



RF Test Report

For BTEK260713005A01E0201

Project No.:	BTEK260713005A01E0201
Product Description:	21.1°C, 55%, 100.6kPa
Test Engineer:	Milo
Test Date:	2026-08-11



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

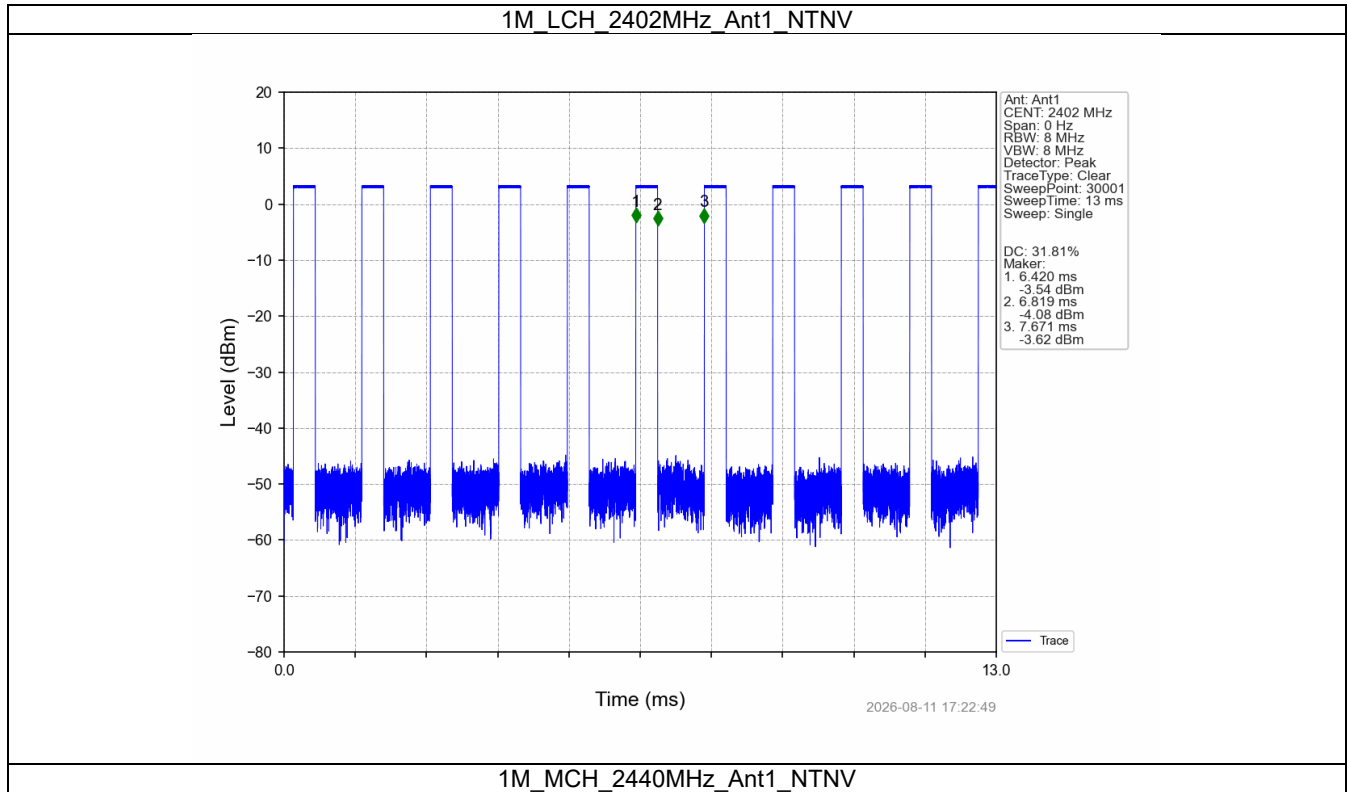
1.1.1 Ant1

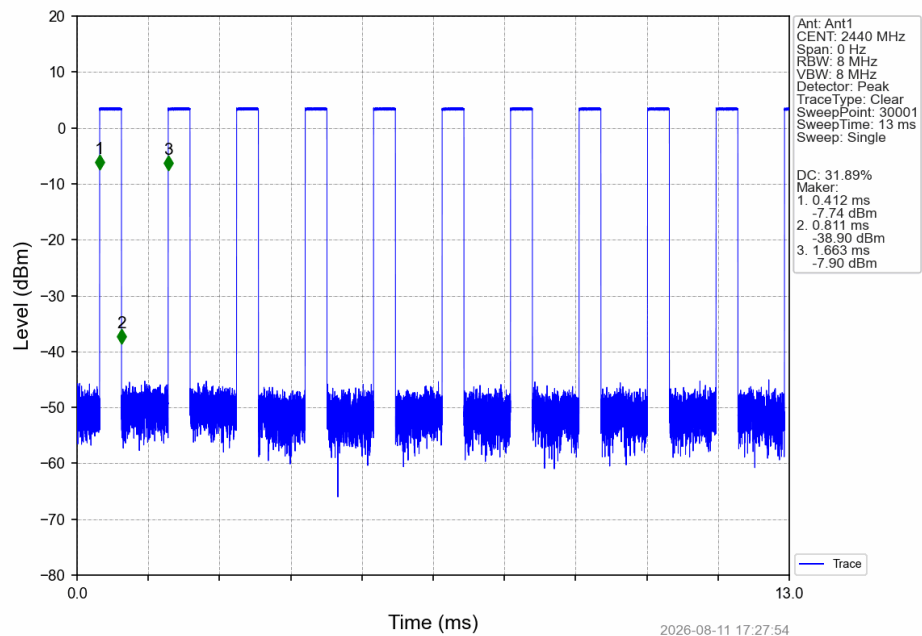
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
1M	SISO	2402	0.398	1.251	31.81	4.97	0.09
		2440	0.399	1.251	31.89	4.96	0.08
		2480	0.399	1.251	31.89	4.96	0.06
2M	SISO	2402	0.461	1.251	36.85	4.34	0.10
		2440	0.461	1.251	36.85	4.34	0.09
		2480	0.461	1.251	36.85	4.34	0.10



1.2 Test Graph

1.2.1 Ant1

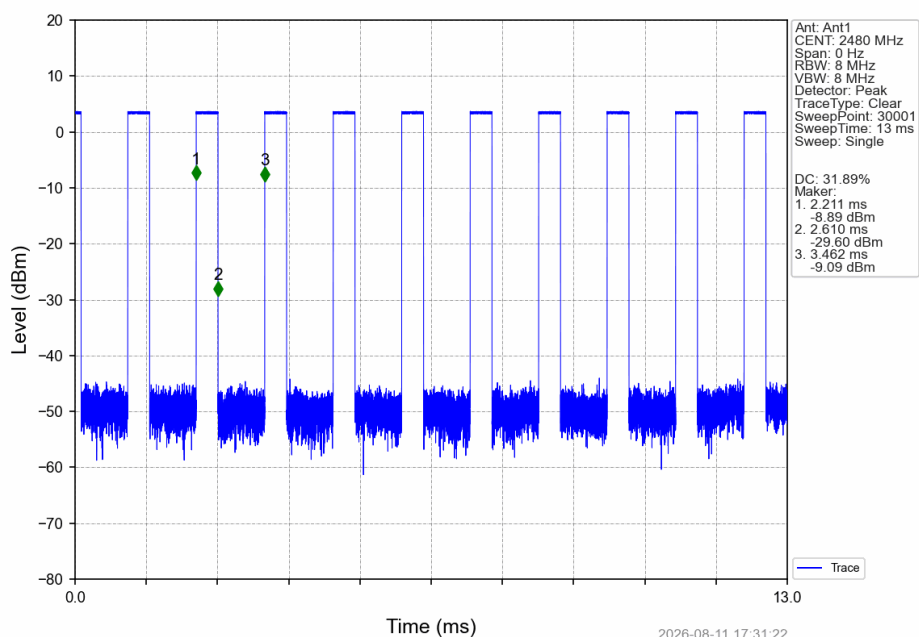




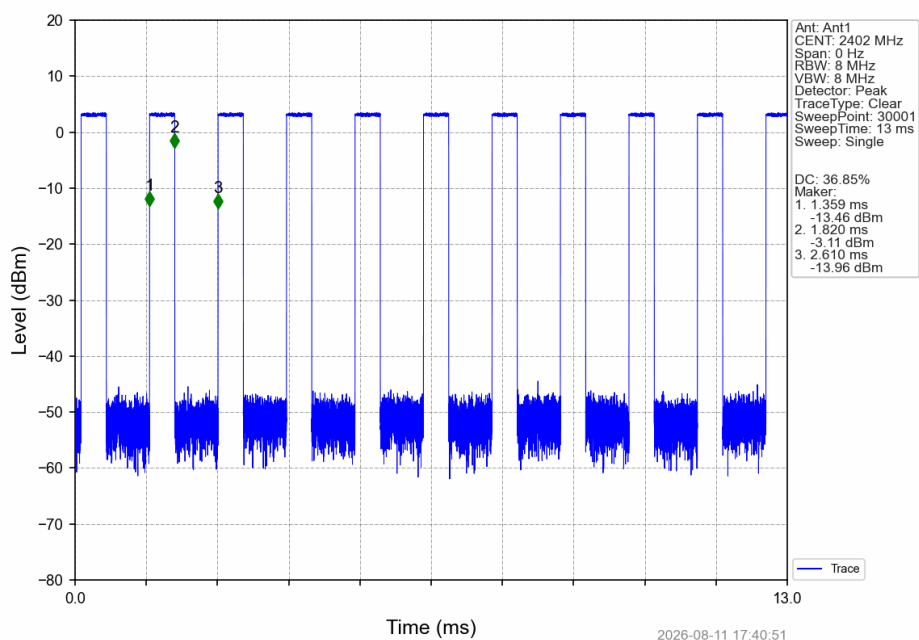
2026-08-11 17:27:54



1M_HCH_2480MHz_Ant1_NTNV

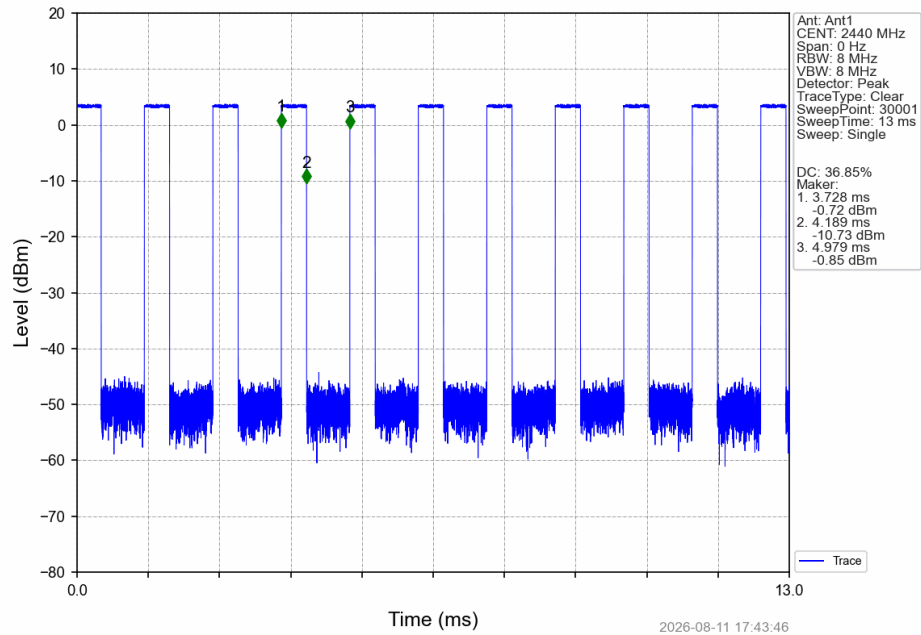


2M_LCH_2402MHz_Ant1_NTNV

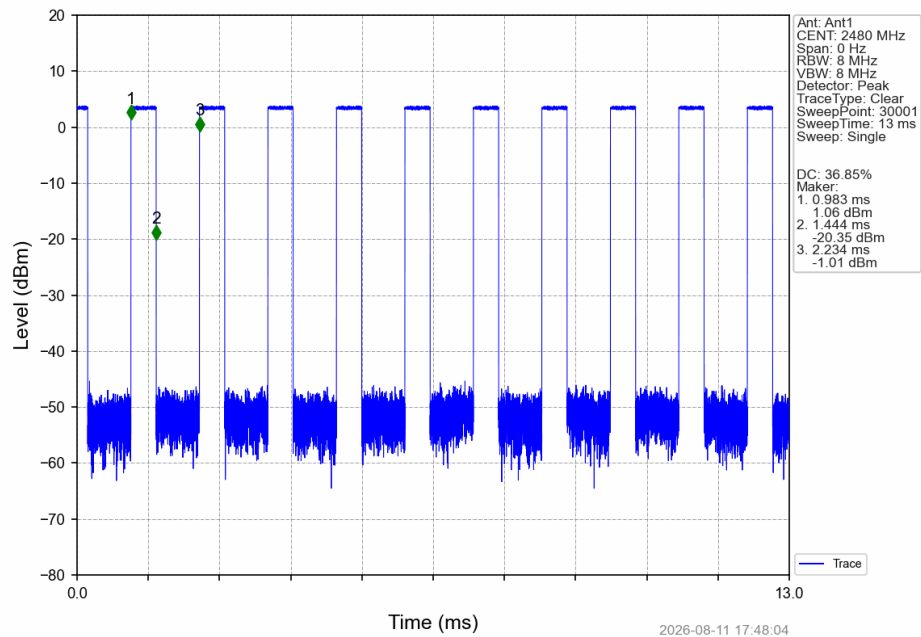




2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_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	
1M	SISO	2402	1	1.040	/	Pass
		2440	1	1.042	/	Pass
		2480	1	1.041	/	Pass
2M	SISO	2402	1	2.093	/	Pass
		2440	1	2.095	/	Pass
		2480	1	2.094	/	Pass

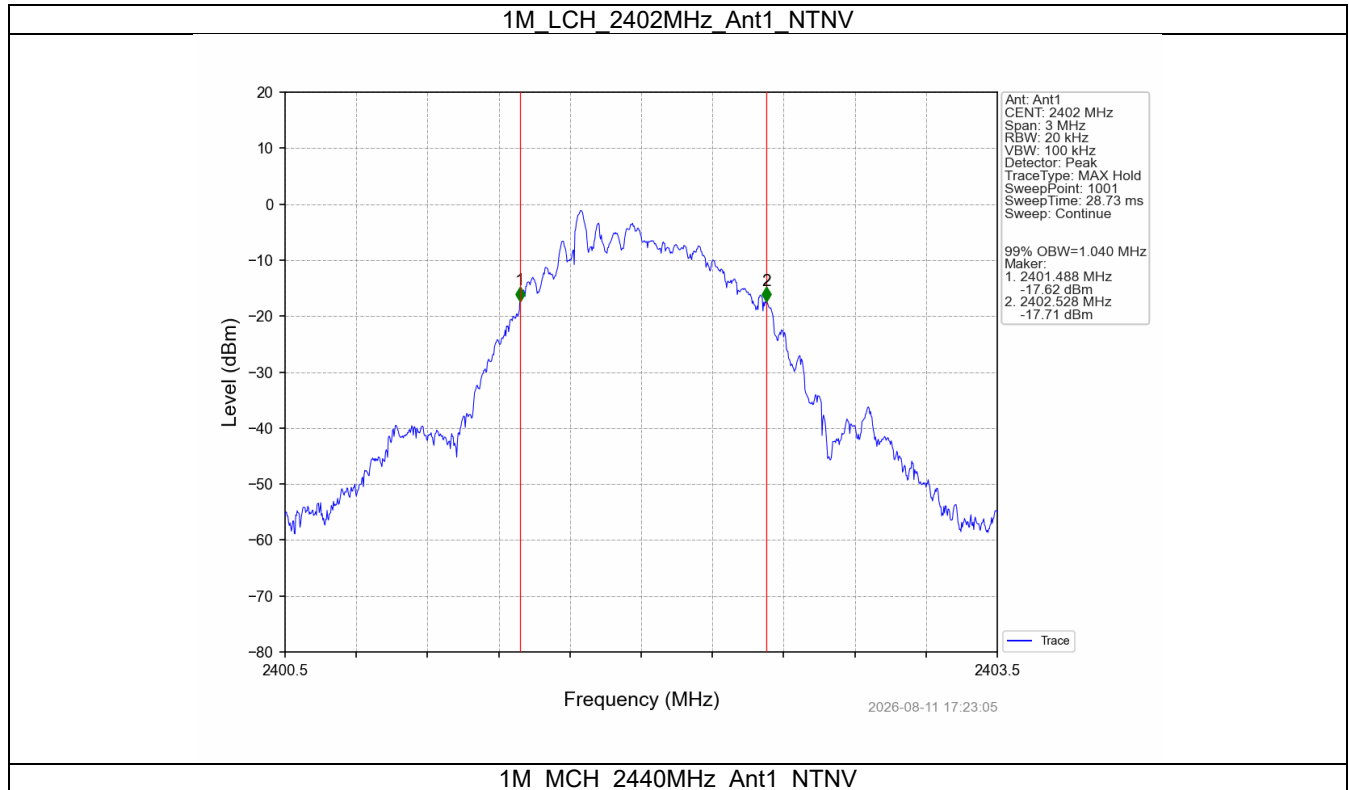
2.1.2 6dB BW

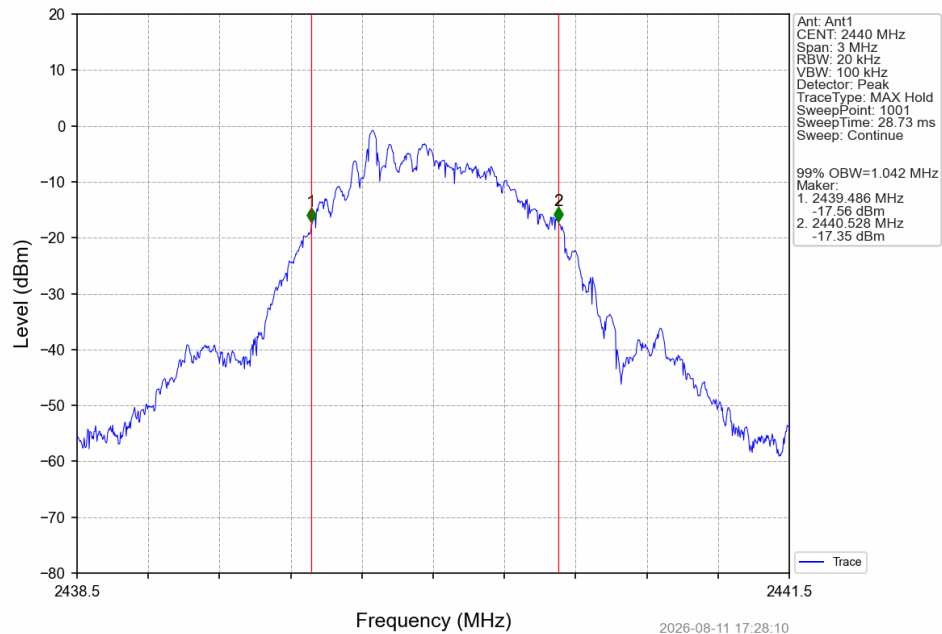
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	2402	1	0.670	≥ 0.5	Pass
		2440	1	0.665	≥ 0.5	Pass
		2480	1	0.662	≥ 0.5	Pass
2M	SISO	2402	1	1.185	≥ 0.5	Pass
		2440	1	1.173	≥ 0.5	Pass
		2480	1	1.201	≥ 0.5	Pass



2.2 Test Graph

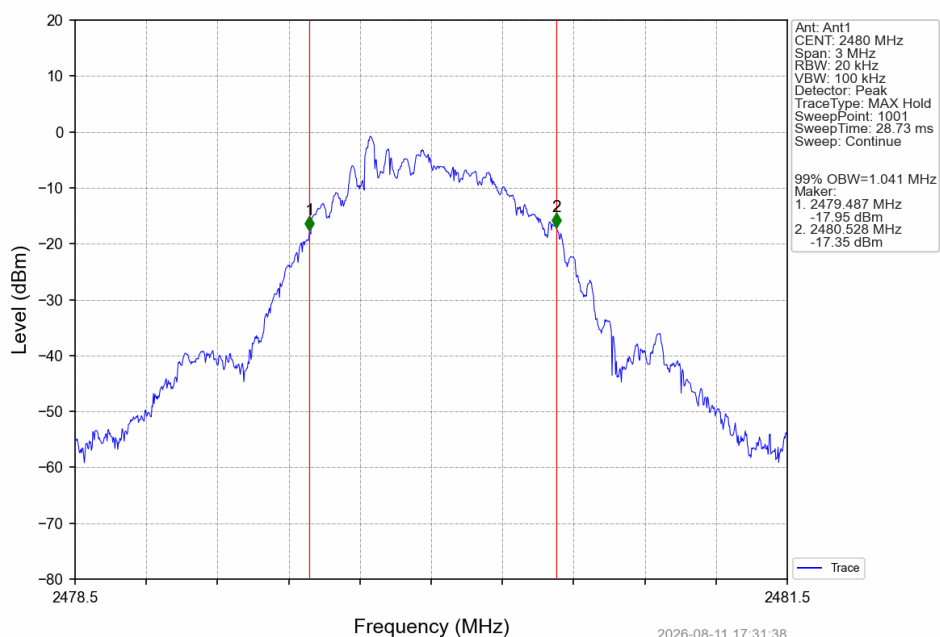
2.2.1 OBW



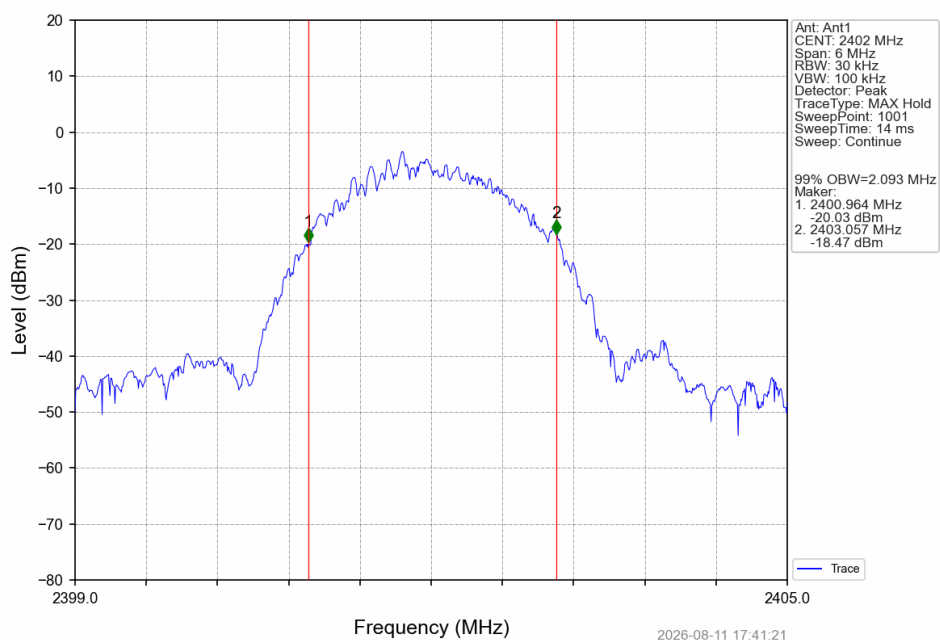




1M_HCH_2480MHz_Ant1_NTNV

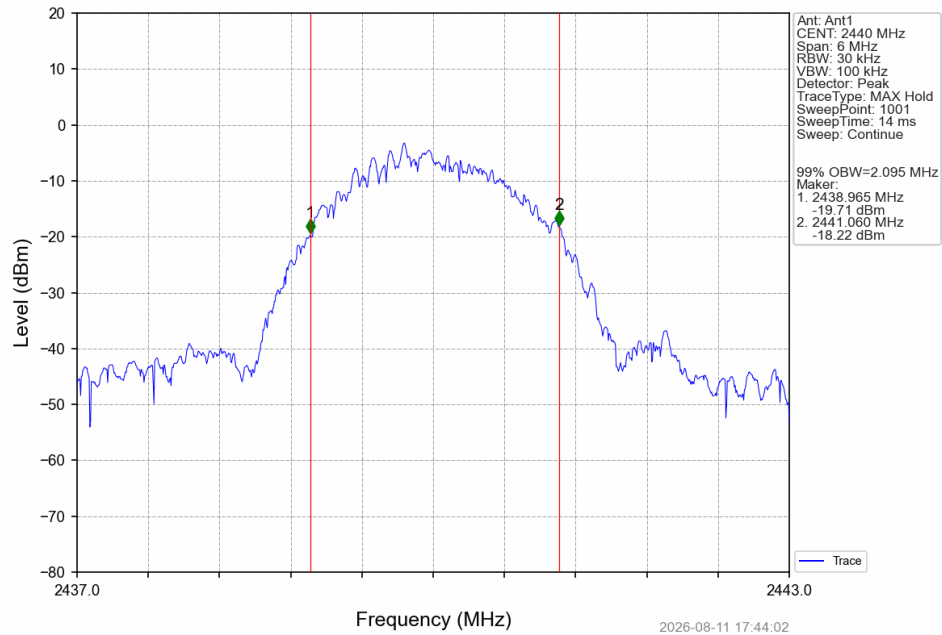


2M_LCH_2402MHz_Ant1_NTNV

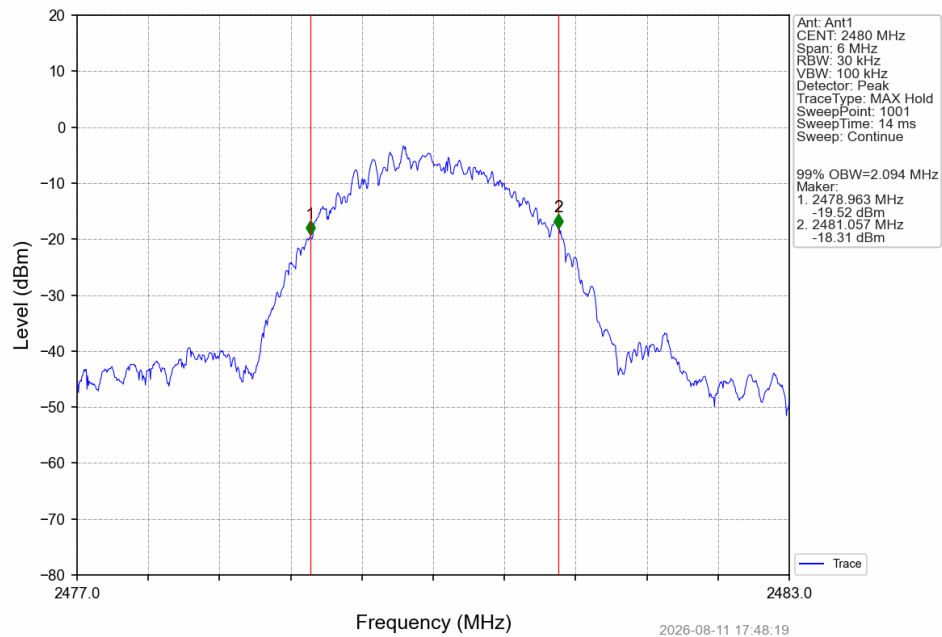




2M_MCH_2440MHz_Ant1_NTNV

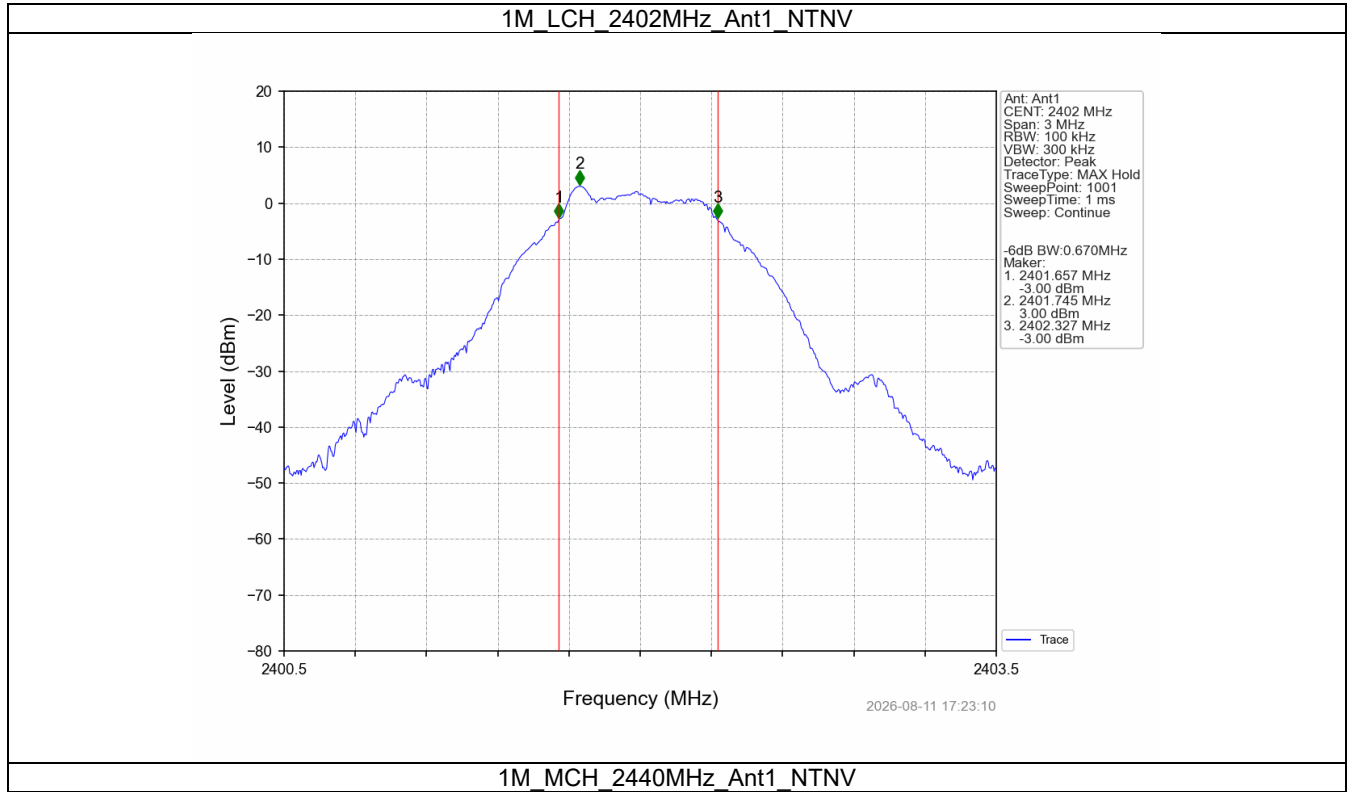


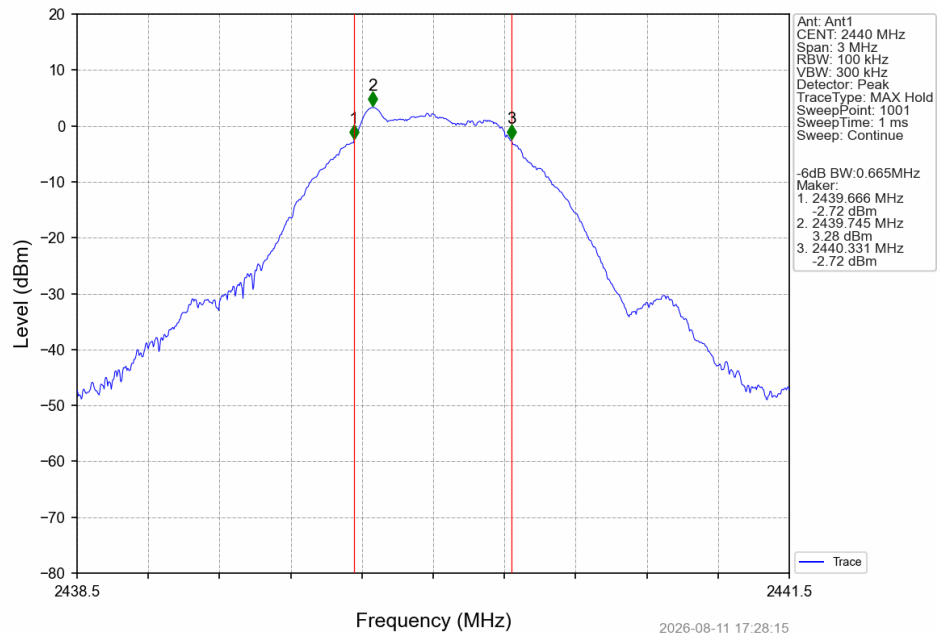
2M_HCH_2480MHz_Ant1_NTNV





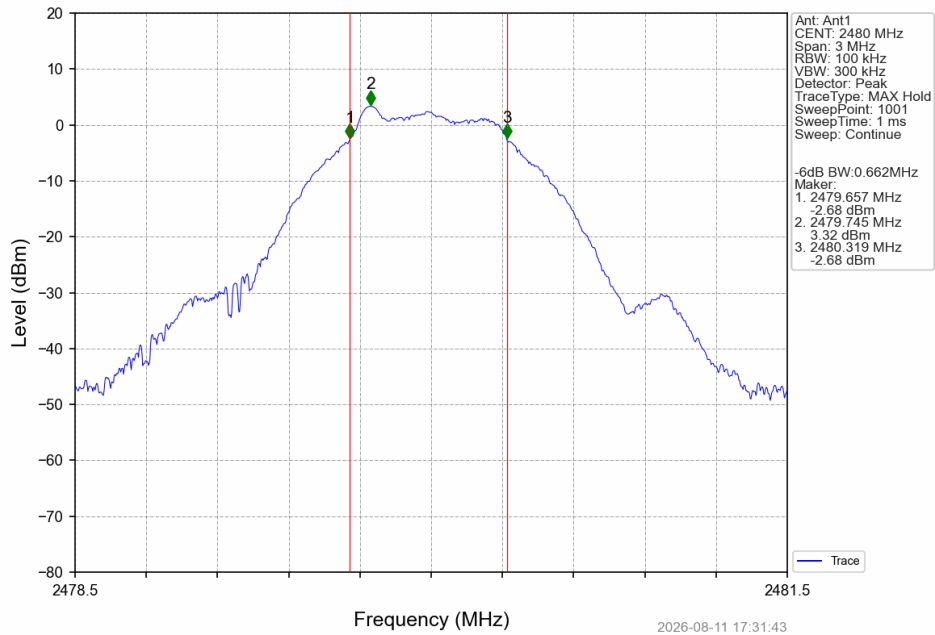
2.2.2 6dB BW



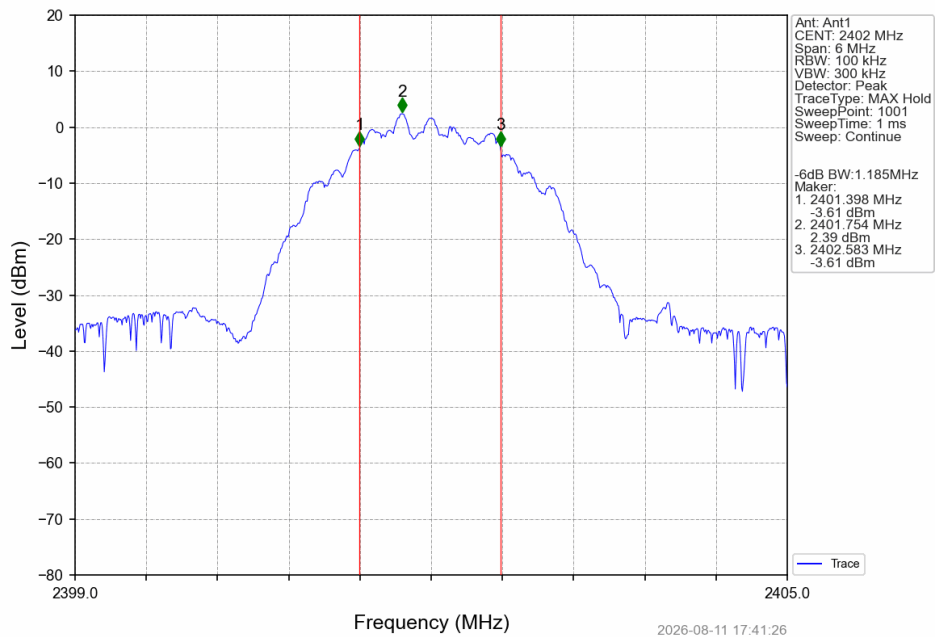




1M_HCH_2480MHz_Ant1_NTNV

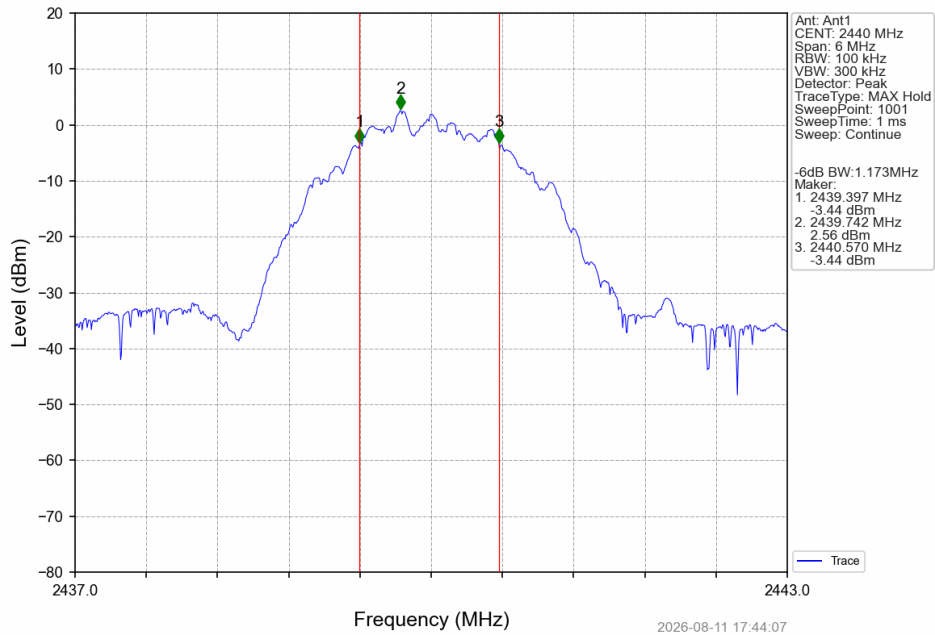


2M_LCH_2402MHz_Ant1_NTNV

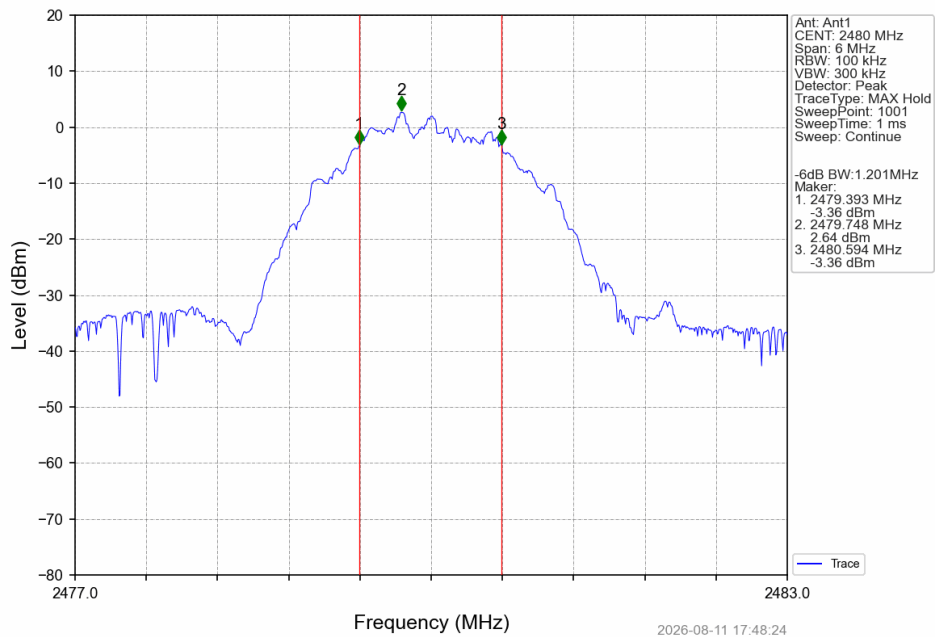




2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV





3. Maximum Conducted Output Power

3.1 Test Result

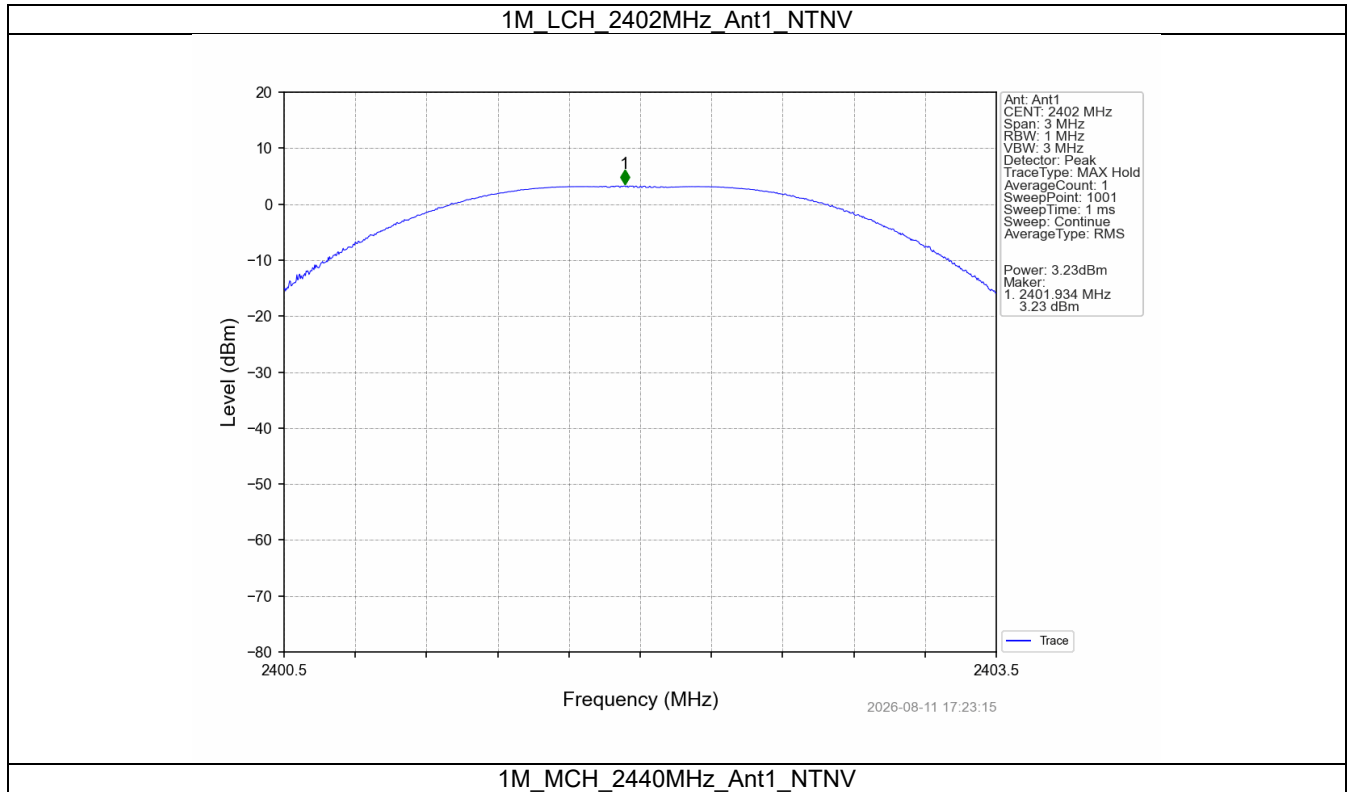
3.1.1 Power

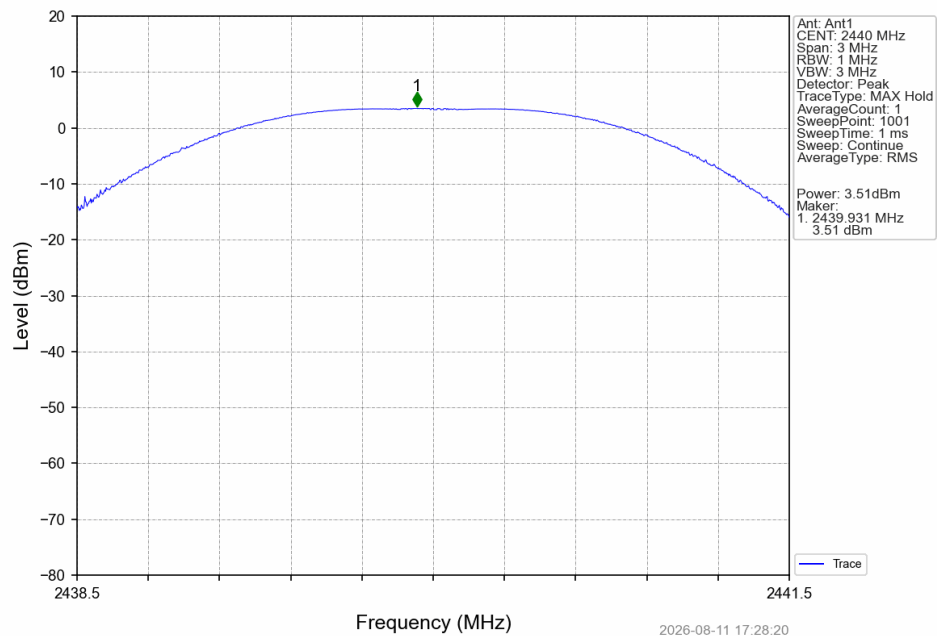
Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1M	SISO	2402	3.23	<=30	Pass
		2440	3.51	<=30	Pass
		2480	3.55	<=30	Pass
2M	SISO	2402	3.21	<=30	Pass
		2440	3.45	<=30	Pass
		2480	3.53	<=30	Pass
Note1: Antenna Gain: Ant1: 1.96dBi;					



3.2 Test Graph

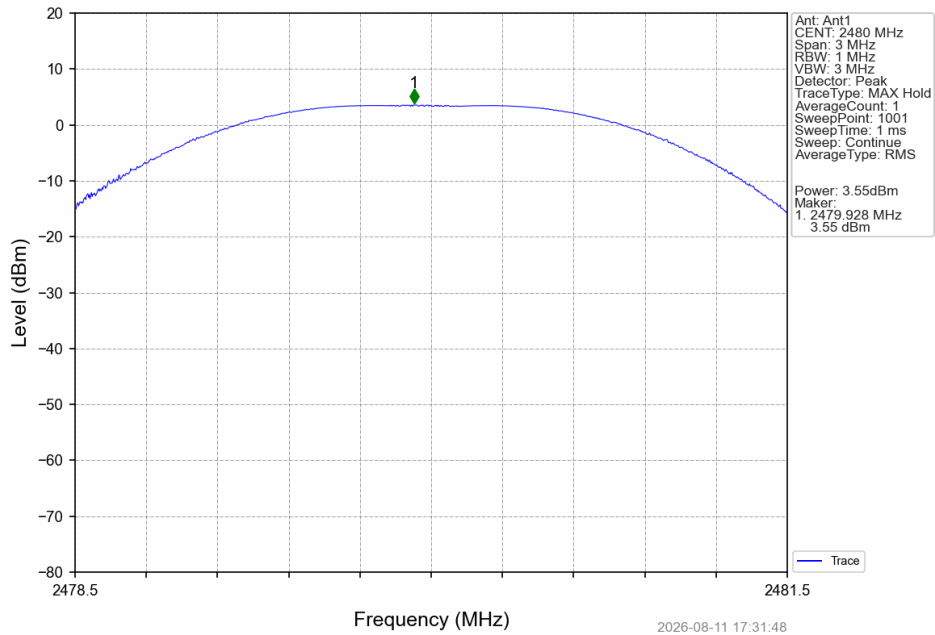
3.2.1 Power



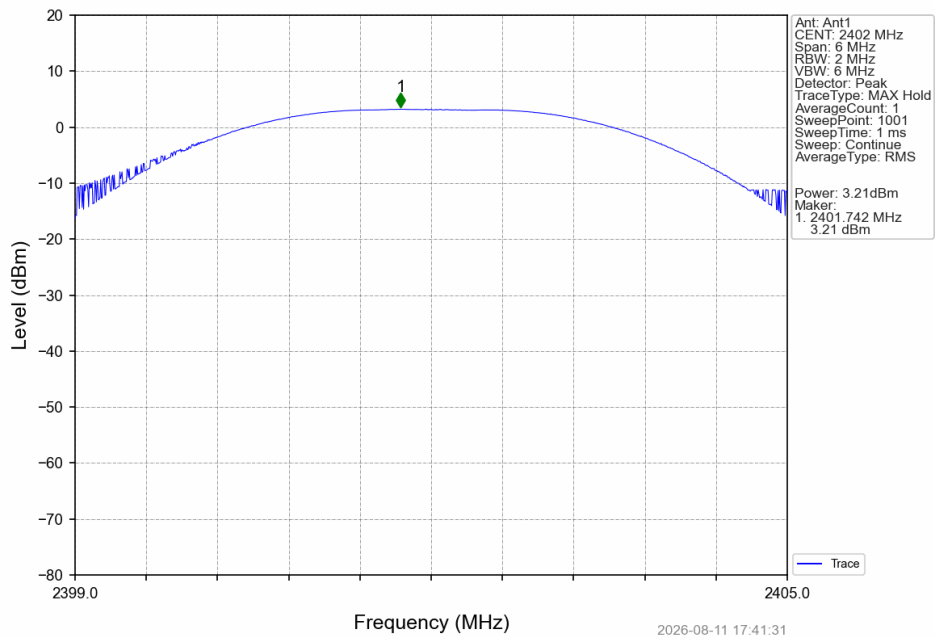




1M_HCH_2480MHz_Ant1_NTNV

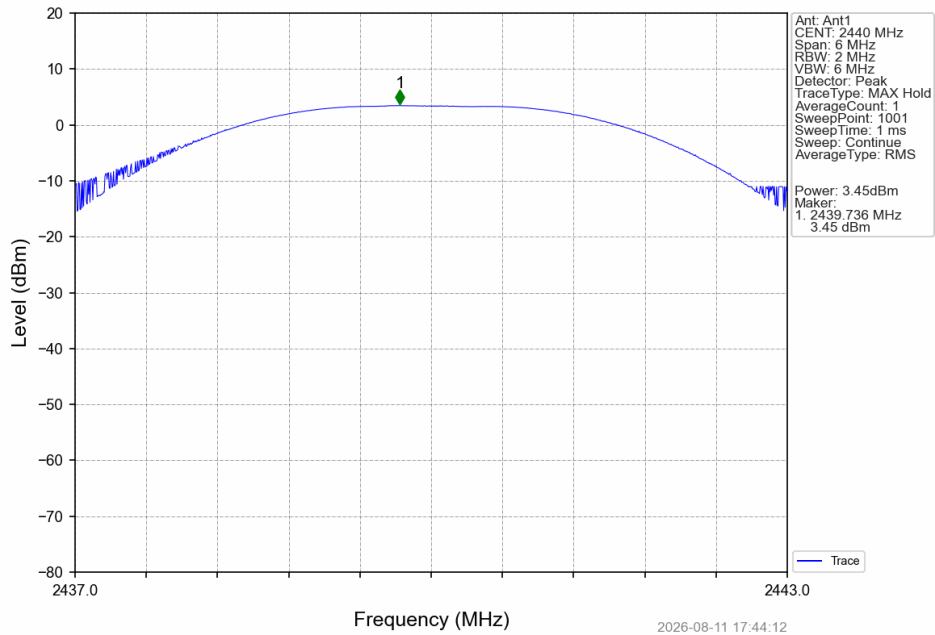


2M_LCH_2402MHz_Ant1_NTNV

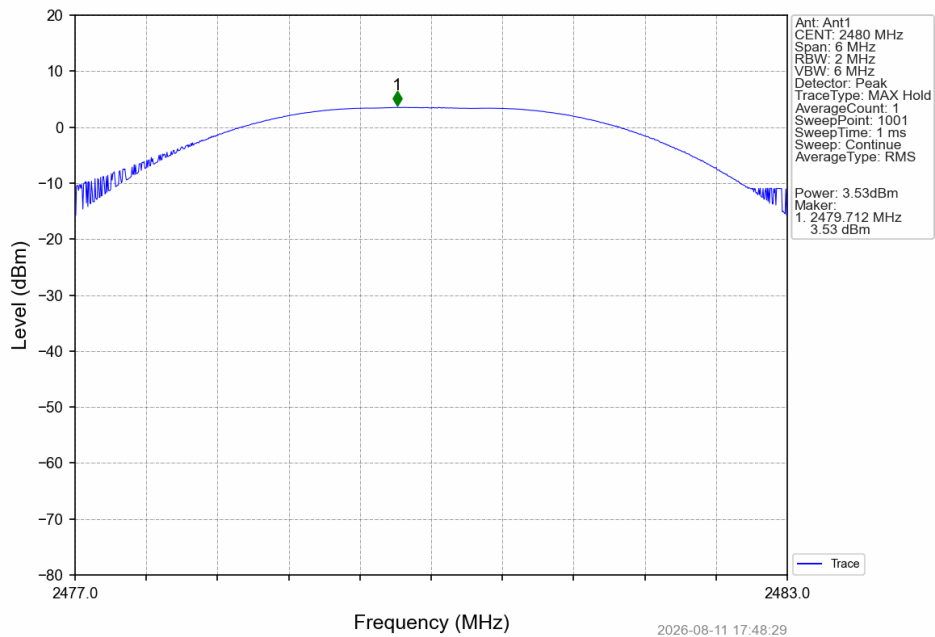




2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV





4. Maximum Power Spectral Density

4.1 Test Result

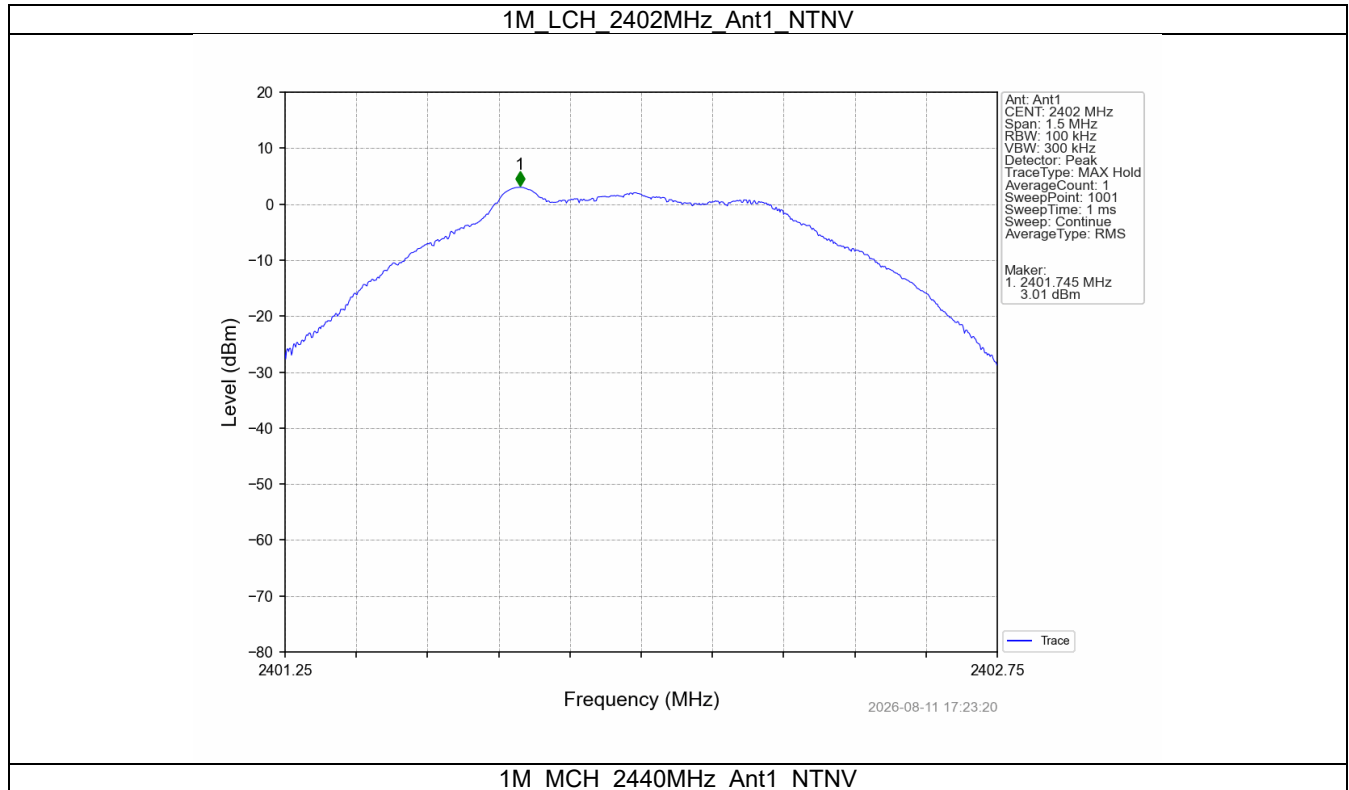
4.1.1 PSD

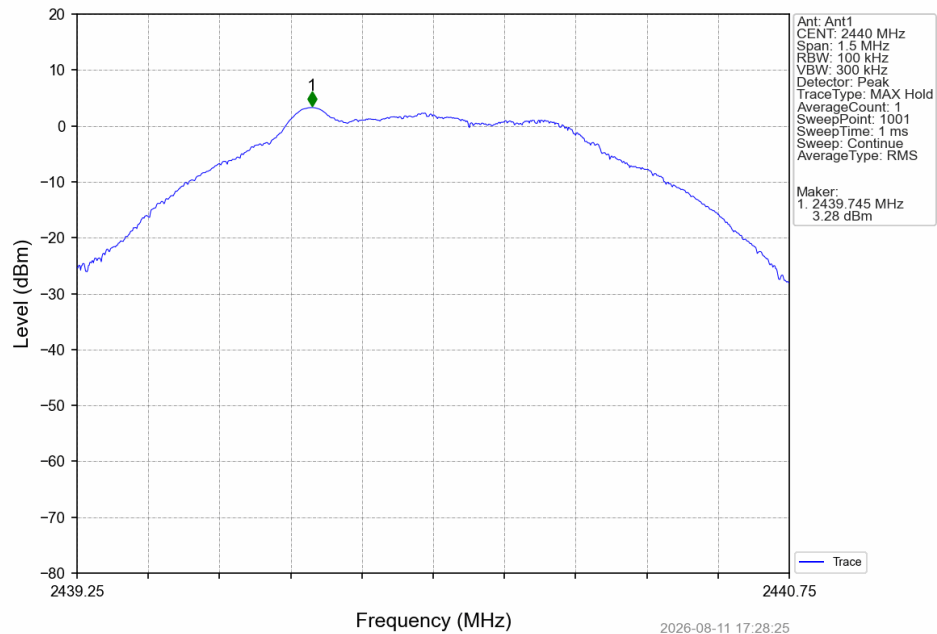
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1	Limit(dBm/3kHz)	
1M	SISO	2402	3.01dBm/100kHz	<=8	Pass
		2440	3.28dBm/100kHz	<=8	Pass
		2480	3.32dBm/100kHz	<=8	Pass
2M	SISO	2402	2.37dBm/100kHz	<=8	Pass
		2440	2.66dBm/100kHz	<=8	Pass
		2480	2.71dBm/100kHz	<=8	Pass
Note1: Antenna Gain: Ant1: 1.96dBi;					



4.2 Test Graph

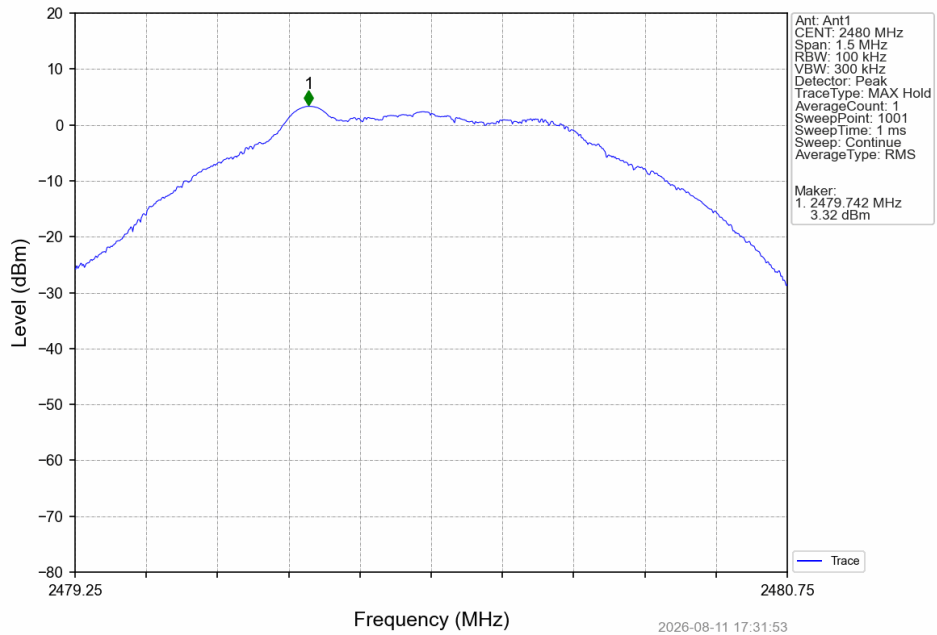
4.2.1 PSD



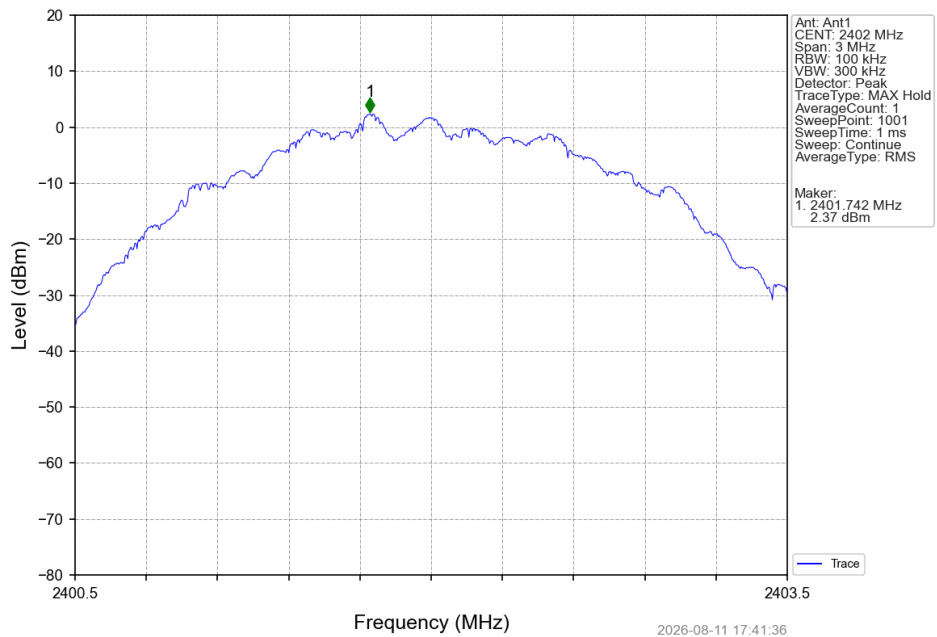




1M_HCH_2480MHz_Ant1_NTNV

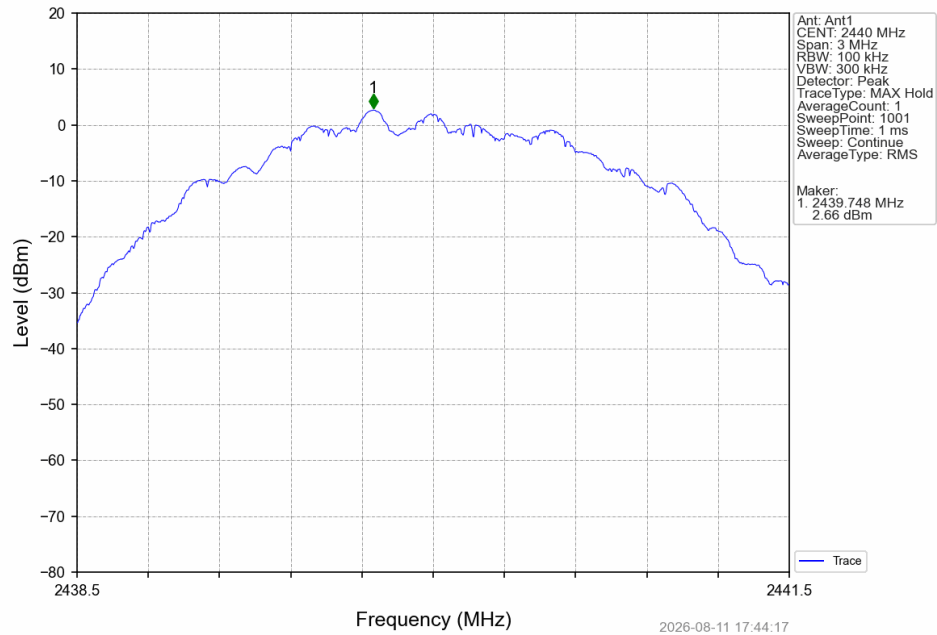


2M_LCH_2402MHz_Ant1_NTNV

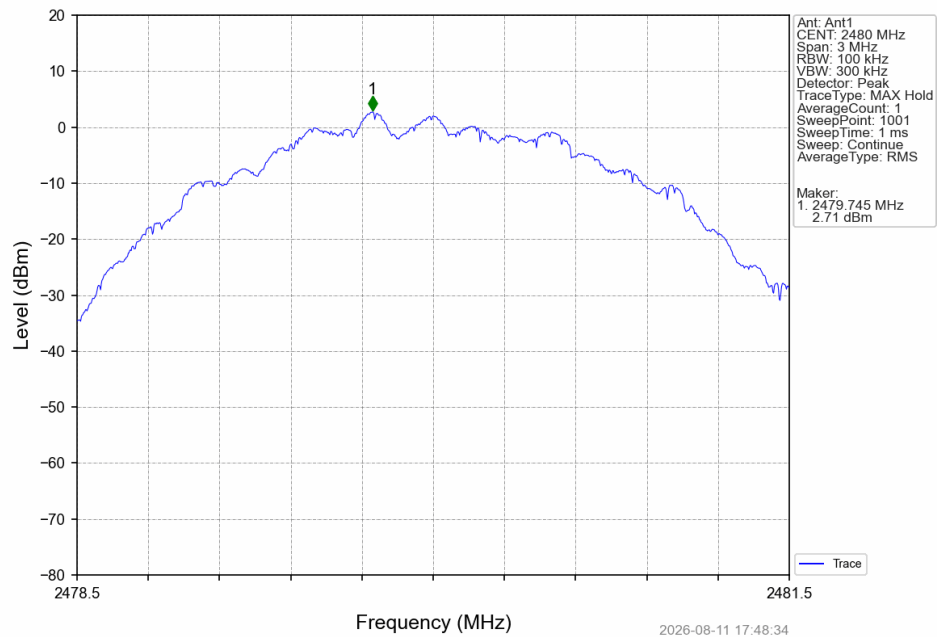




2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_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)
1M	SISO	2402	1	3.00
		2440	1	3.27
		2480	1	3.33
2M	SISO	2402	1	2.40
		2440	1	2.64
		2480	1	2.59

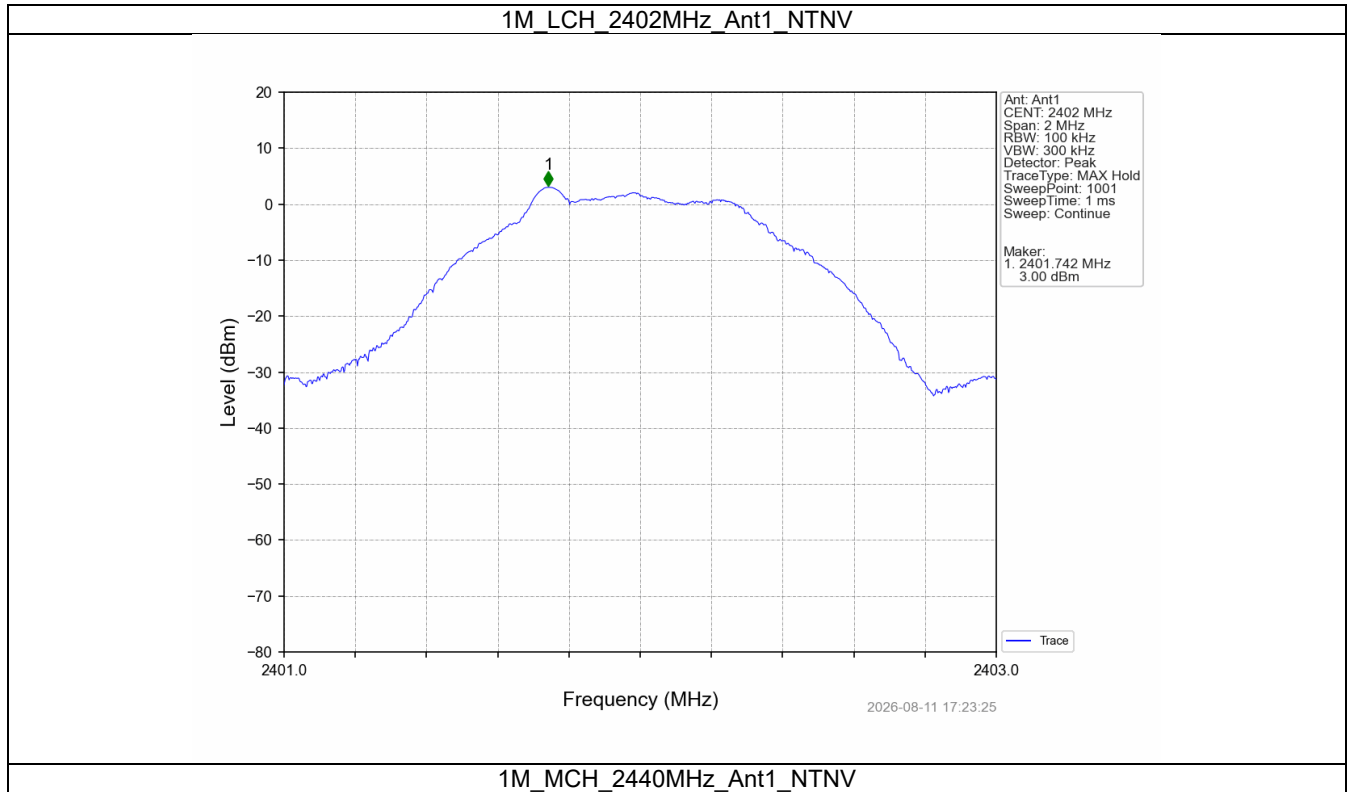
5.1.2 CSE

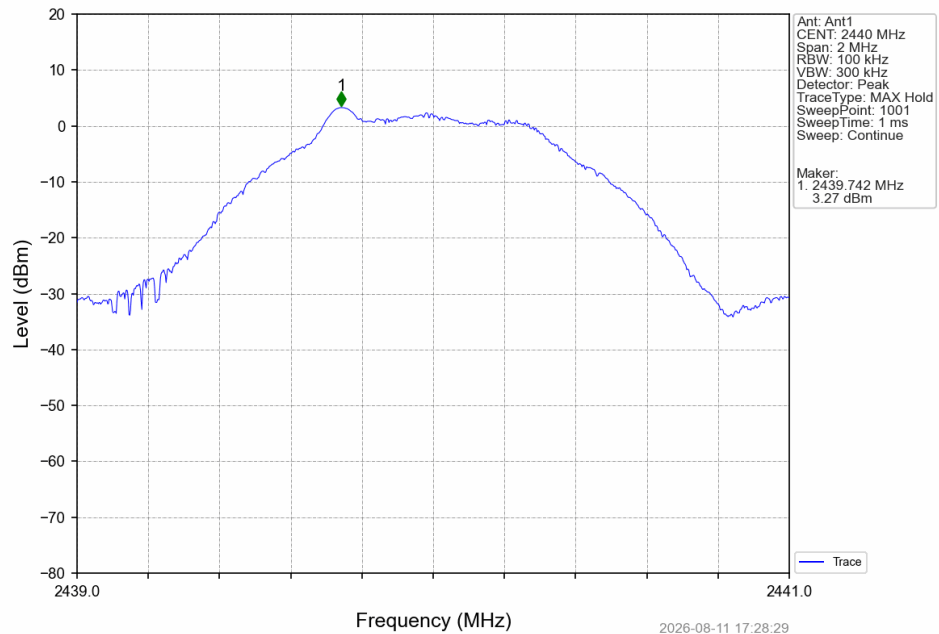
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	2402	1	3.33	-16.67	Pass
		2440	1	3.33	-16.67	Pass
		2480	1	3.33	-16.67	Pass
2M	SISO	2402	1	2.64	-17.36	Pass
		2440	1	2.64	-17.36	Pass
		2480	1	2.64	-17.36	Pass



5.2 Test Graph

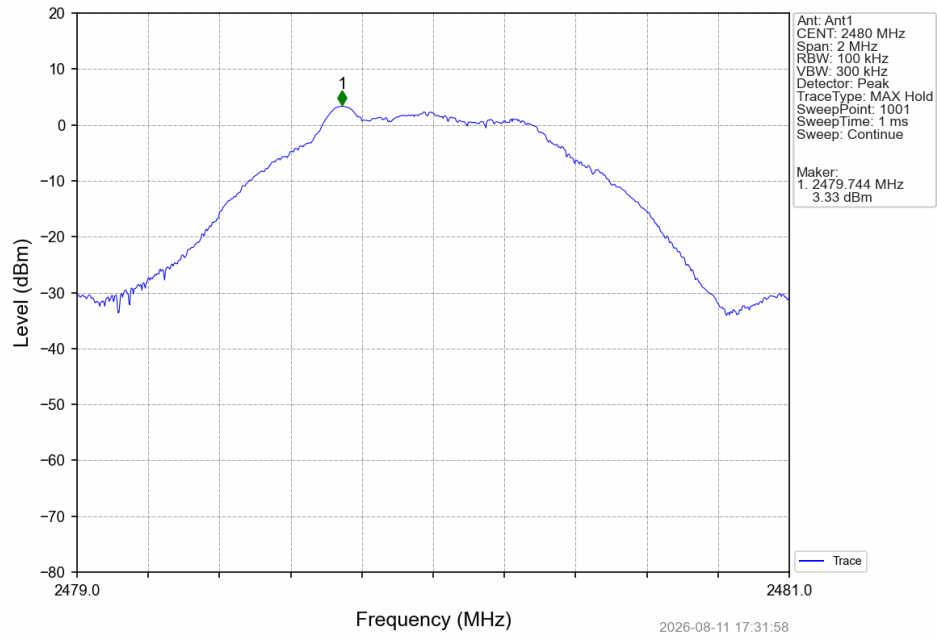
5.2.1 Ref



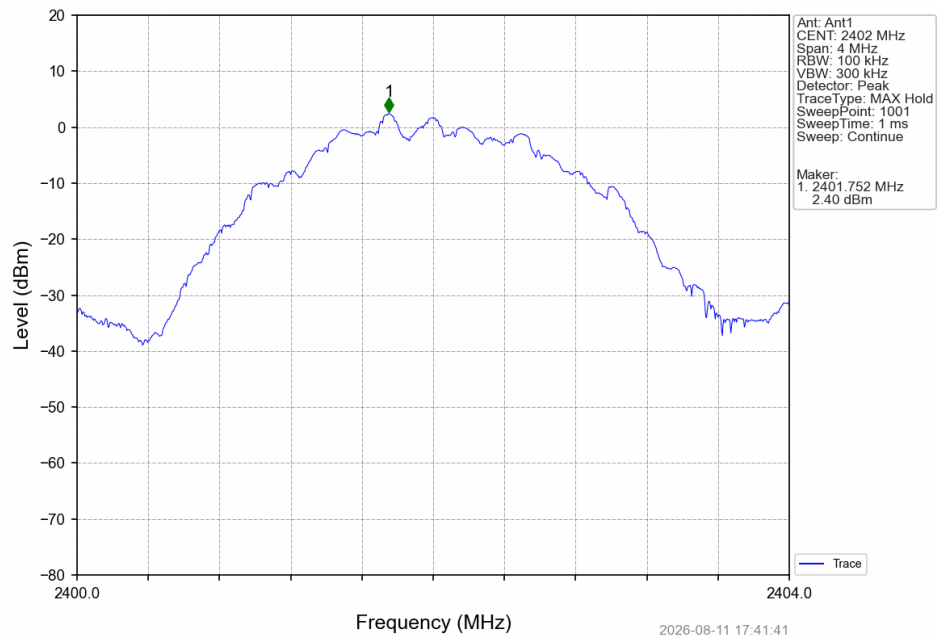




1M_HCH_2480MHz_Ant1_NTNV

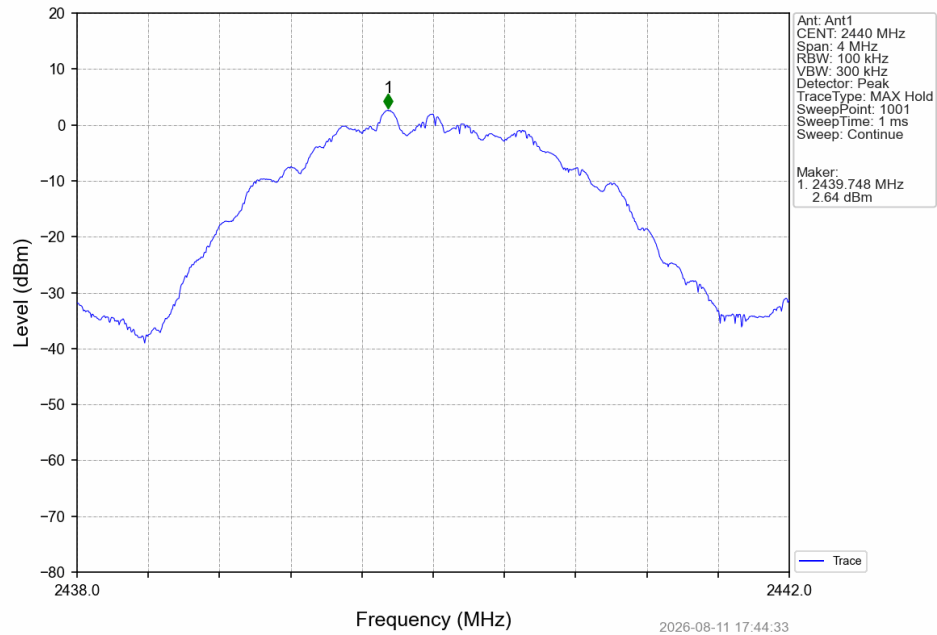


2M_LCH_2402MHz_Ant1_NTNV

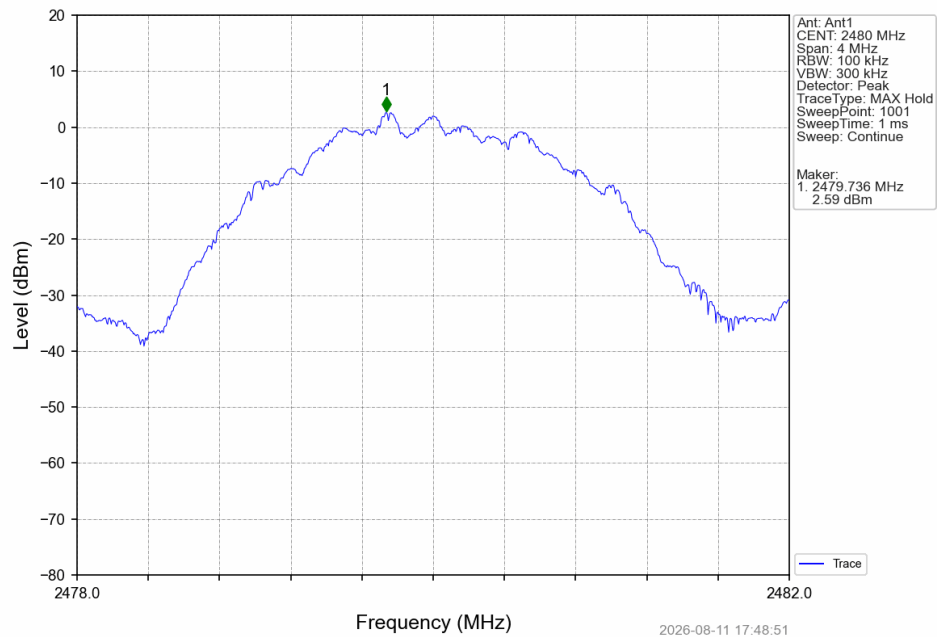




2M_MCH_2440MHz_Ant1_NTNV

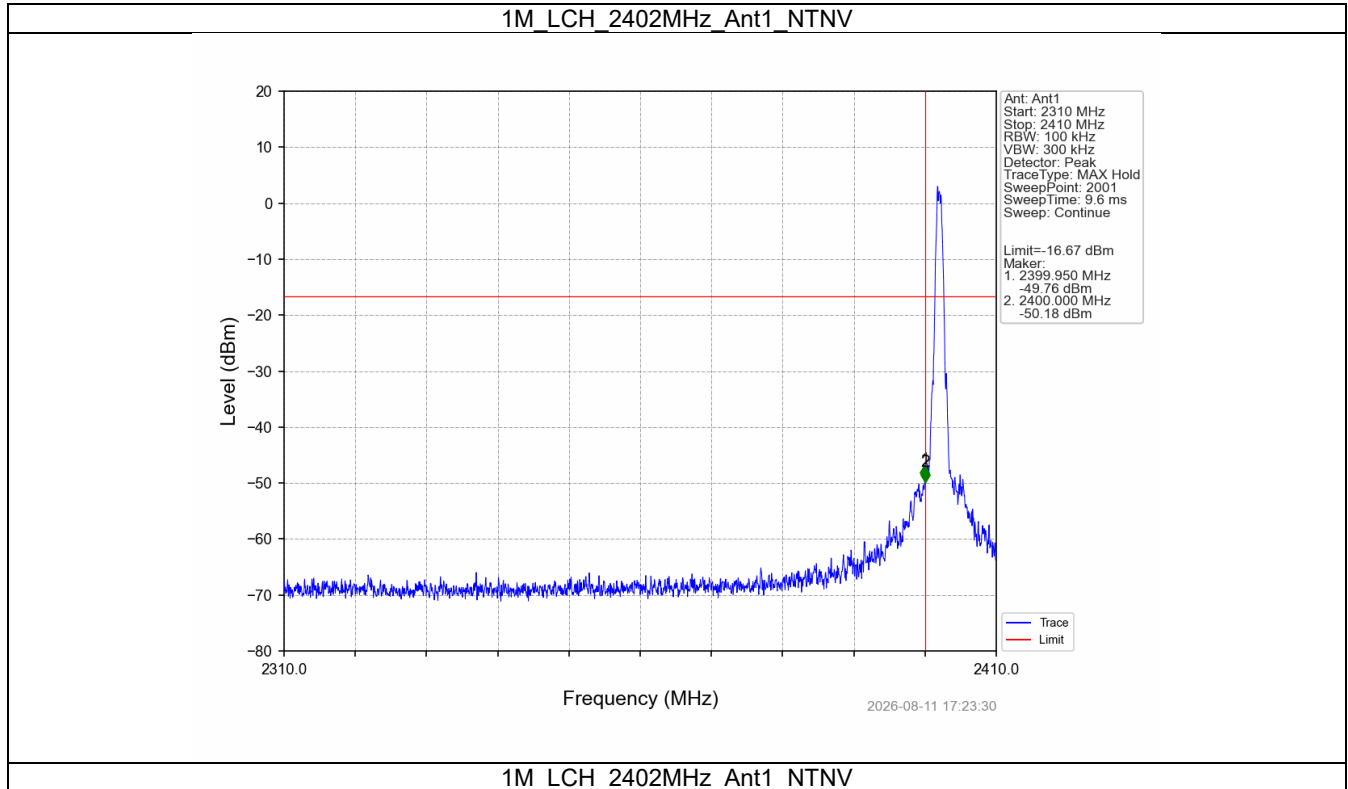


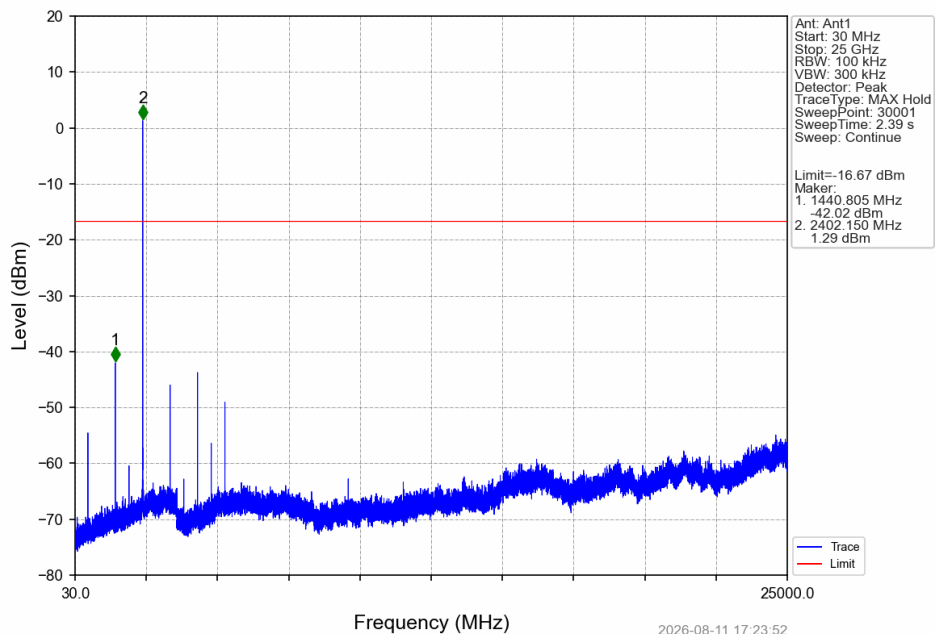
2M_HCH_2480MHz_Ant1_NTNV





5.2.2 CSE

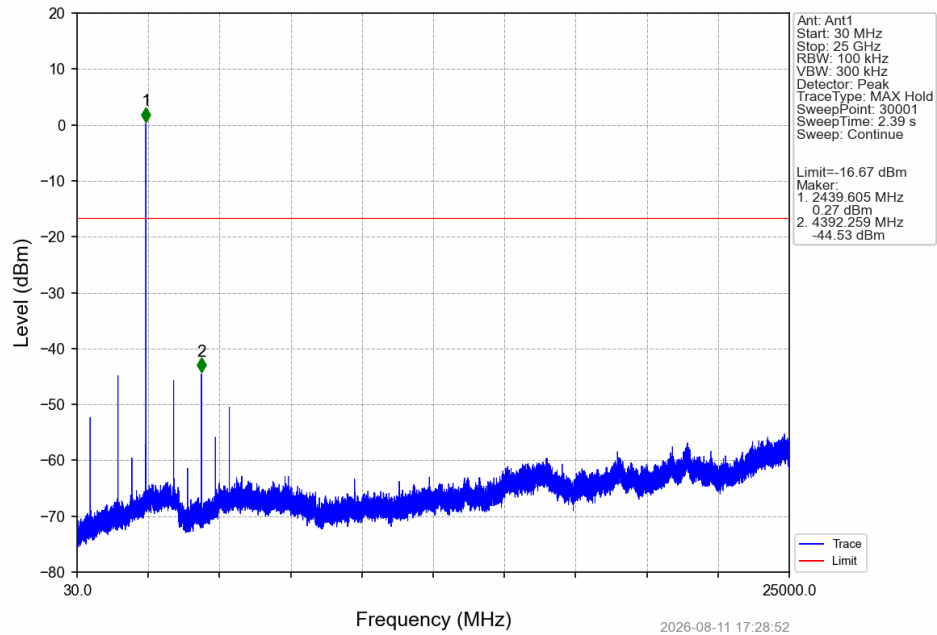




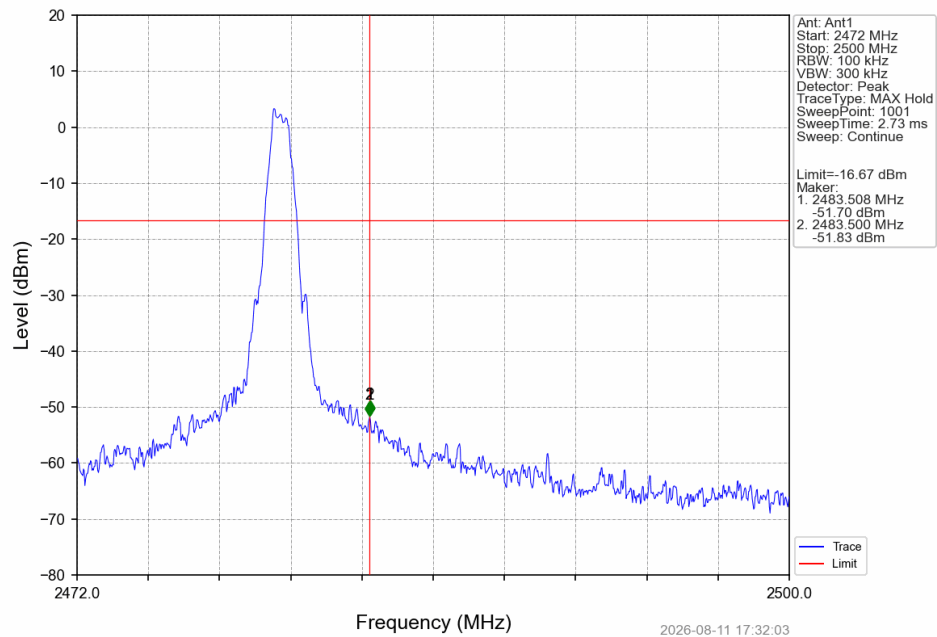
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1M_MCH_2440MHz_Ant1_NTNV

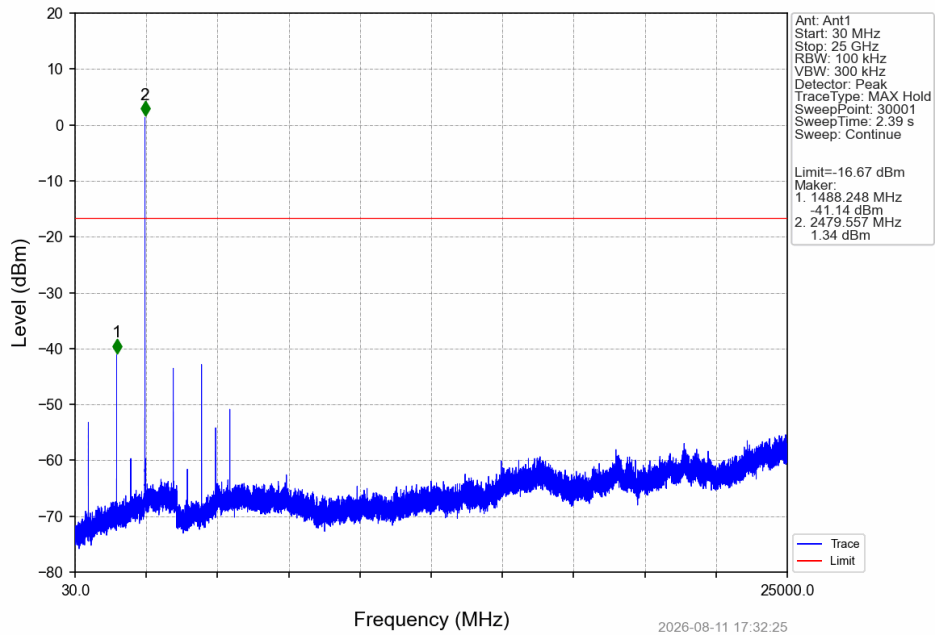


1M_HCH_2480MHz_Ant1_NTNV

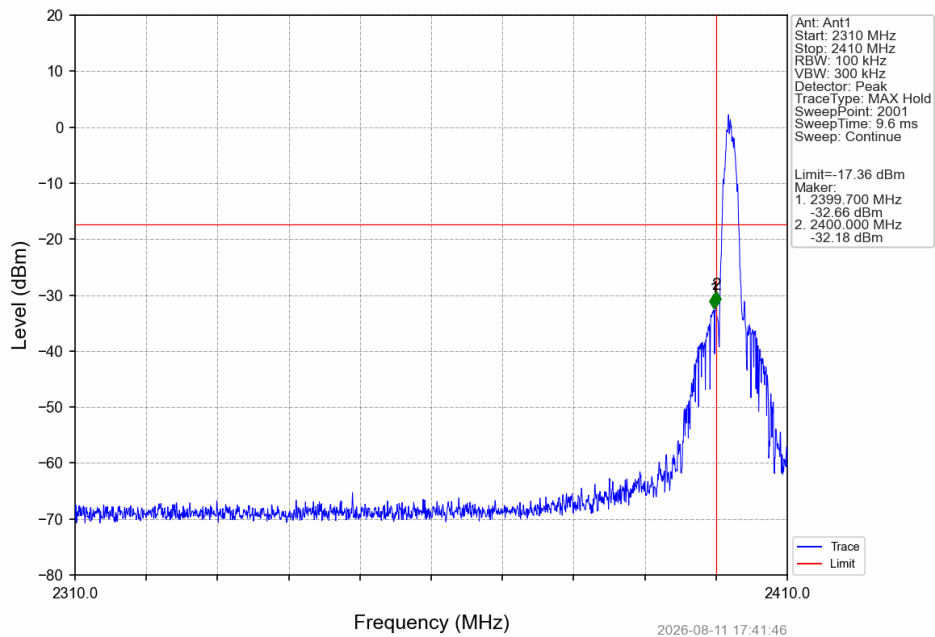




1M_HCH_2480MHz_Ant1_NTNV

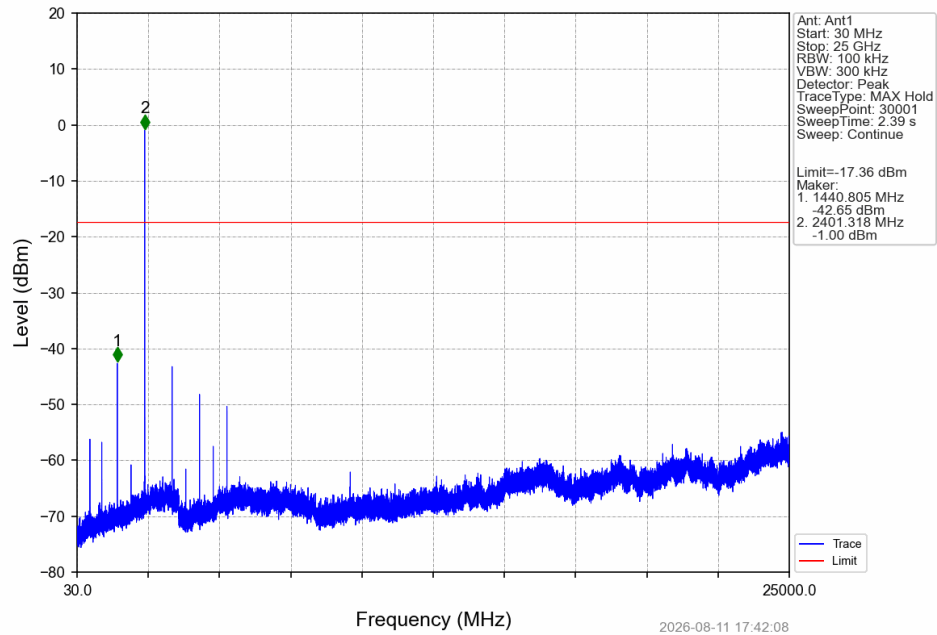


2M_LCH_2402MHz_Ant1_NTNV

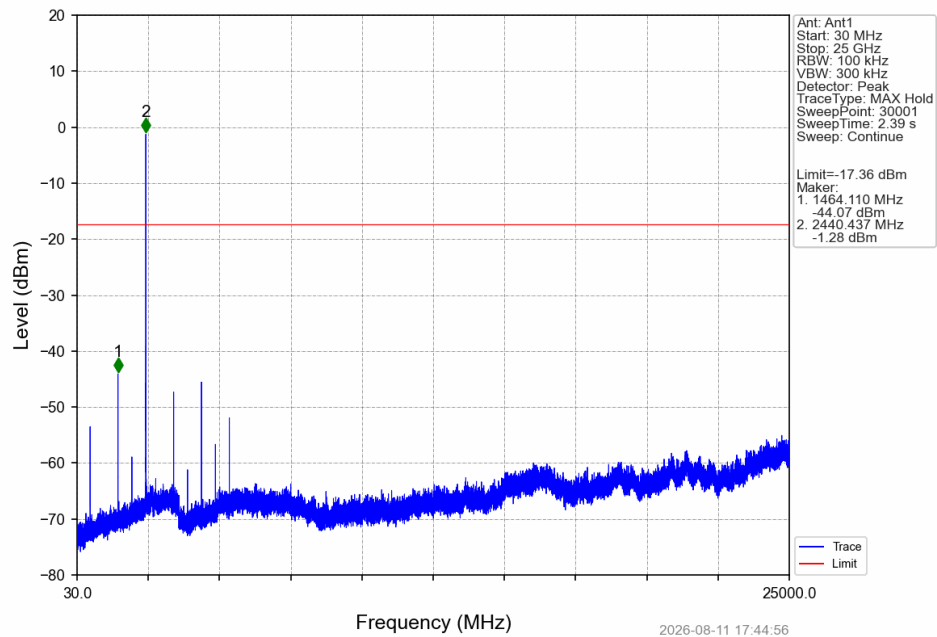




2M_LCH_2402MHz_Ant1_NTNV

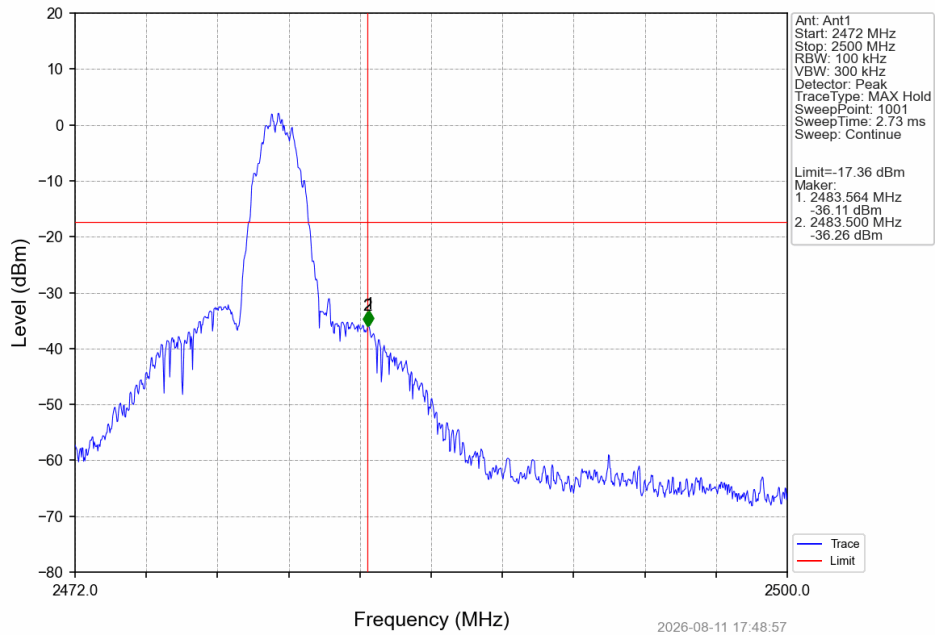


2M_MCH_2440MHz_Ant1_NTNV





2M_HCH_2480MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV

