



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Wifi Digital Phone Frame

Trade Mark: KOHO

Test Model: WF101

Environmental Conditions

Temperature:	25.6° C
Relative Humidity:	51.2%
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

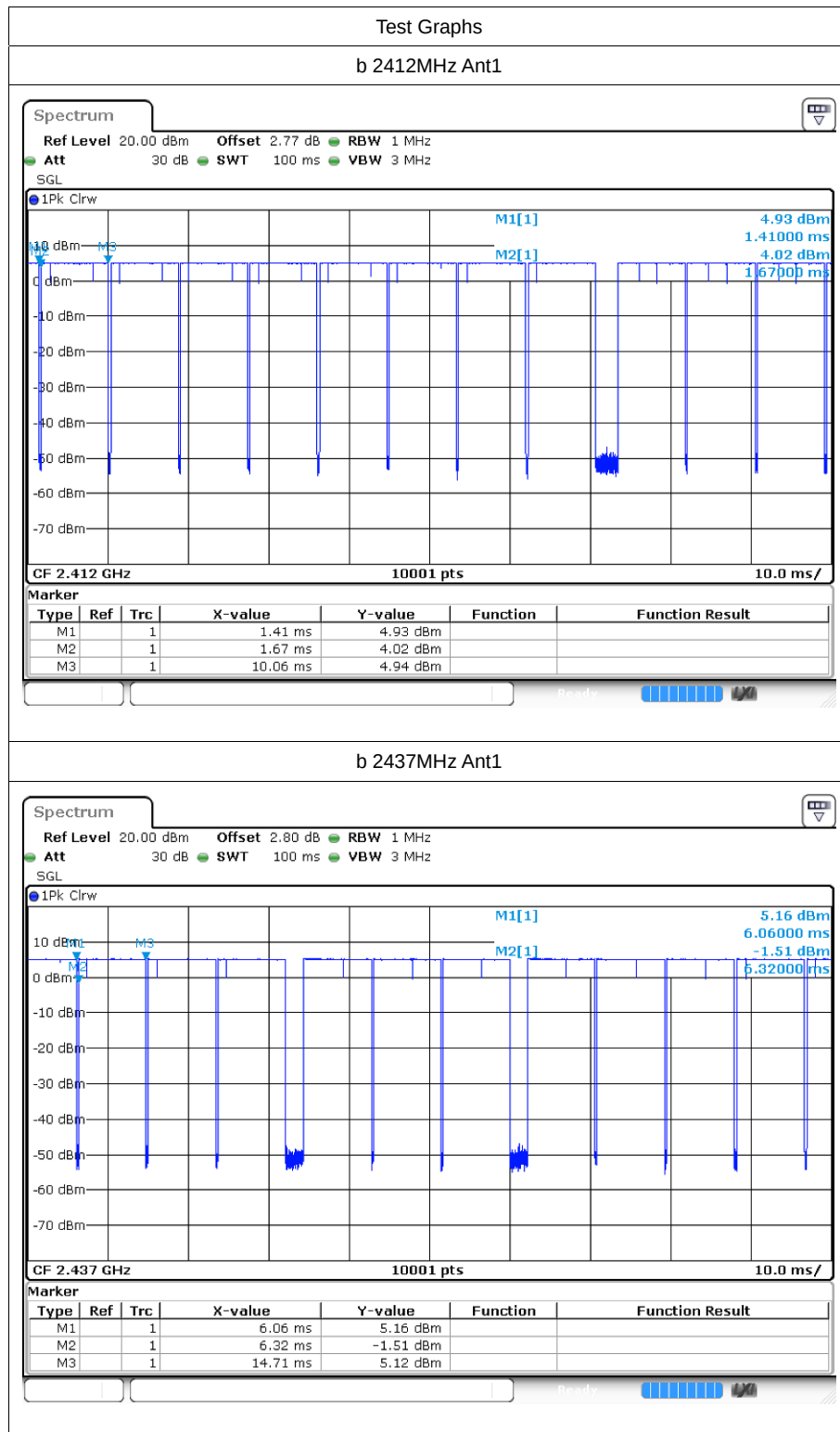


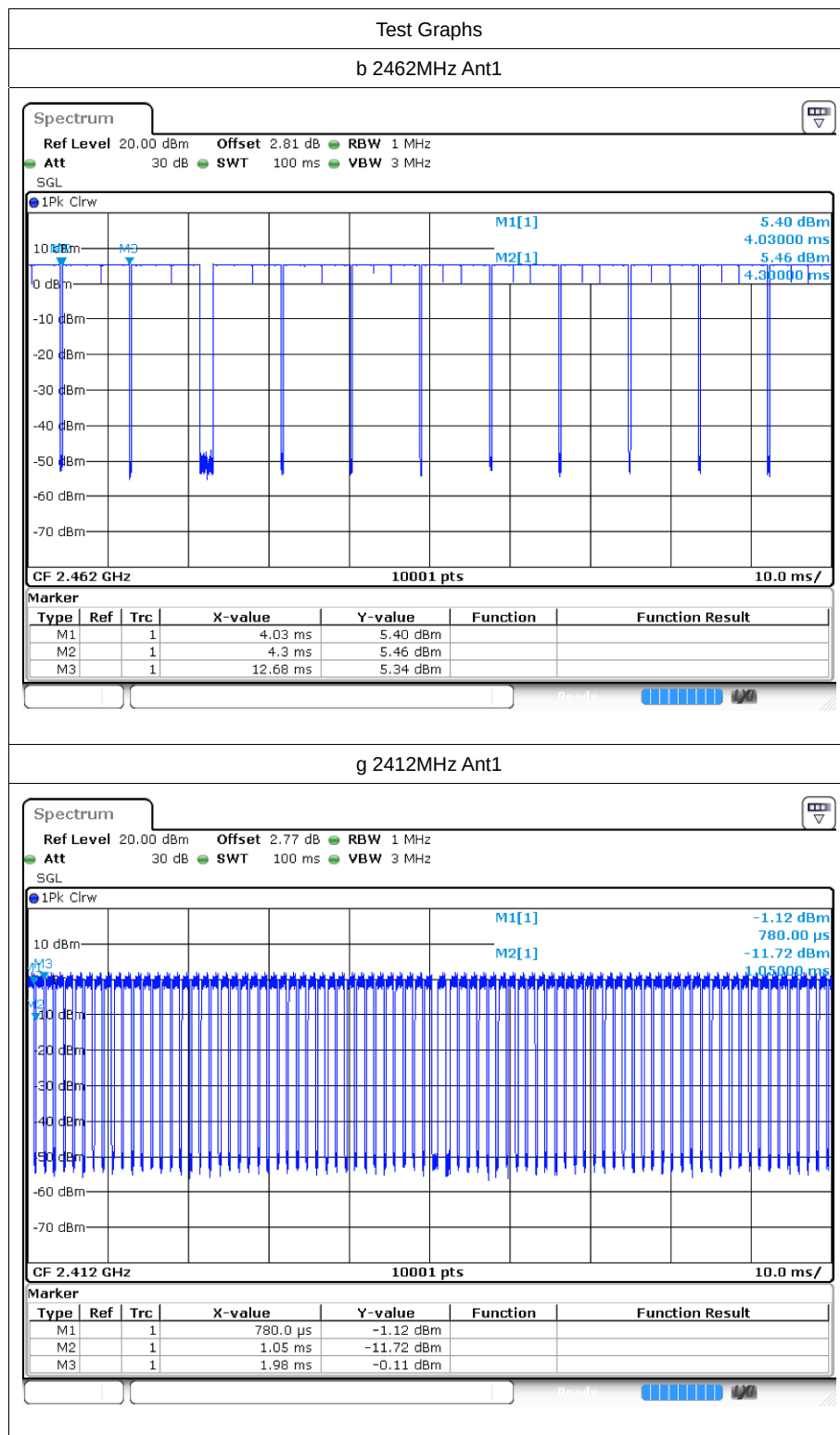
1 Duty Cycle

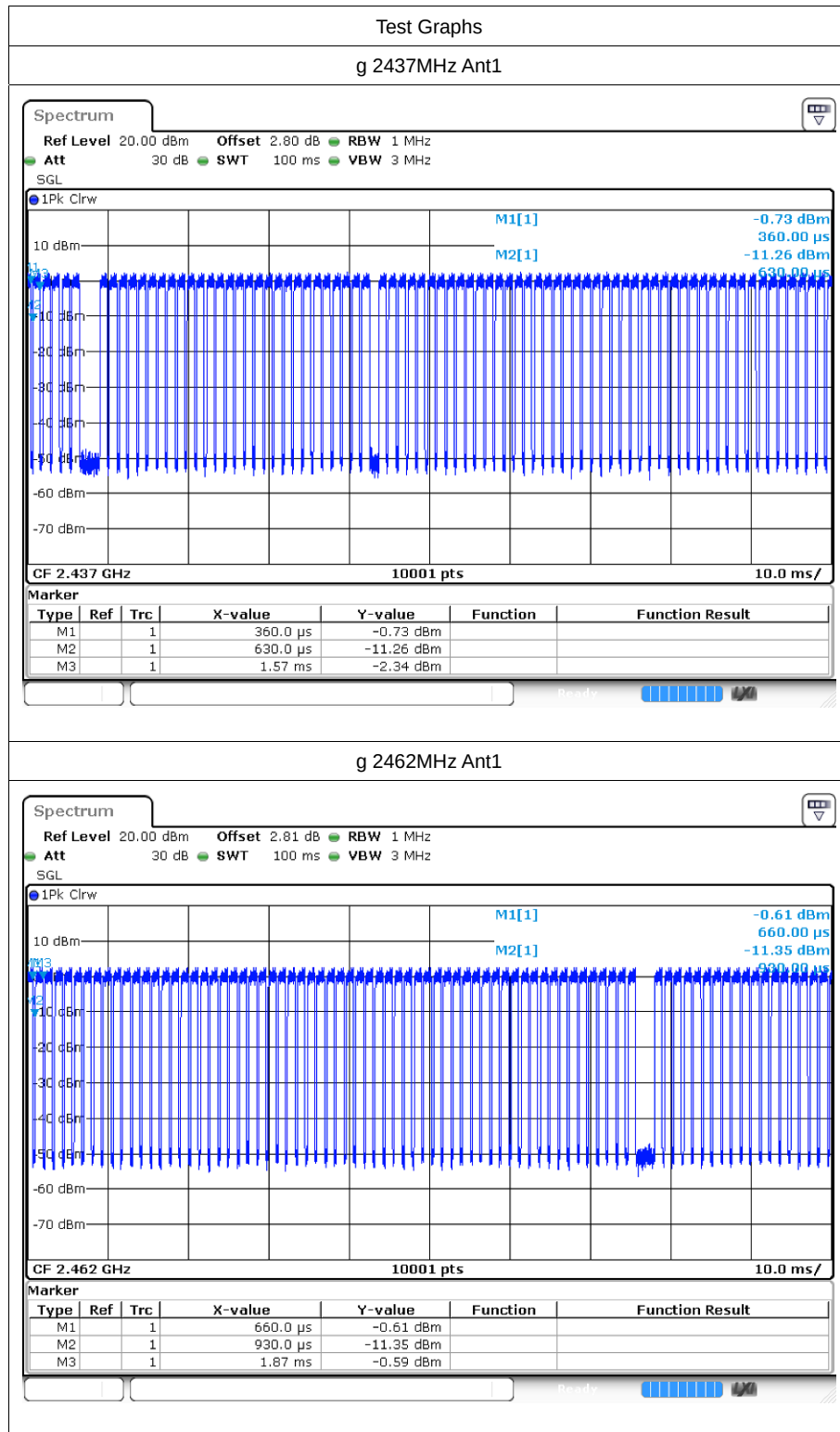
1.1 Test Result

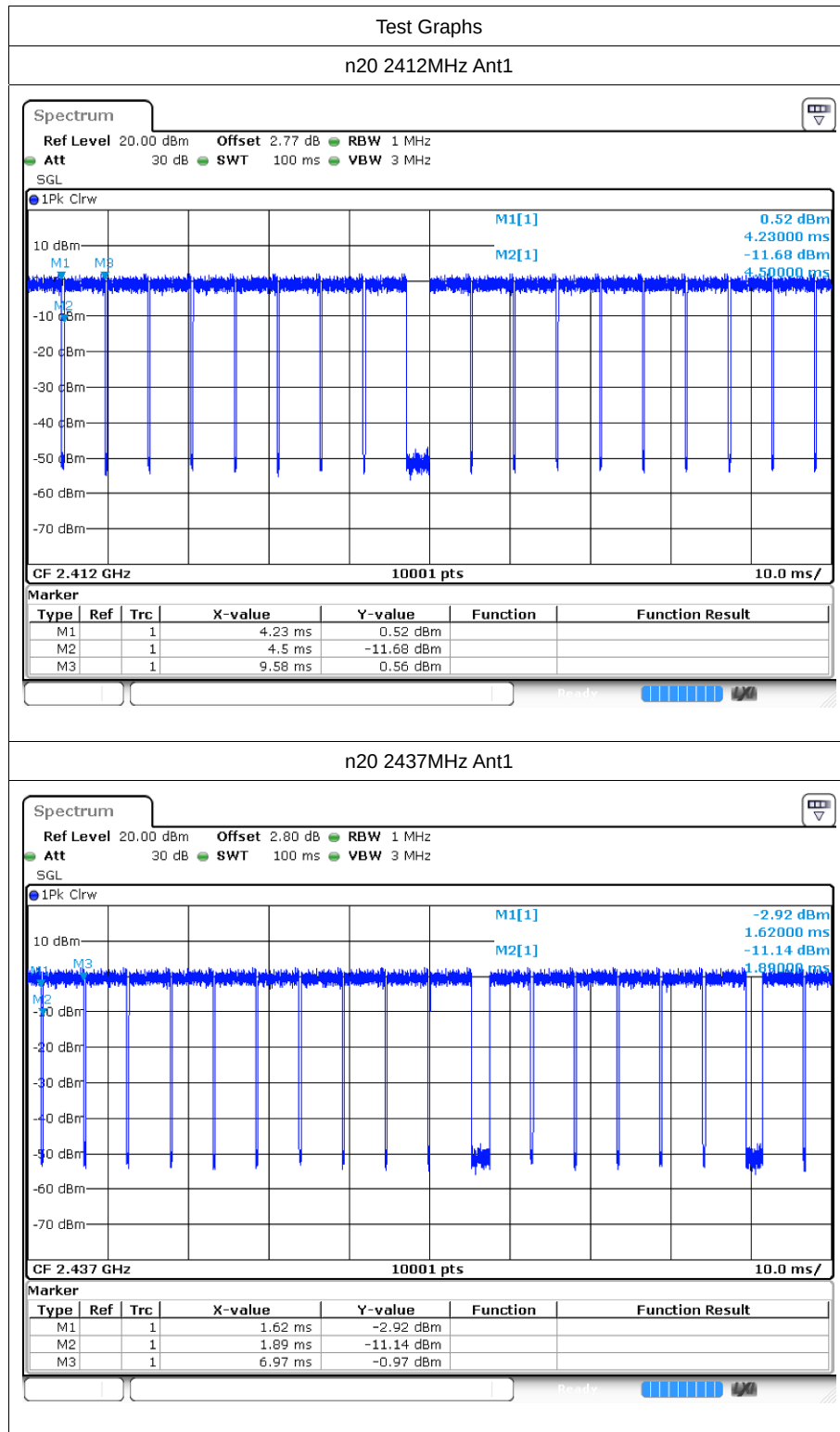
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
b	2412	Ant1	94.44	0.12
b	2437	Ant1	93.1	0.12
b	2462	Ant1	95.72	0.12
g	2412	Ant1	77.93	1.08
g	2437	Ant1	75.76	1.06
g	2462	Ant1	76.66	1.06
n20	2412	Ant1	92.65	0.2
n20	2437	Ant1	91.45	0.2
n20	2462	Ant1	95.01	0.2

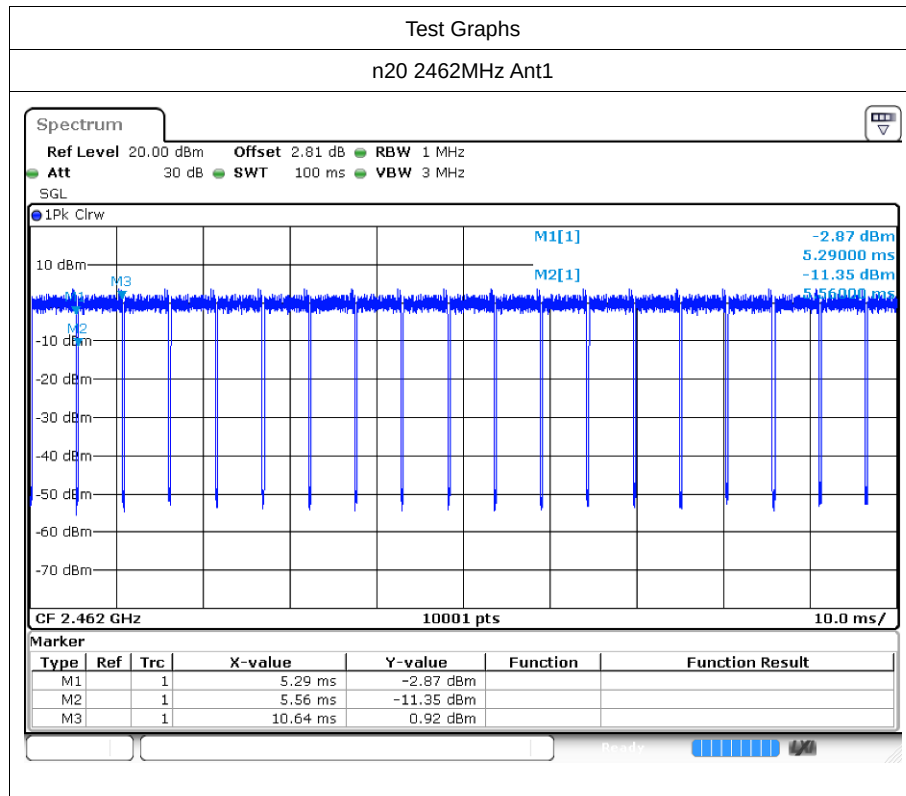
1.2 Test Graphs











2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	14.47	30	Pass
b	2437	Ant1	14.67	30	Pass
b	2462	Ant1	14.84	30	Pass
g	2412	Ant1	13.69	30	Pass
g	2437	Ant1	14.04	30	Pass
g	2462	Ant1	14.29	30	Pass
n20	2412	Ant1	13.79	30	Pass
n20	2437	Ant1	14.13	30	Pass
n20	2462	Ant1	14.32	30	Pass

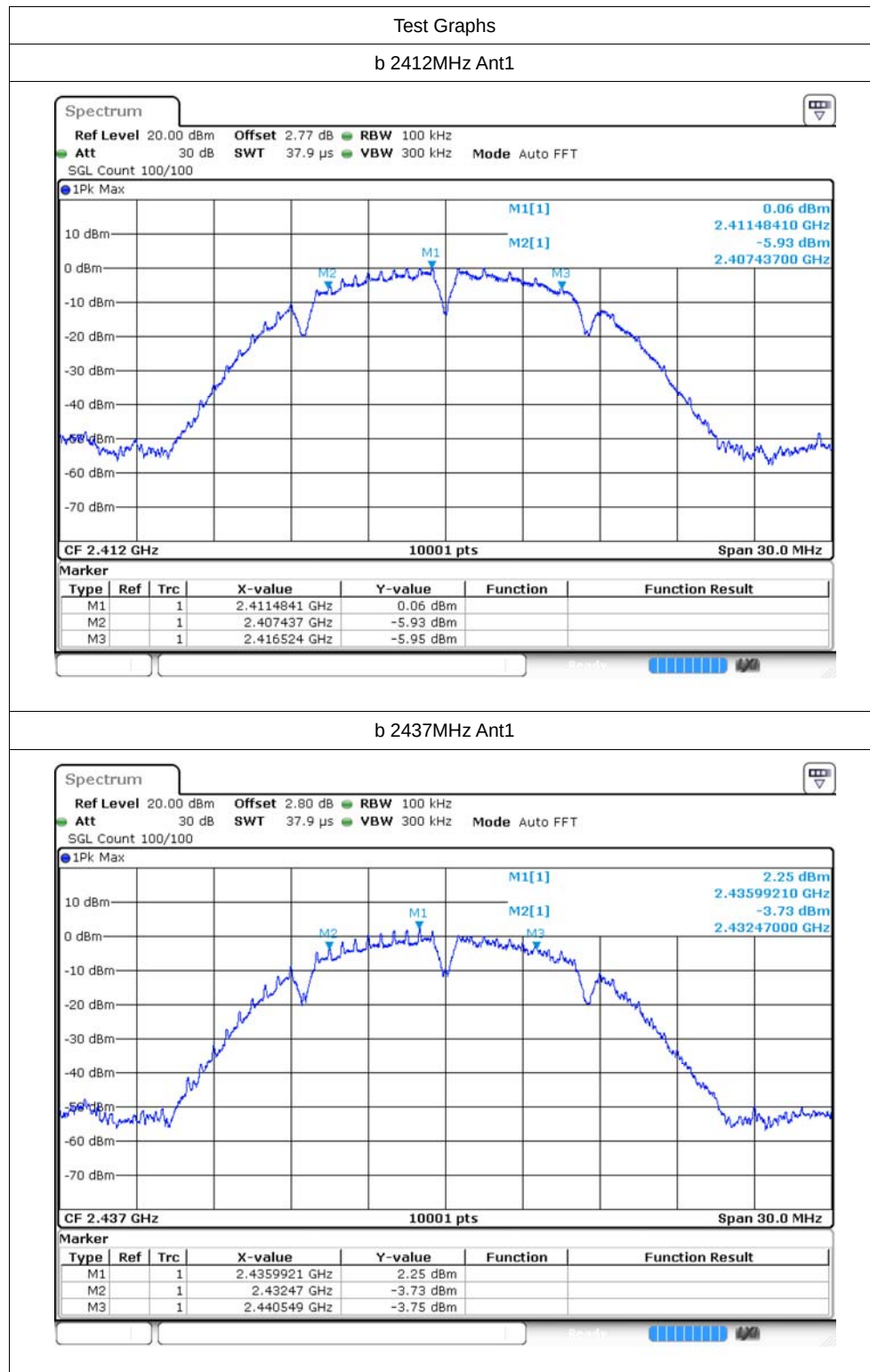


3 -6dB Bandwidth

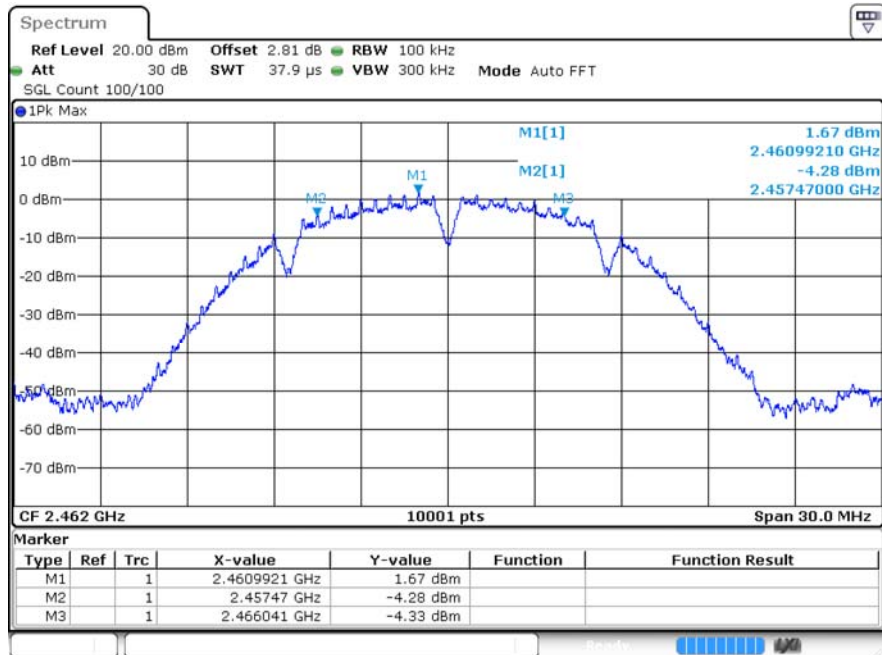
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	9.087	0.5	Pass
b	2437	Ant1	8.079	0.5	Pass
b	2462	Ant1	8.571	0.5	Pass
g	2412	Ant1	16.335	0.5	Pass
g	2437	Ant1	16.56	0.5	Pass
g	2462	Ant1	16.551	0.5	Pass
n20	2412	Ant1	17.802	0.5	Pass
n20	2437	Ant1	17.778	0.5	Pass
n20	2462	Ant1	17.811	0.5	Pass

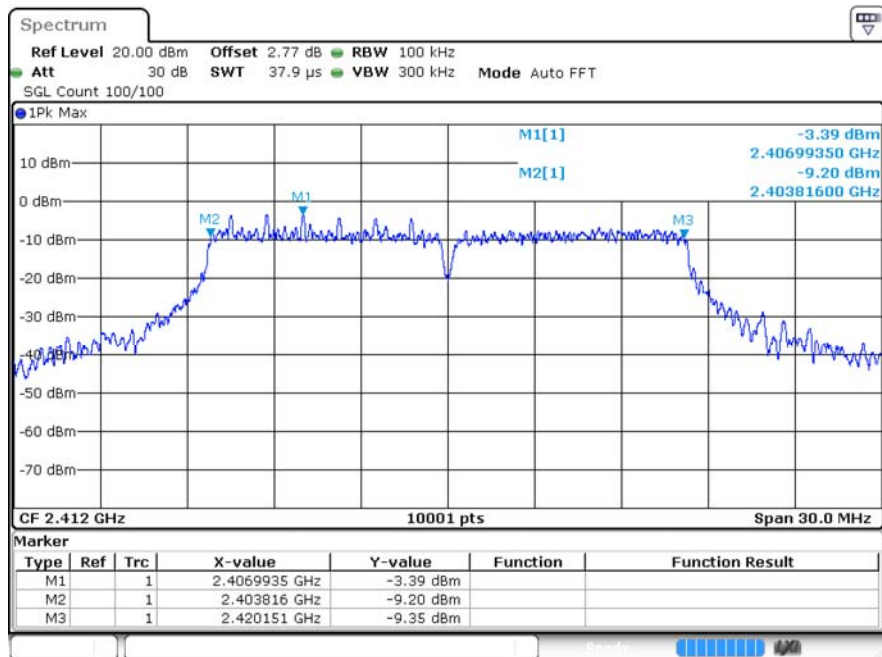
3.2 Test Graphs



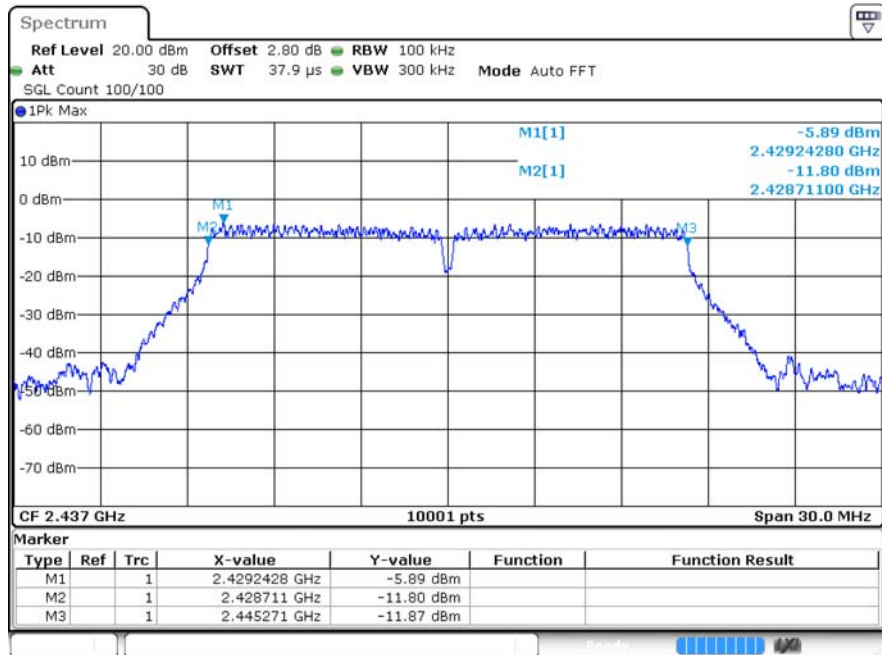
b 2462MHz Ant1



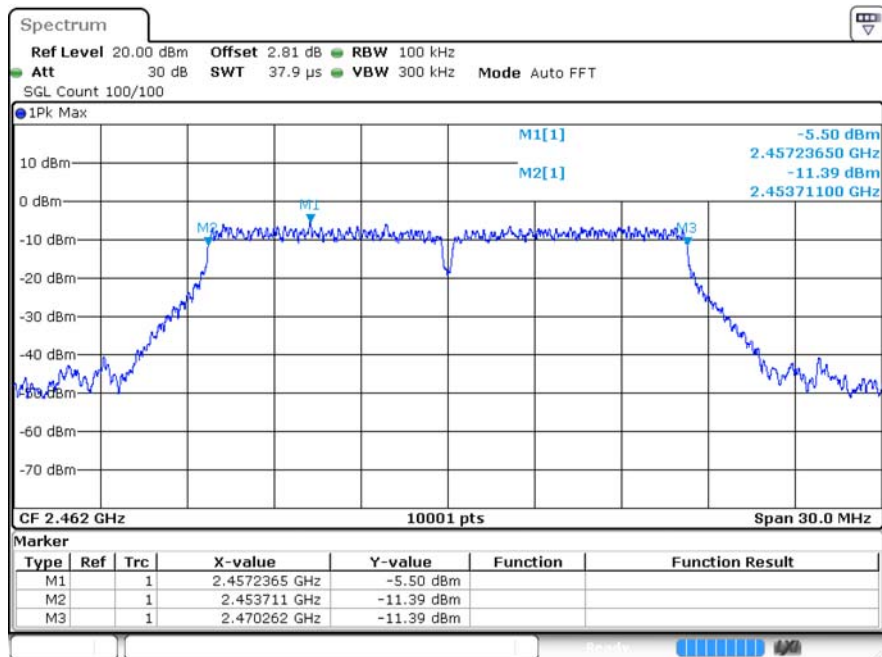
g 2412MHz Ant1

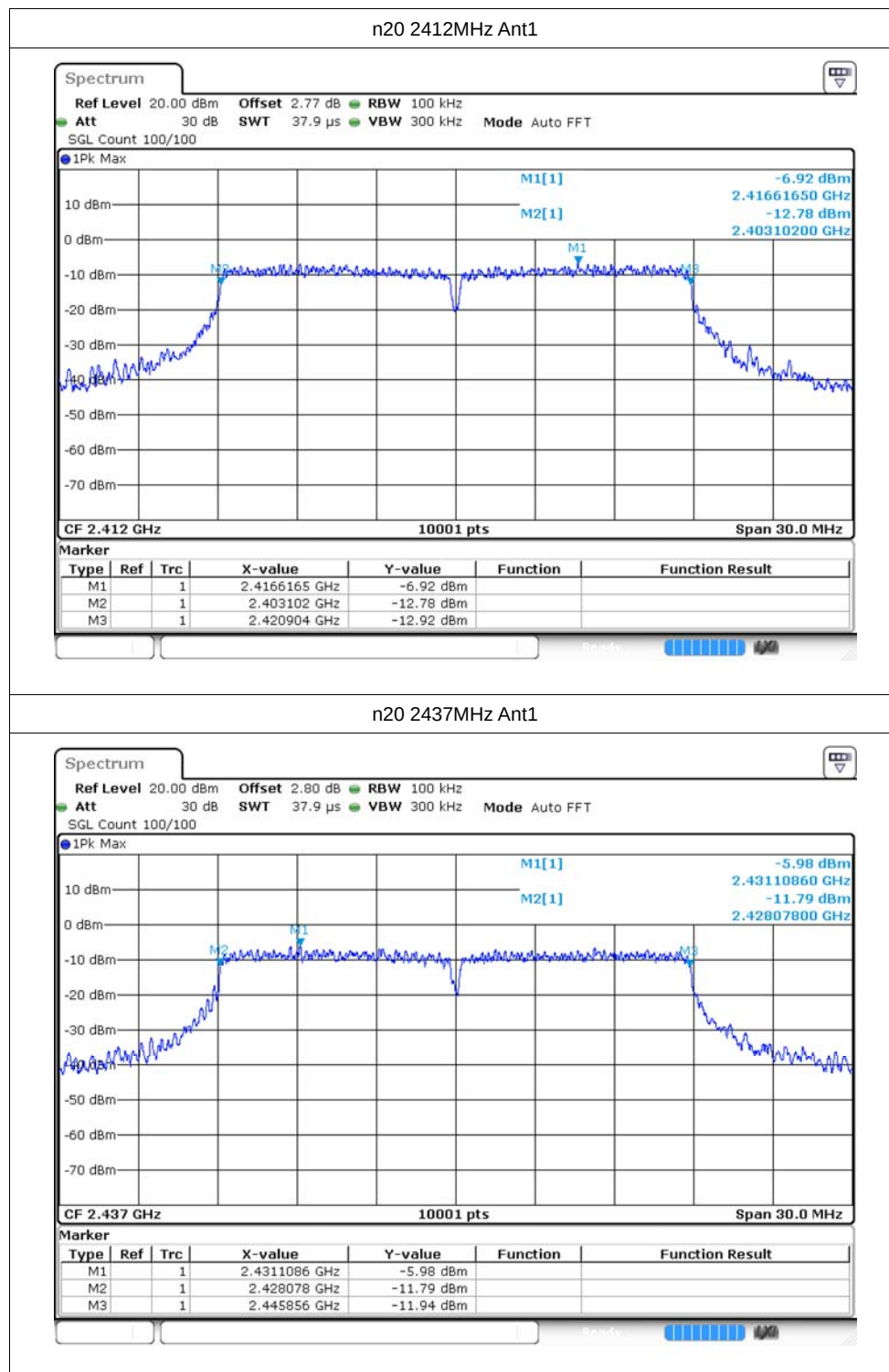


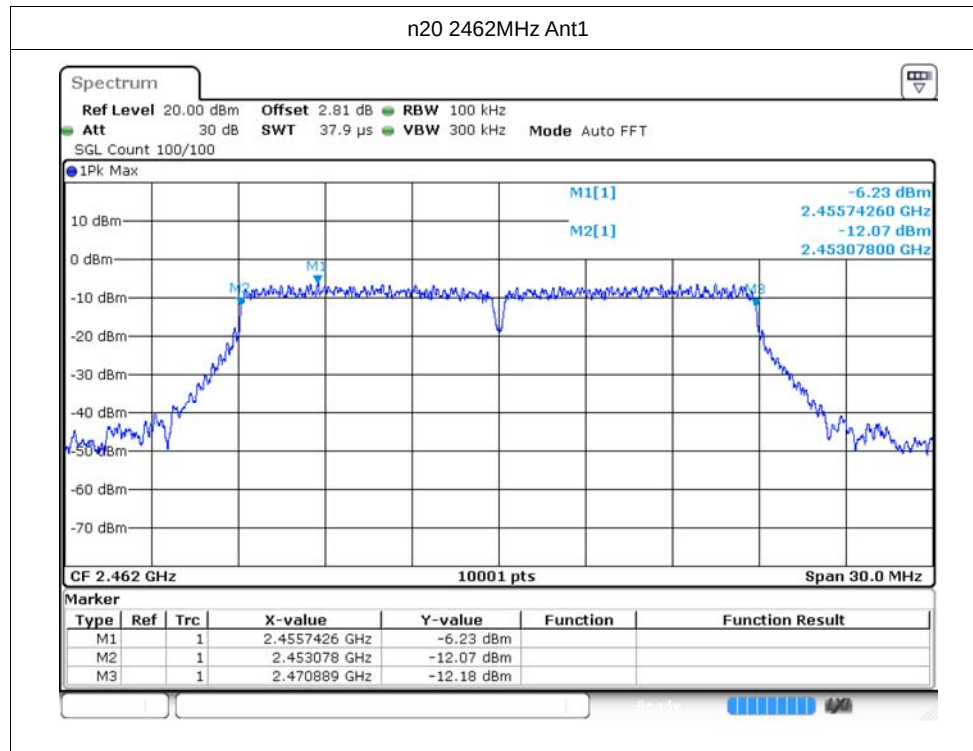
g 2437MHz Ant1



g 2462MHz Ant1





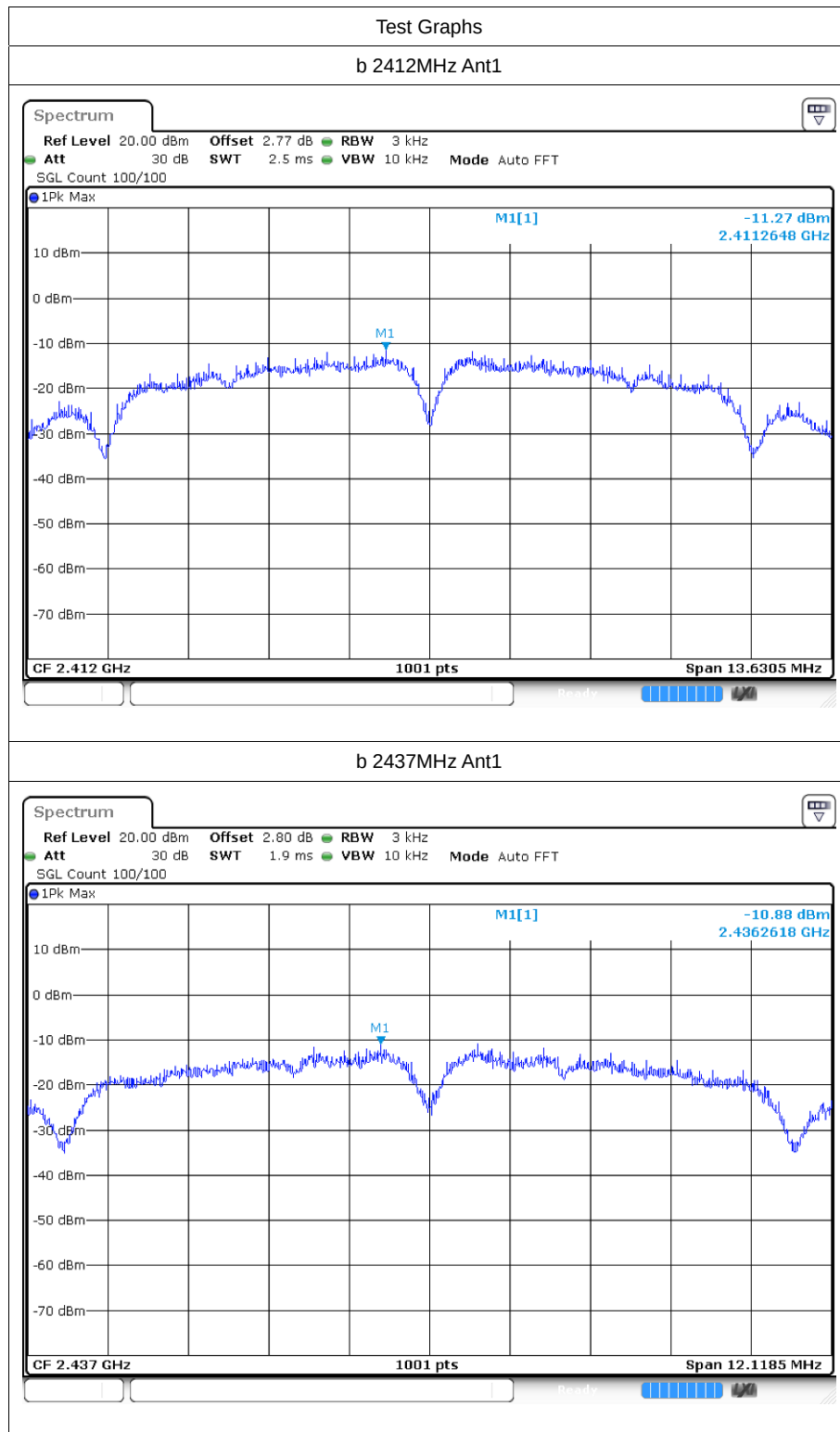


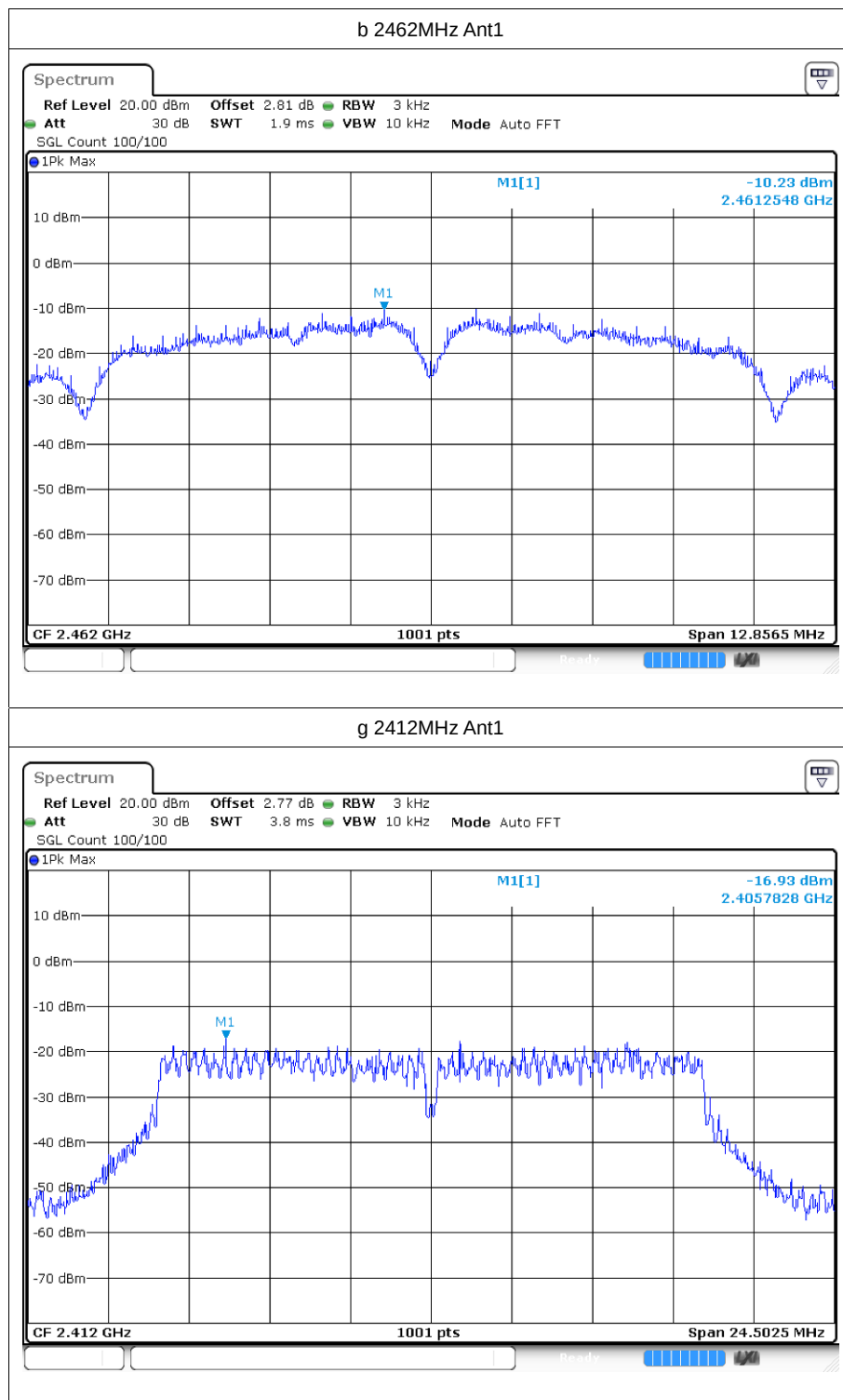
4 Maximum Power Spectral Density Level

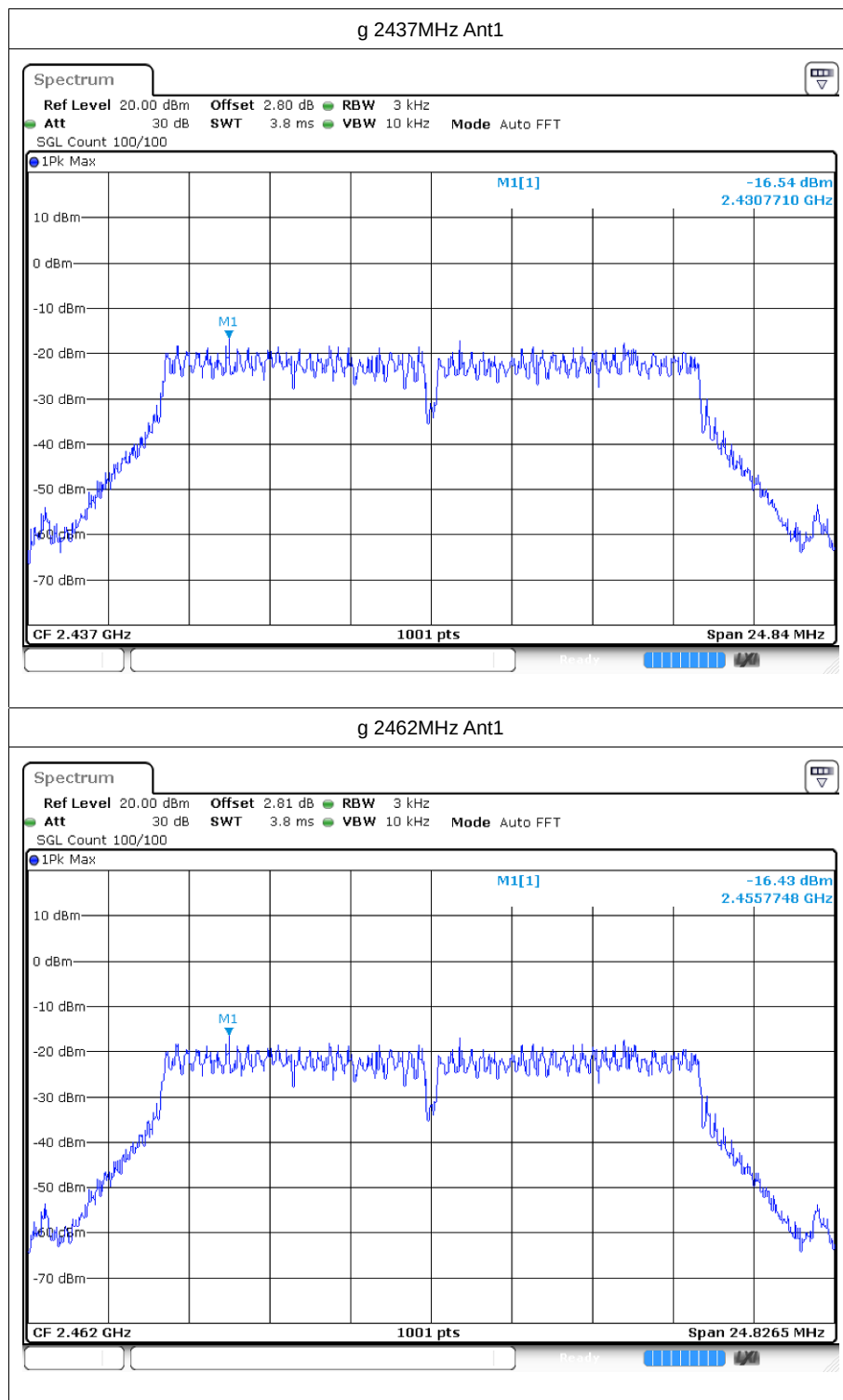
4.1 Test Result

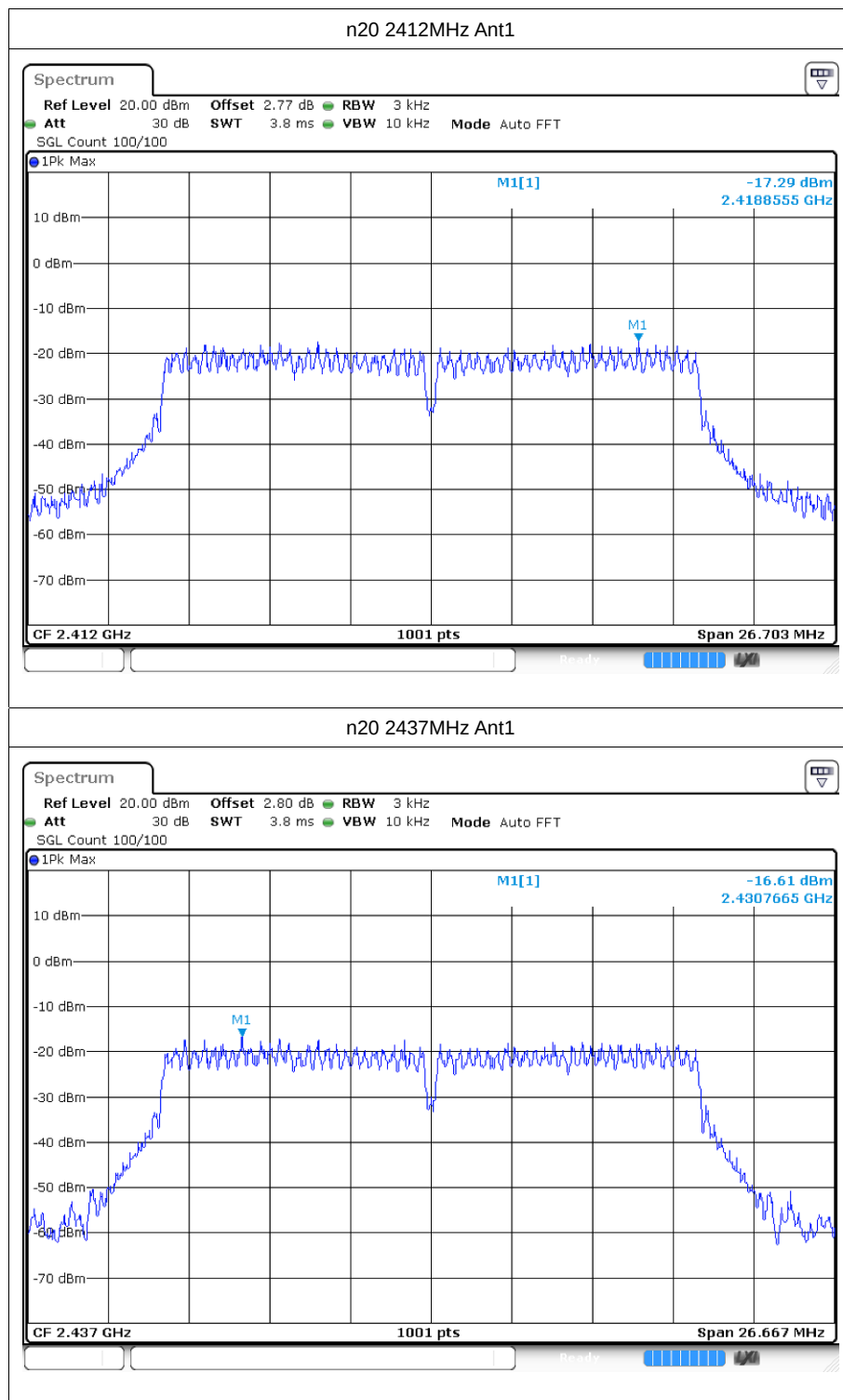
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-11.27	≤ 8	Pass
b	2437	Ant1	-10.88	≤ 8	Pass
b	2462	Ant1	-10.23	≤ 8	Pass
g	2412	Ant1	-16.93	≤ 8	Pass
g	2437	Ant1	-16.54	≤ 8	Pass
g	2462	Ant1	-16.43	≤ 8	Pass
n20	2412	Ant1	-17.29	≤ 8	Pass
n20	2437	Ant1	-16.61	≤ 8	Pass
n20	2462	Ant1	-16.51	≤ 8	Pass

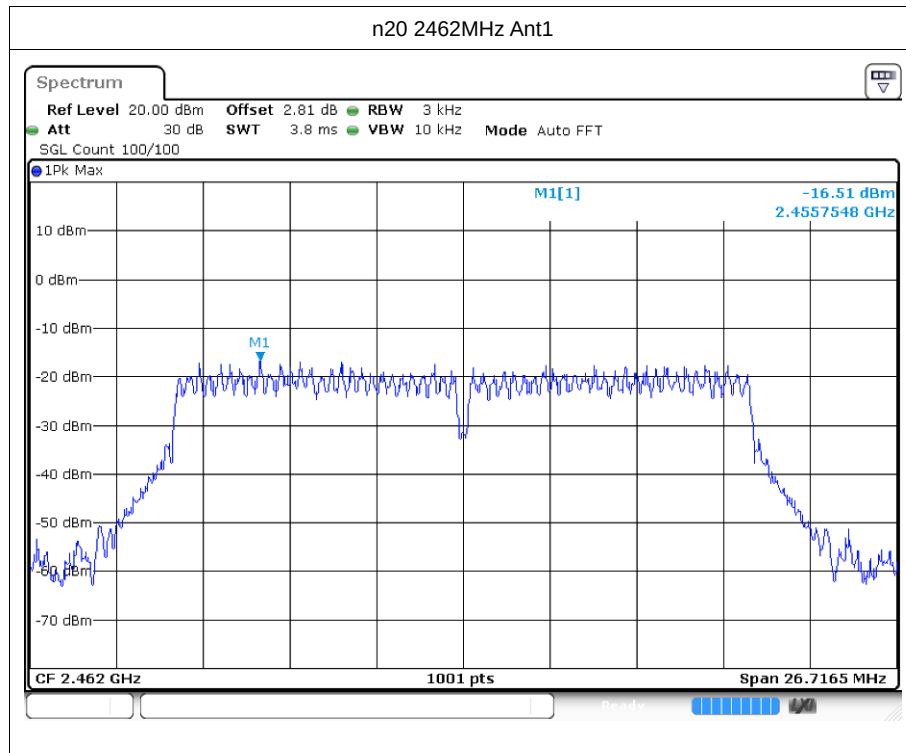
4.2 Test Graphs











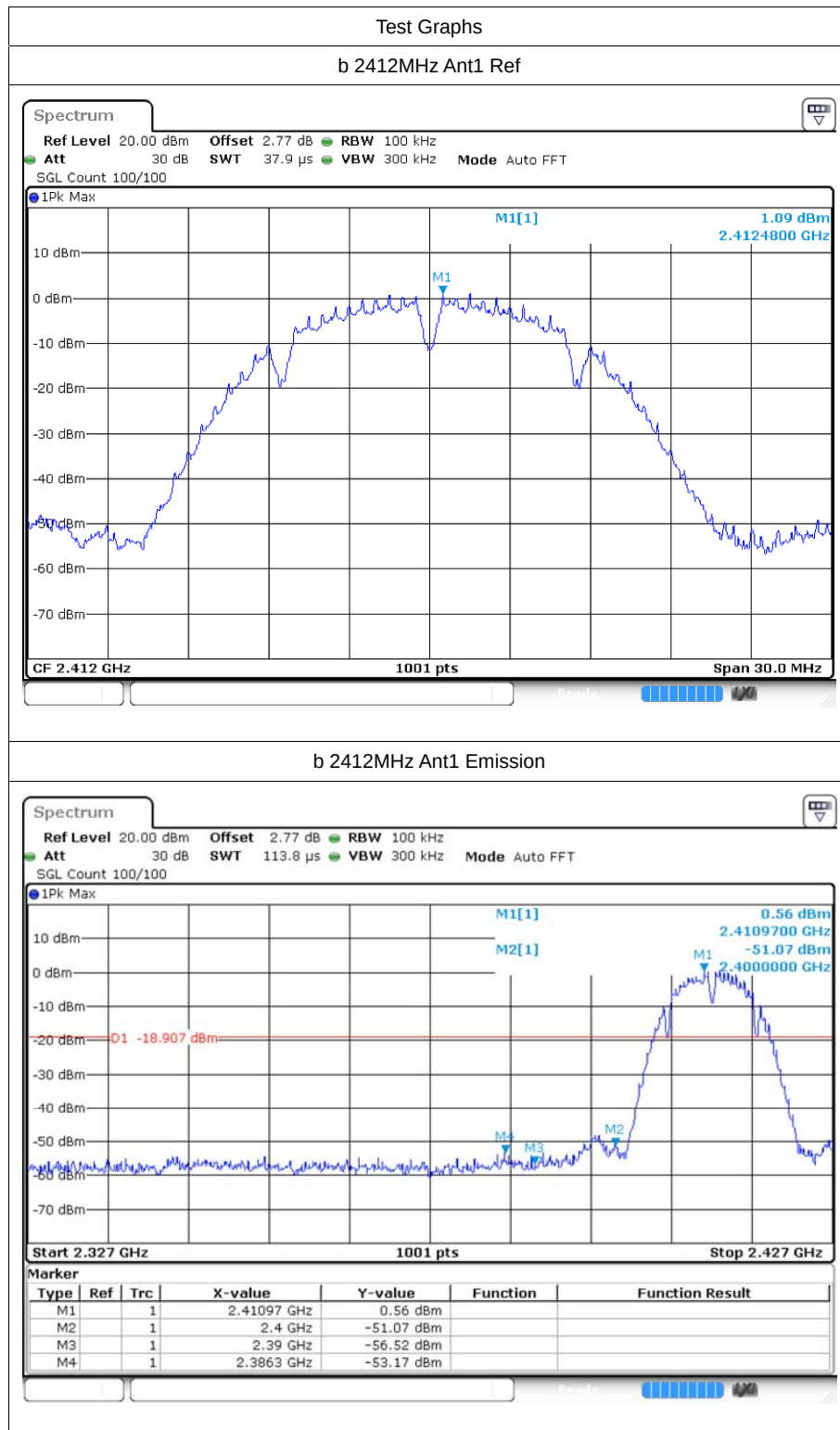


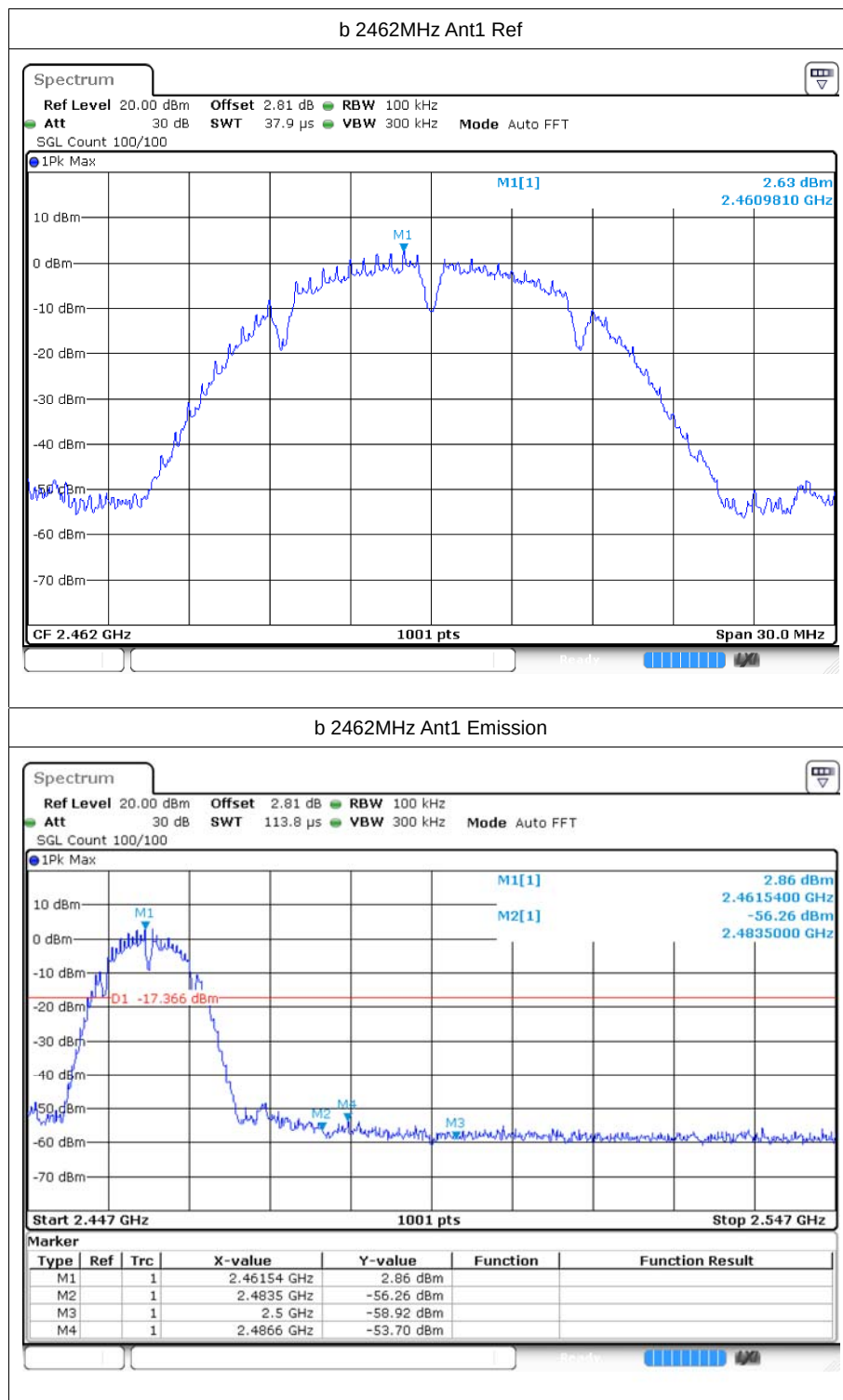
5 Band Edge

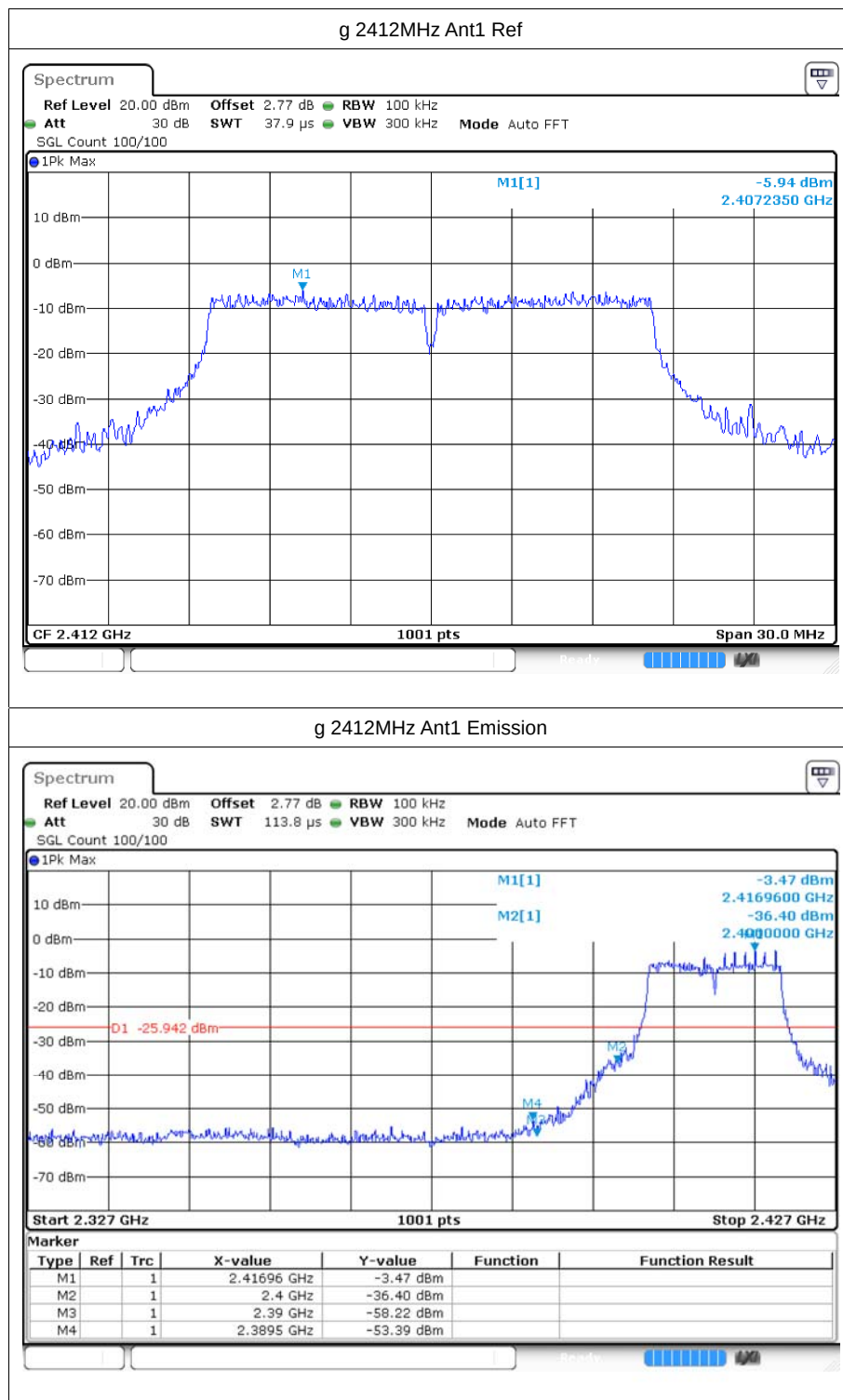
5.1 Test Result

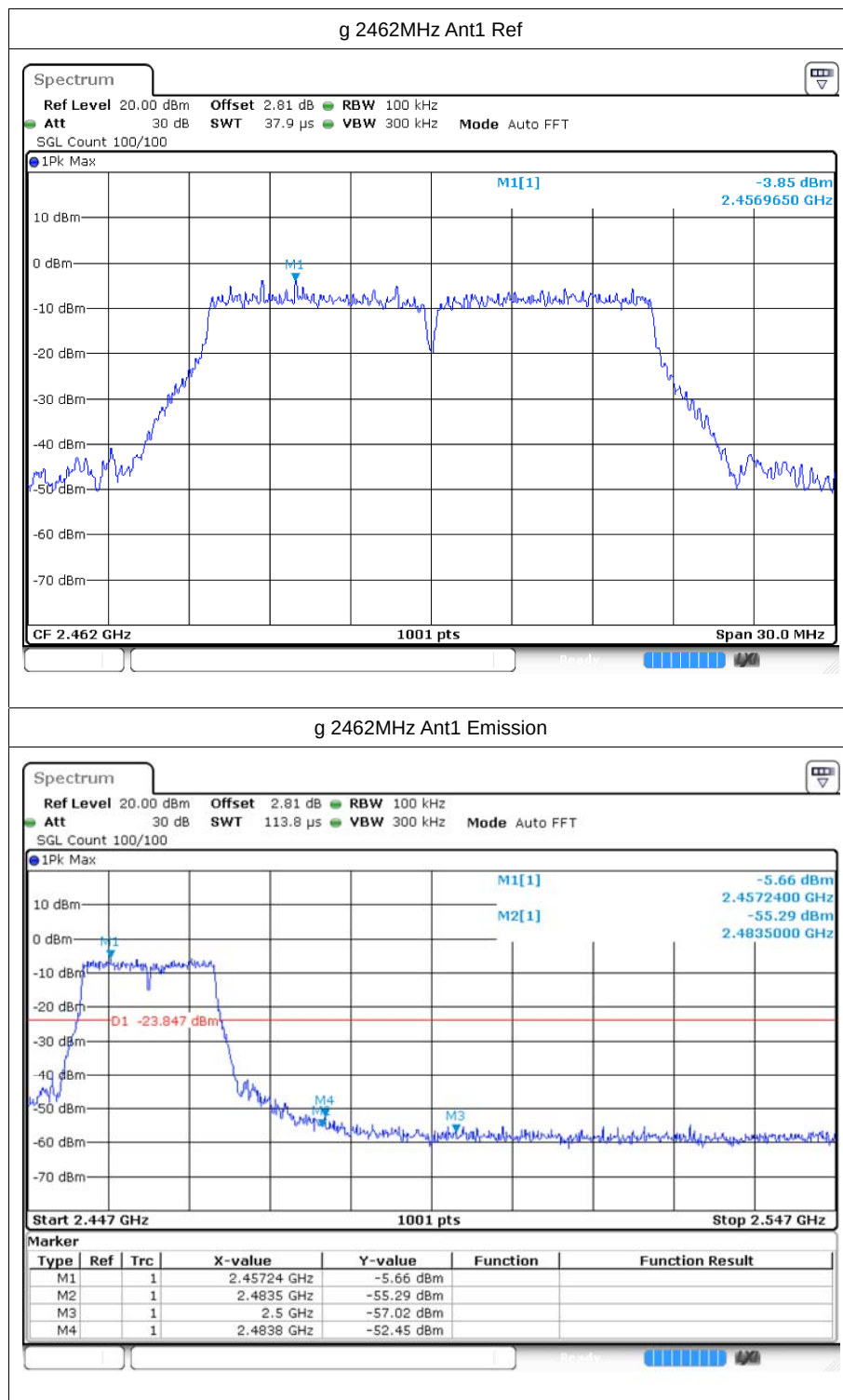
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-54.25	-20	-54.25
b	2462	Ant1	-56.32	-20	Pass
g	2412	Ant1	-47.45	-20	Pass
g	2462	Ant1	-48.6	-20	Pass
n20	2412	Ant1	-47.52	-20	Pass
n20	2462	Ant1	-46.7	-20	Pass

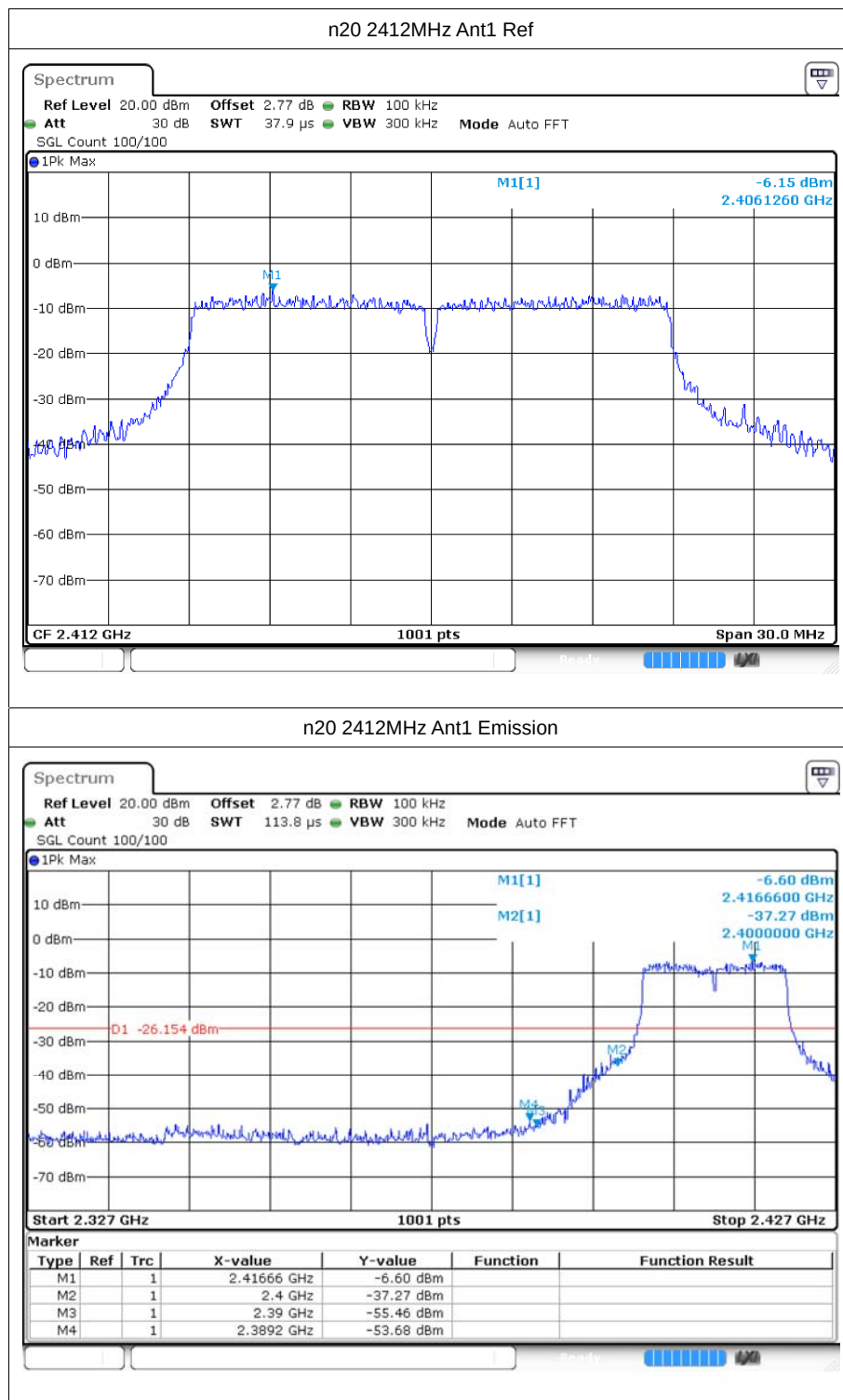
5.2 Test Graphs

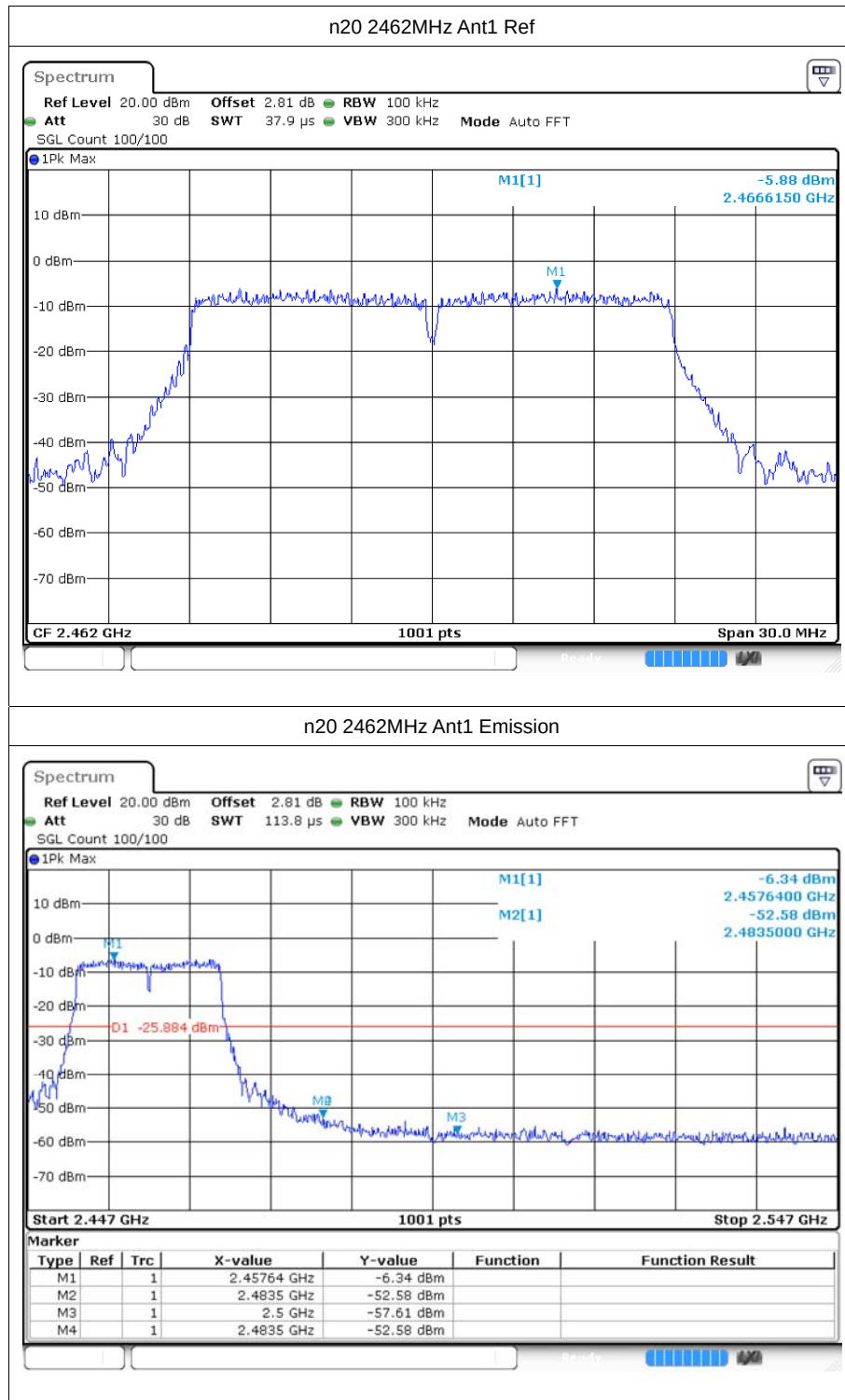












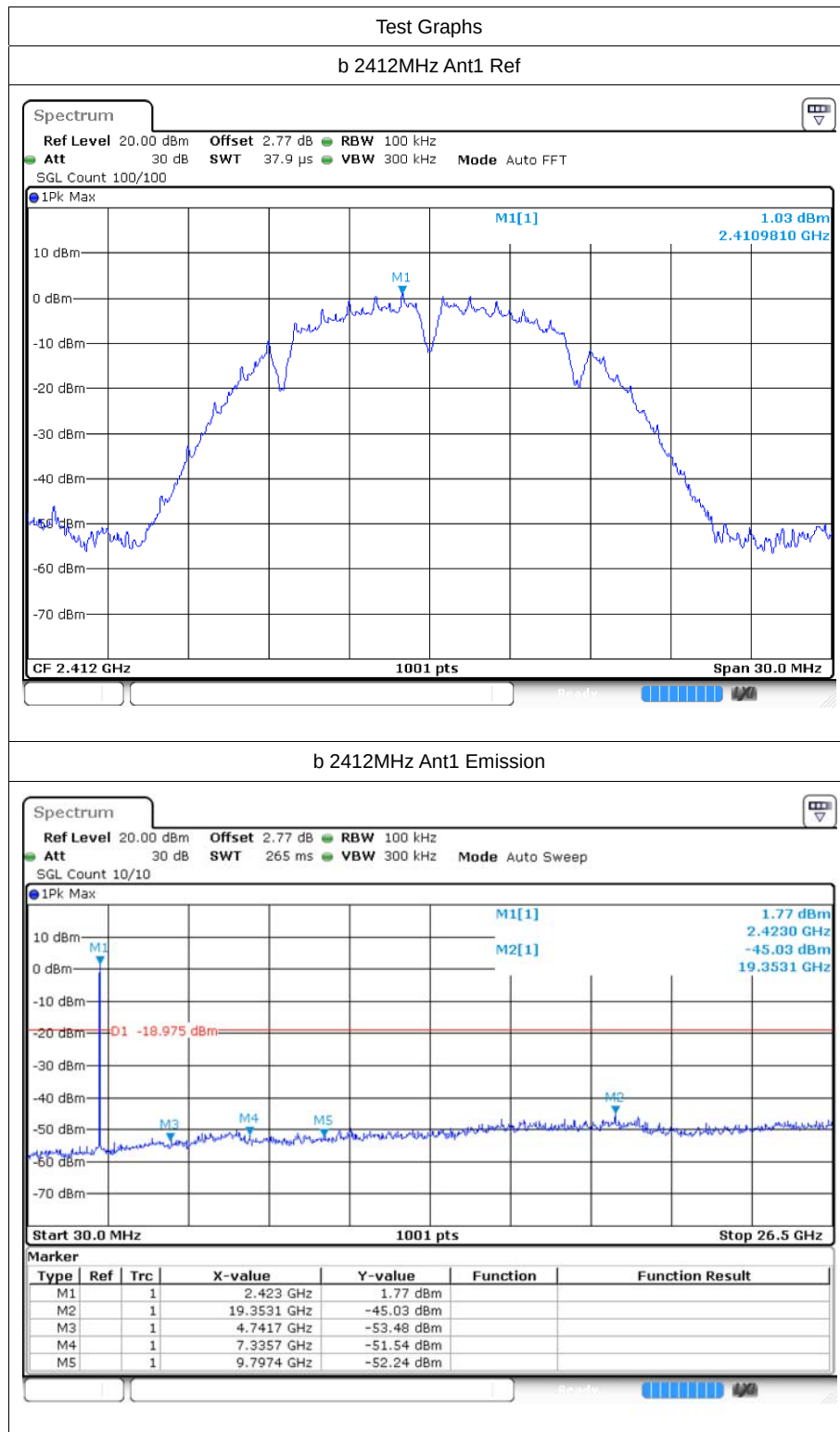


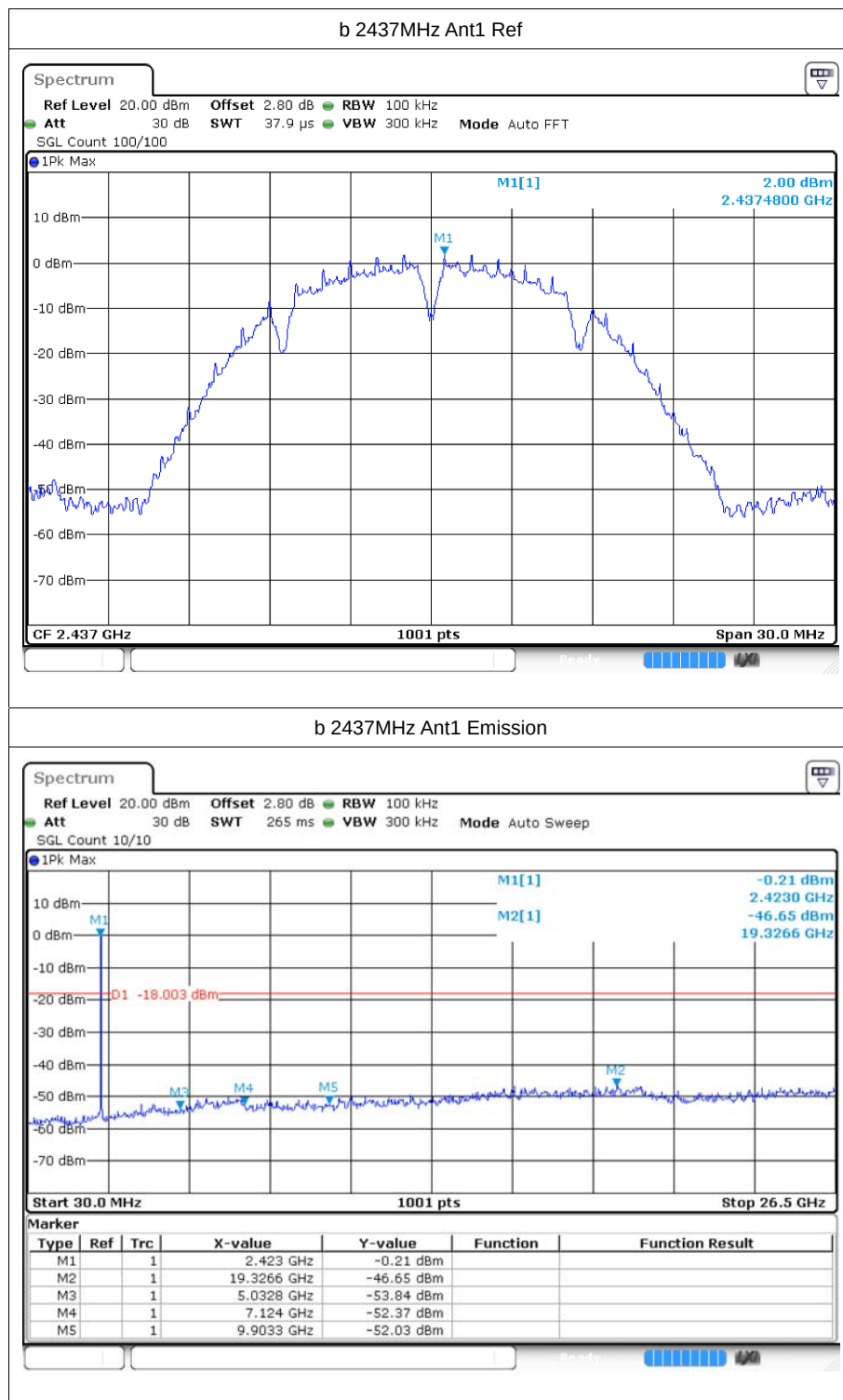
6 Conducted RF Spurious Emission

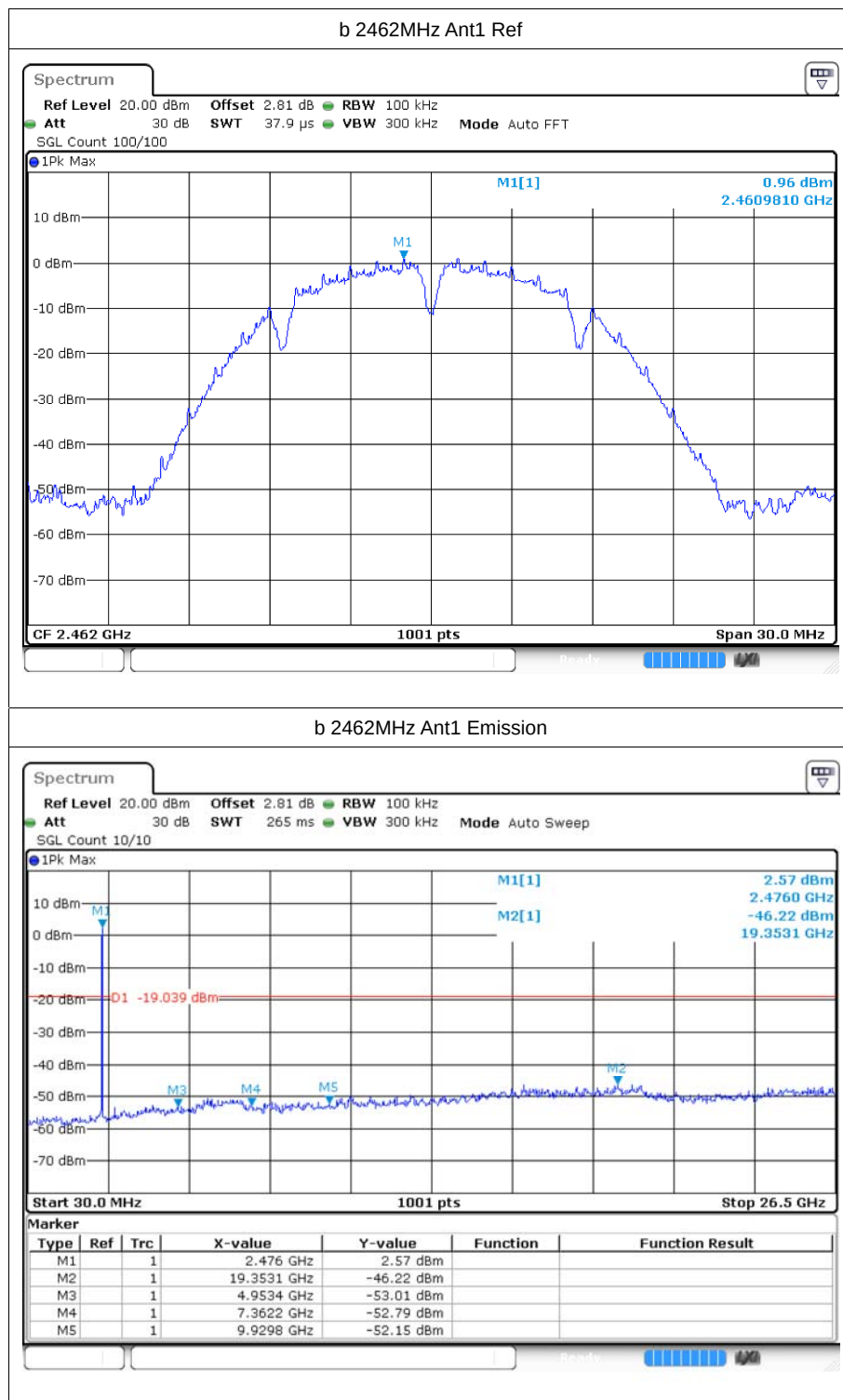
6.1 Test Result

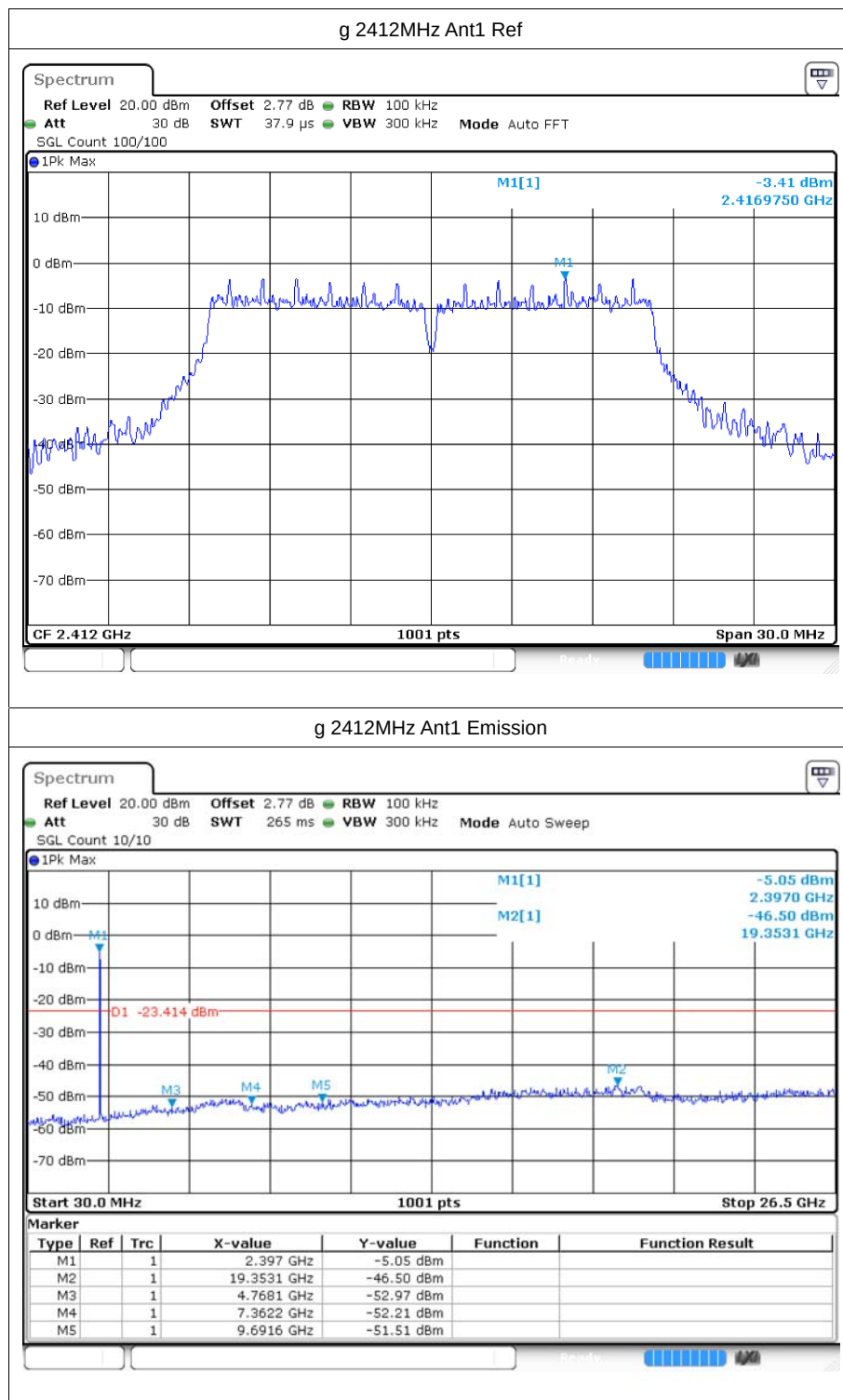
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-46.05	-20	Pass
b	2437	Ant1	-48.64	-20	Pass
b	2462	Ant1	-47.18	-20	Pass
g	2412	Ant1	-43.09	-20	Pass
g	2437	Ant1	-42.43	-20	Pass
g	2462	Ant1	-40.13	-20	Pass
n20	2412	Ant1	-39.17	-20	Pass
n20	2437	Ant1	-40.4	-20	Pass
n20	2462	Ant1	-41.12	-20	Pass

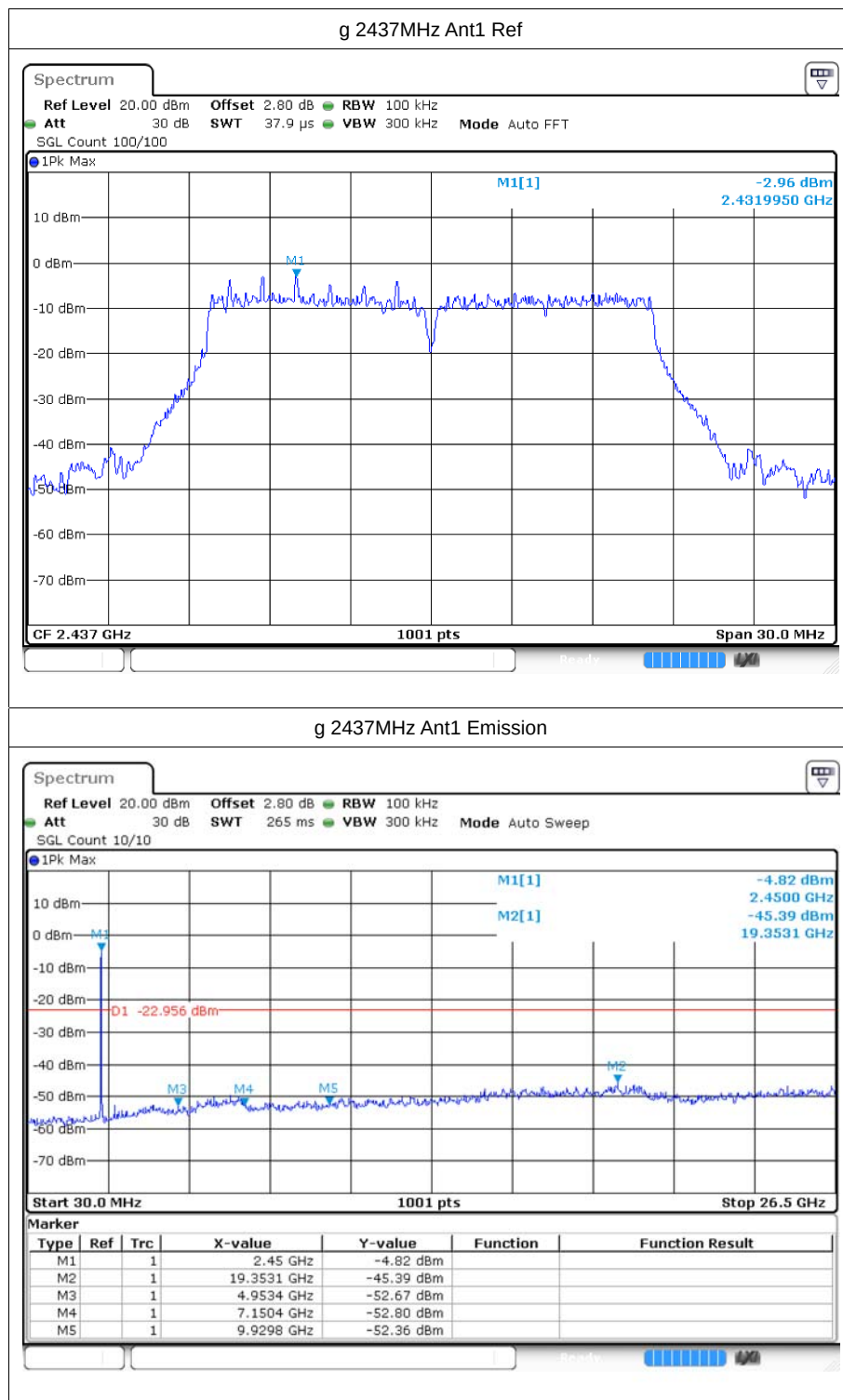
6.2 Test Graphs

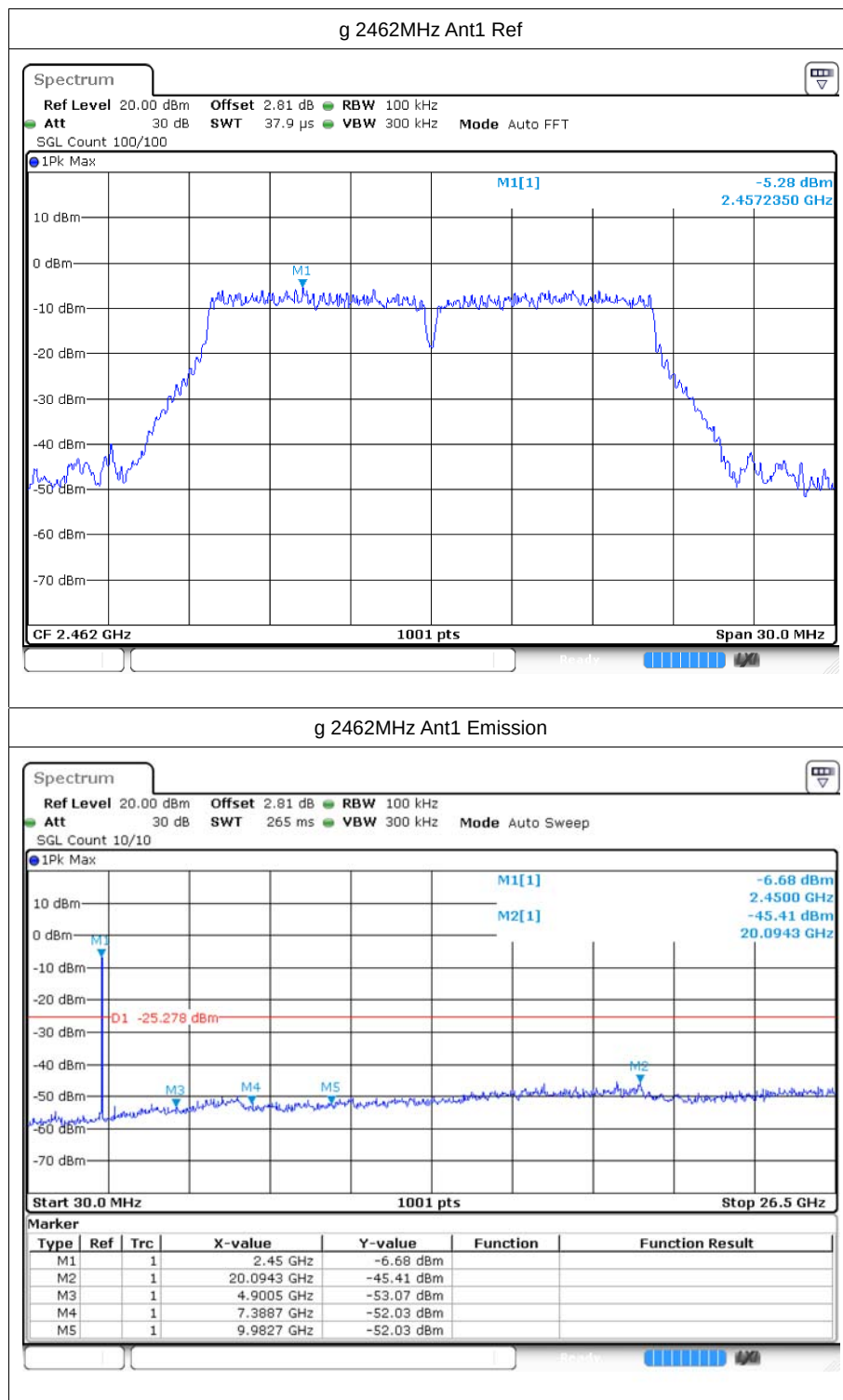


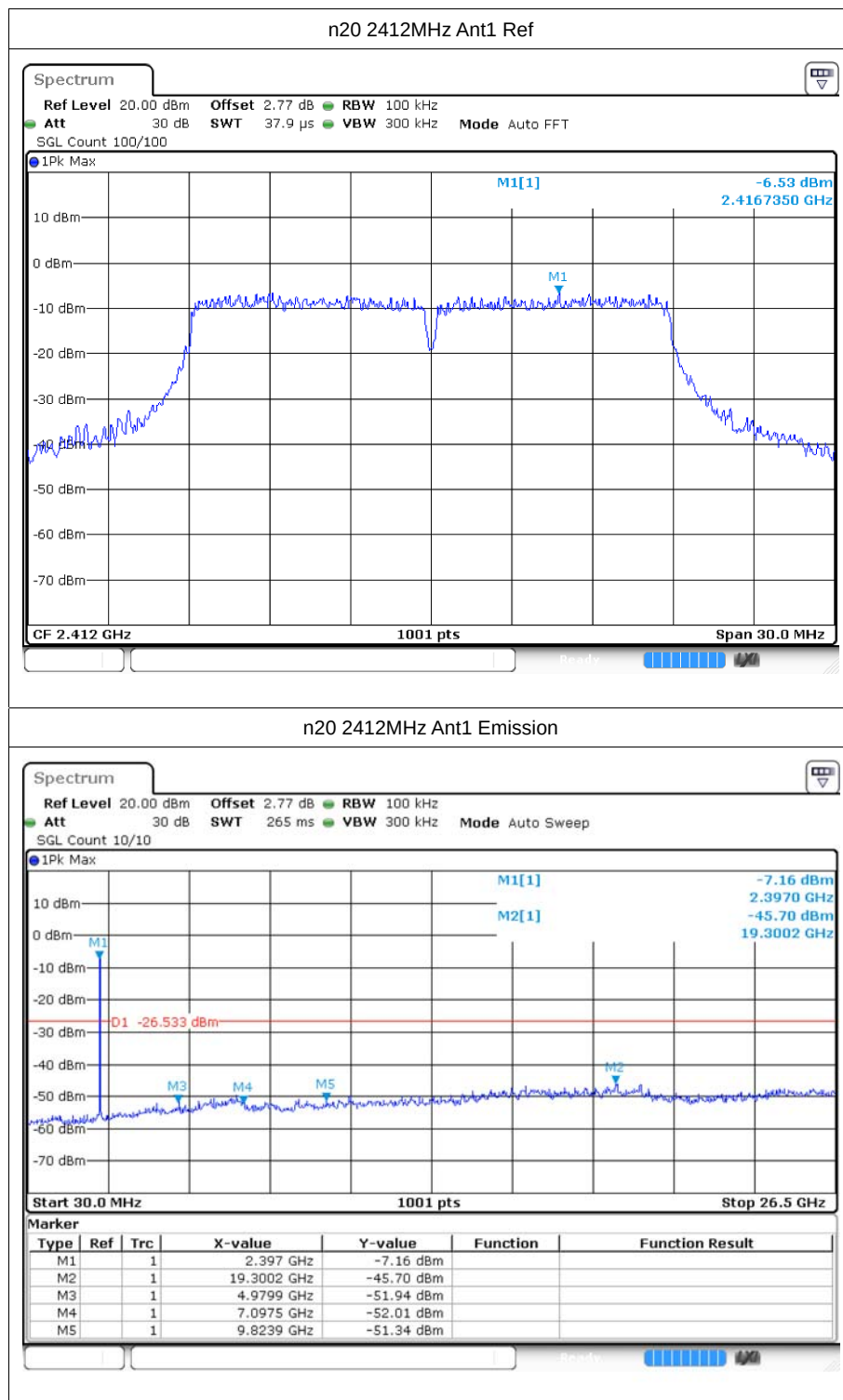


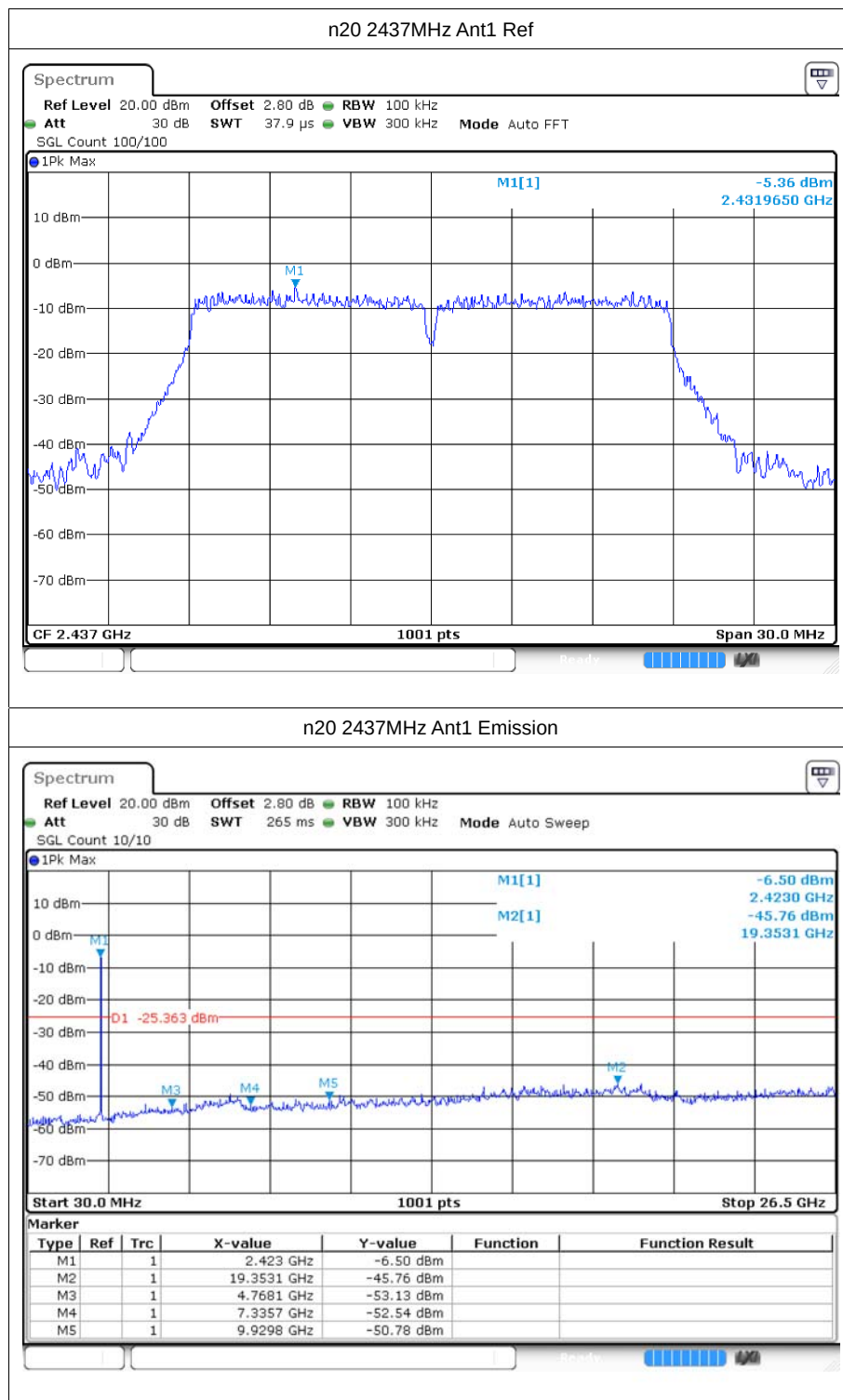


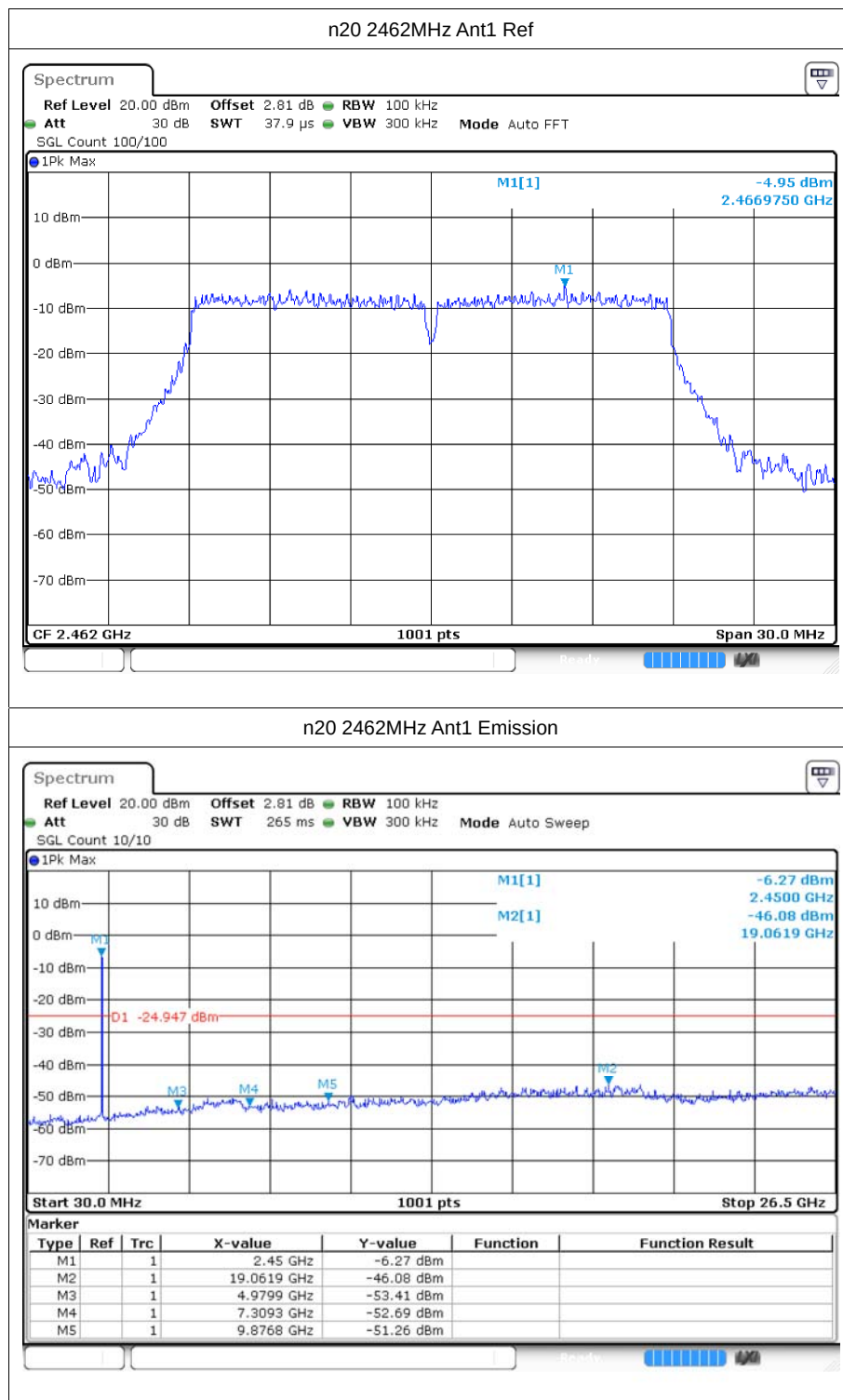














7 Restrict Band

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	-46.19	3.46	52.53	Peak	74	Pass
b	2412	Ant1	2310	-54.59	3.46	44.13	Average	54	Pass
b	2412	Ant1	2340.771	-39.91	3.46	58.81	Peak	74	Pass
b	2412	Ant1	2386.167	-51.91	3.46	46.81	Average	54	Pass
b	2412	Ant1	2390	-41.71	3.46	57.01	Peak	74	Pass
b	2412	Ant1	2390	-52.47	3.46	46.25	Average	54	Pass
b	2462	Ant1	2483.5	-44.26	3.46	54.46	Peak	74	54.46
b	2462	Ant1	2483.5	-52.16	3.46	46.56	Average	54	Pass
b	2462	Ant1	2485.16	-42.98	3.46	55.74	Peak	74	Pass
b	2462	Ant1	2487.704	-52.11	3.46	46.61	Average	54	Pass
b	2462	Ant1	2500	-43.45	3.46	55.27	Peak	74	Pass
b	2462	Ant1	2500	-54.08	3.46	44.64	Average	54	Pass
g	2412	Ant1	2310	-44.87	3.46	53.85	Peak	74	Pass
g	2412	Ant1	2310	-54.02	3.46	44.7	Average	54	Pass
g	2412	Ant1	2389.911	-41.13	3.46	57.59	Peak	74	Pass
g	2412	Ant1	2389.911	-51.51	3.46	47.21	Average	54	Pass
g	2412	Ant1	2390	-40.81	3.46	57.01	Peak	74	Pass
g	2412	Ant1	2390	-51.45	3.46	47.27	Average	54	Pass
g	2462	Ant1	2483.5	-43.29	3.46	55.43	Peak	74	Pass
g	2462	Ant1	2483.5	-50.66	3.46	48.06	Average	54	Pass
g	2462	Ant1	2485.16	-41.67	3.46	57.05	Peak	74	Pass
g	2462	Ant1	2483.676	-50.65	3.46	48.07	Average	54	Pass
g	2462	Ant1	2500	-46.38	3.46	55.27	Peak	74	Pass
g	2462	Ant1	2500	-53.67	3.46	45.05	Average	54	Pass
n20	2412	Ant1	2310	-44.35	3.46	54.37	Peak	74	Pass
n20	2412	Ant1	2310	-54.76	3.46	43.96	Average	54	Pass
n20	2412	Ant1	2389.677	-41.47	3.46	57.25	Peak	74	Pass
n20	2412	Ant1	2389.911	-51.41	3.46	47.31	Average	54	Pass
n20	2412	Ant1	2390	-41.06	3.46	57.66	Peak	74	Pass
n20	2412	Ant1	2390	-51.36	3.46	47.36	Average	54	Pass
n20	2462	Ant1	2483.5	-38.82	3.46	59.9	Peak	74	Pass
n20	2462	Ant1	2483.5	-50.64	3.46	48.08	Average	54	Pass
n20	2462	Ant1	2483.517	-38.82	3.46	59.9	Peak	74	Pass
n20	2462	Ant1	2483.517	-50.64	3.46	48.08	Average	54	Pass



n20	2462	Ant1	2500	-45.56	3.46	53.16	Peak	74	Pass
n20	2462	Ant1	2500	-54.05	3.46	44.67	Average	54	Pass

7.2 Test Graphs

