Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Wireless HDMI Display Dongle

Trade Mark: N/A

Test Model: G2

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen

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1 Duty Cycle

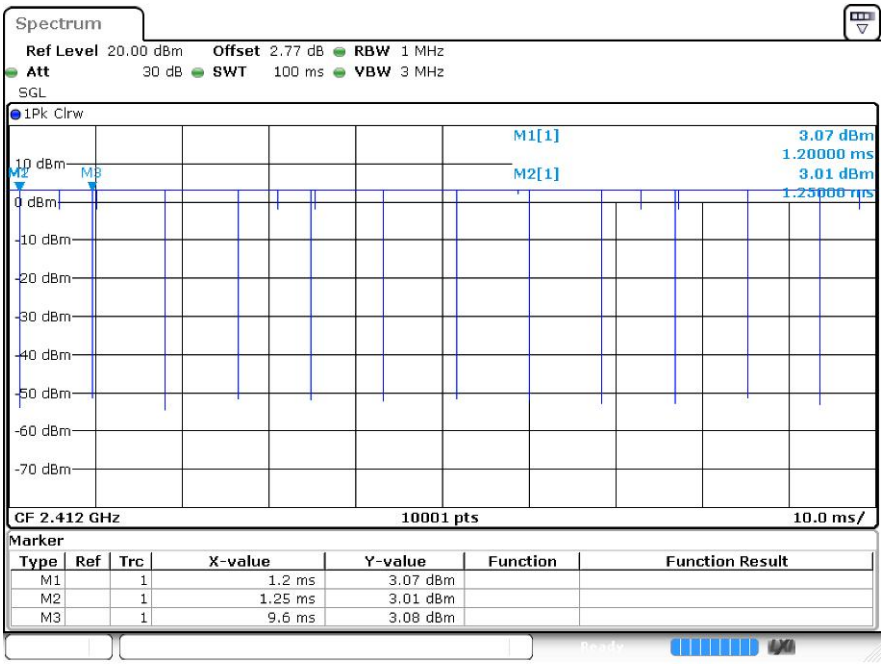
1.1 Test Result

Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
b	2412	Ant1	99.59	0.12
b	2437	Ant1	99.6	0.12
b	2462	Ant1	99.62	0.12
g	2412	Ant1	86.93	4.76
g	2437	Ant1	86.95	4.76
g	2462	Ant1	87	4.76
n20	2412	Ant1	87.57	4.35
n20	2437	Ant1	87.59	4.35
n20	2462	Ant1	87.59	4.35

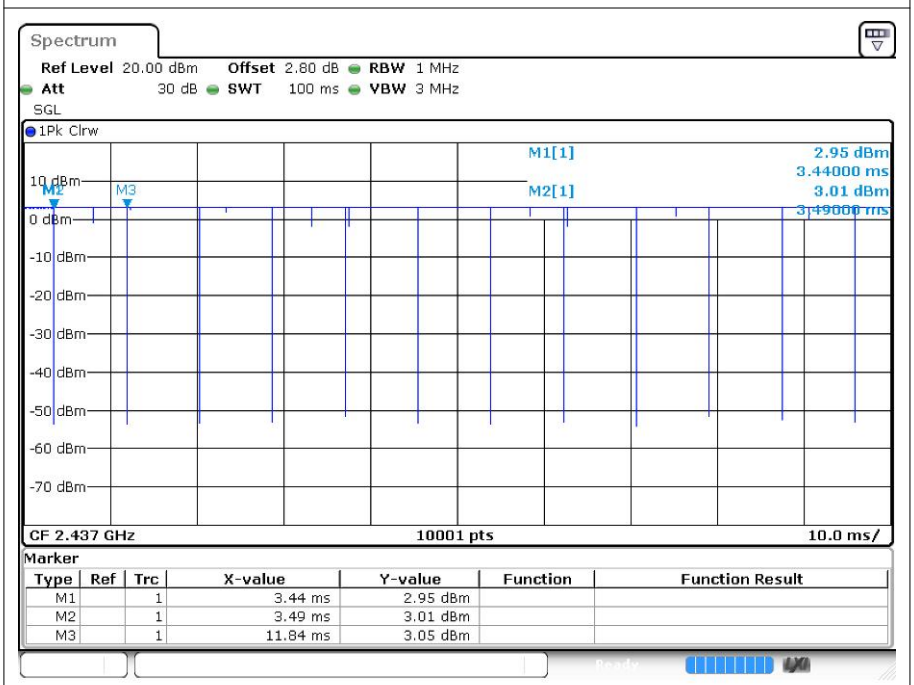
1.2 Test Graphs

Test Graphs

b 2412MHz Ant1

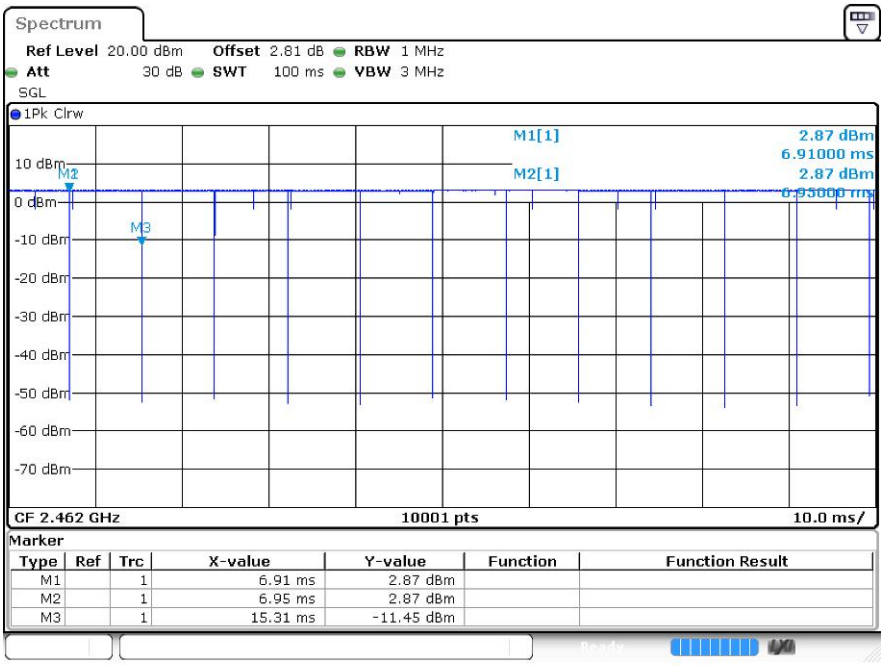


b 2437MHz Ant1

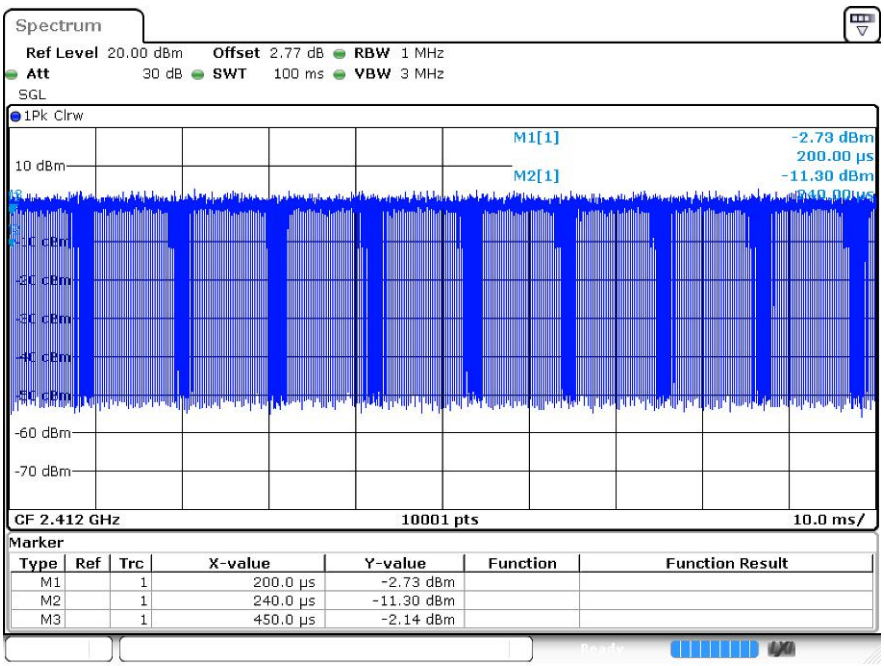


Test Graphs

b 2462MHz Ant1

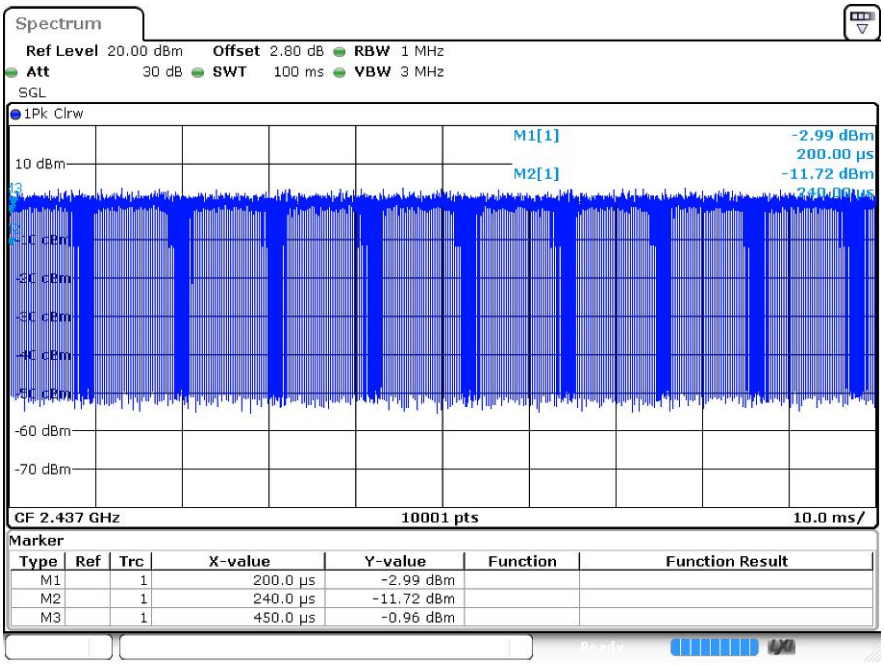


g 2412MHz Ant1

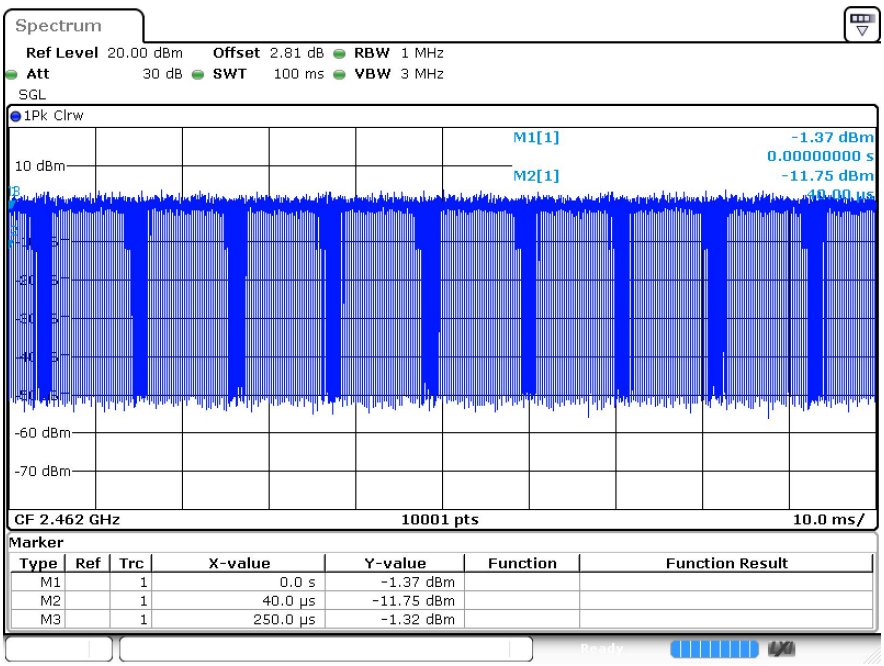


Test Graphs

g 2437MHz Ant1

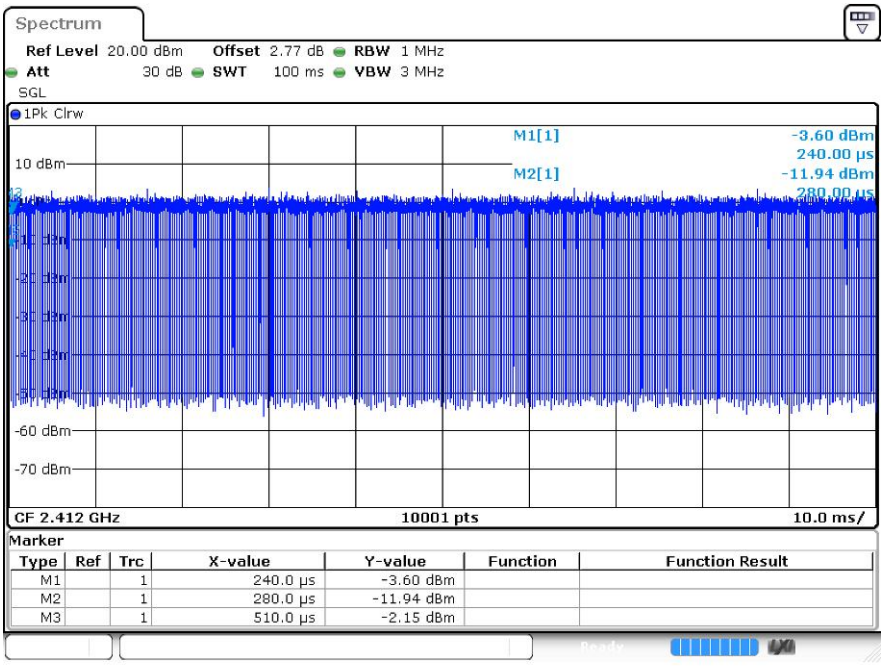


g 2462MHz Ant1

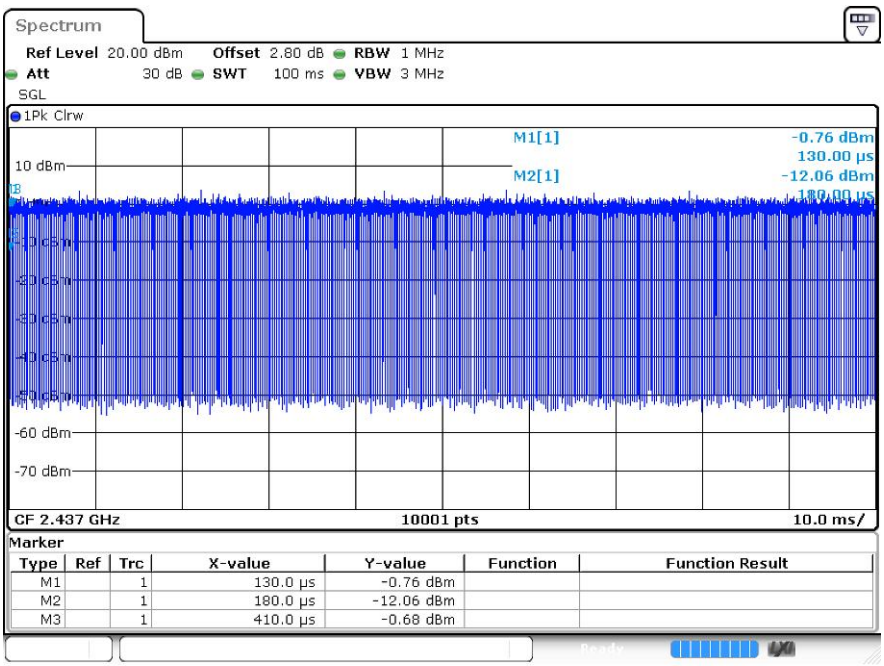


Test Graphs

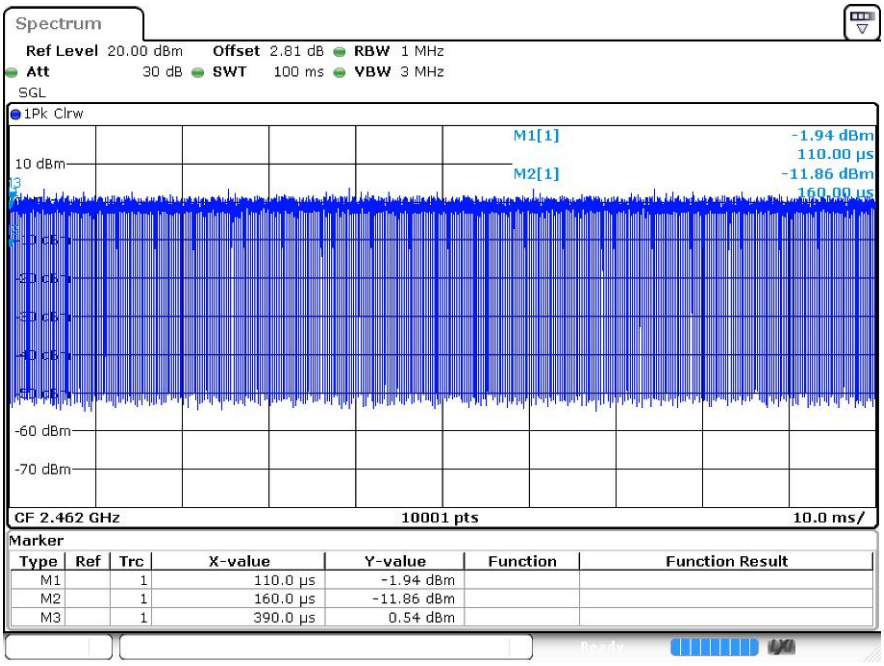
n20 2412MHz Ant1



n20 2437MHz Ant1



Test Graphs
n20 2462MHz Ant1



2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	13.49	30	Pass
b	2437	Ant1	13.49	30	Pass
b	2462	Ant1	13.46	30	Pass
g	2412	Ant1	13.15	30	Pass
g	2437	Ant1	13.01	30	Pass
g	2462	Ant1	12.96	30	Pass
n20	2412	Ant1	12.66	30	Pass
n20	2437	Ant1	12.36	30	Pass
n20	2462	Ant1	12.41	30	Pass

3 -6dB Bandwidth

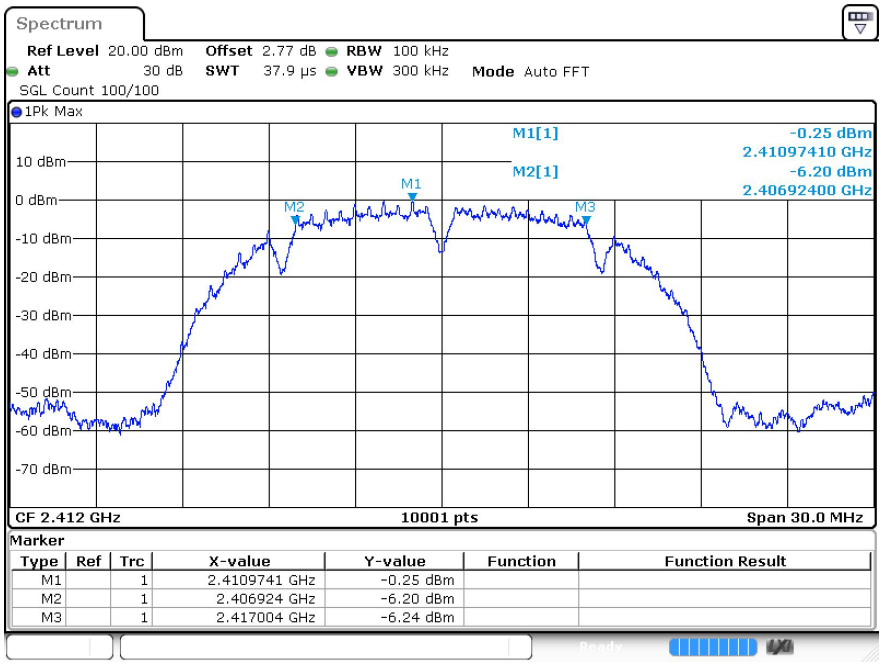
3.1 Test Result

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	9.858	0.5	Pass
b	2462	Ant1	10.077	0.5	Pass
g	2412	Ant1	15.072	0.5	Pass
g	2437	Ant1	15.099	0.5	Pass
g	2462	Ant1	15.048	0.5	Pass
n20	2412	Ant1	15.069	0.5	Pass
n20	2437	Ant1	15.117	0.5	Pass
n20	2462	Ant1	13.863	0.5	Pass

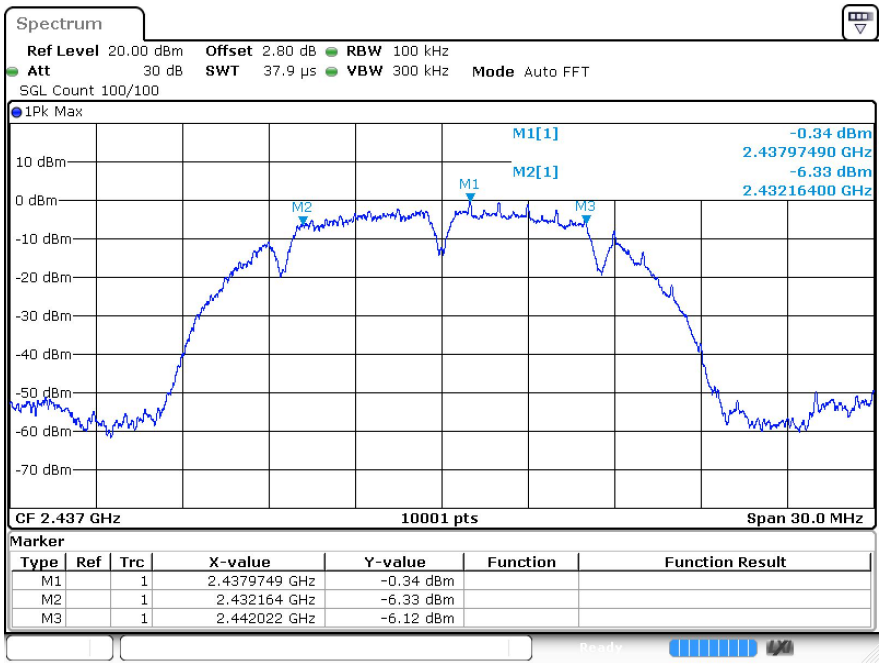
3.2 Test Graphs

Test Graphs

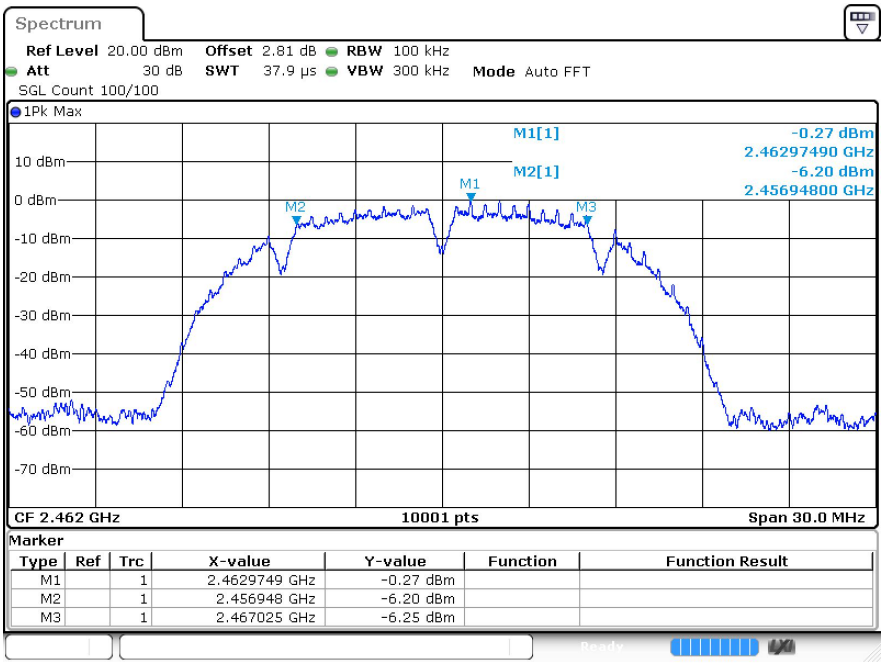
b 2412MHz Ant1



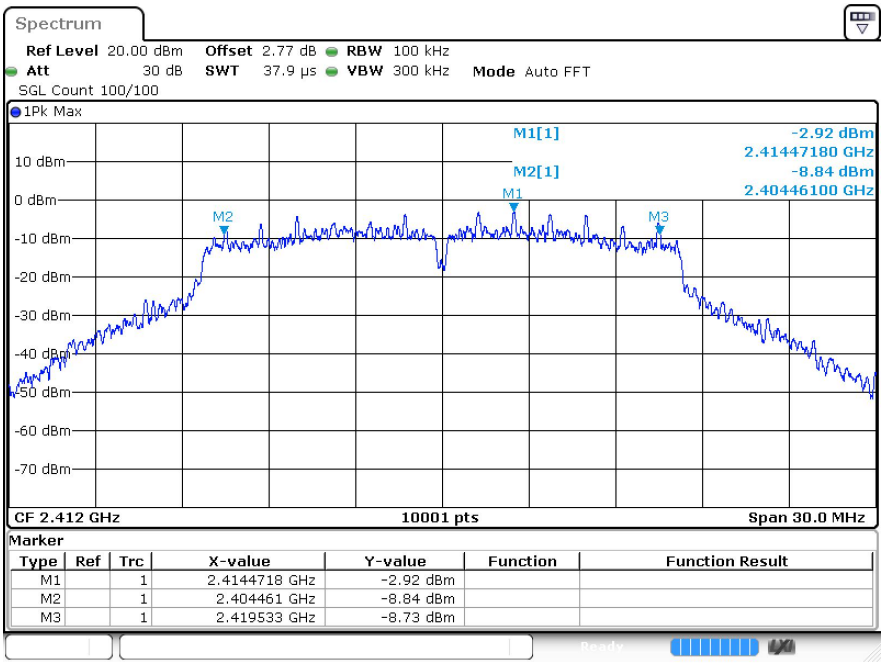
b 2437MHz Ant1



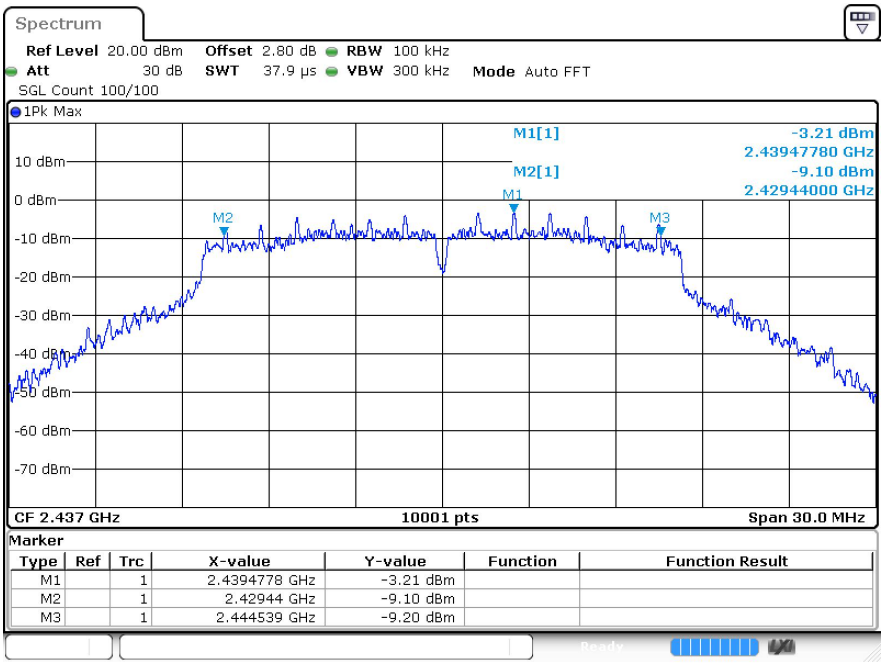
b 2462MHz Ant1



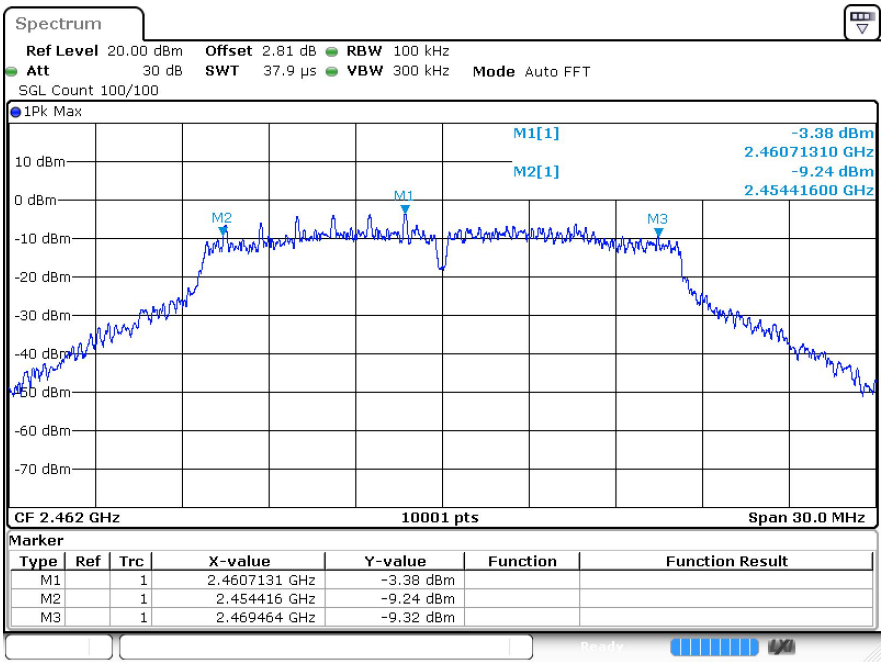
g 2412MHz Ant1



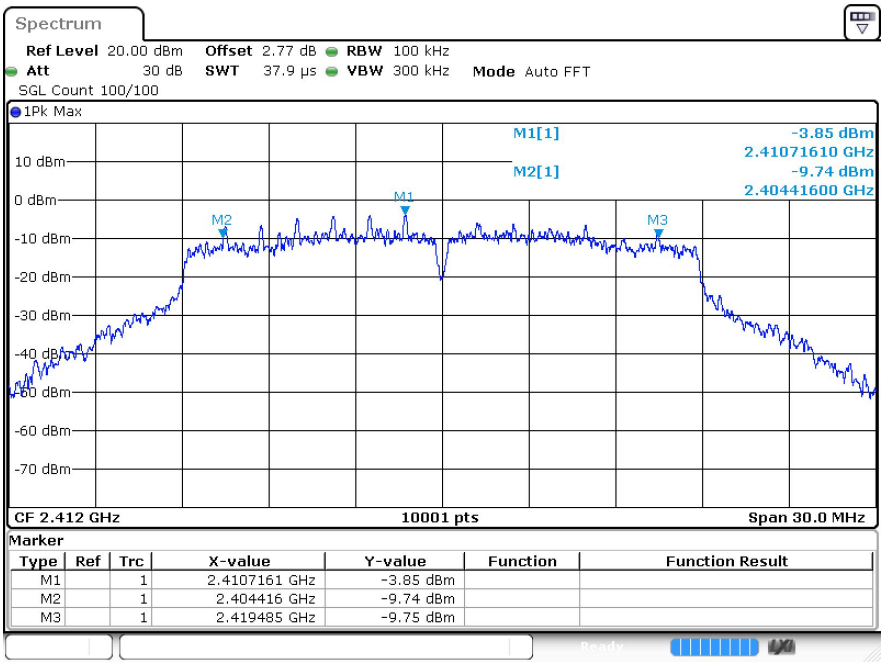
g 2437MHz Ant1



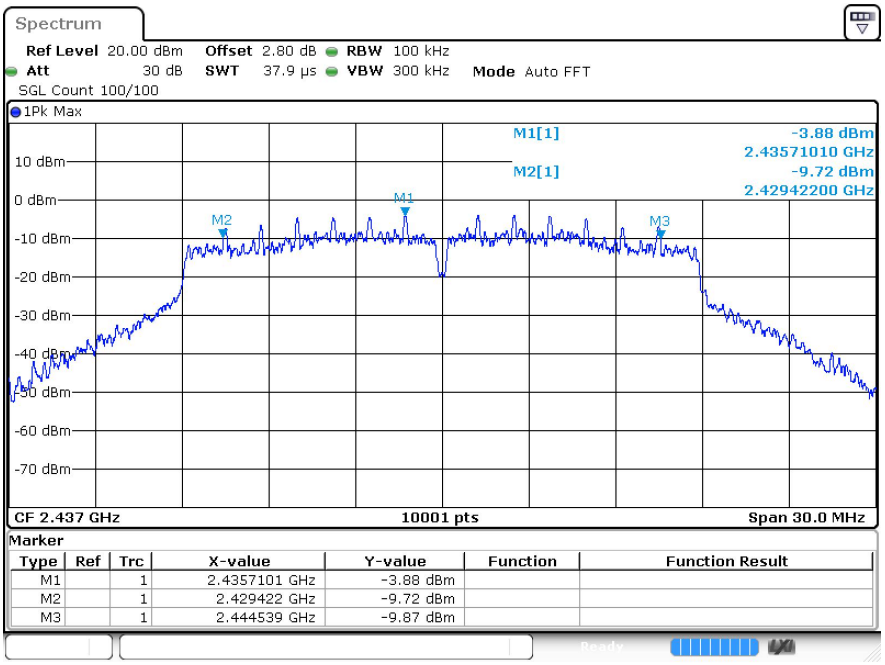
g 2462MHz Ant1



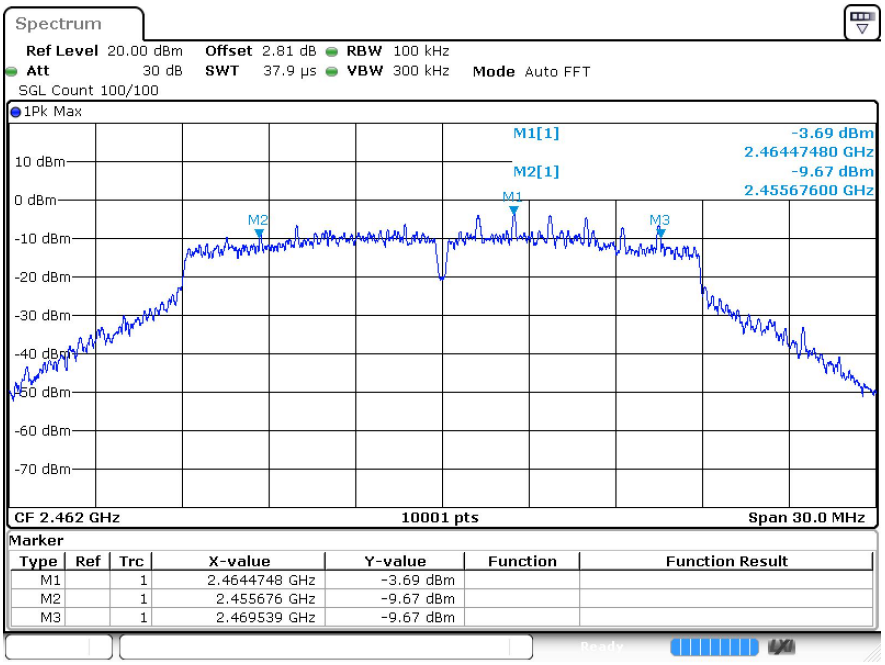
n20 2412MHz Ant1



n20 2437MHz Ant1



n20 2462MHz Ant1



4 Maximum Power Spectral Density Level

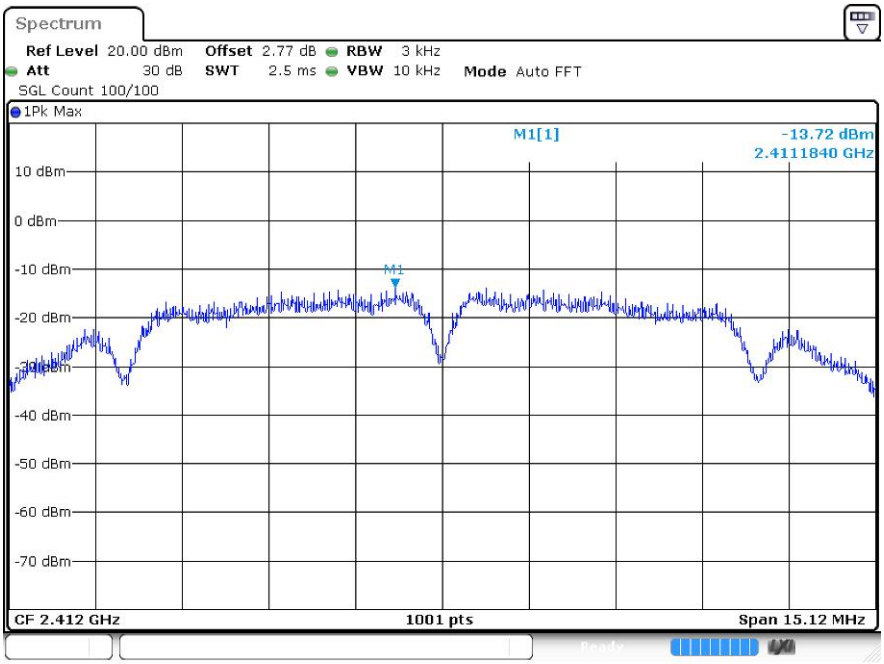
4.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-13.72	≤8	Pass
b	2437	Ant1	-13.98	≤8	Pass
b	2462	Ant1	-13.93	≤8	Pass
g	2412	Ant1	-18.11	≤8	Pass
g	2437	Ant1	-18.09	≤8	Pass
g	2462	Ant1	-17.12	≤8	Pass
n20	2412	Ant1	-18.59	≤8	Pass
n20	2437	Ant1	-17.92	≤8	Pass
n20	2462	Ant1	-18.05	≤8	Pass

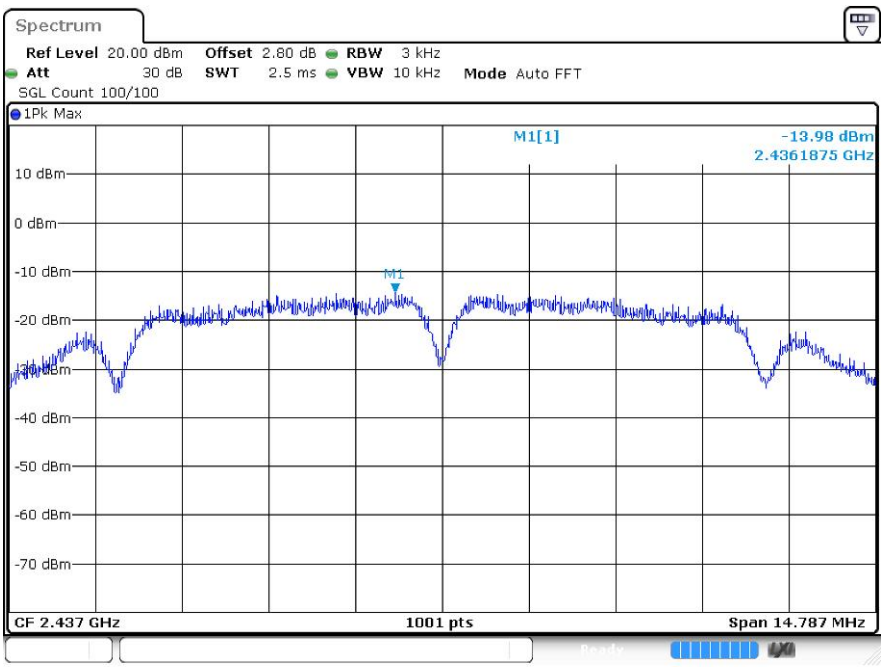
4.2 Test Graphs

Test Graphs

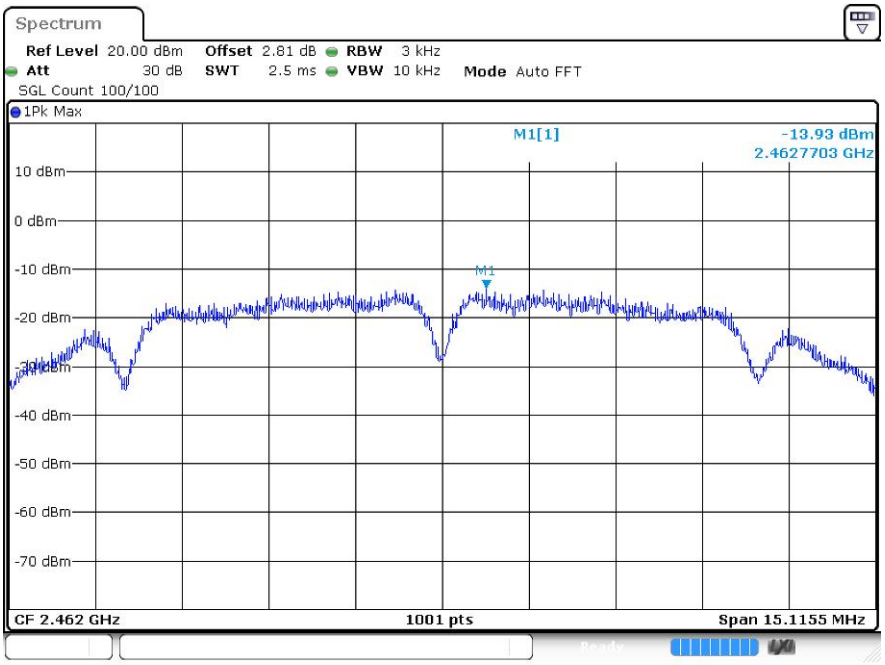
b 2412MHz Ant1



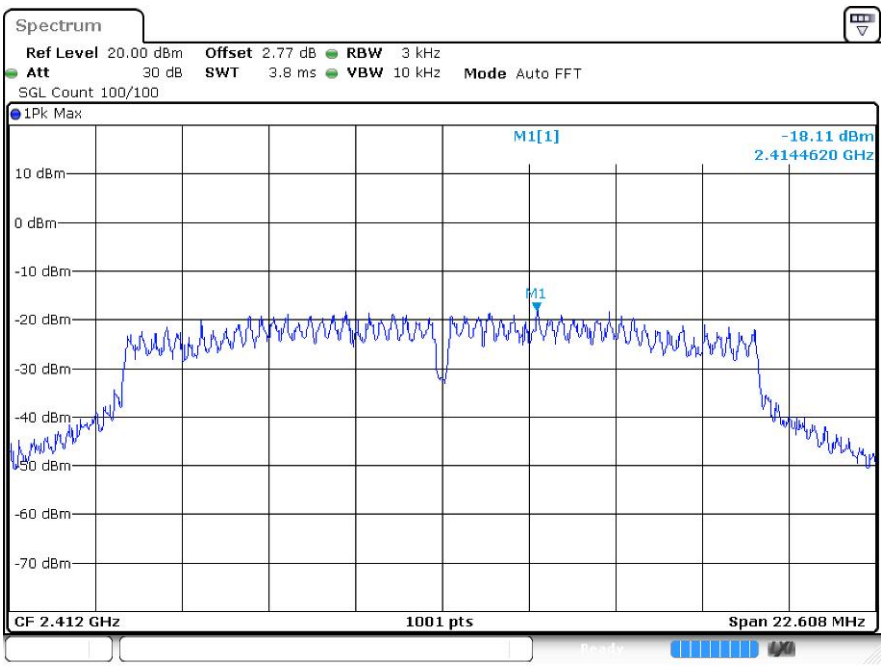
b 2437MHz Ant1



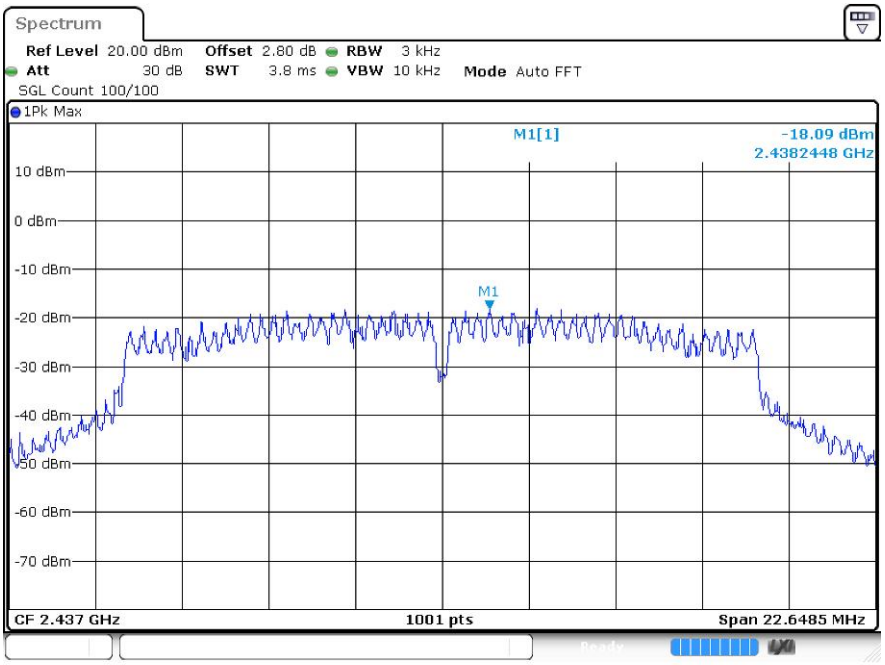
b 2462MHz Ant1



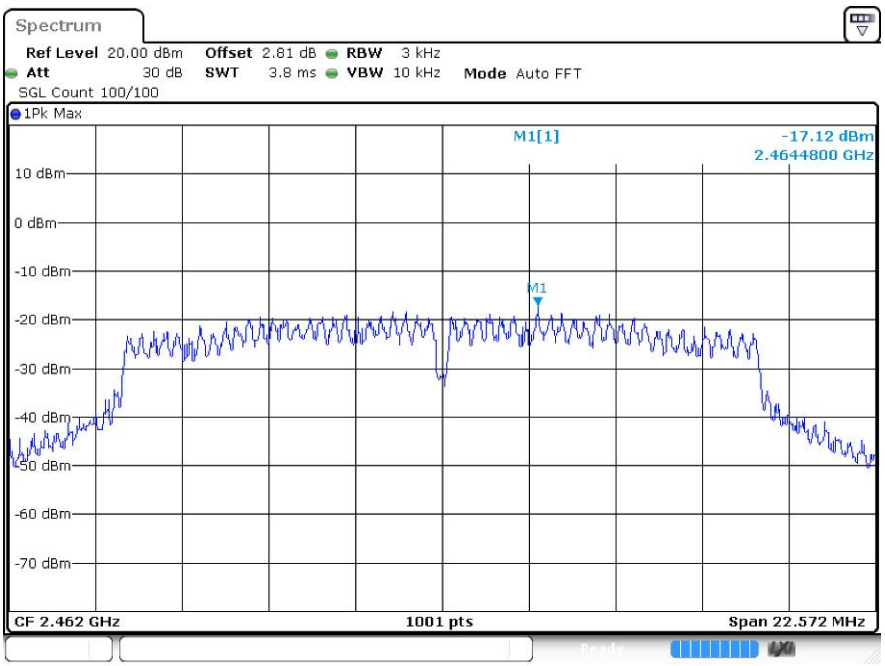
g 2412MHz Ant1



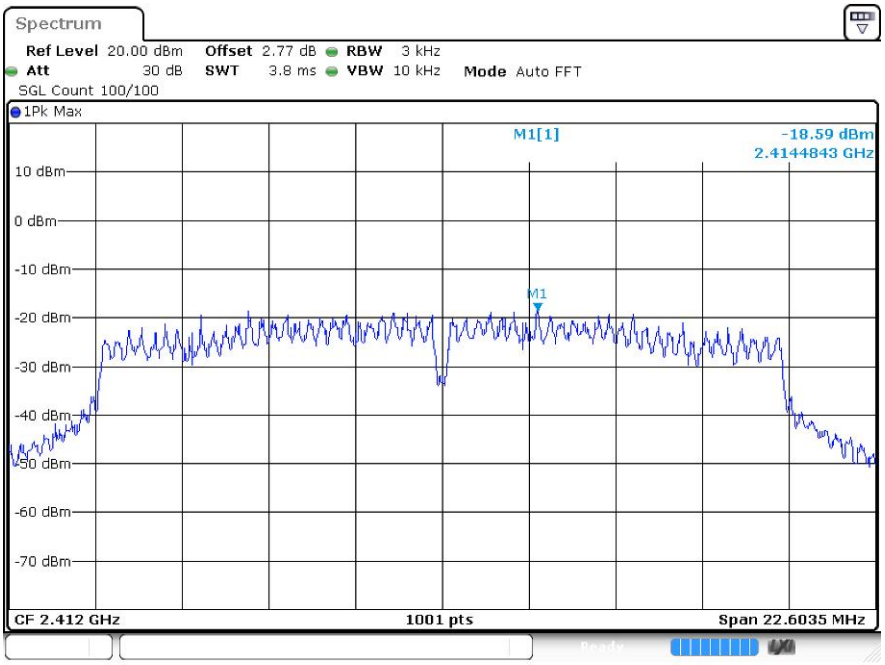
g 2437MHz Ant1



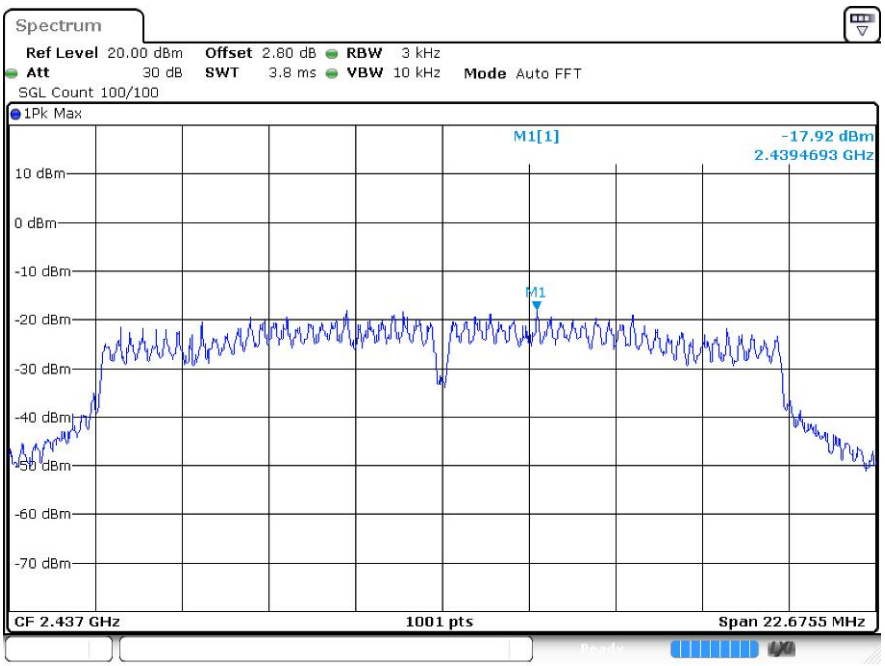
g 2462MHz Ant1



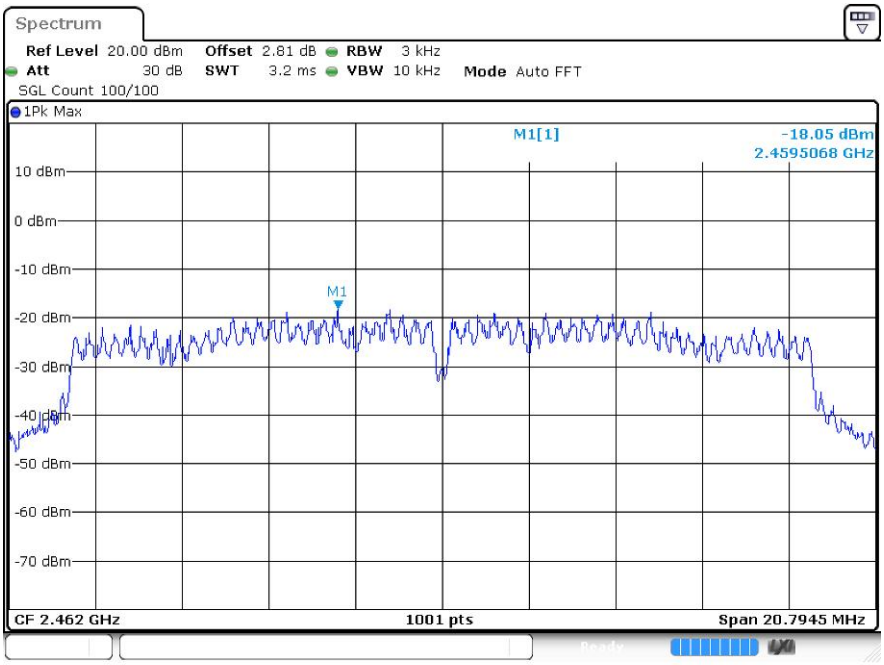
n20 2412MHz Ant1



n20 2437MHz Ant1



n20 2462MHz Ant1



5 Band Edge

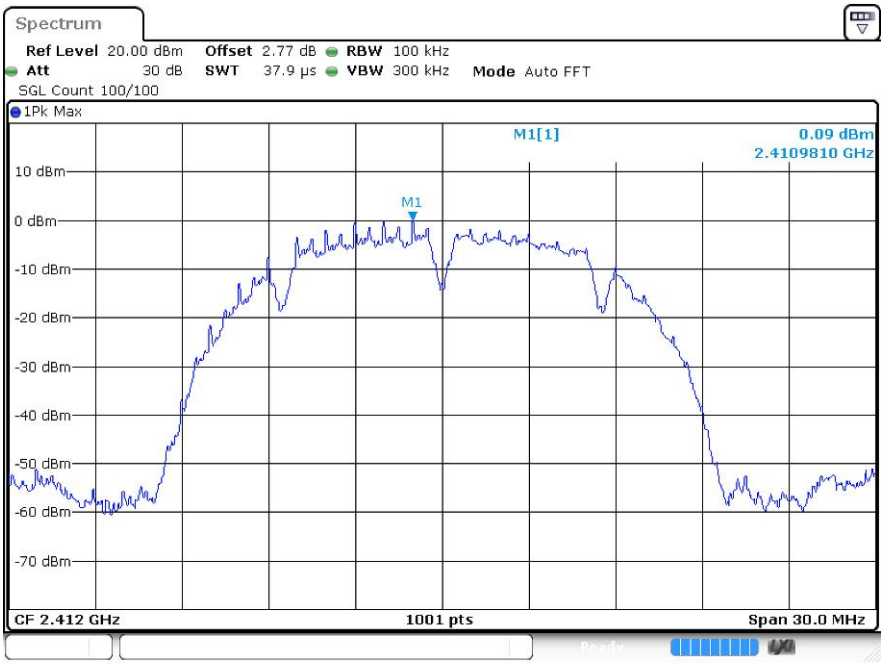
5.1 Test Result

Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-54.82	-20	Pass
b	2462	Ant1	-54.78	-20	Pass
g	2412	Ant1	-52.2	-20	Pass
g	2462	Ant1	-52.8	-20	Pass
n20	2412	Ant1	-50.53	-20	Pass
n20	2462	Ant1	-52.31	-20	Pass

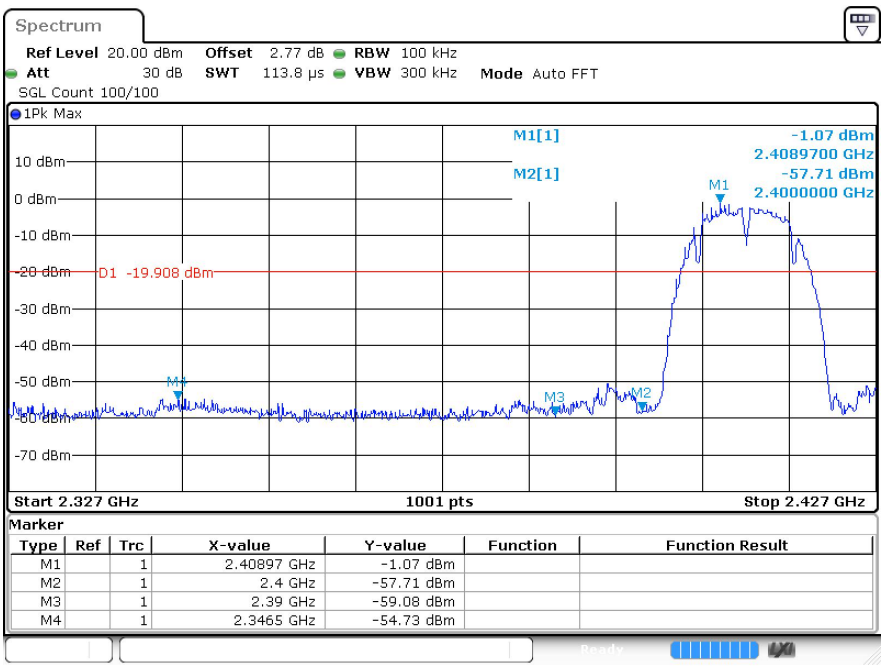
5.2 Test Graphs

Test Graphs

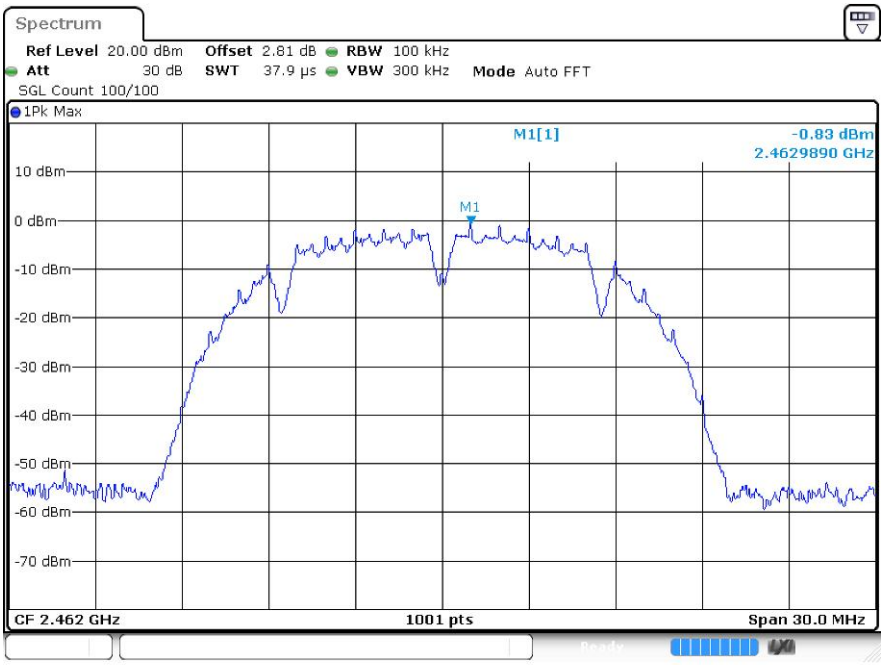
b 2412MHz Ant1 Ref



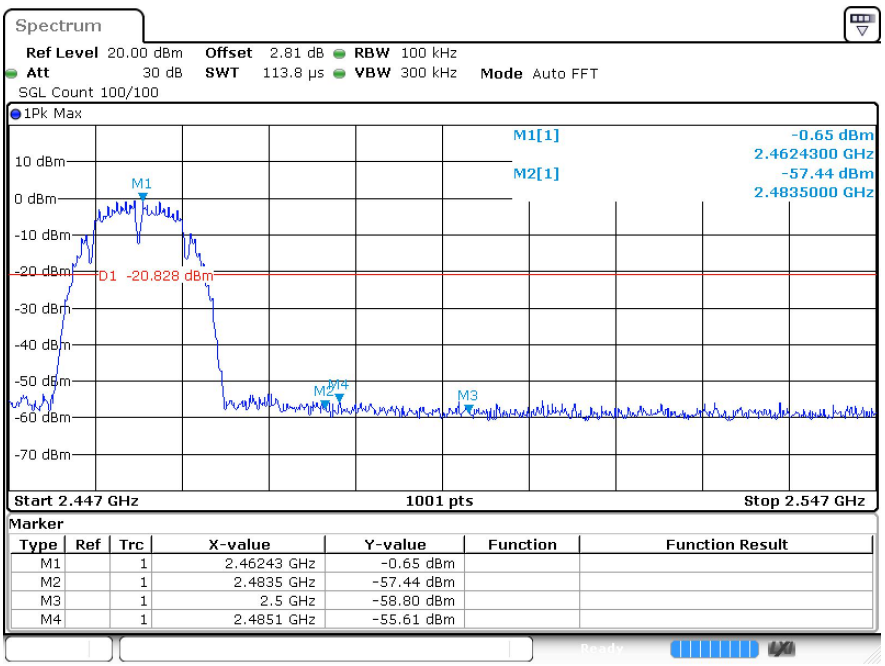
b 2412MHz Ant1 Emission



b 2462MHz Ant1 Ref



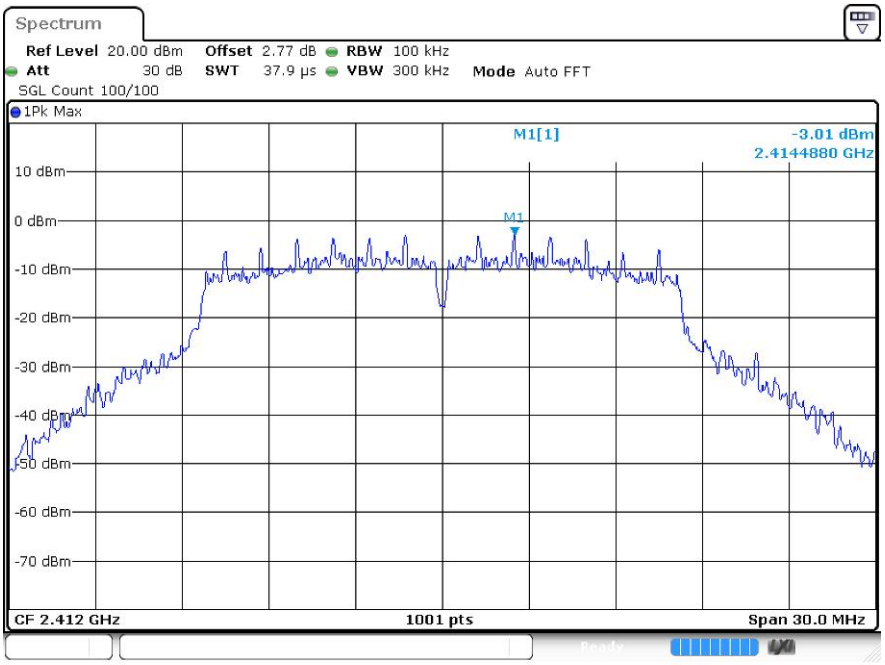
b 2462MHz Ant1 Emission



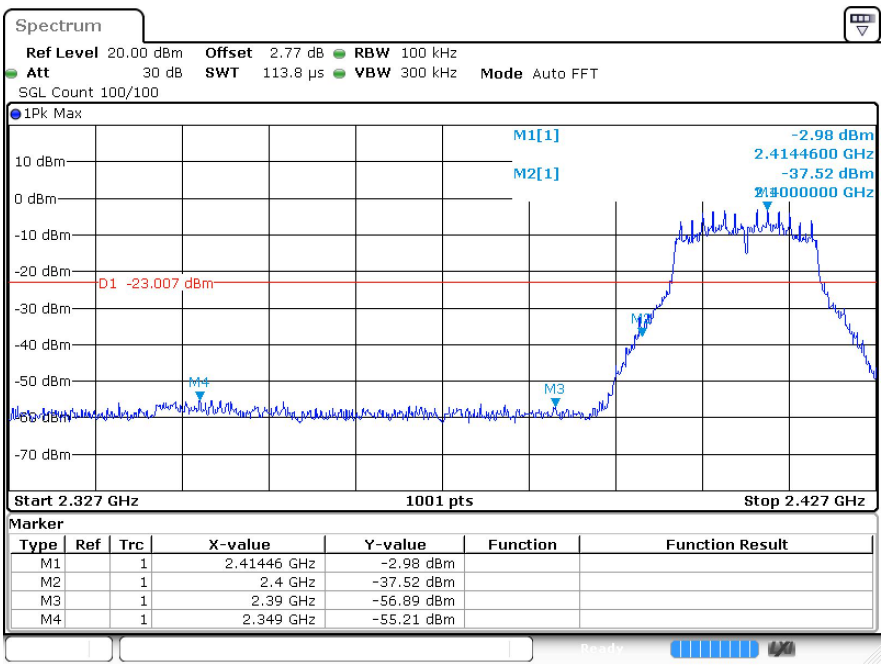
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.46243 GHz	-0.65 dBm		
M2		1	2.4835 GHz	-57.44 dBm		
M3		1	2.5 GHz	-58.80 dBm		
M4		1	2.4851 GHz	-55.61 dBm		

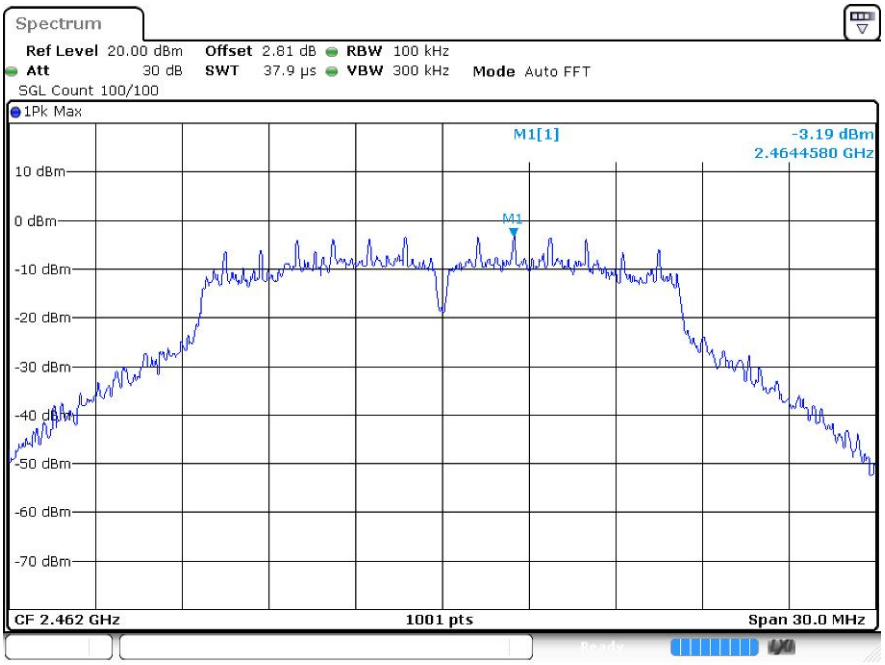
g 2412MHz Ant1 Ref



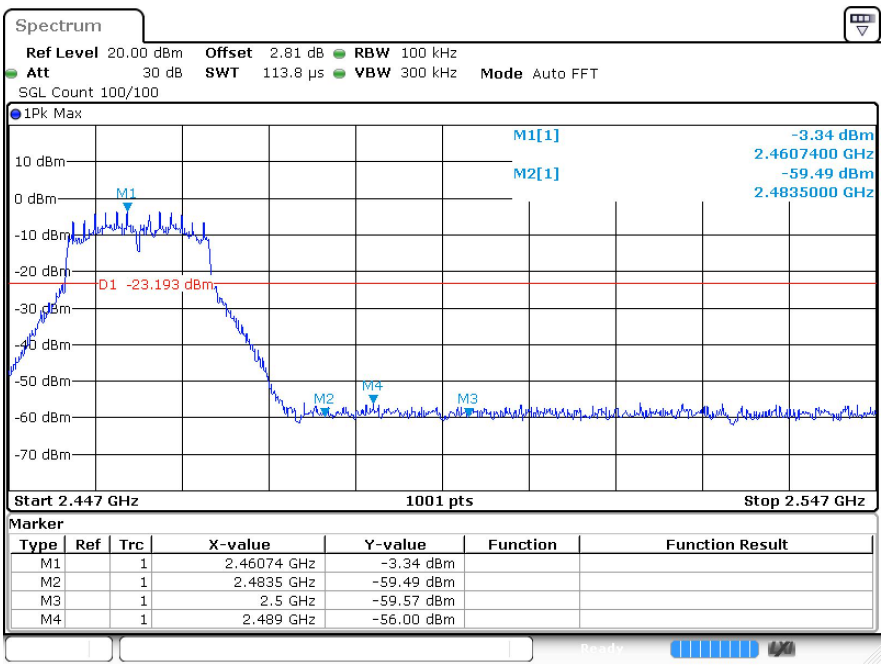
g 2412MHz Ant1 Emission



g 2462MHz Ant1 Ref



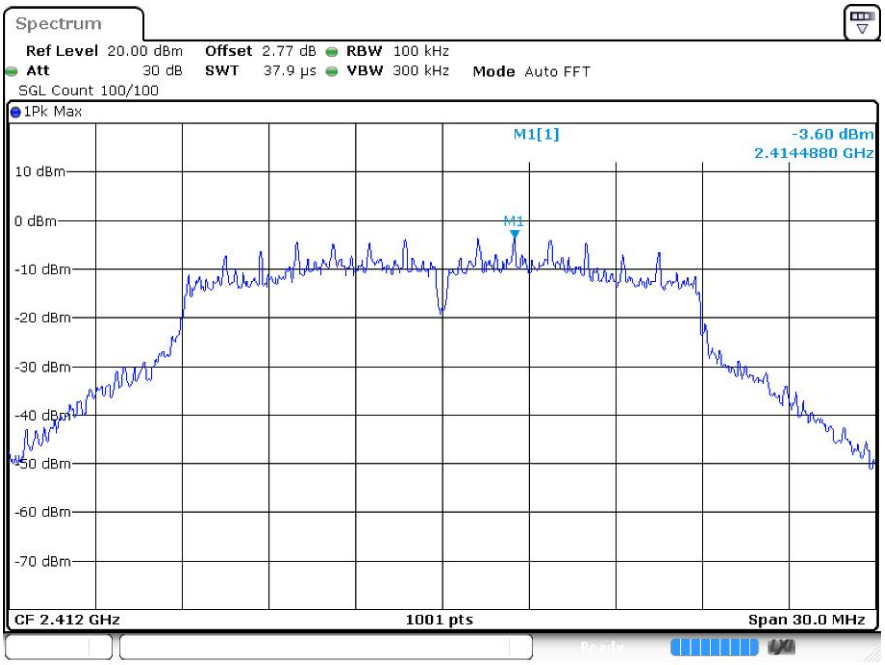
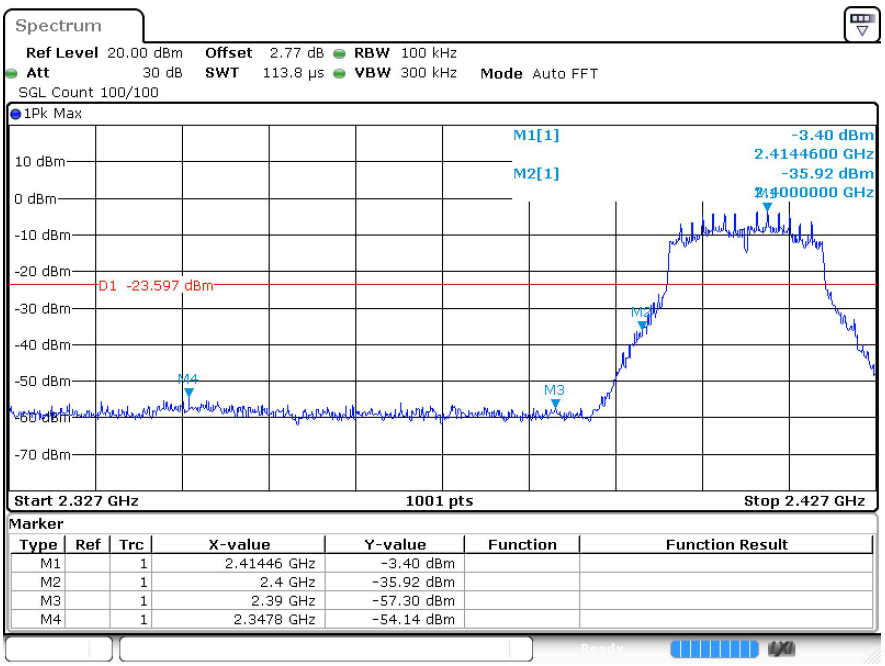
g 2462MHz Ant1 Emission



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.46074 GHz	-3.34 dBm		
M2		1	2.4835 GHz	-59.49 dBm		
M3		1	2.5 GHz	-59.57 dBm		
M4		1	2.489 GHz	-56.00 dBm		

n20 2412MHz Ant1 Ref



n20 2412MHz Ant1 Emission