



Shenzhen BANTEK Testing Co., Ltd.

Report No.: BTEK260323010A01E0201

RF Test Report

For BTEK260323010A01E02

Project No.:	BTEK260323010A01E0201
Product Description:	22.0°C, 68%, 101.4kPa
Test Engineer:	Zora
Test Date:	2026-06-15



Shenzhen BANTEK Testing Co., Ltd.

Report No.: BTEK260323010A01E0201

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
Unwanted Emissions In Restricted Frequency Bands	Pass



1. Duty Cycle

1.1 Test Result

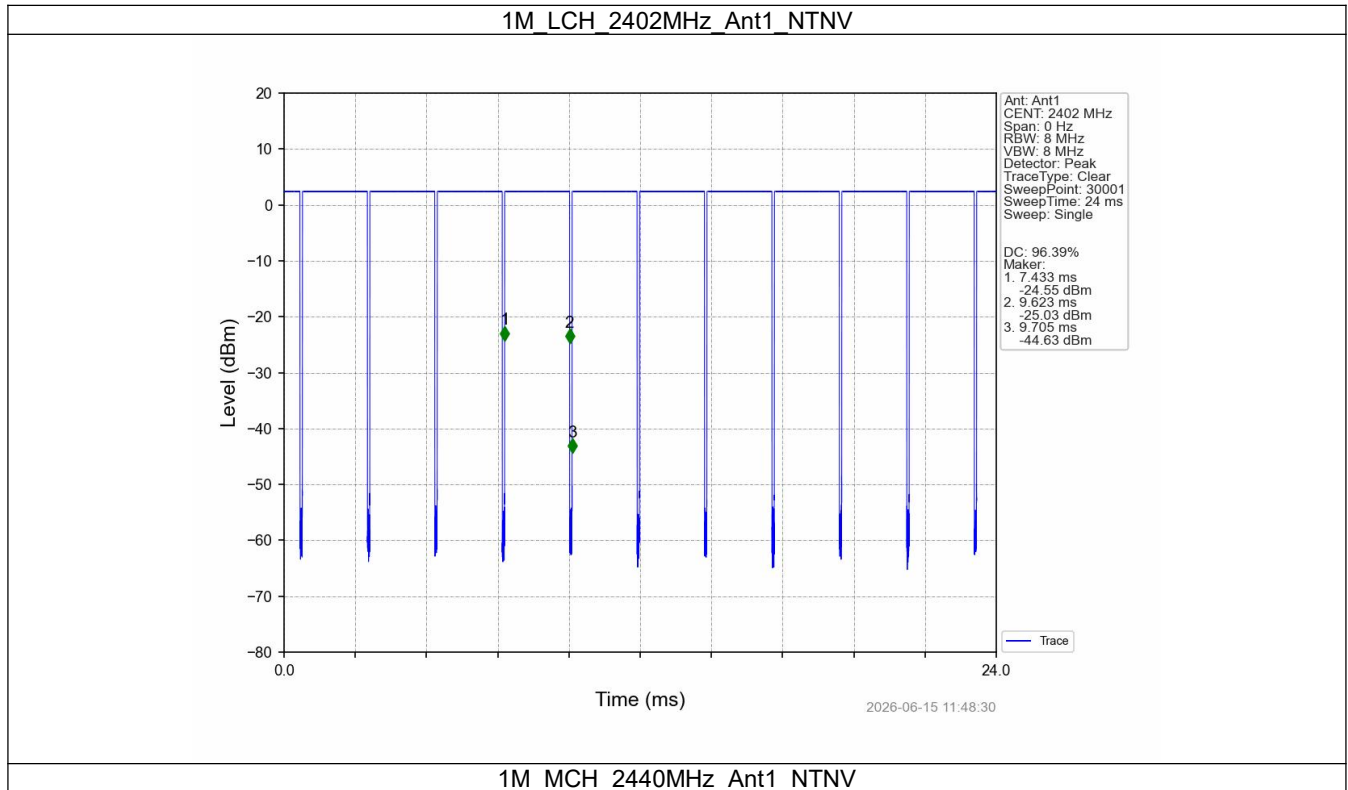
1.1.1 Ant1

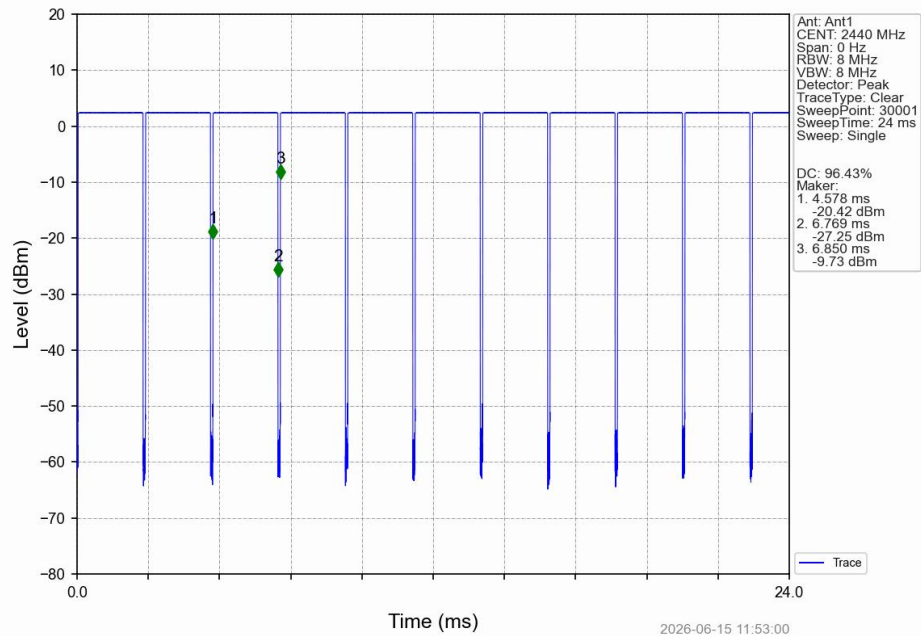
Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
1M	SISO	2402	2.190	2.272	96.39	0.16	0.07
		2440	2.191	2.272	96.43	0.16	0.04
		2480	2.190	2.273	96.35	0.16	0.07
2M	SISO	2402	1.120	1.202	93.18	0.31	0.13
		2440	1.120	1.202	93.18	0.31	0.10
		2480	1.120	1.202	93.18	0.31	0.06



1.2 Test Graph

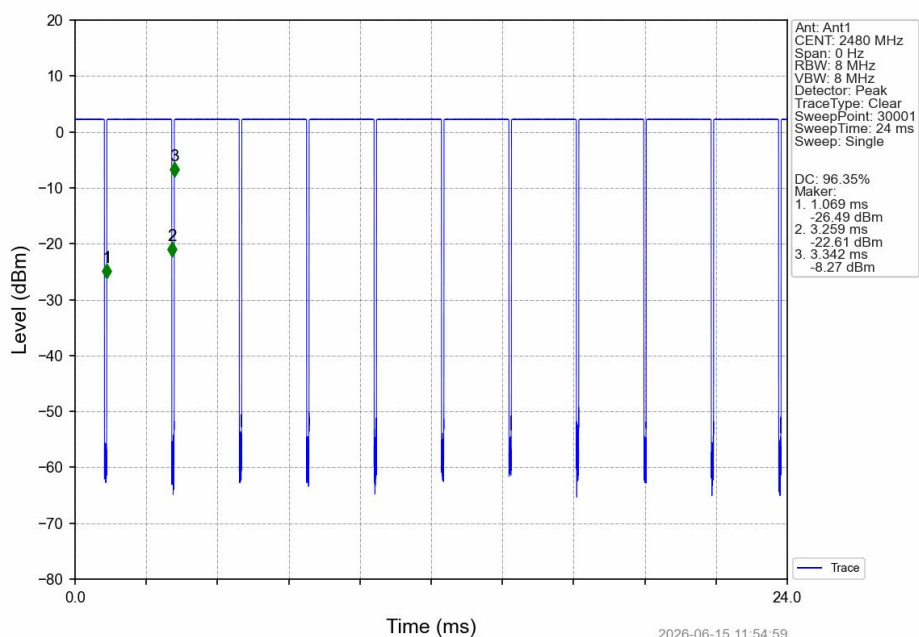
1.2.1 Ant1



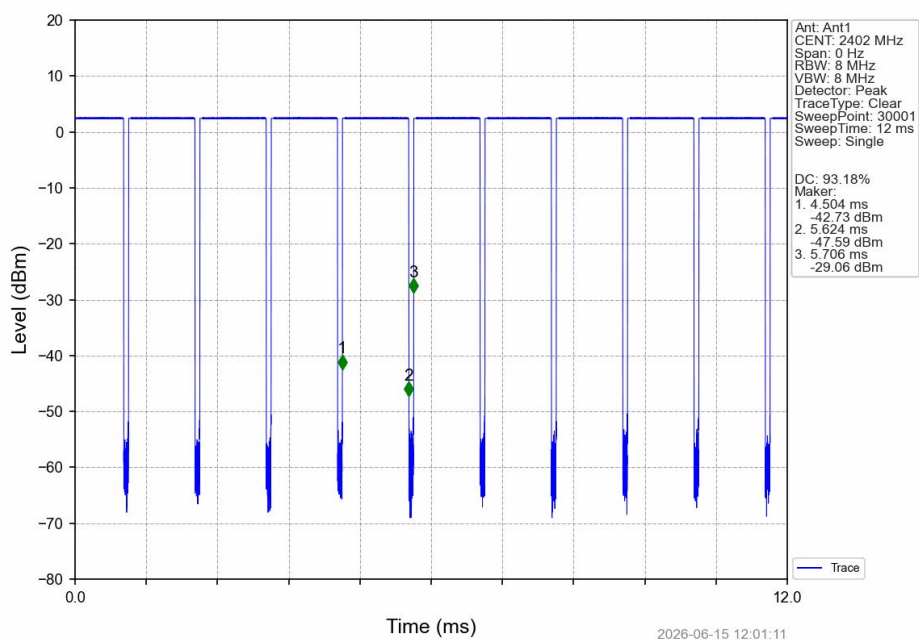




1M_HCH_2480MHz_Ant1_NTNV

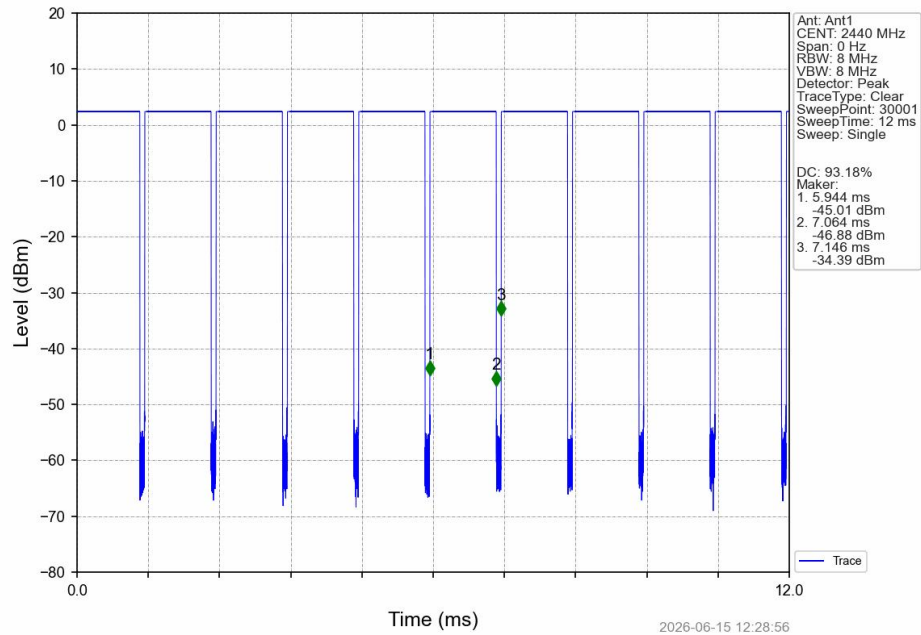


2M_LCH_2402MHz_Ant1_NTNV

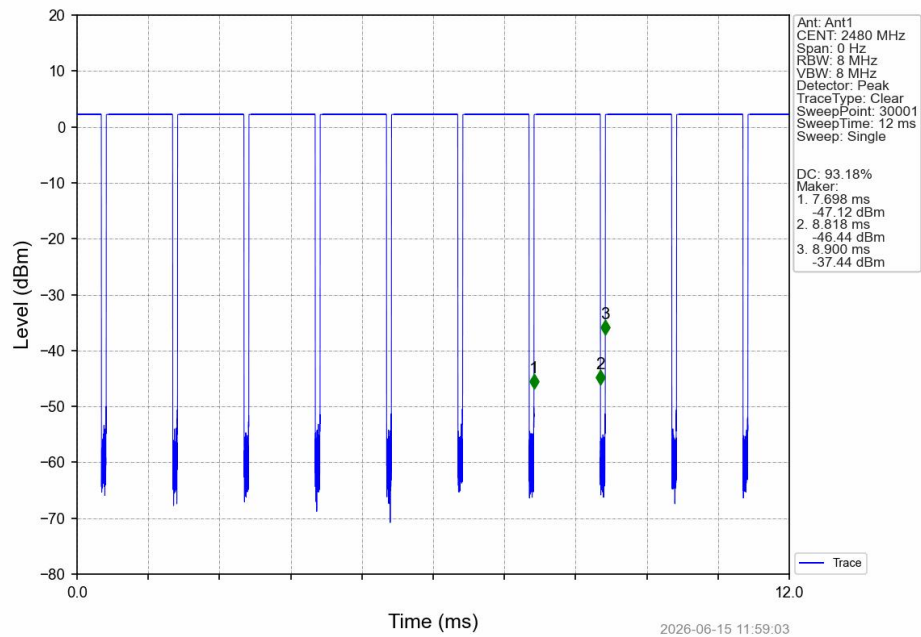




2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV





2. Bandwidth

2.1 Test Result

2.1.1 OBW

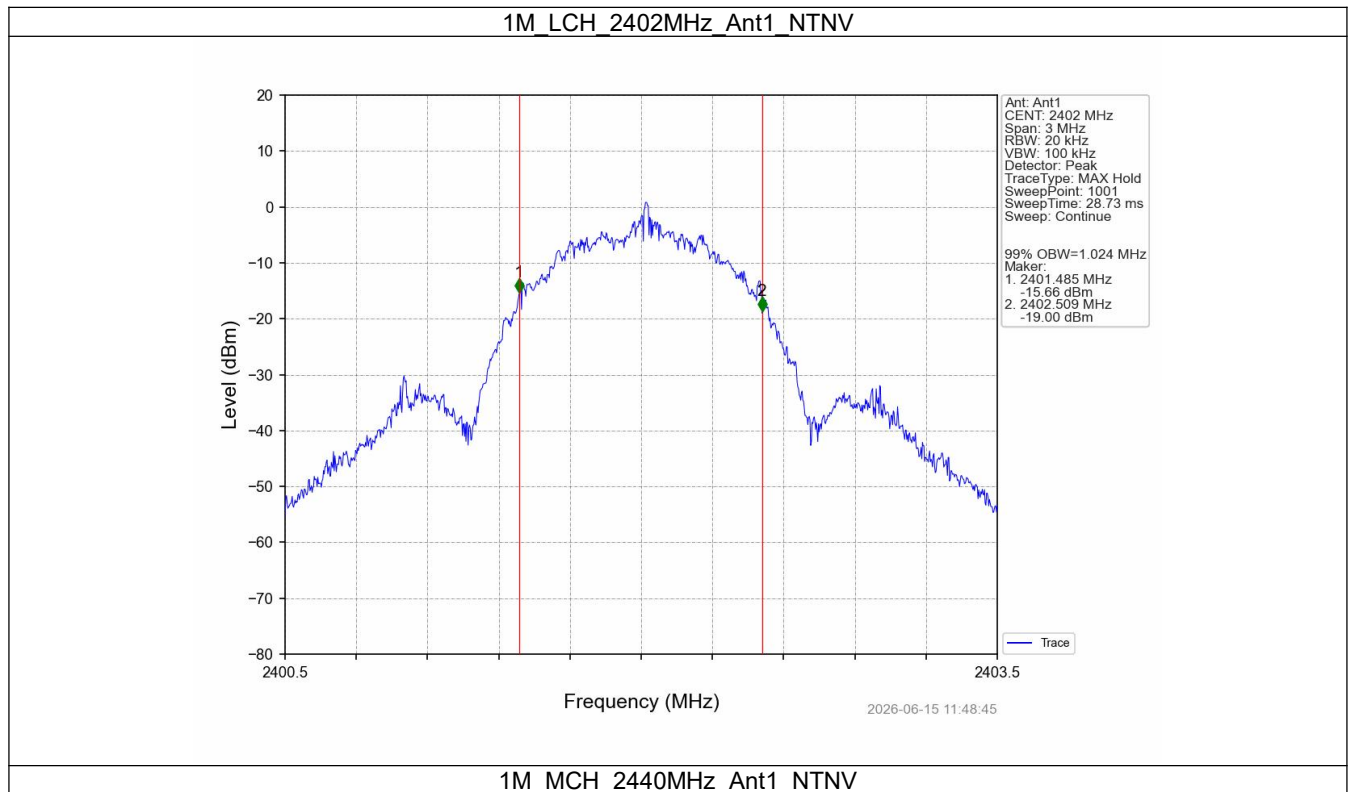
Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	2402	1	1.024	/	Pass
		2440	1	1.020	/	Pass
		2480	1	1.019	/	Pass
2M	SISO	2402	1	2.017	/	Pass
		2440	1	2.026	/	Pass
		2480	1	2.021	/	Pass

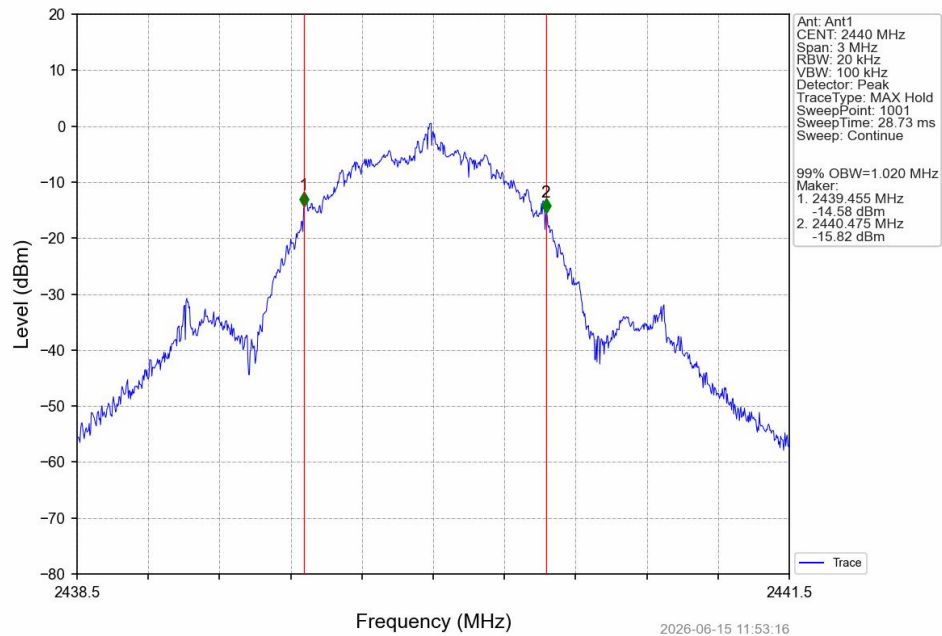
2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	2402	1	0.713	≥ 0.5	Pass
		2440	1	0.704	≥ 0.5	Pass
		2480	1	0.685	≥ 0.5	Pass
2M	SISO	2402	1	1.189	≥ 0.5	Pass
		2440	1	1.210	≥ 0.5	Pass
		2480	1	1.215	≥ 0.5	Pass

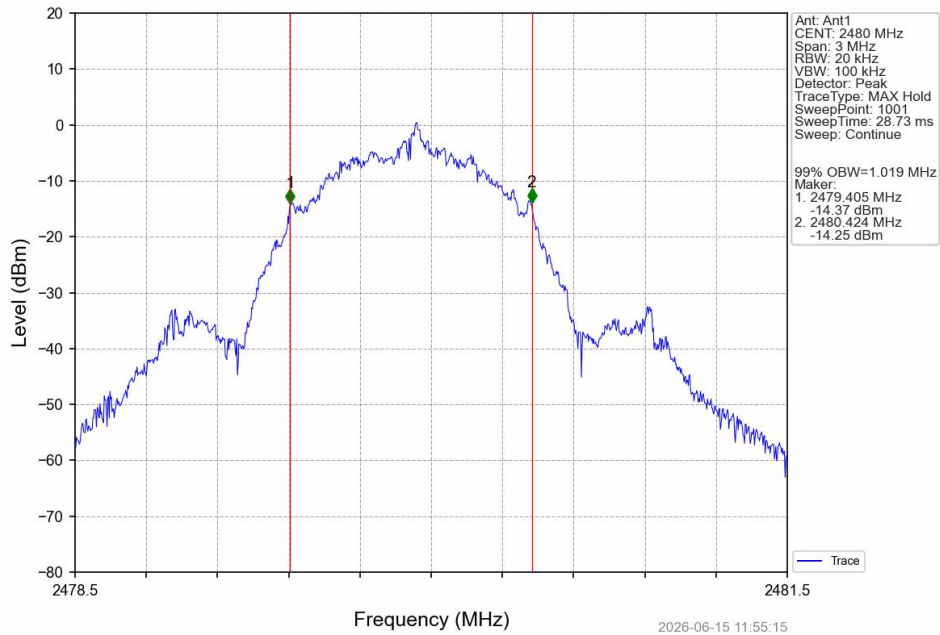
2.2 Test Graph

2.2.1 OBW

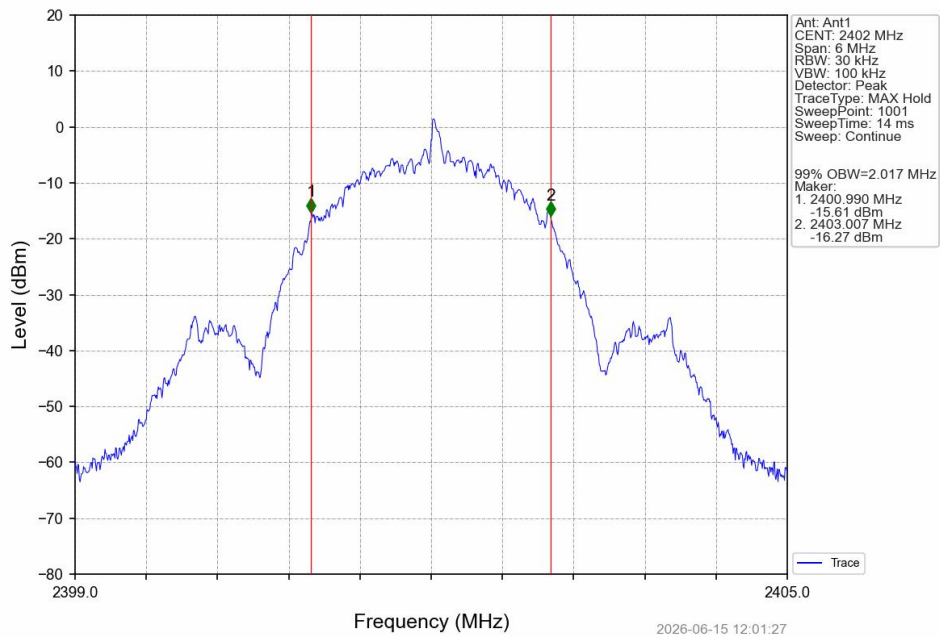




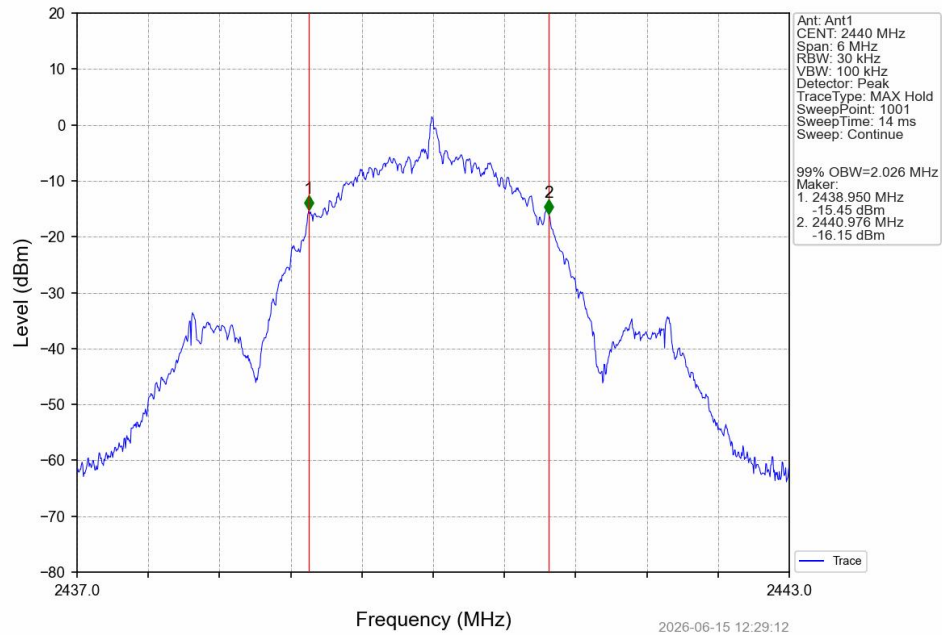
1M_HCH_2480MHz_Ant1_NTNV



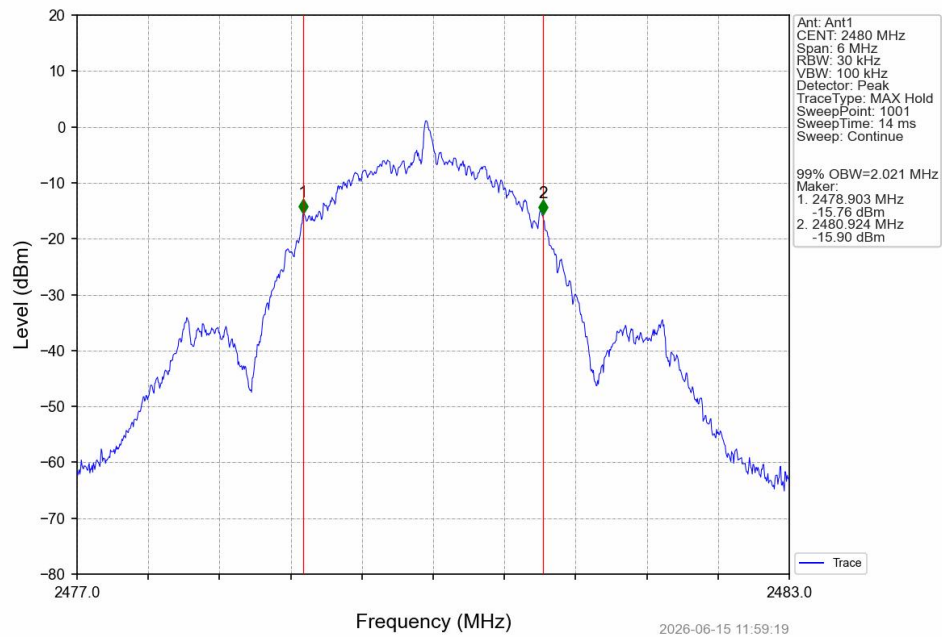
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV

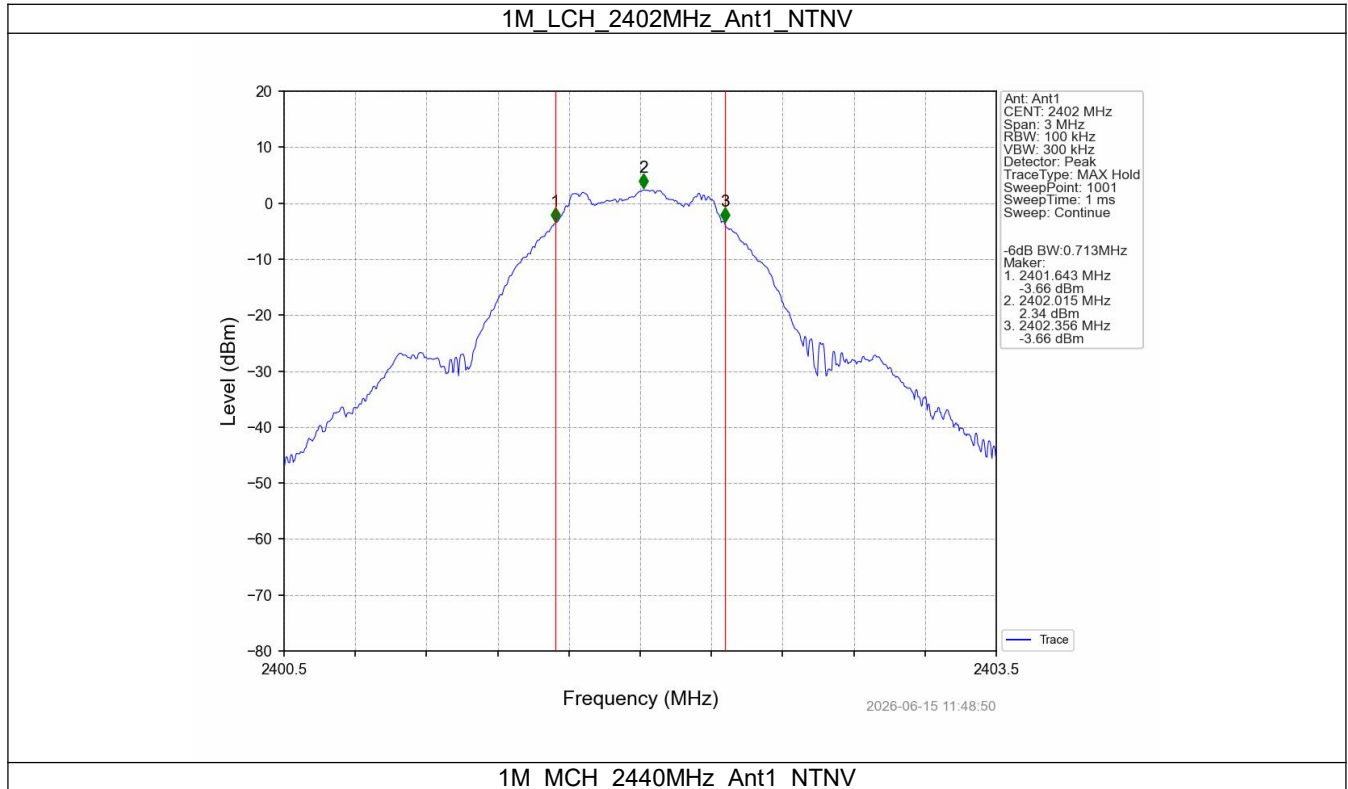


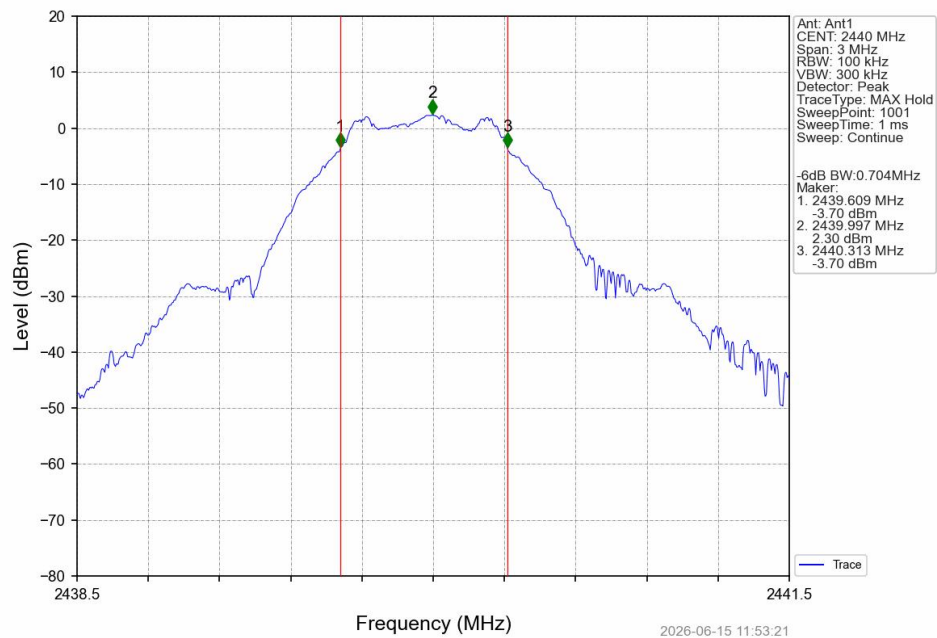
2M_HCH_2480MHz_Ant1_NTNV



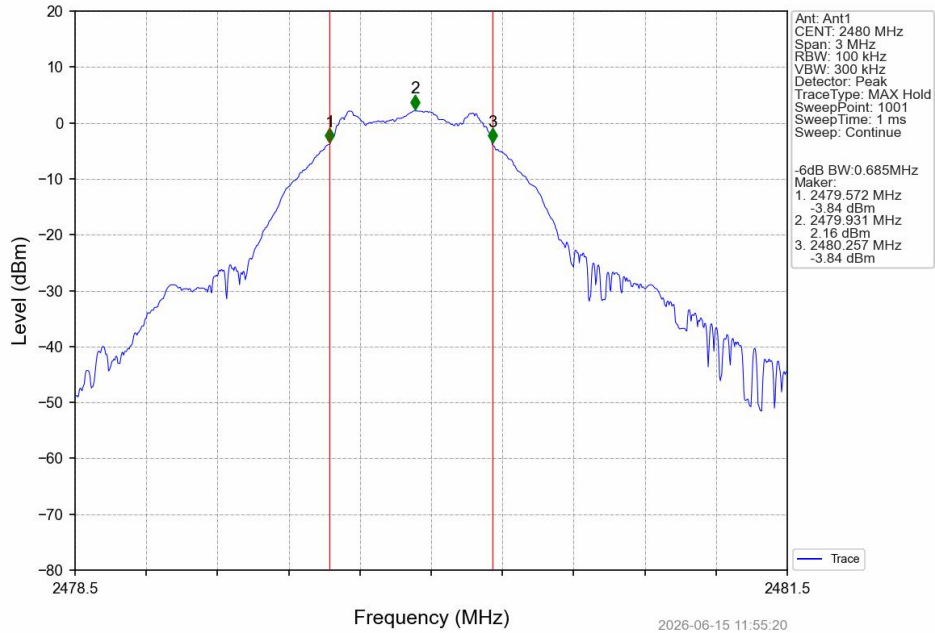


2.2.2 6dB BW

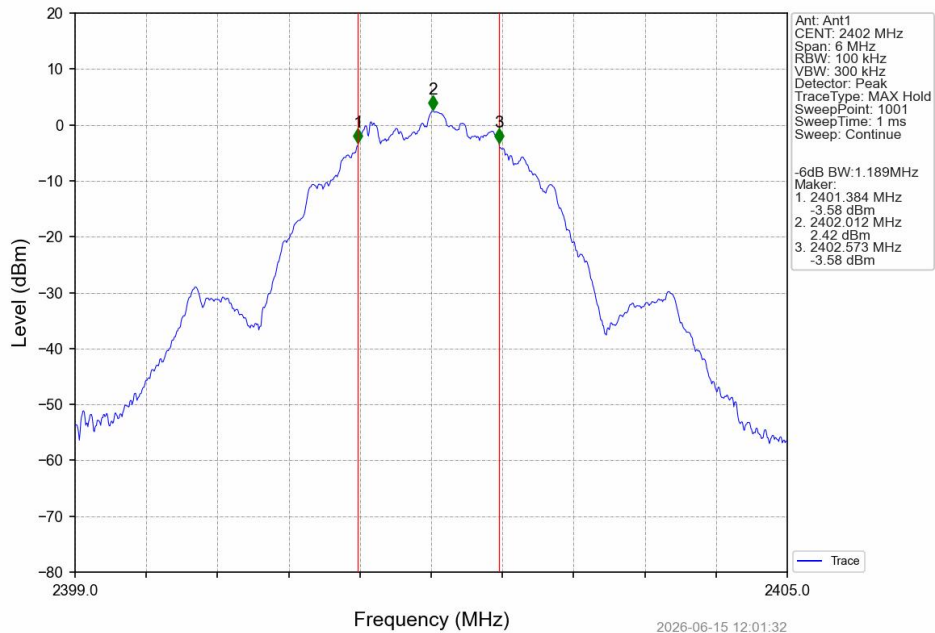




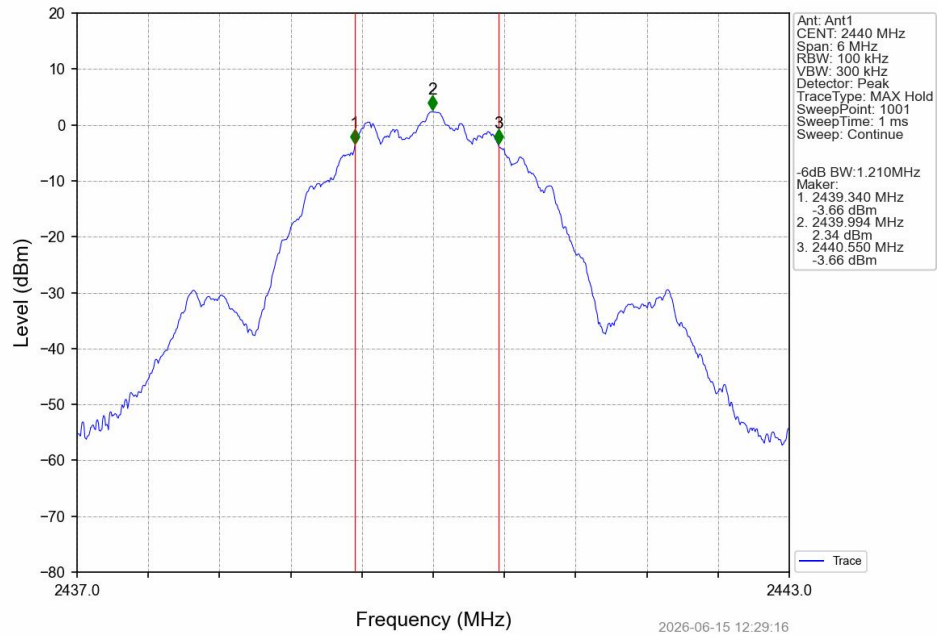
1M_HCH_2480MHz_Ant1_NTNV



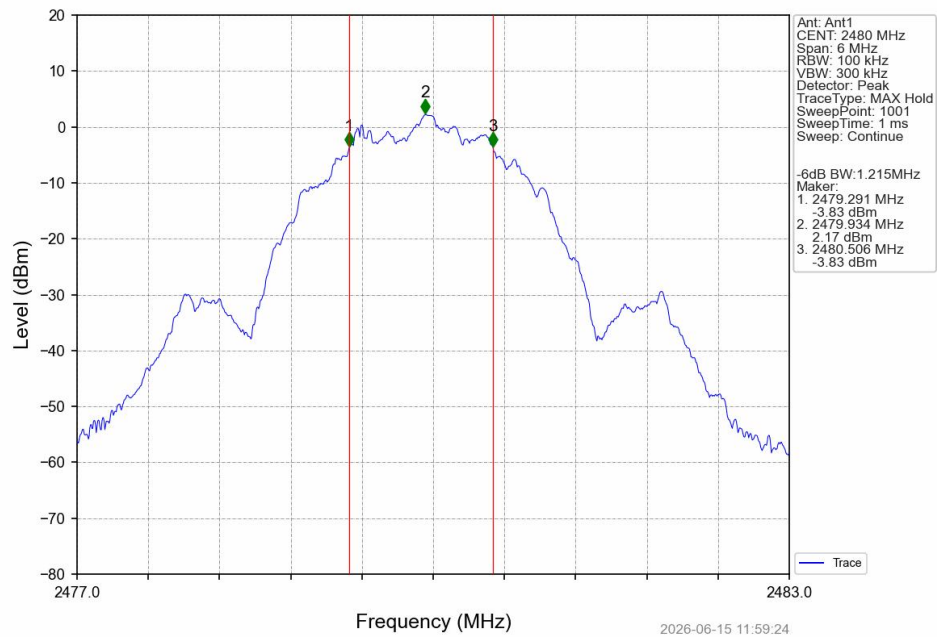
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV





3. Maximum Conducted Output Power

3.1 Test Result

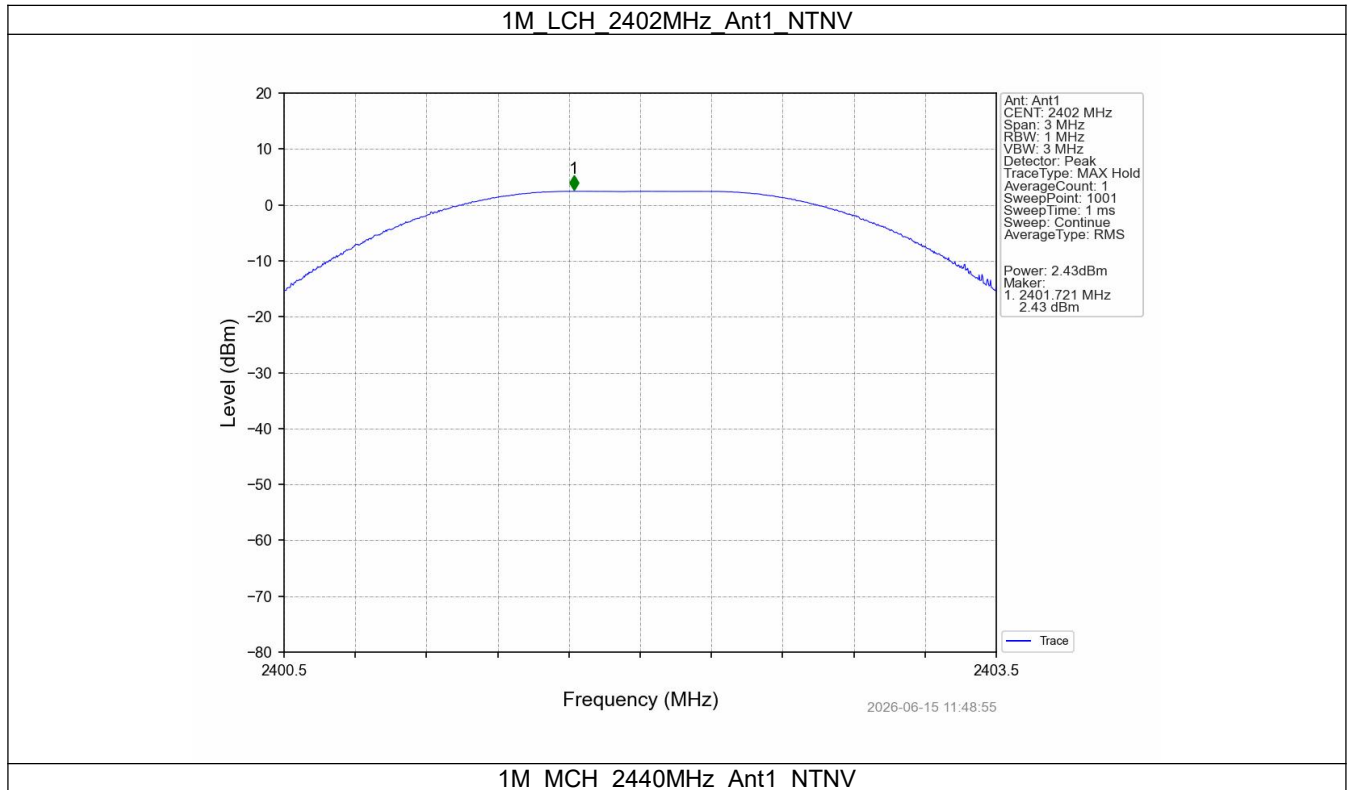
3.1.1 Power

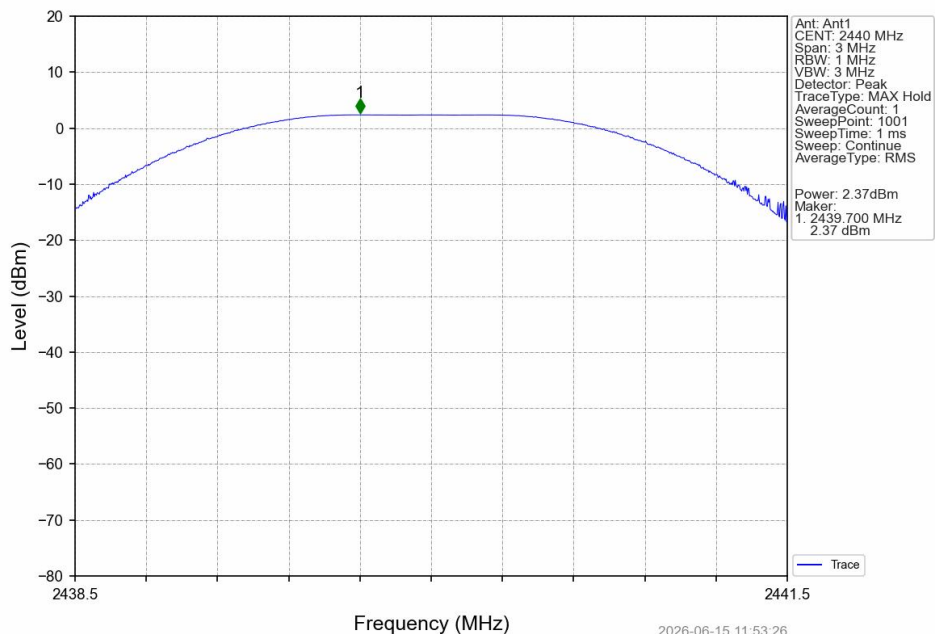
Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1M	SISO	2402	2.43	<=30	Pass
		2440	2.37	<=30	Pass
		2480	2.23	<=30	Pass
2M	SISO	2402	2.45	<=30	Pass
		2440	2.41	<=30	Pass
		2480	2.25	<=30	Pass
Note1: Antenna Gain: Ant1: 1.6dBi;					



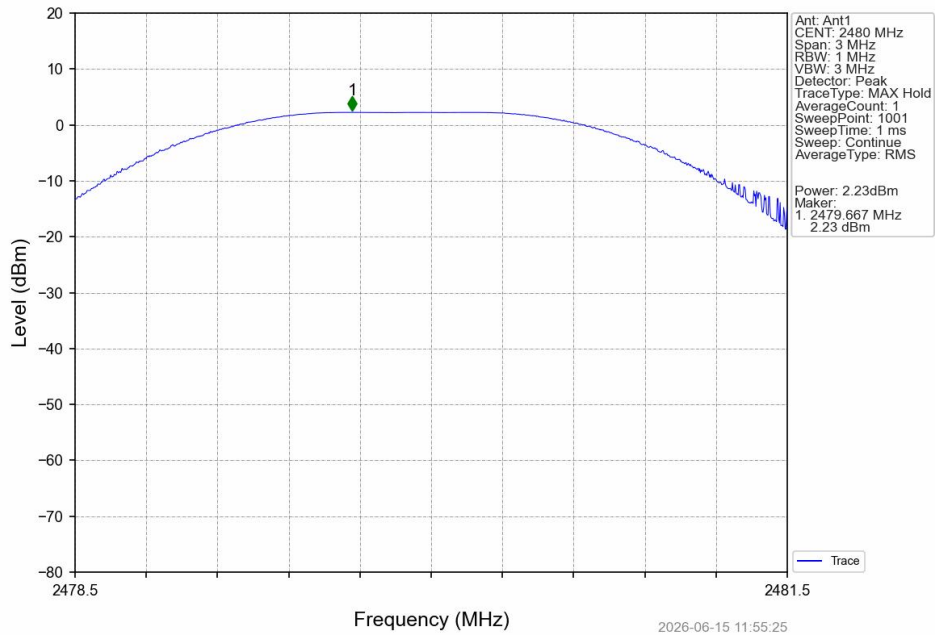
3.2 Test Graph

3.2.1 Power

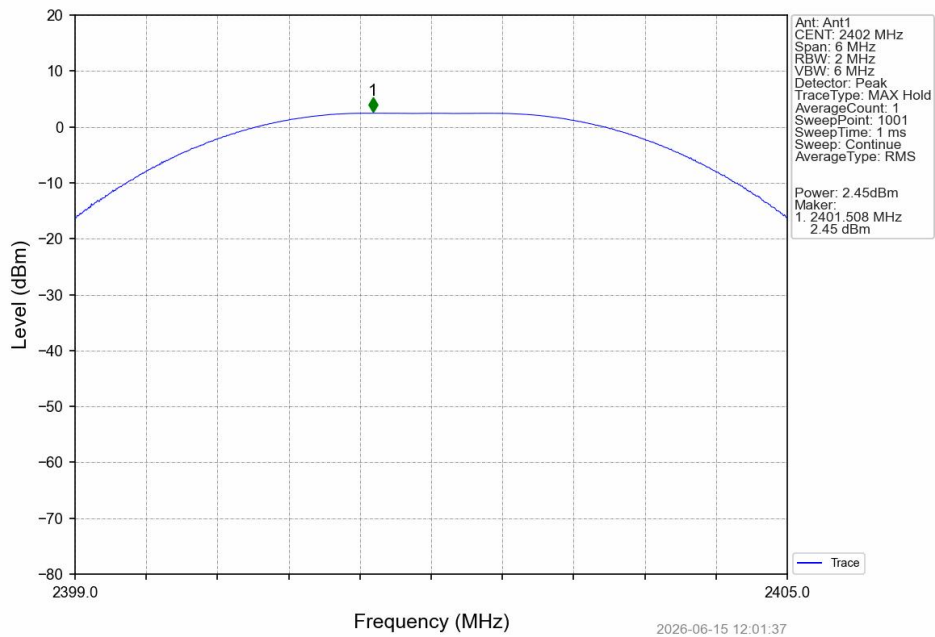




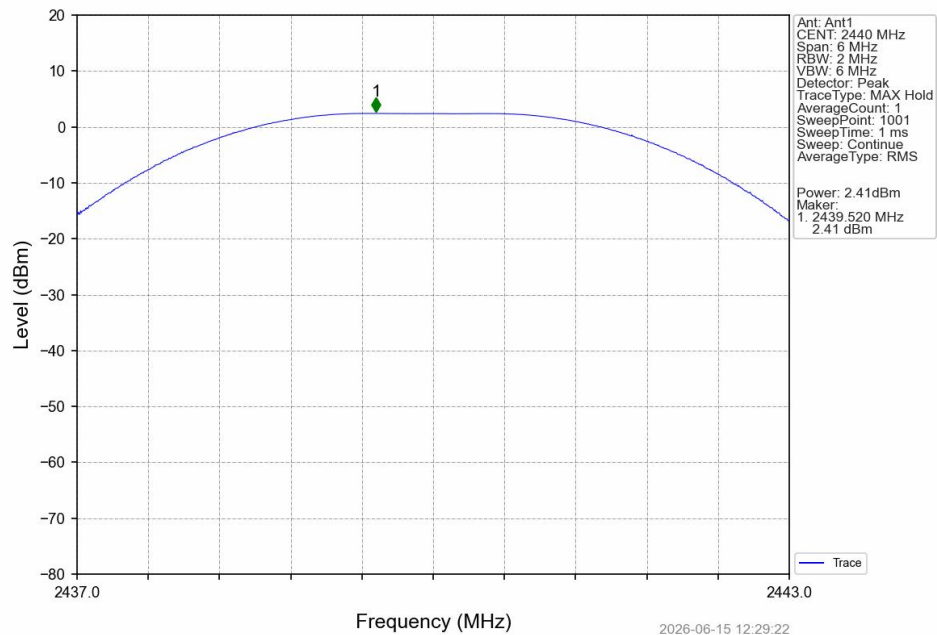
1M_HCH_2480MHz_Ant1_NTNV



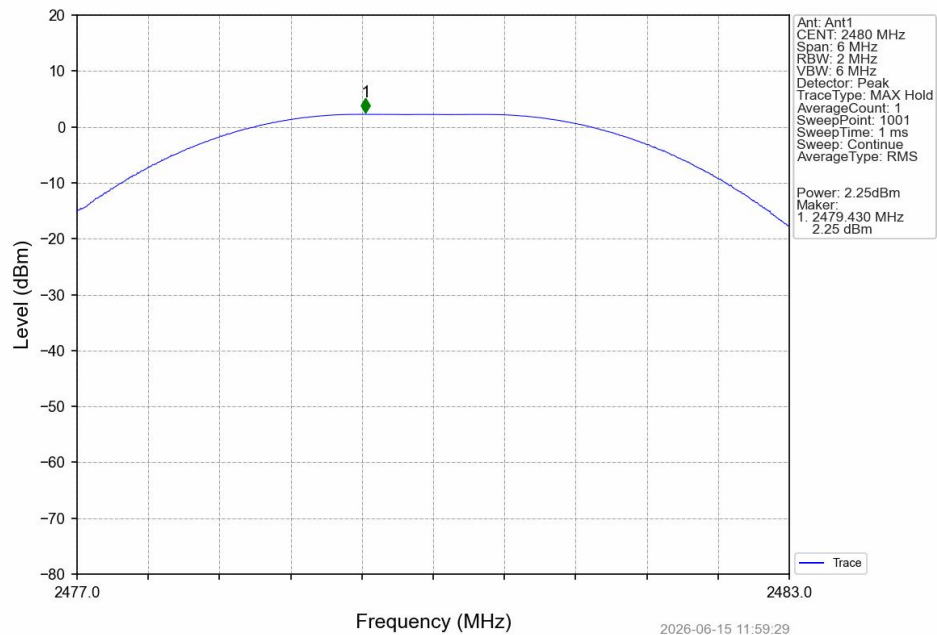
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV





4. Maximum Power Spectral Density

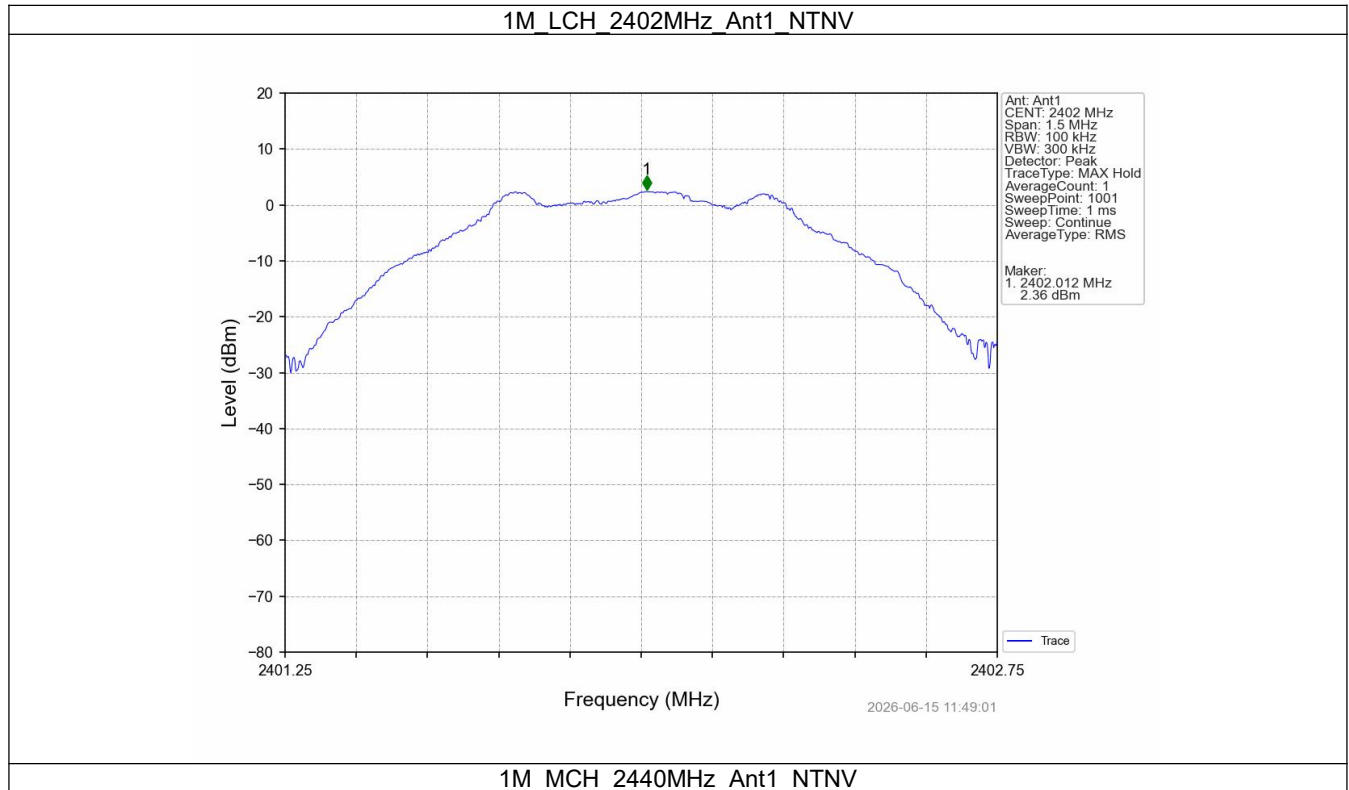
4.1 Test Result

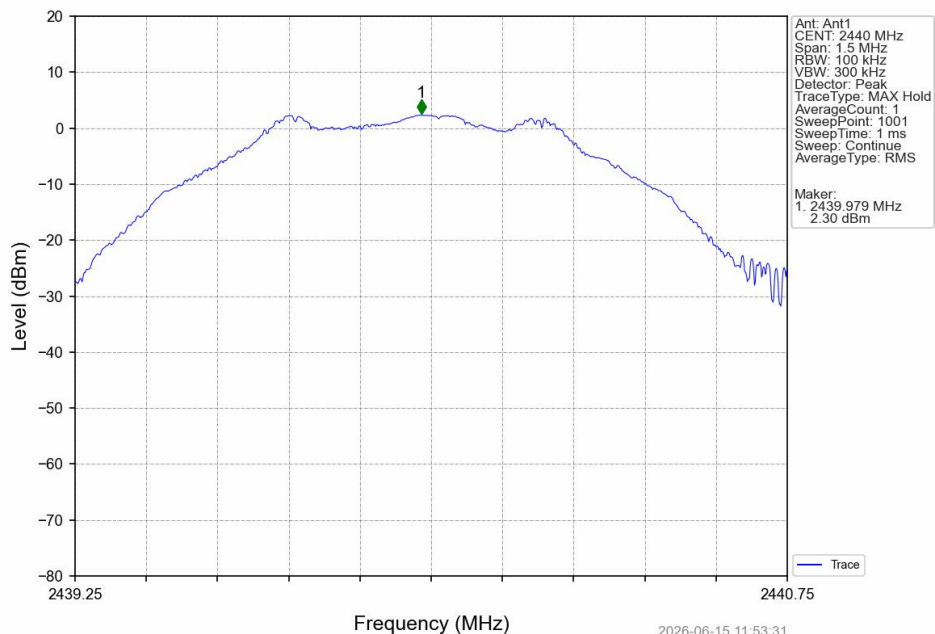
4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm)		Verdict
			ANT1	Limit(dBm/3kHz)	
1M	SISO	2402	2.36dBm/100kHz	<=8	Pass
		2440	2.30dBm/100kHz	<=8	Pass
		2480	2.13dBm/100kHz	<=8	Pass
2M	SISO	2402	2.36dBm/100kHz	<=8	Pass
		2440	2.33dBm/100kHz	<=8	Pass
		2480	2.15dBm/100kHz	<=8	Pass
Note1: Antenna Gain: Ant1: 1.6dBi:					

4.2 Test Graph

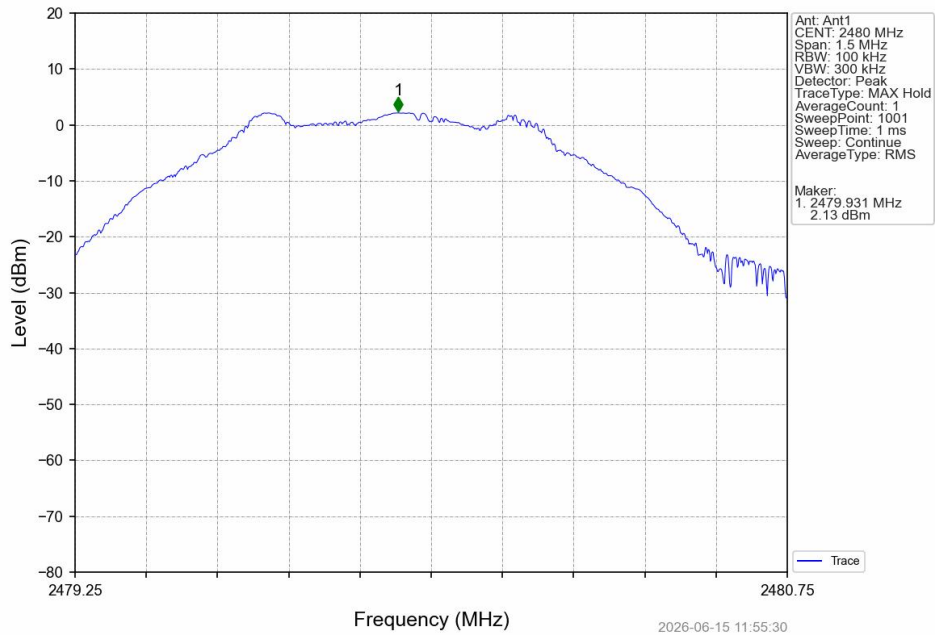
4.2.1 PSD



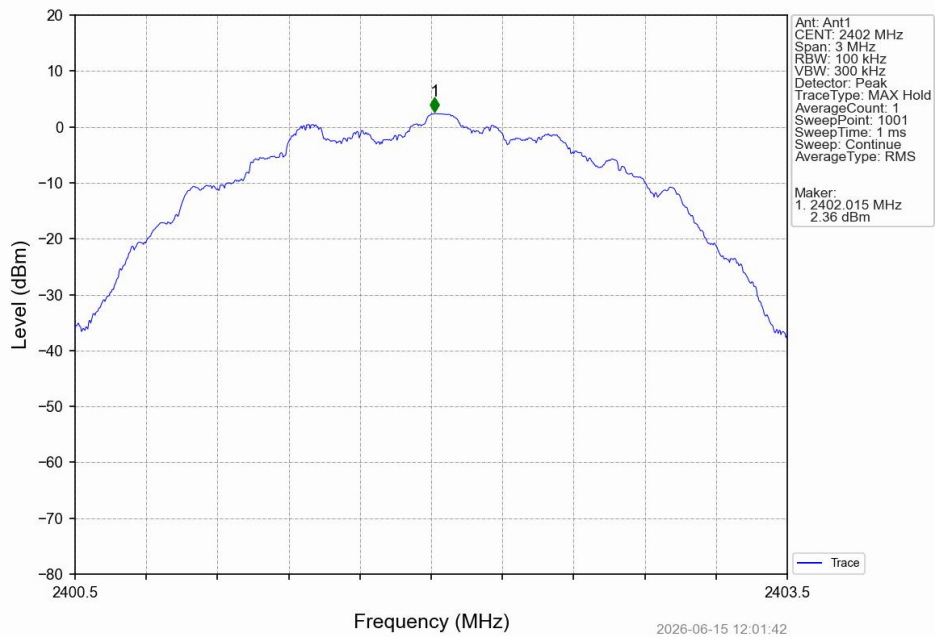




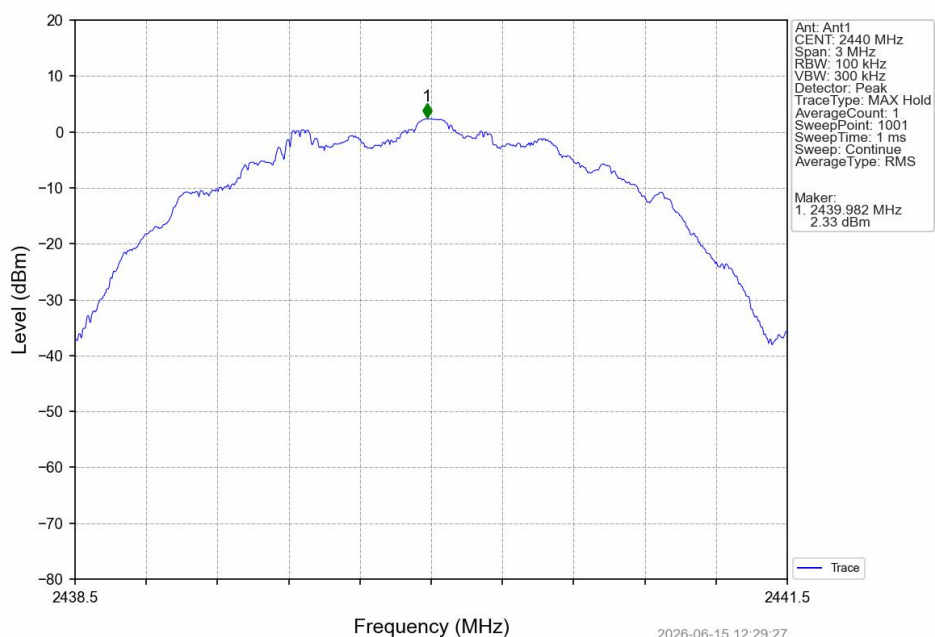
1M_HCH_2480MHz_Ant1_NTNV



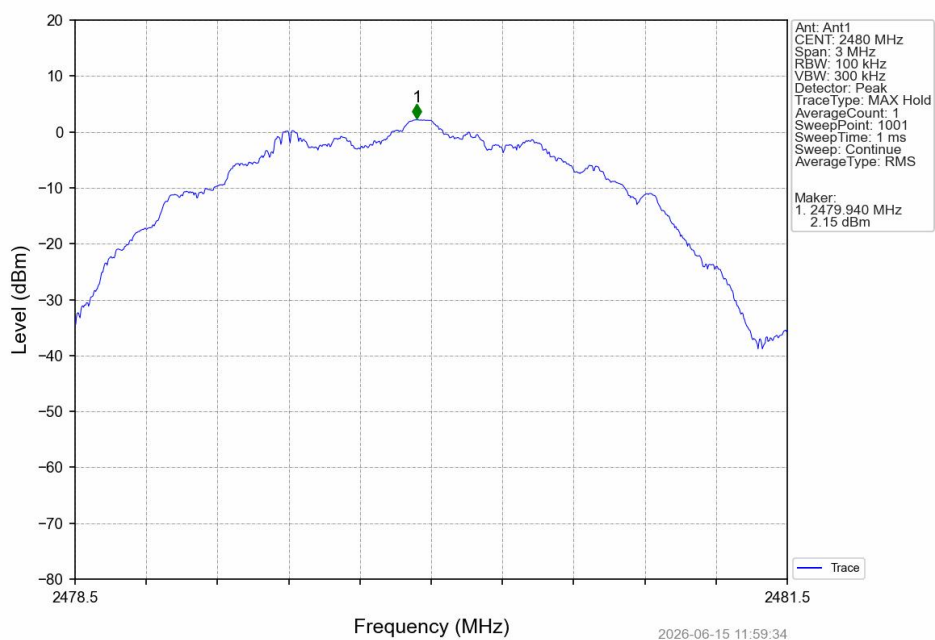
2M_LCH_2402MHz_Ant1_NTNV



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

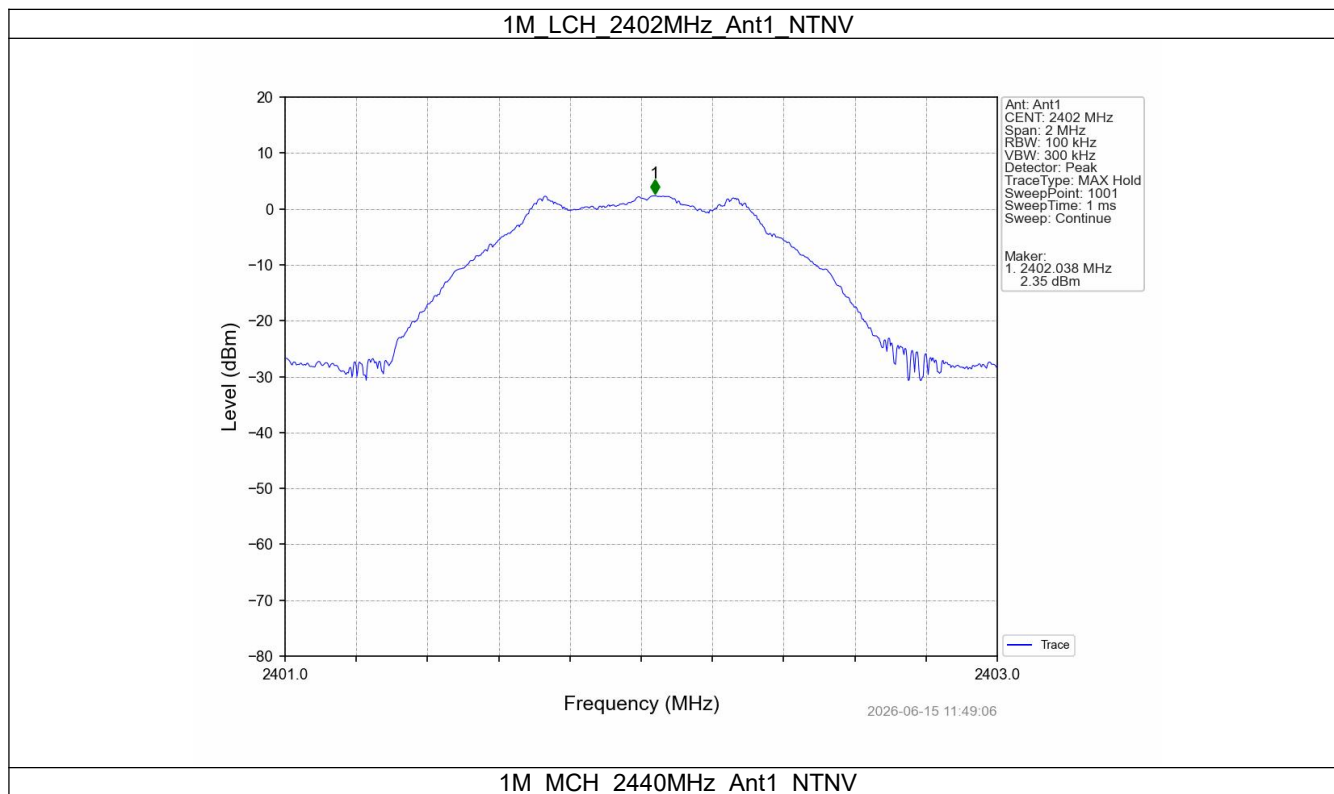
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
1M	SISO	2402	1	2.35
		2440	1	2.29
		2480	1	2.15
2M	SISO	2402	1	2.38
		2440	1	2.35
		2480	1	2.15

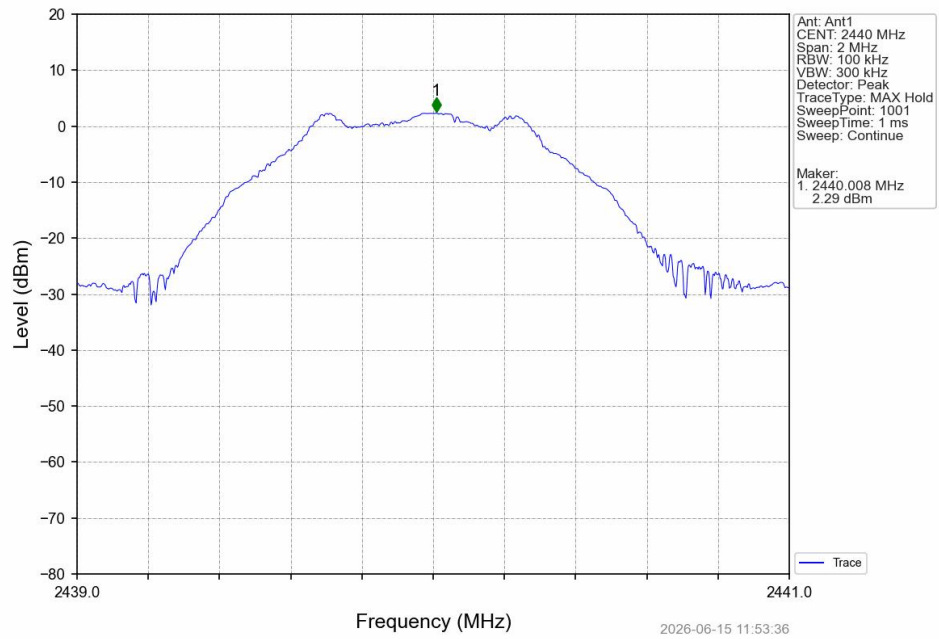
5.1.2 CSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	2402	1	2.35	-17.65	Pass
		2440	1	2.35	-17.65	Pass
		2480	1	2.35	-17.65	Pass
2M	SISO	2402	1	2.38	-17.62	Pass
		2440	1	2.38	-17.62	Pass
		2480	1	2.38	-17.62	Pass

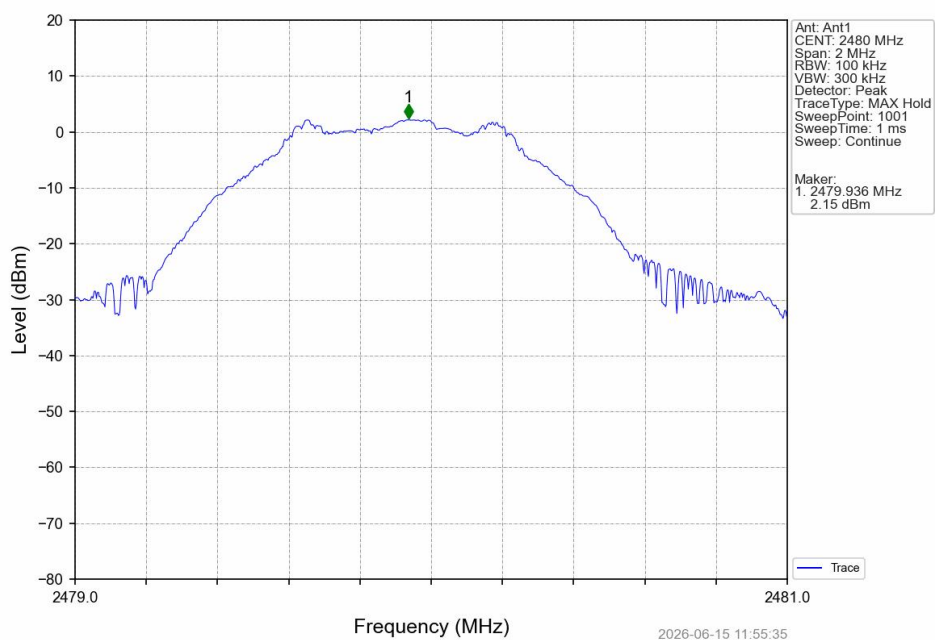
5.2 Test Graph

5.2.1 Ref

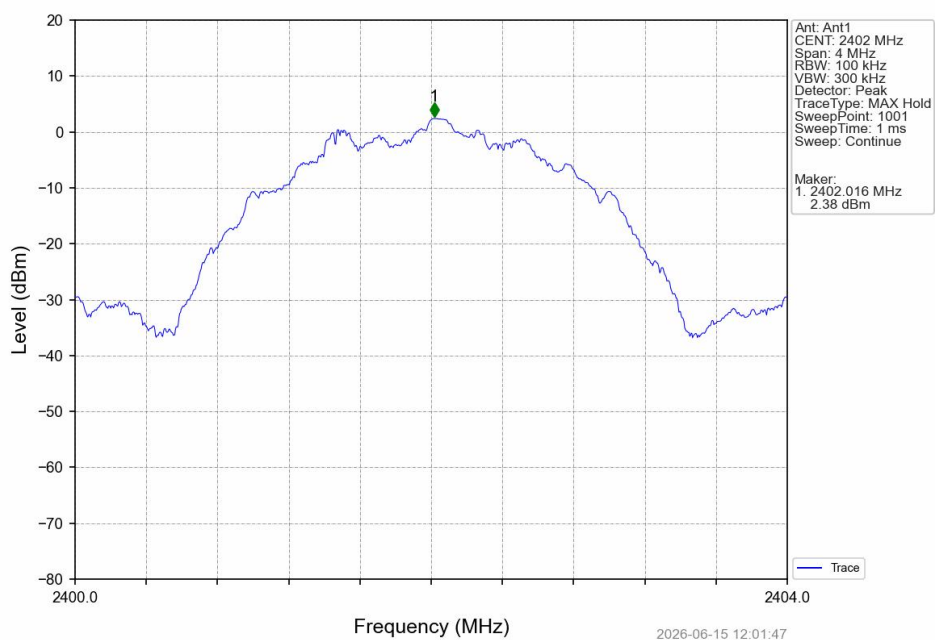




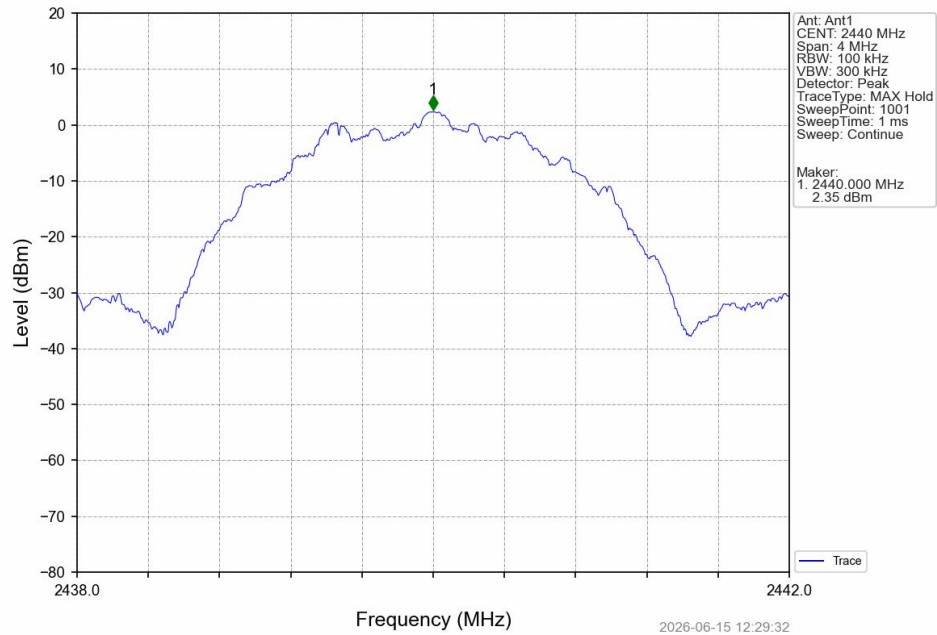
1M_HCH_2480MHz_Ant1_NTNV



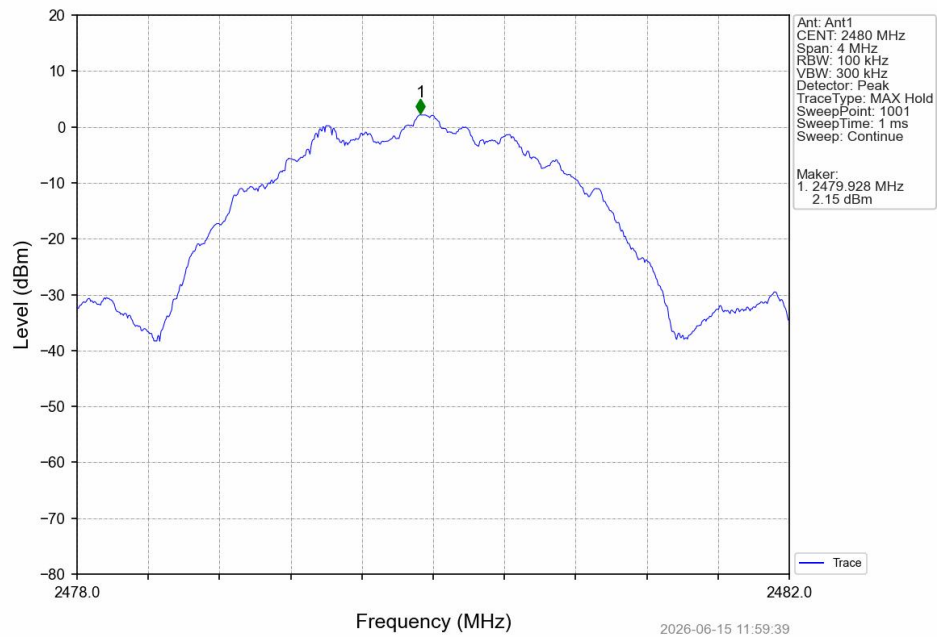
2M_LCH_2402MHz_Ant1_NTNV



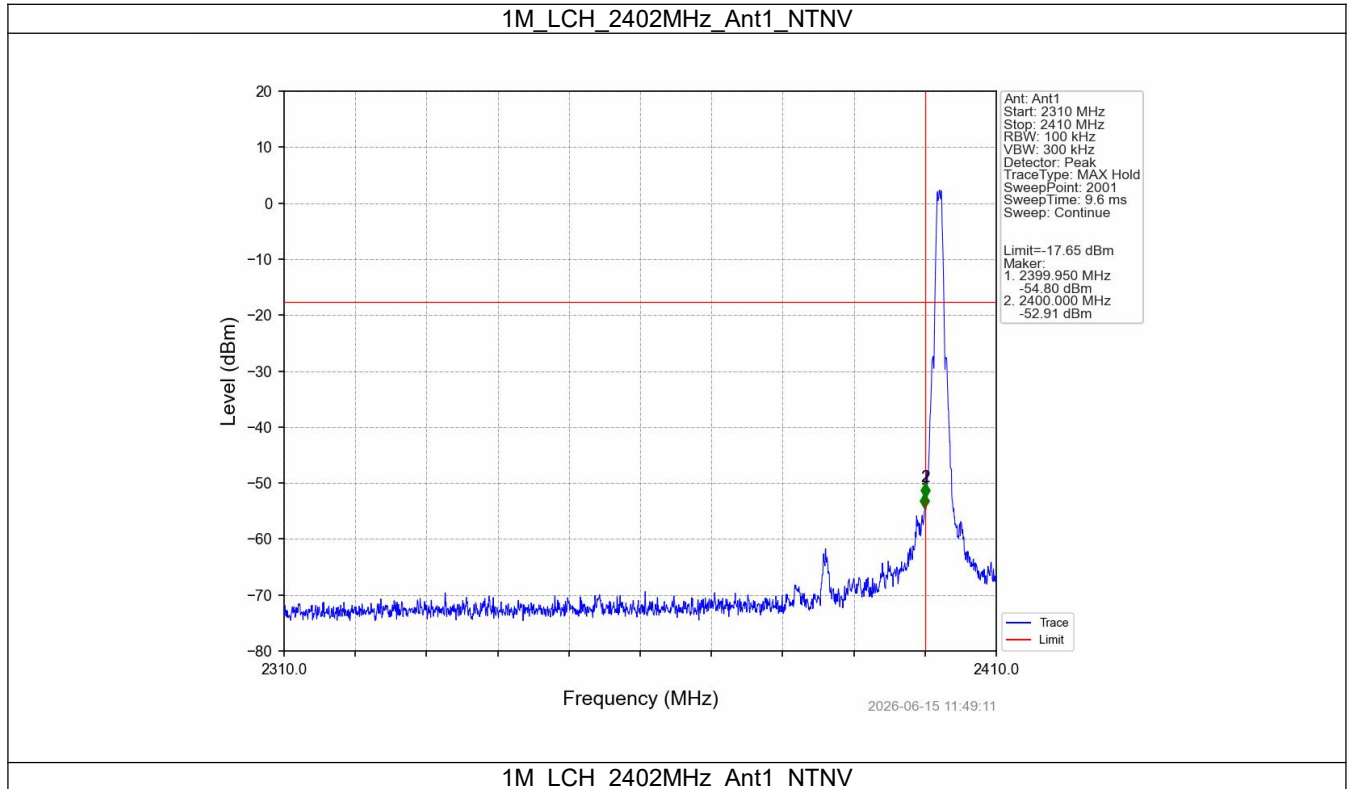
2M_MCH_2440MHz_Ant1_NTNV

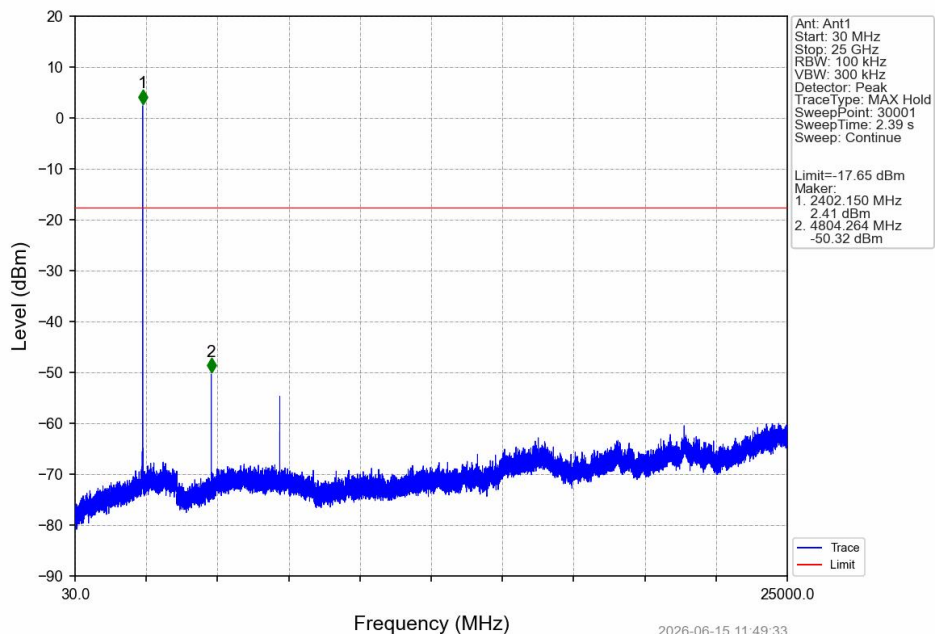


2M_HCH_2480MHz_Ant1_NTNV

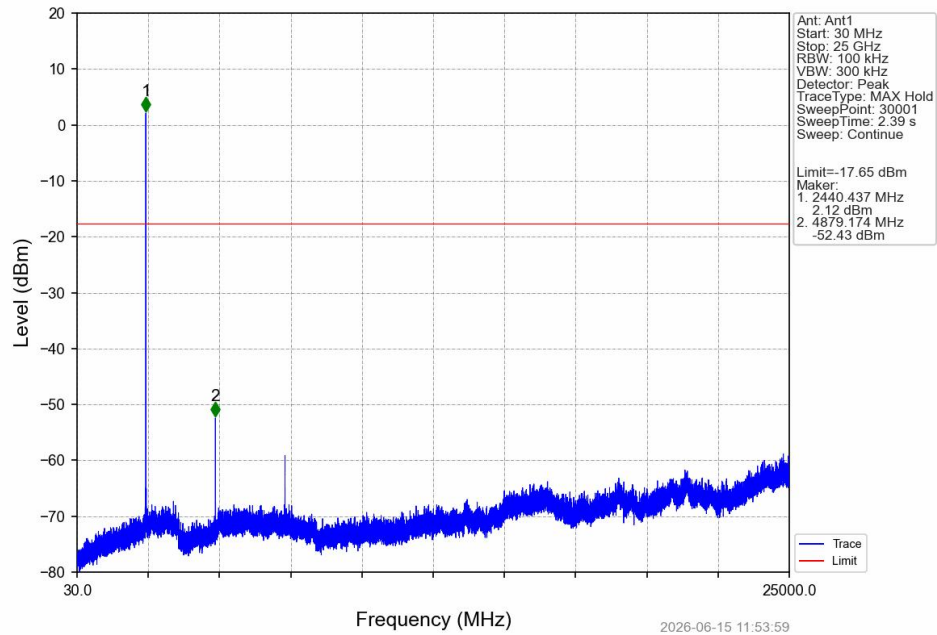


5.2.2 CSE

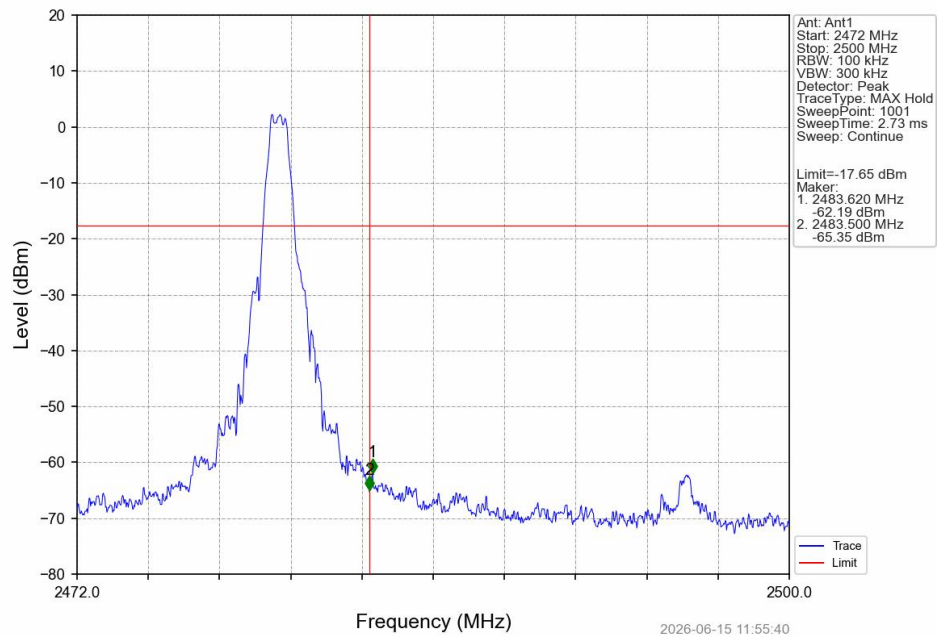




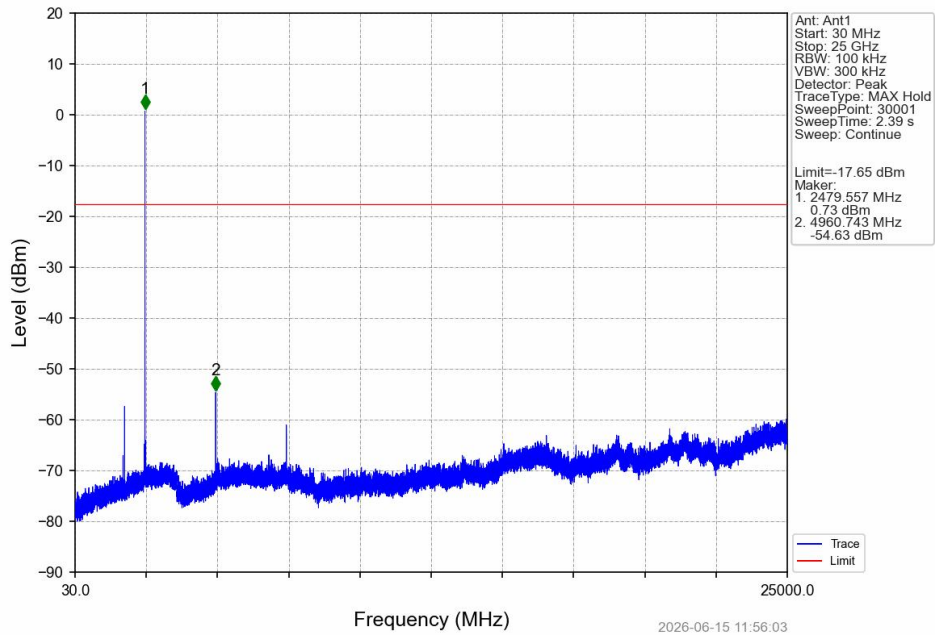
1M_MCH_2440MHz_Ant1_NTNV



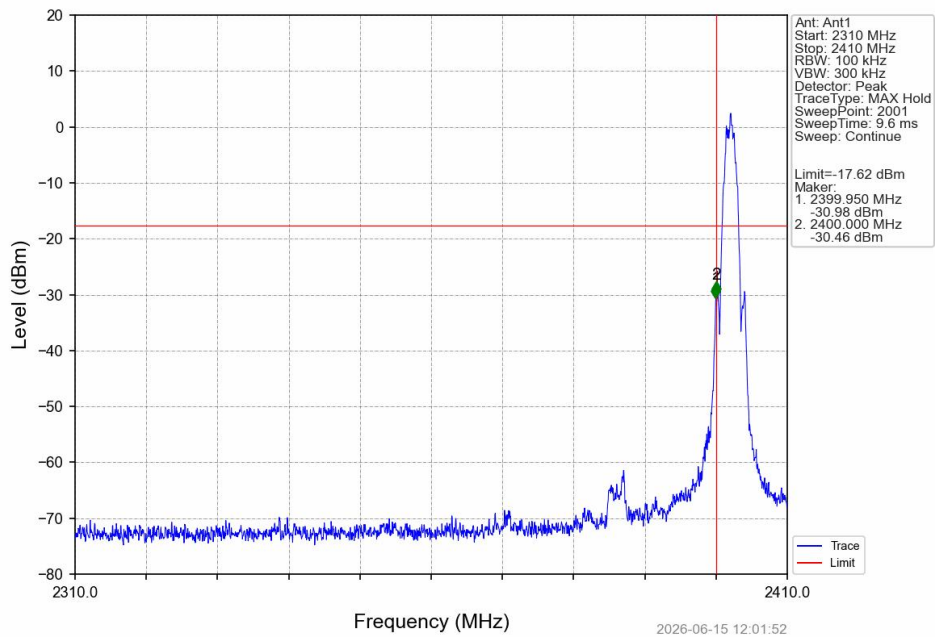
1M_HCH_2480MHz_Ant1_NTNV



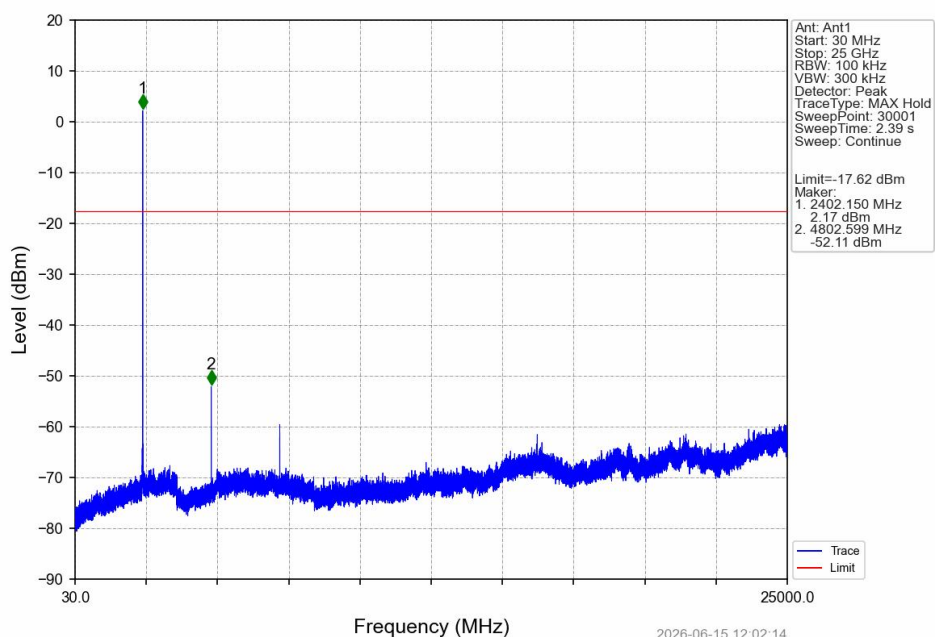
1M_HCH_2480MHz_Ant1_NTNV



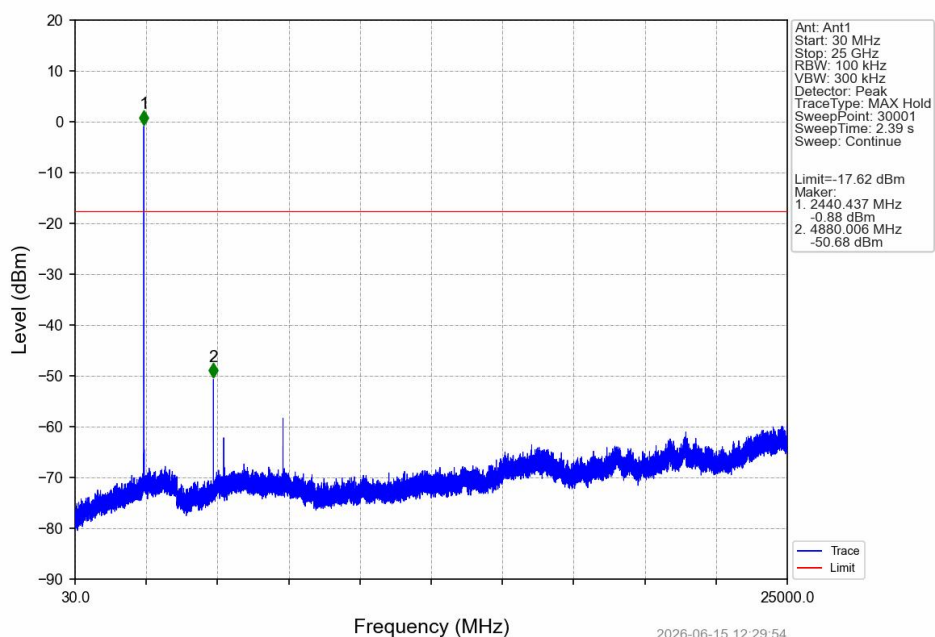
2M_LCH_2402MHz_Ant1_NTNV



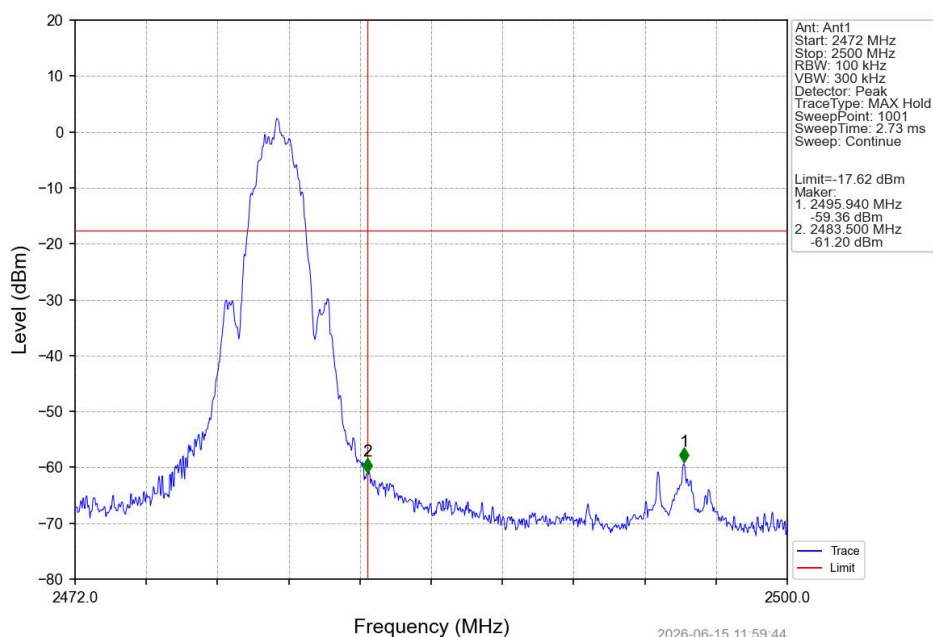
2M_LCH_2402MHz_Ant1_NTNV



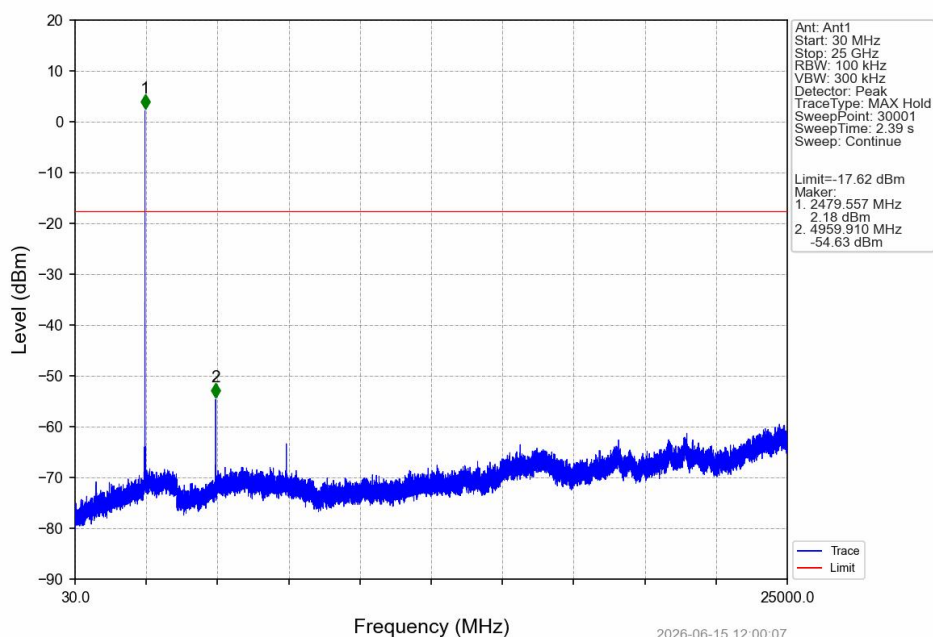
2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV





6. Unwanted Emissions In Restricted Frequency Bands

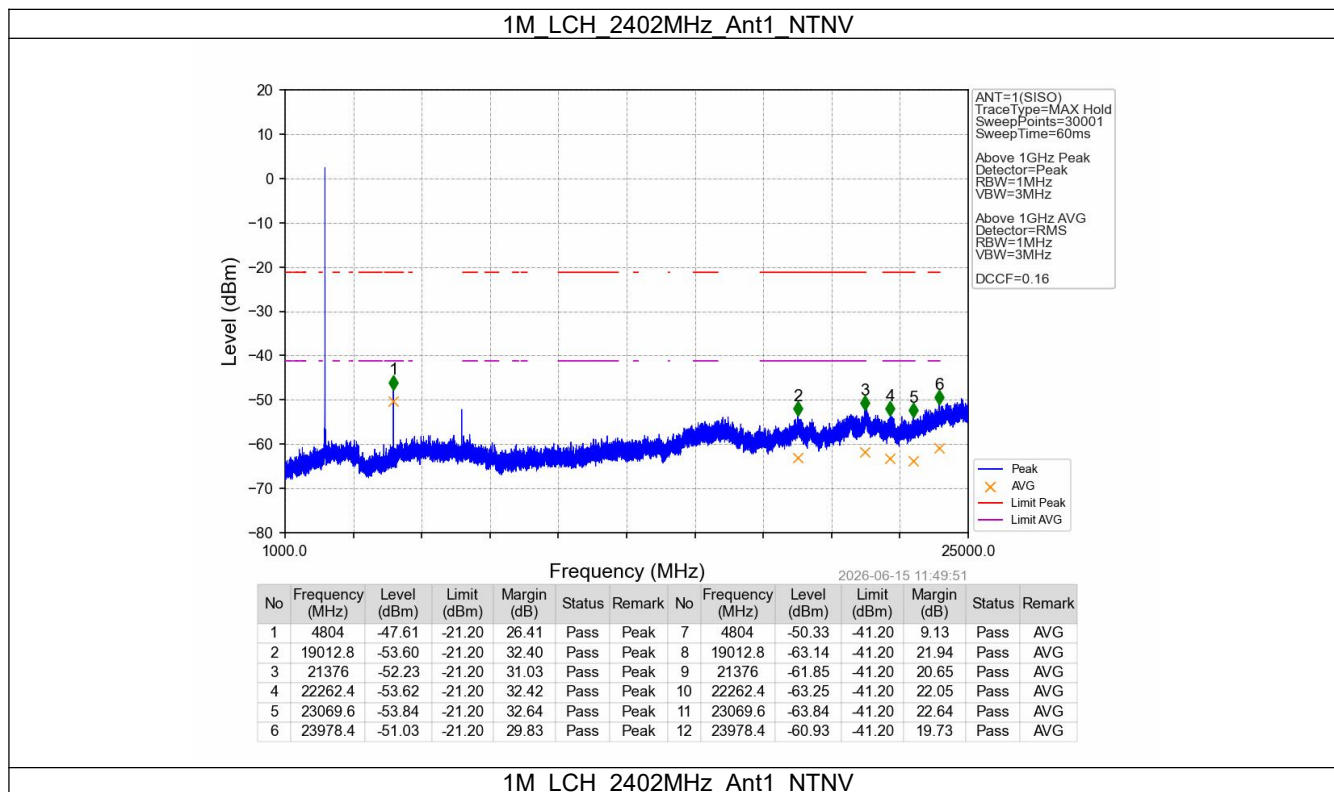
6.1 Test Result

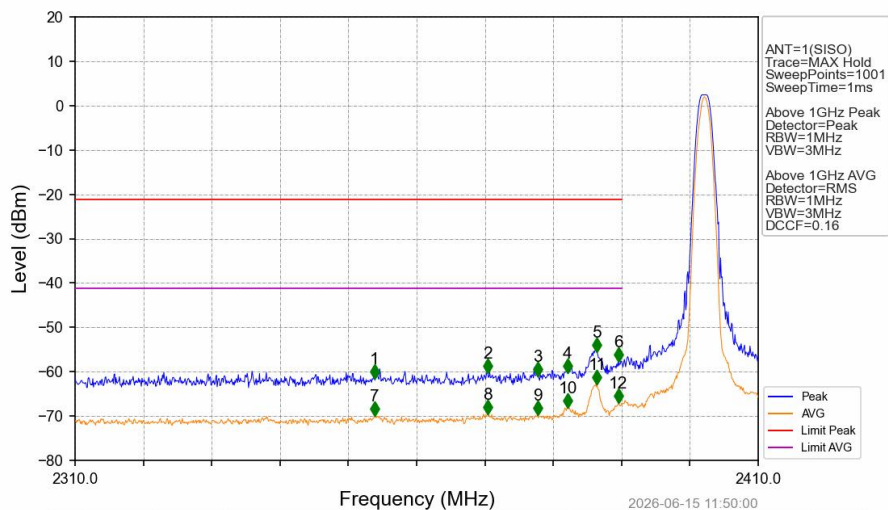
6.1.1 RSE

Mode	TX Type	Frequency (MHz)	ANT	Level of Unwanted Emissions (dBm)		Verdict
				Result	Limit	
1M	SISO	2402	1	Refer To Test Graph		Pass
		2440	1	Refer To Test Graph		Pass
		2480	1	Refer To Test Graph		Pass
2M	SISO	2402	1	Refer To Test Graph		Pass
		2440	1	Refer To Test Graph		Pass
		2480	1	Refer To Test Graph		Pass

6.2 Test Graph

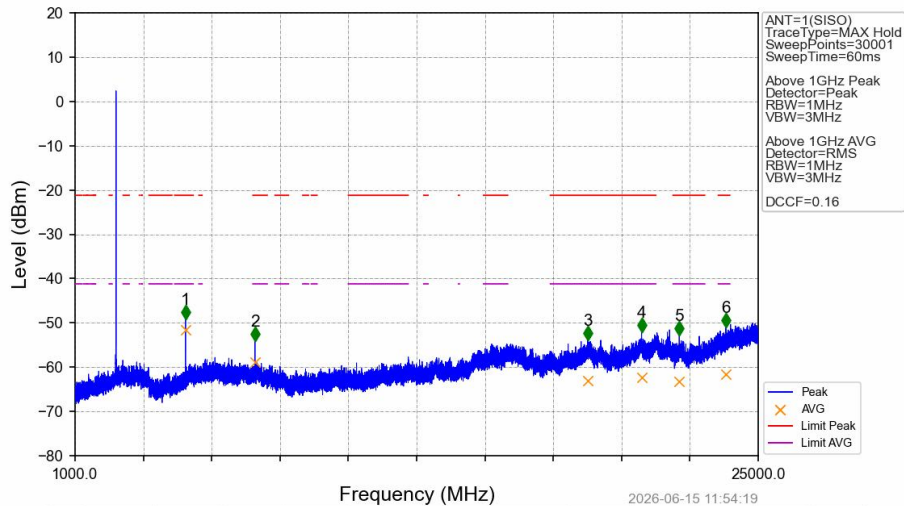
6.2.1 RSE





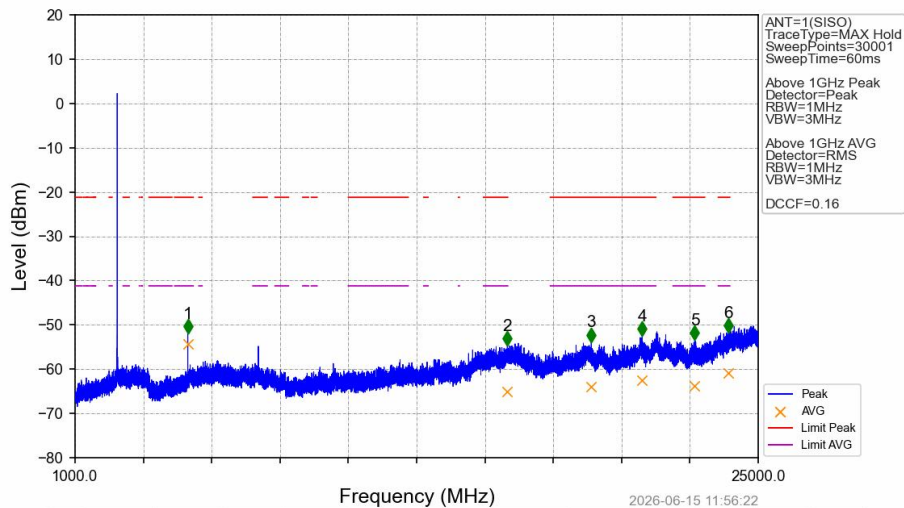
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2353.800	-61.55	-21.20	40.35	Pass	Peak	7	2353.800	-69.94	-41.20	28.74	Pass	AVG
2	2370.400	-60.32	-21.20	39.12	Pass	Peak	8	2370.400	-69.58	-41.20	28.38	Pass	AVG
3	2377.700	-61.05	-21.20	39.85	Pass	Peak	9	2377.700	-69.76	-41.20	28.56	Pass	AVG
4	2382.100	-60.31	-21.20	39.11	Pass	Peak	10	2382.100	-68.13	-41.20	26.93	Pass	AVG
5	2386.400	-55.55	-21.20	34.35	Pass	Peak	11	2386.400	-62.79	-41.20	21.59	Pass	AVG
6	2389.500	-57.67	-21.20	36.47	Pass	Peak	12	2389.500	-67.06	-41.20	25.86	Pass	AVG

1M_MCH_2440MHz_Ant1_NTNV



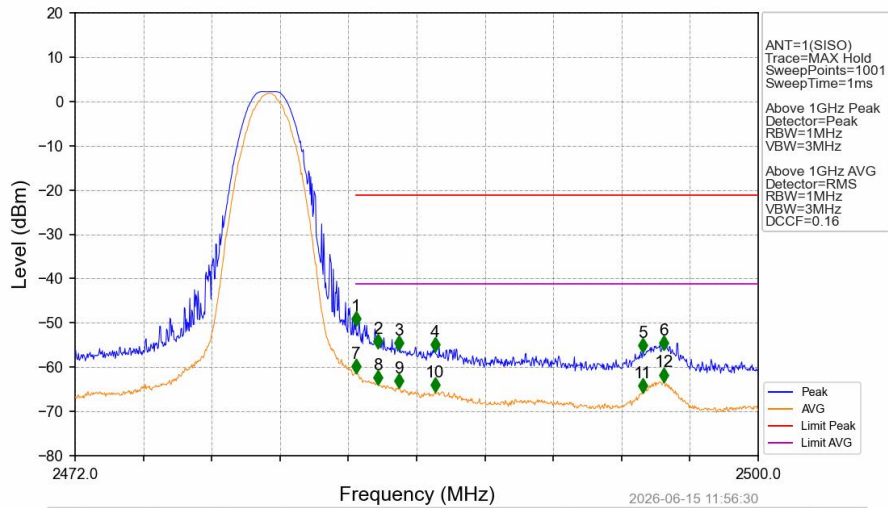
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	4880.8	-49.16	-21.20	27.96	Pass	Peak	7	4880.8	-51.50	-41.20	10.30	Pass	AVG
2	7320.8	-54.02	-21.20	32.82	Pass	Peak	8	7320.8	-58.87	-41.20	17.67	Pass	AVG
3	19010.4	-53.86	-21.20	32.66	Pass	Peak	9	19010.4	-63.07	-41.20	21.87	Pass	AVG
4	20903.2	-52.03	-21.20	30.83	Pass	Peak	10	20903.2	-62.30	-41.20	21.10	Pass	AVG
5	22226.4	-52.88	-21.20	31.68	Pass	Peak	11	22226.4	-63.33	-41.20	22.13	Pass	AVG
6	23863.2	-50.96	-21.20	29.76	Pass	Peak	12	23863.2	-61.60	-41.20	20.40	Pass	AVG

1M_HCH_2480MHz_Ant1_NTNV

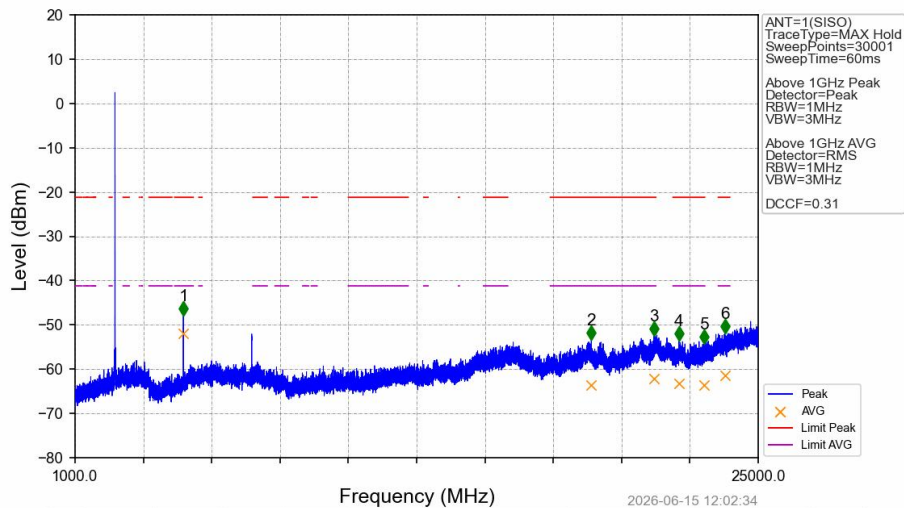


No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	4960.8	-51.83	-21.20	30.63	Pass	Peak	7	4960.8	-54.35	-41.20	13.15	Pass	AVG
2	16186.4	-54.67	-21.20	33.47	Pass	Peak	8	16186.4	-65.02	-41.20	23.82	Pass	AVG
3	19135.2	-53.81	-21.20	32.61	Pass	Peak	9	19135.2	-63.92	-41.20	22.72	Pass	AVG
4	20924	-52.44	-21.20	31.24	Pass	Peak	10	20924	-62.52	-41.20	21.32	Pass	AVG
5	22770.4	-53.28	-21.20	32.08	Pass	Peak	11	22770.4	-63.86	-41.20	22.66	Pass	AVG
6	23954.4	-51.74	-21.20	30.54	Pass	Peak	12	23954.4	-60.85	-41.20	19.65	Pass	AVG

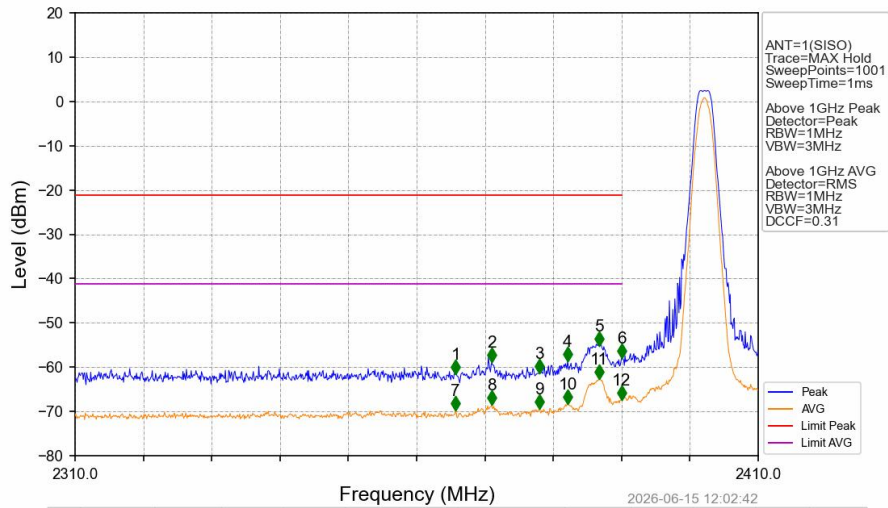
1M_HCH_2480MHz_Ant1_NTNV



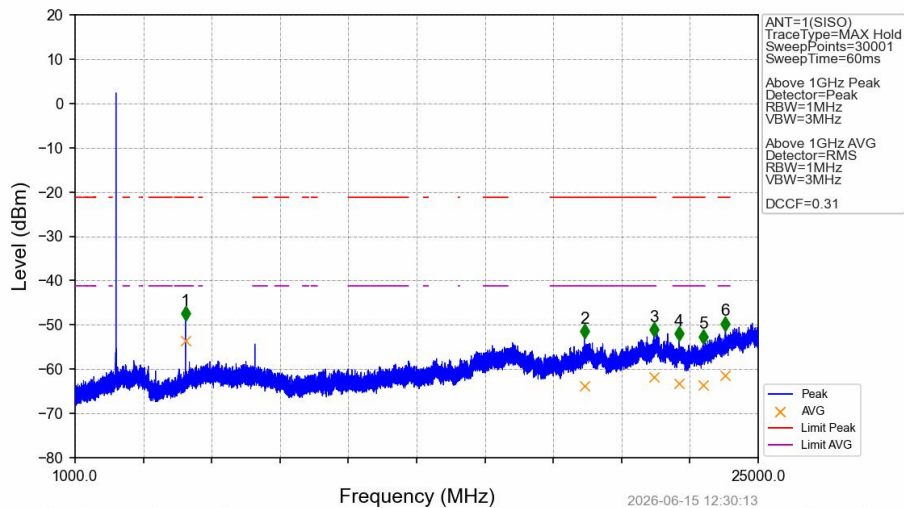
2M_LCH_2402MHz_Ant1_NTNV



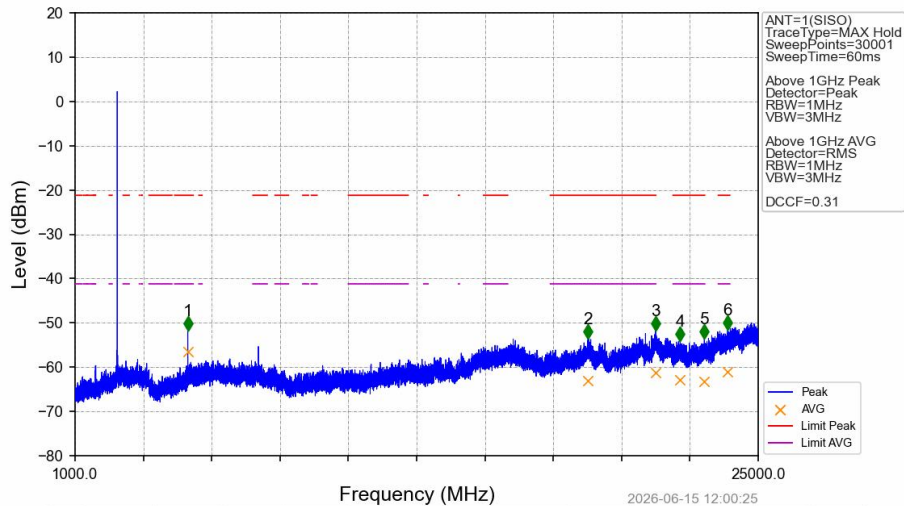
2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV

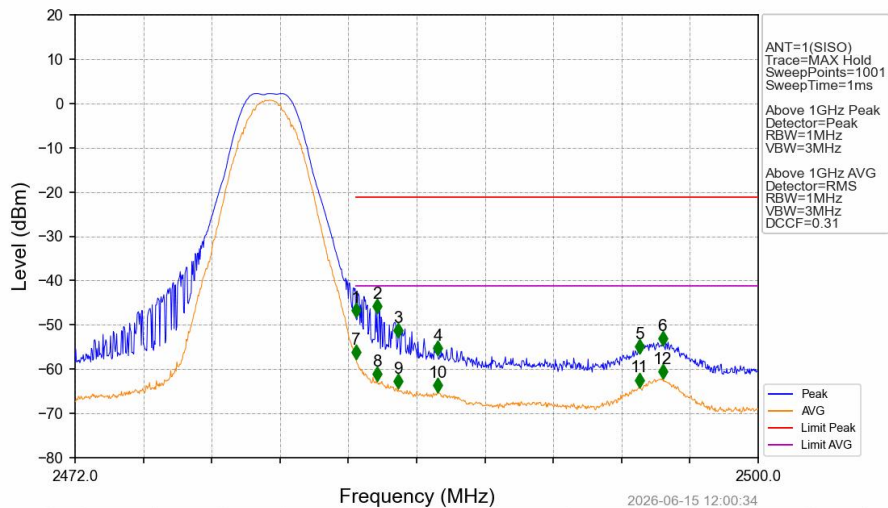


2M_HCH_2480MHz_Ant1_NTNV



No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	4960	-51.80	-21.20	30.60	Pass	Peak	7	4960	-56.56	-41.20	15.36	Pass	AVG
2	19020	-53.51	-21.20	32.31	Pass	Peak	8	19020	-63.14	-41.20	21.94	Pass	AVG
3	21394.4	-51.67	-21.20	30.47	Pass	Peak	9	21394.4	-61.31	-41.20	20.11	Pass	AVG
4	22256.8	-54.07	-21.20	32.87	Pass	Peak	10	22256.8	-62.89	-41.20	21.69	Pass	AVG
5	23108	-53.60	-21.20	32.40	Pass	Peak	11	23108	-63.29	-41.20	22.09	Pass	AVG
6	23925.6	-51.60	-21.20	30.40	Pass	Peak	12	23925.6	-61.00	-41.20	19.80	Pass	AVG

2M_HCH_2480MHz_Ant1_NTNV



No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2483.508	-48.33	-21.20	27.13	Pass	Peak	7	2483.508	-57.77	-41.20	16.57	Pass	AVG
2	2484.376	-47.37	-21.20	26.17	Pass	Peak	8	2484.376	-62.67	-41.20	21.47	Pass	AVG
3	2485.244	-52.80	-21.20	31.60	Pass	Peak	9	2485.244	-64.31	-41.20	23.11	Pass	AVG
4	2486.868	-56.87	-21.20	35.67	Pass	Peak	10	2486.868	-65.25	-41.20	24.05	Pass	AVG
5	2495.128	-56.40	-21.20	35.20	Pass	Peak	11	2495.128	-64.00	-41.20	22.80	Pass	AVG
6	2496.080	-54.60	-21.20	33.40	Pass	Peak	12	2496.080	-62.10	-41.20	20.90	Pass	AVG