Appendix C

RF Test Data for 2.4GWIFI(Conducted Measurement)

Product Name: Mini PC

Trade Mark: Huidun

Test Model: H20

Environmental Conditions

Temperature:	24.9℃
Relative Humidity:	52.3%
ATM Pressure:	101Kpa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung

Contents

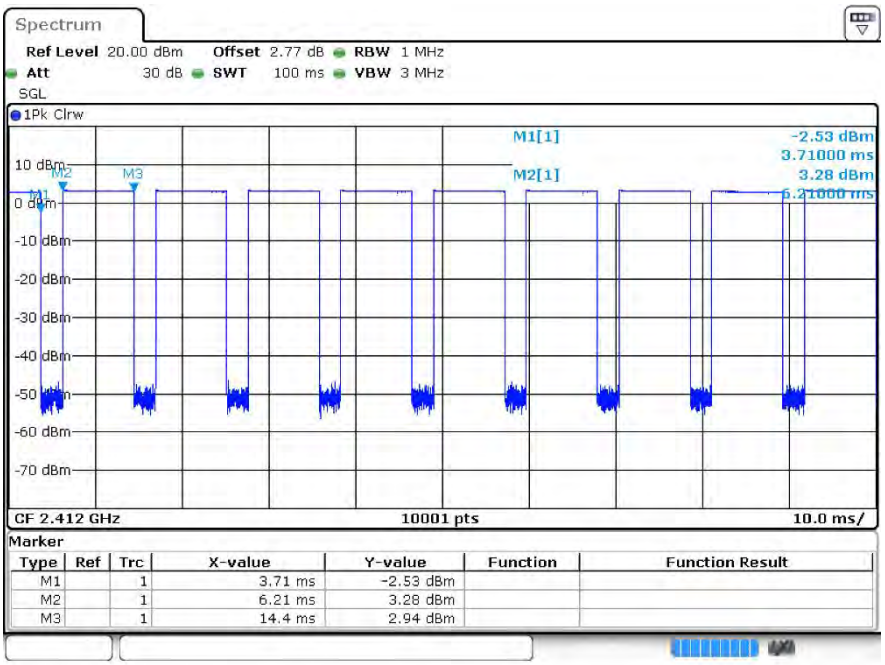
1 Duty Cycle

1.1 Test Result

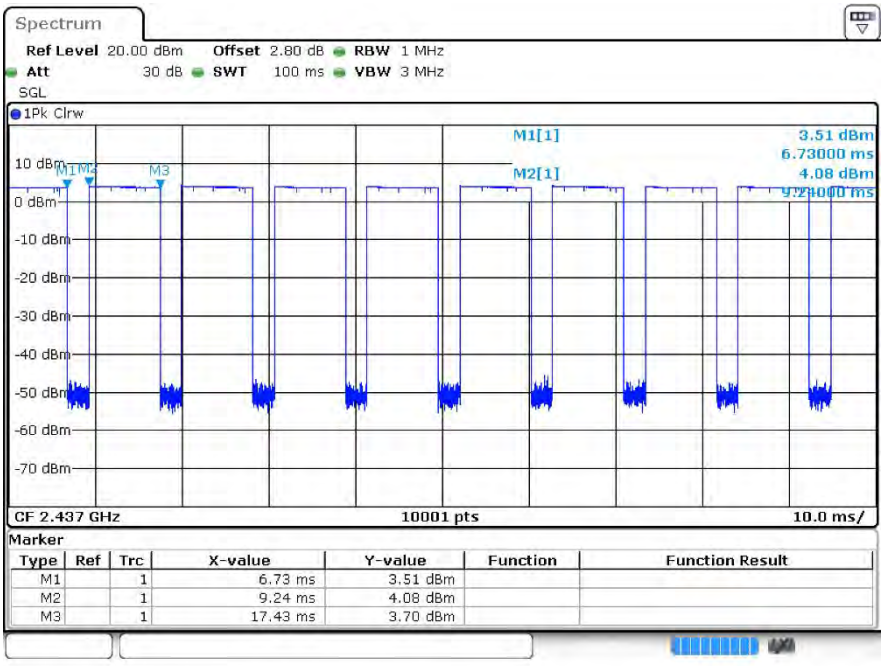
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
b	2412	Ant1	77.55	1.1	0.12
b	2437	Ant1	77.54	1.1	0.12
b	2462	Ant1	77.55	1.1	0.12
g	2412	Ant1	77.55	1.1	0.12
g	2437	Ant1	77.54	1.1	0.12
g	2462	Ant1	77.55	1.1	0.12
n20	2412	Ant1	33.9	4.7	0.79
n20	2437	Ant1	34.64	4.6	0.79
n20	2462	Ant1	33.93	4.69	0.79
n40	2422	Ant1	20.26	6.93	鋆?
n40	2437	Ant1	20.26	6.93	1.61
n40	2452	Ant1	20.24	6.94	1.59
ax20	2412	Ant1	47.67	3.22	0.44
ax20	2437	Ant1	47.67	3.22	0.44
ax20	2462	Ant1	47.7	3.22	0.44
ax40	2422	Ant1	31.48	5.02	0.86
ax40	2437	Ant1	31.49	5.02	0.86
ax40	2452	Ant1	31.5	5.02	0.86
b	2412	Ant2	76.19	1.18	0.12
b	2437	Ant2	76.26	1.18	0.12
b	2462	Ant2	76.67	1.15	0.12
g	2412	Ant2	76.19	1.18	0.12
g	2437	Ant2	76.26	1.18	0.12
g	2462	Ant2	76.67	1.15	0.12
n20	2412	Ant2	34.1	4.67	0.79
n20	2437	Ant2	33.92	4.7	0.78
n20	2462	Ant2	34.62	4.61	0.79
n40	2422	Ant2	20.57	6.87	1.59
n40	2437	Ant2	20.44	6.9	1.59
n40	2452	Ant2	20.55	6.87	1.59
ax20	2412	Ant2	47.67	3.22	0.44
ax20	2437	Ant2	47.69	3.22	0.44
ax20	2462	Ant2	47.67	3.22	0.44
ax40	2422	Ant2	31.5	5.02	0.87
ax40	2437	Ant2	31.48	5.02	0.86
ax40	2452	Ant2	31.48	5.02	0.86

1.2 Test Graphs

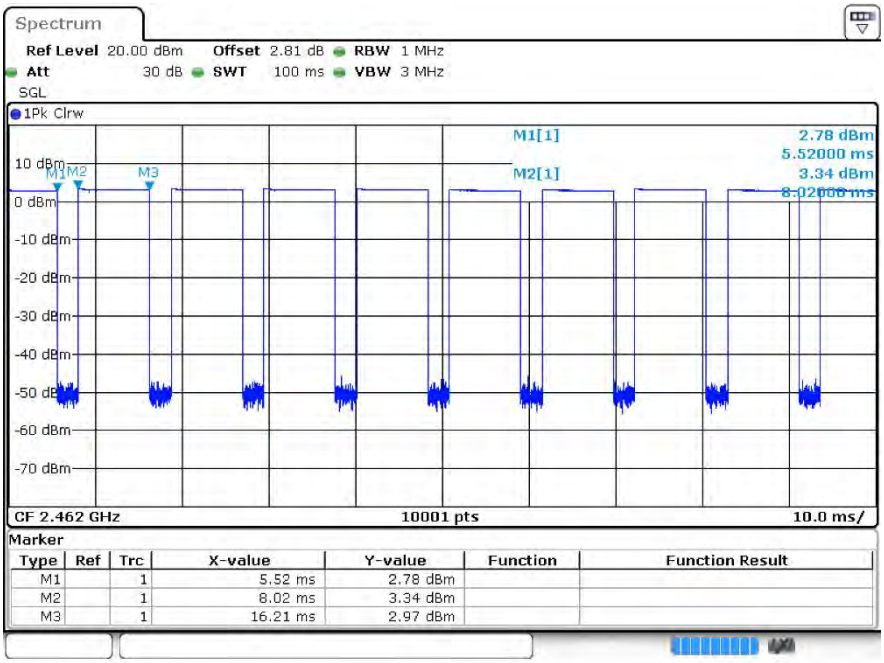
Test Graphs
Duty Cycleb 2412MHz Ant1



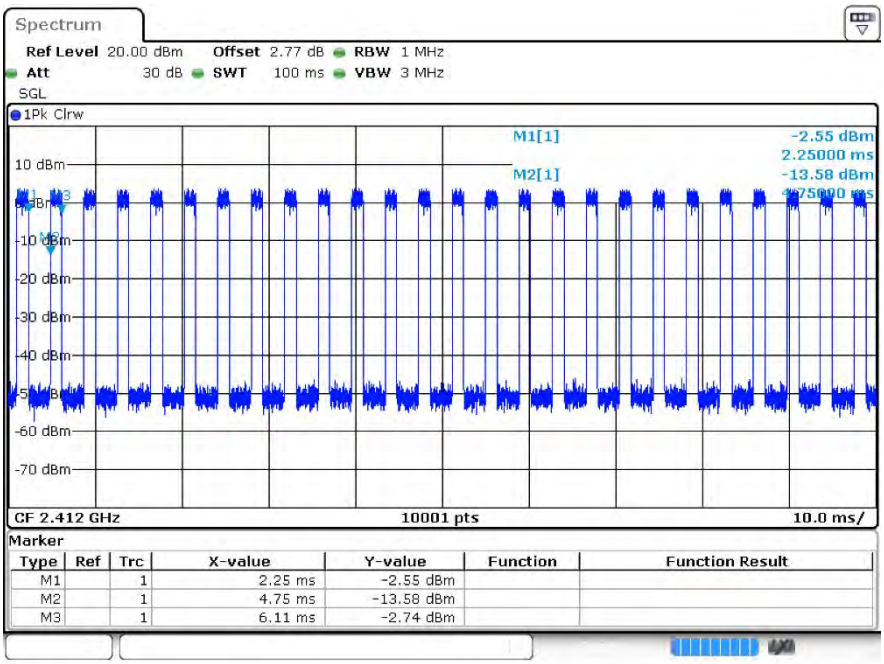
Duty Cycleb 2437MHz Ant1



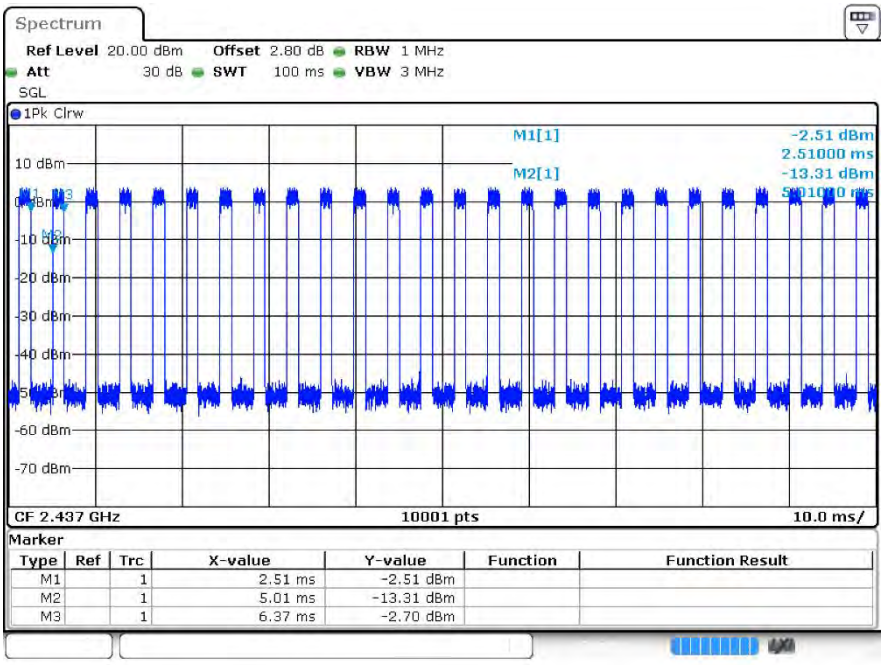
Duty Cycleb 2462MHz Ant1



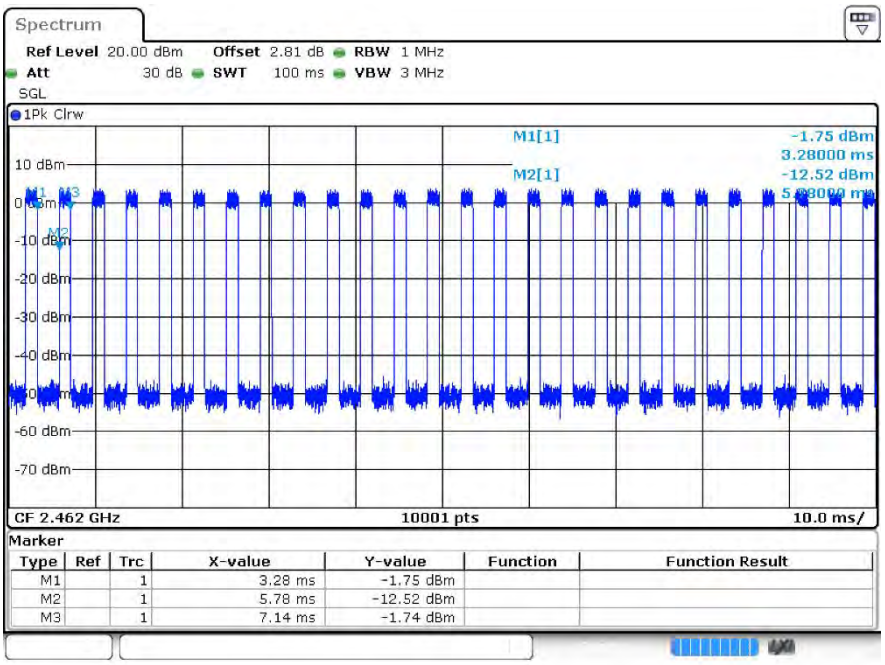
Duty Cycleg 2412MHz Ant1



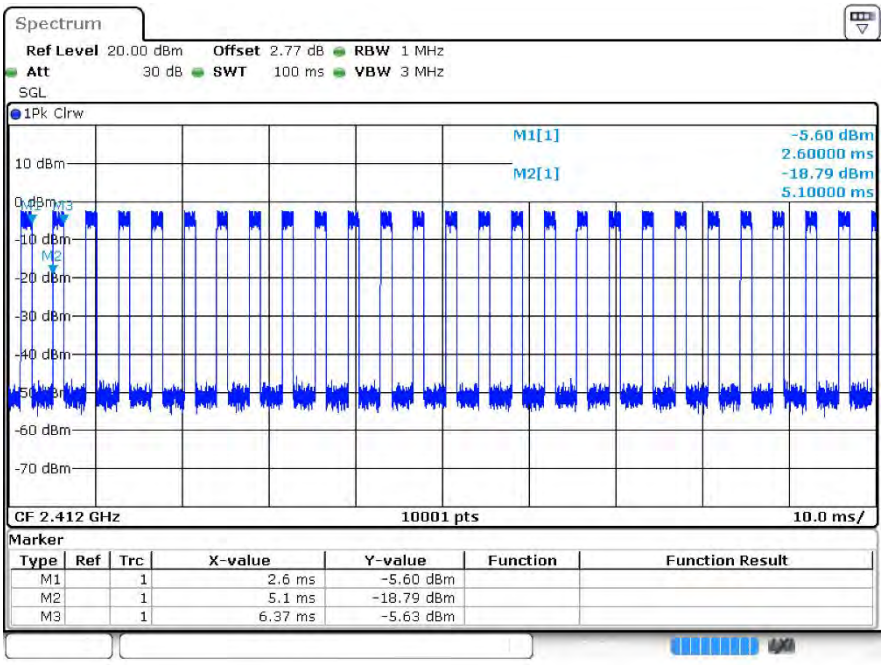
Duty Cycleg 2437MHz Ant1



Duty Cycleg 2462MHz Ant1



Duty Cyclen20 2412MHz Ant1



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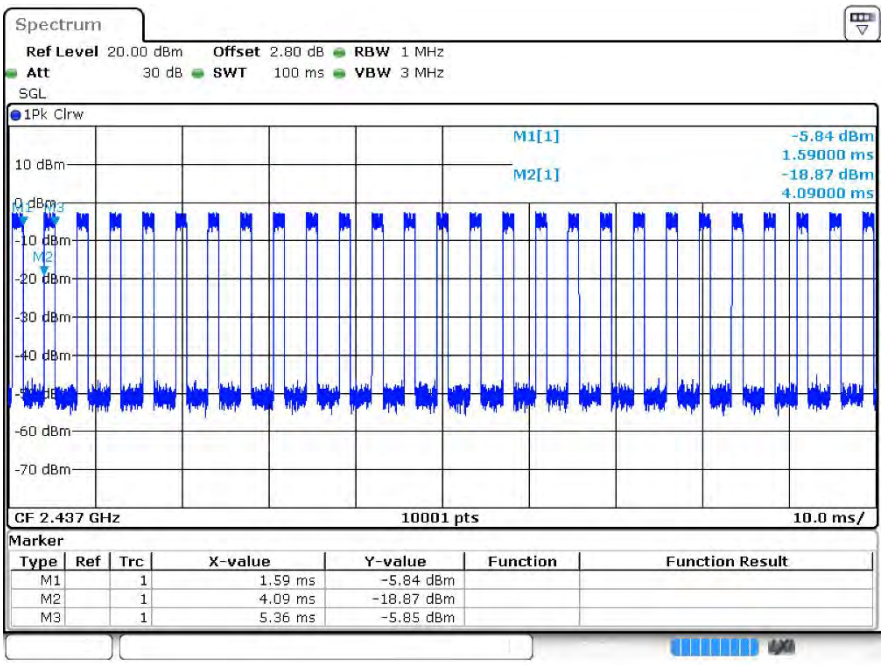
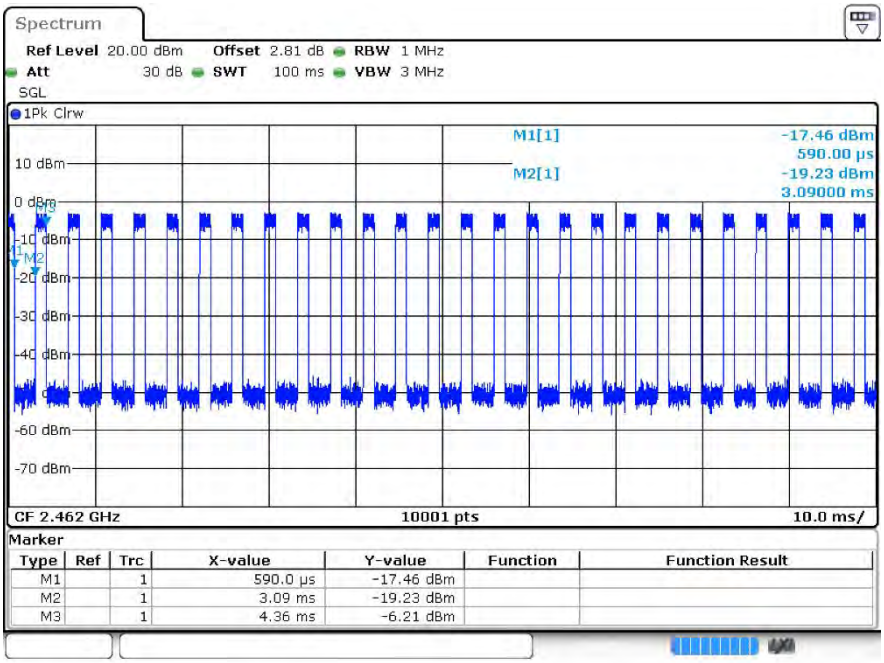
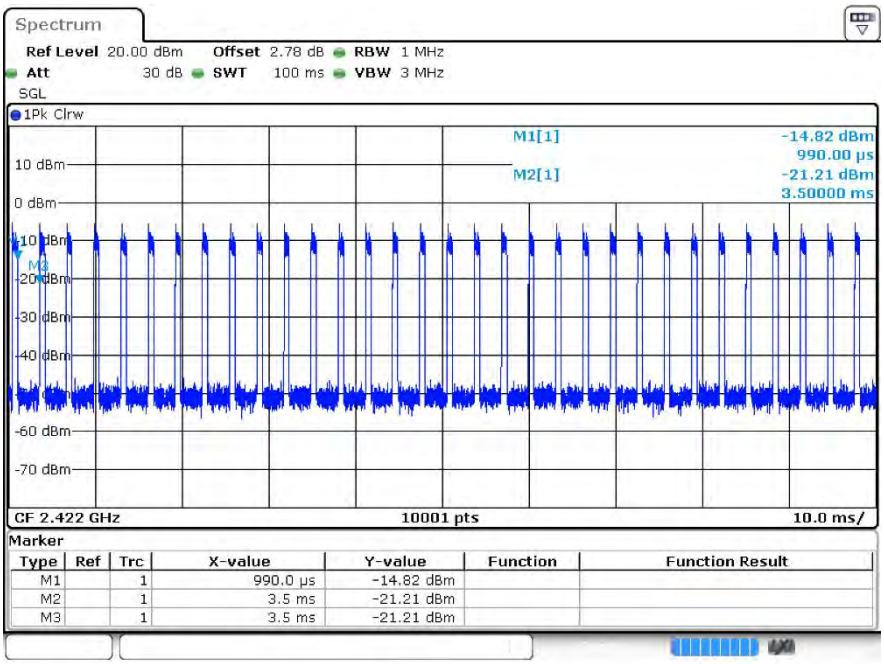


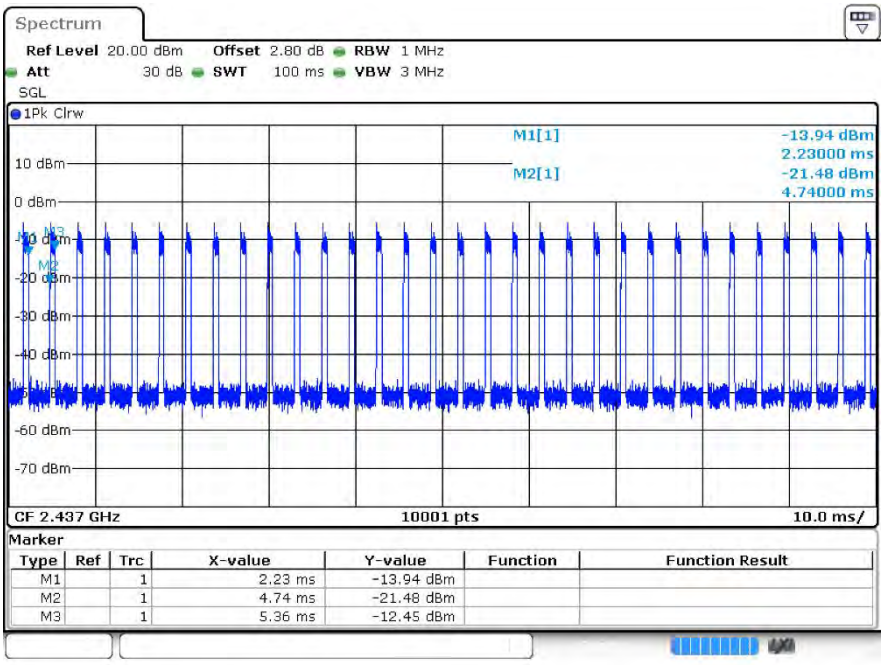
Duty Cyclen20 2462MHz Ant1



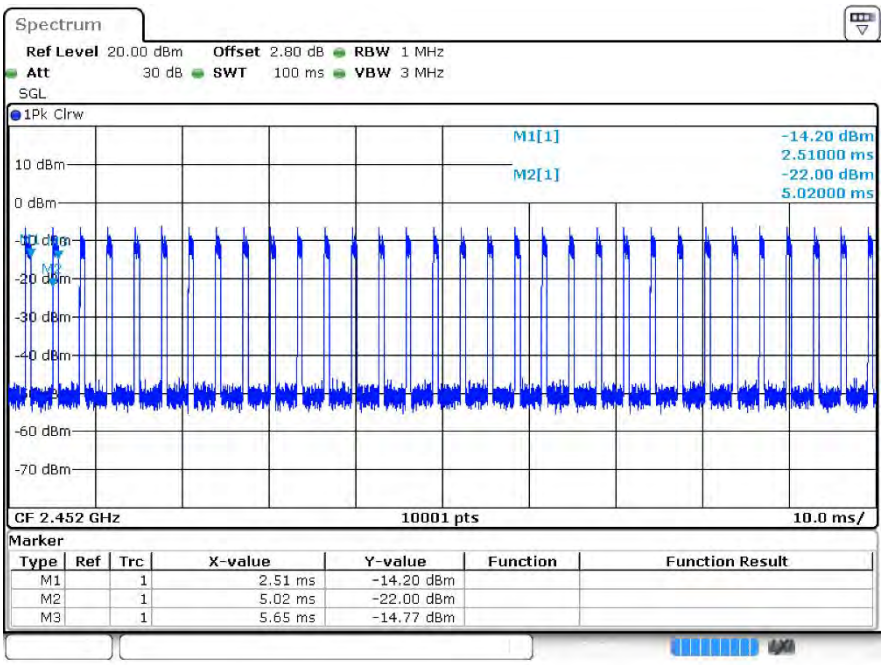
Duty Cyclen40 2422MHz Ant1



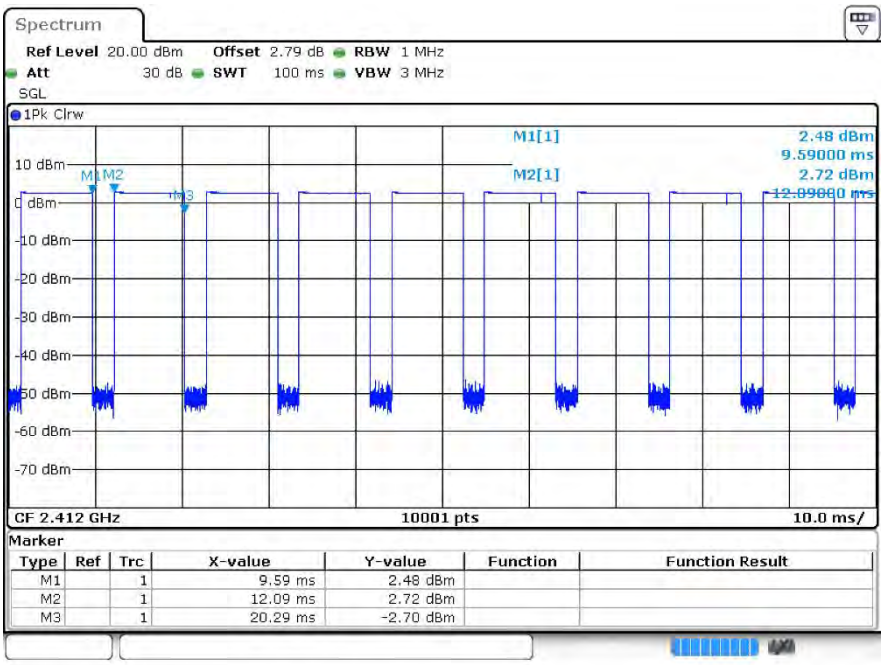
Duty Cyclen40 2437MHz Ant1



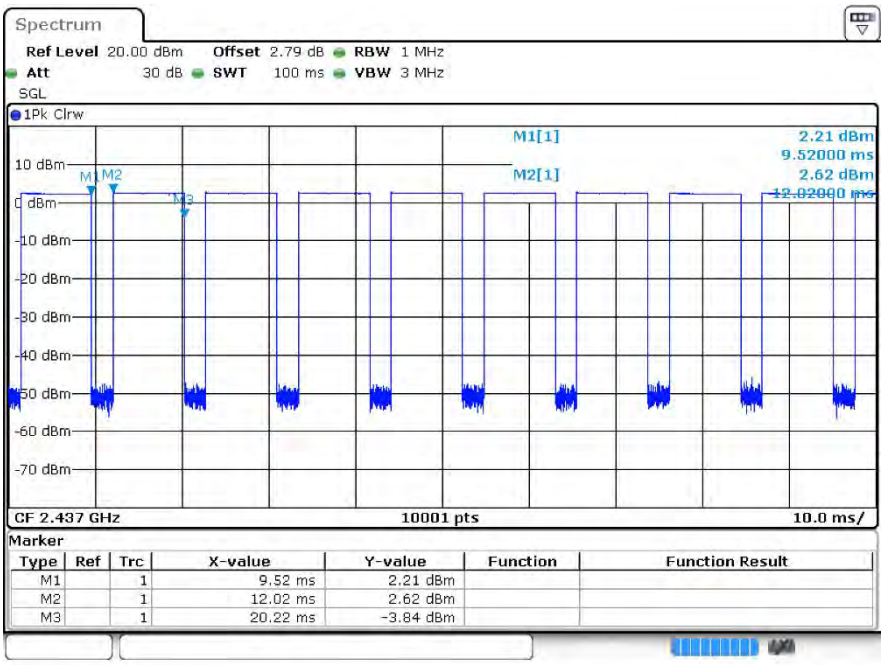
Duty Cyclen40 2452MHz Ant1



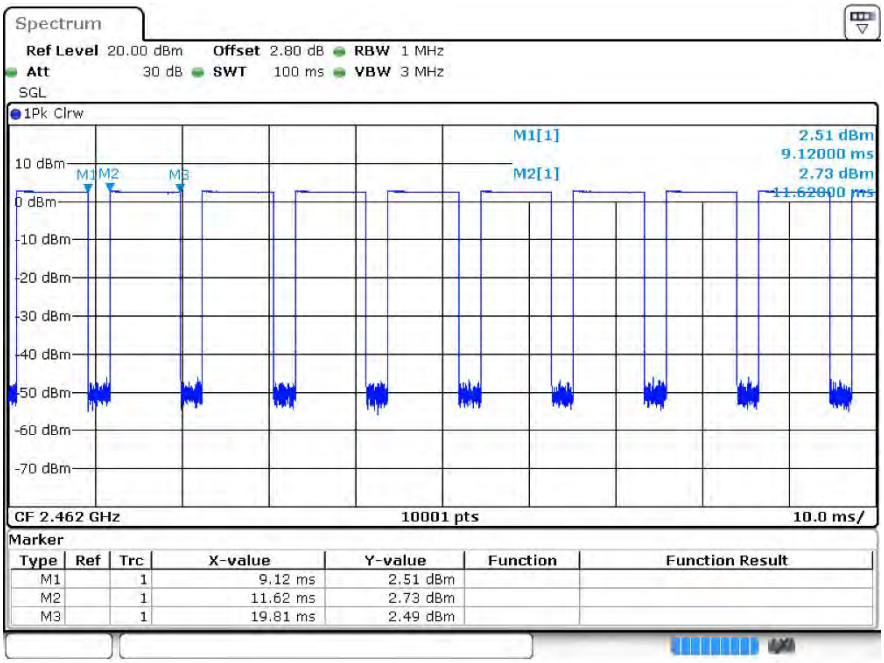
Test Graphs
Duty Cycleb 2412MHz Ant2



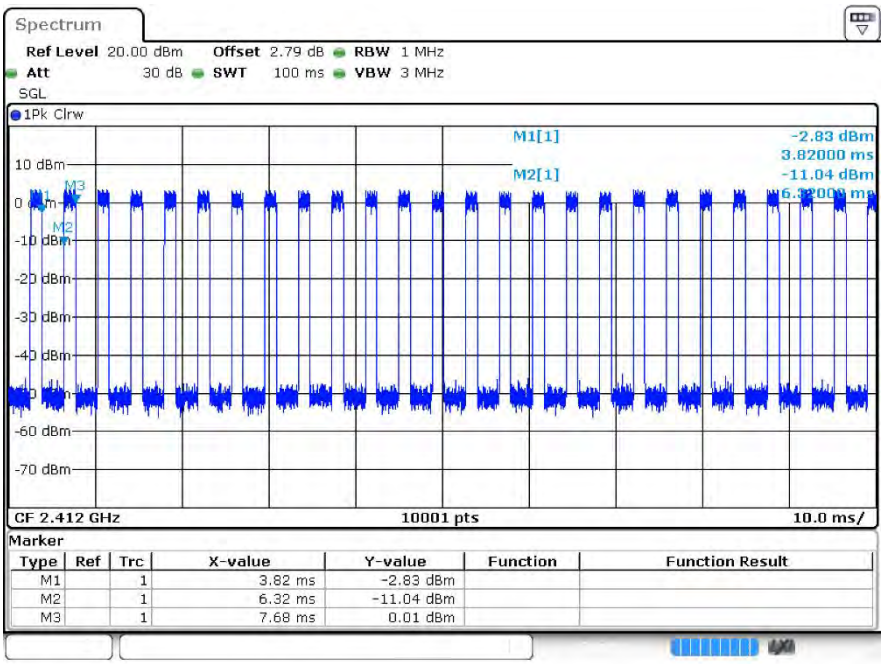
Duty Cycleb 2437MHz Ant2



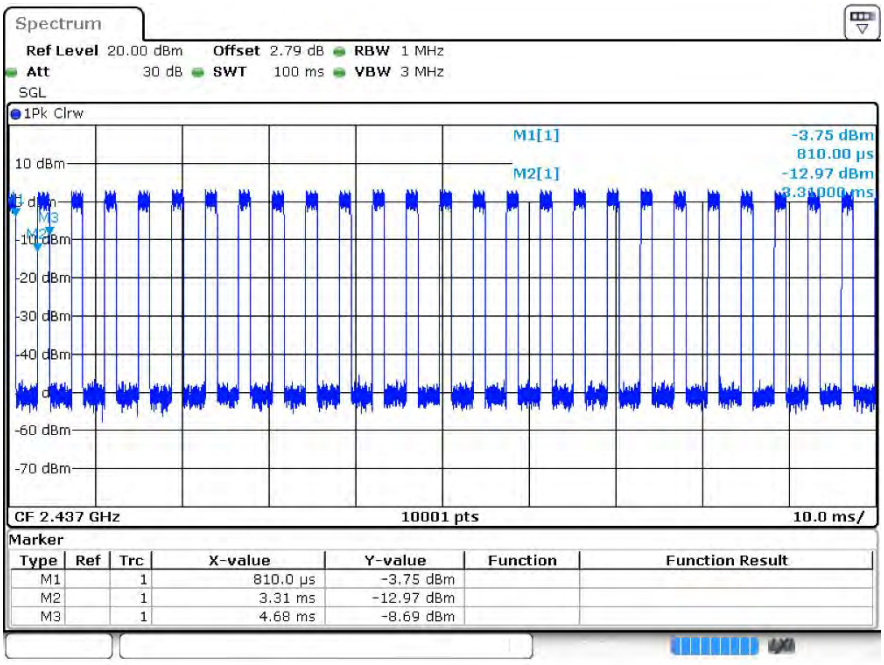
Duty Cycleb 2462MHz Ant2



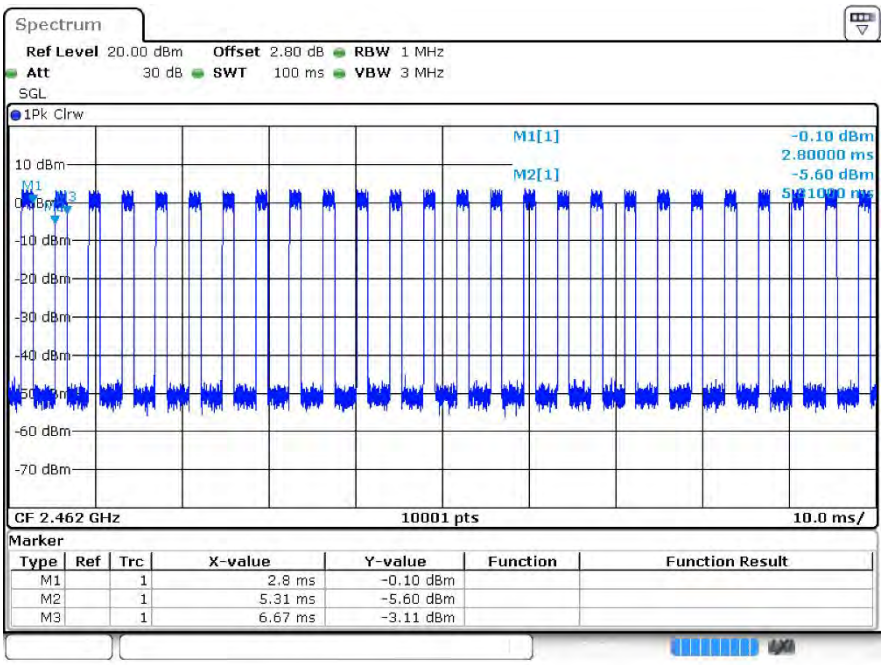
Duty Cycleg 2412MHz Ant2



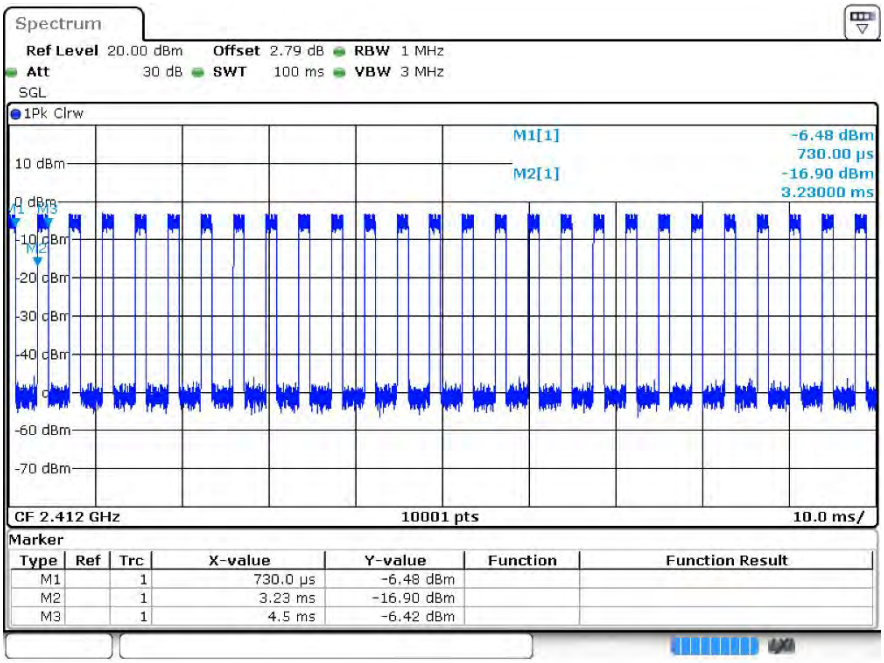
Duty Cycleg 2437MHz Ant2



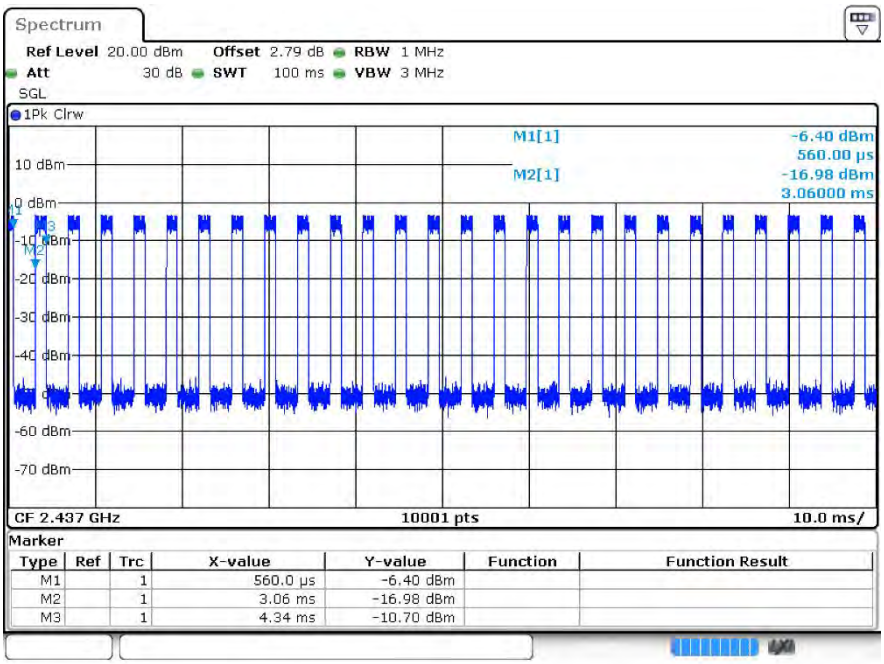
Duty Cycleg 2462MHz Ant2



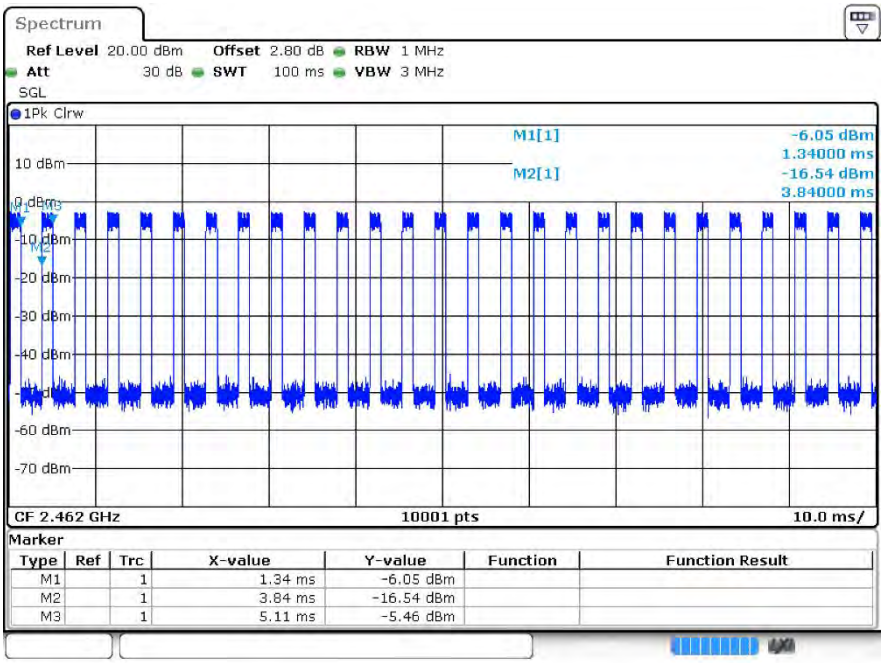
Duty Cyclen20 2412MHz Ant2



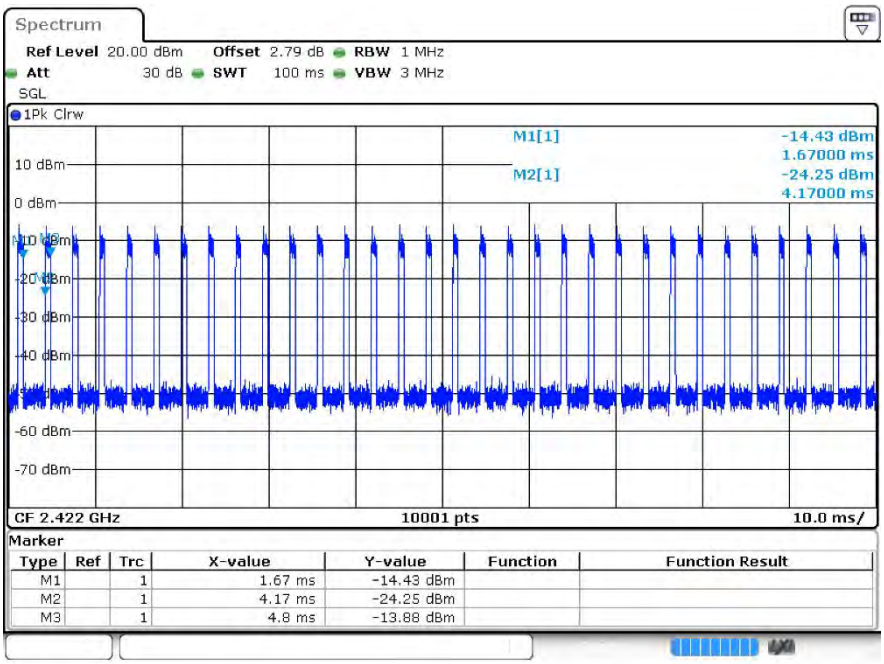
Duty Cyclen20 2437MHz Ant2



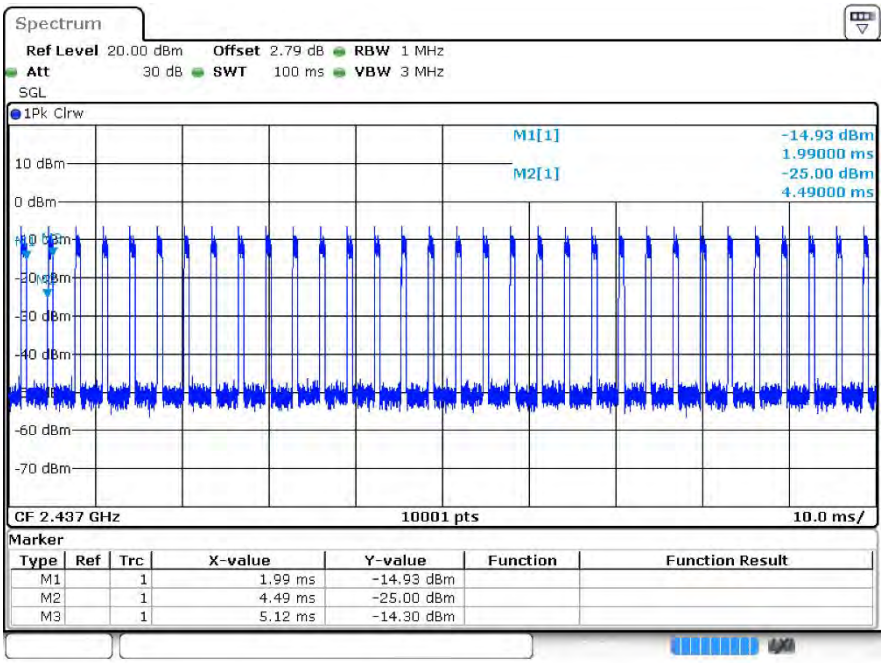
Duty Cyclen20 2462MHz Ant2



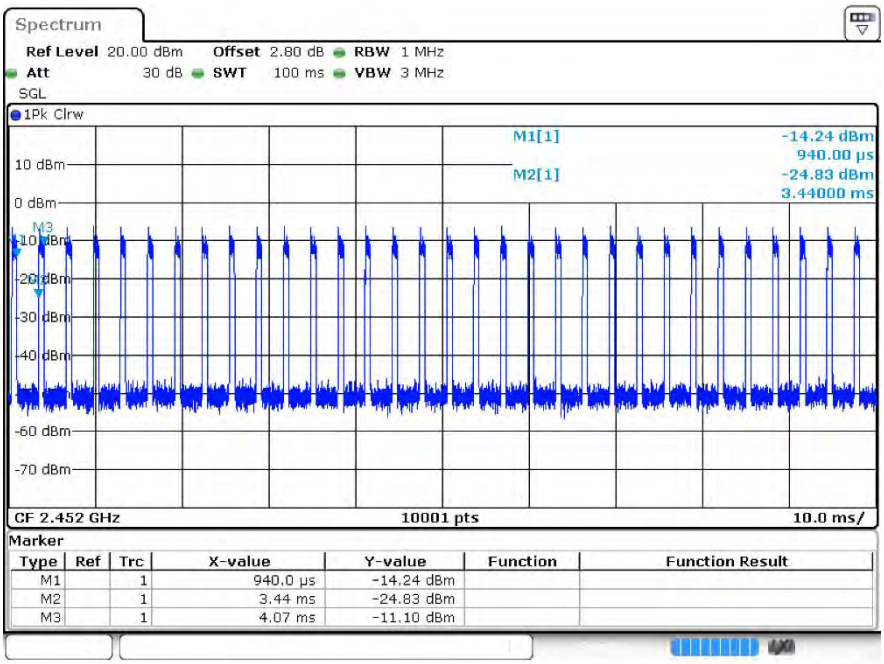
Duty Cyclen40 2422MHz Ant2



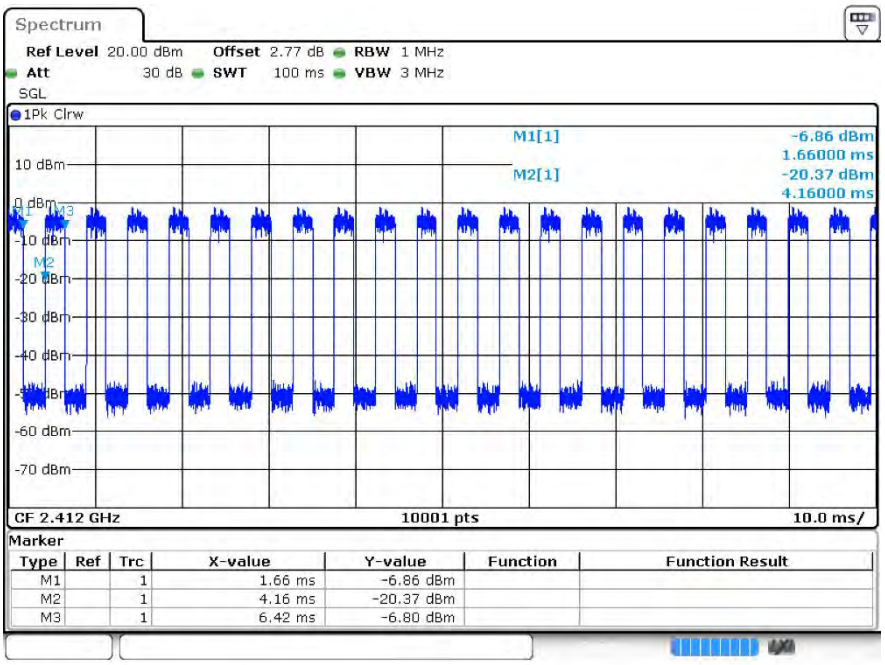
Duty Cyclen40 2437MHz Ant2



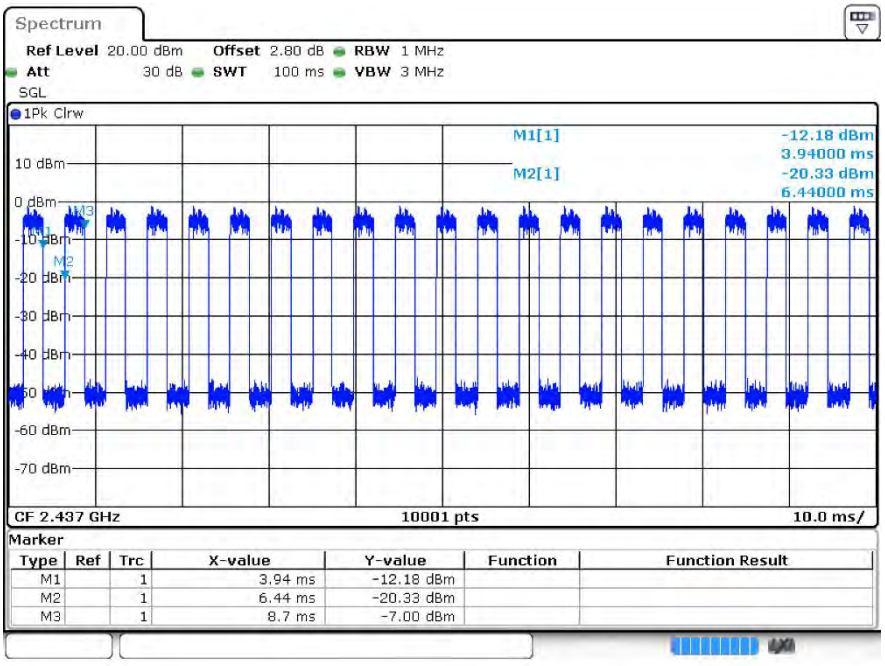
Duty Cyclen40 2452MHz Ant2



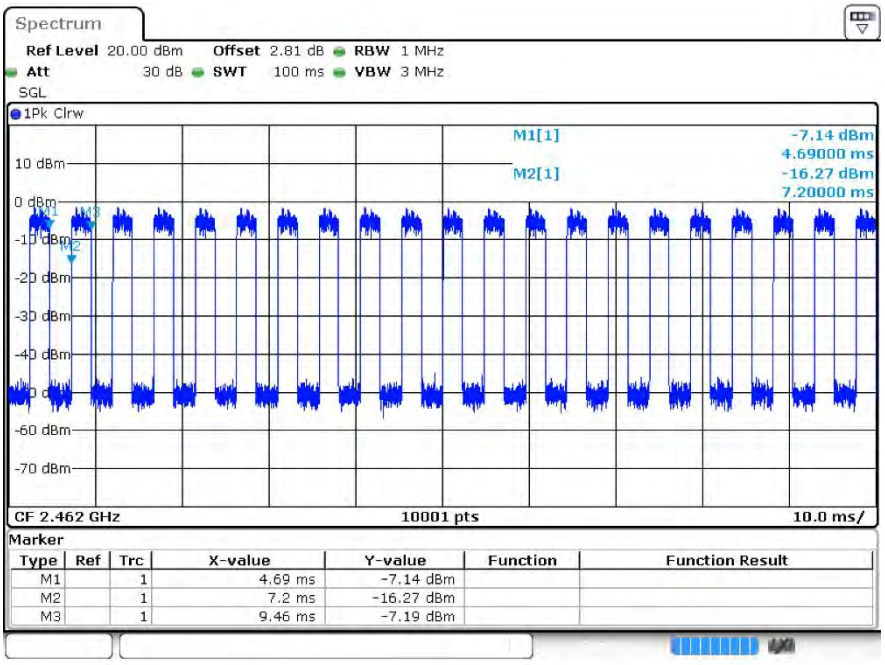
Duty Cycleax20 2412MHz Ant1



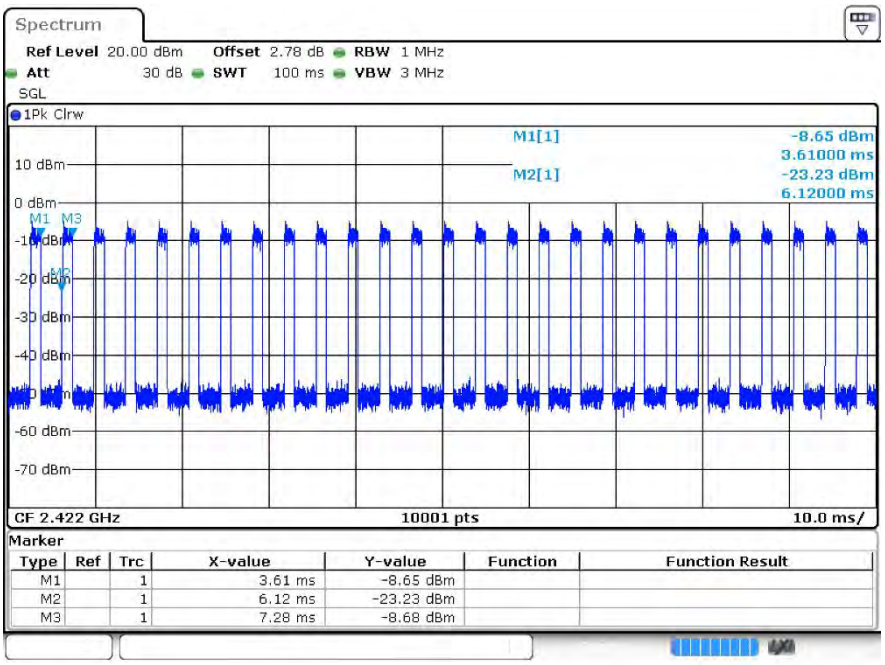
Duty Cycleax20 2437MHz Ant1



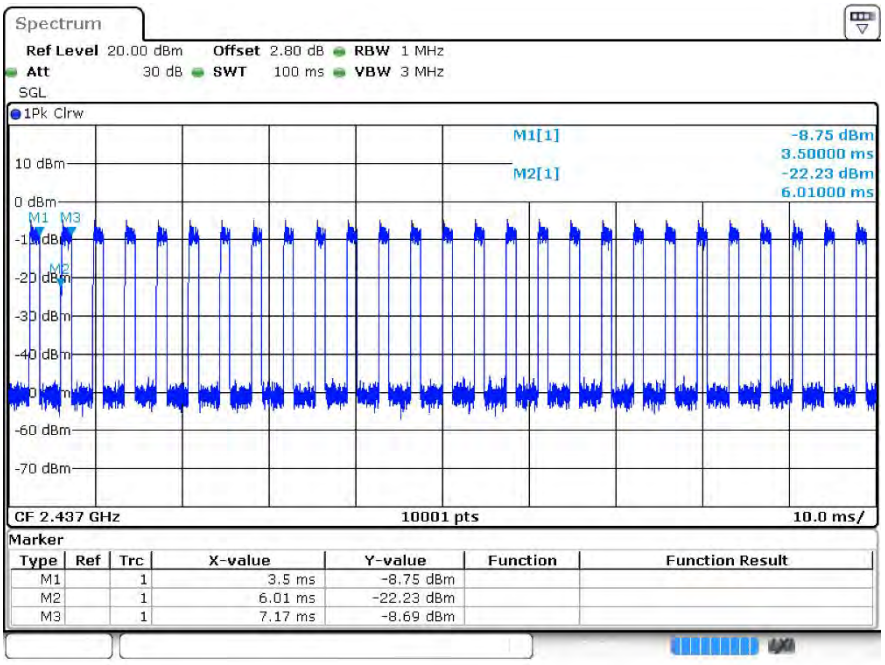
Duty Cycleax20 2462MHz Ant1



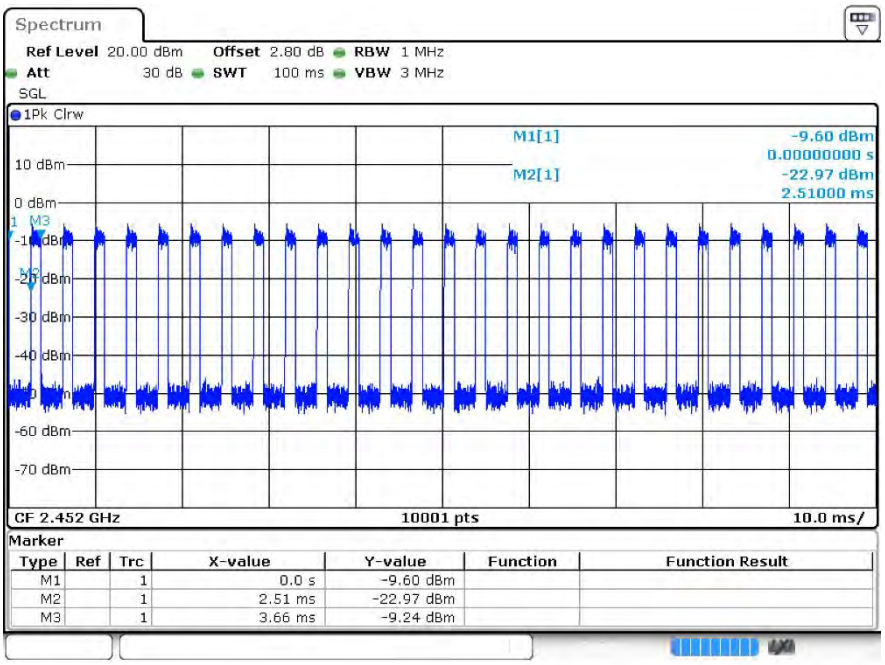
Duty Cycleax40 2422MHz Ant1



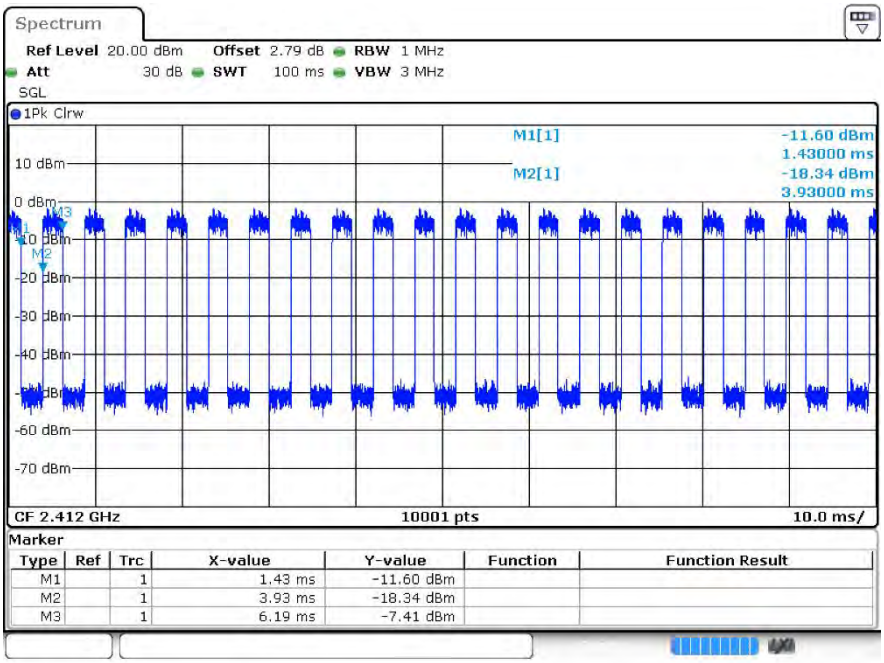
Duty Cycleax40 2437MHz Ant1



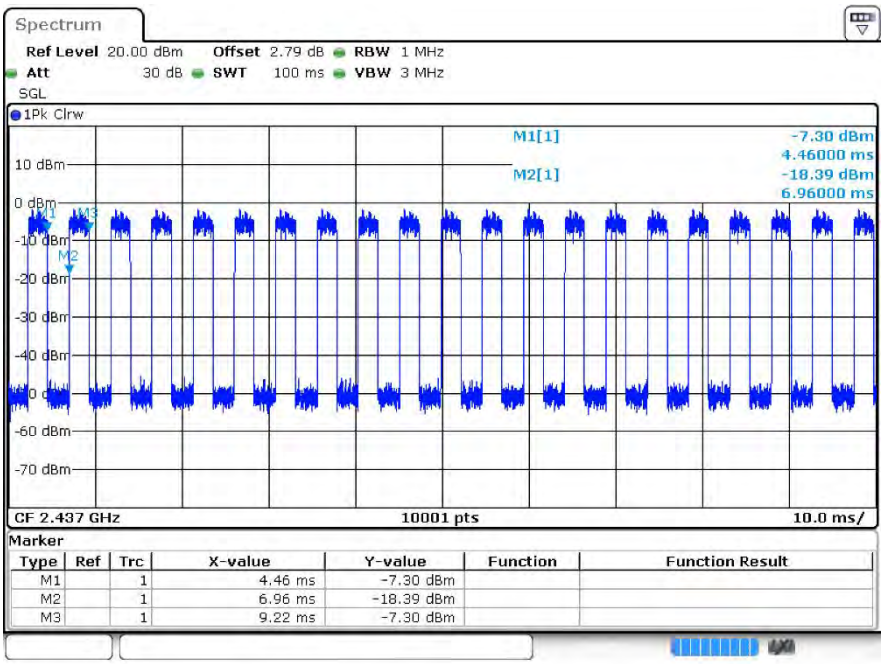
Duty Cycleax40 2452MHz Ant1



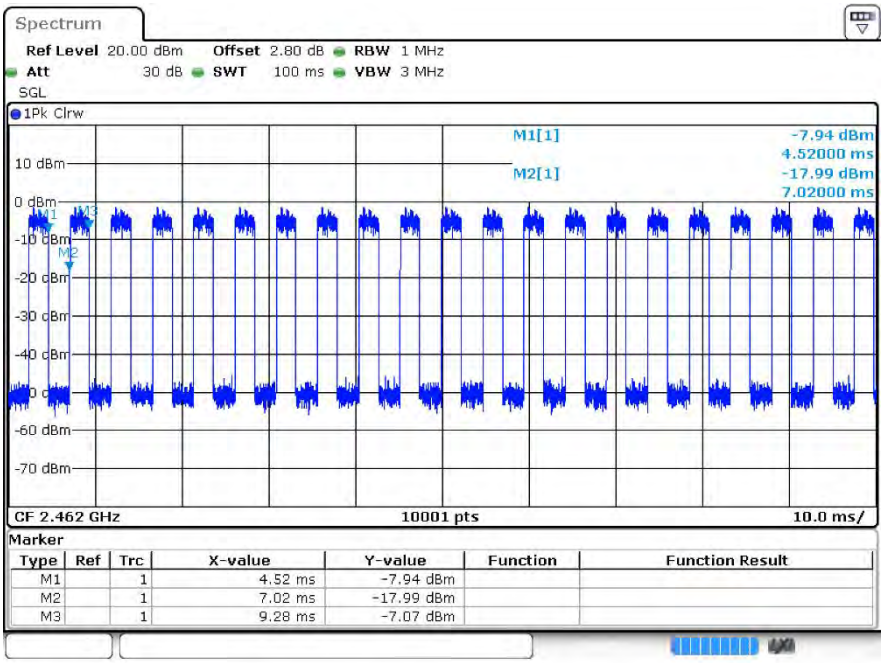
Duty Cycleax20 2412MHz Ant2



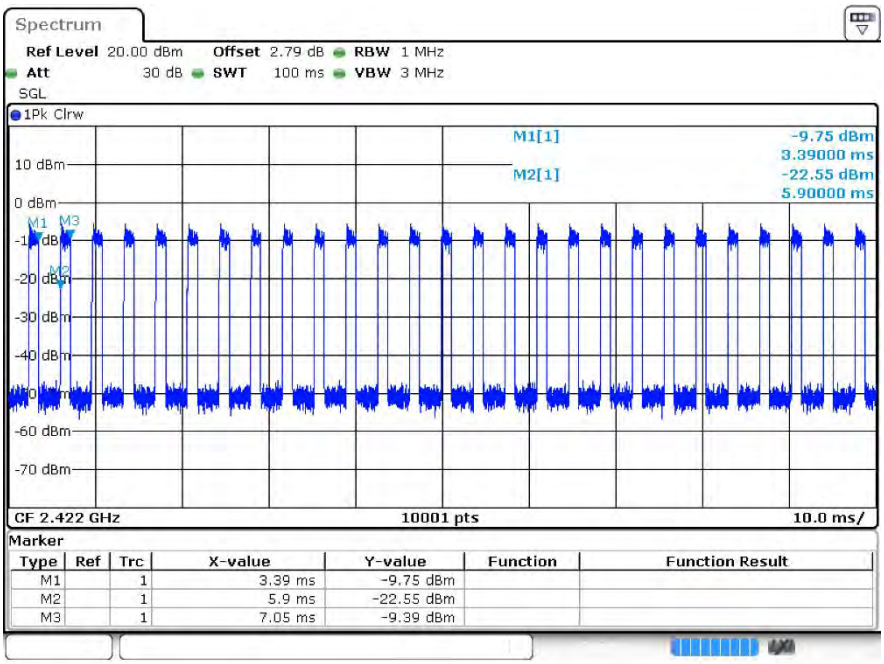
Duty Cycleax20 2437MHz Ant2



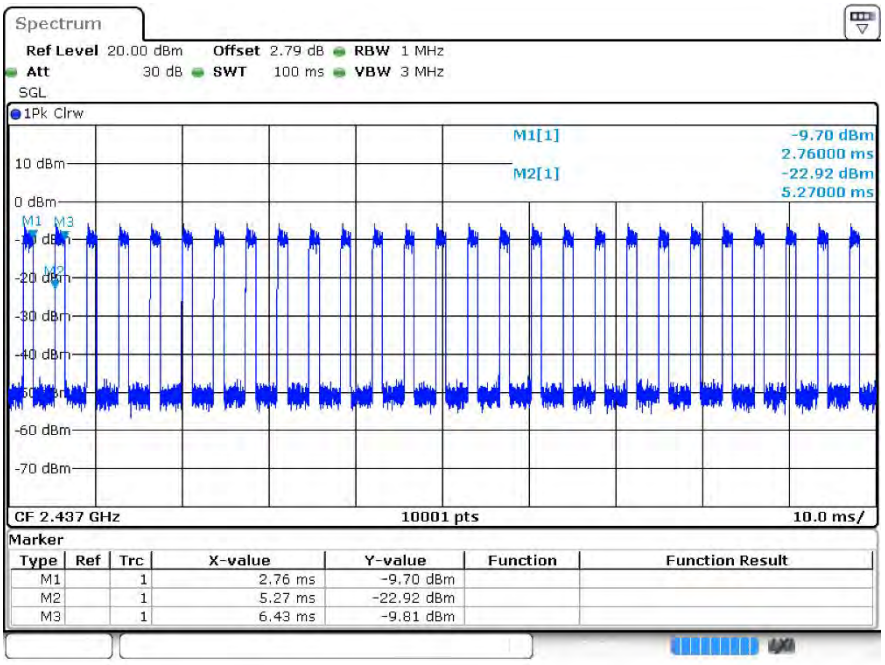
Duty Cycleax20 2462MHz Ant2



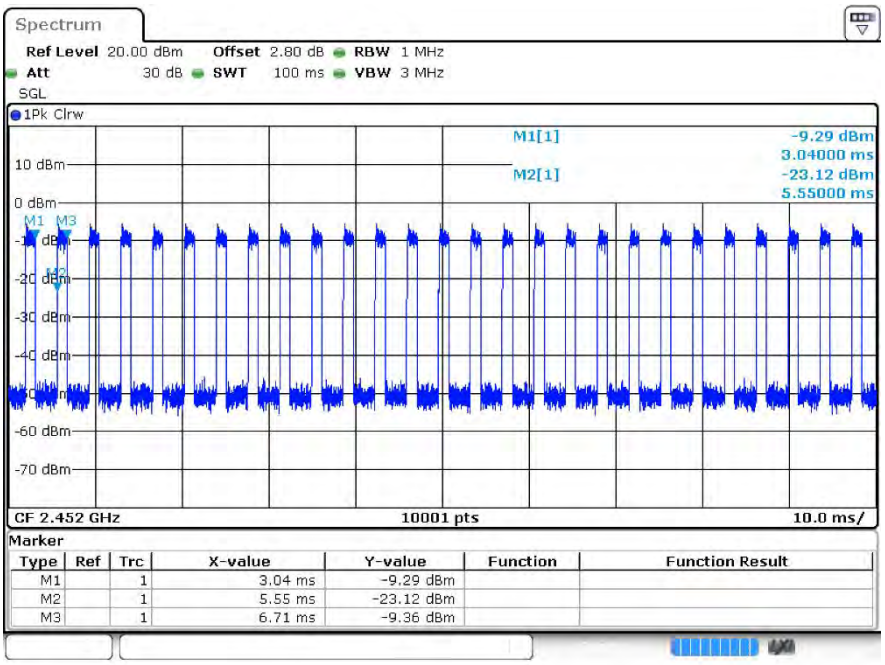
Duty Cycleax40 2422MHz Ant2



Duty Cycleax40 2437MHz Ant2



Duty Cycleax40 2452MHz Ant2



2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant1	14.17	30	Pass
b	2437	Ant1	14.34	30	Pass
b	2462	Ant1	14.2	30	Pass
b	2412	Ant2	13.65	30	Pass
b	2437	Ant2	13.49	30	Pass
b	2462	Ant2	12.78	30	Pass
g	2412	Ant1	13.89	30	Pass
g	2437	Ant1	13.59	30	Pass
g	2462	Ant1	13.52	30	Pass
g	2412	Ant2	13.32	30	Pass
g	2437	Ant2	13.04	30	Pass
g	2462	Ant2	13.14	30	Pass
n20	2412	Ant1	10.05	30	Pass
n20	2437	Ant1	9.99	30	Pass
n20	2462	Ant1	9.8	30	Pass
n20	2412	Ant2	9.72	30	Pass
n20	2437	Ant2	9.53	30	Pass
n20	2462	Ant2	9.61	30	Pass
n20	2412	Sum	12.9	30	Pass
n20	2437	Sum	12.78	30	Pass
n20	2462	Sum	12.72	30	Pass
n40	2422	Ant1	10.2	30	Pass
n40	2437	Ant1	9.73	30	Pass
n40	2452	Ant1	9.56	30	Pass
n40	2422	Ant2	9.15	30	Pass
n40	2437	Ant2	9.06	30	Pass
n40	2452	Ant2	9.28	30	Pass
n40	2422	Sum	12.72	30	Pass
n40	2437	Sum	12.42	30	Pass
n40	2452	Sum	12.43	30	Pass
ax20	2412	Ant1	10.3	30	Pass
ax20	2437	Ant1	10.04	30	Pass
ax20	2462	Ant1	9.91	30	Pass
ax20	2412	Ant2	9.88	30	Pass
ax20	2437	Ant2	9.74	30	Pass
ax20	2462	Ant2	10.04	30	Pass

ax20	2412	Sum	13.05	30	Pass
ax20	2437	Sum	13.1	30	Pass
ax20	2462	Sum	13.09	30	Pass
ax40	2422	Ant1	10.1	30	Pass
ax40	2437	Ant1	9.48	30	Pass
ax40	2452	Ant1	9.6	30	Pass
ax40	2422	Ant2	9.27	30	Pass
ax40	2437	Ant2	8.76	30	Pass
ax40	2452	Ant2	9.08	30	Pass
ax40	2422	Sum	12.72	30	Pass
ax40	2437	Sum	12.15	30	Pass
ax40	2452	Sum	12.36	30	Pass

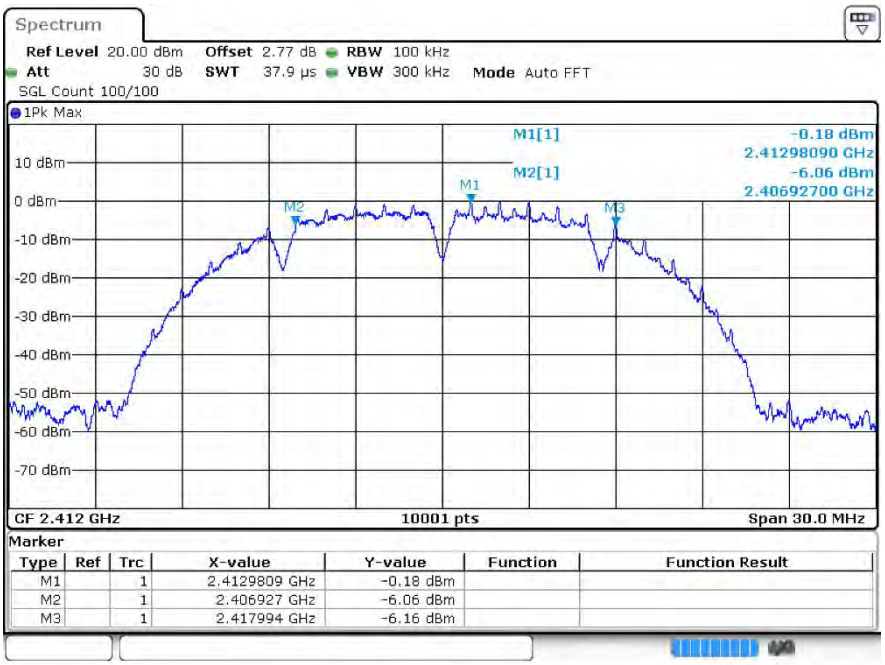
3 -6dB Bandwidth

3.1 Test Result

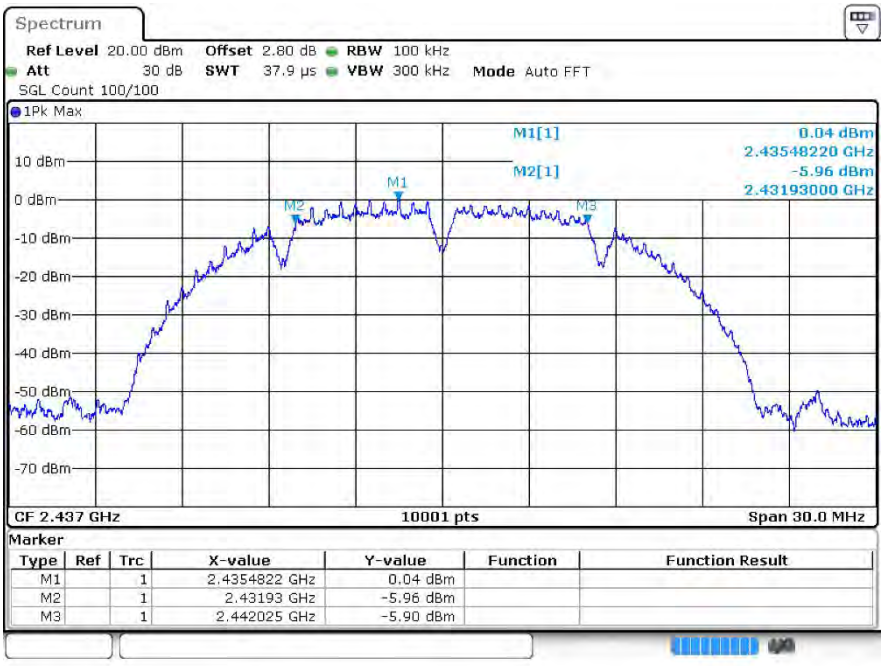
Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	11.067	0.5	Pass
b	2437	Ant1	10.095	0.5	Pass
b	2462	Ant1	11.061	0.5	Pass
g	2412	Ant1	16.371	0.5	Pass
g	2437	Ant1	16.38	0.5	Pass
g	2462	Ant1	15.528	0.5	Pass
n20	2412	Ant1	17.634	0.5	Pass
n20	2437	Ant1	17.631	0.5	Pass
n20	2462	Ant1	17.592	0.5	Pass
n40	2422	Ant1	36.294	0.5	Pass
n40	2437	Ant1	36.324	0.5	Pass
n40	2452	Ant1	35.04	0.5	Pass
ax20	2412	Ant1	18.954	0.5	Pass
ax20	2437	Ant1	18.978	0.5	Pass
ax20	2462	Ant1	18.942	0.5	Pass
ax40	2422	Ant1	37.212	0.5	Pass
ax40	2437	Ant1	38.082	0.5	Pass
ax40	2452	Ant1	38.064	0.5	Pass
b	2412	Ant2	11.07	0.5	Pass
b	2437	Ant2	10.122	0.5	Pass
b	2462	Ant2	10.089	0.5	Pass
g	2412	Ant2	16.485	0.5	Pass
g	2437	Ant2	16.317	0.5	Pass
g	2462	Ant2	16.029	0.5	Pass
n20	2412	Ant2	17.646	0.5	Pass
n20	2437	Ant2	17.595	0.5	Pass
n20	2462	Ant2	17.595	0.5	Pass
n40	2422	Ant2	36.06	0.5	Pass
n40	2437	Ant2	36.318	0.5	Pass
n40	2452	Ant2	36.03	0.5	Pass
ax20	2412	Ant2	19.071	0.5	Pass
ax20	2437	Ant2	18.933	0.5	Pass
ax20	2462	Ant2	19.011	0.5	Pass
ax40	2422	Ant2	36.93	0.5	Pass
ax40	2437	Ant2	37.854	0.5	Pass
ax40	2452	Ant2	37.794	0.5	Pass

3.2 Test Graphs

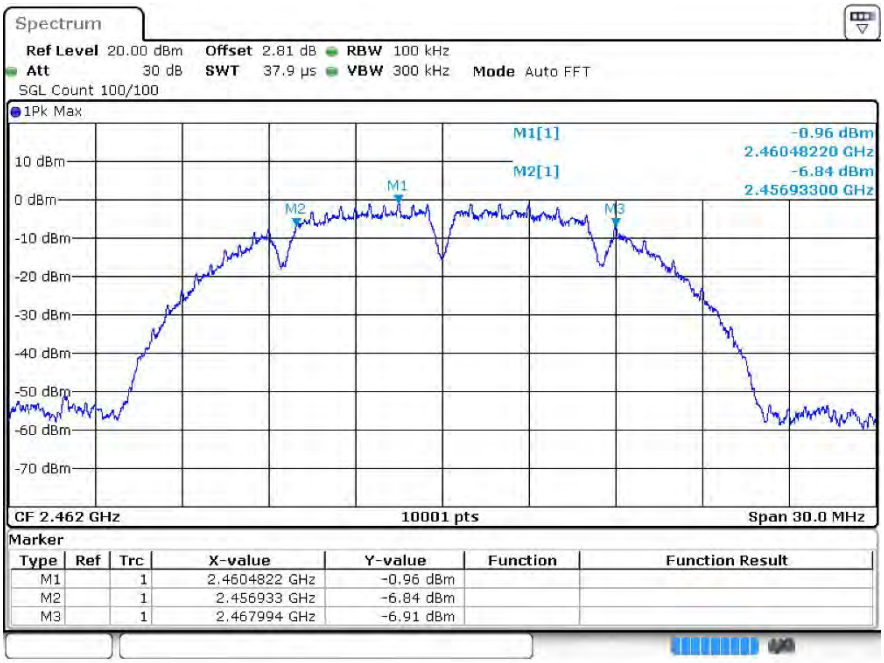
Test Graphs
b 2412MHz Ant1



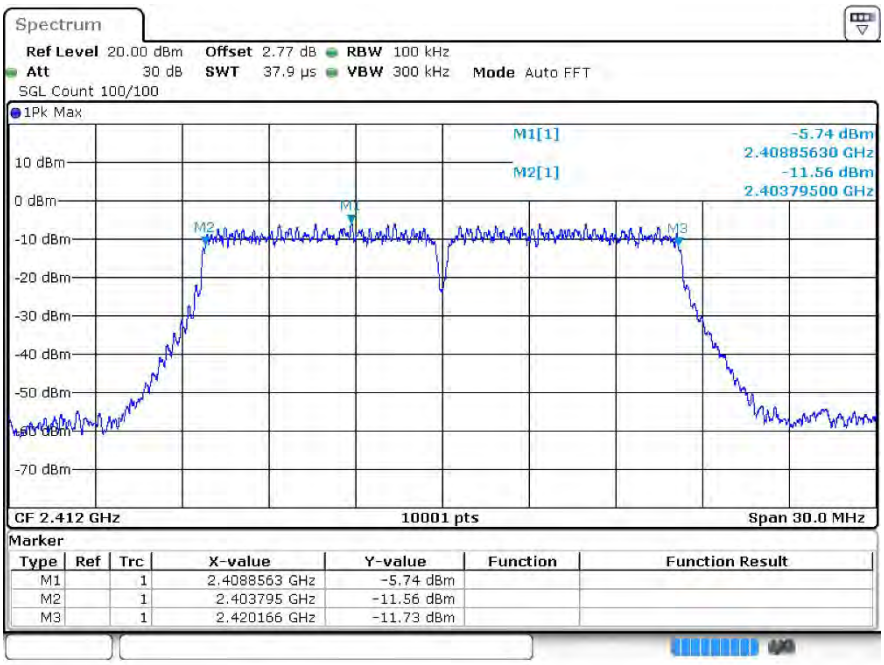
b 2437MHz Ant1



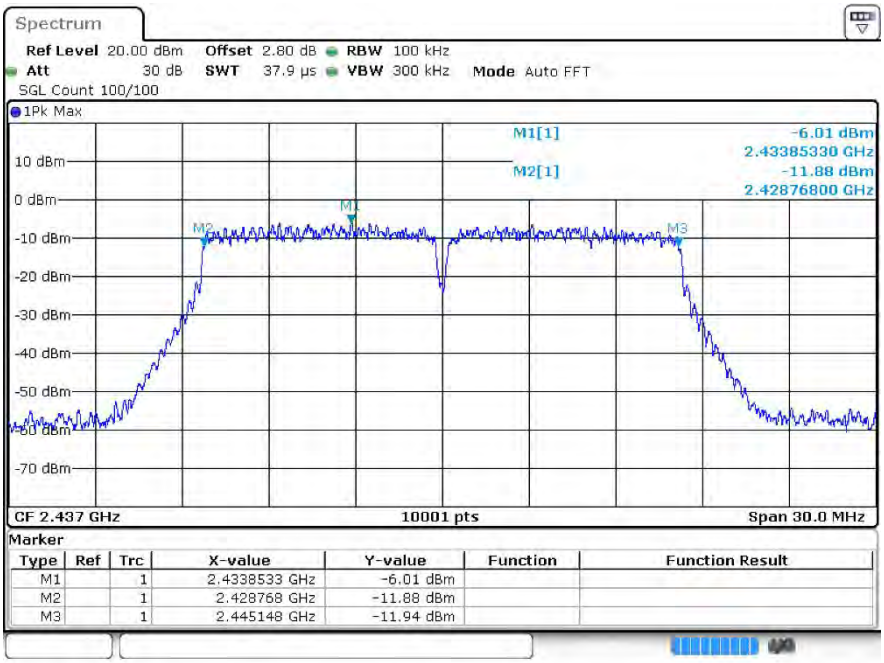
b 2462MHz Ant1



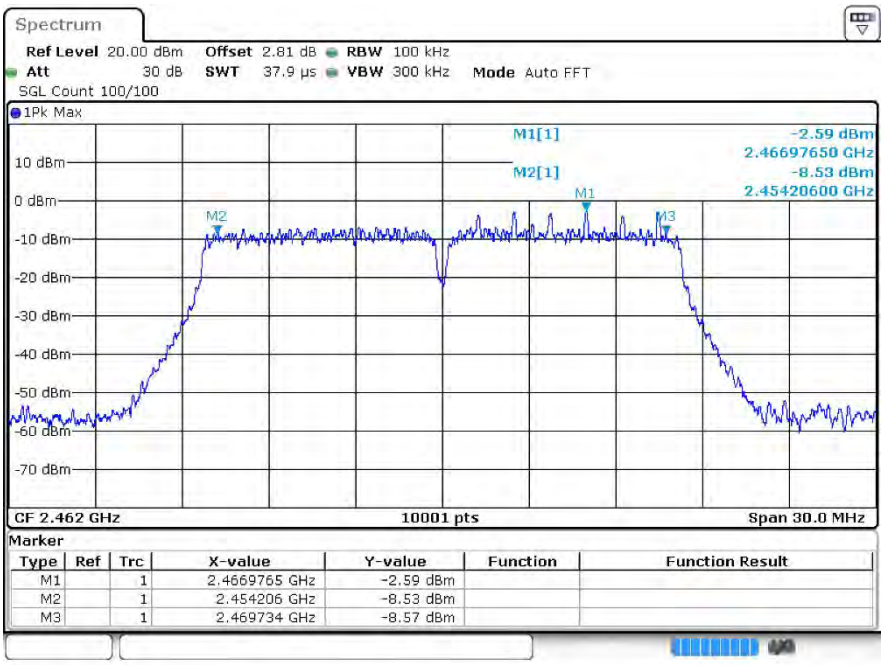
g 2412MHz Ant1



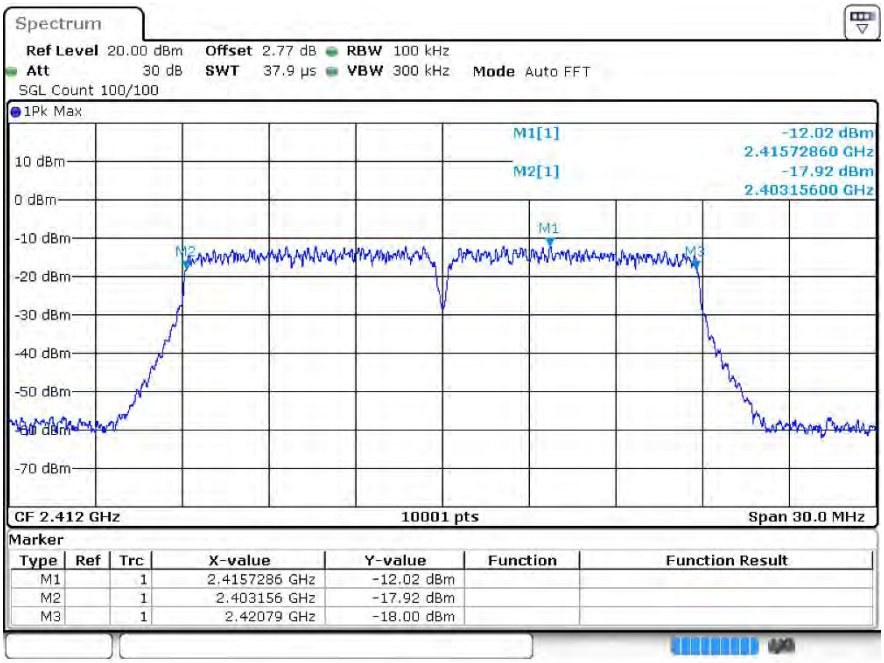
g 2437MHz Ant1



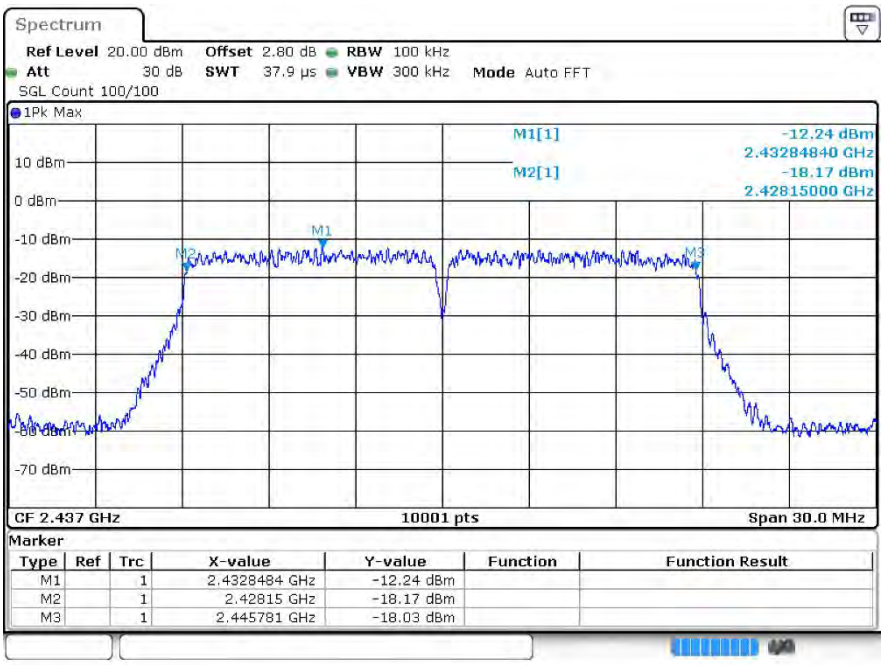
g 2462MHz Ant1



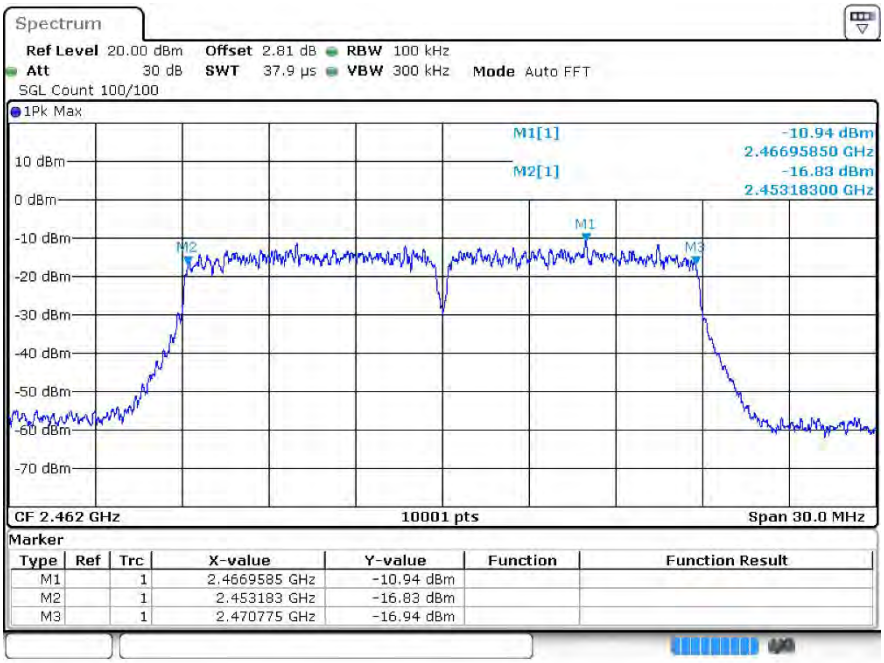
n20 2412MHz Ant1



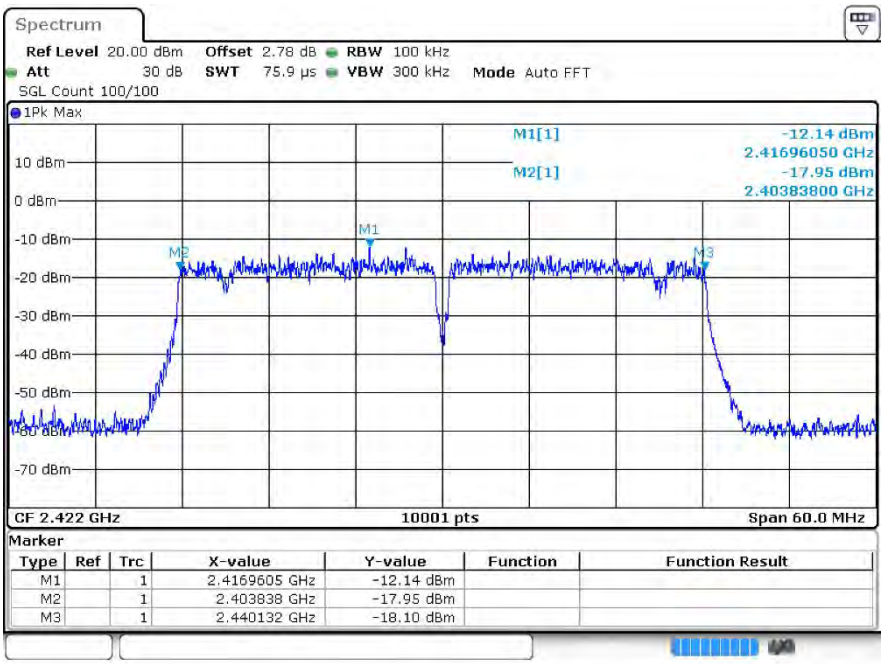
n20 2437MHz Ant1



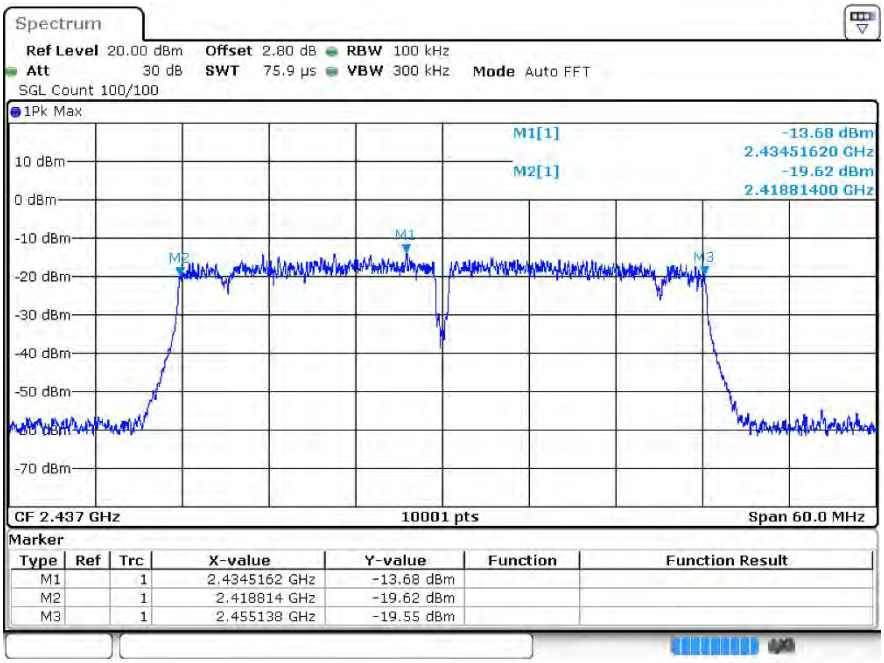
n20 2462MHz Ant1



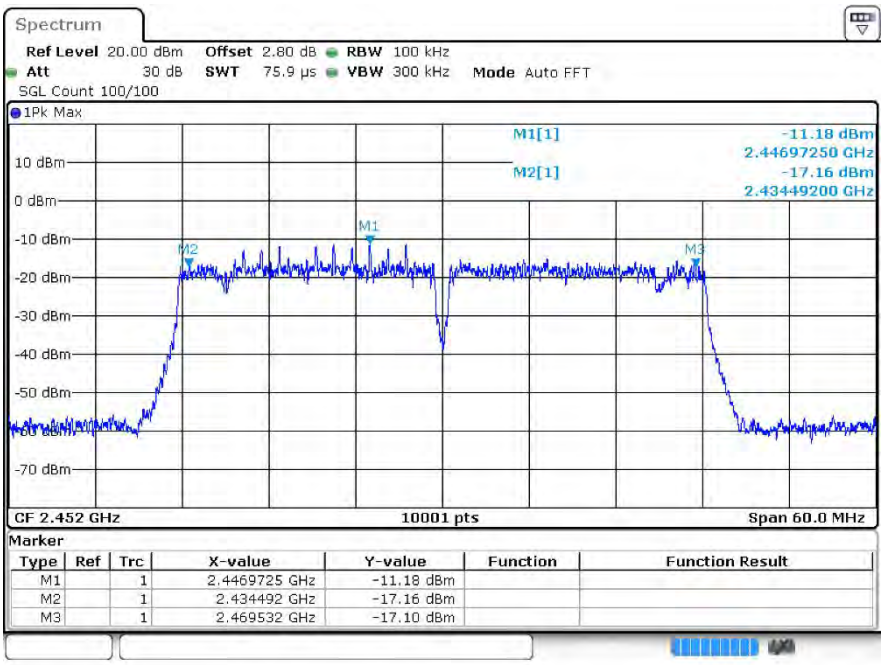
n40 2422MHz Ant1



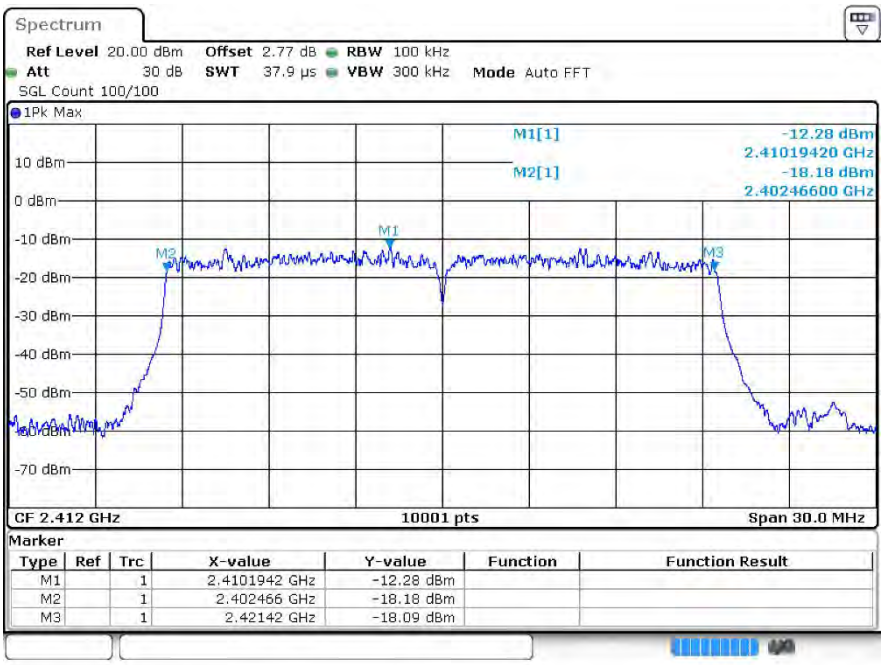
n40 2437MHz Ant1



n40 2452MHz Ant1



ax20 2412MHz Ant1



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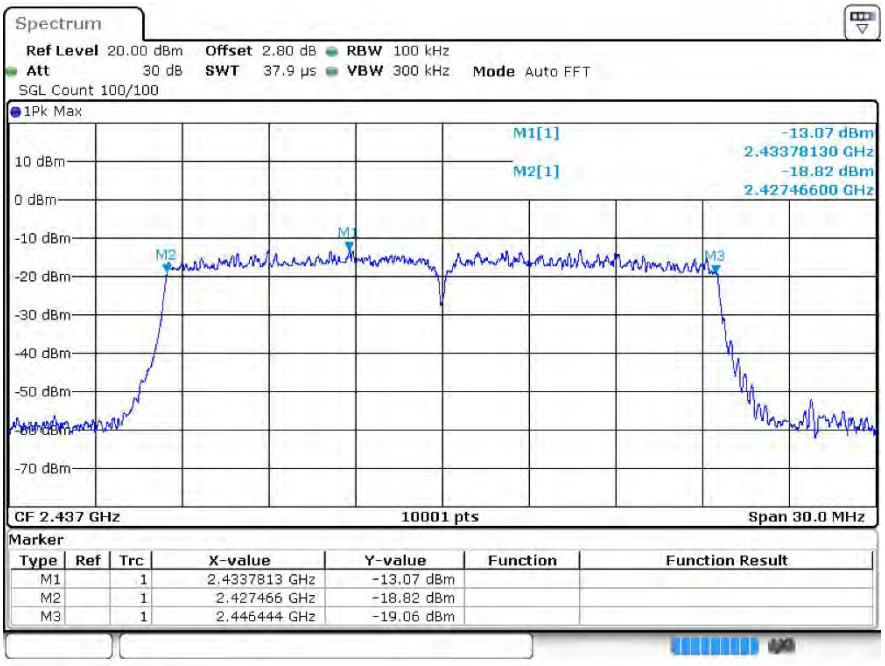
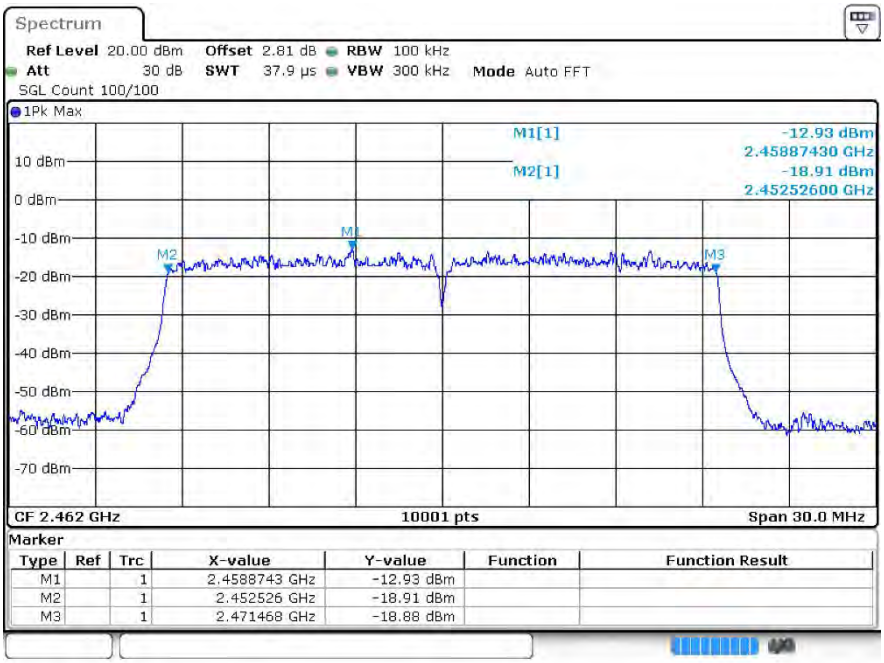
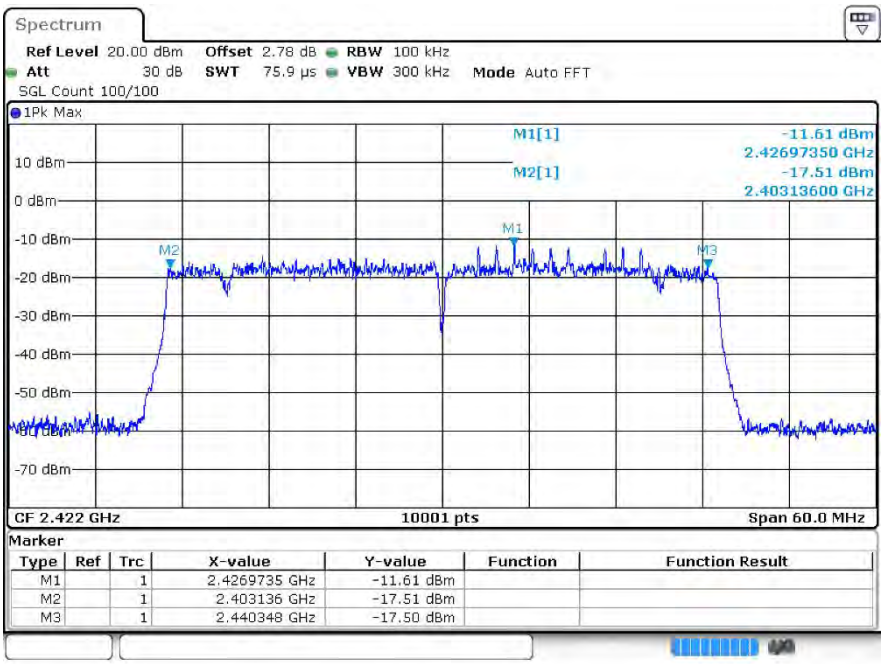


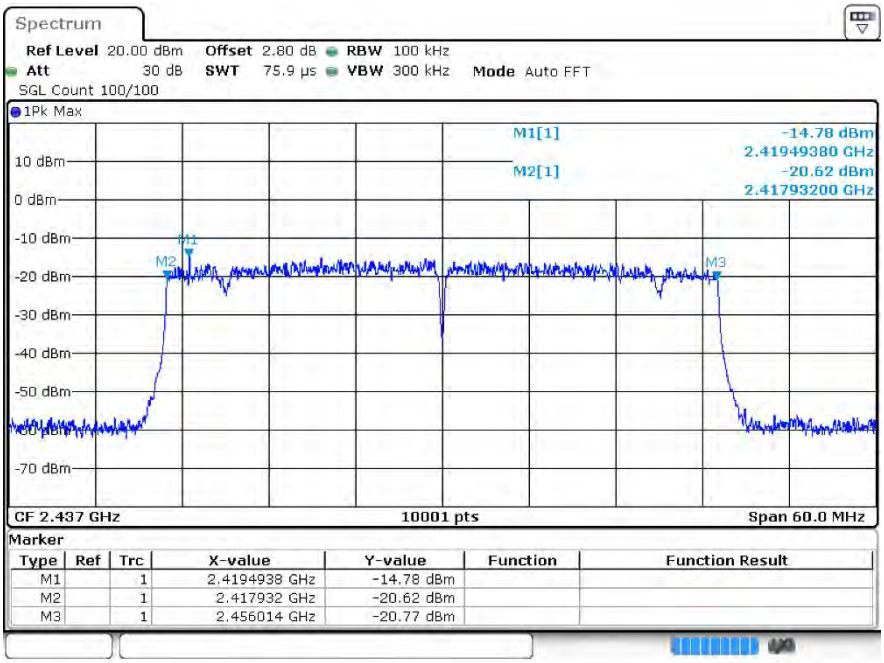
ax20 2462MHz Ant1



ax40 2422MHz Ant1



ax40 2437MHz Ant1



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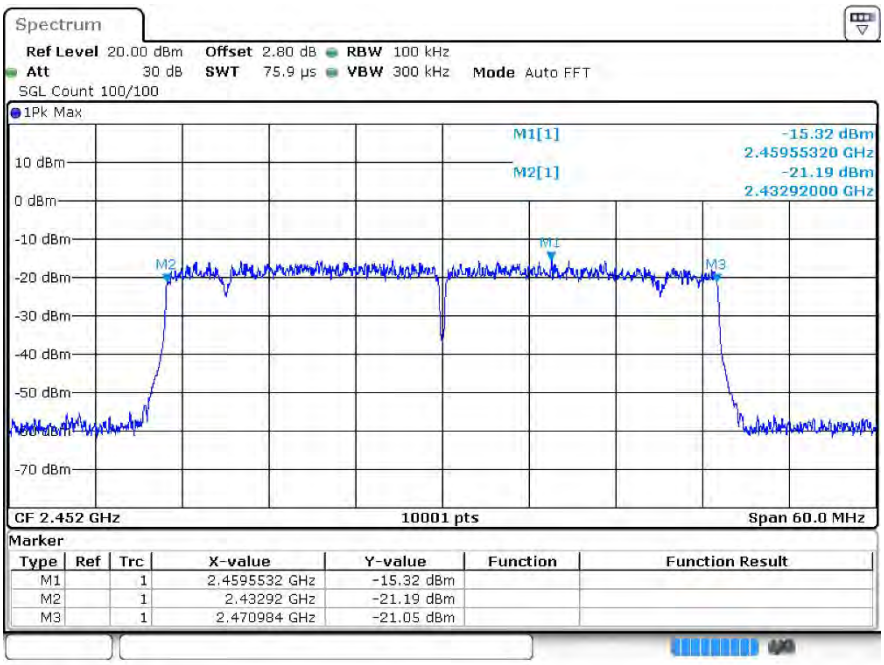
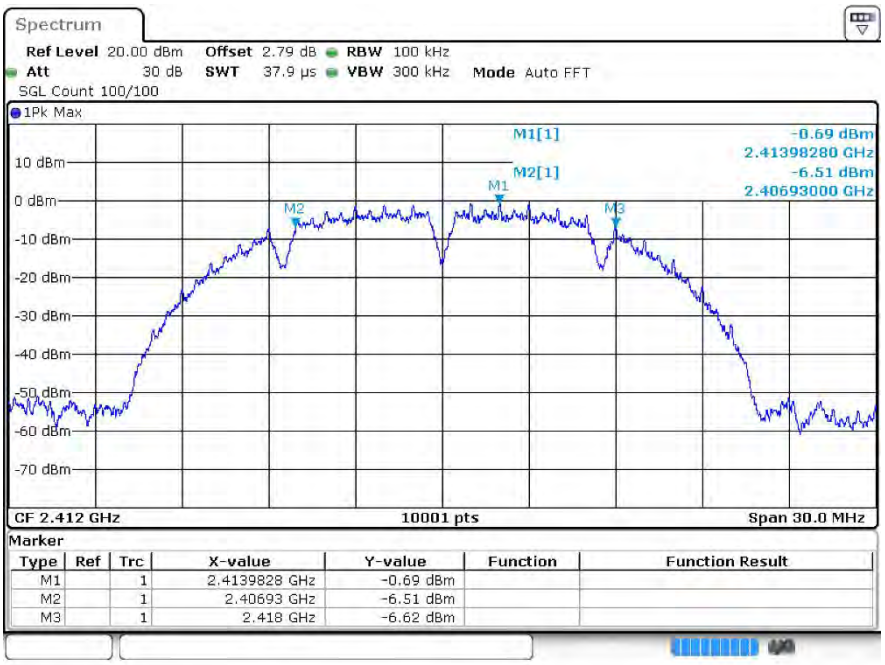
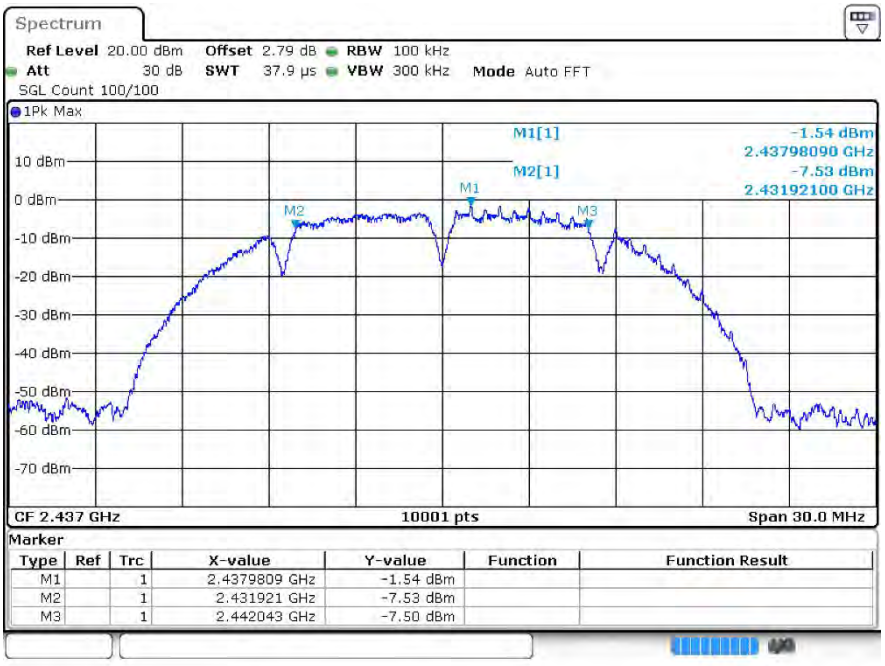


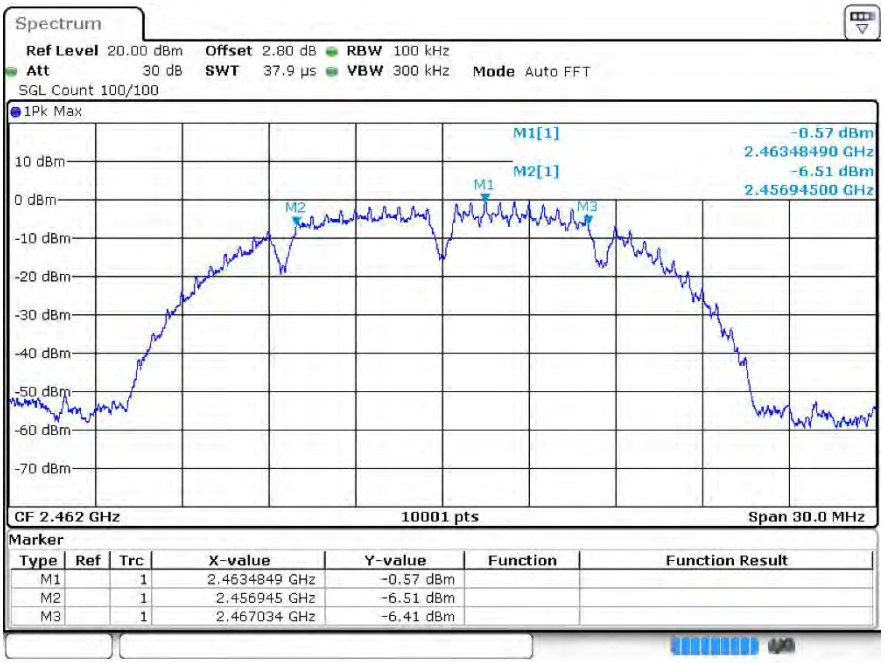
b 2412MHz Ant2



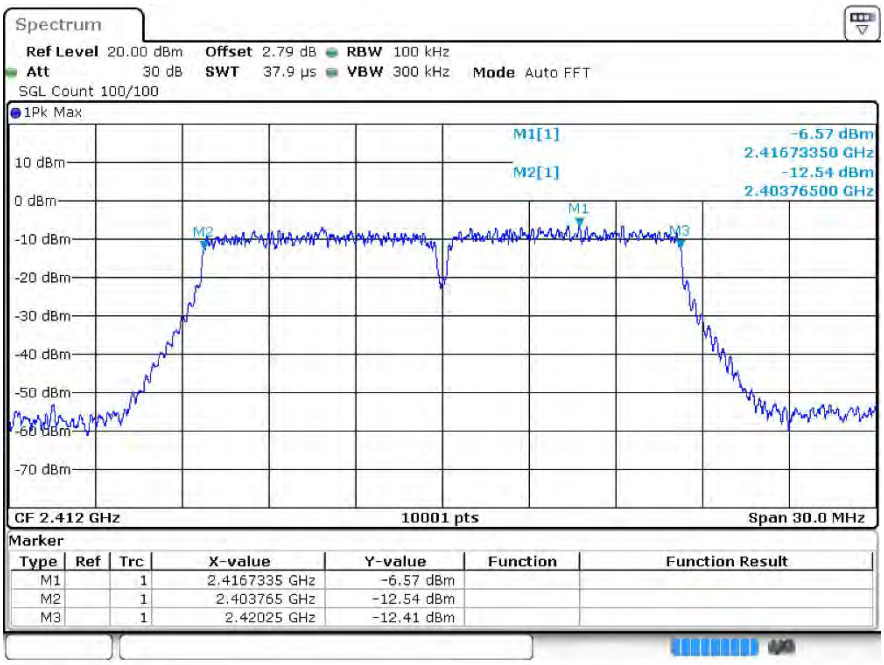
b 2437MHz Ant2



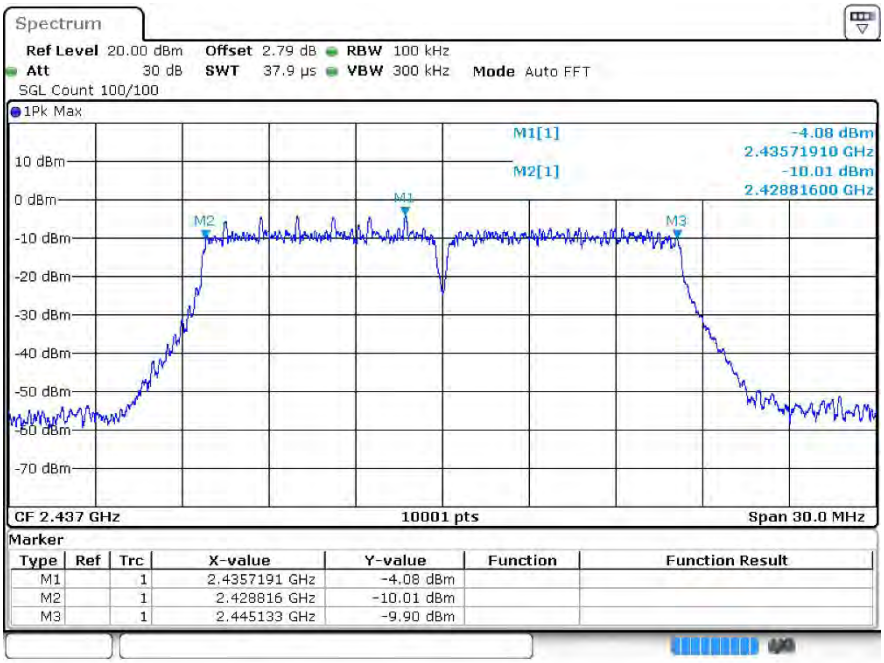
b 2462MHz Ant2



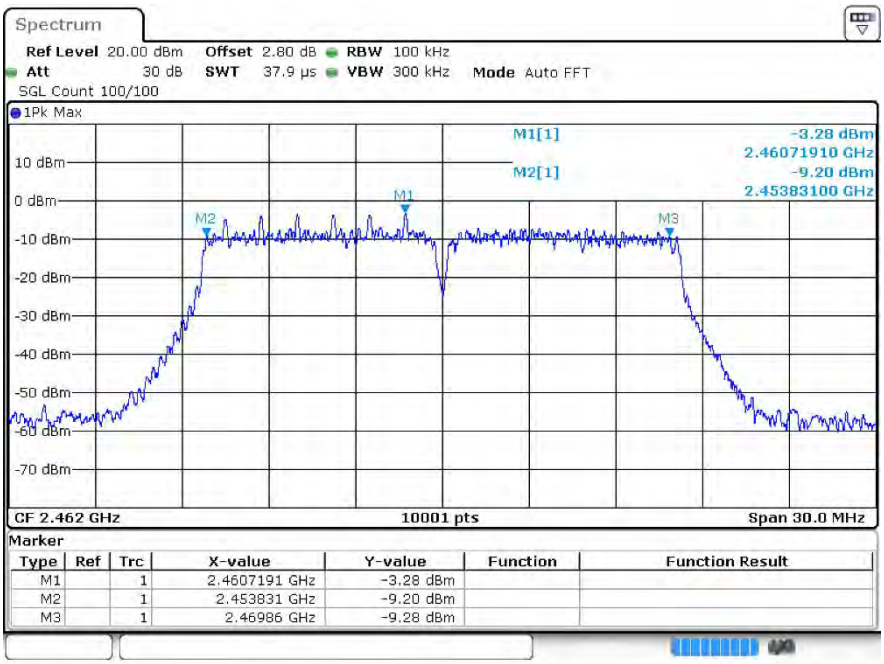
g 2412MHz Ant2



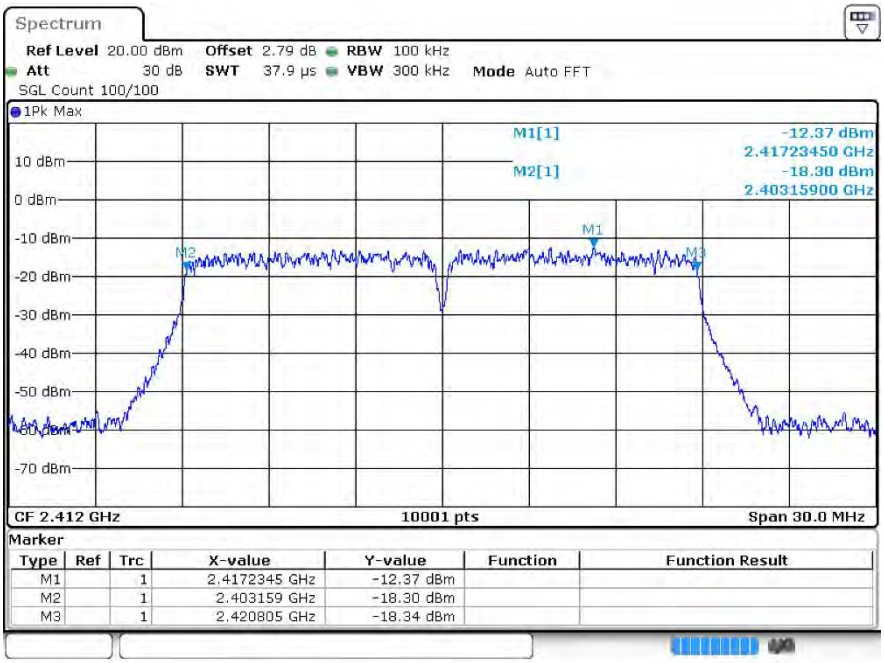
g 2437MHz Ant2



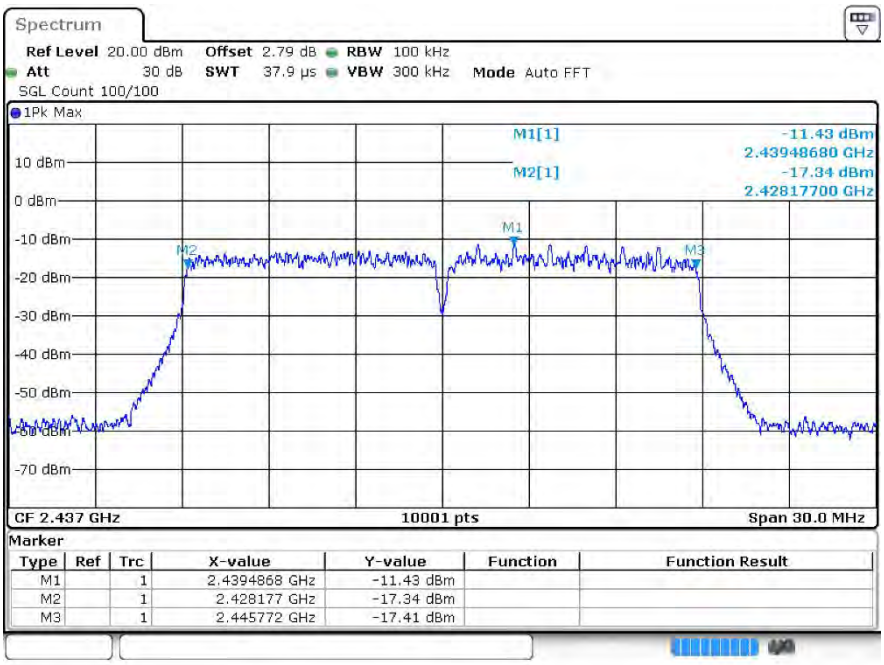
g 2462MHz Ant2



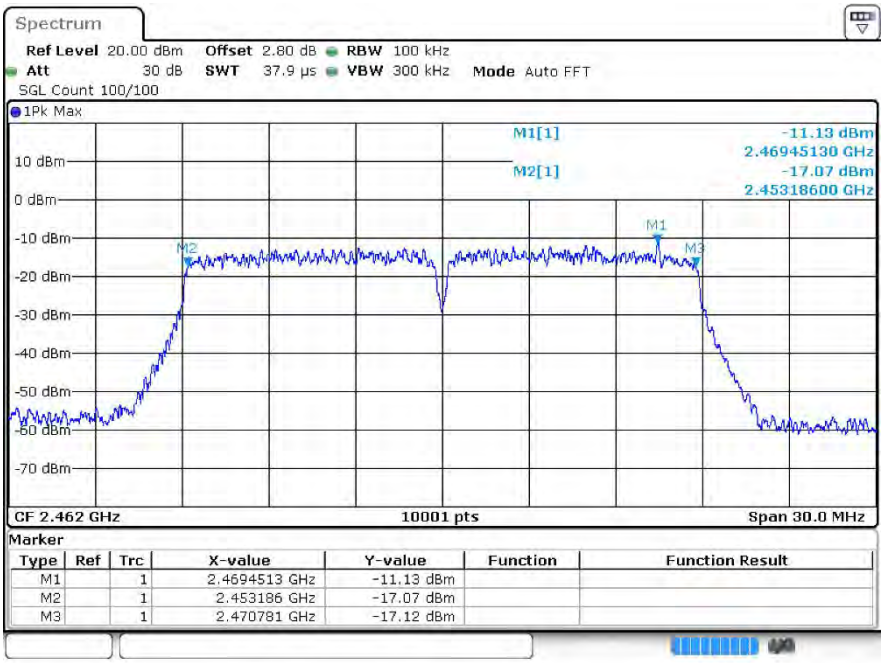
n20 2412MHz Ant2



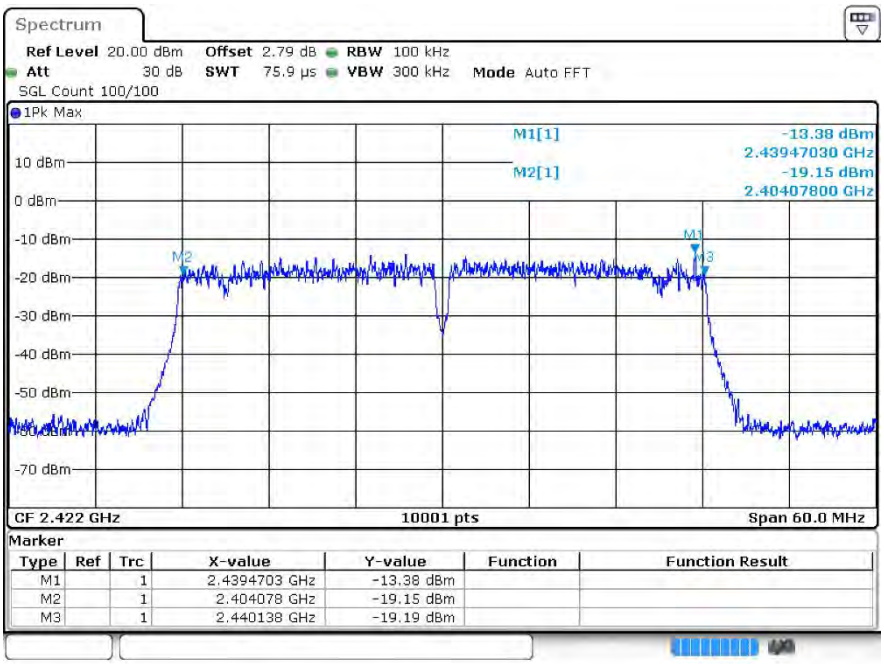
n20 2437MHz Ant2



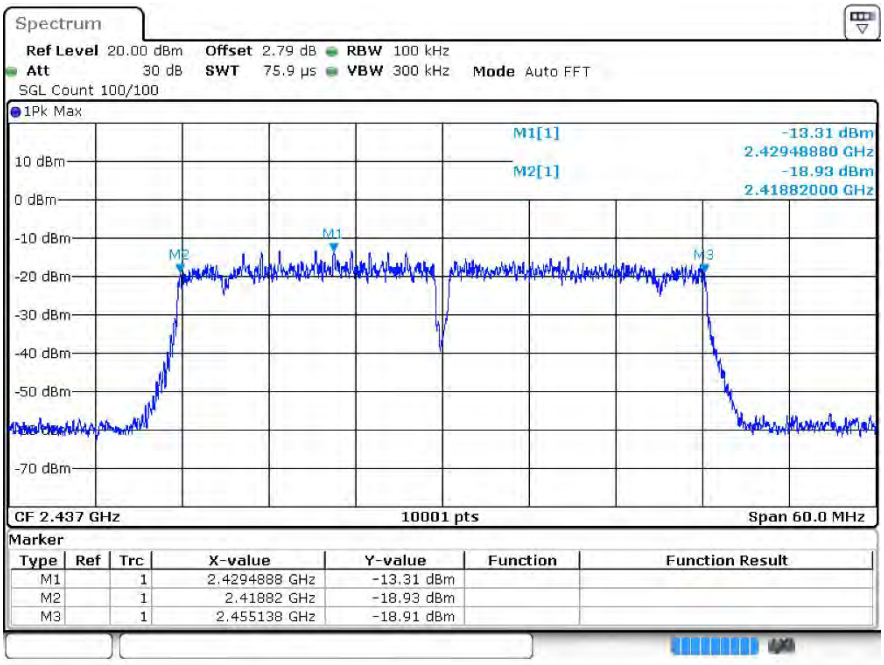
n20 2462MHz Ant2



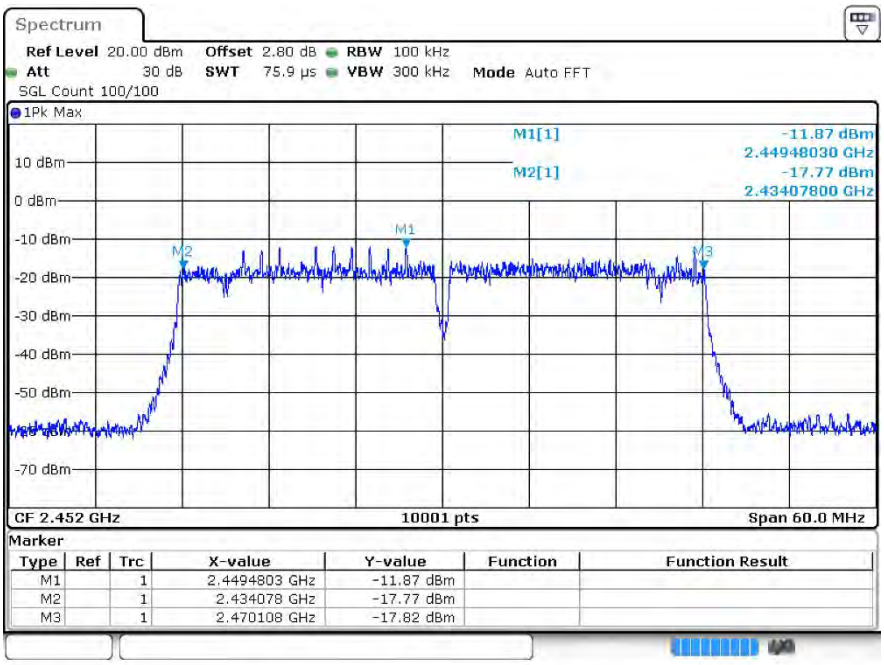
n40 2422MHz Ant2



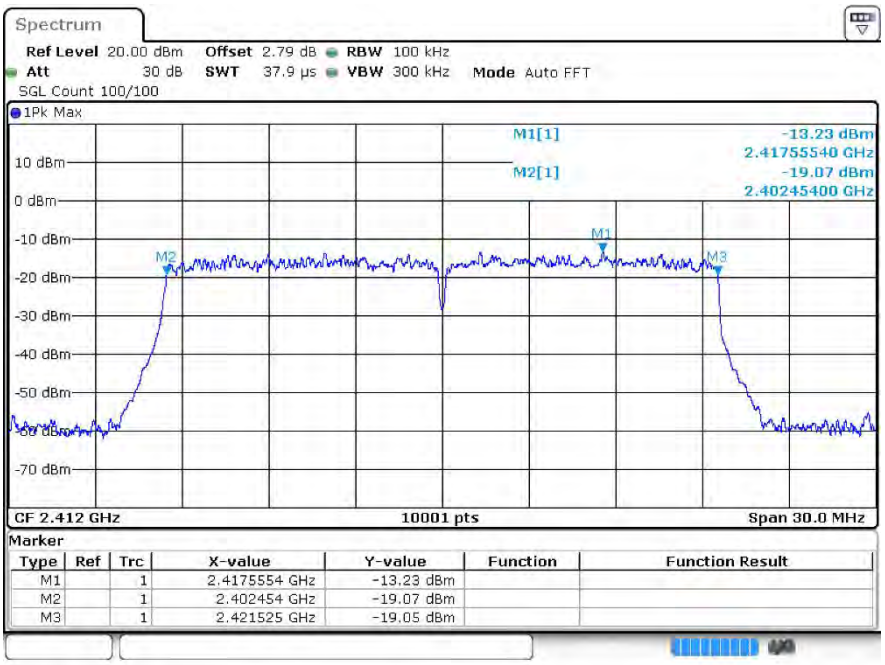
n40 2437MHz Ant2



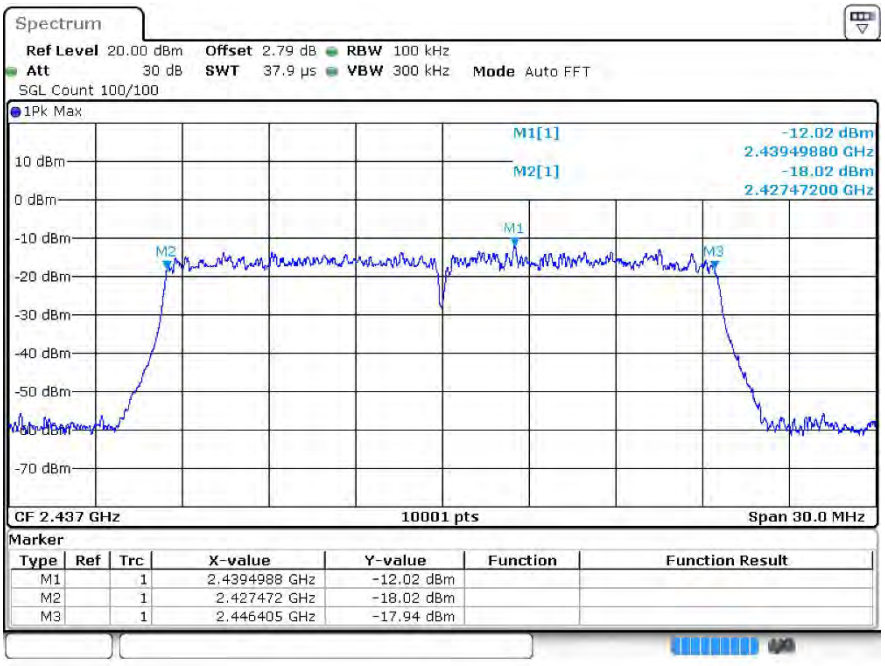
n40 2452MHz Ant2



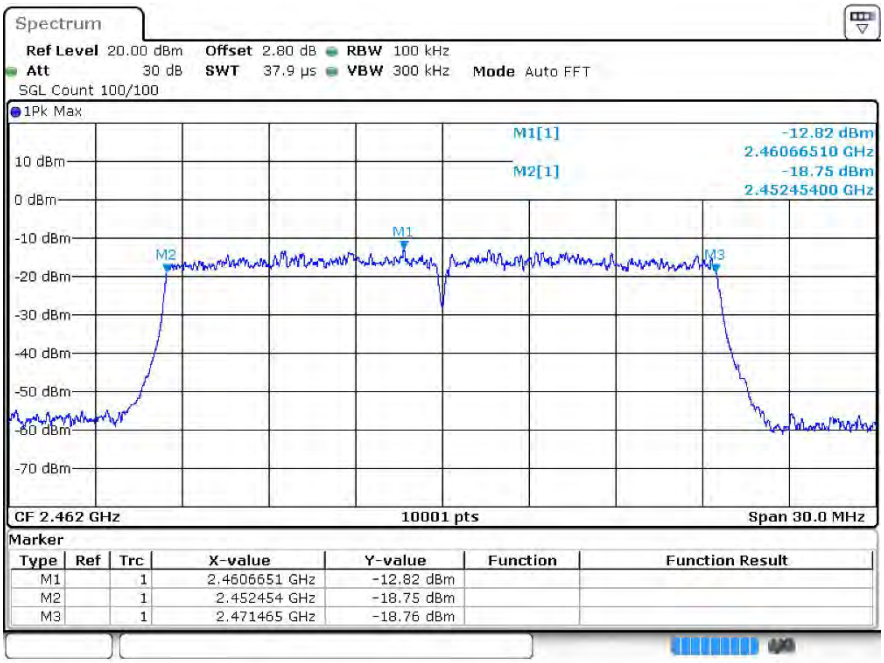
ax20 2412MHz Ant2



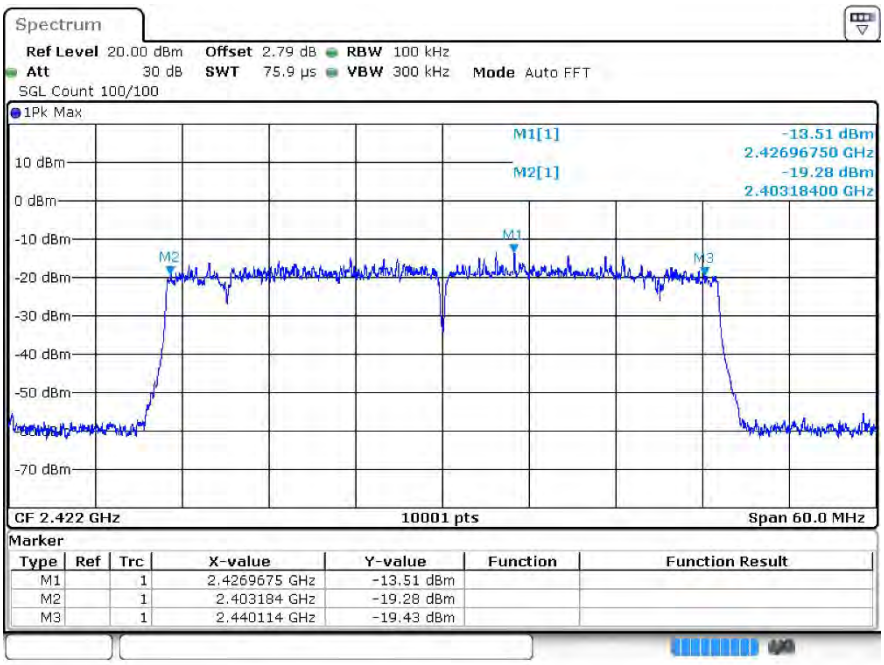
ax20 2437MHz Ant2



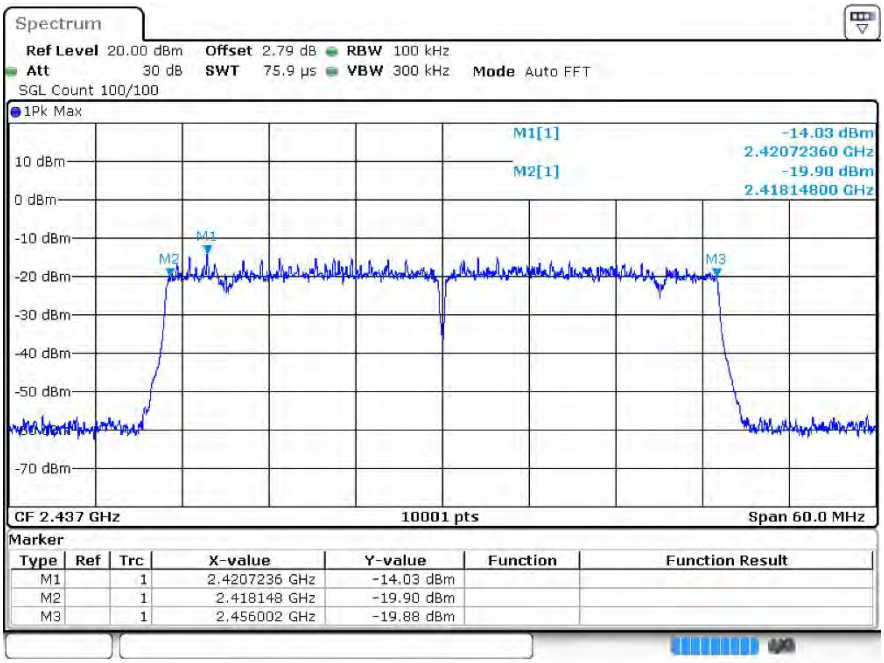
ax20 2462MHz Ant2



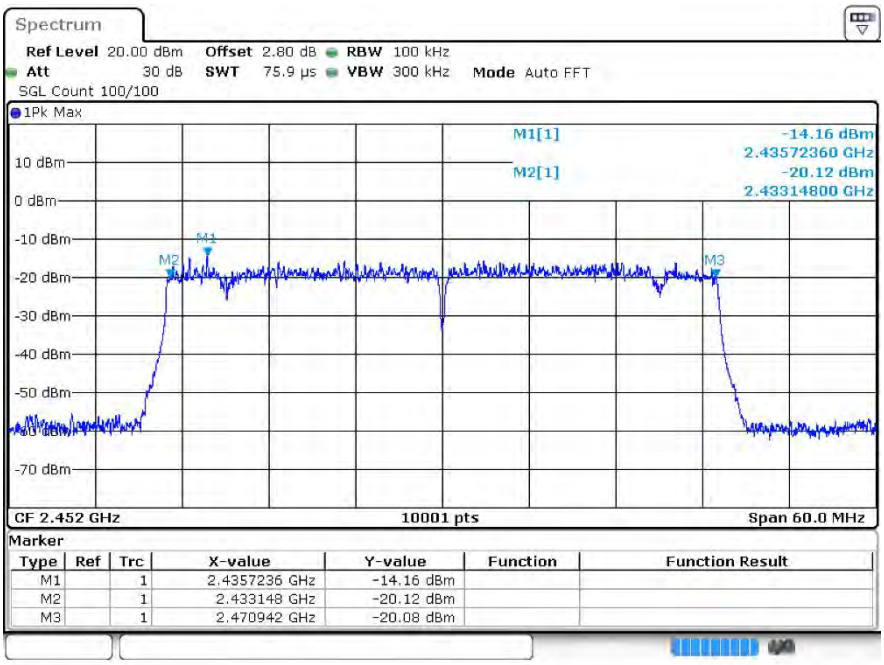
ax40 2422MHz Ant2



ax40 2437MHz Ant2



ax40 2452MHz Ant2



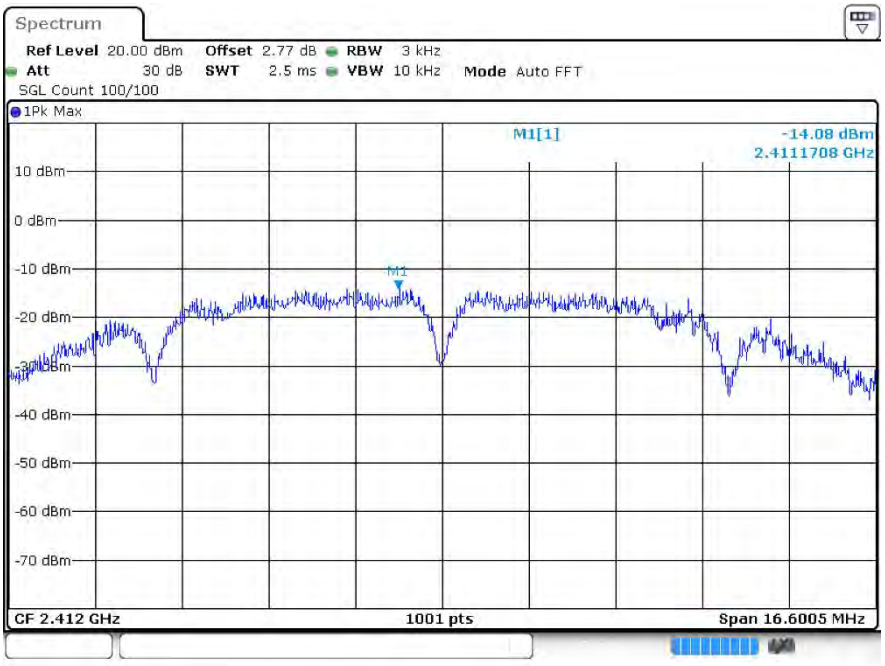
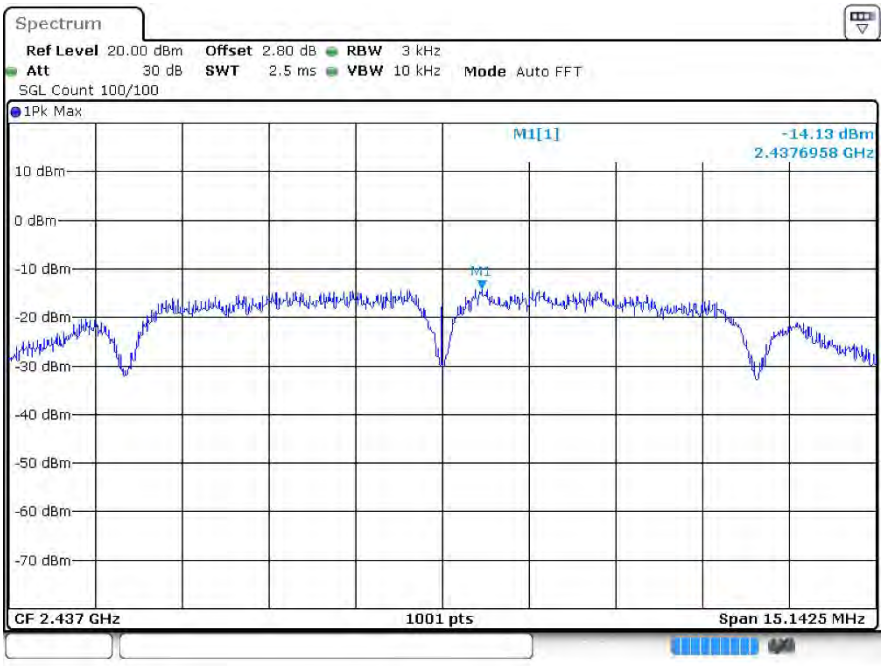
4 Maximum Power Spectral Density Level

4.1 Test Result

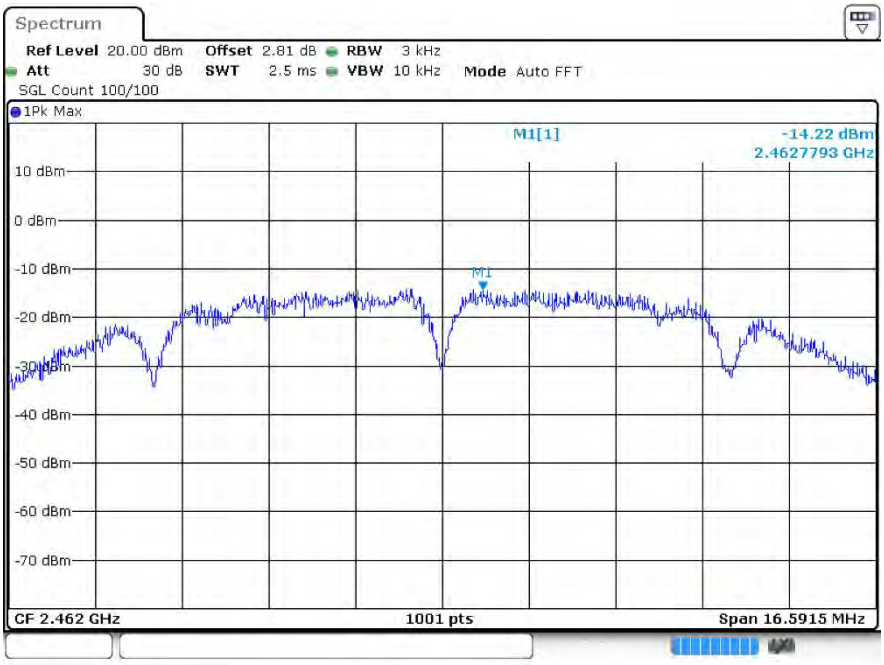
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3-100kHz)	Limit (dBm/3kHz)	Verdict
b	2412	Ant1	-14.08	≤8	Pass
b	2437	Ant1	-14.13	≤8	Pass
b	2462	Ant1	-14.22	≤8	Pass
g	2412	Ant1	-19.34	≤8	Pass
g	2437	Ant1	-19.2	≤8	Pass
g	2462	Ant1	-19.22	≤8	Pass
n20	2412	Ant1	-24.33	≤8	Pass
n20	2437	Ant1	-24.53	≤8	Pass
n20	2462	Ant1	-24.75	≤8	Pass
n40	2422	Ant1	-26.26	≤8	Pass
n40	2437	Ant1	-27.04	≤8	Pass
n40	2452	Ant1	-27.36	≤8	Pass
ax20	2412	Ant1	-11.76	≤8	Pass
ax20	2437	Ant1	-12.03	≤8	Pass
ax20	2462	Ant1	-13.48	≤8	Pass
ax40	2422	Ant1	-11.87	≤8	Pass
ax40	2437	Ant1	-13.44	≤8	Pass
ax40	2452	Ant1	-12.58	≤8	Pass
b	2412	Ant2	-14.44	≤8	Pass
b	2437	Ant2	-14.22	≤8	Pass
b	2462	Ant2	-14.14	≤8	Pass
g	2412	Ant2	-19.95	≤8	Pass
g	2437	Ant2	-20.57	≤8	Pass
g	2462	Ant2	-20.07	≤8	Pass
n20	2412	Ant2	-25.09	≤8	Pass
n20	2437	Ant2	-25.71	≤8	Pass
n20	2462	Ant2	-24.84	≤8	Pass
n40	2422	Ant2	-26.89	≤8	Pass
n40	2437	Ant2	-26.55	≤8	Pass
n40	2452	Ant2	-27.11	≤8	Pass
ax20	2412	Ant2	-12.88	≤8	Pass
ax20	2437	Ant2	-13.43	≤8	Pass
ax20	2462	Ant2	-13.04	≤8	Pass
ax40	2422	Ant2	-15.77	≤8	Pass
ax40	2437	Ant2	-13.83	≤8	Pass
ax40	2452	Ant2	-13.3	≤8	Pass

n20	2412	Sum	-21.68	≤8	Pass
n20	2437	Sum	-22.07	≤8	Pass
n20	2462	Sum	-21.78	≤8	Pass
n40	2422	Sum	-23.55	≤8	Pass
n40	2437	Sum	-23.78	≤8	Pass
n40	2452	Sum	-24.22	≤8	Pass
ax20	2412	Sum	-9.27	≤8	Pass
ax20	2437	Sum	-9.66	≤8	Pass
ax20	2462	Sum	-10.24	≤8	Pass
ax40	2422	Sum	-10.39	≤8	Pass
ax40	2437	Sum	-10.62	≤8	Pass
ax40	2452	Sum	-9.91	≤8	Pass

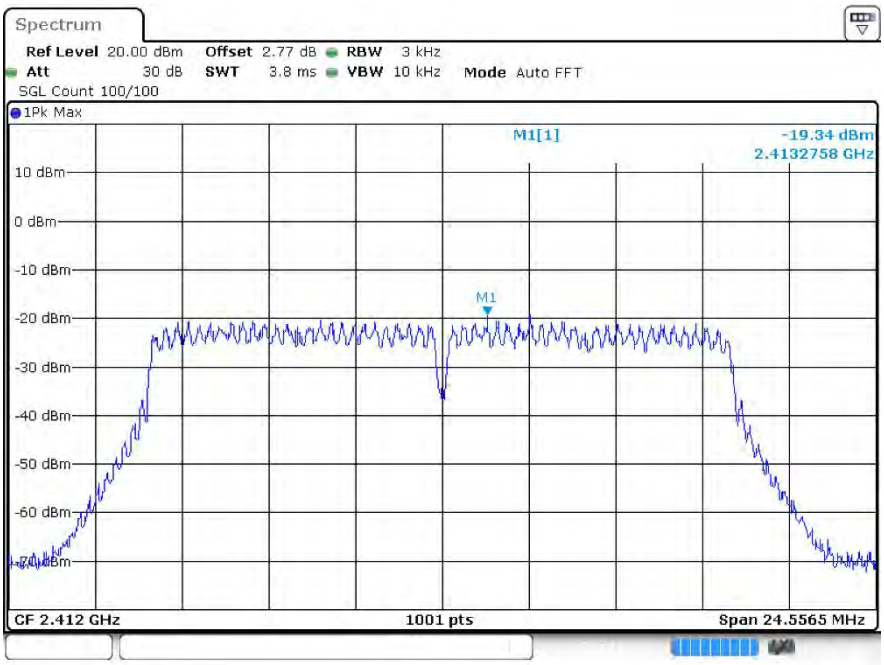
4.2 Test Graphs

Test Graphs
PSDb 2412MHz Ant1

PSD b 2437MHz Ant1


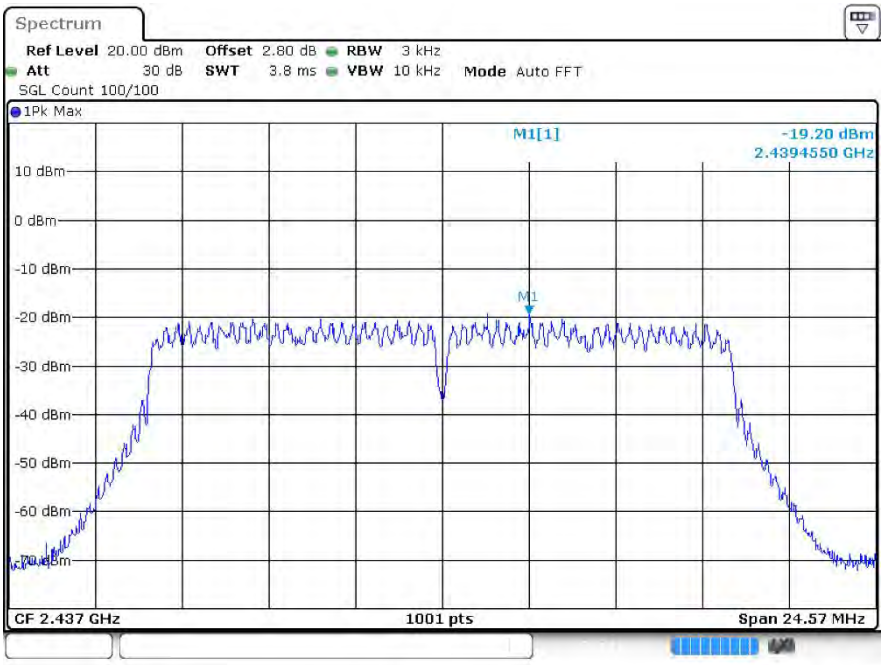
PSD b 2462MHz Ant1



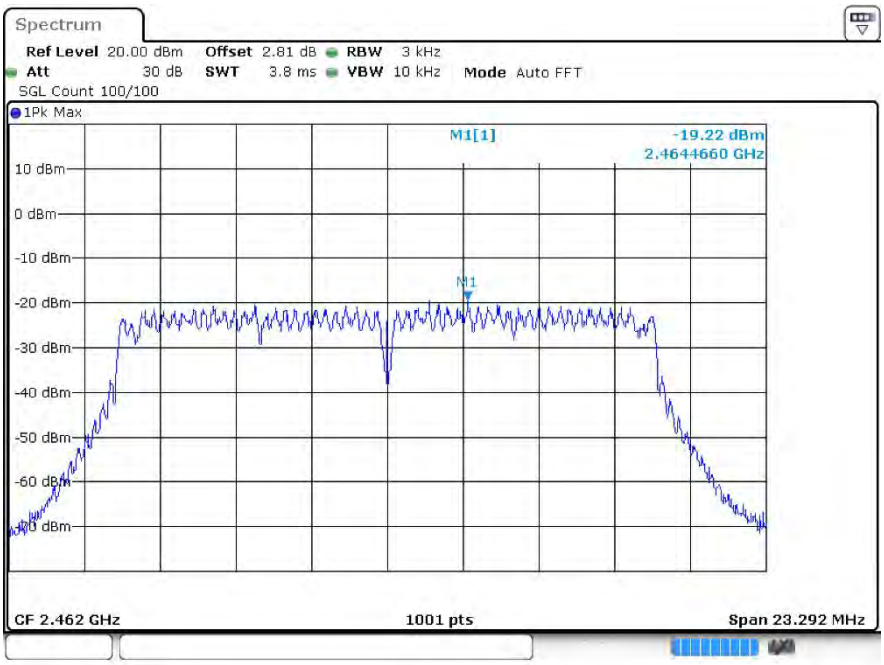
PSD g 2412MHz Ant1



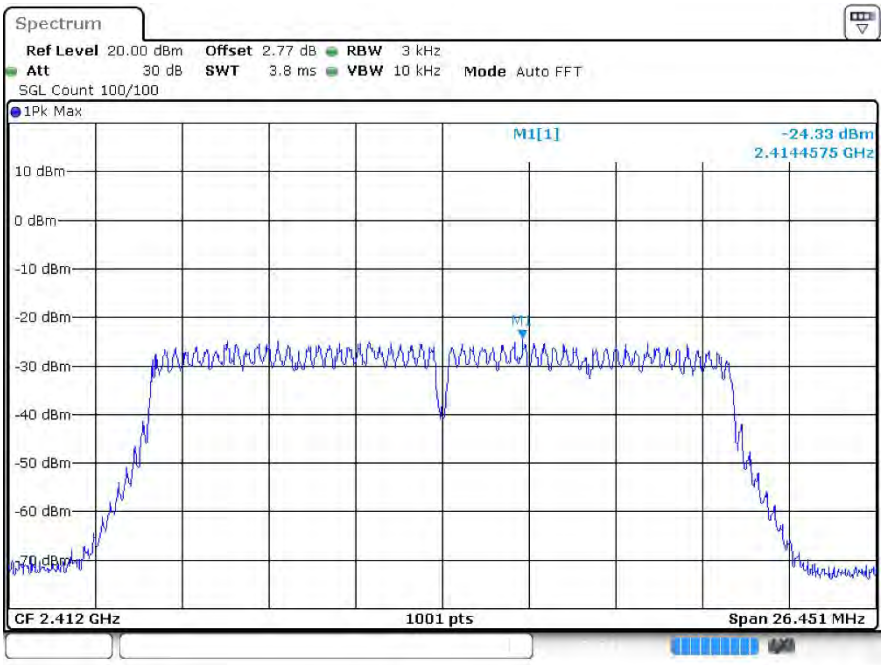
PSD g 2437MHz Ant1



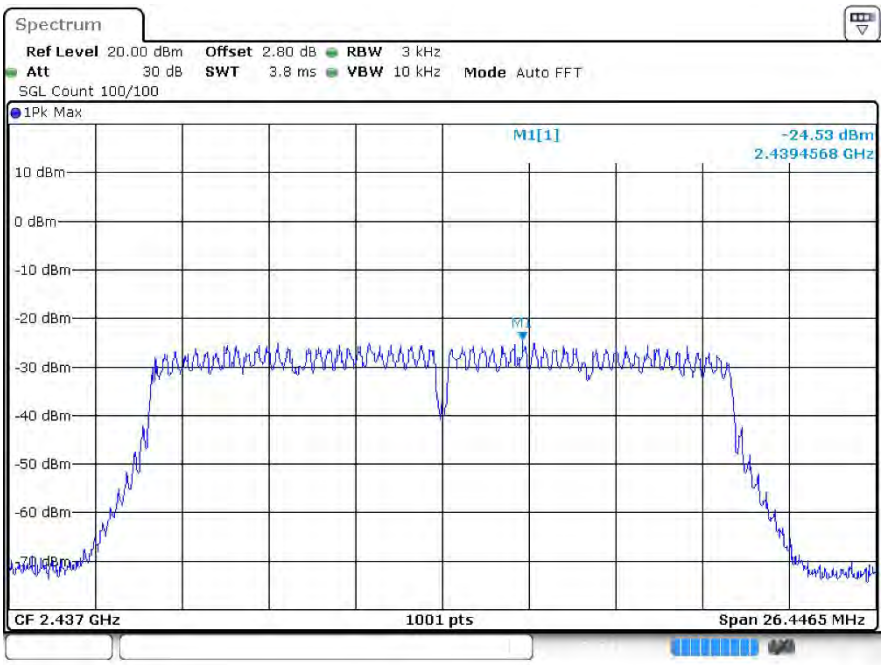
PSD g 2462MHz Ant1



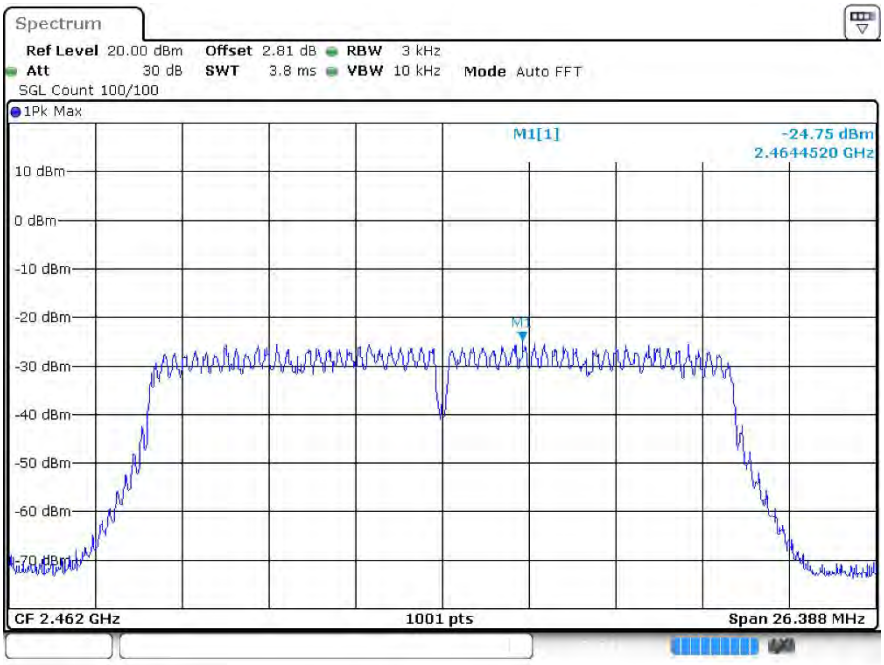
PSD n20 2412MHz Ant1



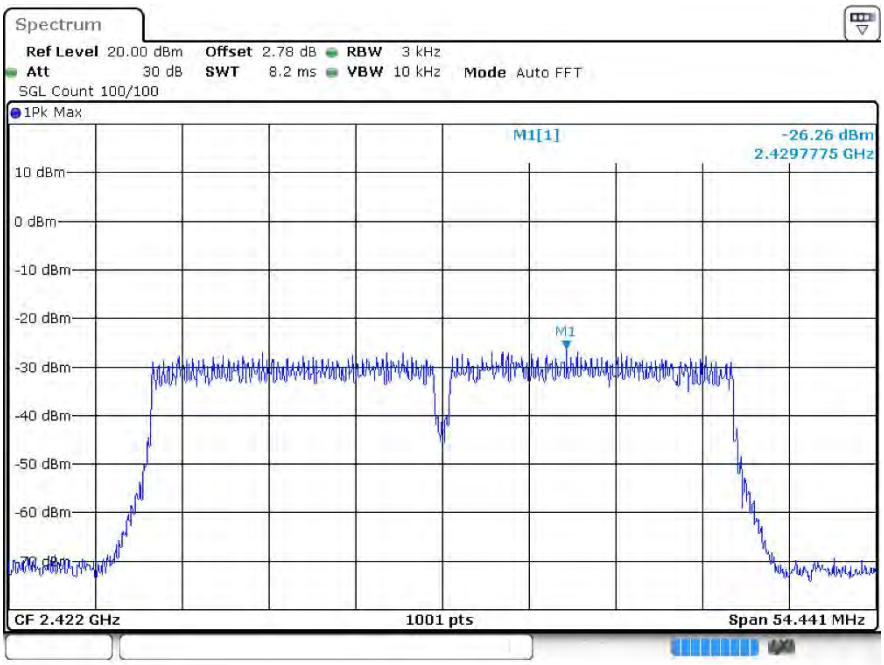
PSD n20 2437MHz Ant1



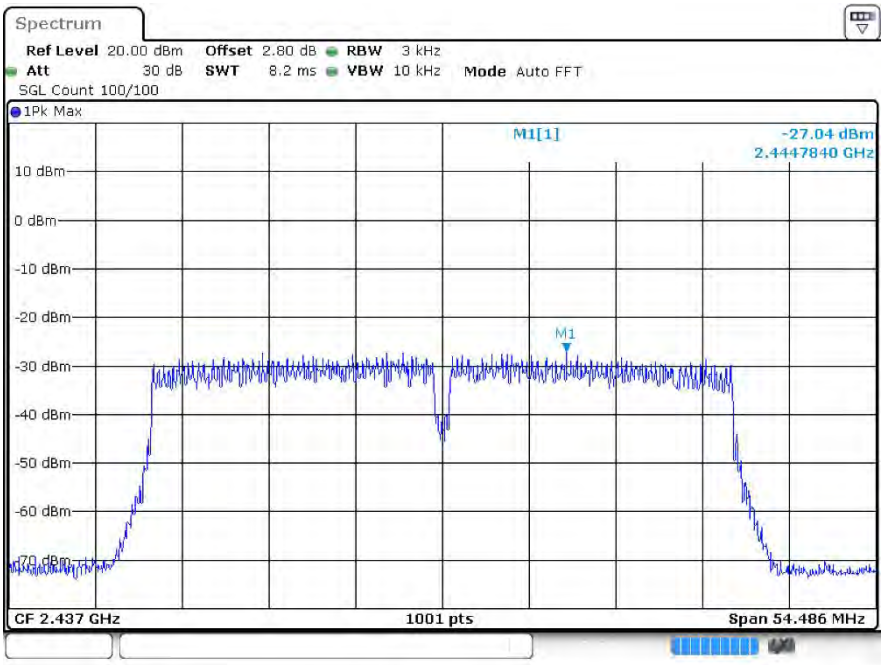
PSD n20 2462MHz Ant1



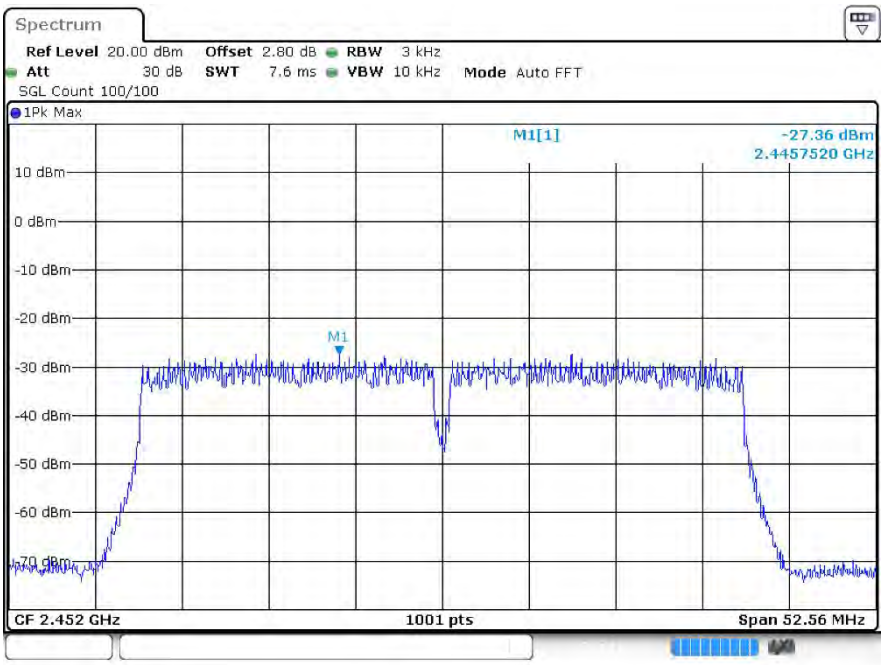
PSD n40 2422MHz Ant1



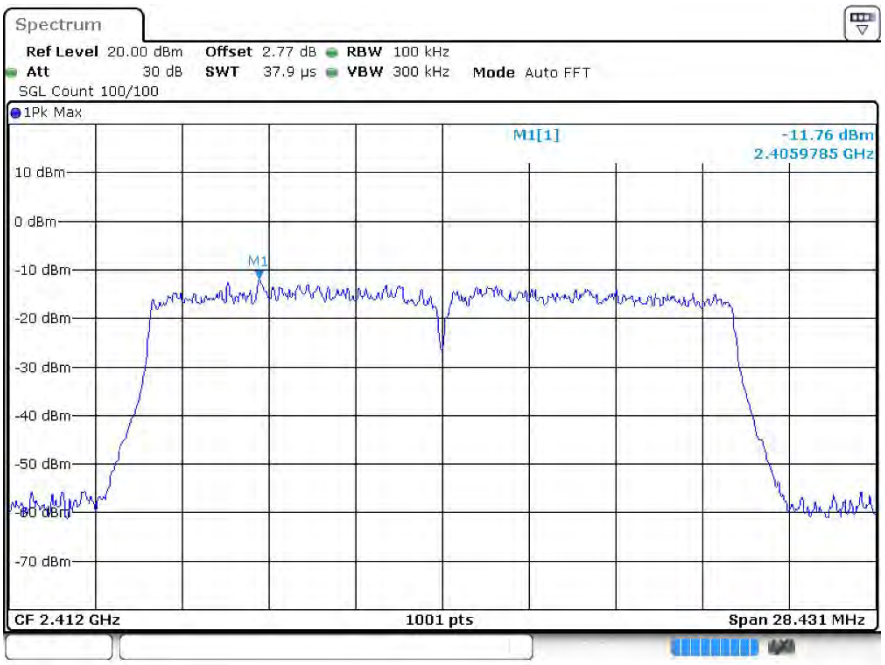
PSD n40 2437MHz Ant1



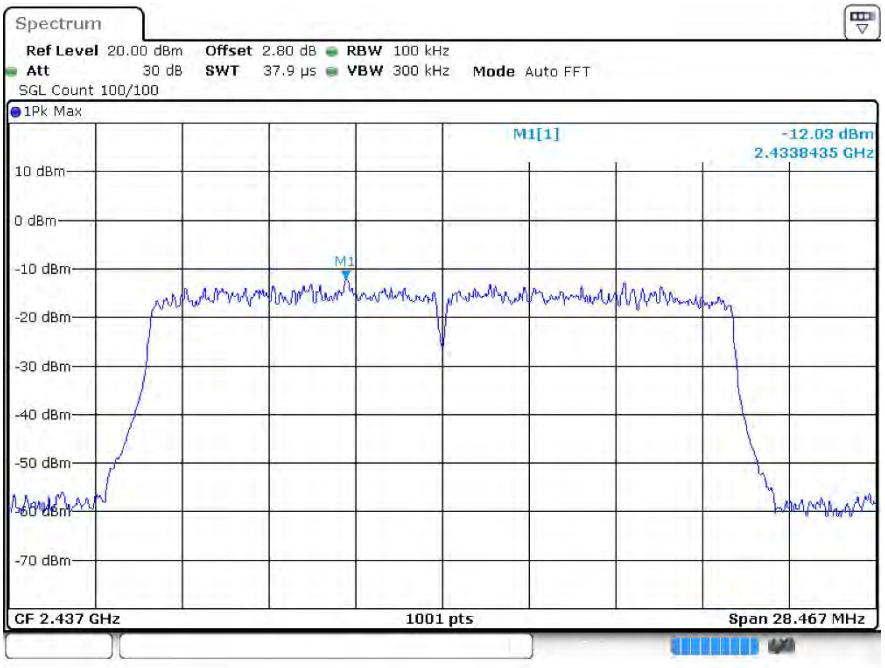
PSD n40 2452MHz Ant1



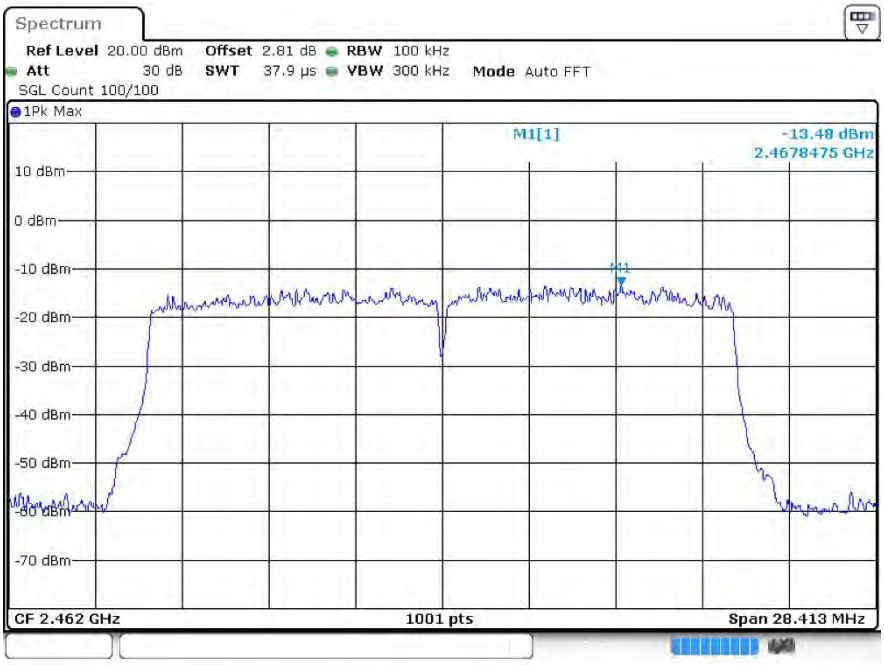
PSD ax20 2412MHz Ant1



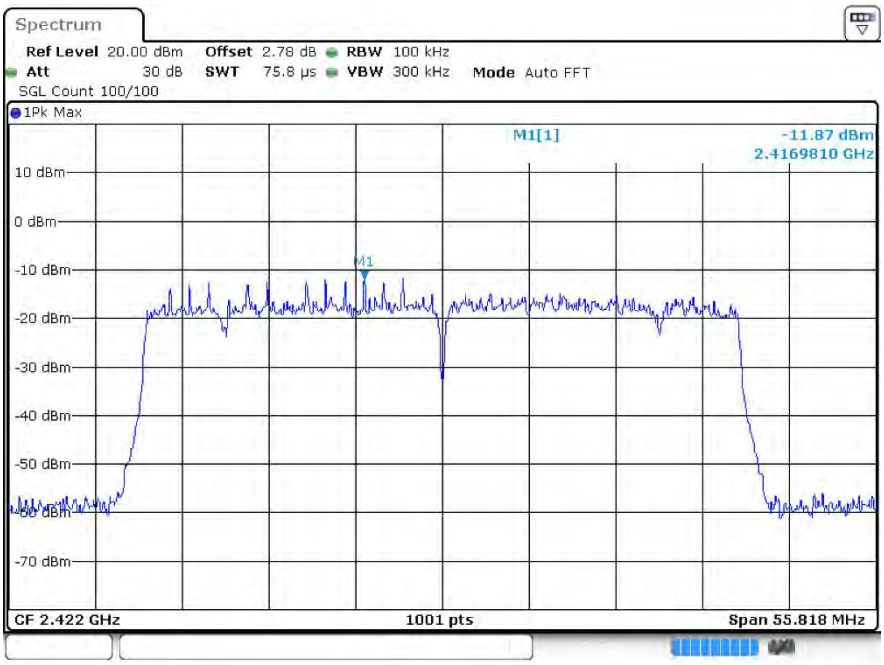
PSD ax20 2437MHz Ant1



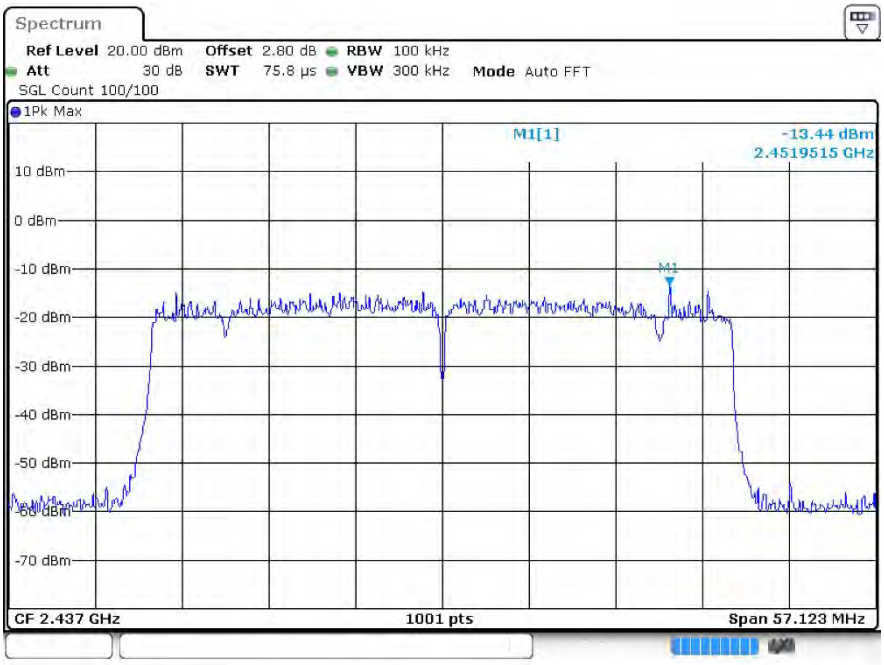
PSD ax20 2462MHz Ant1



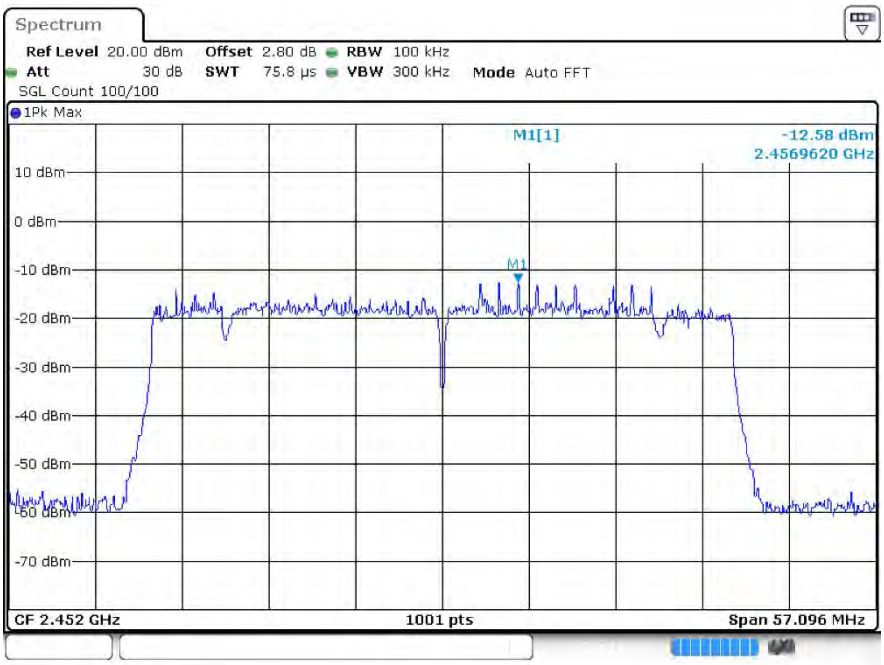
PSD ax40 2422MHz Ant1



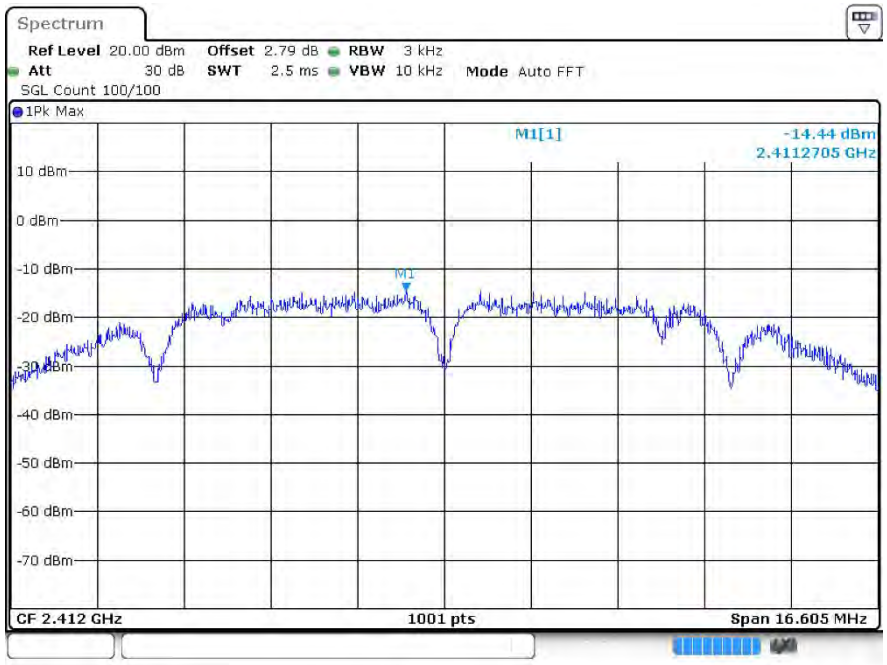
PSD ax40 2437MHz Ant1



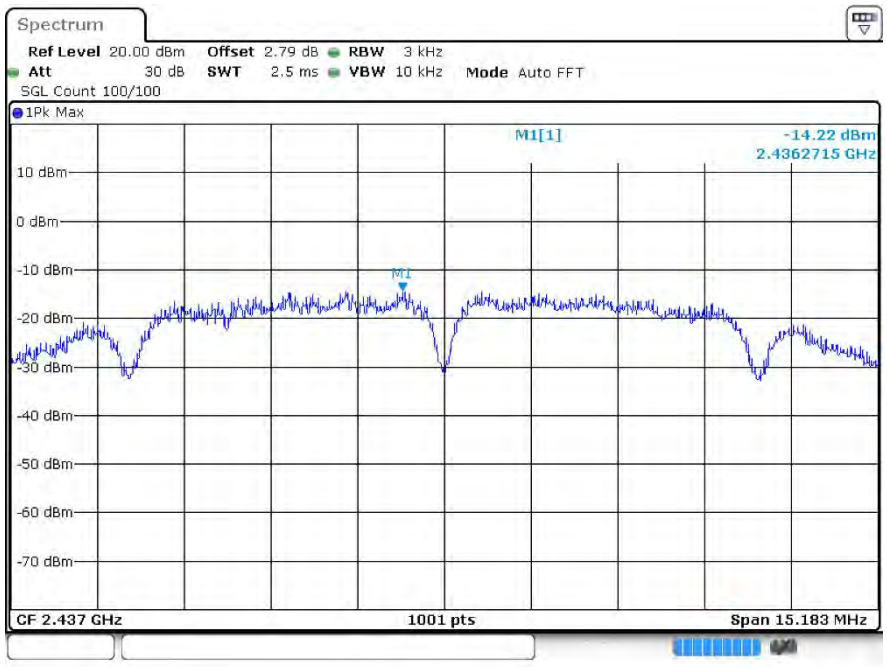
PSD ax40 2452MHz Ant1



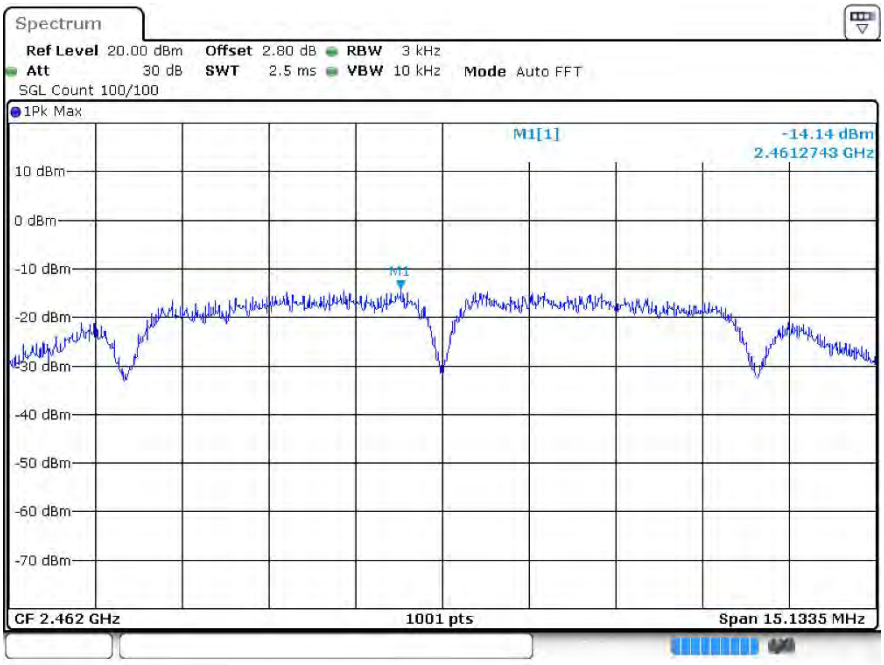
PSDb 2412MHz Ant2



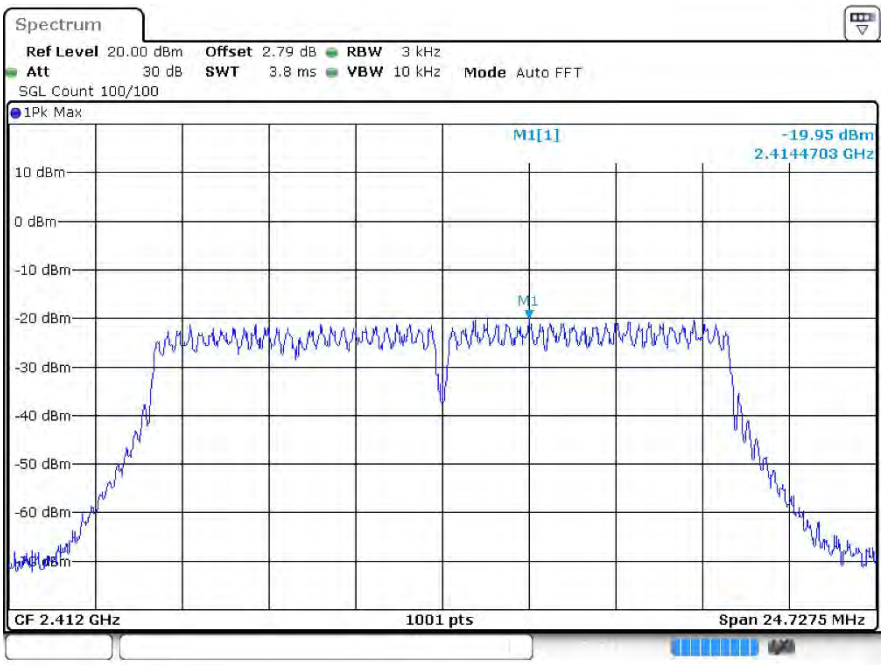
PSD b 2437MHz Ant2



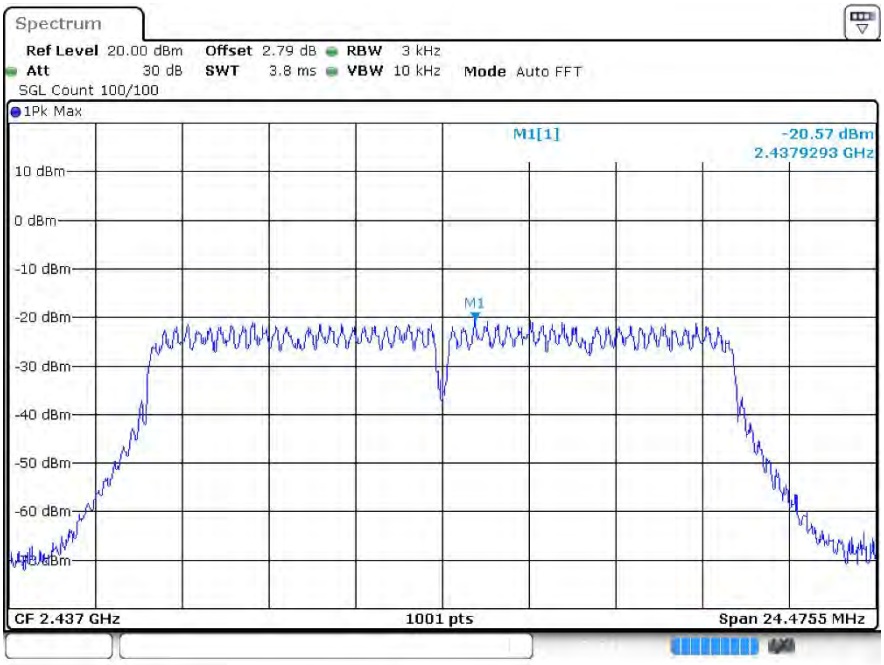
PSD b 2462MHz Ant2



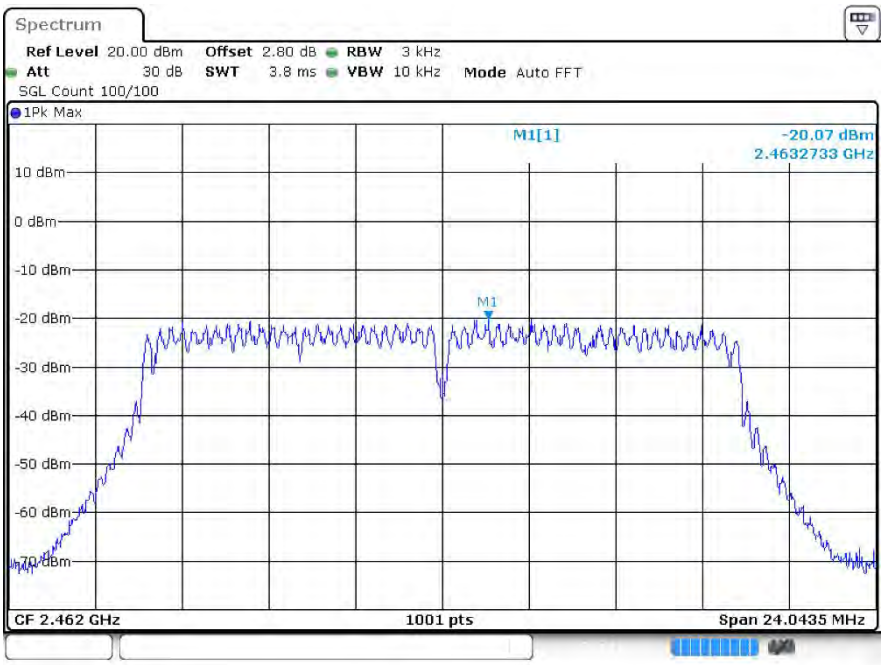
PSD g 2412MHz Ant2



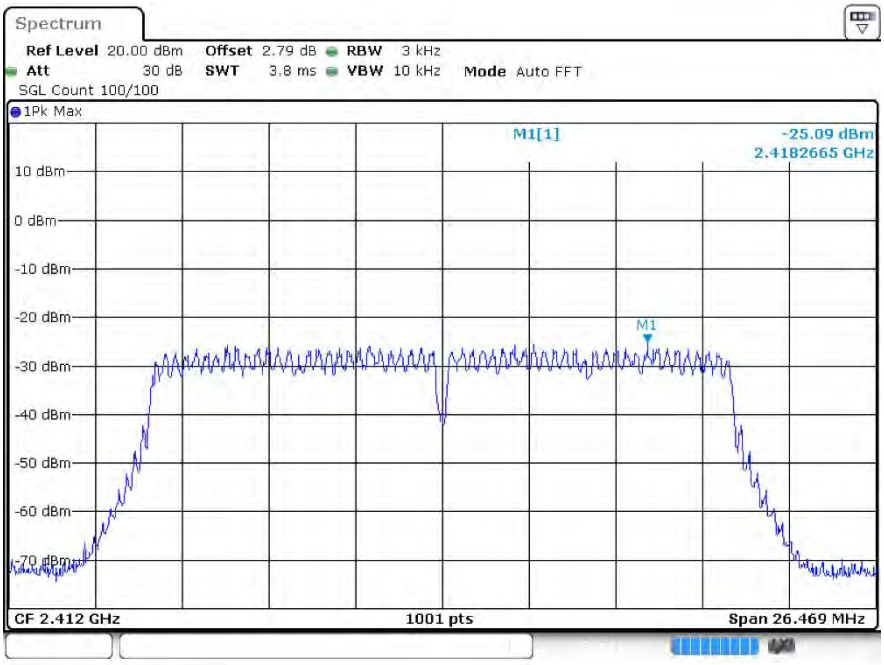
PSD g 2437MHz Ant2



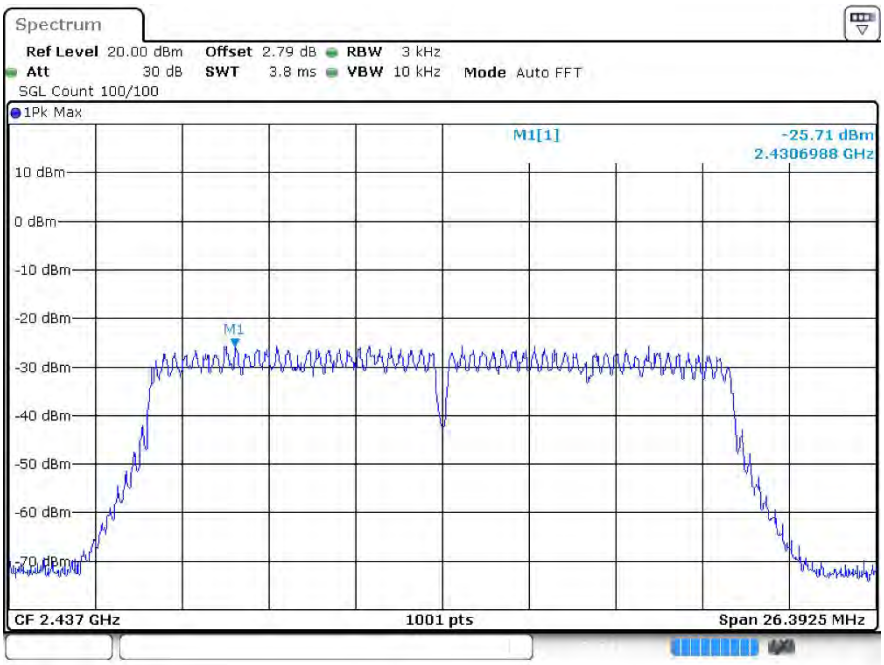
PSD g 2462MHz Ant2



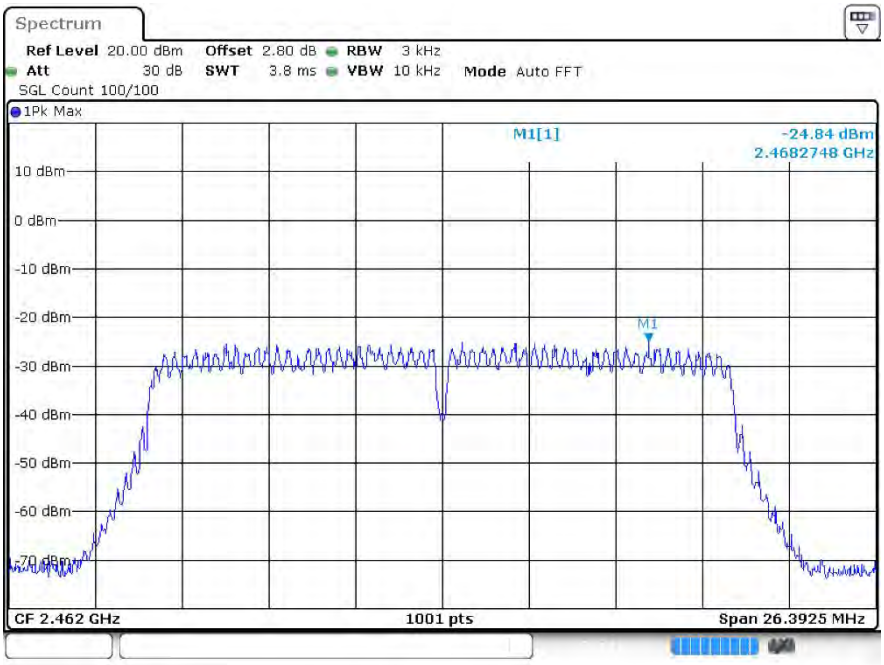
PSD n20 2412MHz Ant2



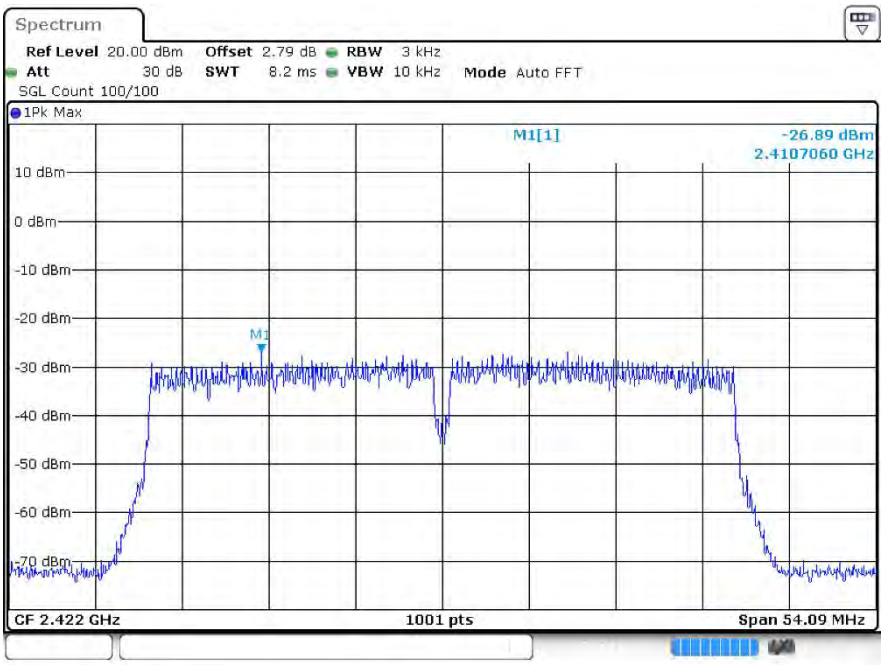
PSD n20 2437MHz Ant2



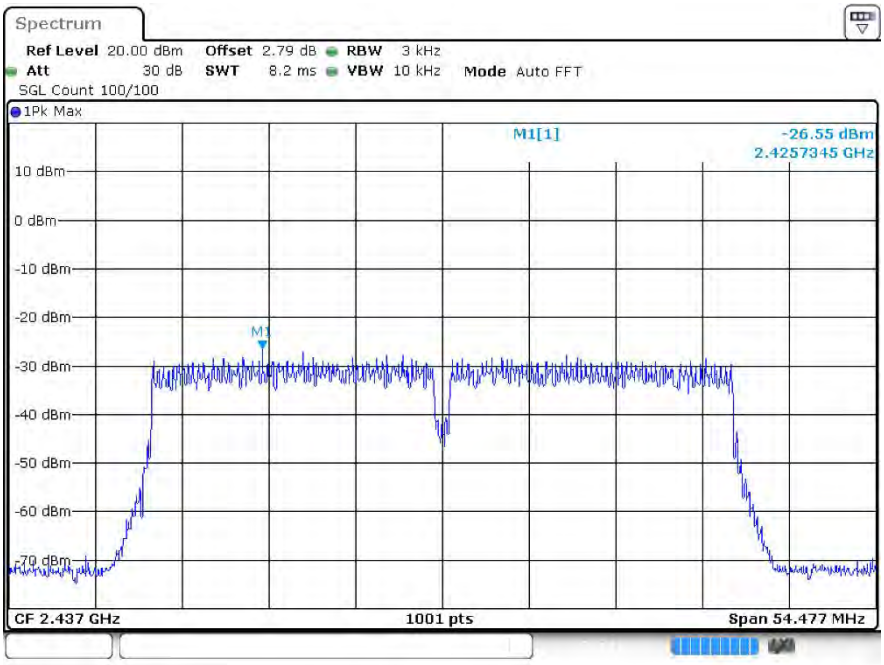
PSD n20 2462MHz Ant2



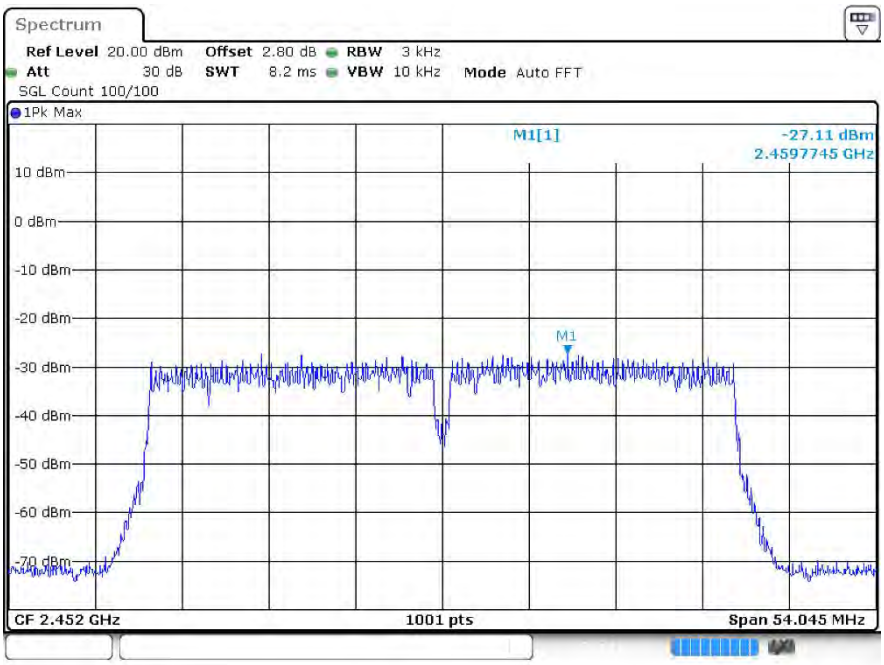
PSD n40 2422MHz Ant2



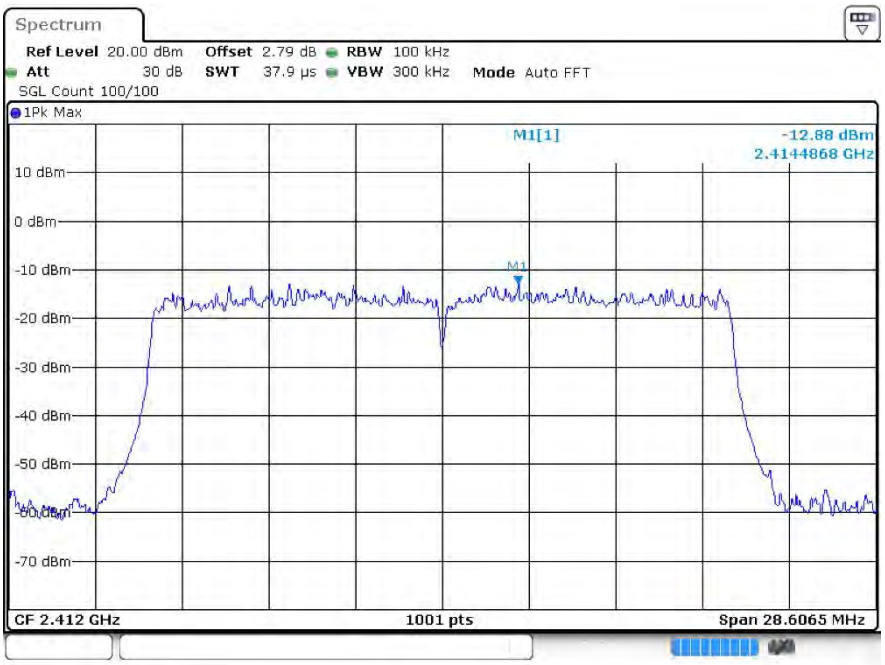
PSD n40 2437MHz Ant2



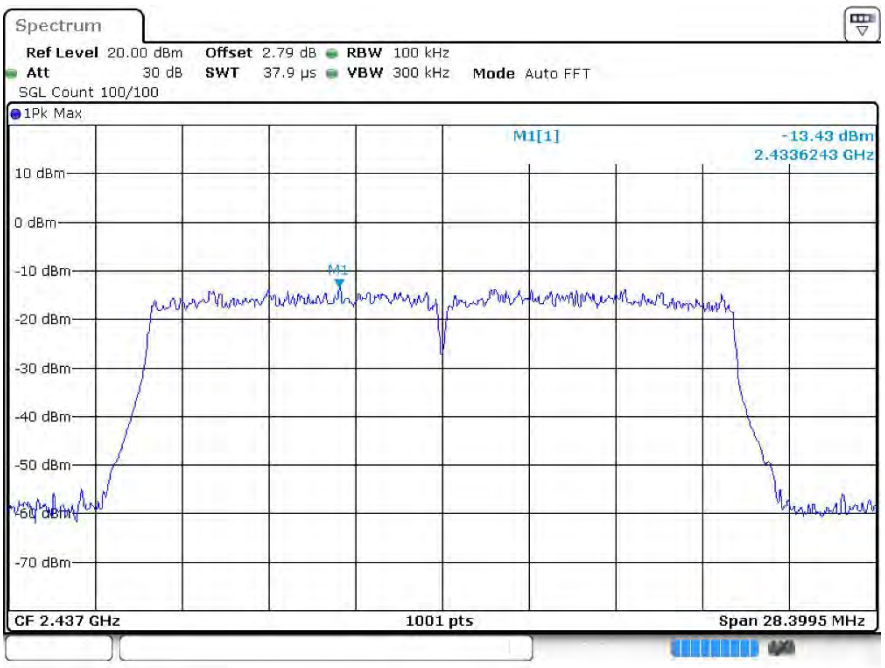
PSD n40 2452MHz Ant2



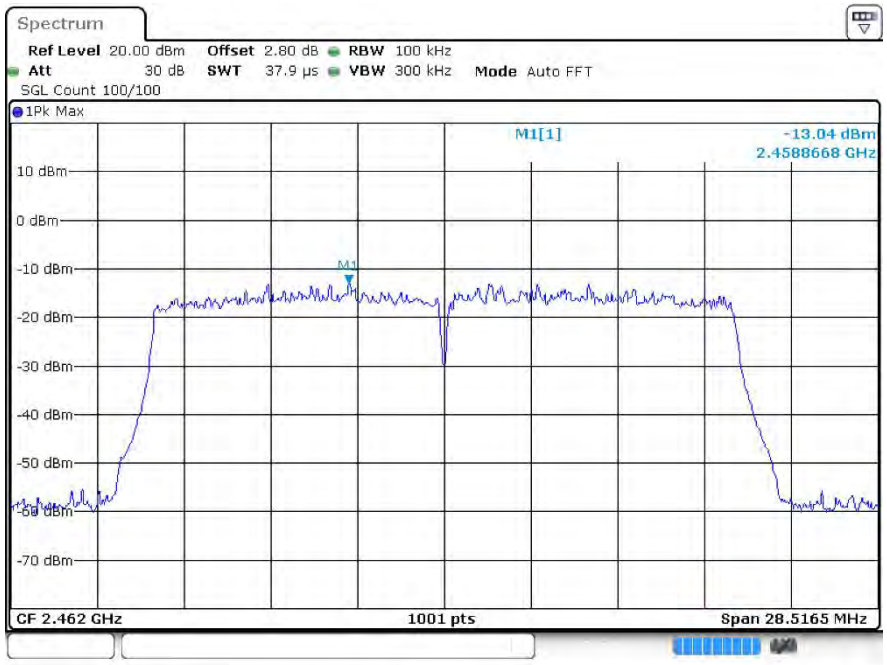
PSD ax20 2412MHz Ant2



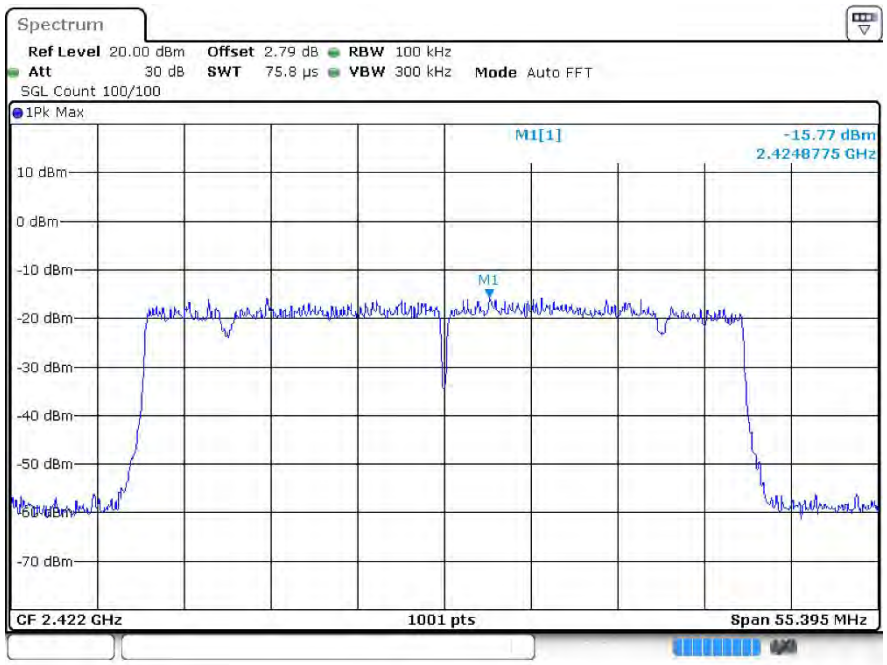
PSD ax20 2437MHz Ant2



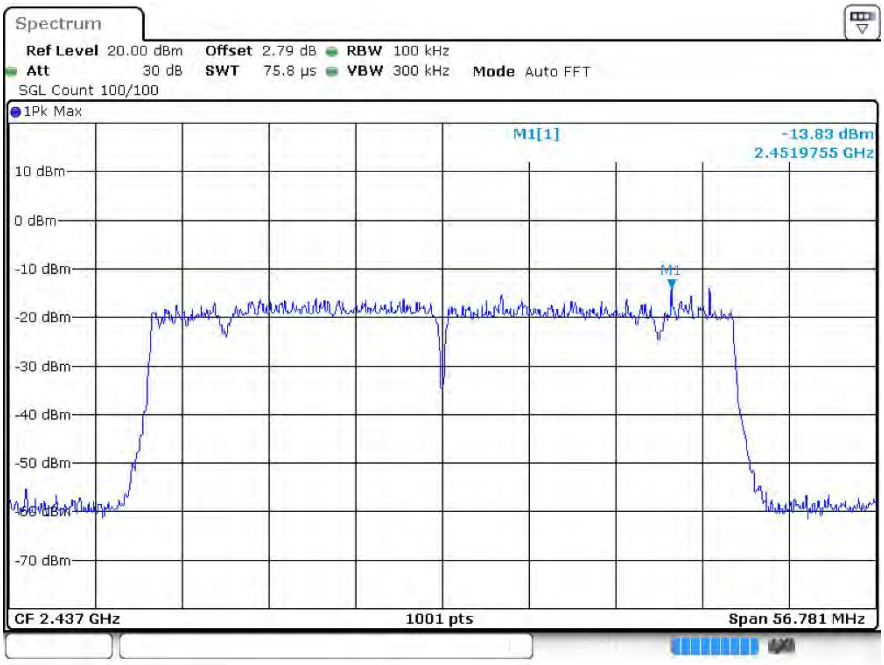
PSD ax20 2462MHz Ant2



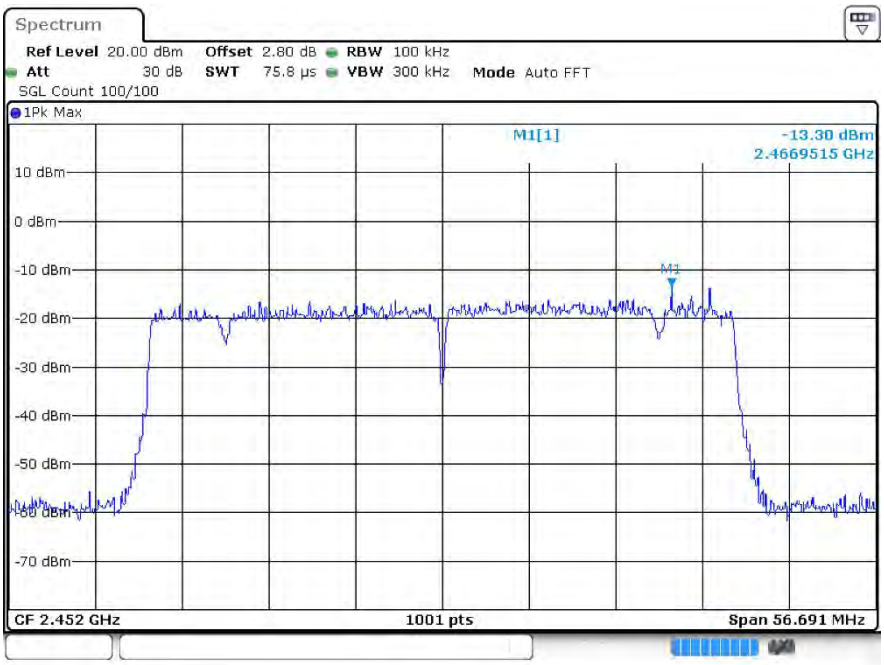
PSD ax40 2422MHz Ant2



PSD ax40 2437MHz Ant2



PSD ax40 2452MHz Ant2



5 Band Edge

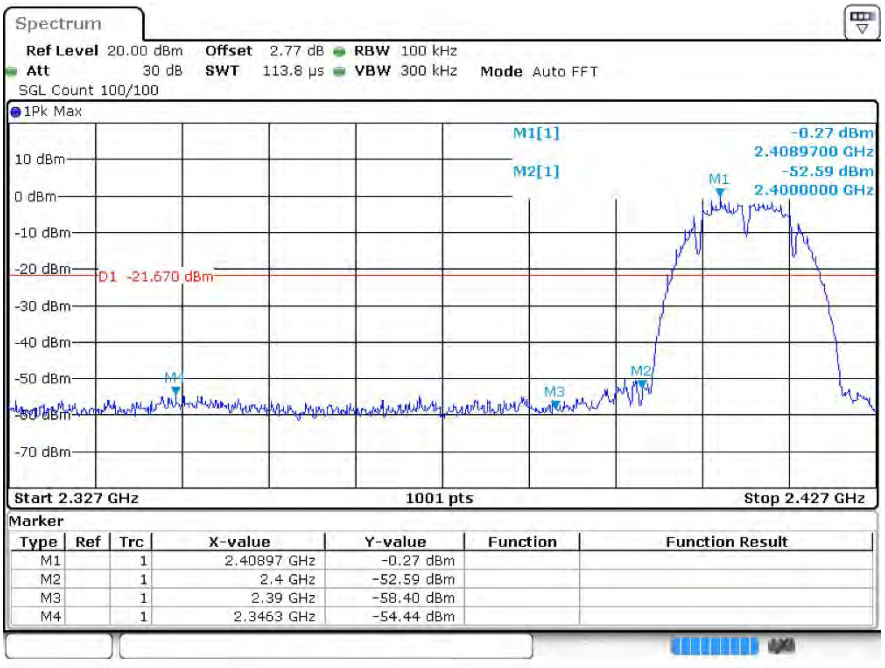
5.1 Test Result

Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
b	2412	Ant1	-52.77	-20	Pass
b	2462	Ant1	-54.63	-20	Pass
g	2412	Ant1	-48.6	-20	Pass
g	2462	Ant1	-49.58	-20	Pass
n20	2412	Ant1	-46.9	-20	Pass
n20	2462	Ant1	-44.41	-20	Pass
n40	2422	Ant1	-40.72	-20	Pass
n40	2452	Ant1	-44.54	-20	Pass
ax20	2412	Ant1	-42.5	-20	Pass
ax20	2462	Ant1	-43.49	-20	Pass
ax40	2422	Ant1	-44.05	-20	Pass
ax40	2452	Ant1	-41.23	-20	Pass
b	2412	Ant2	-52.32	-20	-52.32
b	2462	Ant2	-55.32	-20	Pass
g	2412	Ant2	-49.06	-20	Pass
g	2462	Ant2	-48.89	-20	Pass
n20	2412	Ant2	-42.74	-20	Pass
n20	2462	Ant2	-43.41	-20	Pass
n40	2422	Ant2	-44.23	-20	Pass
n40	2452	Ant2	-39.38	-20	Pass
ax20	2412	Ant2	-43.08	-20	Pass
ax20	2462	Ant2	-45.62	-20	Pass
ax40	2422	Ant2	-40.99	-20	Pass
ax40	2452	Ant2	-40.94	-20	Pass

5.2 Test Graphs

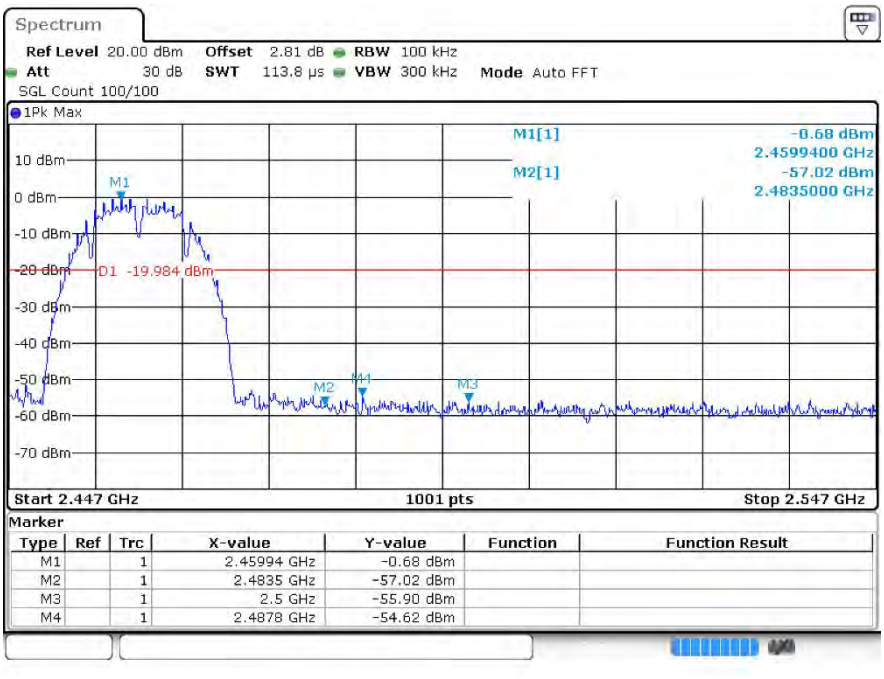
Test Graphs
b 2412MHz Ant1 Ref

b 2412MHz Ant1 Emission

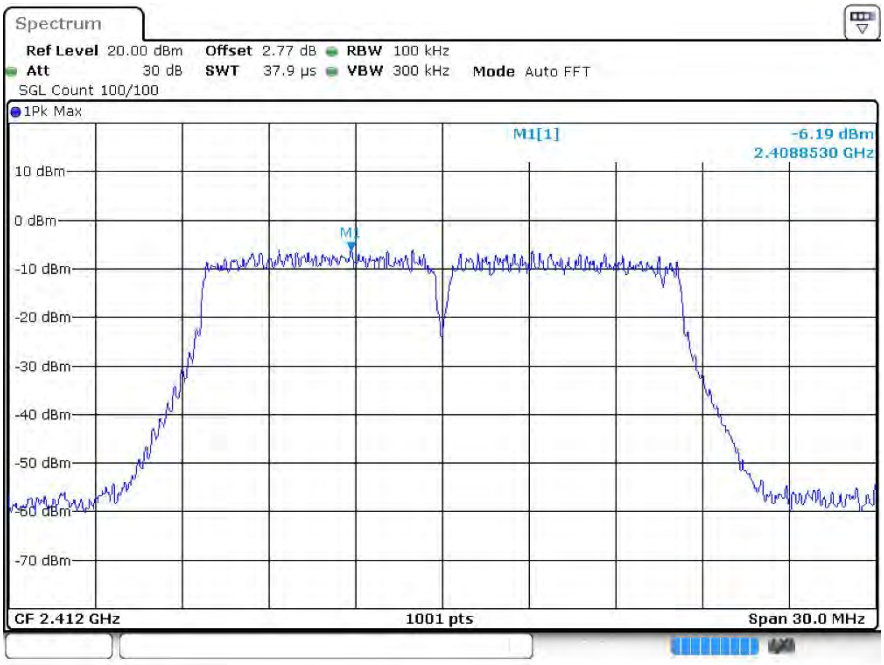


b 2462MHz Ant1 Ref

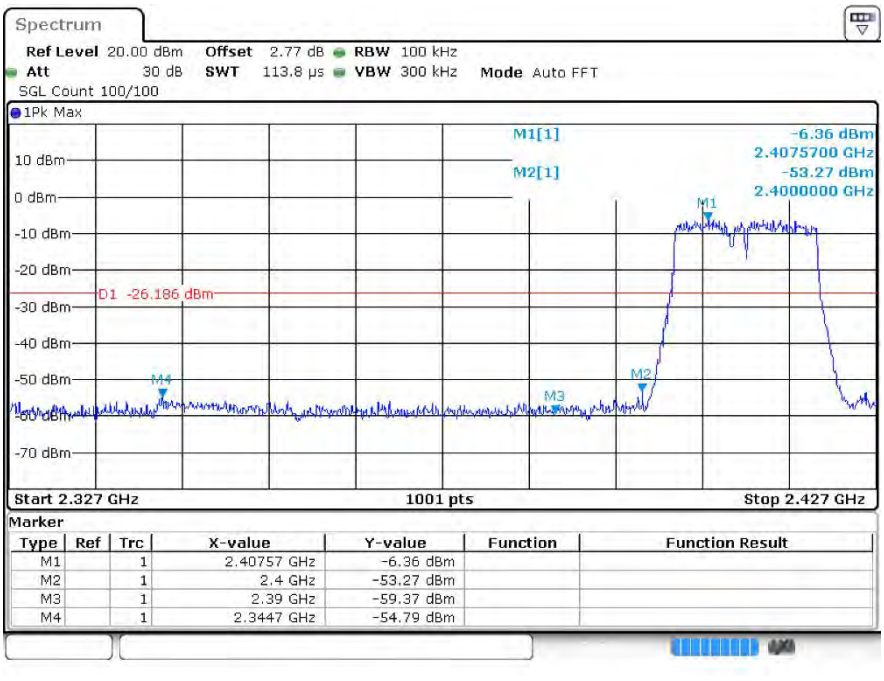
b 2462MHz Ant1 Emission



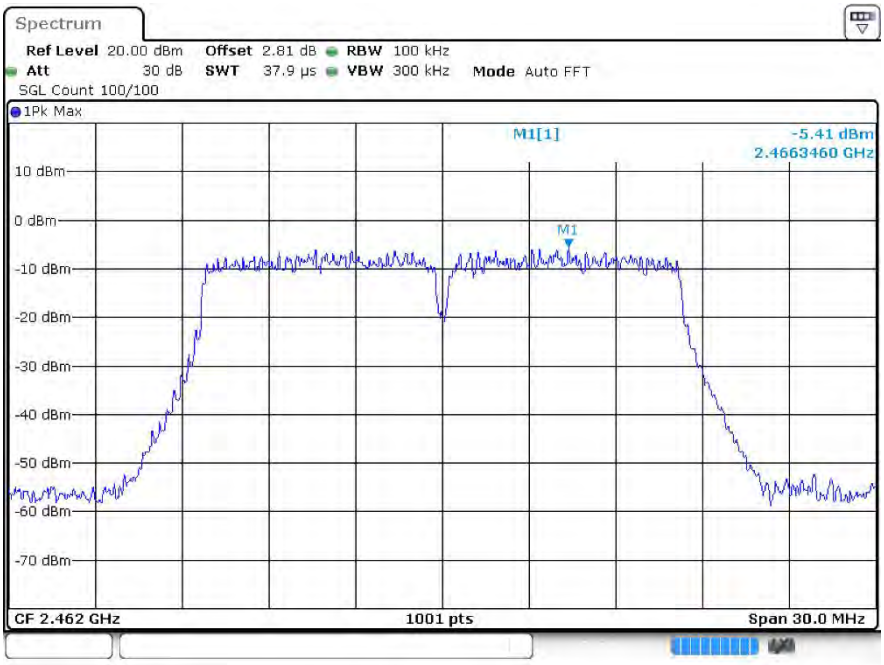
g 2412MHz Ant1 Ref



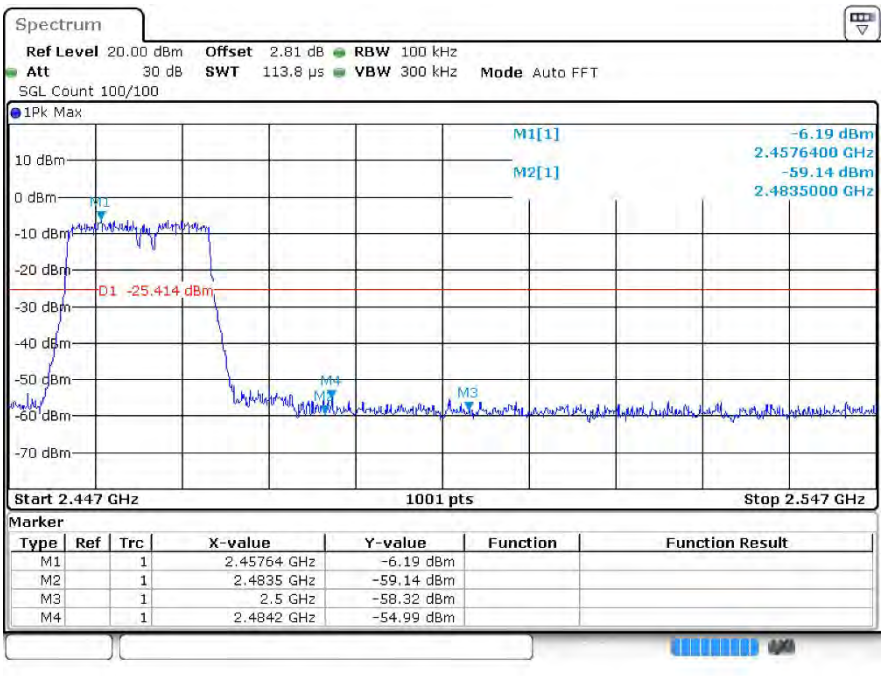
g 2412MHz Ant1 Emission



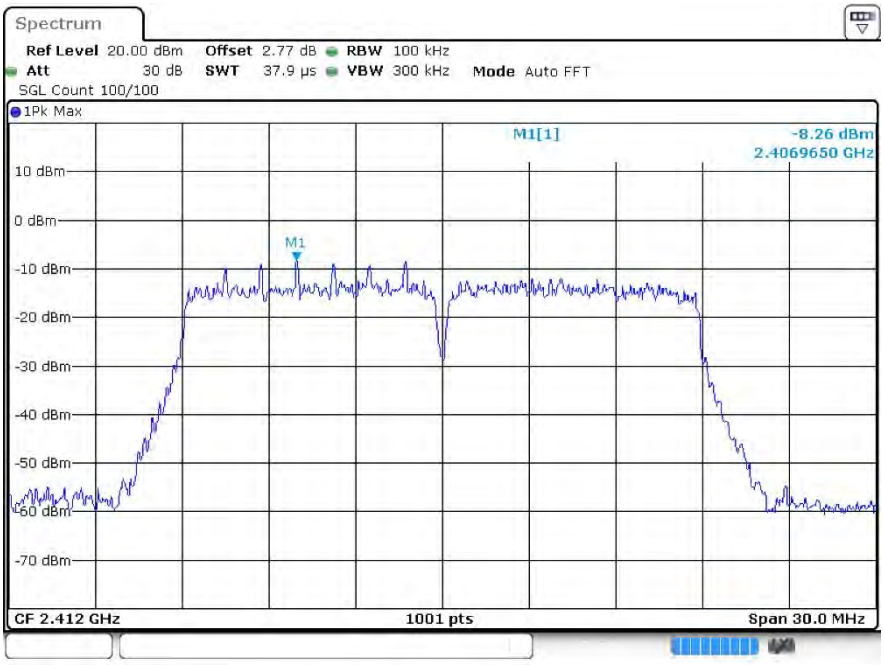
g 2462MHz Ant1 Ref



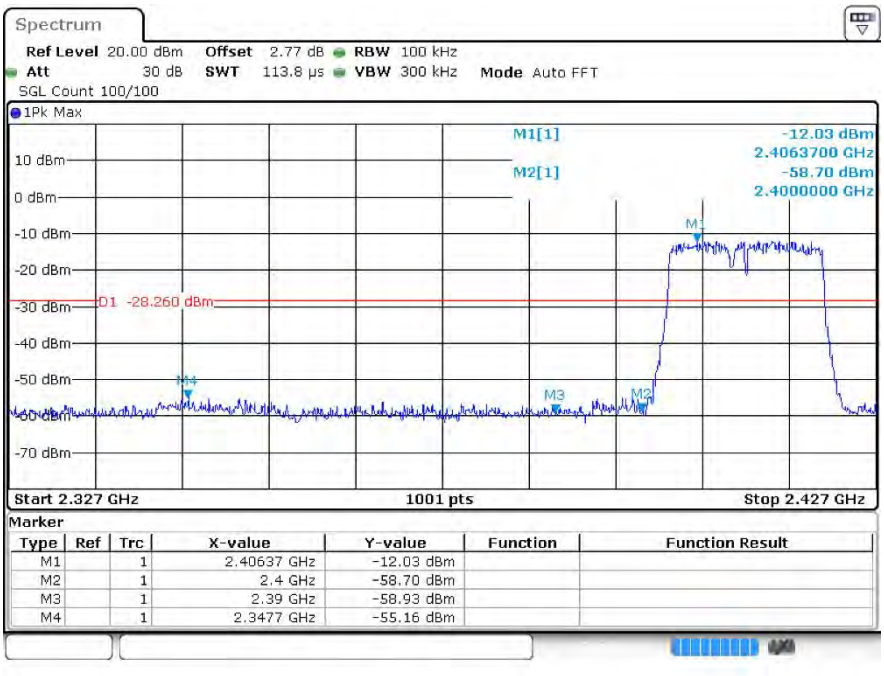
g 2462MHz Ant1 Emission



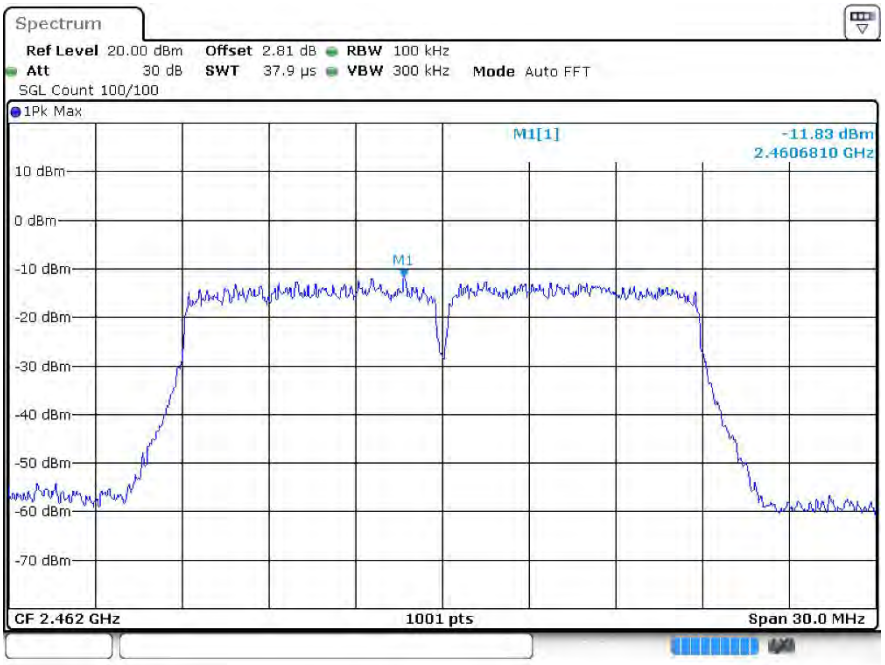
n20 2412MHz Ant1 Ref



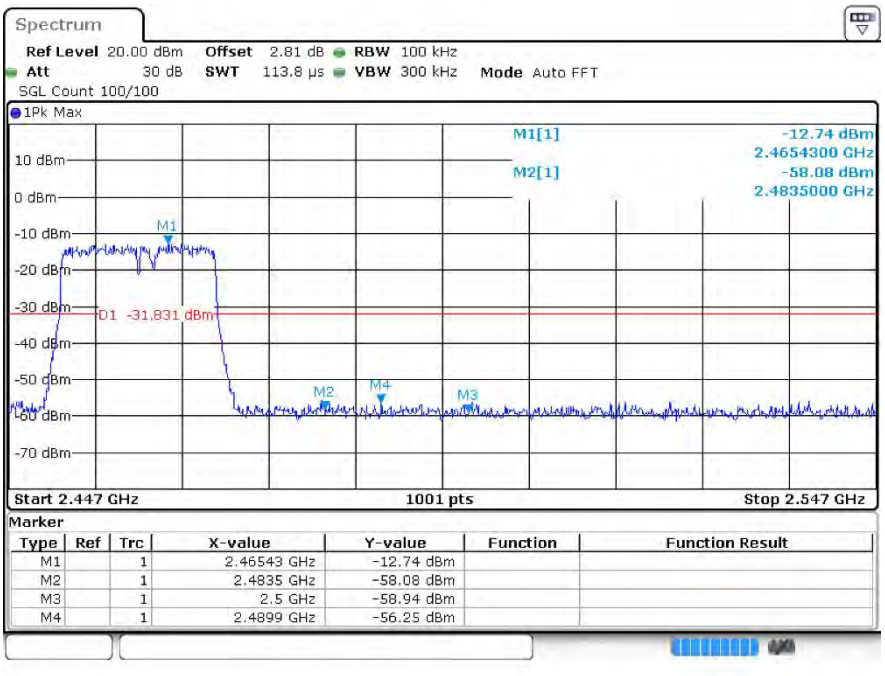
n20 2412MHz Ant1 Emission



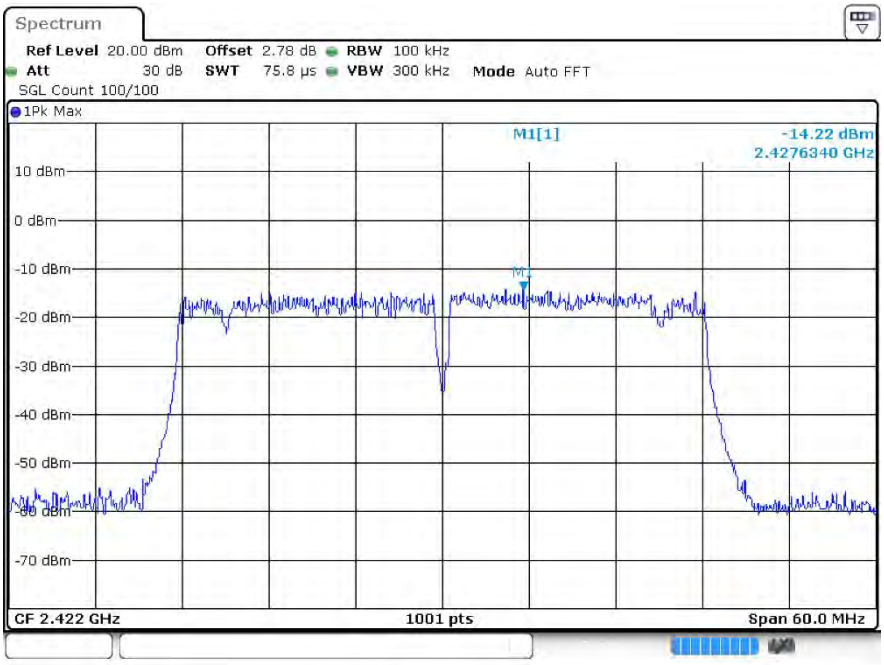
n20 2462MHz Ant1 Ref



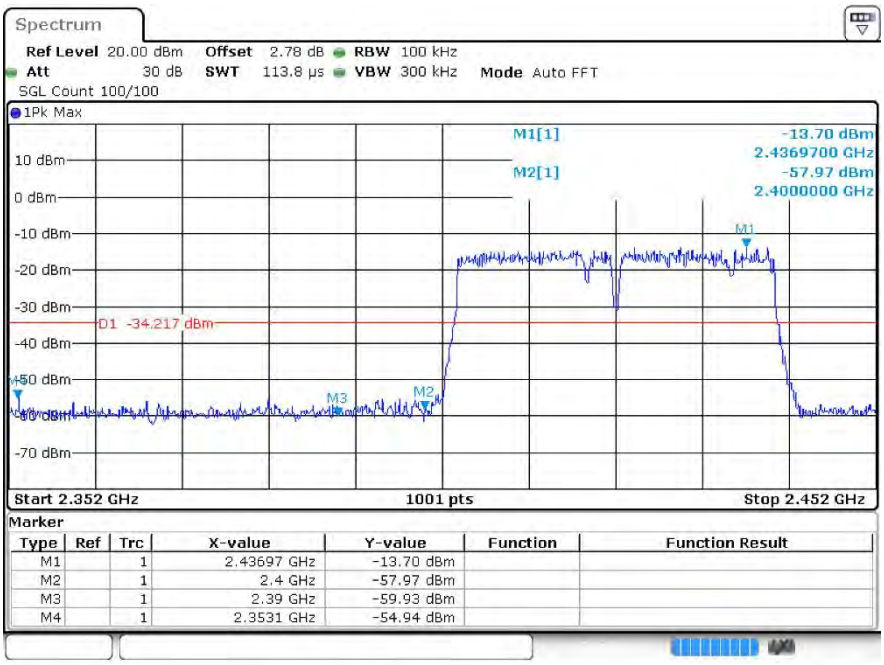
n20 2462MHz Ant1 Emission



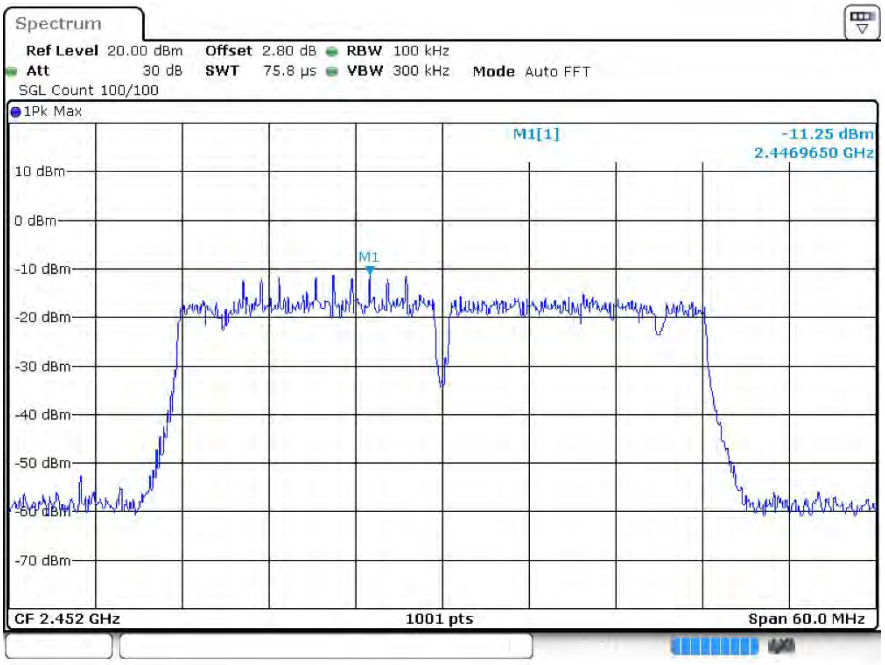
n40 2422MHz Ant1 Ref



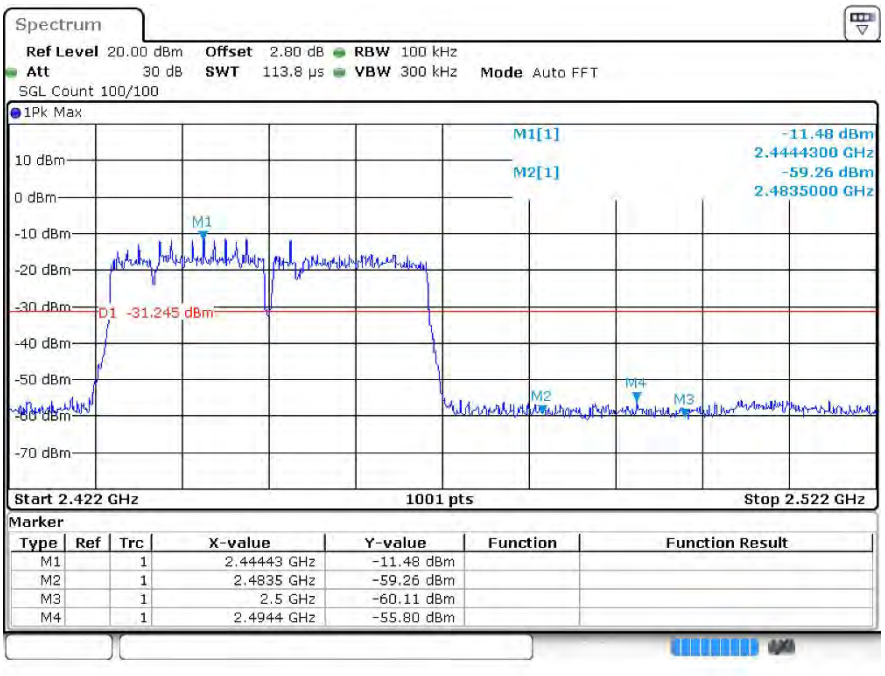
n40 2422MHz Ant1 Emission



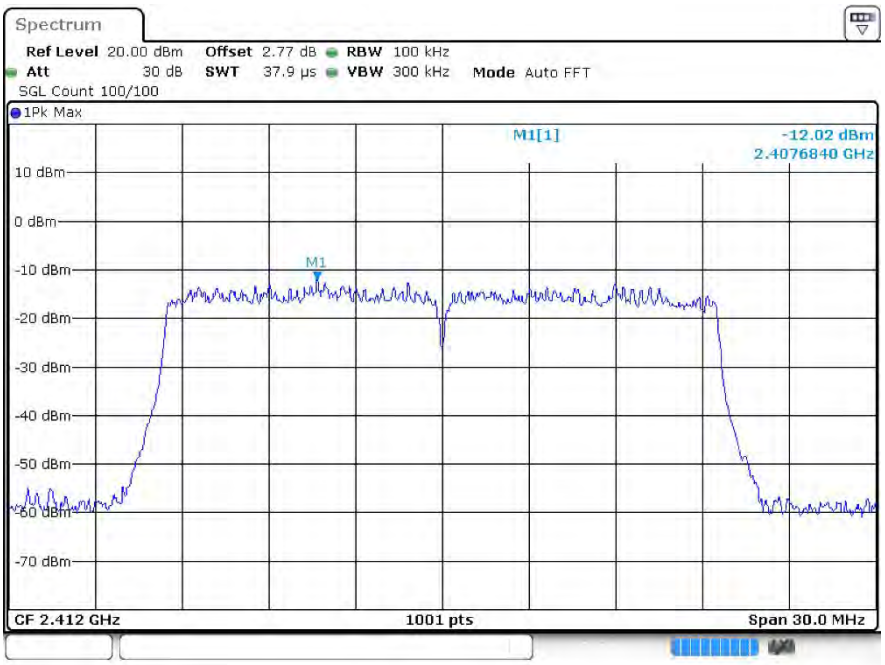
n40 2452MHz Ant1 Ref



n40 2452MHz Ant1 Emission



ax20 2412MHz Ant1 Ref



ax20 2412MHz Ant1 Emission