

Appendix RF Test Data for 2.4G WIFI

Company: : Lantian New Technology R&D (Shenzhen) Co., Ltd.

EUT : CASTJOY

FCC ID: : 2BYMC-X1

Model Number : X1

Report No. : HTT202609298F01

Reviewed By : Heber He

1. Duty Cycle

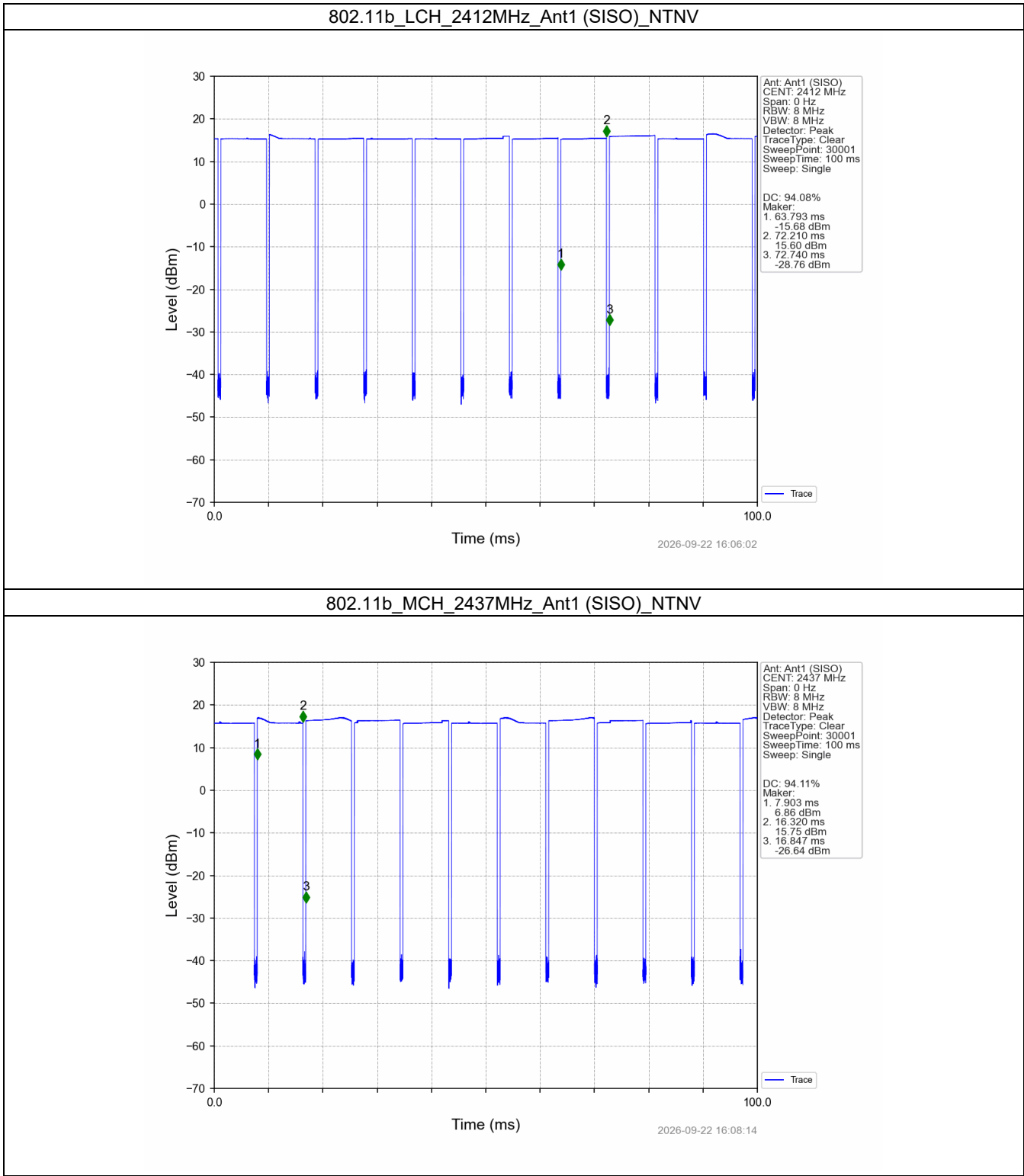
1.1 Test Result

1.1.1 Ant1

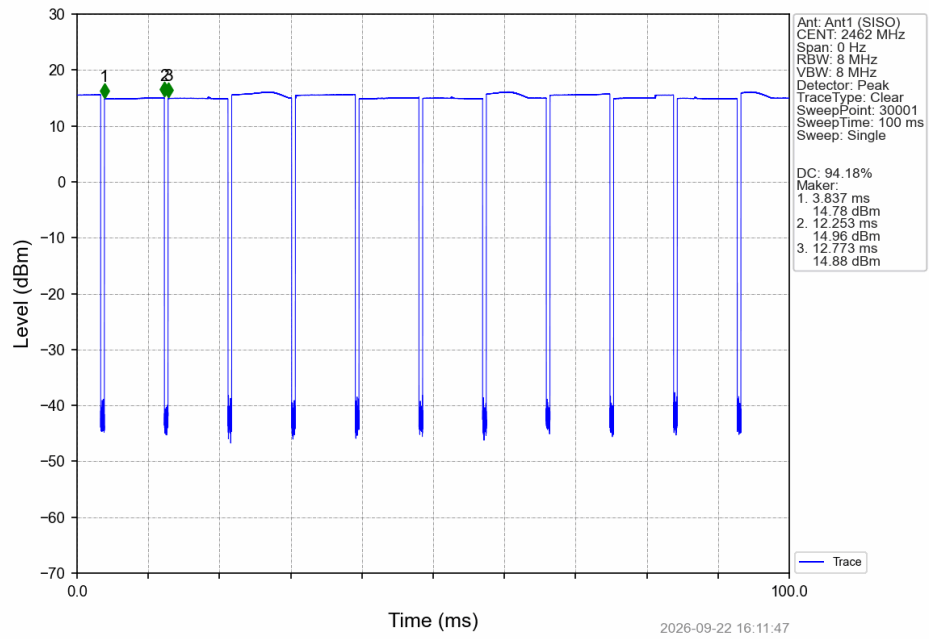
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	8.417	8.947	94.08	0.27	0.14
		2437	8.417	8.944	94.11	0.26	0.04
		2462	8.416	8.936	94.18	0.26	0.00

1.2 Test Graph

1.2.1 Ant1



802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

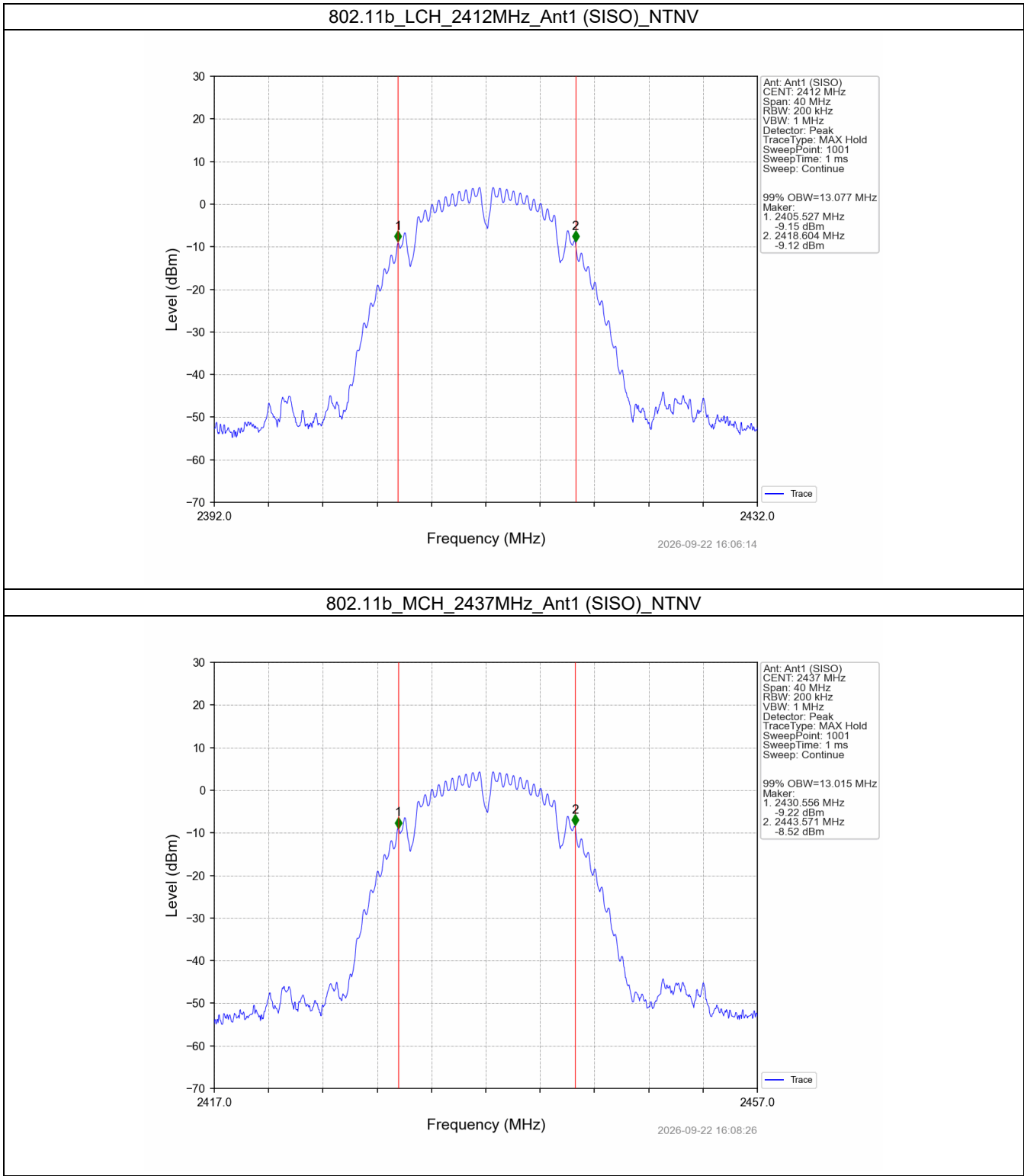
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	13.077	/	Pass
		2437	1	13.015	/	Pass
		2462	1	13.012	/	Pass

2.1.2 6dB BW

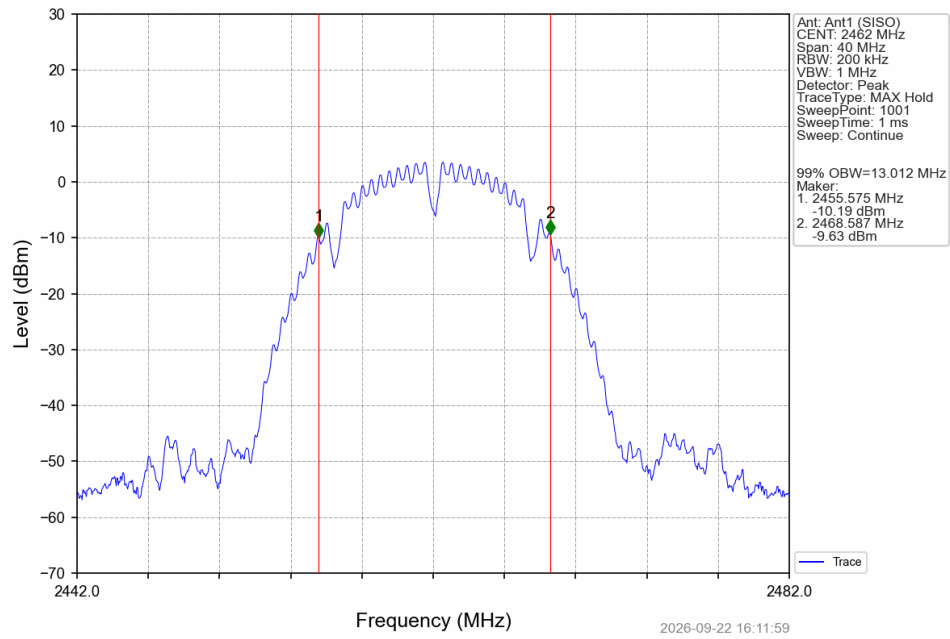
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	9.176	≥ 0.5	Pass
		2437	1	9.165	≥ 0.5	Pass
		2462	1	9.168	≥ 0.5	Pass

2.2 Test Graph

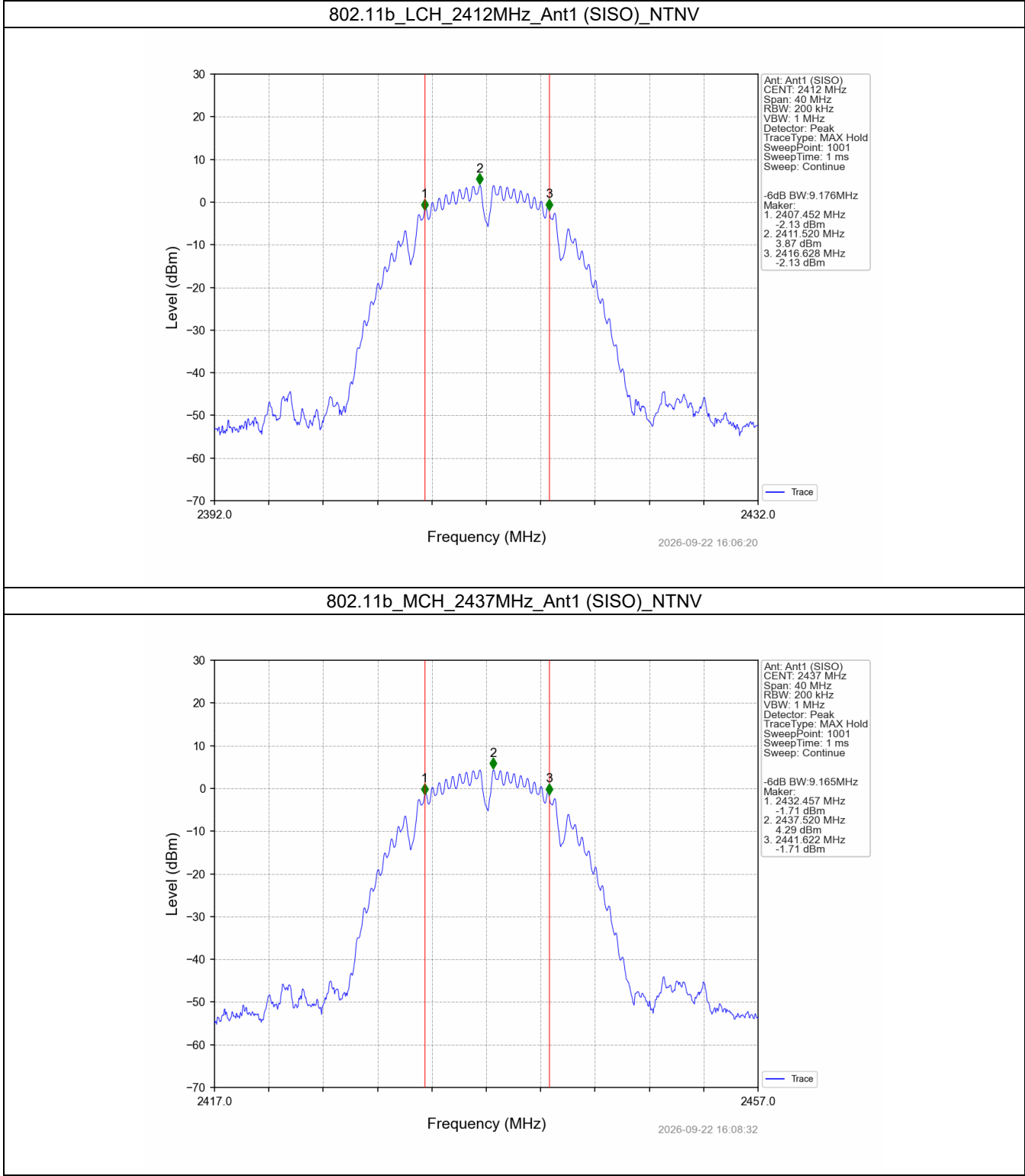
2.2.1 OBW



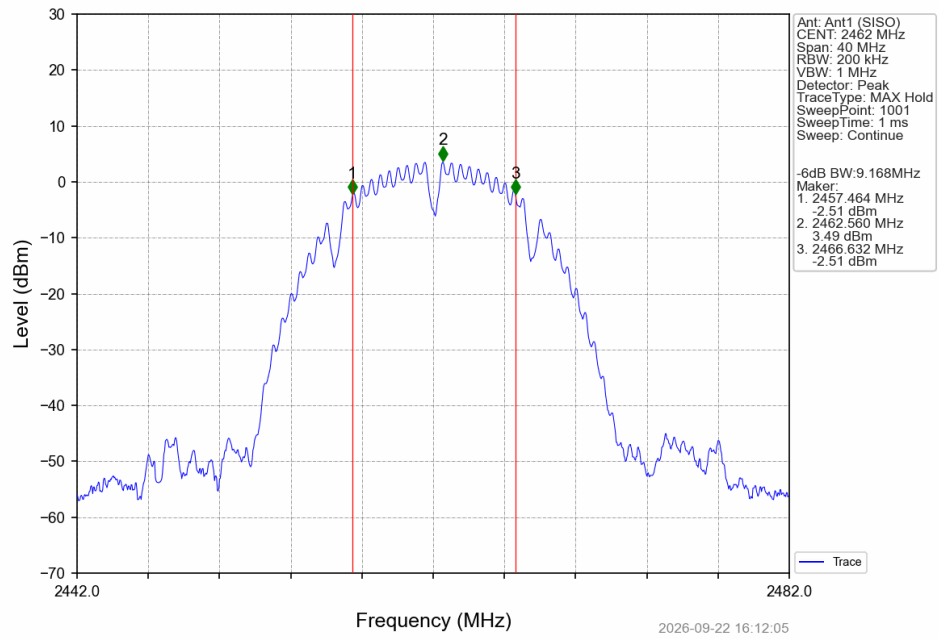
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



2.2.2 6dB BW



802.11b_HCH_2462MHz_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	14.57	<=30	Pass
		2437	14.94	<=30	Pass
		2462	14.14	<=30	Pass

4. Maximum Power Spectral Density

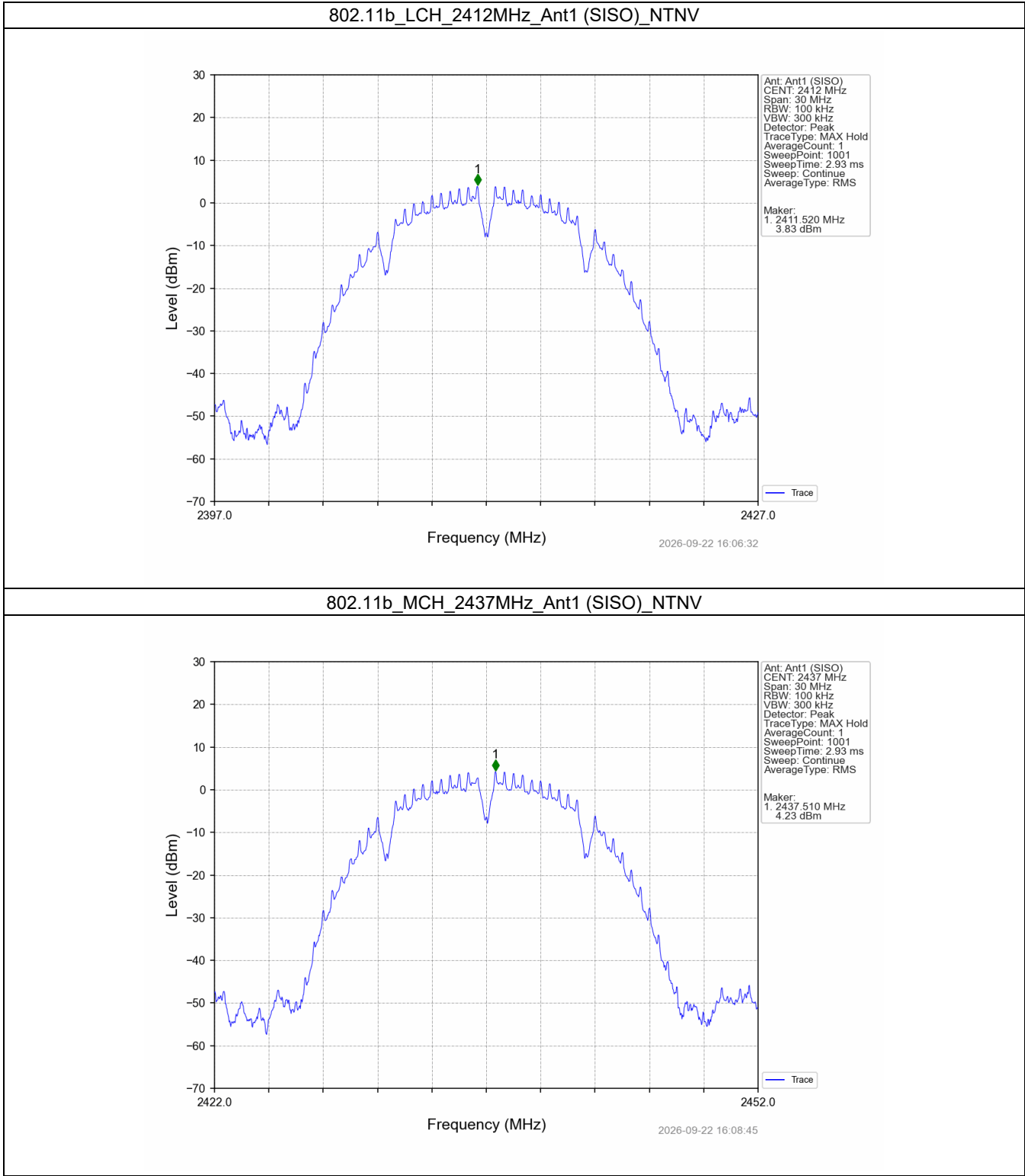
4.1 Test Result

4.1.1 PSD

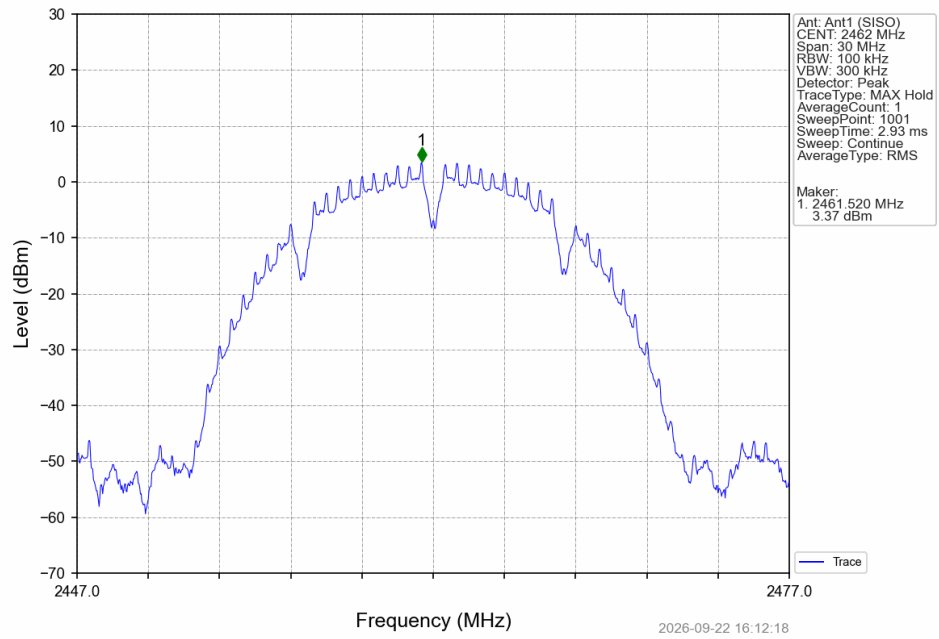
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1	Limit(dBm/3kHz)	
802.11b	SISO	2412	3.83dBm/100kHz	<=8	Pass
		2437	4.23dBm/100kHz	<=8	Pass
		2462	3.37dBm/100kHz	<=8	Pass

4.2 Test Graph

4.2.1 PSD



802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



5. Unwanted Emissions In Non-restricted Frequency Bands

5.1 Test Result

5.1.1 Ref

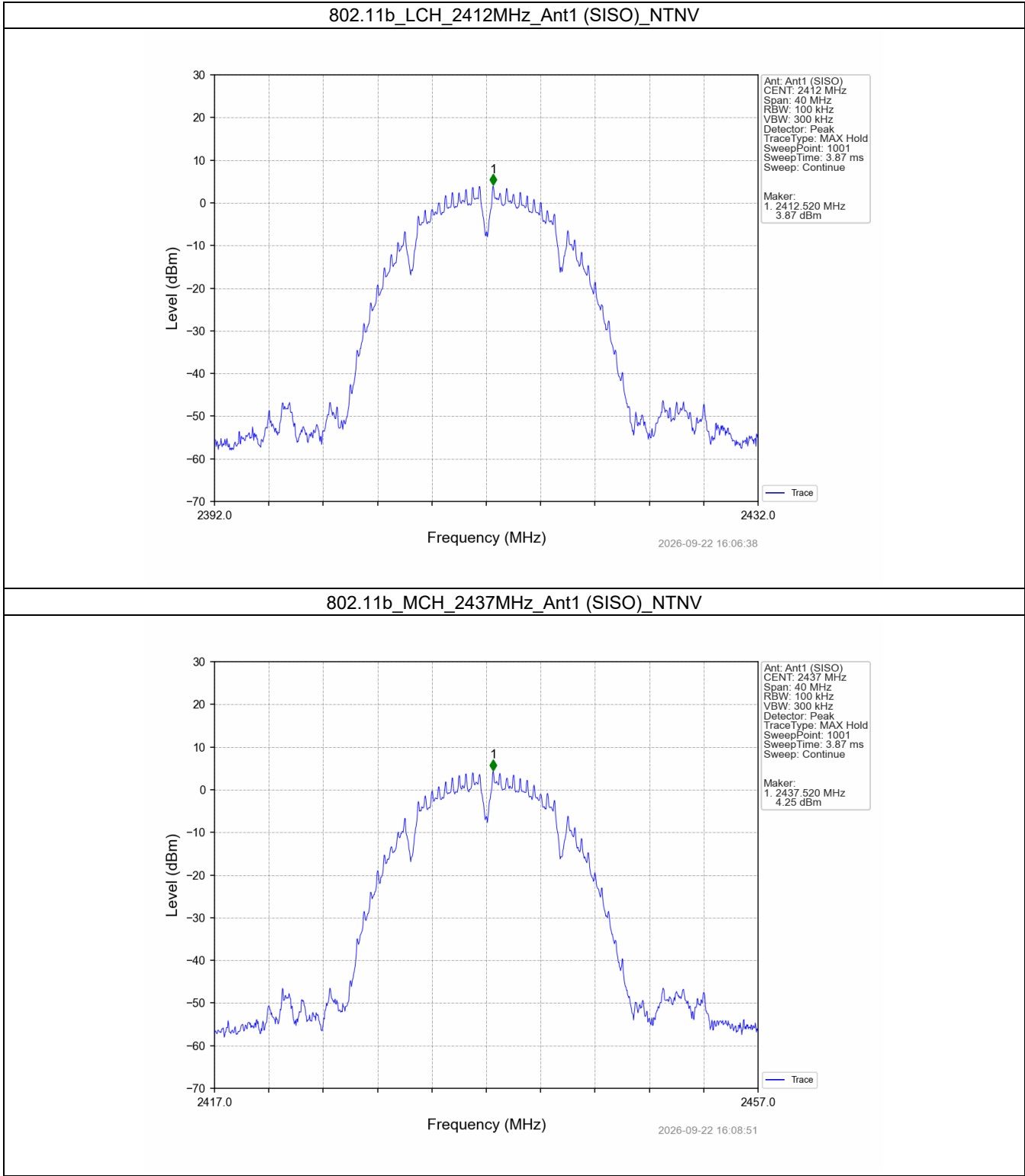
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	3.87
		2437	1	4.25
		2462	1	3.32

5.1.2 CSE

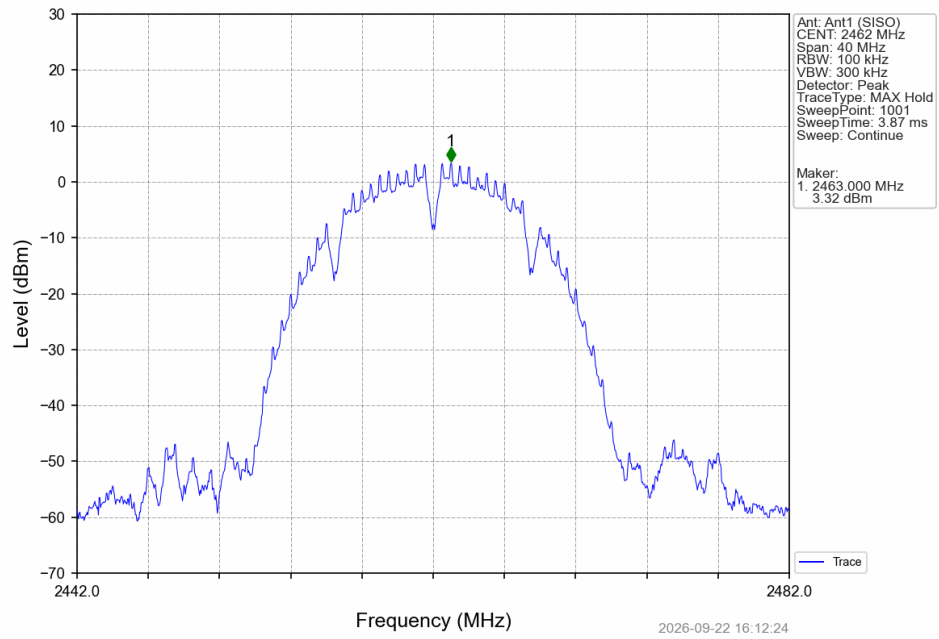
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	3.87	-16.13	Pass
		2437	1	4.25	-15.75	Pass
		2462	1	3.32	-16.68	Pass

5.2 Test Graph

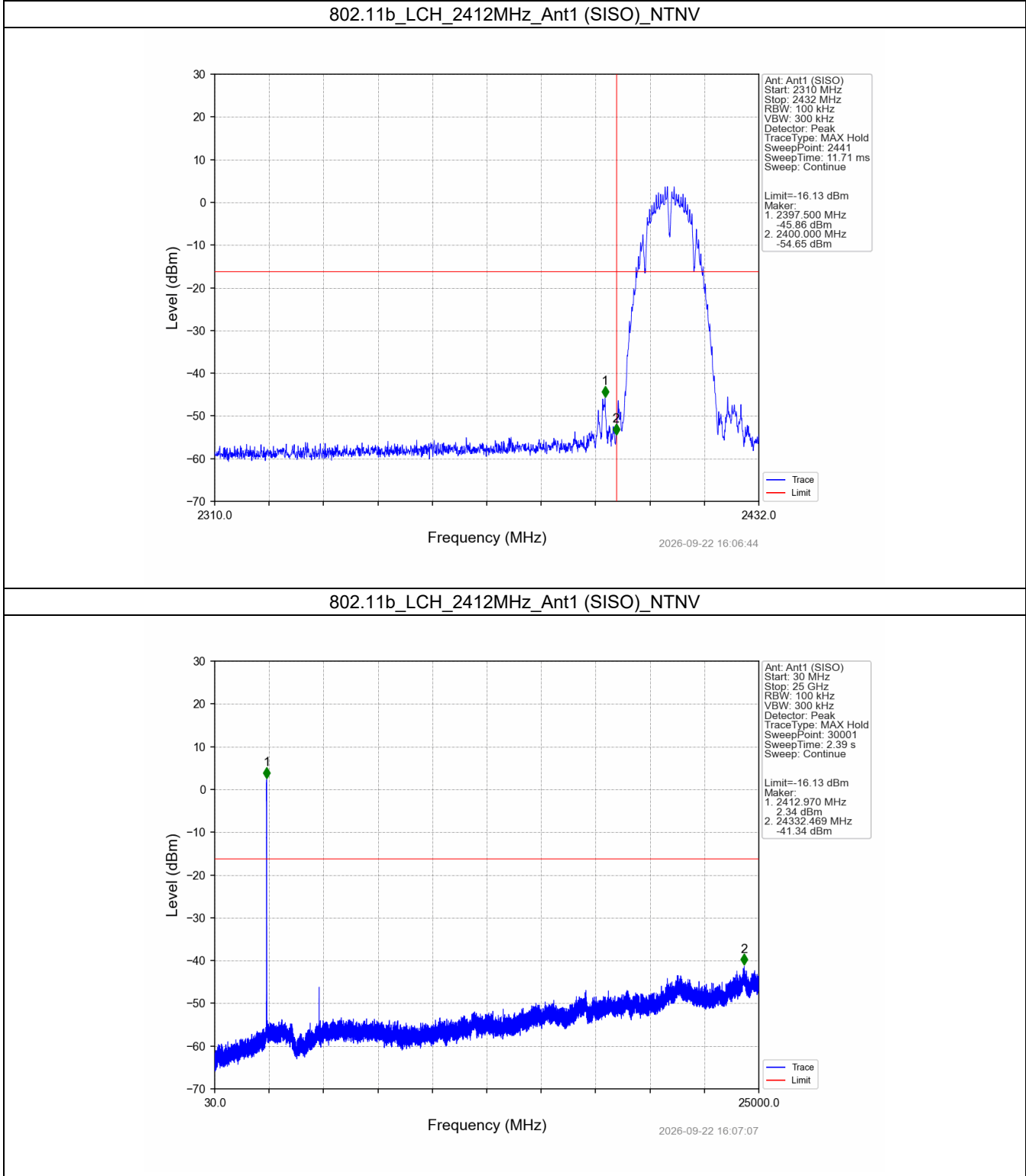
5.2.1 Ref



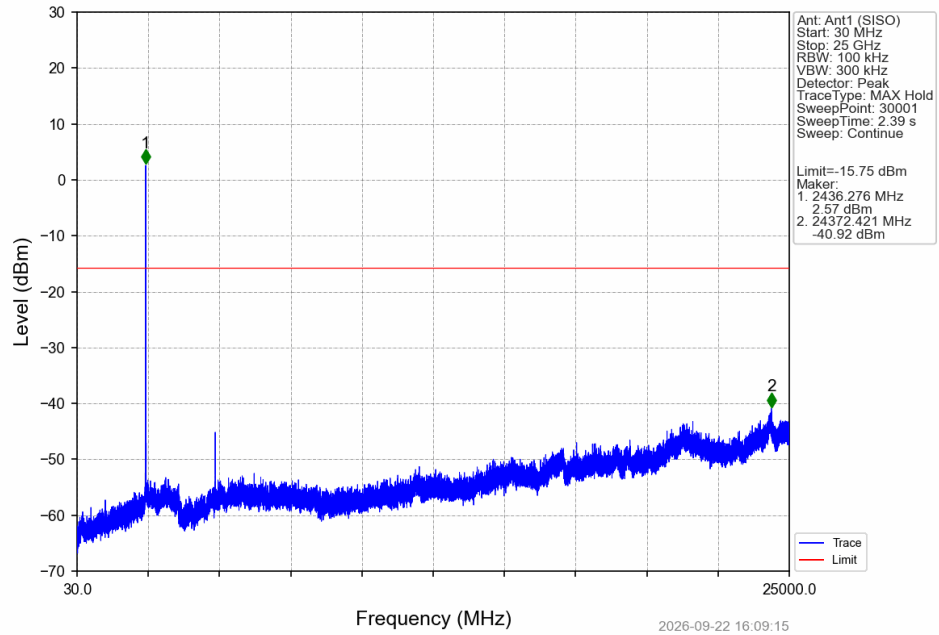
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



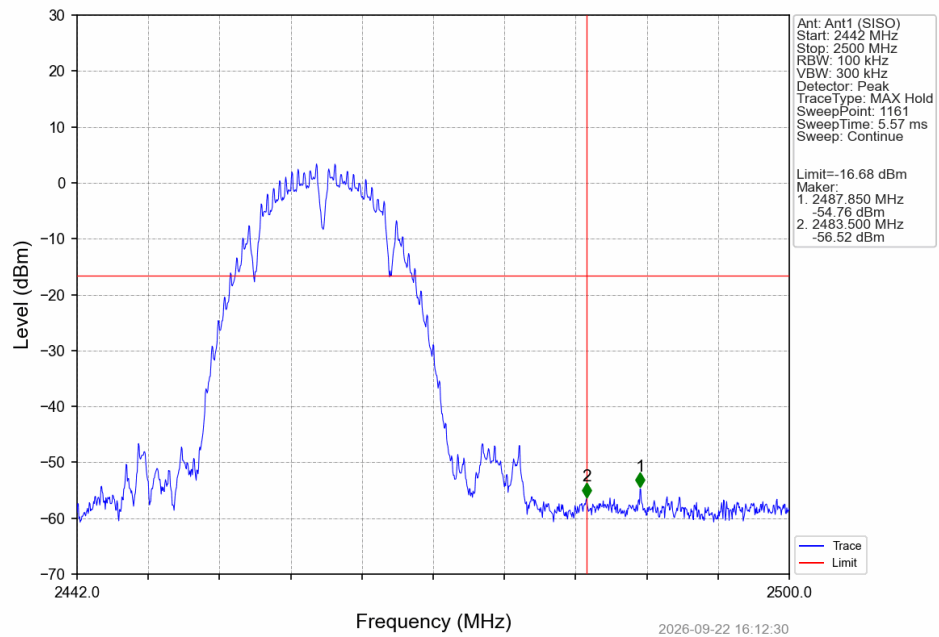
5.2.2 CSE



802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV

