



Shenzhen CTL Testing Technology Co., Ltd.

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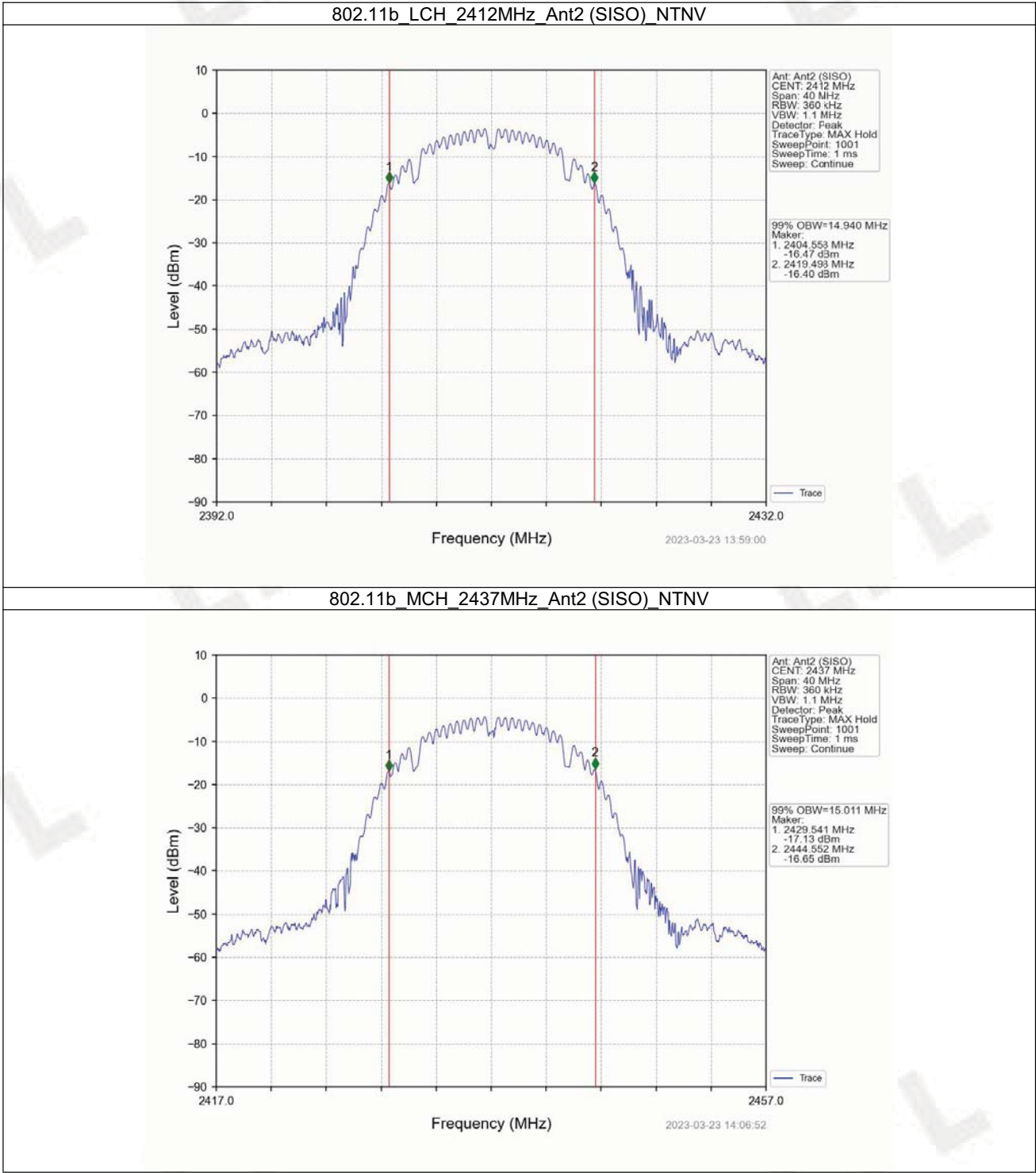
1. Bandwidth

1.1 OBW

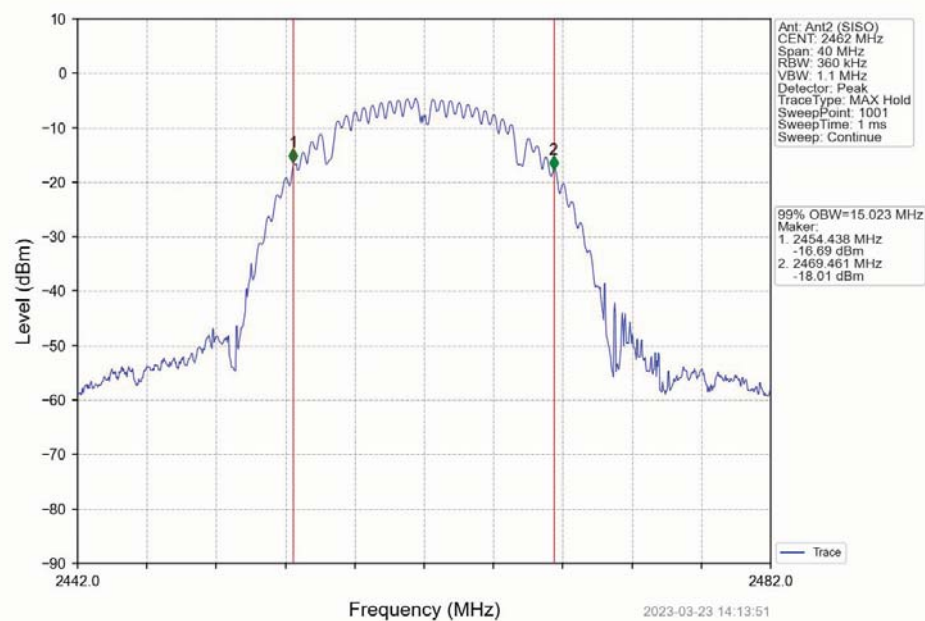
1.1.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)	Verdict
				Result	
802.11b	SISO	2412	2	14.940	Pass
		2437	2	15.011	Pass
		2462	2	15.023	Pass
802.11g	SISO	2412	2	17.596	Pass
		2437	2	17.648	Pass
		2462	2	17.654	Pass
802.11n (HT20)	SISO	2412	2	18.394	Pass
		2437	2	18.440	Pass
		2462	2	18.476	Pass
802.11n (HT40)	SISO	2422	2	37.144	Pass
		2437	2	36.965	Pass
		2452	2	36.880	Pass

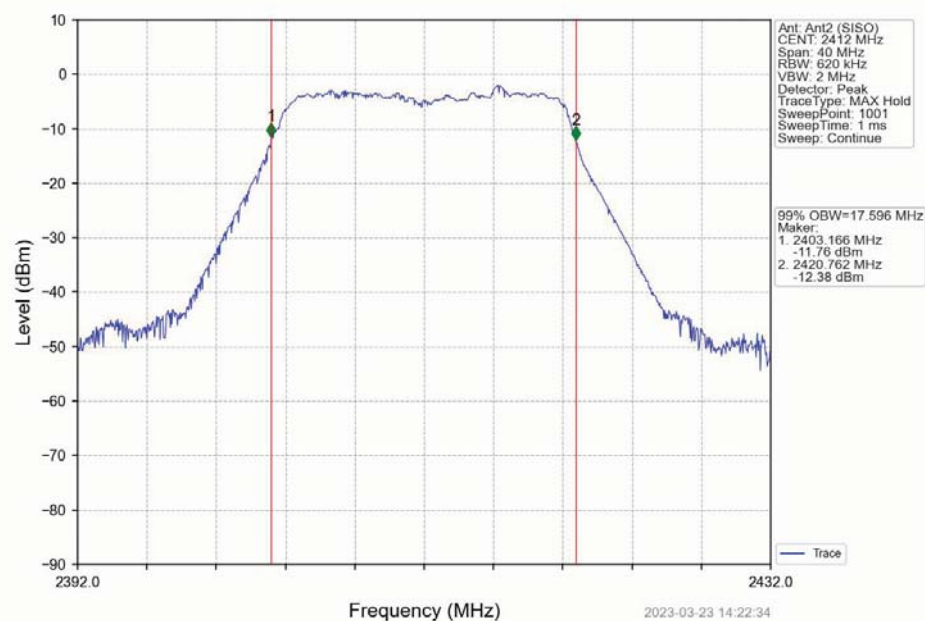
1.1.2 Test Graph



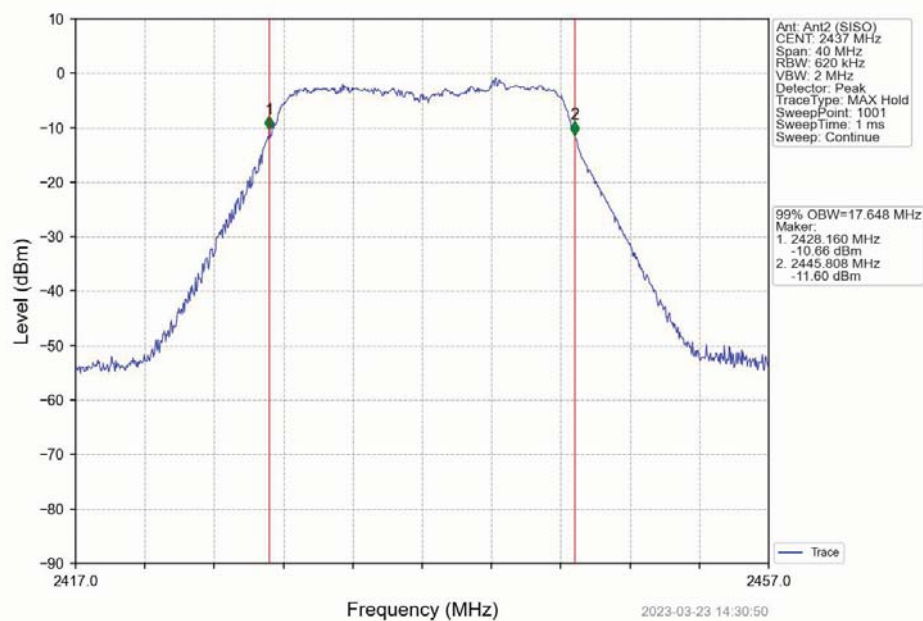
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



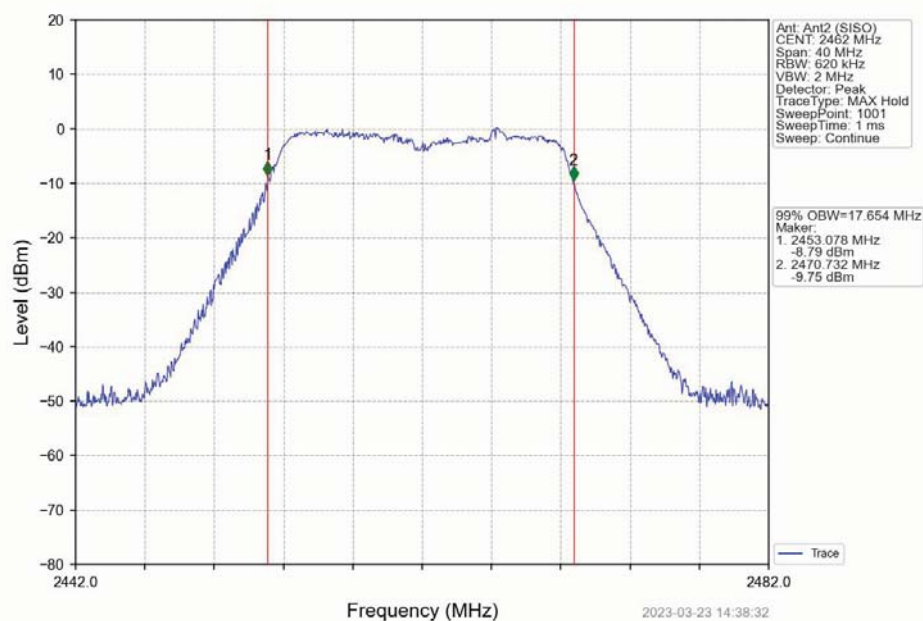
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



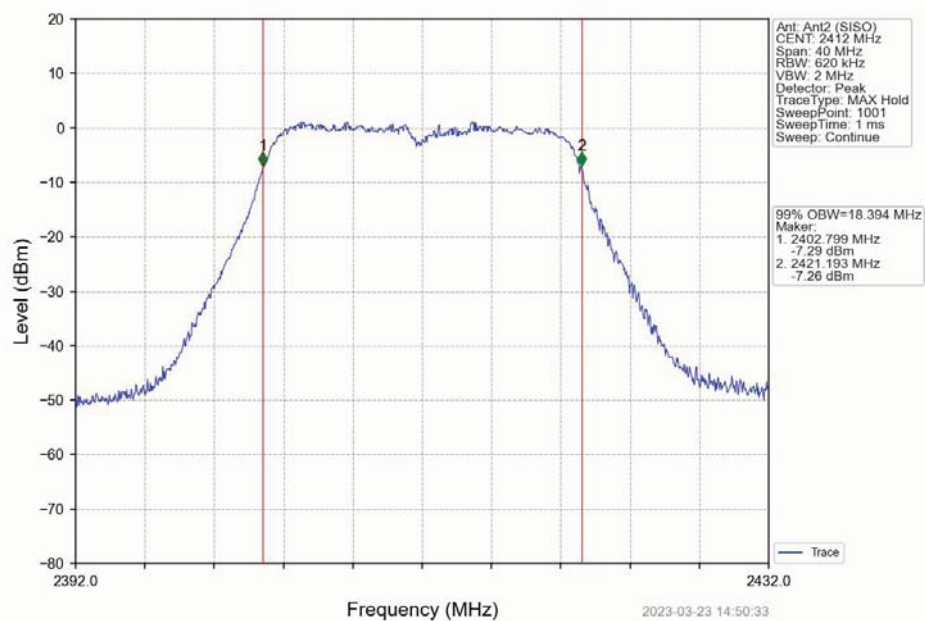
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



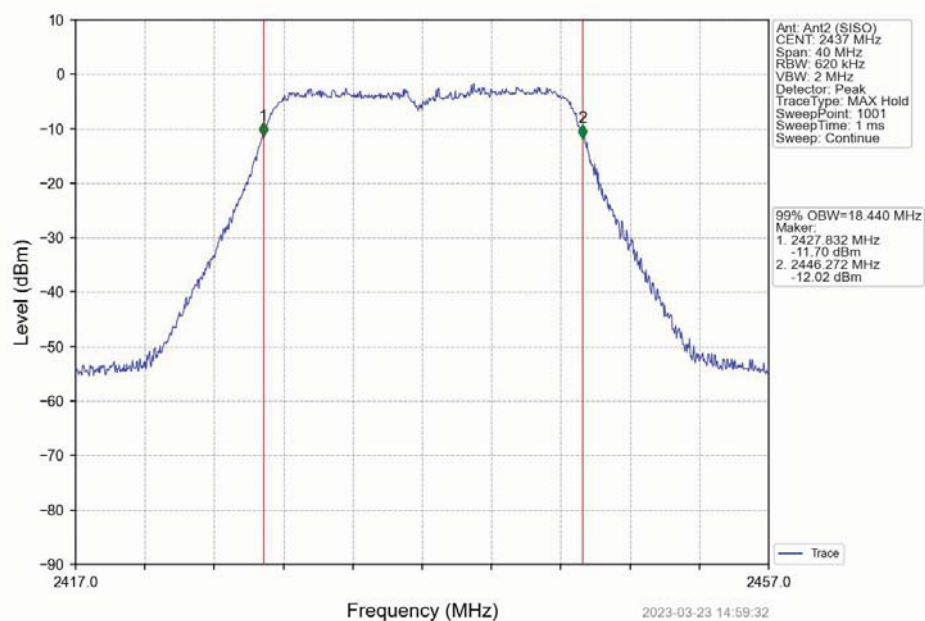
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



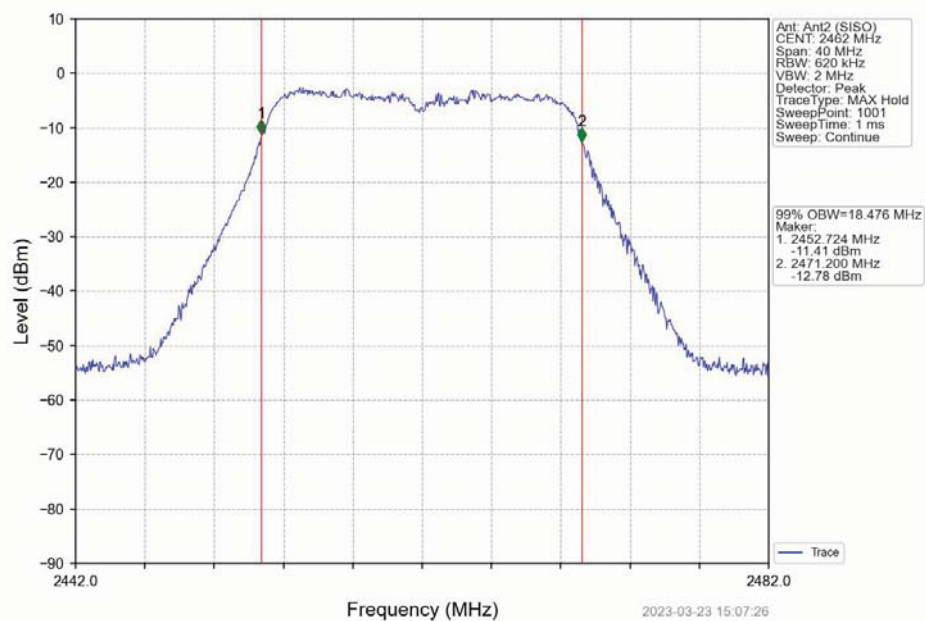
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



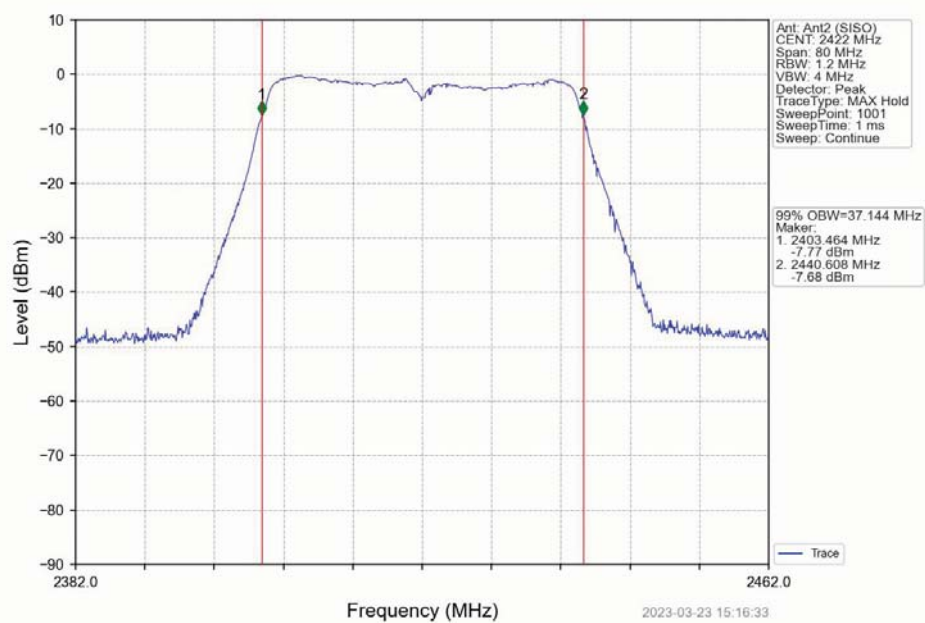
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



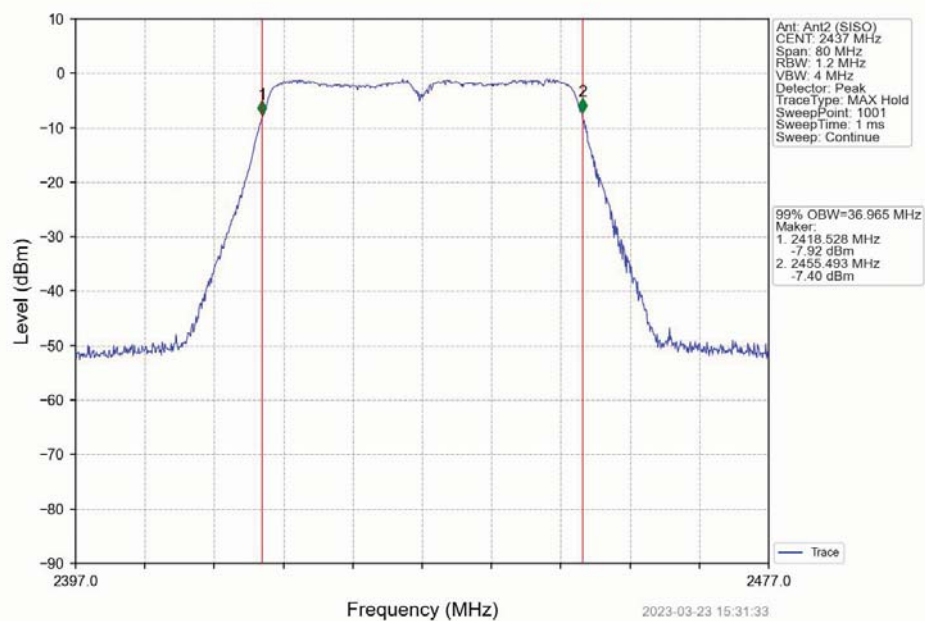
802.11n(HT20)_HCH_2462MHz_Ant2 (SISO)_NTNV



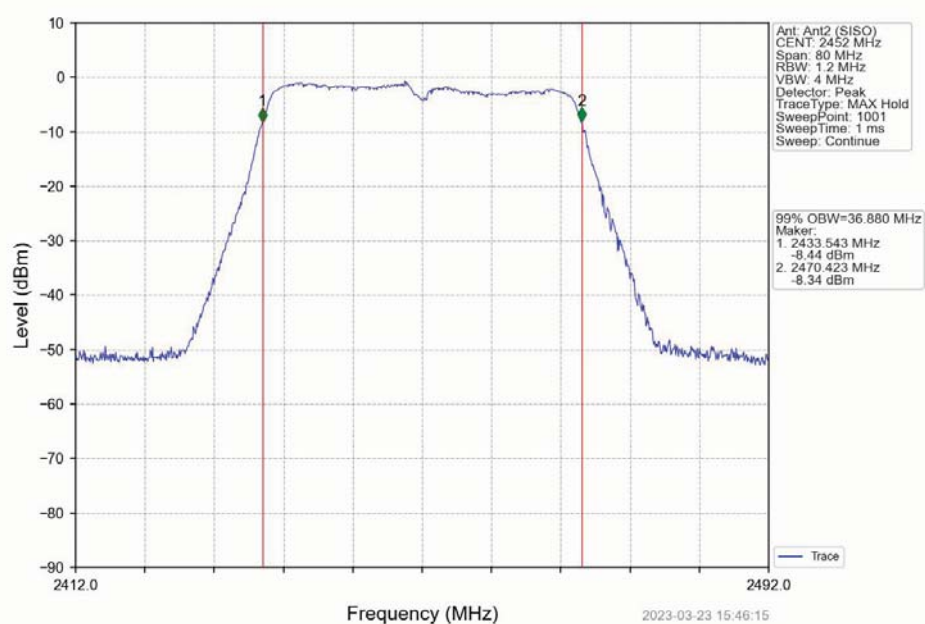
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV

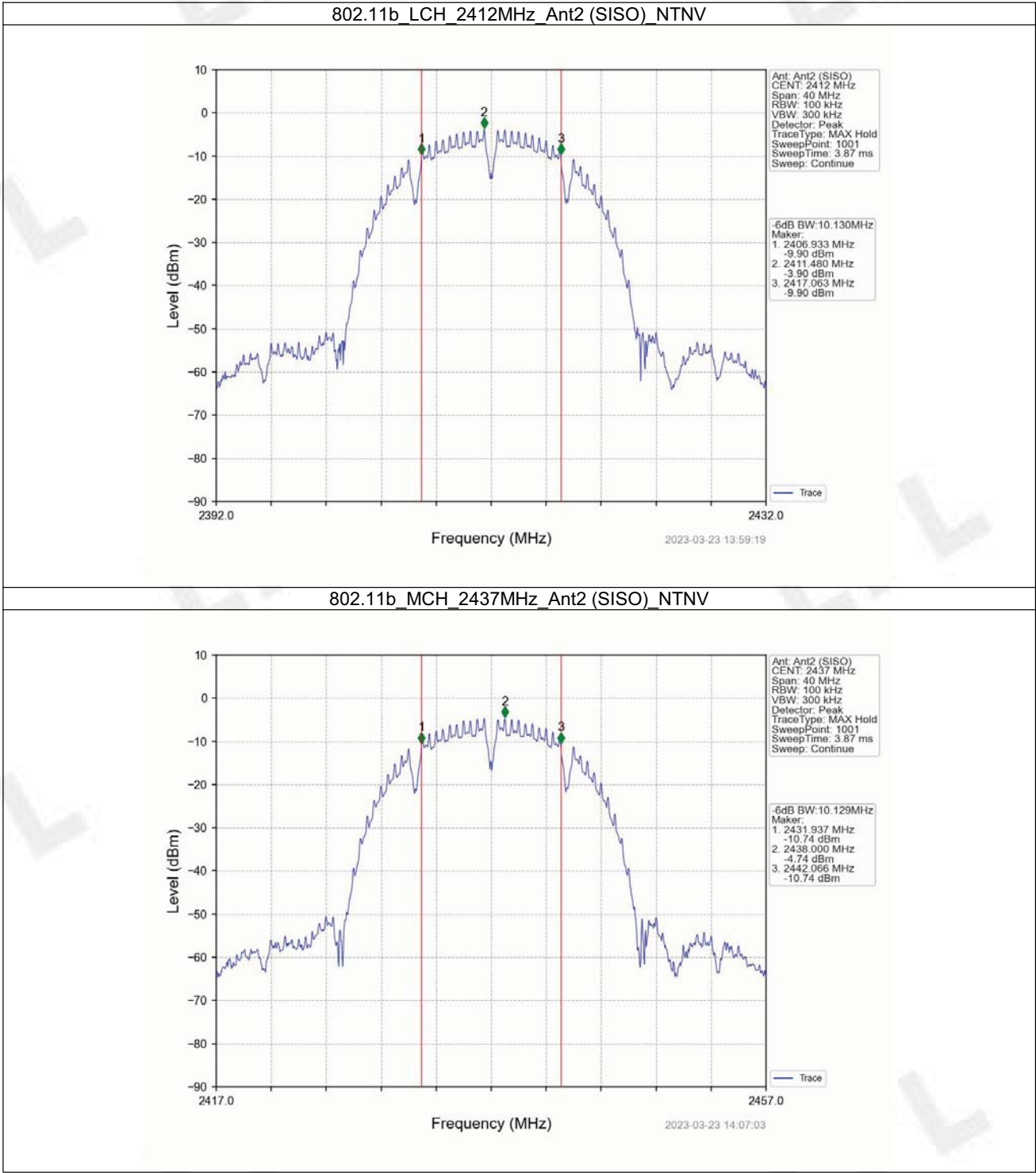


1.2 6dB BW

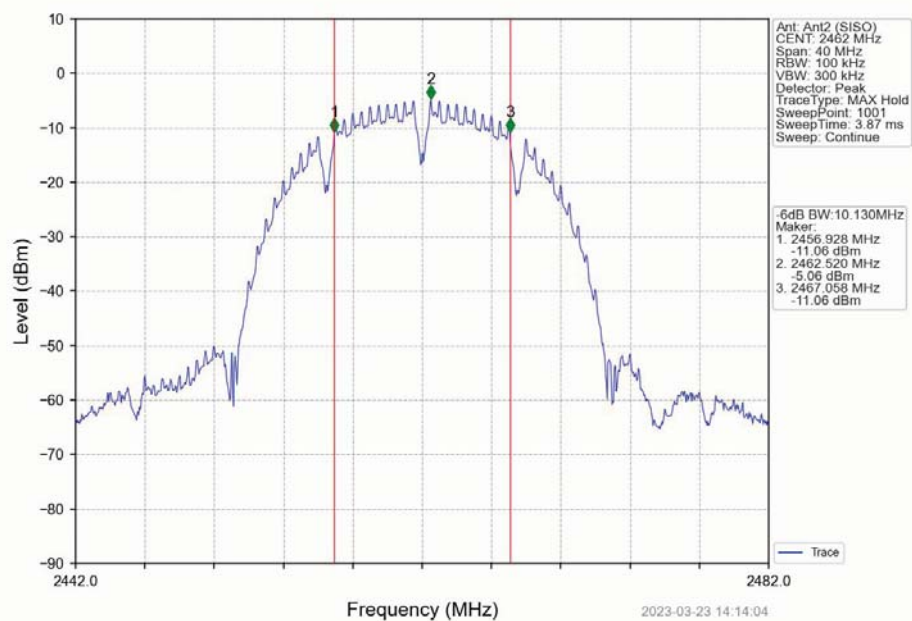
1.2.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	2	10.130	≥ 0.5	Pass
		2437	2	10.129	≥ 0.5	Pass
		2462	2	10.130	≥ 0.5	Pass
802.11g	SISO	2412	2	16.363	≥ 0.5	Pass
		2437	2	16.366	≥ 0.5	Pass
		2462	2	16.369	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	2	16.934	≥ 0.5	Pass
		2437	2	17.093	≥ 0.5	Pass
		2462	2	17.185	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	2	35.510	≥ 0.5	Pass
		2437	2	35.727	≥ 0.5	Pass
		2452	2	35.525	≥ 0.5	Pass

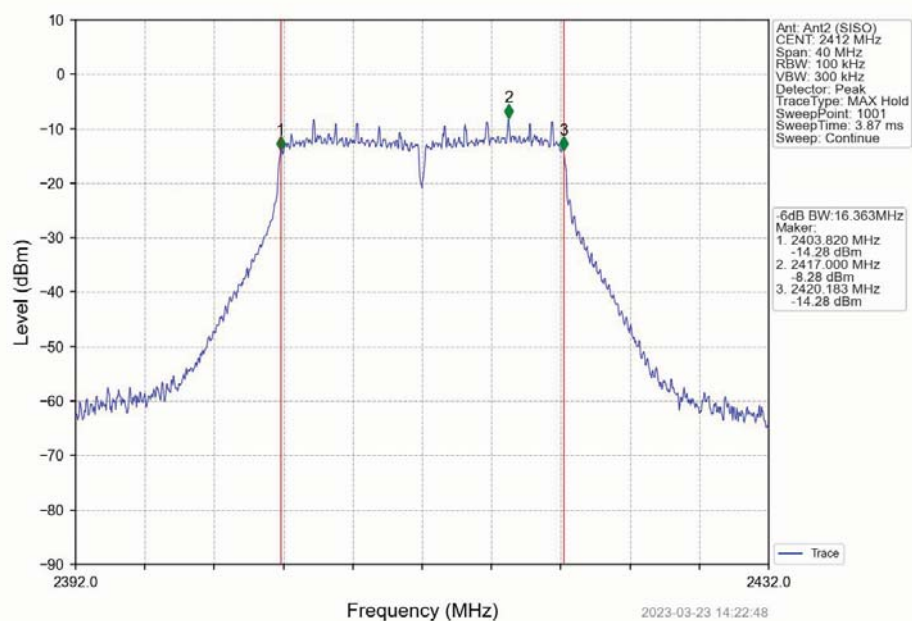
1.2.2 Test Graph



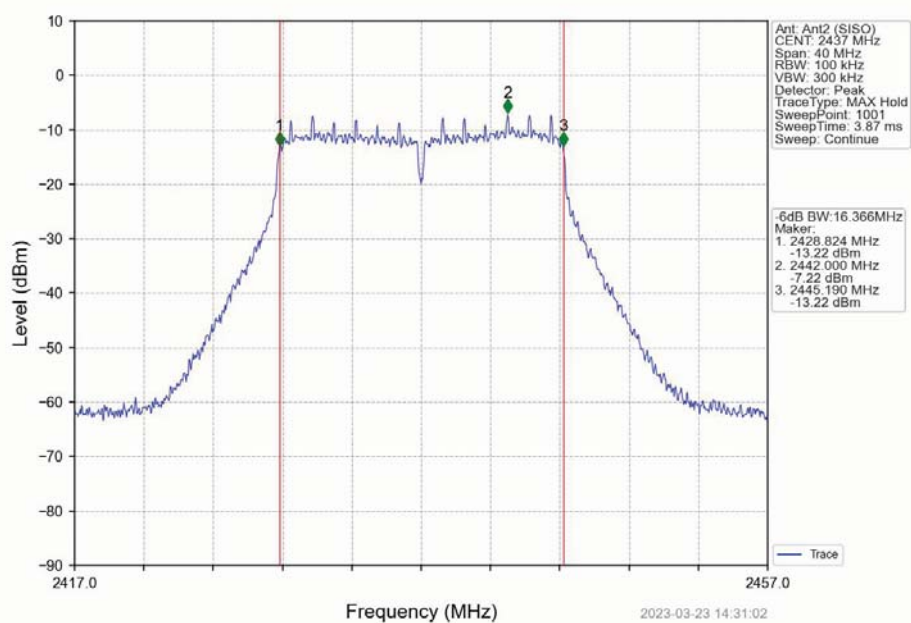
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



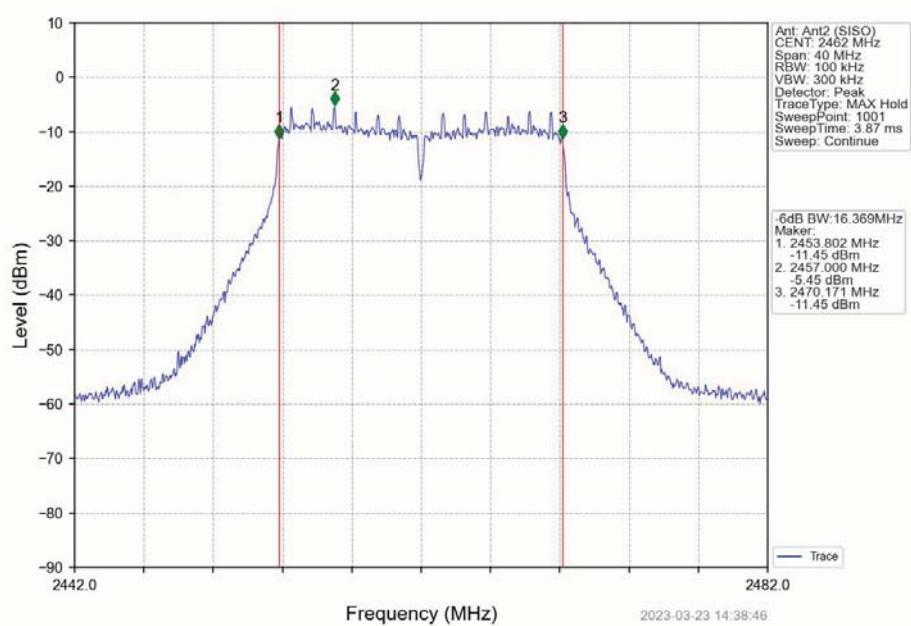
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



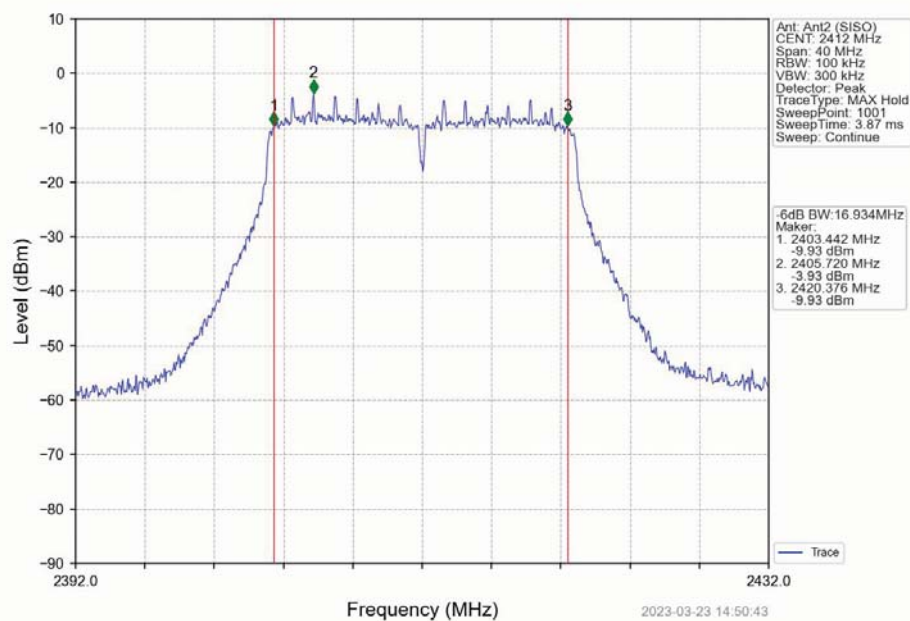
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



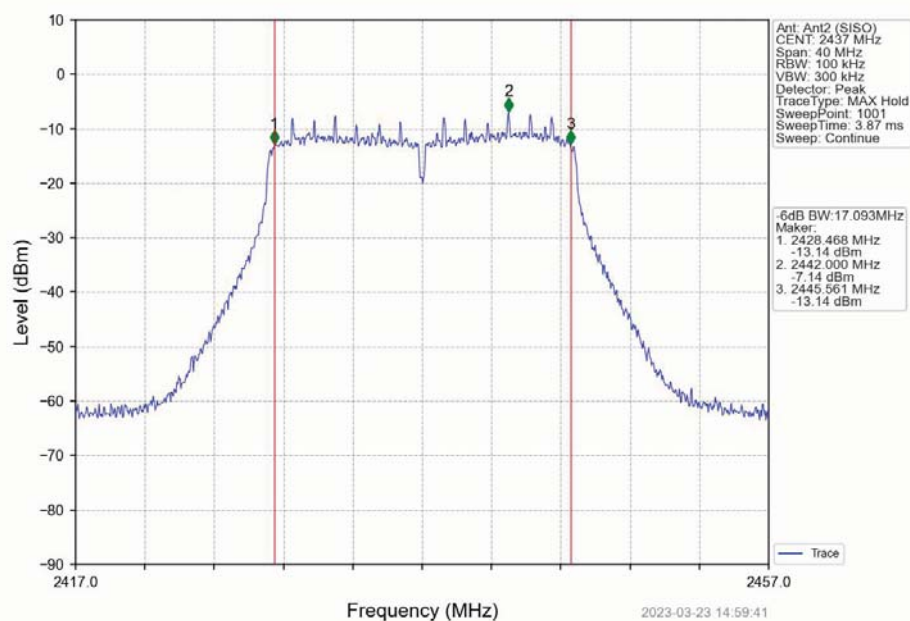
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



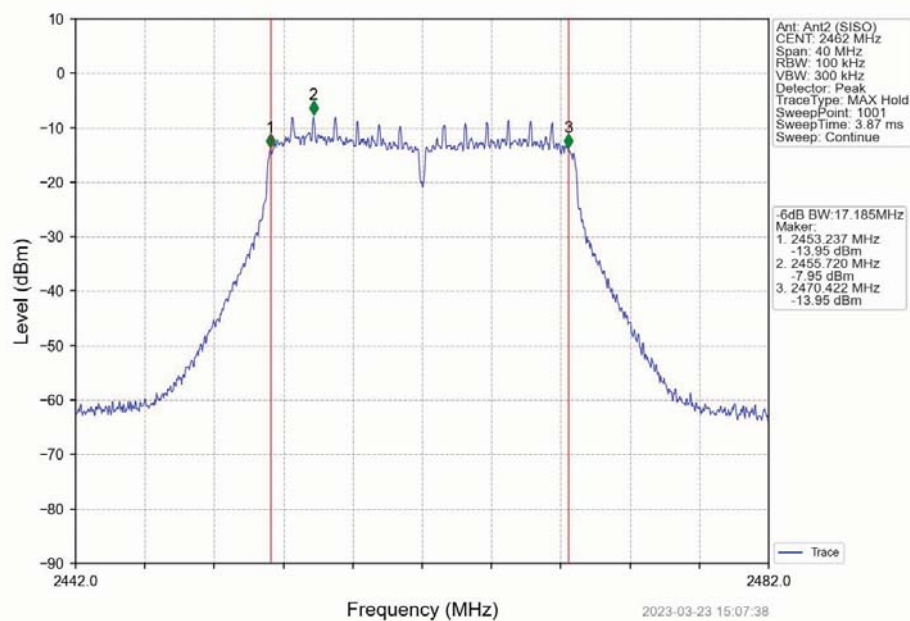
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



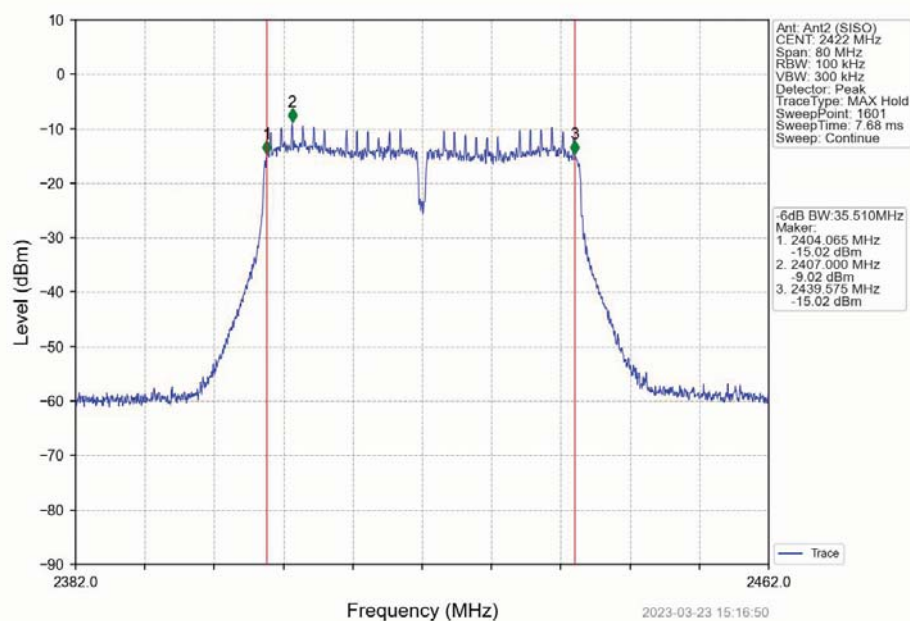
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



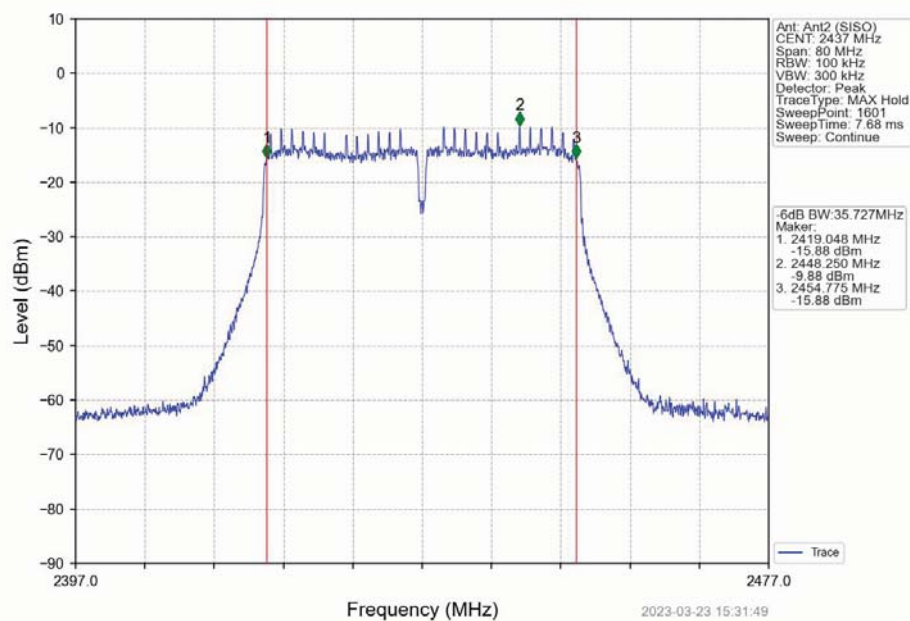
802.11n(HT20)_HCH_2462MHz_Ant2 (SISO)_NTNV



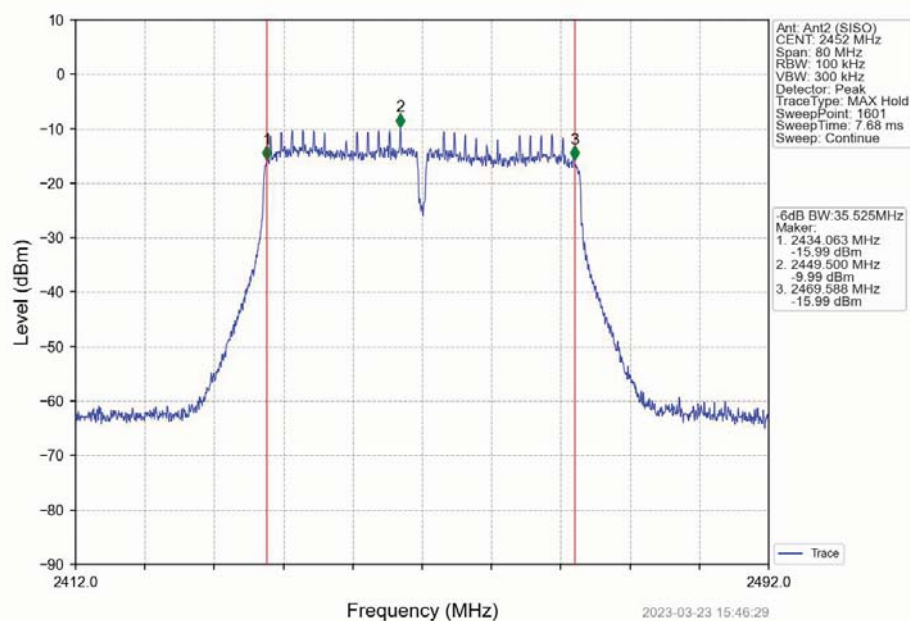
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV



2. Maximum Conducted Output Power

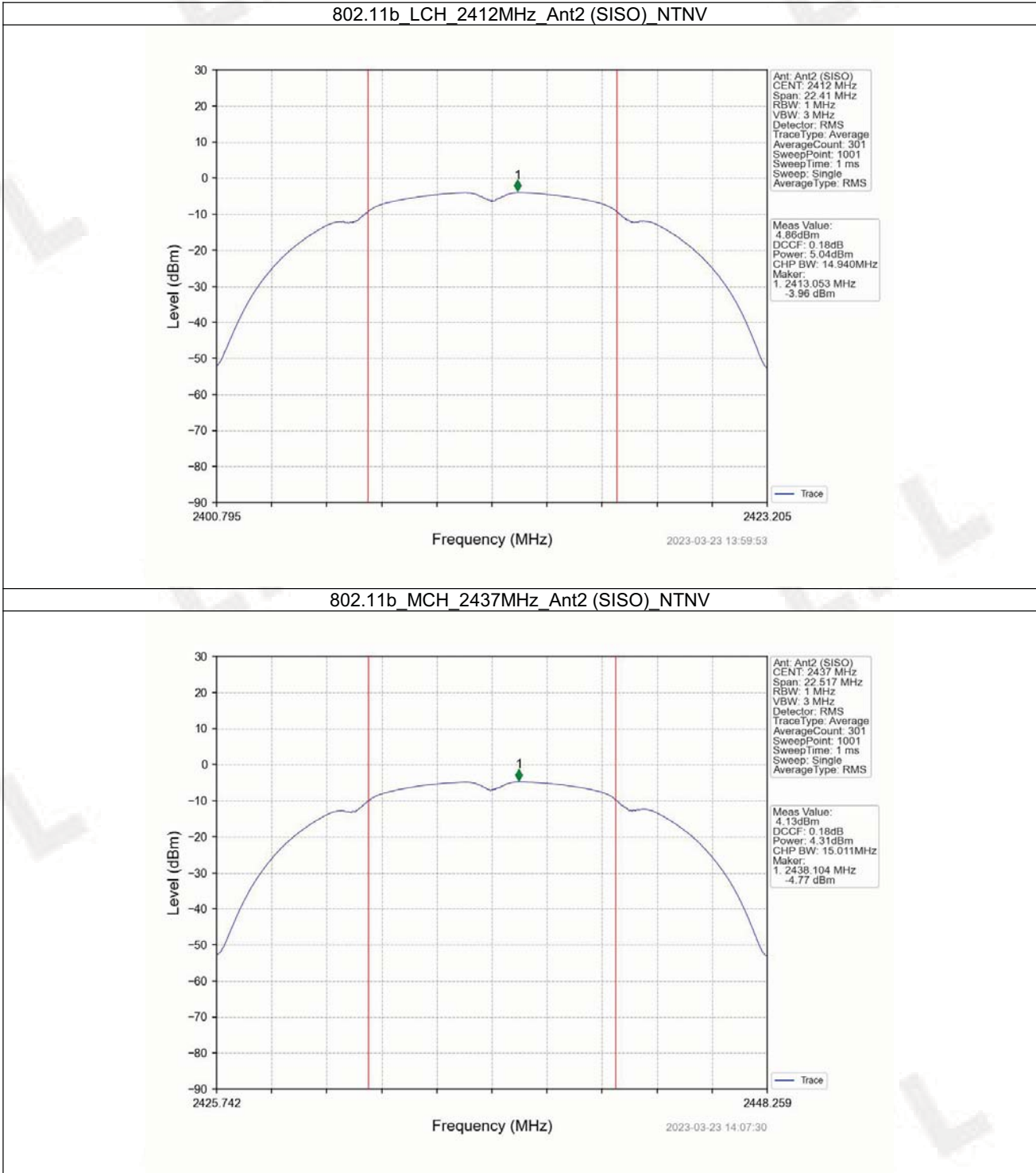
2.1 Power

2.1.1 Test Result

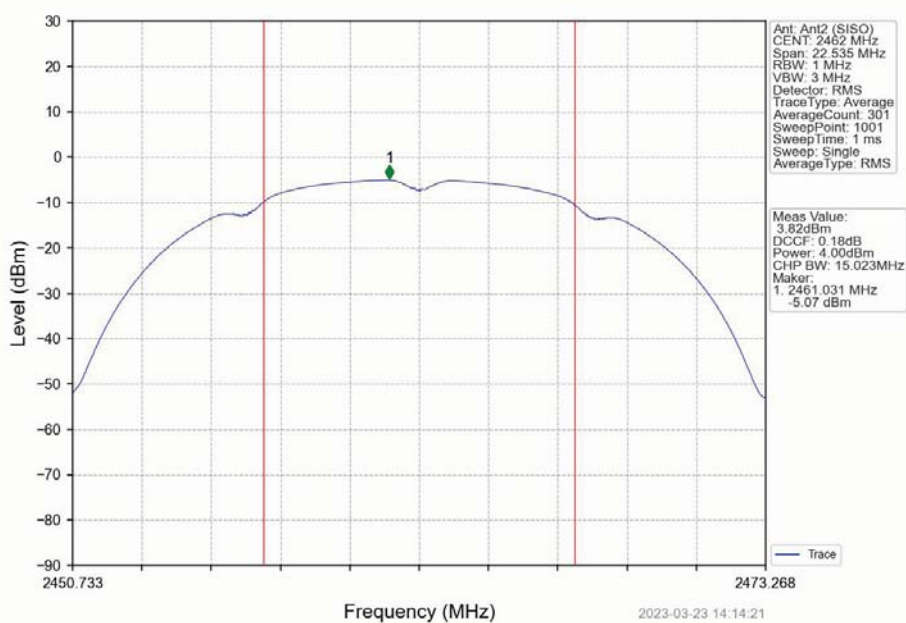
Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT2	Limit	
802.11b	SISO	2412	5.04	<=30	Pass
		2437	4.31	<=30	Pass
		2462	4.00	<=30	Pass
802.11g	SISO	2412	4.14	<=30	Pass
		2437	3.51	<=30	Pass
		2462	4.23	<=30	Pass
802.11n (HT20)	SISO	2412	5.02	<=30	Pass
		2437	5.97	<=30	Pass
		2462	5.13	<=30	Pass
802.11n (HT40)	SISO	2422	4.59	<=30	Pass
		2437	4.18	<=30	Pass
		2452	3.88	<=30	Pass

Note1: Antenna Gain: Ant2: 1.27dBi;

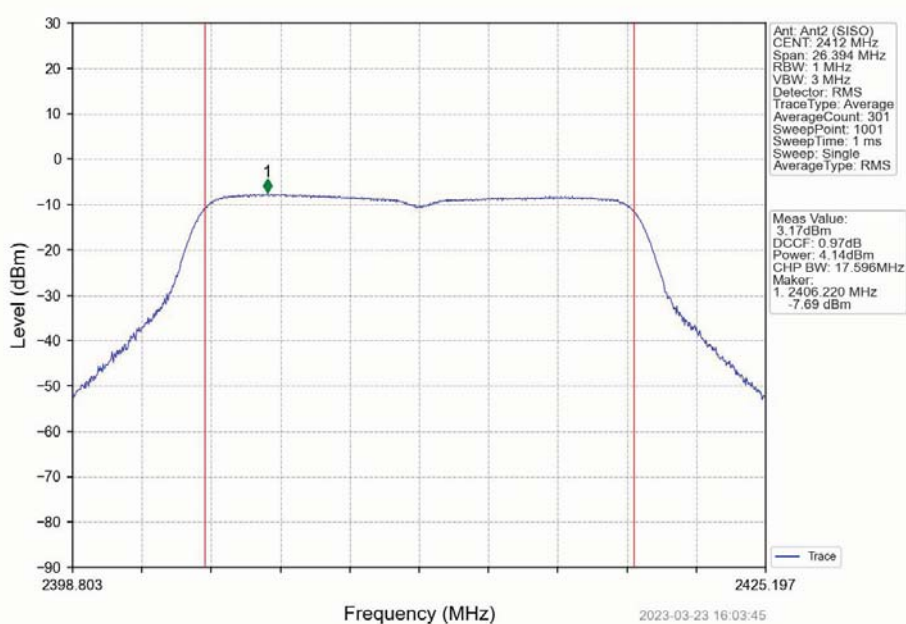
2.1.2 Test Graph



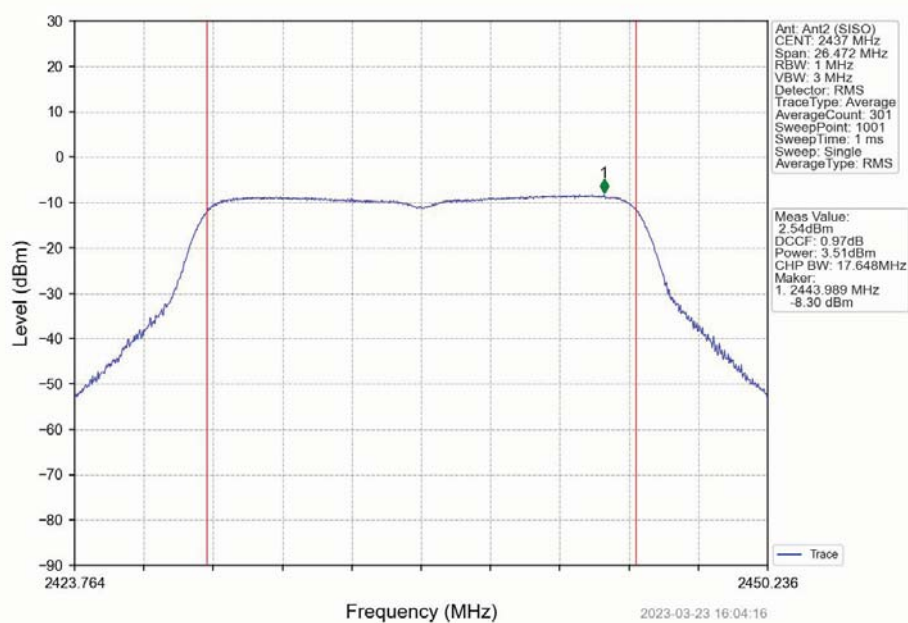
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



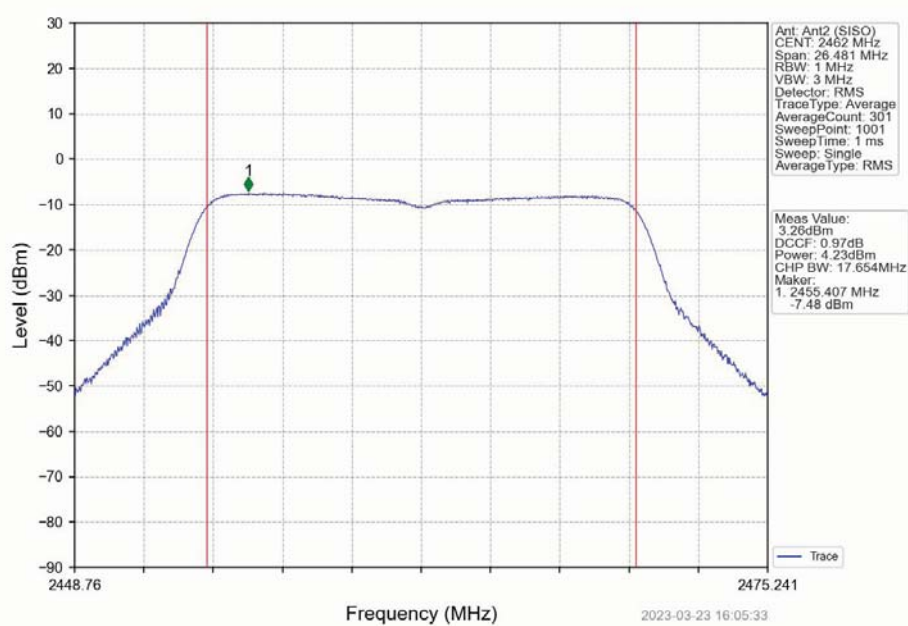
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



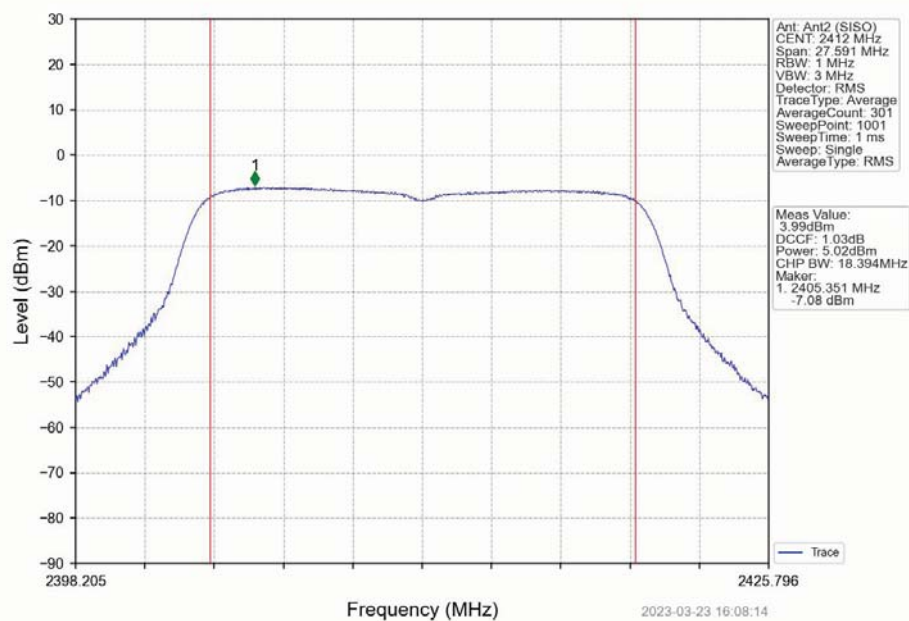
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



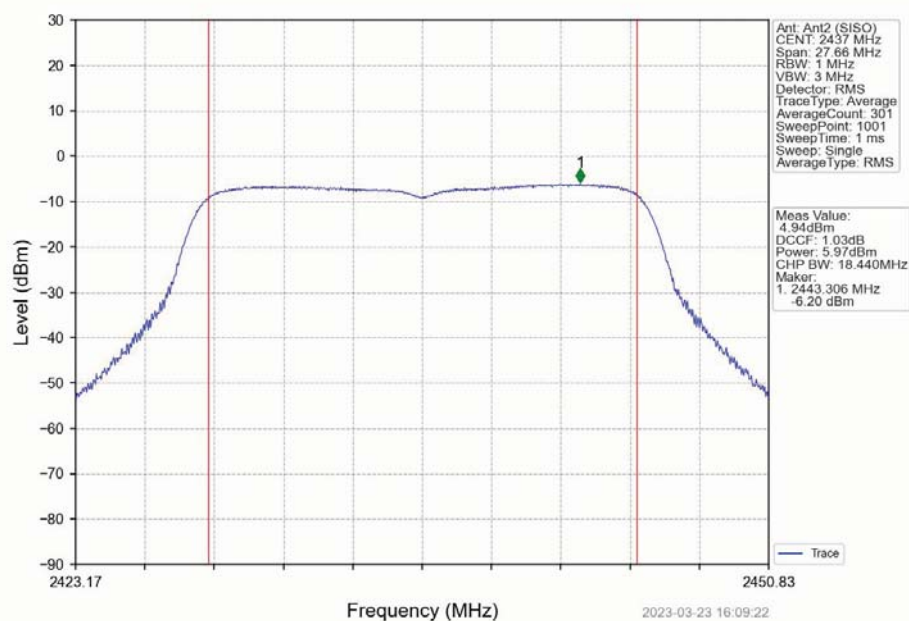
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



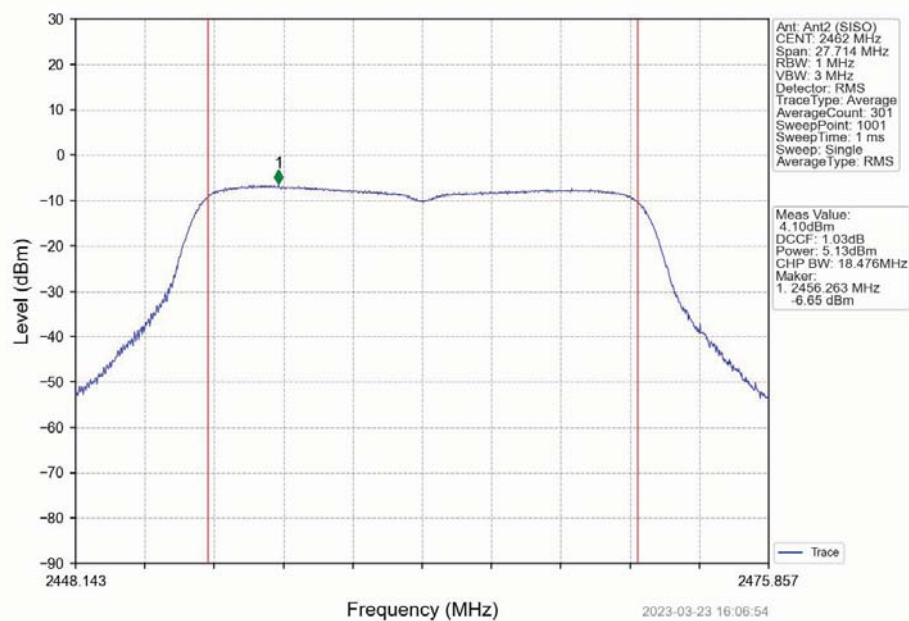
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



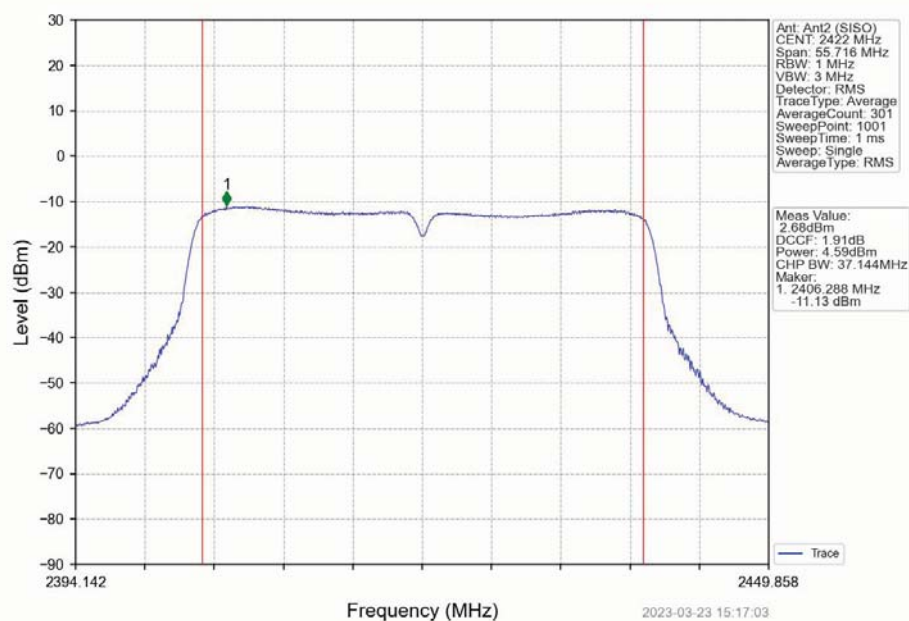
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



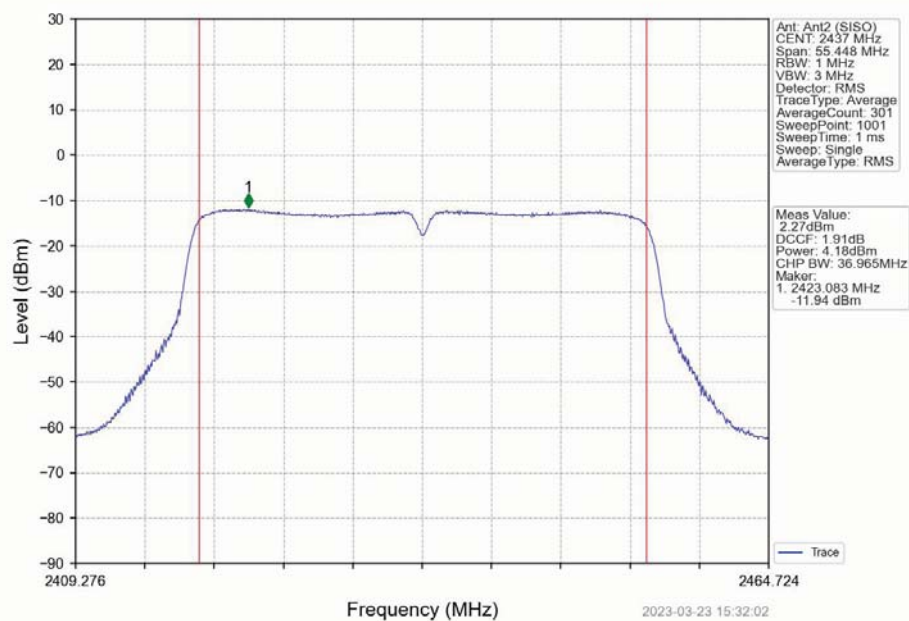
802.11n(HT20)_HCH_2462MHz_Ant2 (SISO)_NTNV



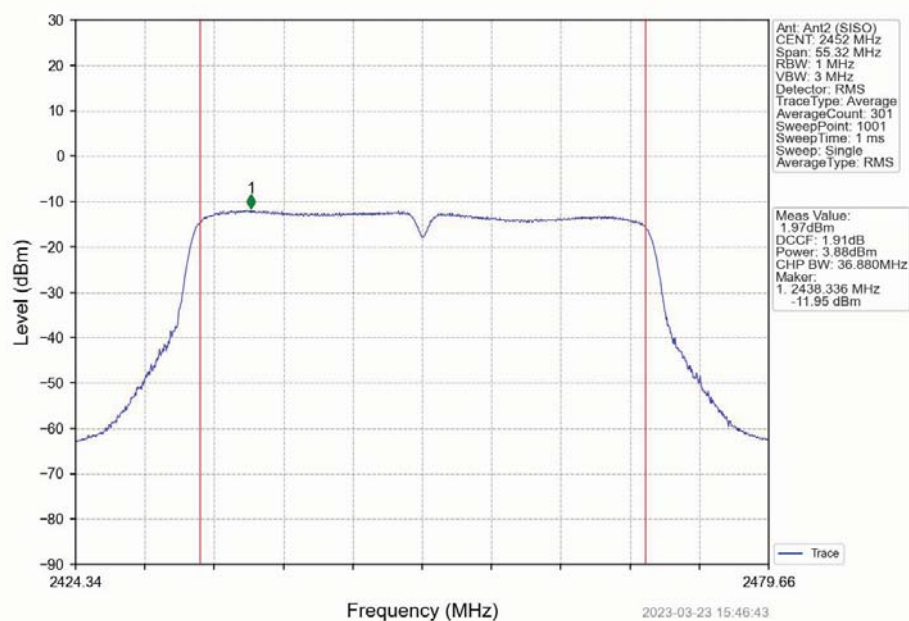
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV



3. Maximum Power Spectral Density

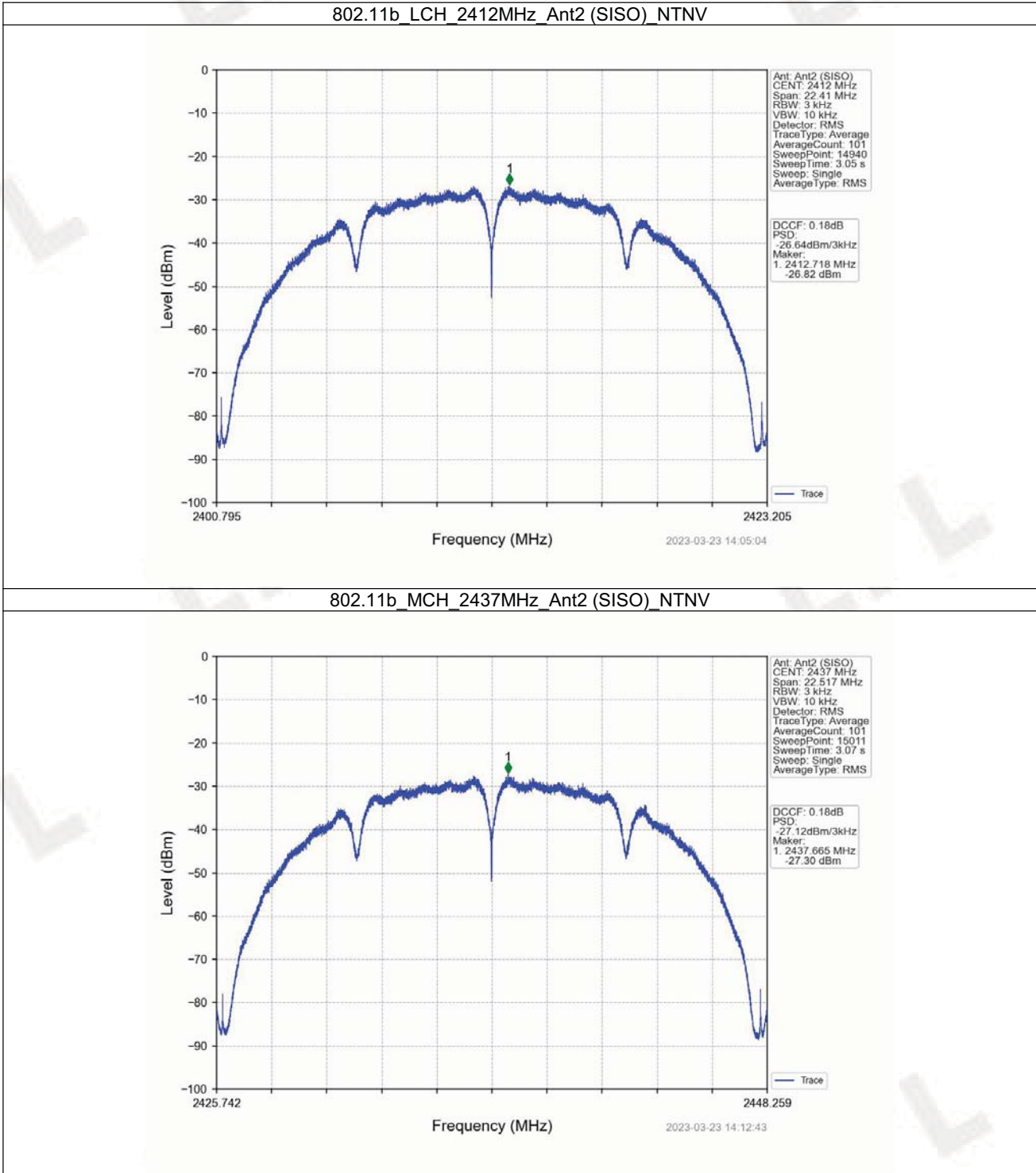
3.1 PSD

3.1.1 Test Result

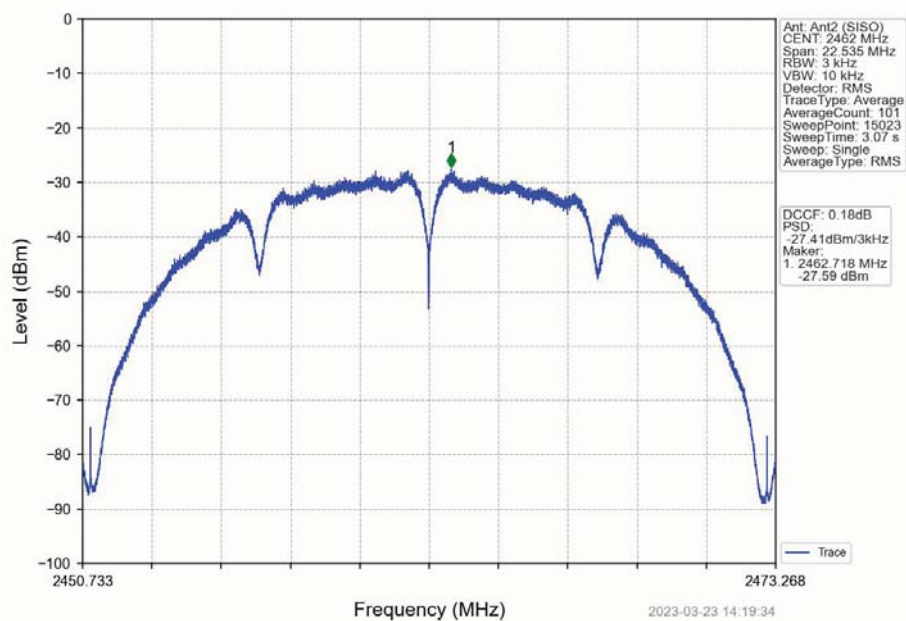
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT2	Limit	
802.11b	SISO	2412	-26.64	<=8	Pass
		2437	-27.12	<=8	Pass
		2462	-27.41	<=8	Pass
802.11g	SISO	2412	-29.69	<=8	Pass
		2437	-28.48	<=8	Pass
		2462	-26.95	<=8	Pass
802.11n (HT20)	SISO	2412	-25.91	<=8	Pass
		2437	-28.67	<=8	Pass
		2462	-29.65	<=8	Pass
802.11n (HT40)	SISO	2422	-29.64	<=8	Pass
		2437	-28.79	<=8	Pass
		2452	-30.75	<=8	Pass

Note1: Antenna Gain: Ant2: 1.27dBi;

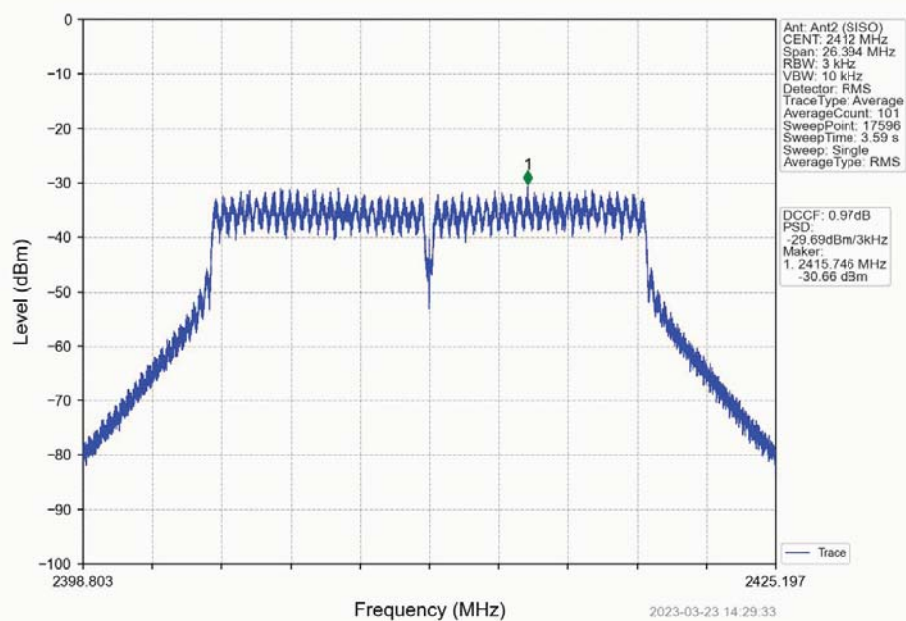
3.1.2 Test Graph



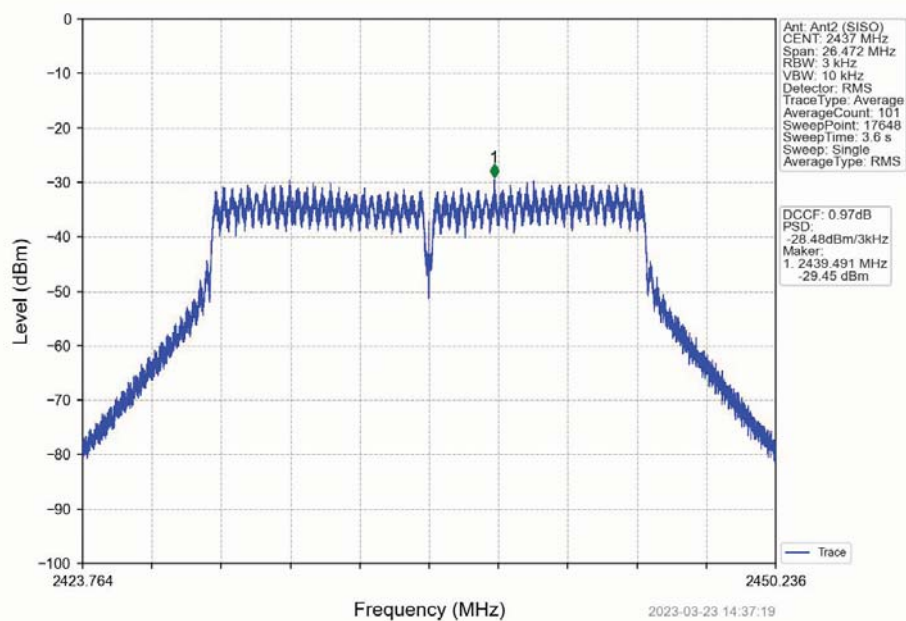
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



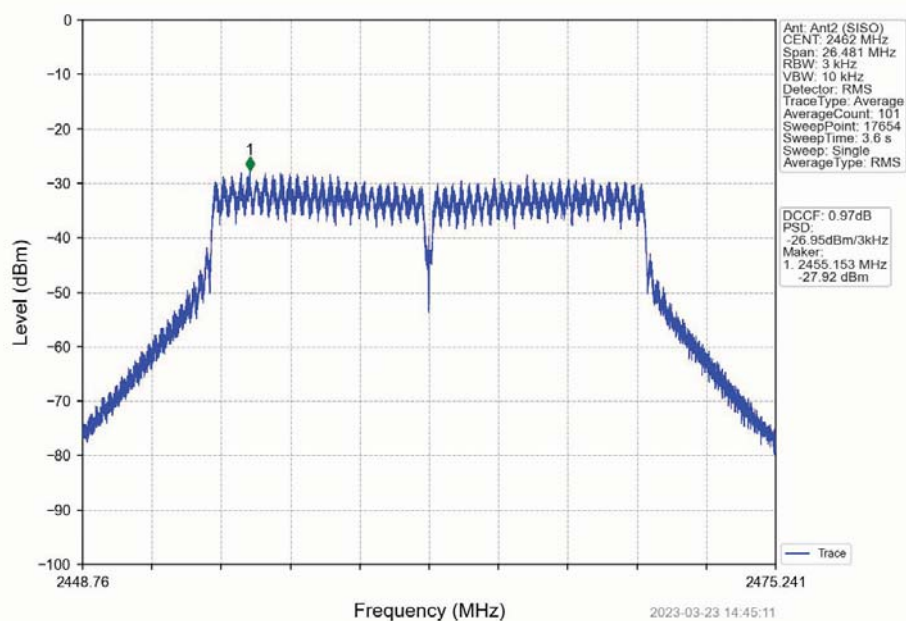
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



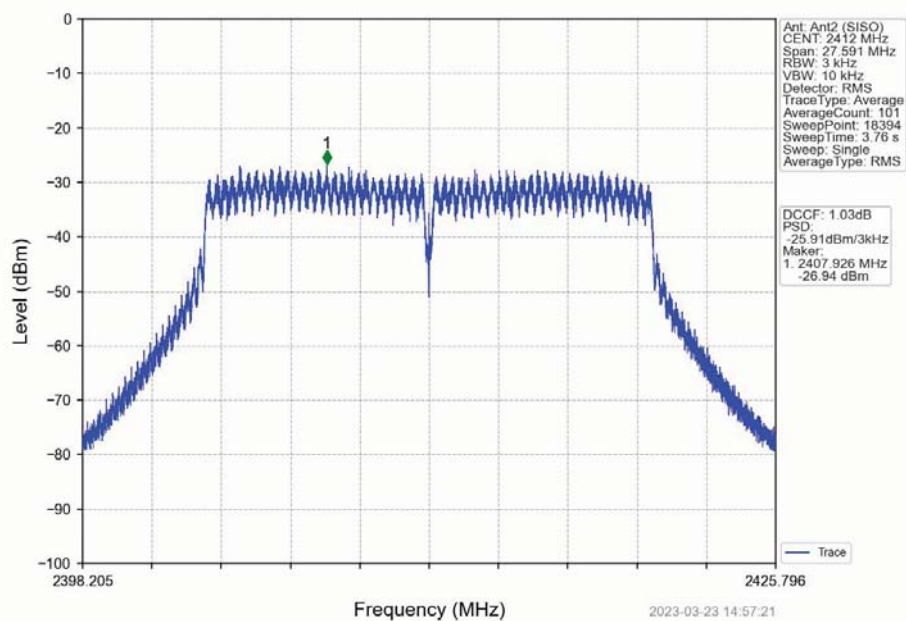
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



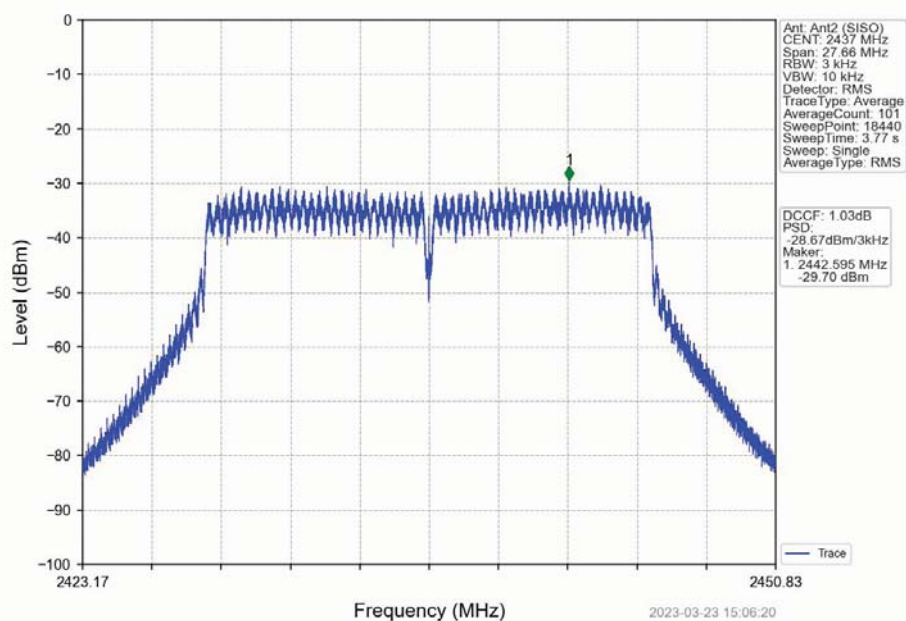
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



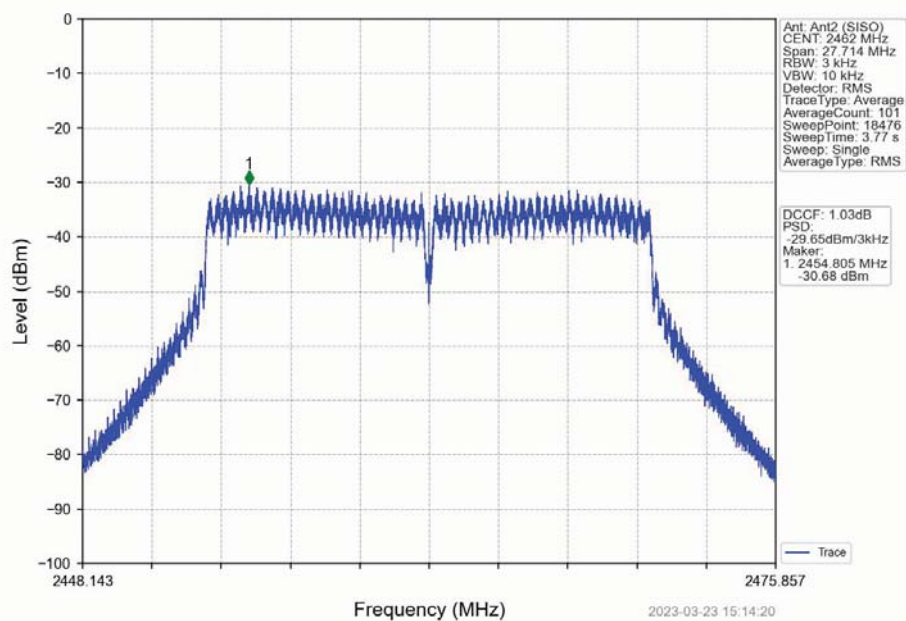
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



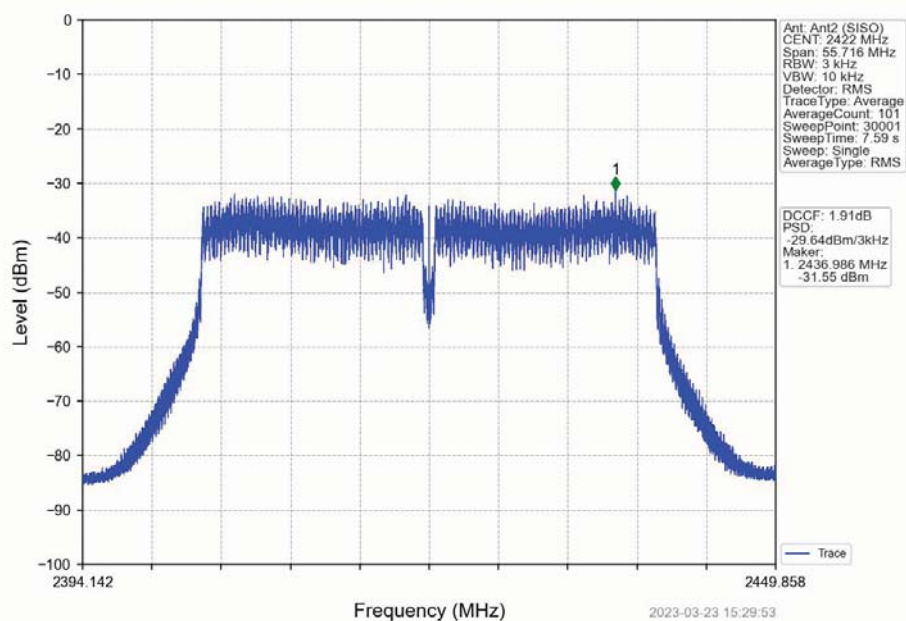
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



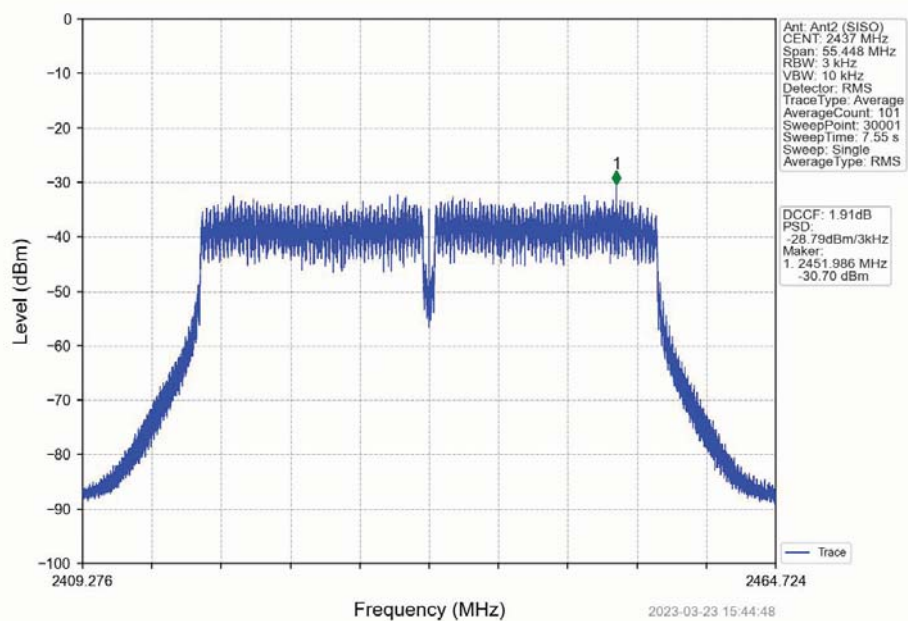
802.11n(HT20)_HCH_2462MHz_Ant2 (SISO)_NTNV



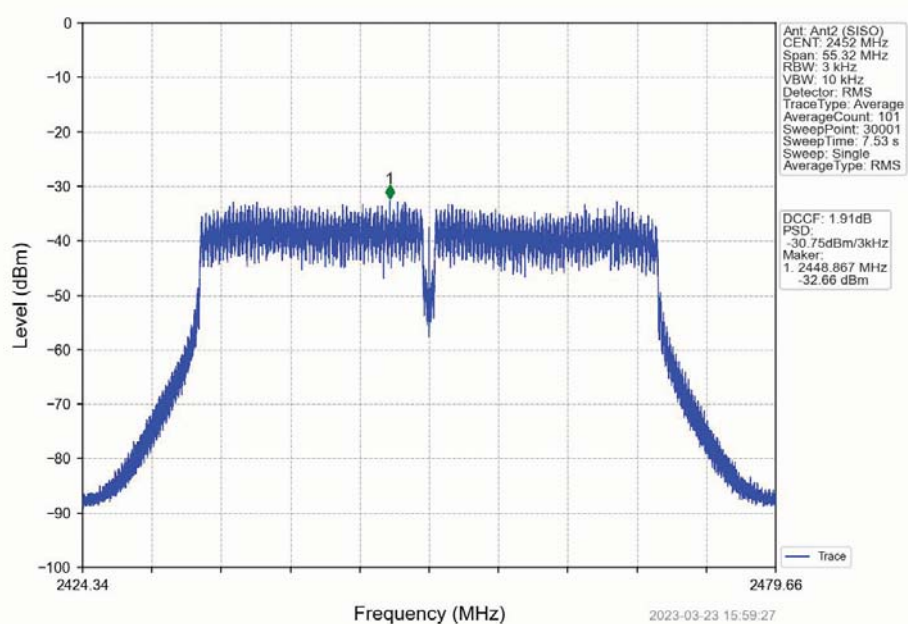
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV



4. Unwanted Emissions In Non-restricted Frequency Bands

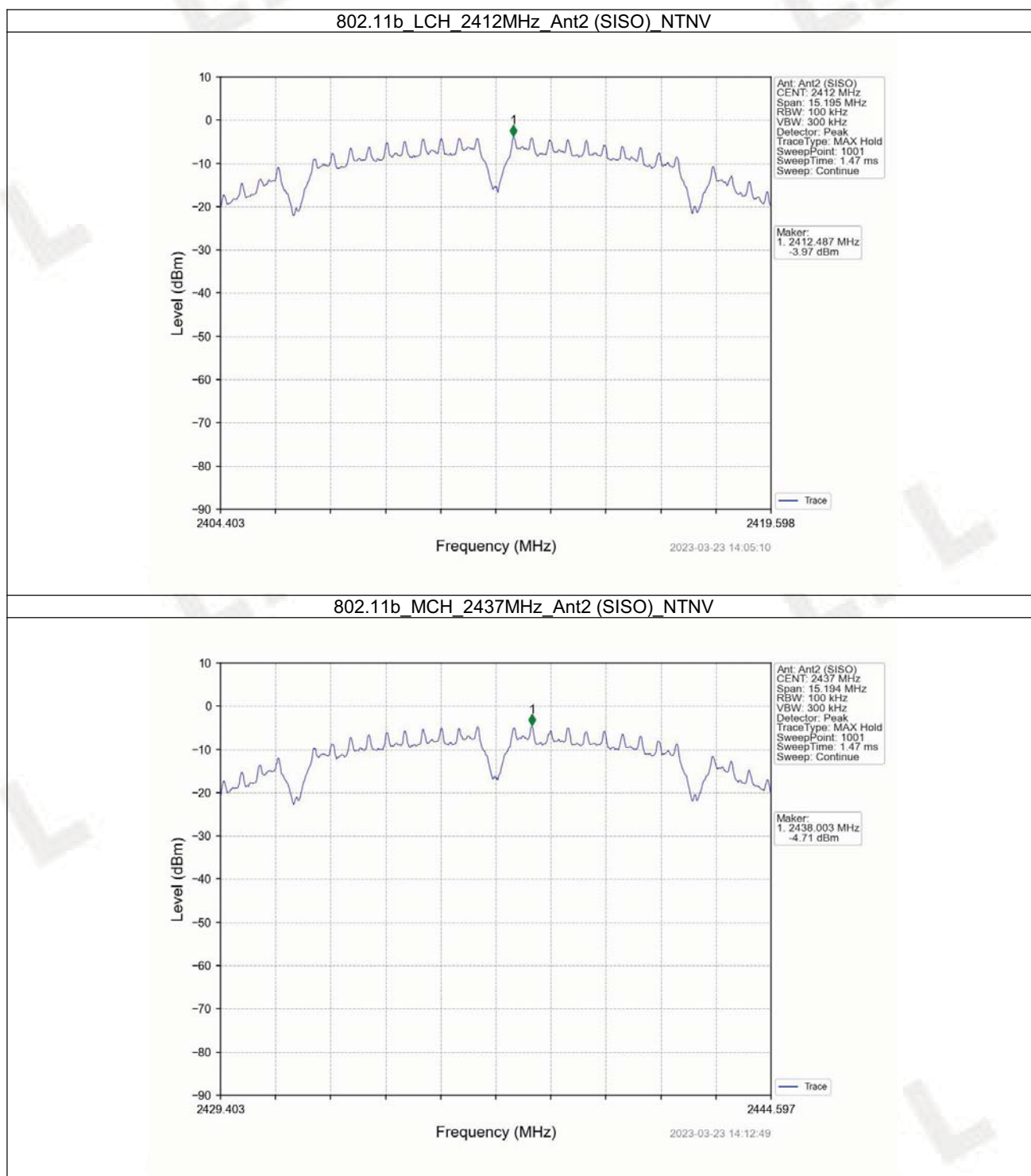
4.1 Ref

4.1.1 Test Result

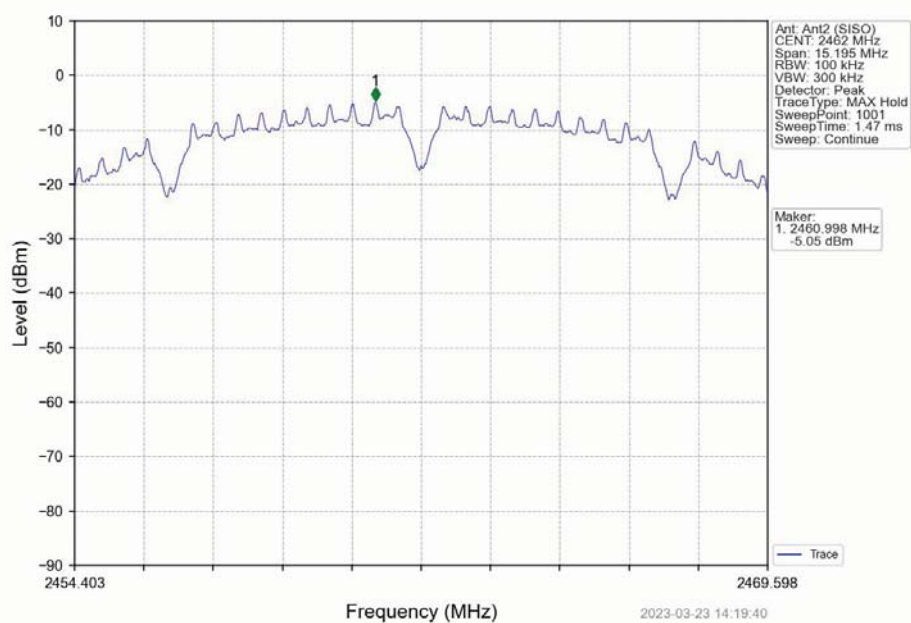
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	2	-3.97
		2437	2	-4.71
		2462	2	-5.05
802.11g	SISO	2412	2	-8.47
		2437	2	-7.34
		2462	2	-5.53
802.11n (HT20)	SISO	2412	2	-3.84
		2437	2	-7.65
		2462	2	-8.62
802.11n (HT40)	SISO	2422	2	-9.01
		2437	2	-10.02
		2452	2	-9.85

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

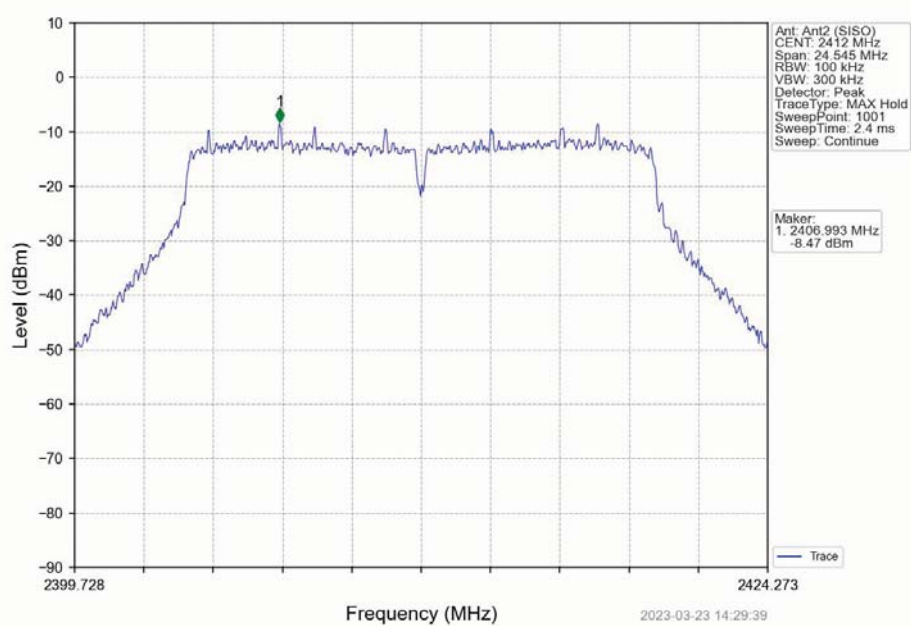
4.1.2 Test Graph



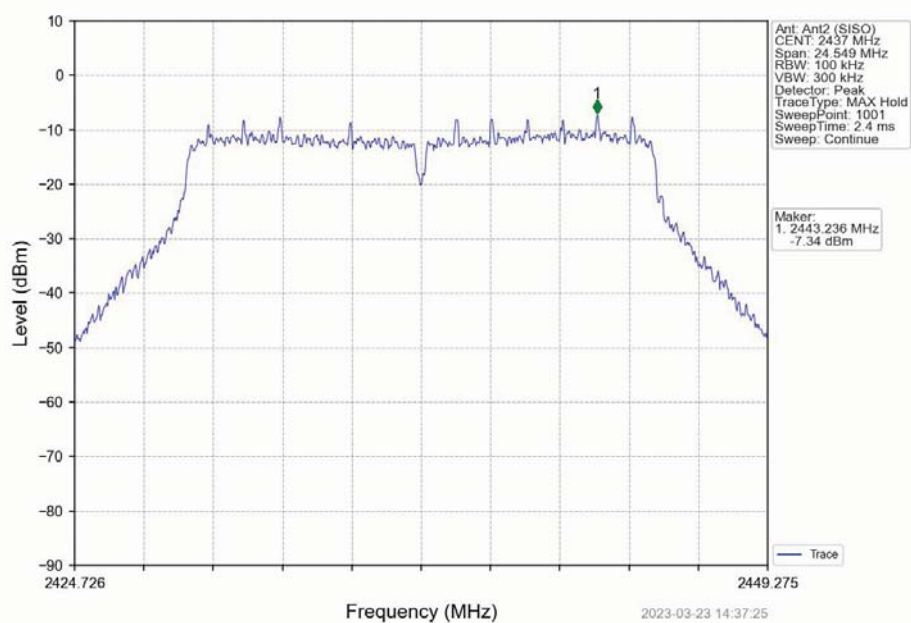
802.11b_HCH_2462MHz_Ant2 (SISO)_NTNV



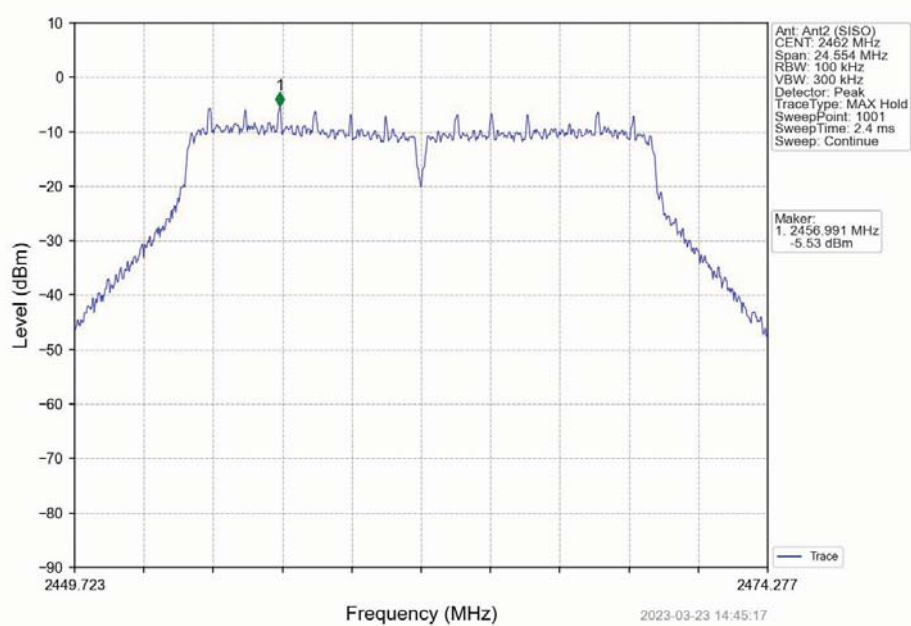
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



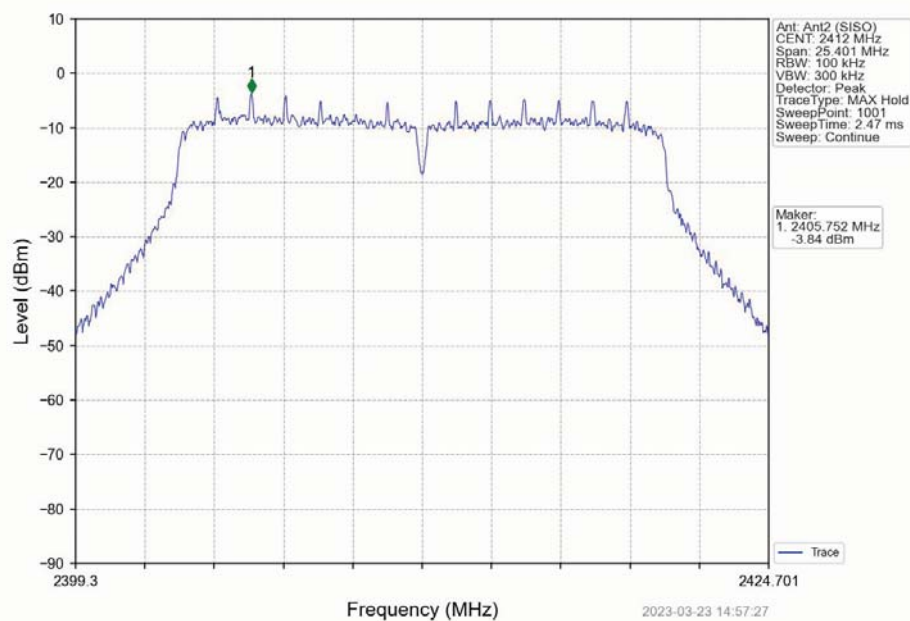
802.11g_MCH_2437MHz_Ant2 (SISO)_NTNV



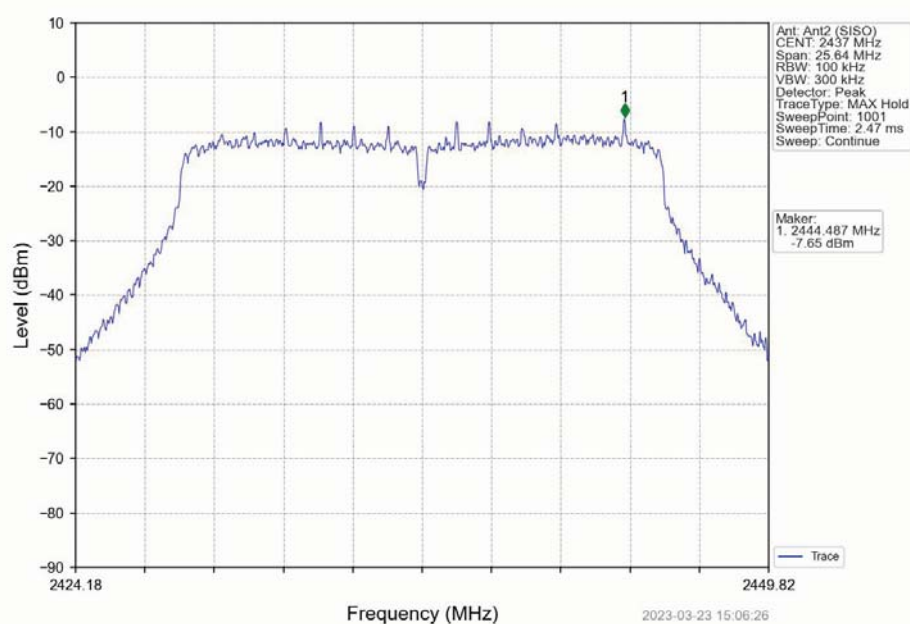
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



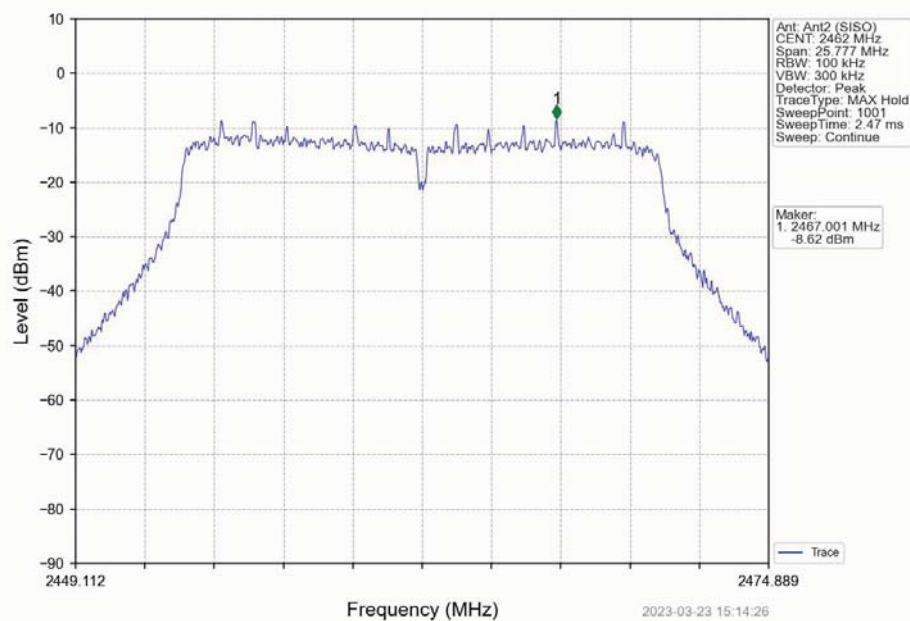
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



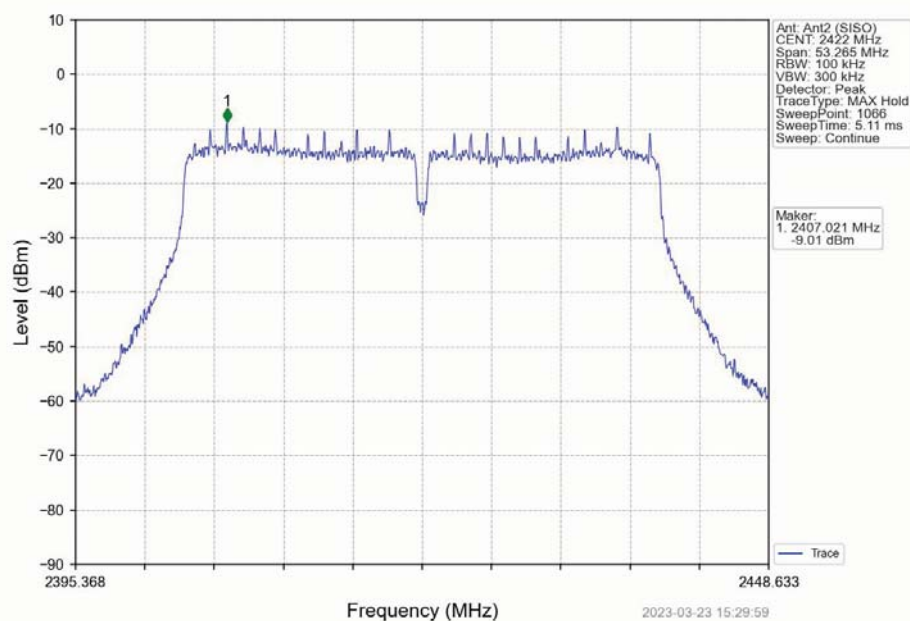
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



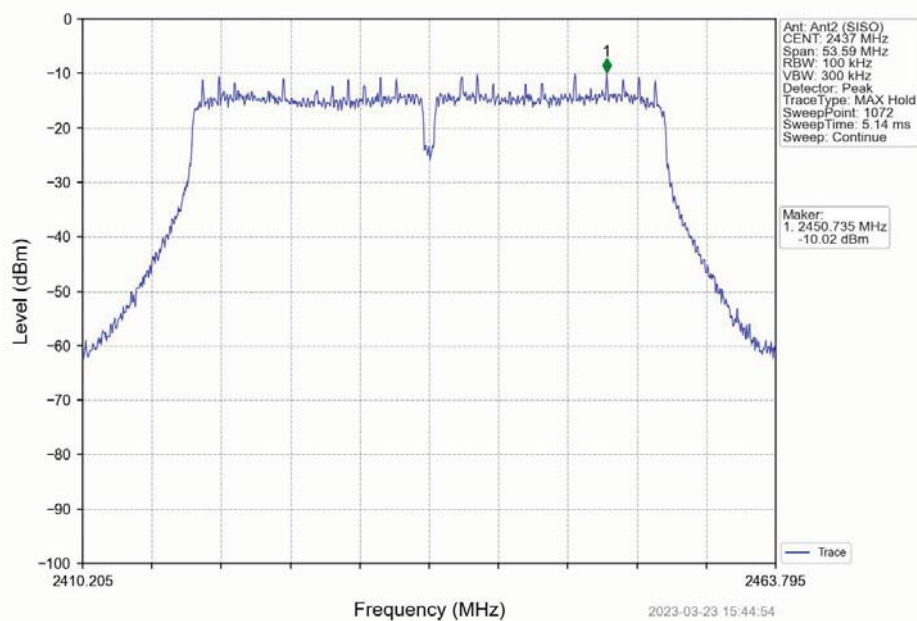
802.11n(HT20)_HCH_2462MHz_Ant2 (SISO)_NTNV



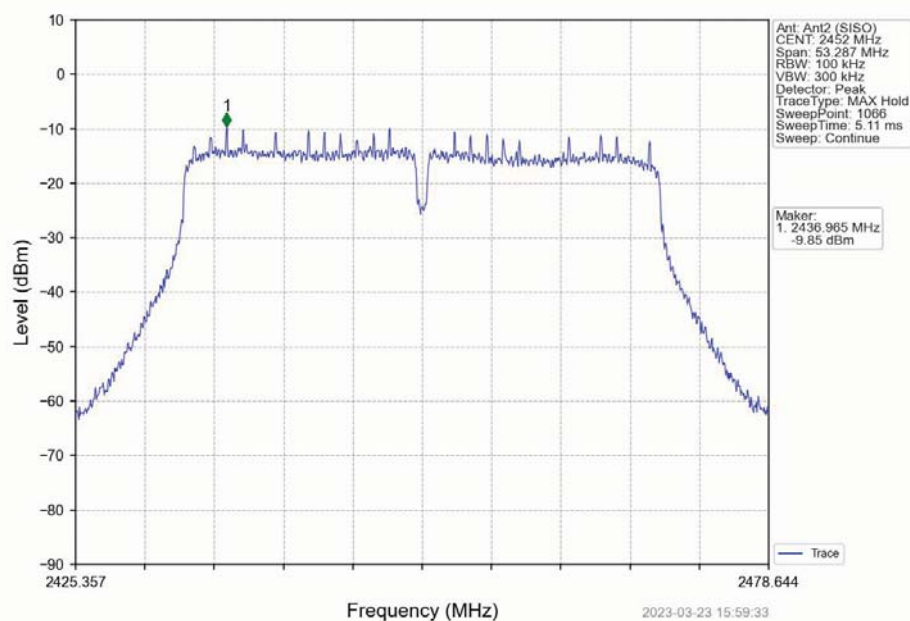
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV



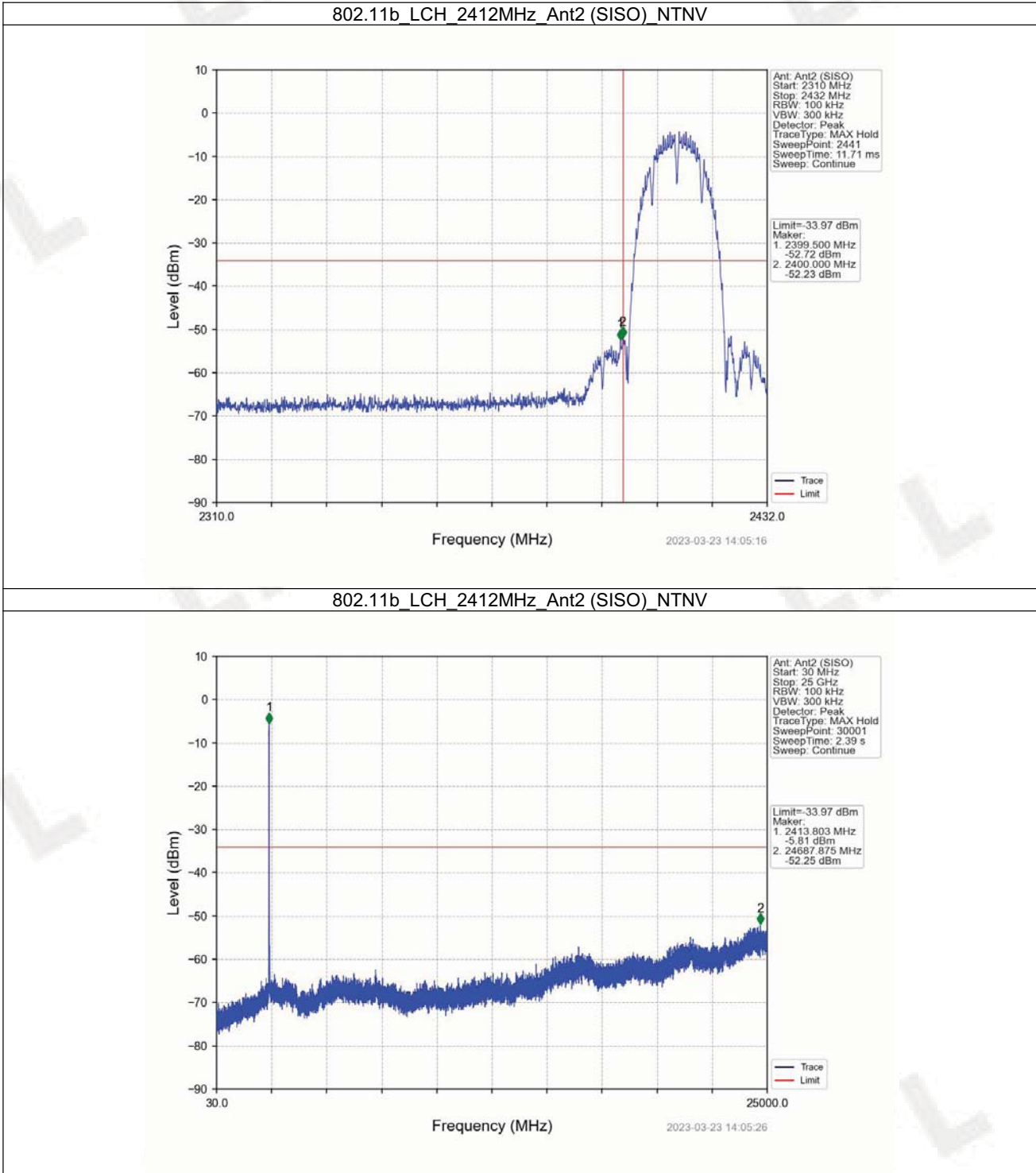
4.2 CSE

4.2.1 Test Result

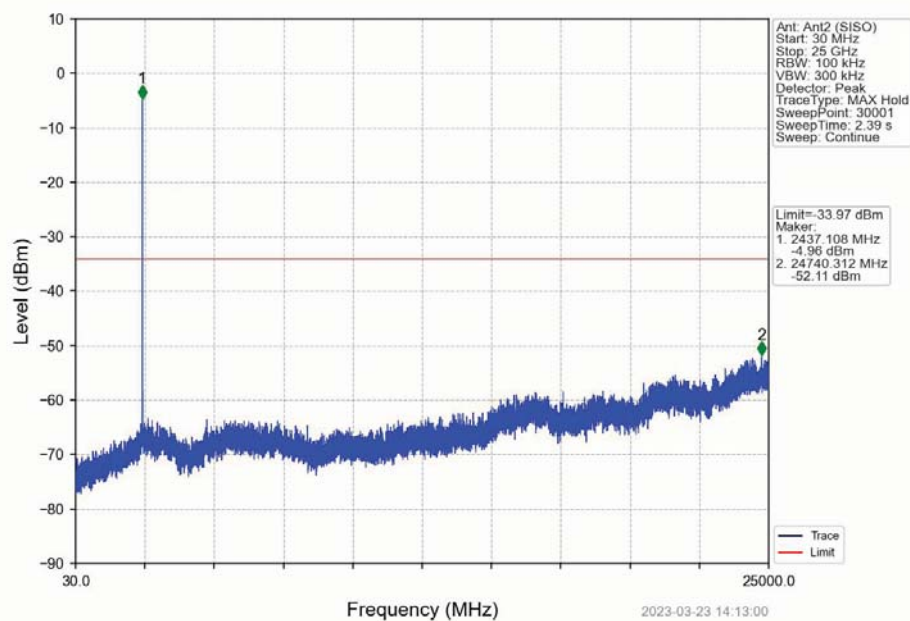
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	2	-3.97	-33.97	Pass
		2437	2	-3.97	-33.97	Pass
		2462	2	-3.97	-33.97	Pass
802.11g	SISO	2412	2	-5.53	-35.53	Pass
		2437	2	-5.53	-35.53	Pass
		2462	2	-5.53	-35.53	Pass
802.11n (HT20)	SISO	2412	2	-3.84	-33.84	Pass
		2437	2	-3.84	-33.84	Pass
		2462	2	-3.84	-33.84	Pass
802.11n (HT40)	SISO	2422	2	-9.01	-39.01	Pass
		2437	2	-9.01	-39.01	Pass
		2452	2	-9.01	-39.01	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.

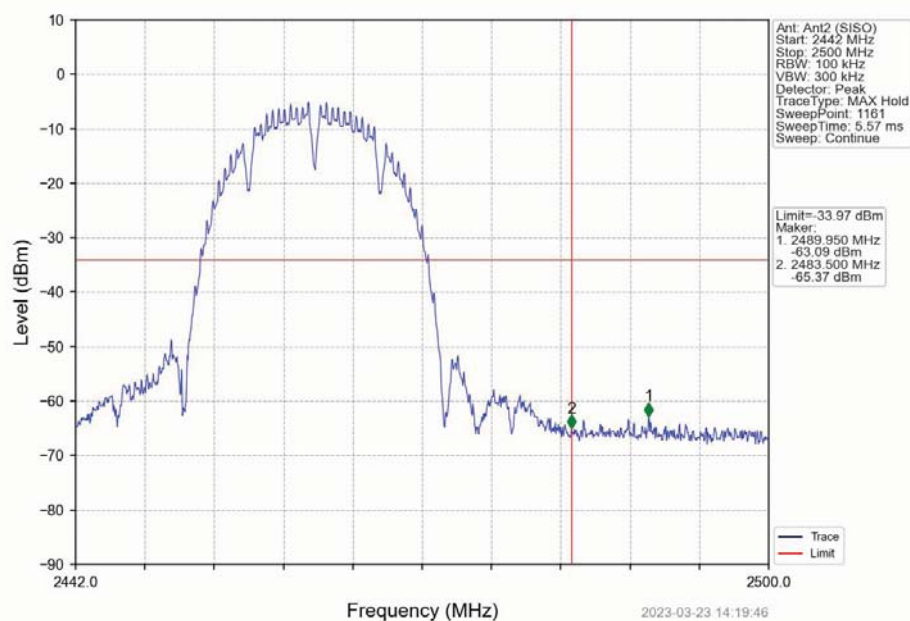
4.2.2 Test Graph



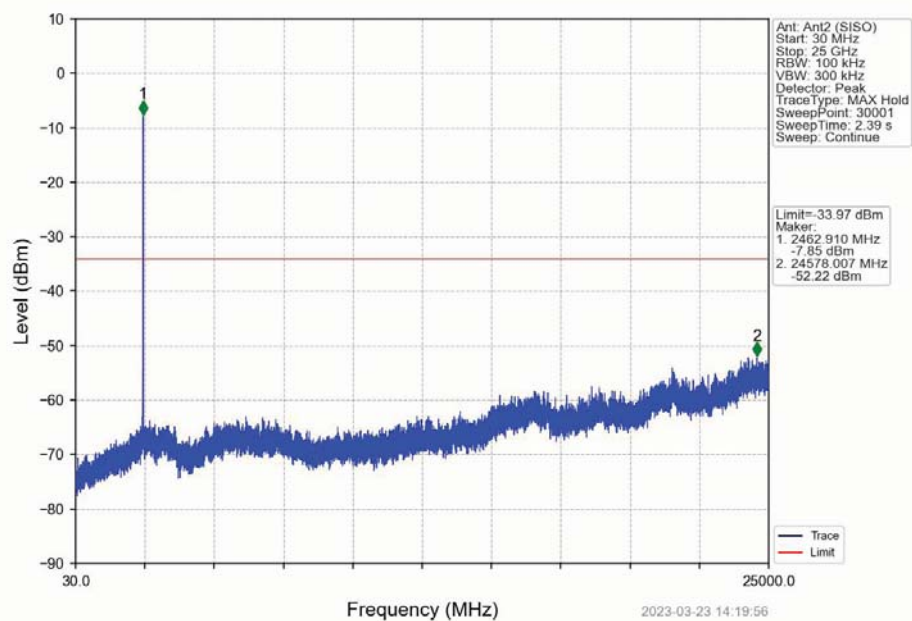
802.11b_MCH_2437MHz_Ant2 (SISO)_NTNV



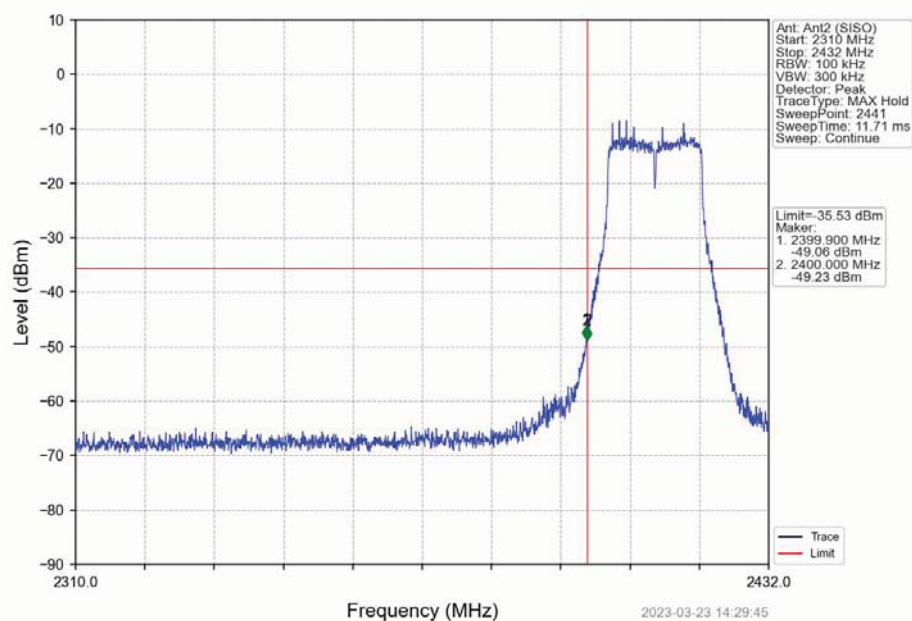
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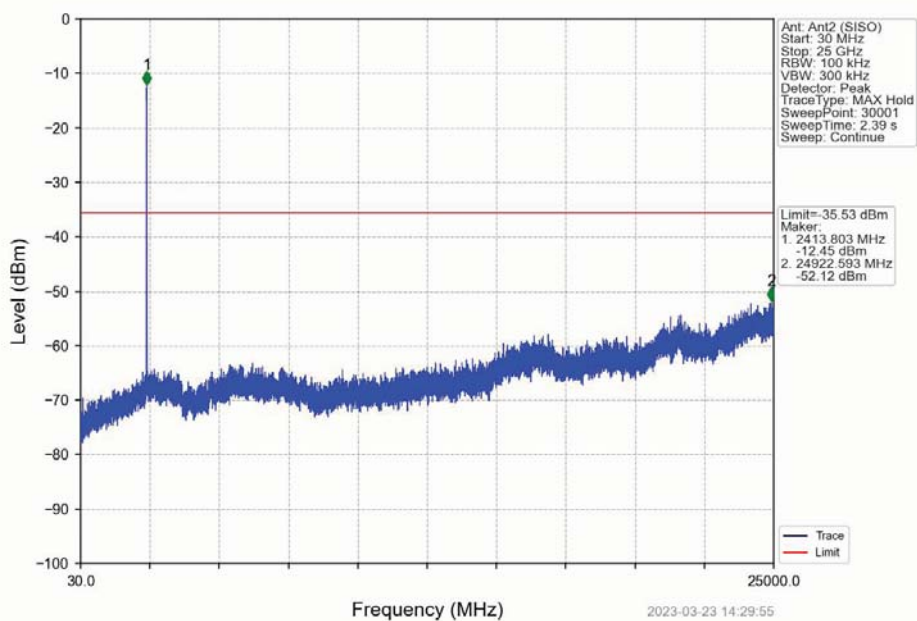
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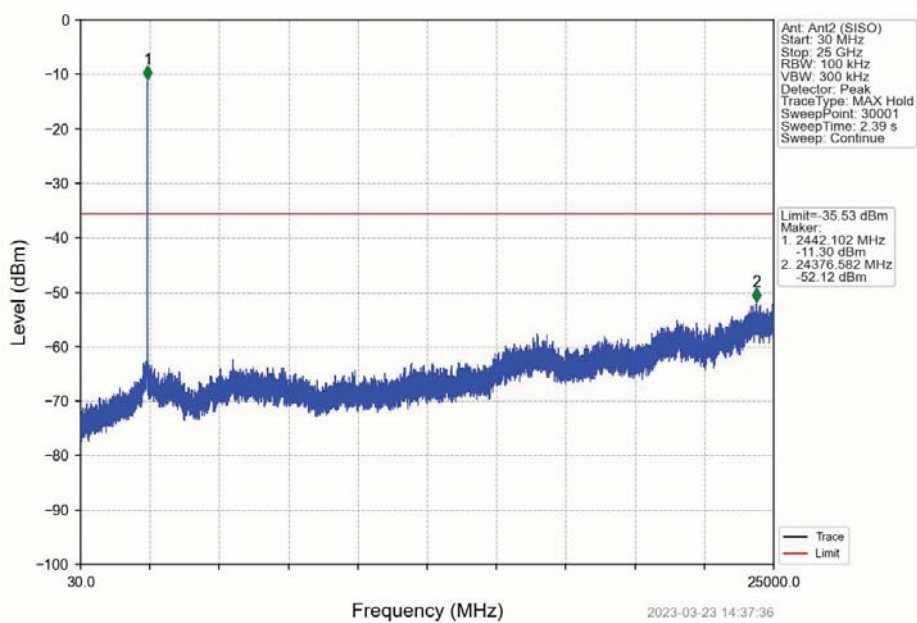
802.11g_LCH_2412MHz_Ant2 (SISO)_NTNV



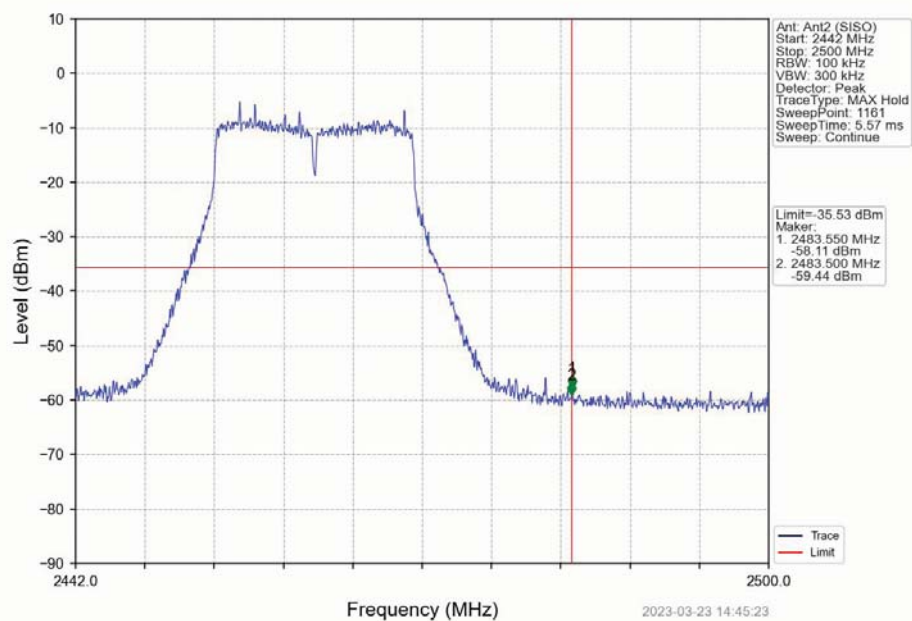
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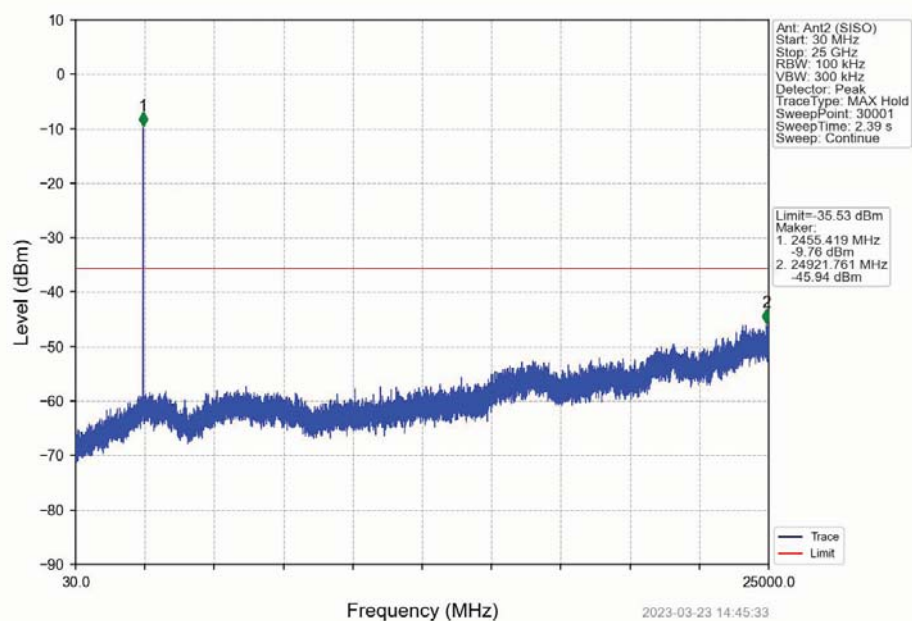
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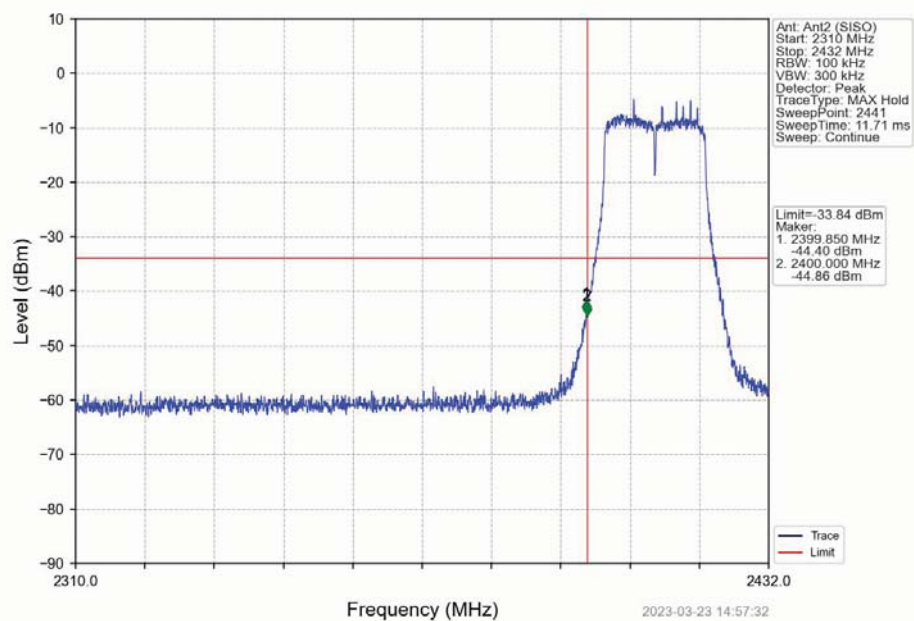
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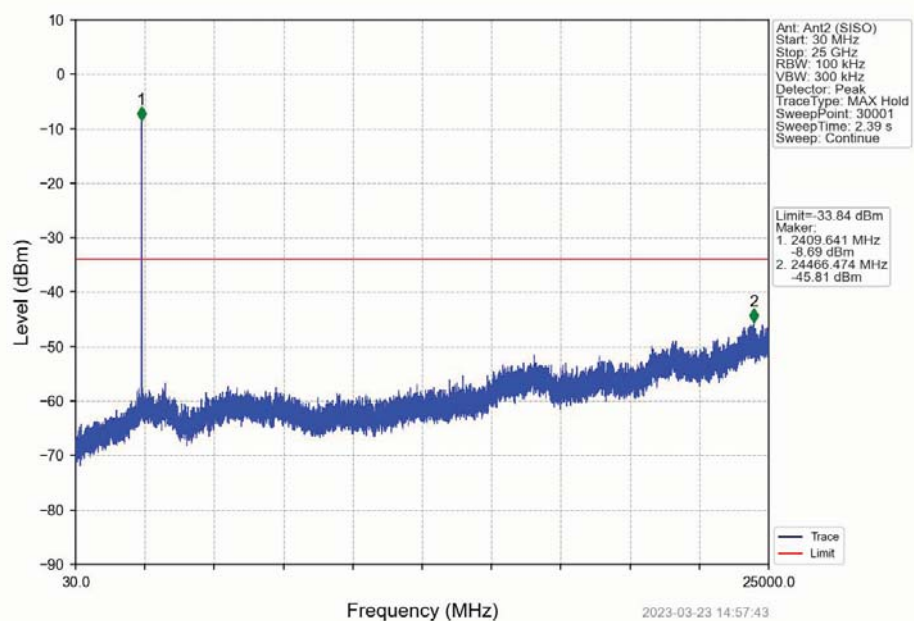
802.11g_HCH_2462MHz_Ant2 (SISO)_NTNV



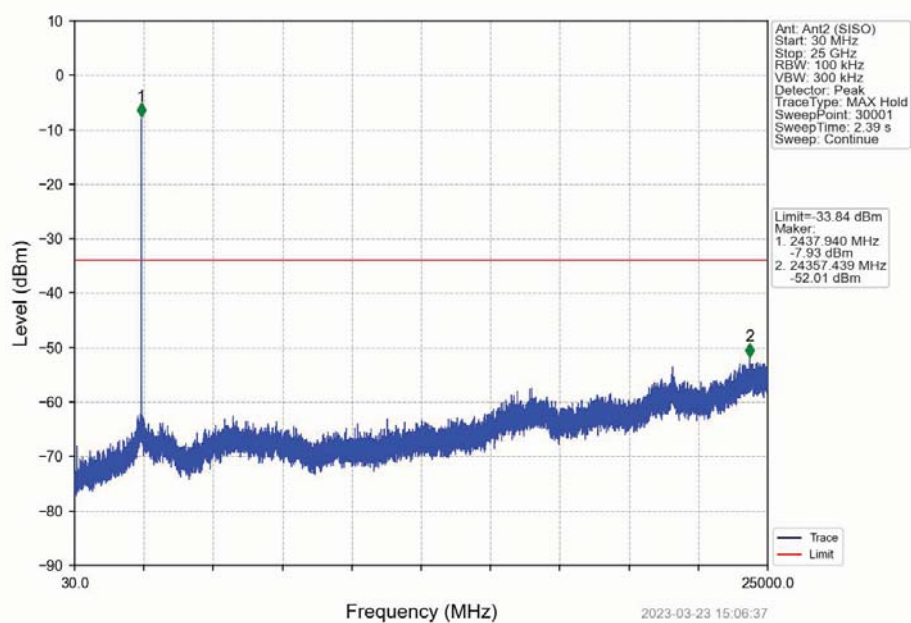
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



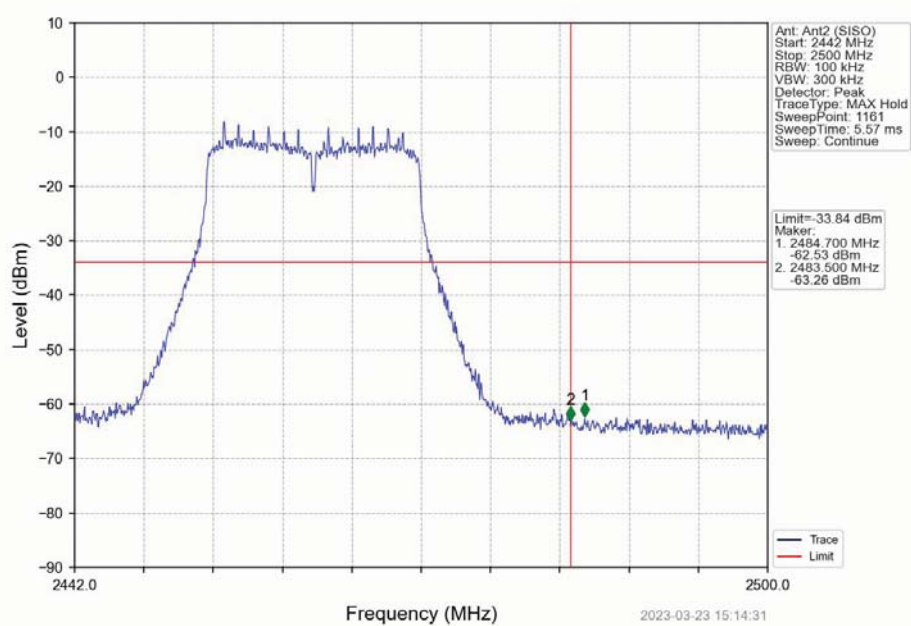
802.11n(HT20)_LCH_2412MHz_Ant2 (SISO)_NTNV



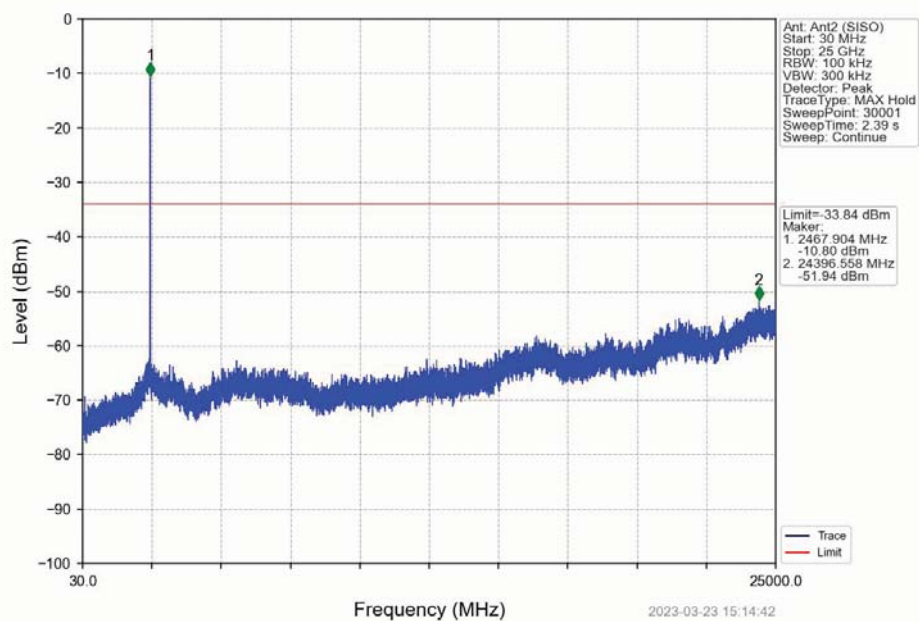
802.11n(HT20)_MCH_2437MHz_Ant2 (SISO)_NTNV



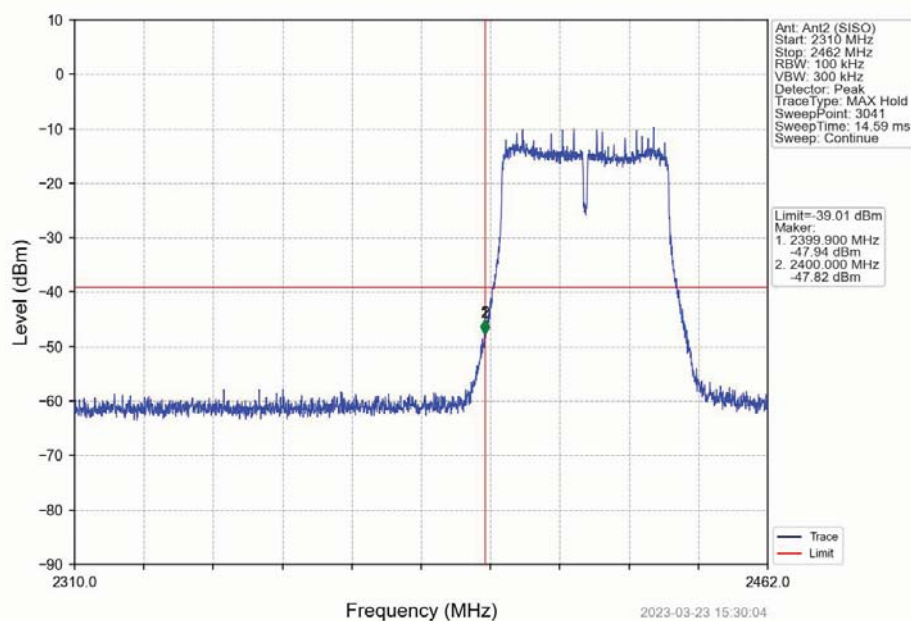
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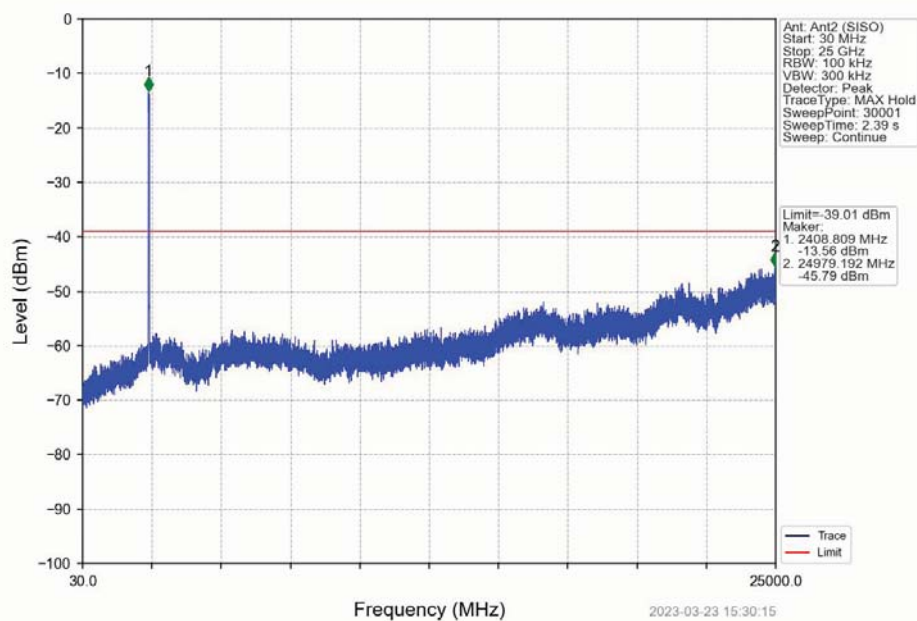
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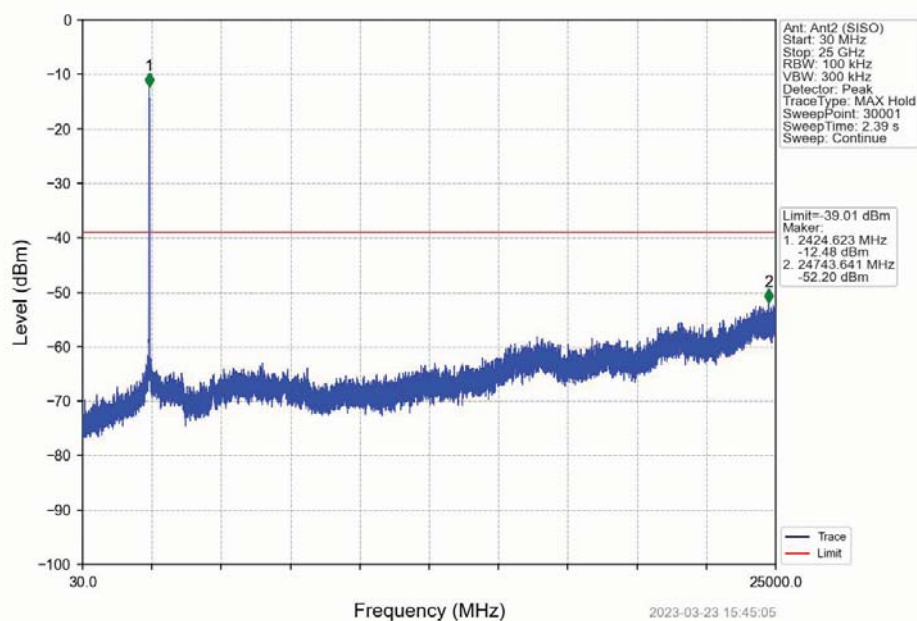
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



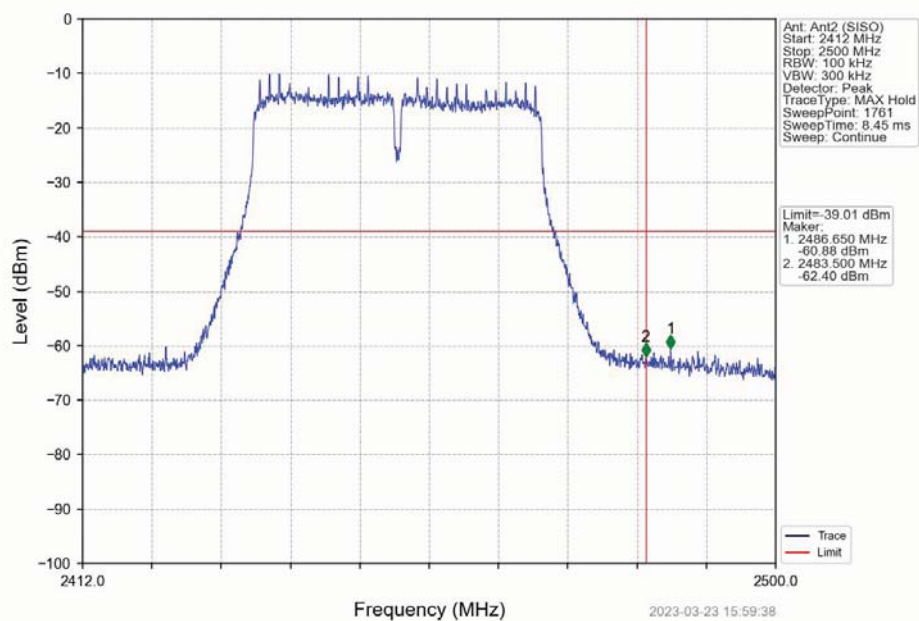
802.11n(HT40)_LCH_2422MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_MCH_2437MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV



802.11n(HT40)_HCH_2452MHz_Ant2 (SISO)_NTNV

