



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Nybble Q

Trade Mark: N/A

Test Model: Plastic servo

Environmental Conditions

Temperature:	25.3℃
Relative Humidity:	52.2%
ATM Pressure:	101Kpa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



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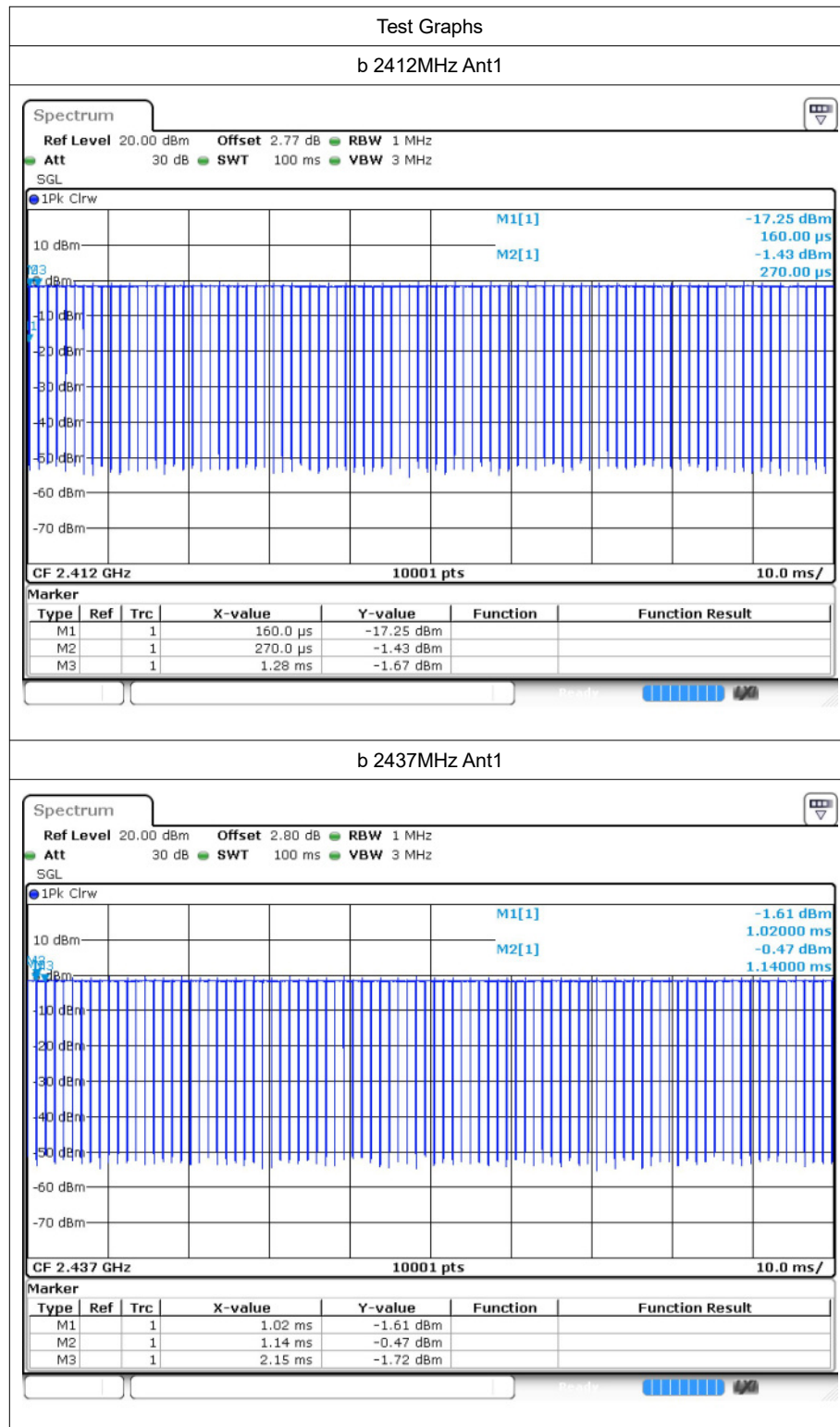


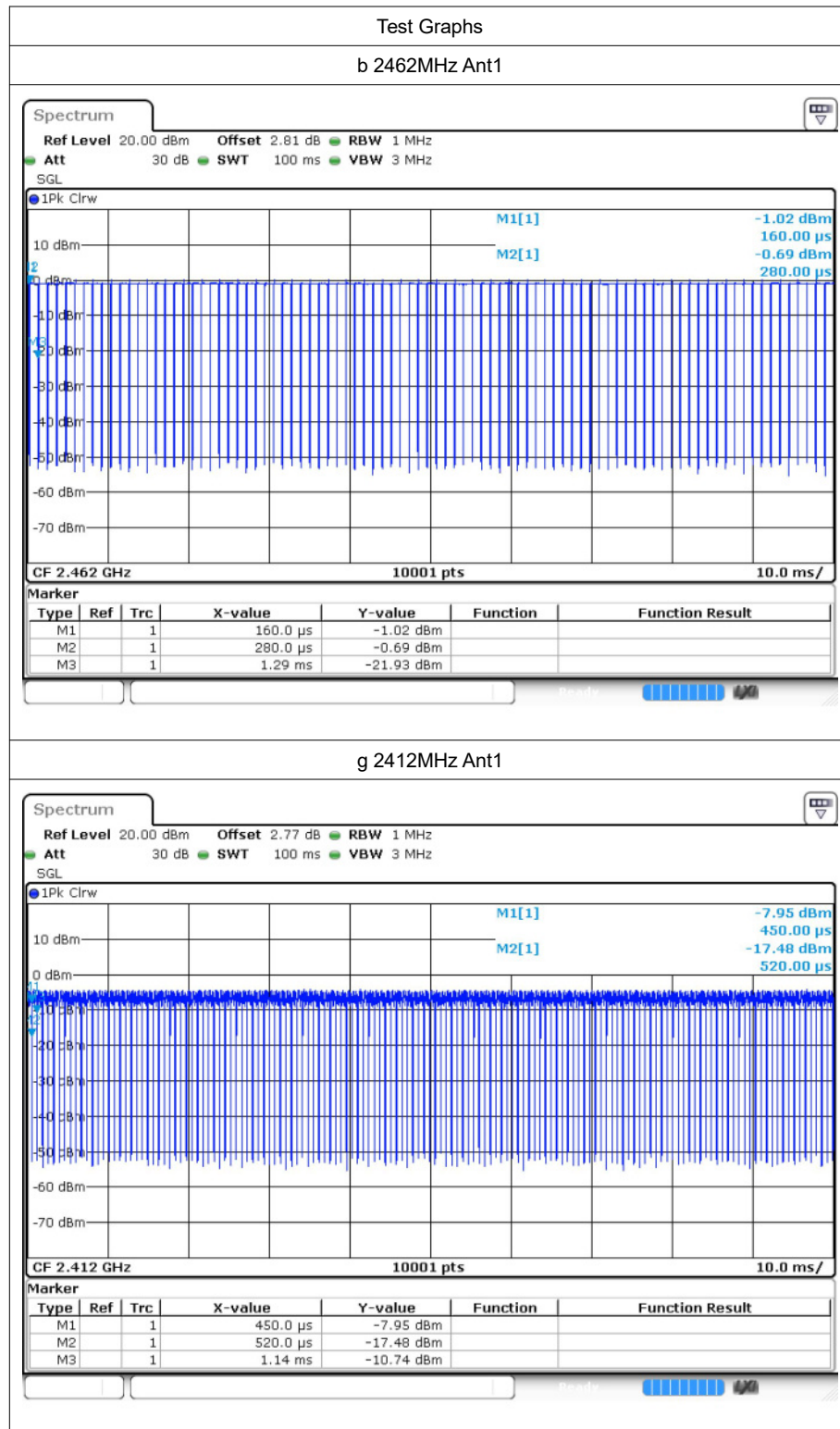
1 Duty Cycle

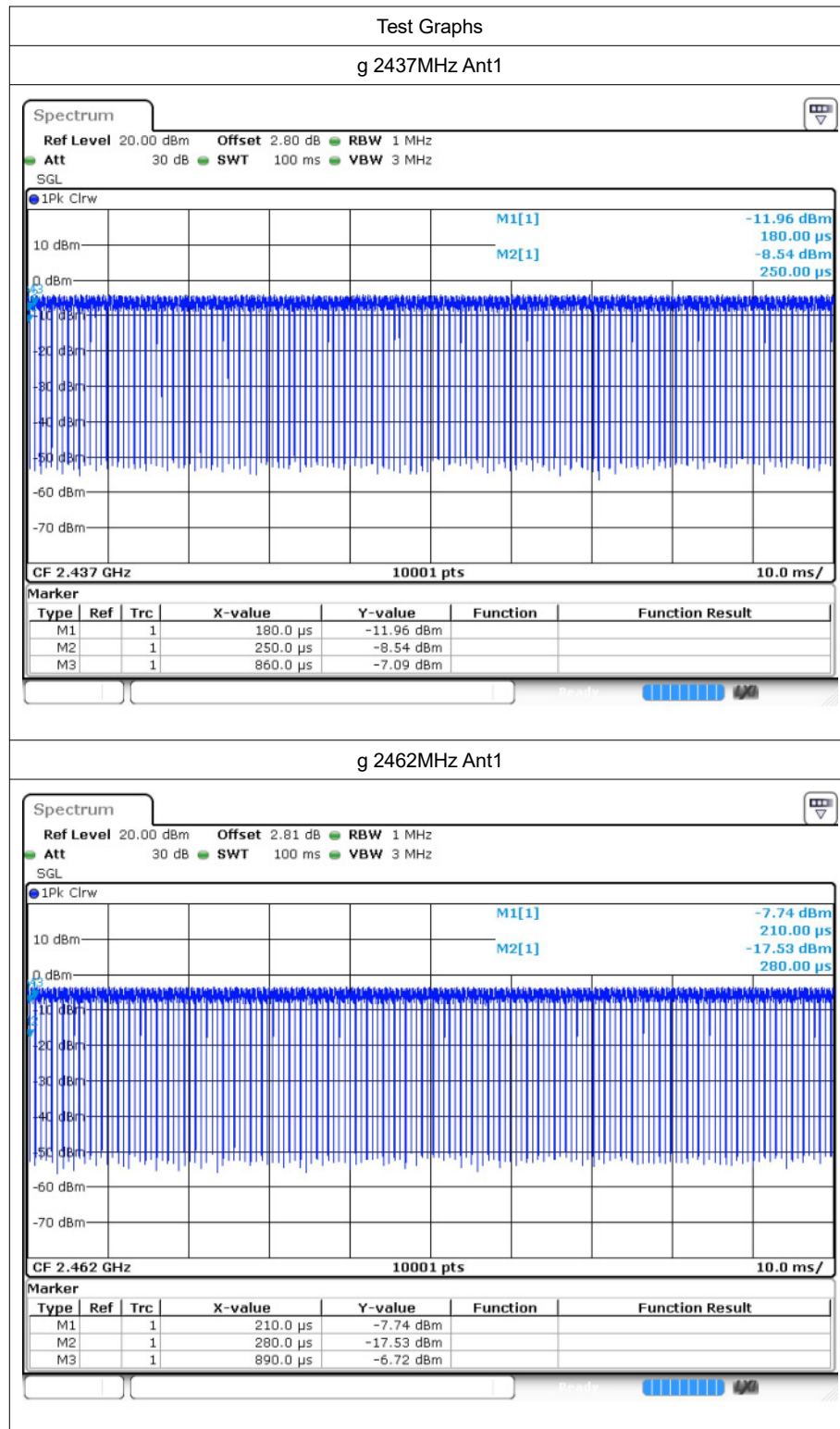
1.1 Test Result

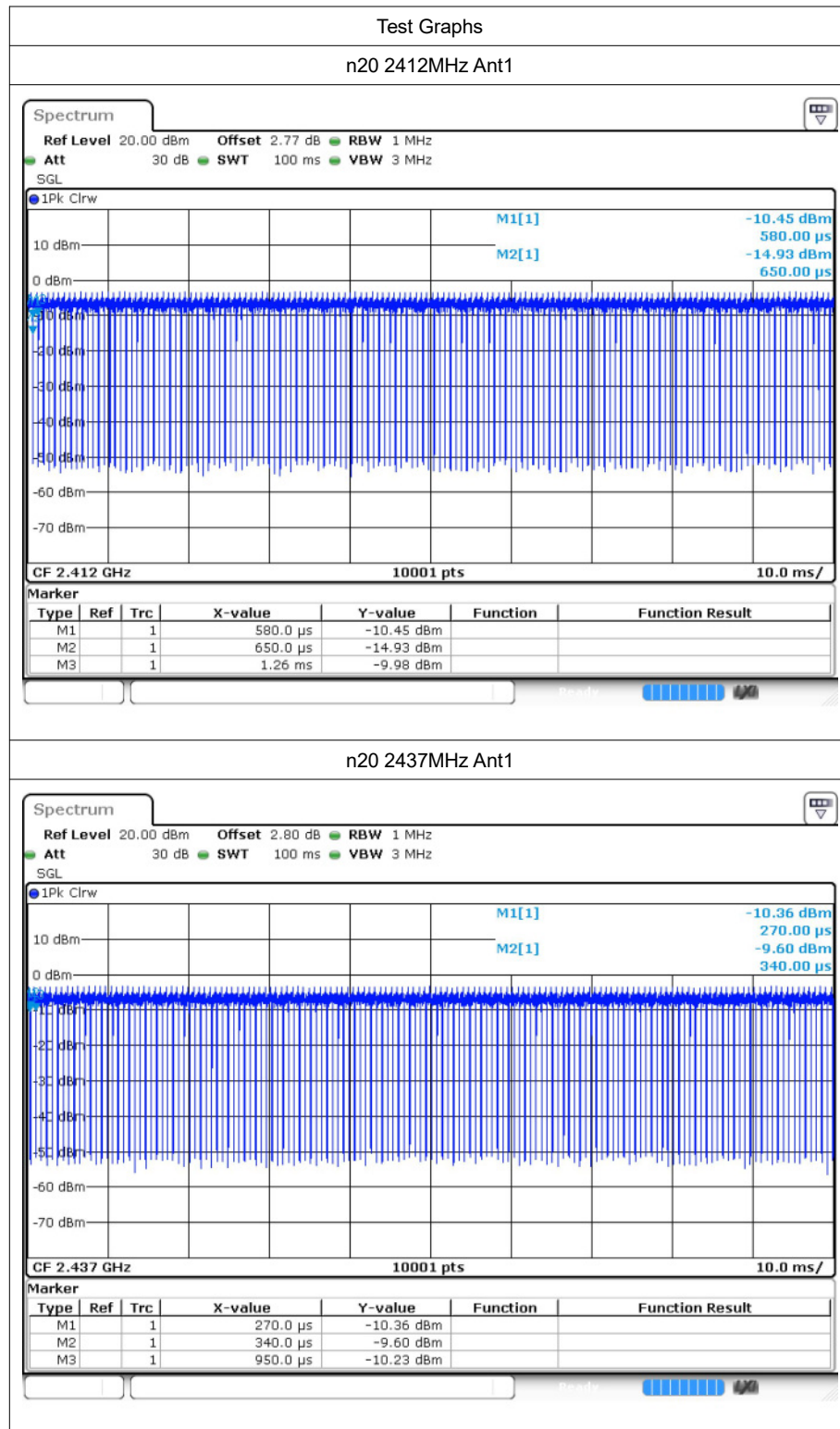
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
b	2412	Ant1	90.77	0.42	0.99
b	2437	Ant1	90.74	0.42	0.99
b	2462	Ant1	90.77	0.42	0.99
g	2412	Ant1	91.33	0.39	1.61
g	2437	Ant1	91.32	0.39	1.64
g	2462	Ant1	91.33	0.39	1.64
n20	2412	Ant1	91.24	0.4	1.64
n20	2437	Ant1	91.18	0.4	1.64
n20	2462	Ant1	91.24	0.4	1.64

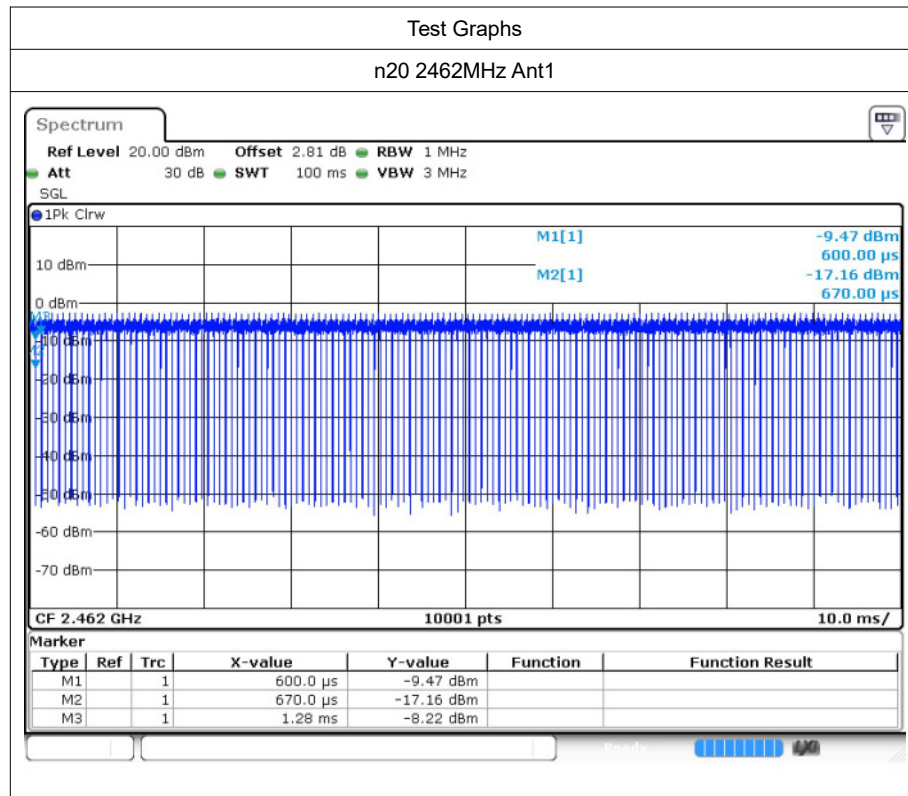
1.2 Test Graphs













2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	7.74	30	Pass
b	2437	Ant1	7.73	30	Pass
b	2462	Ant1	8.49	30	Pass
g	2412	Ant1	6.95	30	Pass
g	2437	Ant1	7.1	30	Pass
g	2462	Ant1	7.87	30	Pass
n20	2412	Ant1	6.89	30	Pass
n20	2437	Ant1	7.09	30	Pass
n20	2462	Ant1	7.8	30	Pass

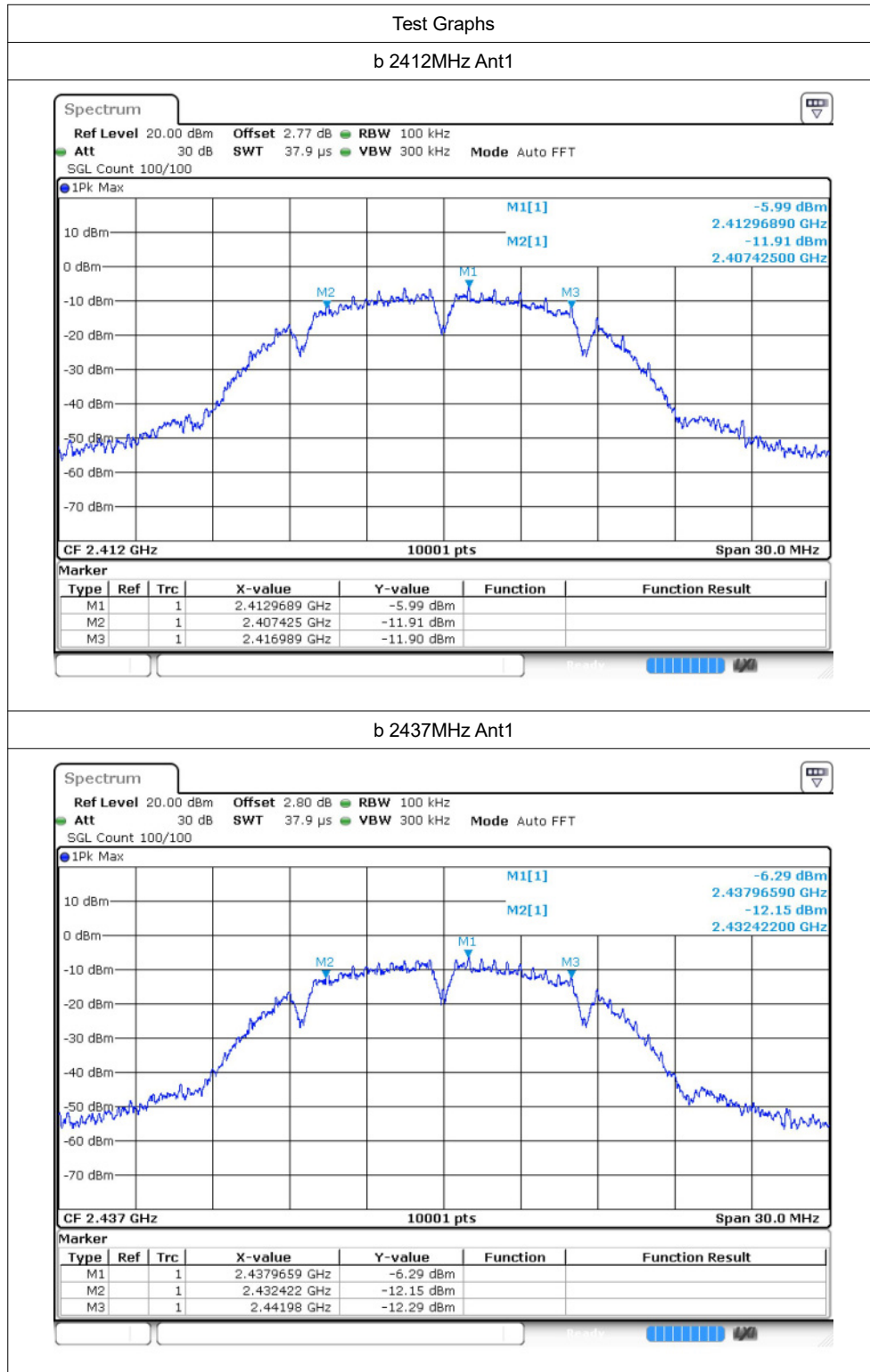


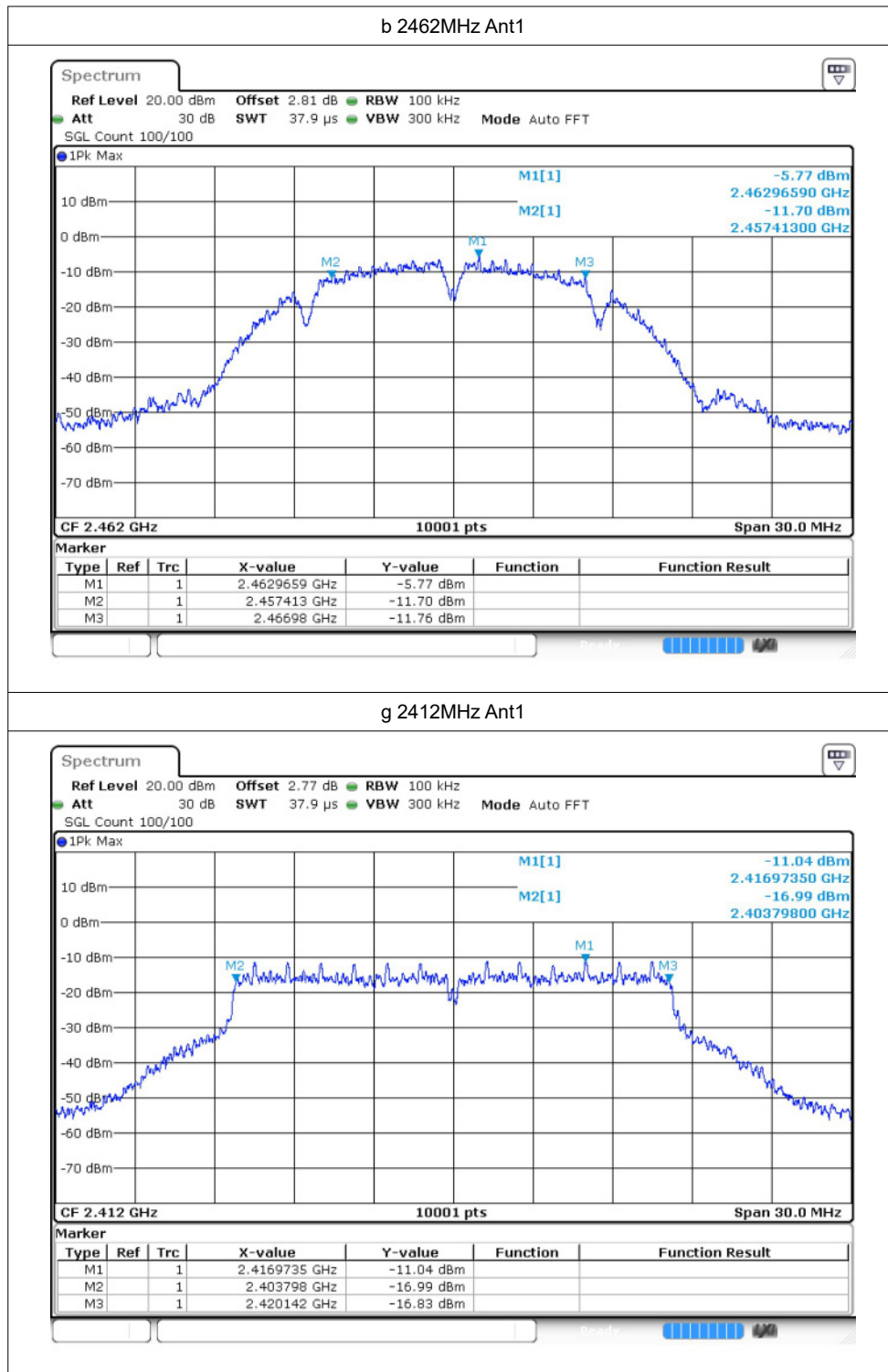
3 -6dB Bandwidth

3.1 Test Result

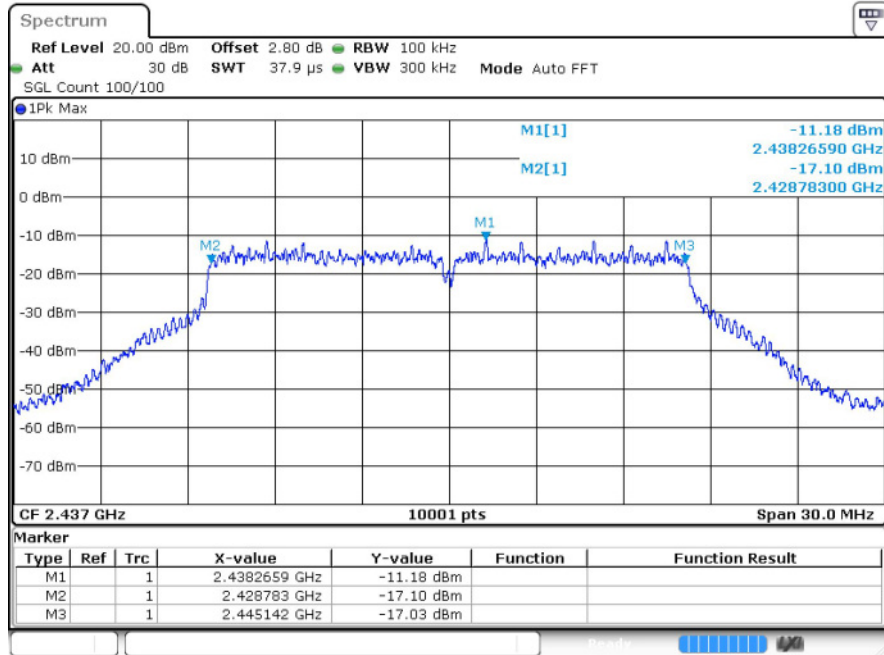
Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	9.564	0.5	Pass
b	2437	Ant1	9.558	0.5	Pass
b	2462	Ant1	9.567	0.5	Pass
g	2412	Ant1	16.344	0.5	Pass
g	2437	Ant1	16.359	0.5	Pass
g	2462	Ant1	16.56	0.5	Pass
n20	2412	Ant1	17.553	0.5	Pass
n20	2437	Ant1	17.568	0.5	Pass
n20	2462	Ant1	17.568	0.5	Pass

3.2 Test Graphs

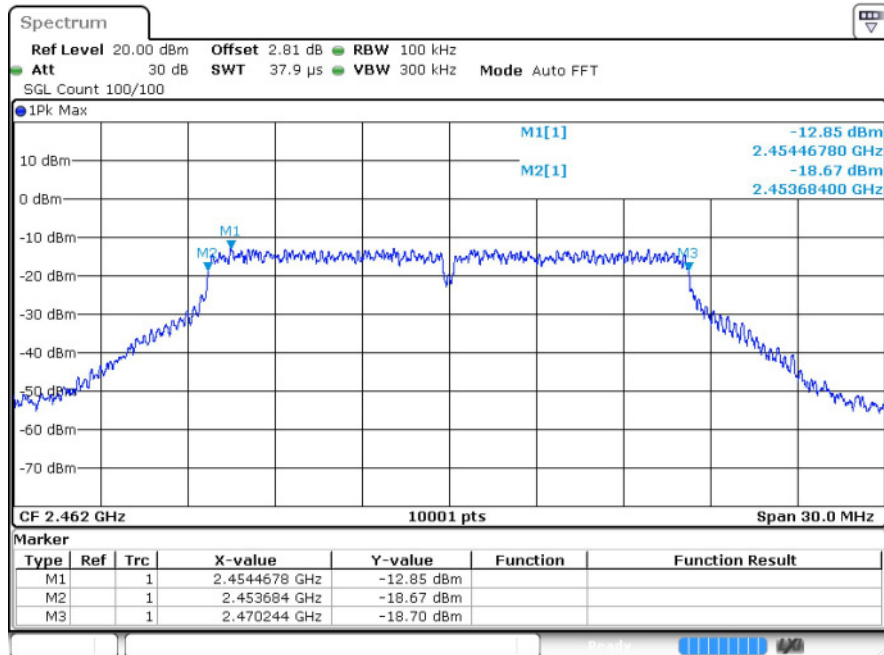


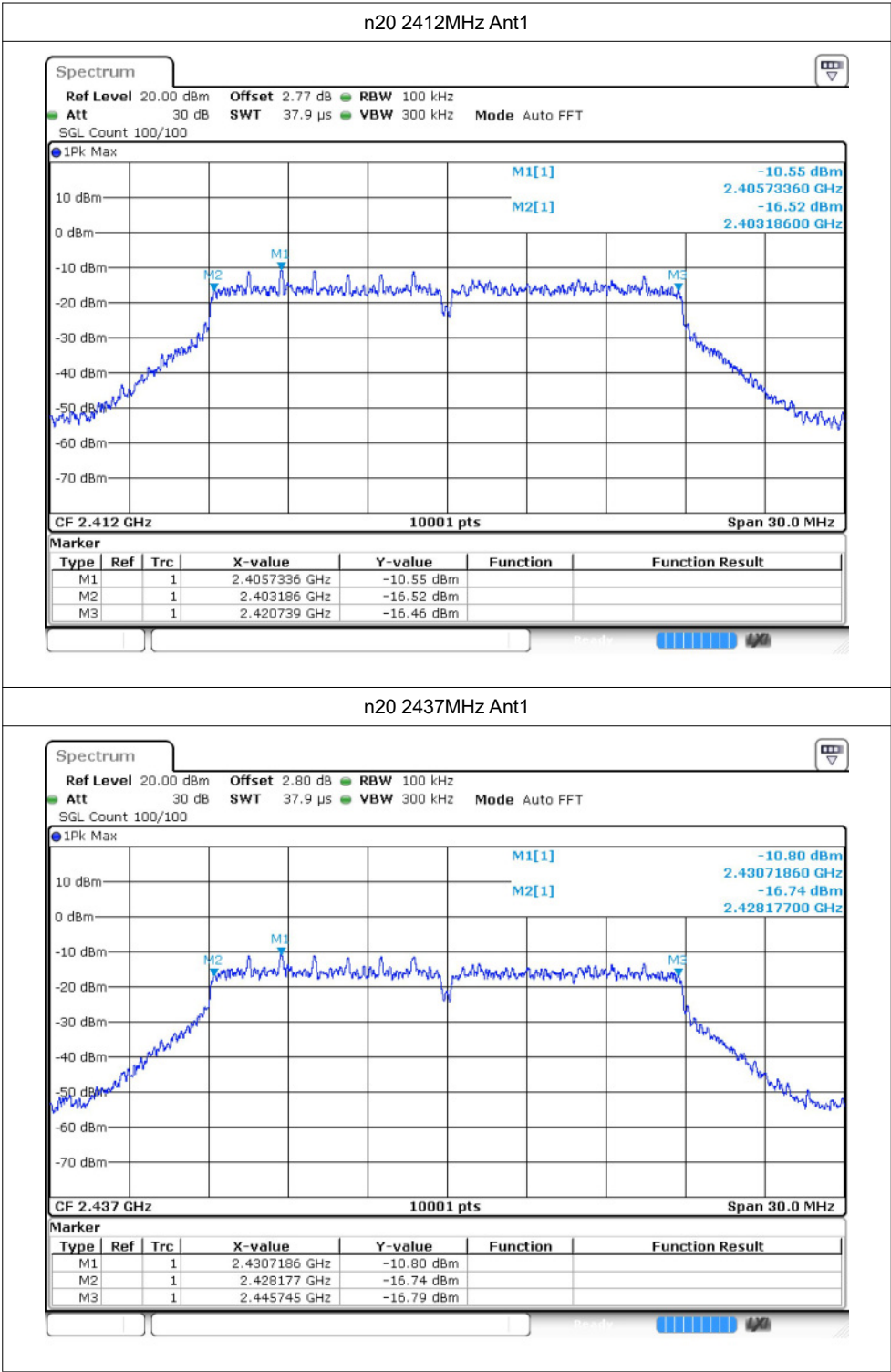


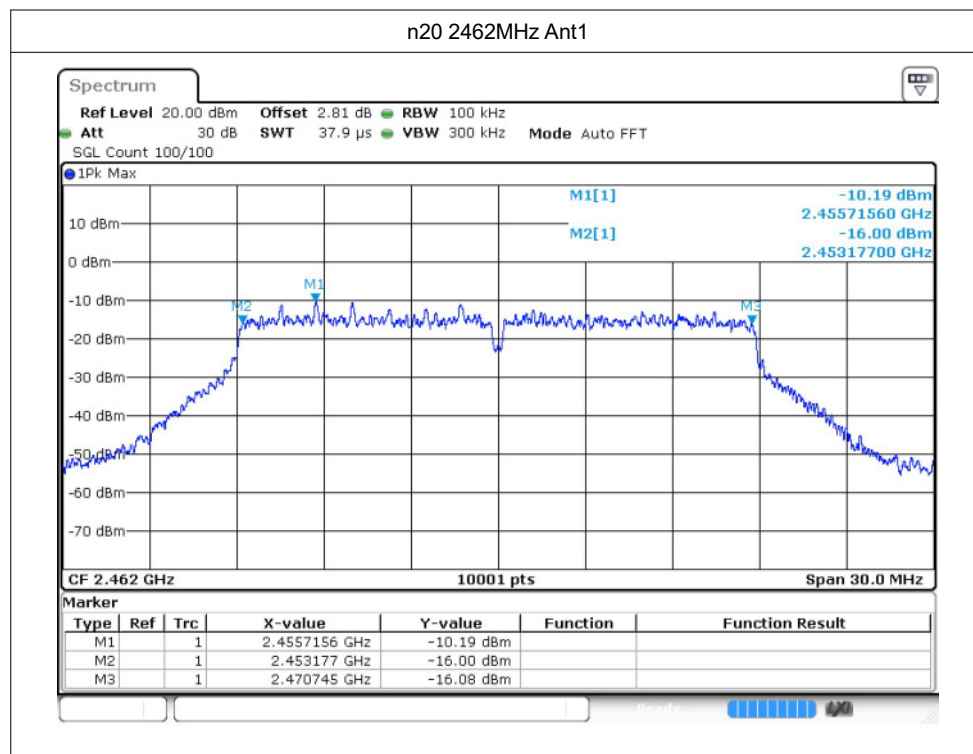
g 2437MHz Ant1



g 2462MHz Ant1





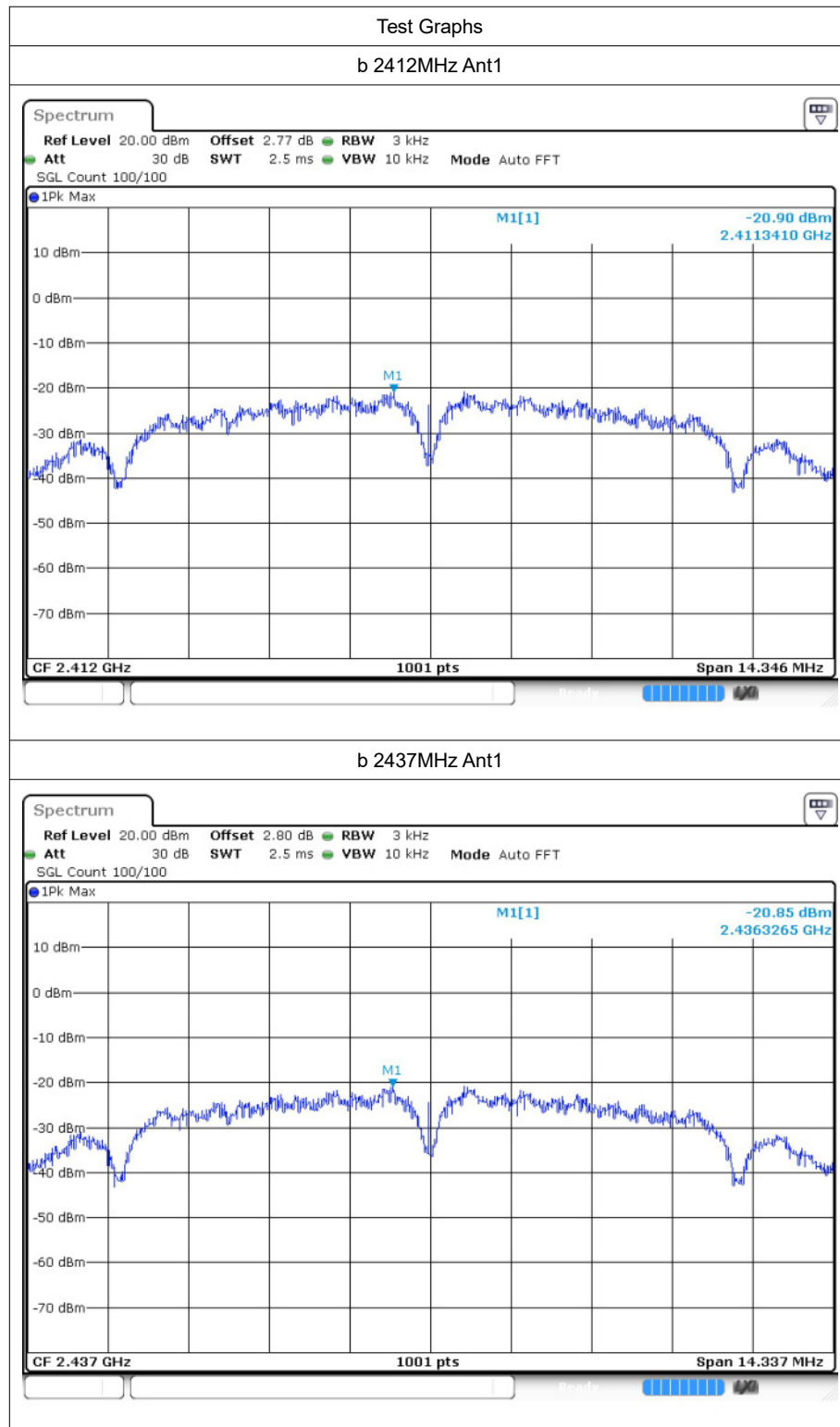


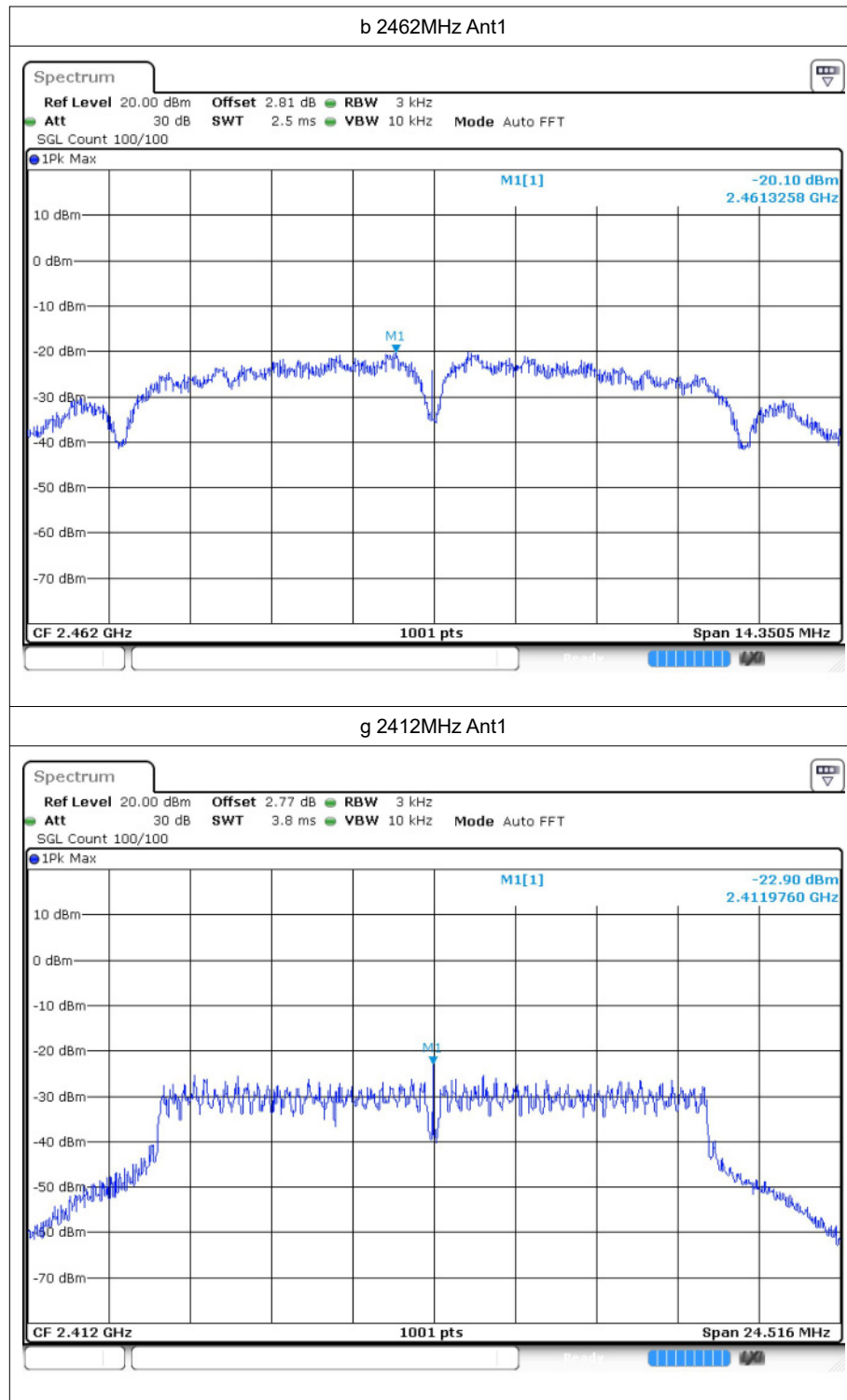
4 Maximum Power Spectral Density Level

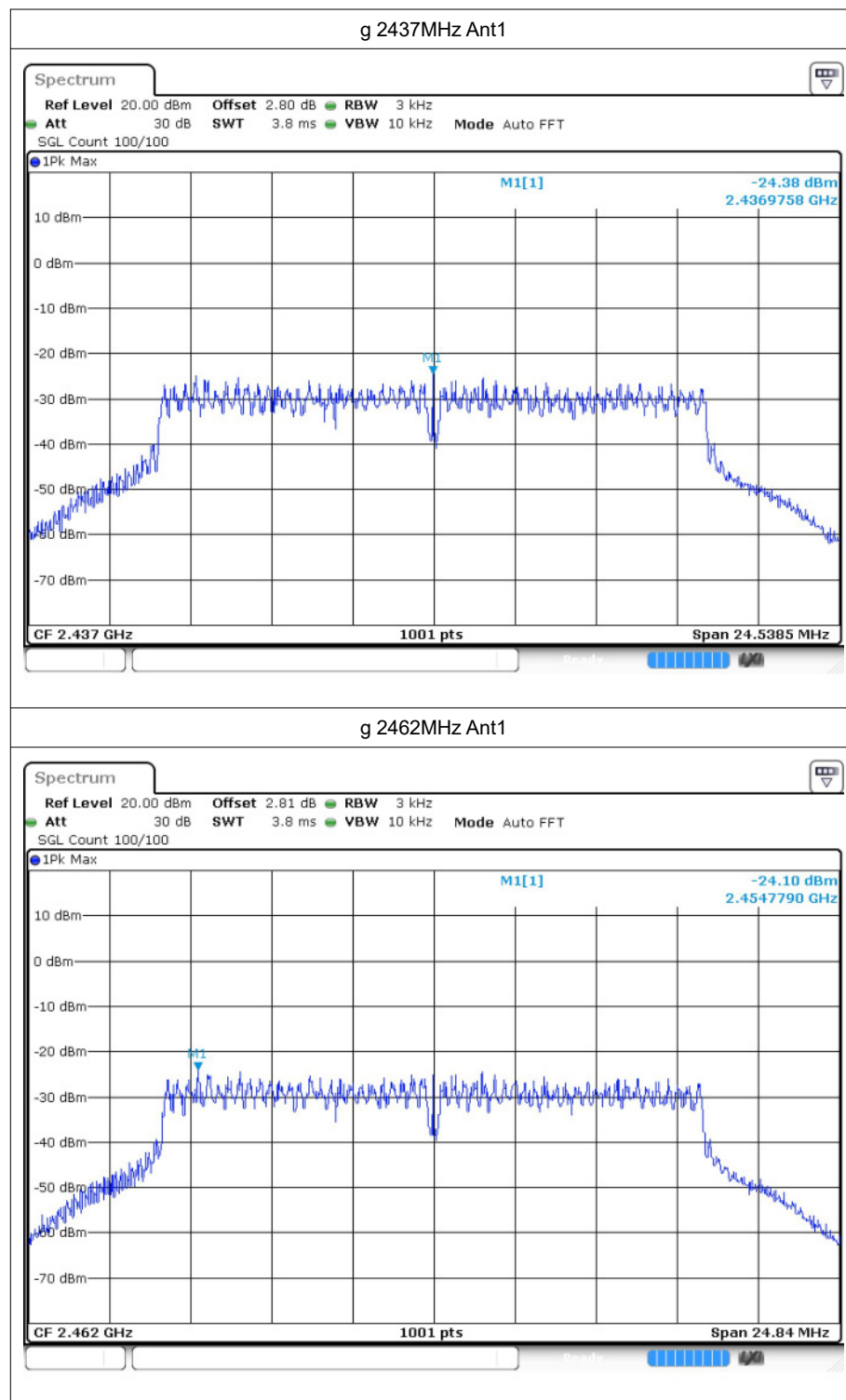
4.1 Test Result

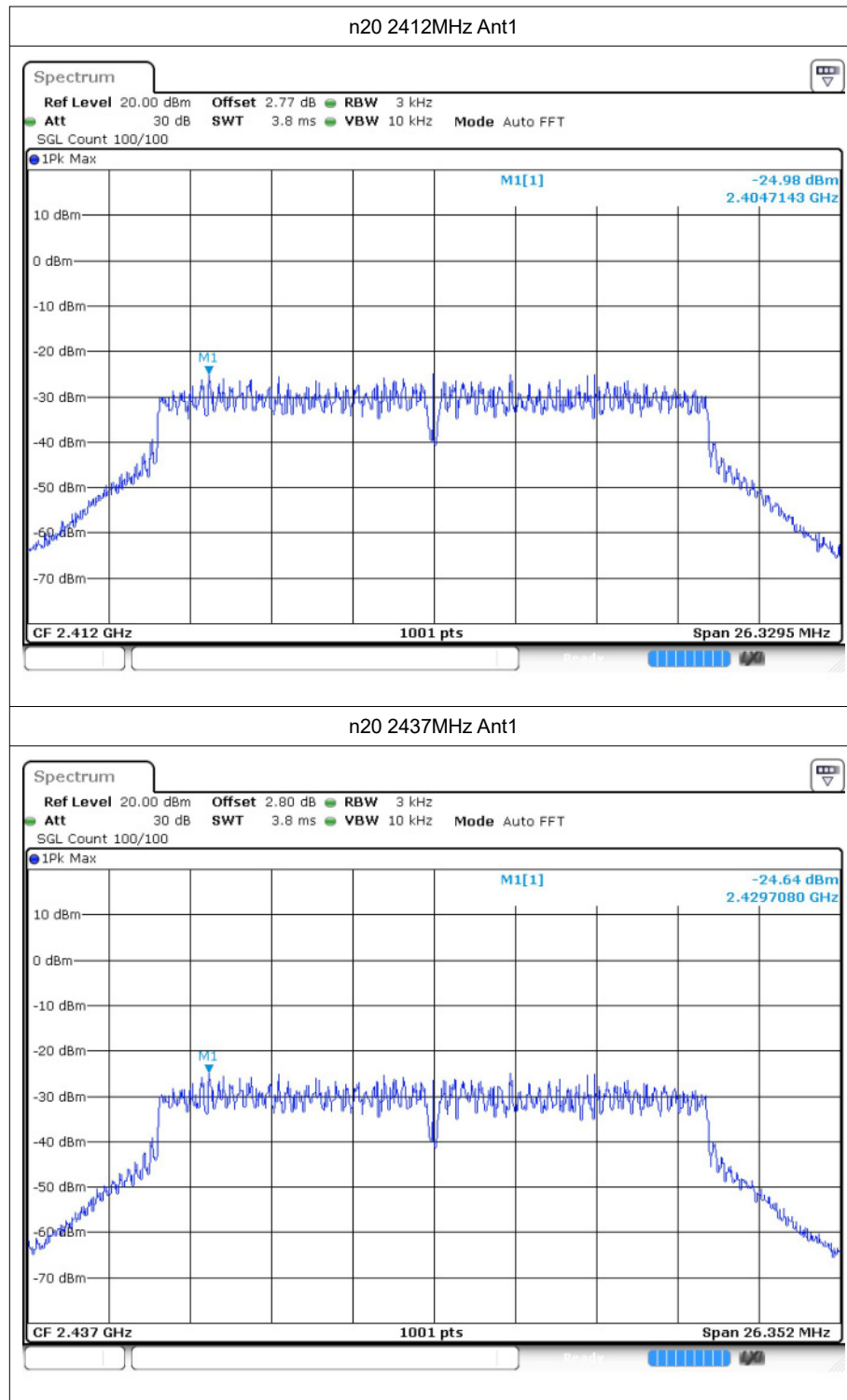
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-20.9	≤ 8	Pass
b	2437	Ant1	-20.85	≤ 8	Pass
b	2462	Ant1	-20.1	≤ 8	Pass
g	2412	Ant1	-22.9	≤ 8	Pass
g	2437	Ant1	-24.38	≤ 8	Pass
g	2462	Ant1	-24.1	≤ 8	Pass
n20	2412	Ant1	-24.98	≤ 8	Pass
n20	2437	Ant1	-24.64	≤ 8	Pass
n20	2462	Ant1	-23.89	≤ 8	Pass

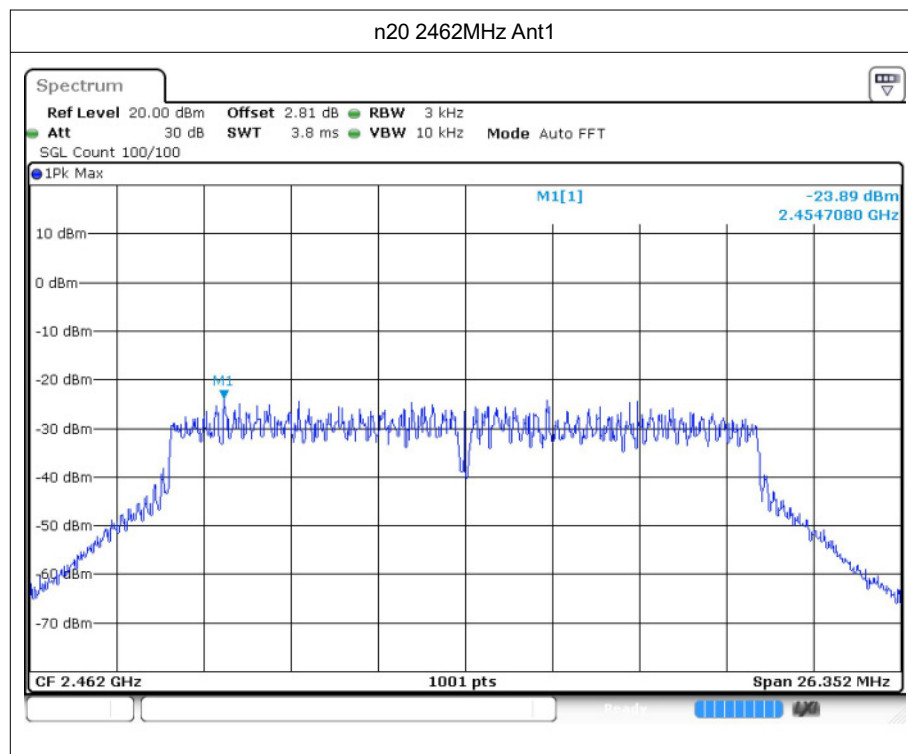
4.2 Test Graphs











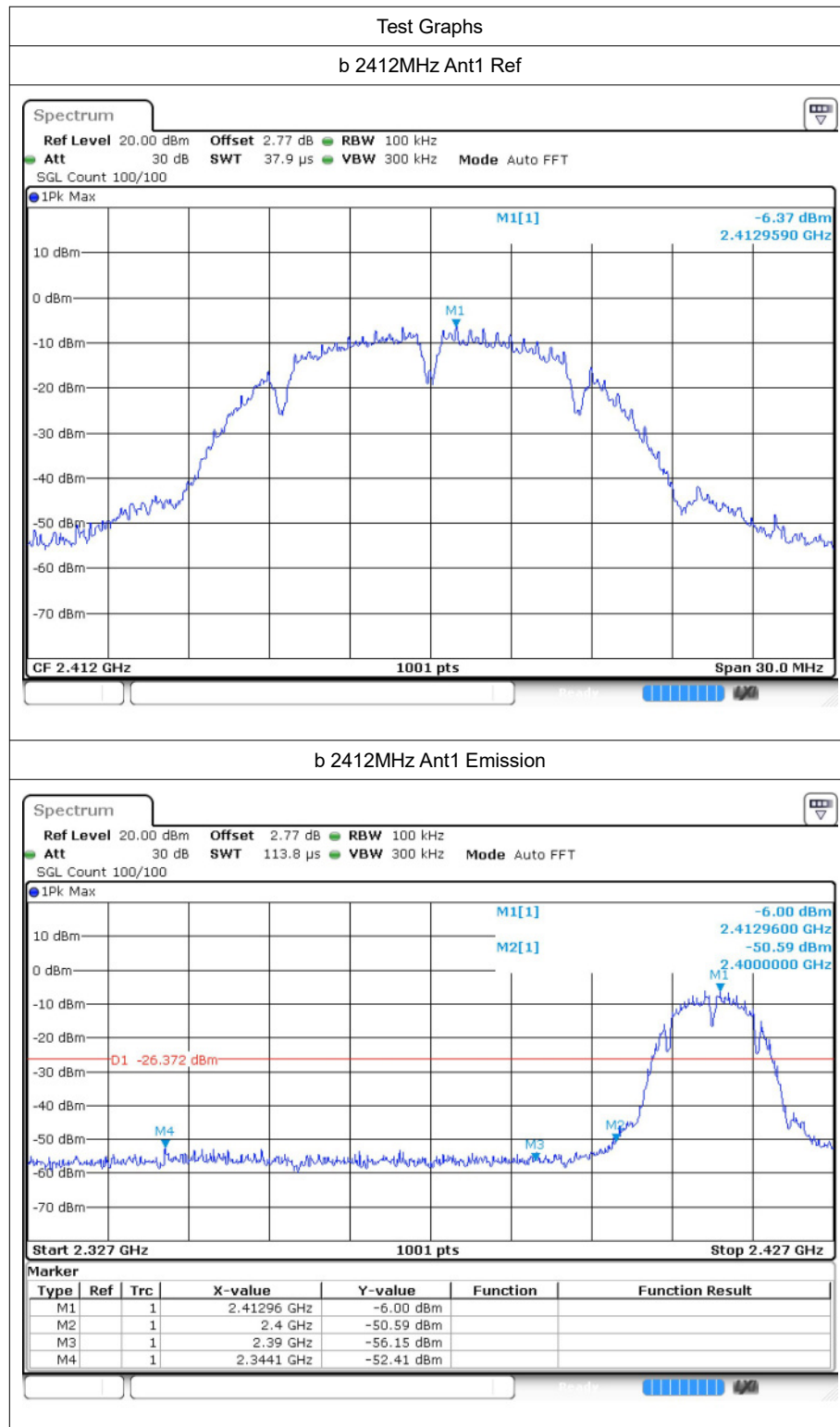


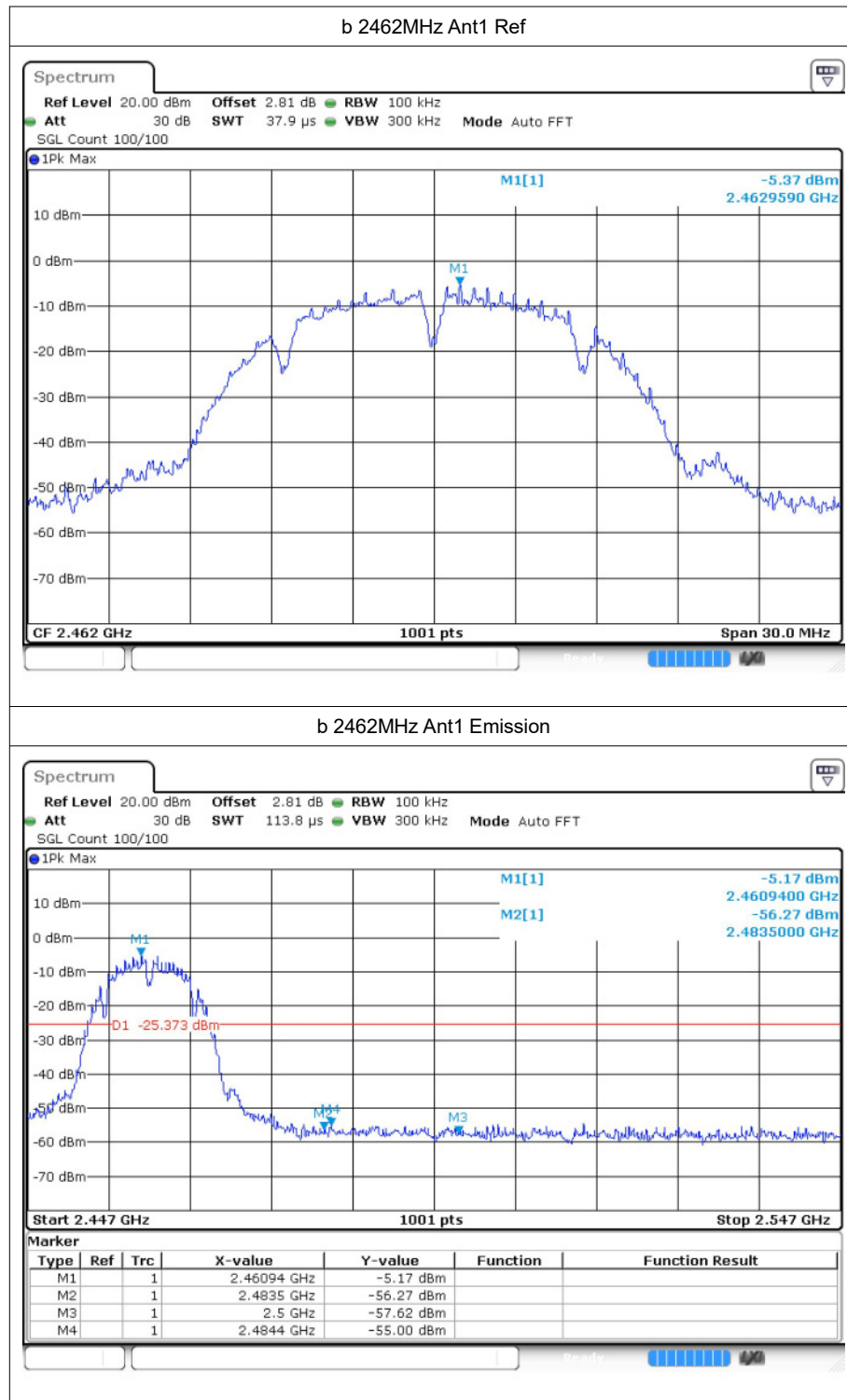
5 Band Edge

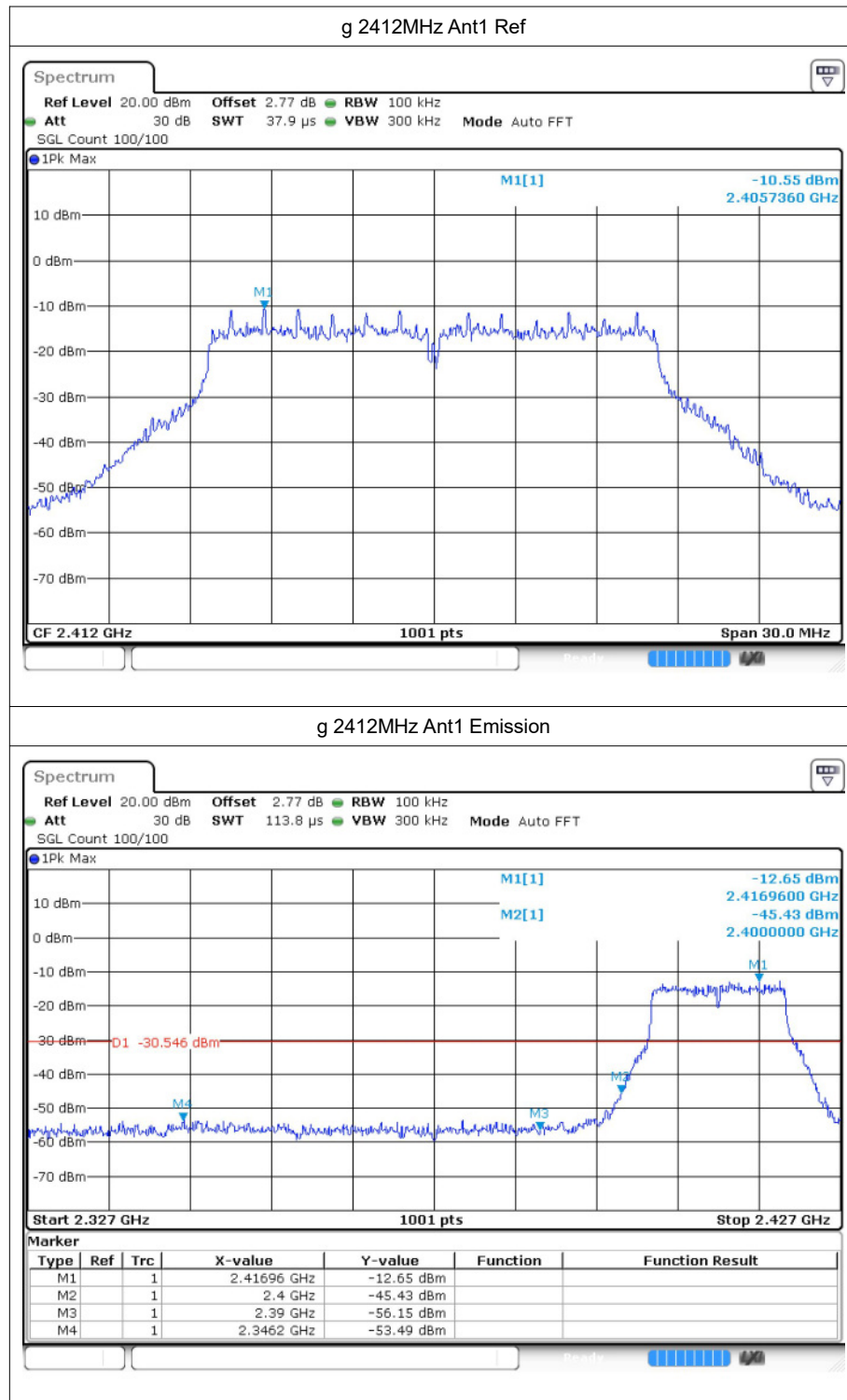
5.1 Test Result

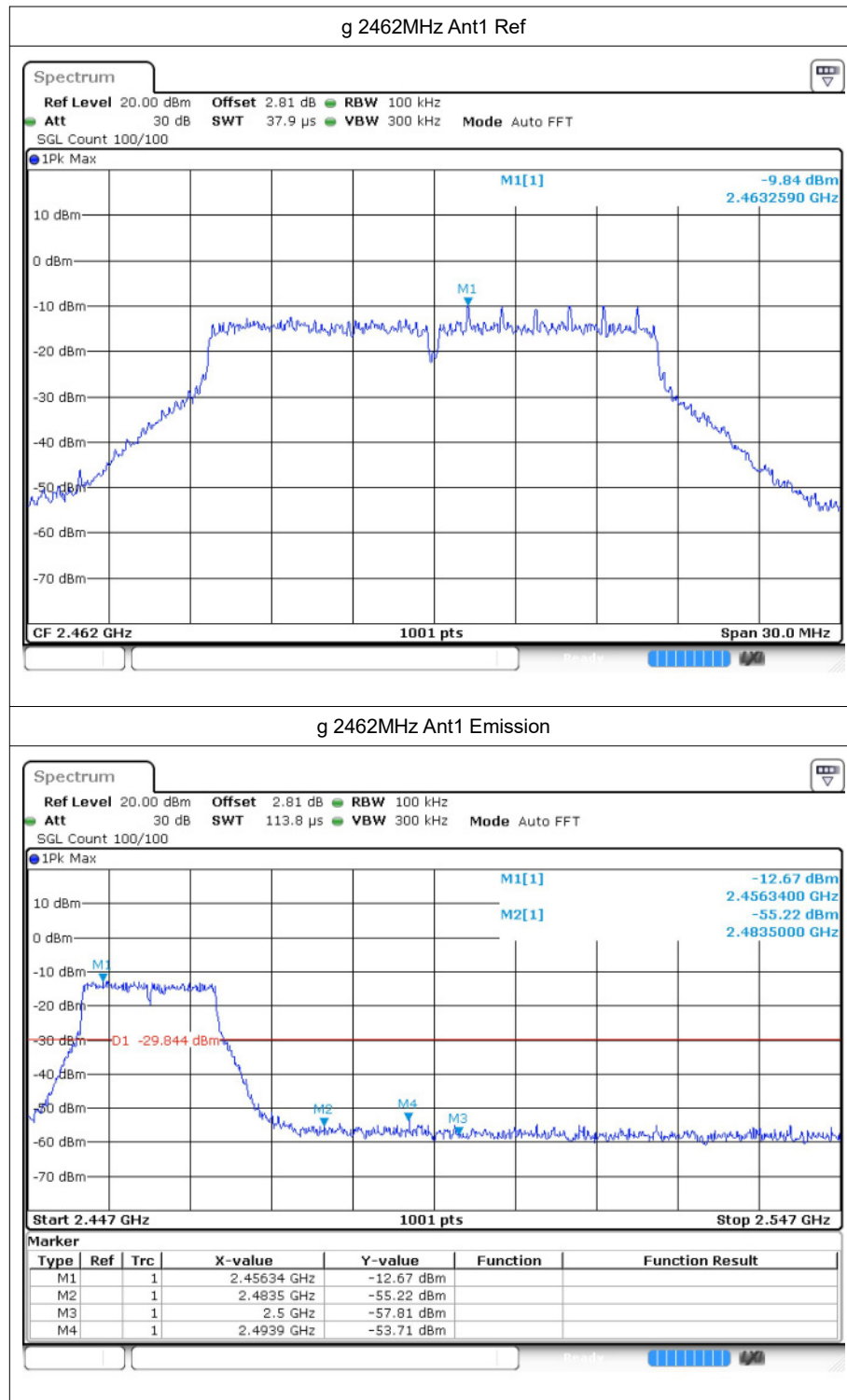
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-46.03	-20	Pass
b	2462	Ant1	-49.63	-20	Pass
g	2412	Ant1	-42.93	-20	Pass
g	2462	Ant1	-43.87	-20	Pass
n20	2412	Ant1	-41.4	-20	Pass
n20	2462	Ant1	-44.47	-20	Pass

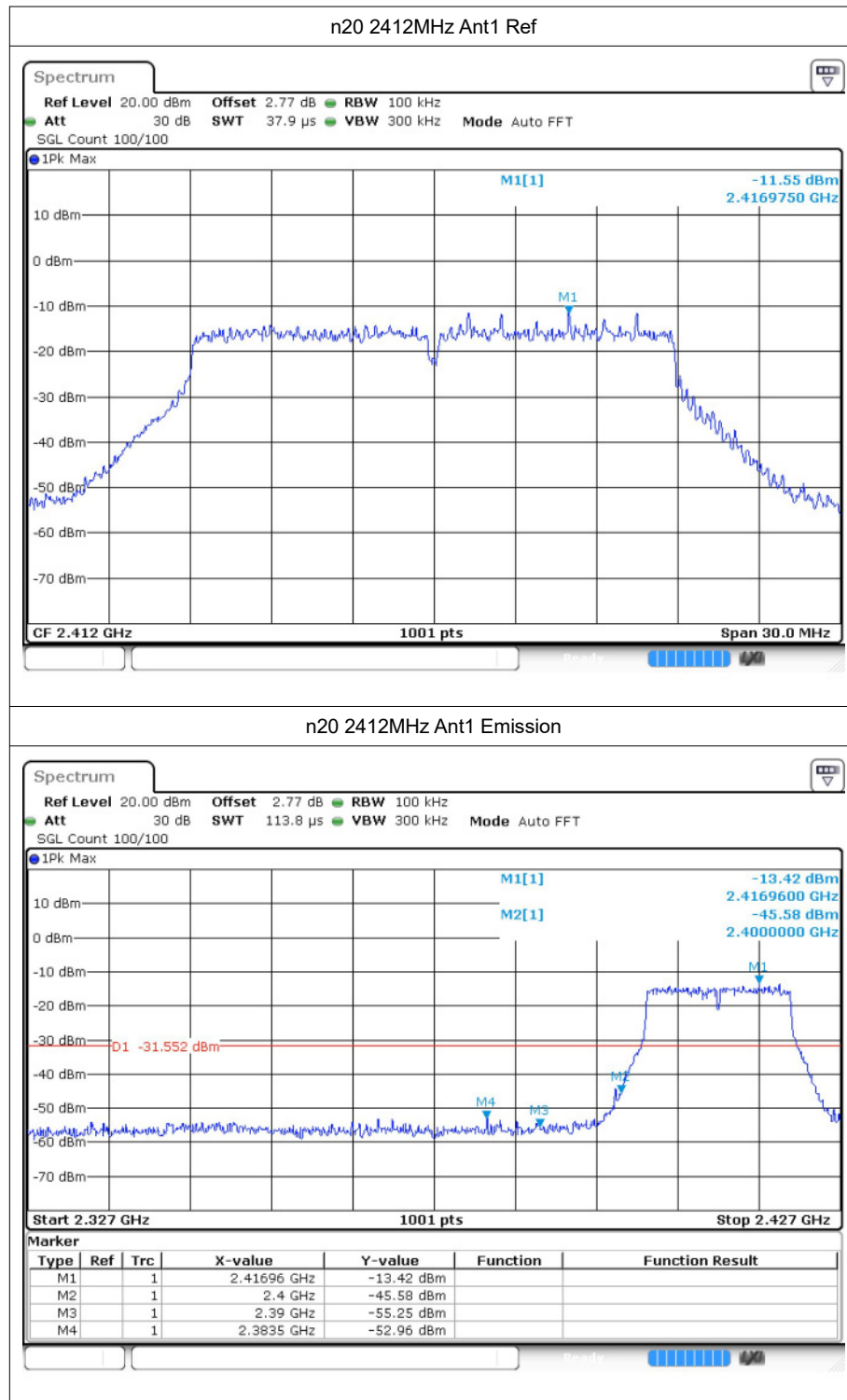
5.2 Test Graphs

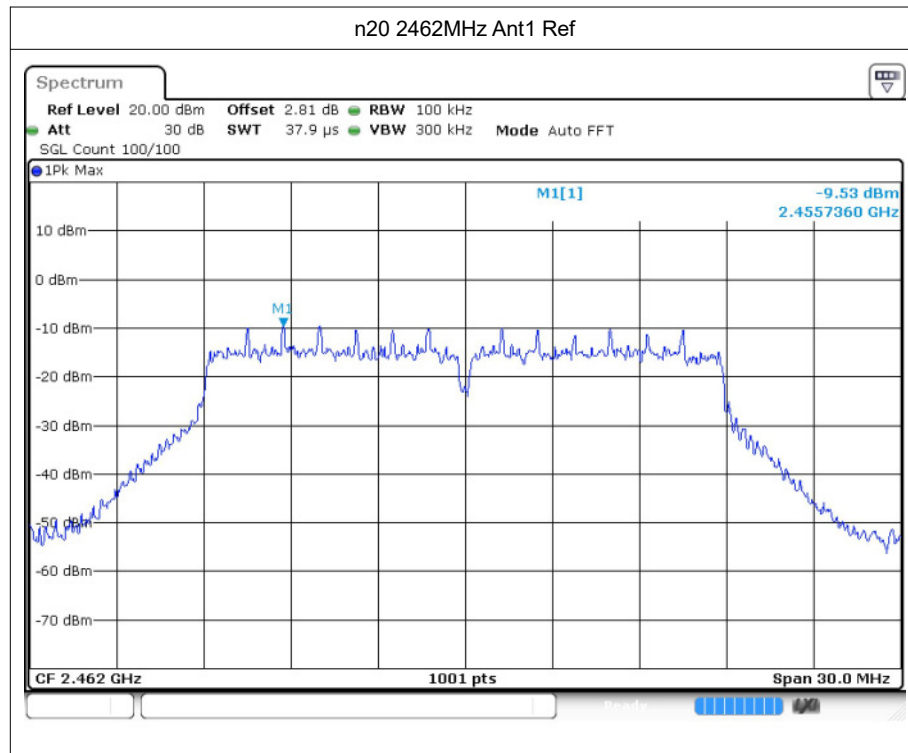














6 Conducted RF Spurious Emission

6.1 Test Result

Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-36.75	-20	Pass
b	2437	Ant1	-35.65	-20	Pass
b	2462	Ant1	-36.17	-20	Pass
g	2412	Ant1	-32.66	-20	Pass
g	2437	Ant1	-32.88	-20	Pass
g	2462	Ant1	-33.43	-20	Pass
n20	2412	Ant1	-32.69	-20	Pass
n20	2437	Ant1	-32.25	-20	Pass
n20	2462	Ant1	-33.22	-20	Pass

6.2 Test Graphs

