Appendix B

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Diagnostic Charging/Discharging Balancer
Test Model: CE39

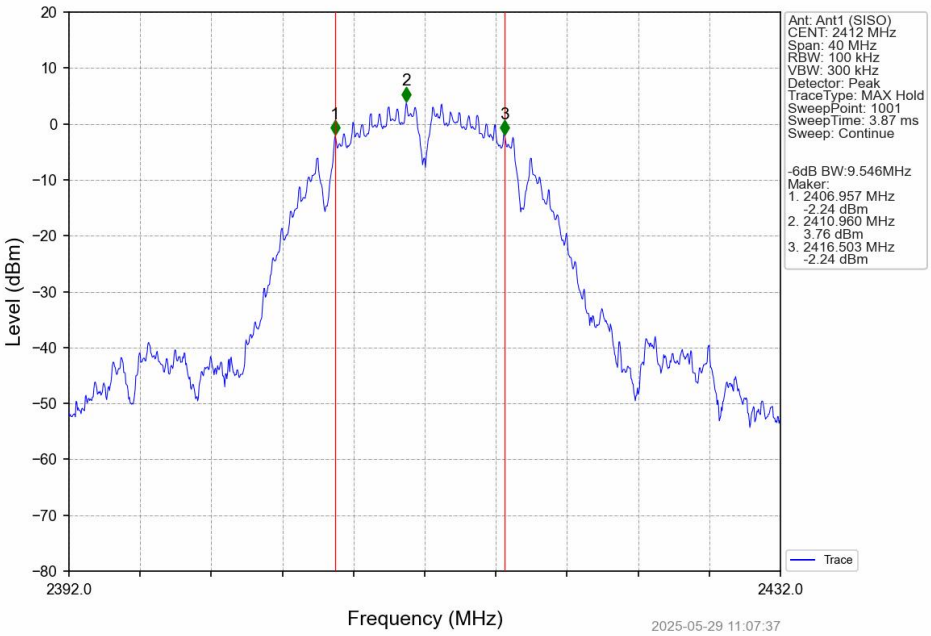
Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Luo
Supervised by:	Nick Peng

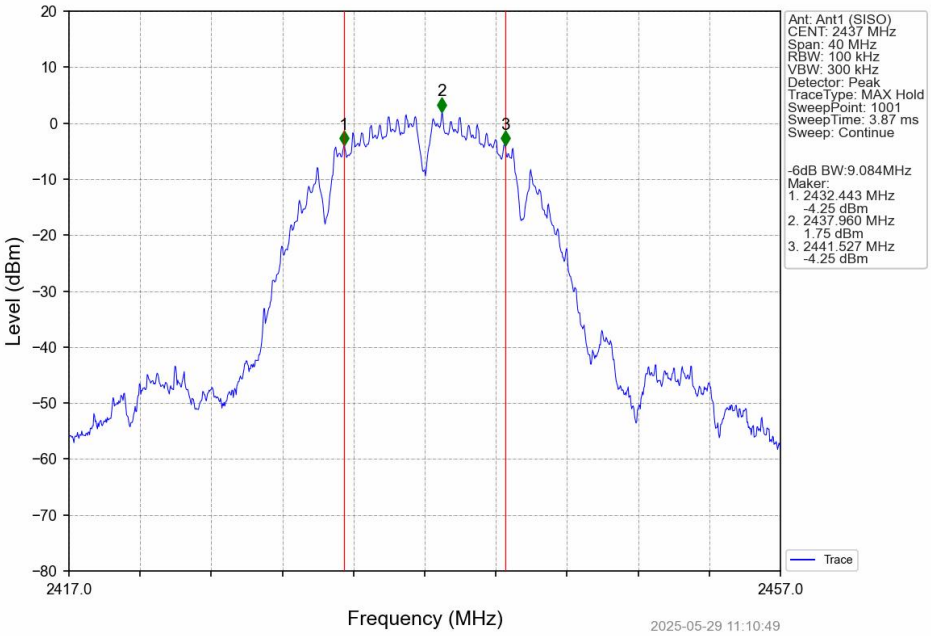
B.1 -6dB Bandwidth

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11b	SISO	2412	1	9.546	>=0.5	Pass
		2437	1	9.084	>=0.5	Pass
		2462	1	9.099	>=0.5	Pass
802.11g	SISO	2412	1	16.360	>=0.5	Pass
		2437	1	16.368	>=0.5	Pass
		2462	1	16.372	>=0.5	Pass
802.11n (HT20)	SISO	2412	1	17.578	>=0.5	Pass
		2437	1	17.584	>=0.5	Pass
		2462	1	17.595	>=0.5	Pass

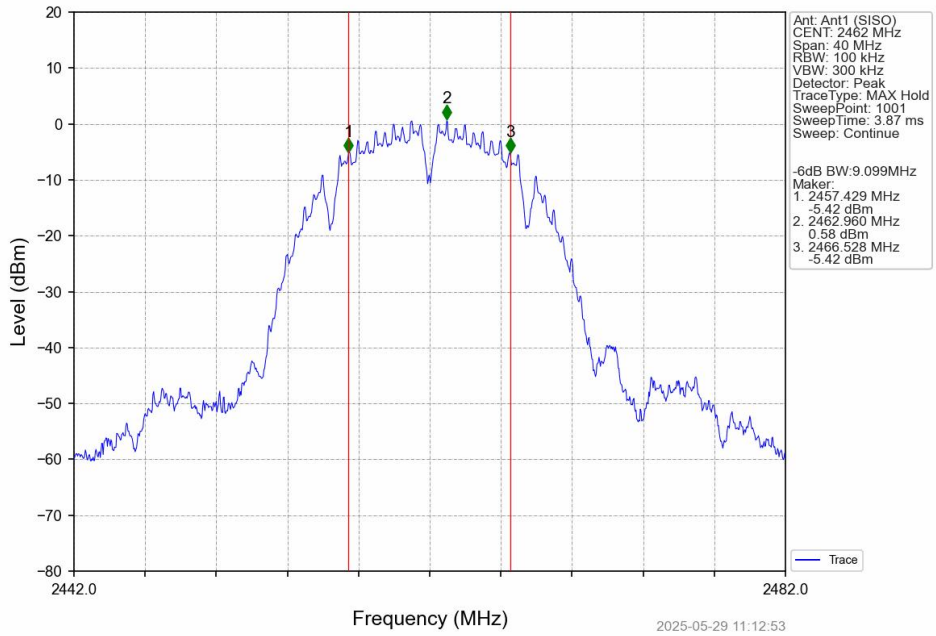
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



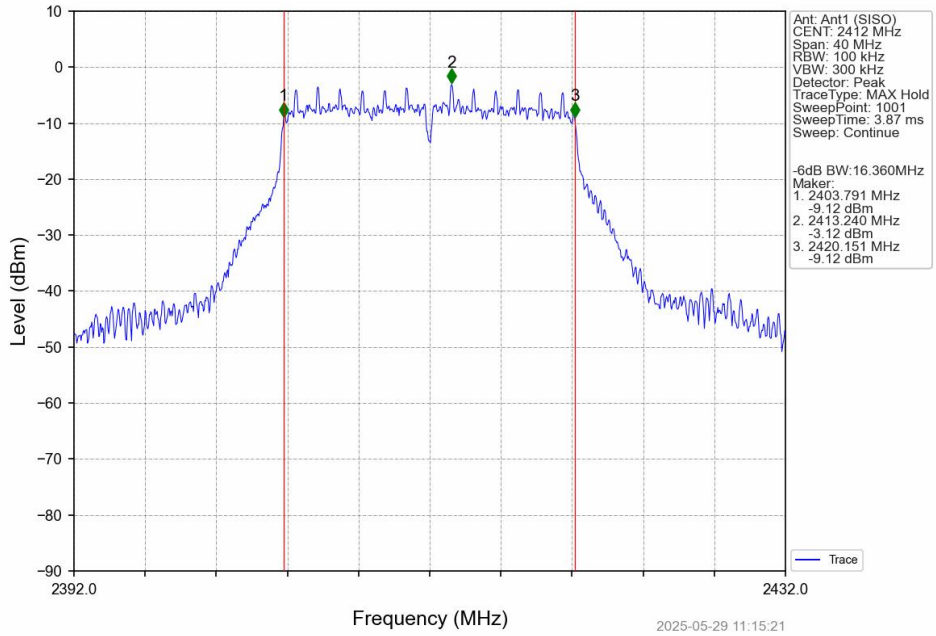
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



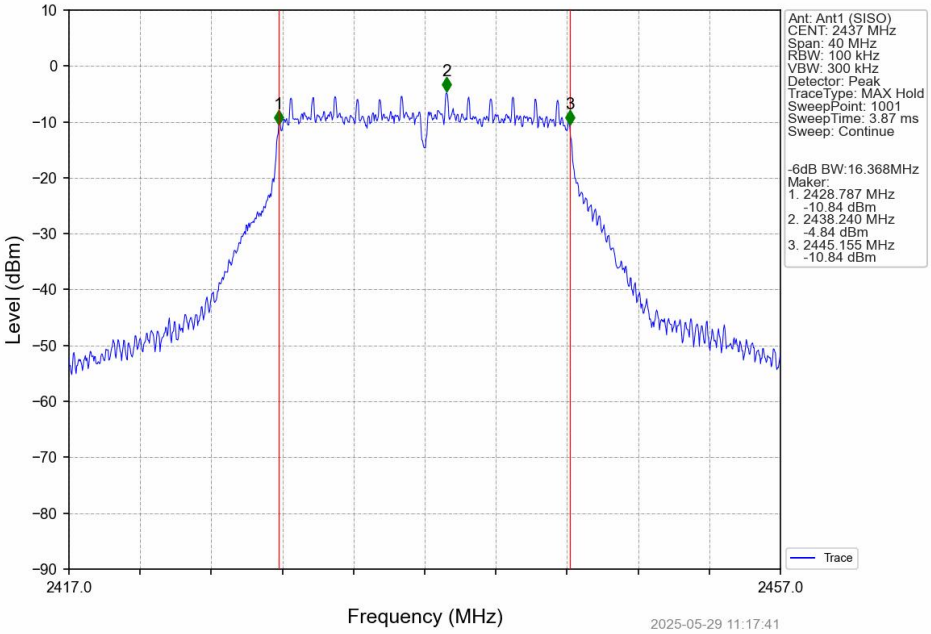
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



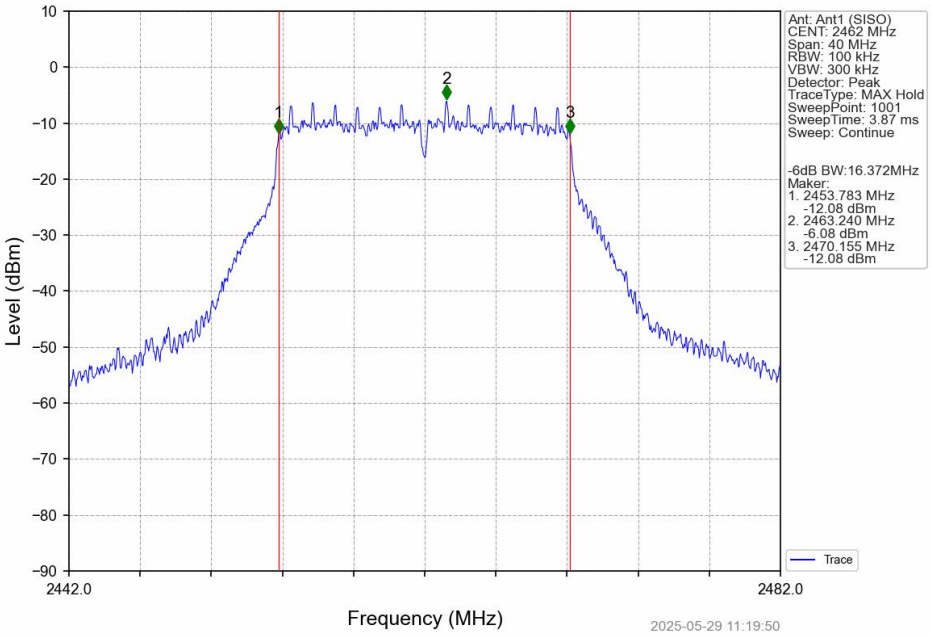
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



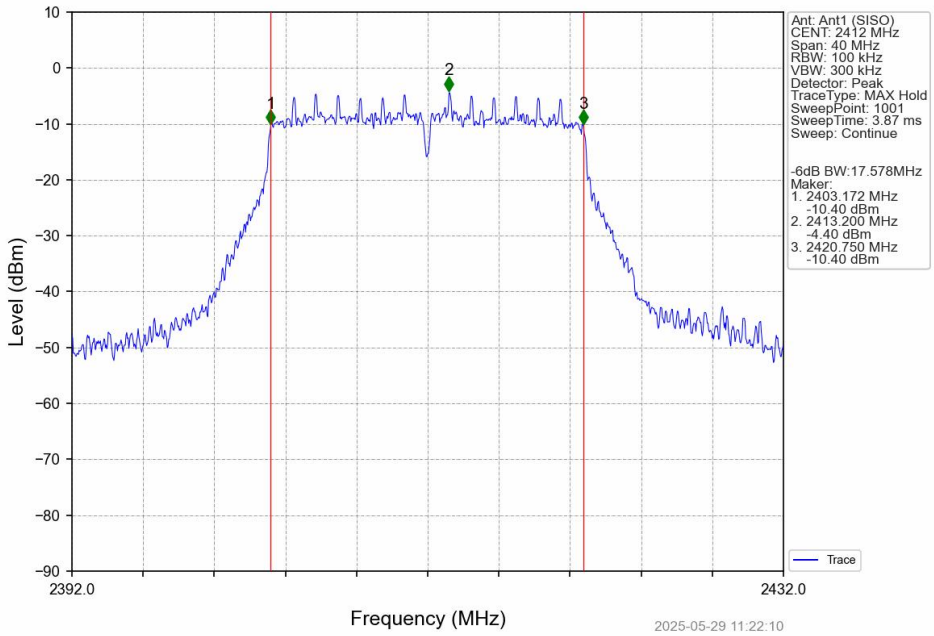
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



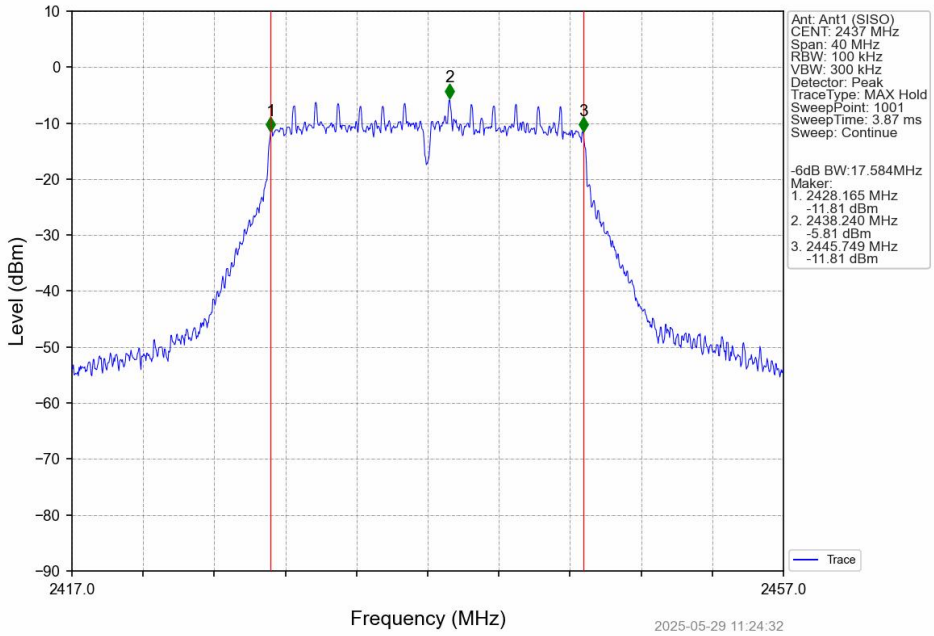
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



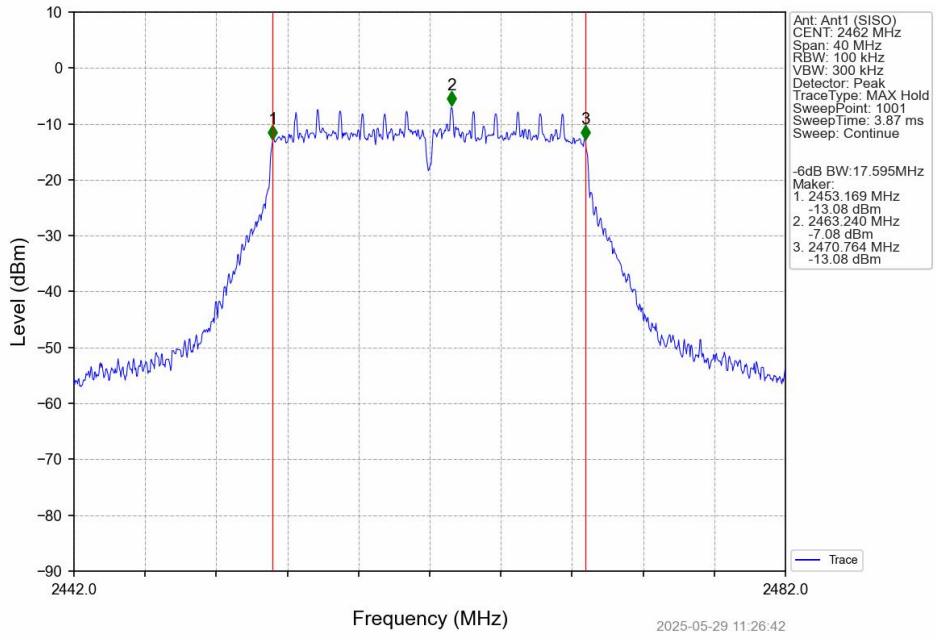
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV



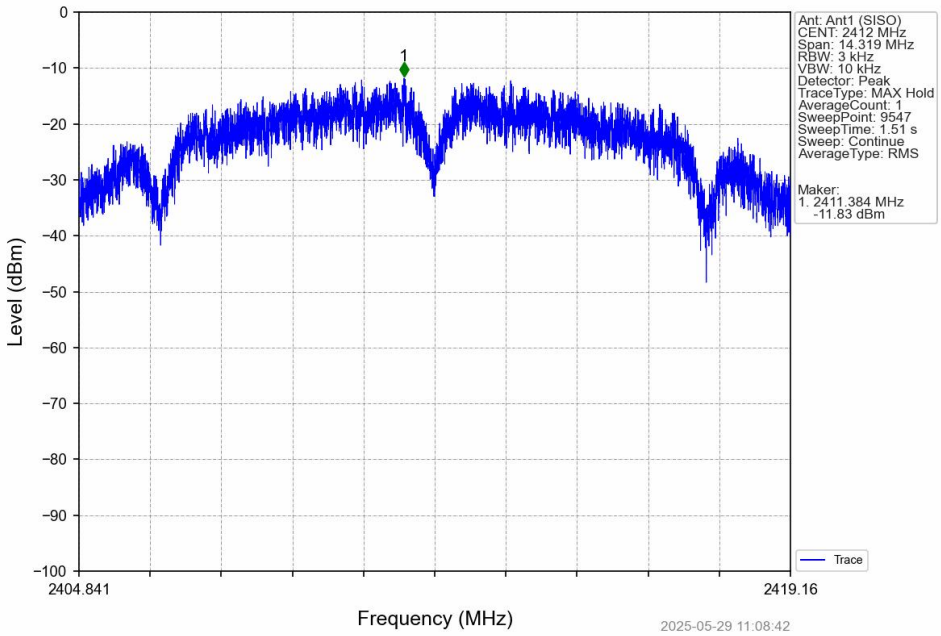
B.2 Maximum Peak Conducted Output Power

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	15.17	<=30	Pass
		2437	13.26	<=30	Pass
		2462	12.06	<=30	Pass
802.11g	SISO	2412	**15.57**	<=30	Pass
		2437	13.94	<=30	Pass
		2462	12.72	<=30	Pass
802.11n (HT20)	SISO	2412	14.51	<=30	Pass
		2437	12.91	<=30	Pass
		2462	11.67	<=30	Pass

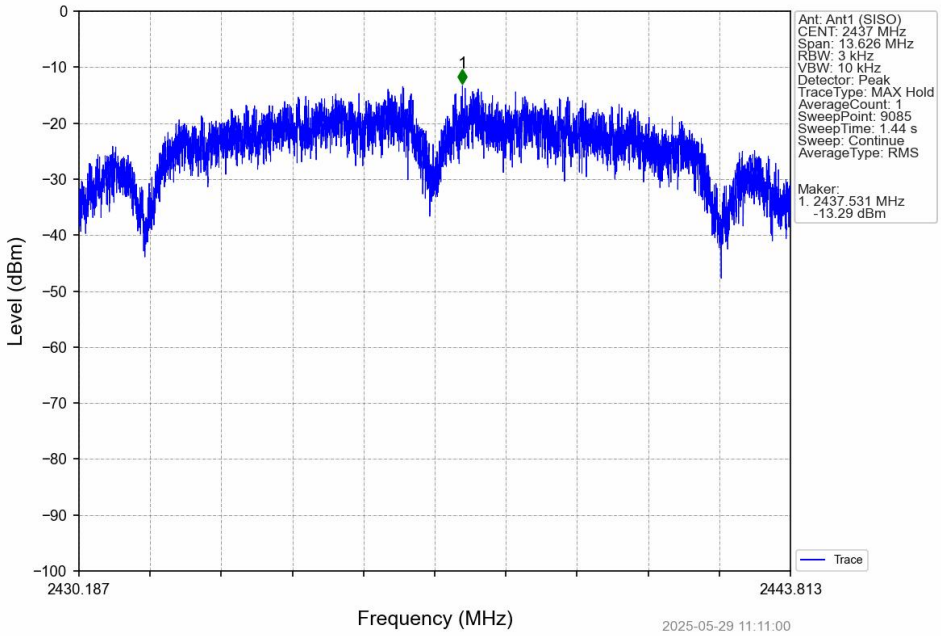
B.3 Maximum Power Spectral Density

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
802.11b	SISO	2412	-11.83	<=8	Pass
		2437	-13.29	<=8	Pass
		2462	-14.84	<=8	Pass
802.11g	SISO	2412	-18.86	<=8	Pass
		2437	-19.92	<=8	Pass
		2462	-21.02	<=8	Pass
802.11n (HT20)	SISO	2412	-19.01	<=8	Pass
		2437	-20.68	<=8	Pass
		2462	-21.43	<=8	Pass

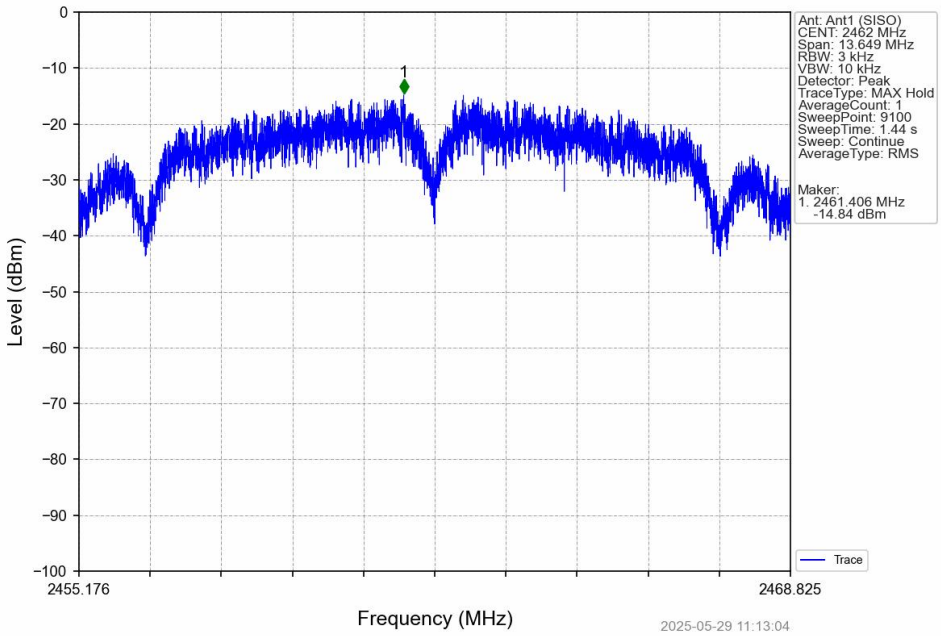
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



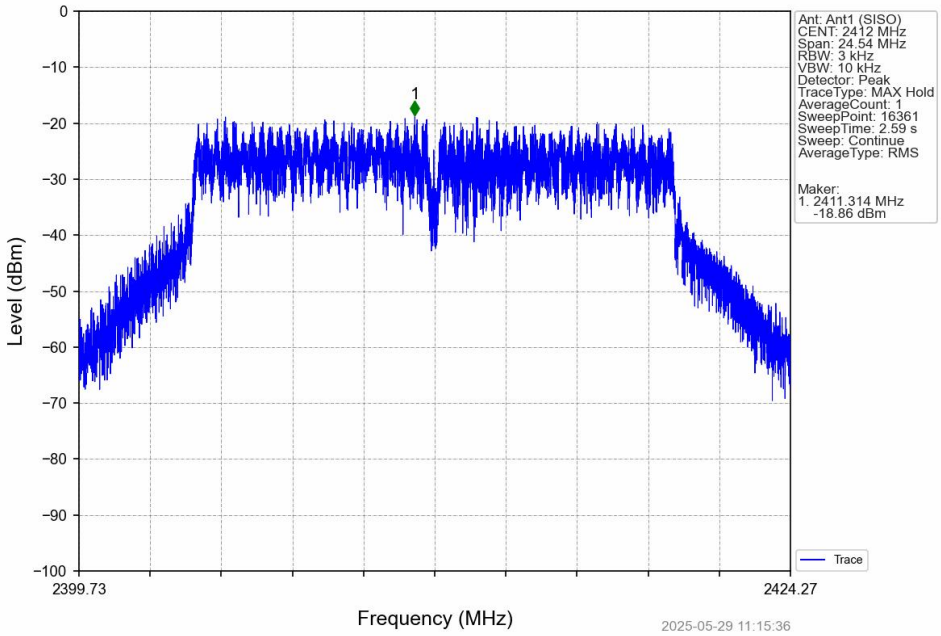
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



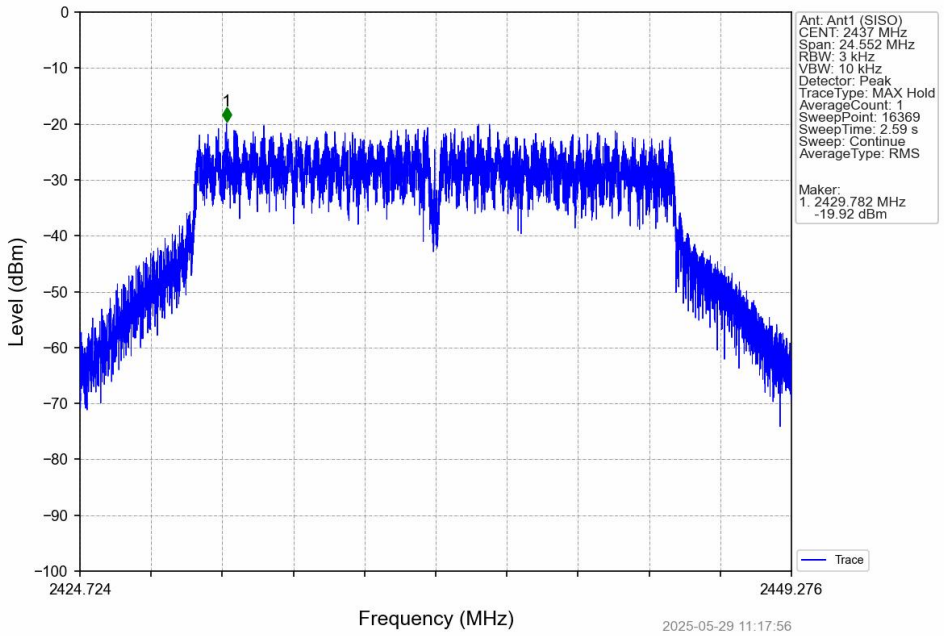
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



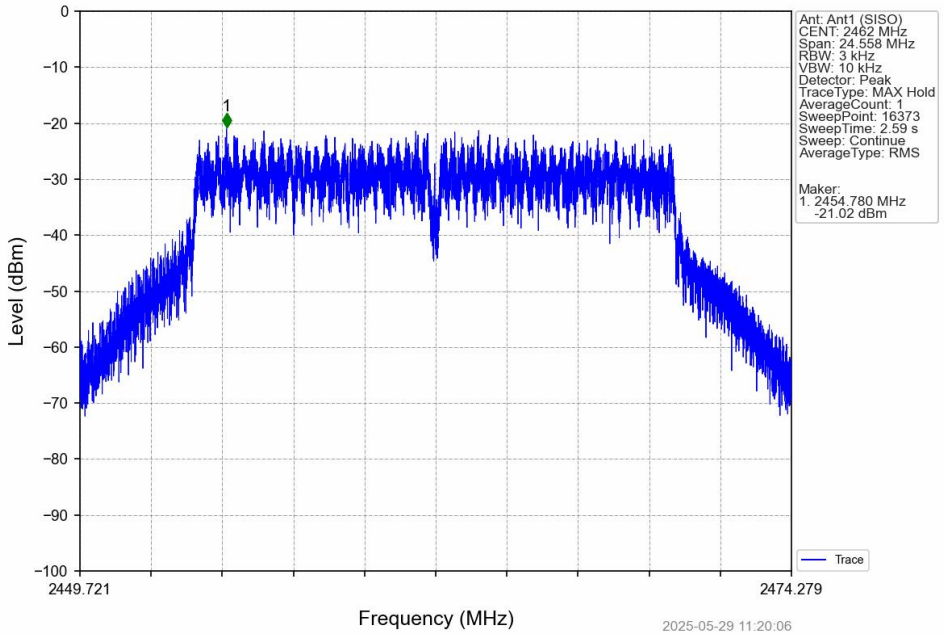
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



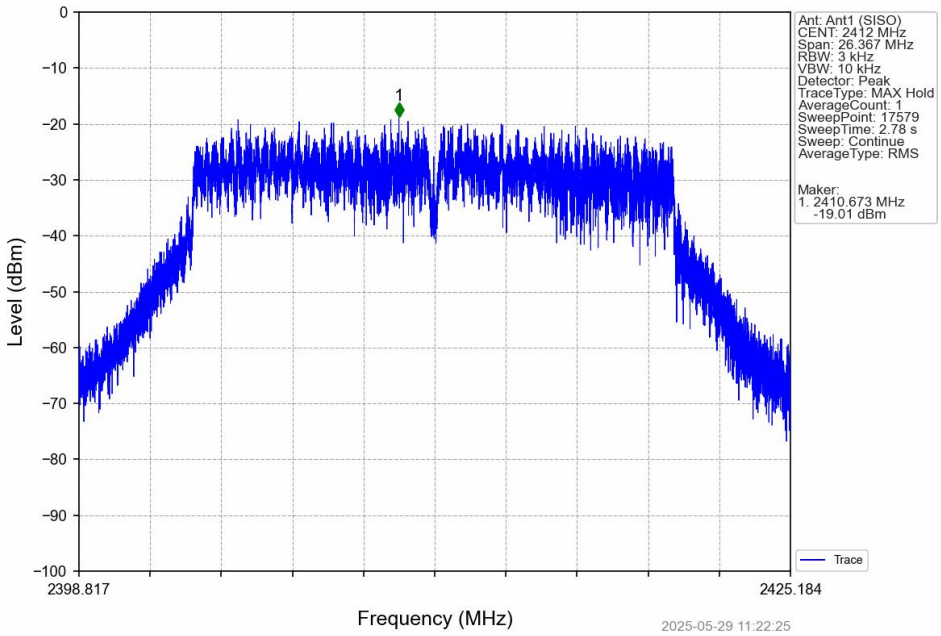
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



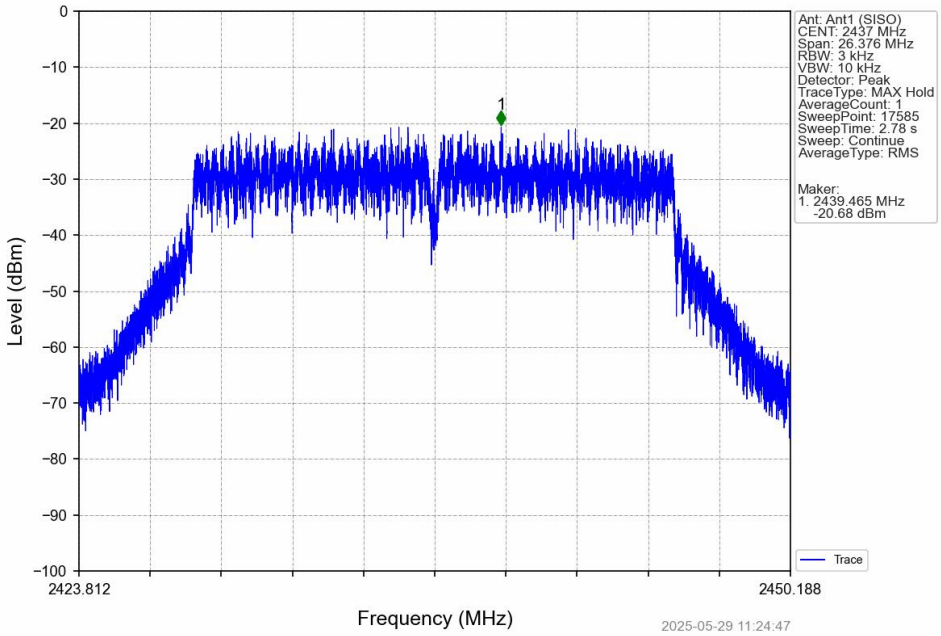
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



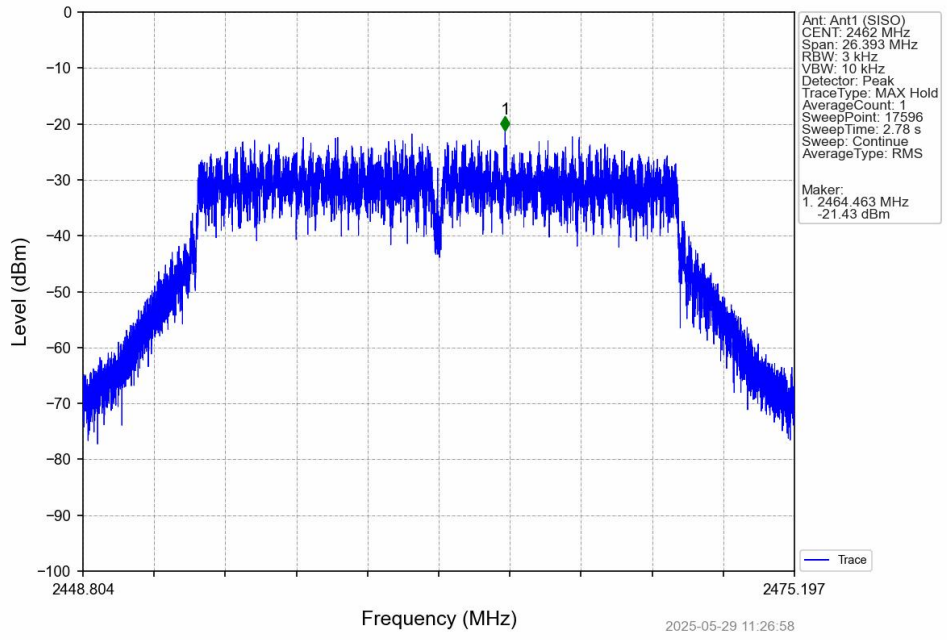
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

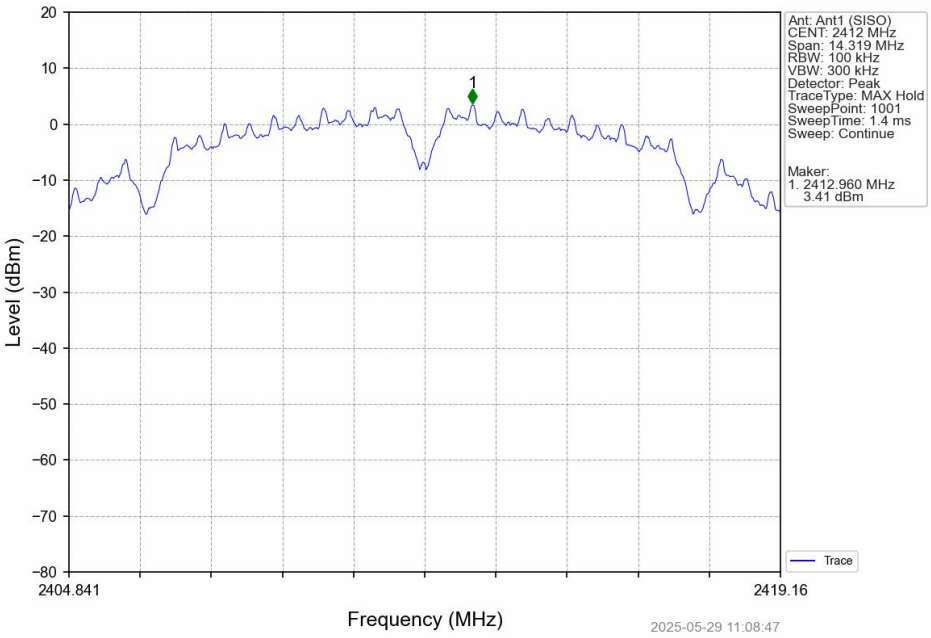


B.4 Band Edge

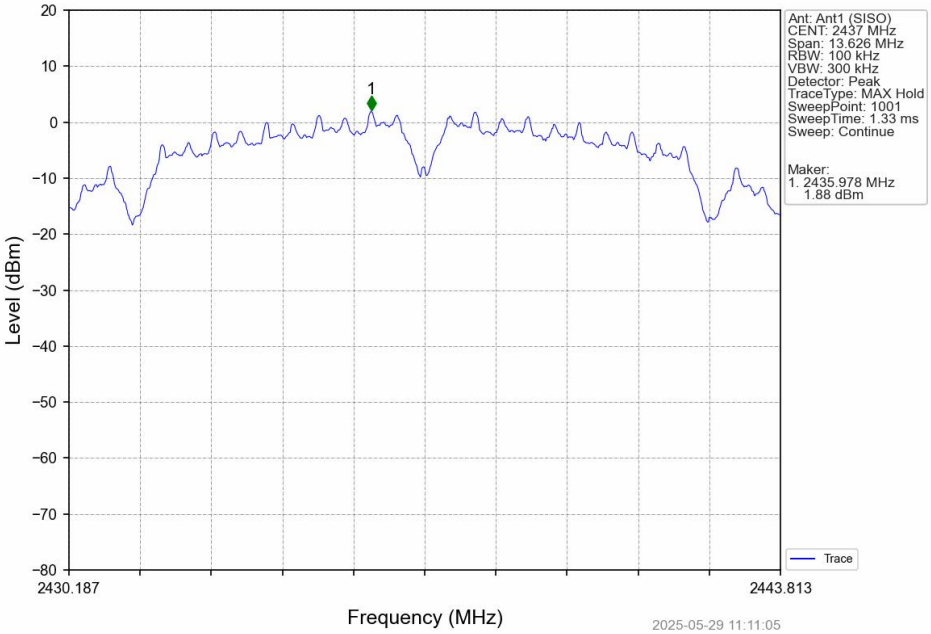
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
802.11b	SISO	2412	1	3.41	-16.59	Pass
		2437	1	1.88	-18.12	Pass
		2462	1	0.70	-19.30	Pass
802.11g	SISO	2412	1	-3.25	-23.25	Pass
		2437	1	-4.80	-24.80	Pass
		2462	1	-6.03	-26.03	Pass
802.11n (HT20)	SISO	2412	1	-4.18	-24.18	Pass
		2437	1	-5.78	-25.78	Pass
		2462	1	-7.43	-27.43	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.						

Ref

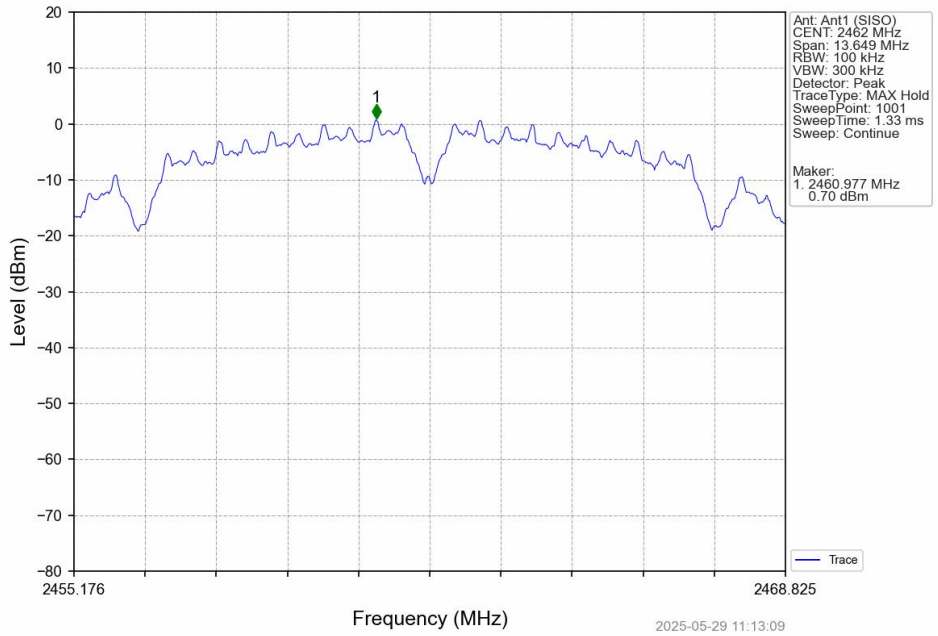
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



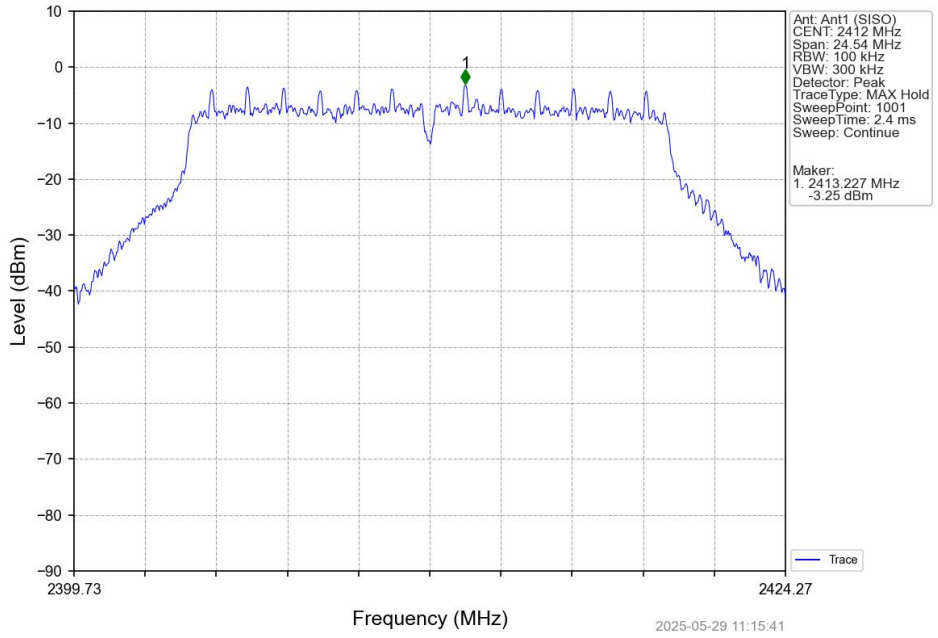
802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV



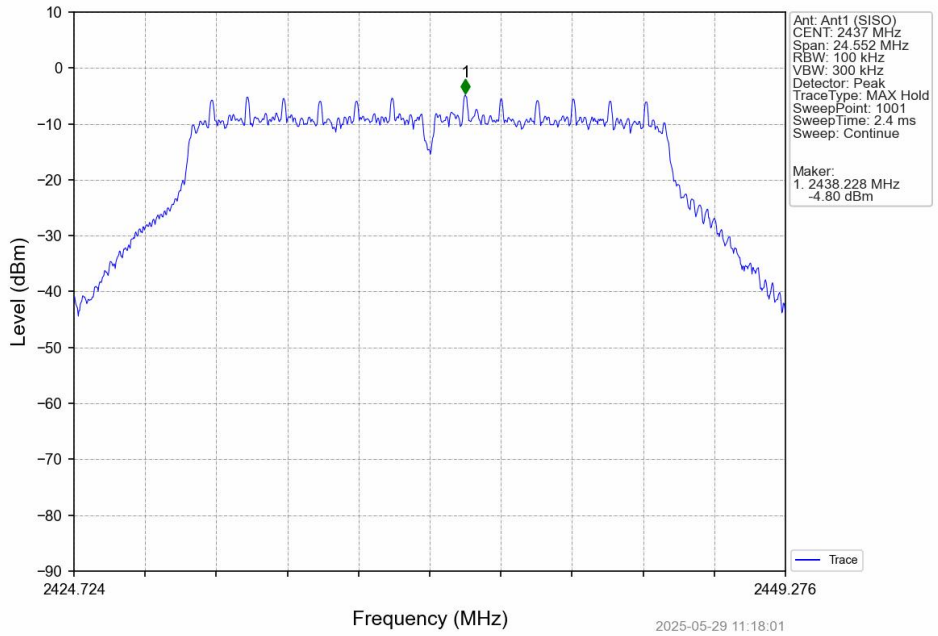
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



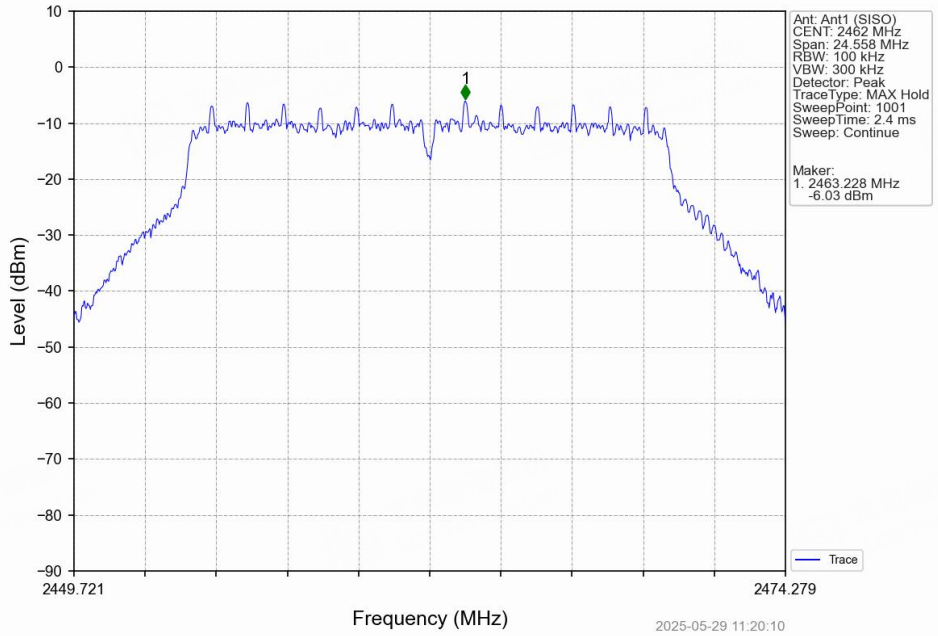
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



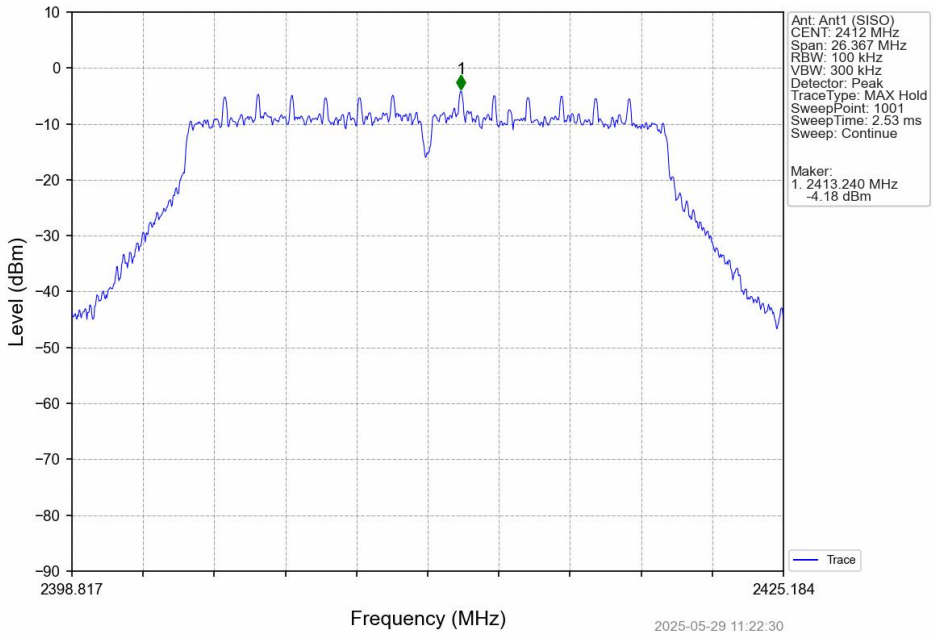
802.11g_MCH_2437MHz_Ant1 (SISO)_NTNV



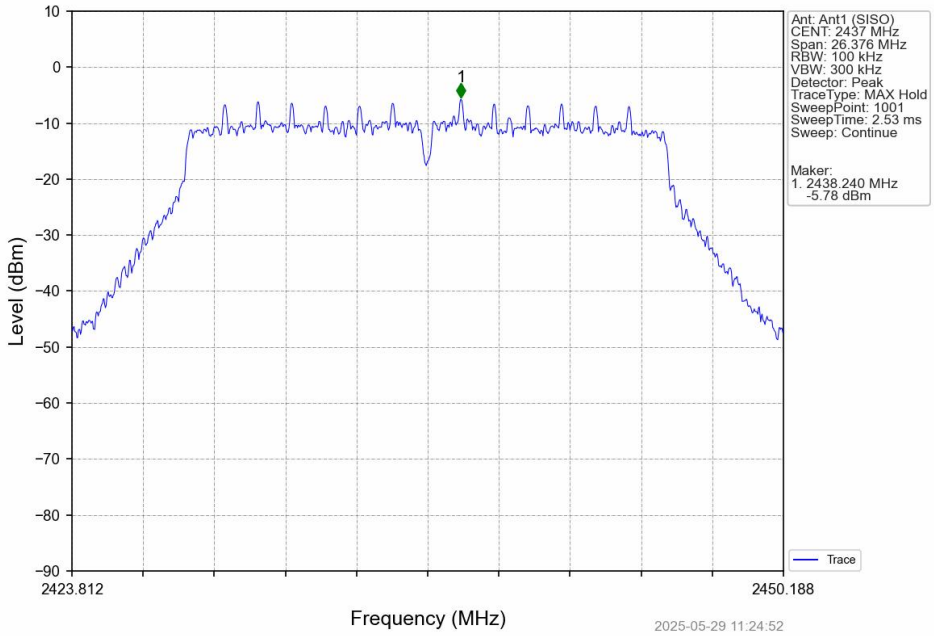
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



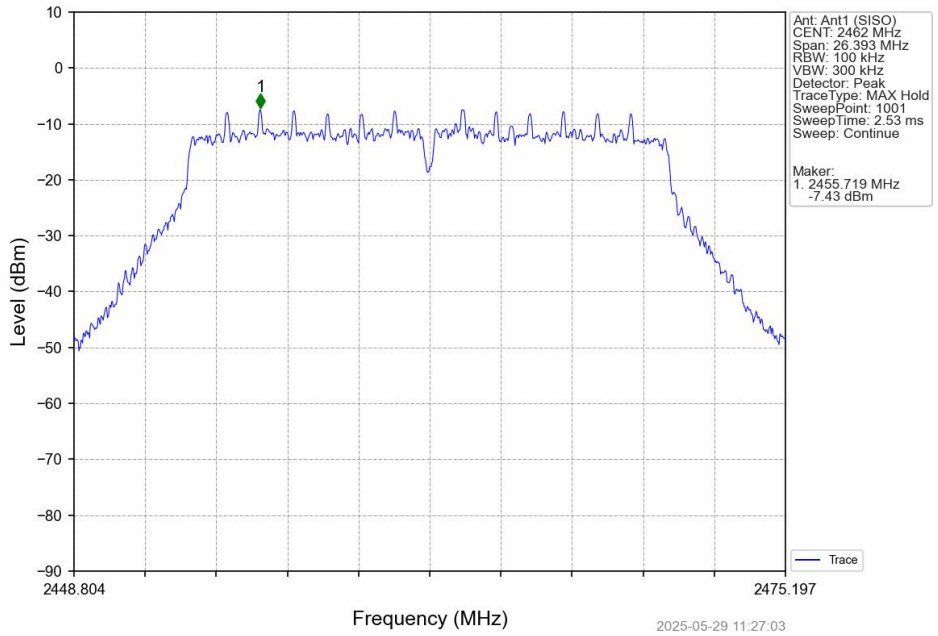
802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_MCH_2437MHz_Ant1 (SISO)_NTNV

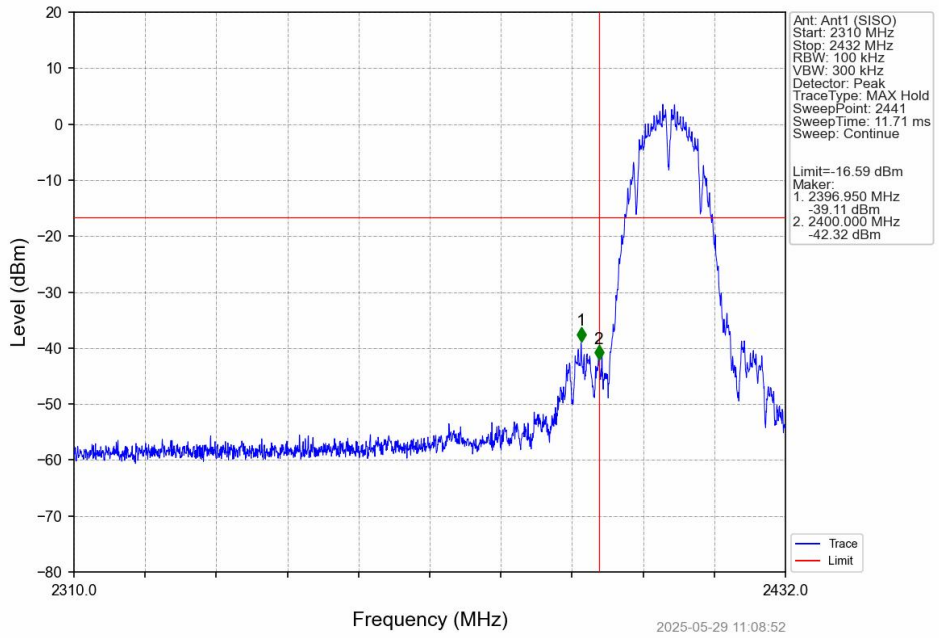


802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

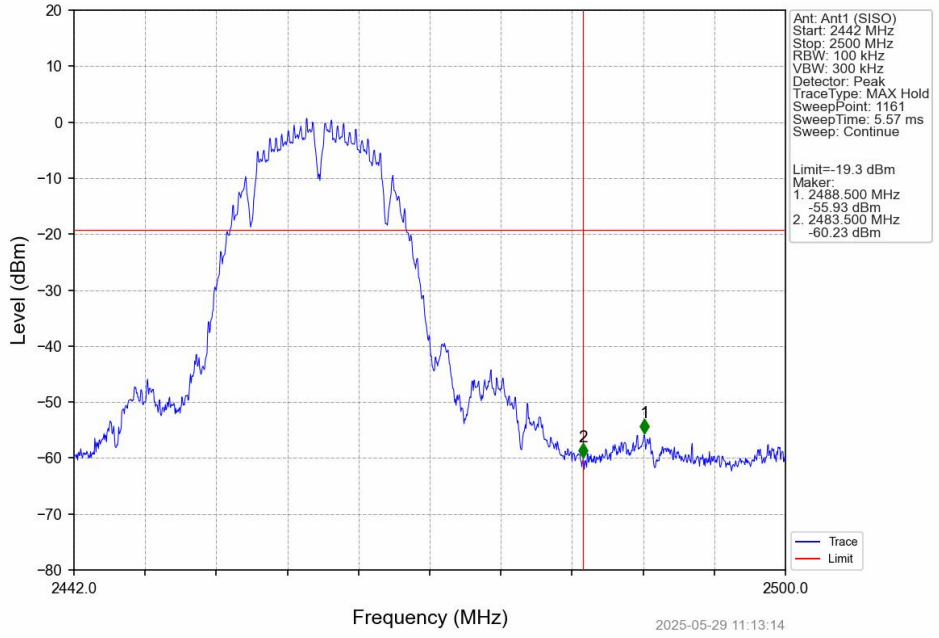


Band Edge

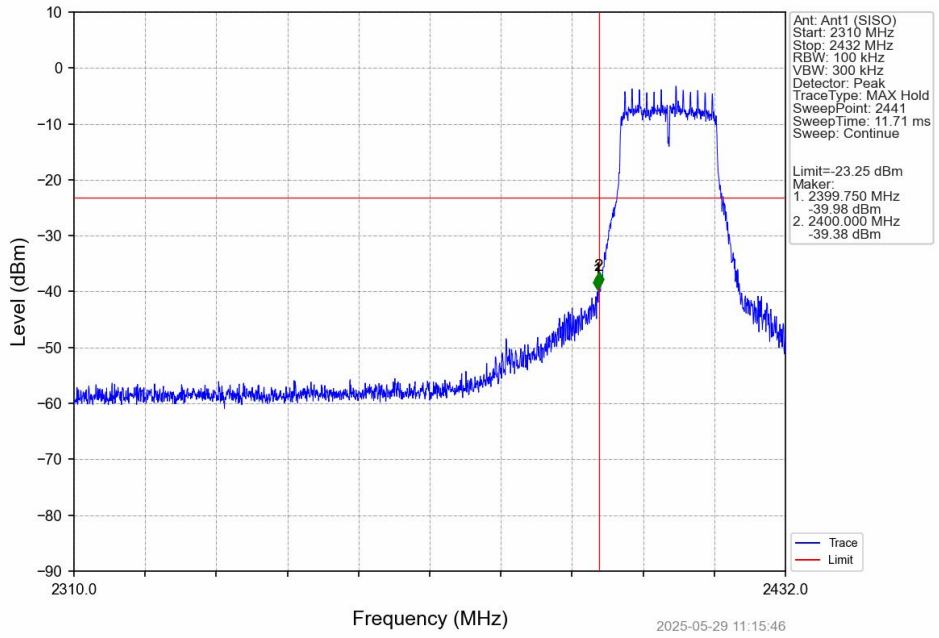
802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



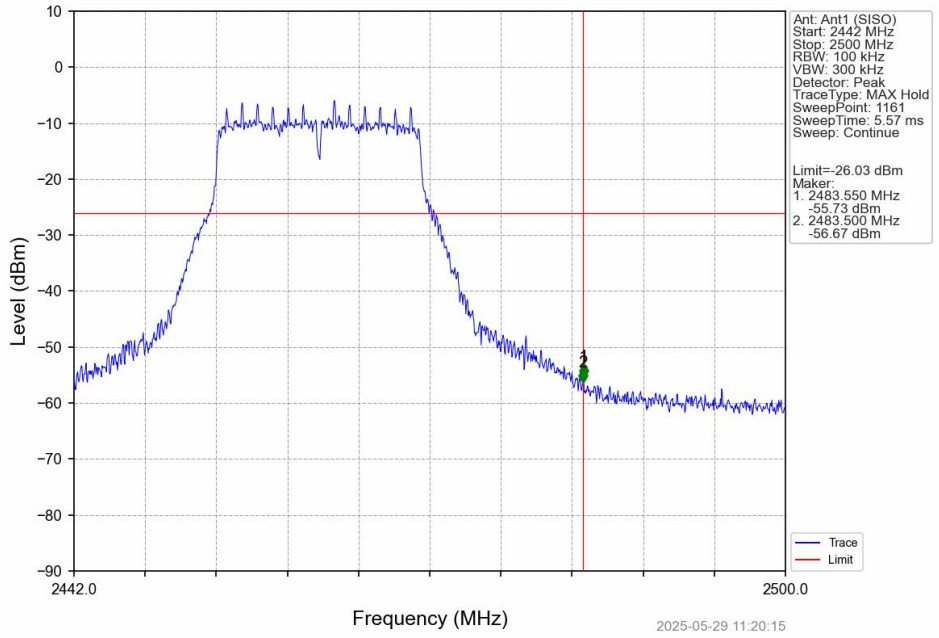
802.11b_HCH_2462MHz_Ant1 (SISO)_NTNV



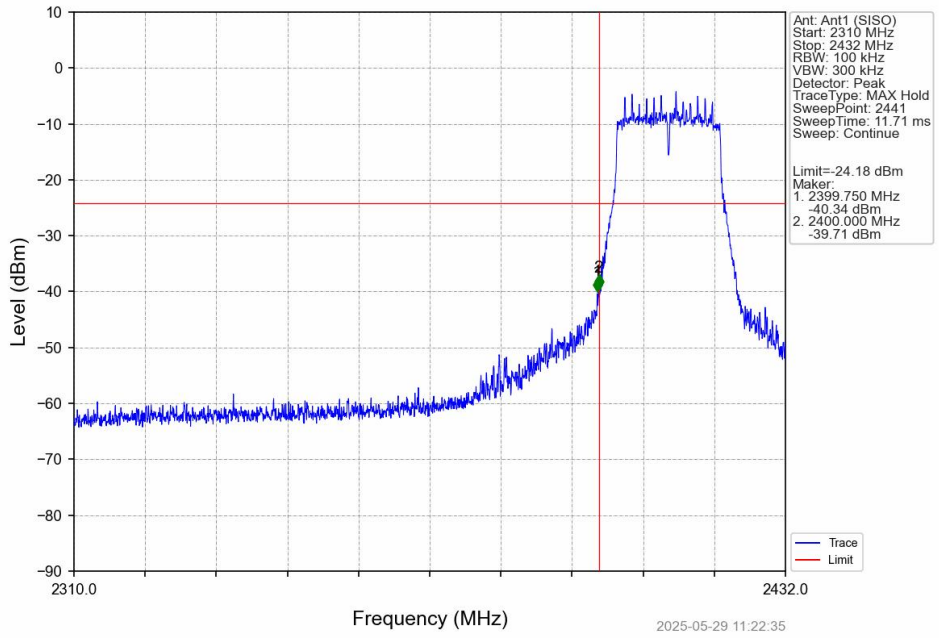
802.11g_LCH_2412MHz_Ant1 (SISO)_NTNV



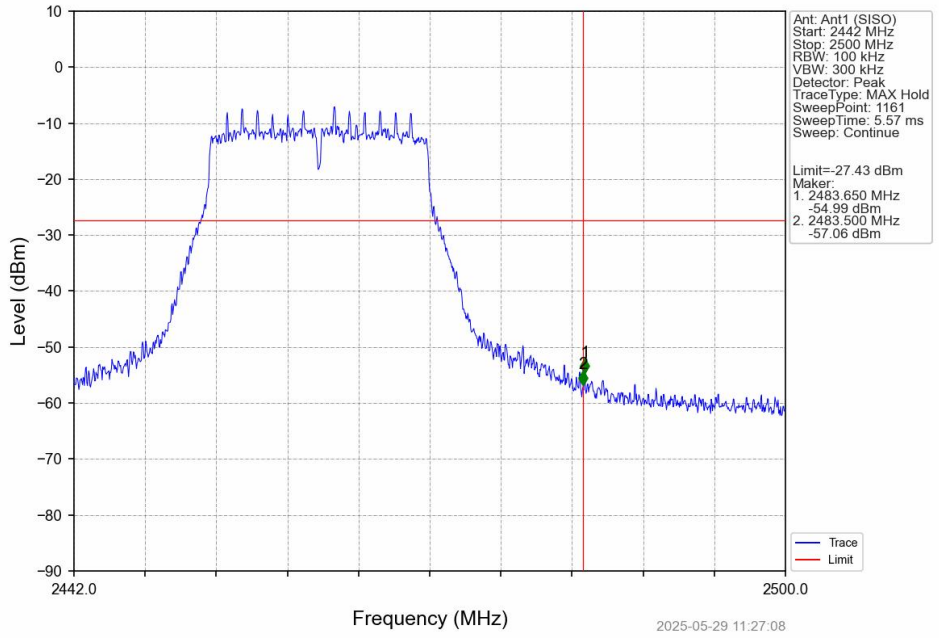
802.11g_HCH_2462MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11n(HT20)_HCH_2462MHz_Ant1 (SISO)_NTNV

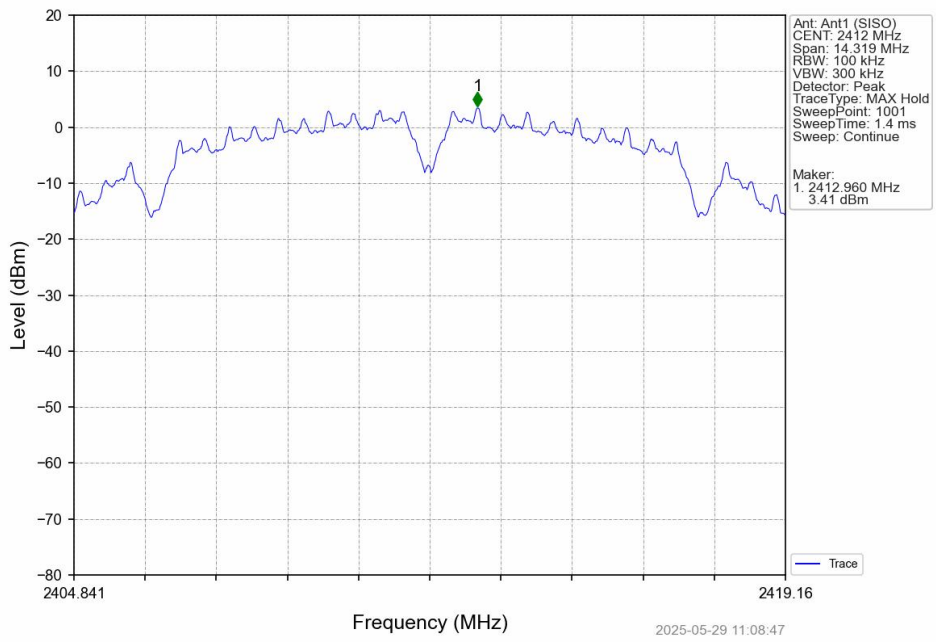


B.5 Conducted RF Spurious Emission

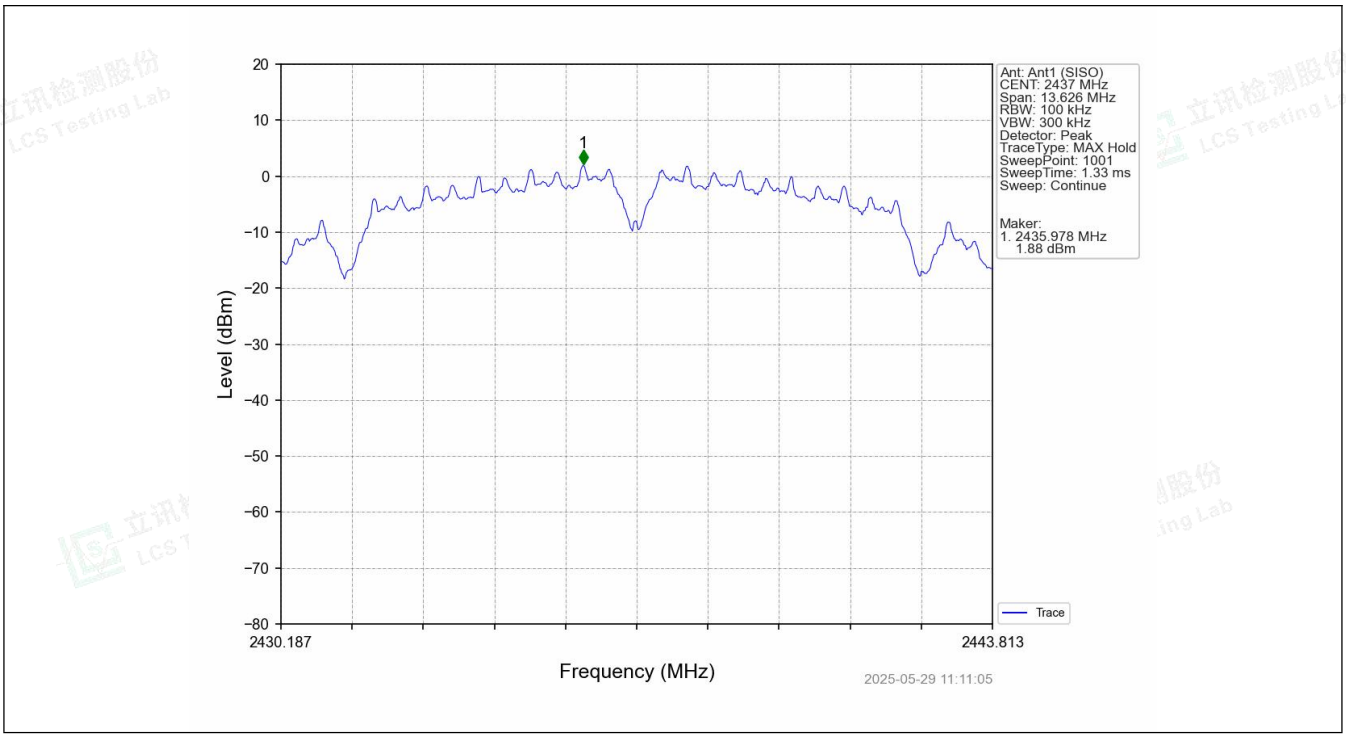
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
802.11b	SISO	2412	1	3.41
		2437	1	1.88
		2462	1	0.70
802.11g	SISO	2412	1	-3.25
		2437	1	-4.80
		2462	1	-6.03
802.11n (HT20)	SISO	2412	1	-4.18
		2437	1	-5.78
		2462	1	-7.43
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.				

Ref

802.11b_LCH_2412MHz_Ant1 (SISO)_NTNV



802.11b_MCH_2437MHz_Ant1 (SISO)_NTNV


Ant: Ant1 (SISO)
CENT: 2437 MHz
Span: 13.626 MHz
RBW: 100 kHz
VBW: 300 kHz
Detector: Peak
TraceType: MAX Hold
SweepPoint: 1001
SweepTime: 1.33 ms
Sweep: Continue
Maker:
1. 2435.978 MHz
1.88 dBm
Level (dBm)
Frequency (MHz)
2430.187
2443.813
Trace
2025-05-29 11:11:05