



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Power Station

Trade Mark: MARSTEK

Test Model: M2200

Environmental Conditions

Temperature:	24.7° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



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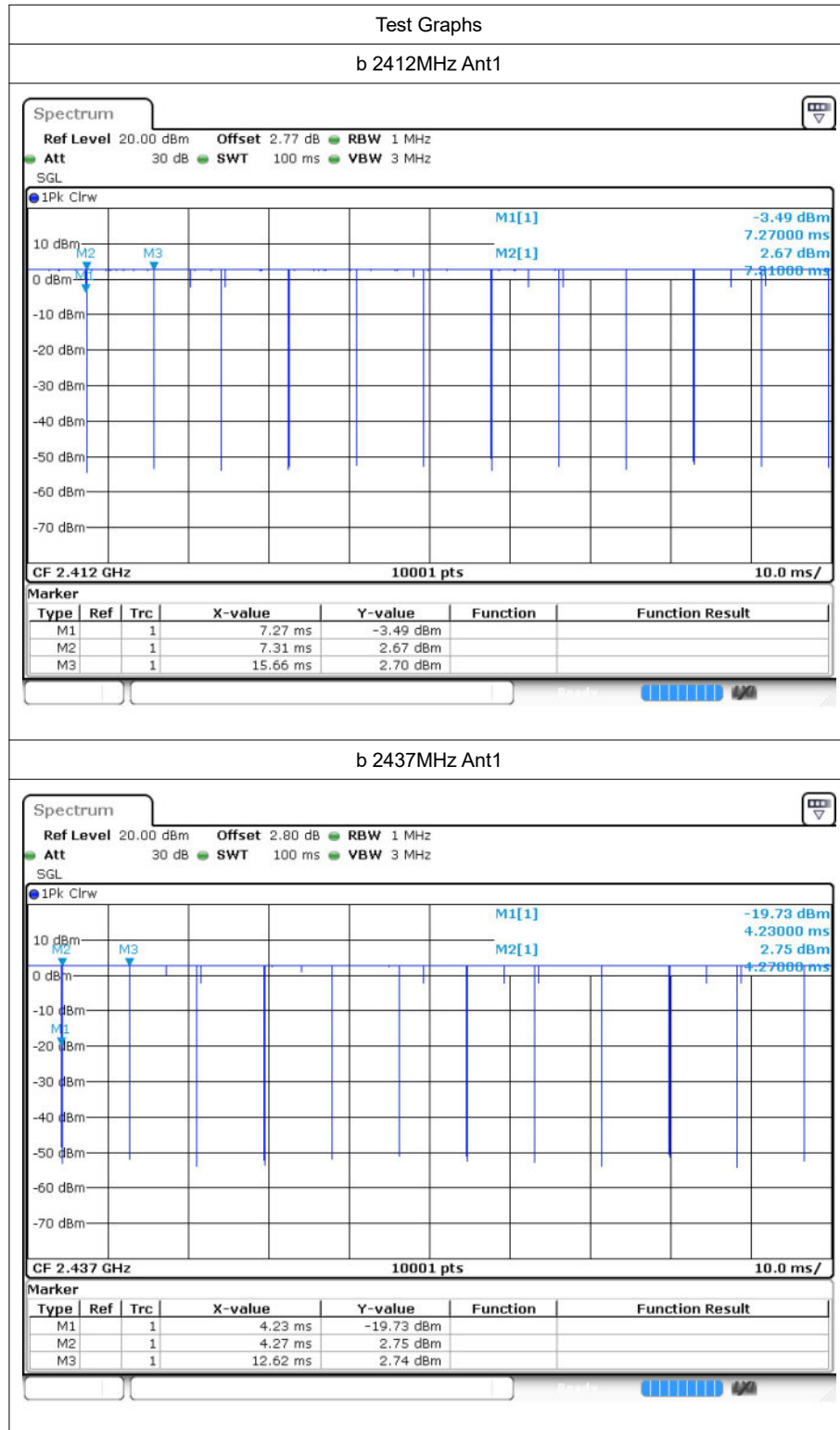


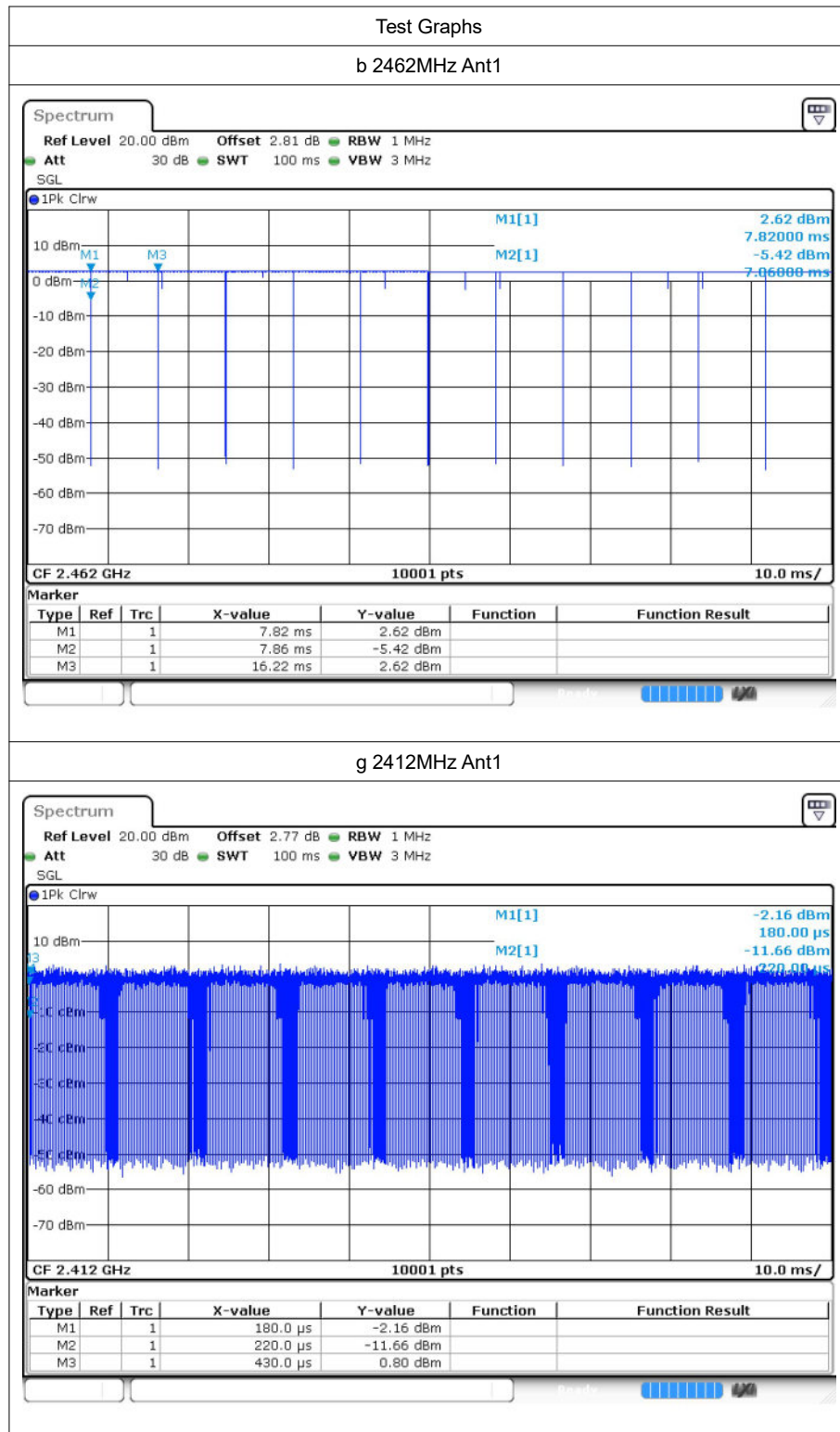
1 Duty Cycle

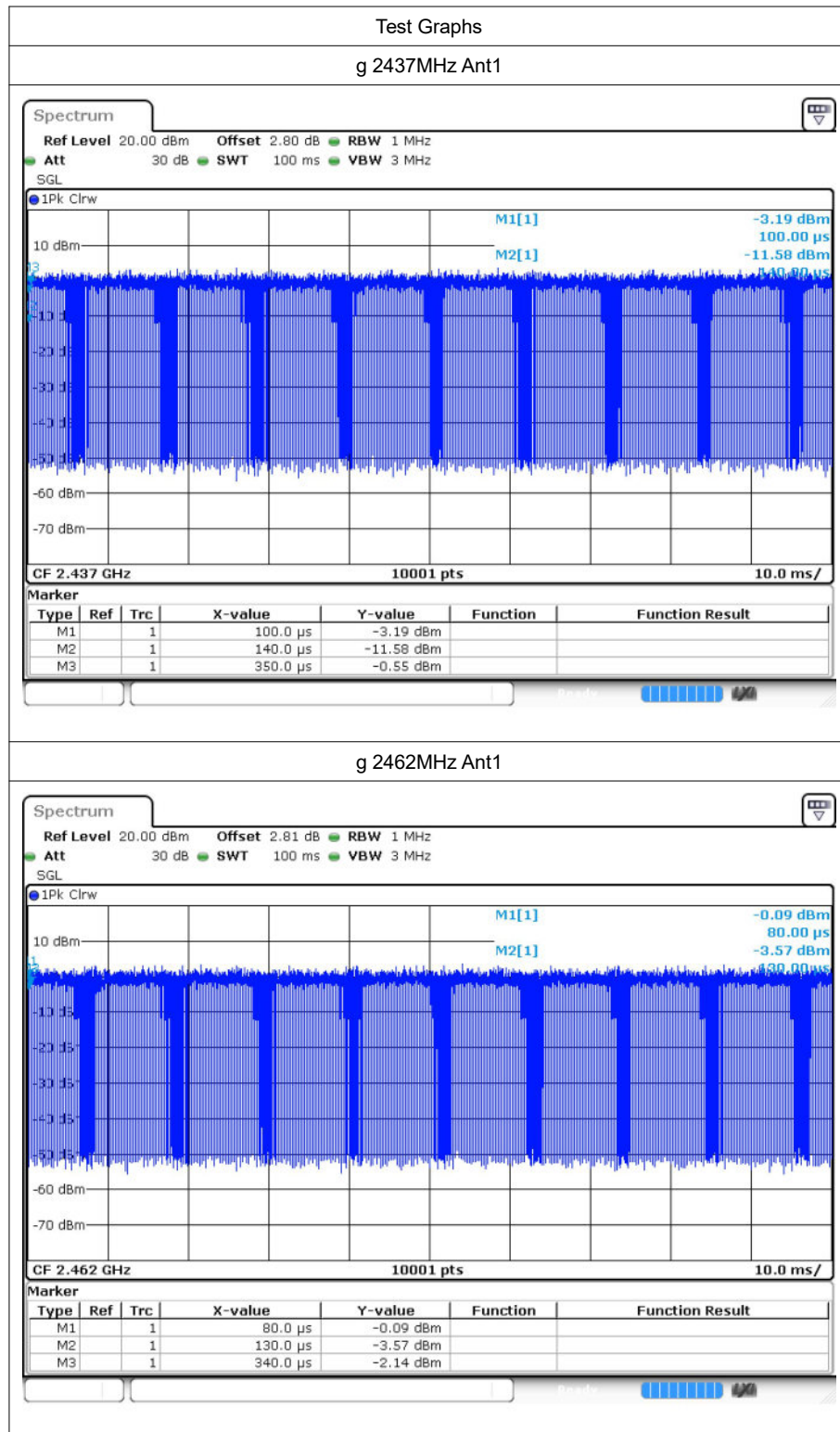
1.1 Test Result

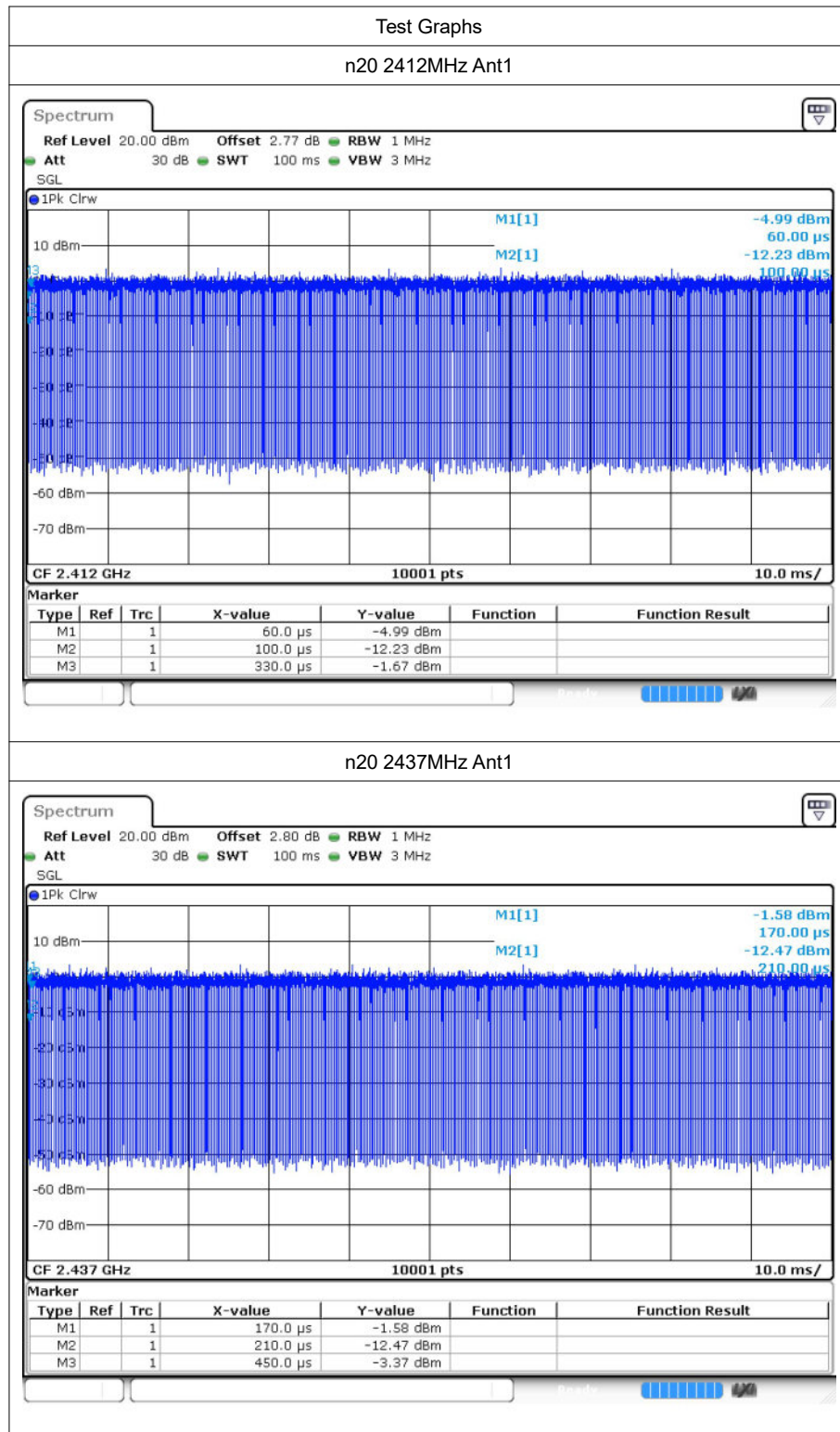
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
b	2412	Ant1	99.59	0.02	0.12
b	2437	Ant1	99.61	0.02	0.12
b	2462	Ant1	99.64	0.02	0.12
g	2412	Ant1	86.91	0.61	4.76
g	2437	Ant1	86.97	0.61	4.76
g	2462	Ant1	86.89	0.61	4.76
n20	2412	Ant1	87.57	0.58	4.35
n20	2437	Ant1	87.57	0.58	4.17
n20	2462	Ant1	87.56	0.58	4.17

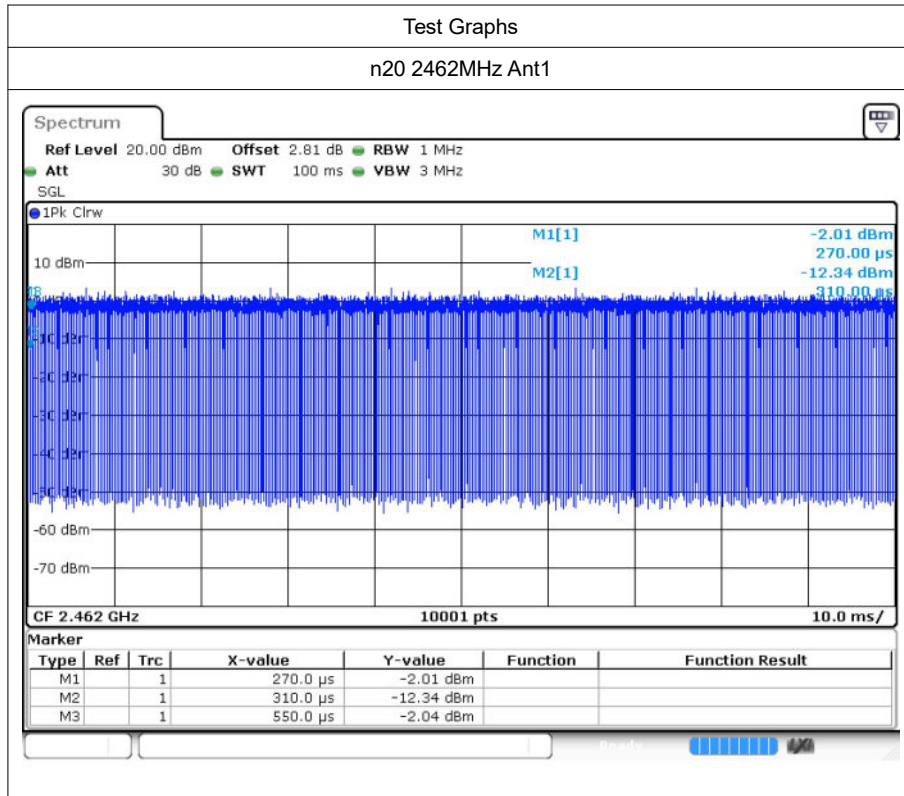
1.2 Test Graphs











2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	13.22	30	Pass
b	2437	Ant1	13.14	30	Pass
b	2462	Ant1	13.13	30	Pass
g	2412	Ant1	12.89	30	Pass
g	2437	Ant1	12.84	30	Pass
g	2462	Ant1	12.83	30	Pass
n20	2412	Ant1	12.43	30	Pass
n20	2437	Ant1	12.4	30	Pass
n20	2462	Ant1	12.32	30	Pass

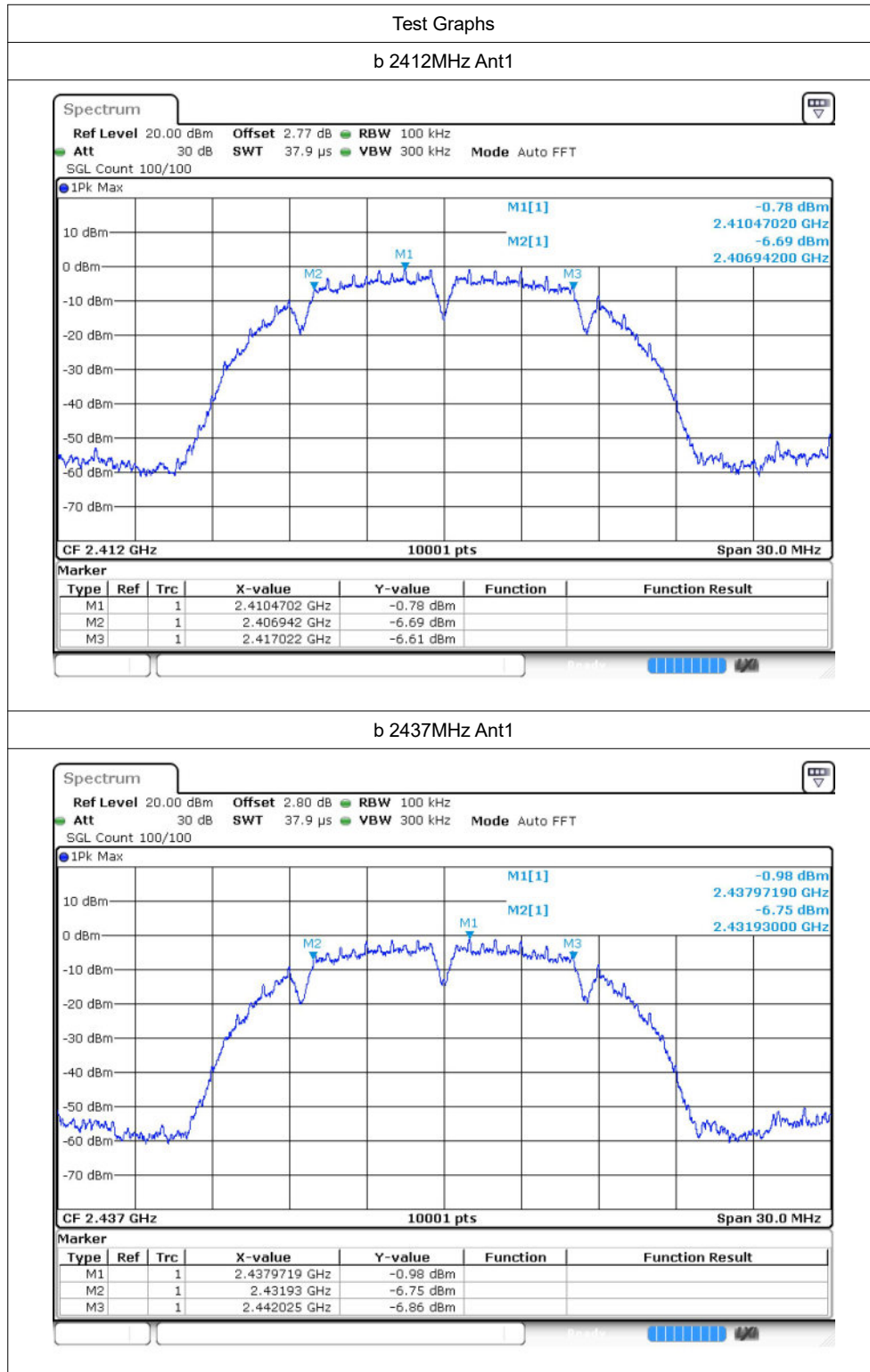


3 -6dB Bandwidth

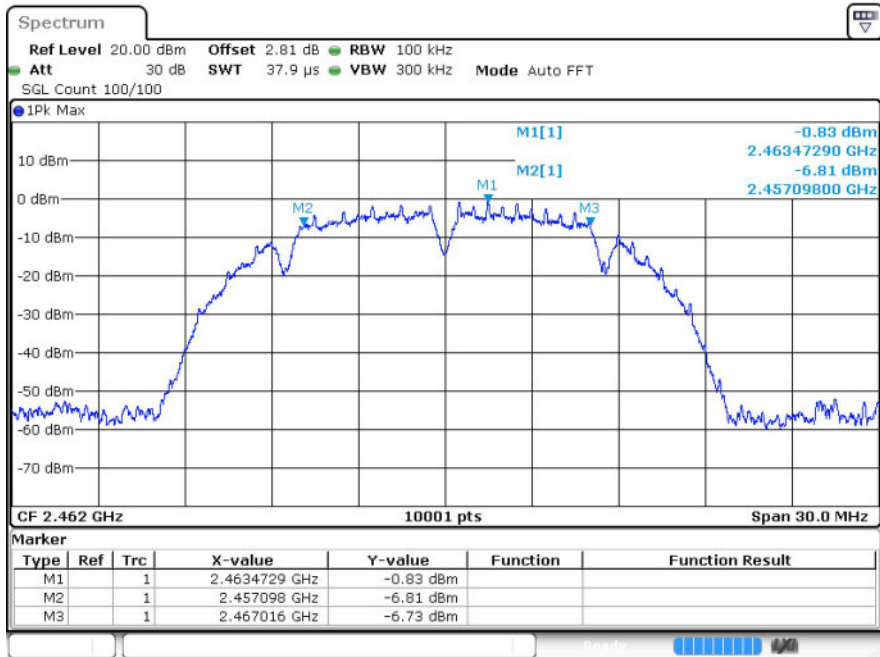
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	10.08	0.5	Pass
b	2437	Ant1	10.095	0.5	Pass
b	2462	Ant1	9.918	0.5	Pass
g	2412	Ant1	15.114	0.5	Pass
g	2437	Ant1	15.111	0.5	Pass
g	2462	Ant1	15.123	0.5	Pass
n20	2412	Ant1	15.039	0.5	Pass
n20	2437	Ant1	15.117	0.5	Pass
n20	2462	Ant1	15.111	0.5	Pass

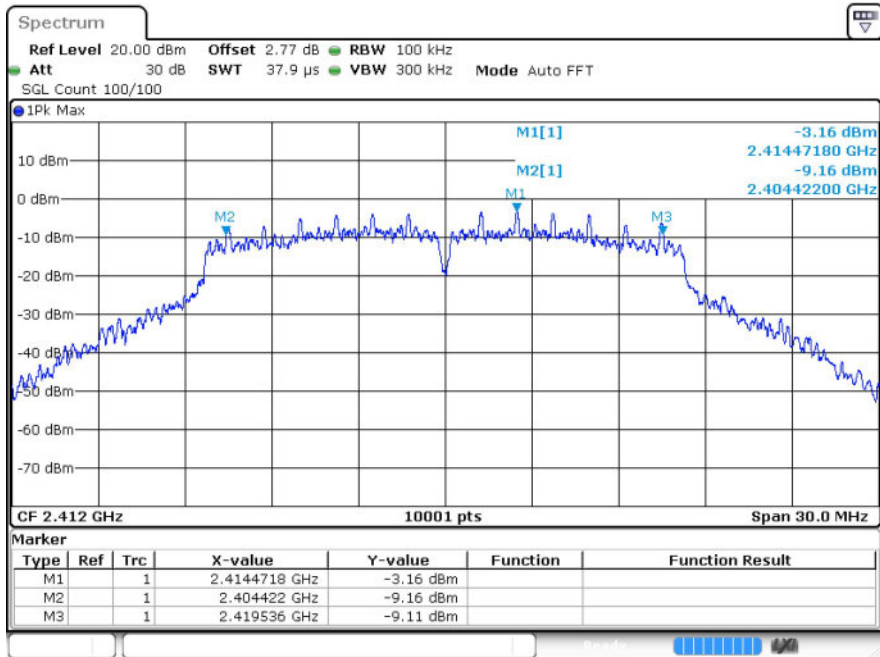
3.2 Test Graphs



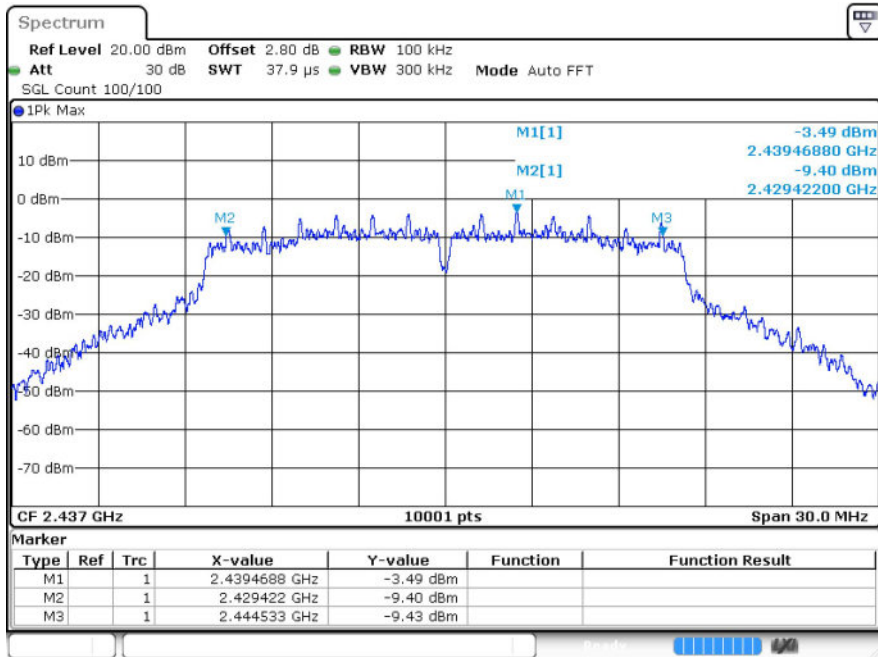
b 2462MHz Ant1



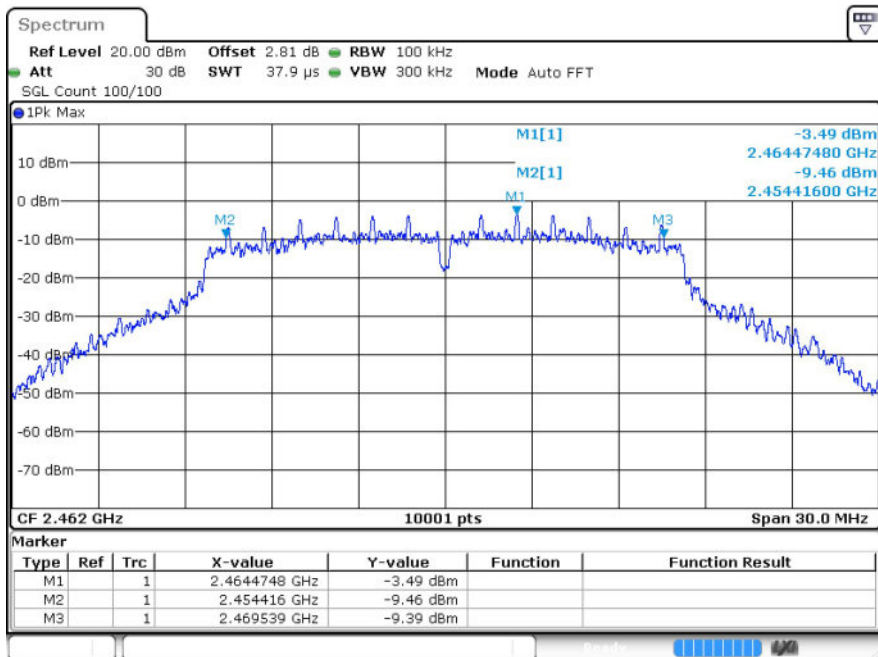
g 2412MHz Ant1

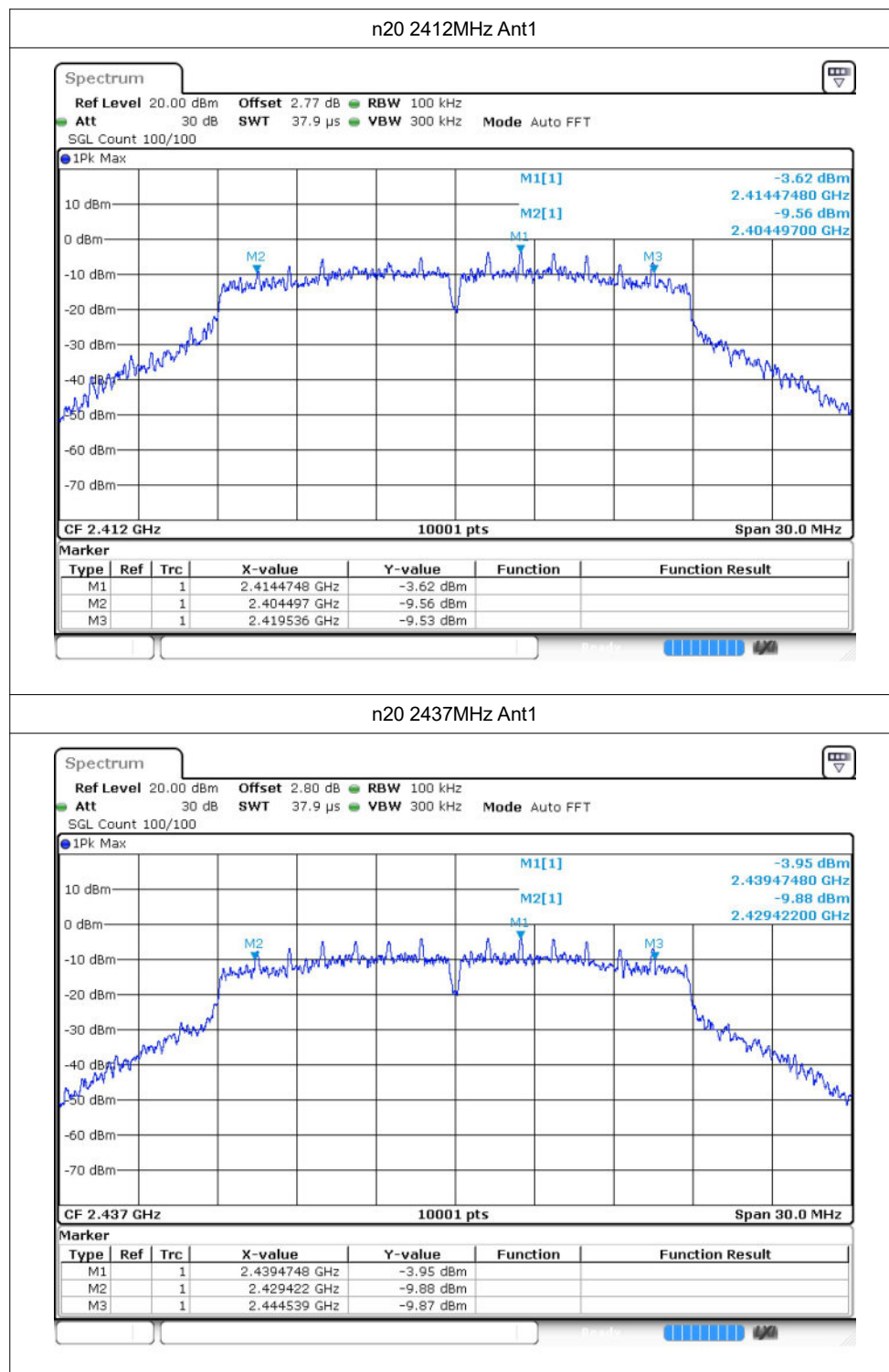


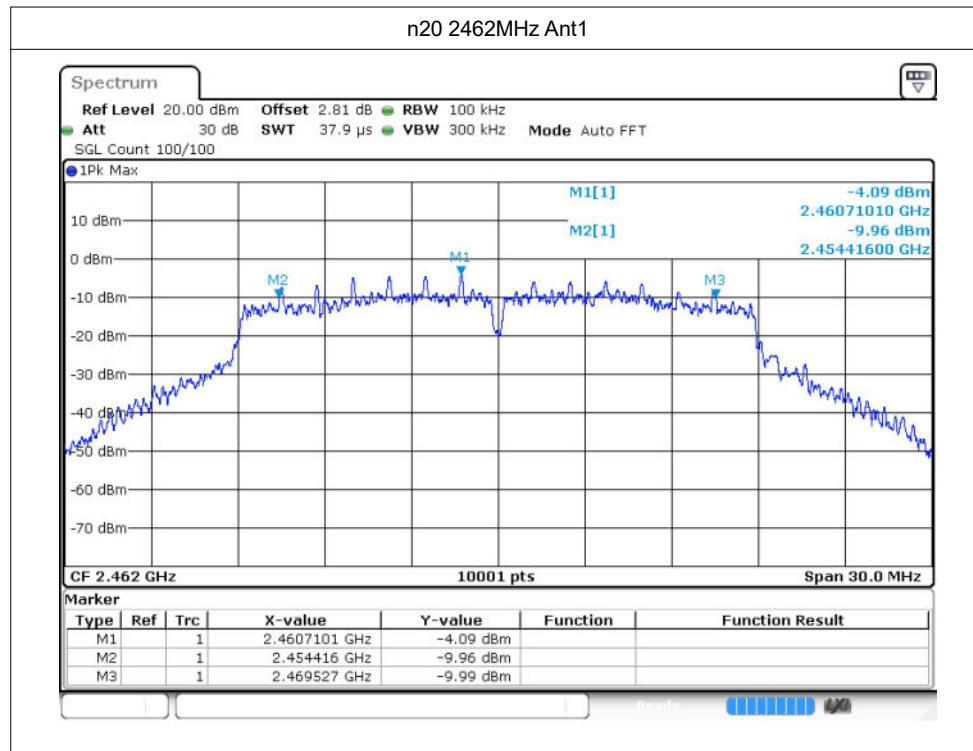
g 2437MHz Ant1



g 2462MHz Ant1





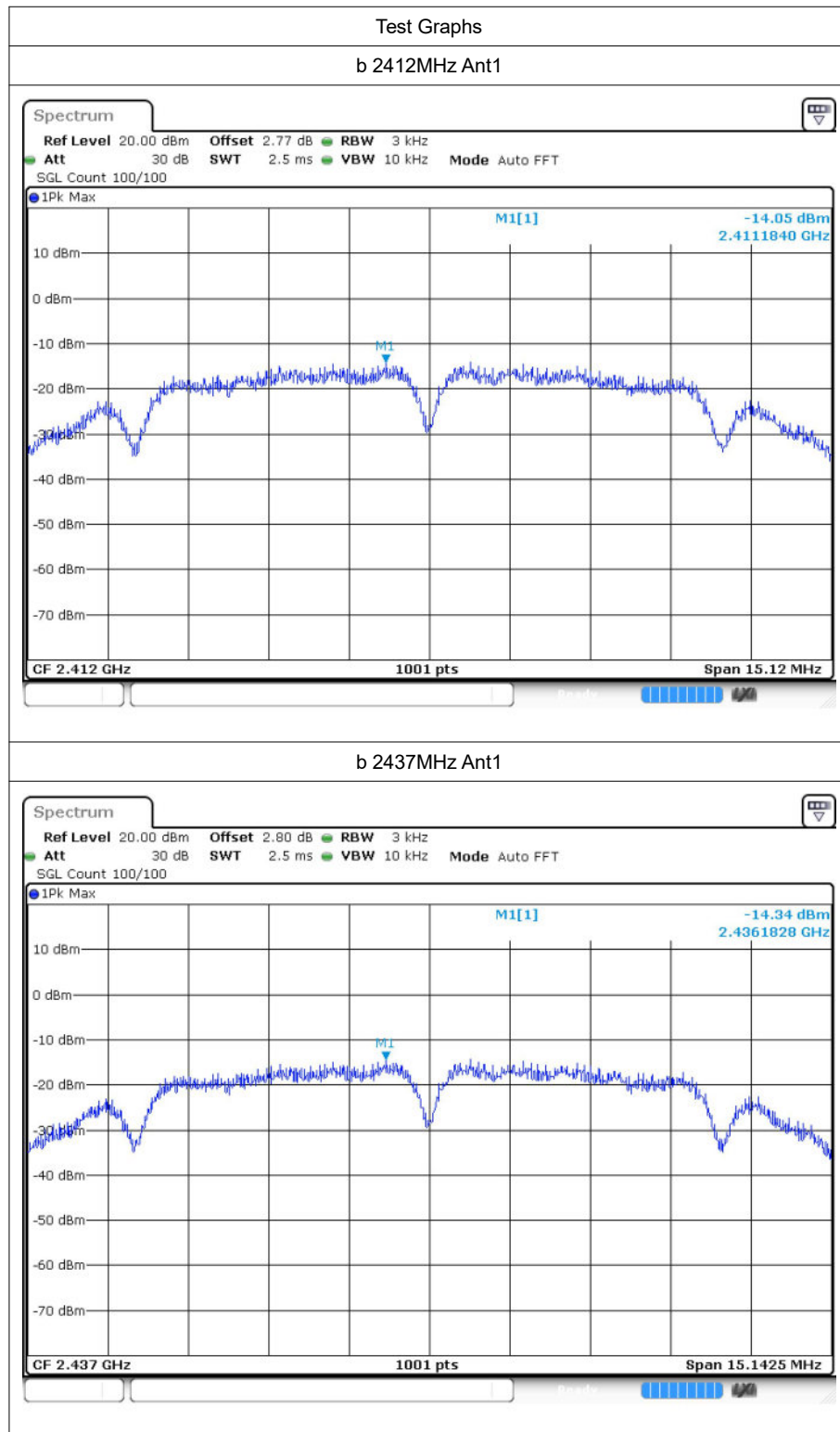


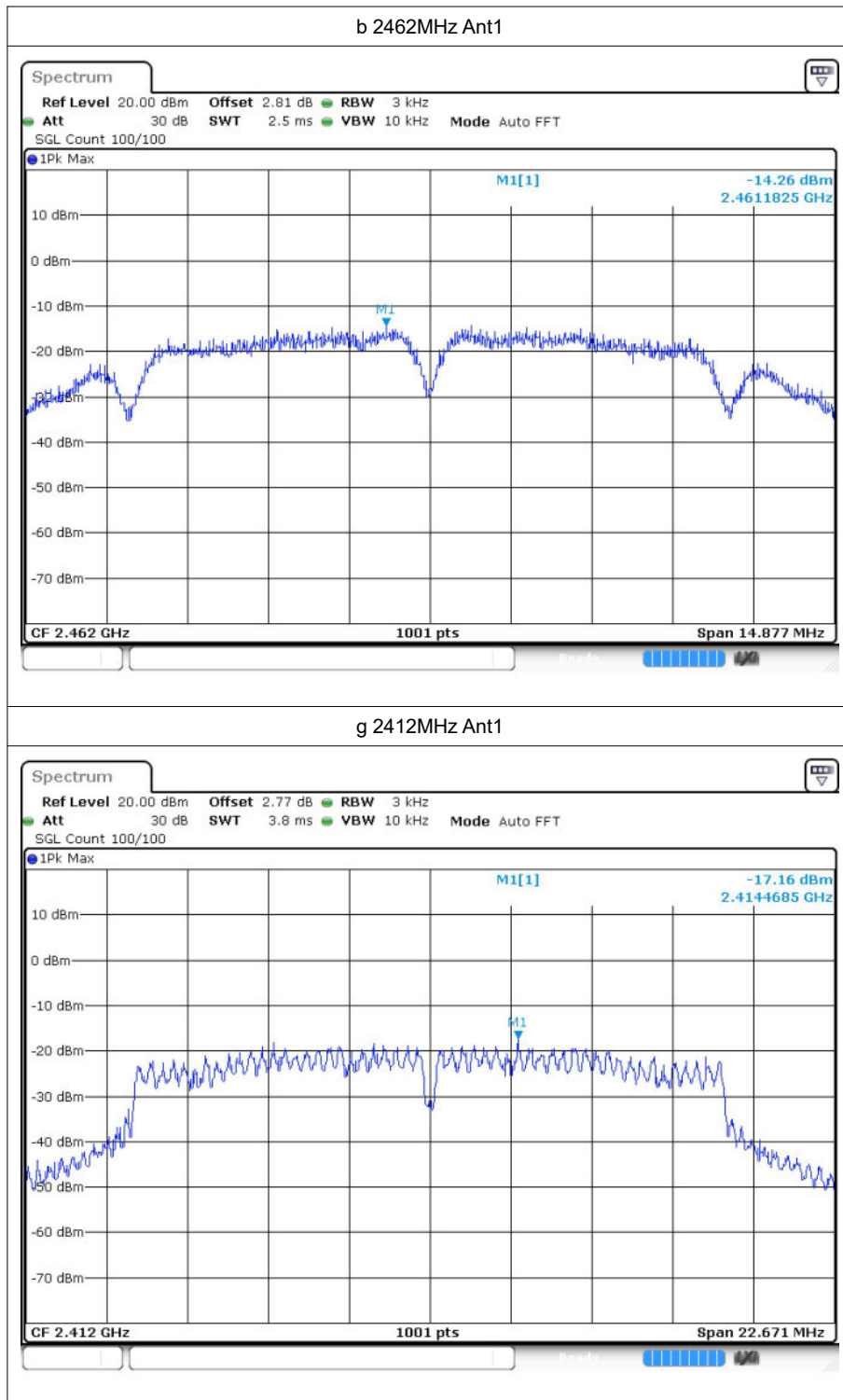
4 Maximum Power Spectral Density Level

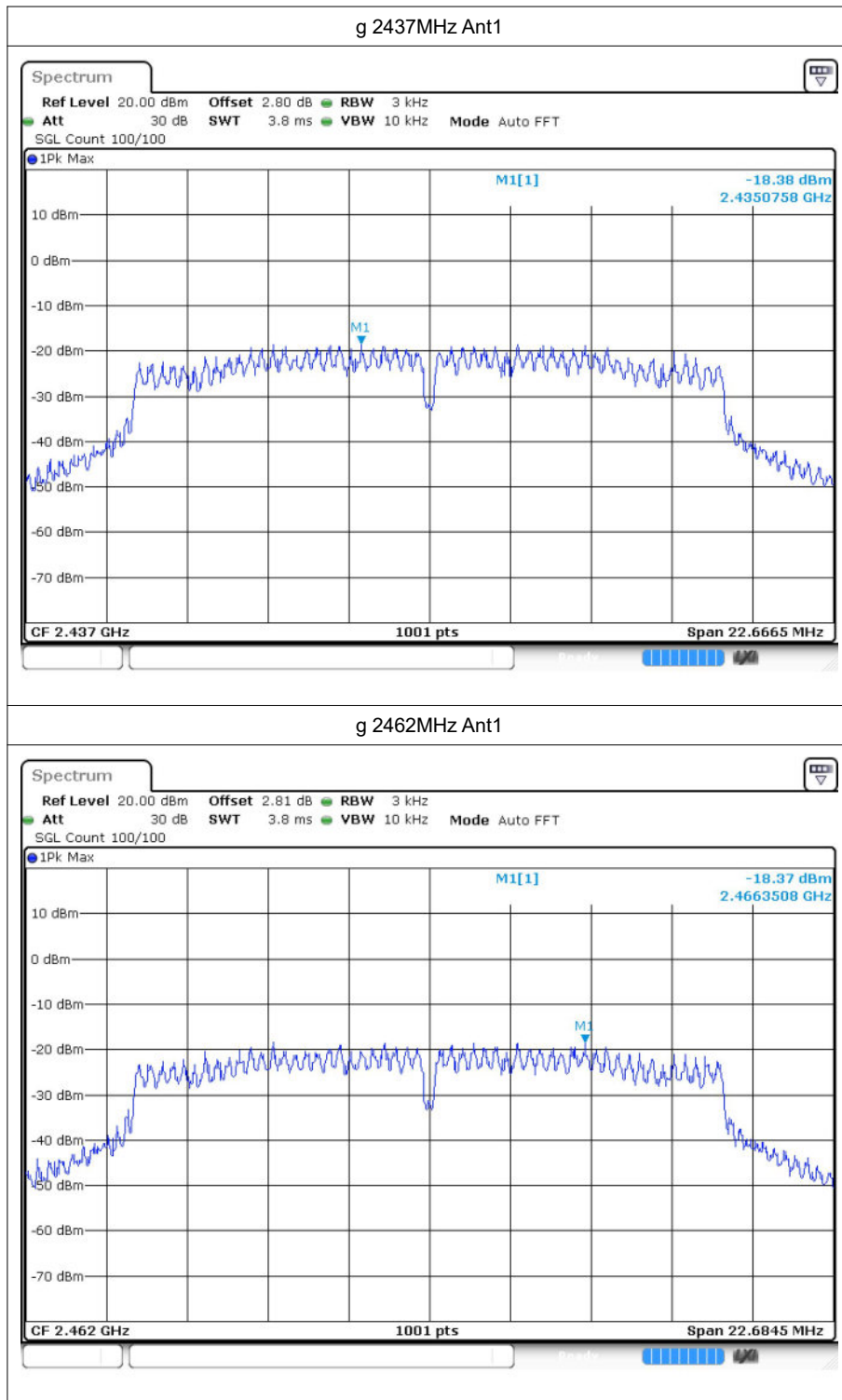
4.1 Test Result

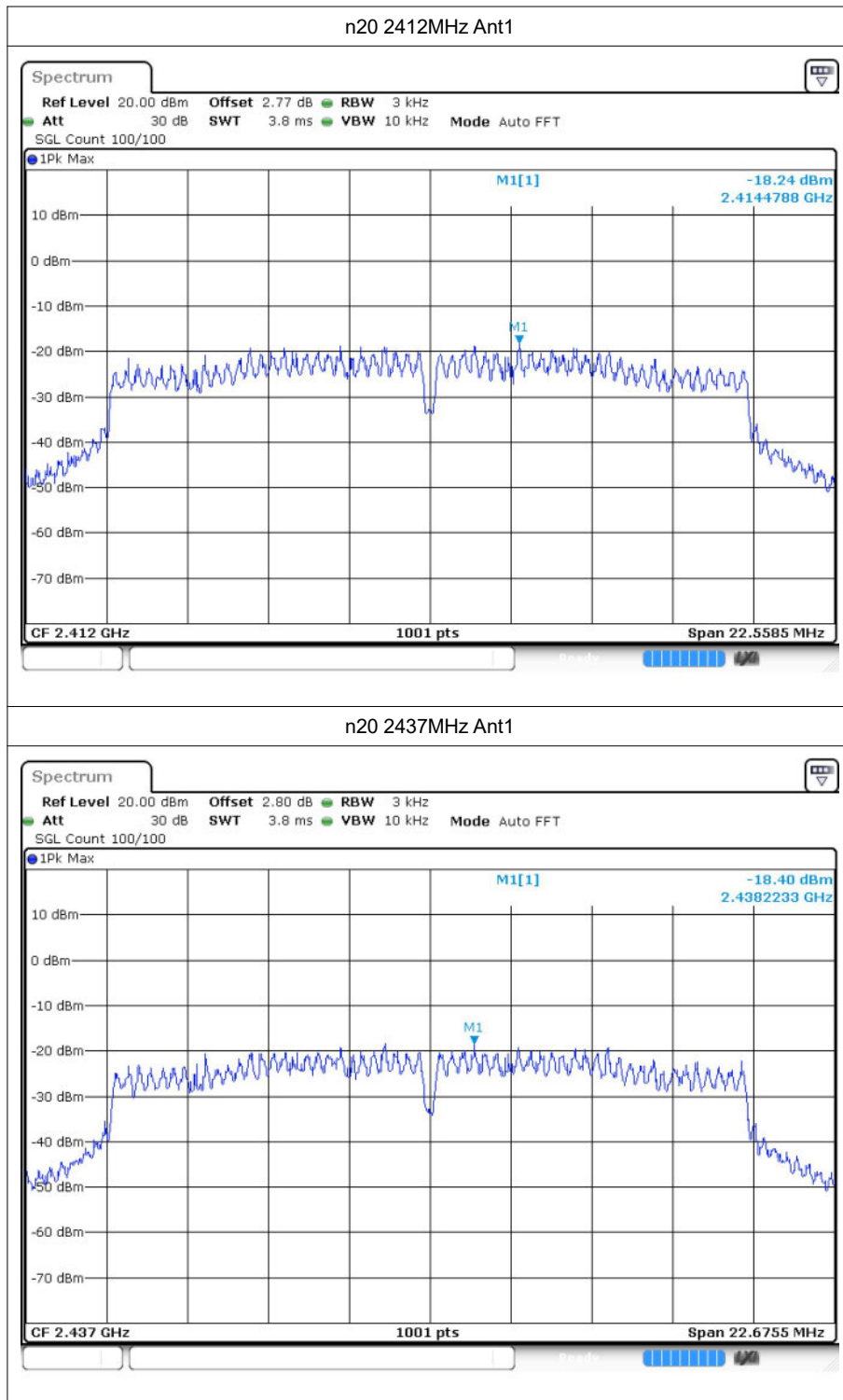
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-14.05	≤ 8	Pass
b	2437	Ant1	-14.34	≤ 8	Pass
b	2462	Ant1	-14.26	≤ 8	Pass
g	2412	Ant1	-17.16	≤ 8	Pass
g	2437	Ant1	-18.38	≤ 8	Pass
g	2462	Ant1	-18.37	≤ 8	Pass
n20	2412	Ant1	-18.24	≤ 8	Pass
n20	2437	Ant1	-18.4	≤ 8	Pass
n20	2462	Ant1	-18.63	≤ 8	Pass

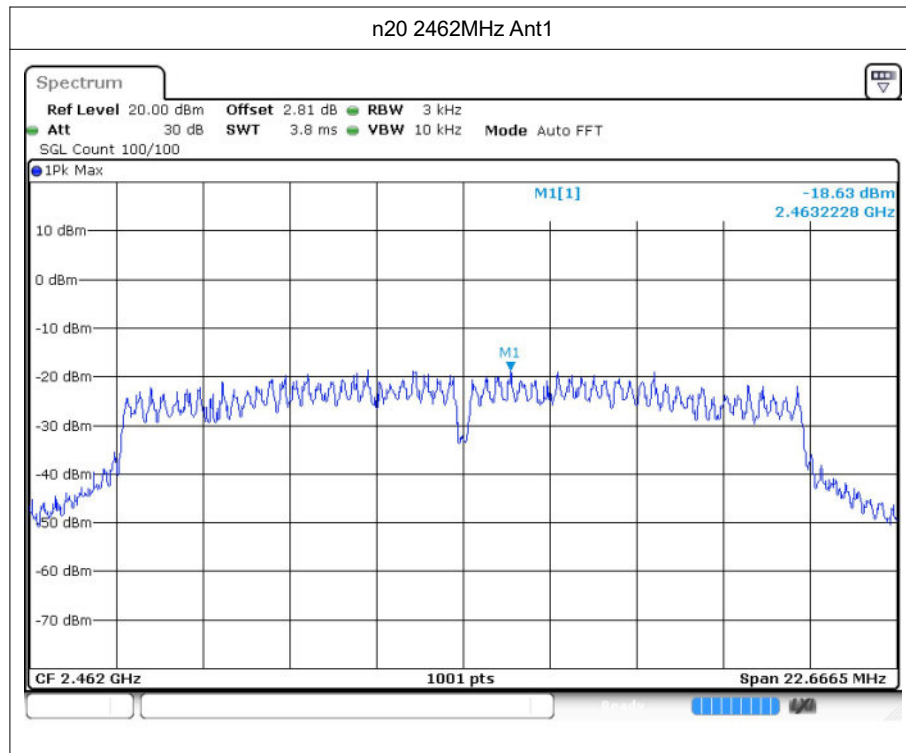
4.2 Test Graphs











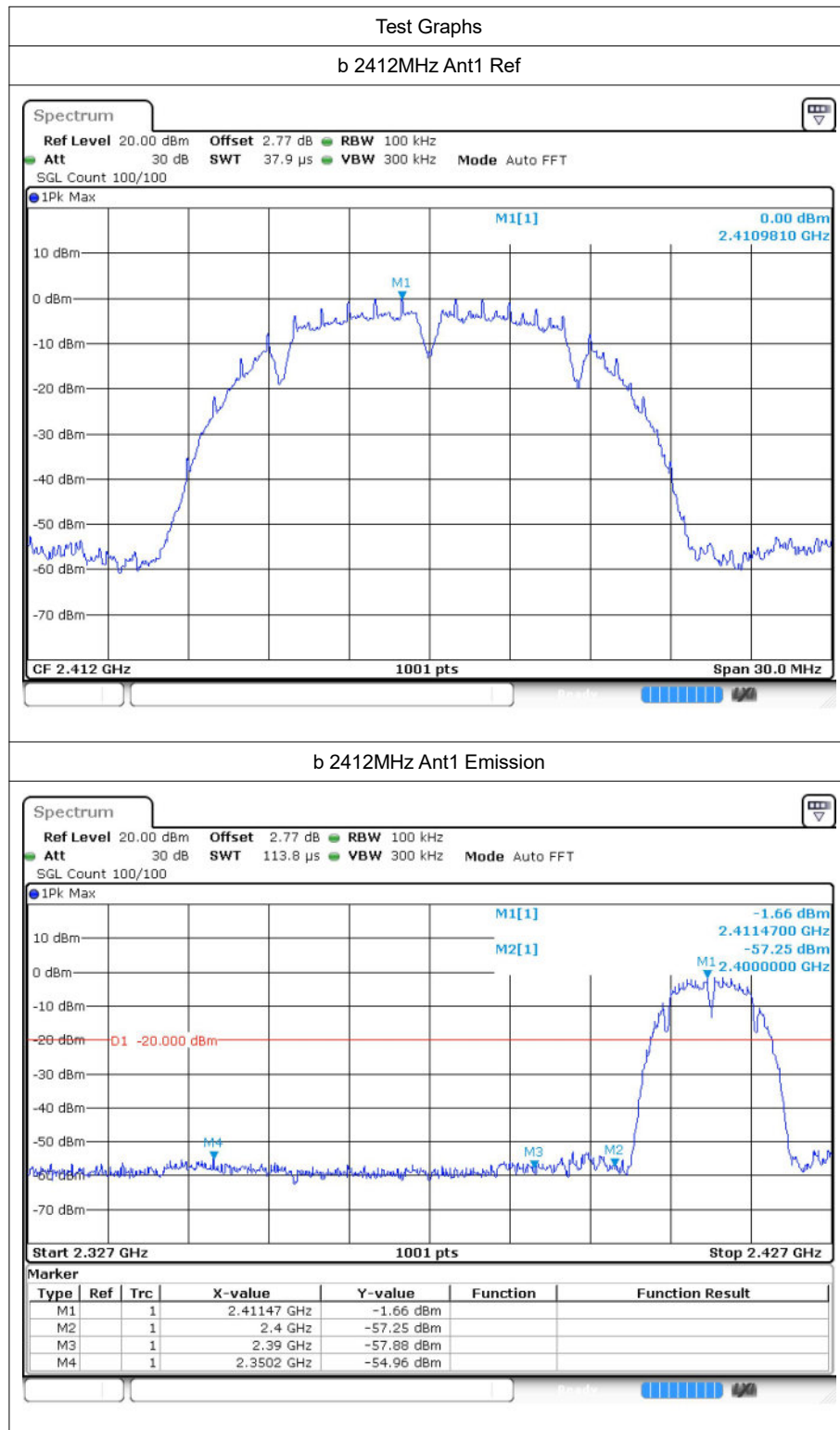


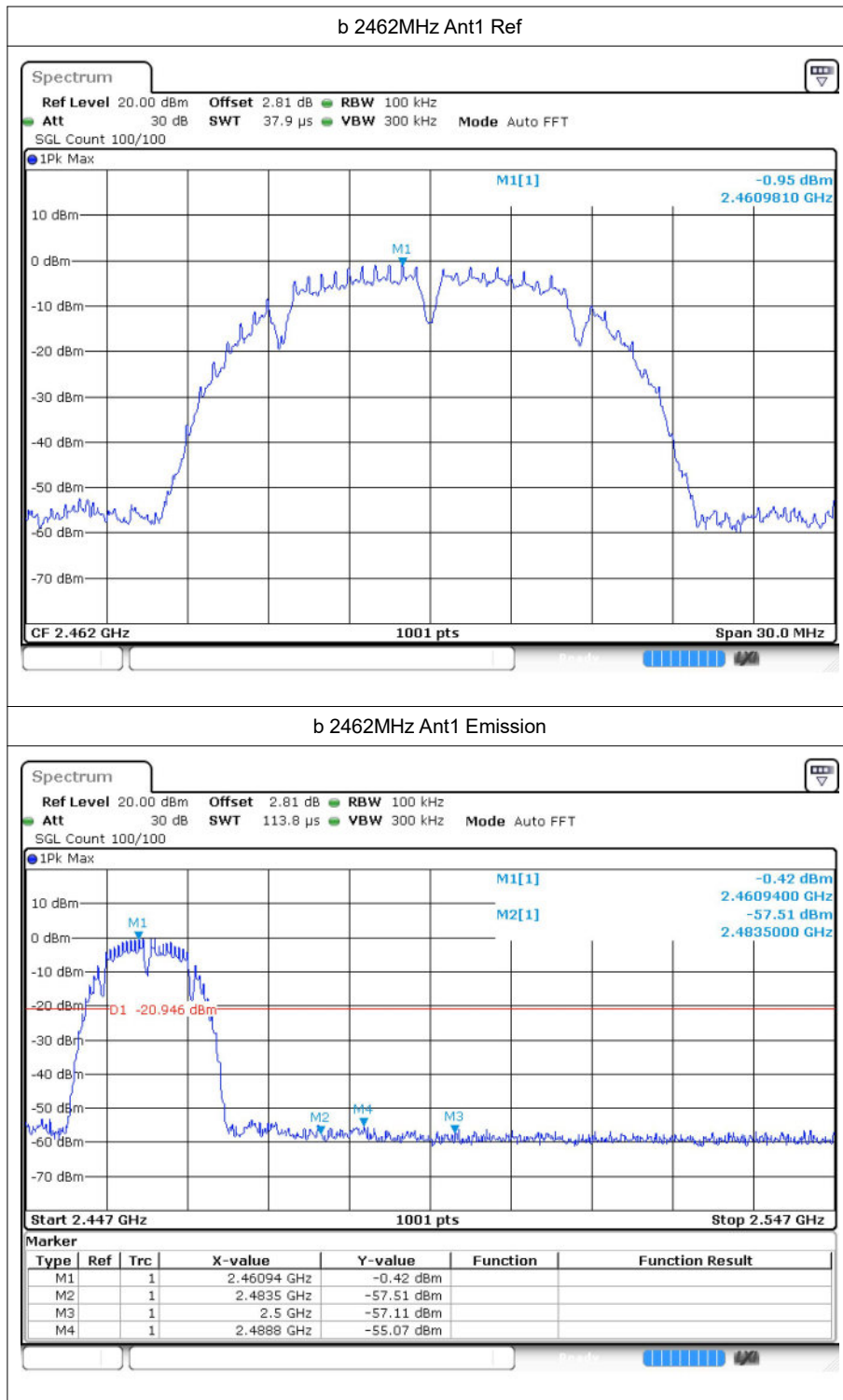
5 Band Edge

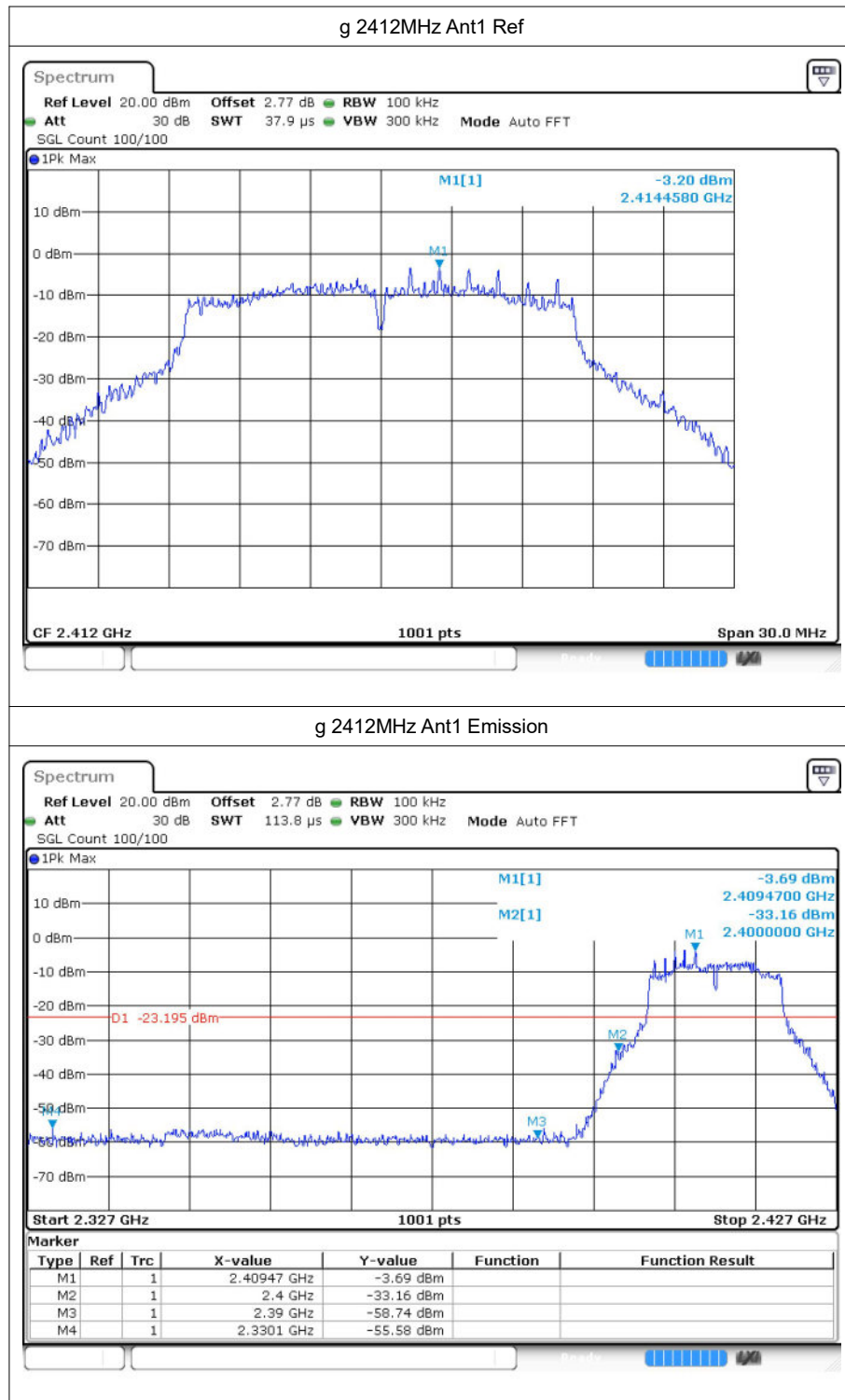
5.1 Test Result

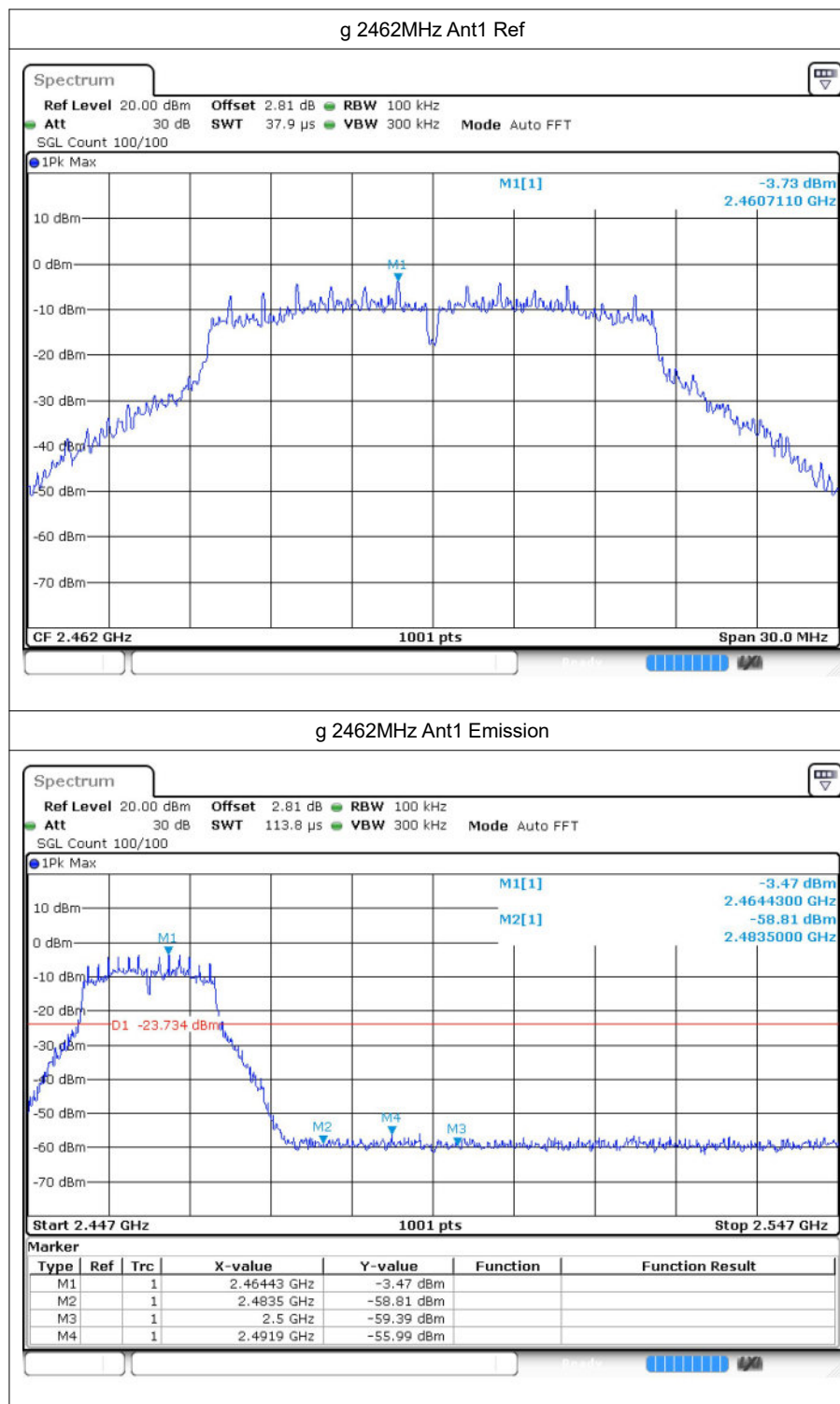
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-54.95	-20	Pass
b	2462	Ant1	-54.12	-20	Pass
g	2412	Ant1	-52.37	-20	Pass
g	2462	Ant1	-52.26	-20	Pass
n20	2412	Ant1	-51.21	-20	Pass
n20	2462	Ant1	-51.64	-20	Pass

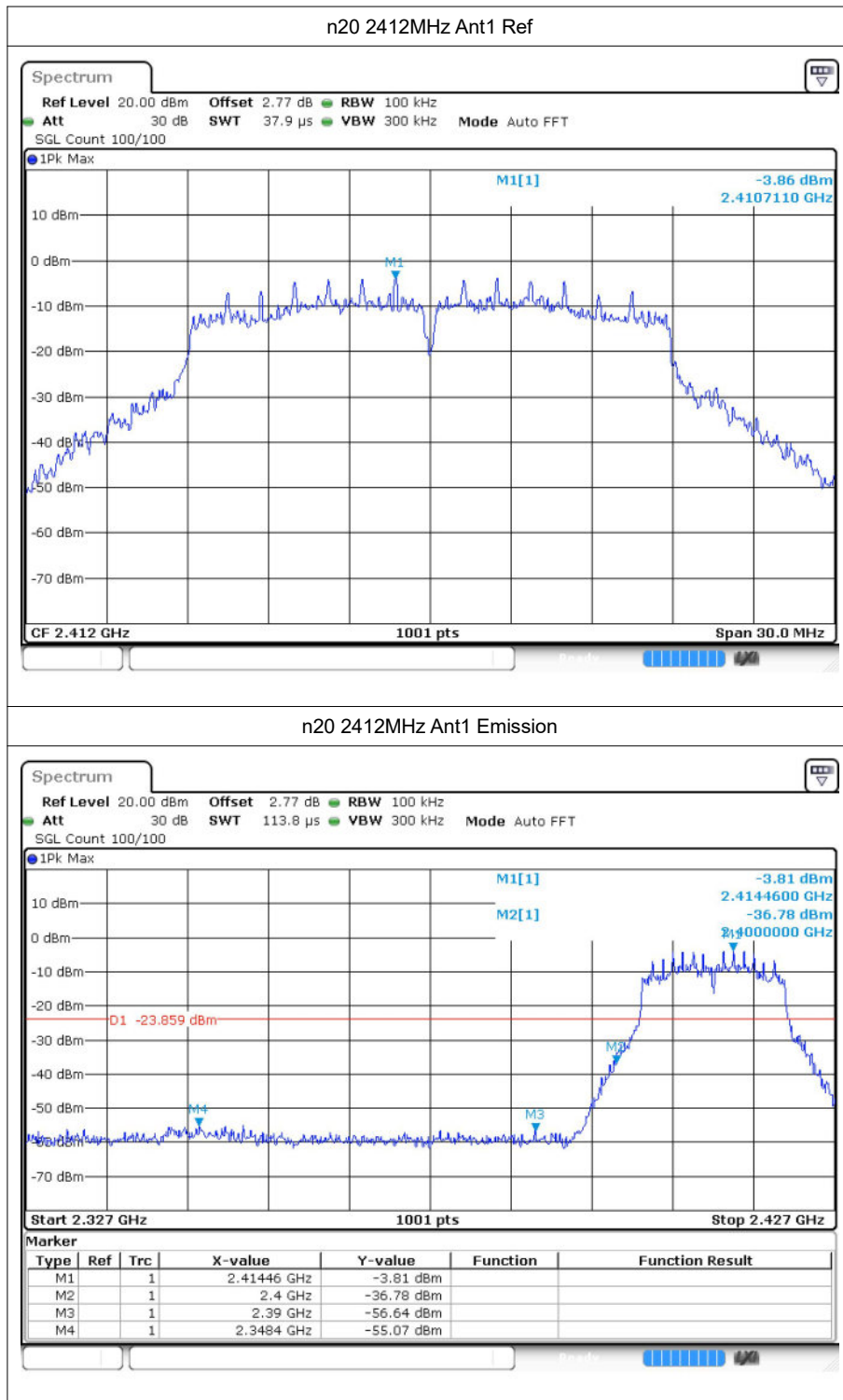
5.2 Test Graphs

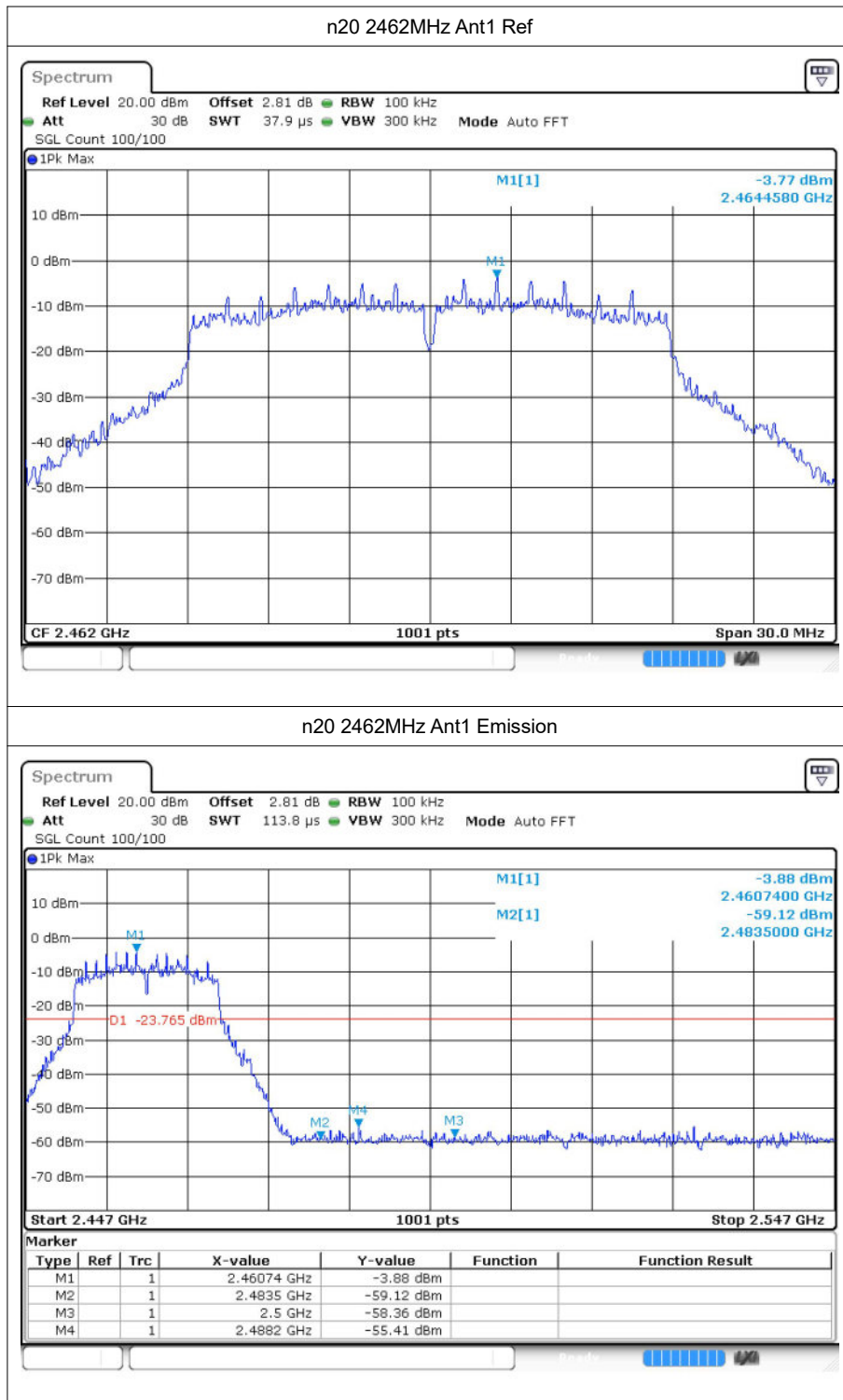












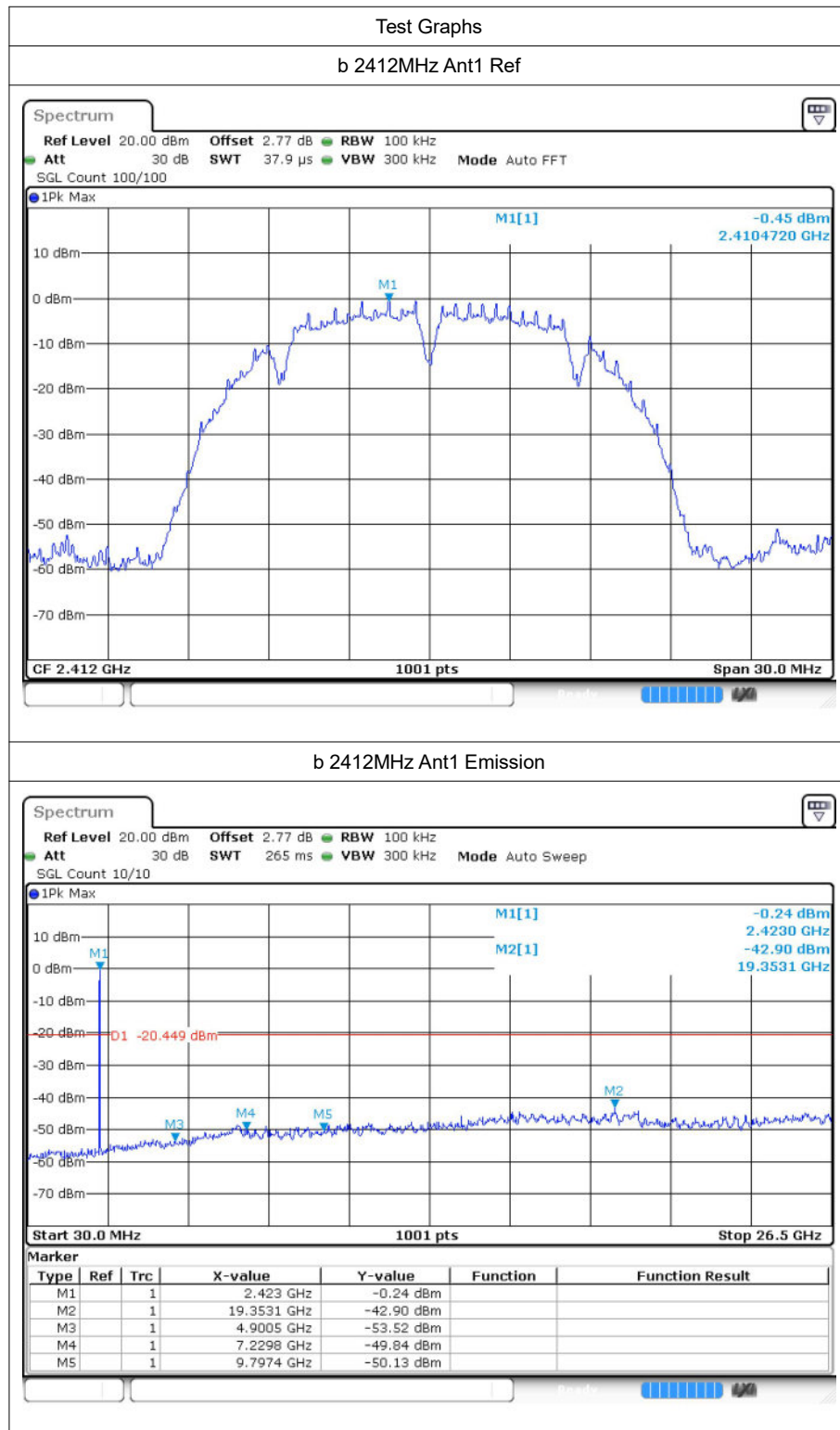


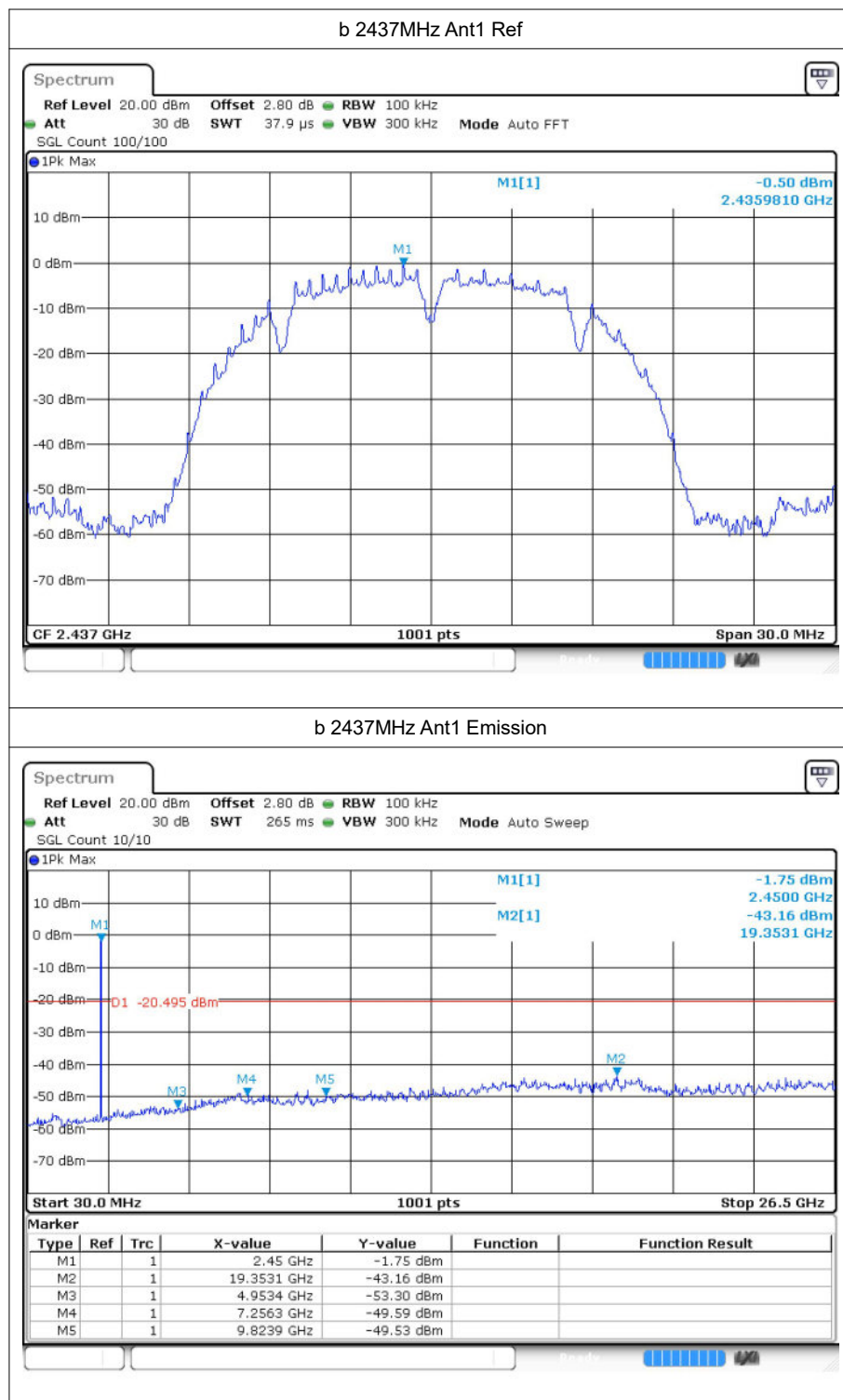
6 Conducted RF Spurious Emission

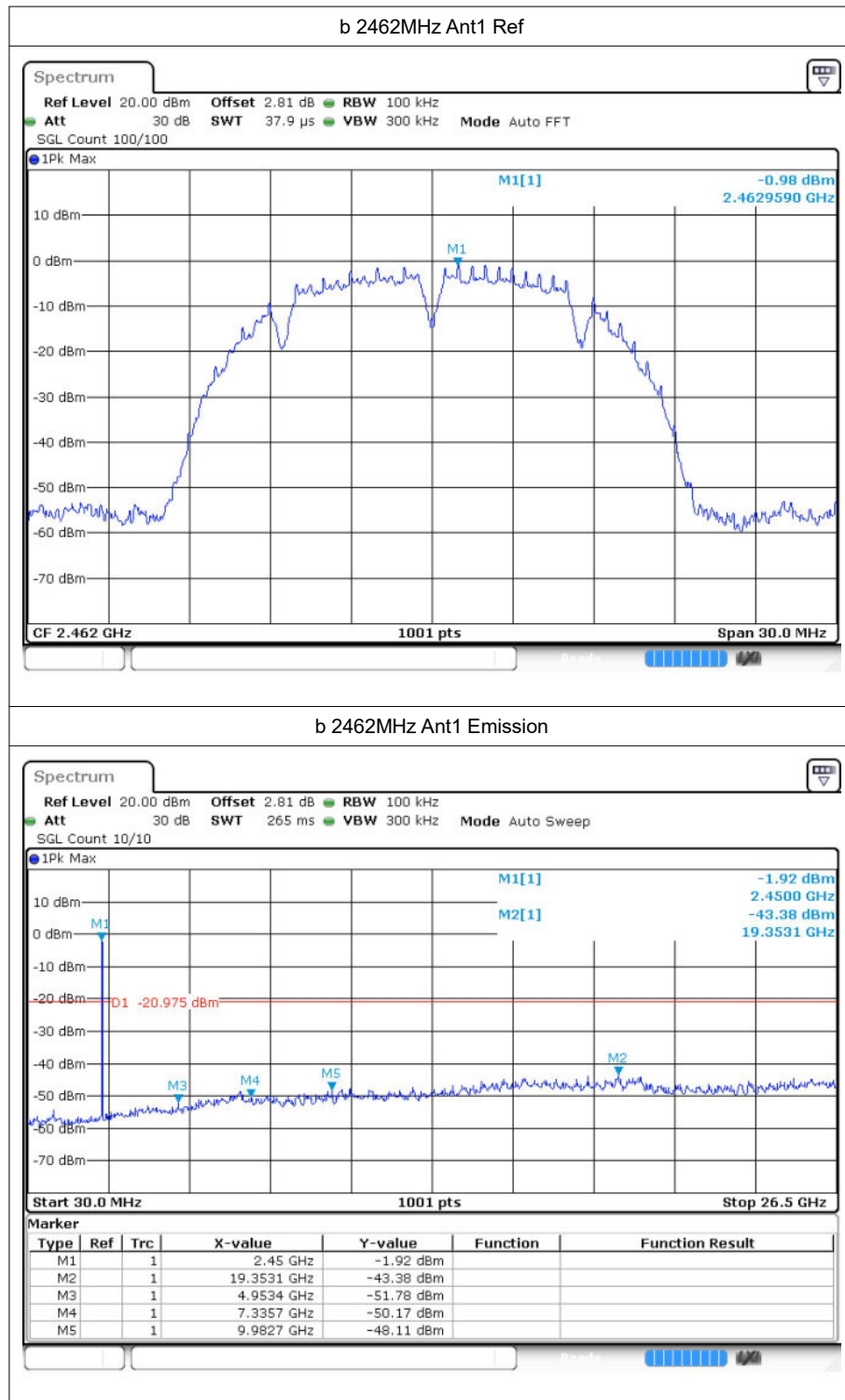
6.1 Test Result

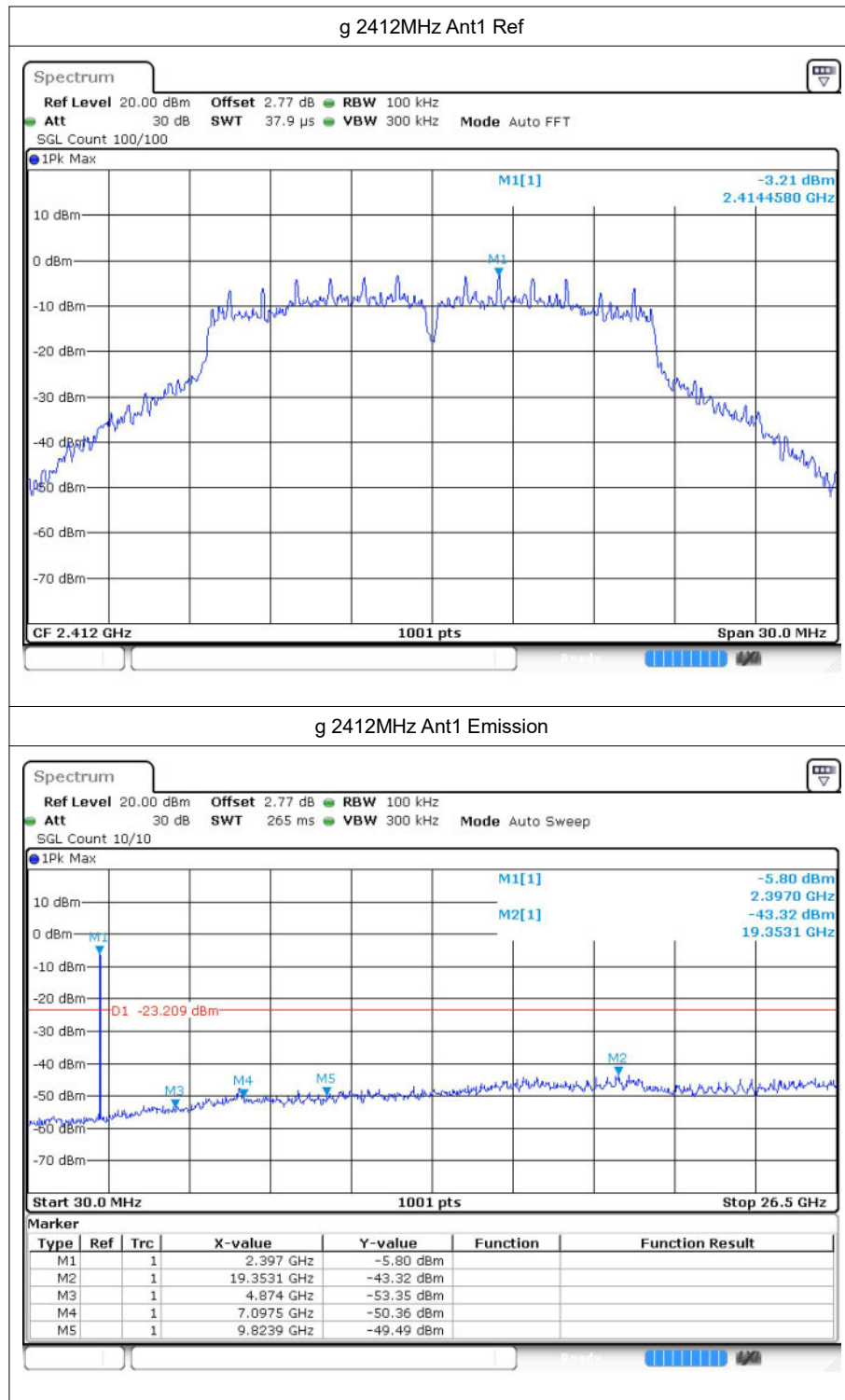
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-42.45	-20	Pass
b	2437	Ant1	-42.66	-20	Pass
b	2462	Ant1	-42.4	-20	Pass
g	2412	Ant1	-40.1	-20	Pass
g	2437	Ant1	-39.65	-20	Pass
g	2462	Ant1	-39.73	-20	Pass
n20	2412	Ant1	-38.61	-20	Pass
n20	2437	Ant1	-39.66	-20	Pass
n20	2462	Ant1	-39.59	-20	Pass

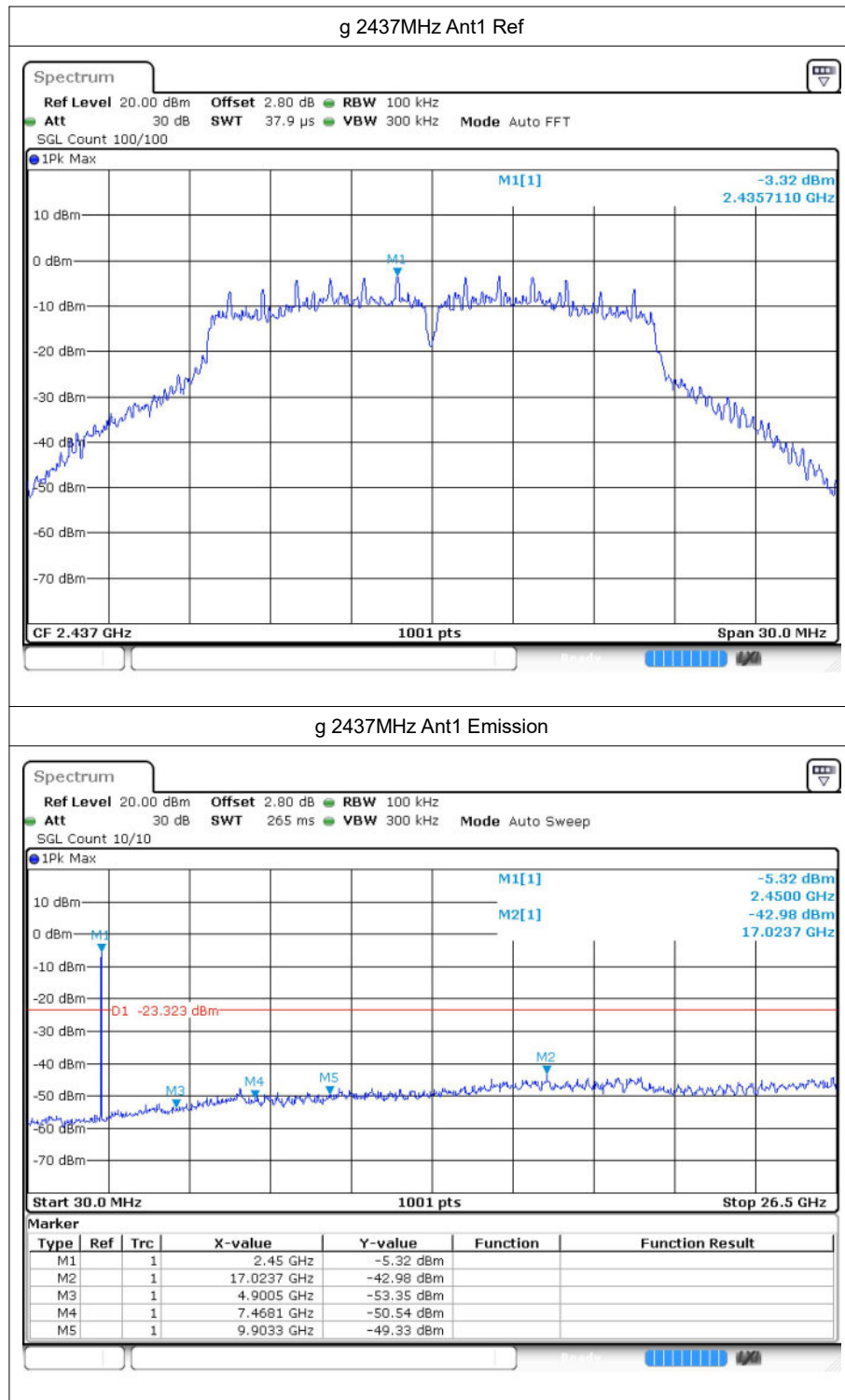
6.2 Test Graphs

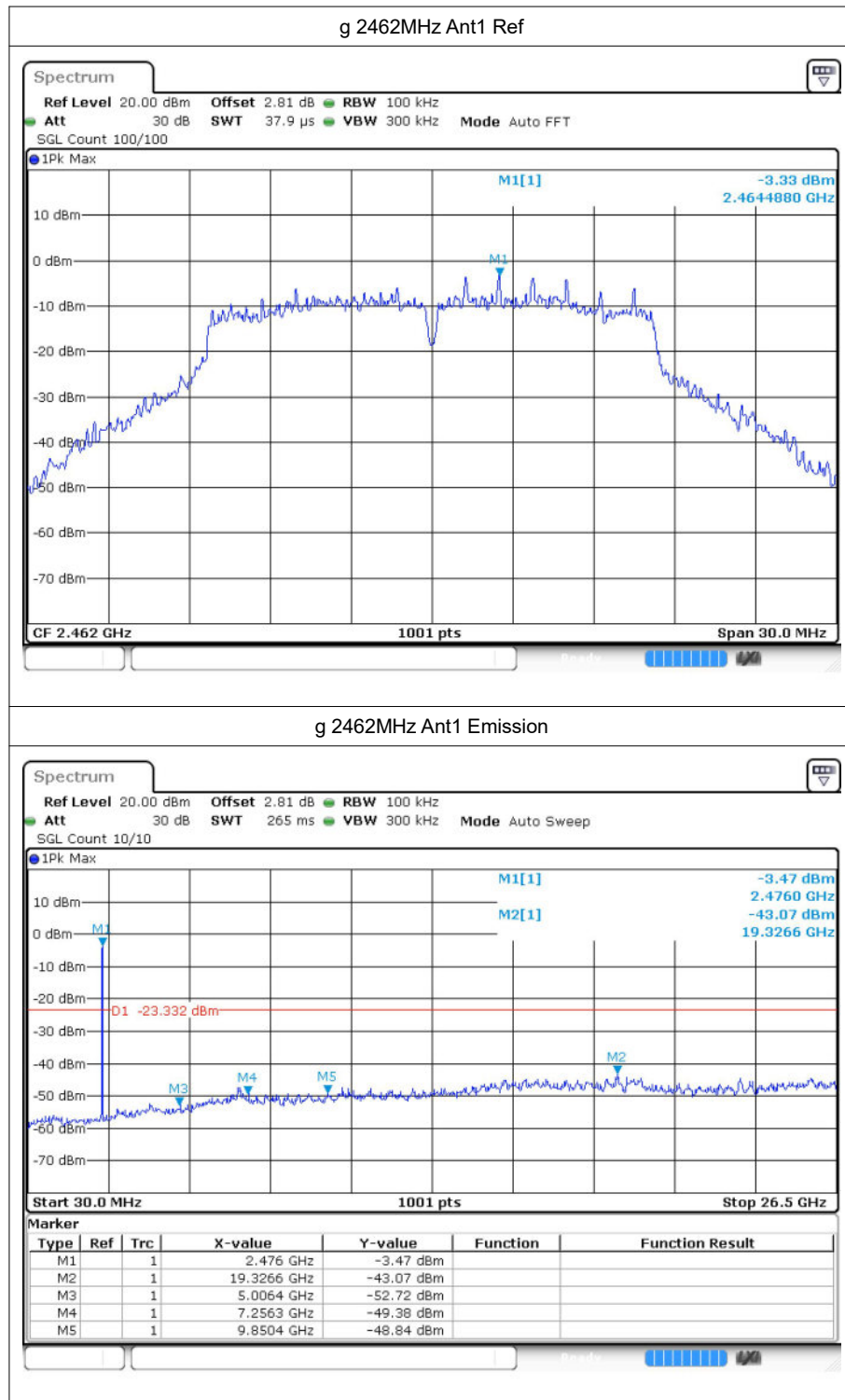


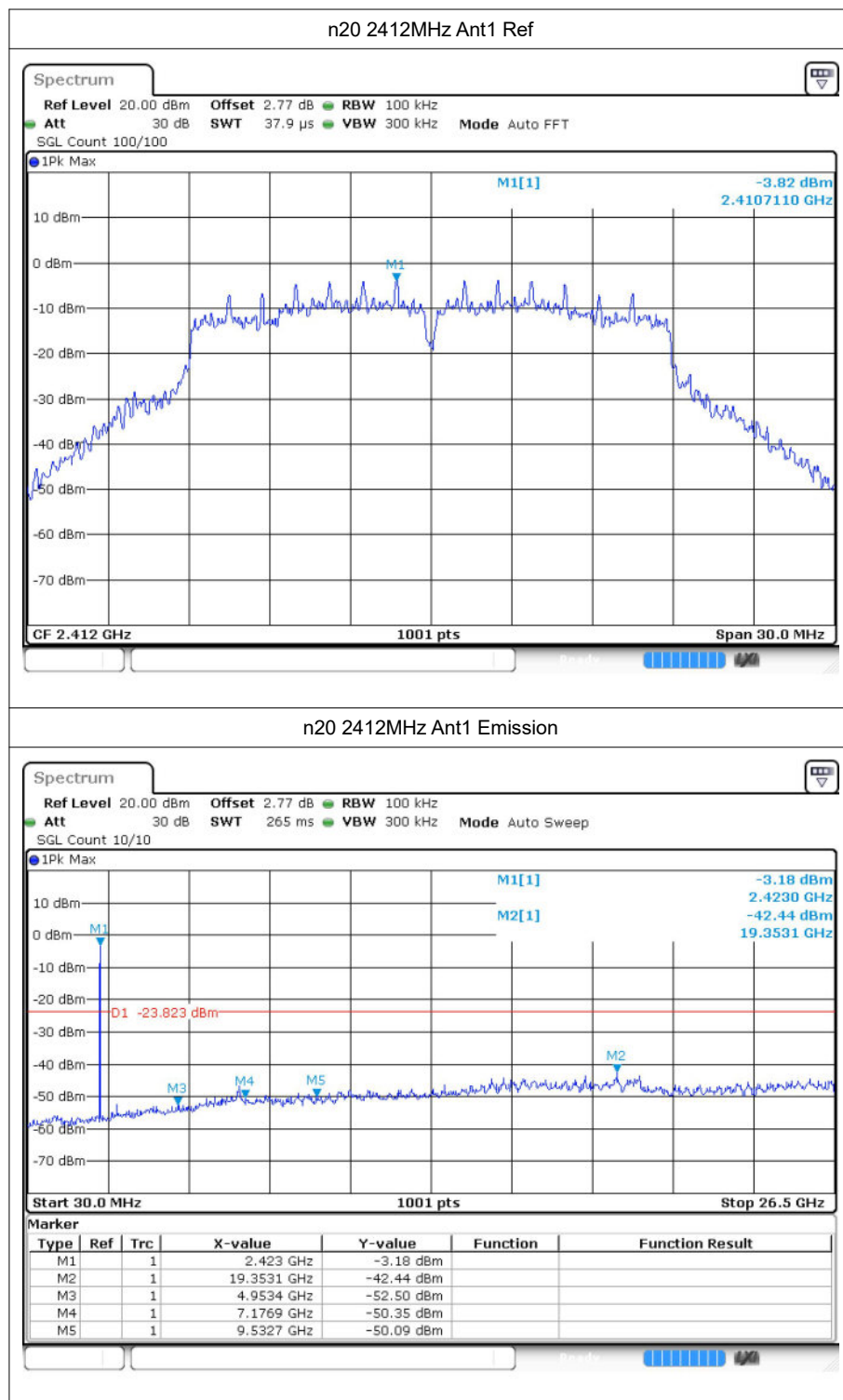


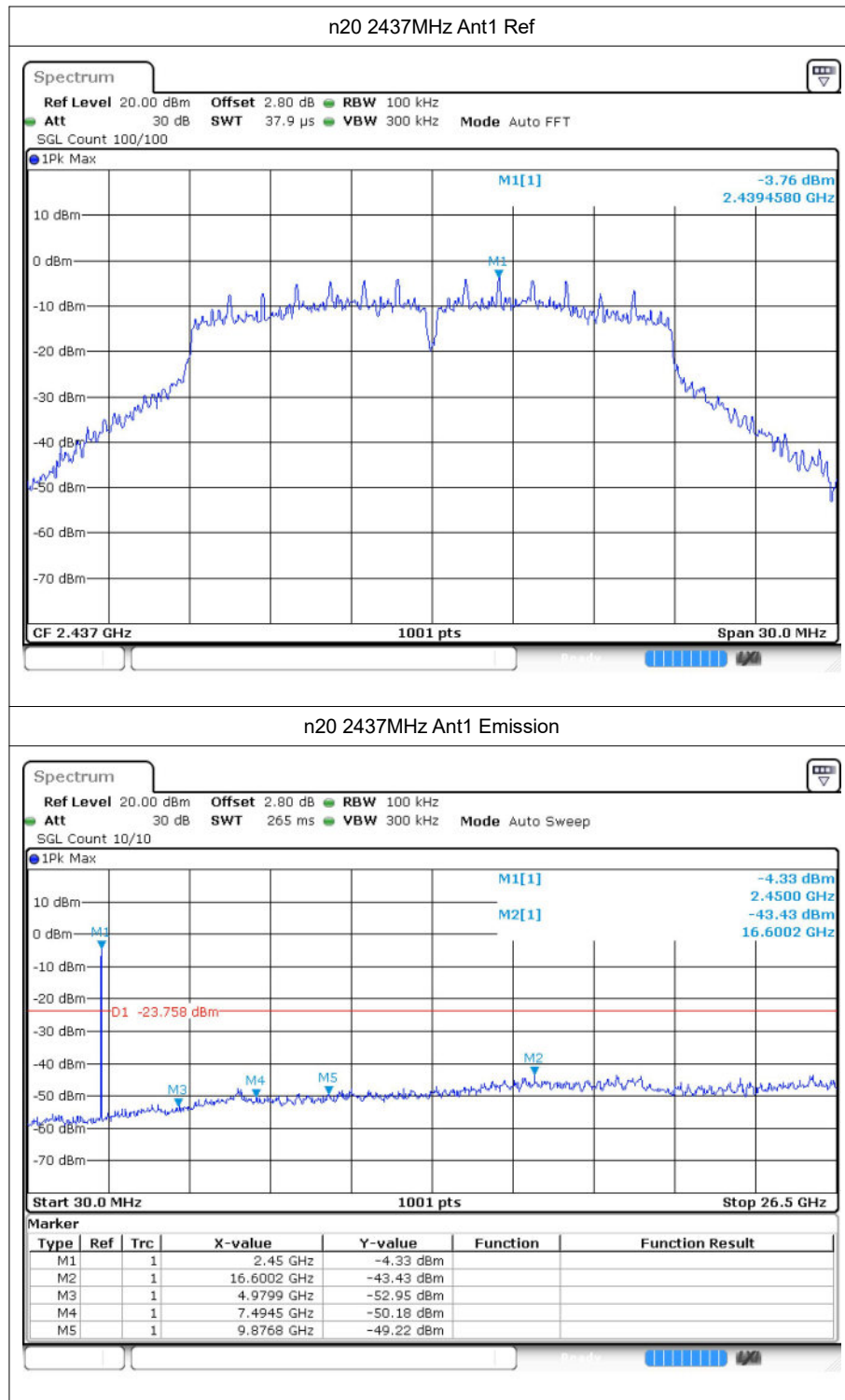


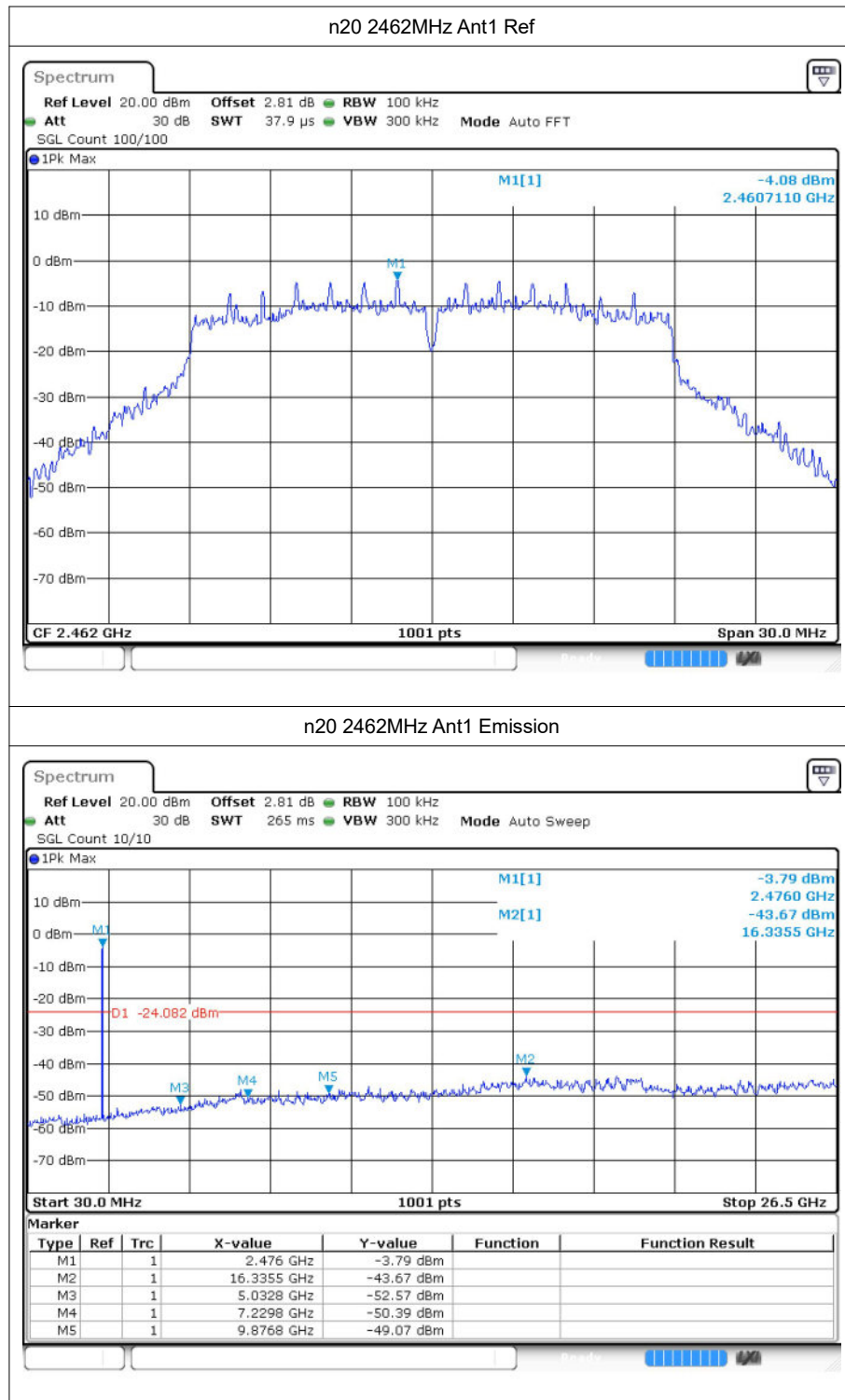














7 Restrict Band

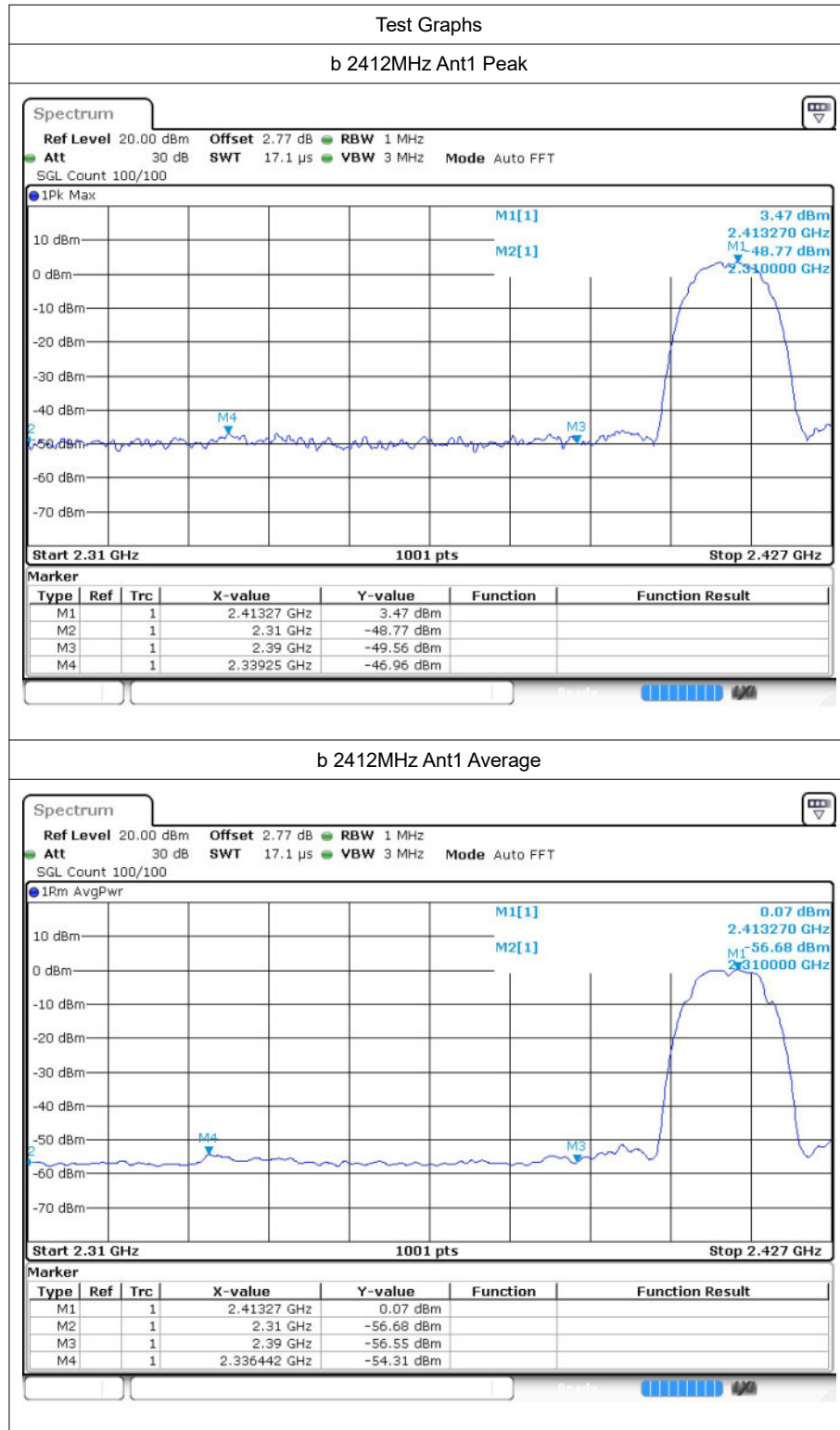
7.1 Test Result

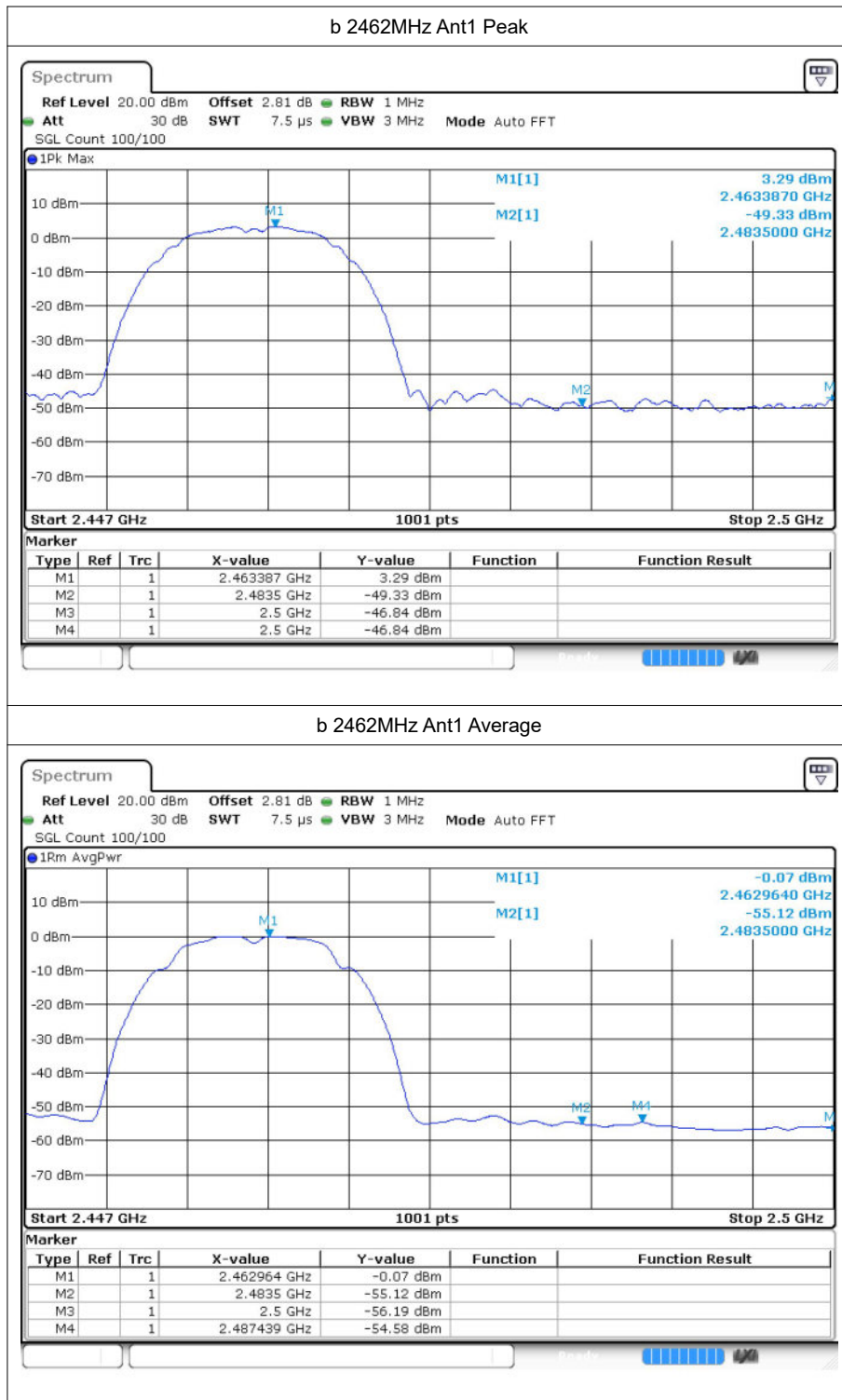
Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
b	2412	Ant1	2310	-48.77	2	-	48.49	Peak	74	Pass
b	2412	Ant1	2310	-56.68	2	0	40.58	Average	54	Pass
b	2412	Ant1	2339.25	-46.95	2	-	50.31	Peak	74	Pass
b	2412	Ant1	2336.442	-54.31	2	0	42.95	Average	54	Pass
b	2412	Ant1	2390	-49.56	2	-	47.7	Peak	74	Pass
b	2412	Ant1	2390	-56.55	2	0	40.71	Average	54	Pass
b	2462	Ant1	2483.5	-49.33	2	-	47.93	Peak	74	Pass
b	2462	Ant1	2483.5	-55.12	2	0	42.14	Average	54	Pass
b	2462	Ant1	2500	-46.83	2	-	50.43	Peak	74	Pass
b	2462	Ant1	2487.439	-54.57	2	0	42.69	Average	54	Pass
b	2462	Ant1	2500	-46.84	2	-	50.42	Peak	74	Pass
b	2462	Ant1	2500	-56.19	2	0	41.07	Average	54	Pass
g	2412	Ant1	2310	-48.74	2	-	48.52	Peak	74	Pass
g	2412	Ant1	2310	-56.36	2	0.61	41.51	Average	54	Pass
g	2412	Ant1	2337.846	-47.04	2	-	50.22	Peak	74	Pass
g	2412	Ant1	2337.846	-54.55	2	0.61	43.32	Average	54	Pass
g	2412	Ant1	2390	-49.14	2	-	47.7	Peak	74	Pass
g	2412	Ant1	2390	-57.13	2	0.61	40.74	Average	54	Pass
g	2462	Ant1	2483.5	-50.26	2	-	47	Peak	74	Pass
g	2462	Ant1	2483.5	-56.33	2	0.61	41.54	Average	54	Pass
g	2462	Ant1	2500	-47.7	2	-	49.56	Peak	74	Pass
g	2462	Ant1	2487.757	-55.75	2	0.61	42.12	Average	54	Pass
g	2462	Ant1	2500	-48.46	2	-	50.42	Peak	74	Pass
g	2462	Ant1	2500	-57.05	2	0.61	40.82	Average	54	Pass
n20	2412	Ant1	2310	-51.05	2	-	46.21	Peak	74	Pass
n20	2412	Ant1	2310	-57.44	2	0.58	40.4	Average	54	Pass
n20	2412	Ant1	2323.923	-46.97	2	-	50.29	Peak	74	Pass
n20	2412	Ant1	2336.091	-54.78	2	0.58	43.06	Average	54	Pass
n20	2412	Ant1	2390	-50	2	-	47.26	Peak	74	Pass
n20	2412	Ant1	2390	-57.09	2	0.58	40.75	Average	54	Pass
n20	2462	Ant1	2483.5	-49.26	2	-	48	Peak	74	Pass
n20	2462	Ant1	2483.5	-56.9	2	0.58	40.94	Average	54	Pass
n20	2462	Ant1	2491.52	-46.99	2	-	50.27	Peak	74	Pass
n20	2462	Ant1	2486.697	-55.88	2	0.58	41.96	Average	54	Pass

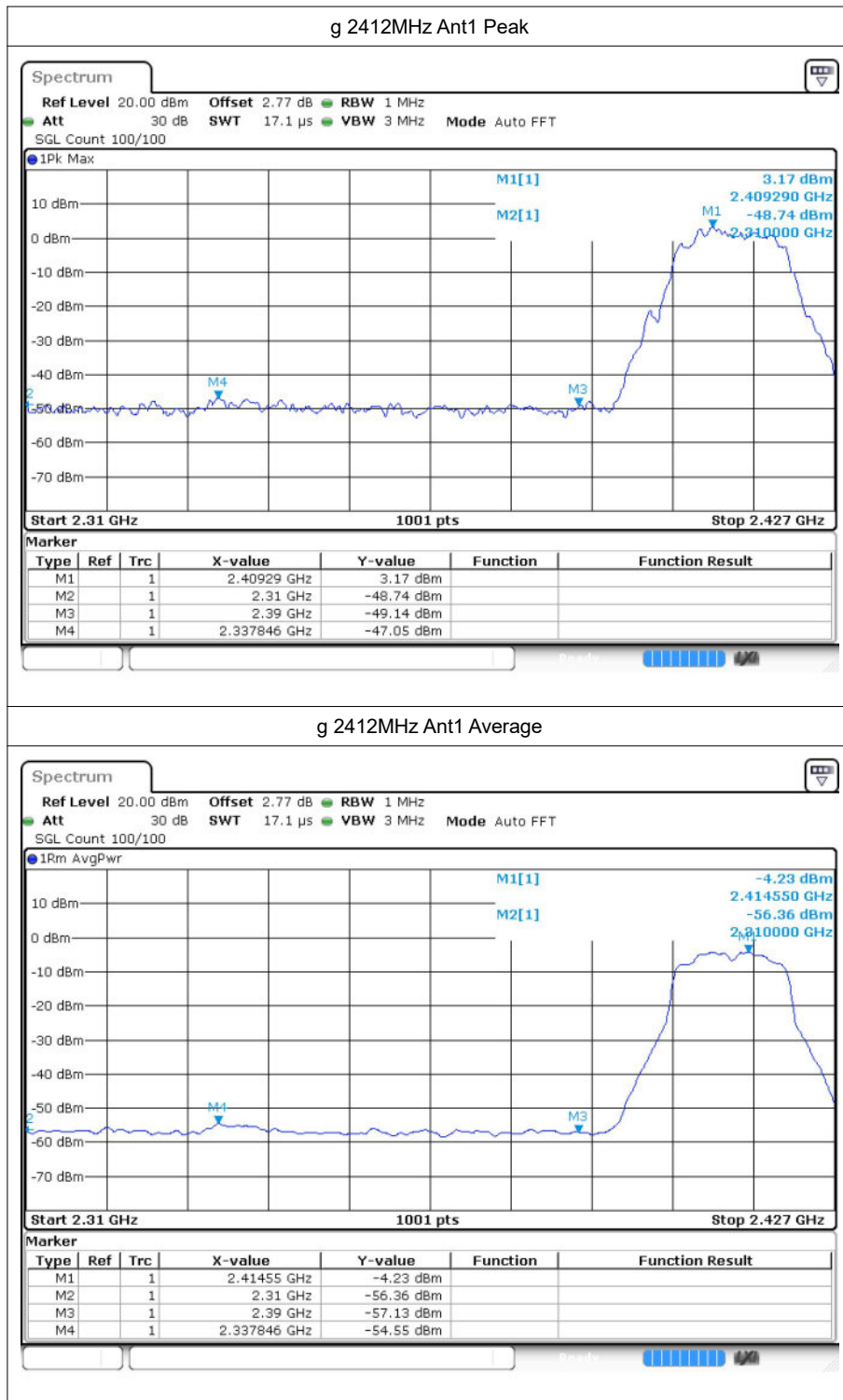


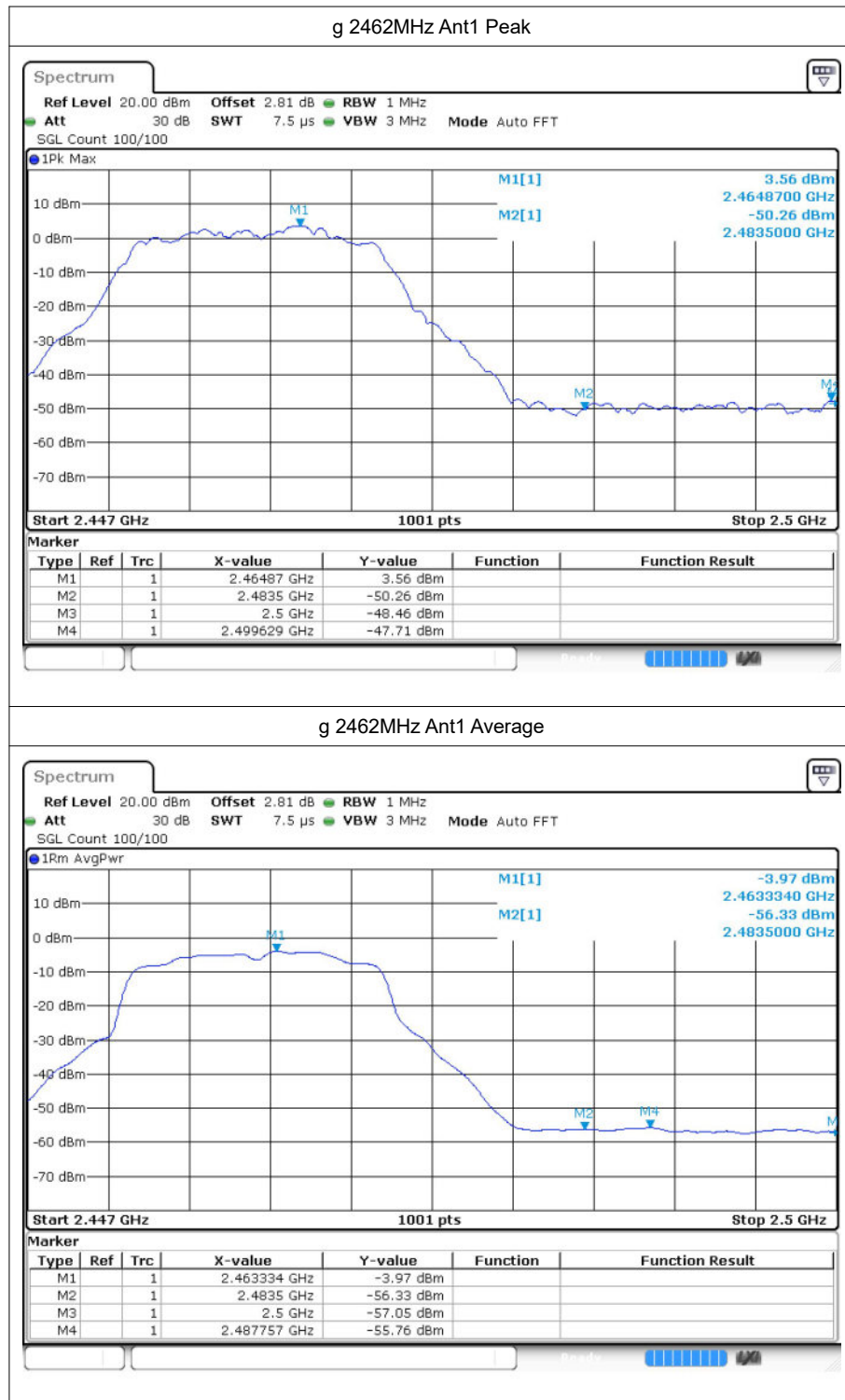
n20	2462	Ant1	2500	-49.1	2	-	48.16	Peak	74	Pass
n20	2462	Ant1	2500	-56.29	2	0.58	41.55	Average	54	Pass

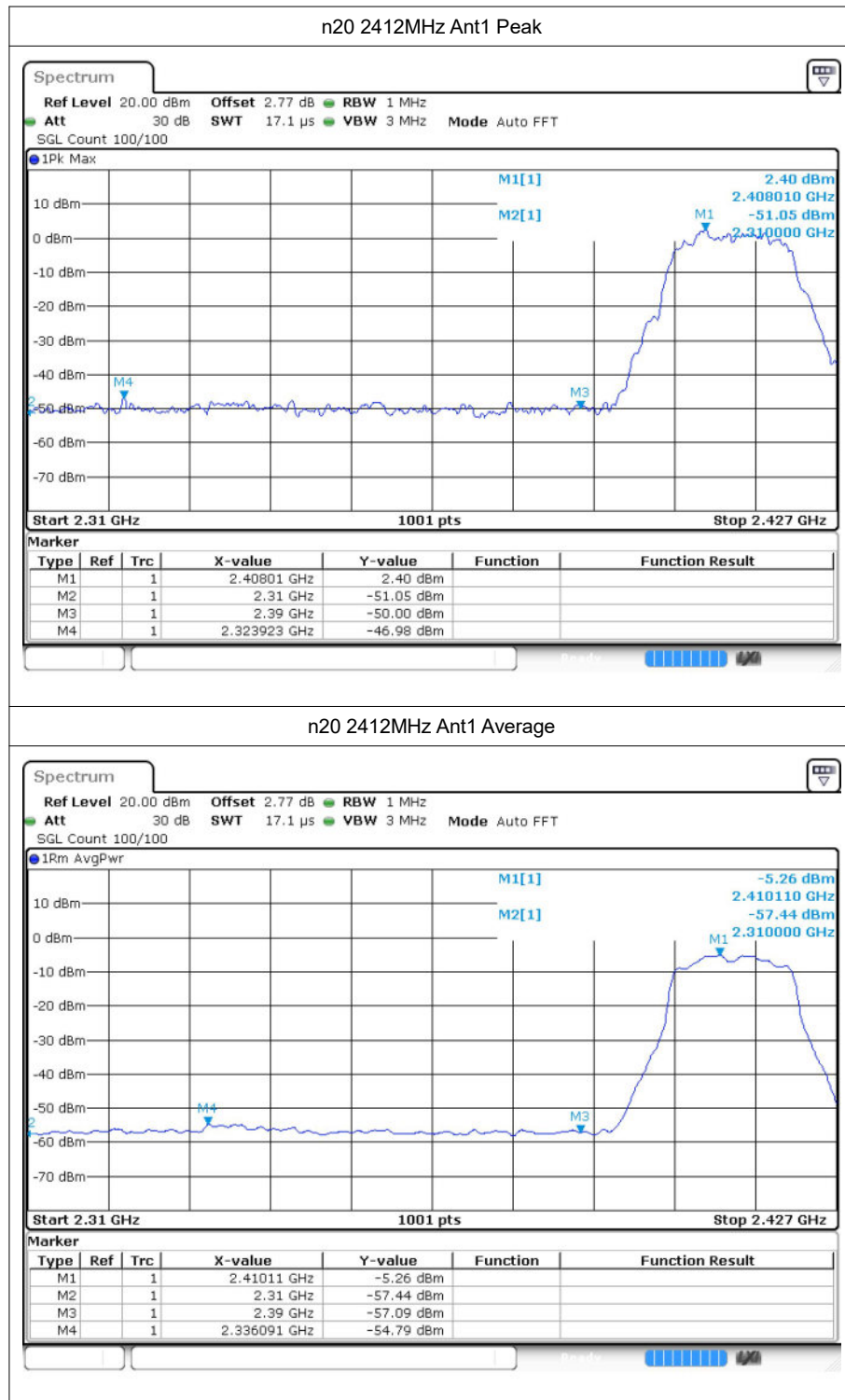
7.2 Test Graphs

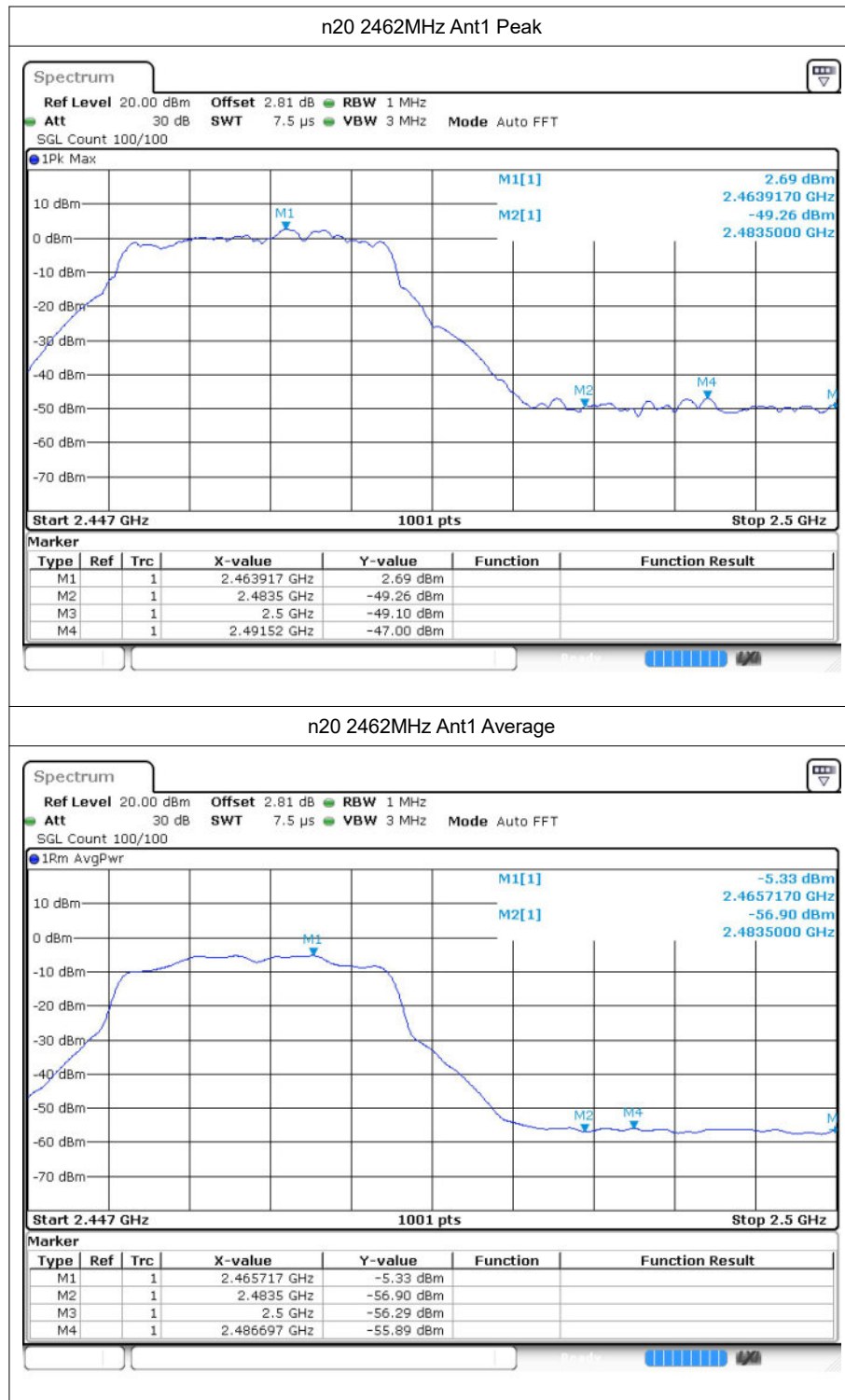












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