



Appendix C

RF Test Data for 2.4GWIFI(Conducted Measurement)

Product Name: WiFi Module

Trade Mark: N/A

Test Model: IO1201B

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Leon.yi
Supervised by:	Sean She



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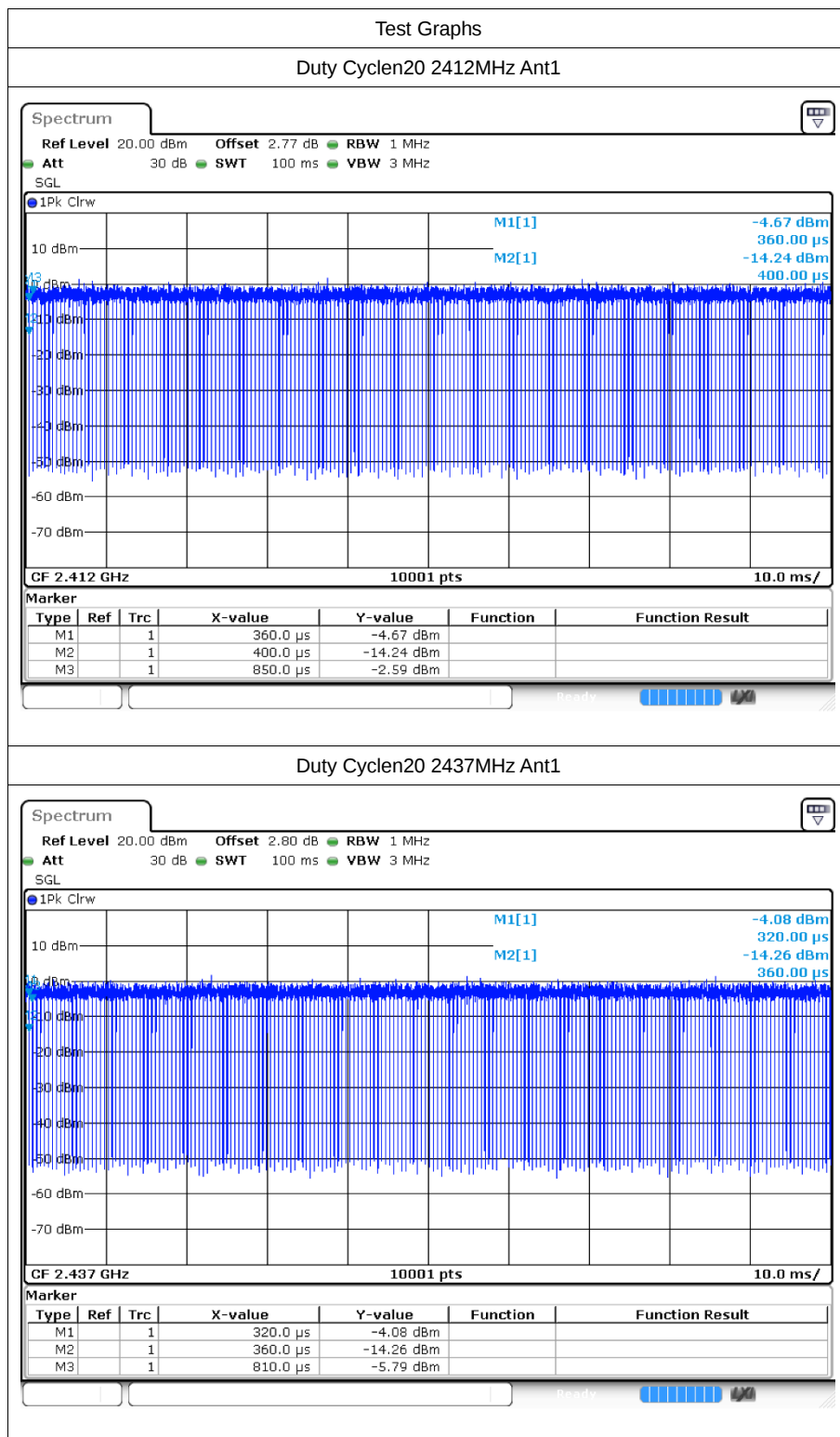
1 Duty Cycle

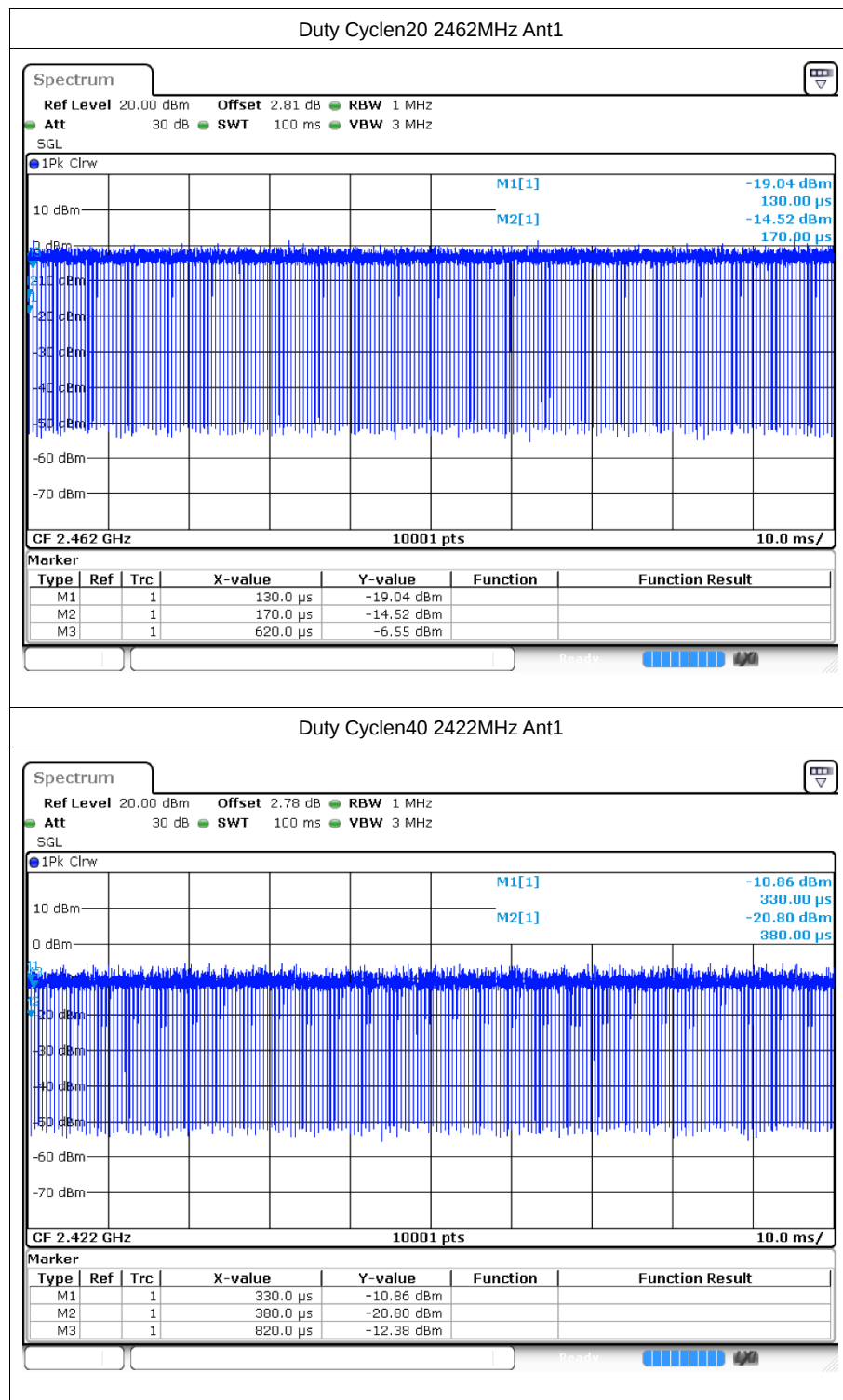
1.1 Test Result

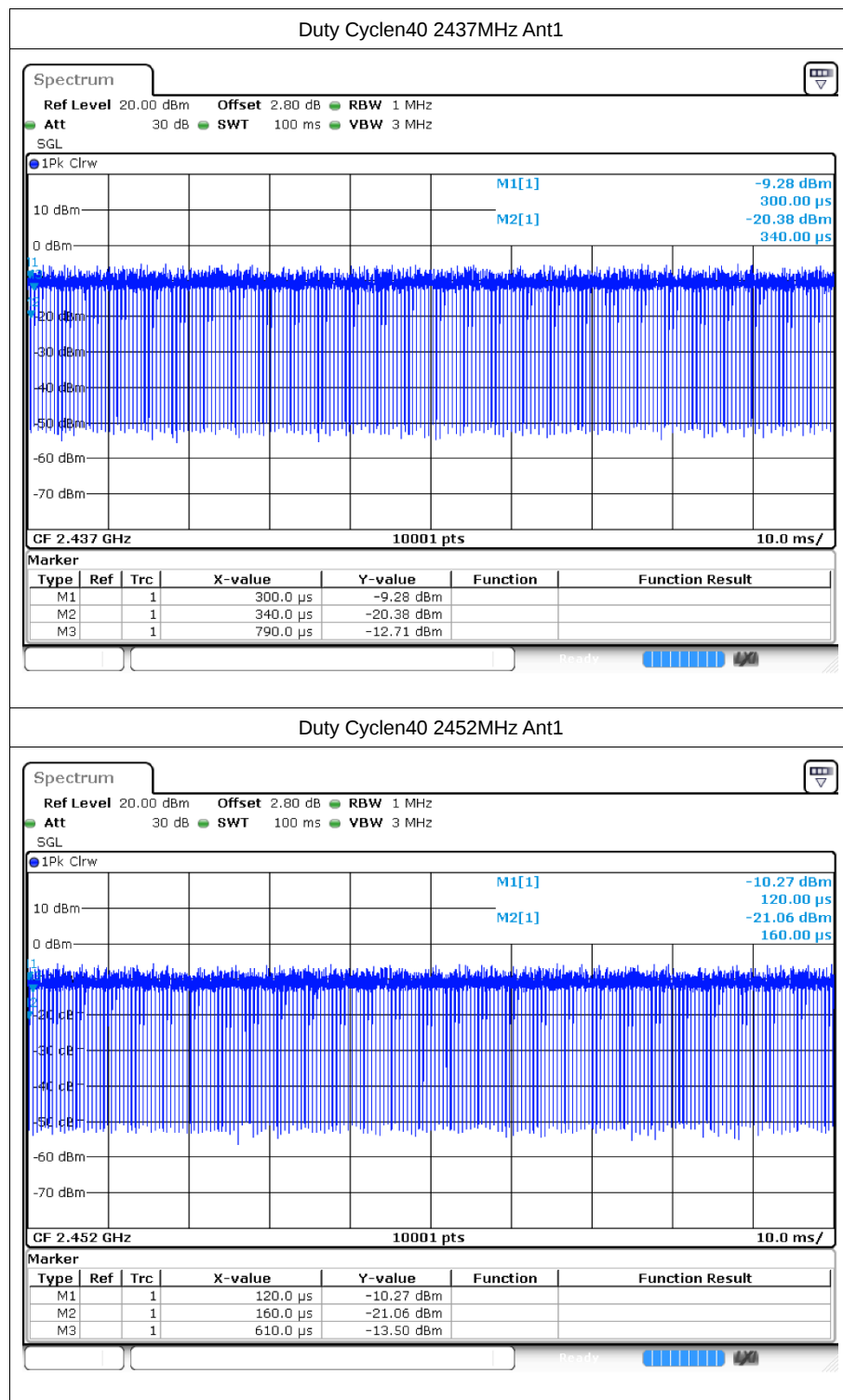
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
n20	2412	Ant1	93.02	0.31	2.22
n20	2437	Ant1	92.99	0.32	2.22
n20	2462	Ant1	93	0.32	2.22
n40	2422	Ant1	92.85	0.32	2.27
n40	2437	Ant1	92.95	0.32	2.22
n40	2452	Ant1	92.94	0.32	2.22
ax20	2412	Ant1	87.13	0.6	4.35
ax20	2437	Ant1	87.11	0.6	4.35
ax20	2462	Ant1	86.65	0.62	4.35
ax40	2422	Ant1	87.08	0.6	4.35
ax40	2437	Ant1	86.92	0.61	4.35
ax40	2452	Ant1	87.02	0.6	4.35
n20	2412	Ant2	93.02	0.31	2.22
n20	2437	Ant2	92.84	0.32	2.22
n20	2462	Ant2	93	0.32	2.22
n40	2422	Ant2	92.91	0.32	2.27
n40	2437	Ant2	92.91	0.32	2.27
n40	2452	Ant2	92.92	0.32	2.22
ax20	2412	Ant2	87.05	0.6	4.35
ax20	2437	Ant2	87.01	0.6	4.35
ax20	2462	Ant2	87.12	0.6	4.35
ax40	2422	Ant2	87.05	0.6	4.35
ax40	2437	Ant2	87.09	0.6	4.55
ax40	2452	Ant2	87.07	0.6	4.35

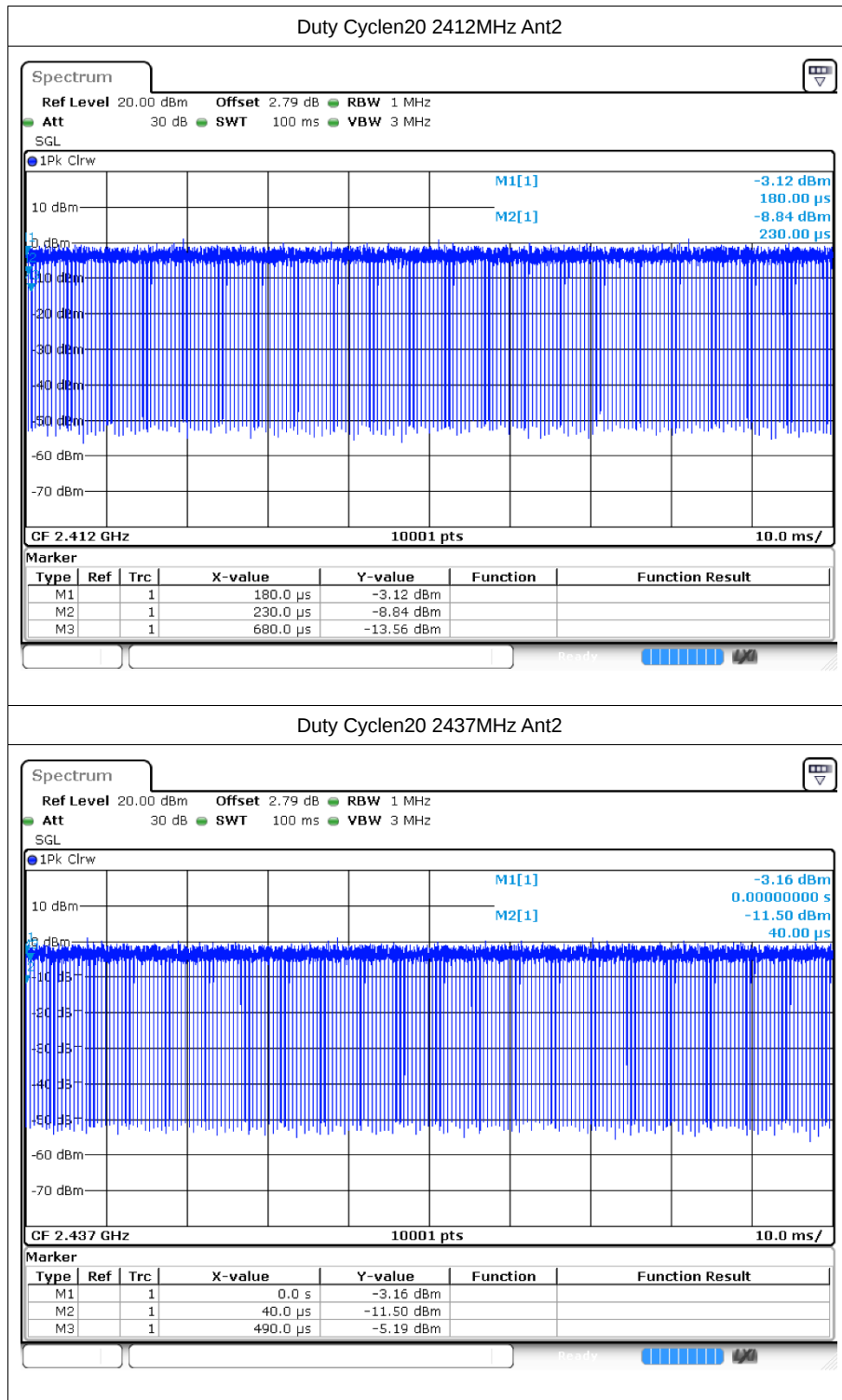


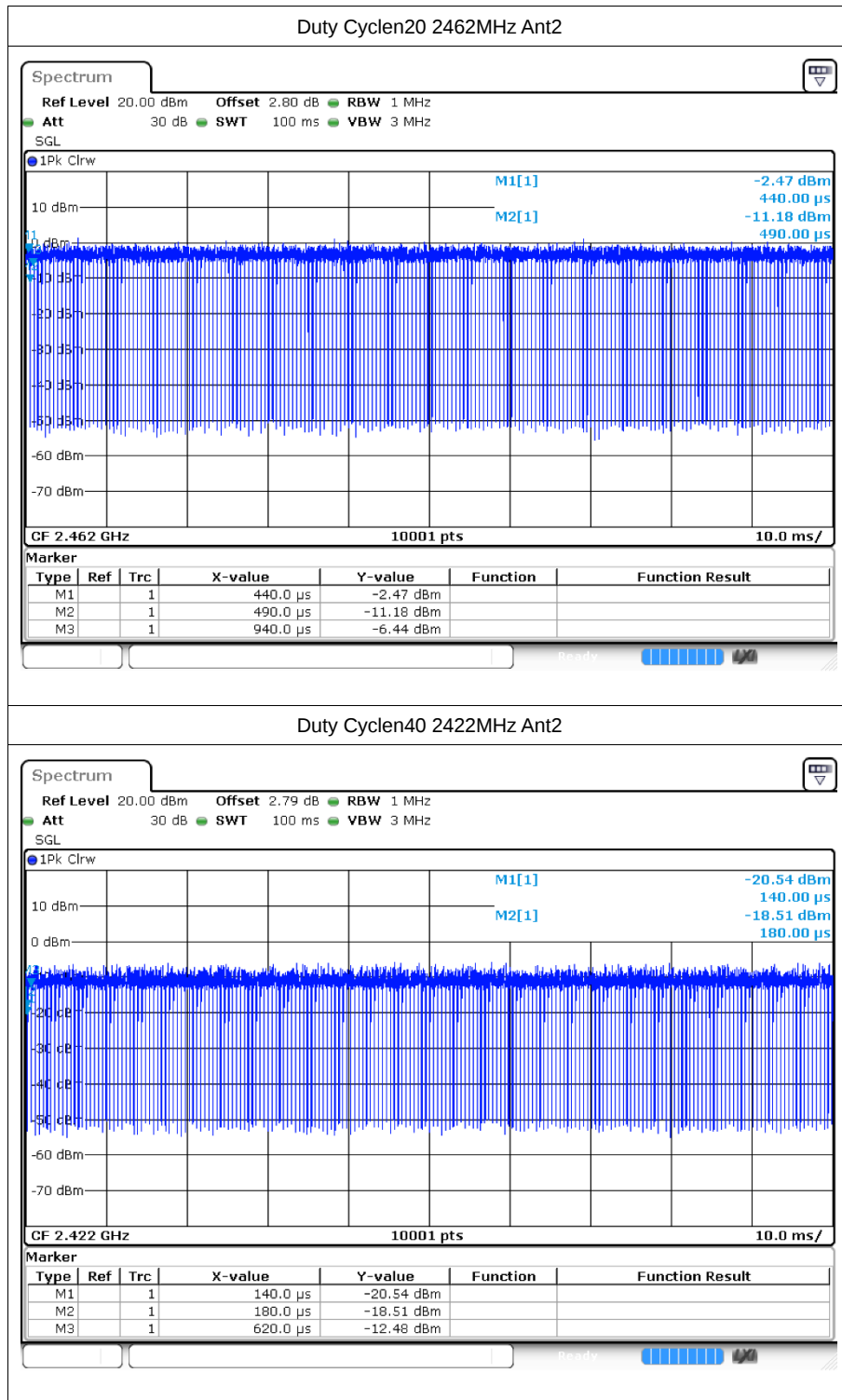
1.2 Test Graphs

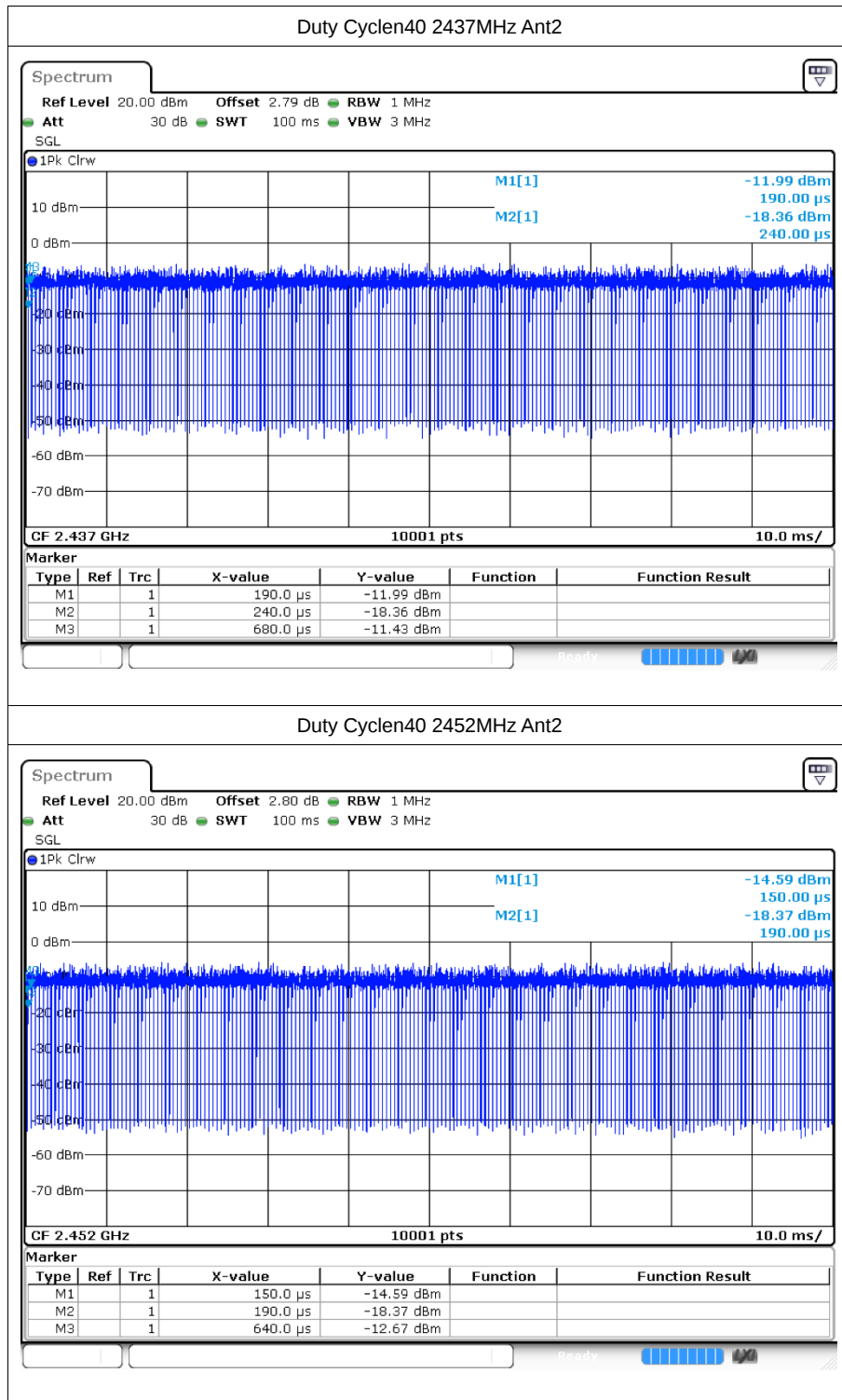


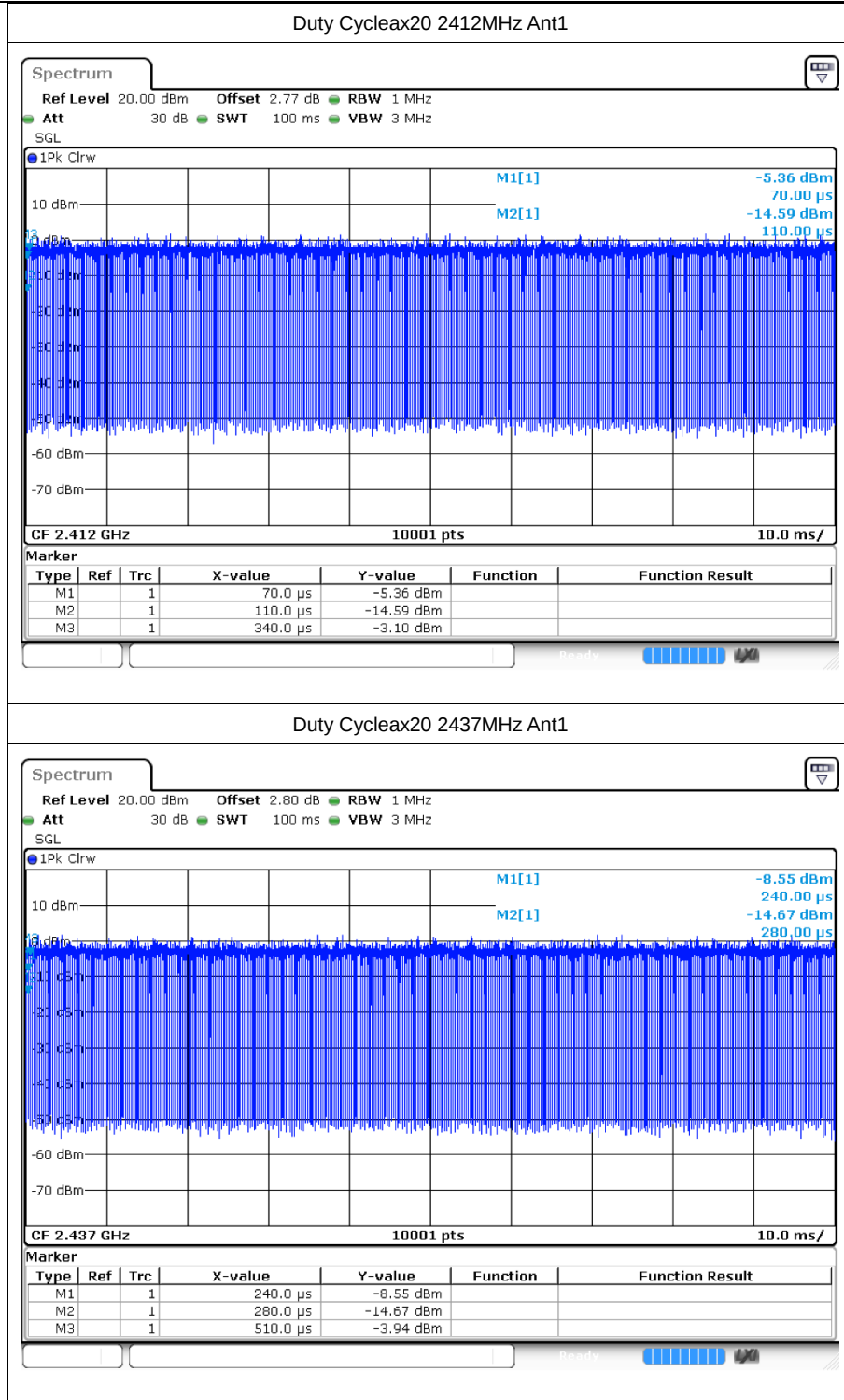


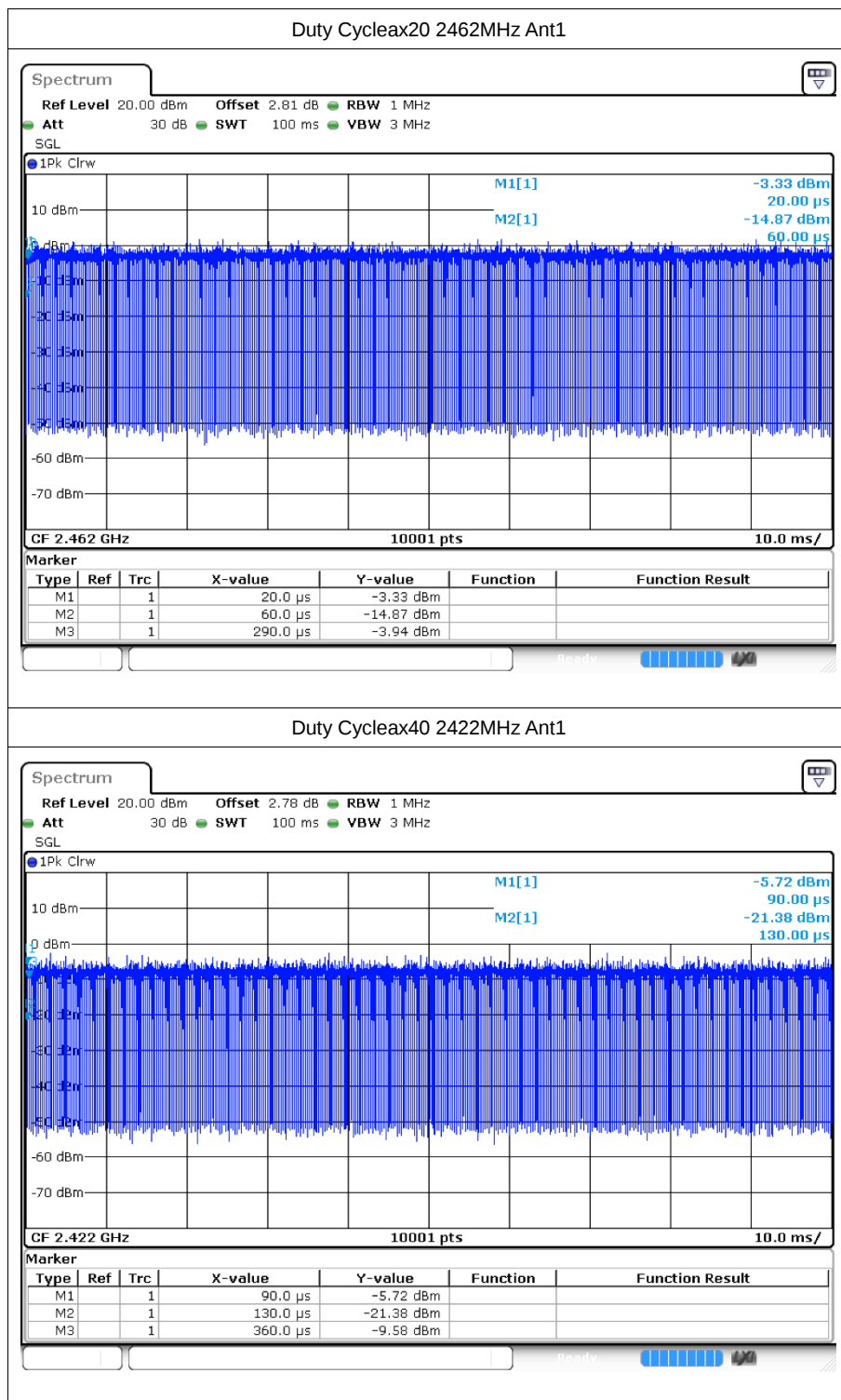


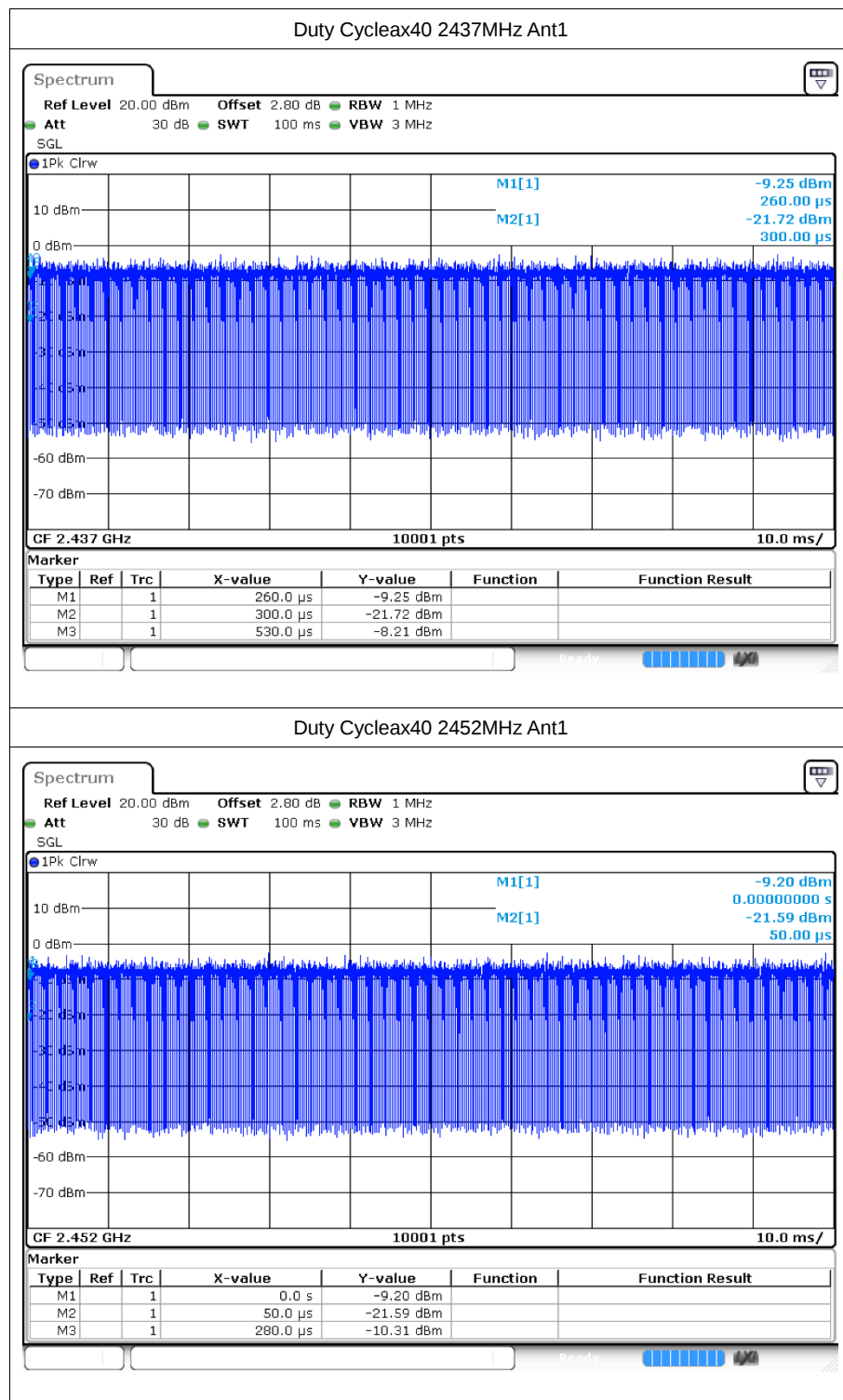












2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
n20	2412	Ant1	14.04	30	Pass
n20	2437	Ant1	14.02	30	Pass
n20	2462	Ant1	14.00	30	Pass
n20	2412	Ant2	13.56	30	Pass
n20	2437	Ant2	13.68	30	Pass
n20	2462	Ant2	13.77	30	Pass
n20	2412	Sum	16.82	30	Pass
n20	2437	Sum	16.86	30	Pass
n20	2462	Sum	16.90	30	Pass
n40	2422	Ant1	13.40	30	Pass
n40	2437	Ant1	13.46	30	Pass
n40	2452	Ant1	13.44	30	Pass
n40	2422	Ant2	13.07	30	Pass
n40	2437	Ant2	13.04	30	Pass
n40	2452	Ant2	12.99	30	Pass
n40	2422	Sum	16.25	30	Pass
n40	2437	Sum	16.27	30	Pass
n40	2452	Sum	16.23	30	Pass
ax20	2412	Ant1	14.44	30	Pass
ax20	2437	Ant1	14.24	30	Pass
ax20	2462	Ant1	14.33	30	Pass
ax20	2412	Ant2	13.63	30	Pass
ax20	2437	Ant2	13.90	30	Pass
ax20	2462	Ant2	14.01	30	Pass
ax20	2412	Sum	17.06	30	Pass
ax20	2437	Sum	17.08	30	Pass
ax20	2462	Sum	17.18	30	Pass
ax40	2422	Ant1	13.33	30	Pass
ax40	2437	Ant1	13.38	30	Pass
ax40	2452	Ant1	13.46	30	Pass
ax40	2422	Ant2	13.26	30	Pass
ax40	2437	Ant2	12.98	30	Pass
ax40	2452	Ant2	13.07	30	Pass
ax40	2422	Sum	16.31	30	Pass



ax40	2437	Sum	16.19	30	Pass
ax40	2452	Sum	16.28	30	Pass

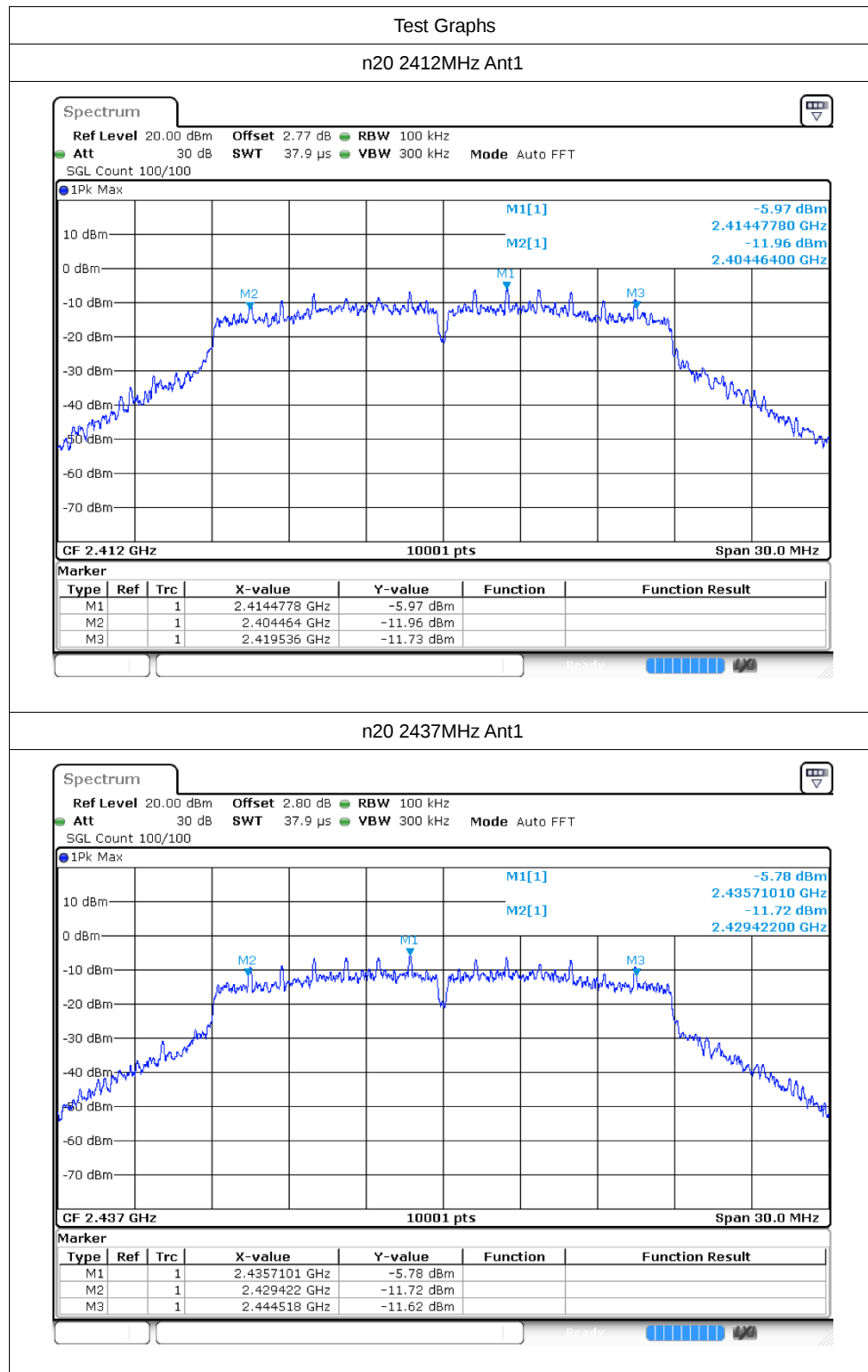


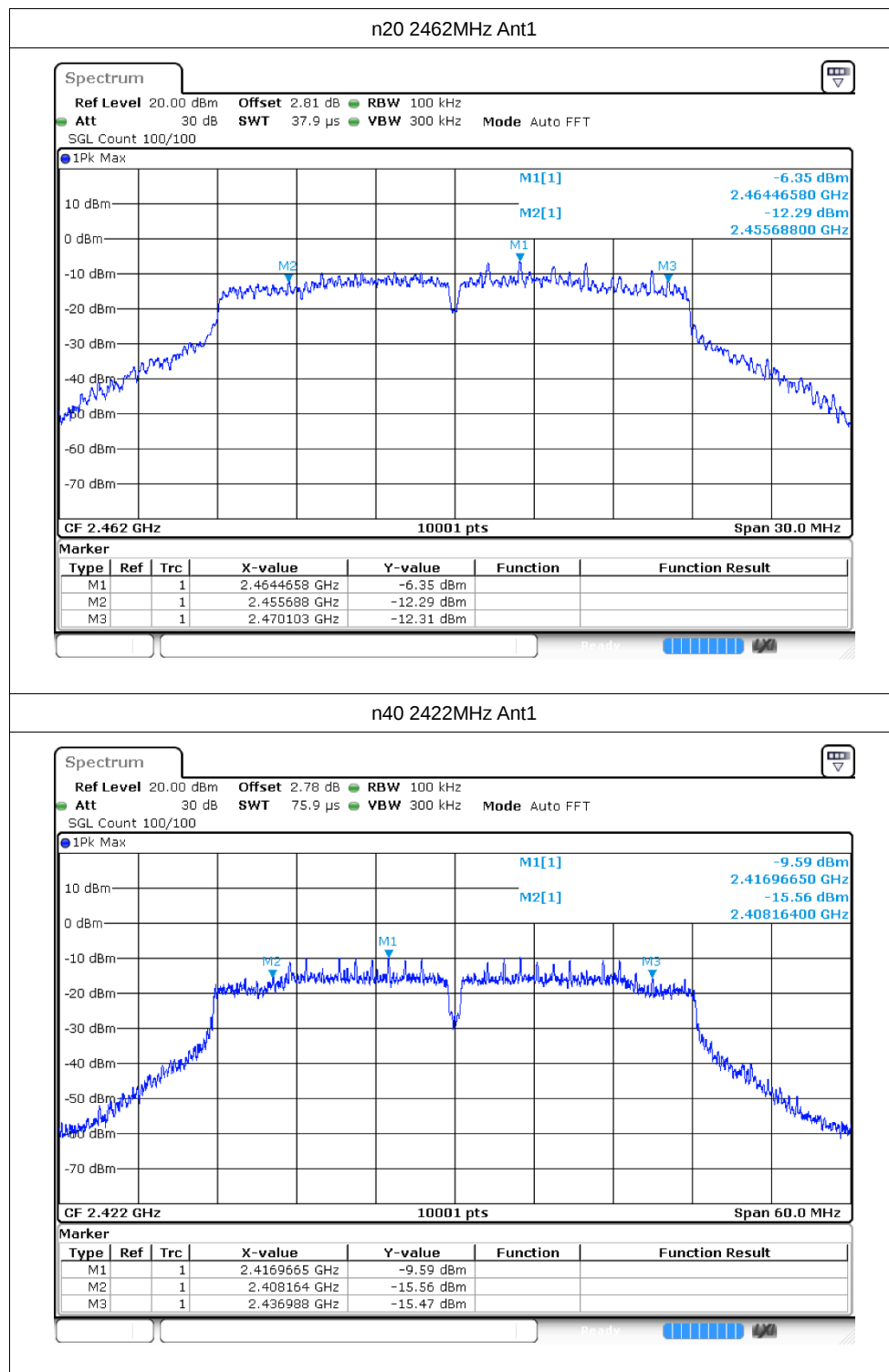
3 -6dB Bandwidth

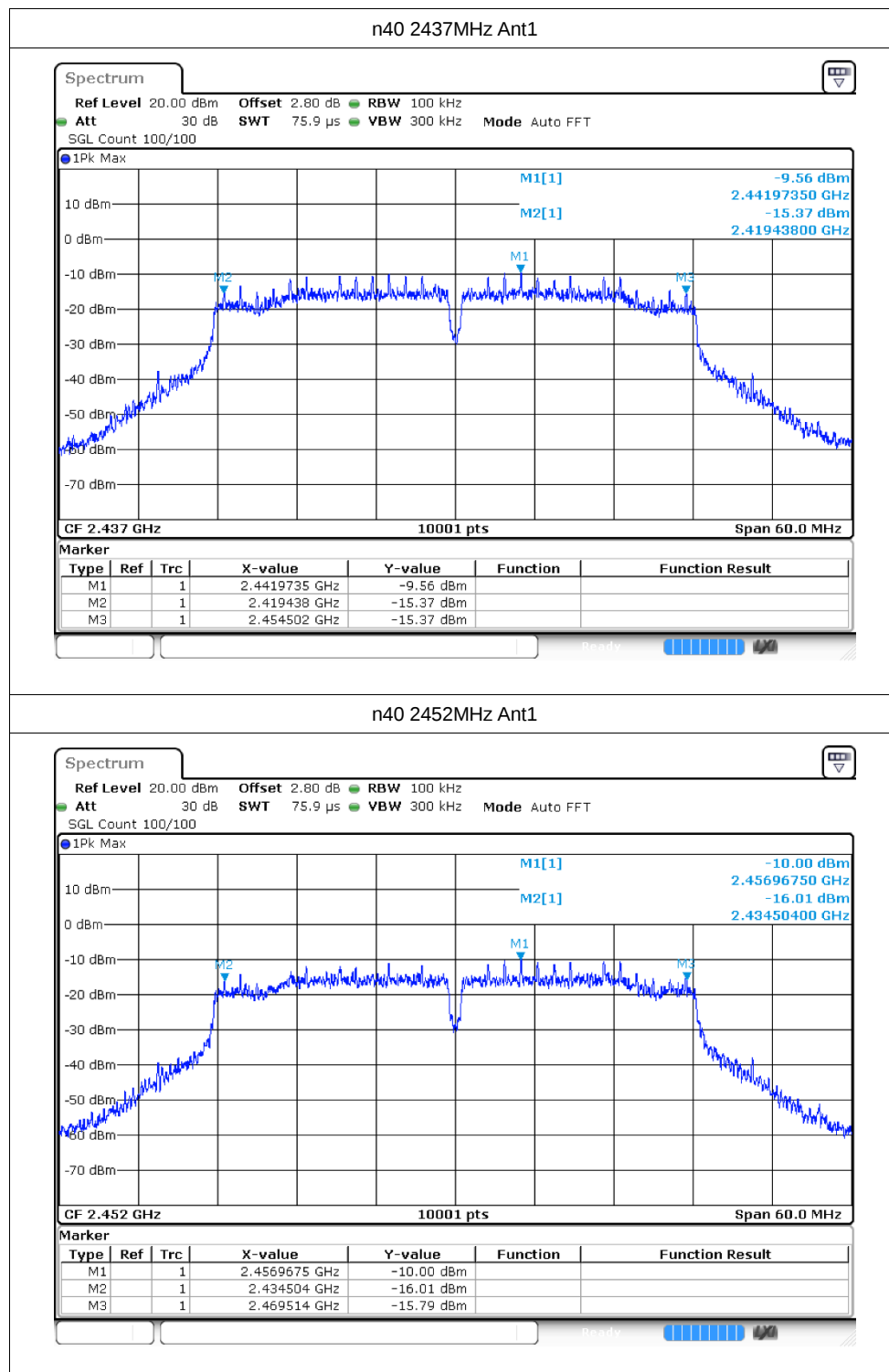
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
n20	2412	Ant1	15.072	0.5	Pass
n20	2437	Ant1	15.096	0.5	Pass
n20	2462	Ant1	14.415	0.5	Pass
n40	2422	Ant1	28.824	0.5	Pass
n40	2437	Ant1	35.064	0.5	Pass
n40	2452	Ant1	35.01	0.5	Pass
ax20	2412	Ant1	15.117	0.5	Pass
ax20	2437	Ant1	15.09	0.5	Pass
ax20	2462	Ant1	16.389	0.5	Pass
ax40	2422	Ant1	35.082	0.5	Pass
ax40	2437	Ant1	31.32	0.5	Pass
ax40	2452	Ant1	35.07	0.5	Pass
n20	2412	Ant2	12.645	0.5	Pass
n20	2437	Ant2	12.582	0.5	Pass
n20	2462	Ant2	15.111	0.5	Pass
n40	2422	Ant2	28.83	0.5	Pass
n40	2437	Ant2	30.69	0.5	Pass
n40	2452	Ant2	35.064	0.5	Pass
ax20	2412	Ant2	15.153	0.5	Pass
ax20	2437	Ant2	15.132	0.5	Pass
ax20	2462	Ant2	15.12	0.5	Pass
ax40	2422	Ant2	31.332	0.5	Pass
ax40	2437	Ant2	35.088	0.5	Pass
ax40	2452	Ant2	35.076	0.5	Pass

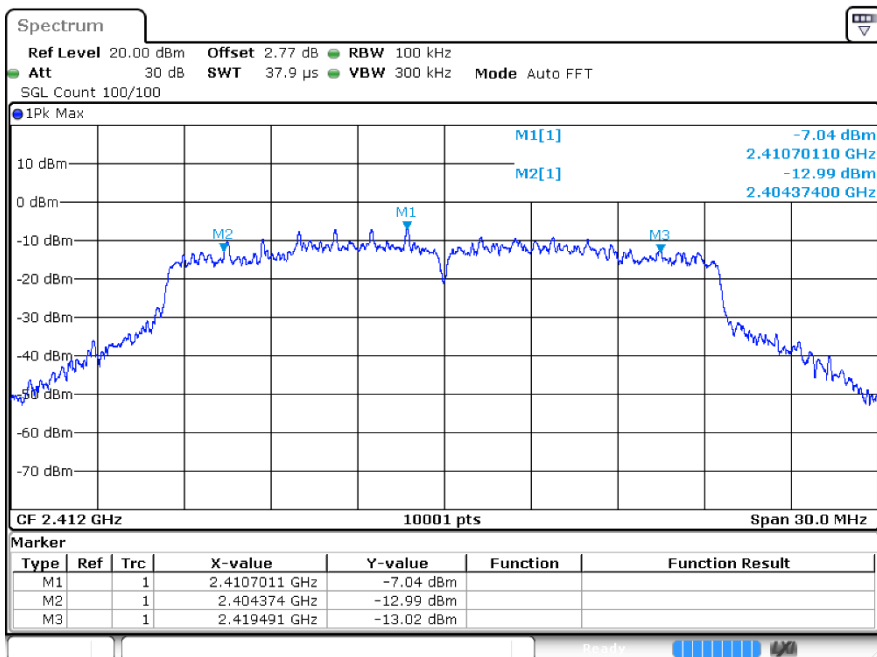
3.2 Test Graphs



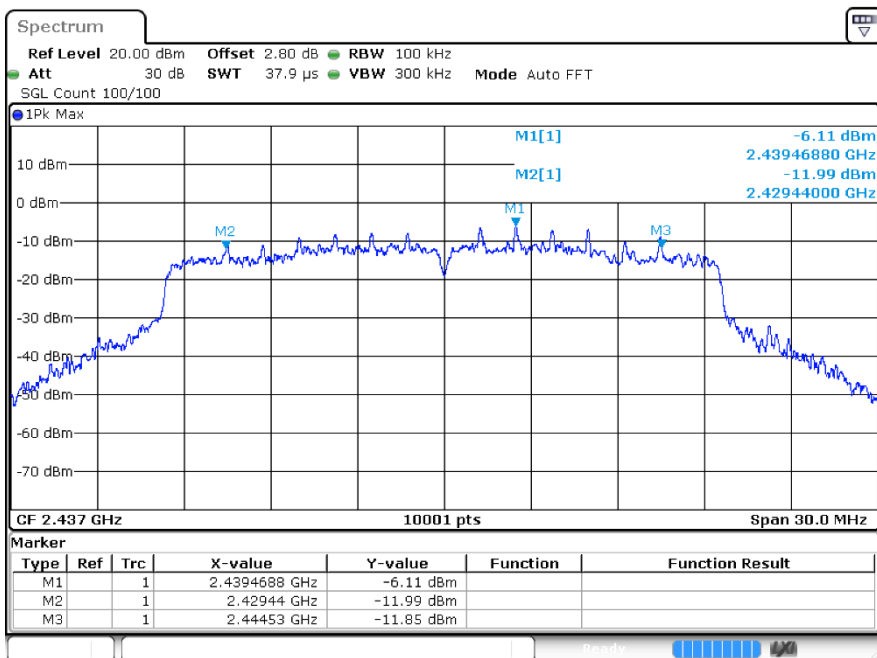


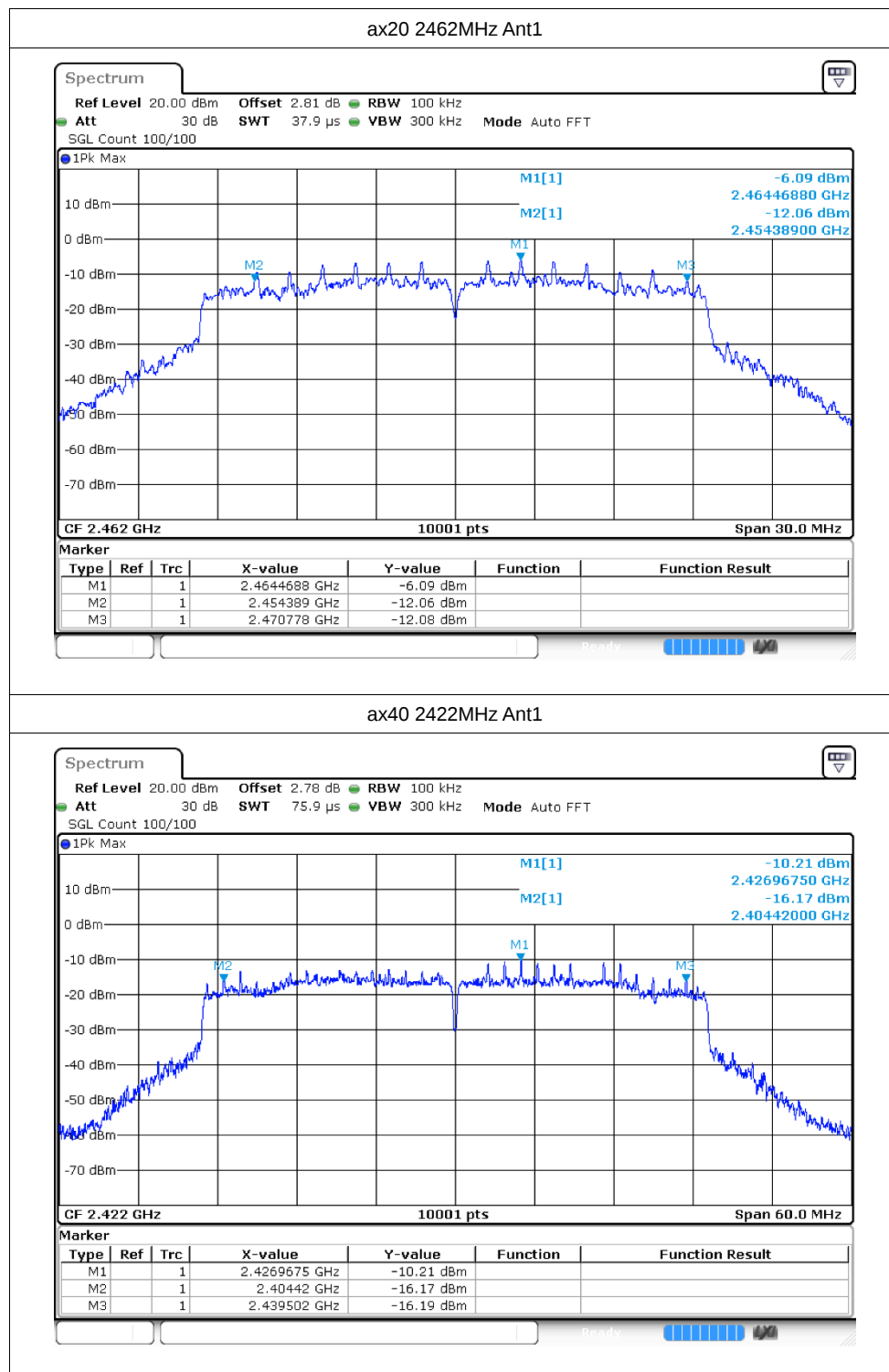


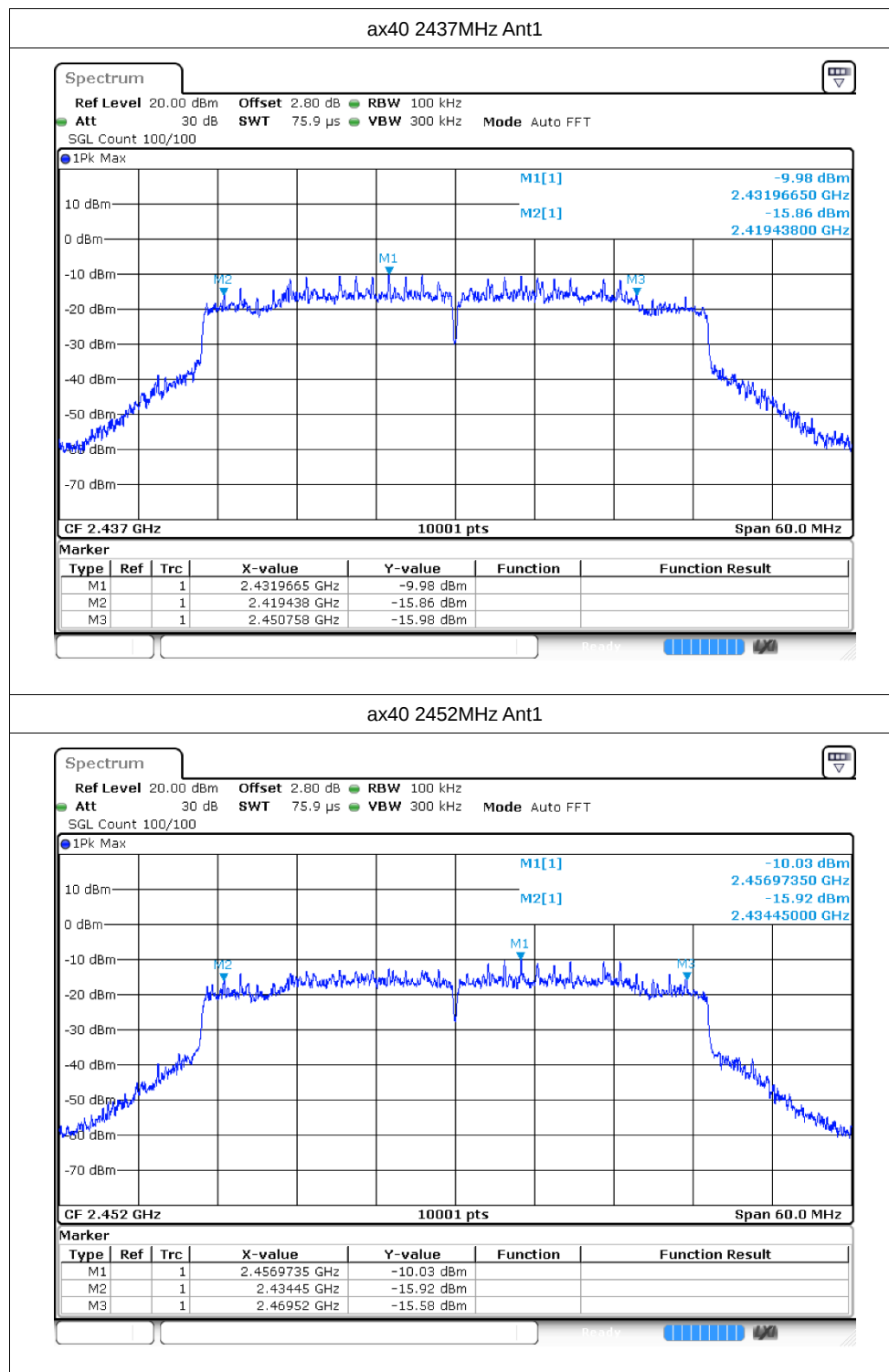
ax20 2412MHz Ant1

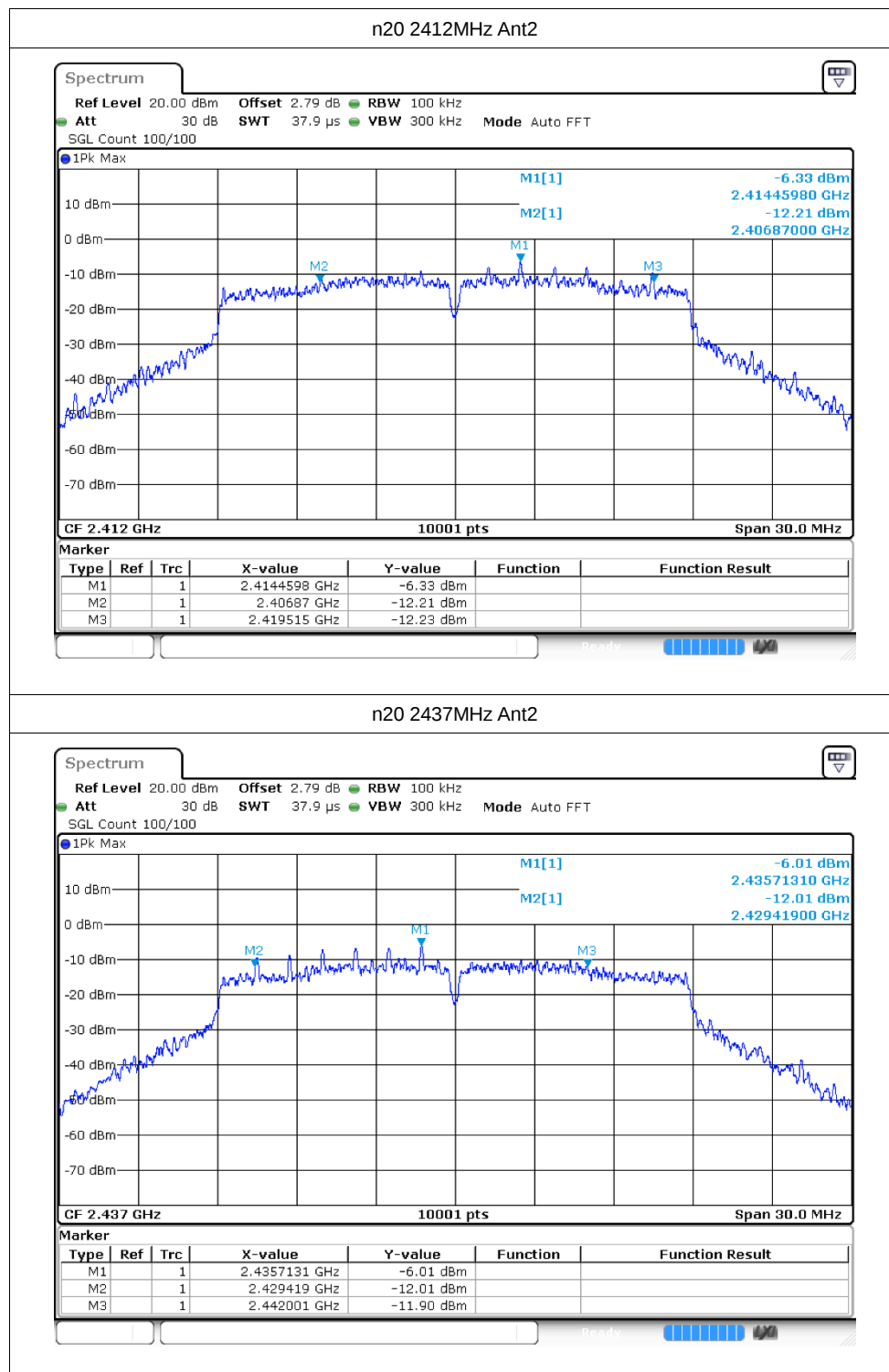


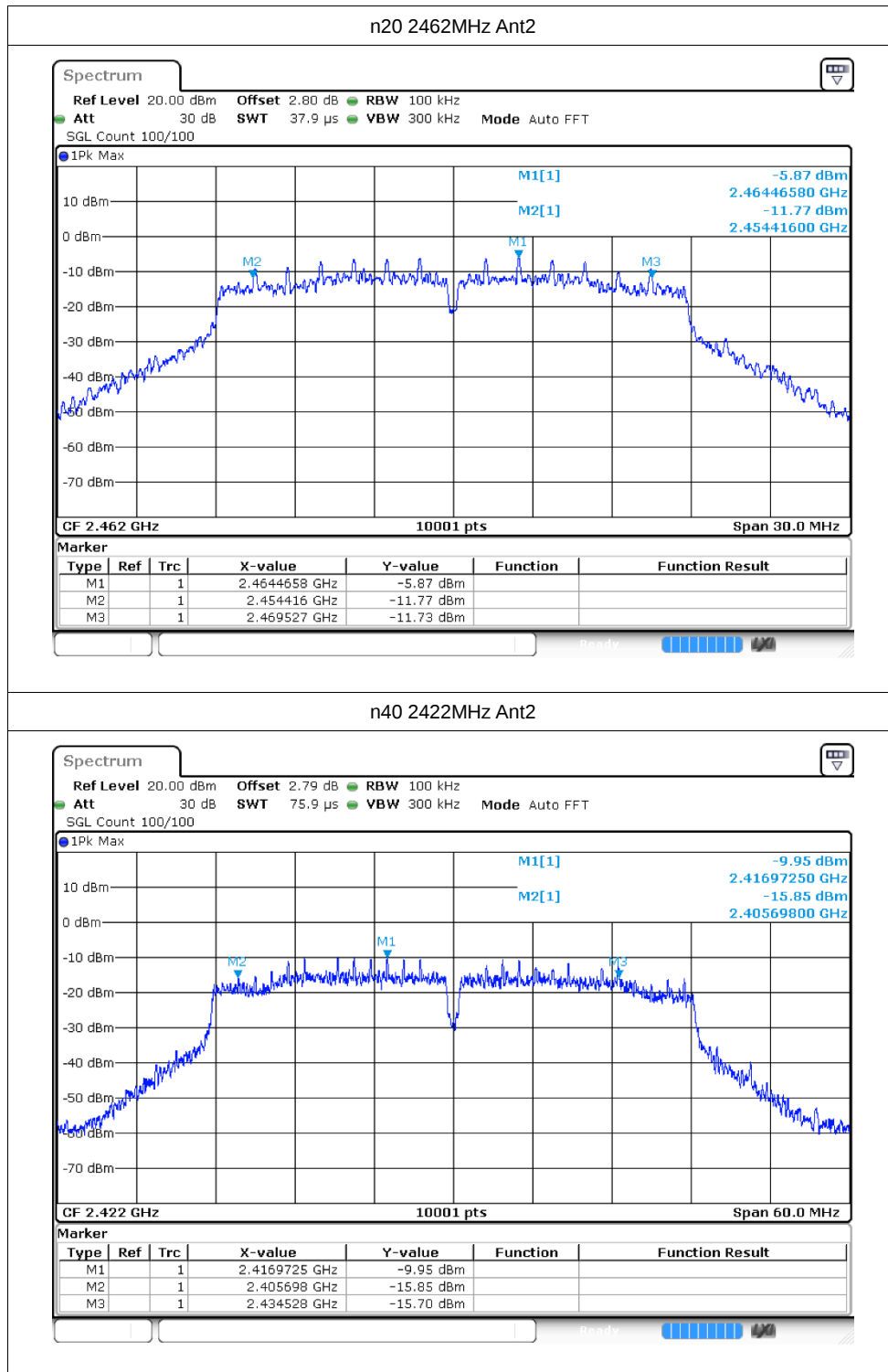
ax20 2437MHz Ant1

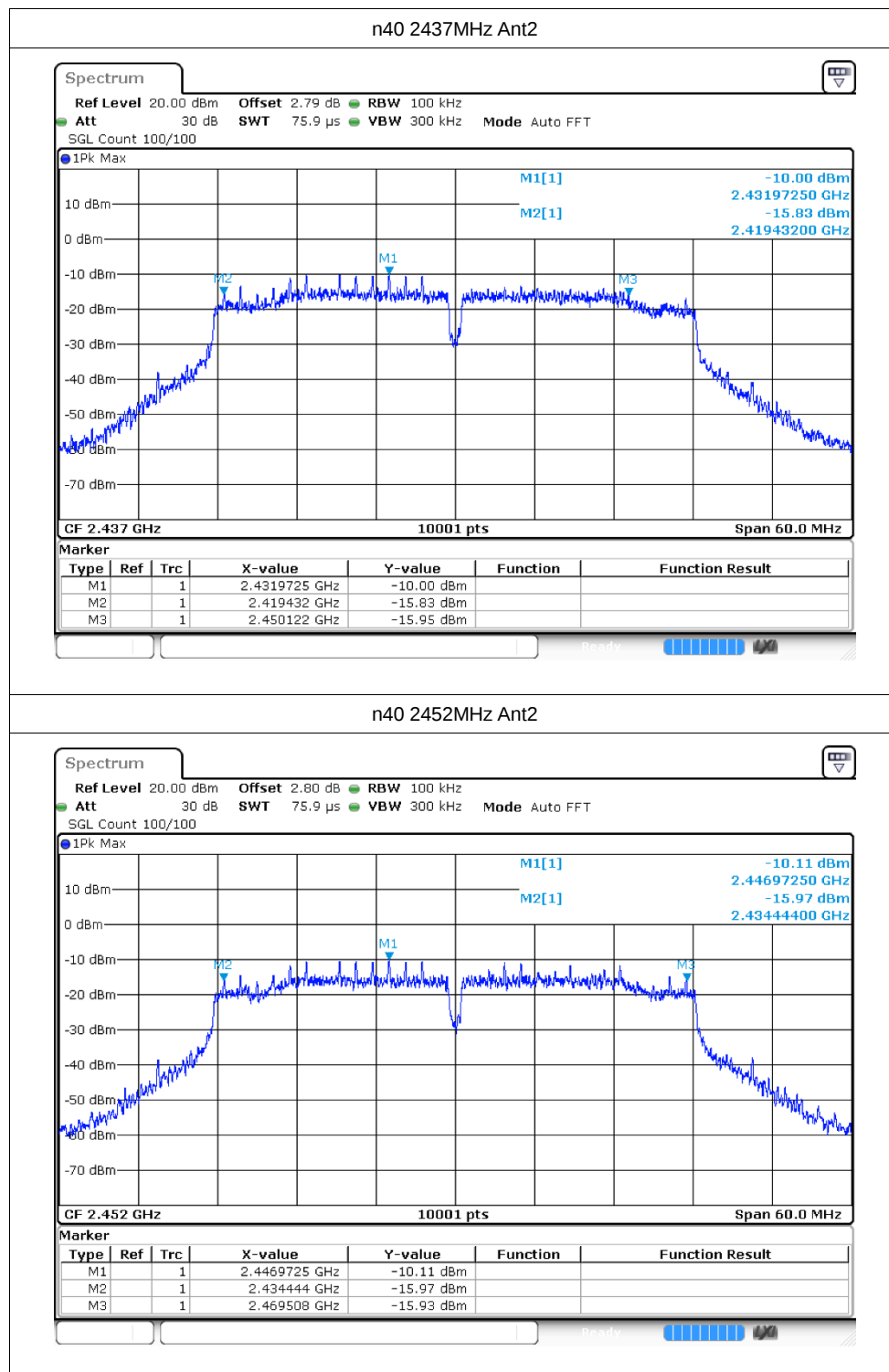




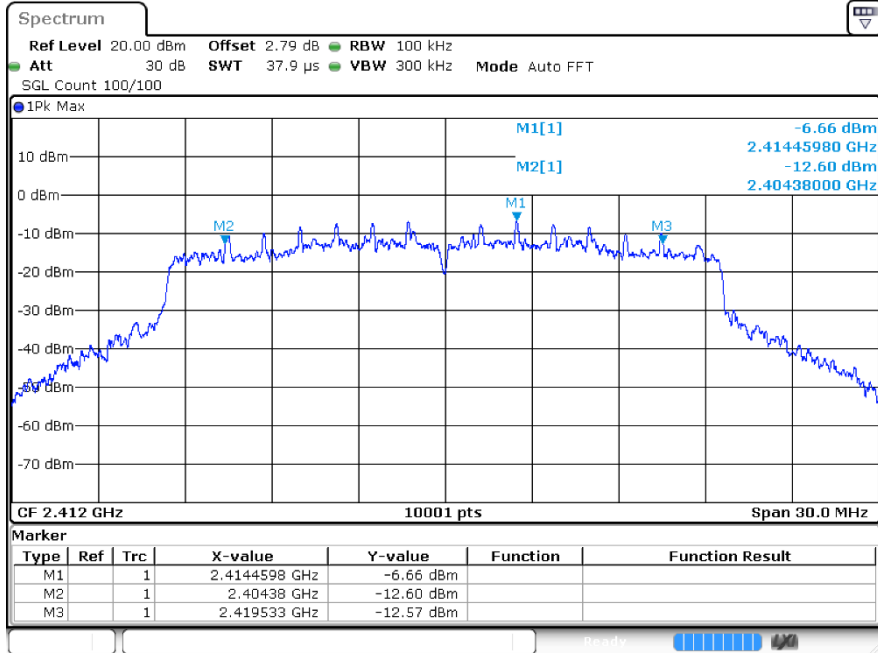




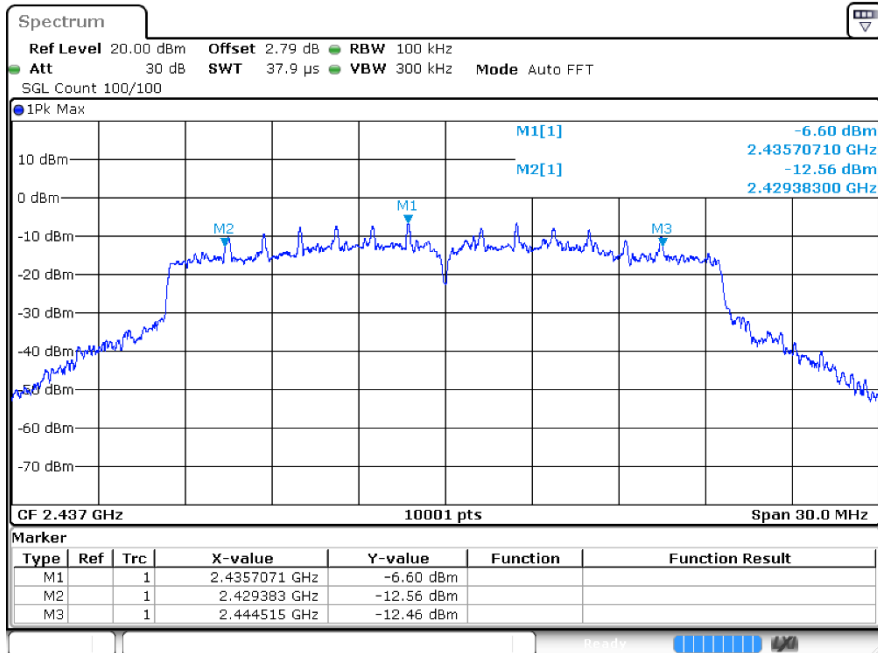


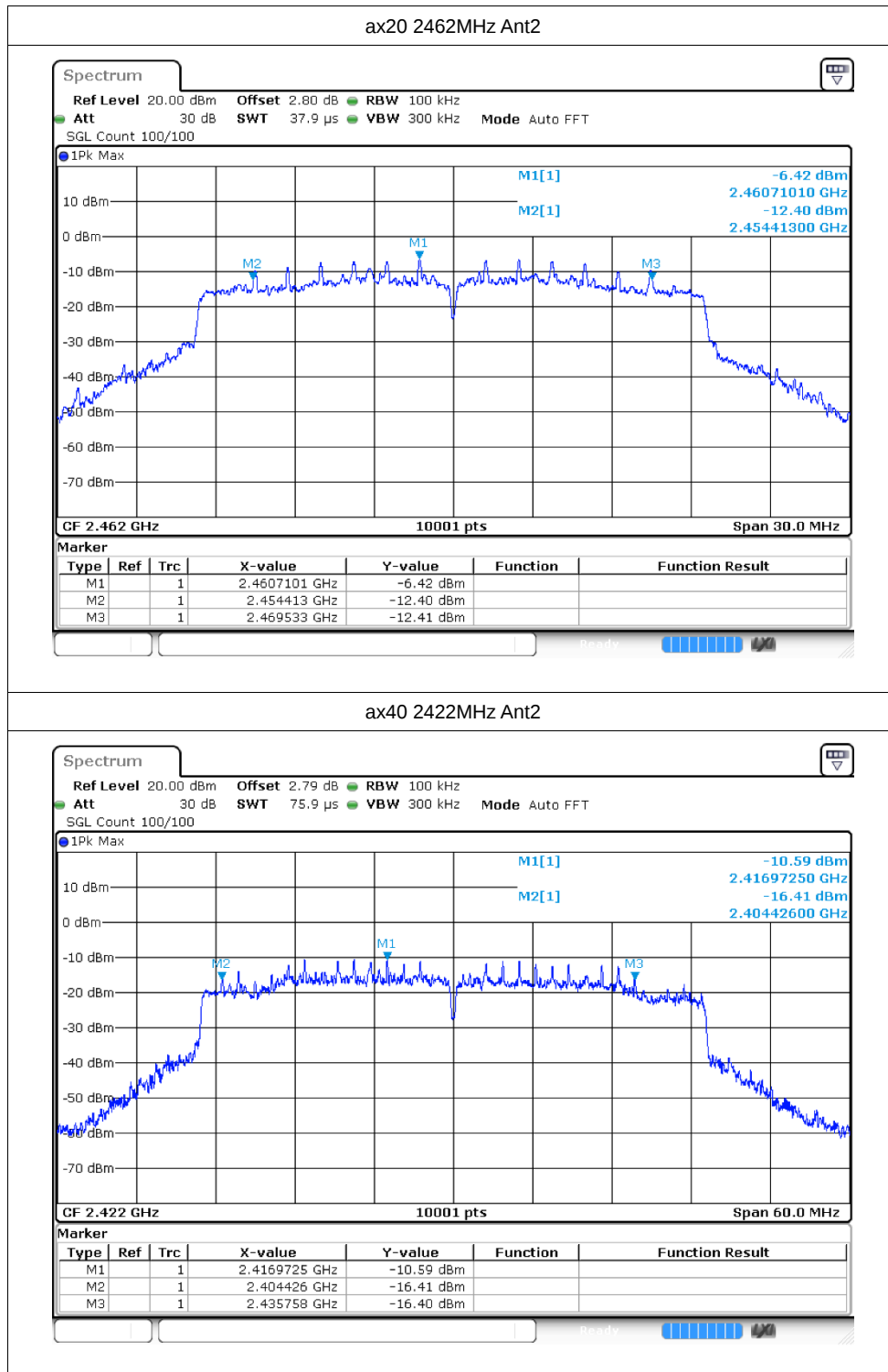


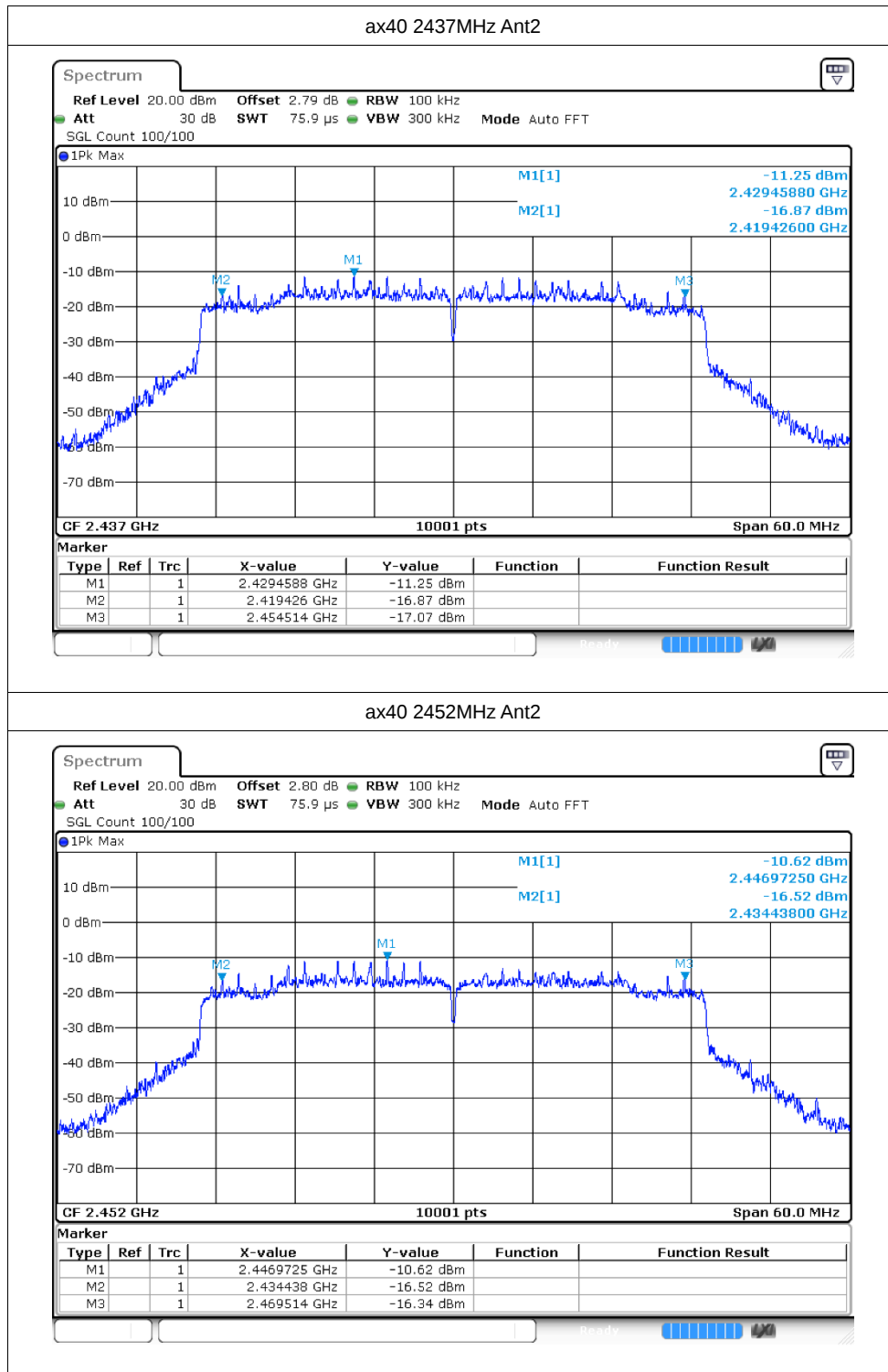
ax20 2412MHz Ant2



ax20 2437MHz Ant2







4 Maximum Power Spectral Density Level

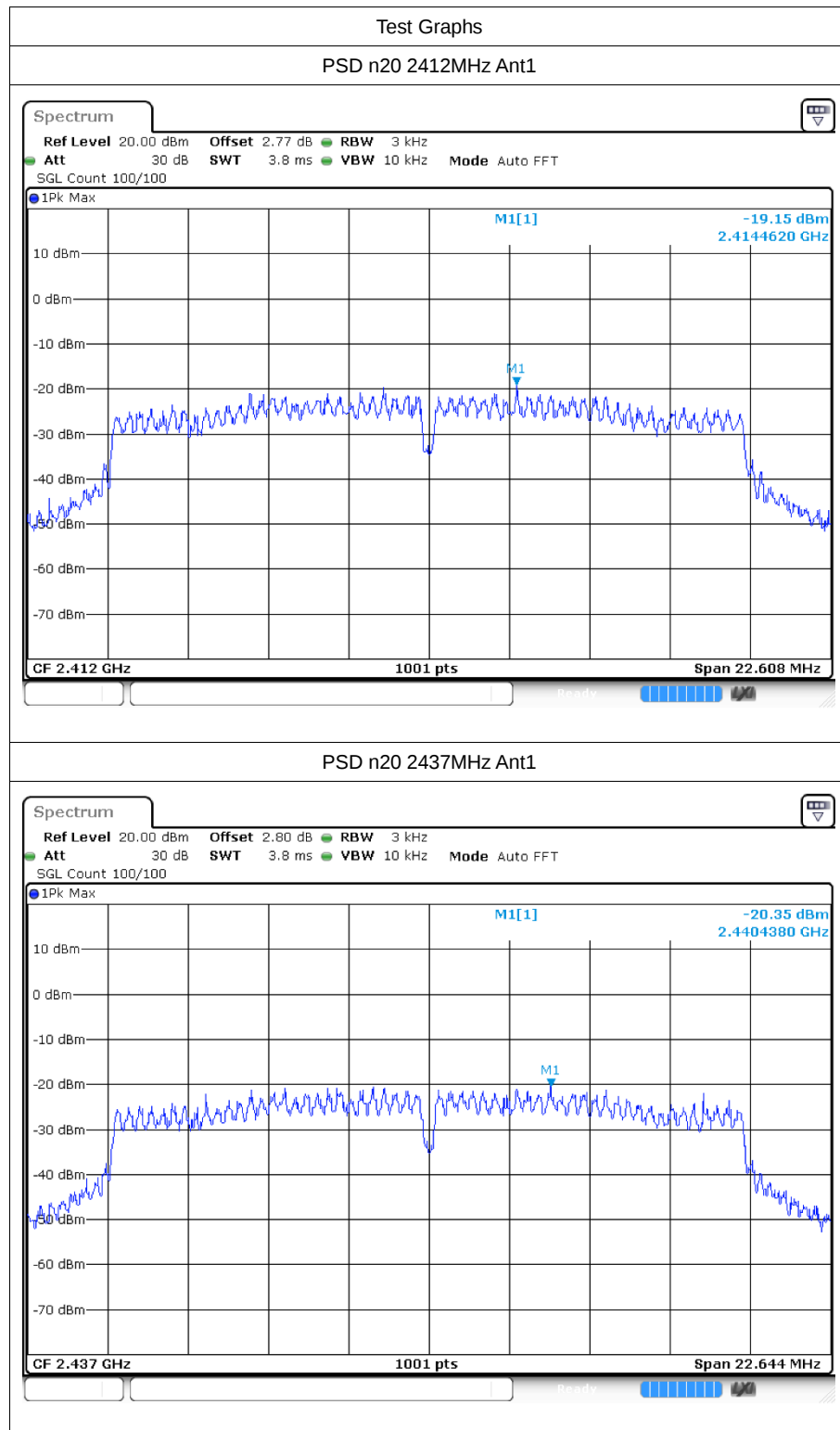
4.1 Test Result

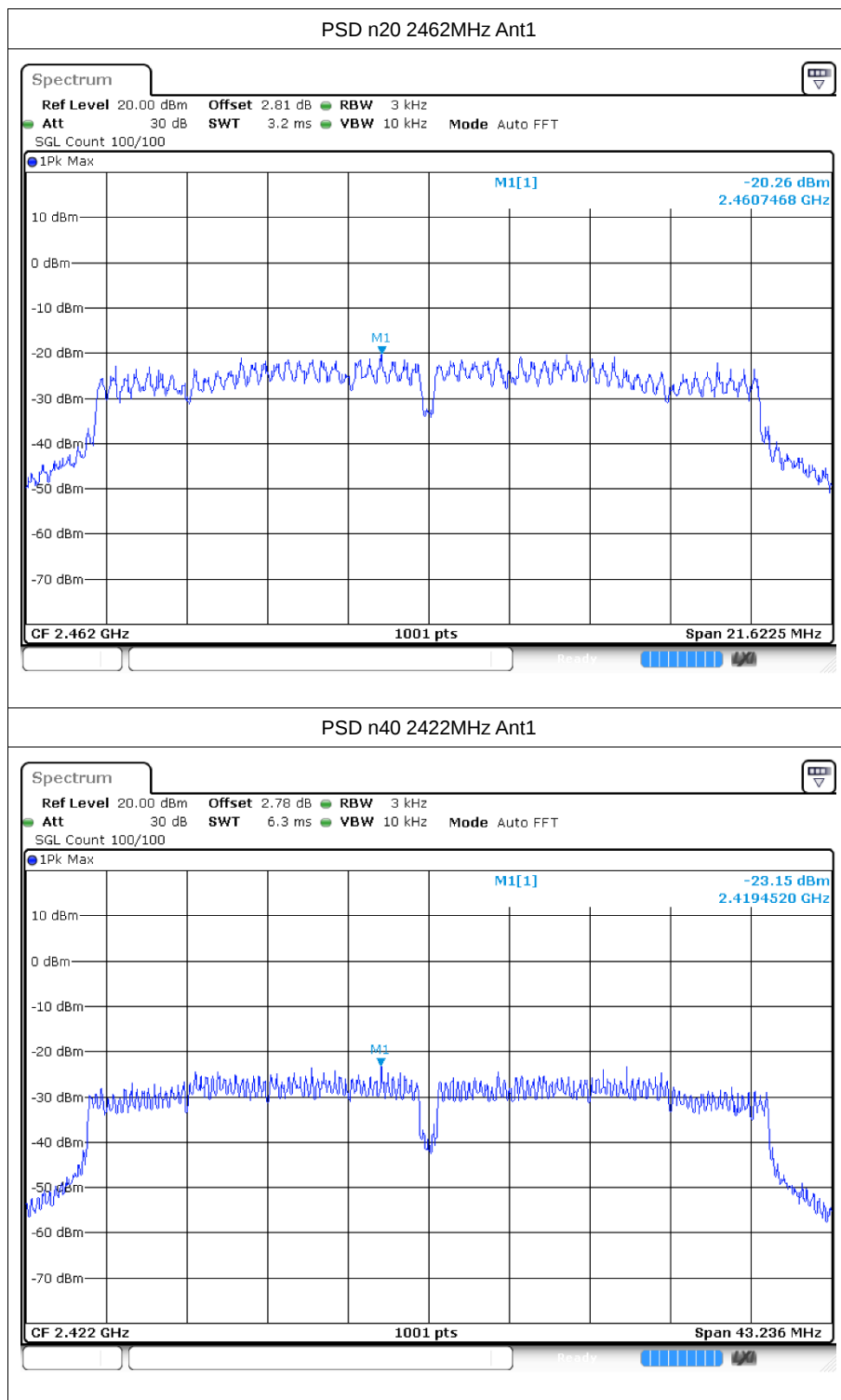
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
n20	2412	Ant1	-19.15	≤8	Pass
n20	2437	Ant1	-20.35	≤8	Pass
n20	2462	Ant1	-20.26	≤8	Pass
n40	2422	Ant1	-23.15	≤8	Pass
n40	2437	Ant1	-23.31	≤8	Pass
n40	2452	Ant1	-23.3	≤8	Pass
ax20	2412	Ant1	-5.99	≤8	Pass
ax20	2437	Ant1	-5.82	≤8	Pass
ax20	2462	Ant1	-6.93	≤8	Pass
ax40	2422	Ant1	-9.94	≤8	Pass
ax40	2437	Ant1	-10.79	≤8	Pass
ax40	2452	Ant1	-10.33	≤8	Pass
n20	2412	Ant2	-19.85	≤8	Pass
n20	2437	Ant2	-20.17	≤8	Pass
n20	2462	Ant2	-19.97	≤8	Pass
n40	2422	Ant2	-24.44	≤8	Pass
n40	2437	Ant2	-24.19	≤8	Pass
n40	2452	Ant2	-25.03	≤8	Pass
ax20	2412	Ant2	-6.67	≤8	Pass
ax20	2437	Ant2	-6.22	≤8	Pass
ax20	2462	Ant2	-6.86	≤8	Pass
ax40	2422	Ant2	-10.63	≤8	Pass
ax40	2437	Ant2	-10.63	≤8	Pass
ax40	2452	Ant2	-11.08	≤8	Pass
n20	2412	Sum	-16.48	≤8	Pass
n20	2437	Sum	-17.25	≤8	Pass
n20	2462	Sum	-17.10	≤8	Pass
n40	2422	Sum	-20.74	≤8	Pass
n40	2437	Sum	-20.72	≤8	Pass
n40	2452	Sum	-21.07	≤8	Pass
ax20	2412	Sum	-3.31	≤8	Pass
ax20	2437	Sum	-3.01	≤8	Pass
ax20	2462	Sum	-3.88	≤8	Pass

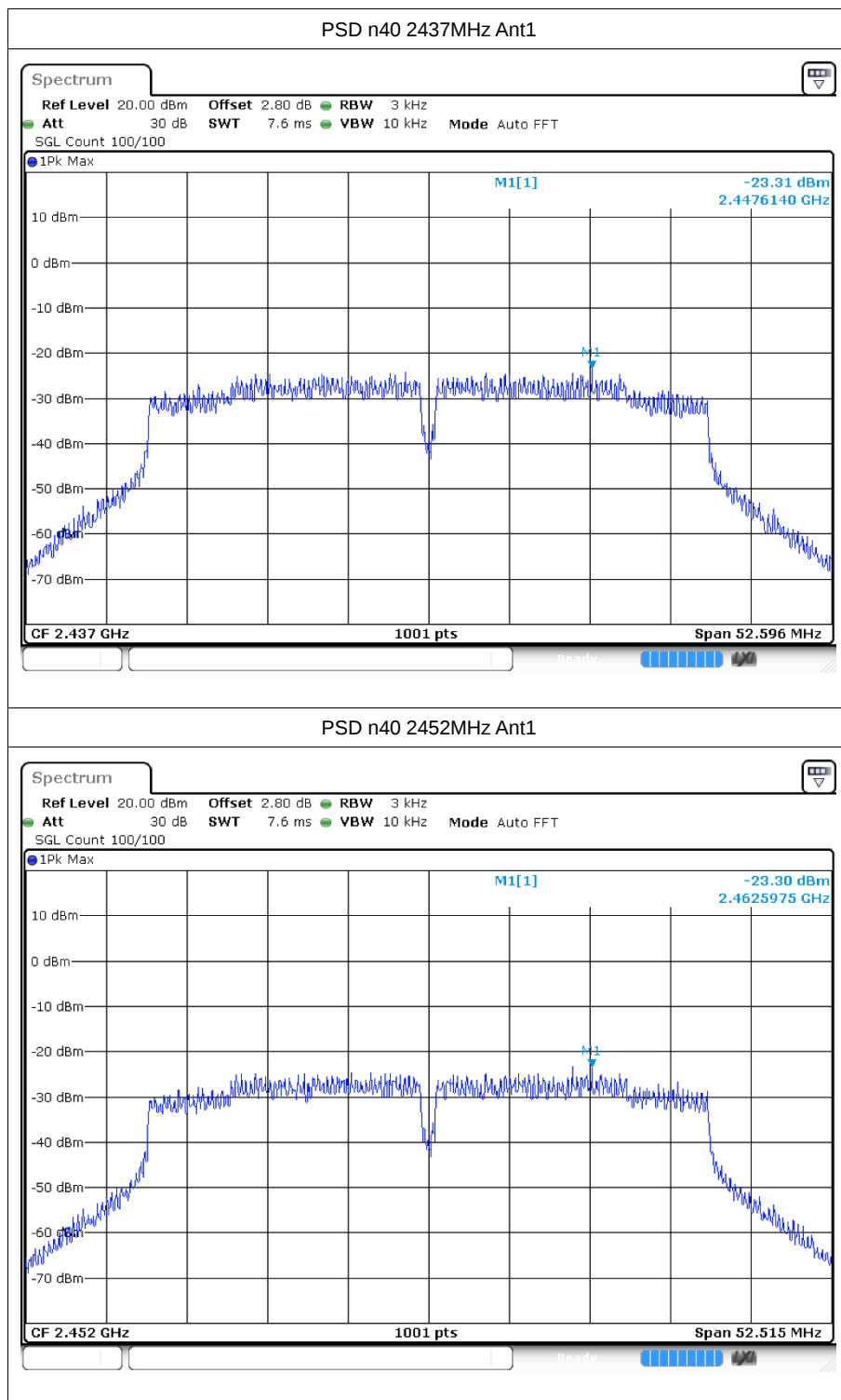


ax40	2422	Sum	-7.26	≤ 8	Pass
ax40	2437	Sum	-7.70	≤ 8	Pass
ax40	2452	Sum	-7.68	≤ 8	Pass

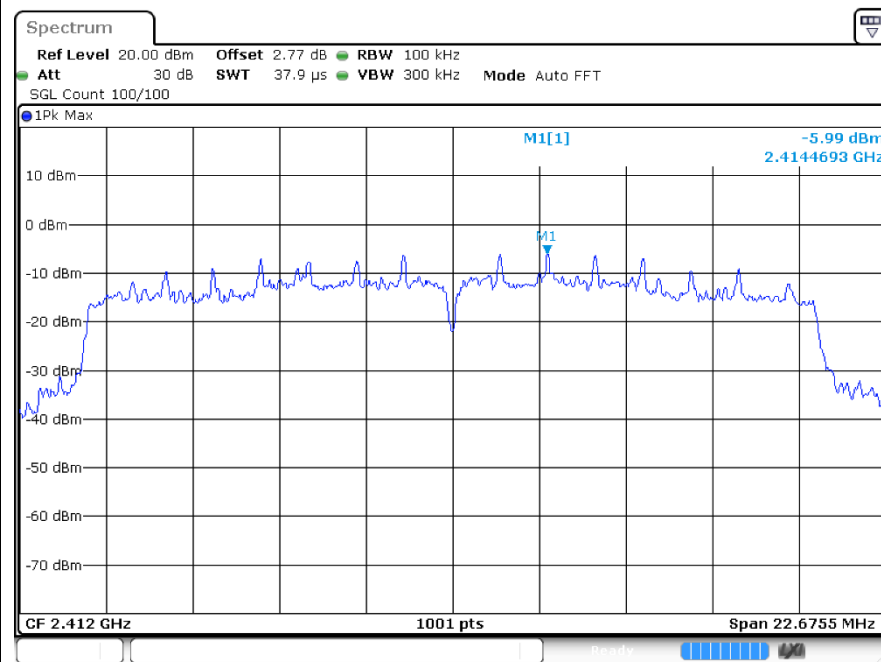
4.2 Test Graphs



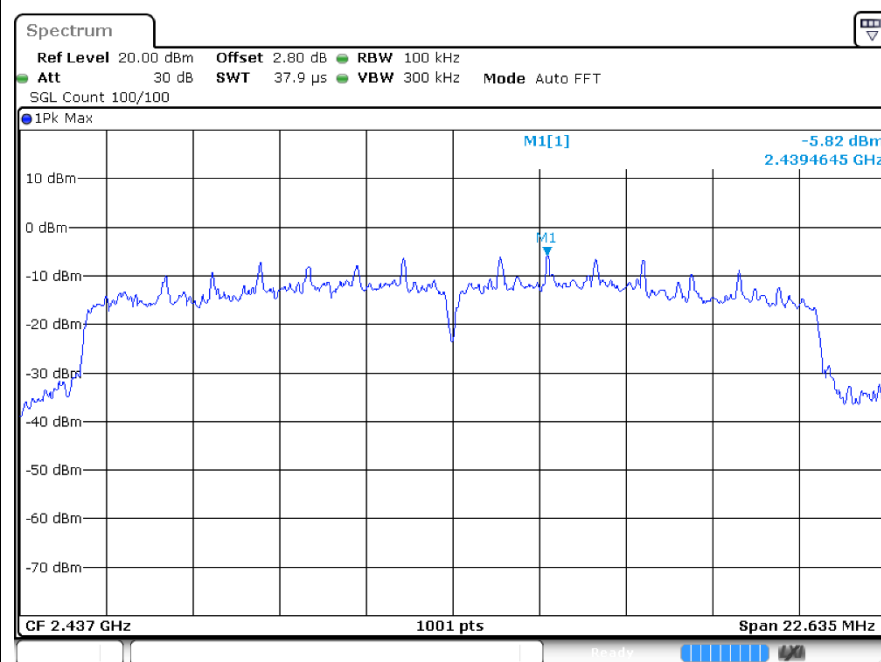


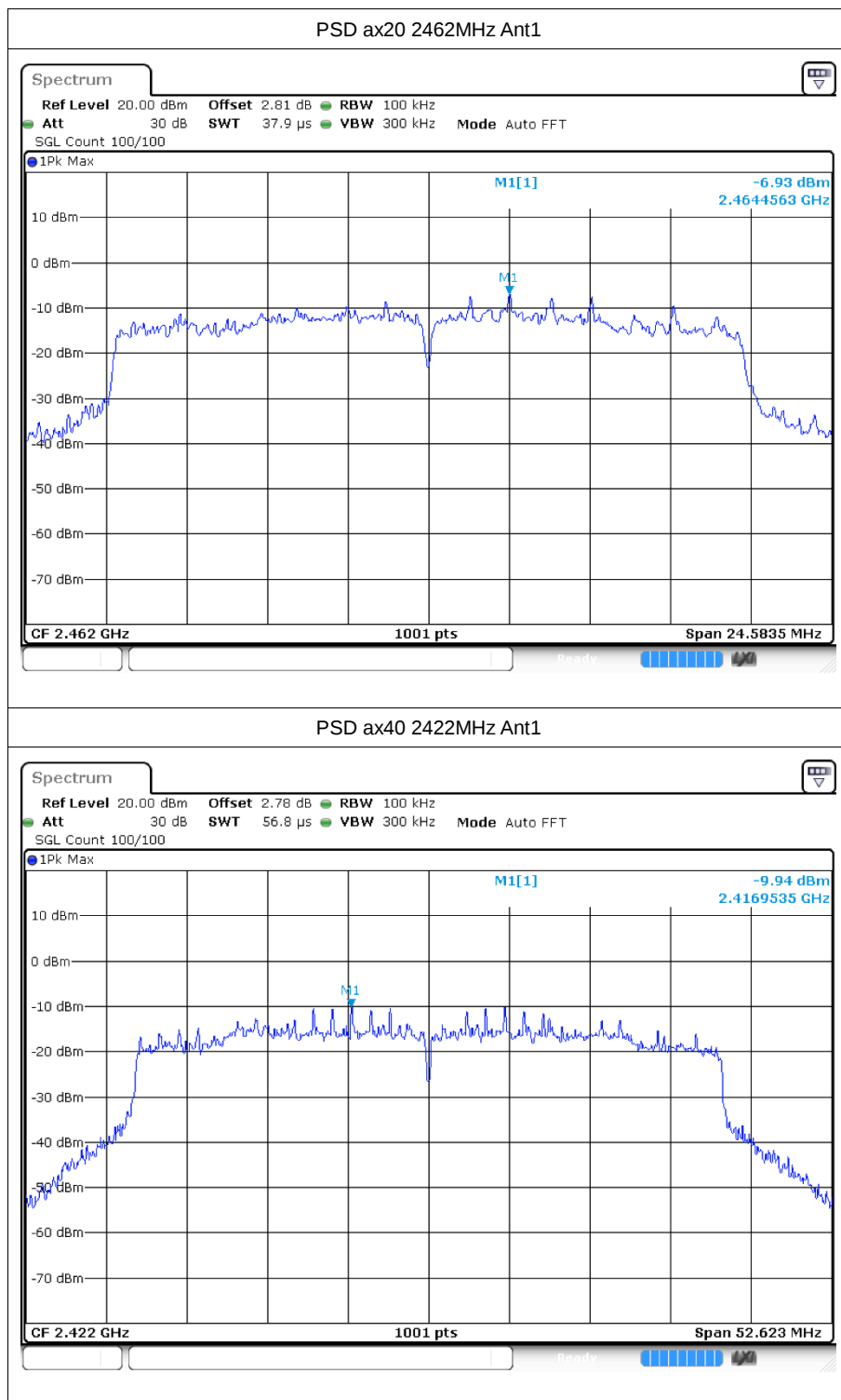


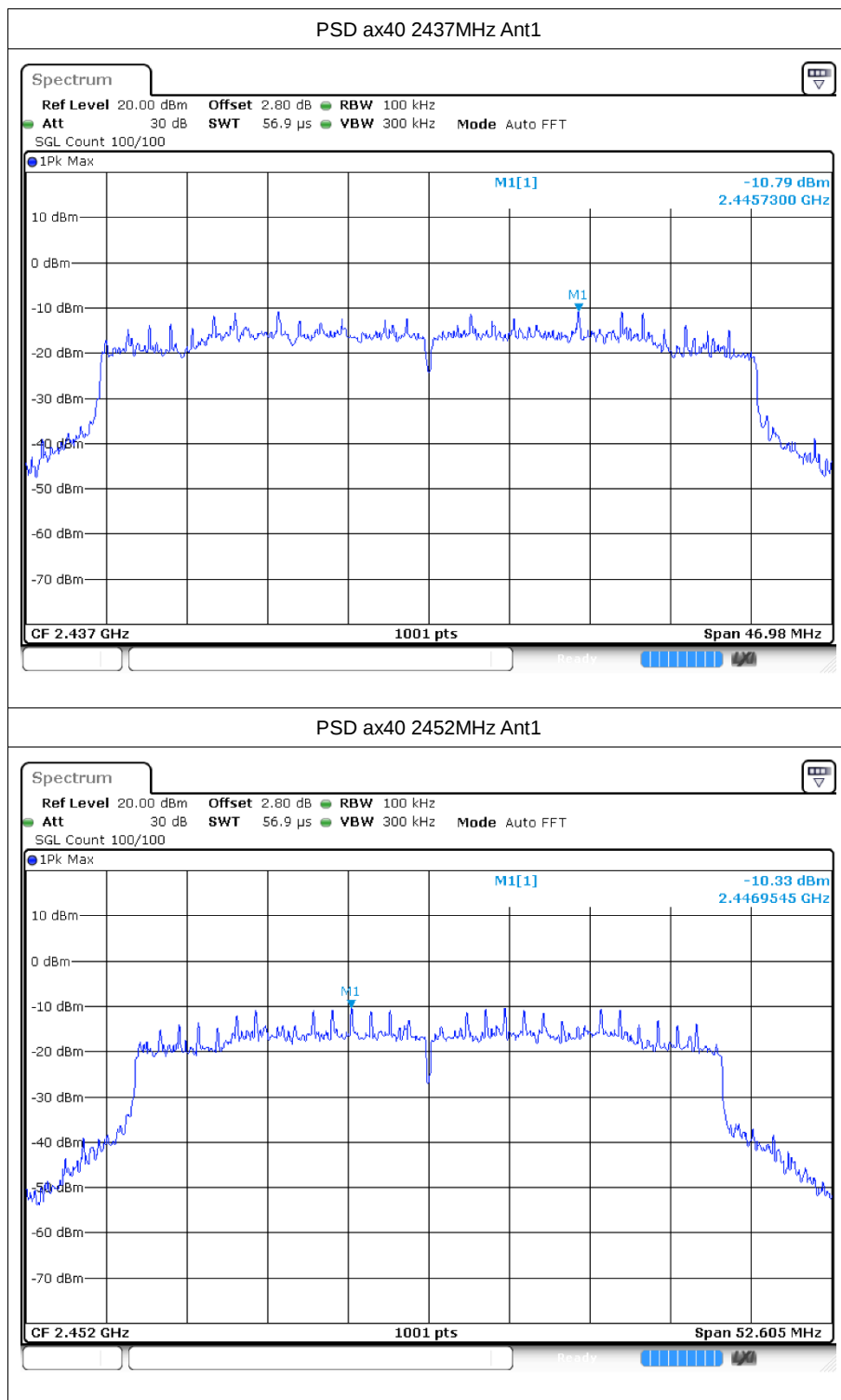
PSD ax20 2412MHz Ant1

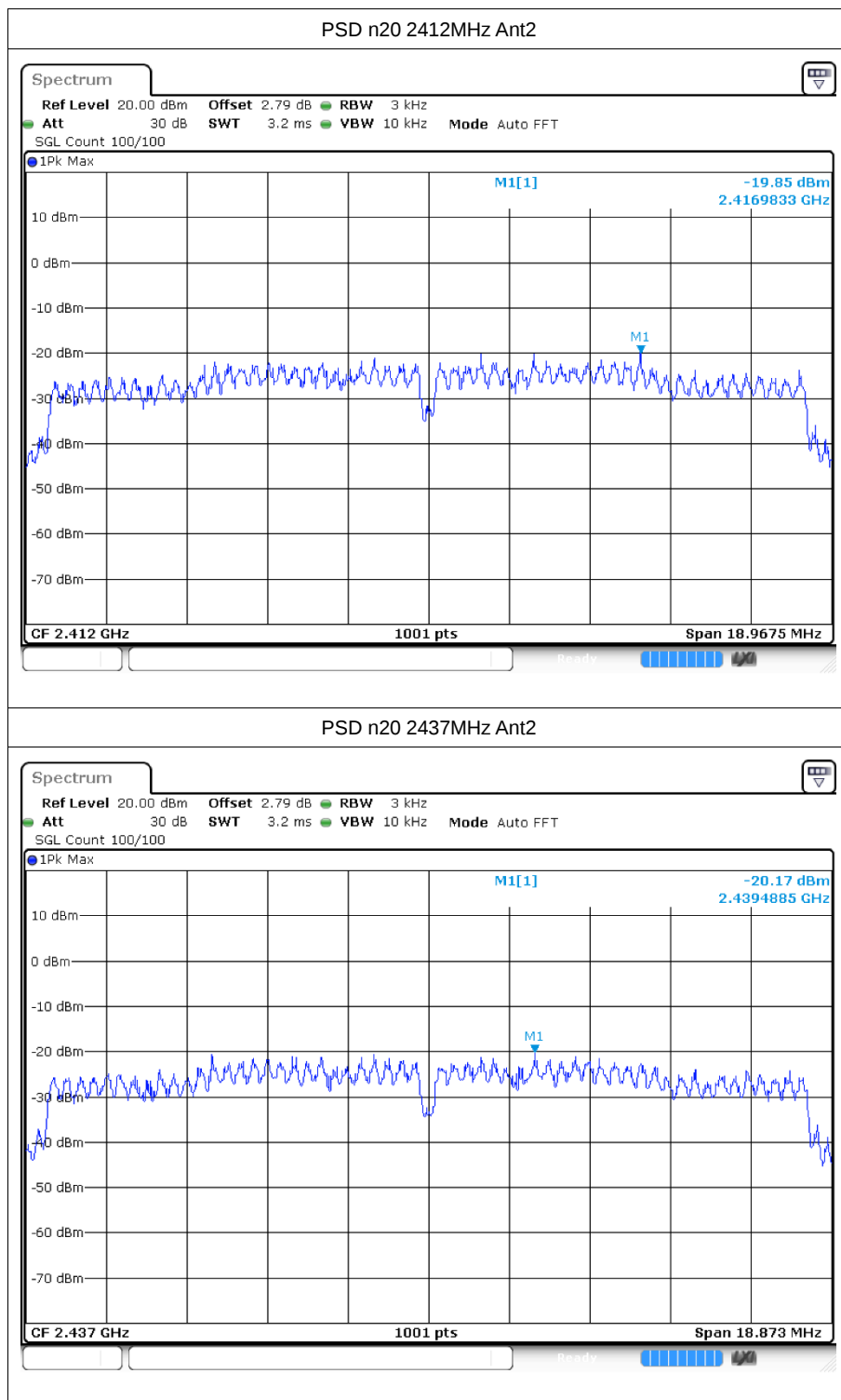


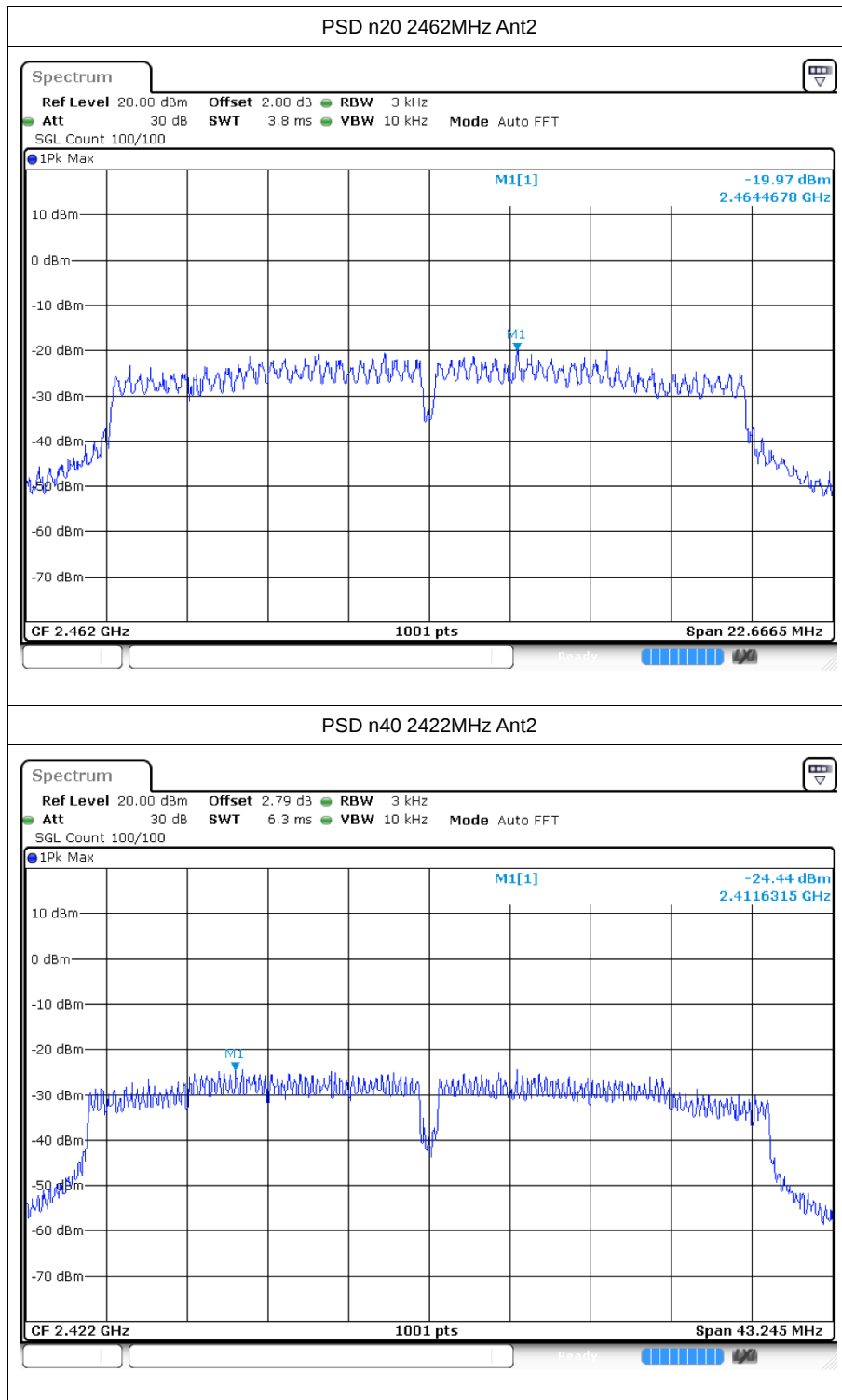
PSD ax20 2437MHz Ant1

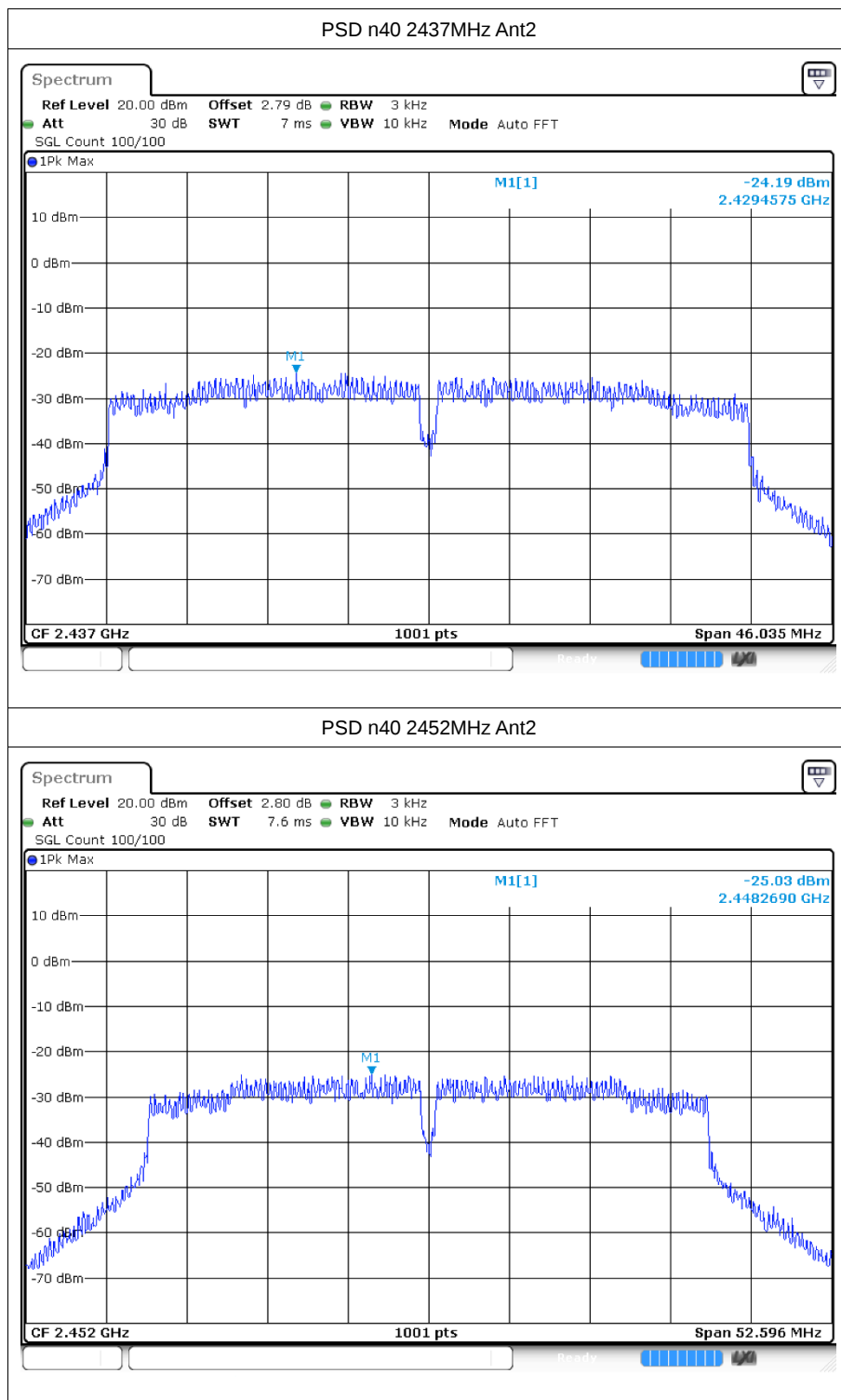




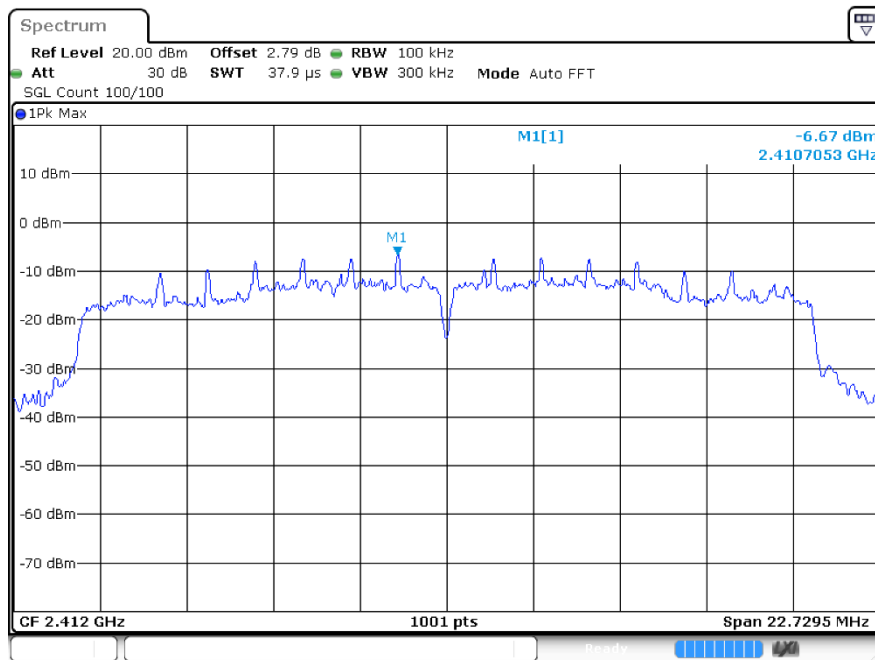




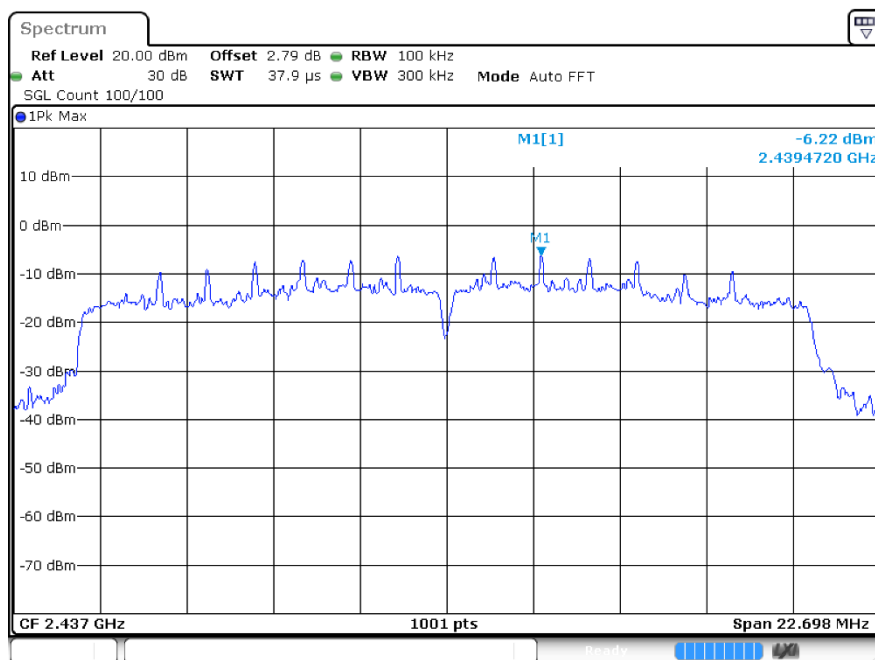


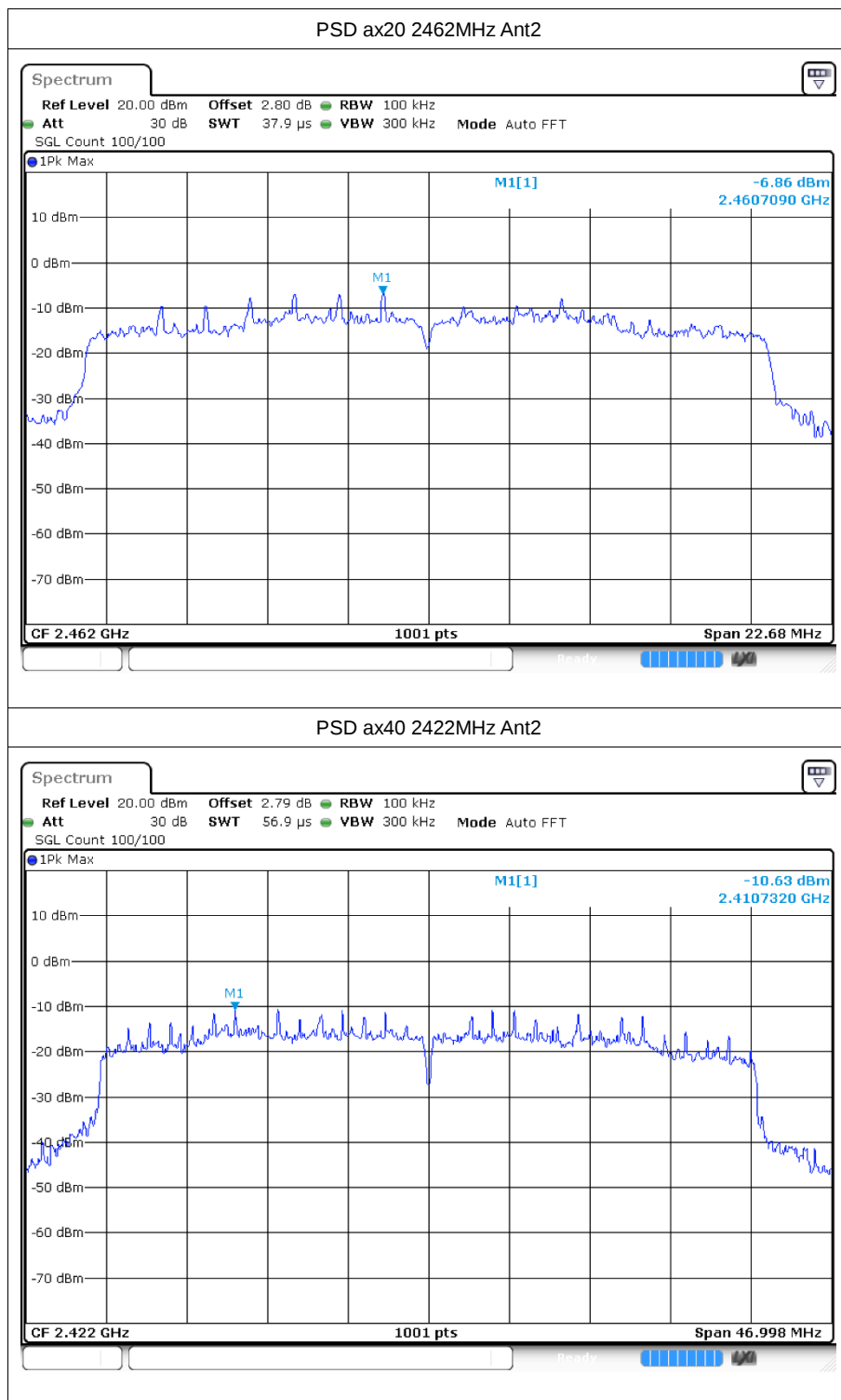


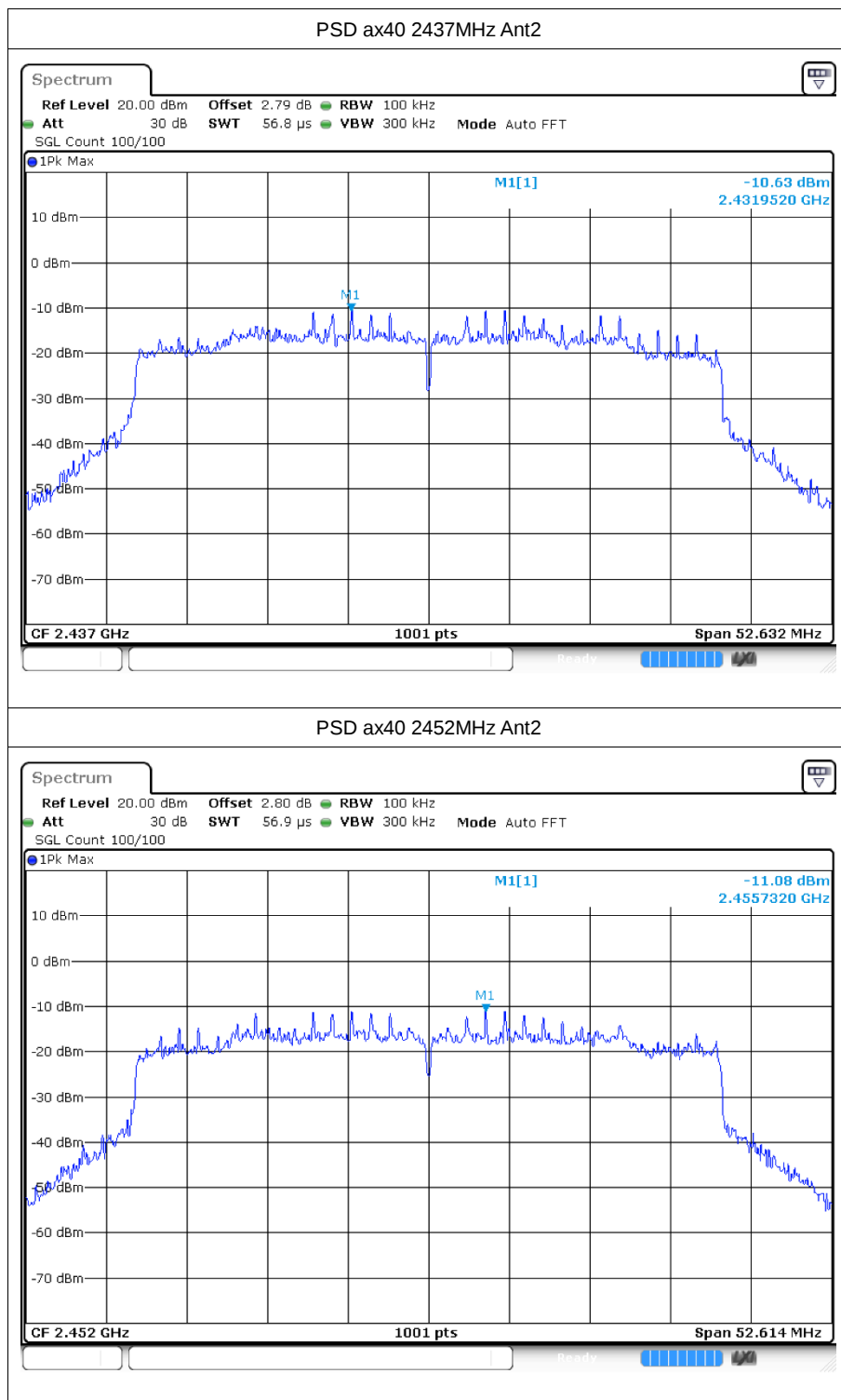
PSD ax20 2412MHz Ant2



PSD ax20 2437MHz Ant2







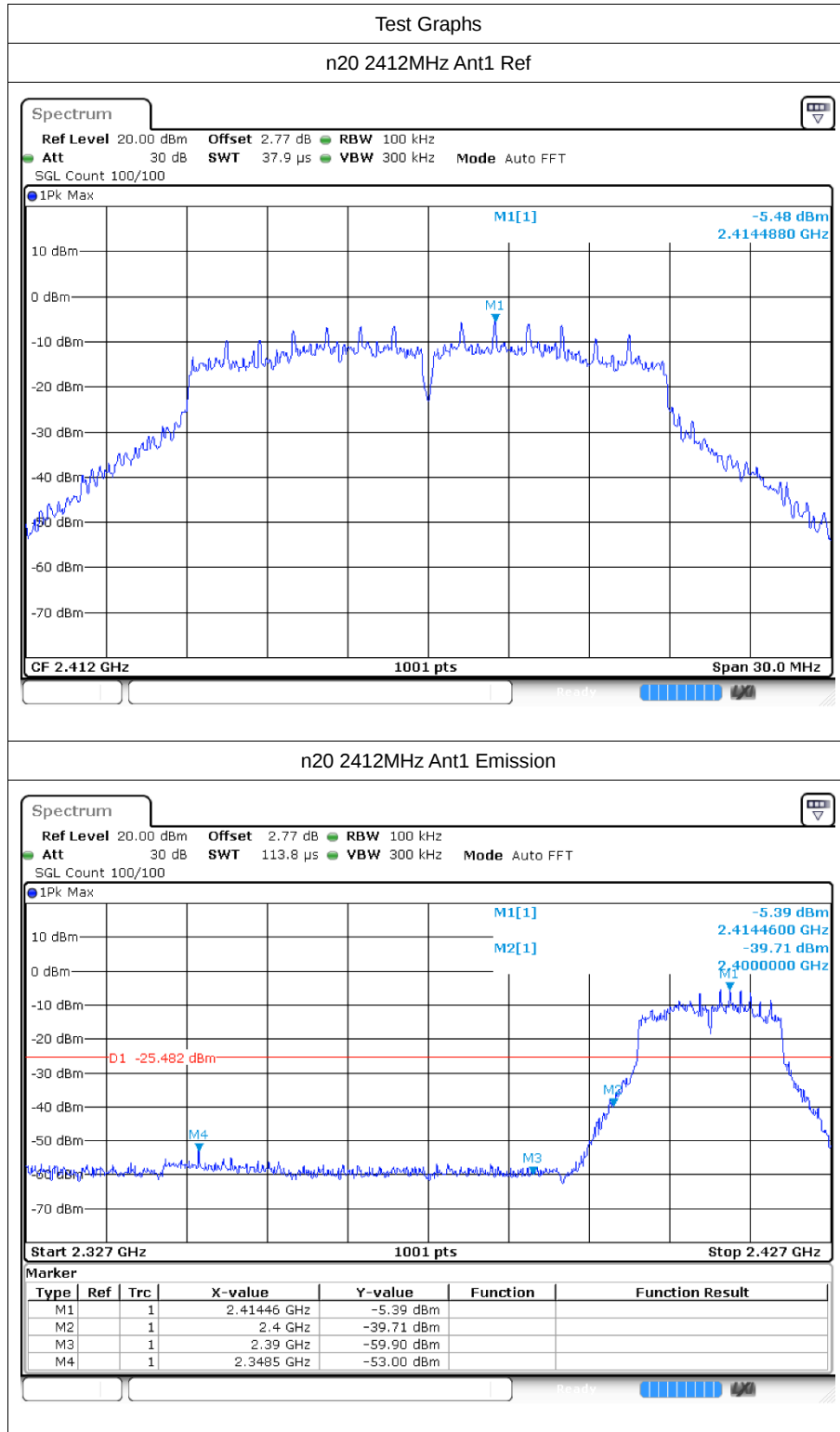


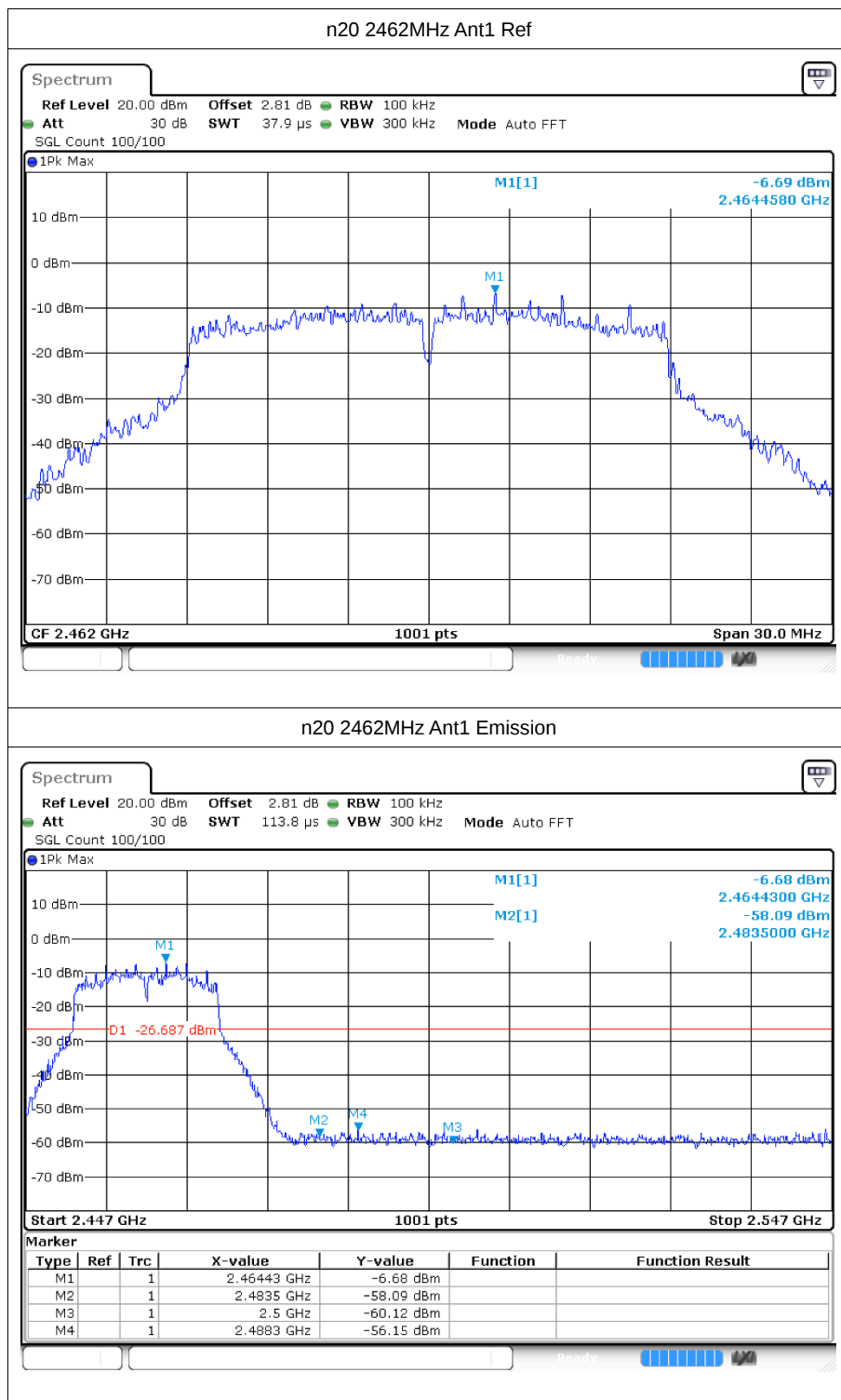
5 Band Edge

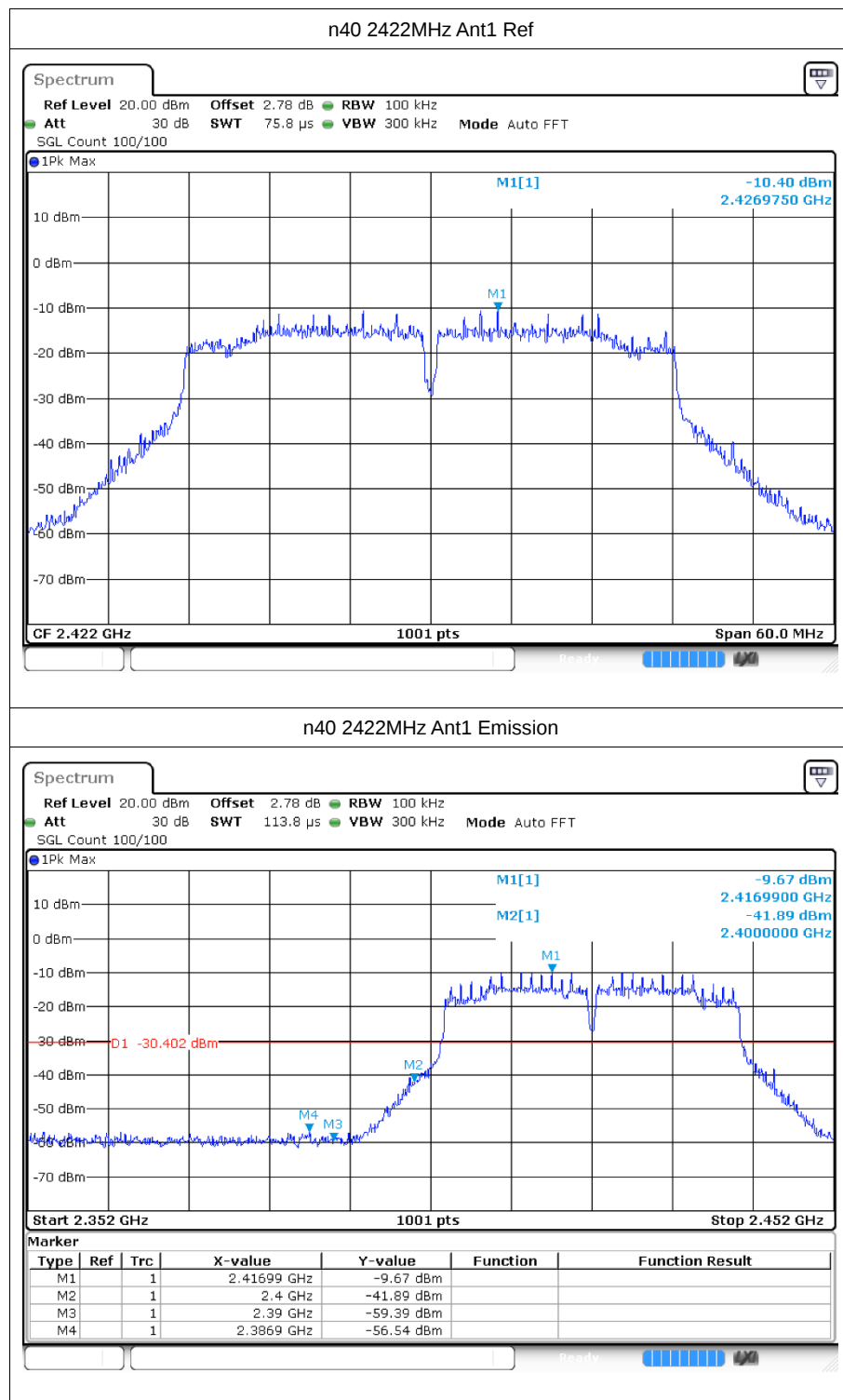
5.1 Test Result

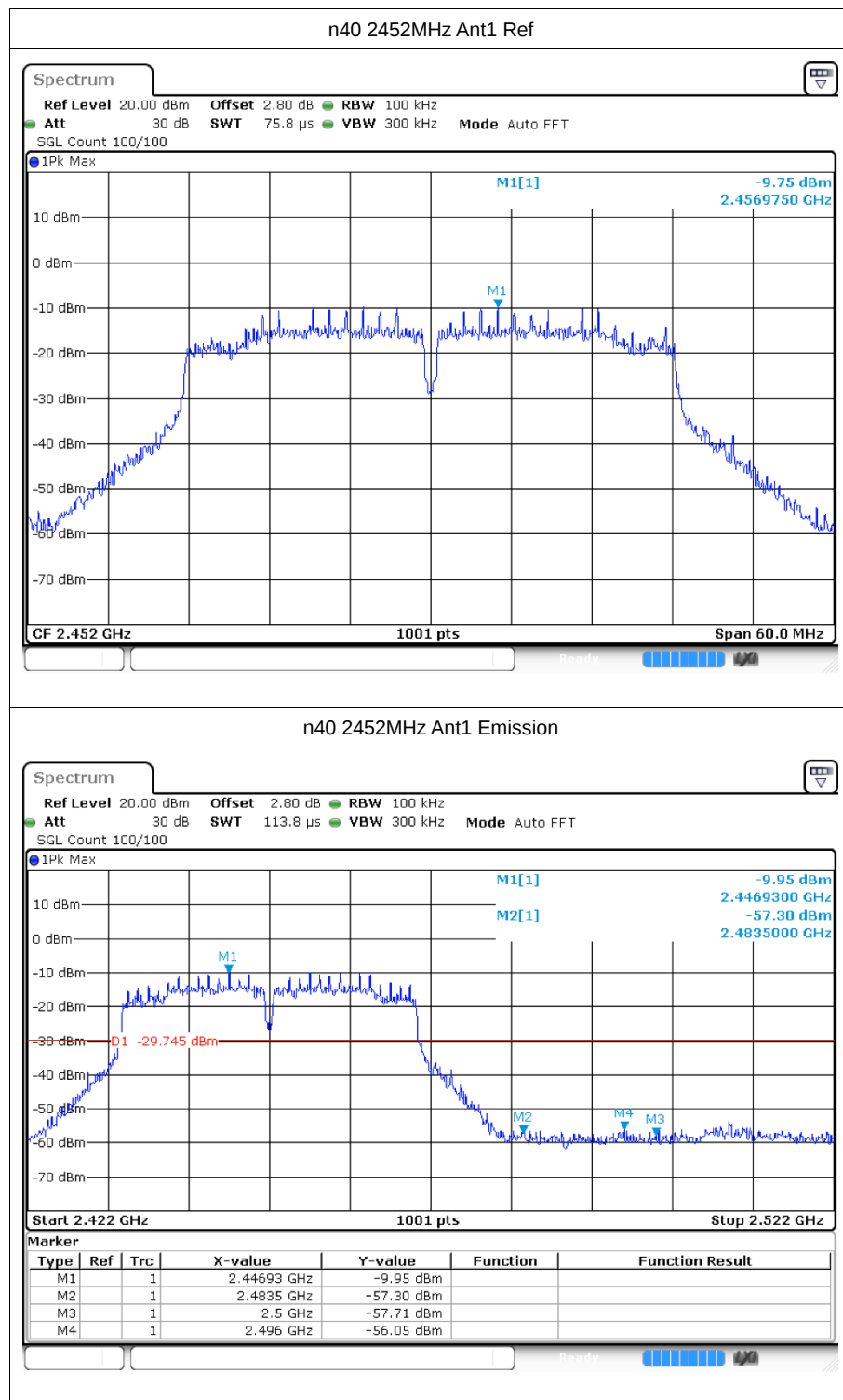
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
n20	2412	Ant1	-47.52	-20	Pass
n20	2462	Ant1	-49.45	-20	Pass
n40	2422	Ant1	-46.13	-20	Pass
n40	2452	Ant1	-46.3	-20	Pass
ax20	2412	Ant1	-49.44	-20	Pass
ax20	2462	Ant1	-49.21	-20	Pass
ax40	2422	Ant1	-46.18	-20	Pass
ax40	2452	Ant1	-45.21	-20	Pass
n20	2412	Ant2	-47.46	-20	Pass
n20	2462	Ant2	-49.51	-20	Pass
n40	2422	Ant2	-46.29	-20	Pass
n40	2452	Ant2	-44.96	-20	Pass
ax20	2412	Ant2	-48.35	-20	Pass
ax20	2462	Ant2	-50.19	-20	Pass
ax40	2422	Ant2	-44.05	-20	Pass
ax40	2452	Ant2	-44.69	-20	Pass

5.2 Test Graphs

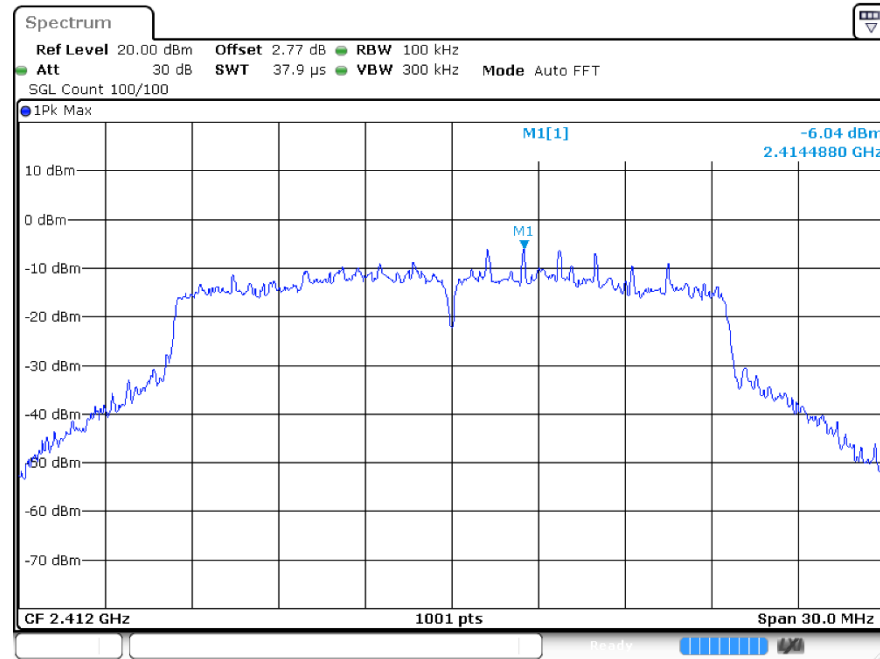








ax20 2412MHz Ant1 Ref



ax20 2412MHz Ant1 Emission

