



Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: M5 LLM630 Compute Kit



Test Model: LLM630 Compute Kit

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



Contents

Page

COVER PAGE

1	Duty Cycle	3
1.1	Test Result	3
1.2	Test Graphs	4
2	Maximum Conducted Output Power	12
2.1	Test Result	12
3	-6dB Bandwidth	13
3.1	Test Result	13
3.2	Test Graphs	14
4	Maximum Power Spectral Density Level	22
4.1	Test Result	22
4.2	Test Graphs	23
5	Band Edge	31
5.1	Test Result	31
5.2	Test Graphs	32
6	Conducted RF Spurious Emission	42
6.1	Test Result	42
6.2	Test Graphs	43
7	Restrict Band	58
7.1	Test Result	58
7.2	Test Graphs	60

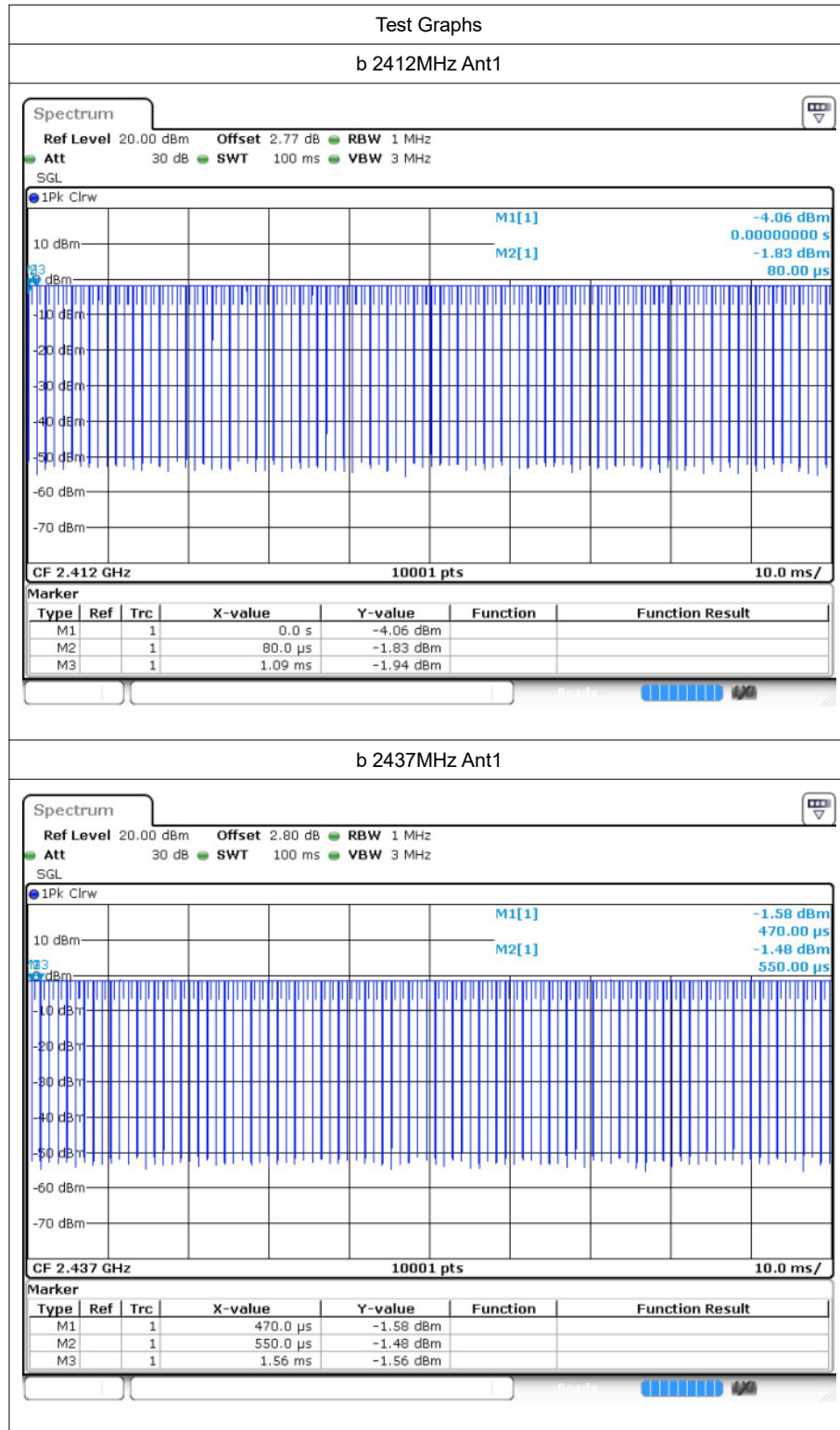


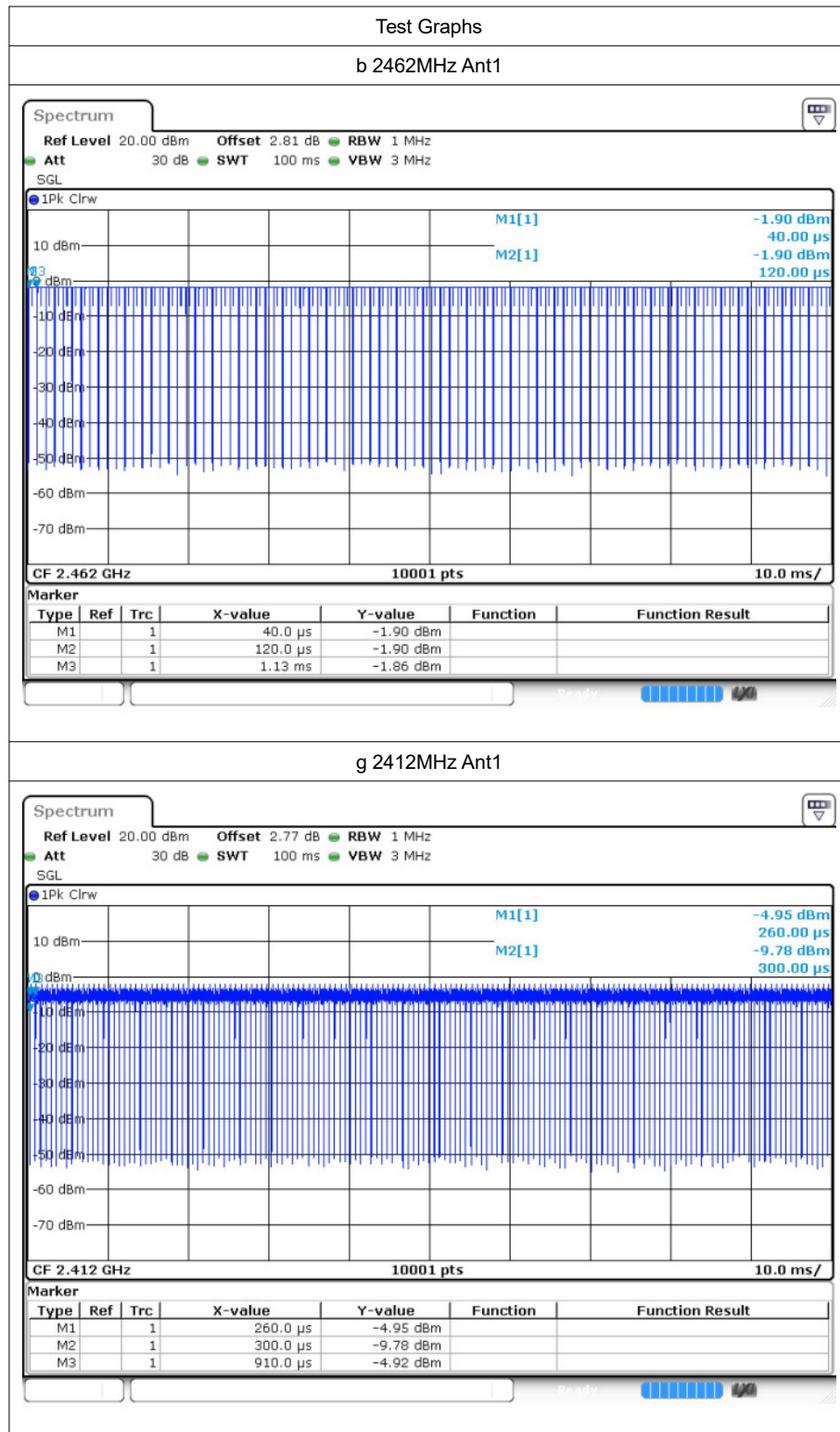
1 Duty Cycle

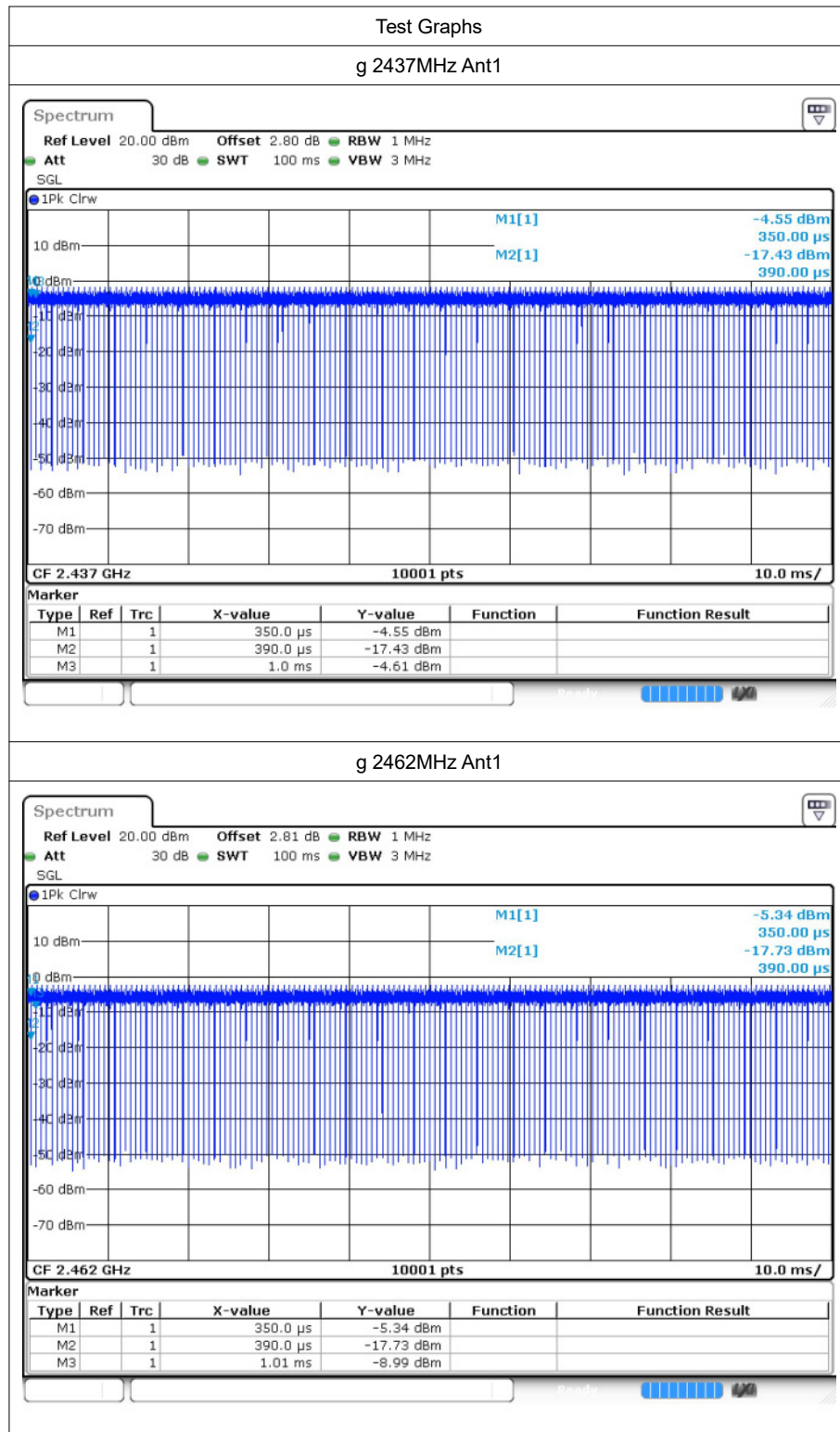
1.1 Test Result

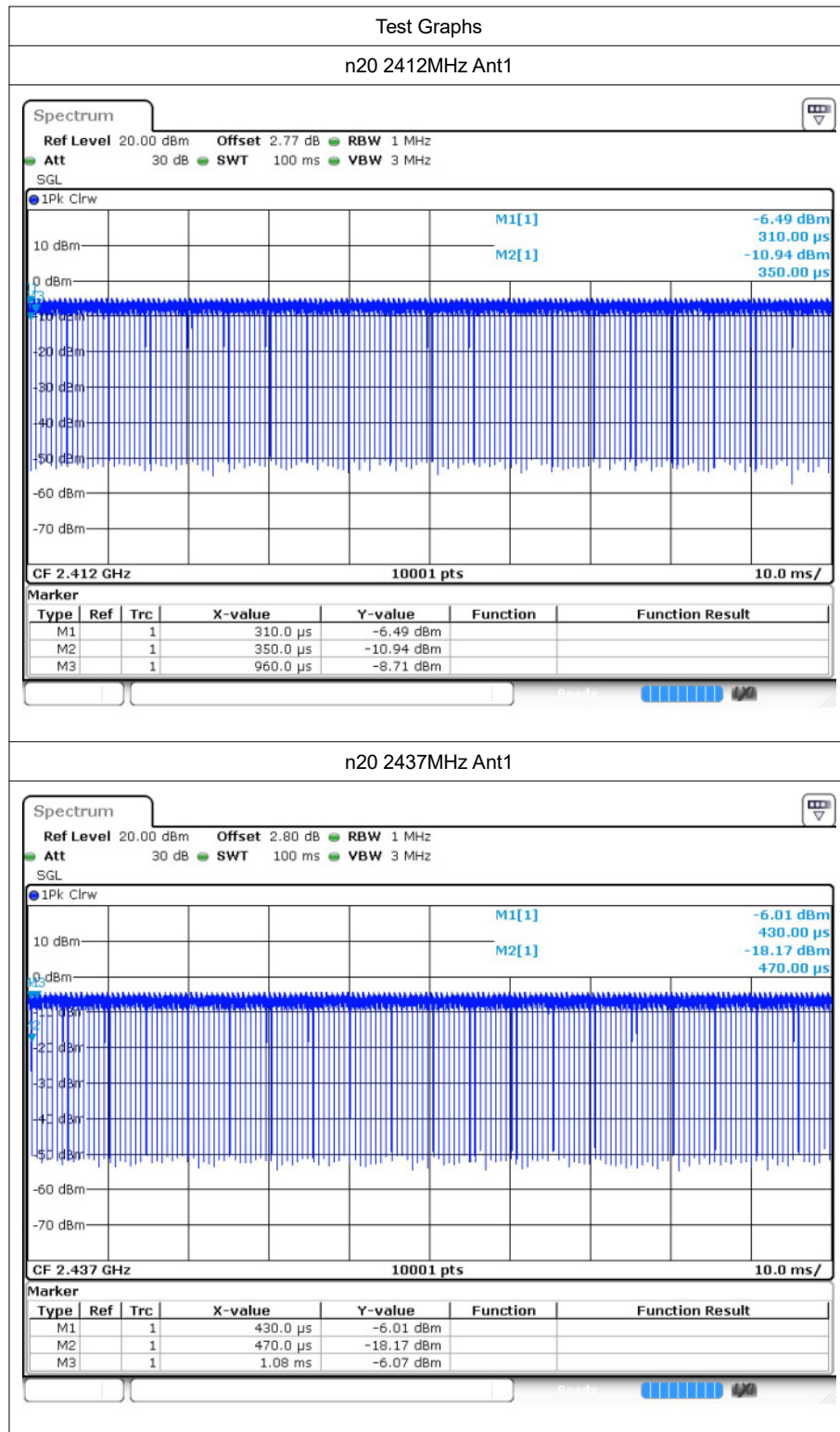
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
b	2412	Ant1	93.4	0.3	0.99
b	2437	Ant1	93.38	0.3	0.99
b	2462	Ant1	93.38	0.3	0.99
g	2412	Ant1	96.02	0.18	1.64
g	2437	Ant1	96.01	0.18	1.64
g	2462	Ant1	95.87	0.18	1.61
n20	2412	Ant1	95.79	0.19	1.64
n20	2437	Ant1	95.75	0.19	1.64
n20	2462	Ant1	95.75	0.19	1.64
n40	2422	Ant1	94.55	0.24	1.67
n40	2437	Ant1	94.62	0.24	1.64
n40	2452	Ant1	94.58	0.24	1.64
ax20	2412	Ant1	96.62	0.15	1.35
ax20	2437	Ant1	96.63	0.15	1.33
ax20	2462	Ant1	96.61	0.15	1.35

1.2 Test Graphs



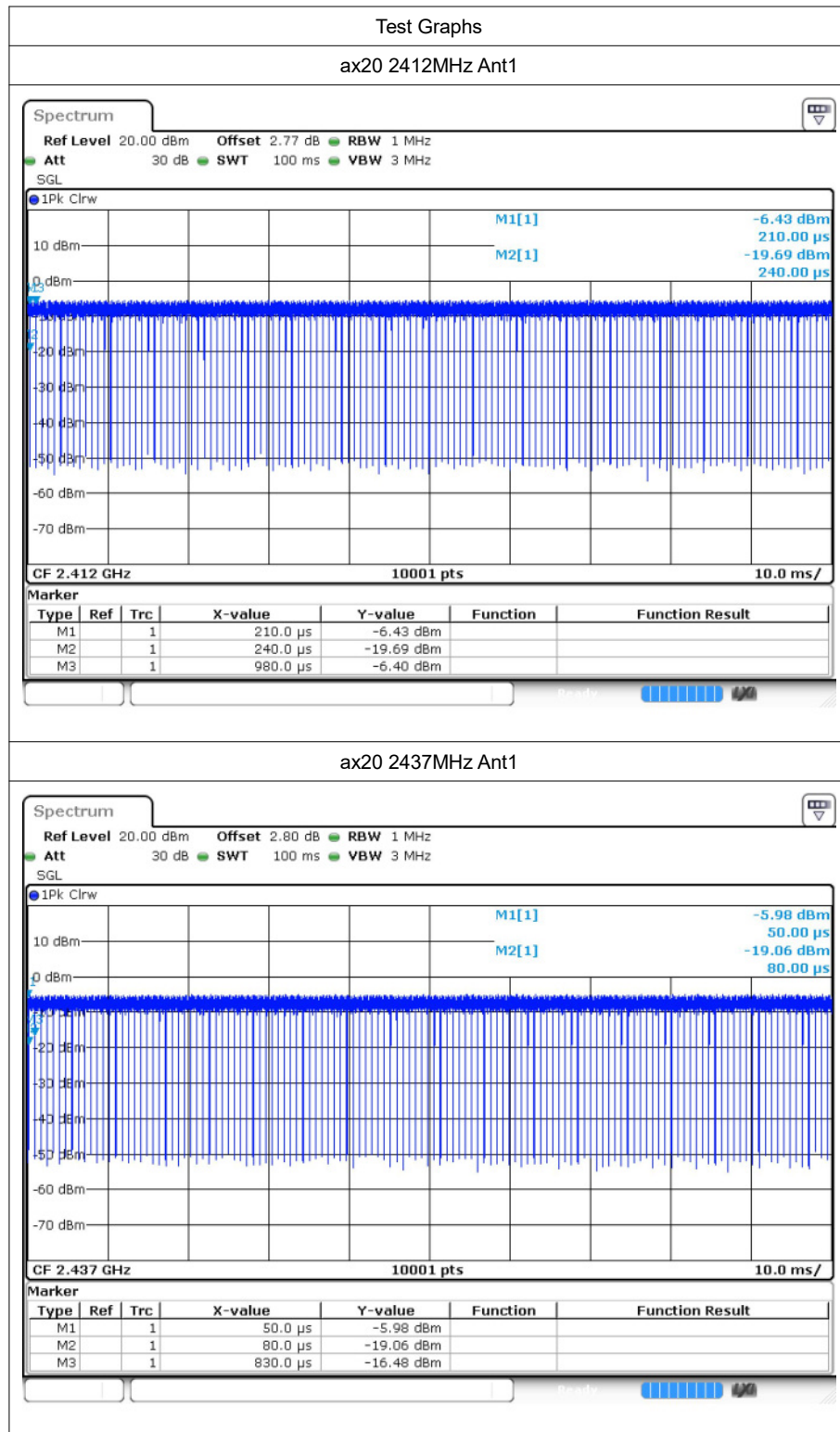


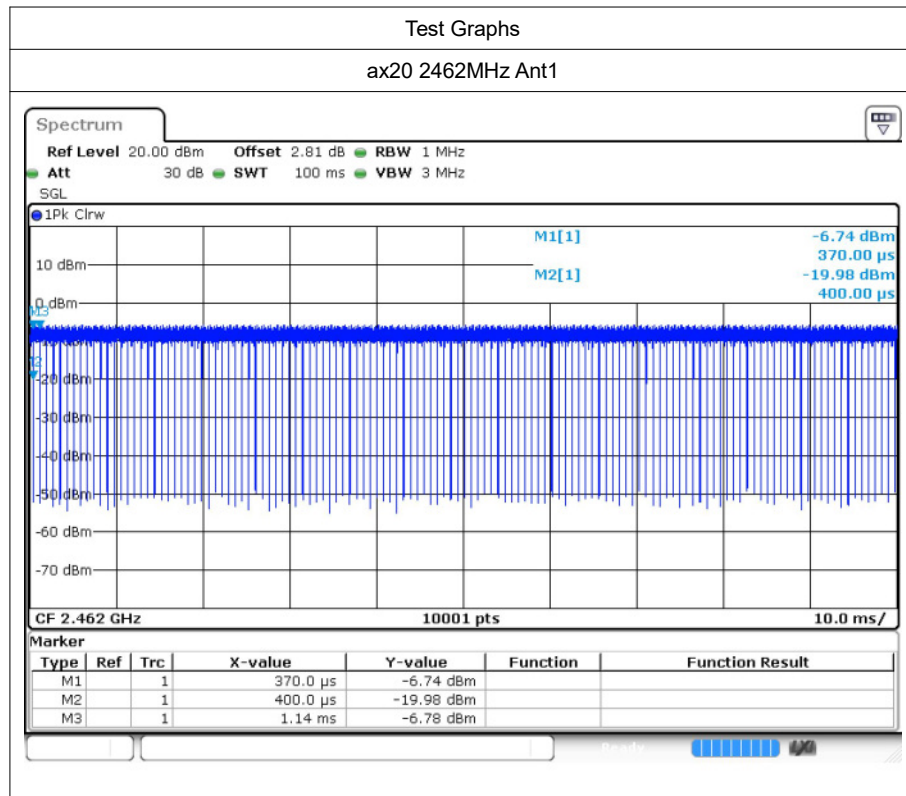












2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	7.84	30	Pass
b	2437	Ant1	8.15	30	Pass
b	2462	Ant1	7.8	30	Pass
g	2412	Ant1	7.57	30	Pass
g	2437	Ant1	7.79	30	Pass
g	2462	Ant1	7.14	30	Pass
n20	2412	Ant1	6.57	30	Pass
n20	2437	Ant1	7.02	30	Pass
n20	2462	Ant1	6.3	30	Pass
n40	2422	Ant1	7.29	30	Pass
n40	2437	Ant1	7.75	30	Pass
n40	2452	Ant1	7.53	30	Pass
ax20	2412	Ant1	7.23	30	Pass
ax20	2437	Ant1	7.44	30	Pass
ax20	2462	Ant1	6.7	30	Pass

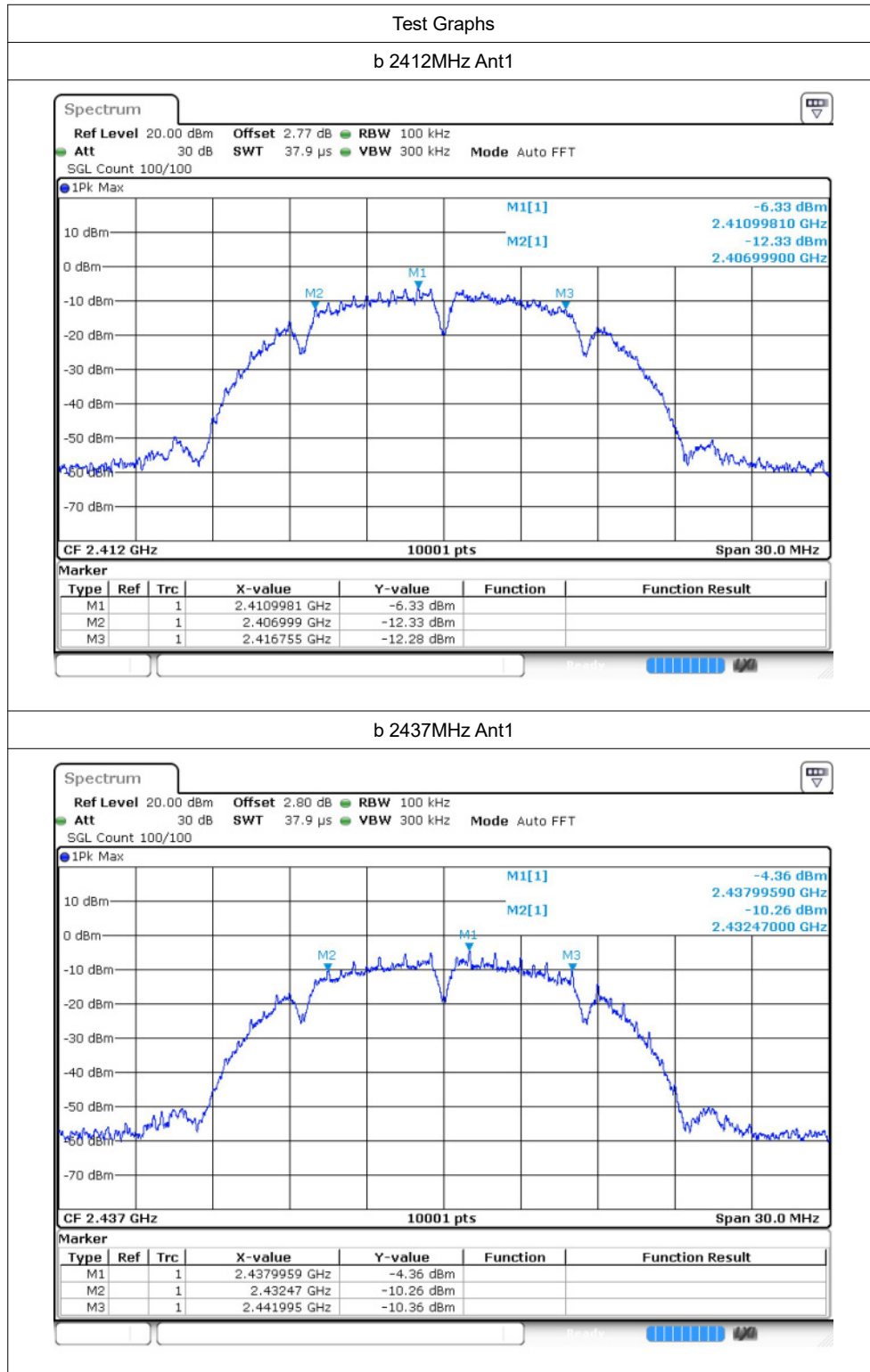


3 -6dB Bandwidth

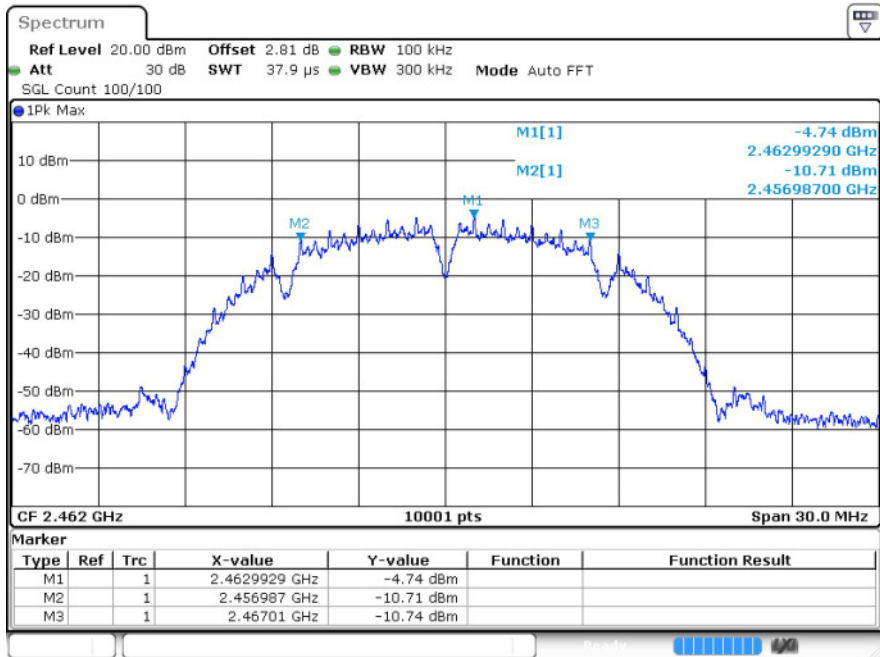
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	9.756	0.5	Pass
b	2437	Ant1	9.525	0.5	Pass
b	2462	Ant1	10.023	0.5	Pass
g	2412	Ant1	16.32	0.5	Pass
g	2437	Ant1	16.323	0.5	Pass
g	2462	Ant1	16.341	0.5	Pass
n20	2412	Ant1	16.884	0.5	Pass
n20	2437	Ant1	16.914	0.5	Pass
n20	2462	Ant1	17.04	0.5	Pass
n40	2422	Ant1	35.01	0.5	Pass
n40	2437	Ant1	34.98	0.5	Pass
n40	2452	Ant1	35.13	0.5	Pass
ax20	2412	Ant1	18.897	0.5	Pass
ax20	2437	Ant1	18.708	0.5	Pass
ax20	2462	Ant1	18.84	0.5	Pass

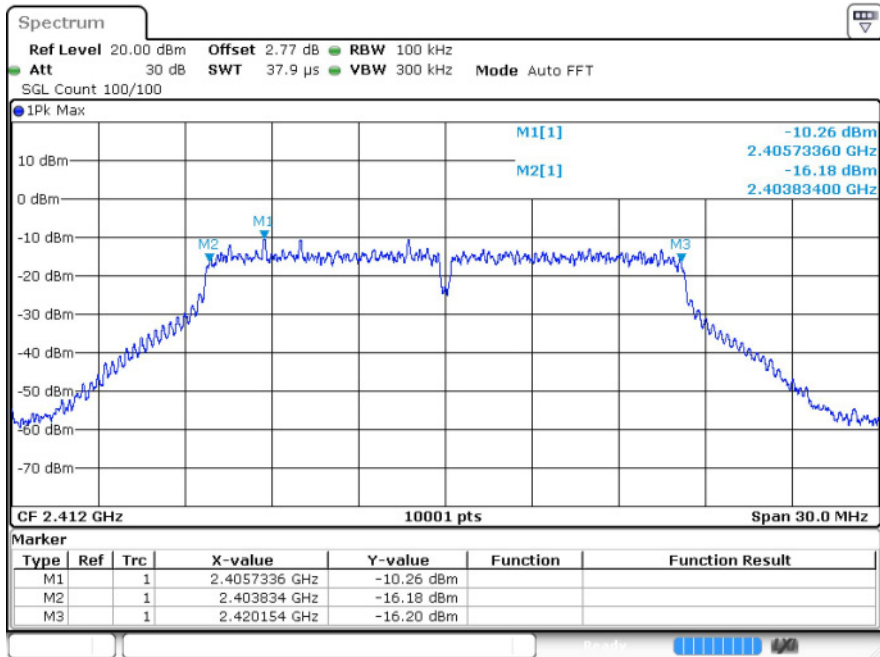
3.2 Test Graphs

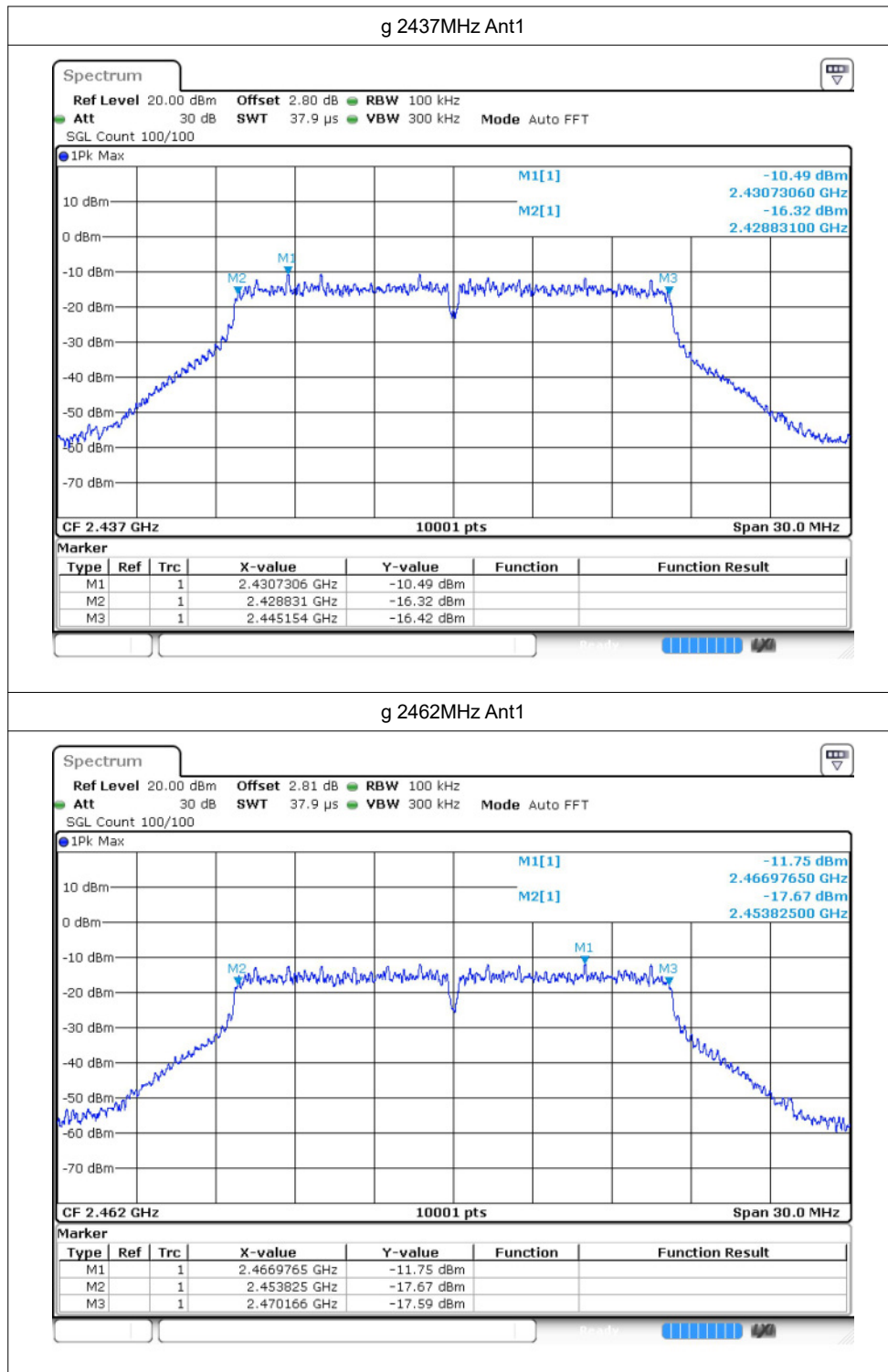


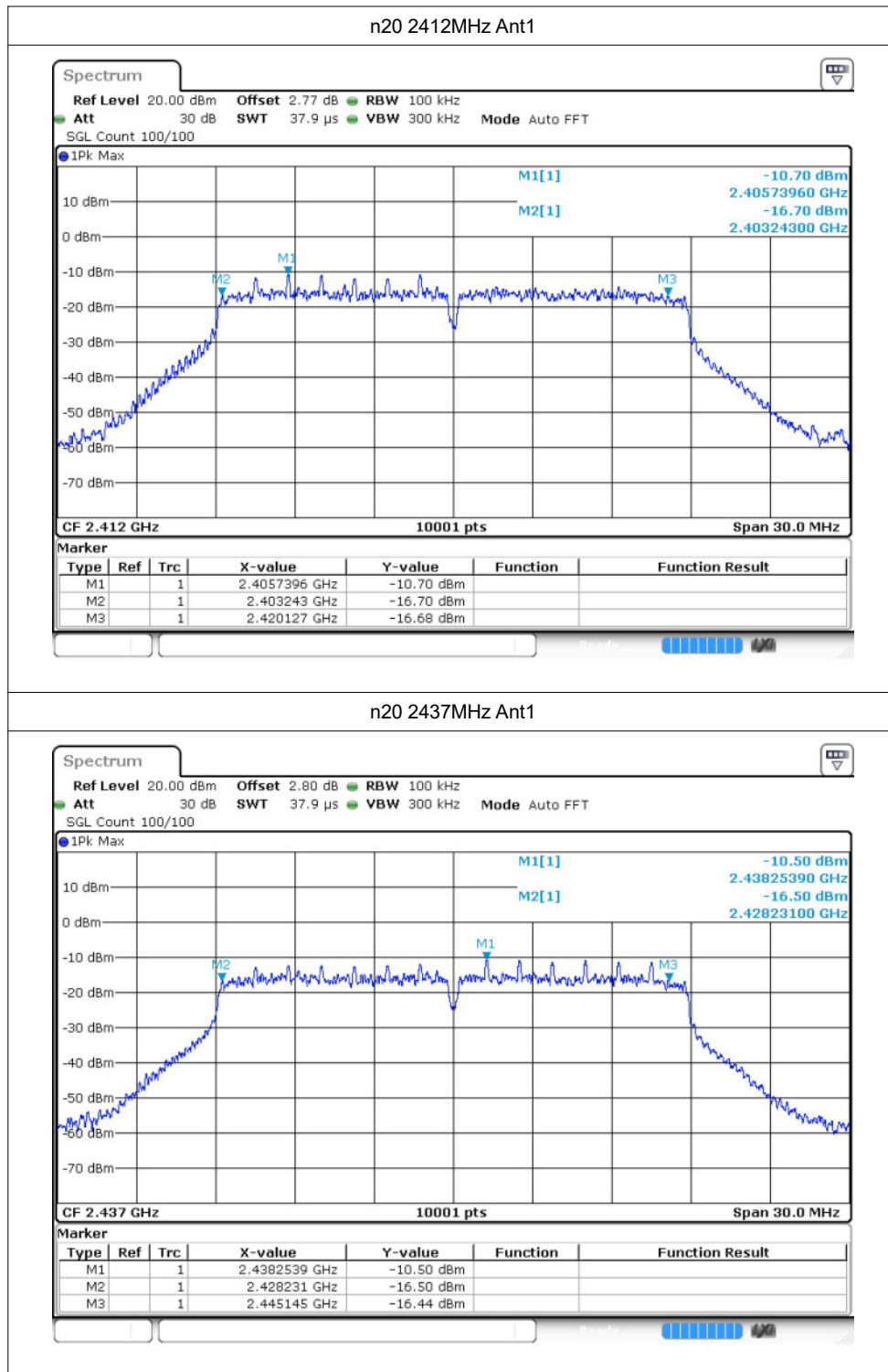
b 2462MHz Ant1

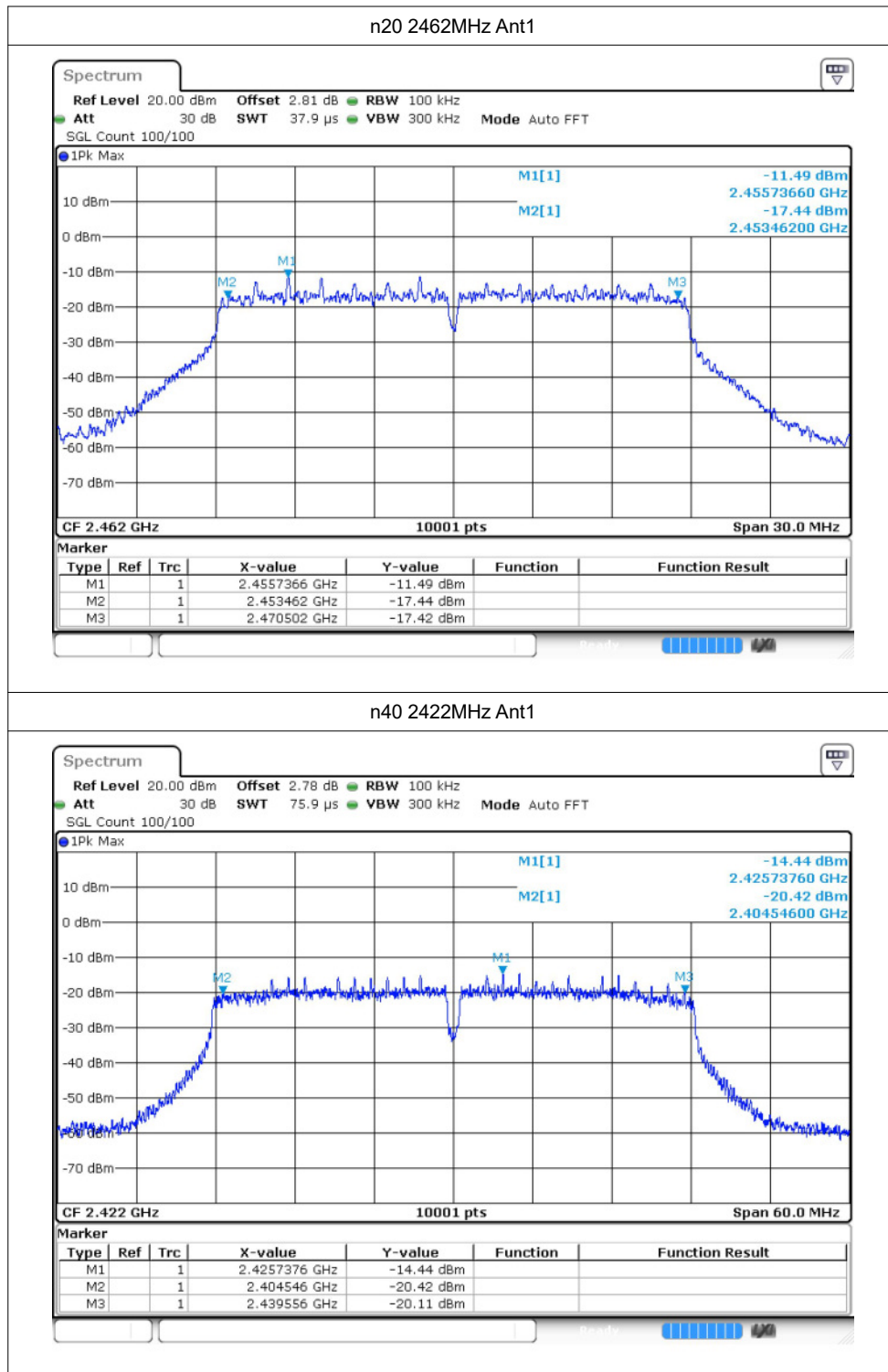


g 2412MHz Ant1

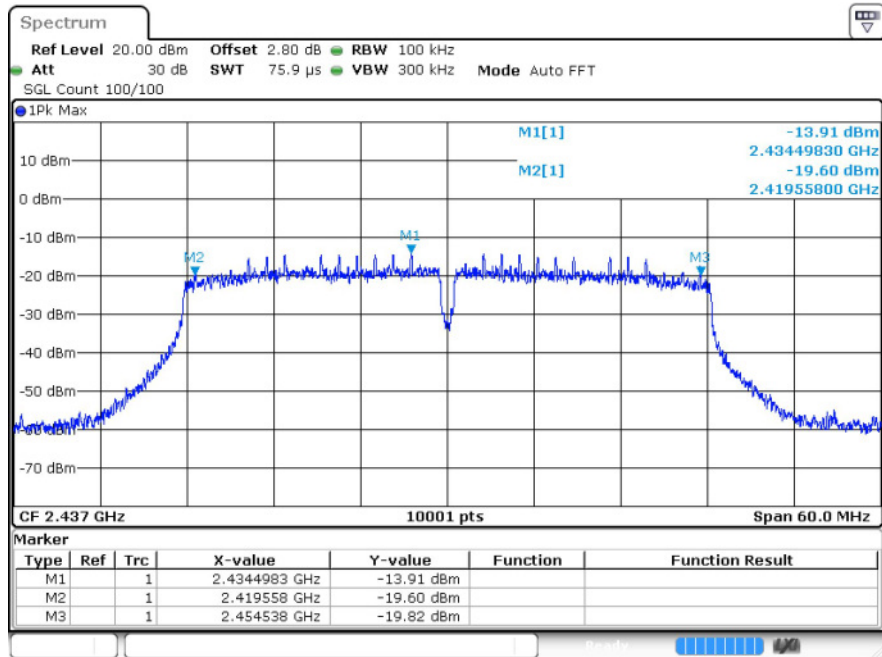




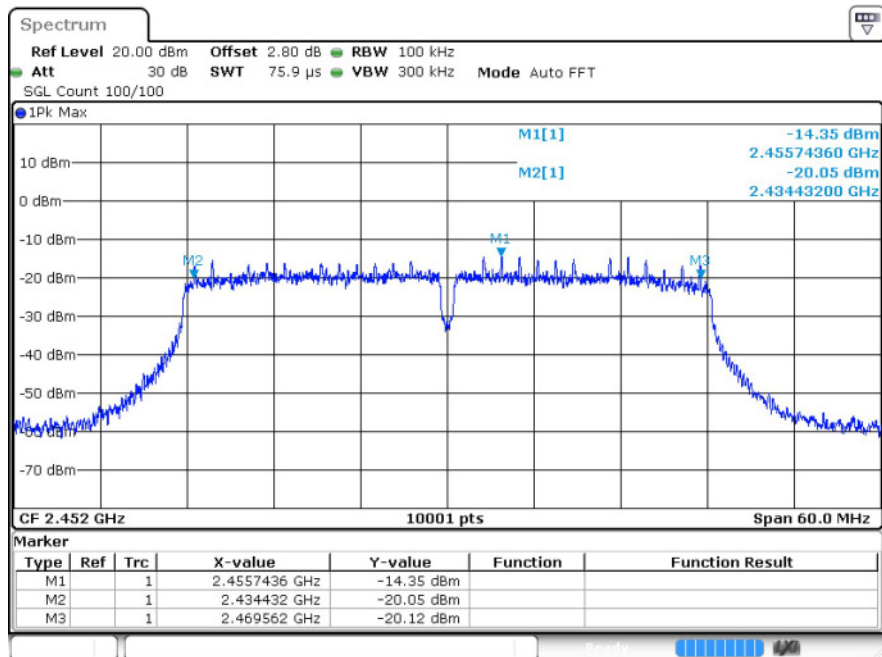




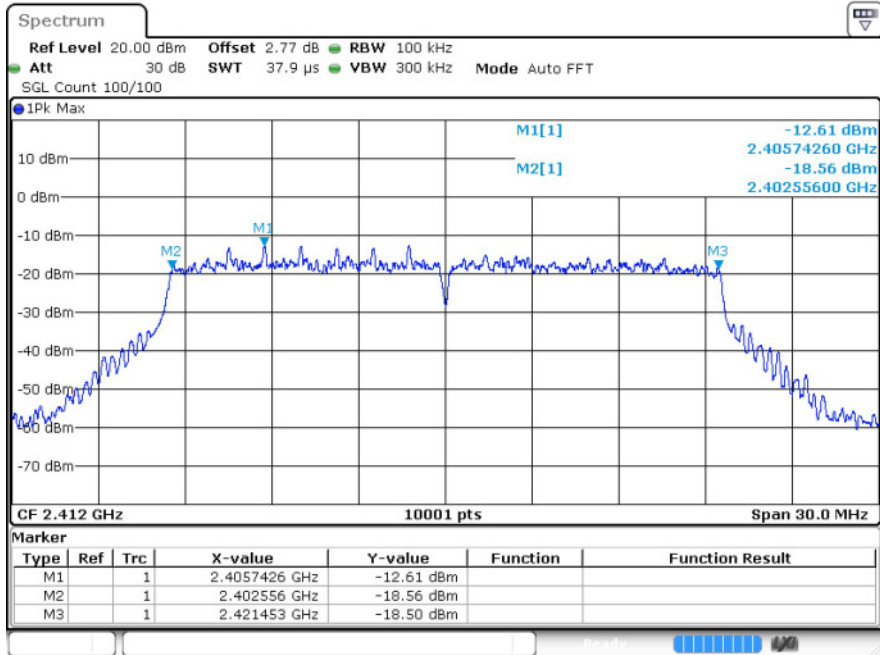
n40 2437MHz Ant1



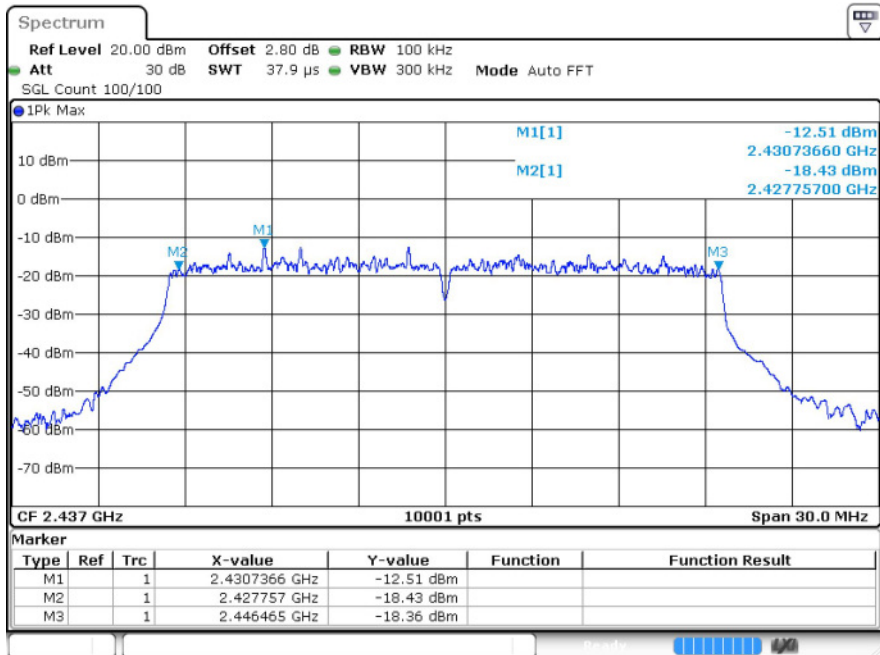
n40 2452MHz Ant1

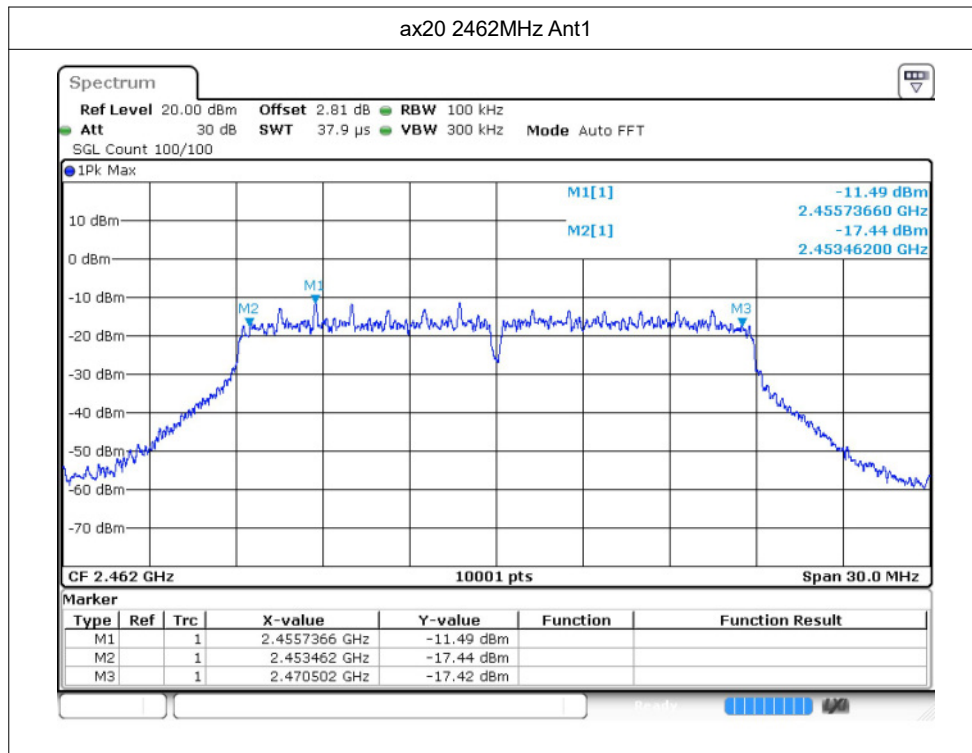


ax20 2412MHz Ant1



ax20 2437MHz Ant1



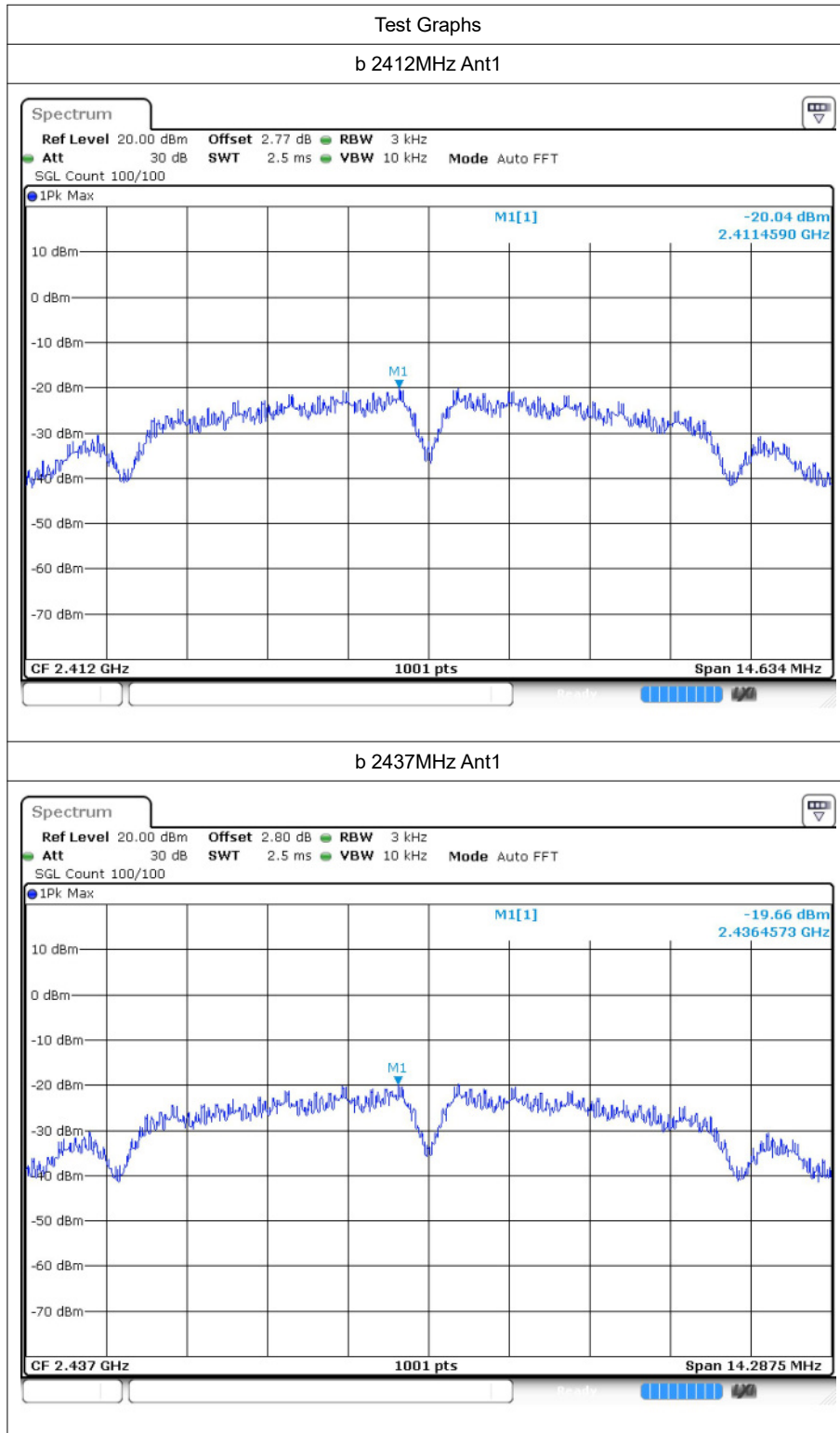


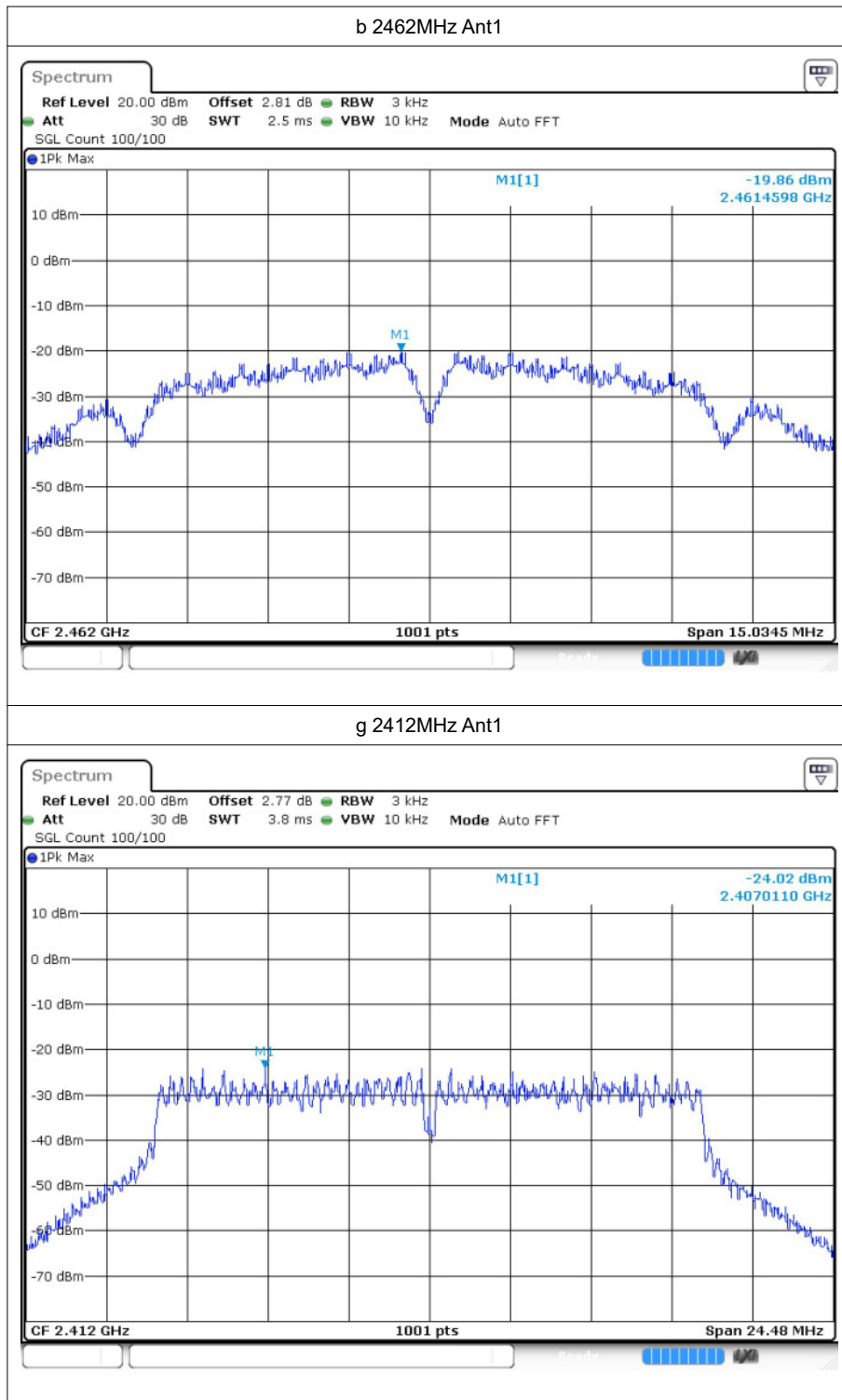
4 Maximum Power Spectral Density Level

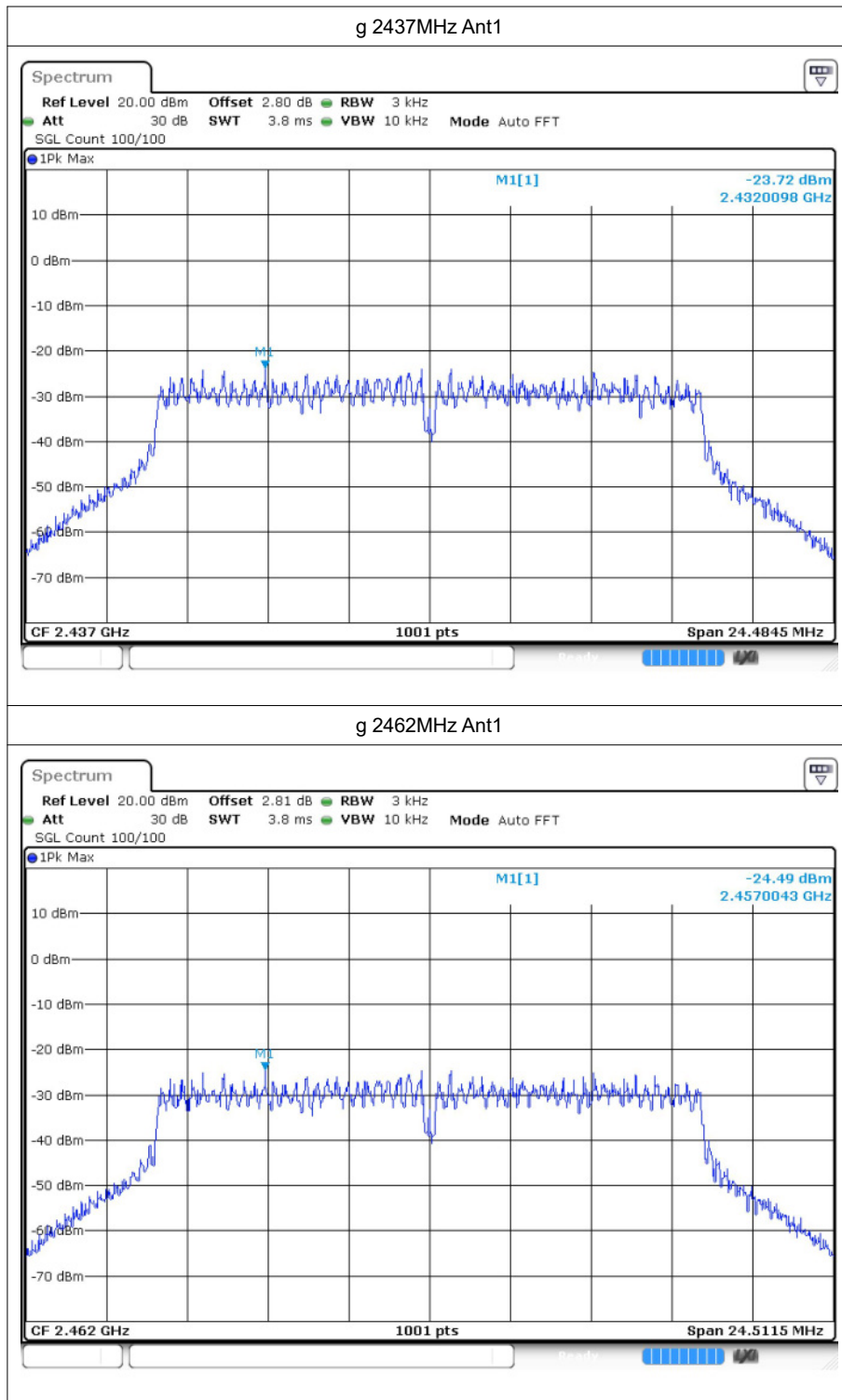
4.1 Test Result

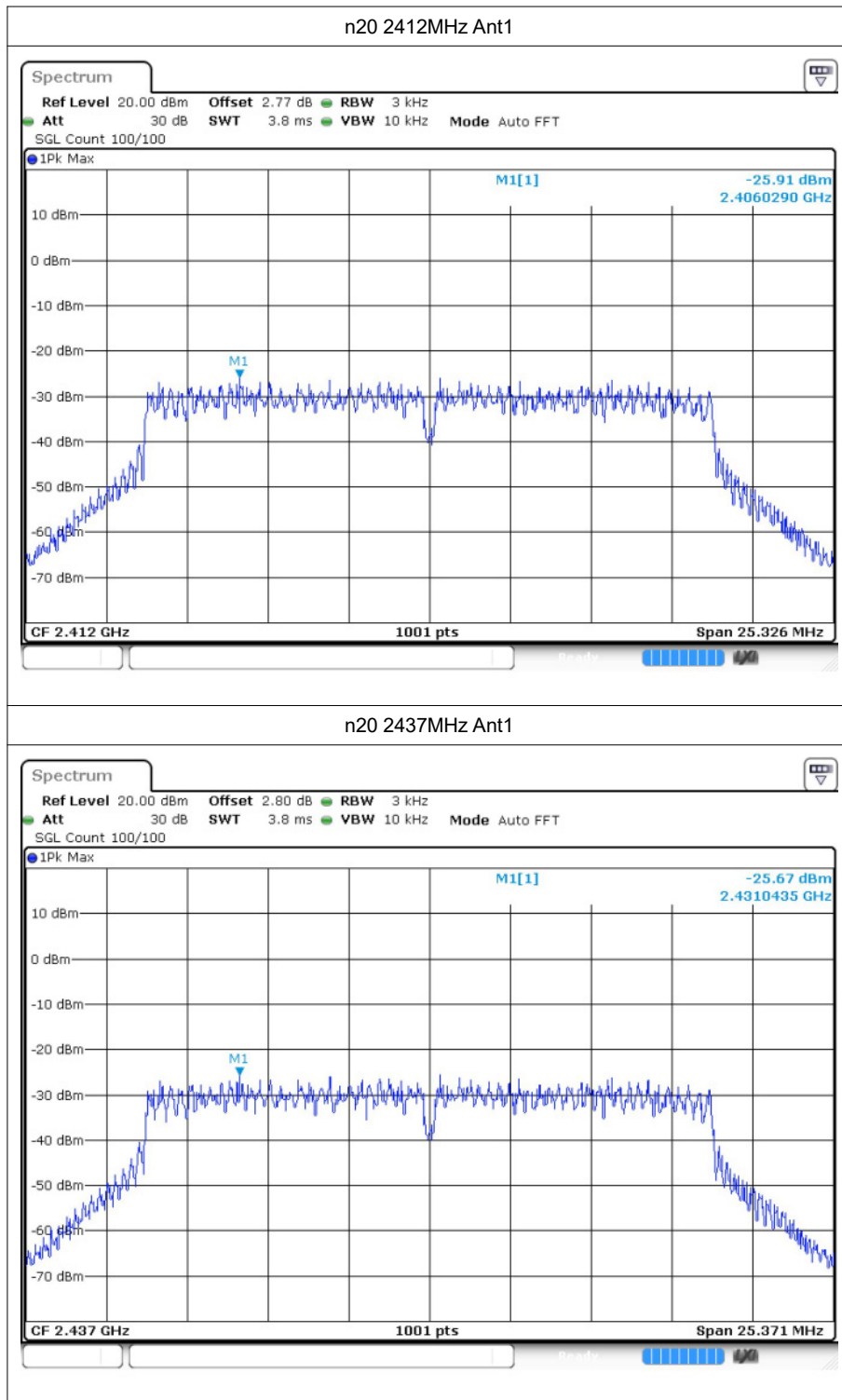
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-20.04	≤8	Pass
b	2437	Ant1	-19.66	≤8	Pass
b	2462	Ant1	-19.86	≤8	Pass
g	2412	Ant1	-24.02	≤8	Pass
g	2437	Ant1	-23.72	≤8	Pass
g	2462	Ant1	-24.49	≤8	Pass
n20	2412	Ant1	-25.91	≤8	Pass
n20	2437	Ant1	-25.67	≤8	Pass
n20	2462	Ant1	-26.45	≤8	Pass
n40	2422	Ant1	-28.41	≤8	Pass
n40	2437	Ant1	-28.05	≤8	Pass
n40	2452	Ant1	-28.41	≤8	Pass
ax20	2412	Ant1	-14.88	≤8	Pass
ax20	2437	Ant1	-13.29	≤8	Pass
ax20	2462	Ant1	-12.99	≤8	Pass

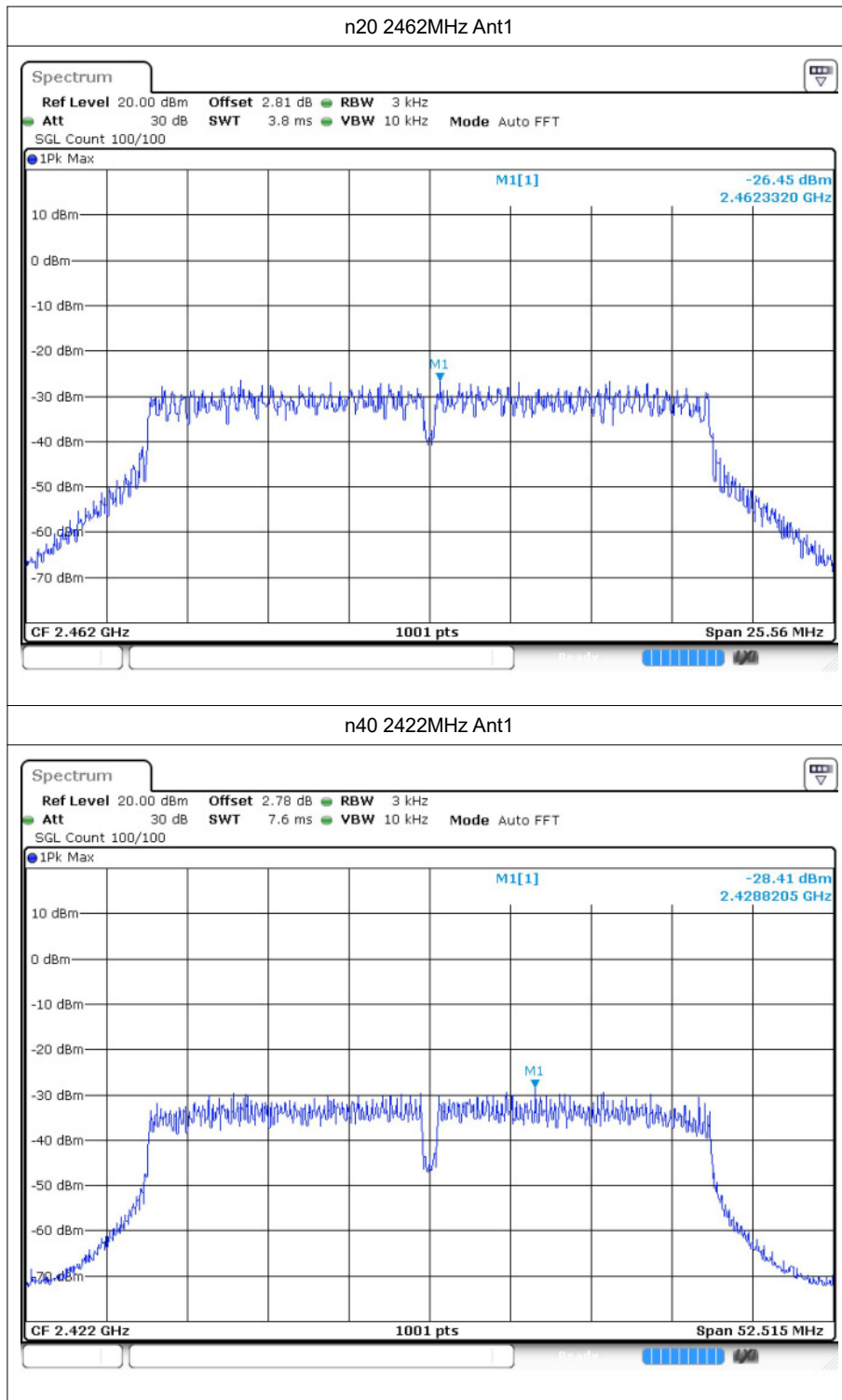
4.2 Test Graphs

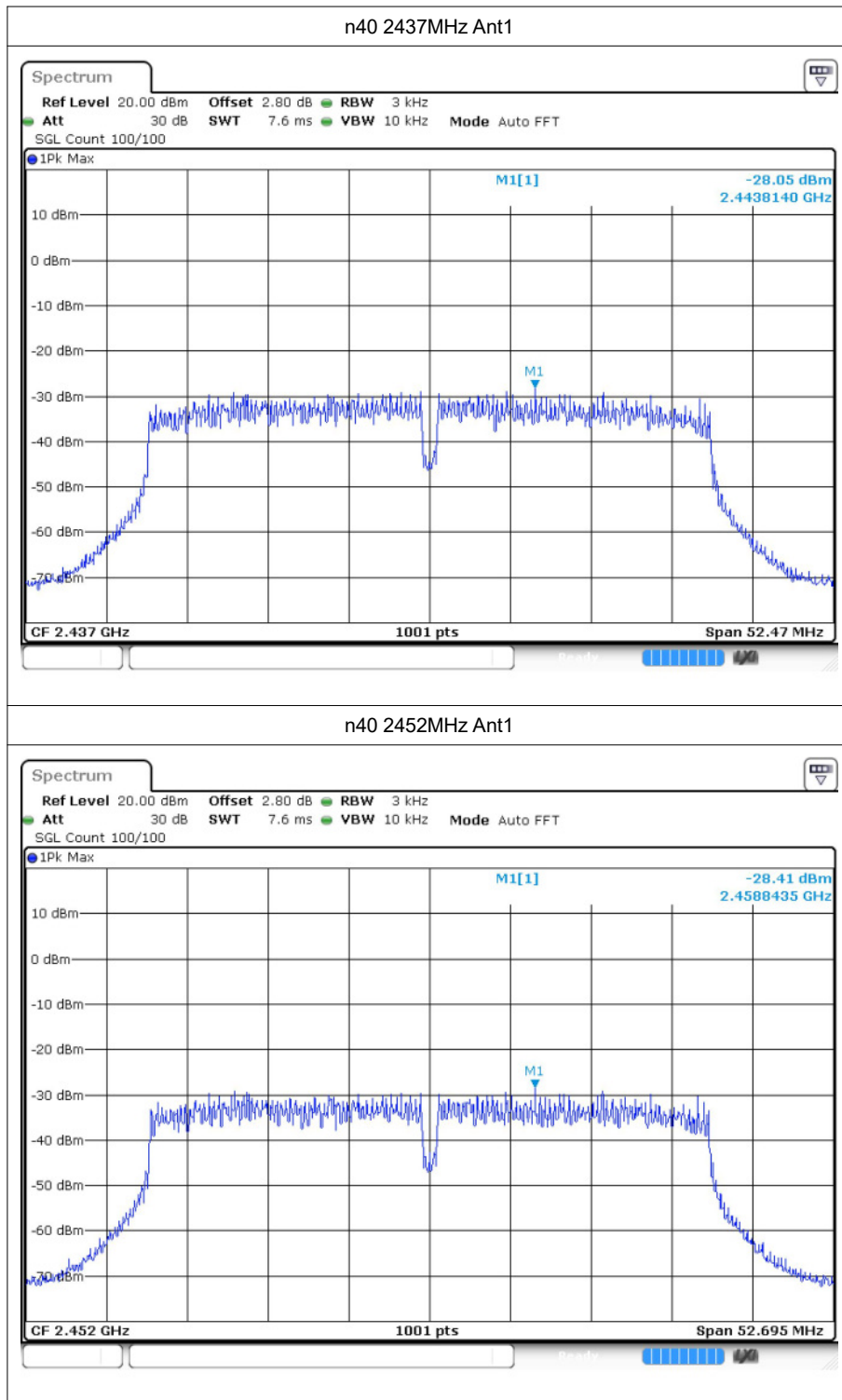


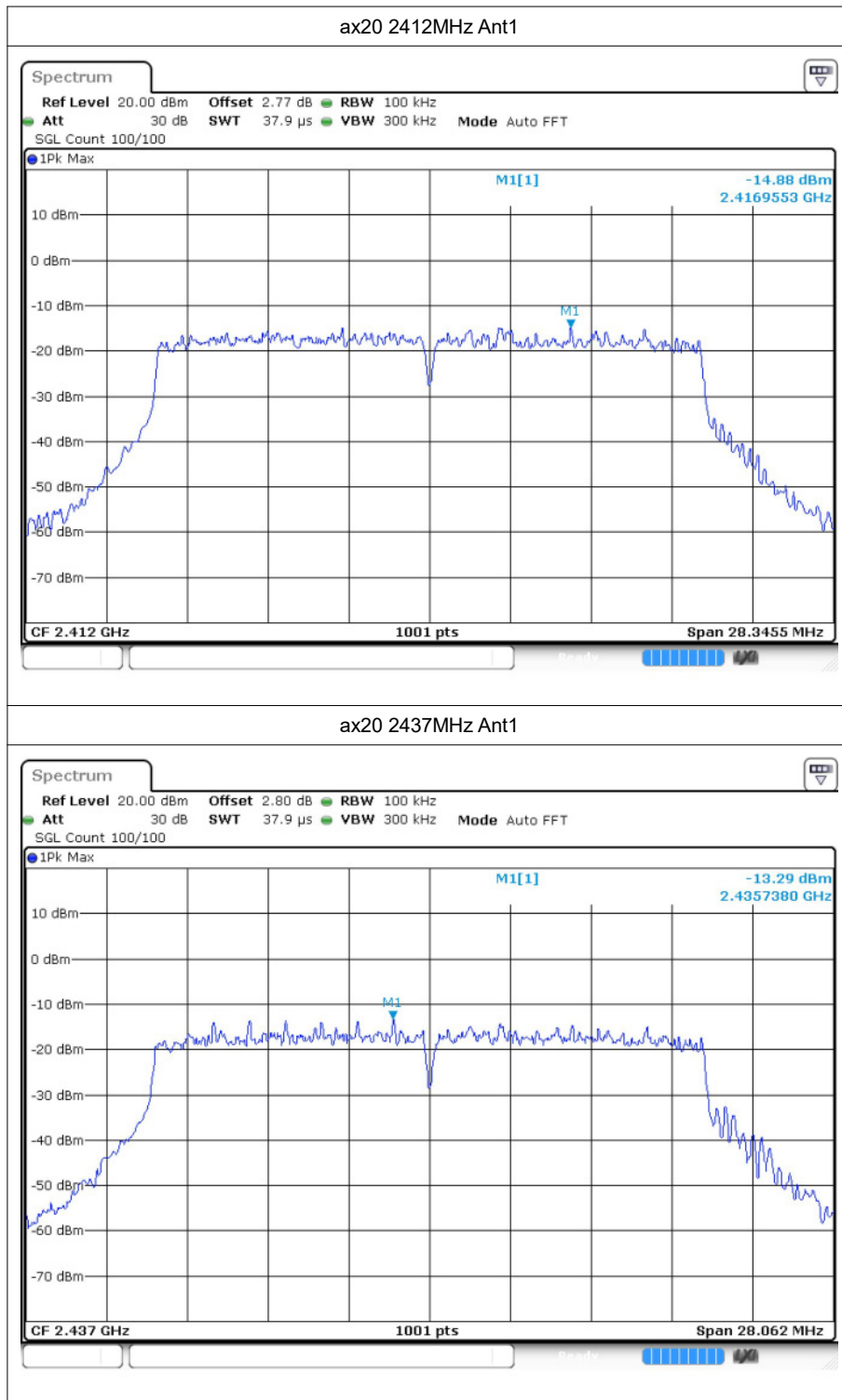


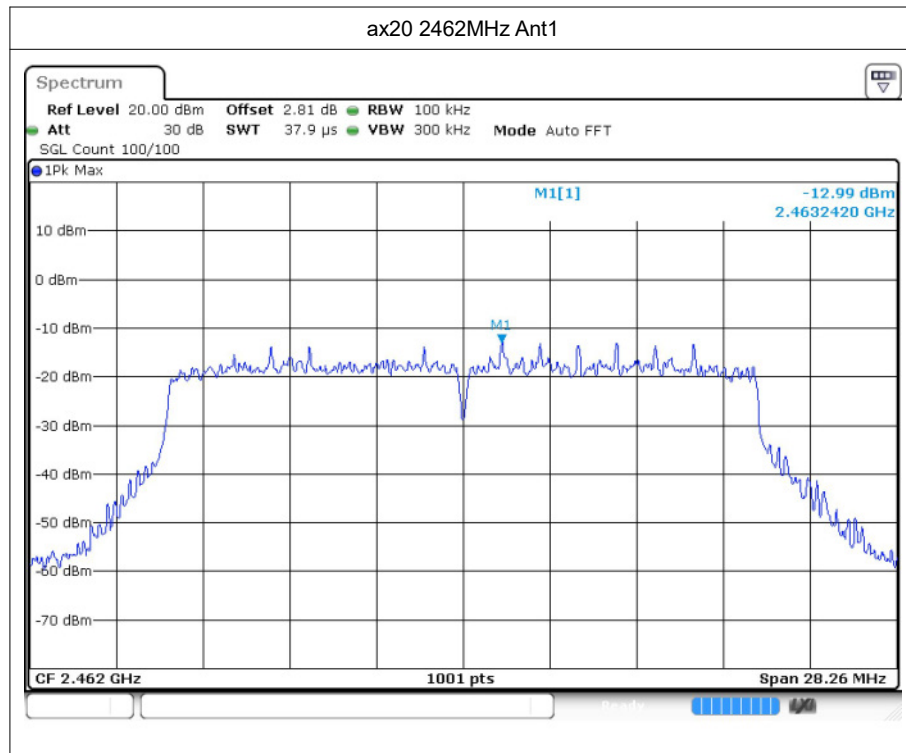














5 Band Edge

5.1 Test Result

Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-48.95	-20	Pass
b	2462	Ant1	-51.94	-20	Pass
g	2412	Ant1	-44.73	-20	Pass
g	2462	Ant1	-44.79	-20	Pass
n20	2412	Ant1	-42.12	-20	Pass
n20	2462	Ant1	-42.55	-20	Pass
n40	2422	Ant1	-40.9	-20	Pass
n40	2452	Ant1	-40.08	-20	Pass
ax20	2412	Ant1	-41.66	-20	Pass
ax20	2462	Ant1	-42.68	-20	Pass

5.2 Test Graphs

