



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Smart TV Box

Trade Mark: N/A

Test Model: T95Q

Environmental Conditions

Temperature:	15.7° C
Relative Humidity:	51.9%
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

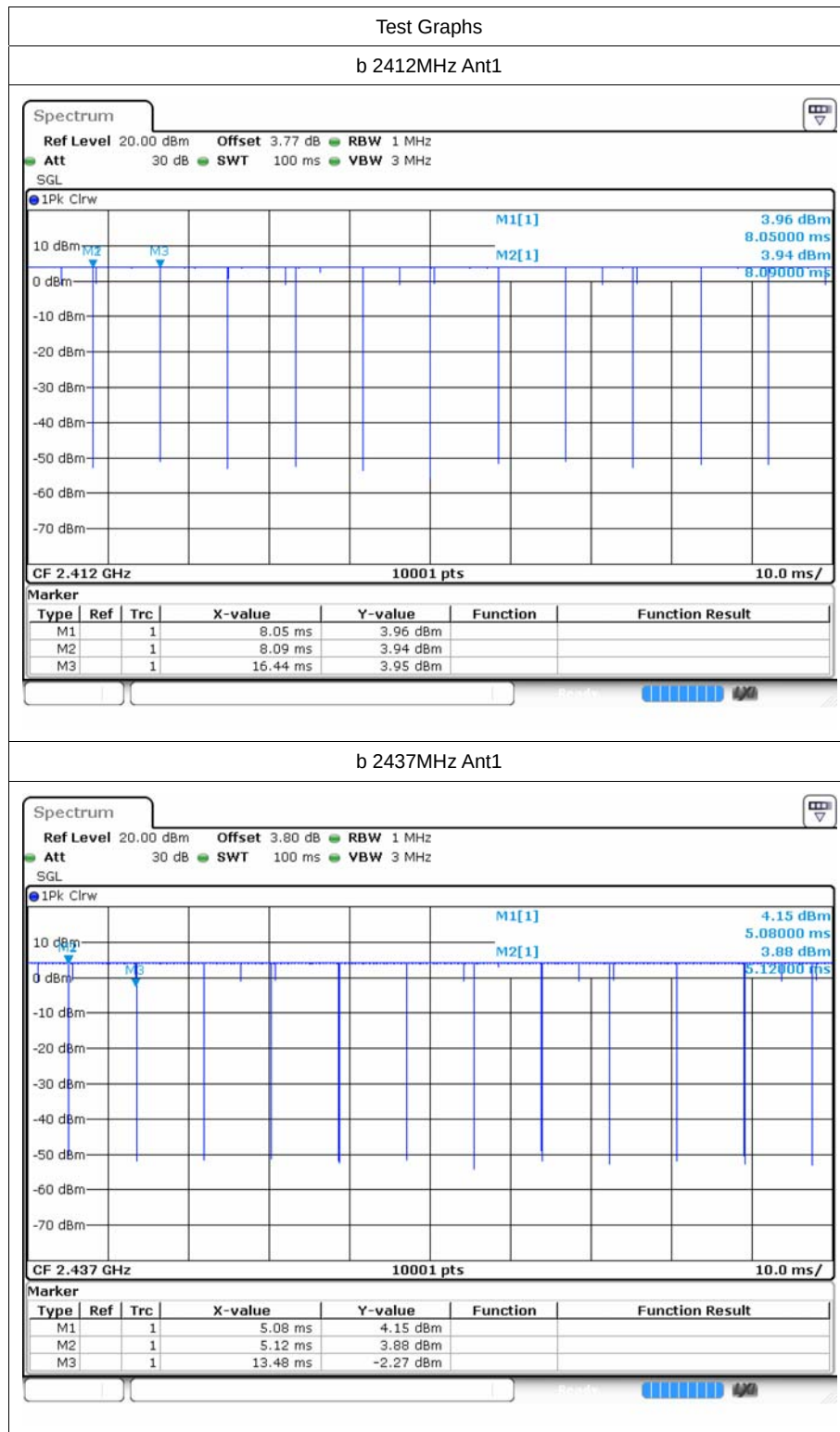


1 Duty Cycle

1.1 Test Result

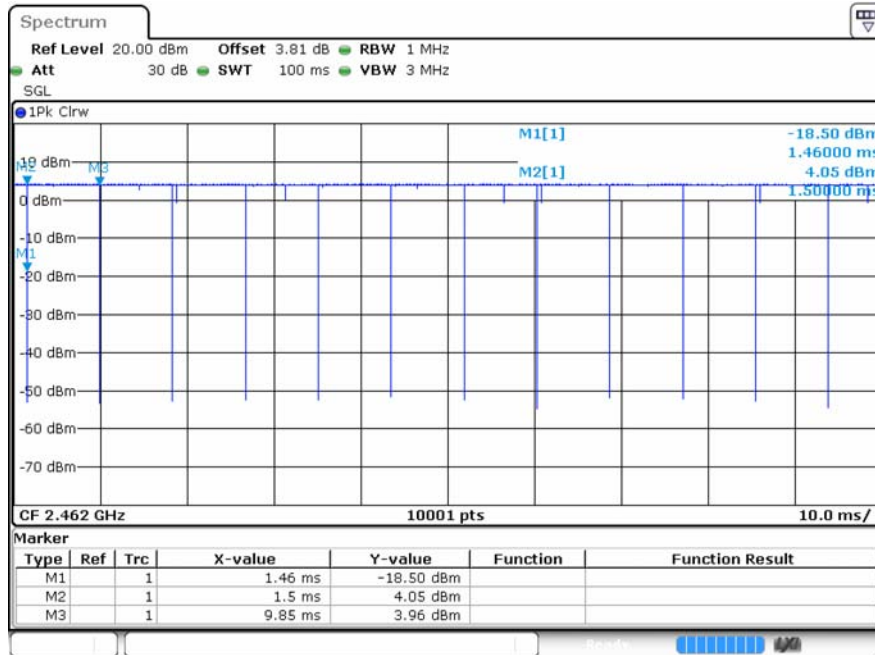
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
b	2412	Ant1	99.63	0.12
b	2437	Ant1	99.6	0.12
b	2462	Ant1	99.61	0.12
g	2412	Ant1	86.85	4.76
g	2437	Ant1	86.9	4.76
g	2462	Ant1	86.98	4.76
n20	2412	Ant1	87.6	4.17
n20	2437	Ant1	87.55	4.35
n20	2462	Ant1	87.59	4.35

1.2 Test Graphs

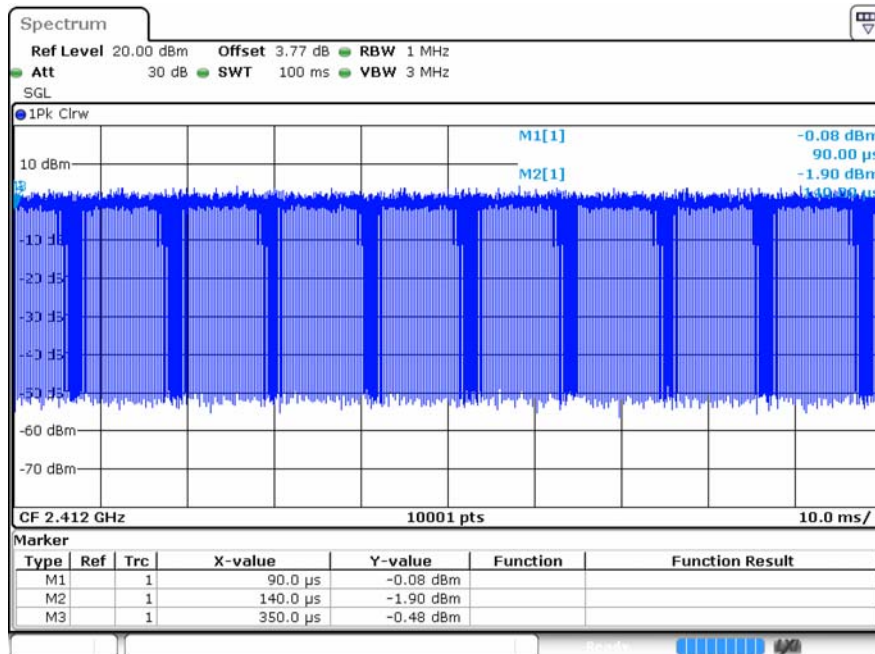


Test Graphs

b 2462MHz Ant1

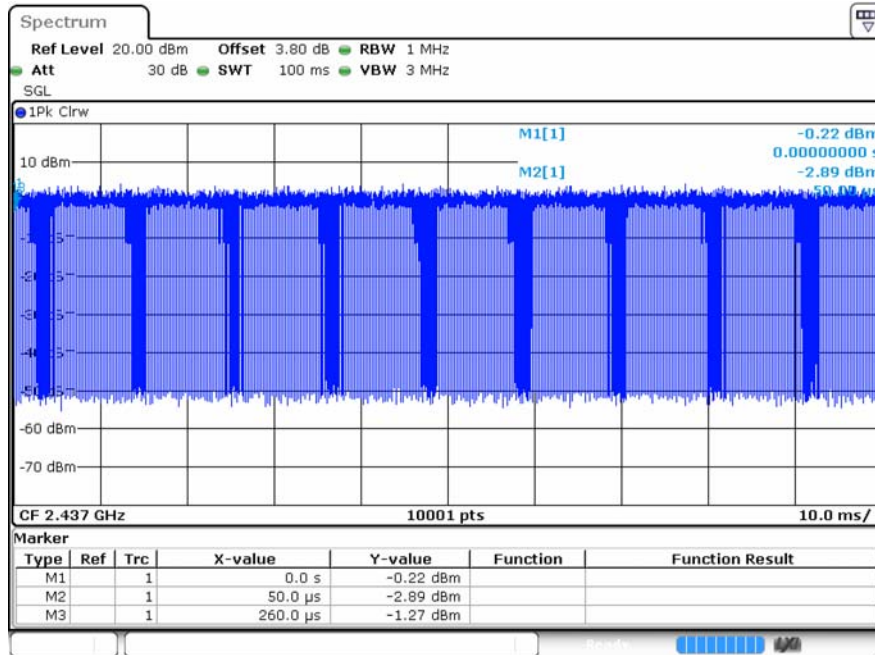


g 2412MHz Ant1

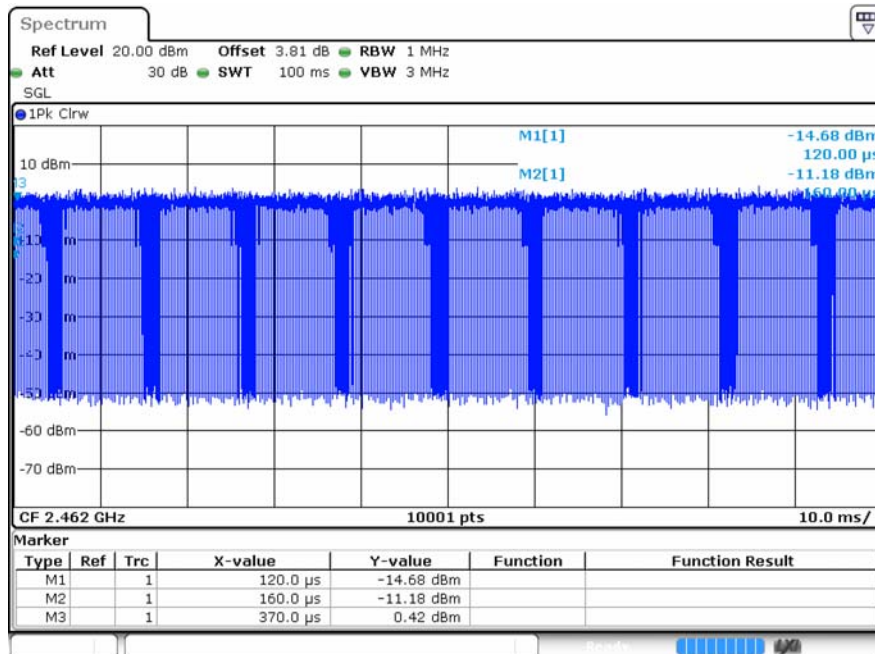


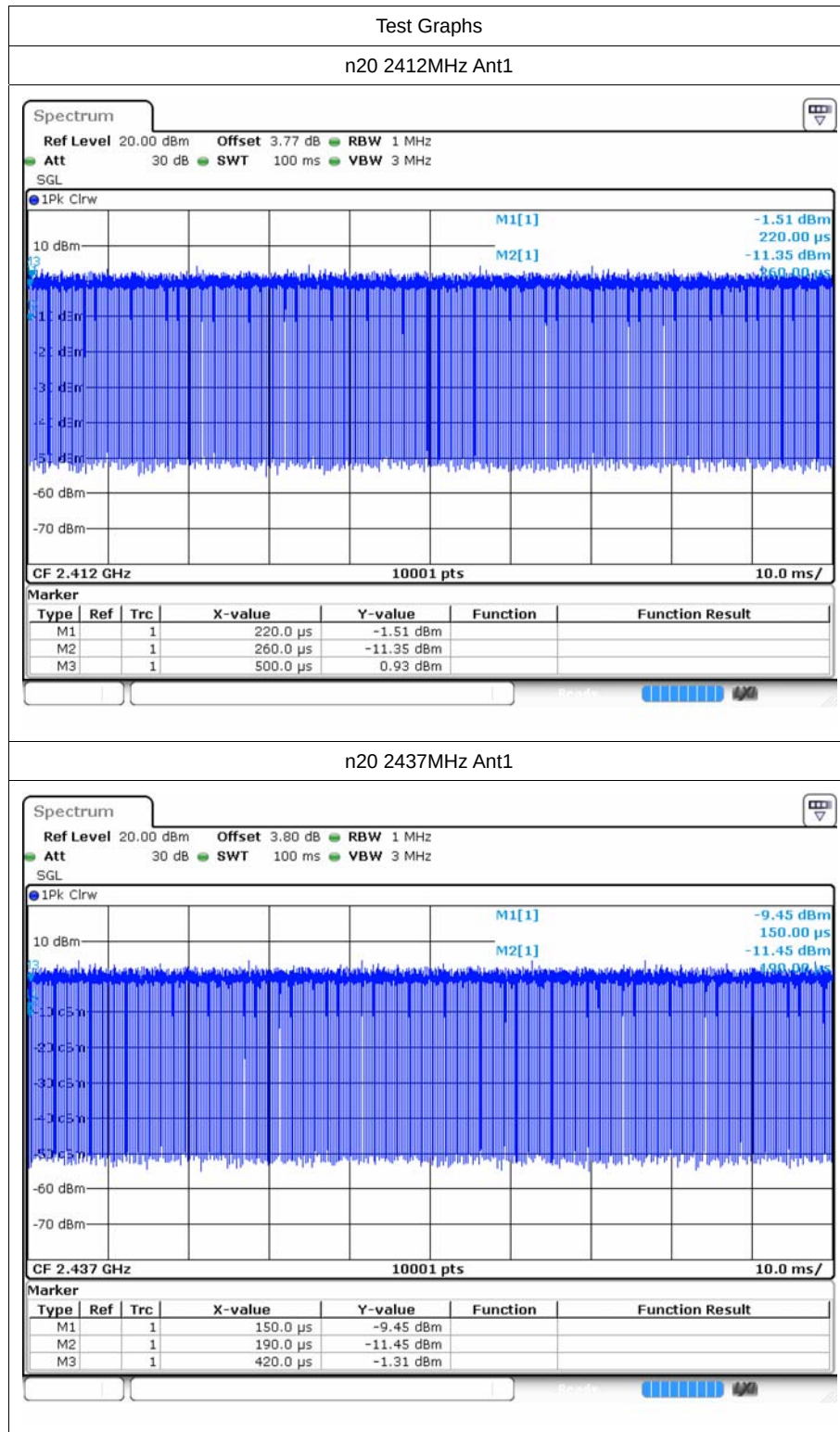
Test Graphs

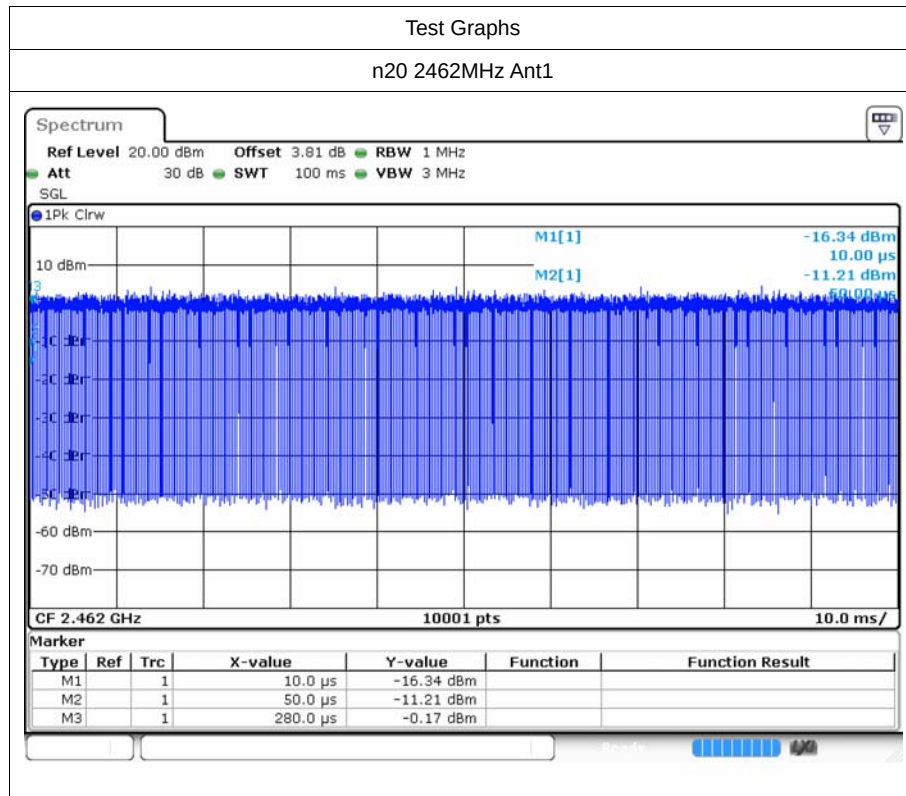
g 2437MHz Ant1



g 2462MHz Ant1









2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	14.46	30	Pass
b	2437	Ant1	14.56	30	Pass
b	2462	Ant1	14.42	30	Pass
g	2412	Ant1	13.4	30	Pass
g	2437	Ant1	13.37	30	Pass
g	2462	Ant1	13.25	30	Pass
n20	2412	Ant1	13.33	30	Pass
n20	2437	Ant1	13.44	30	Pass
n20	2462	Ant1	13.34	30	Pass

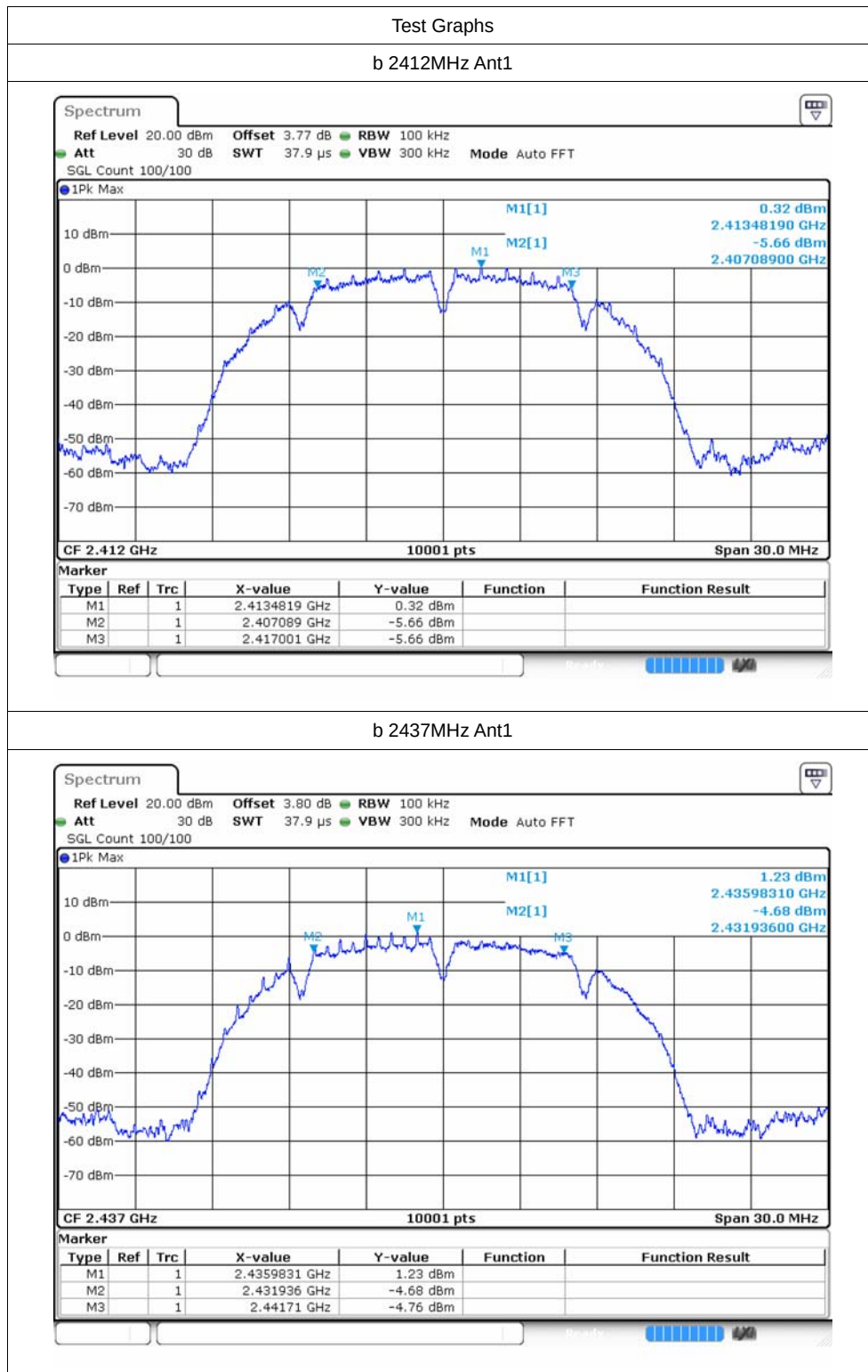


3 -6dB Bandwidth

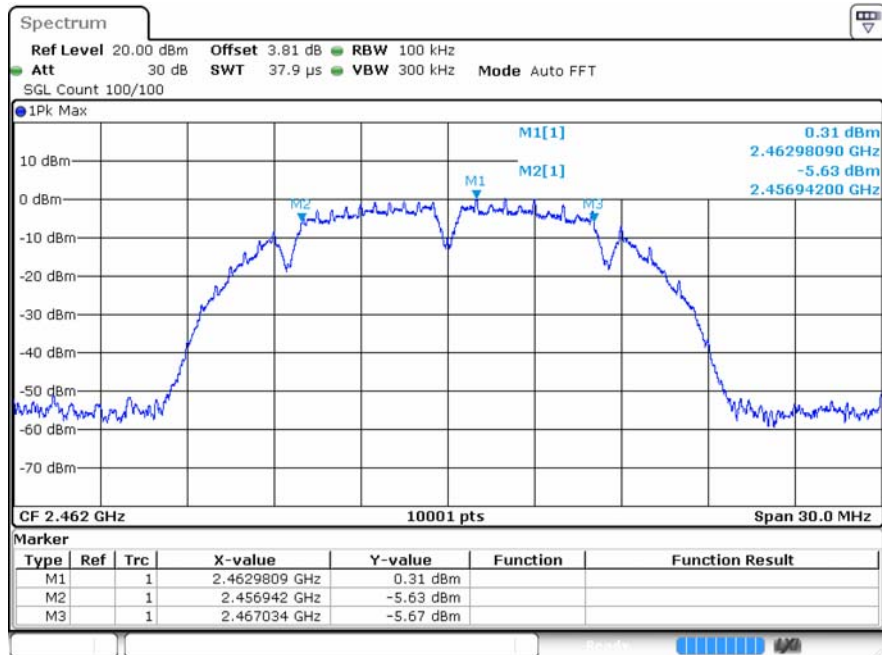
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	9.912	0.5	Pass
b	2437	Ant1	9.774	0.5	Pass
b	2462	Ant1	10.092	0.5	Pass
g	2412	Ant1	15.114	0.5	Pass
g	2437	Ant1	15.105	0.5	Pass
g	2462	Ant1	15.066	0.5	Pass
n20	2412	Ant1	15.684	0.5	Pass
n20	2437	Ant1	15.129	0.5	Pass
n20	2462	Ant1	15.12	0.5	Pass

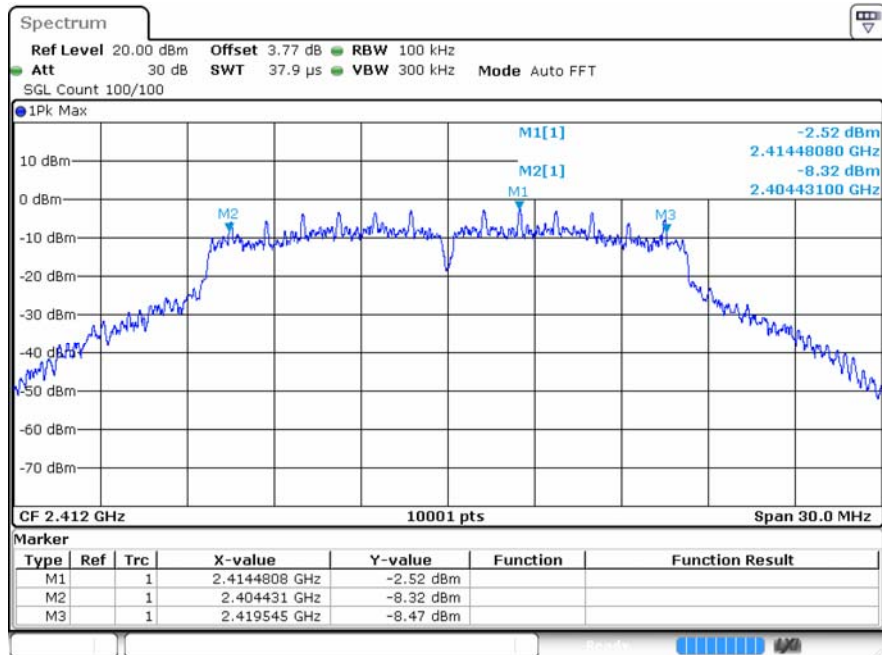
3.2 Test Graphs



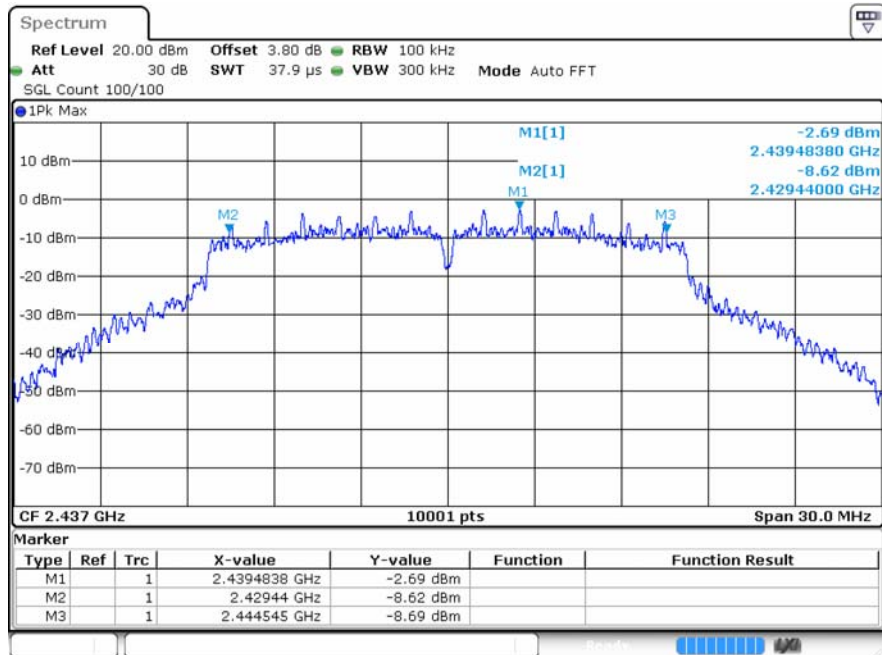
b 2462MHz Ant1



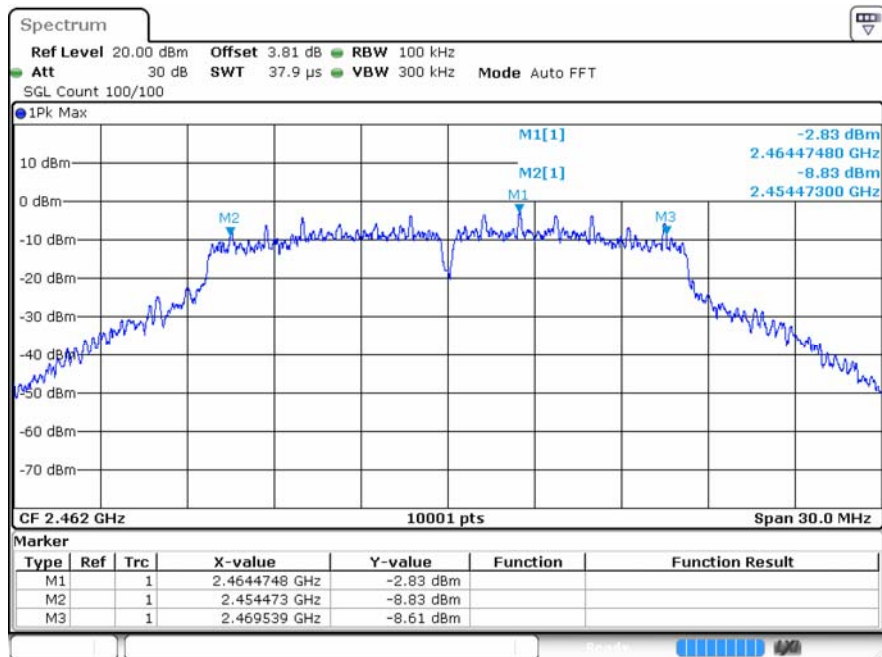
g 2412MHz Ant1

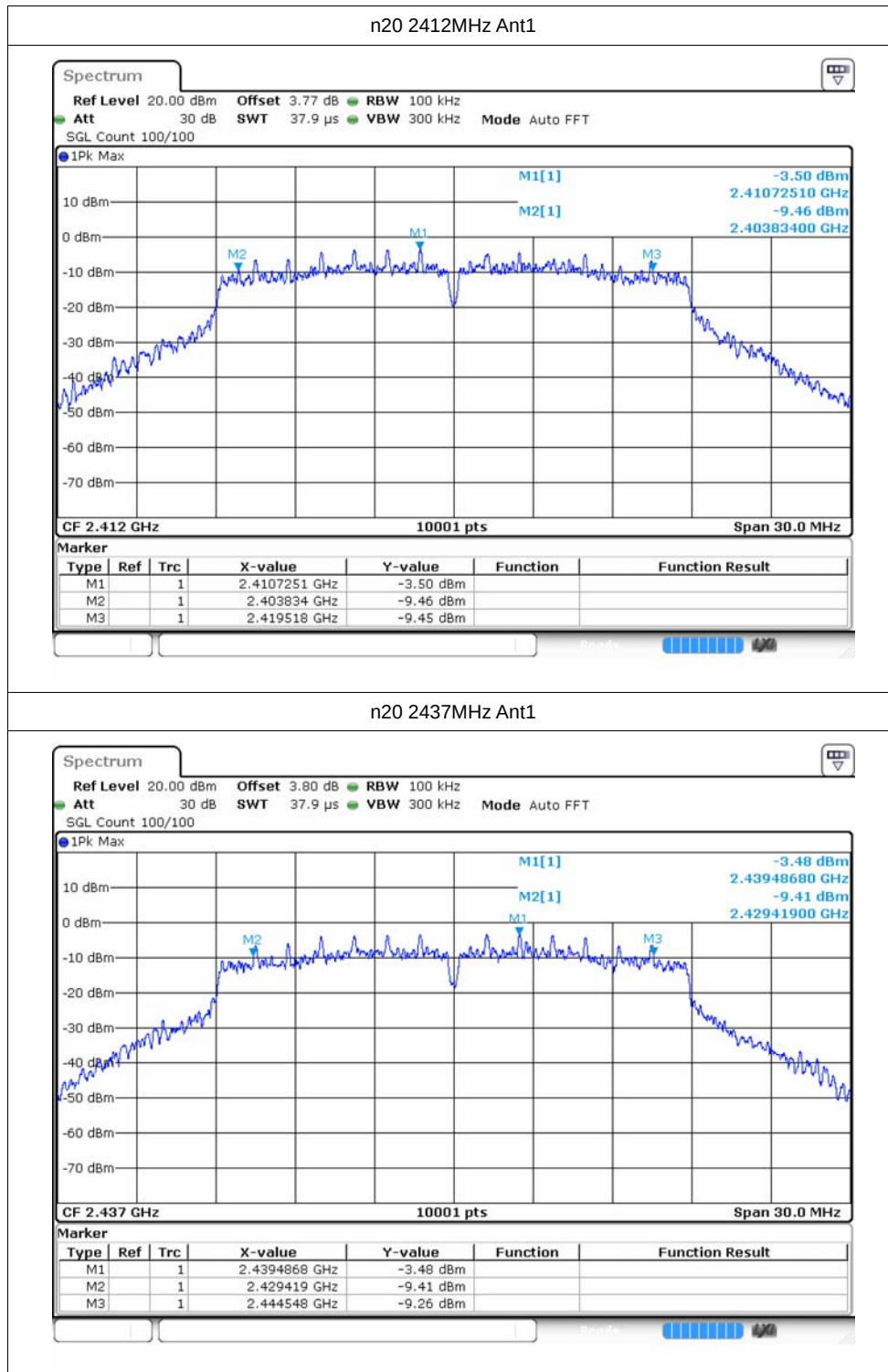


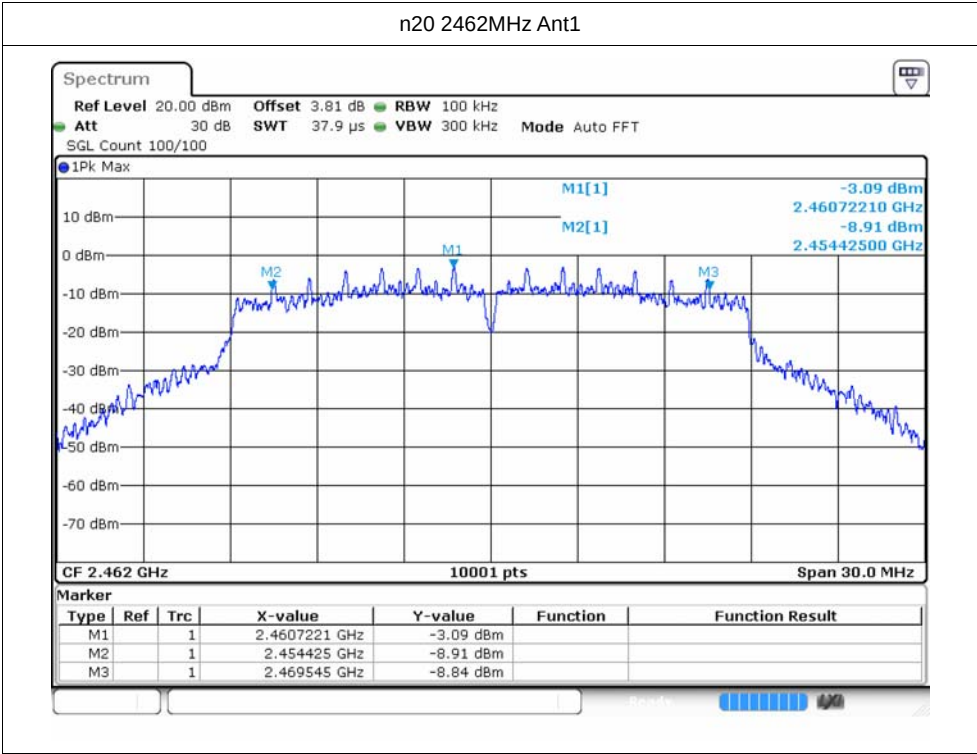
g 2437MHz Ant1



g 2462MHz Ant1





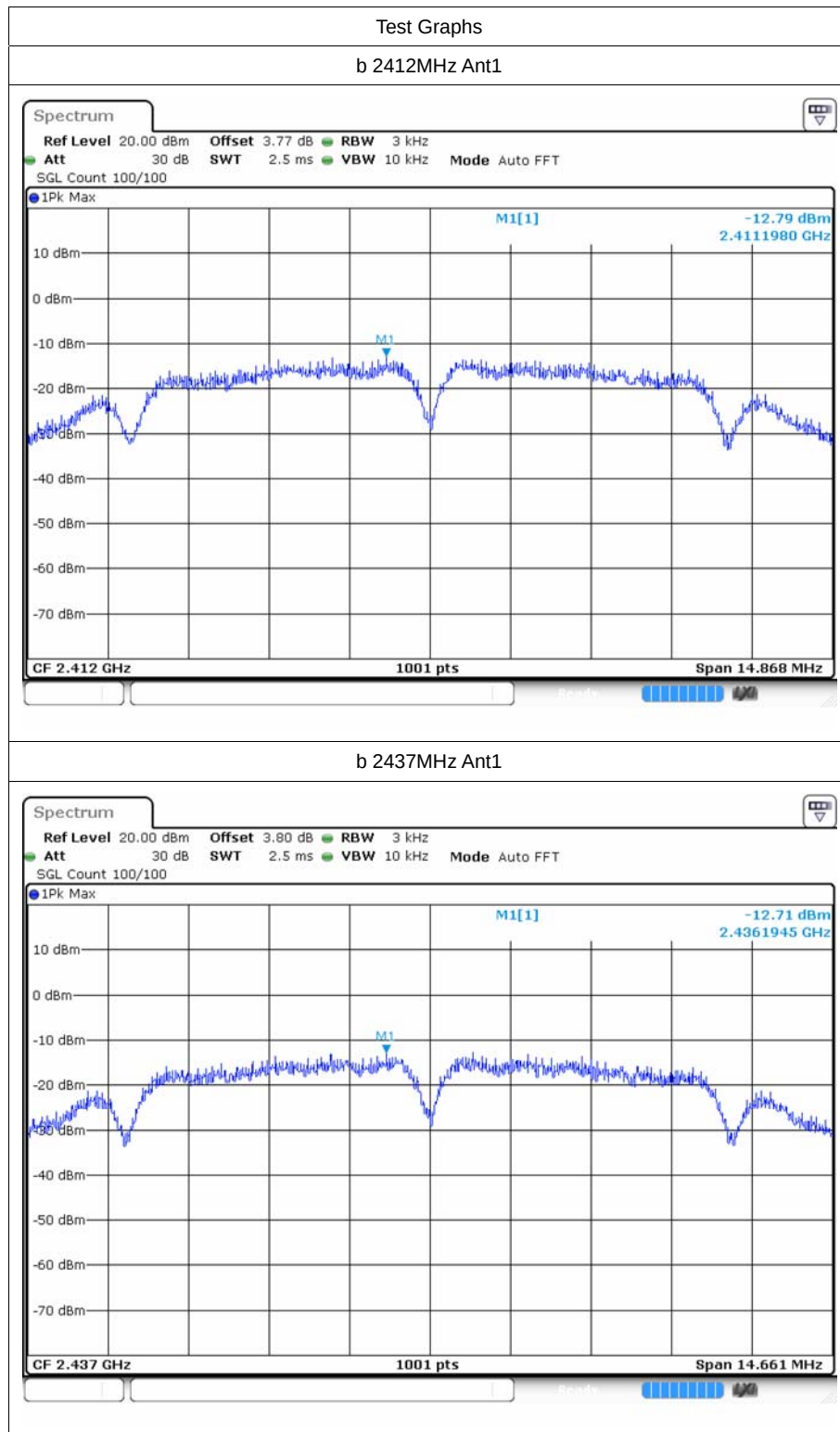


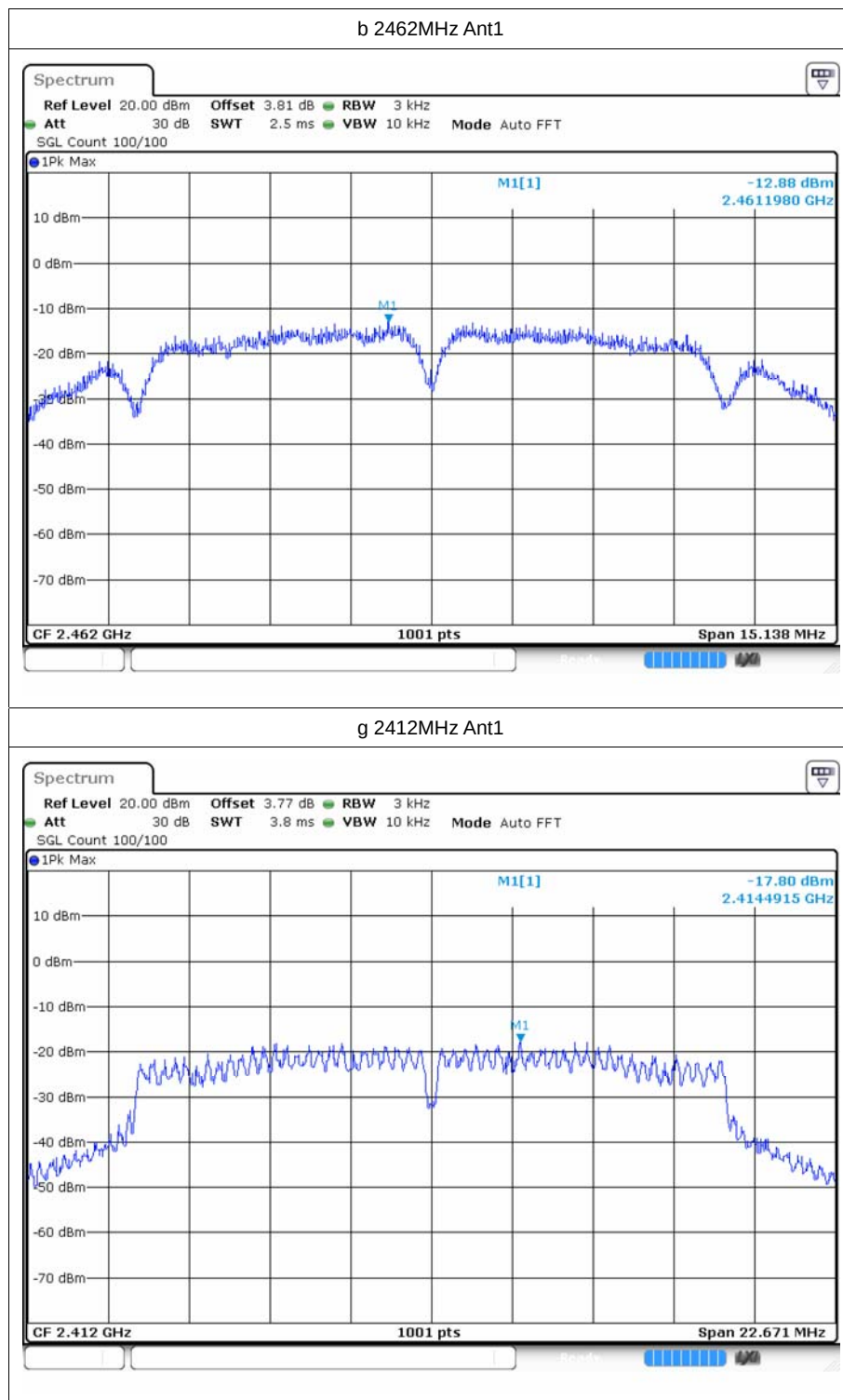
4 Maximum Power Spectral Density Level

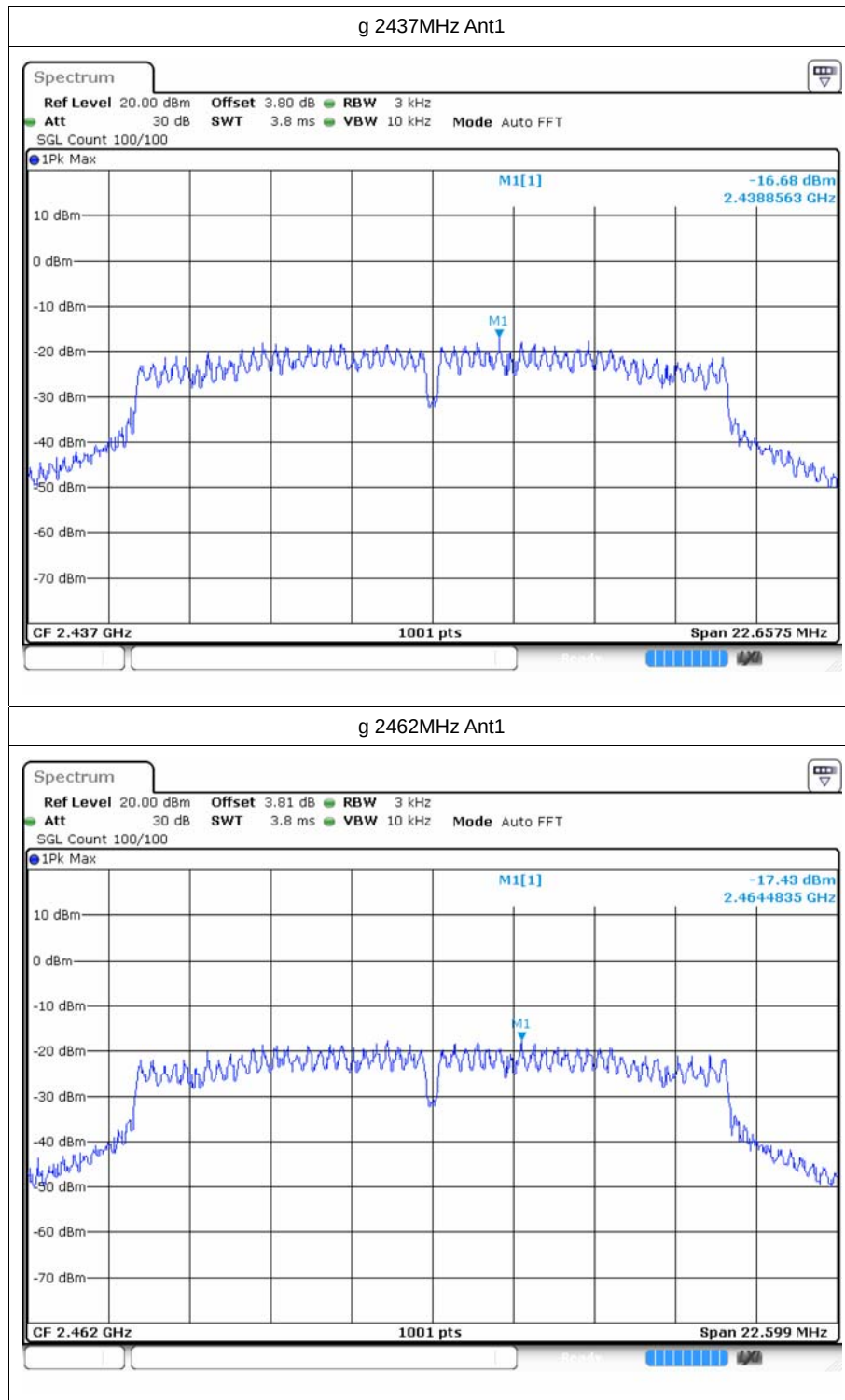
4.1 Test Result

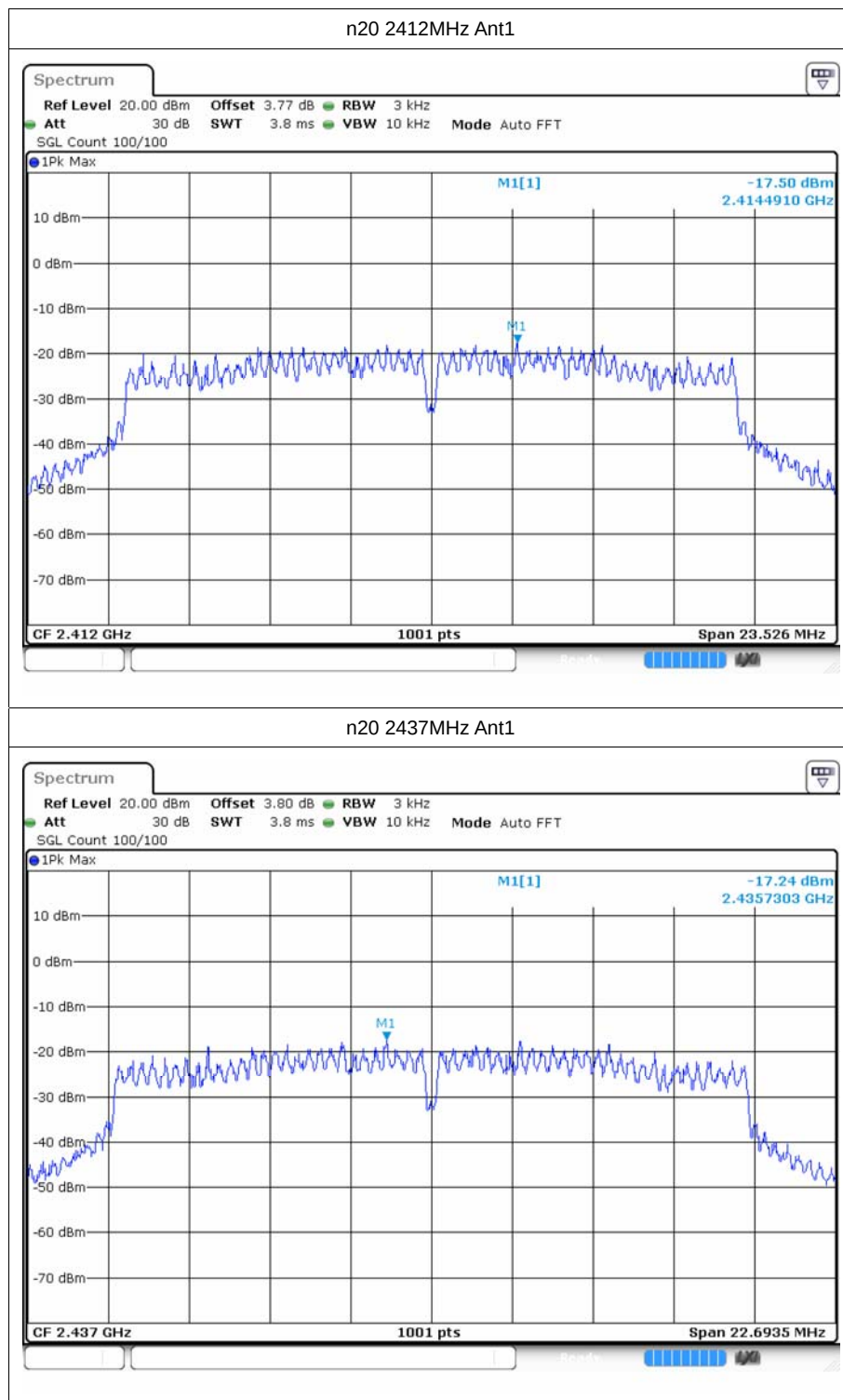
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-12.79	≤ 8	Pass
b	2437	Ant1	-12.71	≤ 8	Pass
b	2462	Ant1	-12.88	≤ 8	Pass
g	2412	Ant1	-17.8	≤ 8	Pass
g	2437	Ant1	-16.68	≤ 8	Pass
g	2462	Ant1	-17.43	≤ 8	Pass
n20	2412	Ant1	-17.5	≤ 8	Pass
n20	2437	Ant1	-17.24	≤ 8	Pass
n20	2462	Ant1	-16.94	≤ 8	Pass

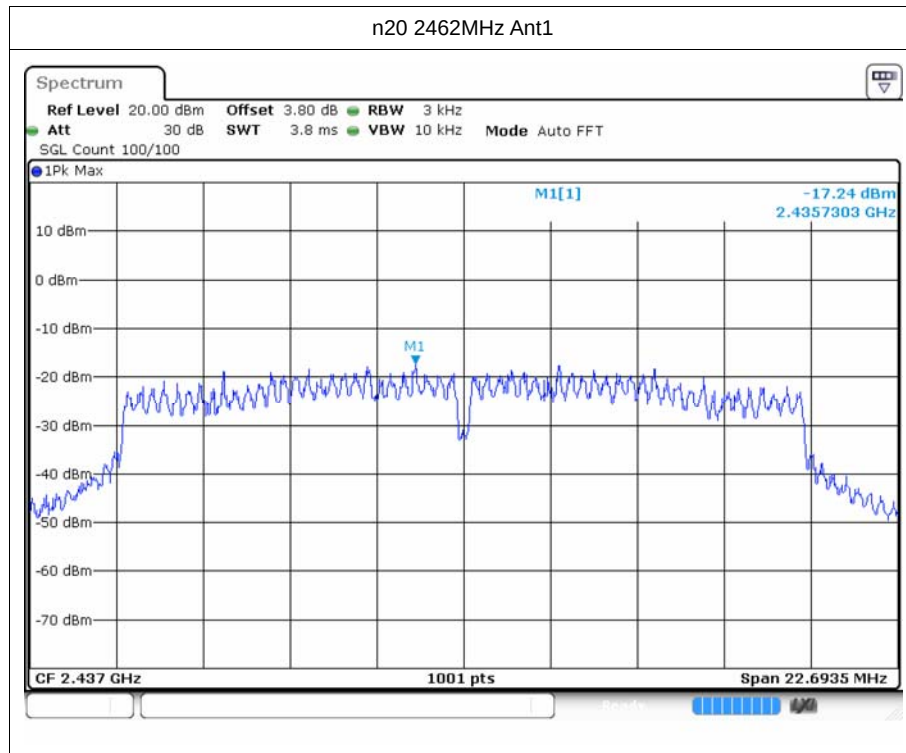
4.2 Test Graphs











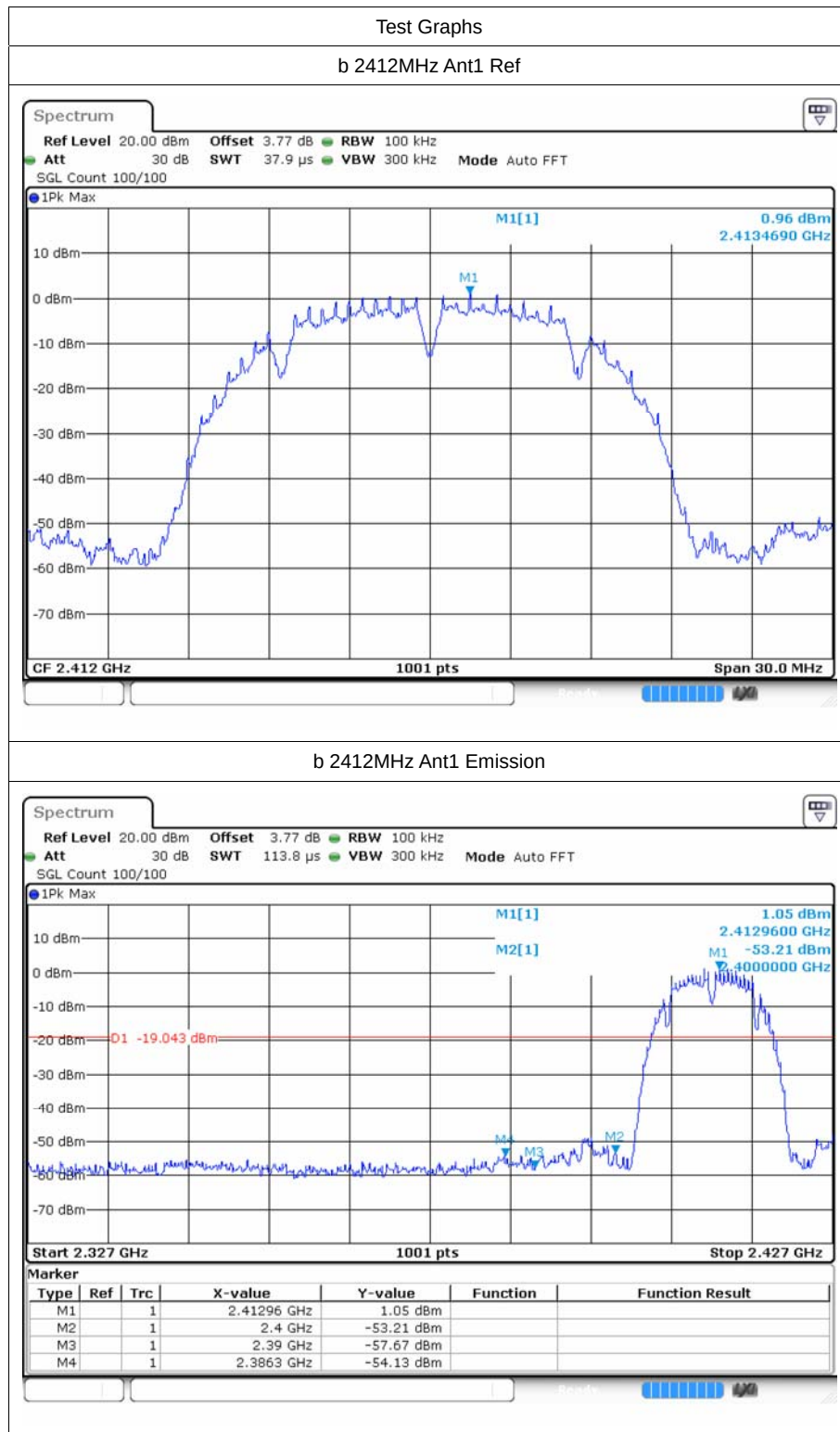


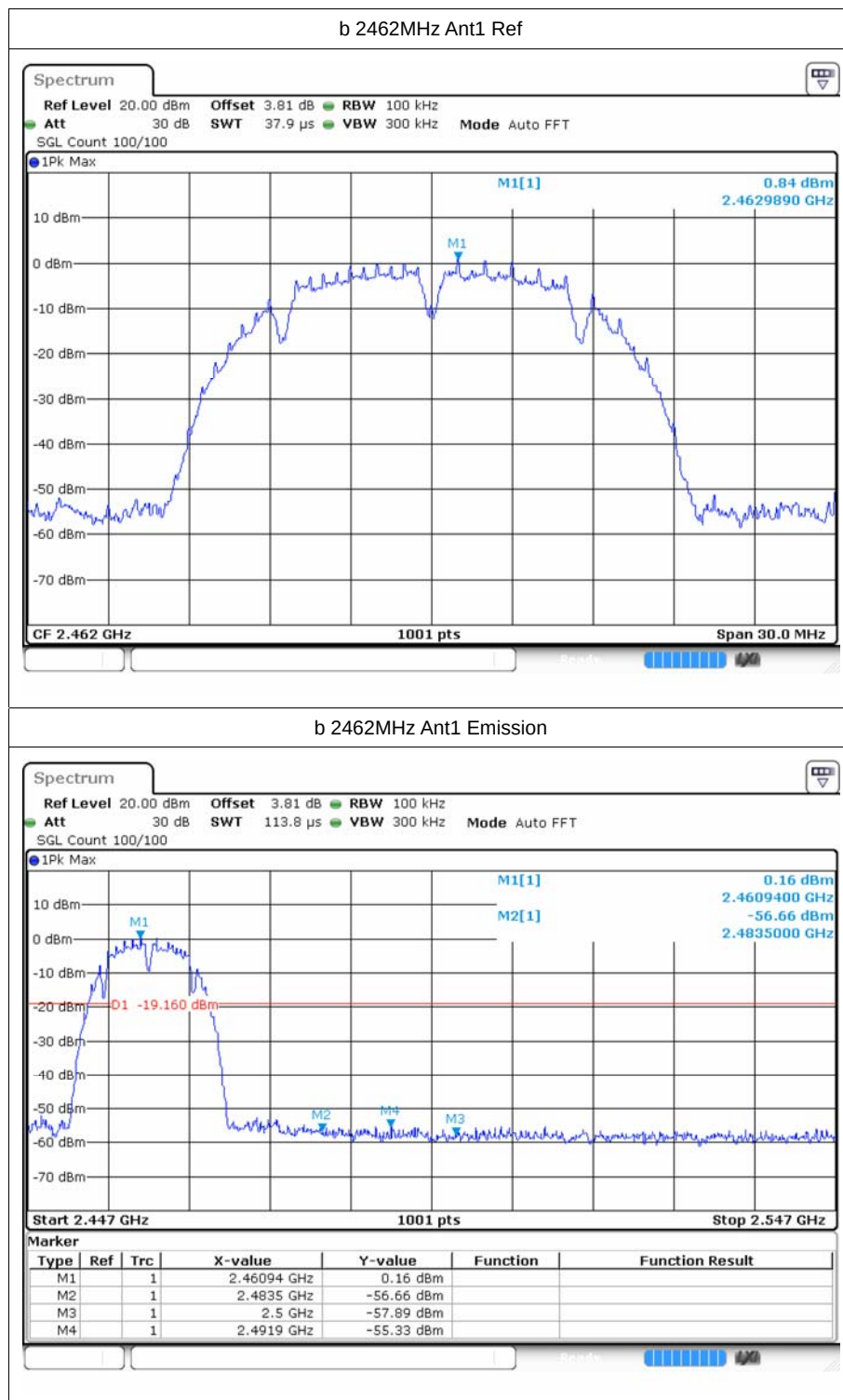
5 Band Edge

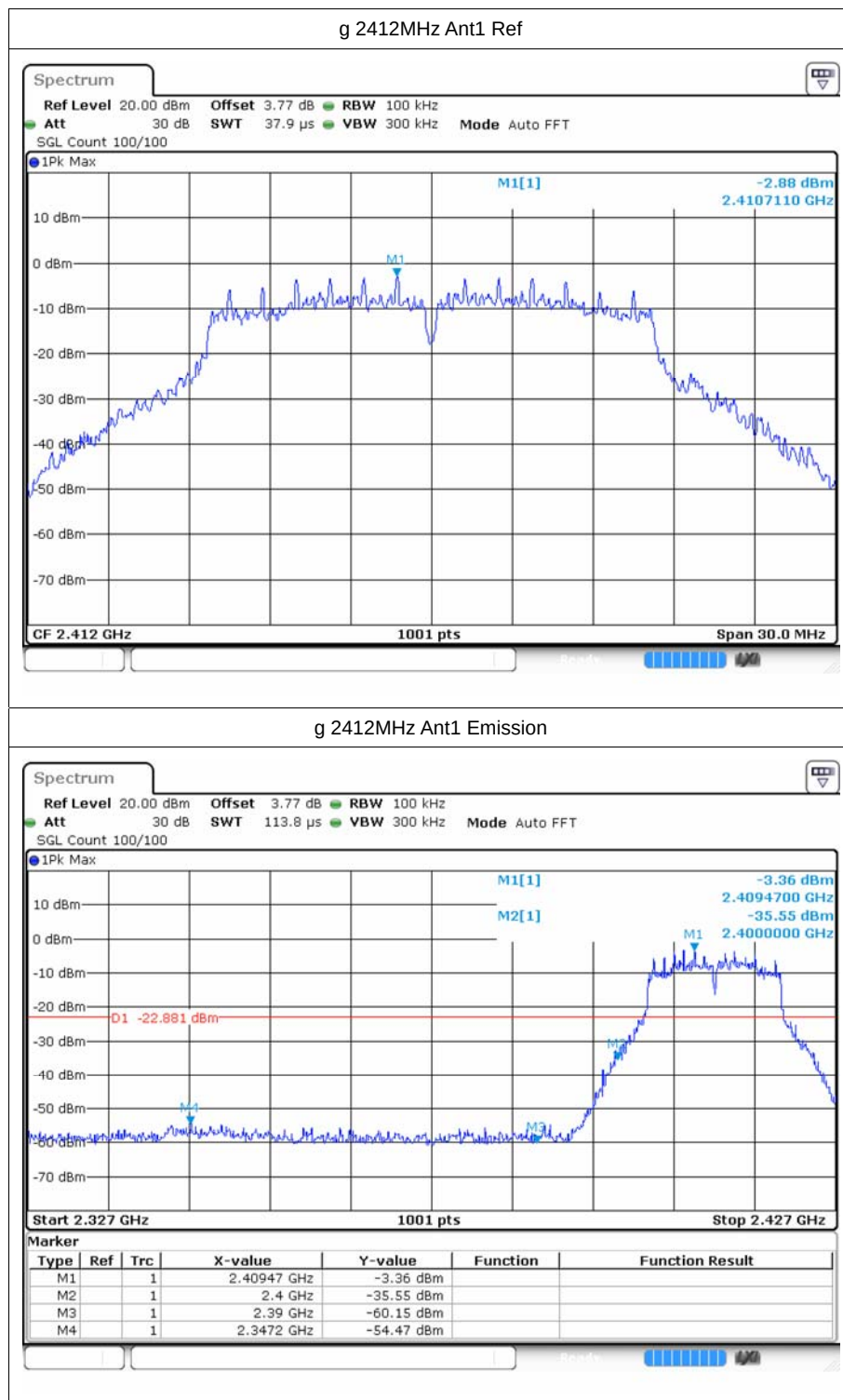
5.1 Test Result

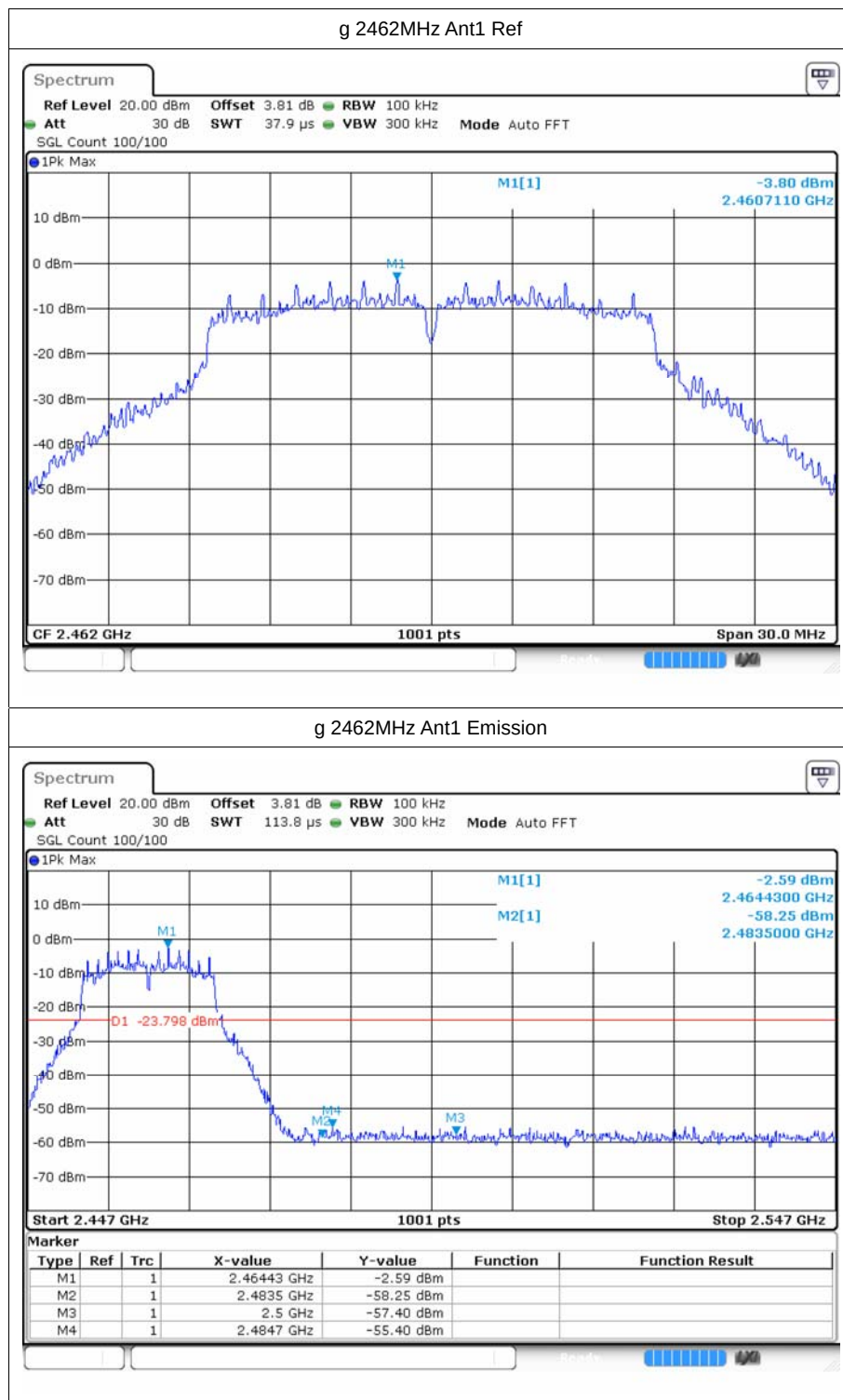
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-55.09	-20	-55.09
b	2462	Ant1	-56.17	-20	Pass
g	2412	Ant1	-51.58	-20	Pass
g	2462	Ant1	-51.59	-20	Pass
n20	2412	Ant1	-51.93	-20	Pass
n20	2462	Ant1	-52.18	-20	Pass

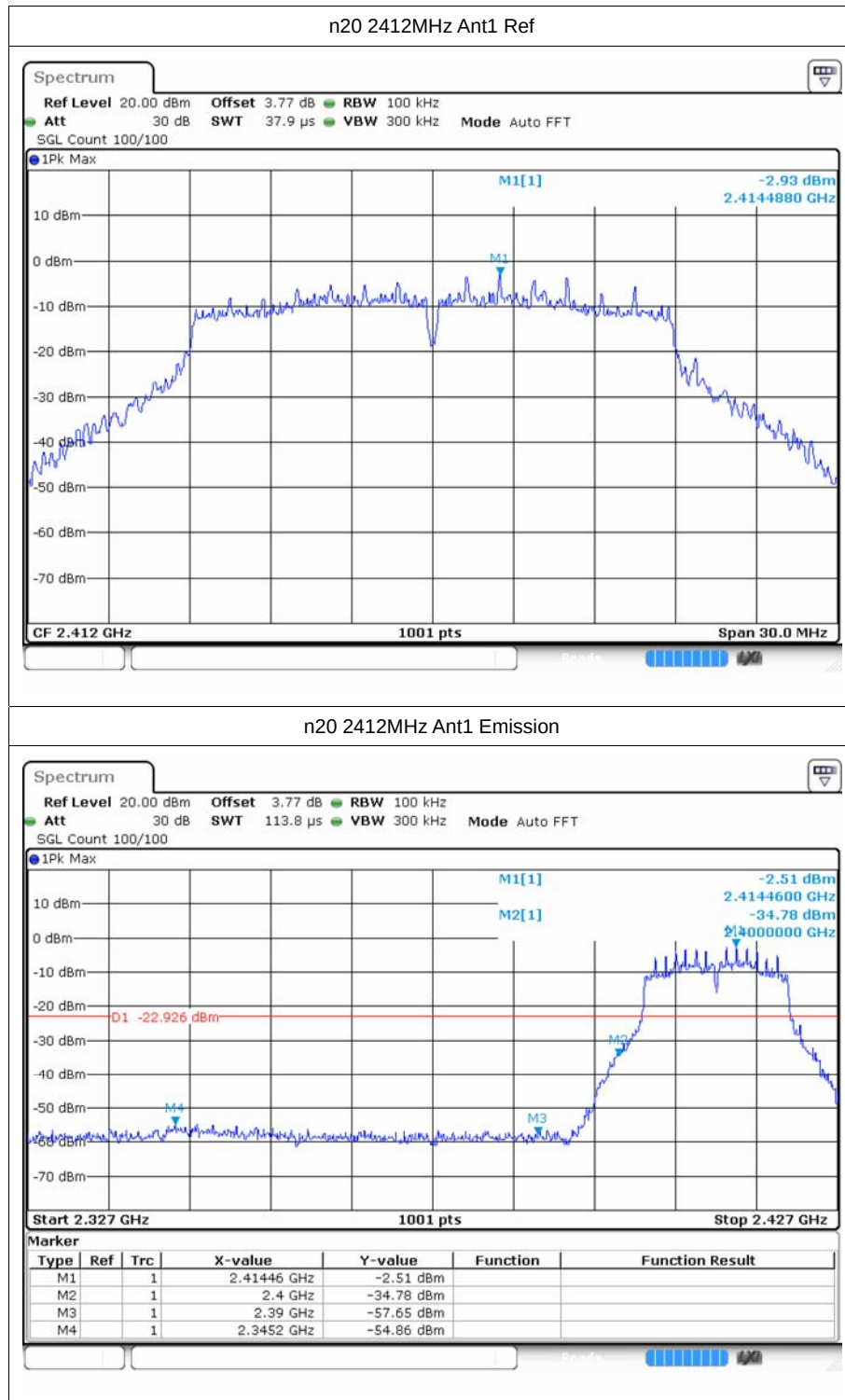
5.2 Test Graphs

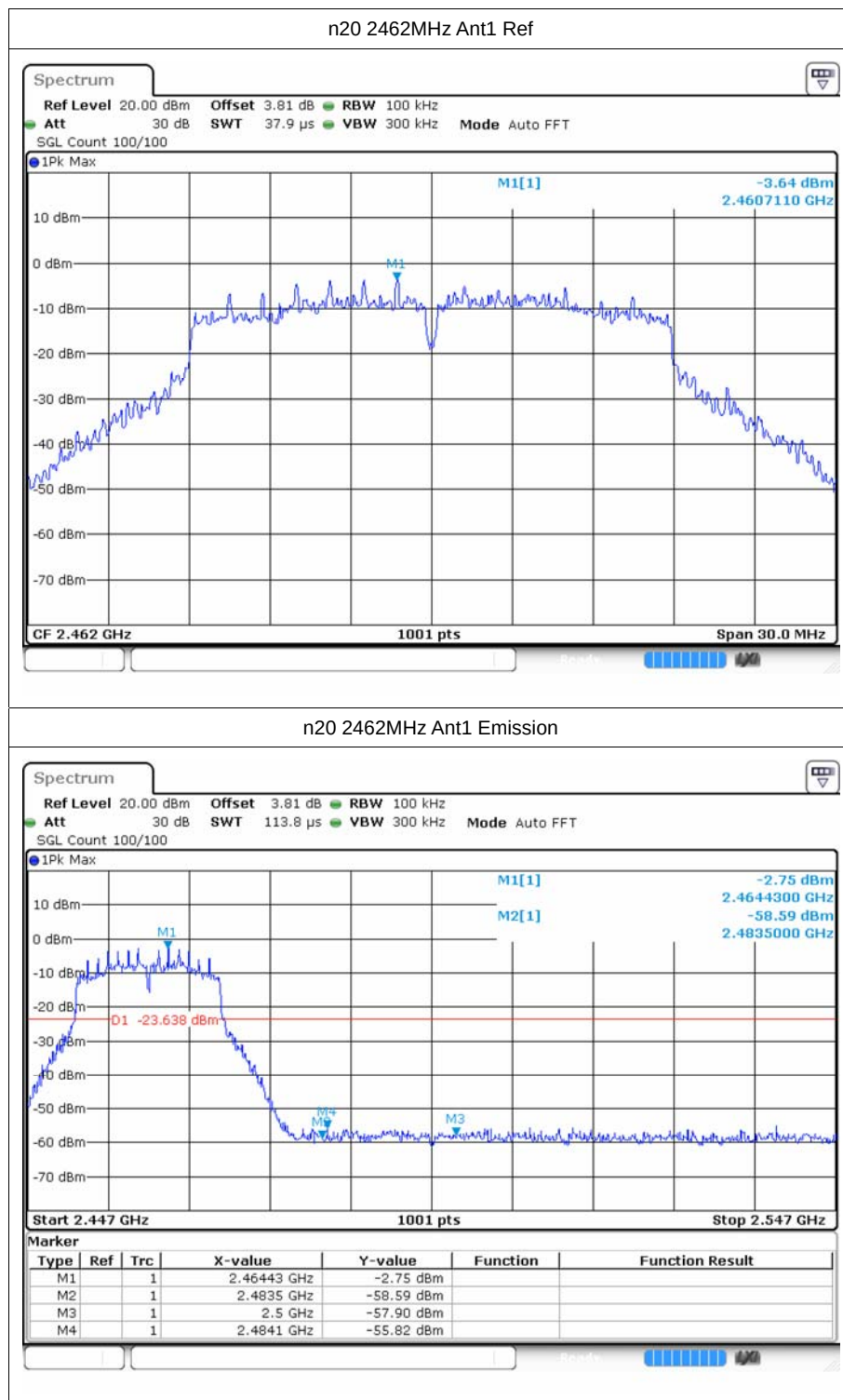












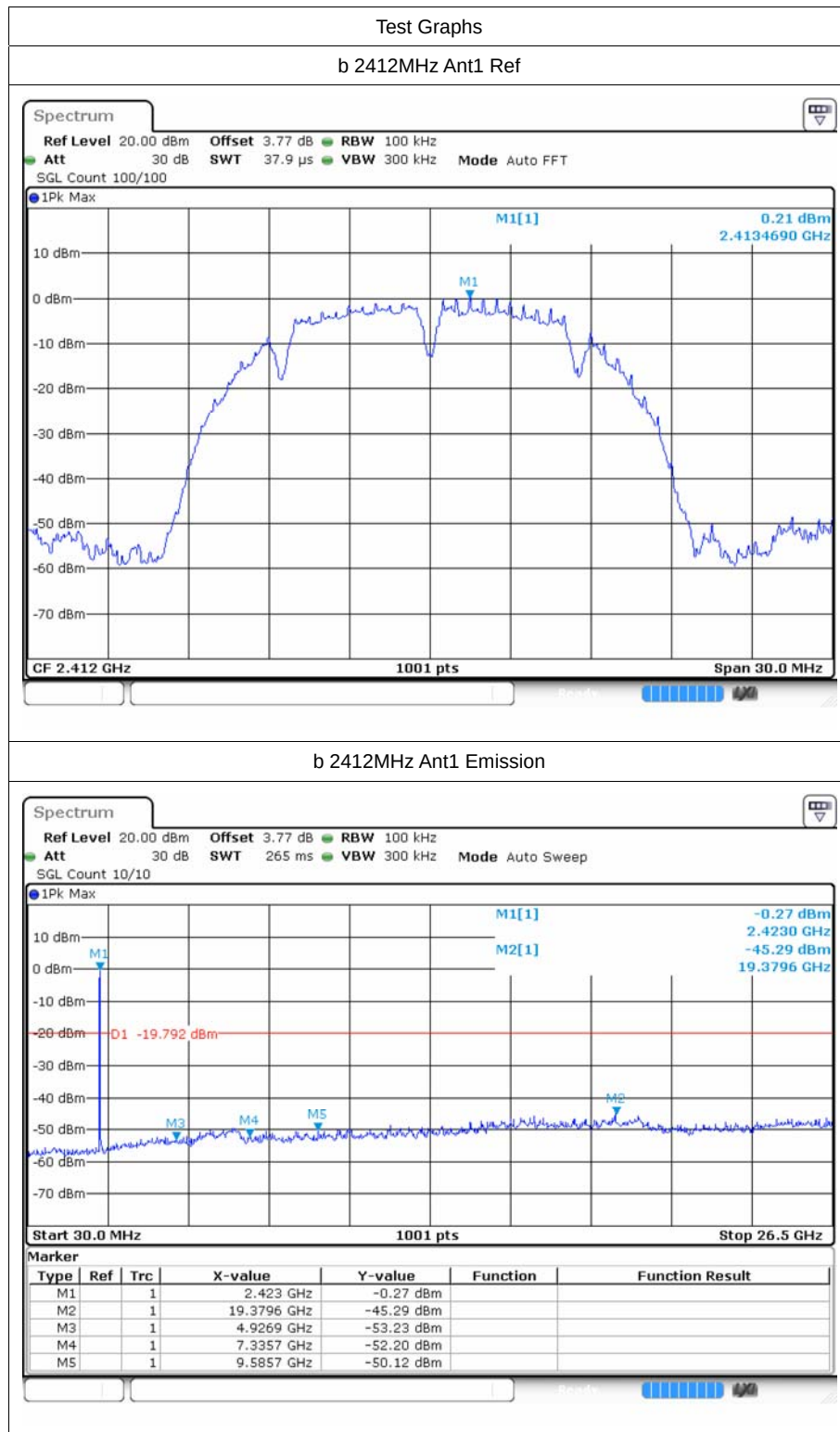


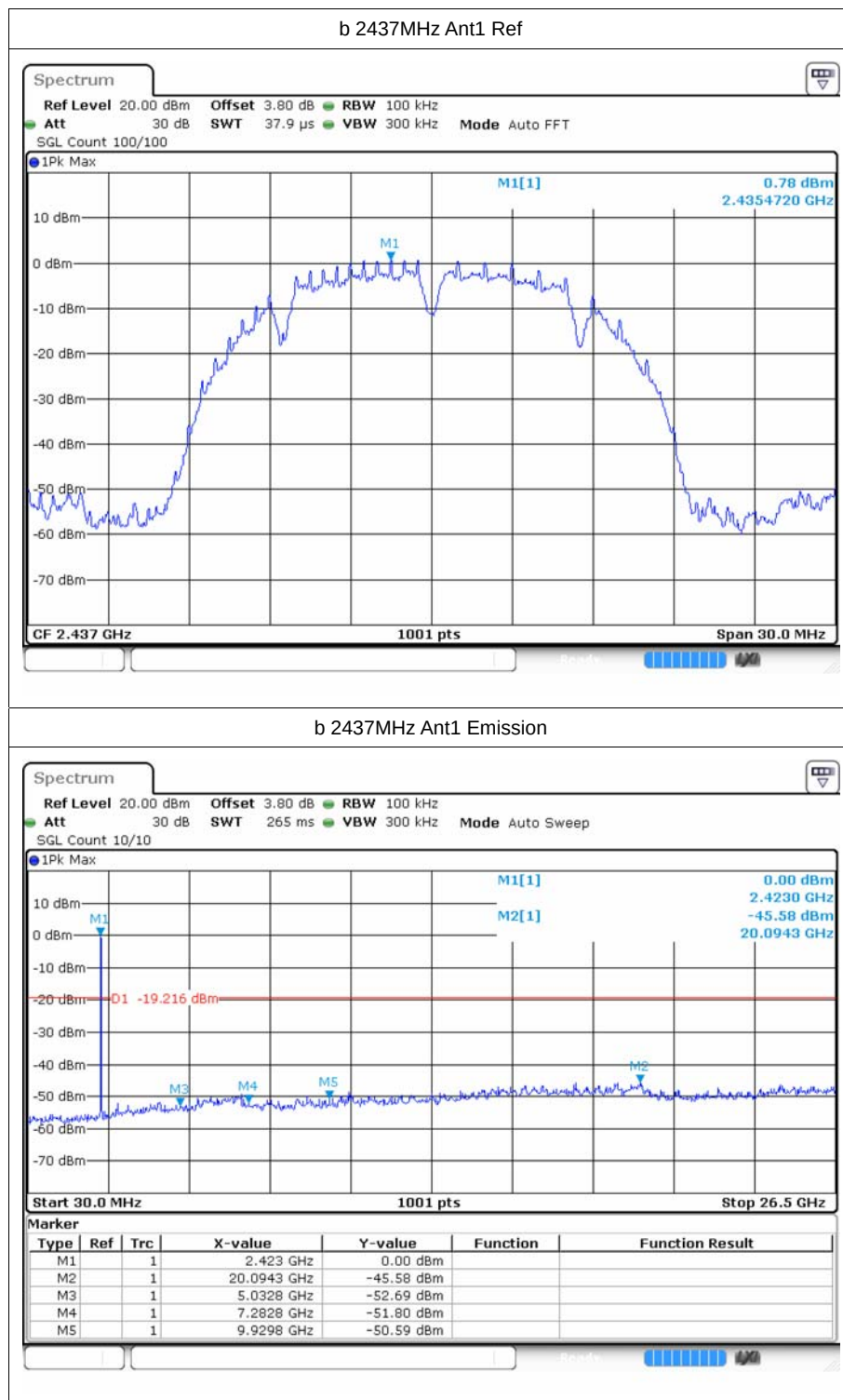
6 Conducted RF Spurious Emission

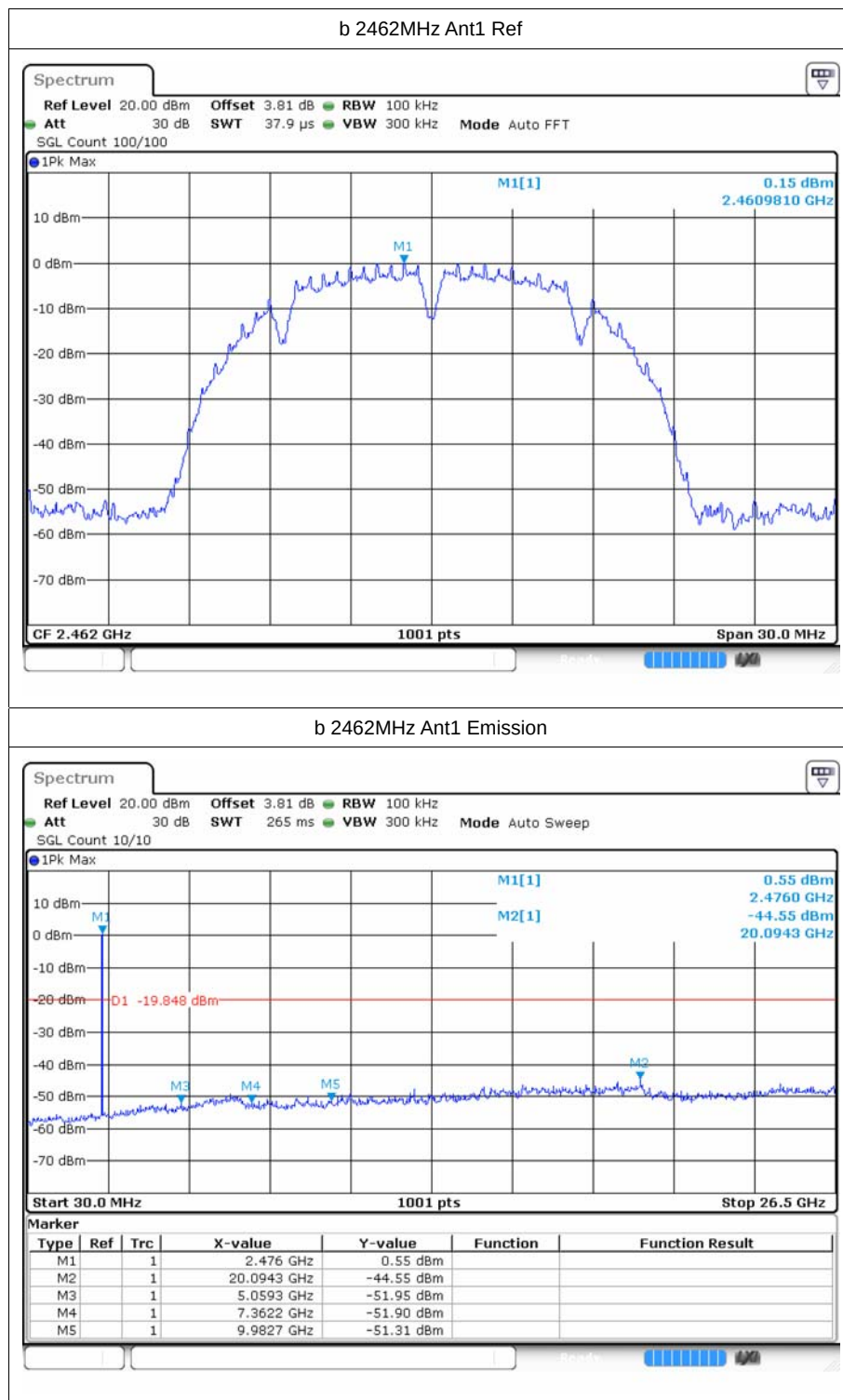
6.1 Test Result

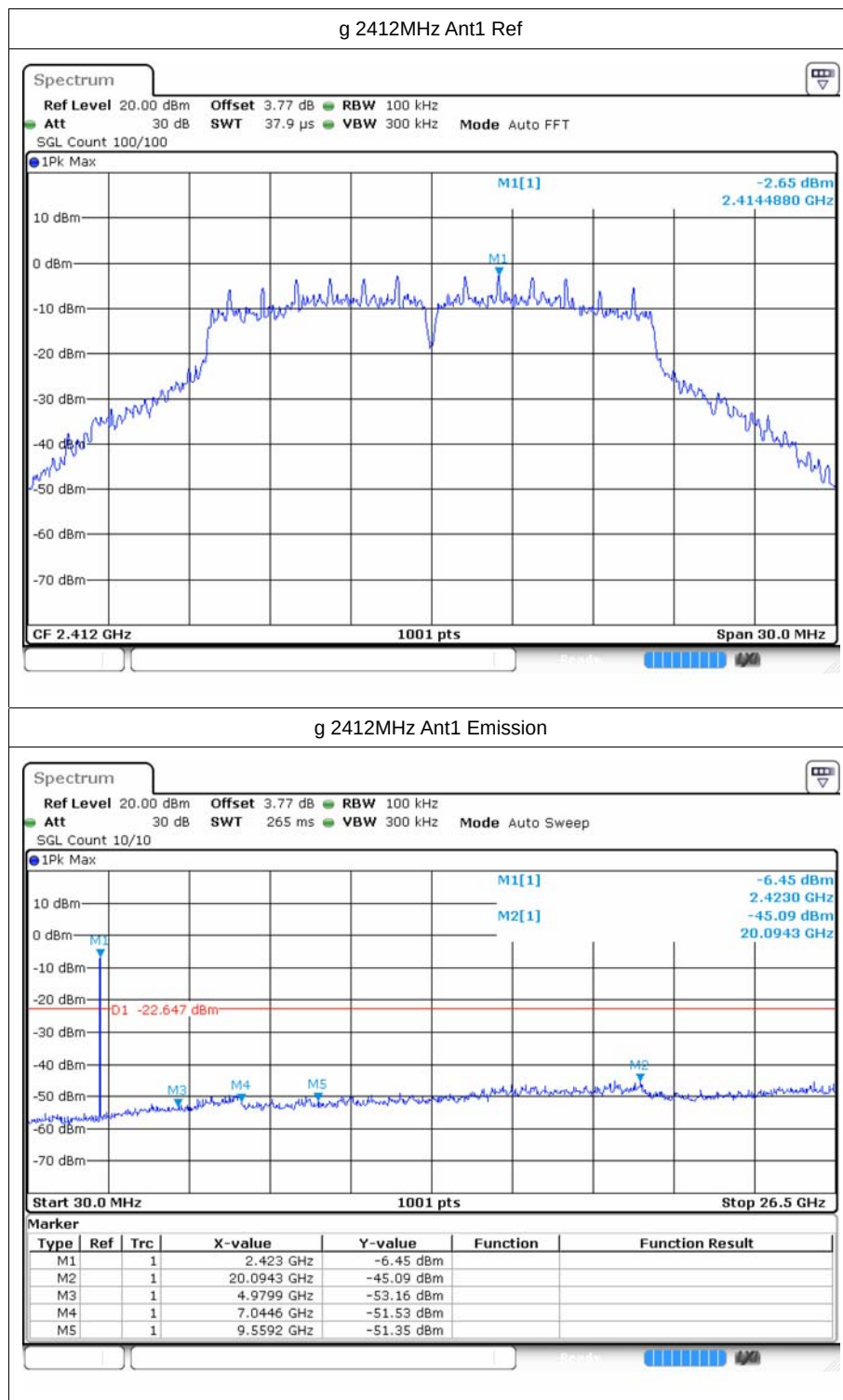
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-45.49	-20	Pass
b	2437	Ant1	-46.36	-20	Pass
b	2462	Ant1	-44.69	-20	Pass
g	2412	Ant1	-42.44	-20	Pass
g	2437	Ant1	-41.36	-20	Pass
g	2462	Ant1	-41.6	-20	Pass
n20	2412	Ant1	-42.68	-20	Pass
n20	2437	Ant1	-42.45	-20	Pass
n20	2462	Ant1	-42.79	-20	Pass

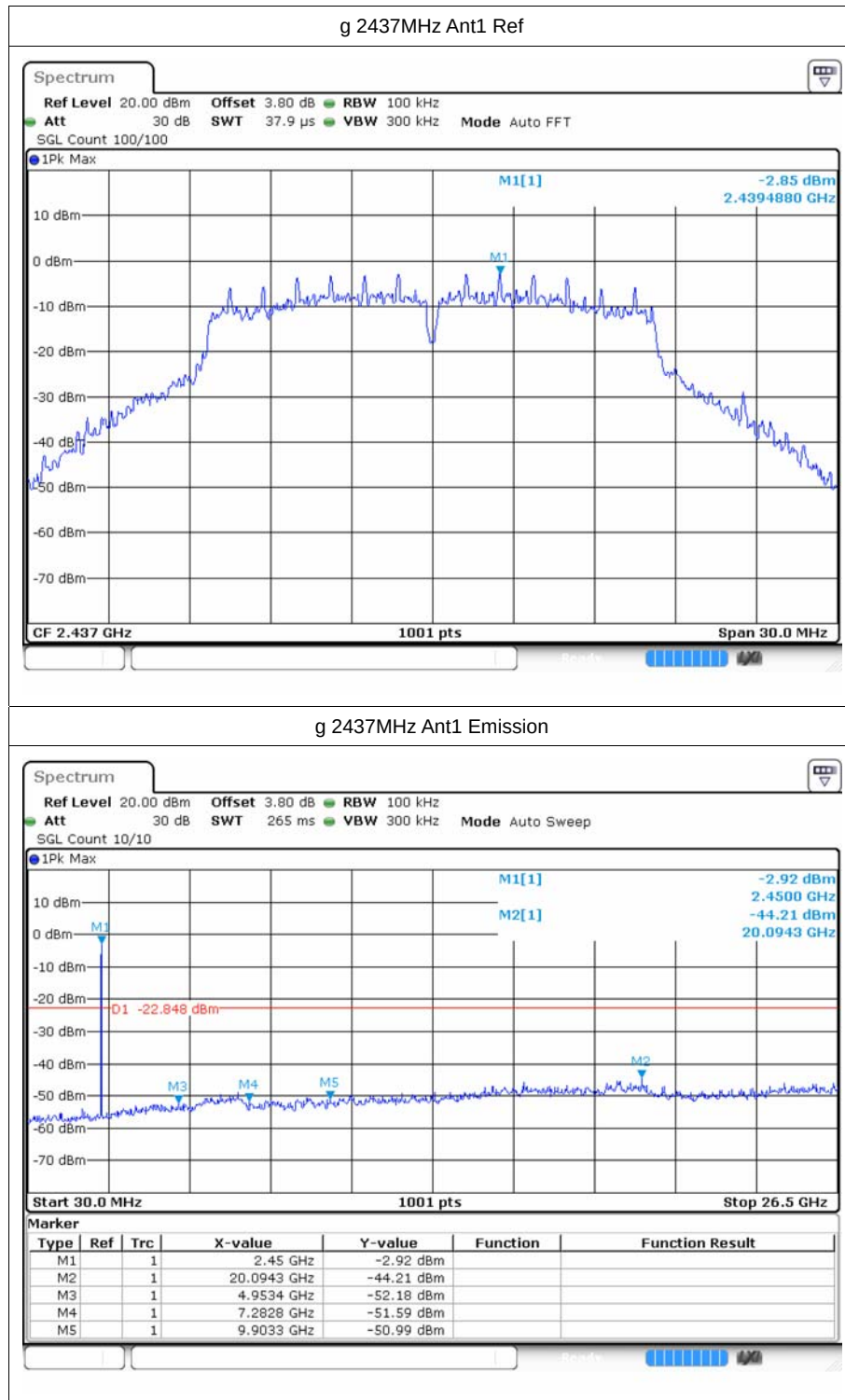
6.2 Test Graphs

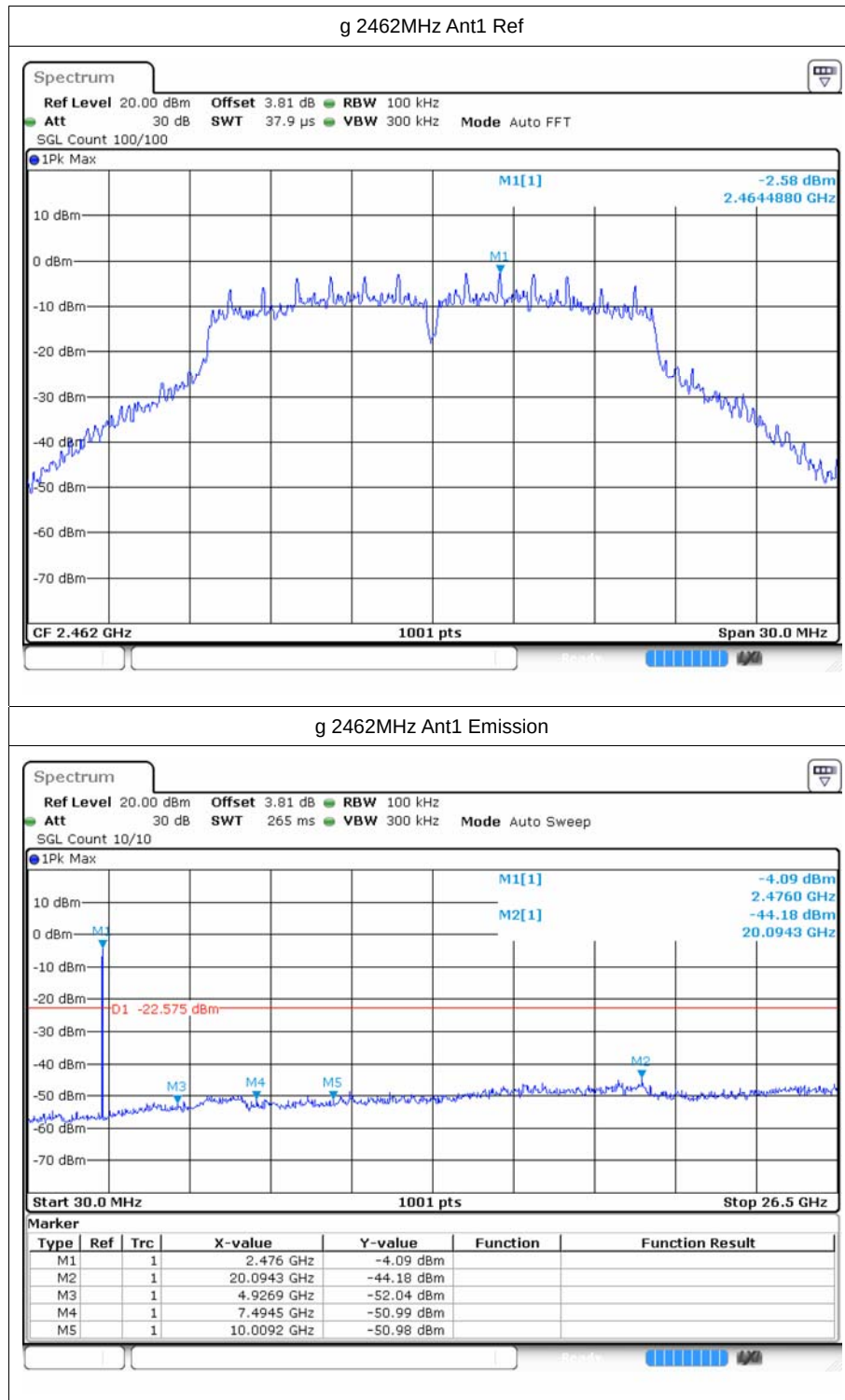


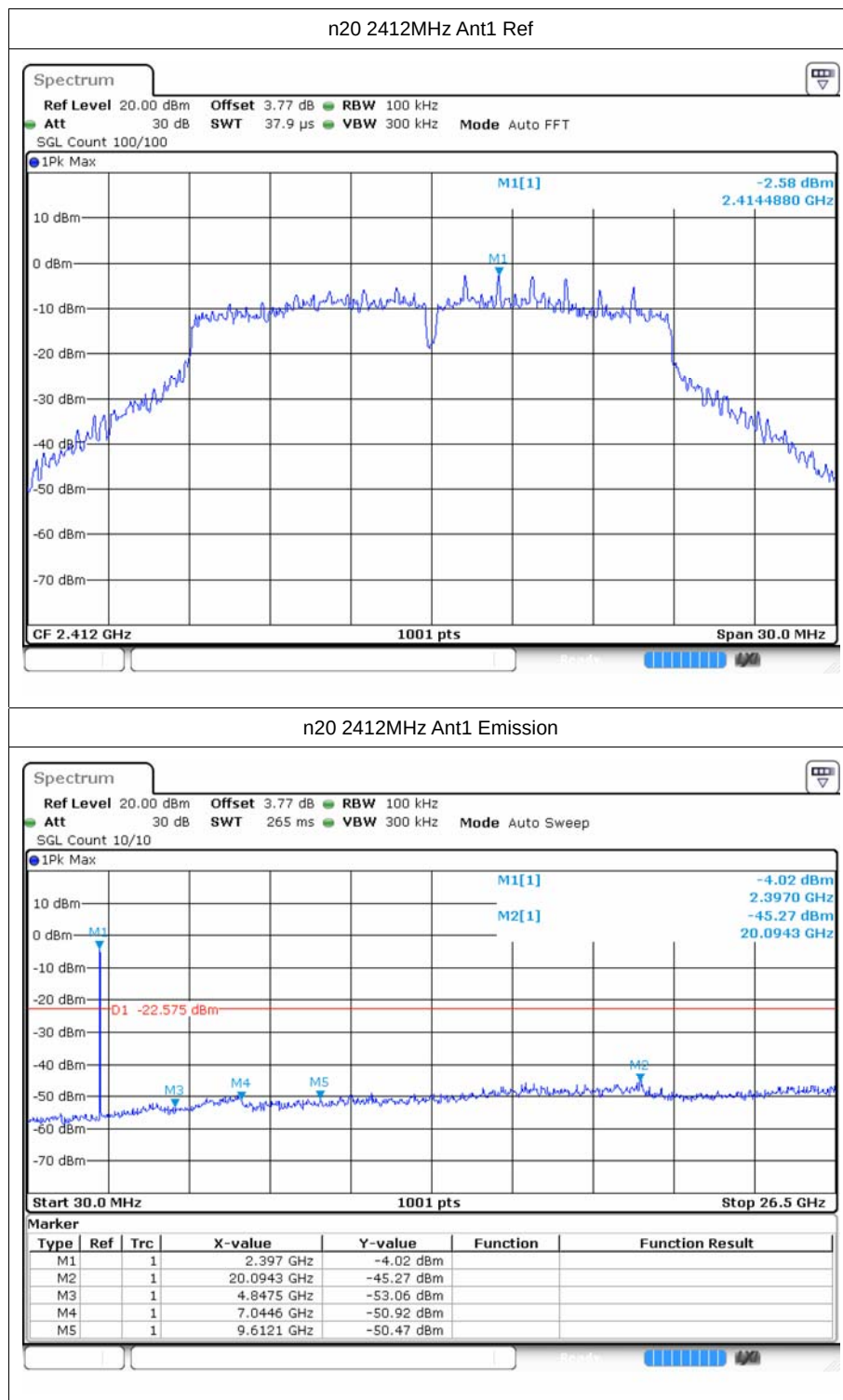


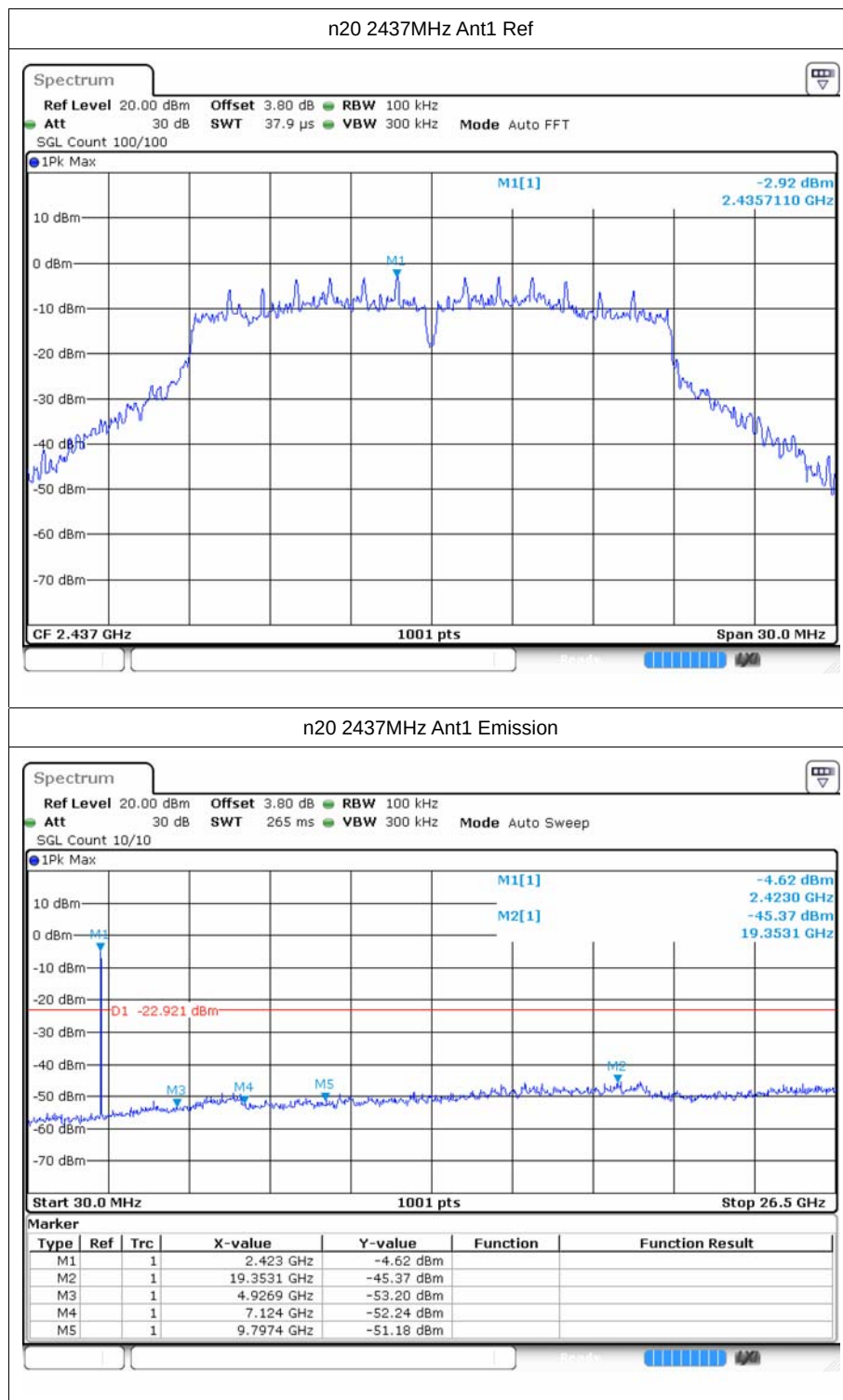


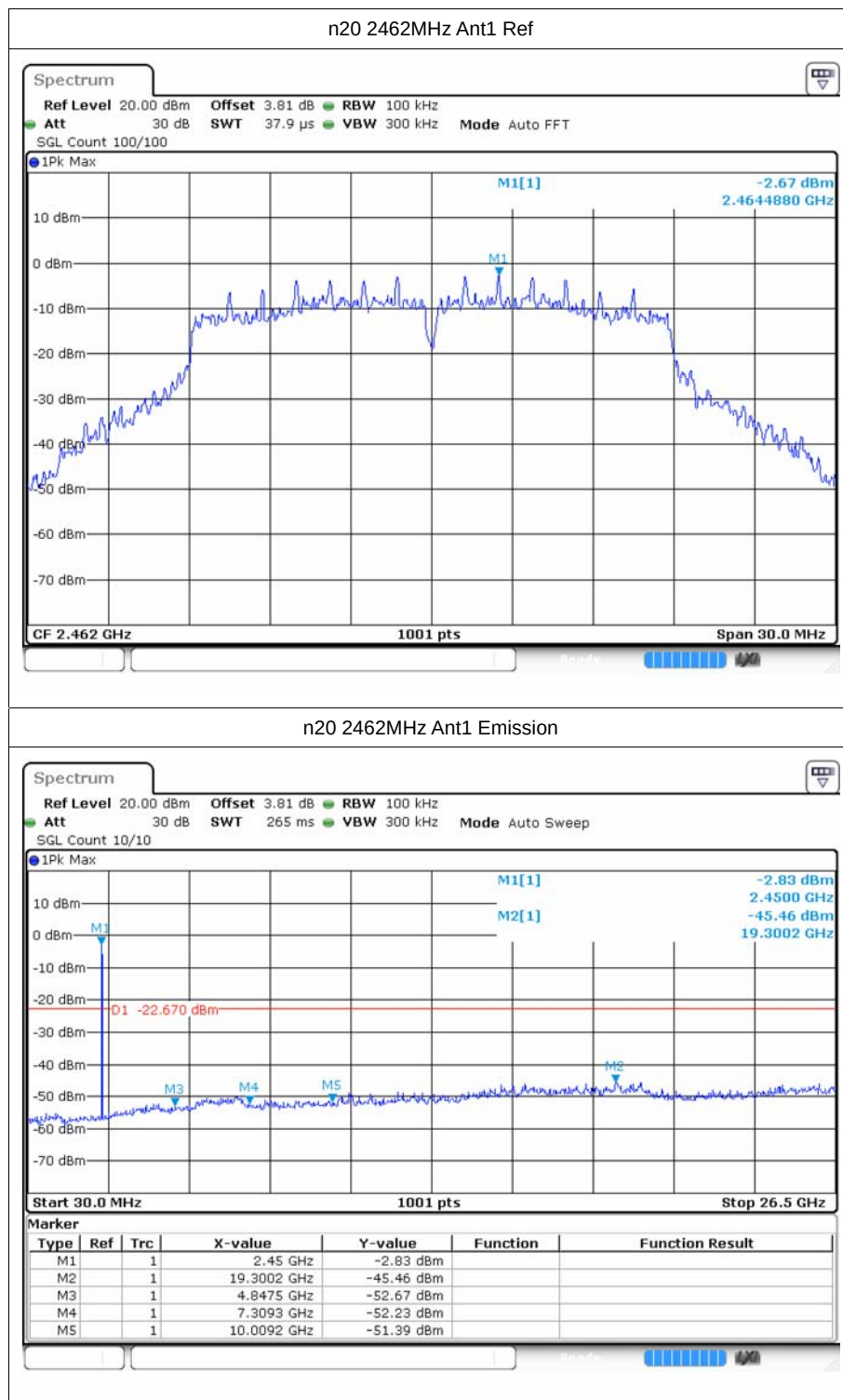














7 Restrict Band

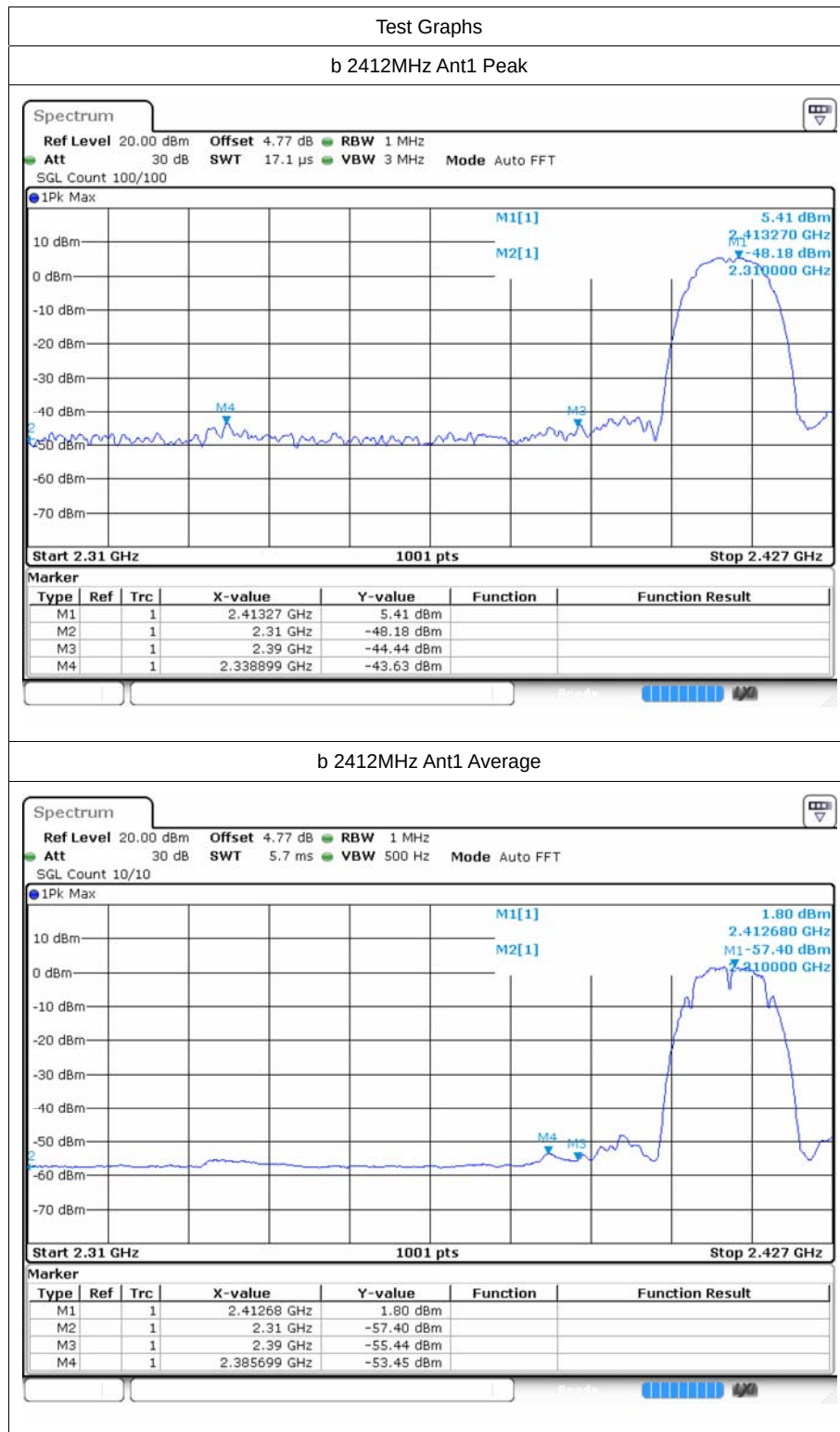
7.1 Test Result

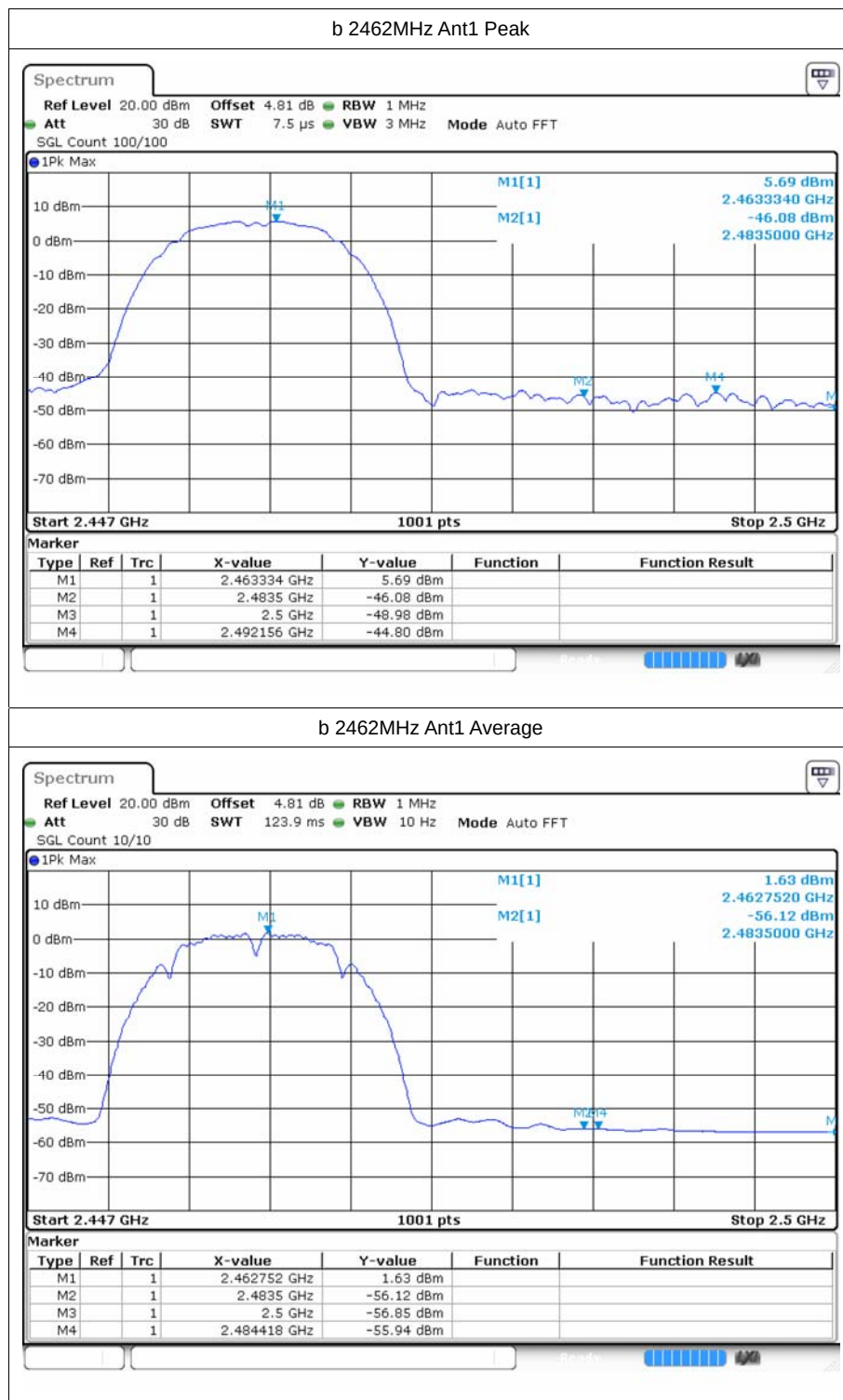
Mod e	Frequency (MHz)	Antenn a	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detecto r	Limit (dBuV/m)	Verdic t
b	2412	Ant1	2310	-48.17	2	49.09	Peak	74	Pass
b	2412	Ant1	2310	-57.39	2	39.87	Average	54	Pass
b	2412	Ant1	2338.899	-43.62	2	53.64	Peak	74	Pass
b	2412	Ant1	2385.699	-53.45	2	43.81	Average	54	Pass
b	2412	Ant1	2390	-44.44	2	52.82	Peak	74	Pass
b	2412	Ant1	2390	-55.44	2	41.82	Average	54	Pass
b	2462	Ant1	2483.5	-46.07	2	51.19	Peak	74	51.19
b	2462	Ant1	2483.5	-56.11	2	41.15	Average	54	Pass
b	2462	Ant1	2492.156	-44.8	2	52.46	Peak	74	Pass
b	2462	Ant1	2484.418	-55.93	2	41.33	Average	54	Pass
b	2462	Ant1	2500	-48.97	2	48.29	Peak	74	Pass
b	2462	Ant1	2500	-56.85	2	40.41	Average	54	Pass
g	2412	Ant1	2310	-49.65	2	47.61	Peak	74	Pass
g	2412	Ant1	2310	-55.64	2	41.62	Average	54	Pass
g	2412	Ant1	2337.144	-43.47	2	53.79	Peak	74	Pass
g	2412	Ant1	2340.186	-54.01	2	43.25	Average	54	Pass
g	2412	Ant1	2390	-48.03	2	52.82	Peak	74	Pass
g	2412	Ant1	2390	-56.52	2	40.74	Average	54	Pass
g	2462	Ant1	2483.5	-47.19	2	50.07	Peak	74	Pass
g	2462	Ant1	2483.5	-55.29	2	41.97	Average	54	Pass
g	2462	Ant1	2492.156	-45.77	2	51.49	Peak	74	Pass
g	2462	Ant1	2485.584	-54.97	2	42.29	Average	54	Pass
g	2462	Ant1	2500	-47.47	2	48.29	Peak	74	Pass
g	2462	Ant1	2500	-56	2	41.26	Average	54	Pass
n20	2412	Ant1	2310	-48.03	2	49.23	Peak	74	Pass
n20	2412	Ant1	2310	-56.02	2	41.24	Average	54	Pass
n20	2412	Ant1	2372.244	-44.27	2	52.99	Peak	74	Pass
n20	2412	Ant1	2337.144	-54.01	2	43.25	Average	54	Pass
n20	2412	Ant1	2390	-48.33	2	48.93	Peak	74	Pass
n20	2412	Ant1	2390	-56.16	2	41.1	Average	54	Pass
n20	2462	Ant1	2483.5	-47.62	2	49.64	Peak	74	Pass
n20	2462	Ant1	2483.5	-55.25	2	42.01	Average	54	Pass
n20	2462	Ant1	2499.841	-45.13	2	52.13	Peak	74	Pass
n20	2462	Ant1	2498.357	-54.99	2	42.27	Average	54	Pass

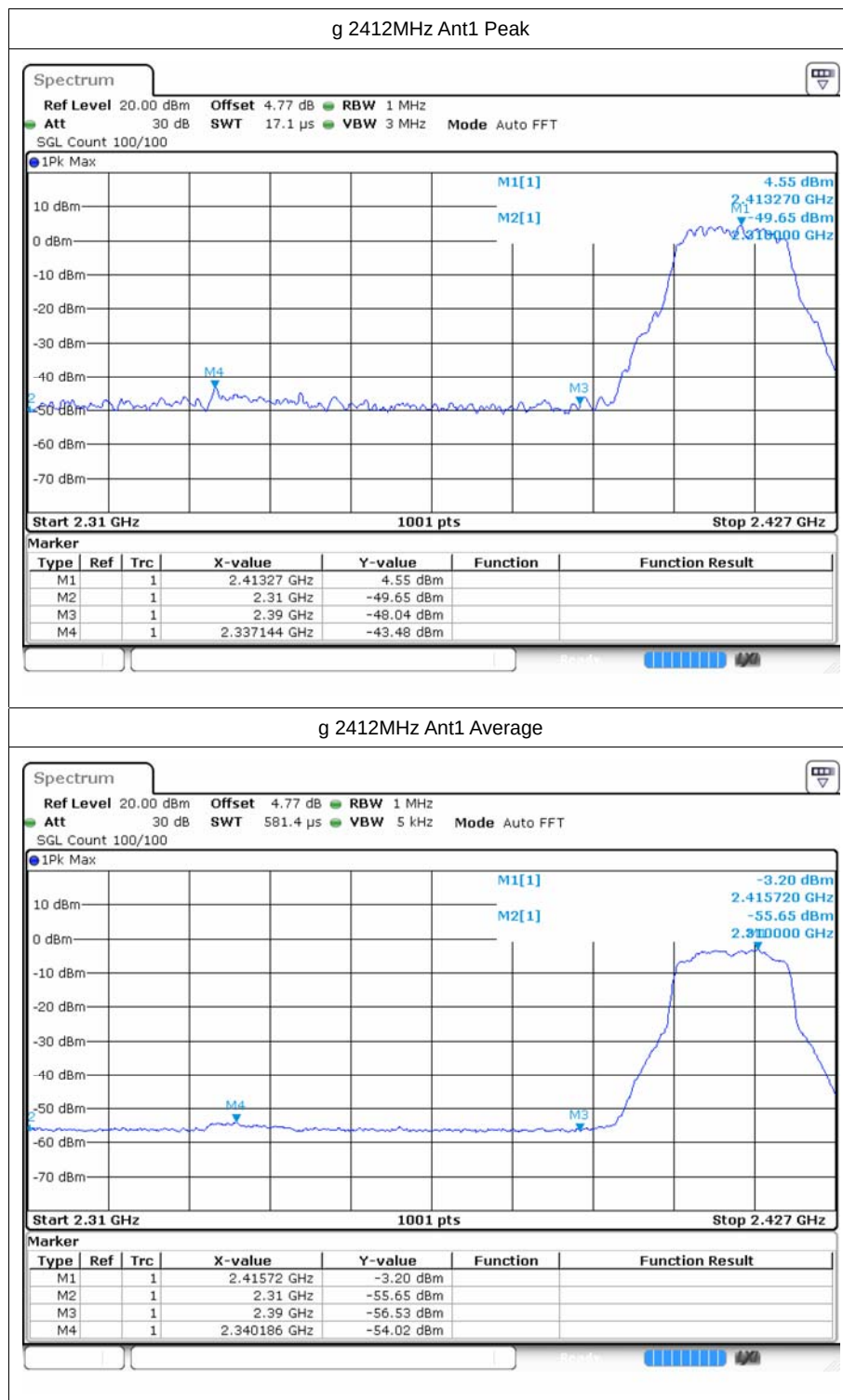


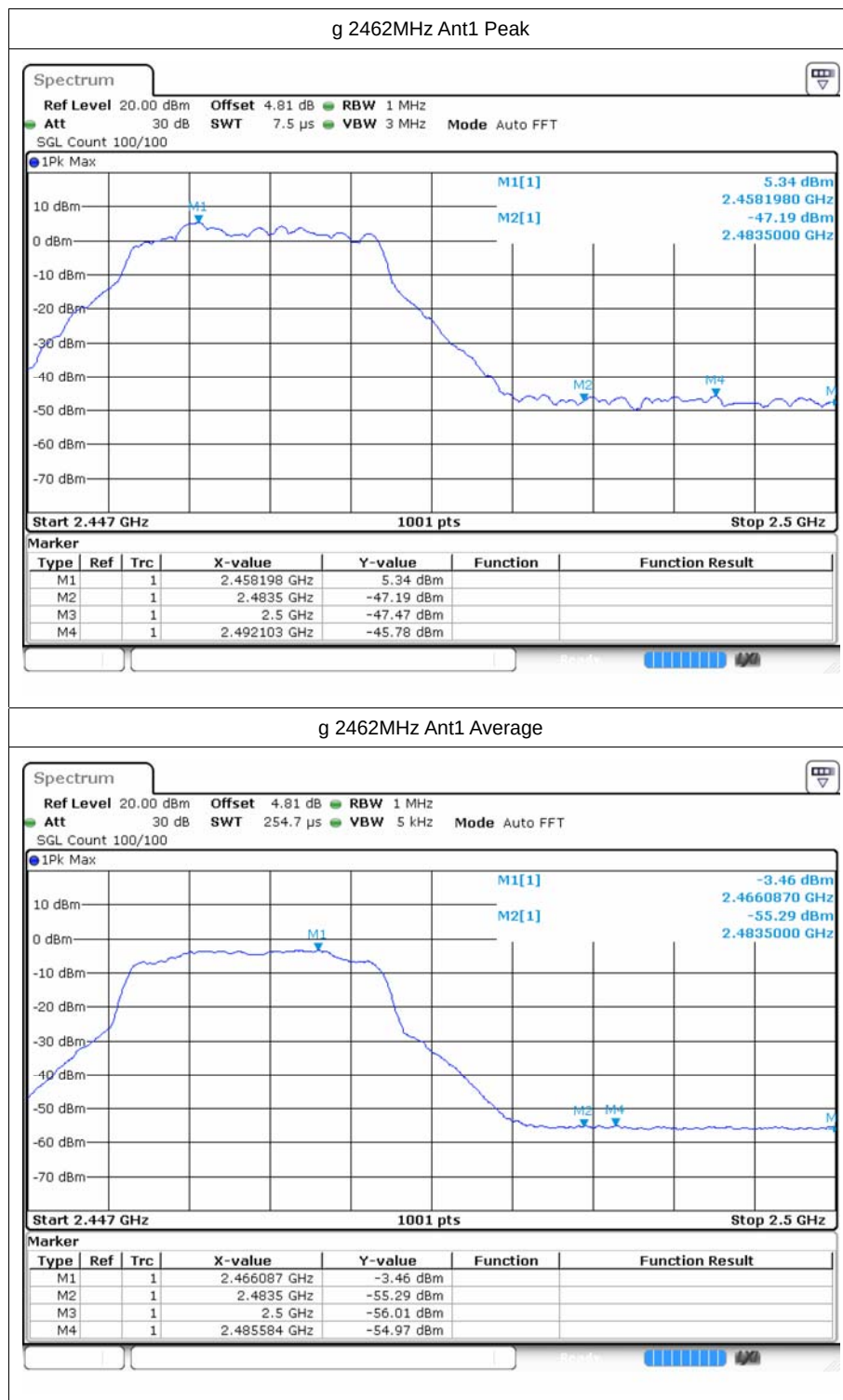
n20	2462	Ant1	2500	-45.3	2	51.96	Peak	74	Pass
n20	2462	Ant1	2500	-55.59	2	41.67	Average	54	Pass

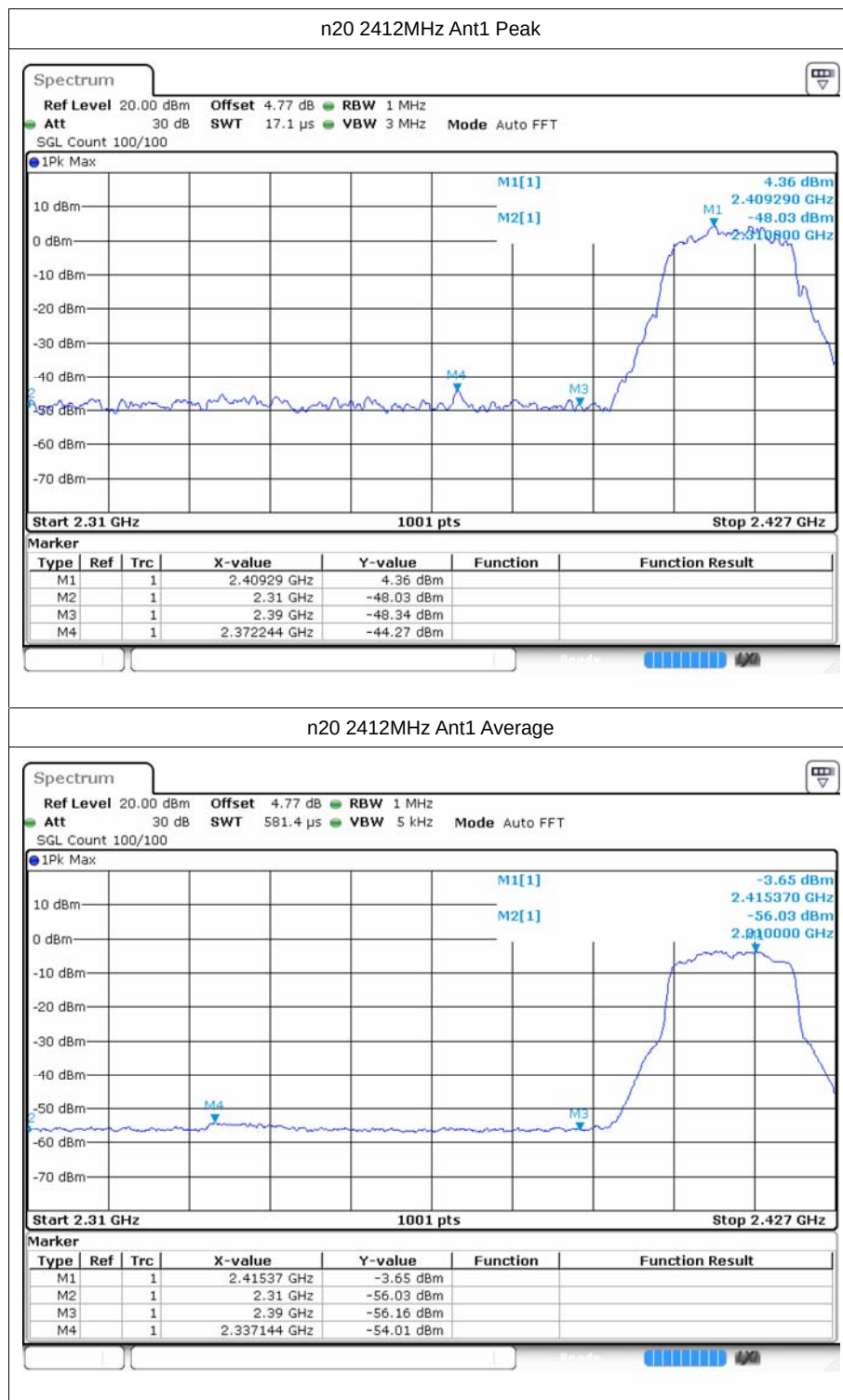
7.2 Test Graphs













---The End---