



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: SwitchBot Pan/Tilt Cam 2K

Trade Mark: SwitchBot

Test Model: W3101100

Environmental Conditions

Temperature:	25.2° C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



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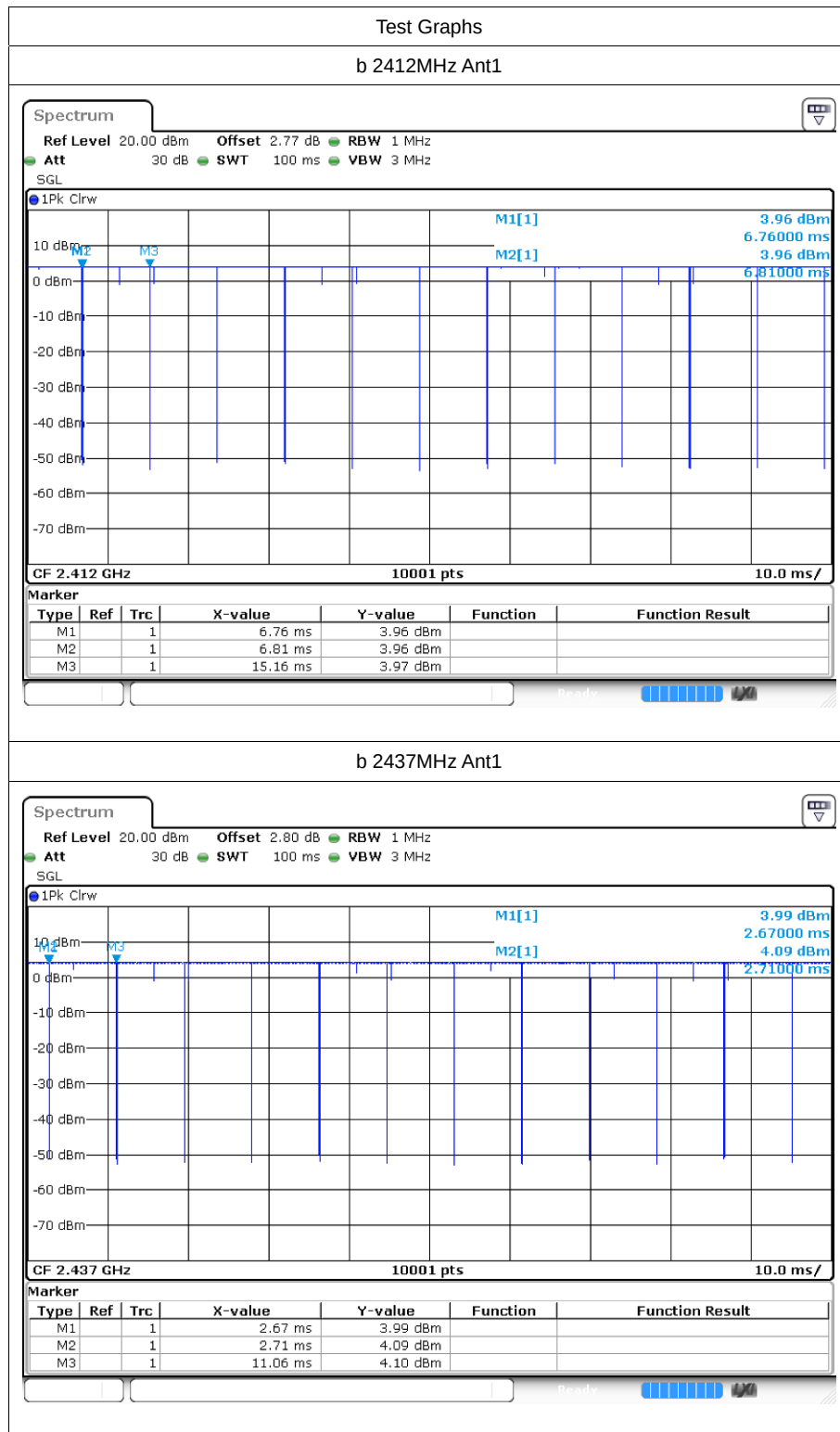


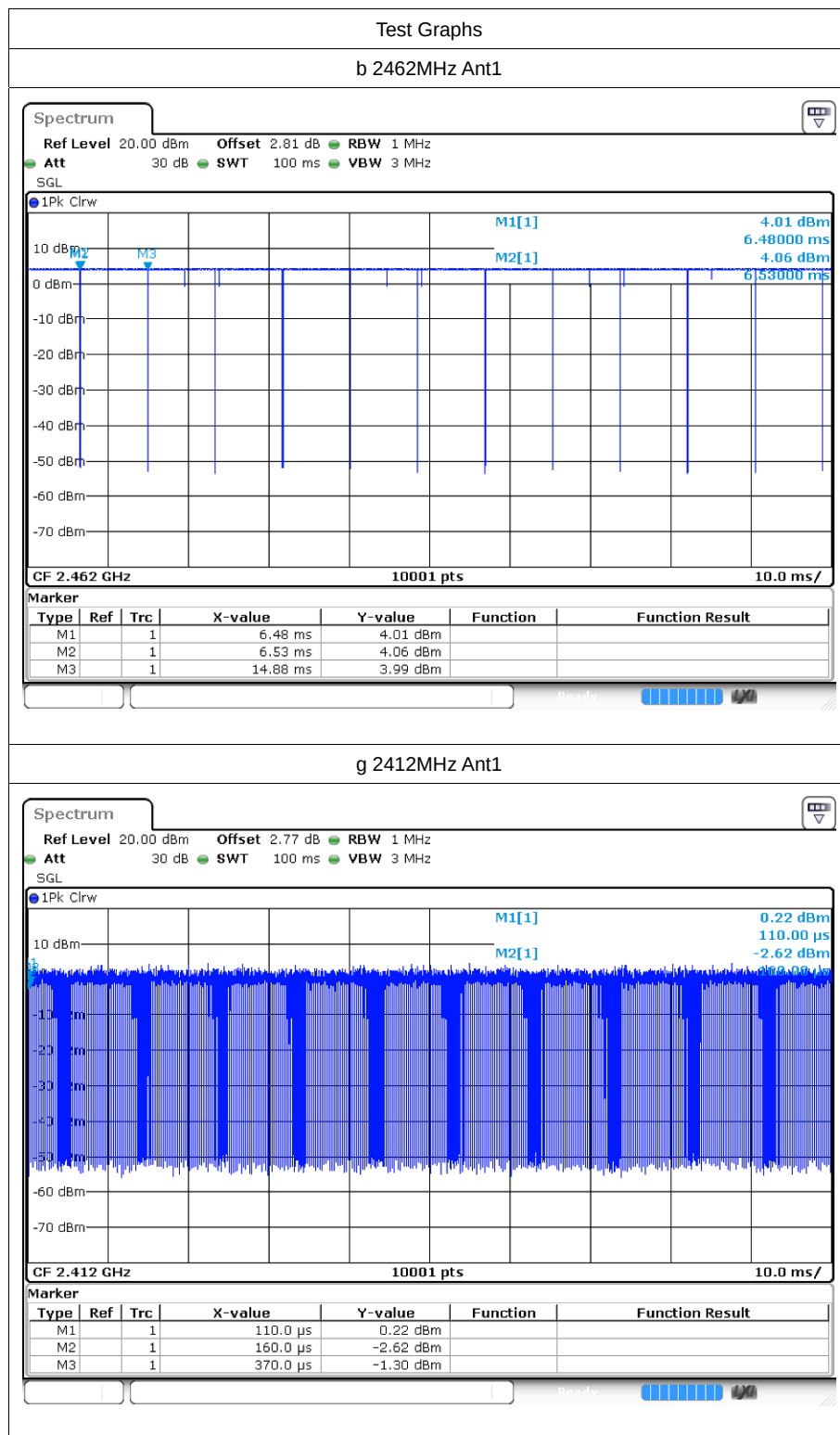
1 Duty Cycle

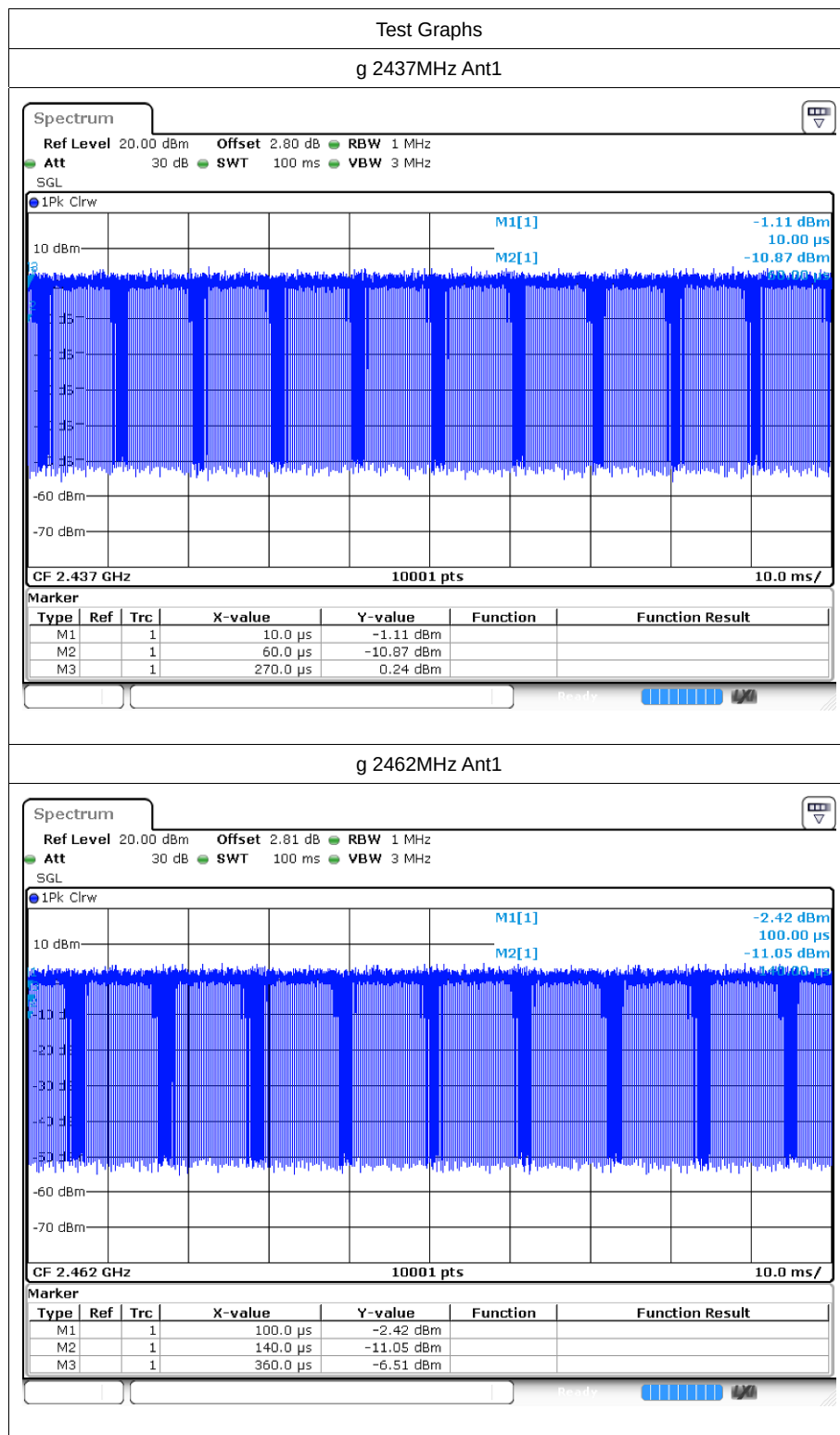
1.1 Test Result

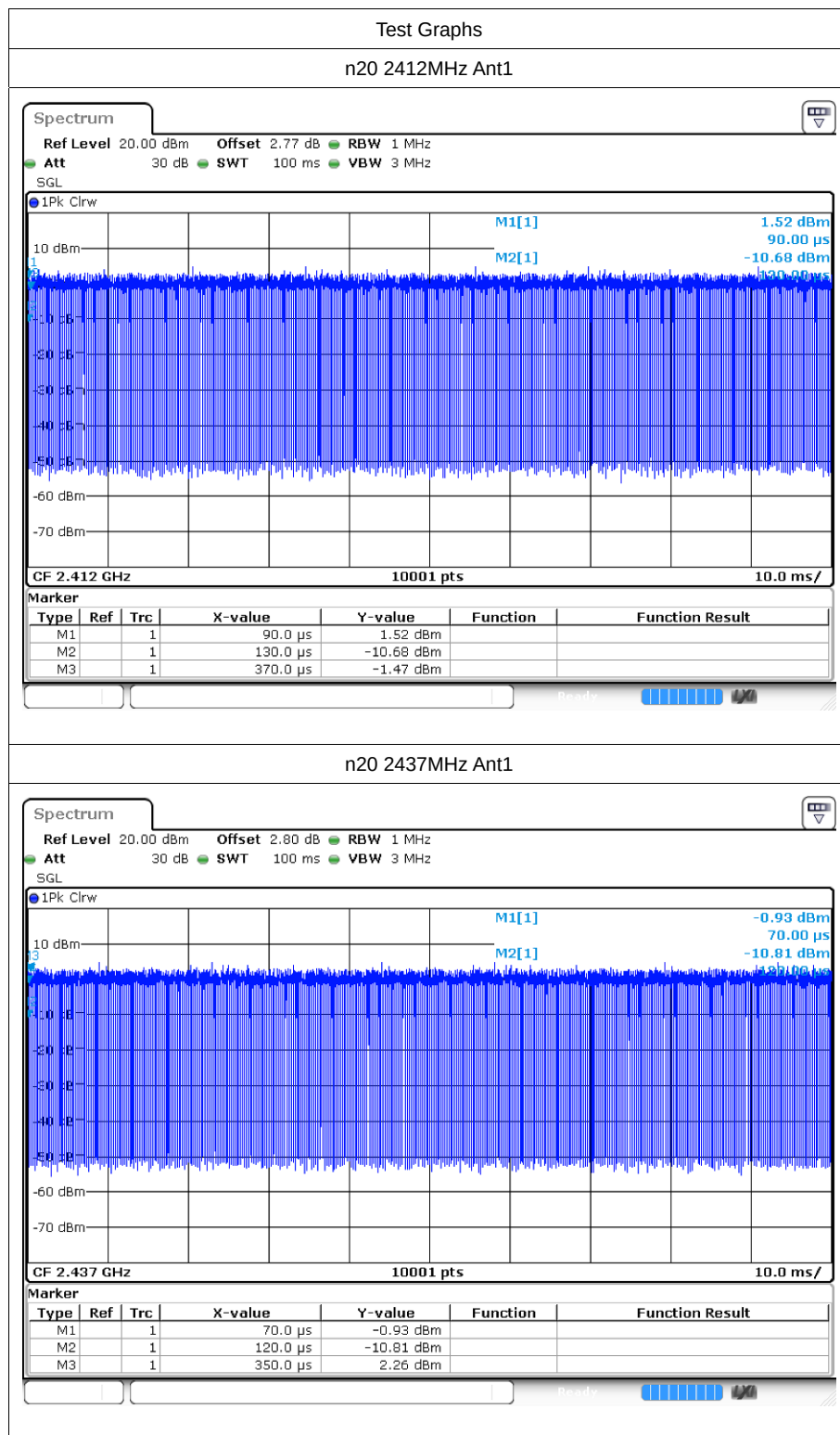
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
b	2412	Ant1	99.59	0.12
b	2437	Ant1	99.61	0.12
b	2462	Ant1	99.61	0.12
g	2412	Ant1	86.77	4.76
g	2437	Ant1	86.82	4.76
g	2462	Ant1	87	4.55
n20	2412	Ant1	87.56	4.17
n20	2437	Ant1	87.61	4.35
n20	2462	Ant1	87.6	4.35

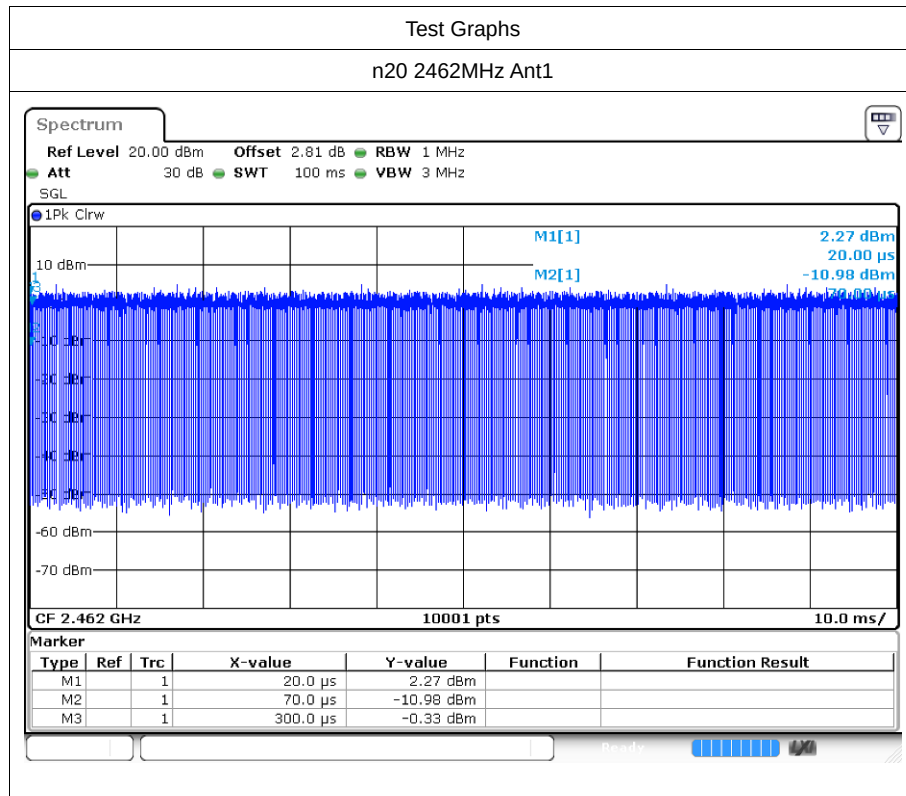
1.2 Test Graphs













2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	14.54	30	Pass
b	2437	Ant1	14.56	30	Pass
b	2462	Ant1	14.53	30	Pass
g	2412	Ant1	13.85	30	Pass
g	2437	Ant1	13.83	30	Pass
g	2462	Ant1	13.79	30	Pass
n20	2412	Ant1	13.81	30	Pass
n20	2437	Ant1	13.85	30	Pass
n20	2462	Ant1	13.82	30	Pass

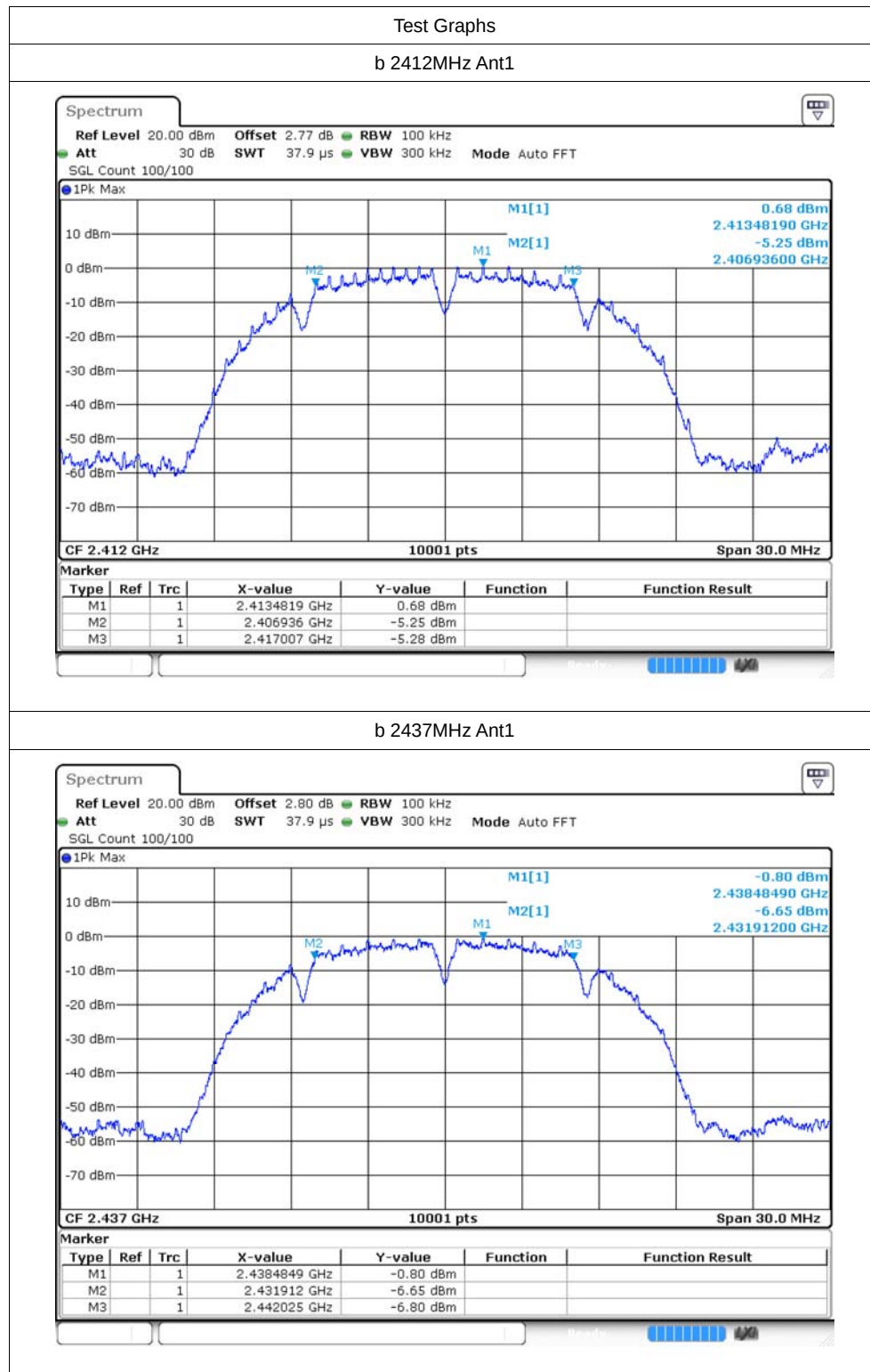


3 -6dB Bandwidth

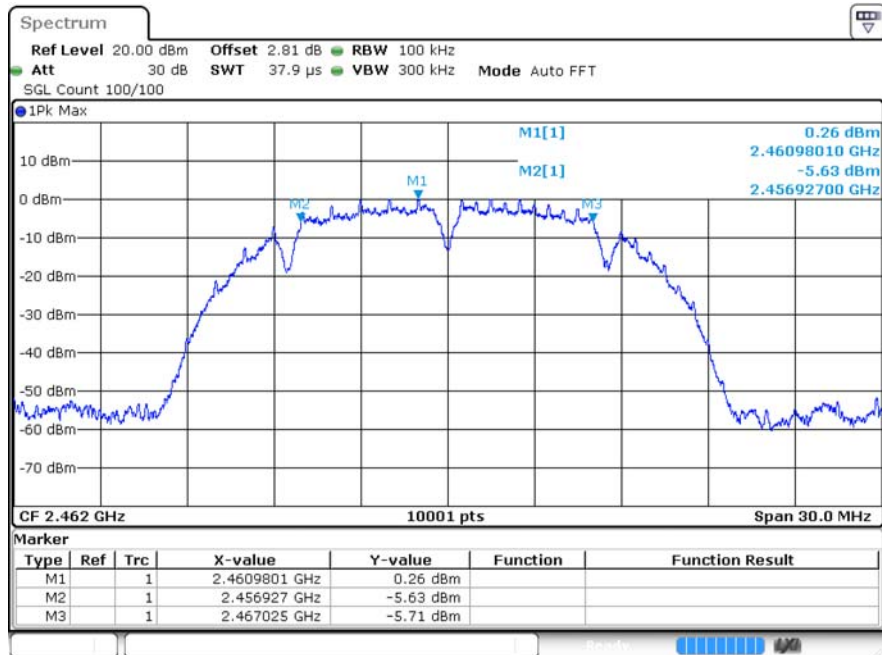
3.1 Test Result

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	10.113	0.5	Pass
b	2462	Ant1	10.098	0.5	Pass
g	2412	Ant1	15.288	0.5	Pass
g	2437	Ant1	15.684	0.5	Pass
g	2462	Ant1	15.399	0.5	Pass
n20	2412	Ant1	12.831	0.5	Pass
n20	2437	Ant1	15.117	0.5	Pass
n20	2462	Ant1	15.105	0.5	Pass

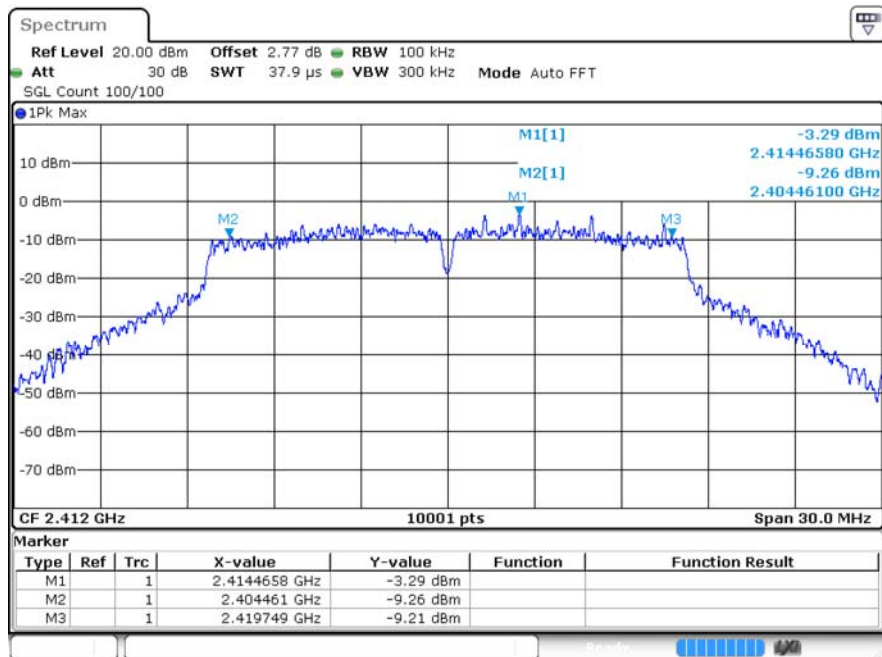
3.2 Test Graphs



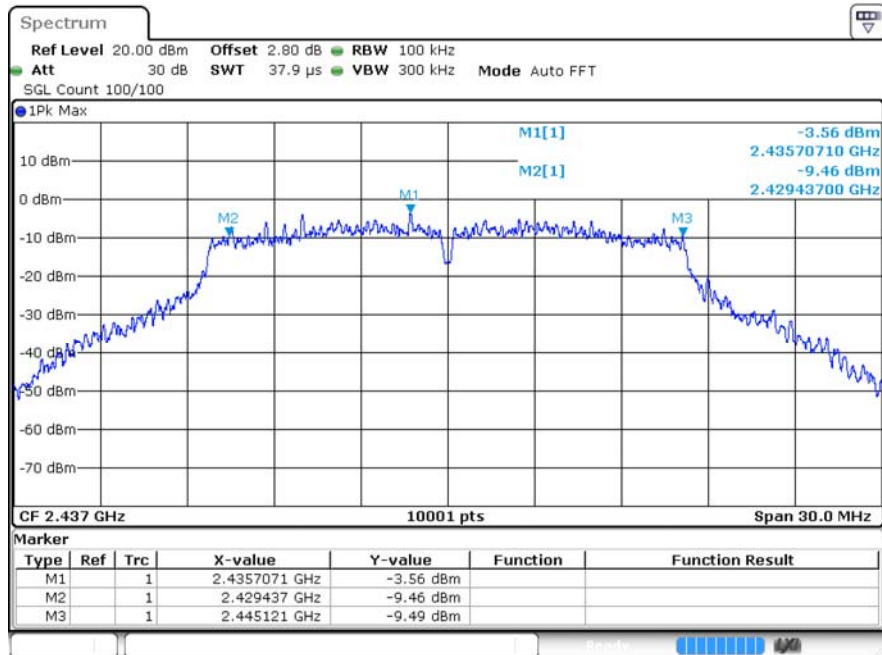
b 2462MHz Ant1



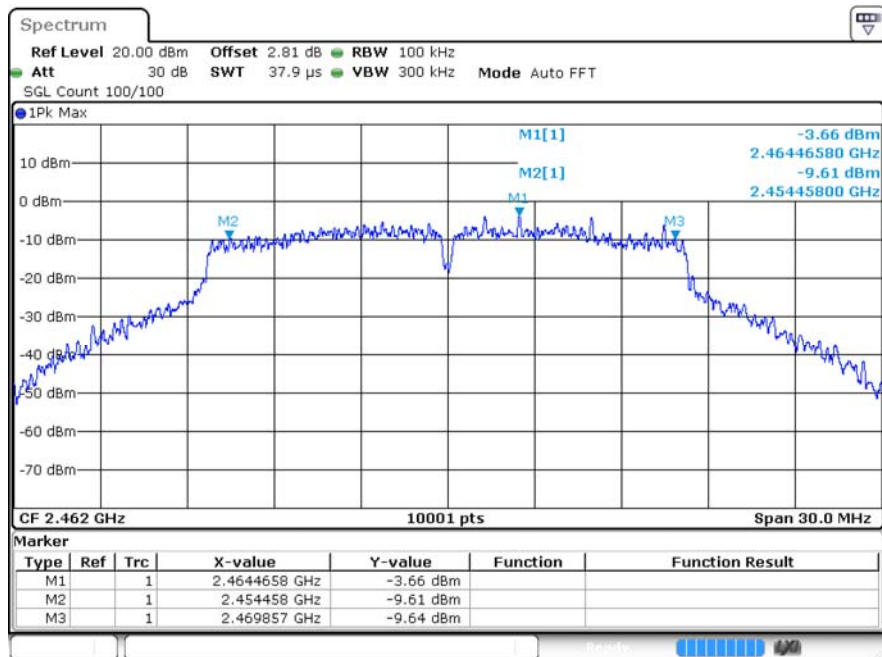
g 2412MHz Ant1

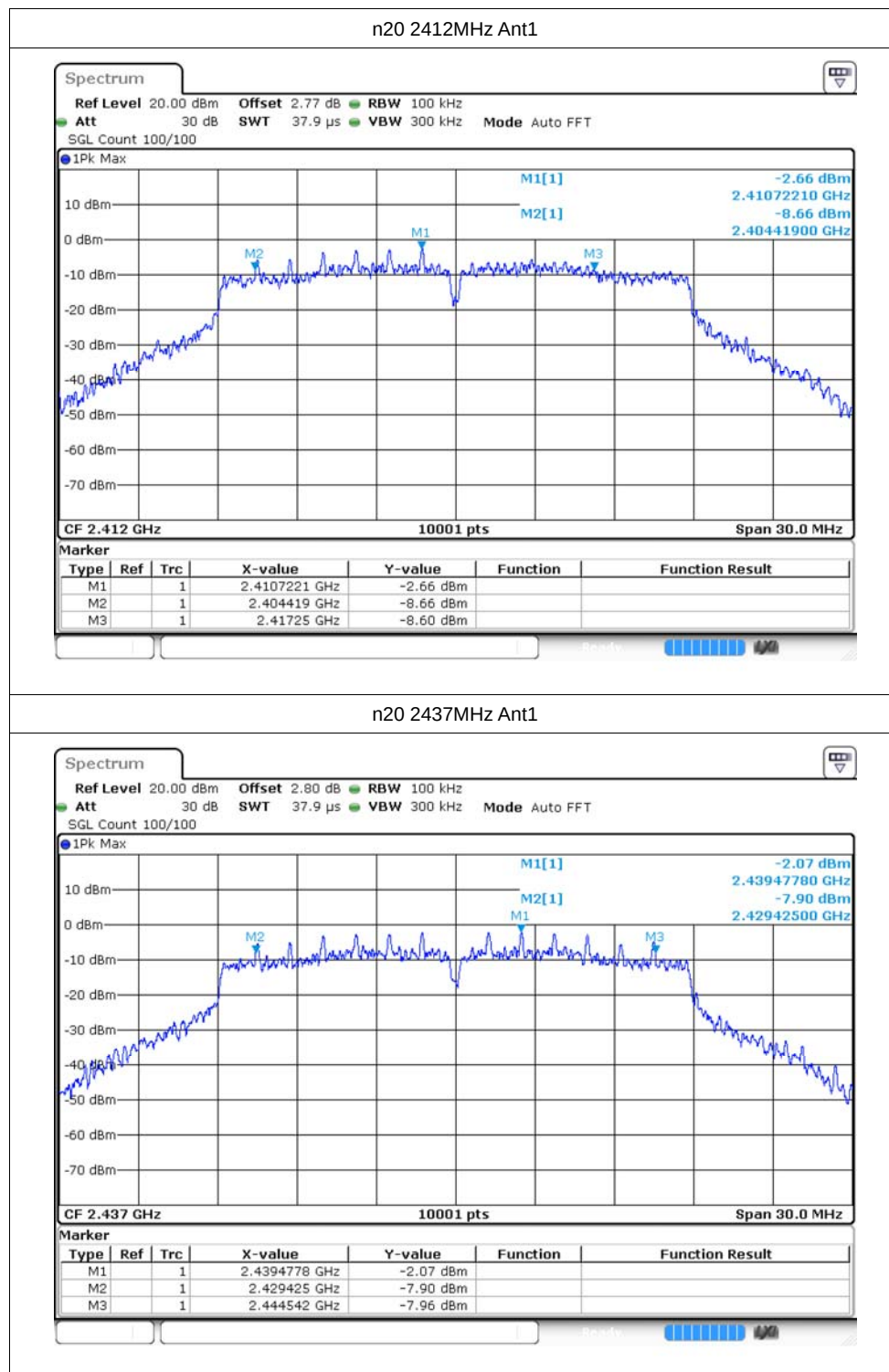


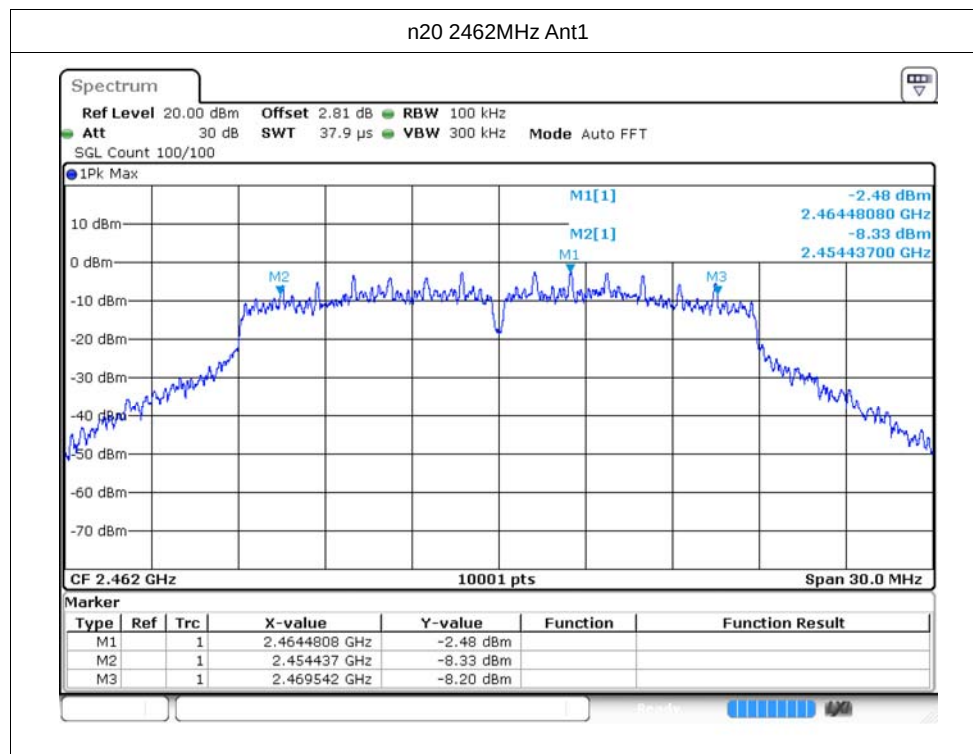
g 2437MHz Ant1



g 2462MHz Ant1





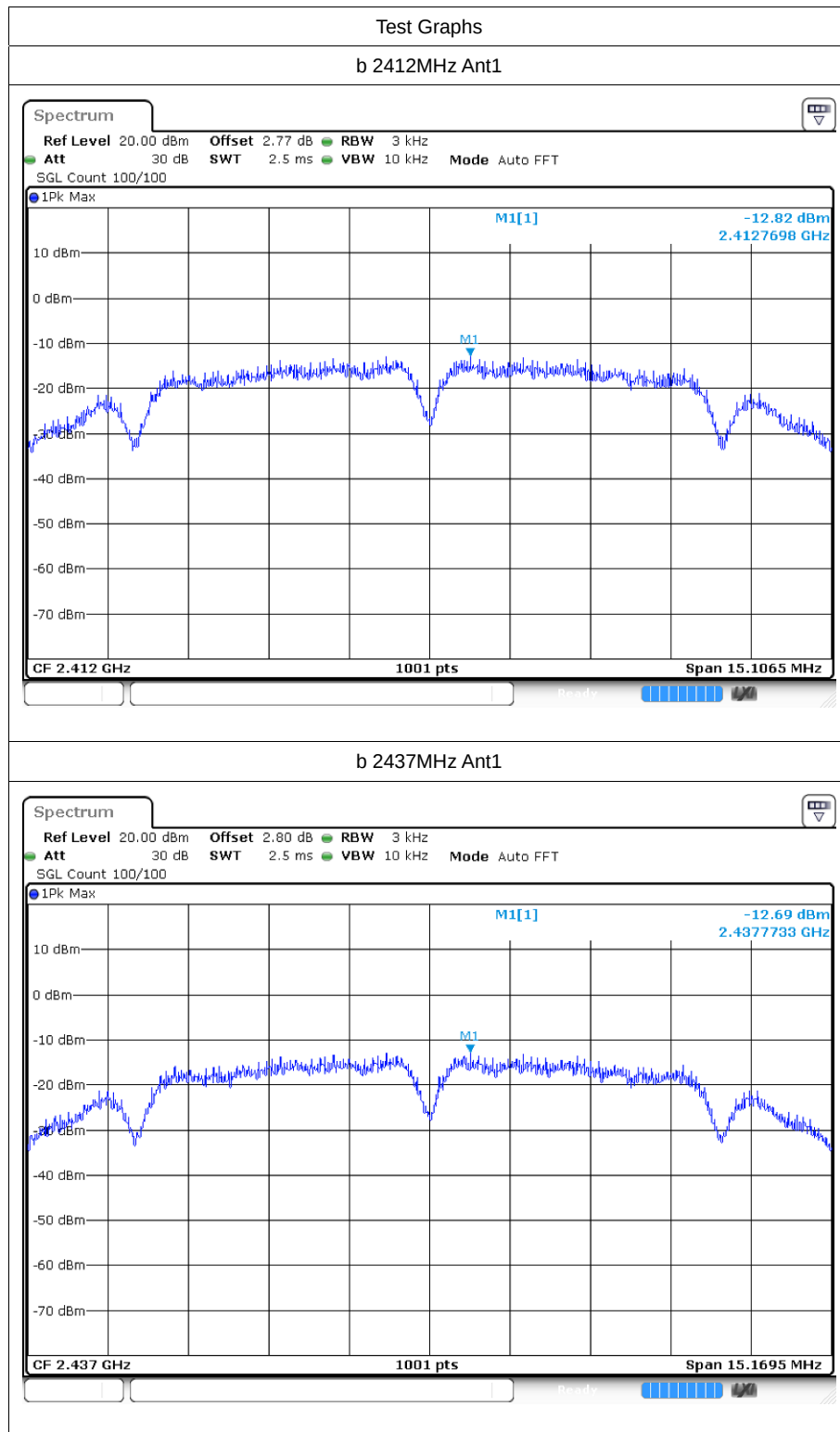


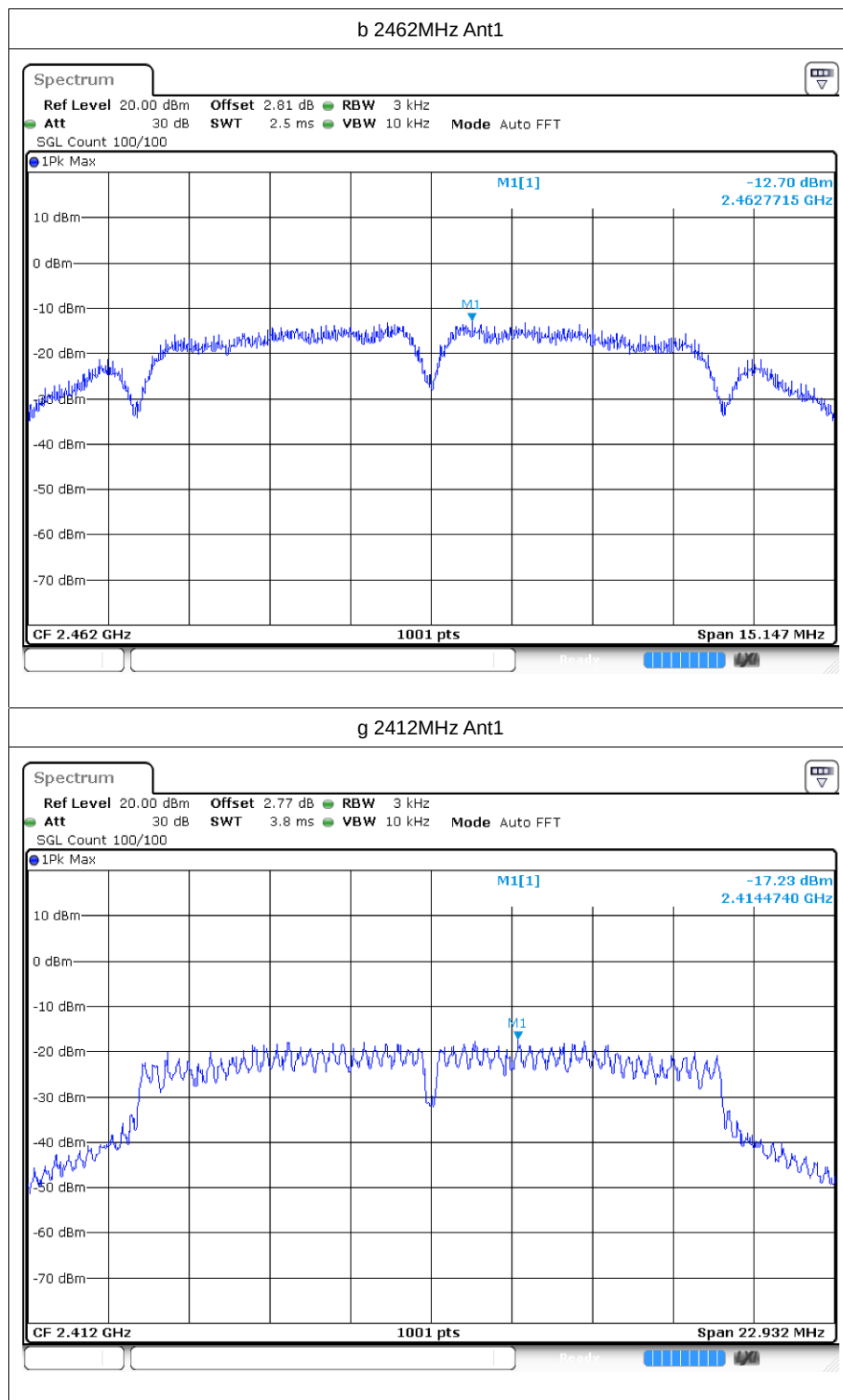
4 Maximum Power Spectral Density Level

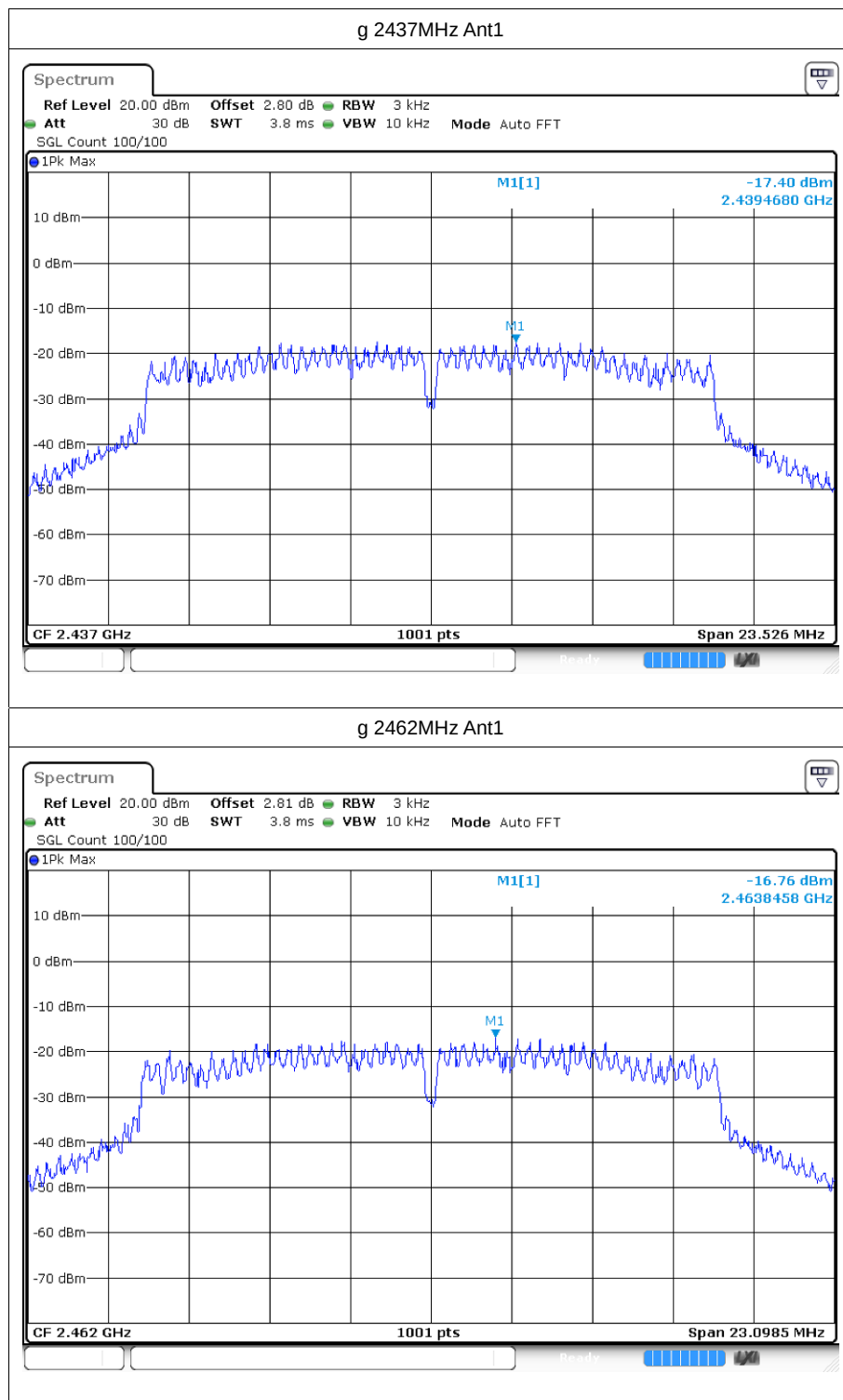
4.1 Test Result

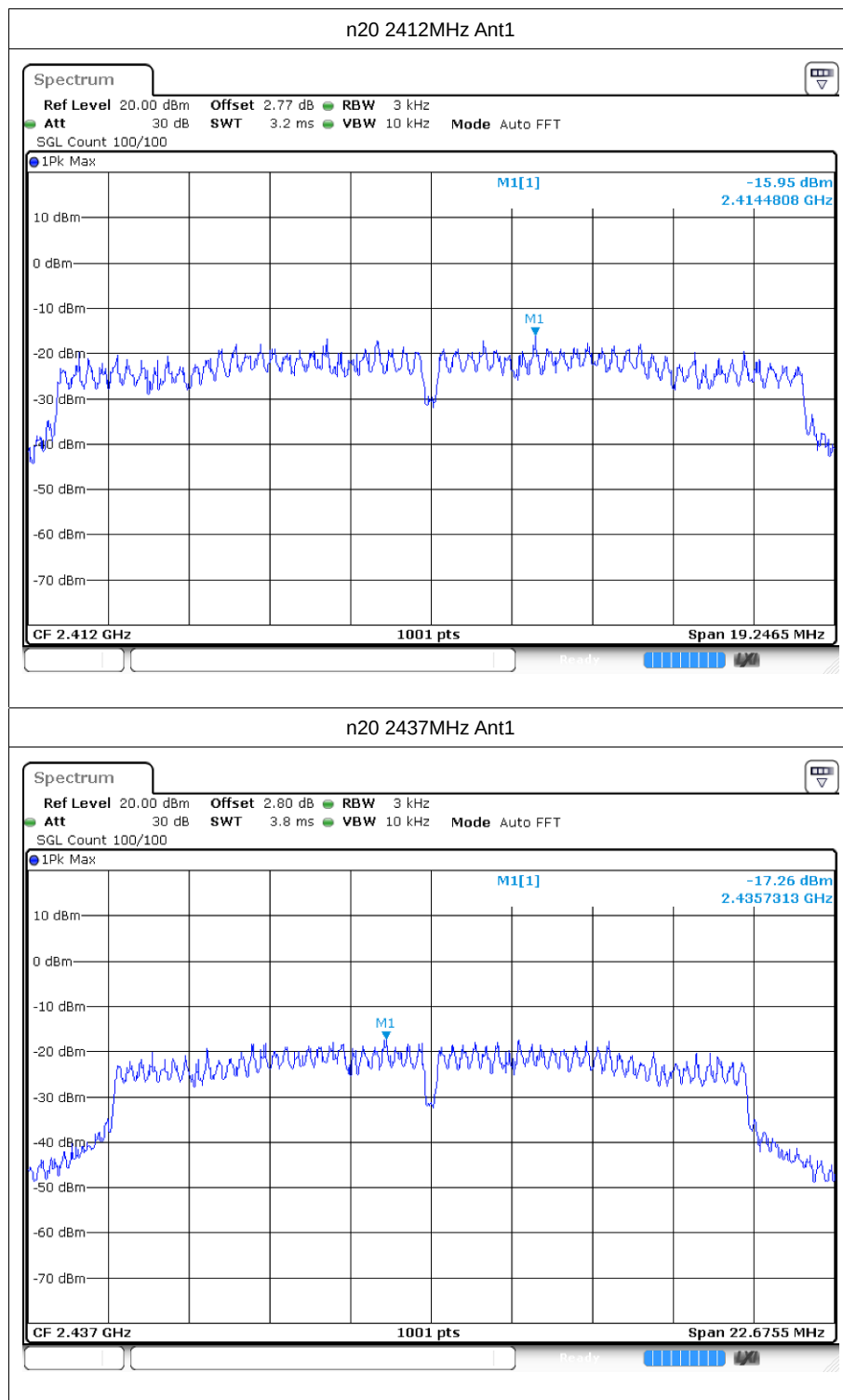
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-12.82	≤ 8	Pass
b	2437	Ant1	-12.69	≤ 8	Pass
b	2462	Ant1	-12.7	≤ 8	Pass
g	2412	Ant1	-17.23	≤ 8	Pass
g	2437	Ant1	-17.4	≤ 8	Pass
g	2462	Ant1	-16.76	≤ 8	Pass
n20	2412	Ant1	-15.95	≤ 8	Pass
n20	2437	Ant1	-17.26	≤ 8	Pass
n20	2462	Ant1	-16.71	≤ 8	Pass

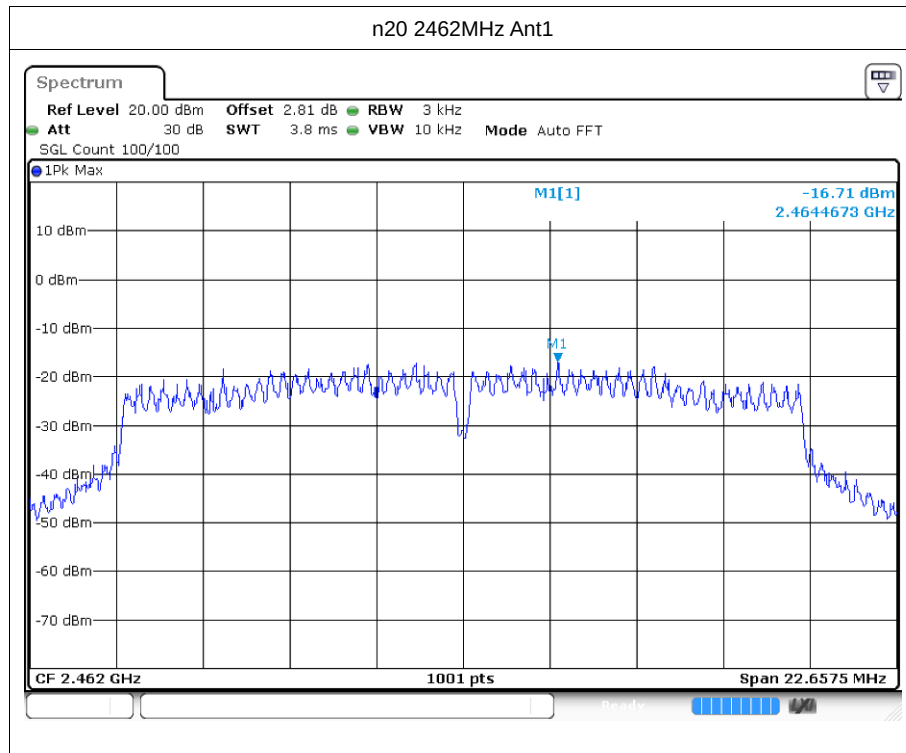
4.2 Test Graphs











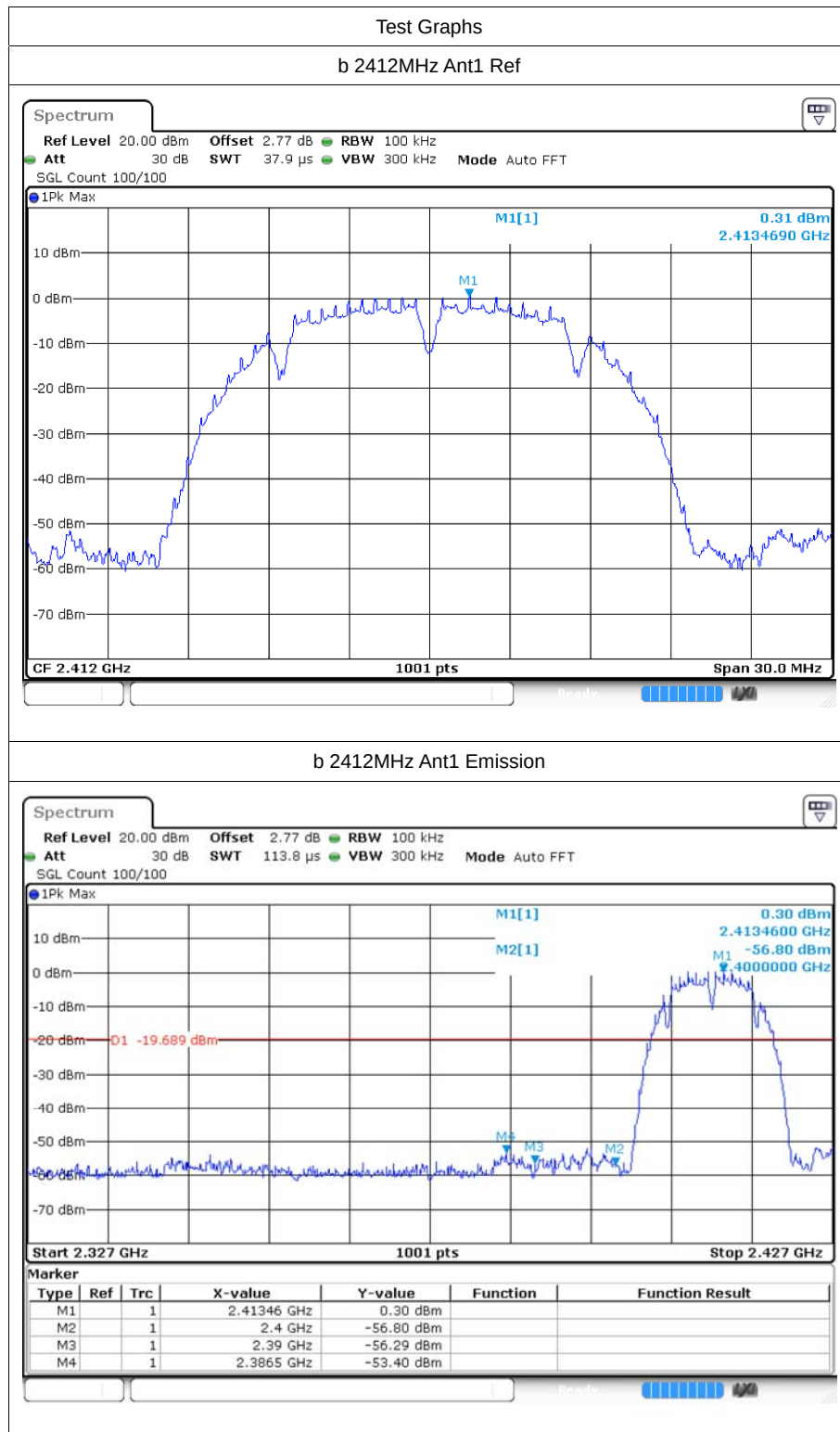


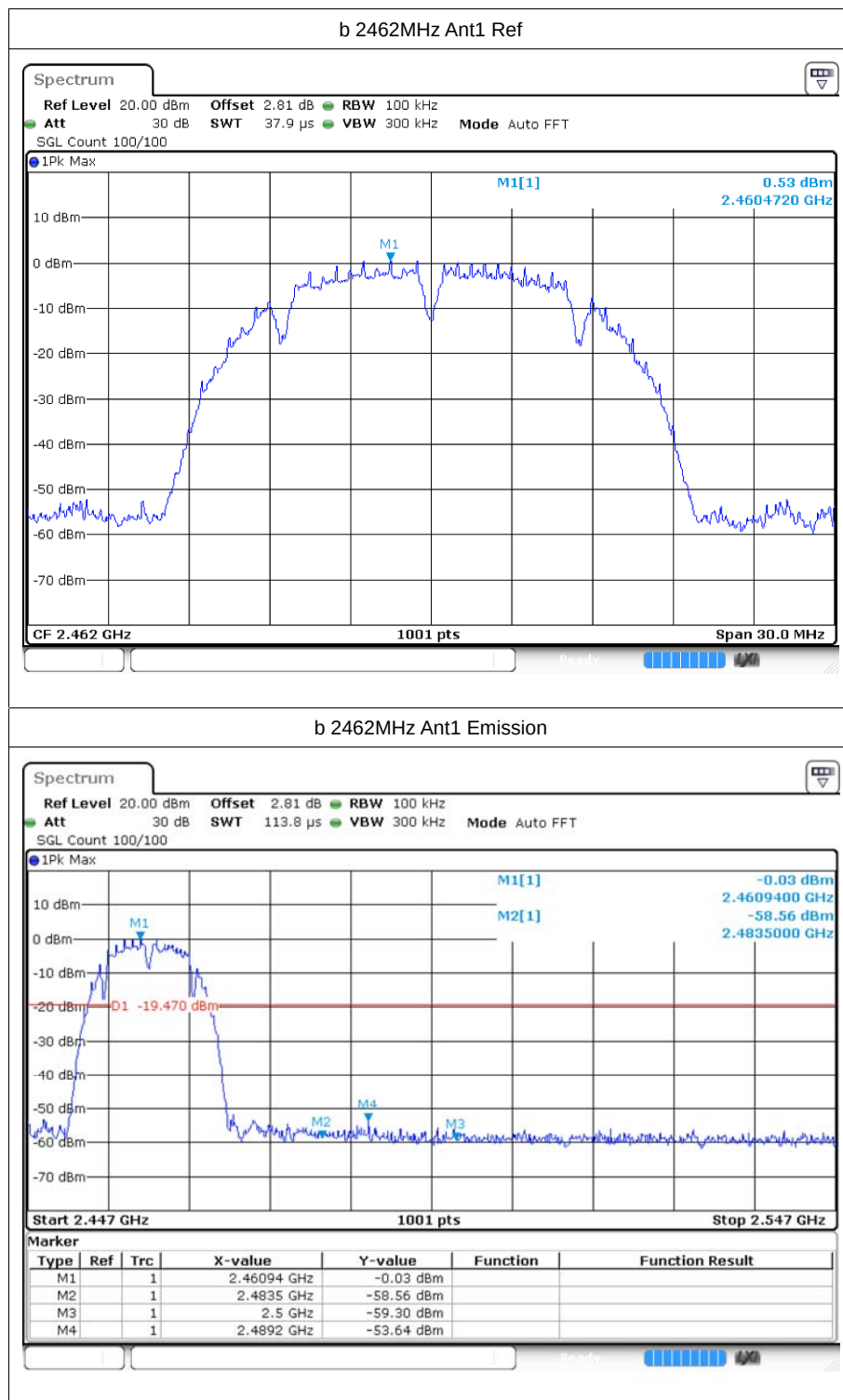
5 Band Edge

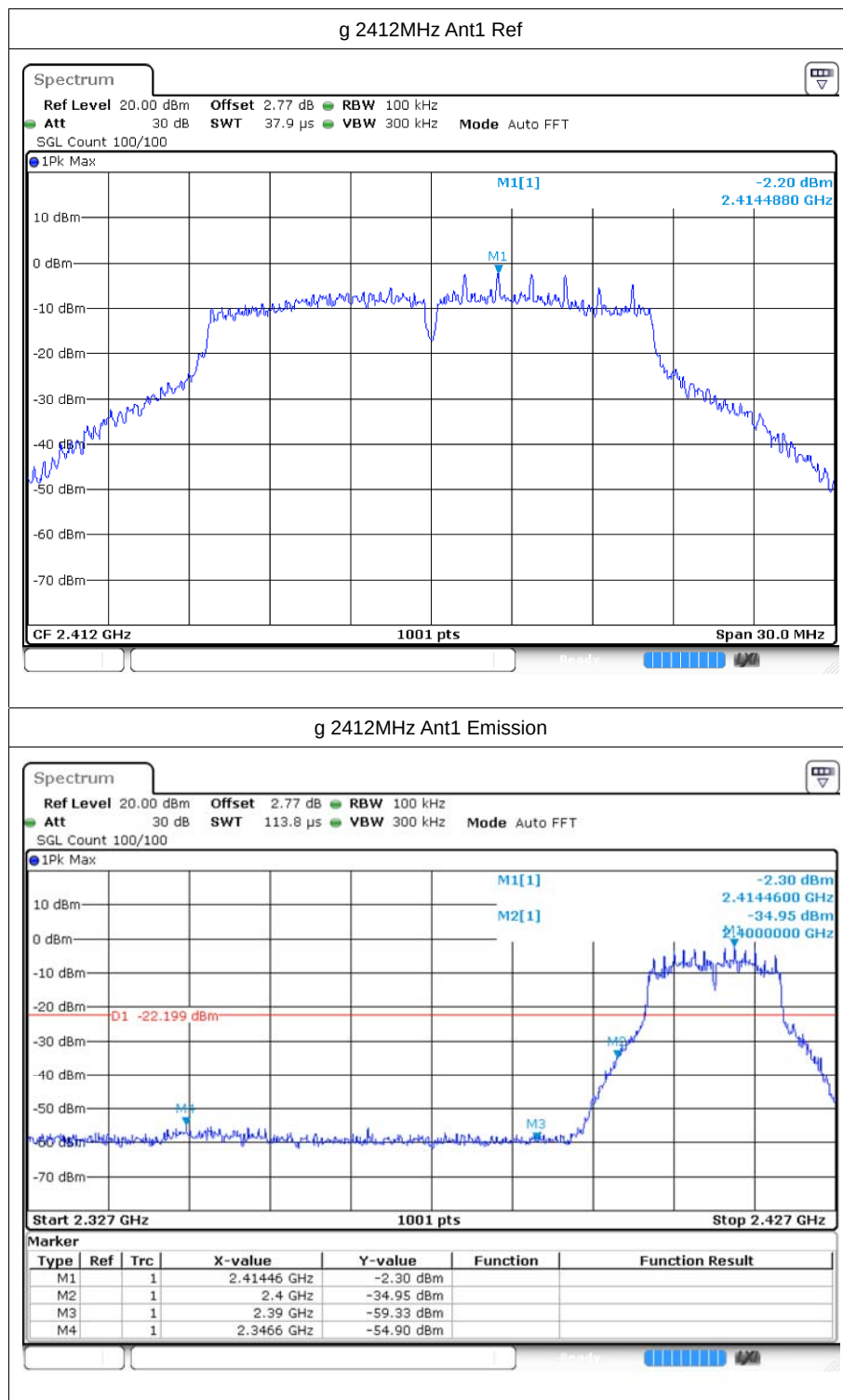
5.1 Test Result

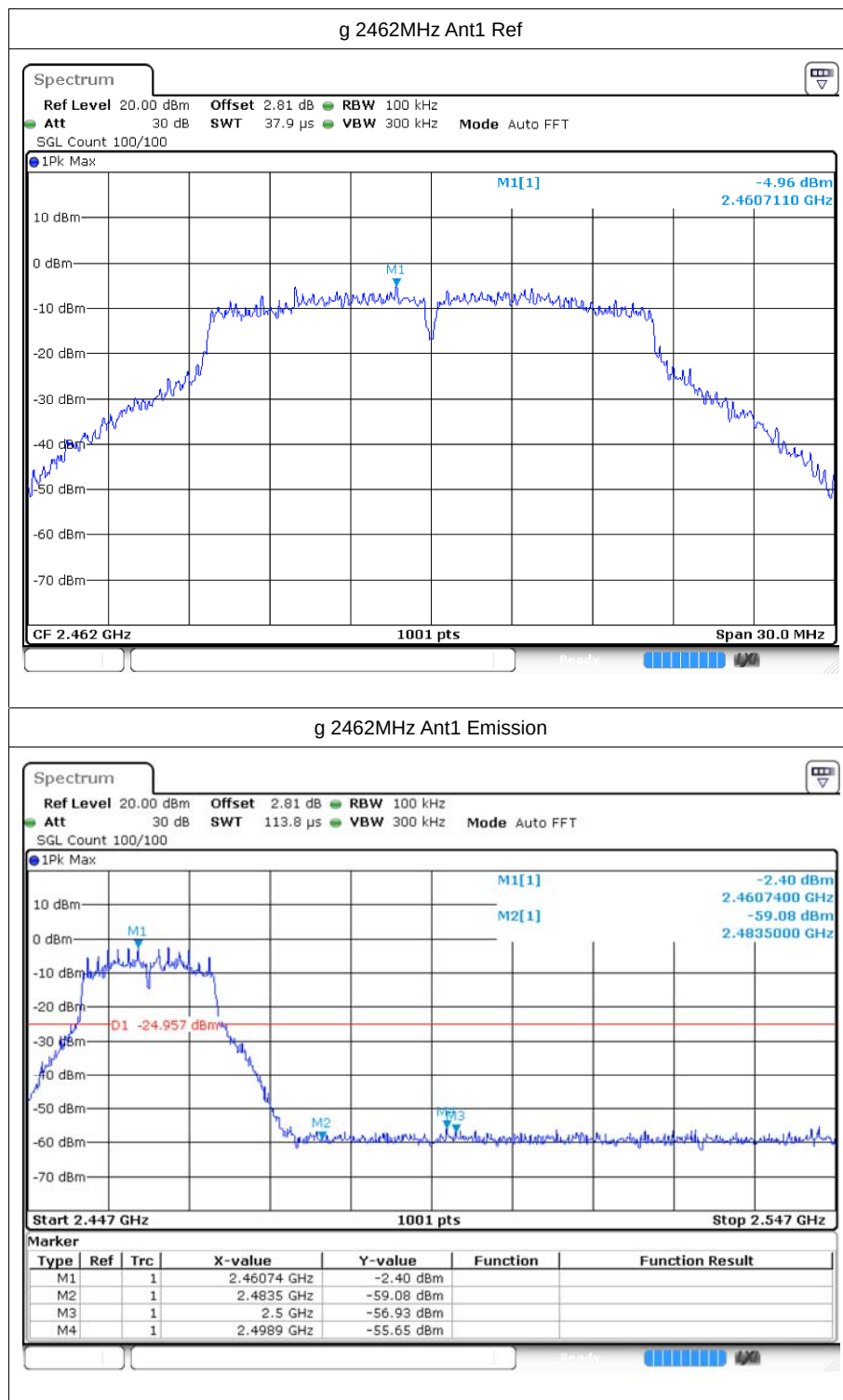
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-53.7	-20	-53.7
b	2462	Ant1	-54.17	-20	Pass
g	2412	Ant1	-52.69	-20	Pass
g	2462	Ant1	-50.68	-20	Pass
n20	2412	Ant1	-52.25	-20	Pass
n20	2462	Ant1	-53.99	-20	Pass

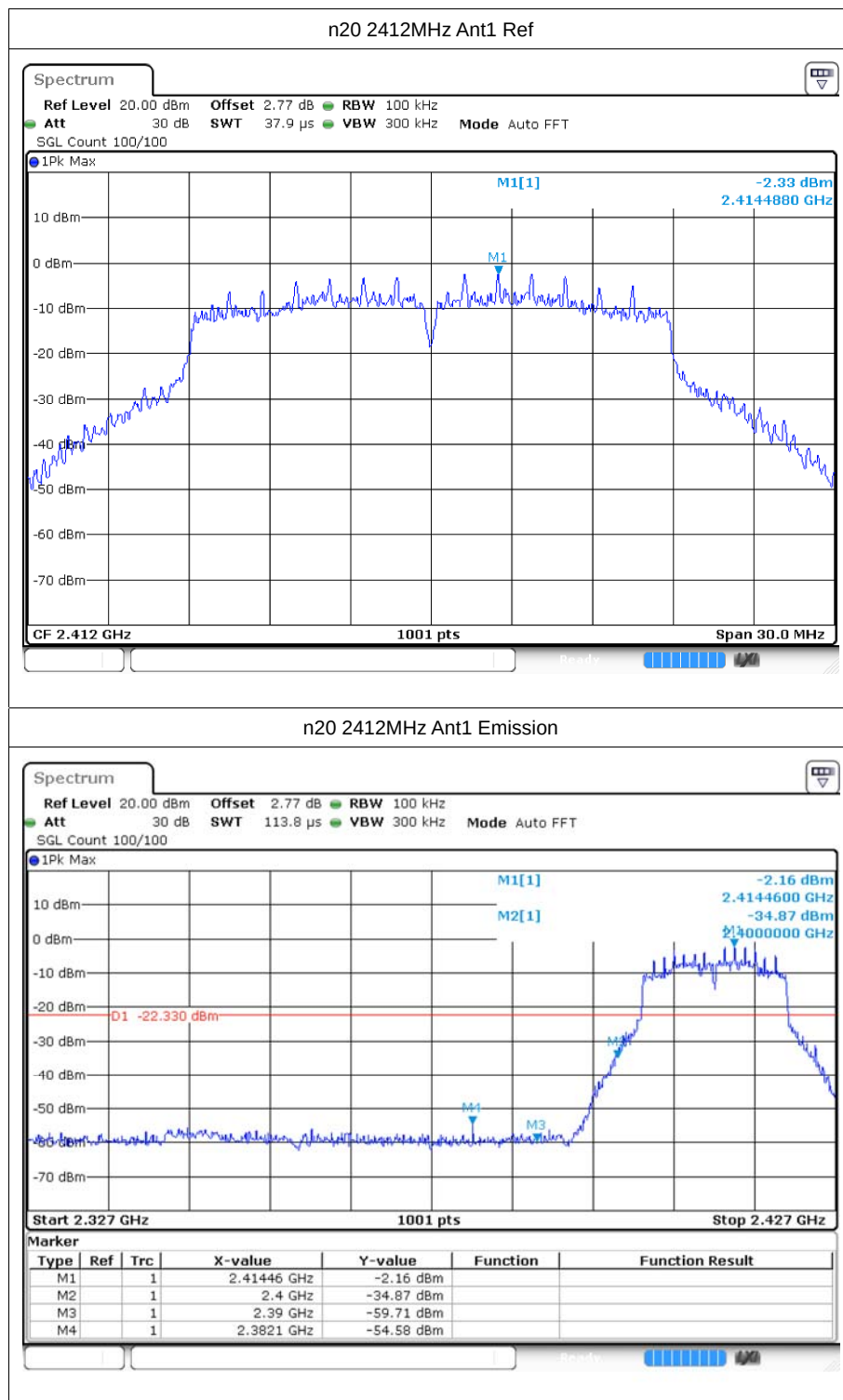
5.2 Test Graphs

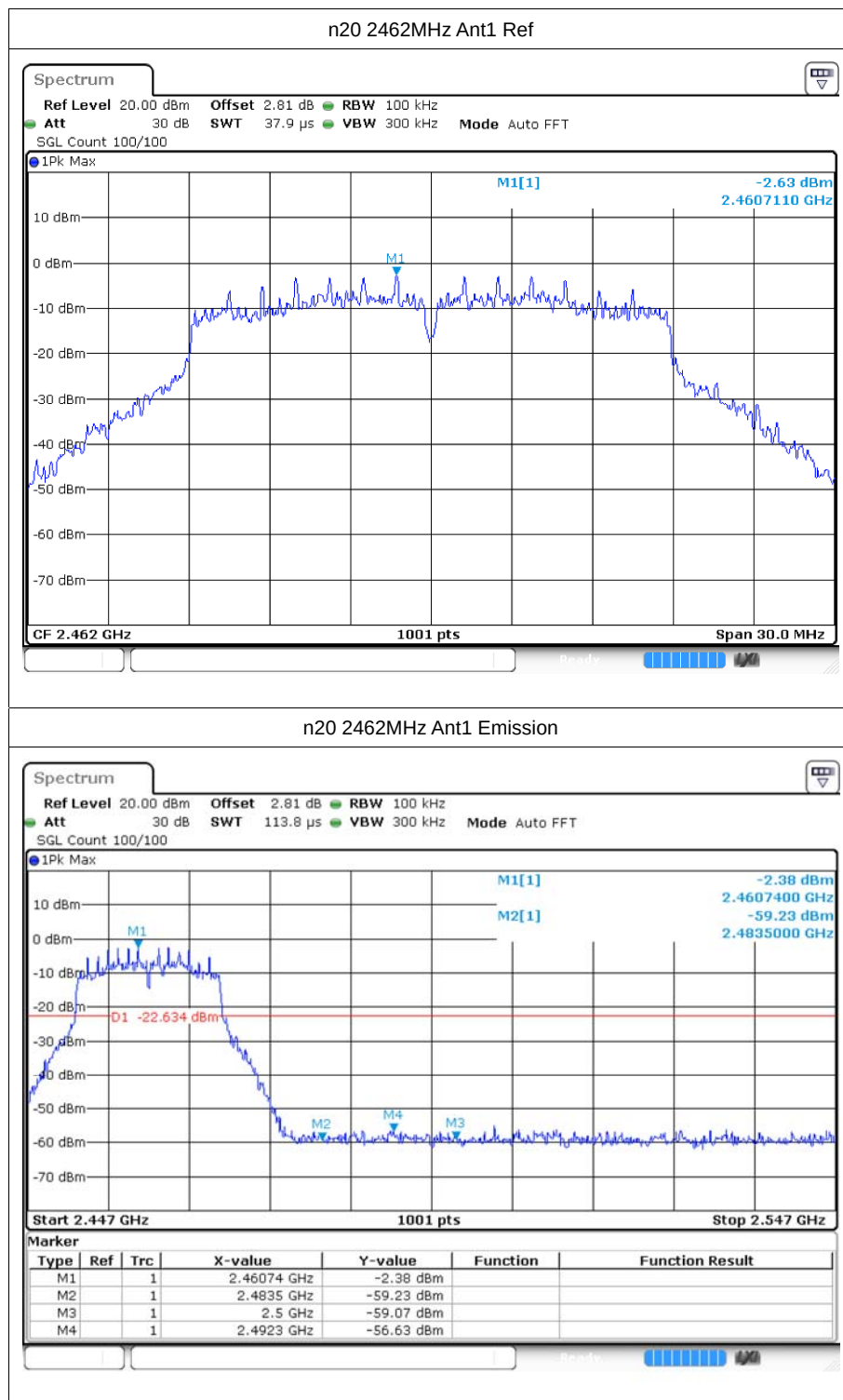












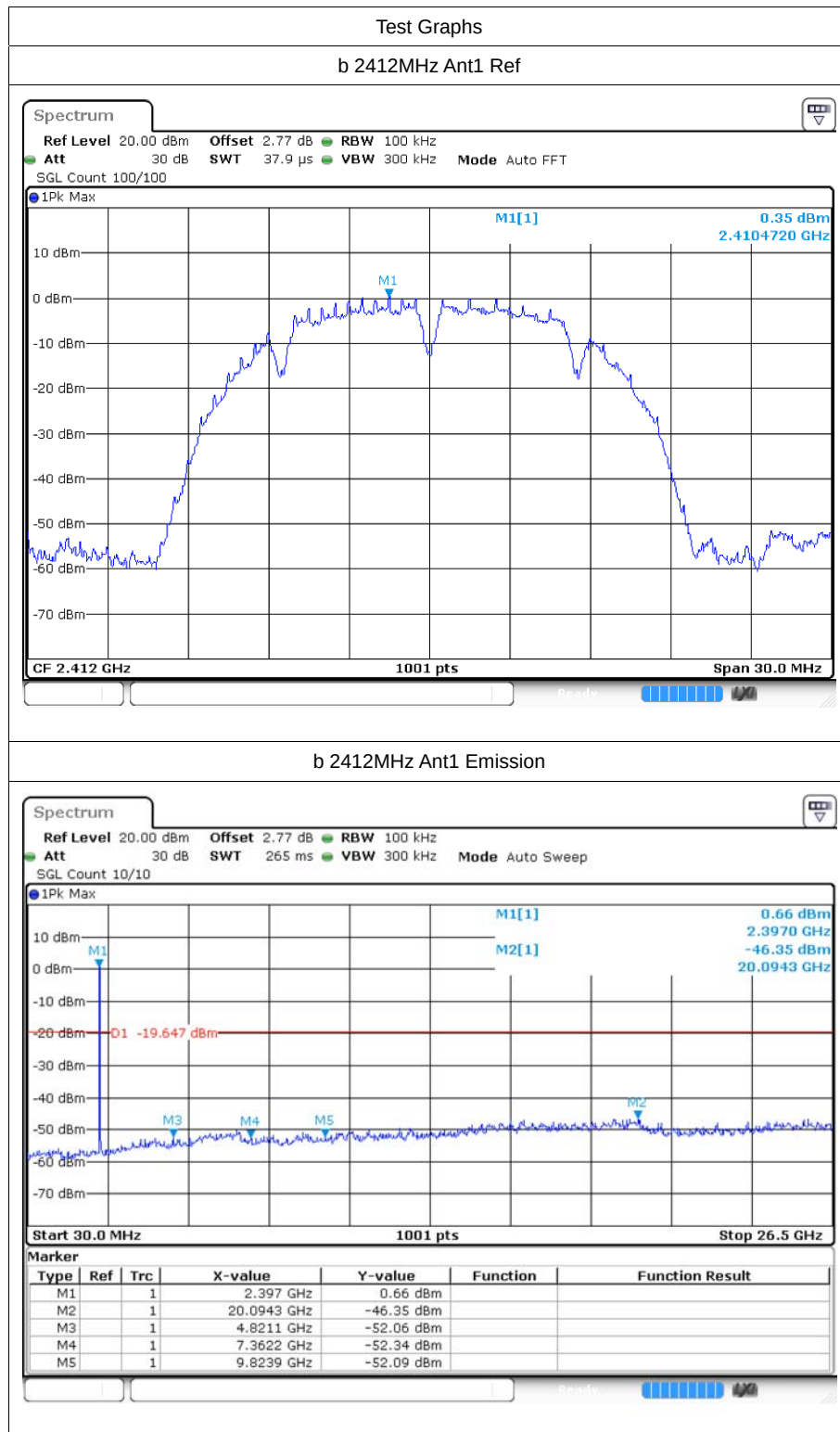


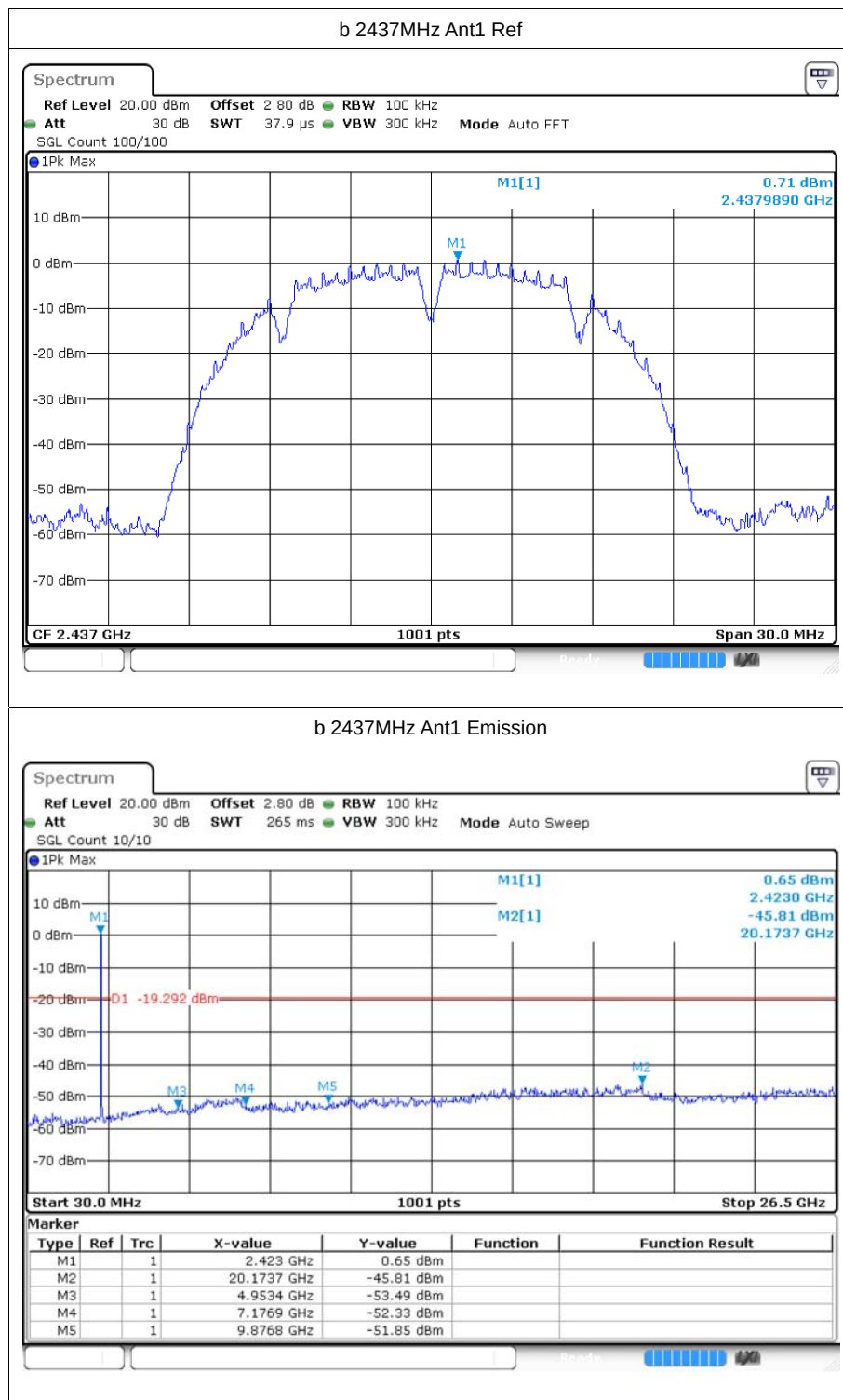
6 Conducted RF Spurious Emission

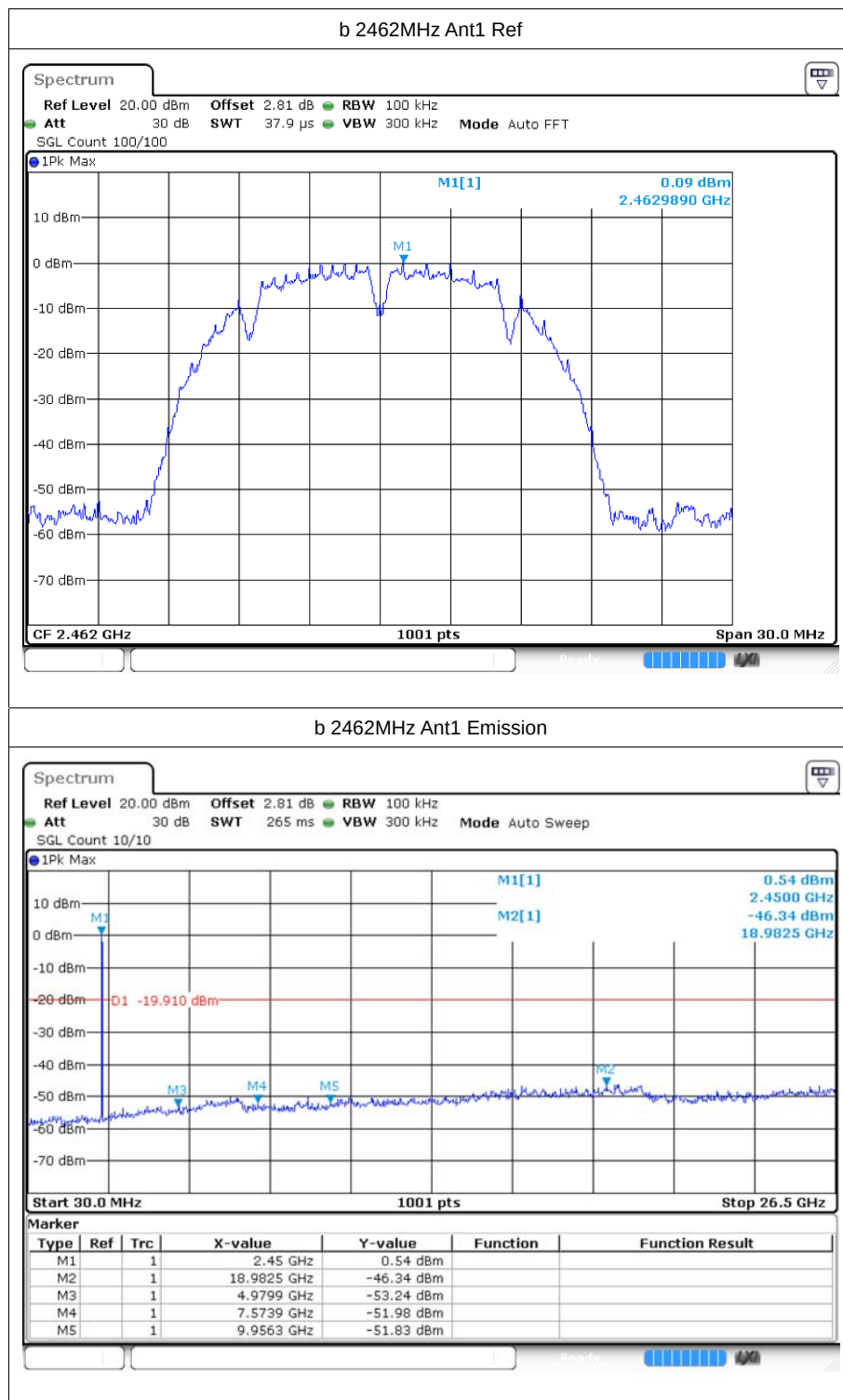
6.1 Test Result

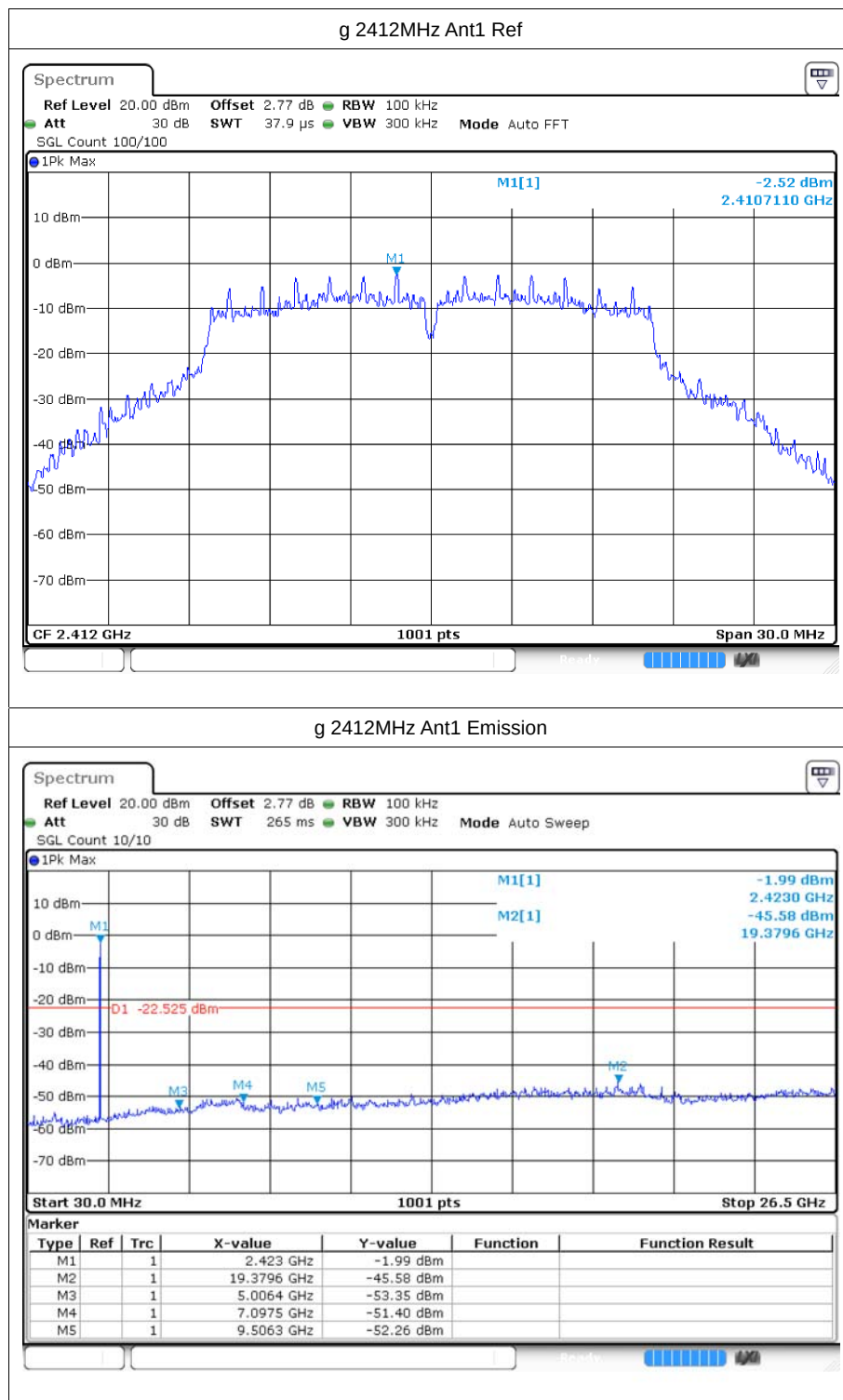
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-46.7	-20	Pass
b	2437	Ant1	-46.52	-20	Pass
b	2462	Ant1	-46.43	-20	Pass
g	2412	Ant1	-43.06	-20	Pass
g	2437	Ant1	-44.47	-20	Pass
g	2462	Ant1	-43.55	-20	Pass
n20	2412	Ant1	-43.21	-20	Pass
n20	2437	Ant1	-44.21	-20	Pass
n20	2462	Ant1	-43.88	-20	Pass

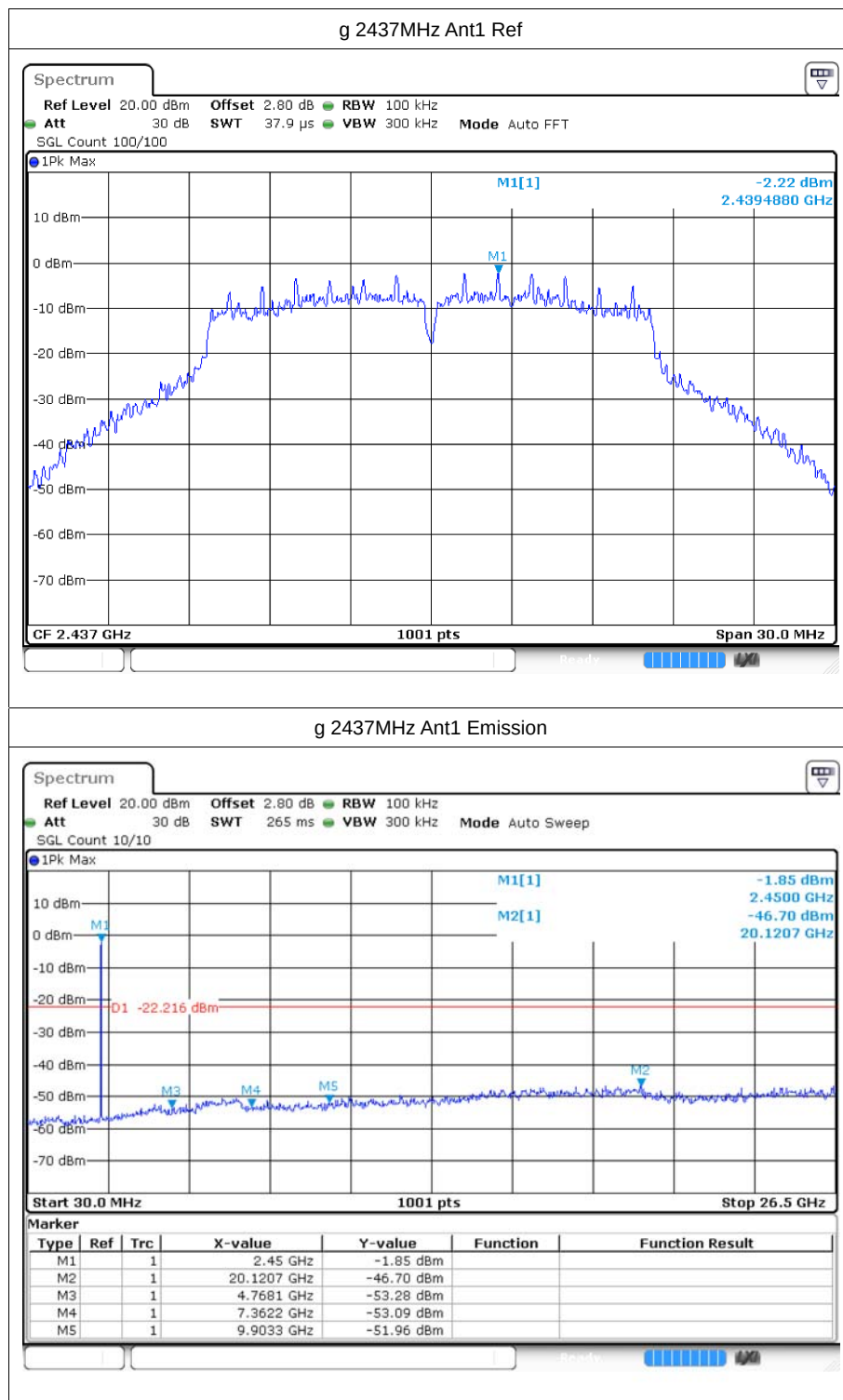
6.2 Test Graphs

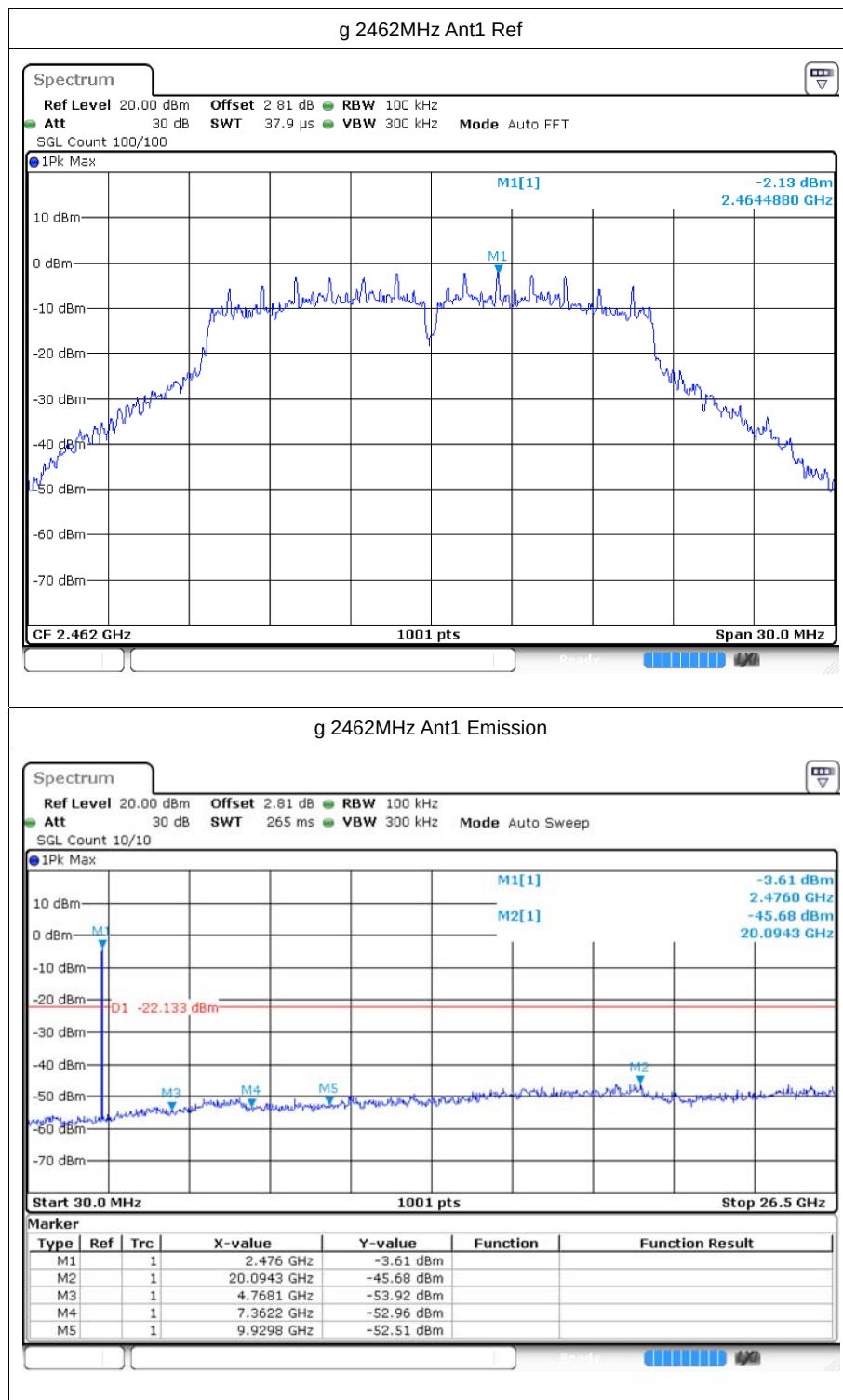


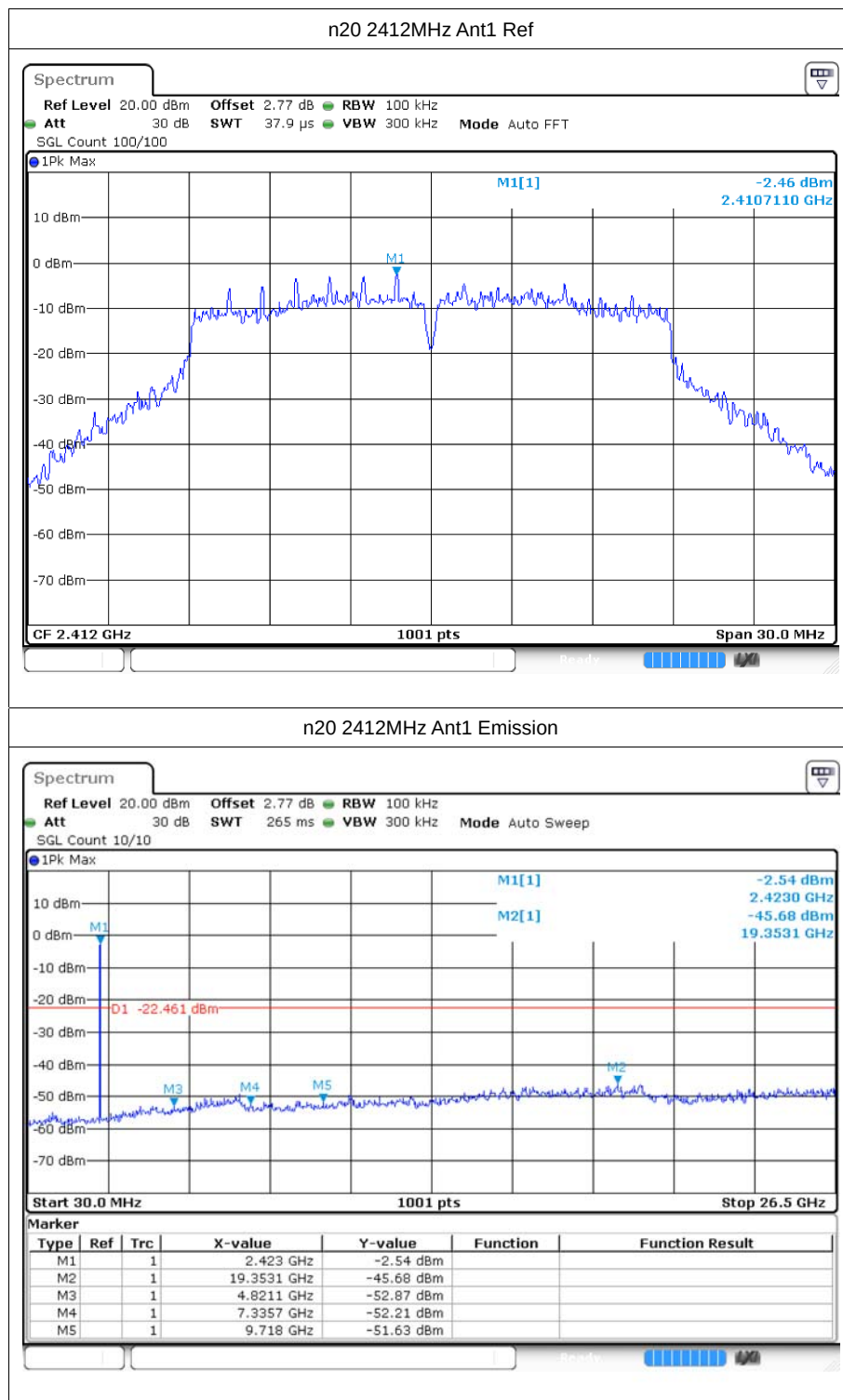


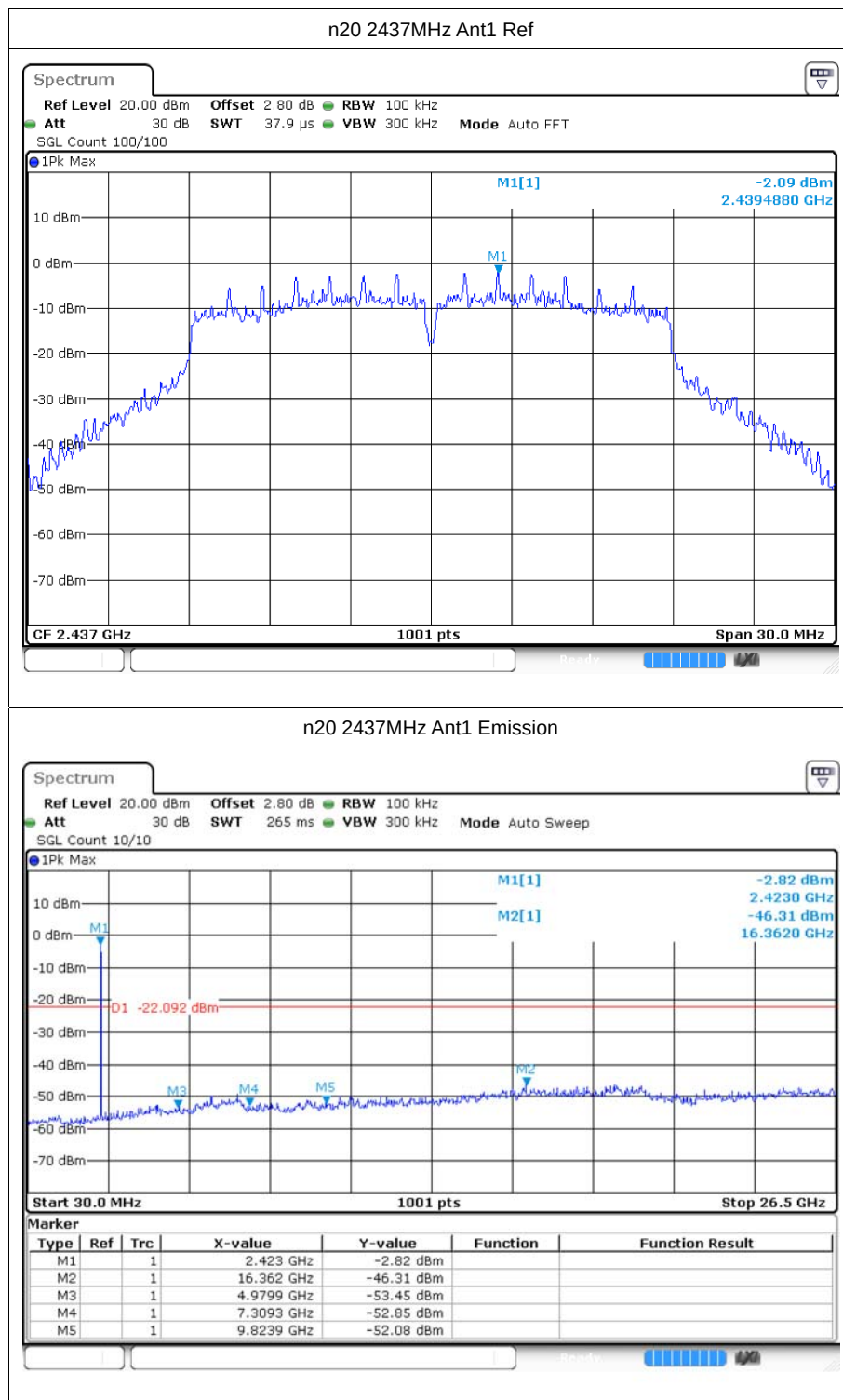


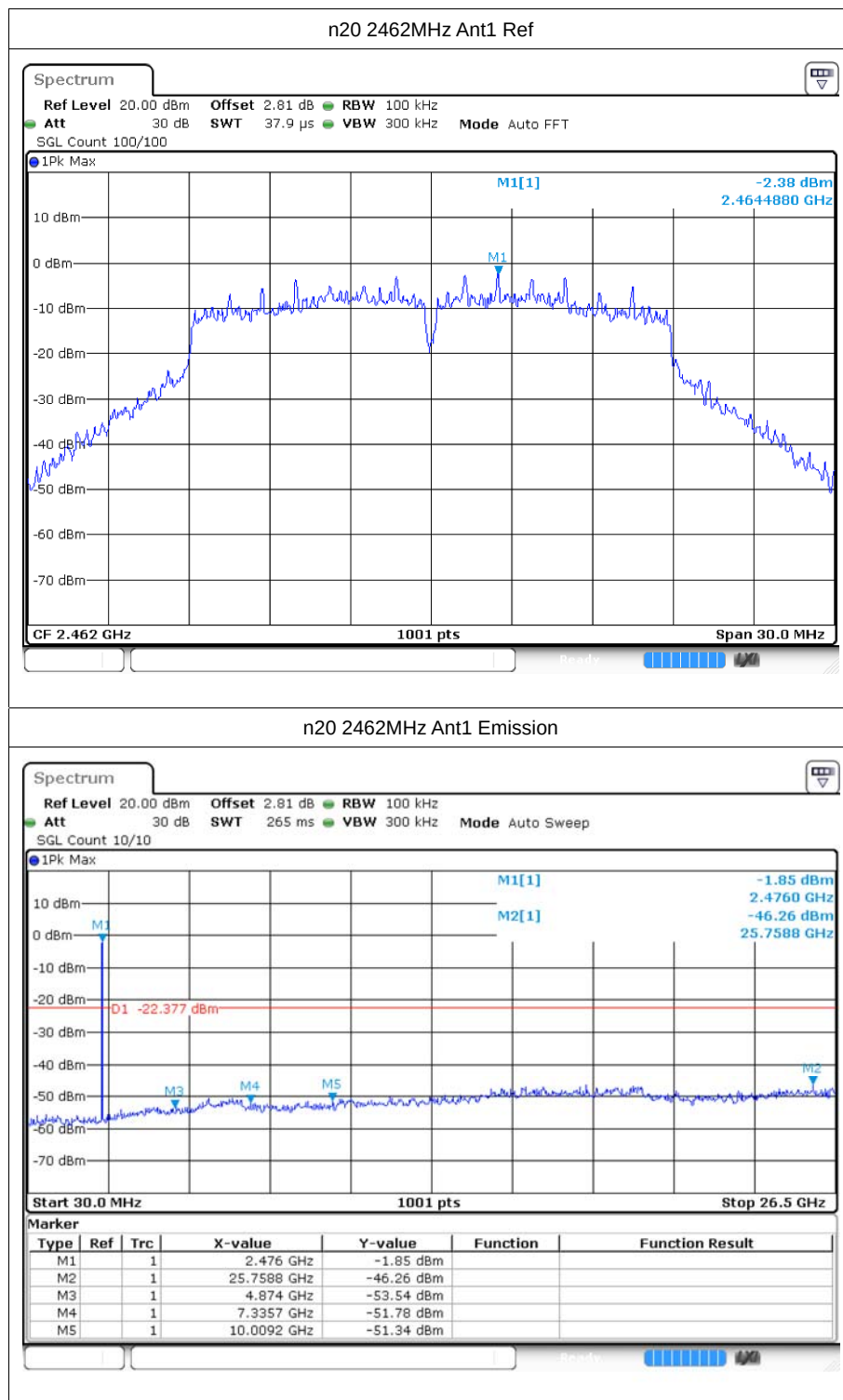














7 Restrict Band

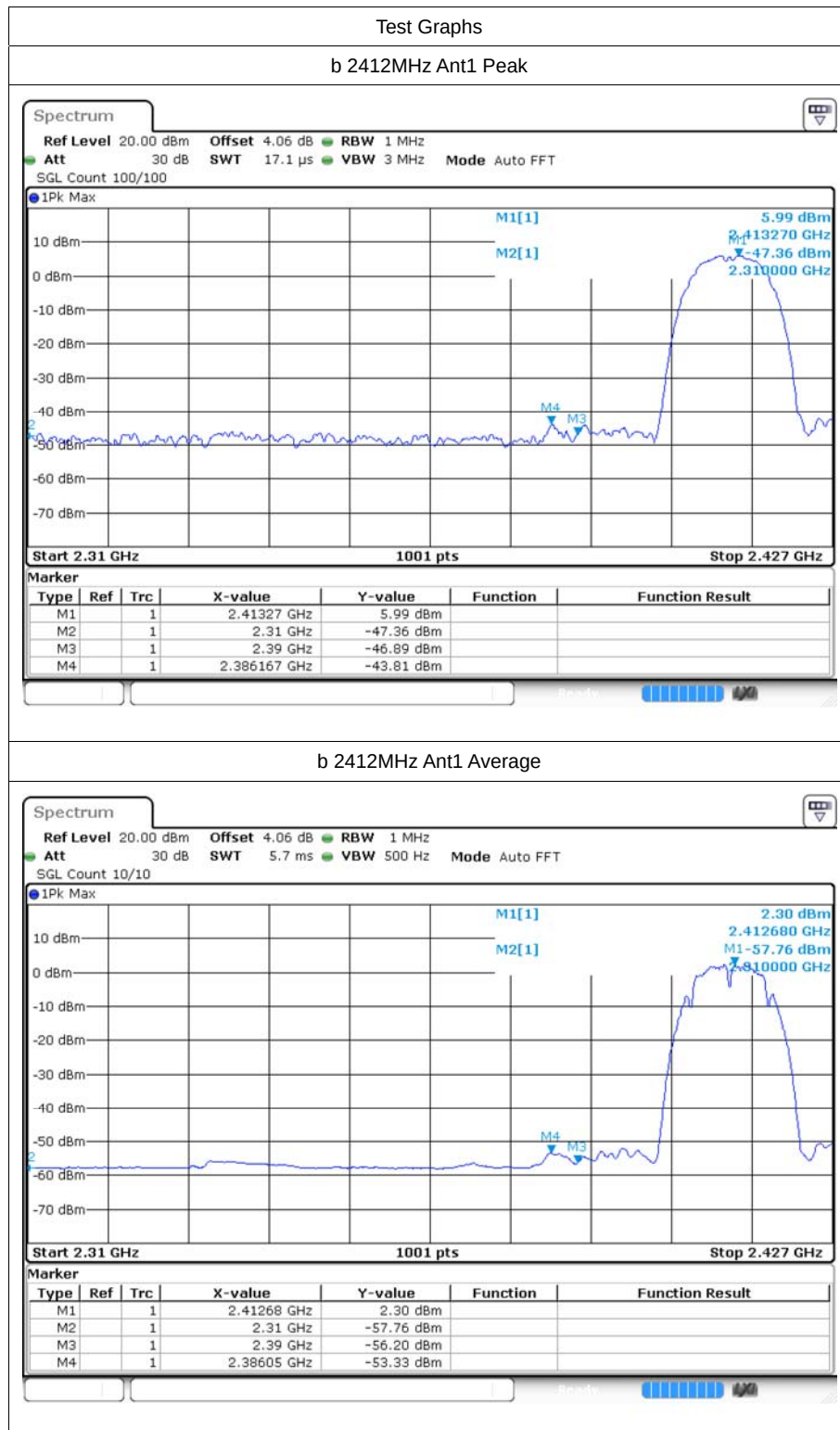
7.1 Test Result

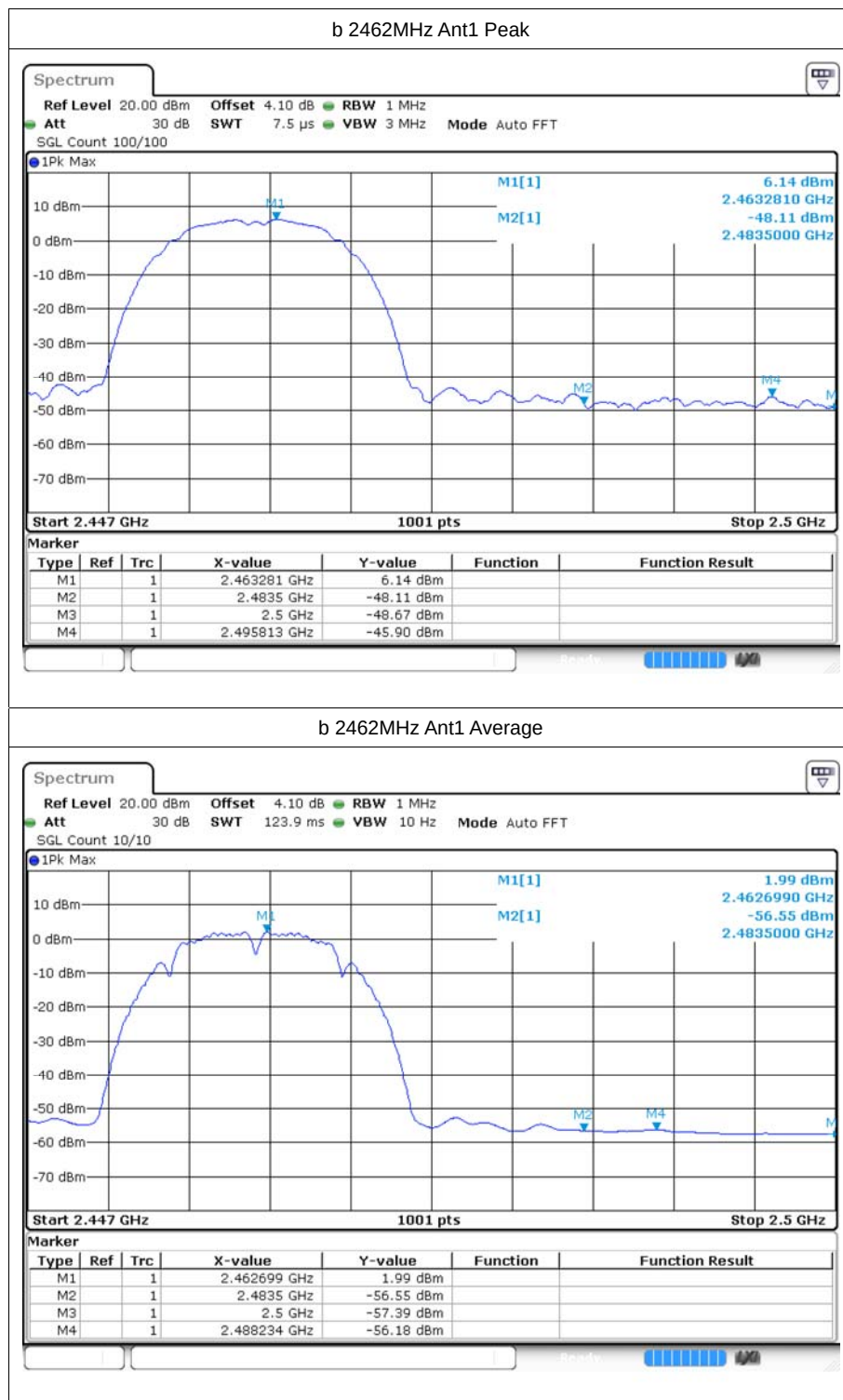
Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
b	2412	Ant1	2310	-47.36	2	49.9	Peak	74	Pass
b	2412	Ant1	2310	-57.76	2	39.5	Average	54	Pass
b	2412	Ant1	2386.167	-43.8	2	53.46	Peak	74	Pass
b	2412	Ant1	2386.05	-53.33	2	43.93	Average	54	Pass
b	2412	Ant1	2390	-46.88	2	50.38	Peak	74	Pass
b	2412	Ant1	2390	-56.2	2	41.06	Average	54	Pass
b	2462	Ant1	2483.5	-48.11	2	49.15	Peak	74	49.15
b	2462	Ant1	2483.5	-56.54	2	40.72	Average	54	Pass
b	2462	Ant1	2495.813	-45.9	2	51.36	Peak	74	Pass
b	2462	Ant1	2488.234	-56.17	2	41.09	Average	54	Pass
b	2462	Ant1	2500	-48.66	2	48.6	Peak	74	Pass
b	2462	Ant1	2500	-57.39	2	39.87	Average	54	Pass
g	2412	Ant1	2310	-50.34	2	46.92	Peak	74	Pass
g	2412	Ant1	2310	-56.58	2	40.68	Average	54	Pass
g	2412	Ant1	2338.665	-45.09	2	52.17	Peak	74	Pass
g	2412	Ant1	2338.548	-54.47	2	42.79	Average	54	Pass
g	2412	Ant1	2390	-49.85	2	50.38	Peak	74	Pass
g	2412	Ant1	2390	-56.63	2	40.63	Average	54	Pass
g	2462	Ant1	2483.5	-48.58	2	48.68	Peak	74	Pass
g	2462	Ant1	2483.5	-55.71	2	41.55	Average	54	Pass
g	2462	Ant1	2495.813	-45.46	2	51.8	Peak	74	Pass
g	2462	Ant1	2489.612	-55.38	2	41.88	Average	54	Pass
g	2462	Ant1	2500	-50	2	48.6	Peak	74	Pass
g	2462	Ant1	2500	-56.42	2	40.84	Average	54	Pass
n20	2412	Ant1	2310	-48.44	2	48.82	Peak	74	Pass
n20	2412	Ant1	2310	-56.36	2	40.9	Average	54	Pass
n20	2412	Ant1	2341.59	-44.05	2	53.21	Peak	74	Pass
n20	2412	Ant1	2338.548	-53.99	2	43.27	Average	54	Pass
n20	2412	Ant1	2390	-48.38	2	48.88	Peak	74	Pass
n20	2412	Ant1	2390	-56.5	2	40.76	Average	54	Pass
n20	2462	Ant1	2483.5	-48.08	2	49.18	Peak	74	Pass
n20	2462	Ant1	2483.5	-56.17	2	41.09	Average	54	Pass
n20	2462	Ant1	2497.403	-46.54	2	50.72	Peak	74	Pass
n20	2462	Ant1	2485.584	-55.02	2	42.24	Average	54	Pass

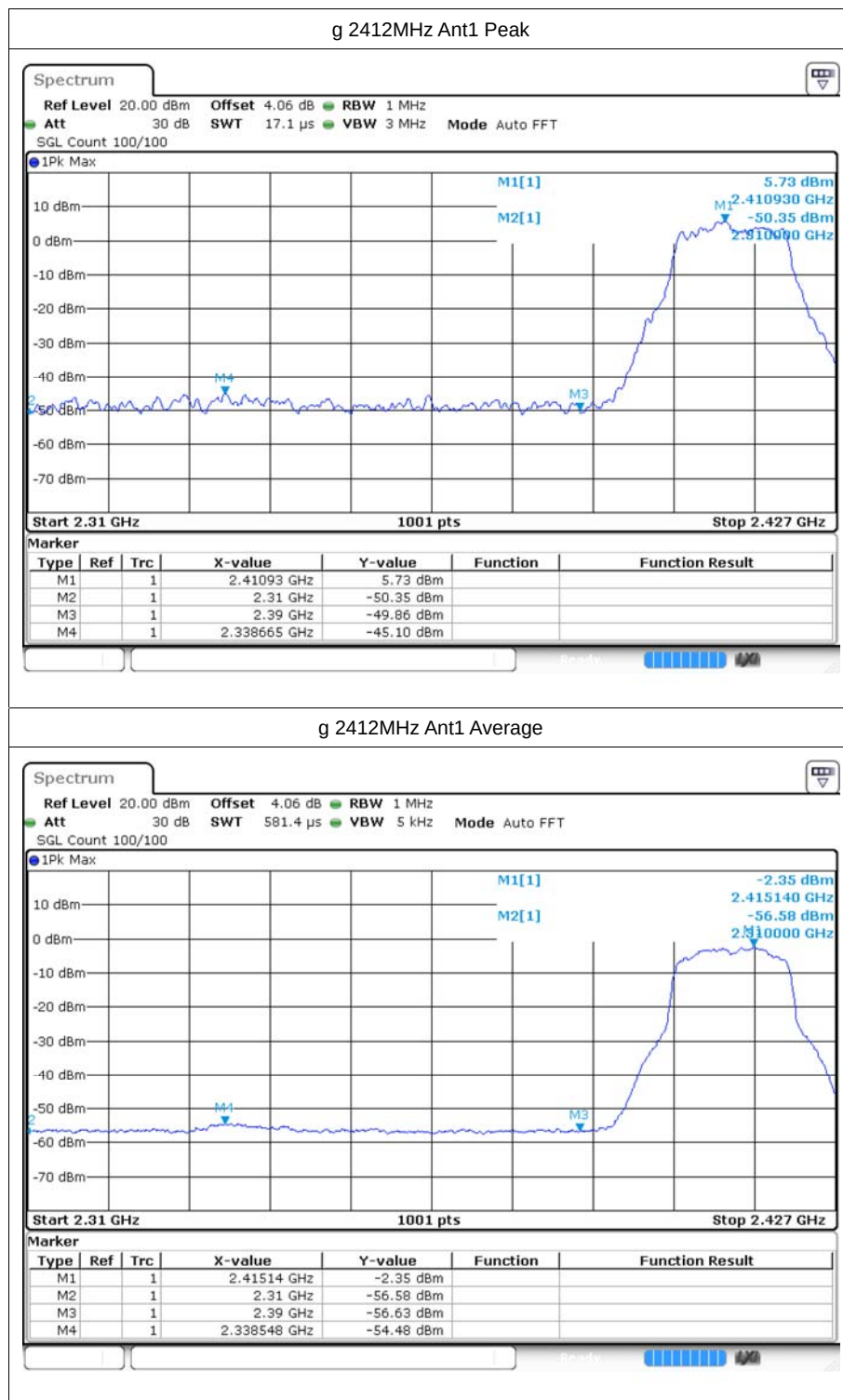


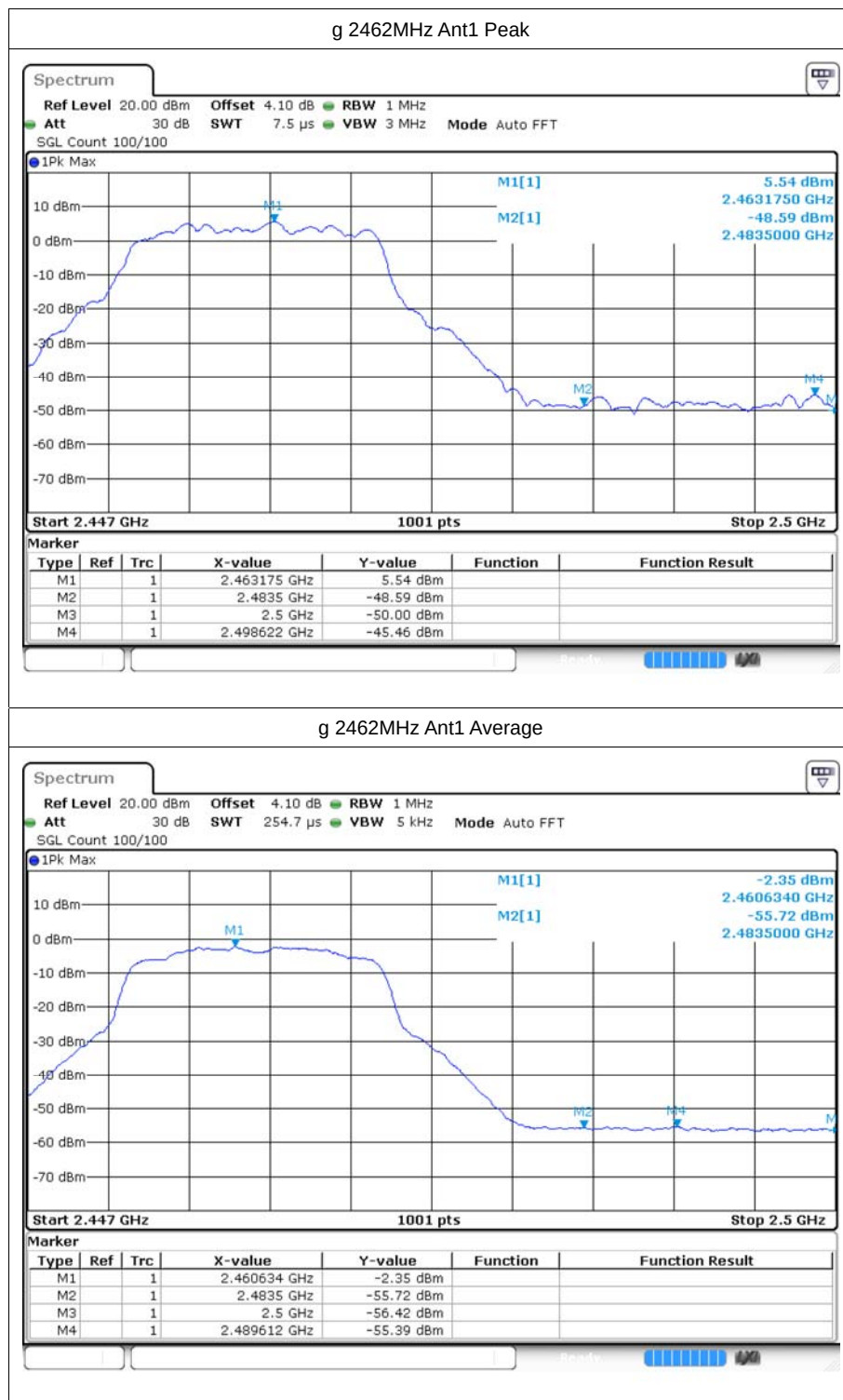
n20	2462	Ant1	2500	-48.9	2	48.36	Peak	74	Pass
n20	2462	Ant1	2500	-56.27	2	40.99	Average	54	Pass

7.2 Test Graphs

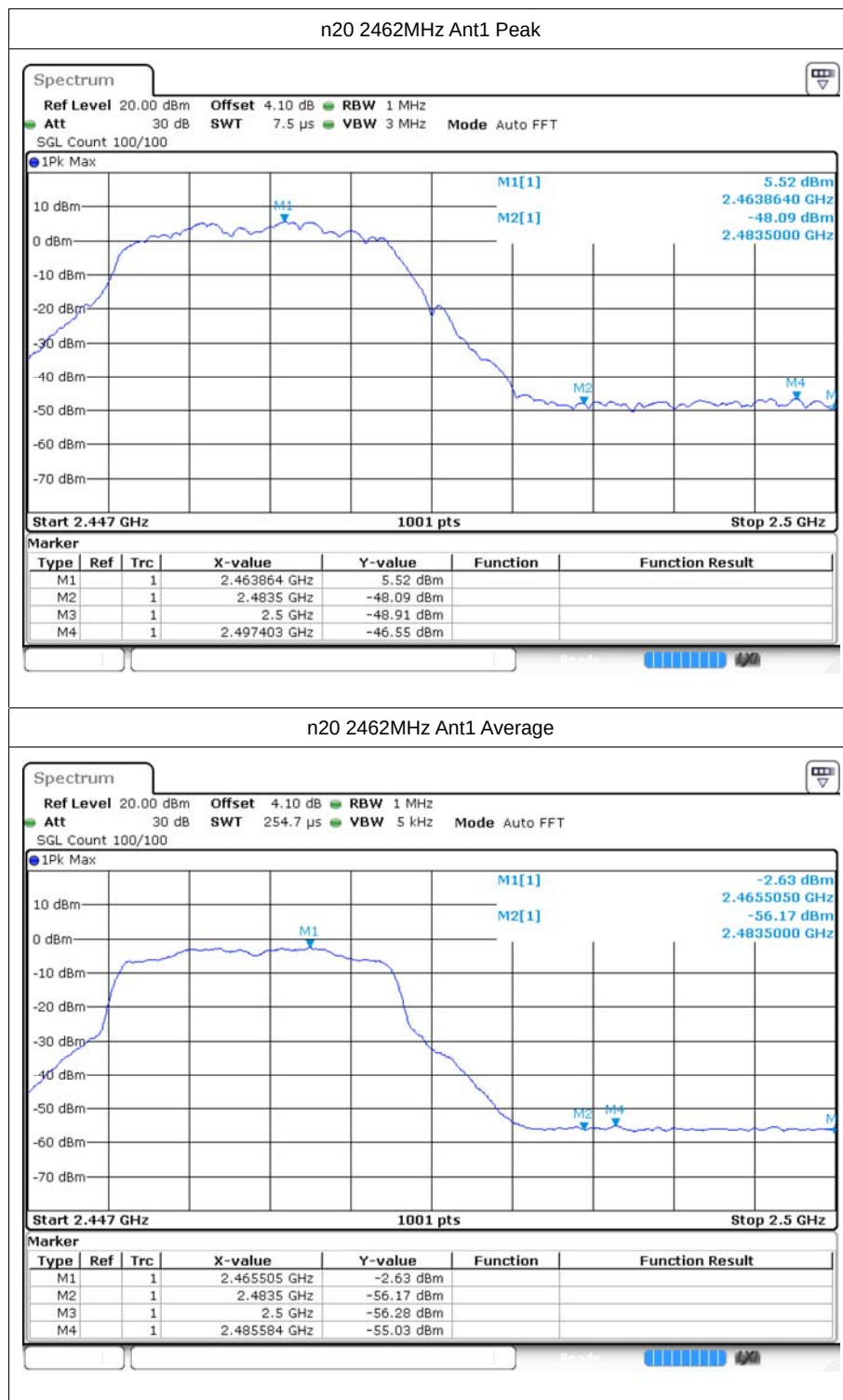












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