Appendix C

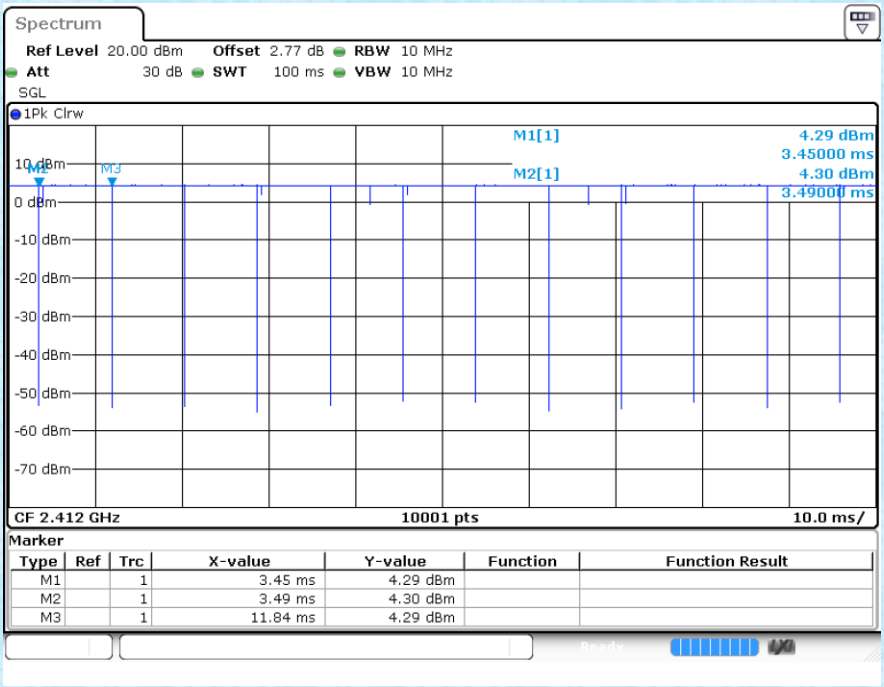
1 Duty Cycle

1.1 Test Result

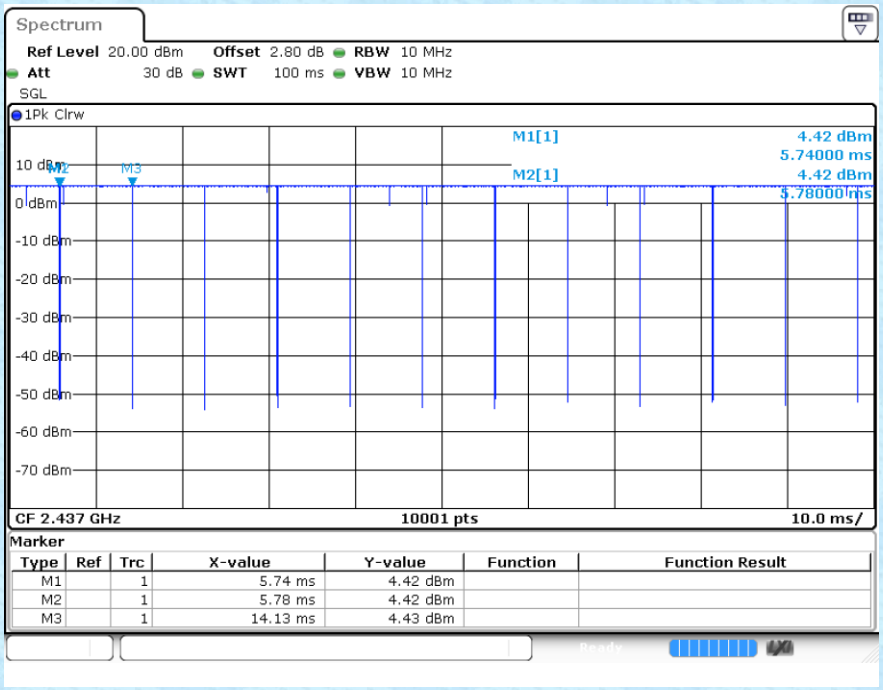
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
b	2412	Ant1	99.6	0.12
b	2437	Ant1	99.6	0.12
b	2462	Ant1	99.61	0.12
g	2412	Ant1	86.88	4.55
g	2437	Ant1	86.95	4.55
g	2462	Ant1	86.88	4.76
n20	2412	Ant1	87.58	4.17
n20	2437	Ant1	87.58	4.35
n20	2462	Ant1	87.57	4.35
n40	2422	Ant1	88.07	4
n40	2437	Ant1	88.05	4
n40	2452	Ant1	88.08	4

1.2 Test Graphs

Test Graphs
b 2412MHz Ant1

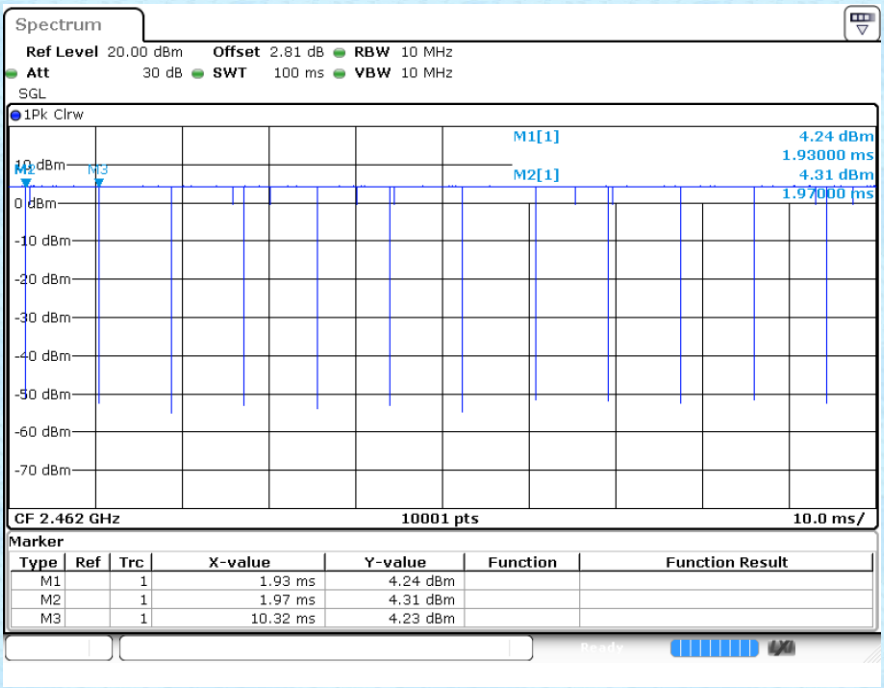


b 2437MHz Ant1

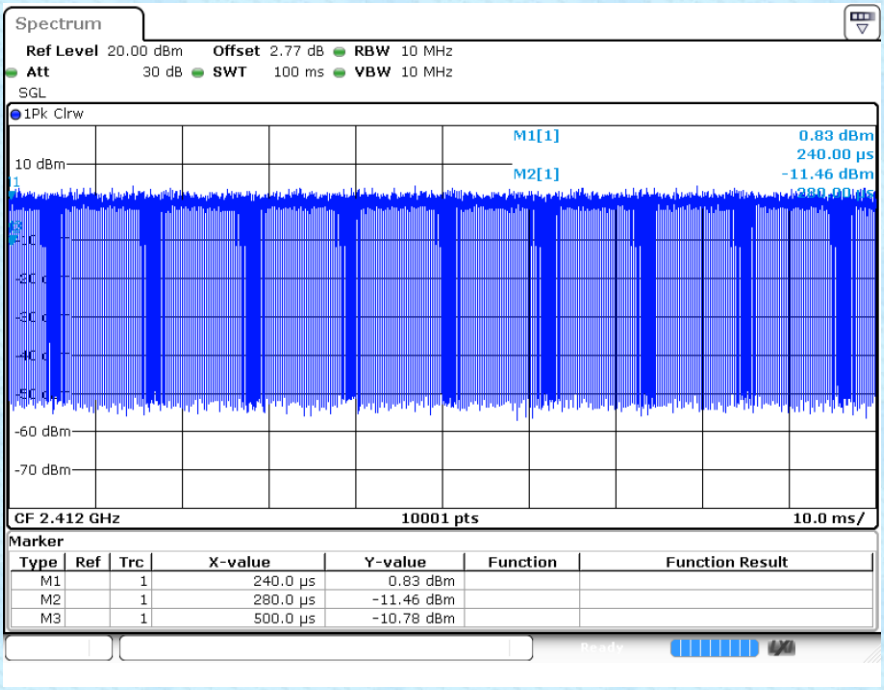


Test Graphs

b 2462MHz Ant1

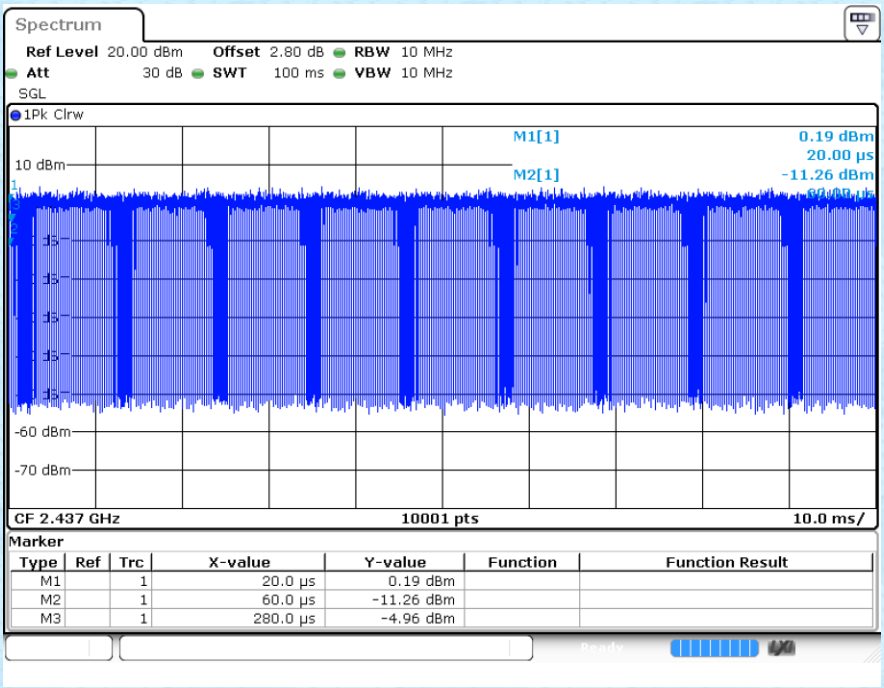


g 2412MHz Ant1

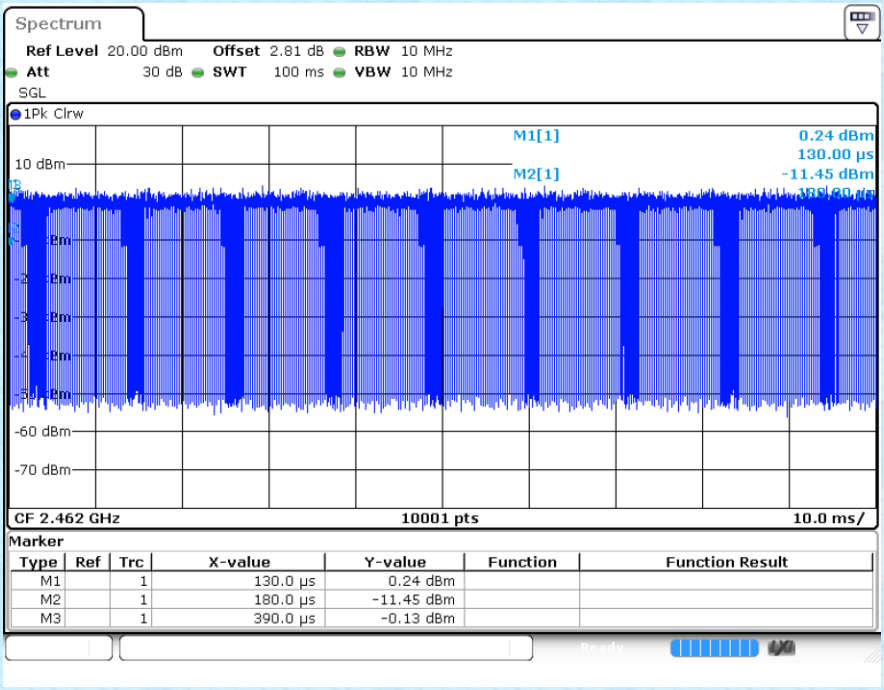


Test Graphs

g 2437MHz Ant1

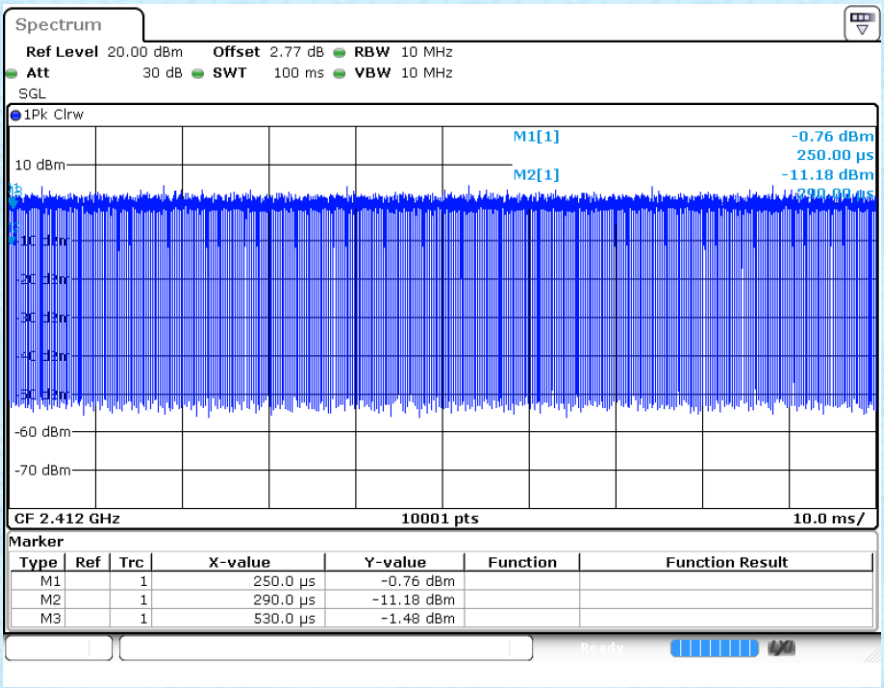


g 2462MHz Ant1

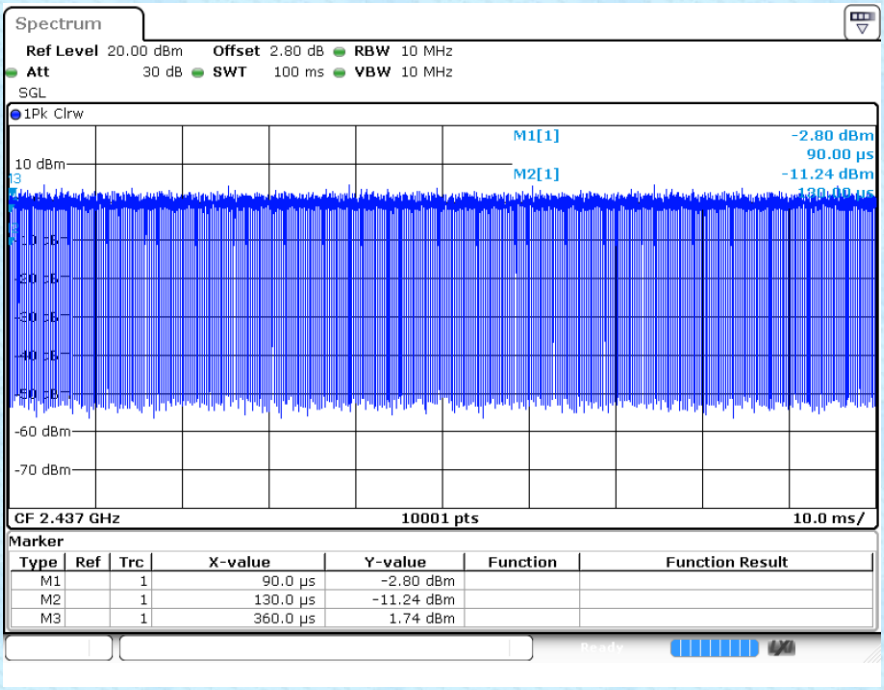


Test Graphs

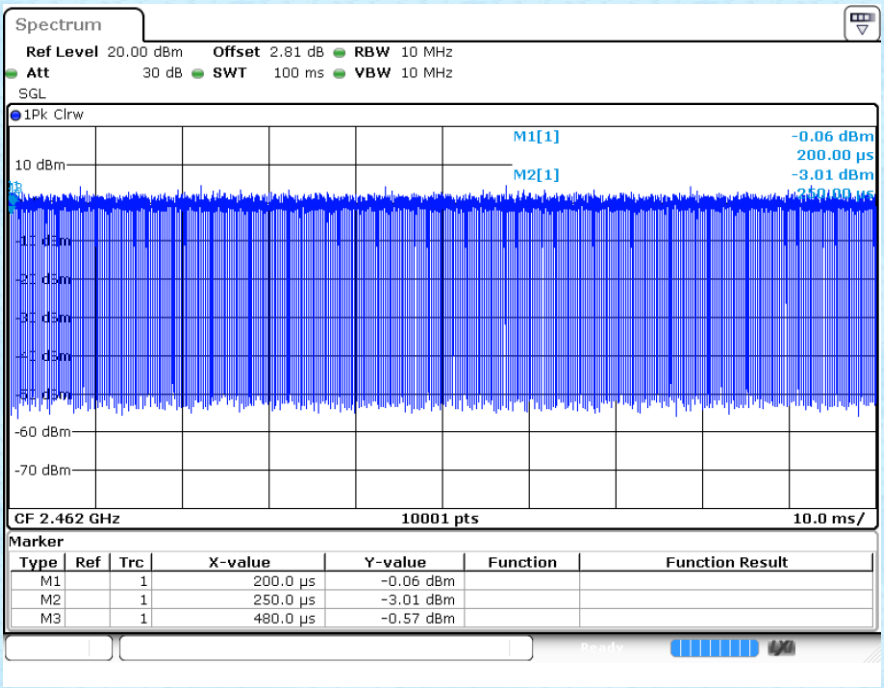
n20 2412MHz Ant1



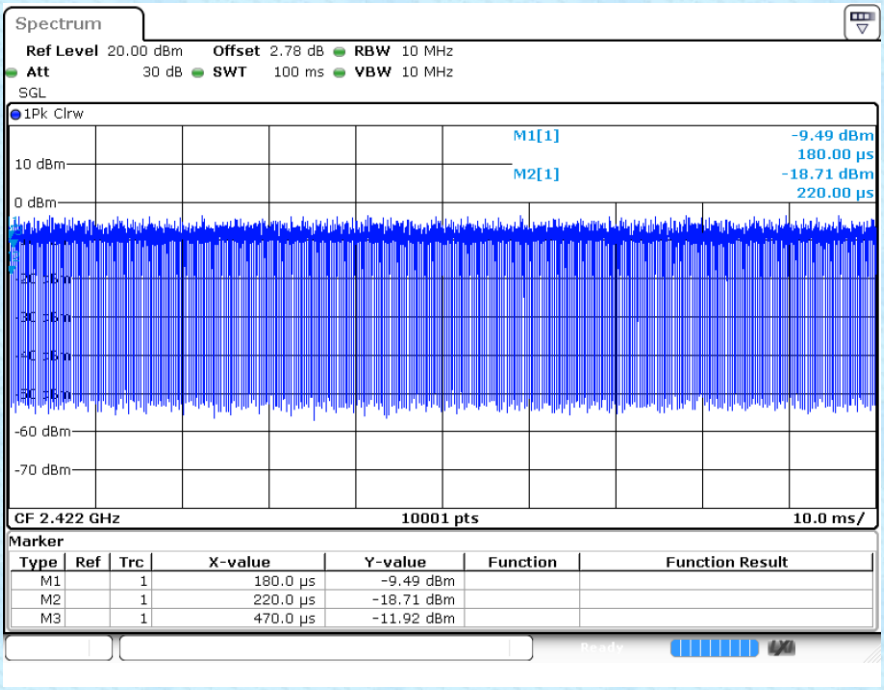
n20 2437MHz Ant1



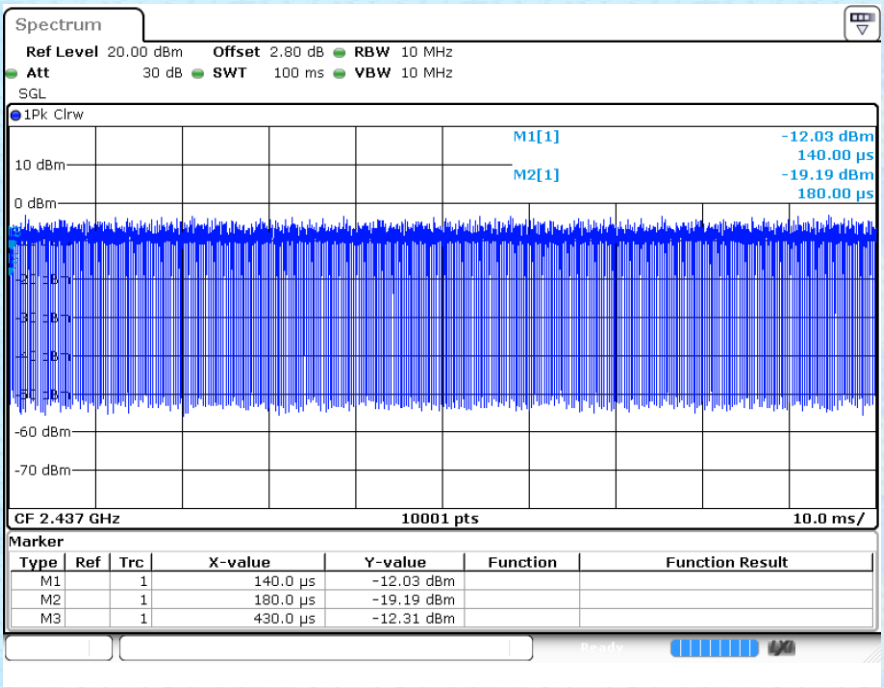
Test Graphs
n20 2462MHz Ant1



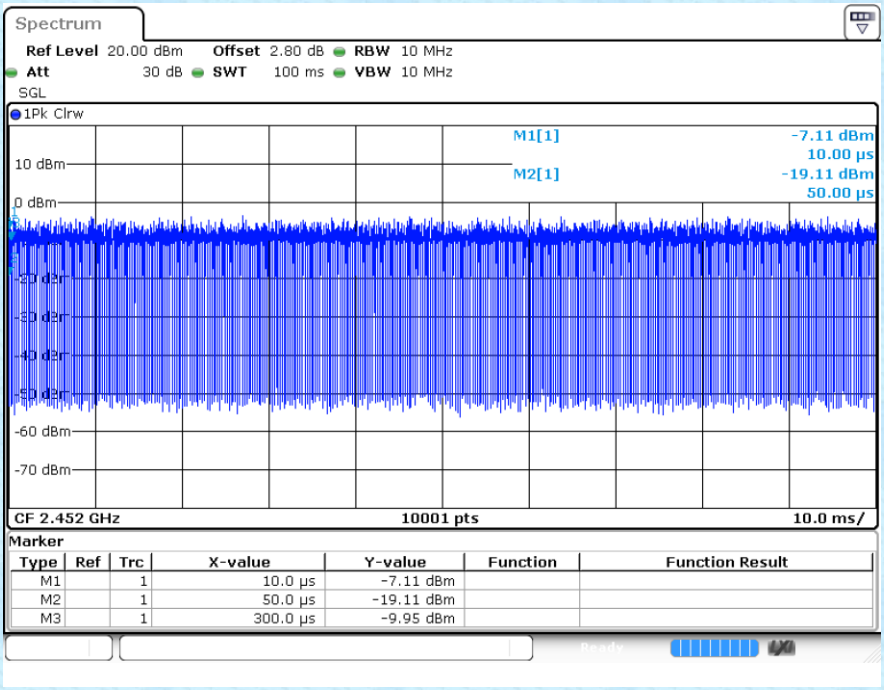
n40 2422MHz Ant1



Test Graphs
n40 2437MHz Ant1



n40 2452MHz Ant1



2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	14.81	30	Pass
b	2437	Ant1	14.86	30	Pass
b	2462	Ant1	14.82	30	Pass
g	2412	Ant1	13.4	30	Pass
g	2437	Ant1	13.6	30	Pass
g	2462	Ant1	13.39	30	Pass
n20	2412	Ant1	13.46	30	Pass
n20	2437	Ant1	13.38	30	Pass
n20	2462	Ant1	13.35	30	Pass
n40	2422	Ant1	12.88	30	Pass
n40	2437	Ant1	12.81	30	Pass
n40	2452	Ant1	12.71	30	Pass

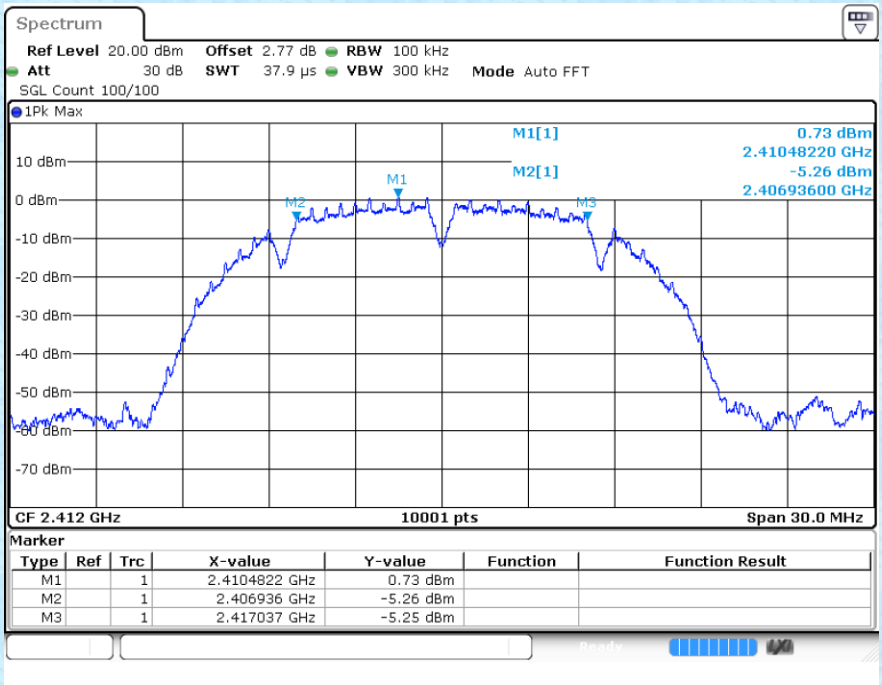
3 -6dB Bandwidth

3.1 Test Result

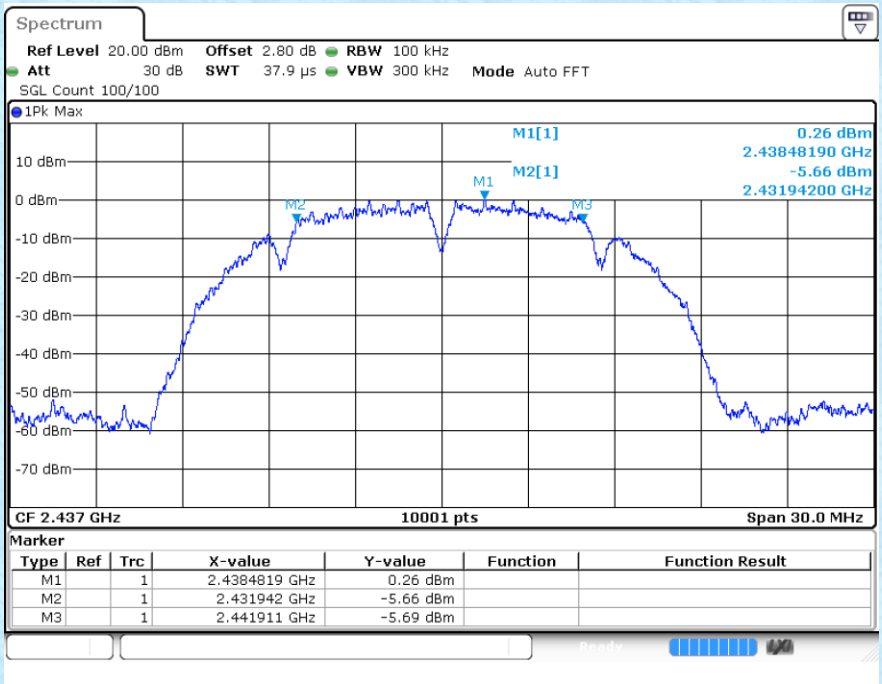
Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	10.101	0.5	Pass
b	2437	Ant1	9.969	0.5	Pass
b	2462	Ant1	10.101	0.5	Pass
g	2412	Ant1	15.114	0.5	Pass
g	2437	Ant1	15.114	0.5	Pass
g	2462	Ant1	15.048	0.5	Pass
n20	2412	Ant1	15.114	0.5	Pass
n20	2437	Ant1	15.114	0.5	Pass
n20	2462	Ant1	15.084	0.5	Pass
n40	2422	Ant1	34.992	0.5	Pass
n40	2437	Ant1	33.84	0.5	Pass
n40	2452	Ant1	35.028	0.5	Pass

3.2 Test Graphs

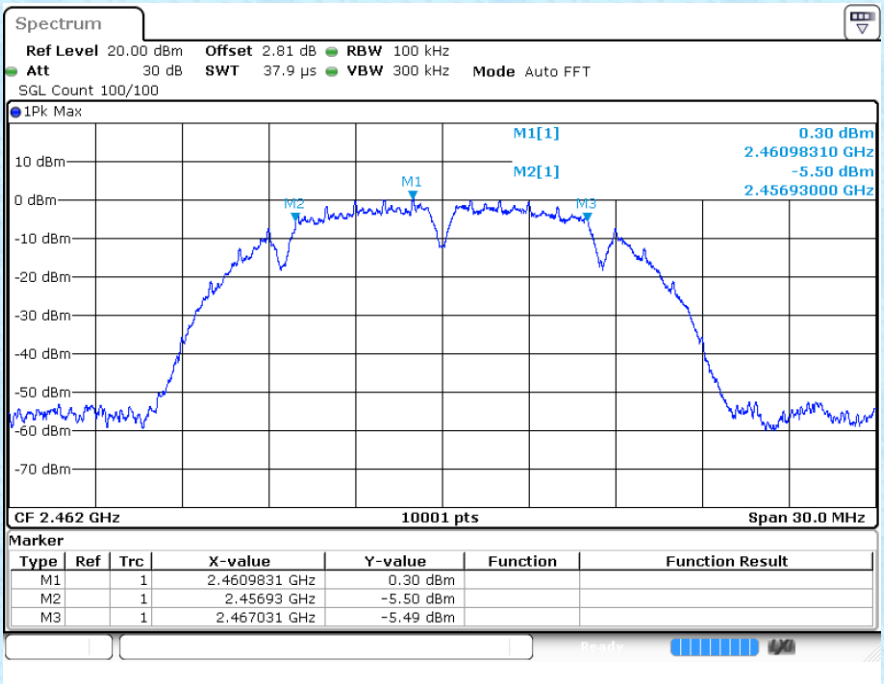
Test Graphs
b 2412MHz Ant1



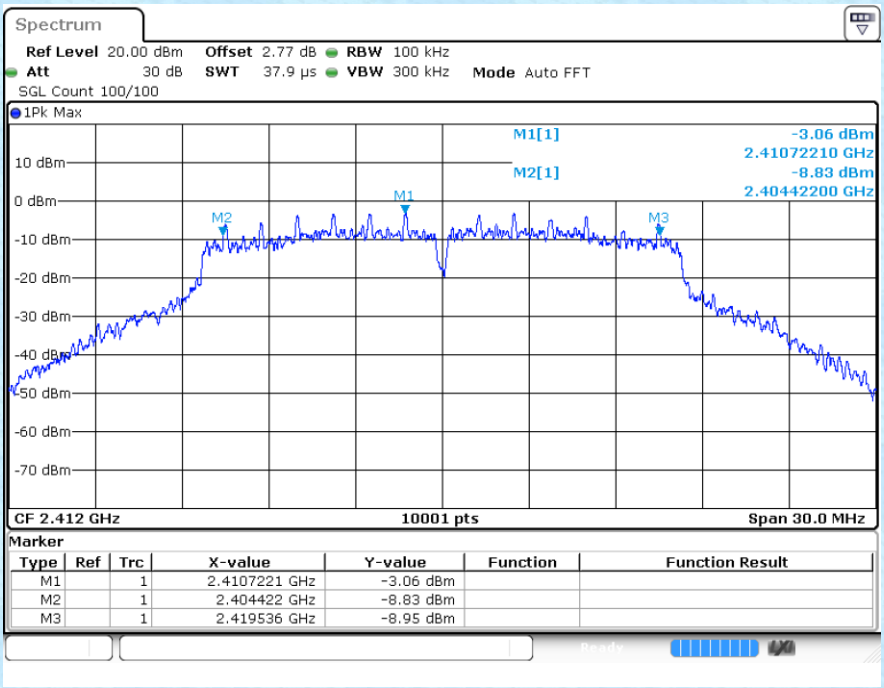
b 2437MHz Ant1



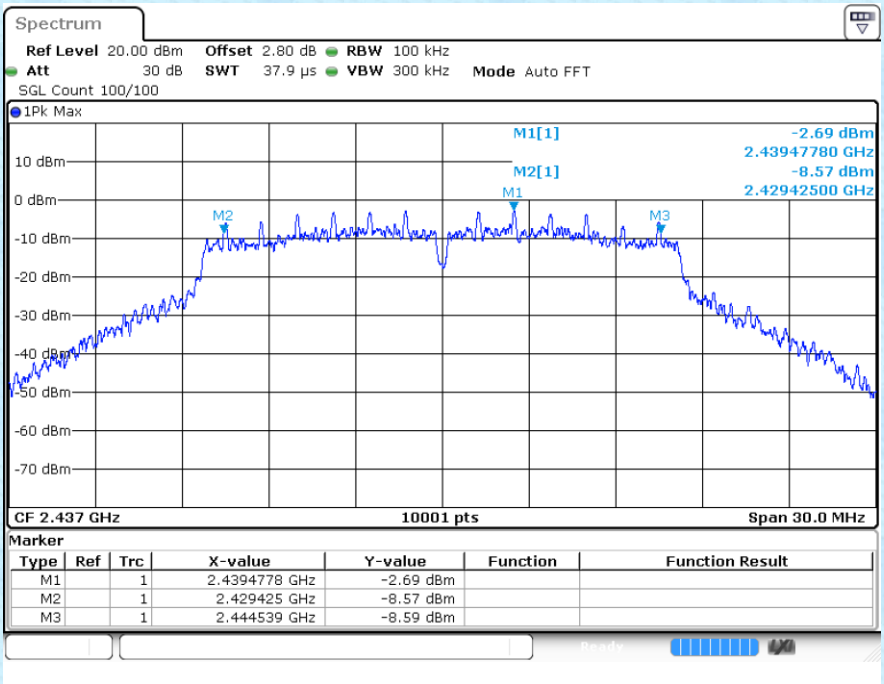
b 2462MHz Ant1



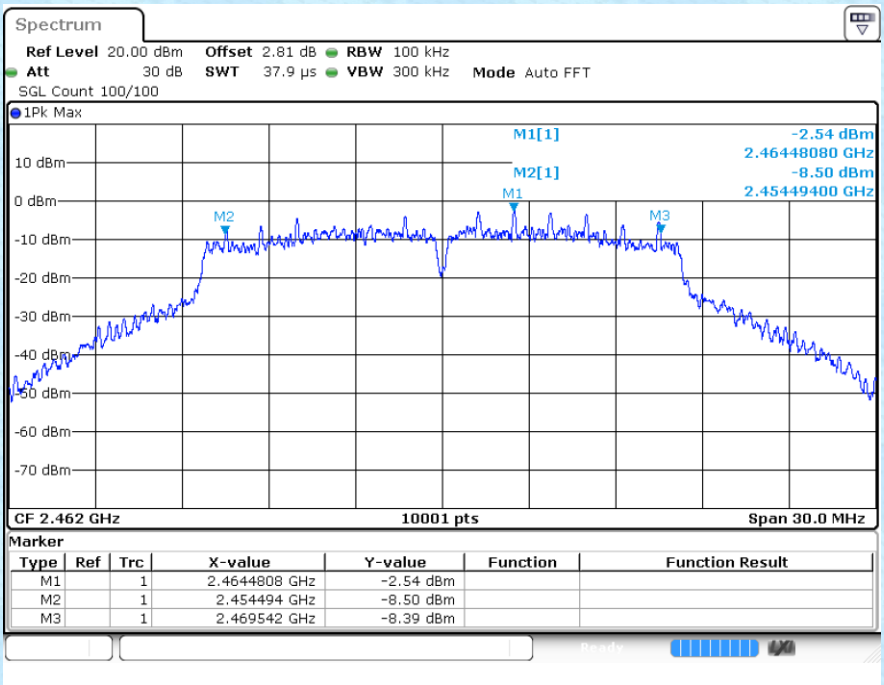
g 2412MHz Ant1



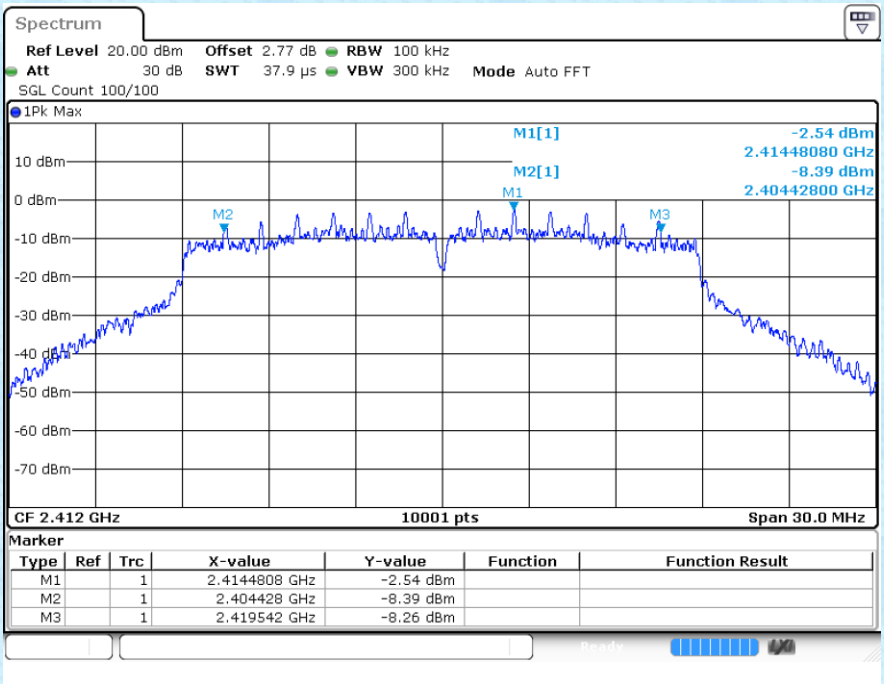
g 2437MHz Ant1



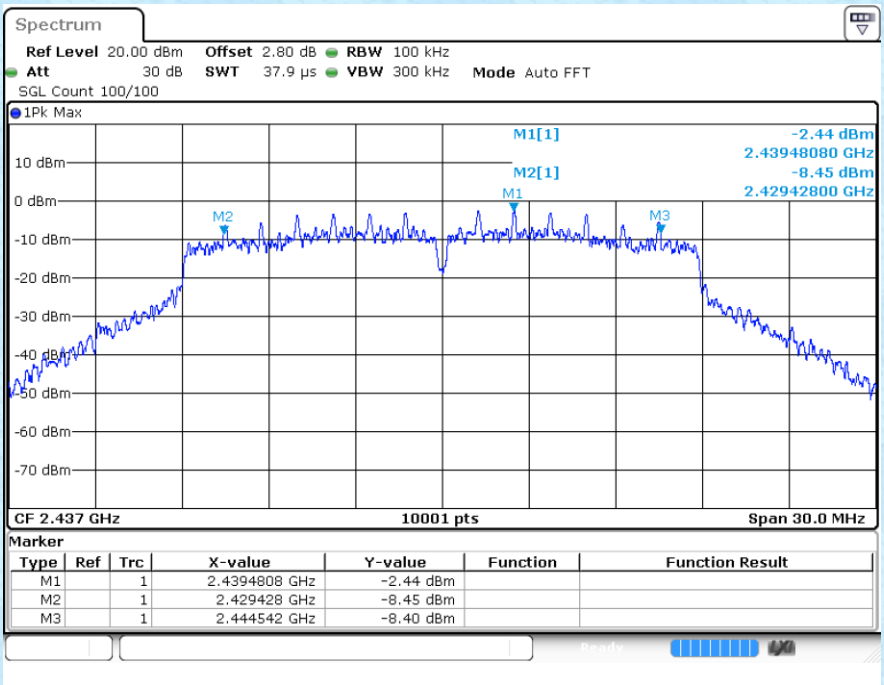
g 2462MHz Ant1



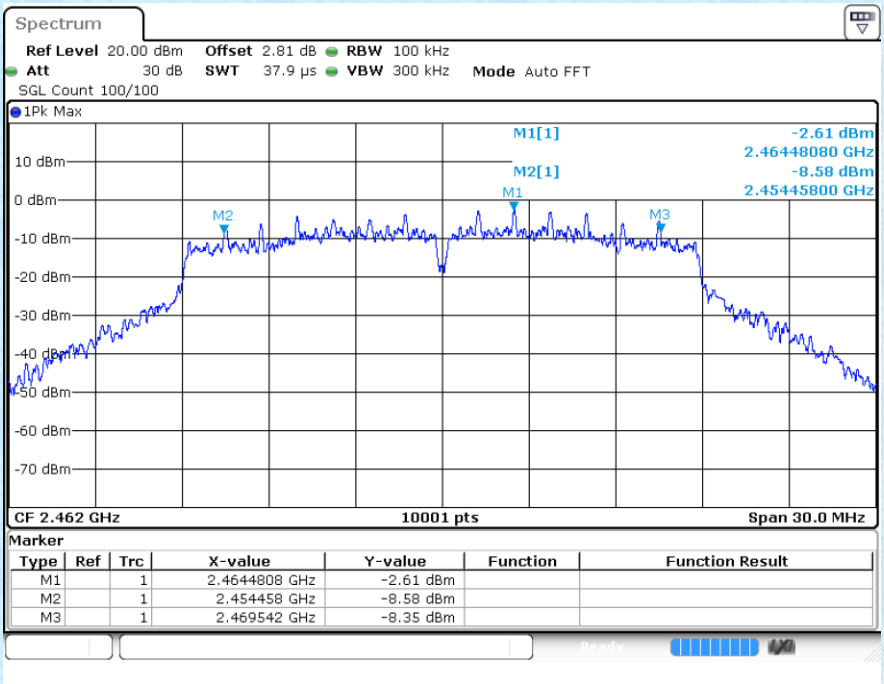
n20 2412MHz Ant1



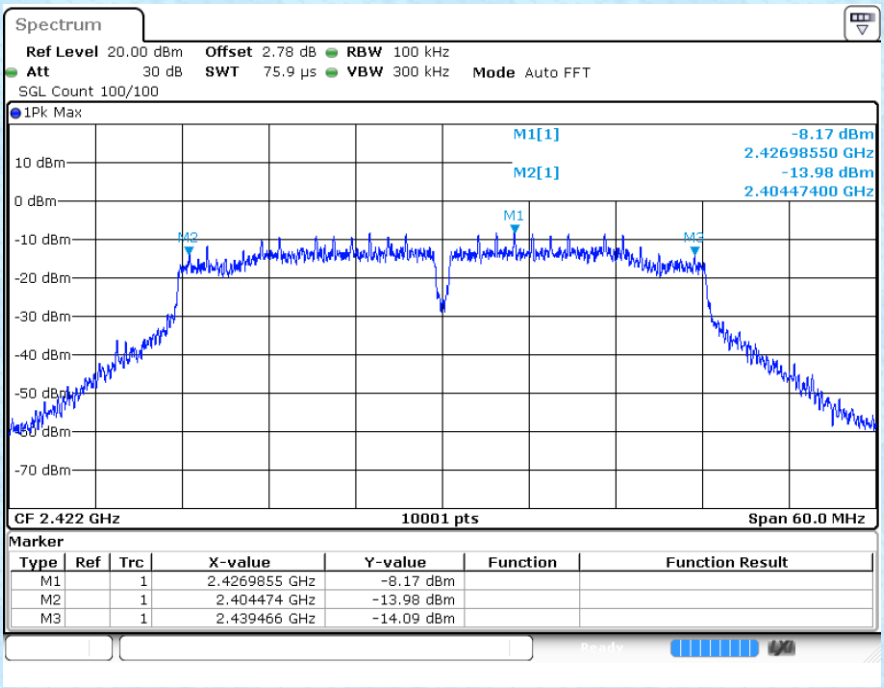
n20 2437MHz Ant1



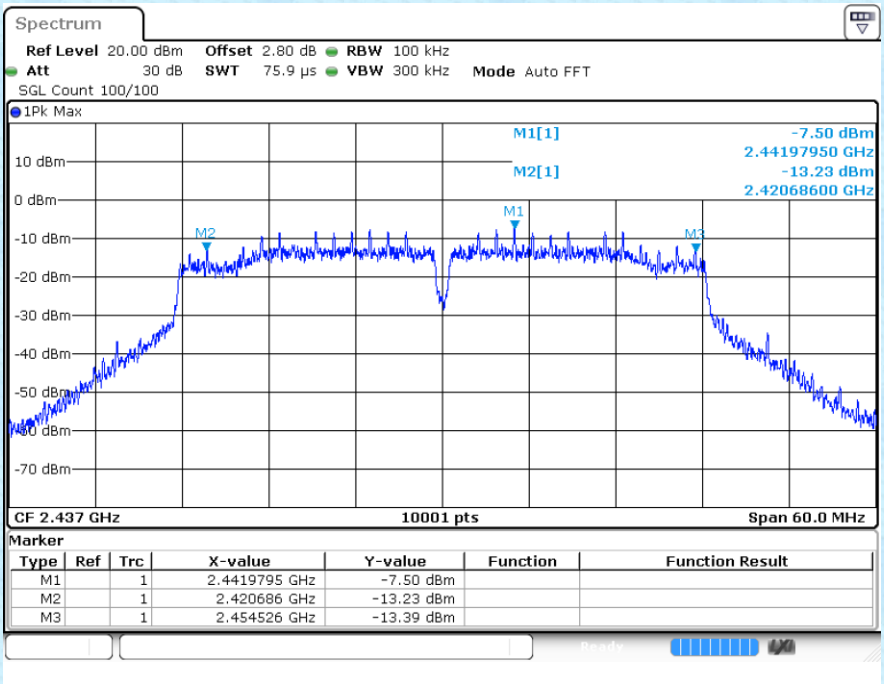
n20 2462MHz Ant1



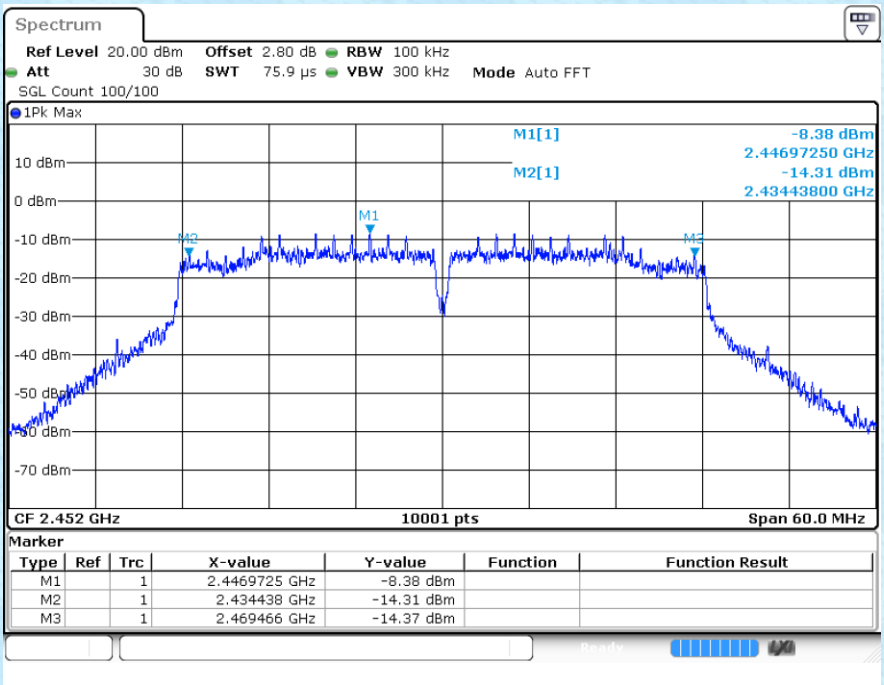
n40 2422MHz Ant1



n40 2437MHz Ant1



n40 2452MHz Ant1

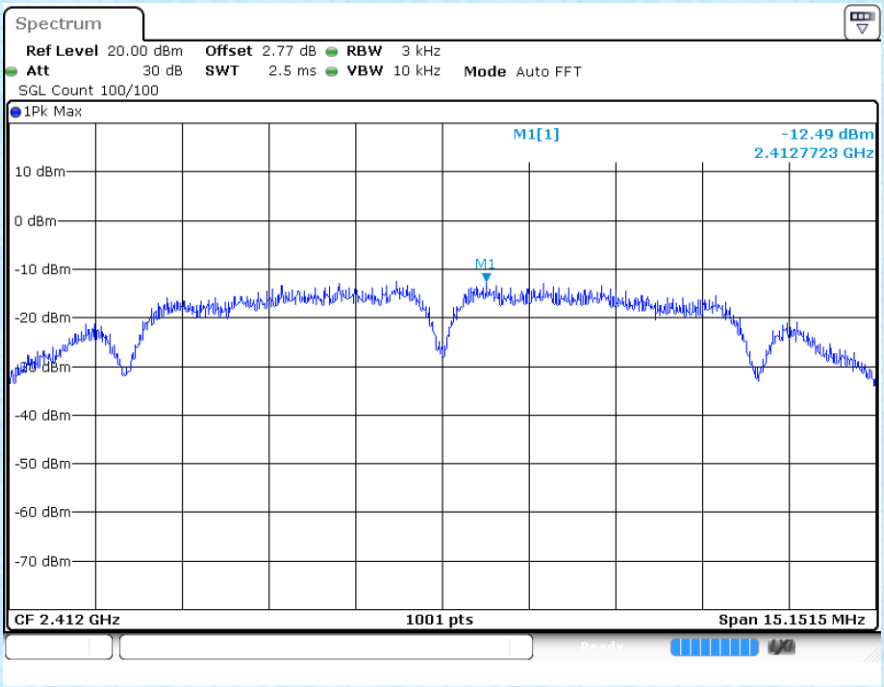
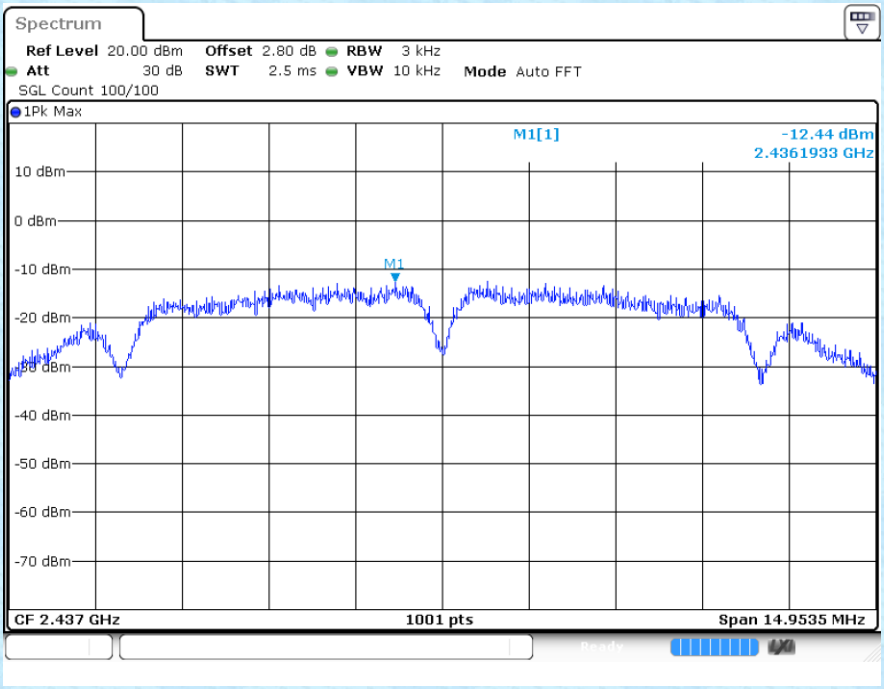


4 Maximum Power Spectral Density Level

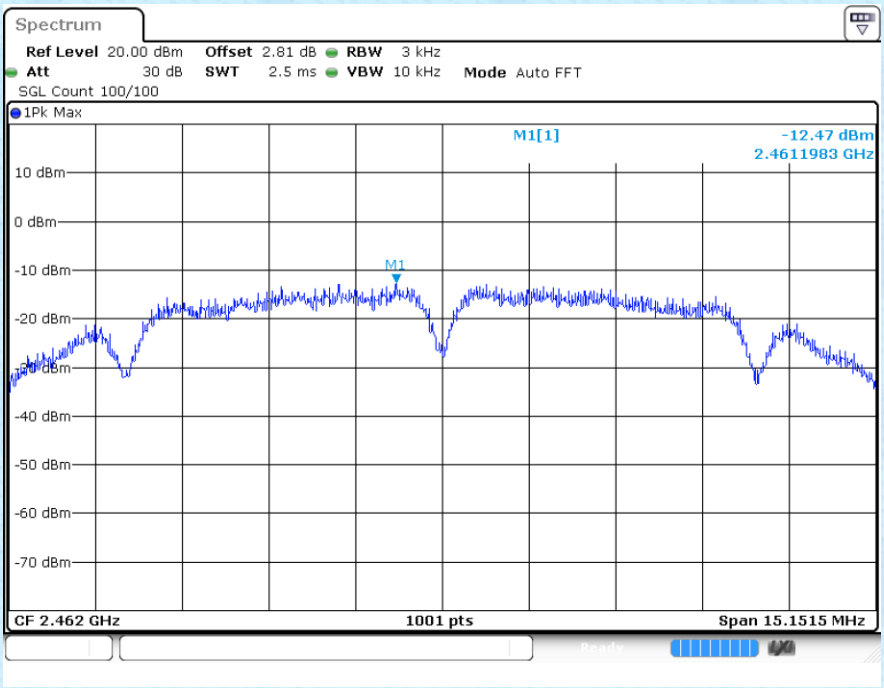
4.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-12.49	≤8	Pass
b	2437	Ant1	-12.44	≤8	Pass
b	2462	Ant1	-12.47	≤8	Pass
g	2412	Ant1	-17.75	≤8	Pass
g	2437	Ant1	-16.46	≤8	Pass
g	2462	Ant1	-16.38	≤8	Pass
n20	2412	Ant1	-17.69	≤8	Pass
n20	2437	Ant1	-16.7	≤8	Pass
n20	2462	Ant1	-16.54	≤8	Pass
n40	2422	Ant1	-21.57	≤8	Pass
n40	2437	Ant1	-22.08	≤8	Pass
n40	2452	Ant1	-21.5	≤8	Pass

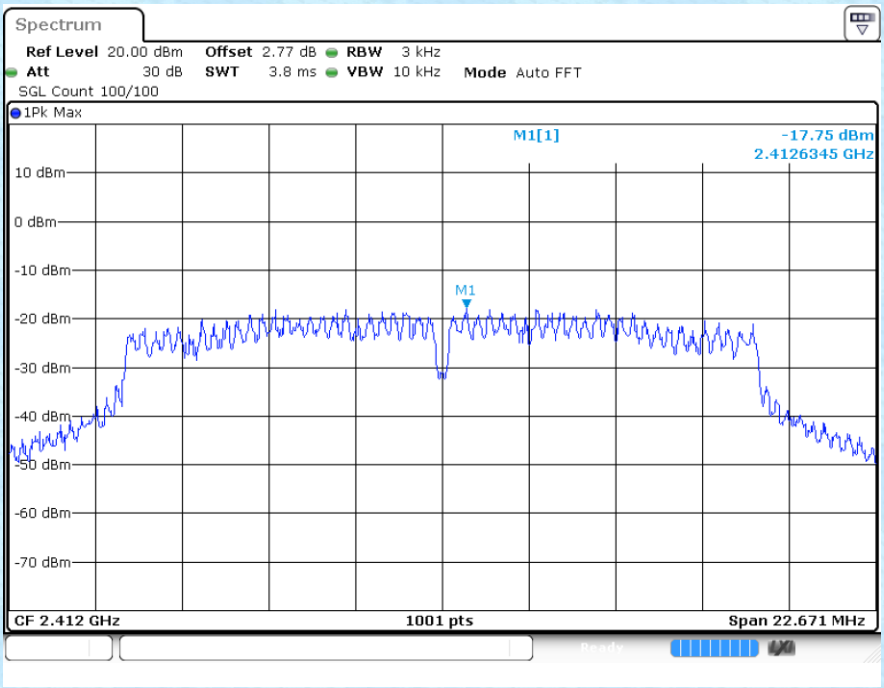
4.2 Test Graphs

Test Graphs
b 2412MHz Ant1

b 2437MHz Ant1


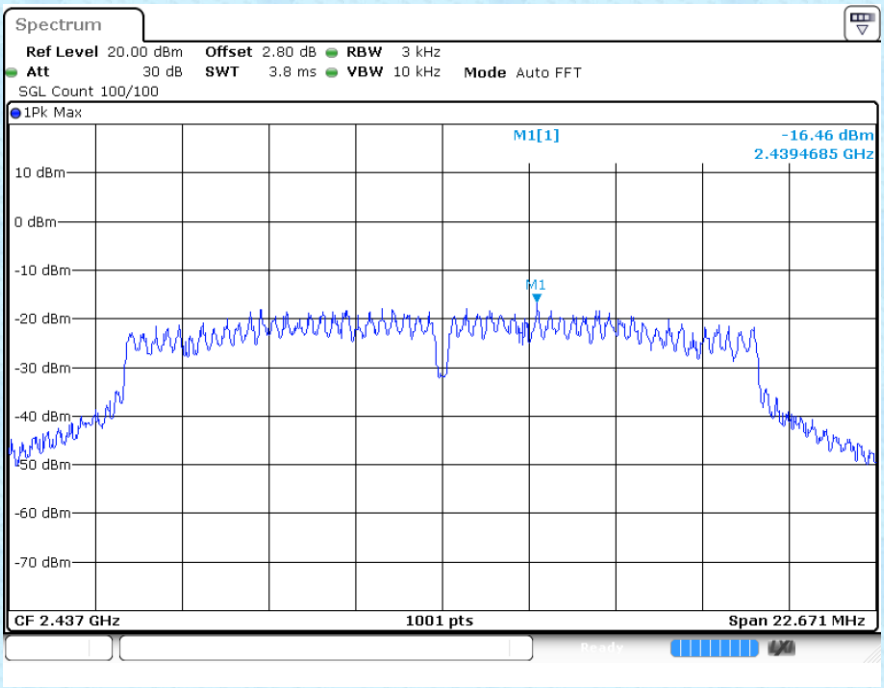
b 2462MHz Ant1



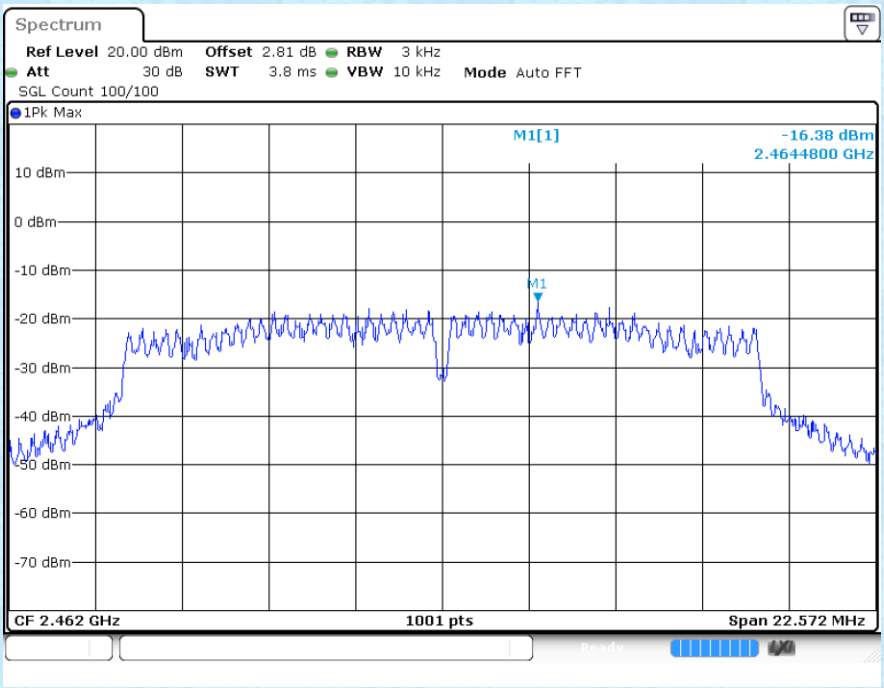
g 2412MHz Ant1



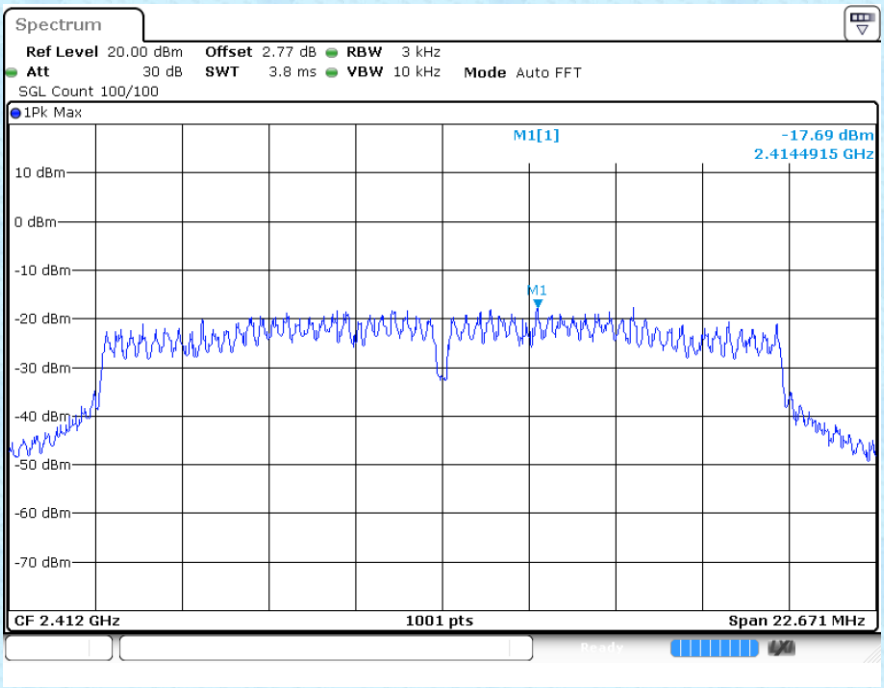
g 2437MHz Ant1



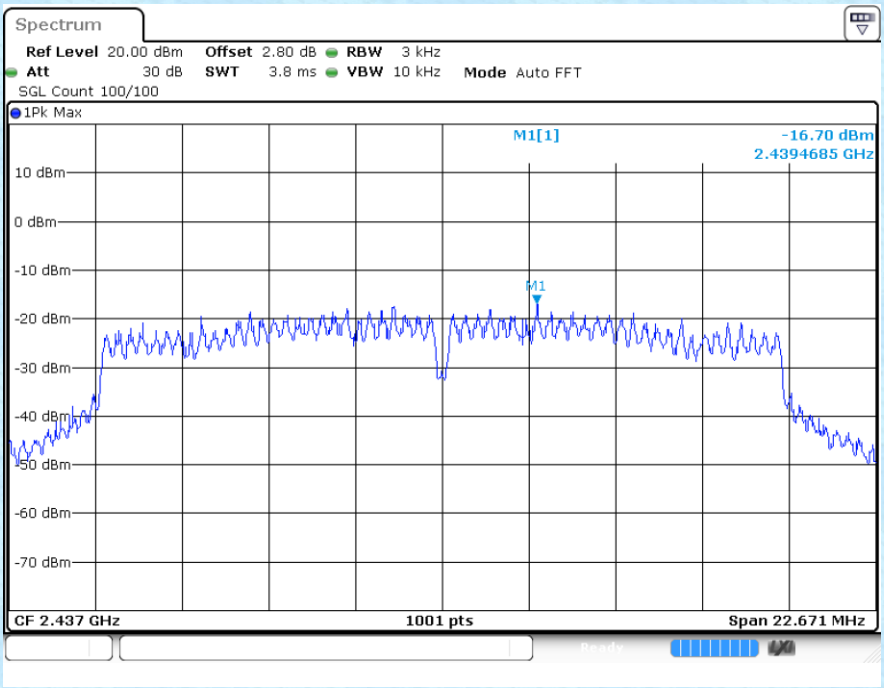
g 2462MHz Ant1



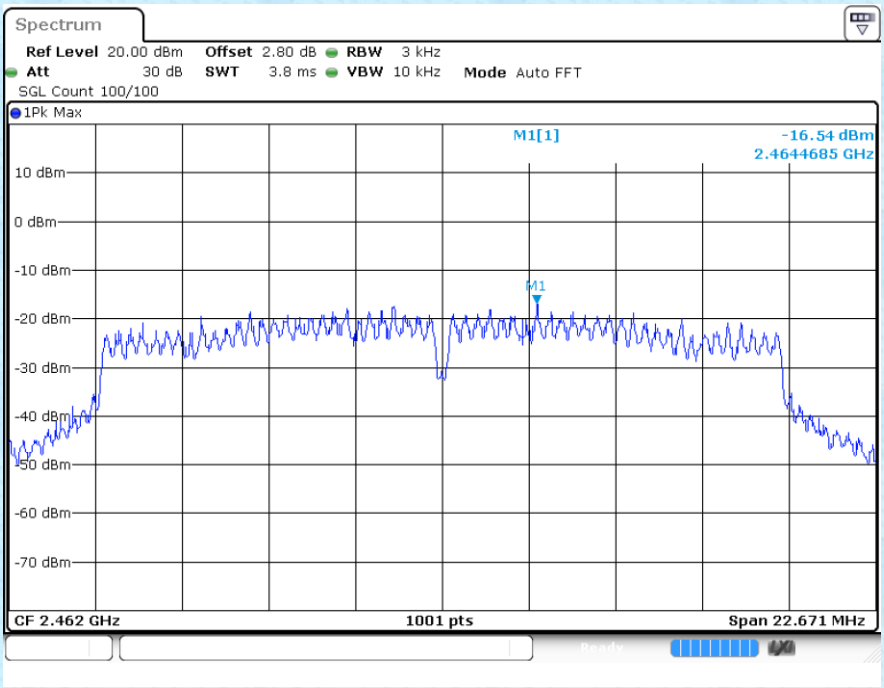
n20 2412MHz Ant1



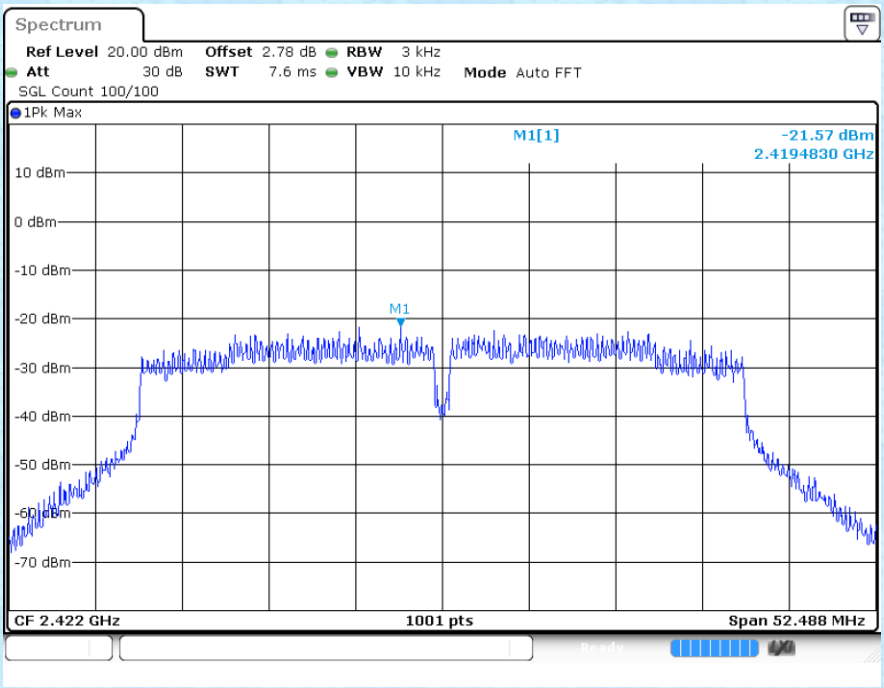
n20 2437MHz Ant1



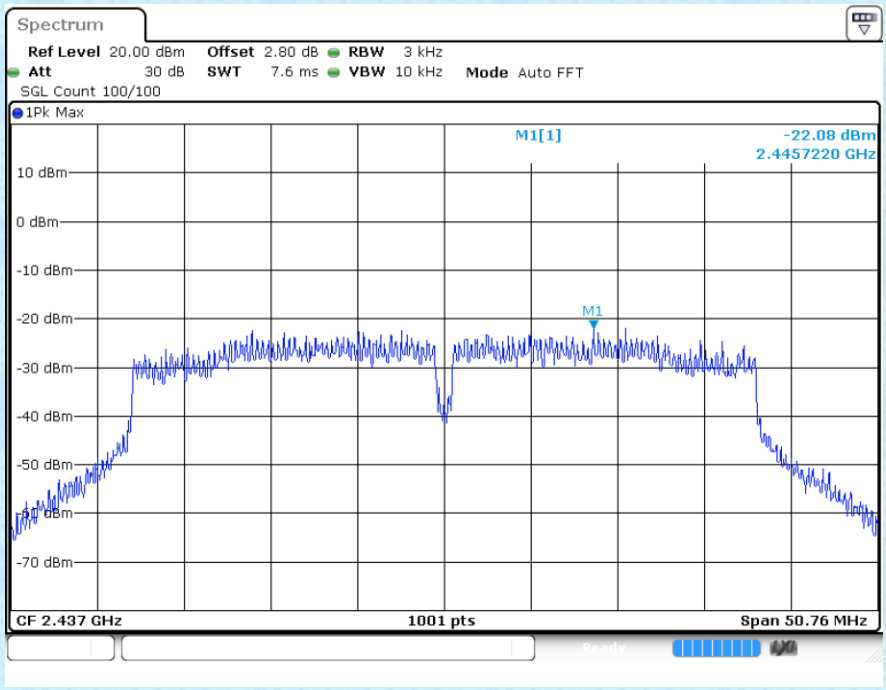
n20 2462MHz Ant1



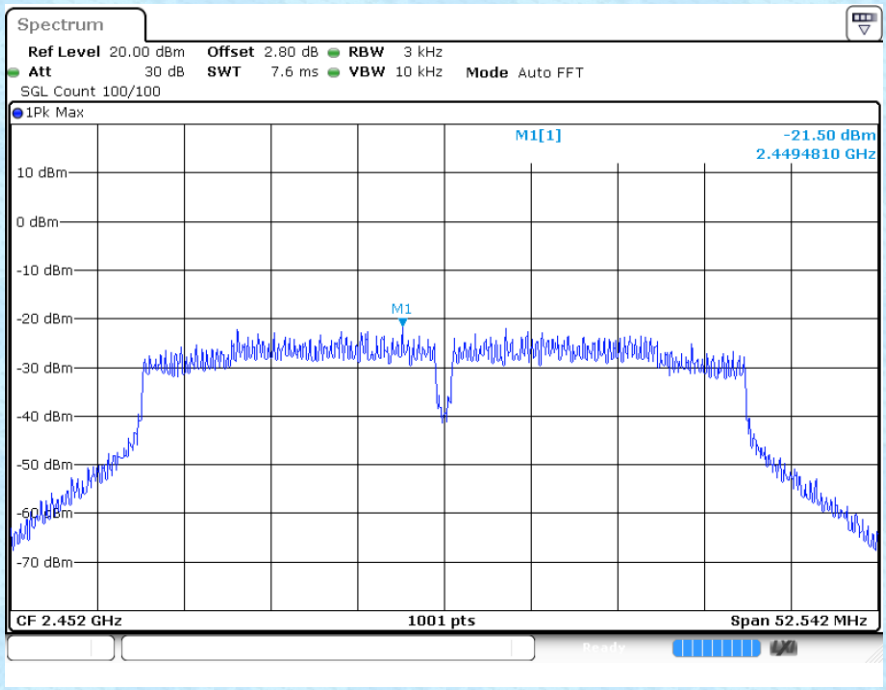
n40 2422MHz Ant1



n40 2437MHz Ant1



n40 2452MHz Ant1



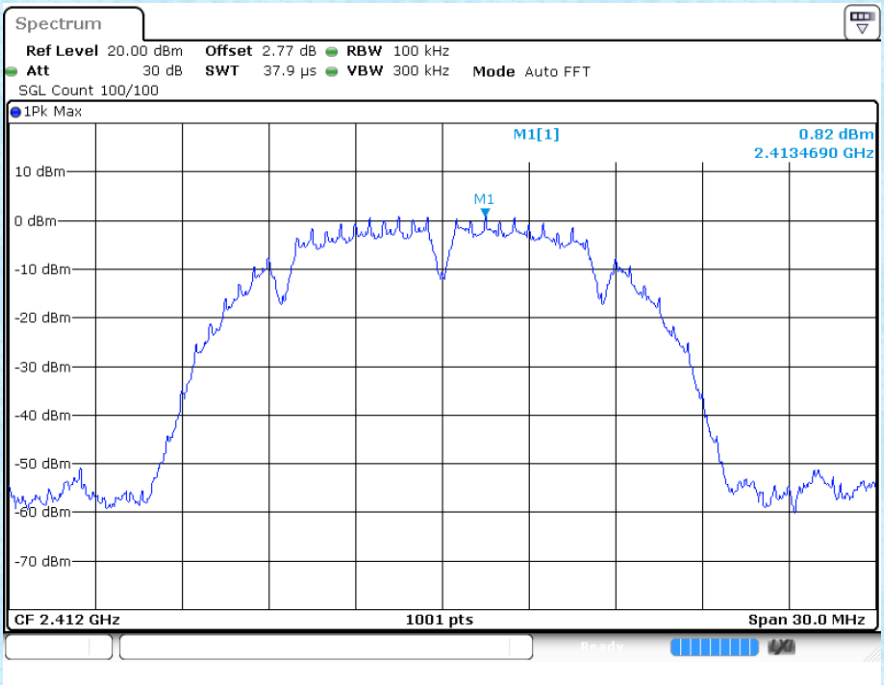
5 Band Edge

5.1 Test Result

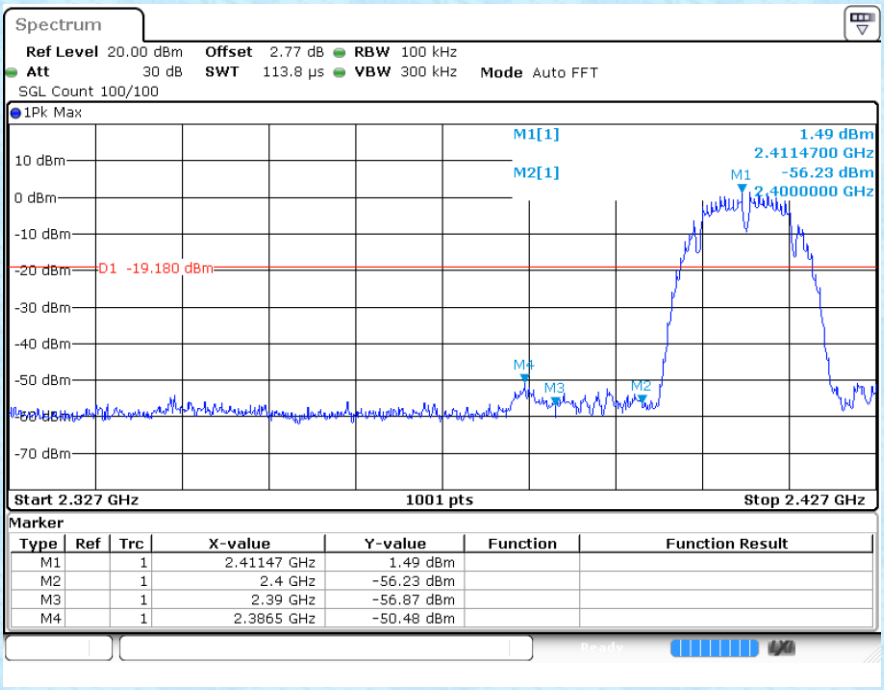
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-51.3	-20	-51.3
b	2462	Ant1	-55.51	-20	Pass
g	2412	Ant1	-51.78	-20	Pass
g	2462	Ant1	-52.8	-20	Pass
n20	2412	Ant1	-52.92	-20	Pass
n20	2462	Ant1	-53.45	-20	Pass
n40	2422	Ant1	-48.83	-20	Pass
n40	2452	Ant1	-48.31	-20	Pass

5.2 Test Graphs

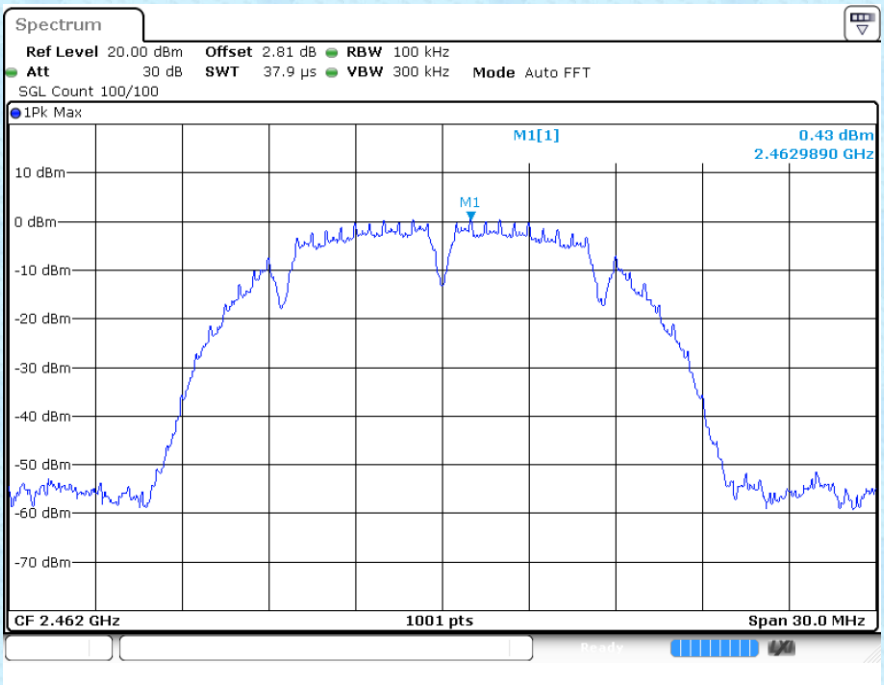
Test Graphs
b 2412MHz Ant1 Ref



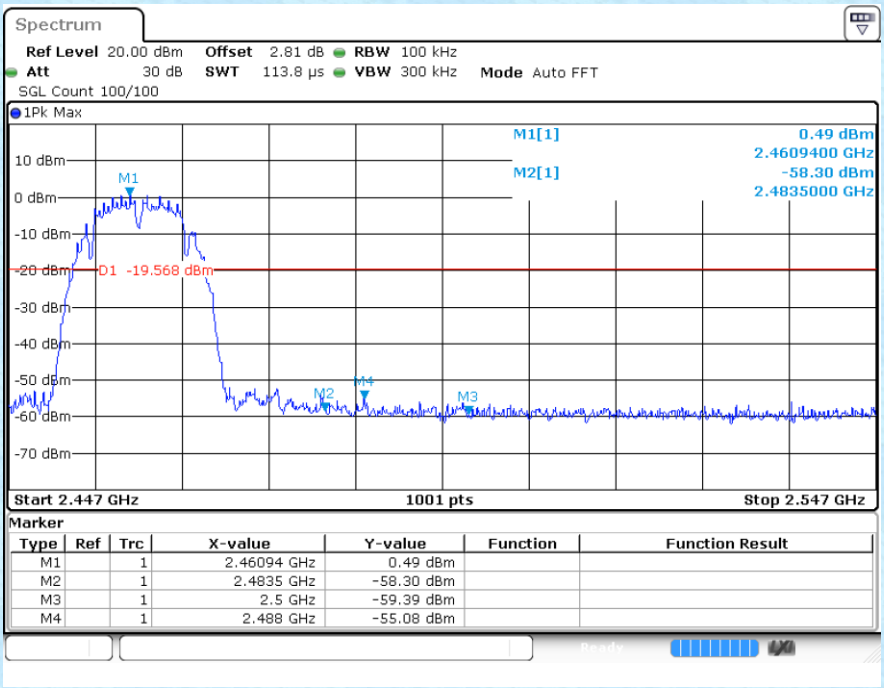
b 2412MHz Ant1 Emission



b 2462MHz Ant1 Ref

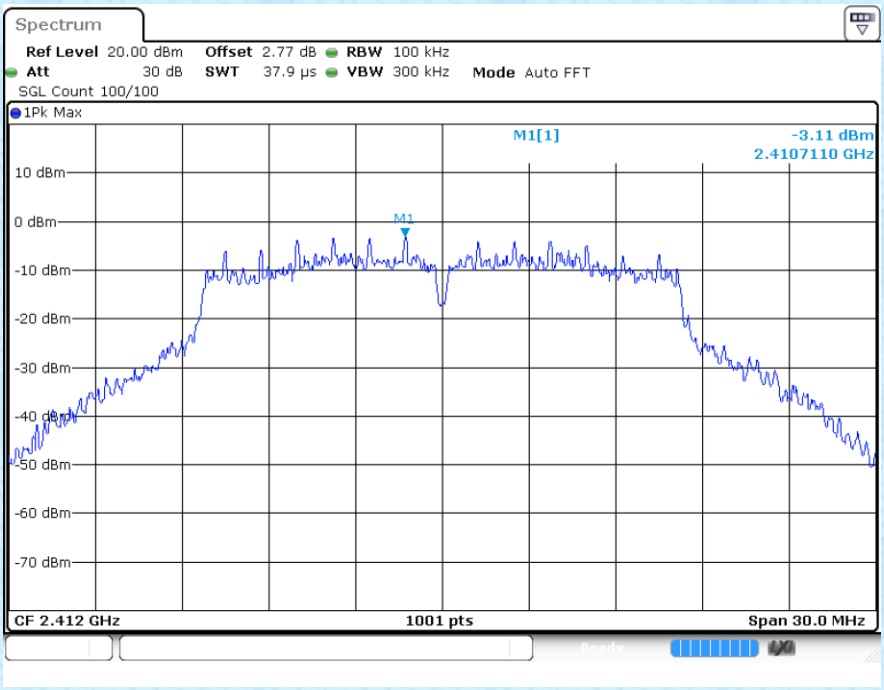


b 2462MHz Ant1 Emission

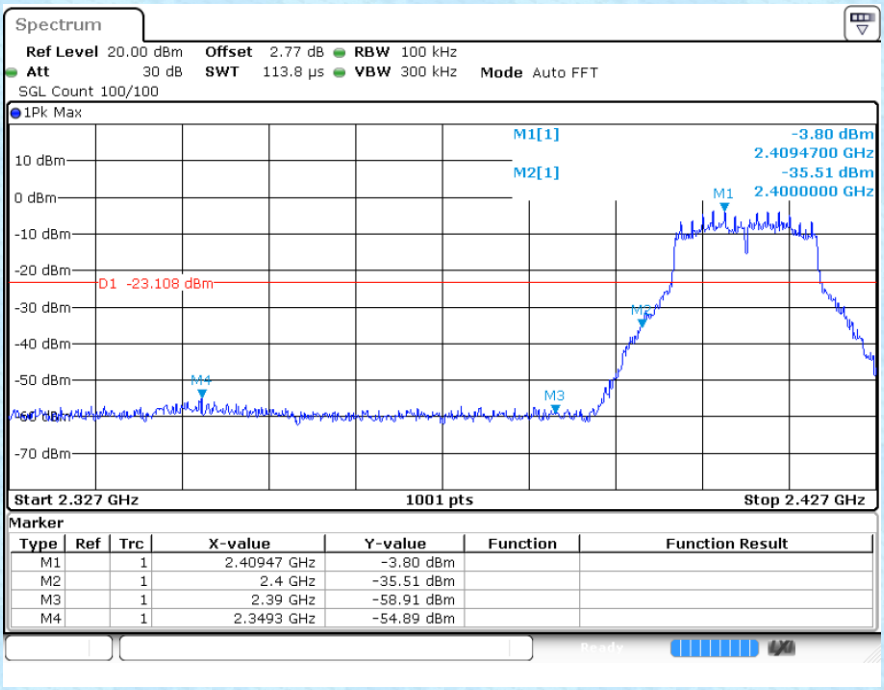


Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.46094 GHz	0.49 dBm		
M2		1	2.4835 GHz	-58.30 dBm		
M3		1	2.5 GHz	-59.39 dBm		
M4		1	2.488 GHz	-55.08 dBm		

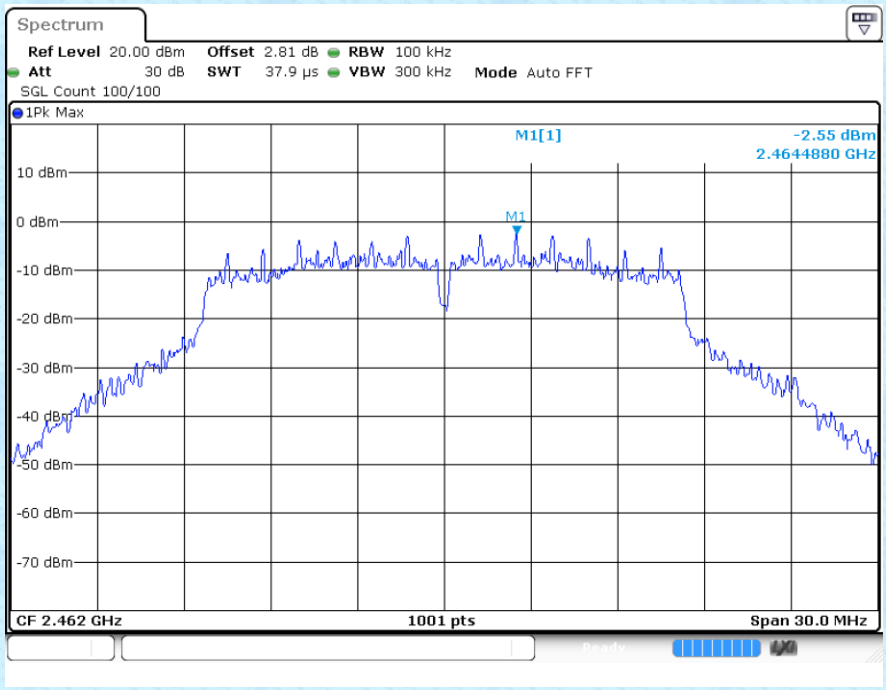
g 2412MHz Ant1 Ref



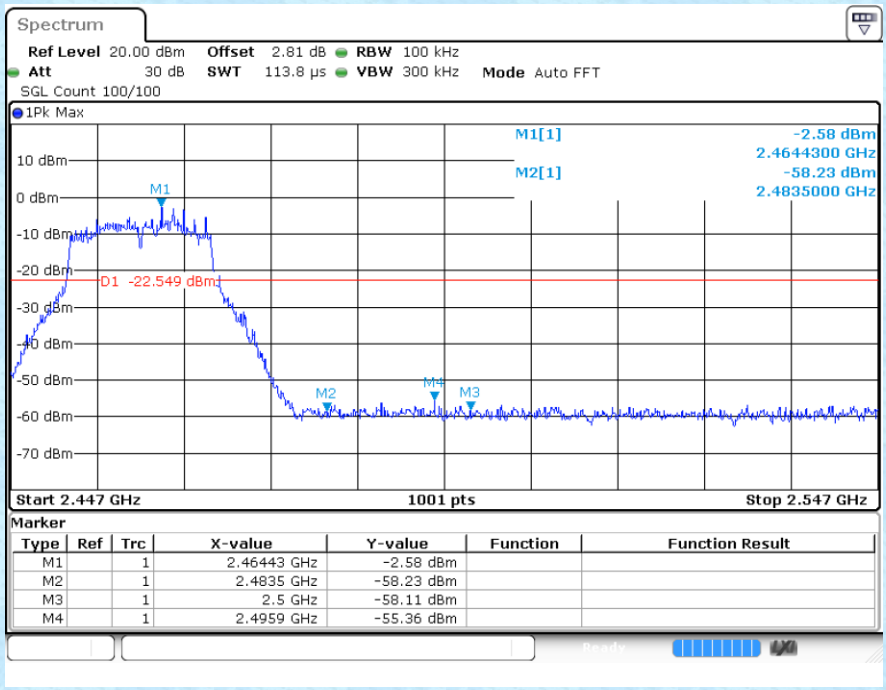
g 2412MHz Ant1 Emission



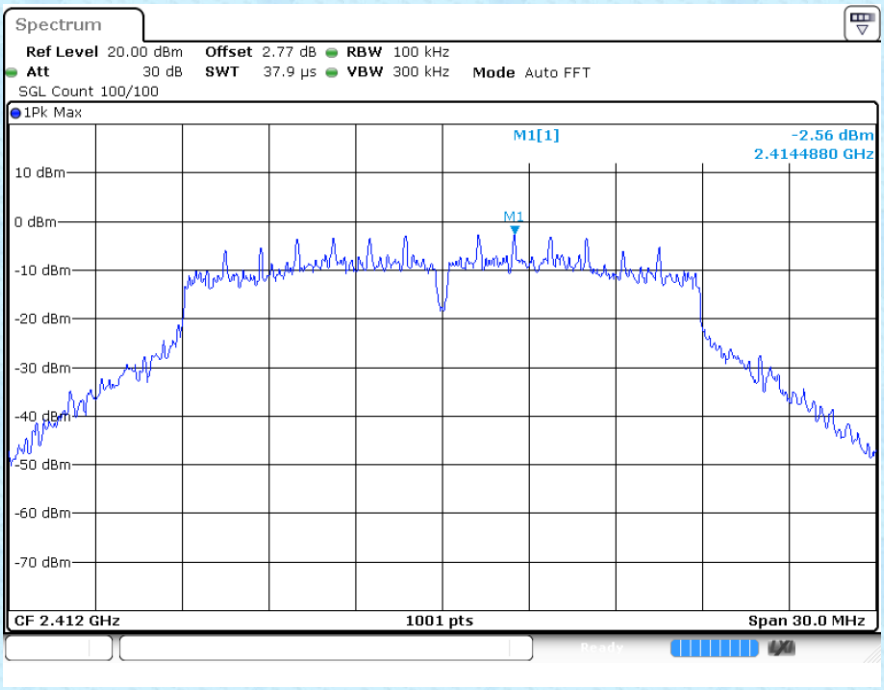
g 2462MHz Ant1 Ref



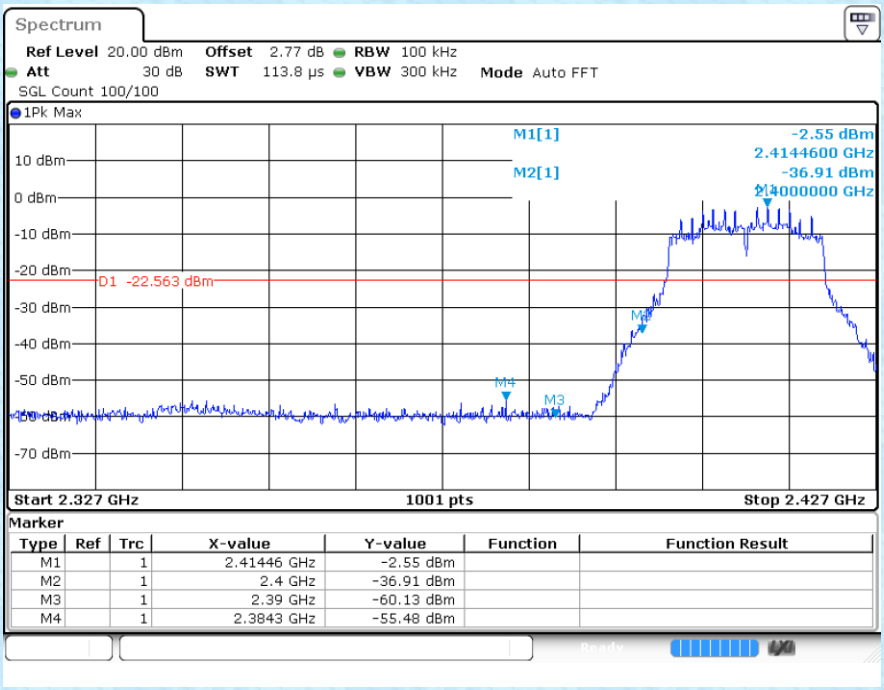
g 2462MHz Ant1 Emission



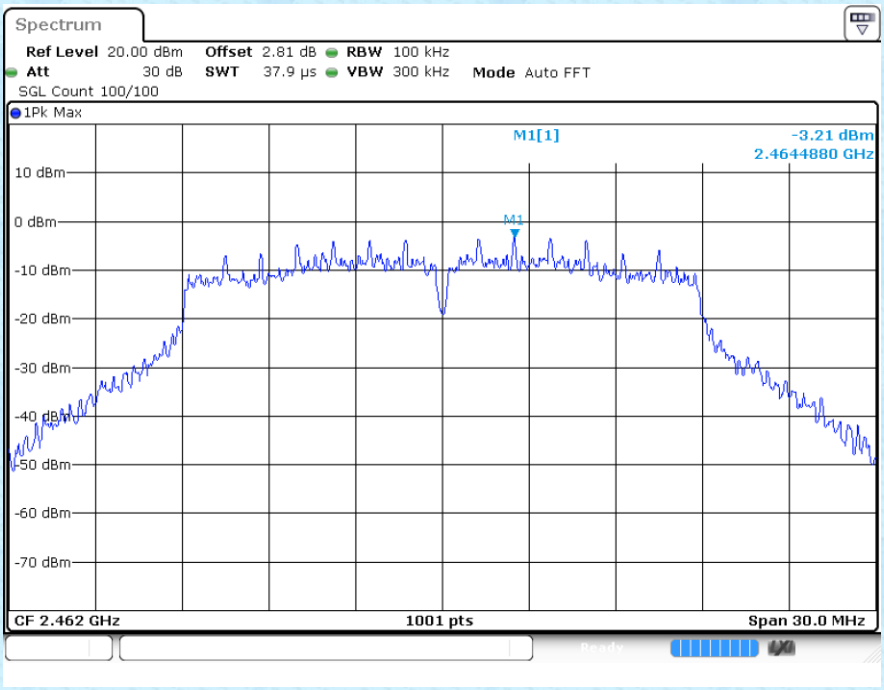
n20 2412MHz Ant1 Ref



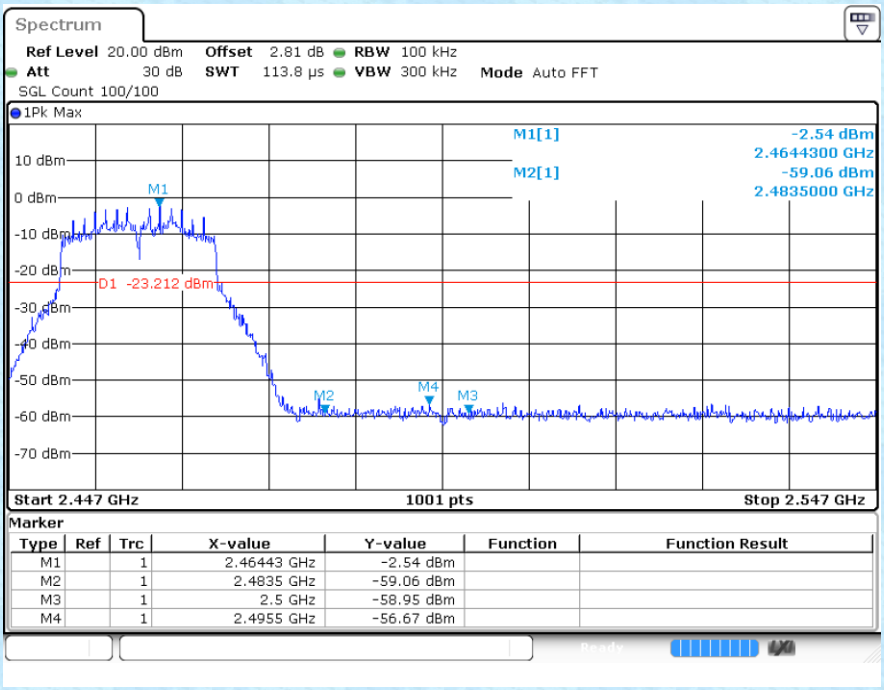
n20 2412MHz Ant1 Emission



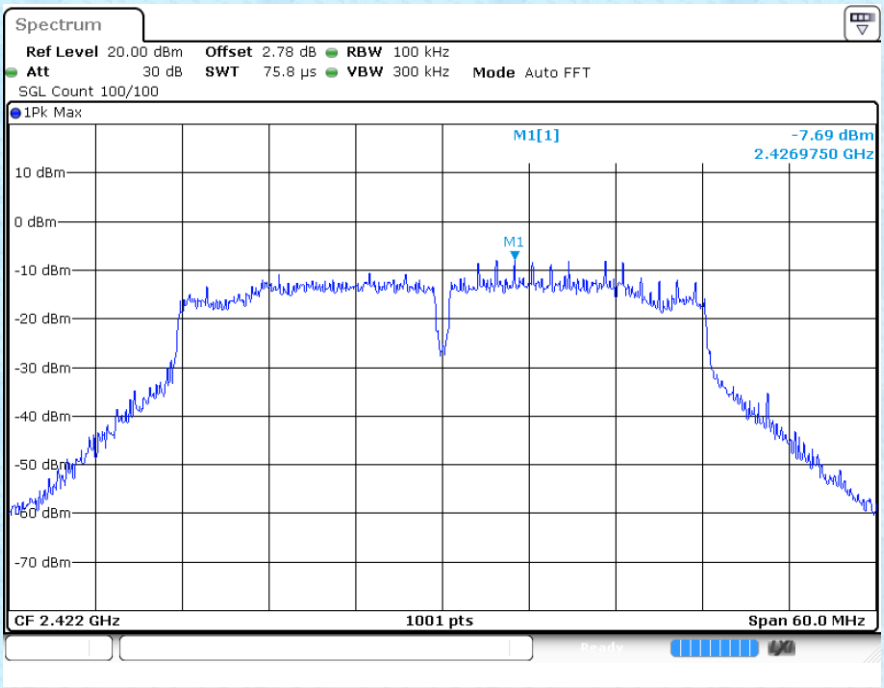
n20 2462MHz Ant1 Ref



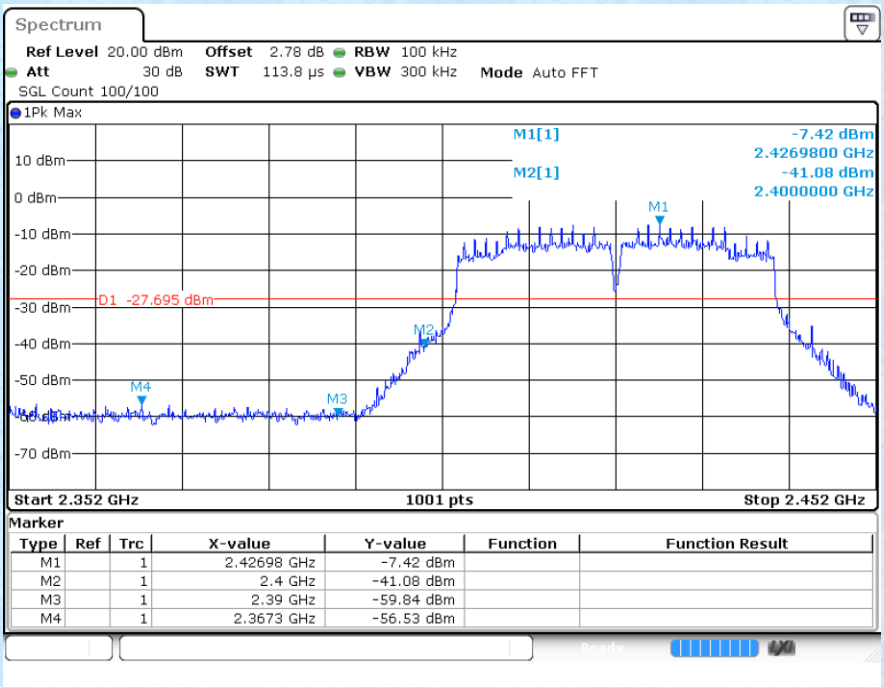
n20 2462MHz Ant1 Emission



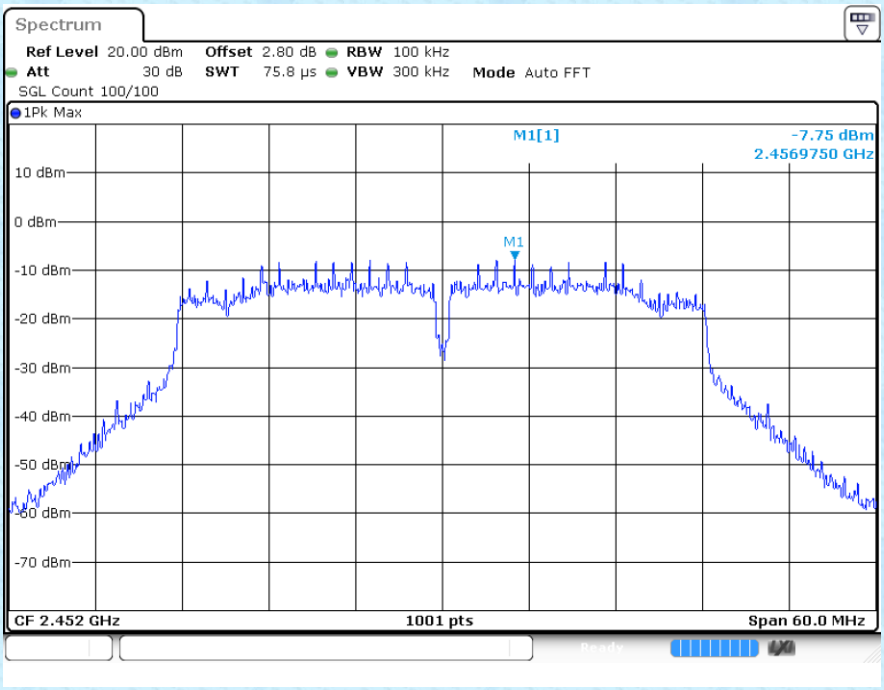
n40 2422MHz Ant1 Ref



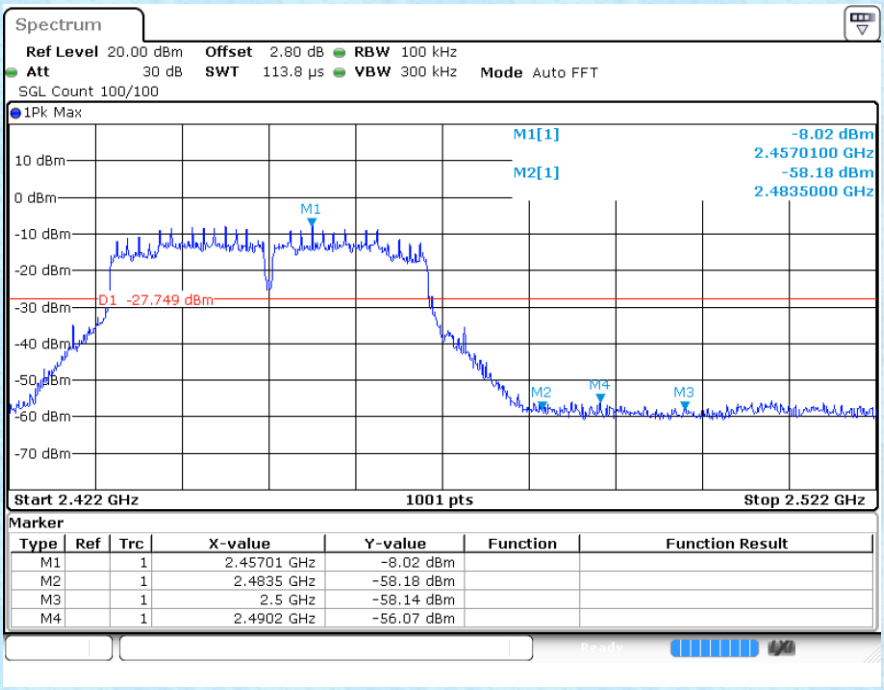
n40 2422MHz Ant1 Emission



n40 2452MHz Ant1 Ref



n40 2452MHz Ant1 Emission



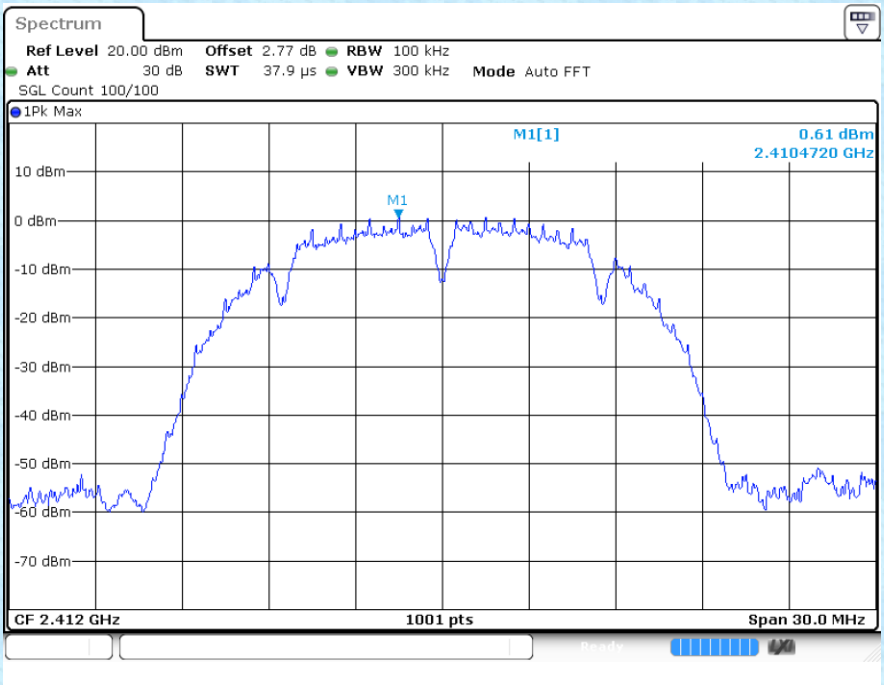
6 Conducted RF Spurious Emission

6.1 Test Result

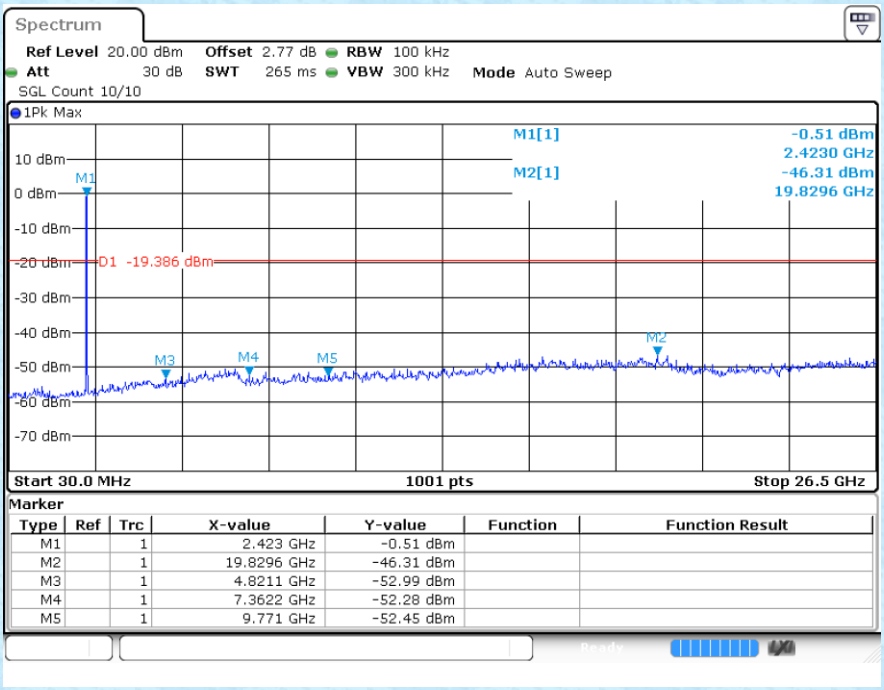
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-46.92	-20	Pass
b	2437	Ant1	-47.7	-20	Pass
b	2462	Ant1	-46.96	-20	Pass
g	2412	Ant1	-43.59	-20	Pass
g	2437	Ant1	-44.39	-20	Pass
g	2462	Ant1	-42.34	-20	Pass
n20	2412	Ant1	-42.73	-20	Pass
n20	2437	Ant1	-42.53	-20	Pass
n20	2462	Ant1	-44.05	-20	Pass
n40	2422	Ant1	-39.2	-20	Pass
n40	2437	Ant1	-38.52	-20	Pass
n40	2452	Ant1	-36.9	-20	Pass

6.2 Test Graphs

Test Graphs
b 2412MHz Ant1 Ref

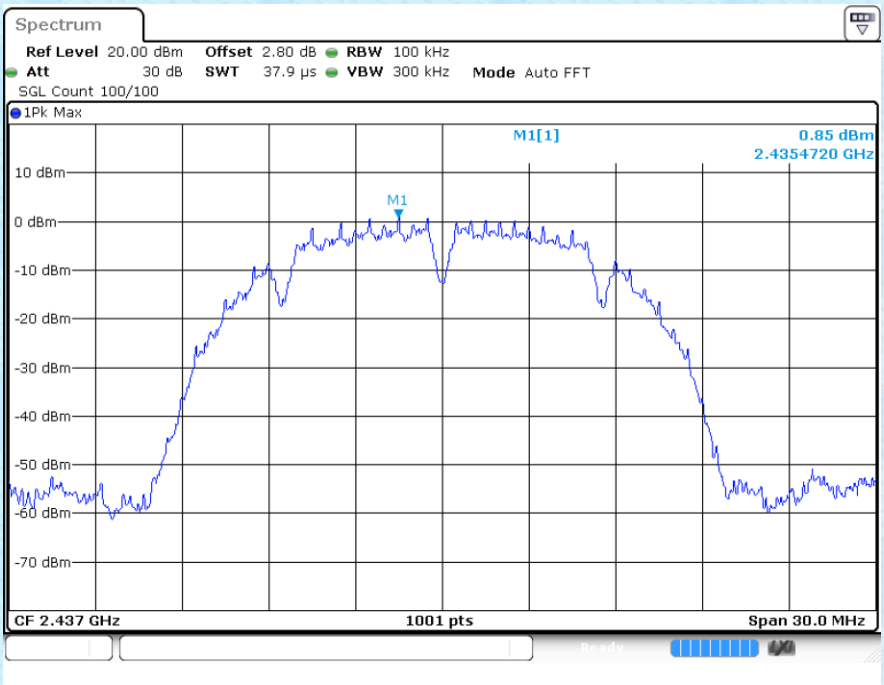


b 2412MHz Ant1 Emission

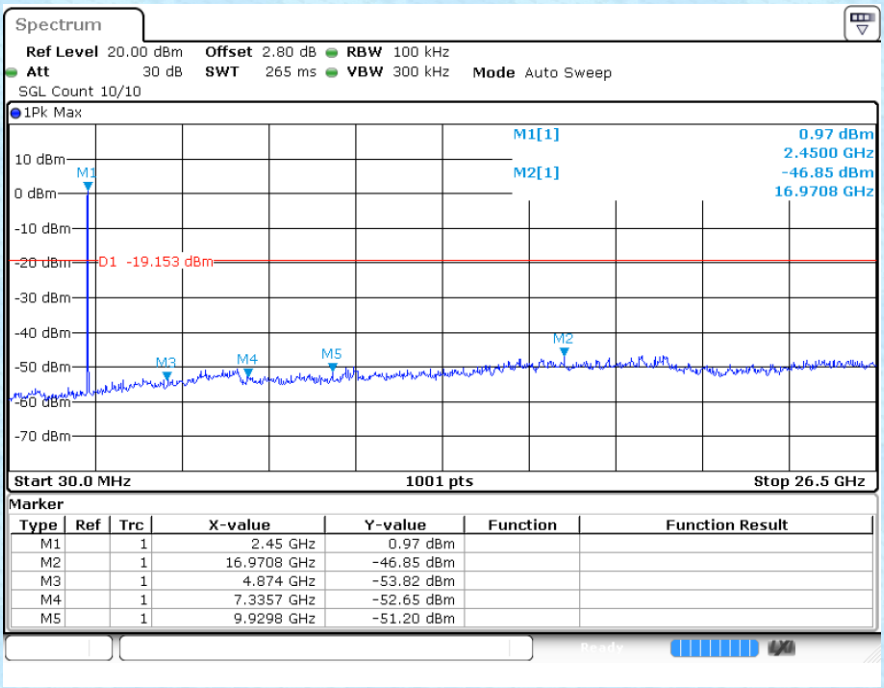


Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.423 GHz	-0.51 dBm		
M2		1	19.8296 GHz	-46.31 dBm		
M3		1	4.8211 GHz	-52.99 dBm		
M4		1	7.3622 GHz	-52.28 dBm		
M5		1	9.771 GHz	-52.45 dBm		

b 2437MHz Ant1 Ref



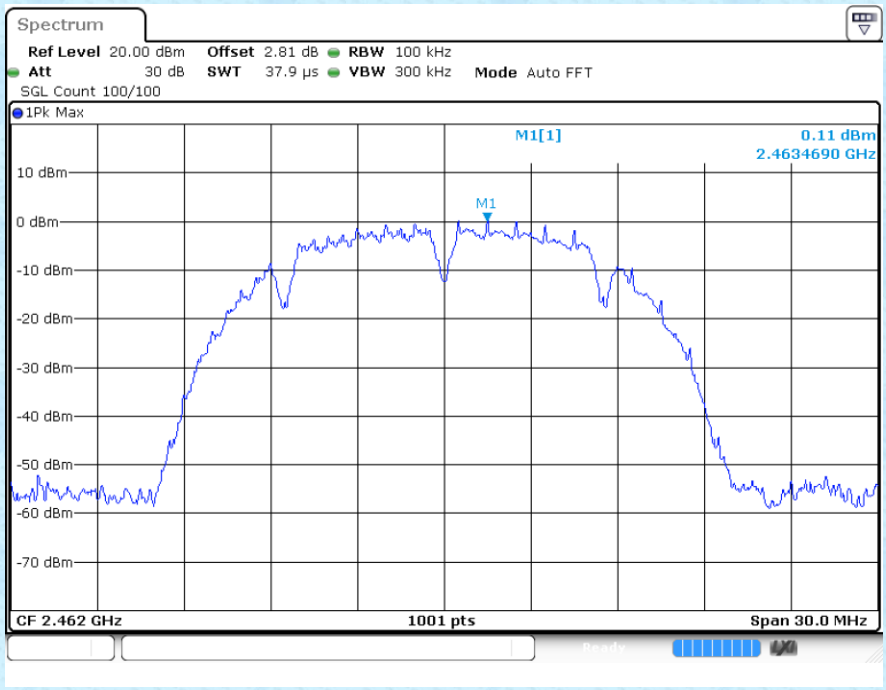
b 2437MHz Ant1 Emission



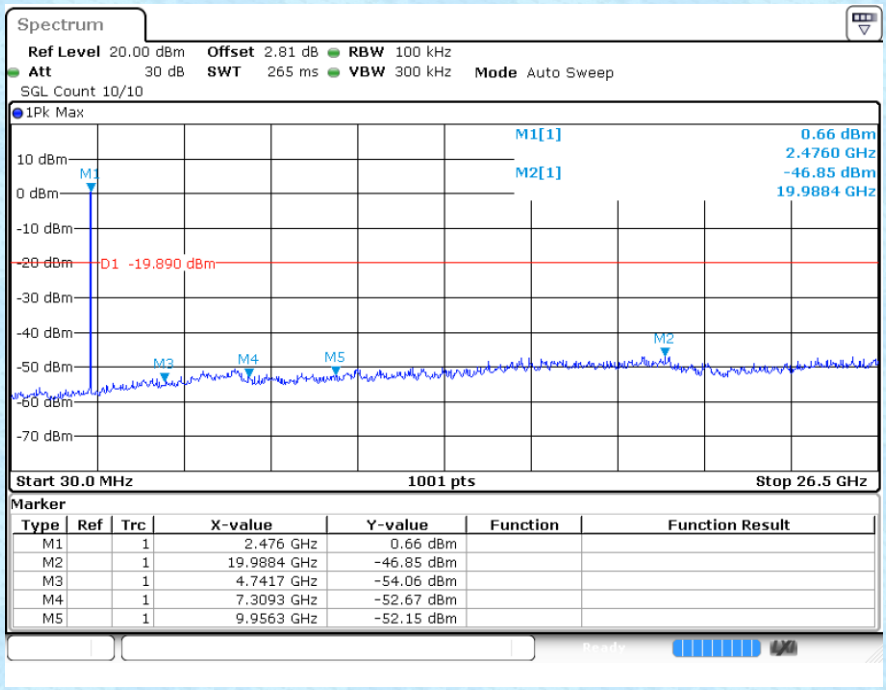
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.45 GHz	0.97 dBm		
M2		1	16.9708 GHz	-46.85 dBm		
M3		1	4.874 GHz	-53.82 dBm		
M4		1	7.3357 GHz	-52.65 dBm		
M5		1	9.9298 GHz	-51.20 dBm		

b 2462MHz Ant1 Ref



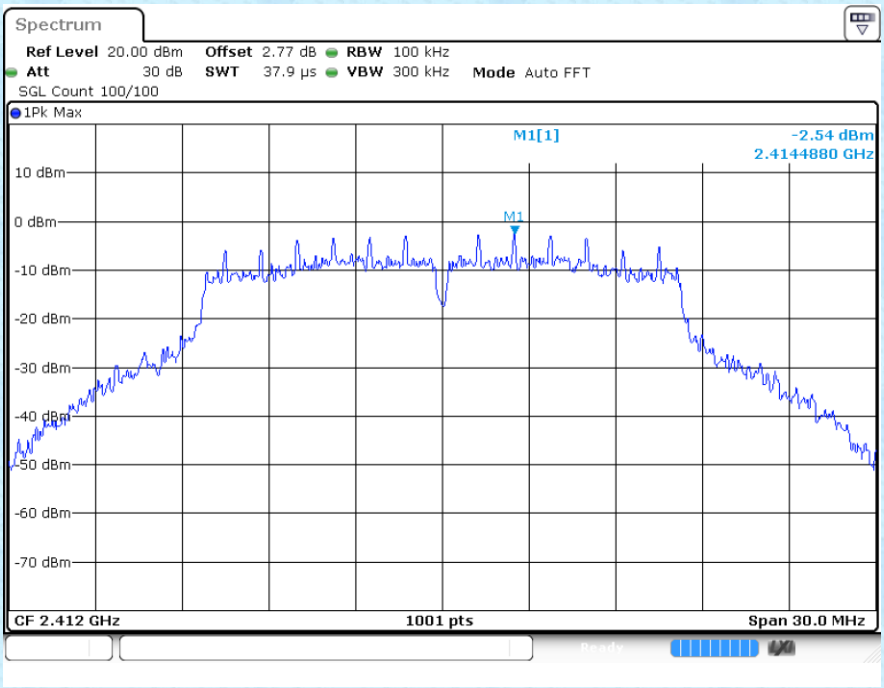
b 2462MHz Ant1 Emission



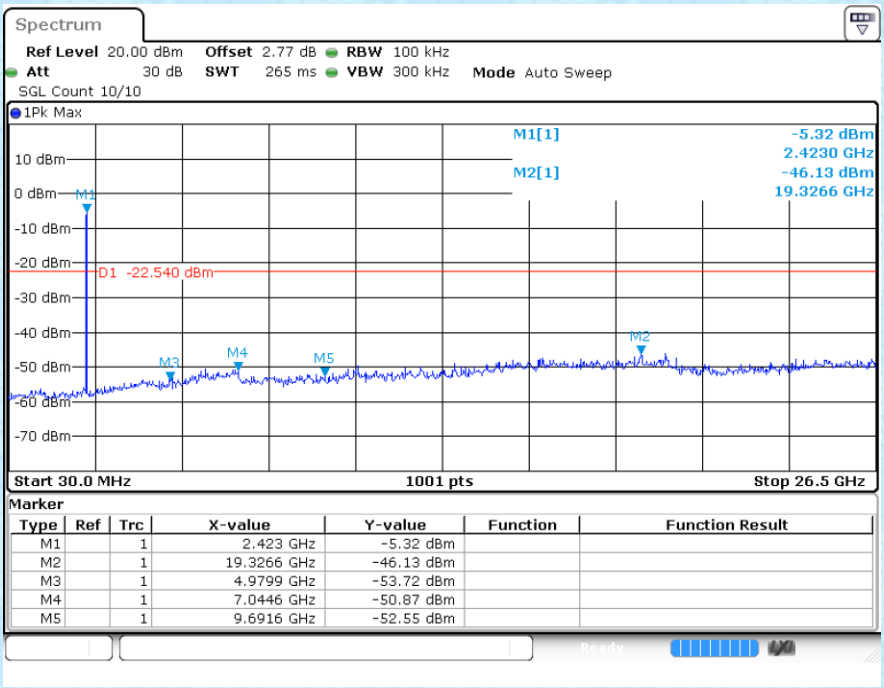
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.476 GHz	0.66 dBm		
M2		1	19.9884 GHz	-46.85 dBm		
M3		1	4.7417 GHz	-54.06 dBm		
M4		1	7.3093 GHz	-52.67 dBm		
M5		1	9.9563 GHz	-52.15 dBm		

g 2412MHz Ant1 Ref



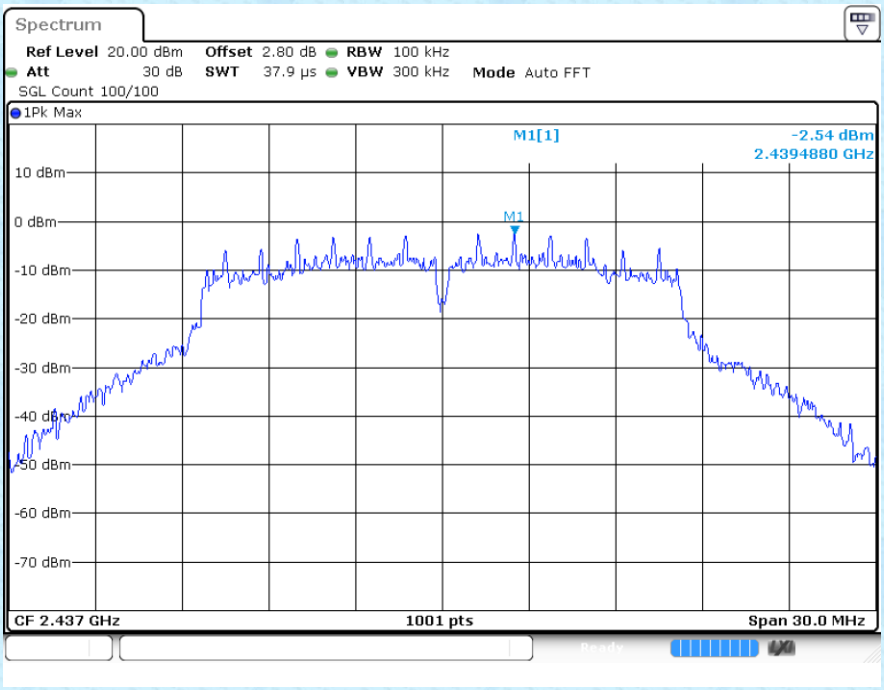
g 2412MHz Ant1 Emission



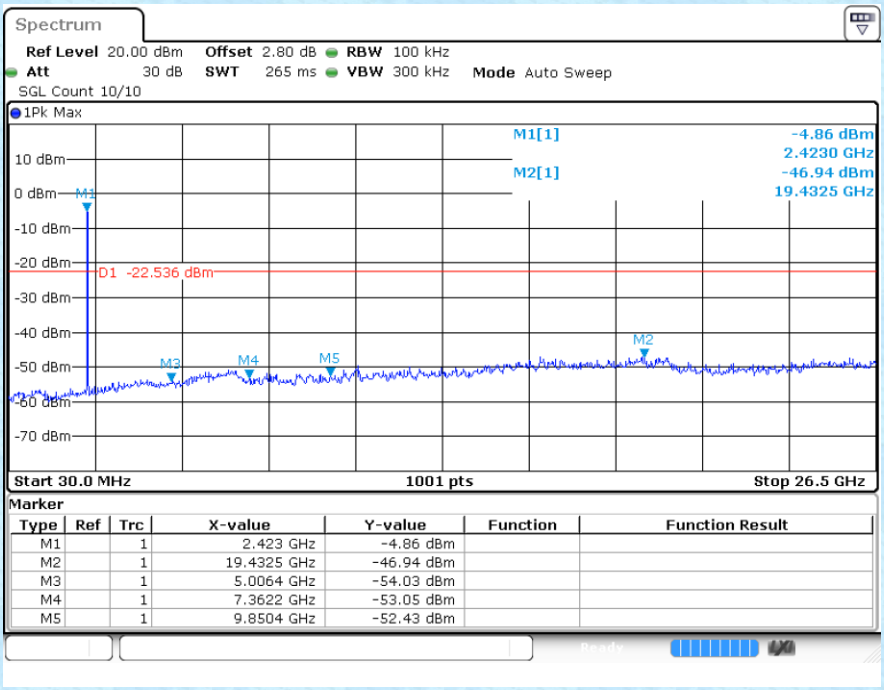
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.423 GHz	-5.32 dBm		
M2		1	19.3266 GHz	-46.13 dBm		
M3		1	4.9799 GHz	-53.72 dBm		
M4		1	7.0446 GHz	-50.87 dBm		
M5		1	9.6916 GHz	-52.55 dBm		

g 2437MHz Ant1 Ref



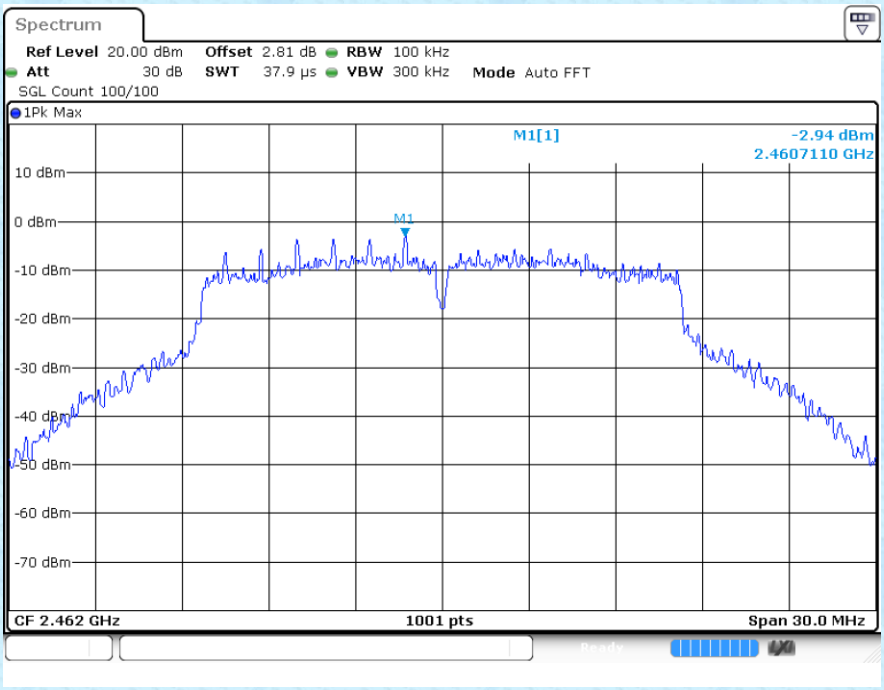
g 2437MHz Ant1 Emission



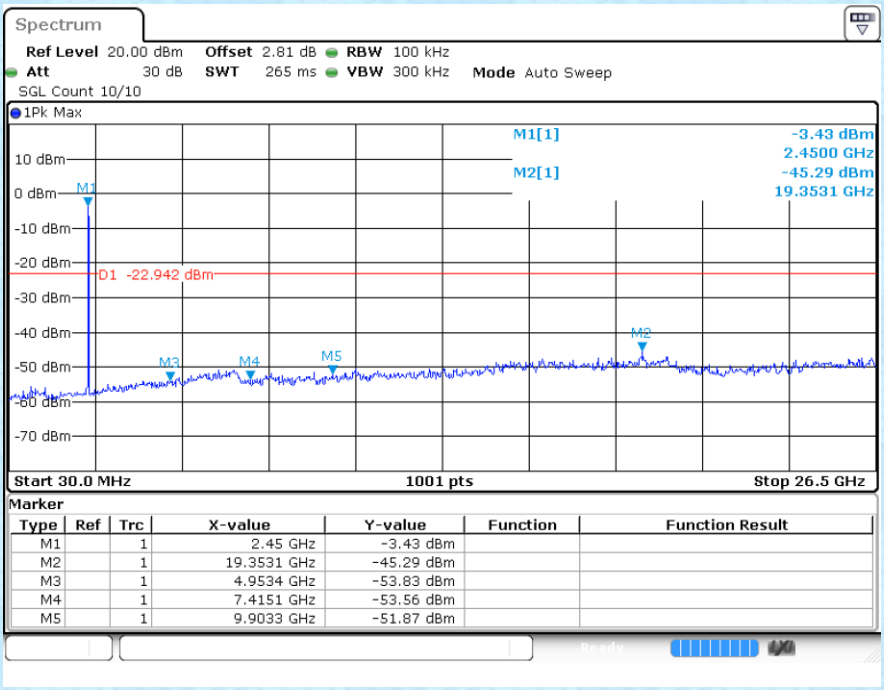
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.423 GHz	-4.86 dBm		
M2		1	19.4325 GHz	-46.94 dBm		
M3		1	5.0064 GHz	-54.03 dBm		
M4		1	7.3622 GHz	-53.05 dBm		
M5		1	9.8504 GHz	-52.43 dBm		

g 2462MHz Ant1 Ref



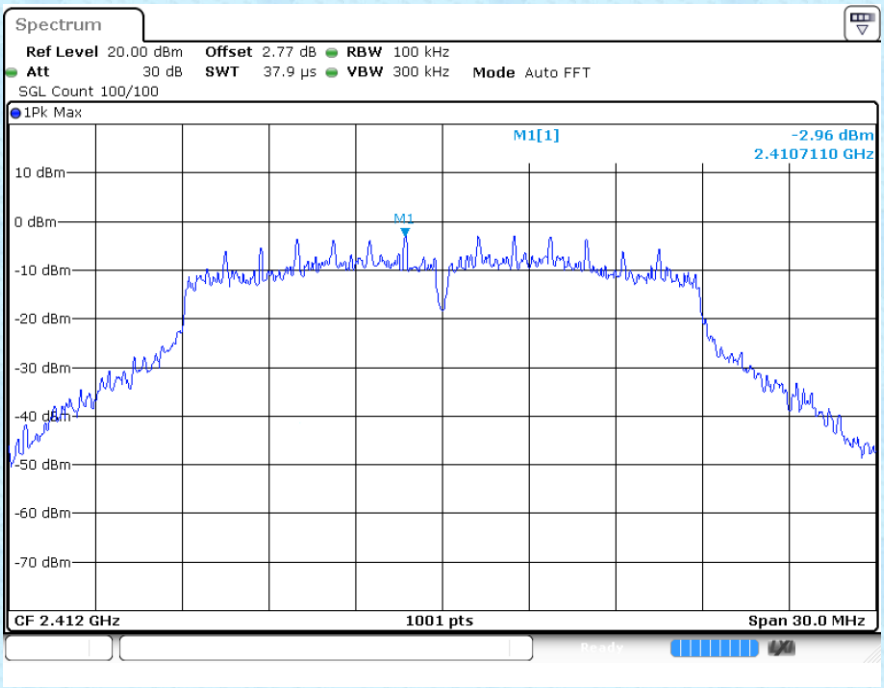
g 2462MHz Ant1 Emission



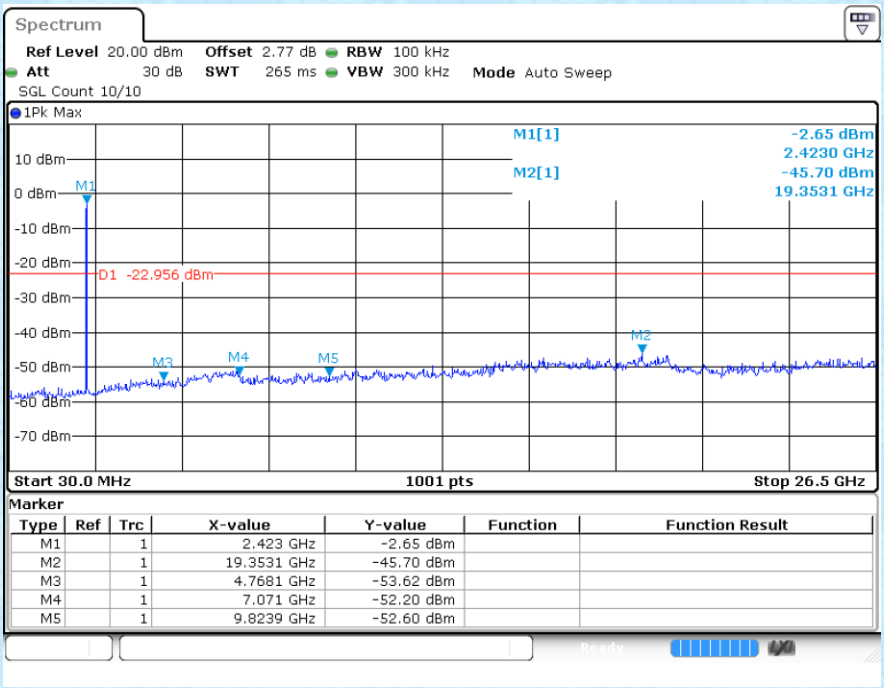
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.45 GHz	-3.43 dBm		
M2		1	19.3531 GHz	-45.29 dBm		
M3		1	4.9534 GHz	-53.83 dBm		
M4		1	7.4151 GHz	-53.56 dBm		
M5		1	9.9033 GHz	-51.87 dBm		

n20 2412MHz Ant1 Ref



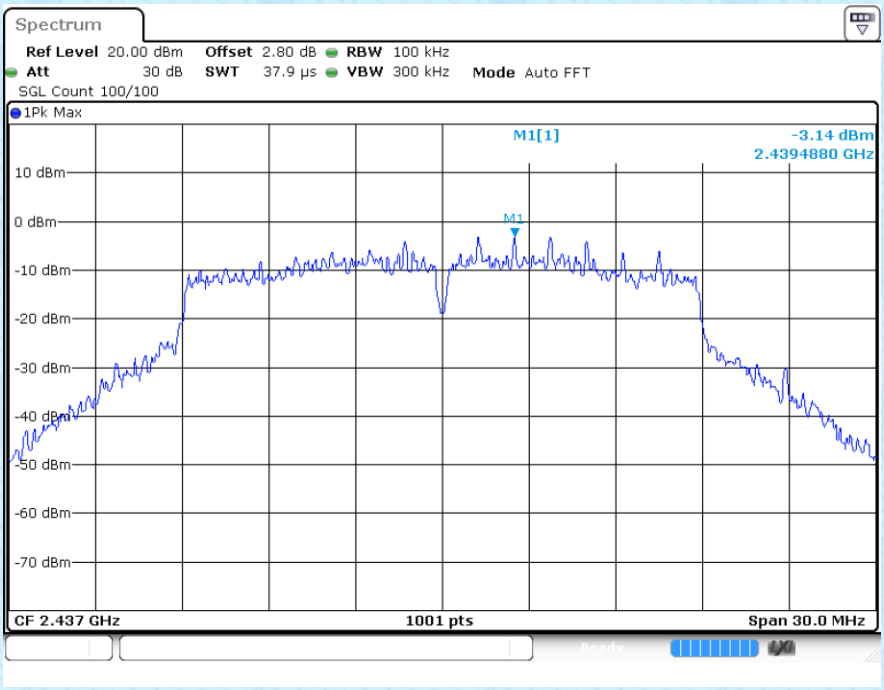
n20 2412MHz Ant1 Emission



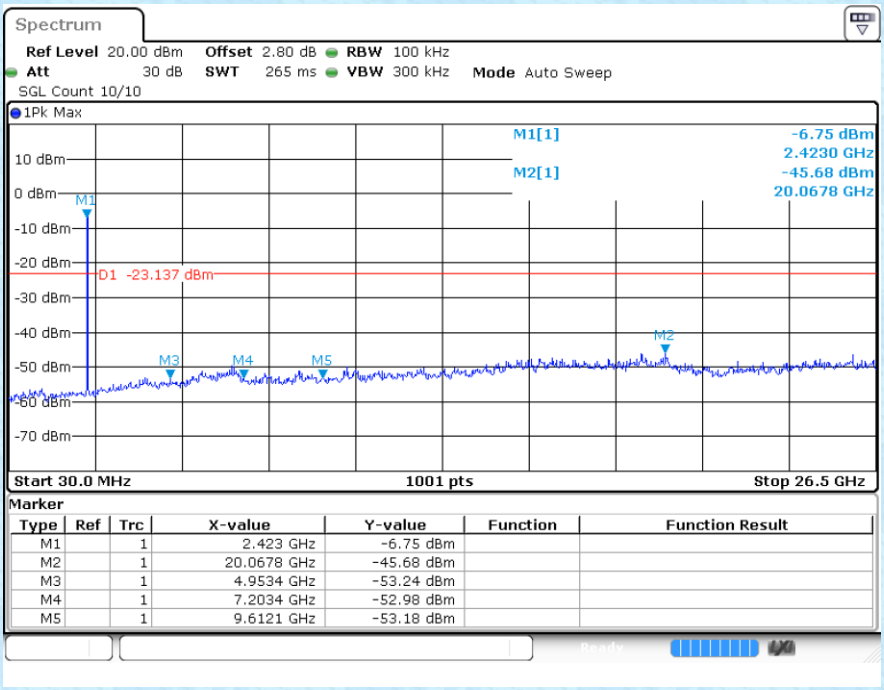
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.423 GHz	-2.65 dBm		
M2		1	19.3531 GHz	-45.70 dBm		
M3		1	4.7681 GHz	-53.62 dBm		
M4		1	7.071 GHz	-52.20 dBm		
M5		1	9.8239 GHz	-52.60 dBm		

n20 2437MHz Ant1 Ref



n20 2437MHz Ant1 Emission



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.423 GHz	-6.75 dBm		
M2		1	20.0678 GHz	-45.68 dBm		
M3		1	4.9534 GHz	-53.24 dBm		
M4		1	7.2034 GHz	-52.98 dBm		
M5		1	9.6121 GHz	-53.18 dBm		