



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Grow lights controller

Trade Mark: N/A

Test Model: GTC42PRO

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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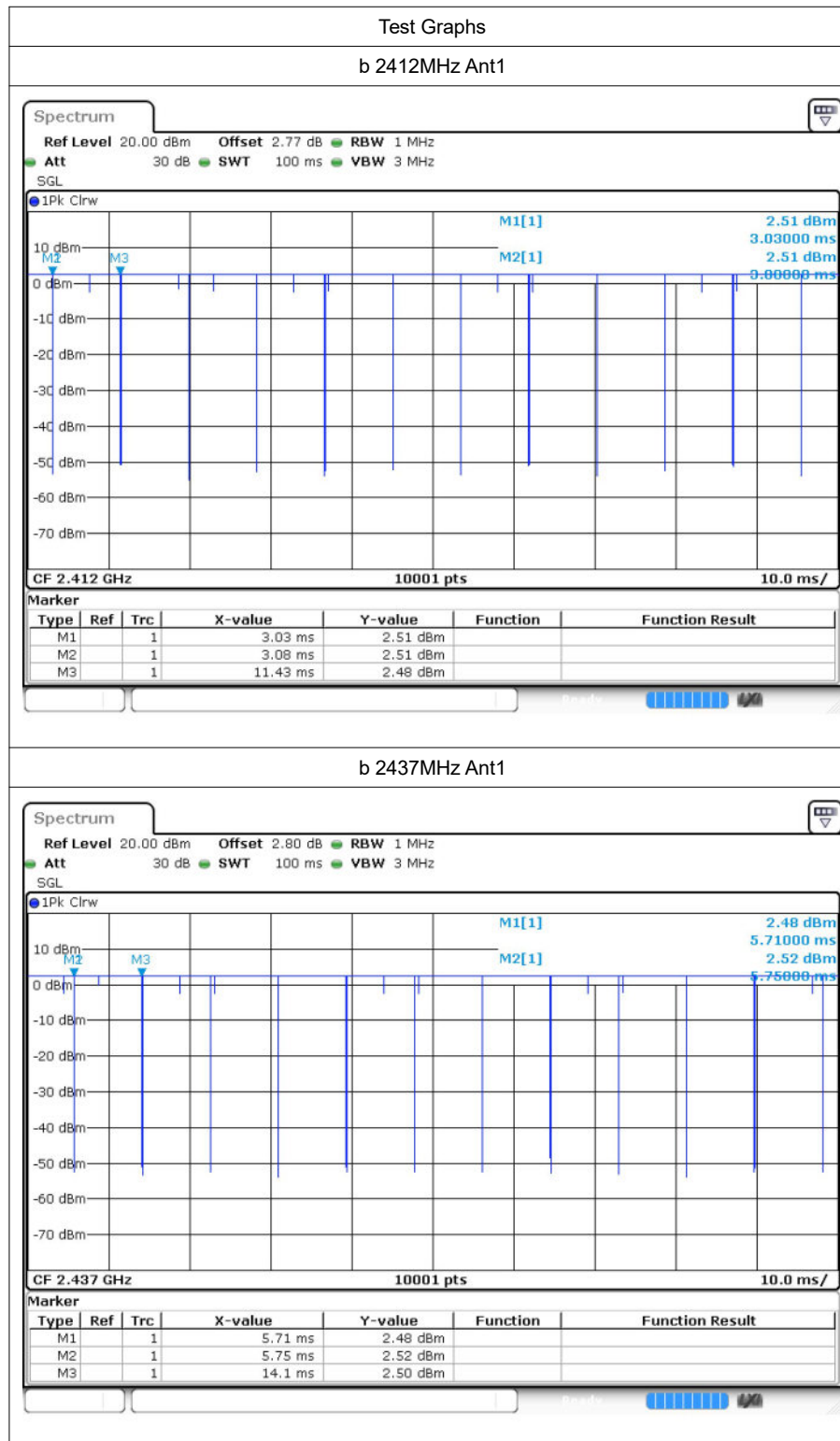


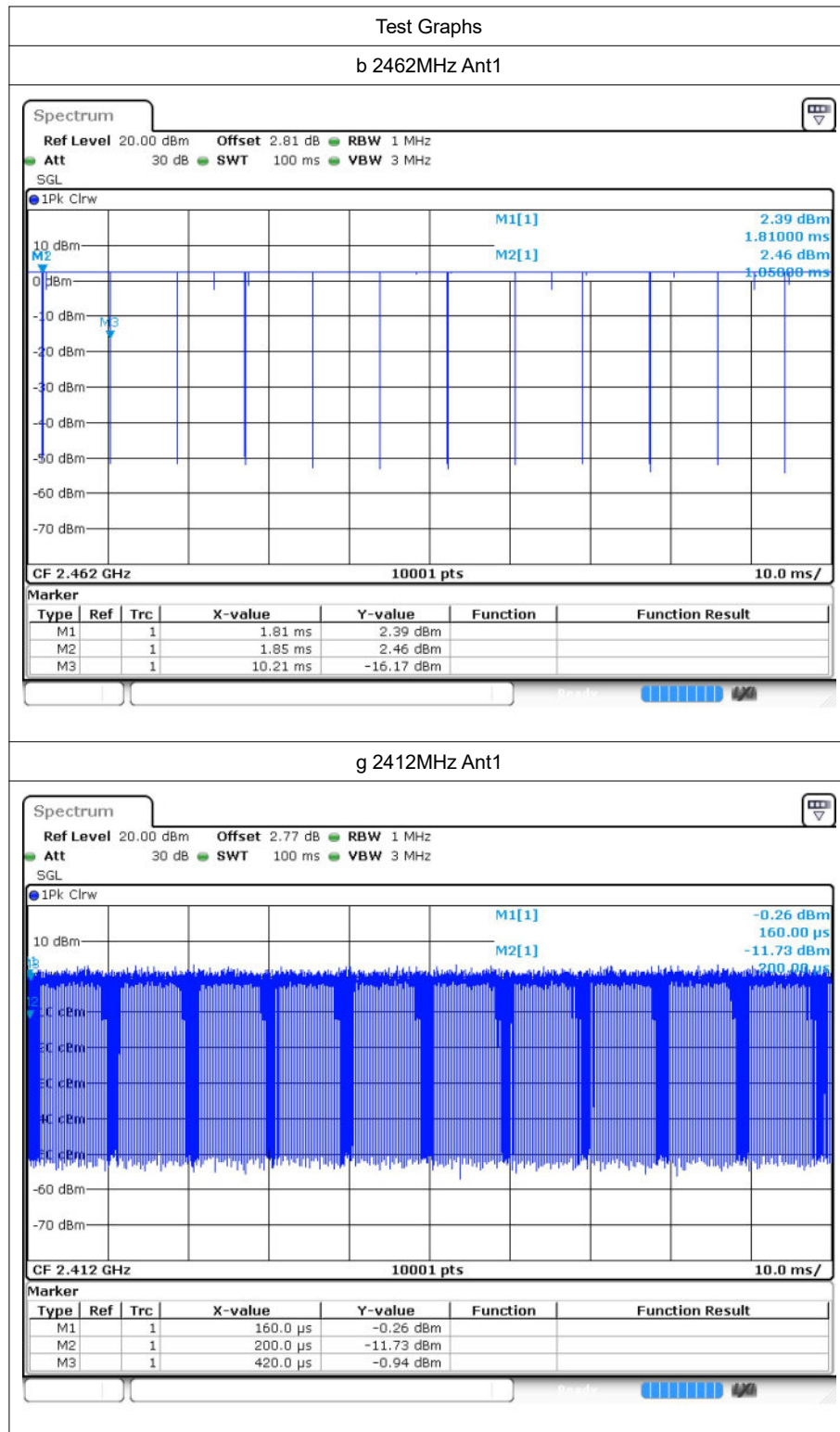
1 Duty Cycle

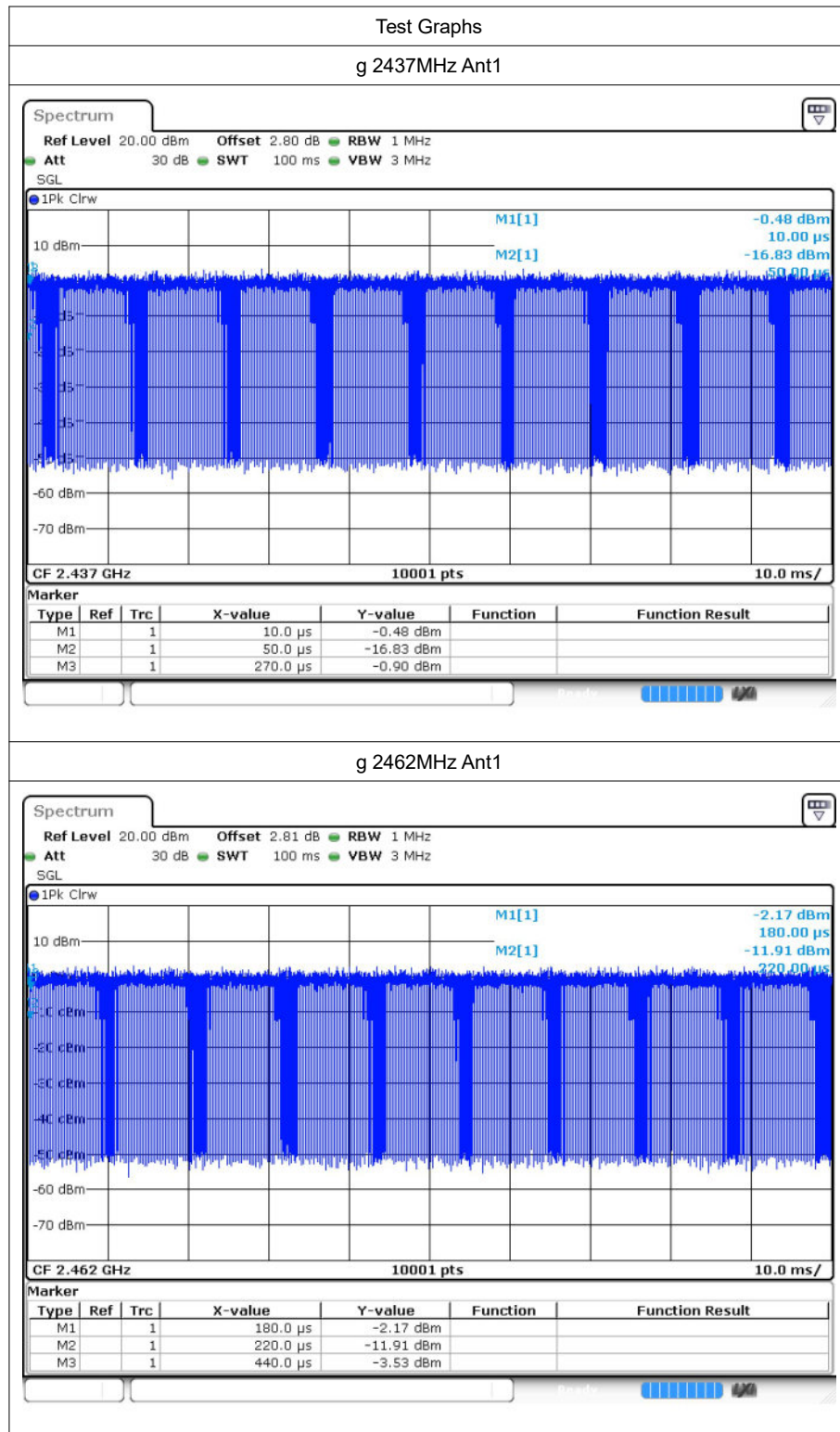
1.1 Test Result

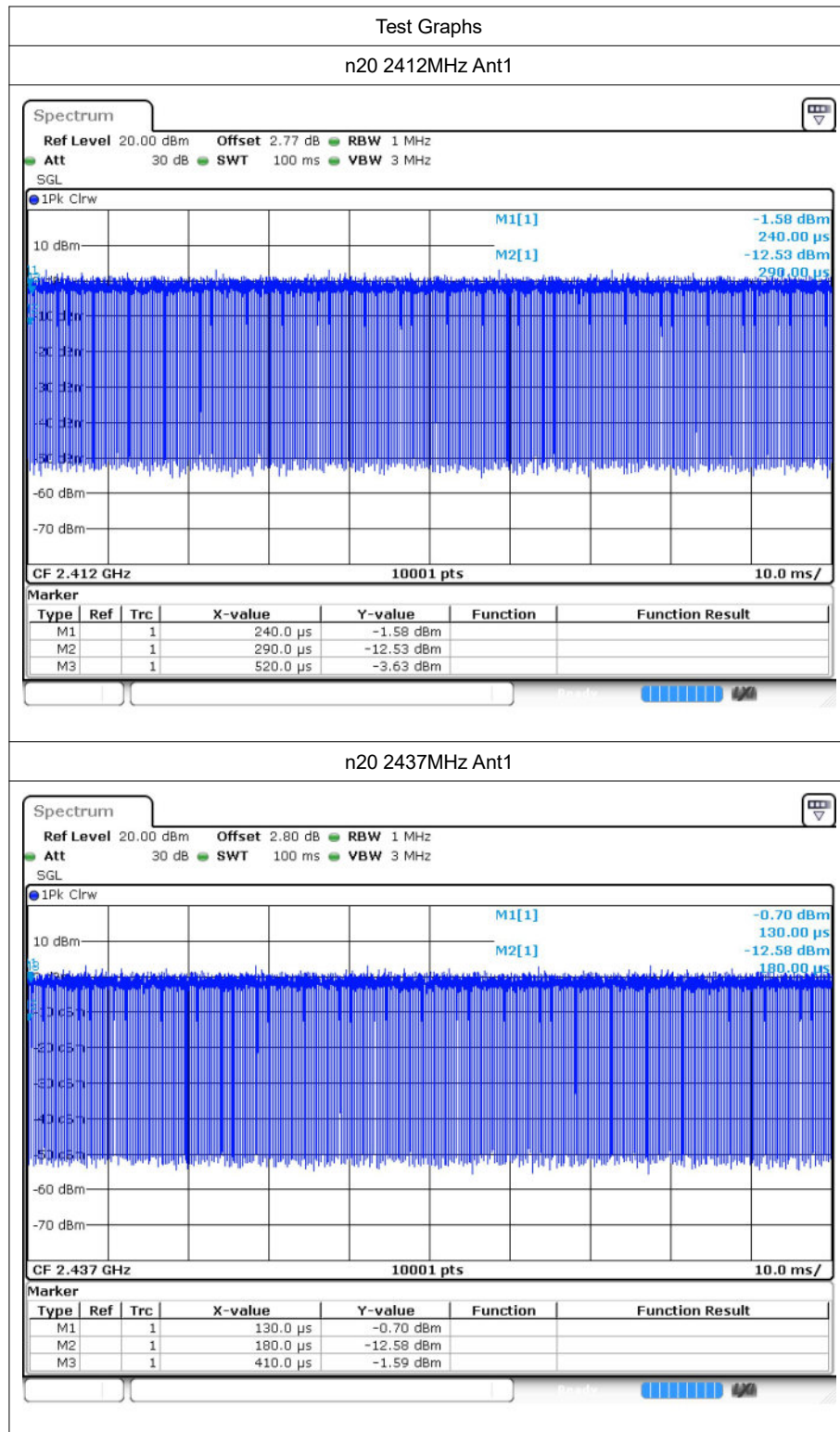
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
b	2412	Ant1	99.6	0.02	0.12
b	2437	Ant1	99.6	0.02	0.12
b	2462	Ant1	99.61	0.02	0.12
g	2412	Ant1	86.74	0.62	4.55
g	2437	Ant1	86.88	0.61	4.55
g	2462	Ant1	86.94	0.61	4.55
n20	2412	Ant1	87.55	0.58	4.35
n20	2437	Ant1	87.56	0.58	4.35
n20	2462	Ant1	87.53	0.58	4.35
n40	2422	Ant1	87.81	0.56	4.17
n40	2437	Ant1	88.04	0.55	4
n40	2452	Ant1	88.05	0.55	4

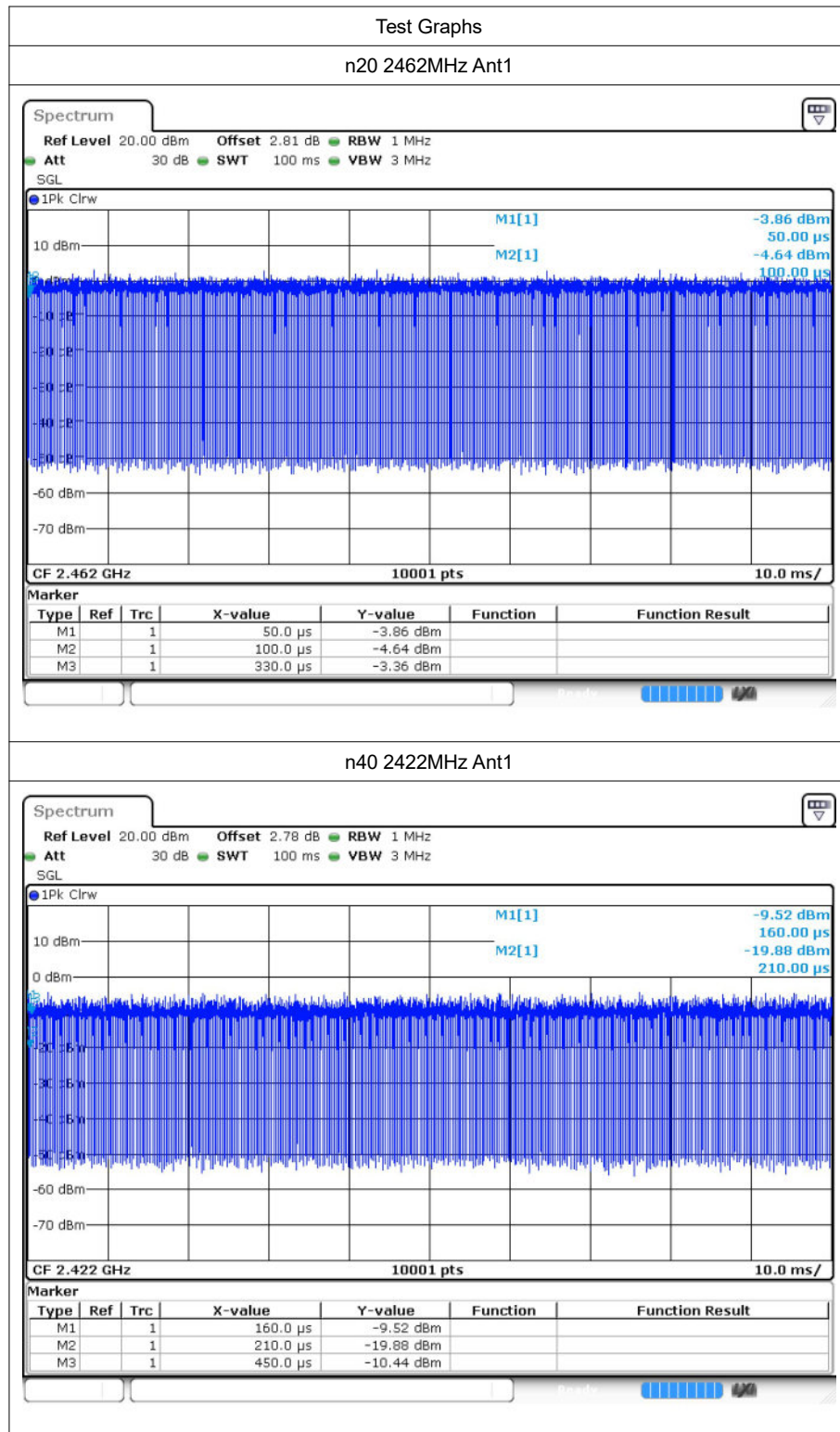
1.2 Test Graphs

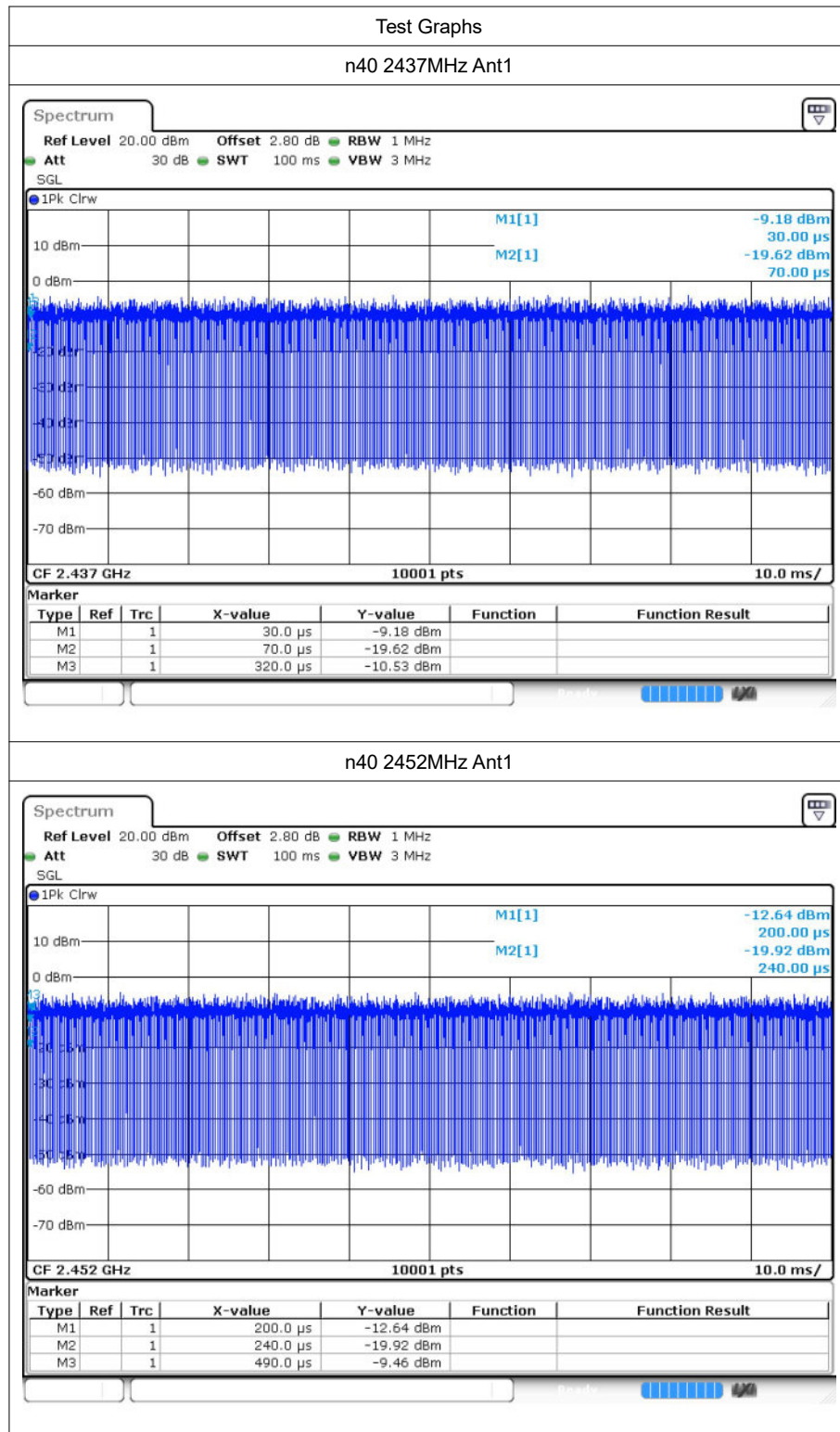












2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	13.07	30	Pass
b	2437	Ant1	12.93	30	Pass
b	2462	Ant1	12.93	30	Pass
g	2412	Ant1	12.64	30	Pass
g	2437	Ant1	12.6	30	Pass
g	2462	Ant1	12.5	30	Pass
n20	2412	Ant1	12.17	30	Pass
n20	2437	Ant1	12	30	Pass
n20	2462	Ant1	11.91	30	Pass
n40	2422	Ant1	11.99	30	Pass
n40	2437	Ant1	12.02	30	Pass
n40	2452	Ant1	11.94	30	Pass

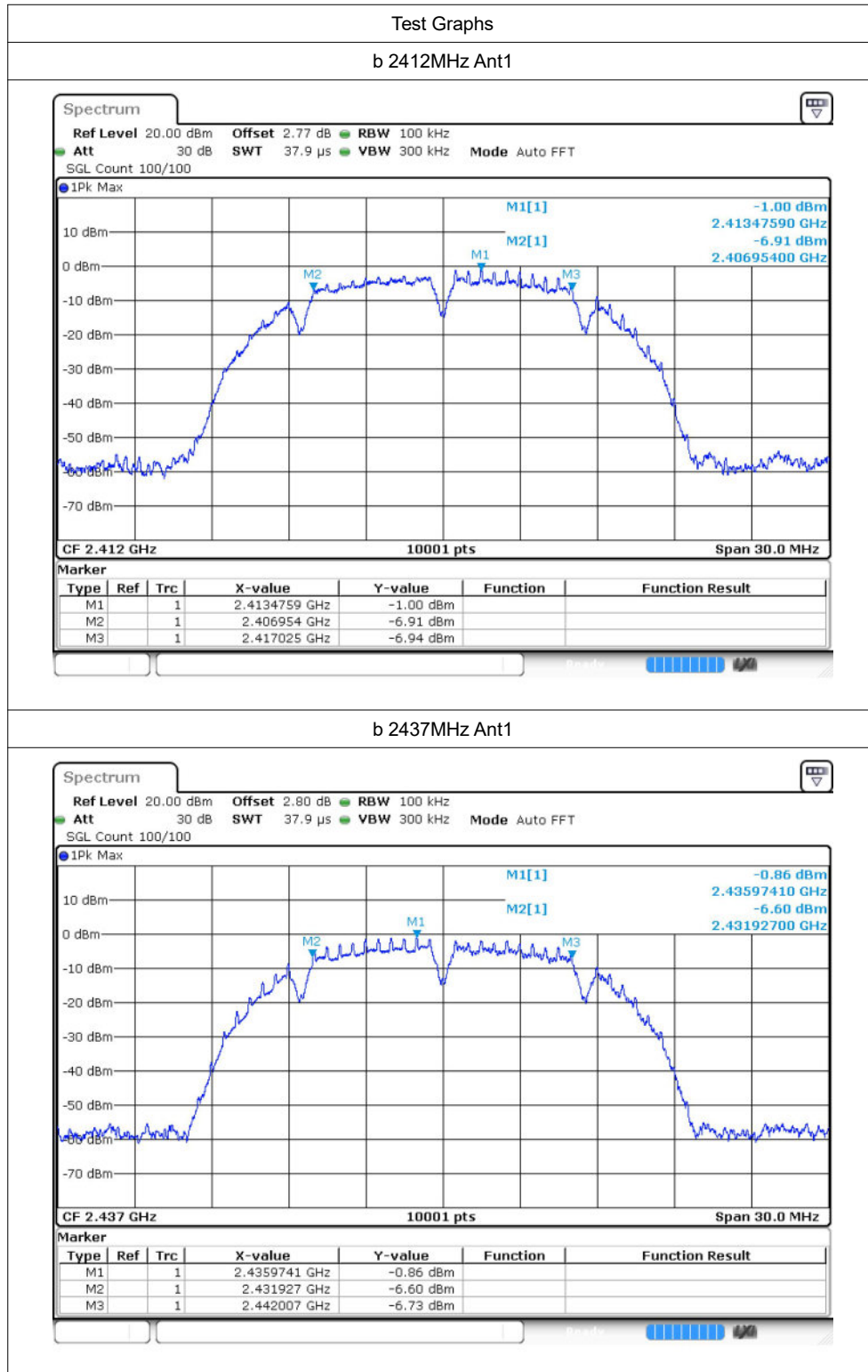


3 -6dB Bandwidth

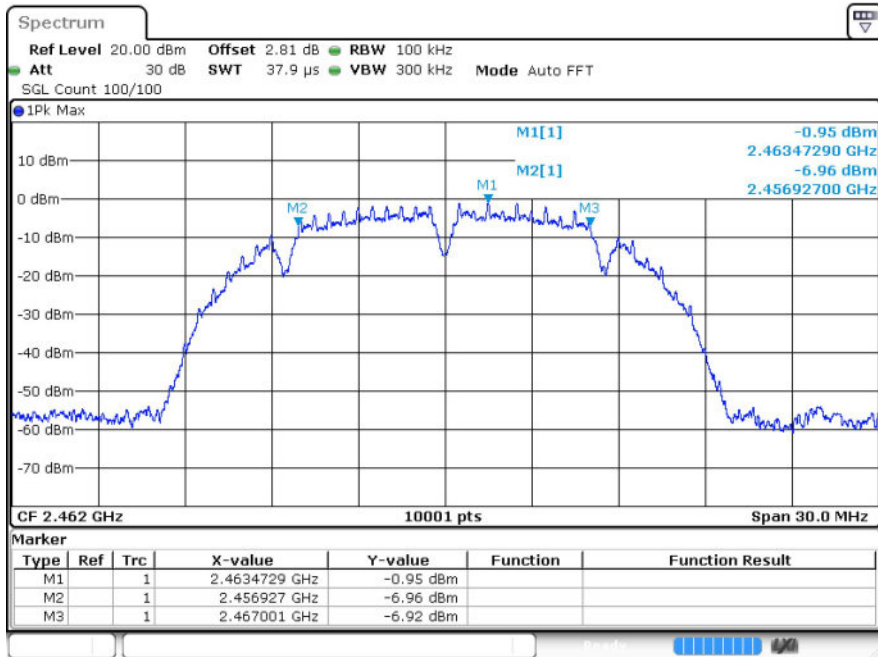
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	10.071	0.5	Pass
b	2437	Ant1	10.08	0.5	Pass
b	2462	Ant1	10.074	0.5	Pass
g	2412	Ant1	15.114	0.5	Pass
g	2437	Ant1	15.114	0.5	Pass
g	2462	Ant1	15.066	0.5	Pass
n20	2412	Ant1	15.099	0.5	Pass
n20	2437	Ant1	15.105	0.5	Pass
n20	2462	Ant1	15.102	0.5	Pass
n40	2422	Ant1	35.076	0.5	Pass
n40	2437	Ant1	35.046	0.5	Pass
n40	2452	Ant1	35.076	0.5	Pass

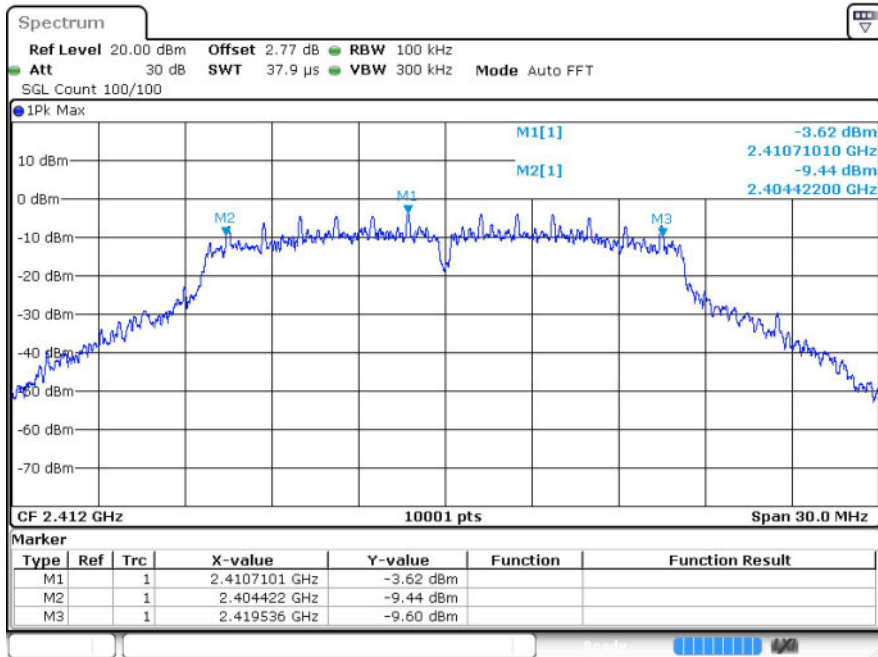
3.2 Test Graphs



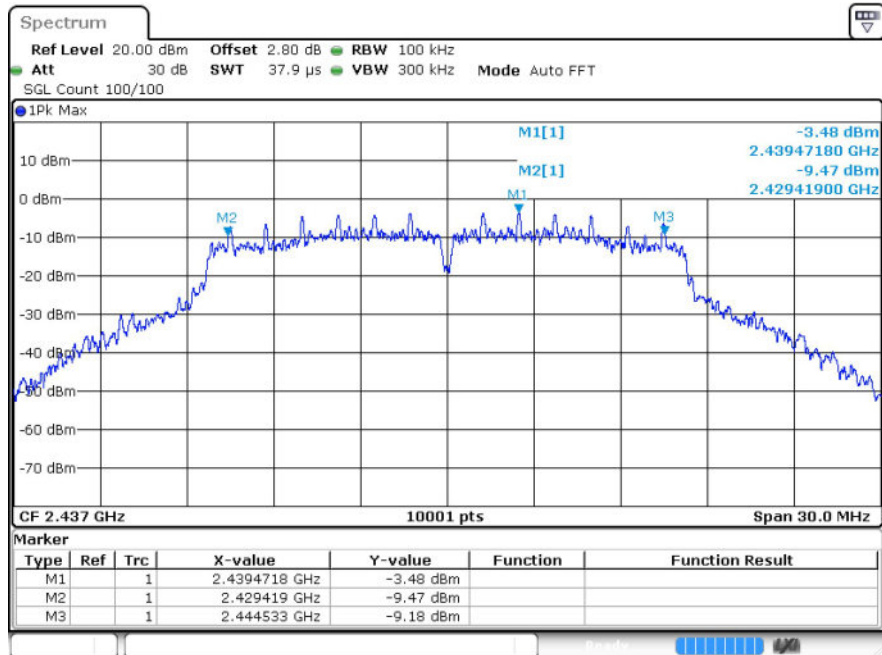
b 2462MHz Ant1



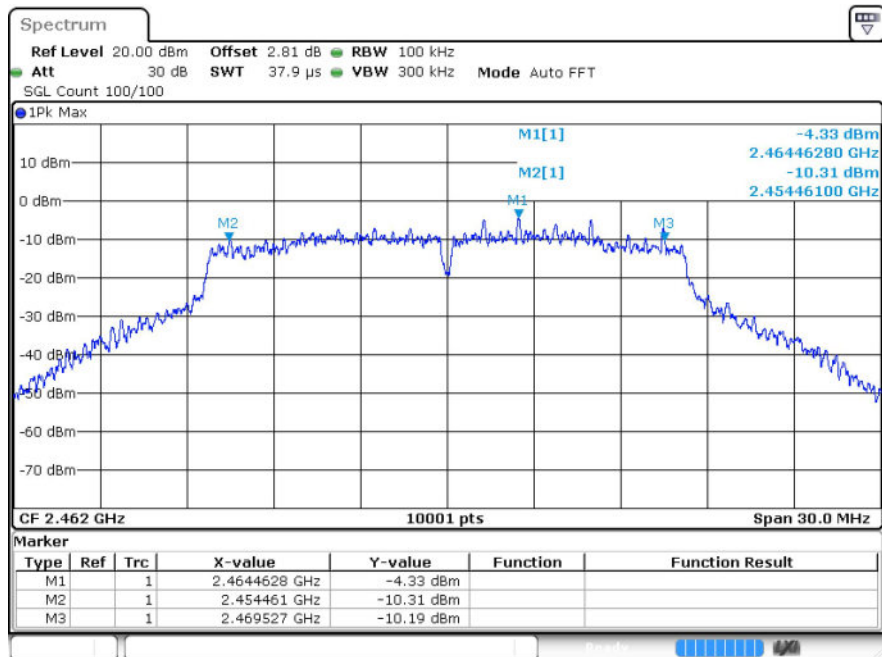
g 2412MHz Ant1



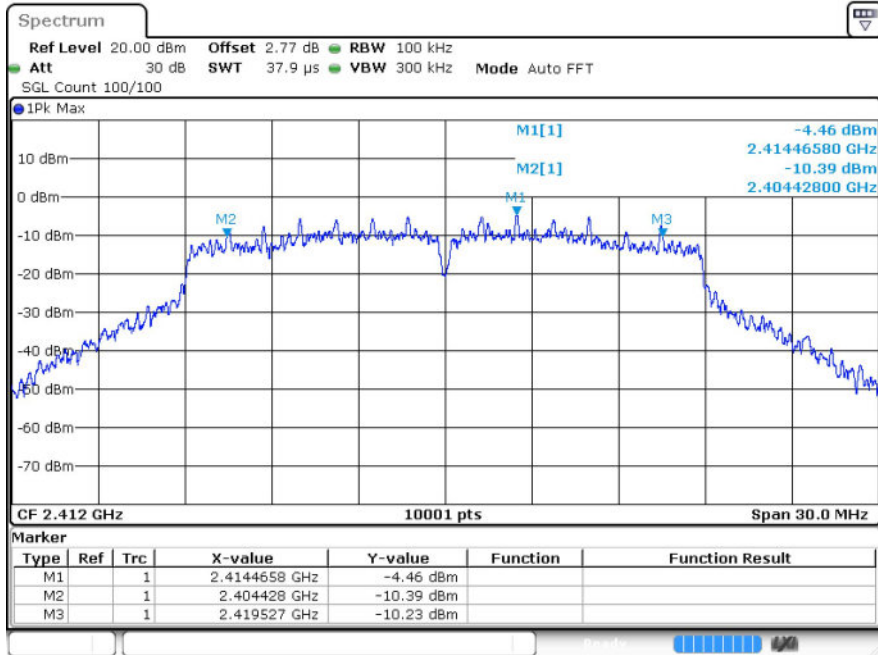
g 2437MHz Ant1



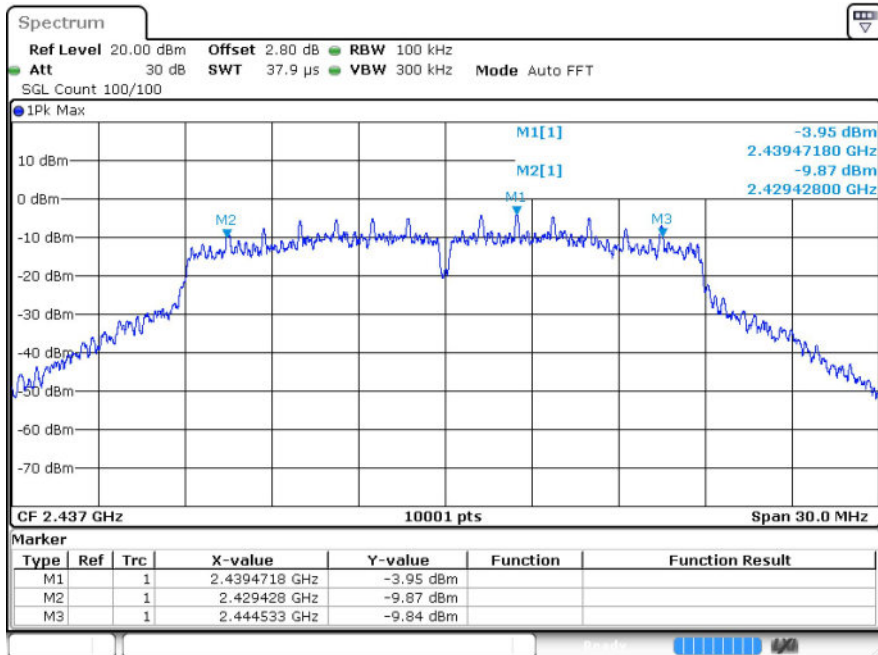
g 2462MHz Ant1

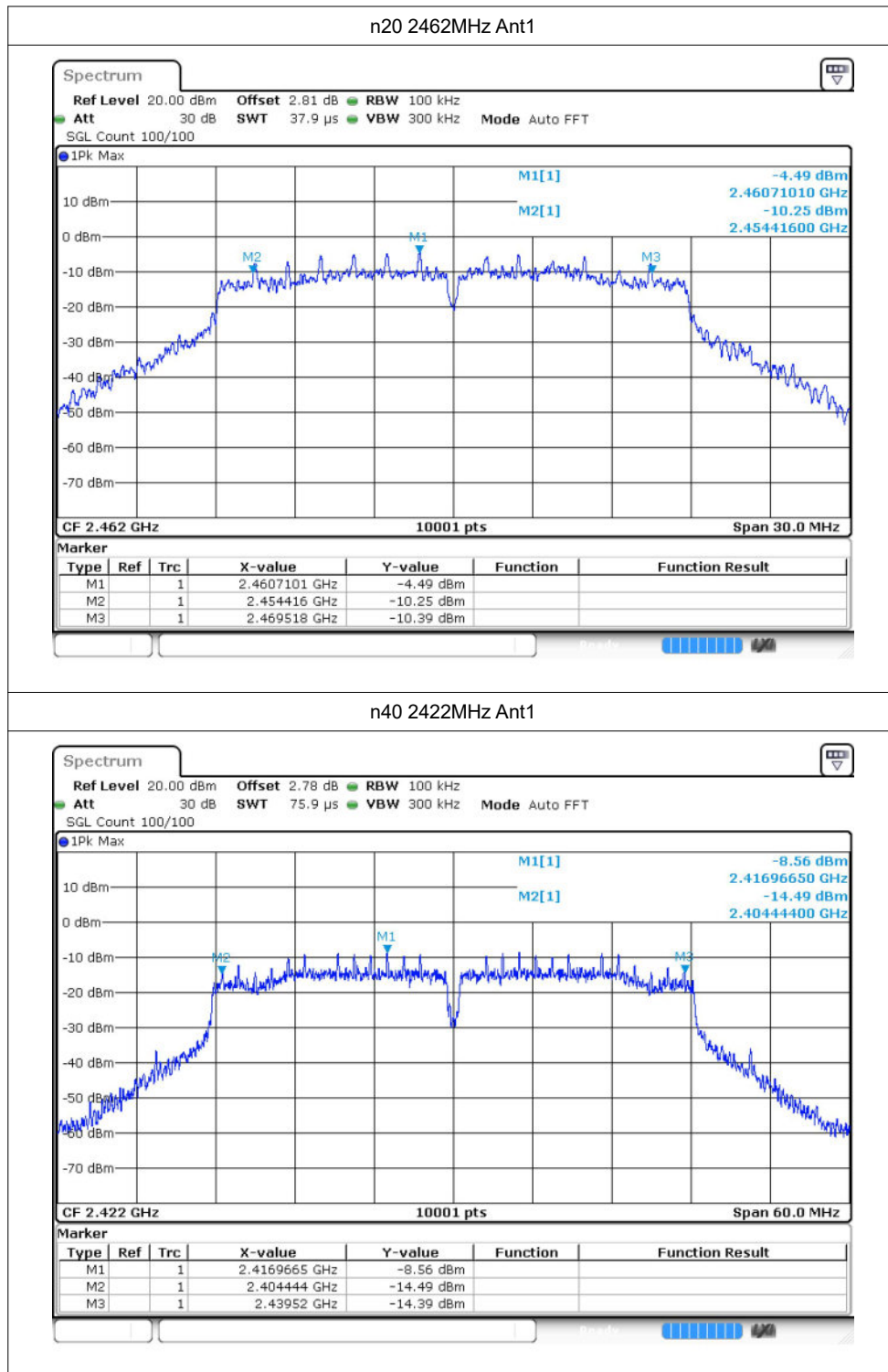


n20 2412MHz Ant1

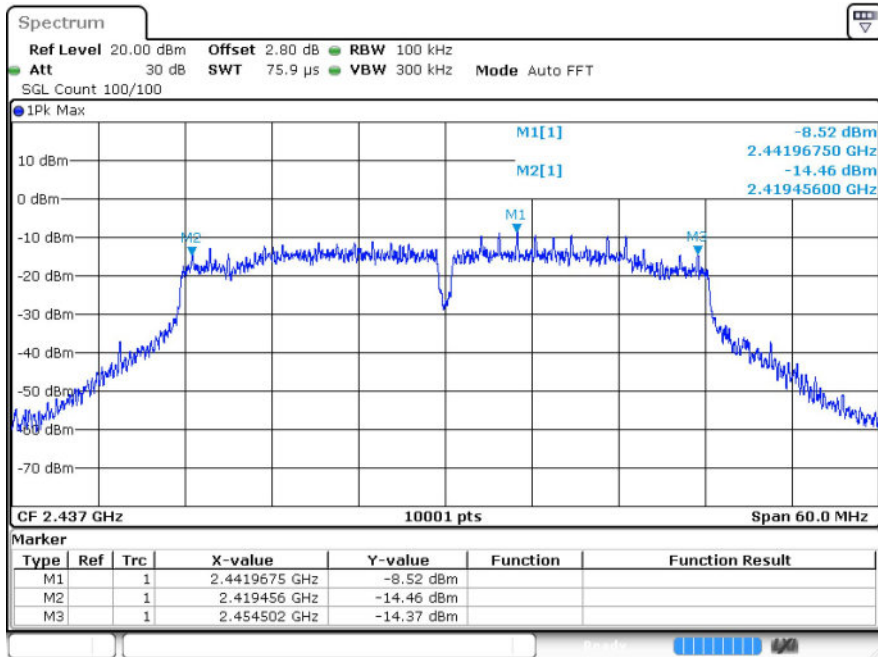


n20 2437MHz Ant1

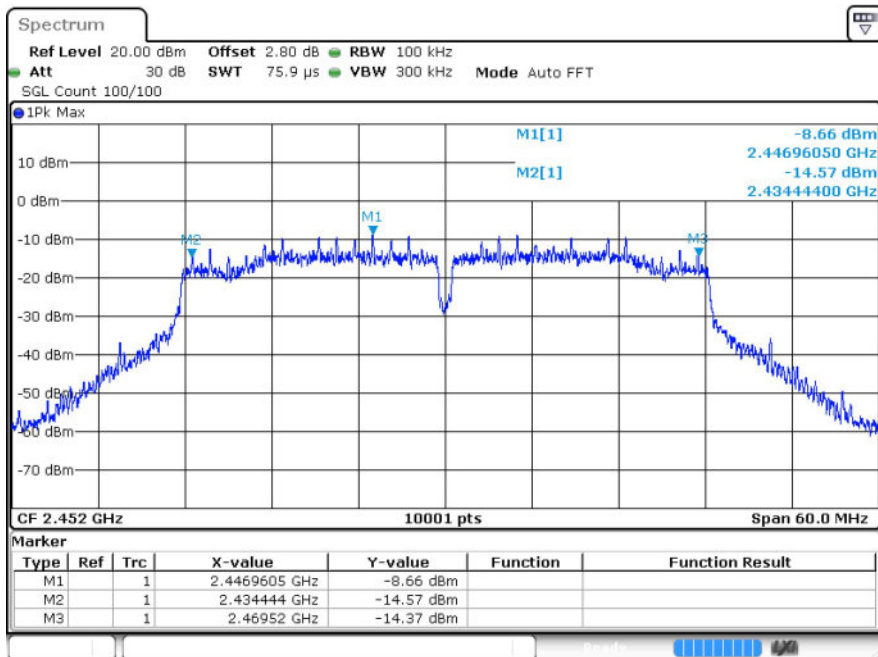




n40 2437MHz Ant1



n40 2452MHz Ant1

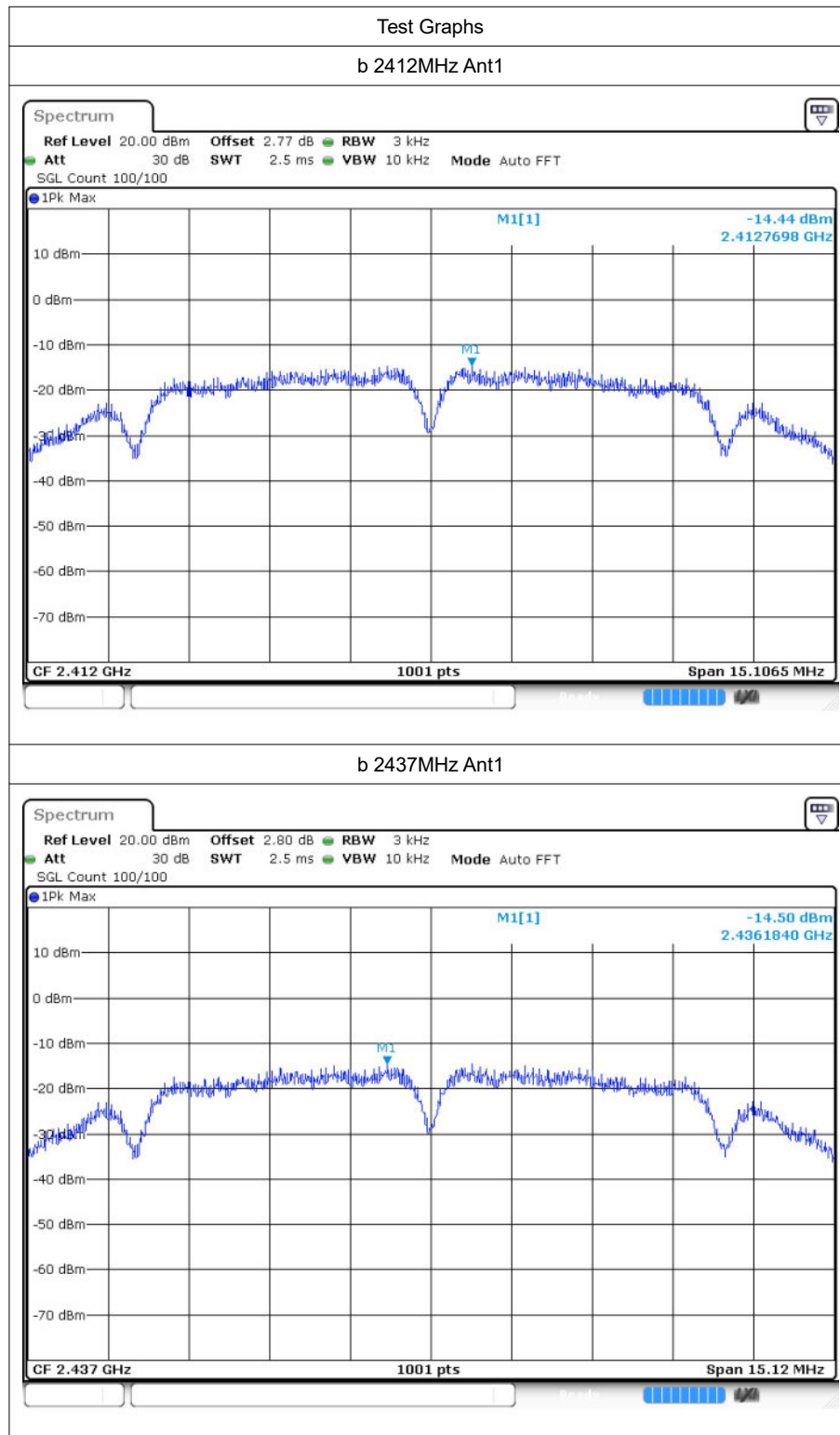


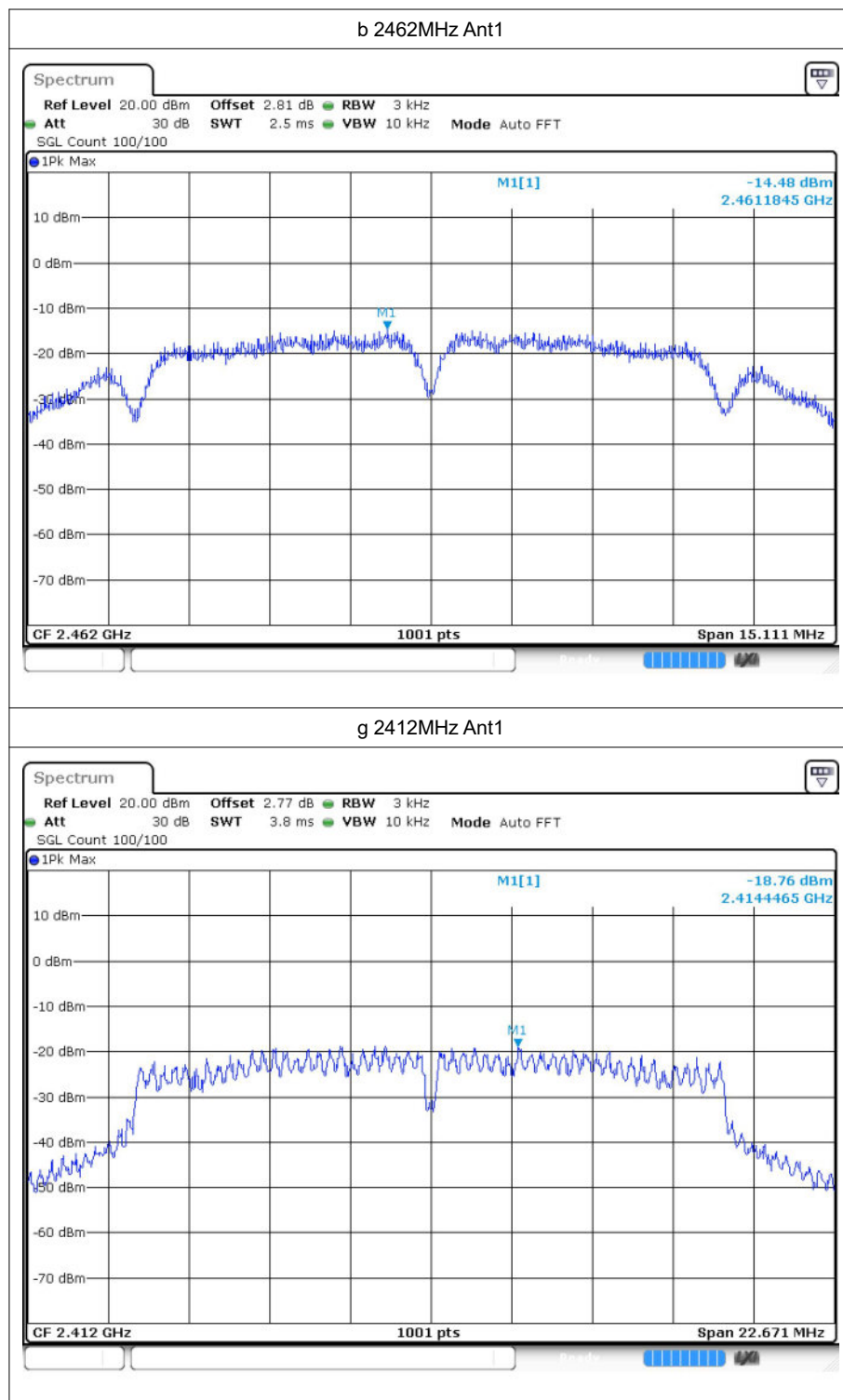
4 Maximum Power Spectral Density Level

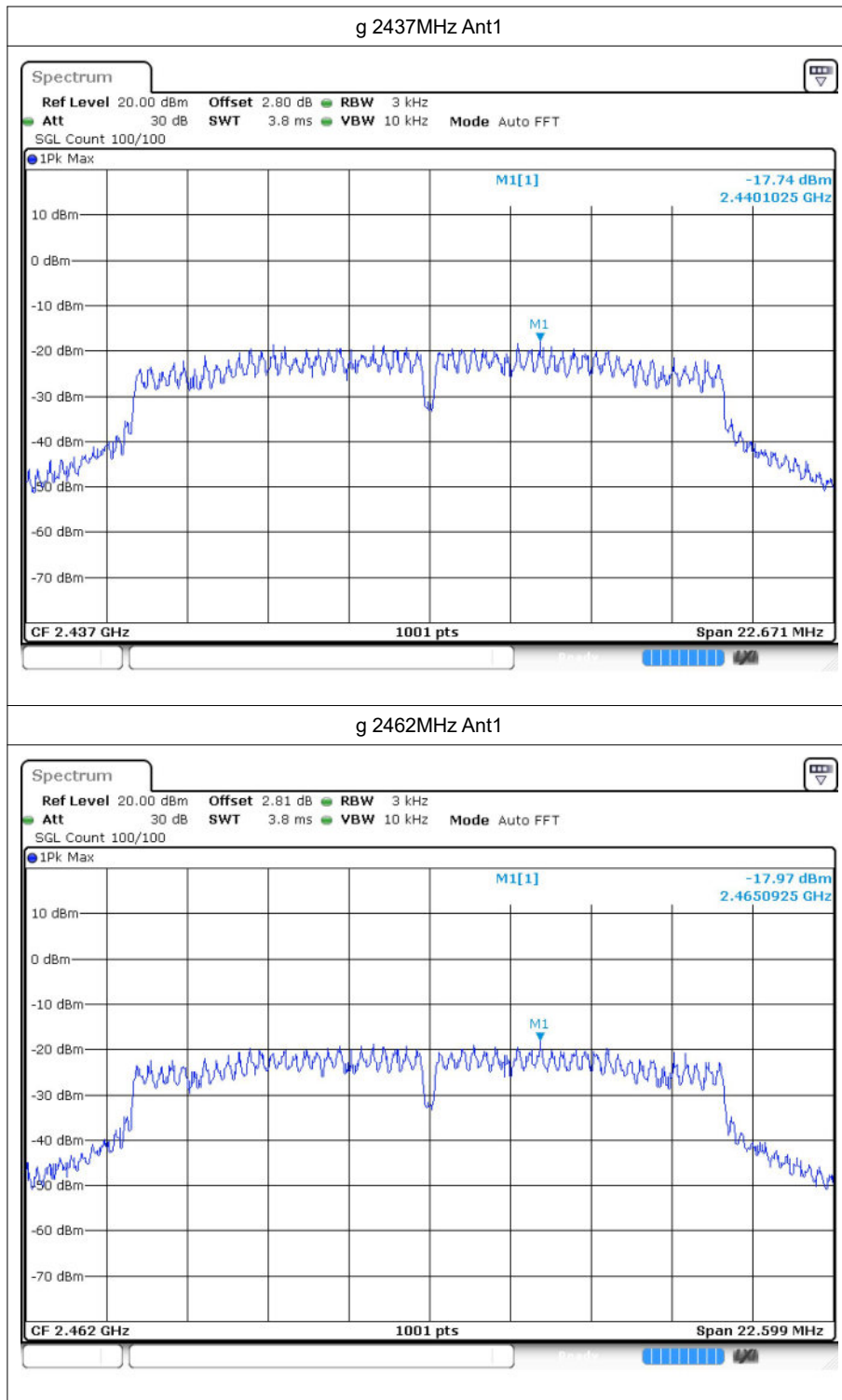
4.1 Test Result

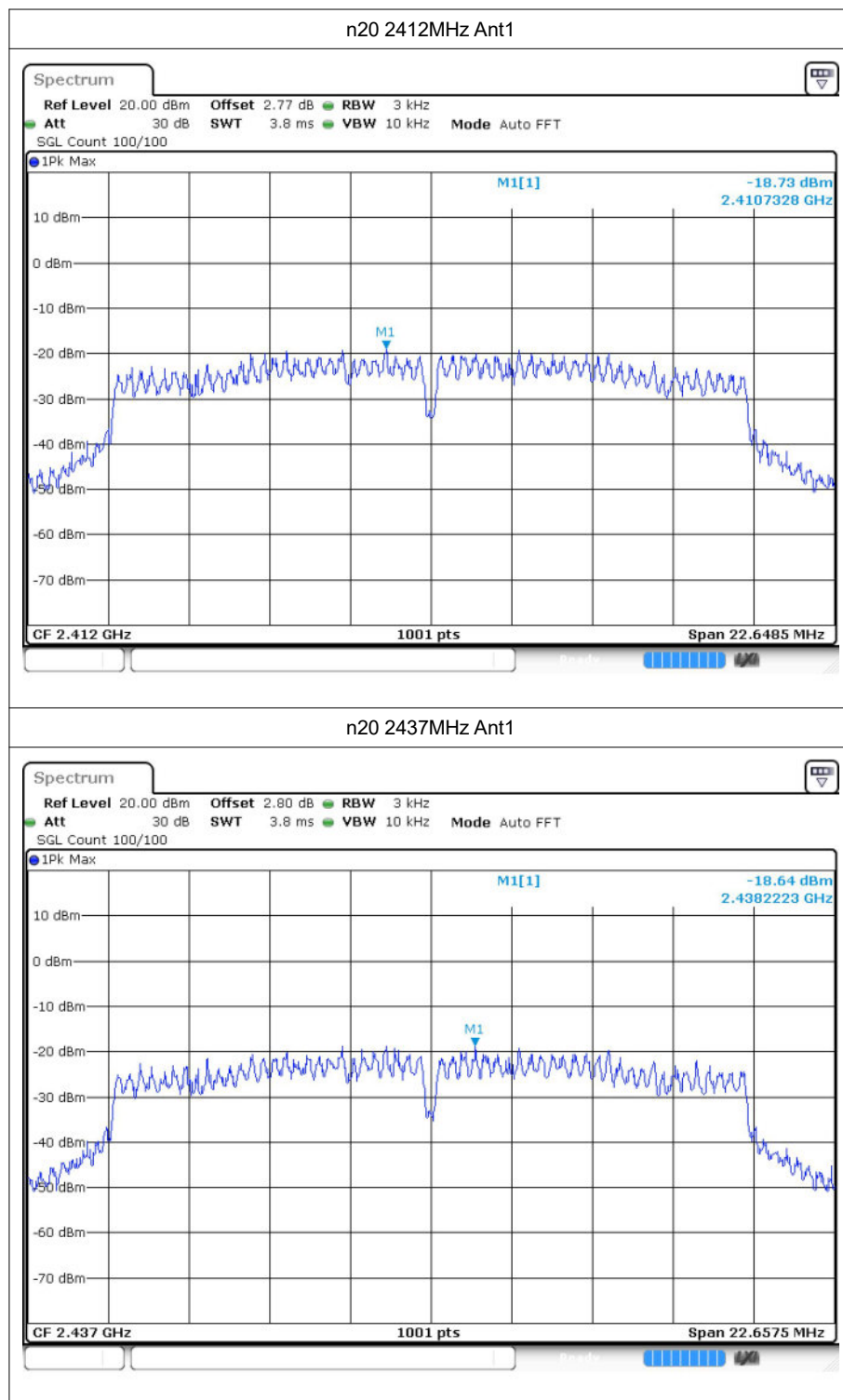
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-14.44	≤ 8	Pass
b	2437	Ant1	-14.5	≤ 8	Pass
b	2462	Ant1	-14.48	≤ 8	Pass
g	2412	Ant1	-18.76	≤ 8	Pass
g	2437	Ant1	-17.74	≤ 8	Pass
g	2462	Ant1	-17.97	≤ 8	Pass
n20	2412	Ant1	-18.73	≤ 8	Pass
n20	2437	Ant1	-18.64	≤ 8	Pass
n20	2462	Ant1	-19.05	≤ 8	Pass
n40	2422	Ant1	-23.15	≤ 8	Pass
n40	2437	Ant1	-22.69	≤ 8	Pass
n40	2452	Ant1	-22.33	≤ 8	Pass

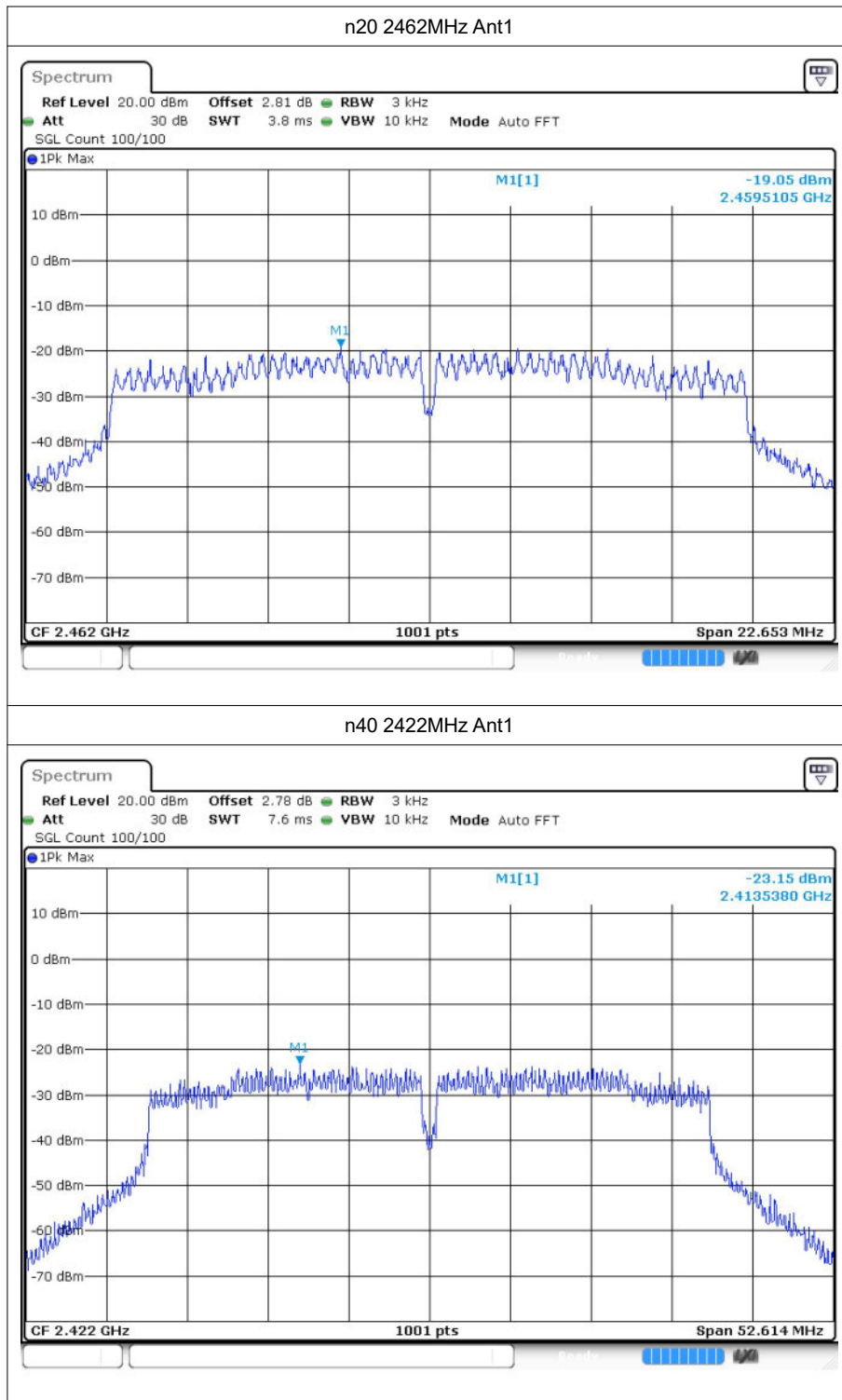
4.2 Test Graphs

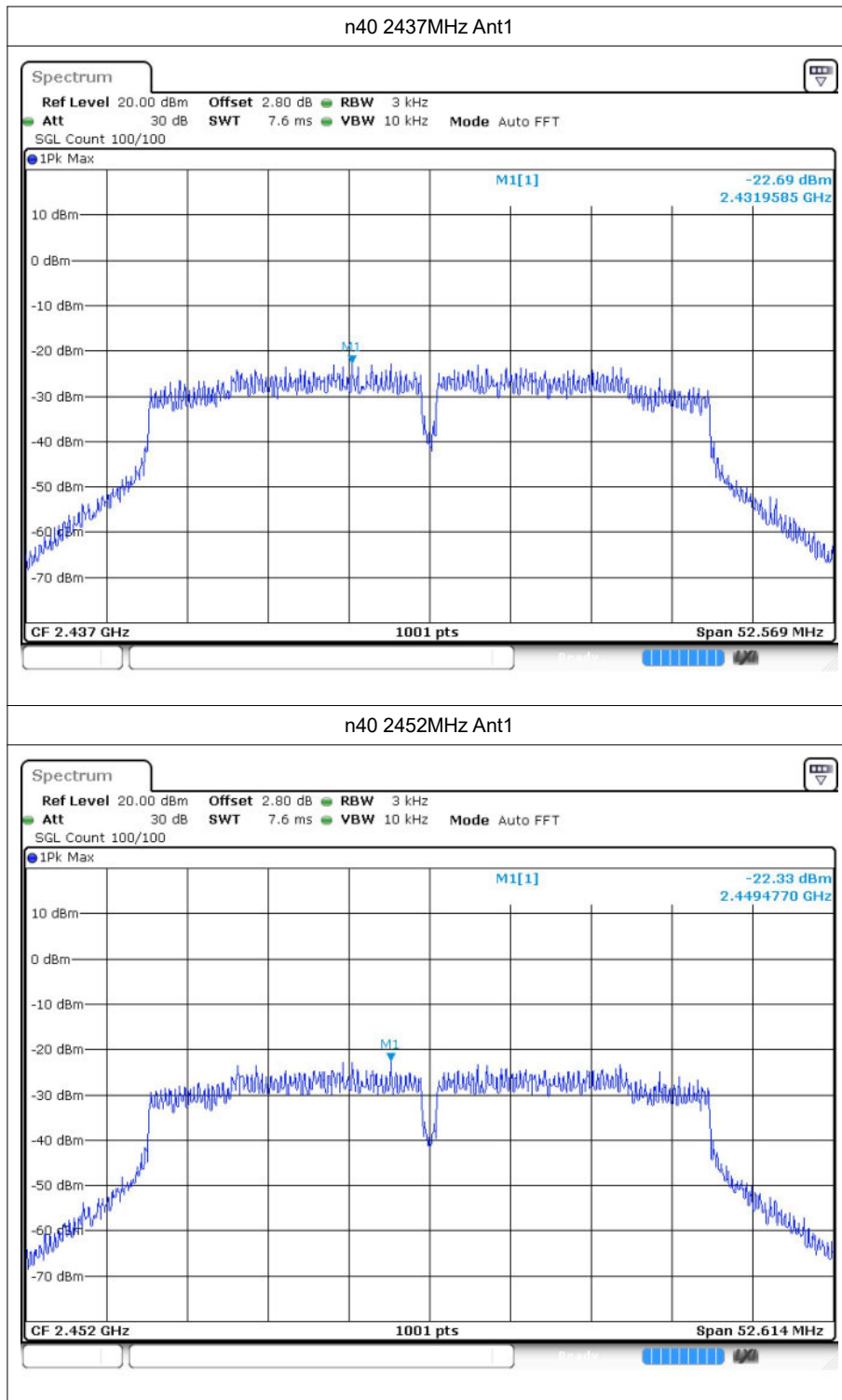














5 Band Edge

5.1 Test Result

Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-53.59	-20	Pass
b	2462	Ant1	-55.34	-20	Pass
g	2412	Ant1	-51.36	-20	Pass
g	2462	Ant1	-51.95	-20	Pass
n20	2412	Ant1	-49.97	-20	Pass
n20	2462	Ant1	-51.09	-20	Pass
n40	2422	Ant1	-47.27	-20	Pass
n40	2452	Ant1	-47.36	-20	Pass

5.2 Test Graphs

