Appendix C

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Mini PC

Trade Mark: Huidun

Test Model: H30

Environmental Conditions

Temperature:	24.8℃
Relative Humidity:	52.3%
ATM Pressure:	101Kpa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung

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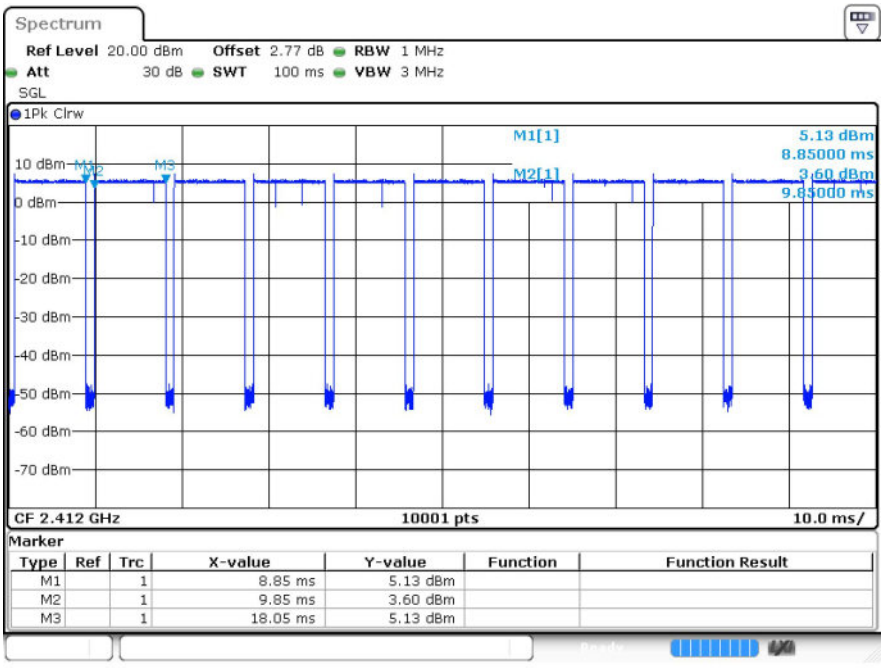
1 Duty Cycle

1.1 Test Result

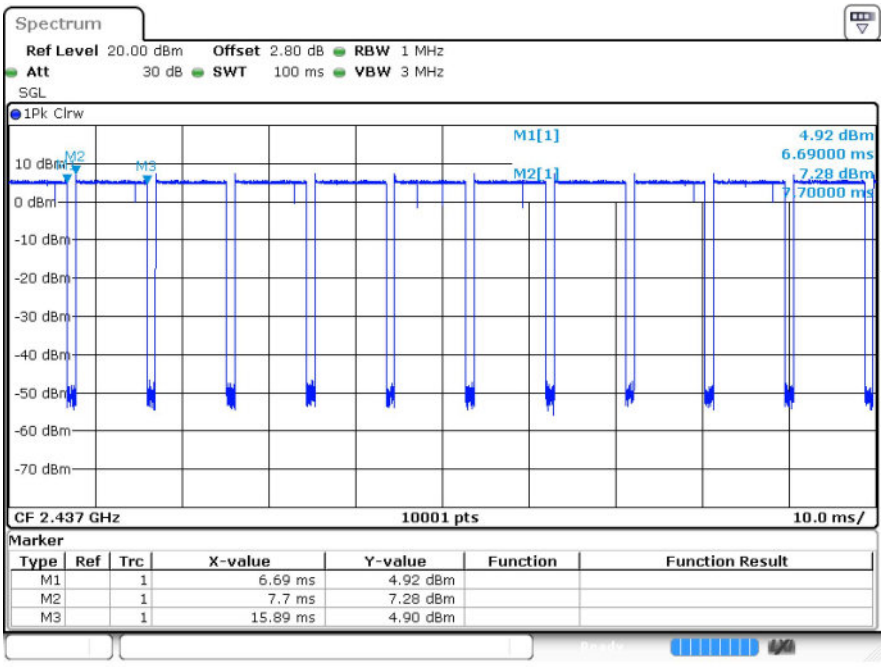
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
b	2412	Ant1	89.42	0.49	0.12
b	2437	Ant1	89.08	0.5	0.12
b	2462	Ant1	89.06	0.5	0.12
g	2412	Ant1	57.81	2.38	0.74
g	2437	Ant1	57.59	2.4	0.73
g	2462	Ant1	57.99	2.37	0.74
n20	2412	Ant1	56.25	2.5	0.79
n20	2437	Ant1	56.41	2.49	0.79
n20	2462	Ant1	56.27	2.5	0.79
n40	2422	Ant1	39.43	4.04	1.59
n40	2437	Ant1	39.27	4.06	1.59
n40	2452	Ant1	39.39	4.05	1.56

1.2 Test Graphs

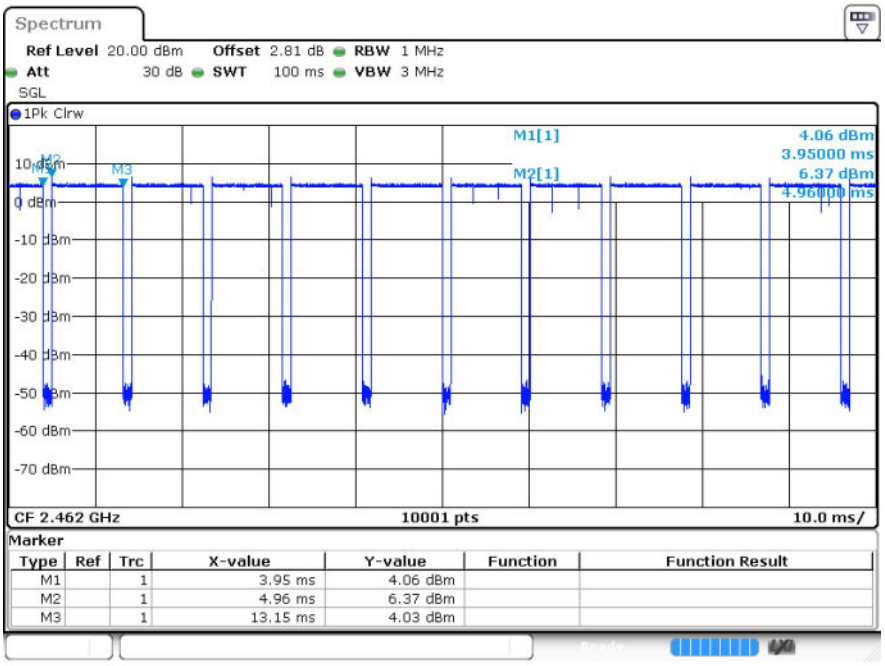
Test Graphs
b 2412MHz Ant1



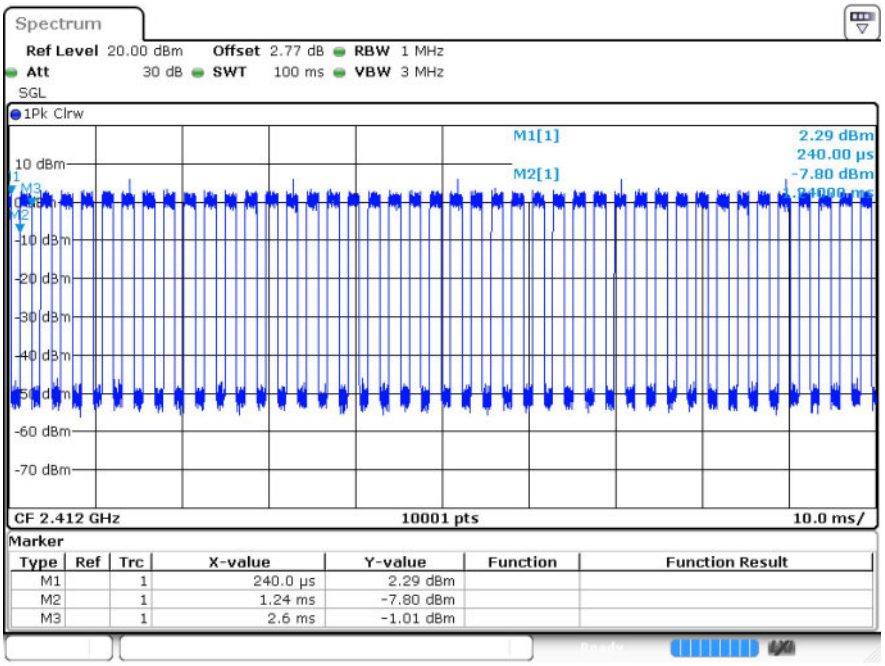
b 2437MHz Ant1



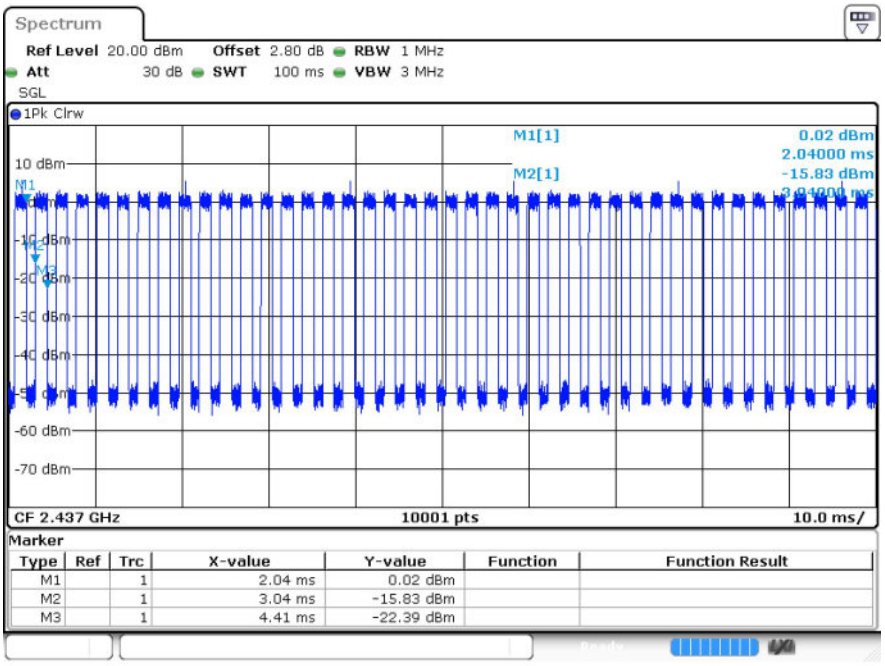
Test Graphs
b 2462MHz Ant1



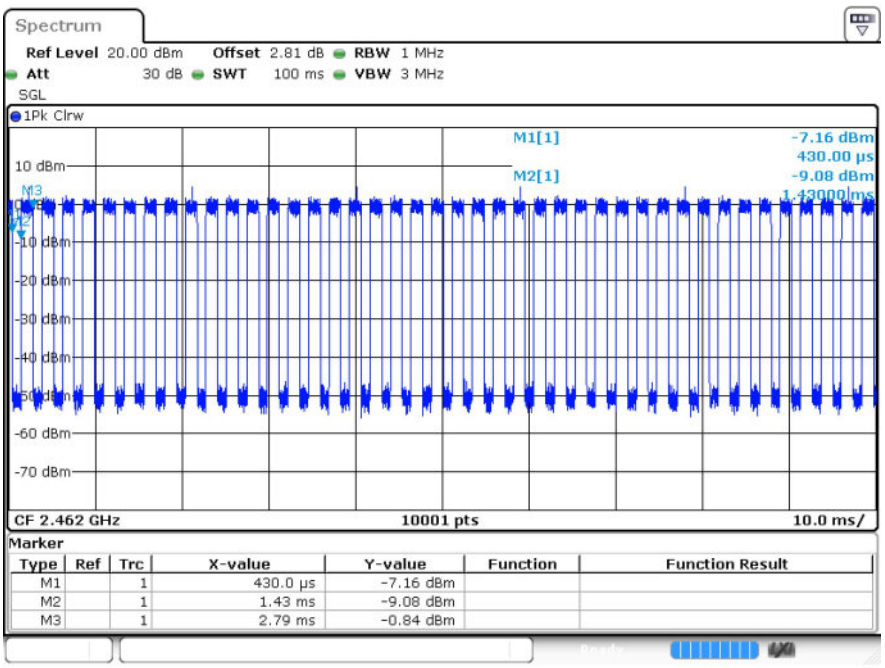
g 2412MHz Ant1



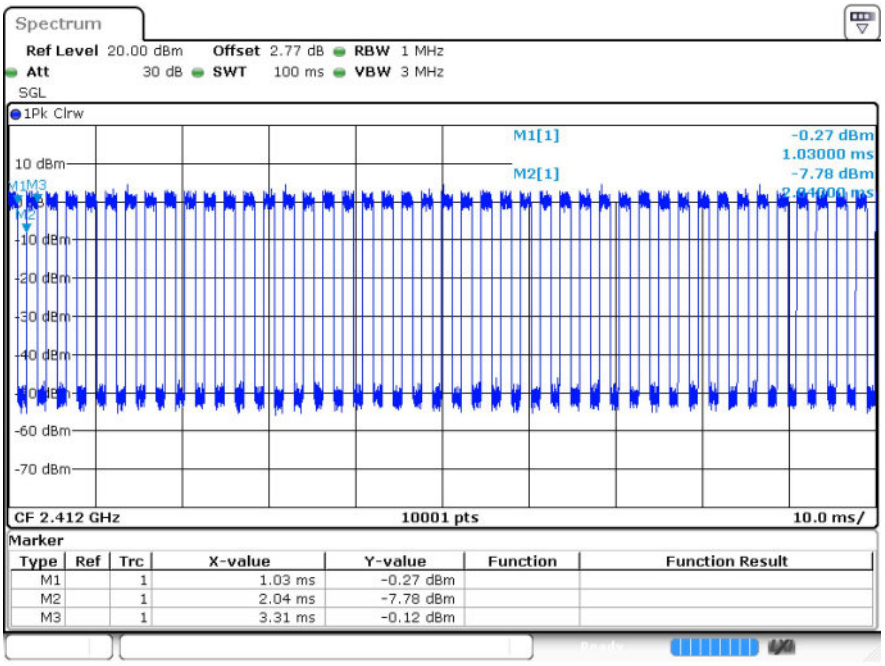
Test Graphs
g 2437MHz Ant1



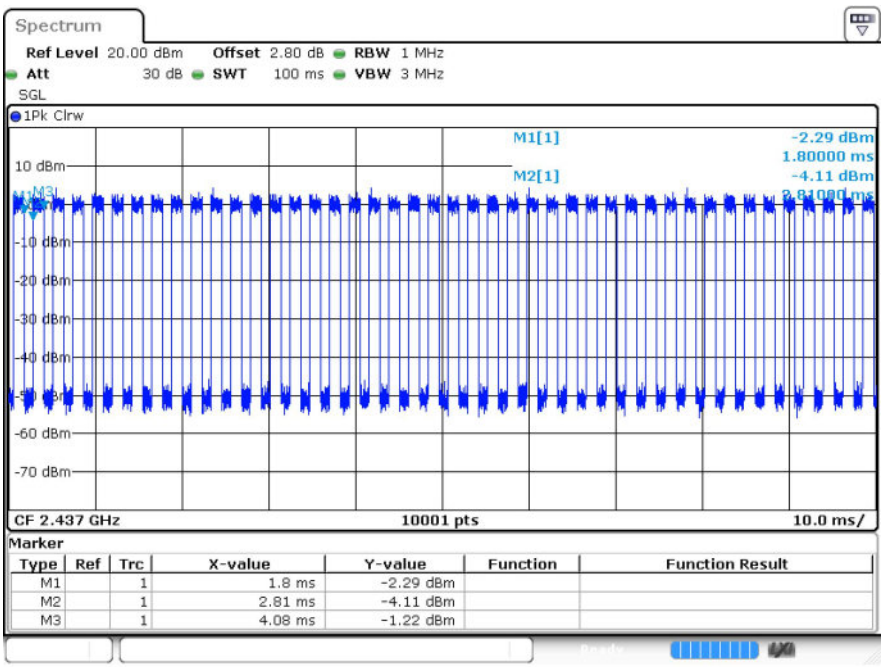
g 2462MHz Ant1



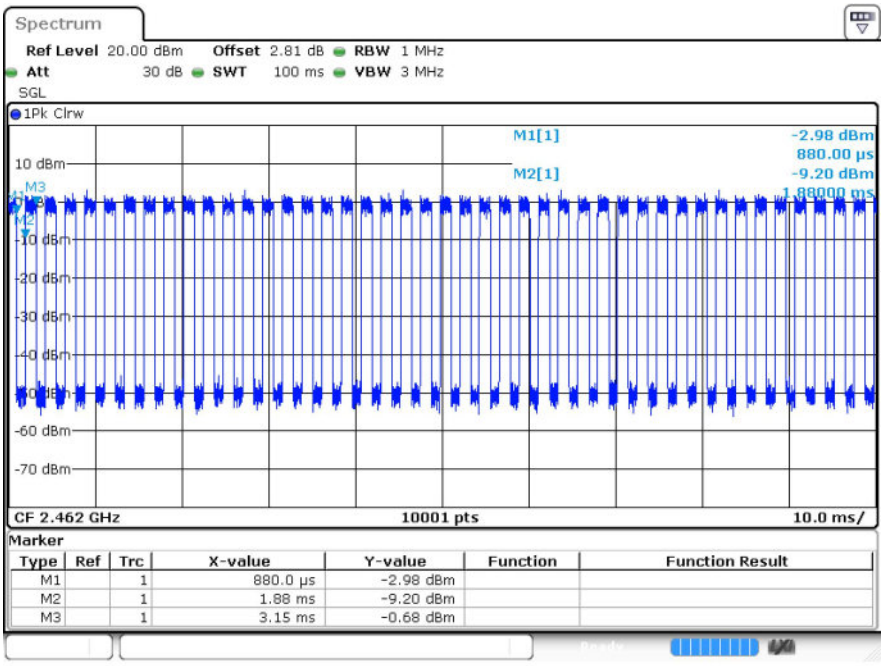
Test Graphs
n20 2412MHz Ant1



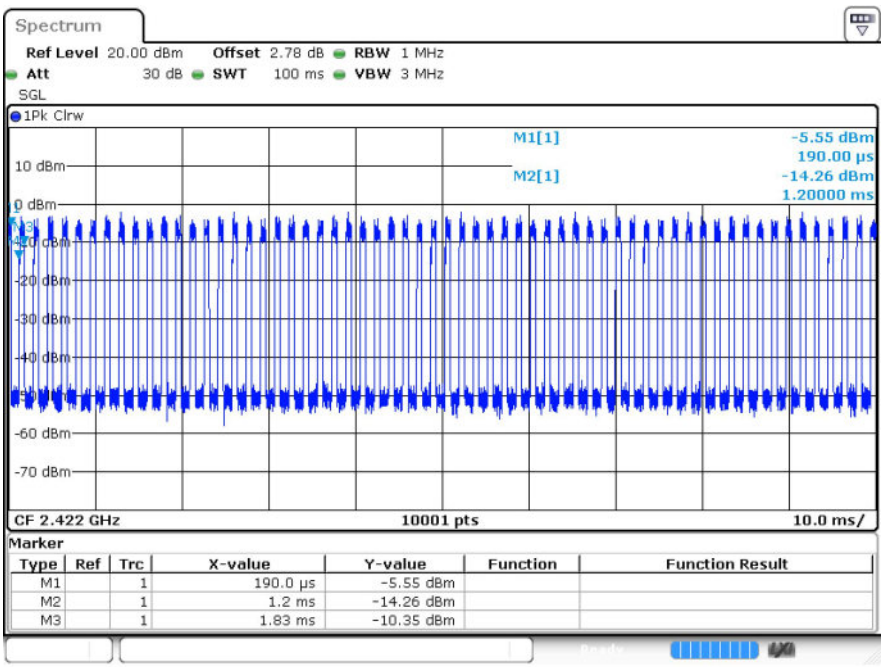
n20 2437MHz Ant1



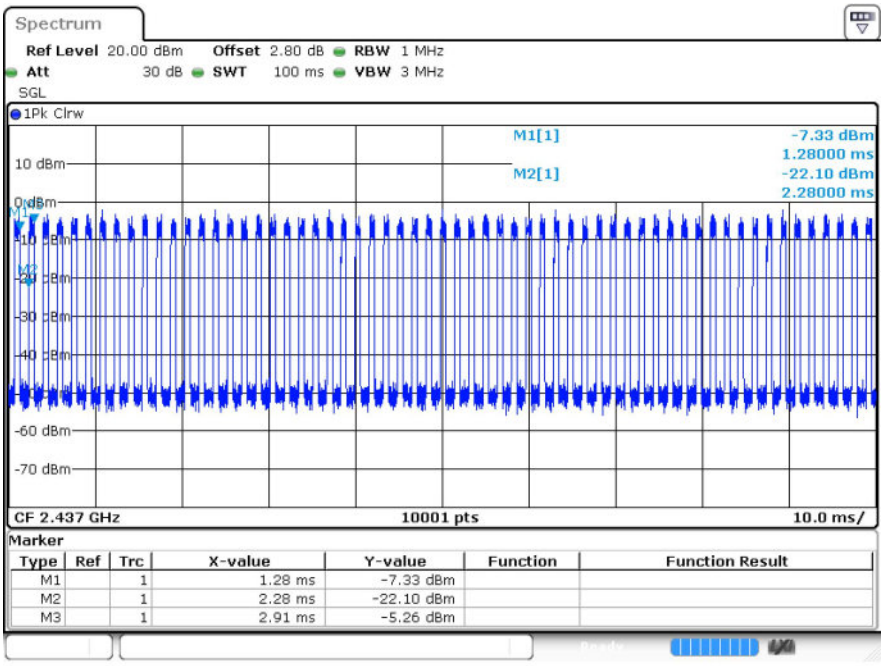
Test Graphs
n20 2462MHz Ant1



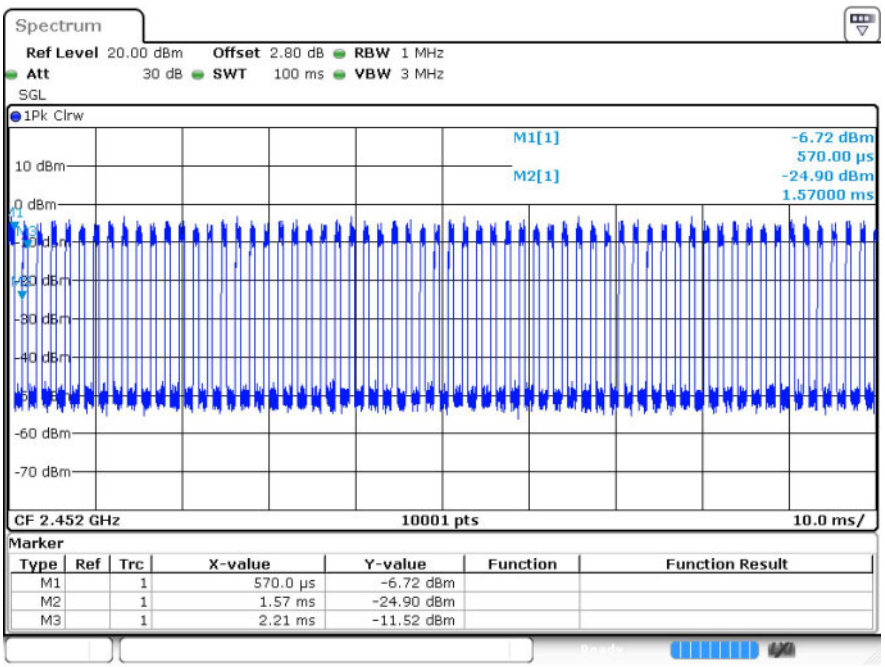
n40 2422MHz Ant1



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	15.34	30	Pass
b	2437	Ant1	15.02	30	Pass
b	2462	Ant1	14.17	30	Pass
g	2412	Ant1	14.78	30	Pass
g	2437	Ant1	14.25	30	Pass
g	2462	Ant1	13.48	30	Pass
n20	2412	Ant1	14.96	30	Pass
n20	2437	Ant1	14.32	30	Pass
n20	2462	Ant1	13.39	30	Pass
n40	2422	Ant1	14.36	30	Pass
n40	2437	Ant1	13.94	30	Pass
n40	2452	Ant1	13.36	30	Pass

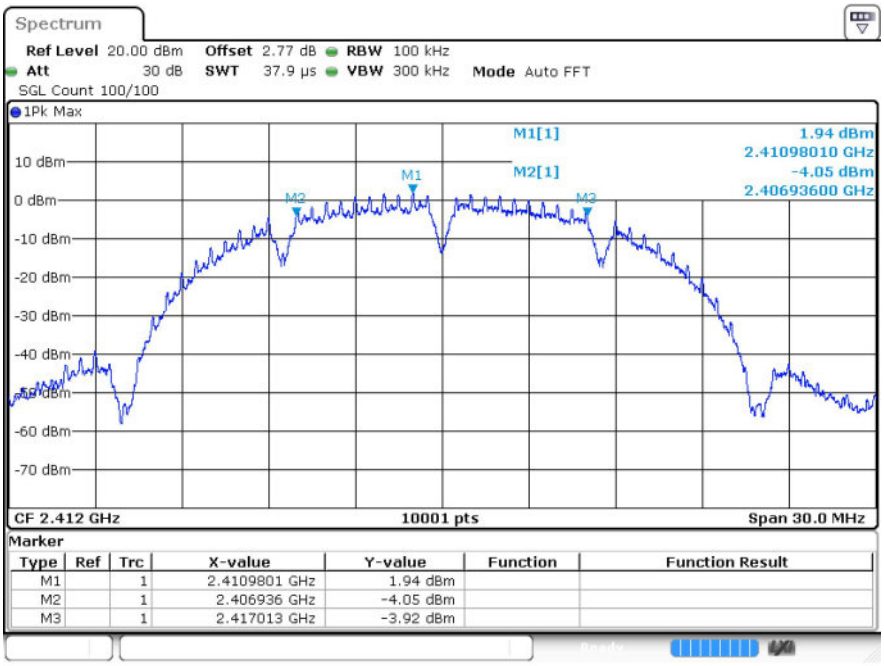
3 -6dB Bandwidth

3.1 Test Result

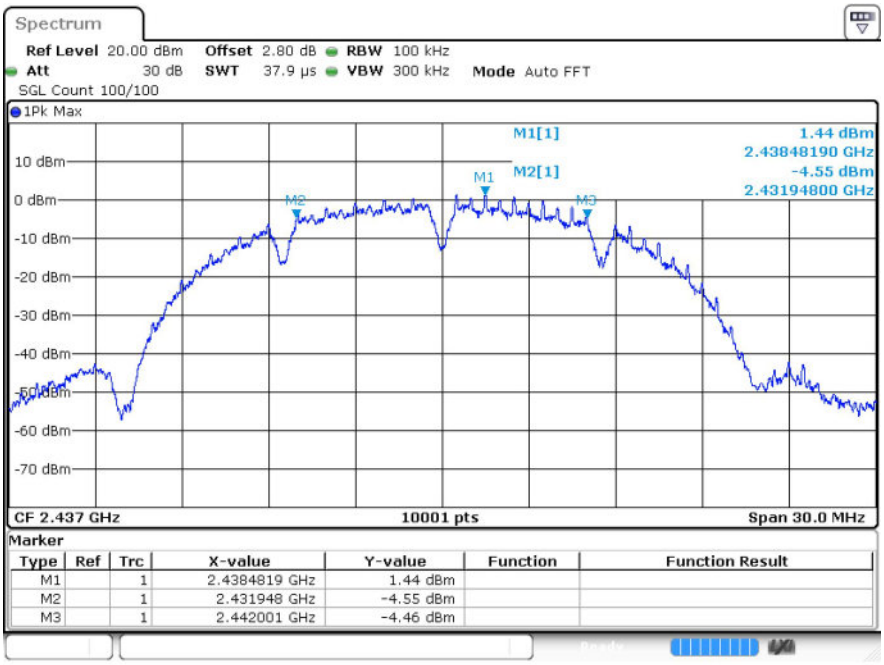
Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	10.077	0.5	Pass
b	2437	Ant1	10.053	0.5	Pass
b	2462	Ant1	10.074	0.5	Pass
g	2412	Ant1	16.533	0.5	Pass
g	2437	Ant1	16.317	0.5	Pass
g	2462	Ant1	16.308	0.5	Pass
n20	2412	Ant1	17.631	0.5	Pass
n20	2437	Ant1	17.604	0.5	Pass
n20	2462	Ant1	17.547	0.5	Pass
n40	2422	Ant1	36.348	0.5	Pass
n40	2437	Ant1	35.7	0.5	Pass
n40	2452	Ant1	35.94	0.5	Pass

3.2 Test Graphs

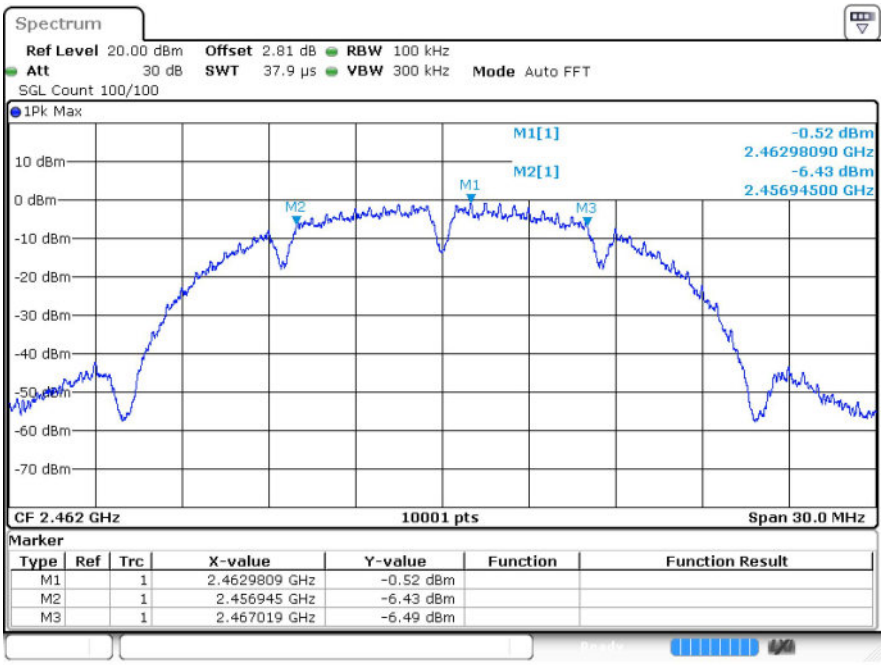
Test Graphs
b 2412MHz Ant1



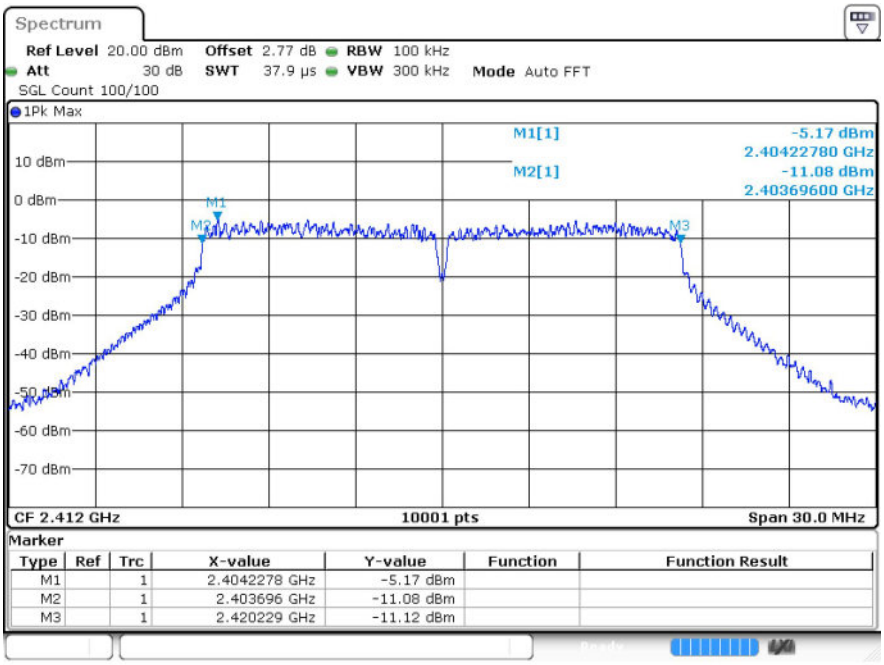
b 2437MHz Ant1



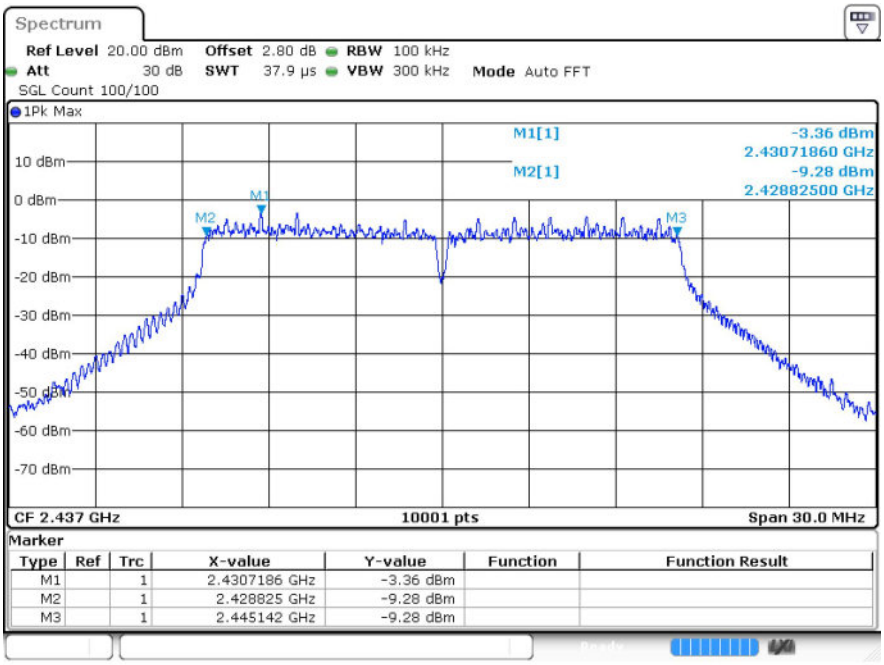
b 2462MHz Ant1



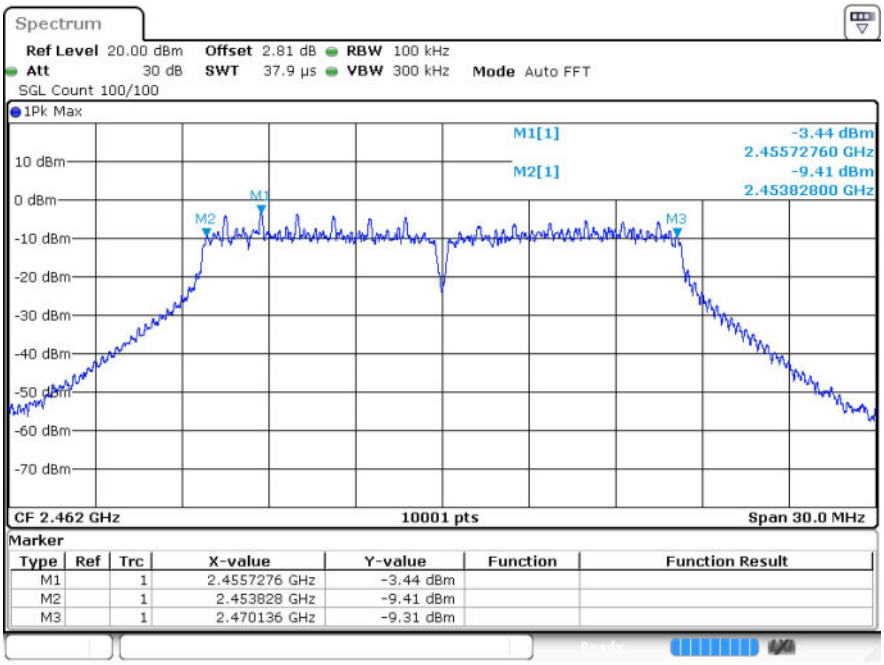
g 2412MHz Ant1



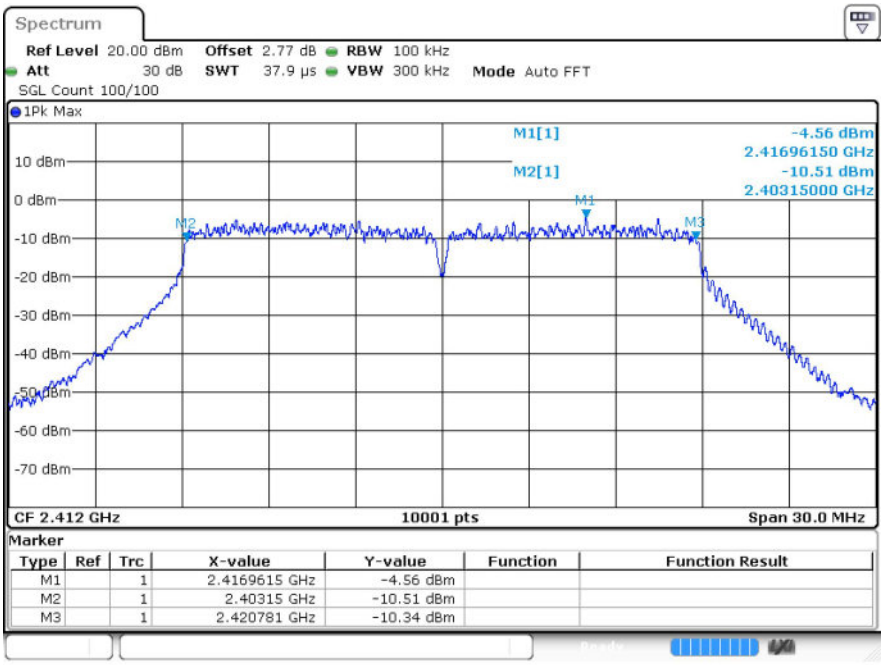
g 2437MHz Ant1



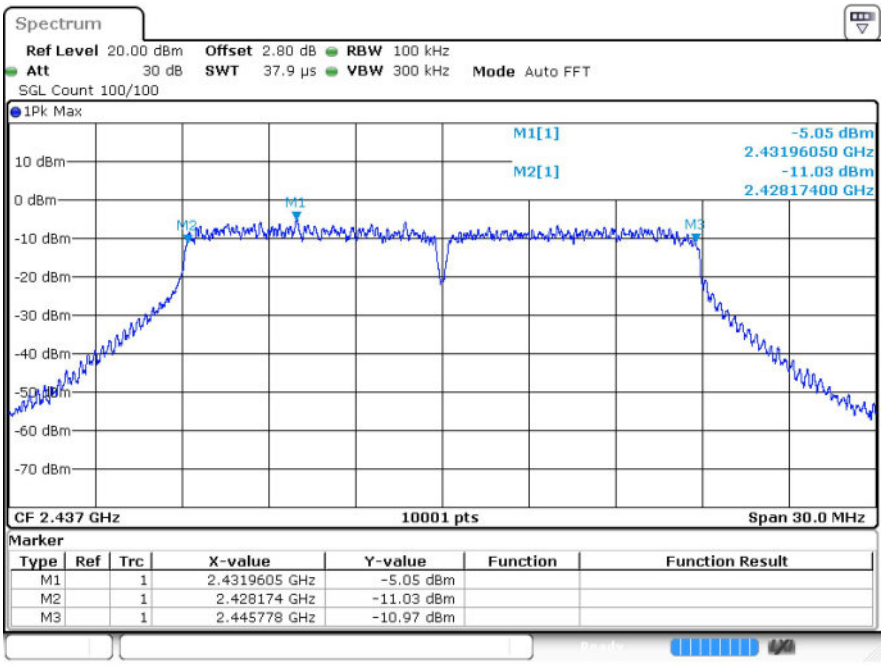
g 2462MHz Ant1



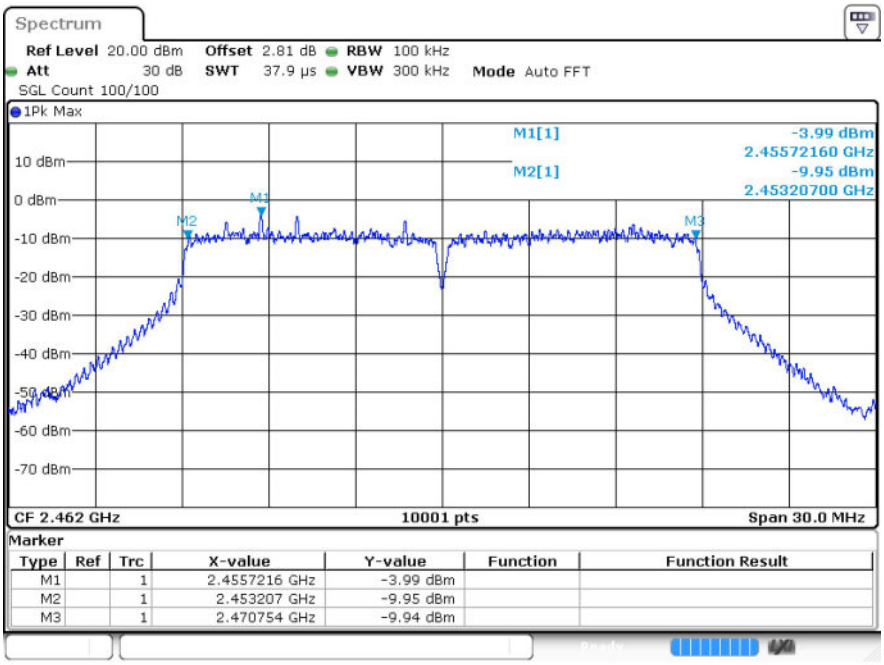
n20 2412MHz Ant1



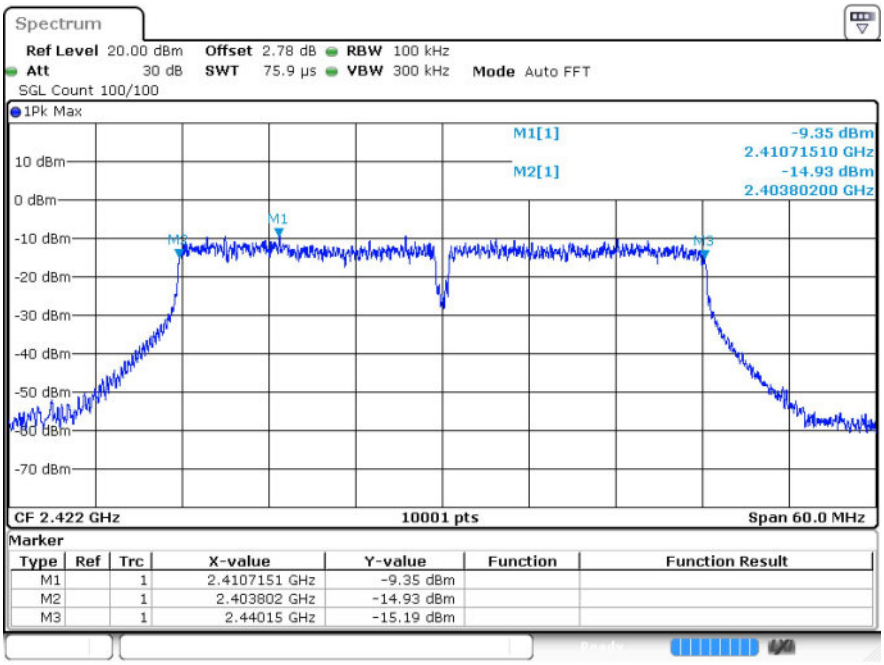
n20 2437MHz Ant1



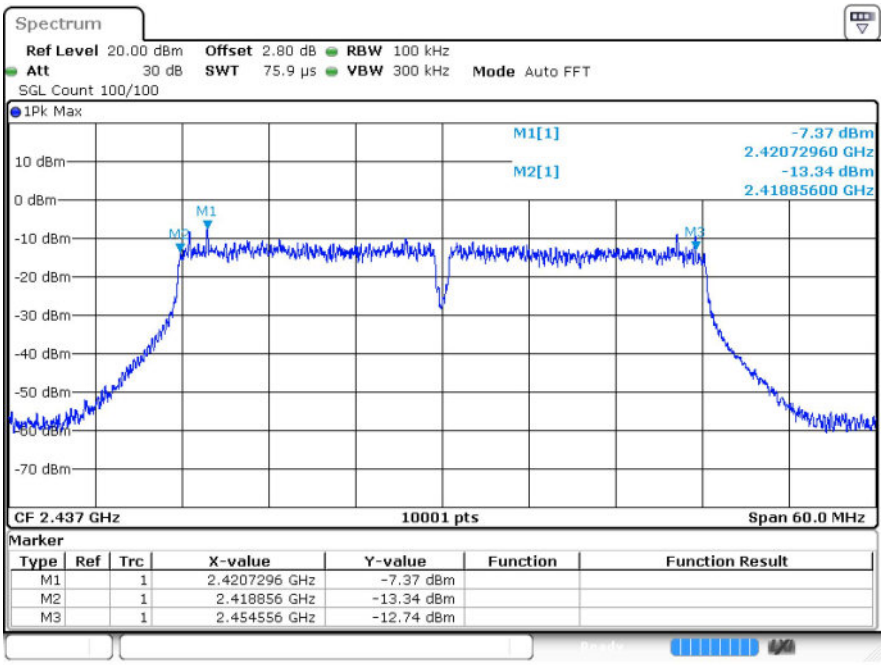
n20 2462MHz Ant1



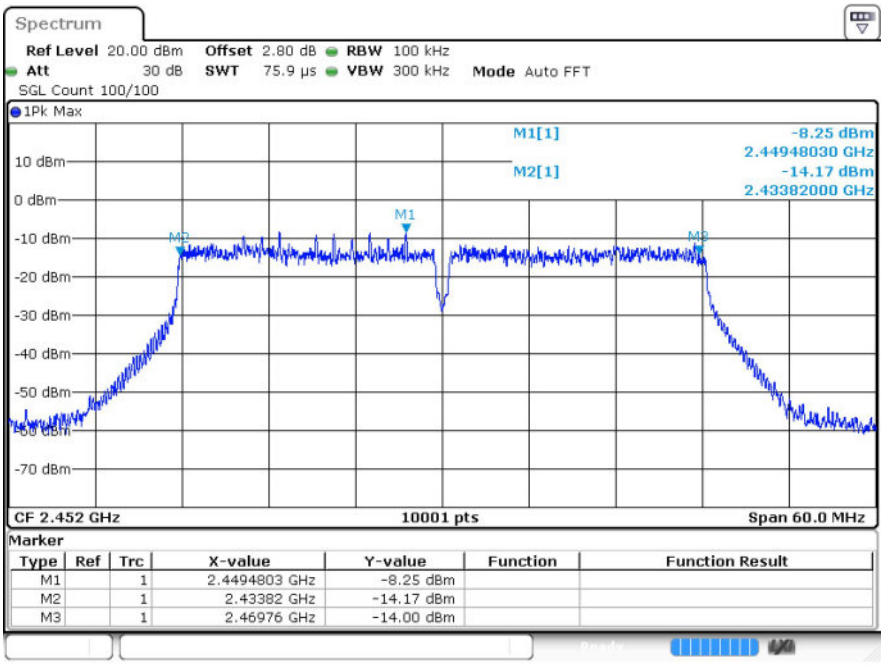
n40 2422MHz Ant1



n40 2437MHz Ant1



n40 2452MHz Ant1



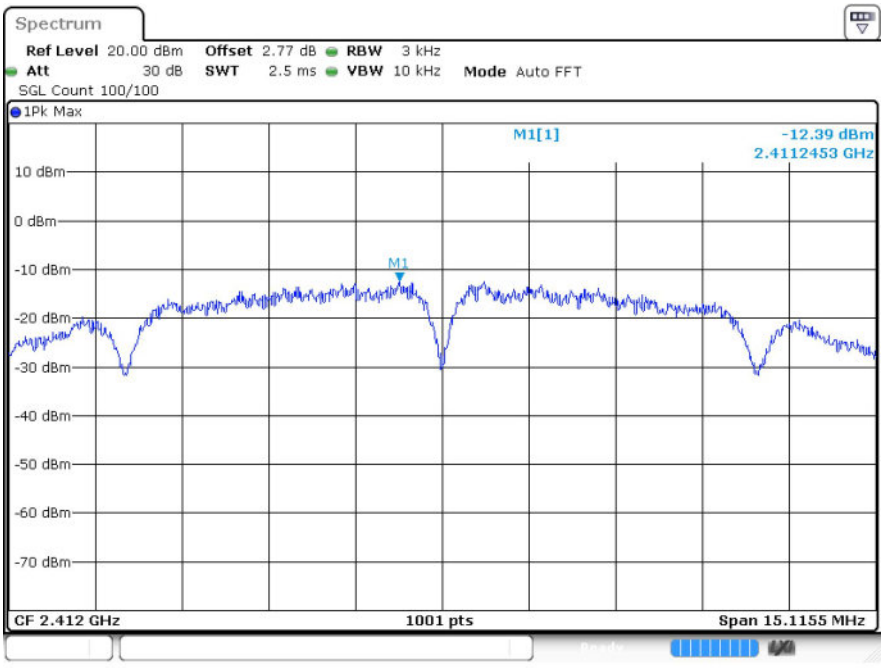
4 Maximum Power Spectral Density Level

4.1 Test Result

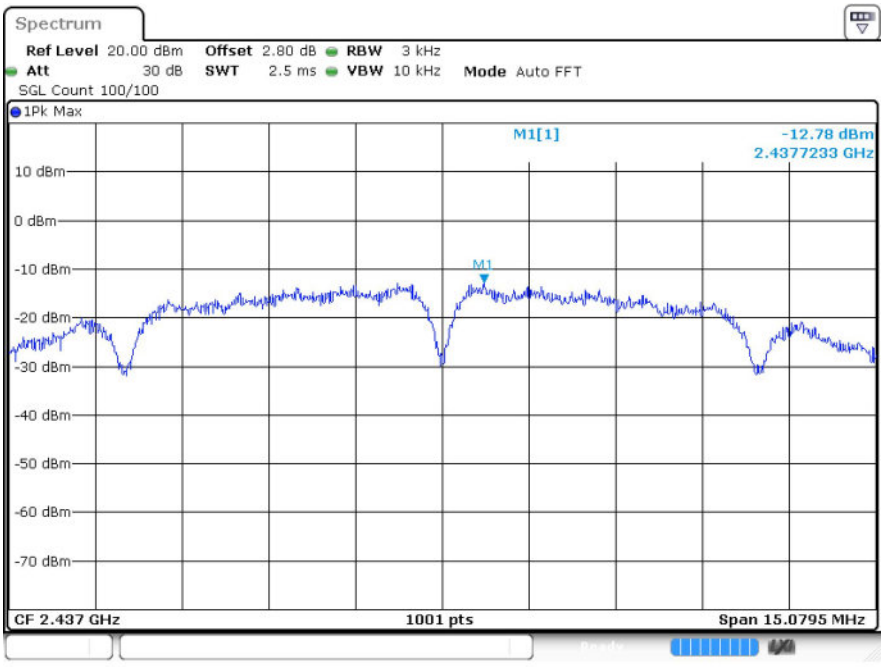
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-12.39	≤8	Pass
b	2437	Ant1	-12.78	≤8	Pass
b	2462	Ant1	-13.7	≤8	Pass
g	2412	Ant1	-16.44	≤8	Pass
g	2437	Ant1	-16.68	≤8	Pass
g	2462	Ant1	-17.23	≤8	Pass
n20	2412	Ant1	-16.21	≤8	Pass
n20	2437	Ant1	-16.17	≤8	Pass
n20	2462	Ant1	-17.97	≤8	Pass
n40	2422	Ant1	-21.46	≤8	Pass
n40	2437	Ant1	-21.37	≤8	Pass
n40	2452	Ant1	-21.99	≤8	Pass

4.2 Test Graphs

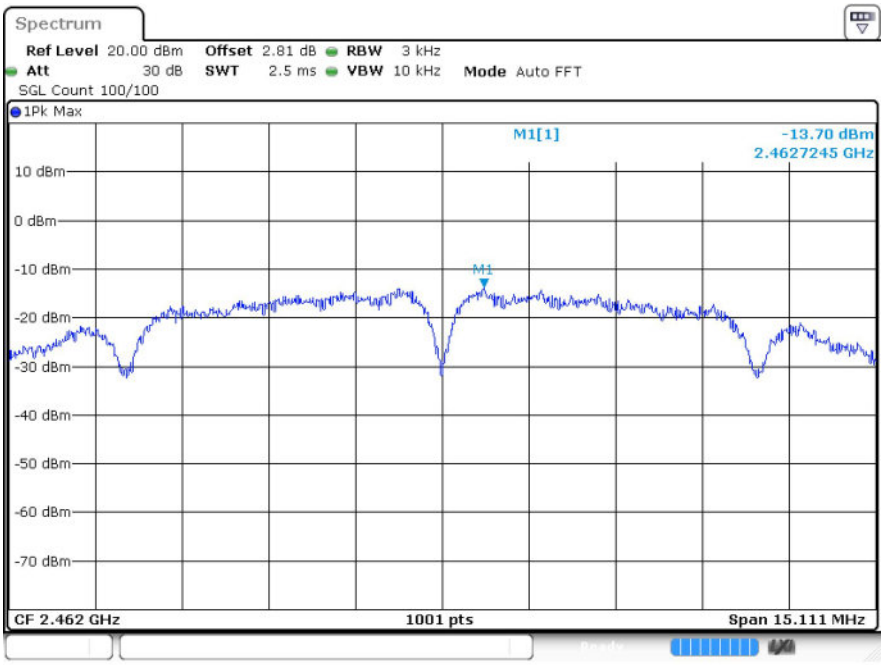
Test Graphs
b 2412MHz Ant1



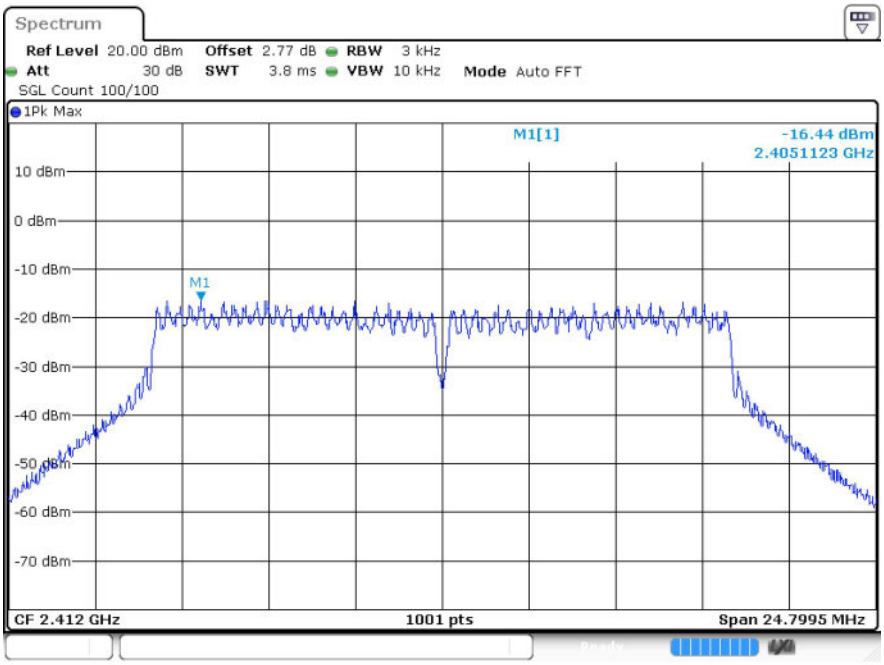
b 2437MHz Ant1



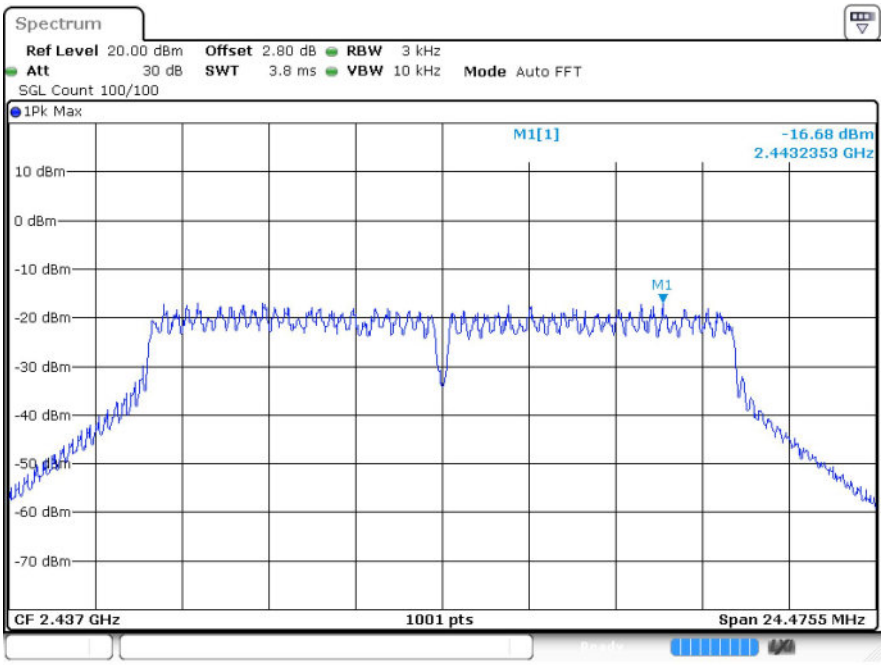
b 2462MHz Ant1



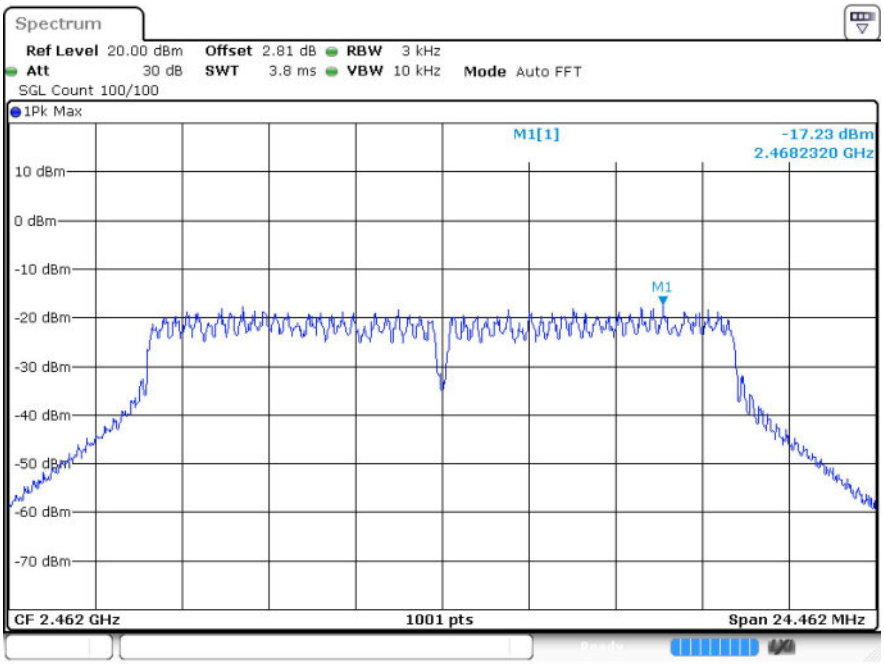
g 2412MHz Ant1



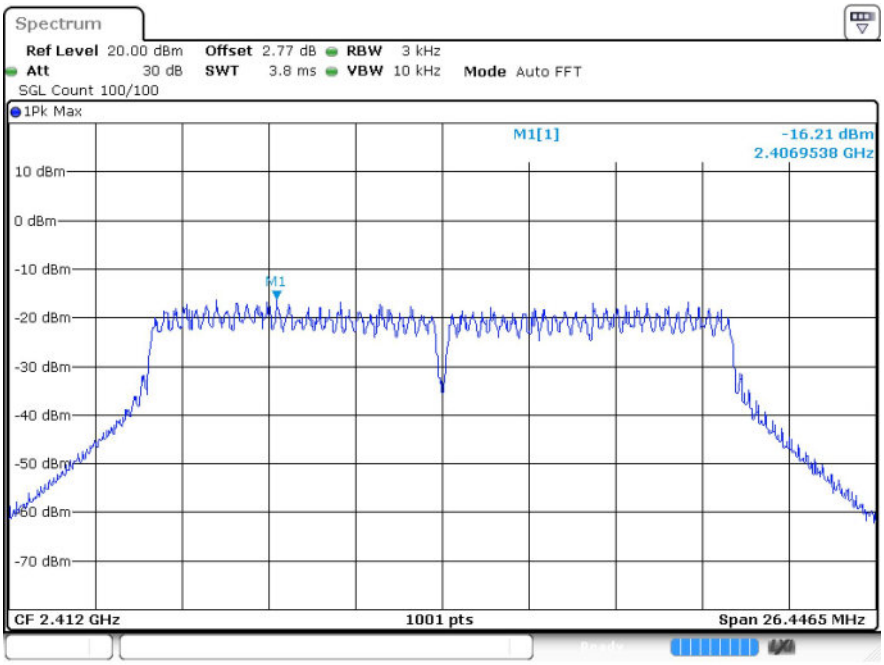
g 2437MHz Ant1



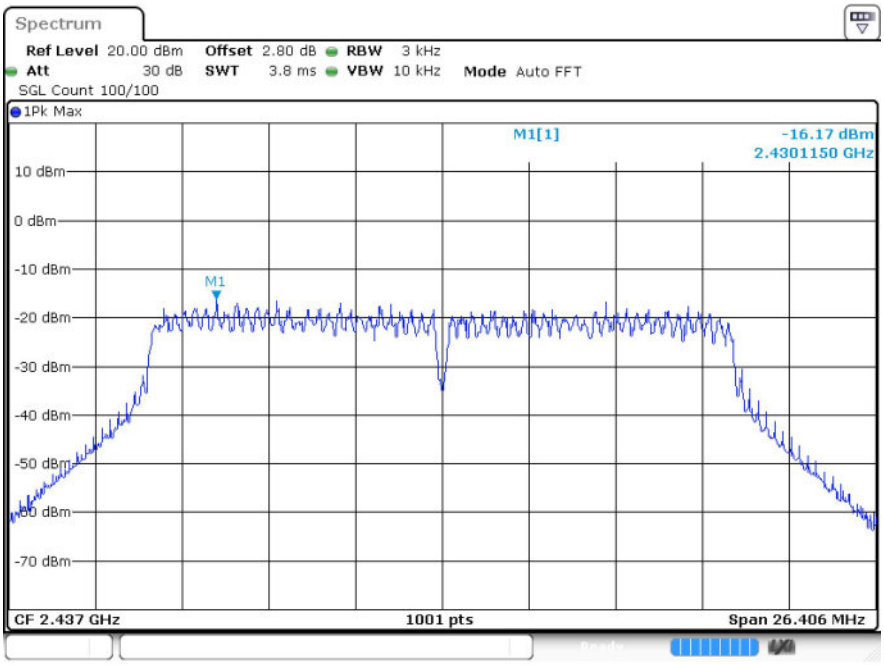
g 2462MHz Ant1



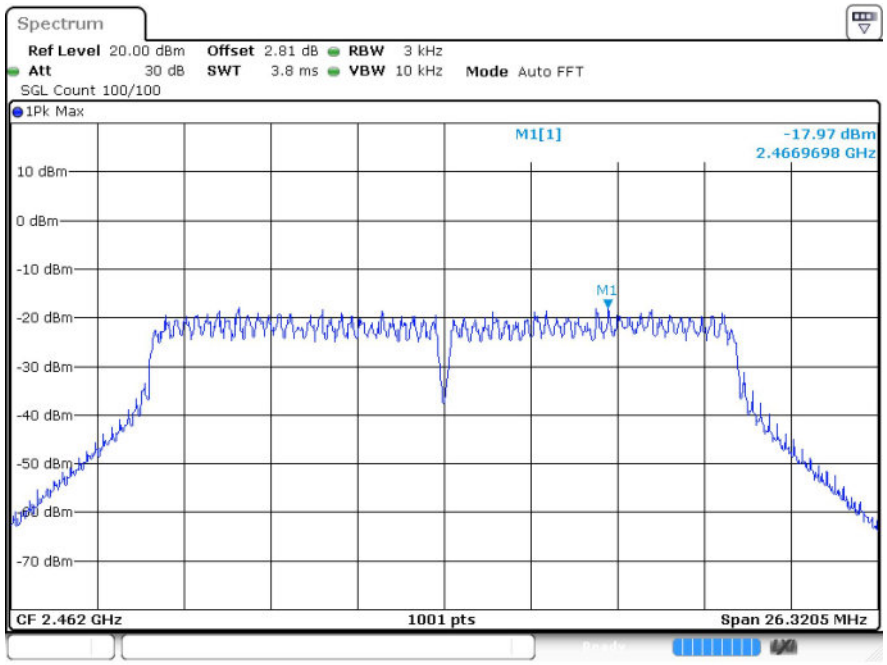
n20 2412MHz Ant1



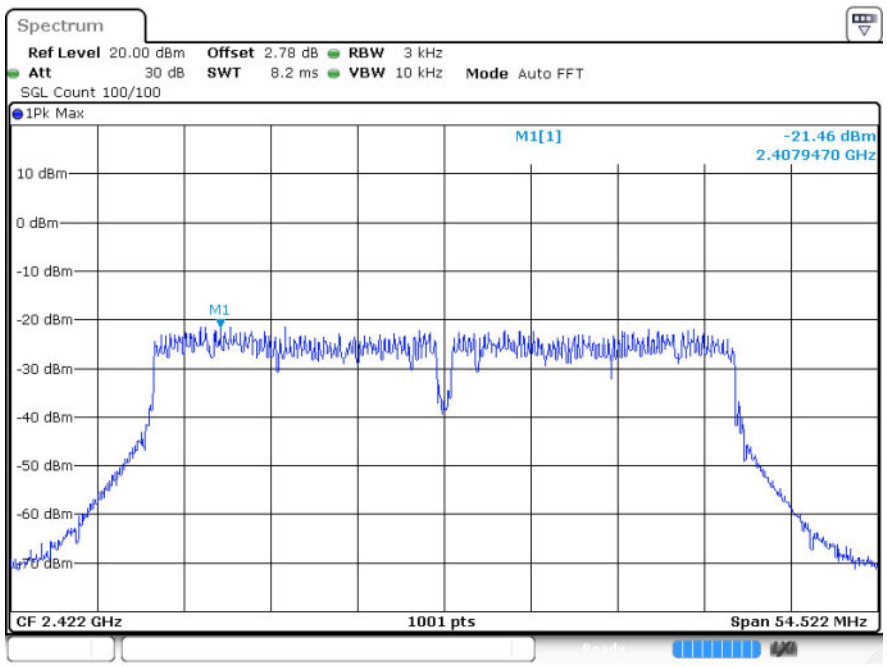
n20 2437MHz Ant1



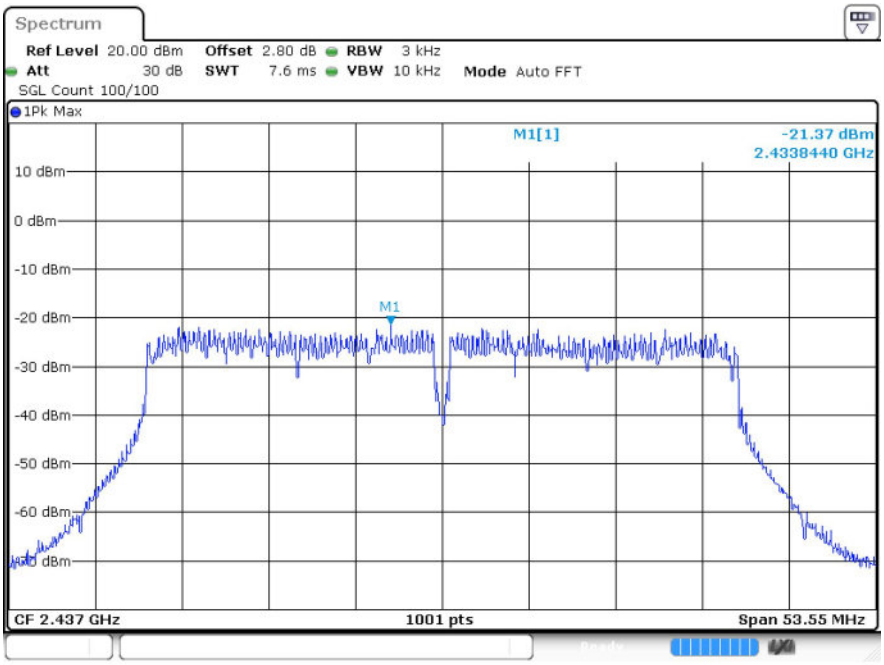
n20 2462MHz Ant1



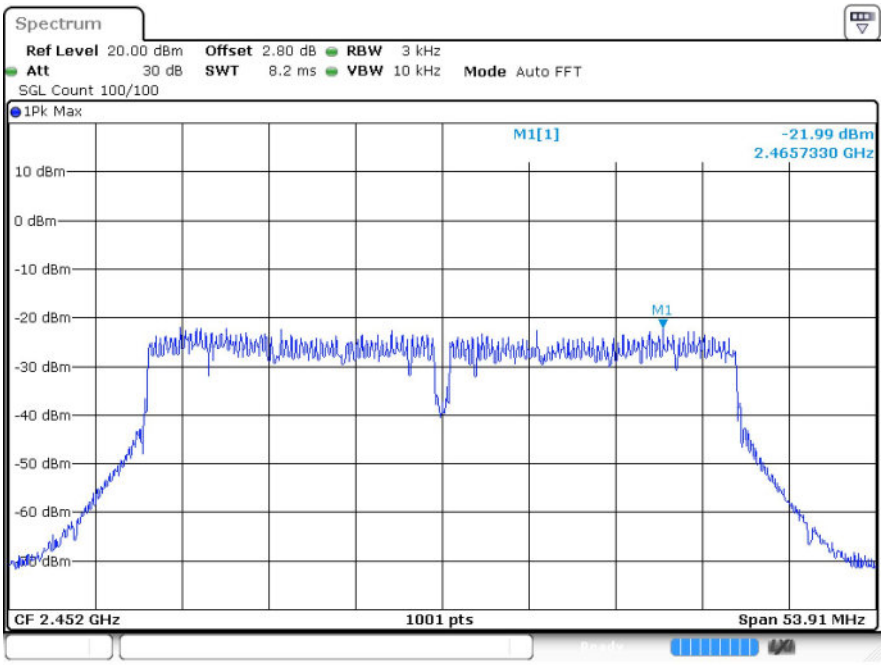
n40 2422MHz Ant1



n40 2437MHz Ant1



n40 2452MHz Ant1



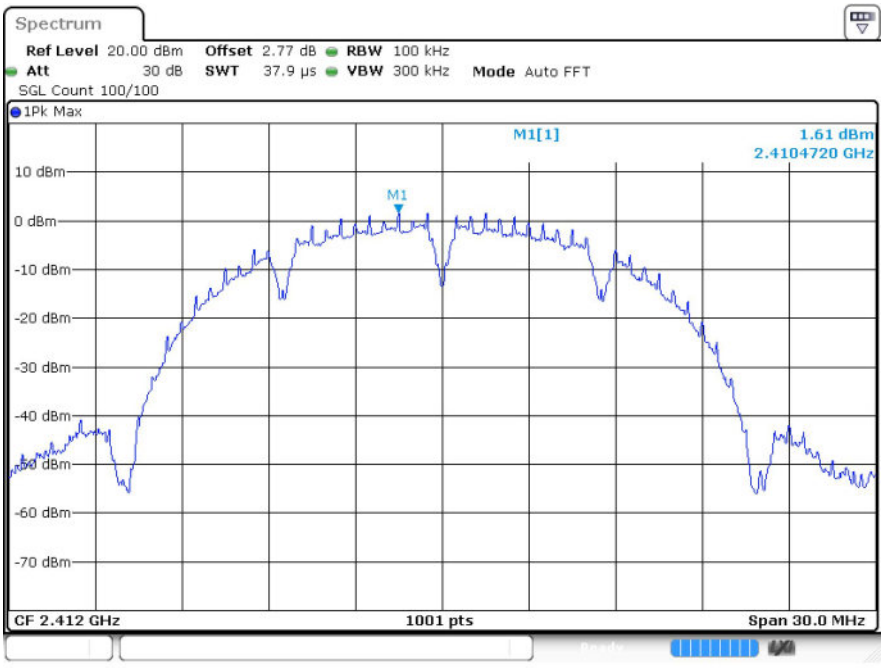
5 Band Edge

5.1 Test Result

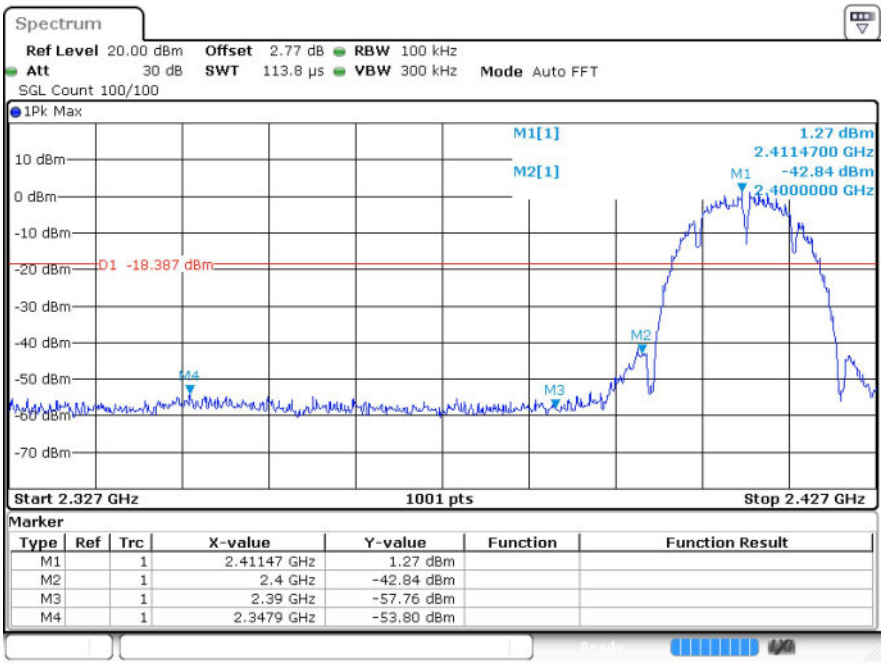
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-55.4	-20	Pass
b	2462	Ant1	-54.96	-20	Pass
g	2412	Ant1	-50.55	-20	Pass
g	2462	Ant1	-49.47	-20	Pass
n20	2412	Ant1	-51.33	-20	Pass
n20	2462	Ant1	-49.59	-20	Pass
n40	2422	Ant1	-45.64	-20	Pass
n40	2452	Ant1	-47.16	-20	Pass

5.2 Test Graphs

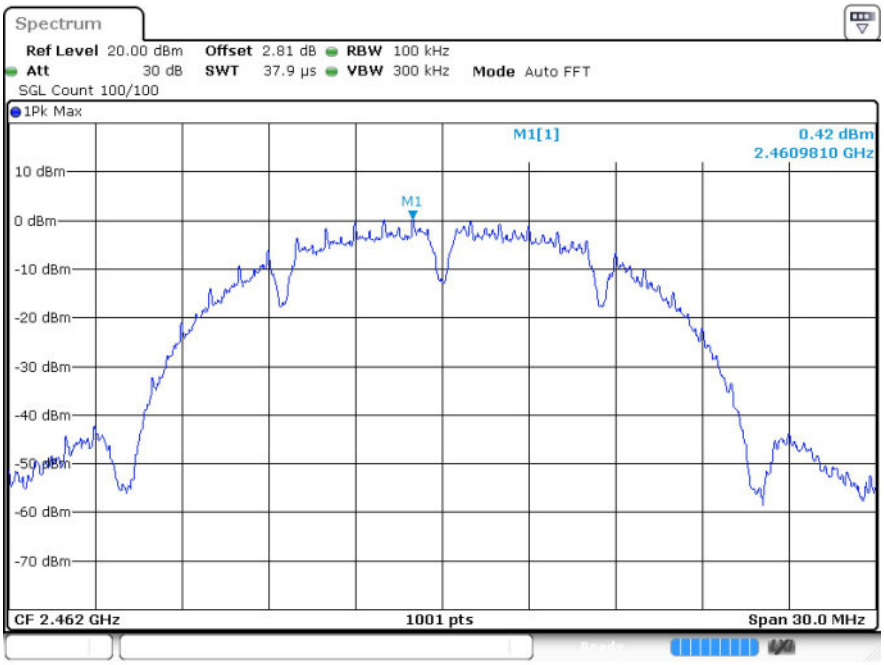
Test Graphs
b 2412MHz Ant1 Ref



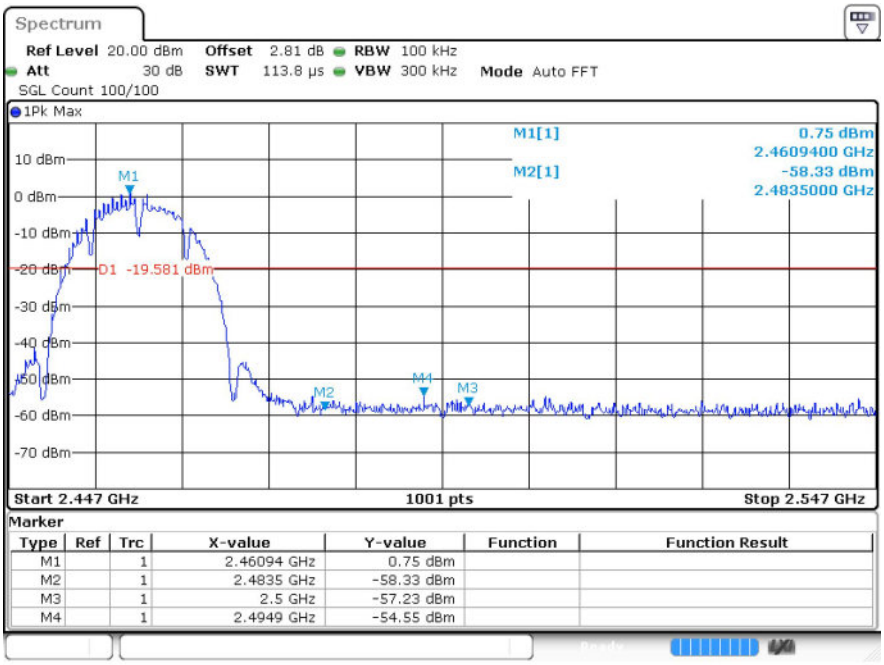
b 2412MHz Ant1 Emission



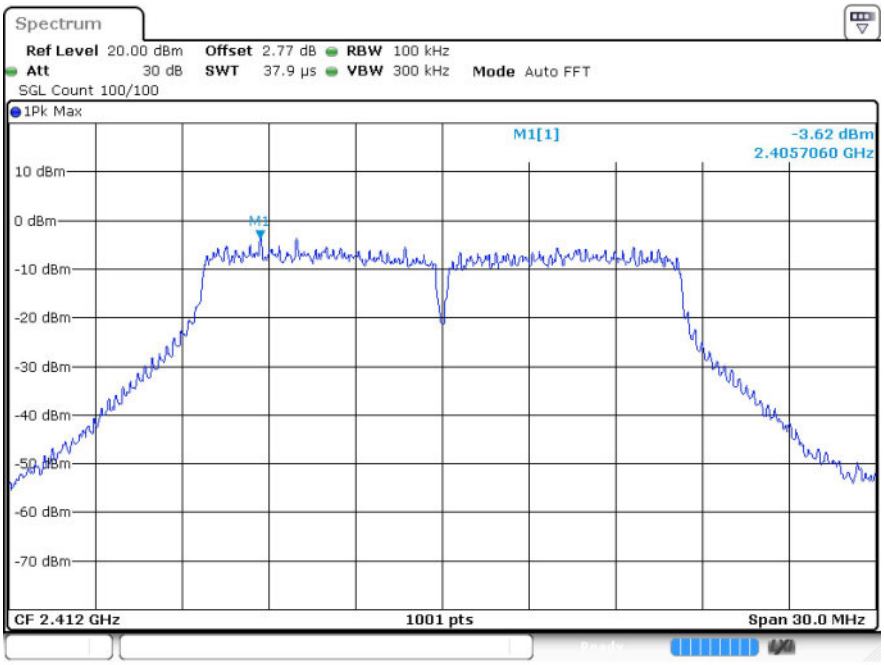
b 2462MHz Ant1 Ref



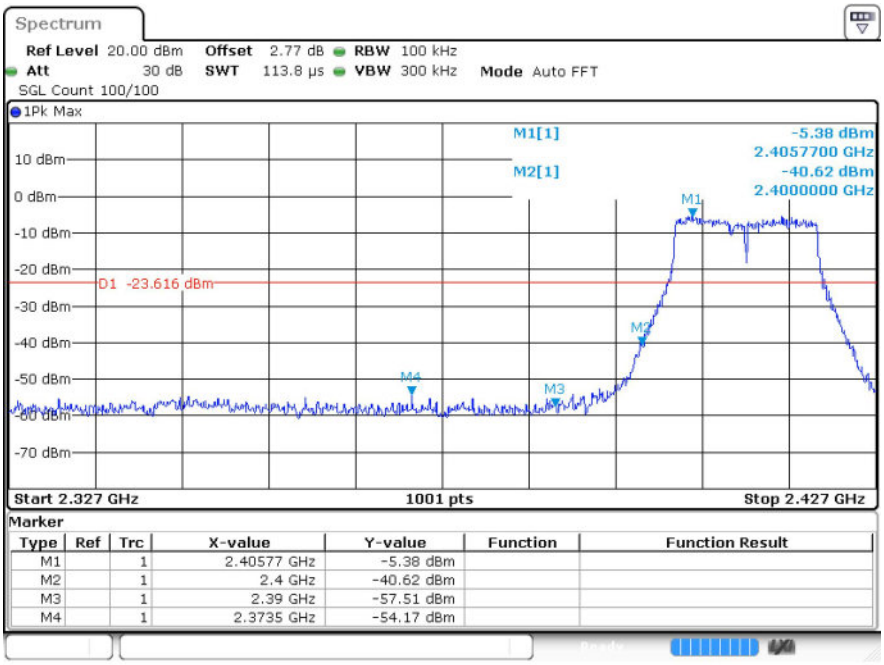
b 2462MHz Ant1 Emission



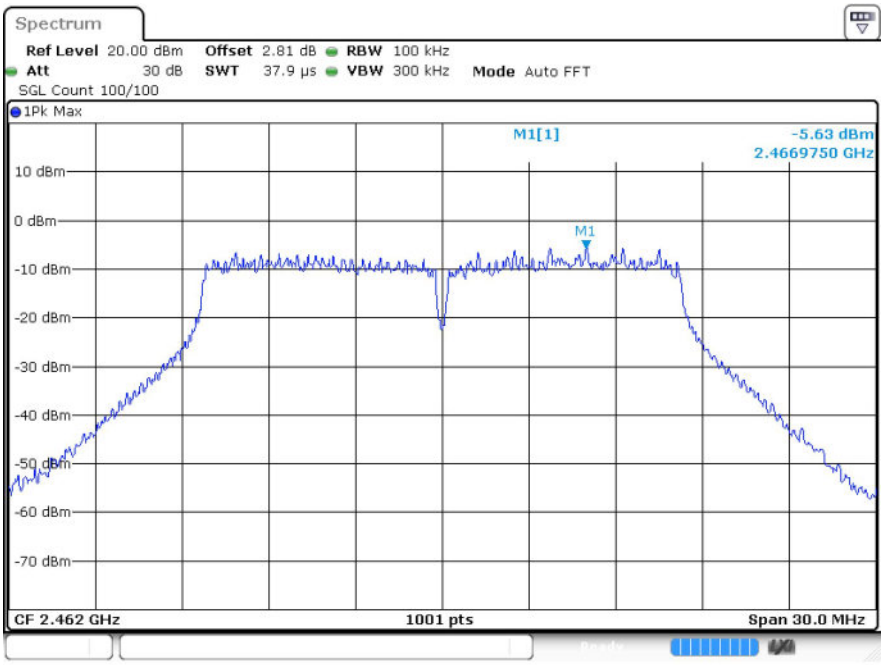
g 2412MHz Ant1 Ref



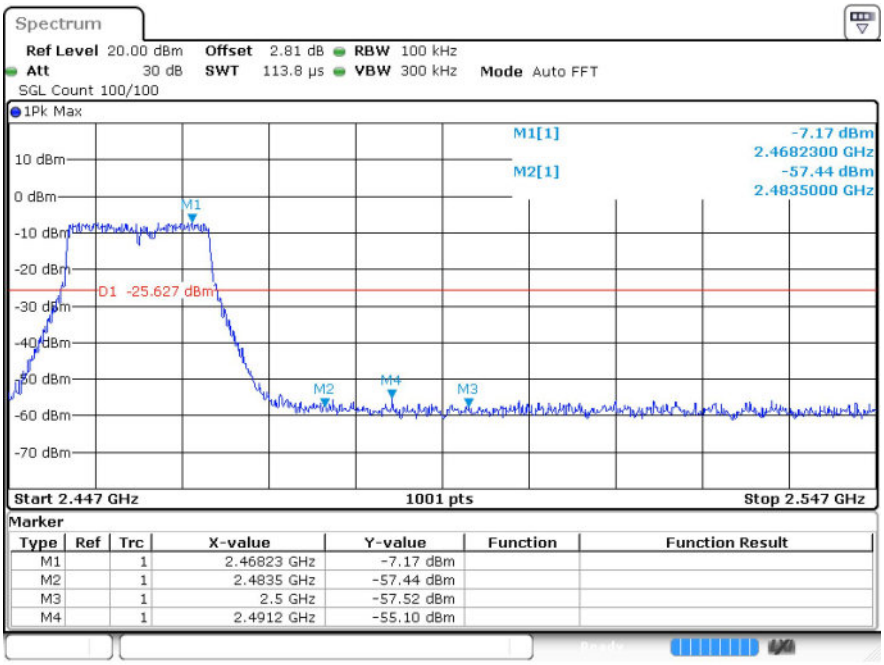
g 2412MHz Ant1 Emission



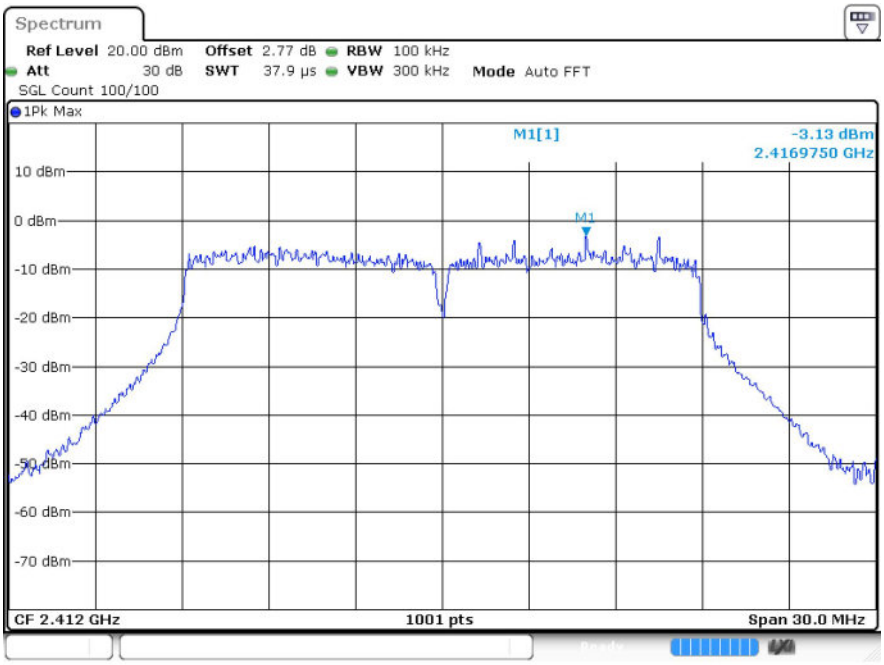
g 2462MHz Ant1 Ref



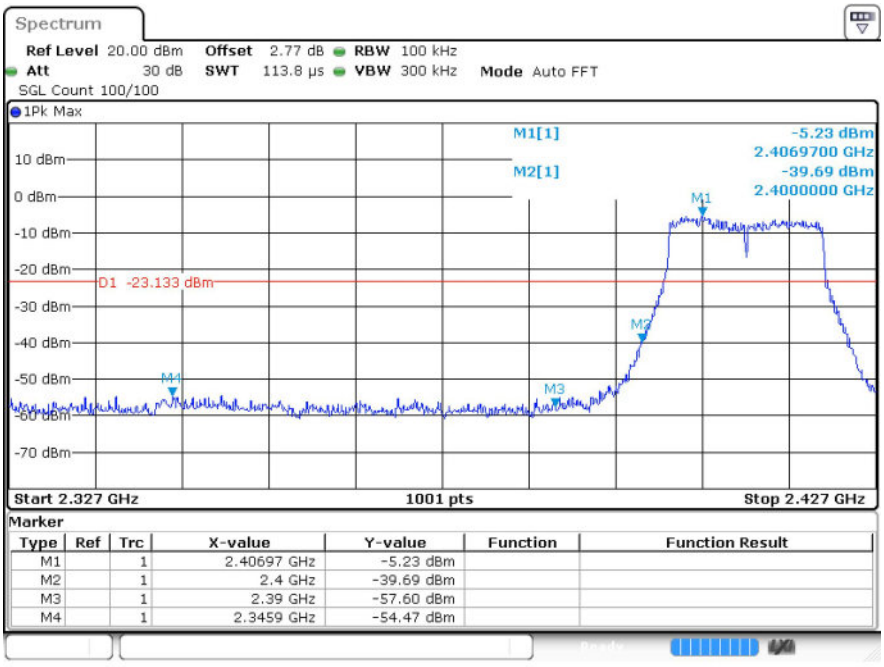
g 2462MHz Ant1 Emission



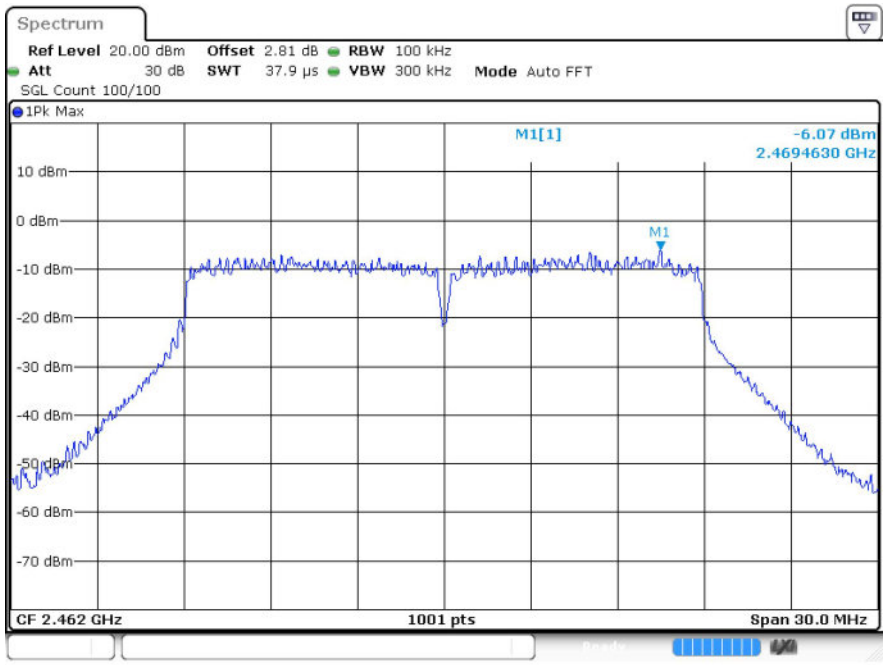
n20 2412MHz Ant1 Ref



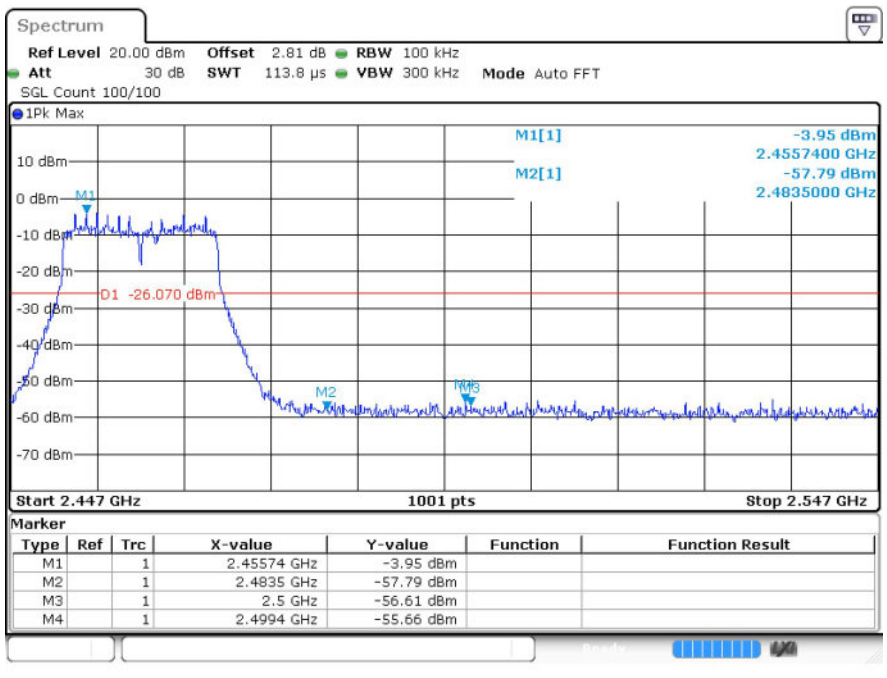
n20 2412MHz Ant1 Emission



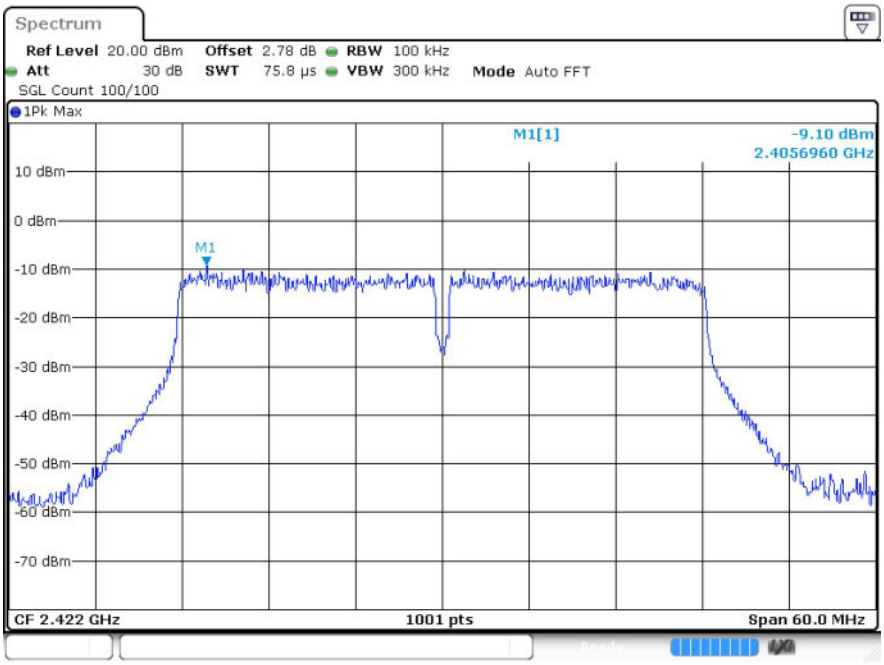
n20 2462MHz Ant1 Ref



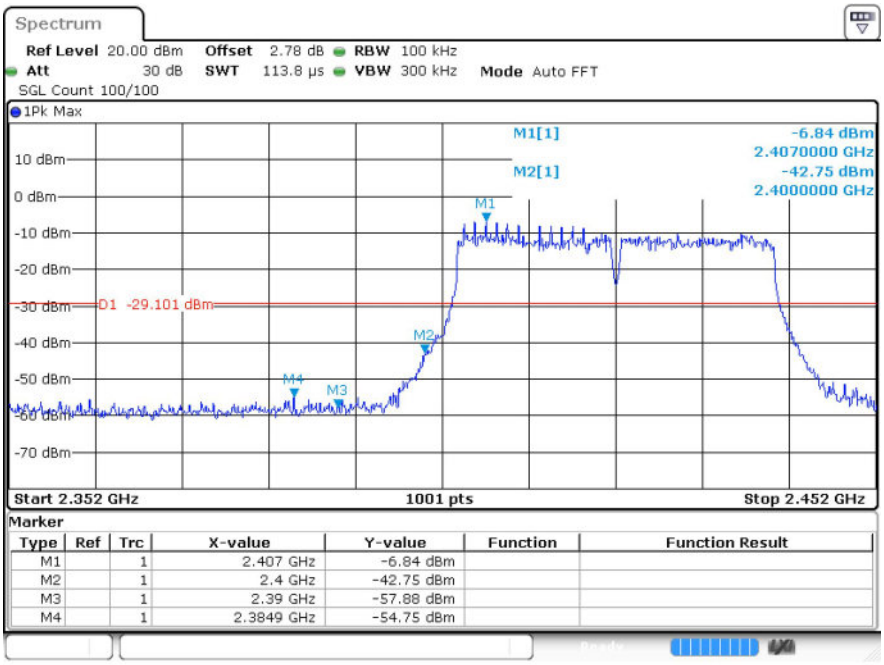
n20 2462MHz Ant1 Emission



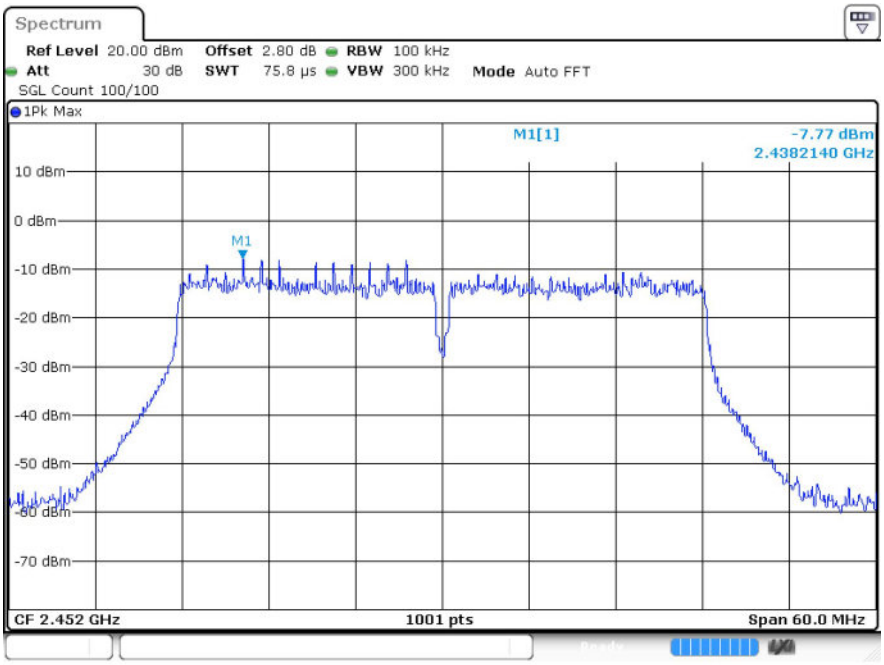
n40 2422MHz Ant1 Ref



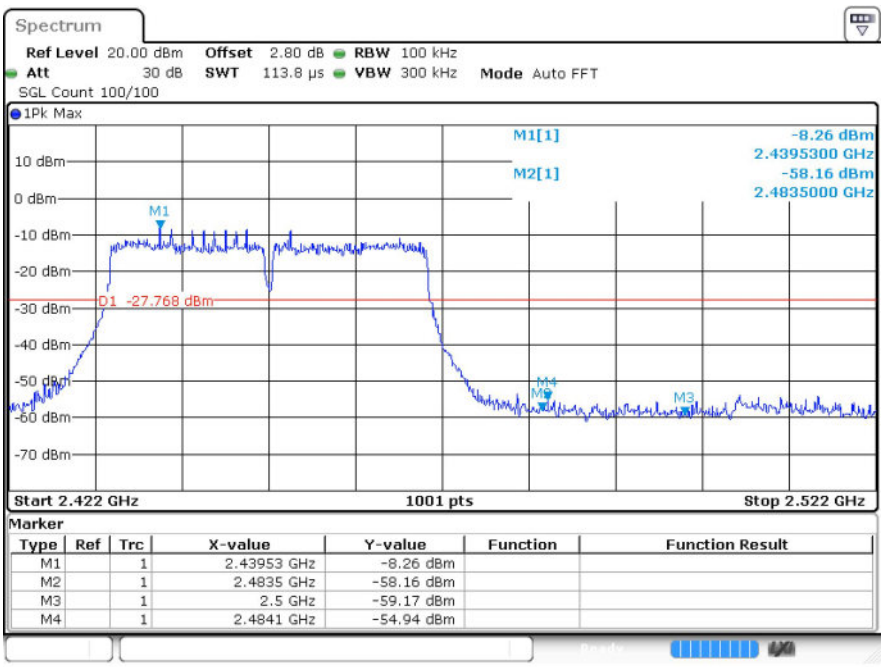
n40 2422MHz Ant1 Emission



n40 2452MHz Ant1 Ref



n40 2452MHz Ant1 Emission



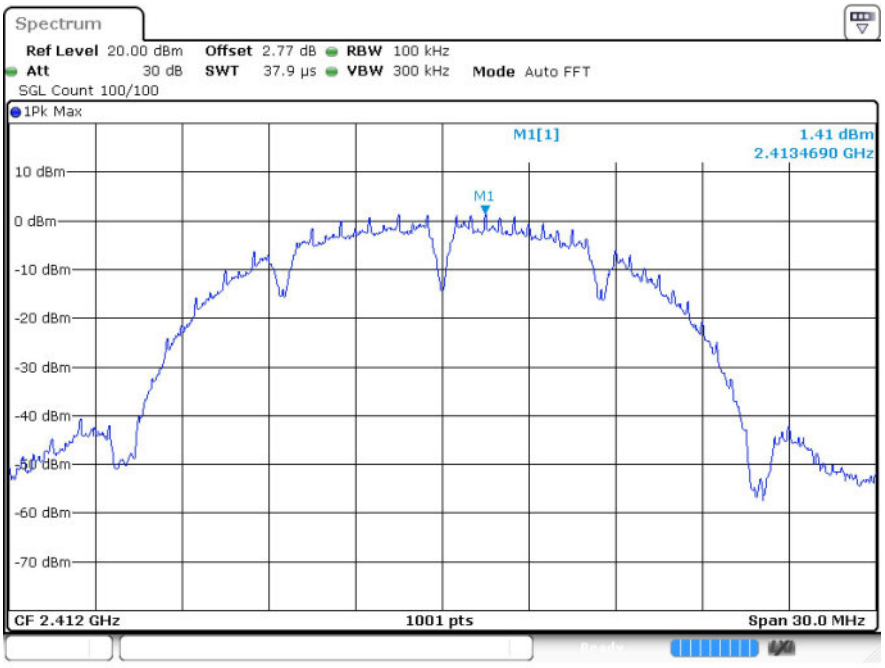
6 Conducted RF Spurious Emission

6.1 Test Result

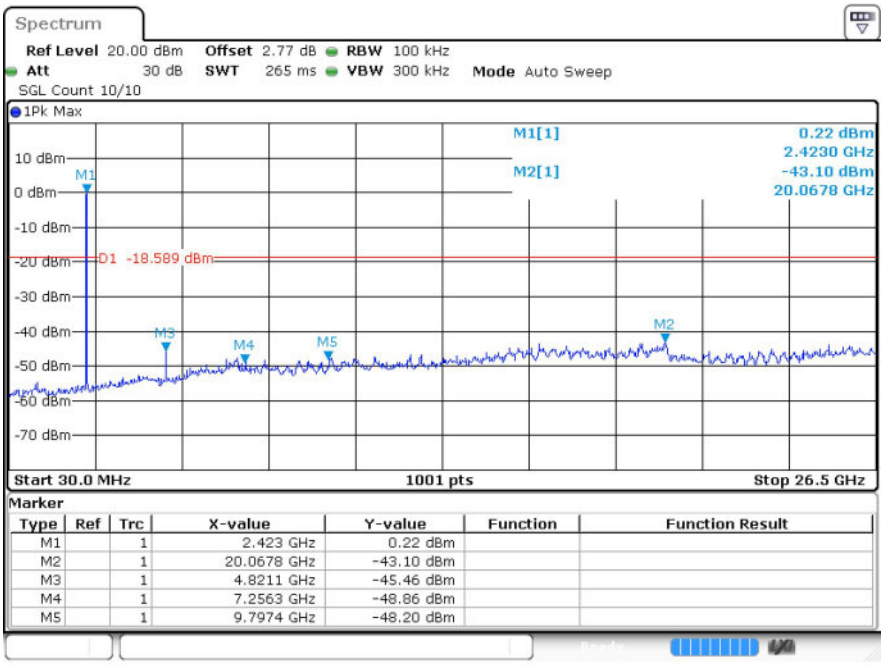
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-44.5	-20	Pass
b	2437	Ant1	-44.35	-20	Pass
b	2462	Ant1	-42.36	-20	Pass
g	2412	Ant1	-38.81	-20	Pass
g	2437	Ant1	-40.23	-20	Pass
g	2462	Ant1	-39.31	-20	Pass
n20	2412	Ant1	-38.12	-20	Pass
n20	2437	Ant1	-40.29	-20	Pass
n20	2462	Ant1	-36.25	-20	Pass
n40	2422	Ant1	-32.56	-20	Pass
n40	2437	Ant1	-35.18	-20	Pass
n40	2452	Ant1	-32.51	-20	Pass

6.2 Test Graphs

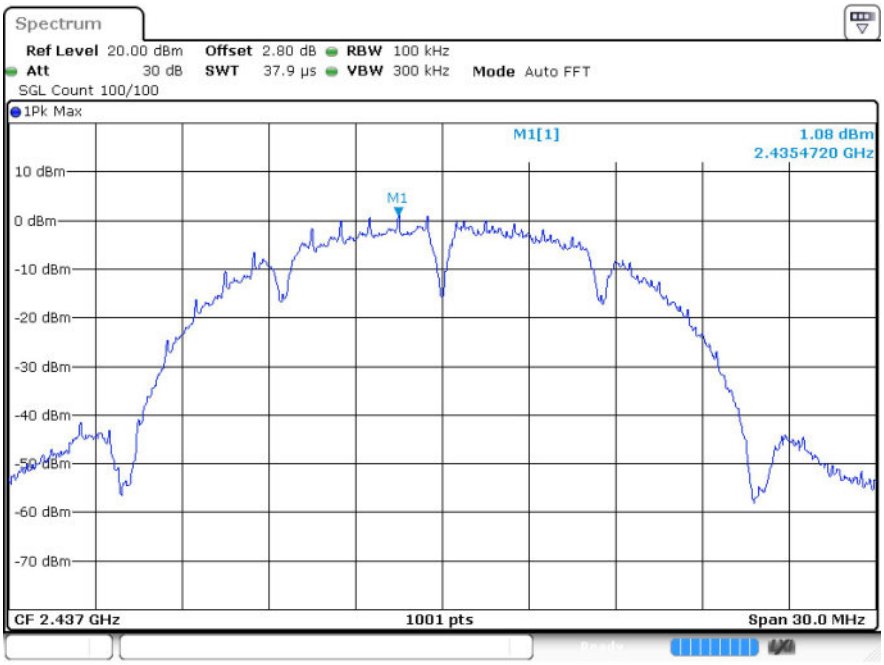
Test Graphs
b 2412MHz Ant1 Ref



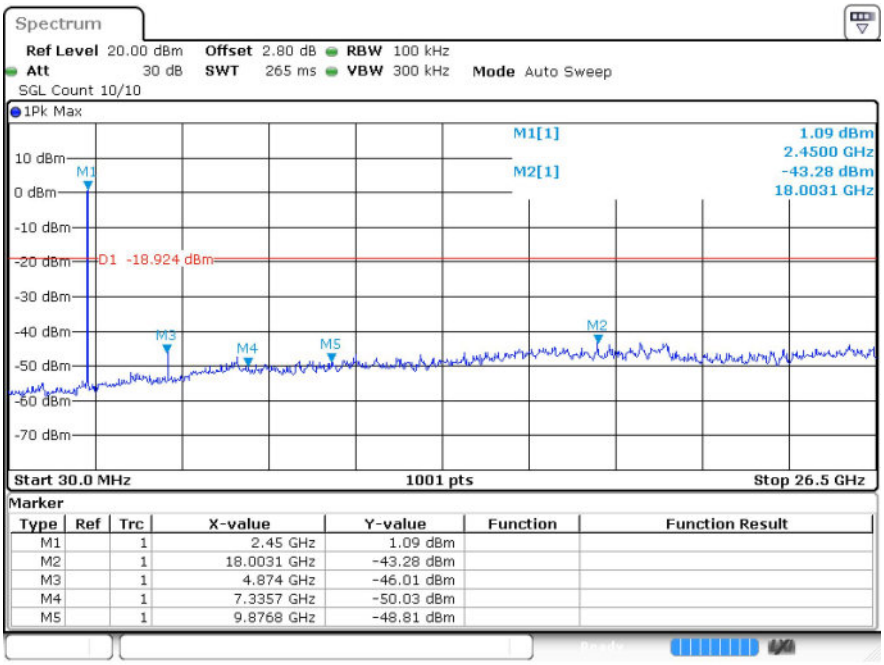
b 2412MHz Ant1 Emission



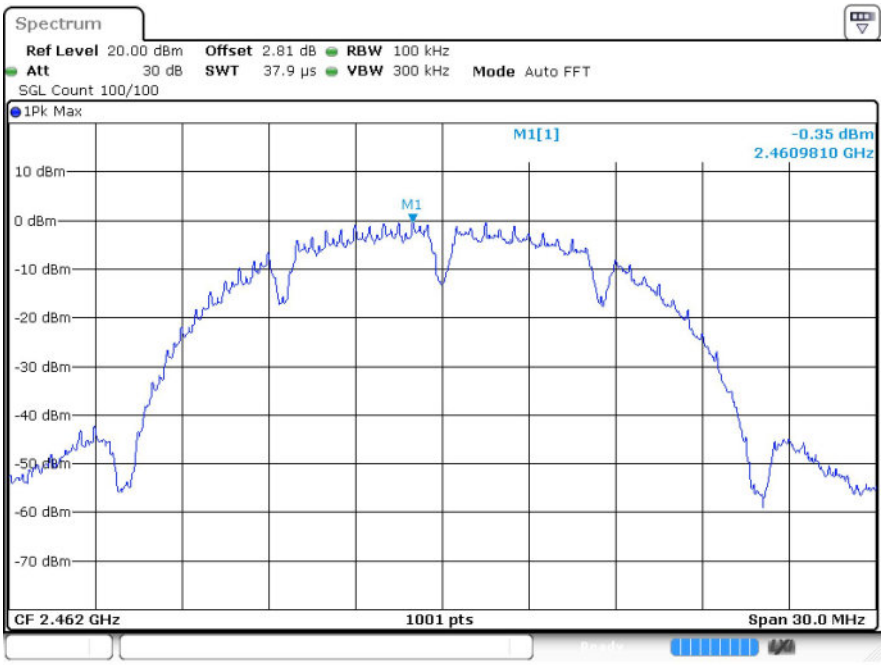
b 2437MHz Ant1 Ref



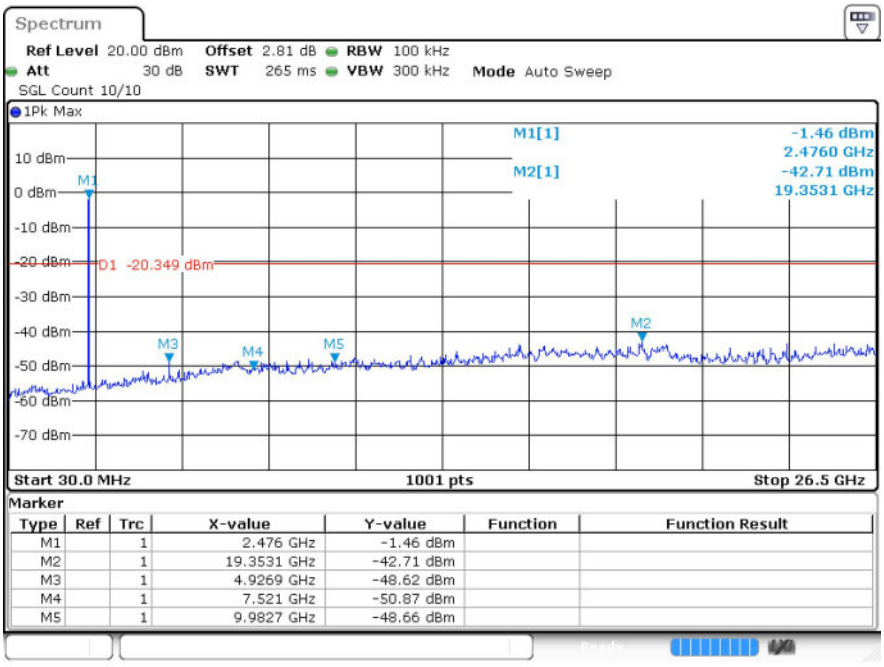
b 2437MHz Ant1 Emission



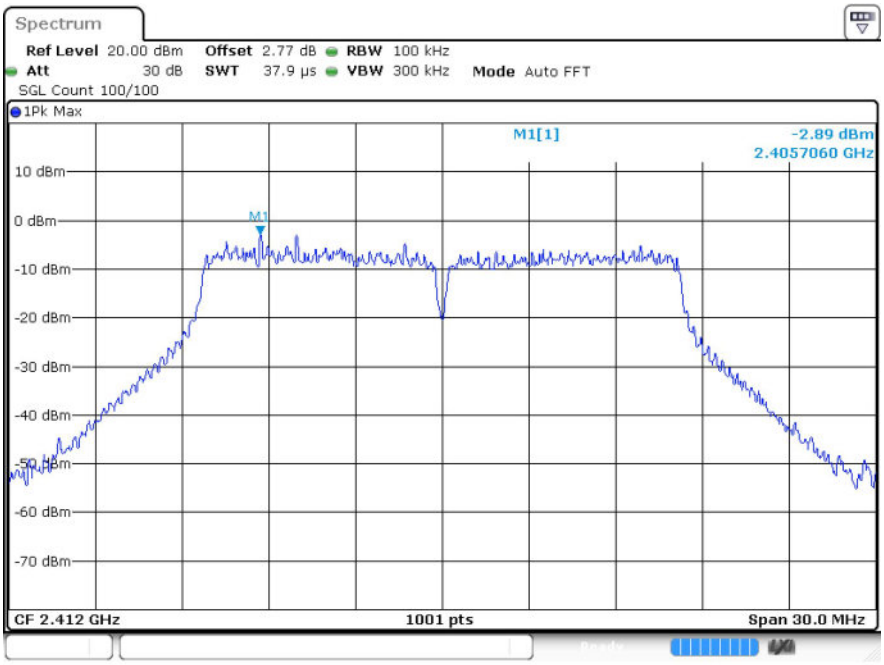
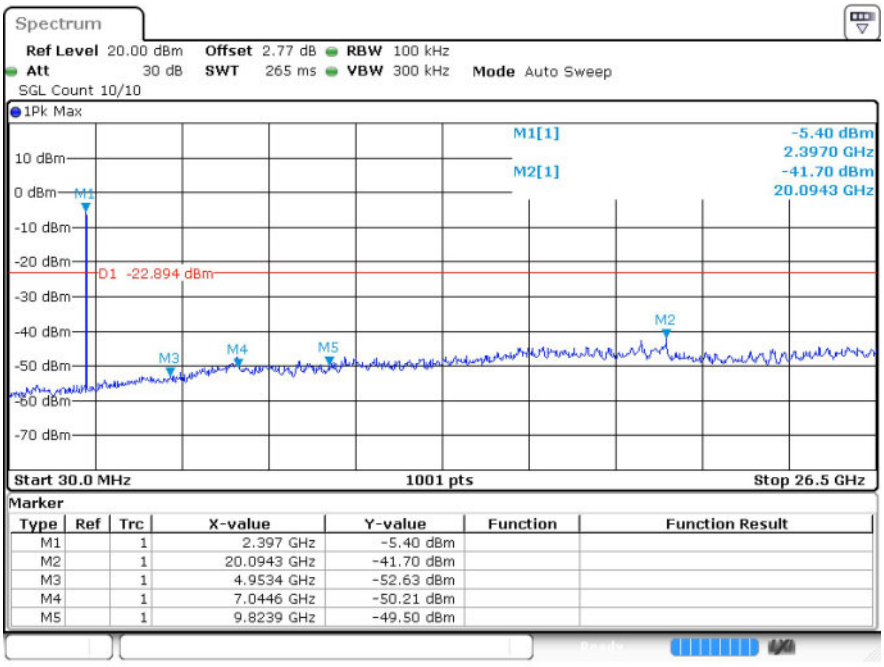
b 2462MHz Ant1 Ref



b 2462MHz Ant1 Emission



g 2412MHz Ant1 Ref



g 2412MHz Ant1 Emission