Appendix A

RF Test Data for BLE(Conducted Measurement)

Product Name: Electric Scooter
Trade Mark: INMOTION
Test Model: RS, RS series, RS maybe followed by letter, number or blank

Environmental Conditions

Temperature:	24.6℃
Relative Humidity:	51.4%
ATM Pressure:	101Kpa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen

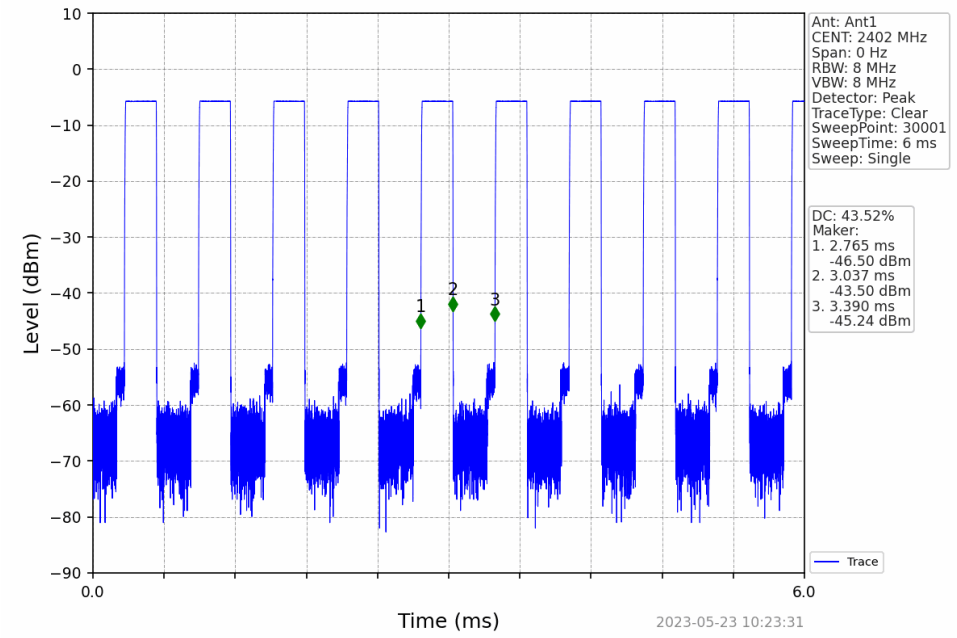
B.1. Duty Cycle

Test Result

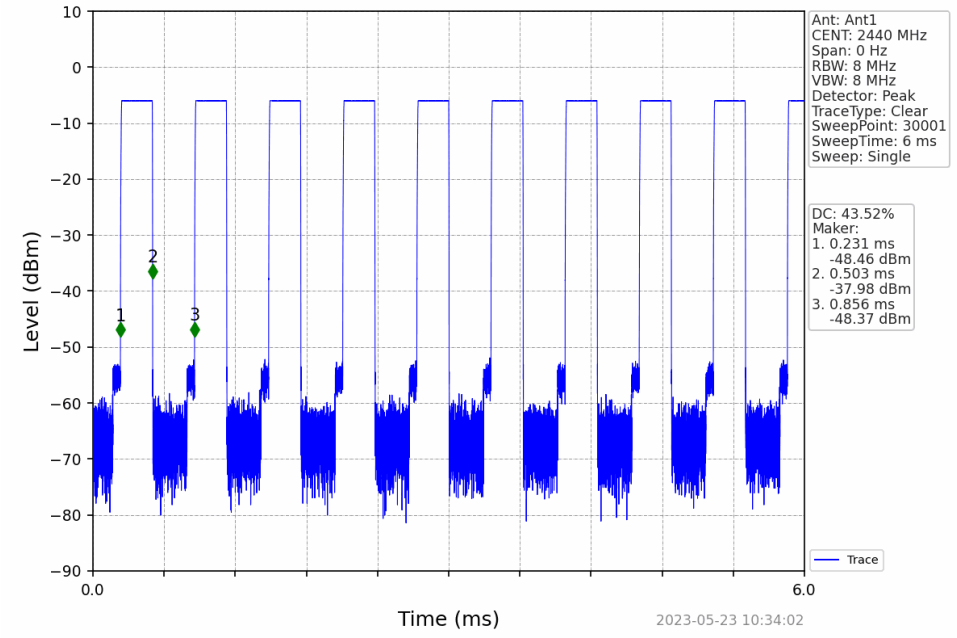
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
1M	SISO	2402	0.272	0.625	43.52	3.61	0.03
		2440	0.272	0.625	43.52	3.61	0.00
		2480	0.272	0.625	43.52	3.61	0.00
2M	SISO	2402	0.160	0.625	25.60	5.92	0.00
		2440	0.160	0.625	25.60	5.92	0.00
		2480	0.160	0.625	25.60	5.92	0.00

Test Graph

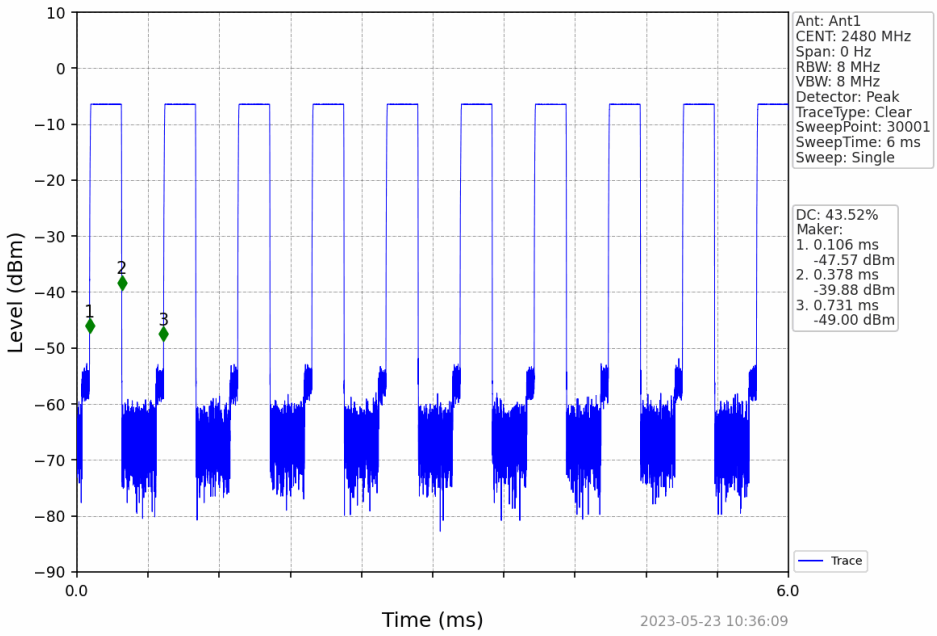
1M_LCH_2402MHz_Ant1_NTNV



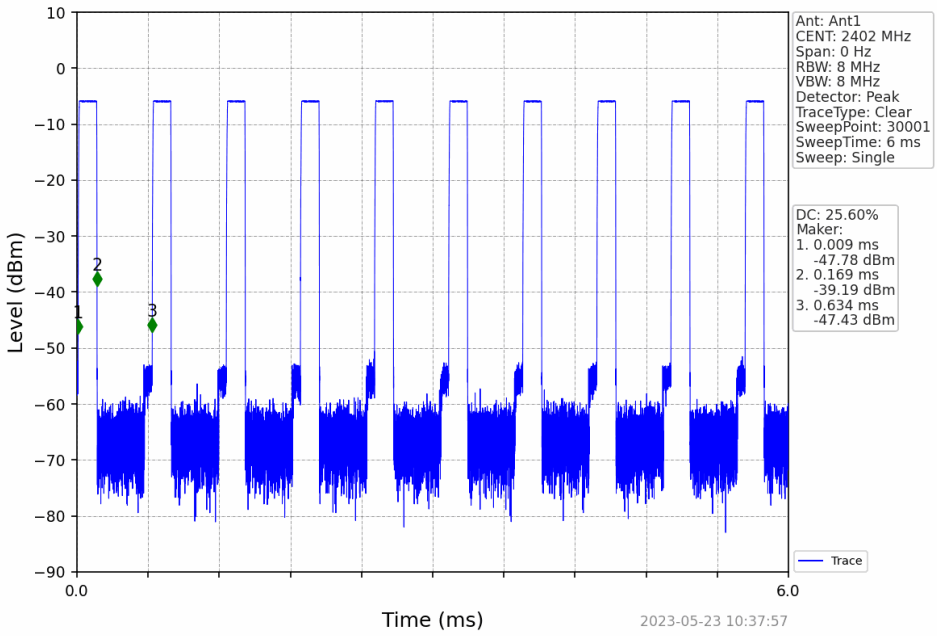
1M_MCH_2440MHz_Ant1_NTNV



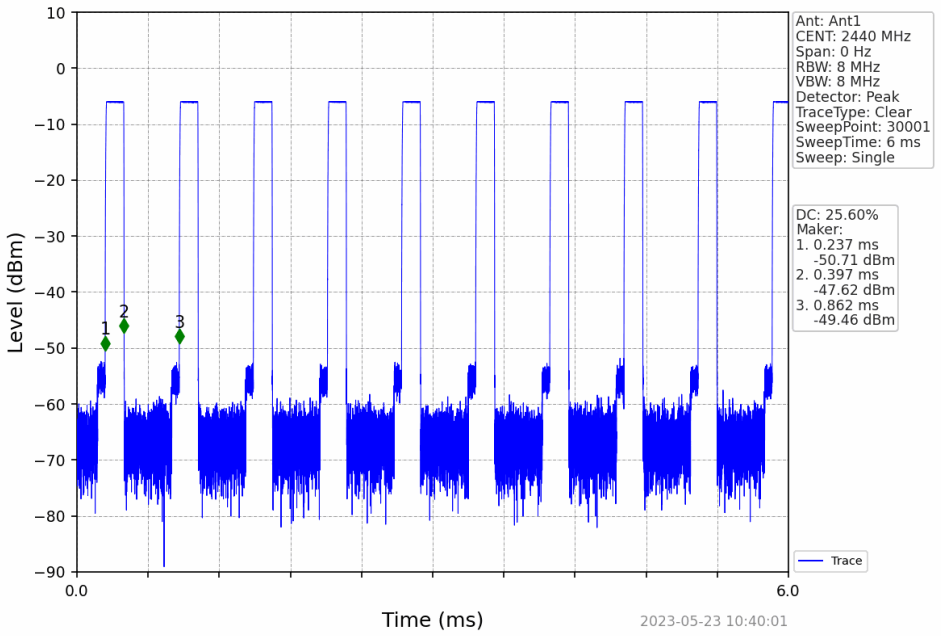
1M_HCH_2480MHz_Ant1_NTNV



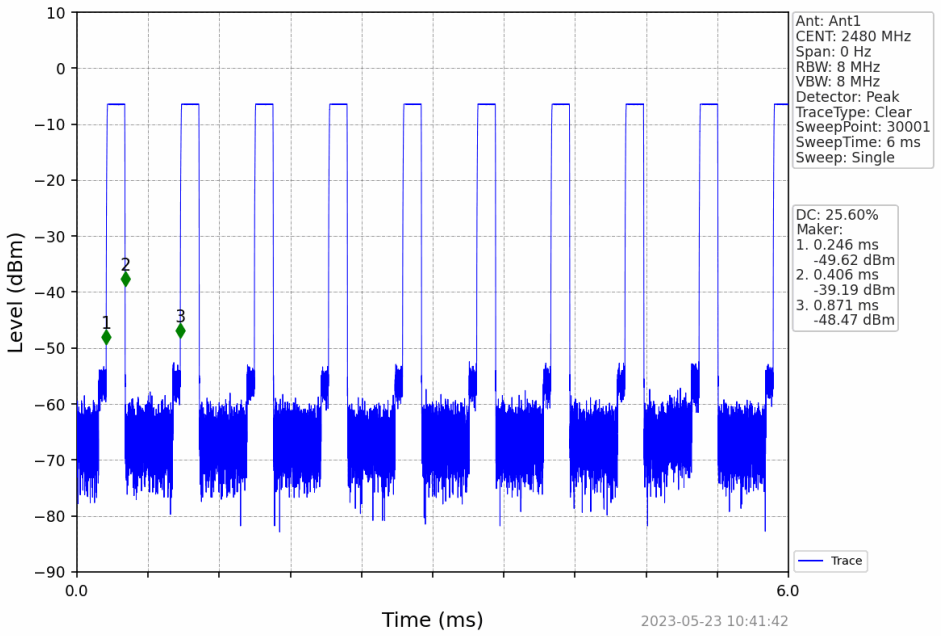
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



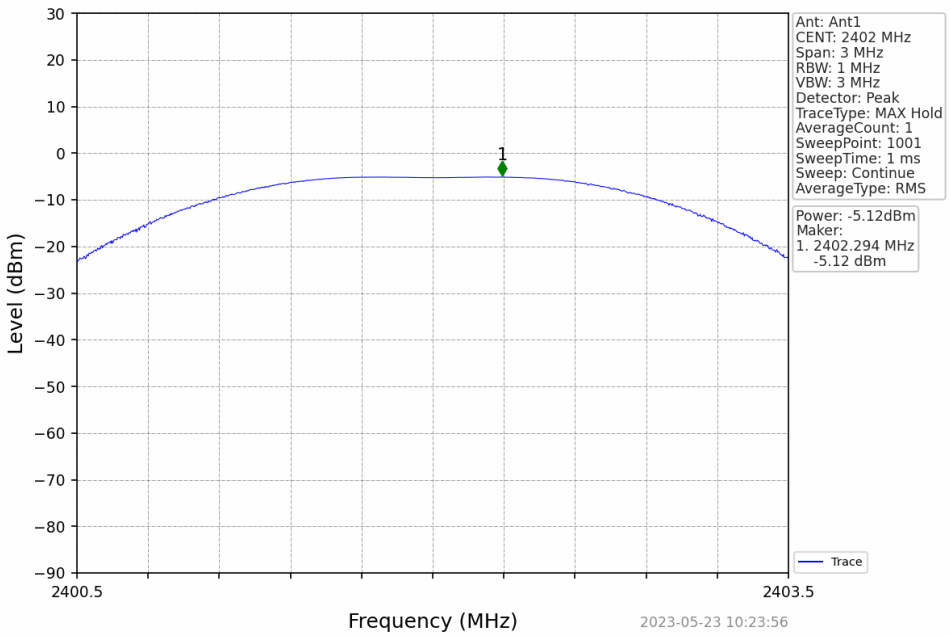
B.2. Maximum Conducted Output Power

Test Result

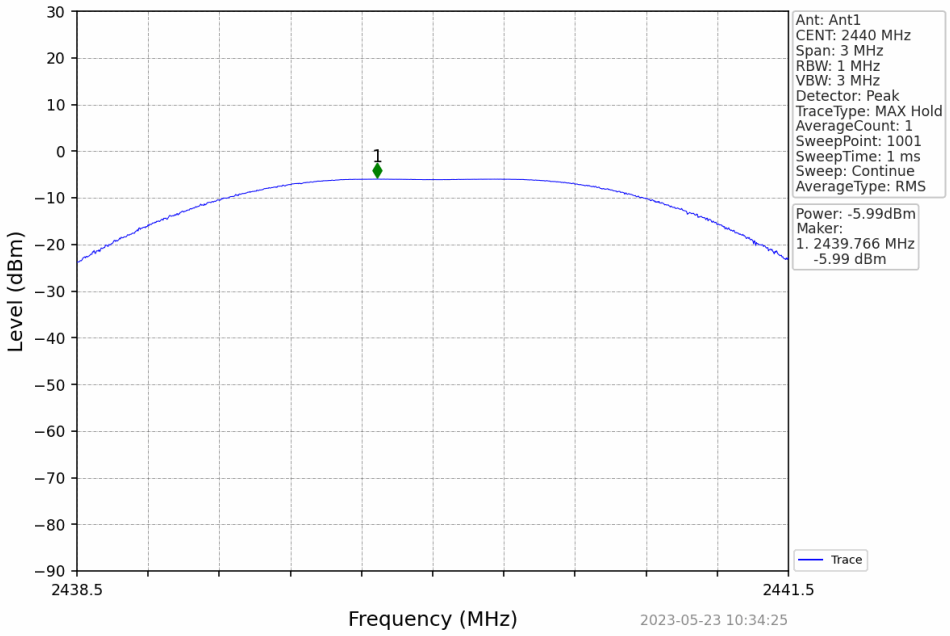
Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1M	SISO	2402	-5.12	<=30	Pass
		2440	-5.99	<=30	Pass
		2480	-6.45	<=30	Pass
2M	SISO	2402	-5.75	<=30	Pass
		2440	-6.01	<=30	Pass
		2480	-6.16	<=30	Pass

Test Graph

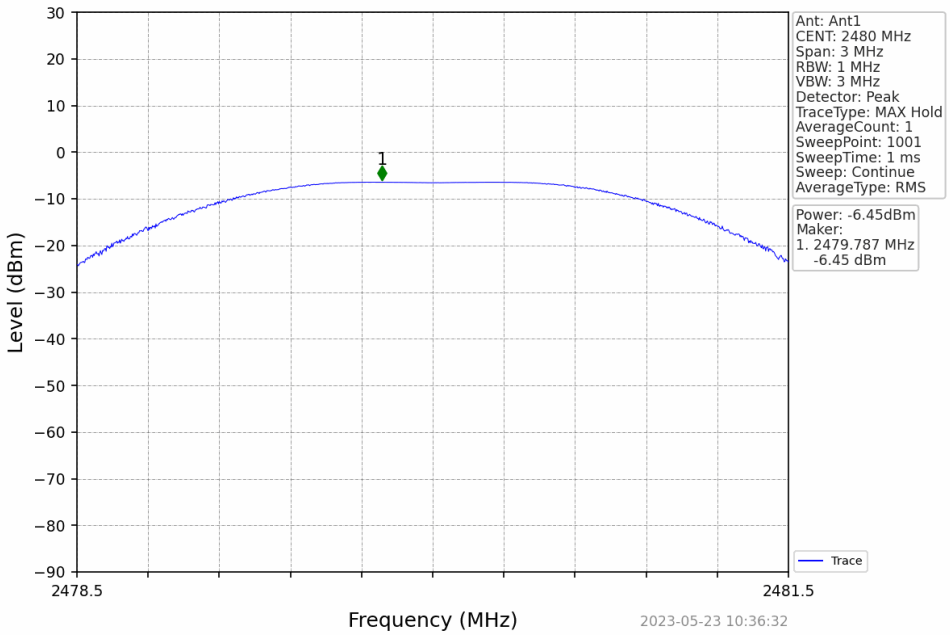
1M_LCH_2402MHz_Ant1_NTNV



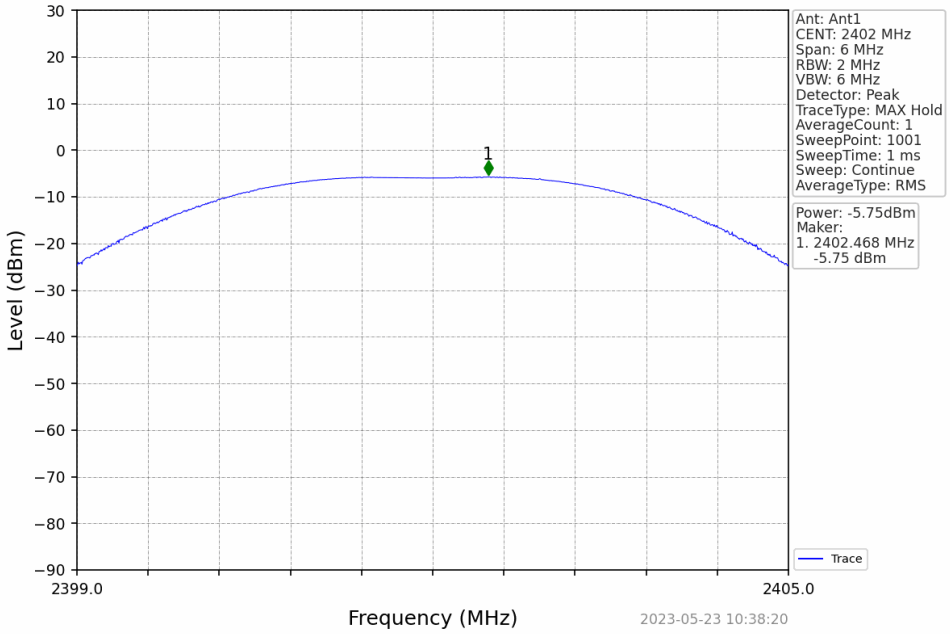
1M_MCH_2440MHz_Ant1_NTNV



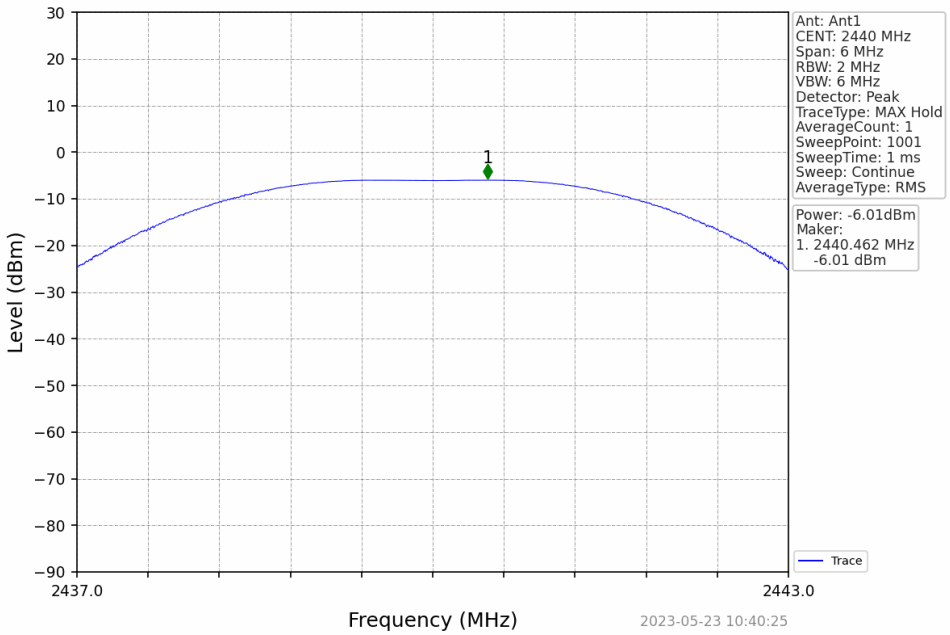
1M_HCH_2480MHz_Ant1_NTNV



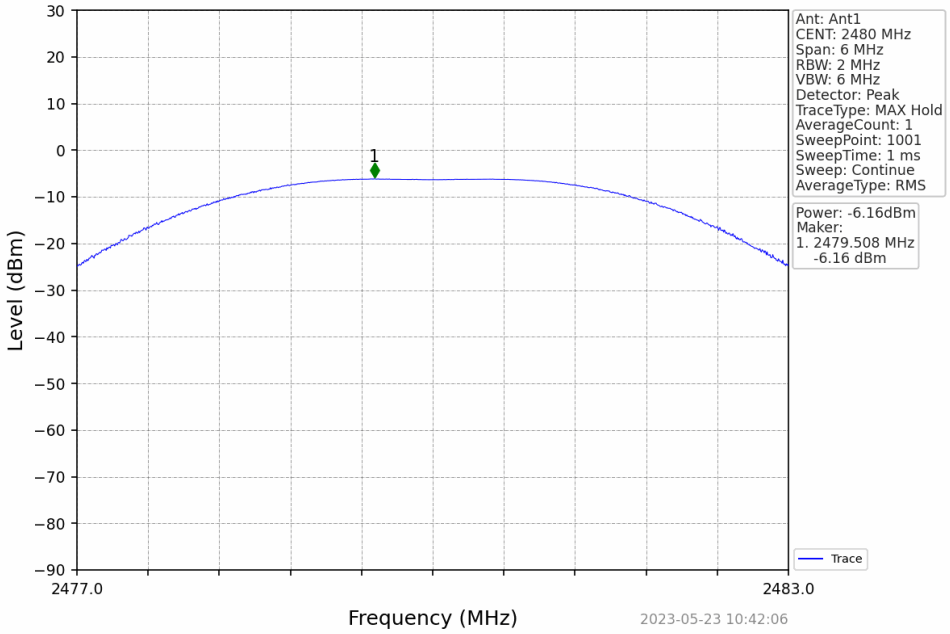
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



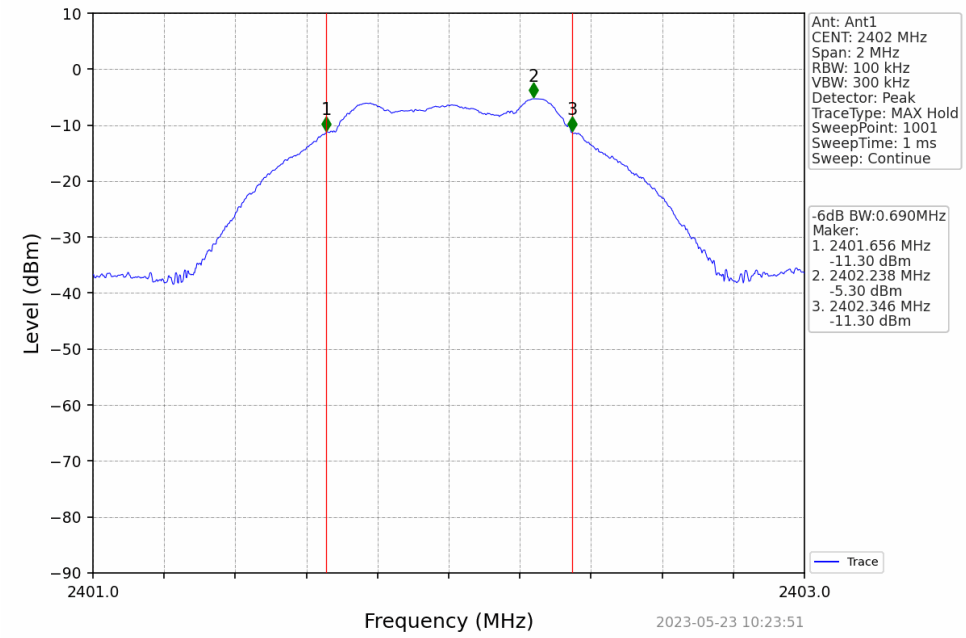
B.3. 6dB BW

Test Result

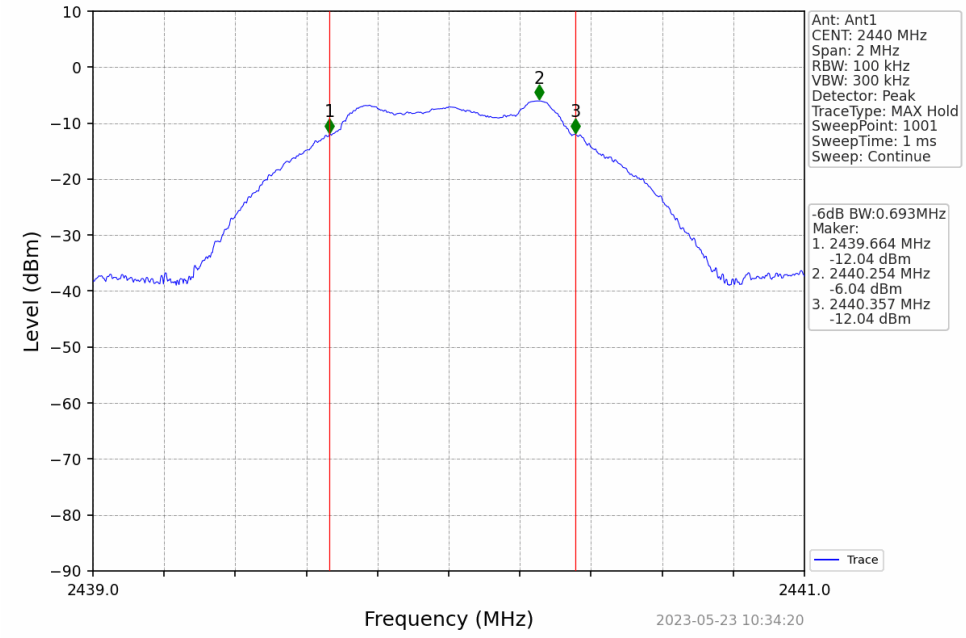
Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	2402	1	0.690	>=0.5	Pass
		2440	1	0.693	>=0.5	Pass
		2480	1	0.720	>=0.5	Pass
2M	SISO	2402	1	1.156	>=0.5	Pass
		2440	1	1.137	>=0.5	Pass
		2480	1	1.155	>=0.5	Pass

Test Graph

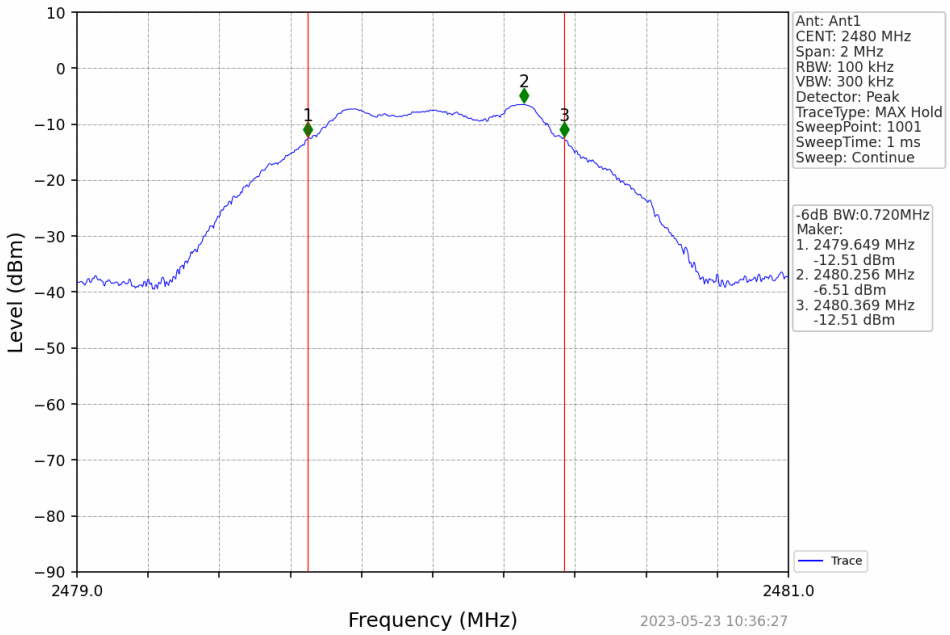
1M_LCH_2402MHz_Ant1_NTNV



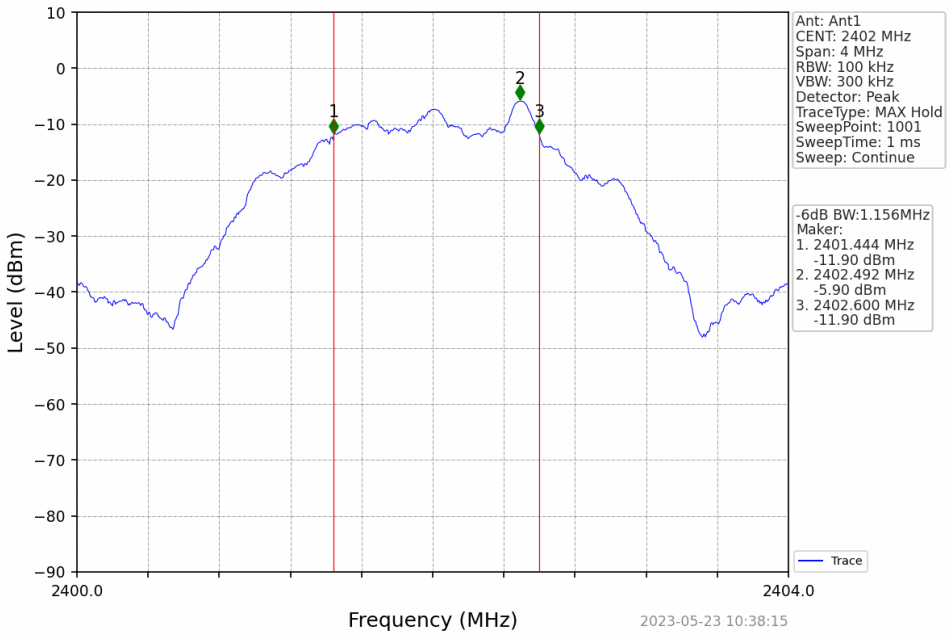
1M_MCH_2440MHz_Ant1_NTNV



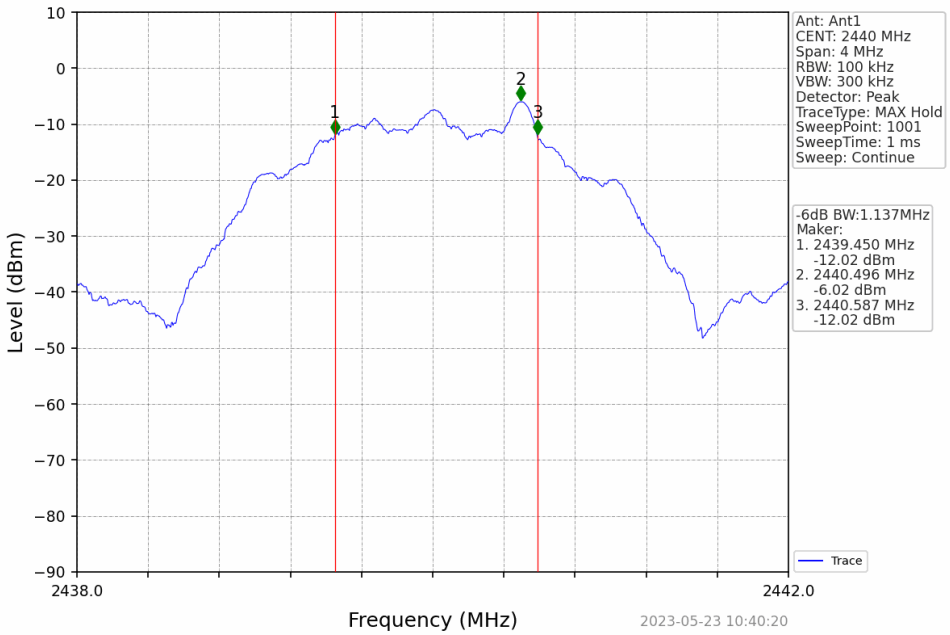
1M_HCH_2480MHz_Ant1_NTNV



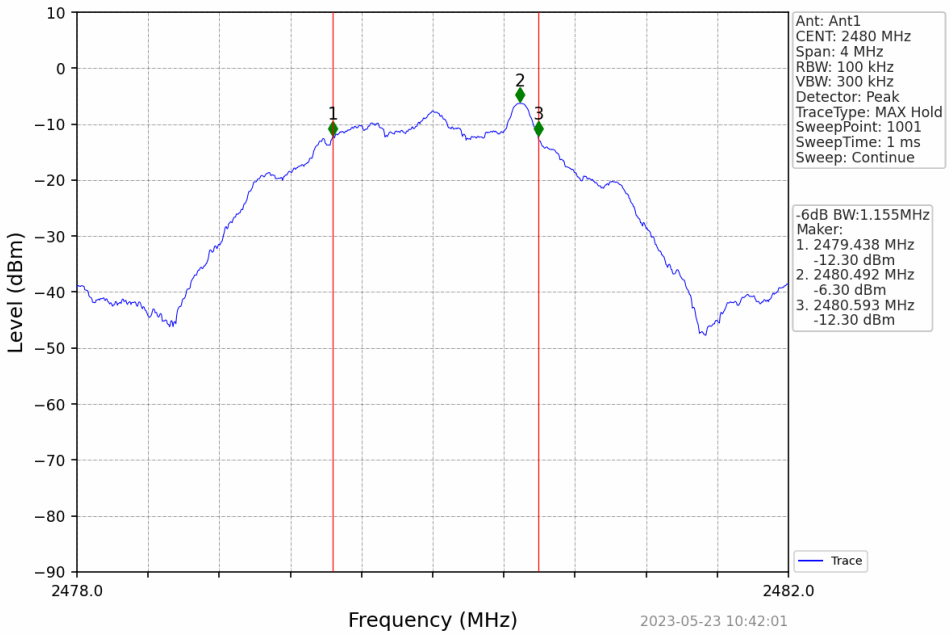
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



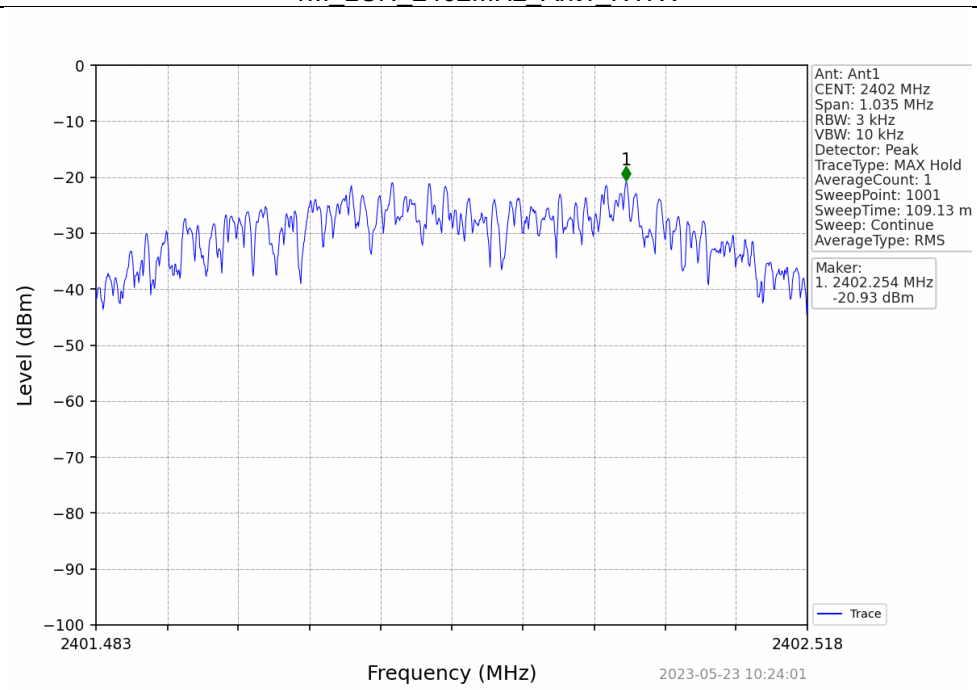
B.4. Maximum Power Spectral Density

Test Result

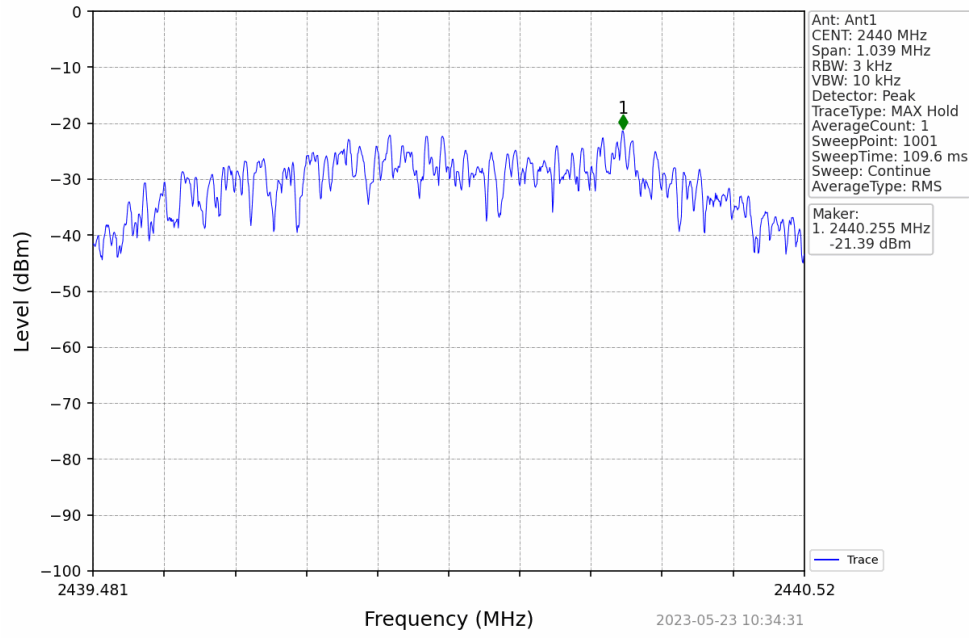
Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
1M	SISO	2402	-20.93	<=8	Pass
		2440	-21.39	<=8	Pass
		2480	-21.37	<=8	Pass
2M	SISO	2402	-22.61	<=8	Pass
		2440	-22.75	<=8	Pass
		2480	-22.75	<=8	Pass

Test Graph

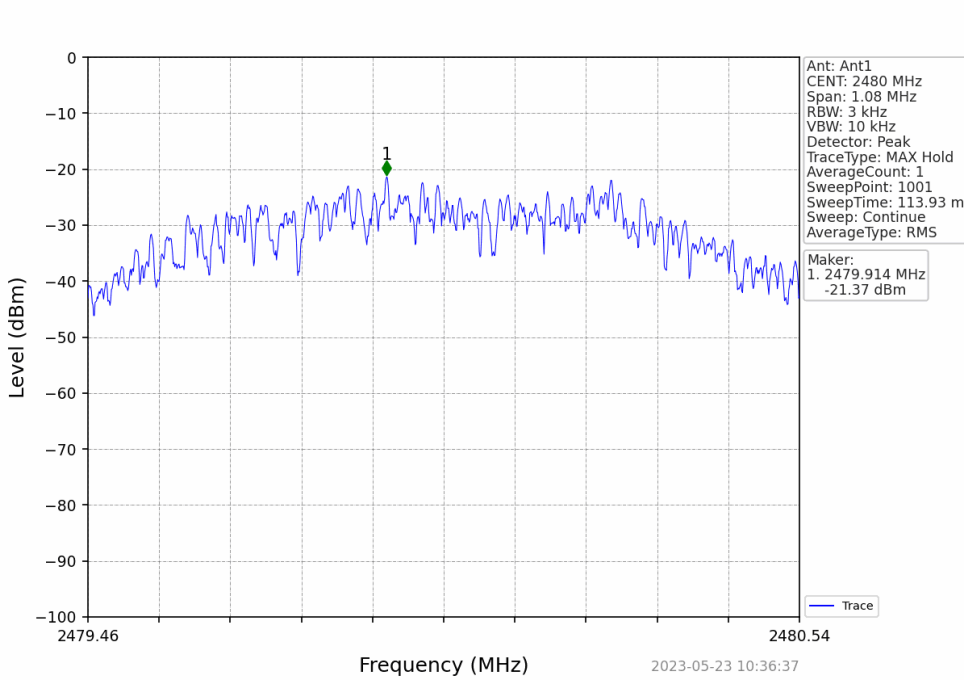
1M_LCH_2402MHz_Ant1_NTNV



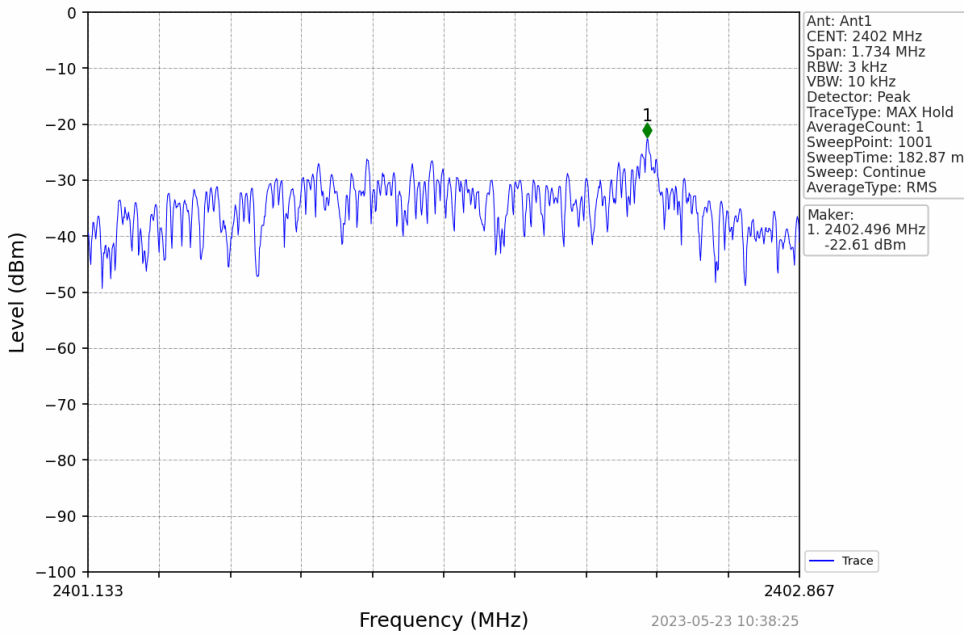
1M_MCH_2440MHz_Ant1_NTNV



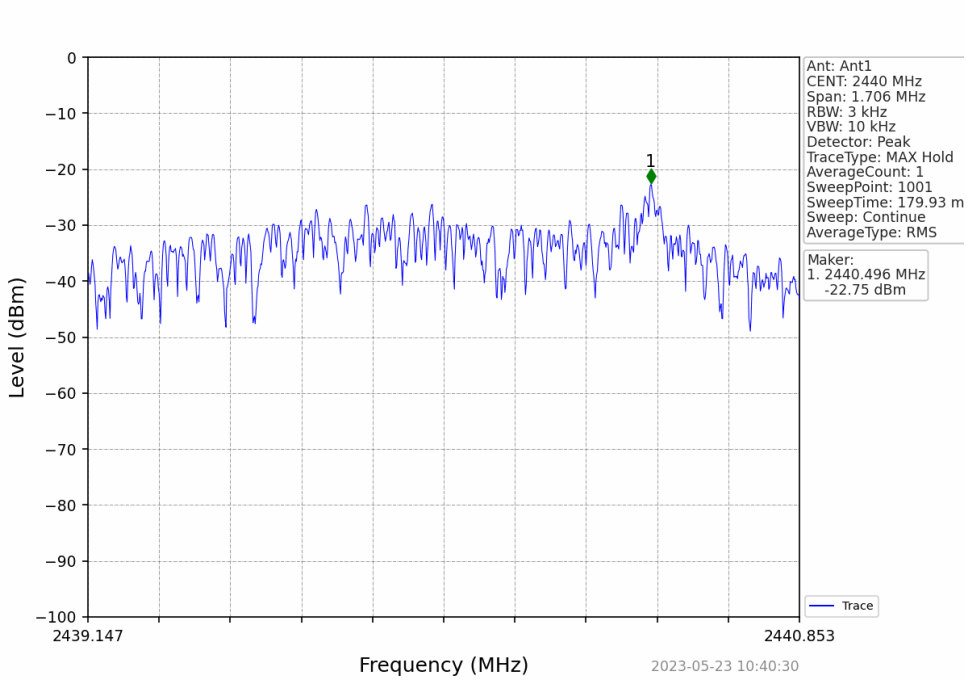
1M_HCH_2480MHz_Ant1_NTNV



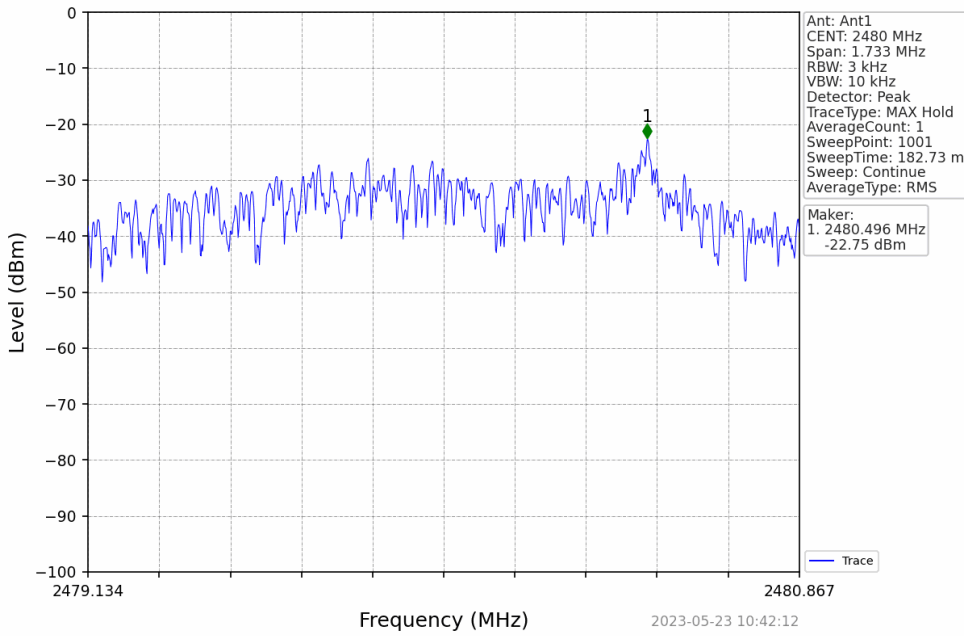
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



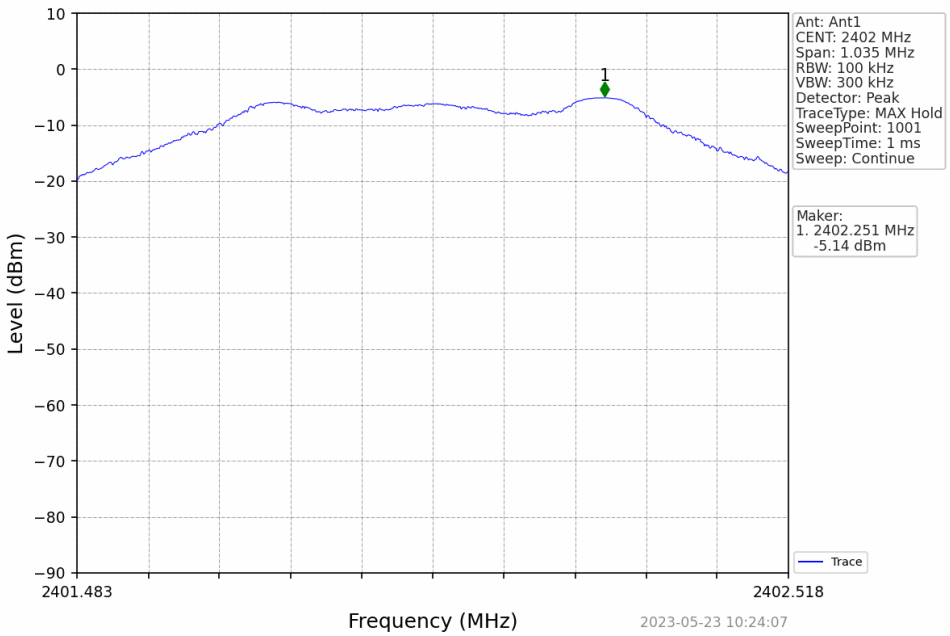
B.5. Conducted Spurious Emissions Test

Test Result

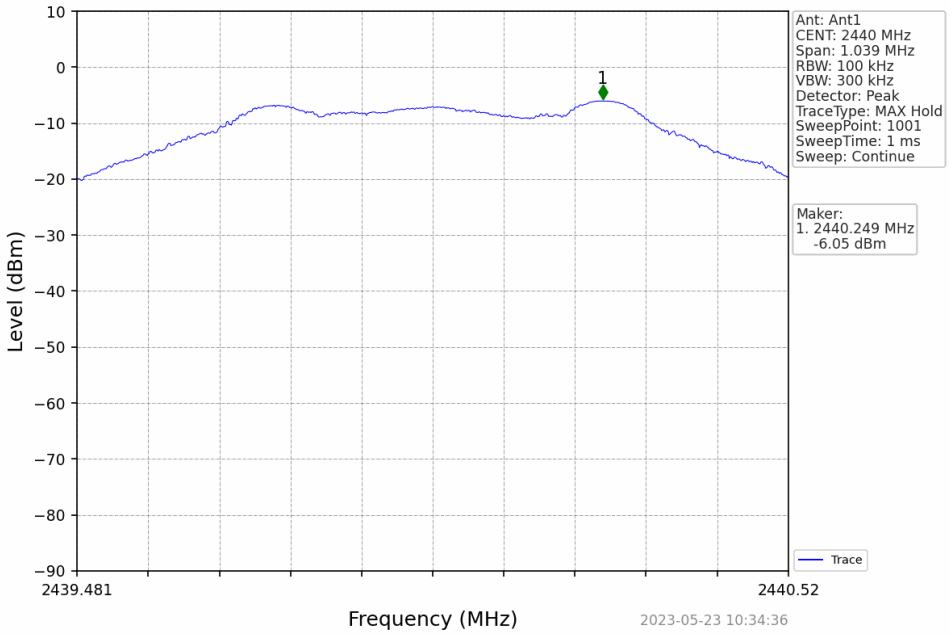
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
1M	SISO	2402	1	-5.14
		2440	1	-6.05
		2480	1	-6.50
2M	SISO	2402	1	-5.93
		2440	1	-6.06
		2480	1	-6.19

Test Graph

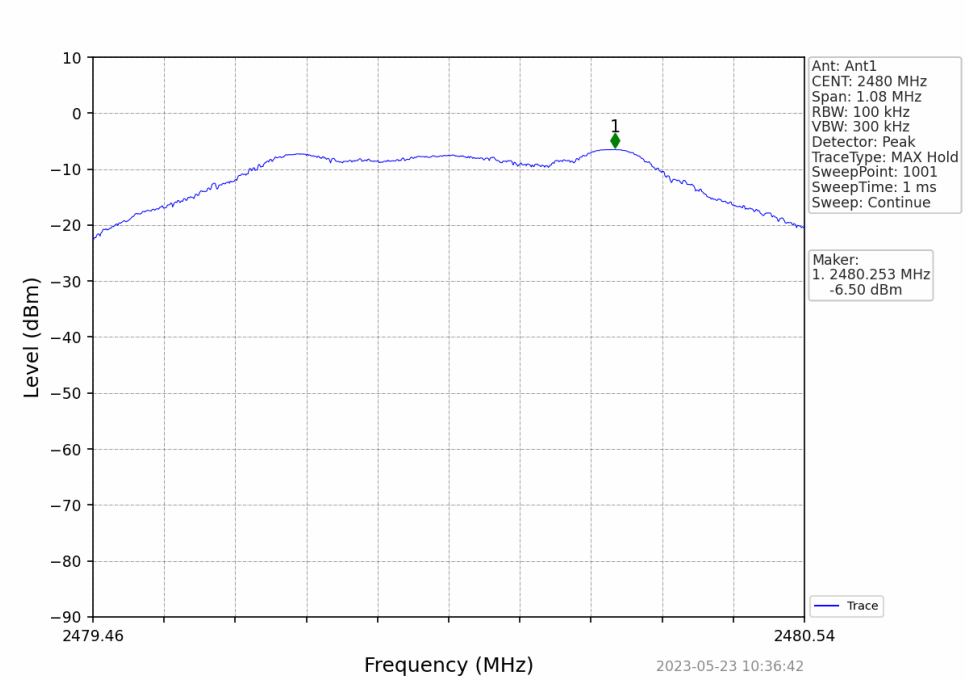
1M_LCH_2402MHz_Ant1_NTNV



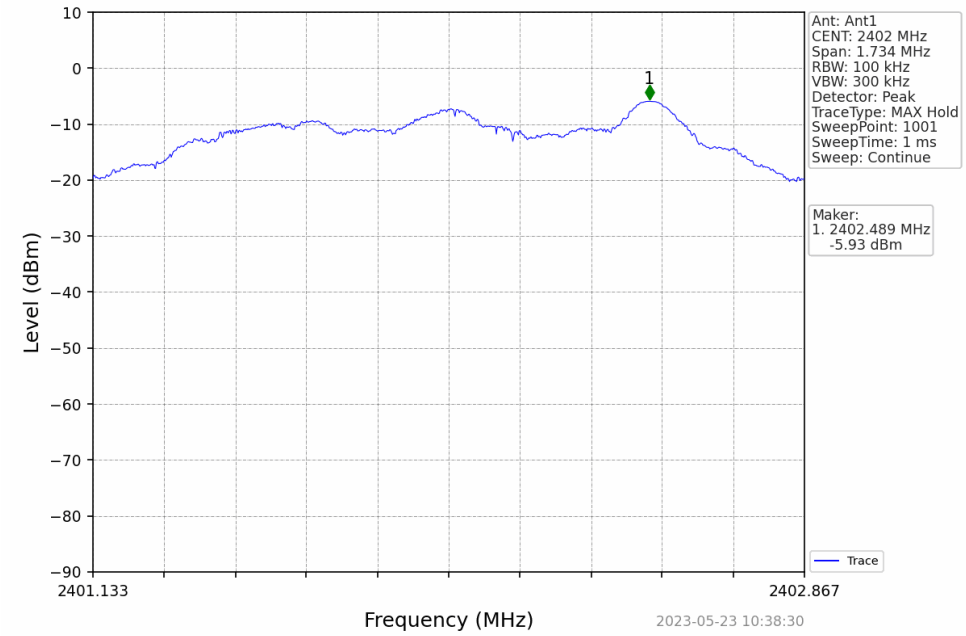
1M_MCH_2440MHz_Ant1_NTNV



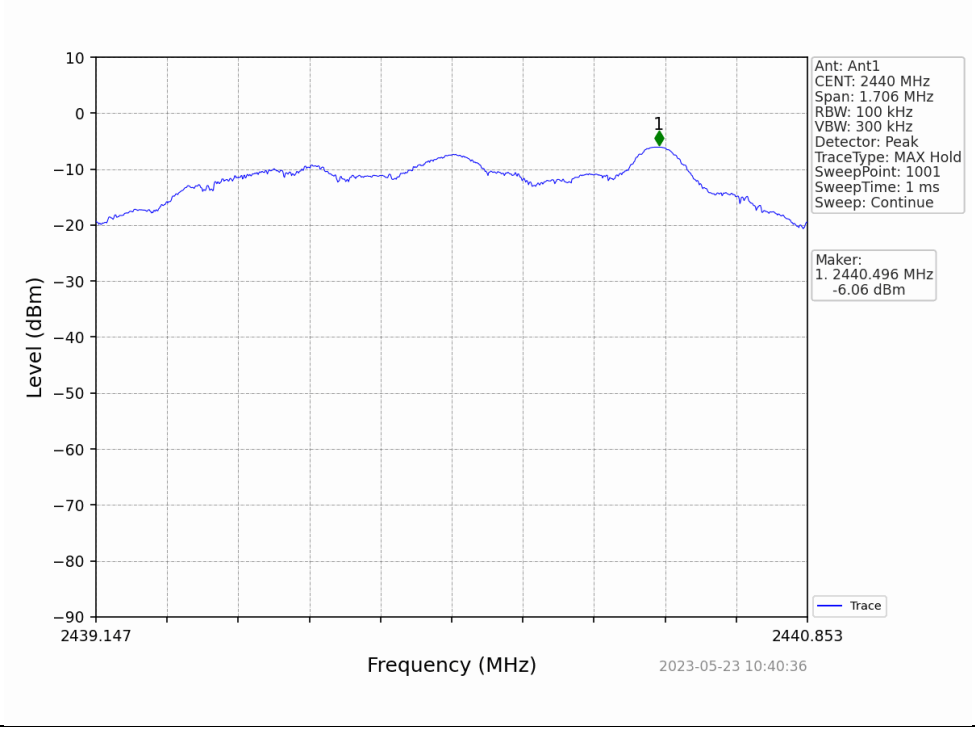
1M_HCH_2480MHz_Ant1_NTNV



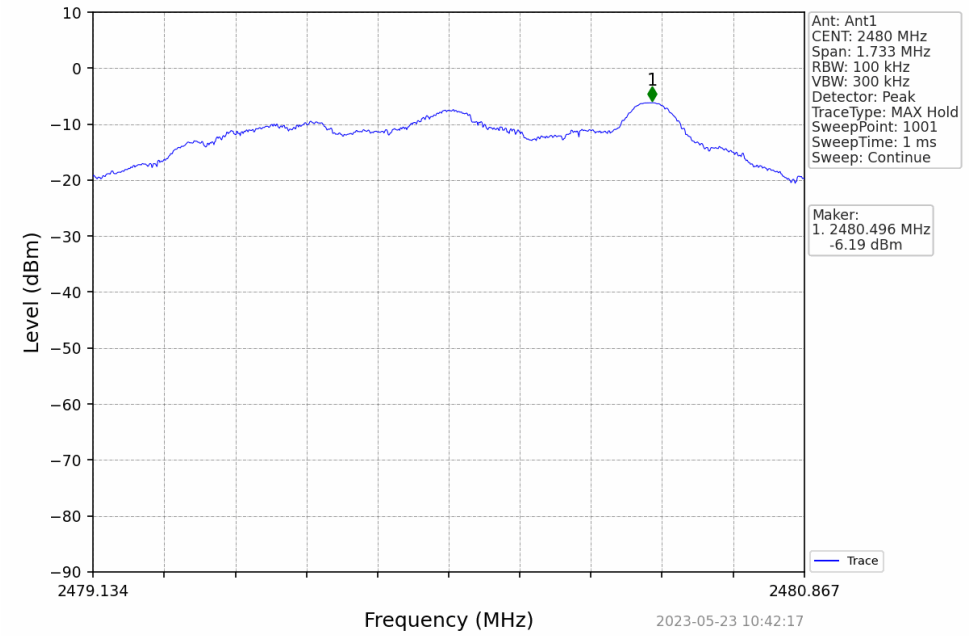
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



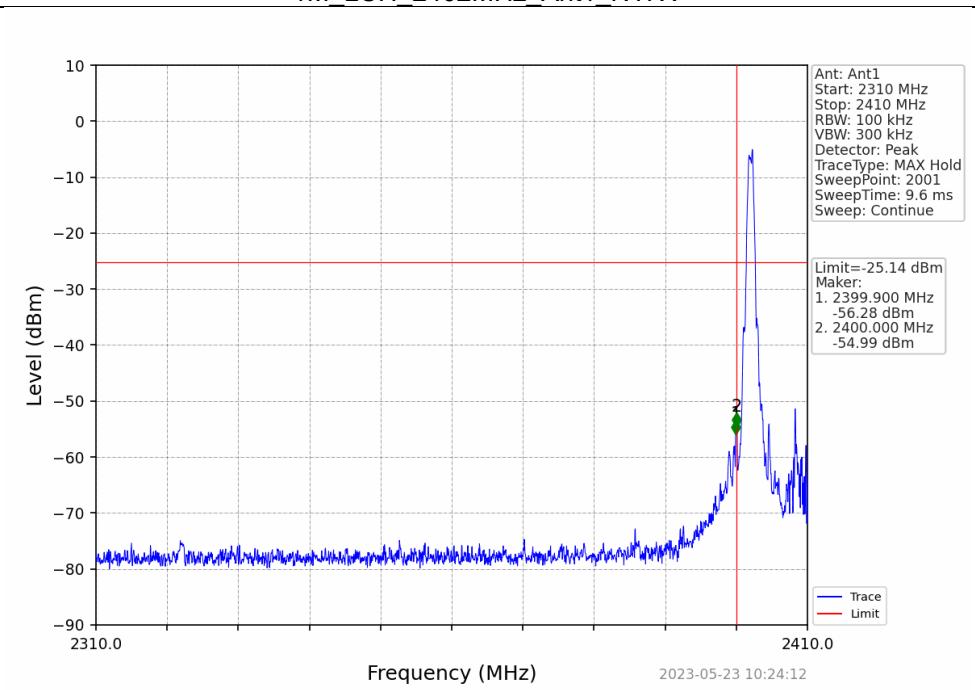
CSE

Test Result

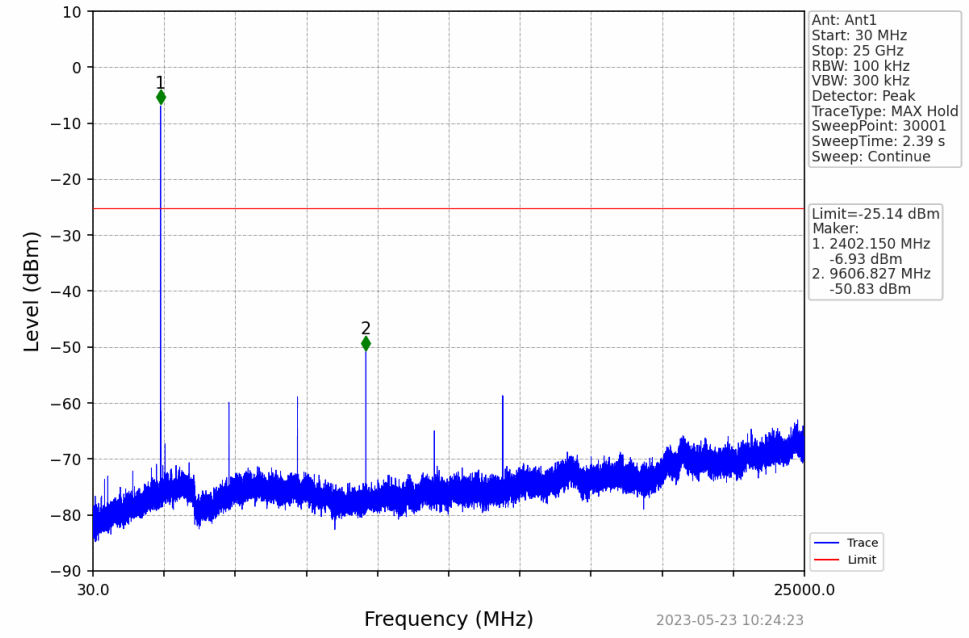
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	2402	1	-5.14	-25.14	Pass
		2440	1	-5.14	-25.14	Pass
		2480	1	-5.14	-25.14	Pass
2M	SISO	2402	1	-5.93	-25.93	Pass
		2440	1	-5.93	-25.93	Pass
		2480	1	-5.93	-25.93	Pass
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.						

Test Graph

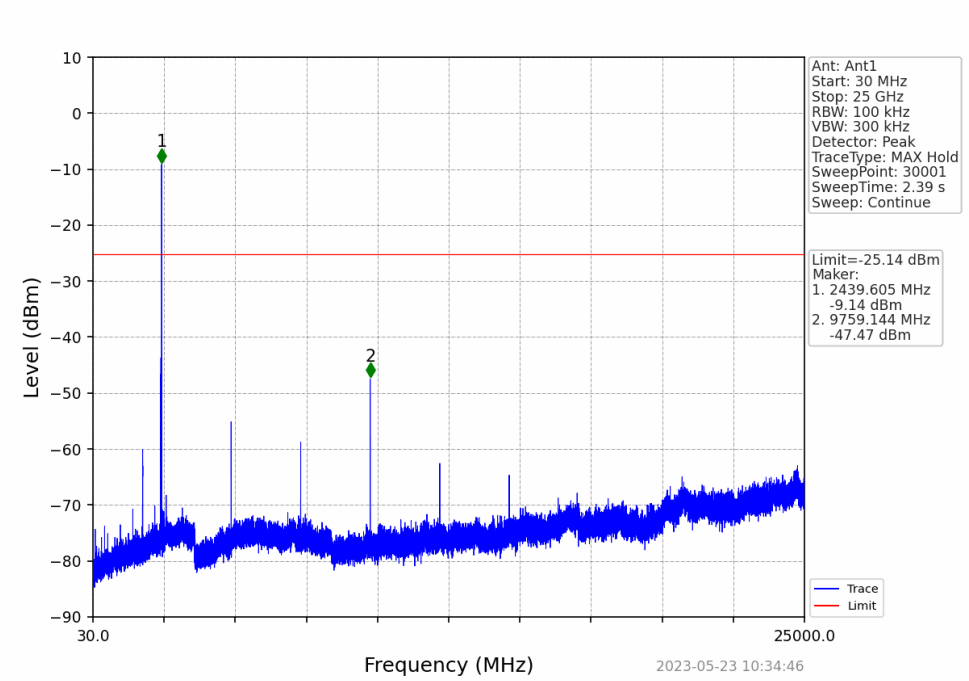
1M_LCH_2402MHz_Ant1_NTNV



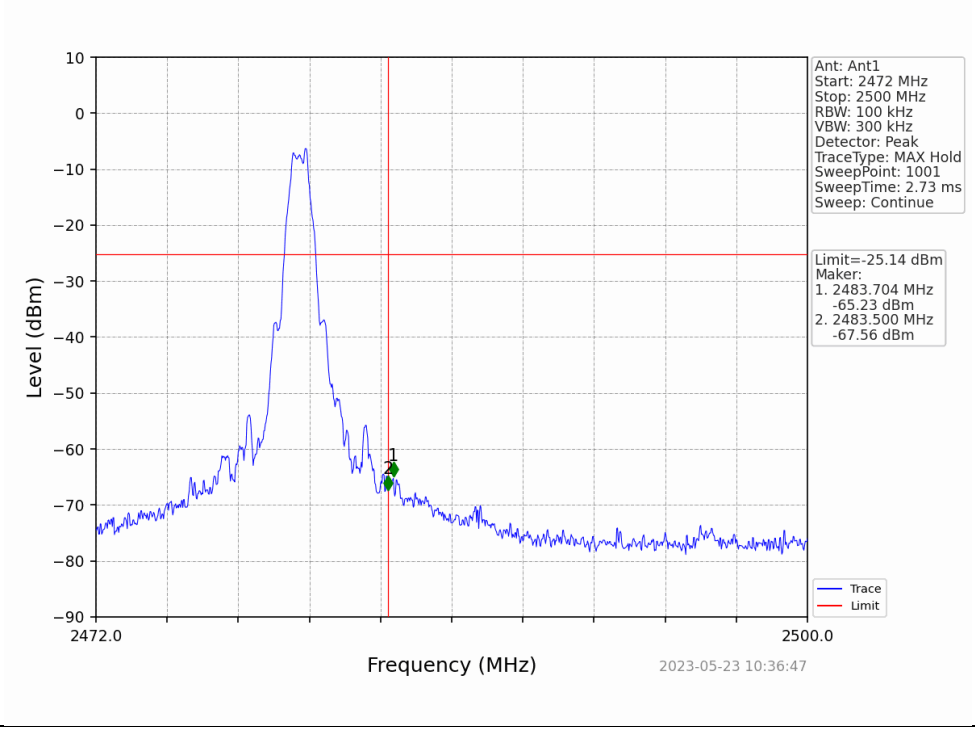
1M_LCH_2402MHz_Ant1_NTNV



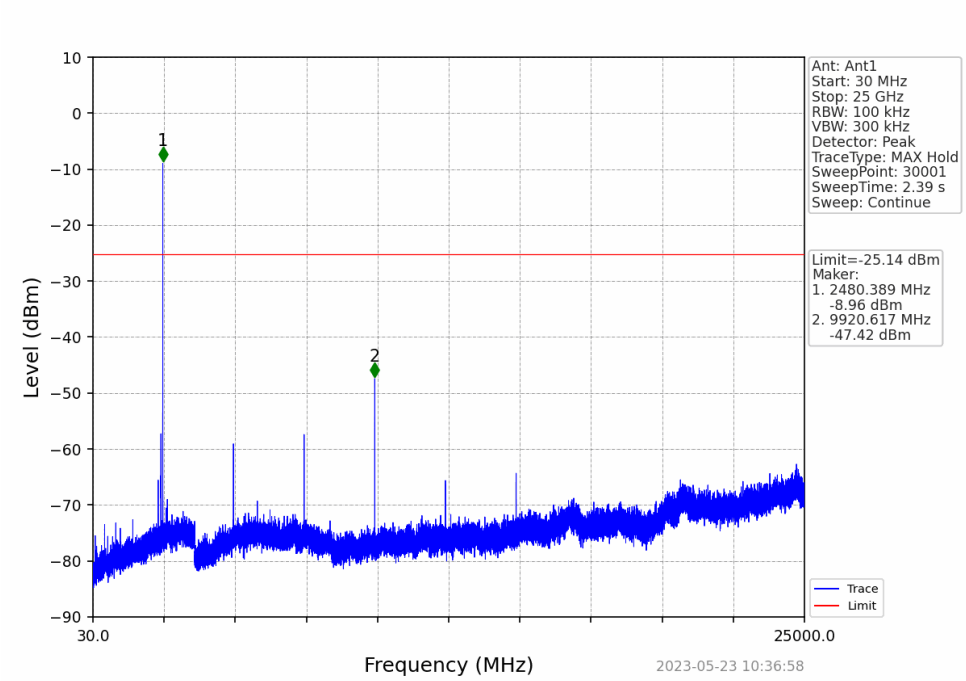
1M_MCH_2440MHz_Ant1_NTNV



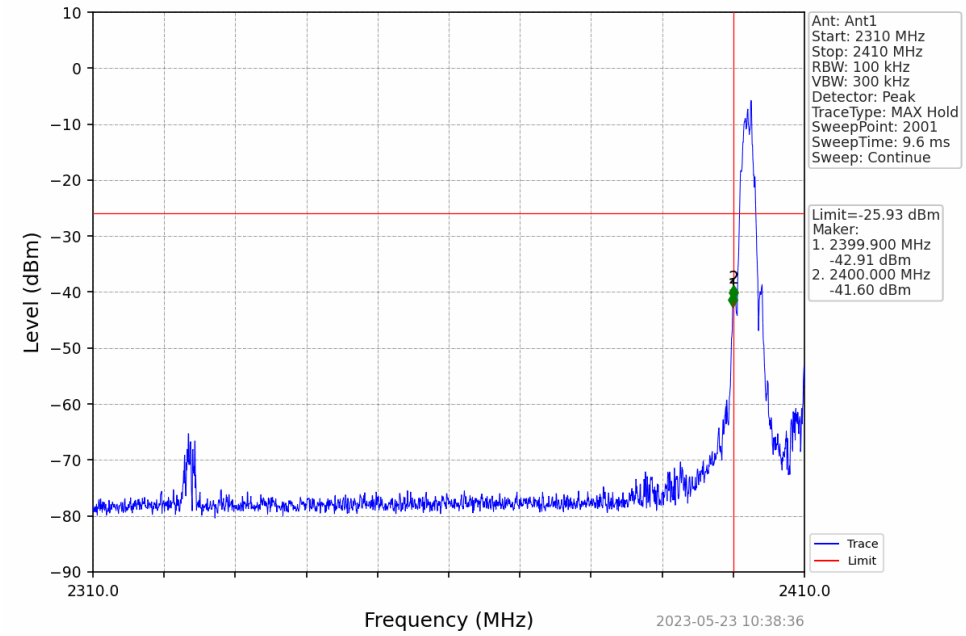
1M_HCH_2480MHz_Ant1_NTNV



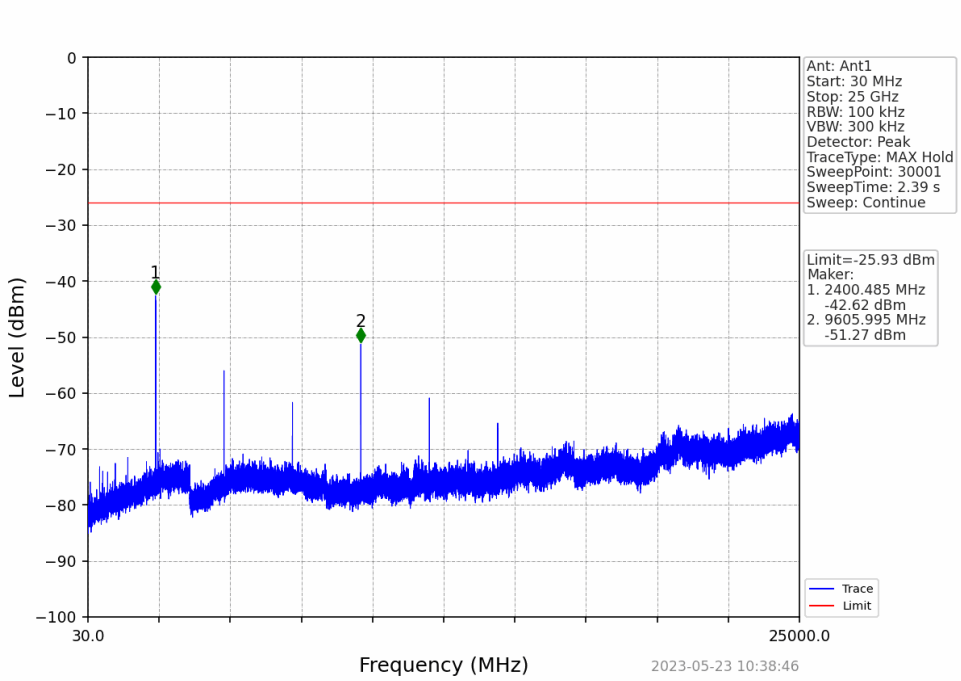
1M_HCH_2480MHz_Ant1_NTNV



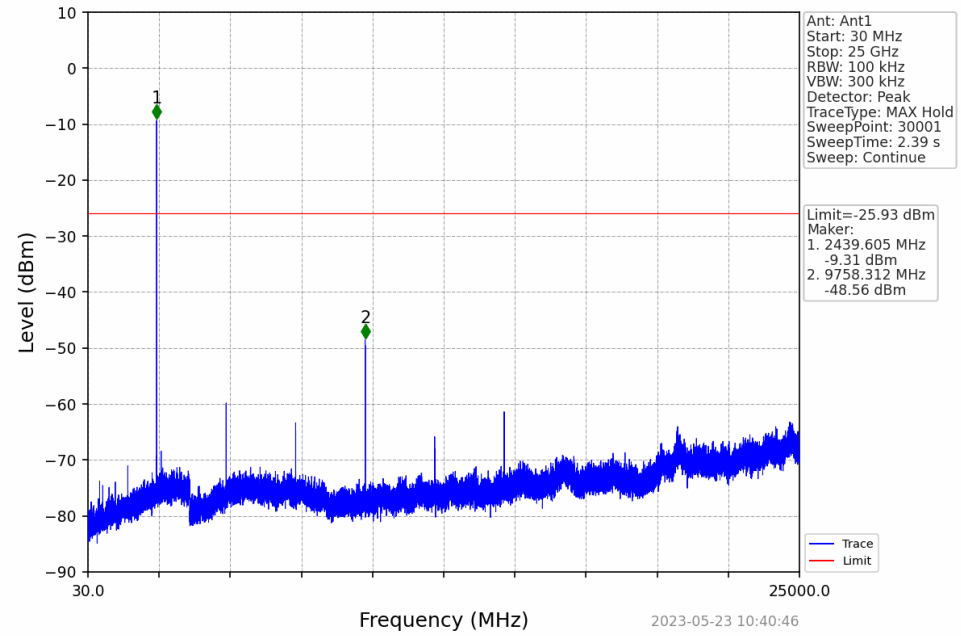
2M_LCH_2402MHz_Ant1_NTNV



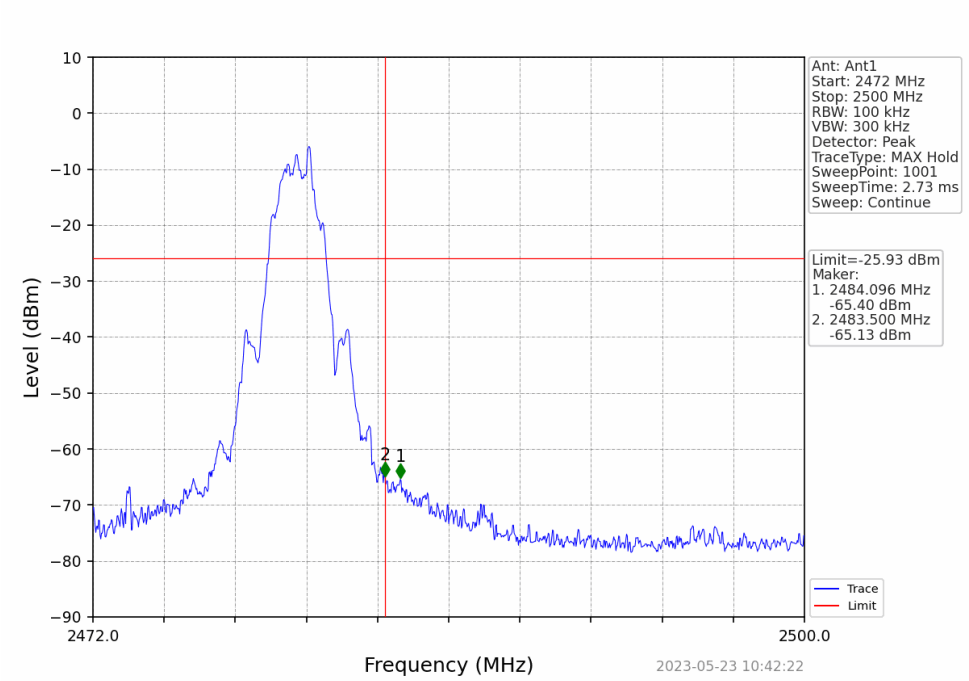
2M_LCH_2402MHz_Ant1_NTNV



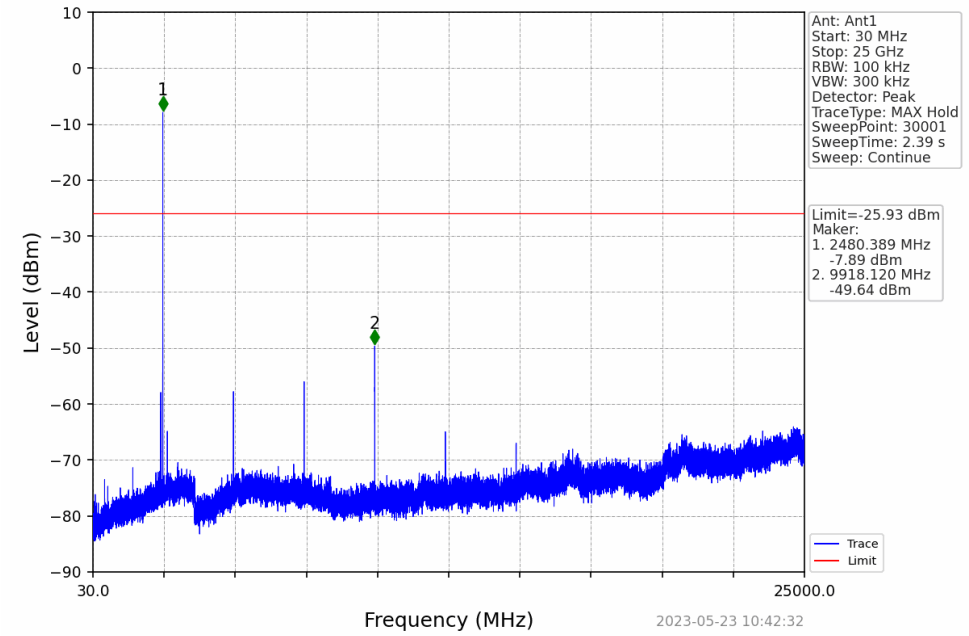
2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



B.6. Conducted band edge emission Test

Test Mode: GFSK										
Pol.	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
Low Channel: 2402MHz										
H	2390.00	47.54	29.15	3.41	34.01	46.09	74.00	-27.91	PK	PASS
H	2400.00	64.99	29.16	3.43	34.01	63.57	74.00	-10.43	PK	PASS
V	2390.00	48.53	29.15	3.41	34.01	47.08	74.00	-26.92	PK	PASS
V	2400.00	67.52	29.16	3.43	34.01	66.10	74.00	-7.90	PK	PASS
H	2390.00	37.03	29.15	3.41	34.01	35.58	54.00	-18.42	AV	PASS
H	2400.00	48.55	29.16	3.43	34.01	47.13	54.00	-6.87	AV	PASS
V	2390.00	37.31	29.15	3.41	34.01	35.86	54.00	-18.14	AV	PASS
V	2400.00	45.64	29.16	3.43	34.01	44.22	54.00	-9.78	AV	PASS
High Channel: 2480MHz										
H	2483.50	50.19	29.28	3.53	34.03	48.97	74.00	-25.03	PK	PASS
H	2500.00	48.48	29.30	3.56	34.03	47.31	74.00	-26.69	PK	PASS
V	2483.50	51.81	29.28	3.53	34.03	50.59	74.00	-23.41	PK	PASS
V	2500.00	49.92	29.30	3.56	34.03	48.75	74.00	-25.25	PK	PASS
H	2483.50	39.91	29.28	3.53	34.03	38.69	54.00	-15.31	AV	PASS
H	2500.00	37.25	29.30	3.56	34.03	36.08	54.00	-17.92	AV	PASS
V	2483.50	41.51	29.28	3.53	34.03	40.29	54.00	-13.71	AV	PASS
V	2500.00	37.56	29.30	3.56	34.03	36.39	54.00	-17.61	AV	PASS
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit										

End of the report