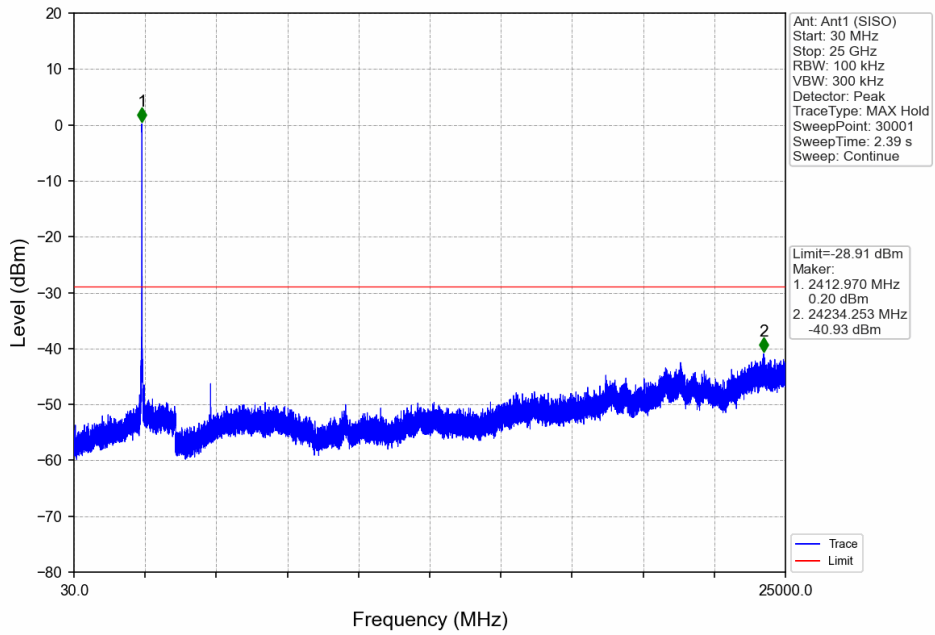
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



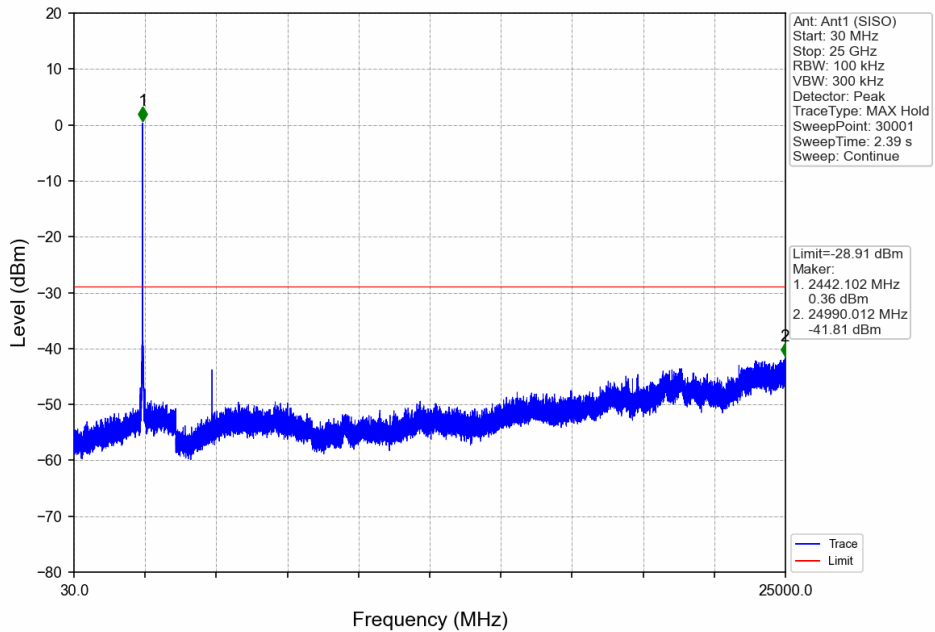
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



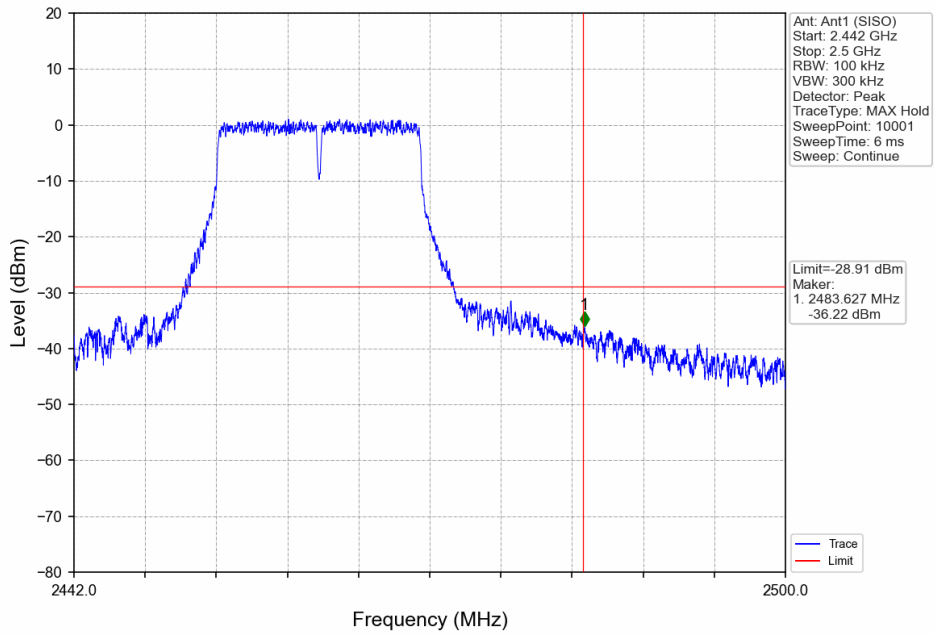
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



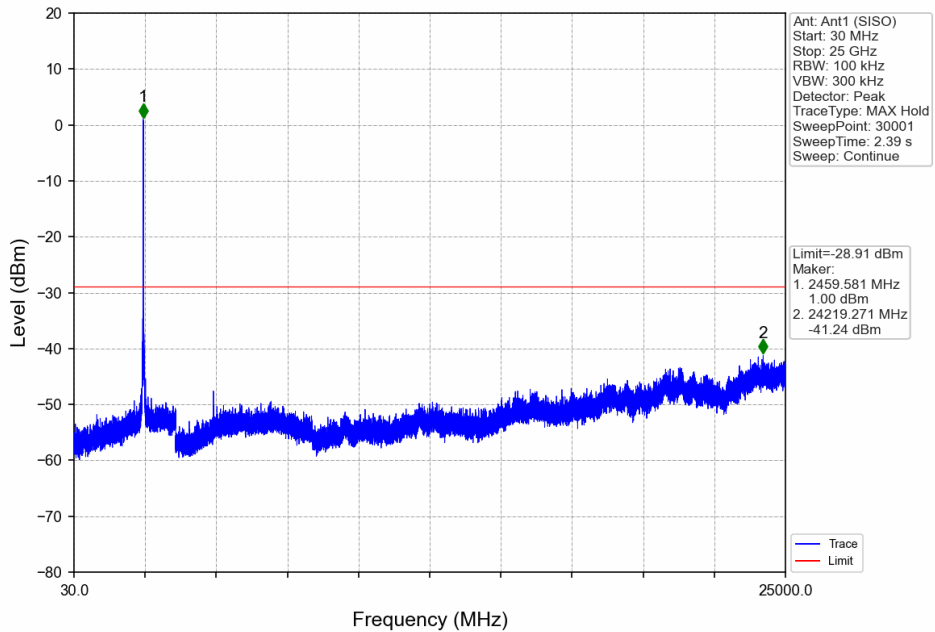
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



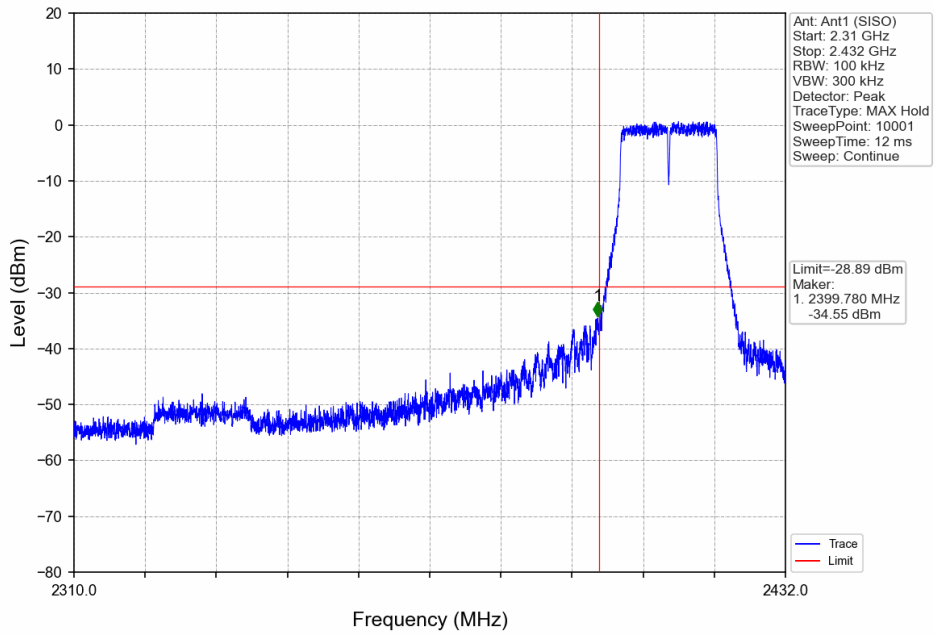
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



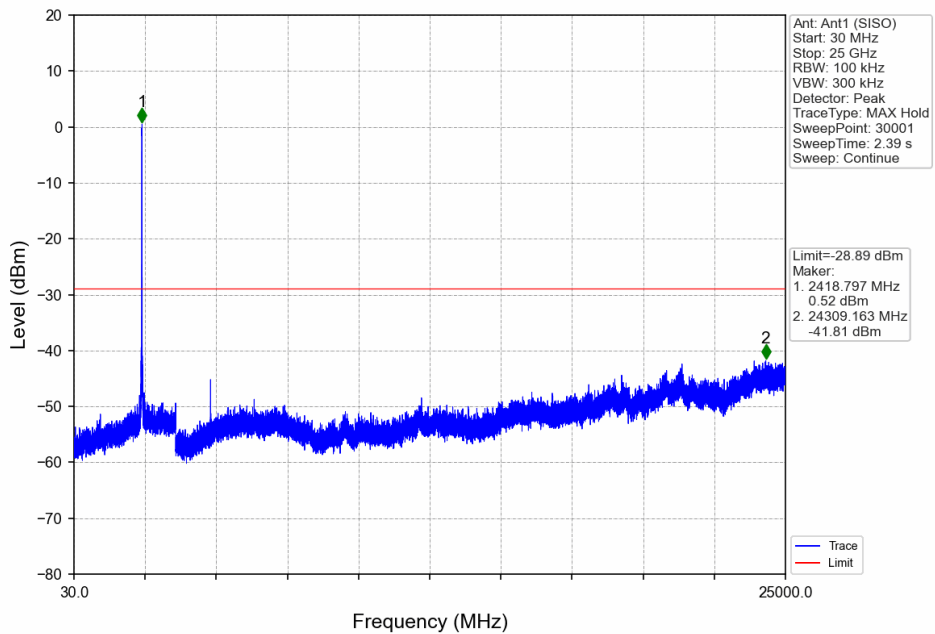
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



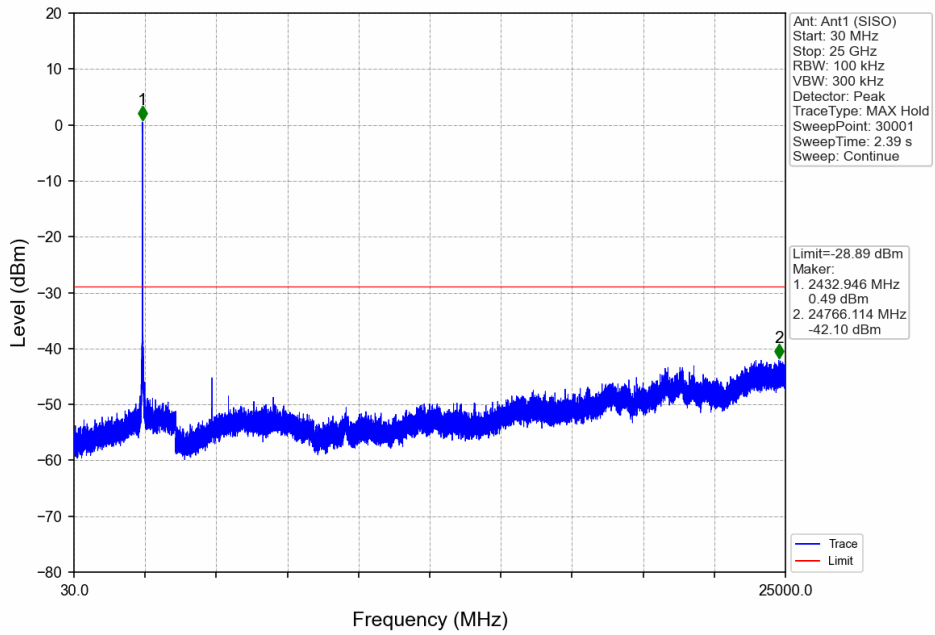
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



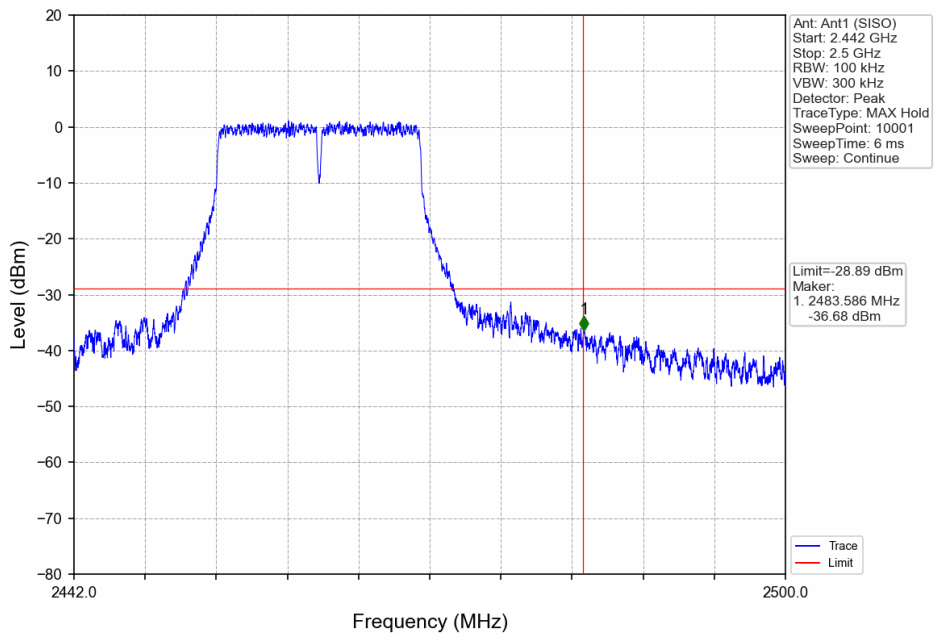
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



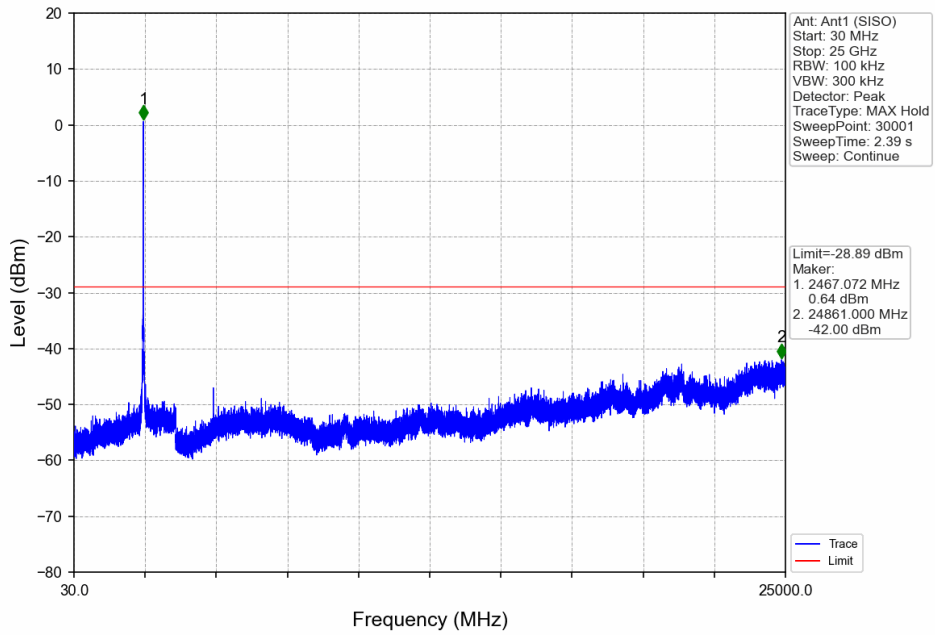
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



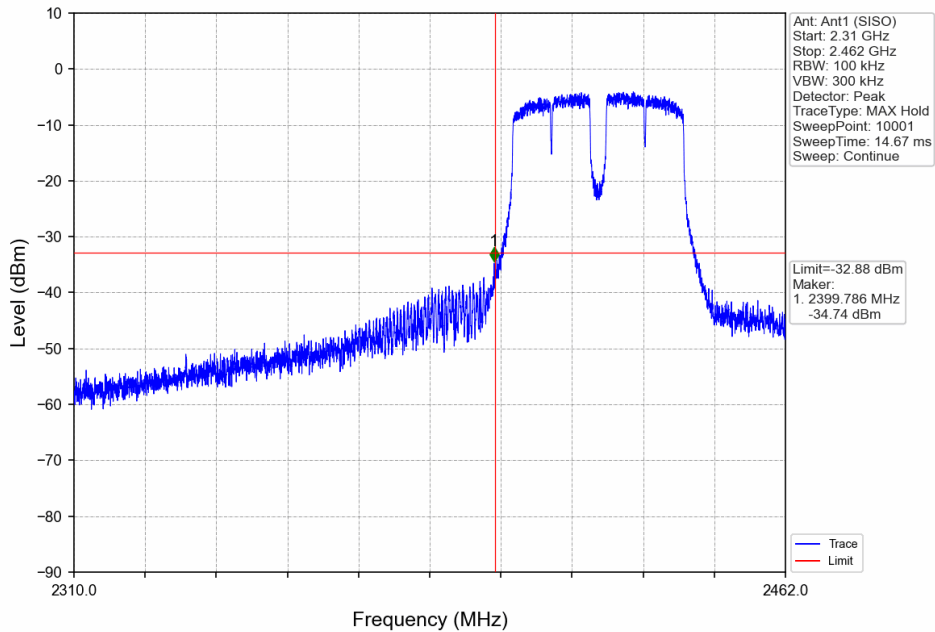
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



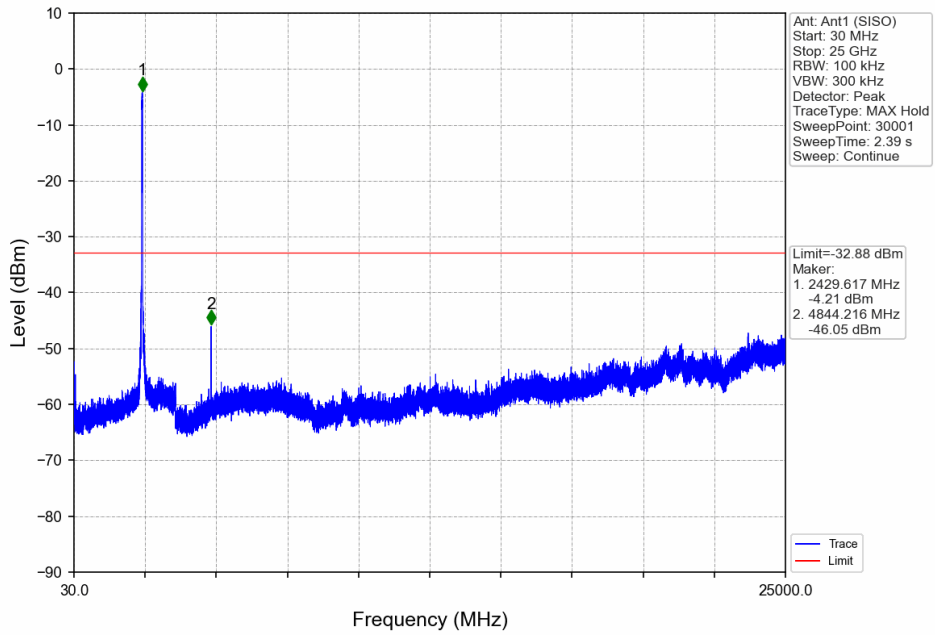
802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



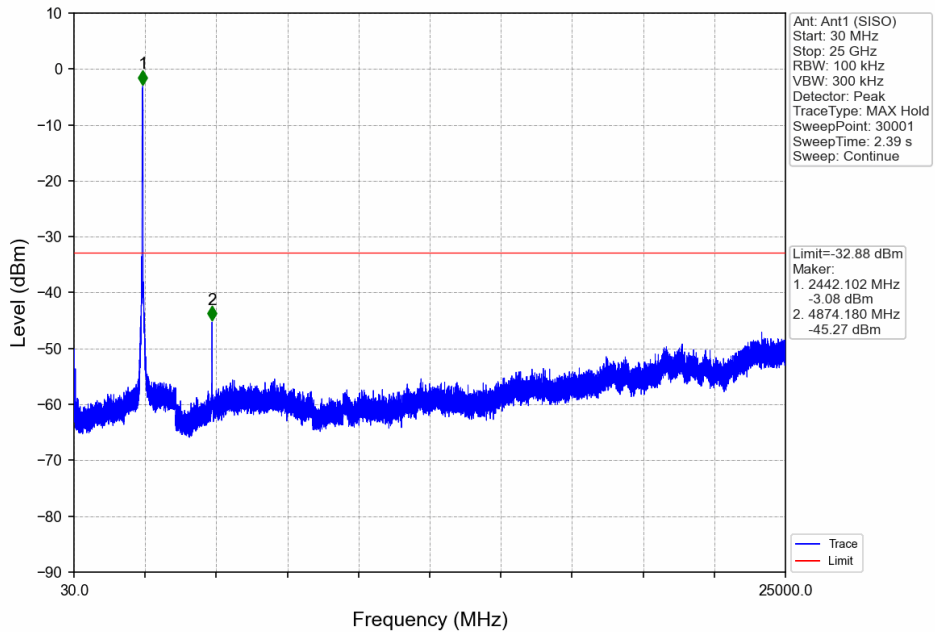
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



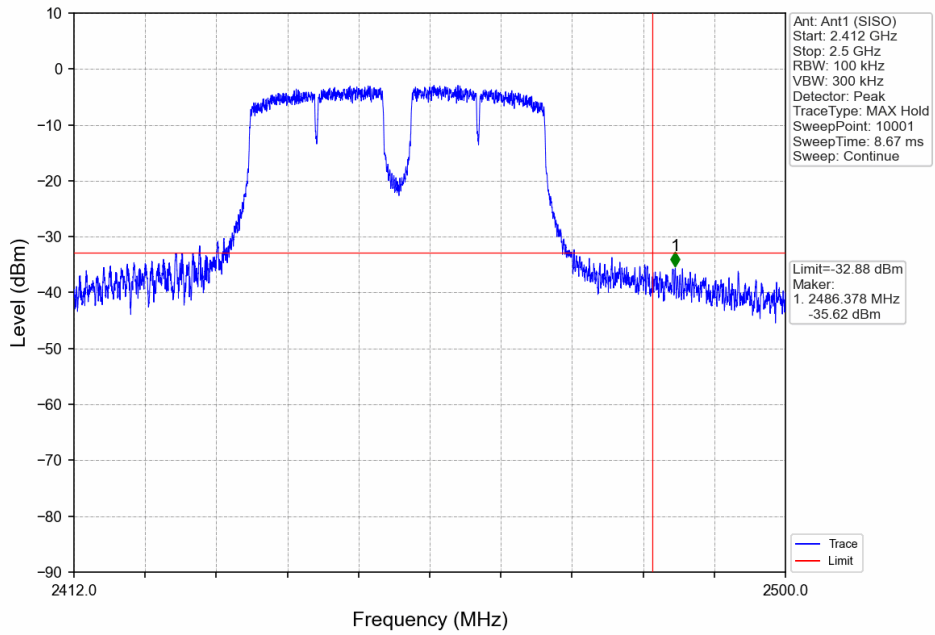
802.11n(HT40)_LCH_2422MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant1 (SISO)_NTNV

