



Test Data_Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Smart POS Terminal

Test Model: P10

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



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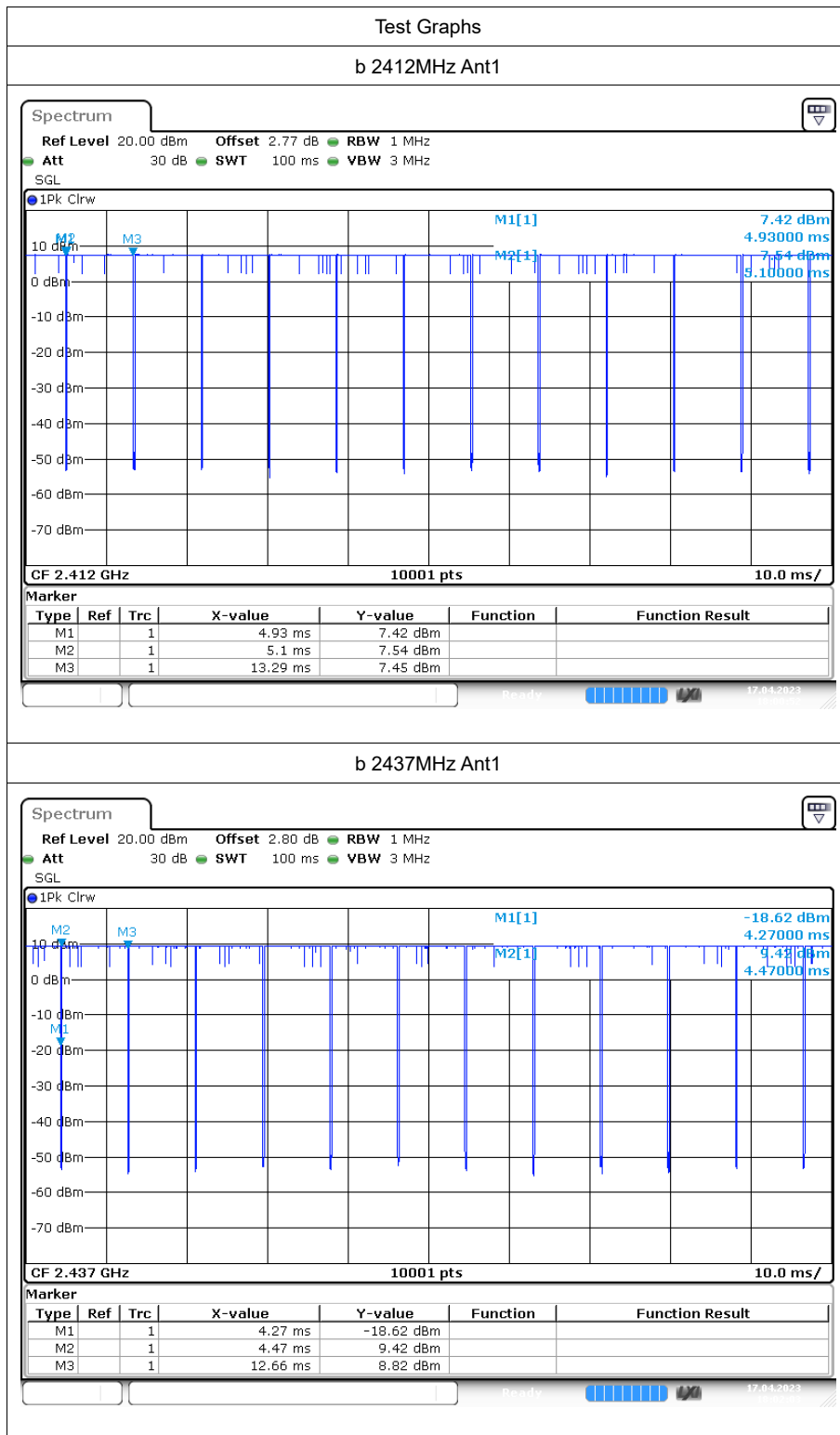
1 Duty Cycle

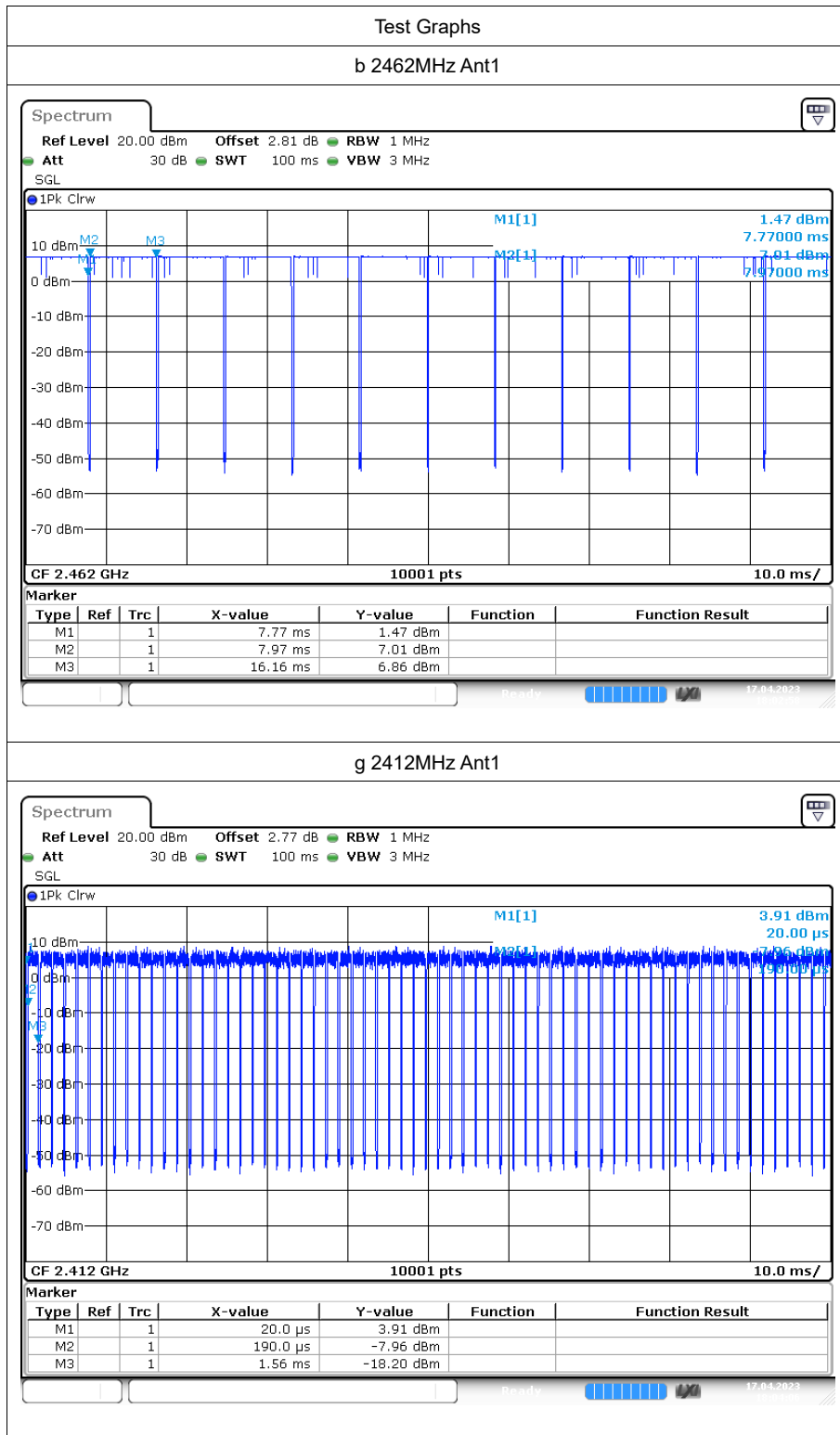
1.1 Test Result

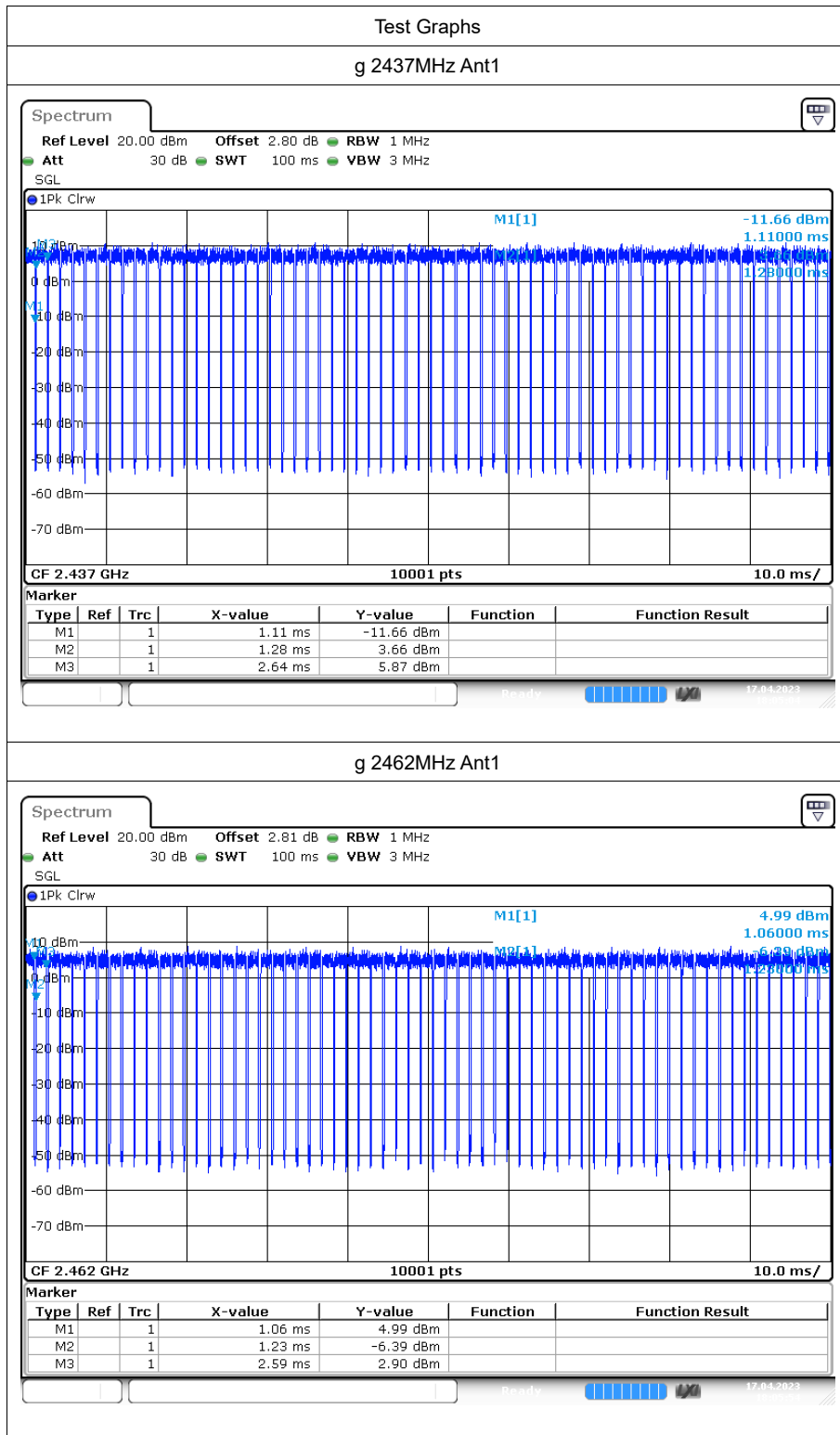
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
b	2412	Ant1	97.86	0.12
b	2437	Ant1	97.87	0.12
b	2462	Ant1	97.97	0.12
g	2412	Ant1	88.46	0.73
g	2437	Ant1	89.03	0.74
g	2462	Ant1	88.79	0.74
n20	2412	Ant1	87.42	0.87
n20	2437	Ant1	87.38	0.87
n20	2462	Ant1	87.13	0.87
n40	2422	Ant1	77.14	1.75
n40	2437	Ant1	77.35	1.75
n40	2452	Ant1	77.53	1.75

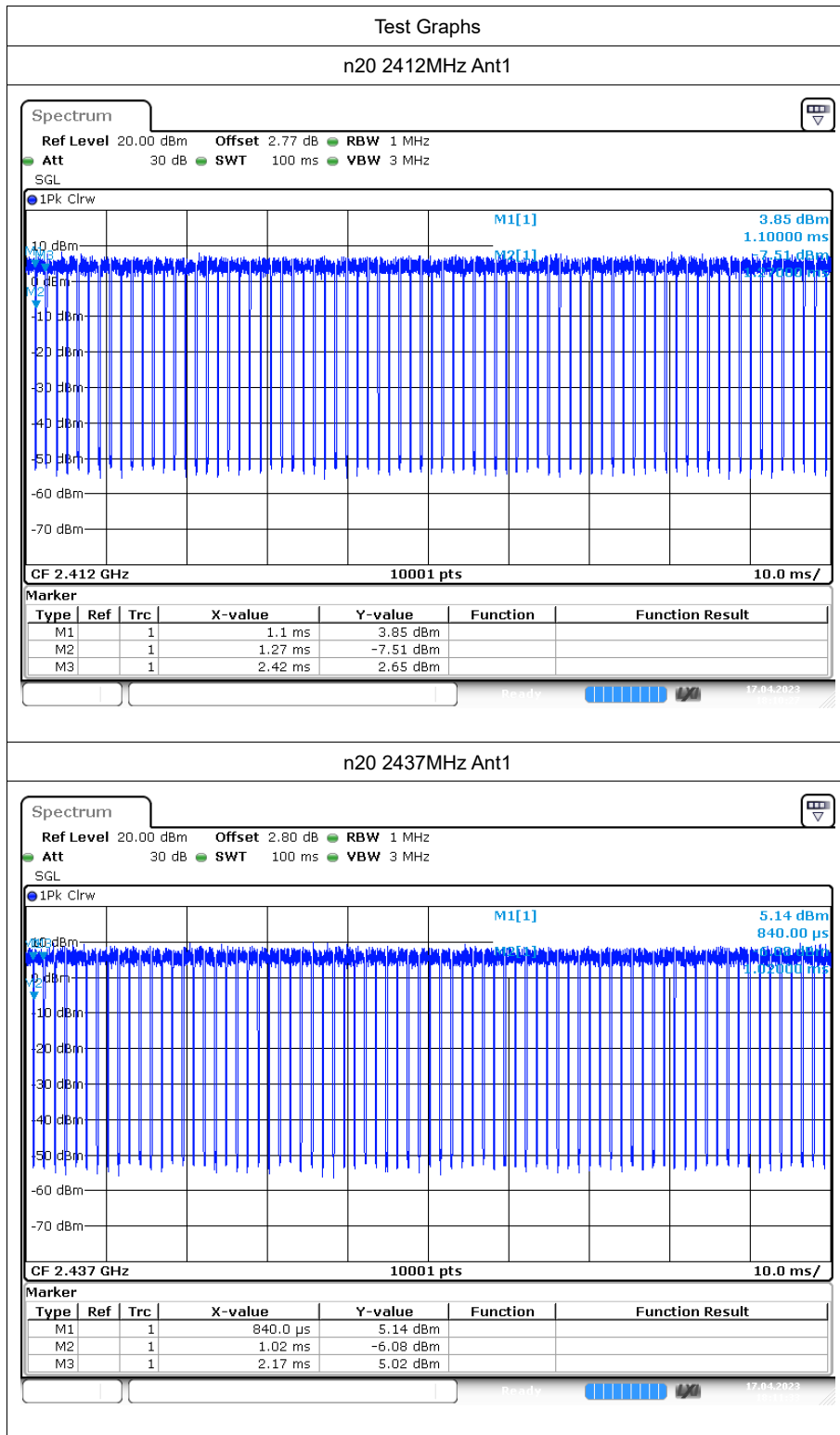


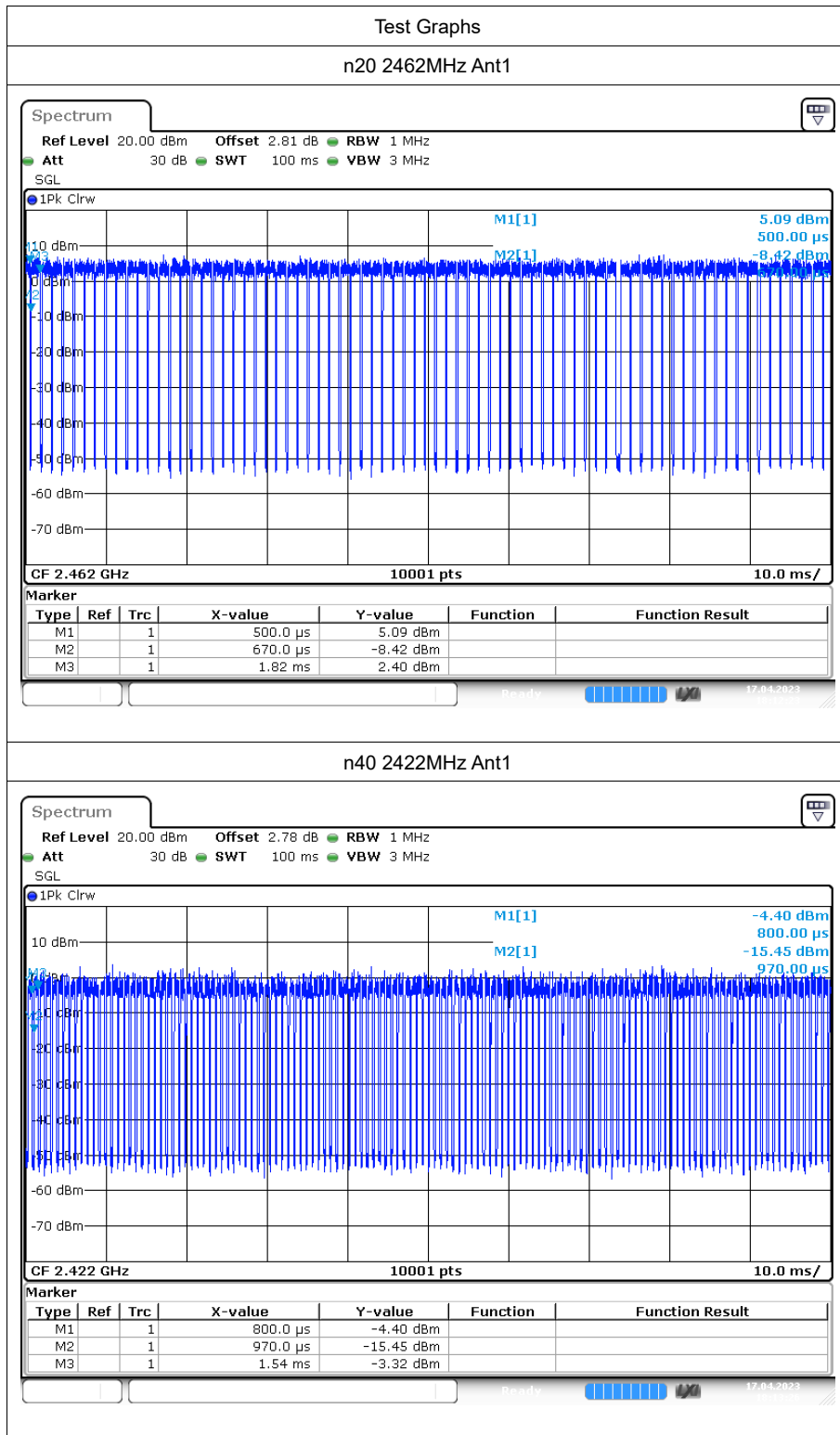
1.2 Test Graphs

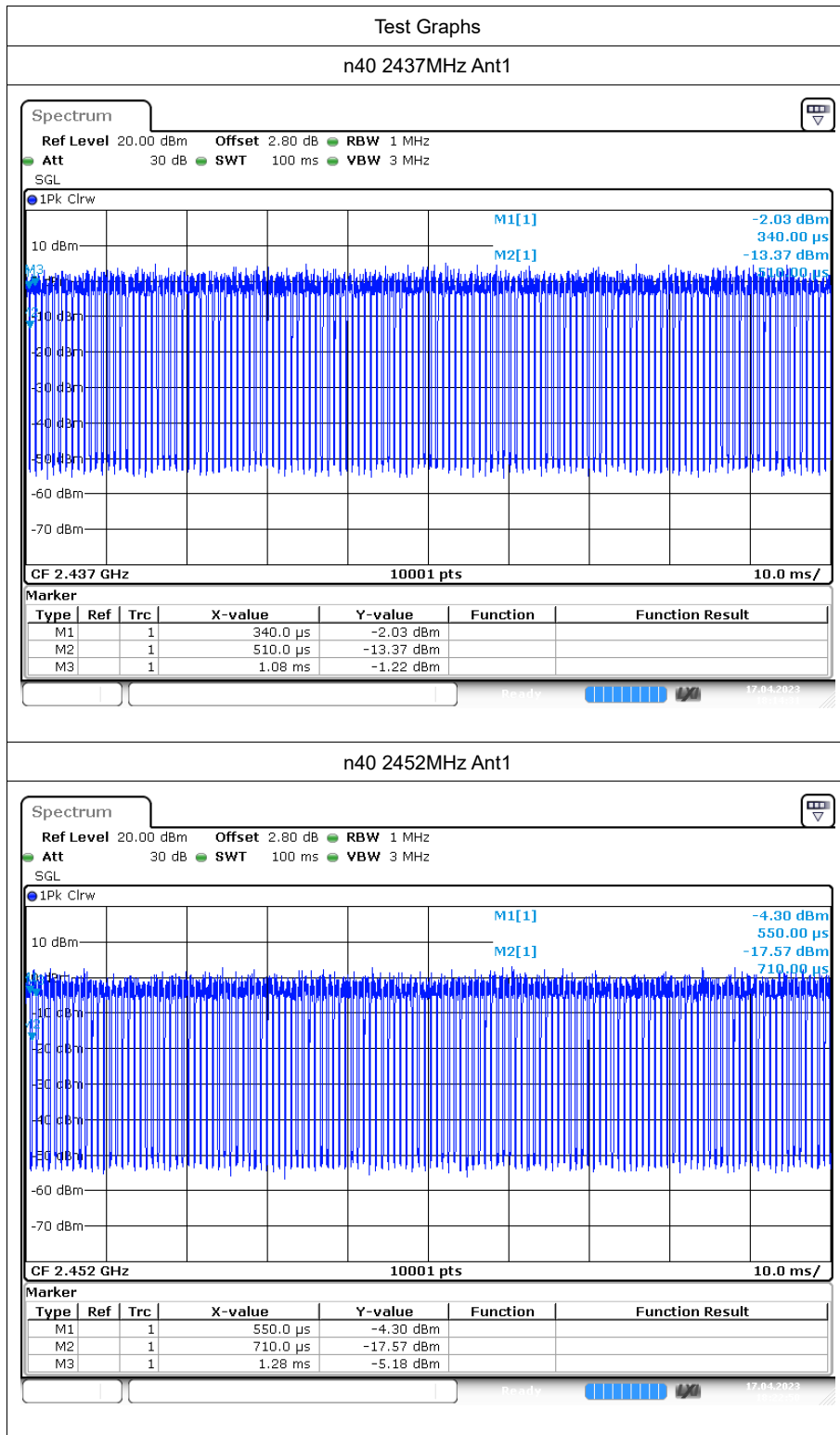














2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	17.91	30	Pass
b	2437	Ant1	19.61	30	Pass
b	2462	Ant1	17.17	30	Pass
g	2412	Ant1	19.22	30	Pass
g	2437	Ant1	20.79	30	Pass
g	2462	Ant1	18.66	30	Pass
n20	2412	Ant1	18.03	30	Pass
n20	2437	Ant1	19.59	30	Pass
n20	2462	Ant1	17.31	30	Pass
n40	2422	Ant1	18.86	30	Pass
n40	2437	Ant1	20.07	30	Pass
n40	2452	Ant1	18.23	30	Pass

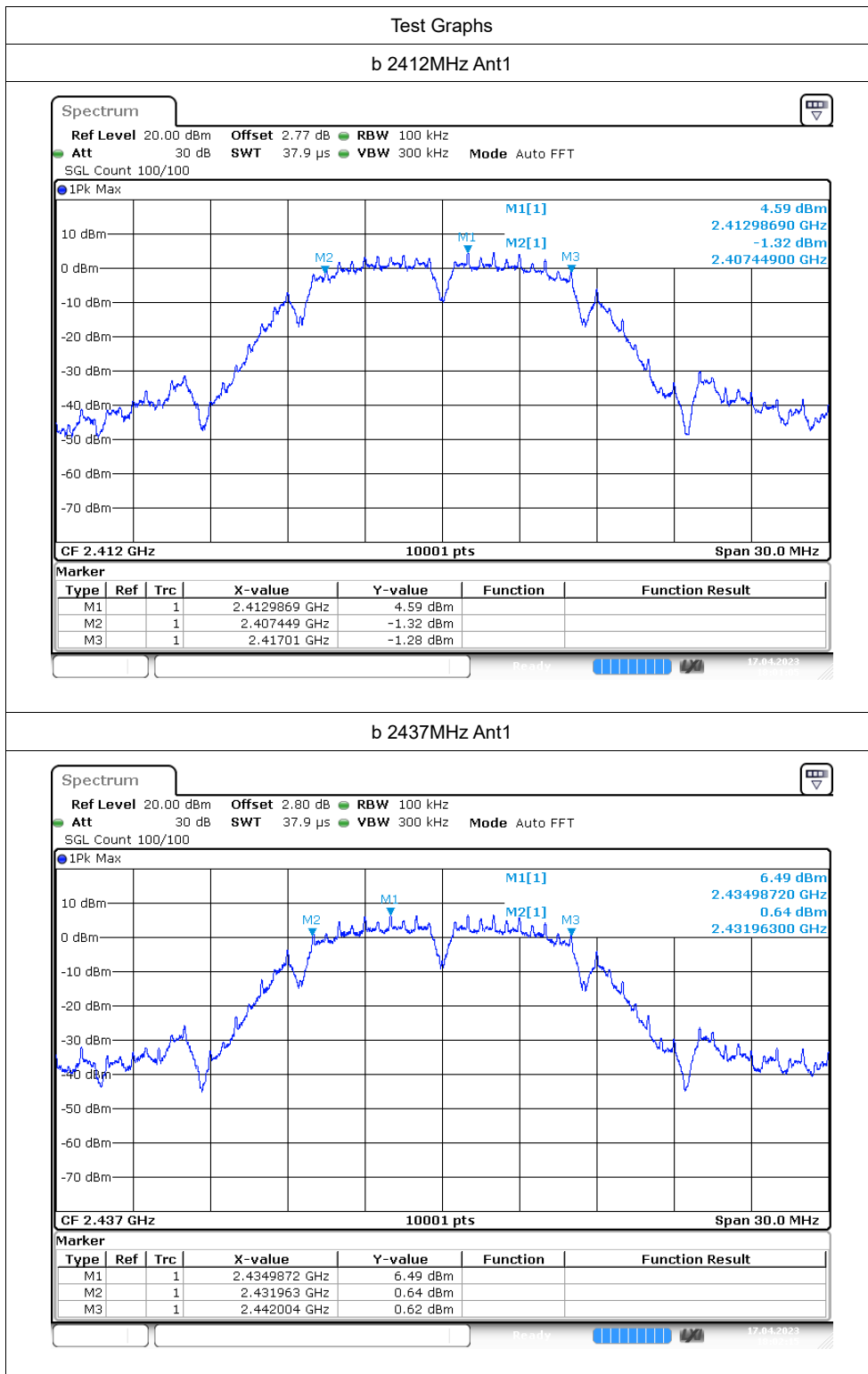


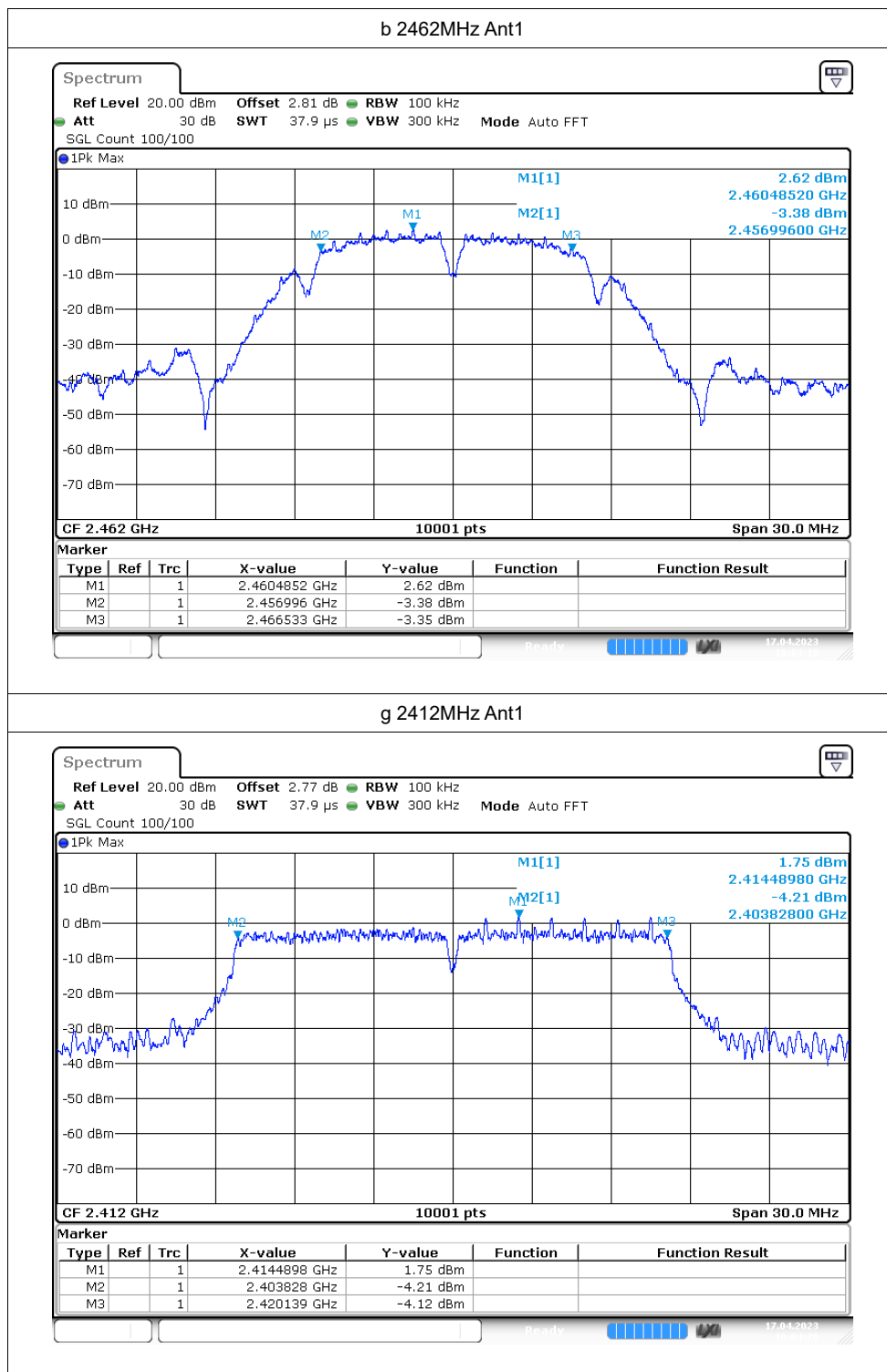
3 -6dB Bandwidth

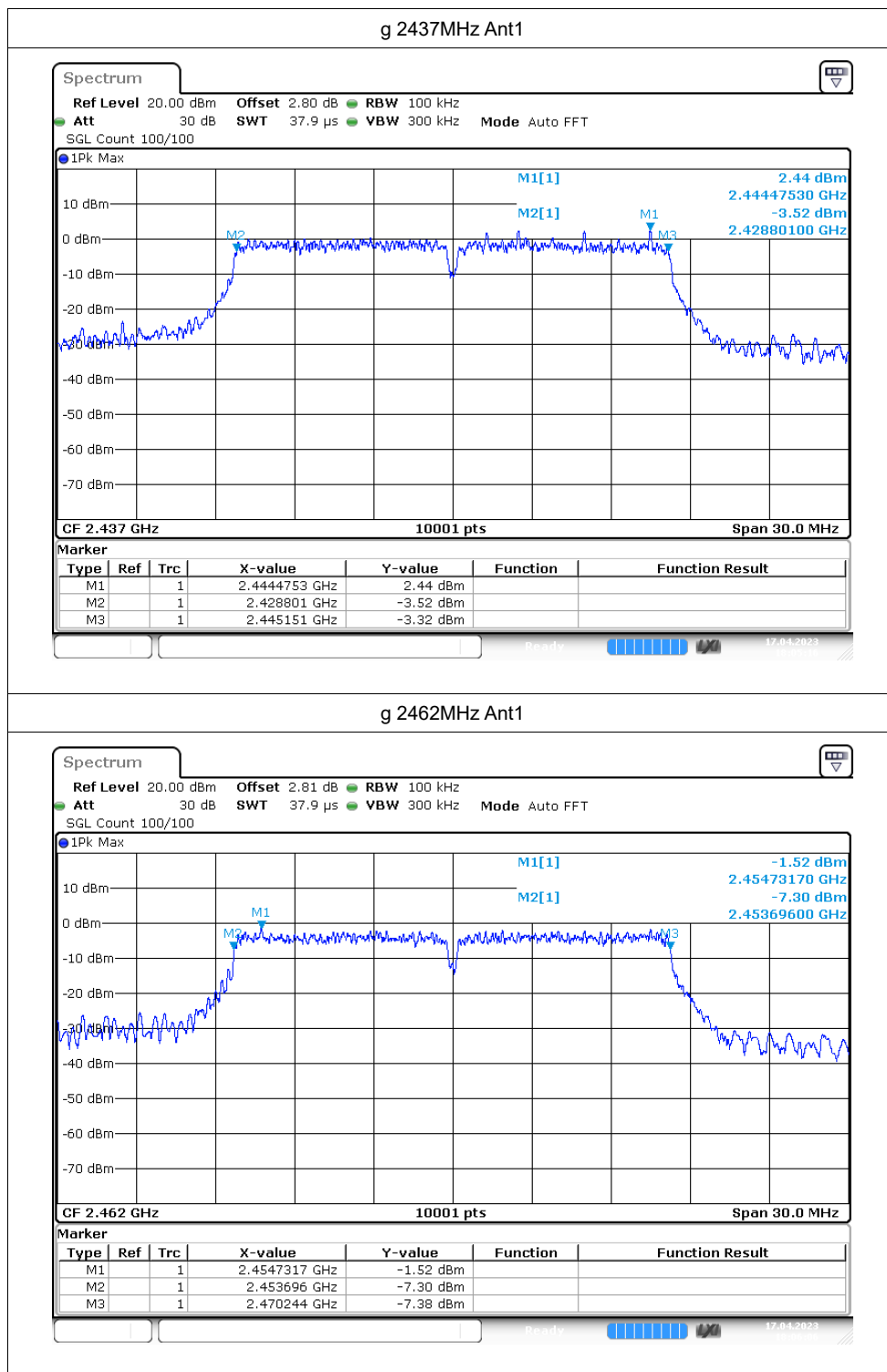
3.1 Test Result

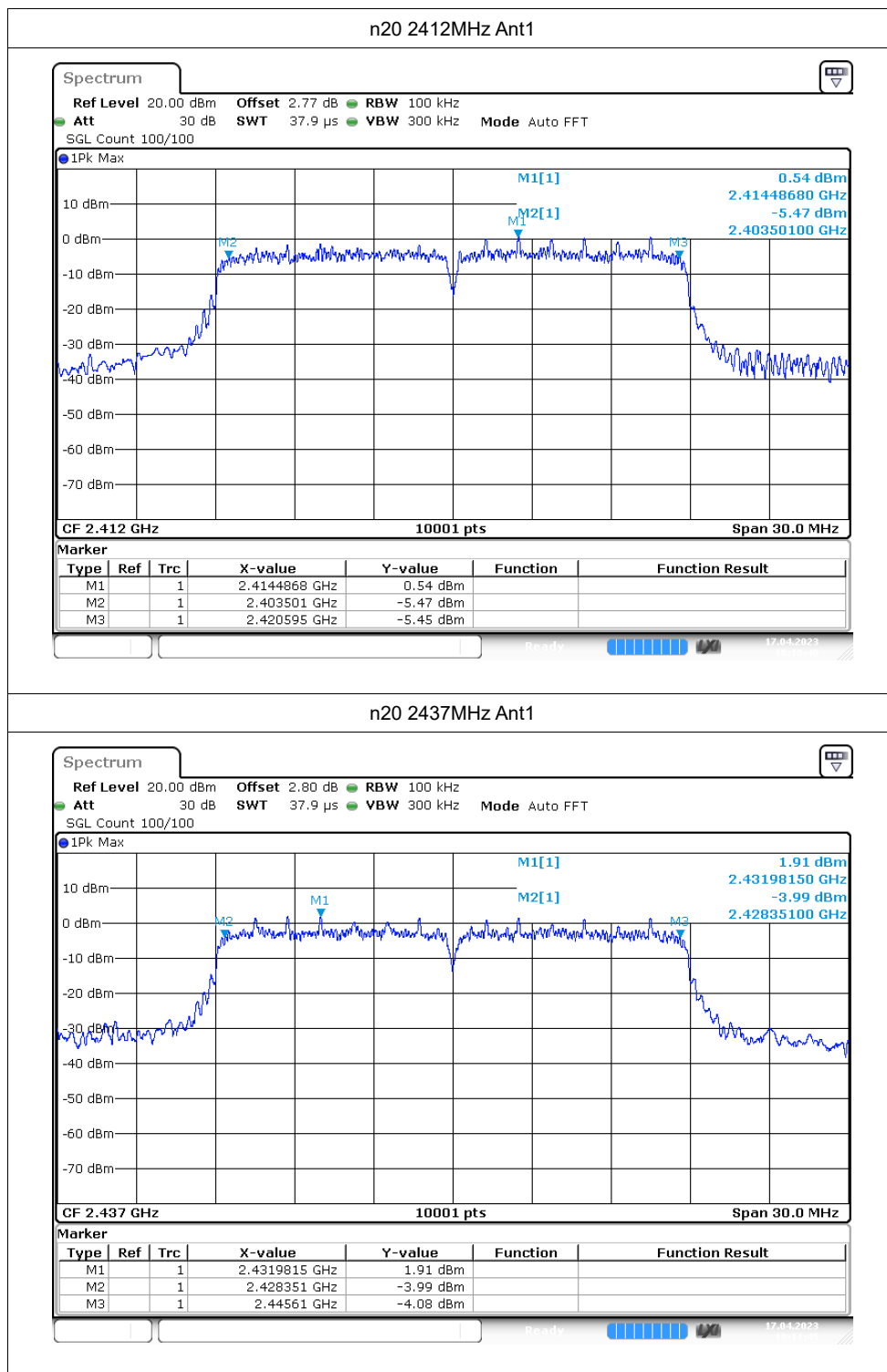
Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	9.561	0.5	Pass
b	2437	Ant1	10.041	0.5	Pass
b	2462	Ant1	9.537	0.5	Pass
g	2412	Ant1	16.311	0.5	Pass
g	2437	Ant1	16.35	0.5	Pass
g	2462	Ant1	16.548	0.5	Pass
n20	2412	Ant1	17.094	0.5	Pass
n20	2437	Ant1	17.259	0.5	Pass
n20	2462	Ant1	17.61	0.5	Pass
n40	2422	Ant1	35.274	0.5	Pass
n40	2437	Ant1	35.472	0.5	Pass
n40	2452	Ant1	34.494	0.5	Pass

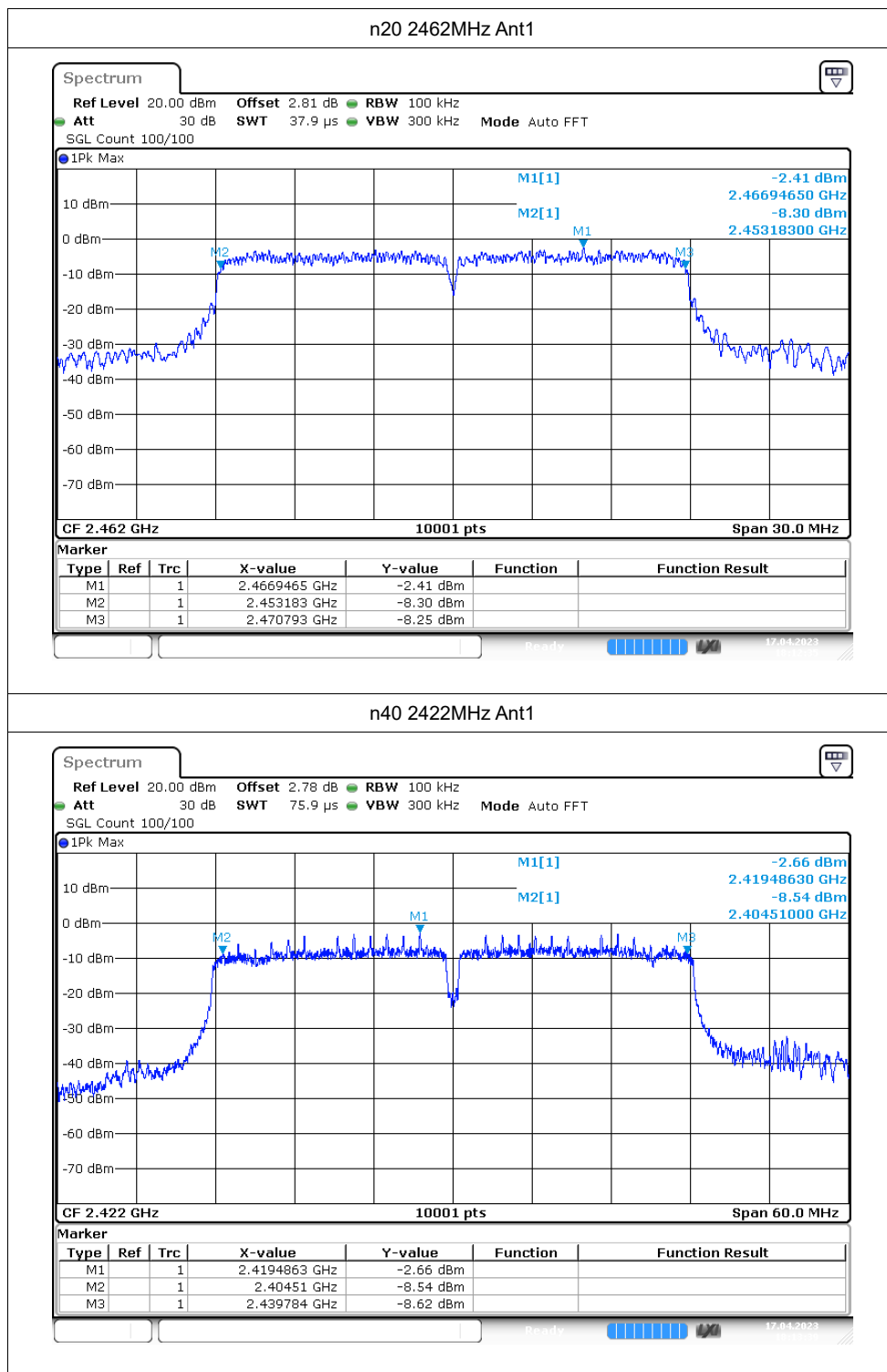
3.2 Test Graphs

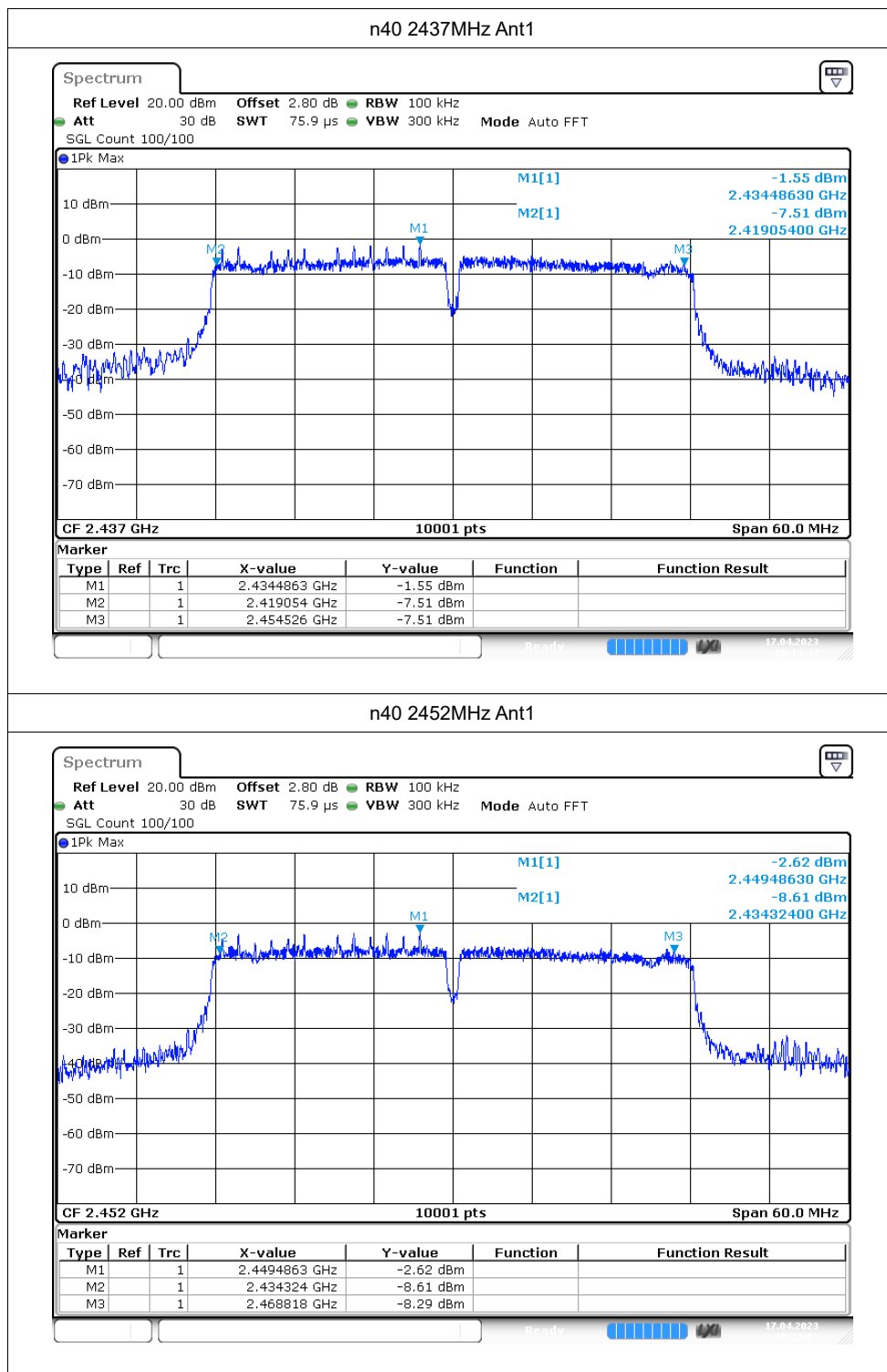










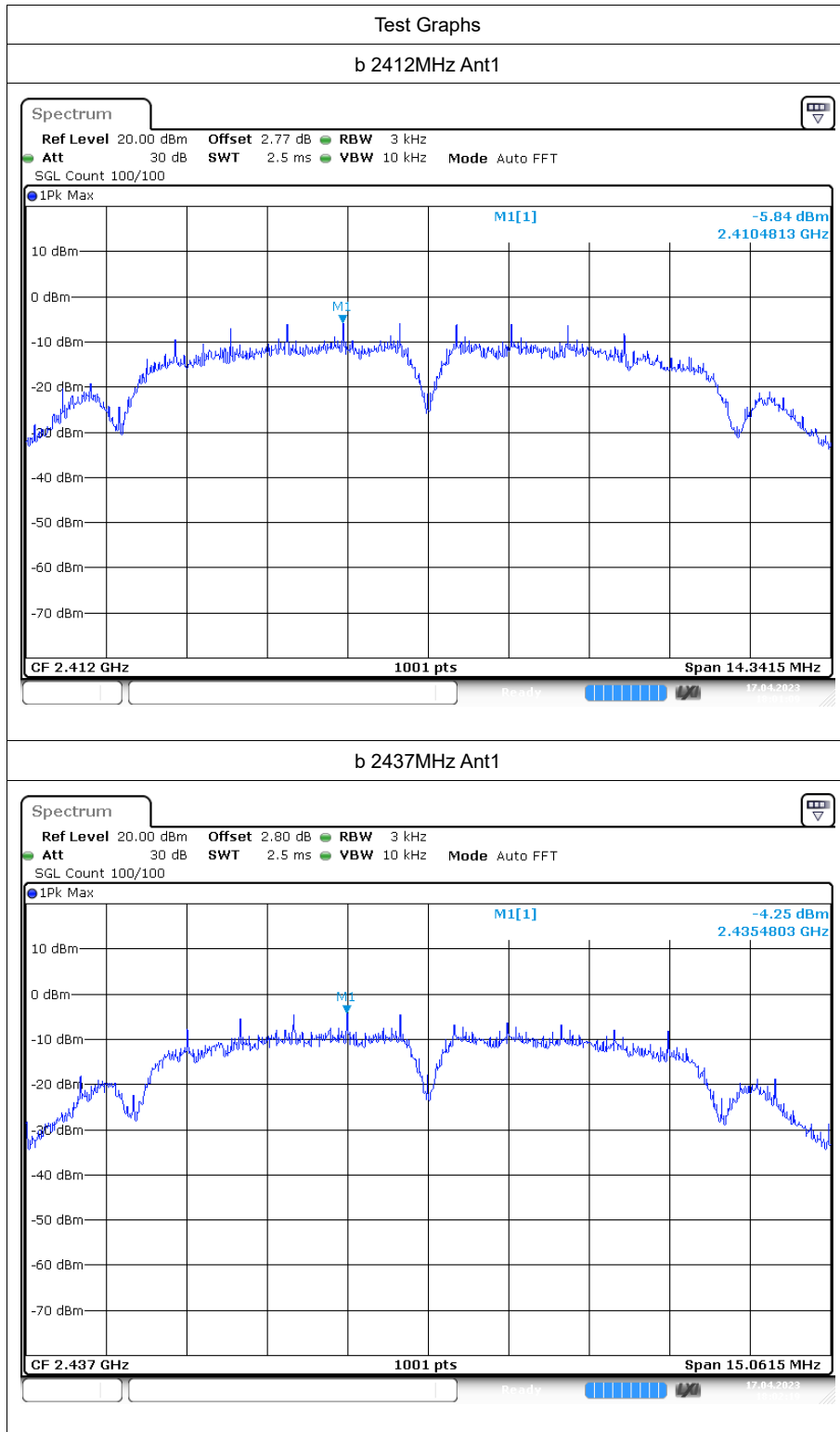


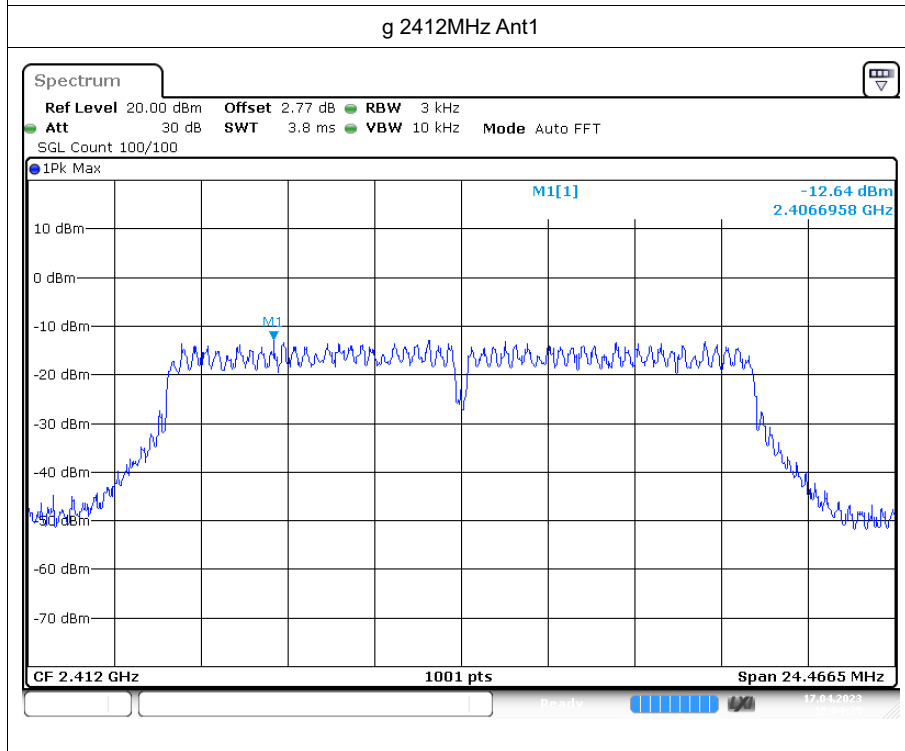
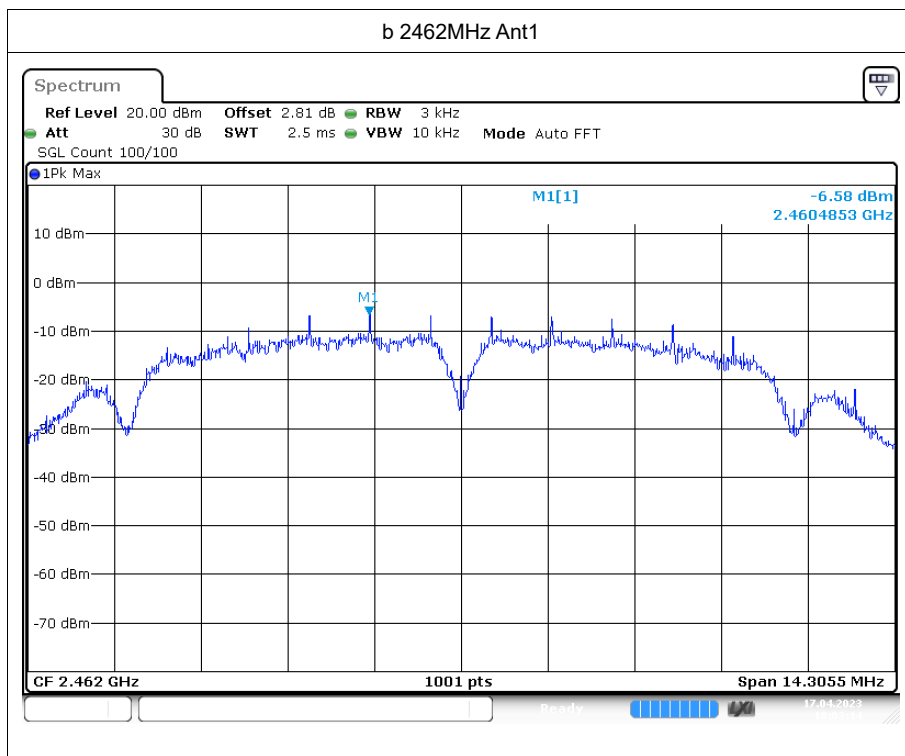
4 Maximum Power Spectral Density Level

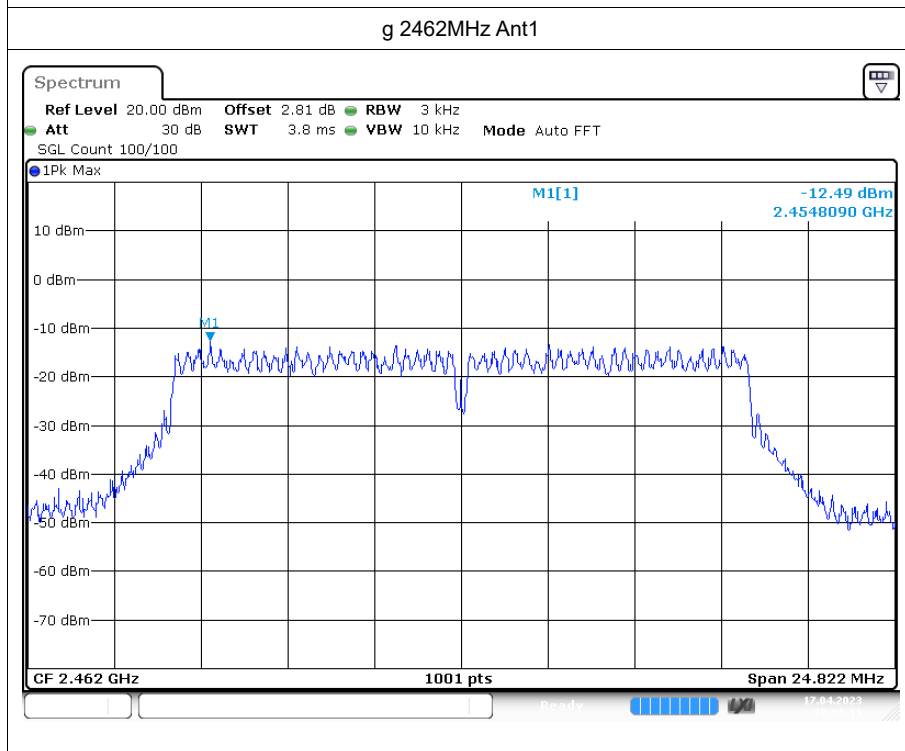
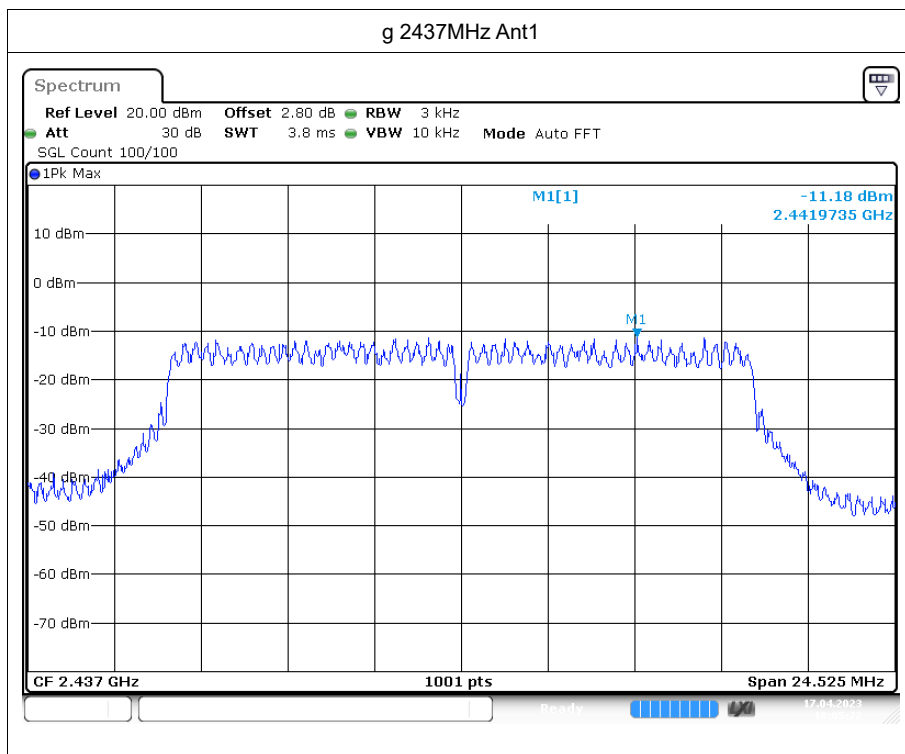
4.1 Test Result

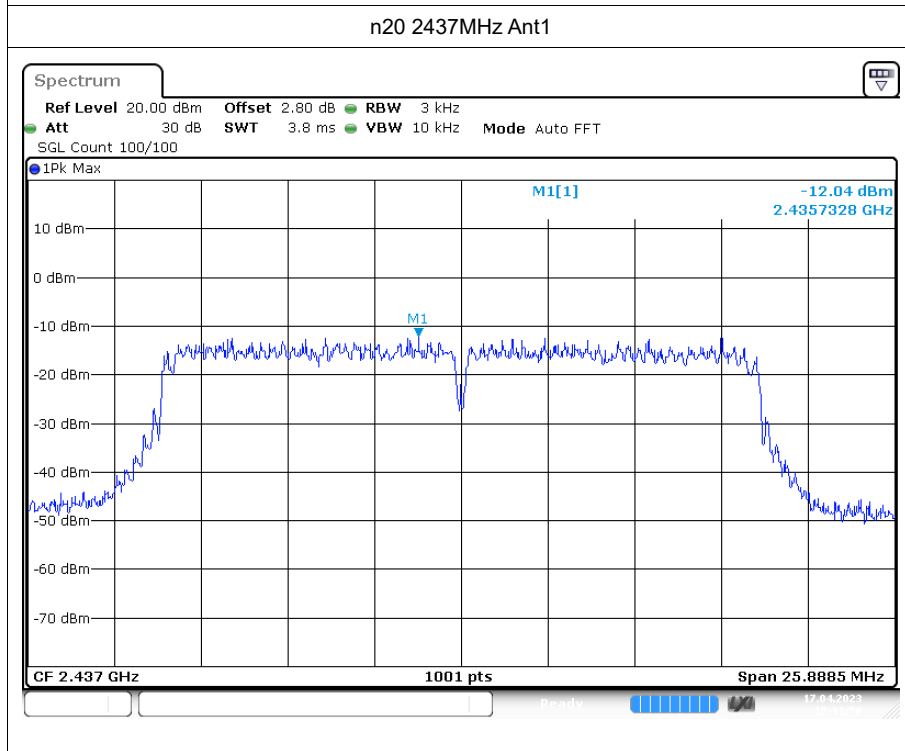
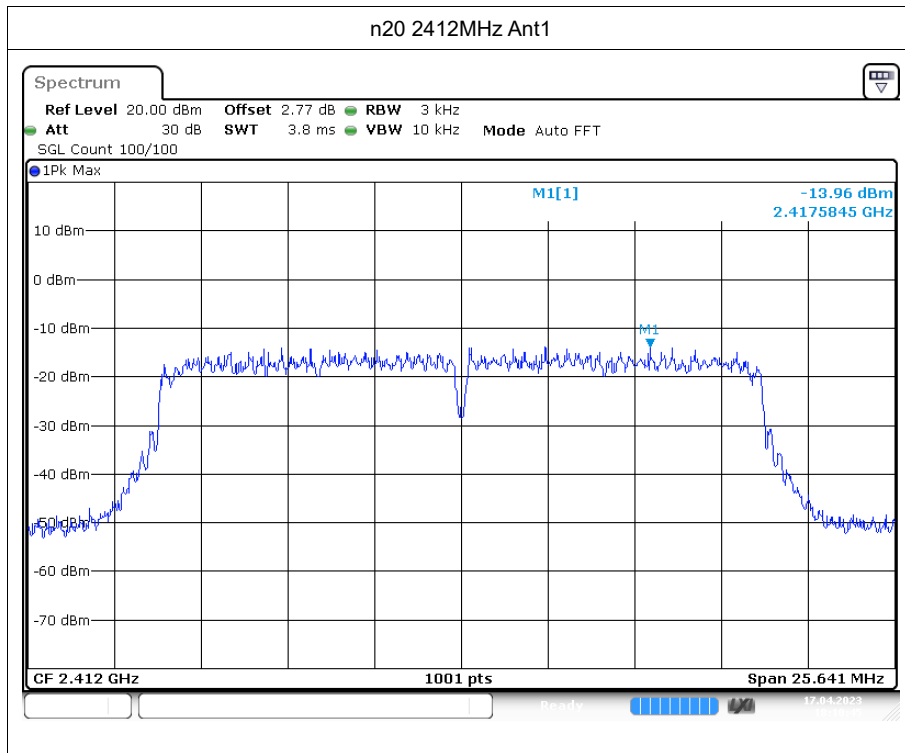
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-5.84	≤8	Pass
b	2437	Ant1	-4.25	≤8	Pass
b	2462	Ant1	-6.58	≤8	Pass
g	2412	Ant1	-12.64	≤8	Pass
g	2437	Ant1	-11.18	≤8	Pass
g	2462	Ant1	-12.49	≤8	Pass
n20	2412	Ant1	-13.96	≤8	Pass
n20	2437	Ant1	-12.04	≤8	Pass
n20	2462	Ant1	-14.04	≤8	Pass
n40	2422	Ant1	-17.86	≤8	Pass
n40	2437	Ant1	-15.82	≤8	Pass
n40	2452	Ant1	-15.37	≤8	Pass

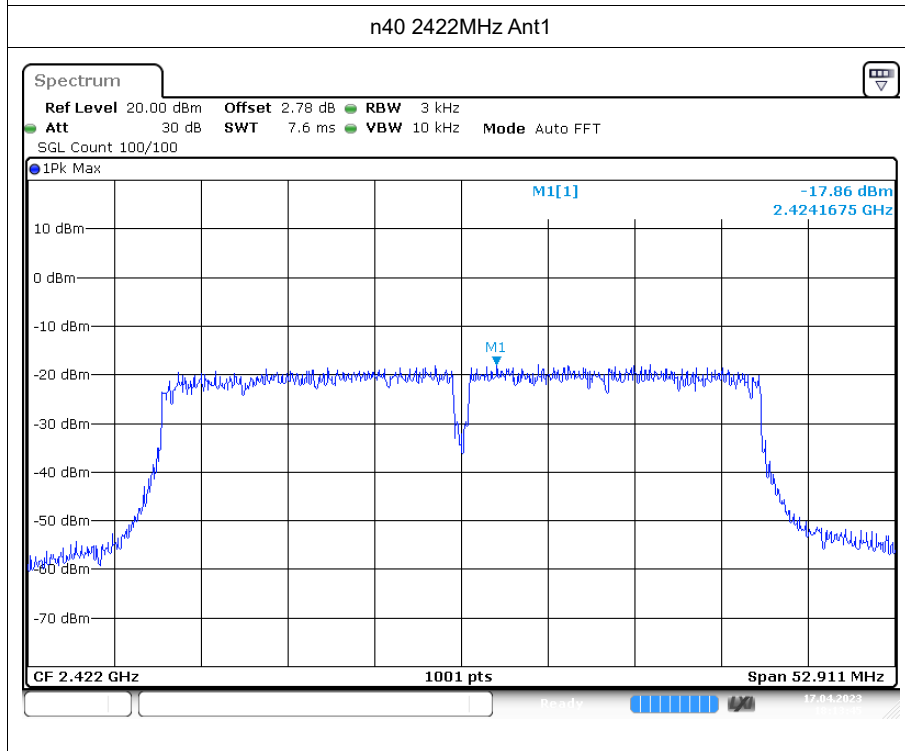
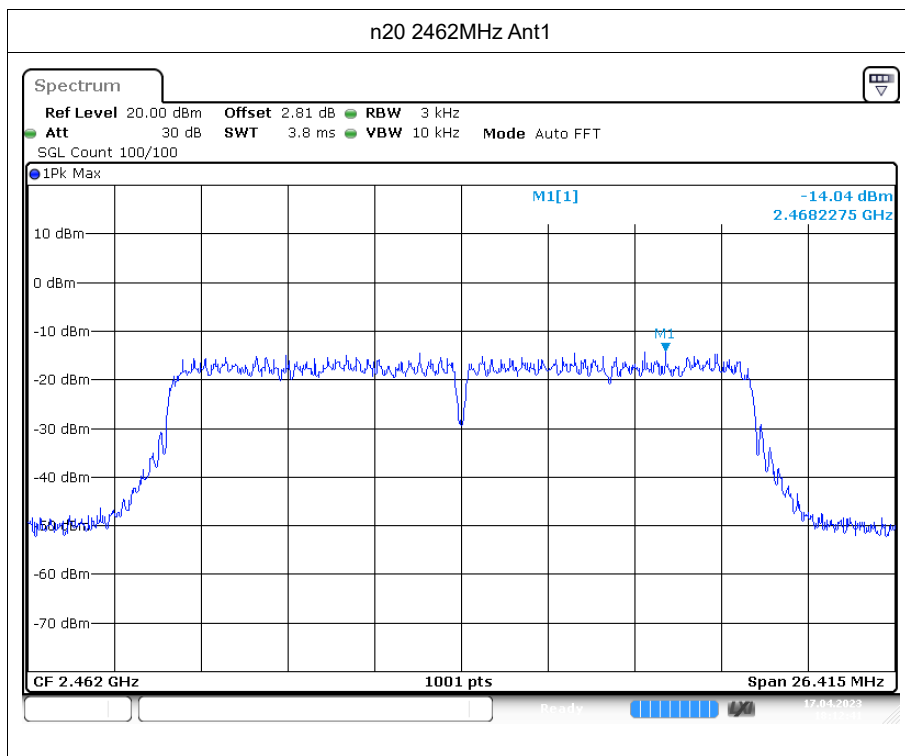
4.2 Test Graphs

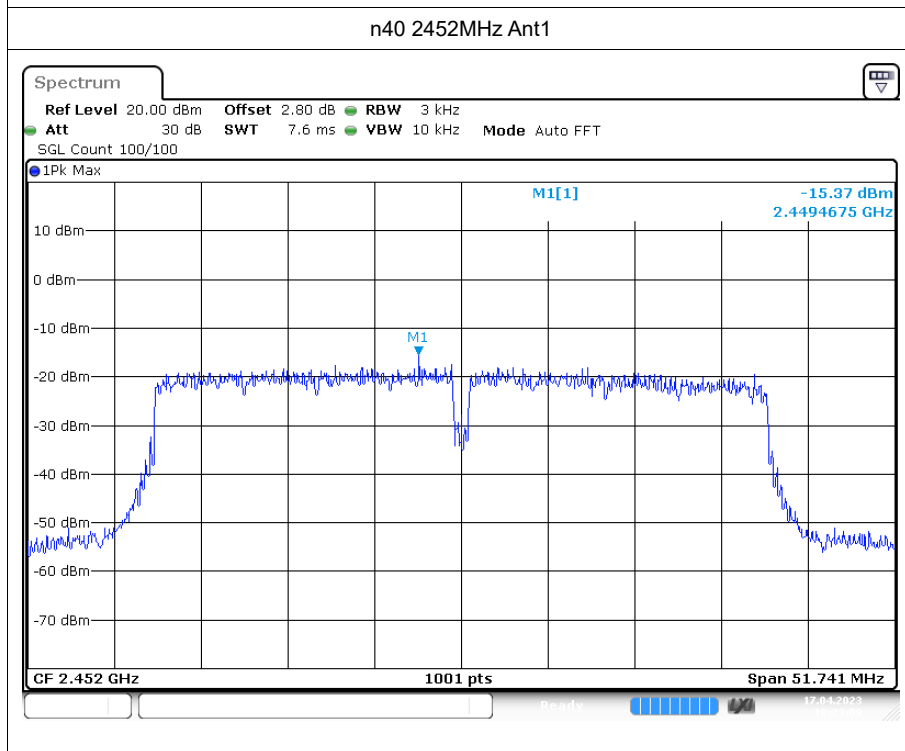
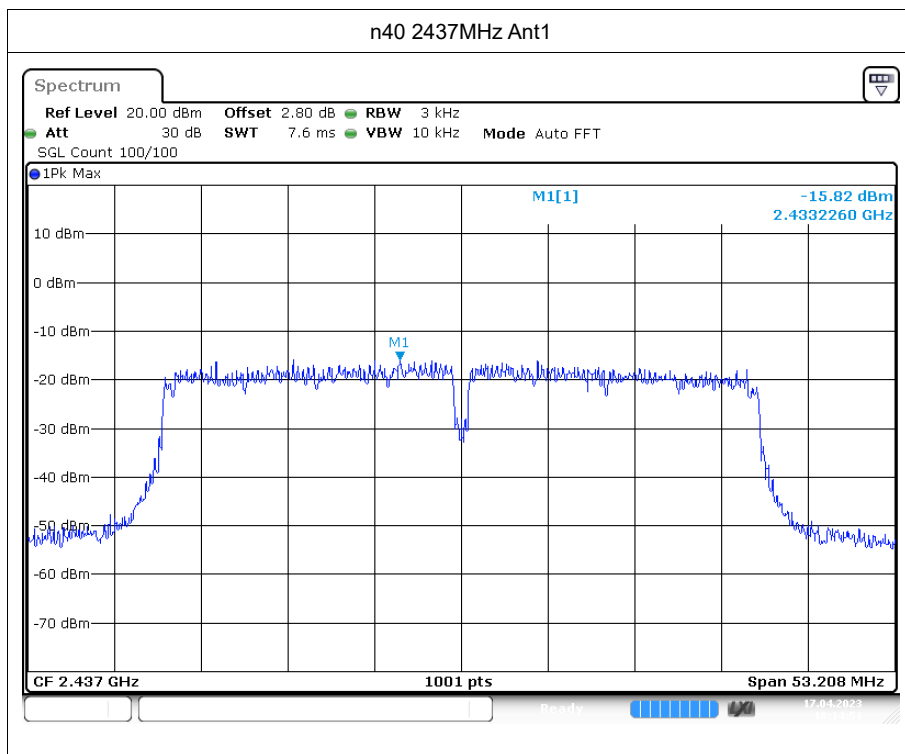












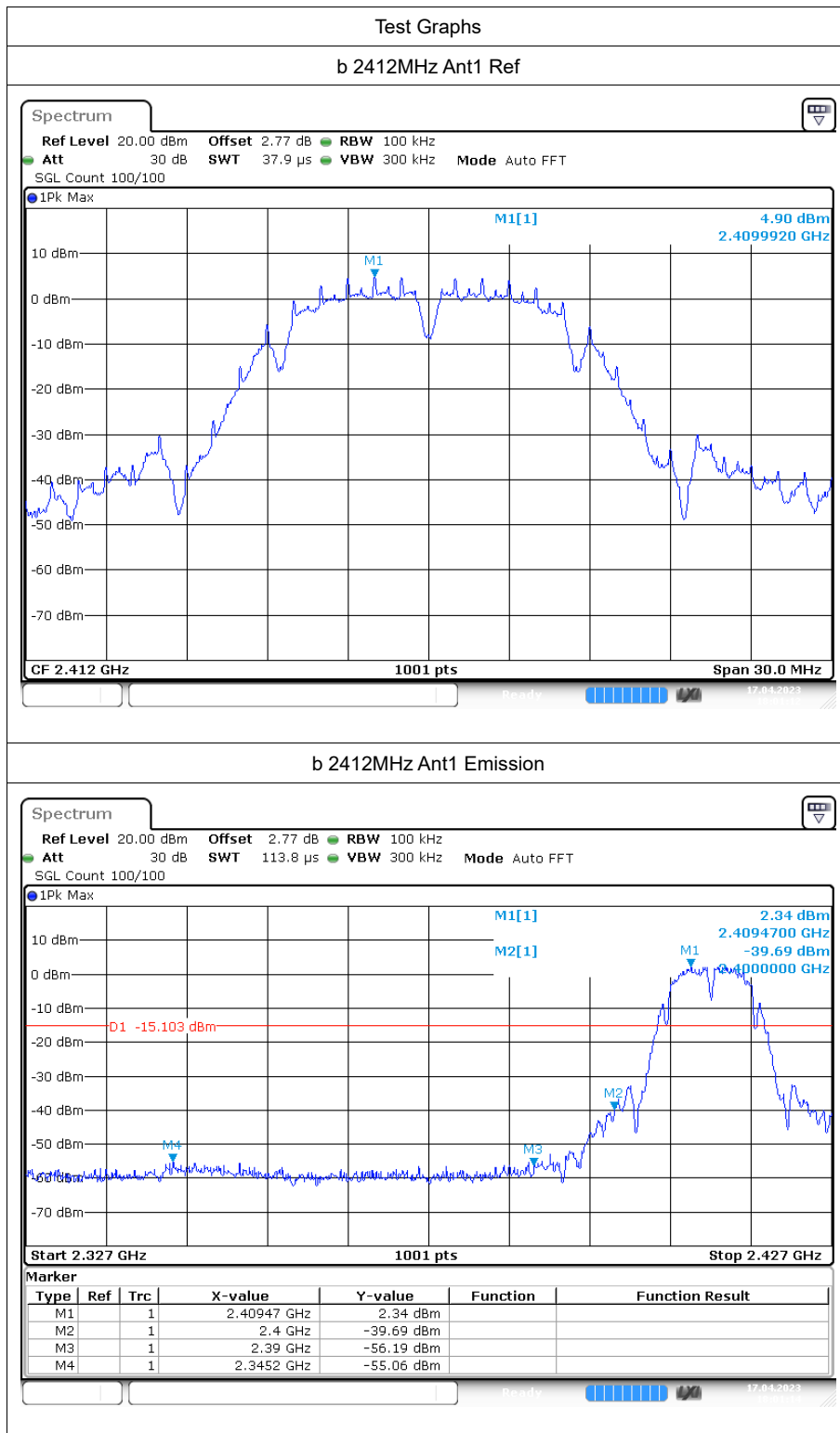


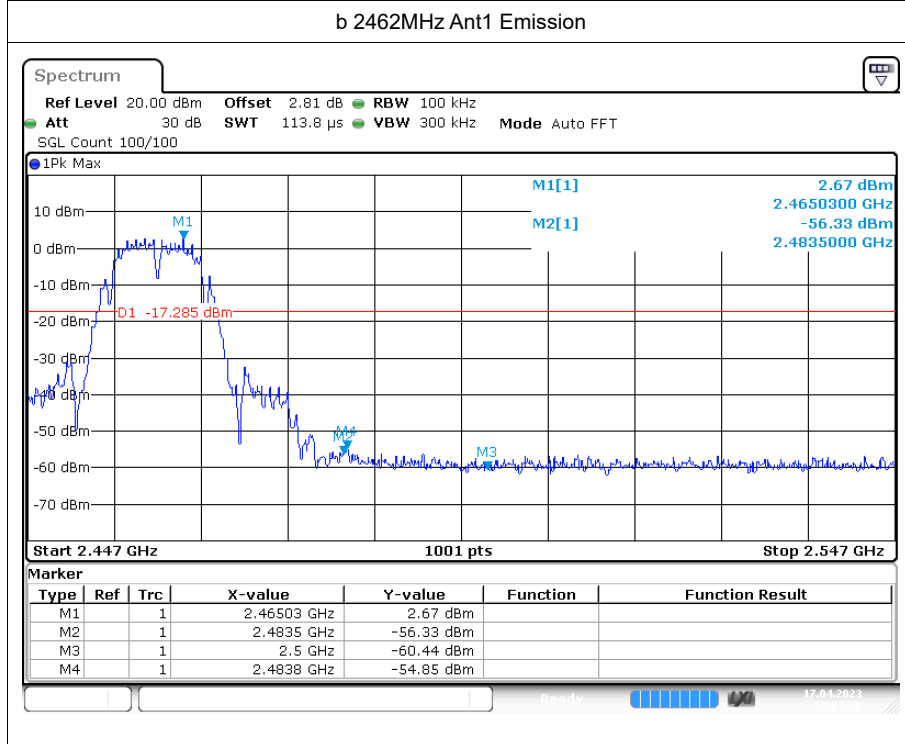
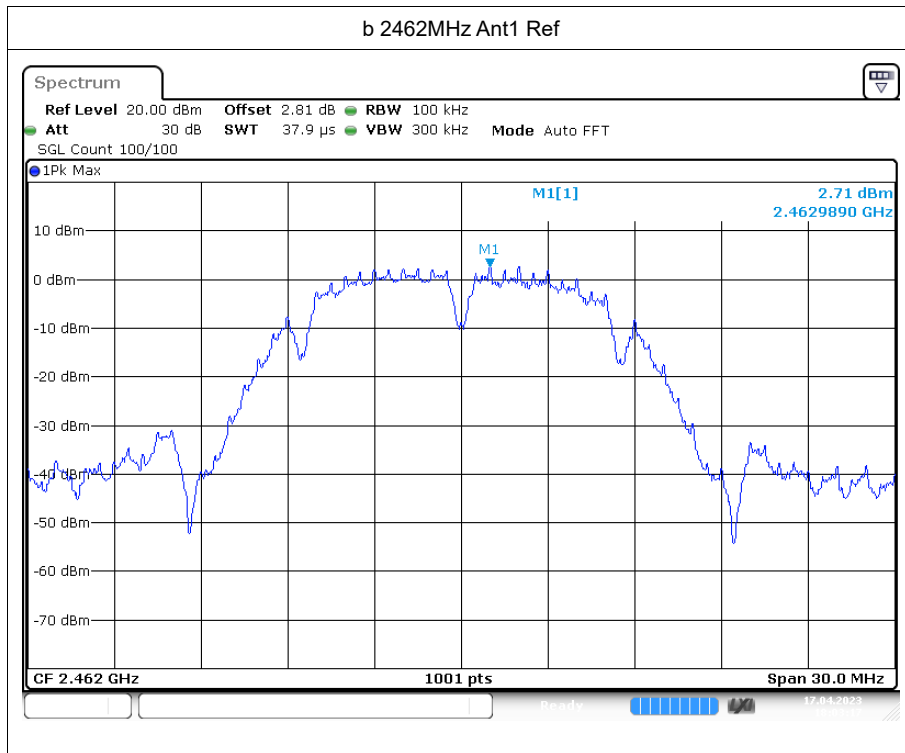
5 Band Edge

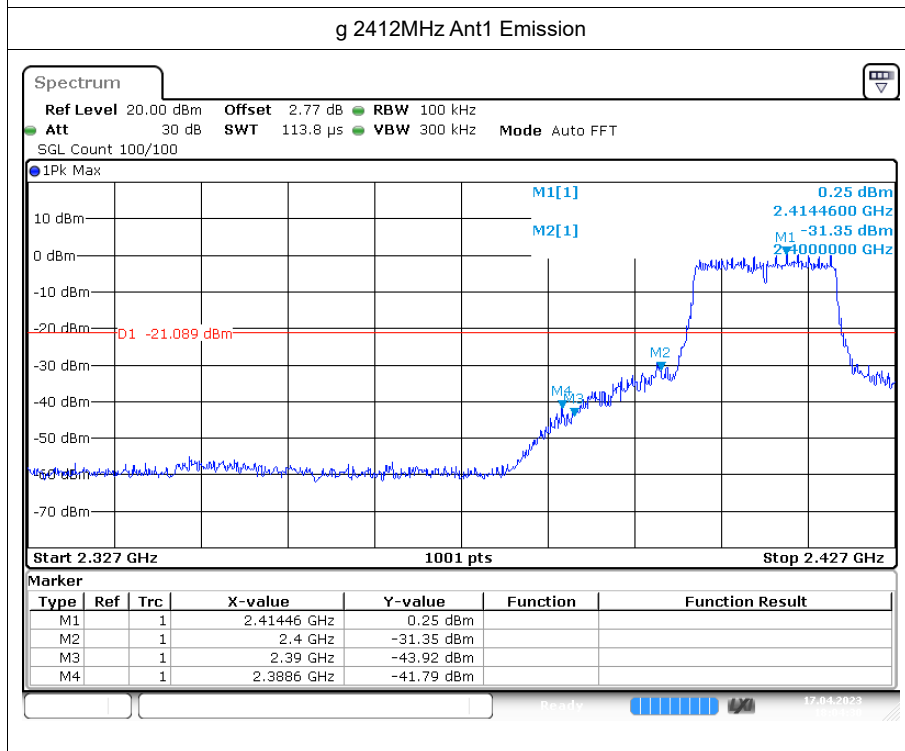
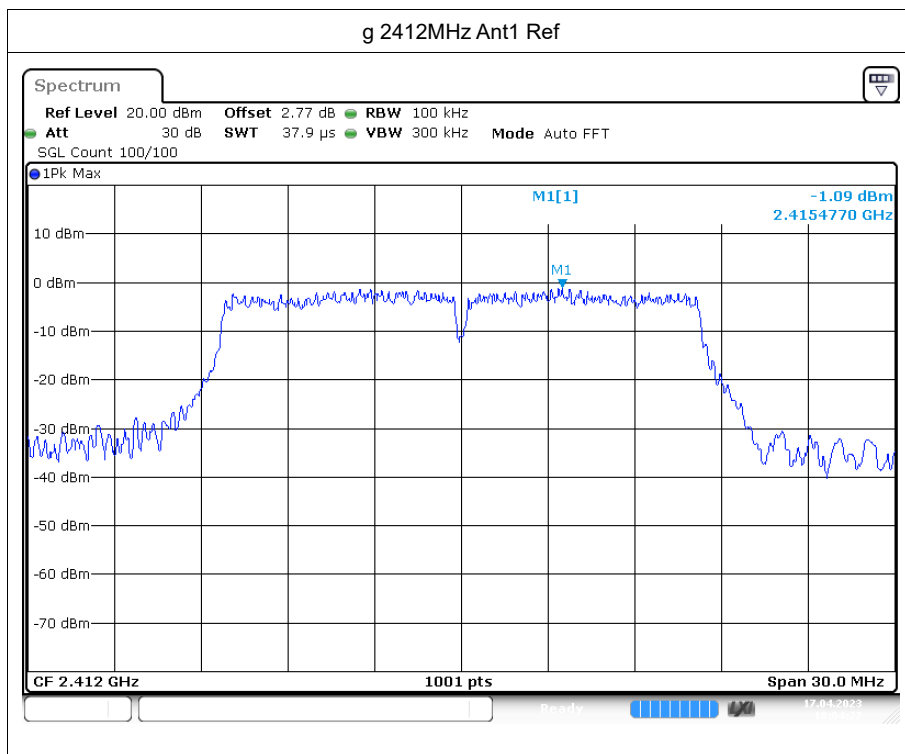
5.1 Test Result

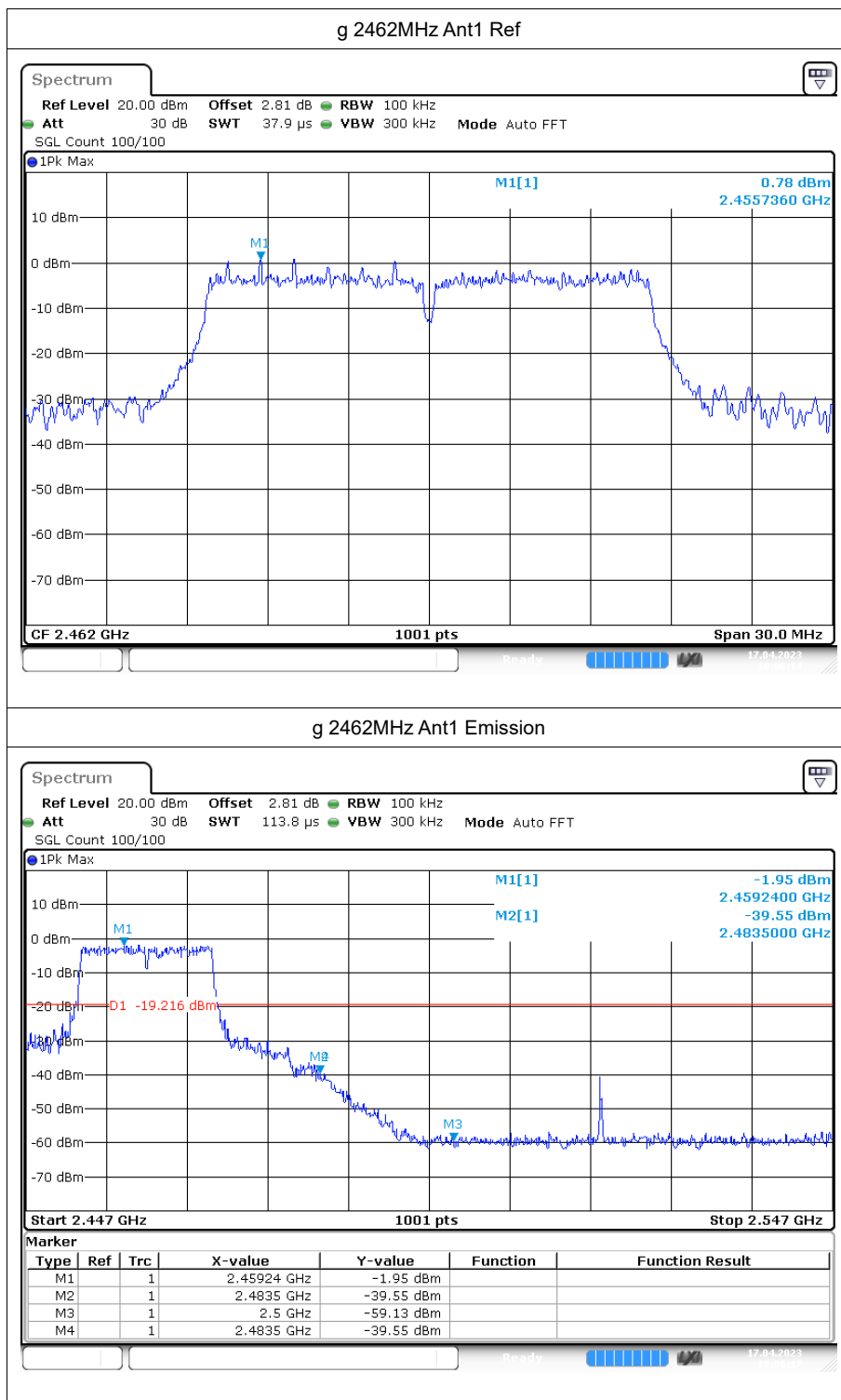
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-59.95	-20	-59.95
b	2462	Ant1	-57.56	-20	Pass
g	2412	Ant1	-40.69	-20	Pass
g	2462	Ant1	-40.32	-20	Pass
n20	2412	Ant1	-41.38	-20	Pass
n20	2462	Ant1	-37.87	-20	Pass
n40	2422	Ant1	-40.68	-20	Pass
n40	2452	Ant1	-37.82	-20	Pass

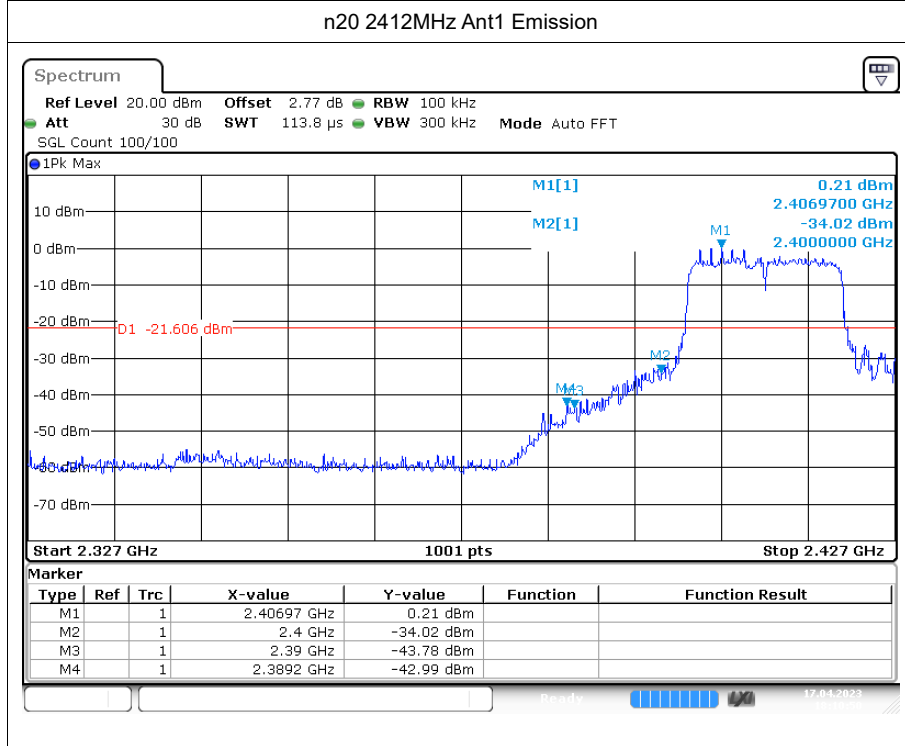
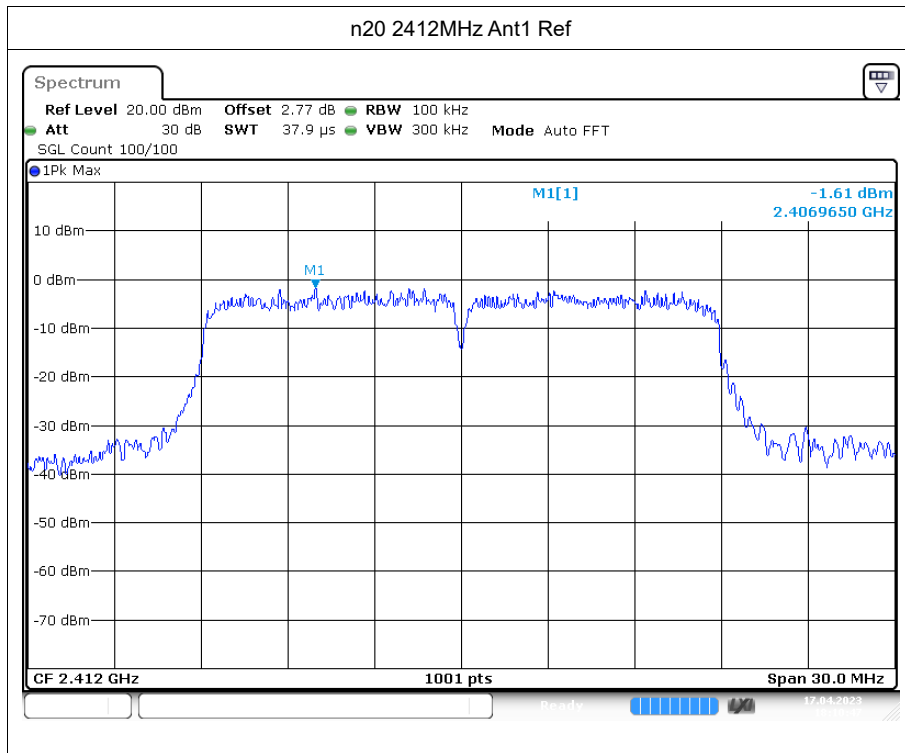
5.2 Test Graphs

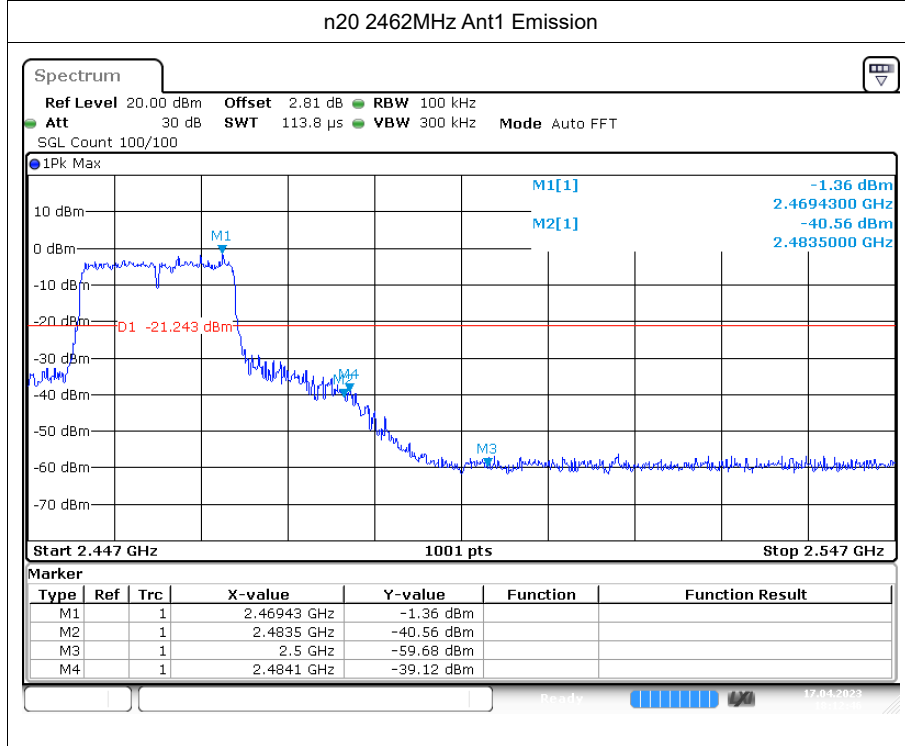
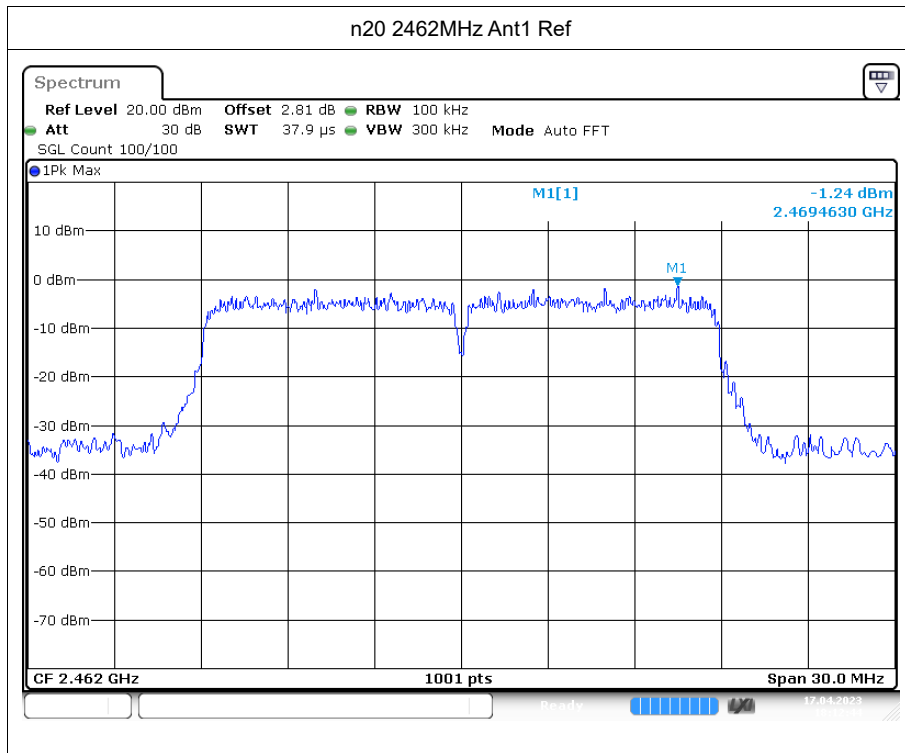


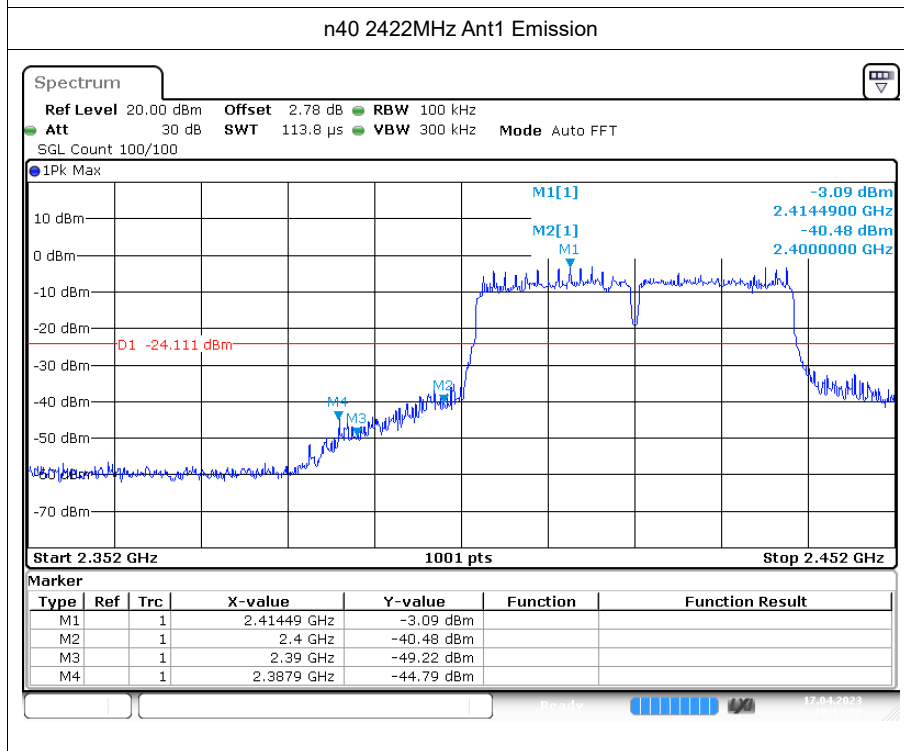
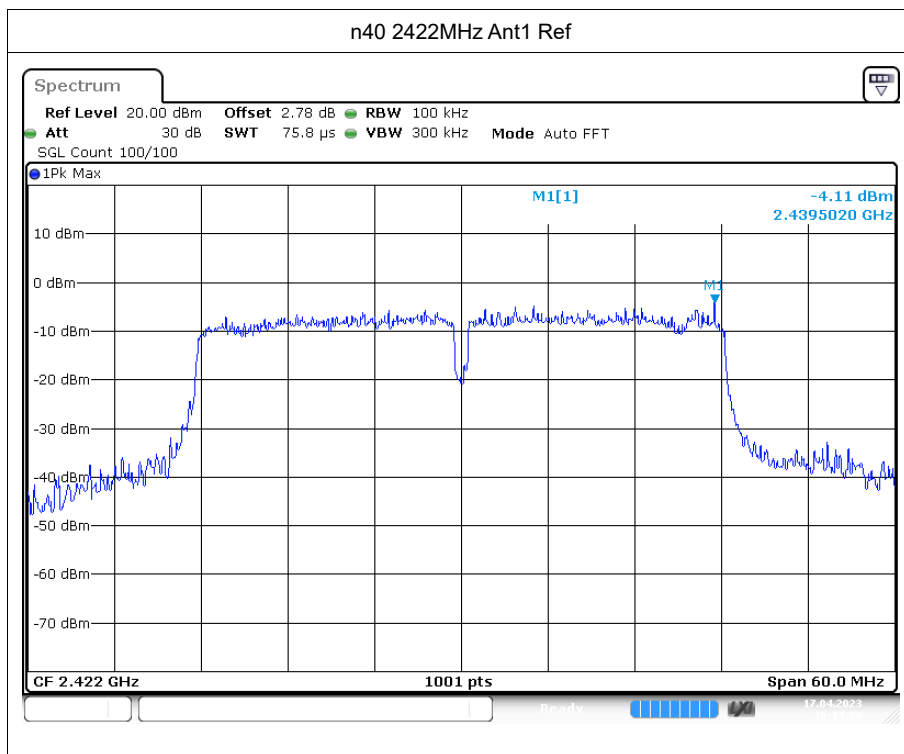


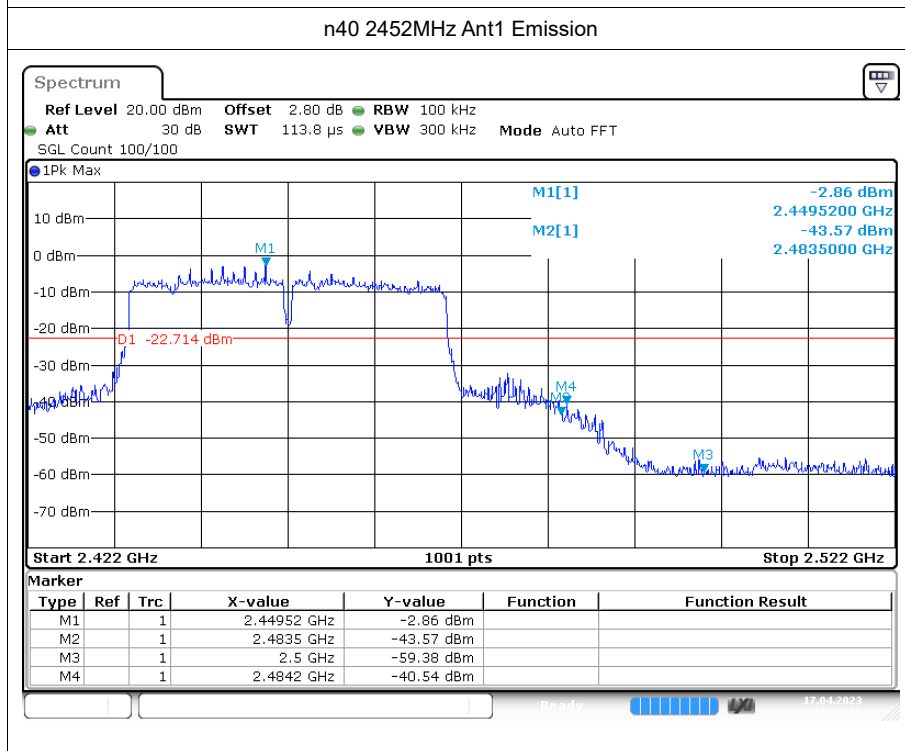
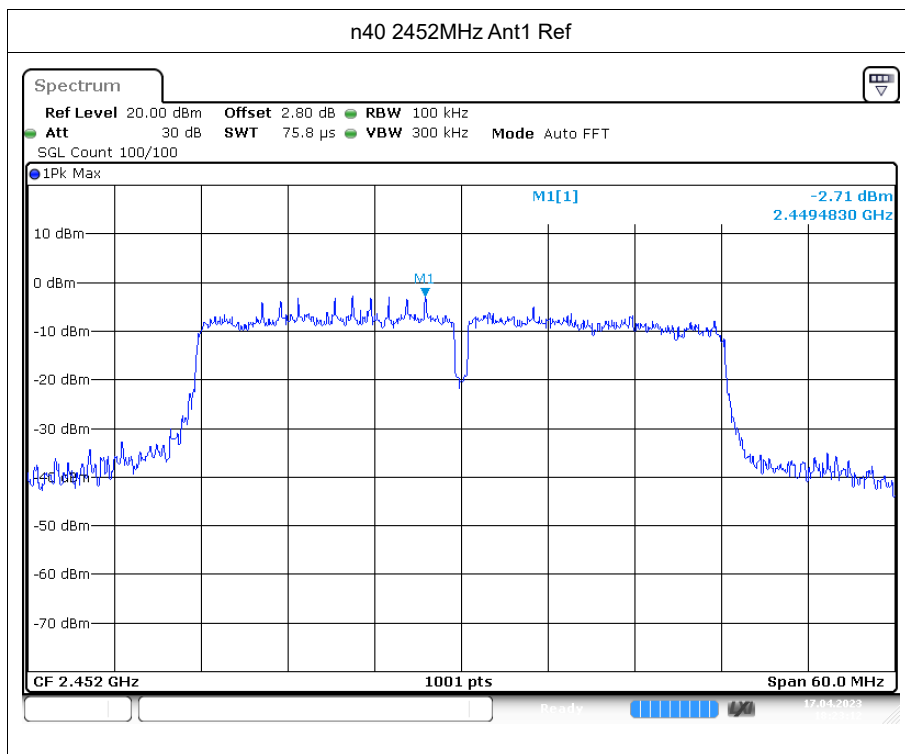












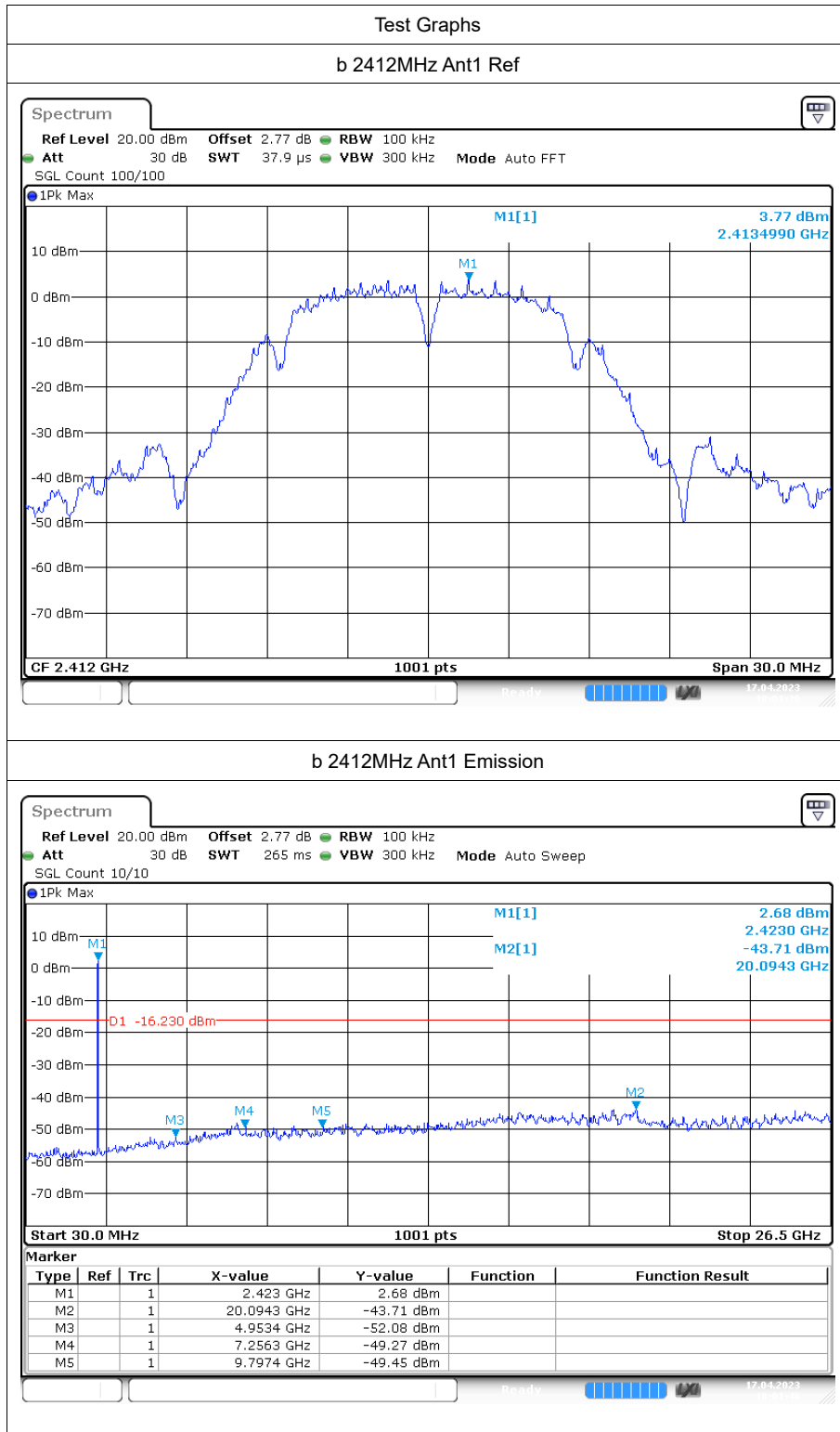


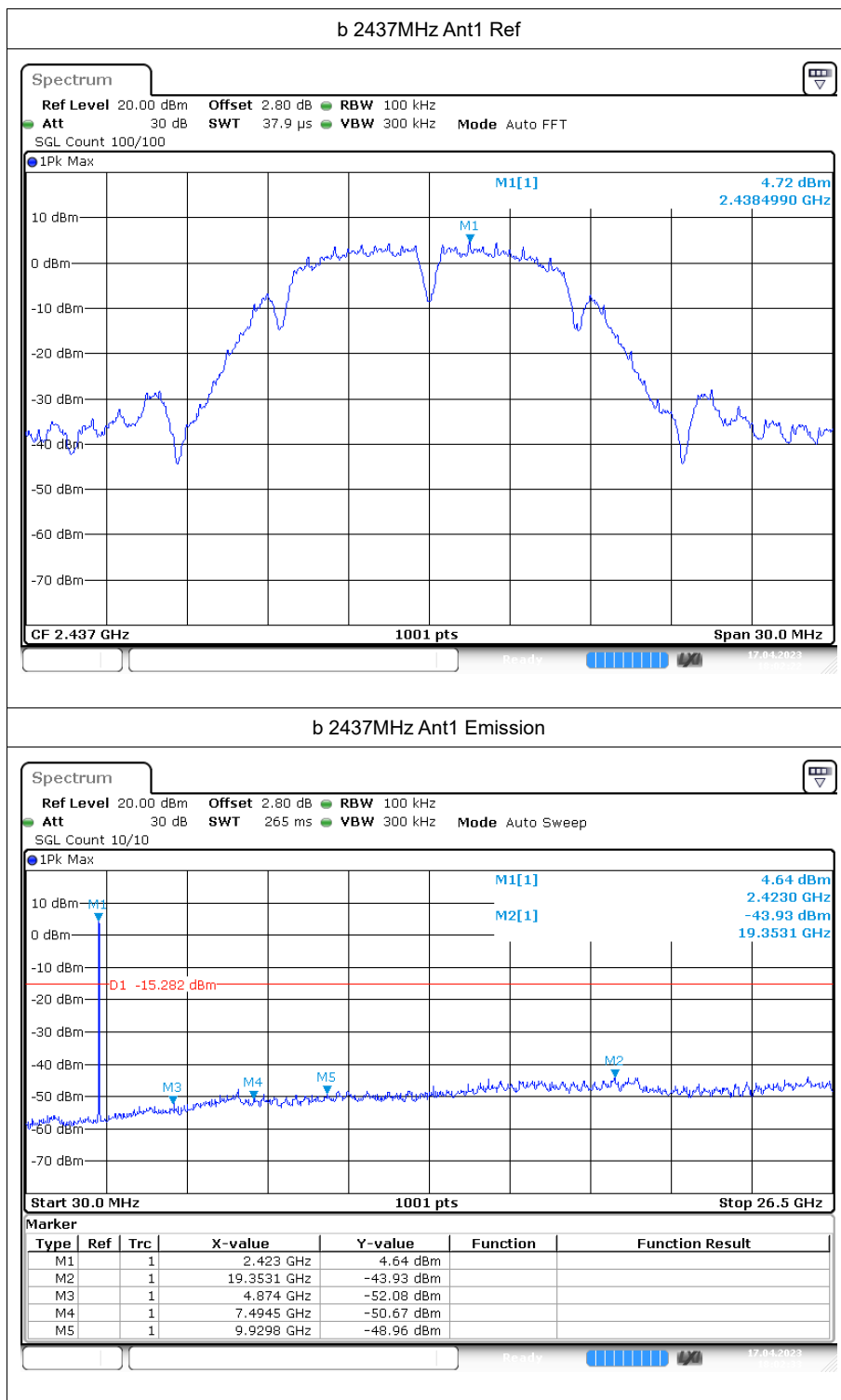
6 Conducted RF Spurious Emission

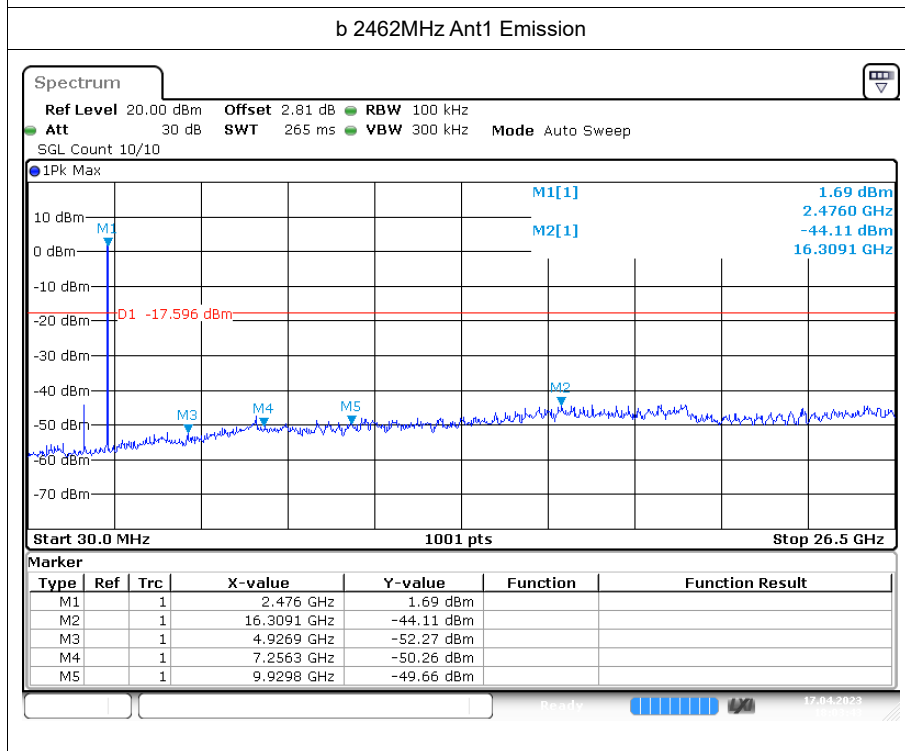
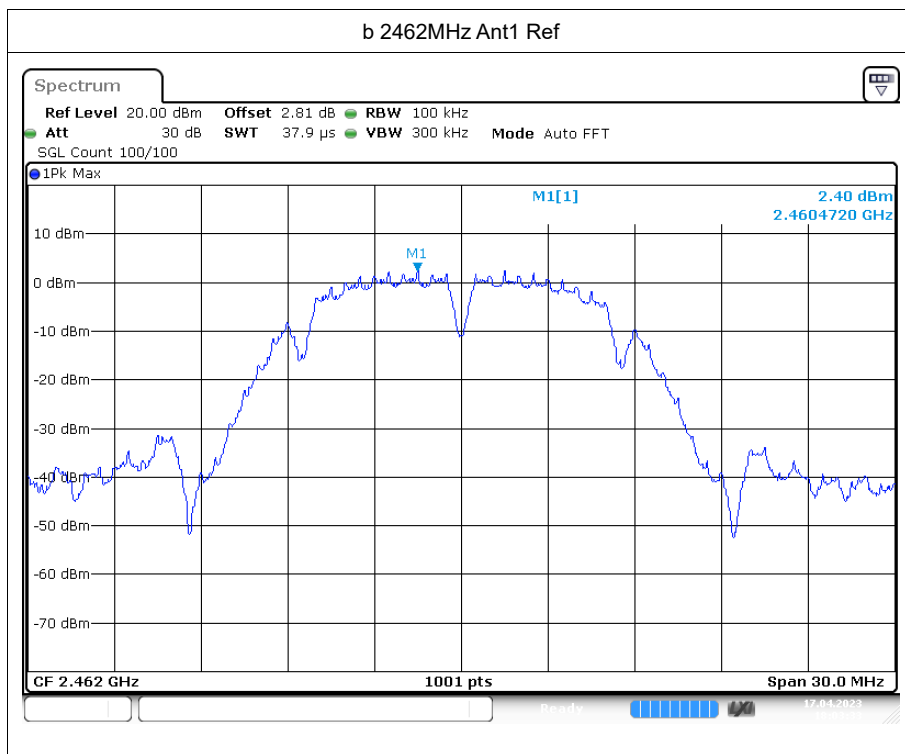
6.1 Test Result

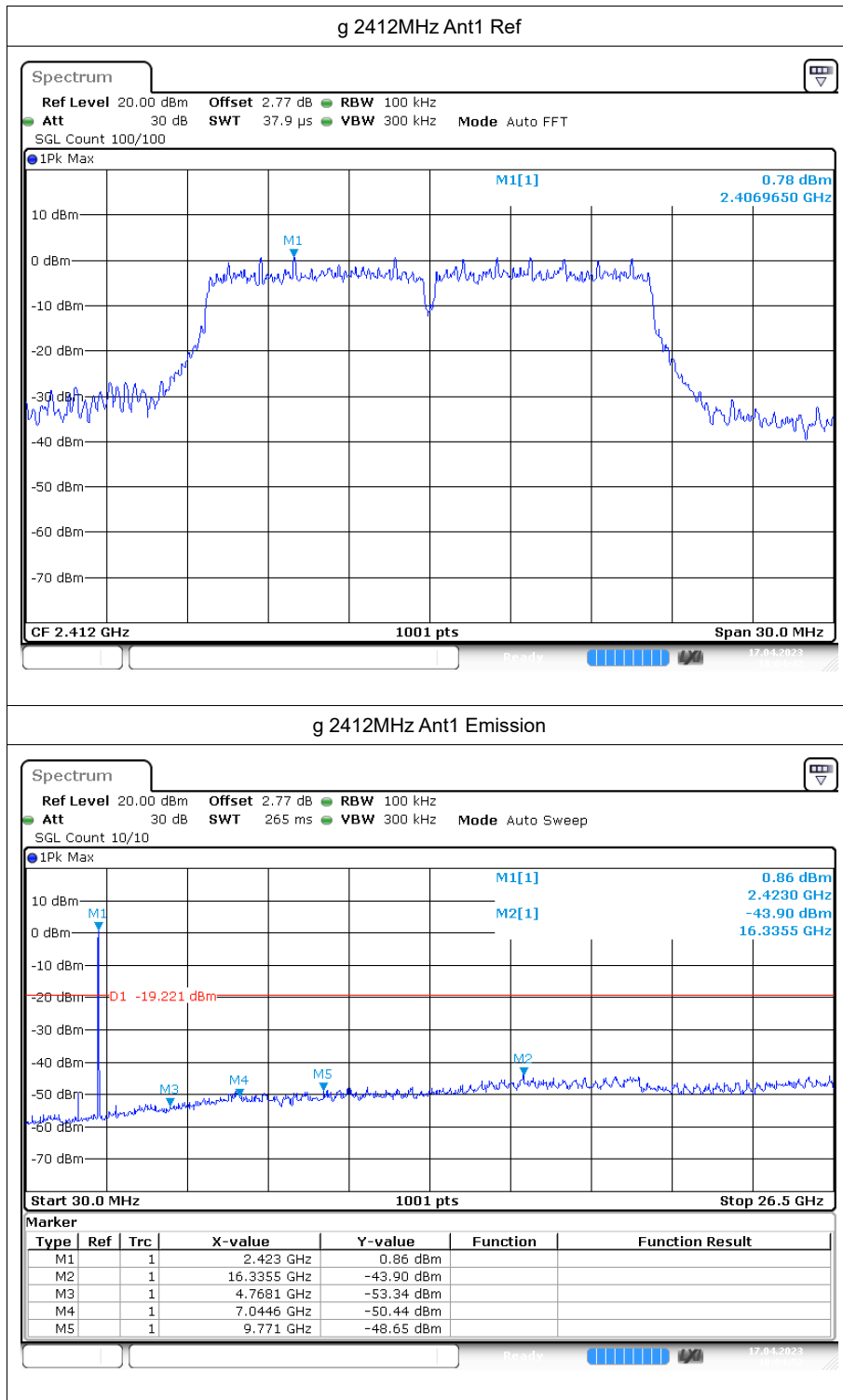
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-47.48	-20	Pass
b	2437	Ant1	-48.64	-20	Pass
b	2462	Ant1	-46.5	-20	Pass
g	2412	Ant1	-44.68	-20	Pass
g	2437	Ant1	-47.08	-20	Pass
g	2462	Ant1	-42.63	-20	Pass
n20	2412	Ant1	-43.35	-20	Pass
n20	2437	Ant1	-42.94	-20	Pass
n20	2462	Ant1	-43.16	-20	Pass
n40	2422	Ant1	-40.15	-20	Pass
n40	2437	Ant1	-42.89	-20	Pass
n40	2452	Ant1	-38.05	-20	Pass

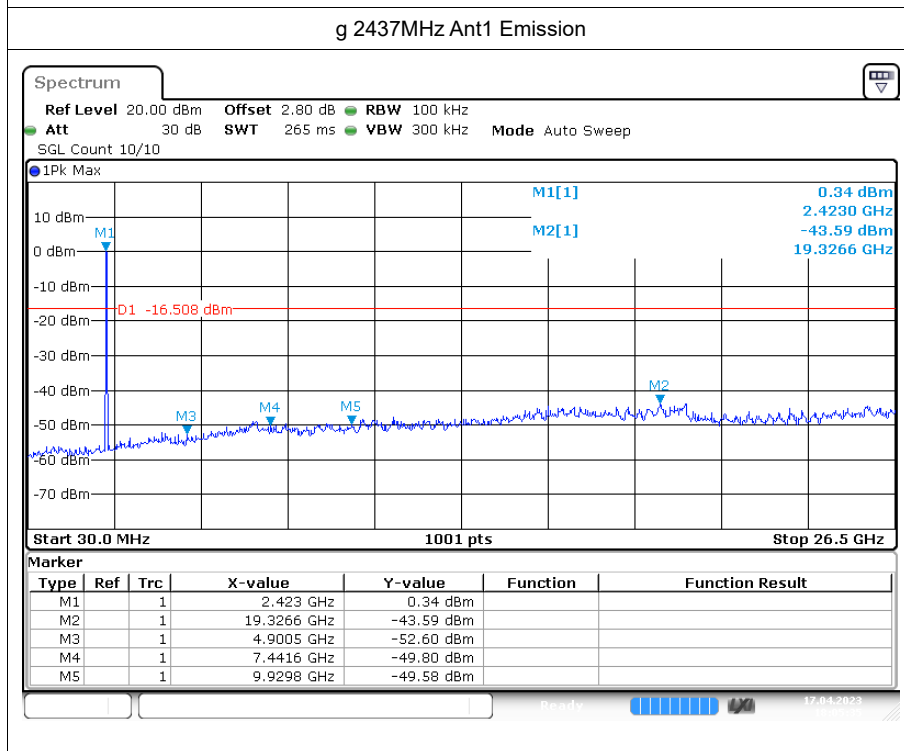
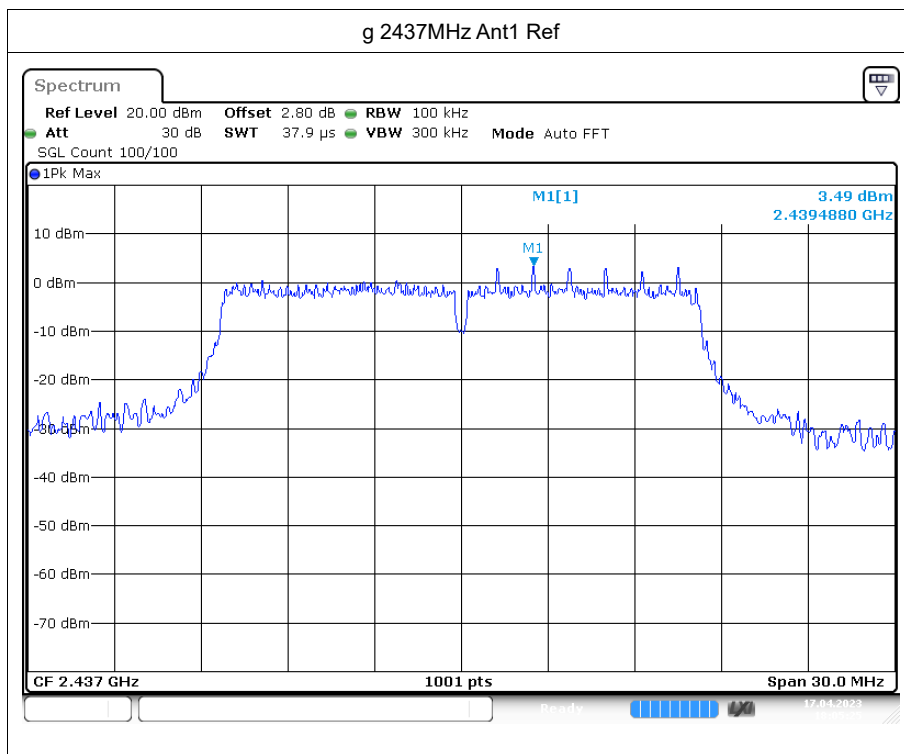
6.2 Test Graphs

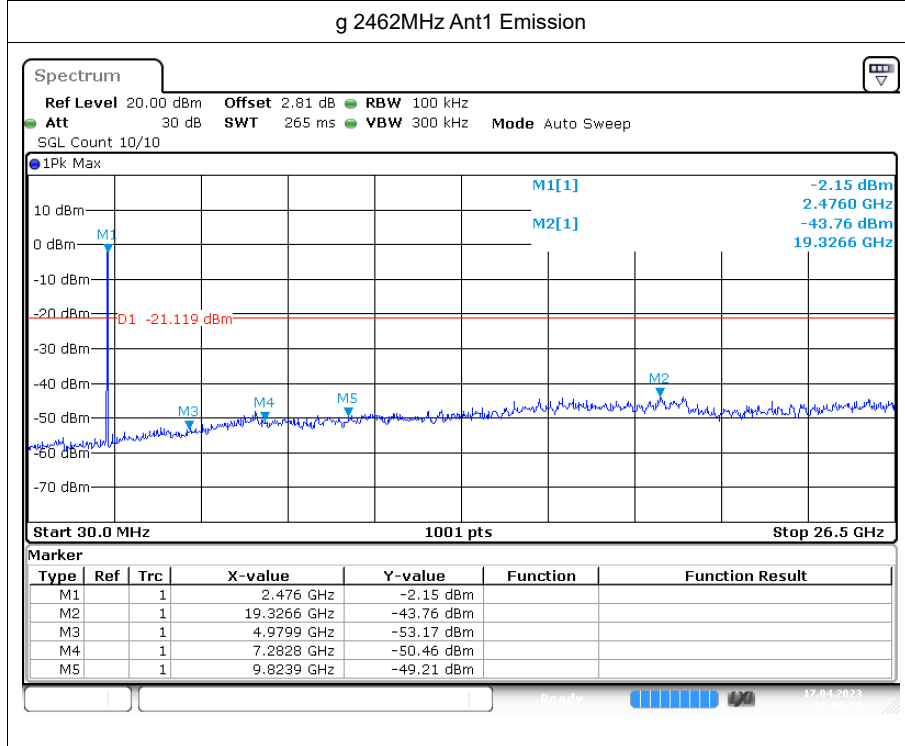
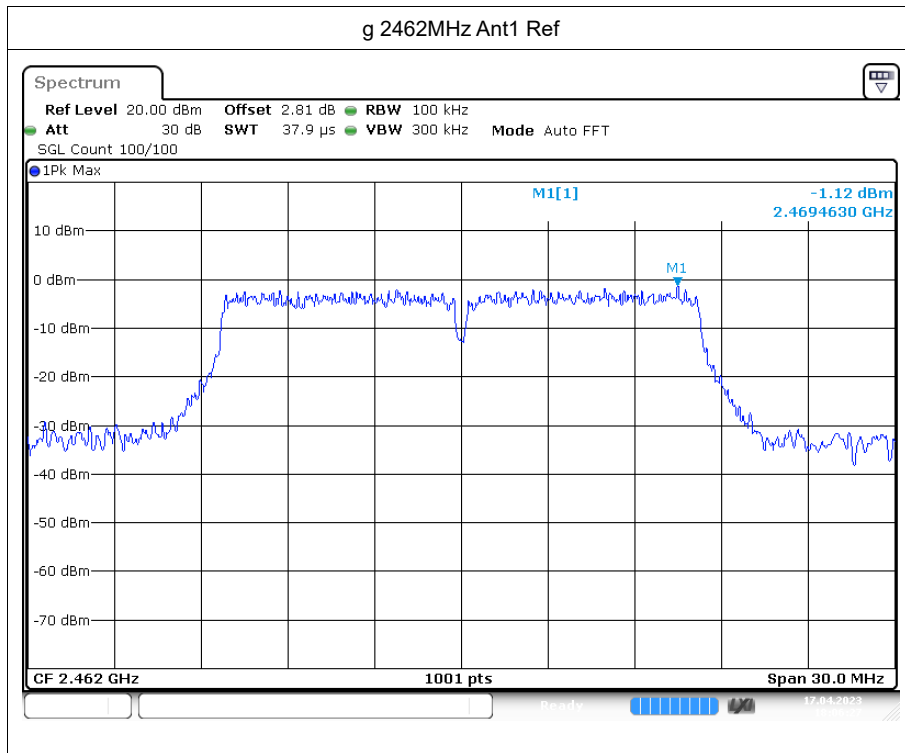


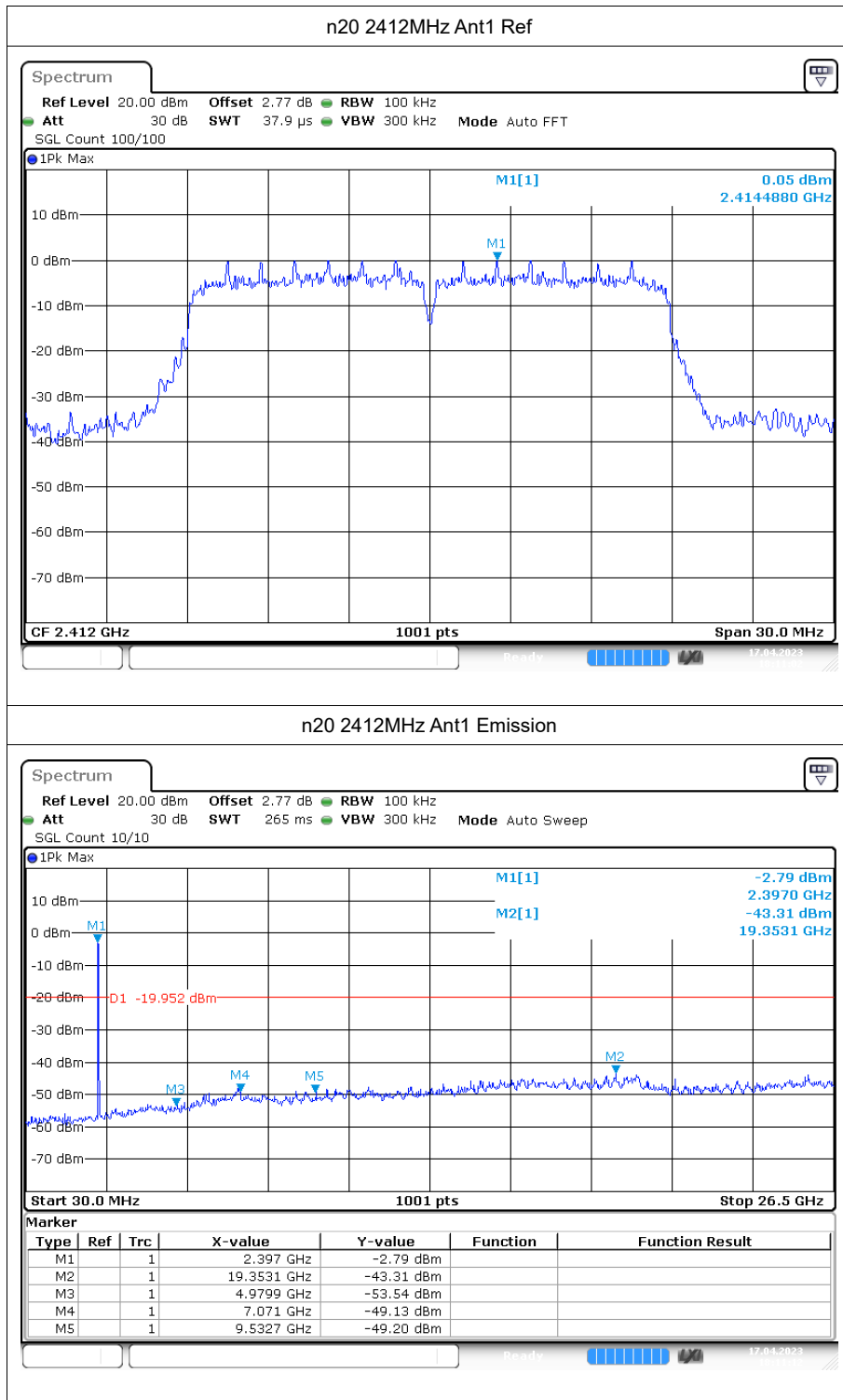


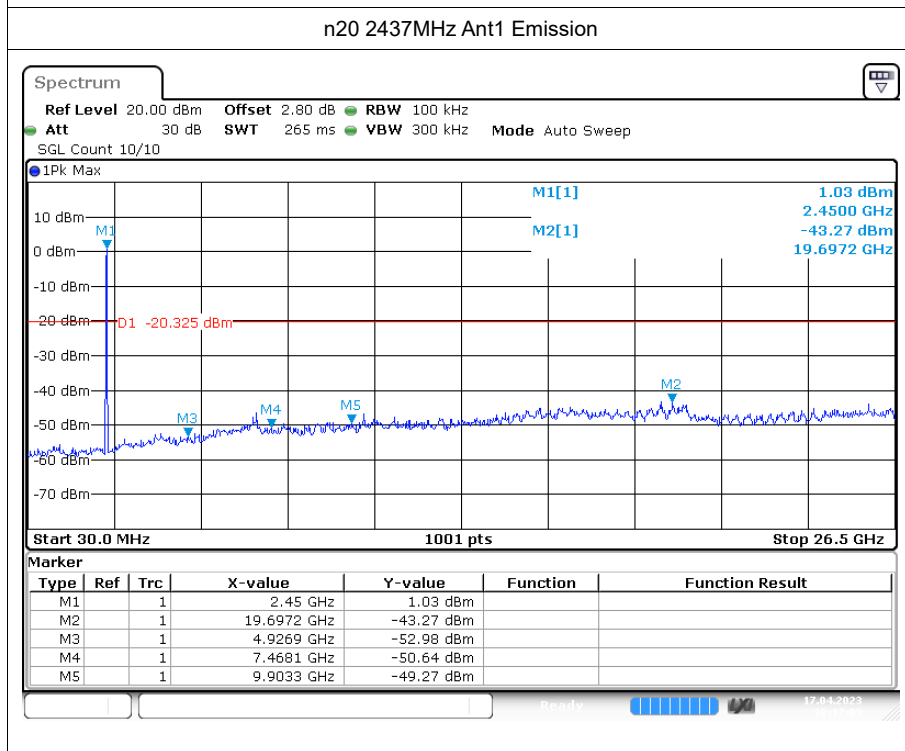
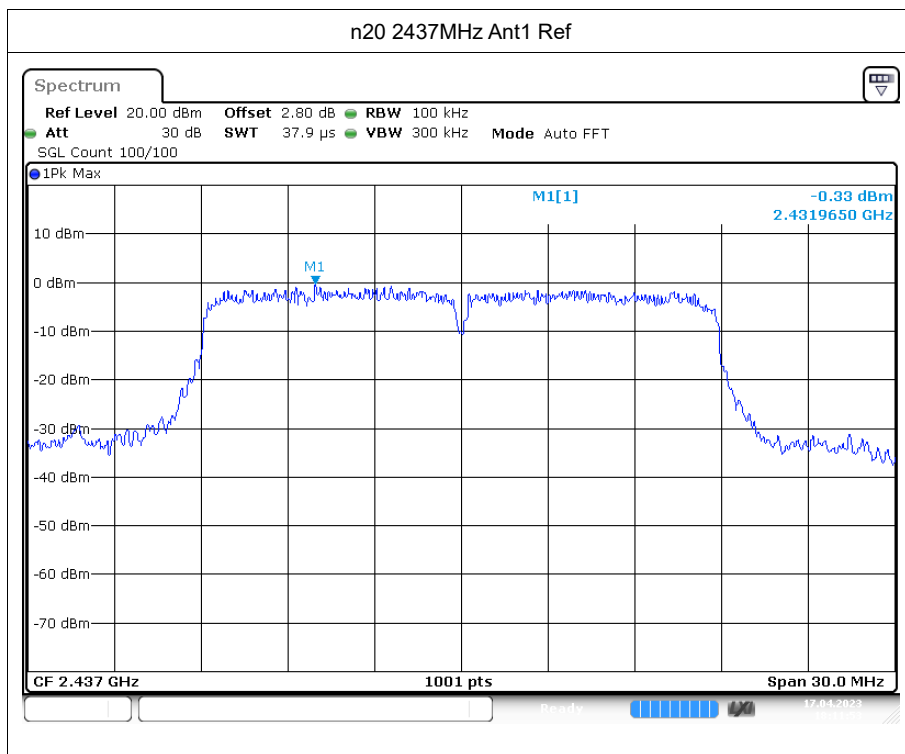


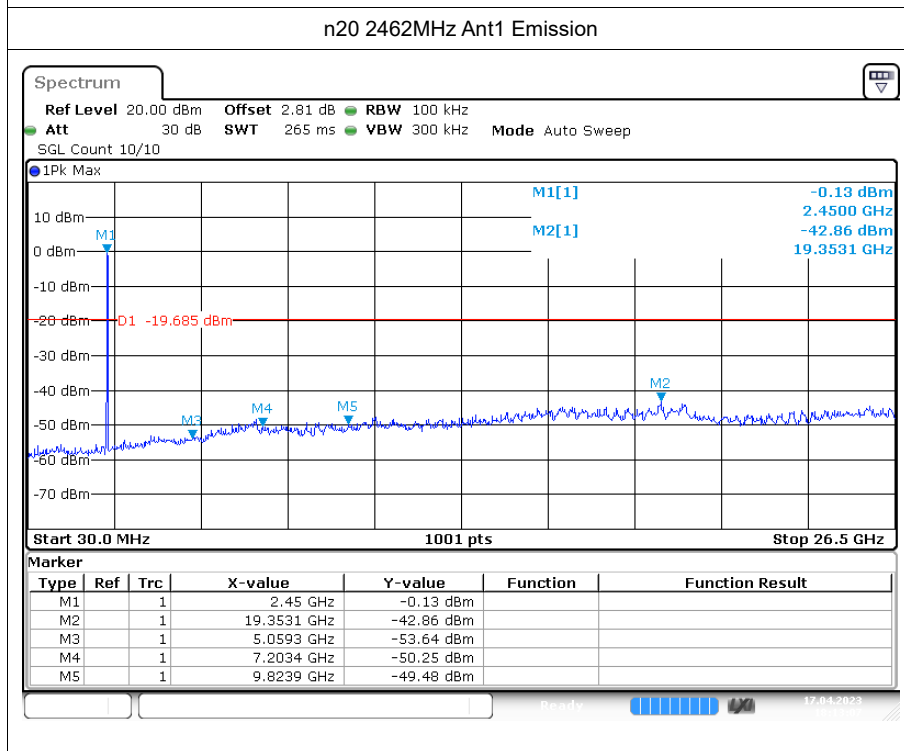
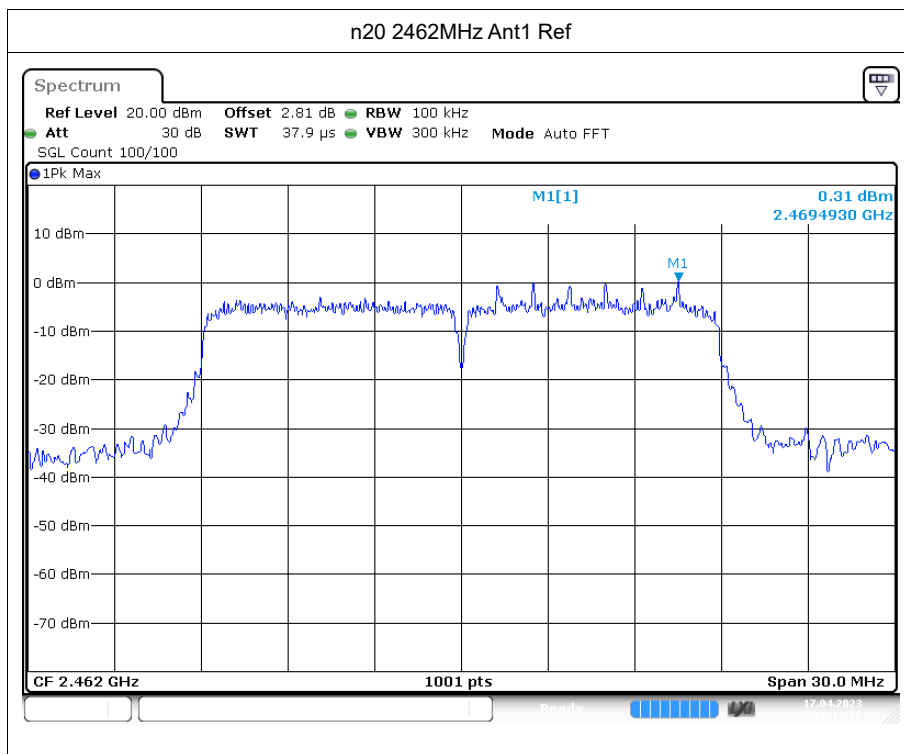


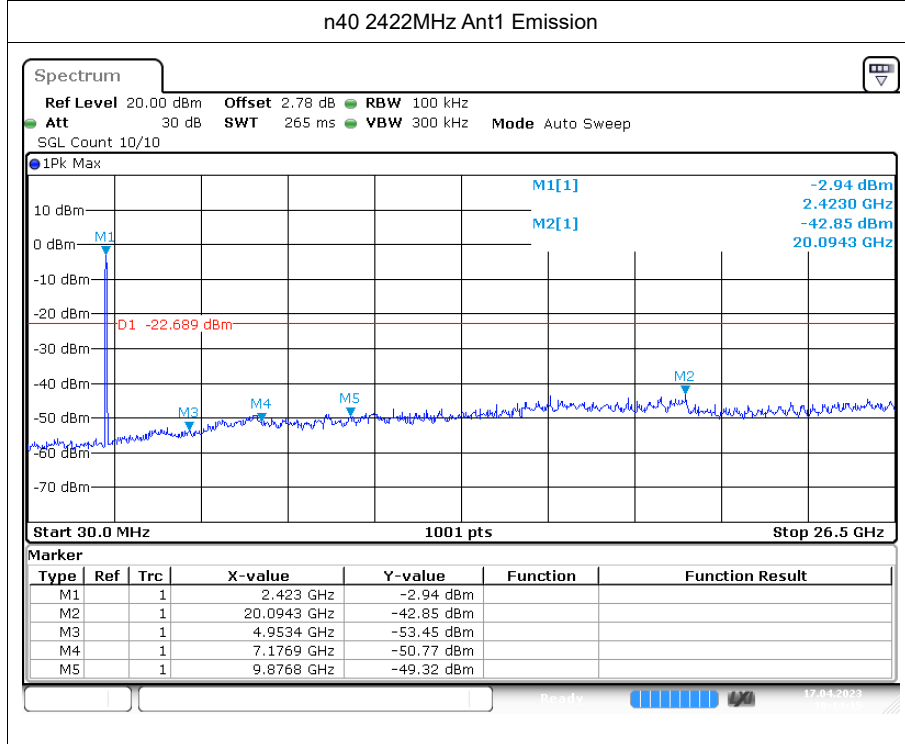
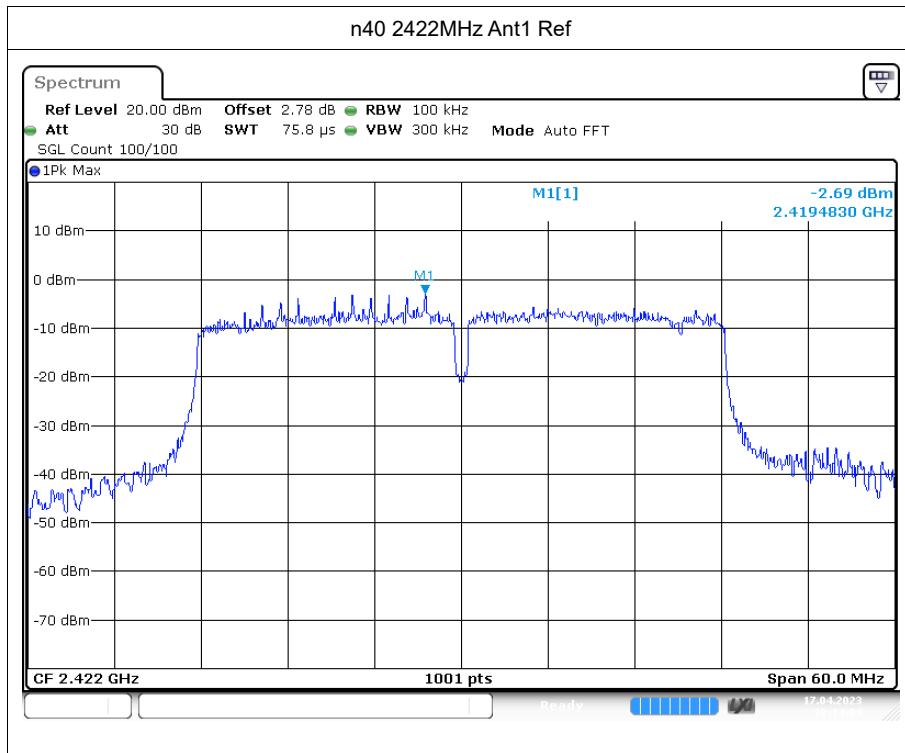


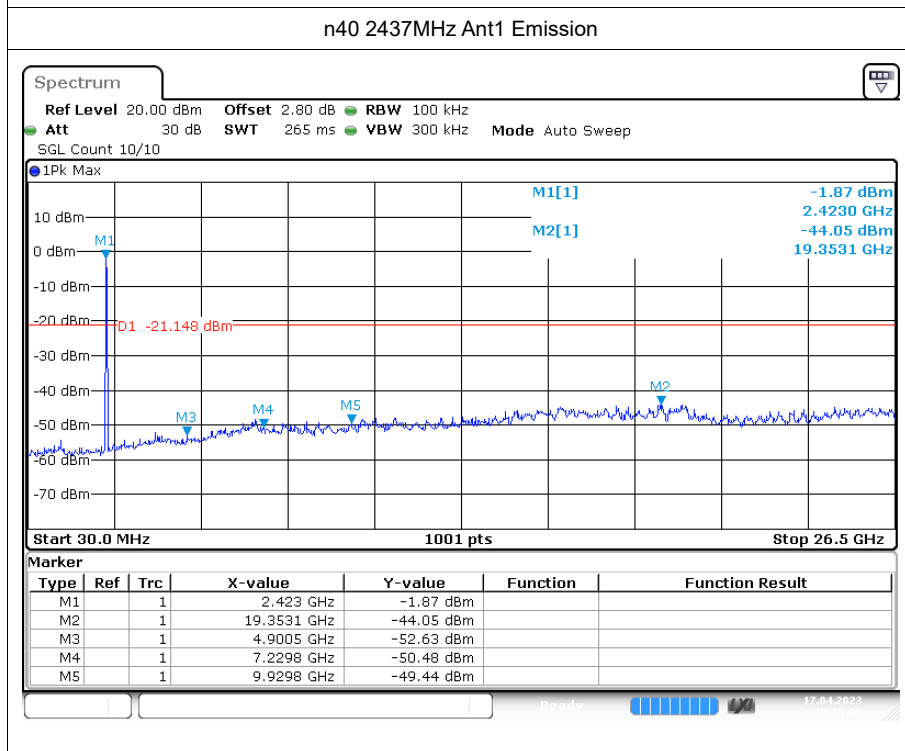
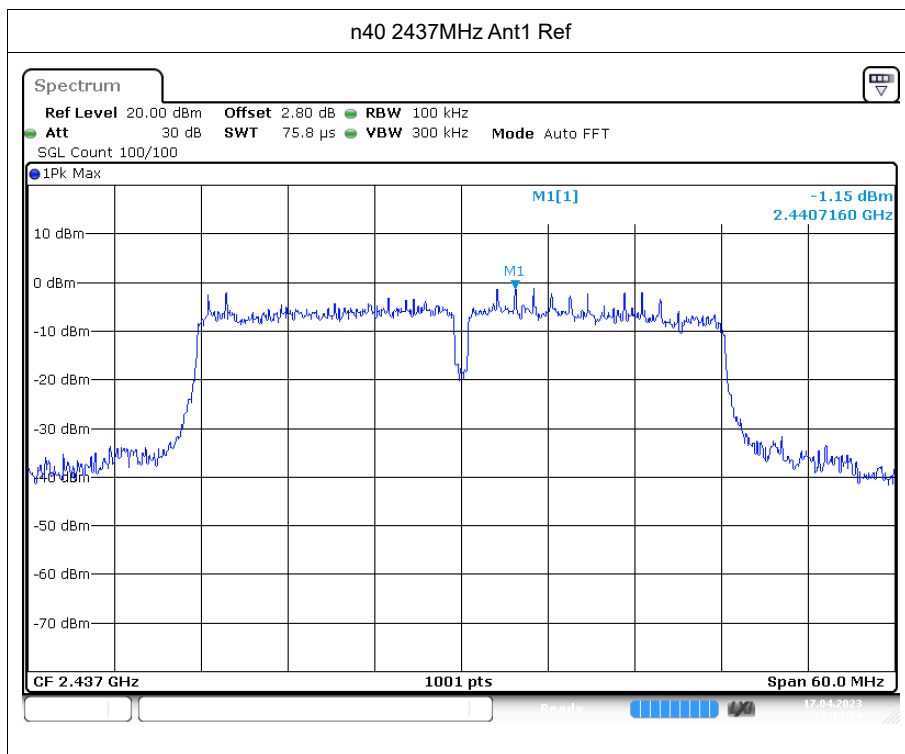


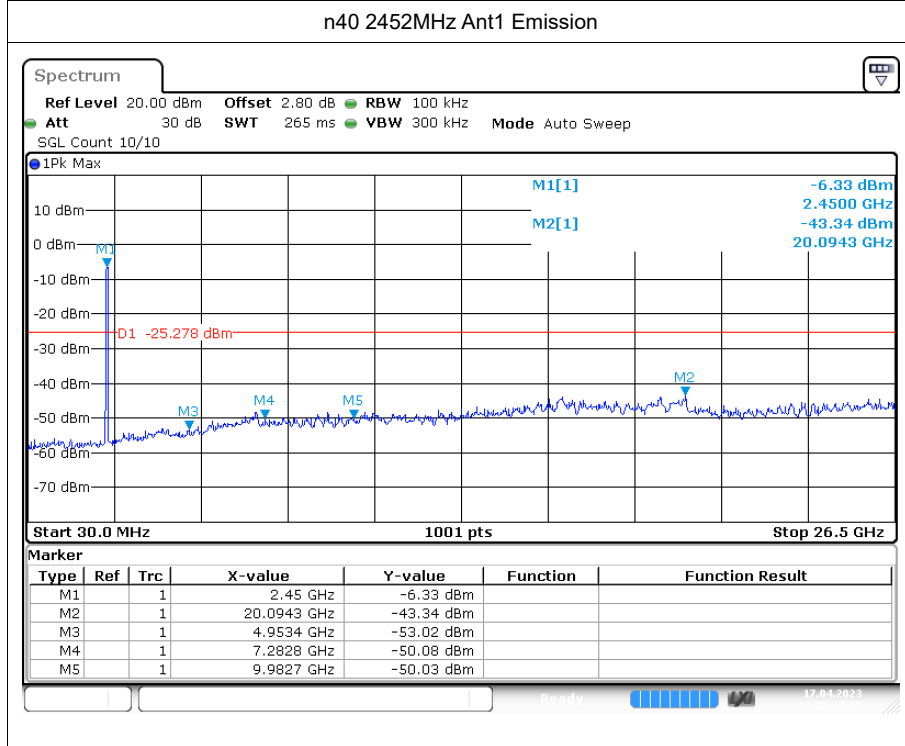
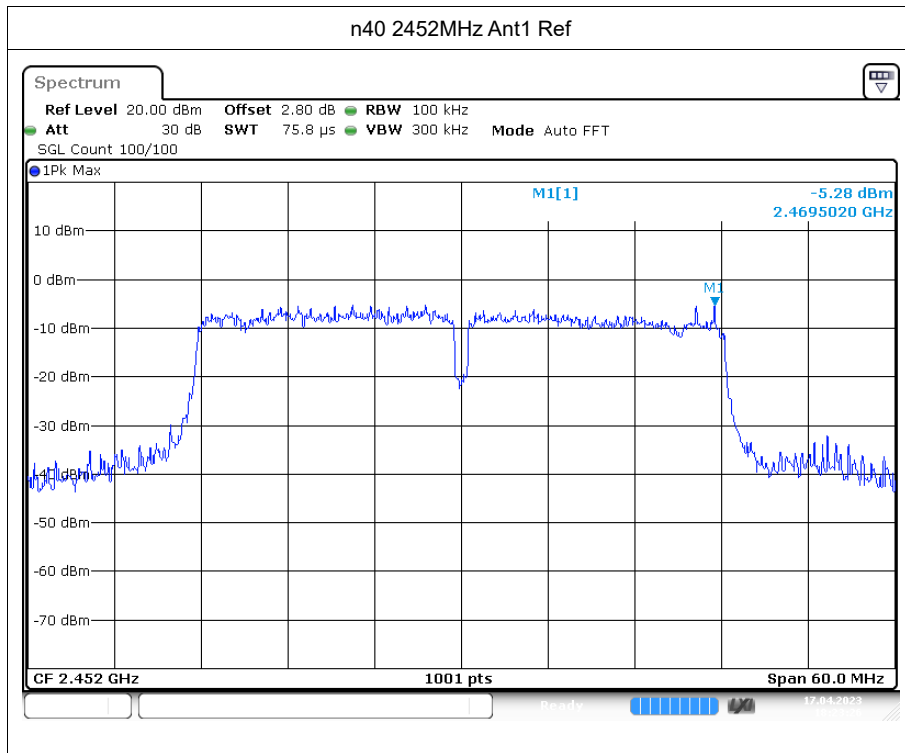














7 Restrict Band

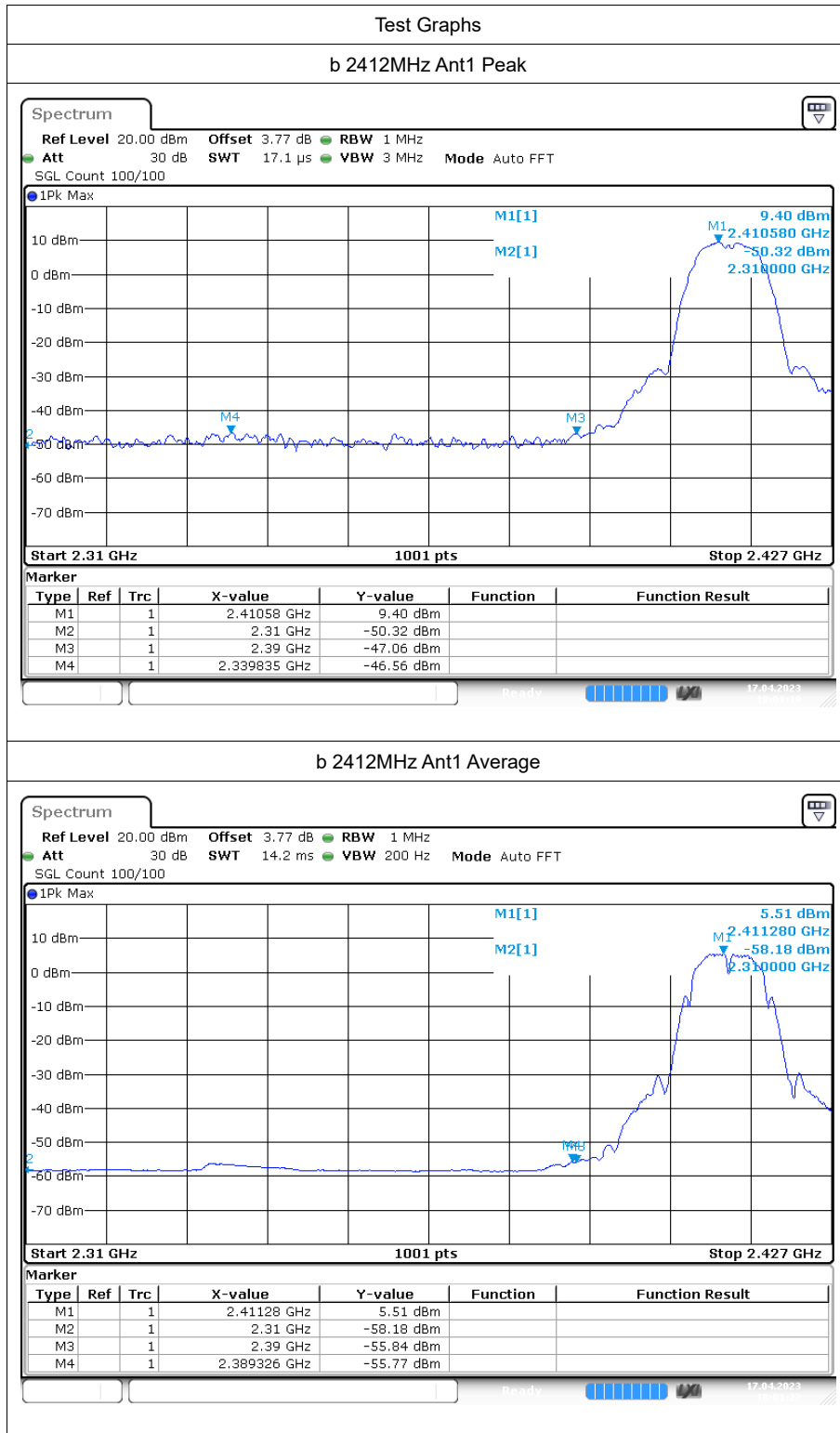
7.1 Test Result

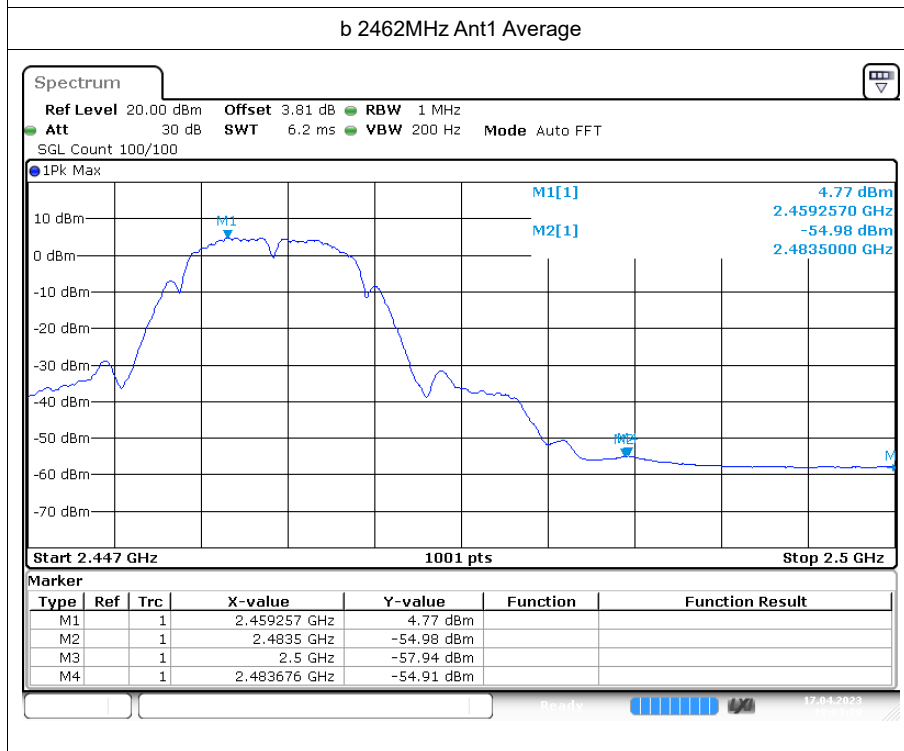
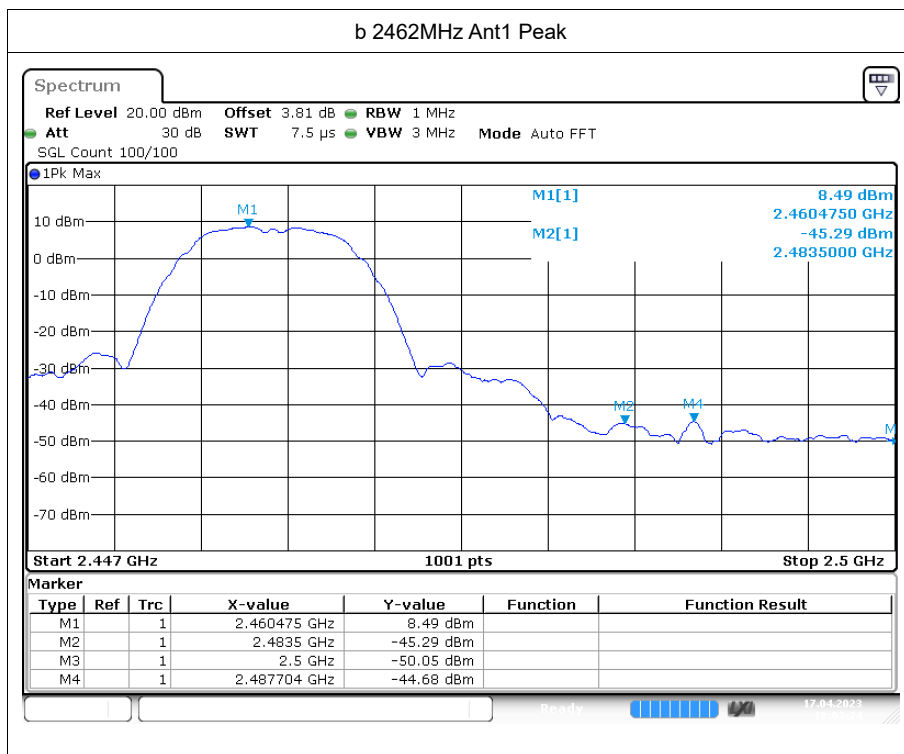
Mode	Frequency (MHz)	Ant.	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
b	2412	Ant1	2310	-50.32	2	46.94	Peak	74	Pass
b	2412	Ant1	2310	-58.17	2	39.09	Average	54	Pass
b	2412	Ant1	2339.835	-46.55	2	50.71	Peak	74	Pass
b	2412	Ant1	2389.326	-55.76	2	41.5	Average	54	Pass
b	2412	Ant1	2390	-47.05	2	50.21	Peak	74	Pass
b	2412	Ant1	2390	-55.83	2	41.43	Average	54	Pass
b	2462	Ant1	2483.5	-45.28	2	51.98	Peak	74	51.98
b	2462	Ant1	2483.5	-54.98	2	42.28	Average	54	Pass
b	2462	Ant1	2487.704	-44.67	2	52.59	Peak	74	Pass
b	2462	Ant1	2483.676	-54.9	2	42.36	Average	54	Pass
b	2462	Ant1	2500	-50.05	2	47.21	Peak	74	Pass
b	2462	Ant1	2500	-57.93	2	39.33	Average	54	Pass
g	2412	Ant1	2310	-49.37	2	47.89	Peak	74	Pass
g	2412	Ant1	2310	-57.58	2	39.68	Average	54	Pass
g	2412	Ant1	2389.911	-30.39	2	66.87	Peak	74	Pass
g	2412	Ant1	2389.911	-44.37	2	52.89	Average	54	Pass
g	2412	Ant1	2390	-30.14	2	50.21	Peak	74	Pass
g	2412	Ant1	2390	-44.2	2	53.06	Average	54	Pass
g	2462	Ant1	2483.5	-33.04	2	64.22	Peak	74	Pass
g	2462	Ant1	2483.5	-51.64	2	45.62	Average	54	Pass
g	2462	Ant1	2487.704	-30.96	2	66.3	Peak	74	Pass
g	2462	Ant1	2483.517	-51.64	2	45.62	Average	54	Pass
g	2462	Ant1	2500	-49.81	2	47.21	Peak	74	Pass
g	2462	Ant1	2500	-57.31	2	39.95	Average	54	Pass
n20	2412	Ant1	2310	-48.69	2	48.57	Peak	74	Pass
n20	2412	Ant1	2310	-57.77	2	39.49	Average	54	Pass
n20	2412	Ant1	2389.911	-27.9	2	69.36	Peak	74	Pass
n20	2412	Ant1	2389.911	-46.29	2	50.97	Average	54	Pass
n20	2412	Ant1	2390	-27.14	2	70.12	Peak	74	Pass
n20	2412	Ant1	2390	-46.1	2	51.16	Average	54	Pass
n20	2462	Ant1	2483.5	-28.05	2	69.21	Peak	74	Pass
n20	2462	Ant1	2483.5	-44.37	2	52.89	Average	54	Pass
n20	2462	Ant1	2484.153	-27.6	2	69.66	Peak	74	Pass
n20	2462	Ant1	2483.517	-44.37	2	52.89	Average	54	Pass

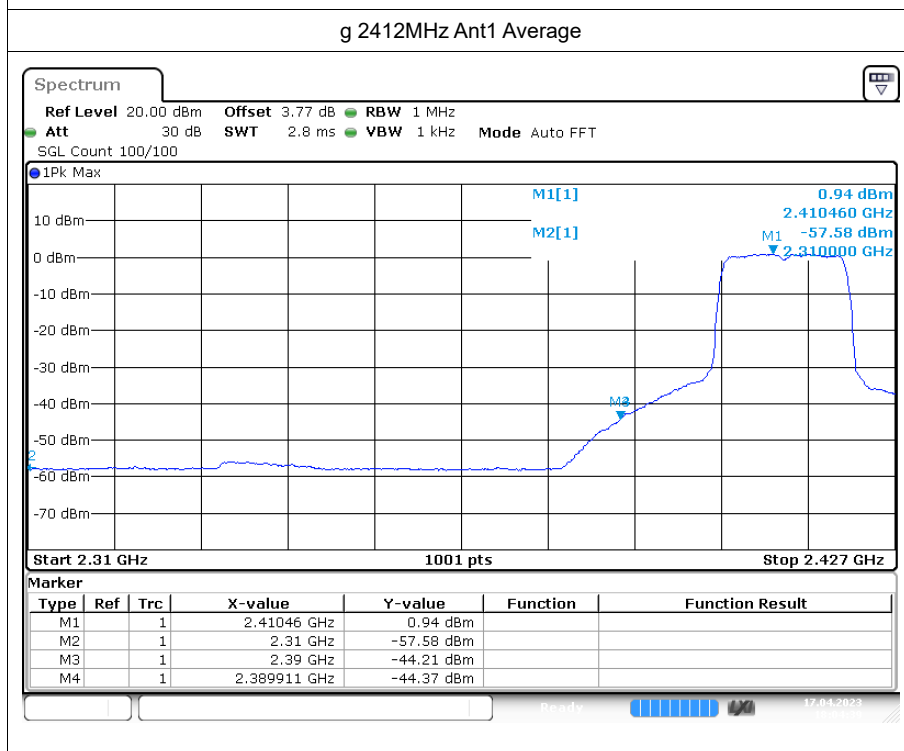
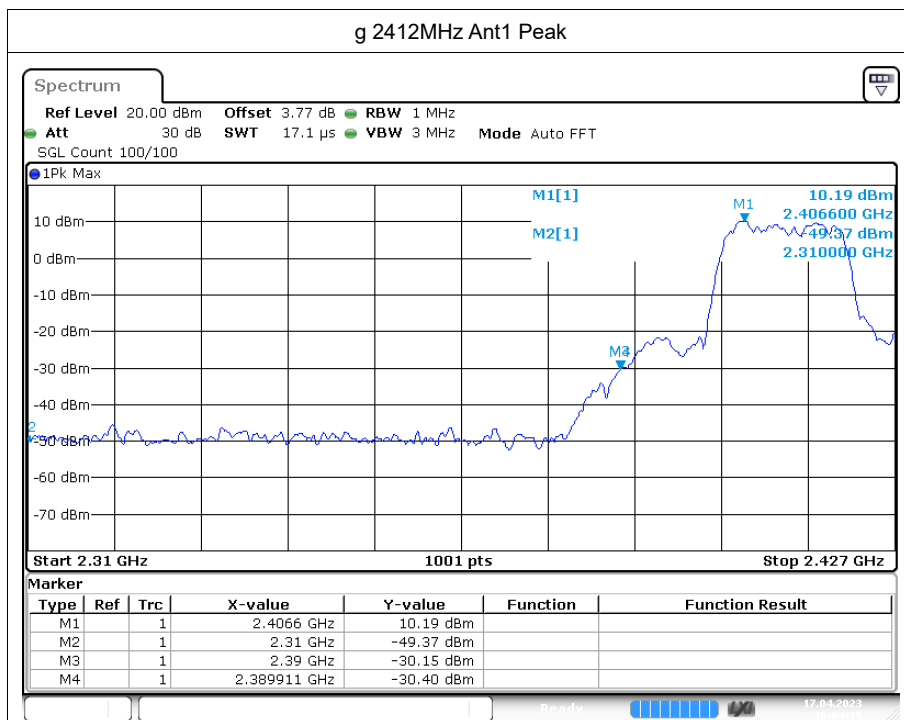


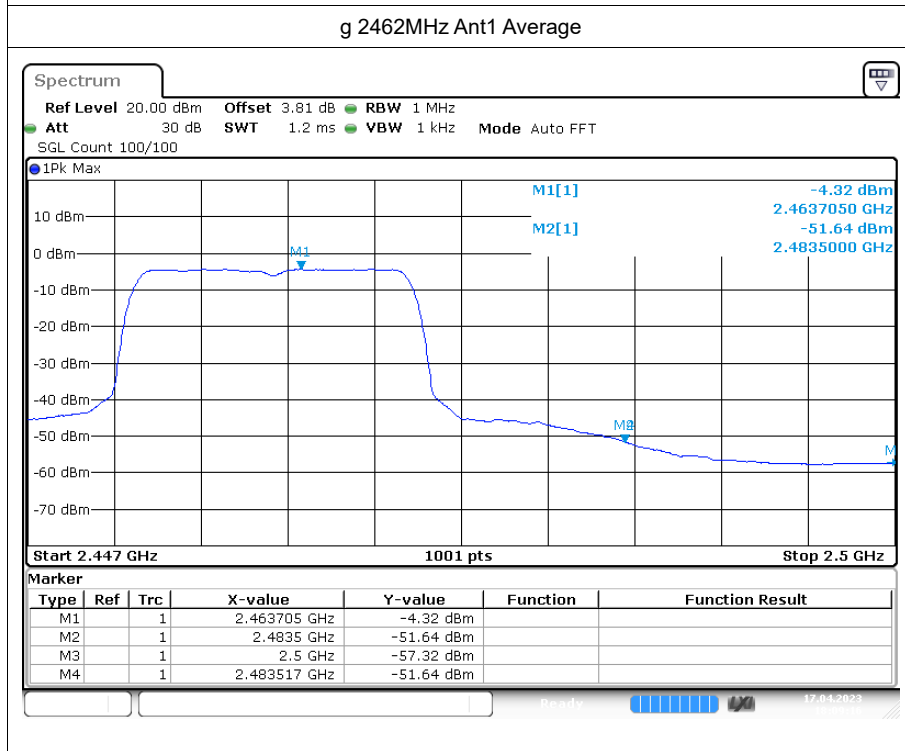
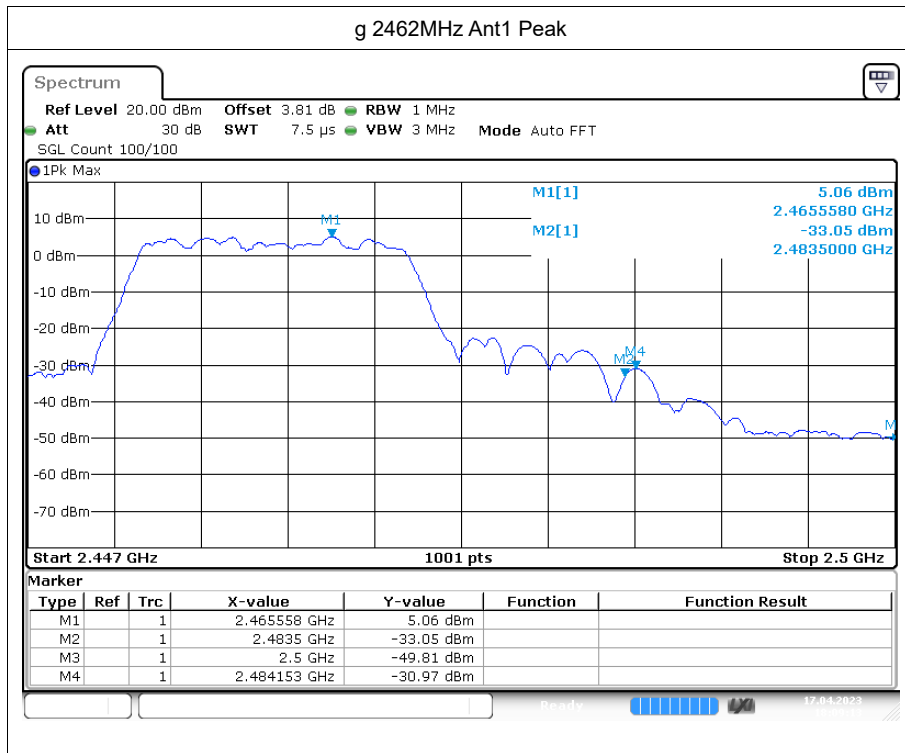
n20	2462	Ant1	2500	-47.6	2	49.66	Peak	74	Pass
n20	2462	Ant1	2500	-57.65	2	39.61	Average	54	Pass
n40	2422	Ant1	2310	-49.5	2	47.76	Peak	74	Pass
n40	2422	Ant1	2310	-57.32	2	39.94	Average	54	Pass
n40	2422	Ant1	2389.946	-32.73	2	64.53	Peak	74	Pass
n40	2422	Ant1	2389.946	-48.27	2	48.99	Average	54	Pass
n40	2422	Ant1	2390	-32.52	2	64.74	Peak	74	Pass
n40	2422	Ant1	2390	-48.02	2	49.24	Average	54	Pass
n40	2452	Ant1	2483.5	-31.18	2	66.08	Peak	74	Pass
n40	2452	Ant1	2483.5	-45.42	2	51.84	Average	54	Pass
n40	2452	Ant1	2483.542	-31.18	2	66.08	Peak	74	Pass
n40	2452	Ant1	2483.542	-45.42	2	51.84	Average	54	Pass
n40	2452	Ant1	2500	-49.6	2	47.66	Peak	74	Pass
n40	2452	Ant1	2500	-57.34	2	39.92	Average	54	Pass

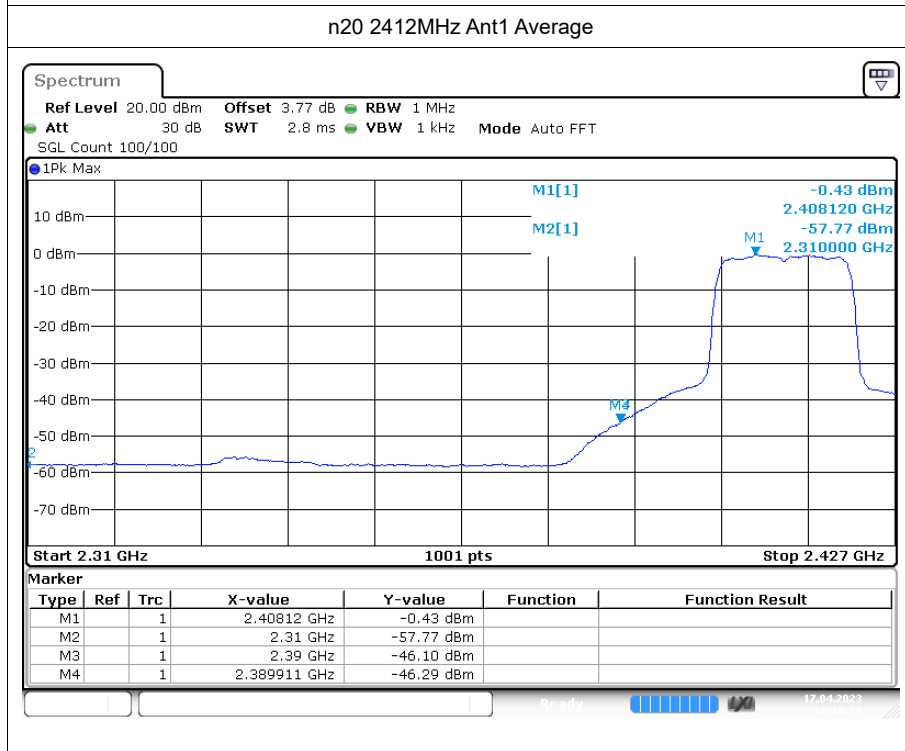
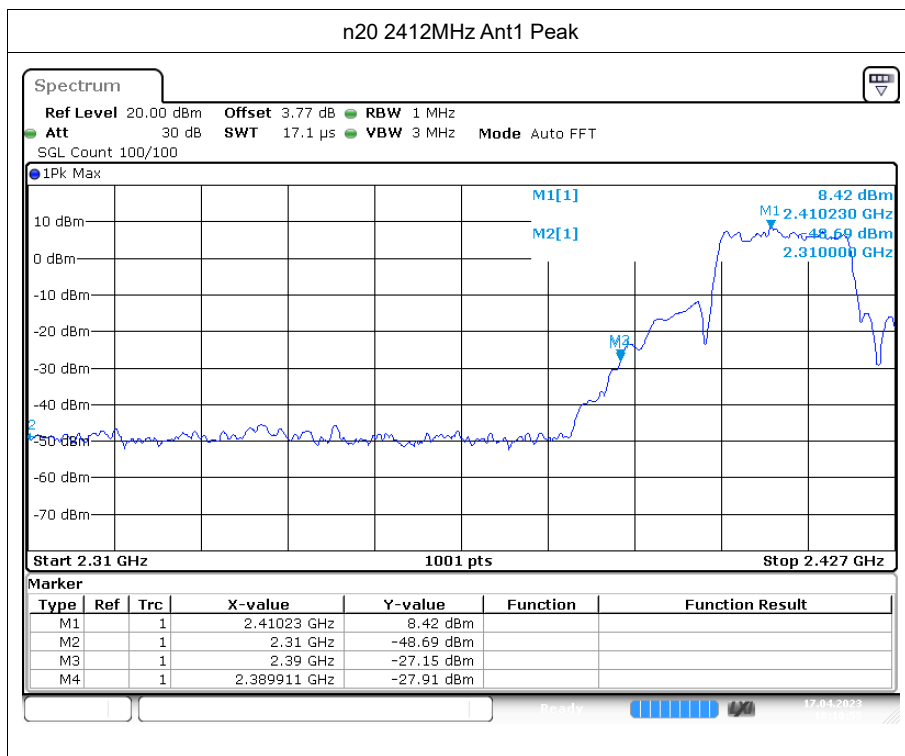
7.2 Test Graphs

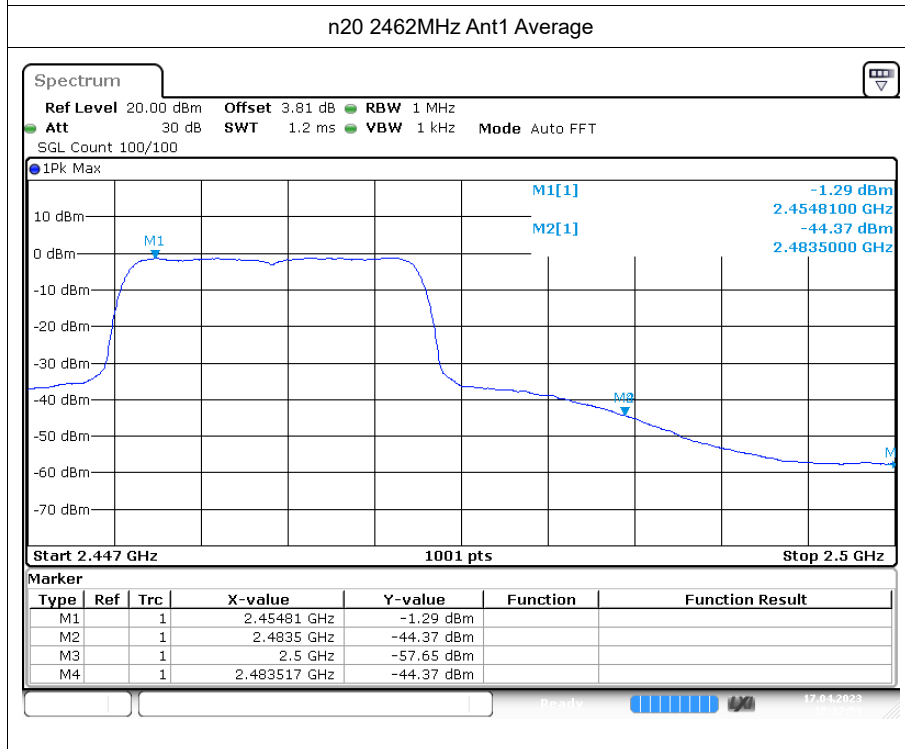
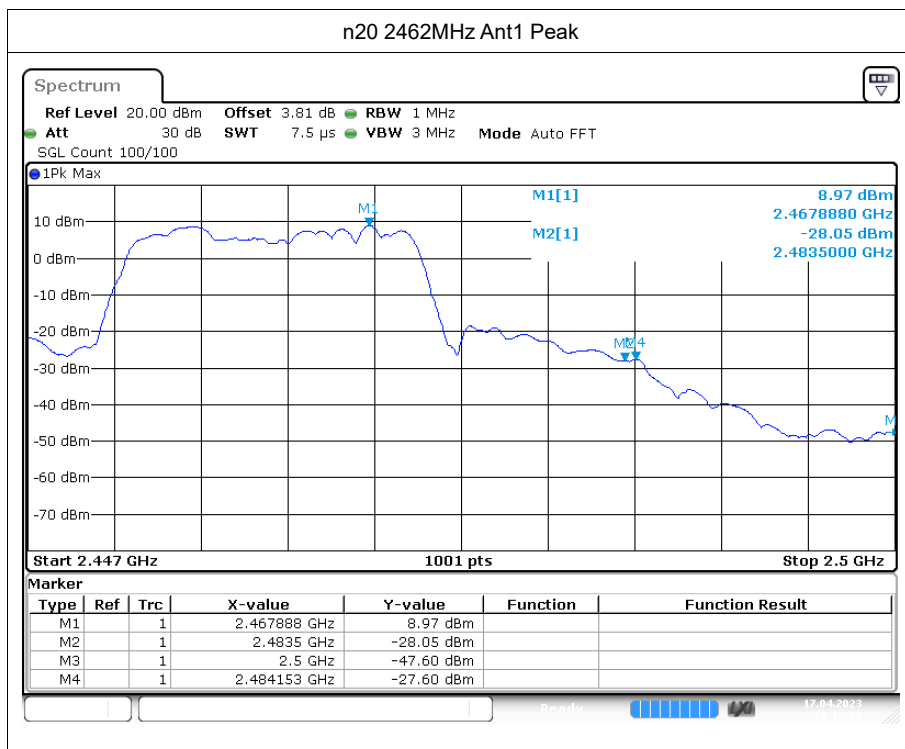


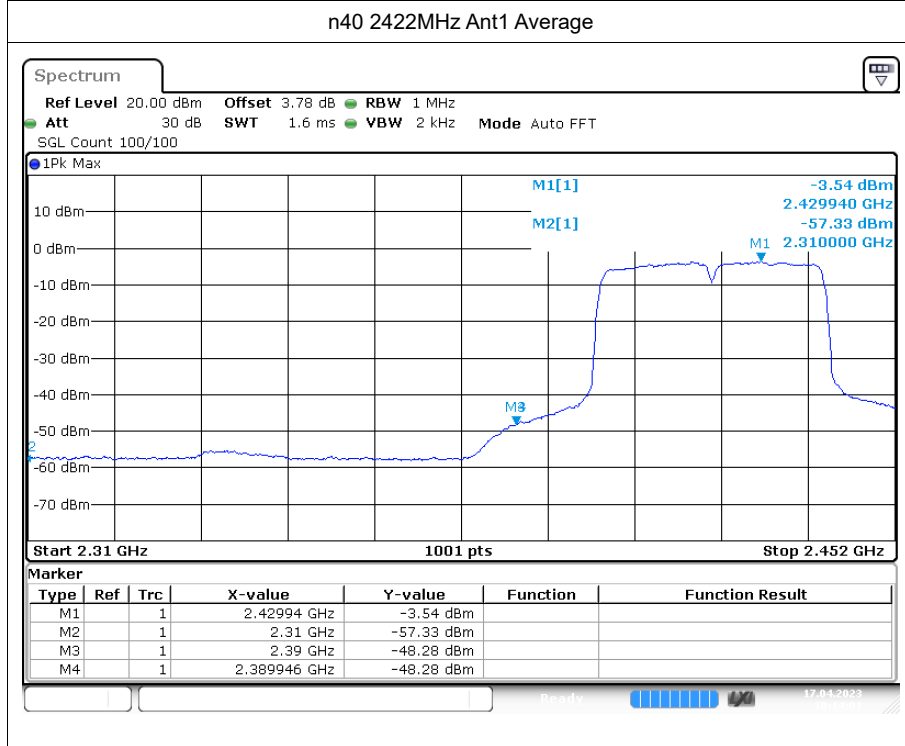
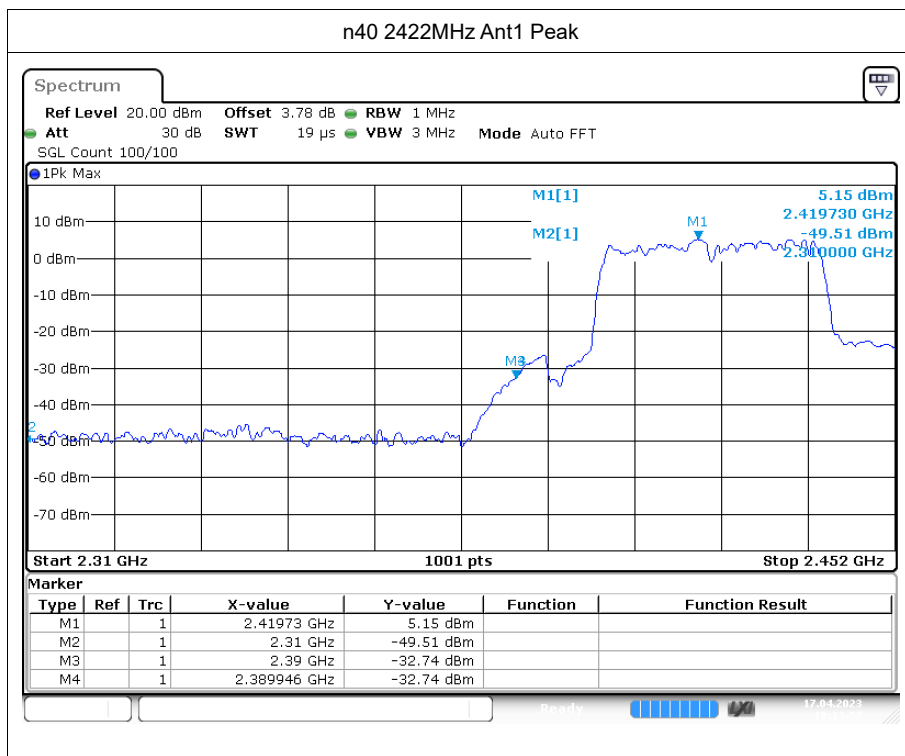


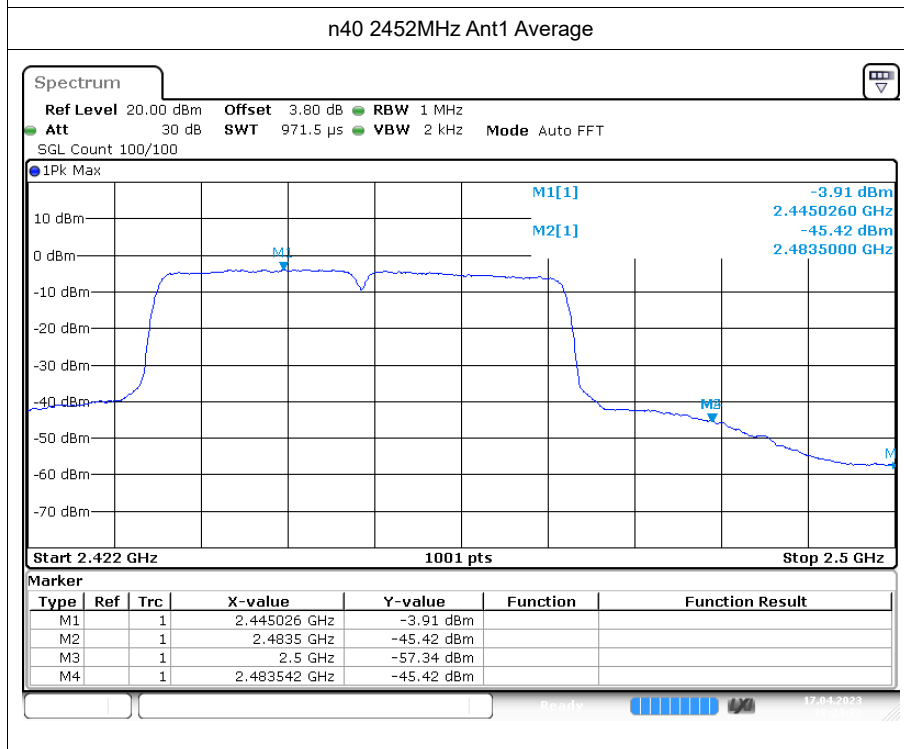
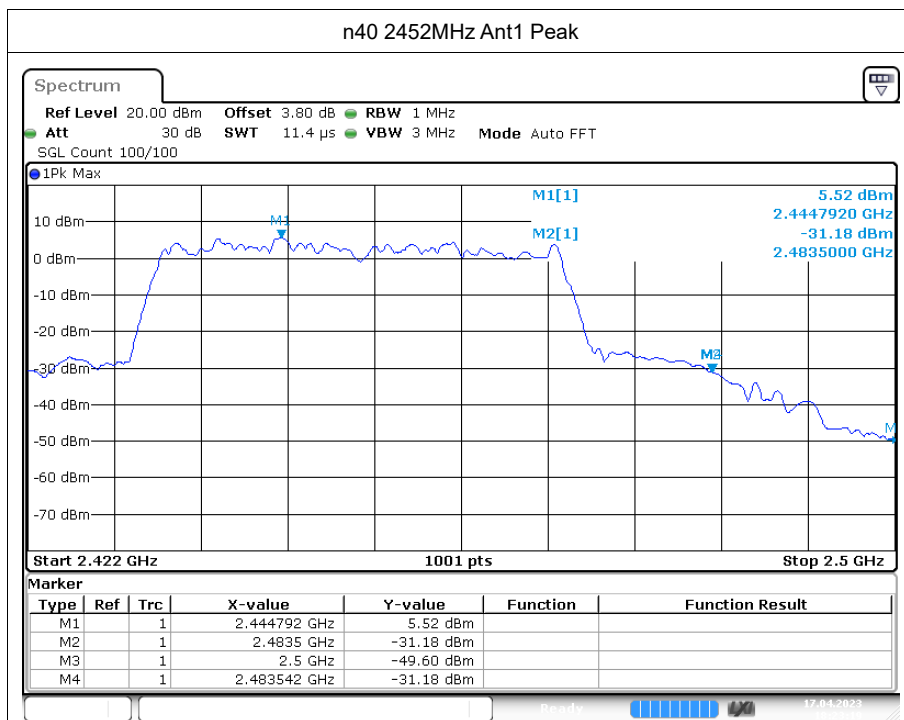












---The End---