

Appendix RF Test Data for WIFI 2.4G

Company: : Shenzhen Daxun Co.,LTD

EUT : Car Multimedia LCD Screen

FCC ID: : 2BCFX-HC-DX56123

Model Number : HC-DX56123

Report No. : HTT202506681F02

Reviewed By : Heber He

1. Duty Cycle

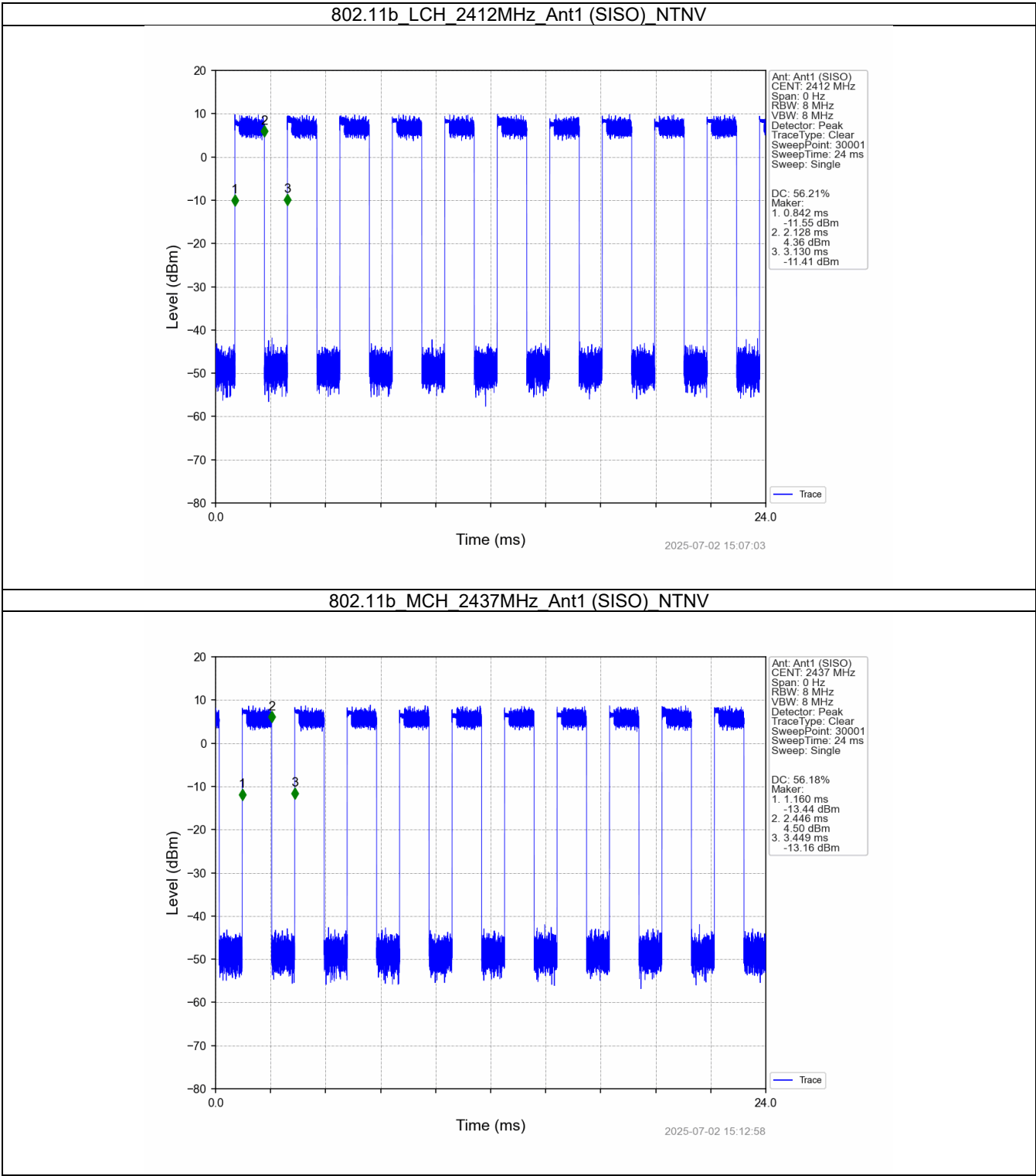
1.1 Test Result

1.1.1 Ant1

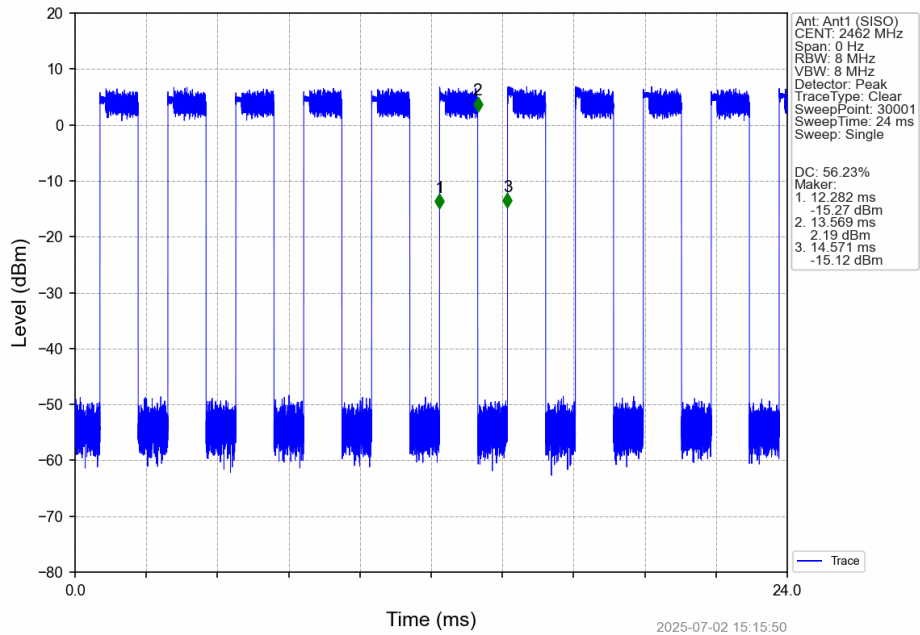
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11b	SISO	2412	1.286	2.288	56.21	2.50	0.03
		2437	1.286	2.289	56.18	2.50	0.03
		2462	1.287	2.289	56.23	2.50	0.03
802.11g	SISO	2412	0.247	1.249	19.78	7.04	46.63
		2437	0.247	1.249	19.78	7.04	0.03
		2462	0.246	1.248	19.71	7.05	0.03
802.11n (HT20)	SISO	2412	0.226	1.228	18.40	7.35	0.03
		2437	0.226	1.228	18.40	7.35	0.03
		2462	0.227	1.229	18.47	7.34	0.03
802.11n (HT40)	SISO	2422	0.130	1.133	11.47	9.40	0.06
		2437	0.131	1.133	11.56	9.37	0.03
		2452	0.130	1.132	11.48	9.40	0.06

1.2 Test Graph

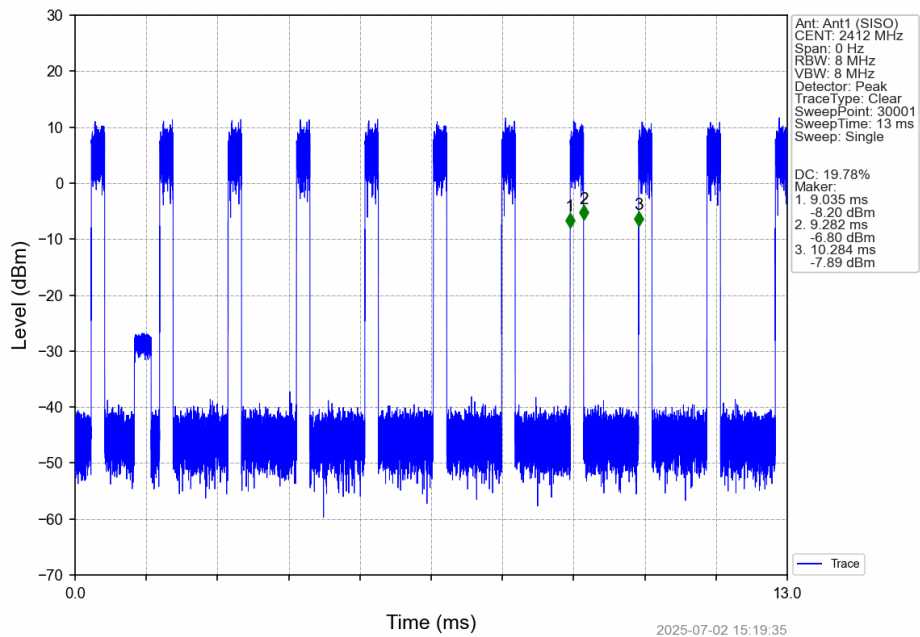
1.2.1 Ant1



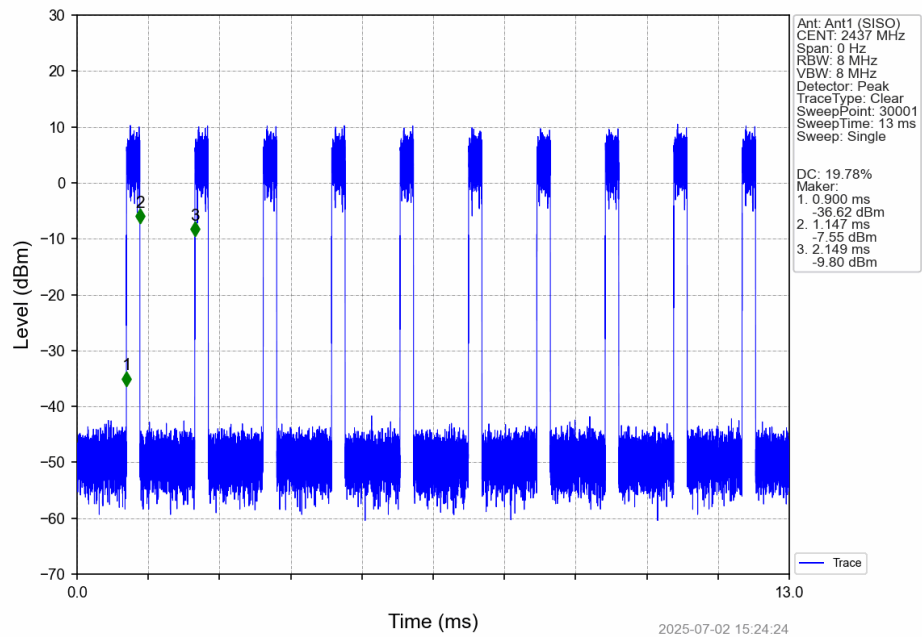
802.11b HCH 2462MHz Ant1 (SISO) NTN



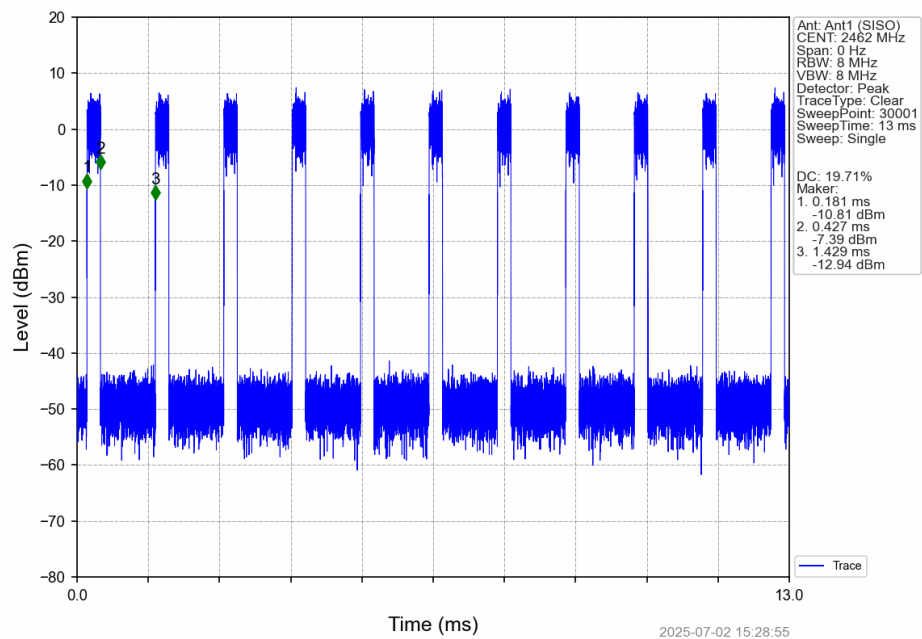
802.11g LCH 2412MHz Ant1 (SISO) NTN



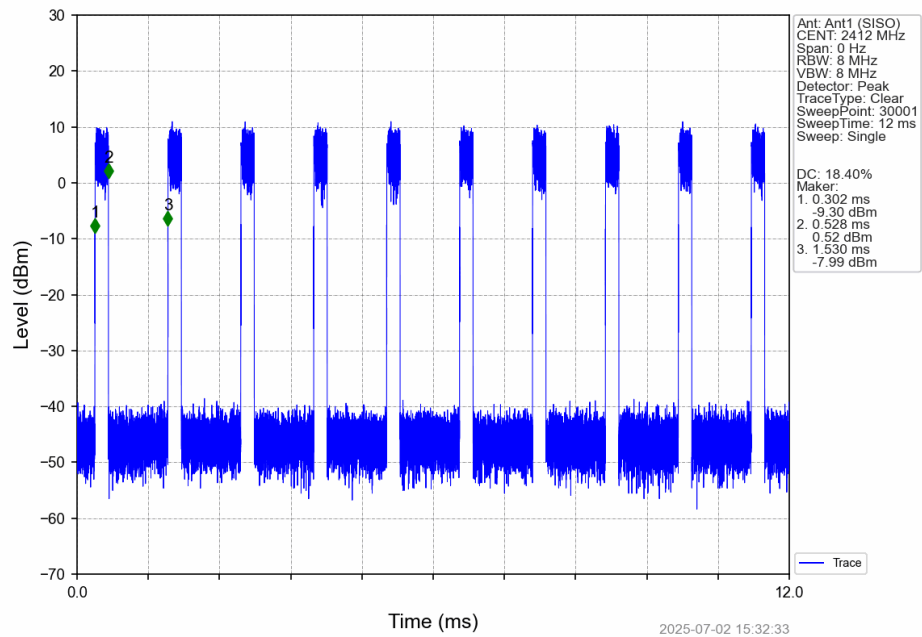
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



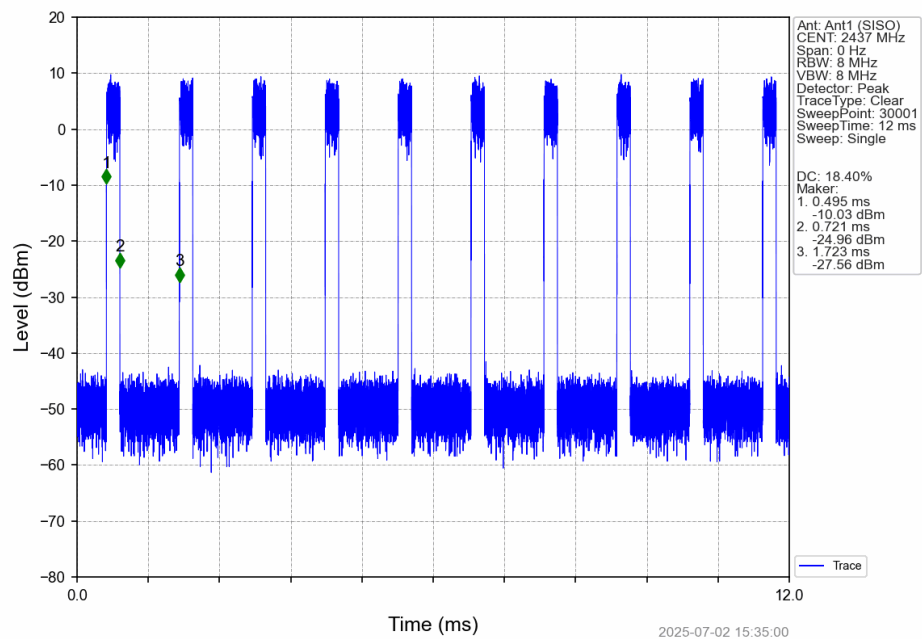
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



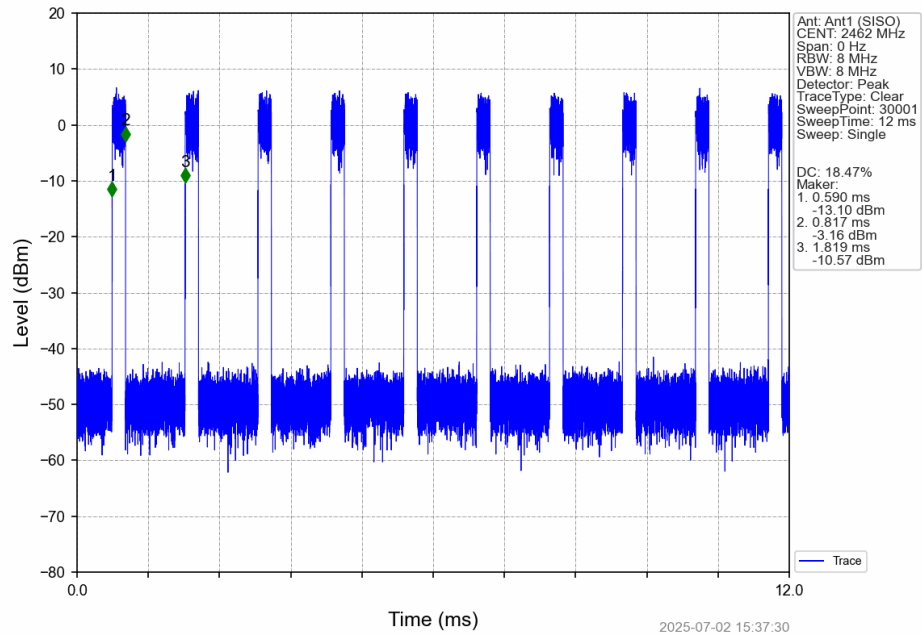
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



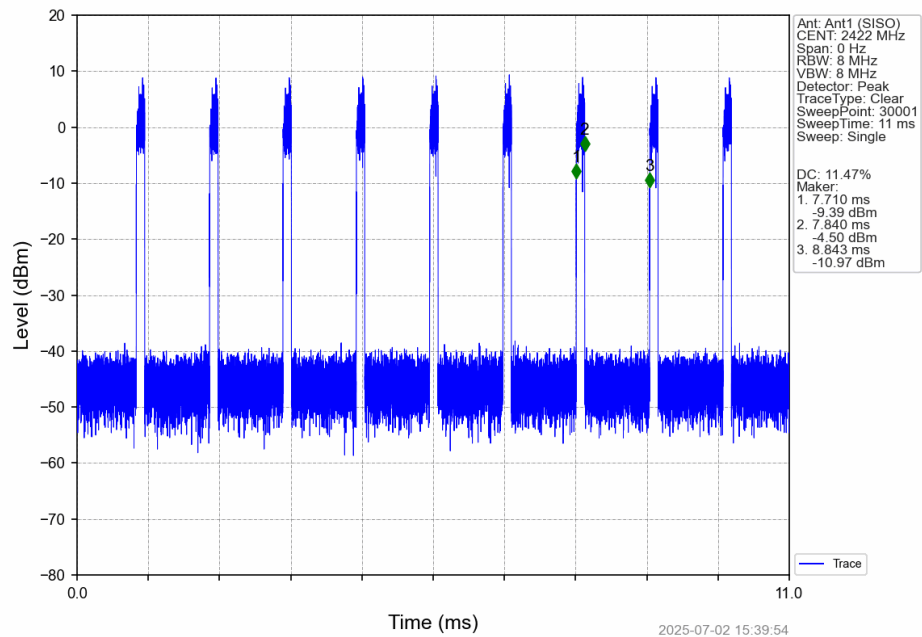
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



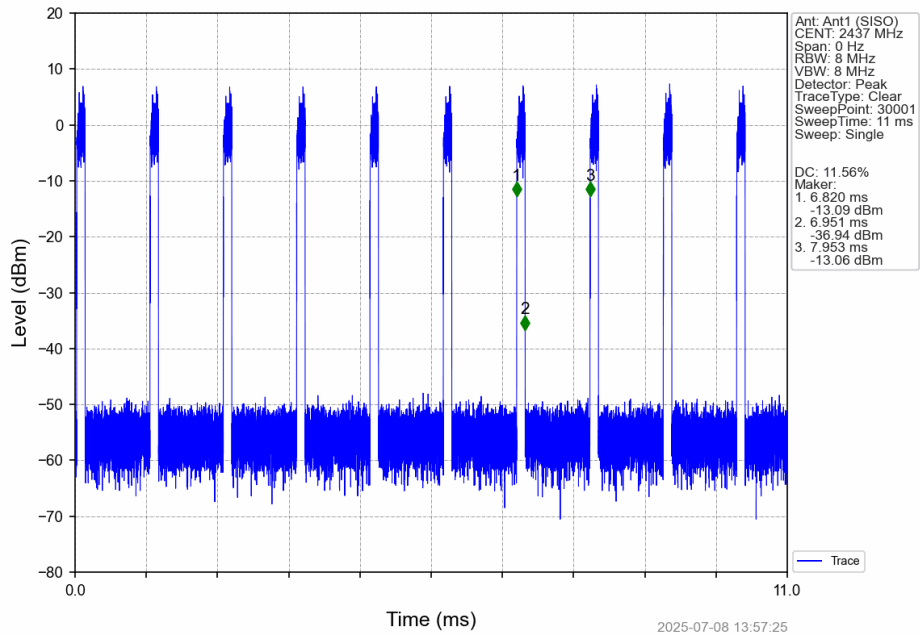
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



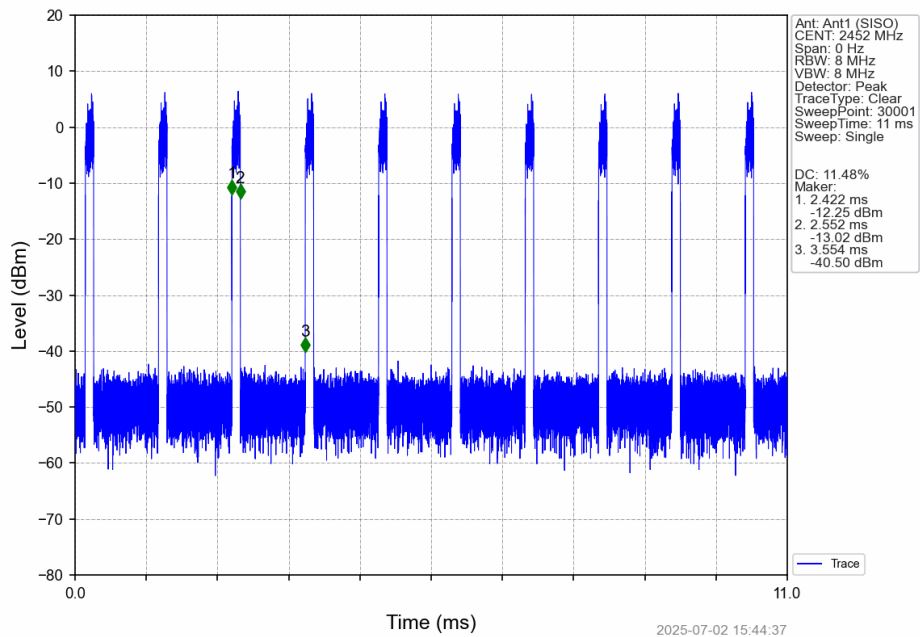
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



2. Bandwidth

2.1 Test Result

2.1.1 OBW

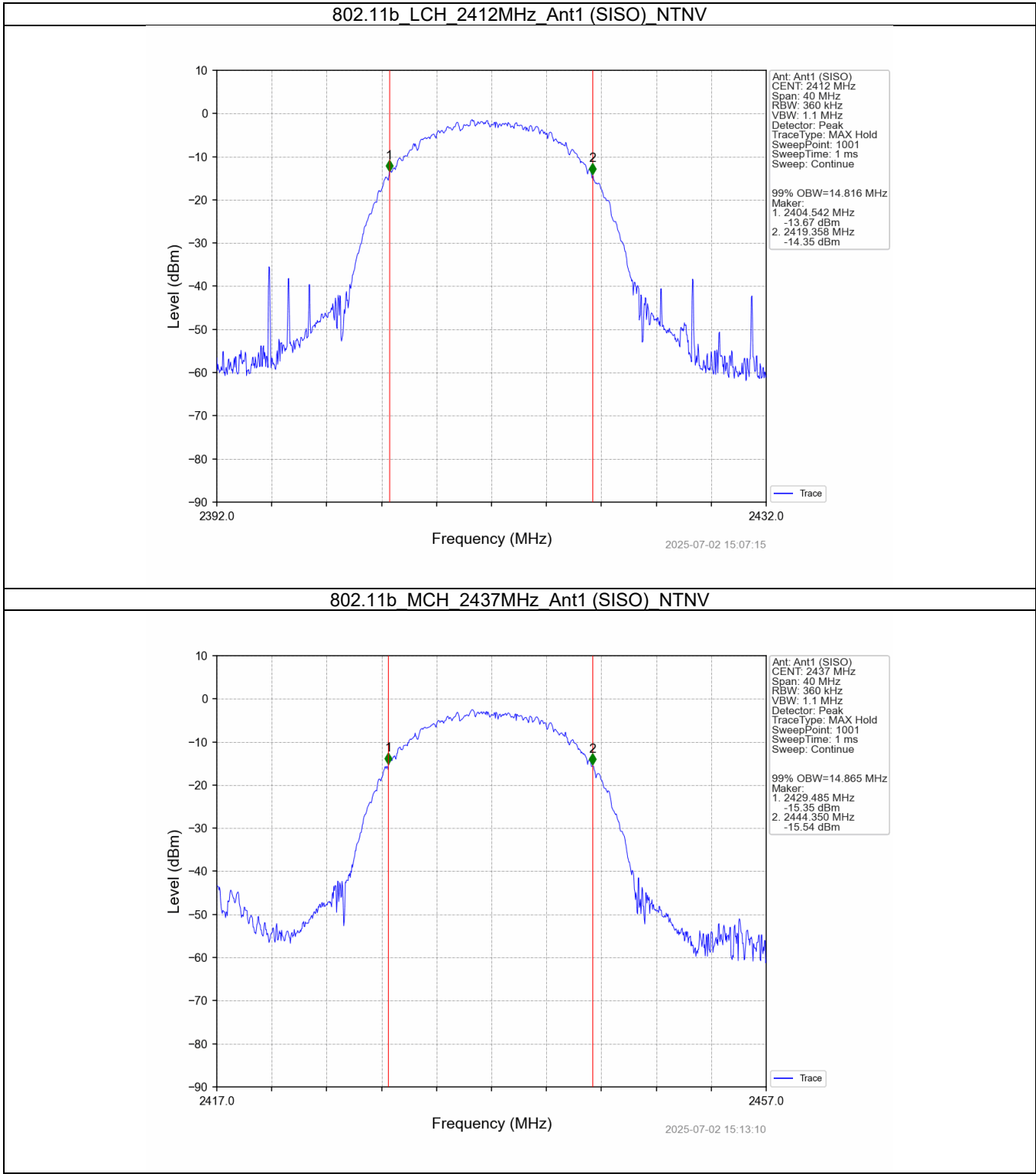
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	14.816	/	Pass
		2437	1	14.865	/	Pass
		2462	1	14.811	/	Pass
802.11g	SISO	2412	1	16.945	/	Pass
		2437	1	16.959	/	Pass
		2462	1	16.919	/	Pass
802.11n (HT20)	SISO	2412	1	18.165	/	Pass
		2437	1	18.226	/	Pass
		2462	1	18.228	/	Pass
802.11n (HT40)	SISO	2422	1	36.261	/	Pass
		2437	1	36.390	/	Pass
		2452	1	36.206	/	Pass

2.1.2 6dB BW

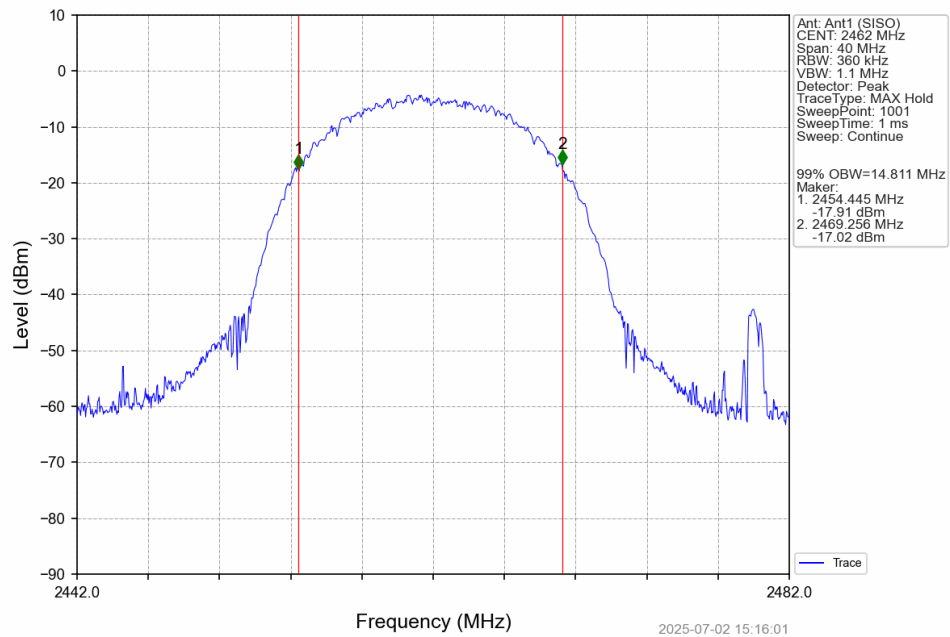
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	10.348	≥ 0.5	Pass
		2437	1	10.186	≥ 0.5	Pass
		2462	1	10.115	≥ 0.5	Pass
802.11g	SISO	2412	1	16.415	≥ 0.5	Pass
		2437	1	16.409	≥ 0.5	Pass
		2462	1	16.079	≥ 0.5	Pass
802.11n (HT20)	SISO	2412	1	17.372	≥ 0.5	Pass
		2437	1	17.321	≥ 0.5	Pass
		2462	1	16.955	≥ 0.5	Pass
802.11n (HT40)	SISO	2422	1	35.378	≥ 0.5	Pass
		2437	1	35.387	≥ 0.5	Pass
		2452	1	35.095	≥ 0.5	Pass

2.2 Test Graph

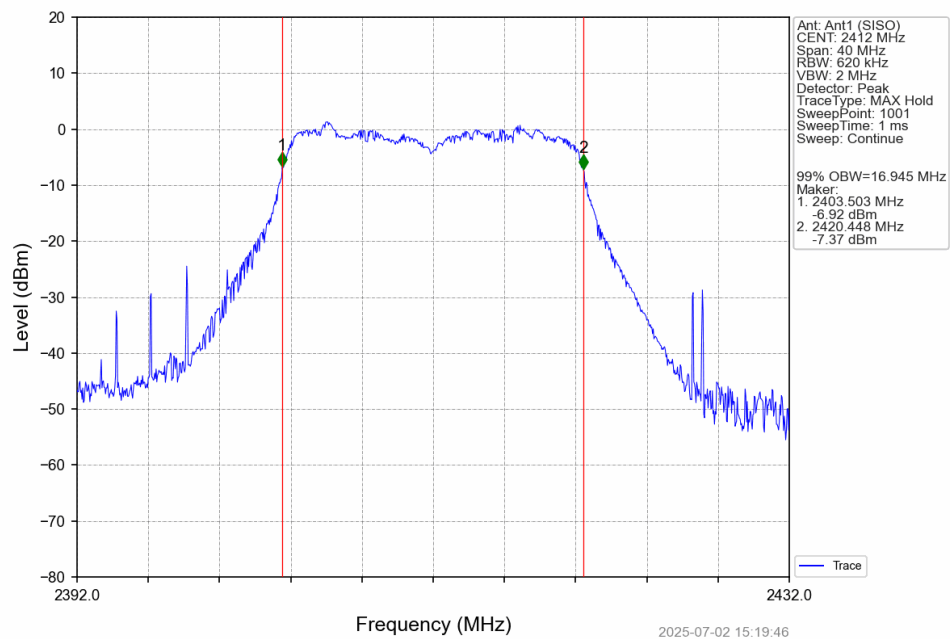
2.2.1 OBW



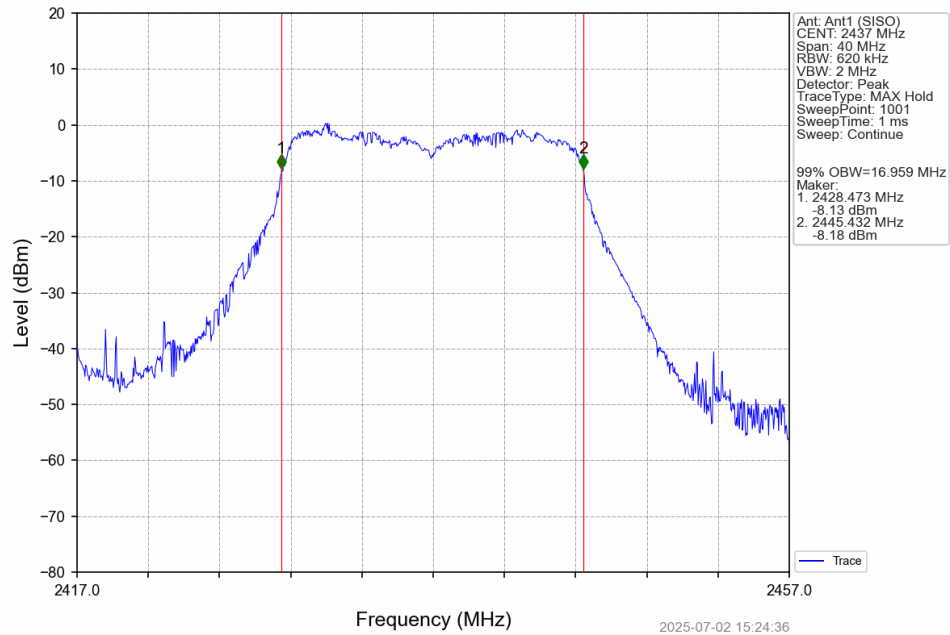
802.11b HCH 2462MHz Ant1 (SISO) NTN



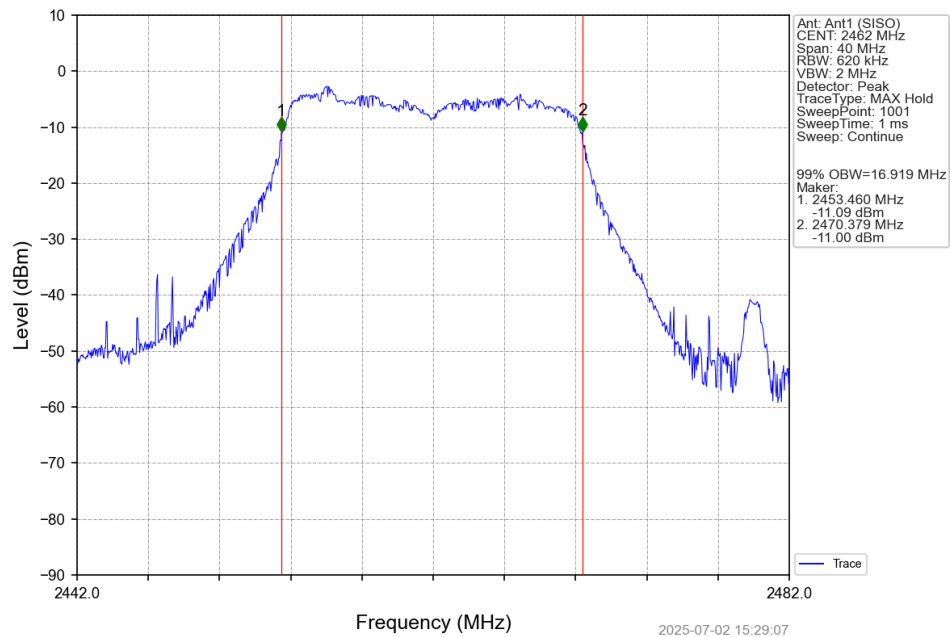
802.11g LCH 2412MHz Ant1 (SISO) NTN



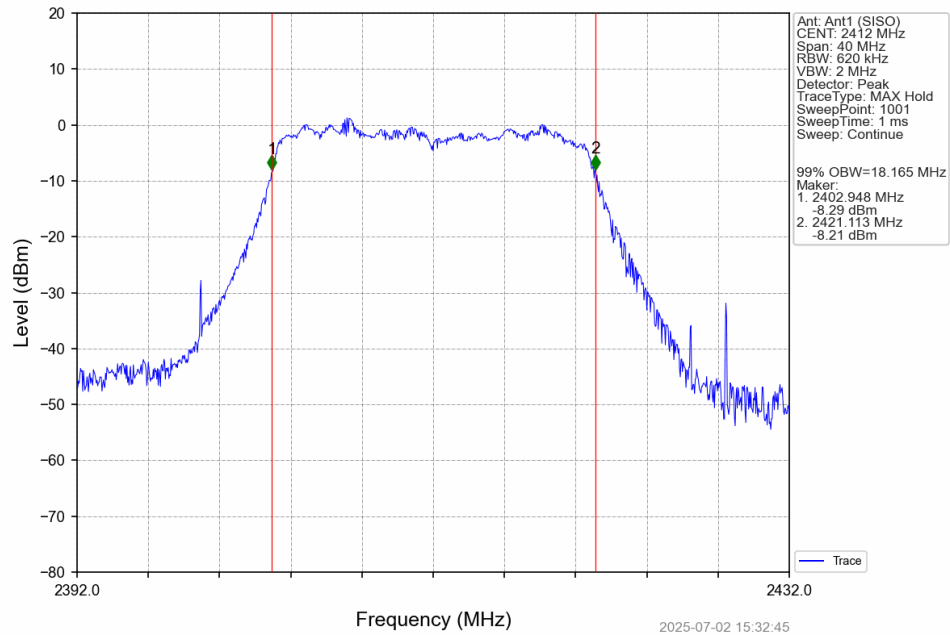
802.11g MCH 2437MHz Ant1 (SISO) NTN



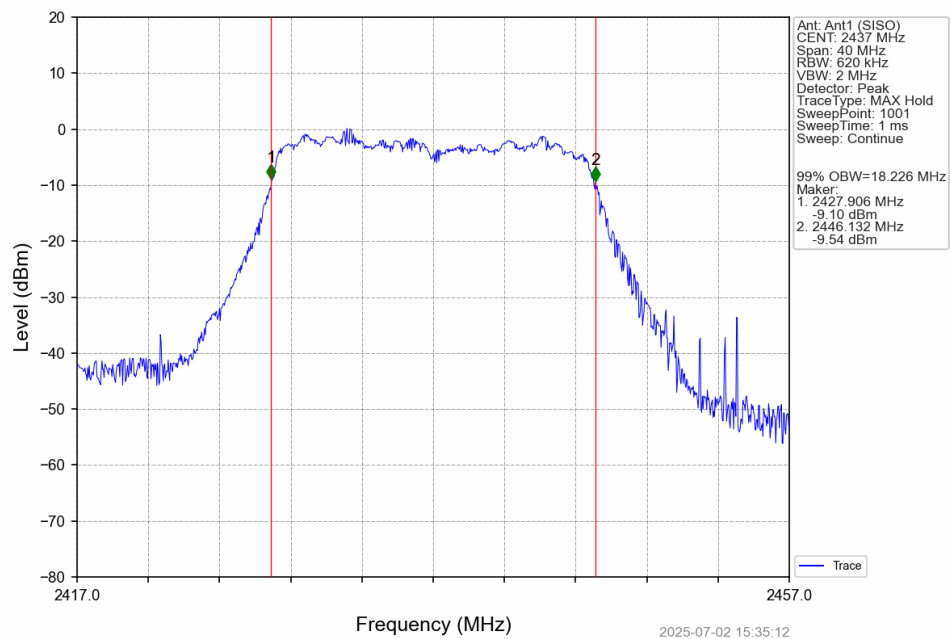
802.11g_HCH_2462MHz_Ant1 (SISO)_NTN



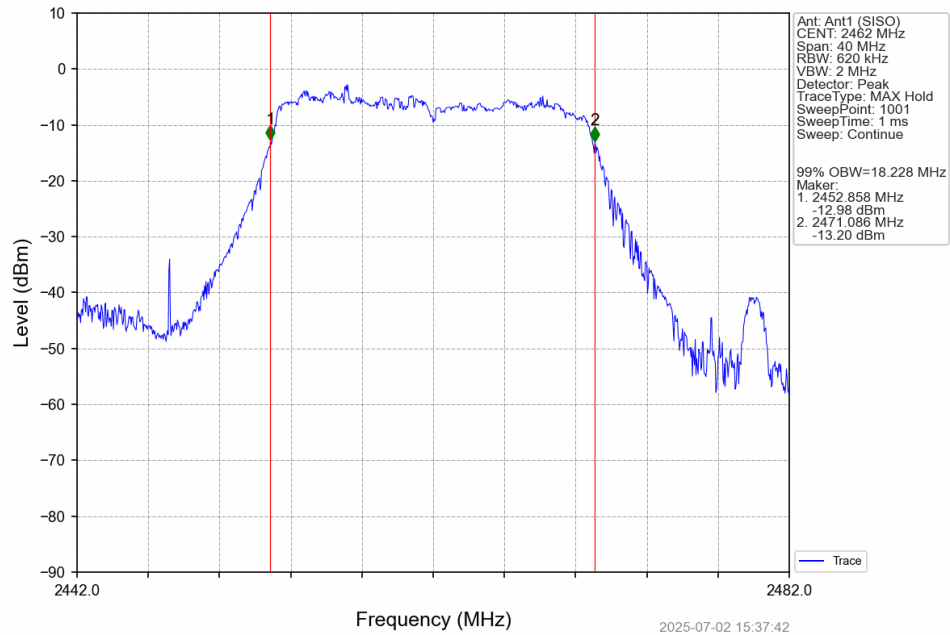
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



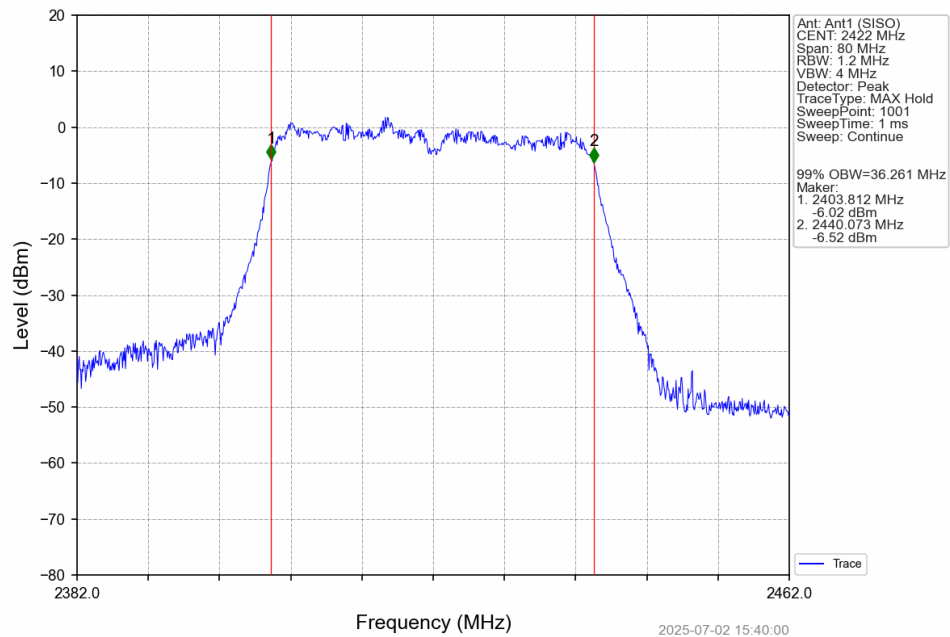
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



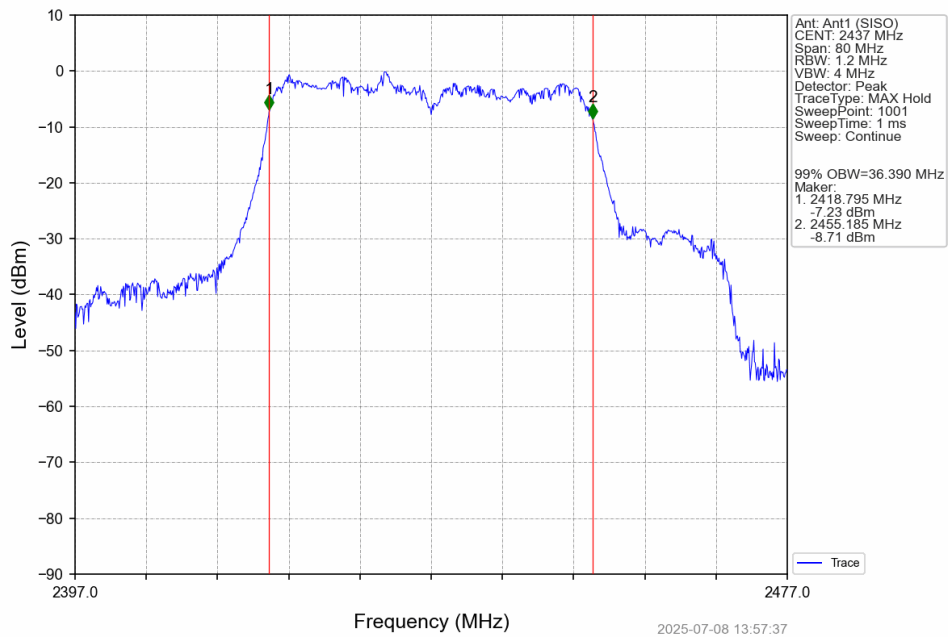
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



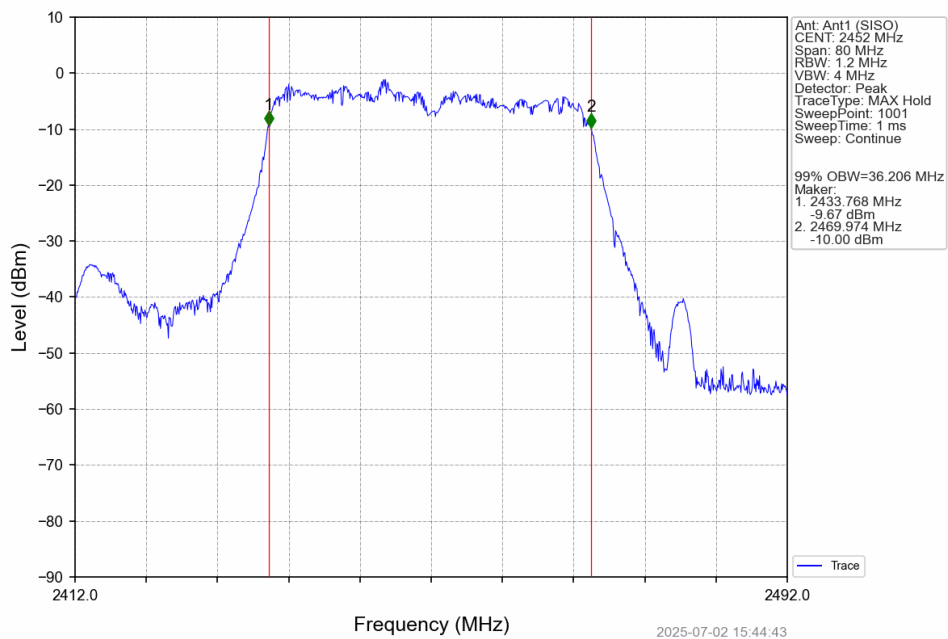
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



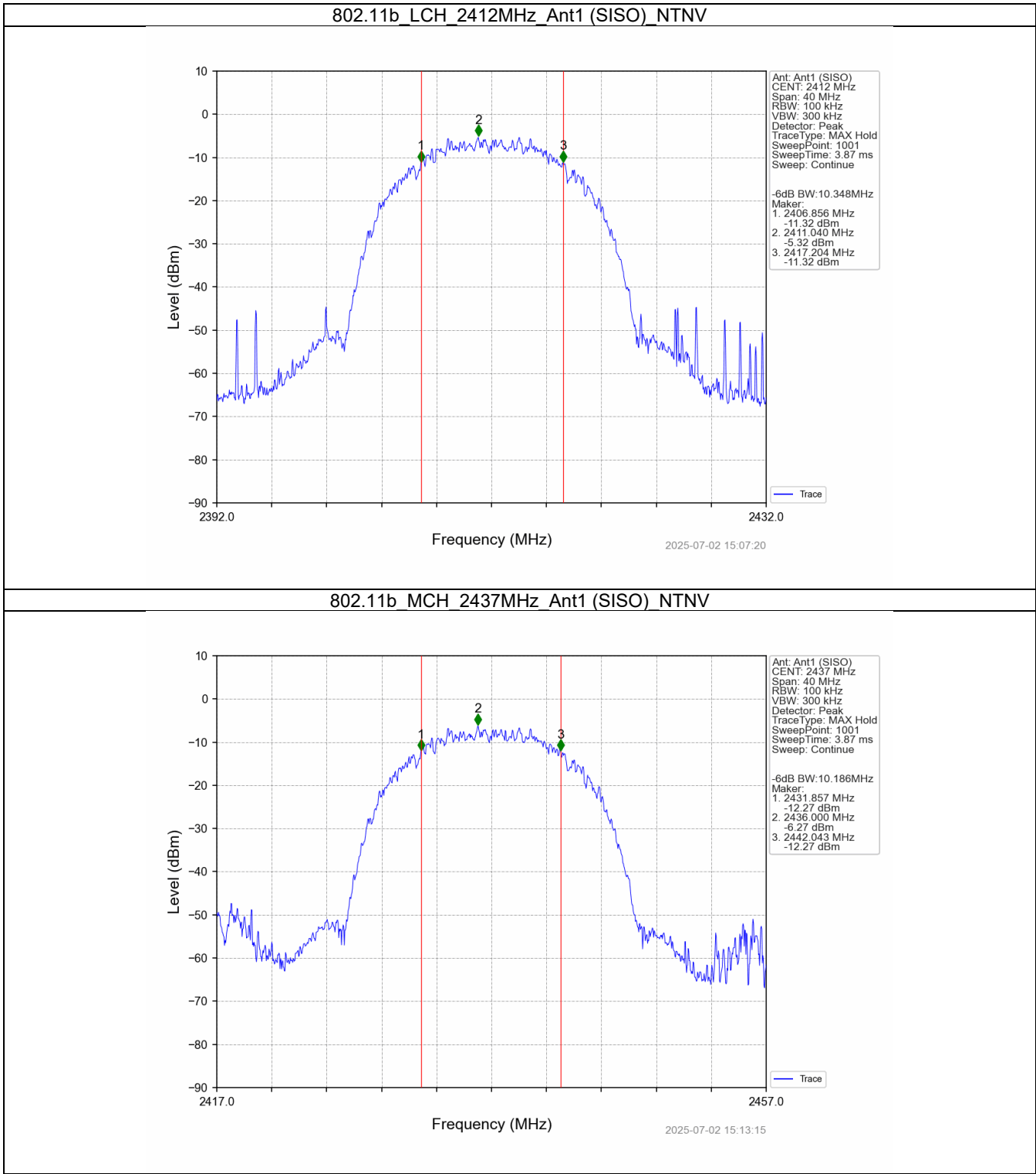
802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



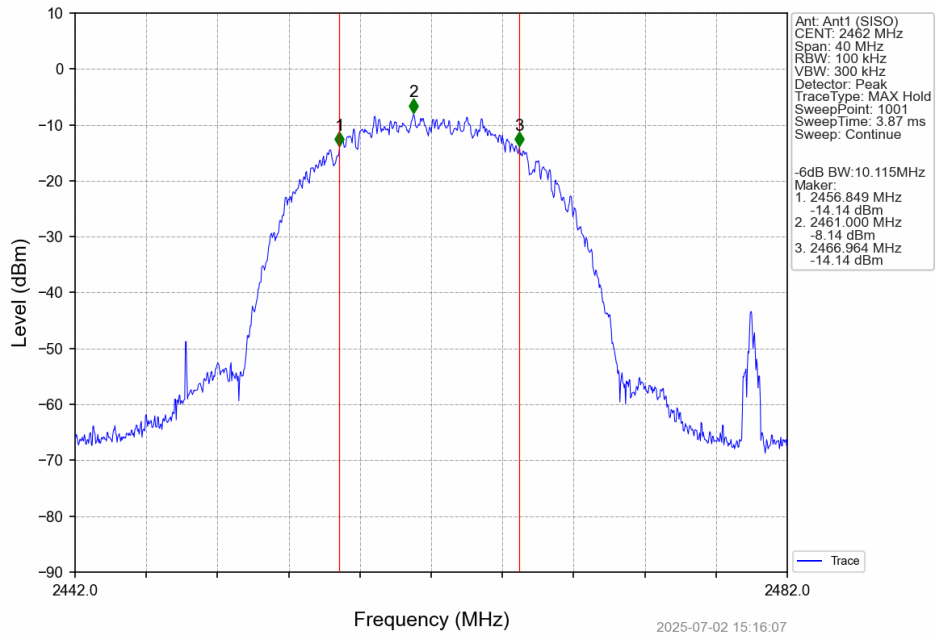
802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



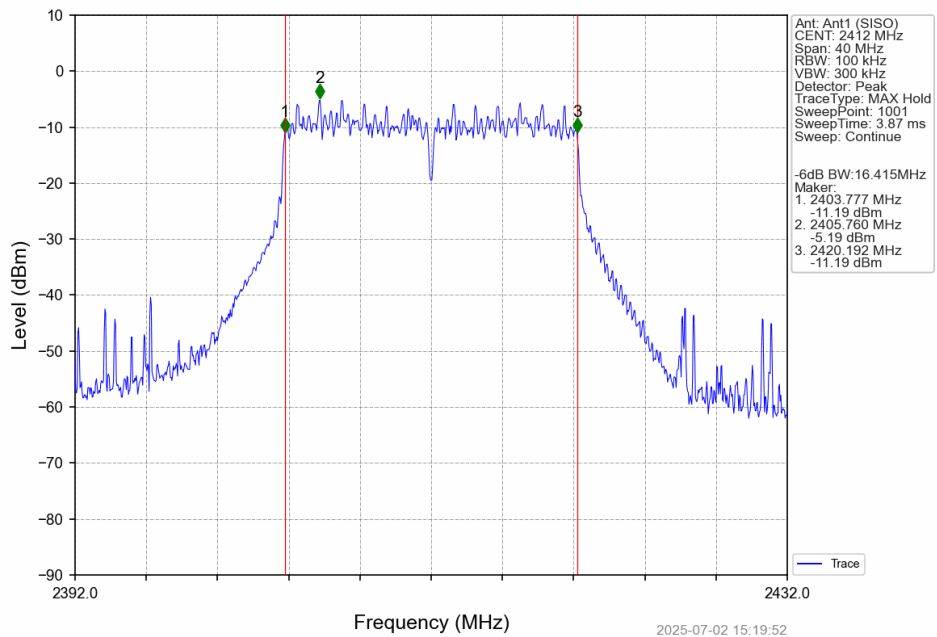
2.2.2 6dB BW



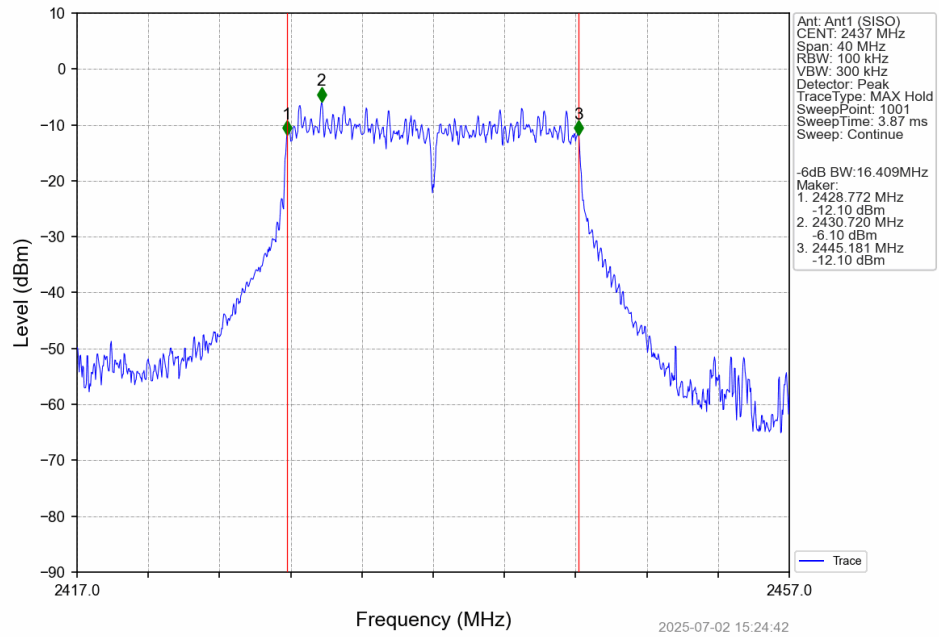
802.11b HCH 2462MHz Ant1 (SISO) NTN



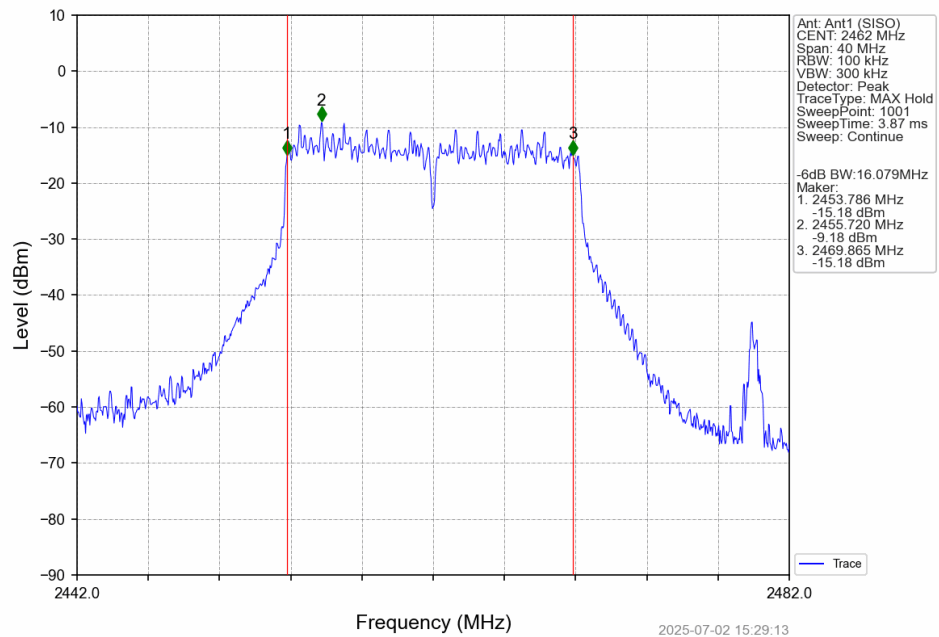
802.11g LCH 2412MHz Ant1 (SISO) NTN



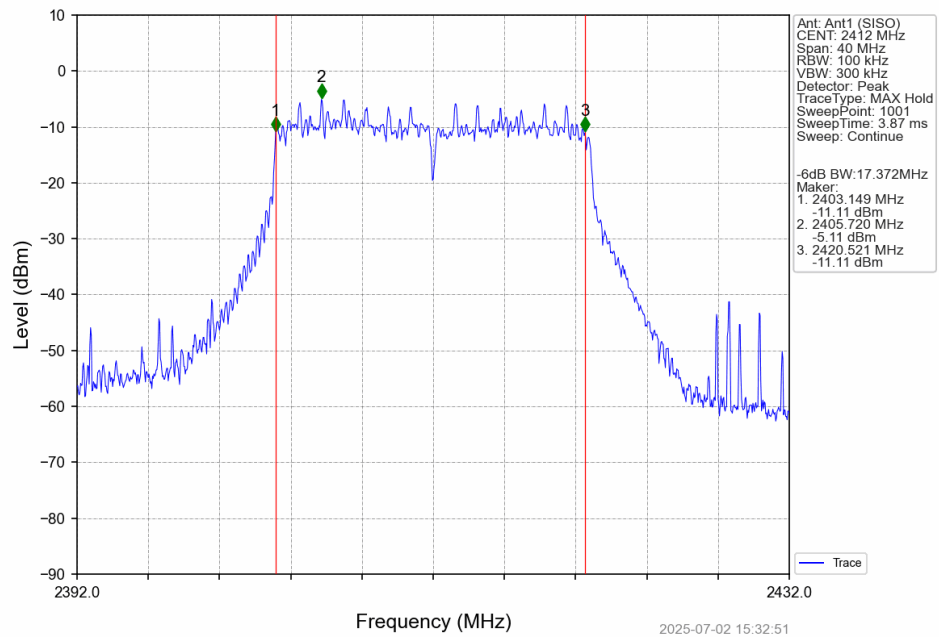
802.11g MCH 2437MHz Ant1 (SISO) NTN



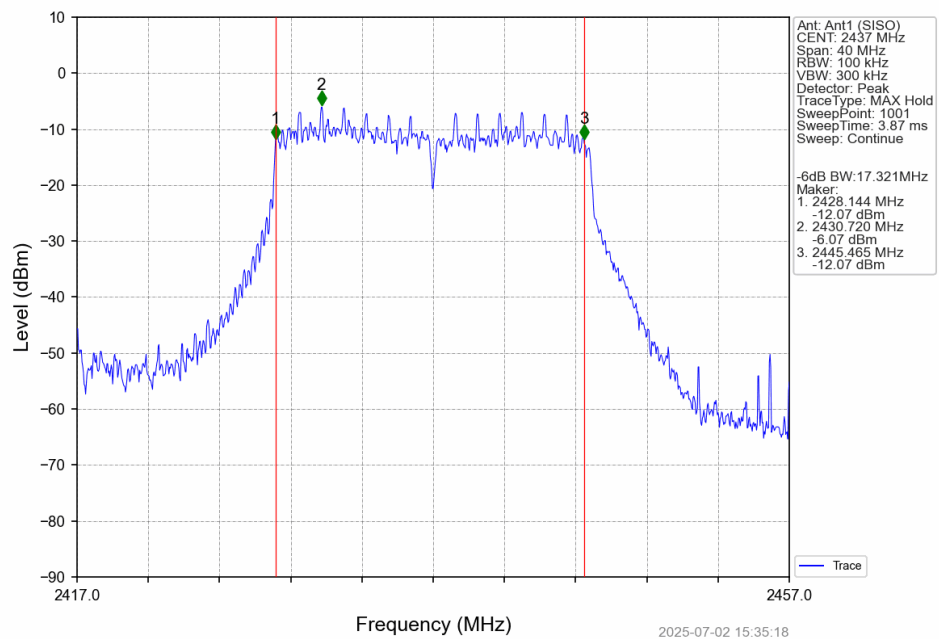
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



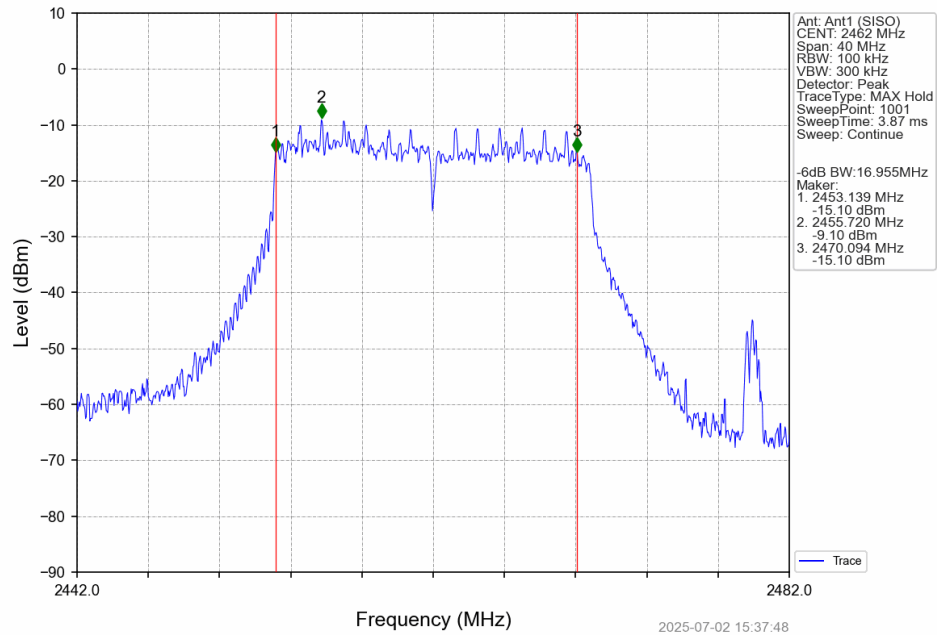
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



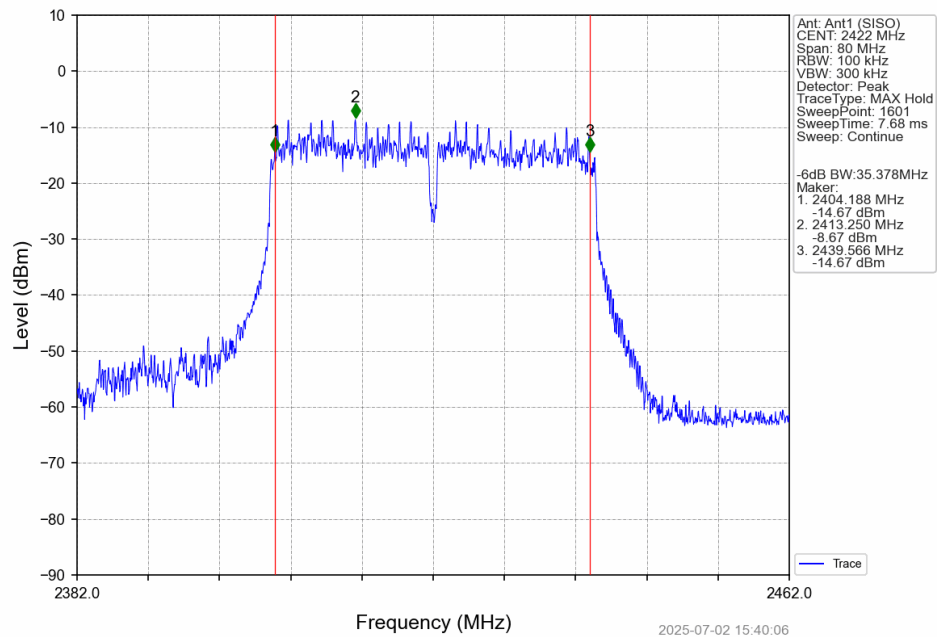
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



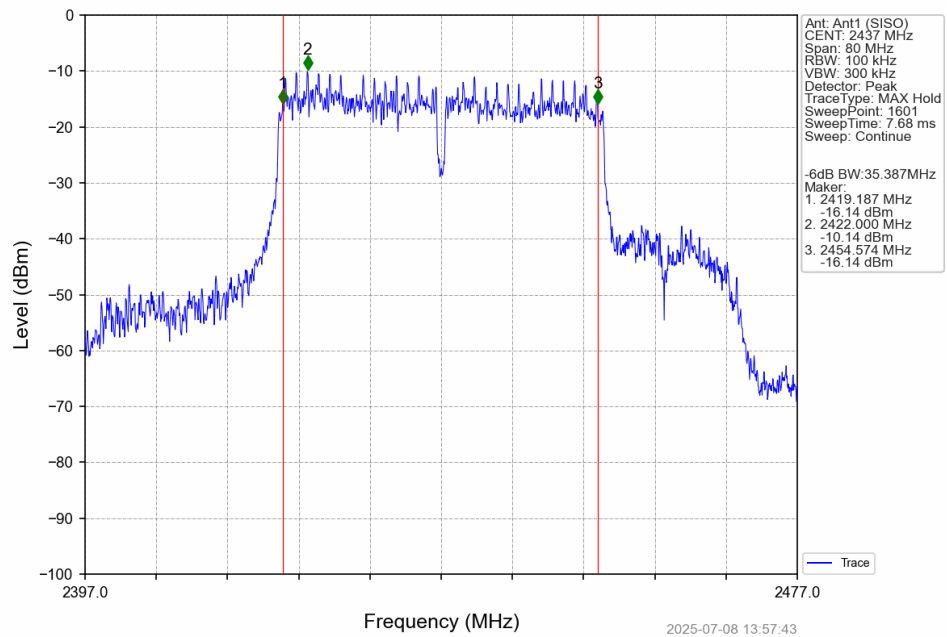
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTN



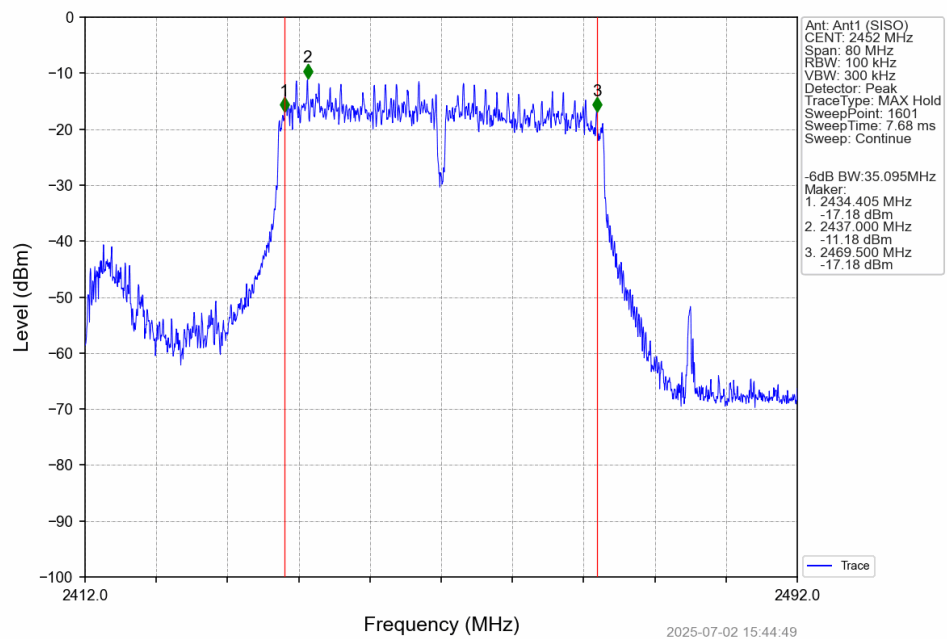
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTN



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



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	10.37	<=30	Pass
		2437	9.16	<=30	Pass
		2462	7.29	<=30	Pass
802.11g	SISO	2412	12.97	<=30	Pass
		2437	11.75	<=30	Pass
		2462	8.48	<=30	Pass
802.11n (HT20)	SISO	2412	12.91	<=30	Pass
		2437	11.72	<=30	Pass
		2462	8.44	<=30	Pass
802.11n (HT40)	SISO	2422	12.52	<=30	Pass
		2437	10.73	<=30	Pass
		2452	9.44	<=30	Pass

4. Maximum Power Spectral Density

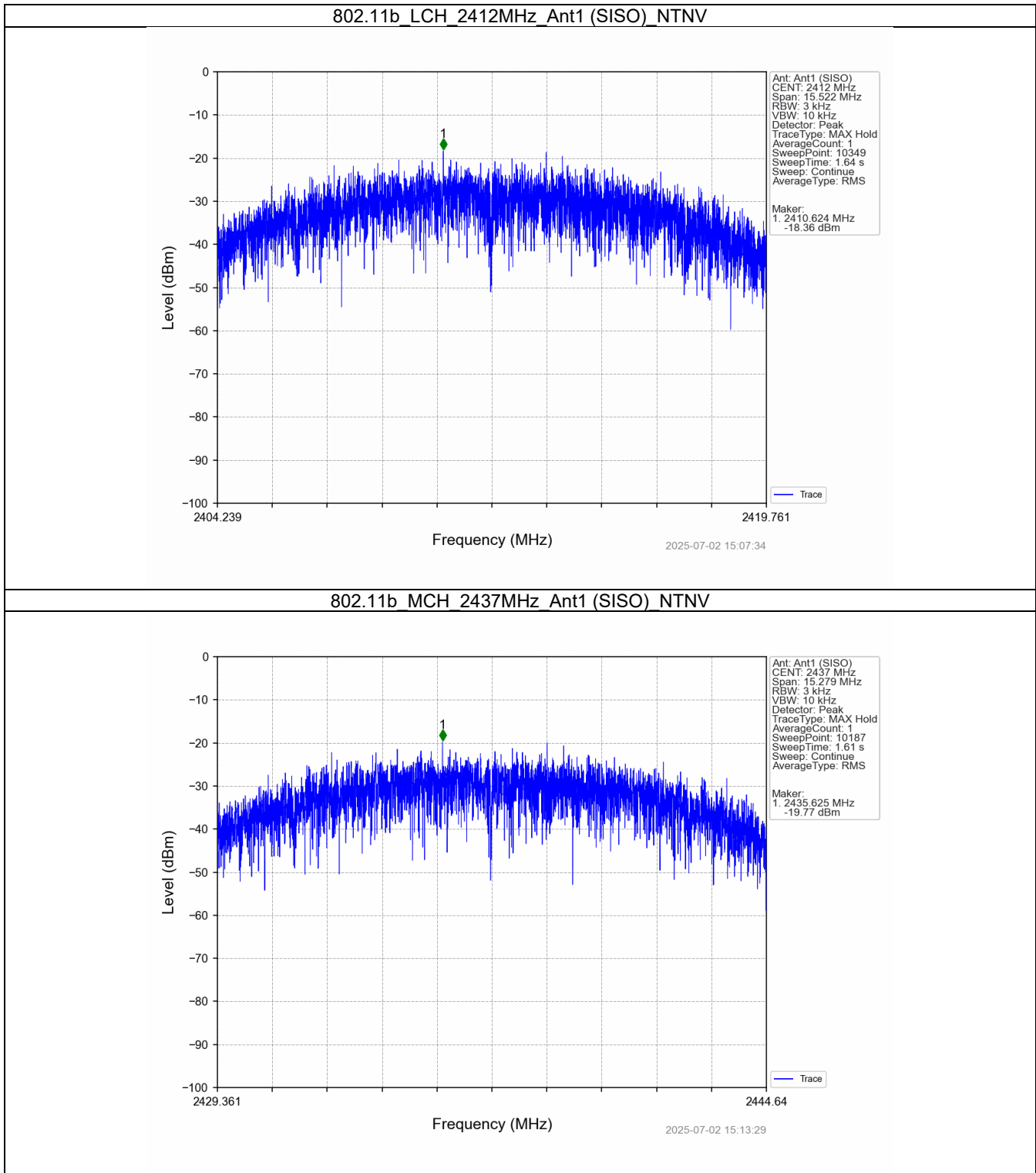
4.1 Test Result

4.1.1 PSD

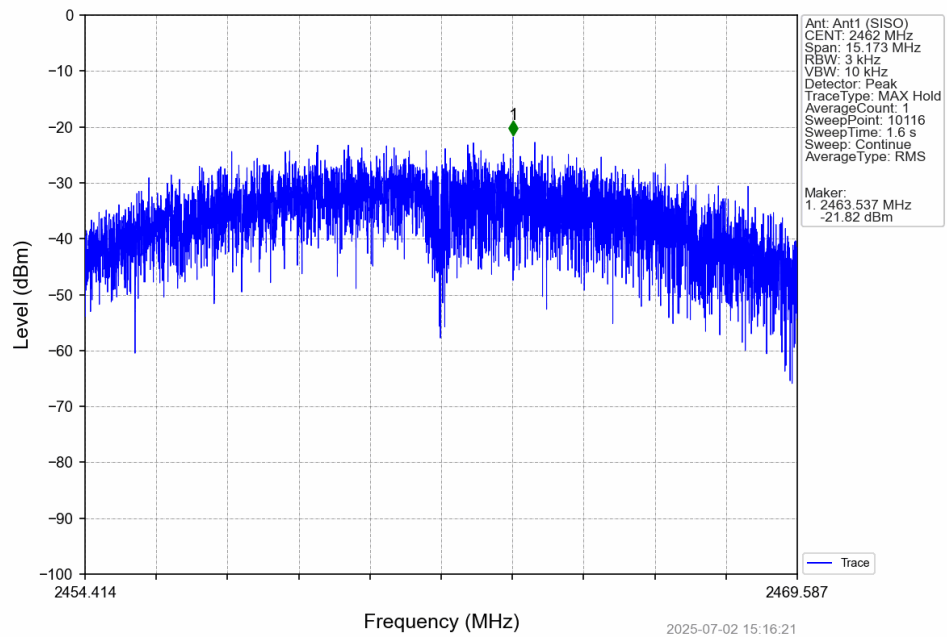
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	-18.36	<=8	Pass
		2437	-19.77	<=8	Pass
		2462	-21.82	<=8	Pass
802.11g	SISO	2412	-22.52	<=8	Pass
		2437	-23.25	<=8	Pass
		2462	-26.54	<=8	Pass
802.11n (HT20)	SISO	2412	-22.67	<=8	Pass
		2437	-23.65	<=8	Pass
		2462	-25.58	<=8	Pass
802.11n (HT40)	SISO	2422	-24.29	<=8	Pass
		2437	-25.86	<=8	Pass
		2452	-27.95	<=8	Pass

4.2 Test Graph

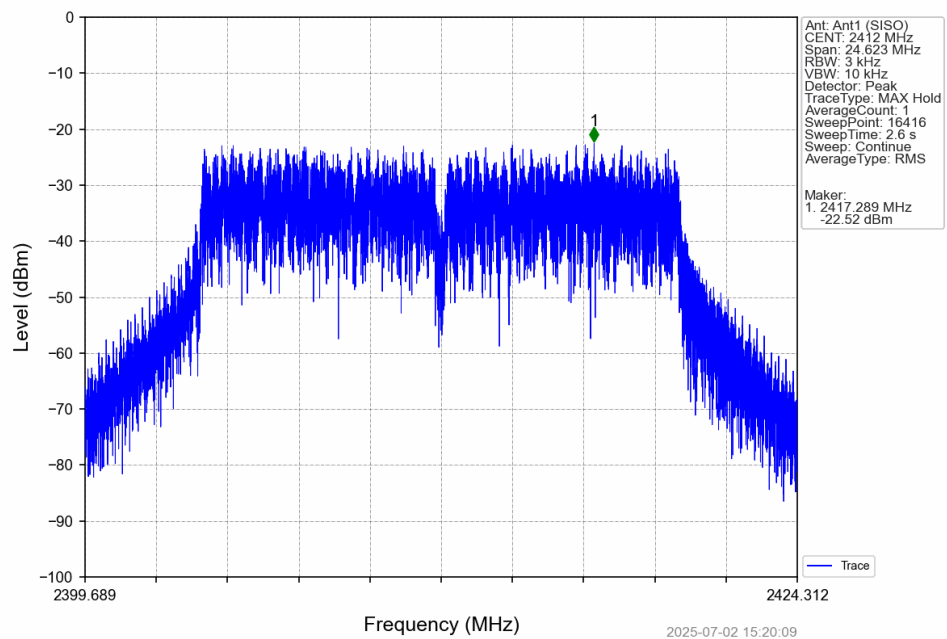
4.2.1 PSD



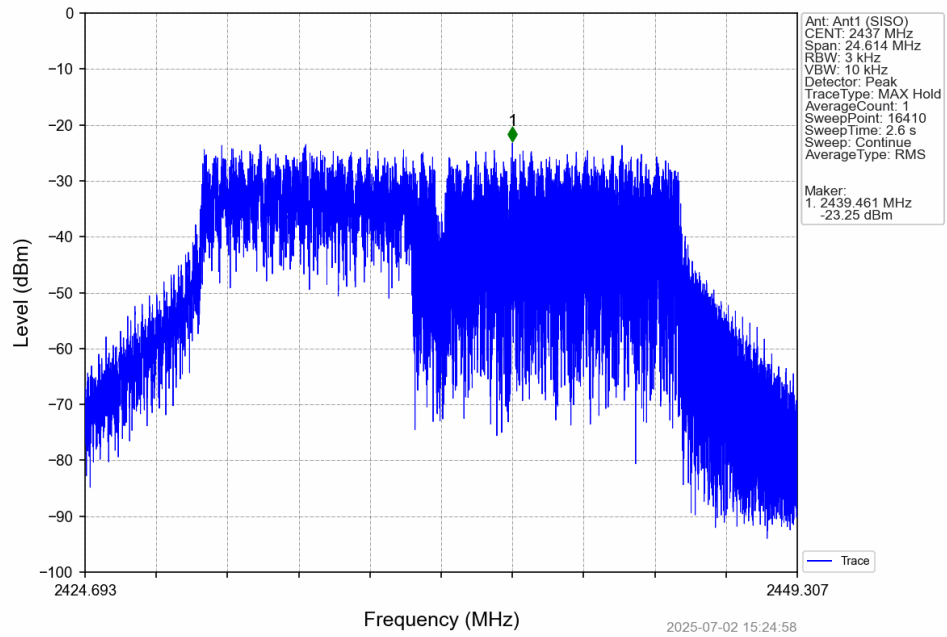
802.11b HCH 2462MHz Ant1 (SISO) NTN



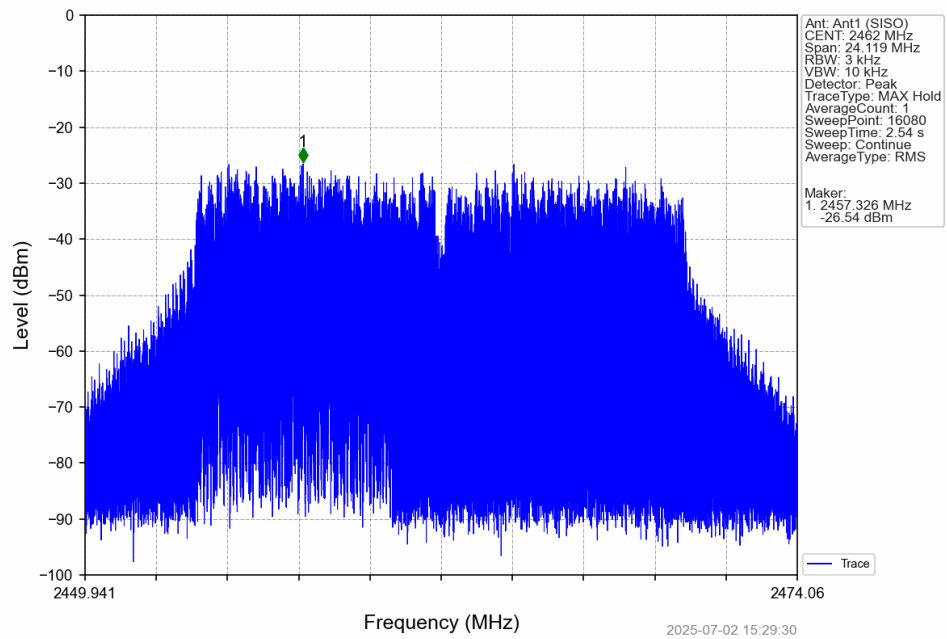
802.11g LCH 2412MHz Ant1 (SISO) NTN



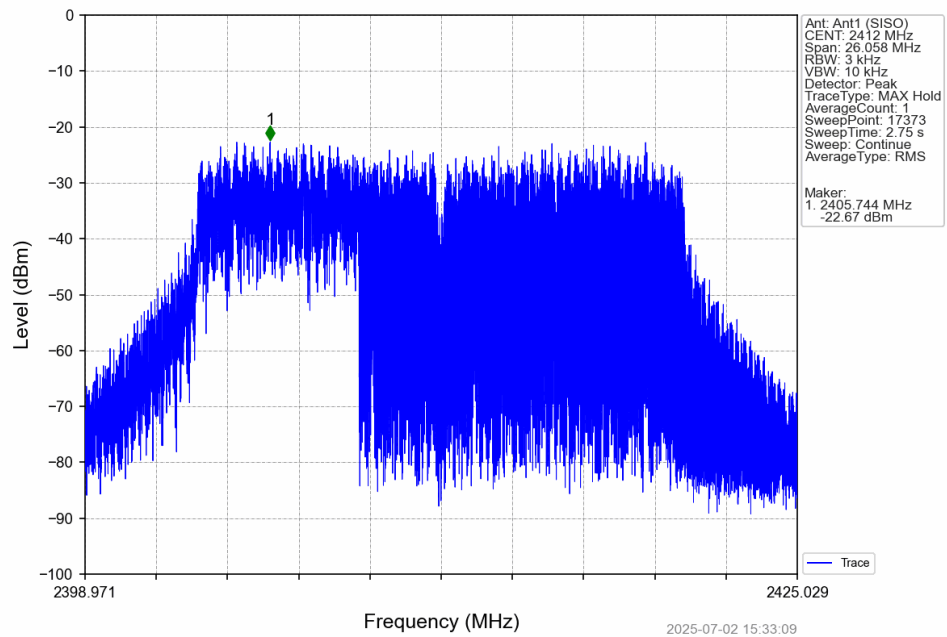
802.11g MCH 2437MHz Ant1 (SISO) NTN



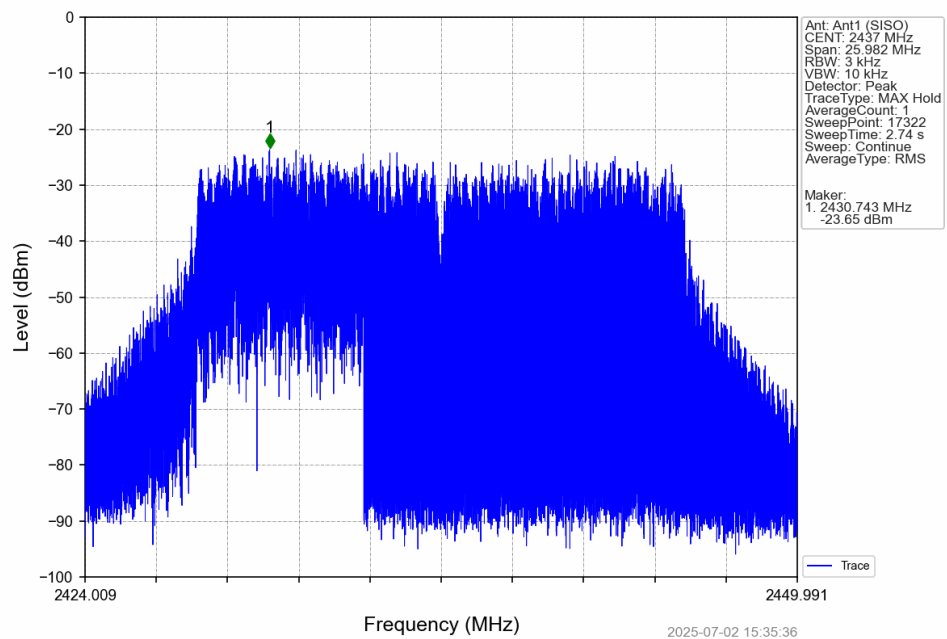
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



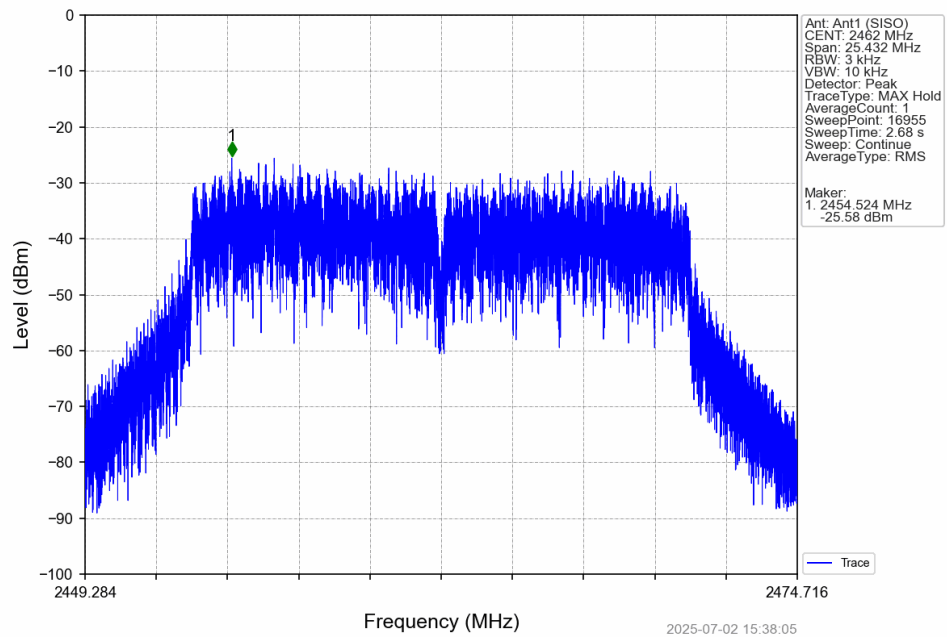
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTNV



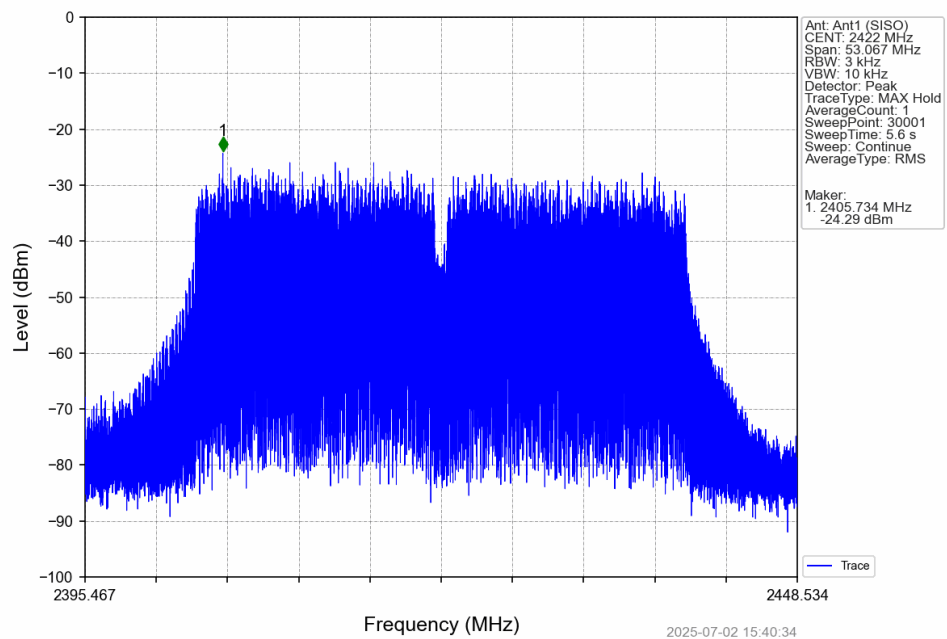
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTNV



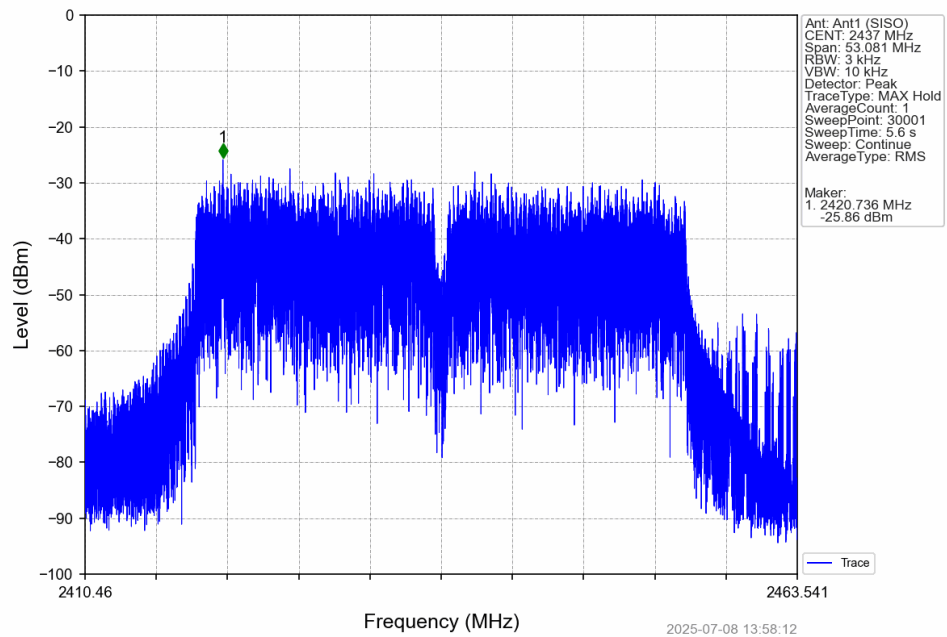
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



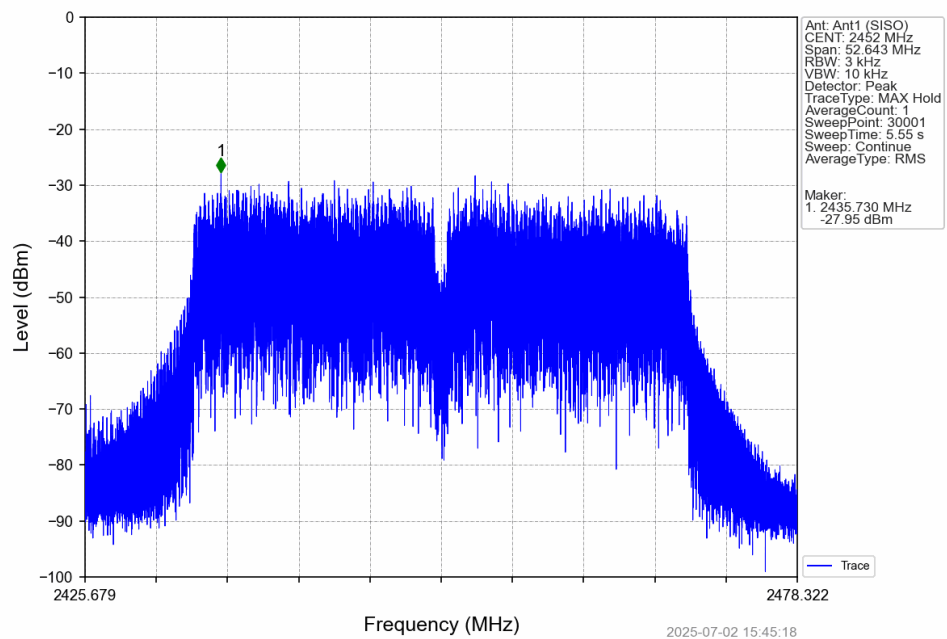
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



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	-5.19
		2437	1	-6.31
		2462	1	-8.09
802.11g	SISO	2412	1	-5.12
		2437	1	-6.10
		2462	1	-9.11
802.11n (HT20)	SISO	2412	1	-5.18
		2437	1	-6.08
		2462	1	-9.25
802.11n (HT40)	SISO	2422	1	-8.33
		2437	1	-10.01
		2452	1	-11.43

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.

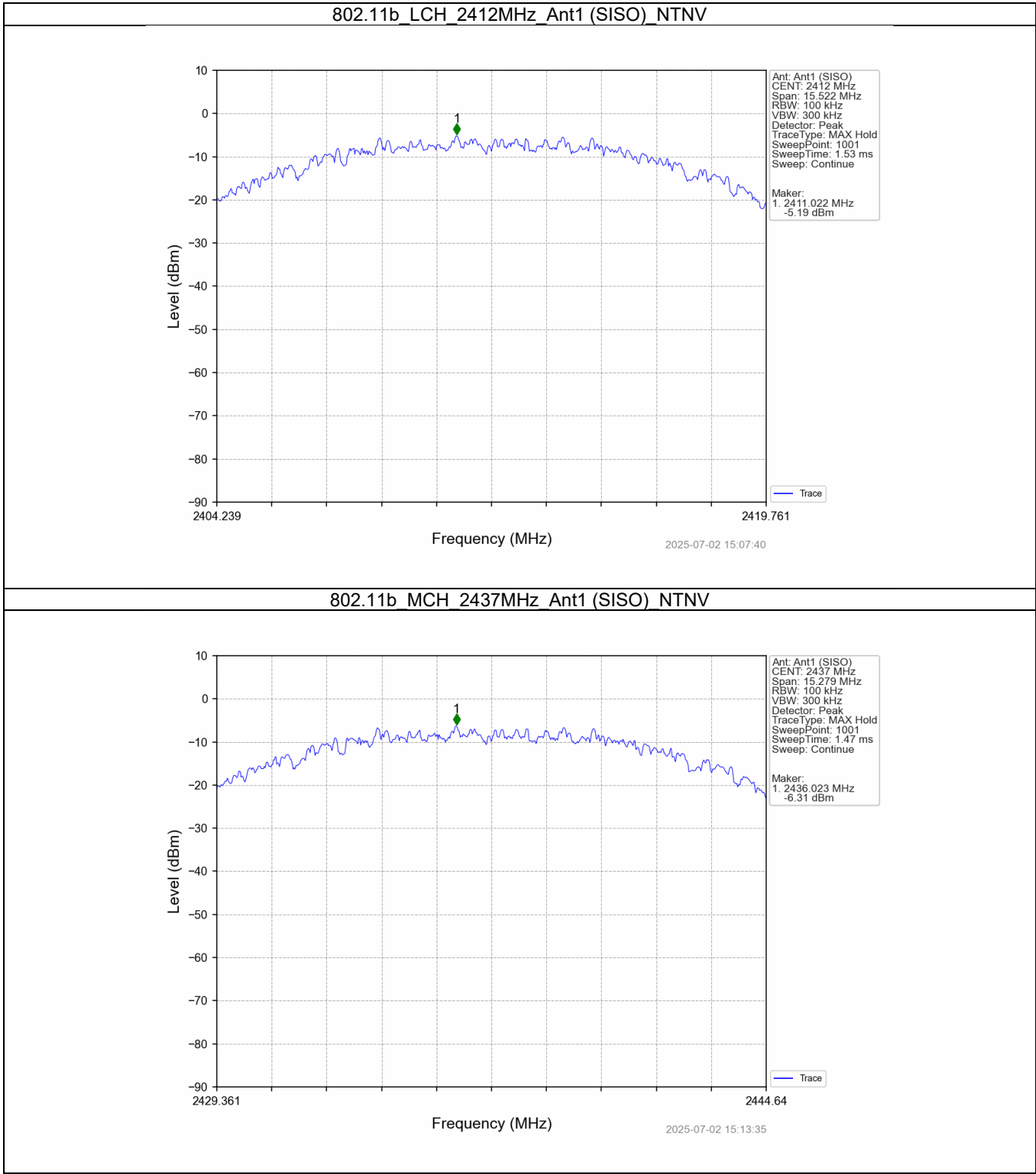
5.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	-5.19	-25.19	Pass
		2437	1	-5.19	-25.19	Pass
		2462	1	-5.19	-25.19	Pass
802.11g	SISO	2412	1	-5.12	-25.12	Pass
		2437	1	-5.12	-25.12	Pass
		2462	1	-5.12	-25.12	Pass
802.11n (HT20)	SISO	2412	1	-5.18	-25.18	Pass
		2437	1	-5.18	-25.18	Pass
		2462	1	-5.18	-25.18	Pass
802.11n (HT40)	SISO	2422	1	-8.33	-28.33	Pass
		2437	1	-8.33	-28.33	Pass
		2452	1	-8.33	-28.33	Pass

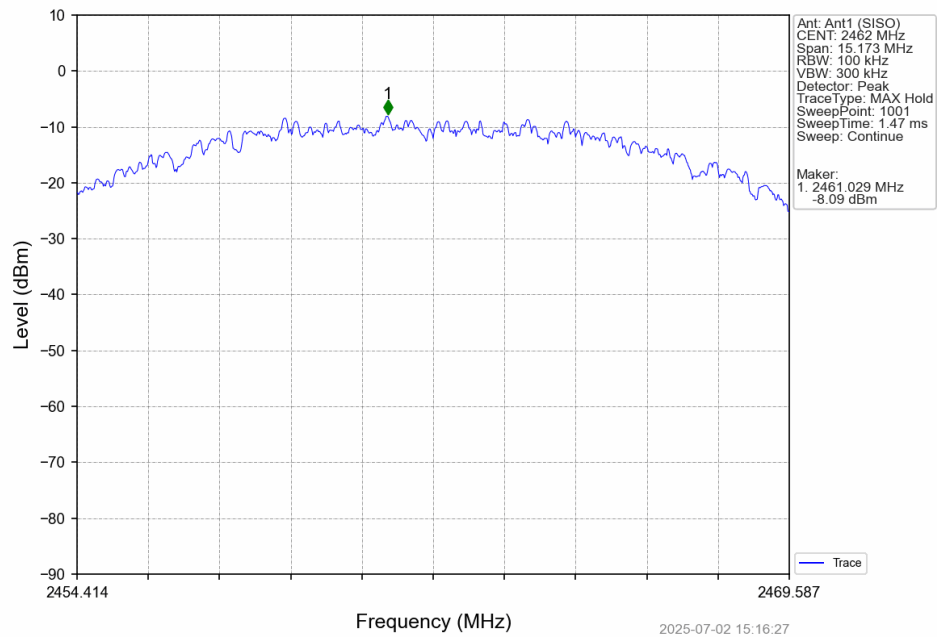
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

5.2 Test Graph

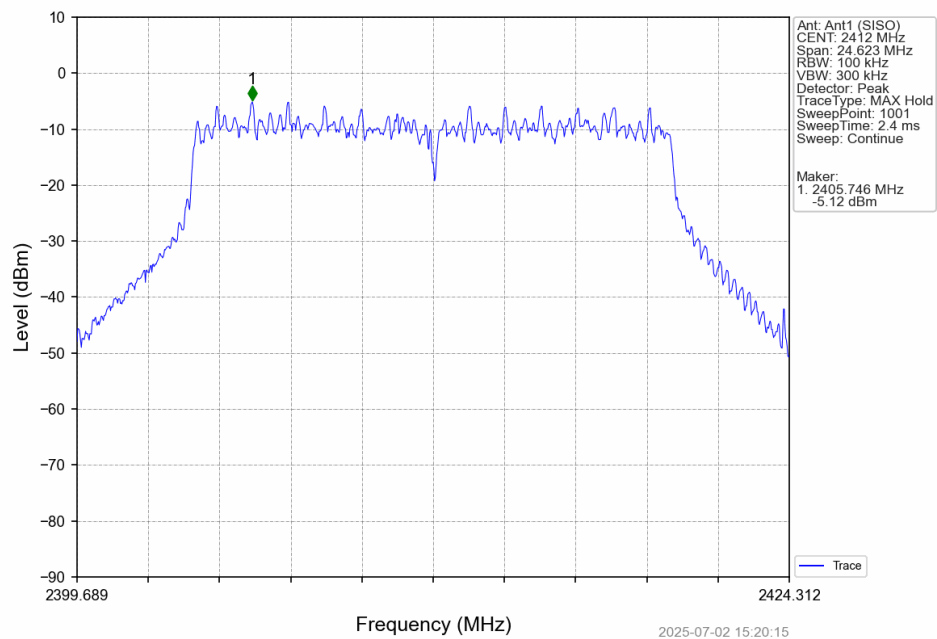
5.2.1 Ref



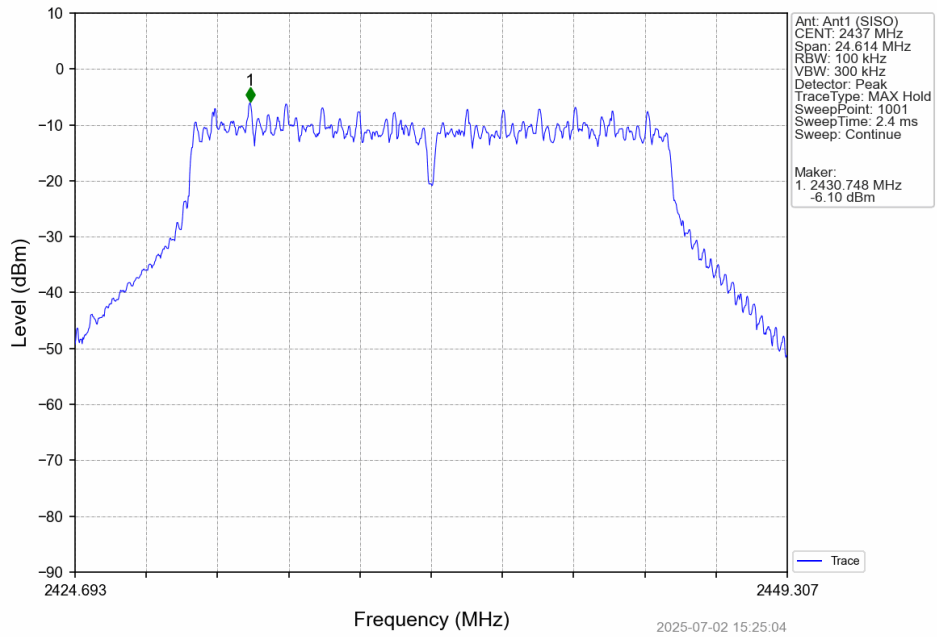
802.11b HCH 2462MHz Ant1 (SISO) NTN



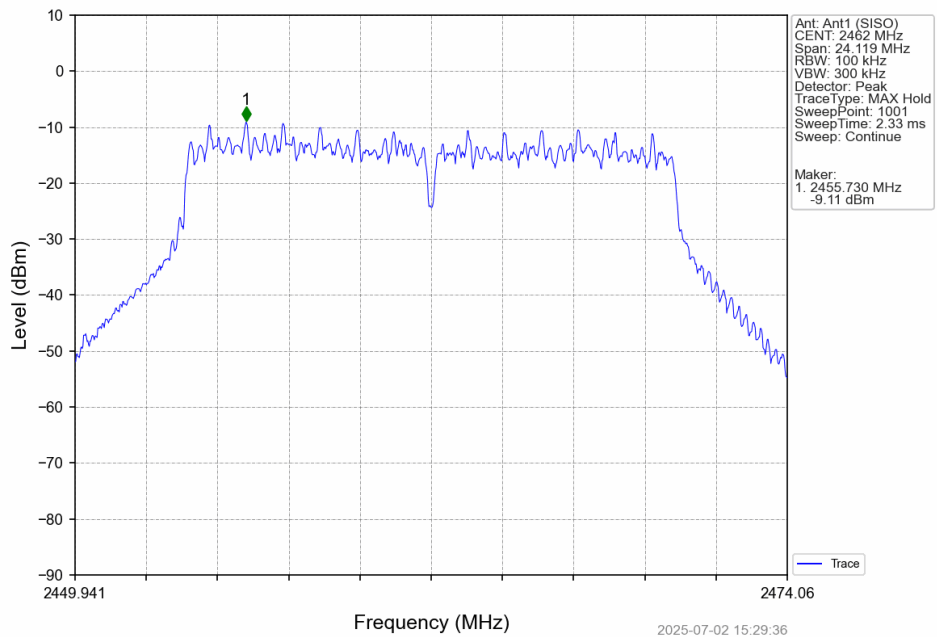
802.11g LCH 2412MHz Ant1 (SISO) NTN



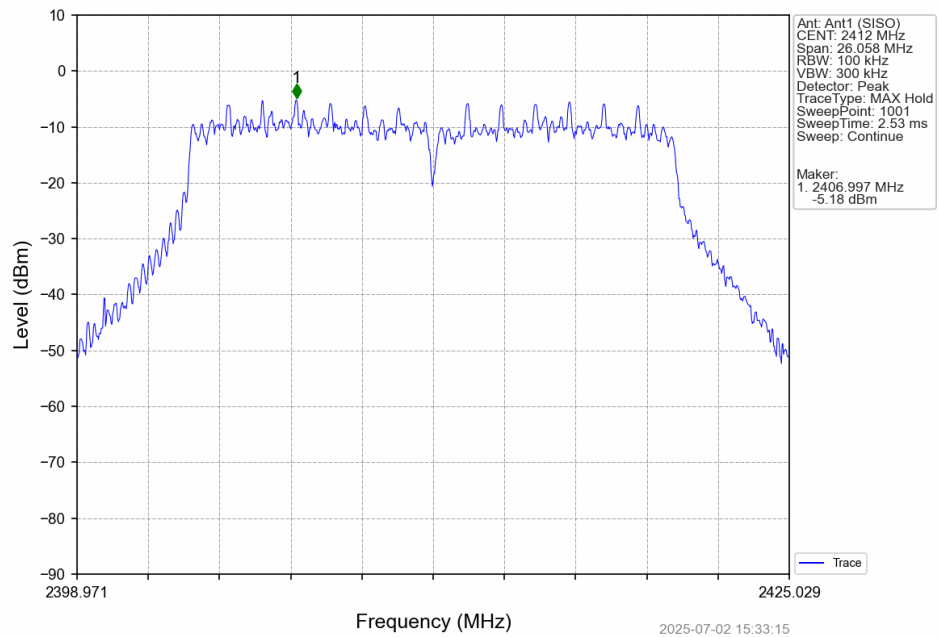
802.11g MCH 2437MHz Ant1 (SISO) NTN



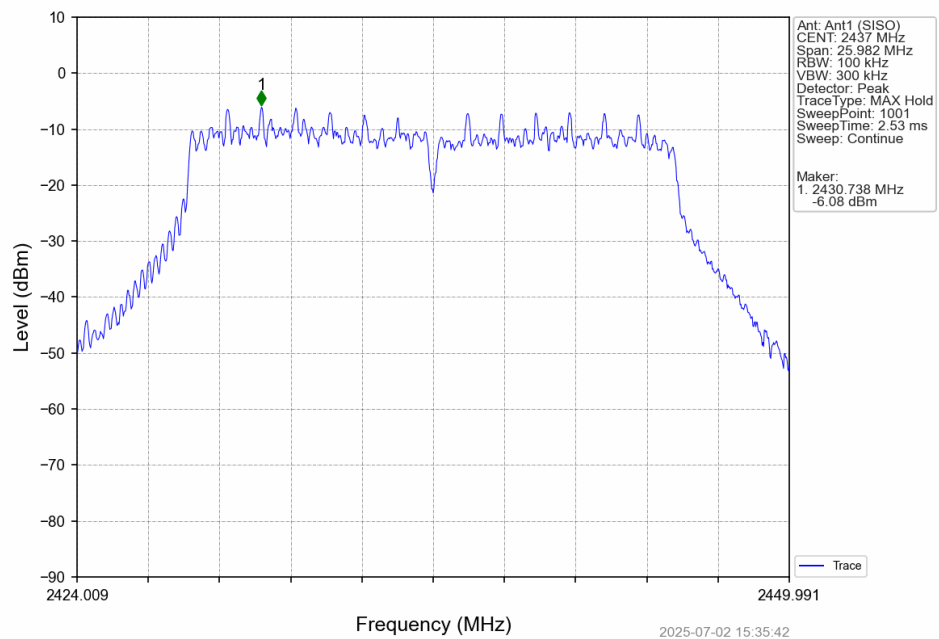
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



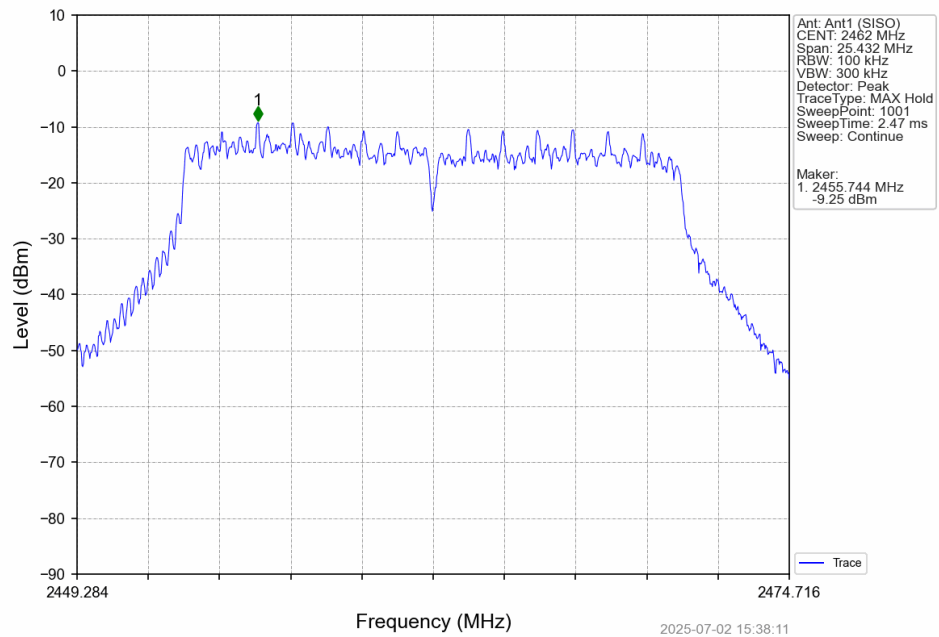
802.11n(HT20) LCH 2412MHz Ant1 (SISO) NTN



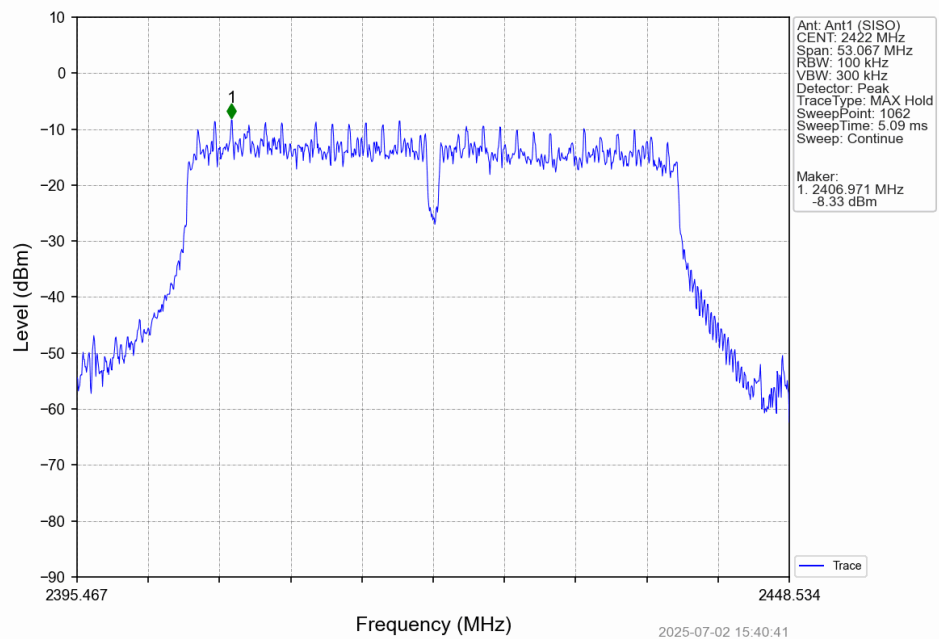
802.11n(HT20) MCH 2437MHz Ant1 (SISO) NTN



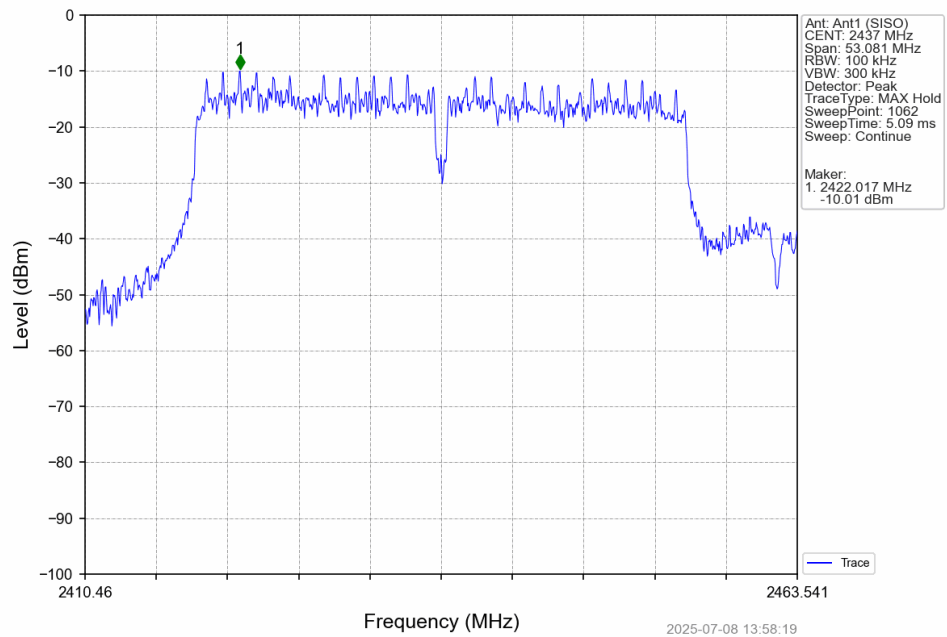
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTNV



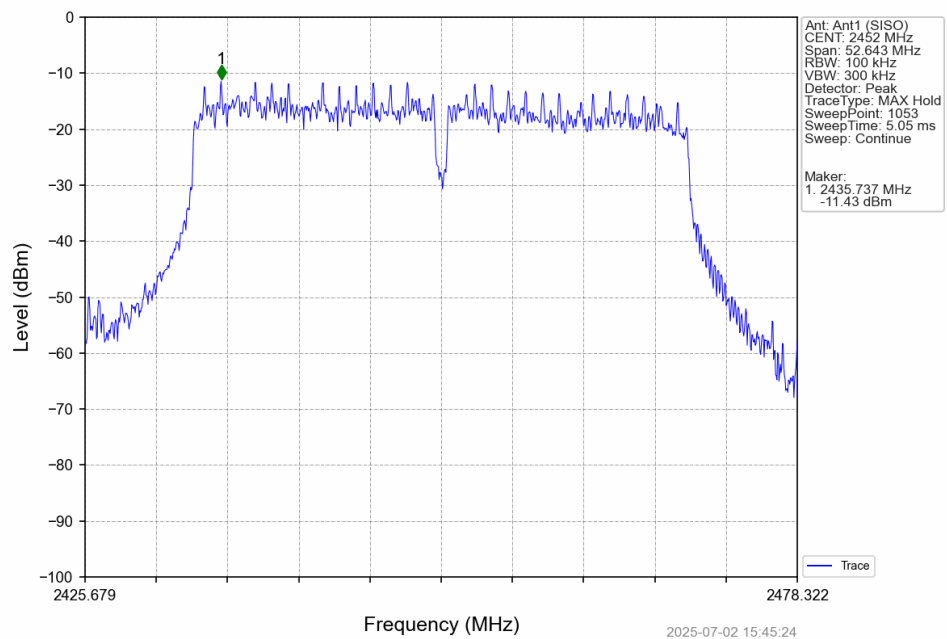
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



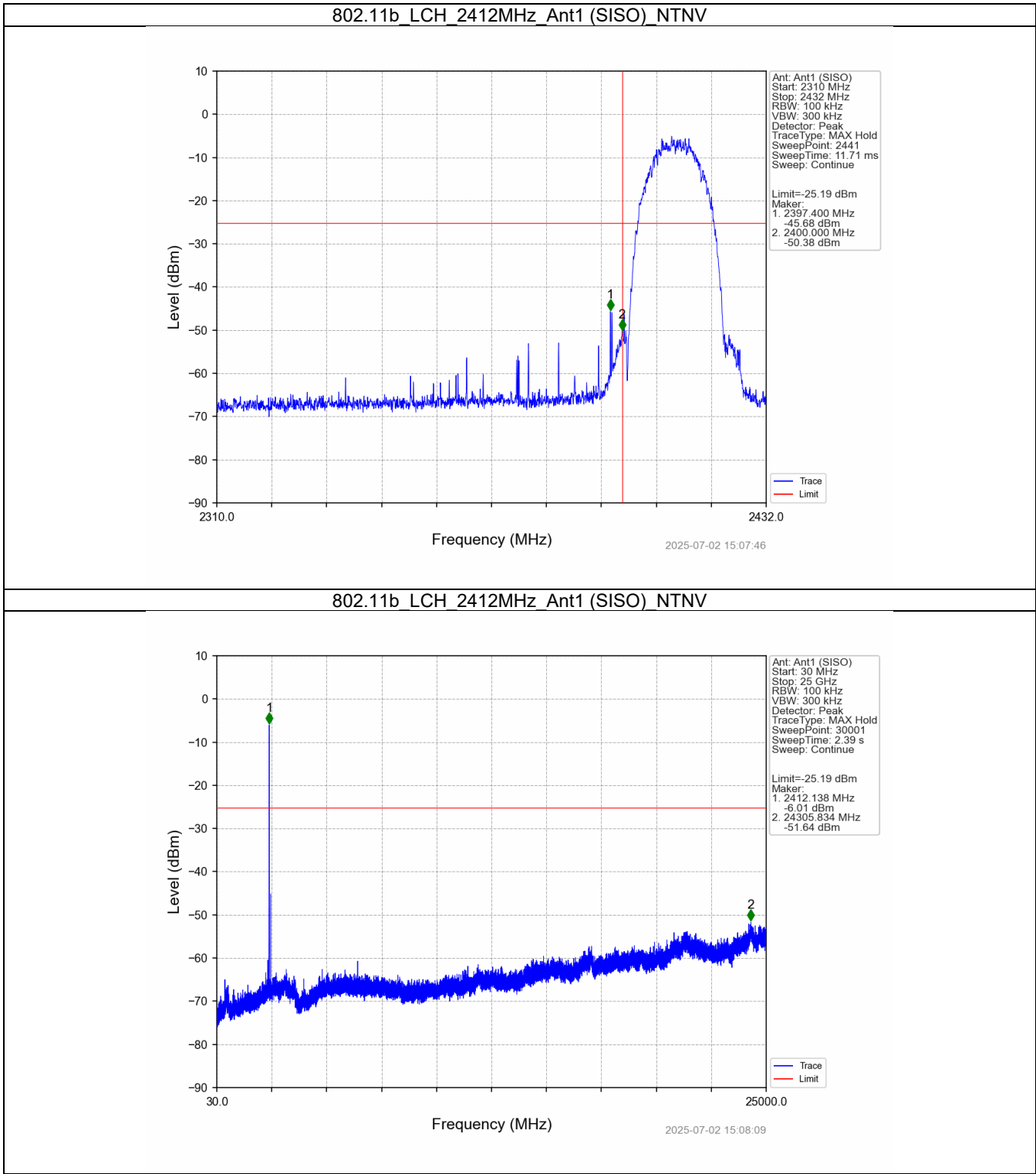
802.11n(HT40) MCH_2437MHz_Ant1 (SISO) NTN



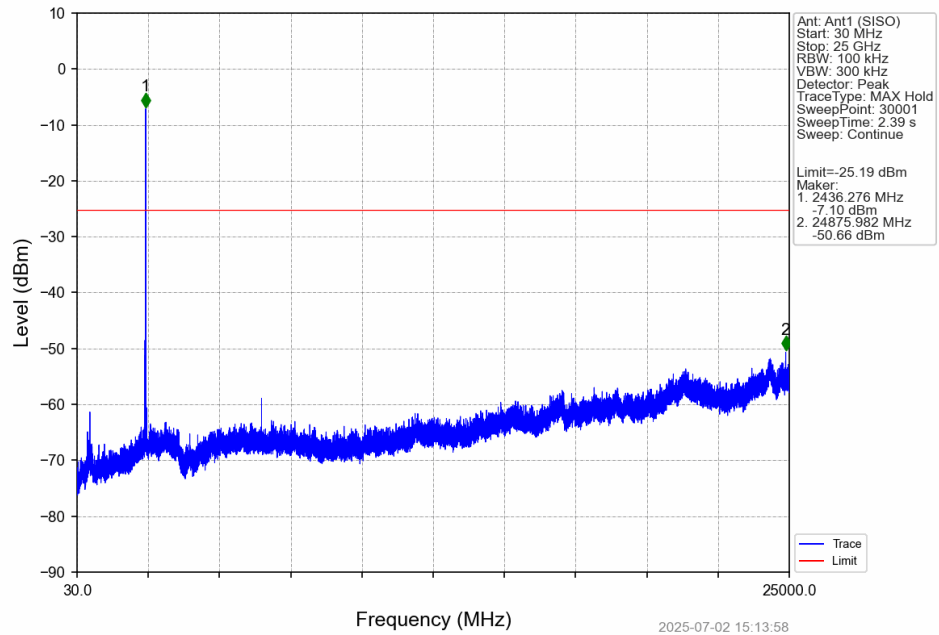
802.11n(HT40) HCH_2452MHz_Ant1 (SISO) NTN



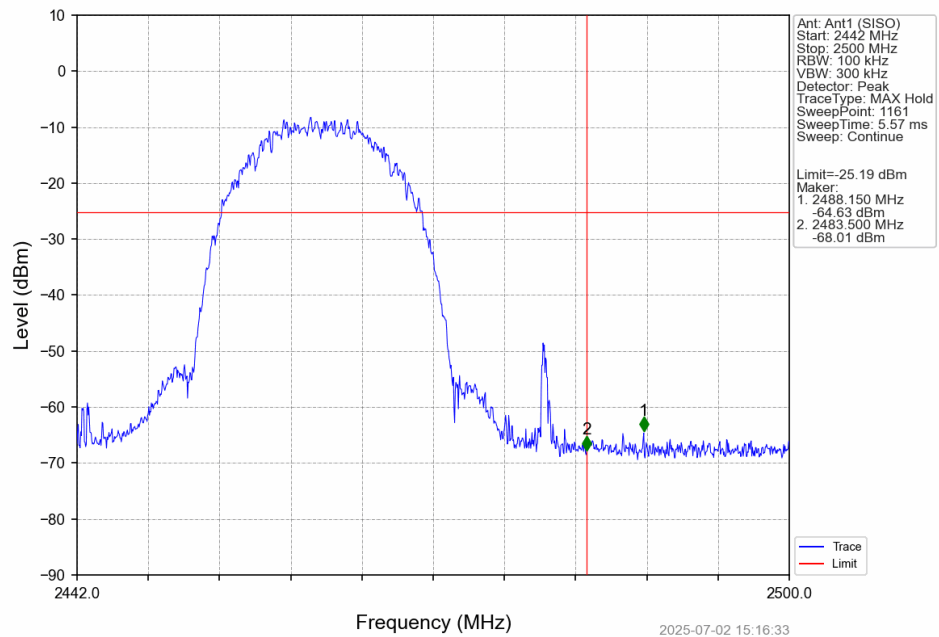
5.2.2 CSE



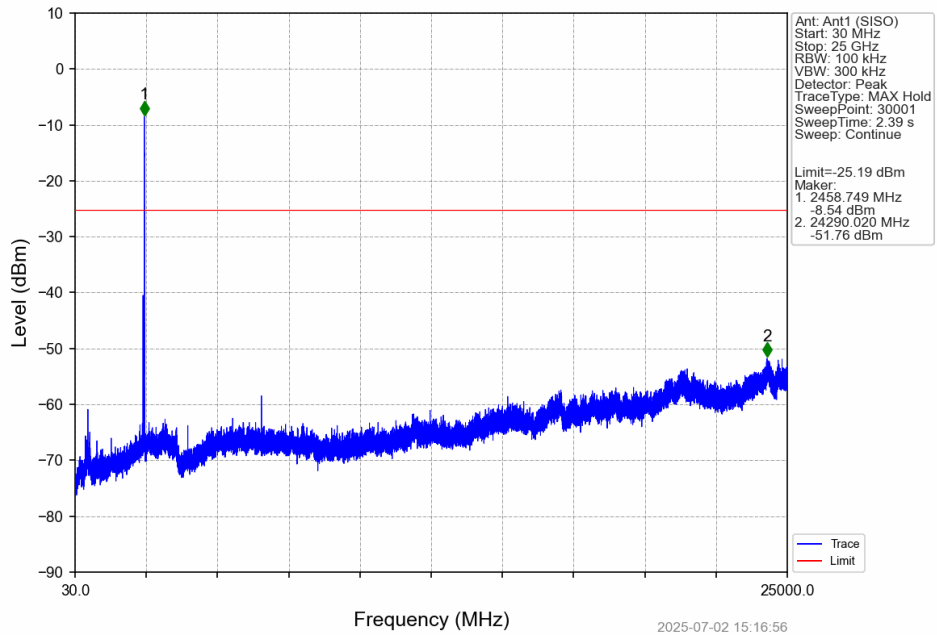
802.11b MCH 2437MHz Ant1 (SISO) NTN



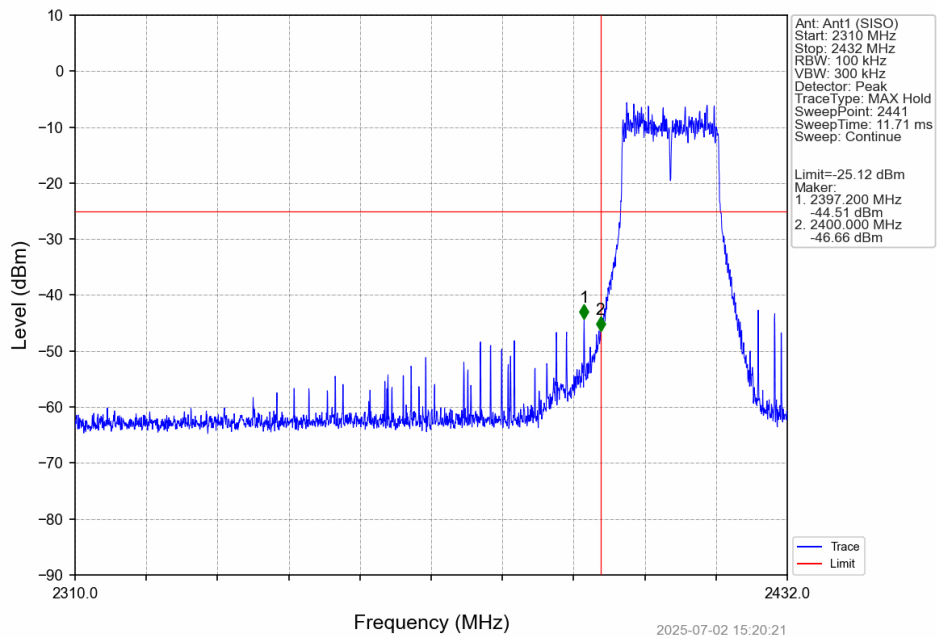
802.11b_HCH_2462MHz_Ant1 (SISO)_NTN



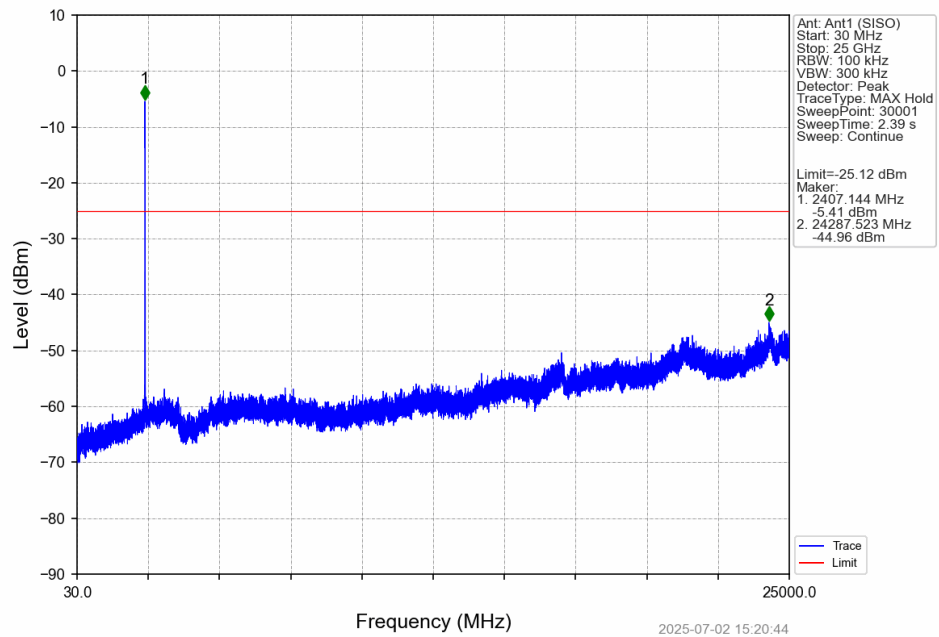
802.11b HCH 2462MHz Ant1 (SISO) NTN



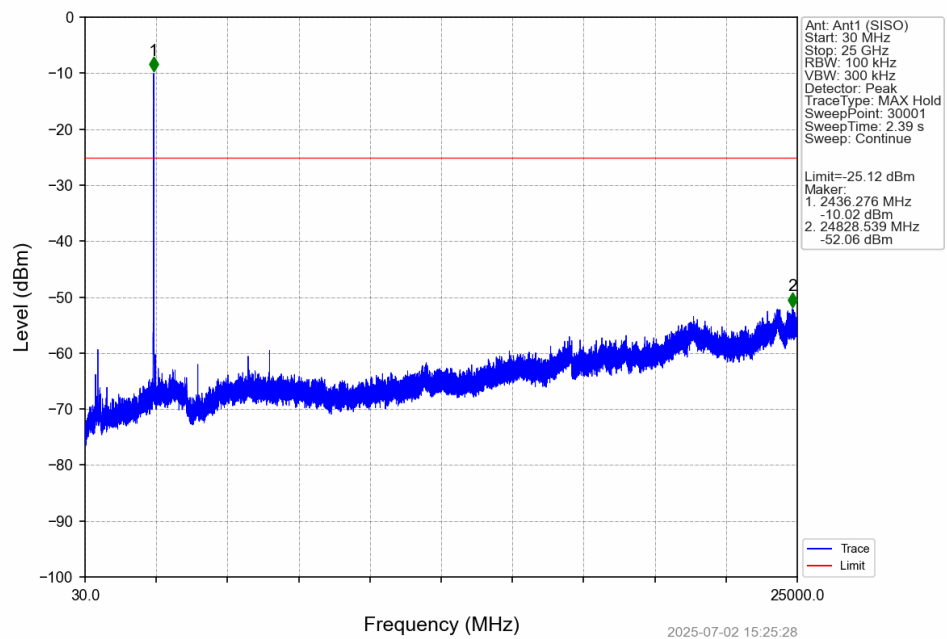
802.11g LCH 2412MHz Ant1 (SISO) NTN



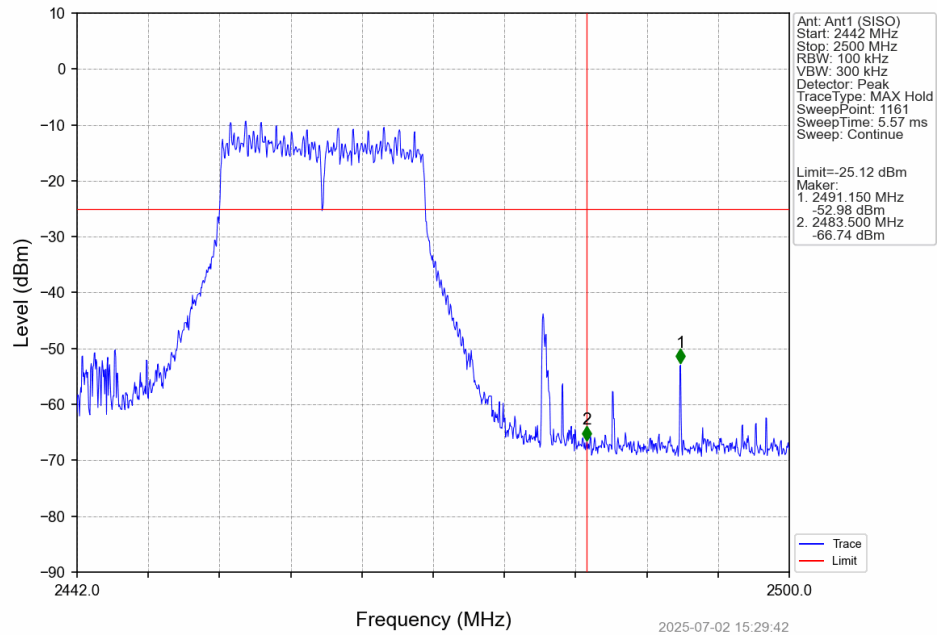
802.11g LCH 2412MHz Ant1 (SISO) NTN



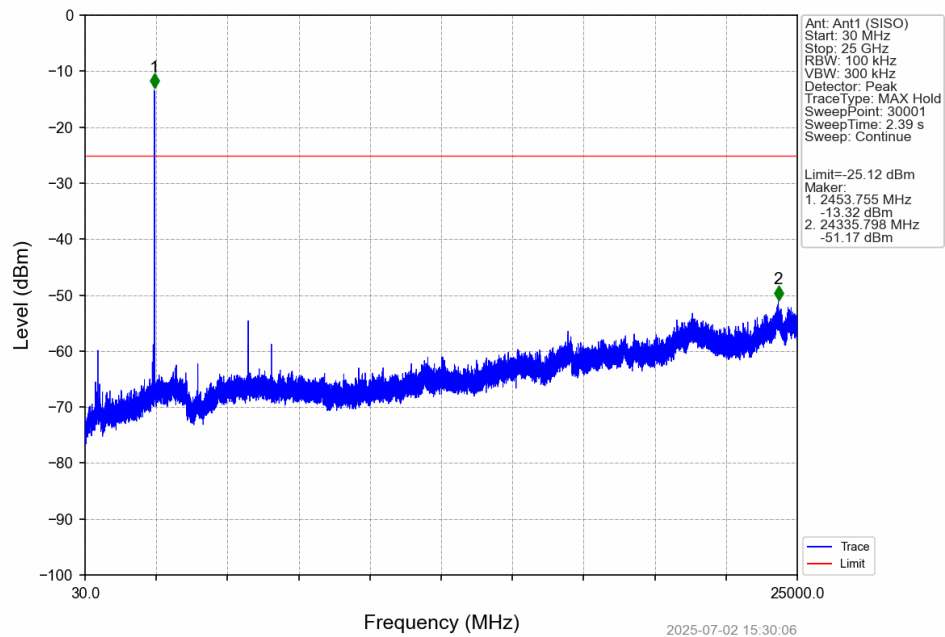
802.11g_MCH_2437MHz_Ant1 (SISO)_NTN



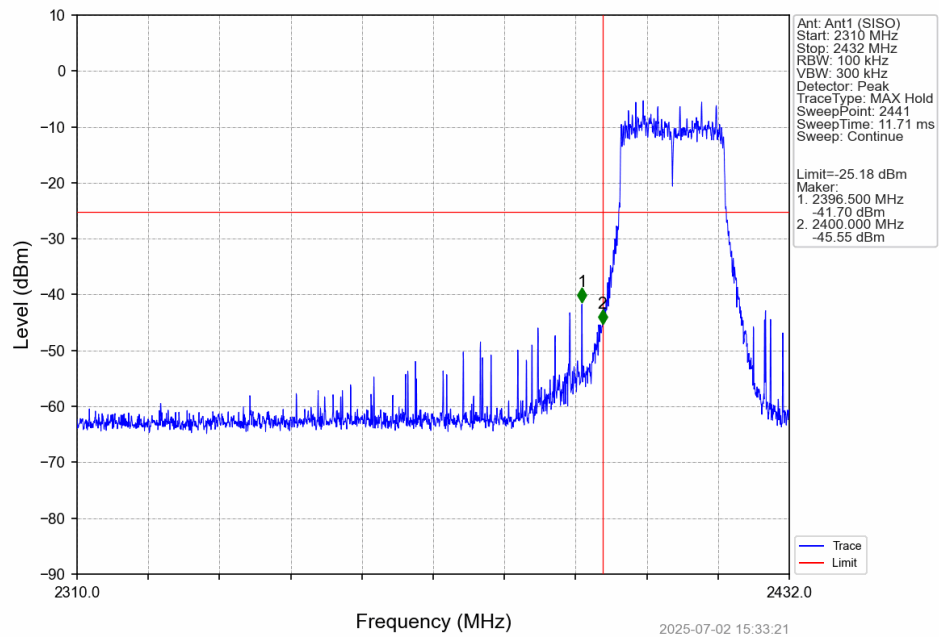
802.11g HCH 2462MHz Ant1 (SISO) NTN



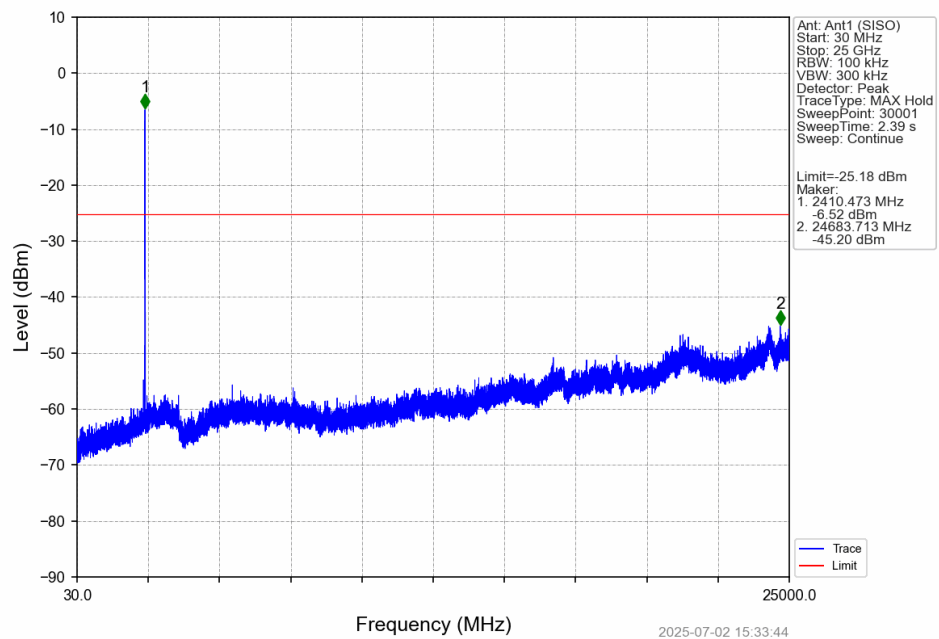
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



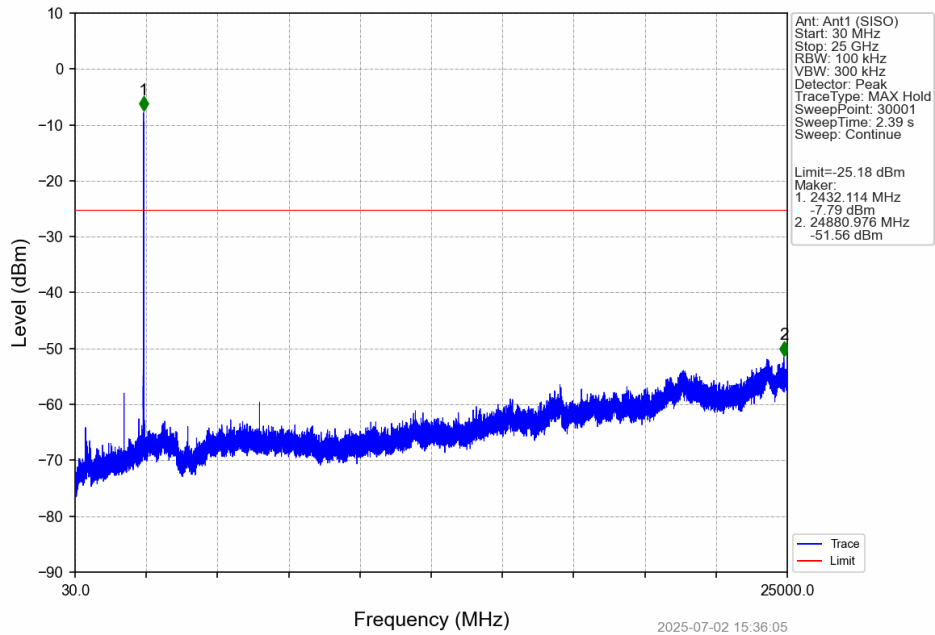
802.11n(HT20) LCH_2412MHz_Ant1 (SISO) NTN



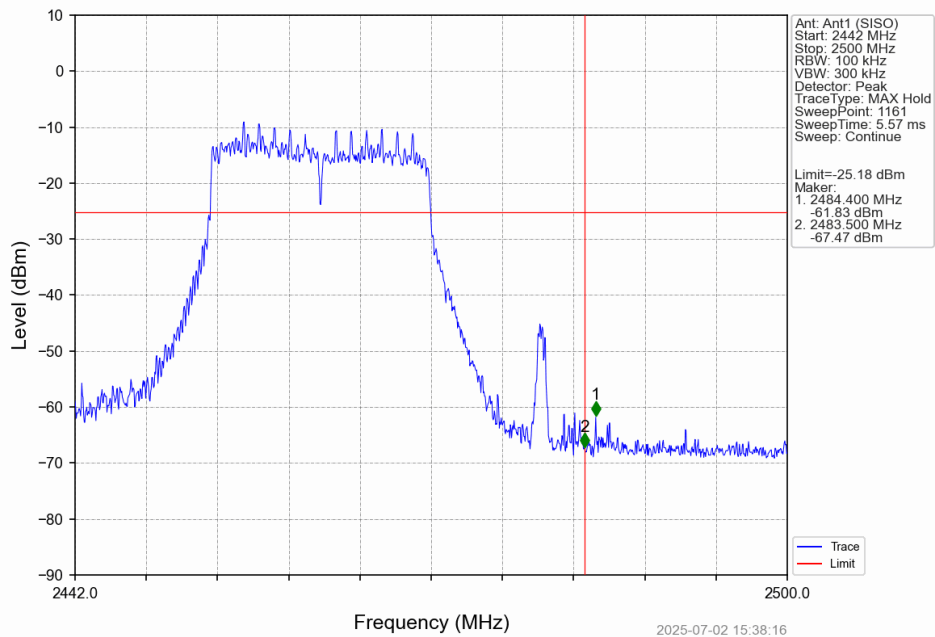
802.11n(HT20) LCH_2412MHz_Ant1 (SISO) NTN



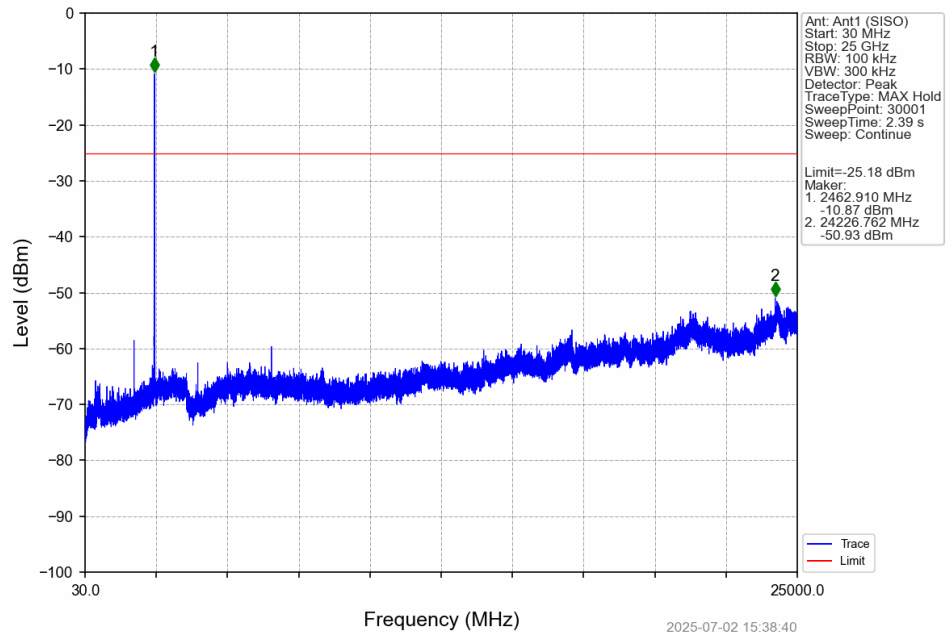
802.11n(HT20) MCH_2437MHz_Ant1 (SISO) NTN



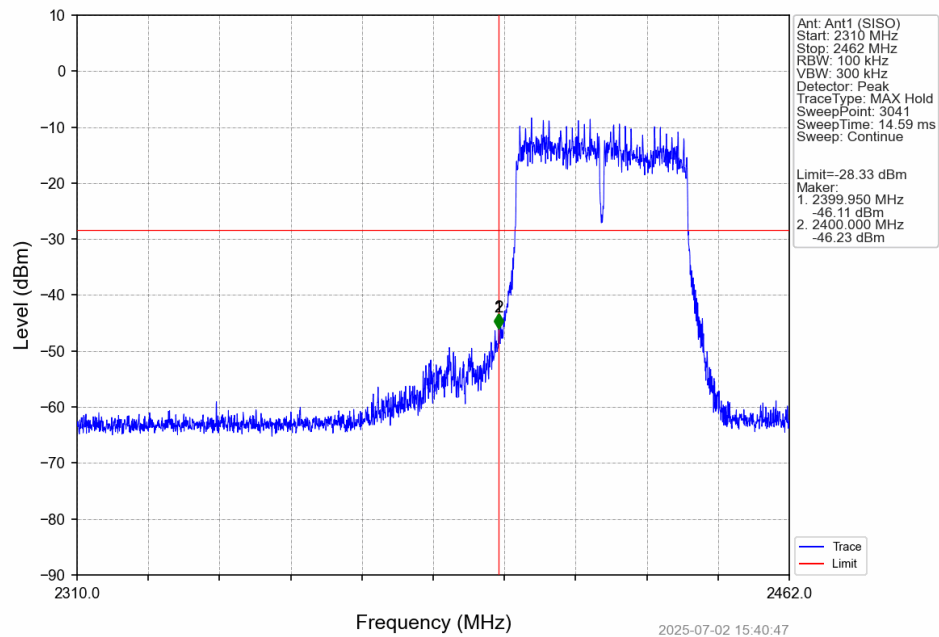
802.11n(HT20) HCH_2462MHz_Ant1 (SISO) NTN



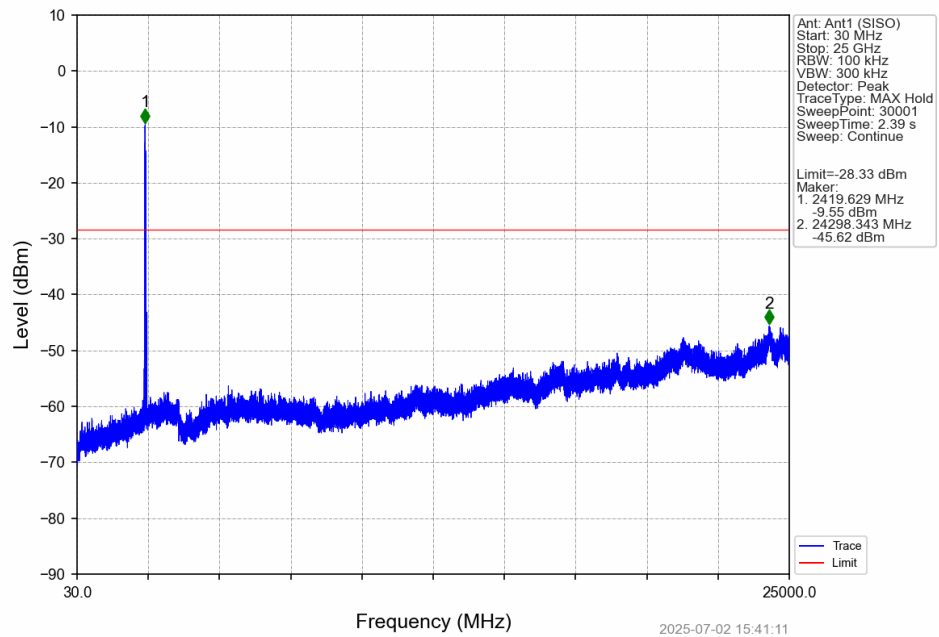
802.11n(HT20) HCH 2462MHz Ant1 (SISO) NTN



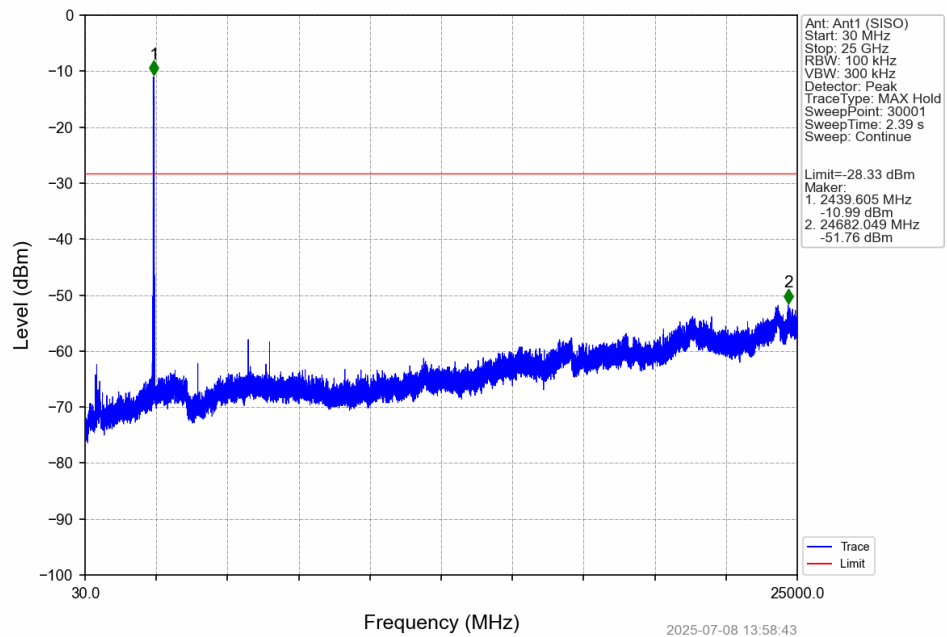
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTN



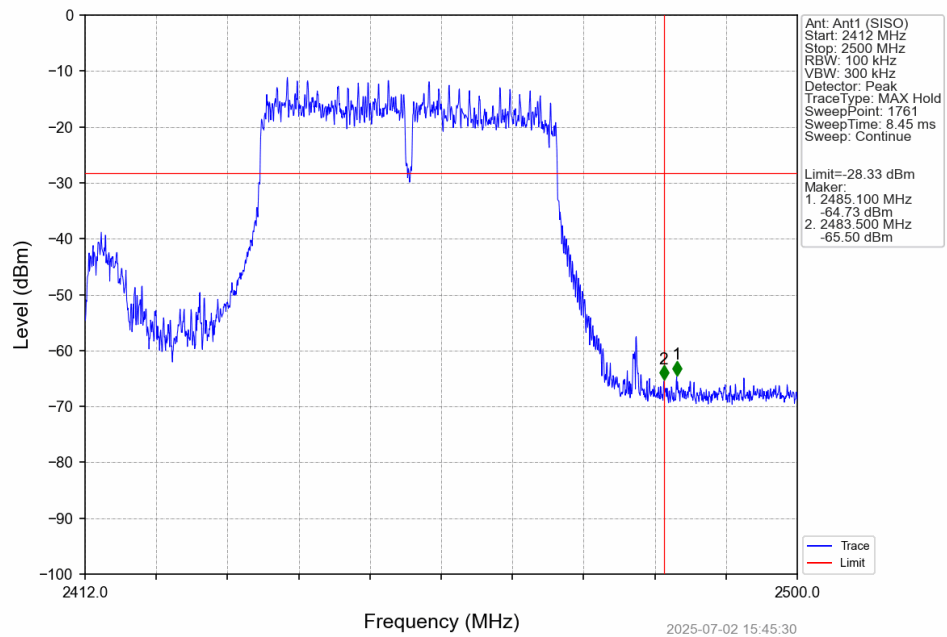
802.11n(HT40) LCH 2422MHz Ant1 (SISO) NTNV



802.11n(HT40) MCH 2437MHz Ant1 (SISO) NTNV



802.11n(HT40) HCH 2452MHz Ant1 (SISO) NTNV



802.11n(HT40) HCH 2452MHz Ant1 (SISO) NTNV

