

Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name:Mako V2

Trade Mark: Smithtek

Test Model: MV2T

Environmental Conditions

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

Contents

	Page
COVER PAGE	
1 MAXIMUM CONDUCTED OUTPUT POWER	3
1.1 TEST RESULT	3
2 -6DB BANDWIDTH.....	4
2.1 TEST RESULT	4
2.2 TEST GRAPHS	5
3 MAXIMUM POWER SPECTRAL DENSITY LEVEL.....	11
3.1 TEST RESULT	11
3.2 TEST GRAPHS	12
4 BAND EDGE.....	18
4.1 TEST RESULT	18
4.2 TEST GRAPHS	19
5 CONDUCTED RF SPURIOUS EMISSION.....	27
5.1 TEST RESULT	27
5.2 TEST GRAPHS	28
6 RESTRICT BAND	40
6.1 TEST RESULT	40
6.2 TEST GRAPHS	42
7 DUTY CYCLE	50
7.1 TEST RESULT	50
7.2 TEST GRAPHS	51

1 Maximum Conducted Output Power

1.1 Test Result

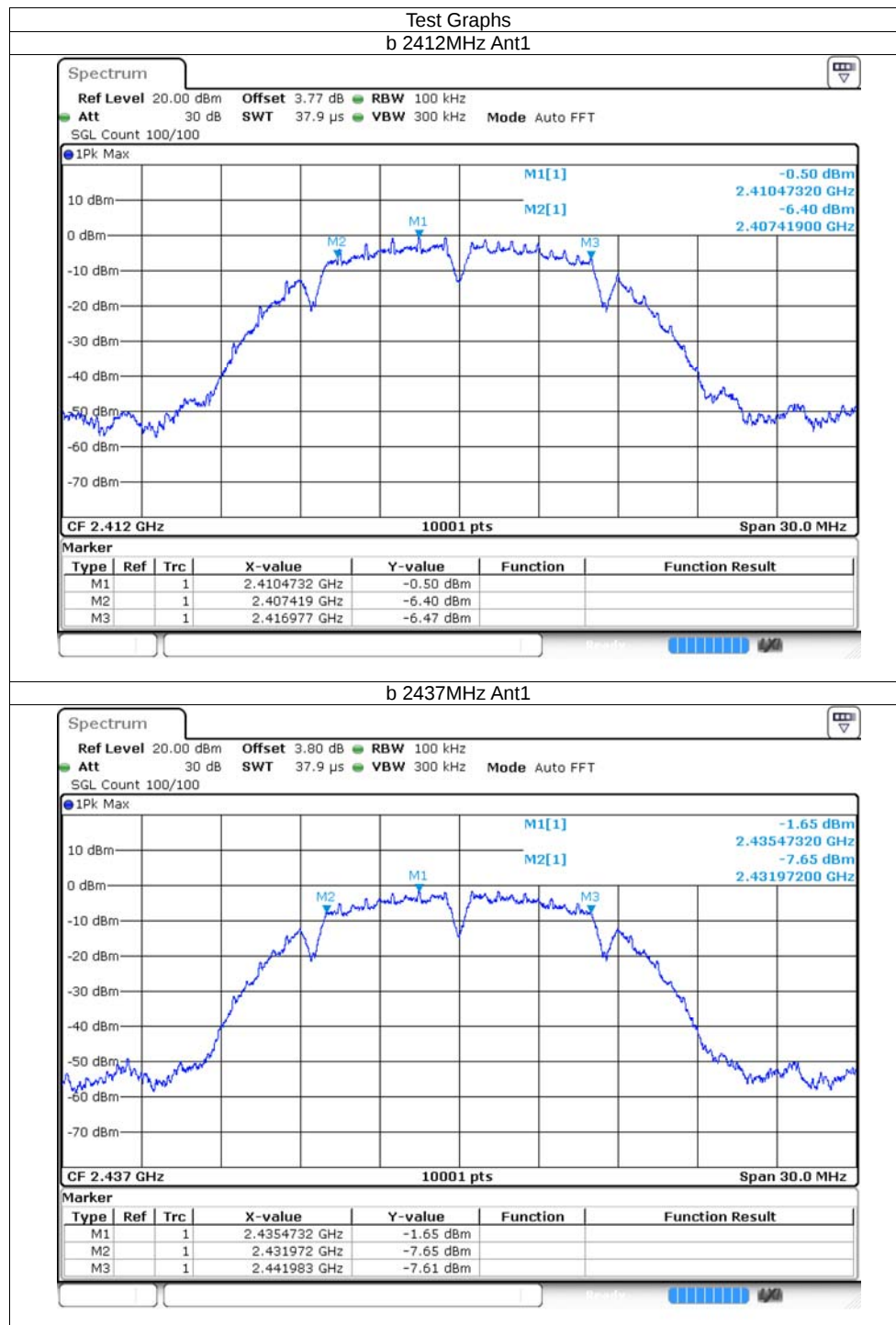
Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
11b	2412	Ant1	13.21	30	Pass
11b	2437	Ant1	13.25	30	Pass
11b	2462	Ant1	12.52	30	Pass
11g	2412	Ant1	11.74	30	Pass
11g	2437	Ant1	11.72	30	Pass
11g	2462	Ant1	11.39	30	Pass
11n20	2412	Ant1	10.28	30	Pass
11n20	2437	Ant1	10.71	30	Pass
11n20	2462	Ant1	10	30	Pass
11n40	2422	Ant1	9.65	30	Pass
11n40	2437	Ant1	10.14	30	Pass
11n40	2452	Ant1	9.98	30	Pass

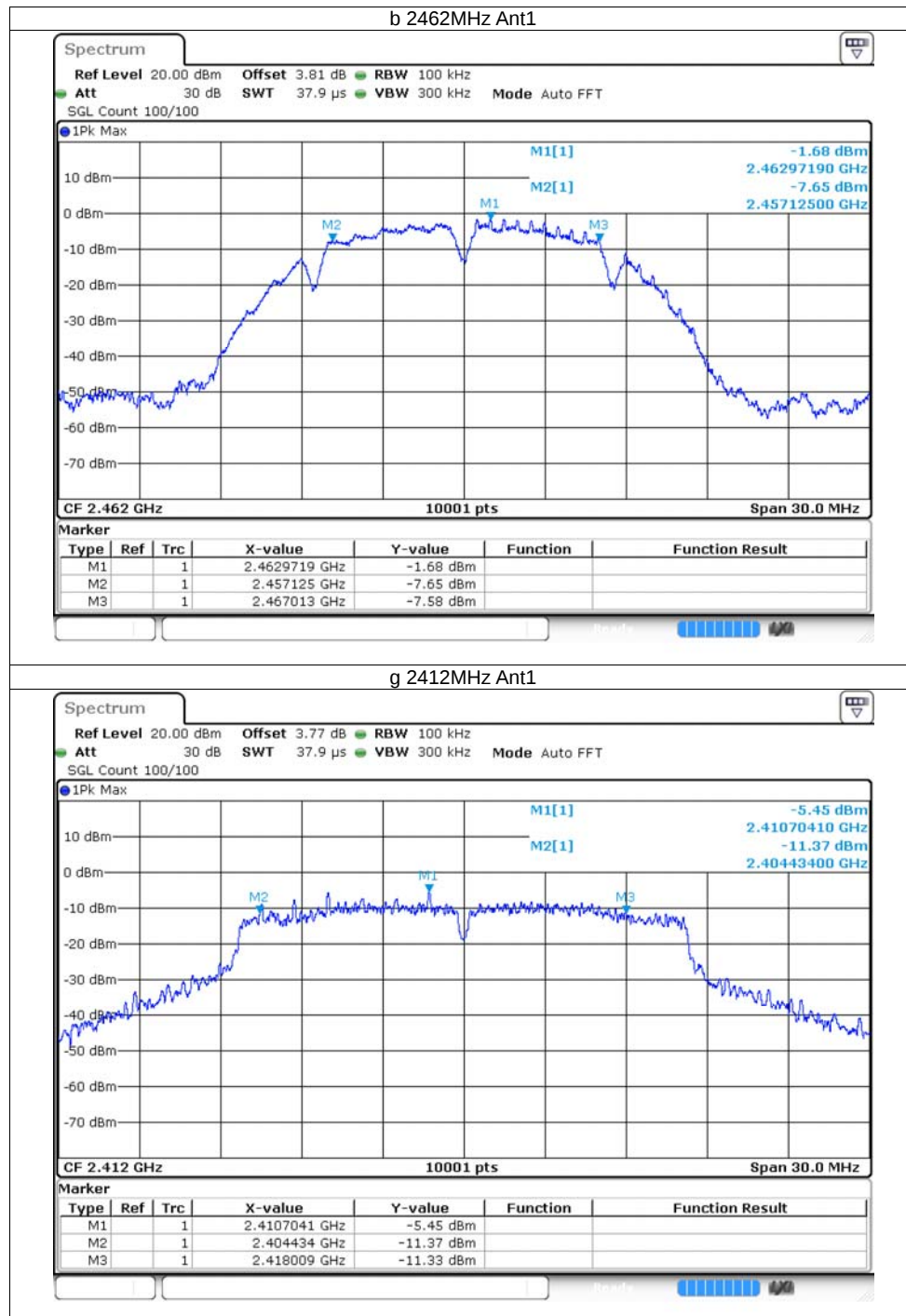
2 -6dB Bandwidth

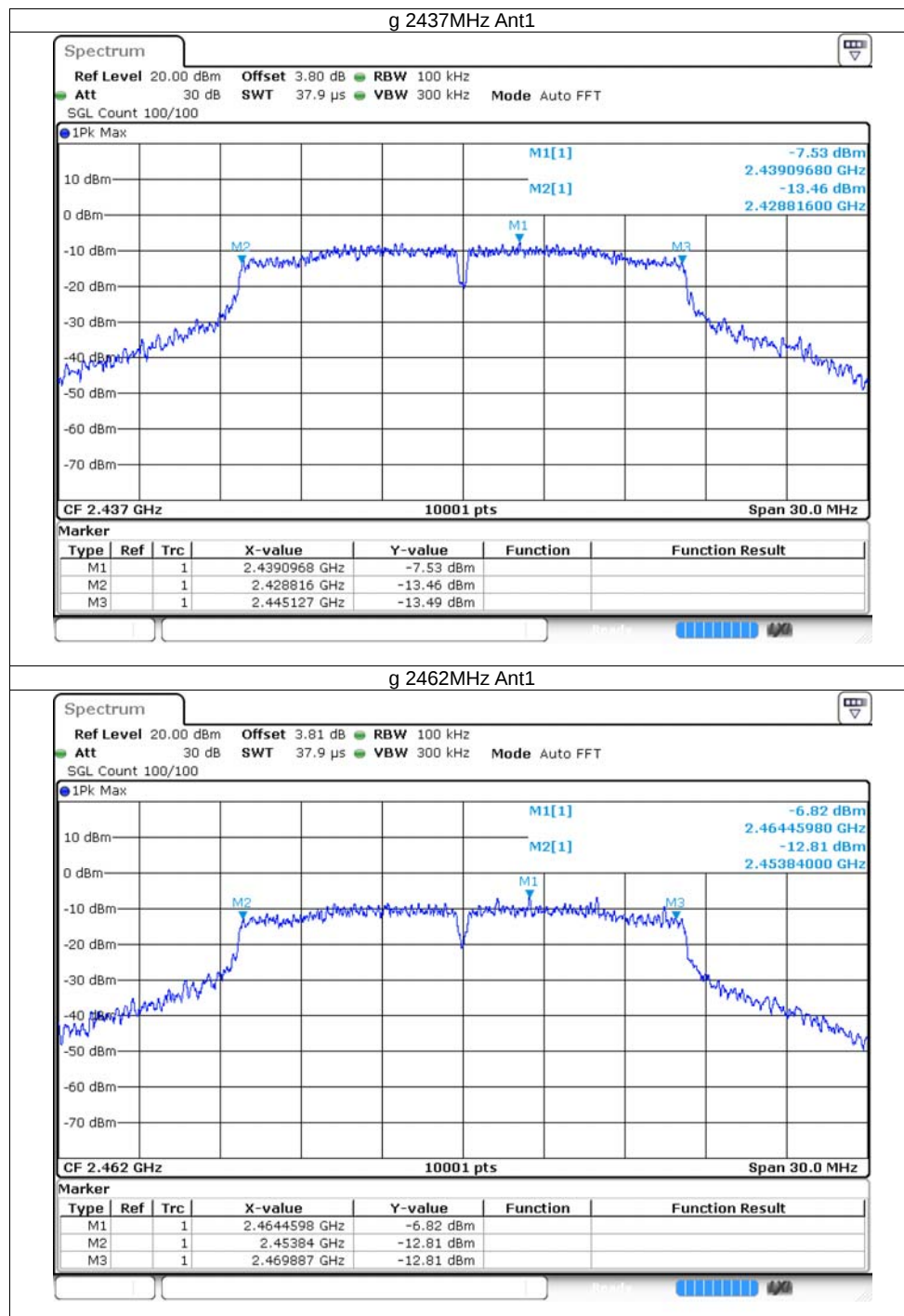
2.1 Test Result

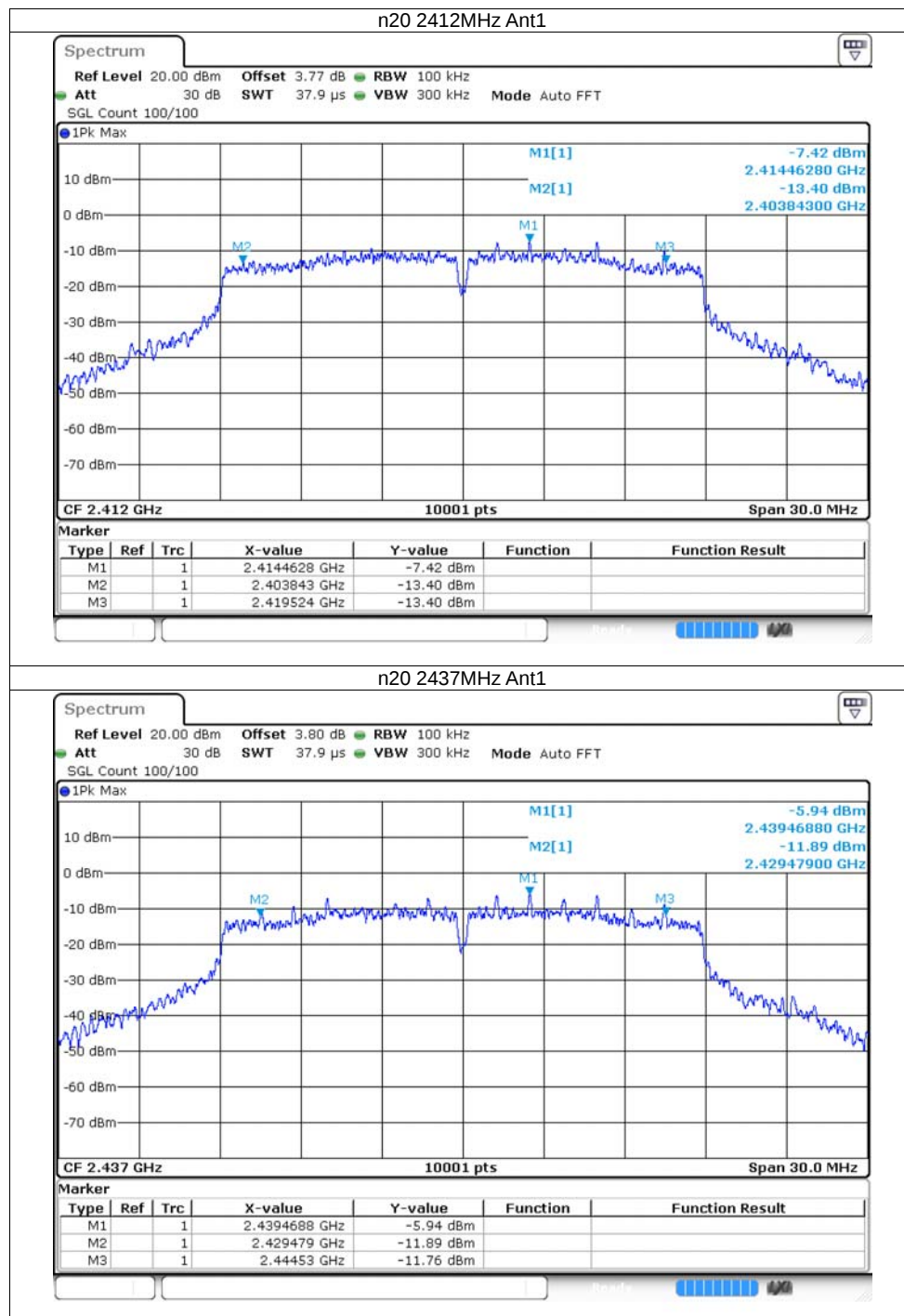
Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	9.558	0.5	Pass
b	2437	Ant1	10.011	0.5	Pass
b	2462	Ant1	9.888	0.5	Pass
g	2412	Ant1	13.575	0.5	Pass
g	2437	Ant1	16.311	0.5	Pass
g	2462	Ant1	16.047	0.5	Pass
n20	2412	Ant1	15.681	0.5	Pass
n20	2437	Ant1	15.051	0.5	Pass
n20	2462	Ant1	13.851	0.5	Pass
n40	2422	Ant1	30.084	0.5	Pass
n40	2437	Ant1	33.81	0.5	Pass
n40	2452	Ant1	35.124	0.5	Pass

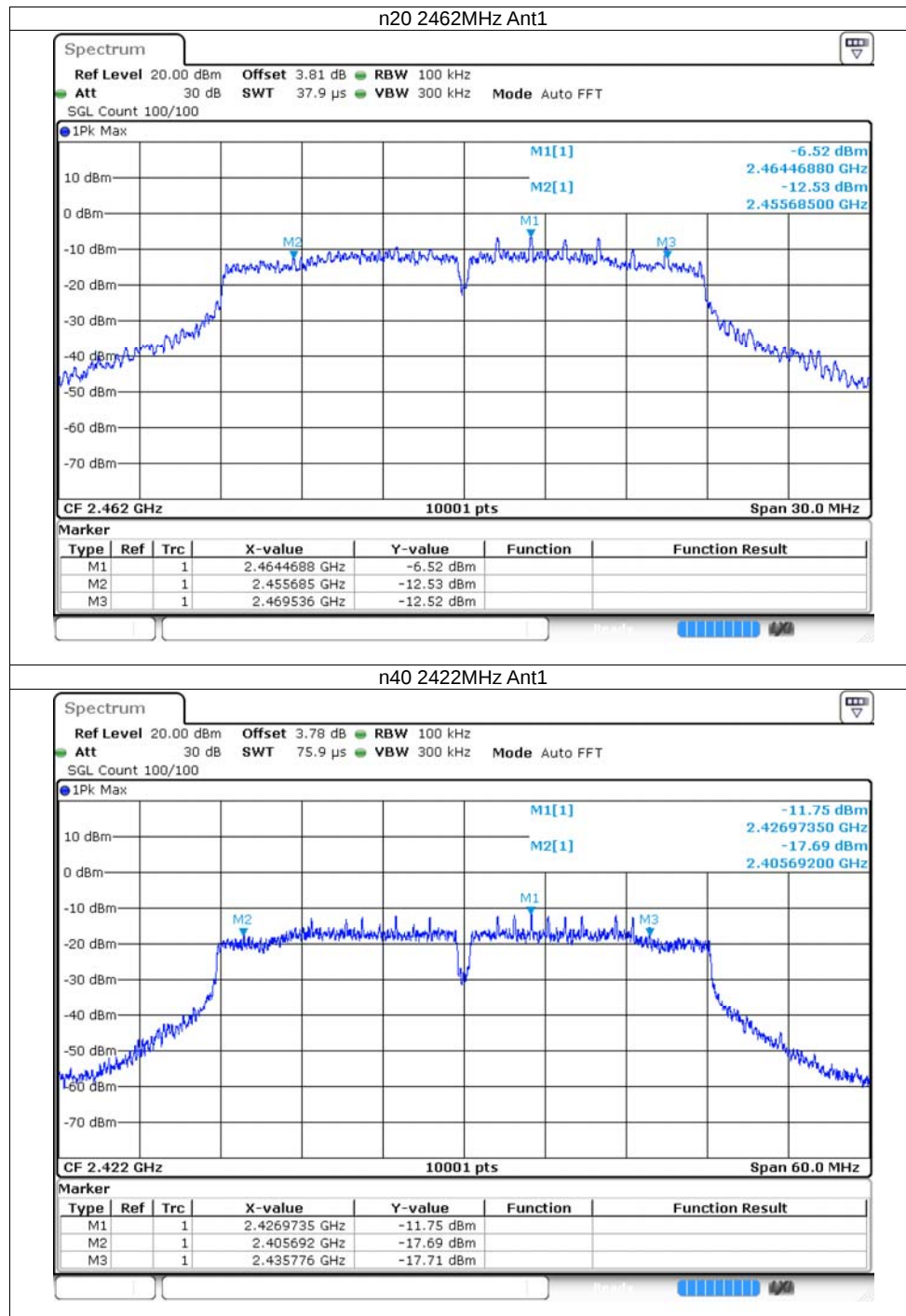
2.2 Test Graphs

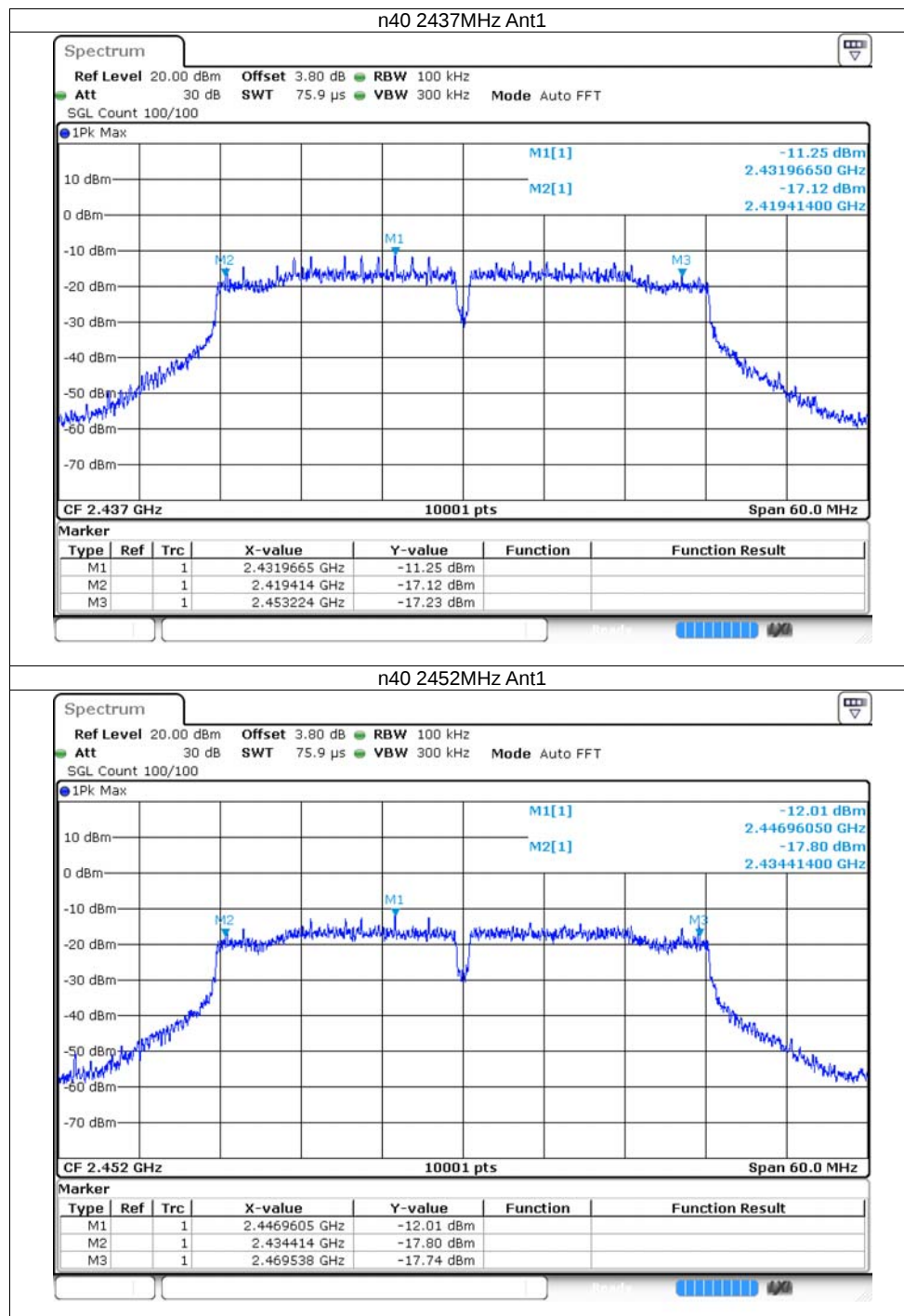










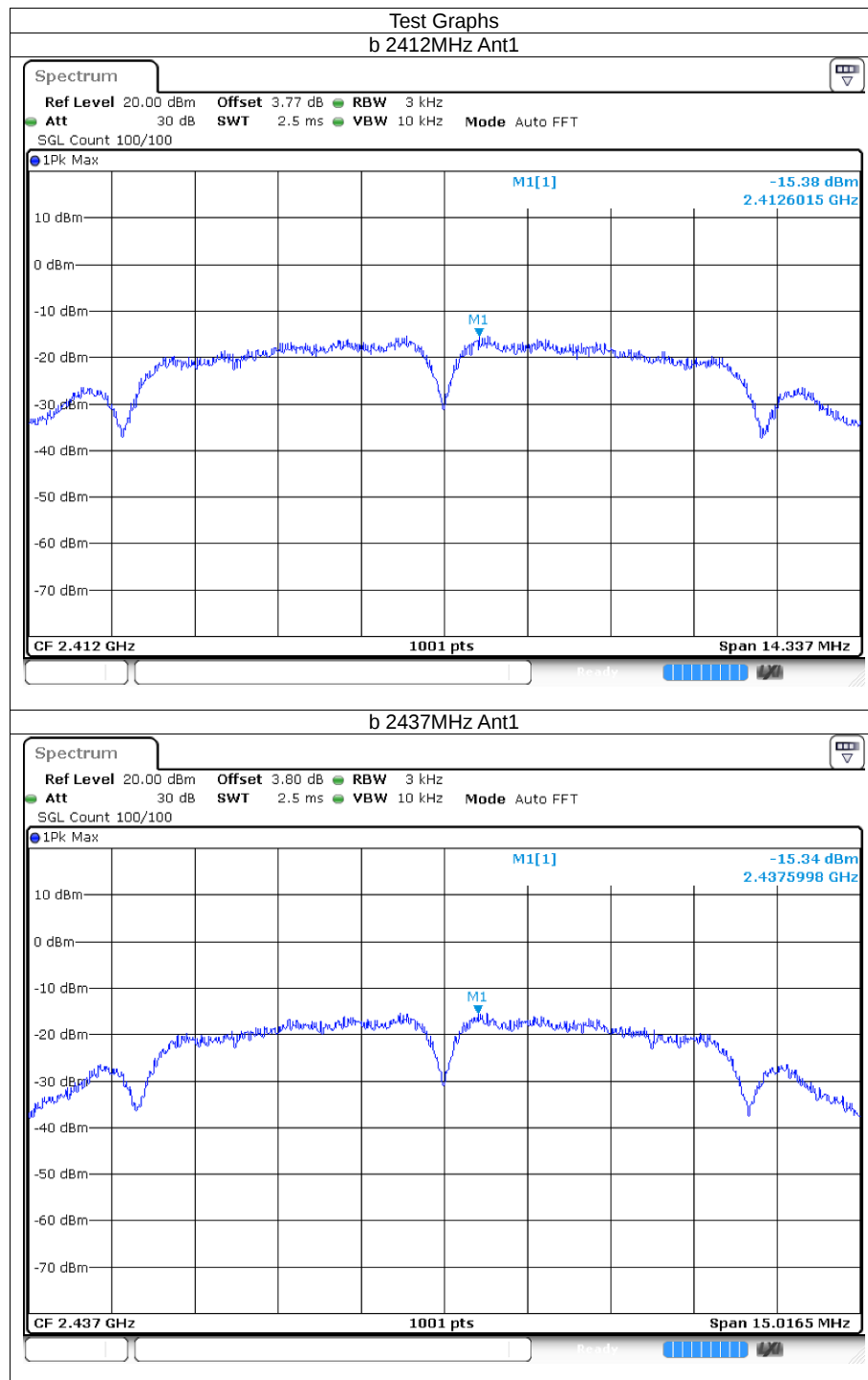


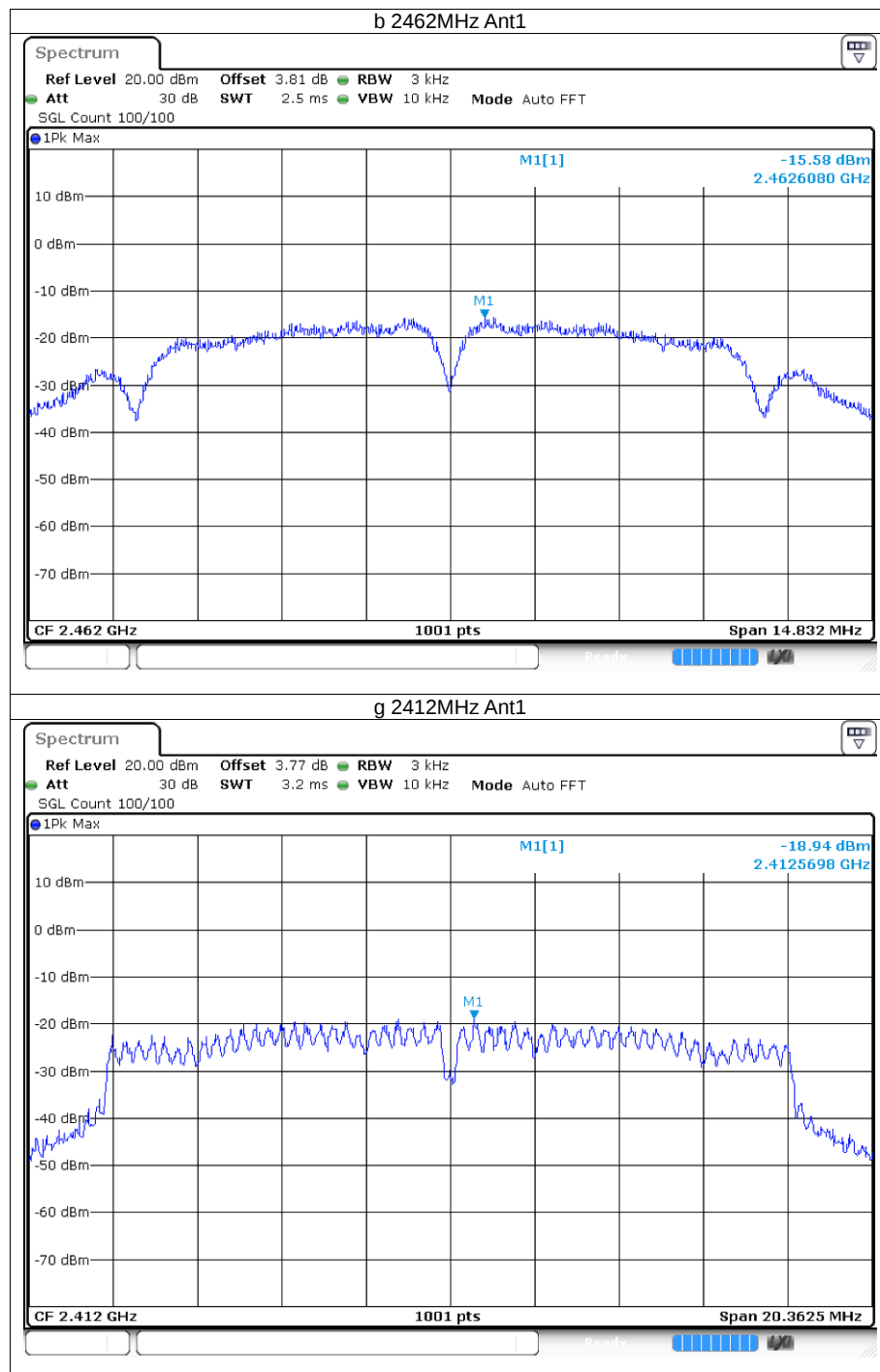
3 Maximum Power Spectral Density Level

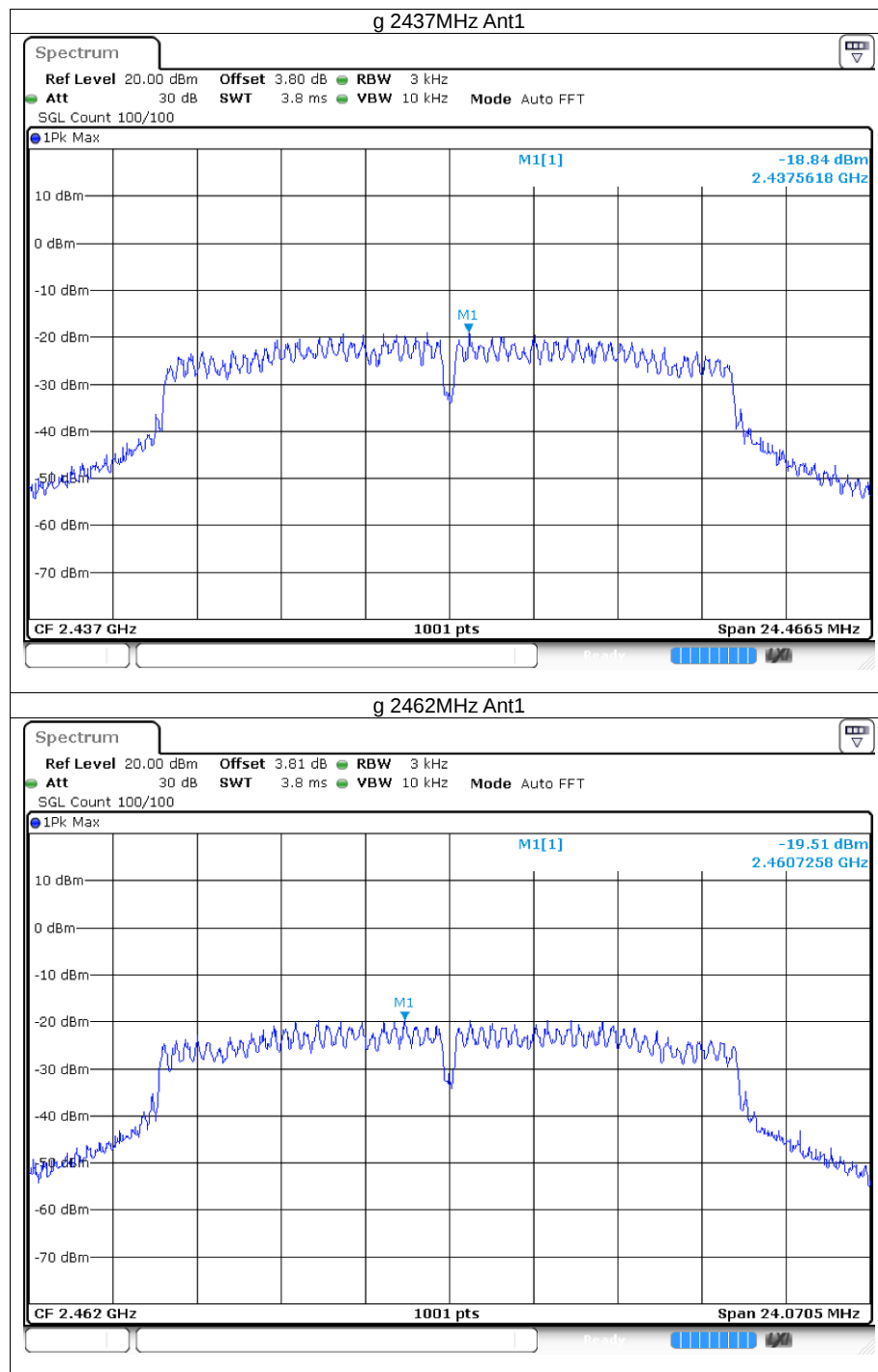
3.1 Test Result

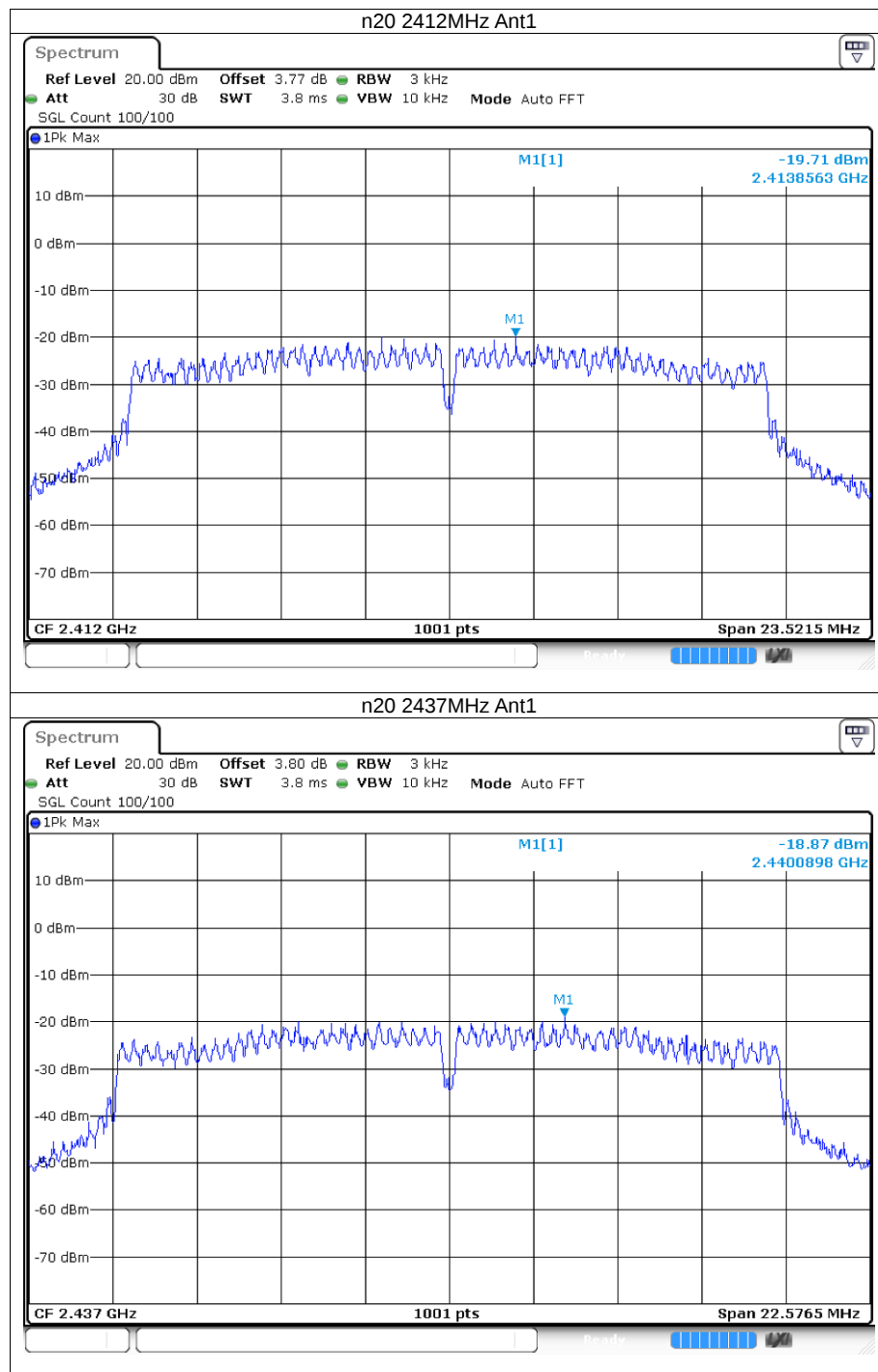
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	-15.38	8	Pass
b	2437	Ant1	-15.34	8	Pass
b	2462	Ant1	-15.58	8	Pass
g	2412	Ant1	-18.94	8	Pass
g	2437	Ant1	-18.84	8	Pass
g	2462	Ant1	-19.51	8	Pass
n20	2412	Ant1	-19.71	8	Pass
n20	2437	Ant1	-18.87	8	Pass
n20	2462	Ant1	-20.28	8	Pass
n40	2422	Ant1	-25.05	8	Pass
n40	2437	Ant1	-24.46	8	Pass
n40	2452	Ant1	-24.55	8	Pass

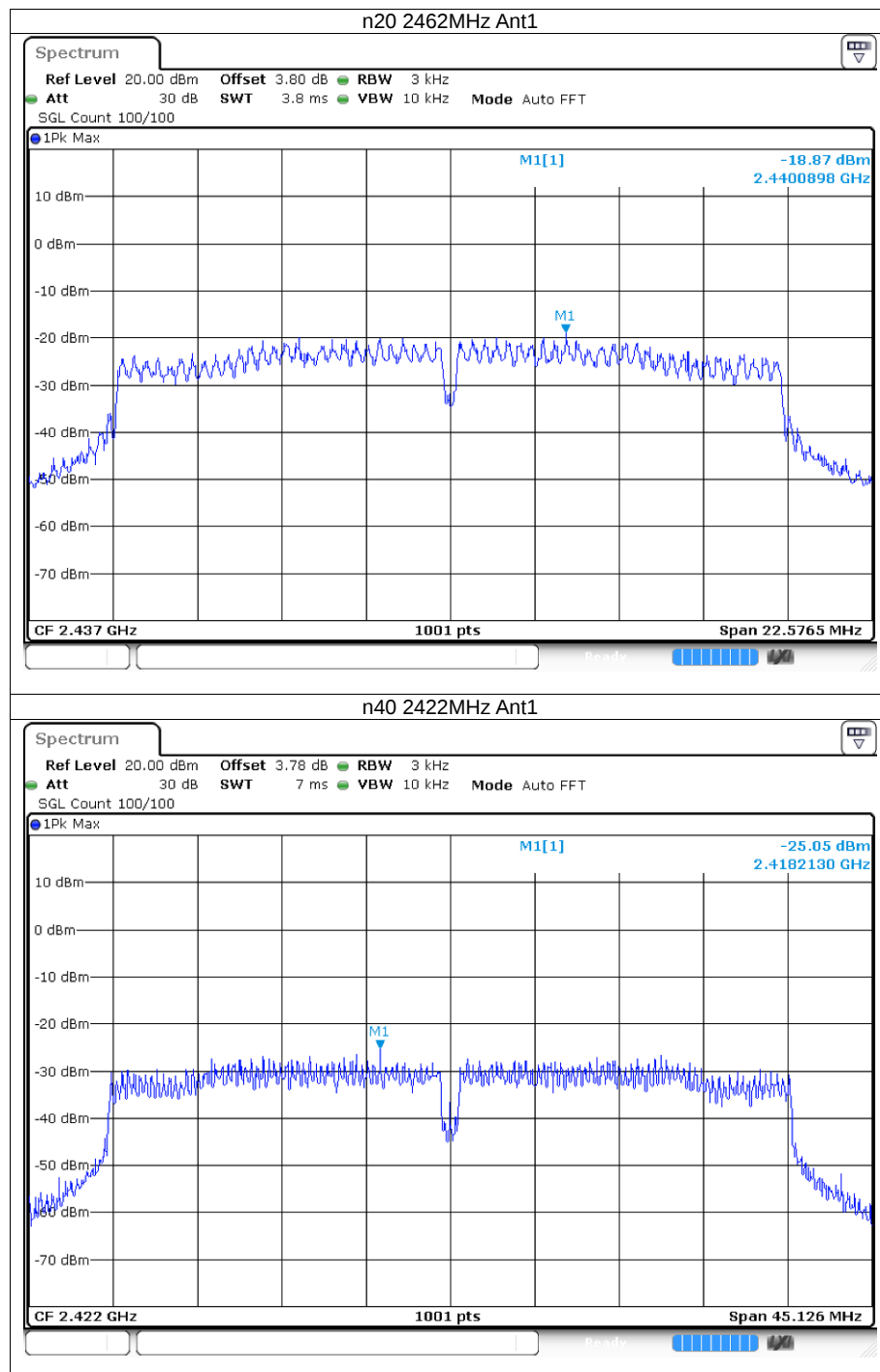
3.2 Test Graphs

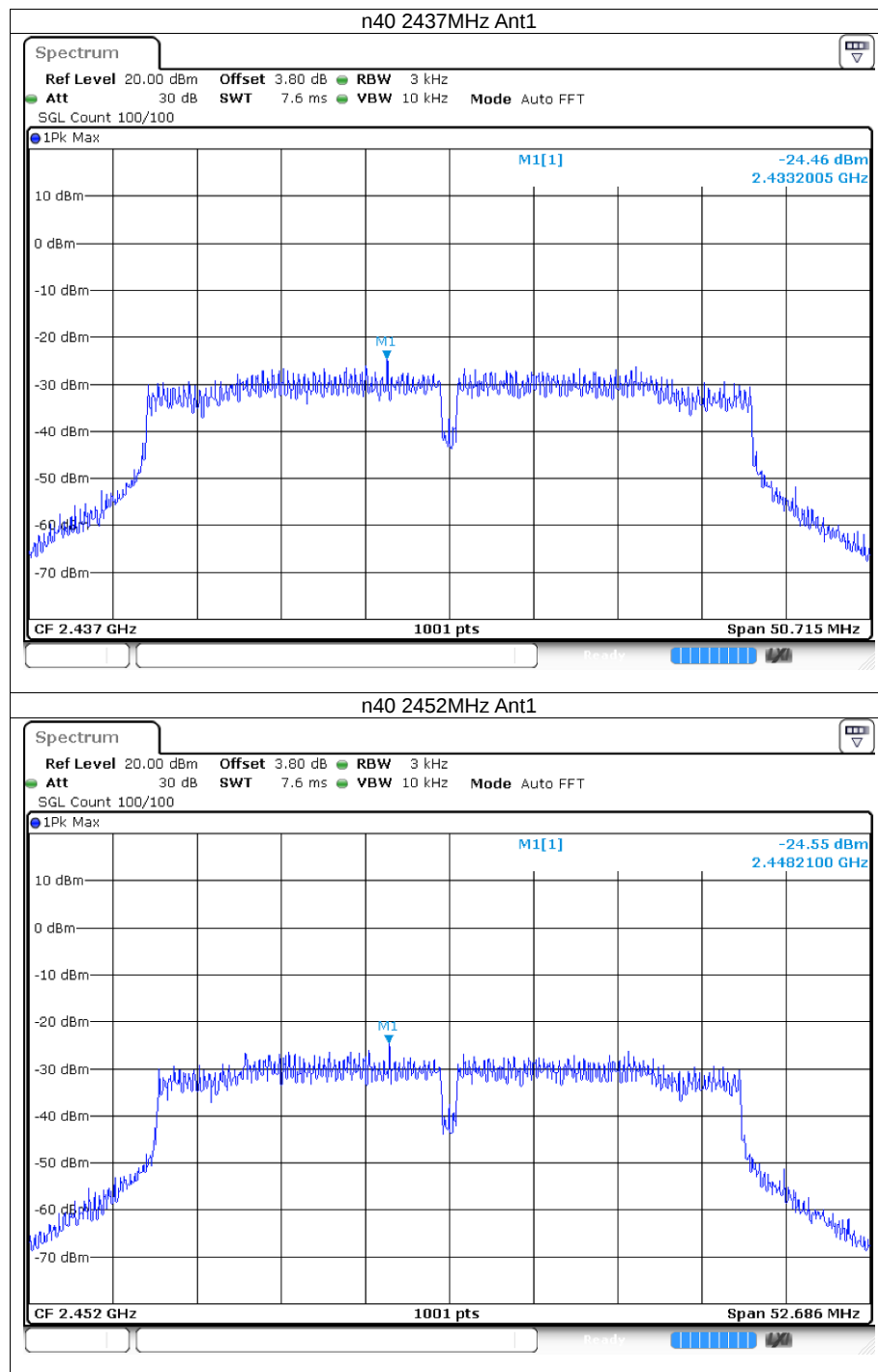










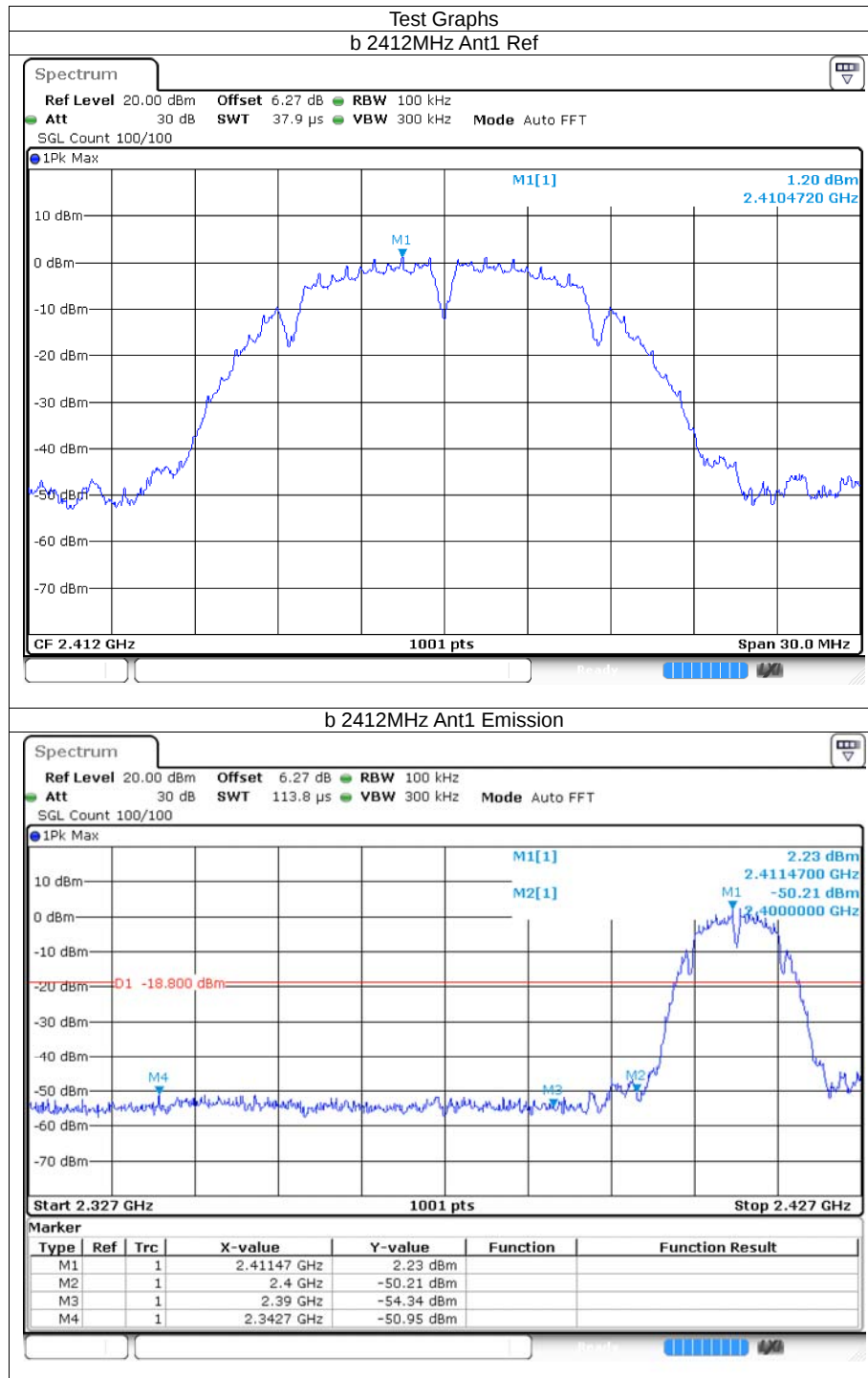


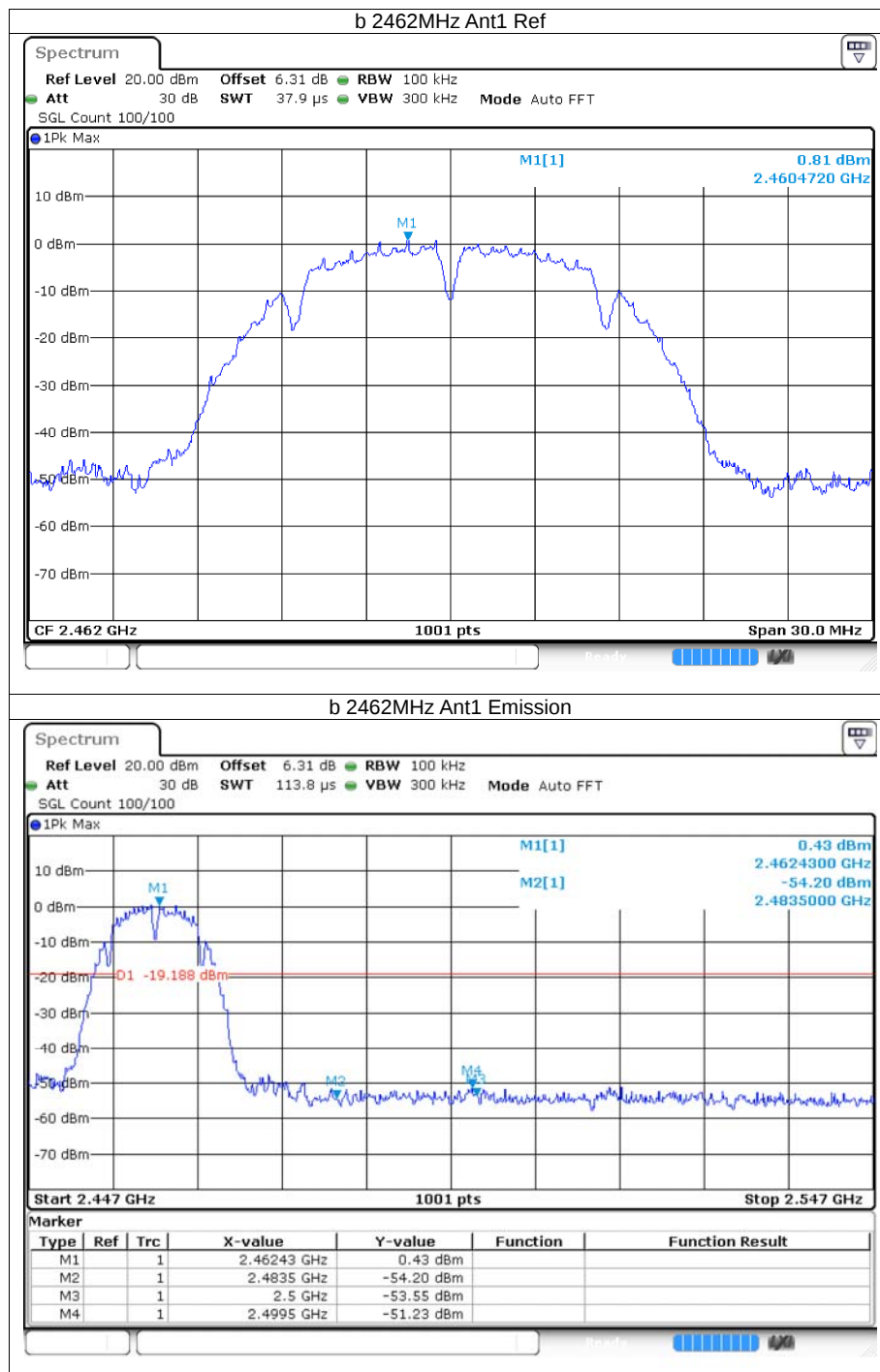
4 Band Edge

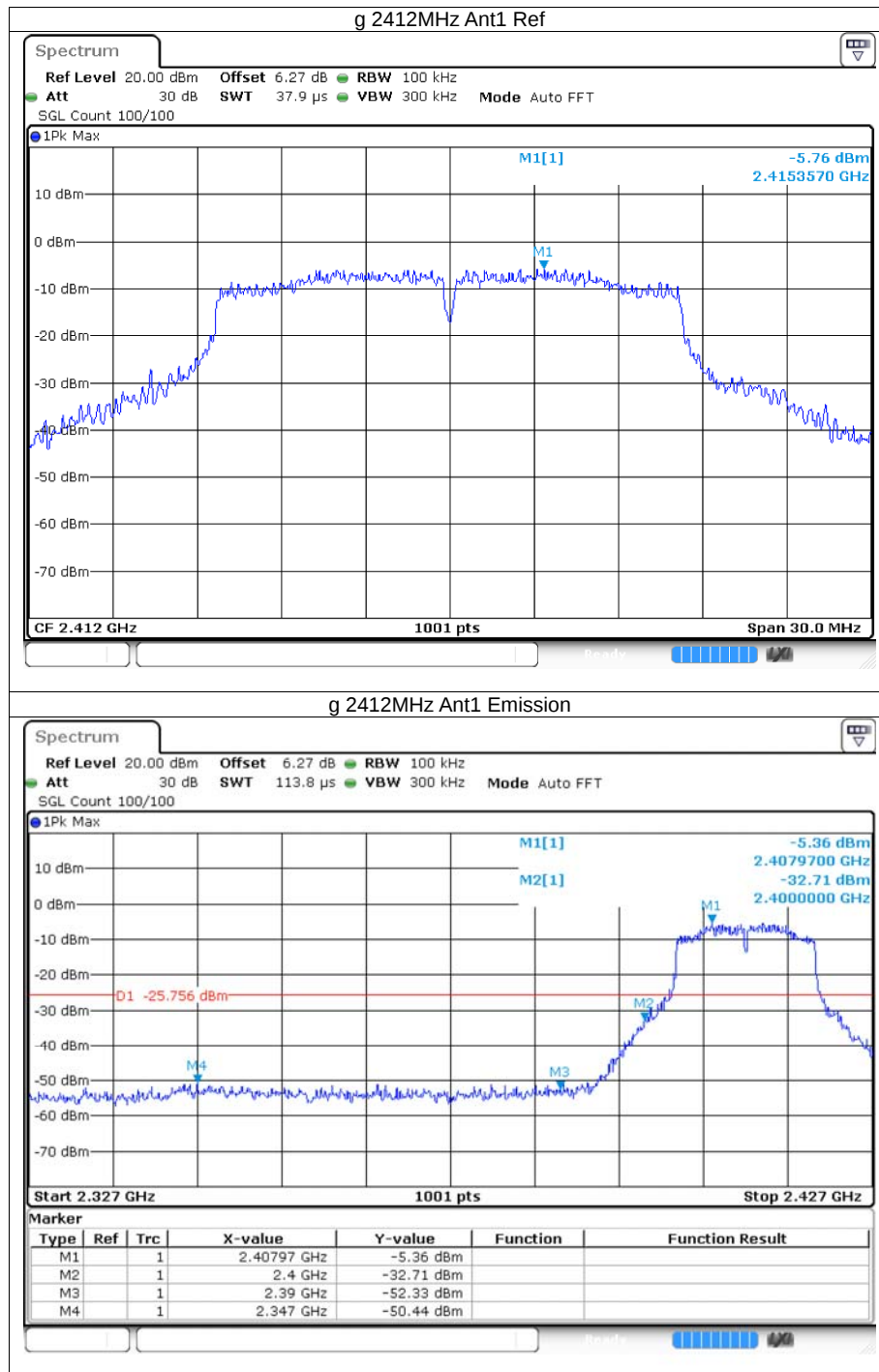
4.1 Test Result

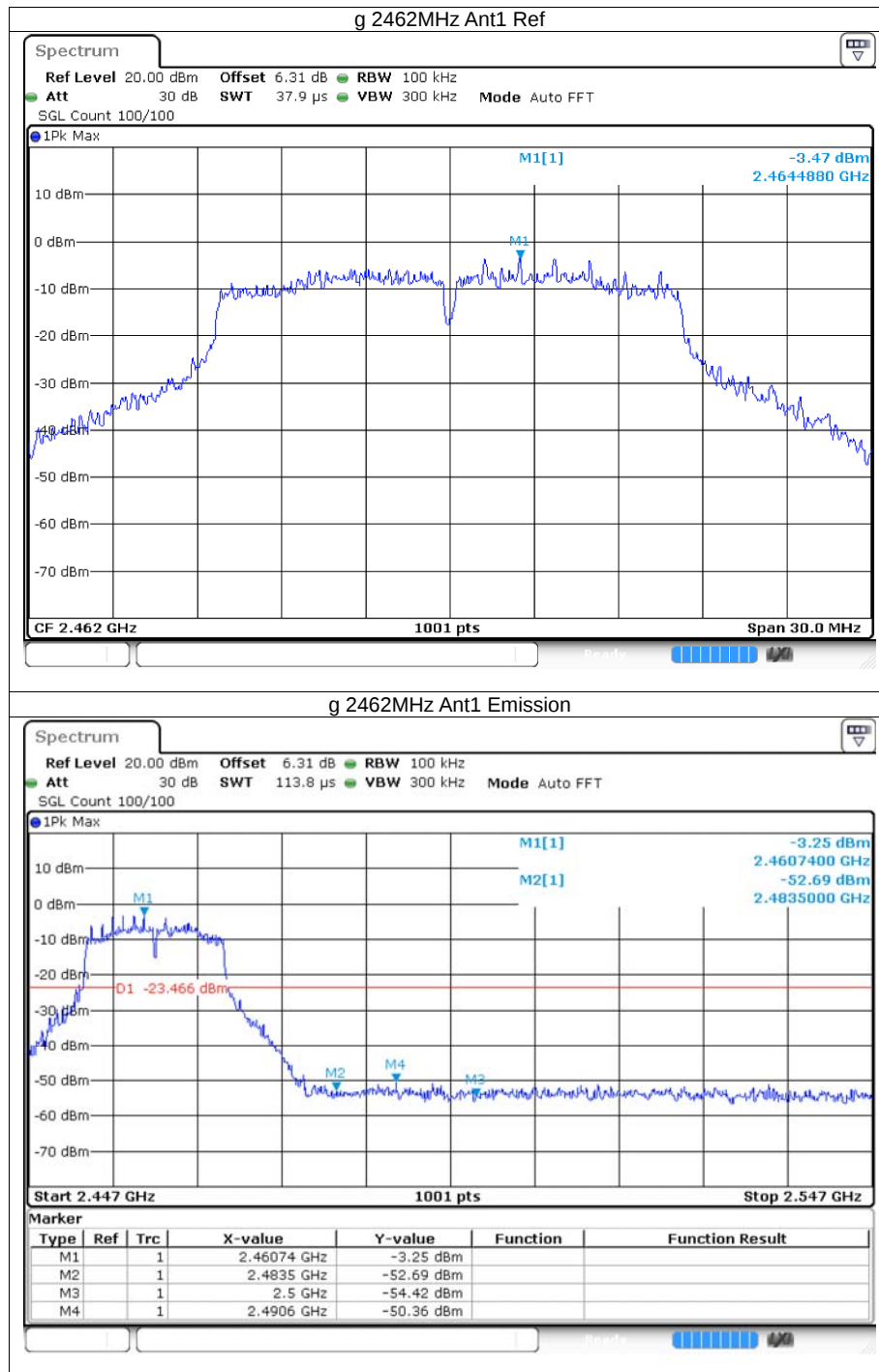
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-52.15	-20	-52.15
b	2462	Ant1	-52.03	-20	Pass
g	2412	Ant1	-44.68	-20	Pass
g	2462	Ant1	-46.89	-20	Pass
n20	2412	Ant1	-44.88	-20	Pass
n20	2462	Ant1	-44.48	-20	Pass
n40	2422	Ant1	-41.03	-20	Pass
n40	2452	Ant1	-43.38	-20	Pass

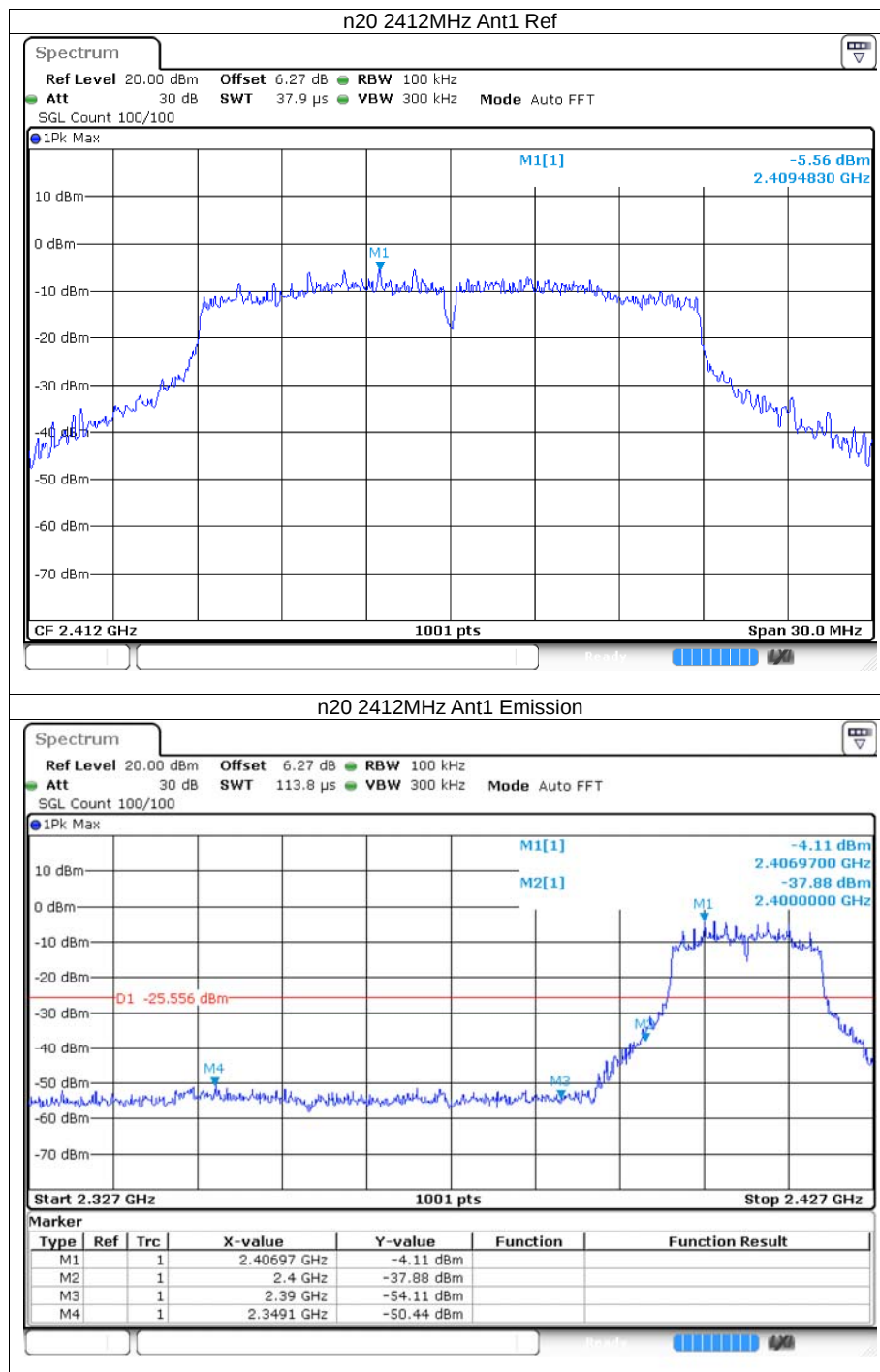
4.2 Test Graphs

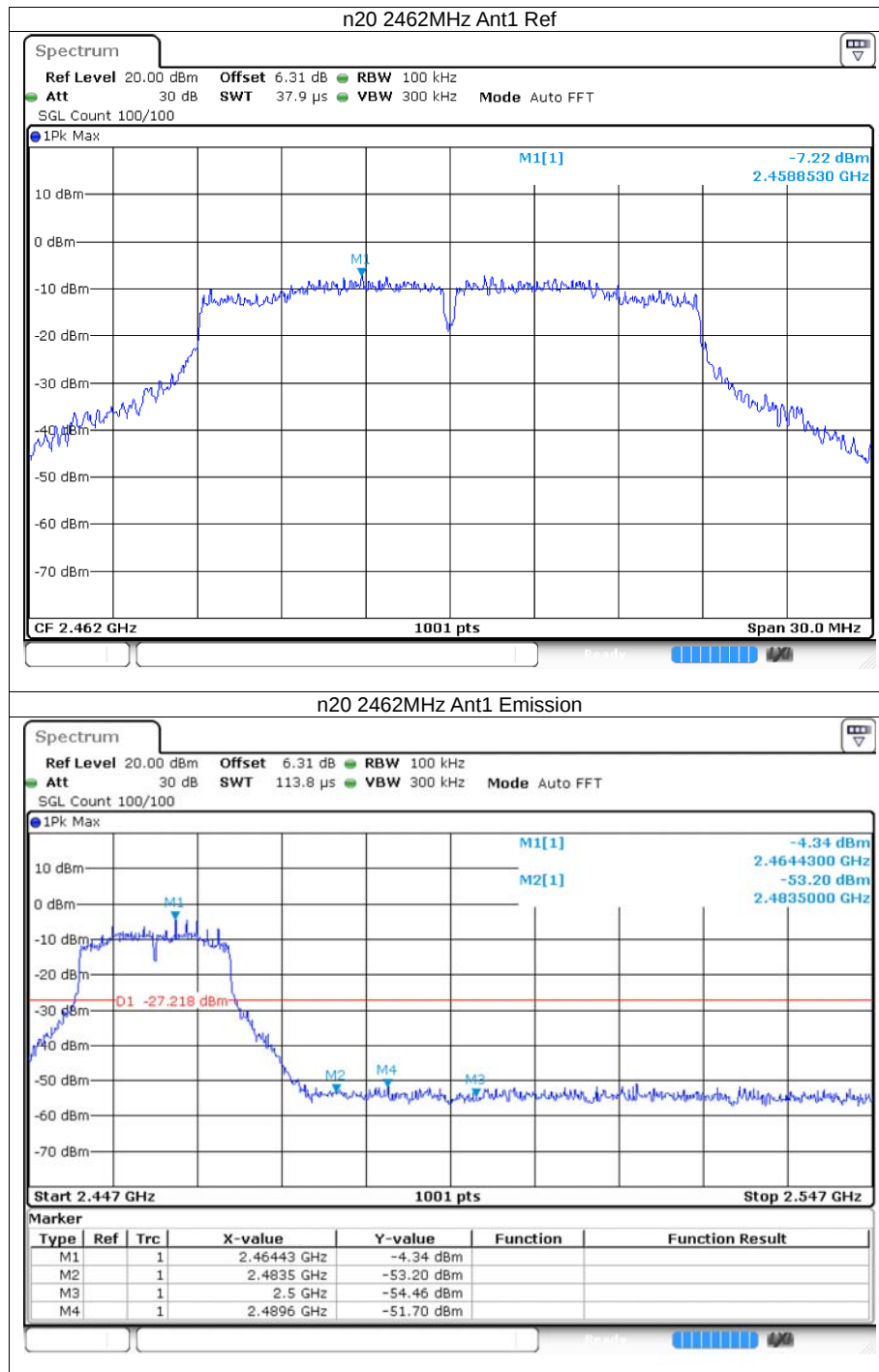


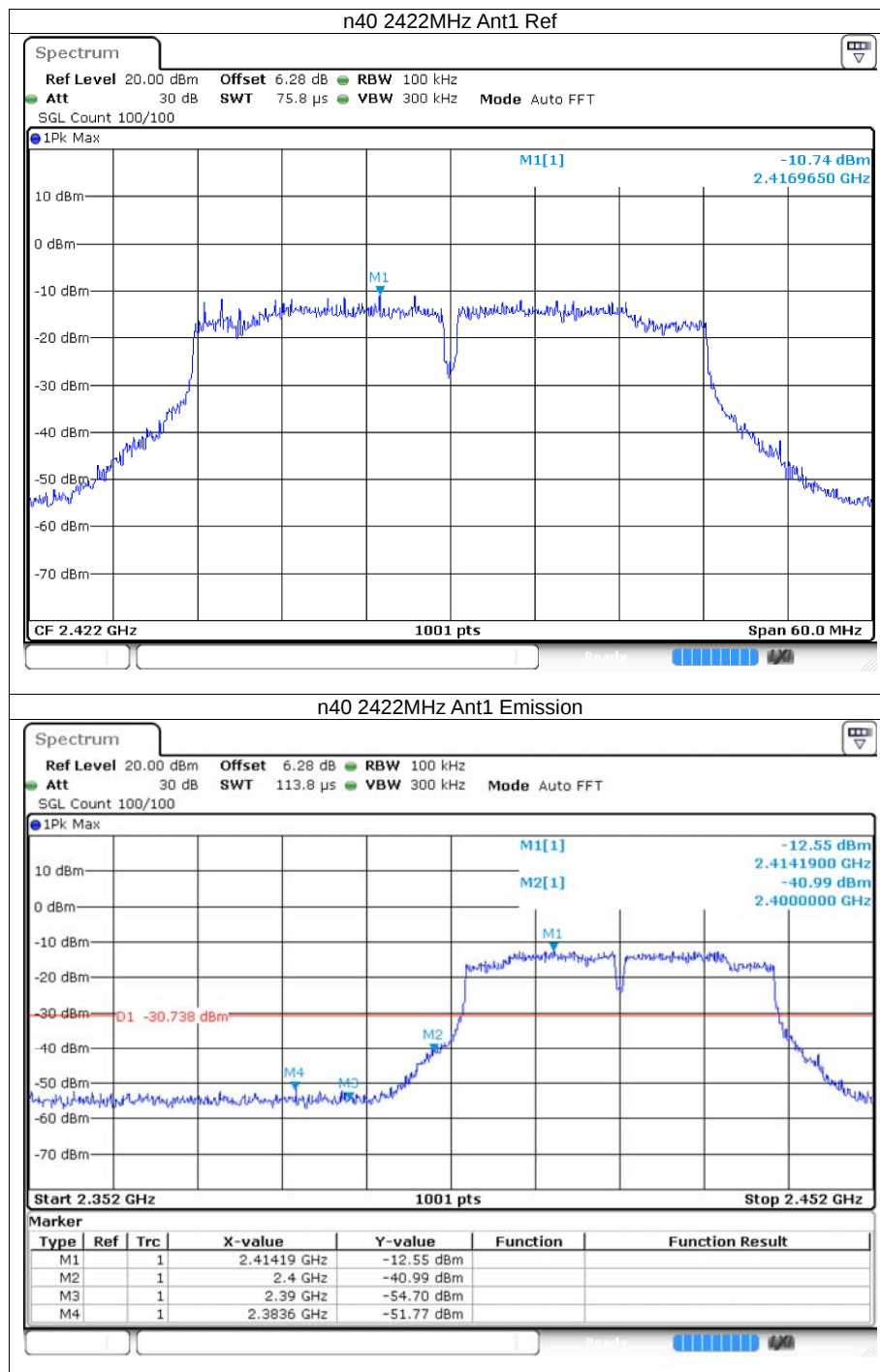


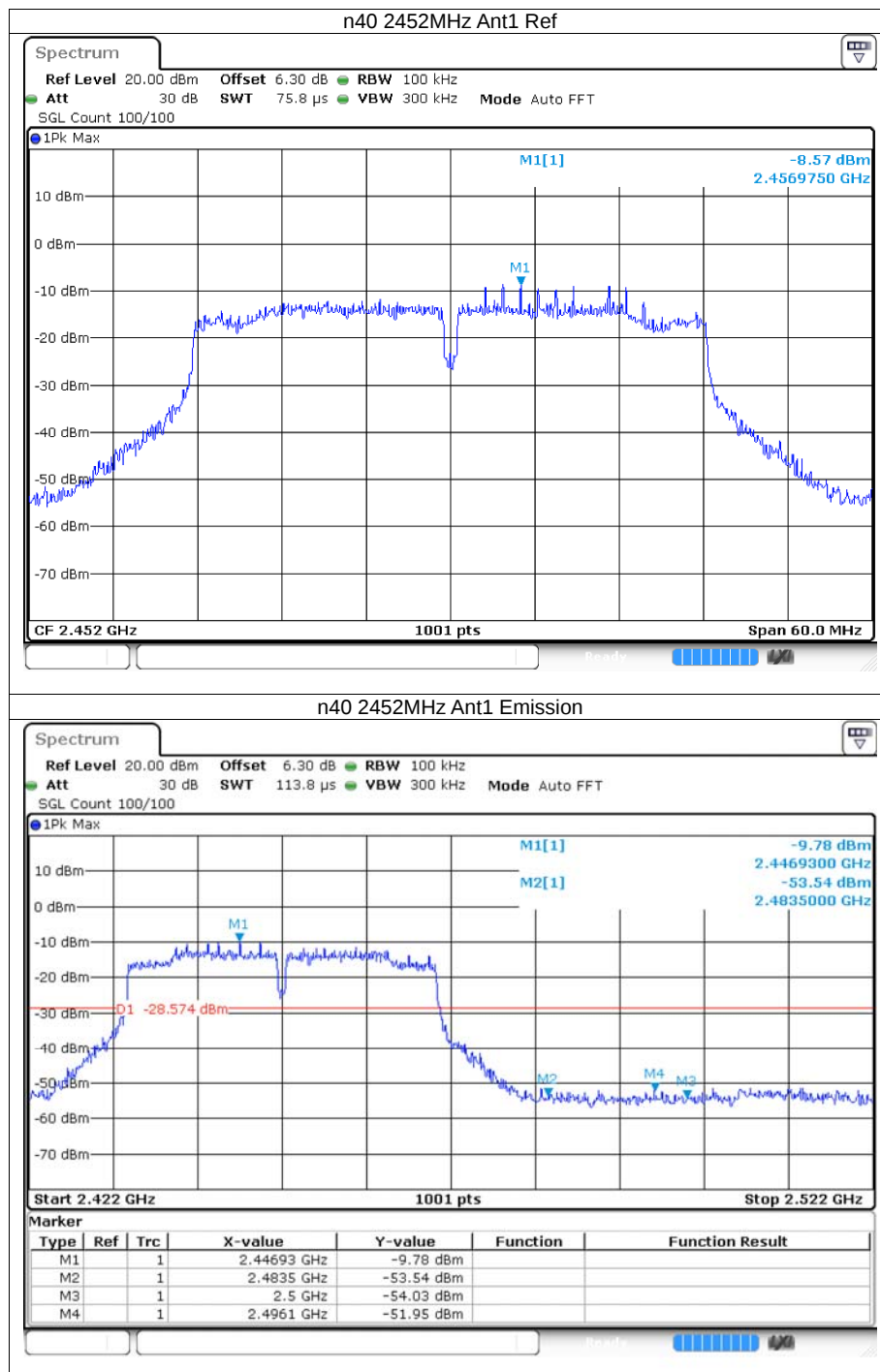










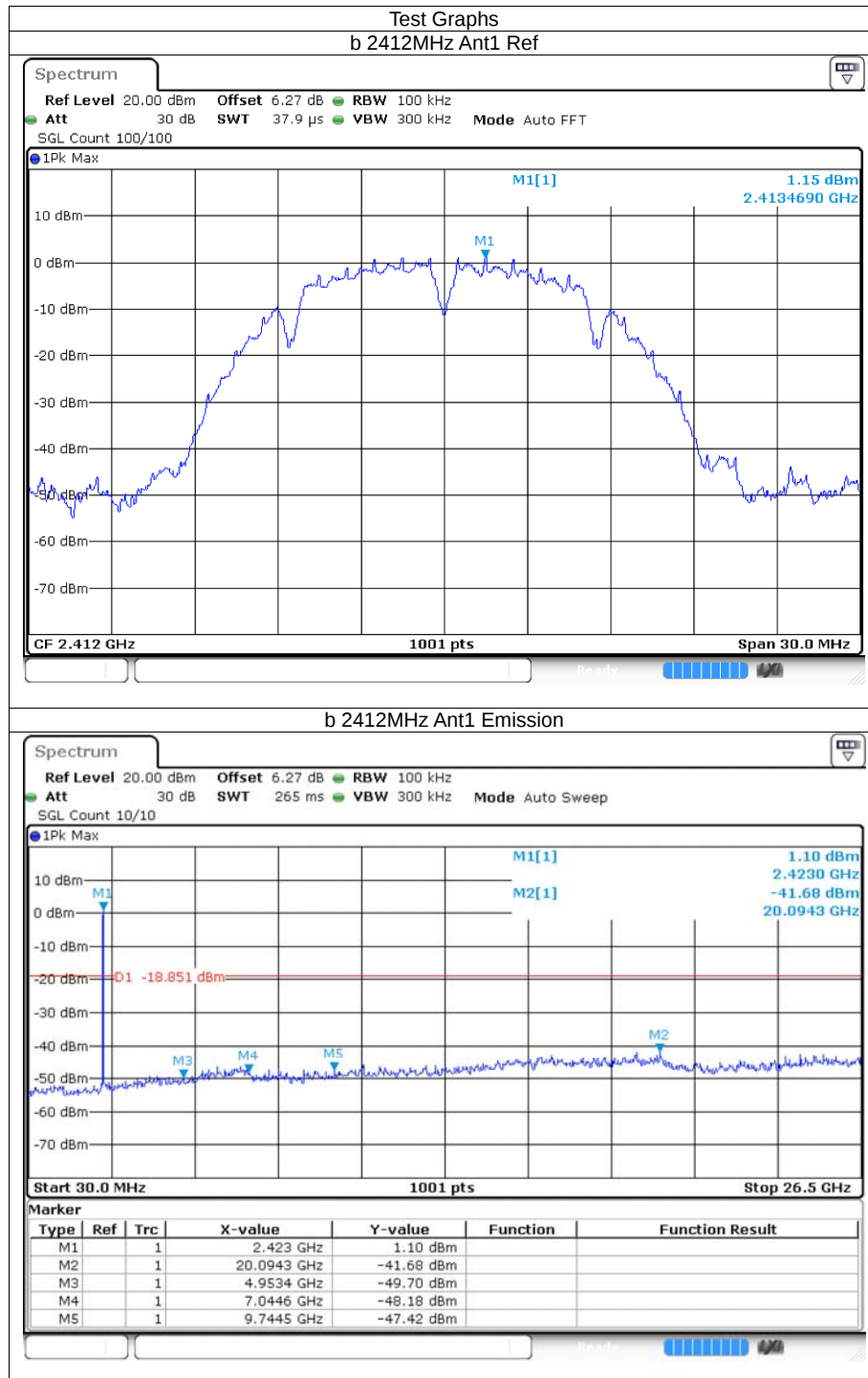


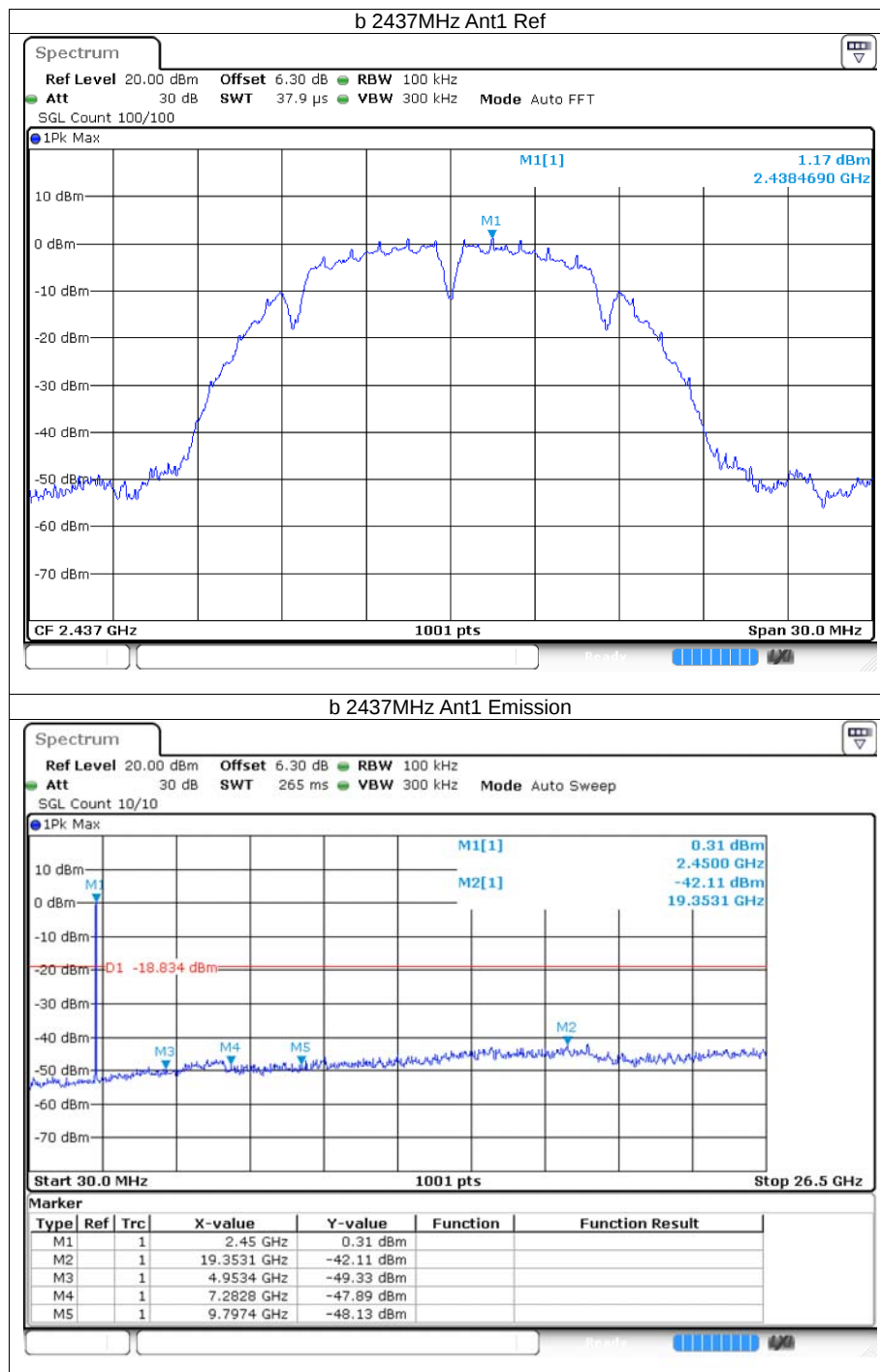
5 Conducted RF Spurious Emission

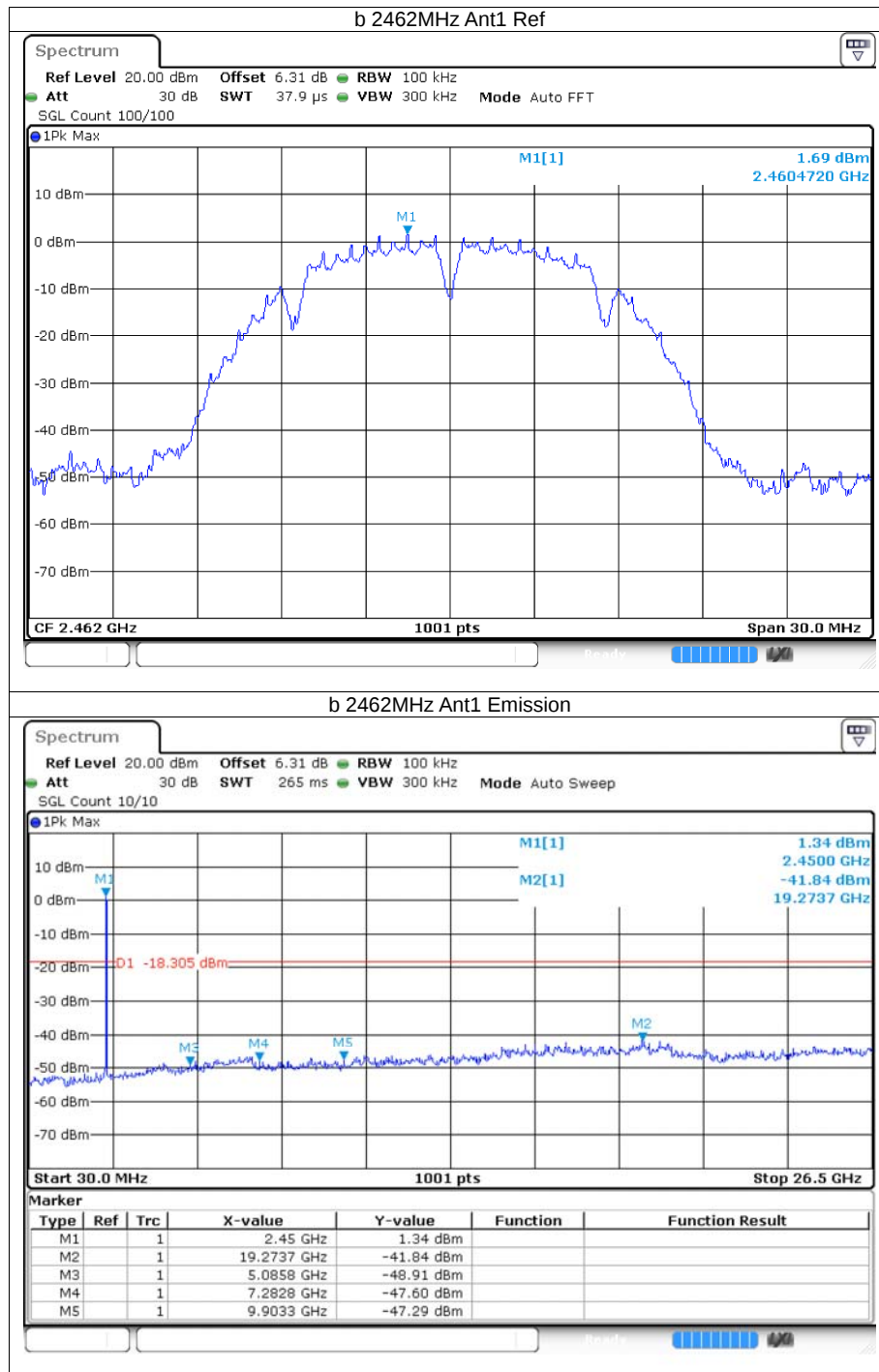
5.1 Test Result

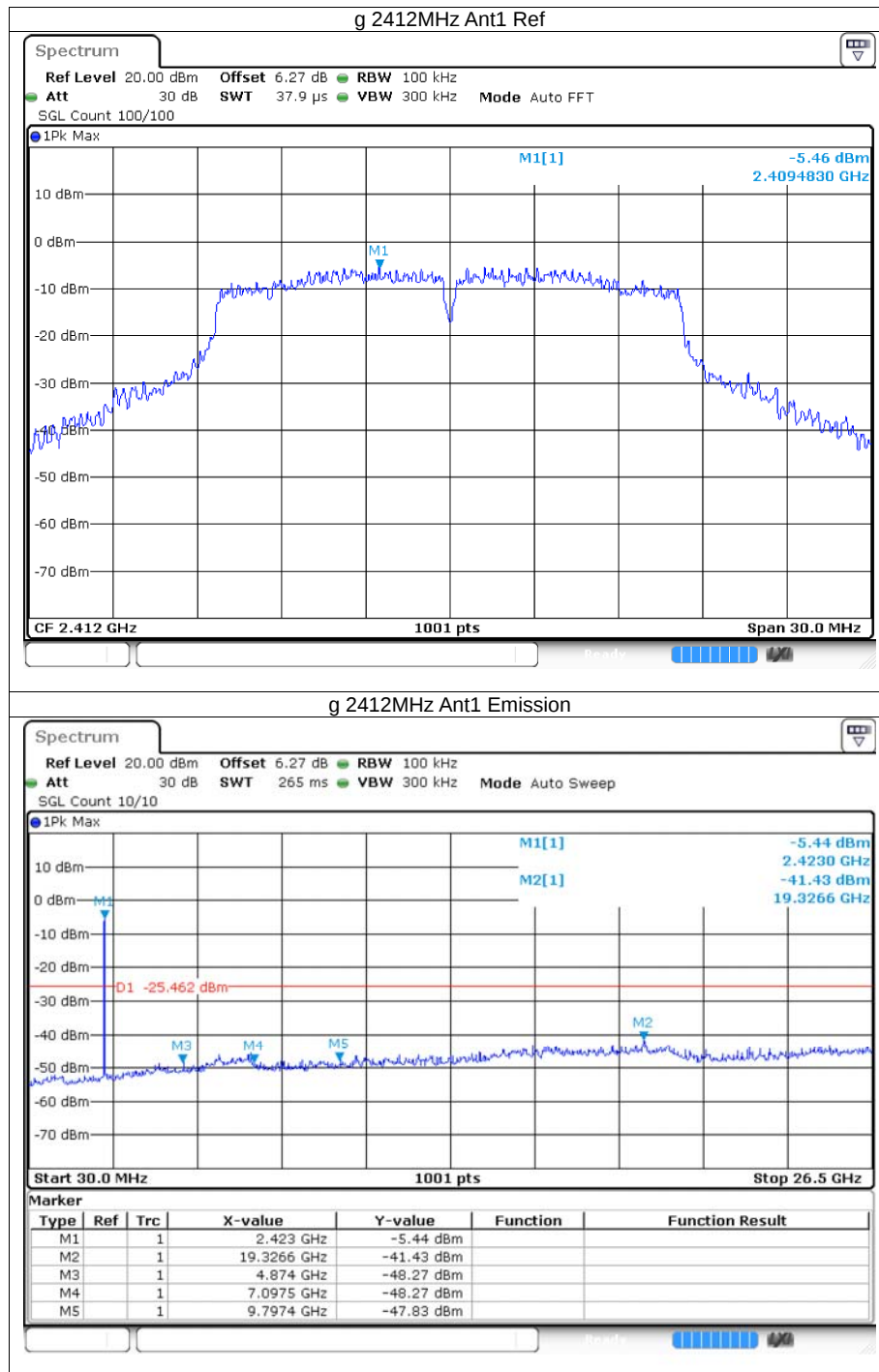
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-42.83	-20	Pass
b	2437	Ant1	-43.28	-20	Pass
b	2462	Ant1	-43.52	-20	Pass
g	2412	Ant1	-35.97	-20	Pass
g	2437	Ant1	-39.87	-20	Pass
g	2462	Ant1	-38.85	-20	Pass
n20	2412	Ant1	-36.97	-20	Pass
n20	2437	Ant1	-36.3	-20	Pass
n20	2462	Ant1	-37.75	-20	Pass
n40	2422	Ant1	-31.11	-20	Pass
n40	2437	Ant1	-33.11	-20	Pass
n40	2452	Ant1	-34.09	-20	Pass

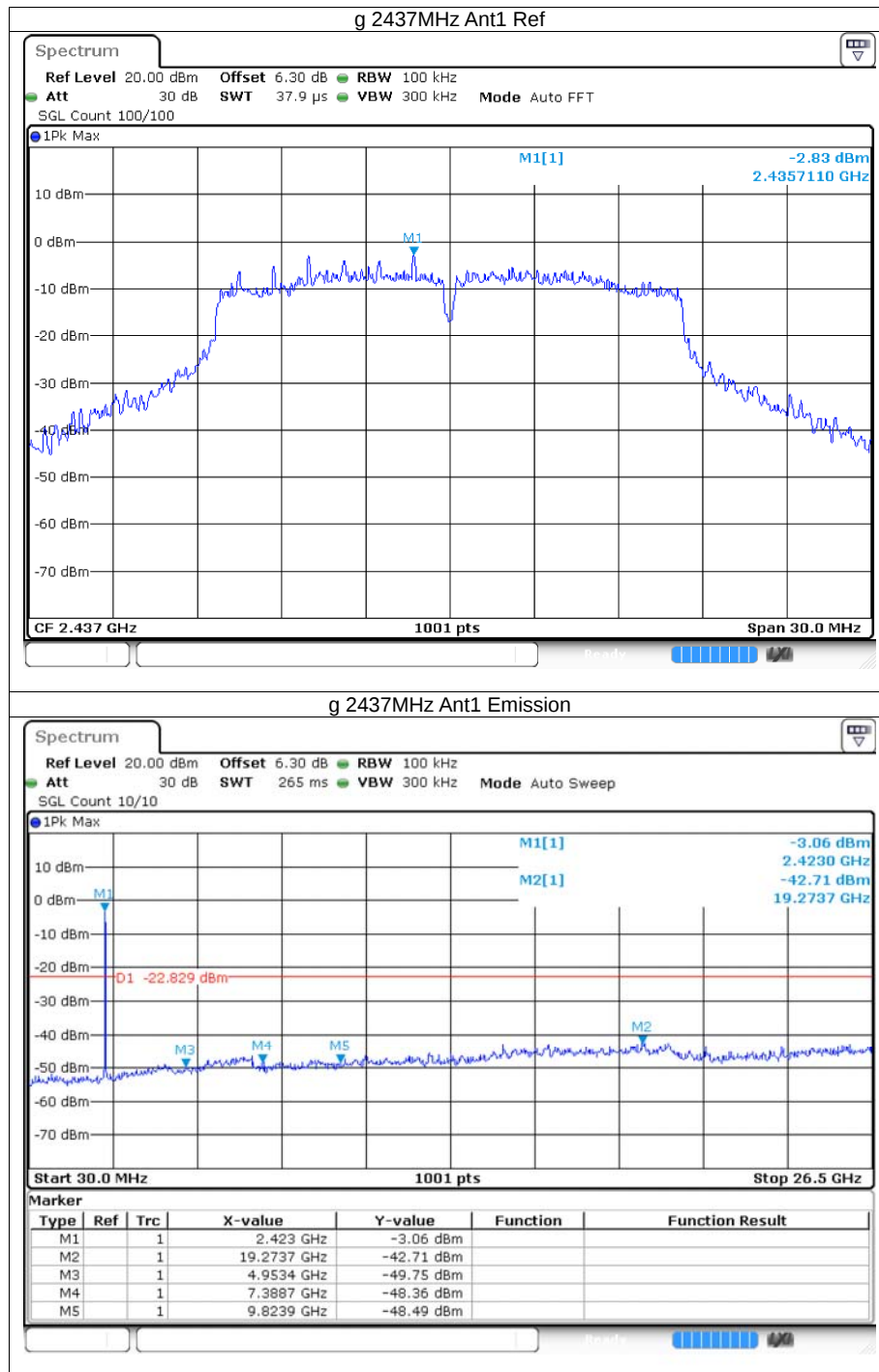
5.2 Test Graphs

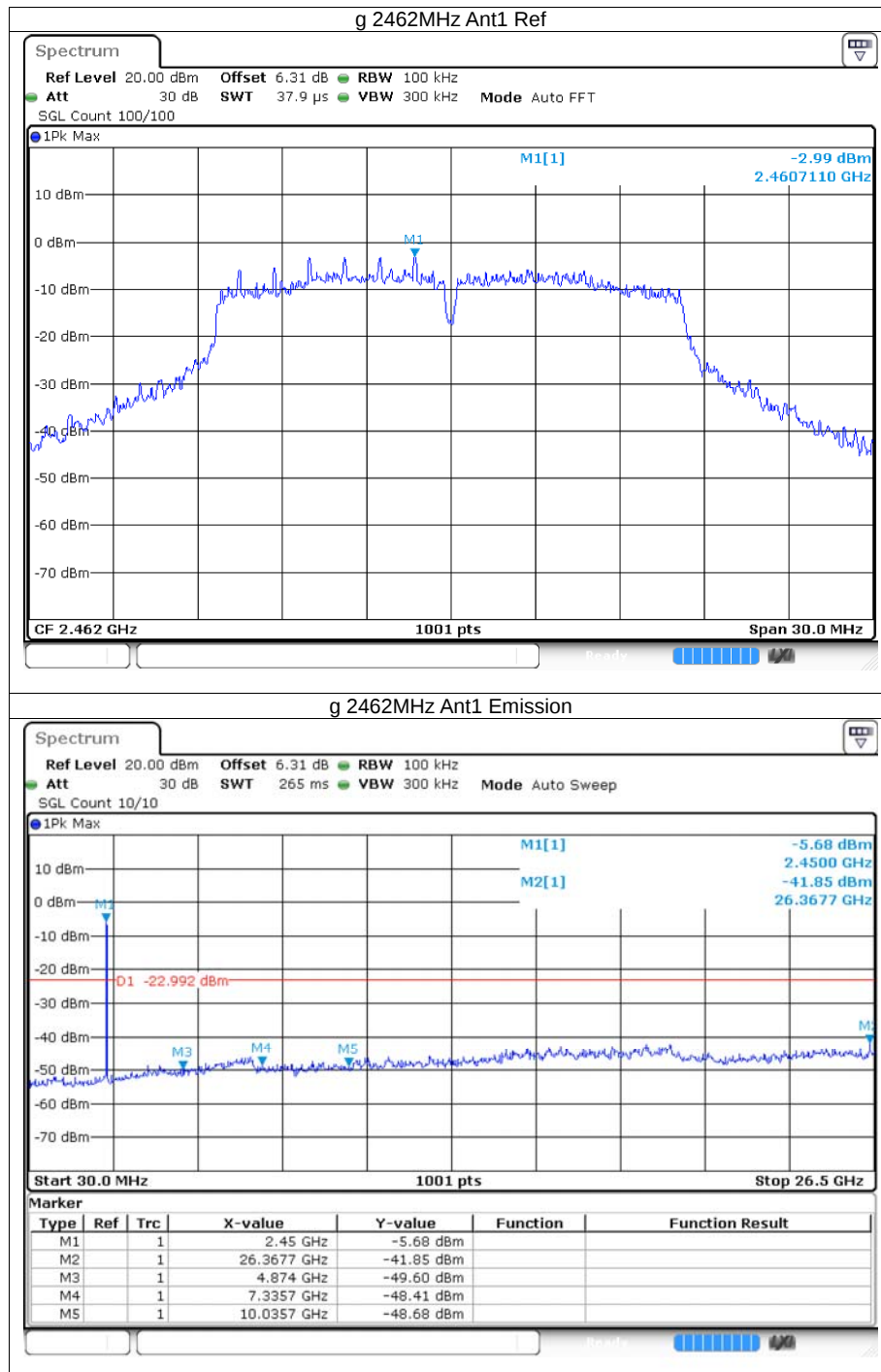


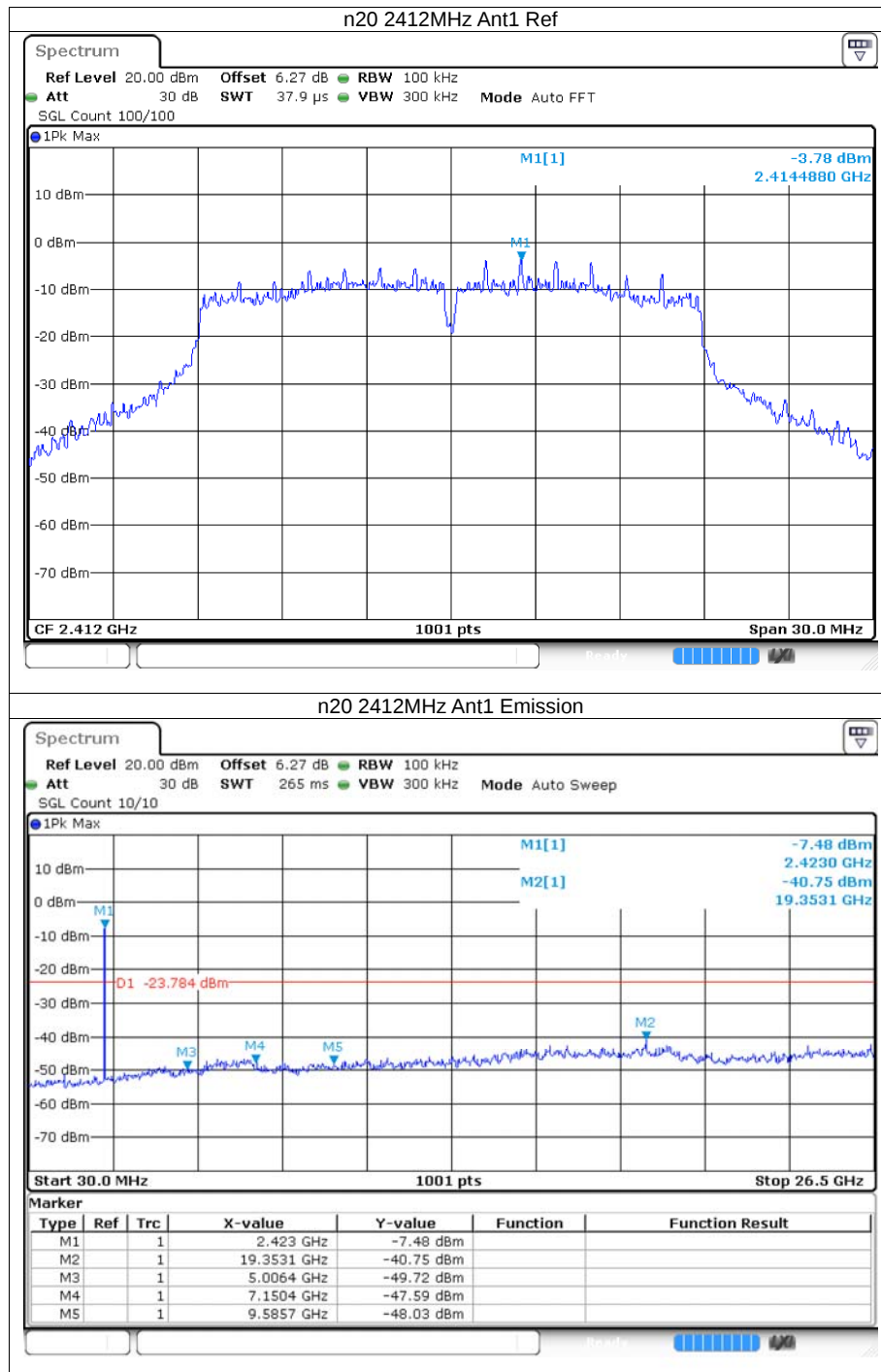


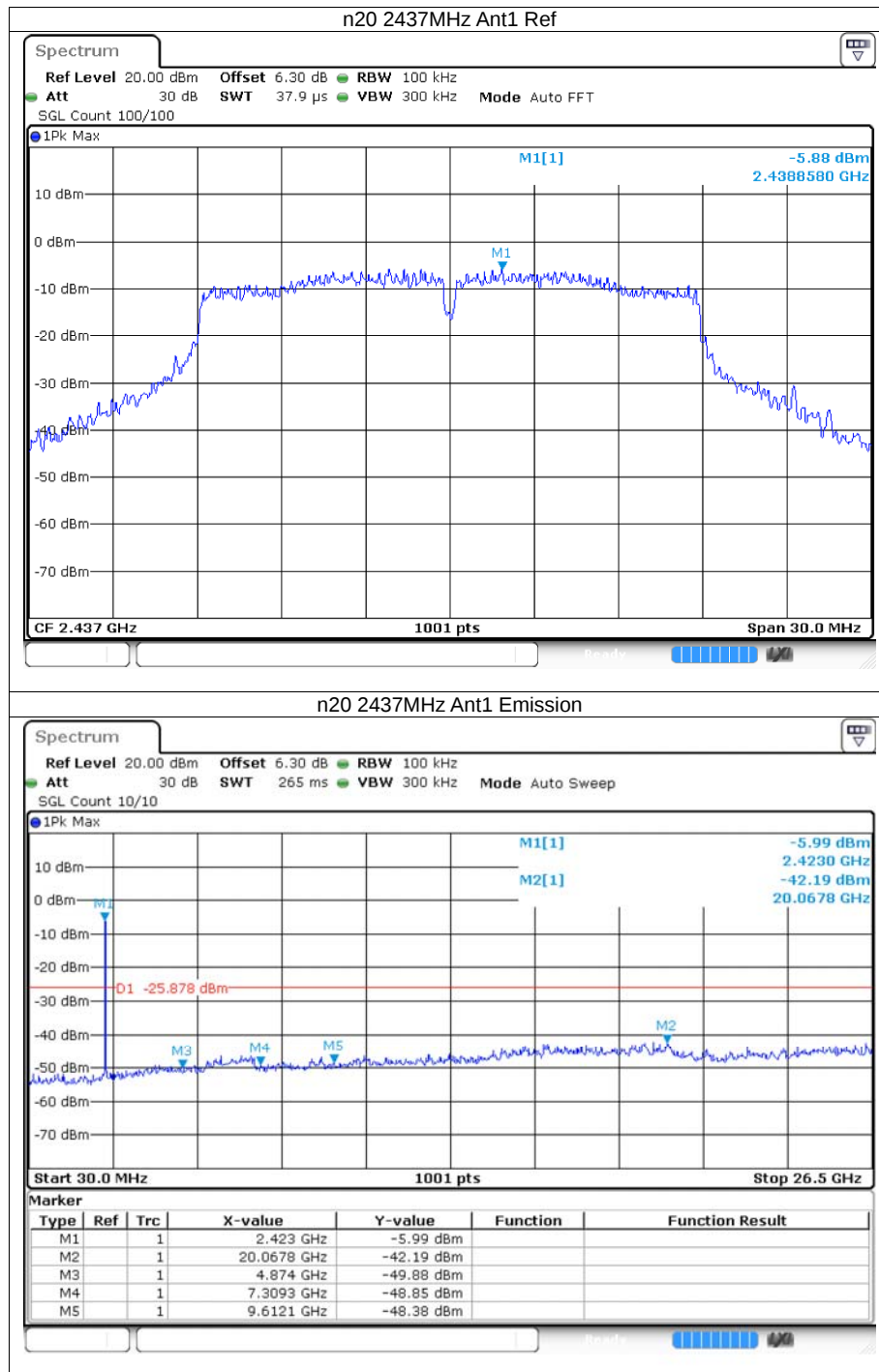


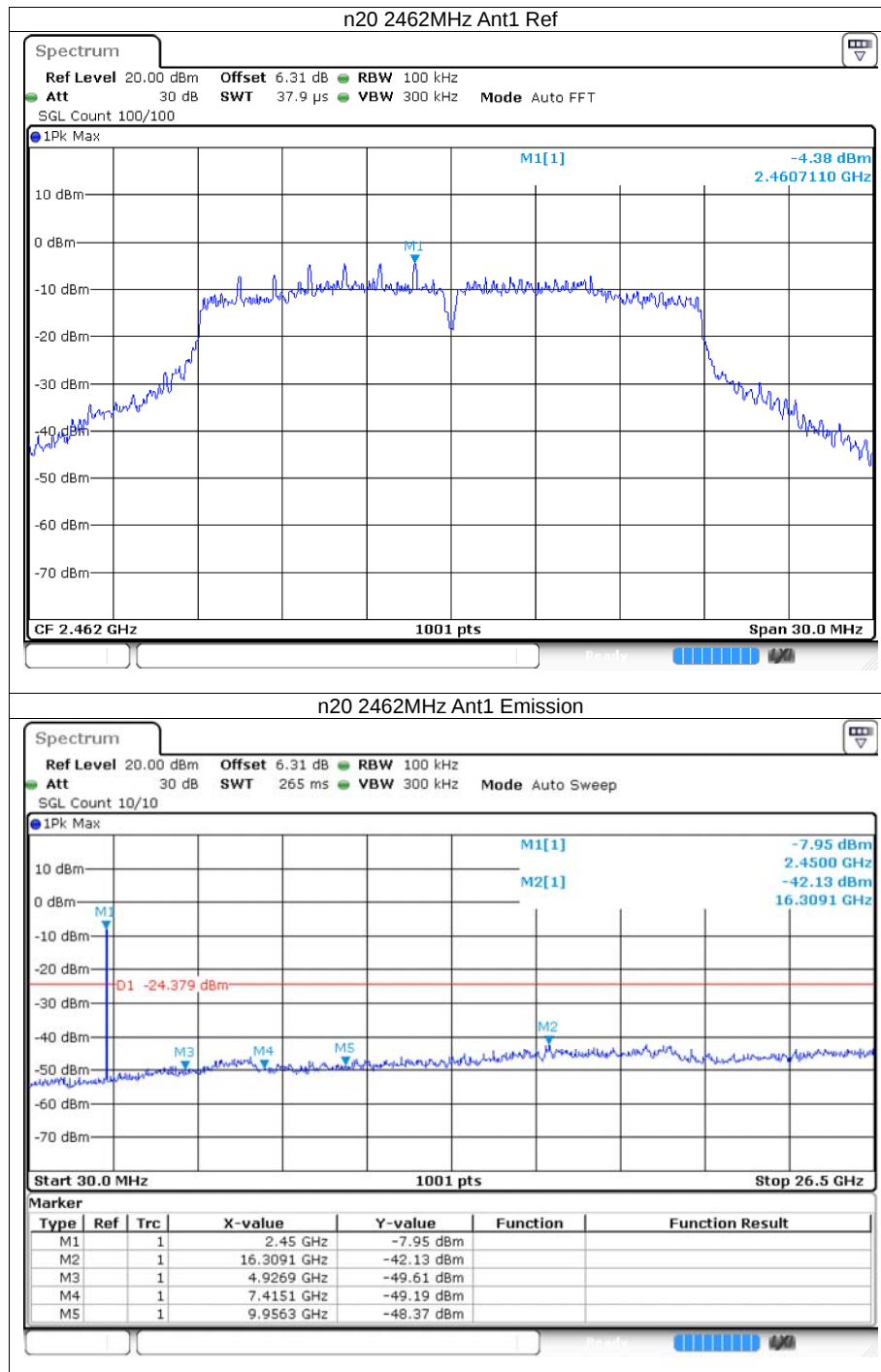


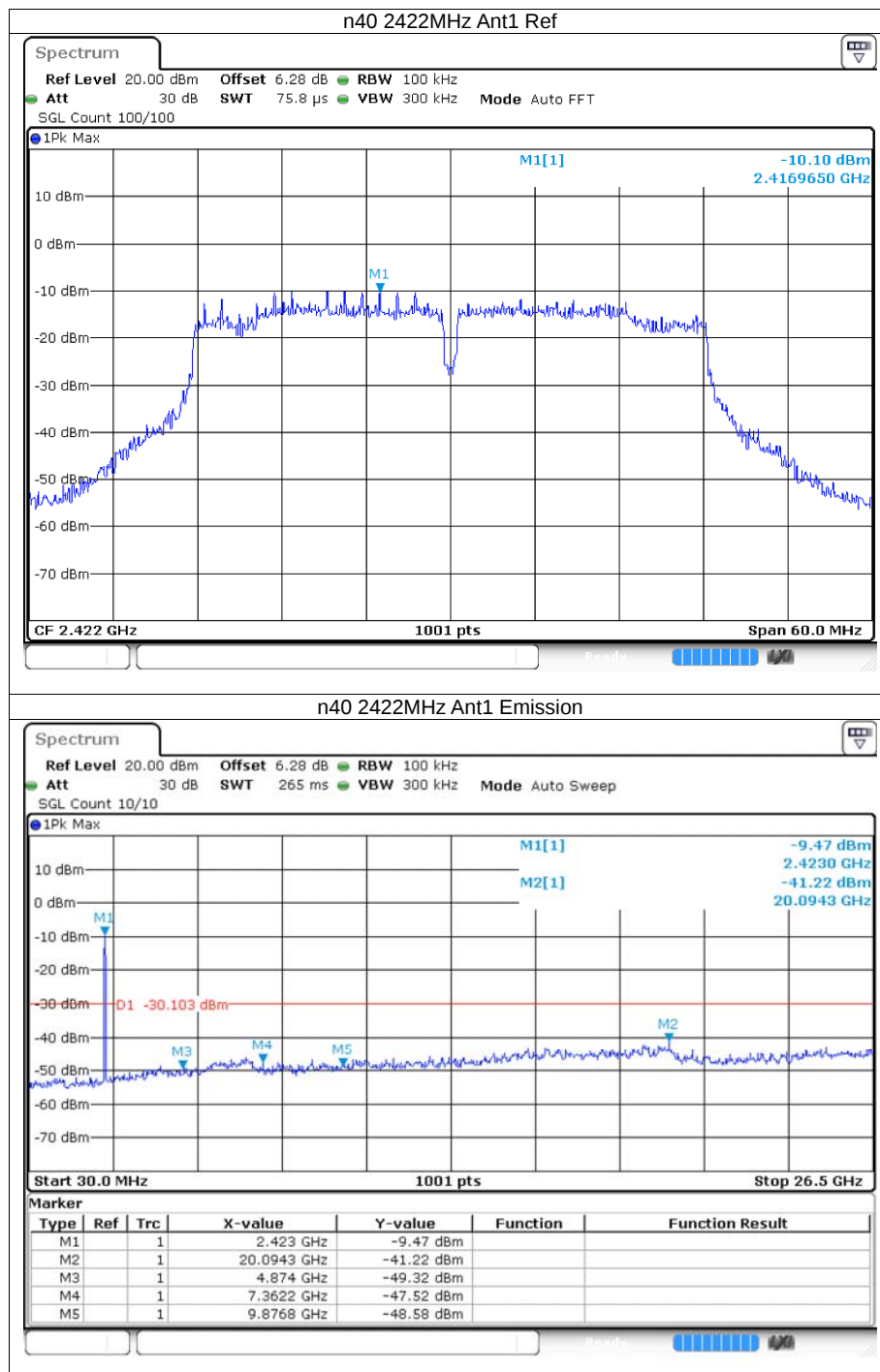


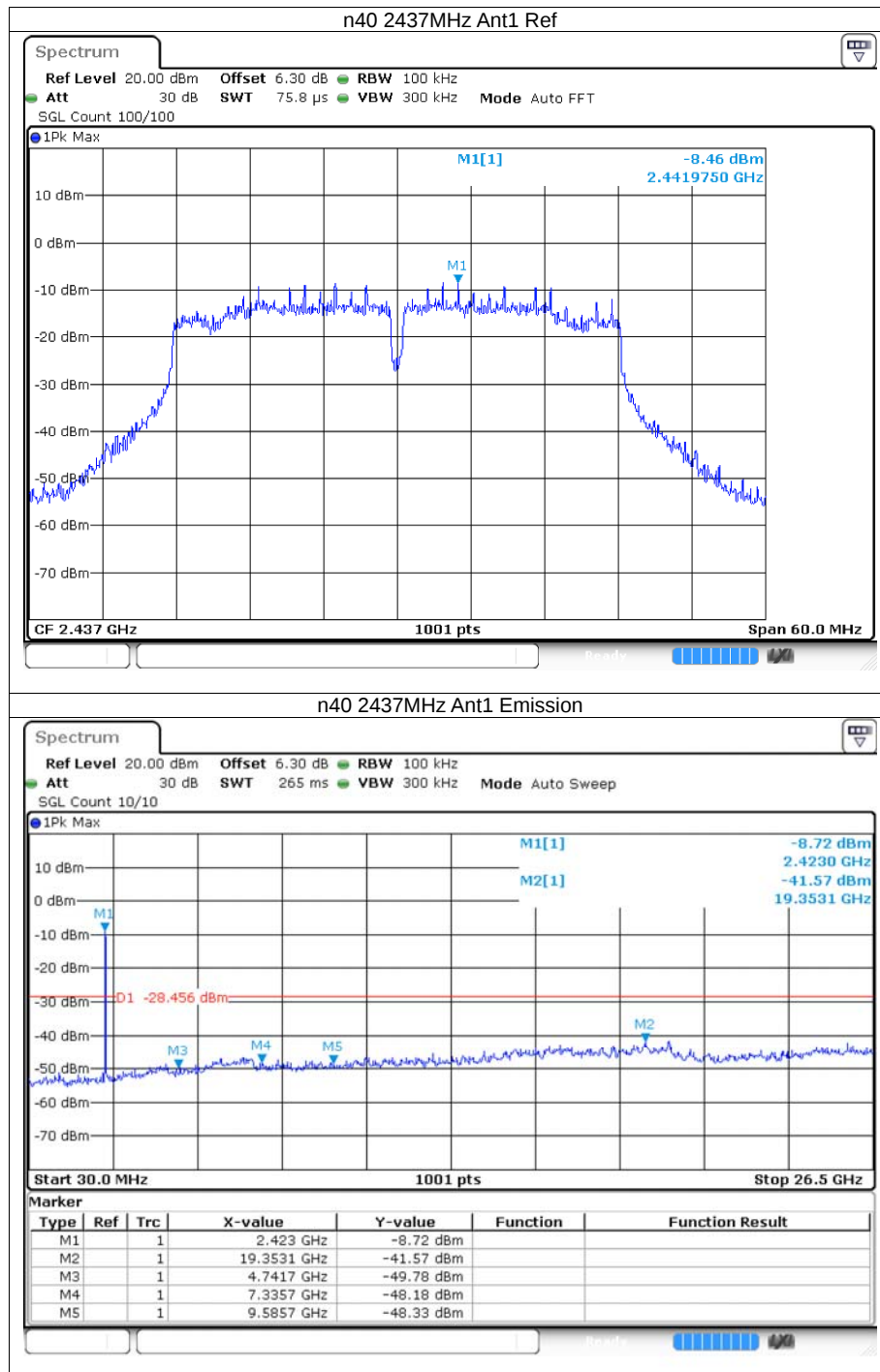


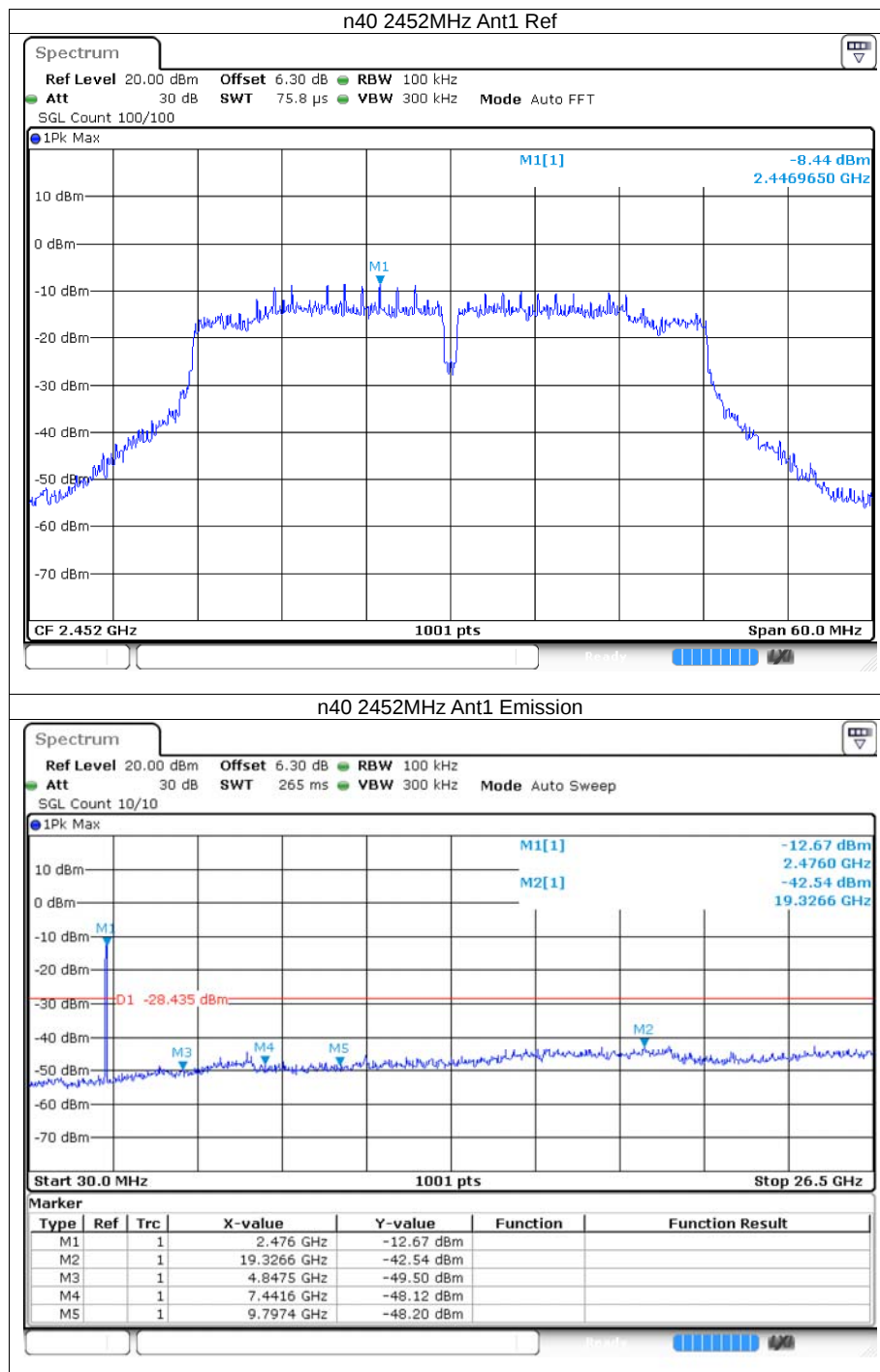












6 Restrict Band

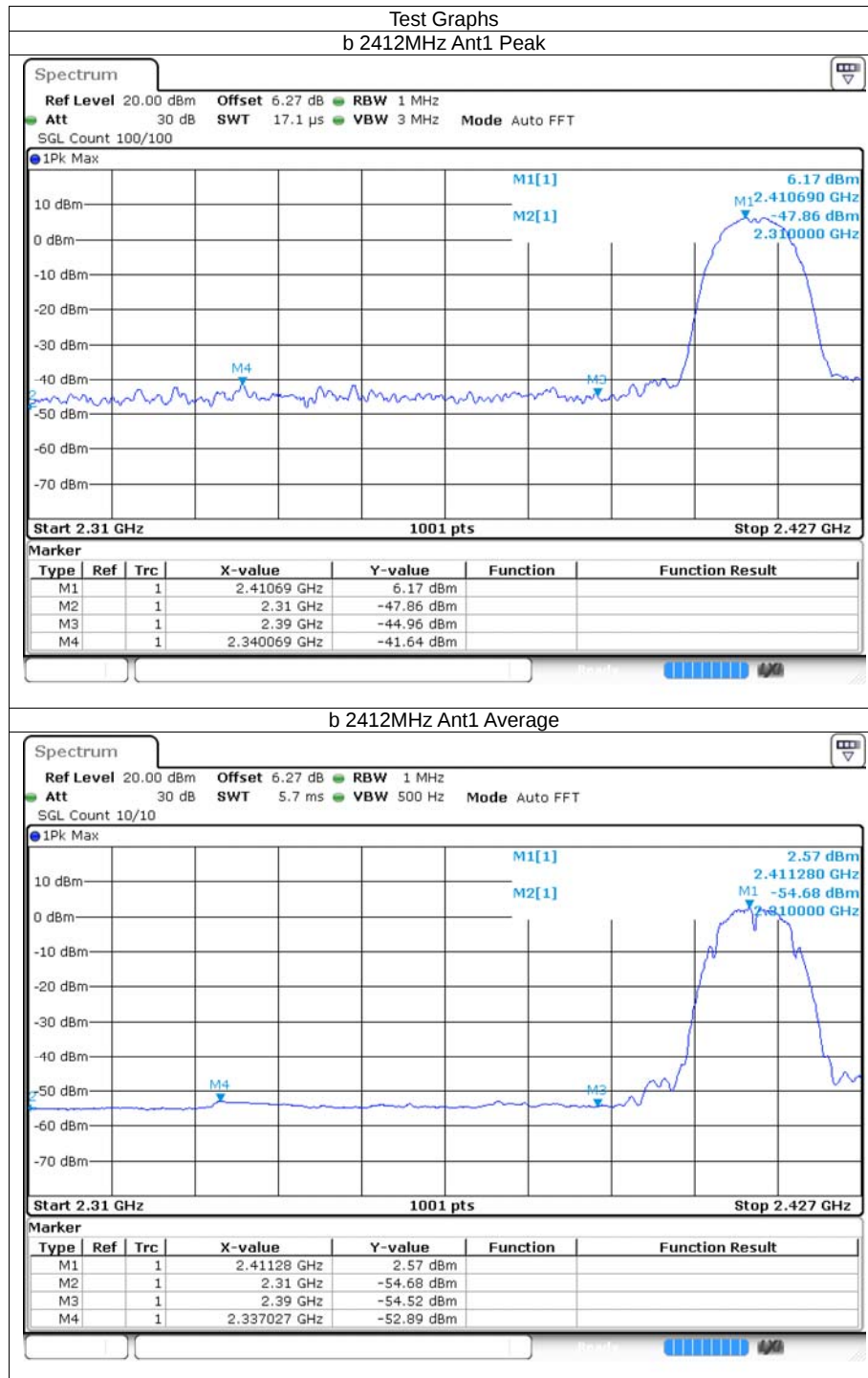
6.1 Test Result

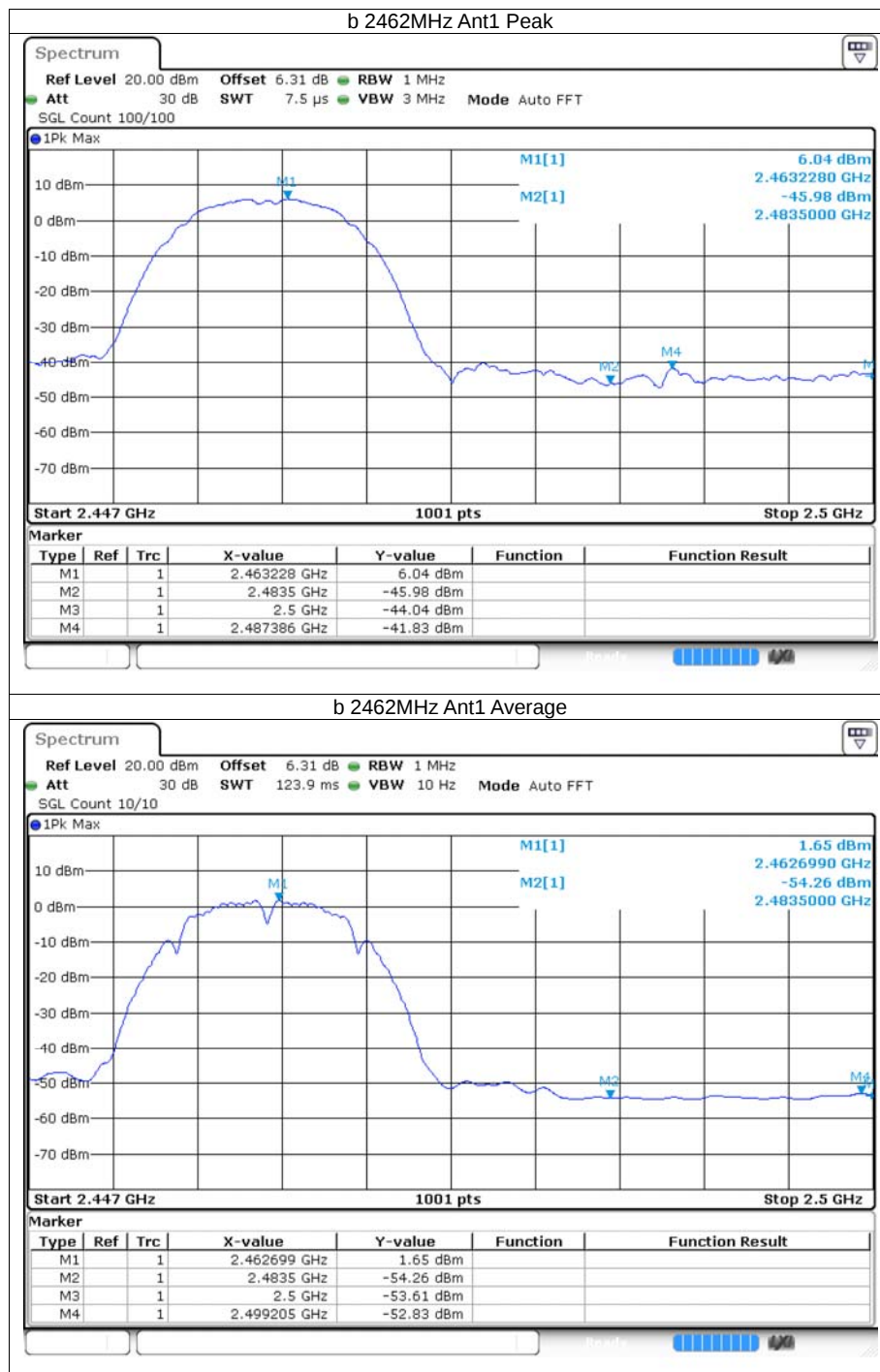
Mod e	Frequency (MHz)	Antenn a	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detecto r	Limit (dBuV/m)	Verdic t
b	2412	Ant1	2310	-47.86	2.5	49.9	Peak	74	Pass
b	2412	Ant1	2310	-54.68	2.5	43.08	Average	54	Pass
b	2412	Ant1	2340.069	-41.64	2.5	56.12	Peak	74	Pass
b	2412	Ant1	2337.027	-52.89	2.5	44.87	Average	54	Pass
b	2412	Ant1	2390	-44.96	2.5	52.8	Peak	74	Pass
b	2412	Ant1	2390	-54.51	2.5	43.25	Average	54	Pass
b	2462	Ant1	2483.5	-45.98	2.5	51.78	Peak	74	51.78
b	2462	Ant1	2483.5	-54.26	2.5	43.5	Average	54	Pass
b	2462	Ant1	2487.386	-41.82	2.5	55.94	Peak	74	Pass
b	2462	Ant1	2499.205	-52.83	2.5	44.93	Average	54	Pass
b	2462	Ant1	2500	-44.03	2.5	53.73	Peak	74	Pass
b	2462	Ant1	2500	-53.6	2.5	44.16	Average	54	Pass
g	2412	Ant1	2310	-44.78	2.5	52.98	Peak	74	Pass
g	2412	Ant1	2310	-55.12	2.5	42.64	Average	54	Pass
g	2412	Ant1	2381.253	-41.79	2.5	55.97	Peak	74	Pass
g	2412	Ant1	2336.676	-53.25	2.5	44.51	Average	54	Pass
g	2412	Ant1	2390	-45.46	2.5	52.8	Peak	74	Pass
g	2412	Ant1	2390	-53.58	2.5	44.18	Average	54	Pass
g	2462	Ant1	2483.5	-41.07	2.5	56.69	Peak	74	Pass
g	2462	Ant1	2483.5	-53.38	2.5	44.38	Average	54	Pass
g	2462	Ant1	2487.386	-40.87	2.5	56.89	Peak	74	Pass
g	2462	Ant1	2483.517	-53.38	2.5	44.38	Average	54	Pass
g	2462	Ant1	2500	-44.35	2.5	53.73	Peak	74	Pass
g	2462	Ant1	2500	-53.71	2.5	44.05	Average	54	Pass
n20	2412	Ant1	2310	-46.5	2.5	51.26	Peak	74	Pass
n20	2412	Ant1	2310	-55.28	2.5	42.48	Average	54	Pass
n20	2412	Ant1	2337.027	-42.18	2.5	55.58	Peak	74	Pass
n20	2412	Ant1	2336.676	-53.42	2.5	44.34	Average	54	Pass
n20	2412	Ant1	2390	-45.15	2.5	52.61	Peak	74	Pass
n20	2412	Ant1	2390	-54.38	2.5	43.38	Average	54	Pass
n20	2462	Ant1	2483.5	-45.96	2.5	51.8	Peak	74	Pass
n20	2462	Ant1	2483.5	-53.99	2.5	43.77	Average	54	Pass

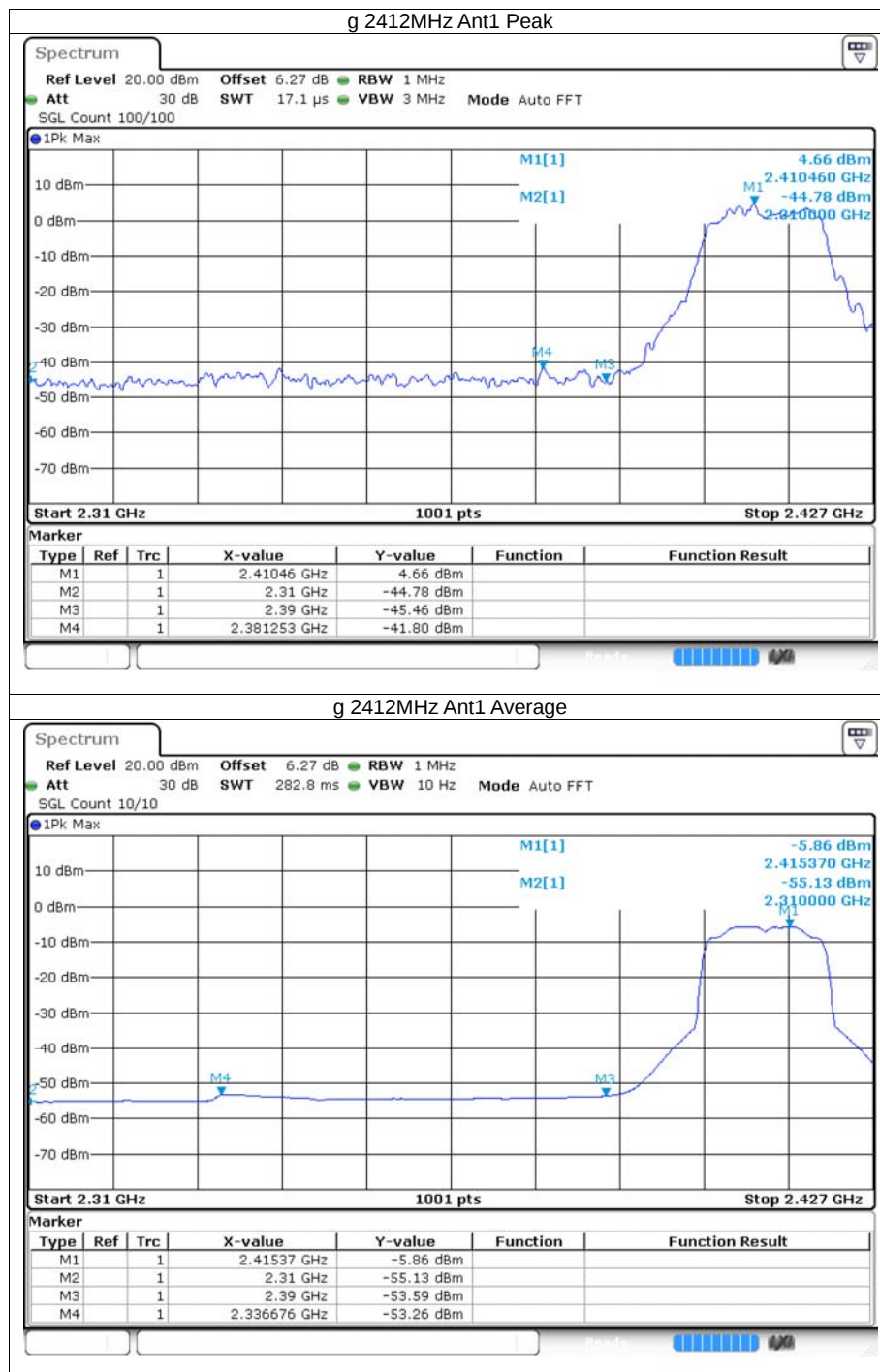


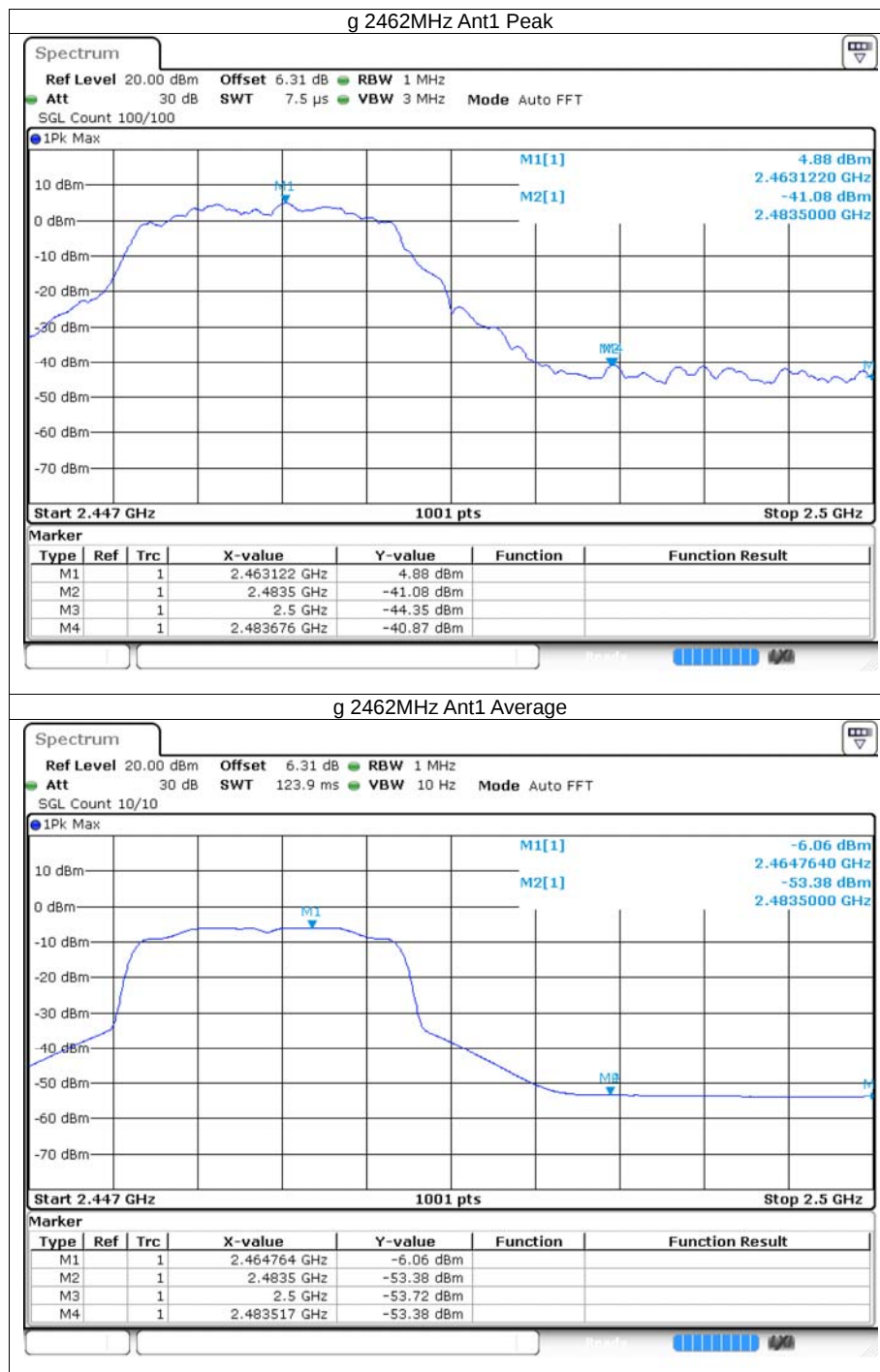
n20	2462	Ant1	2488.552	-42.66	2.5	55.1	Peak	74	Pass
n20	2462	Ant1	2483.517	-53.99	2.5	43.77	Average	54	Pass
n20	2462	Ant1	2500	-43.08	2.5	54.68	Peak	74	Pass
n20	2462	Ant1	2500	-54.29	2.5	43.47	Average	54	Pass
n40	2422	Ant1	2310	-45.86	2.5	51.9	Peak	74	Pass
n40	2422	Ant1	2310	-55.18	2.5	42.58	Average	54	Pass
n40	2422	Ant1	2348.624	-42.41	2.5	55.35	Peak	74	Pass
n40	2422	Ant1	2339.252	-53.45	2.5	44.31	Average	54	Pass
n40	2422	Ant1	2390	-43.84	2.5	53.92	Peak	74	Pass
n40	2422	Ant1	2390	-54.81	2.5	42.95	Average	54	Pass
n40	2452	Ant1	2483.5	-46.63	2.5	51.13	Peak	74	Pass
n40	2452	Ant1	2483.5	-54.21	2.5	43.55	Average	54	Pass
n40	2452	Ant1	2484.946	-42.44	2.5	55.32	Peak	74	Pass
n40	2452	Ant1	2483.542	-54.21	2.5	43.55	Average	54	Pass
n40	2452	Ant1	2500	-45.9	2.5	51.86	Peak	74	Pass
n40	2452	Ant1	2500	-54.42	2.5	43.34	Average	54	Pass

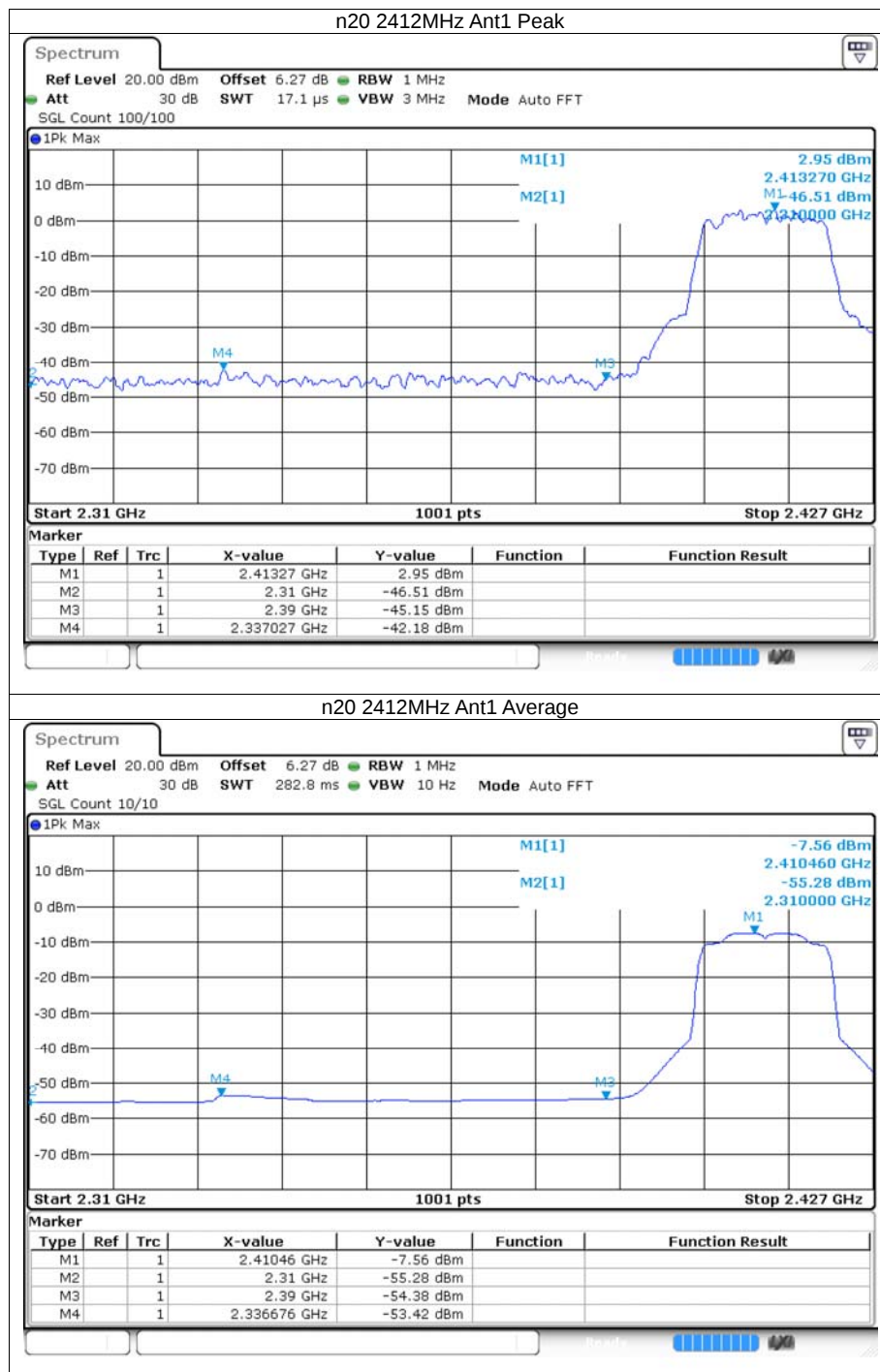
6.2 Test Graphs

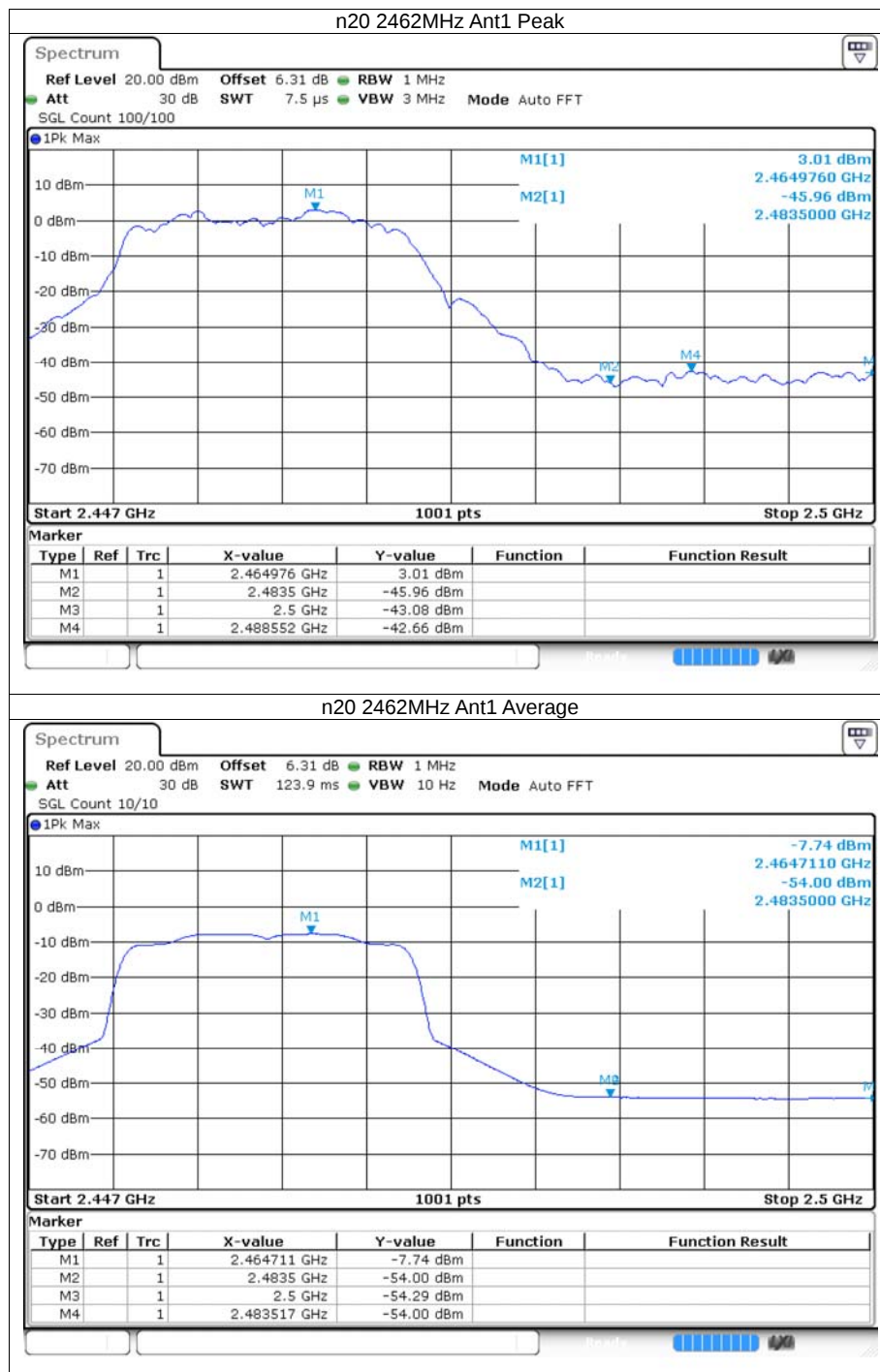


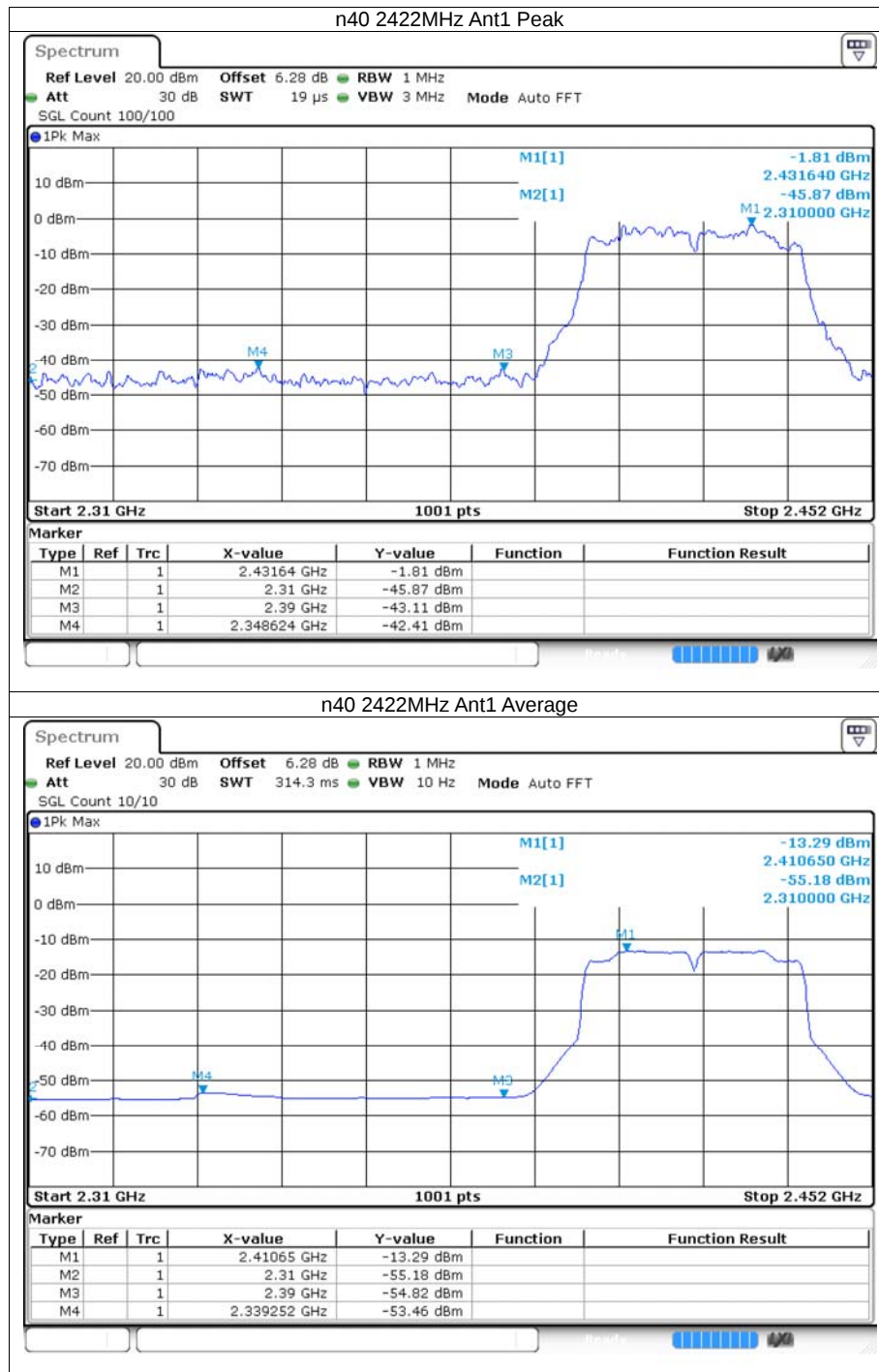


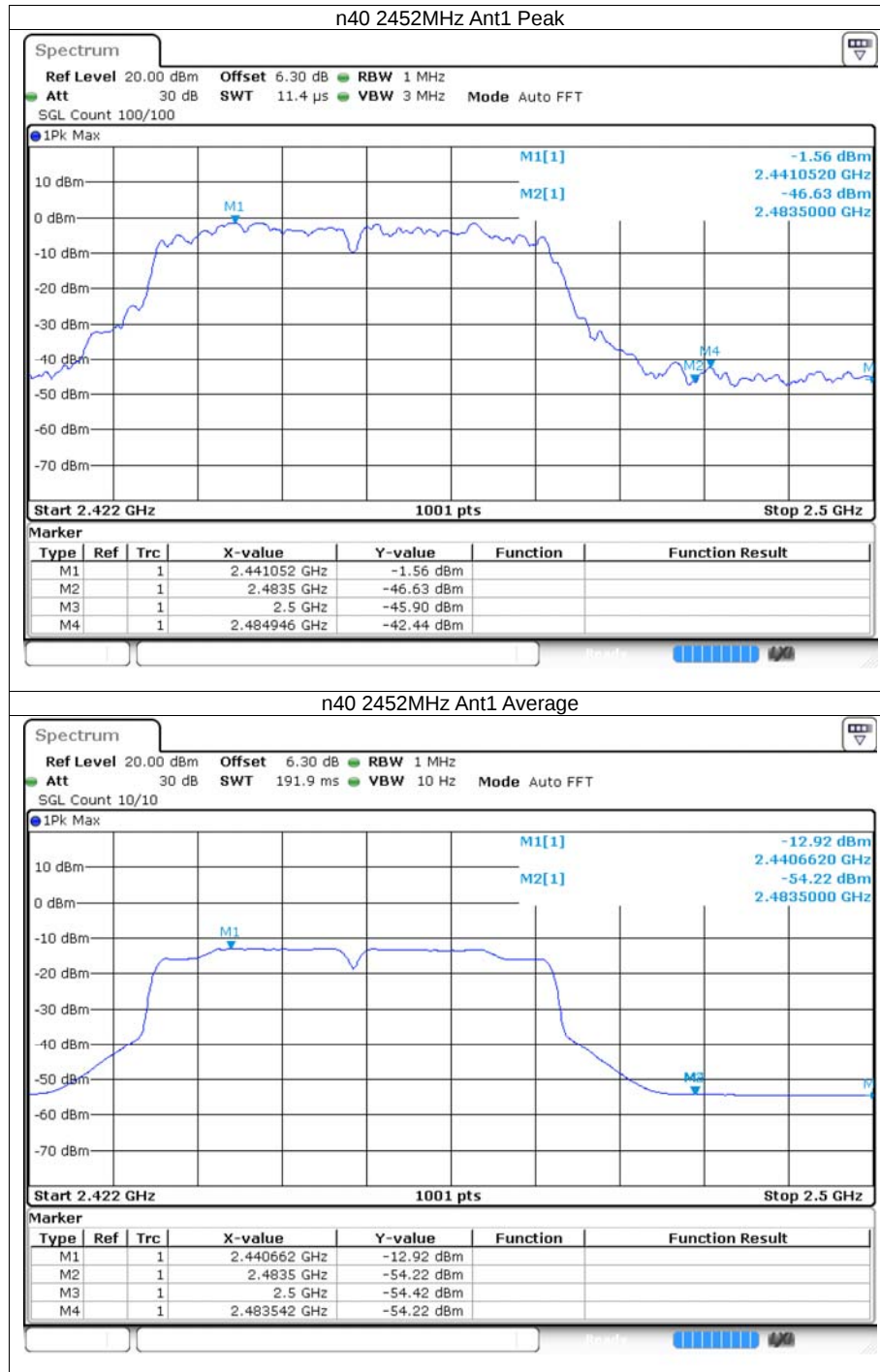










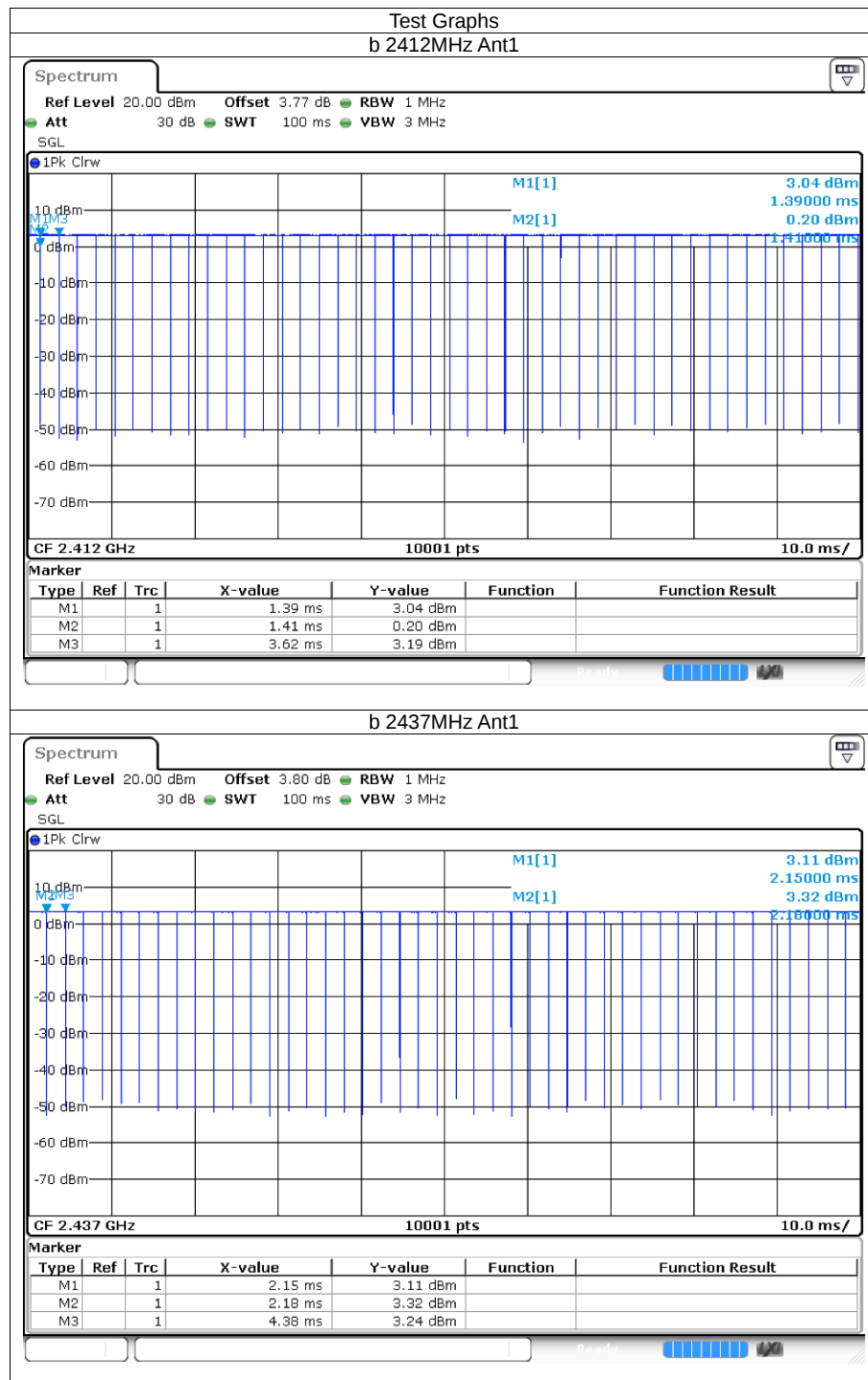


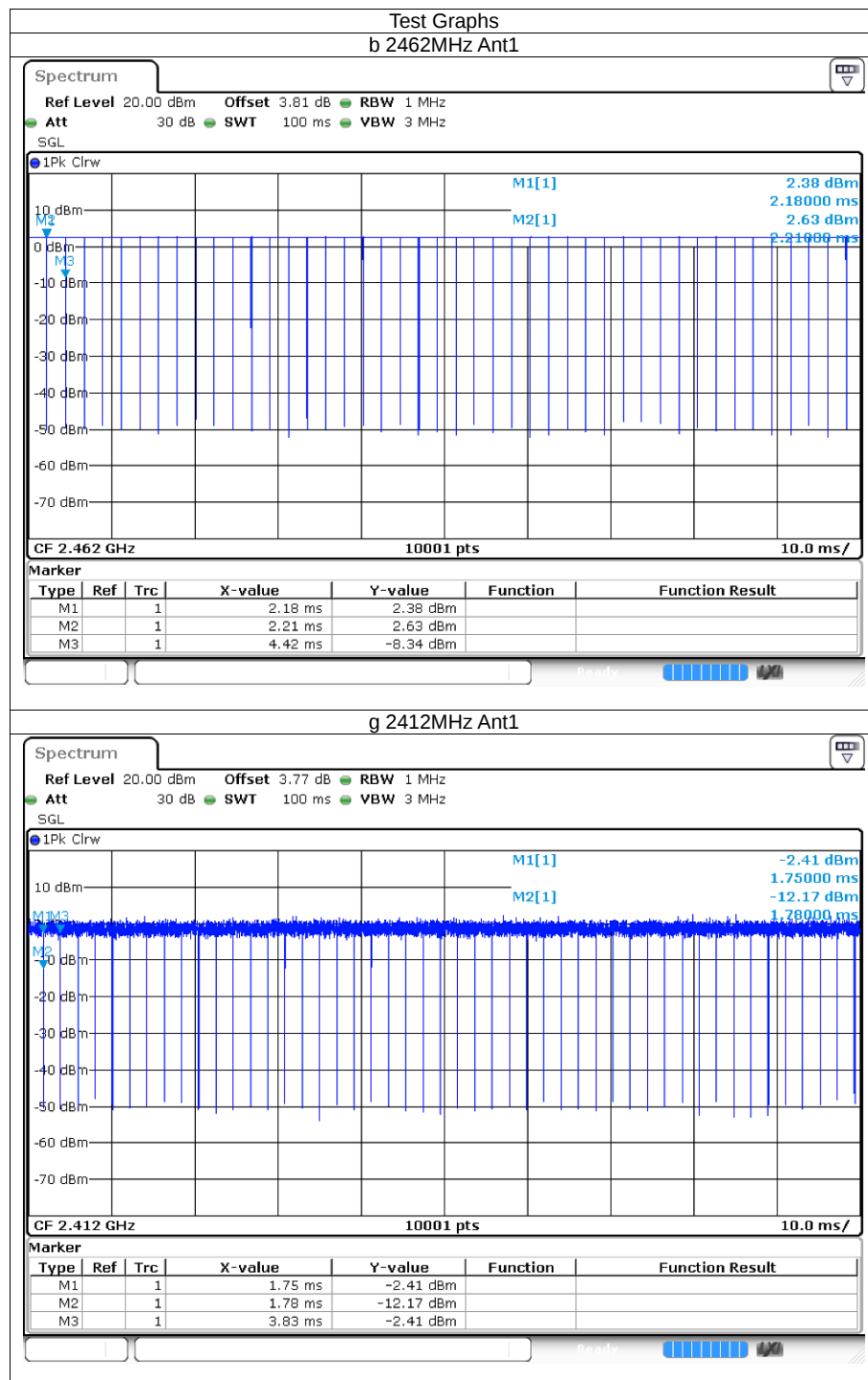
7 Duty Cycle

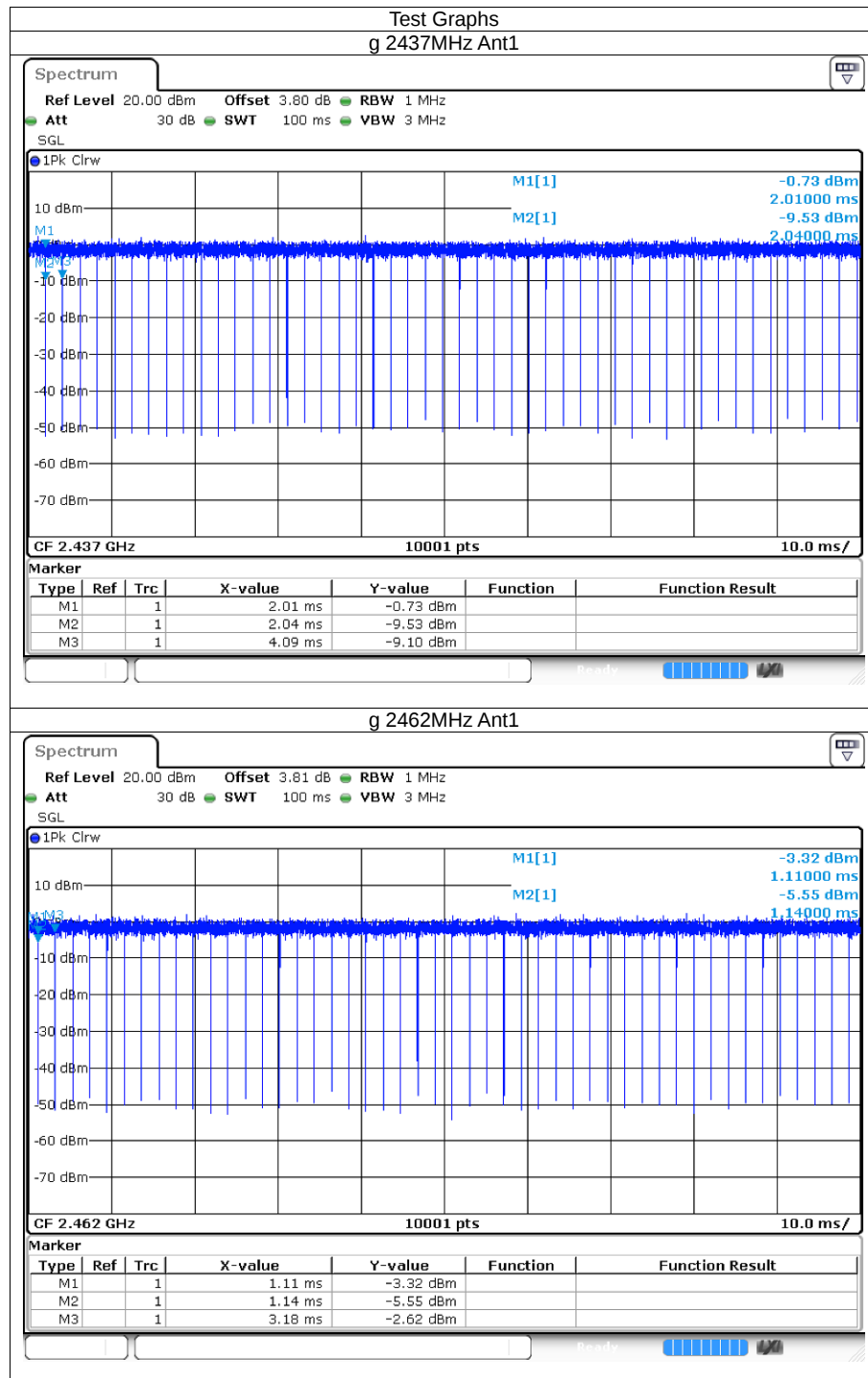
7.1 Test Result

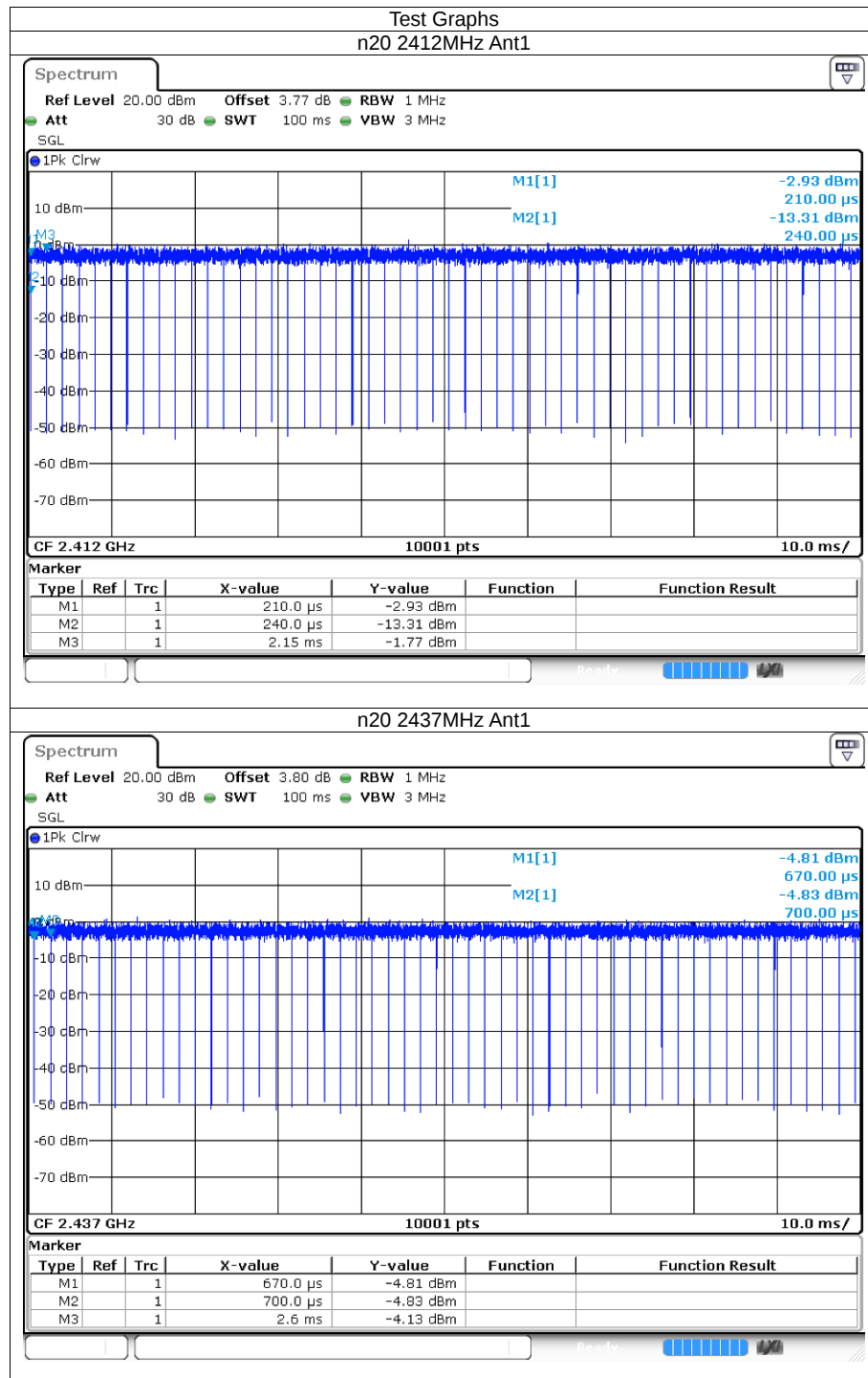
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
b	2412	Ant1	99.29	0.45
b	2437	Ant1	99.18	0.45
b	2462	Ant1	99.32	0.45
g	2412	Ant1	99.19	0.49
g	2437	Ant1	99.22	0.49
g	2462	Ant1	99.2	0.49
n20	2412	Ant1	99.14	0.52
n20	2437	Ant1	99.15	0.53
n20	2462	Ant1	99.15	0.53
n40	2422	Ant1	98.28	1.06
n40	2437	Ant1	98.27	1.08
n40	2452	Ant1	98.28	1.06

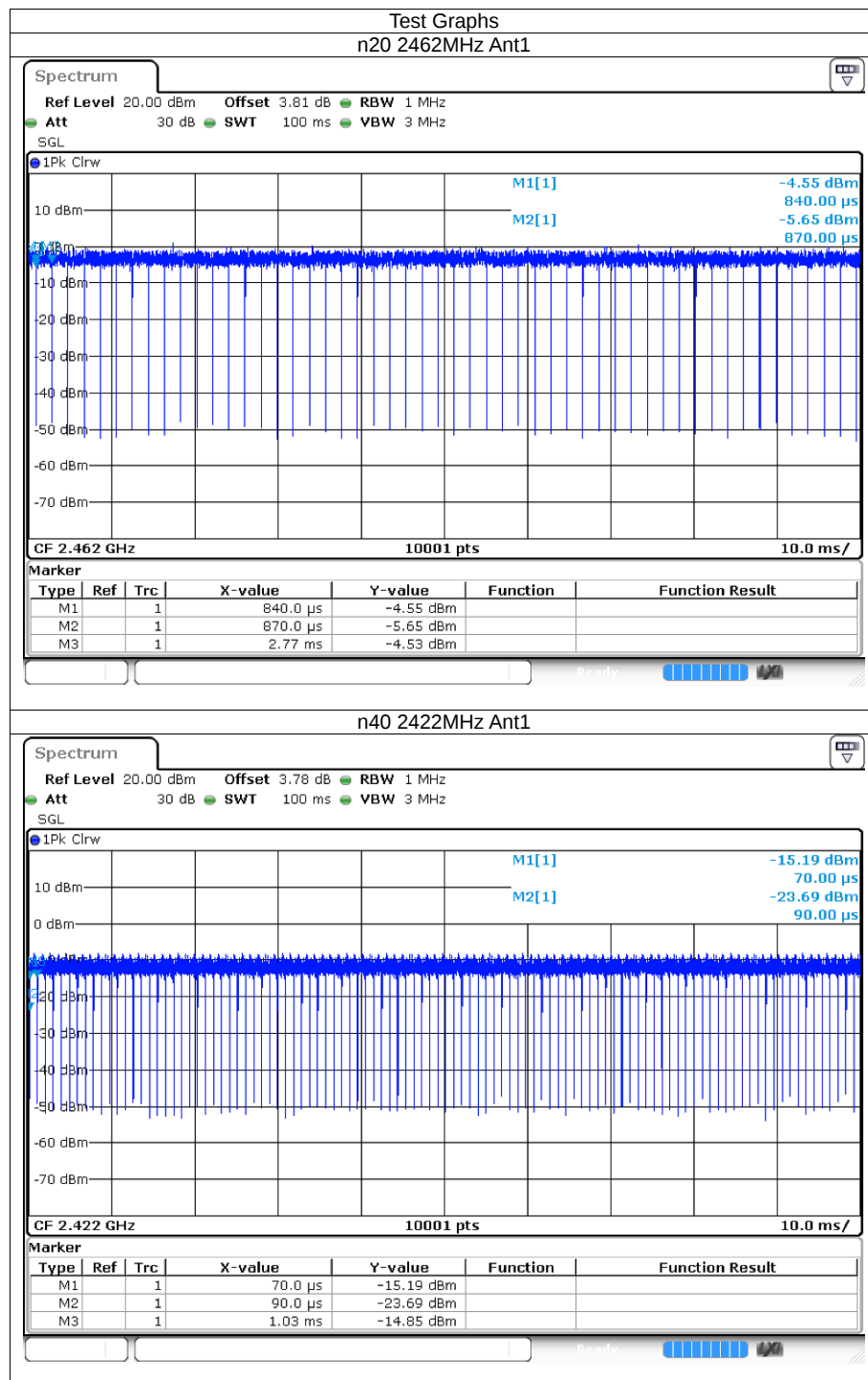
7.2 Test Graphs

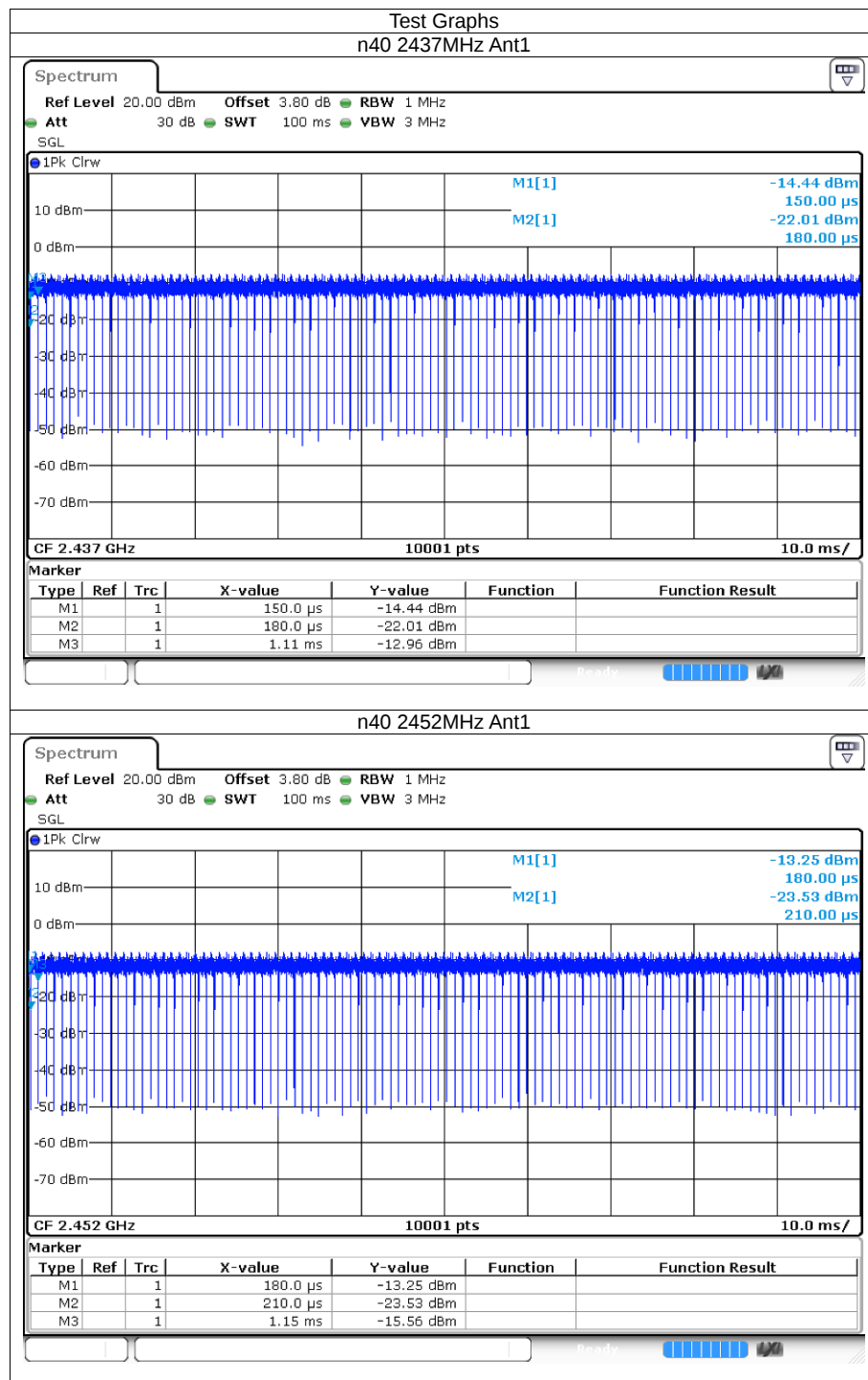












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