



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: translating machine

Trade Mark: N/A

Test Model: T21

Environmental Conditions

Temperature:	24.4 °C
Relative Humidity:	52.5%
ATM Pressure:	101Kpa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



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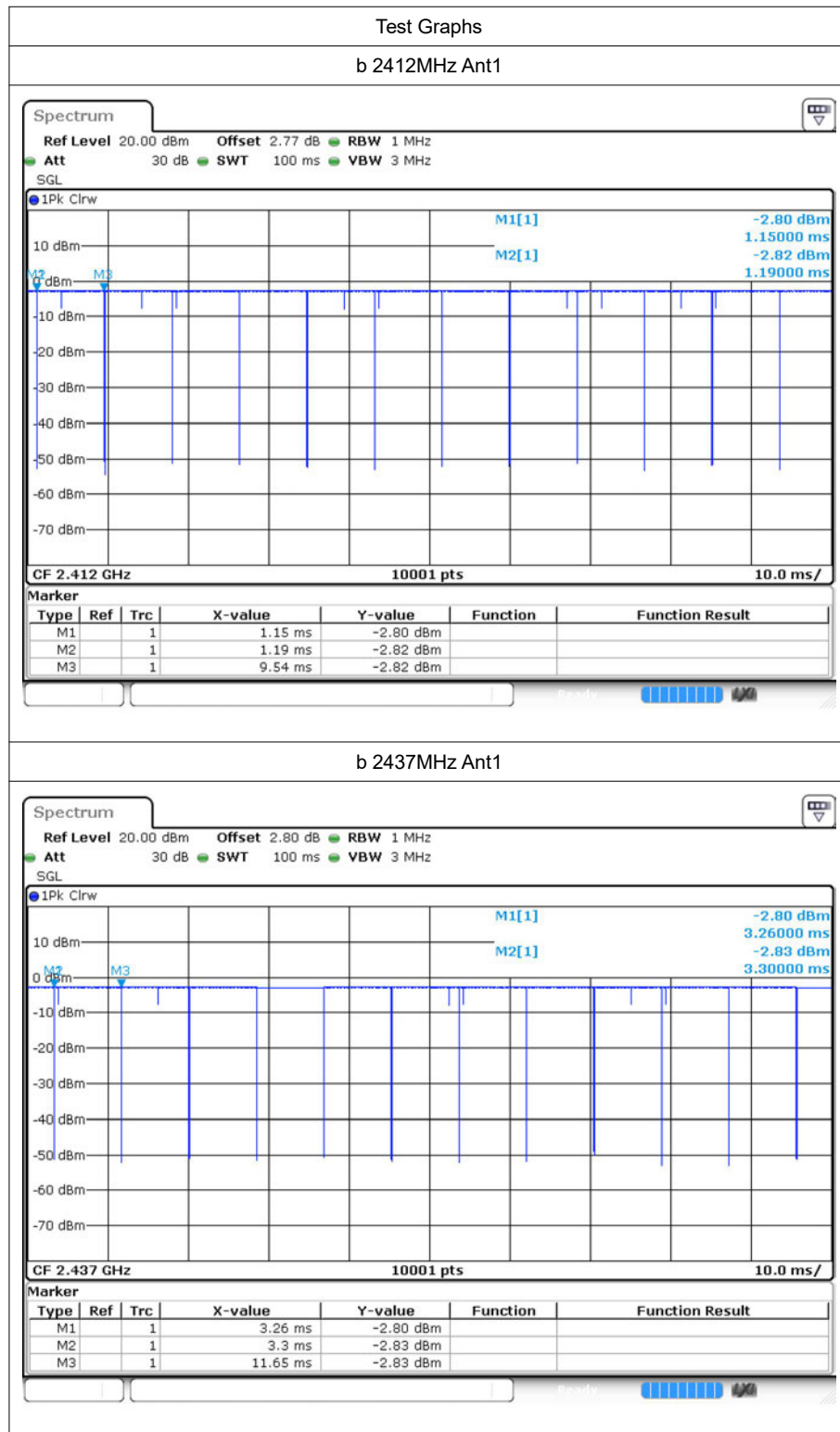


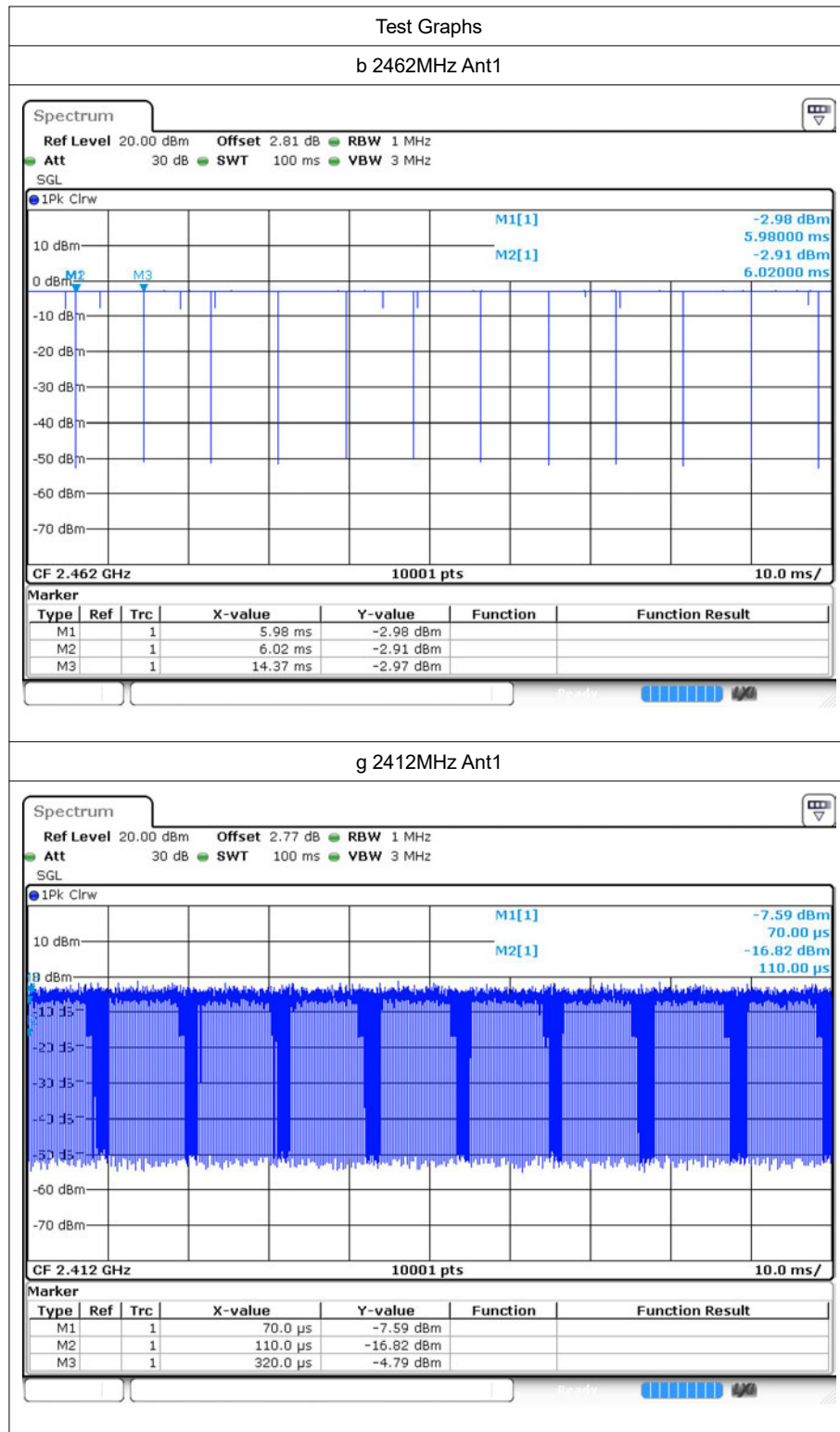
1 Duty Cycle

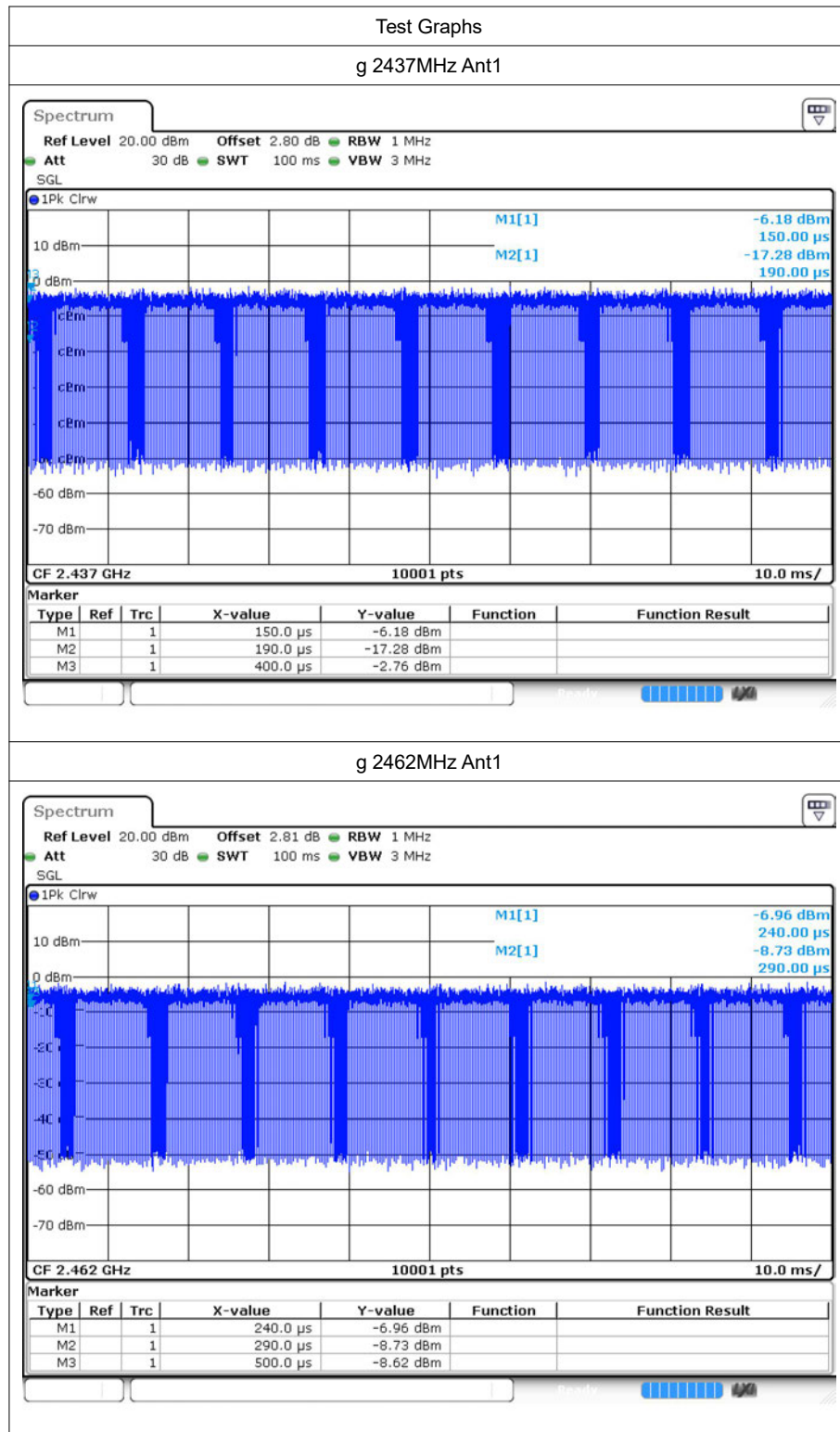
1.1 Test Result

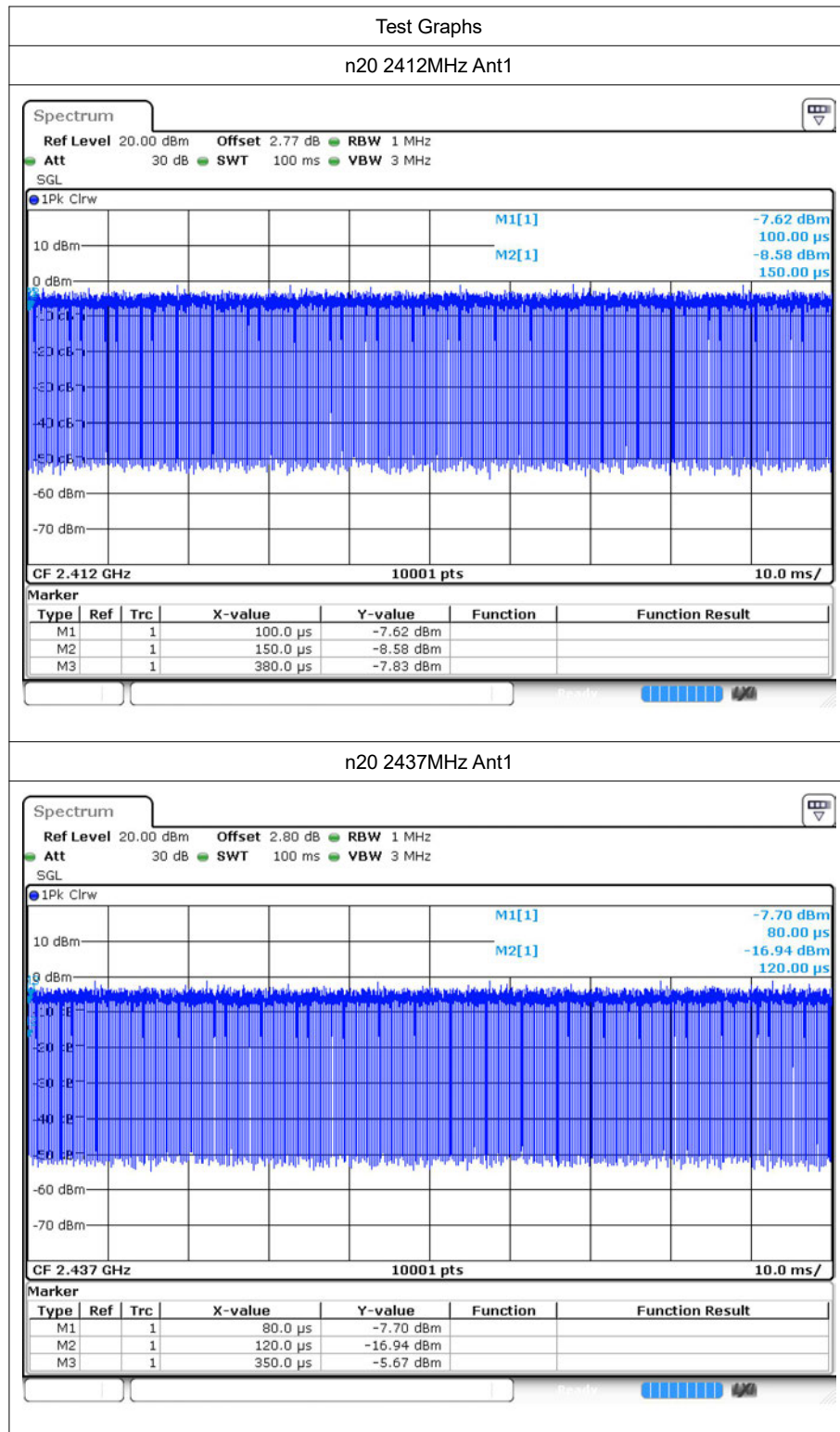
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
b	2412	Ant1	99.61	0.02	0.12
b	2437	Ant1	99.59	0.02	0.12
b	2462	Ant1	99.62	0.02	0.12
g	2412	Ant1	86.87	0.61	4.76
g	2437	Ant1	86.94	0.61	4.76
g	2462	Ant1	86.89	0.61	4.76
n20	2412	Ant1	87.5	0.58	4.35
n20	2437	Ant1	87.51	0.58	4.35
n20	2462	Ant1	87.49	0.58	4.35

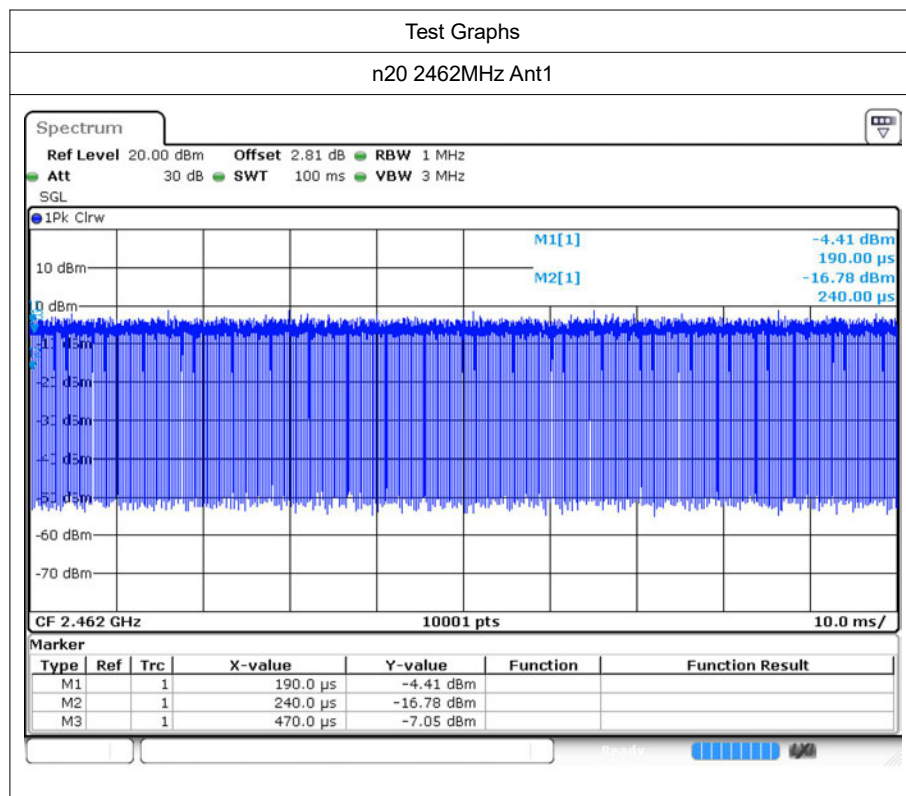
1.2 Test Graphs











2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	7.86	30	Pass
b	2437	Ant1	7.63	30	Pass
b	2462	Ant1	7.64	30	Pass
g	2412	Ant1	7.83	30	Pass
g	2437	Ant1	7.75	30	Pass
g	2462	Ant1	7.68	30	Pass
n20	2412	Ant1	7.78	30	Pass
n20	2437	Ant1	7.64	30	Pass
n20	2462	Ant1	7.77	30	Pass

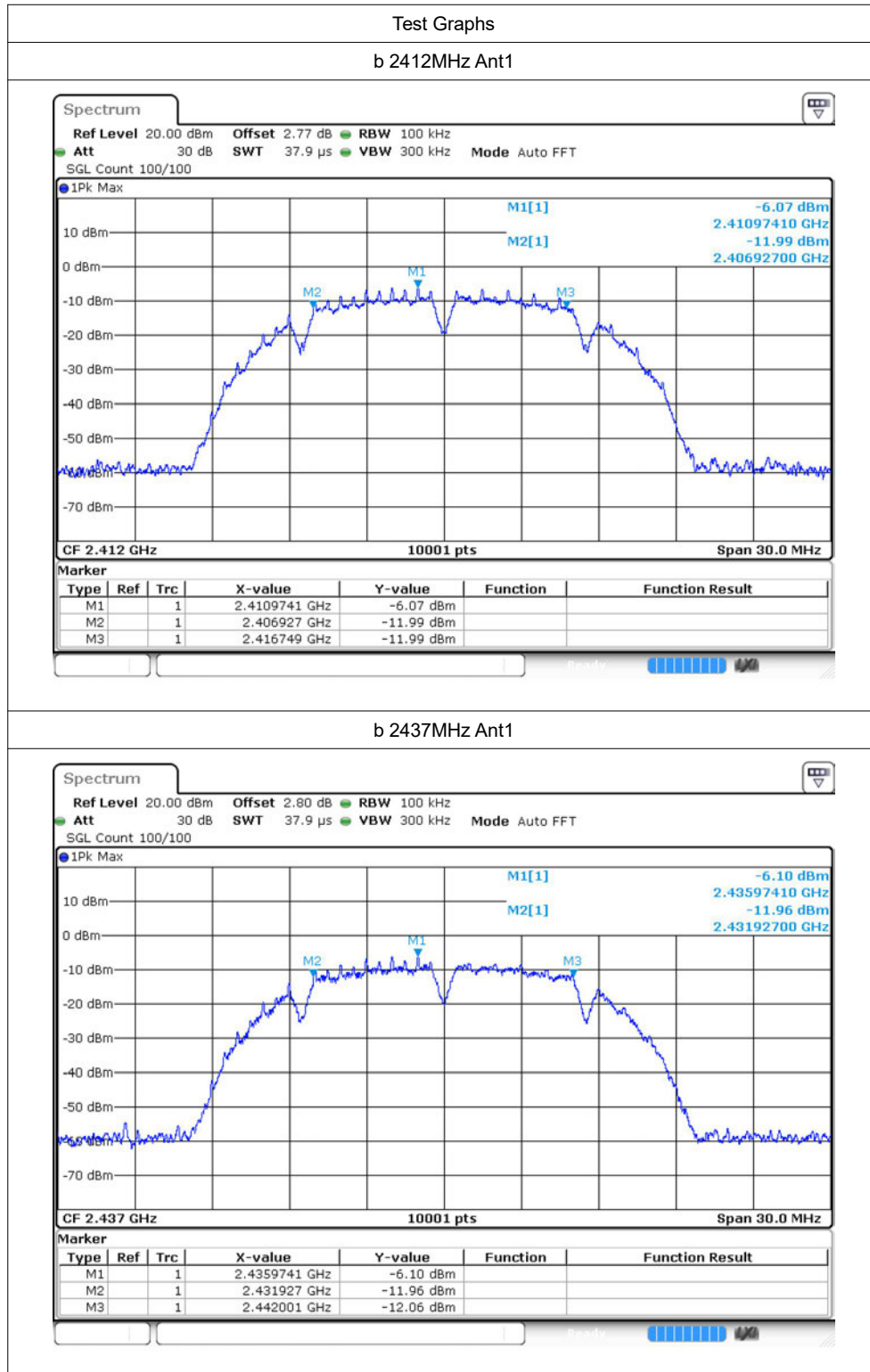


3 -6dB Bandwidth

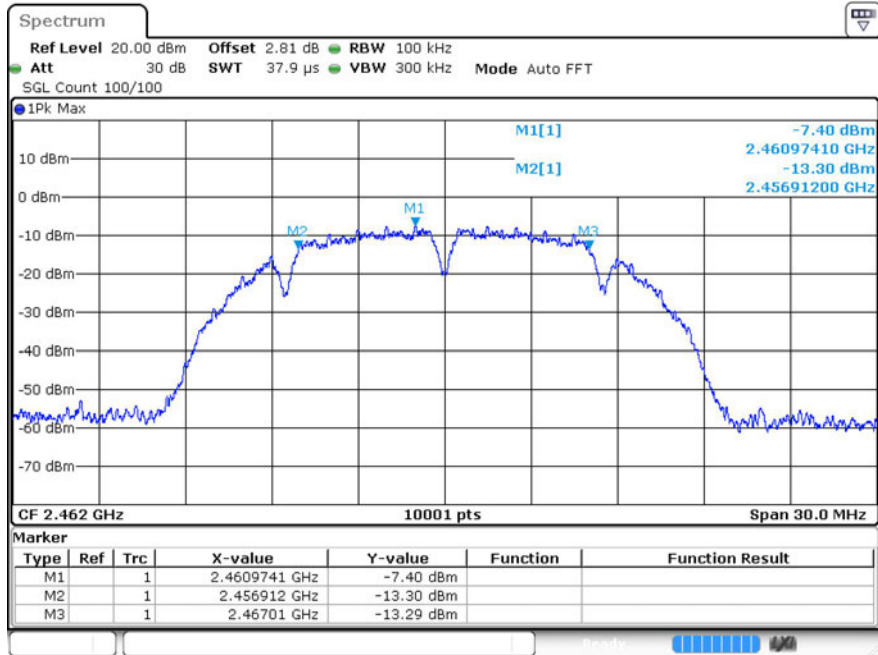
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	9.822	0.5	Pass
b	2437	Ant1	10.074	0.5	Pass
b	2462	Ant1	10.098	0.5	Pass
g	2412	Ant1	15.099	0.5	Pass
g	2437	Ant1	15.111	0.5	Pass
g	2462	Ant1	15.099	0.5	Pass
n20	2412	Ant1	15.108	0.5	Pass
n20	2437	Ant1	15.111	0.5	Pass
n20	2462	Ant1	15.105	0.5	Pass

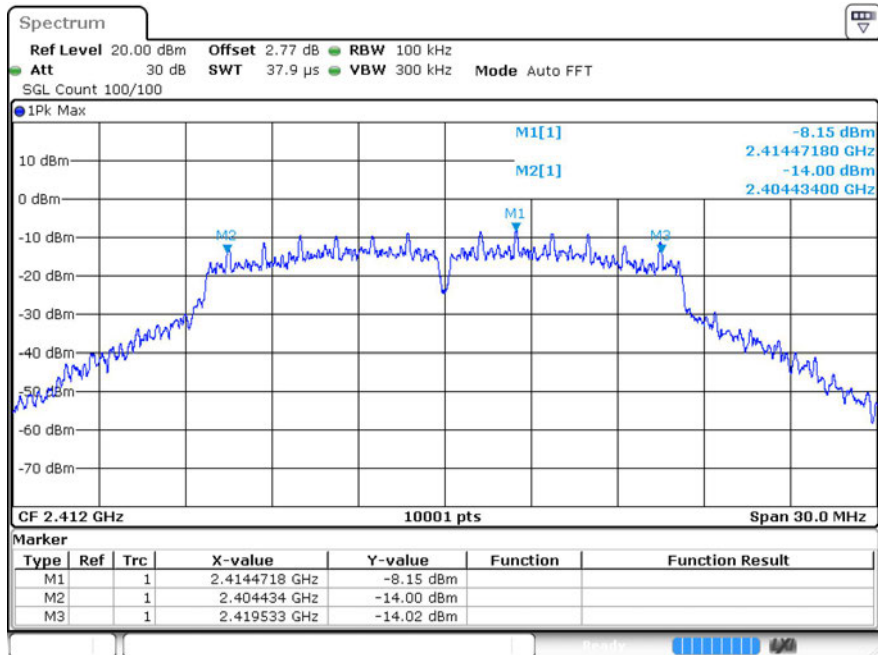
3.2 Test Graphs



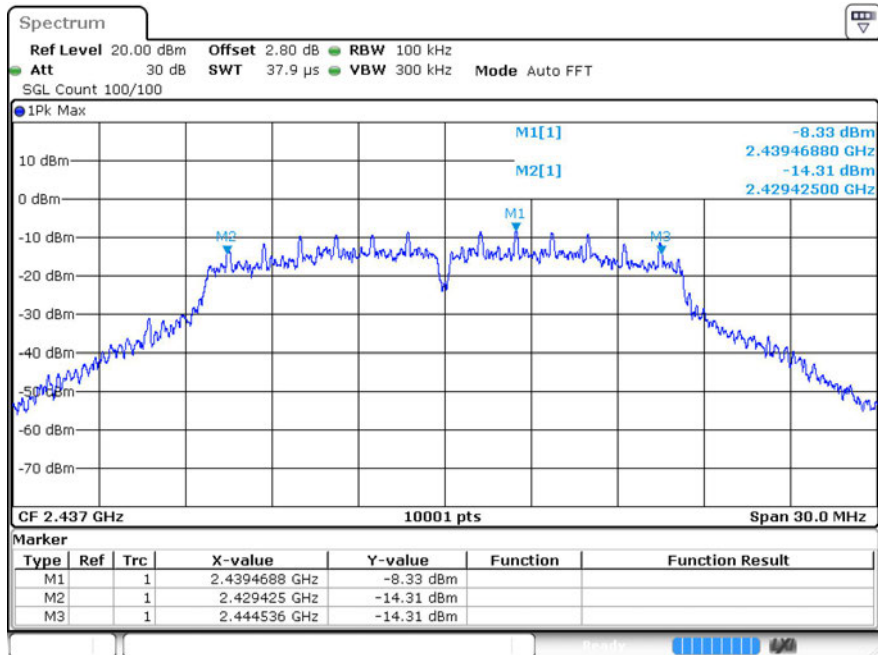
b 2462MHz Ant1



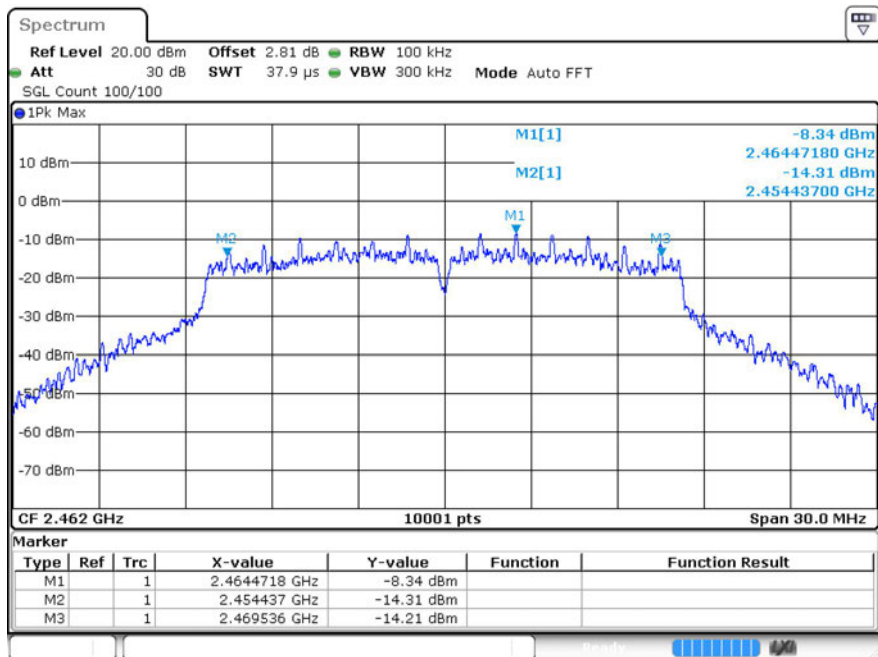
g 2412MHz Ant1

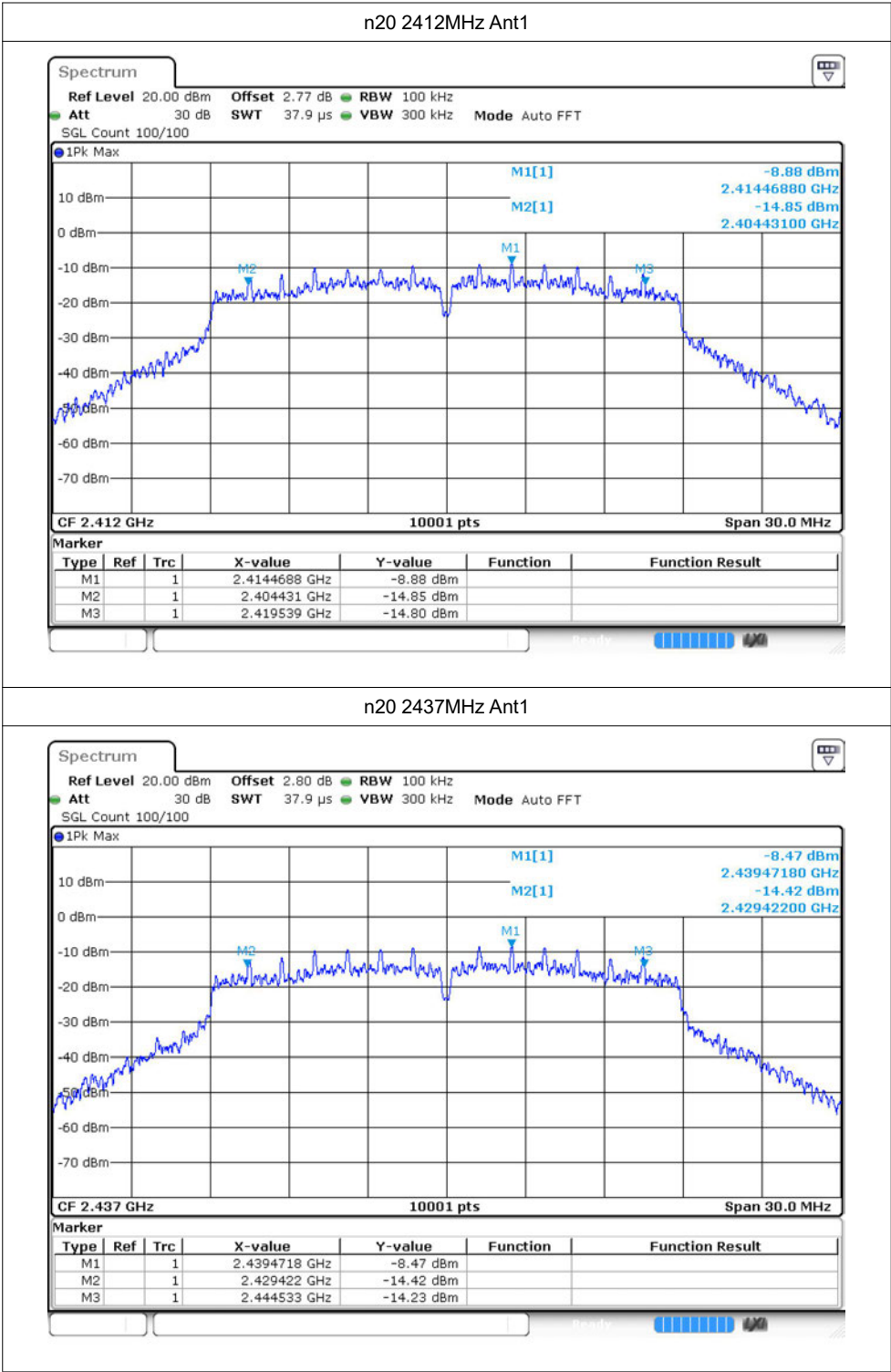


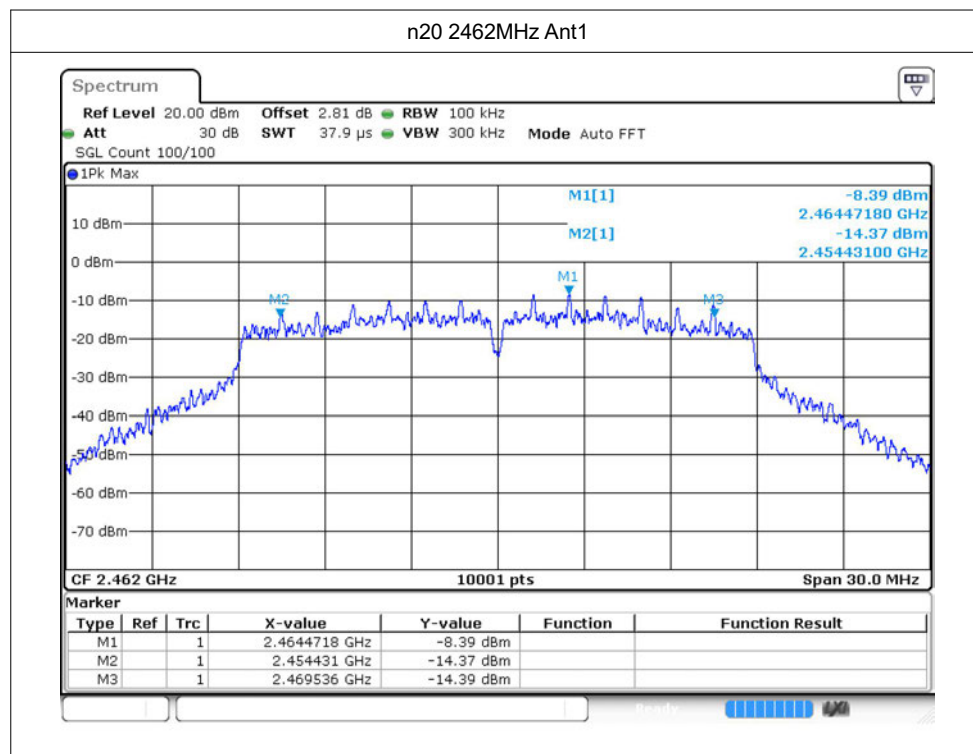
g 2437MHz Ant1



g 2462MHz Ant1





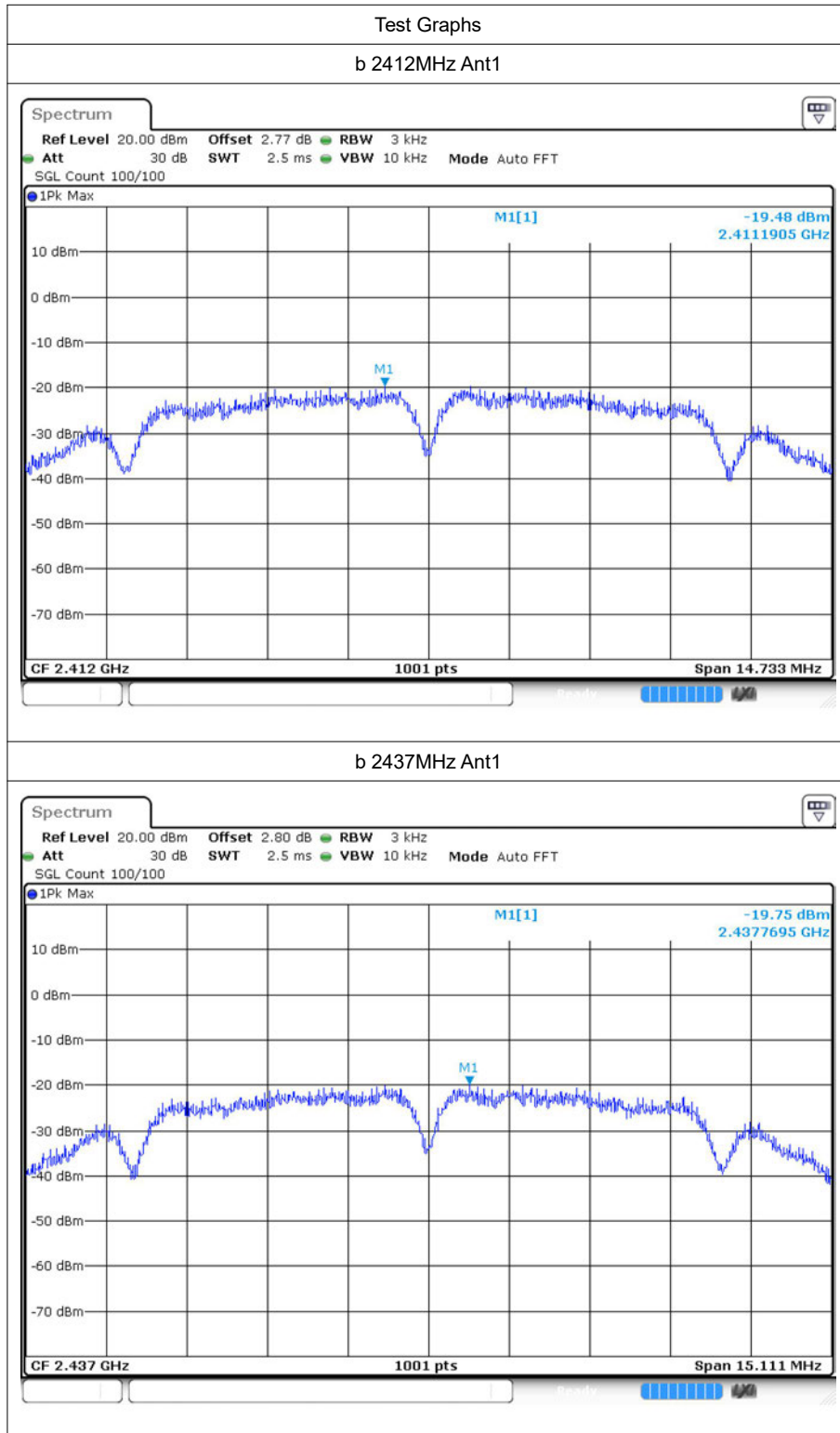


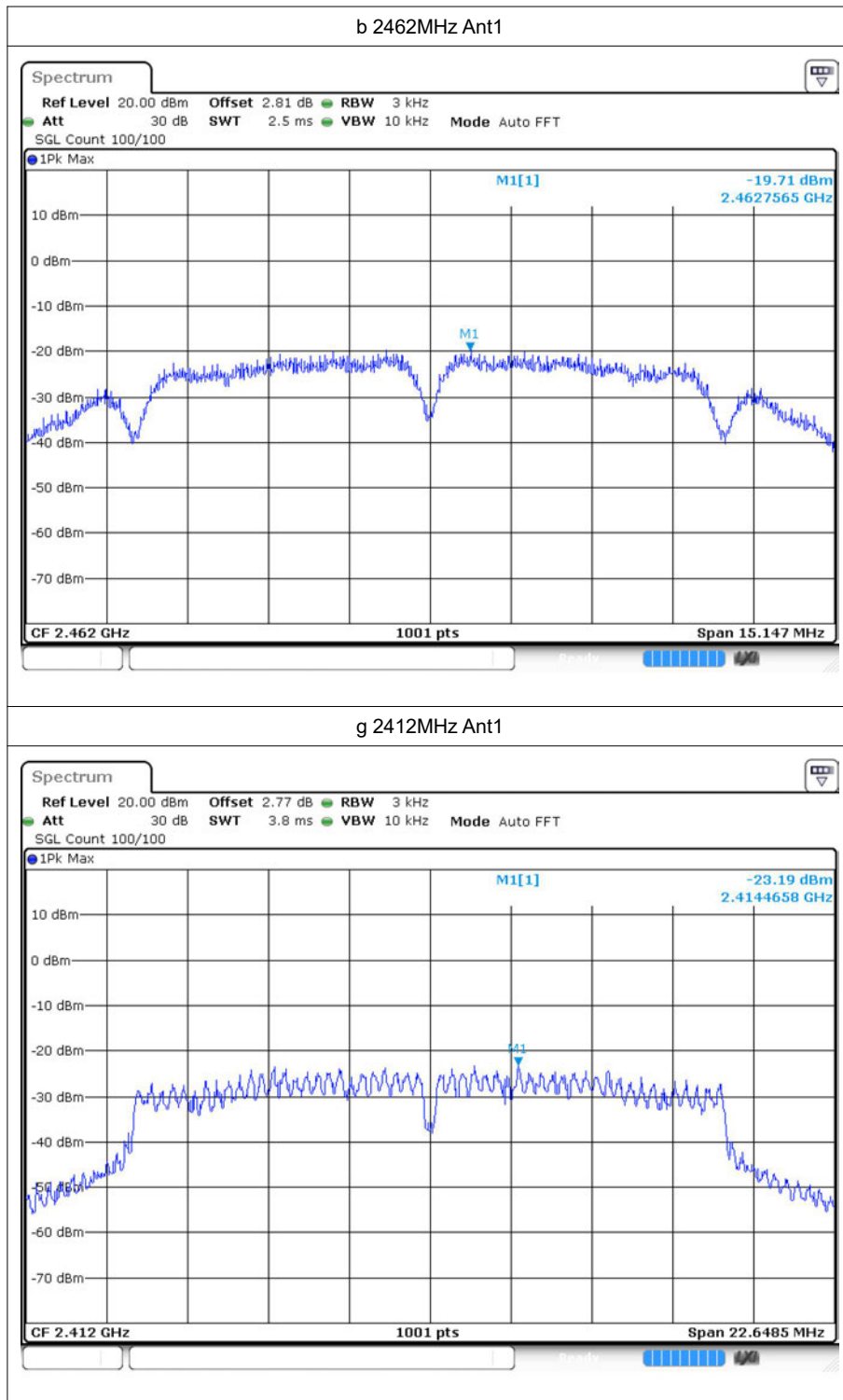
4 Maximum Power Spectral Density Level

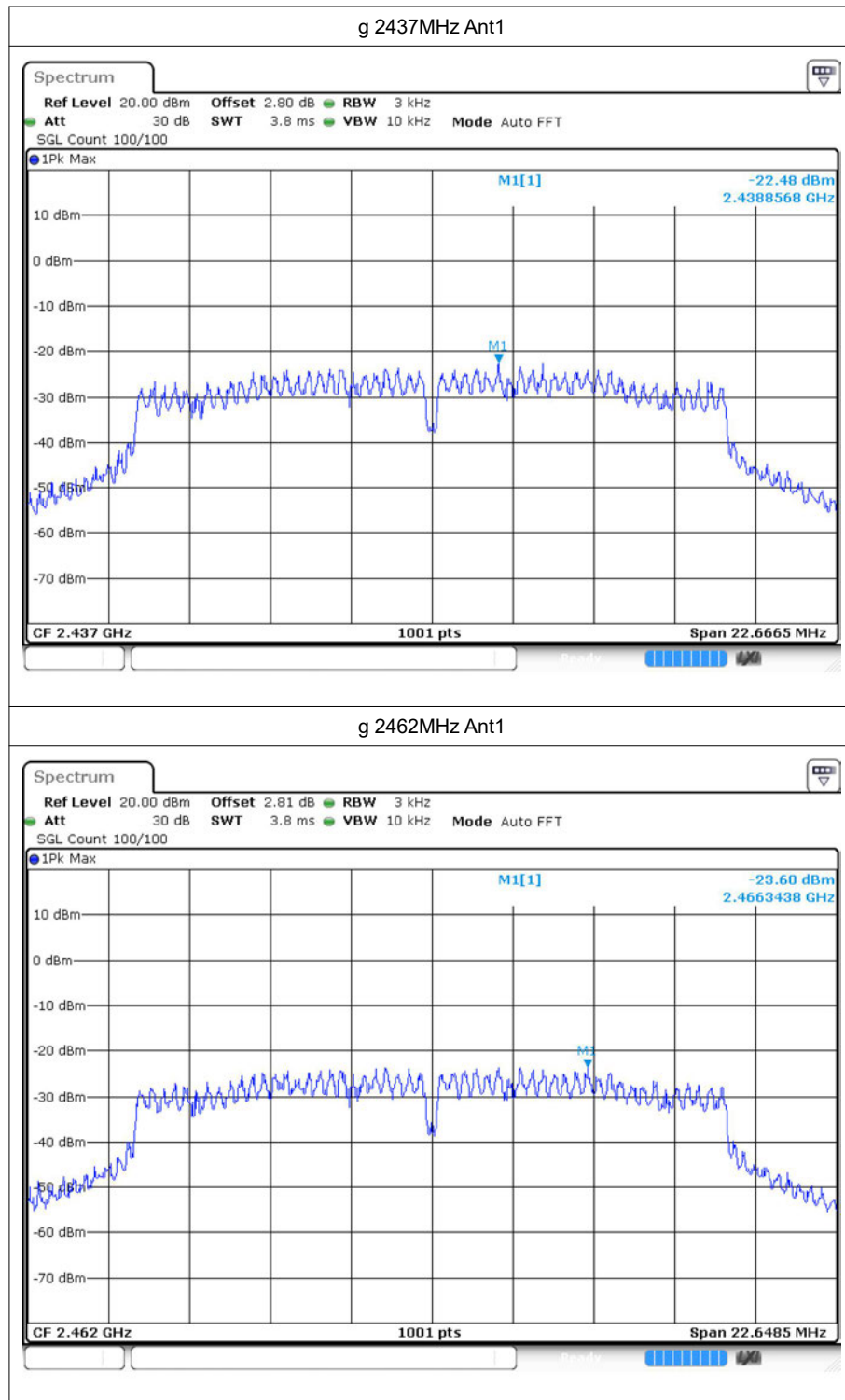
4.1 Test Result

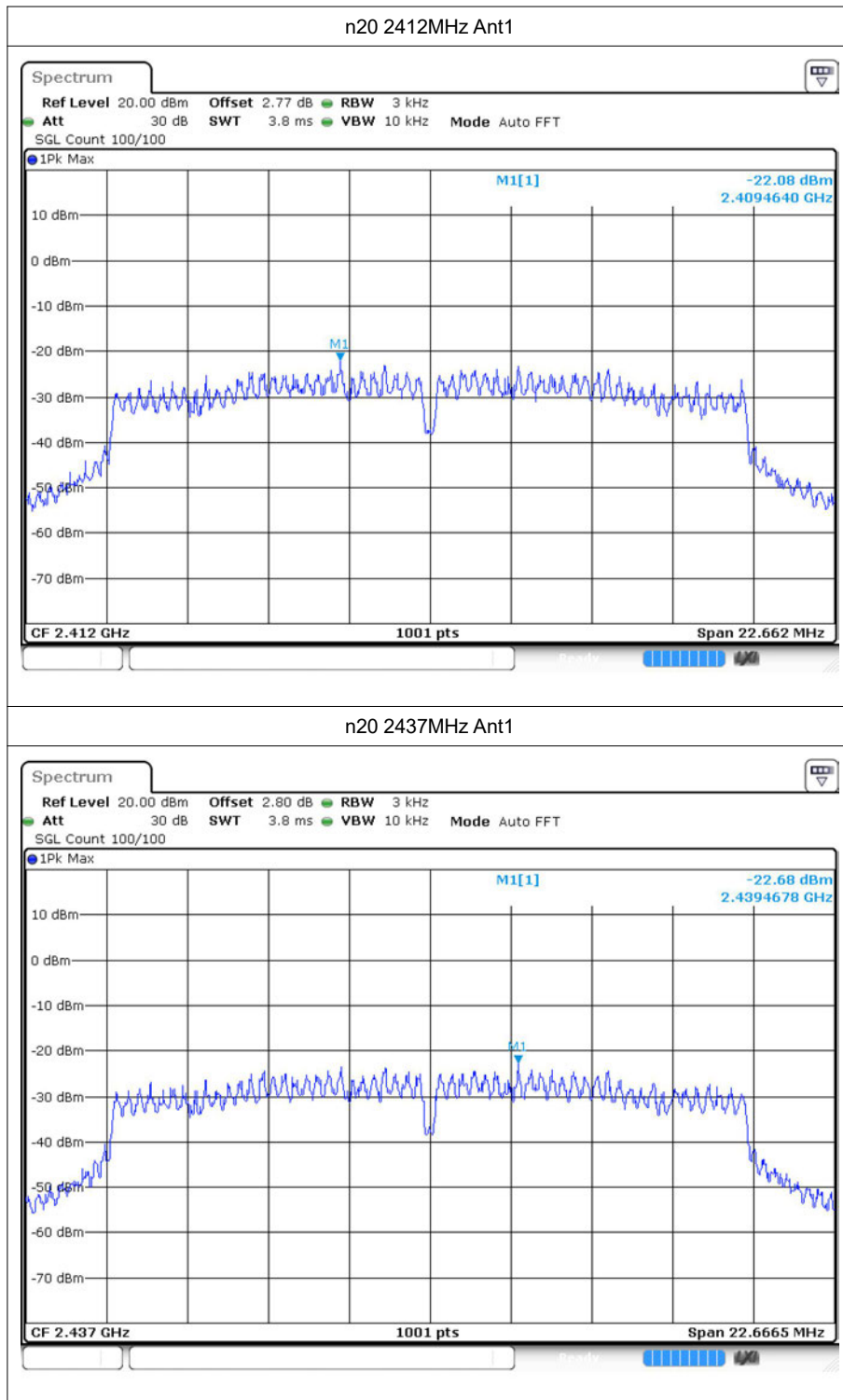
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-19.48	≤ 8	Pass
b	2437	Ant1	-19.75	≤ 8	Pass
b	2462	Ant1	-19.71	≤ 8	Pass
g	2412	Ant1	-23.19	≤ 8	Pass
g	2437	Ant1	-22.48	≤ 8	Pass
g	2462	Ant1	-23.6	≤ 8	Pass
n20	2412	Ant1	-22.08	≤ 8	Pass
n20	2437	Ant1	-22.68	≤ 8	Pass
n20	2462	Ant1	-23.55	≤ 8	Pass

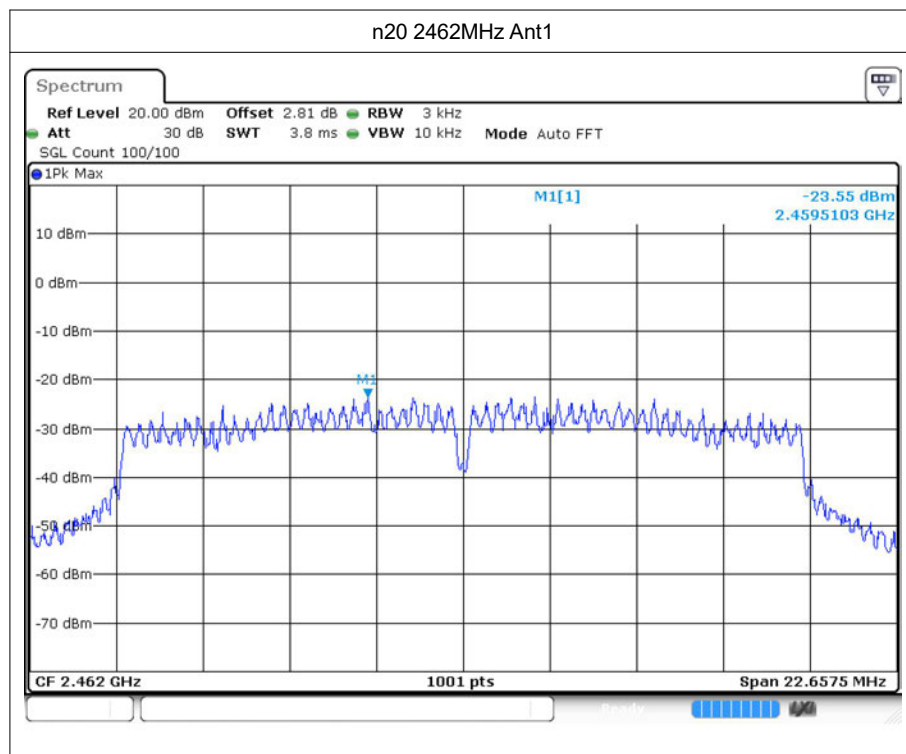
4.2 Test Graphs











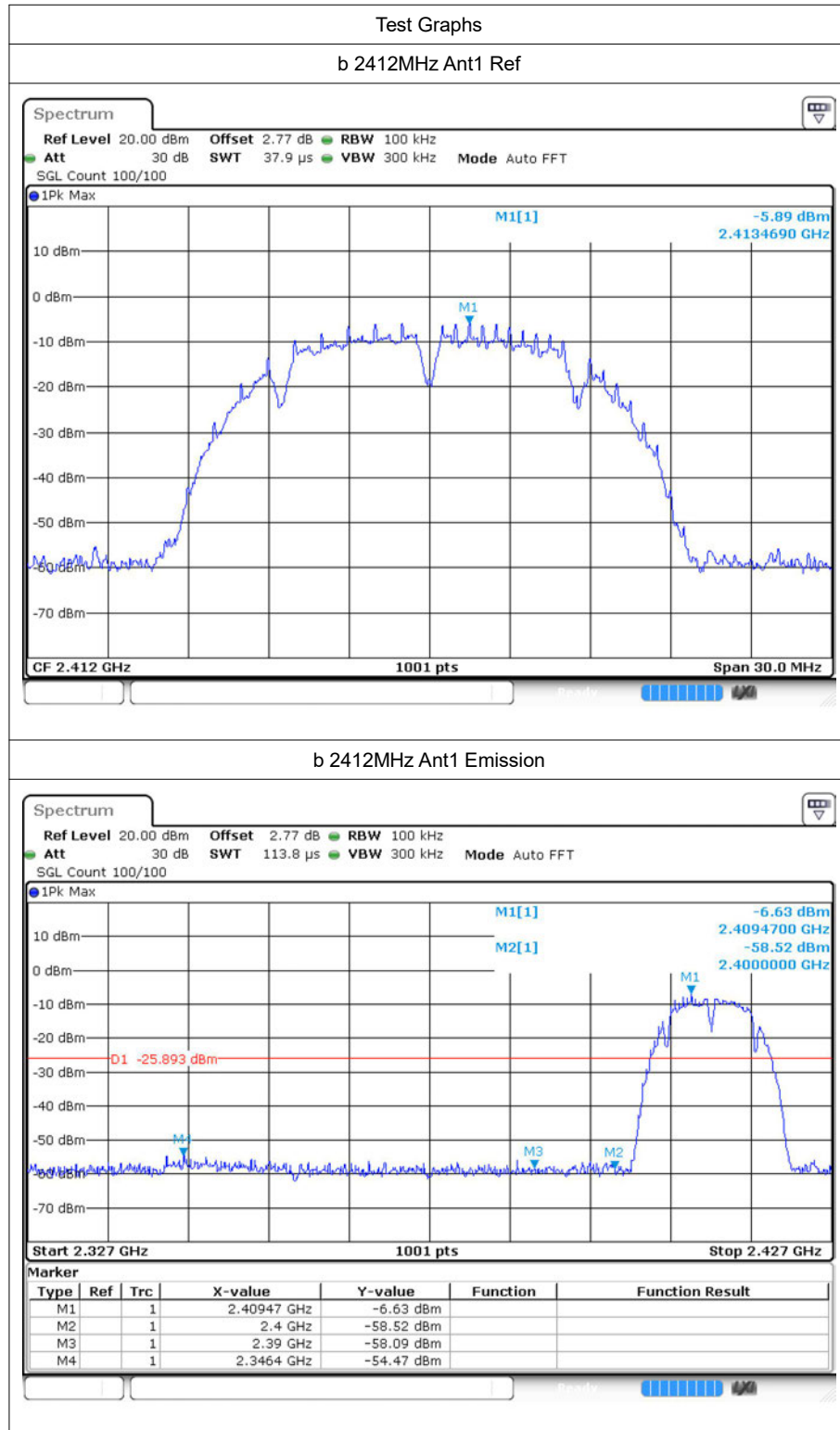


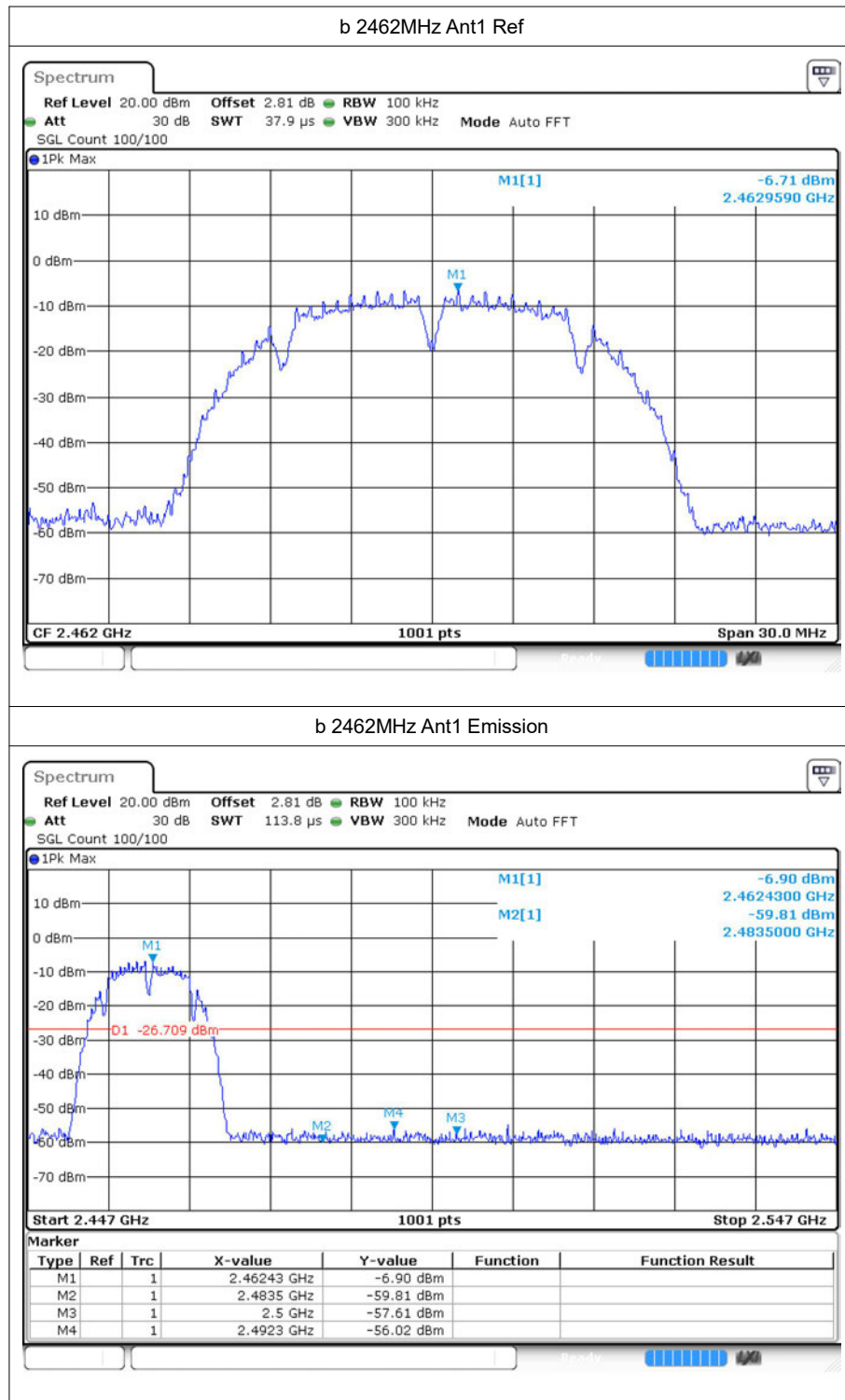
5 Band Edge

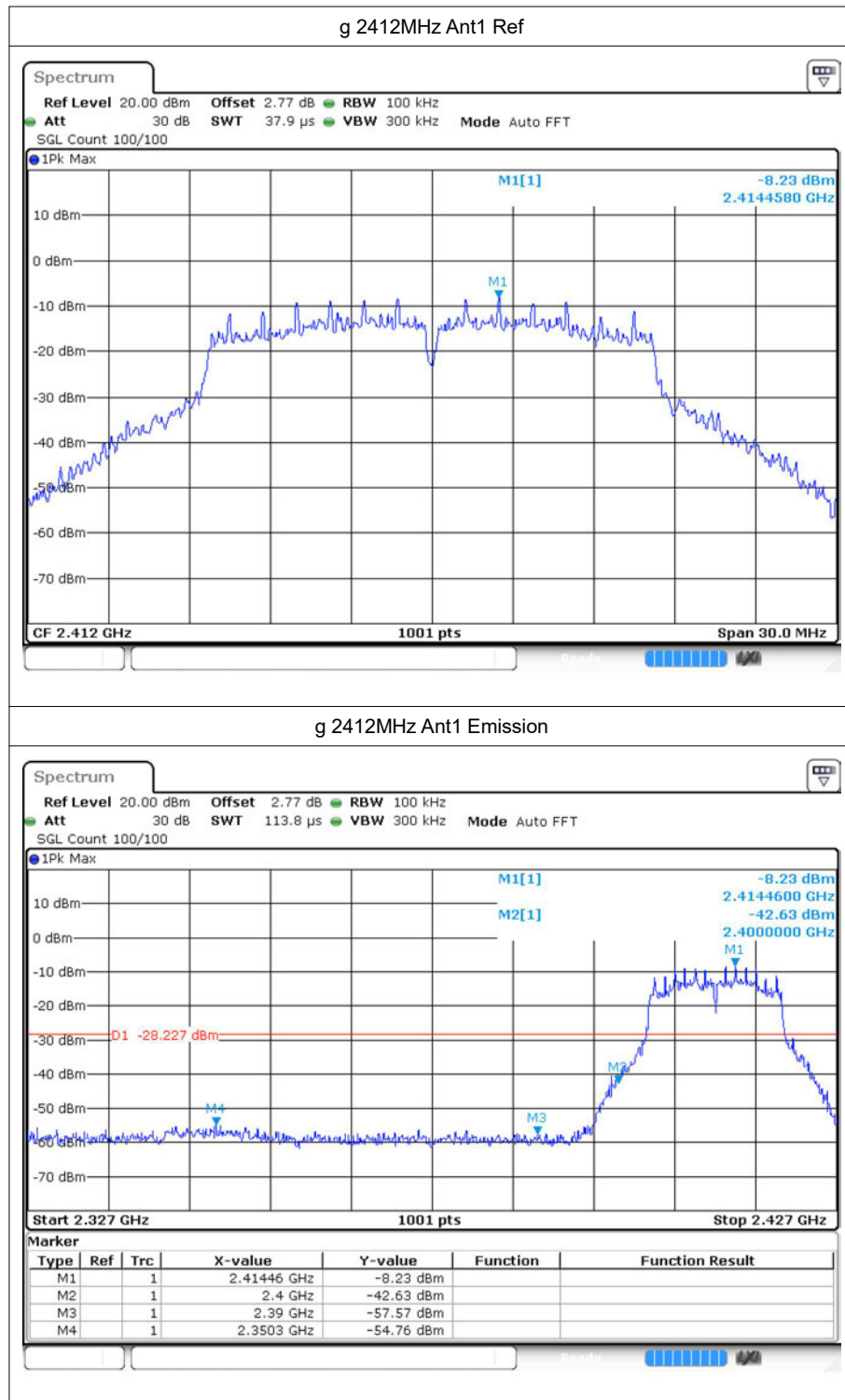
5.1 Test Result

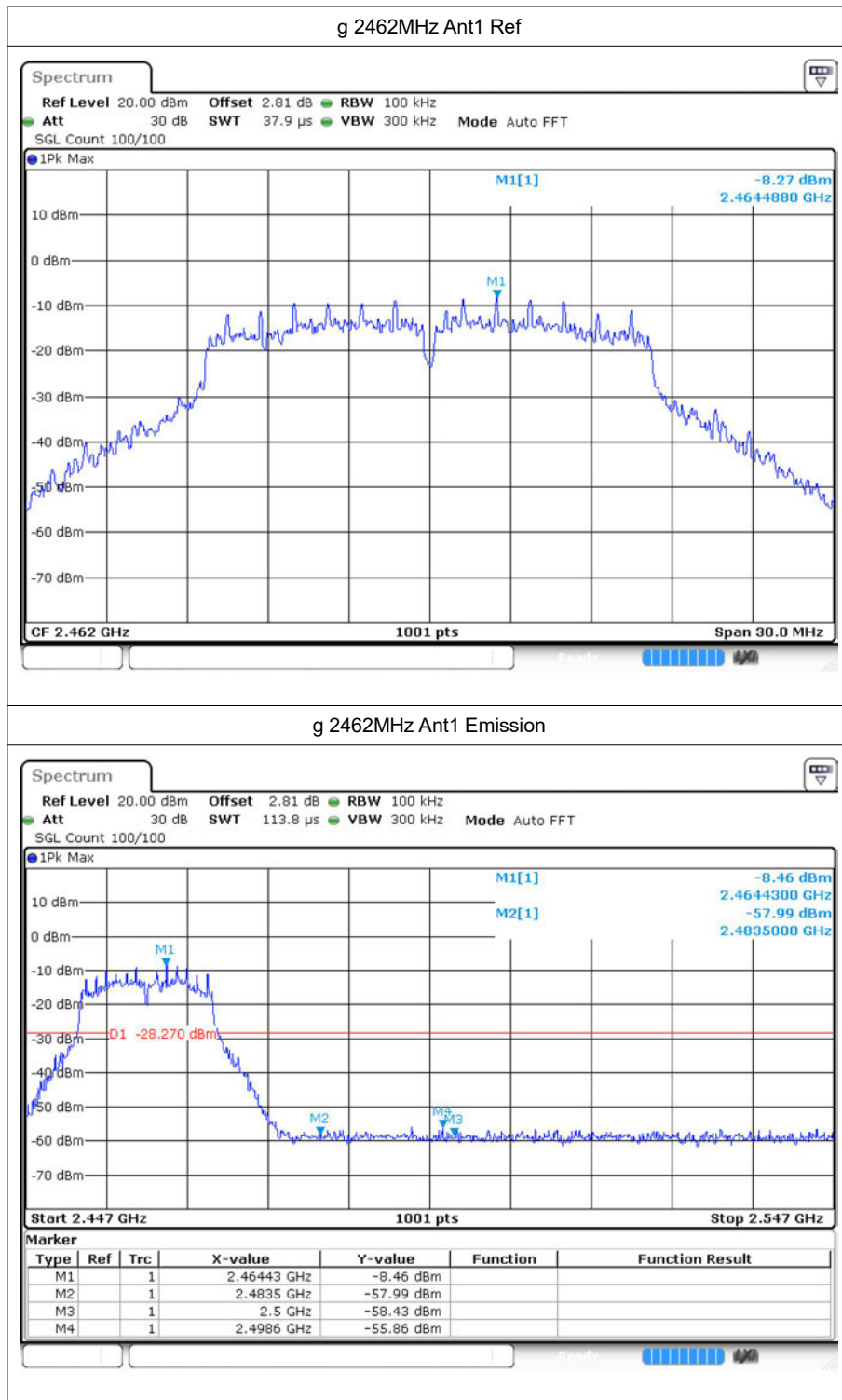
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-48.57	-20	Pass
b	2462	Ant1	-49.31	-20	Pass
g	2412	Ant1	-46.53	-20	Pass
g	2462	Ant1	-47.59	-20	Pass
n20	2412	Ant1	-45.96	-20	Pass
n20	2462	Ant1	-47.31	-20	Pass

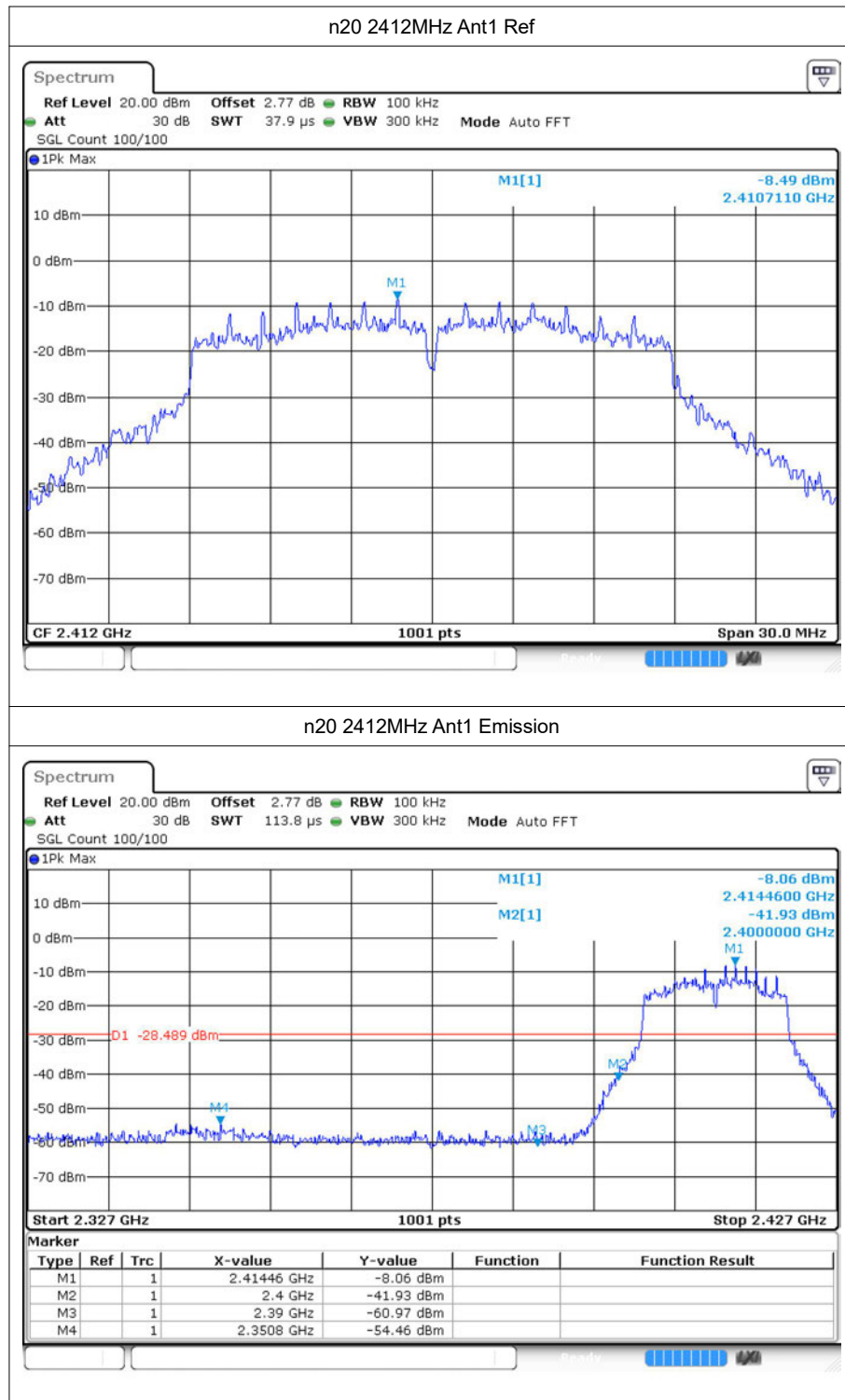
5.2 Test Graphs

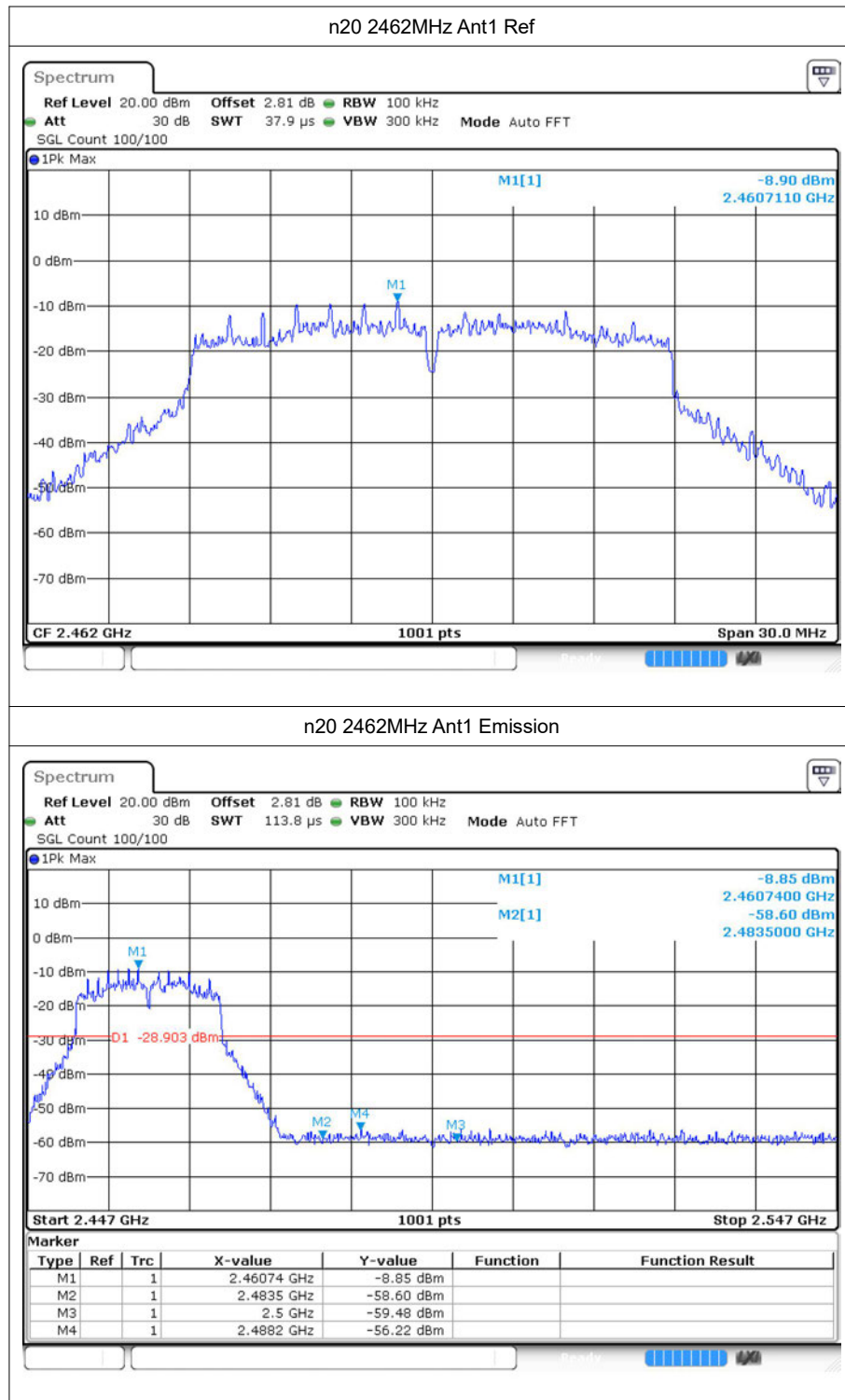












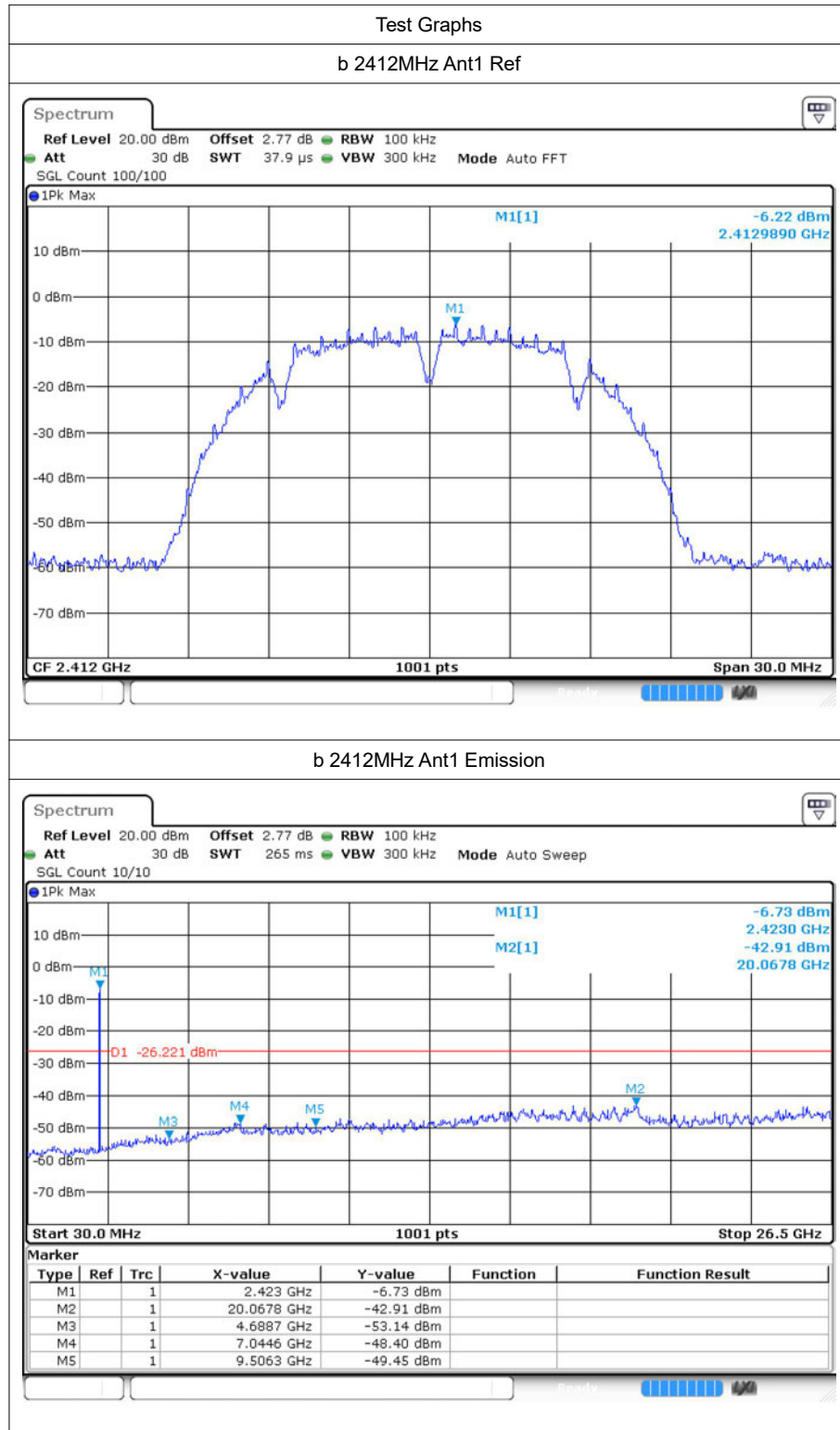


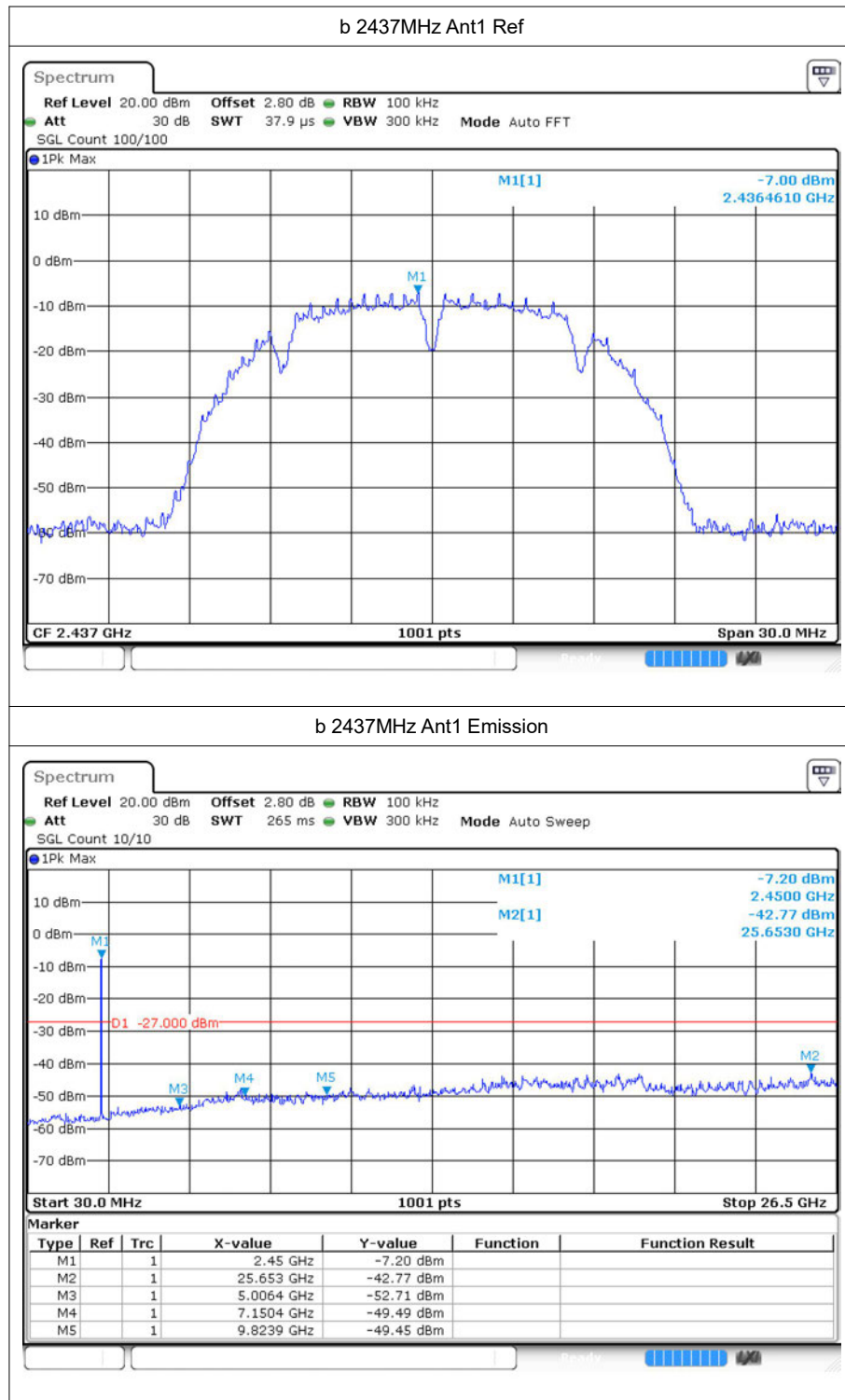
6 Conducted RF Spurious Emission

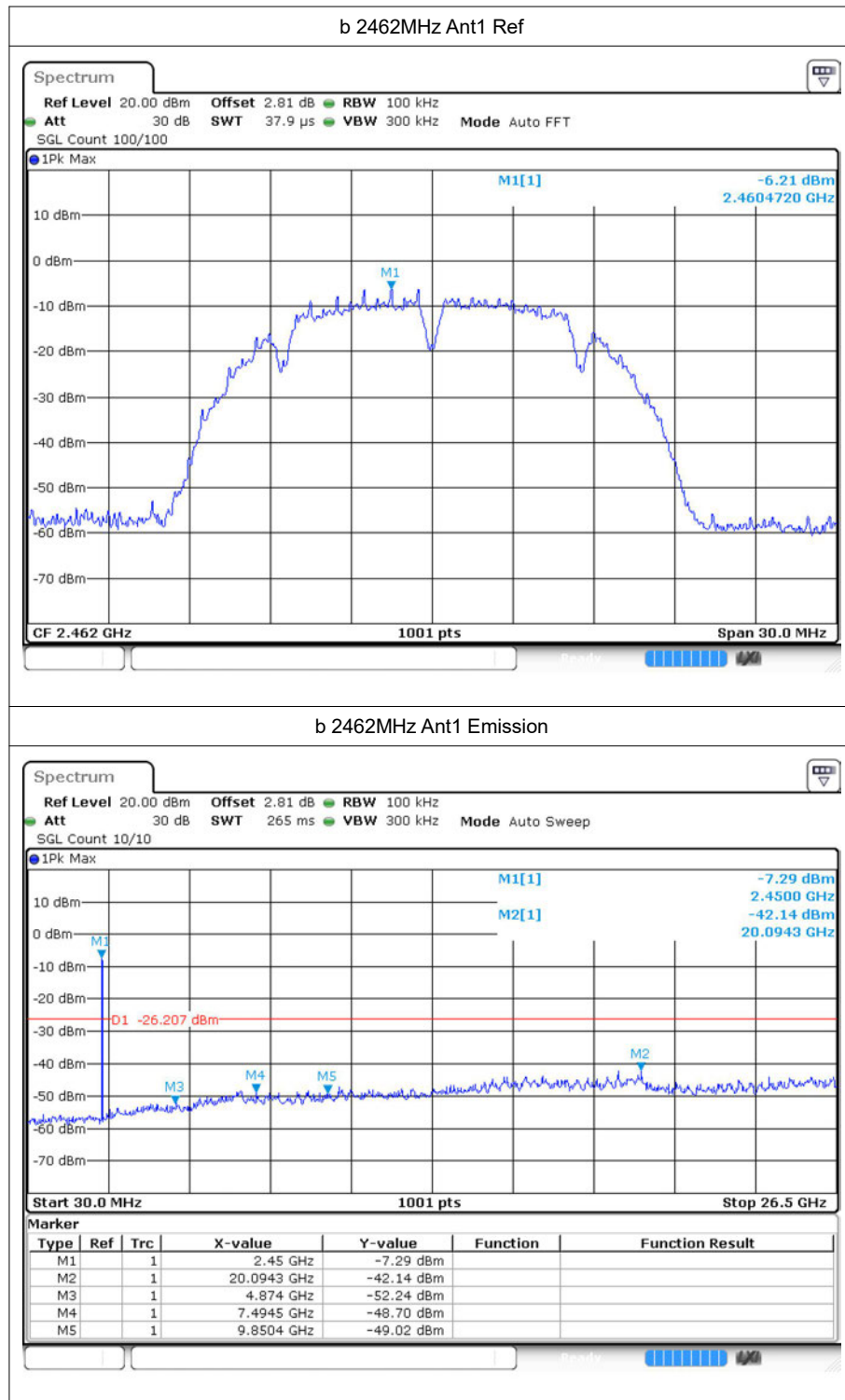
6.1 Test Result

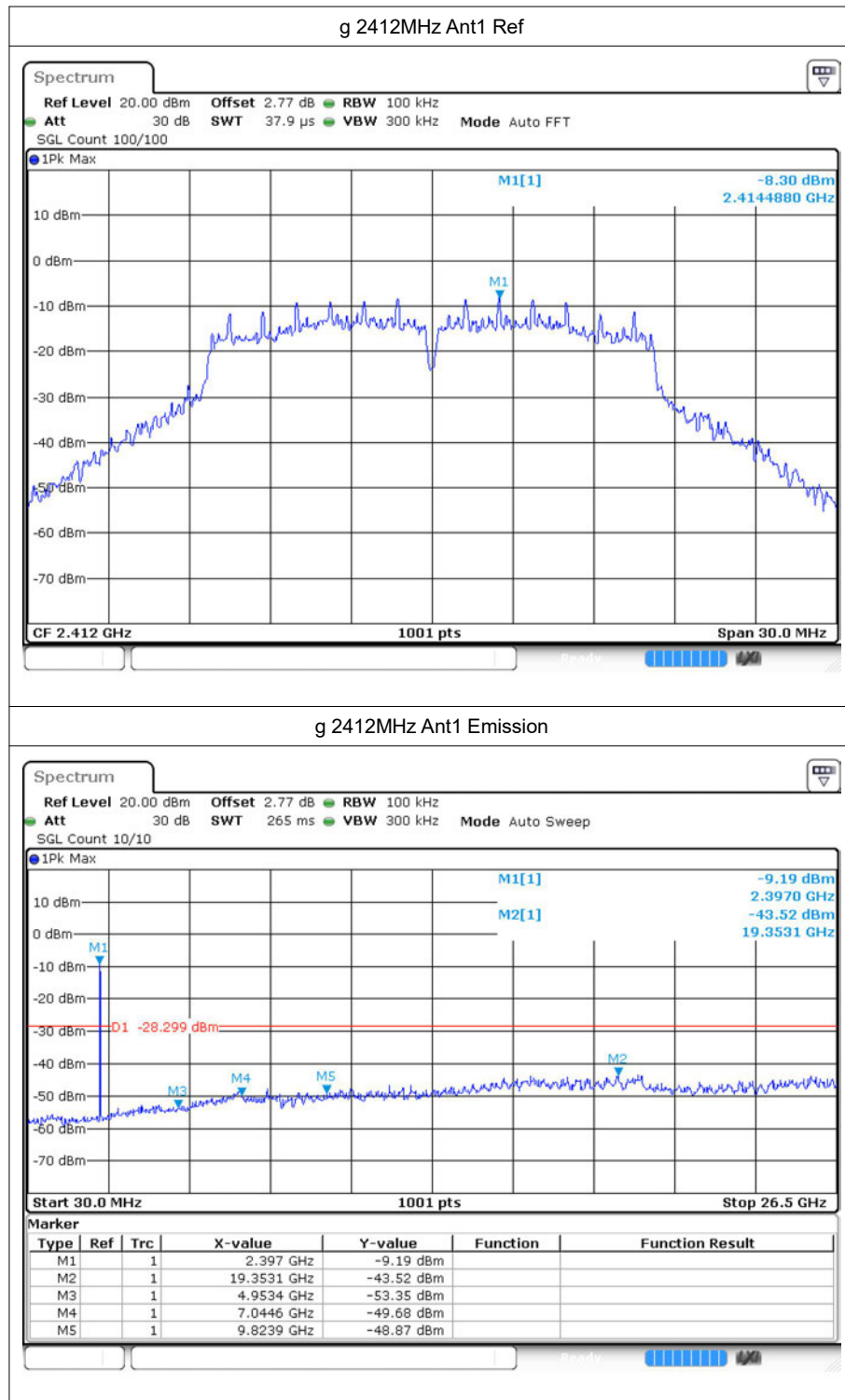
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-36.68	-20	Pass
b	2437	Ant1	-35.76	-20	Pass
b	2462	Ant1	-35.92	-20	Pass
g	2412	Ant1	-35.21	-20	Pass
g	2437	Ant1	-34.69	-20	Pass
g	2462	Ant1	-34.99	-20	Pass
n20	2412	Ant1	-35.1	-20	Pass
n20	2437	Ant1	-34.17	-20	Pass
n20	2462	Ant1	-34.6	-20	Pass

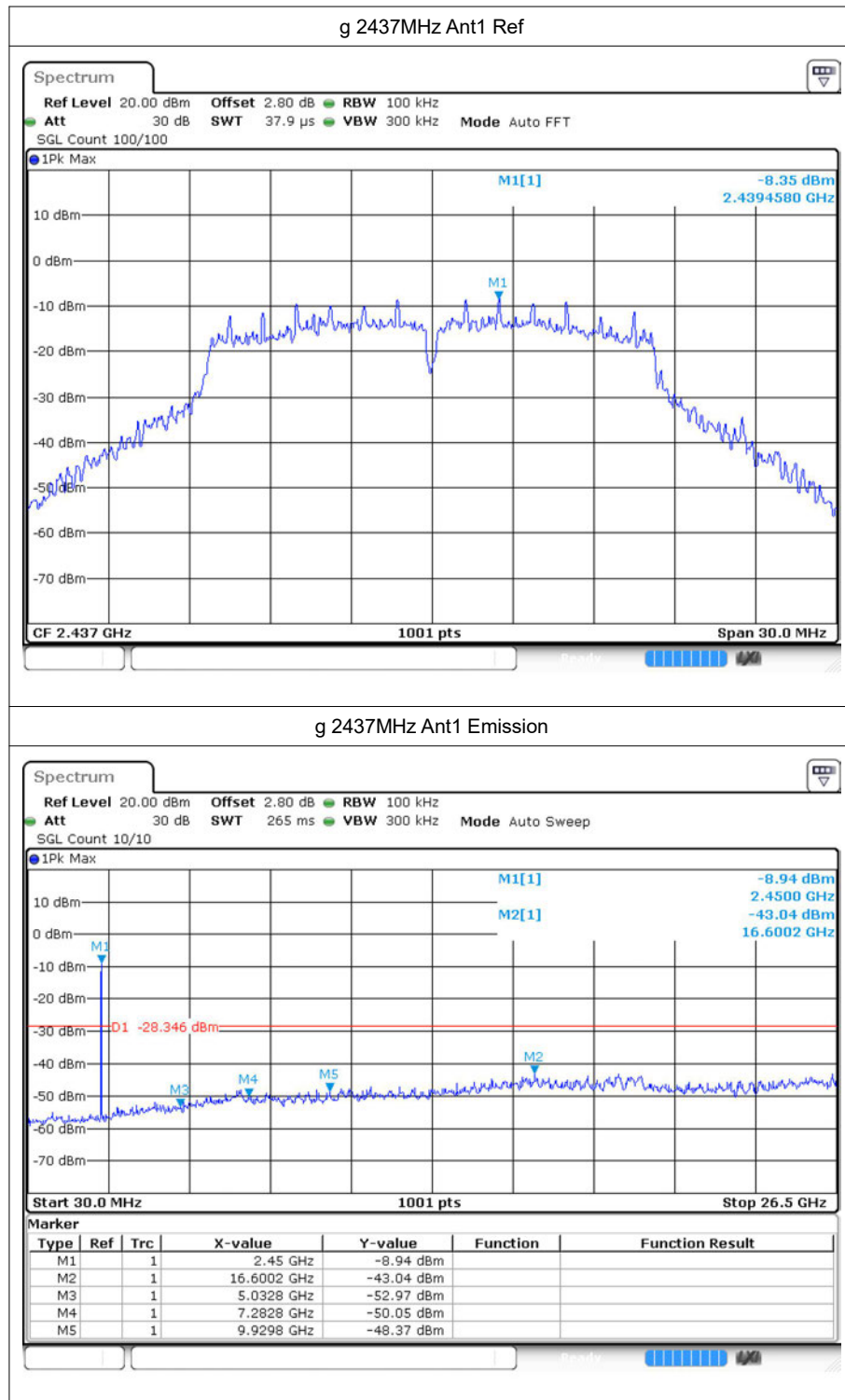
6.2 Test Graphs

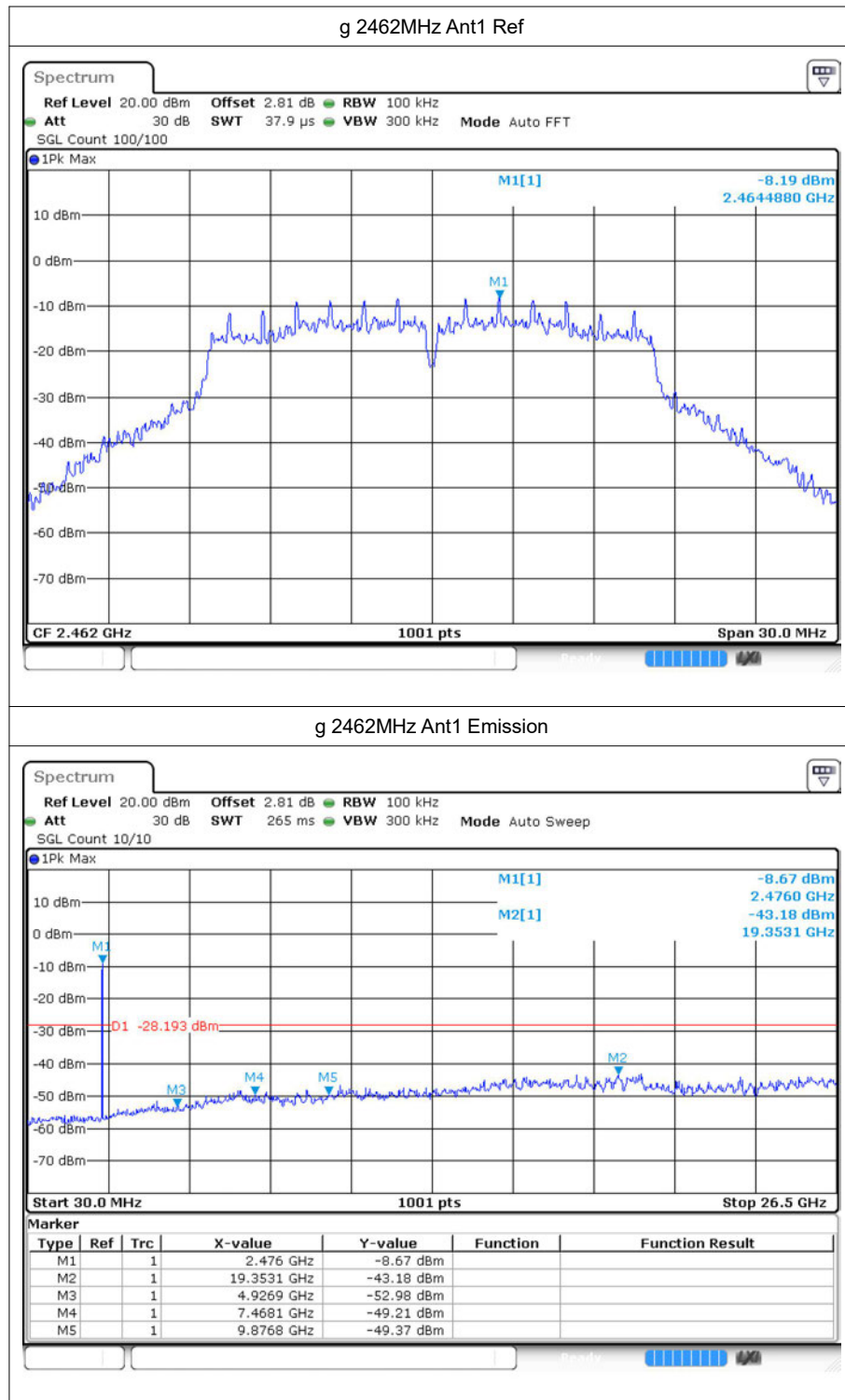


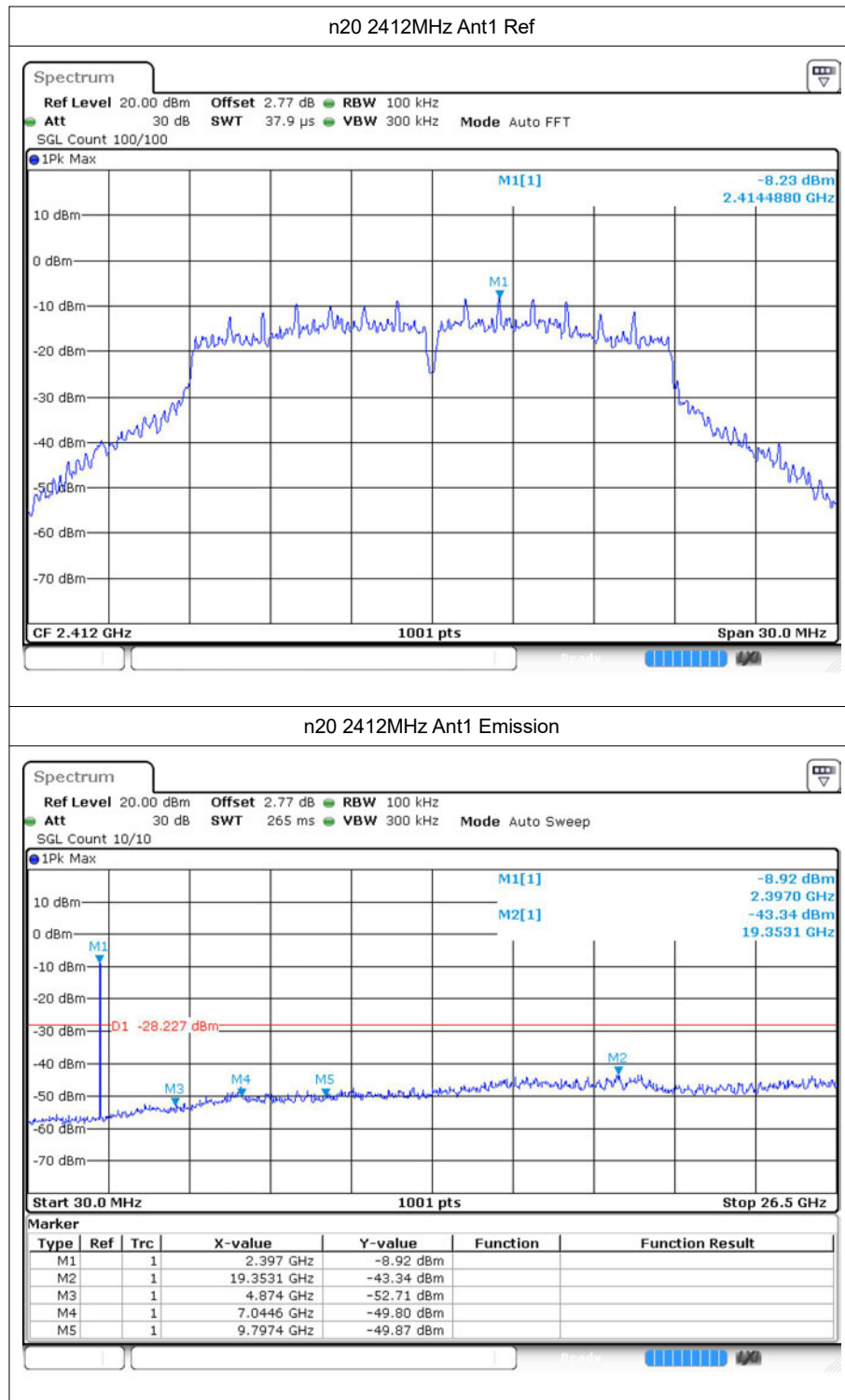


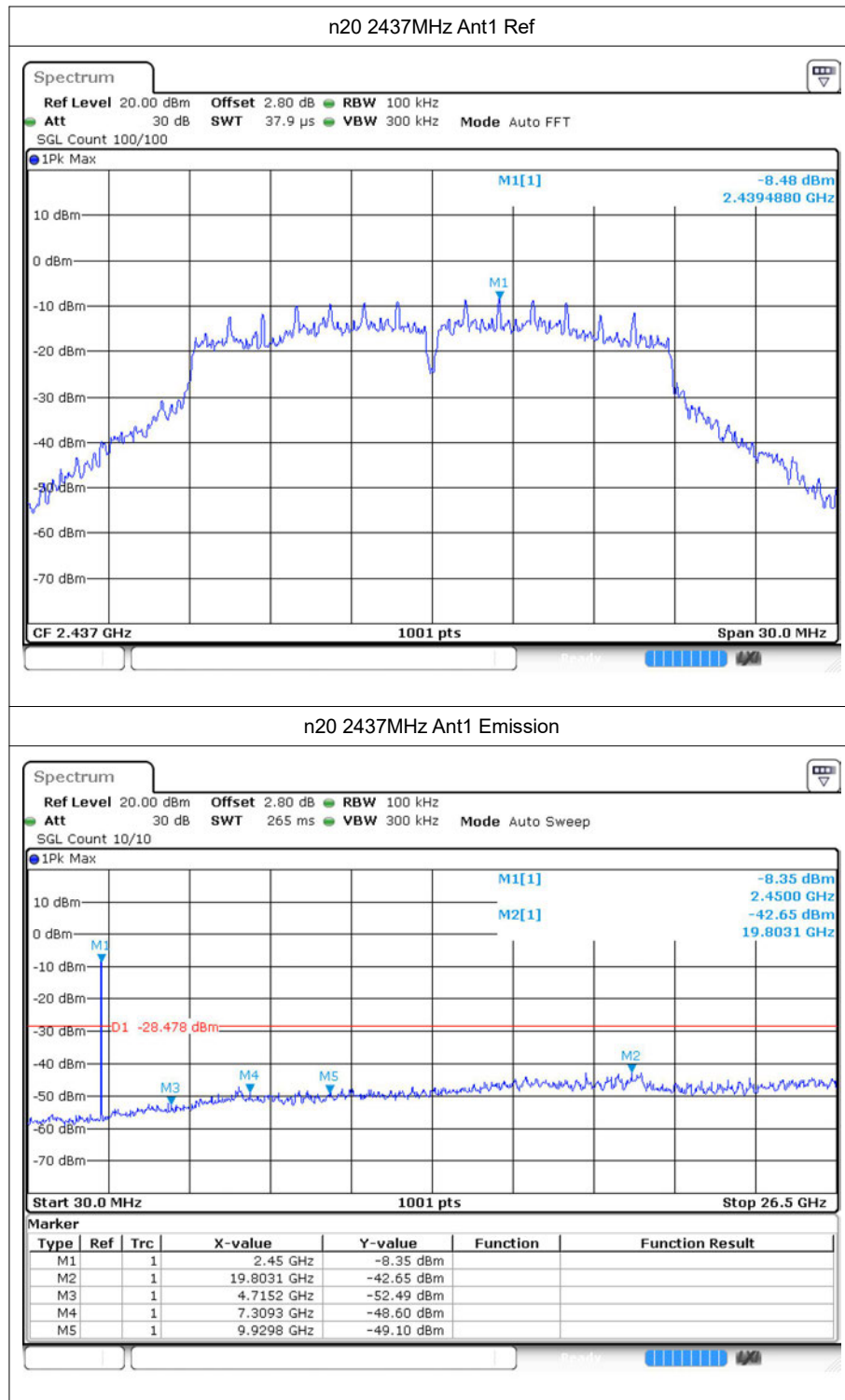


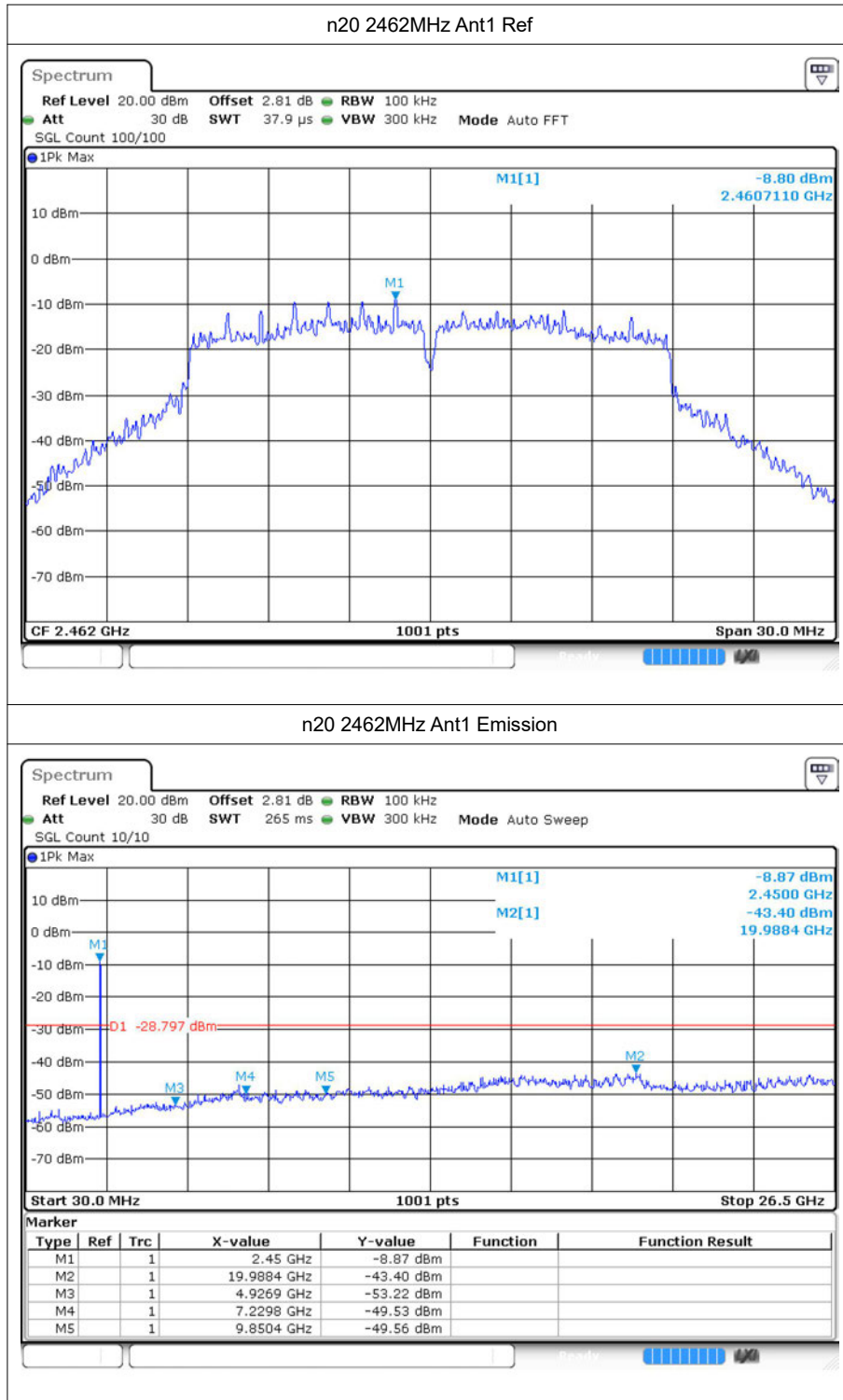














7 Restrict Band

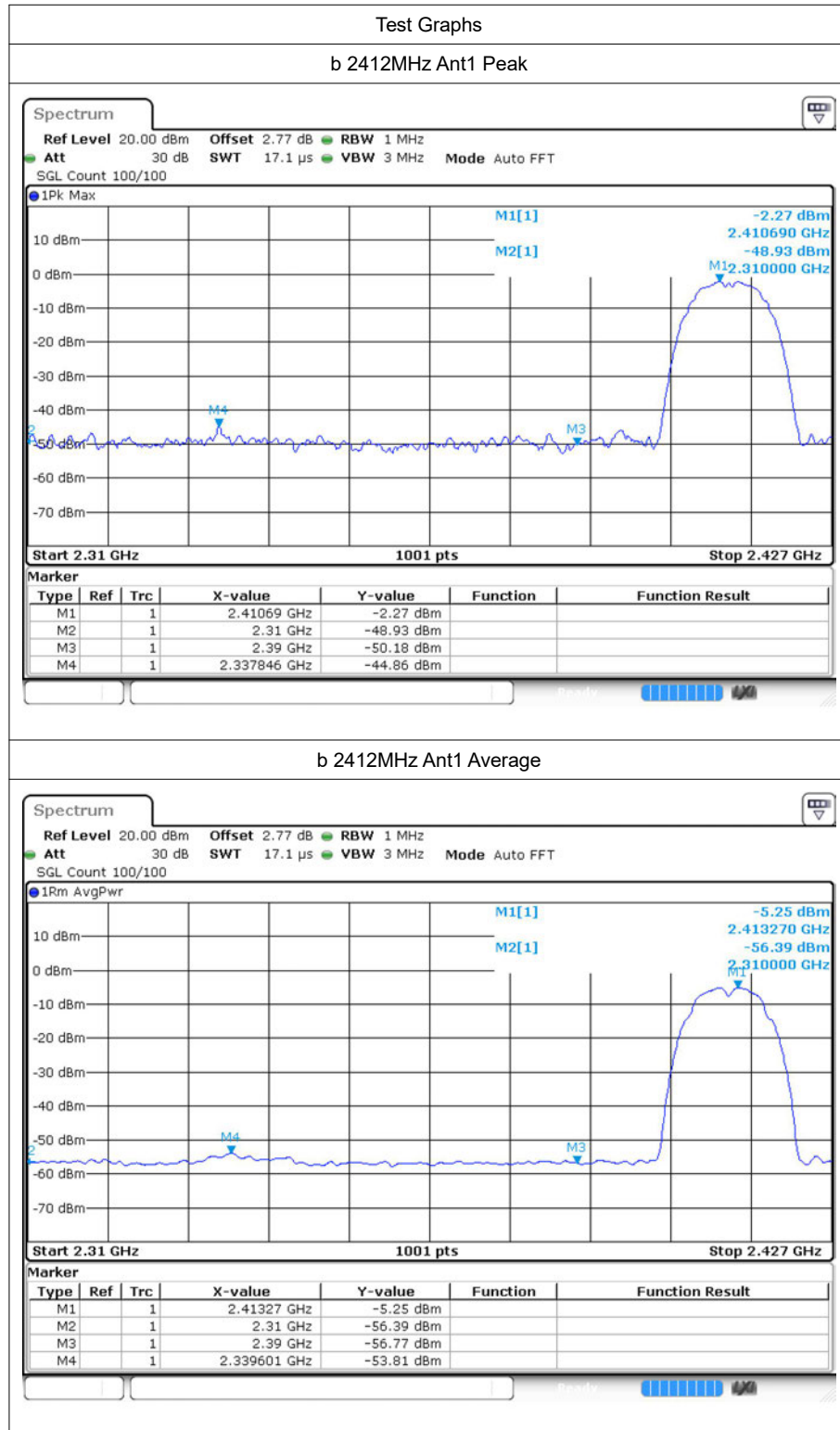
7.1 Test Result

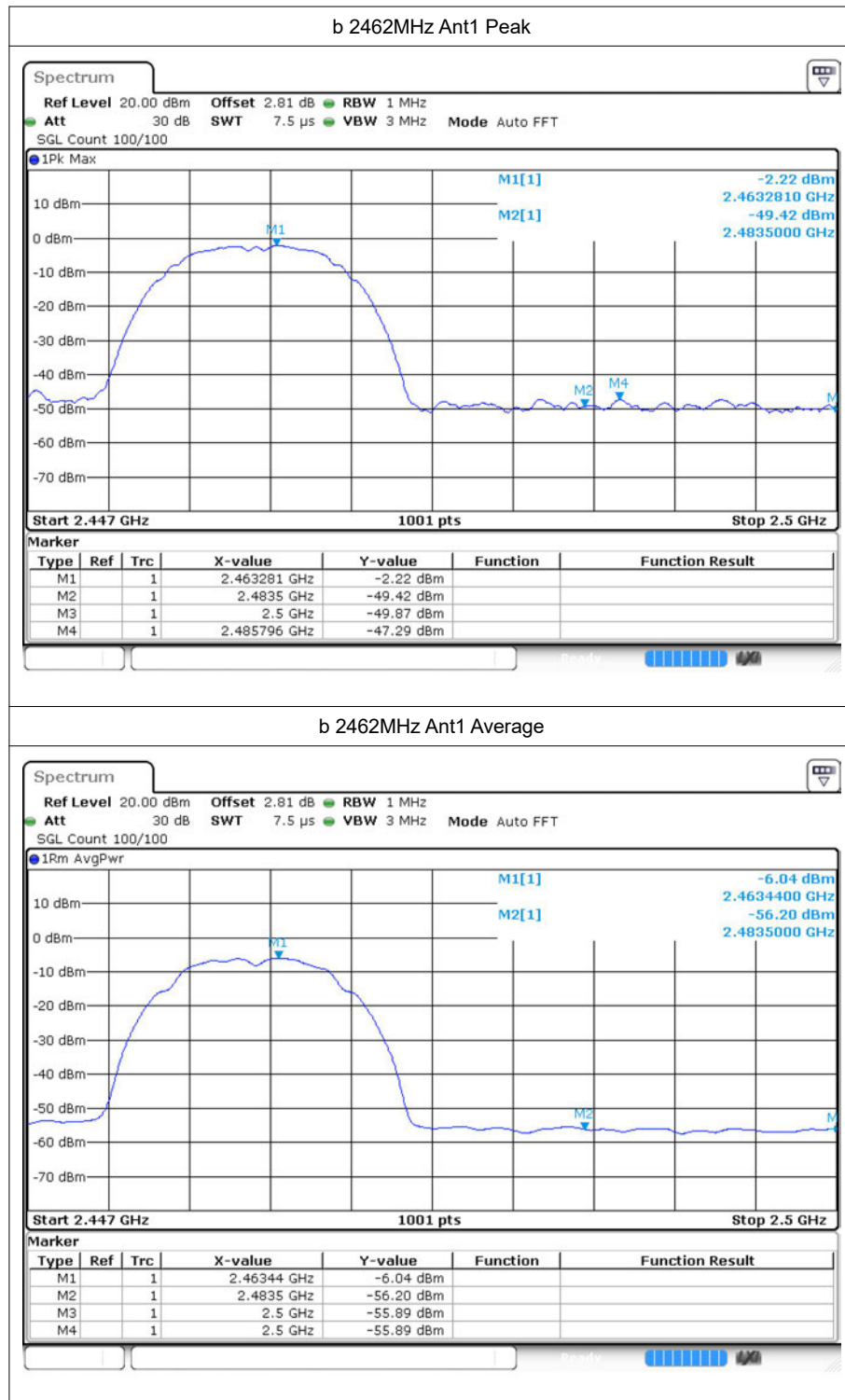
Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
b	2412	Ant1	2310	-48.93	2	-	48.33	Peak	74	Pass
b	2412	Ant1	2310	-56.39	2	0	40.87	Average	54	Pass
b	2412	Ant1	2337.846	-44.85	2	-	52.41	Peak	74	Pass
b	2412	Ant1	2339.601	-53.8	2	0	43.46	Average	54	Pass
b	2412	Ant1	2390	-50.18	2	-	47.08	Peak	74	Pass
b	2412	Ant1	2390	-56.77	2	0	40.49	Average	54	Pass
b	2462	Ant1	2483.5	-49.42	2	-	47.84	Peak	74	Pass
b	2462	Ant1	2483.5	-56.2	2	0	41.06	Average	54	Pass
b	2462	Ant1	2485.796	-47.28	2	-	49.98	Peak	74	Pass
b	2462	Ant1	2500	-55.88	2	0	41.38	Average	54	Pass
b	2462	Ant1	2500	-49.87	2	-	47.39	Peak	74	Pass
b	2462	Ant1	2500	-55.89	2	0	41.37	Average	54	Pass
g	2412	Ant1	2310	-47.75	2	-	49.51	Peak	74	Pass
g	2412	Ant1	2310	-56.37	2	0.61	41.5	Average	54	Pass
g	2412	Ant1	2314.797	-46.6	2	-	50.66	Peak	74	Pass
g	2412	Ant1	2337.729	-54.66	2	0.61	43.21	Average	54	Pass
g	2412	Ant1	2390	-49.36	2	-	47.08	Peak	74	Pass
g	2412	Ant1	2390	-56.84	2	0.61	41.03	Average	54	Pass
g	2462	Ant1	2483.5	-49.99	2	-	47.27	Peak	74	Pass
g	2462	Ant1	2483.5	-56.31	2	0.61	41.56	Average	54	Pass
g	2462	Ant1	2485.796	-46.25	2	-	51.01	Peak	74	Pass
g	2462	Ant1	2500	-55.59	2	0.61	42.28	Average	54	Pass
g	2462	Ant1	2500	-50.04	2	-	47.39	Peak	74	Pass
g	2462	Ant1	2500	-55.6	2	0.61	42.27	Average	54	Pass
n20	2412	Ant1	2310	-48.96	2	-	48.3	Peak	74	Pass
n20	2412	Ant1	2310	-57.04	2	0.58	40.8	Average	54	Pass
n20	2412	Ant1	2341.941	-45.69	2	-	51.57	Peak	74	Pass
n20	2412	Ant1	2341.59	-54.32	2	0.58	43.52	Average	54	Pass
n20	2412	Ant1	2390	-49.32	2	-	47.94	Peak	74	Pass
n20	2412	Ant1	2390	-56.57	2	0.58	41.27	Average	54	Pass
n20	2462	Ant1	2483.5	-49.67	2	-	47.59	Peak	74	Pass
n20	2462	Ant1	2483.5	-56.94	2	0.58	40.9	Average	54	Pass
n20	2462	Ant1	2487.439	-46.67	2	-	50.59	Peak	74	Pass
n20	2462	Ant1	2496.661	-55.54	2	0.58	42.3	Average	54	Pass

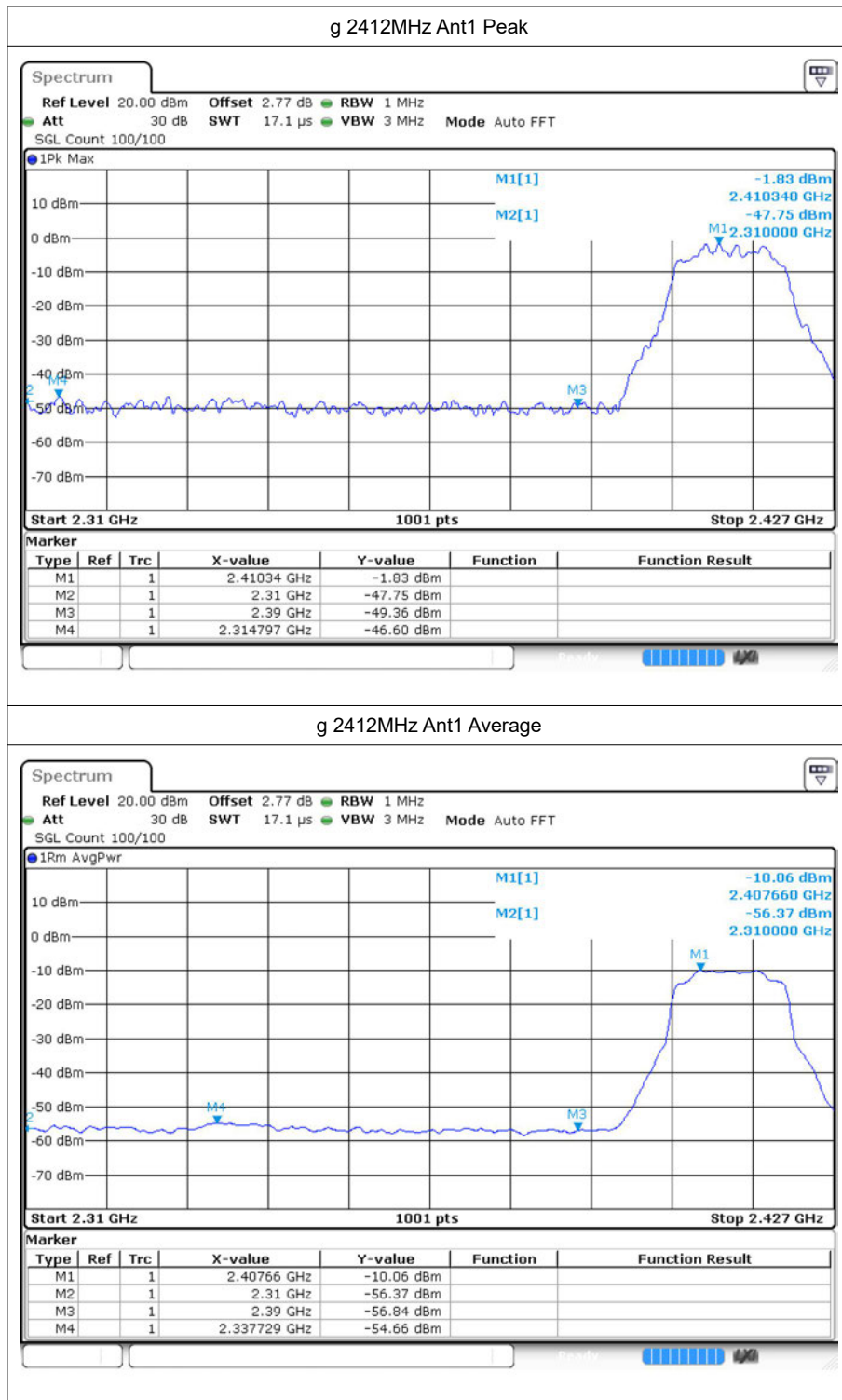


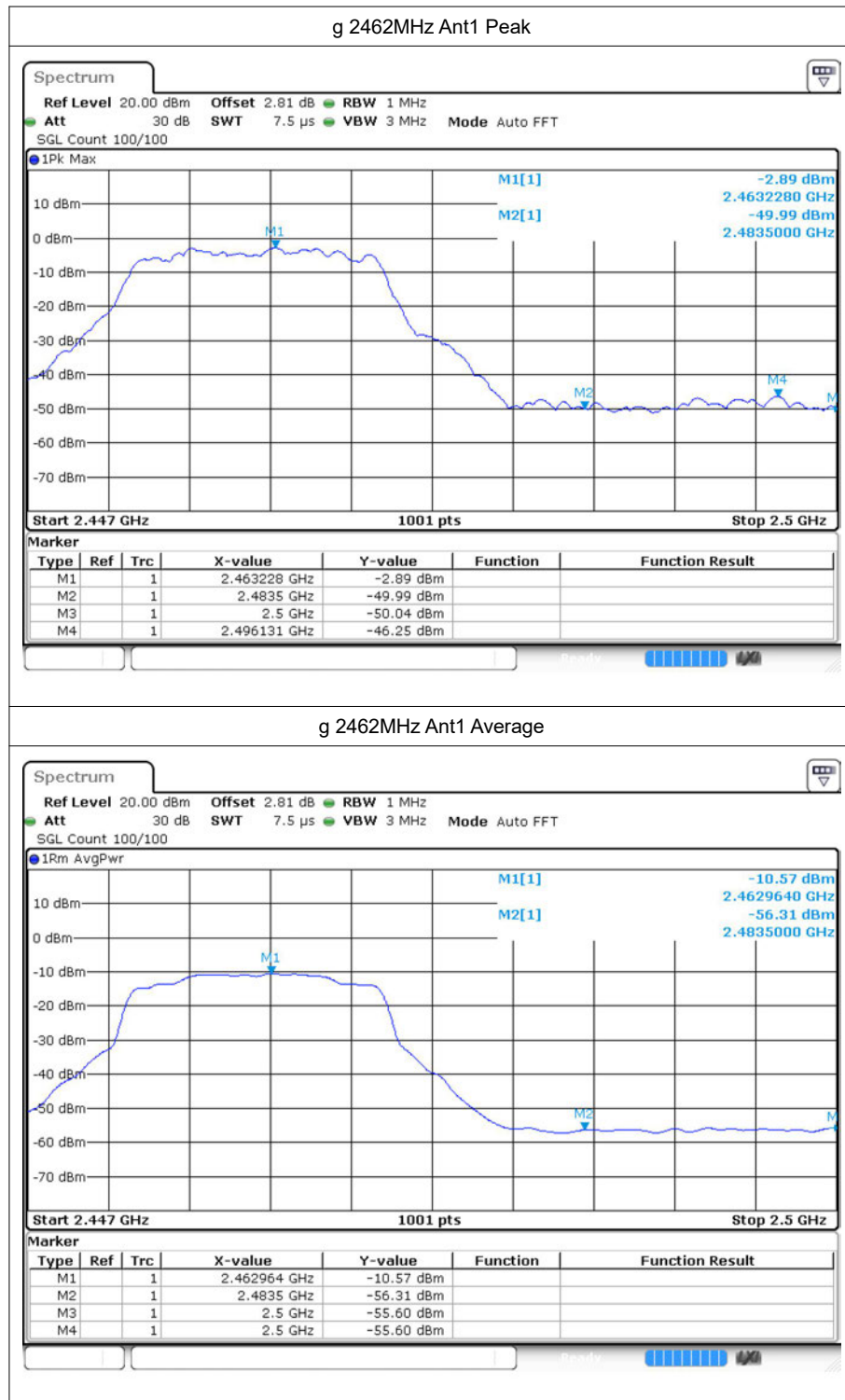
n20	2462	Ant1	2500	-50.36	2	-	46.9	Peak	74	Pass
n20	2462	Ant1	2500	-56.61	2	0.58	41.23	Average	54	Pass

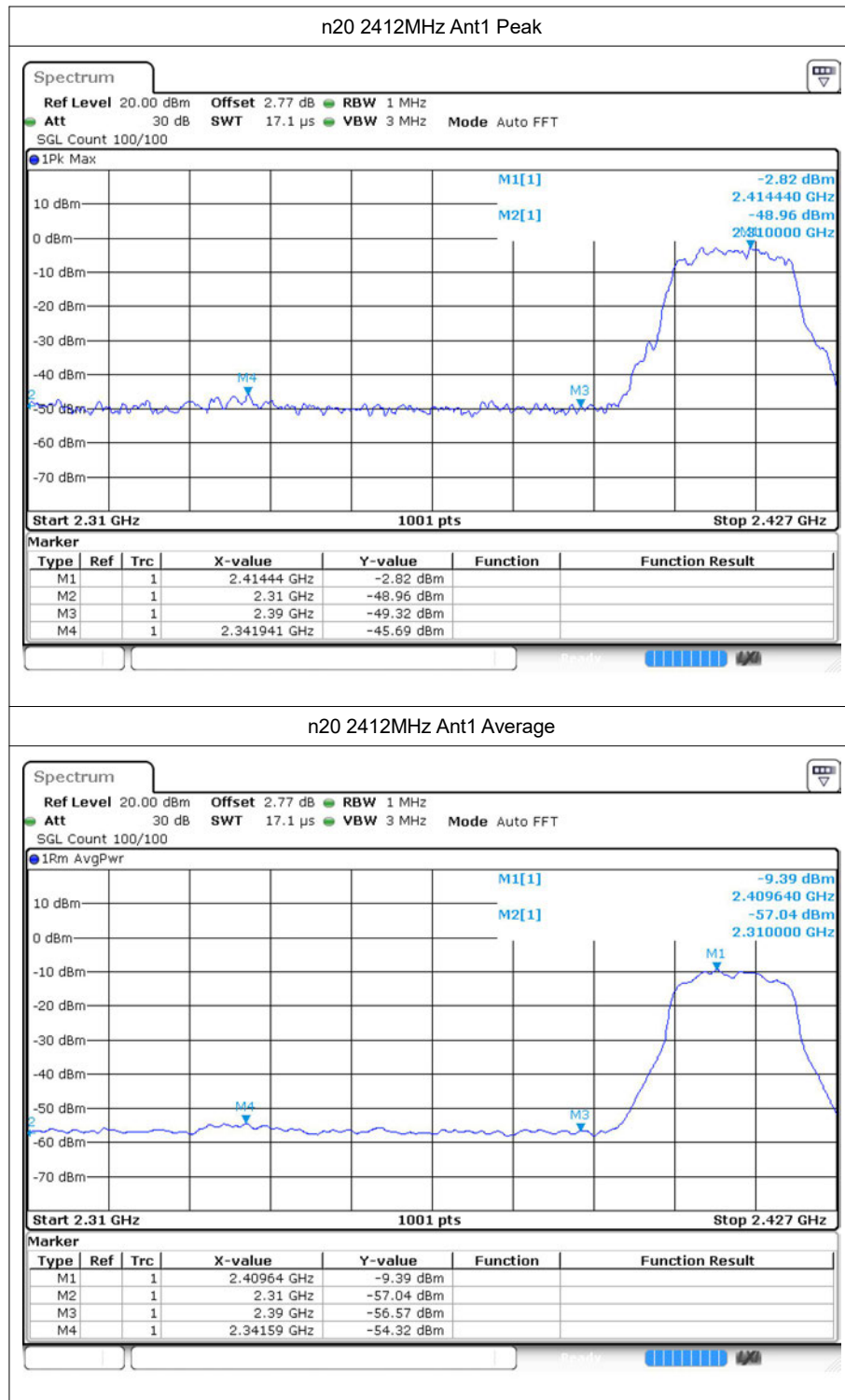
7.2 Test Graphs

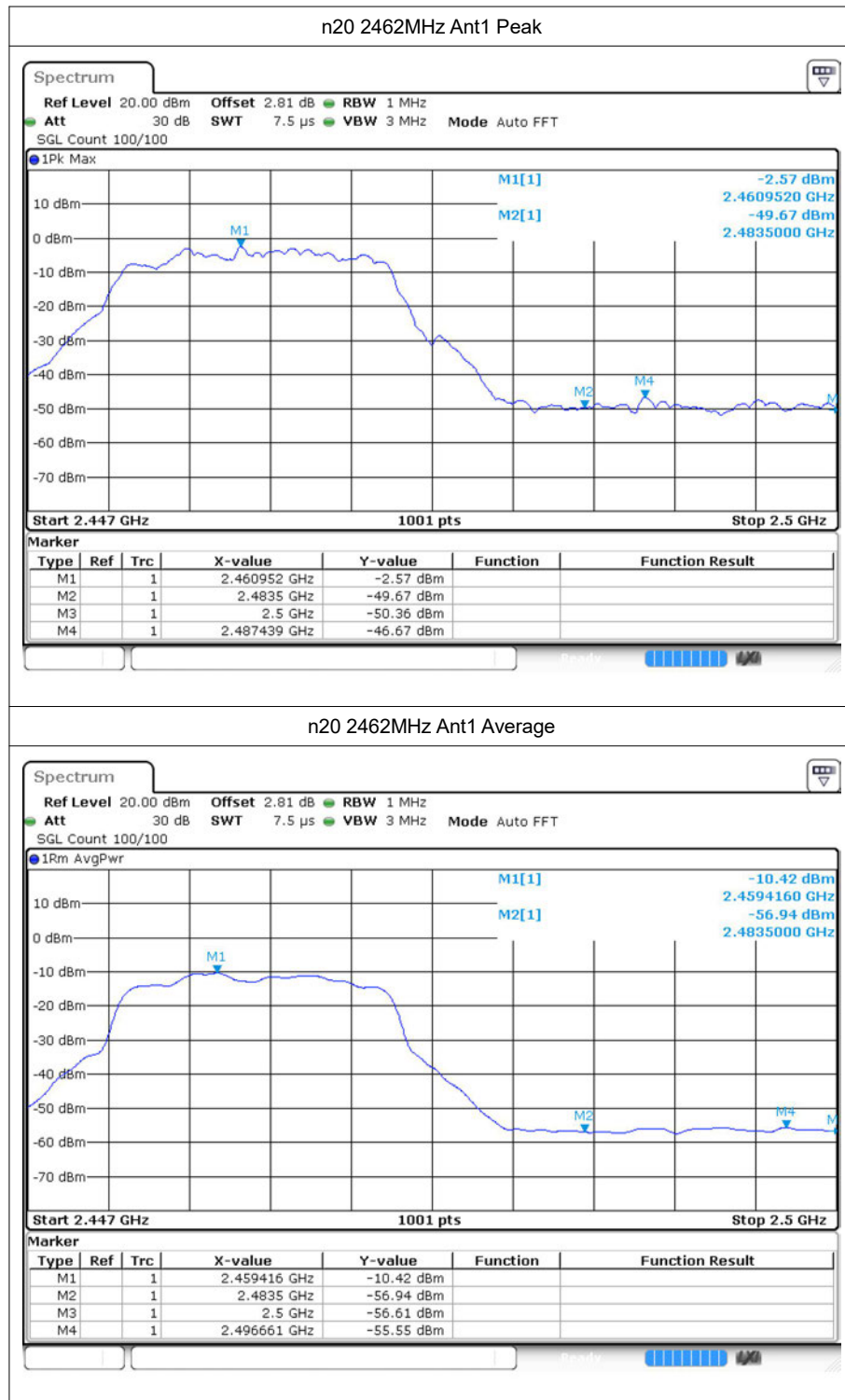












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