



## Appendix C

### RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Hd Smart camera

Trade Mark: N/A

Test Model: CG-Q821A

#### Environmental Conditions

Temperature:	25.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



# Contents

	Page
<b>COVER PAGE</b>	
1 Duty Cycle .....	3
1.1 Test Result .....	3
1.2 Test Graphs .....	4
2 Maximum Conducted Output Power .....	10
2.1 Test Result .....	10
3 -6dB Bandwidth .....	11
3.1 Test Result .....	11
3.2 Test Graphs .....	12
4 Maximum Power Spectral Density Level .....	18
4.1 Test Result .....	18
4.2 Test Graphs .....	19
5 Band Edge .....	25
5.1 Test Result .....	25
5.2 Test Graphs .....	26
6 Conducted RF Spurious Emission .....	34
6.1 Test Result .....	34
6.2 Test Graphs .....	35
7 Restrict Band .....	47
7.1 Test Result .....	47
7.2 Test Graphs .....	49



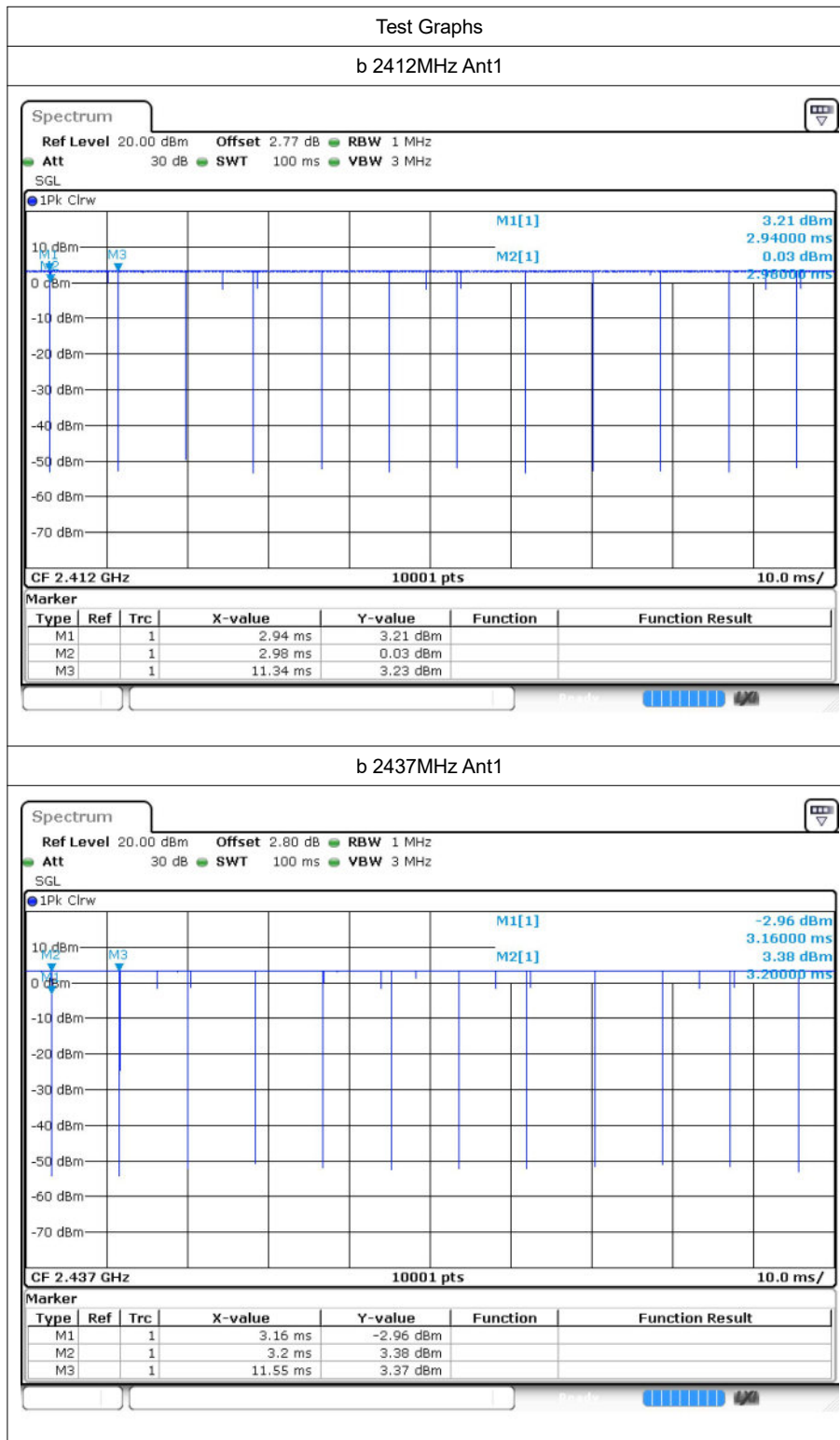
# 1 Duty Cycle

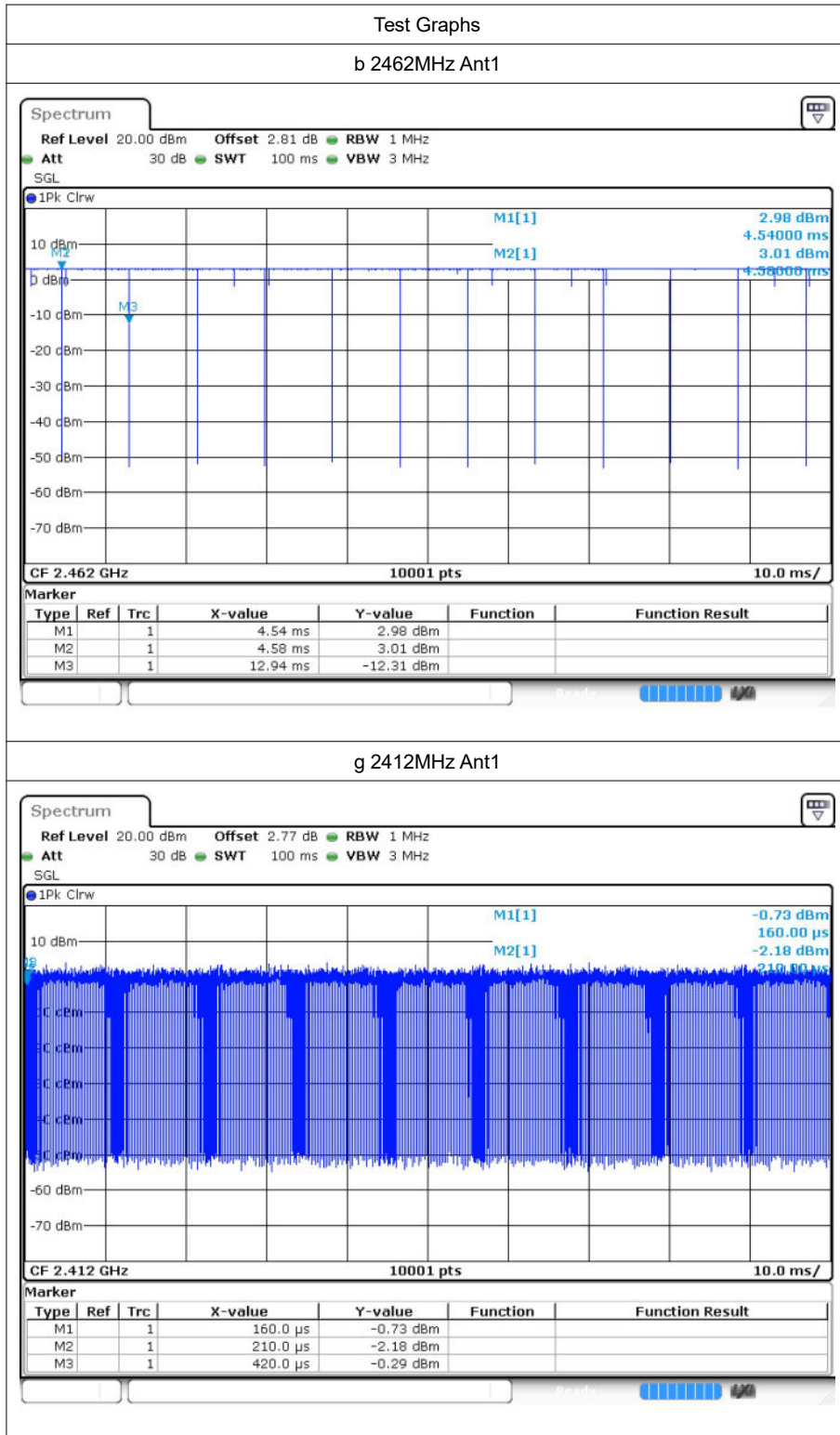
## 1.1 Test Result

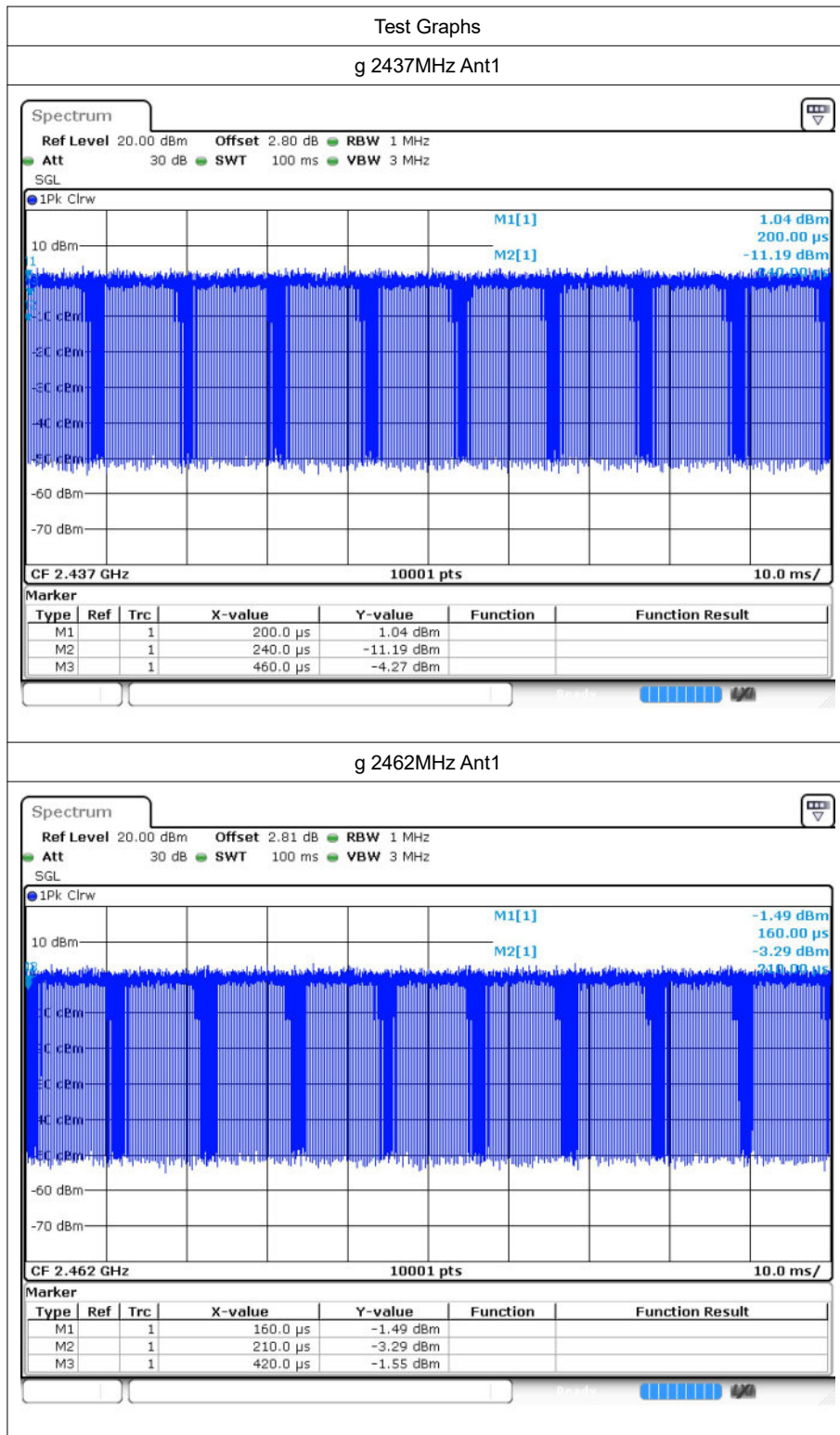
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
b	2412	Ant1	99.6	0.12
b	2437	Ant1	99.6	0.12
b	2462	Ant1	99.62	0.12
g	2412	Ant1	86.86	4.76
g	2437	Ant1	86.94	4.55
g	2462	Ant1	86.89	4.76
n20	2412	Ant1	87.6	4.17
n20	2437	Ant1	87.58	4.17
n20	2462	Ant1	87.53	4.35
n40	2422	Ant1	88.03	4.17
n40	2437	Ant1	88.03	4.17
n40	2452	Ant1	88.01	4.17

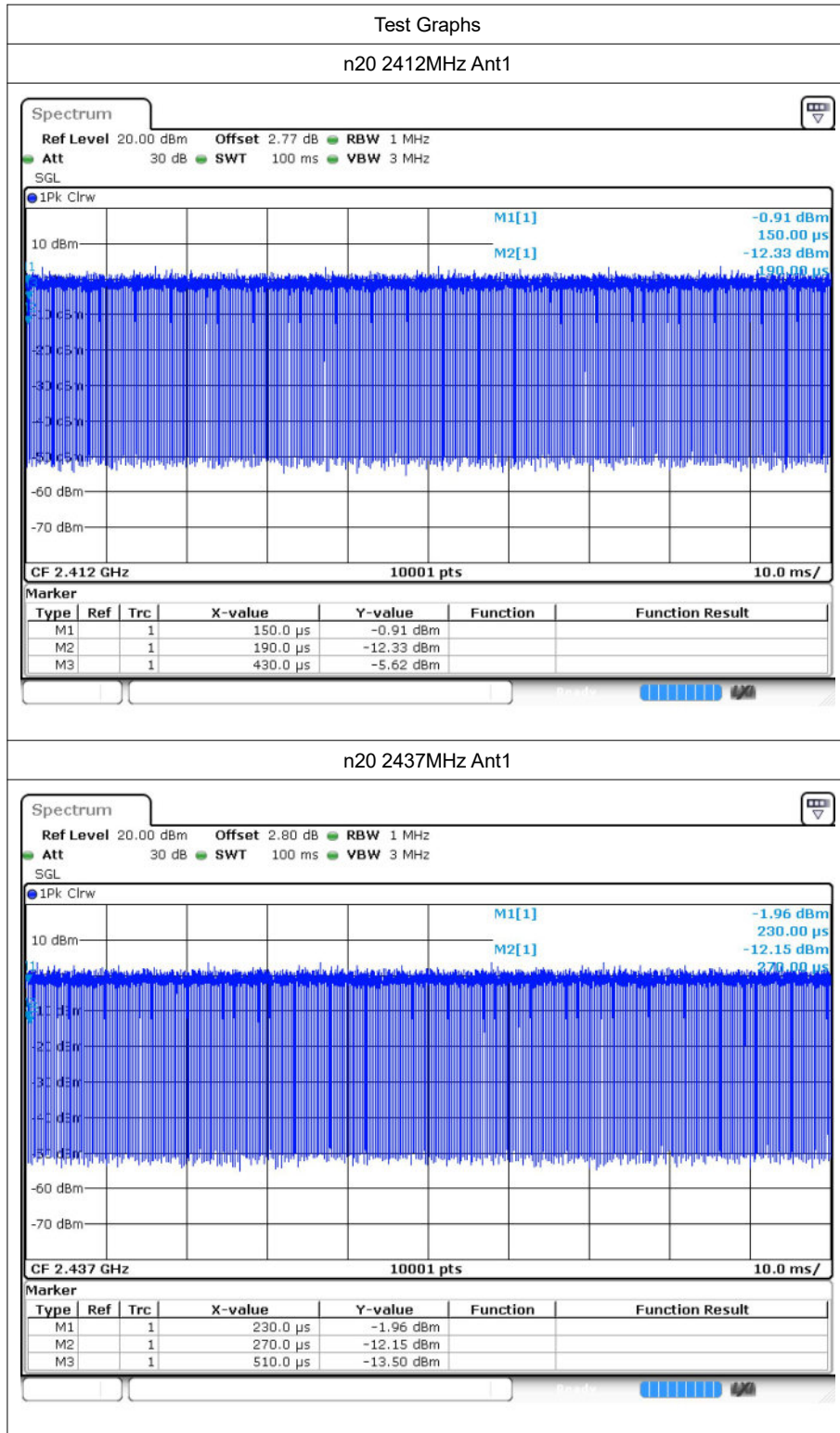


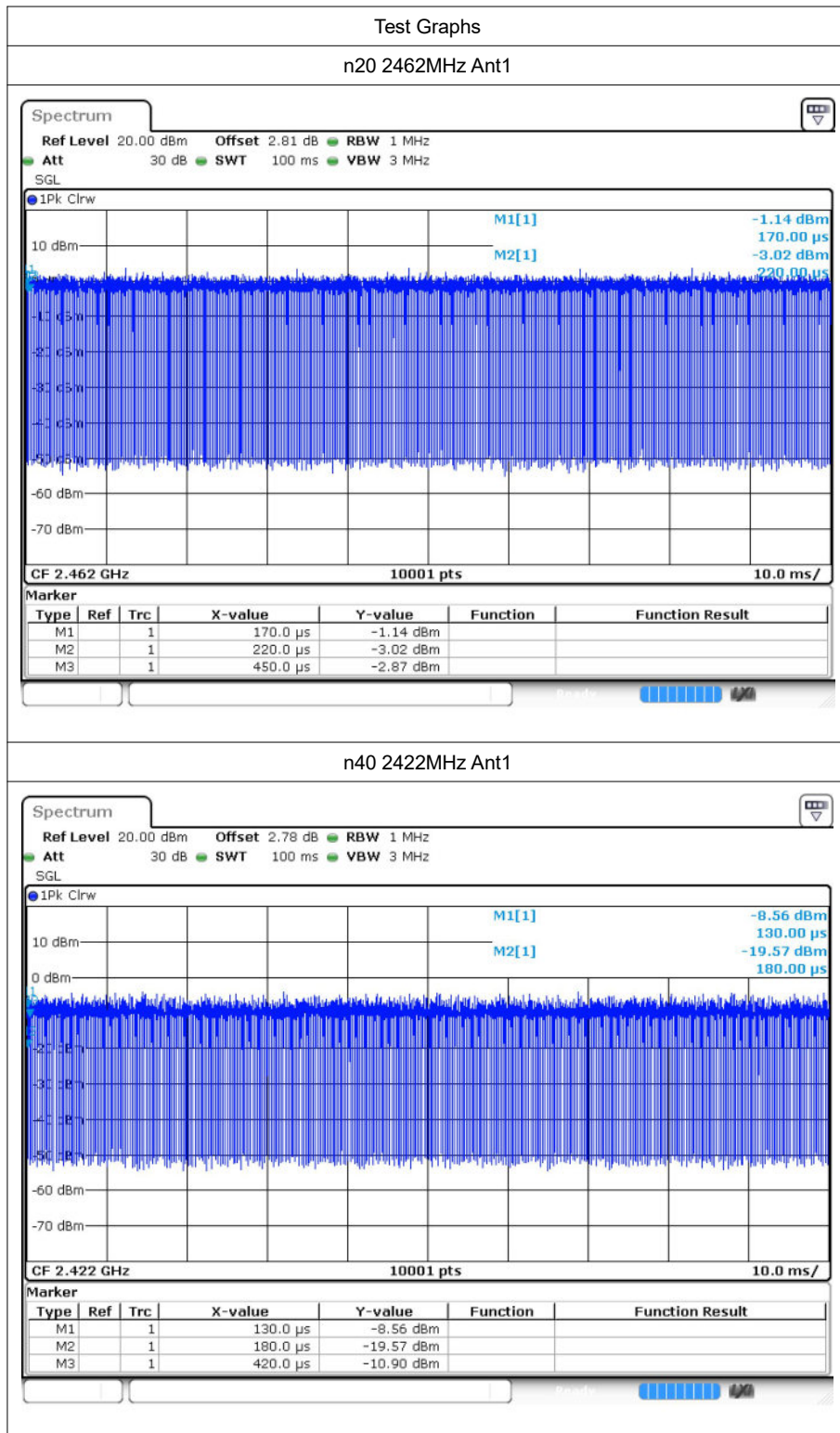
## 1.2 Test Graphs



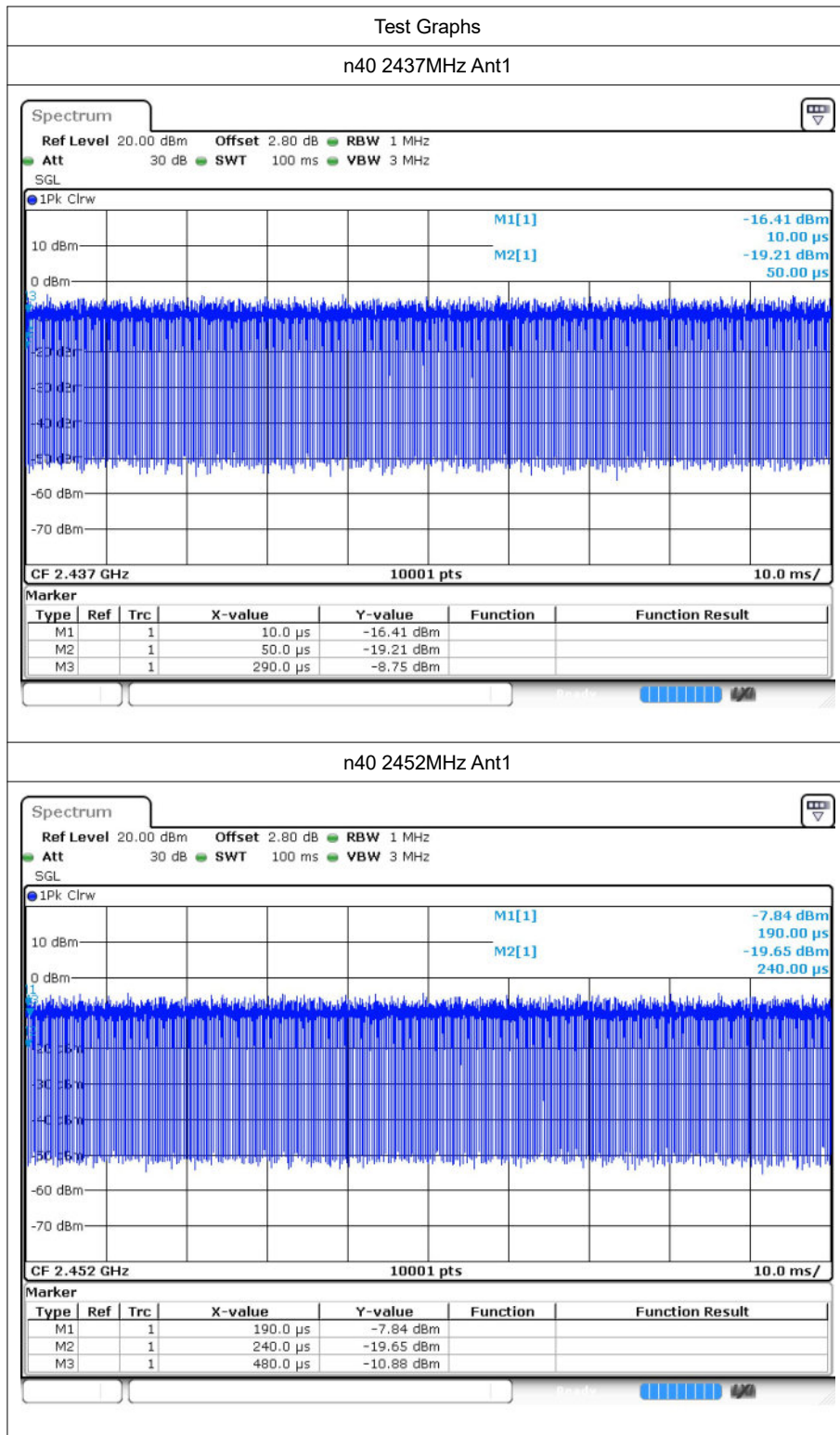














## 2 Maximum Conducted Output Power

### 2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	13.76	30	Pass
b	2437	Ant1	13.79	30	Pass
b	2462	Ant1	13.52	30	Pass
g	2412	Ant1	13.25	30	Pass
g	2437	Ant1	13.26	30	Pass
g	2462	Ant1	12.96	30	Pass
n20	2412	Ant1	12.64	30	Pass
n20	2437	Ant1	12.74	30	Pass
n20	2462	Ant1	12.34	30	Pass
n40	2422	Ant1	12.37	30	Pass
n40	2437	Ant1	12.26	30	Pass
n40	2452	Ant1	12.07	30	Pass

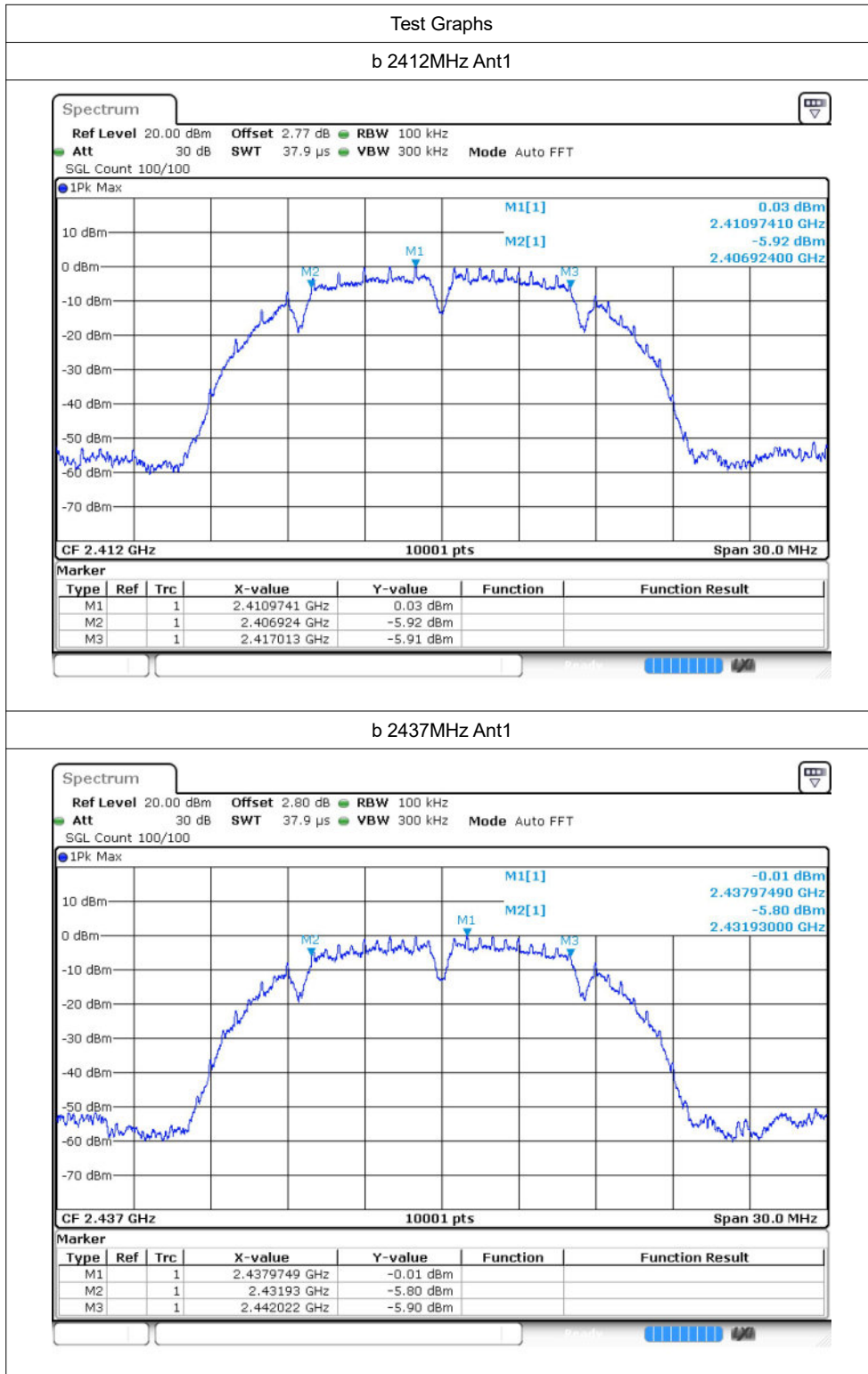


### 3 -6dB Bandwidth

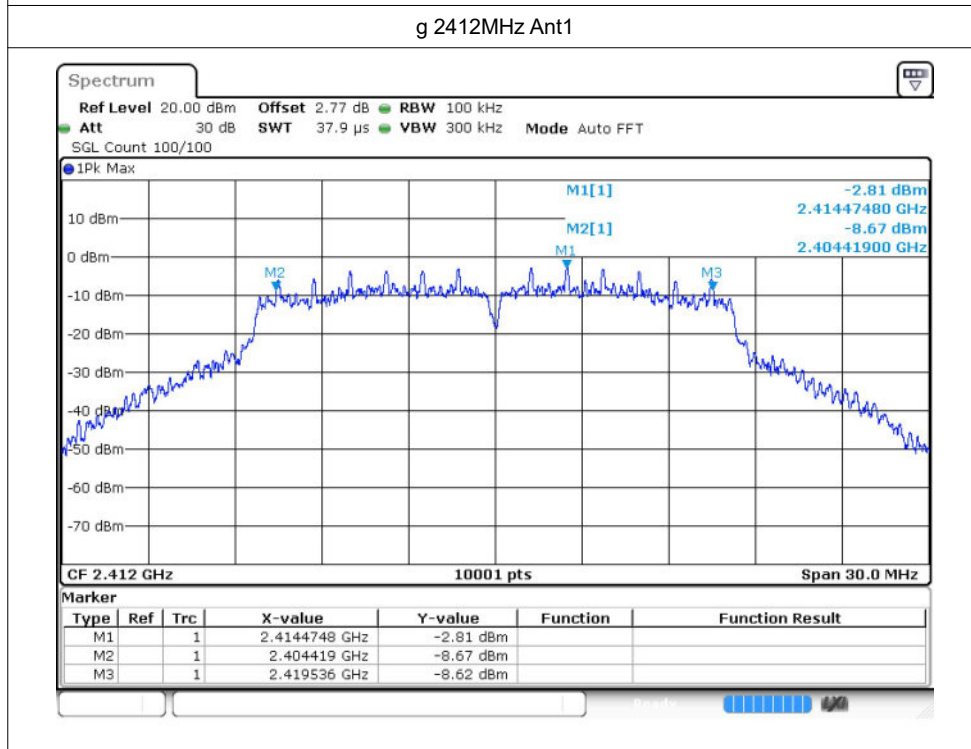
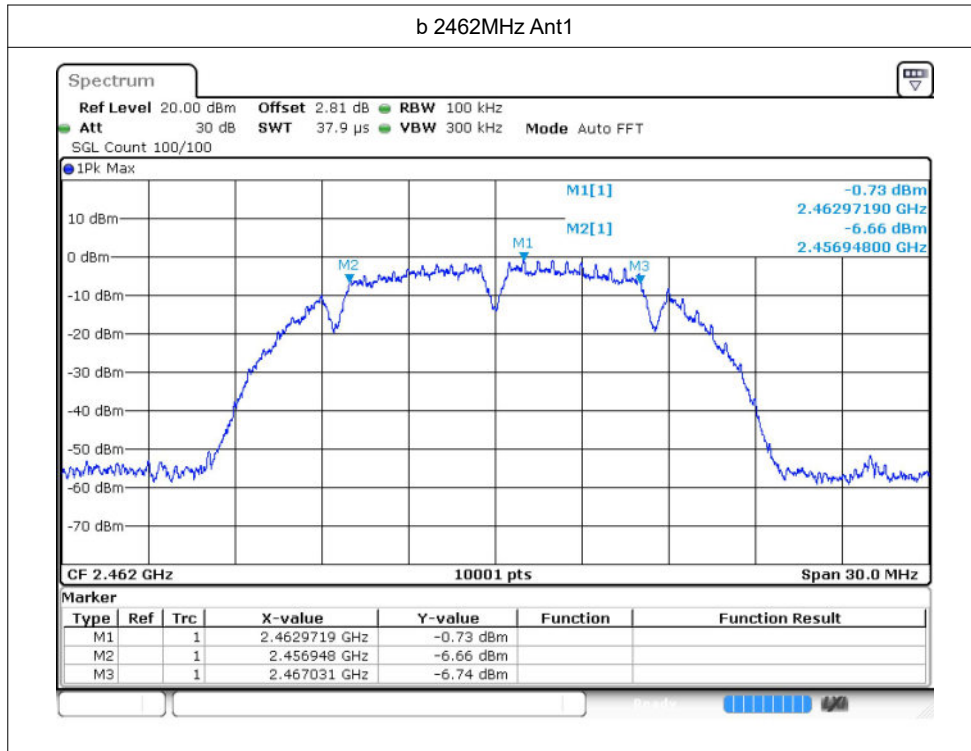
#### 3.1 Test Result

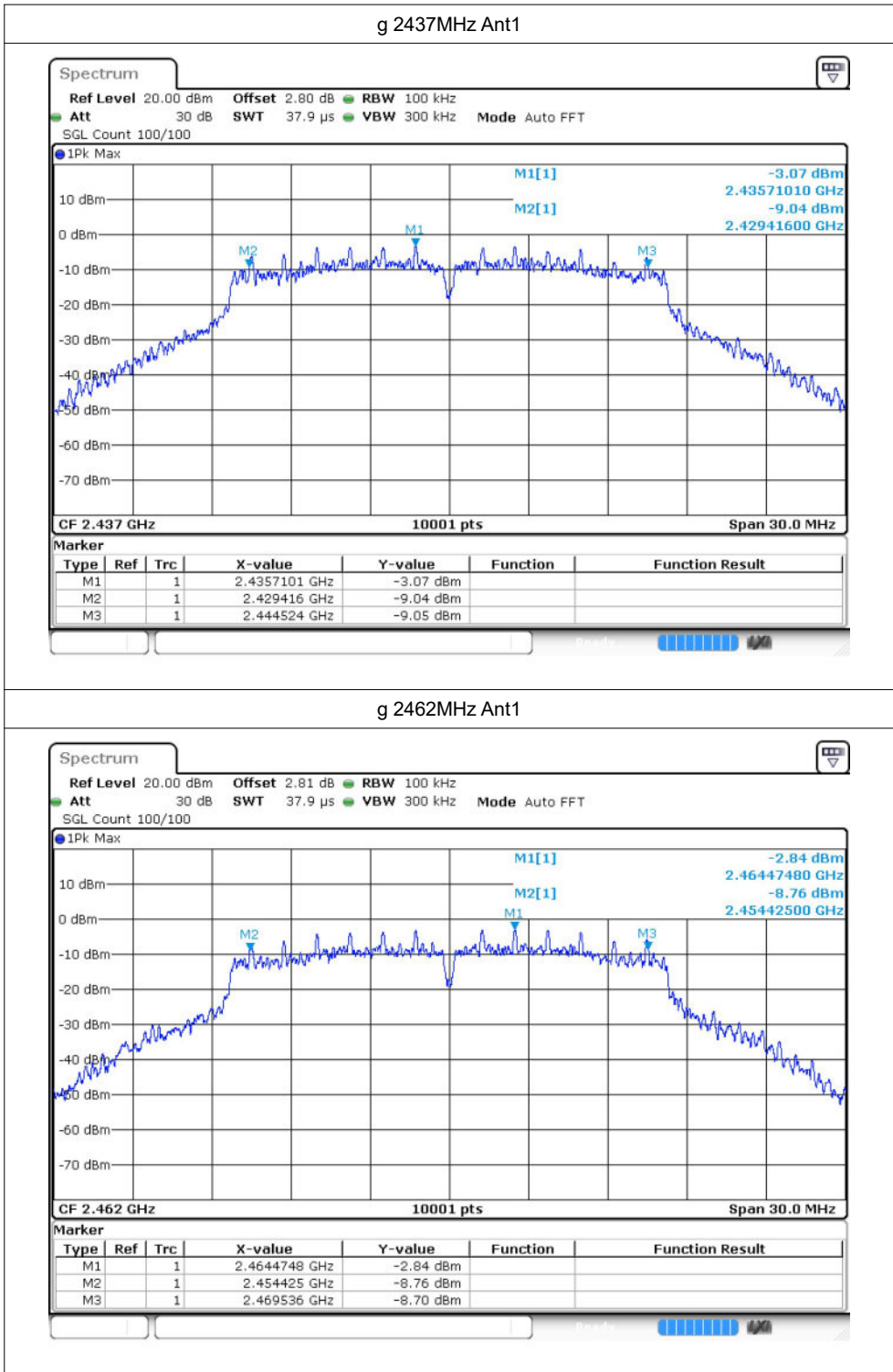
Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	10.089	0.5	Pass
b	2437	Ant1	10.092	0.5	Pass
b	2462	Ant1	10.083	0.5	Pass
g	2412	Ant1	15.117	0.5	Pass
g	2437	Ant1	15.108	0.5	Pass
g	2462	Ant1	15.111	0.5	Pass
n20	2412	Ant1	15.129	0.5	Pass
n20	2437	Ant1	15.111	0.5	Pass
n20	2462	Ant1	15.066	0.5	Pass
n40	2422	Ant1	35.064	0.5	Pass
n40	2437	Ant1	35.022	0.5	Pass
n40	2452	Ant1	33.834	0.5	Pass

### 3.2 Test Graphs

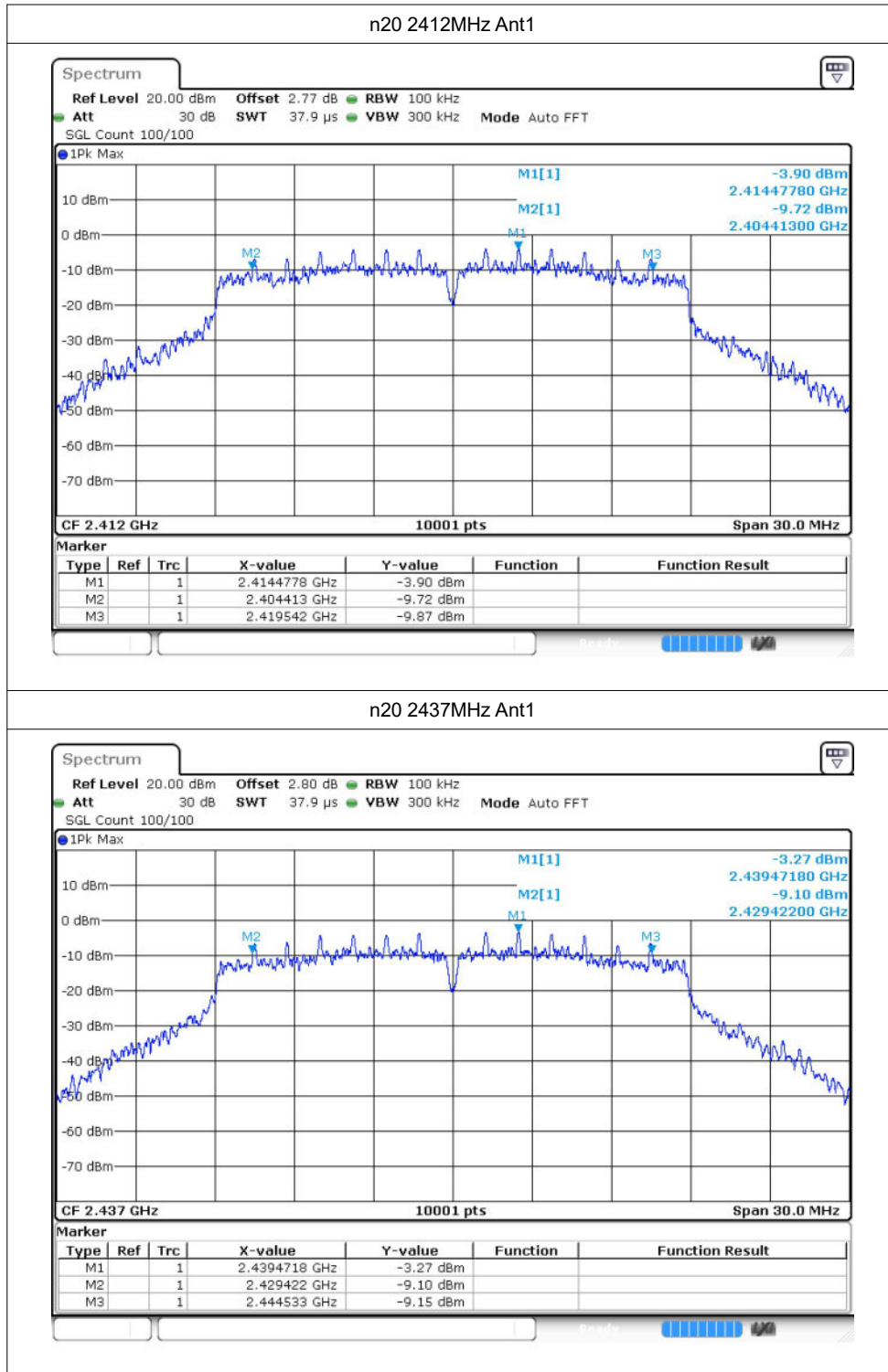


b 2437MHz Ant1

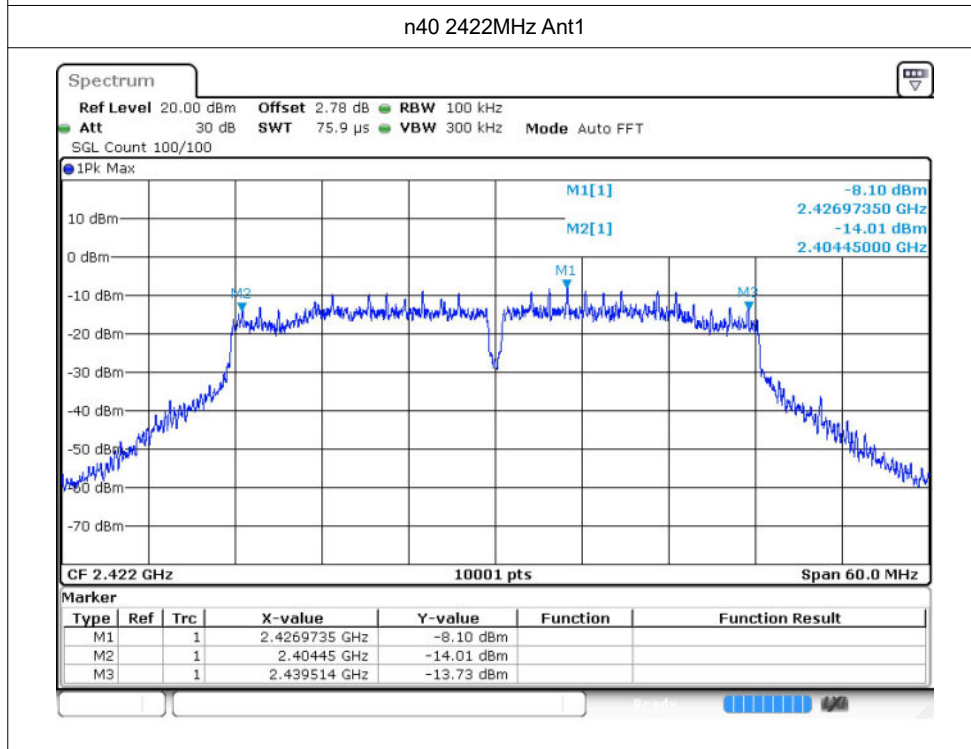
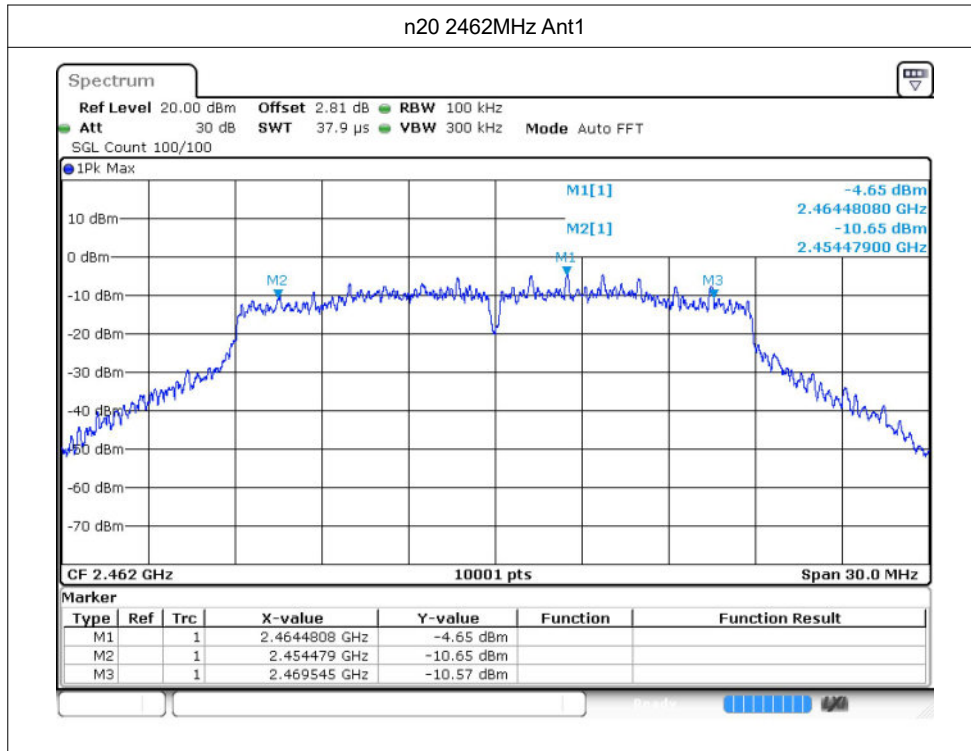




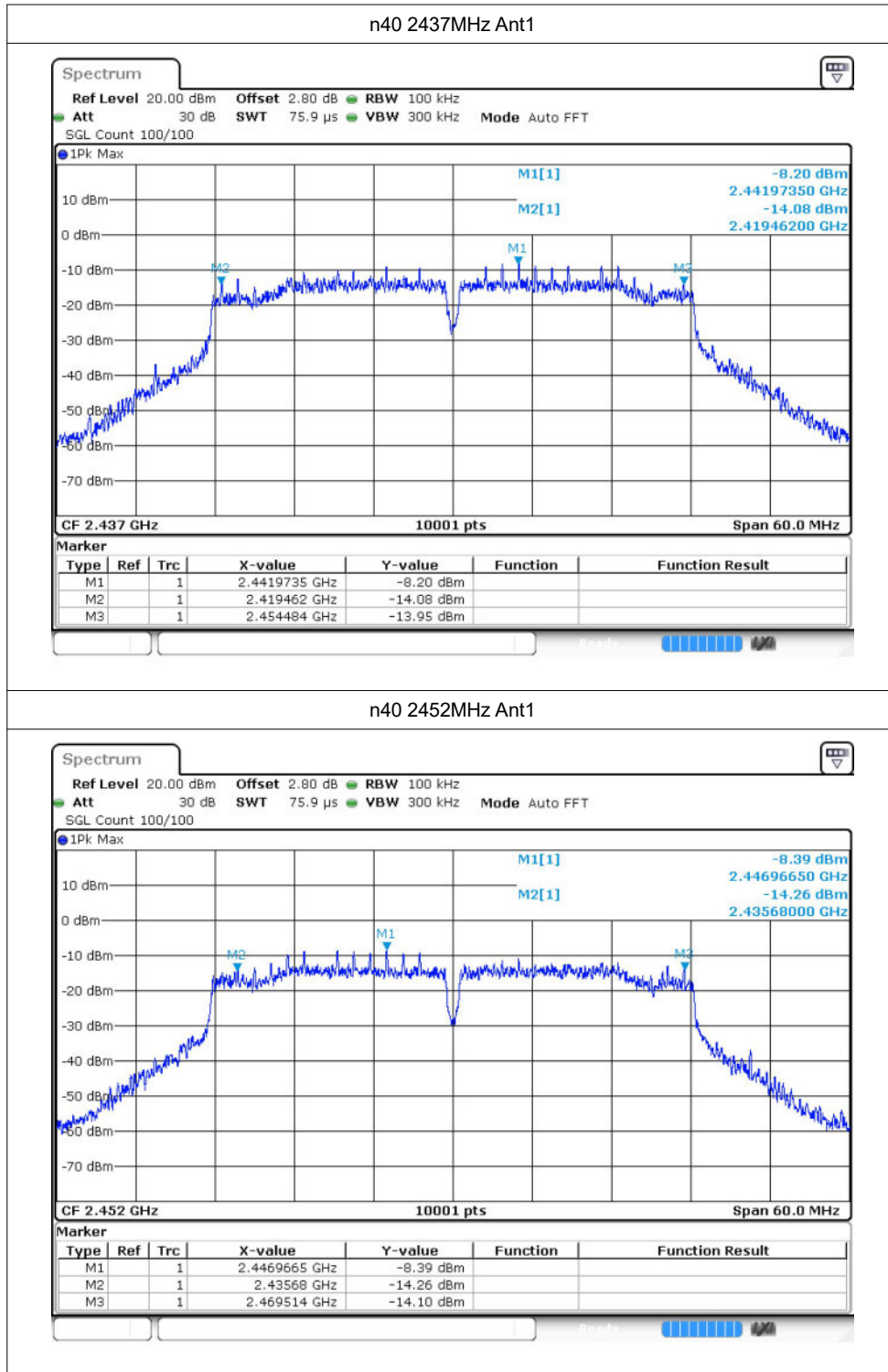
g 2462MHz Ant1



n20 2437MHz Ant1





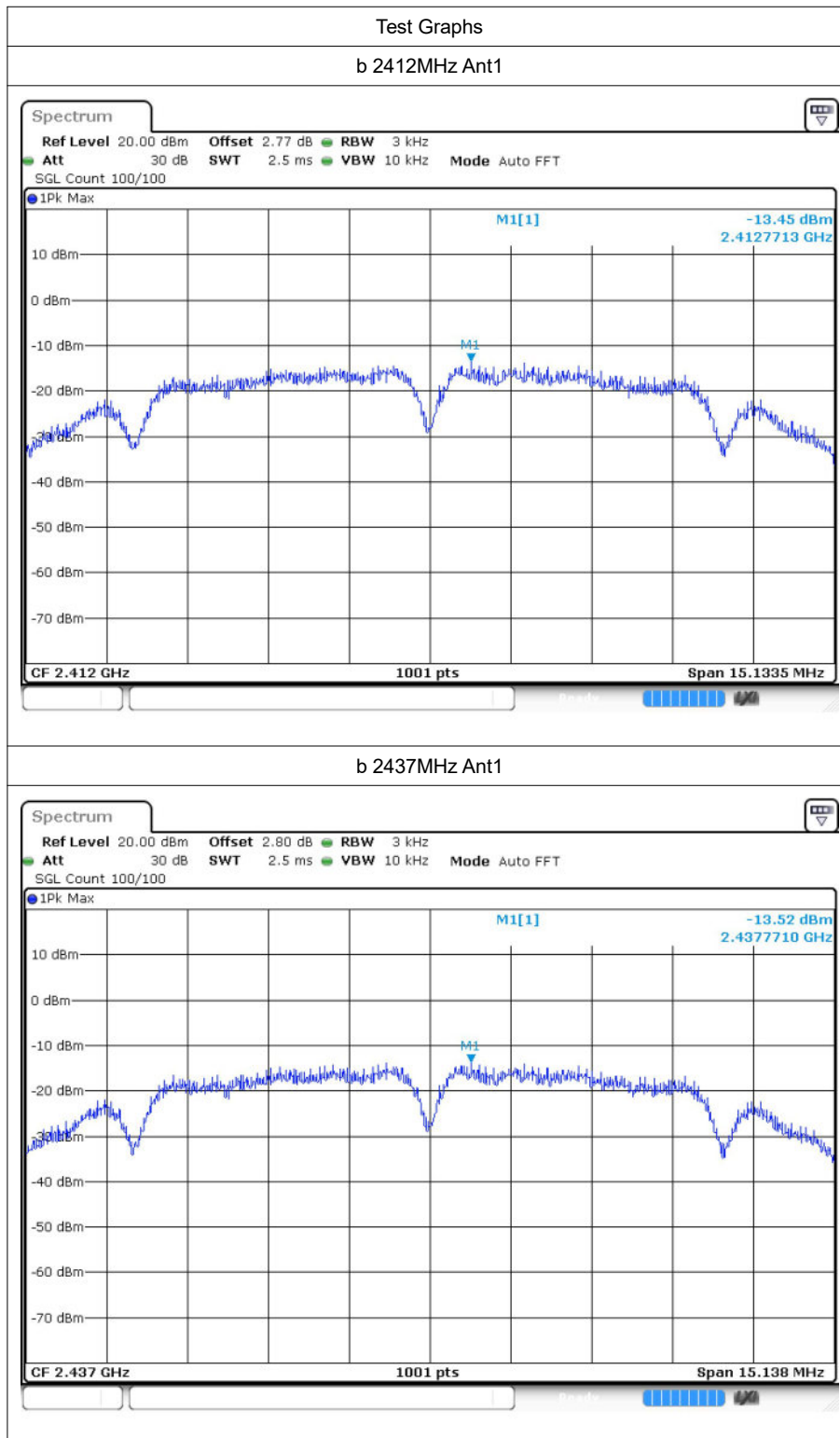


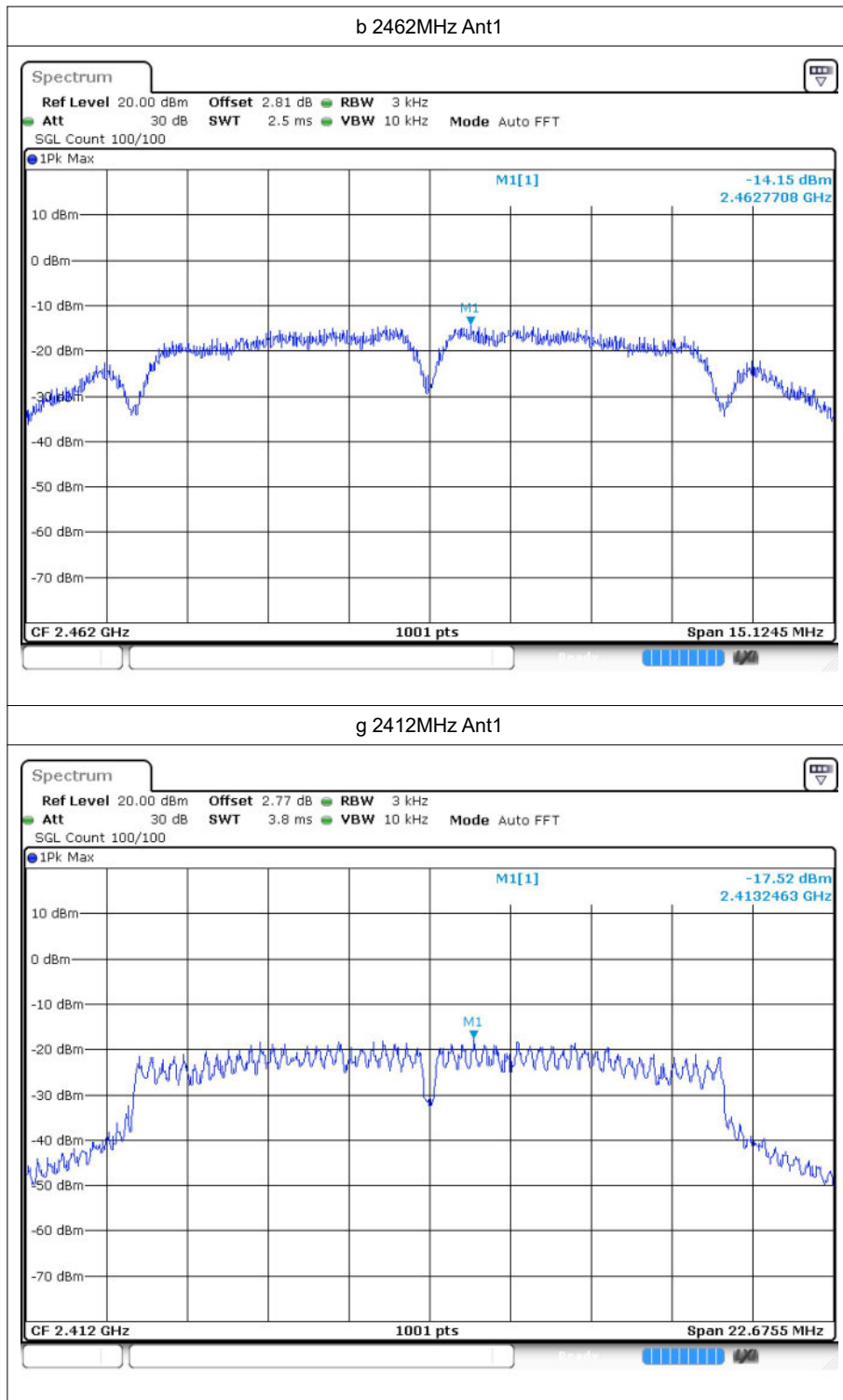
## 4 Maximum Power Spectral Density Level

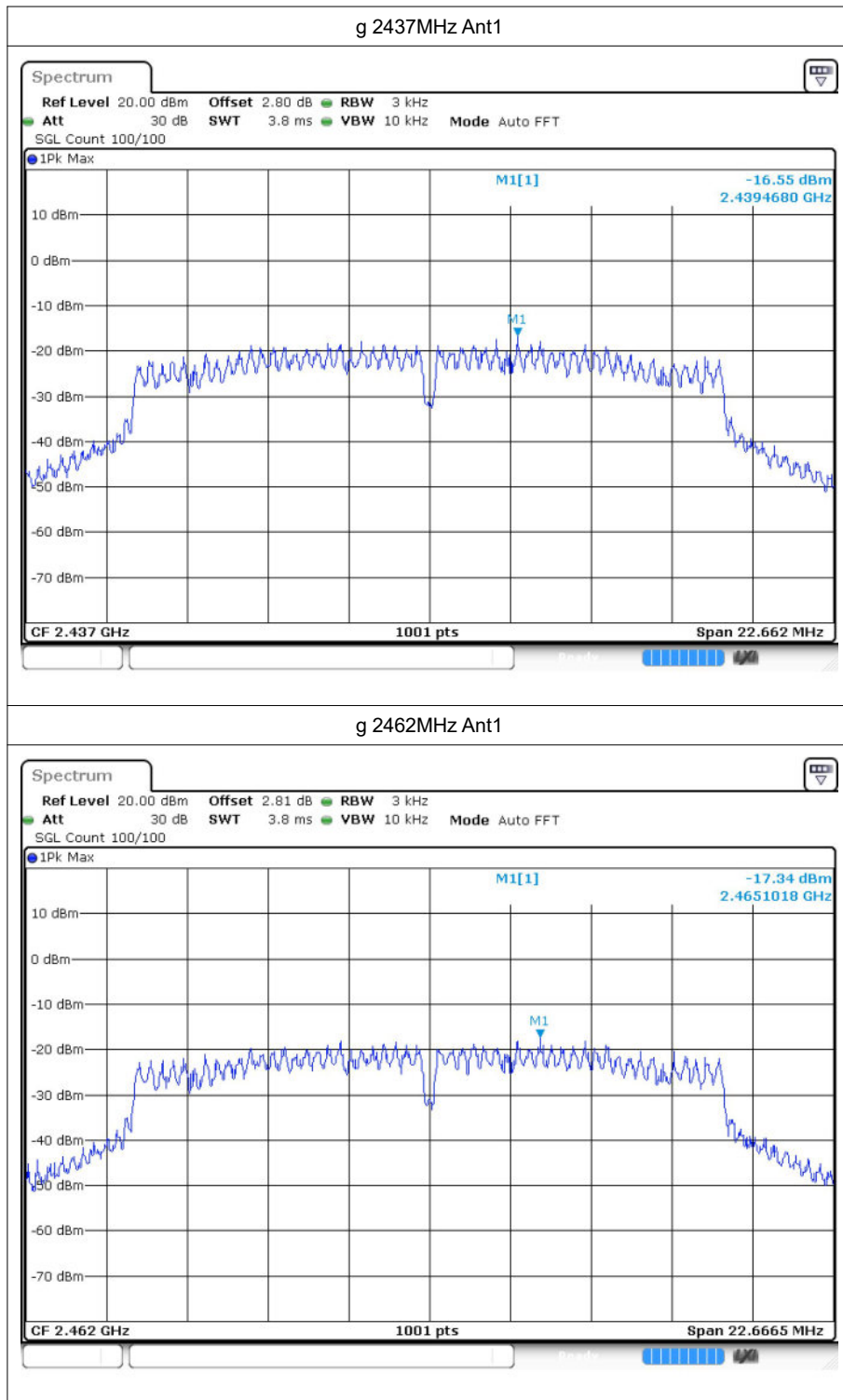
### 4.1 Test Result

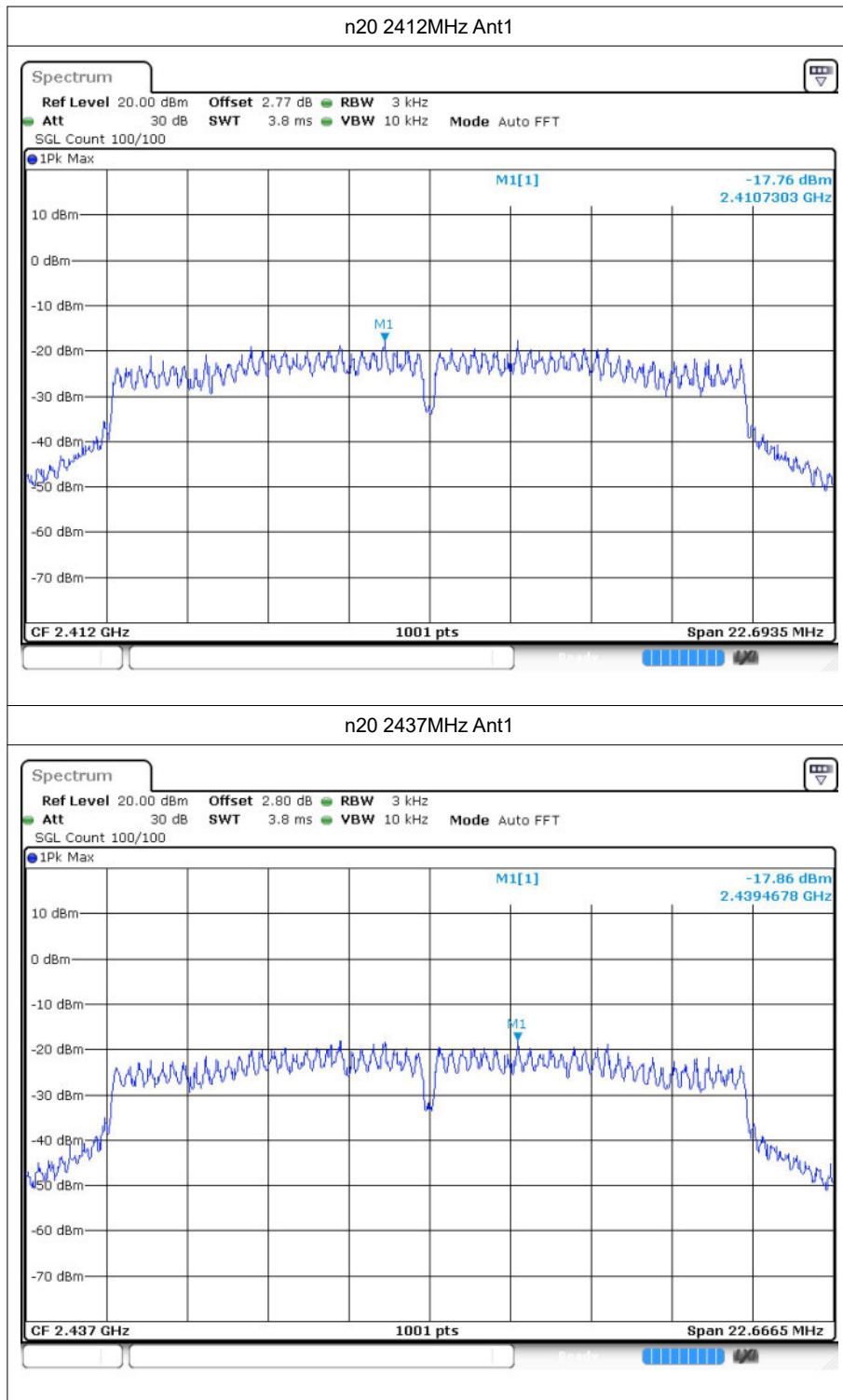
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-13.45	≤8	Pass
b	2437	Ant1	-13.52	≤8	Pass
b	2462	Ant1	-14.15	≤8	Pass
g	2412	Ant1	-17.52	≤8	Pass
g	2437	Ant1	-16.55	≤8	Pass
g	2462	Ant1	-17.34	≤8	Pass
n20	2412	Ant1	-17.76	≤8	Pass
n20	2437	Ant1	-17.86	≤8	Pass
n20	2462	Ant1	-17.99	≤8	Pass
n40	2422	Ant1	-22.76	≤8	Pass
n40	2437	Ant1	-21.59	≤8	Pass
n40	2452	Ant1	-22.43	≤8	Pass

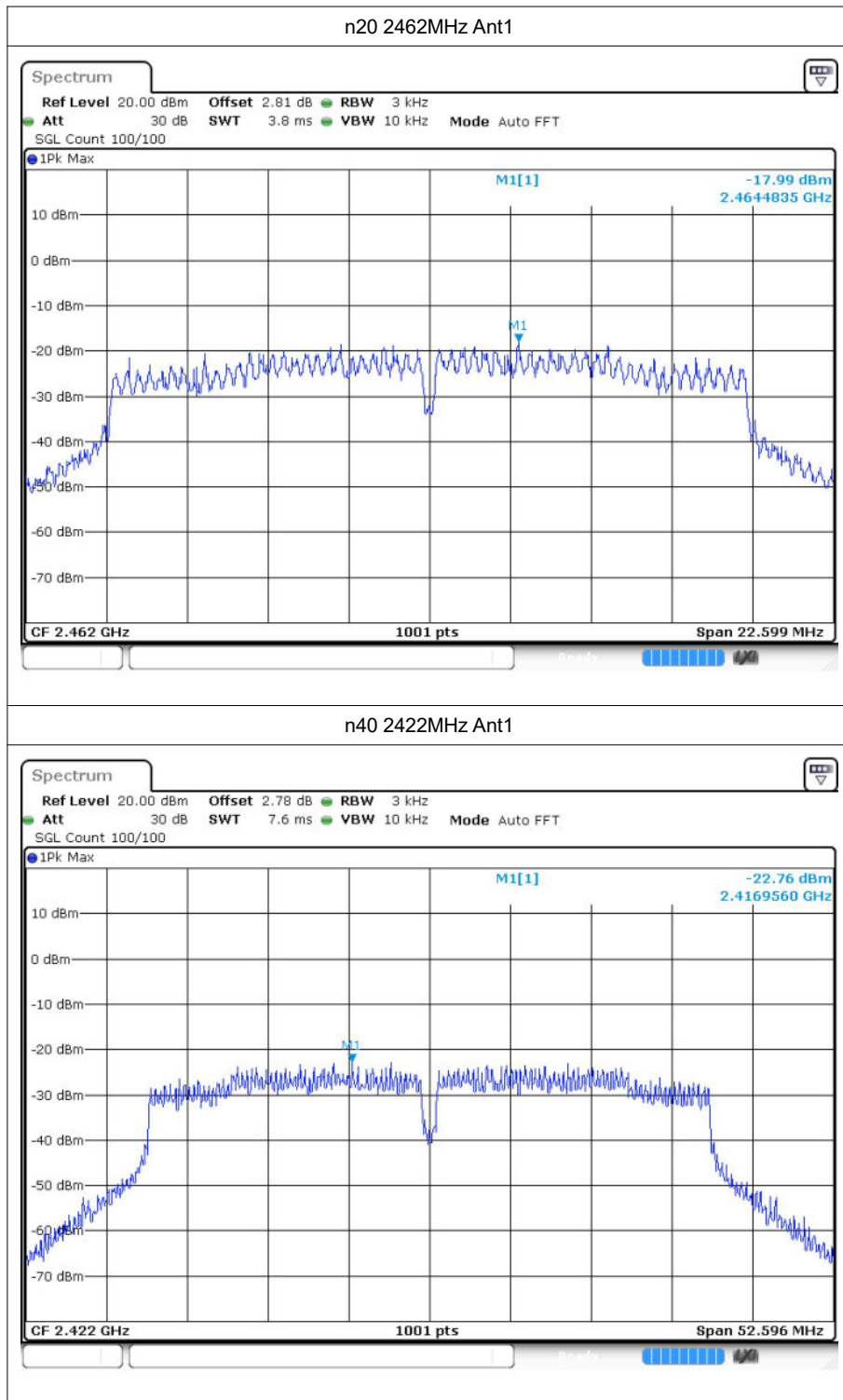
## 4.2 Test Graphs

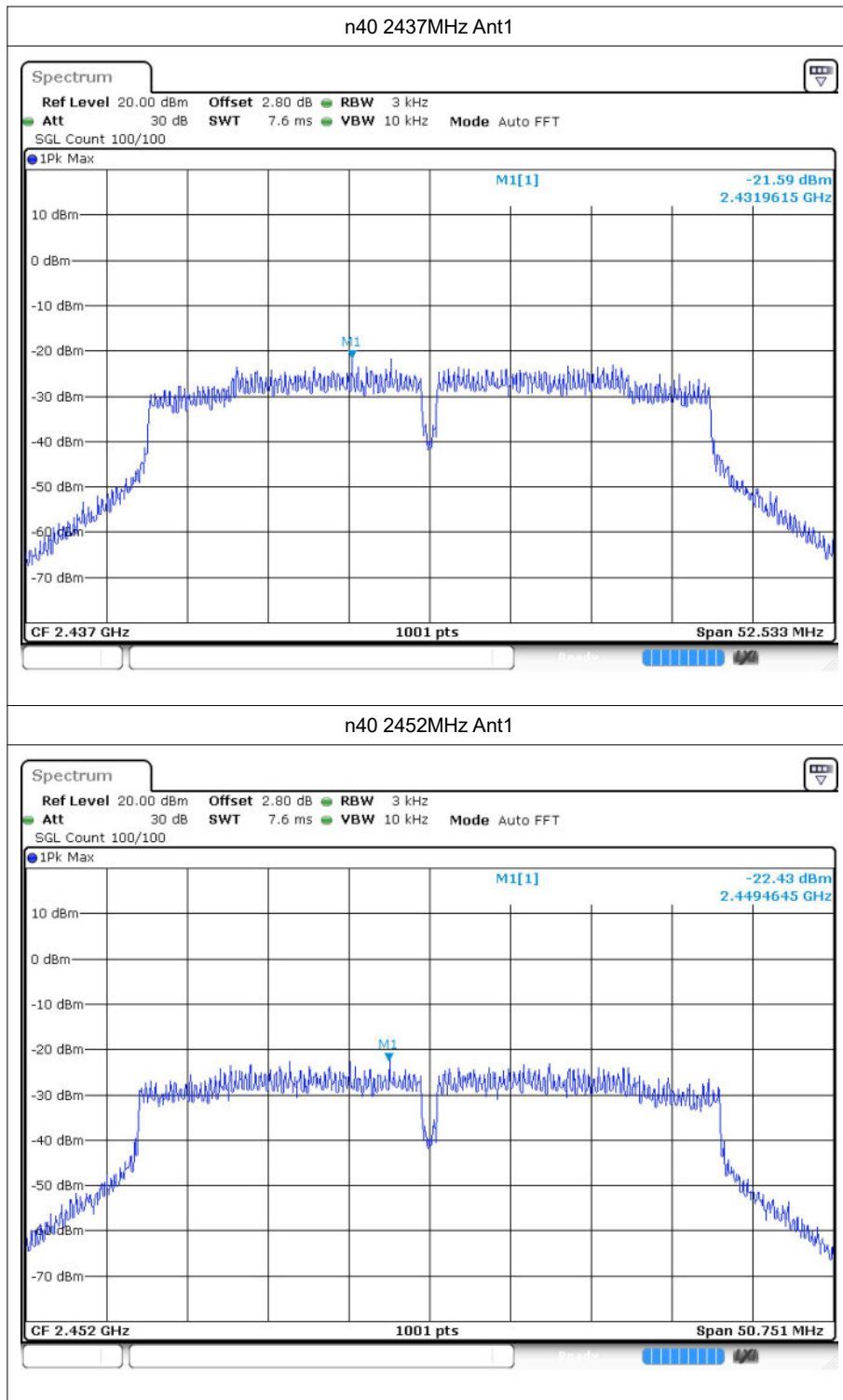
















## 5 Band Edge

### 5.1 Test Result

Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-54.15	-20	Pass
b	2462	Ant1	-55.07	-20	Pass
g	2412	Ant1	-51.41	-20	Pass
g	2462	Ant1	-52.61	-20	Pass
n20	2412	Ant1	-50.47	-20	Pass
n20	2462	Ant1	-52.42	-20	Pass
n40	2422	Ant1	-47.39	-20	Pass
n40	2452	Ant1	-47.55	-20	Pass

## 5.2 Test Graphs

