



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: SMART PROJECTOR

Trade Mark: N/A

Test Model: P50

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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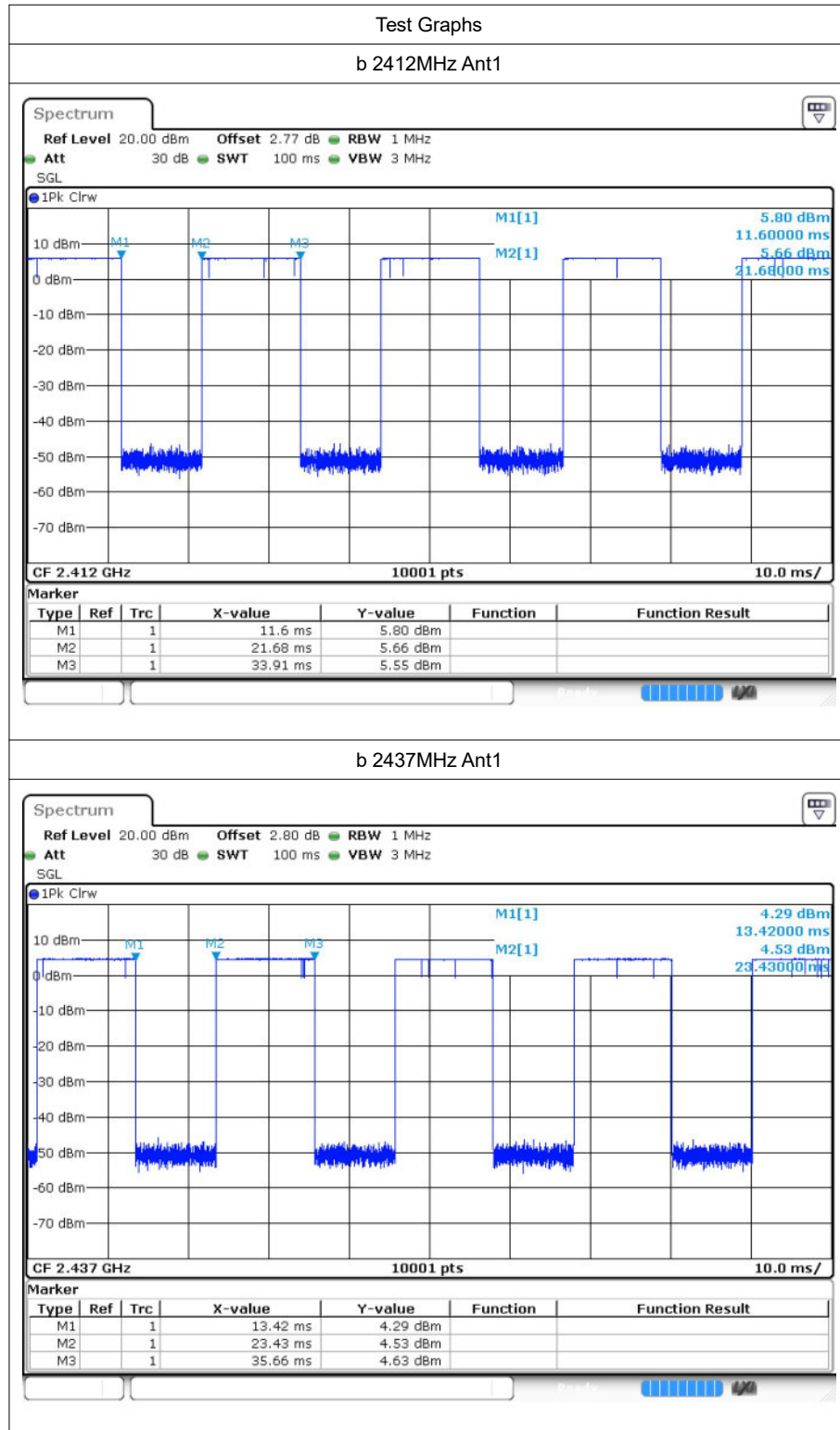


1 Duty Cycle

1.1 Test Result

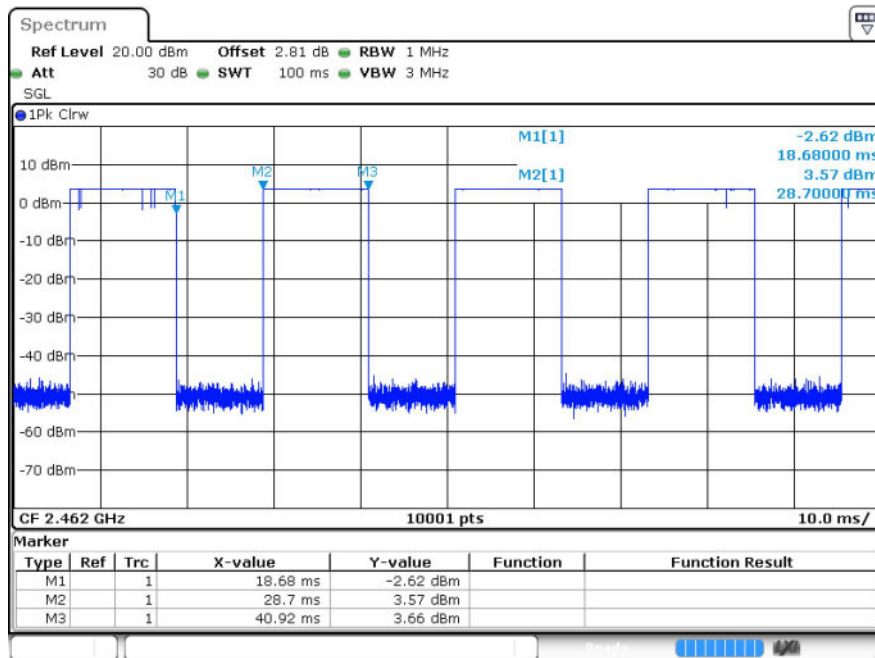
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
b	2412	Ant1	59.53	2.25	0.08
b	2437	Ant1	58.78	2.31	0.08
b	2462	Ant1	53.51	2.72	0.08
g	2412	Ant1	16.38	7.86	0.49
g	2437	Ant1	16.35	7.87	0.49
g	2462	Ant1	16.34	7.87	0.49
n20	2412	Ant1	15.22	8.18	0.53
n20	2437	Ant1	15.23	8.17	0.53
n20	2462	Ant1	15.23	8.17	0.53
n40	2422	Ant1	34.02	4.68	0.2
n40	2437	Ant1	33.47	4.75	0.2
n40	2452	Ant1	34.36	4.64	0.2
ax20	2412	Ant1	13.26	8.77	0.68
ax20	2437	Ant1	13.25	8.78	0.68
ax20	2462	Ant1	13.24	8.78	0.68
ax40	2422	Ant1	28.3	5.48	0.26
ax40	2437	Ant1	27.18	5.66	0.26
ax40	2452	Ant1	27.18	5.66	0.26

1.2 Test Graphs

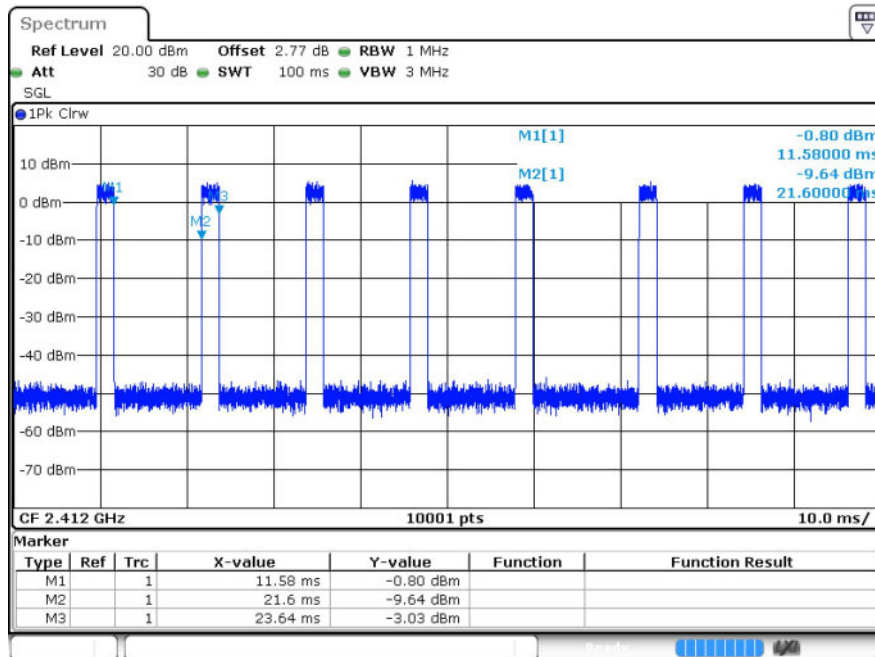


Test Graphs

b 2462MHz Ant1

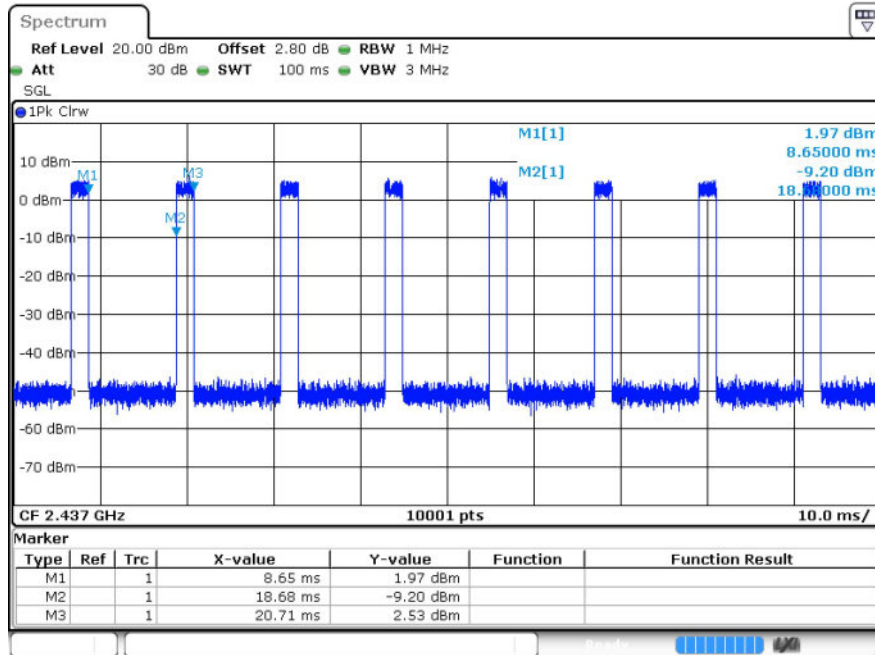


g 2412MHz Ant1

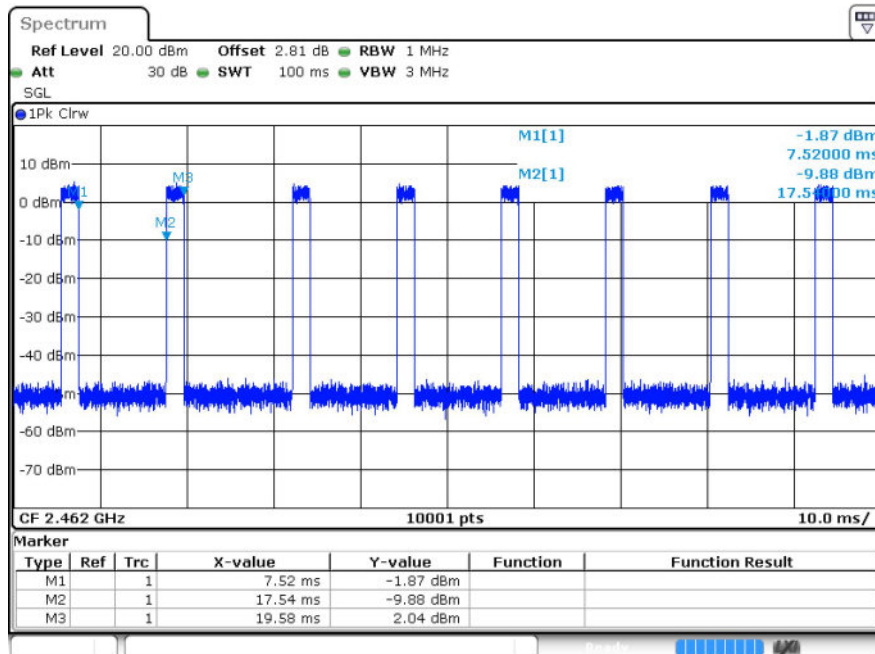


Test Graphs

g 2437MHz Ant1

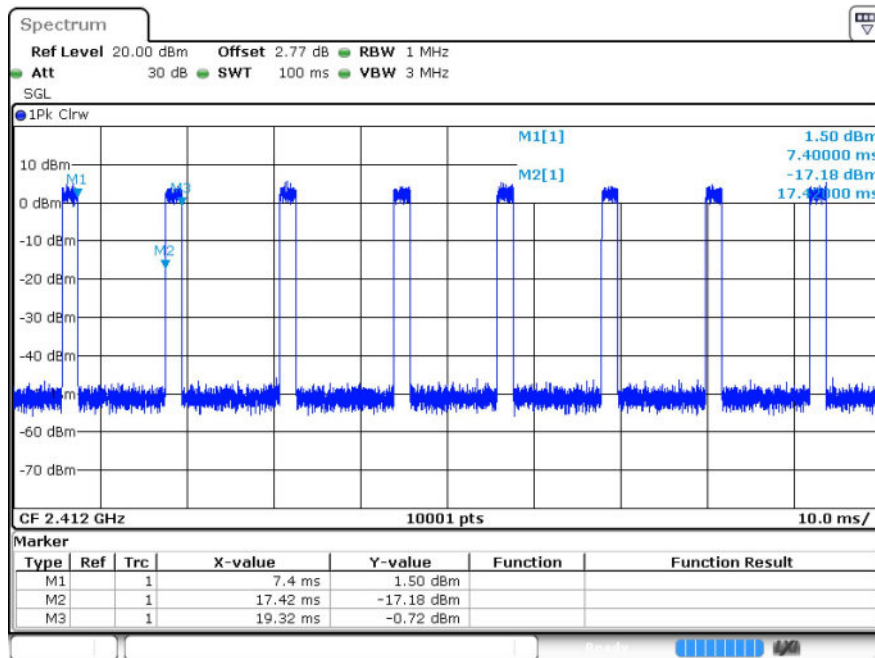


g 2462MHz Ant1

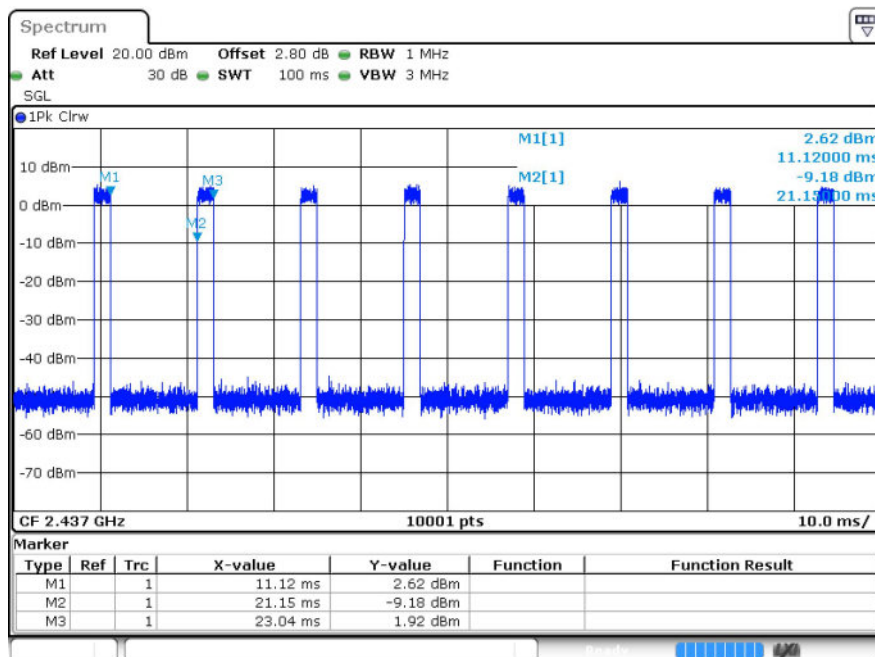


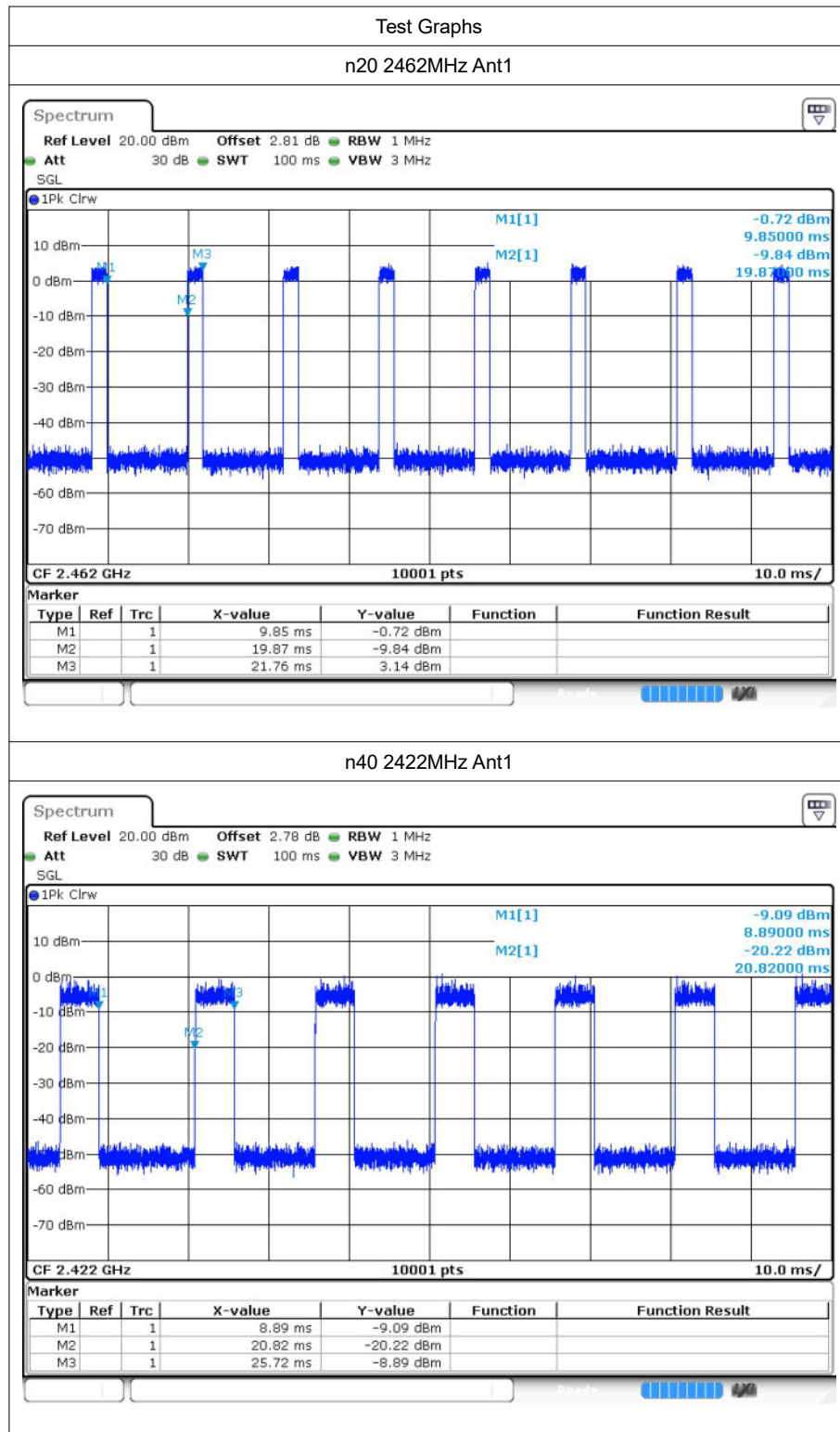
Test Graphs

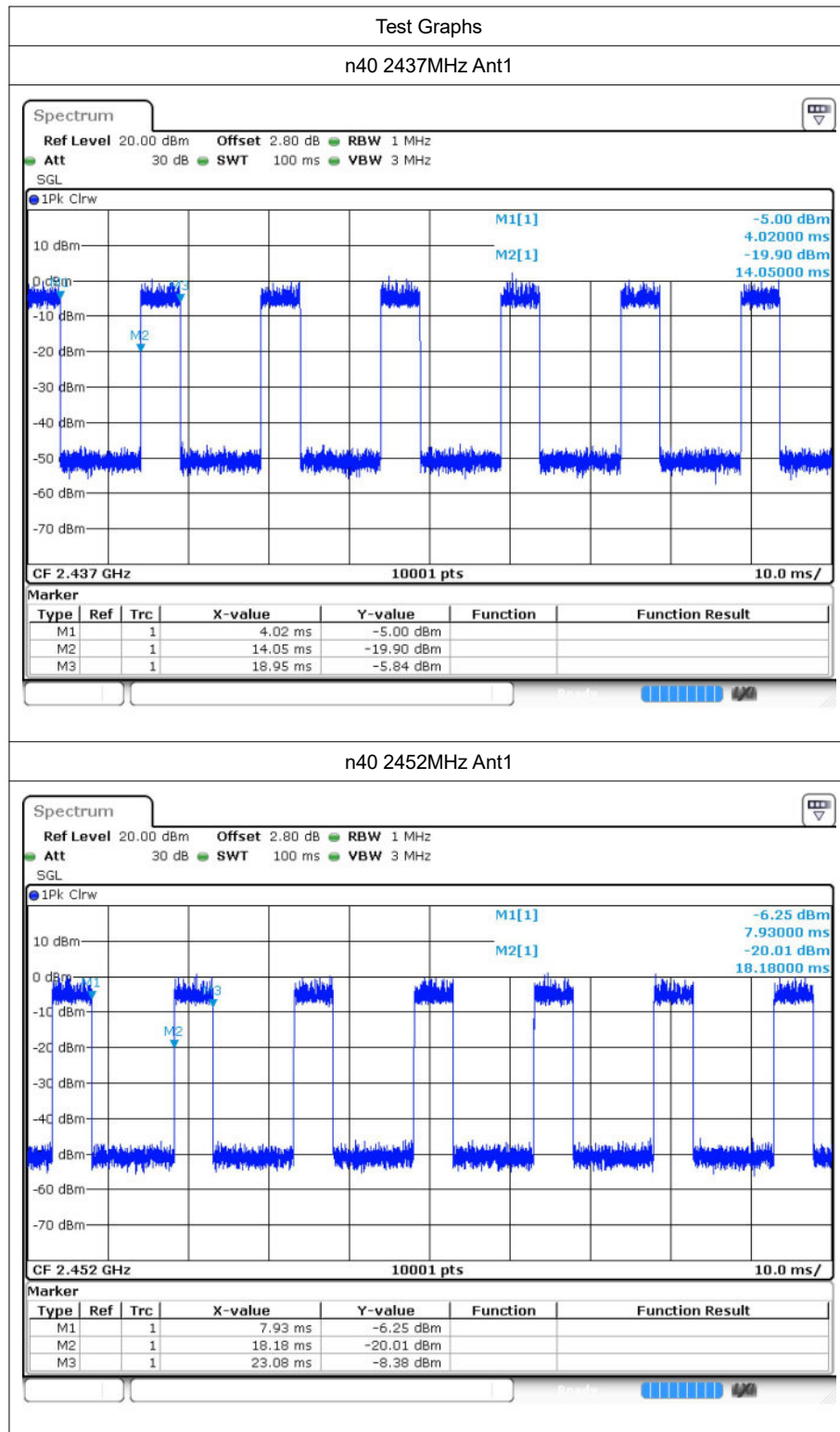
n20 2412MHz Ant1



n20 2437MHz Ant1

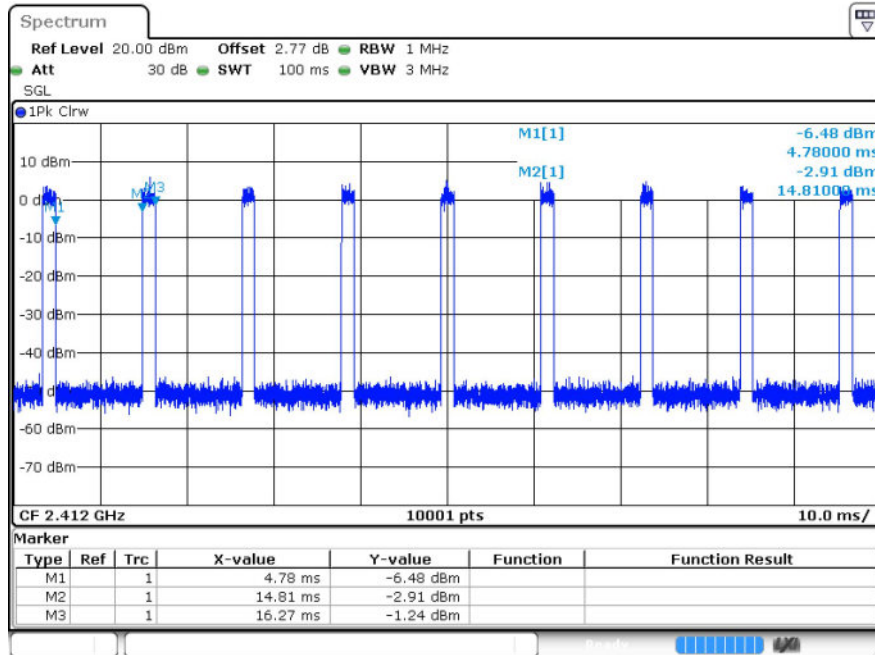




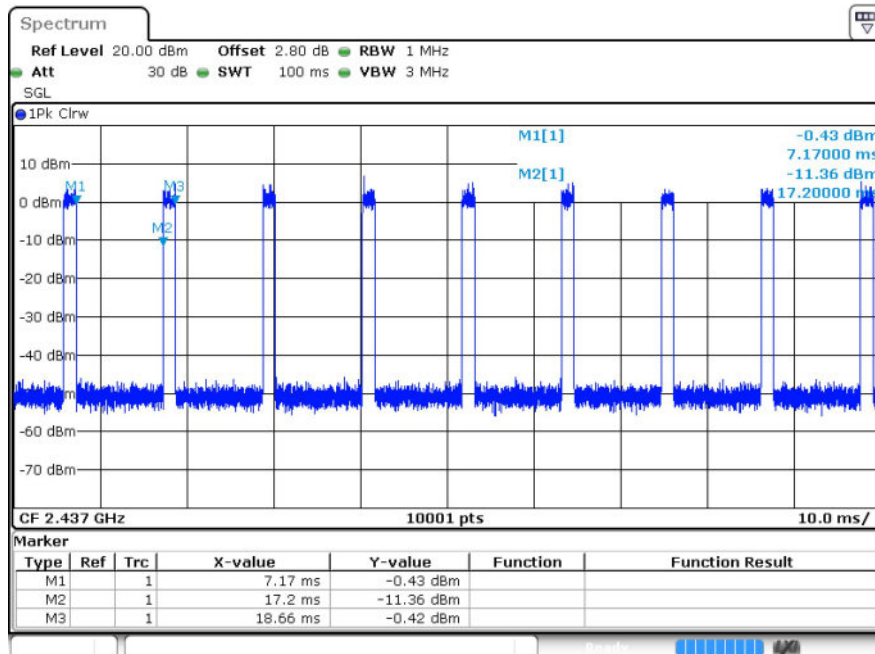


Test Graphs

ax20 2412MHz Ant1

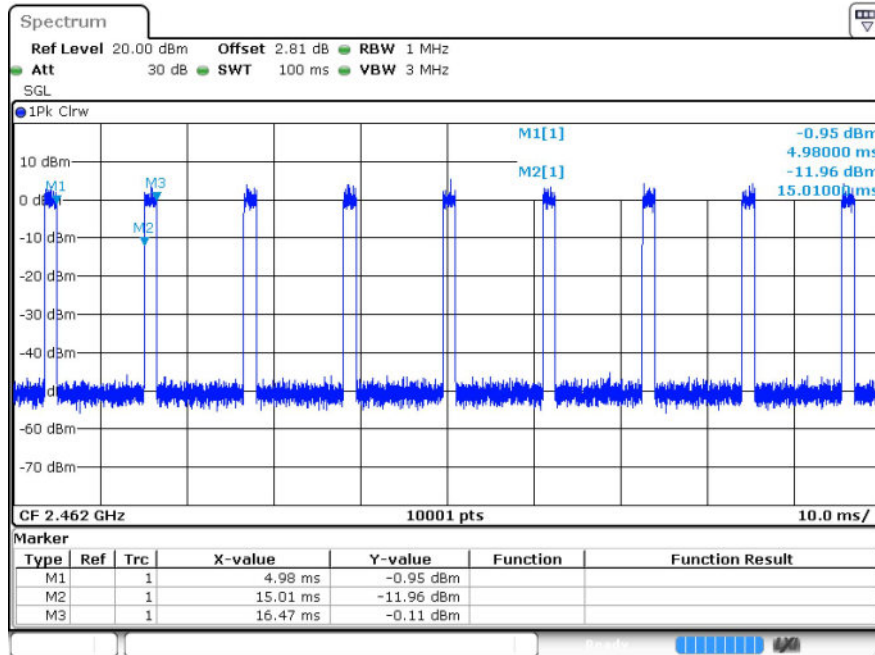


ax20 2437MHz Ant1

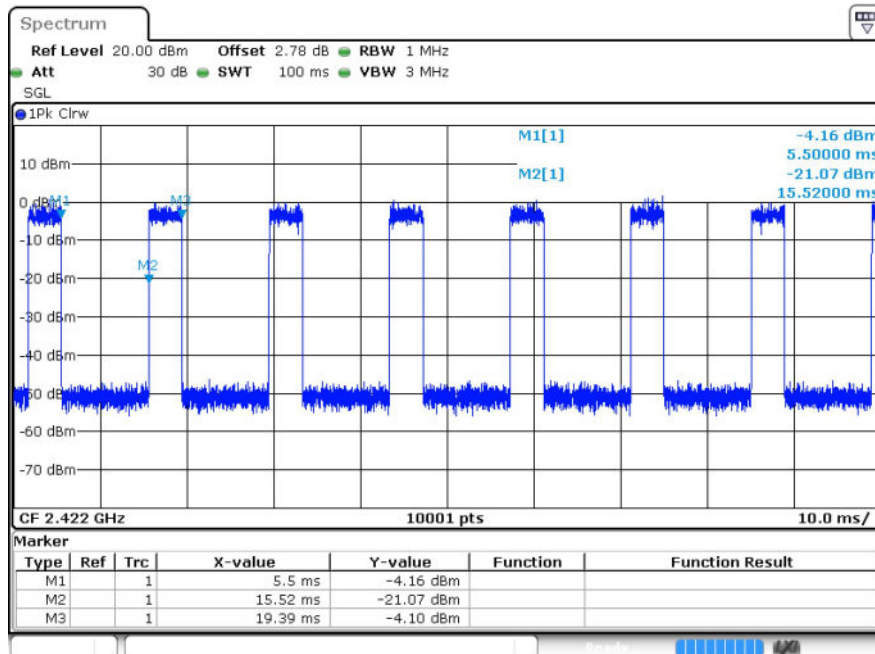


Test Graphs

ax20 2462MHz Ant1

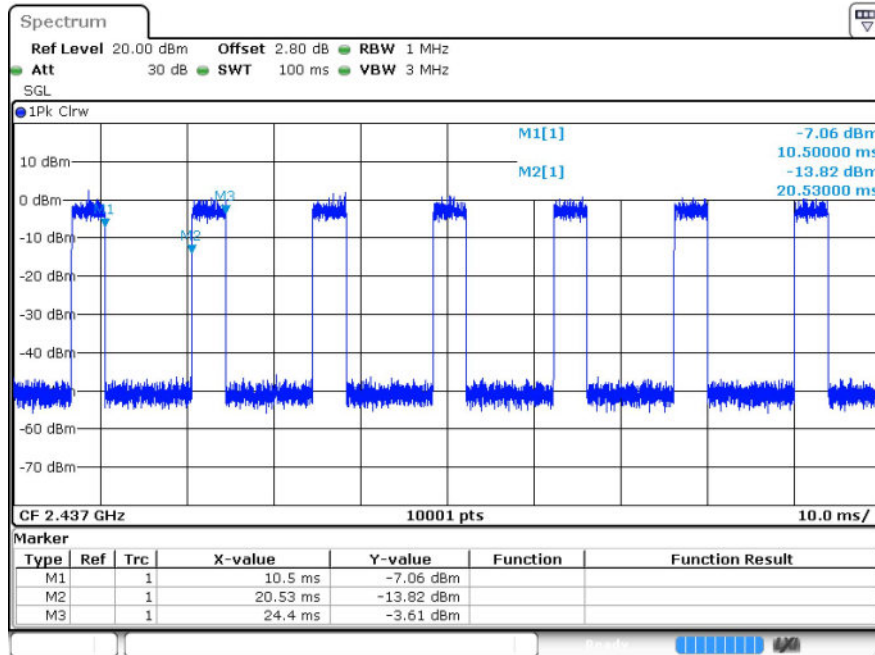


ax40 2422MHz Ant1

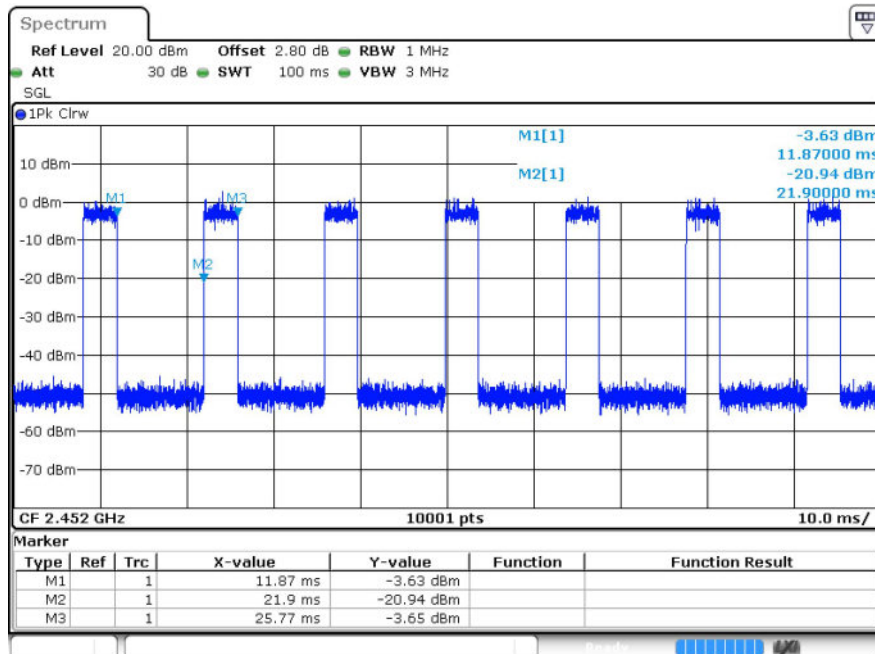


Test Graphs

ax40 2437MHz Ant1



ax40 2452MHz Ant1



2 Maximum Conducted Output Power

2.1 Test Result

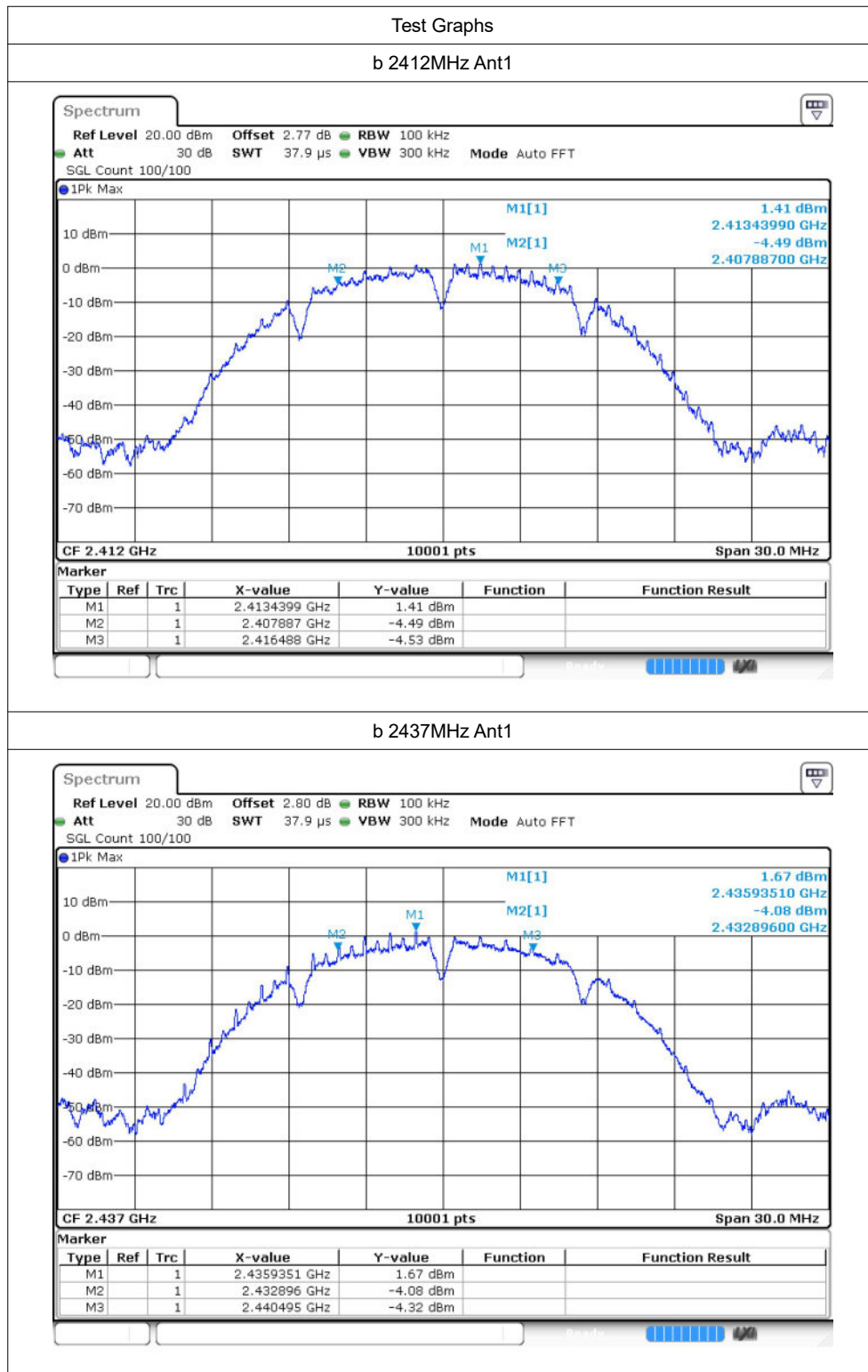
Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	15.3	30	Pass
b	2437	Ant1	14.08	30	Pass
b	2462	Ant1	13.11	30	Pass
g	2412	Ant1	14.08	30	Pass
g	2437	Ant1	14.49	30	Pass
g	2462	Ant1	13.8	30	Pass
n20	2412	Ant1	13.92	30	Pass
n20	2437	Ant1	14.43	30	Pass
n20	2462	Ant1	13.79	30	Pass
n40	2422	Ant1	14.61	30	Pass
n40	2437	Ant1	15.55	30	Pass
n40	2452	Ant1	15.17	30	Pass
ax20	2412	Ant1	13.76	30	Pass
ax20	2437	Ant1	13.94	30	Pass
ax20	2462	Ant1	13.34	30	Pass
ax40	2422	Ant1	14.15	30	Pass
ax40	2437	Ant1	14.67	30	Pass
ax40	2452	Ant1	14.46	30	Pass

3 -6dB Bandwidth

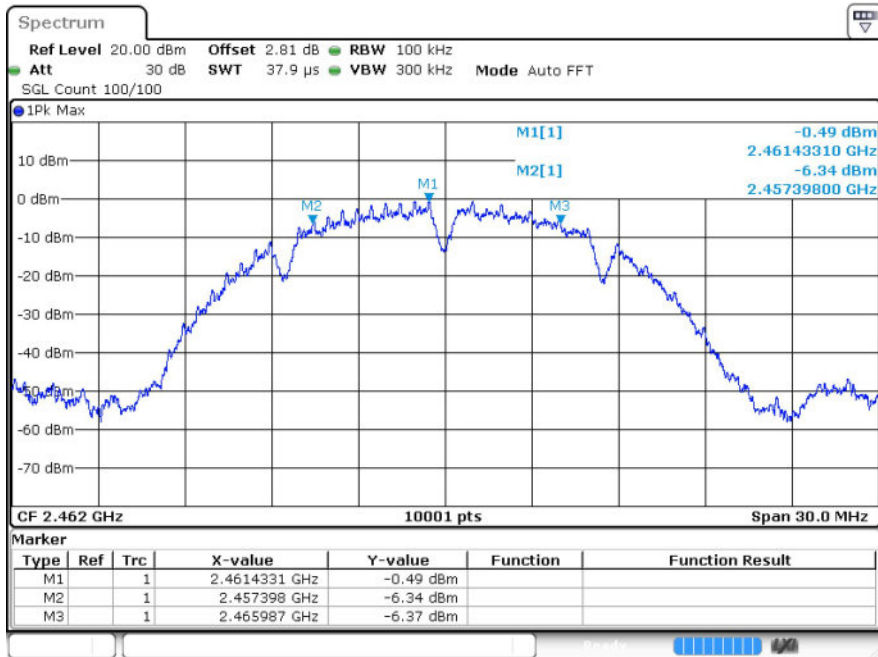
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	8.601	0.5	Pass
b	2437	Ant1	7.599	0.5	Pass
b	2462	Ant1	8.589	0.5	Pass
g	2412	Ant1	16.422	0.5	Pass
g	2437	Ant1	16.44	0.5	Pass
g	2462	Ant1	16.413	0.5	Pass
n20	2412	Ant1	17.577	0.5	Pass
n20	2437	Ant1	17.658	0.5	Pass
n20	2462	Ant1	17.64	0.5	Pass
n40	2422	Ant1	31.92	0.5	Pass
n40	2437	Ant1	36.384	0.5	Pass
n40	2452	Ant1	36.36	0.5	Pass
ax20	2412	Ant1	18.963	0.5	Pass
ax20	2437	Ant1	14.907	0.5	Pass
ax20	2462	Ant1	14.421	0.5	Pass
ax40	2422	Ant1	37.8	0.5	Pass
ax40	2437	Ant1	37.896	0.5	Pass
ax40	2452	Ant1	36.39	0.5	Pass

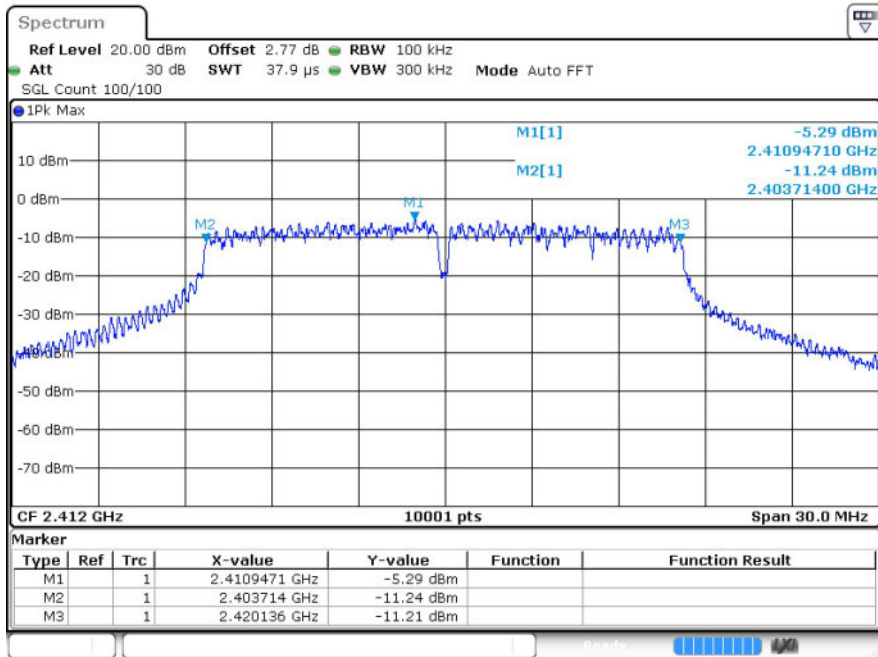
3.2 Test Graphs



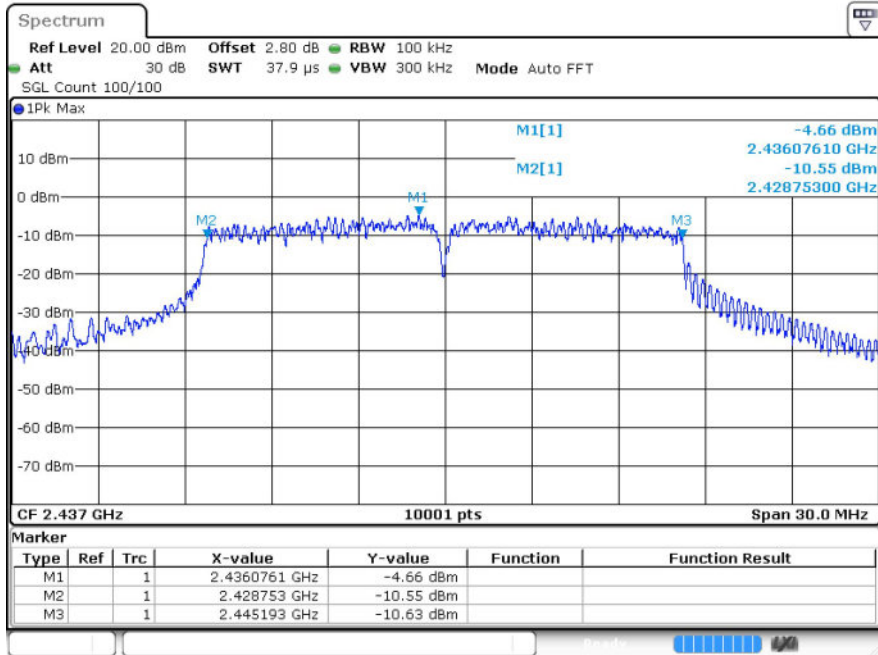
b 2462MHz Ant1



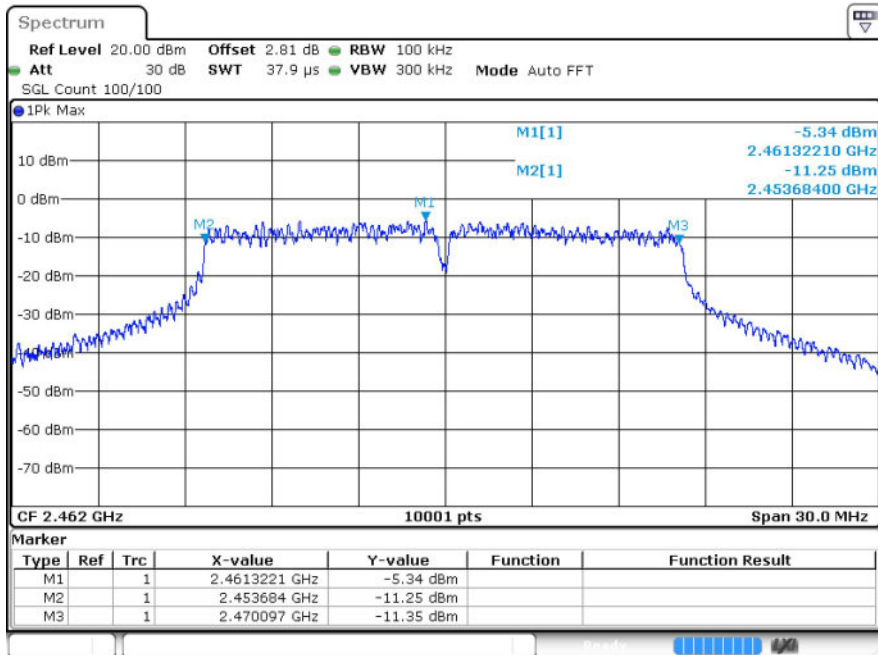
g 2412MHz Ant1

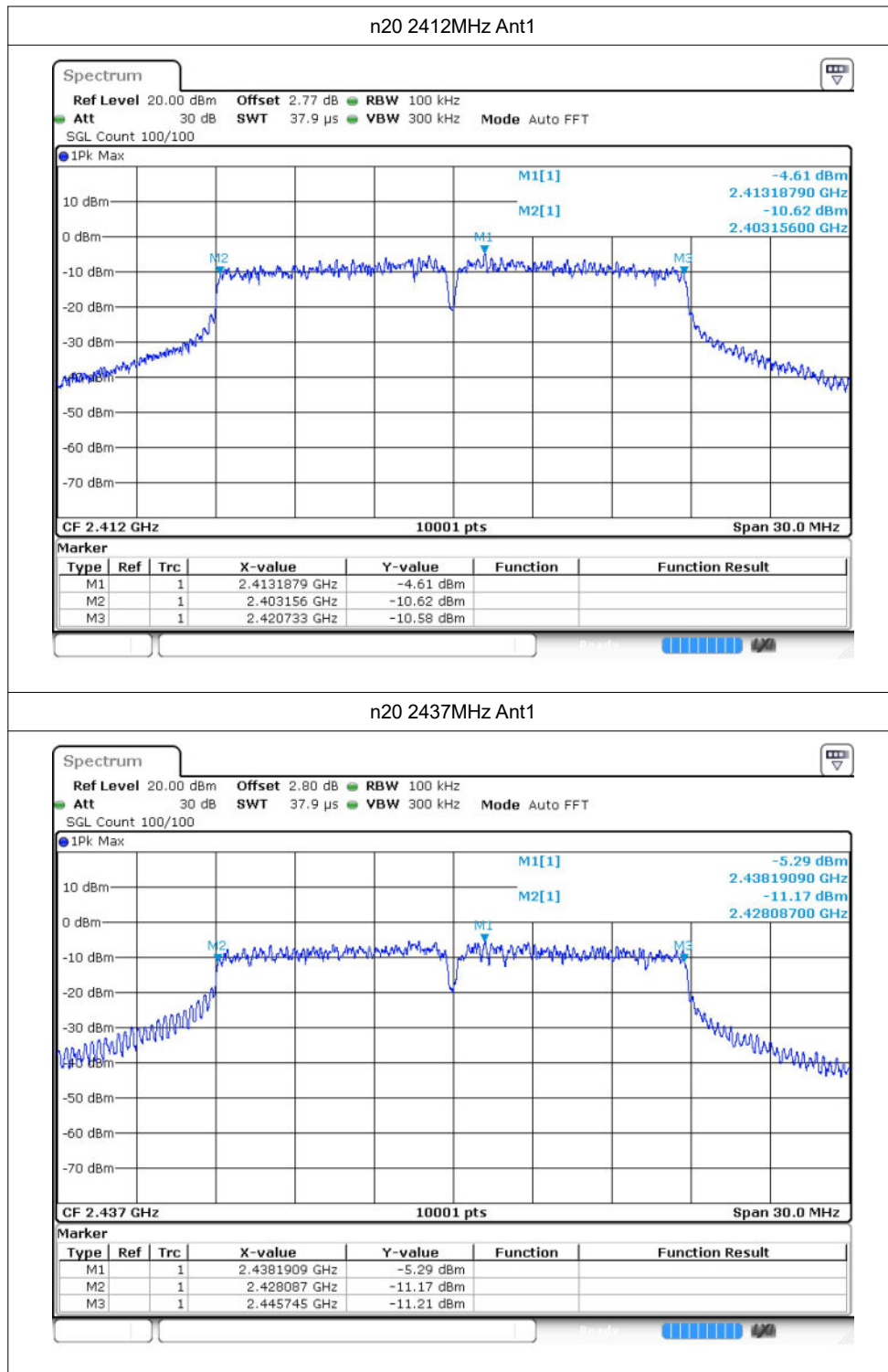


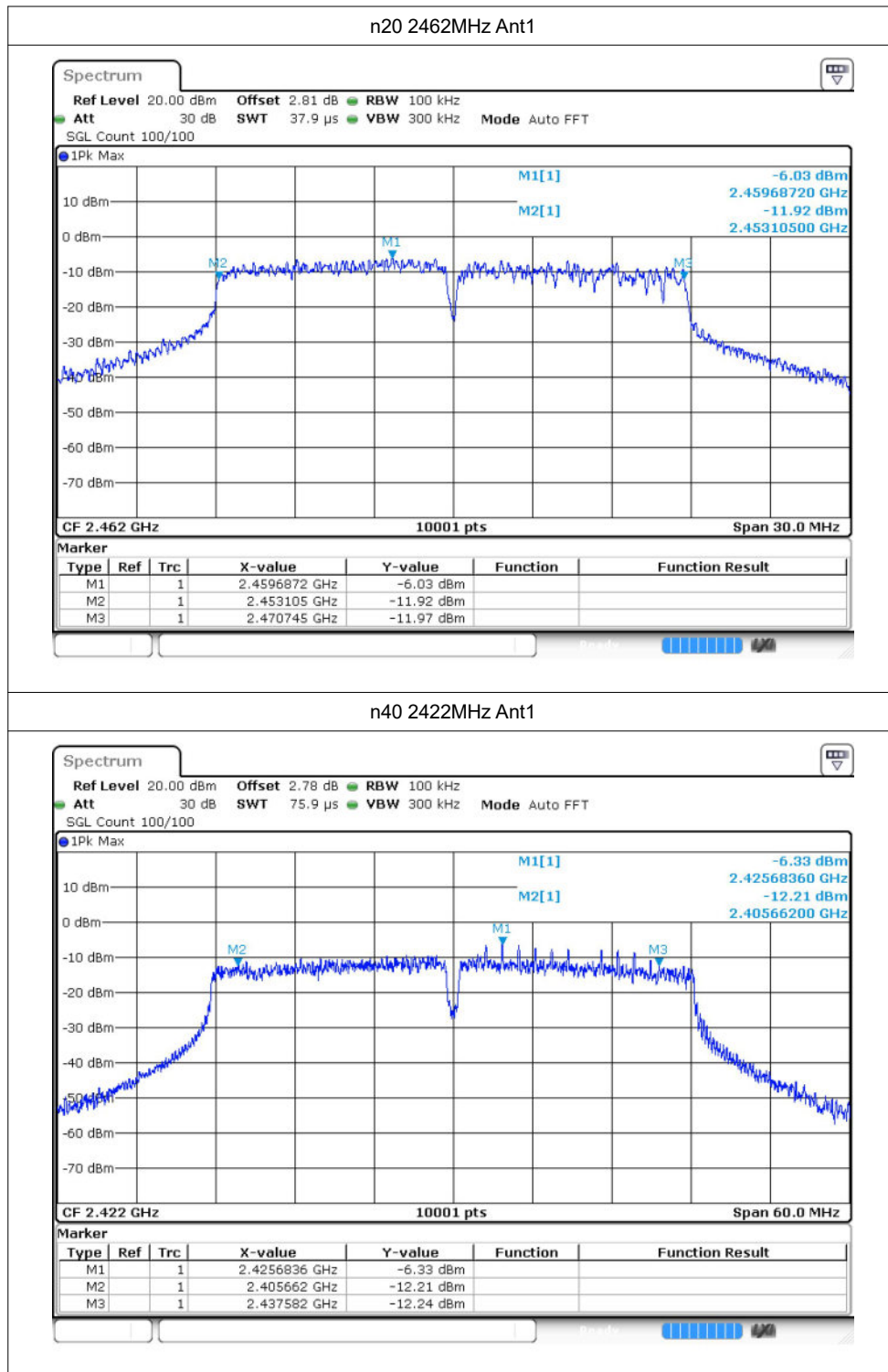
g 2437MHz Ant1



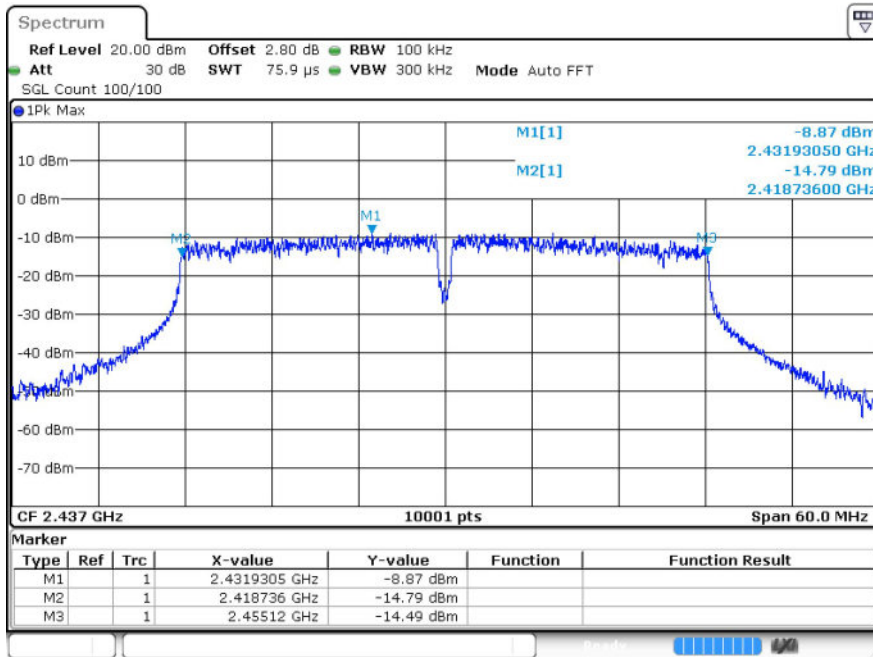
g 2462MHz Ant1



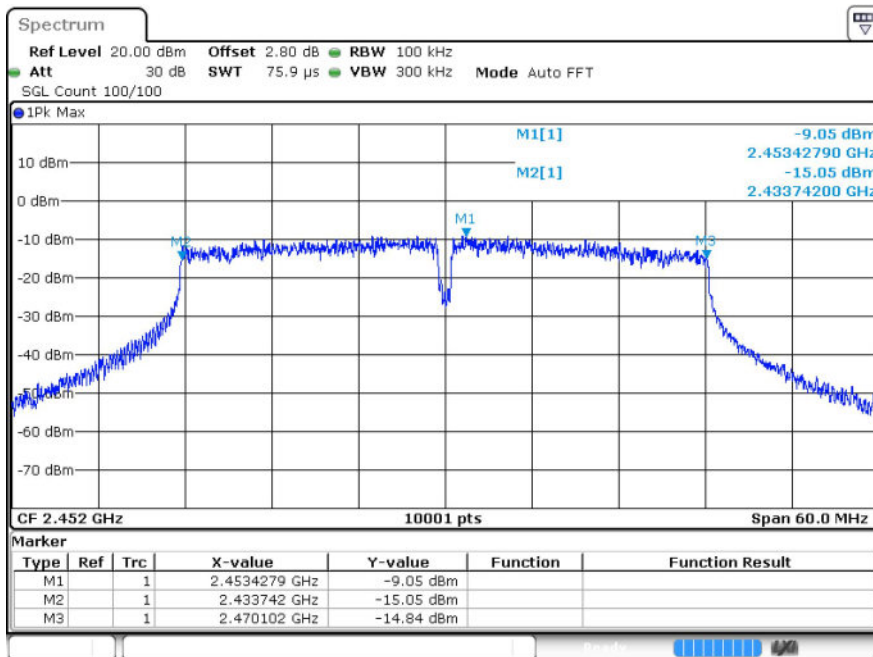




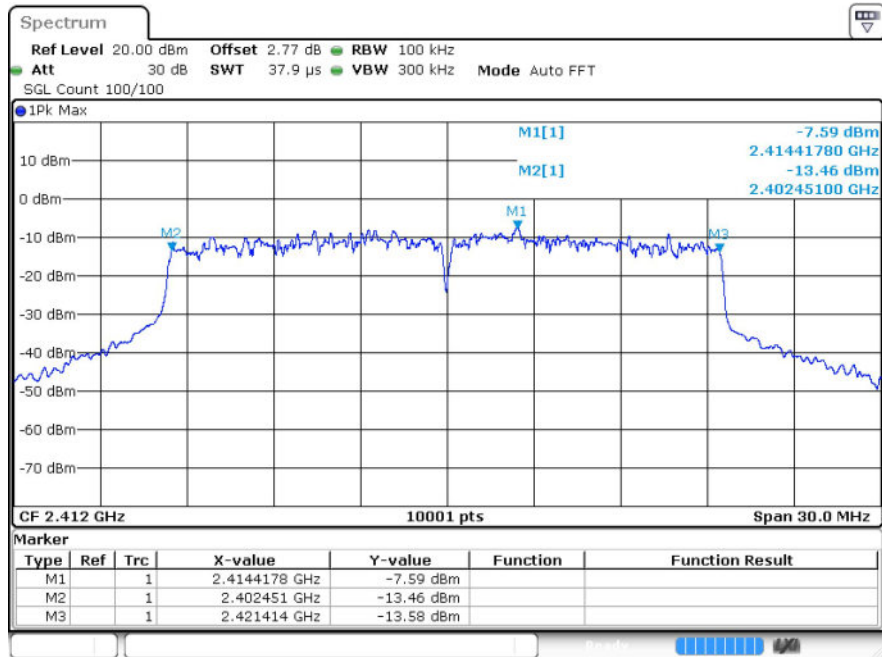
n40 2437MHz Ant1



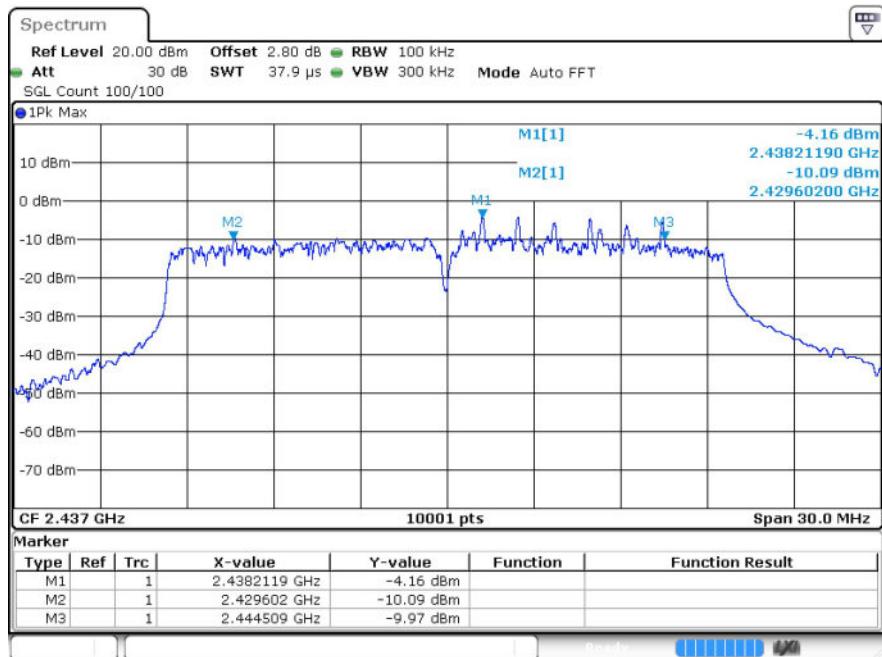
n40 2452MHz Ant1



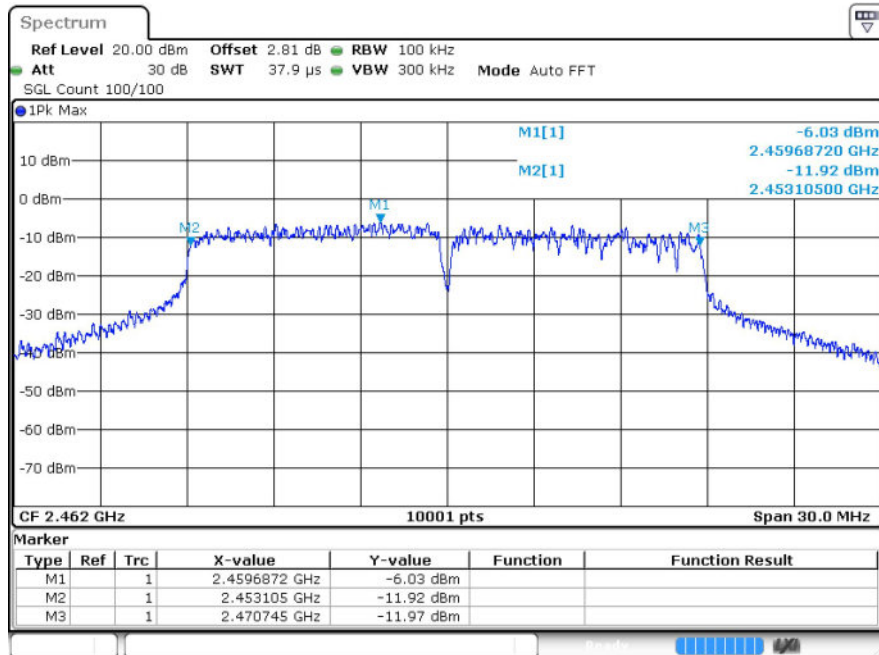
ax20 2412MHz Ant1



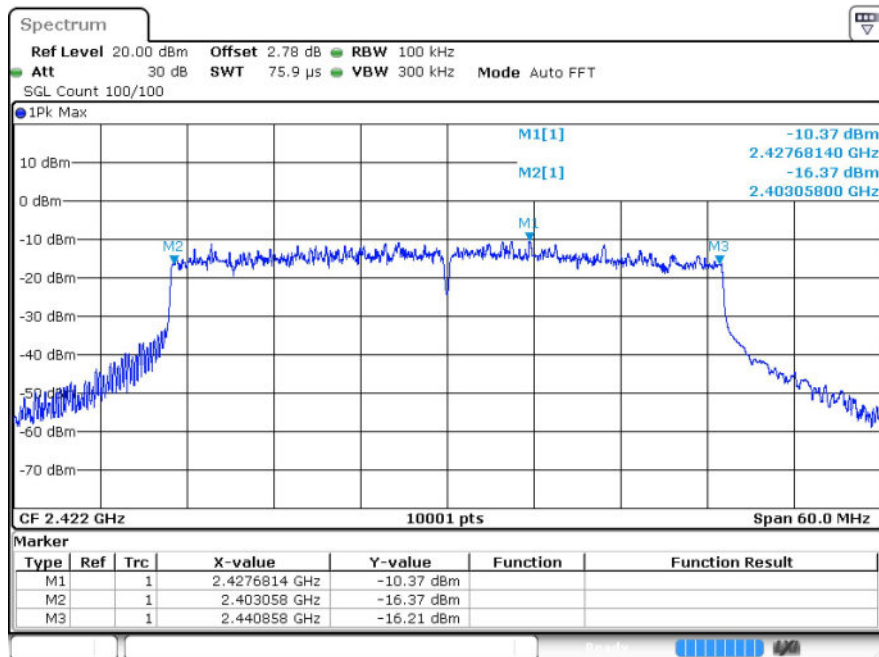
ax20 2437MHz Ant1

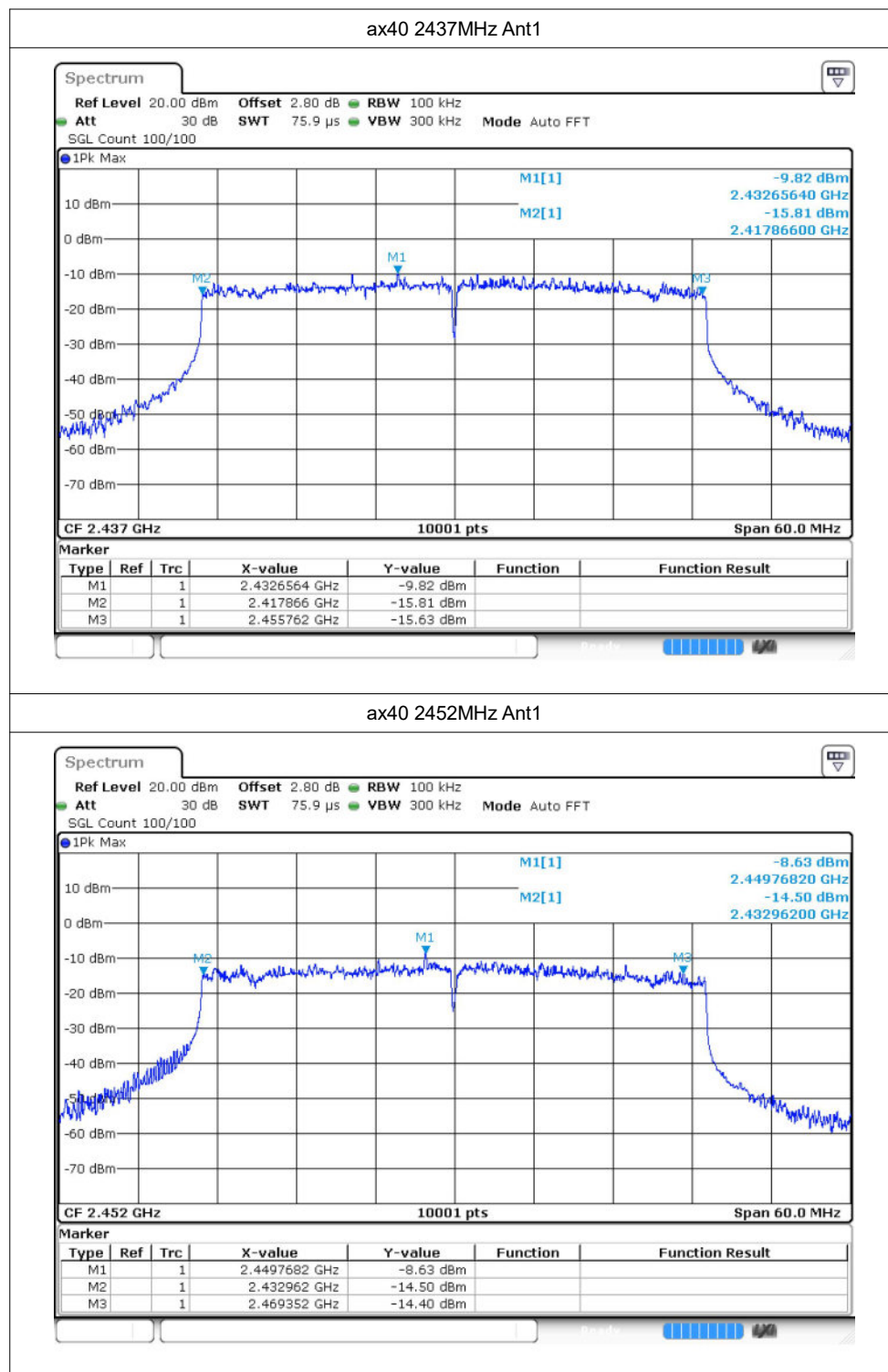


ax20 2462MHz Ant1



ax40 2422MHz Ant1



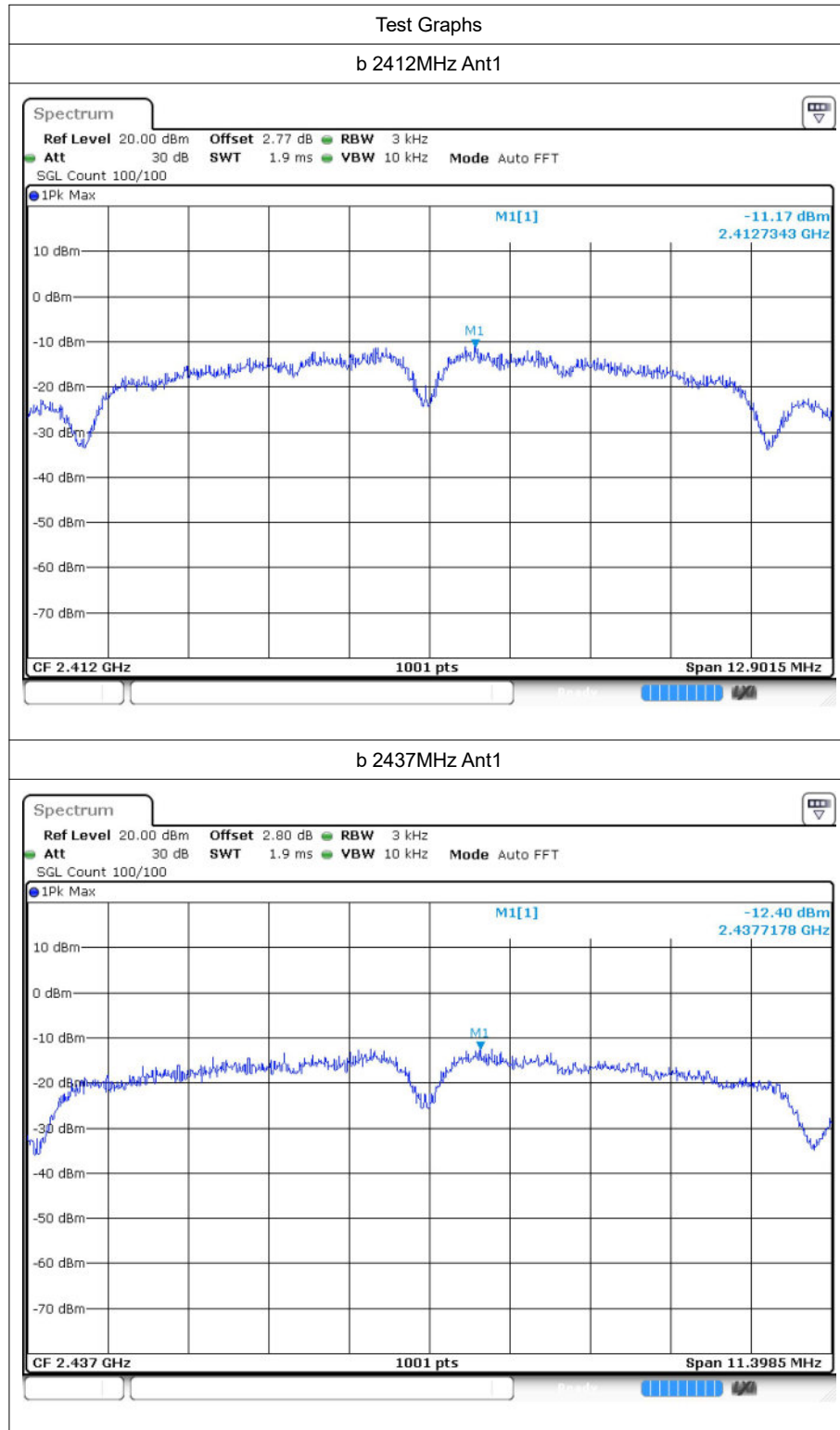


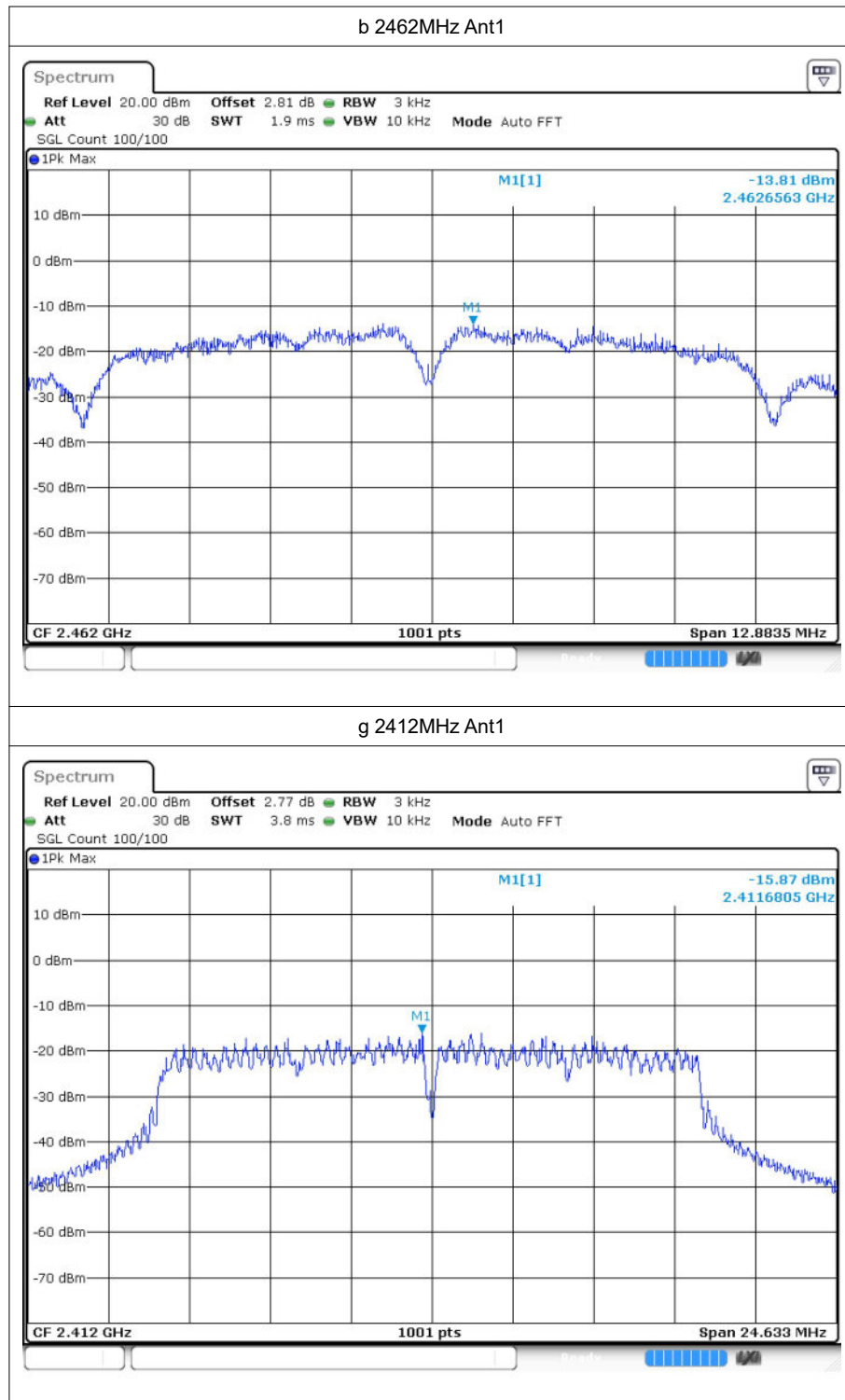
4 Maximum Power Spectral Density Level

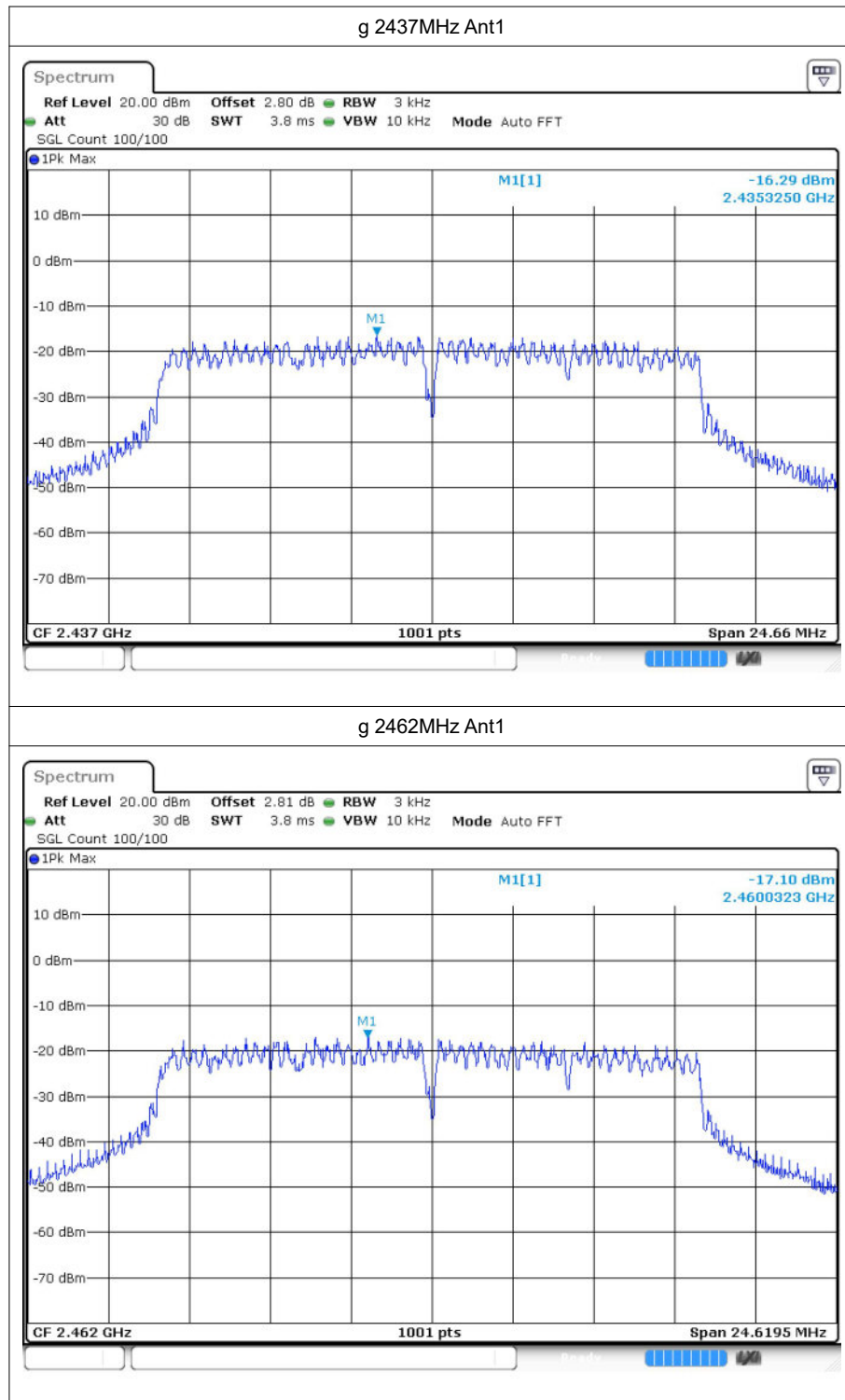
4.1 Test Result

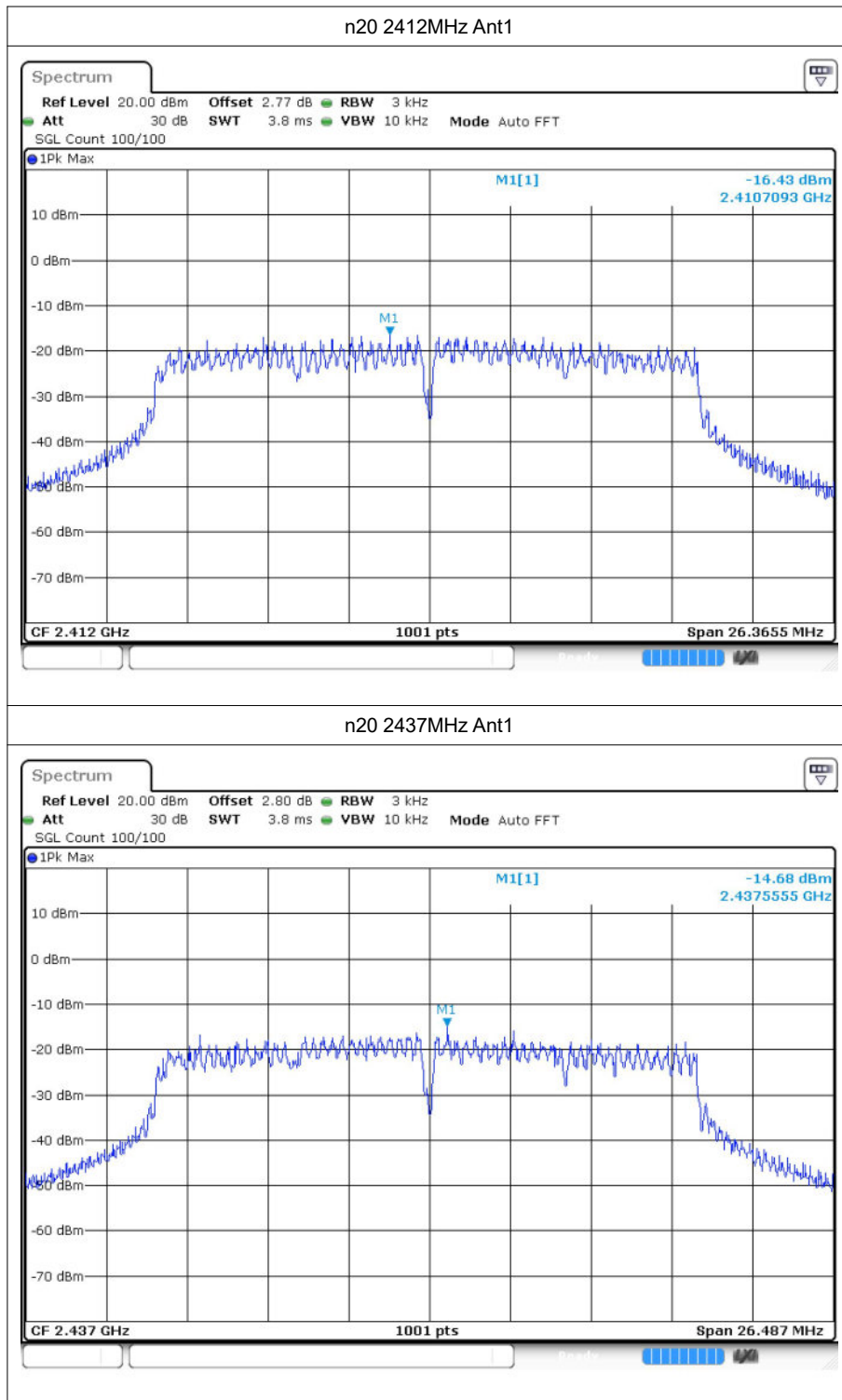
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-11.17	≤8	Pass
b	2437	Ant1	-12.4	≤8	Pass
b	2462	Ant1	-13.81	≤8	Pass
g	2412	Ant1	-15.87	≤8	Pass
g	2437	Ant1	-16.29	≤8	Pass
g	2462	Ant1	-17.1	≤8	Pass
n20	2412	Ant1	-16.43	≤8	Pass
n20	2437	Ant1	-14.68	≤8	Pass
n20	2462	Ant1	-16.88	≤8	Pass
n40	2422	Ant1	-18.08	≤8	Pass
n40	2437	Ant1	-19.42	≤8	Pass
n40	2452	Ant1	-19.39	≤8	Pass
ax20	2412	Ant1	-7.3	≤8	Pass
ax20	2437	Ant1	-8.39	≤8	Pass
ax20	2462	Ant1	-8.7	≤8	Pass
ax40	2422	Ant1	-10.34	≤8	Pass
ax40	2437	Ant1	-10.42	≤8	Pass
ax40	2452	Ant1	-10.07	≤8	Pass

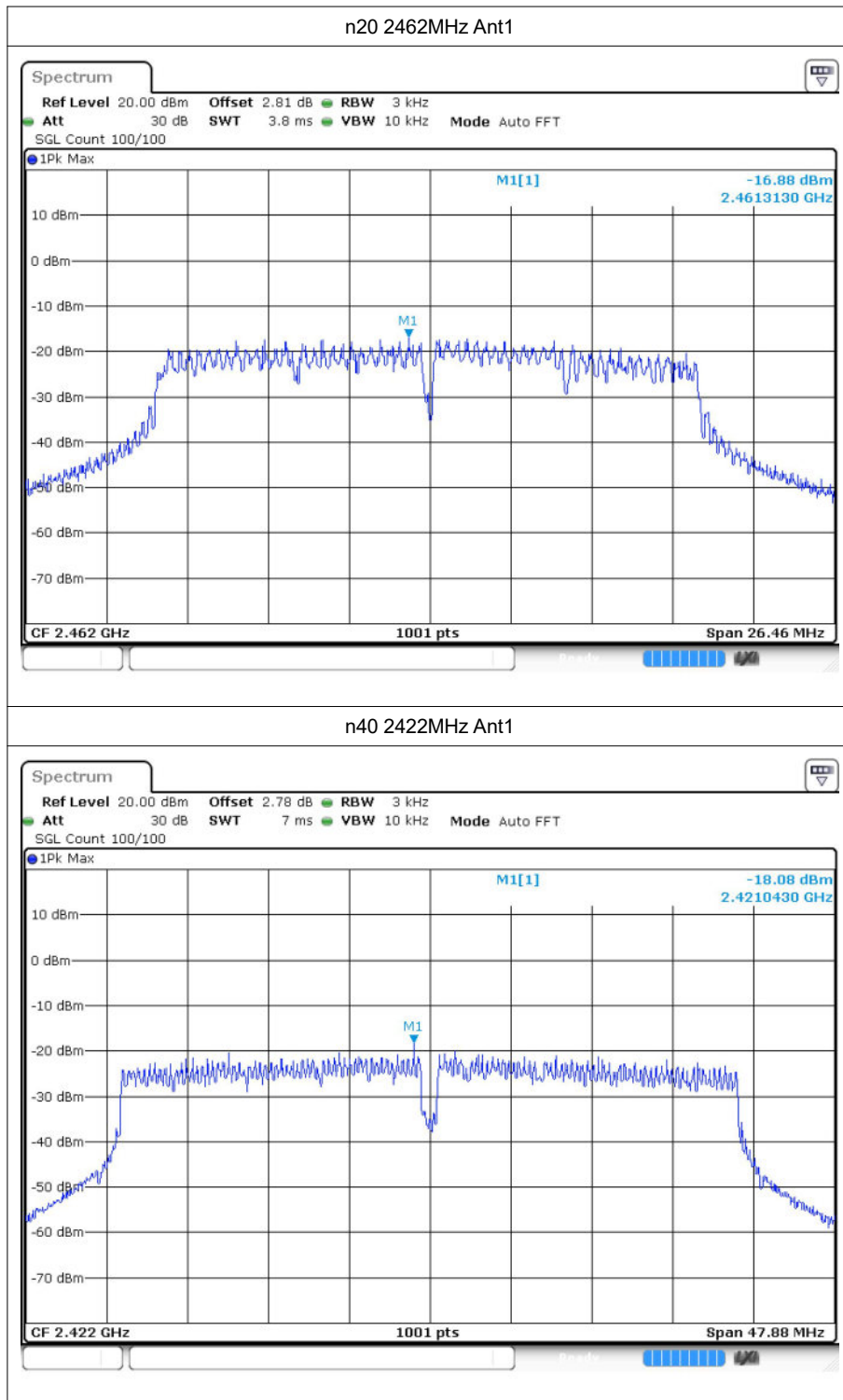
4.2 Test Graphs

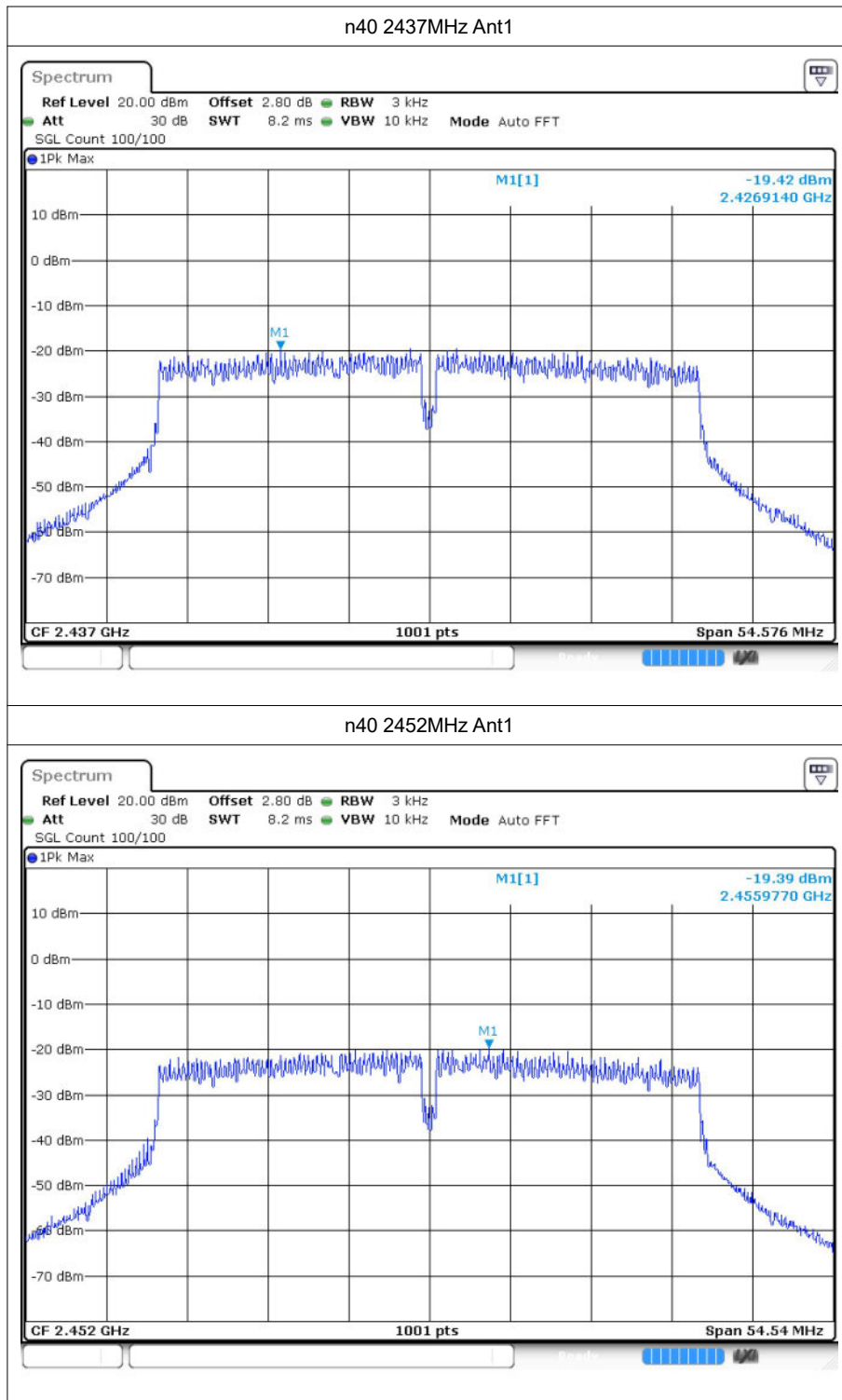


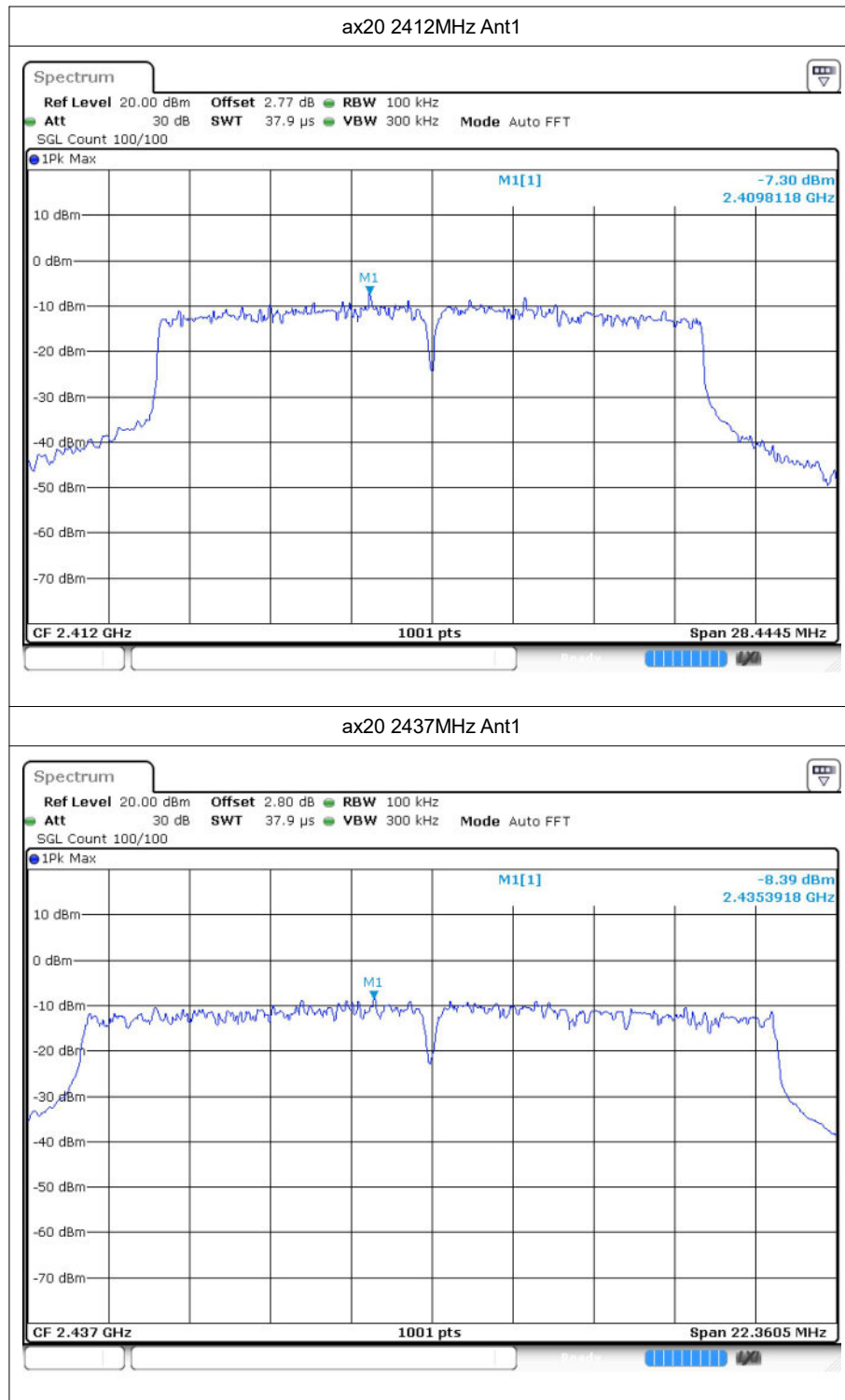


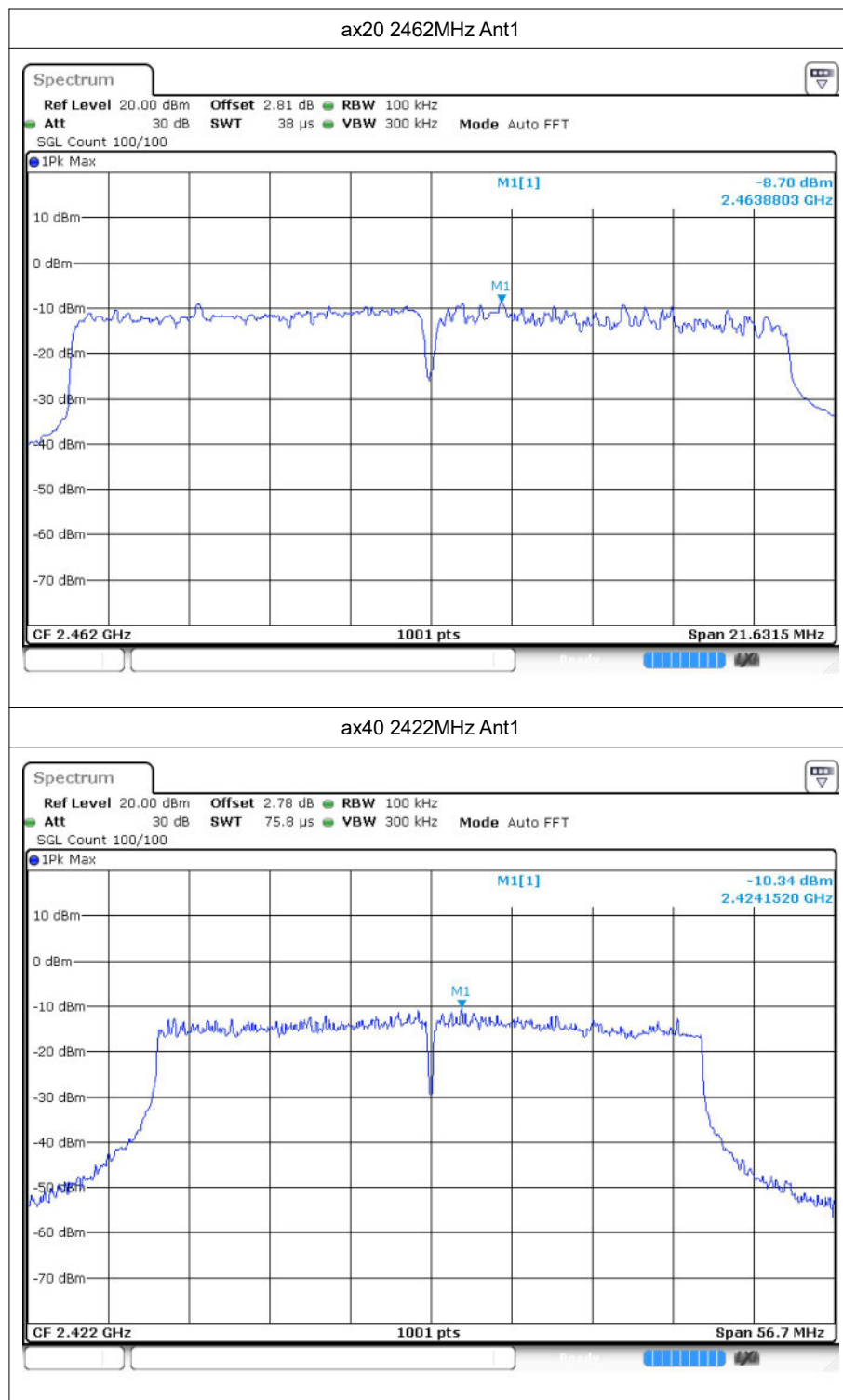


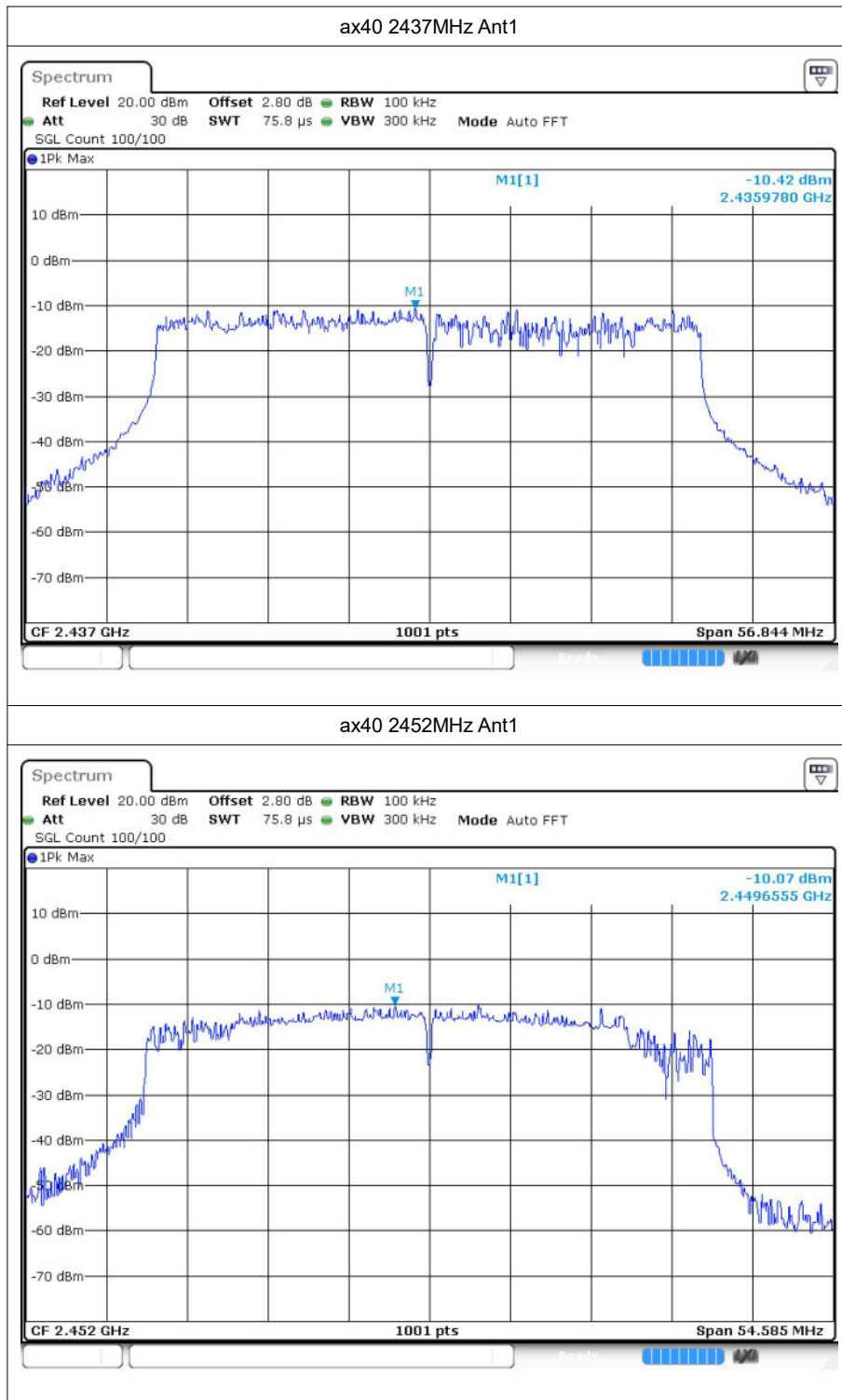












5 Band Edge

5.1 Test Result

Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-57.19	-20	Pass
b	2462	Ant1	-54.84	-20	Pass
g	2412	Ant1	-47.35	-20	Pass
g	2462	Ant1	-47.94	-20	Pass
n20	2412	Ant1	-45.36	-20	Pass
n20	2462	Ant1	-45.49	-20	Pass
n40	2422	Ant1	-42.45	-20	Pass
n40	2452	Ant1	-45.47	-20	Pass
ax20	2412	Ant1	-48.01	-20	Pass
ax20	2462	Ant1	-38.18	-20	Pass
ax40	2422	Ant1	-42.9	-20	Pass
ax40	2452	Ant1	-43.8	-20	Pass

5.2 Test Graphs

