

Appendix: 2.4G Wi-Fi

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1. Duty Cycle

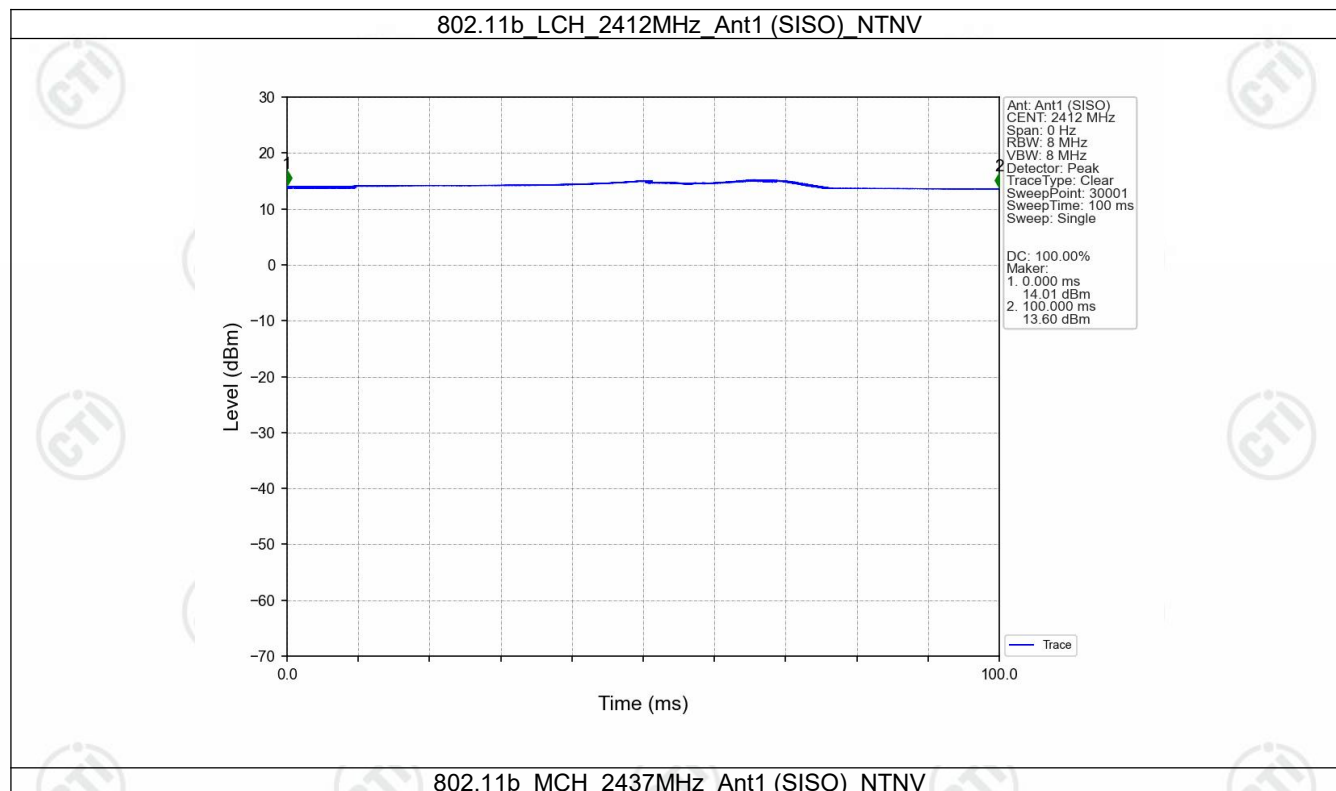
1.1 Test Result

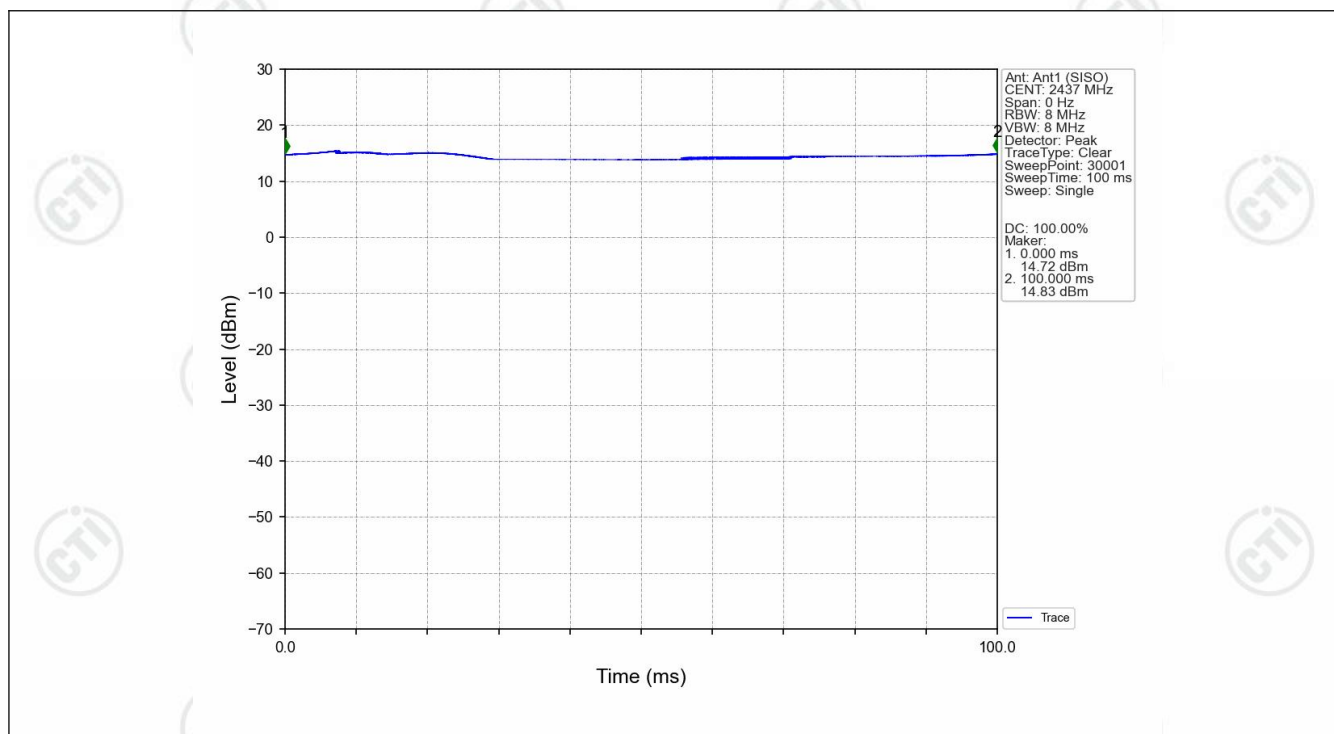
1.1.1 Ant1

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	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

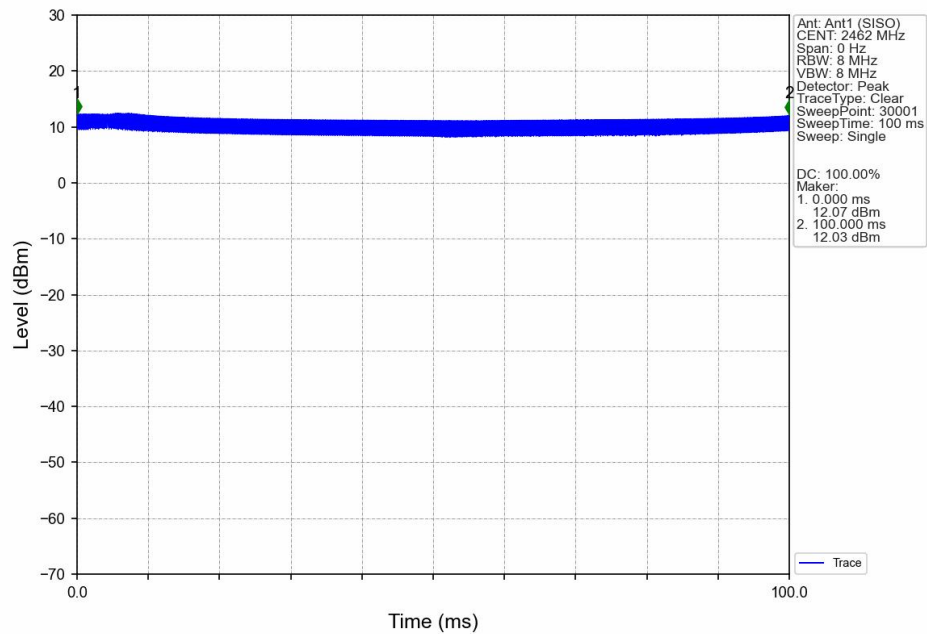
1.2 Test Graph

1.2.1 Ant1

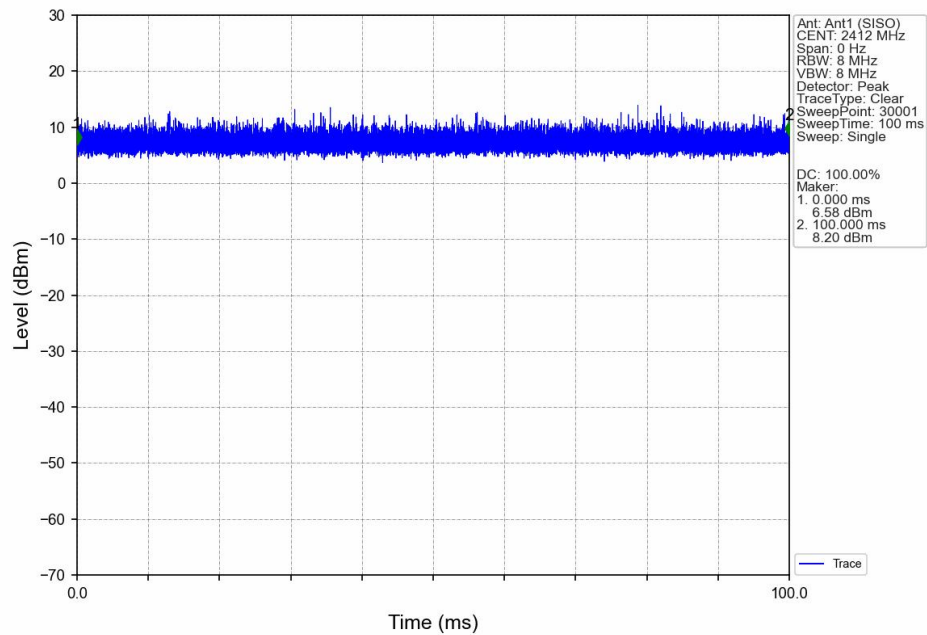




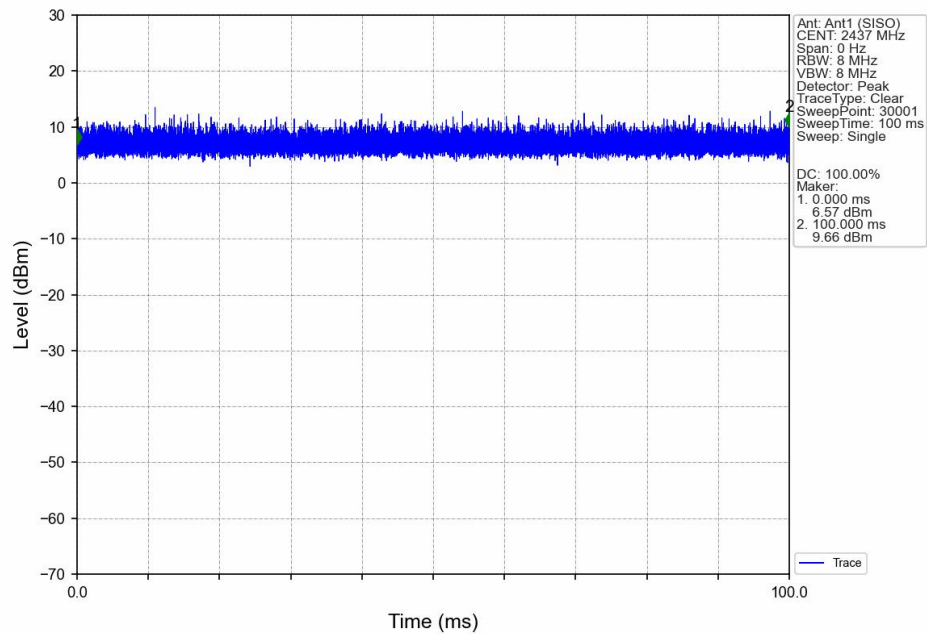
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



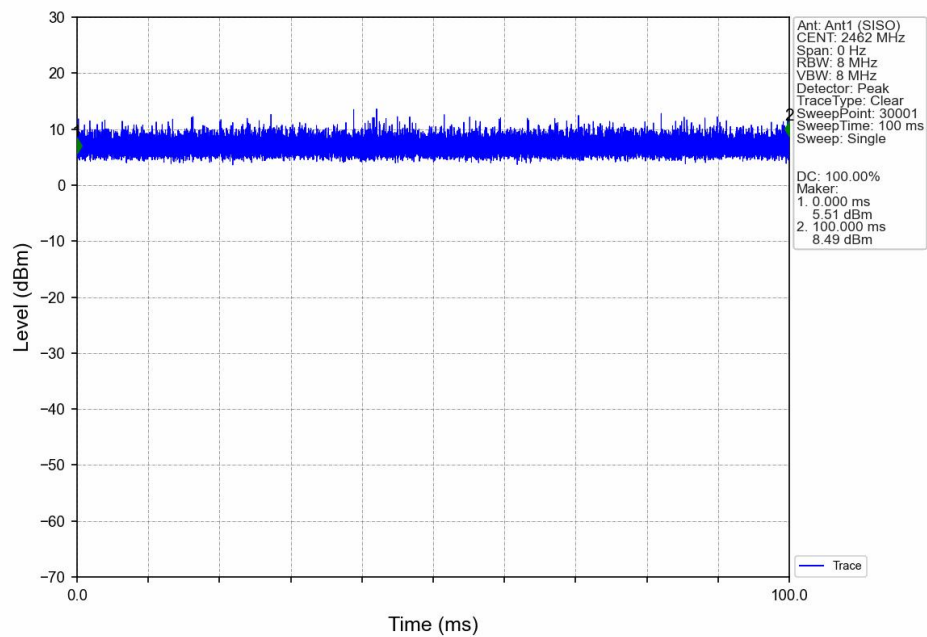
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



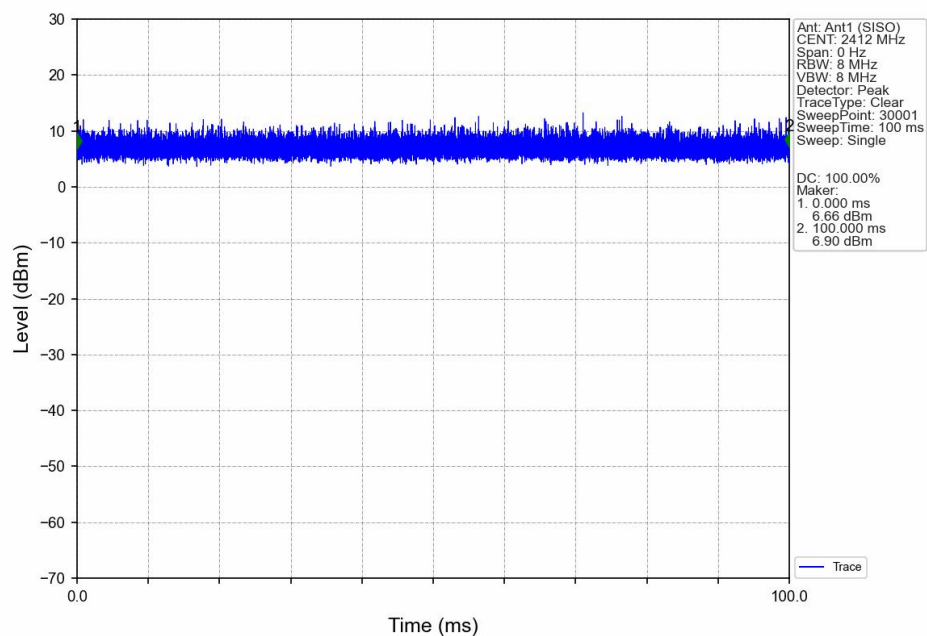
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



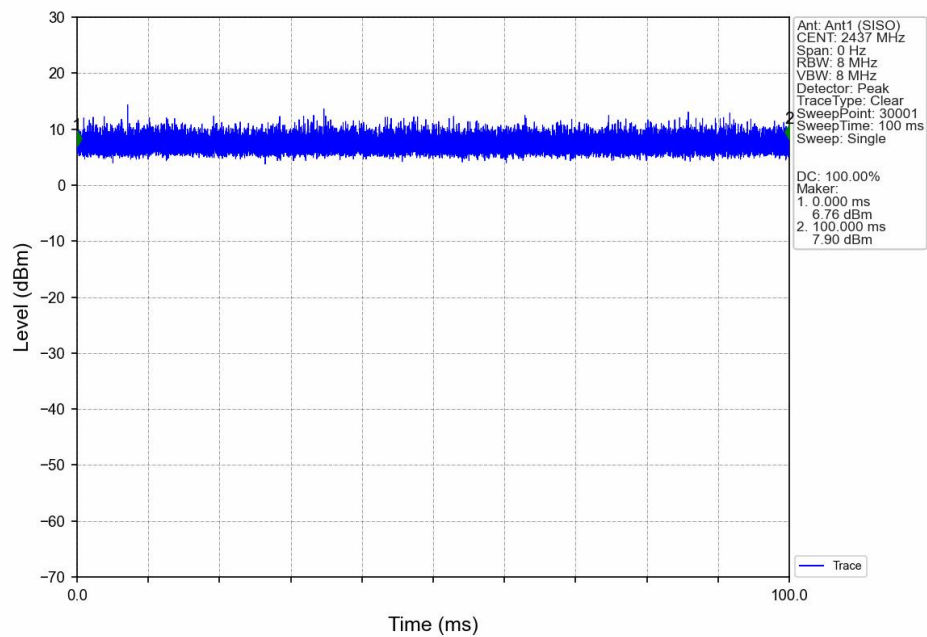
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

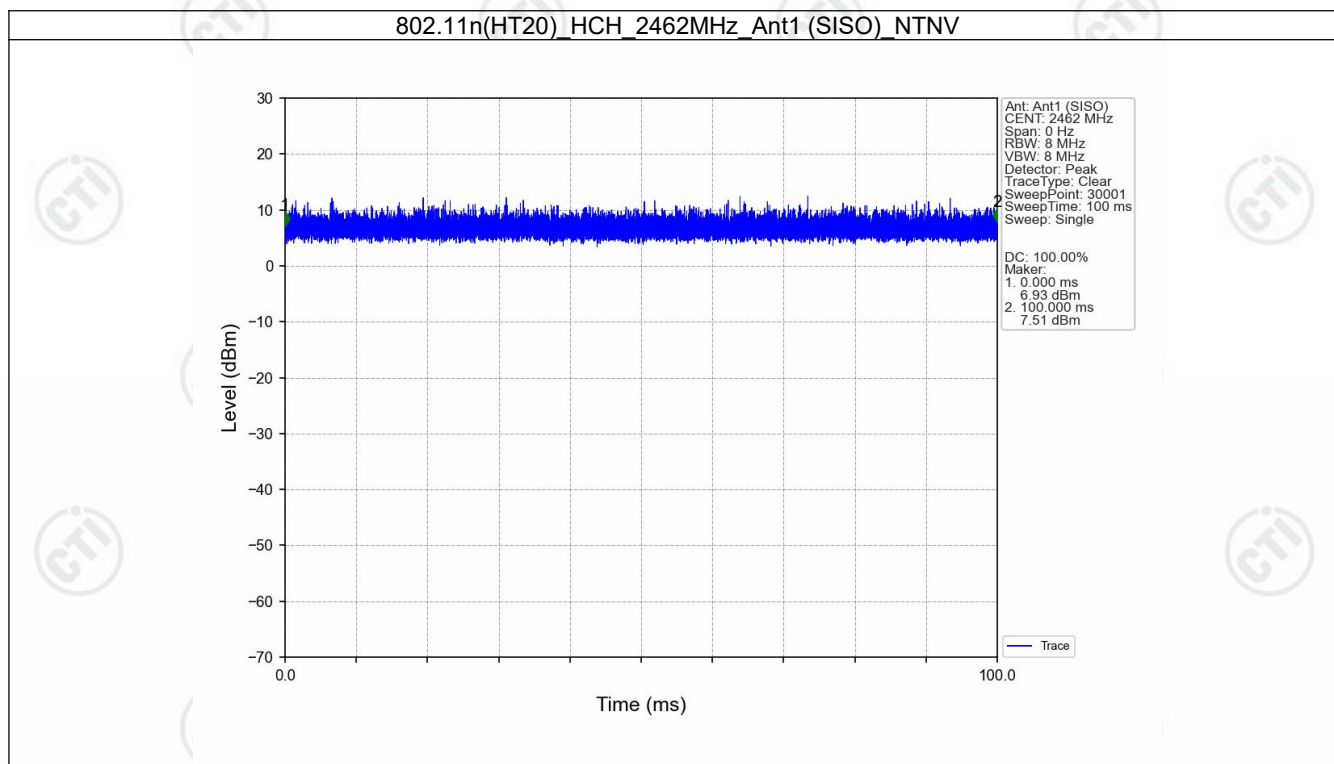


802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV





2. Bandwidth

2.1 Test Result

2.1.1 OBW

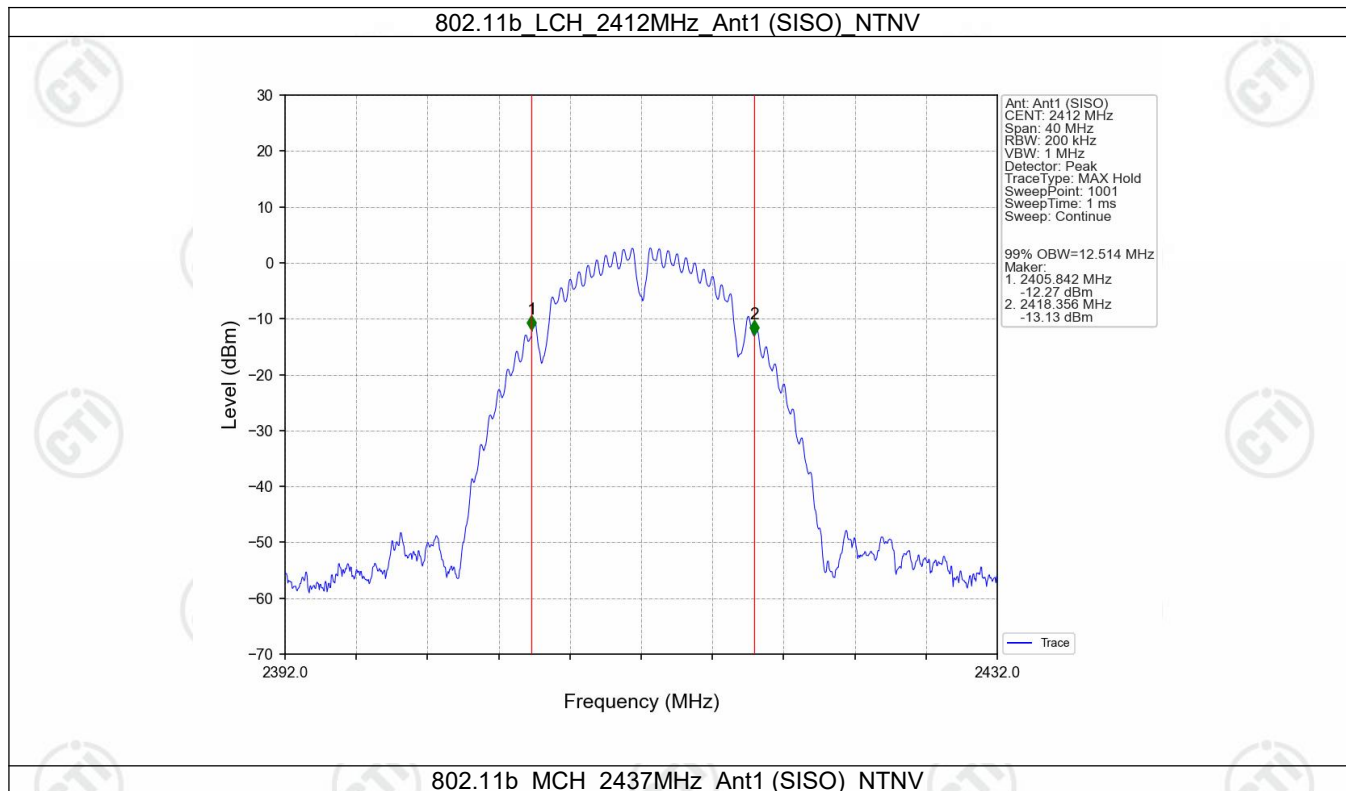
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	12.514	/	Pass
		2437	1	12.705	/	Pass
		2462	1	12.454	/	Pass
802.11g	SISO	2412	1	16.471	/	Pass
		2437	1	16.449	/	Pass
		2462	1	16.428	/	Pass
802.11n (HT20)	SISO	2412	1	17.557	/	Pass
		2437	1	17.575	/	Pass
		2462	1	17.595	/	Pass

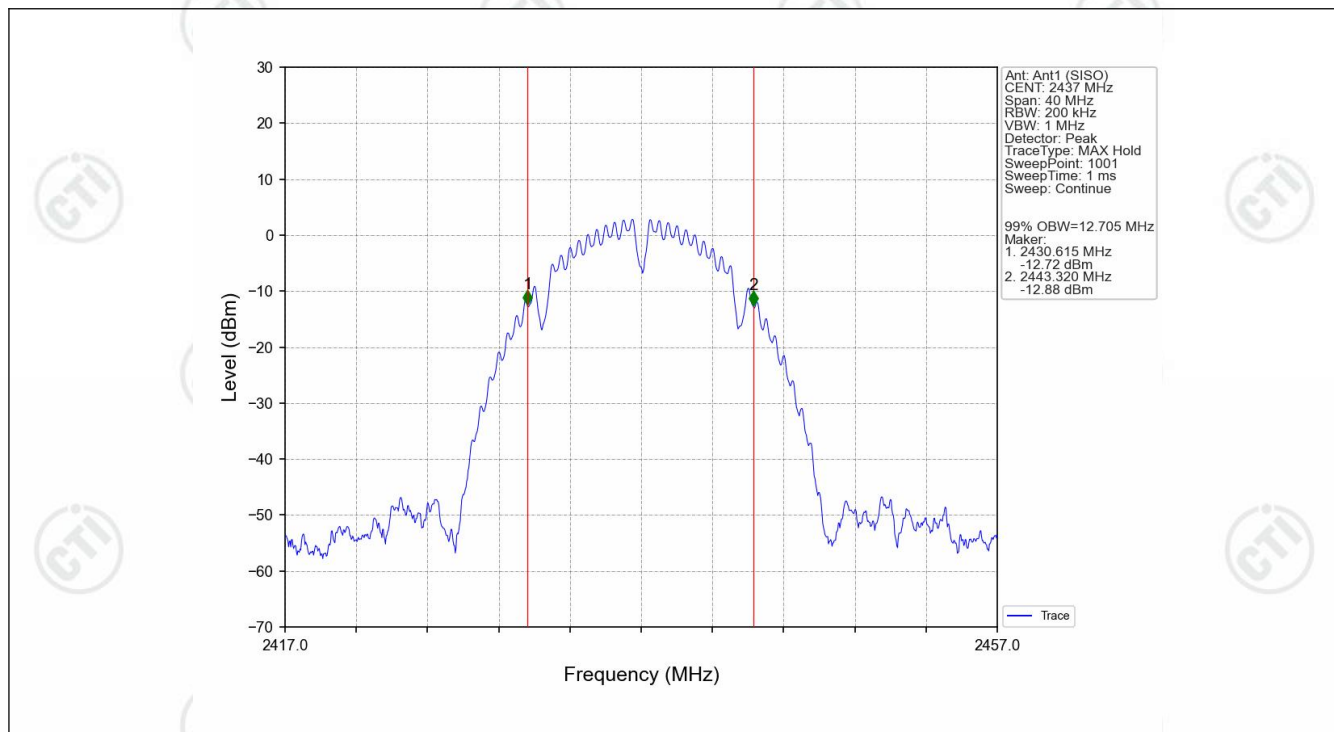
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	8.144	≥ 0.5	Pass
		2437	1	8.166	≥ 0.5	Pass
		2462	1	8.145	≥ 0.5	Pass
802.11g	SISO	2412	1	16.155	≥ 0.5	Pass
		2437	1	16.155	≥ 0.5	Pass
		2462	1	16.208	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	17.239	≥ 0.5	Pass
		2437	1	17.345	≥ 0.5	Pass
		2462	1	17.329	≥ 0.5	Pass

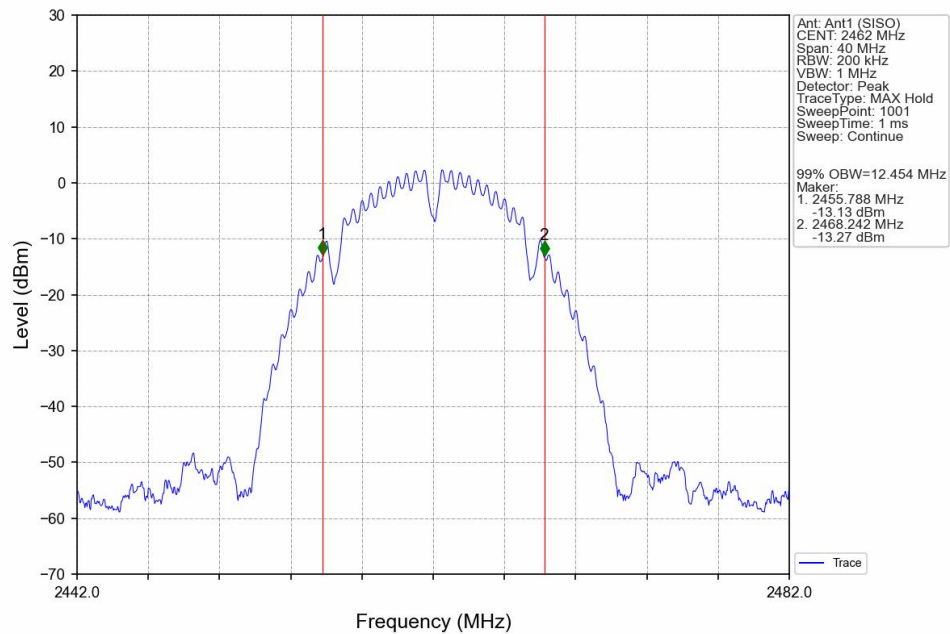
2.2 Test Graph

2.2.1 OBW

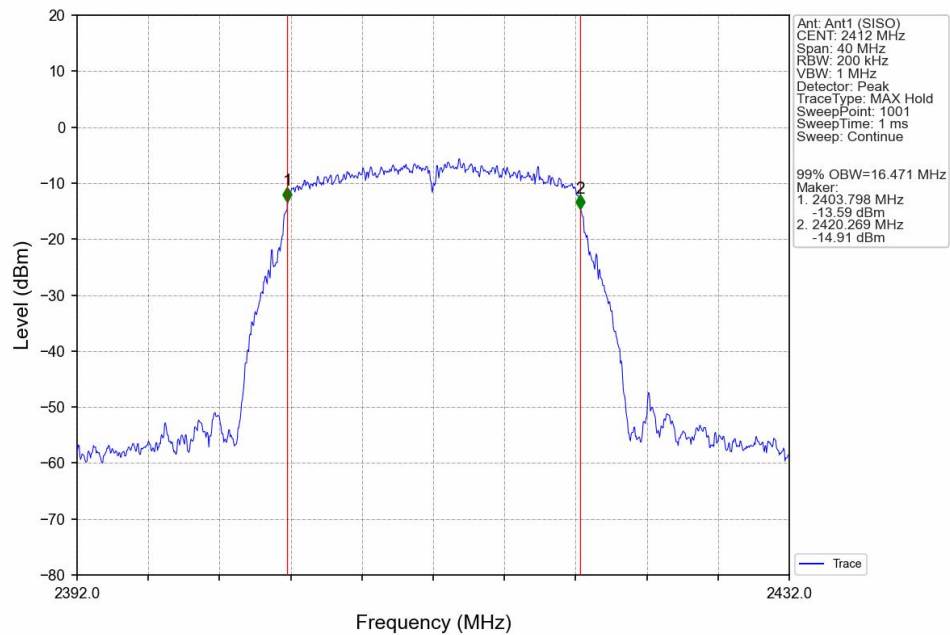




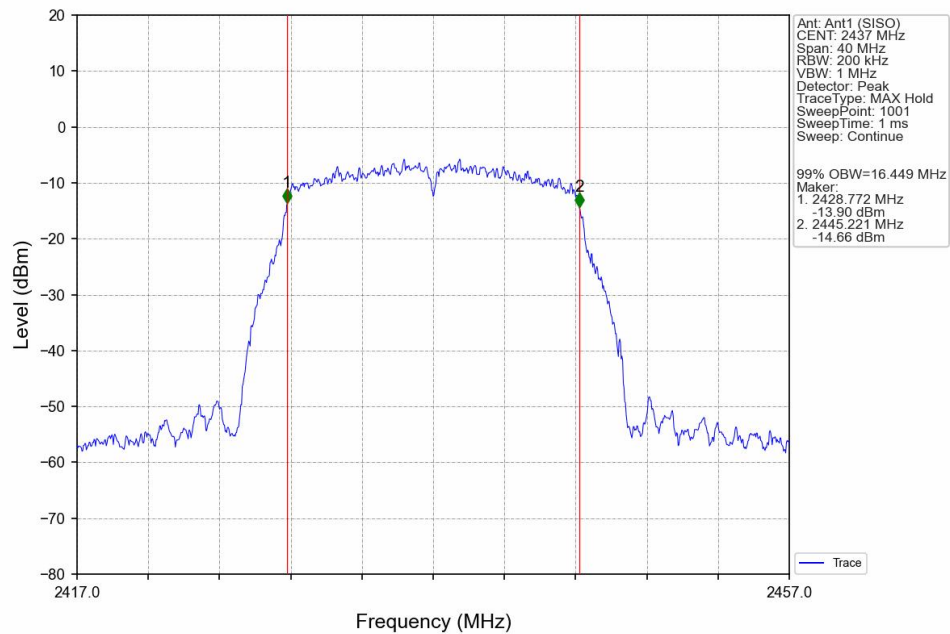
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



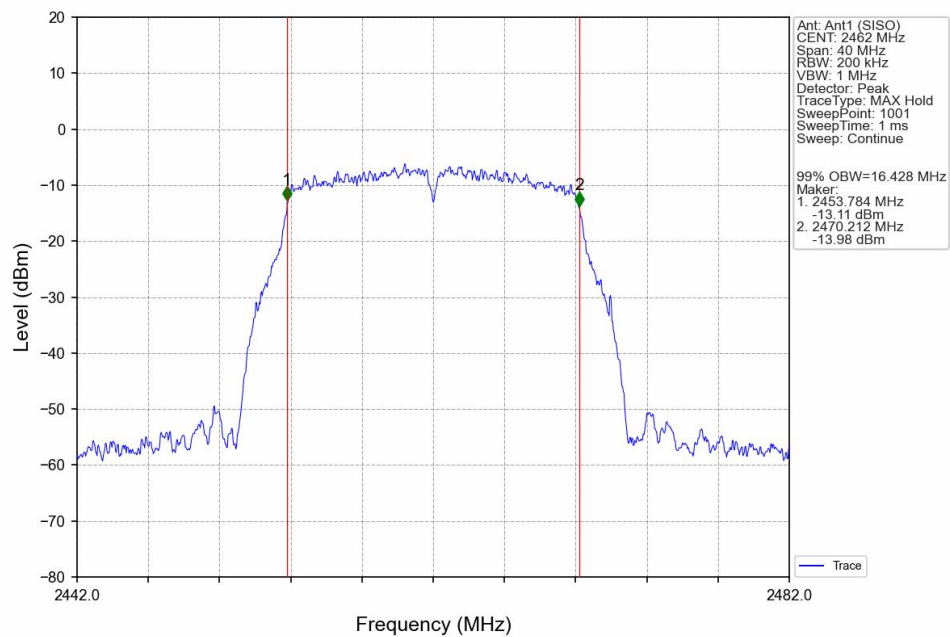
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



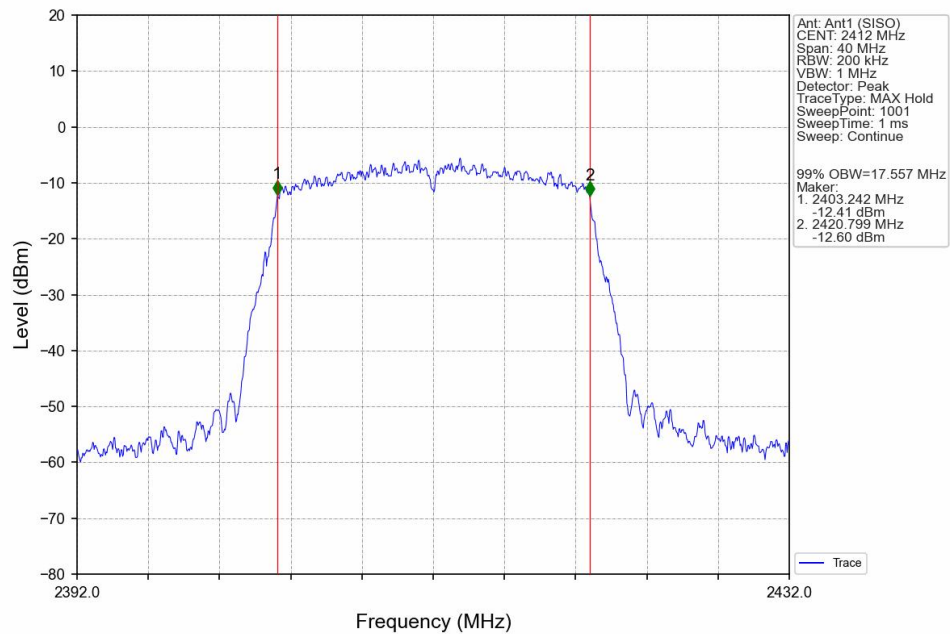
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



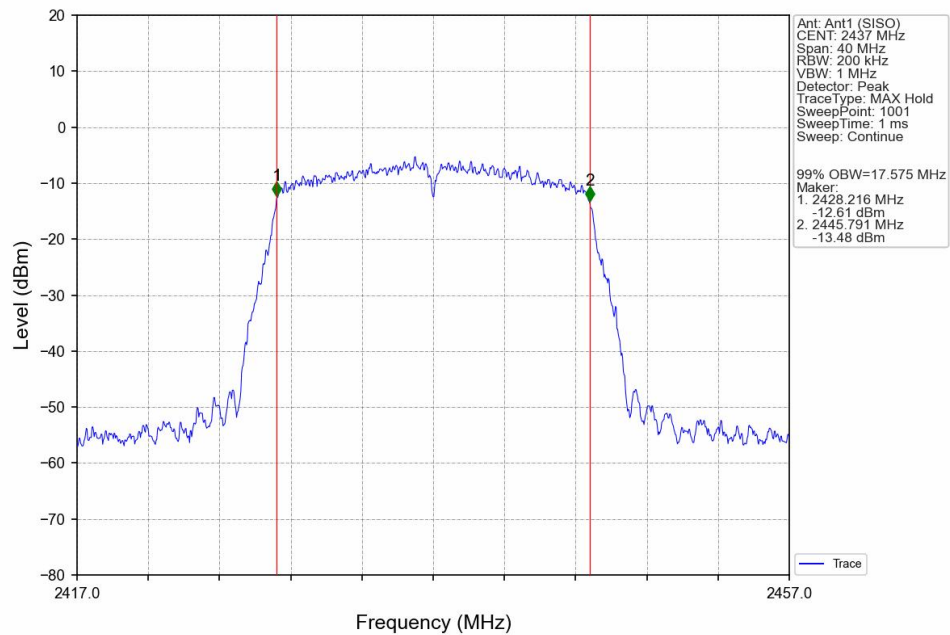
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

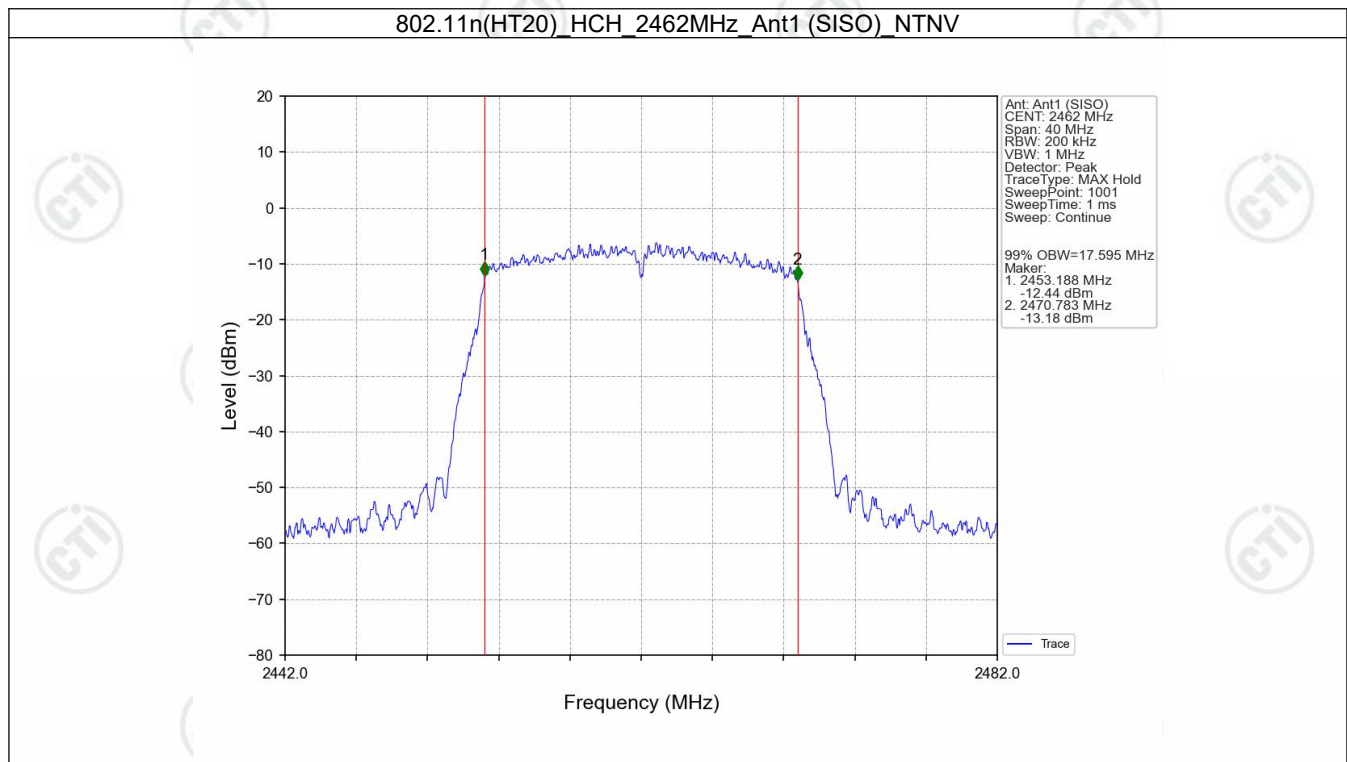


802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

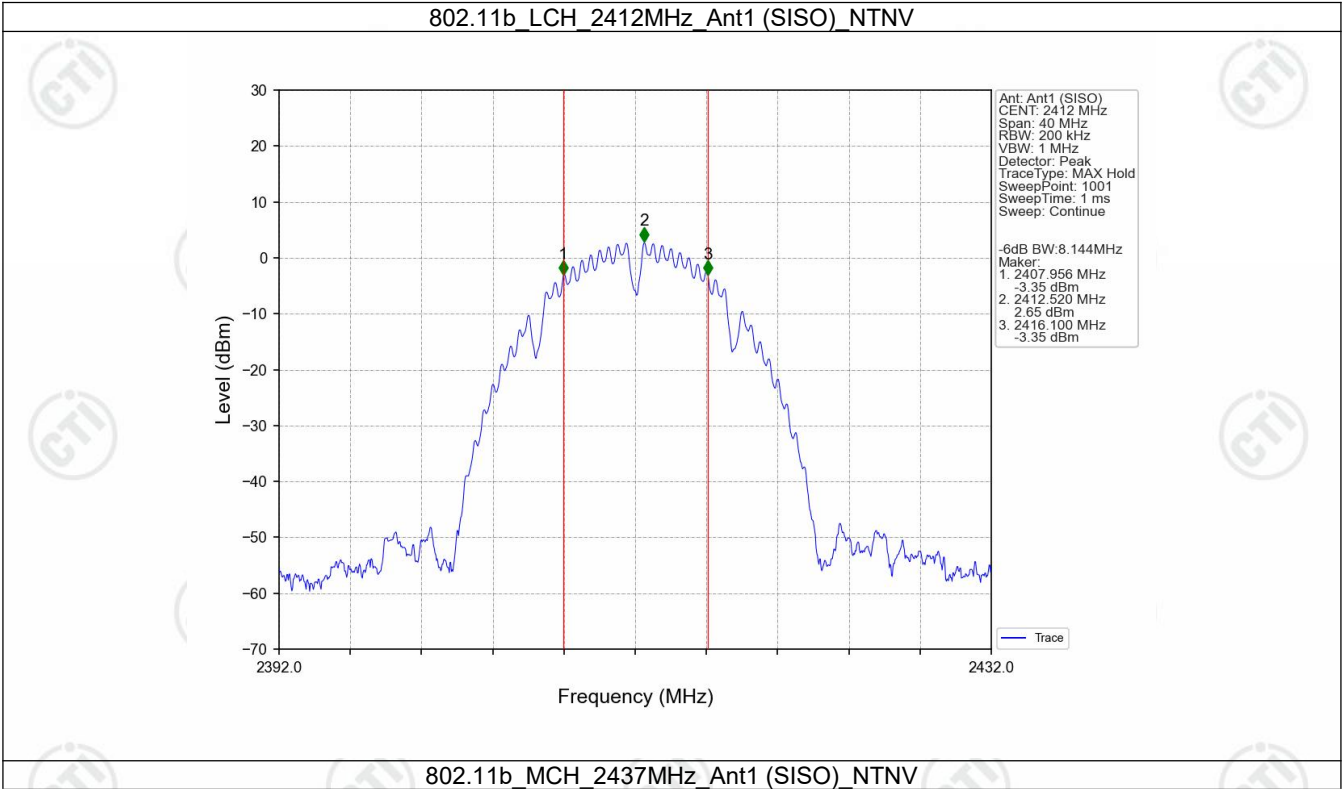


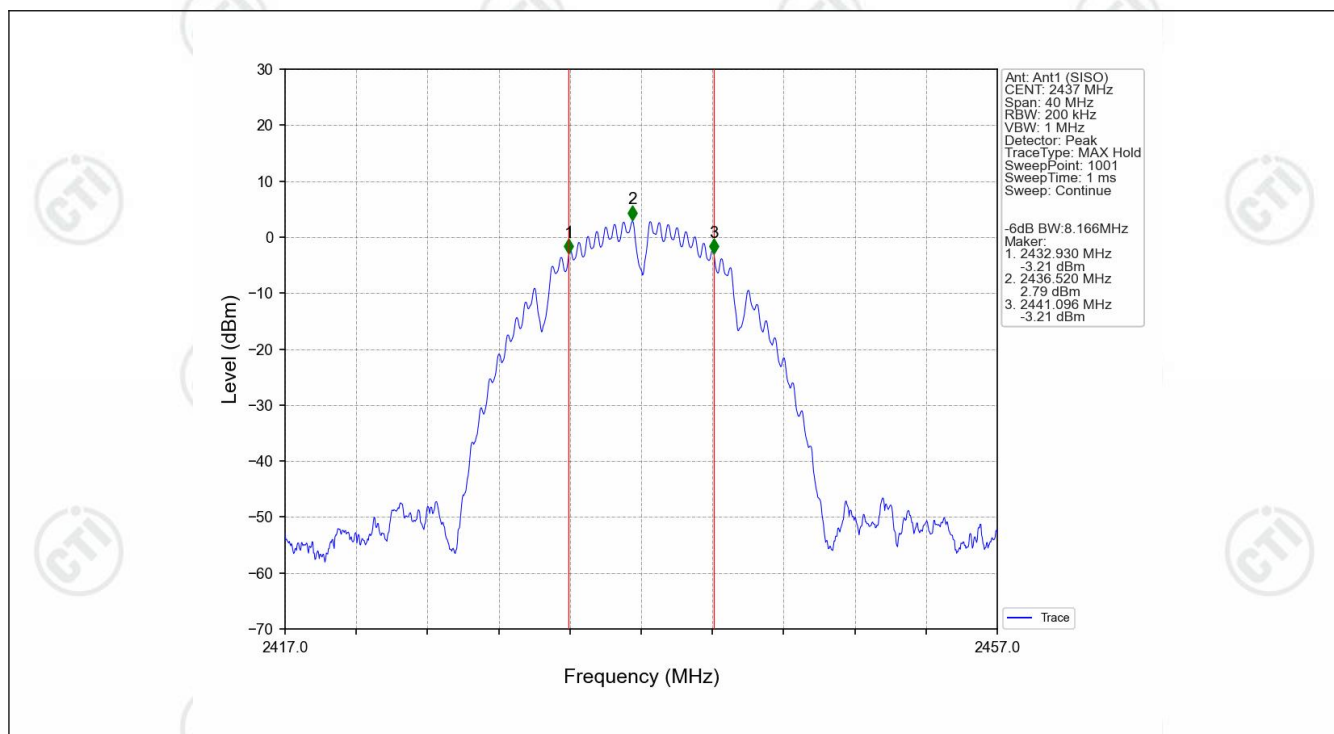
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



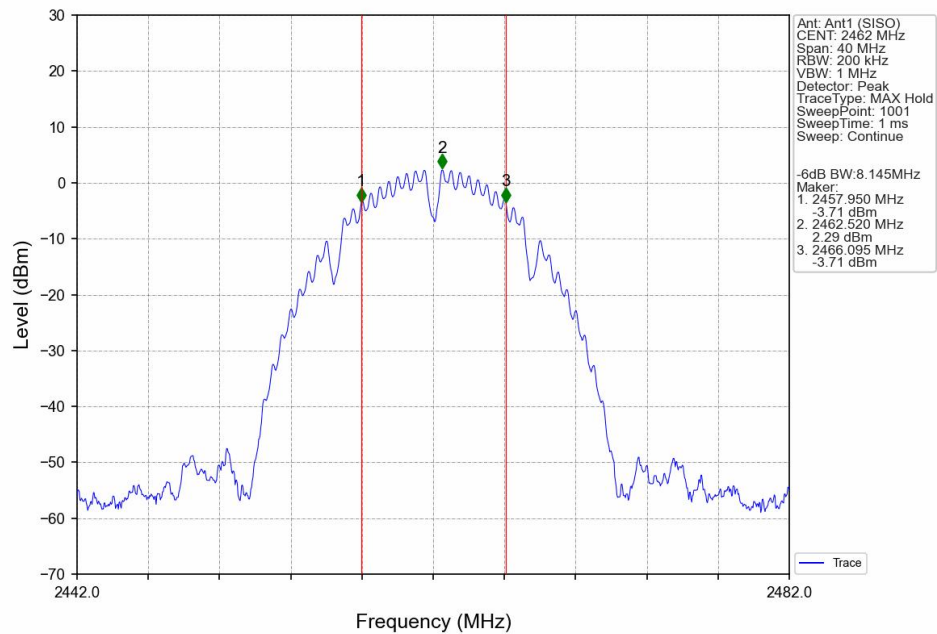


2.2.2 6dB BW

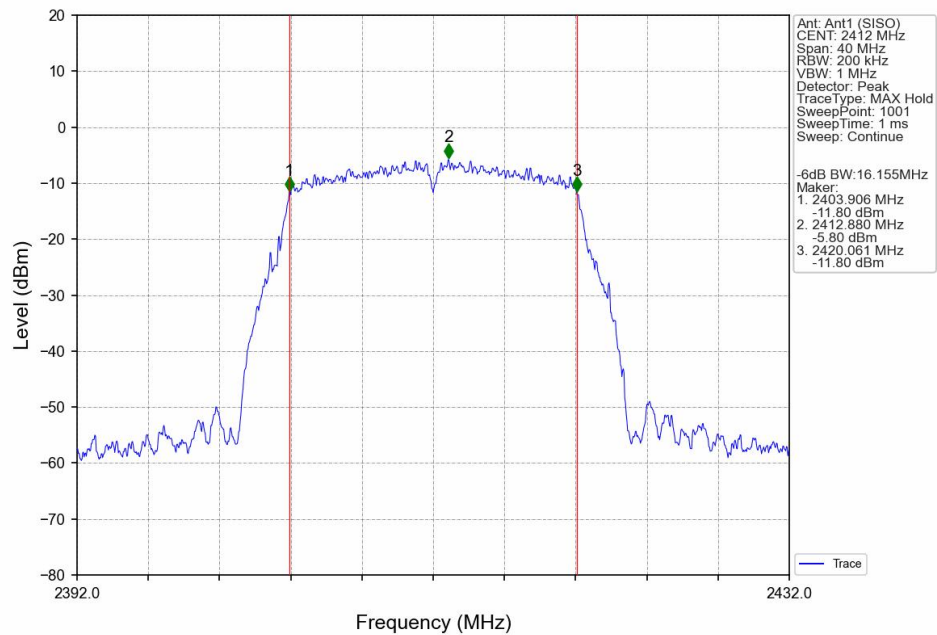




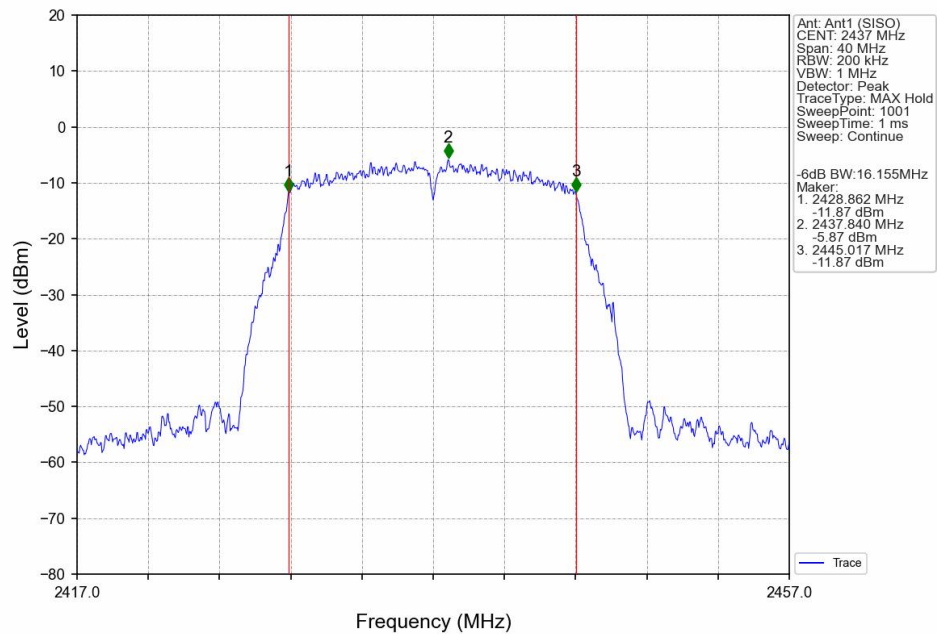
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



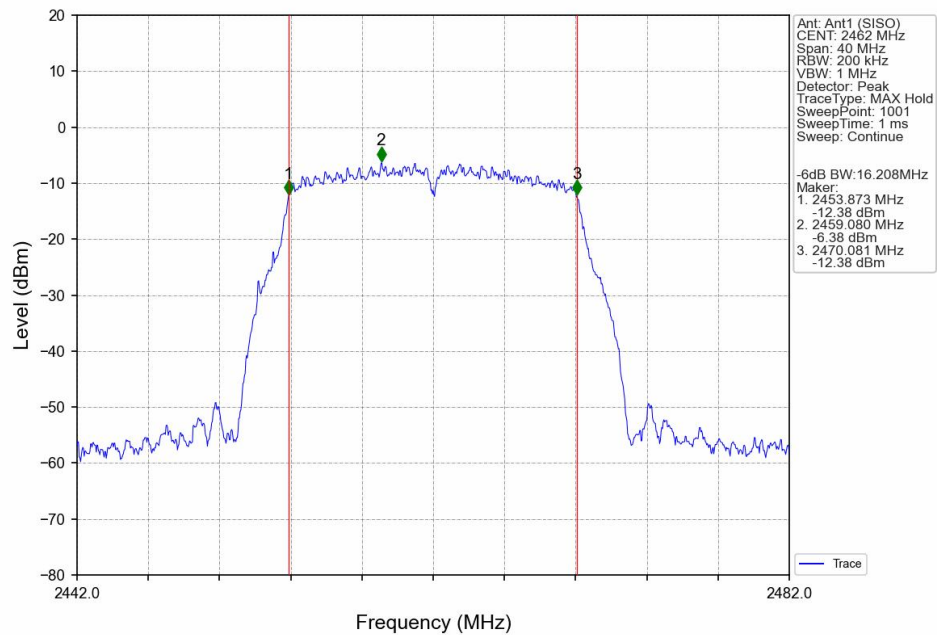
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



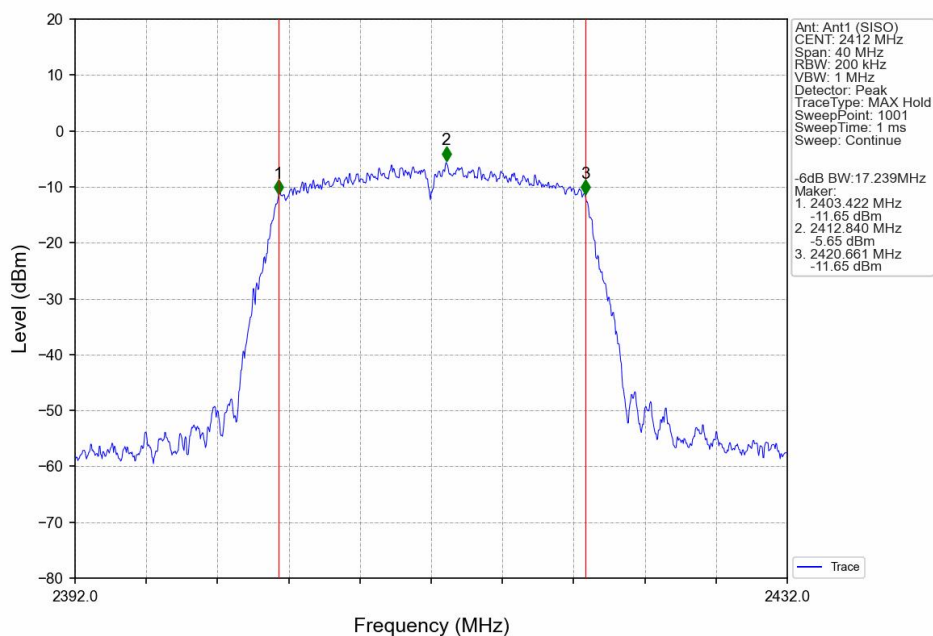
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



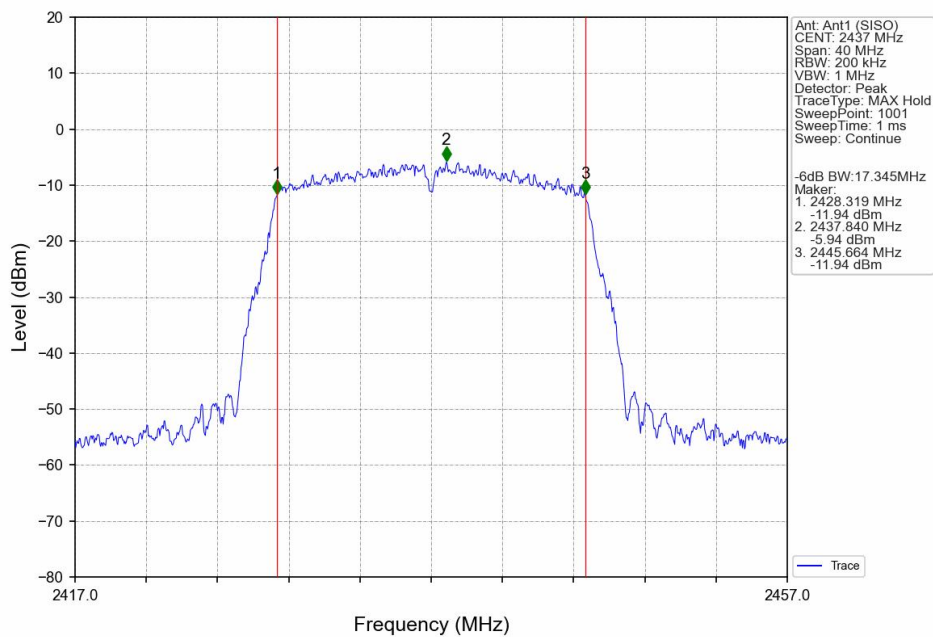
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

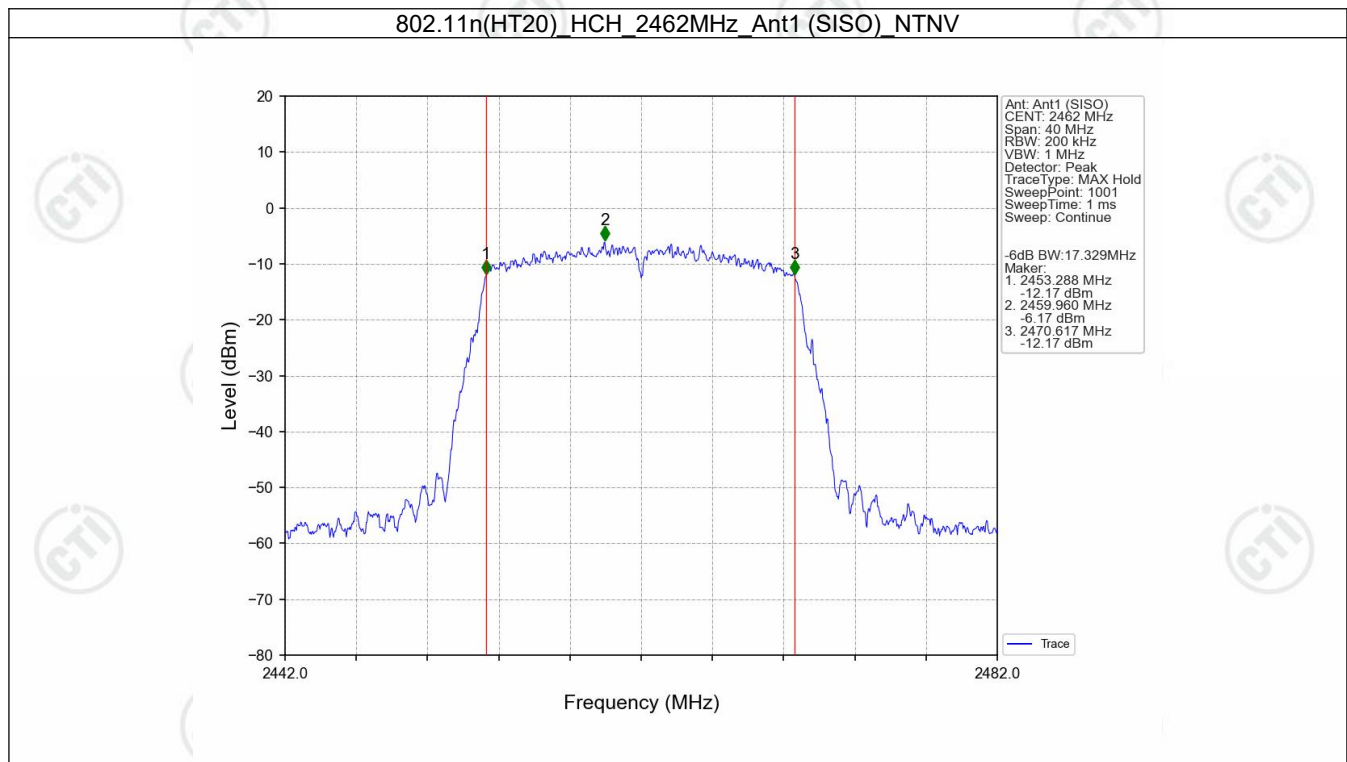


802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV





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	12.75	<=30	Pass
		2437	12.97	<=30	Pass
		2462	12.44	<=30	Pass
802.11g	SISO	2412	11.49	<=30	Pass
		2437	11.19	<=30	Pass
		2462	11.04	<=30	Pass
802.11n (HT20)	SISO	2412	11.48	<=30	Pass
		2437	11.66	<=30	Pass
		2462	11.28	<=30	Pass

Note1: Antenna Gain: Ant1: 1.97dBi;

4. Maximum Power Spectral Density

4.1 Test Result

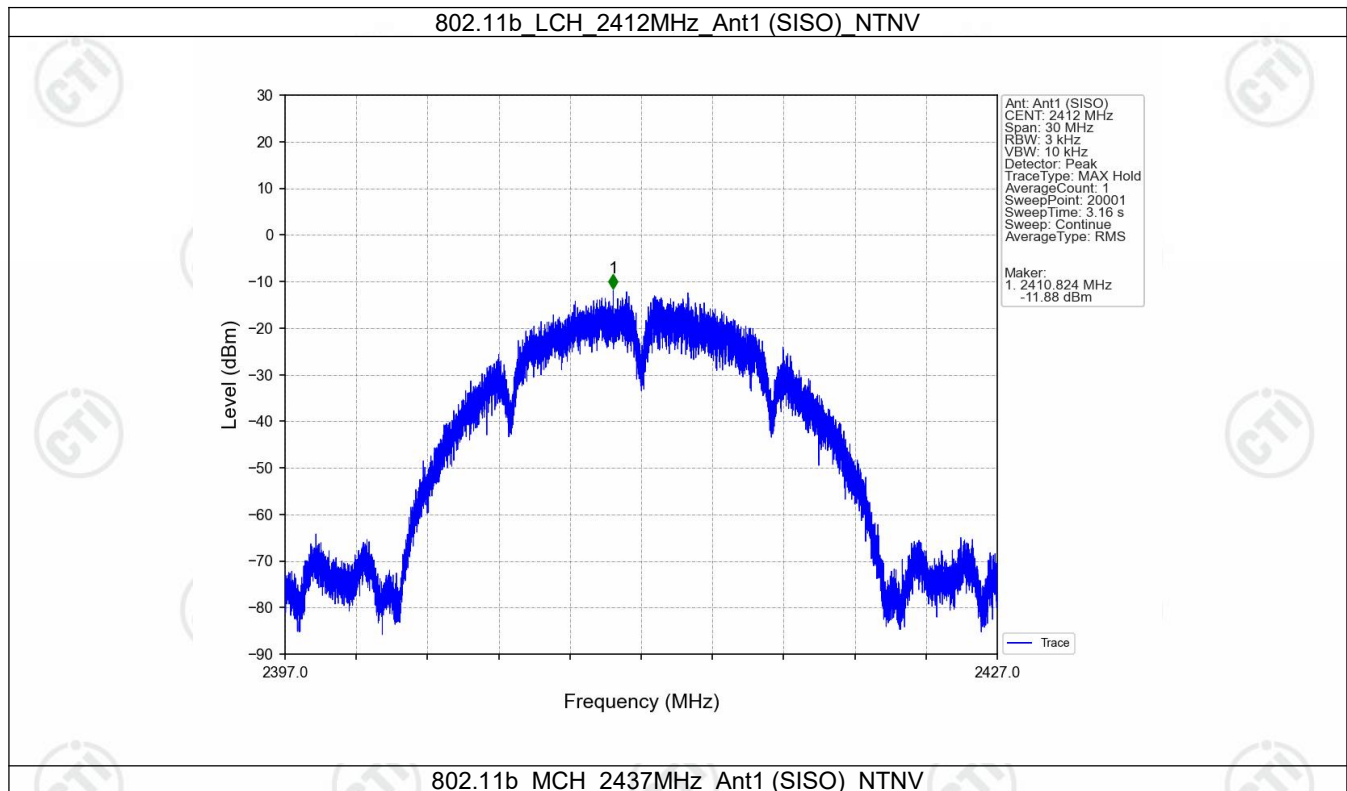
4.1.1 PSD

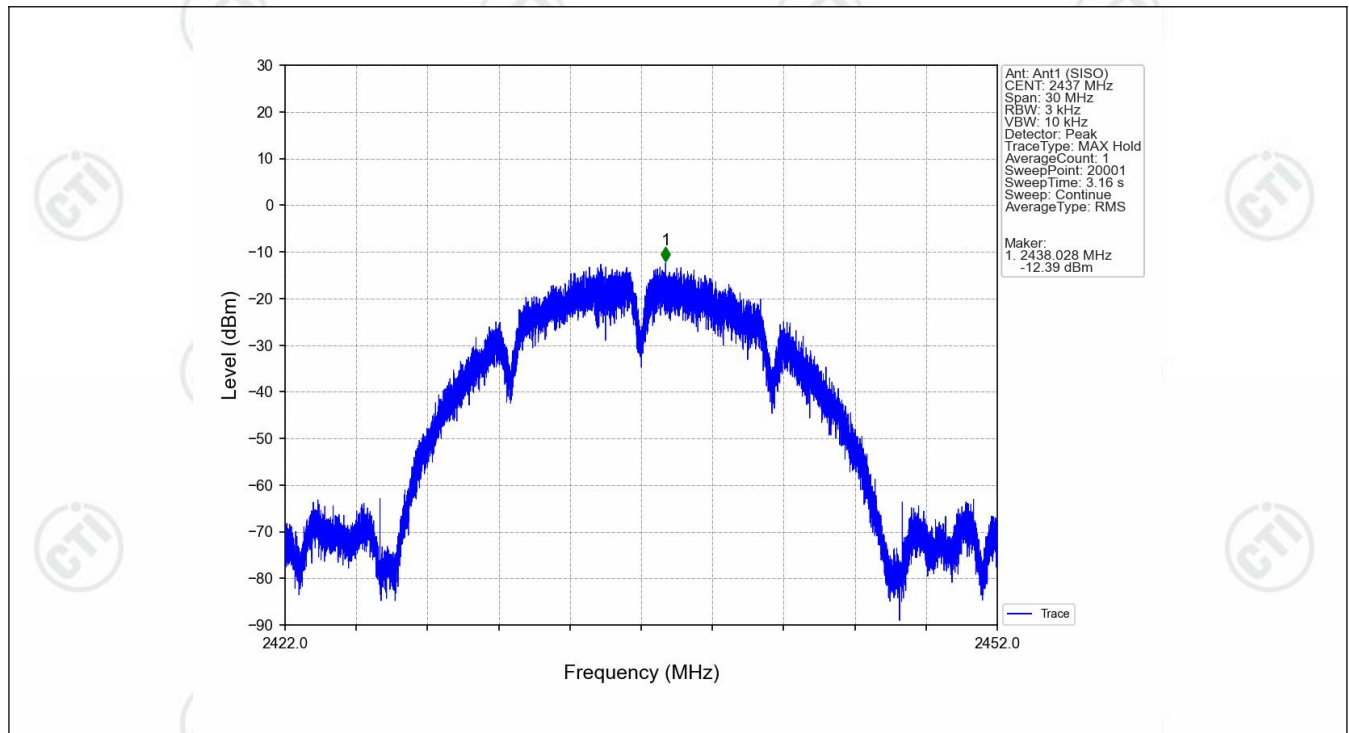
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit(dBm/3kHz)	
802.11b	SISO	2412	-11.88dBm/3kHz	<=8	Pass
		2437	-12.39dBm/3kHz	<=8	Pass
		2462	-12.14dBm/3kHz	<=8	Pass
802.11g	SISO	2412	-21.18dBm/3kHz	<=8	Pass
		2437	-21.38dBm/3kHz	<=8	Pass
		2462	-21.29dBm/3kHz	<=8	Pass
802.11n (HT20)	SISO	2412	-20.23dBm/3kHz	<=8	Pass
		2437	-21.10dBm/3kHz	<=8	Pass
		2462	-20.83dBm/3kHz	<=8	Pass

Note1: Antenna Gain: Ant1: 1.97dBi;

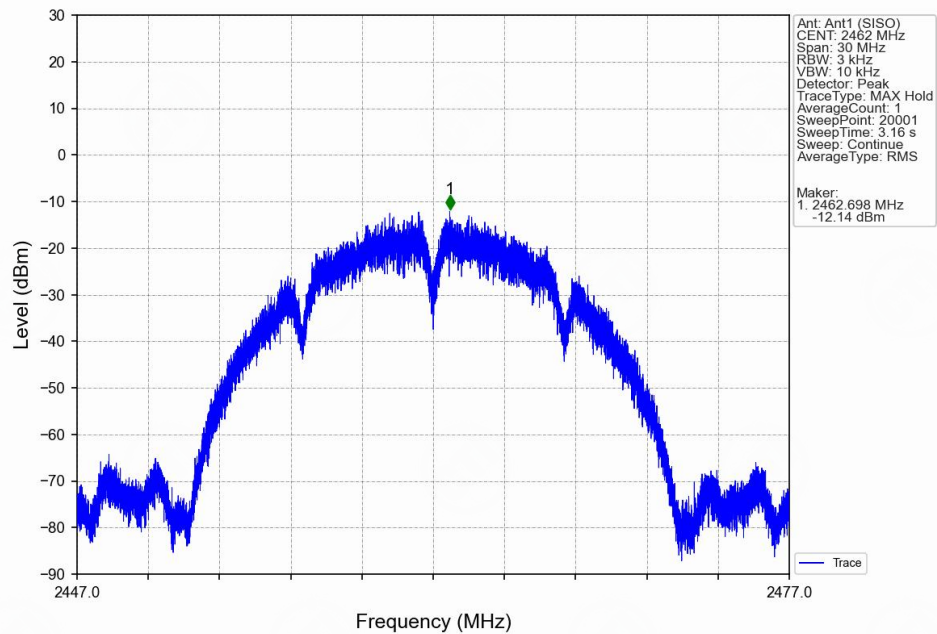
4.2 Test Graph

4.2.1 PSD

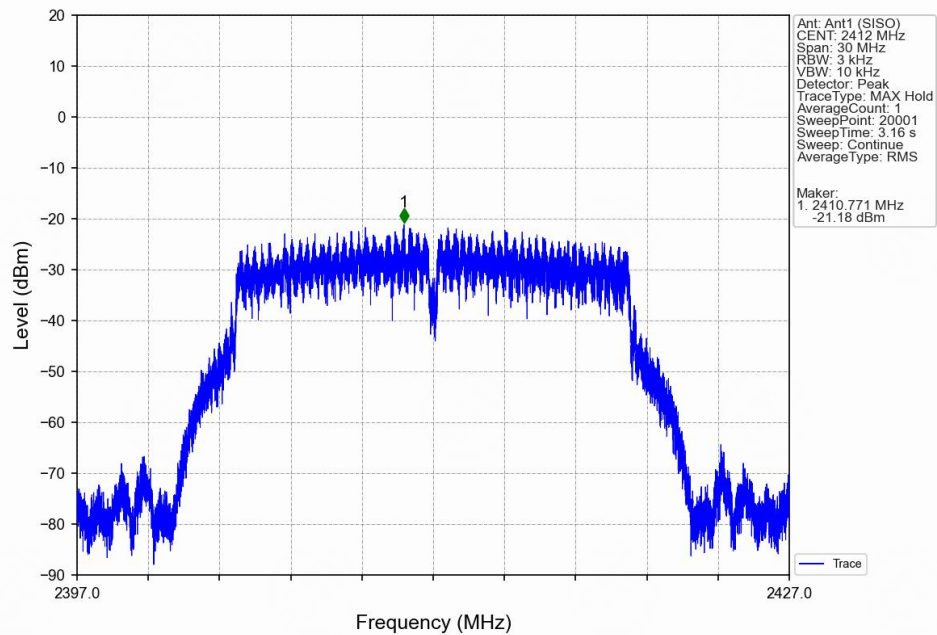




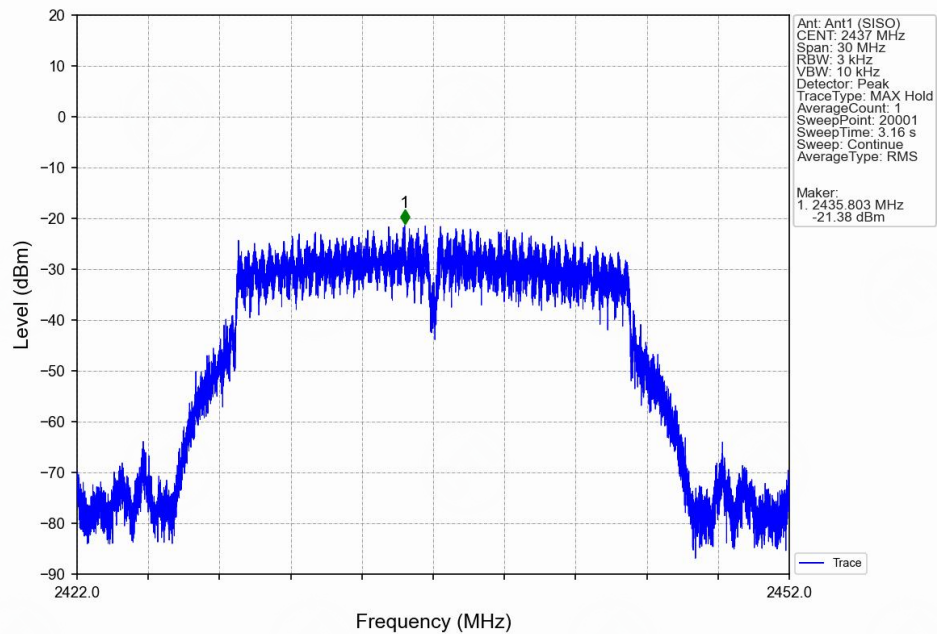
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



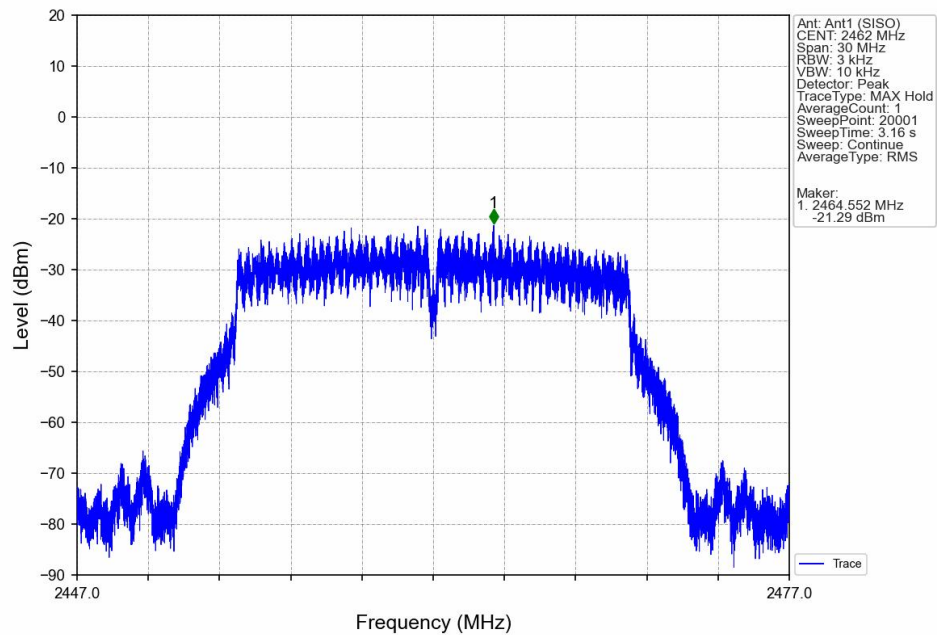
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



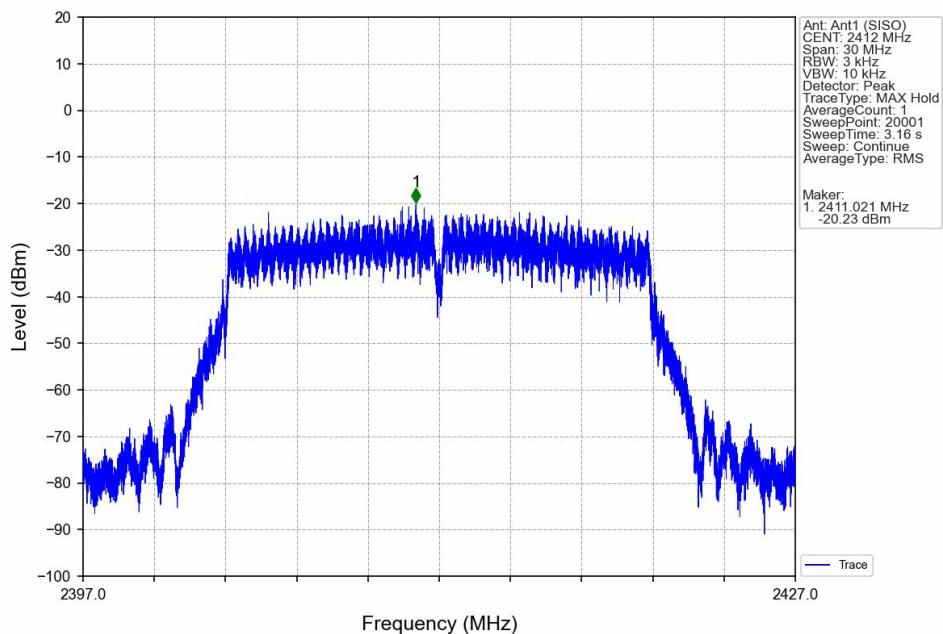
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



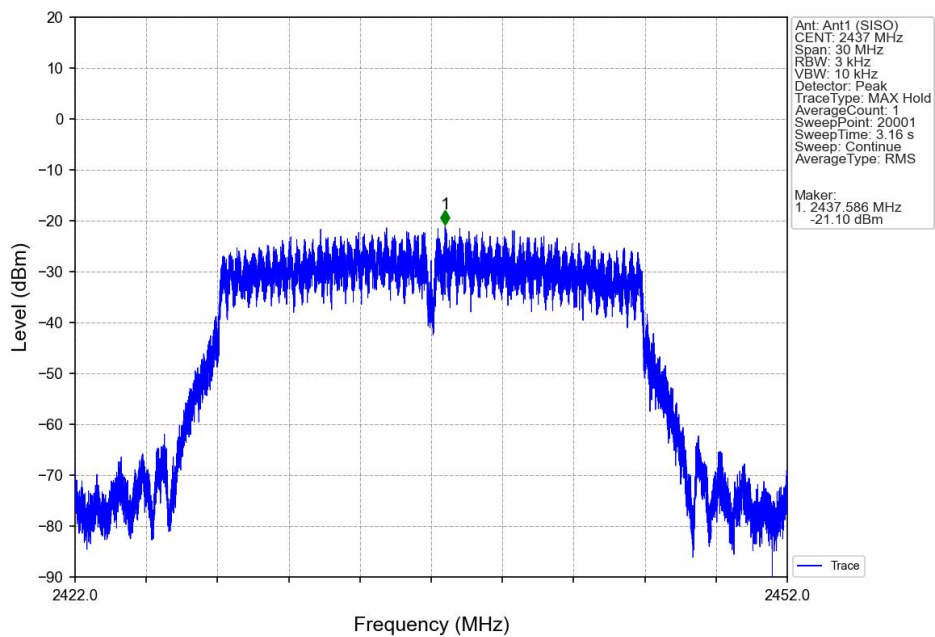
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

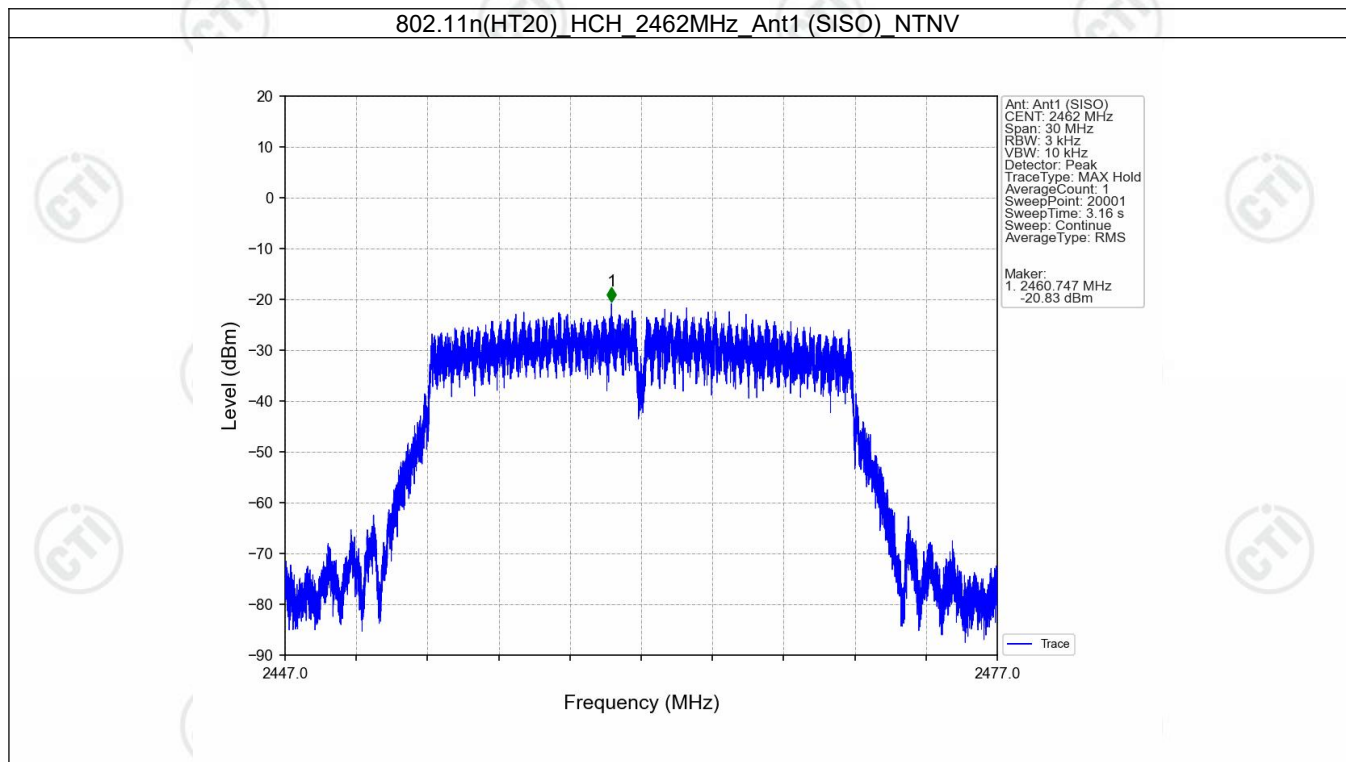


802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV





5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Test Result

5.1.1 Ref

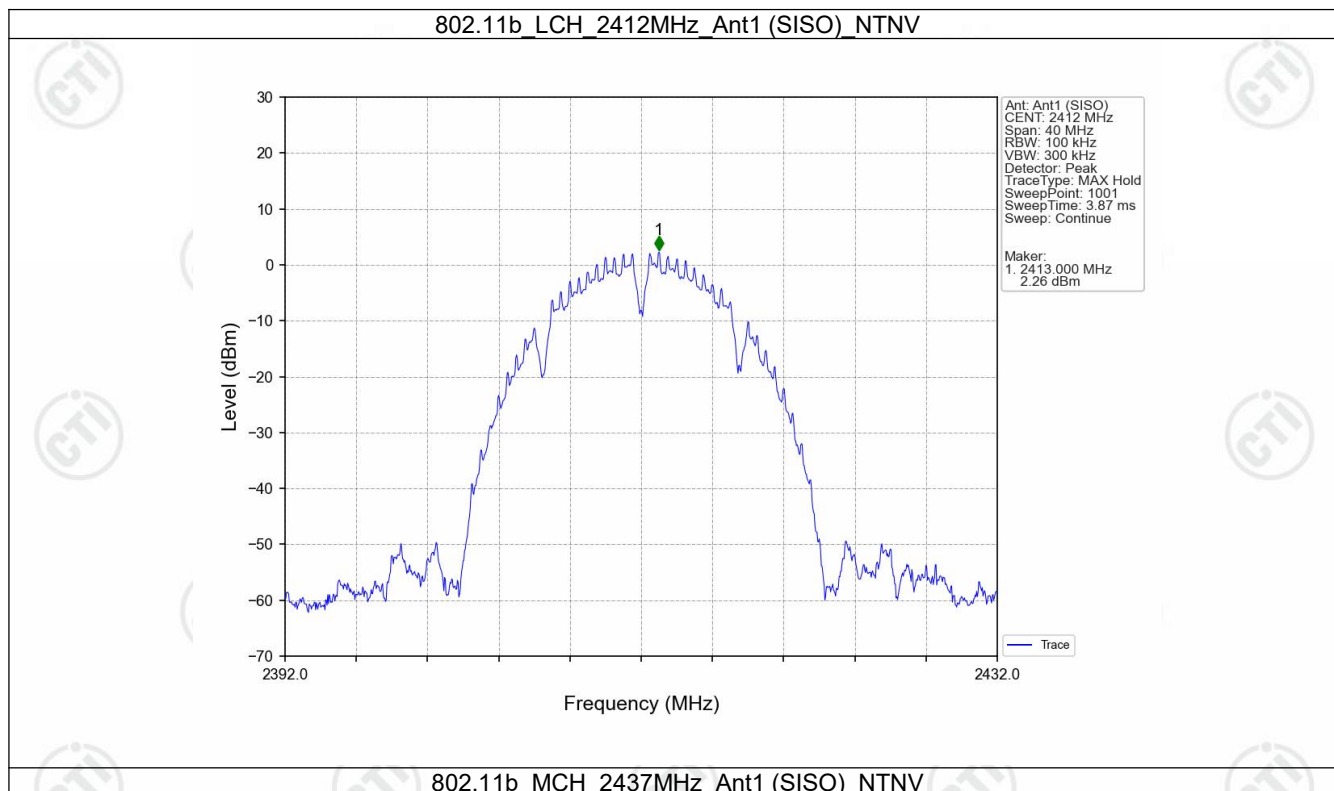
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	2.26
		2437	1	2.81
		2462	1	1.47
802.11g	SISO	2412	1	-9.25
		2437	1	-9.54
		2462	1	-9.62
802.11n (HT20)	SISO	2412	1	-9.06
		2437	1	-9.19
		2462	1	-9.94

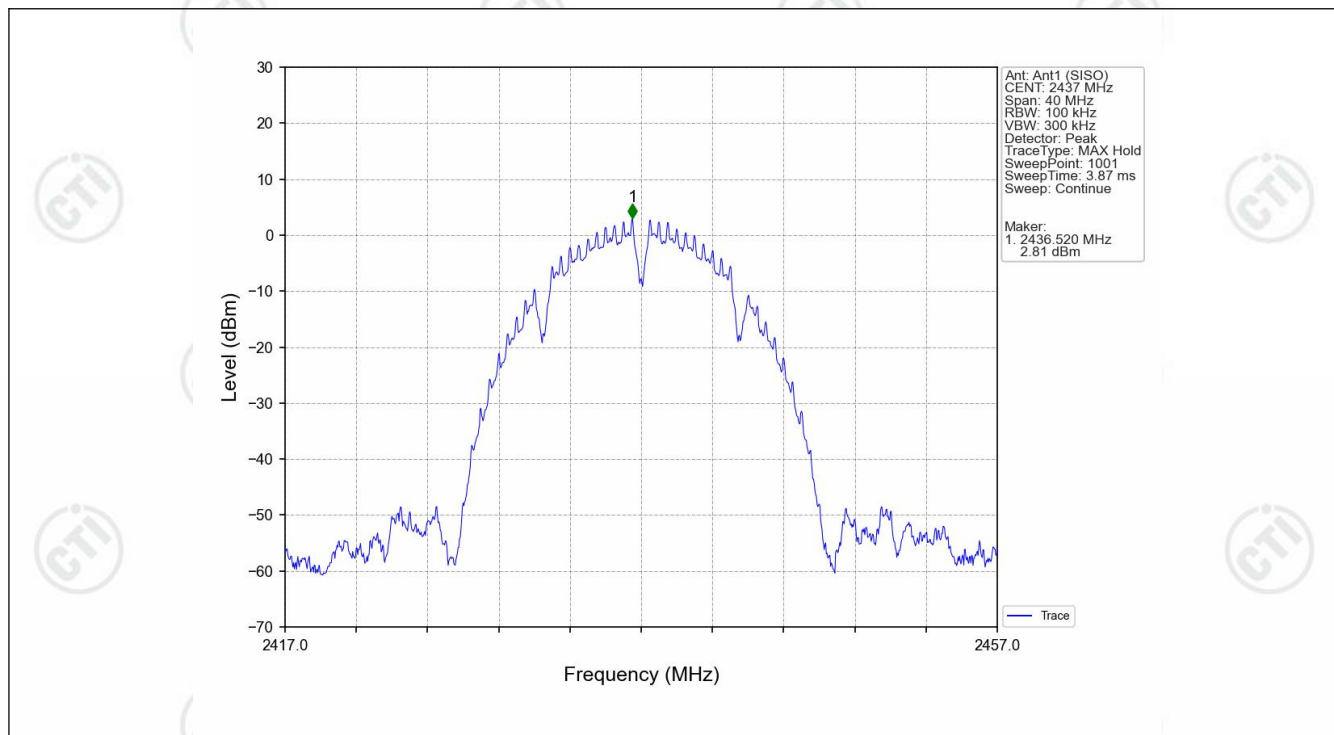
5.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	1.47	-18.53	Pass
		2437	1	1.47	-18.53	Pass
		2462	1	1.47	-18.53	Pass
802.11g	SISO	2412	1	-9.62	-29.62	Pass
		2437	1	-9.62	-29.62	Pass
		2462	1	-9.62	-29.62	Pass
802.11n (HT20)	SISO	2412	1	-9.94	-29.94	Pass
		2437	1	-9.94	-29.94	Pass
		2462	1	-9.94	-29.94	Pass

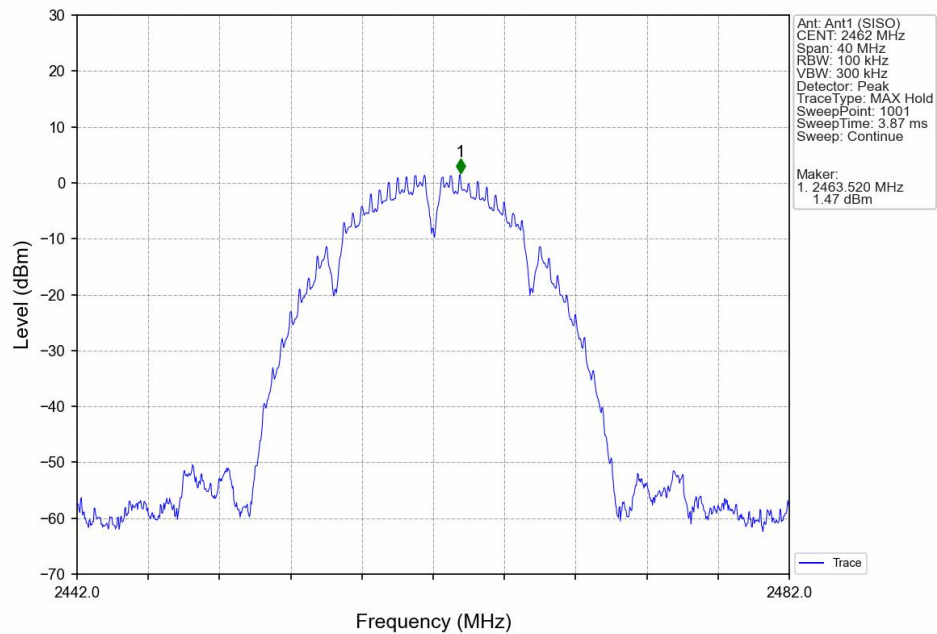
5.2 Test Graph

5.2.1 Ref

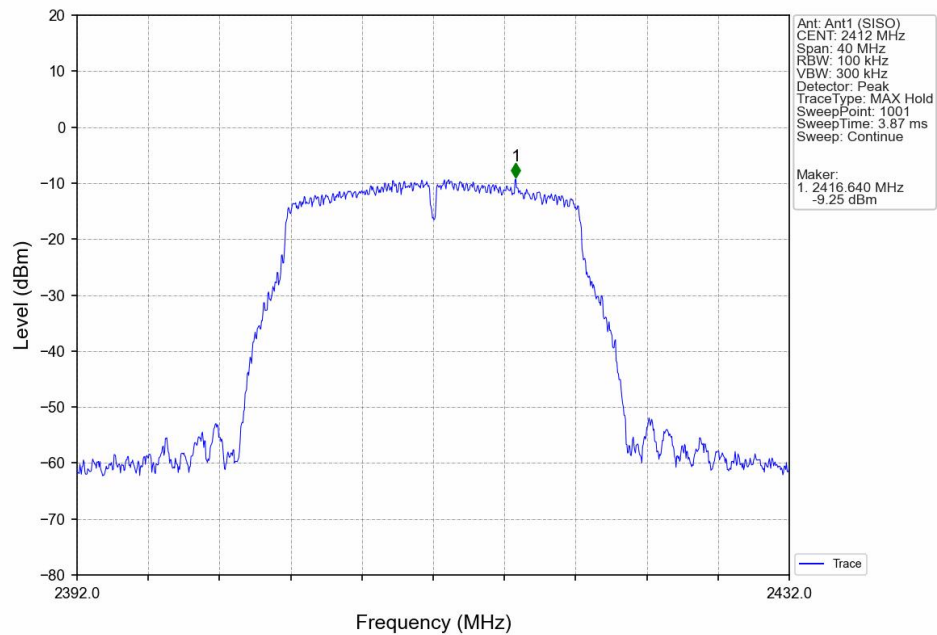




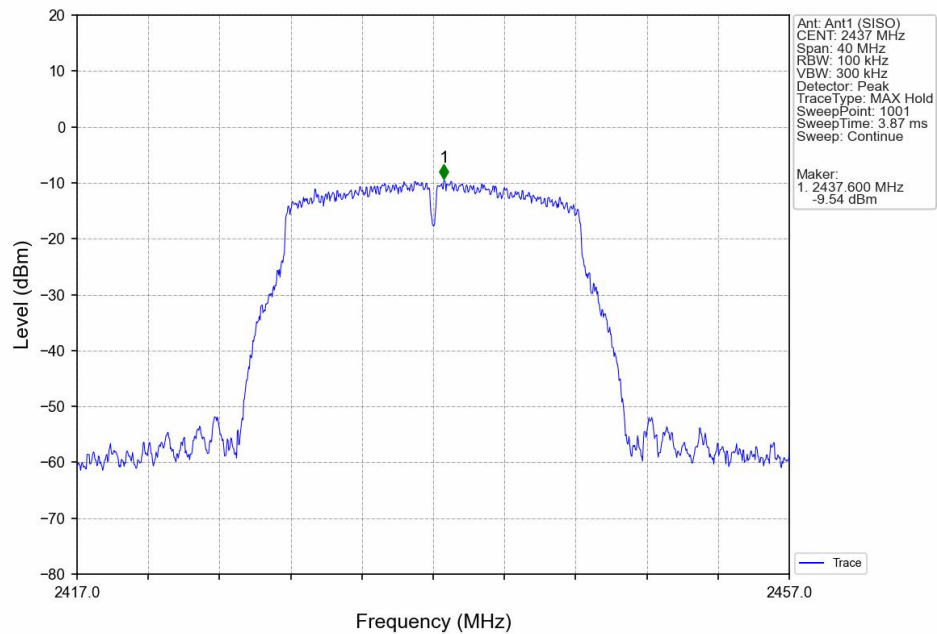
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



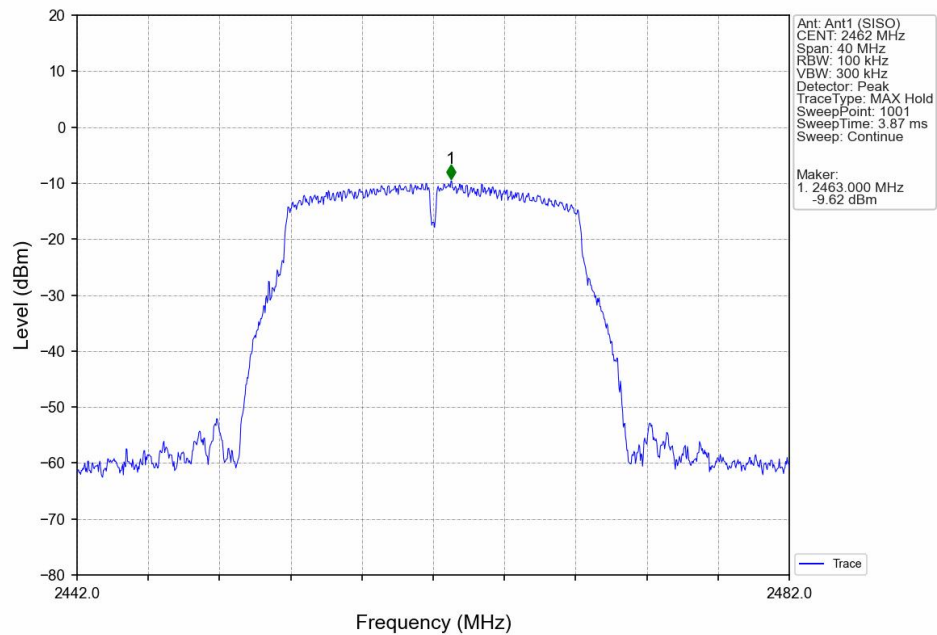
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



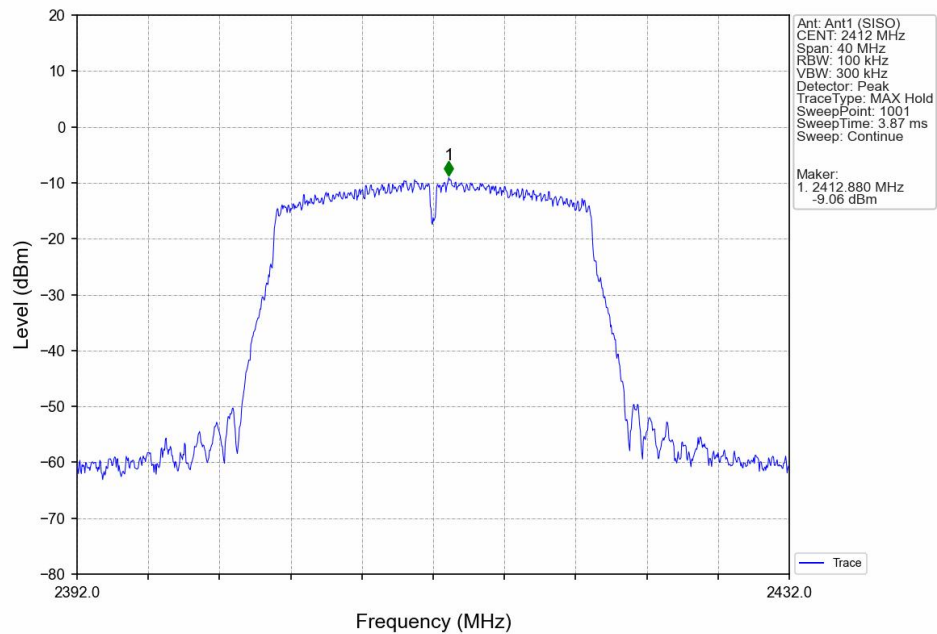
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



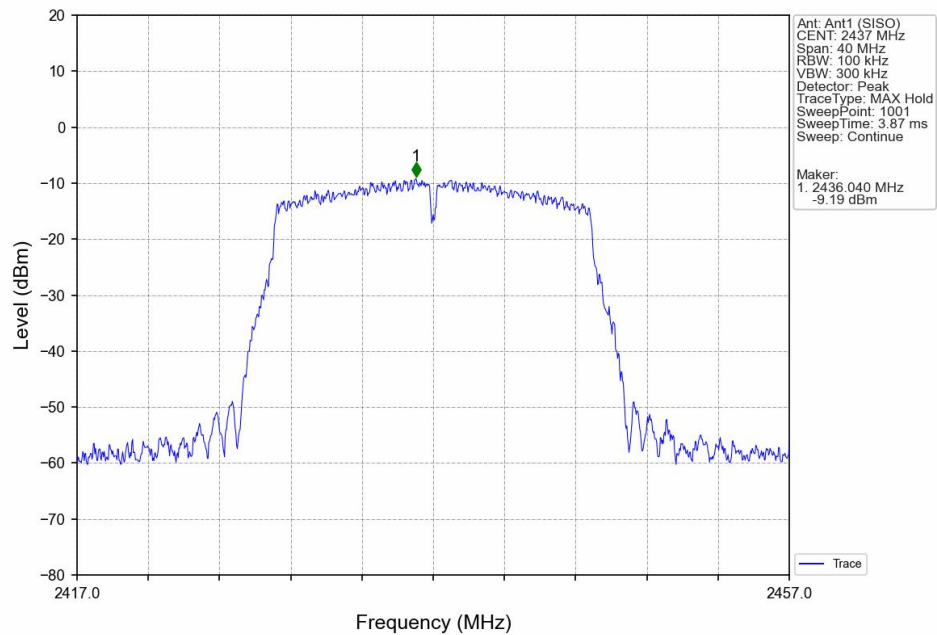
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV

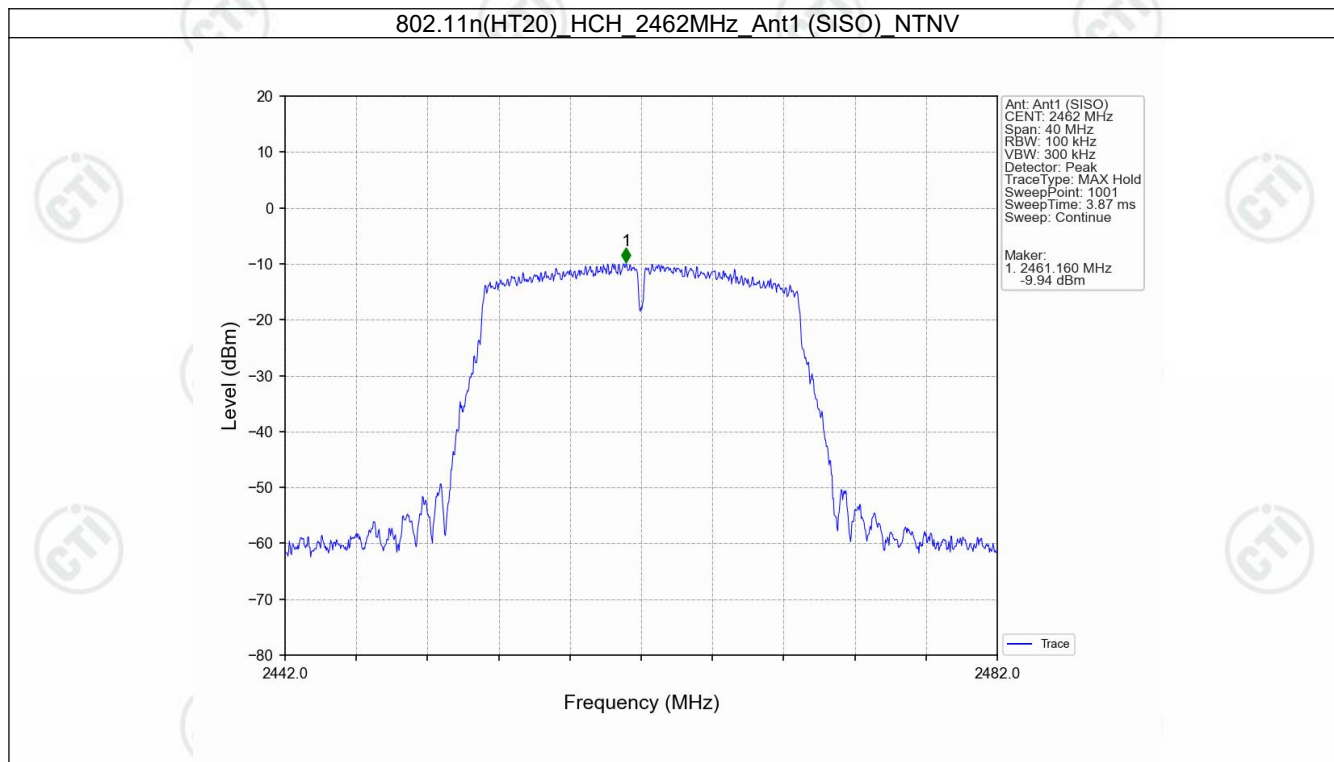


802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV

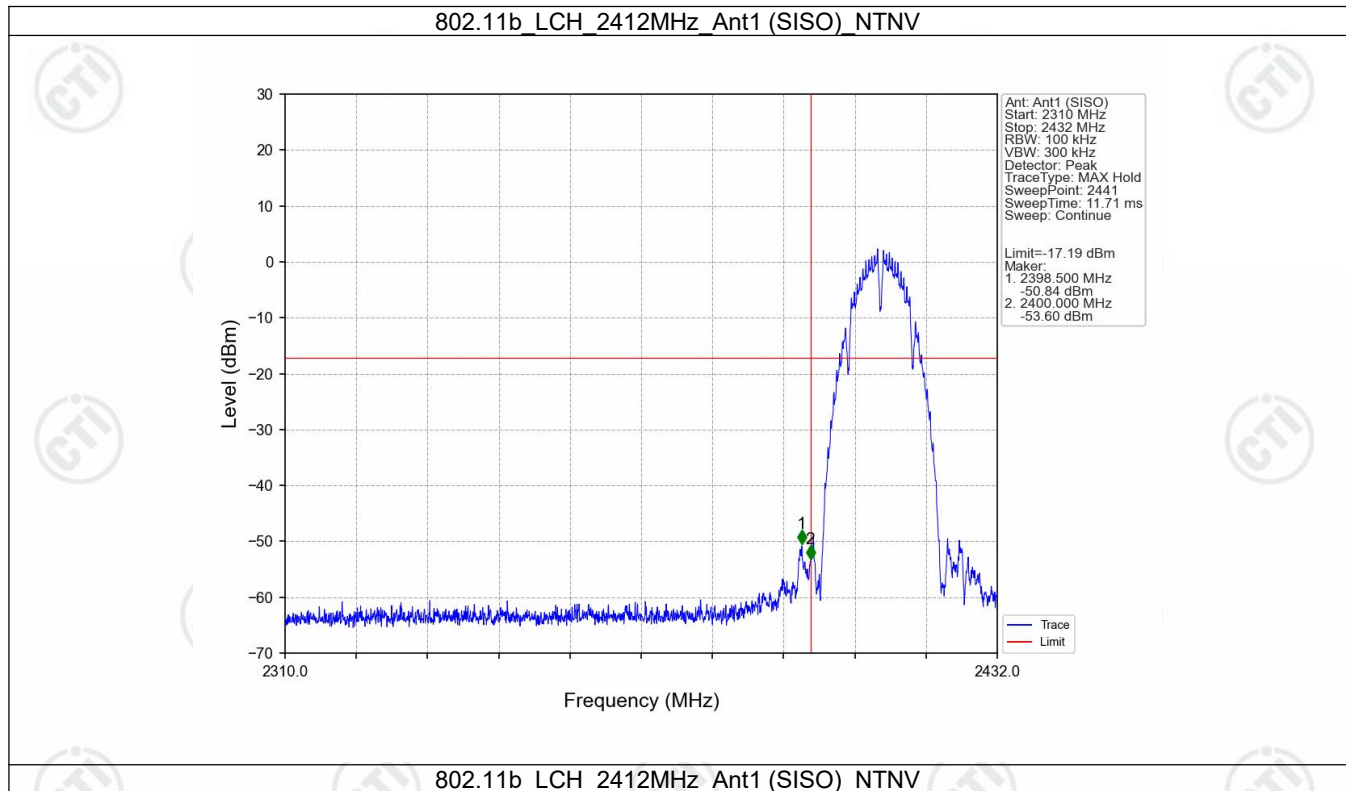


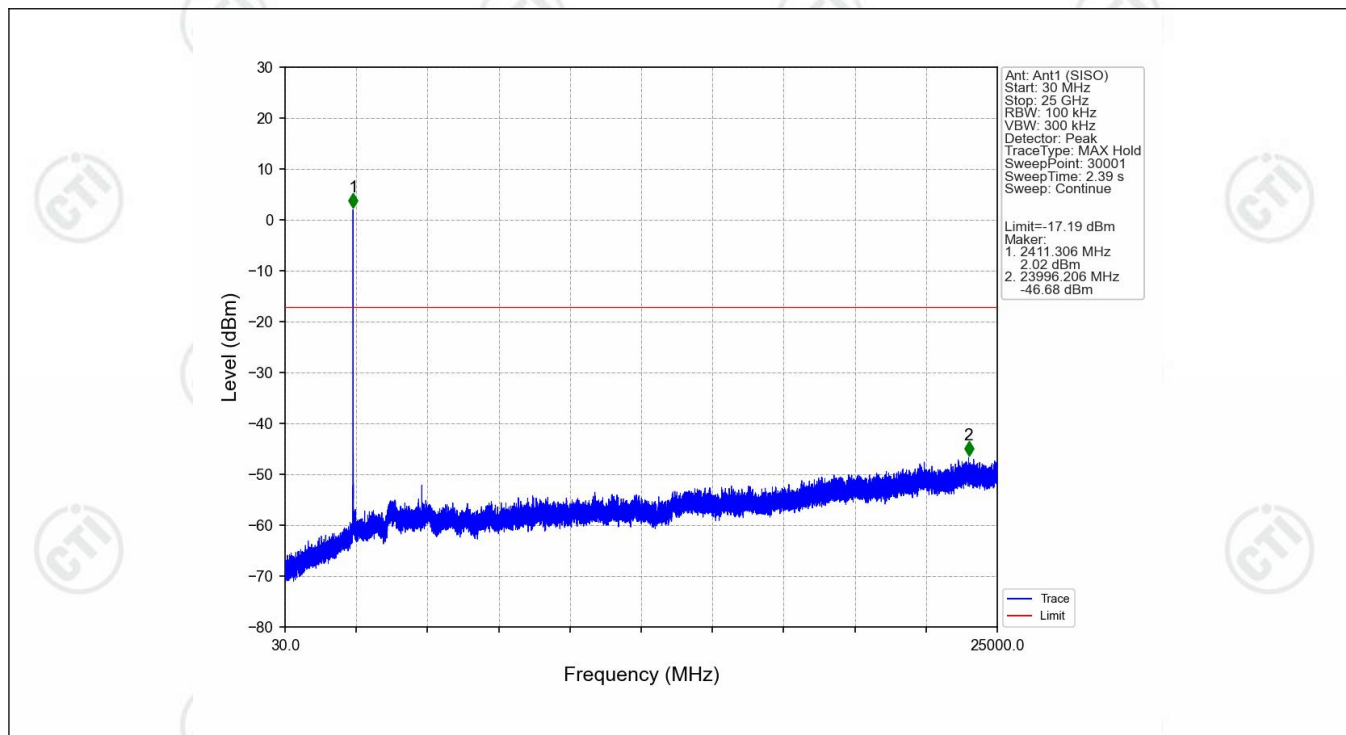
802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



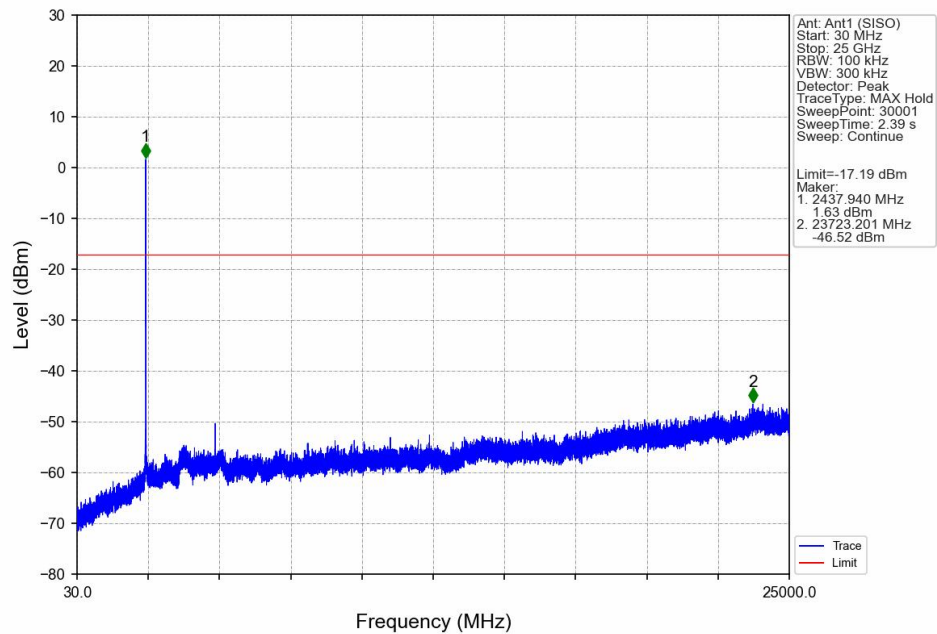


5.2.2 CSE





802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

