ANNEX E TEST DATA

For

Project No.:	8232EU012003W
Client:	SANWA LIMITED
Product Description:	Bluetooth wireless mouse (ergonomics/dolphin shape)
Model No.:	GMAERGWBT5-DPH
FCC ID:	2AMSUGMAERGWBT5-DPH
Technology:	2.4G ISM Proprietary Band
Test Engineer:	Mikey zhu
Test Date:	2024-10-24

Test Summary

Item	Result
Duty Cycle	Pass
Bandwidth	Pass
Maximum Conducted Output Power	Pass
Maximum Power Spectral Density	Pass
Unwanted Emissions In Non-restricted Frequency Bands	Pass

1. Duty Cycle

1.1 Test Result

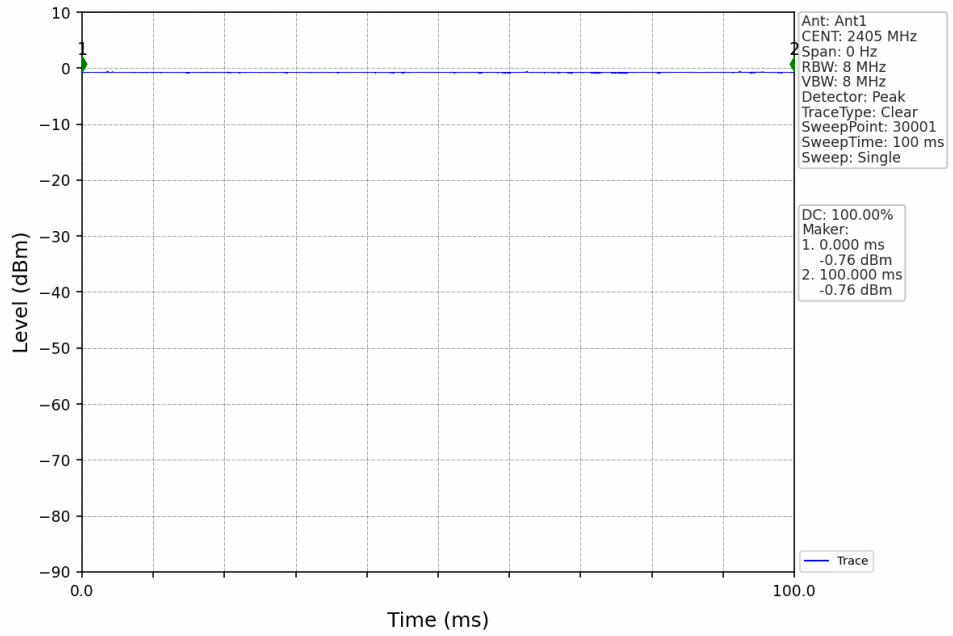
1.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
2.4g	SISO	2405	100.000	100.000	100.00	0.00	0.00
		2430	100.000	100.000	100.00	0.00	0.00
		2470	100.000	100.000	100.00	0.00	0.00

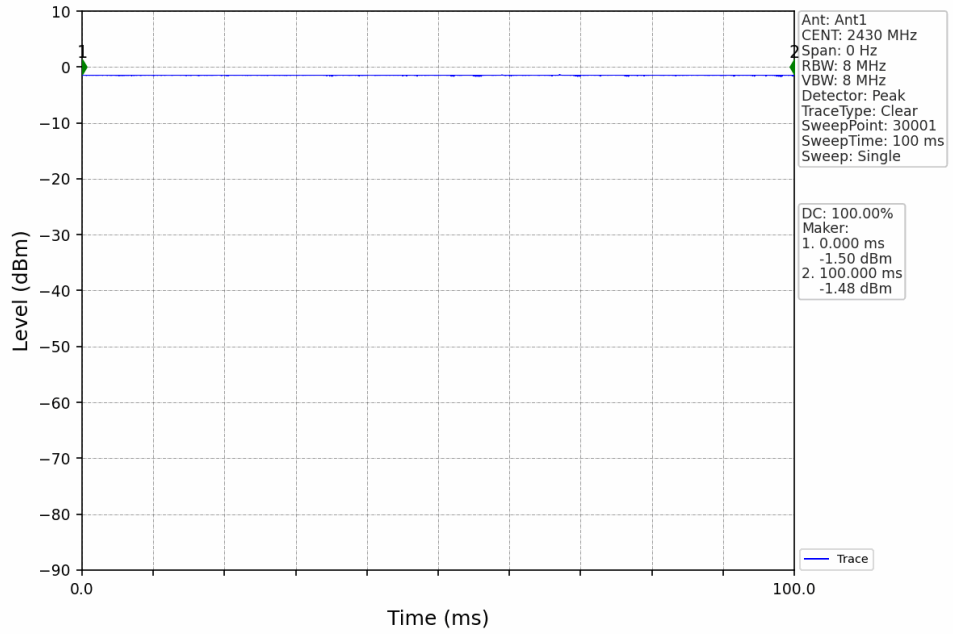
1.2 Test Graph

1.2.1 Ant1

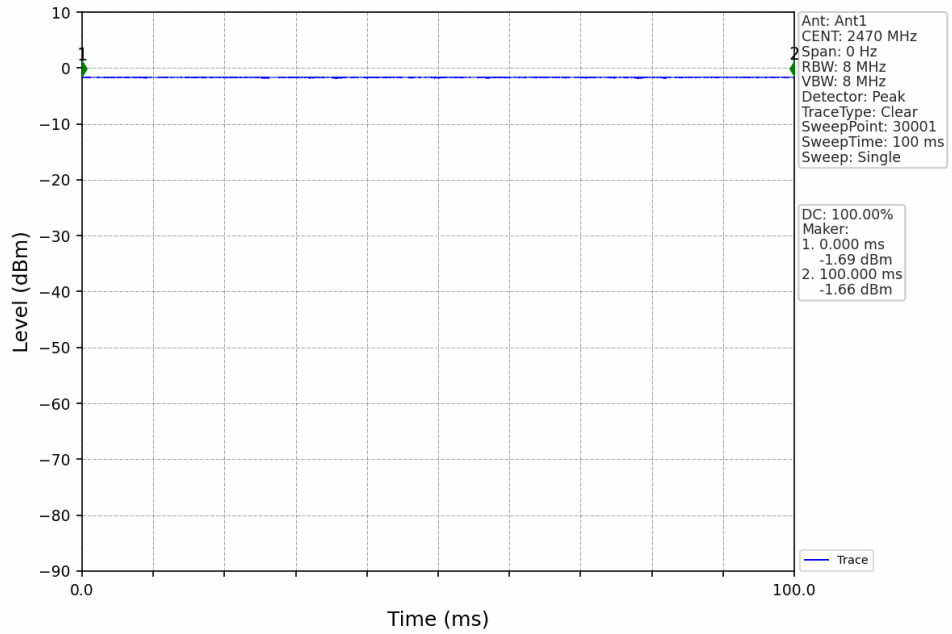
2.4g_LCH_2405MHz_Ant1_NTNV



2.4g_MCH_2430MHz_Ant1_NTNV



2.4g_HCH_2470MHz_Ant1_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
2.4g	SISO	2405	1	2.038	/	Pass
		2430	1	2.036	/	Pass
		2470	1	2.047	/	Pass

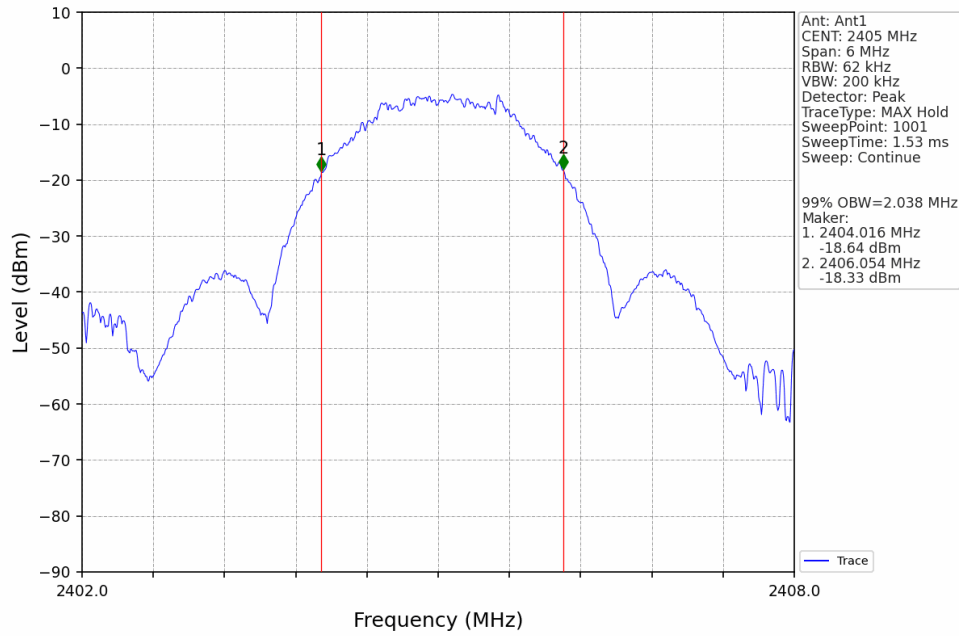
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
2.4g	SISO	2405	1	1.394	>=0.5	Pass
		2430	1	1.355	>=0.5	Pass
		2470	1	1.369	>=0.5	Pass

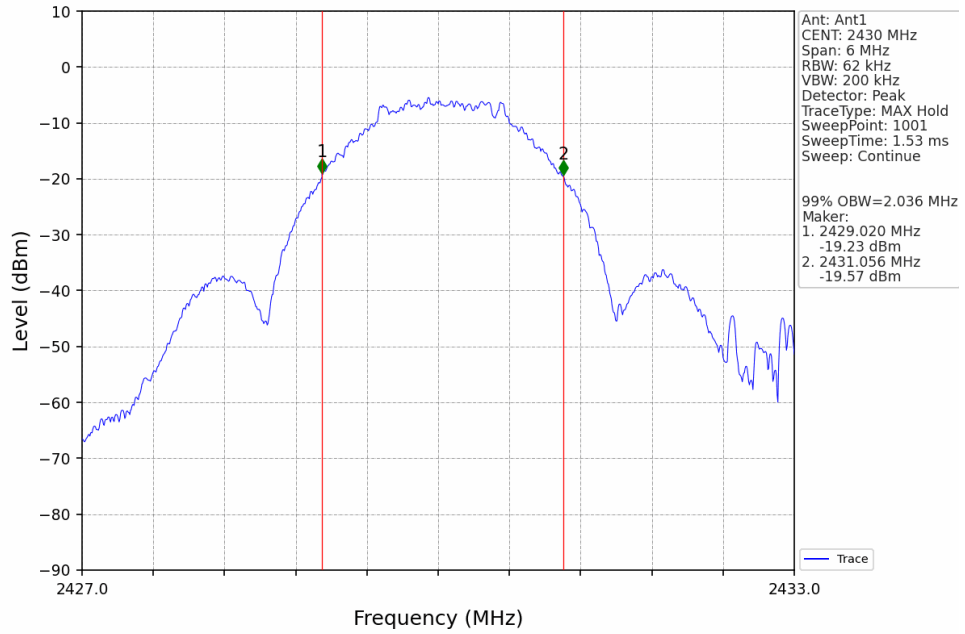
2.2 Test Graph

2.2.1 OBW

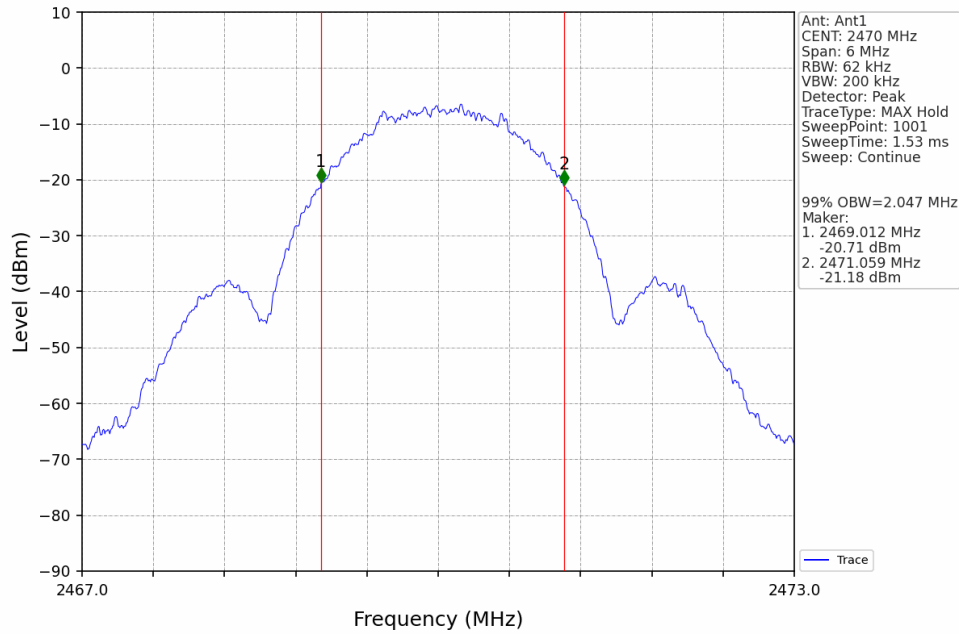
2.4g_LCH_2405MHz_Ant1_NTNV



2.4g_MCH_2430MHz_Ant1_NTNV

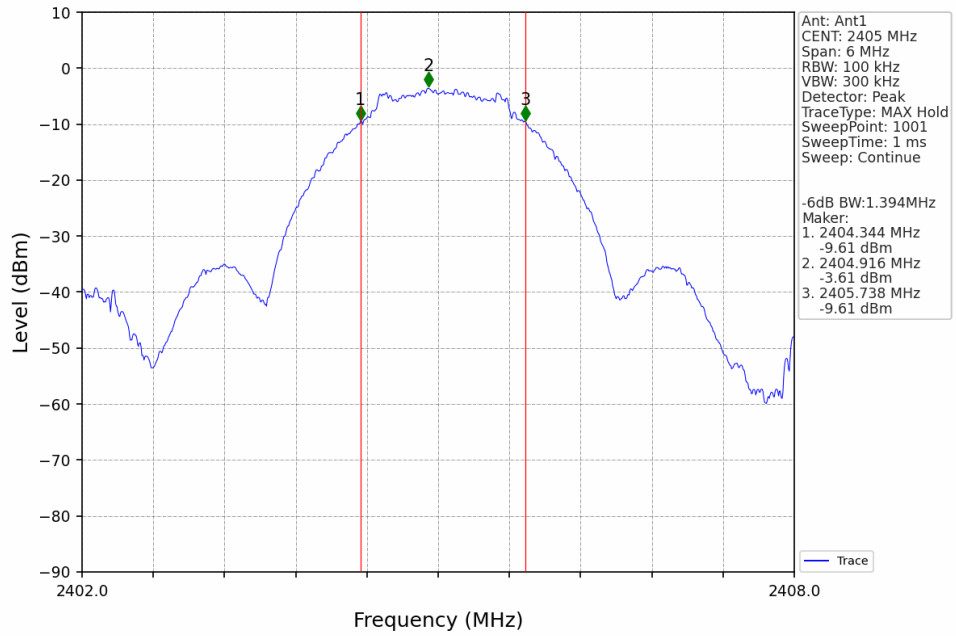


2.4g_HCH_2470MHz_Ant1_NTNV

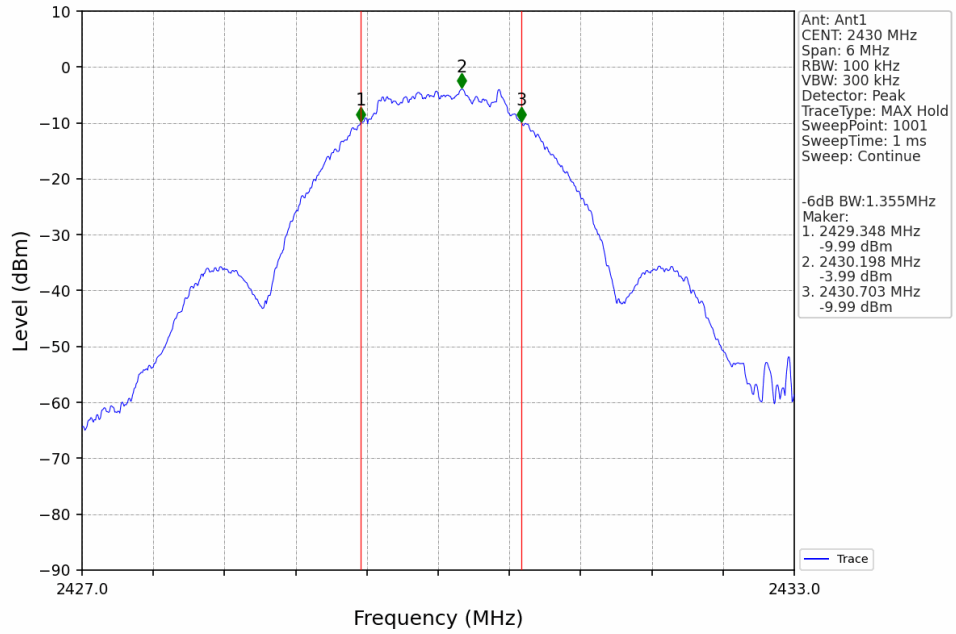


2.2.2 6dB BW

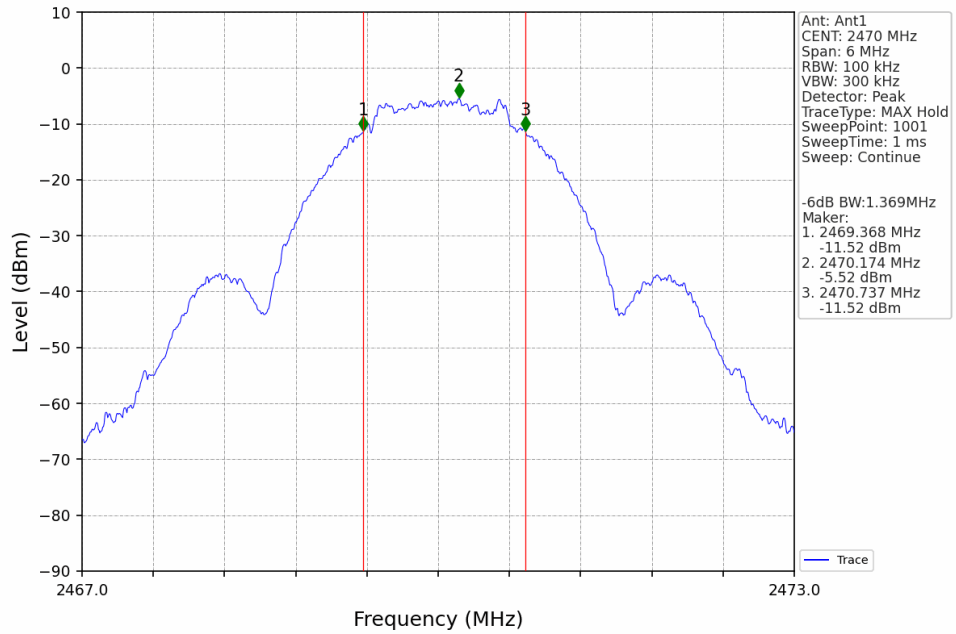
2.4g_LCH_2405MHz_Ant1_NTNV



2.4g_MCH_2430MHz_Ant1_NTNV



2.4g_HCH_2470MHz_Ant1_NTNV



3. Maximum Conducted Output Power

3.1 Test Result

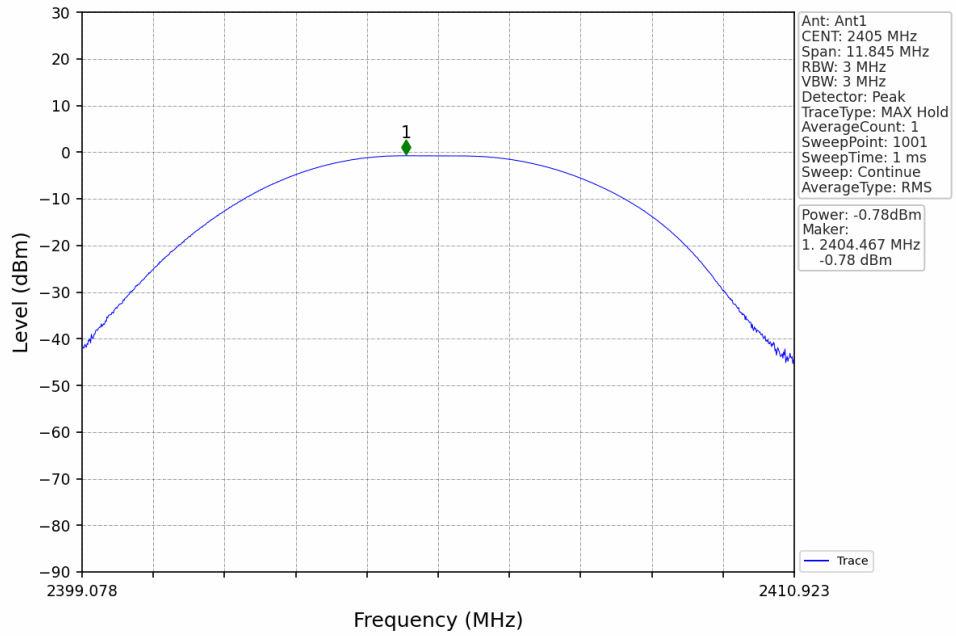
3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
2.4g	SISO	2405	-0.78	<=30	Pass
		2430	-1.49	<=30	Pass
		2470	-1.69	<=30	Pass

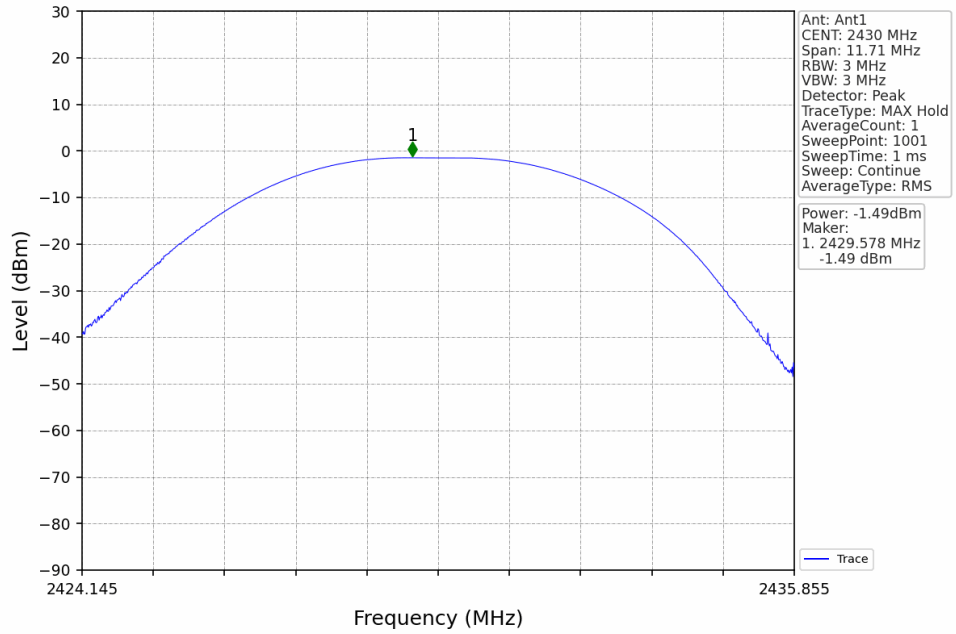
3.2 Test Graph

3.2.1 Power

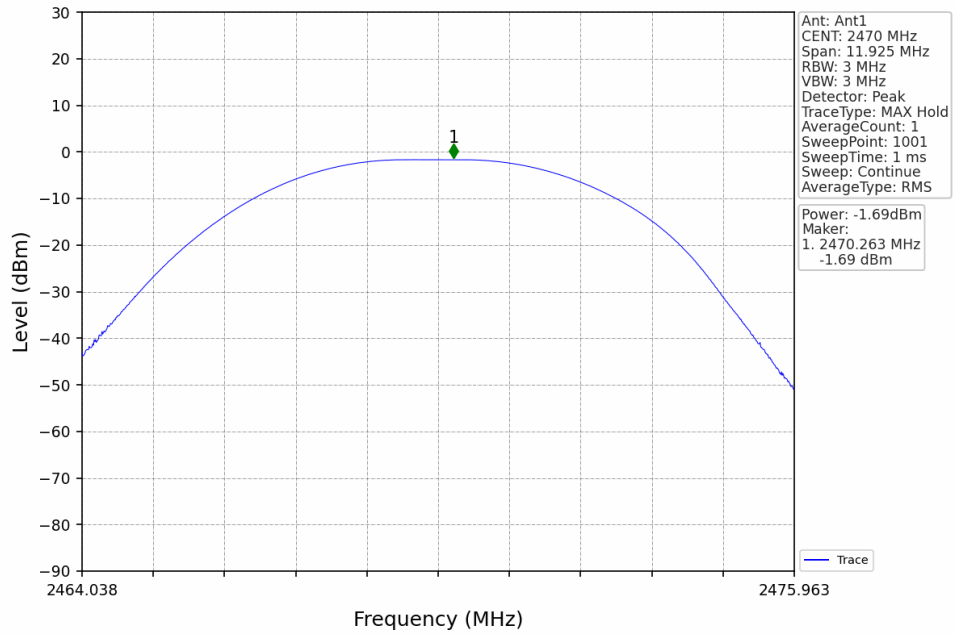
2.4g_LCH_2405MHz_Ant1_NTNV



2.4g_MCH_2430MHz_Ant1_NTNV



2.4g_HCH_2470MHz_Ant1_NTNV



4. Maximum Power Spectral Density

4.1 Test Result

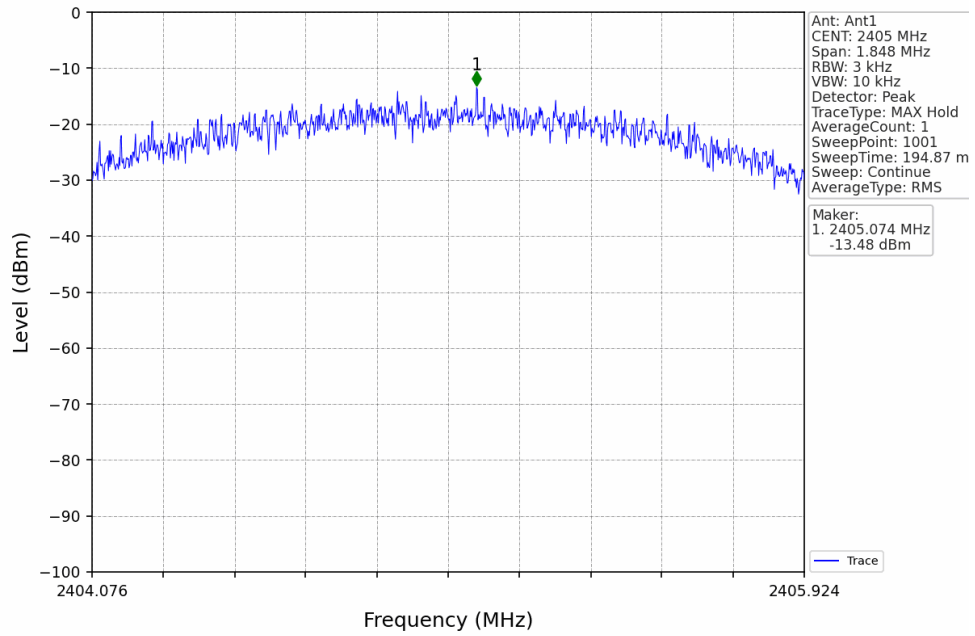
4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
2.4g	SISO	2405	-13.48	<=8	Pass
		2430	-13.35	<=8	Pass
		2470	-13.89	<=8	Pass

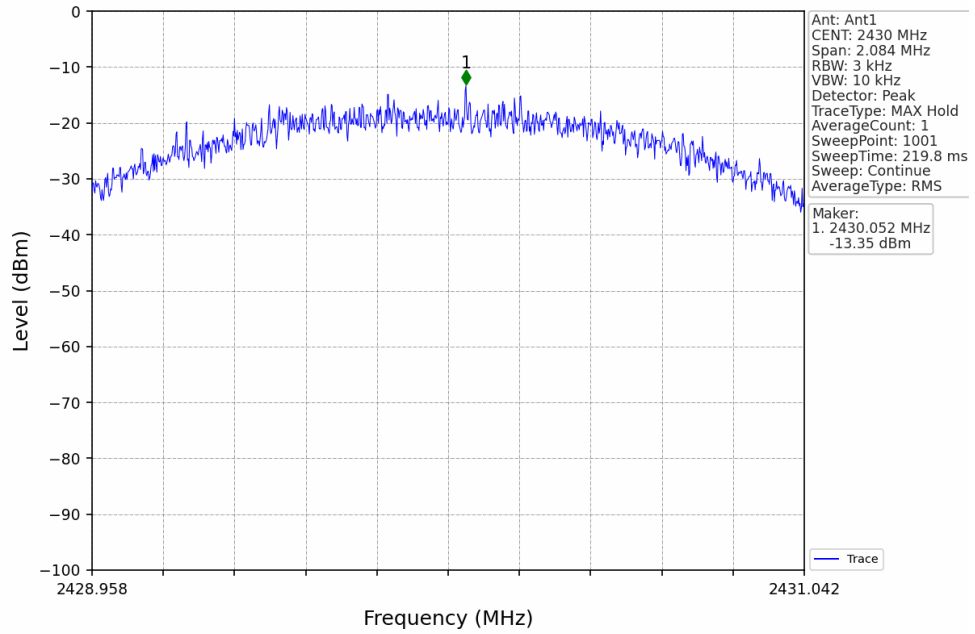
4.2 Test Graph

4.2.1 PSD

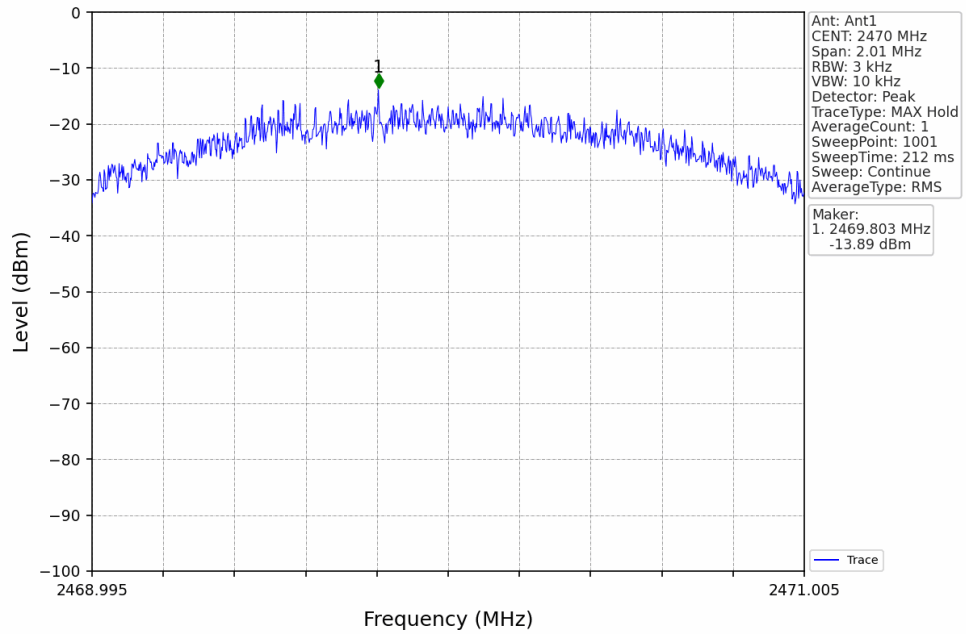
2.4g_LCH_2405MHz_Ant1_NTNV



2.4g_MCH_2430MHz_Ant1_NTNV



2.4g_HCH_2470MHz_Ant1_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)
2.4g	SISO	2405	1	-2.17
		2430	1	-3.27
		2470	1	-2.91
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.				

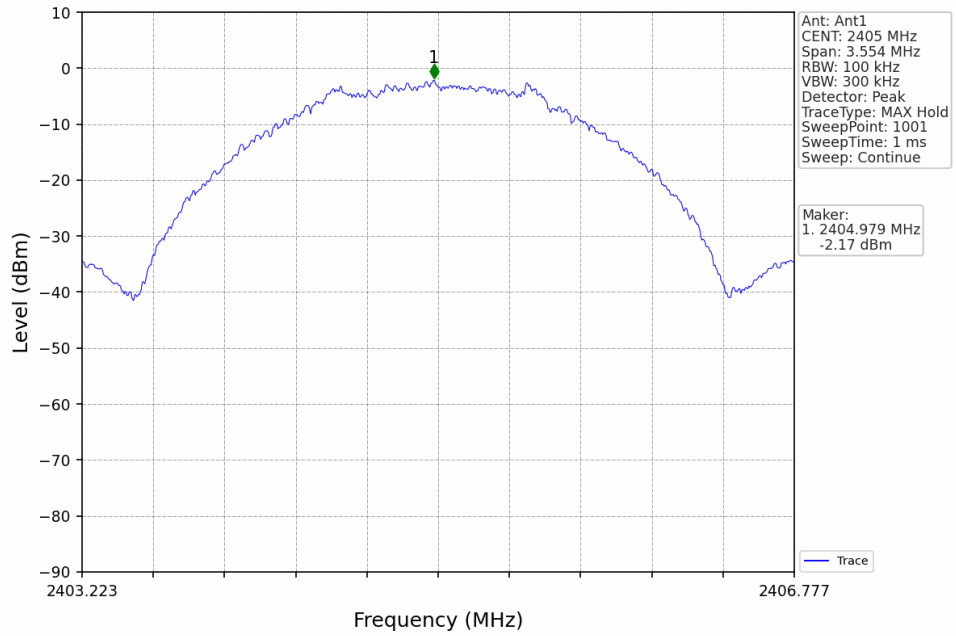
5.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
2.4g	SISO	2405	1	-2.17	-22.17	Pass
		2430	1	-3.27	-23.27	Pass
		2470	1	-2.91	-22.91	Pass
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.						

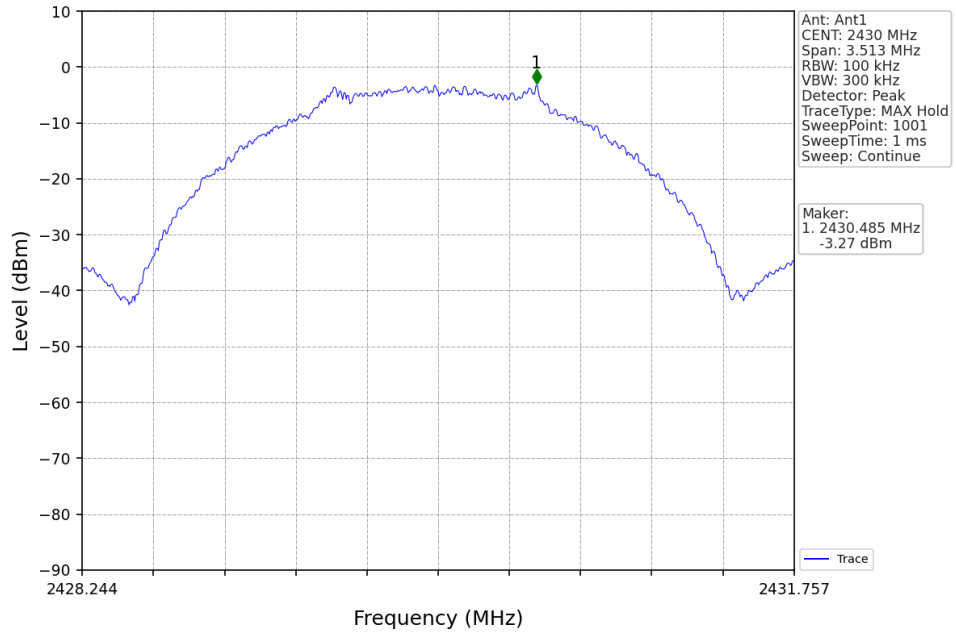
5.2 Test Graph

5.2.1 Ref

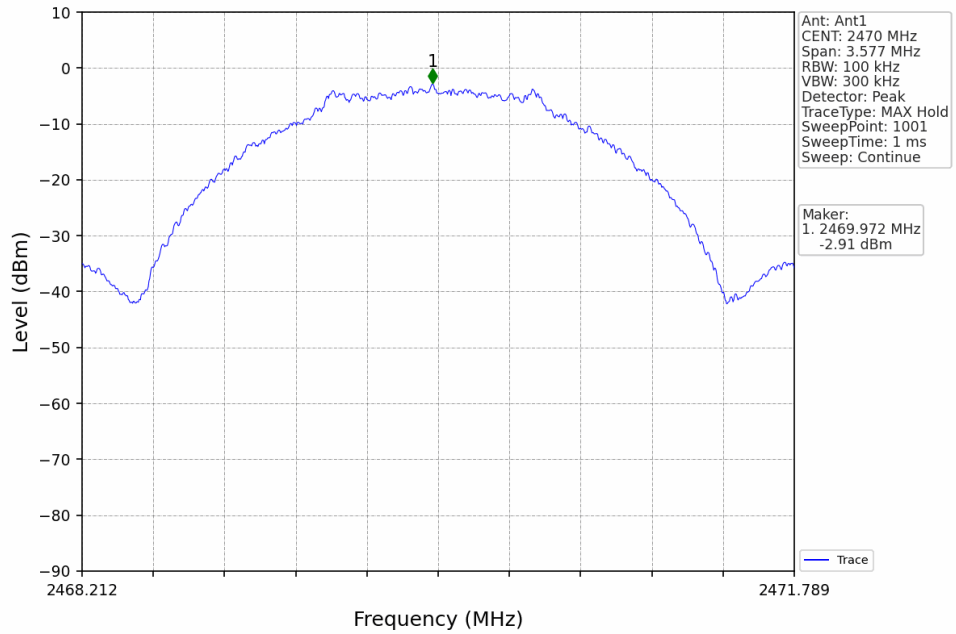
2.4g_LCH_2405MHz_Ant1_NTNV



2.4g_MCH_2430MHz_Ant1_NTNV

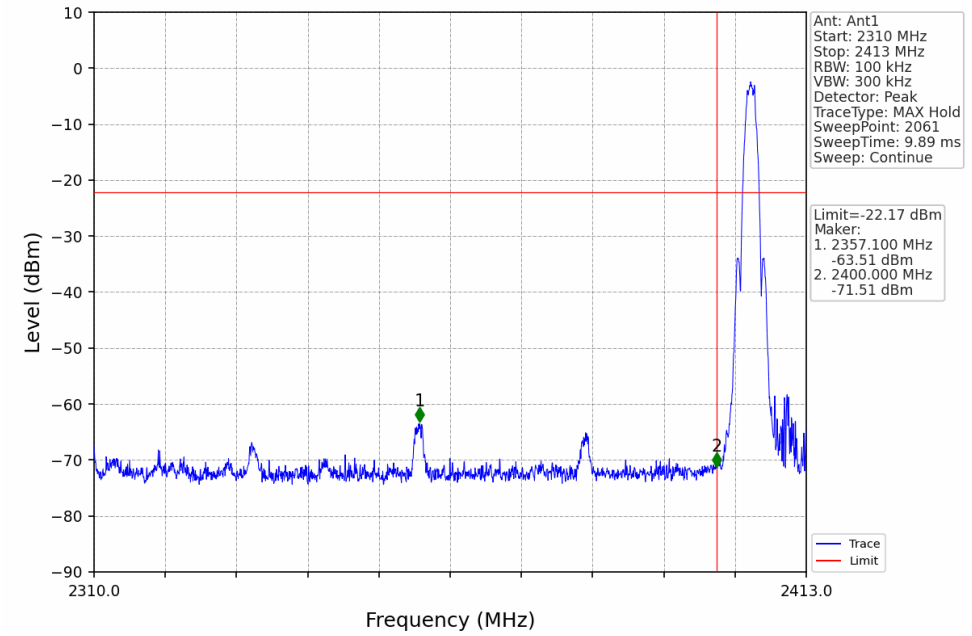


2.4g_HCH_2470MHz_Ant1_NTNV

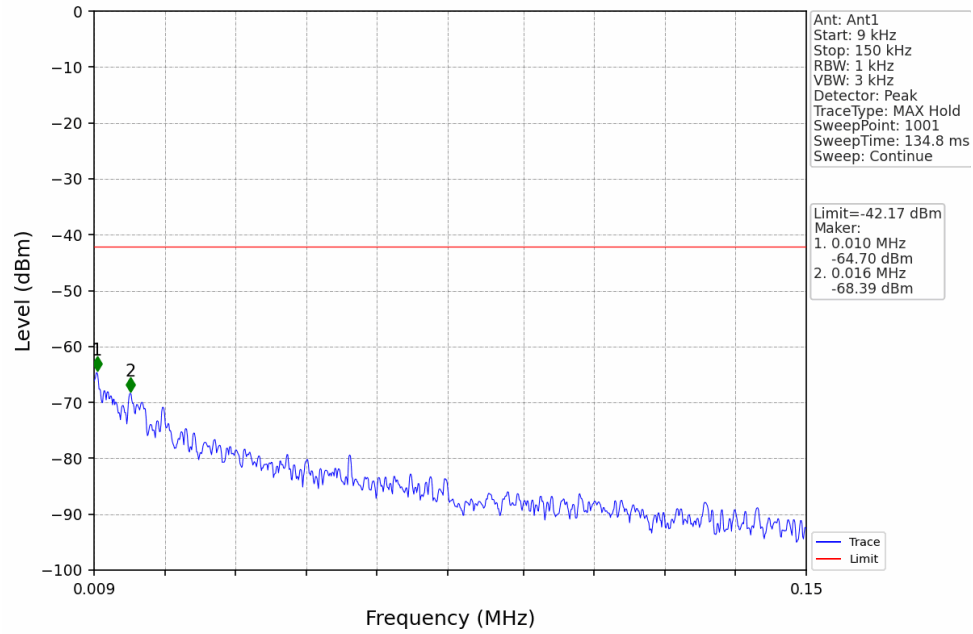


5.2.2 CSE

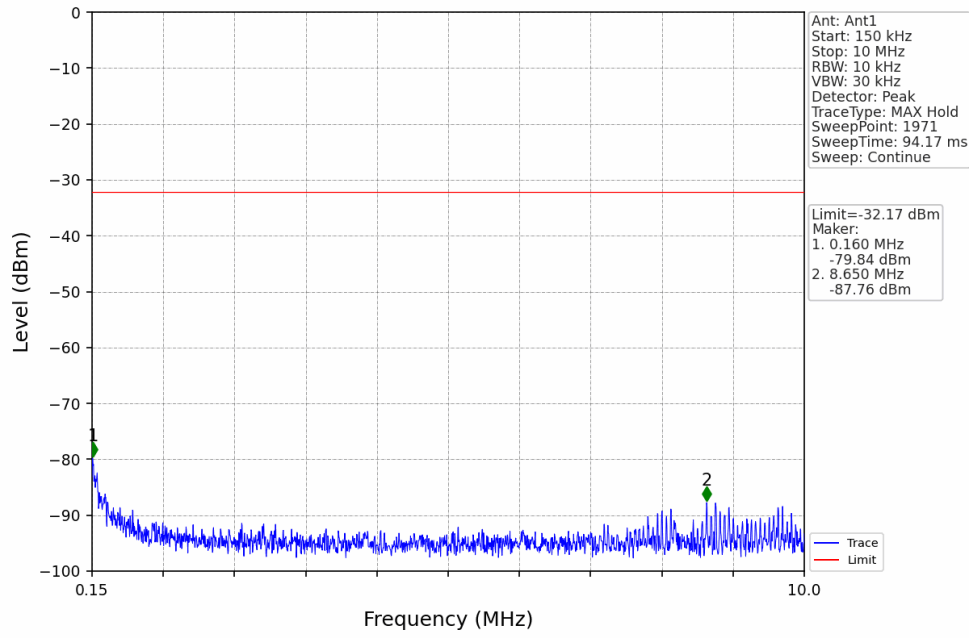
2.4g_LCH_2405MHz_Ant1_NTNV



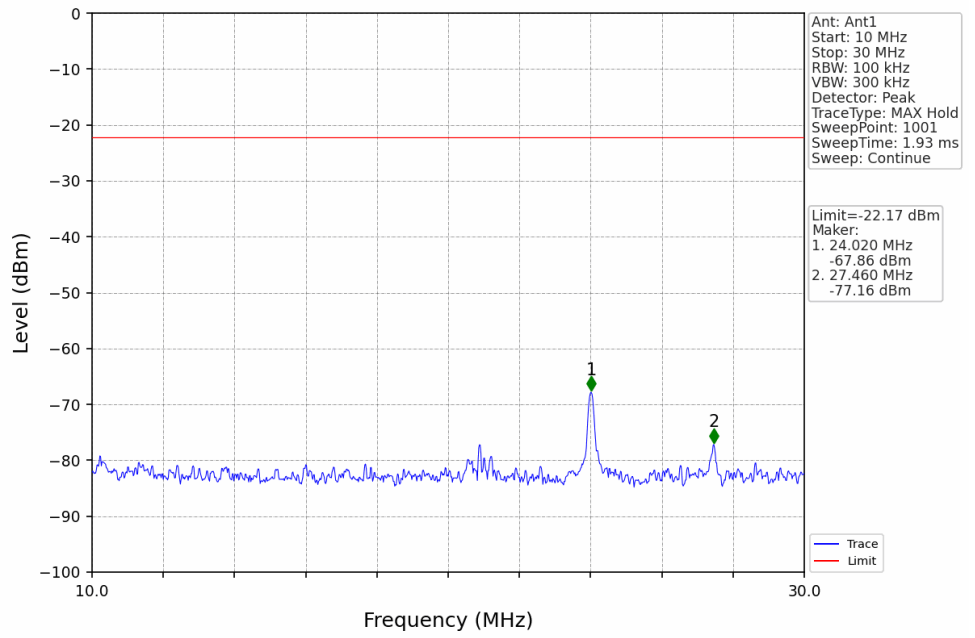
2.4g_LCH_2405MHz_Ant1_NTNV



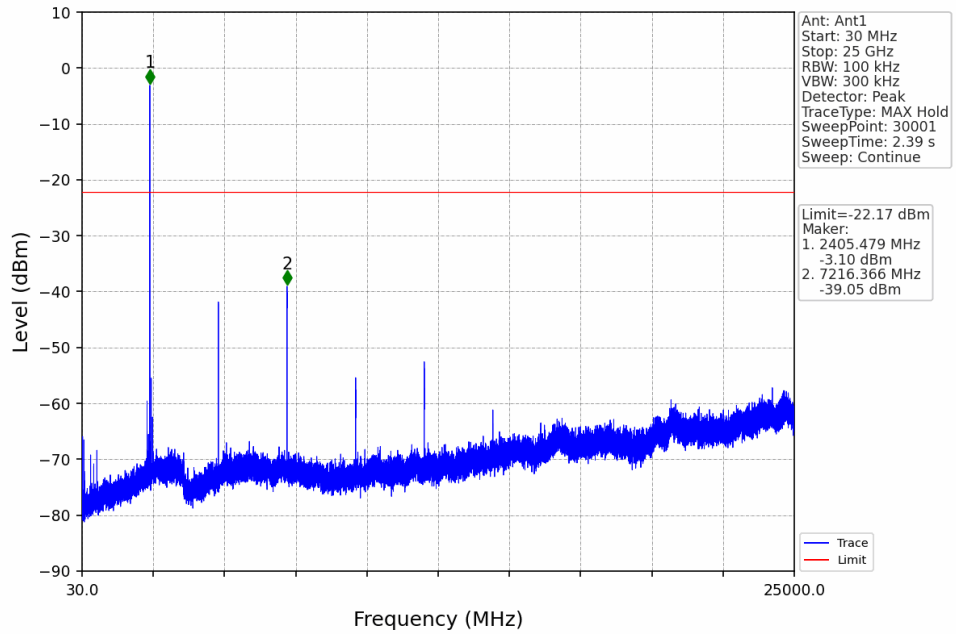
2.4g_LCH_2405MHz_Ant1_NTNV



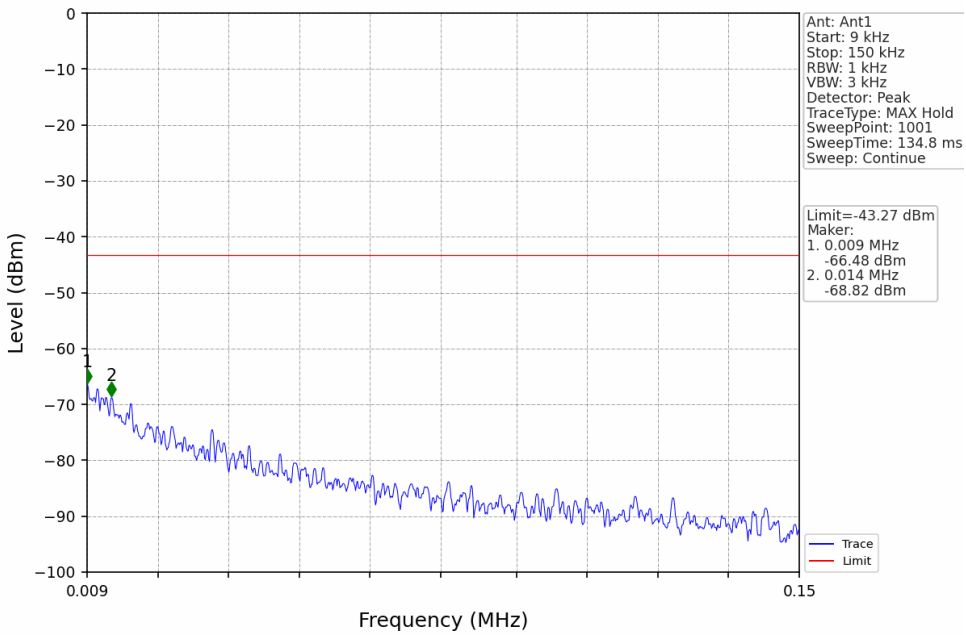
2.4g_LCH_2405MHz_Ant1_NTNV



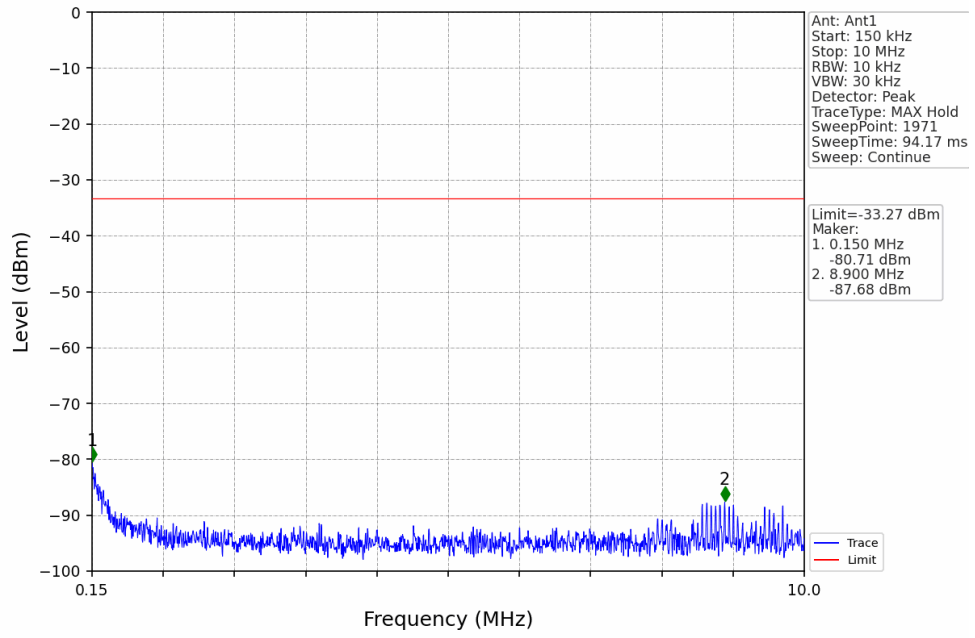
2.4g_LCH_2405MHz_Ant1_NTNV



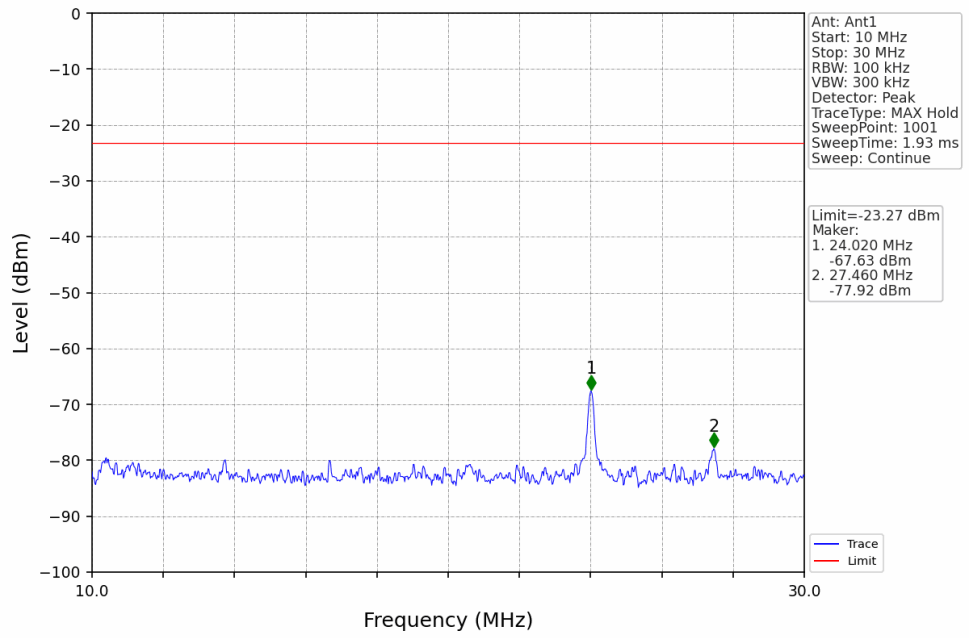
2.4g_MCH_2430MHz_Ant1_NTNV



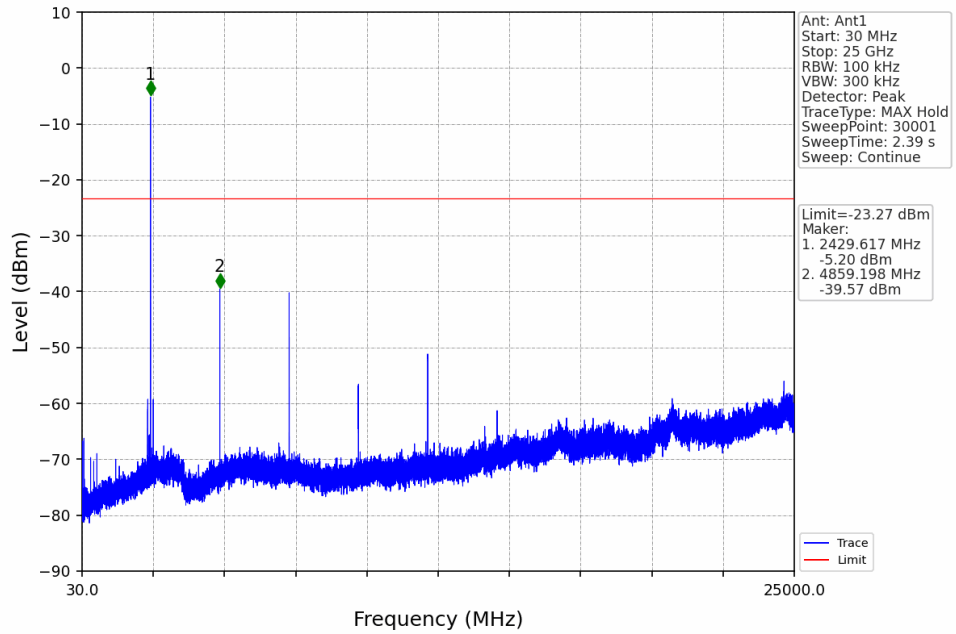
2.4g_MCH_2430MHz_Ant1_NTNV



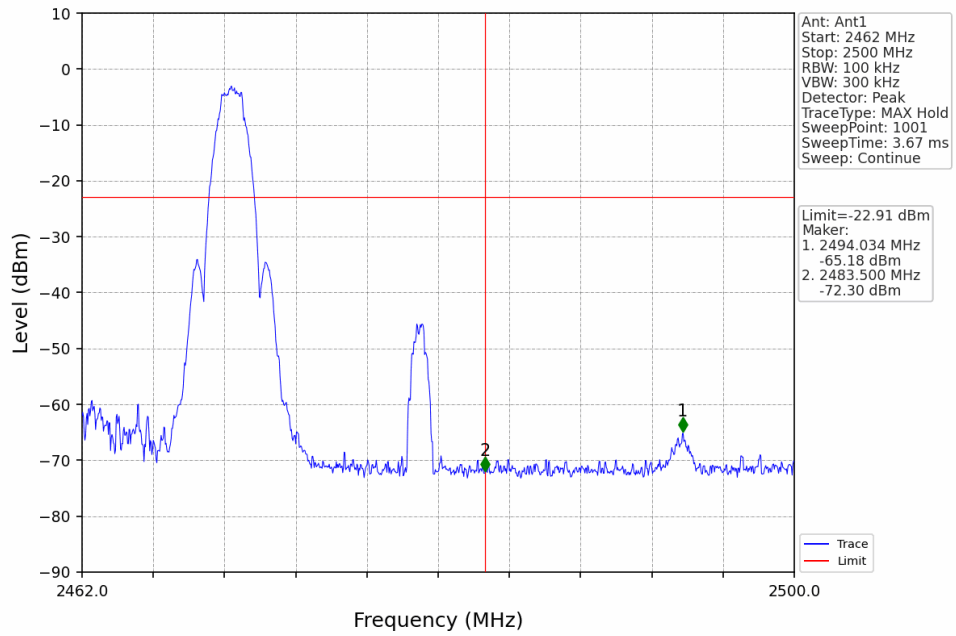
2.4g_MCH_2430MHz_Ant1_NTNV



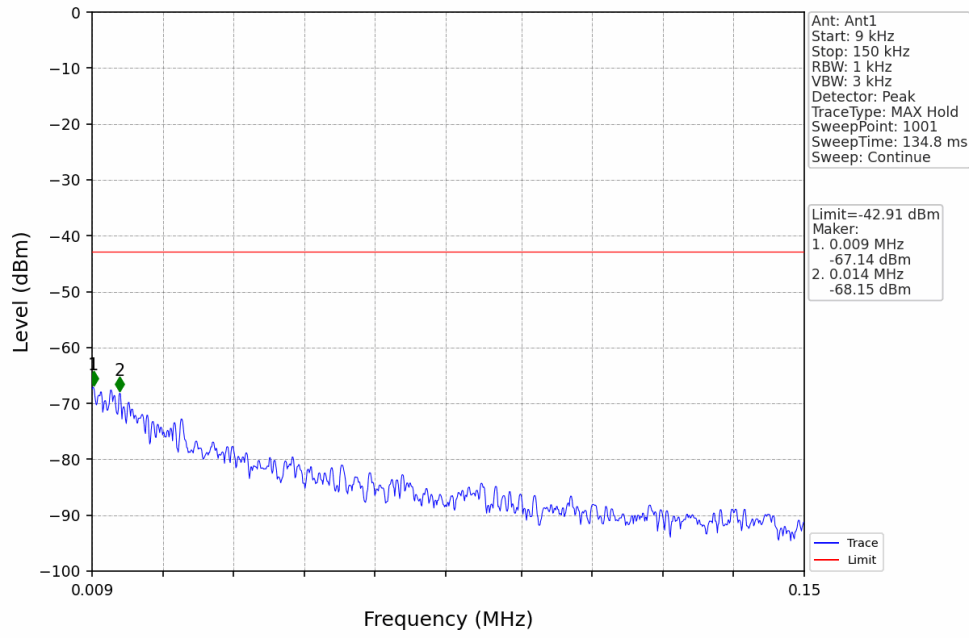
2.4g_MCH_2430MHz_Ant1_NTNV



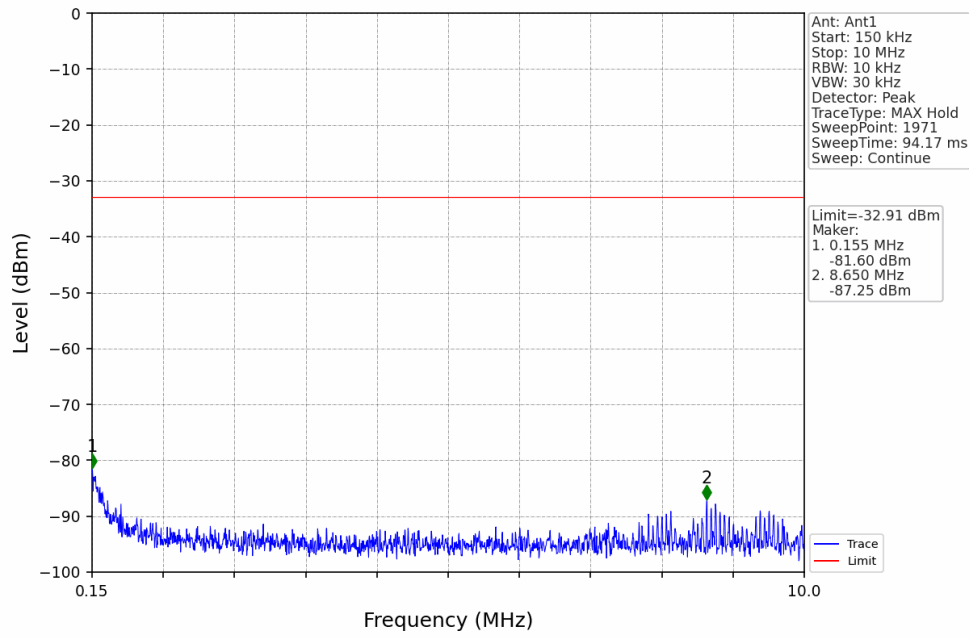
2.4g_HCH_2470MHz_Ant1_NTNV



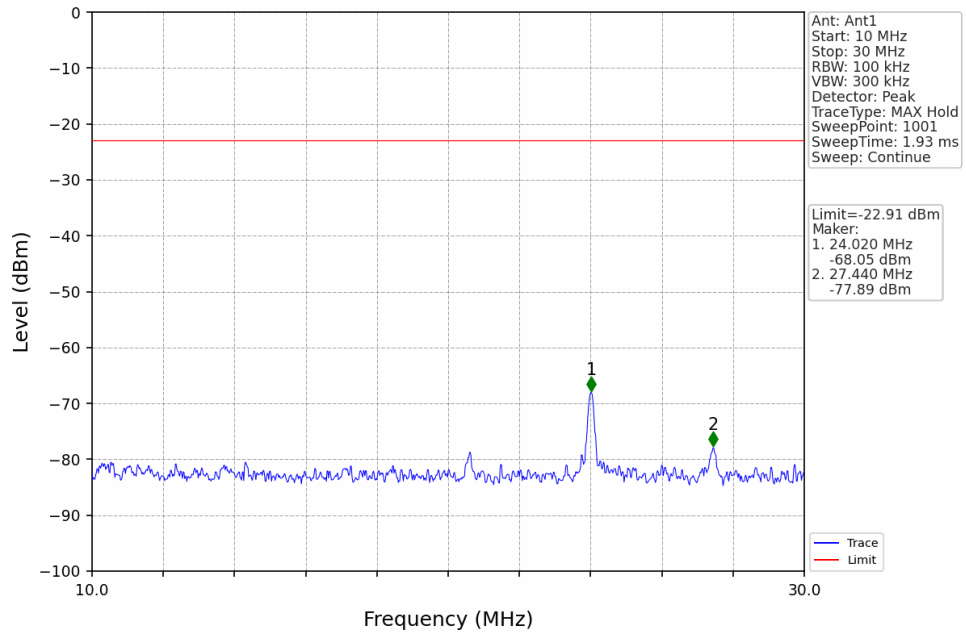
2.4g_HCH_2470MHz_Ant1_NTNV



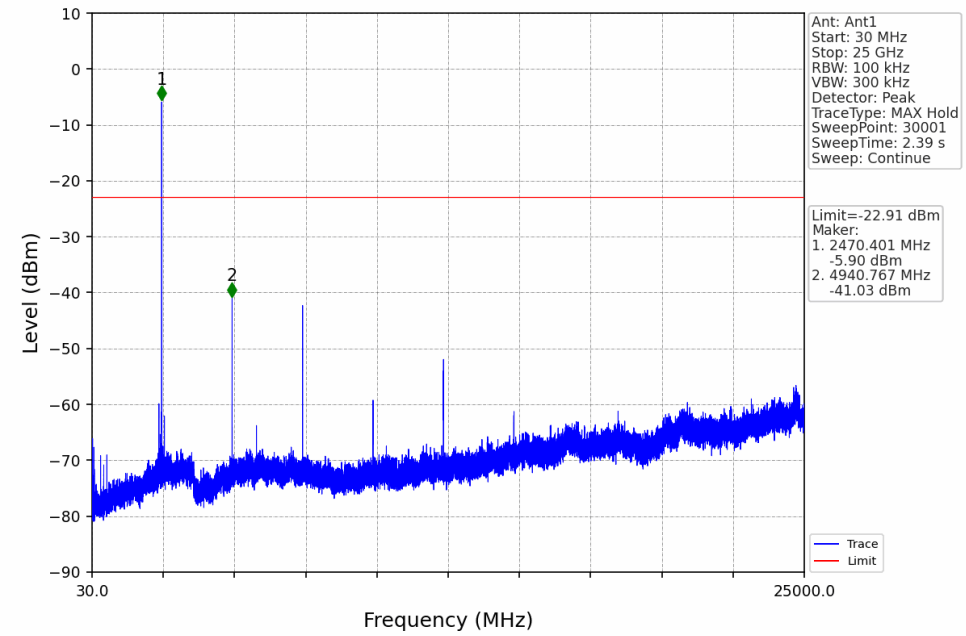
2.4g_HCH_2470MHz_Ant1_NTNV



2.4g_HCH_2470MHz_Ant1_NTNV



2.4g_HCH_2470MHz_Ant1_NTNV



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