



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: BEVRLink 4 Channel ESP32 Relay Module 12V

Trade Mark: BEVRLink

Test Model: 7350001161815

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



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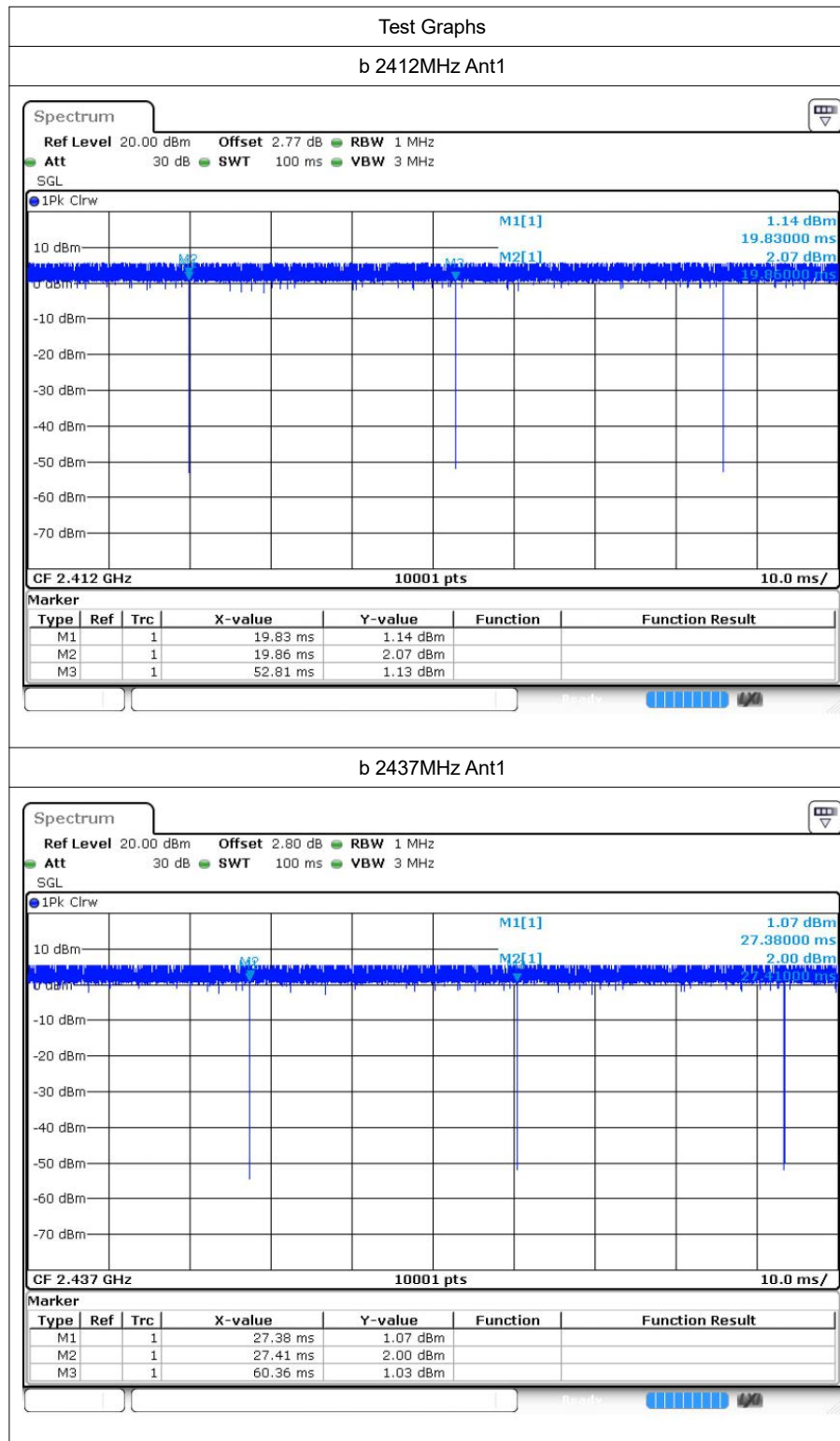


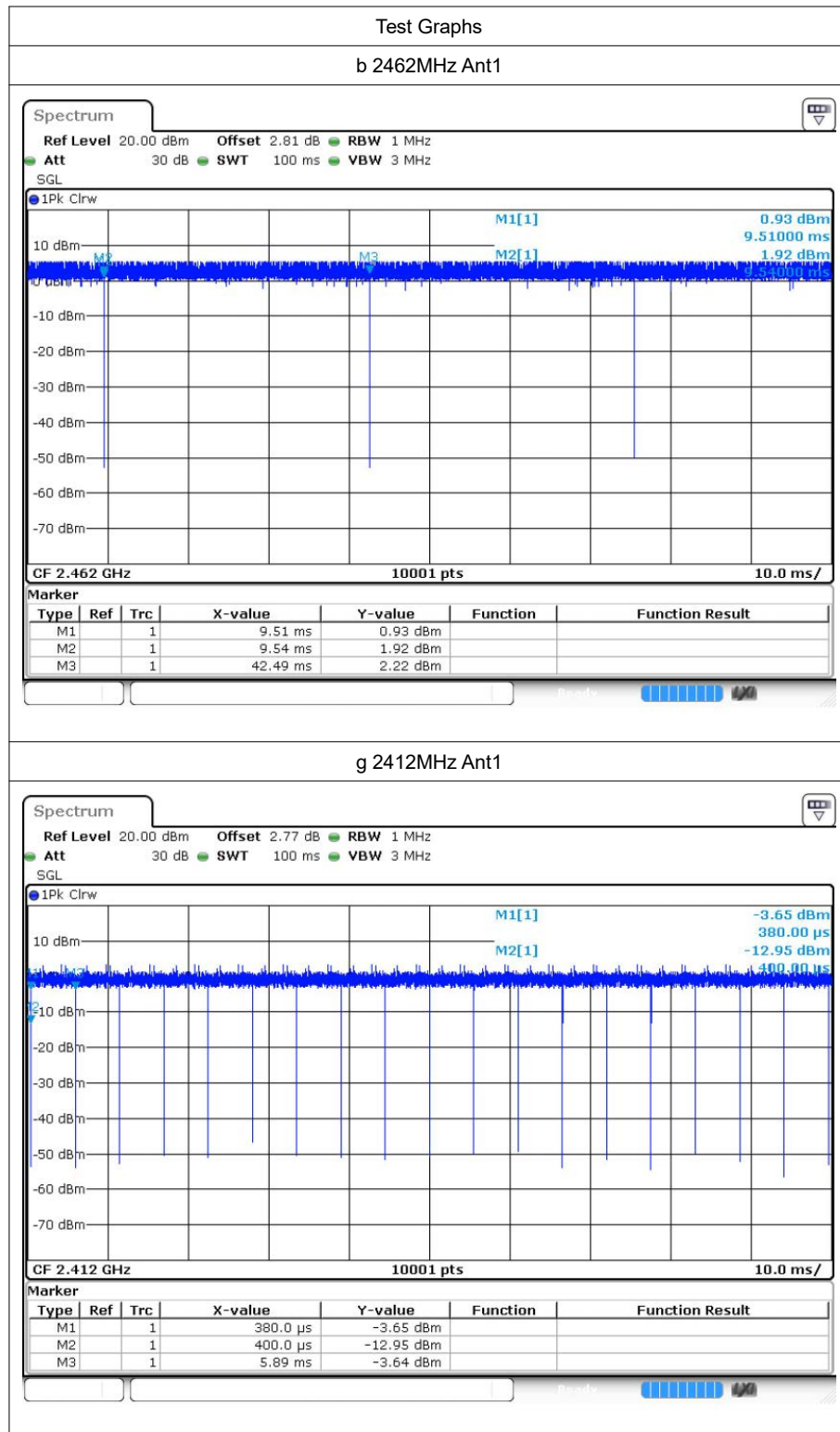
1 Duty Cycle

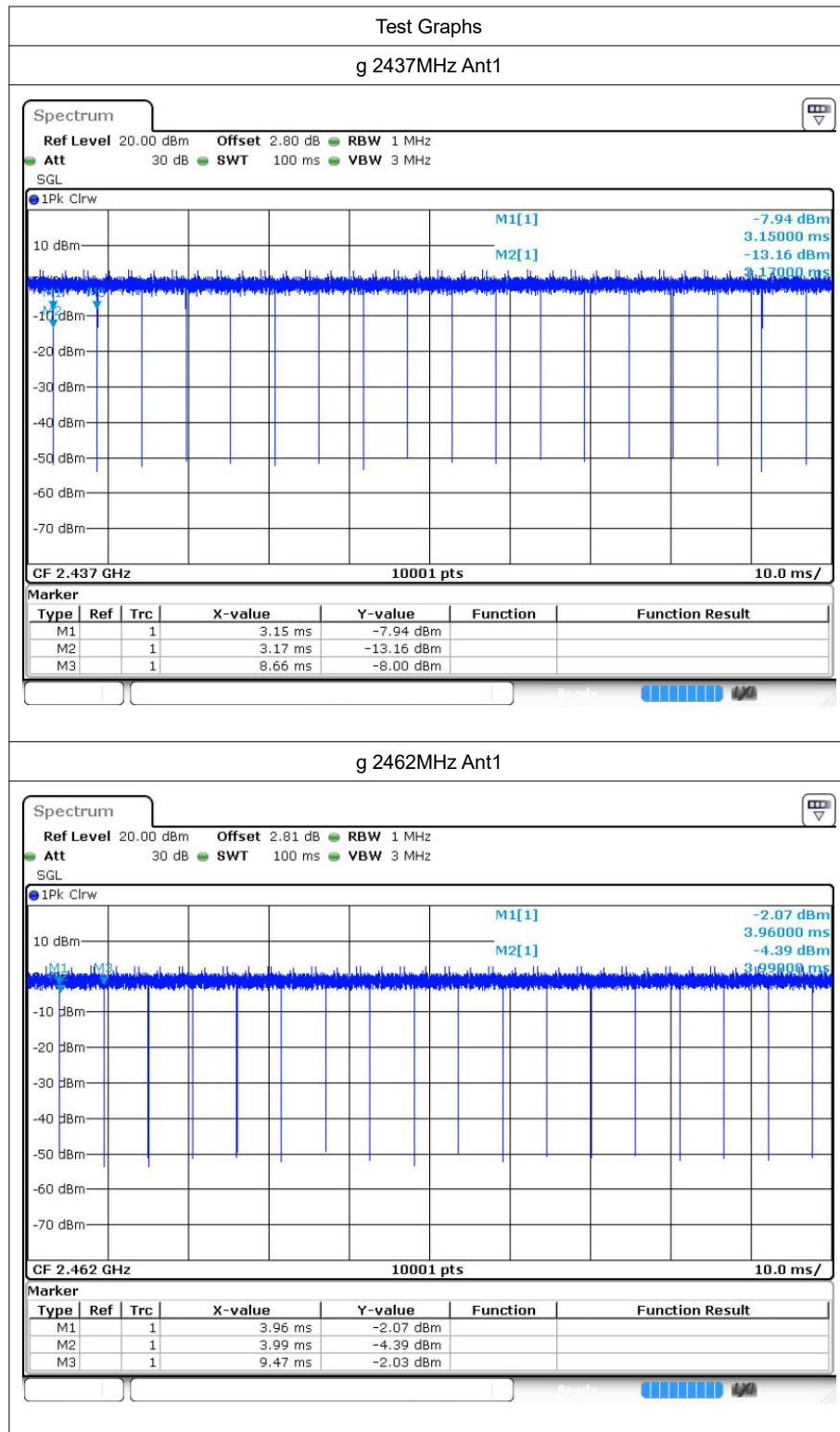
1.1 Test Result

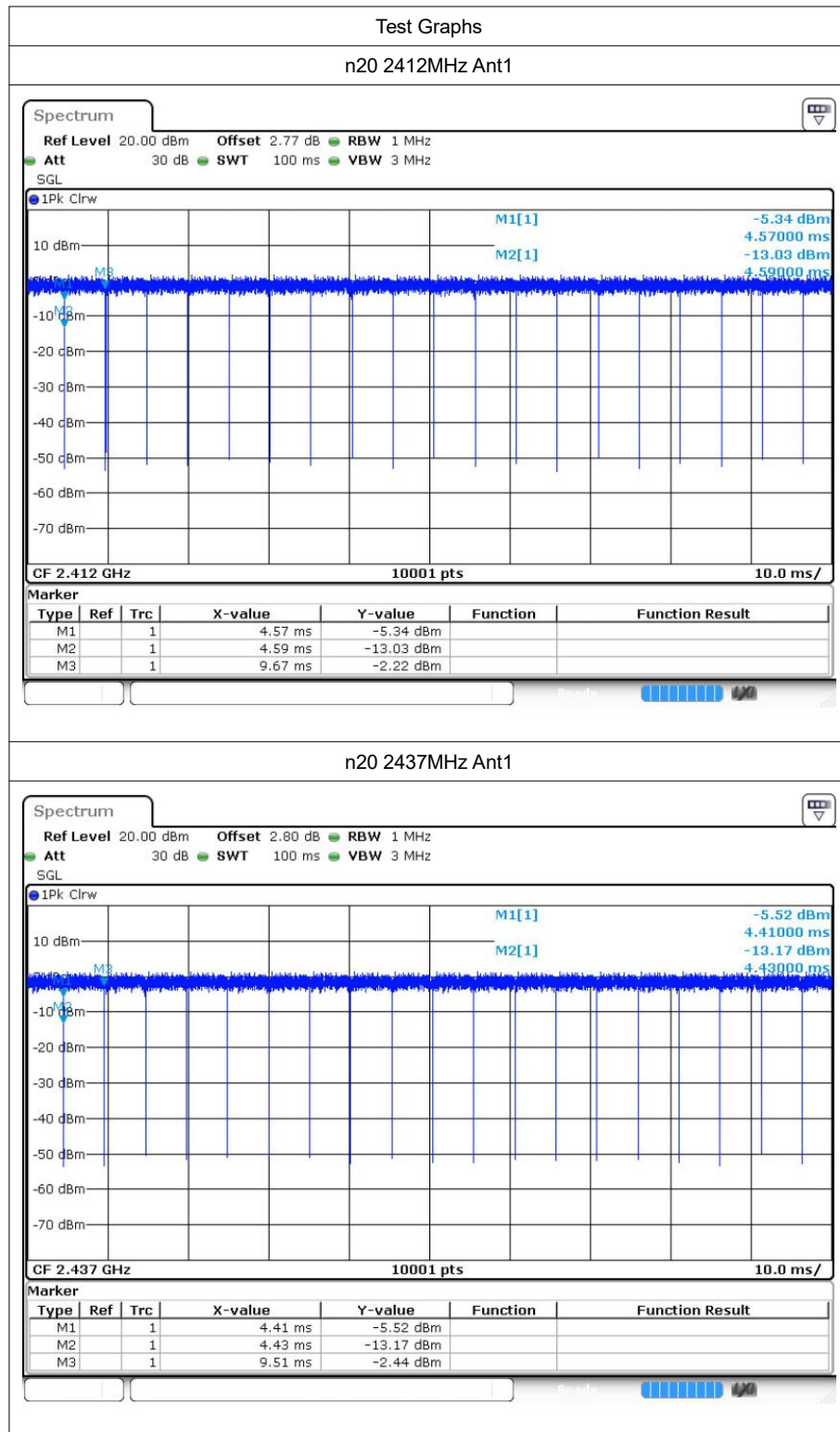
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
b	2412	Ant1	99.94	0	0.03
b	2437	Ant1	99.94	0	0.03
b	2462	Ant1	99.94	0	0.03
g	2412	Ant1	99.81	0.01	0.18
g	2437	Ant1	99.82	0.01	0.18
g	2462	Ant1	99.64	0.02	0.18
n20	2412	Ant1	99.71	0.01	0.2
n20	2437	Ant1	99.7	0.01	0.2
n20	2462	Ant1	99.7	0.01	0.2
n40	2422	Ant1	99.37	0.03	0.4
n40	2437	Ant1	99.33	0.03	0.4
n40	2452	Ant1	99.34	0.03	0.41

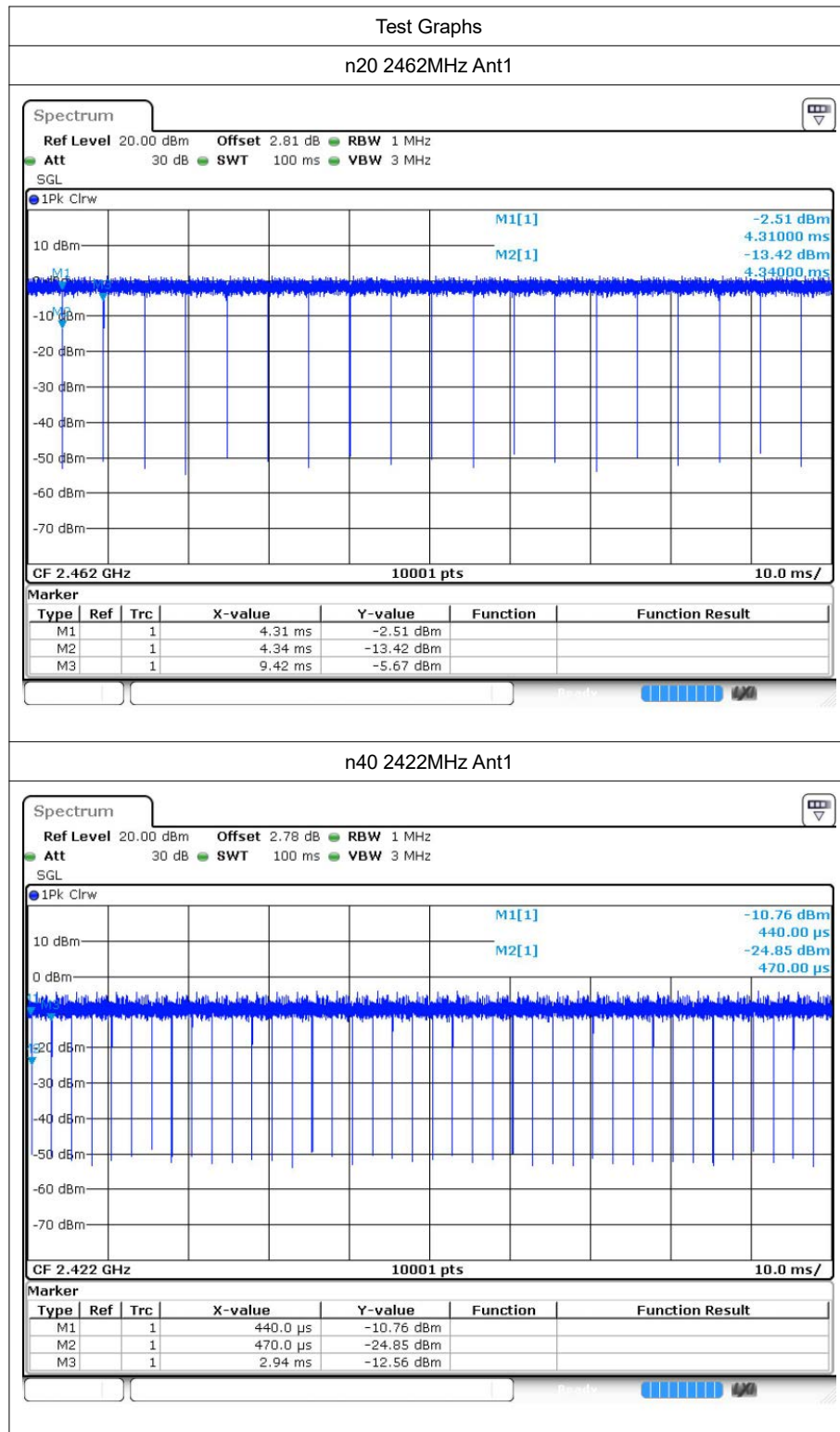
1.2 Test Graphs

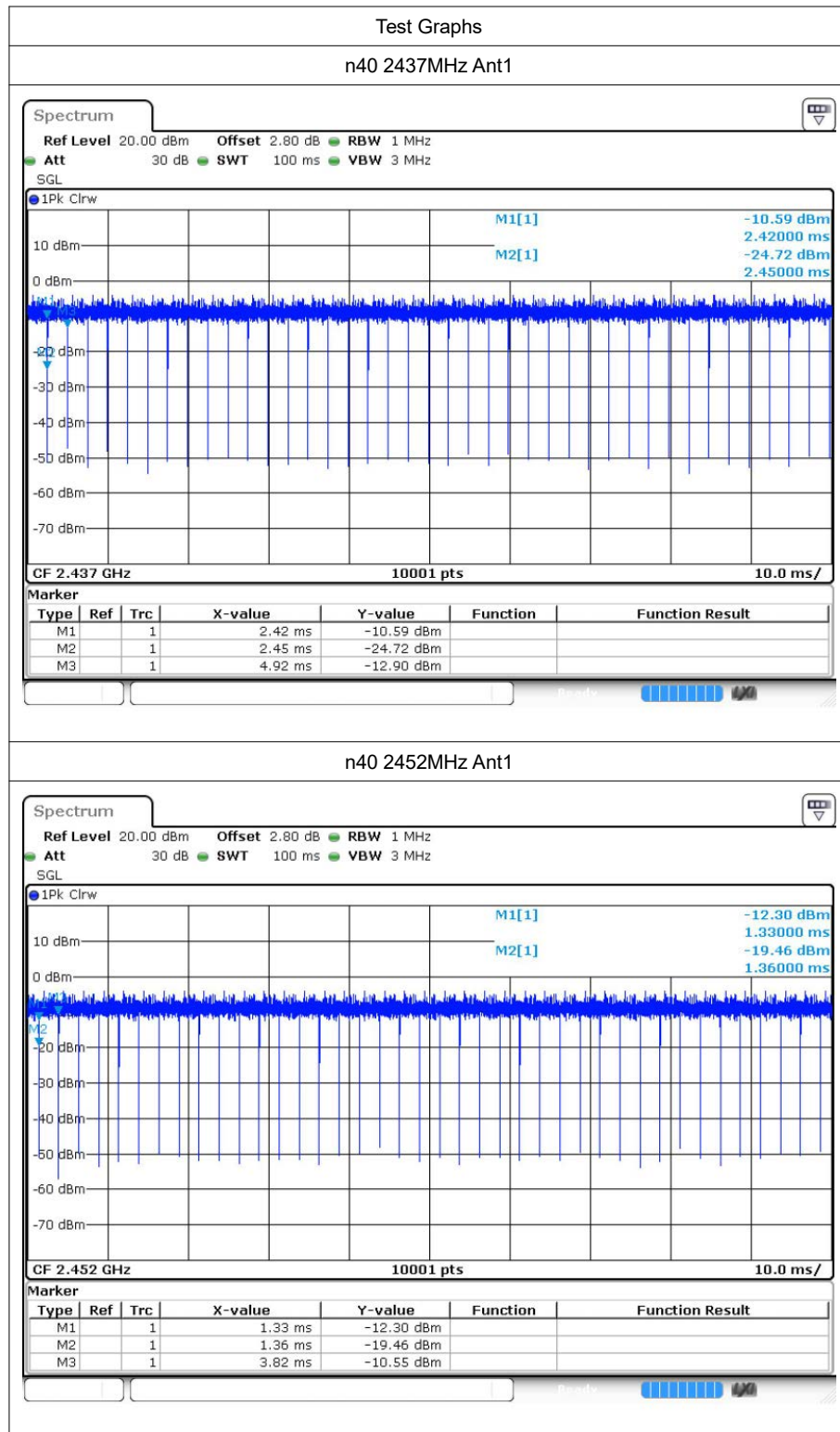












2 Maximum Conducted Output Power

2.1 Test Result

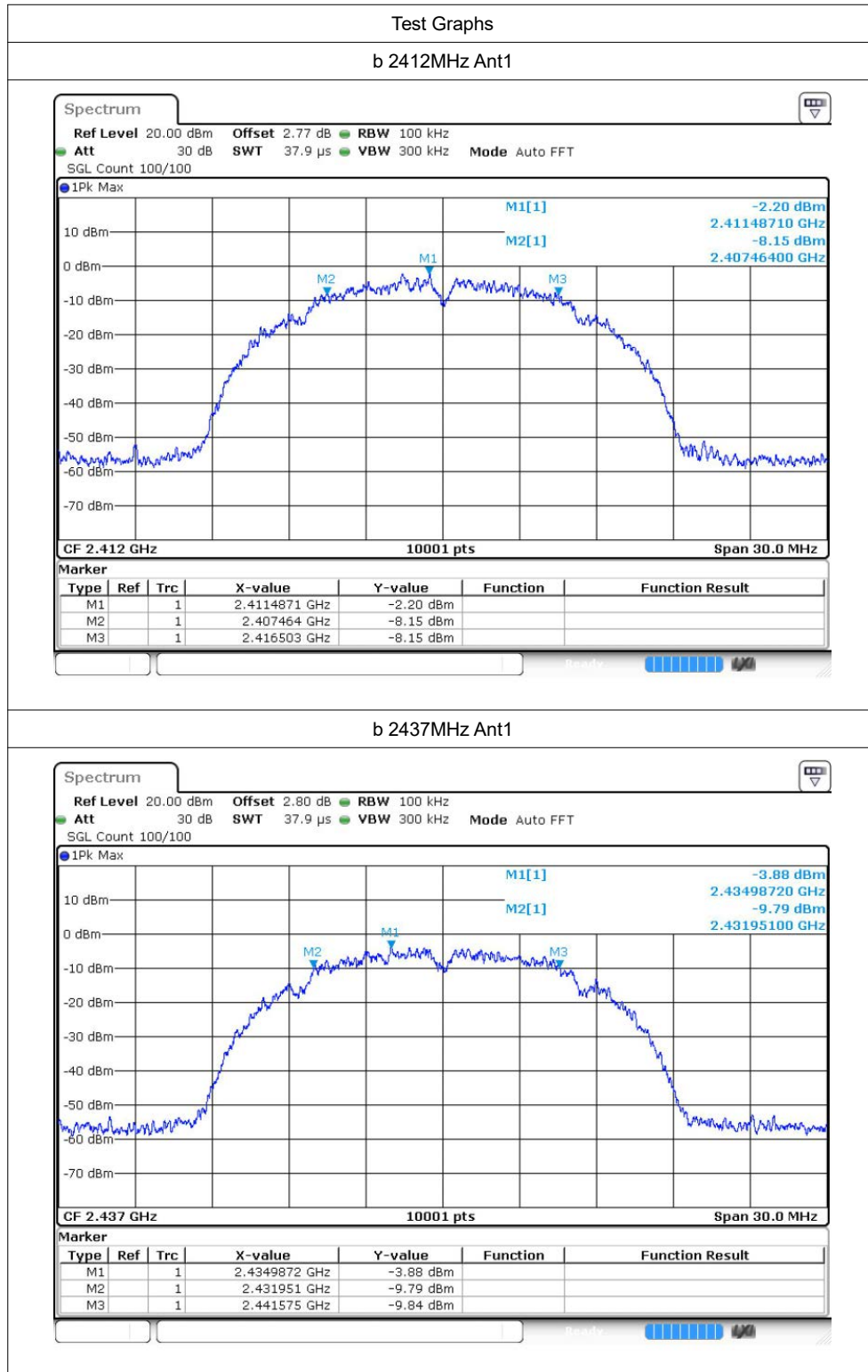
Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	12.91	30	Pass
b	2437	Ant1	12.78	30	Pass
b	2462	Ant1	12.71	30	Pass
g	2412	Ant1	12.23	30	Pass
g	2437	Ant1	12.1	30	Pass
g	2462	Ant1	12.02	30	Pass
n20	2412	Ant1	12.01	30	Pass
n20	2437	Ant1	11.72	30	Pass
n20	2462	Ant1	11.64	30	Pass
n40	2422	Ant1	11.73	30	Pass
n40	2437	Ant1	11.72	30	Pass
n40	2452	Ant1	11.66	30	Pass

3 -6dB Bandwidth

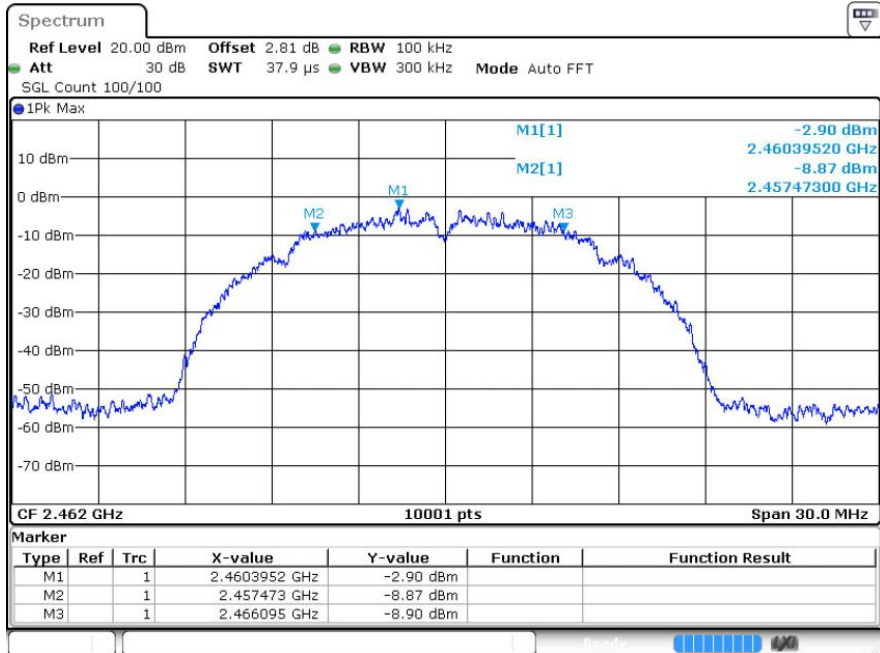
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	9.039	0.5	Pass
b	2437	Ant1	9.624	0.5	Pass
b	2462	Ant1	8.622	0.5	Pass
g	2412	Ant1	16.521	0.5	Pass
g	2437	Ant1	16.374	0.5	Pass
g	2462	Ant1	16.344	0.5	Pass
n20	2412	Ant1	17.571	0.5	Pass
n20	2437	Ant1	17.577	0.5	Pass
n20	2462	Ant1	17.583	0.5	Pass
n40	2422	Ant1	32.52	0.5	Pass
n40	2437	Ant1	36.054	0.5	Pass
n40	2452	Ant1	31.926	0.5	Pass

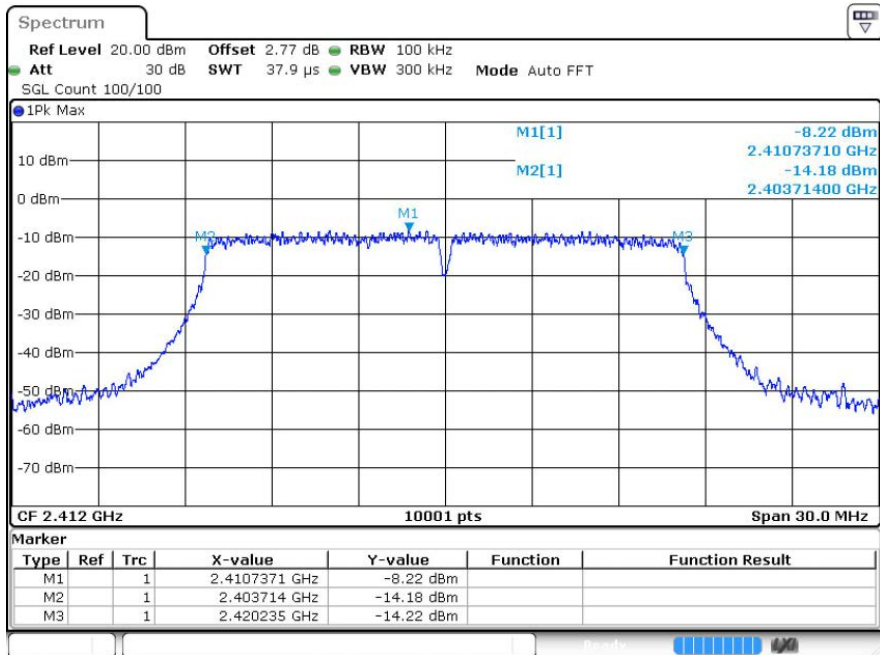
3.2 Test Graphs

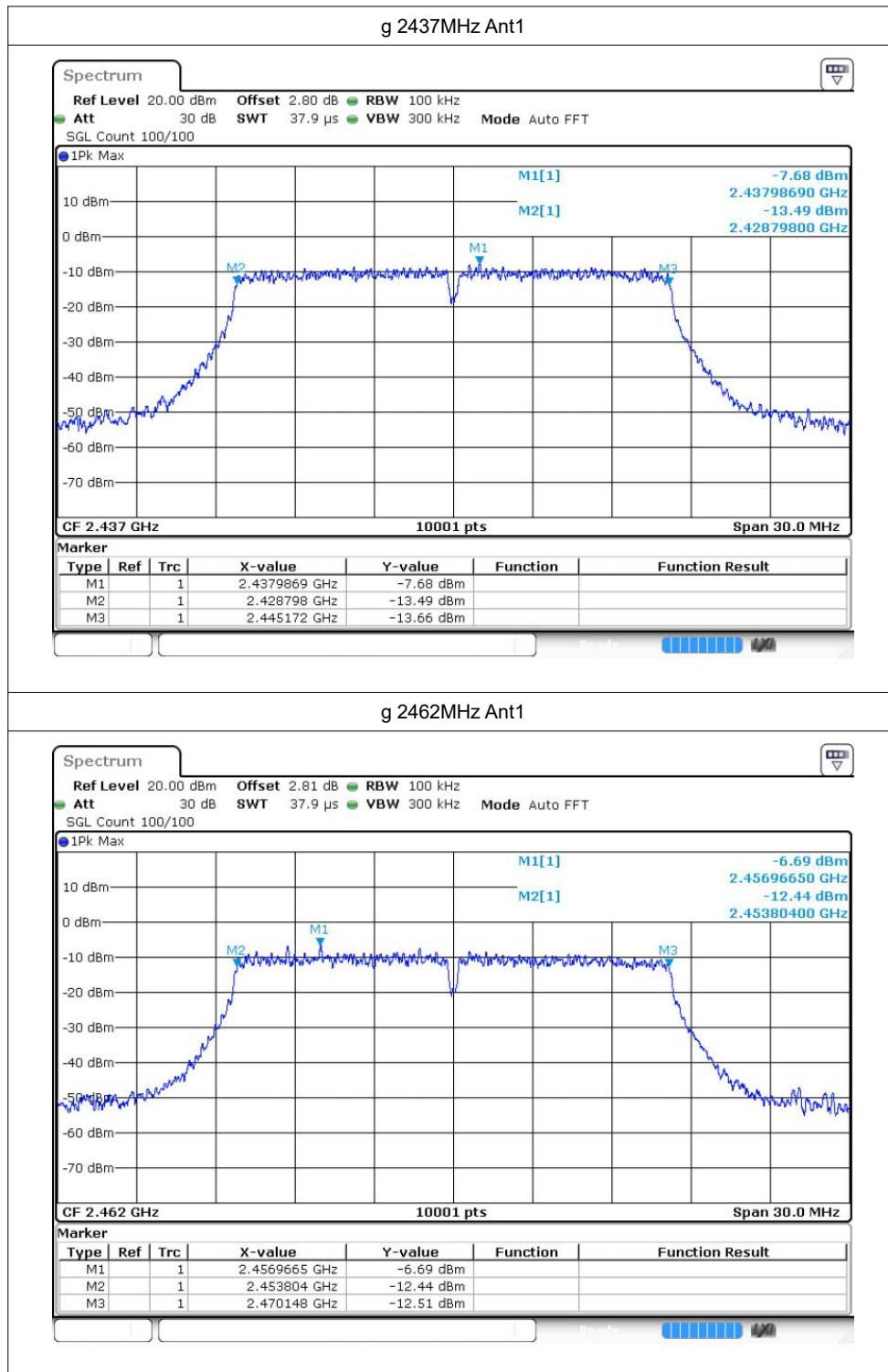


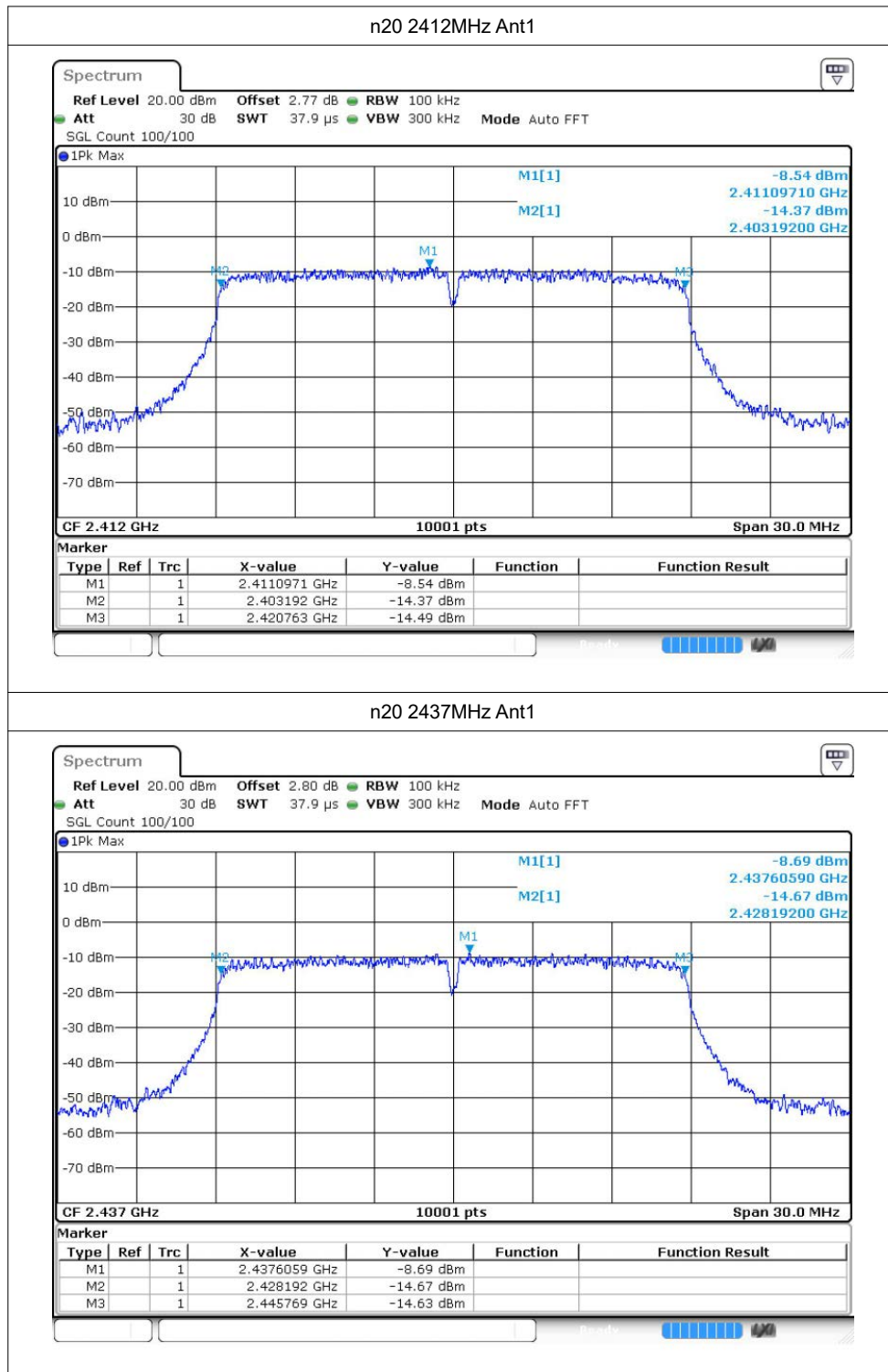
b 2462MHz Ant1

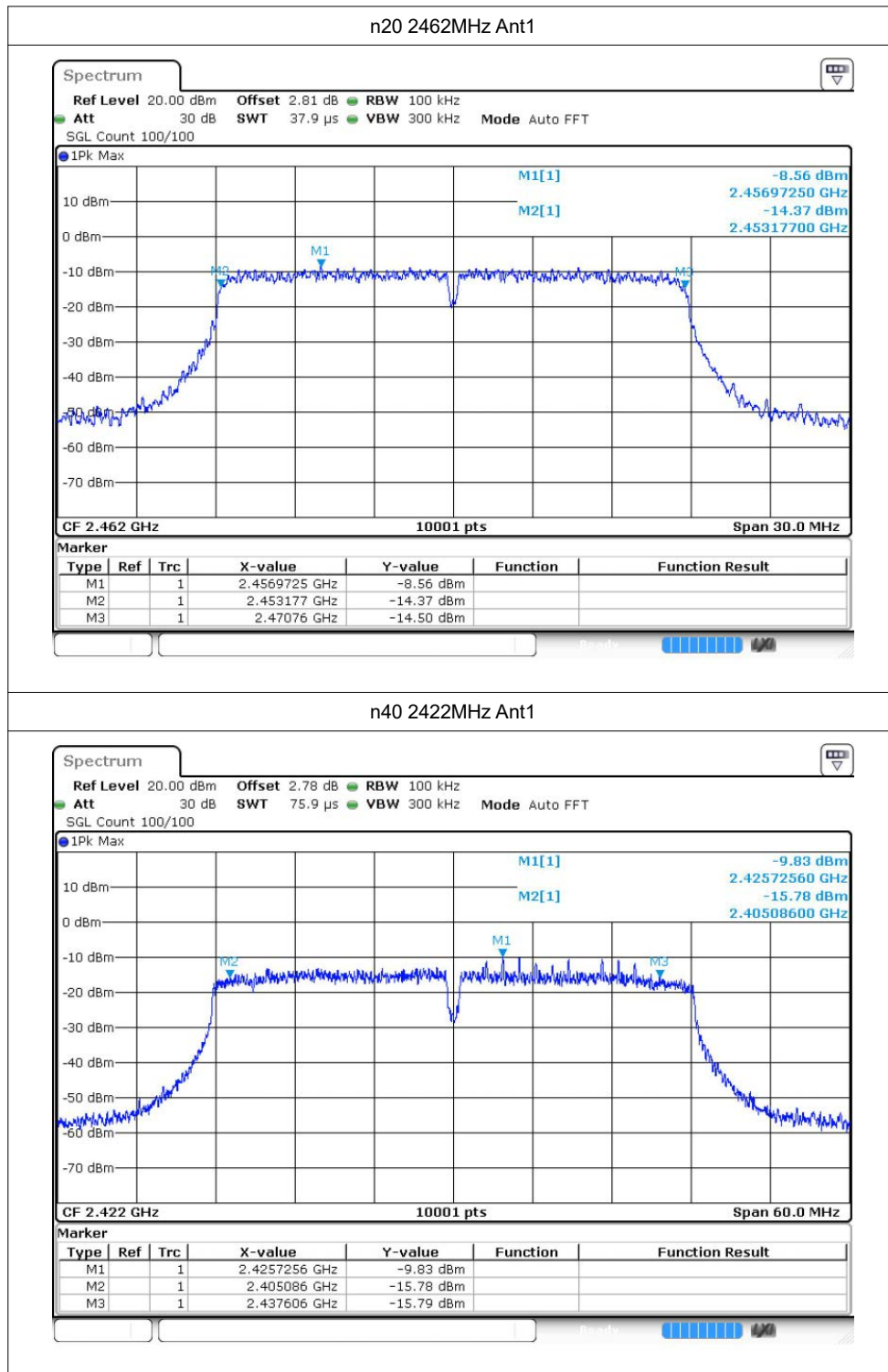


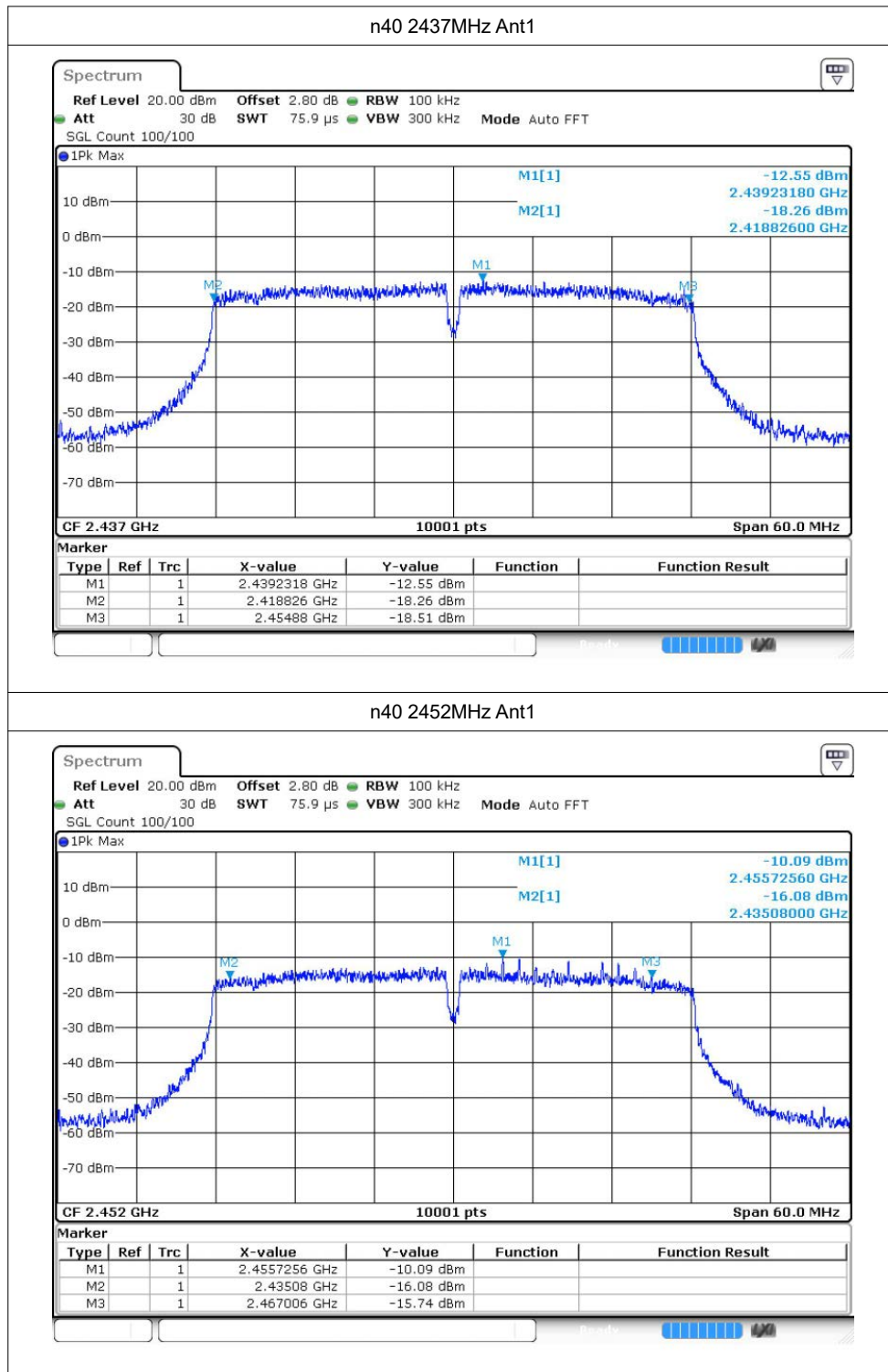
g 2412MHz Ant1









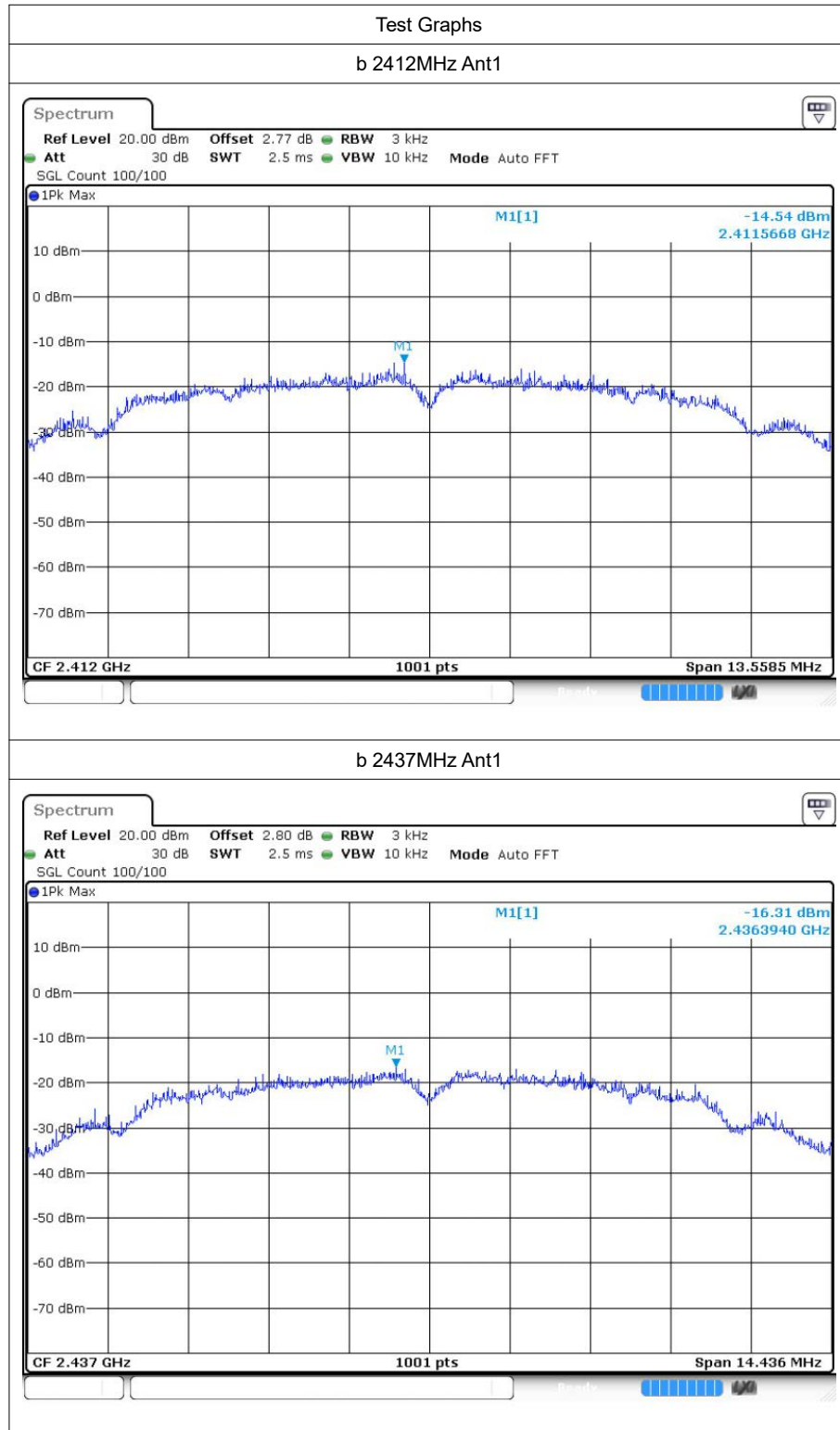


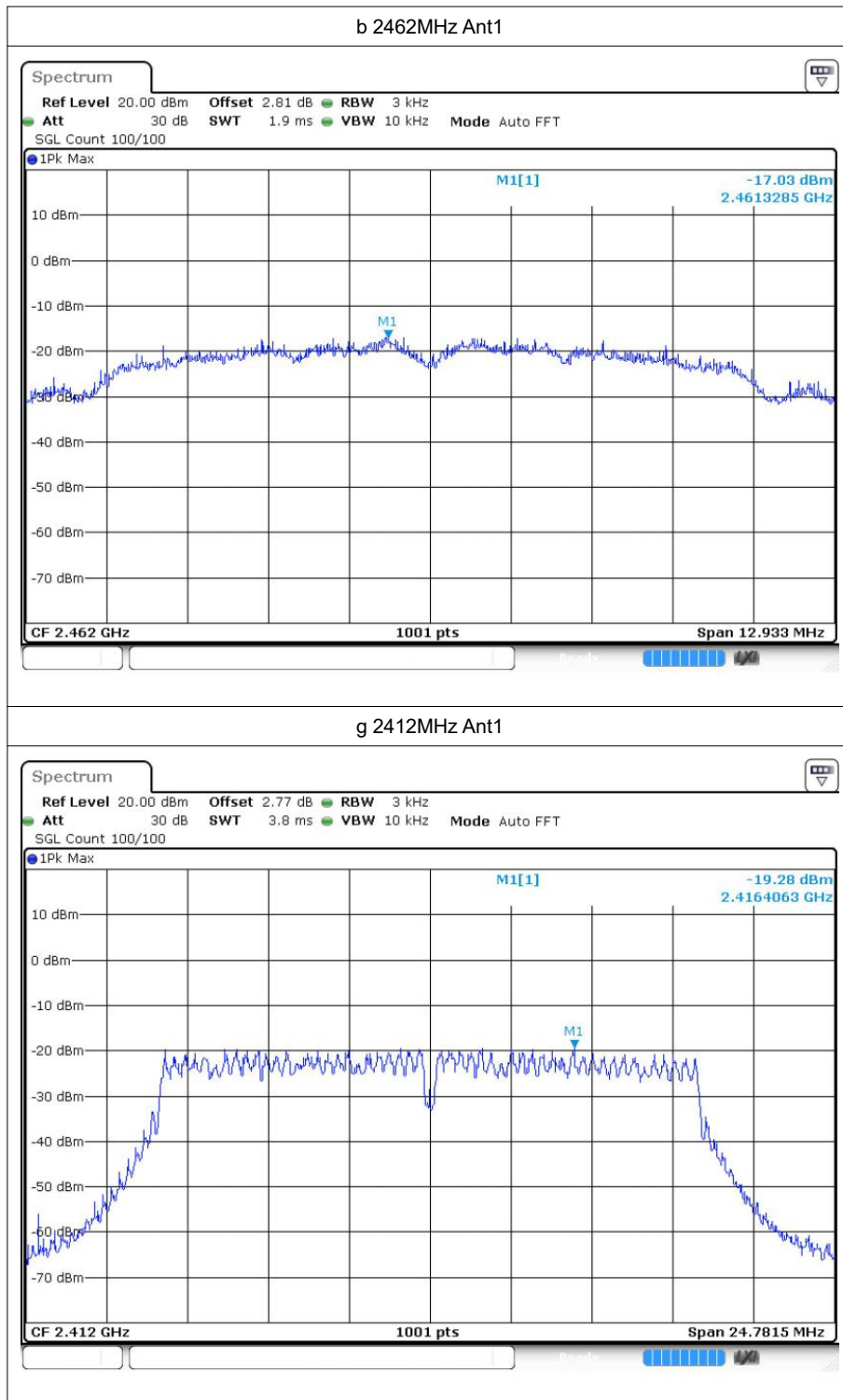
4 Maximum Power Spectral Density Level

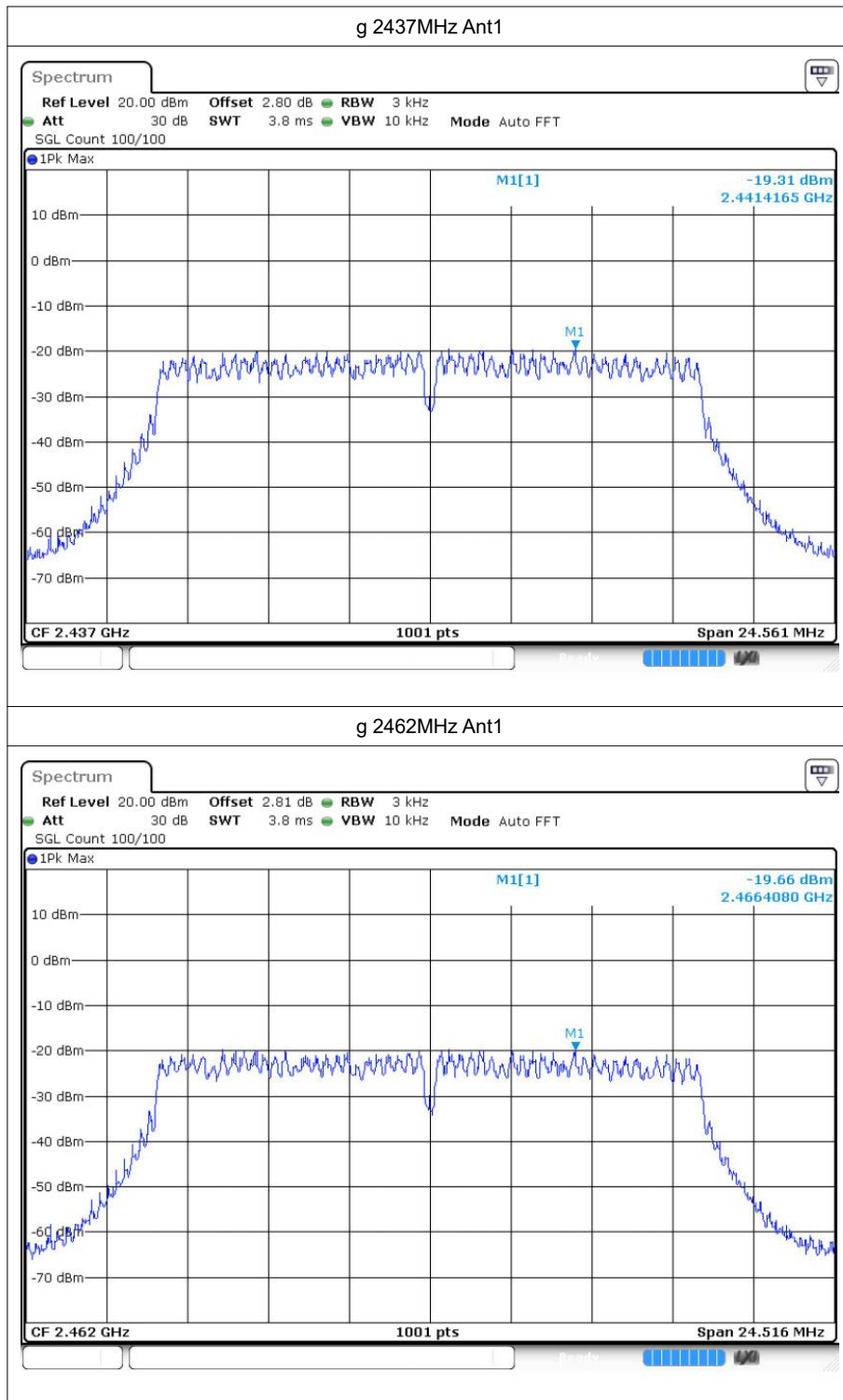
4.1 Test Result

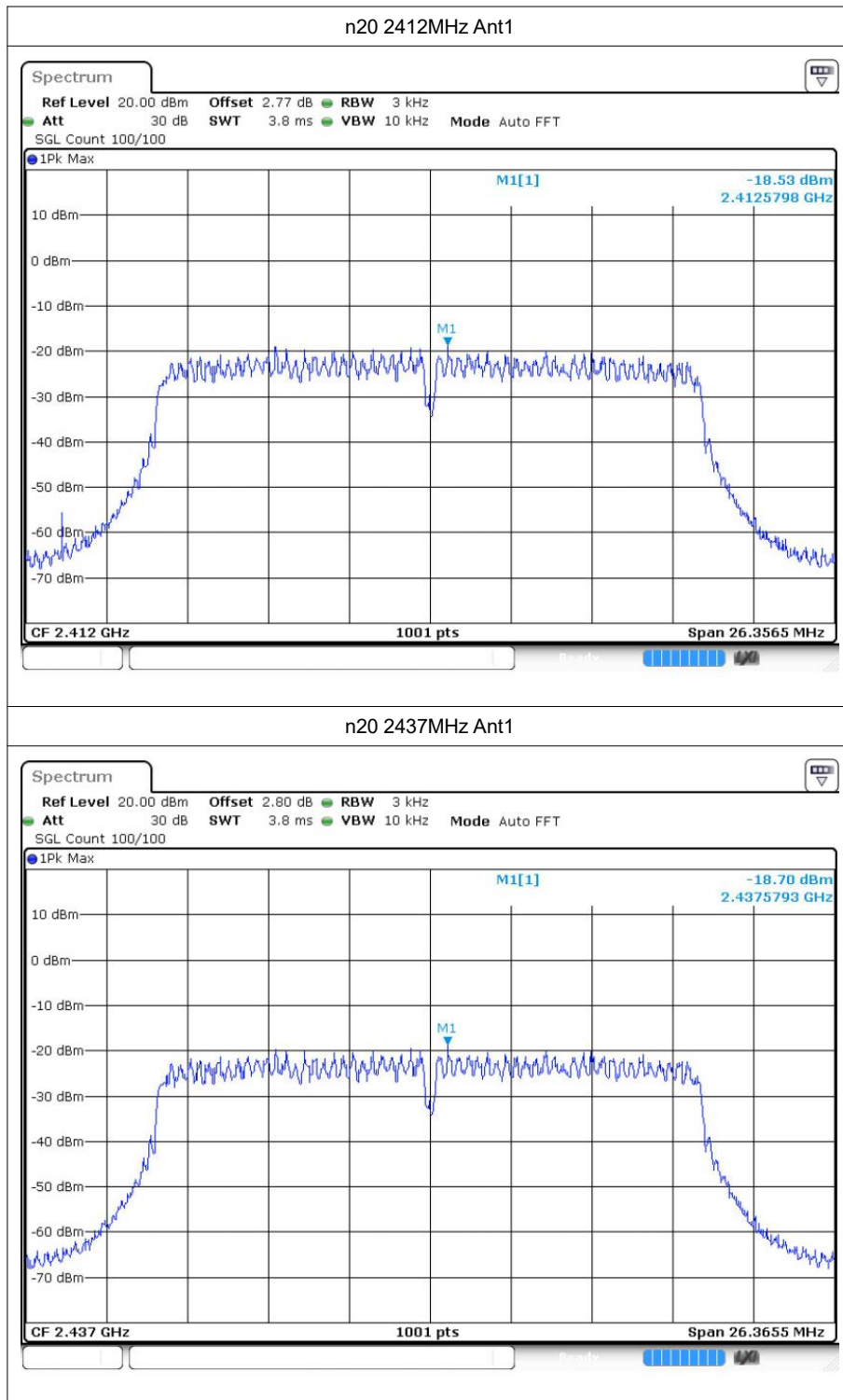
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-14.54	≤8	Pass
b	2437	Ant1	-16.31	≤8	Pass
b	2462	Ant1	-17.03	≤8	Pass
g	2412	Ant1	-19.28	≤8	Pass
g	2437	Ant1	-19.31	≤8	Pass
g	2462	Ant1	-19.66	≤8	Pass
n20	2412	Ant1	-18.53	≤8	Pass
n20	2437	Ant1	-18.7	≤8	Pass
n20	2462	Ant1	-18.72	≤8	Pass
n40	2422	Ant1	-23.38	≤8	Pass
n40	2437	Ant1	-22.9	≤8	Pass
n40	2452	Ant1	-23.1	≤8	Pass

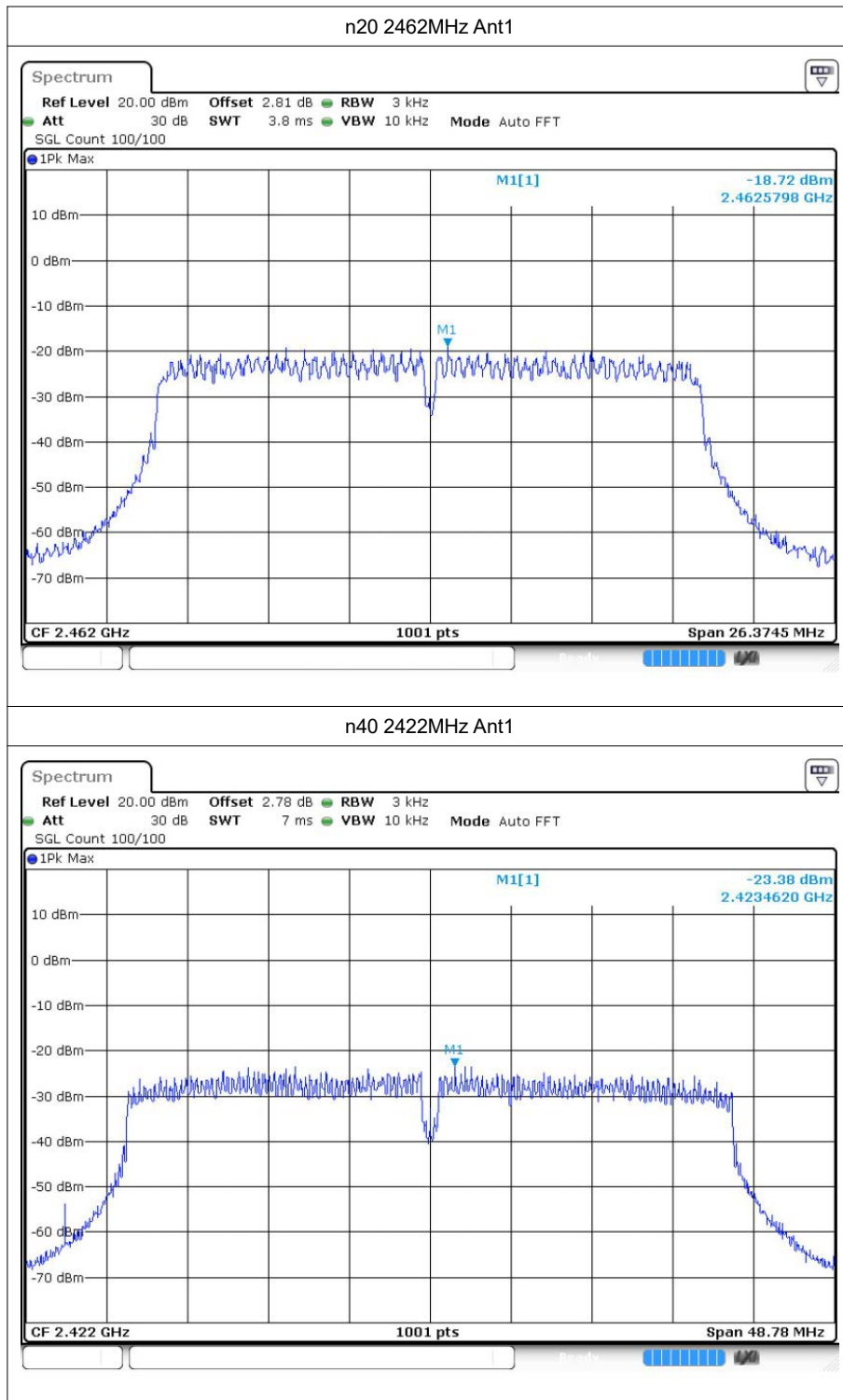
4.2 Test Graphs

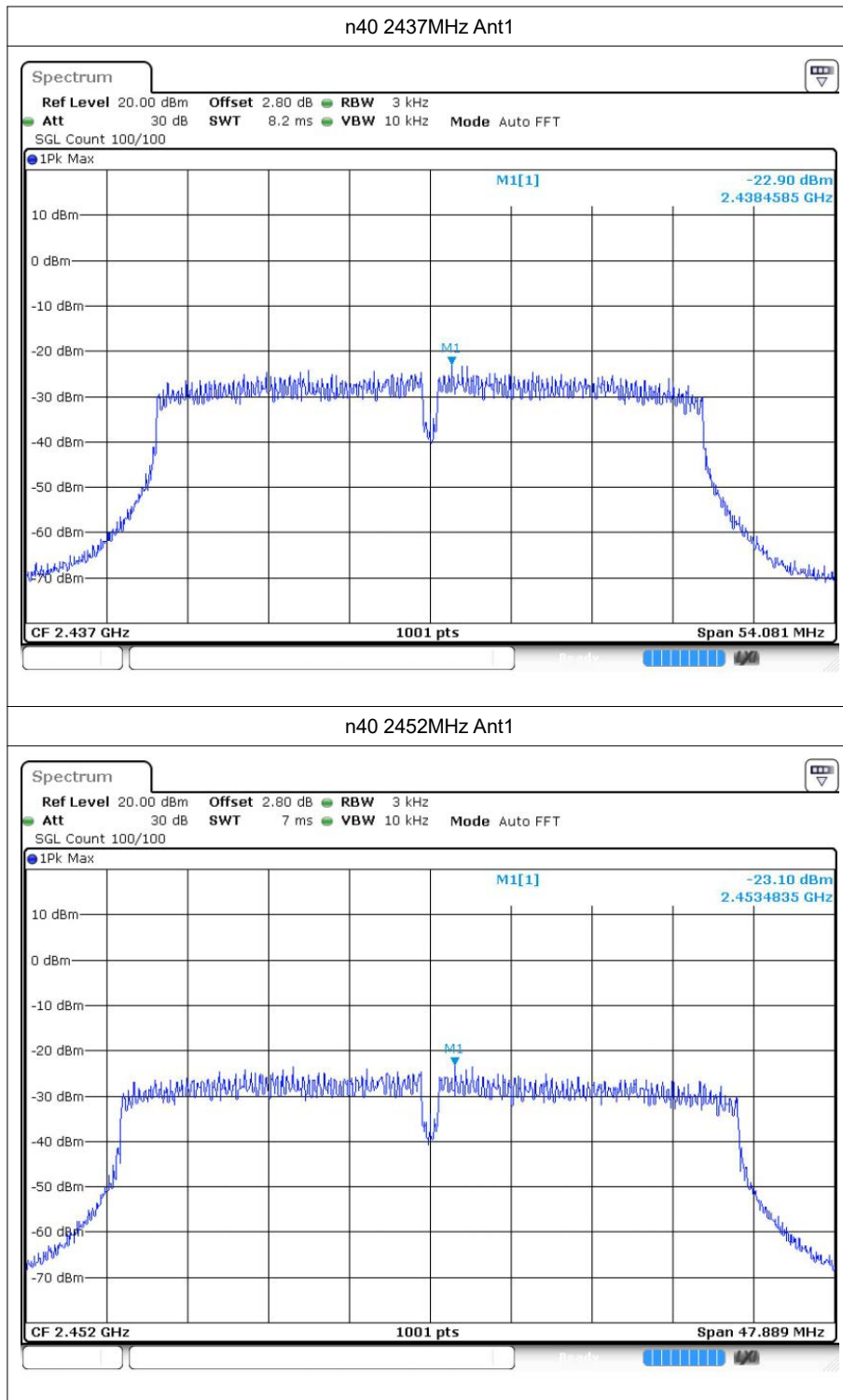












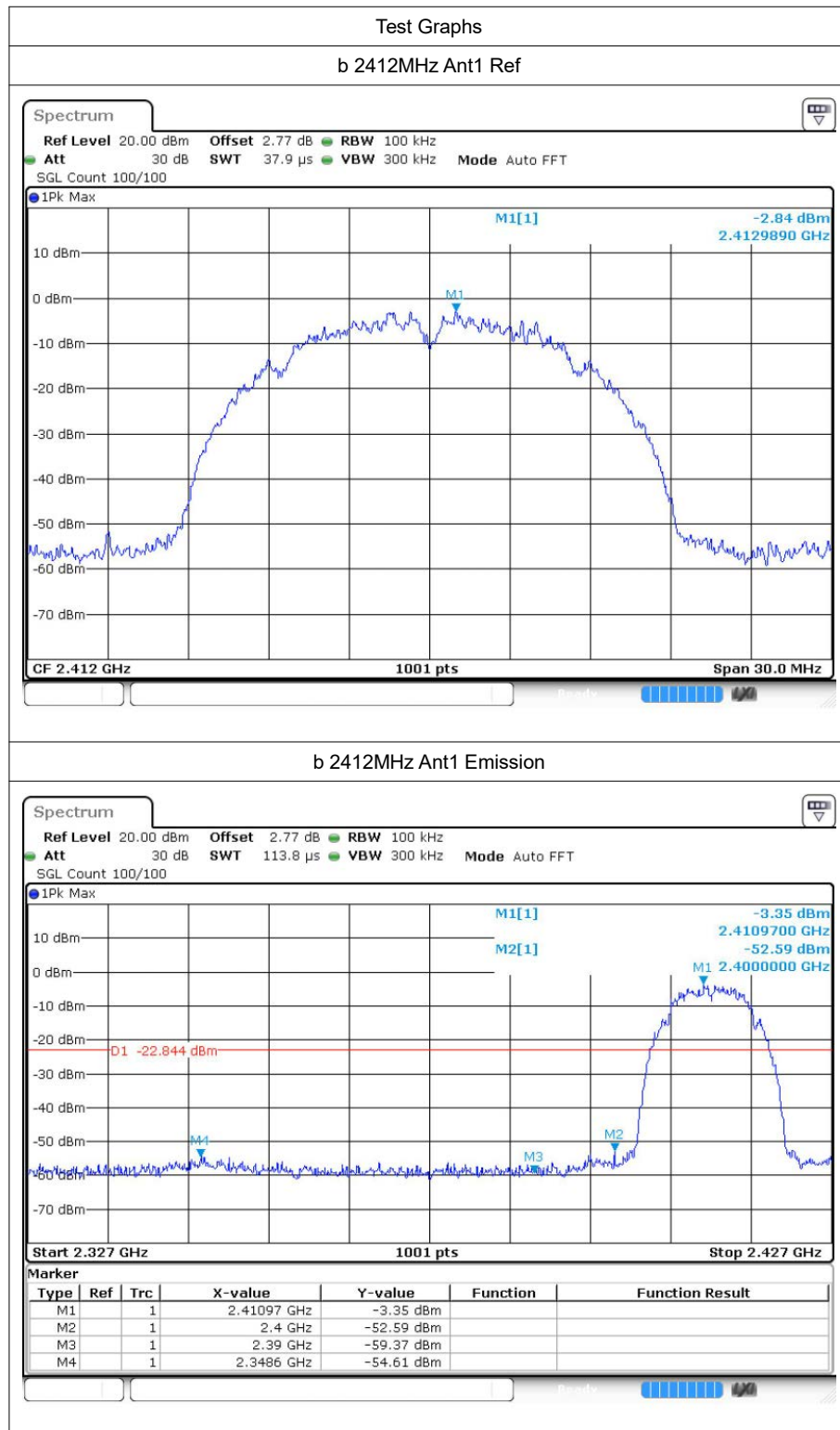


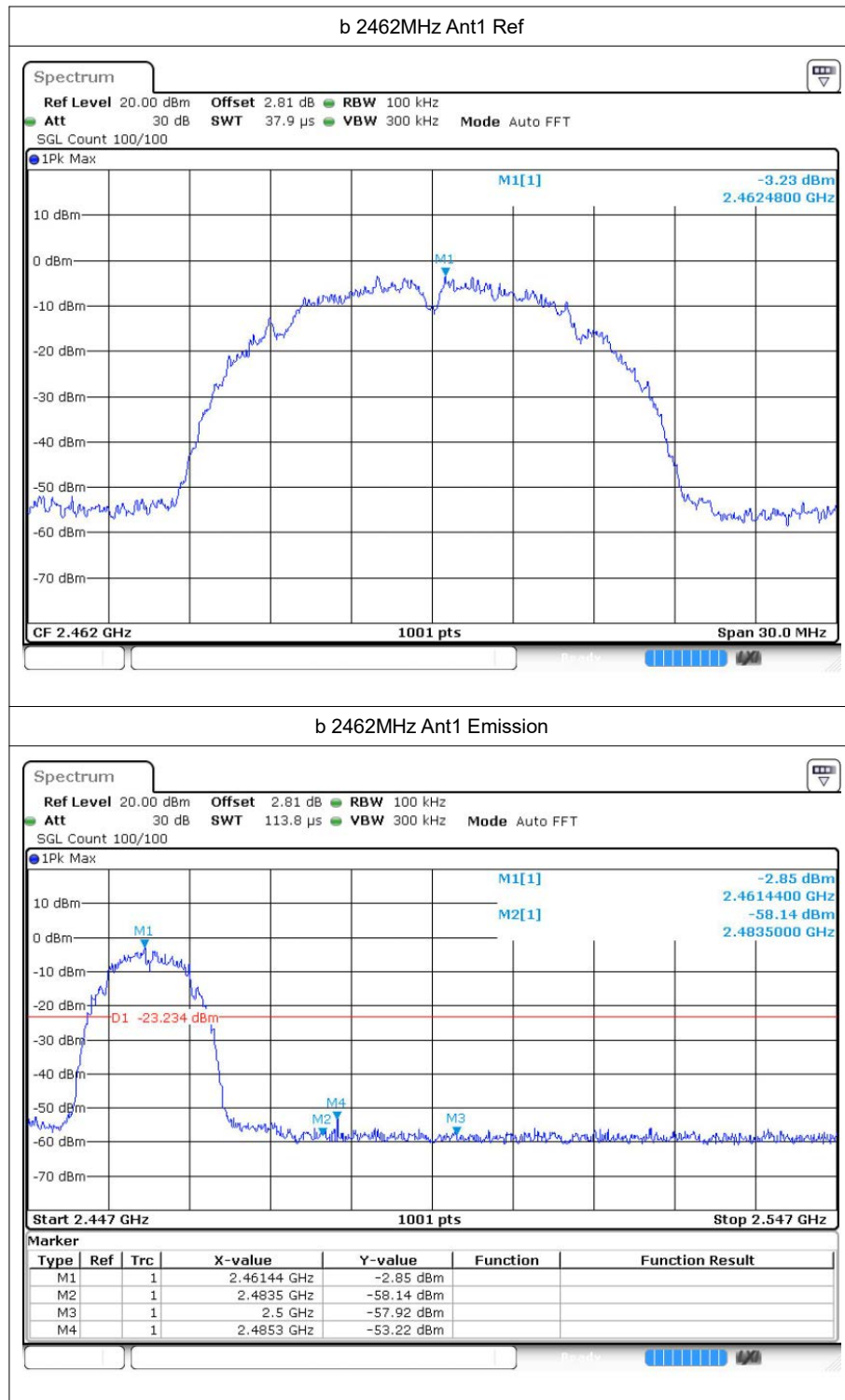
5 Band Edge

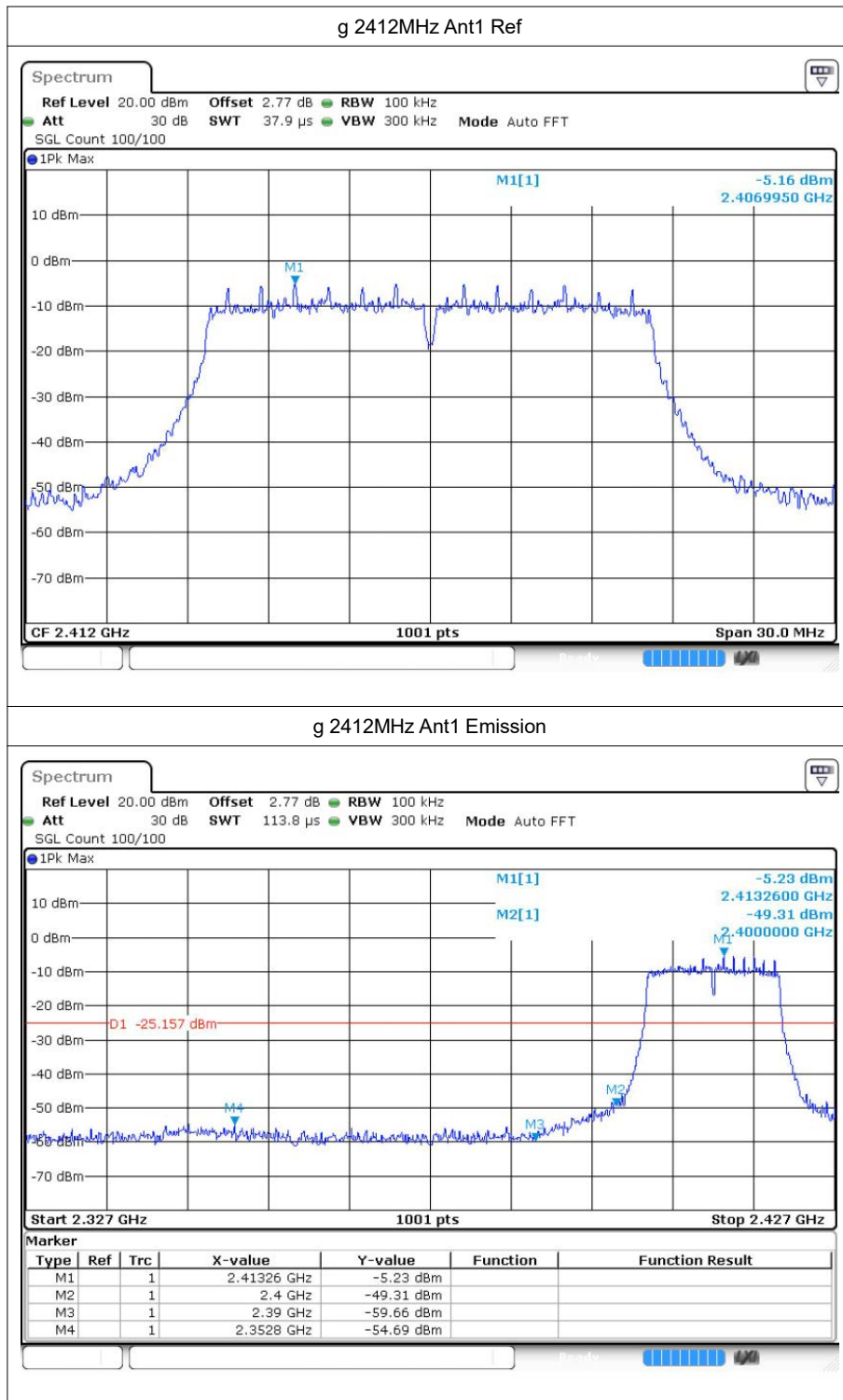
5.1 Test Result

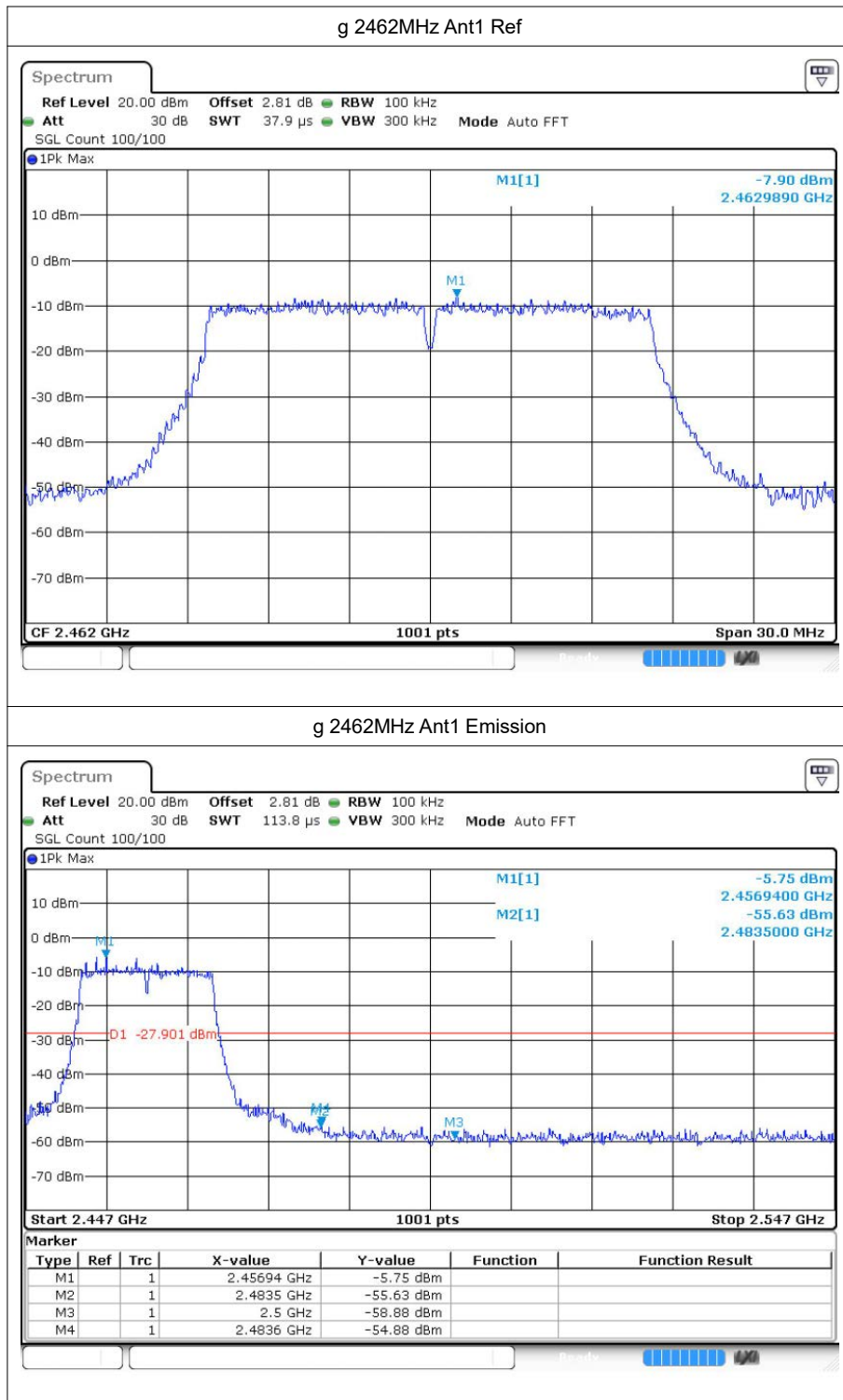
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-51.76	-20	Pass
b	2462	Ant1	-49.98	-20	Pass
g	2412	Ant1	-49.52	-20	Pass
g	2462	Ant1	-46.98	-20	Pass
n20	2412	Ant1	-46.23	-20	Pass
n20	2462	Ant1	-47.02	-20	Pass
n40	2422	Ant1	-41.83	-20	Pass
n40	2452	Ant1	-44.42	-20	Pass

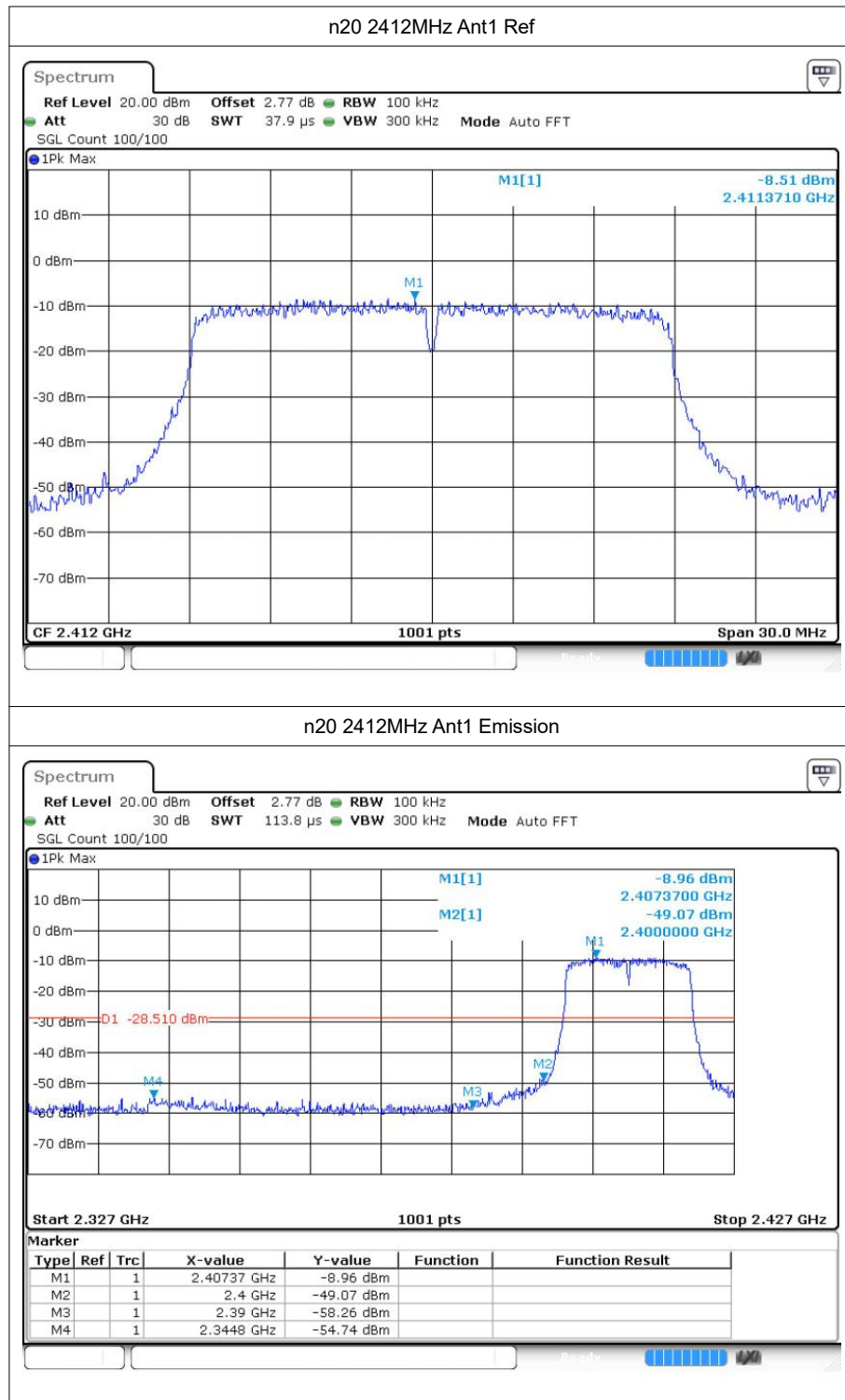
5.2 Test Graphs

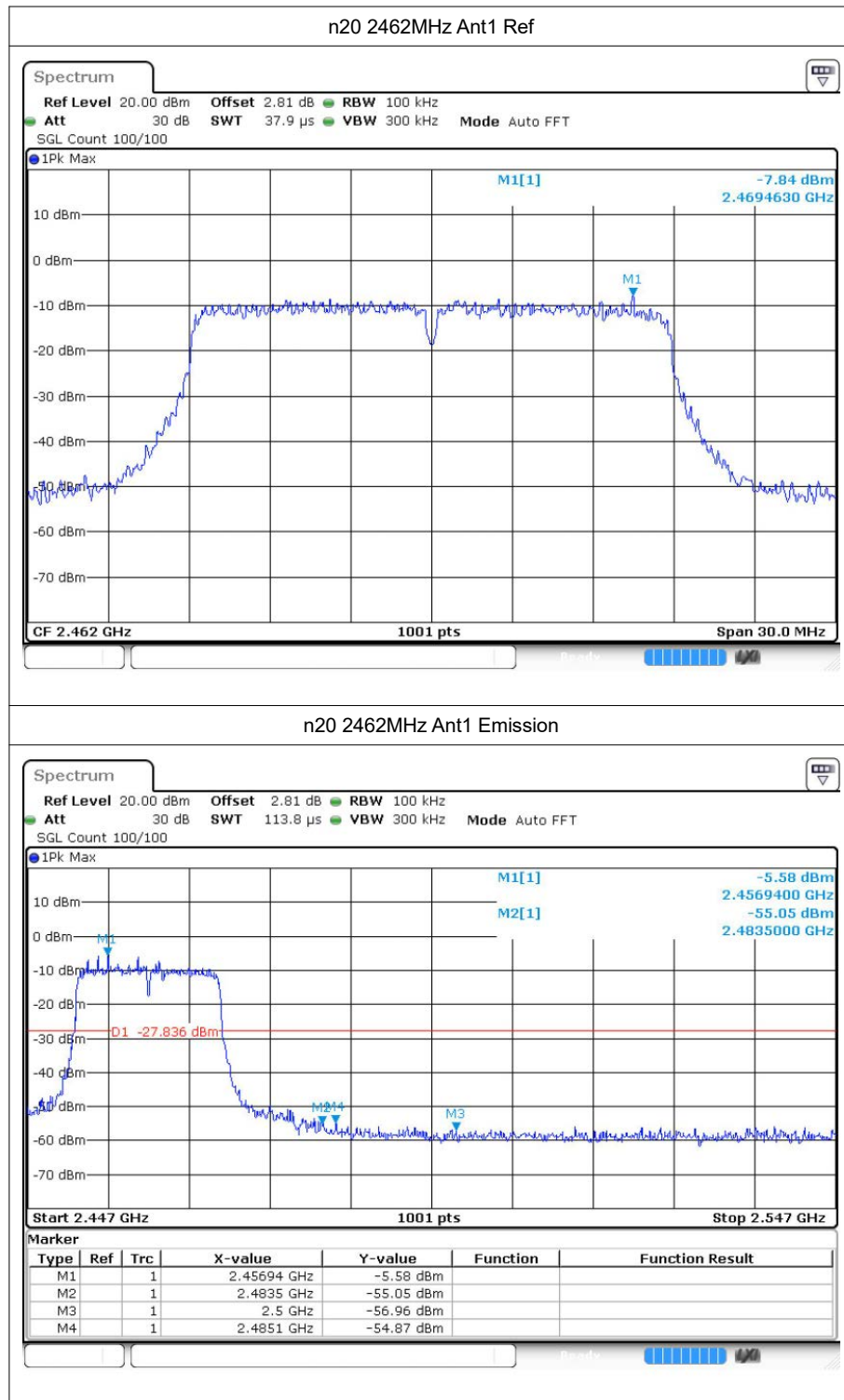


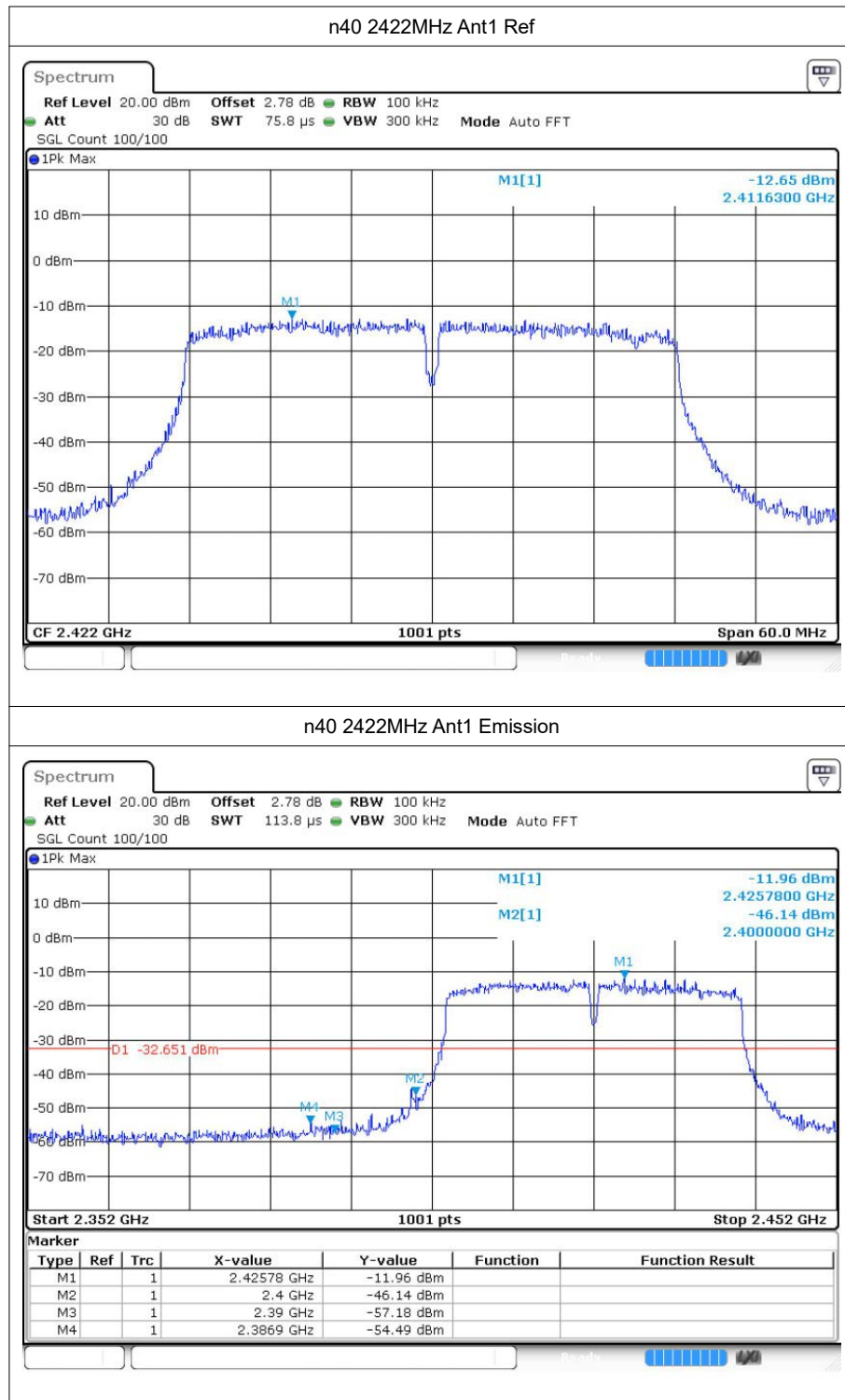


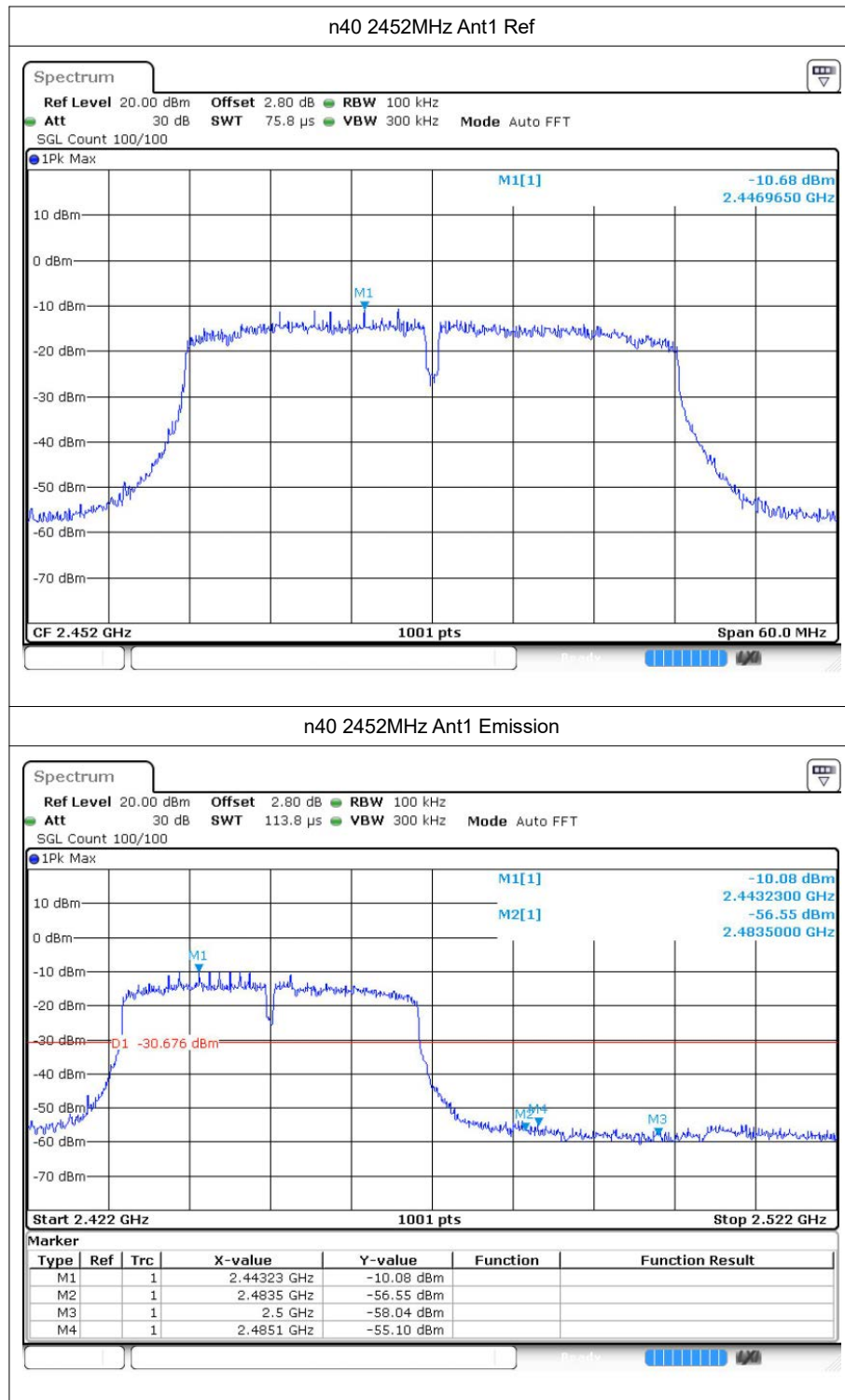












6 Conducted RF Spurious Emission

6.1 Test Result

Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-41.19	-20	Pass
b	2437	Ant1	-39.47	-20	Pass
b	2462	Ant1	-38.75	-20	Pass
g	2412	Ant1	-34.87	-20	Pass
g	2437	Ant1	-34.79	-20	Pass
g	2462	Ant1	-34.92	-20	Pass
n20	2412	Ant1	-35.62	-20	Pass
n20	2437	Ant1	-35	-20	Pass
n20	2462	Ant1	-37.2	-20	Pass
n40	2422	Ant1	-30.63	-20	Pass
n40	2437	Ant1	-30.87	-20	Pass
n40	2452	Ant1	-31.38	-20	Pass

6.2 Test Graphs

