Appendix C

RF Test Data for 2.4GWIFI(Conducted Measurement)

Product Name: Mini PC

Trade Mark: Huidun

Test Model: H50

Environmental Conditions

Temperature:	24.8° C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung

Contents

Page

COVER PAGE

1 Duty Cycle 3
1.1 Test Result 3
1.2 Test Graphs 4
2 Maximum Conducted Output Power 22
2.1 Test Result 22
3 -6dB Bandwidth 24
3.1 Test Result 24
3.2 Test Graphs 25
4 Maximum Power Spectral Density Level 43
4.1 Test Result 43
4.2 Test Graphs 45
5 Band Edge 63
5.1 Test Result 63
5.2 Test Graphs 64
6 Conducted RF Spurious Emission 88
6.1 Test Result 88
6.2 Test Graphs 90

1 Duty Cycle

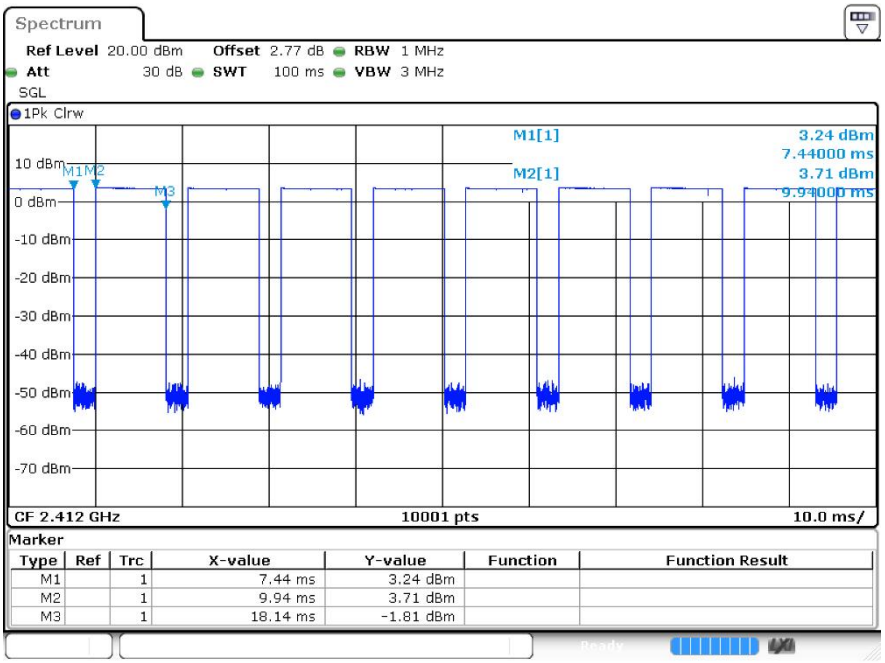
1.1 Test Result

Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor	1/T (kHz)
b	2412	Ant1	77.59	1.1	0.12
b	2437	Ant1	77.59	1.1	0.12
b	2462	Ant1	75.99	1.19	0.12
g	2412	Ant1	77.59	1.1	0.12
g	2437	Ant1	77.59	1.1	0.12
g	2462	Ant1	75.99	1.19	0.12
n20	2412	Ant1	60.14	2.21	0.27
n20	2437	Ant1	59.87	2.23	0.27
n20	2462	Ant1	60.14	2.21	0.27
n40	2422	Ant1	54.96	2.6	0.33
n40	2437	Ant1	54.97	2.6	鋬?
n40	2452	Ant1	54.96	2.6	0.33
ax20	2412	Ant1	57.23	2.42	0.3
ax20	2437	Ant1	57.27	2.42	0.3
ax20	2462	Ant1	57.24	2.42	0.3
ax40	2422	Ant1	52.5	2.8	0.36
ax40	2437	Ant1	52.5	2.8	0.36
ax40	2452	Ant1	52.52	2.8	0.36
b	2412	Ant2	76.89	1.14	0.12
b	2437	Ant2	76.8	1.15	0.12
b	2462	Ant2	77.59	1.1	0.12
g	2412	Ant2	76.89	1.14	0.12
g	2437	Ant2	76.8	1.15	0.12
g	2462	Ant2	77.59	1.1	0.12
n20	2412	Ant2	59.86	2.23	0.27
n20	2437	Ant2	60.12	2.21	0.27
n20	2462	Ant2	60.12	2.21	0.27
n40	2422	Ant2	54.89	2.6	0.33
n40	2437	Ant2	54.69	2.62	0.33
n40	2452	Ant2	54.74	2.62	0.33
ax20	2412	Ant2	57.63	2.39	0.3
ax20	2437	Ant2	57.22	2.42	0.3
ax20	2462	Ant2	57.65	2.39	0.3
ax40	2422	Ant2	53.26	2.74	0.36
ax40	2437	Ant2	52.84	2.77	0.36
ax40	2452	Ant2	52.5	2.8	0.36

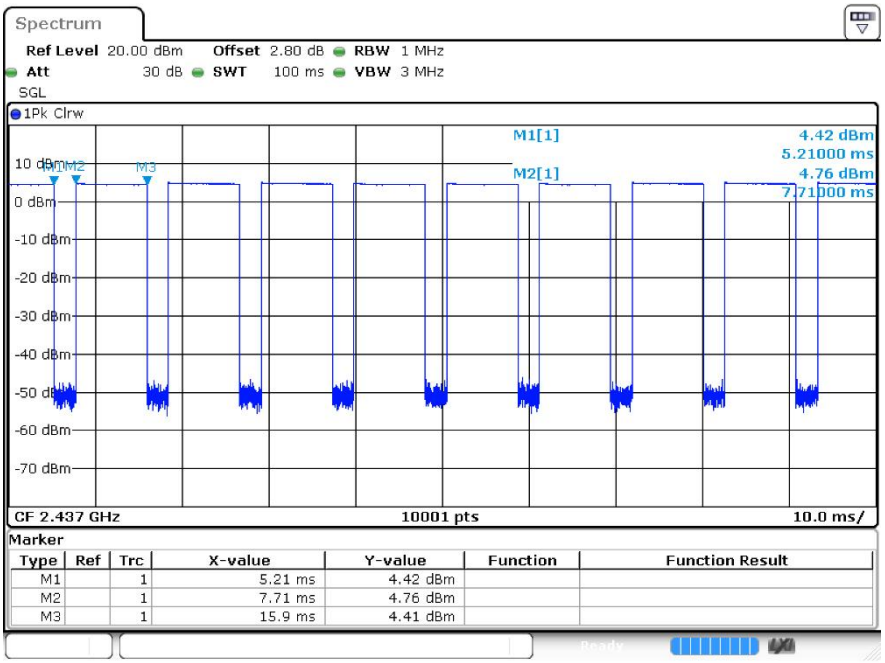
1.2 Test Graphs

Test Graphs

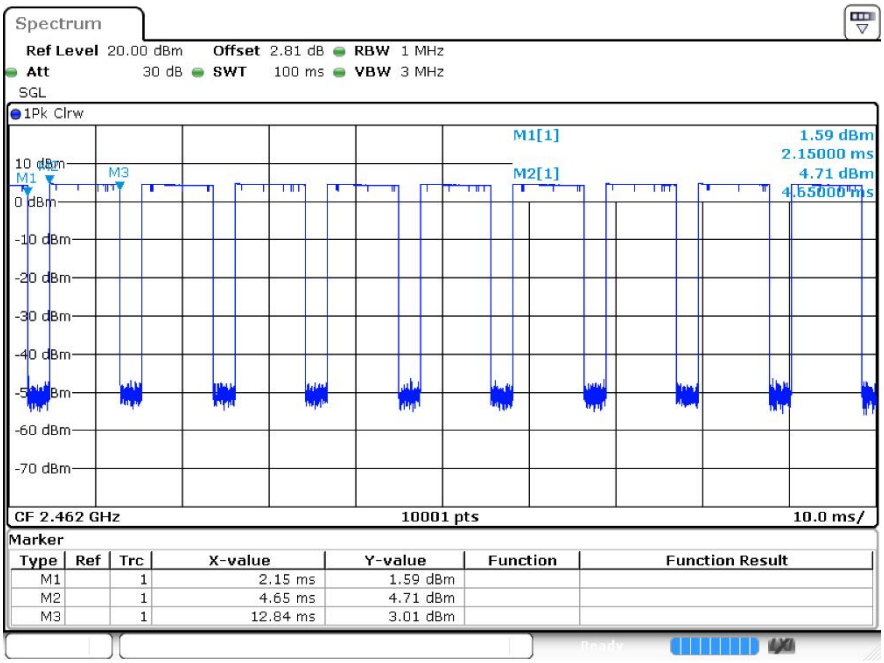
Duty Cycleb 2412MHz Ant1



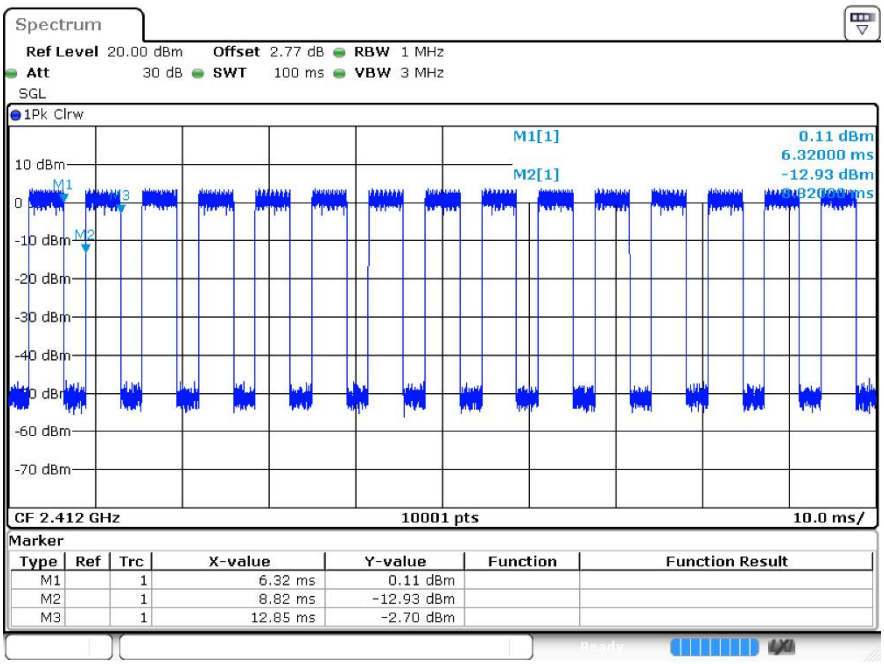
Duty Cycleb 2437MHz Ant1



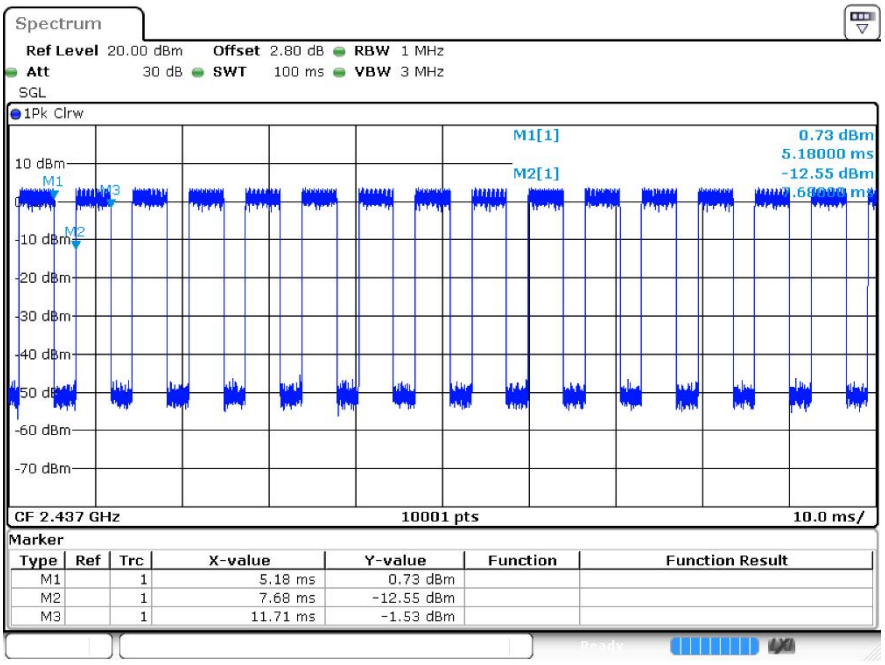
Duty Cycleb 2462MHz Ant1



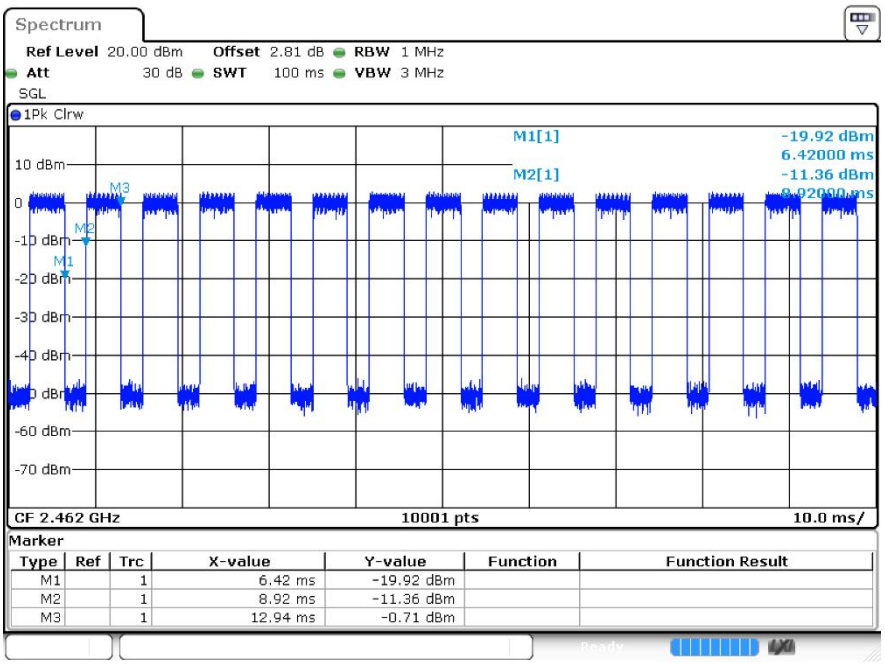
Duty Cycleg 2412MHz Ant1



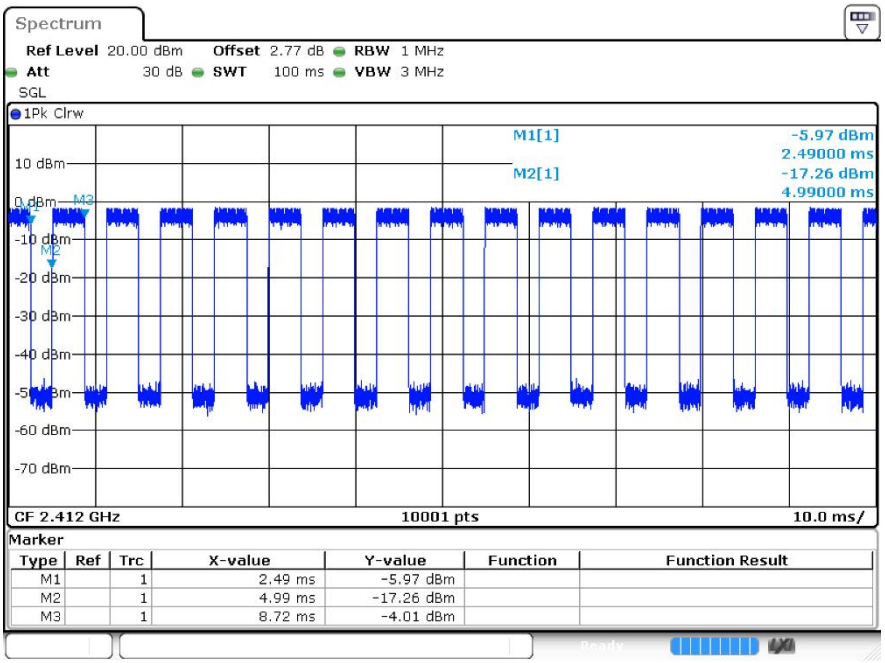
Duty Cycleg 2437MHz Ant1



Duty Cycleg 2462MHz Ant1



Duty Cyclen20 2412MHz Ant1



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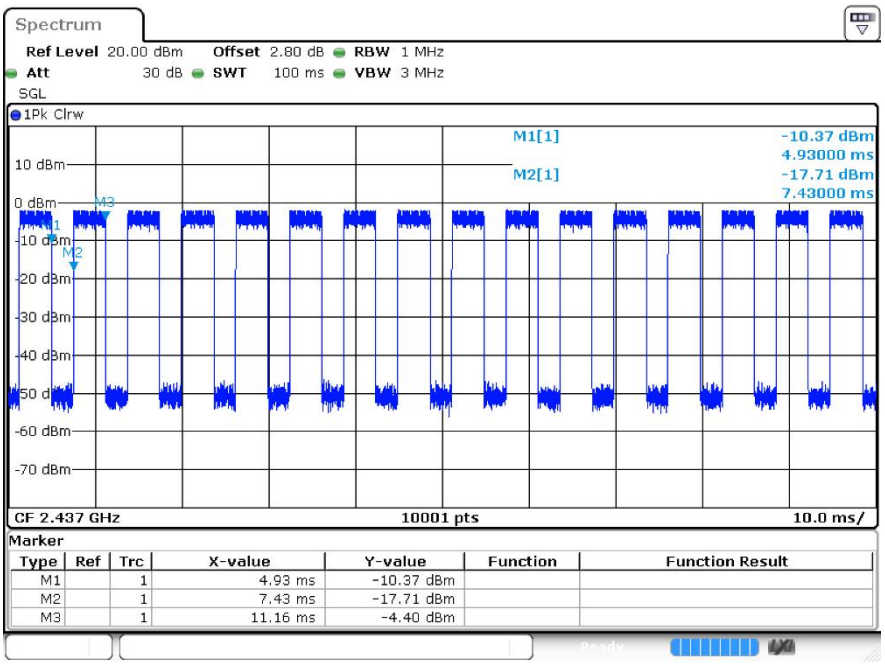
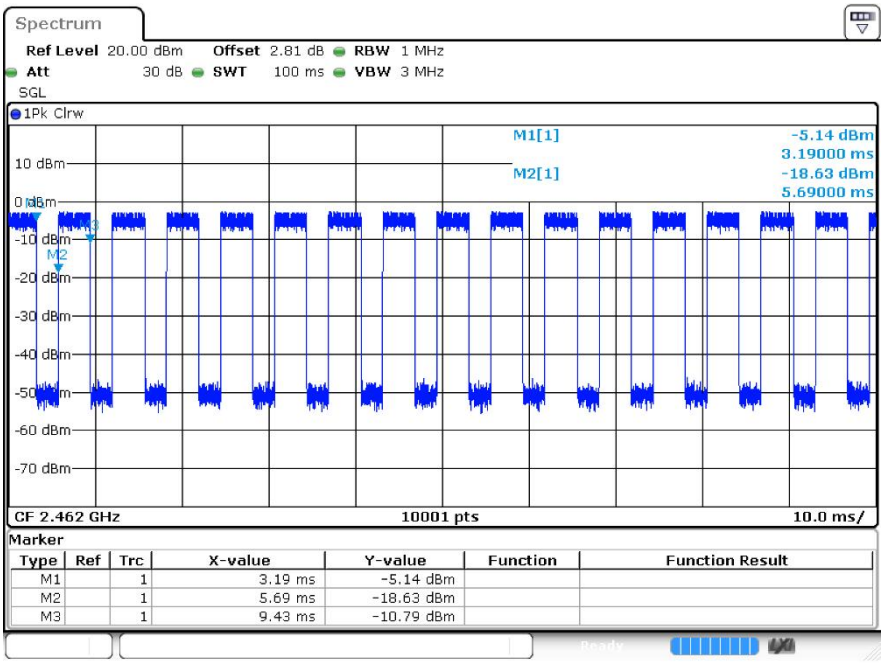
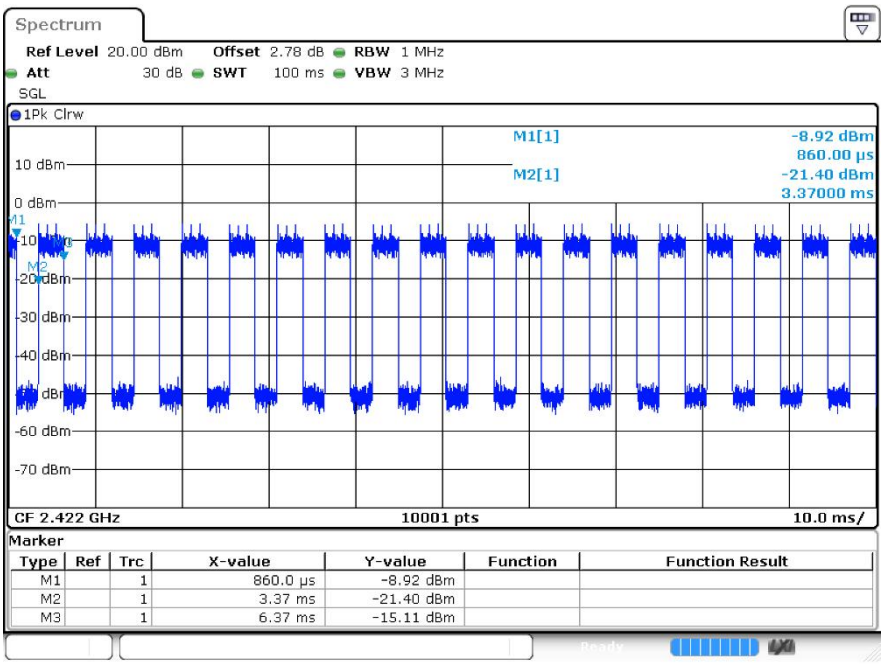


Duty Cyclen20 2462MHz Ant1



Duty Cyclen40 2422MHz Ant1



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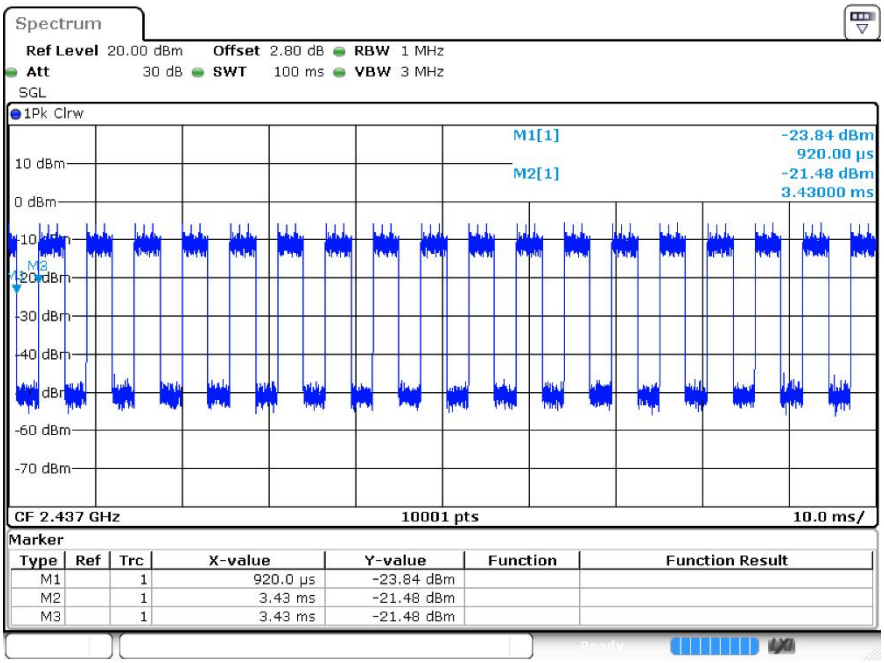
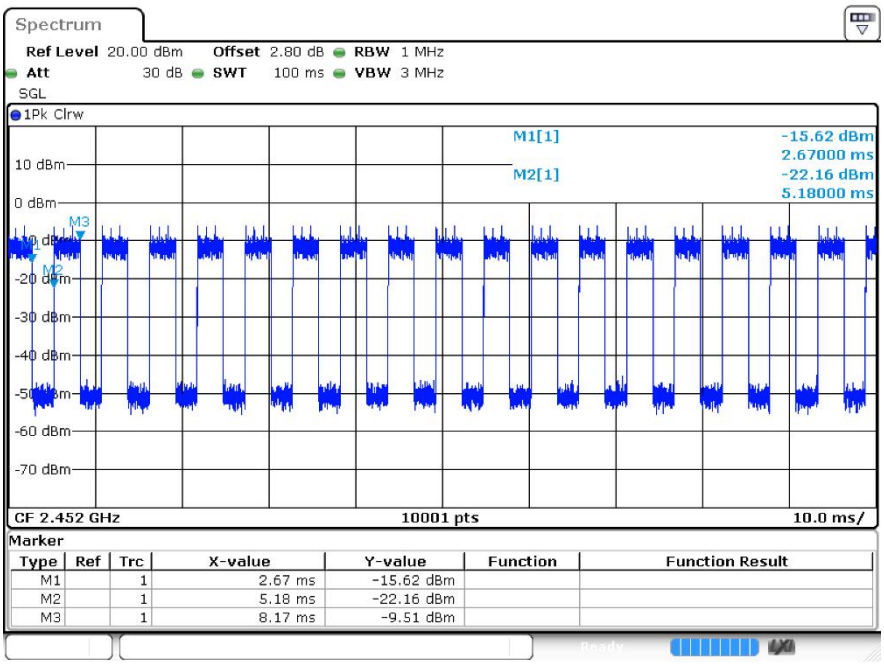
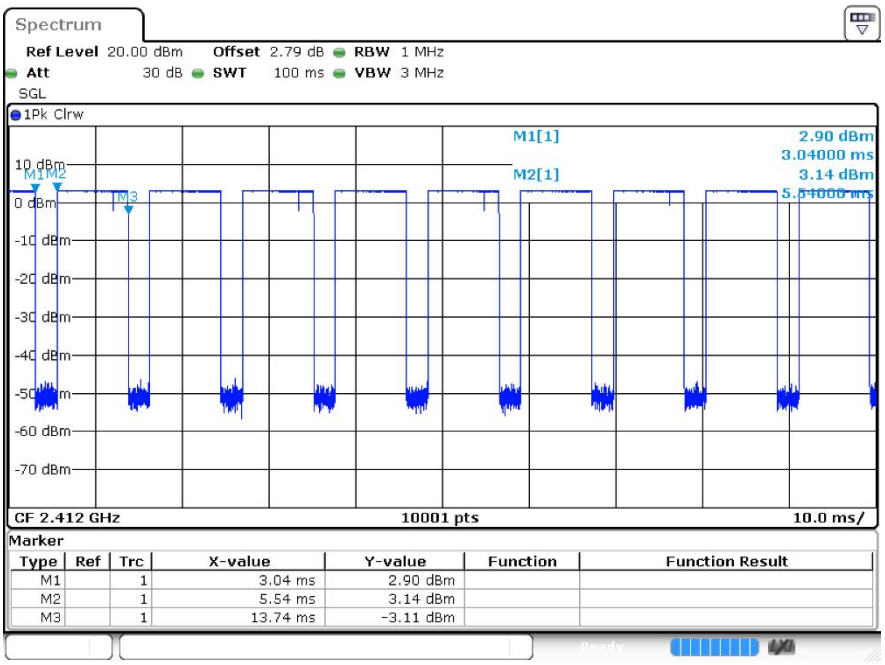


Duty Cyclen40 2452MHz Ant1

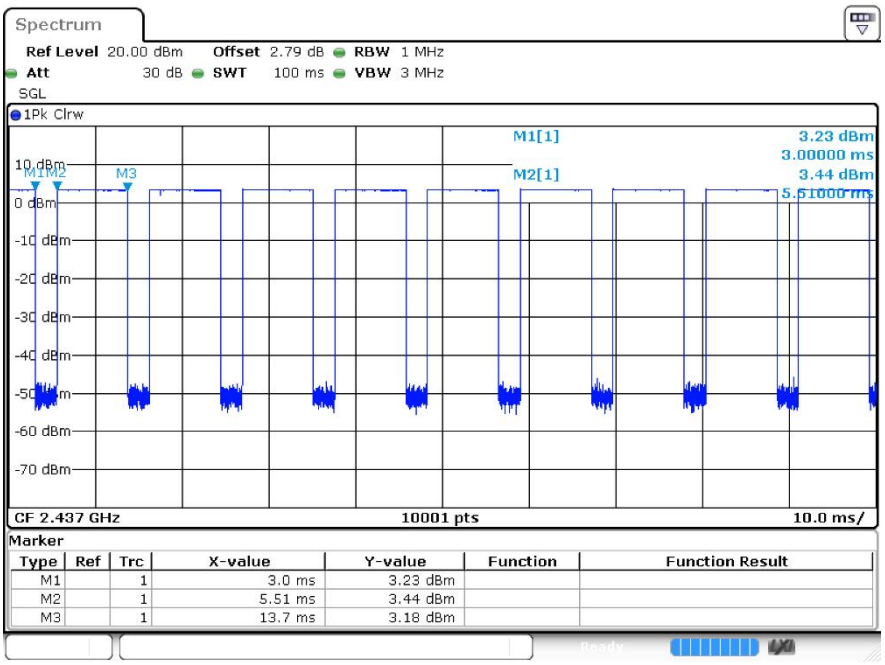


Test Graphs

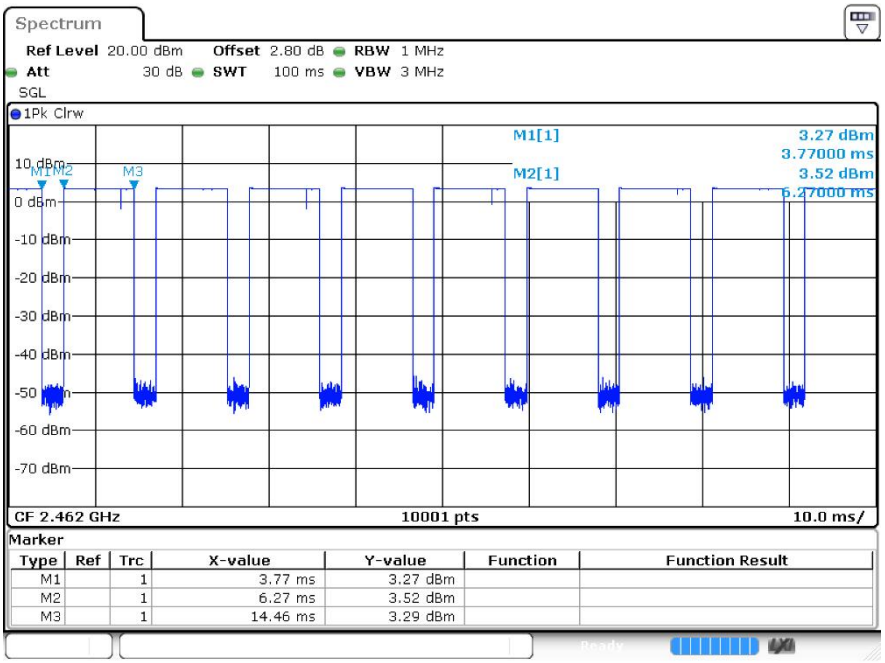
Duty Cycleb 2412MHz Ant2



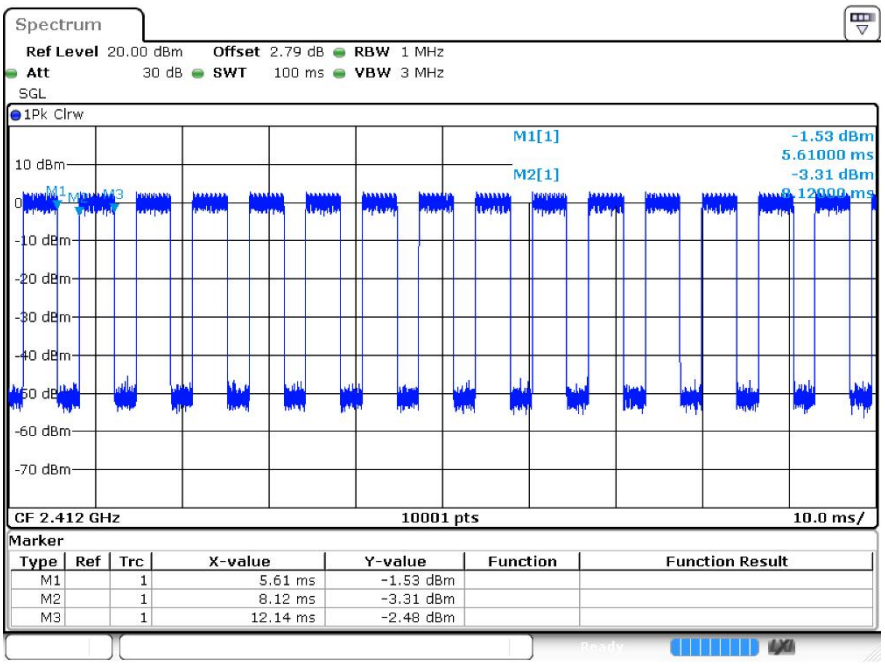
Duty Cycleb 2437MHz Ant2



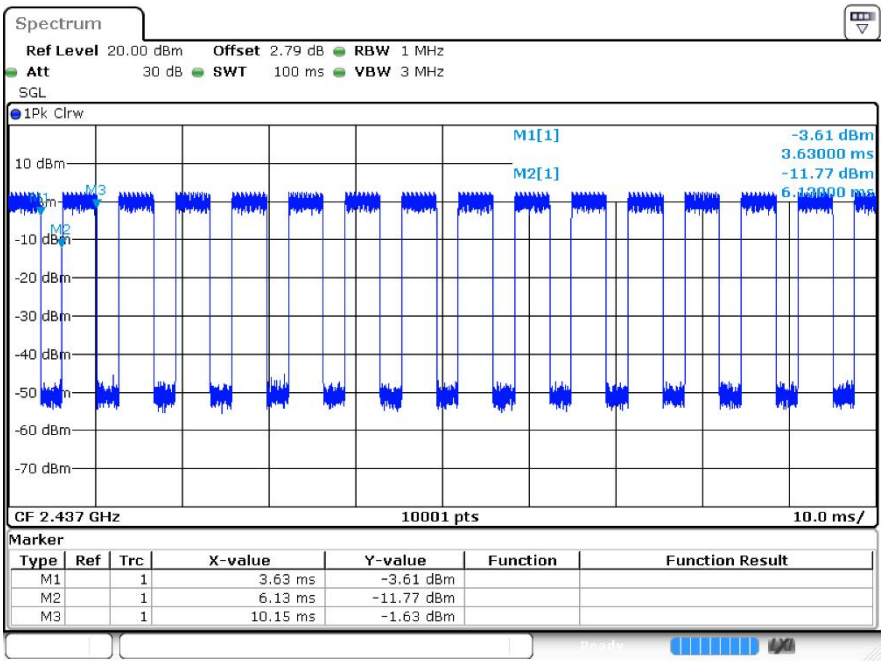
Duty Cycleb 2462MHz Ant2



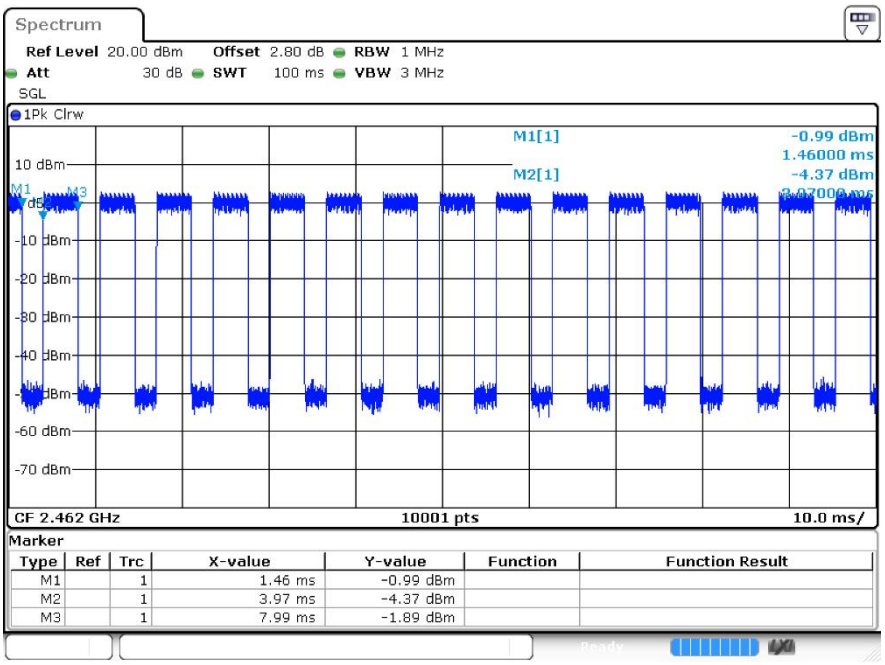
Duty Cycleg 2412MHz Ant2



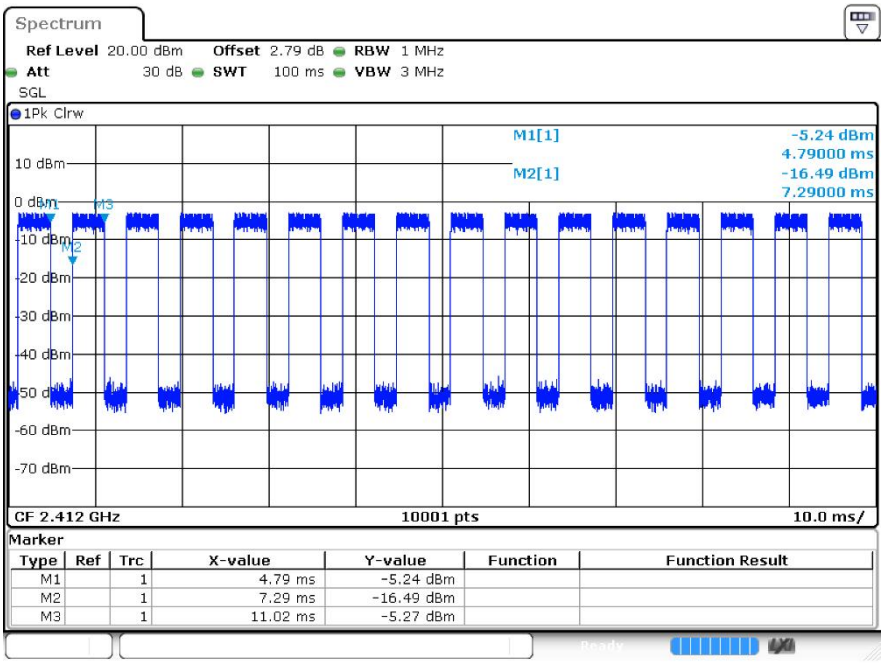
Duty Cycleg 2437MHz Ant2



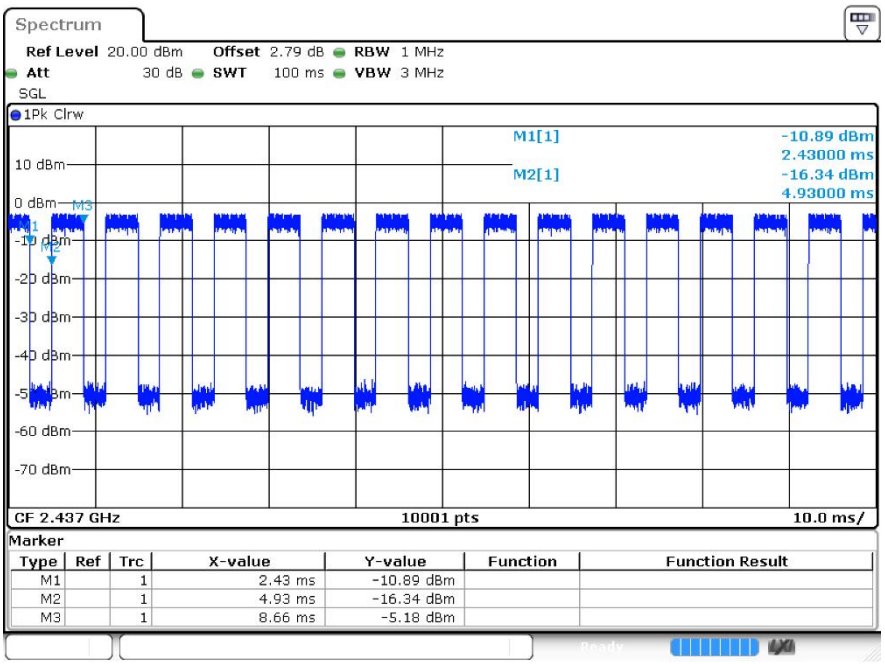
Duty Cycleg 2462MHz Ant2



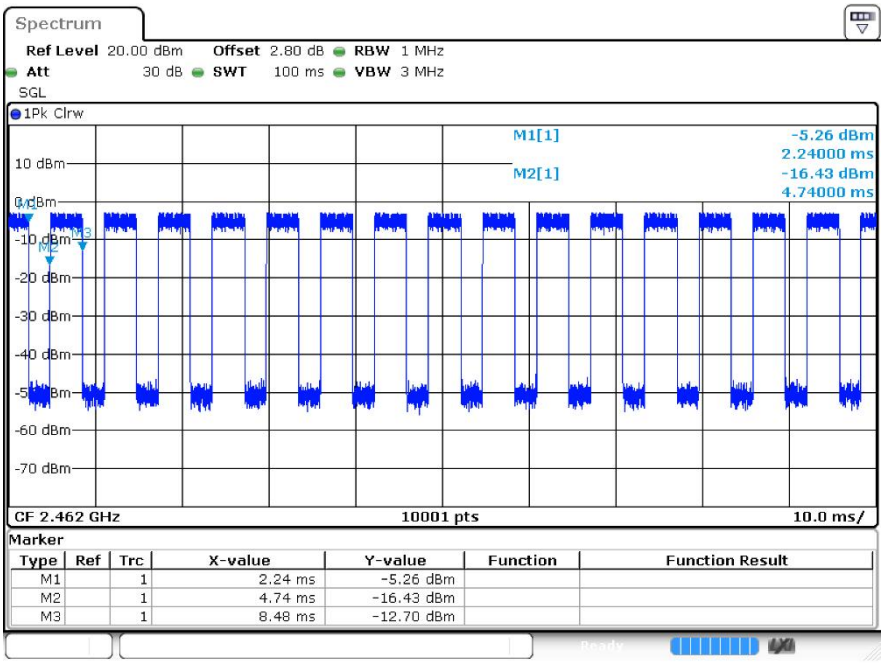
Duty Cyclen20 2412MHz Ant2



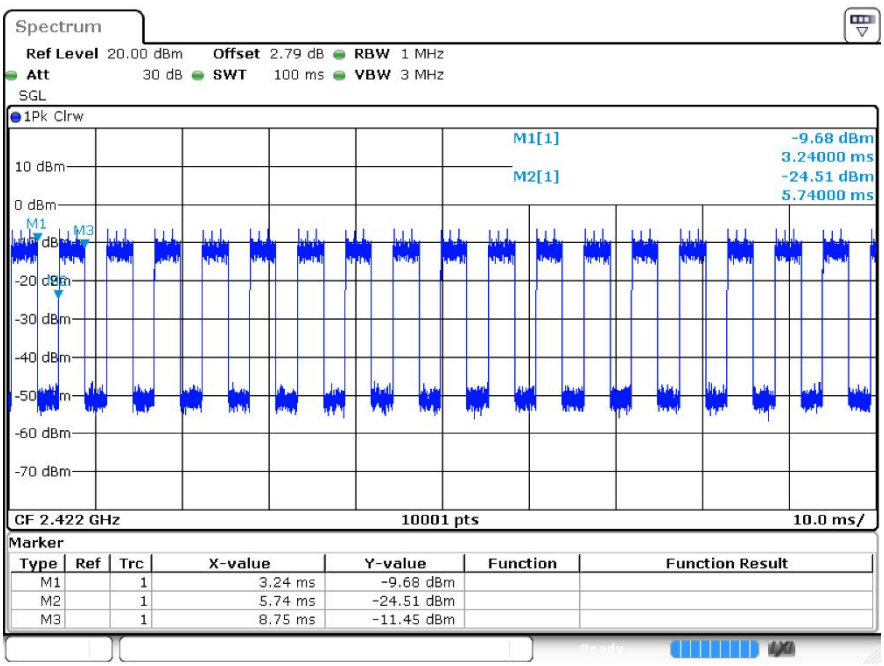
Duty Cyclen20 2437MHz Ant2



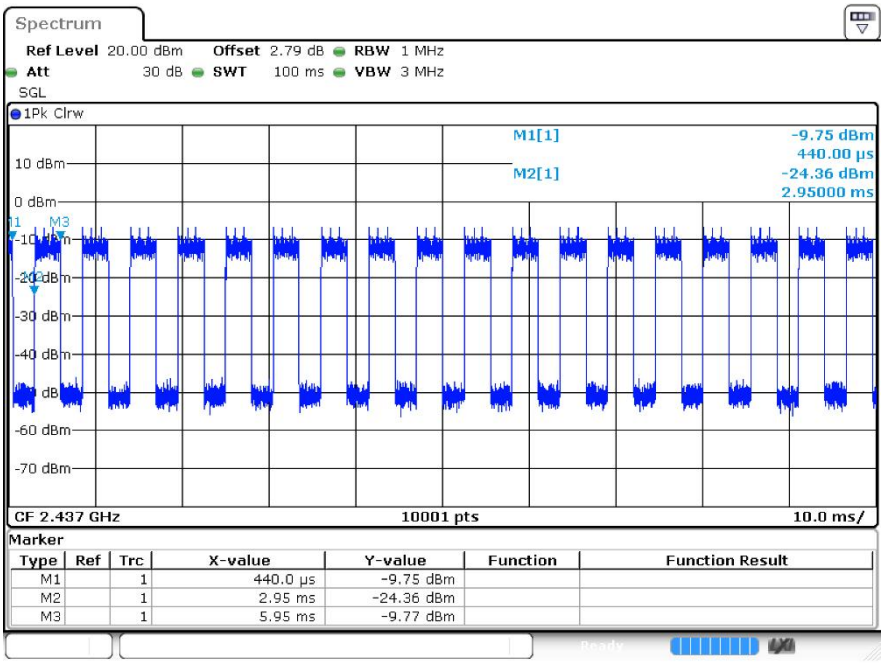
Duty Cyclen20 2462MHz Ant2



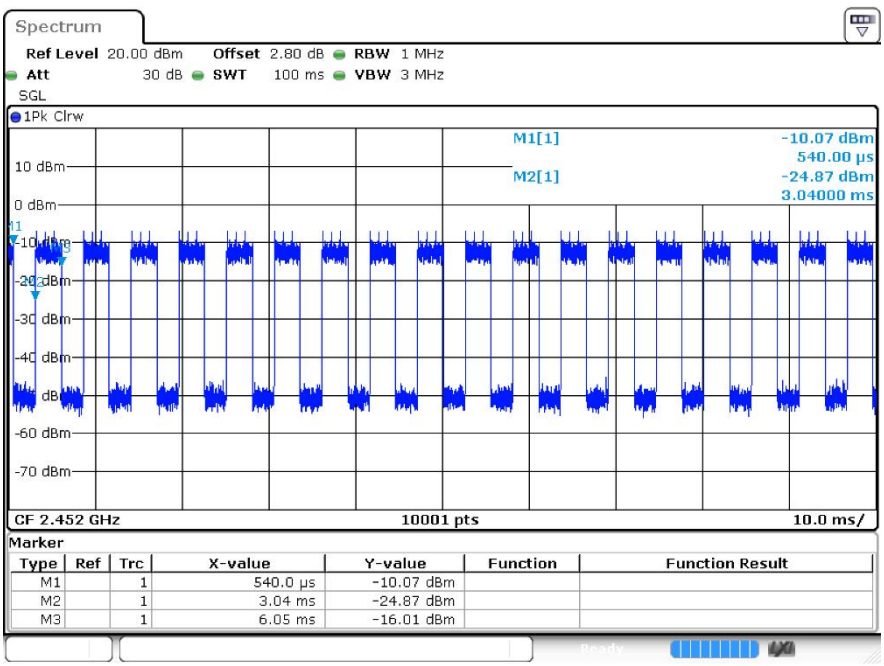
Duty Cyclen40 2422MHz Ant2



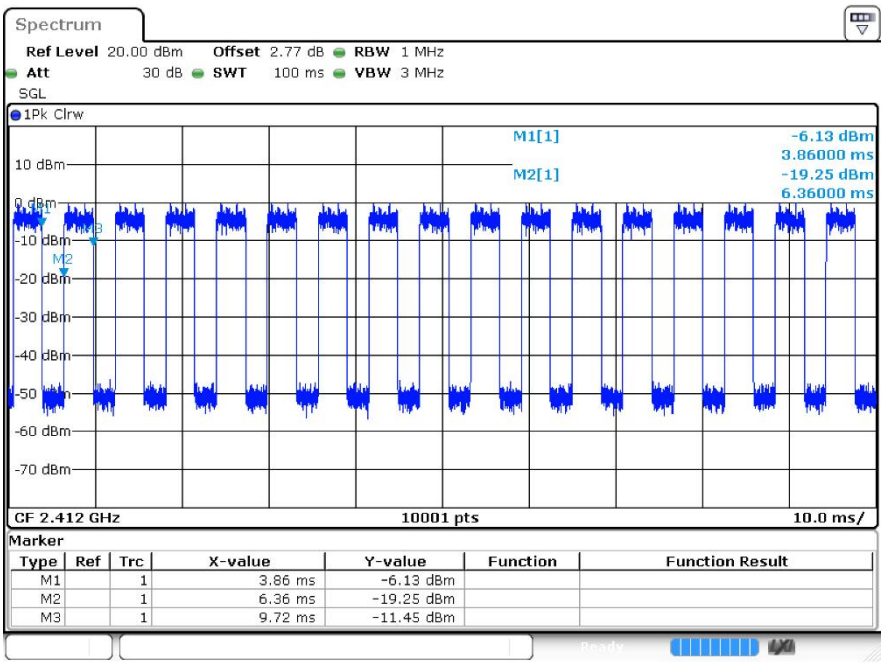
Duty Cyclen40 2437MHz Ant2



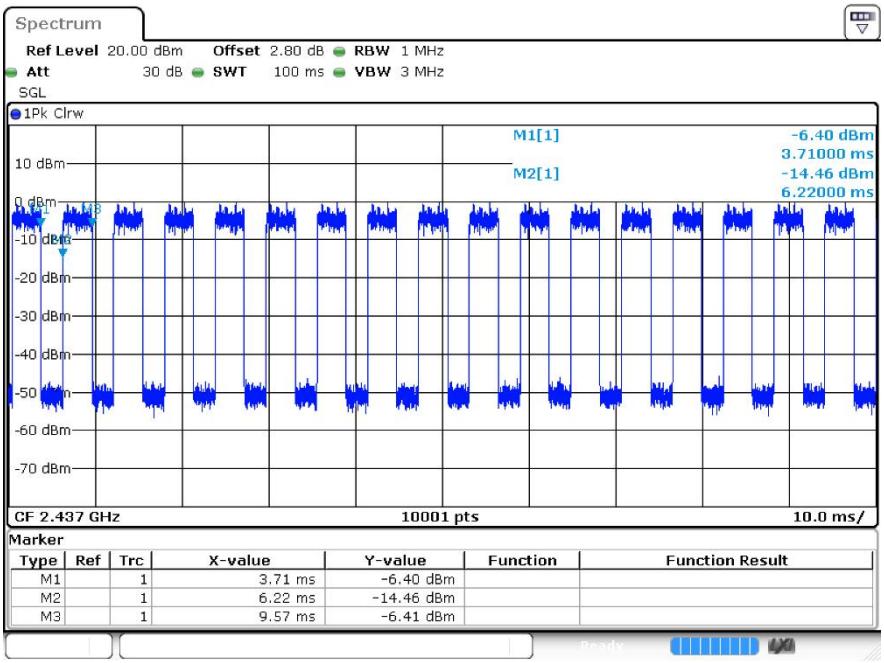
Duty Cyclen40 2452MHz Ant2



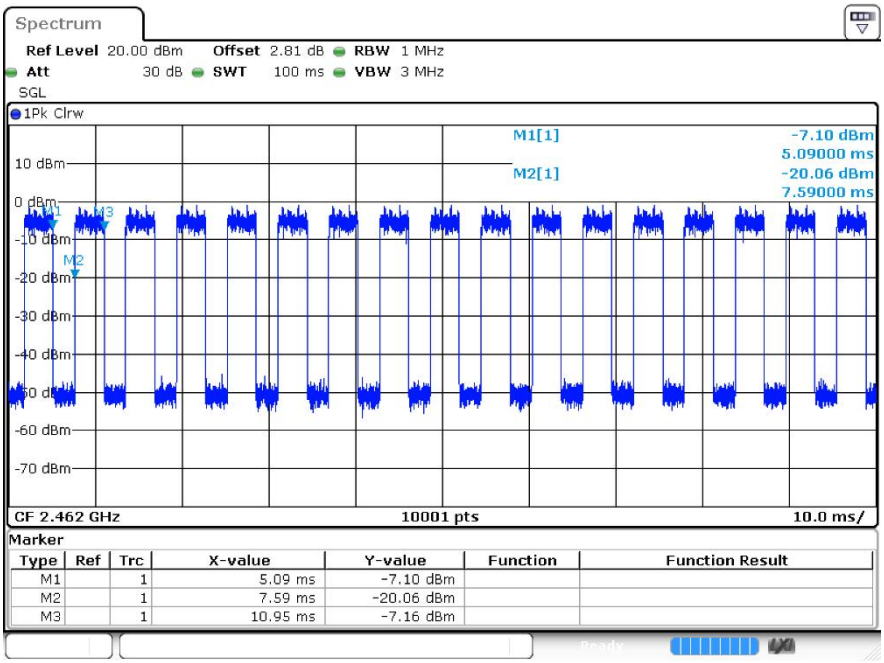
Duty Cycleax20 2412MHz Ant1



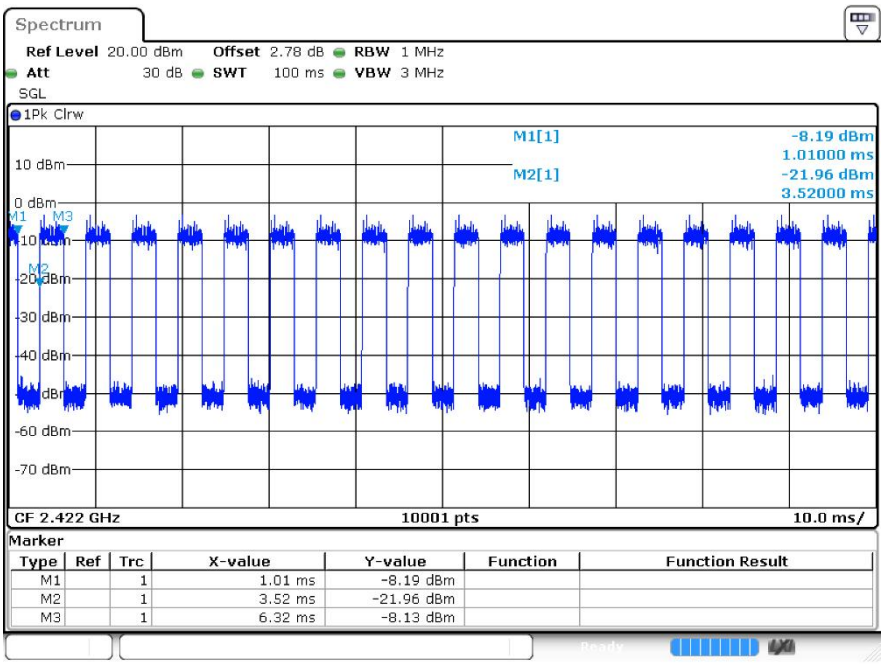
Duty Cycleax20 2437MHz Ant1



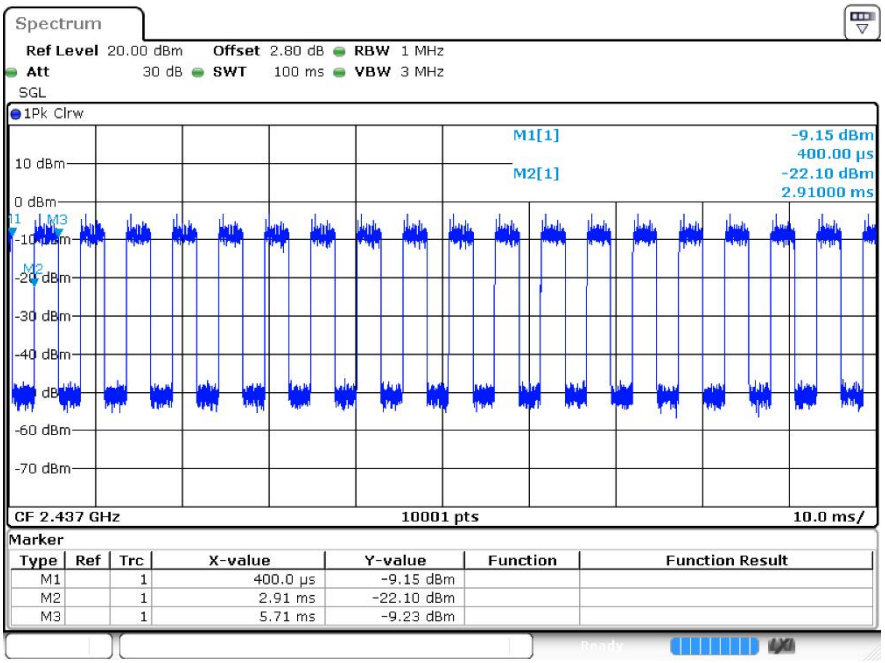
Duty Cycleax20 2462MHz Ant1



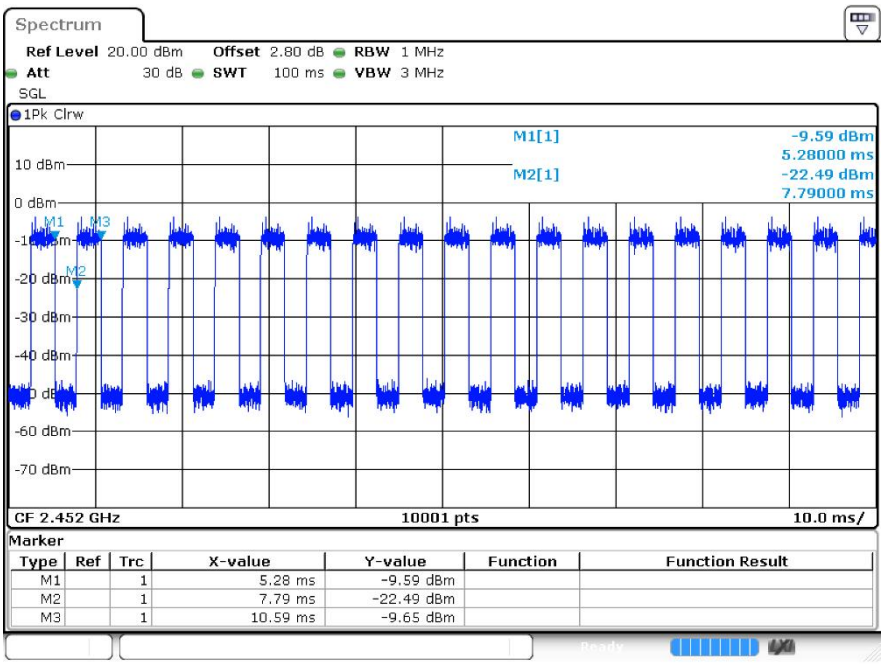
Duty Cycleax40 2422MHz Ant1



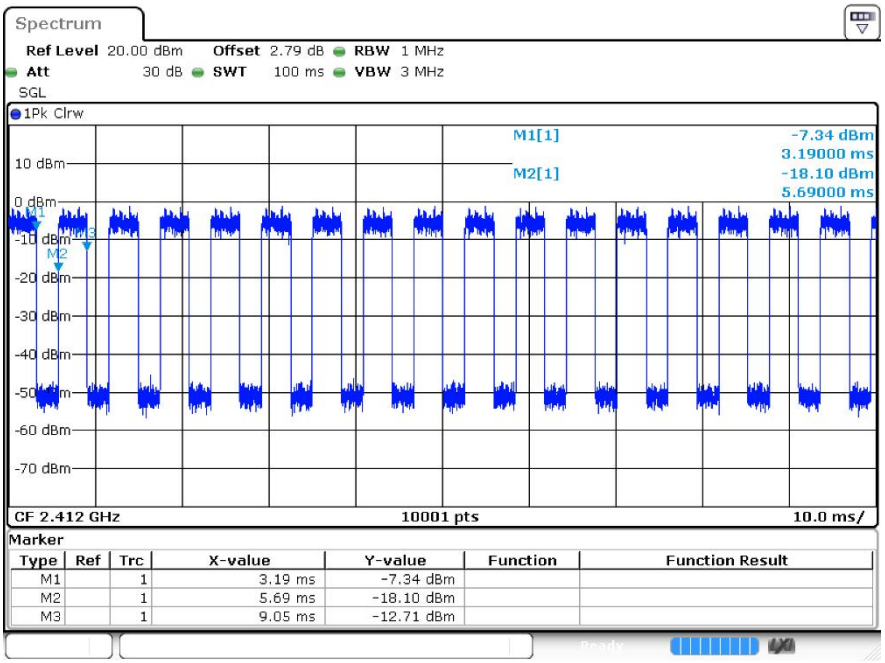
Duty Cycleax40 2437MHz Ant1



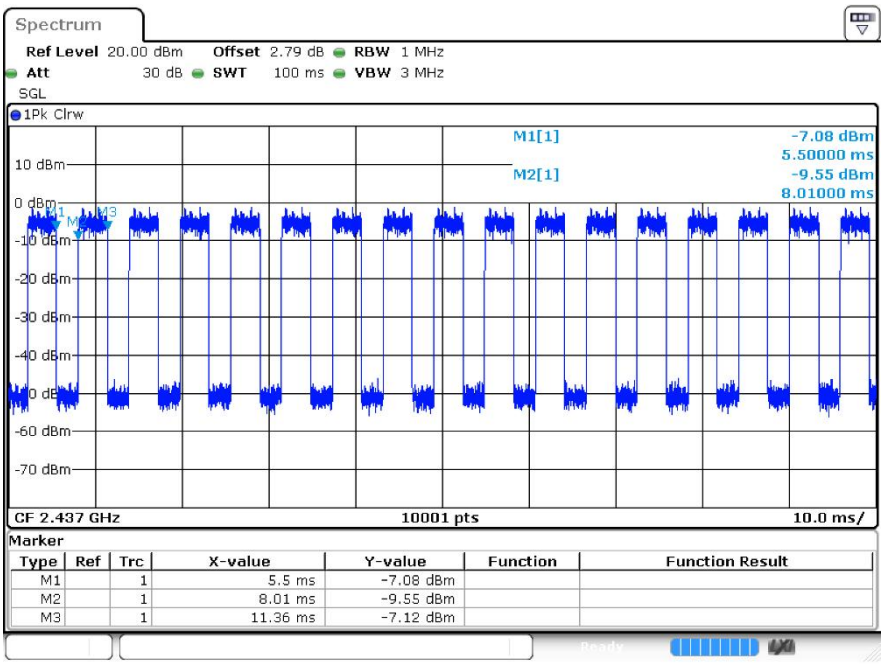
Duty Cycleax40 2452MHz Ant1



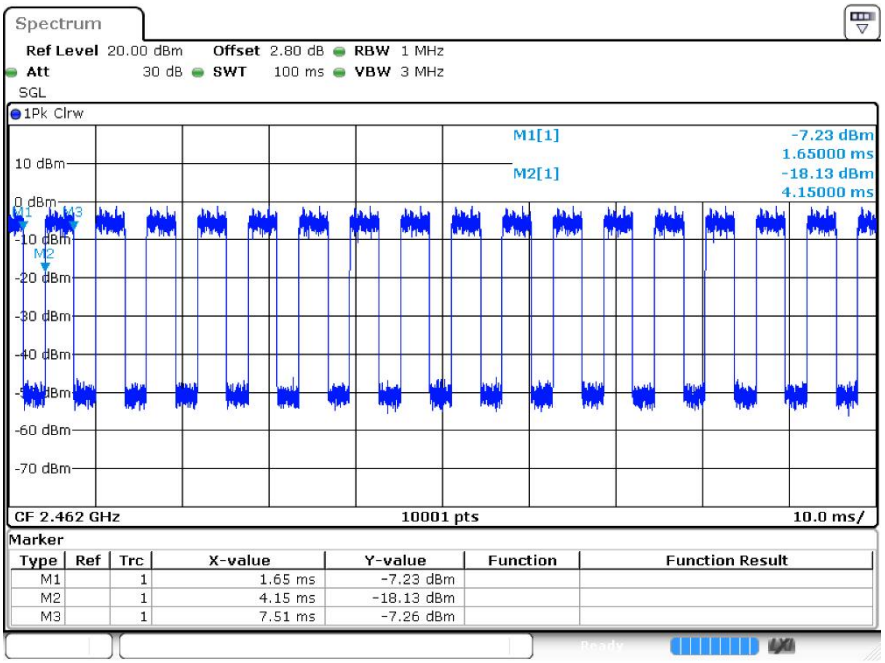
Duty Cycleax20 2412MHz Ant2



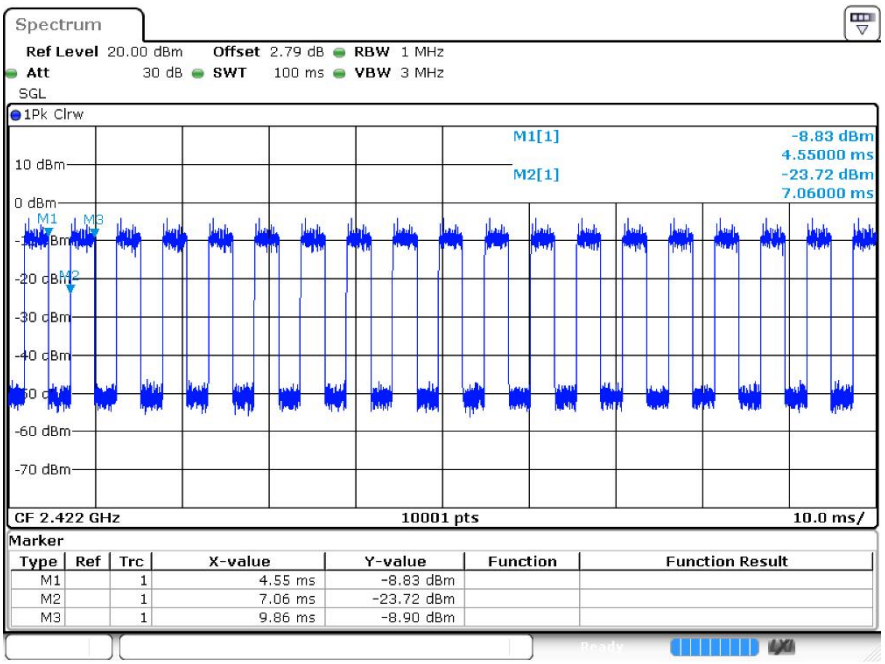
Duty Cycleax20 2437MHz Ant2



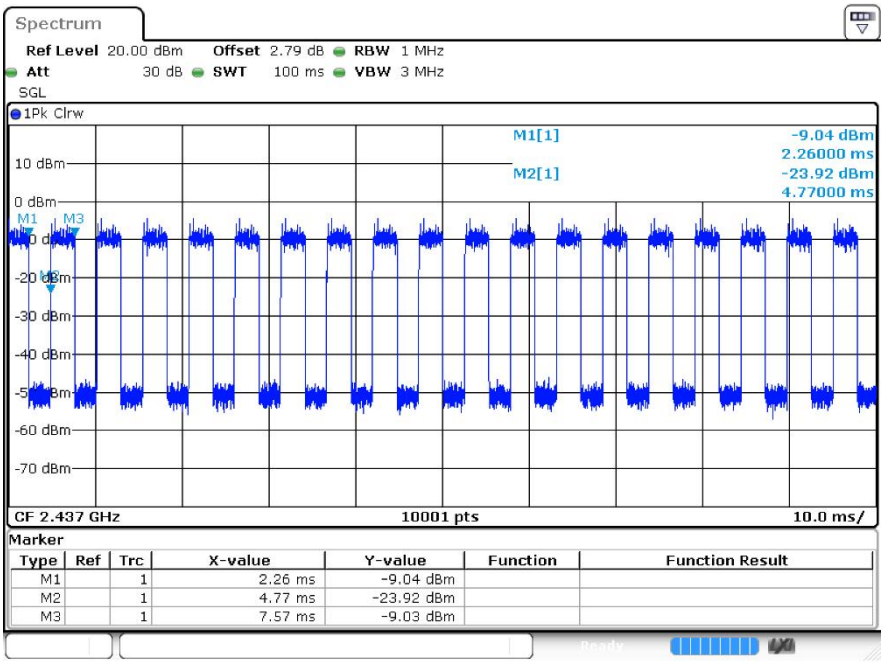
Duty Cycleax20 2462MHz Ant2



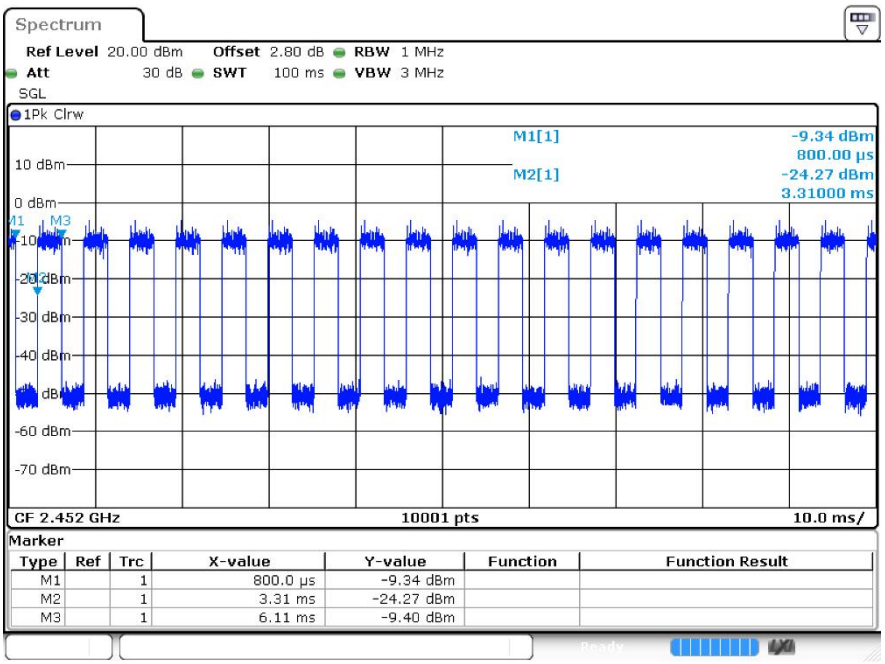
Duty Cycleax40 2422MHz Ant2



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	14.51	30	Pass
b	2437	Ant1	15.72	30	Pass
b	2462	Ant1	14.87	30	Pass
b	2412	Ant2	14.1	30	Pass
b	2437	Ant2	14.38	30	Pass
b	2462	Ant2	14.74	30	Pass
g	2412	Ant1	14.08	30	Pass
g	2437	Ant1	13.55	30	Pass
g	2462	Ant1	13.28	30	Pass
g	2412	Ant2	13.04	30	Pass
g	2437	Ant2	12.76	30	Pass
g	2462	Ant2	13.01	30	Pass
n20	2412	Ant1	11.28	30	Pass
n20	2437	Ant1	10.83	30	Pass
n20	2462	Ant1	10.28	30	Pass
n20	2412	Ant2	10.07	30	Pass
n20	2437	Ant2	10.16	30	Pass
n20	2462	Ant2	9.98	30	Pass
n20	2412	Sum	13.73	29.65	Pass
n20	2437	Sum	13.52	29.65	Pass
n20	2462	Sum	13.14	29.65	Pass
n40	2422	Ant1	10.42	30	Pass
n40	2437	Ant1	10.1	30	Pass
n40	2452	Ant1	10.08	30	Pass
n40	2422	Ant2	9.62	30	Pass
n40	2437	Ant2	9.39	30	Pass
n40	2452	Ant2	9.37	30	Pass
n40	2422	Sum	13.05	29.65	Pass
n40	2437	Sum	12.77	29.65	Pass
n40	2452	Sum	12.75	29.65	Pass
ax20	2412	Ant1	10.83	30	Pass
ax20	2437	Ant1	10.79	30	Pass

ax20	2462	Ant1	10.36	30	Pass
ax20	2412	Ant2	9.98	30	Pass
ax20	2437	Ant2	10.14	30	Pass
ax20	2462	Ant2	10.17	30	Pass
ax20	2412	Sum	13.44	29.65	Pass
ax20	2437	Sum	13.49	29.65	Pass
ax20	2462	Sum	13.28	29.65	Pass
ax40	2422	Ant1	10.57	30	Pass
ax40	2437	Ant1	10.18	30	Pass
ax40	2452	Ant1	9.94	30	Pass
ax40	2422	Ant2	9.49	30	Pass
ax40	2437	Ant2	9.3	30	Pass
ax40	2452	Ant2	9.17	30	Pass
ax40	2422	Sum	13.07	29.65	Pass
ax40	2437	Sum	12.77	29.65	Pass
ax40	2452	Sum	12.58	29.65	Pass

Note: The Direction Gain is 6.35 dBi, the Limit decreases by 0.35 dB.

3 -6dB Bandwidth

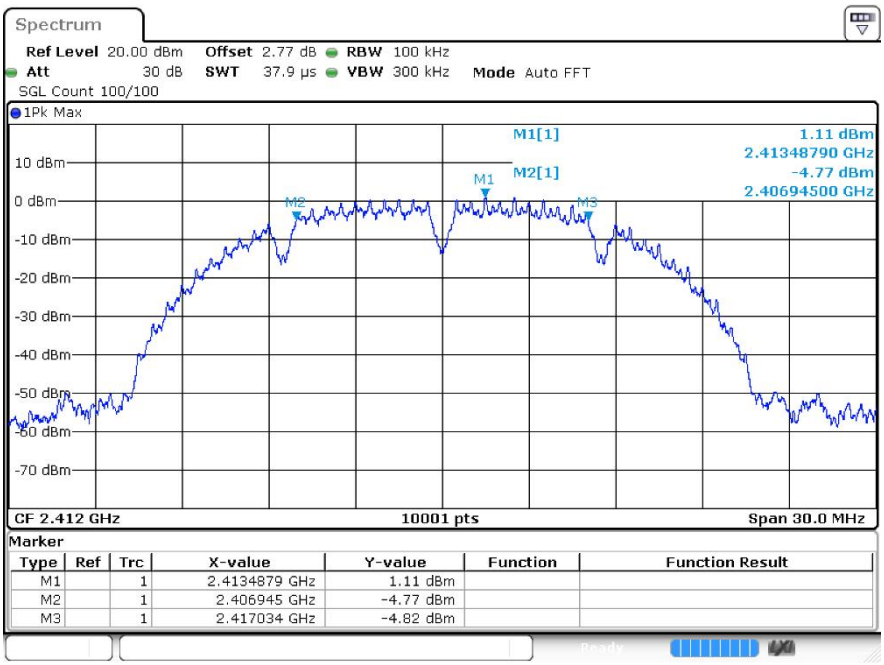
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant1	10.089	0.5	Pass
b	2437	Ant1	10.125	0.5	Pass
b	2462	Ant1	10.092	0.5	Pass
g	2412	Ant1	16.398	0.5	Pass
g	2437	Ant1	16.398	0.5	Pass
g	2462	Ant1	16.332	0.5	Pass
n20	2412	Ant1	17.64	0.5	Pass
n20	2437	Ant1	17.646	0.5	Pass
n20	2462	Ant1	17.661	0.5	Pass
n40	2422	Ant1	36.372	0.5	Pass
n40	2437	Ant1	36.318	0.5	Pass
n40	2452	Ant1	35.424	0.5	Pass
ax20	2412	Ant1	18.999	0.5	Pass
ax20	2437	Ant1	18.906	0.5	Pass
ax20	2462	Ant1	19.074	0.5	Pass
ax40	2422	Ant1	37.566	0.5	Pass
ax40	2437	Ant1	38.088	0.5	Pass
ax40	2452	Ant1	35.412	0.5	Pass
b	2412	Ant2	11.088	0.5	Pass
b	2437	Ant2	10.086	0.5	Pass
b	2462	Ant2	10.119	0.5	Pass
g	2412	Ant2	16.455	0.5	Pass
g	2437	Ant2	16.458	0.5	Pass
g	2462	Ant2	16.398	0.5	Pass
n20	2412	Ant2	17.535	0.5	Pass
n20	2437	Ant2	17.61	0.5	Pass
n20	2462	Ant2	17.628	0.5	Pass
n40	2422	Ant2	35.28	0.5	Pass
n40	2437	Ant2	36.354	0.5	Pass
n40	2452	Ant2	36.36	0.5	Pass
ax20	2412	Ant2	19.011	0.5	Pass
ax20	2437	Ant2	19.002	0.5	Pass
ax20	2462	Ant2	17.976	0.5	Pass
ax40	2422	Ant2	38.088	0.5	Pass
ax40	2437	Ant2	37.884	0.5	Pass
ax40	2452	Ant2	37.92	0.5	Pass

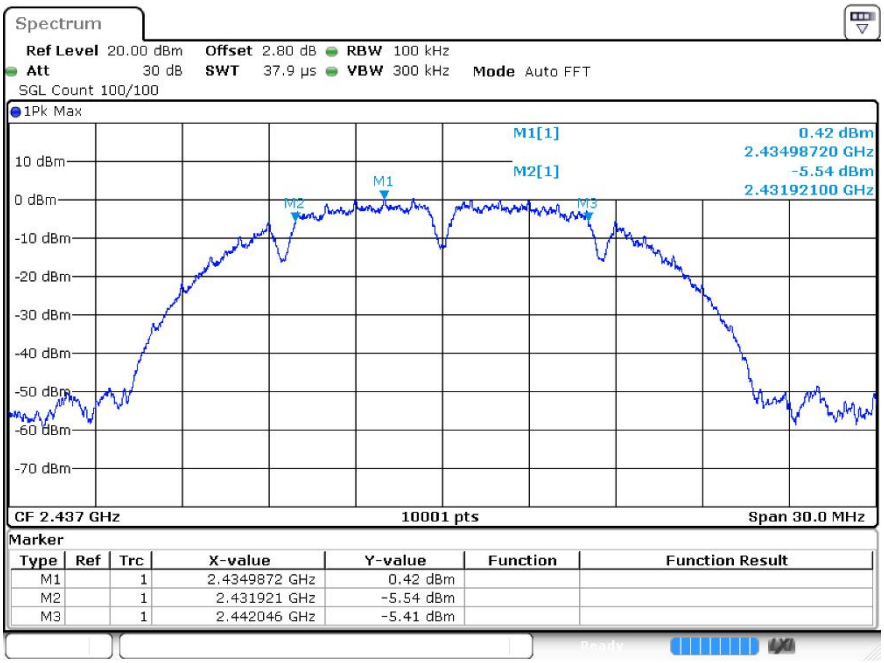
3.2 Test Graphs

Test Graphs

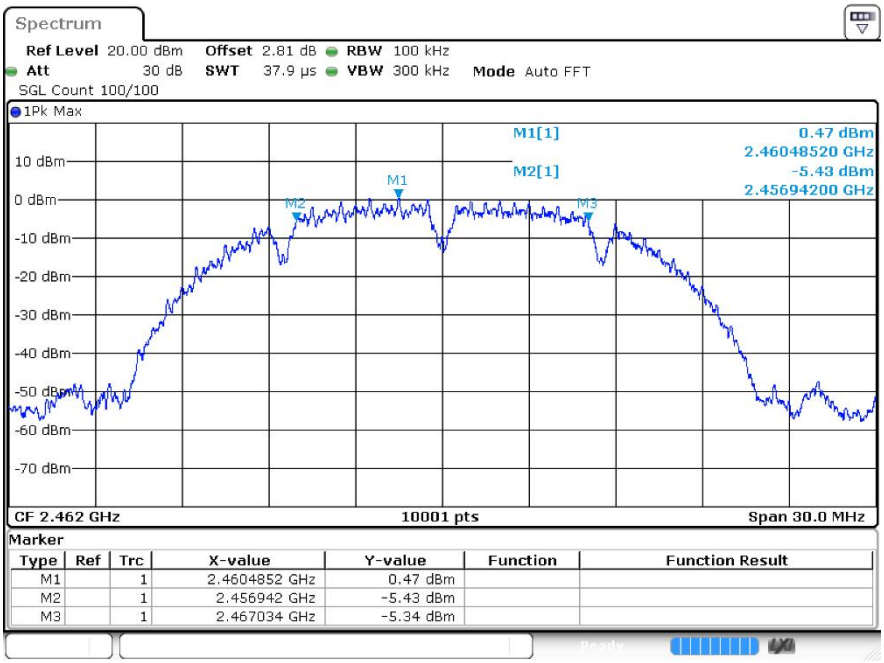
b 2412MHz Ant1



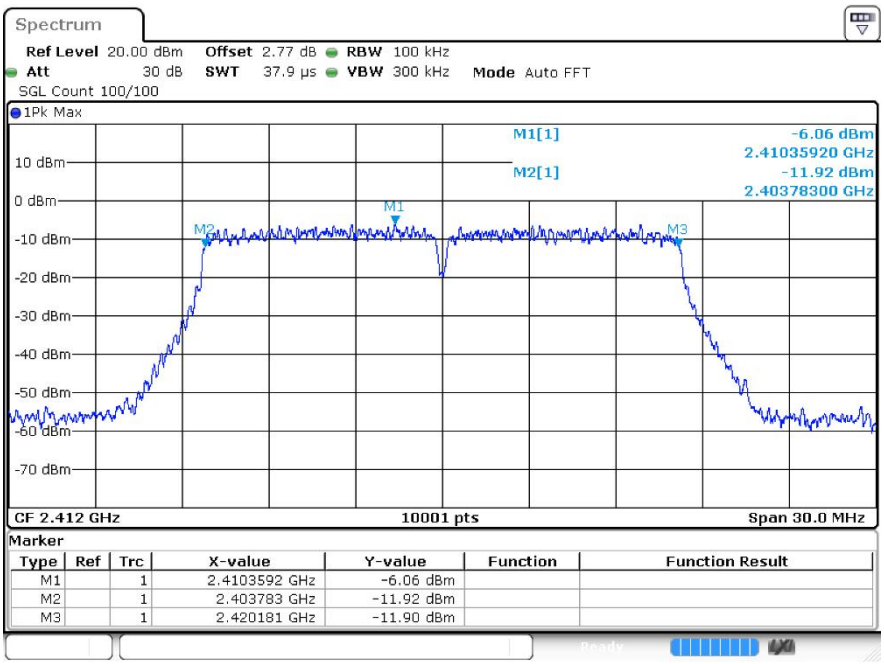
b 2437MHz Ant1



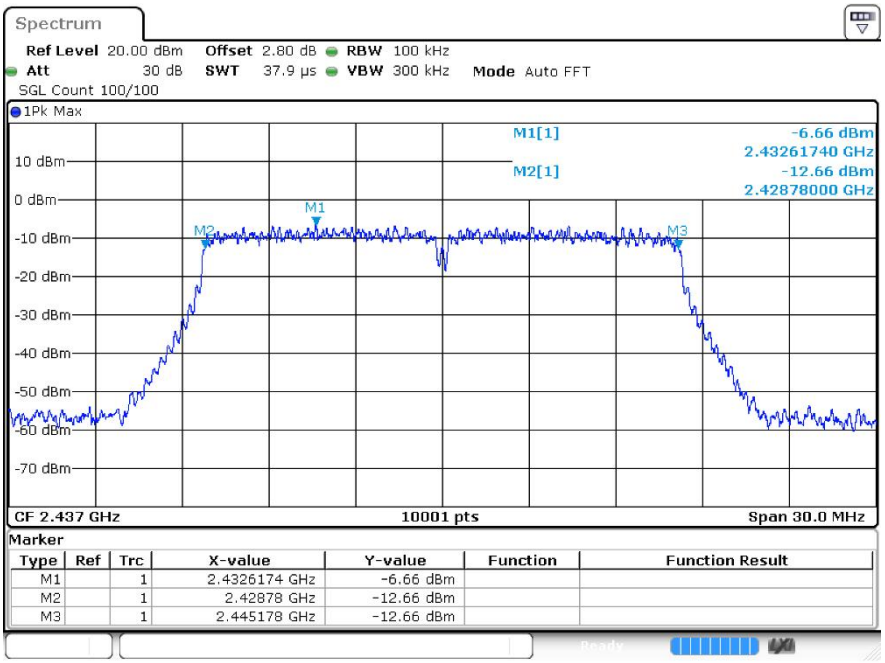
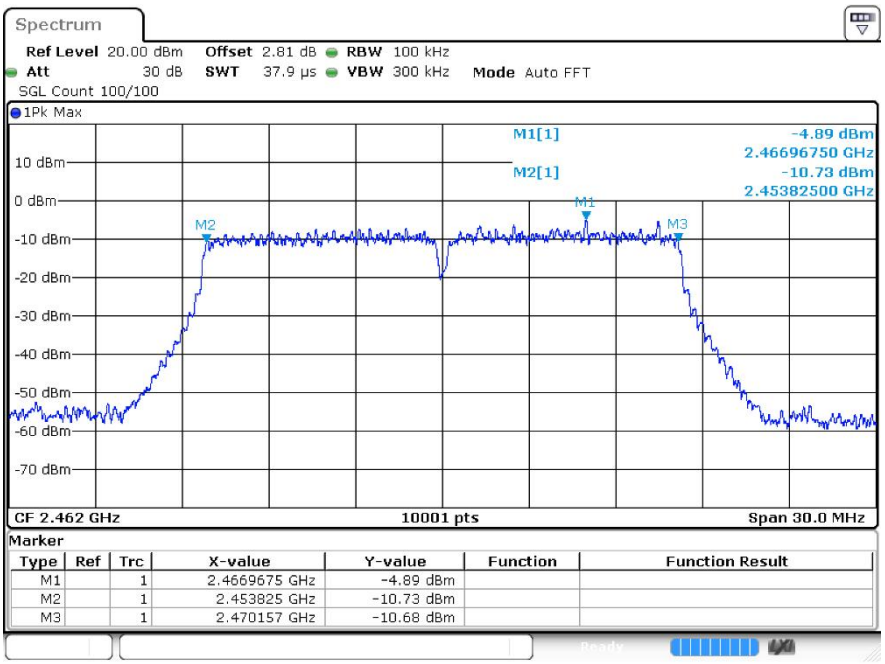
b 2462MHz Ant1



g 2412MHz Ant1



g 2437MHz Ant1



g 2462MHz Ant1