



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Sunshine Electric Heater

Trade Mark:

Test Model: SK-E1

Environmental Conditions

Temperature:	25.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



Contents

	Page
COVER PAGE	
1 Duty Cycle.....	3
1.1 Test Result	3
1.2 Test Graphs.....	4
2 Maximum Conducted Output Power	9
2.1 Test Result	9
3 -6dB Bandwidth.....	10
3.1 Test Result	10
3.2 Test Graphs.....	11
4 Maximum Power Spectral Density Level.....	16
4.1 Test Result	16
4.2 Test Graphs.....	17
5 Band Edge	22
5.1 Test Result	22
5.2 Test Graphs.....	23
6 Conducted RF Spurious Emission	29
6.1 Test Result	29
6.2 Test Graphs.....	30
7 Restrict Band	39
7.1 Test Result	39
7.2 Test Graphs.....	41

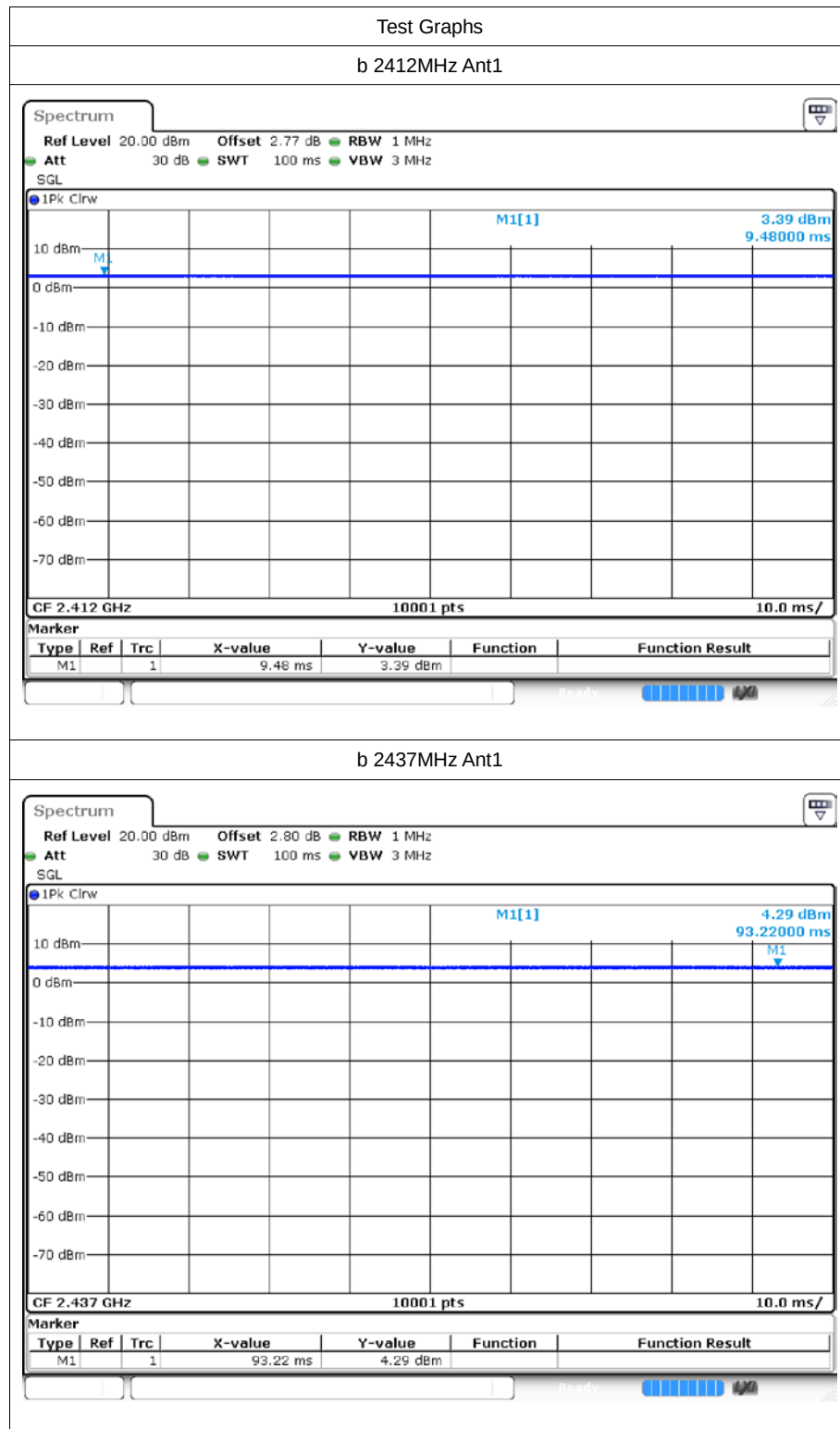


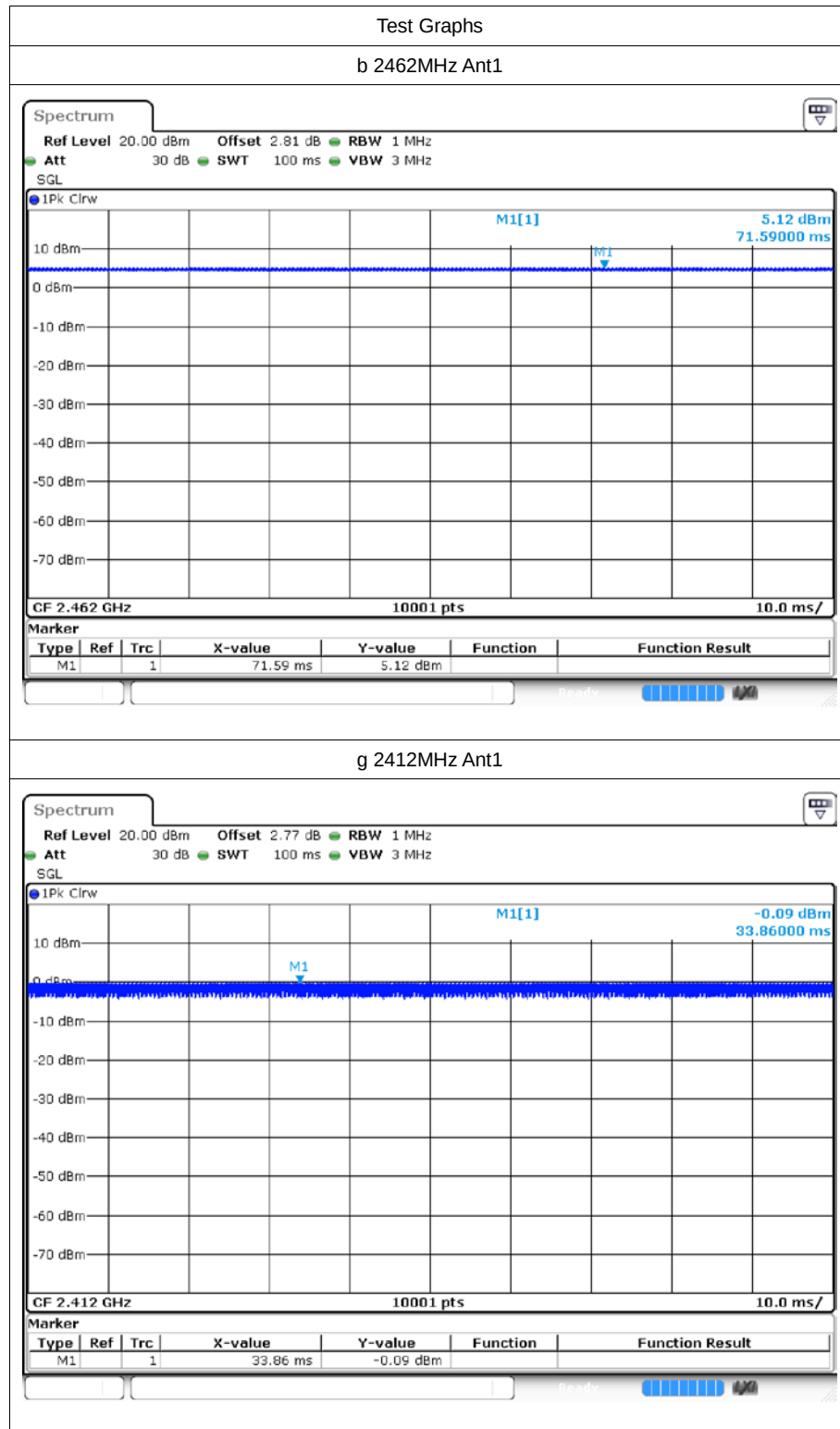
1 Duty Cycle

1.1 Test Result

Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
b	2412	Ant1	100	0
b	2437	Ant1	100	0
b	2462	Ant1	100	0
g	2412	Ant1	100	0
g	2437	Ant1	100	0
g	2462	Ant1	100	0
n20	2412	Ant1	100	0
n20	2437	Ant1	100	0
n20	2462	Ant1	100	0

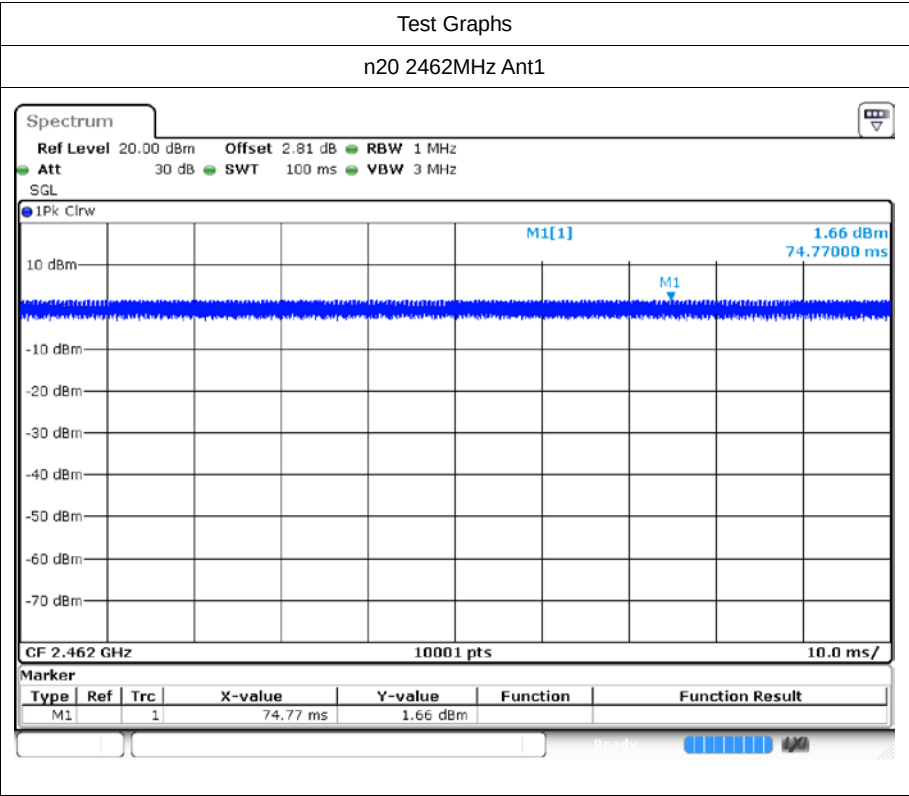
1.2 Test Graphs











2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	12.23	30	Pass
b	2437	Ant1	13	30	Pass
b	2462	Ant1	13.74	30	Pass
g	2412	Ant1	11.7	30	Pass
g	2437	Ant1	12.47	30	Pass
g	2462	Ant1	13.19	30	Pass
n20	2412	Ant1	11.2	30	Pass
n20	2437	Ant1	12.07	30	Pass
n20	2462	Ant1	12.79	30	Pass

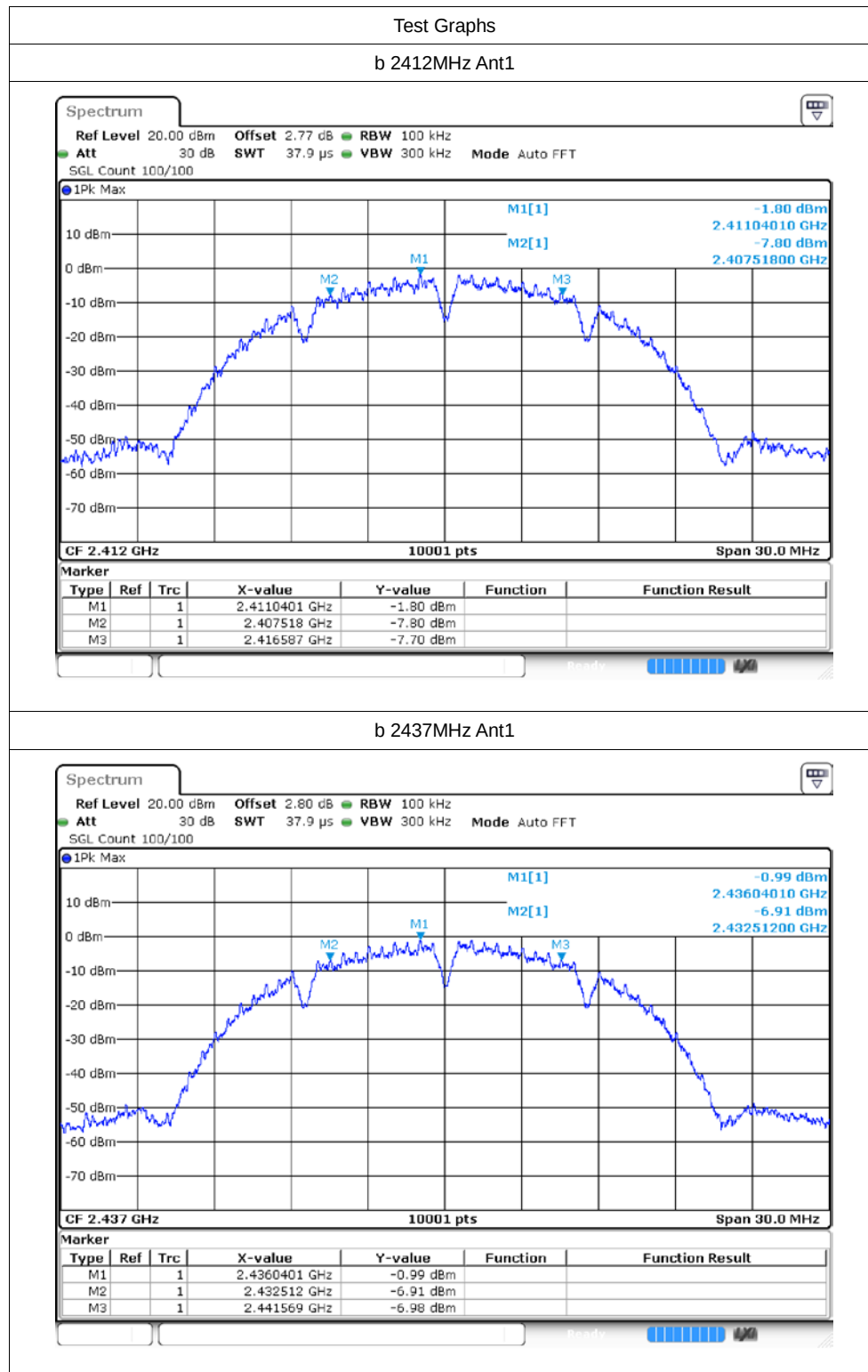


3 -6dB Bandwidth

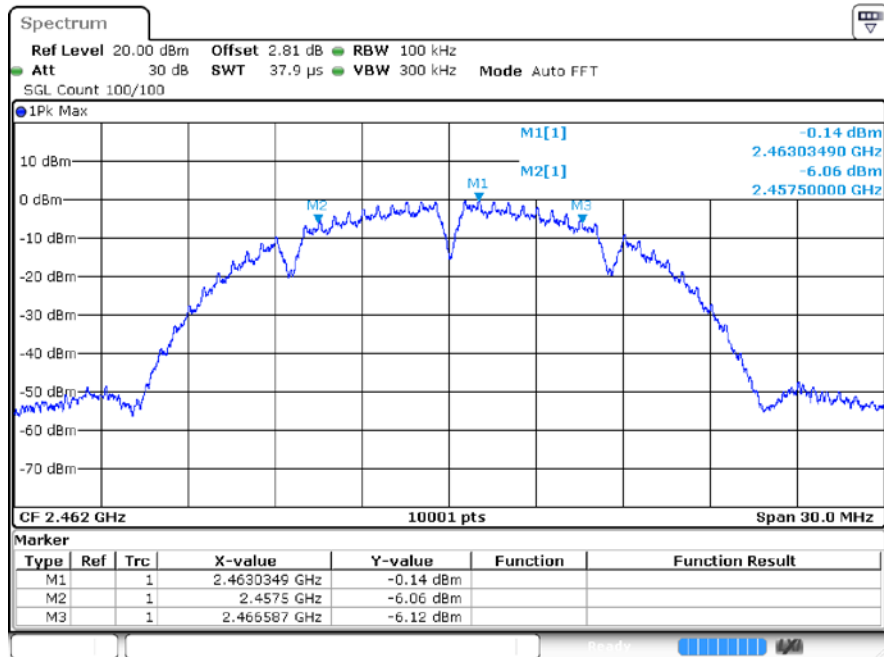
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	9.069	0.5	Pass
b	2437	Ant1	9.057	0.5	Pass
b	2462	Ant1	9.087	0.5	Pass
g	2412	Ant1	16.494	0.5	Pass
g	2437	Ant1	16.416	0.5	Pass
g	2462	Ant1	16.518	0.5	Pass
n20	2412	Ant1	17.682	0.5	Pass
n20	2437	Ant1	17.616	0.5	Pass
n20	2462	Ant1	17.781	0.5	Pass

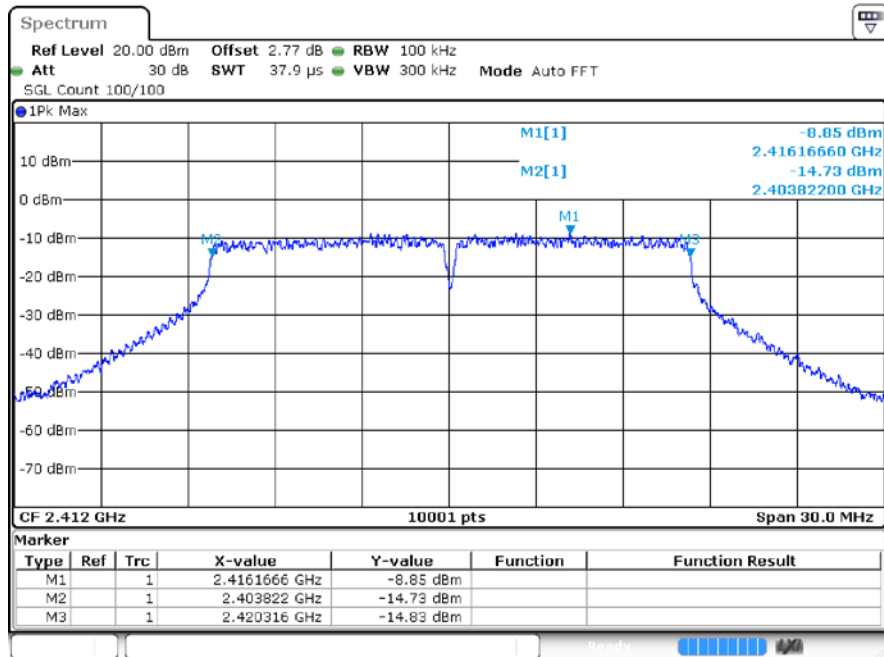
3.2 Test Graphs



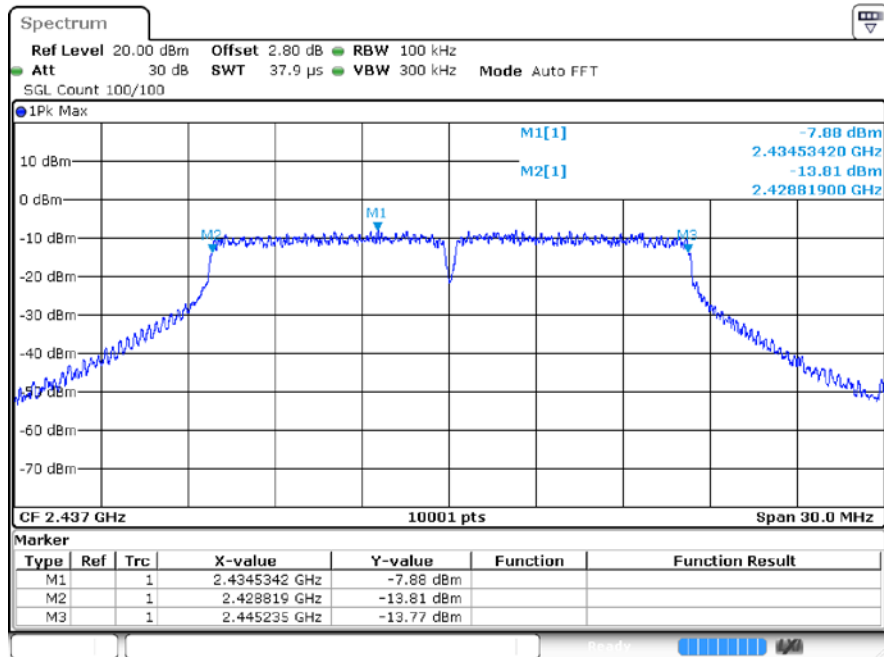
b 2462MHz Ant1



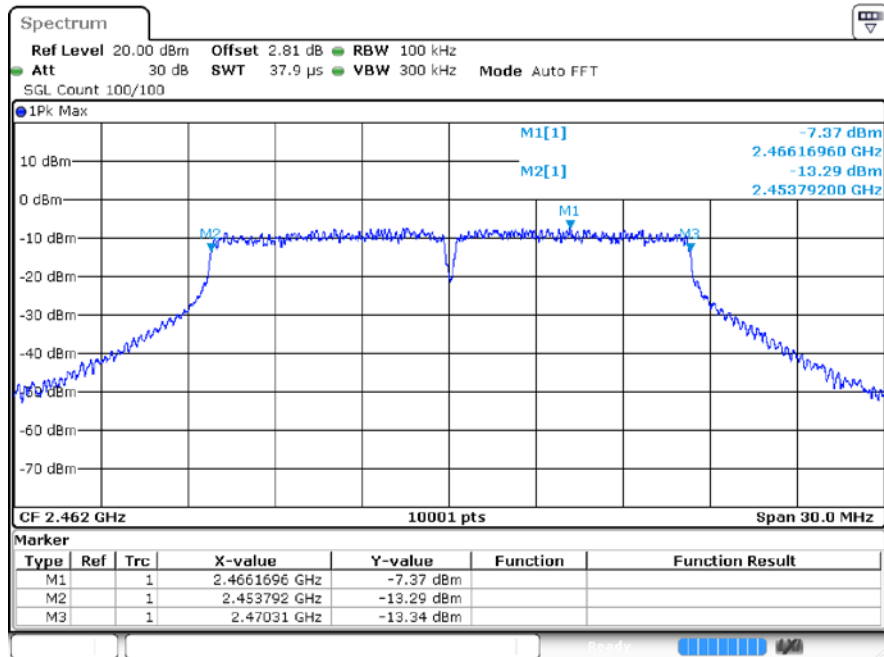
g 2412MHz Ant1

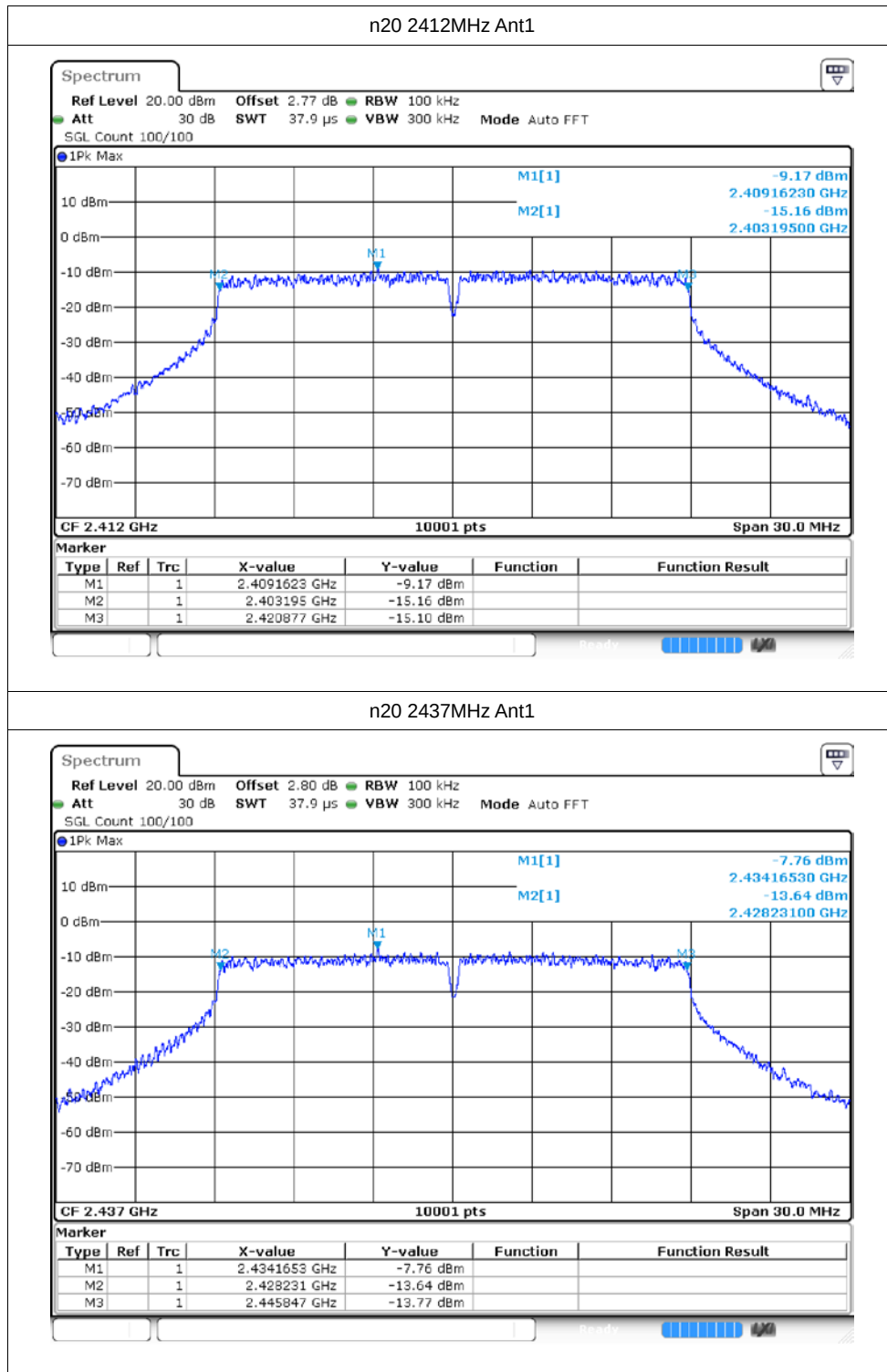


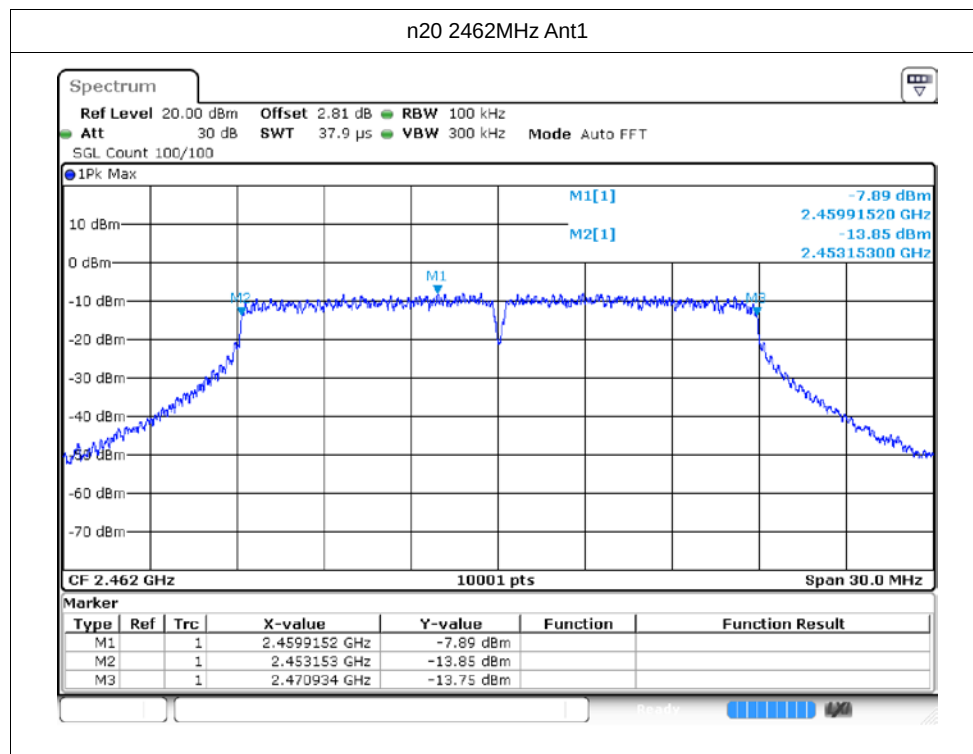
g 2437MHz Ant1



g 2462MHz Ant1





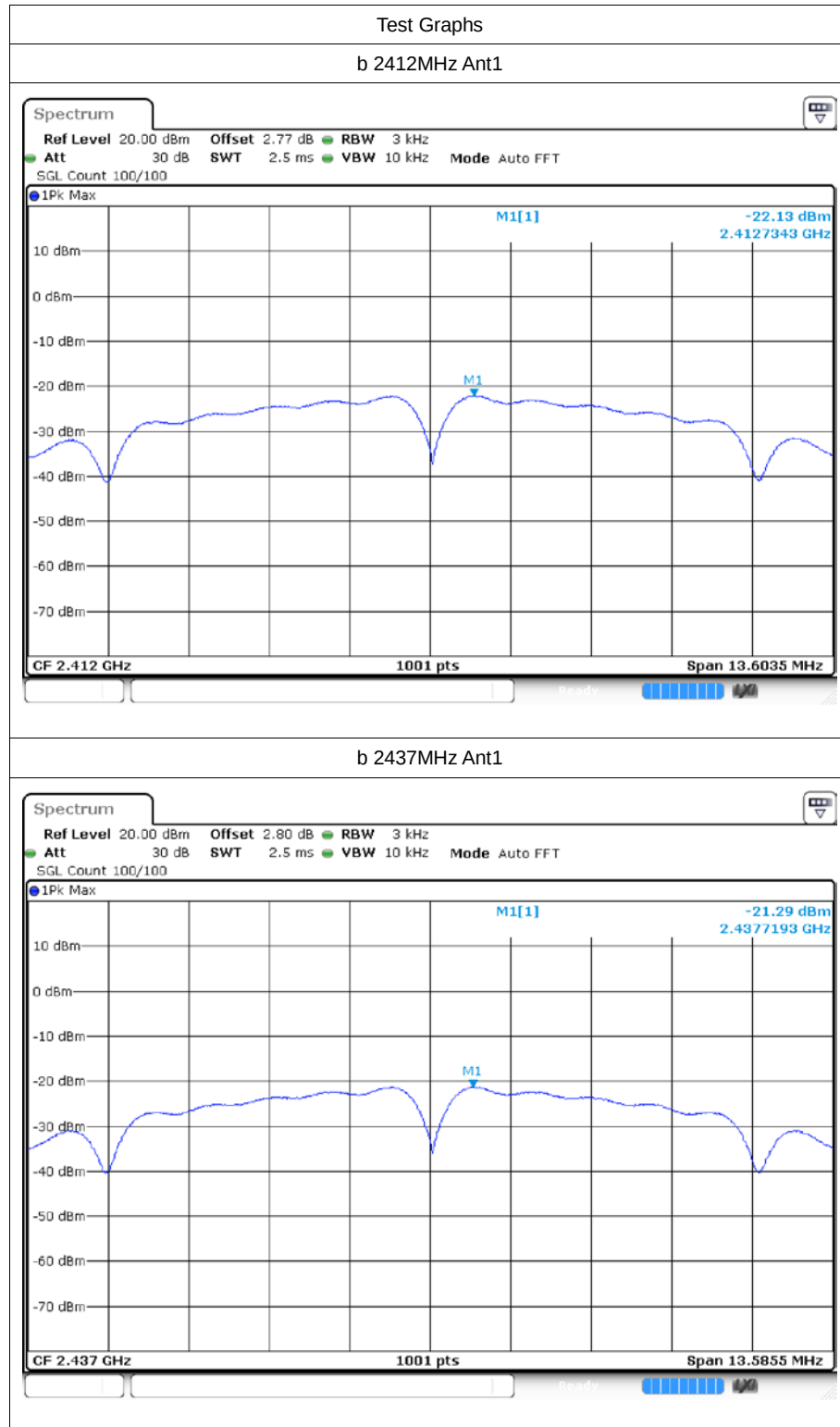


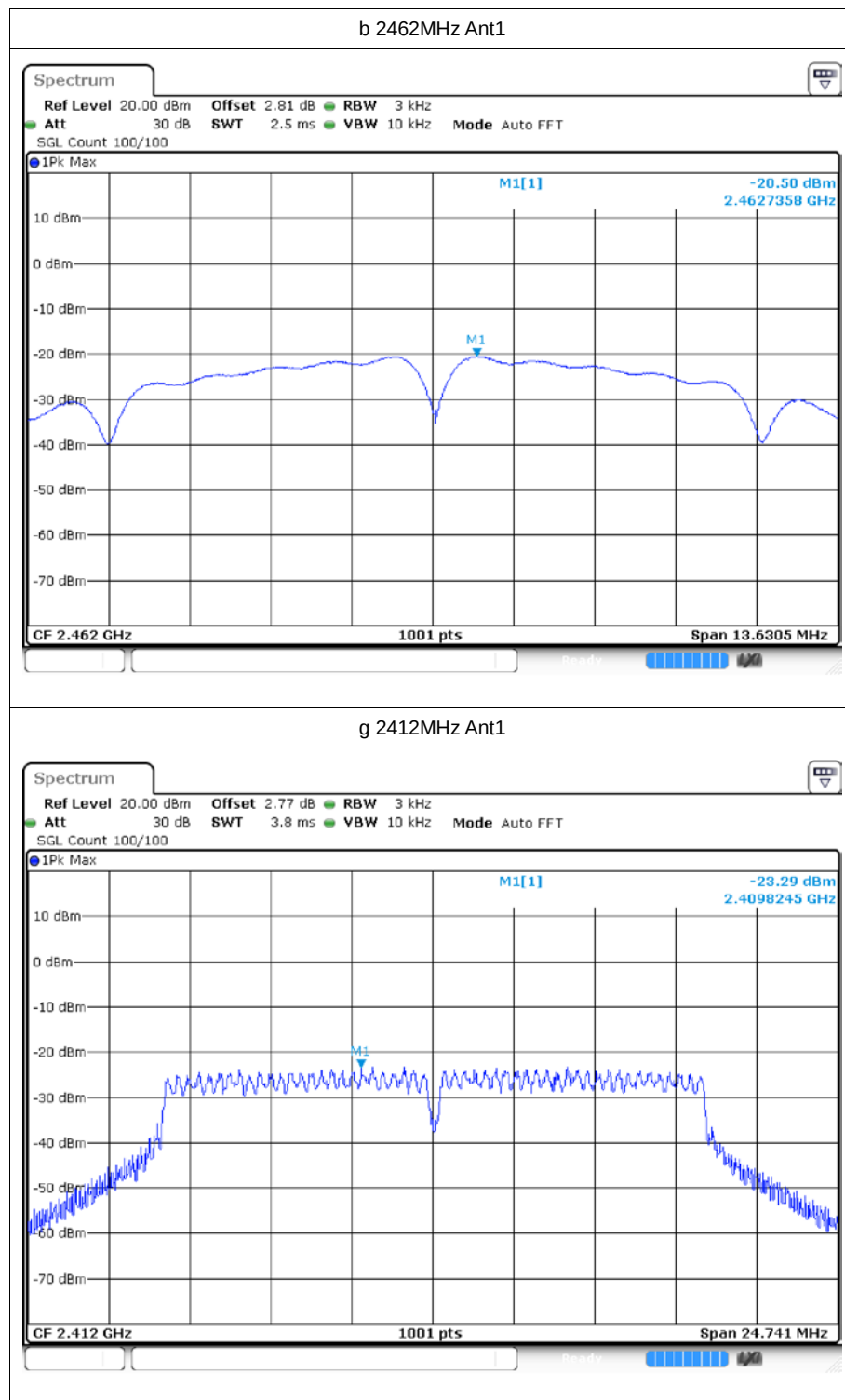
4 Maximum Power Spectral Density Level

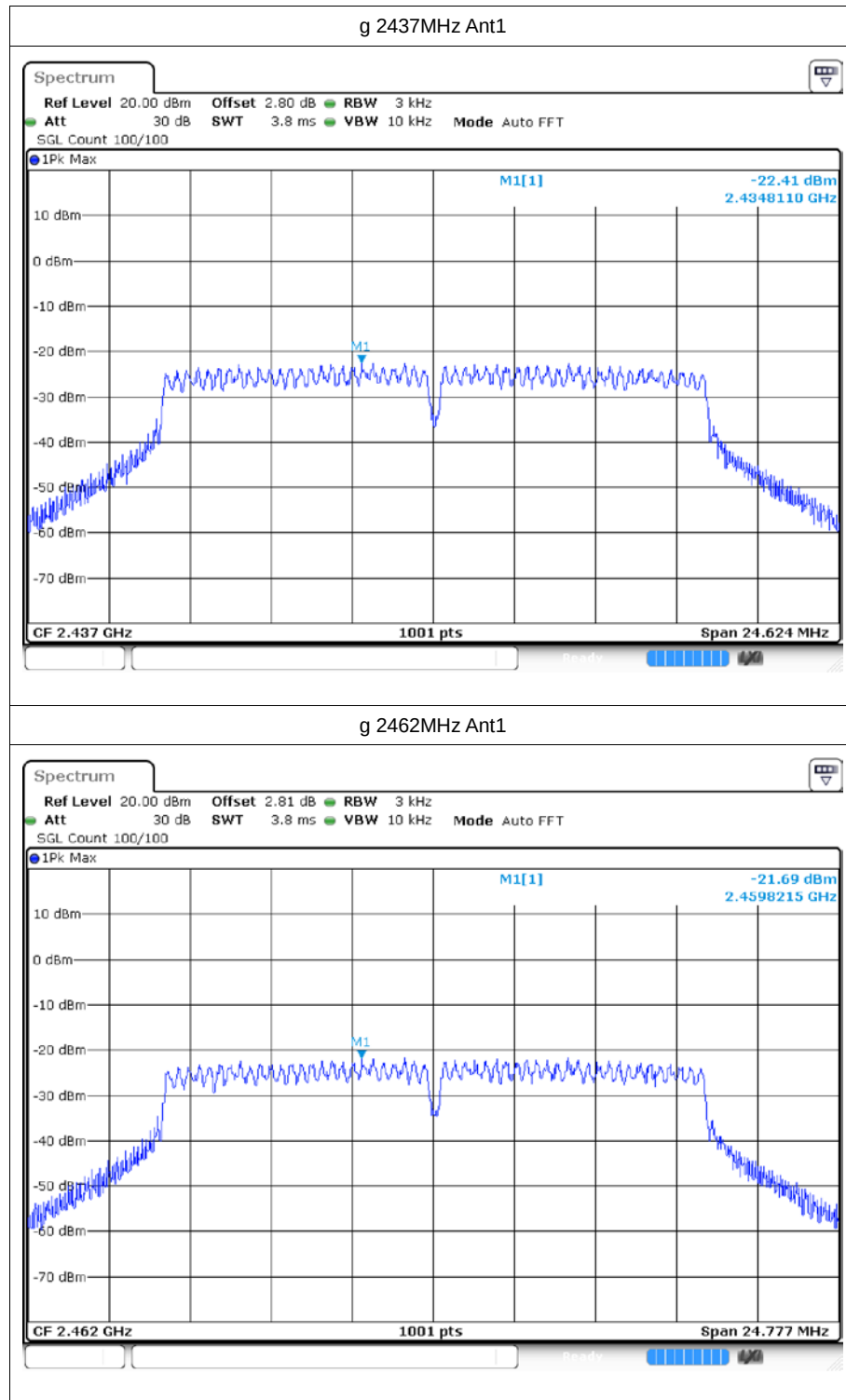
4.1 Test Result

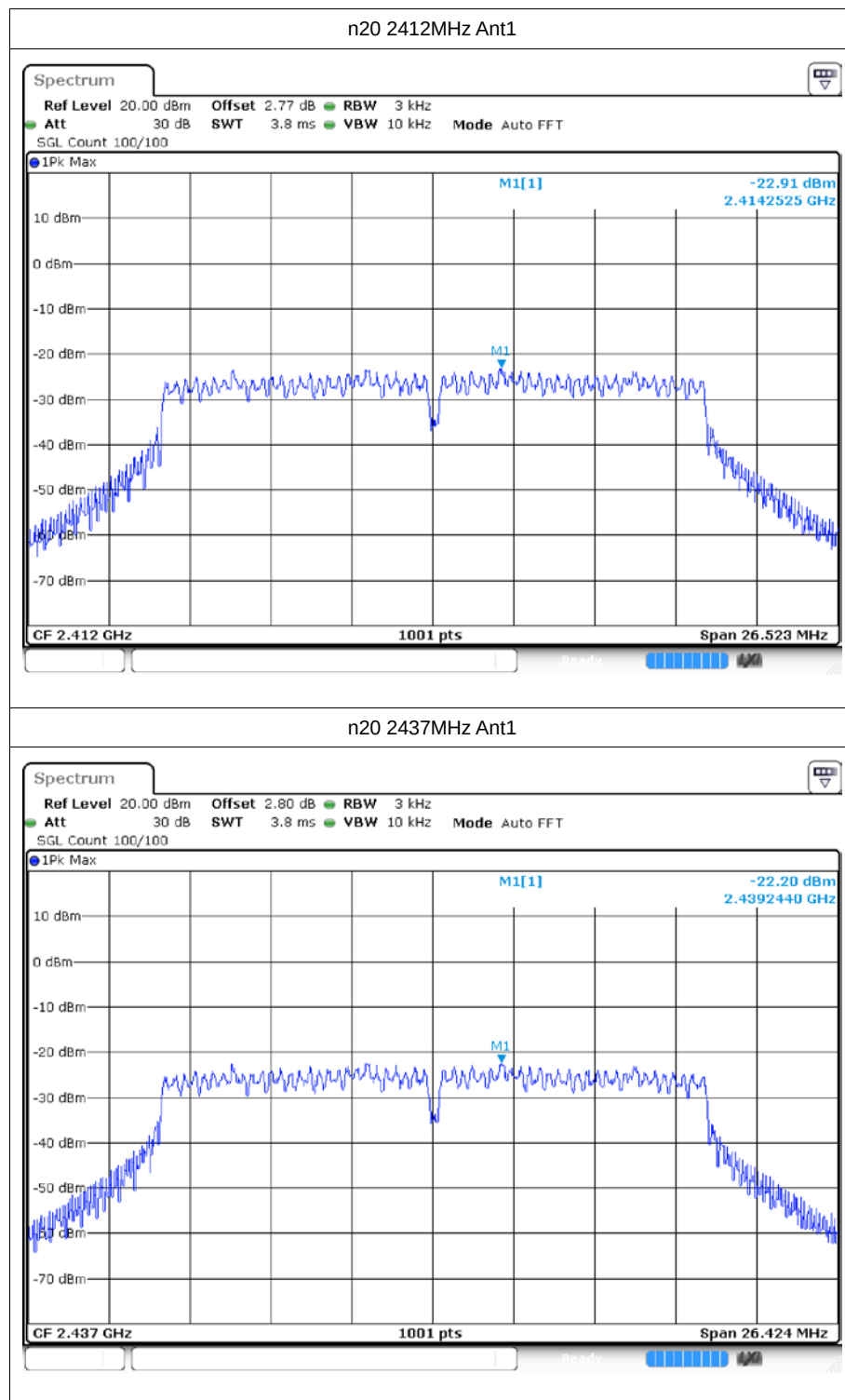
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-22.13	≤ 8	Pass
b	2437	Ant1	-21.29	≤ 8	Pass
b	2462	Ant1	-20.5	≤ 8	Pass
g	2412	Ant1	-23.29	≤ 8	Pass
g	2437	Ant1	-22.41	≤ 8	Pass
g	2462	Ant1	-21.69	≤ 8	Pass
n20	2412	Ant1	-22.91	≤ 8	Pass
n20	2437	Ant1	-22.2	≤ 8	Pass
n20	2462	Ant1	-21.28	≤ 8	Pass

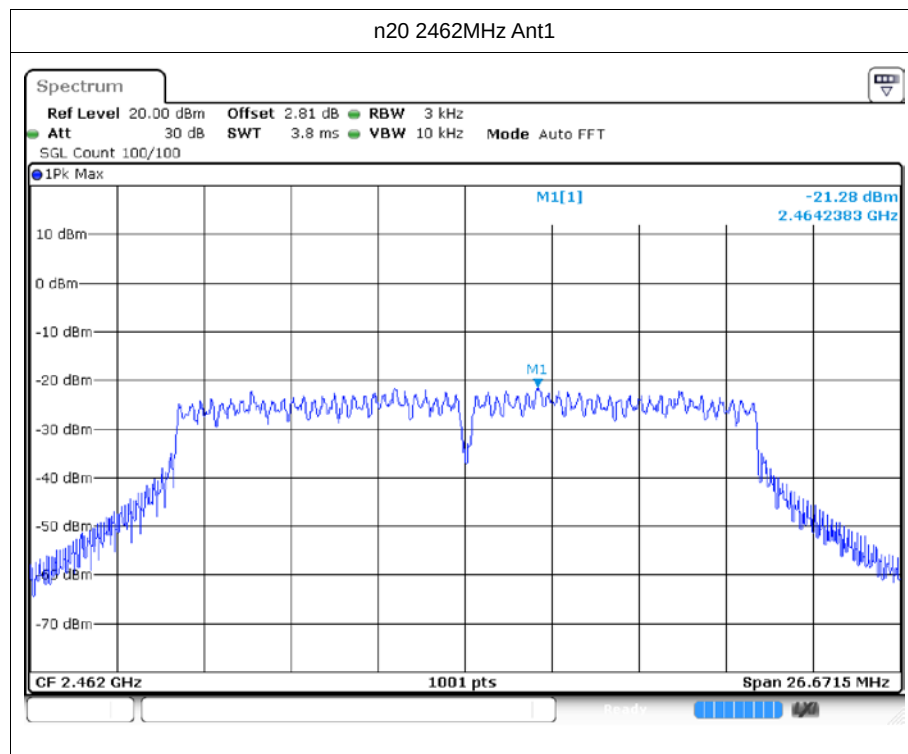
4.2 Test Graphs











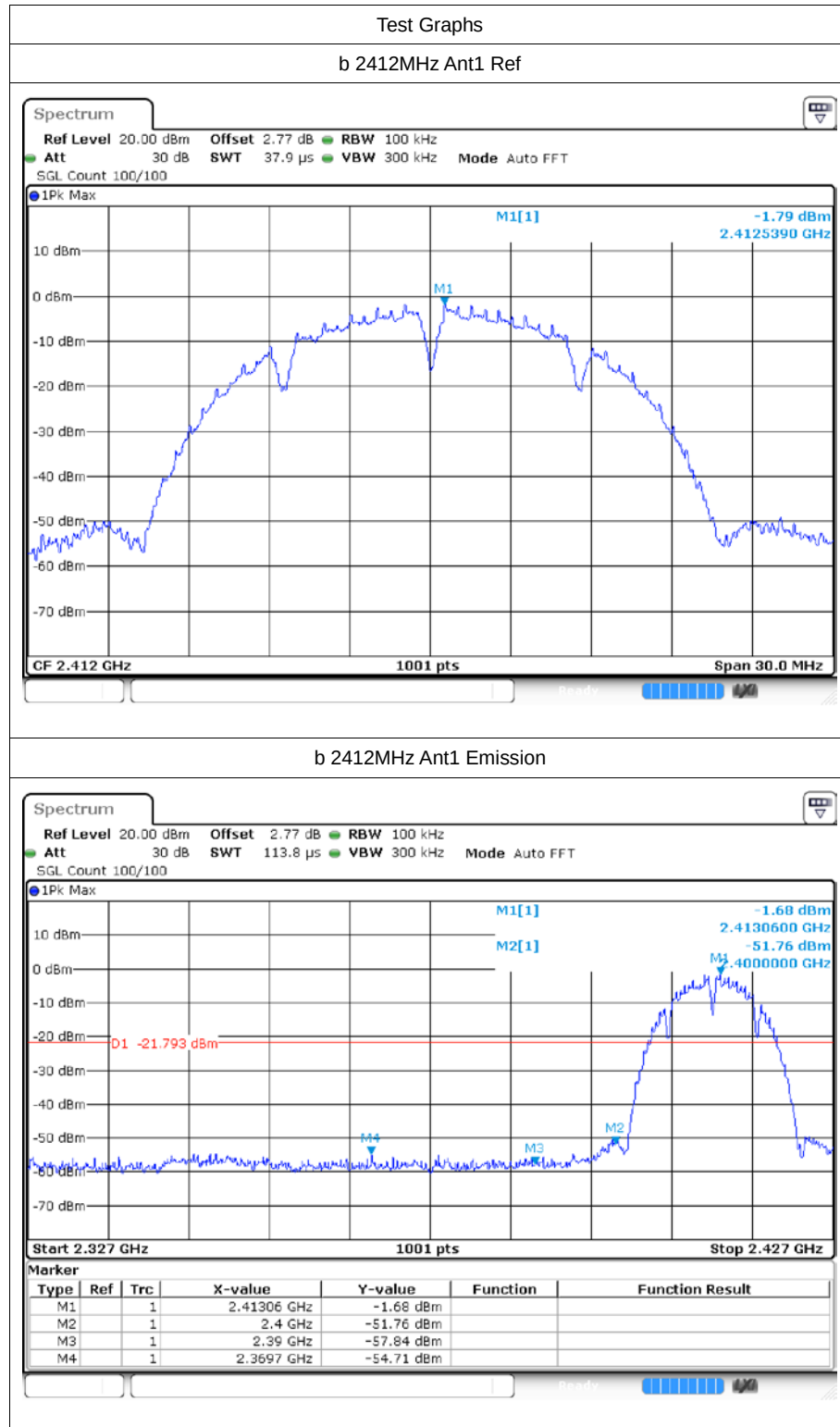


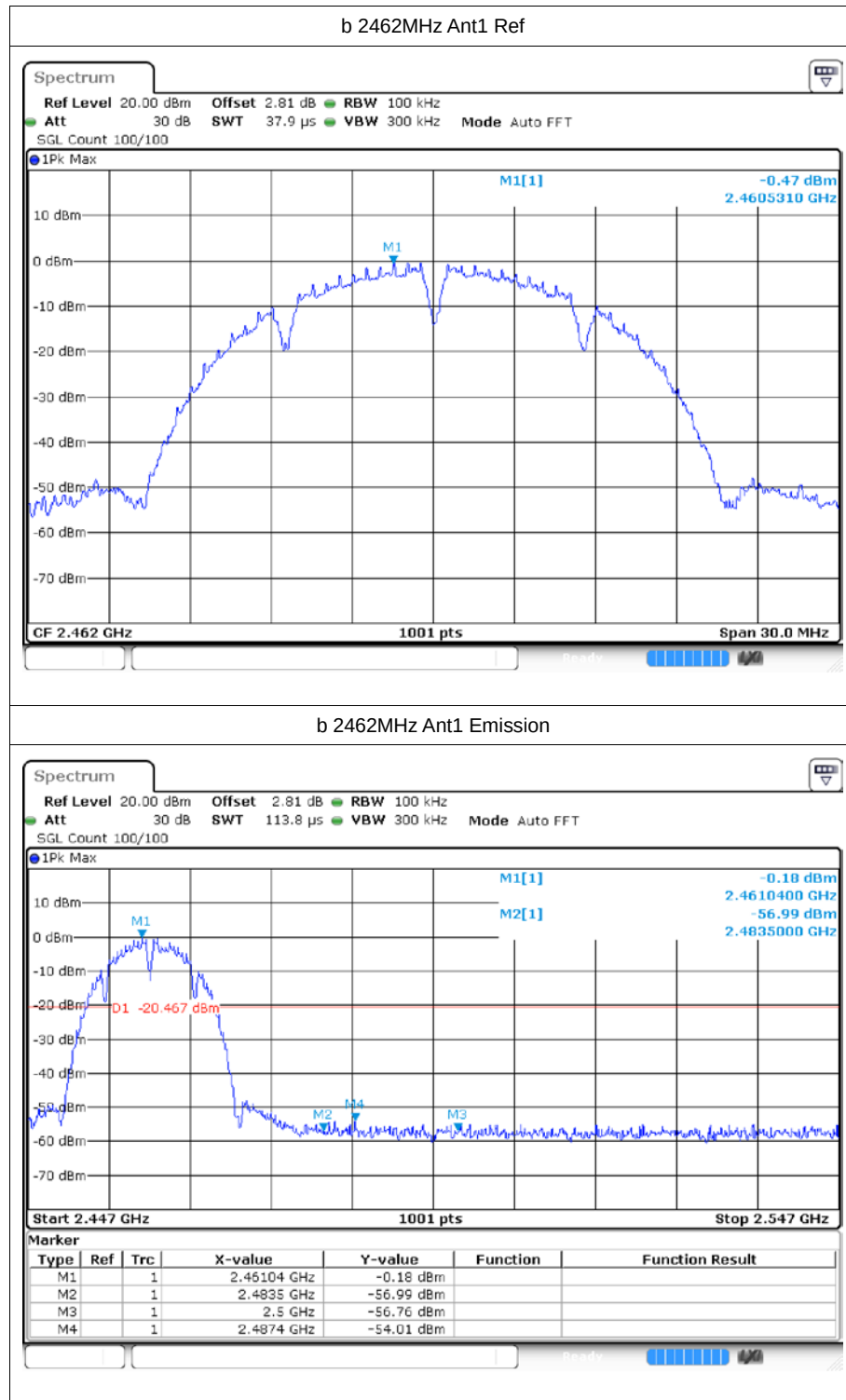
5 Band Edge

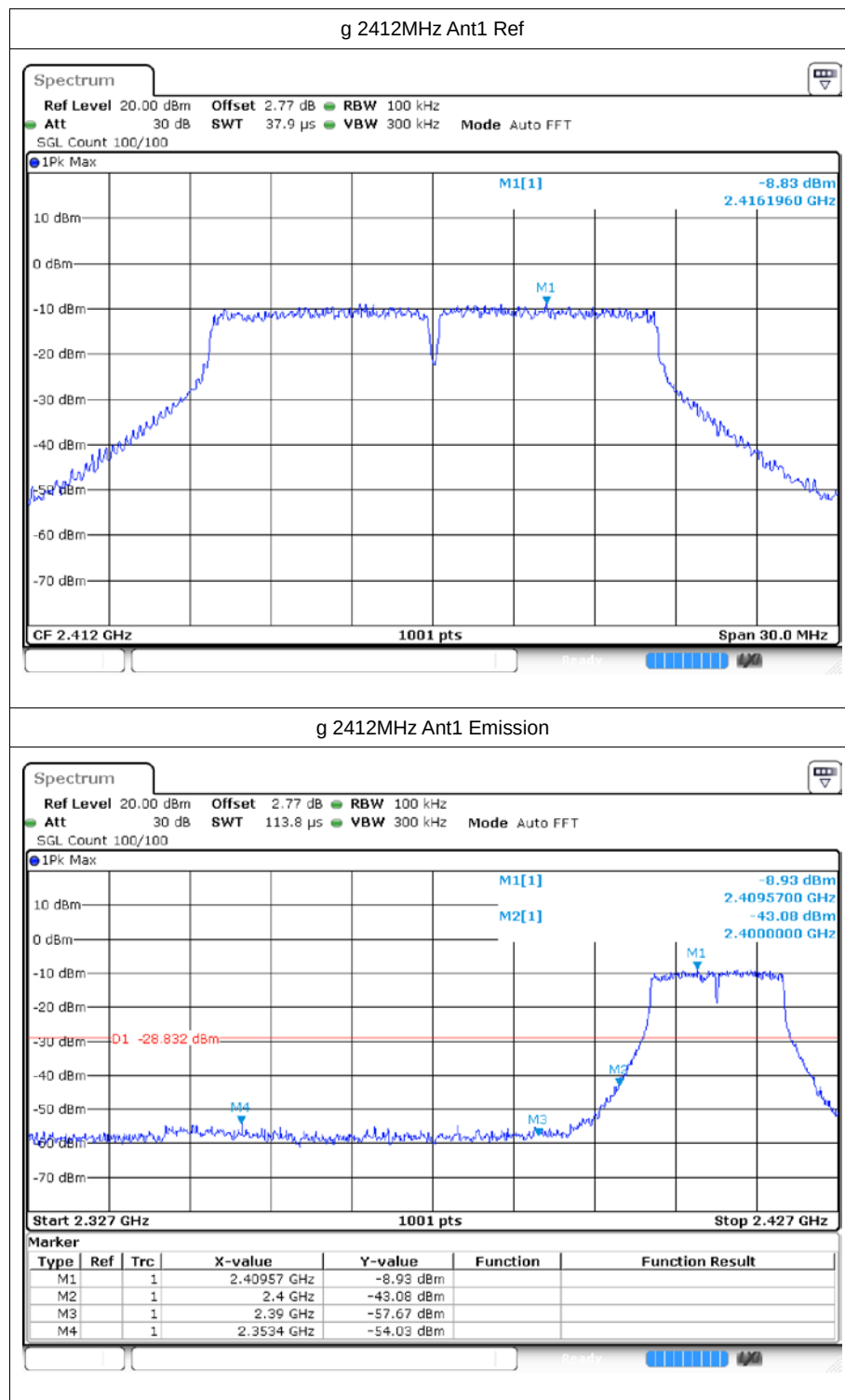
5.1 Test Result

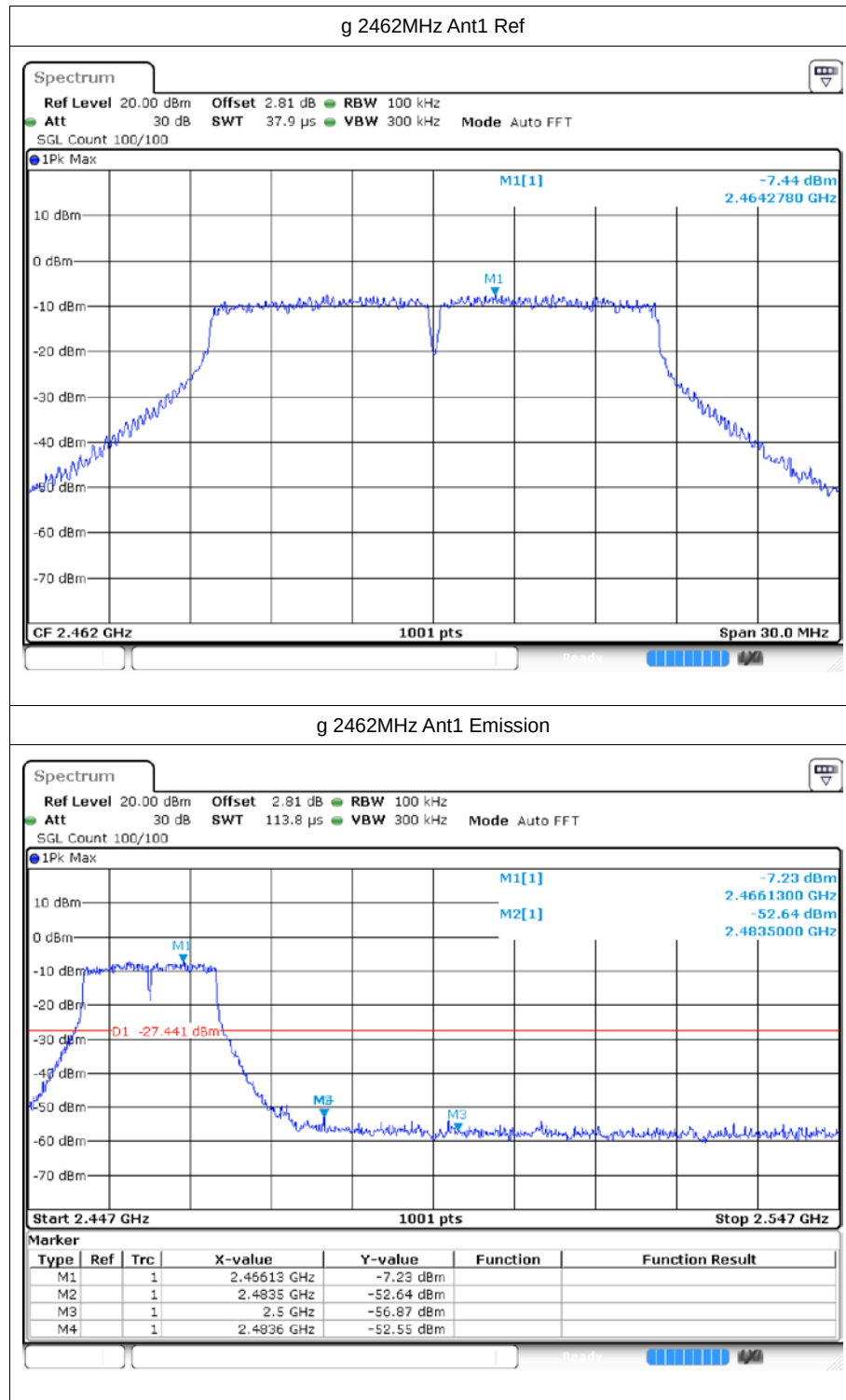
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-52.92	-20	-52.92
b	2462	Ant1	-53.53	-20	Pass
g	2412	Ant1	-45.2	-20	Pass
g	2462	Ant1	-45.1	-20	Pass
n20	2412	Ant1	-44.37	-20	Pass
n20	2462	Ant1	-47.58	-20	Pass

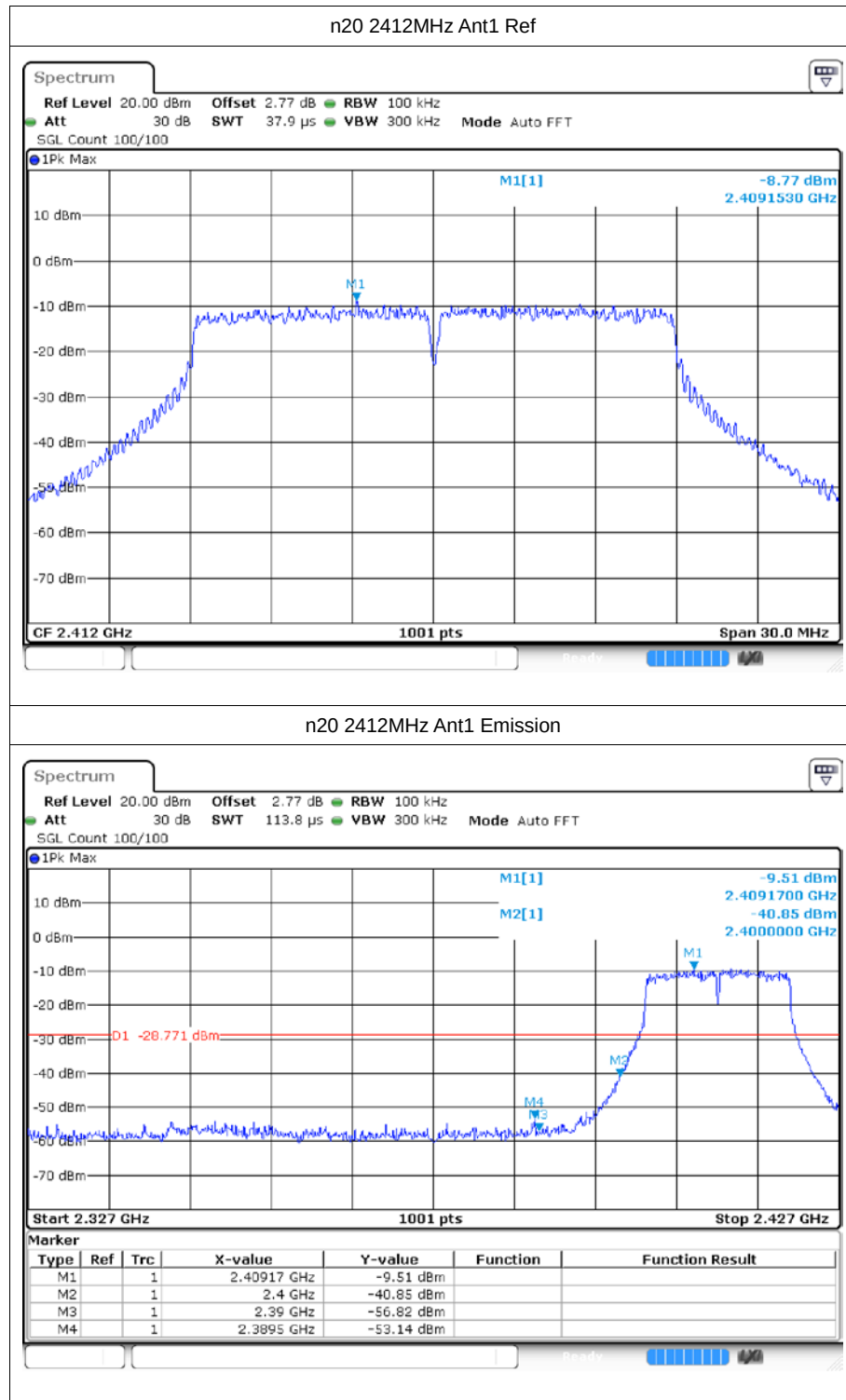
5.2 Test Graphs

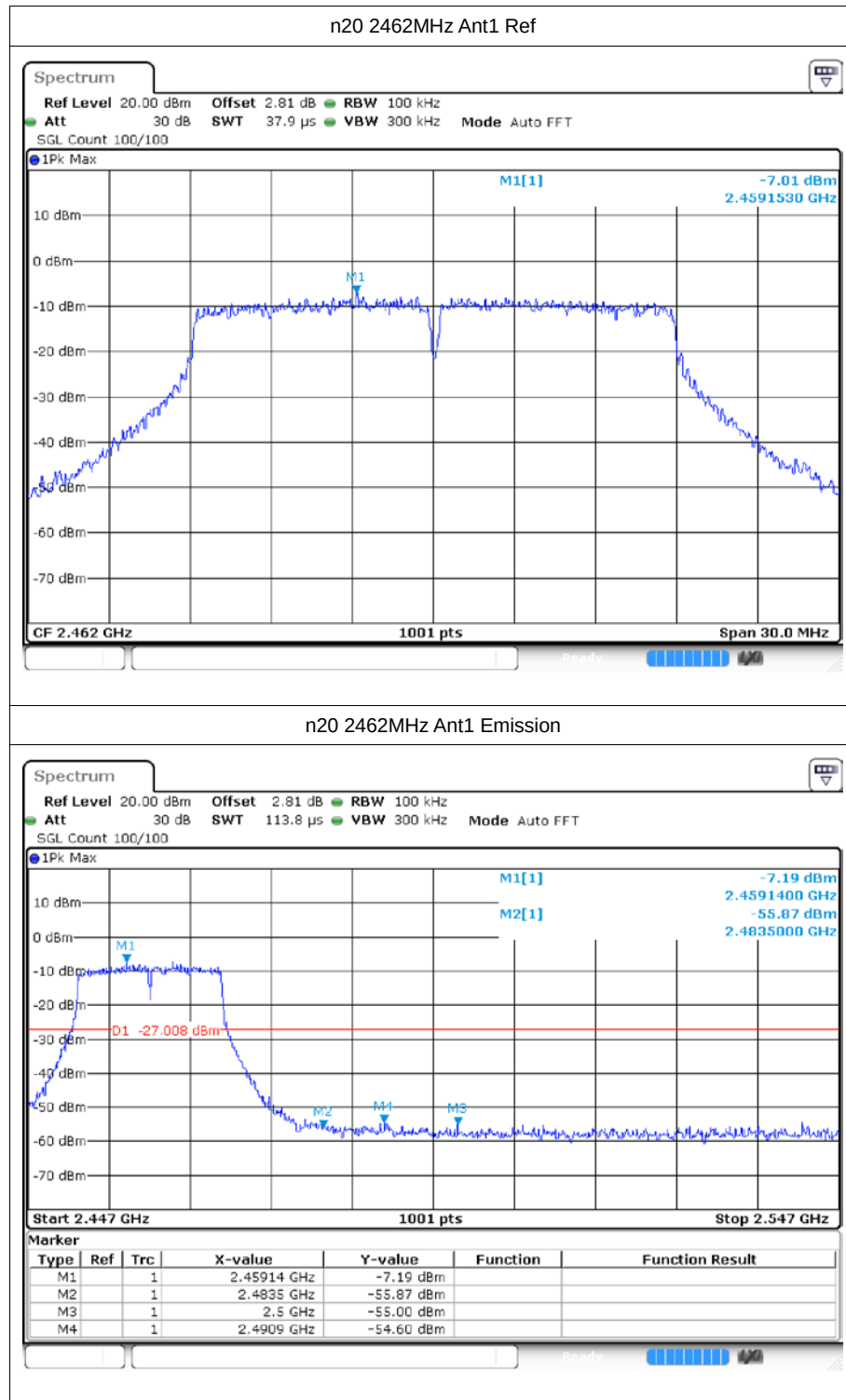












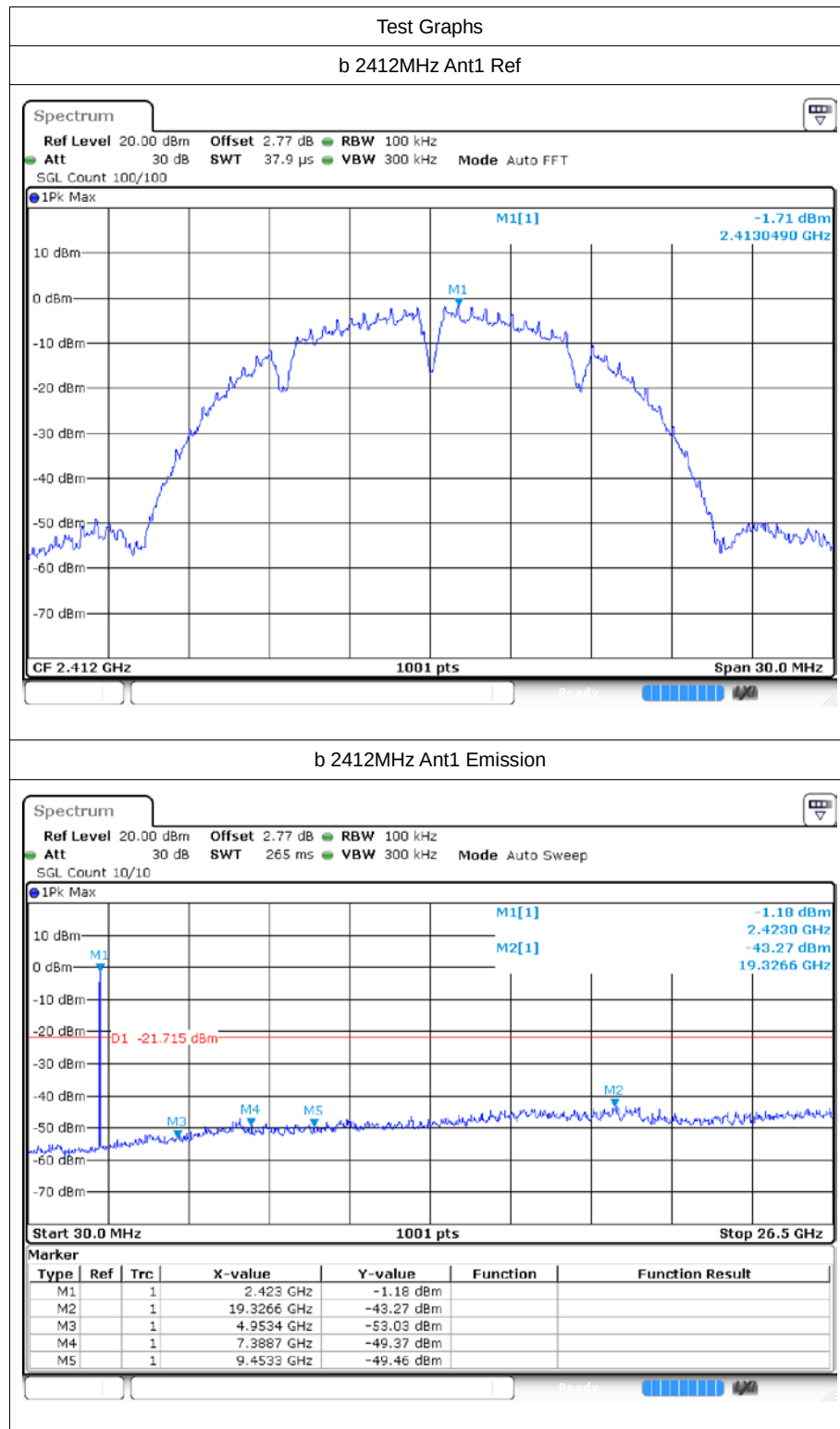


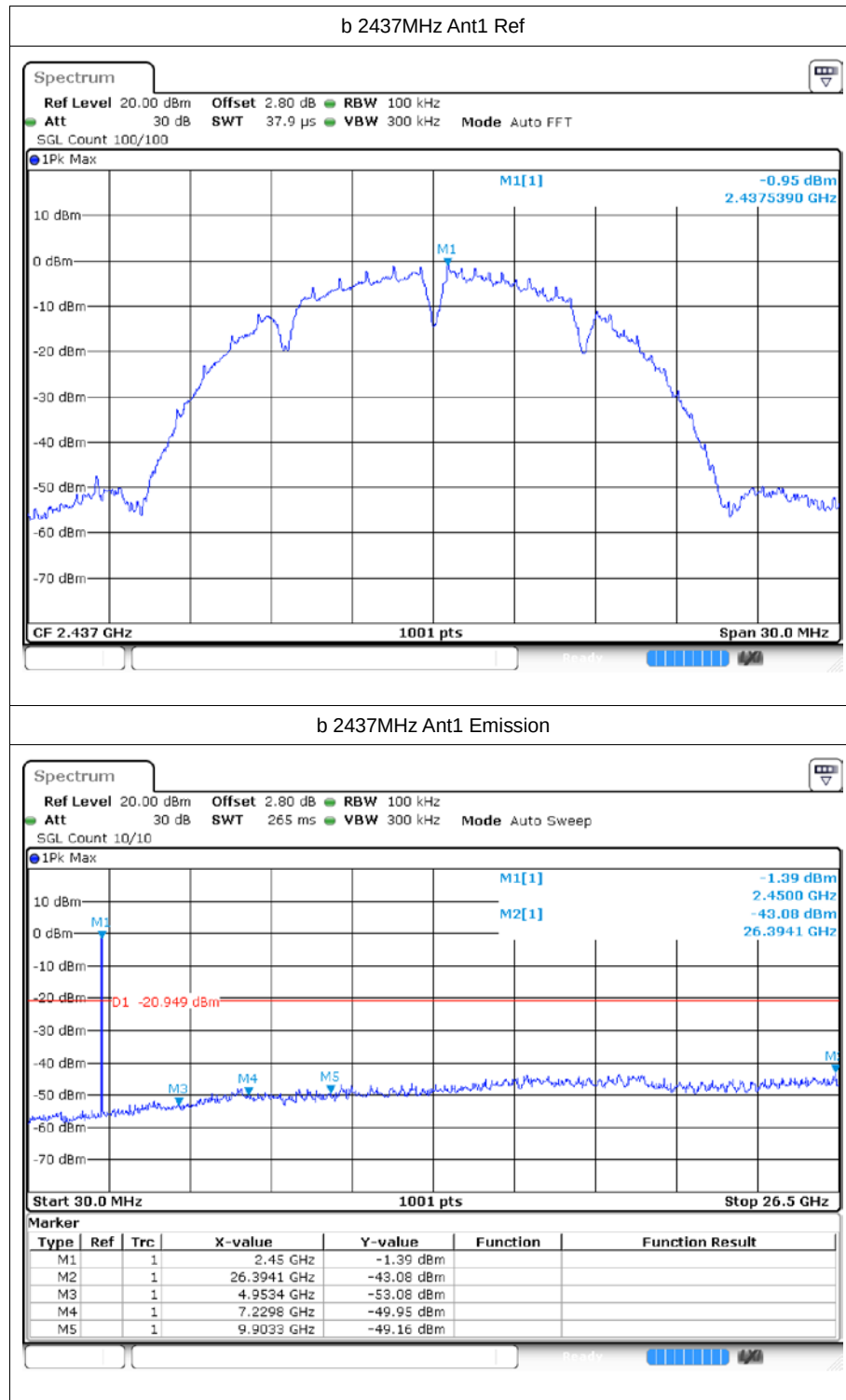
6 Conducted RF Spurious Emission

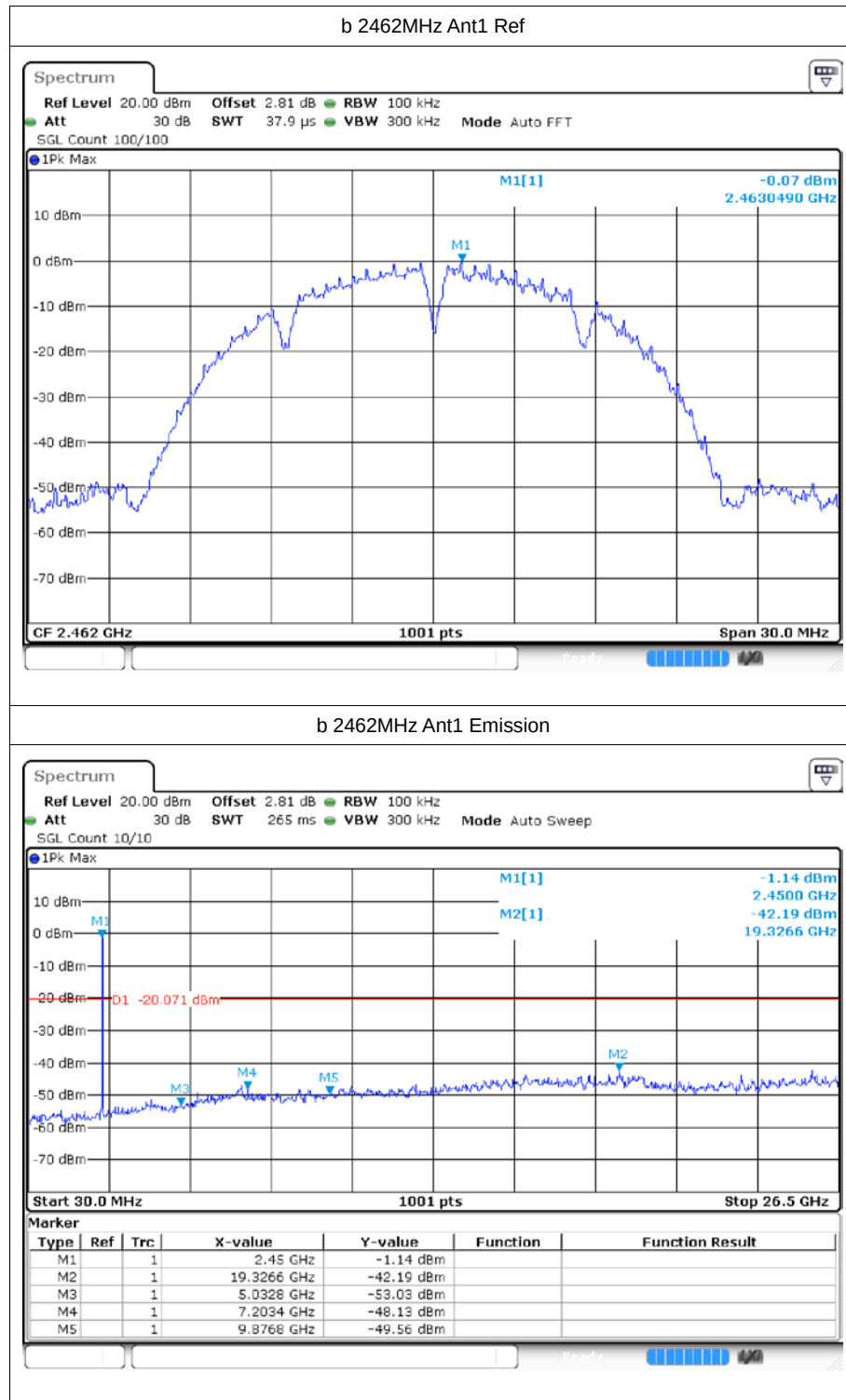
6.1 Test Result

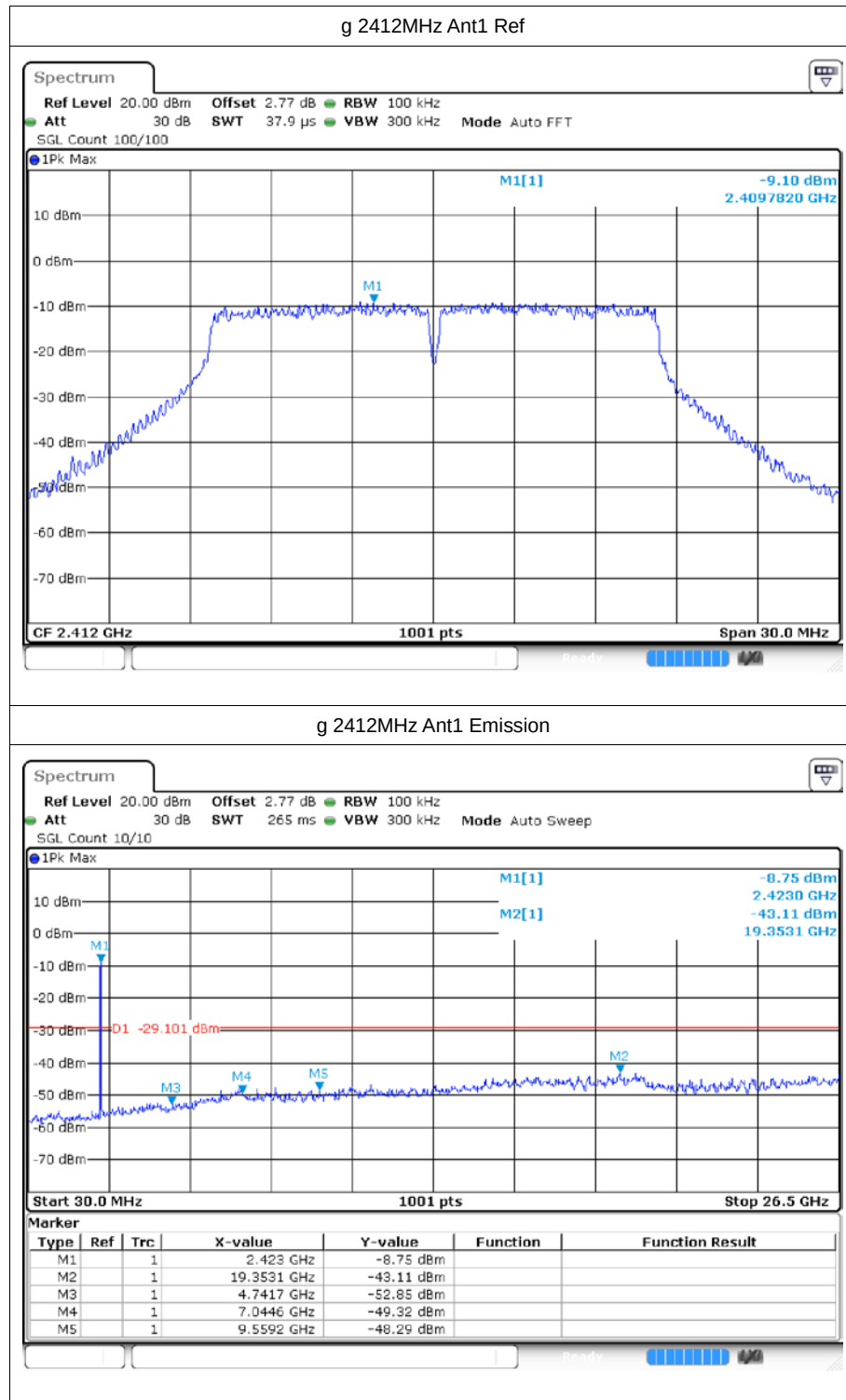
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-41.55	-20	Pass
b	2437	Ant1	-42.12	-20	Pass
b	2462	Ant1	-42.11	-20	Pass
g	2412	Ant1	-34.01	-20	Pass
g	2437	Ant1	-35.01	-20	Pass
g	2462	Ant1	-35.51	-20	Pass
n20	2412	Ant1	-31.96	-20	Pass
n20	2437	Ant1	-34.72	-20	Pass
n20	2462	Ant1	-35.56	-20	Pass

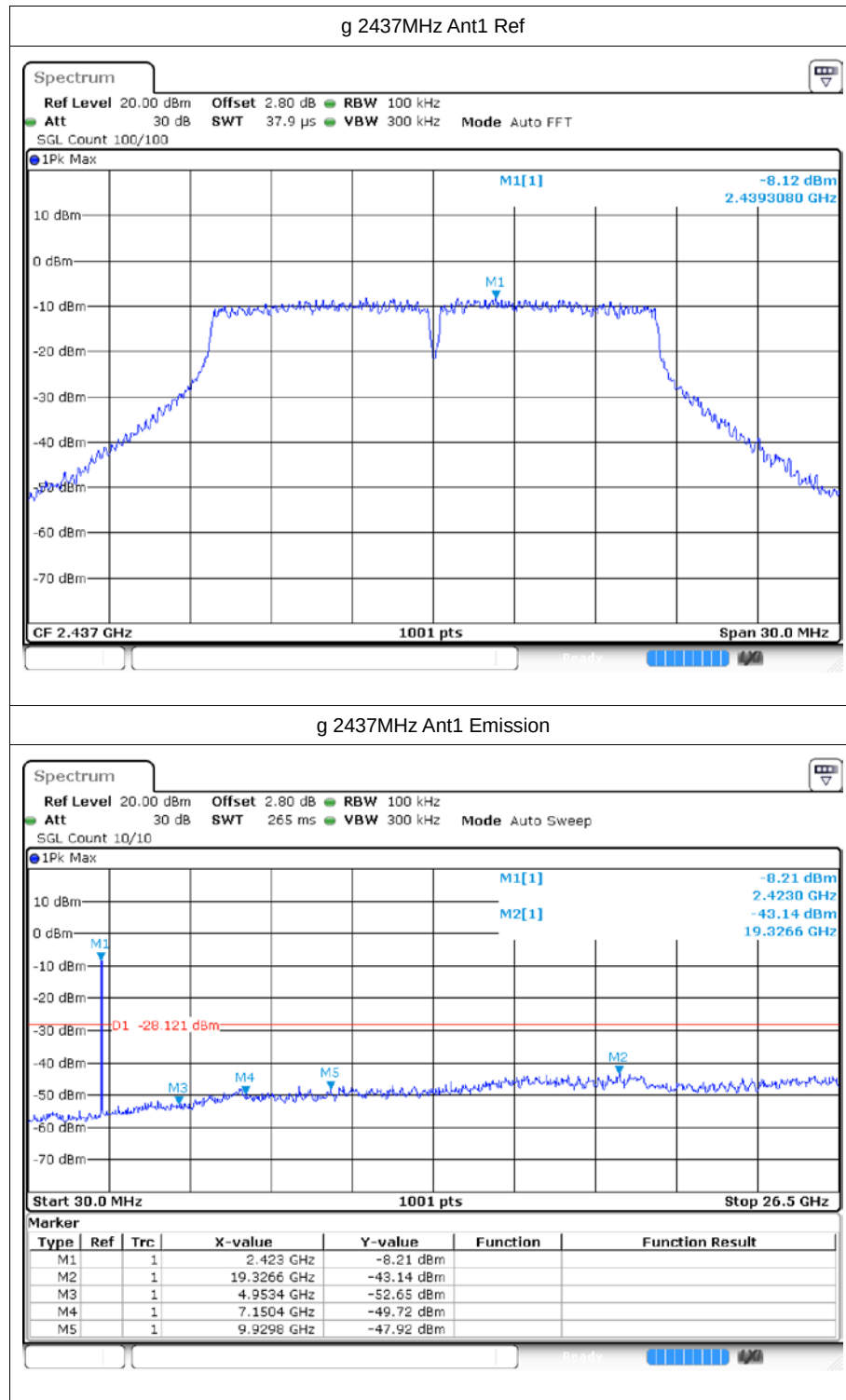
6.2 Test Graphs

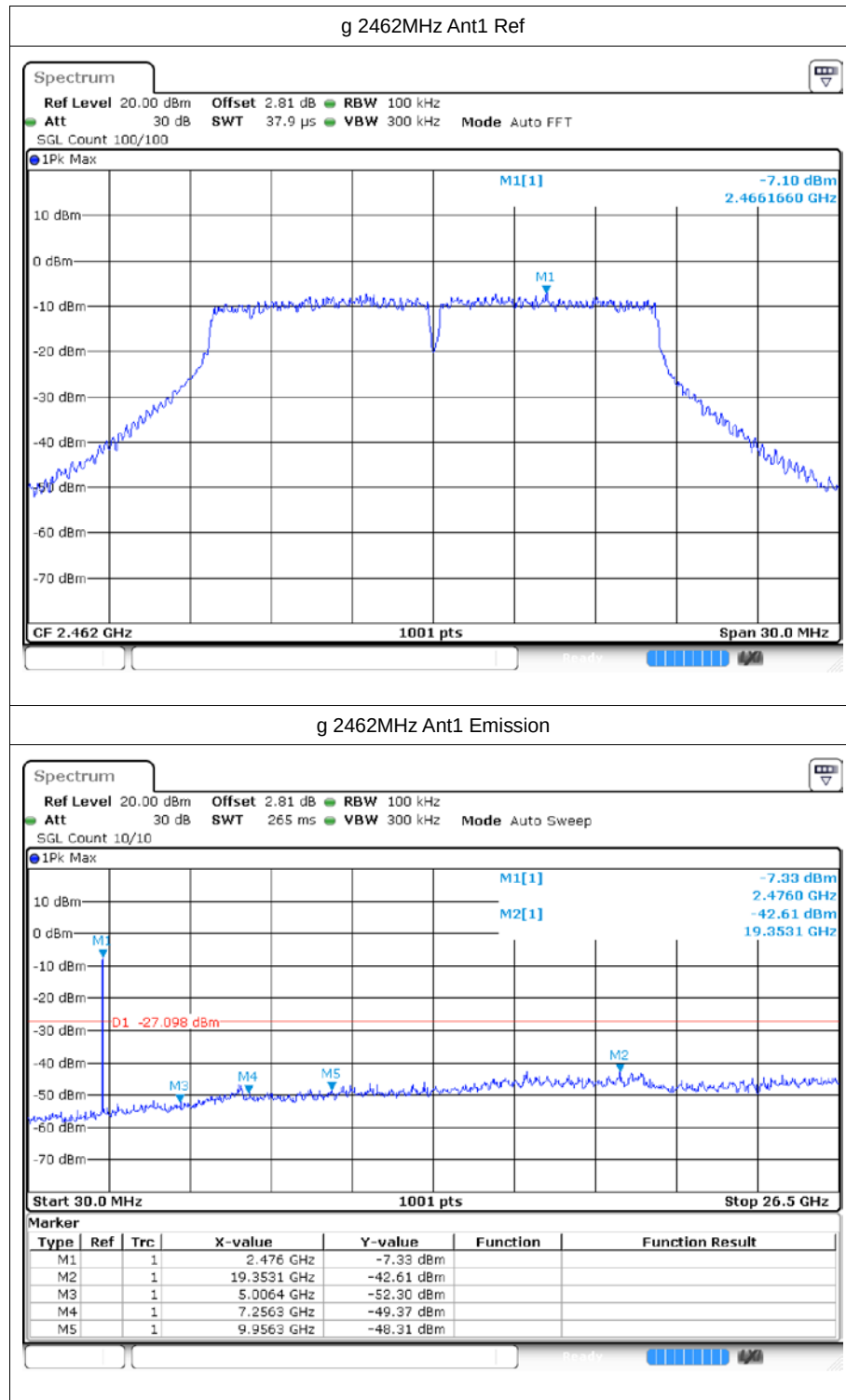


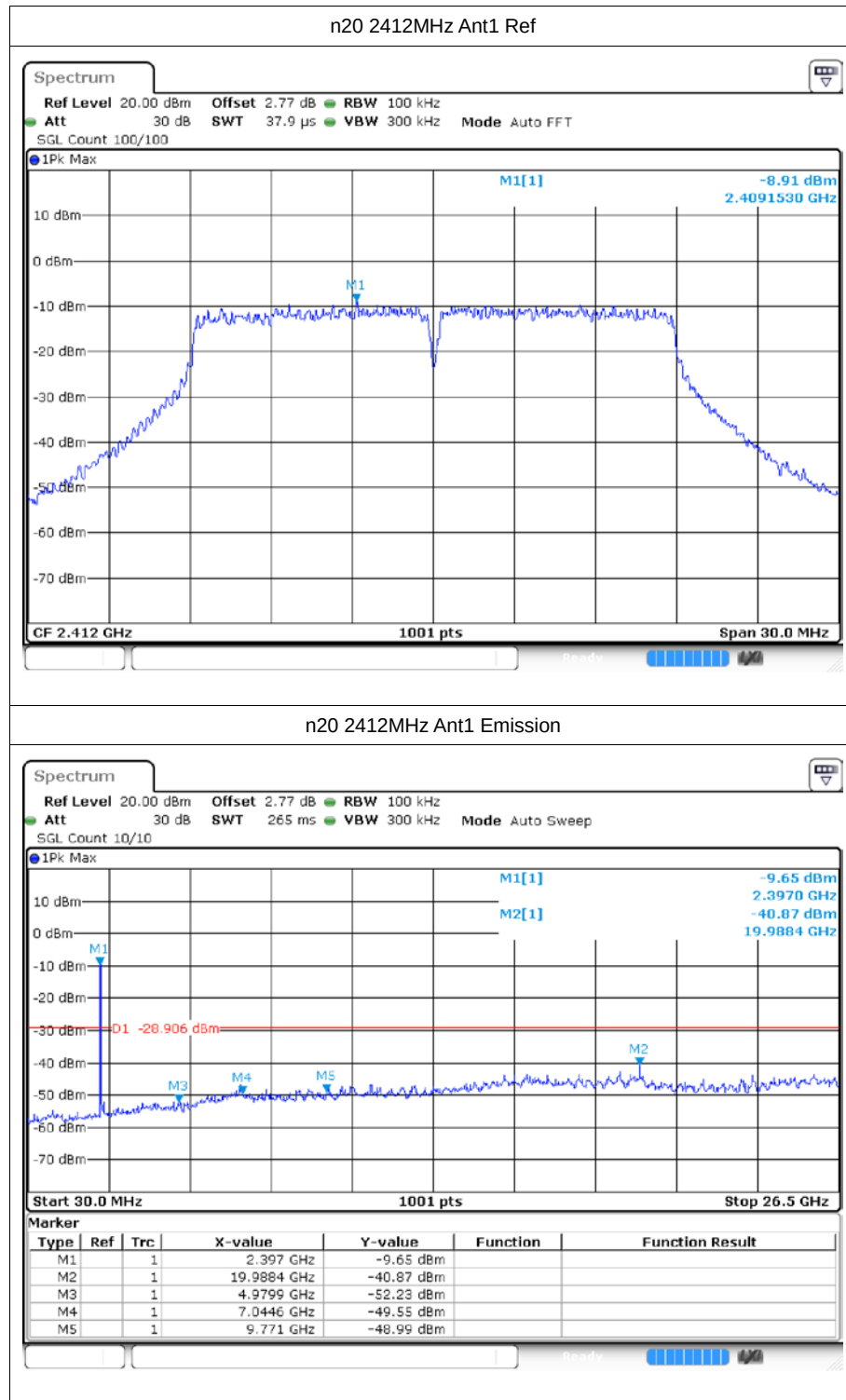


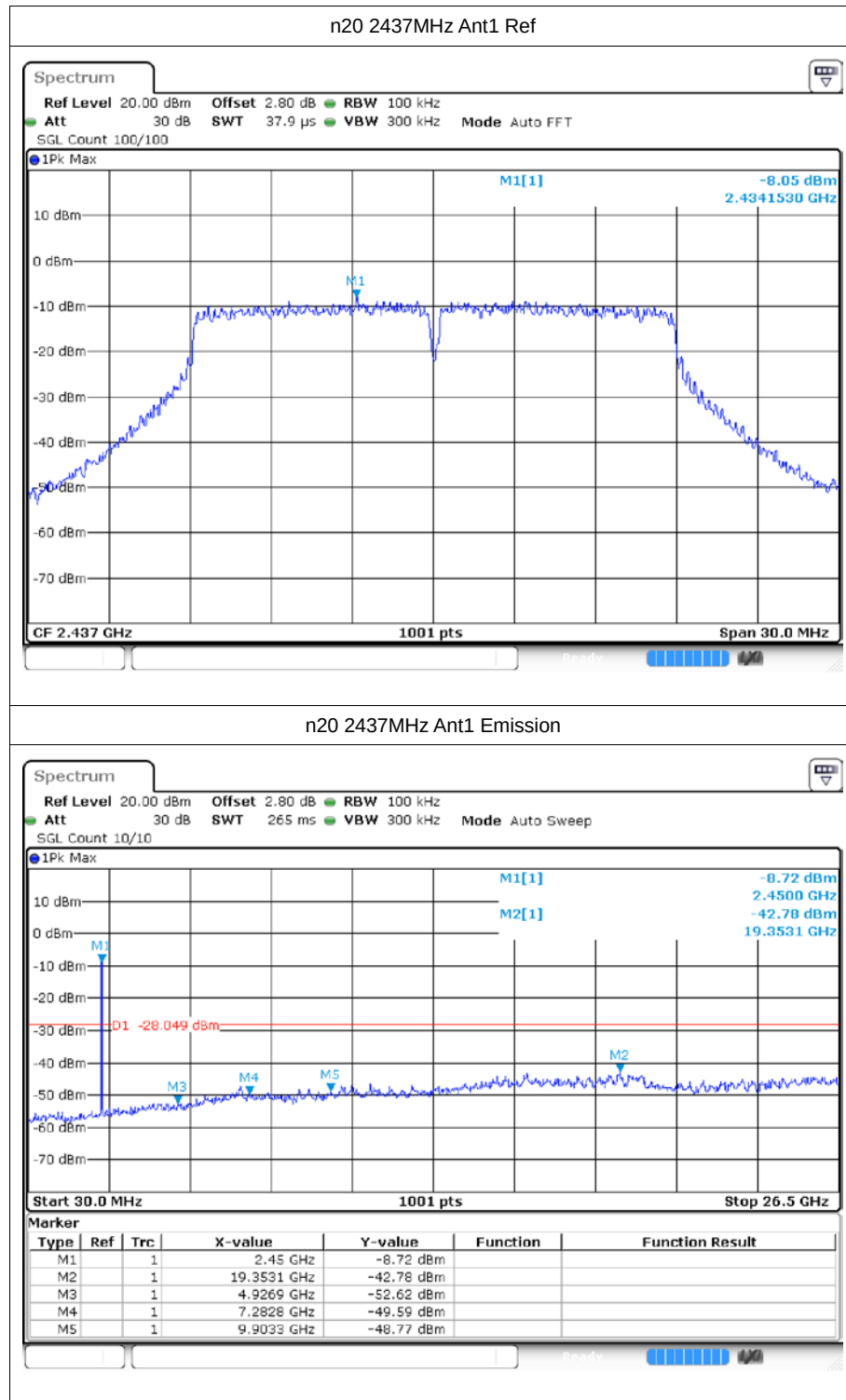


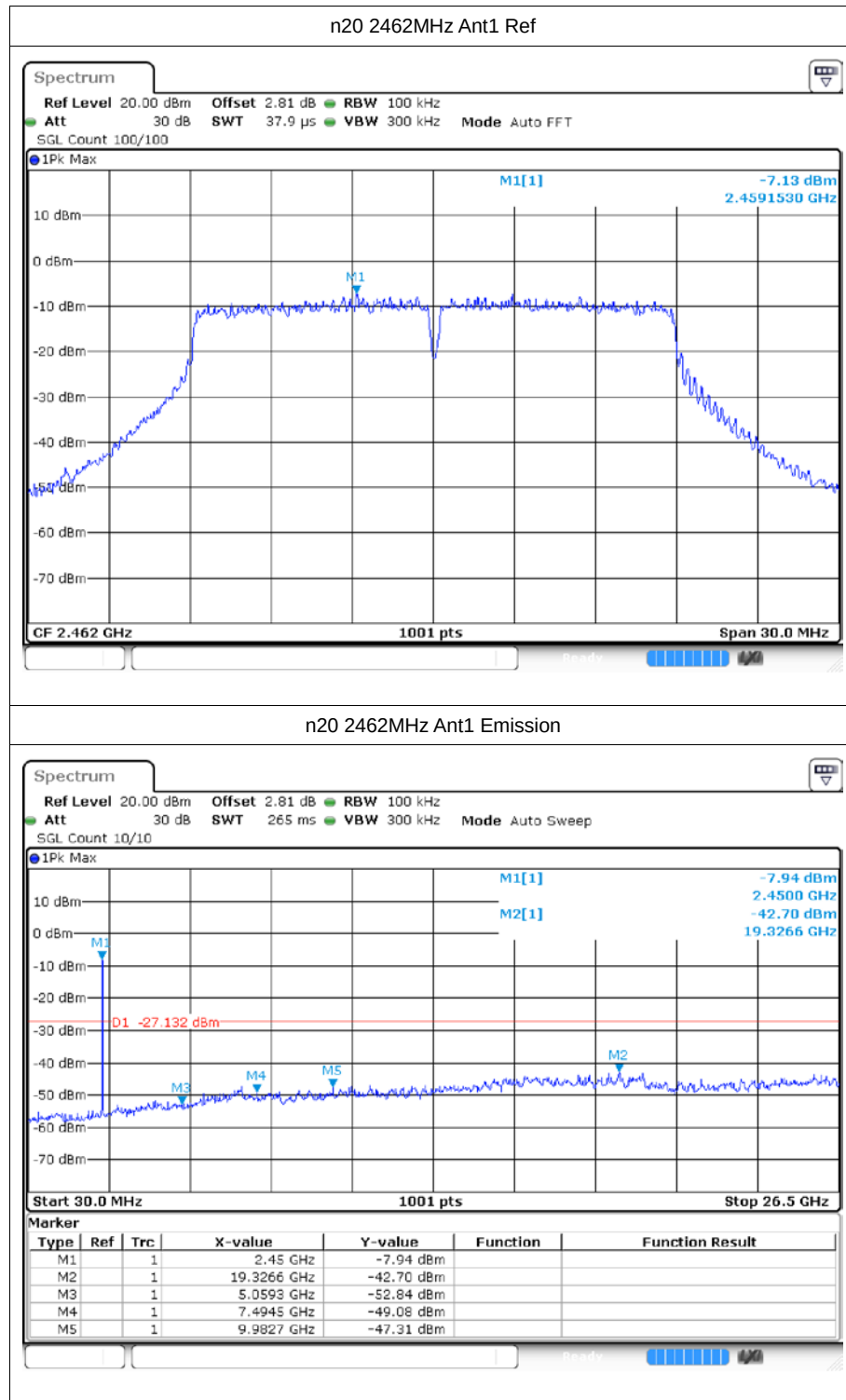














7 Restrict Band

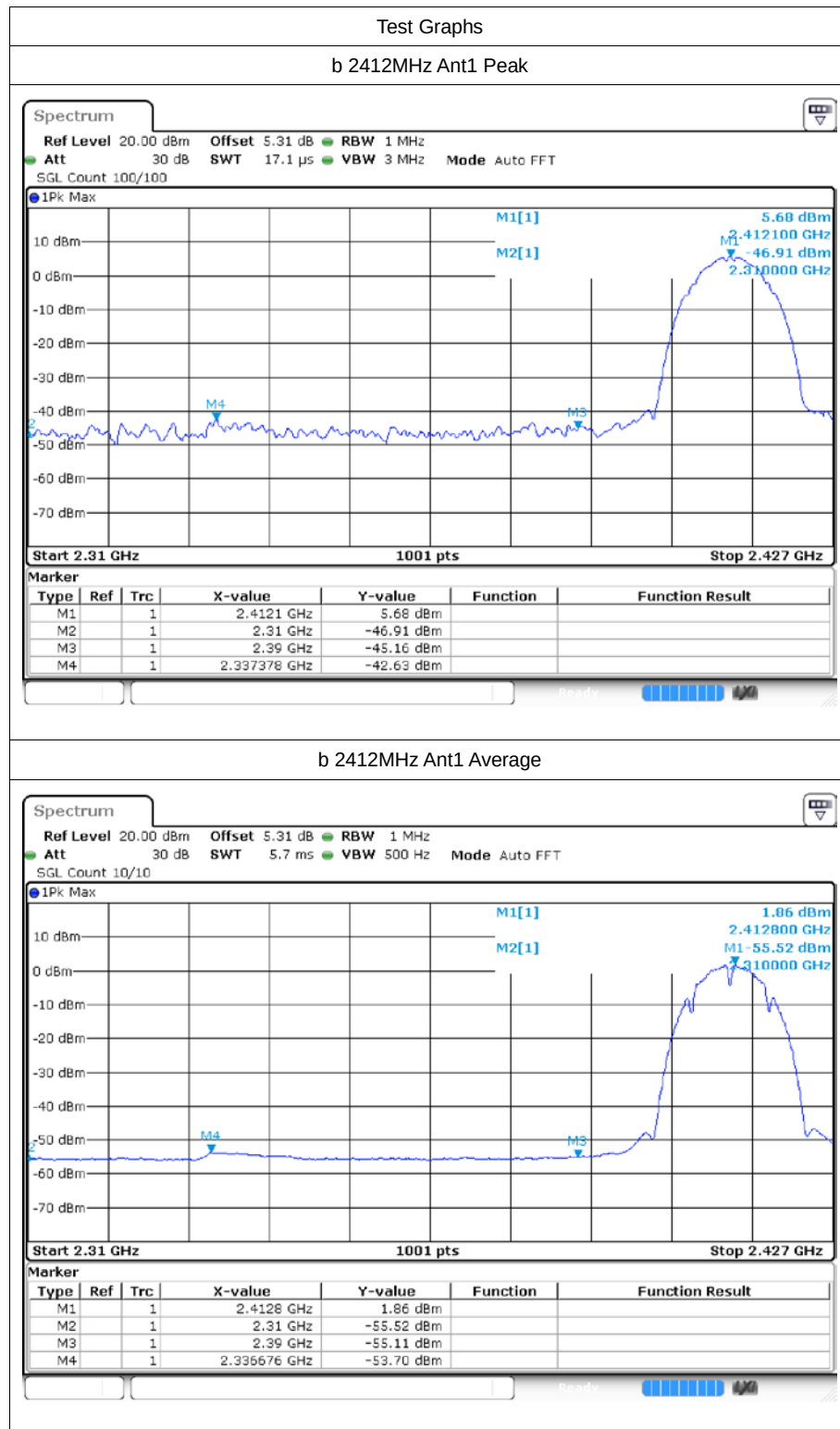
7.1 Test Result

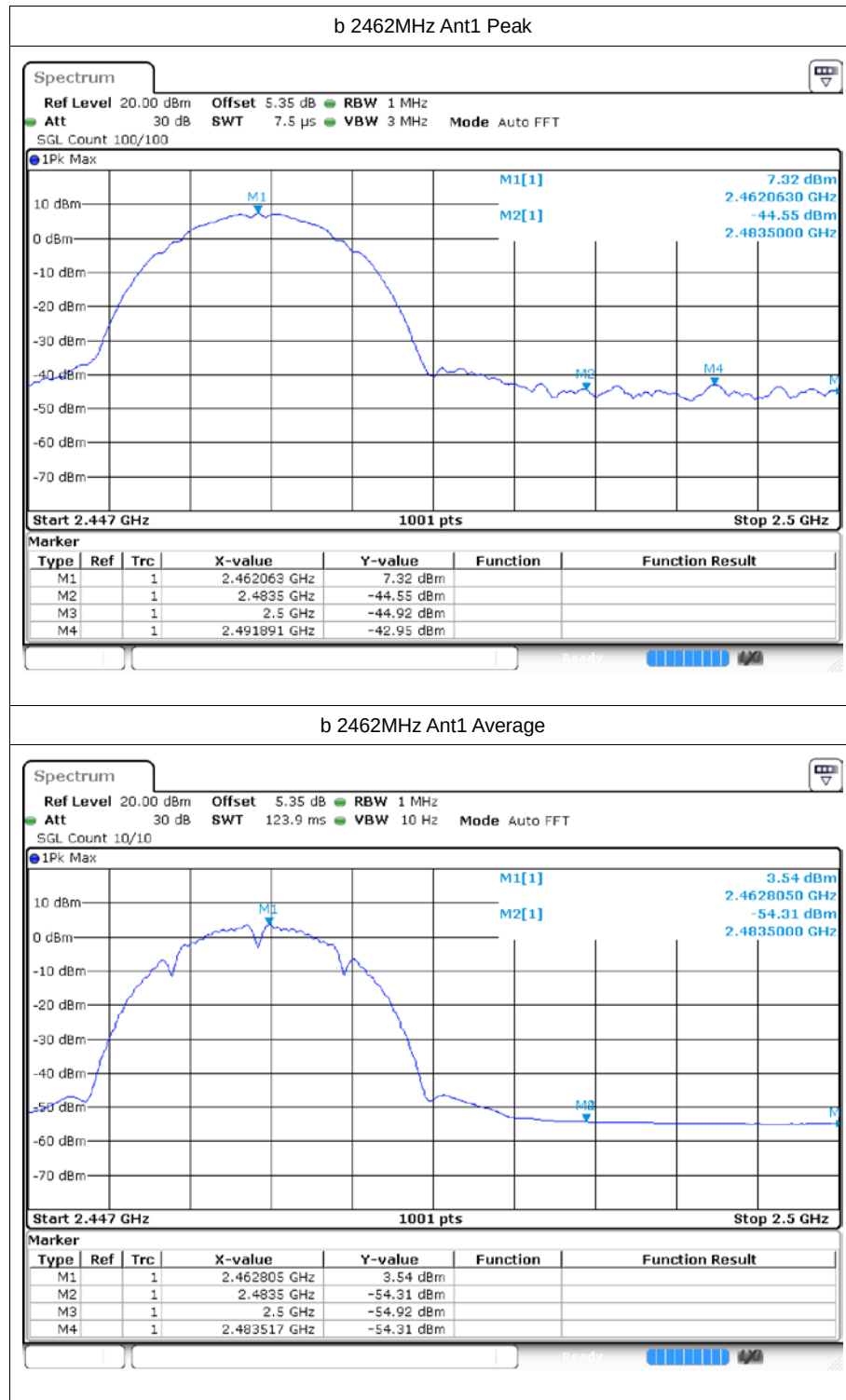
Mod e	Frequency (MHz)	Antenn a	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detecto r	Limit (dBuV/m)	Verdic t
b	2412	Ant1	2310	-46.91	2.54	50.89	Peak	74	Pass
b	2412	Ant1	2310	-55.51	2.54	42.29	Average	54	Pass
b	2412	Ant1	2337.378	-42.63	2.54	55.17	Peak	74	Pass
b	2412	Ant1	2336.676	-53.69	2.54	44.11	Average	54	Pass
b	2412	Ant1	2390	-45.16	2.54	52.64	Peak	74	Pass
b	2412	Ant1	2390	-55.11	2.54	42.69	Average	54	Pass
b	2462	Ant1	2483.5	-44.55	2.54	53.25	Peak	74	53.25
b	2462	Ant1	2483.5	-54.31	2.54	43.49	Average	54	Pass
b	2462	Ant1	2491.891	-42.95	2.54	54.85	Peak	74	Pass
b	2462	Ant1	2483.517	-54.31	2.54	43.49	Average	54	Pass
b	2462	Ant1	2500	-44.91	2.54	52.89	Peak	74	Pass
b	2462	Ant1	2500	-54.91	2.54	42.89	Average	54	Pass
g	2412	Ant1	2310	-44.93	2.54	52.87	Peak	74	Pass
g	2412	Ant1	2310	-54.66	2.54	43.14	Average	54	Pass
g	2412	Ant1	2389.56	-43.32	2.54	54.48	Peak	74	Pass
g	2412	Ant1	2340.303	-52.55	2.54	45.25	Average	54	Pass
g	2412	Ant1	2390	-45.29	2.54	52.64	Peak	74	Pass
g	2412	Ant1	2390	-53.59	2.54	44.21	Average	54	Pass
g	2462	Ant1	2483.5	-44.51	2.54	53.29	Peak	74	Pass
g	2462	Ant1	2483.5	-52.74	2.54	45.06	Average	54	Pass
g	2462	Ant1	2491.891	-43.07	2.54	54.73	Peak	74	Pass
g	2462	Ant1	2483.729	-52.57	2.54	45.23	Average	54	Pass
g	2462	Ant1	2500	-46.07	2.54	52.89	Peak	74	Pass
g	2462	Ant1	2500	-53.92	2.54	43.88	Average	54	Pass
n20	2412	Ant1	2310	-46.53	2.54	51.27	Peak	74	Pass
n20	2412	Ant1	2310	-54.92	2.54	42.88	Average	54	Pass
n20	2412	Ant1	2337.495	-43.34	2.54	54.46	Peak	74	Pass
n20	2412	Ant1	2339.016	-52.18	2.54	45.62	Average	54	Pass
n20	2412	Ant1	2390	-45.6	2.54	52.2	Peak	74	Pass
n20	2412	Ant1	2390	-54.2	2.54	43.6	Average	54	Pass
n20	2462	Ant1	2483.5	-44.61	2.54	53.19	Peak	74	Pass
n20	2462	Ant1	2483.5	-52.4	2.54	45.4	Average	54	Pass
n20	2462	Ant1	2495.442	-43.01	2.54	54.79	Peak	74	Pass
n20	2462	Ant1	2485.001	-52.1	2.54	45.7	Average	54	Pass

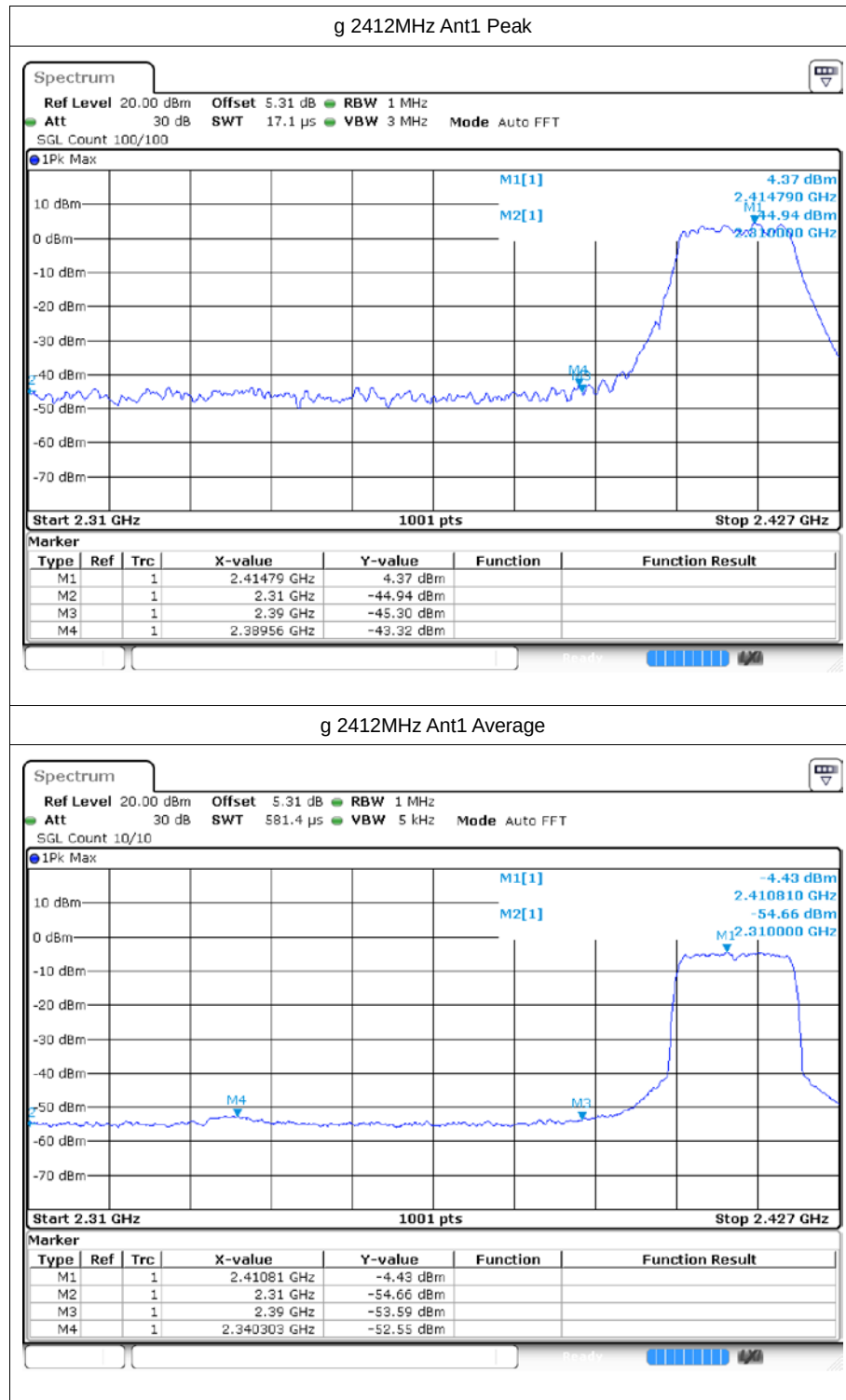


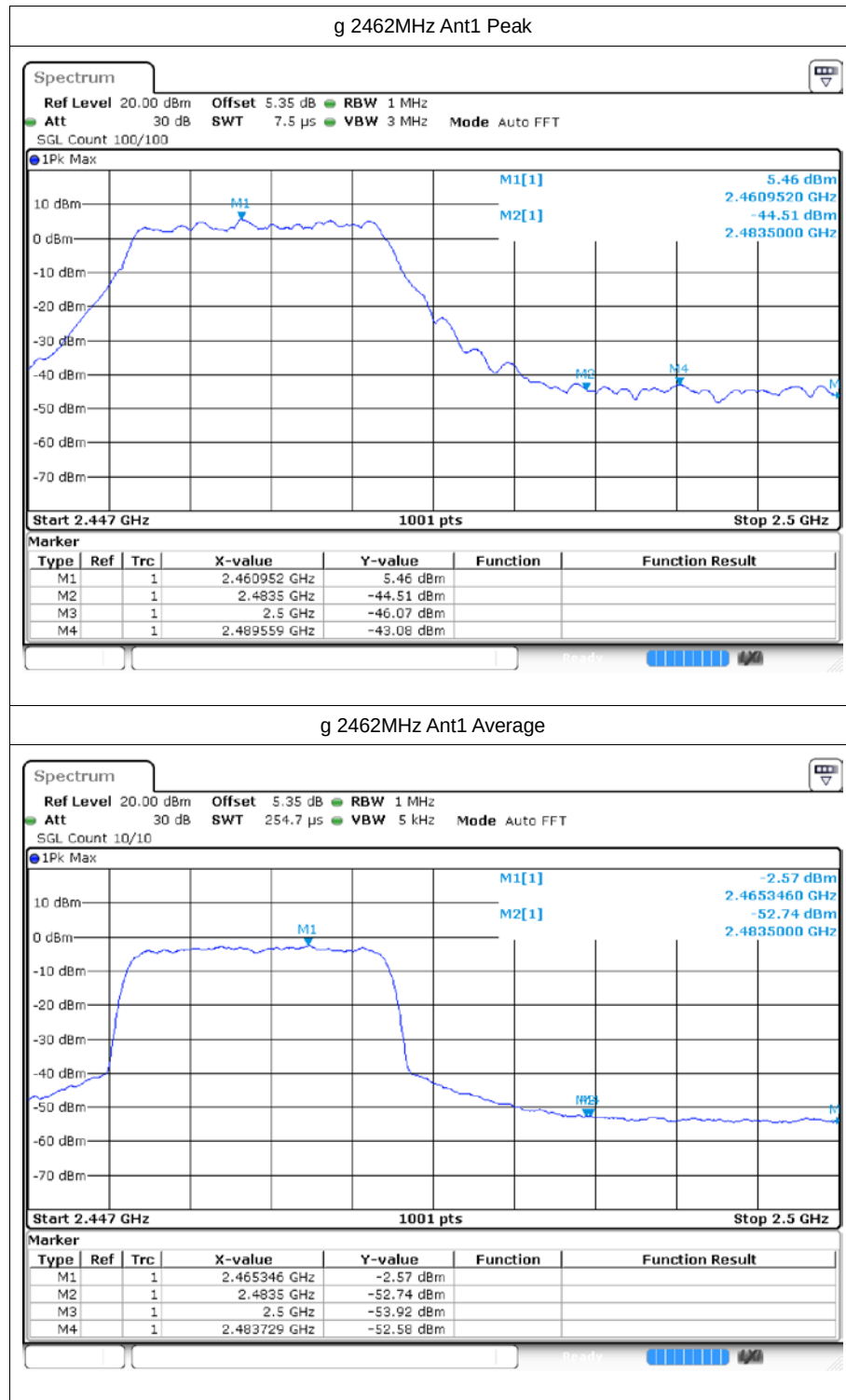
n20	2462	Ant1	2500	-45.16	2.54	52.64	Peak	74	Pass
n20	2462	Ant1	2500	-53.24	2.54	44.56	Average	54	Pass

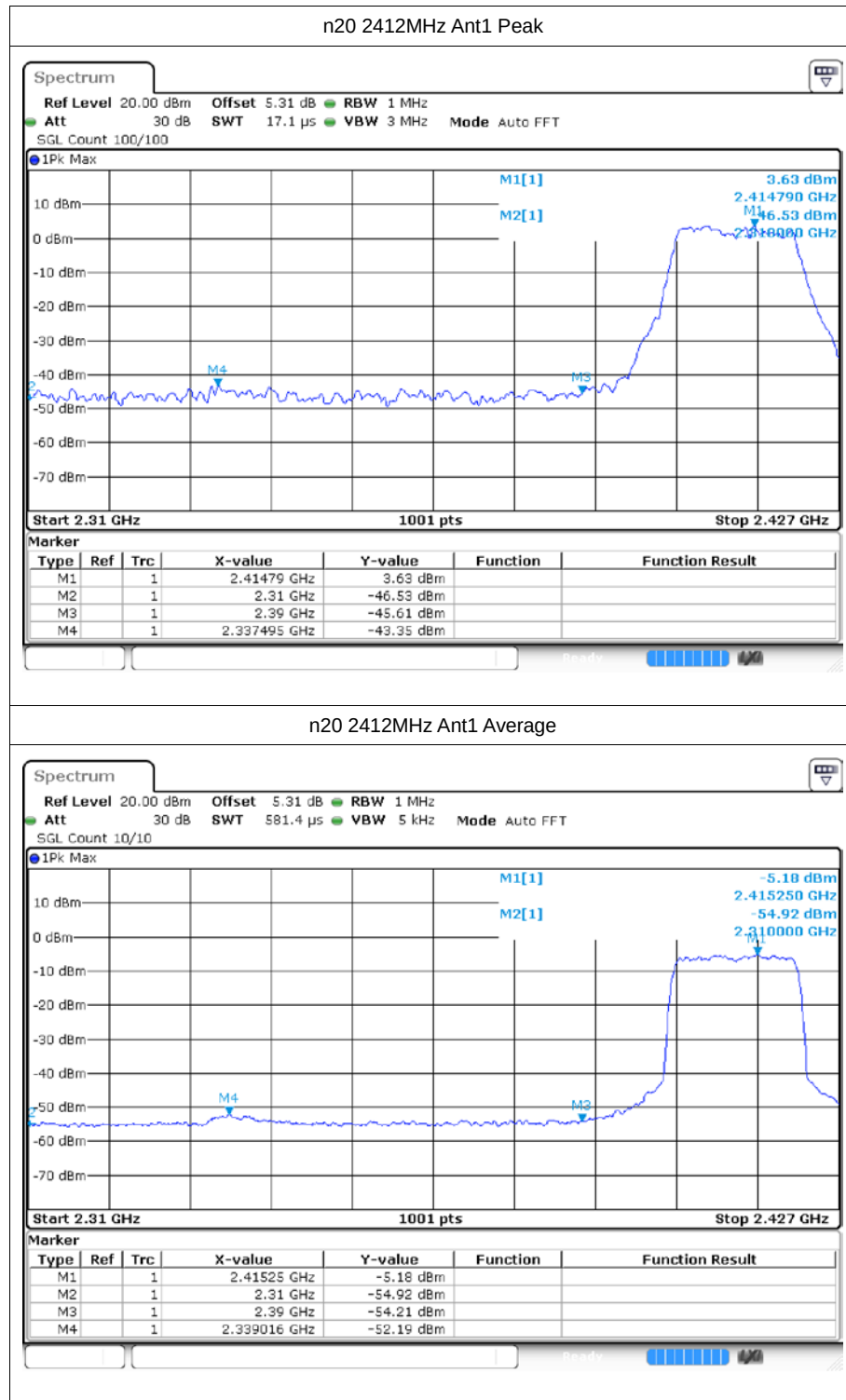
7.2 Test Graphs

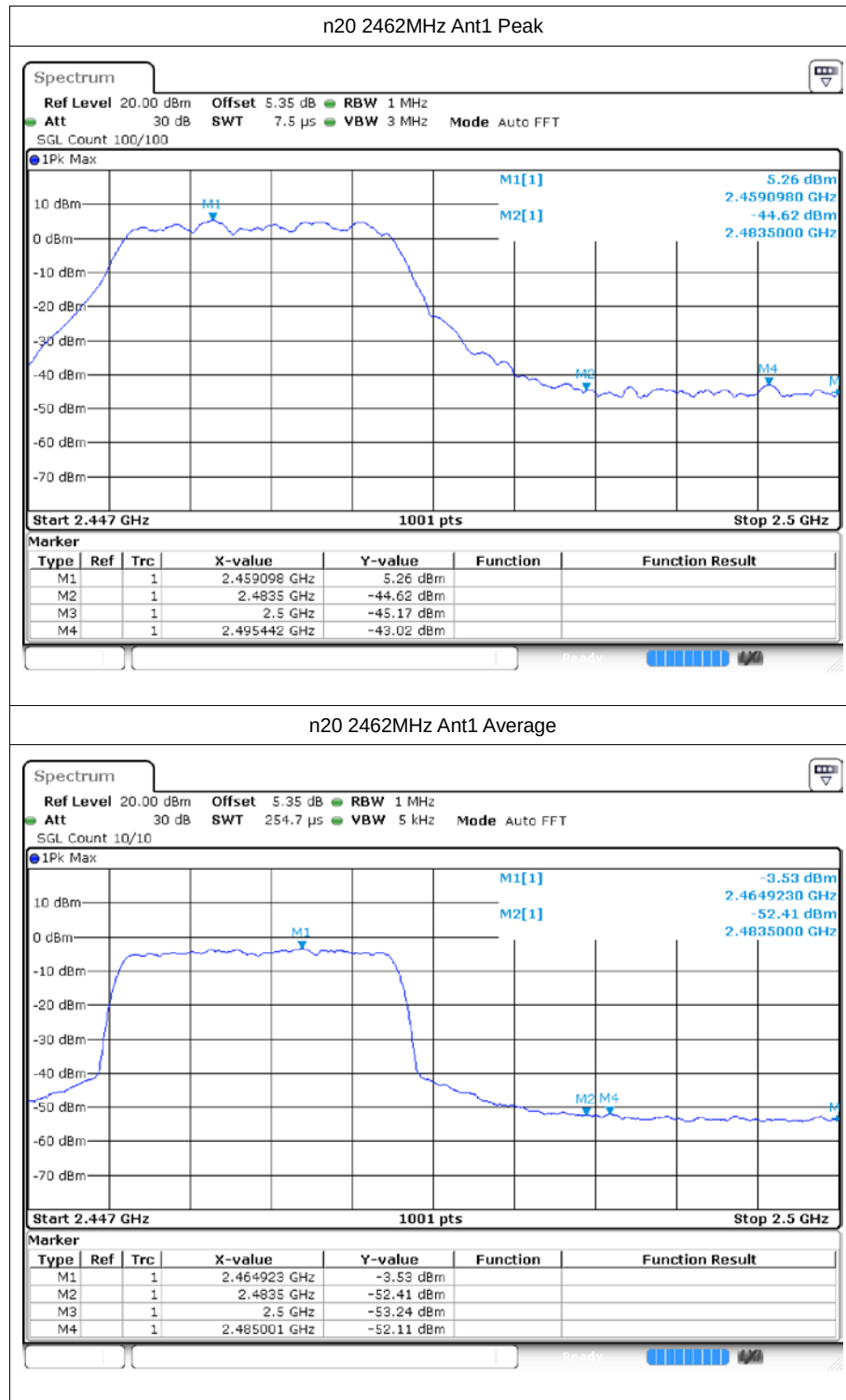












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