



Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Wifi Digital Photo Frame

Trade Mark: KOHO

Test Model: WF156

Environmental Conditions

Temperature:	25.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



Contents

	Page
COVER PAGE	
1 Duty Cycle	3
1.1 Test Result	3
1.2 Test Graphs	4
2 Maximum Conducted Output Power	9
2.1 Test Result	9
3 -6dB Bandwidth	10
3.1 Test Result	10
3.2 Test Graphs	11
4 Maximum Power Spectral Density Level	16
4.1 Test Result	16
4.2 Test Graphs	17
5 Band Edge	22
5.1 Test Result	22
5.2 Test Graphs	23
6 Conducted RF Spurious Emission	29
6.1 Test Result	29
6.2 Test Graphs	30
7 Restrict Band	39
7.1 Test Result	39
7.2 Test Graphs	41

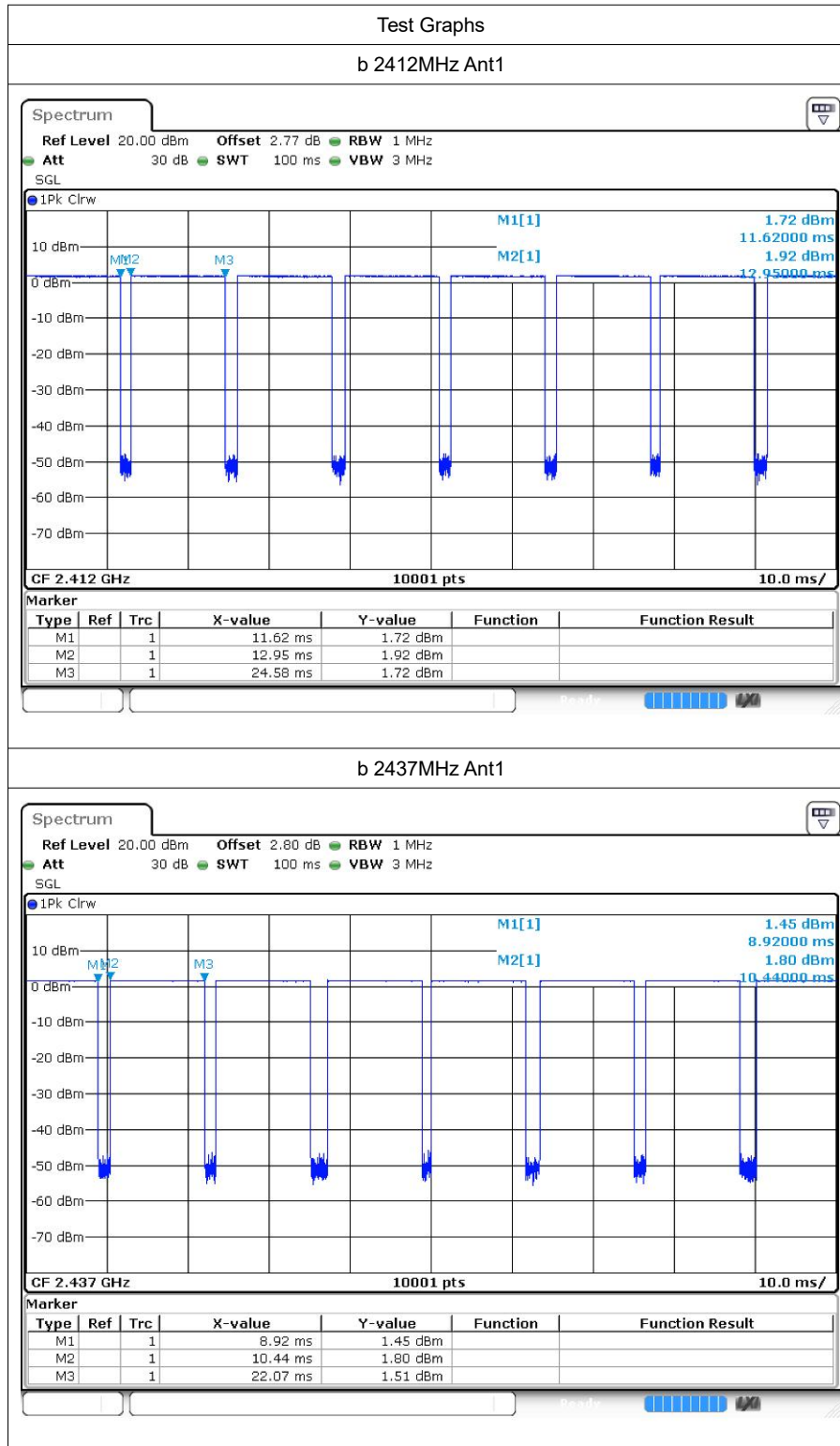


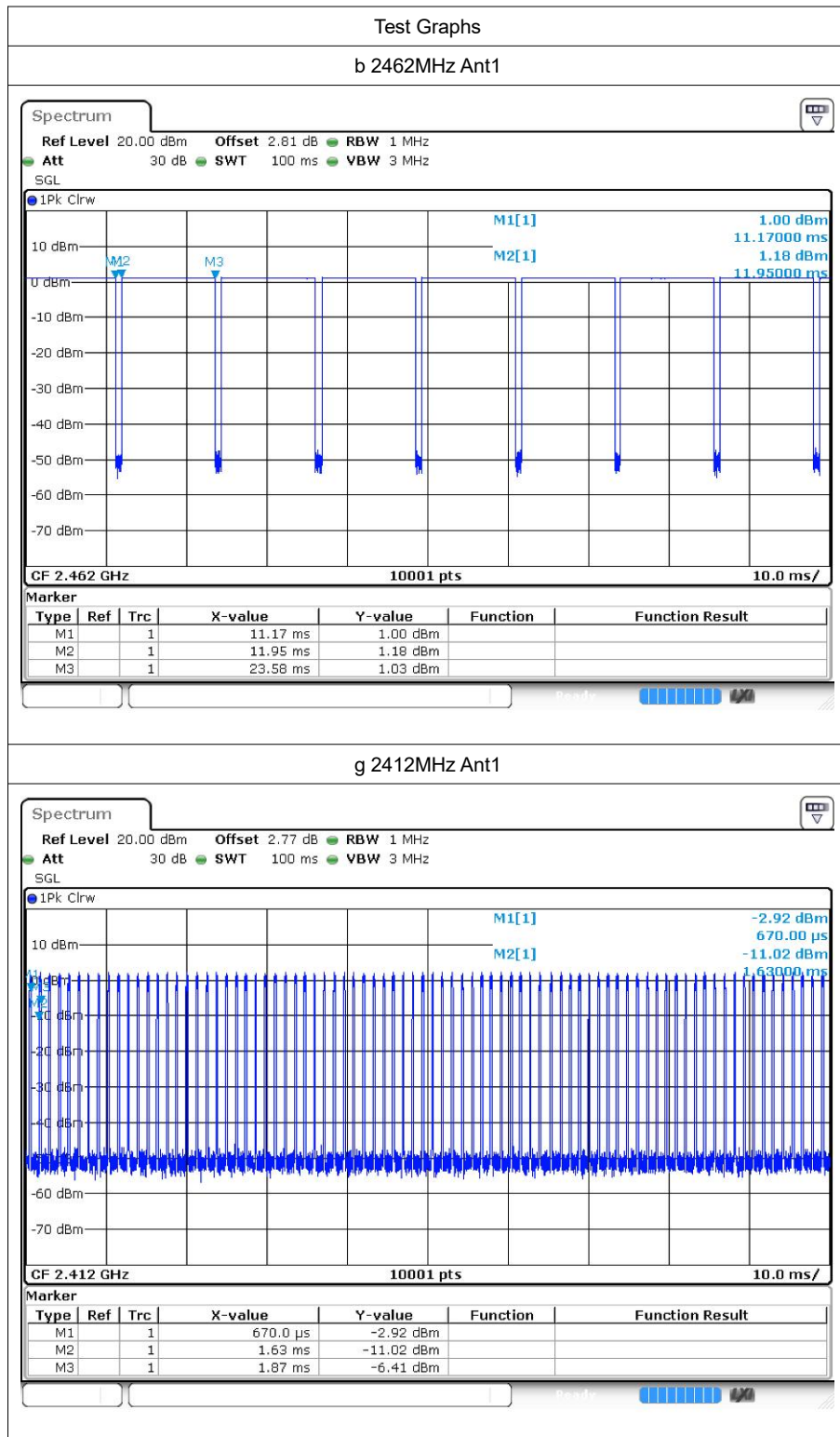
1 Duty Cycle

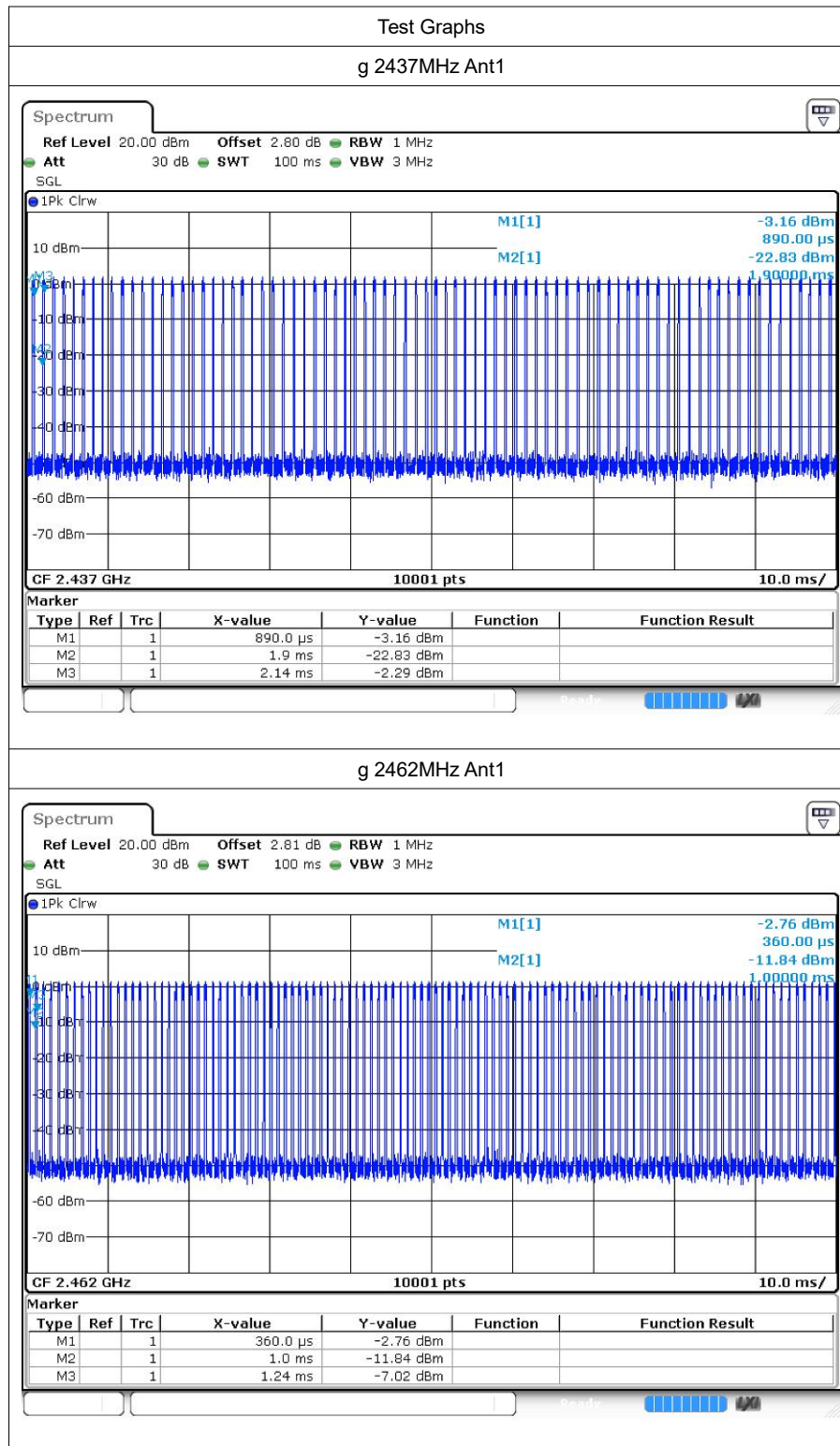
1.1 Test Result

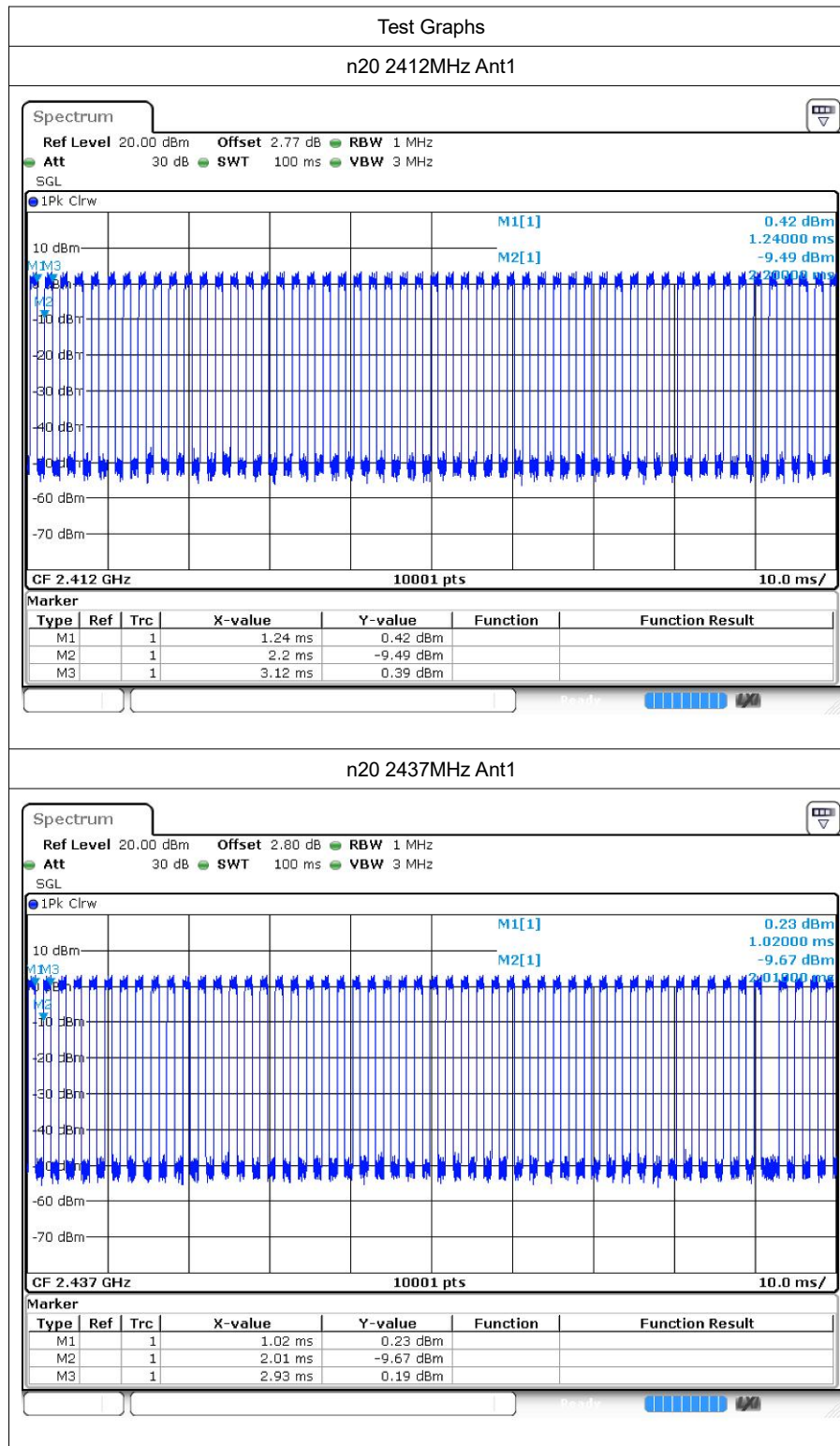
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
b	2412	Ant1	90.01	0.09
b	2437	Ant1	88.63	0.09
b	2462	Ant1	93.96	0.09
g	2412	Ant1	20.2	4.17
g	2437	Ant1	19.74	4.17
g	2462	Ant1	27.42	4.17
n20	2412	Ant1	49.17	1.09
n20	2437	Ant1	48.4	1.09
n20	2462	Ant1	48.29	1.09

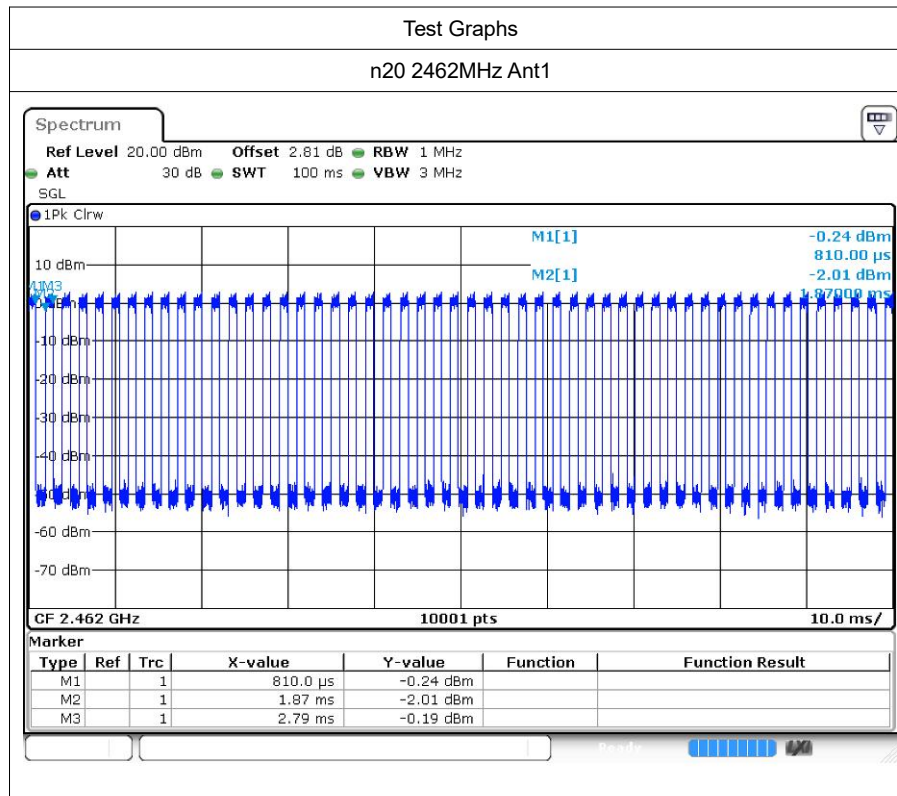
1.2 Test Graphs













2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	12.68	30	Pass
b	2437	Ant1	12.43	30	Pass
b	2462	Ant1	11.96	30	Pass
g	2412	Ant1	12.86	30	Pass
g	2437	Ant1	13.03	30	Pass
g	2462	Ant1	12.44	30	Pass
n20	2412	Ant1	14.55	30	Pass
n20	2437	Ant1	14.37	30	Pass
n20	2462	Ant1	13.94	30	Pass

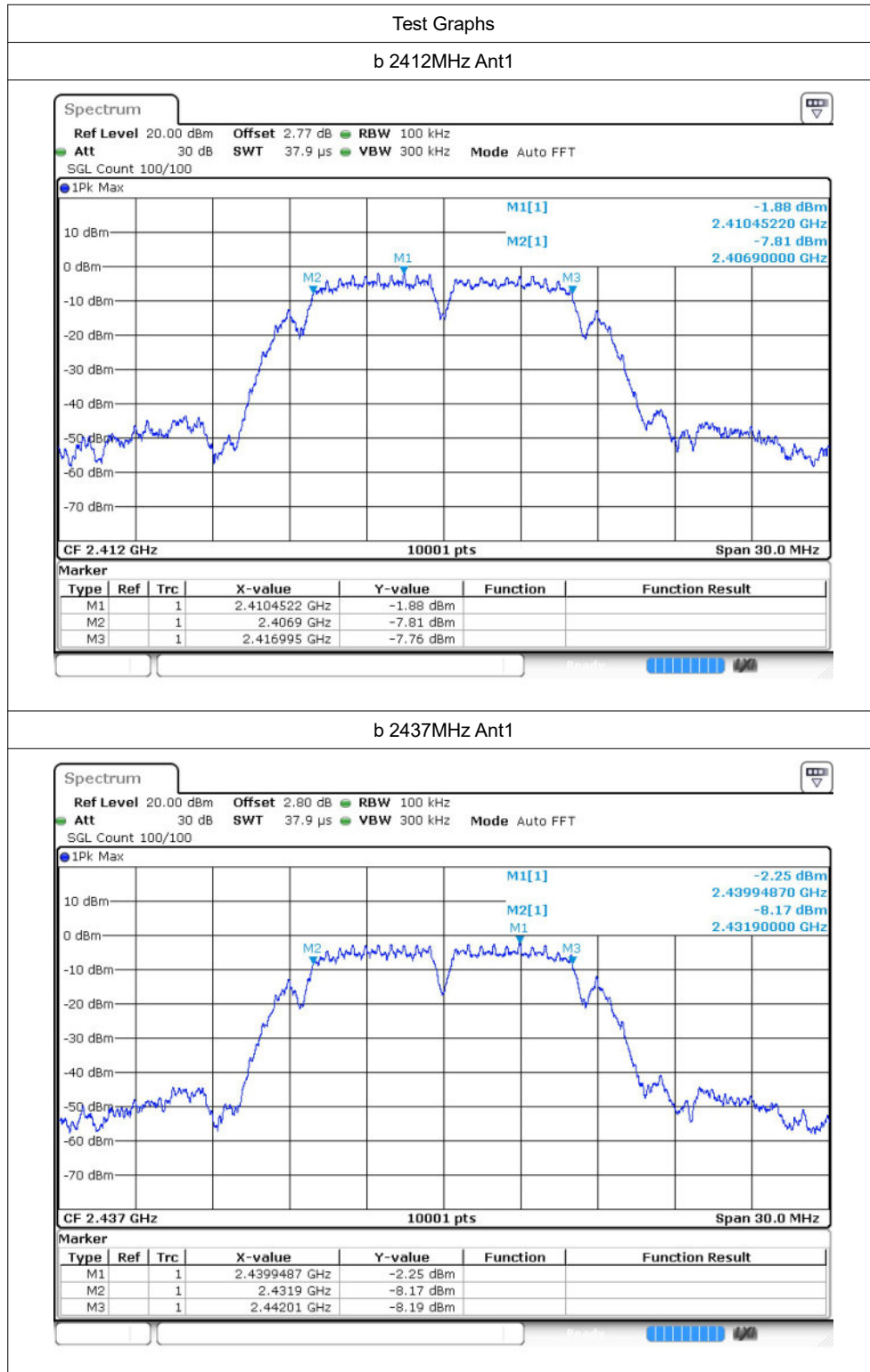


3 -6dB Bandwidth

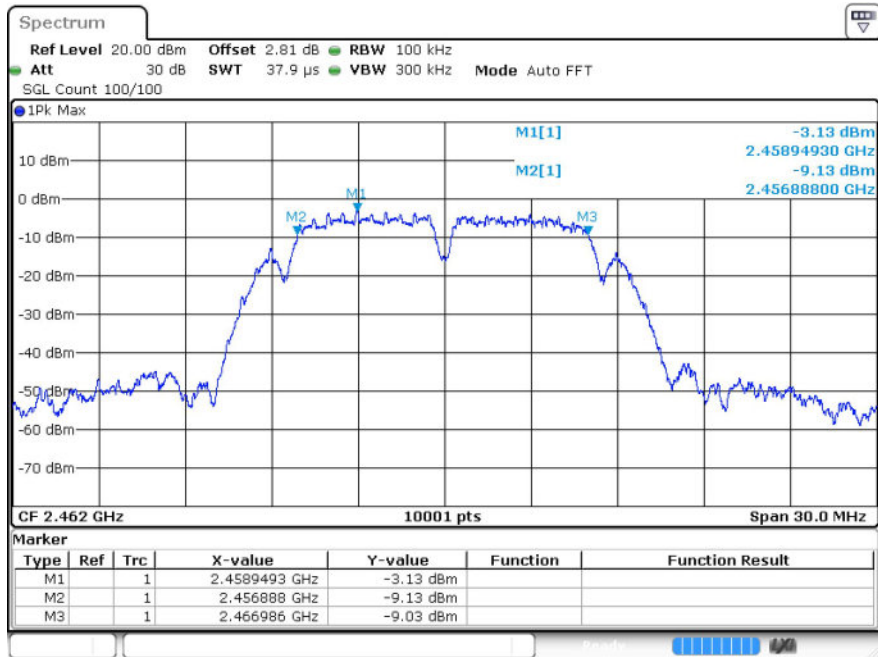
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	10.095	0.5	Pass
b	2437	Ant1	10.11	0.5	Pass
b	2462	Ant1	10.098	0.5	Pass
g	2412	Ant1	16.371	0.5	Pass
g	2437	Ant1	16.392	0.5	Pass
g	2462	Ant1	16.395	0.5	Pass
n20	2412	Ant1	17.583	0.5	Pass
n20	2437	Ant1	17.646	0.5	Pass
n20	2462	Ant1	17.607	0.5	Pass

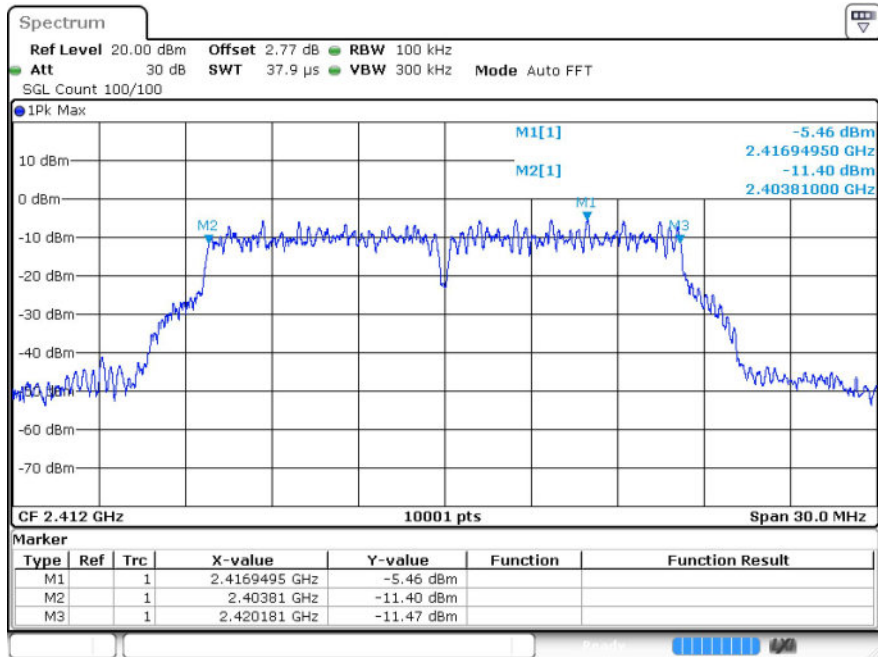
3.2 Test Graphs



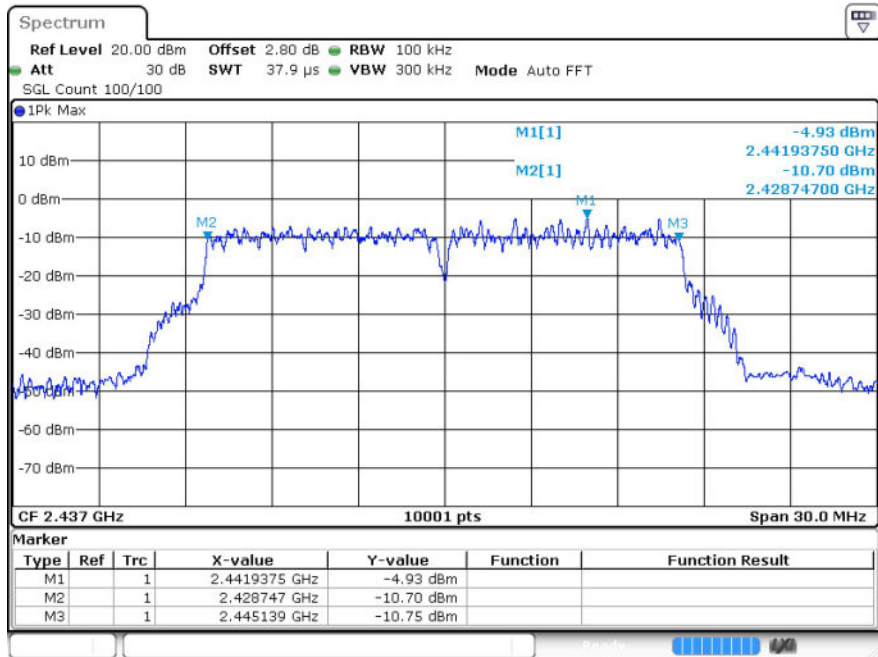
b 2462MHz Ant1



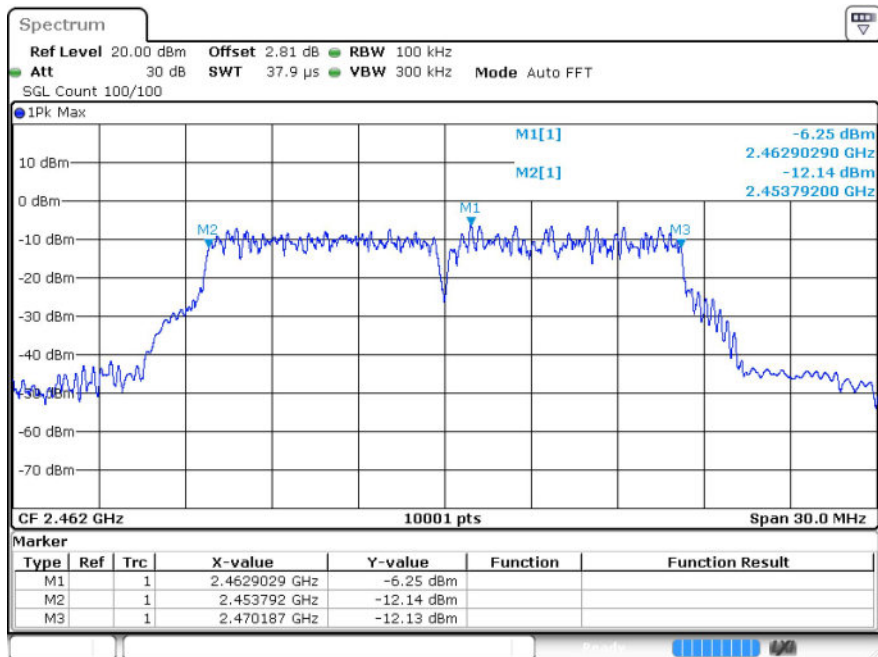
g 2412MHz Ant1



g 2437MHz Ant1

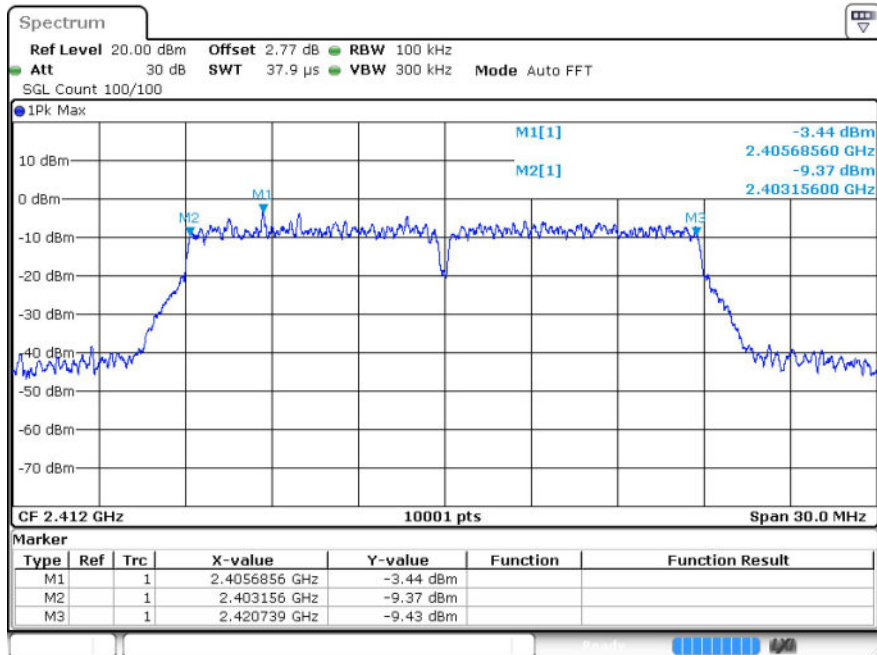


g 2462MHz Ant1

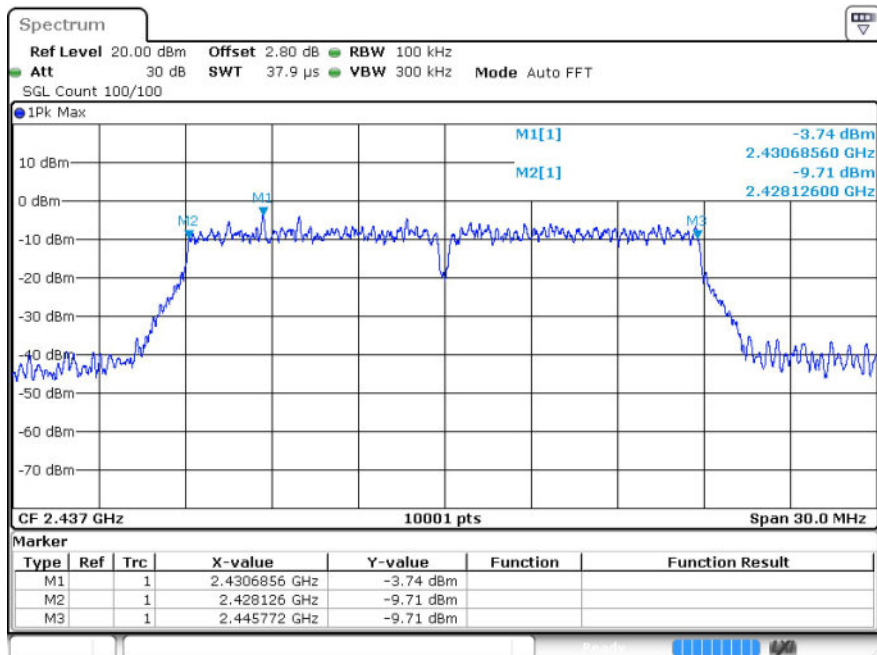


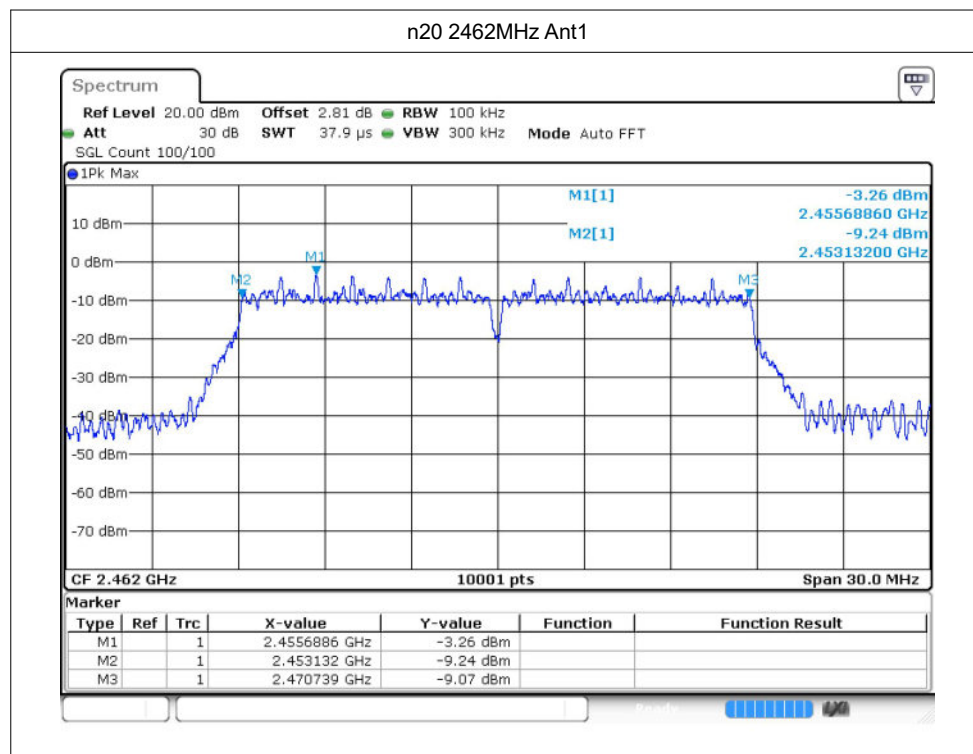


n20 2412MHz Ant1



n20 2437MHz Ant1



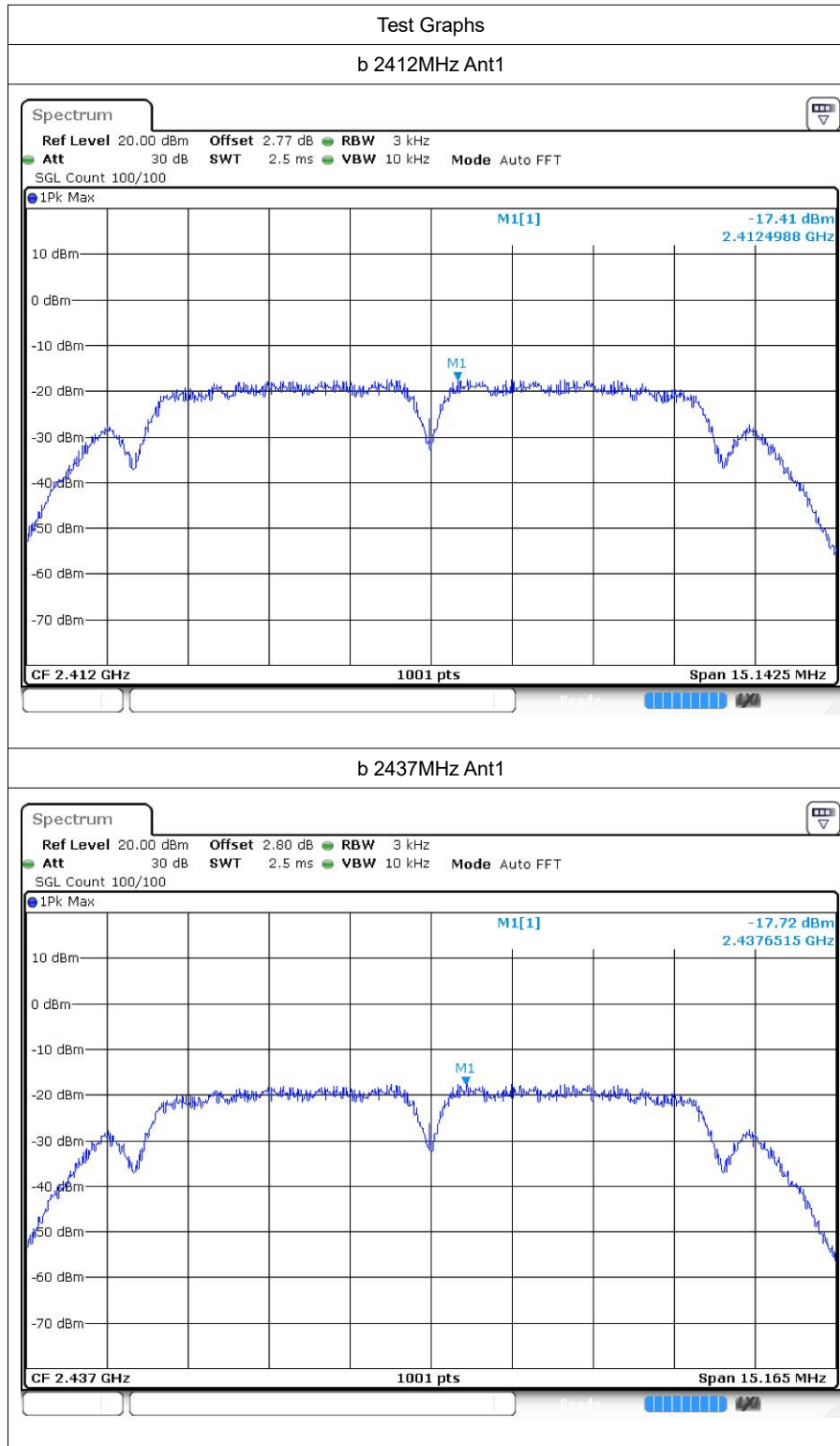


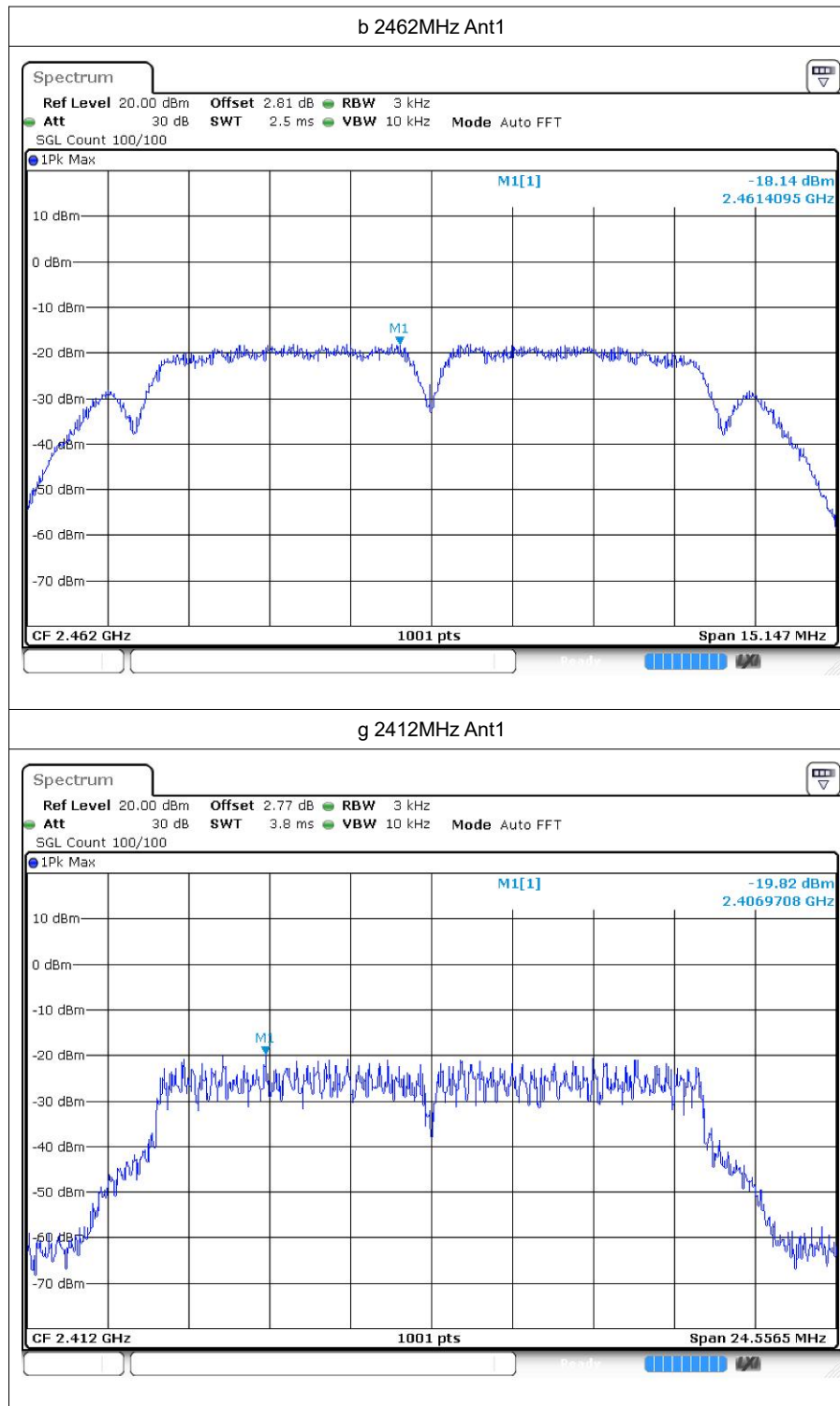
4 Maximum Power Spectral Density Level

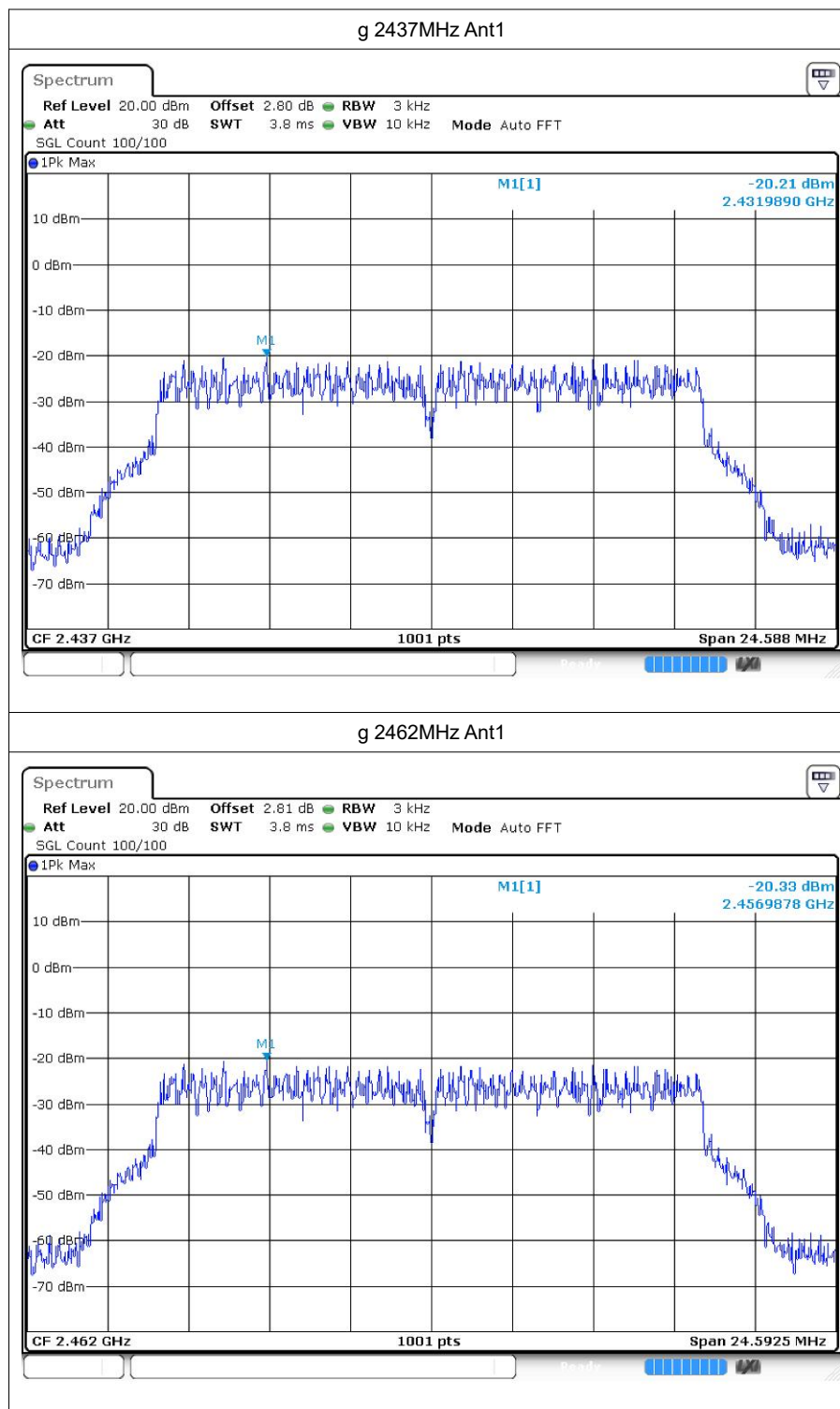
4.1 Test Result

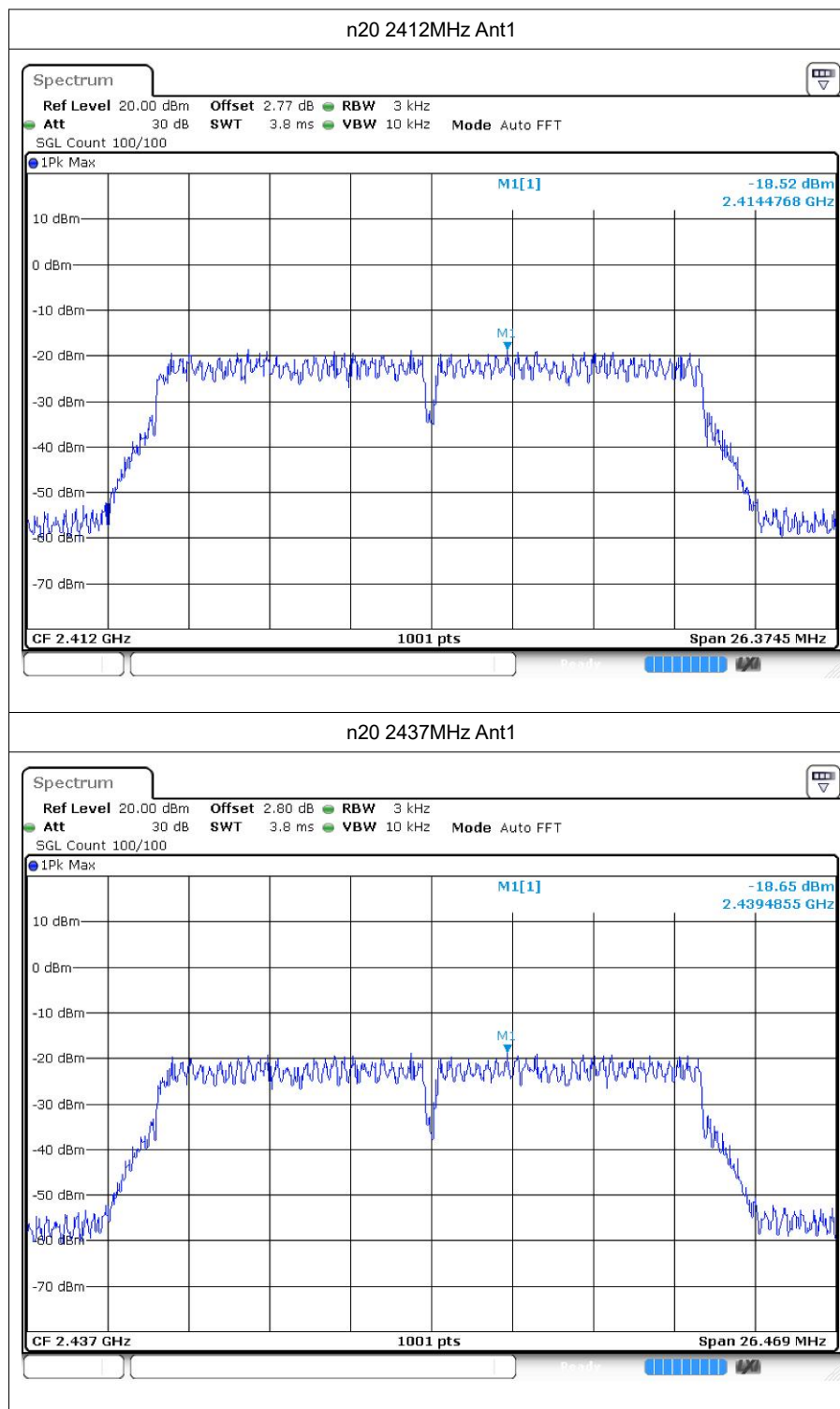
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-17.41	≤ 8	Pass
b	2437	Ant1	-17.72	≤ 8	Pass
b	2462	Ant1	-18.14	≤ 8	Pass
g	2412	Ant1	-19.82	≤ 8	Pass
g	2437	Ant1	-20.21	≤ 8	Pass
g	2462	Ant1	-20.33	≤ 8	Pass
n20	2412	Ant1	-18.52	≤ 8	Pass
n20	2437	Ant1	-18.65	≤ 8	Pass
n20	2462	Ant1	-19.17	≤ 8	Pass

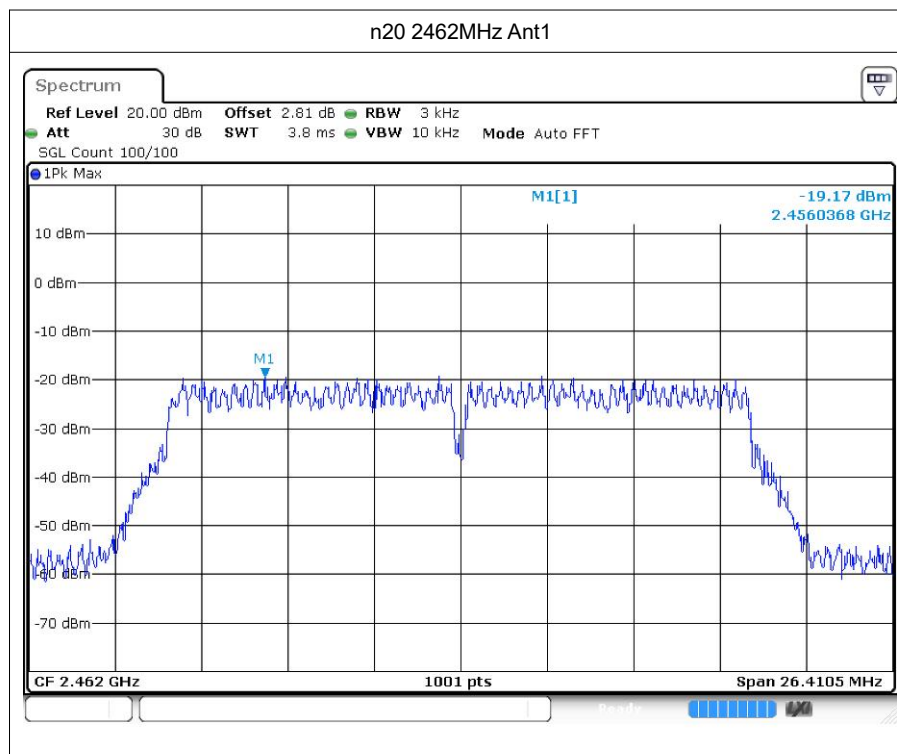
4.2 Test Graphs











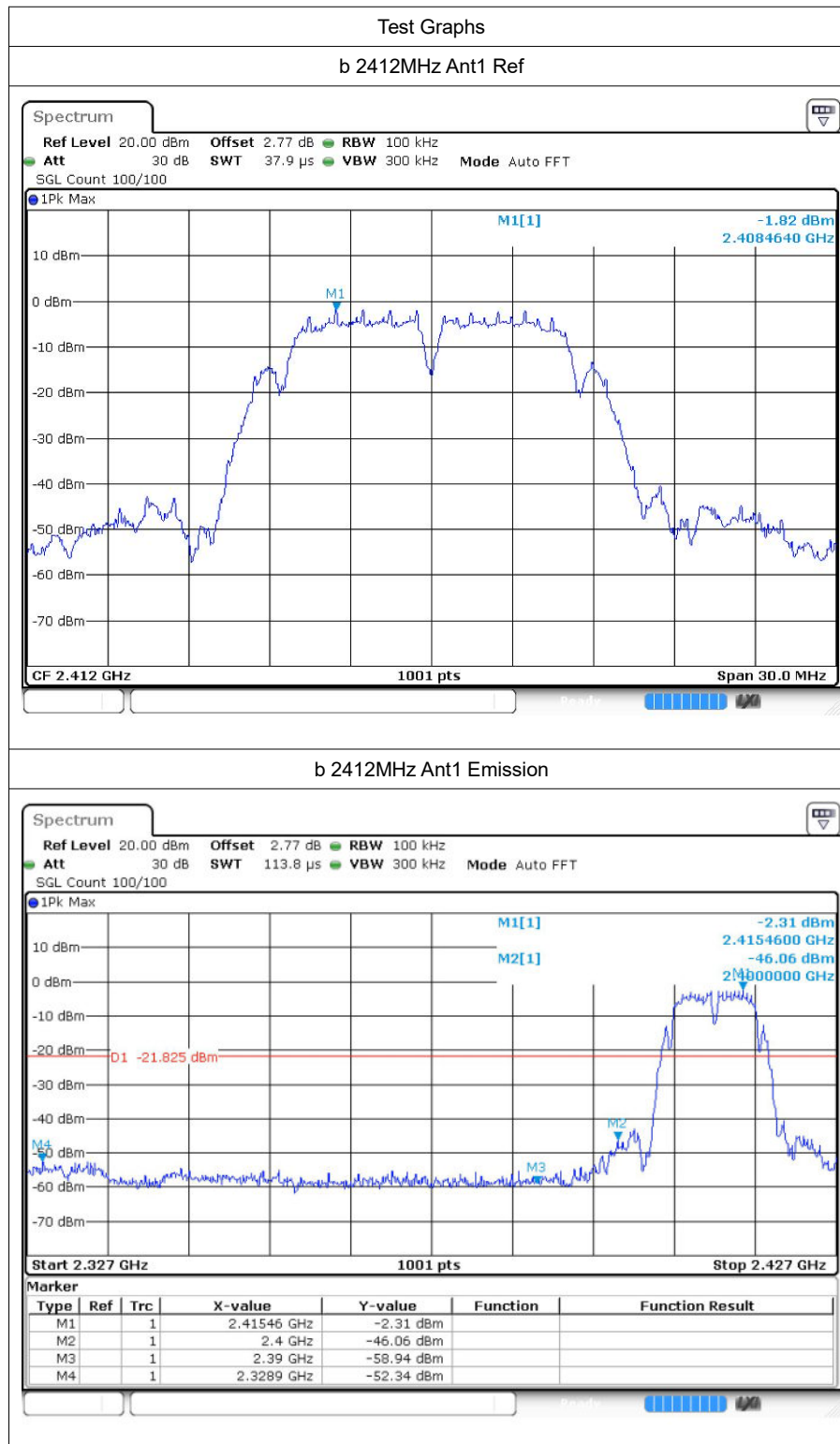


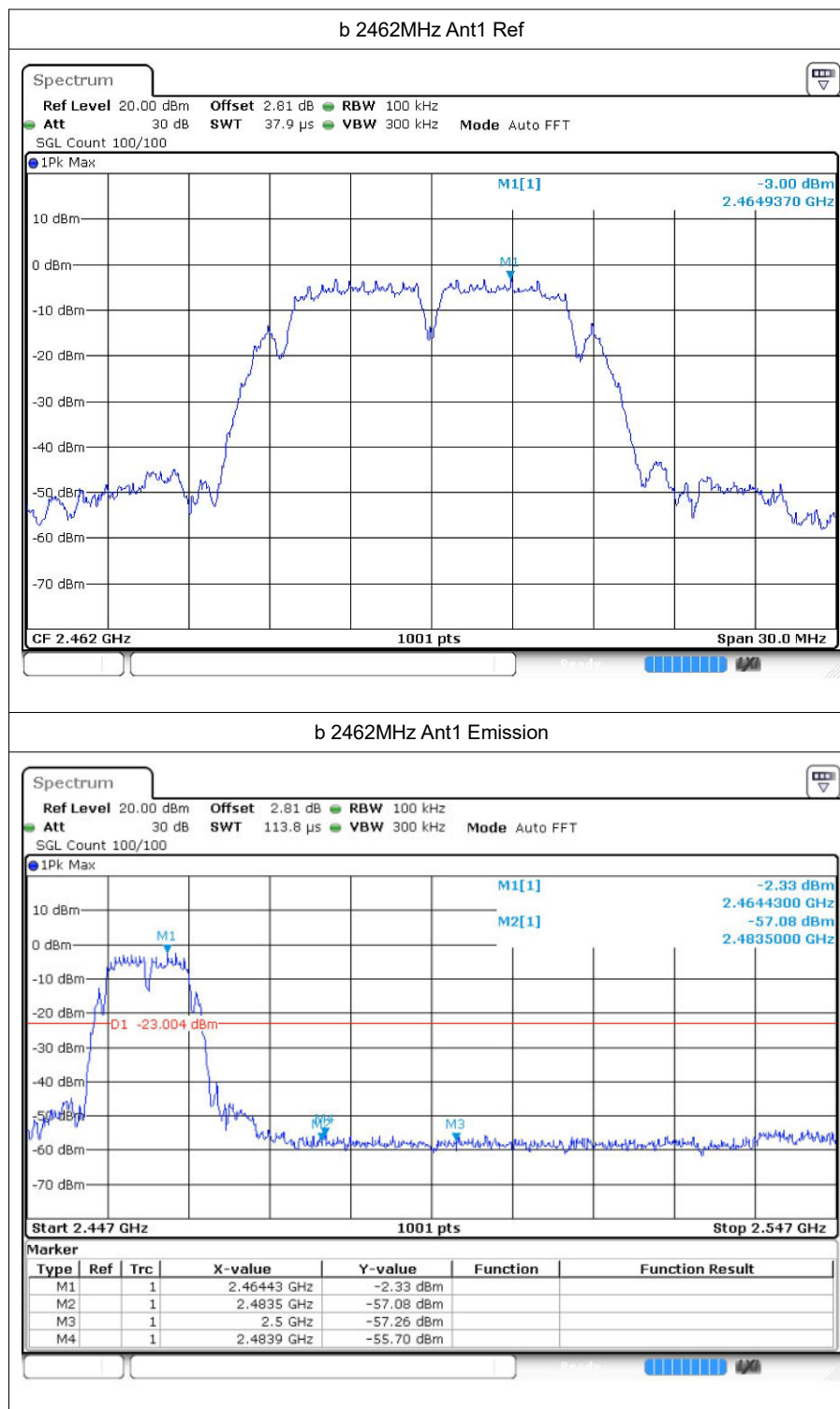
5 Band Edge

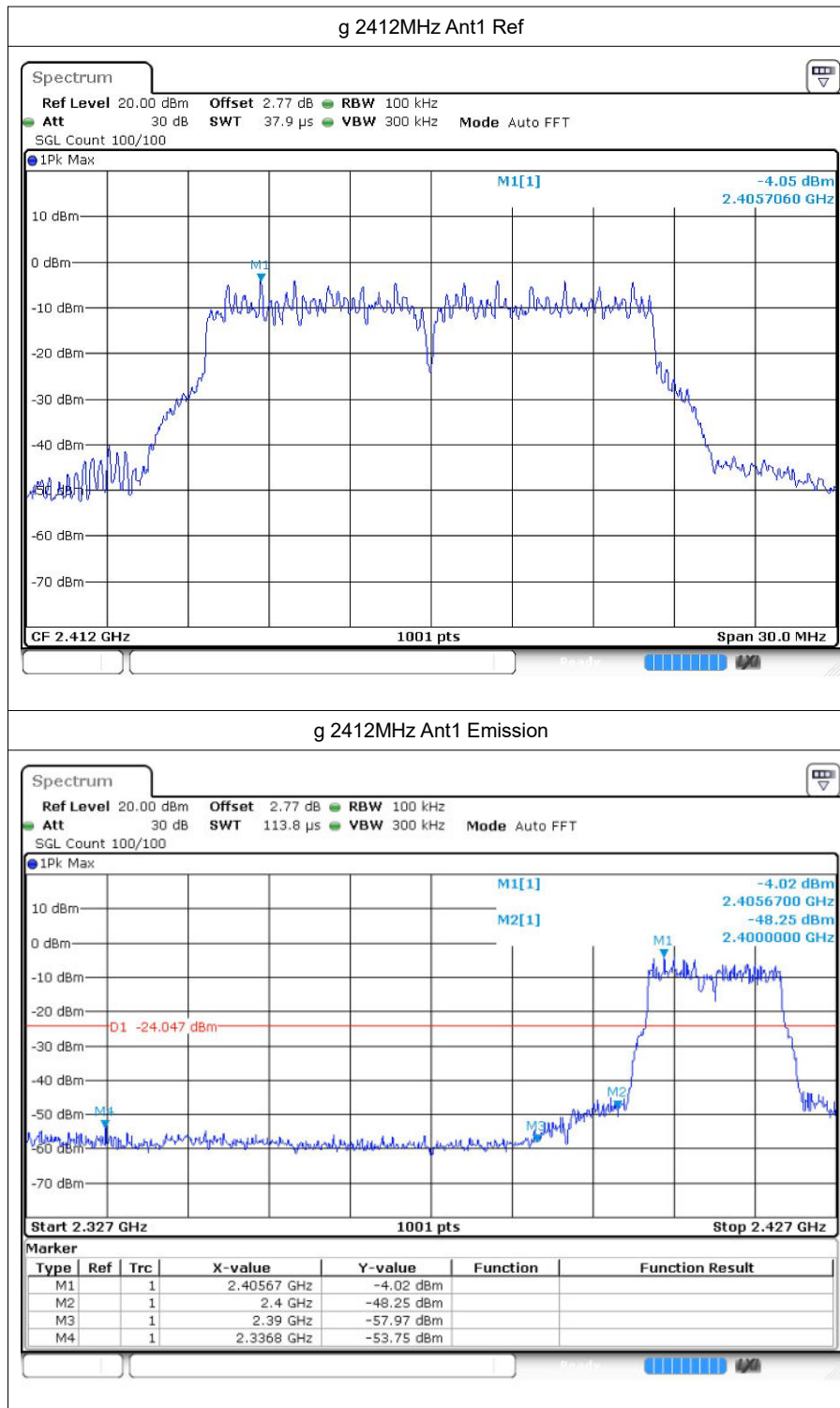
5.1 Test Result

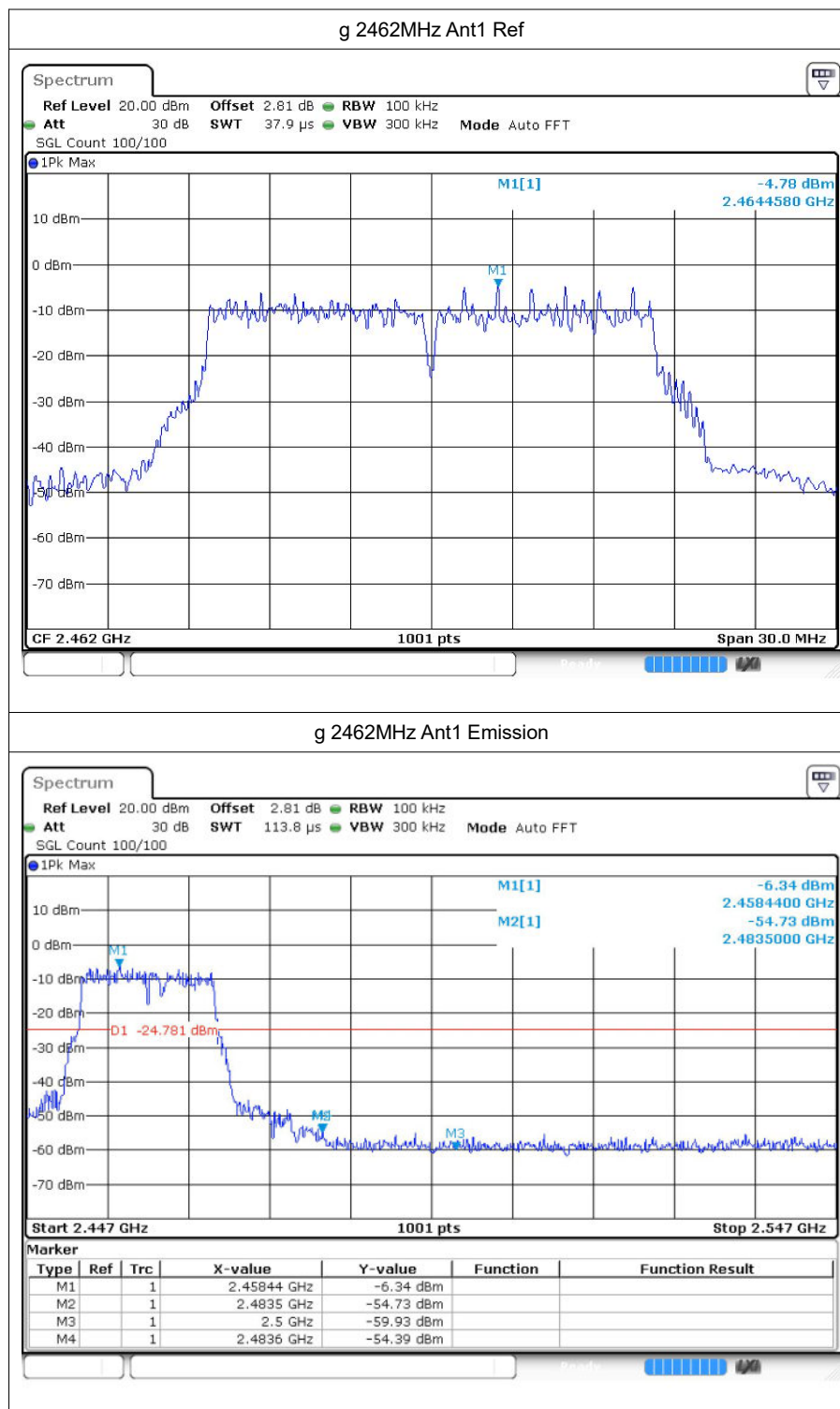
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-50.52	-20	Pass
b	2462	Ant1	-52.69	-20	Pass
g	2412	Ant1	-49.7	-20	Pass
g	2462	Ant1	-49.61	-20	Pass
n20	2412	Ant1	-43.57	-20	Pass
n20	2462	Ant1	-42.67	-20	Pass

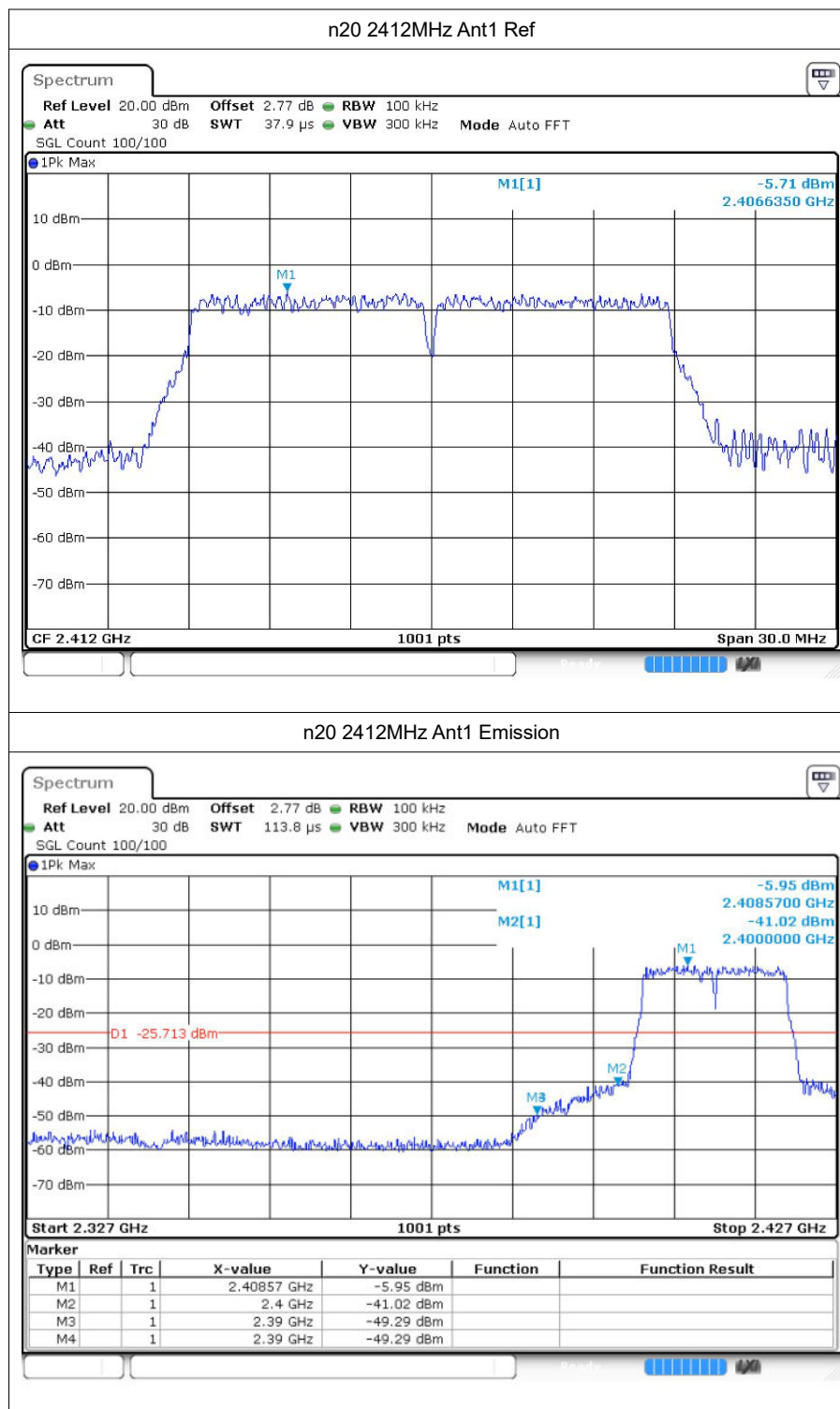
5.2 Test Graphs

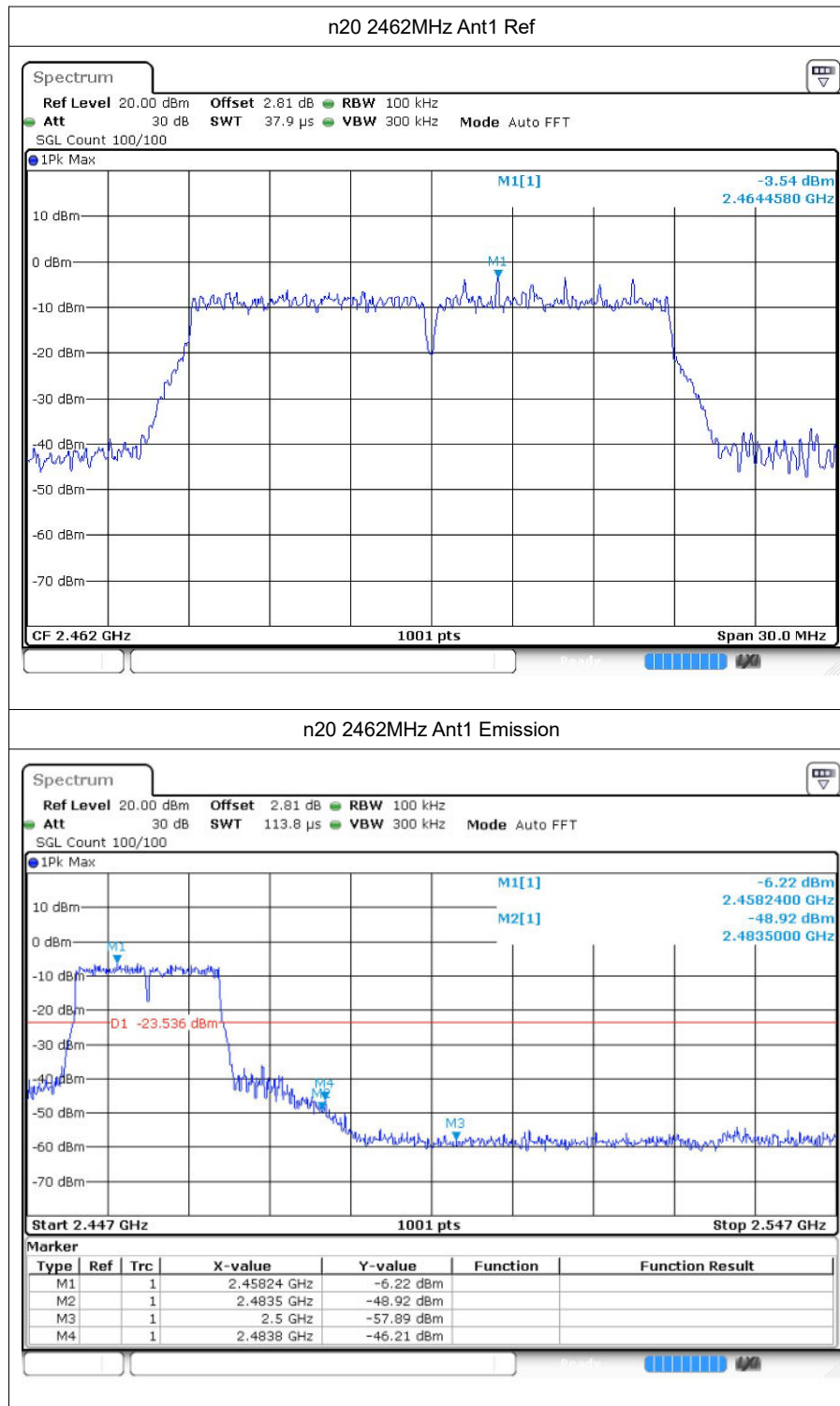












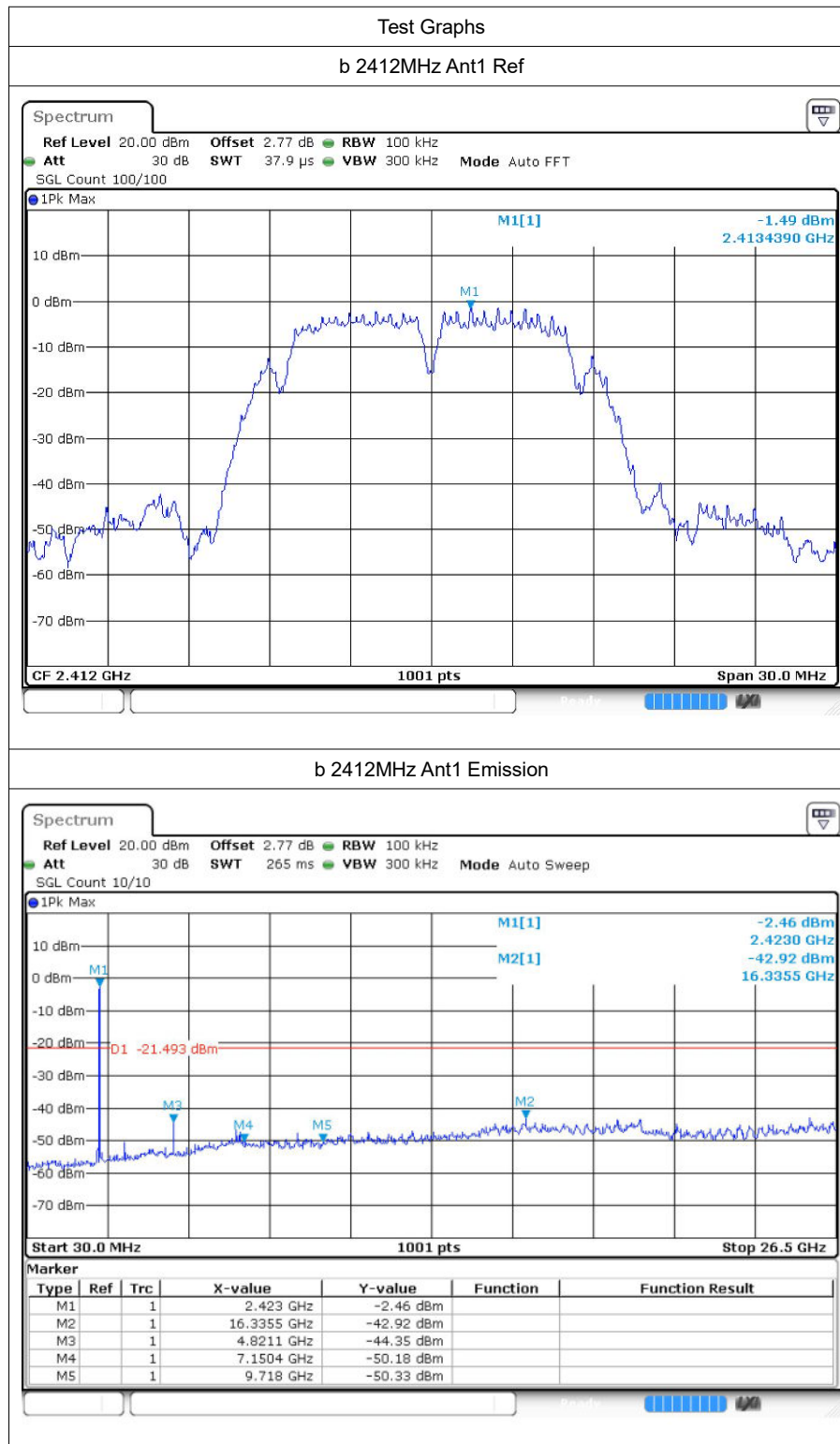


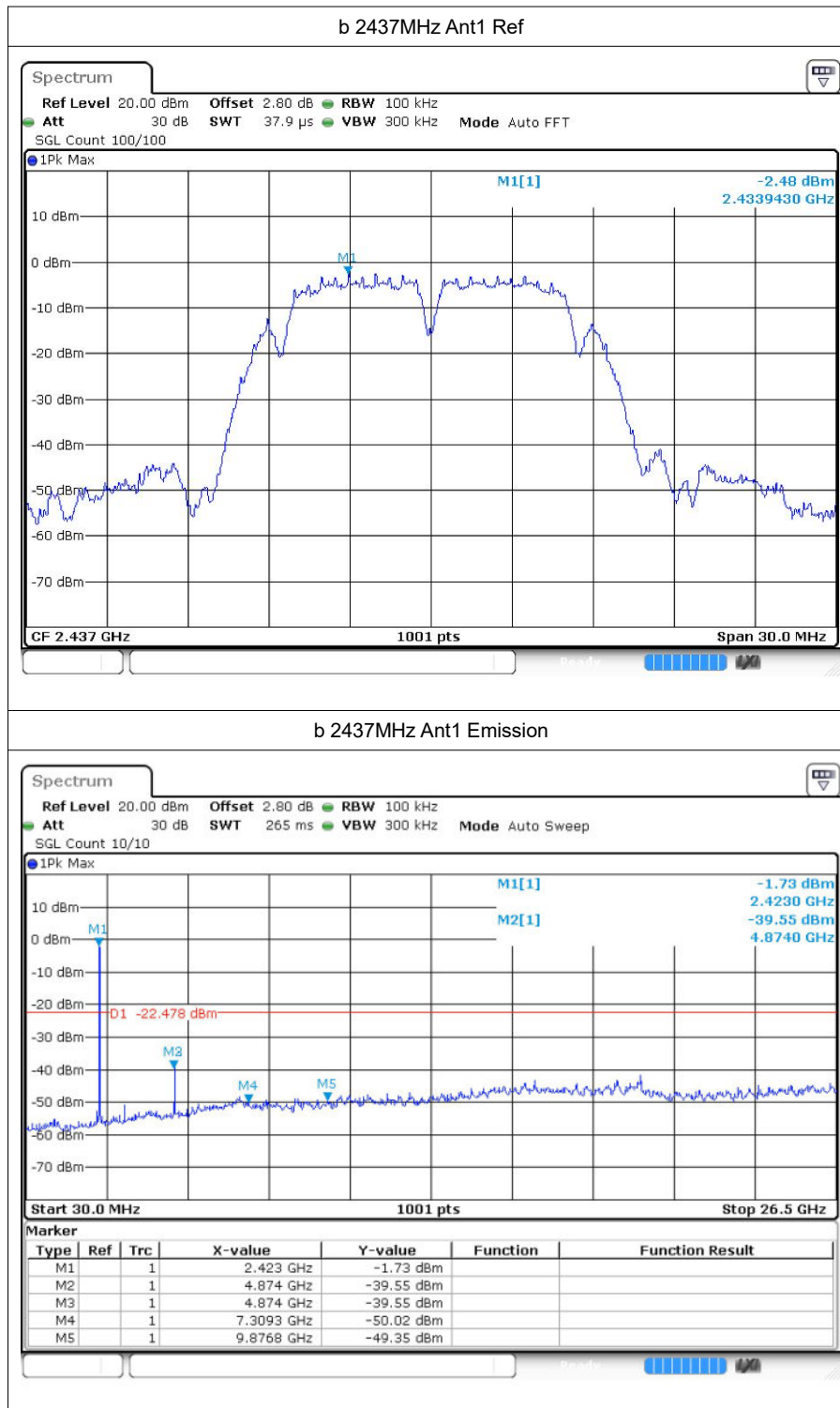
6 Conducted RF Spurious Emission

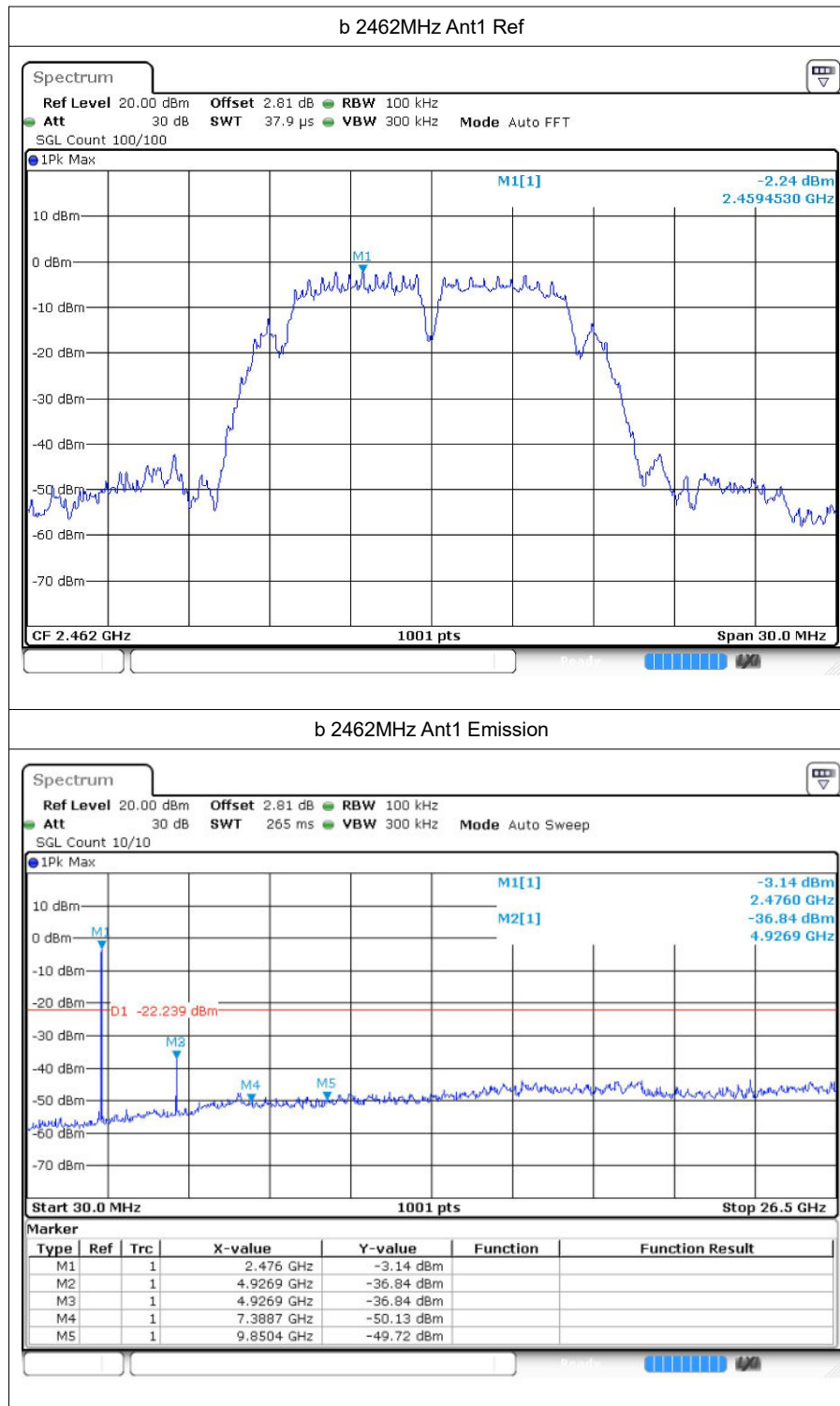
6.1 Test Result

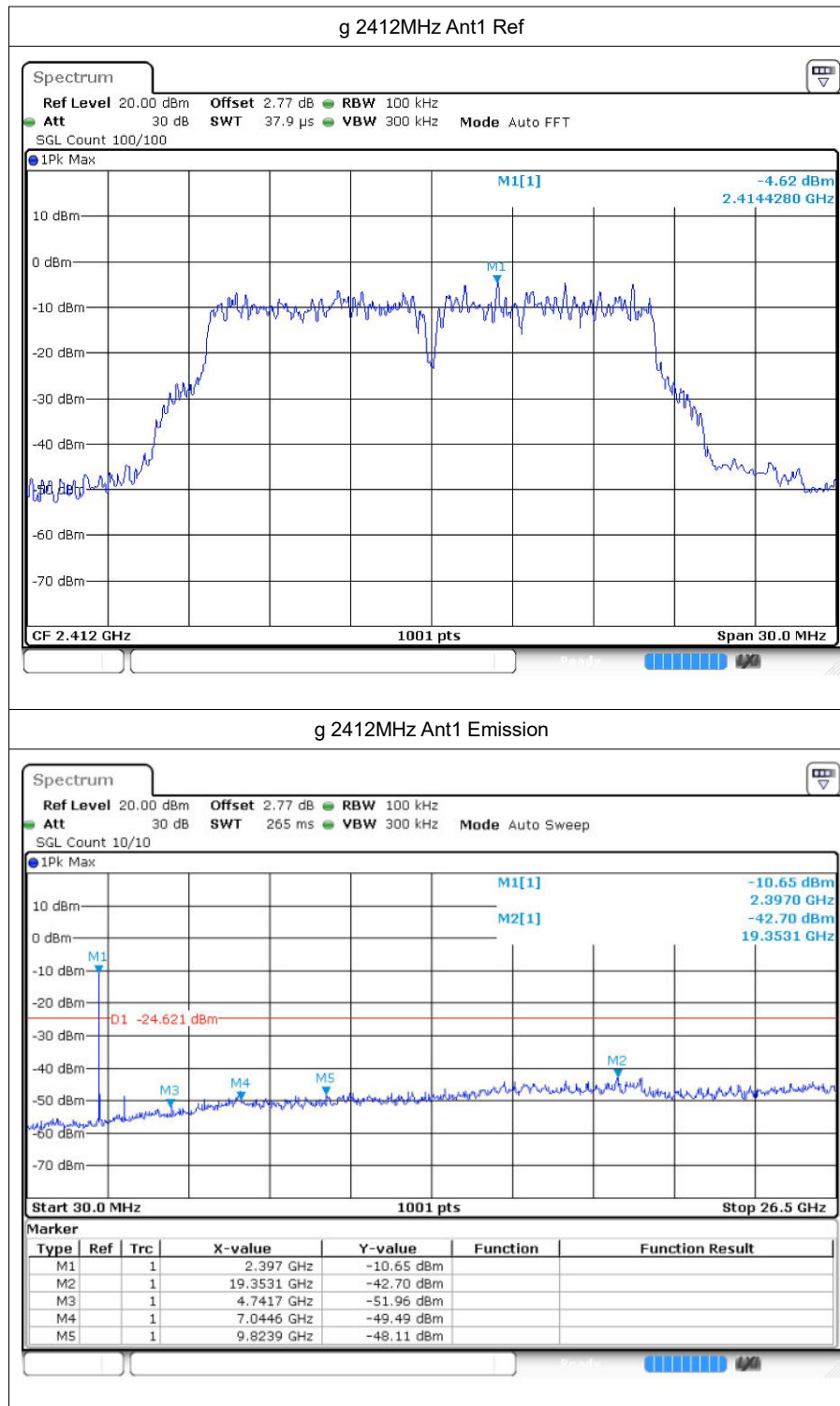
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-41.42	-20	Pass
b	2437	Ant1	-37.06	-20	Pass
b	2462	Ant1	-34.59	-20	Pass
g	2412	Ant1	-38.08	-20	Pass
g	2437	Ant1	-38.65	-20	Pass
g	2462	Ant1	-37.71	-20	Pass
n20	2412	Ant1	-37.43	-20	Pass
n20	2437	Ant1	-39.66	-20	Pass
n20	2462	Ant1	-40.26	-20	Pass

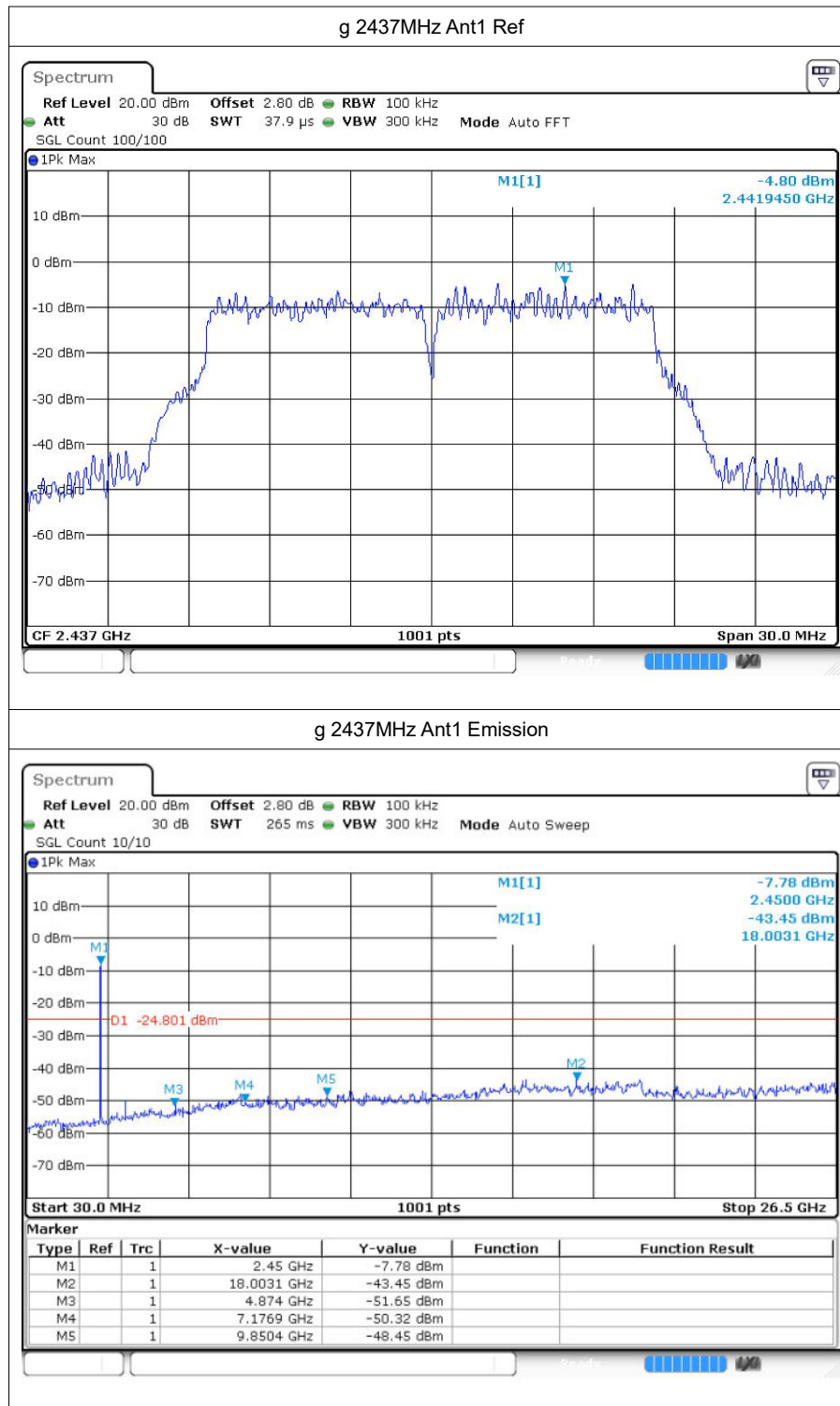
6.2 Test Graphs

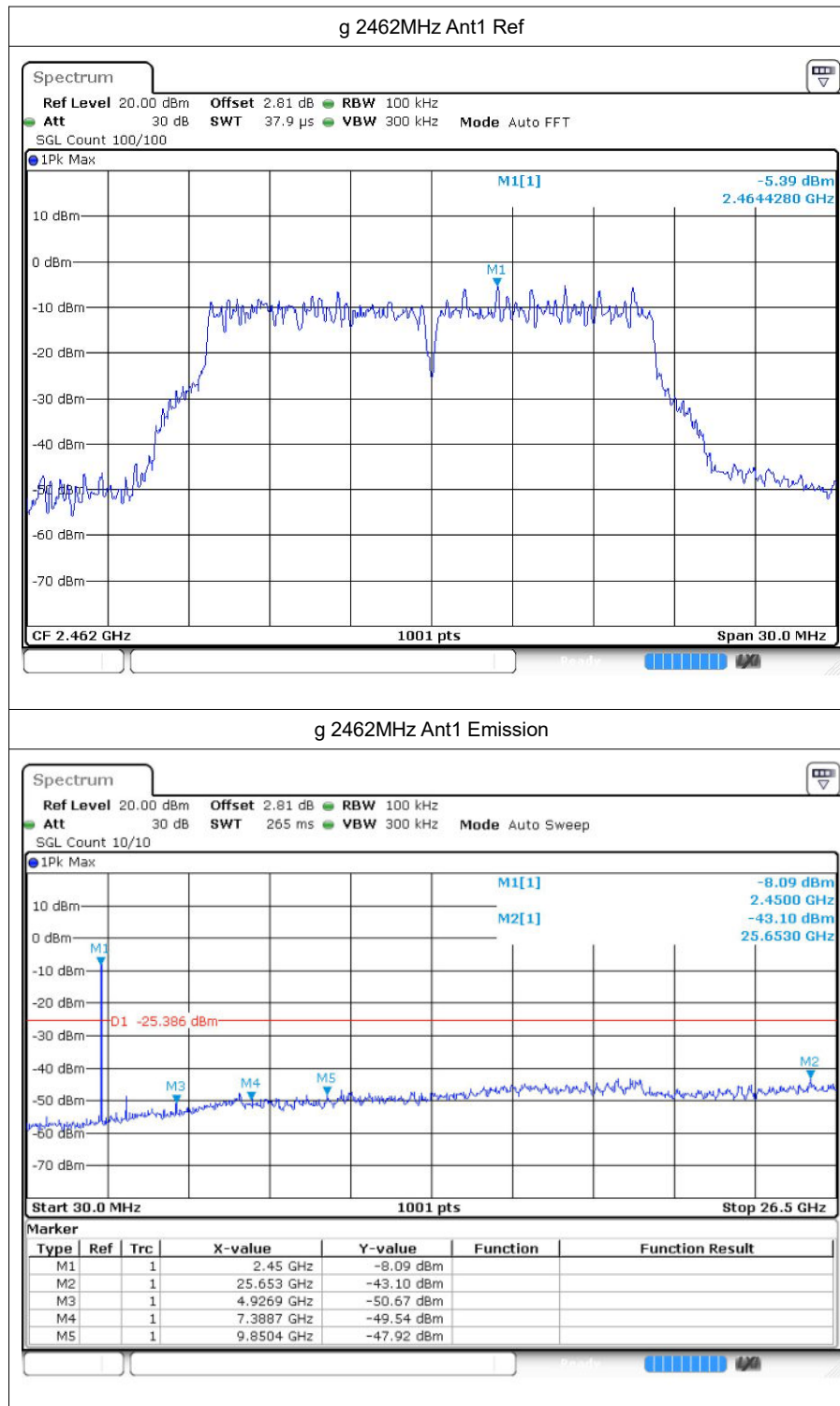


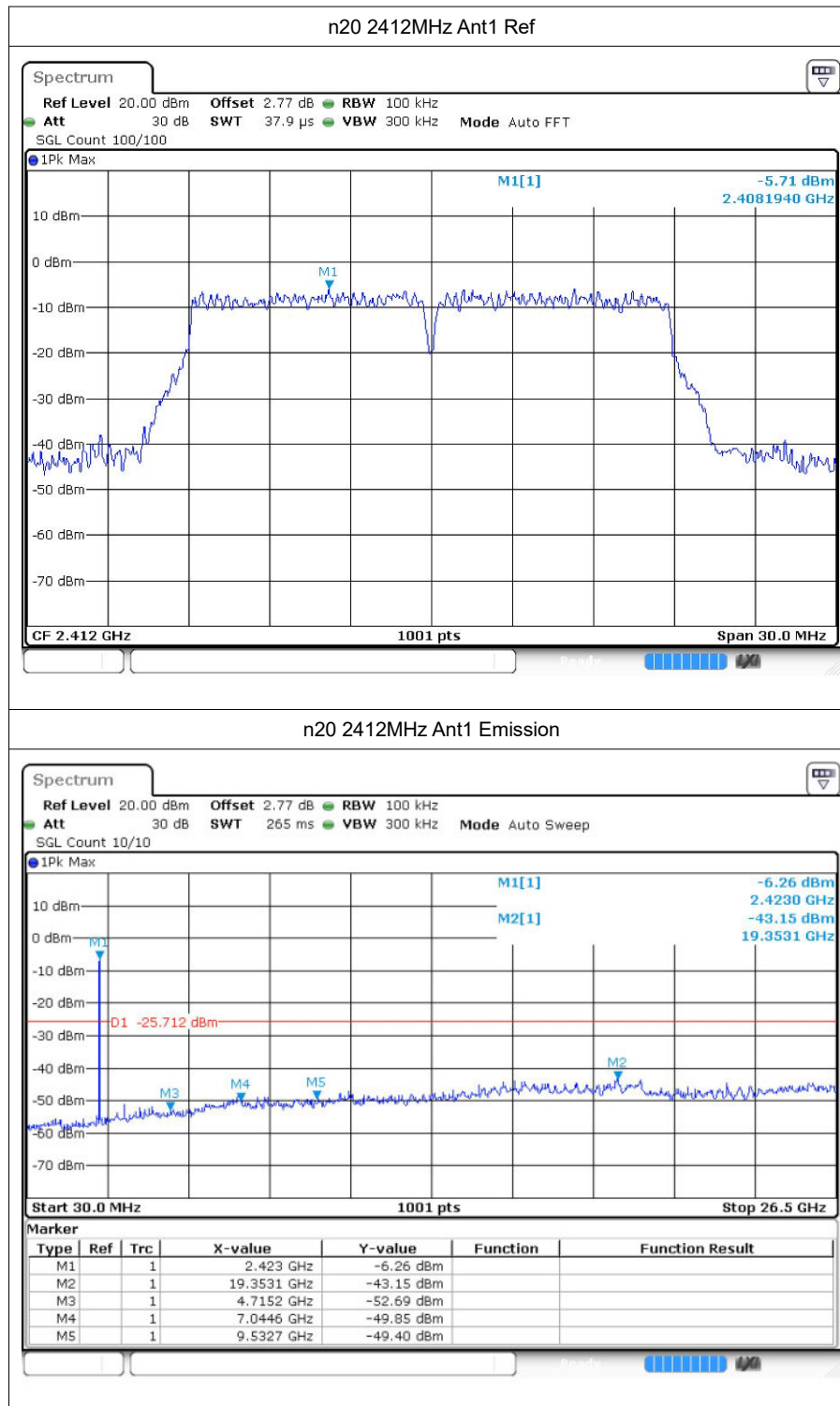


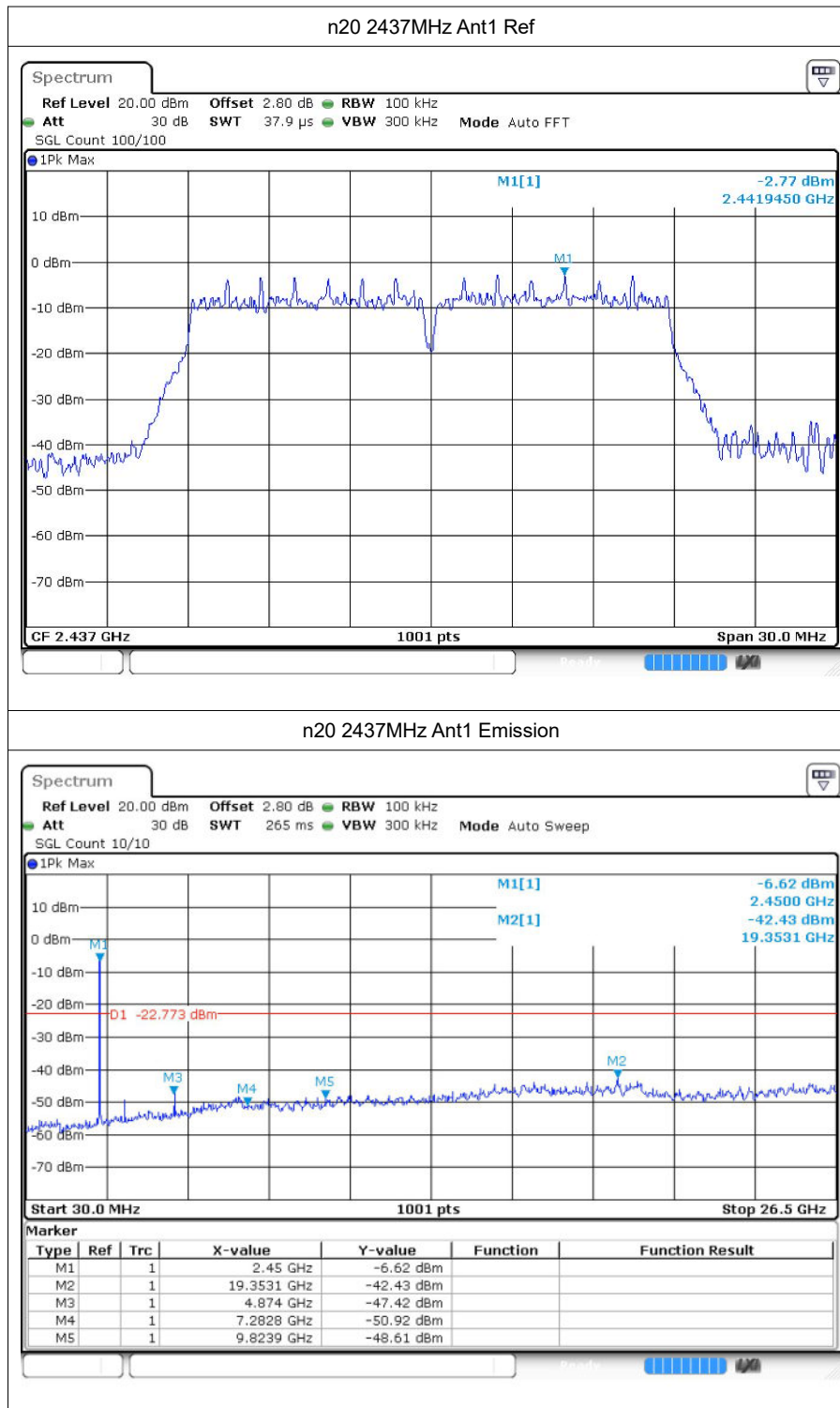


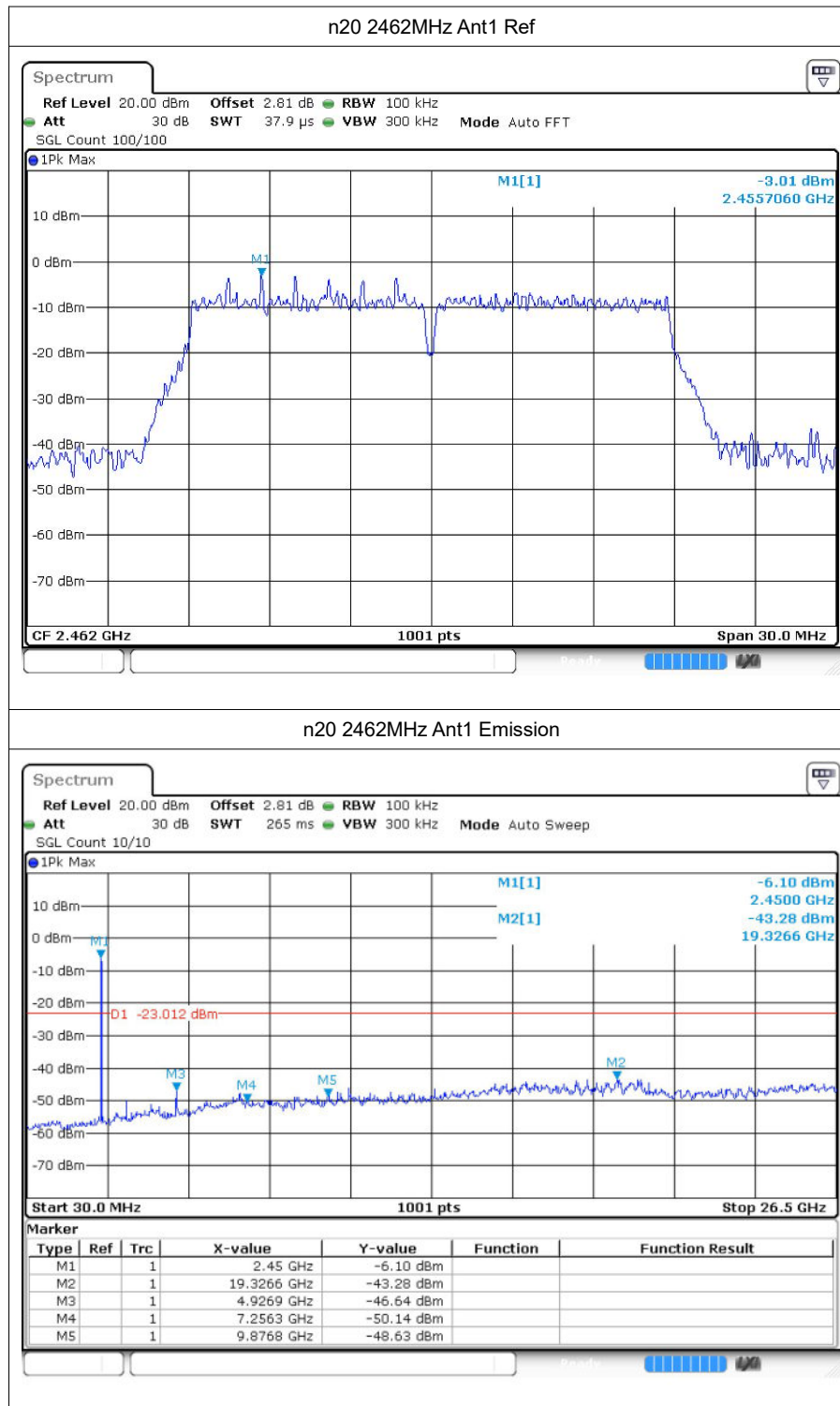














7 Restrict Band

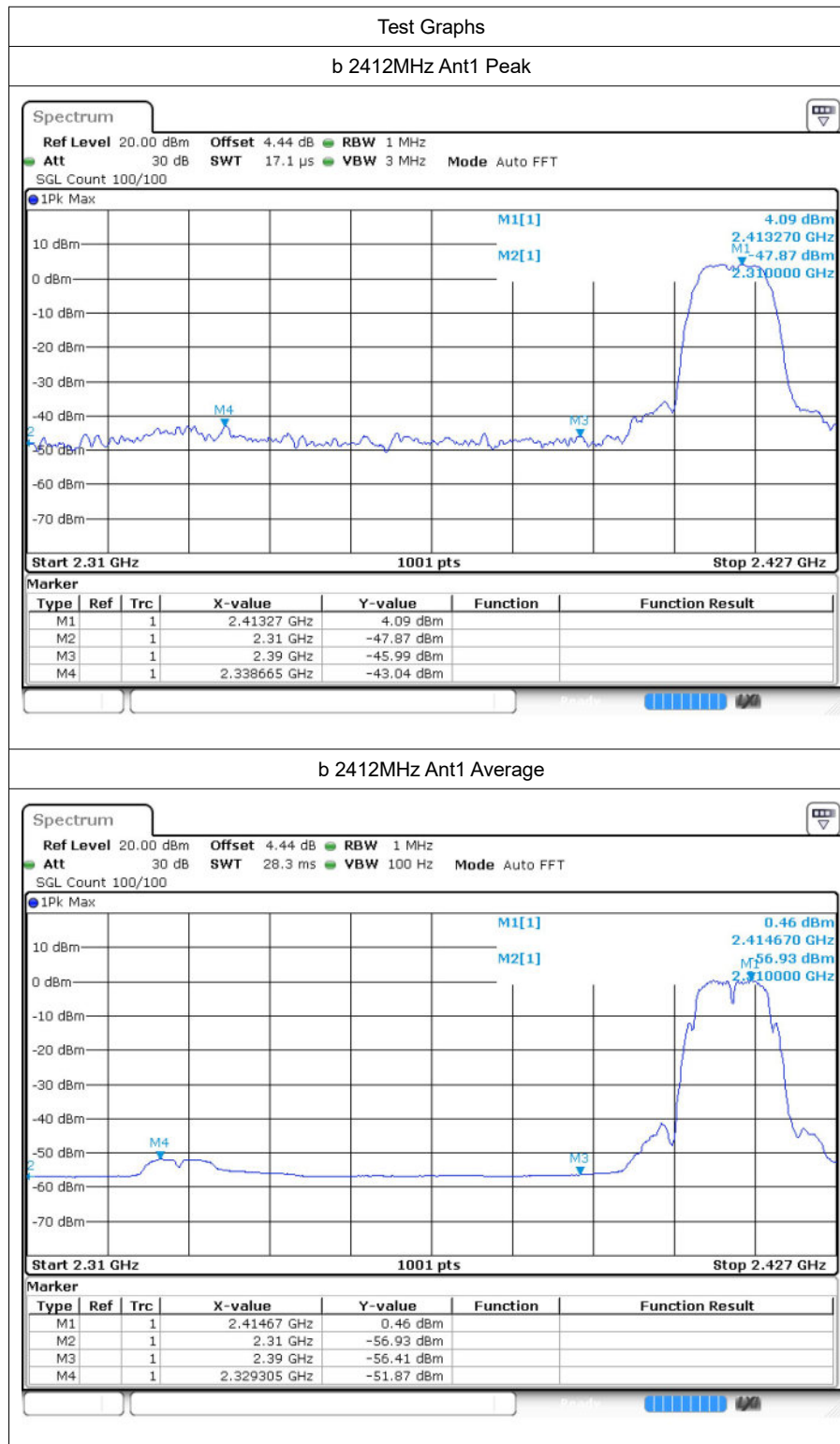
7.1 Test Result

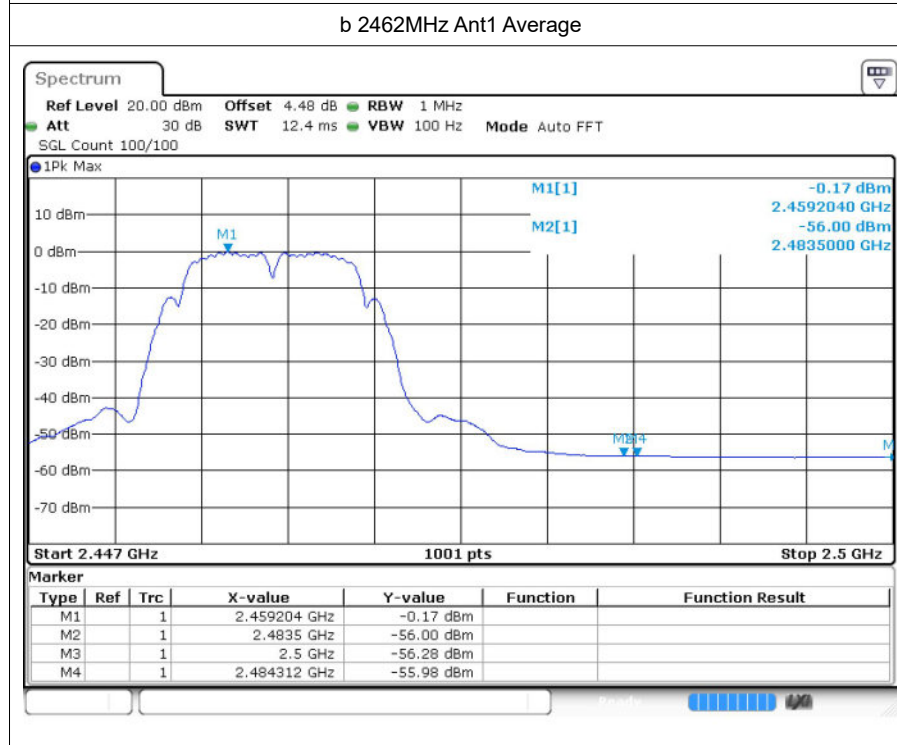
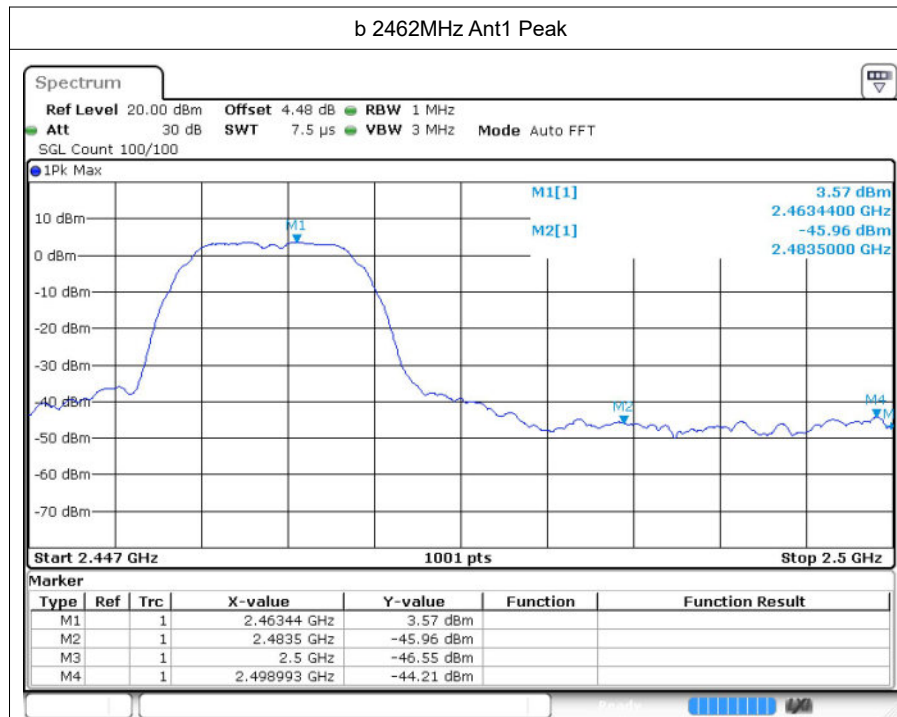
Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
b	2412	Ant1	2310	-47.86	2	49.4	Peak	74	Pass
b	2412	Ant1	2310	-56.93	2	40.33	Average	54	Pass
b	2412	Ant1	2338.665	-43.04	2	54.22	Peak	74	Pass
b	2412	Ant1	2329.305	-51.86	2	45.4	Average	54	Pass
b	2412	Ant1	2390	-45.99	2	51.27	Peak	74	Pass
b	2412	Ant1	2390	-56.41	2	40.85	Average	54	Pass
b	2462	Ant1	2483.5	-45.95	2	51.31	Peak	74	51.31
b	2462	Ant1	2483.5	-55.99	2	41.27	Average	54	Pass
b	2462	Ant1	2498.993	-44.2	2	53.06	Peak	74	Pass
b	2462	Ant1	2484.312	-55.98	2	41.28	Average	54	Pass
b	2462	Ant1	2500	-46.54	2	50.72	Peak	74	Pass
b	2462	Ant1	2500	-56.27	2	40.99	Average	54	Pass
g	2412	Ant1	2310	-47.97	2	49.29	Peak	74	Pass
g	2412	Ant1	2310	-55.45	2	41.81	Average	54	Pass
g	2412	Ant1	2338.314	-43.66	2	53.6	Peak	74	Pass
g	2412	Ant1	2336.793	-52.12	2	45.14	Average	54	Pass
g	2412	Ant1	2390	-43.59	2	51.27	Peak	74	Pass
g	2412	Ant1	2390	-53.68	2	43.58	Average	54	Pass
g	2462	Ant1	2483.5	-45.36	2	51.9	Peak	74	Pass
g	2462	Ant1	2483.5	-52.79	2	44.47	Average	54	Pass
g	2462	Ant1	2498.993	-45.1	2	52.16	Peak	74	Pass
g	2462	Ant1	2483.517	-52.79	2	44.47	Average	54	Pass
g	2462	Ant1	2500	-48.34	2	50.72	Peak	74	Pass
g	2462	Ant1	2500	-55.59	2	41.67	Average	54	Pass
n20	2412	Ant1	2310	-46.7	2	50.56	Peak	74	Pass
n20	2412	Ant1	2310	-55.66	2	41.6	Average	54	Pass
n20	2412	Ant1	2389.911	-39.43	2	57.83	Peak	74	Pass
n20	2412	Ant1	2389.911	-49.35	2	47.91	Average	54	Pass
n20	2412	Ant1	2390	-39.33	2	57.93	Peak	74	Pass
n20	2412	Ant1	2390	-49.2	2	48.06	Average	54	Pass
n20	2462	Ant1	2483.5	-38.24	2	59.02	Peak	74	Pass
n20	2462	Ant1	2483.5	-48.07	2	49.19	Average	54	Pass
n20	2462	Ant1	2483.517	-38.24	2	59.02	Peak	74	Pass
n20	2462	Ant1	2483.623	-48.04	2	49.22	Average	54	Pass



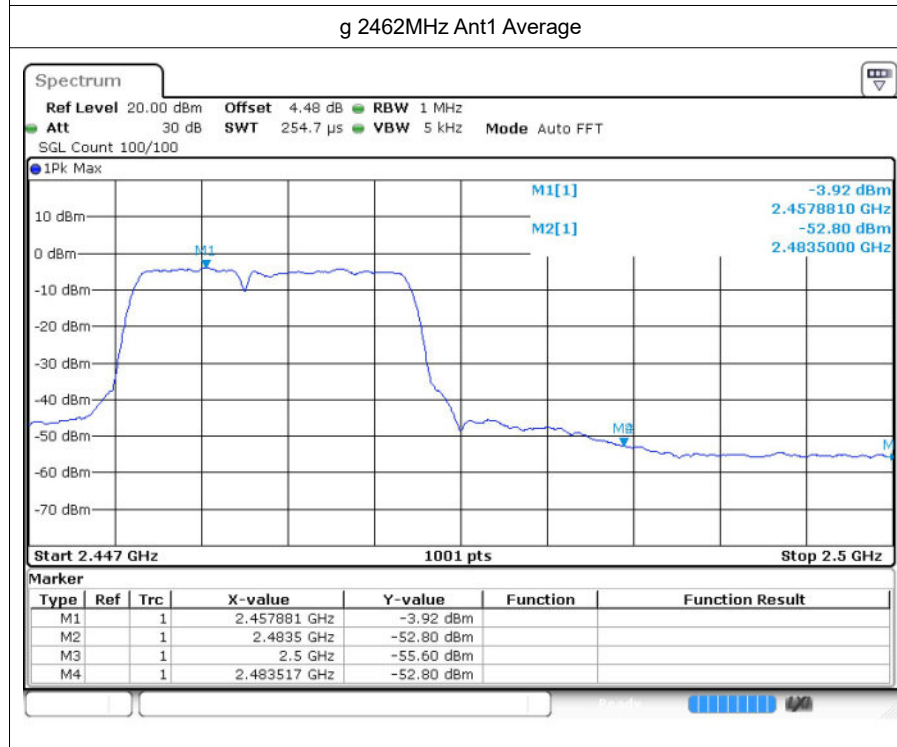
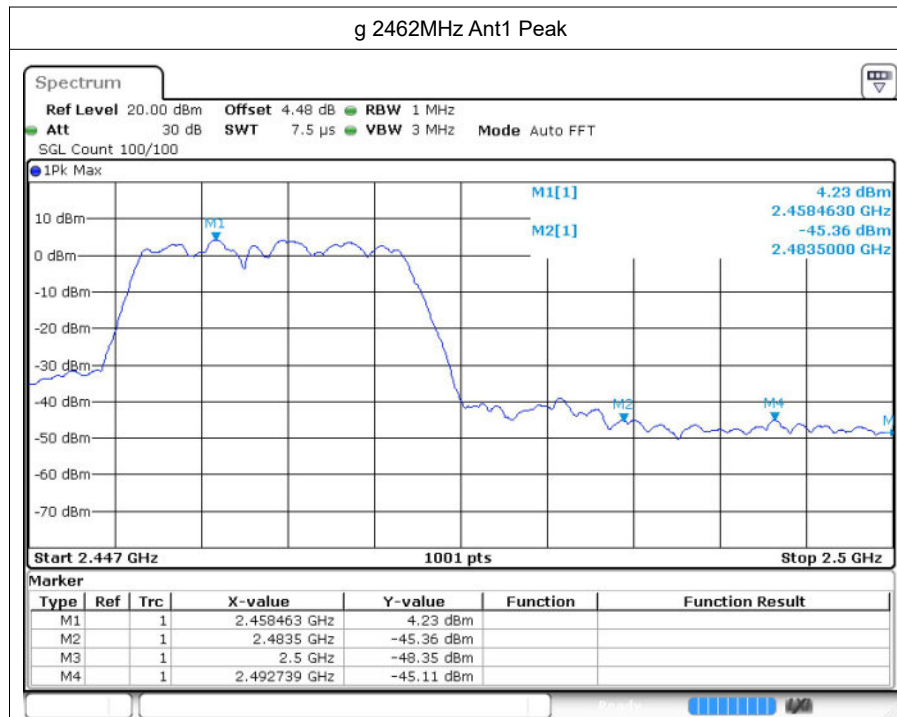
n20	2462	Ant1	2500	-46.43	2	50.83	Peak	74	Pass
n20	2462	Ant1	2500	-55.67	2	41.59	Average	54	Pass

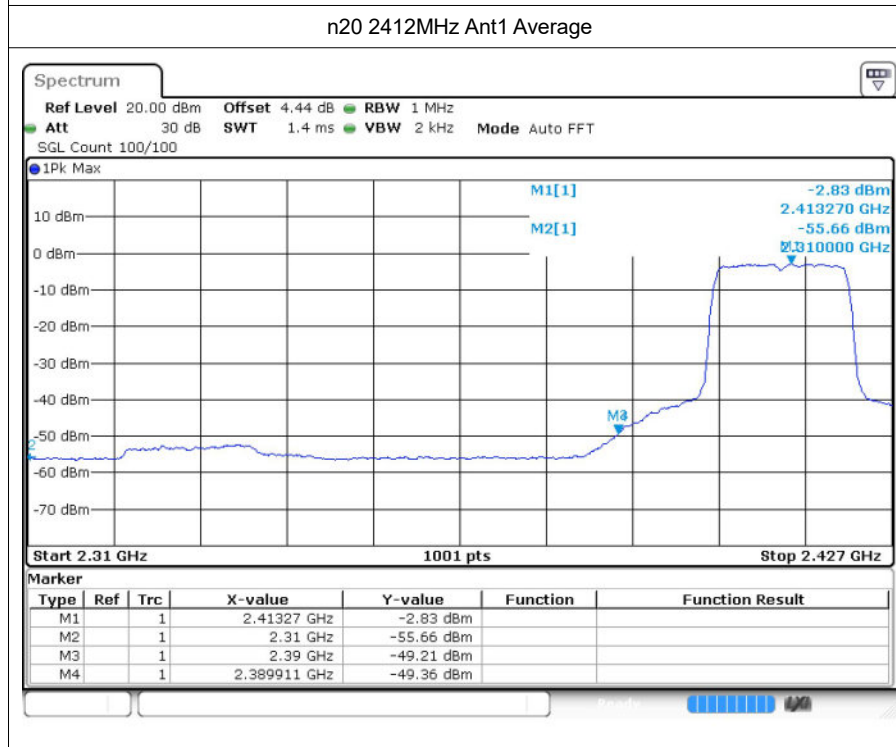
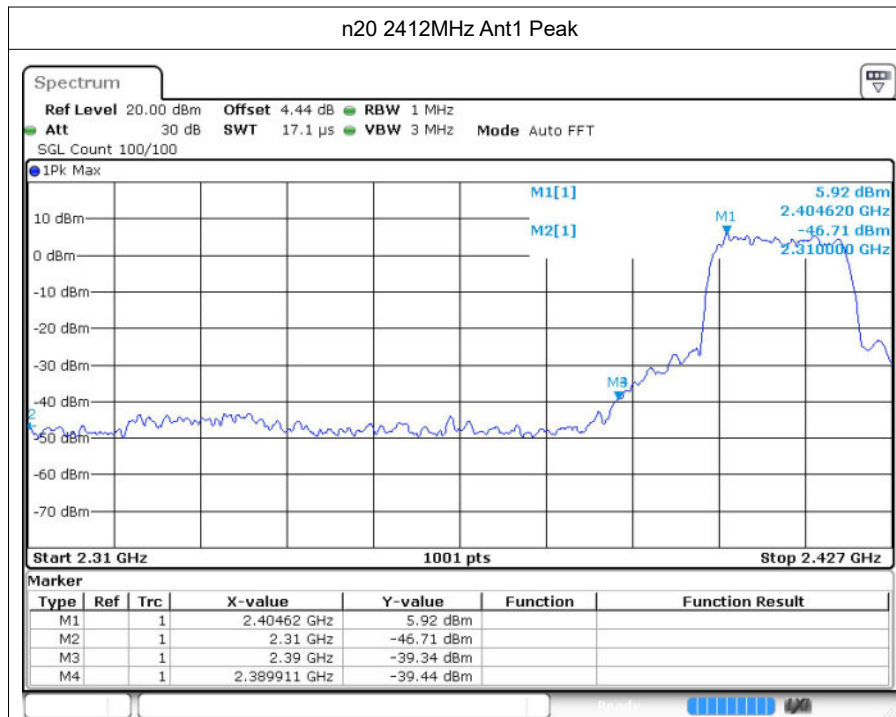
7.2 Test Graphs

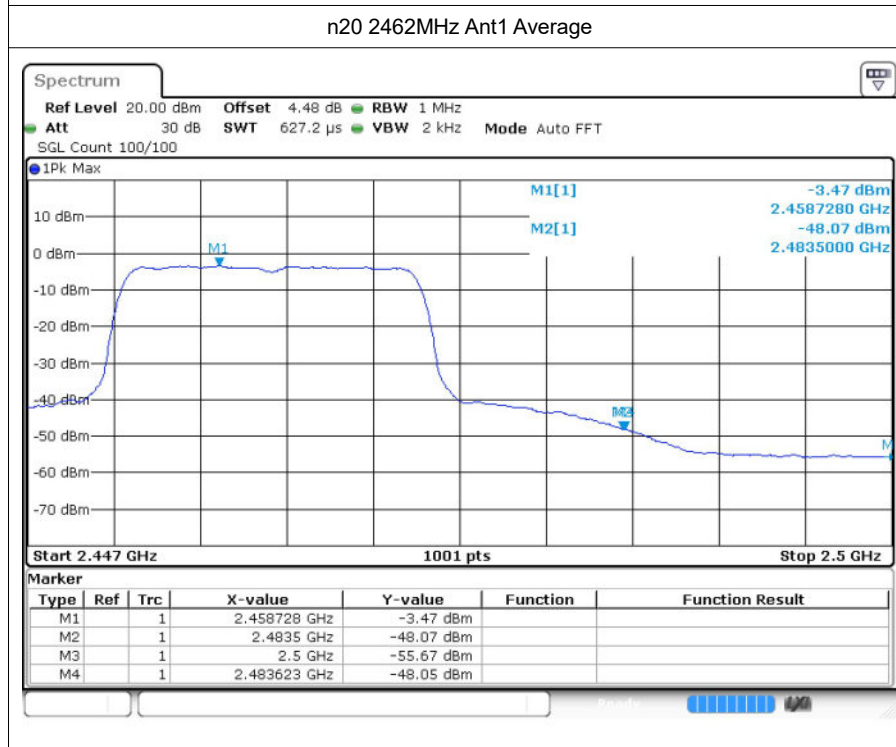
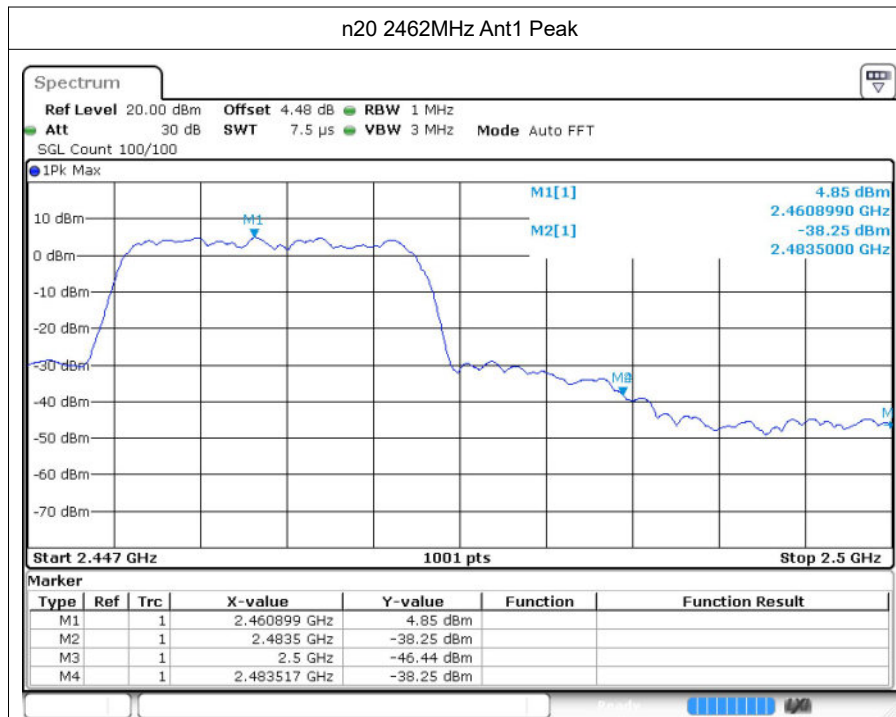












---The End---