



Appendix D

RF Test Data for B1WIFI(Conducted Measurement)

Product Name: Mini PC

Trade Mark: Huidun

Test Model: H60

Environmental Conditions

Temperature:	25.8° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



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1 Duty Cycle

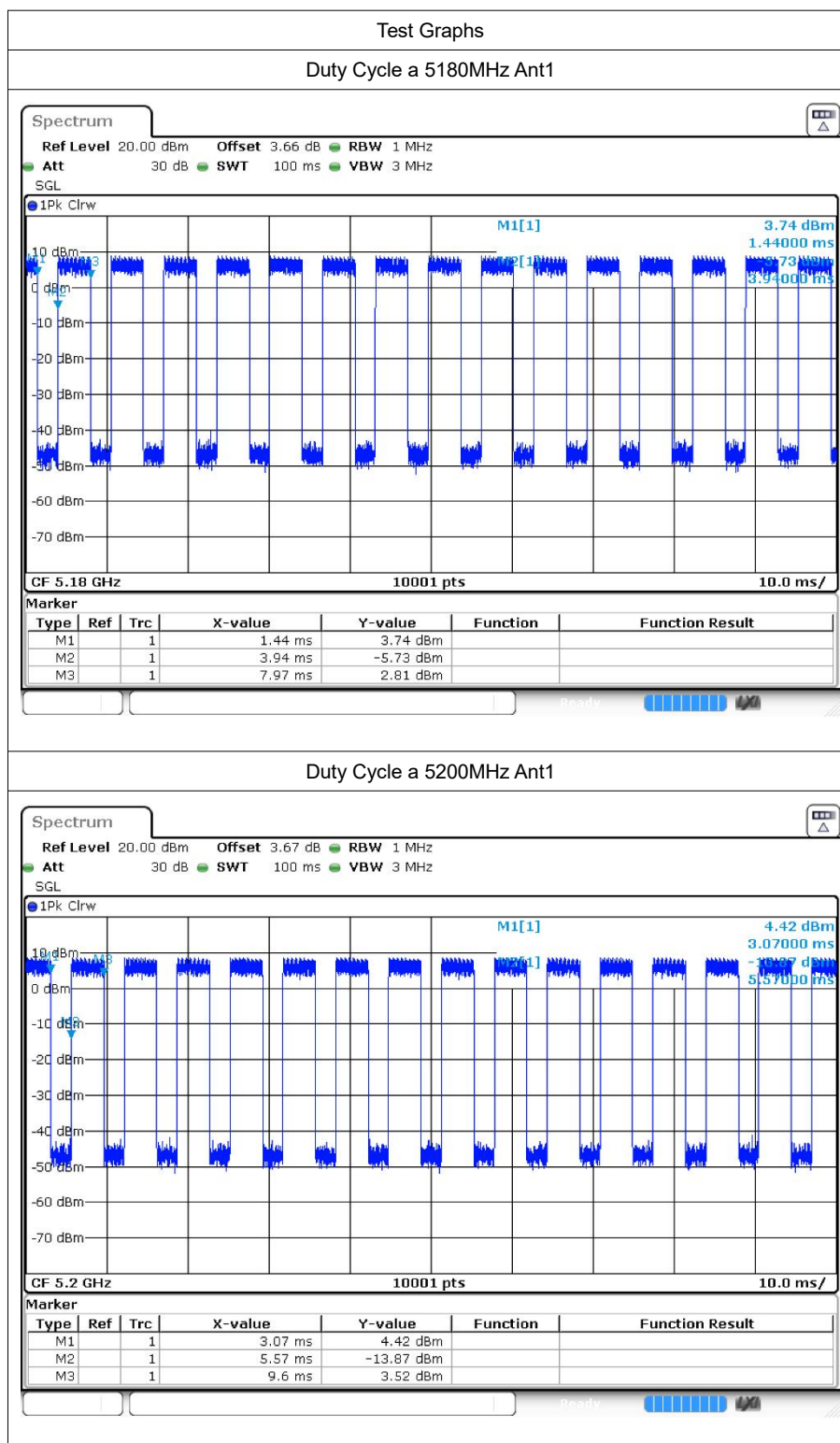
1.1 Test Result

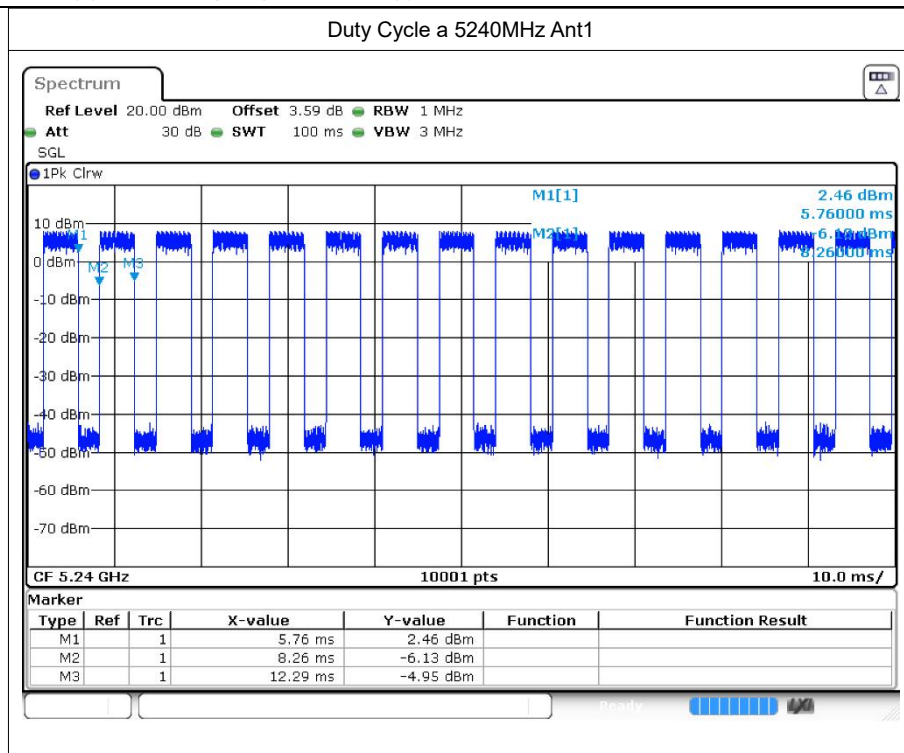
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
a	5180	Ant1	61.99	2.08	0.25
a	5200	Ant1	62.65	2.03	0.25
a	5240	Ant1	60.92	2.15	0.25
a	5180	Ant2	62.61	2.03	0.25
a	5200	Ant2	62.04	2.07	0.25
a	5240	Ant2	61.78	2.09	0.25
n20	5180	Ant1	60.14	2.21	0.27
n20	5200	Ant1	60.13	2.21	0.27
n20	5240	Ant1	60.13	2.21	0.27
n20	5180	Ant2	59.89	2.23	0.27
n20	5200	Ant2	60.13	2.21	0.27
n20	5240	Ant2	60.12	2.21	0.27
n40	5190	Ant1	58.59	2.32	0.28
n40	5230	Ant1	60.12	2.21	0.28
n40	5190	Ant2	58.99	2.29	0.28
n40	5230	Ant2	58.46	2.33	0.28
ac20	5180	Ant1	60.13	2.21	0.27
ac20	5200	Ant1	60.14	2.21	0.27
ac20	5240	Ant1	59.92	2.22	0.27
ac20	5180	Ant2	60.13	2.21	0.27
ac20	5200	Ant2	60.13	2.21	0.27
ac20	5240	Ant2	59.95	2.22	0.27
ac40	5190	Ant1	58.91	2.3	0.28
ac40	5230	Ant1	57.83	2.38	0.28
ac40	5190	Ant2	59.79	2.23	0.28
ac40	5230	Ant2	59.58	2.25	0.28
ac80	5210	Ant1	57.51	2.4	0.3
ac80	5210	Ant2	56.54	2.48	0.3
ax20	5180	Ant1	57.22	2.42	0.3
ax20	5200	Ant1	57.64	2.39	0.3
ax20	5240	Ant1	57.23	2.42	0.3
ax20	5180	Ant2	57.23	2.42	0.3
ax20	5200	Ant2	57.34	2.42	0.3
ax20	5240	Ant2	57.64	2.39	0.3
ax40	5190	Ant1	57.56	2.4	0.3
ax40	5230	Ant1	57.16	2.43	0.3
ax40	5190	Ant2	57.16	2.43	0.3



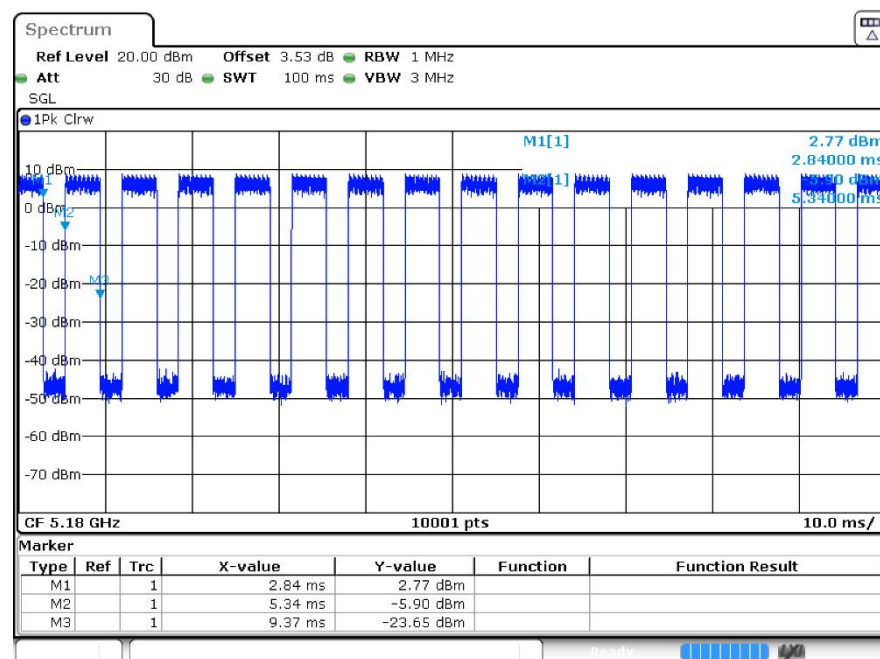
ax40	5230	Ant2	57.63	2.39	0.3
ax80	5210	Ant1	57.01	2.44	0.31
ax80	5210	Ant2	55	2.6	0.31

1.2 Test Graphs

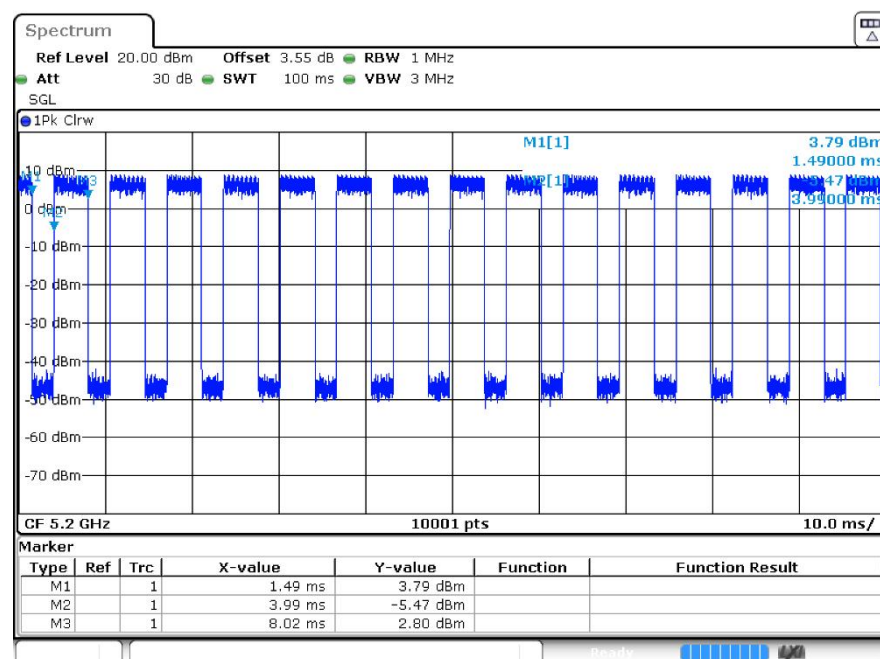


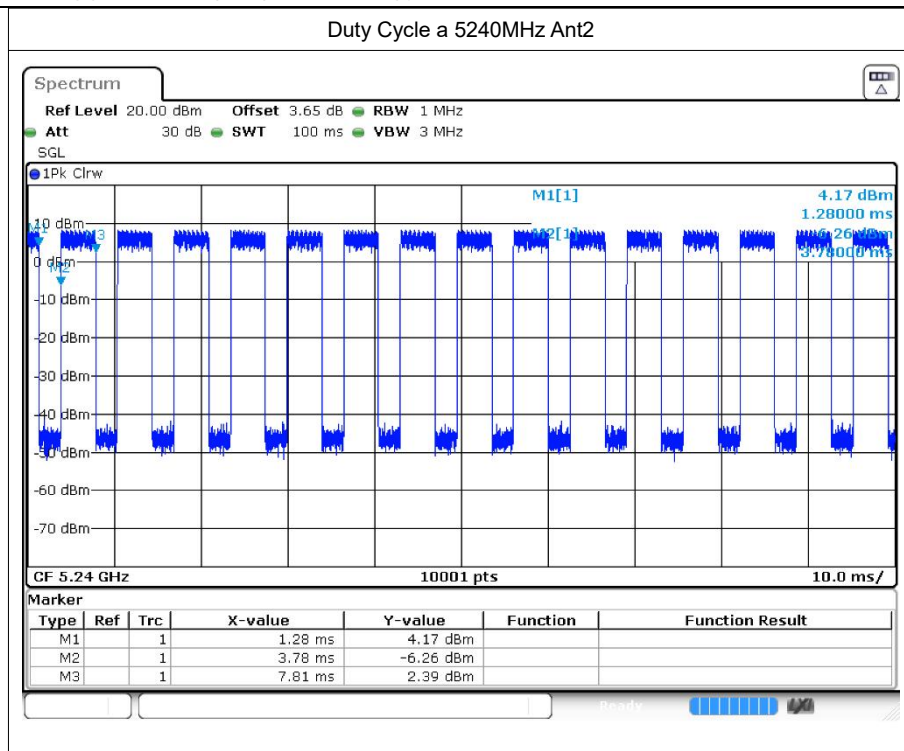


Duty Cycle a 5180MHz Ant2

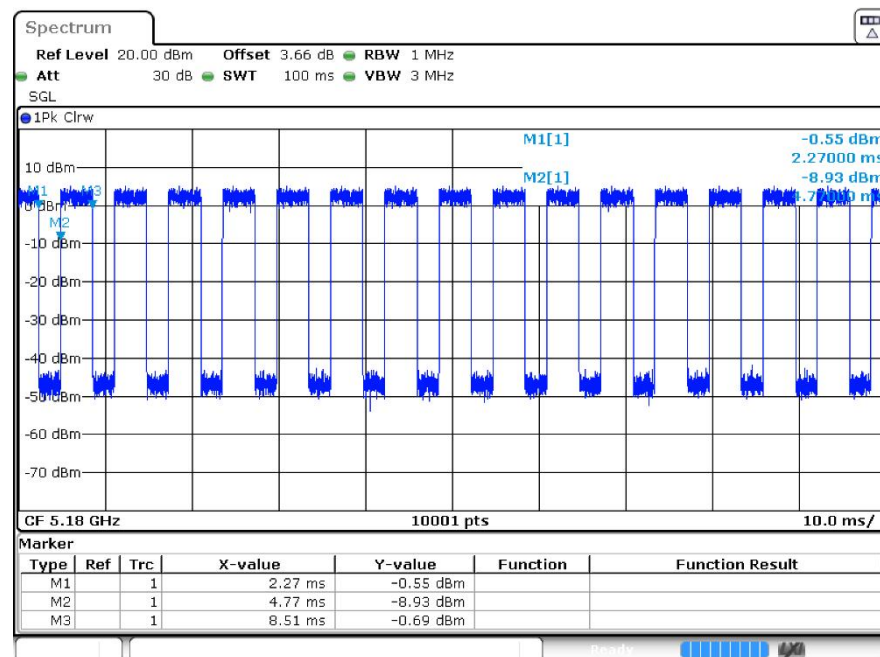


Duty Cycle a 5200MHz Ant2

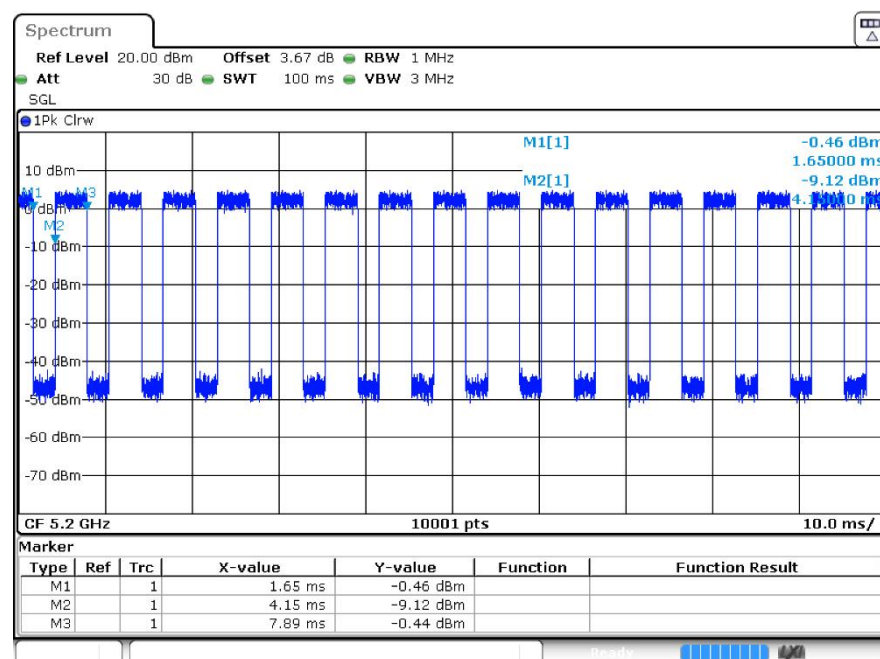


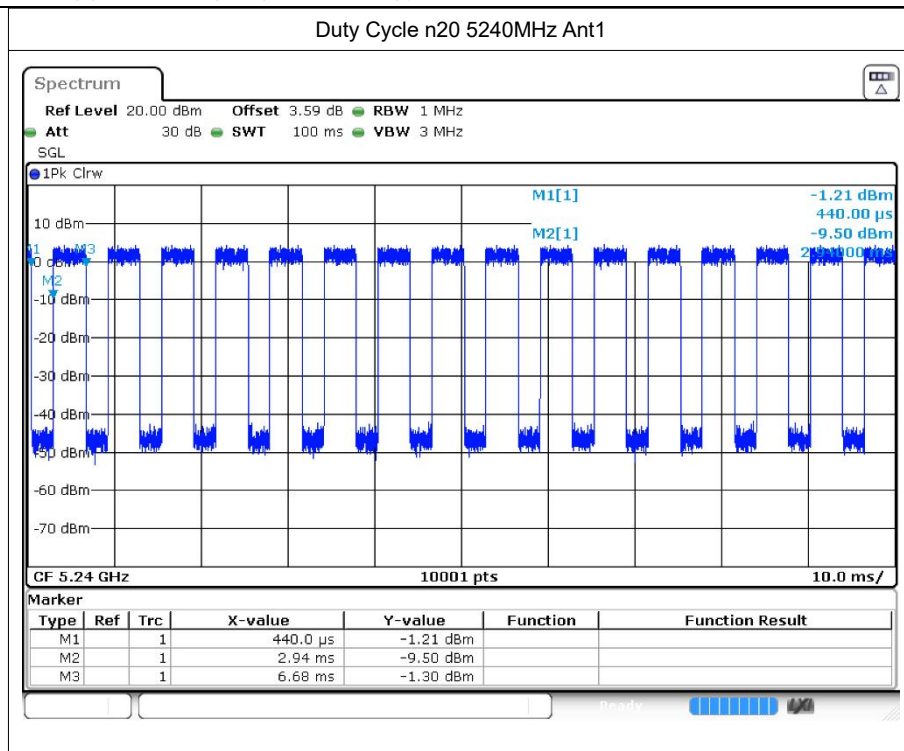


Duty Cycle n20 5180MHz Ant1

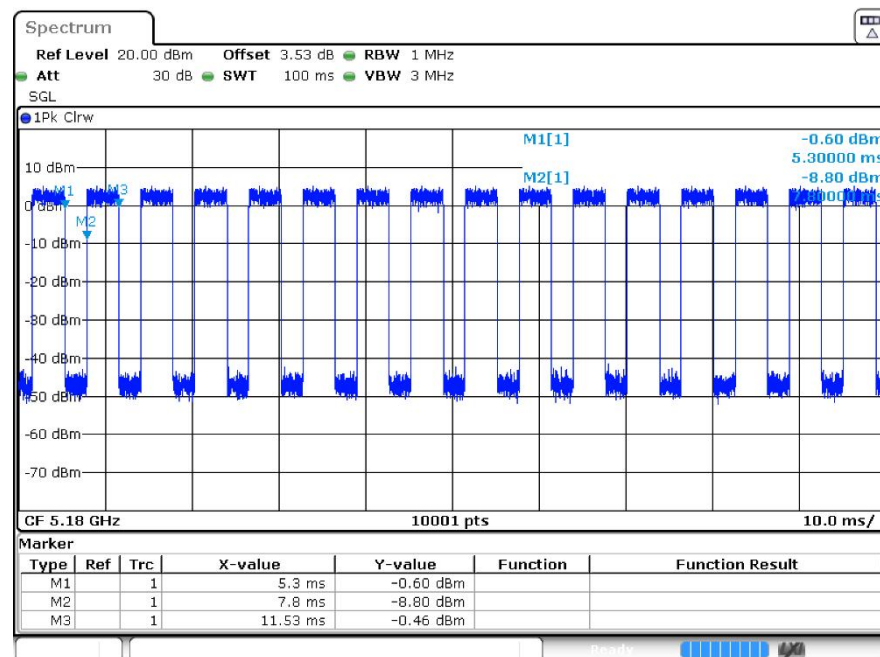


Duty Cycle n20 5200MHz Ant1

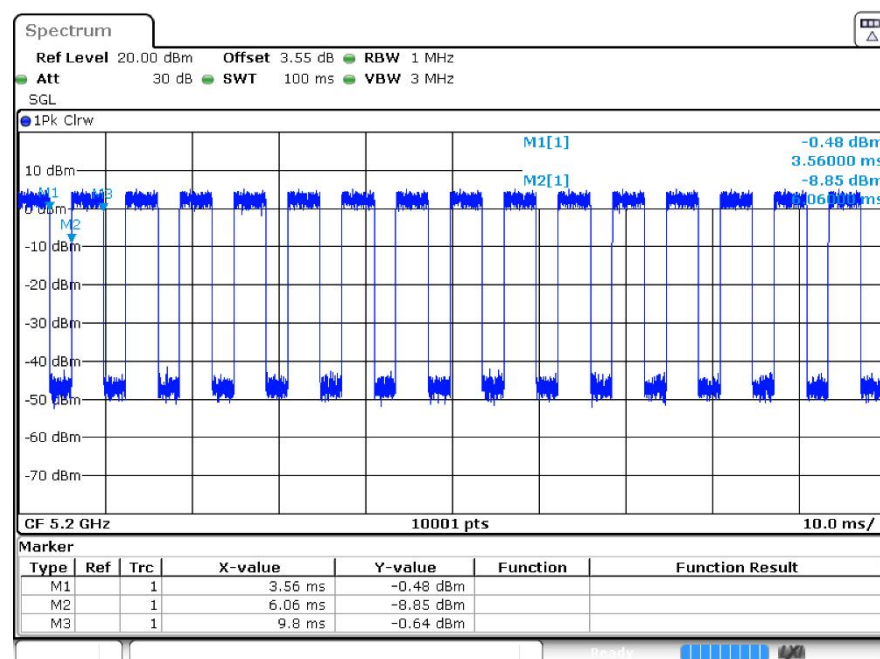


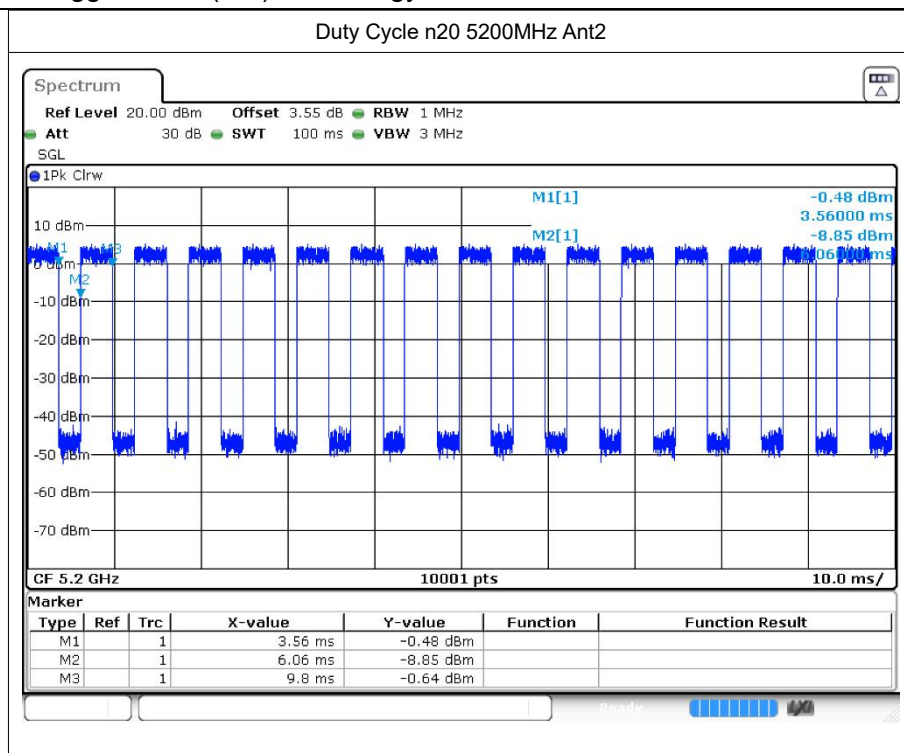


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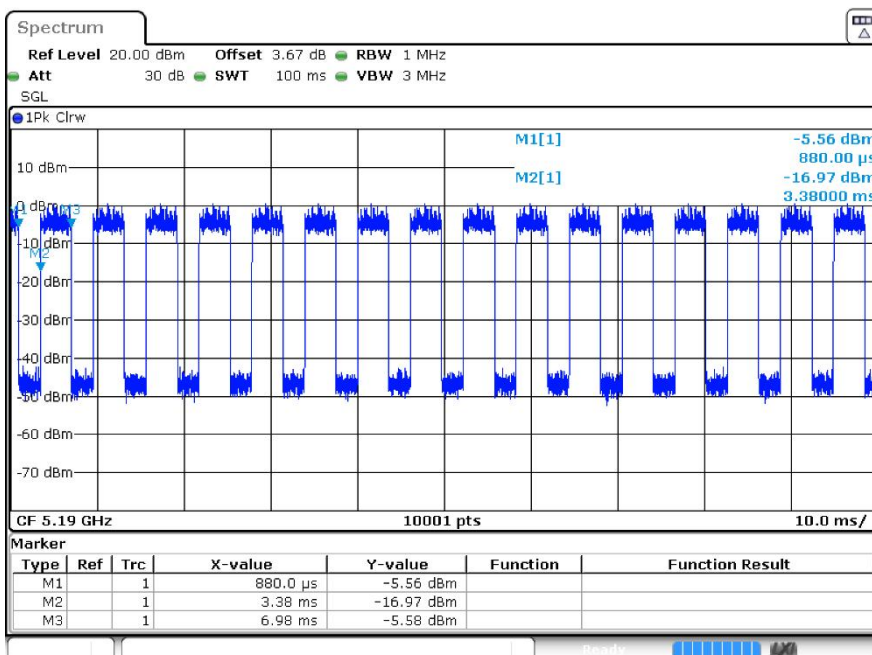


Duty Cycle n20 5200MHz Ant2

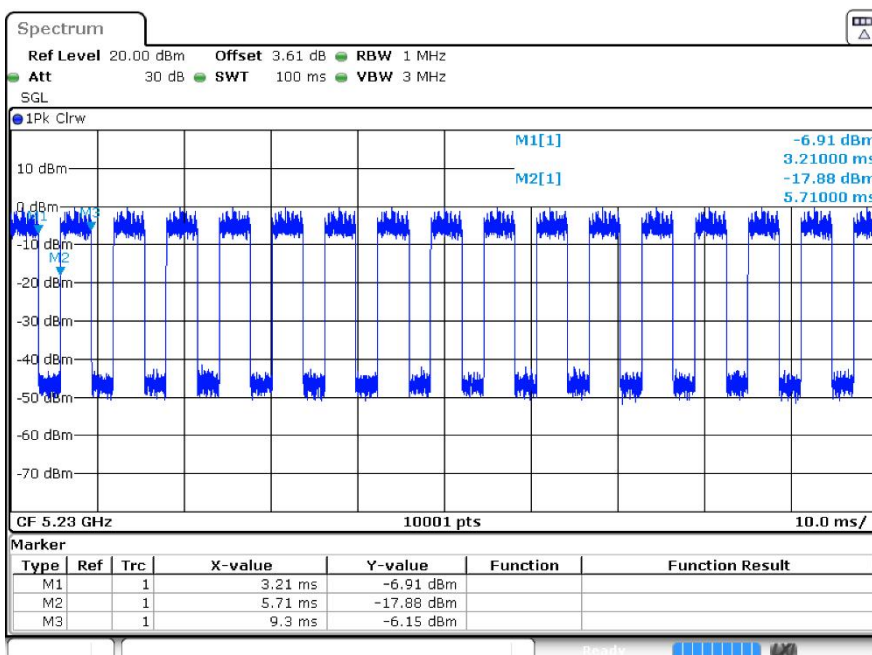




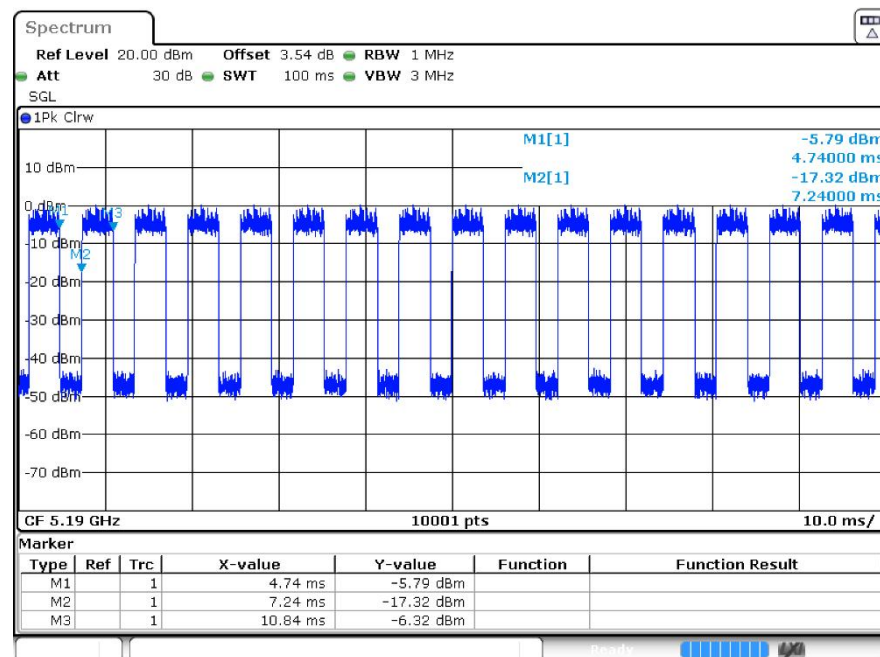
Duty Cycle n40 5190MHz Ant1



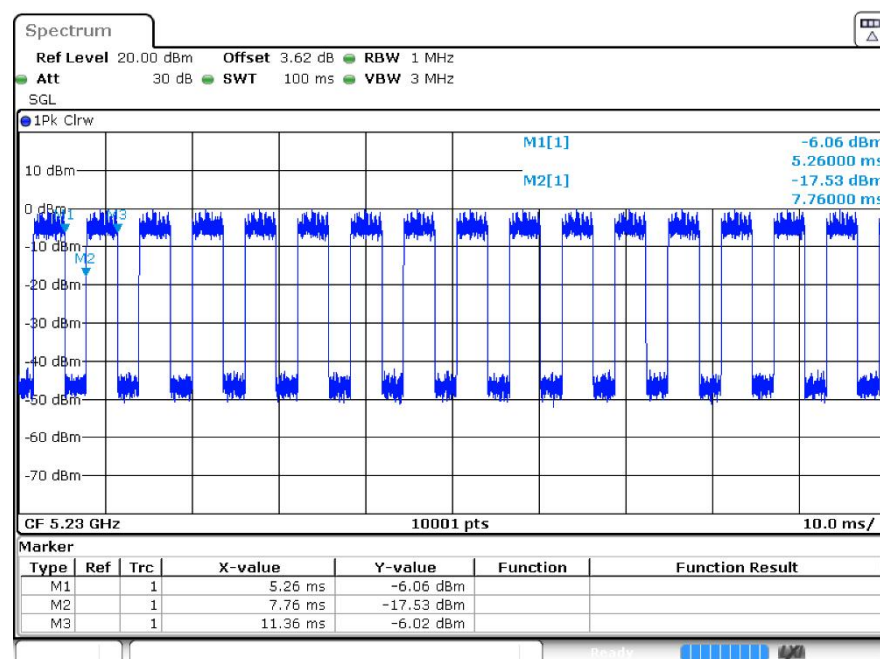
Duty Cycle n40 5230MHz Ant1



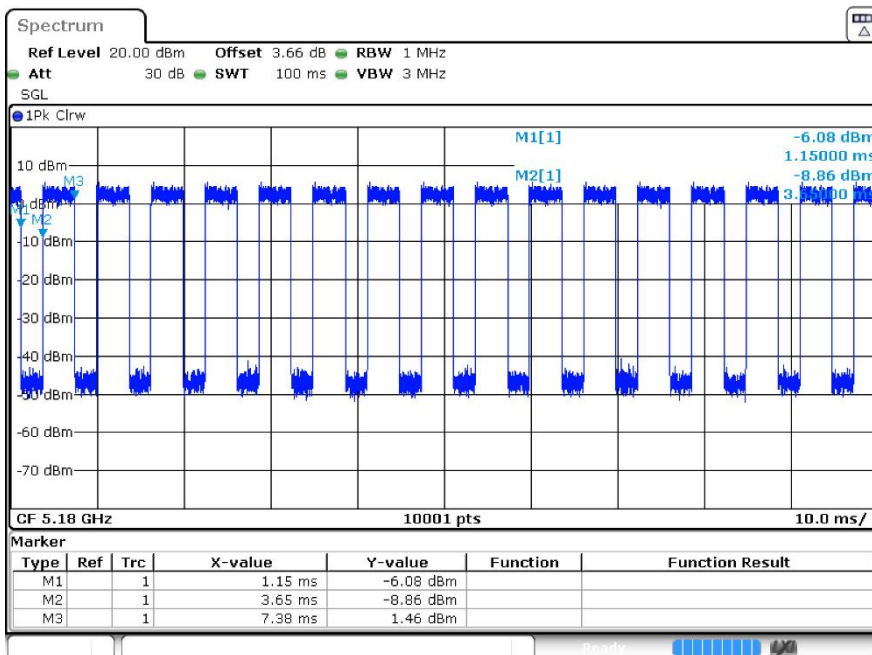
Duty Cycle n40 5190MHz Ant2



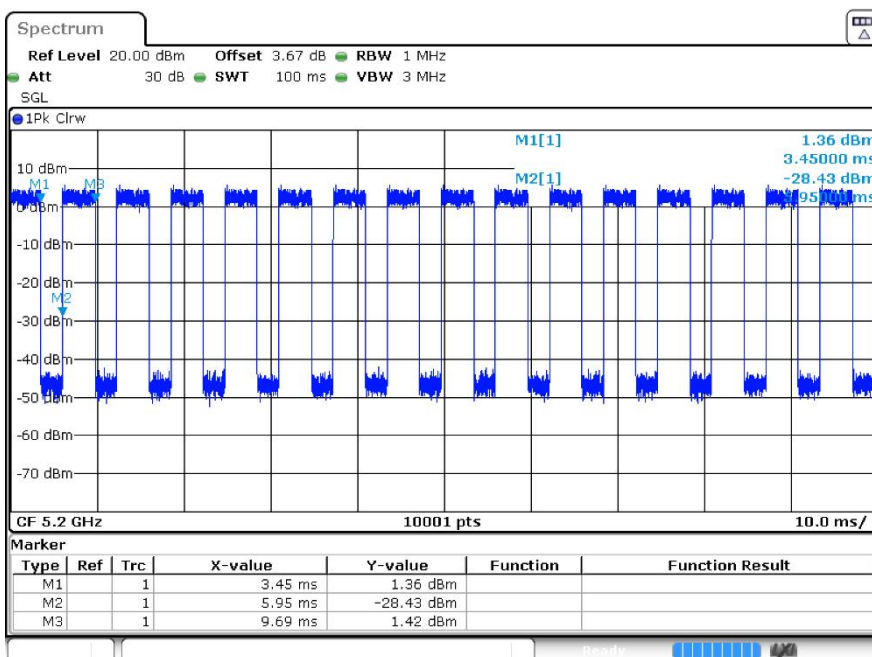
Duty Cycle n40 5230MHz Ant2

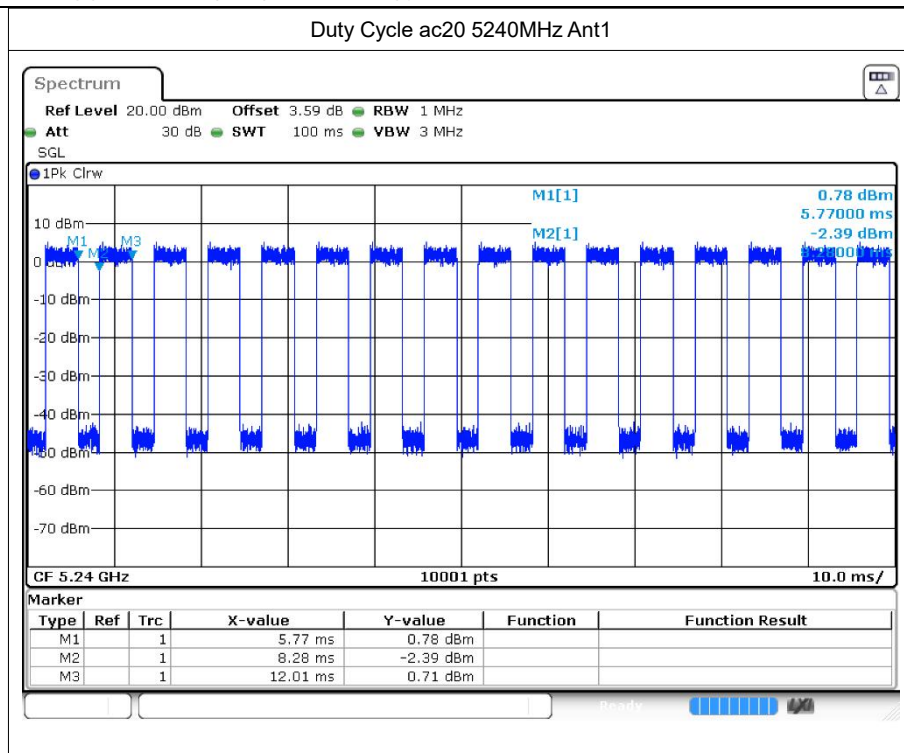


Duty Cycle ac20 5180MHz Ant1

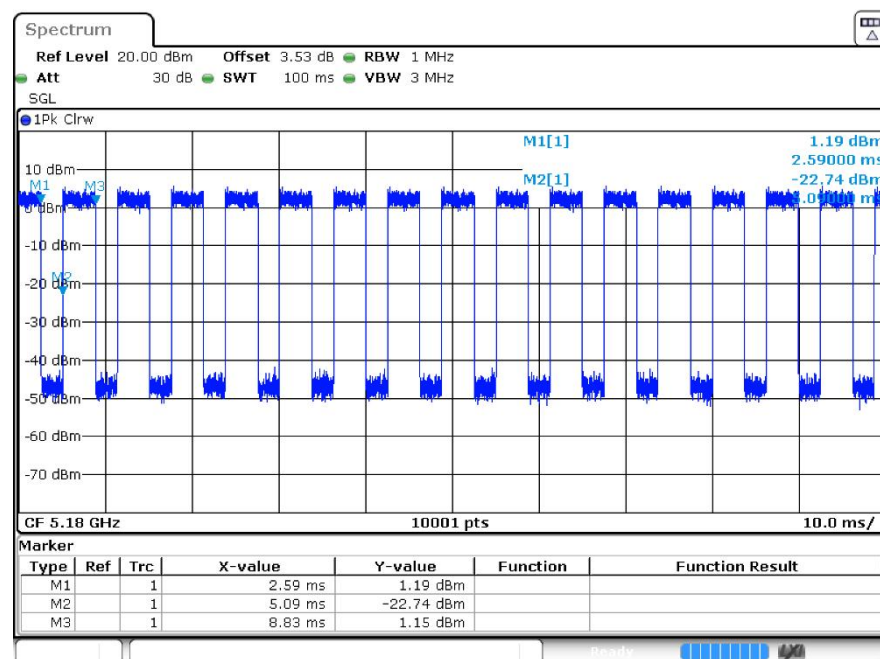


Duty Cycle ac20 5200MHz Ant1

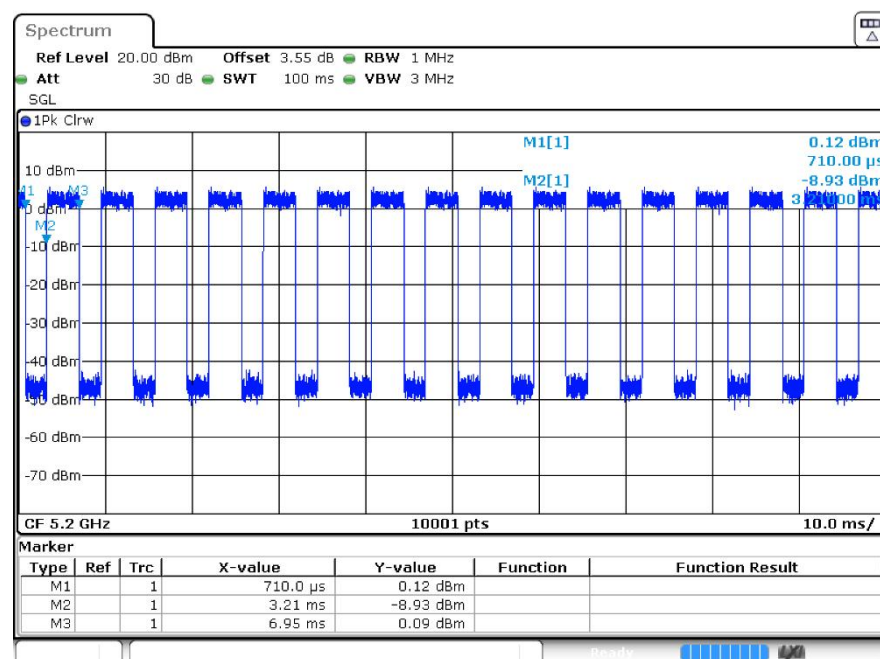


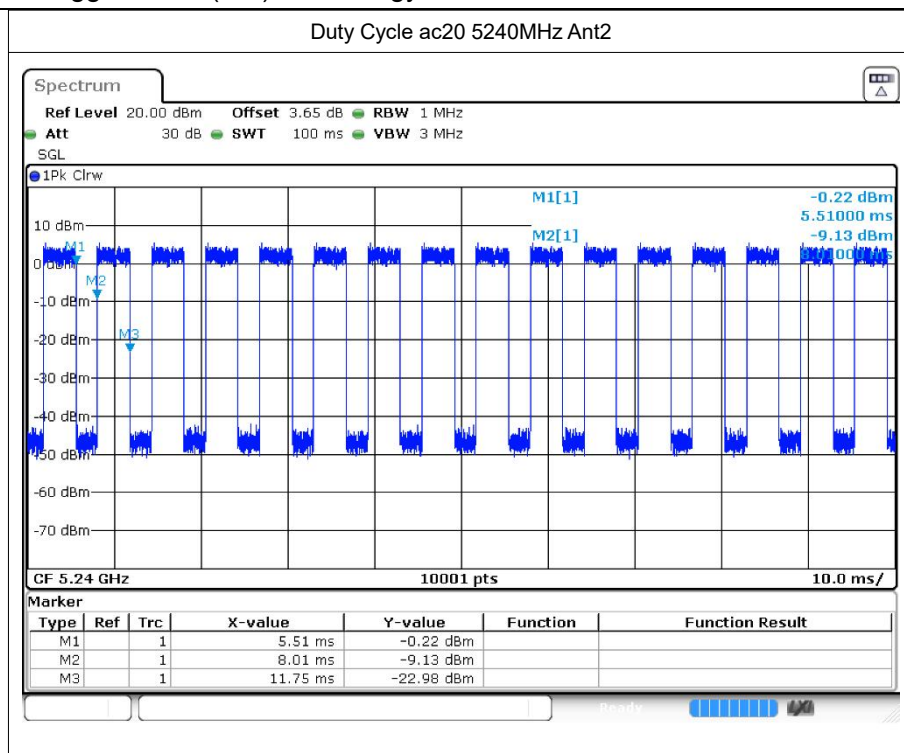


Duty Cycle ac20 5180MHz Ant2

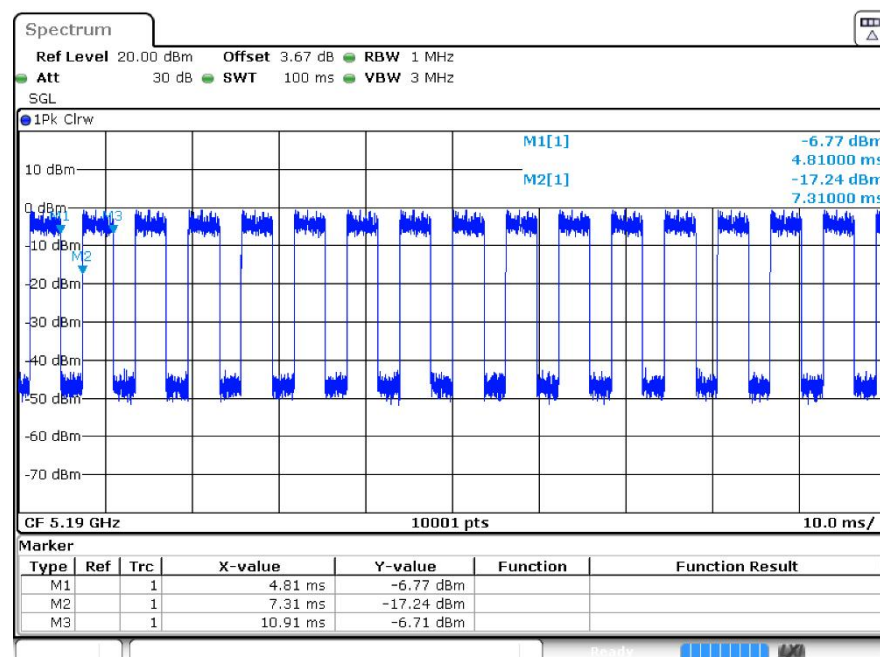


Duty Cycle ac20 5200MHz Ant2

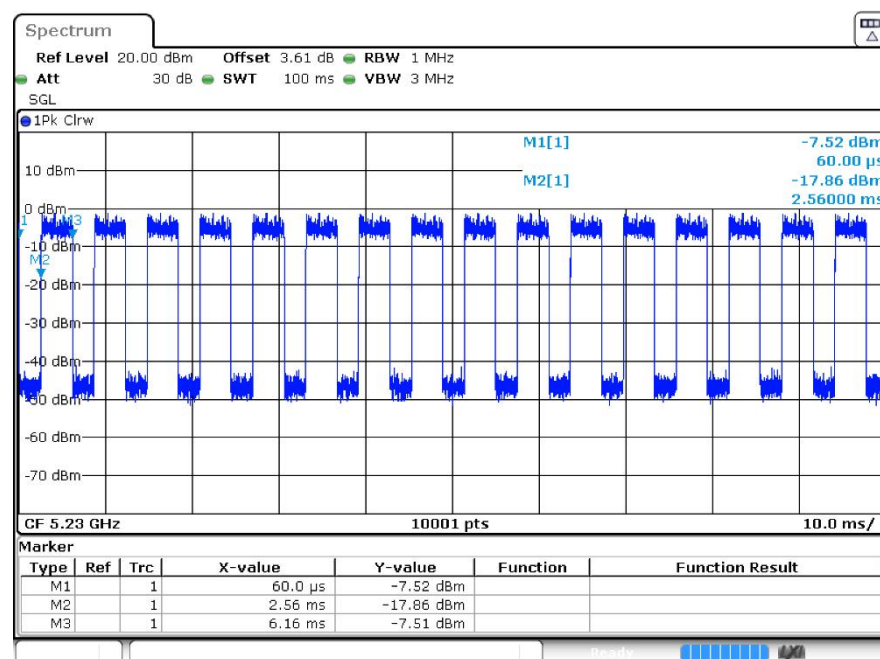




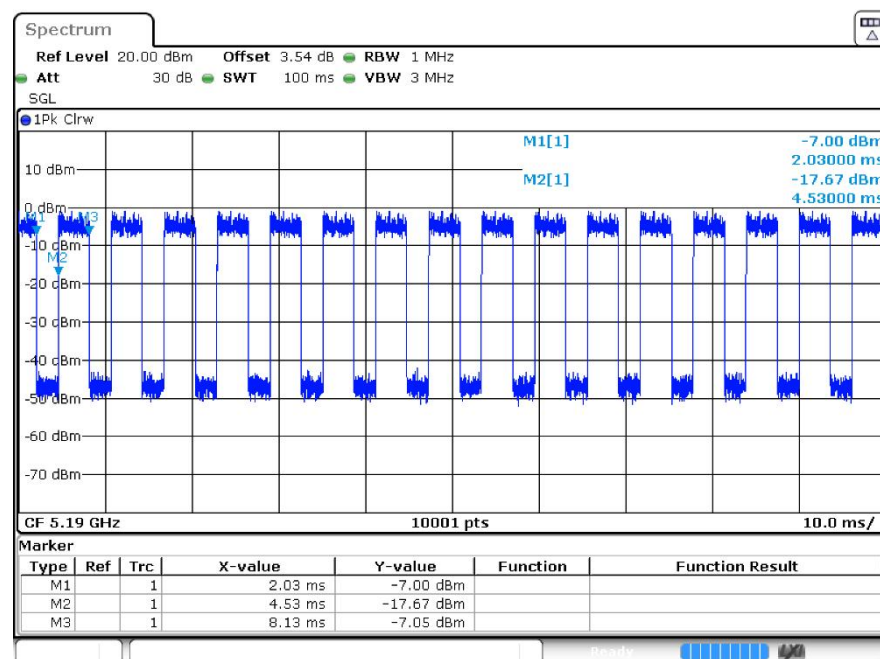
Duty Cycle ac40 5190MHz Ant1



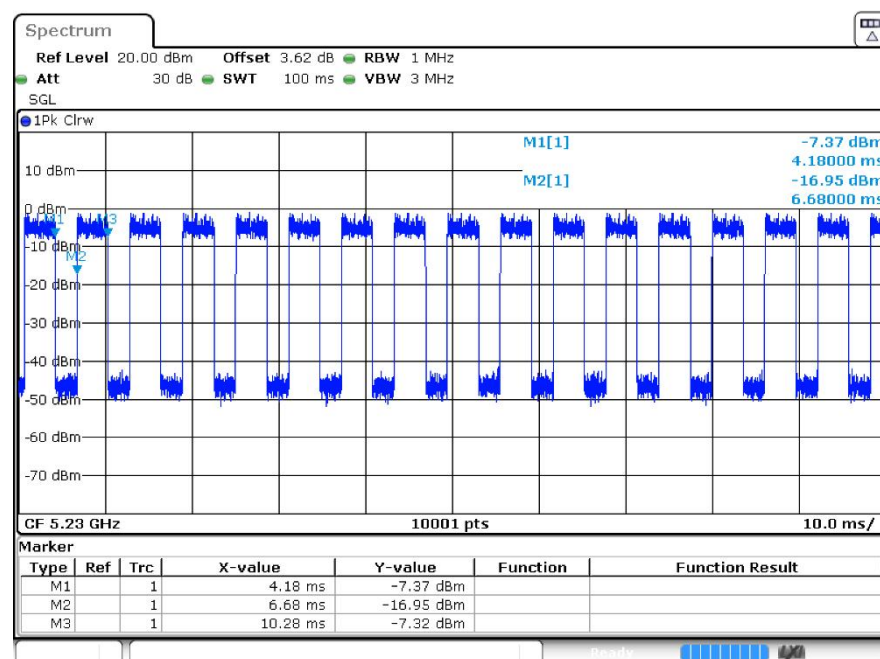
Duty Cycle ac40 5230MHz Ant1



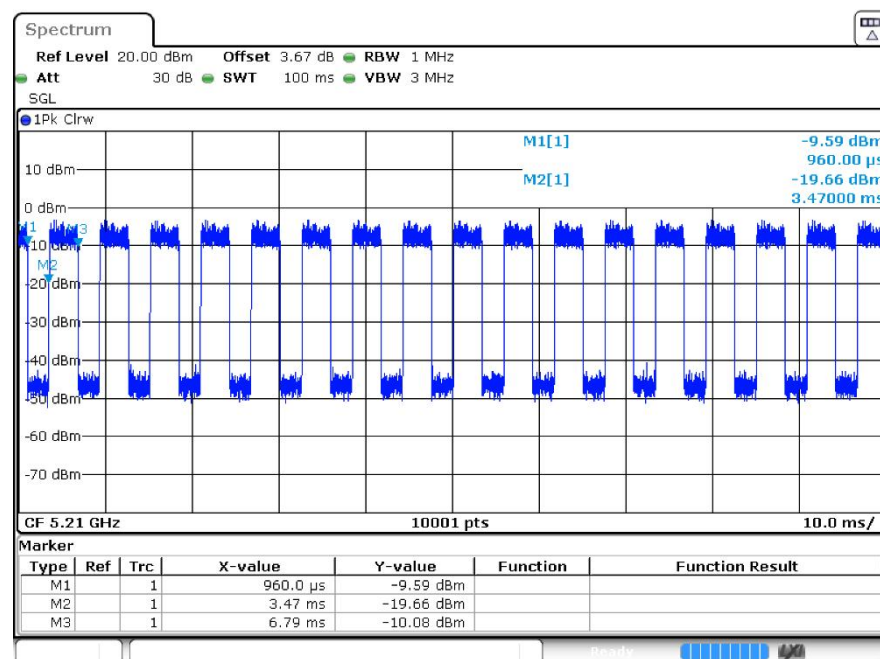
Duty Cycle ac40 5190MHz Ant2



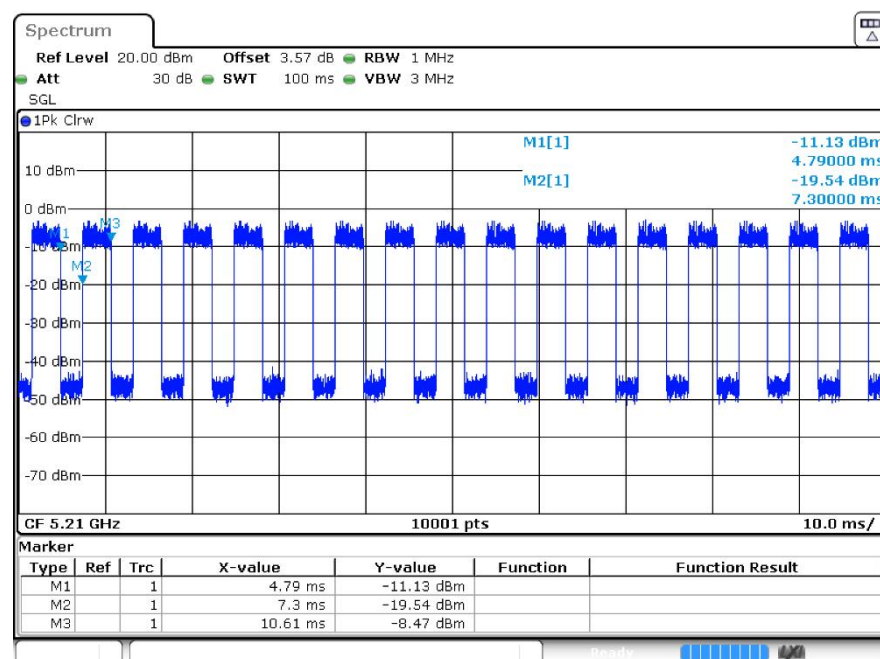
Duty Cycle ac40 5230MHz Ant2



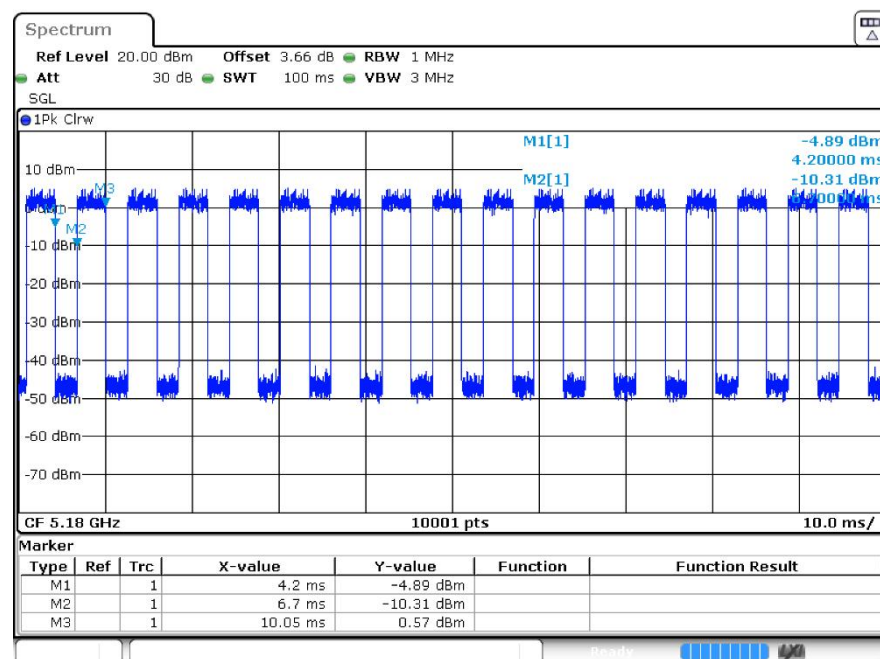
Duty Cycle ac80 5210MHz Ant1



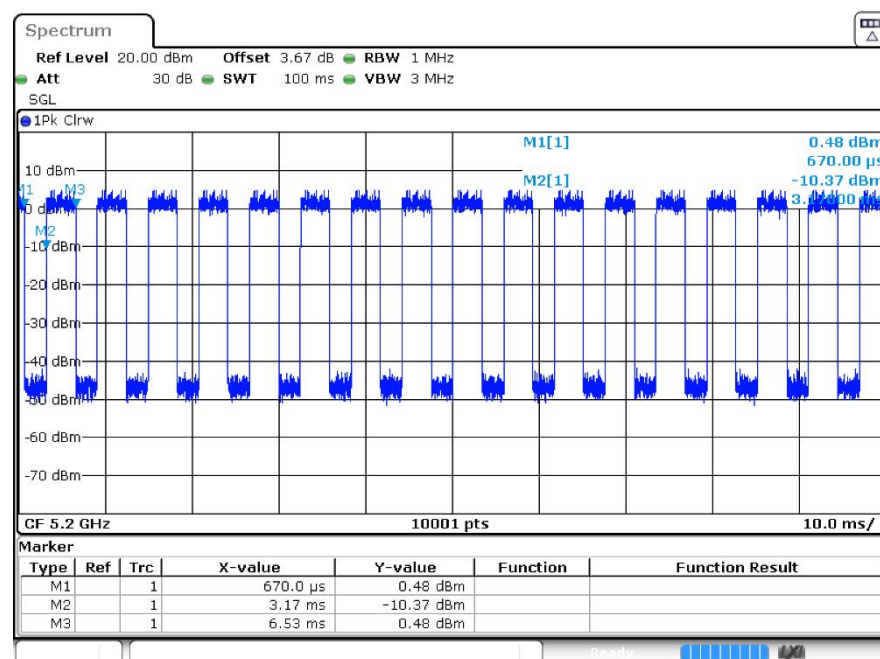
Duty Cycle ac80 5210MHz Ant2

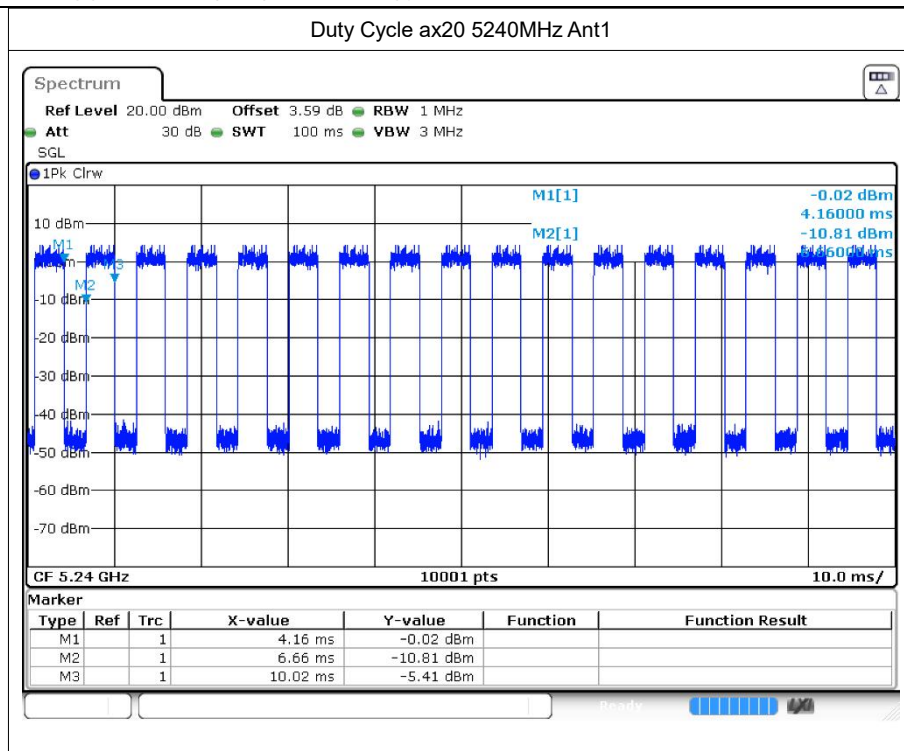


Duty Cycle ax20 5180MHz Ant1

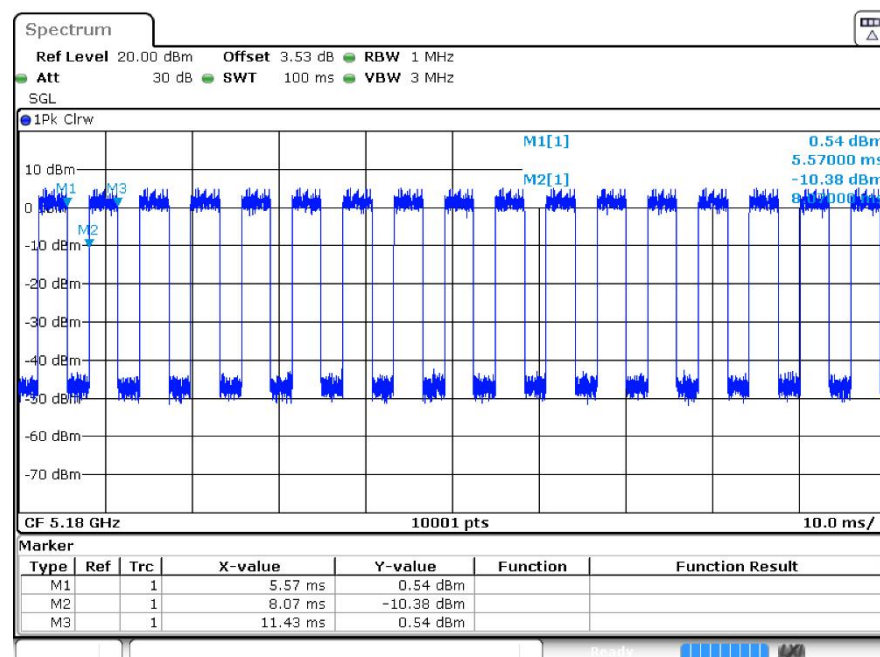


Duty Cycle ax20 5200MHz Ant1

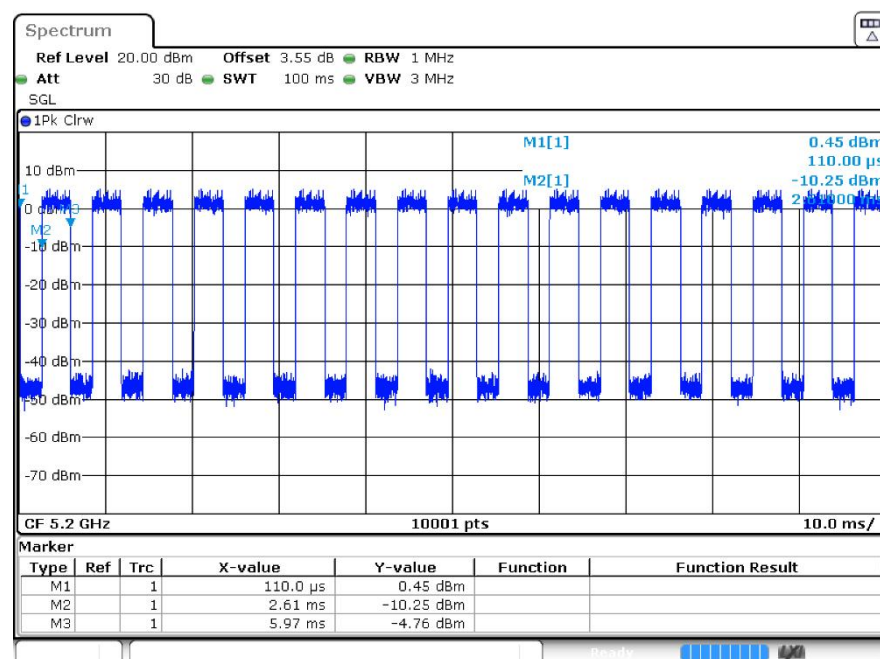


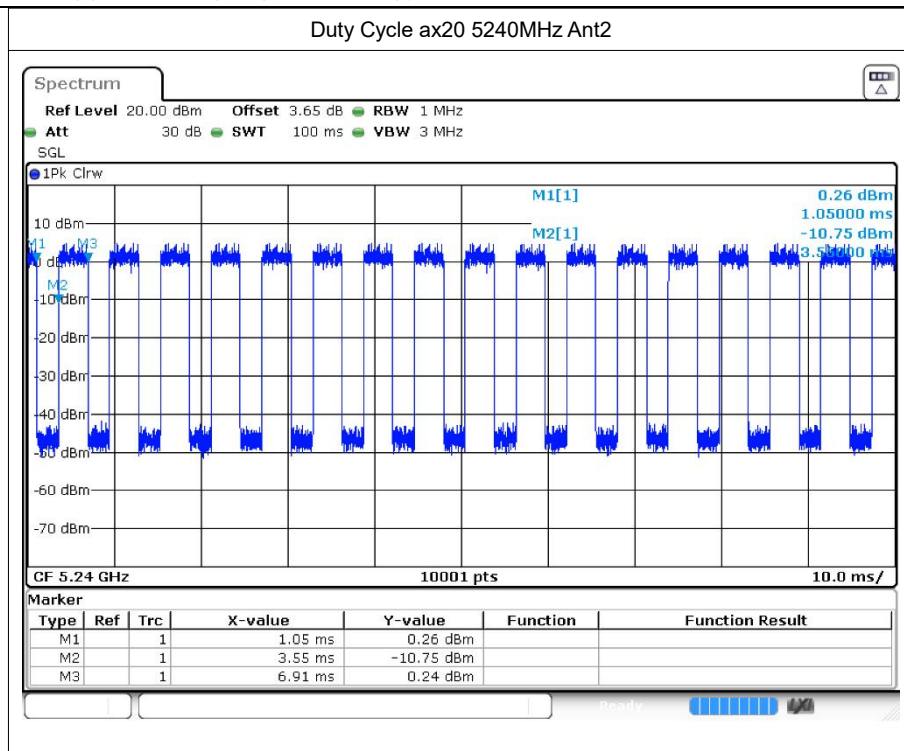


Duty Cycle ax20 5180MHz Ant2

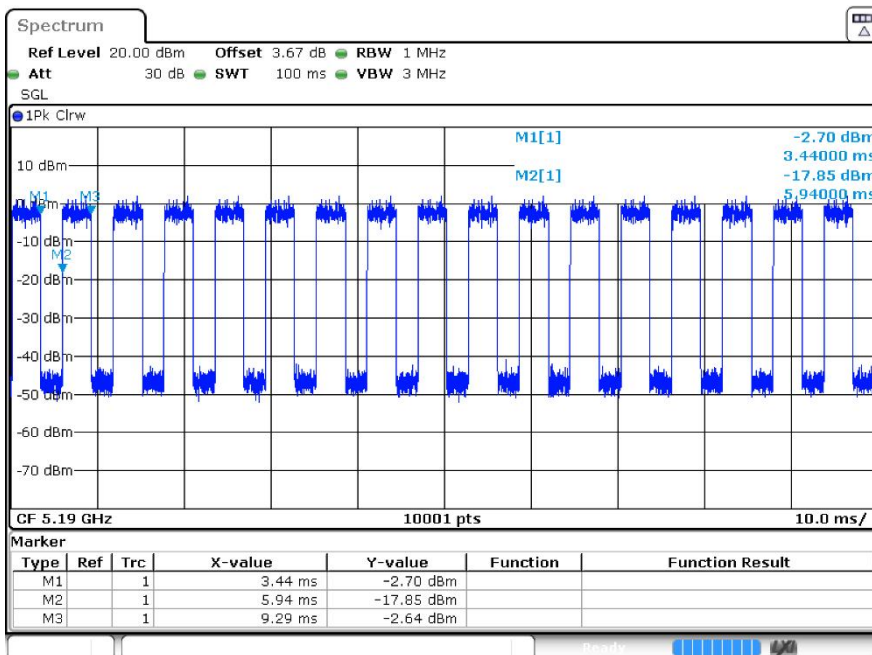


Duty Cycle ax20 5200MHz Ant2

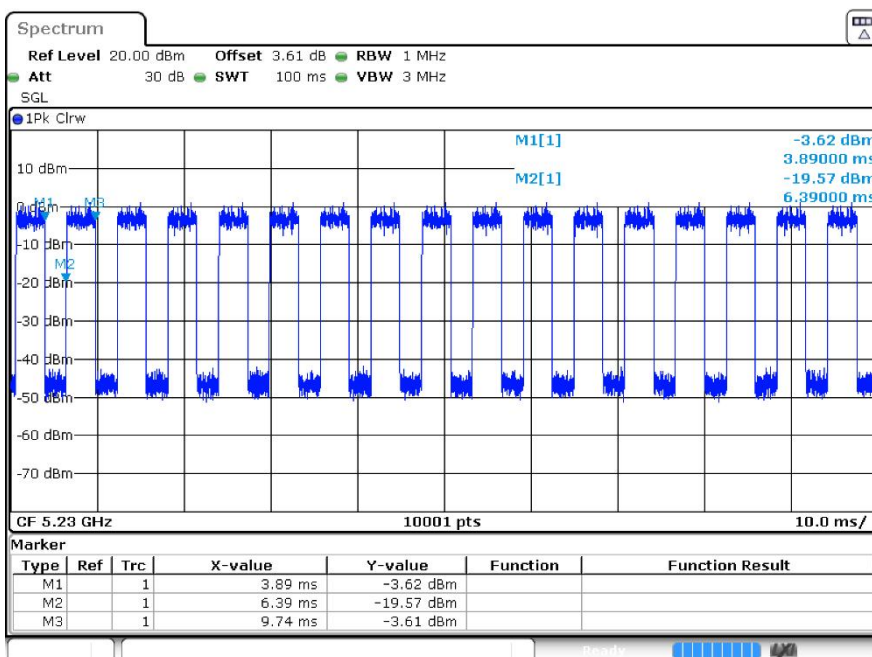




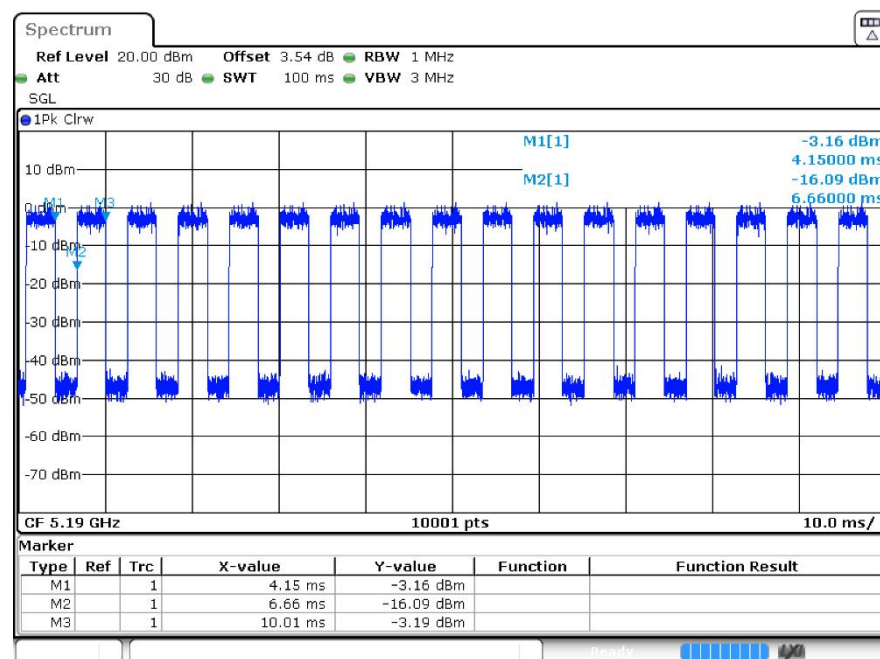
Duty Cycle ax40 5190MHz Ant1



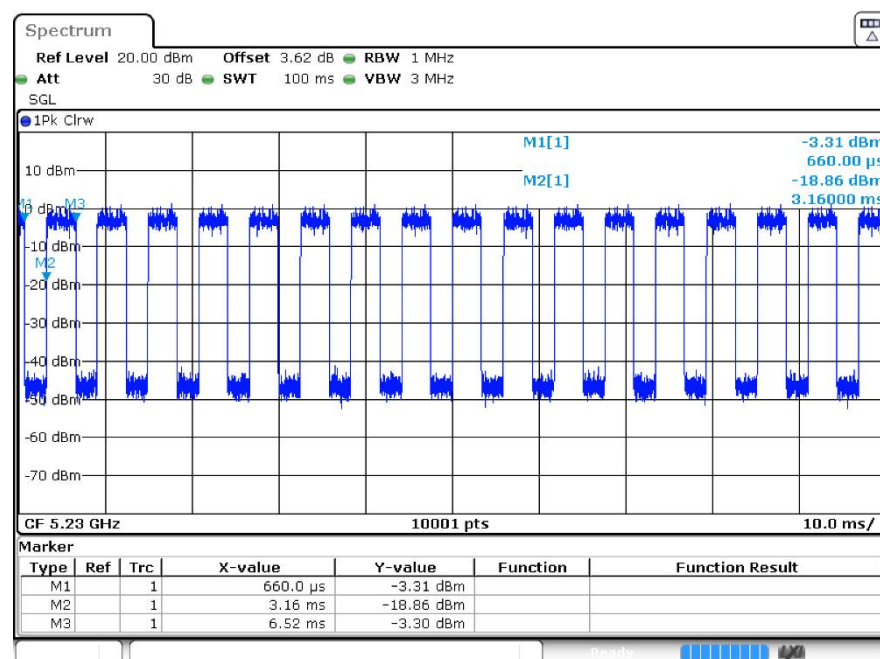
Duty Cycle ax40 5230MHz Ant1



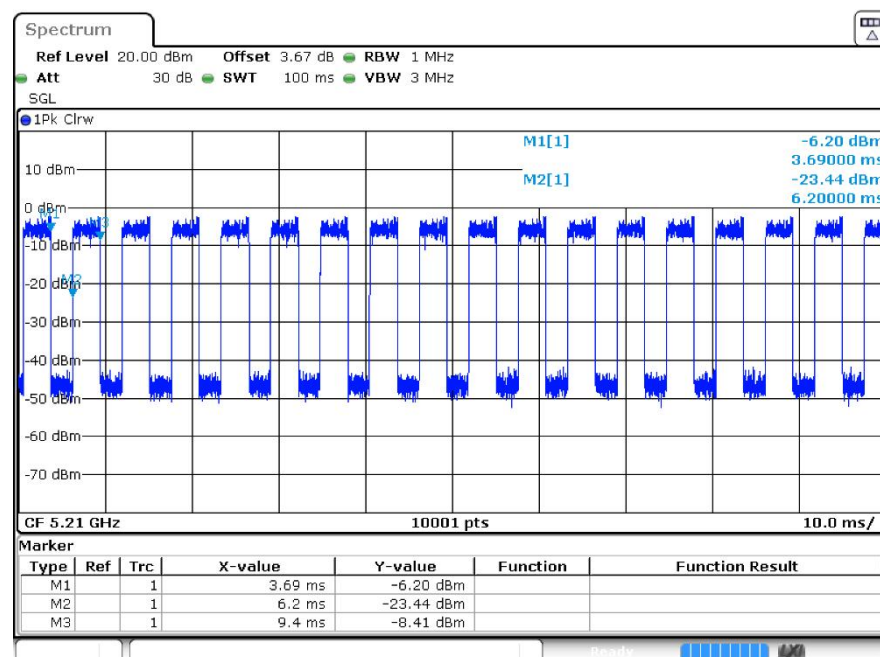
Duty Cycle ax40 5190MHz Ant2



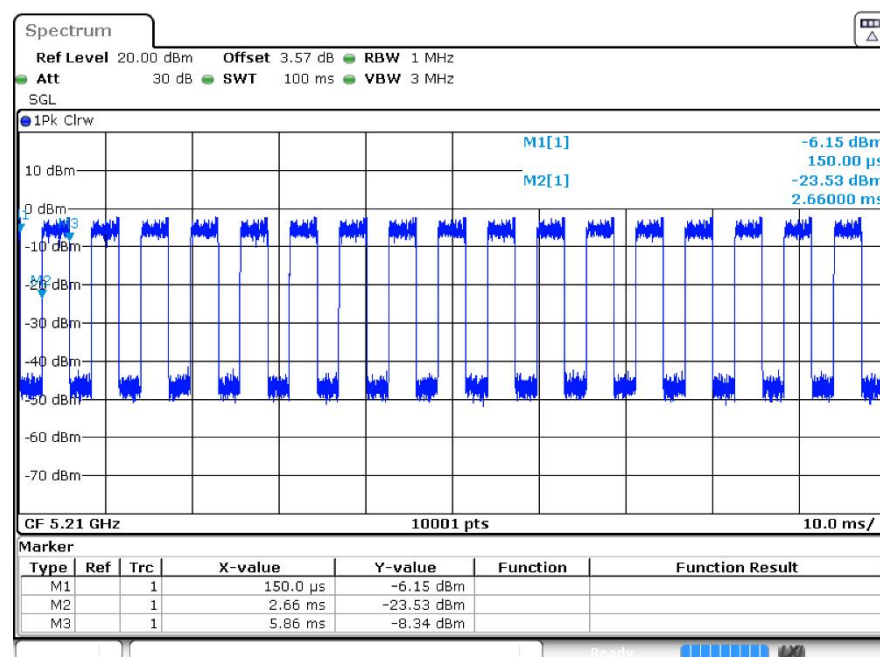
Duty Cycle ax40 5230MHz Ant2



Duty Cycle ax80 5210MHz Ant1



Duty Cycle ax80 5210MHz Ant2



2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
a	5180	Ant1	15.05	24	Pass
a	5200	Ant1	14.95	24	Pass
a	5240	Ant1	14.37	24	Pass
a	5180	Ant2	14.98	24	Pass
a	5200	Ant2	14.94	24	Pass
a	5240	Ant2	14.73	24	Pass
n20	5180	Ant1	11.57	24	Pass
n20	5180	Ant2	11.54	24	Pass
n20	5180	Sum	14.57	23.46	Pass
n20	5200	Ant1	11.51	24	Pass
n20	5200	Ant2	11.6	24	Pass
n20	5200	Sum	14.57	23.46	Pass
n20	5240	Ant1	10.97	24	Pass
n20	5240	Ant2	11.33	24	Pass
n20	5240	Sum	14.16	23.46	Pass
n40	5190	Ant1	11.44	24	Pass
n40	5190	Ant2	11.4	24	Pass
n40	5190	Sum	14.43	23.46	Pass
n40	5230	Ant1	10.73	24	Pass
n40	5230	Ant2	11	24	Pass
n40	5230	Sum	13.88	23.46	Pass
ac20	5180	Ant1	11.53	24	Pass
ac20	5180	Ant2	11.65	24	Pass
ac20	5180	Sum	14.60	23.46	Pass
ac20	5200	Ant1	11.38	24	Pass
ac20	5200	Ant2	11.64	24	Pass
ac20	5200	Sum	14.52	23.46	Pass
ac20	5240	Ant1	10.91	24	Pass
ac20	5240	Ant2	11.26	24	Pass
ac20	5240	Sum	14.10	23.46	Pass
ac40	5190	Ant1	11.27	24	Pass
ac40	5190	Ant2	11.35	24	Pass
ac40	5190	Sum	14.32	23.46	Pass
ac40	5230	Ant1	10.71	24	Pass
ac40	5230	Ant2	11.01	24	Pass



ac40	5230	Sum	13.87	23.46	Pass
ac80	5210	Ant1	10.92	24	Pass
ac80	5210	Ant2	11.27	24	Pass
ac80	5210	Sum	14.11	23.46	Pass
ax20	5180	Ant1	11.43	24	Pass
ax20	5180	Ant2	11.35	24	Pass
ax20	5180	Sum	14.40	23.46	Pass
ax20	5200	Ant1	11.16	24	Pass
ax20	5200	Ant2	11.32	24	Pass
ax20	5200	Sum	14.25	23.46	Pass
ax20	5240	Ant1	10.63	24	Pass
ax20	5240	Ant2	11.05	24	Pass
ax20	5240	Sum	13.86	23.46	Pass
ax40	5190	Ant1	11.01	24	Pass
ax40	5190	Ant2	10.88	24	Pass
ax40	5190	Sum	13.96	23.46	Pass
ax40	5230	Ant1	10.29	24	Pass
ax40	5230	Ant2	10.6	24	Pass
ax40	5230	Sum	13.46	23.46	Pass
ax80	5210	Ant1	10.62	24	Pass
ax80	5210	Ant2	10.89	24	Pass
ax80	5210	Sum	13.77	23.46	Pass

Note:

The duty factor has been compensated into the result.

The Directional Gain is 6.54dBi, which exceeds 0.54dBi. The limit value is $24 - 0.54 = 23.46\text{dBm}$



3 -26dB Bandwidth

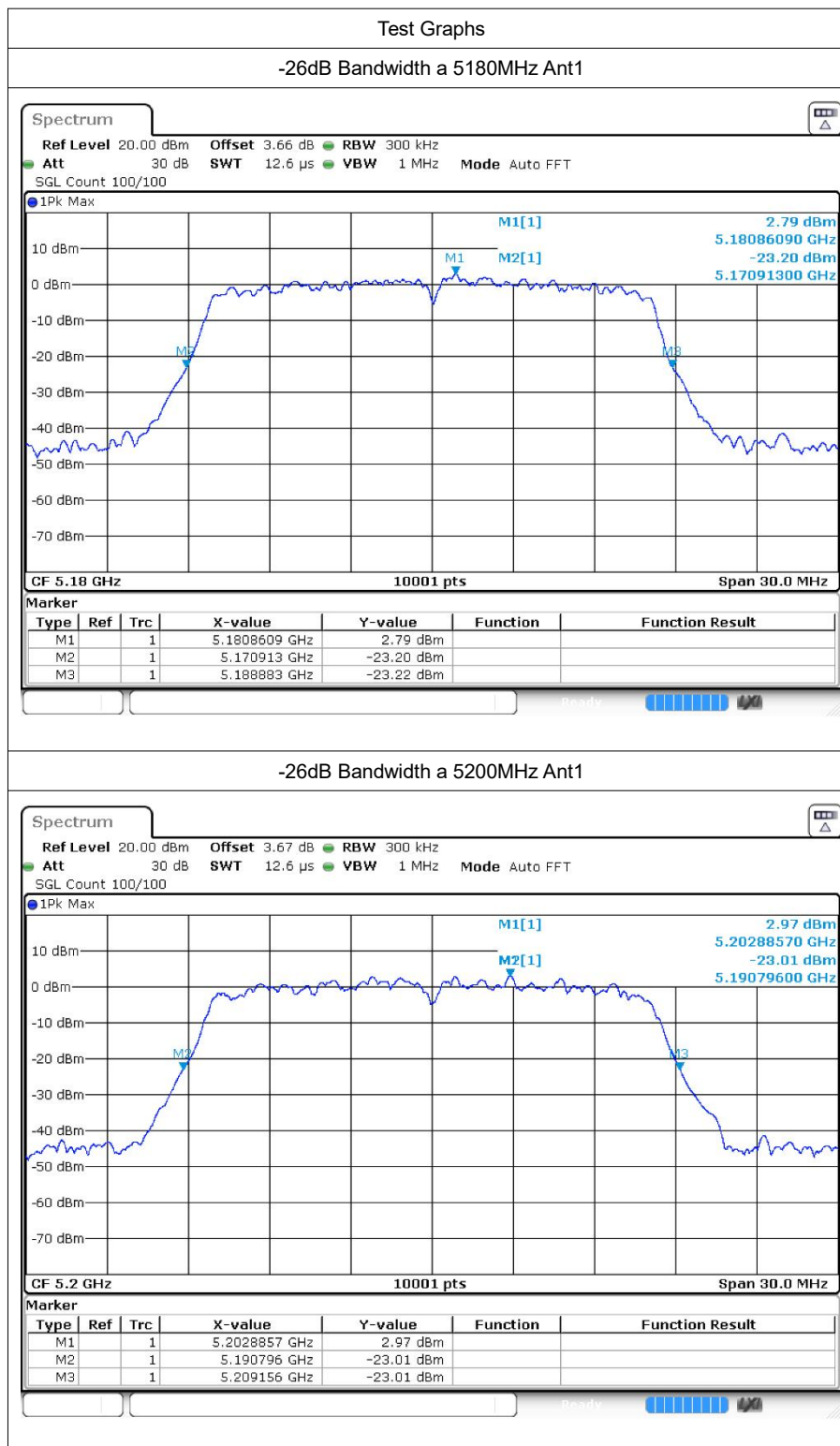
3.1 Test Result

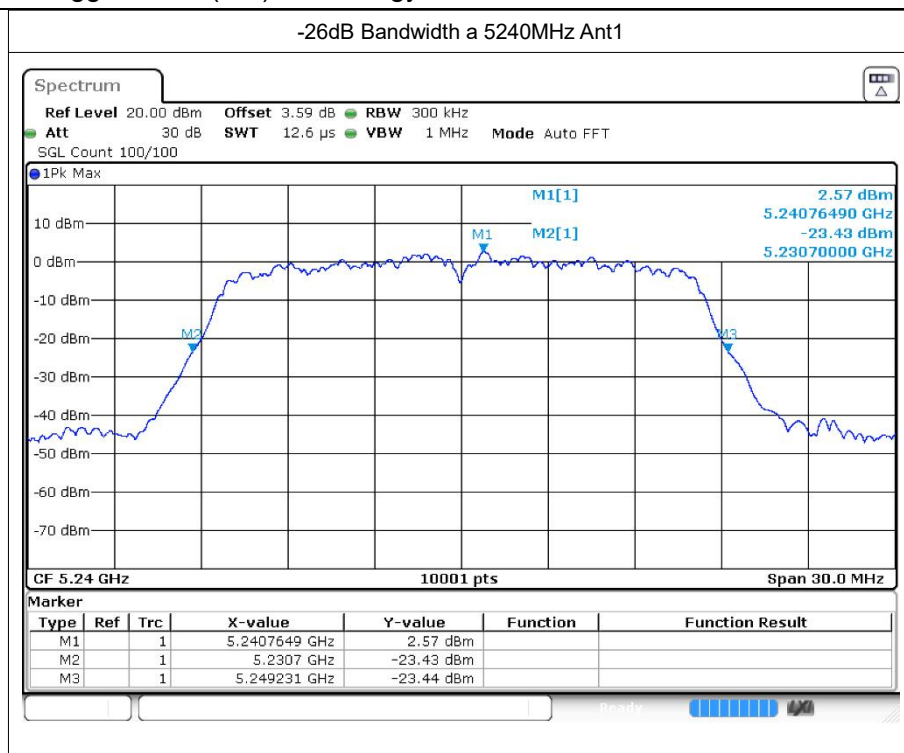
Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
a	5180	Ant1	17.97	0.5	Pass
a	5200	Ant1	18.36	0.5	Pass
a	5240	Ant1	18.531	0.5	Pass
n20	5180	Ant1	19.188	0.5	Pass
n20	5200	Ant1	19.002	0.5	Pass
n20	5240	Ant1	19.017	0.5	Pass
n40	5190	Ant1	37.908	0.5	Pass
n40	5230	Ant1	38.232	0.5	Pass
ac20	5180	Ant1	19.203	0.5	Pass
ac20	5200	Ant1	19.242	0.5	Pass
ac20	5240	Ant1	19.218	0.5	Pass
ac40	5190	Ant1	38.082	0.5	Pass
ac40	5230	Ant1	37.902	0.5	Pass
ac80	5210	Ant1	77.796	0.5	Pass
ax20	5180	Ant1	20.01	0.5	Pass
ax20	5200	Ant1	20.007	0.5	Pass
ax20	5240	Ant1	20.118	0.5	Pass
ax40	5190	Ant1	39.36	0.5	Pass
ax40	5230	Ant1	39.114	0.5	Pass
ax80	5210	Ant1	78.996	0.5	Pass
a	5180	Ant2	18.156	0.5	Pass
a	5200	Ant2	17.997	0.5	Pass
a	5240	Ant2	17.922	0.5	Pass
n20	5180	Ant2	18.852	0.5	Pass
n20	5200	Ant2	19.416	0.5	Pass
n20	5240	Ant2	19.005	0.5	Pass
n40	5190	Ant2	37.848	0.5	Pass
n40	5230	Ant2	38.274	0.5	Pass
ac20	5180	Ant2	19.209	0.5	Pass
ac20	5200	Ant2	19.173	0.5	Pass
ac20	5240	Ant2	19.305	0.5	Pass
ac40	5190	Ant2	37.878	0.5	Pass
ac40	5230	Ant2	38.142	0.5	Pass
ac80	5210	Ant2	77.784	0.5	Pass
ax20	5180	Ant2	19.929	0.5	Pass
ax20	5200	Ant2	20.073	0.5	Pass
ax20	5240	Ant2	19.992	0.5	Pass



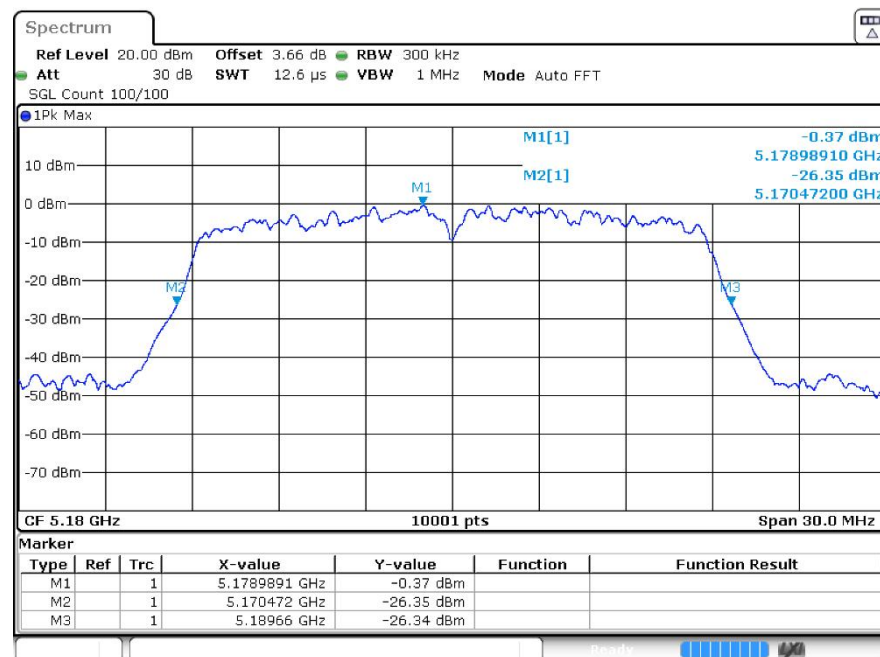
ax40	5190	Ant2	39.33	0.5	Pass
ax40	5230	Ant2	39.06	0.5	Pass
ax80	5210	Ant2	79.308	0.5	Pass

3.2 Test Graphs

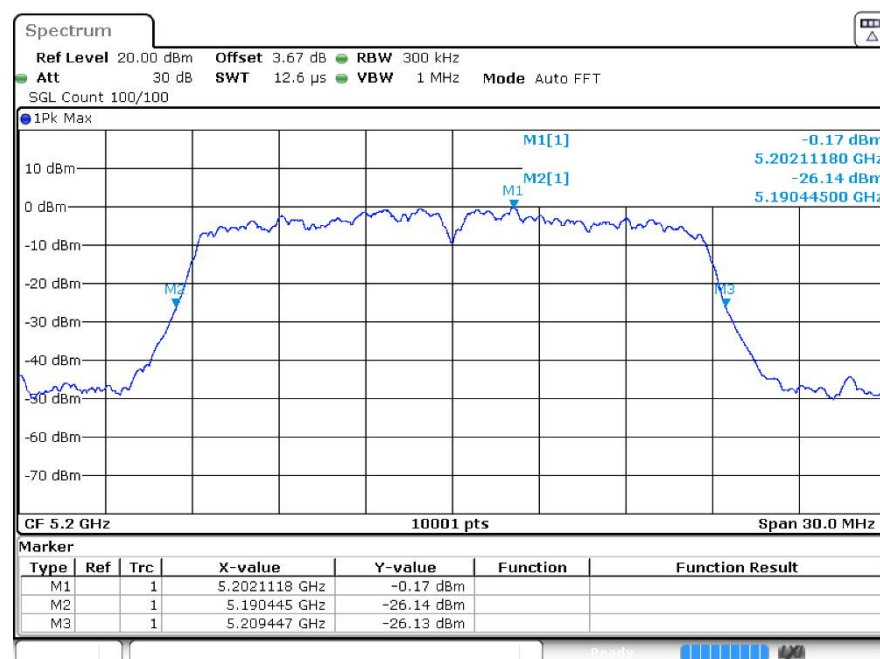


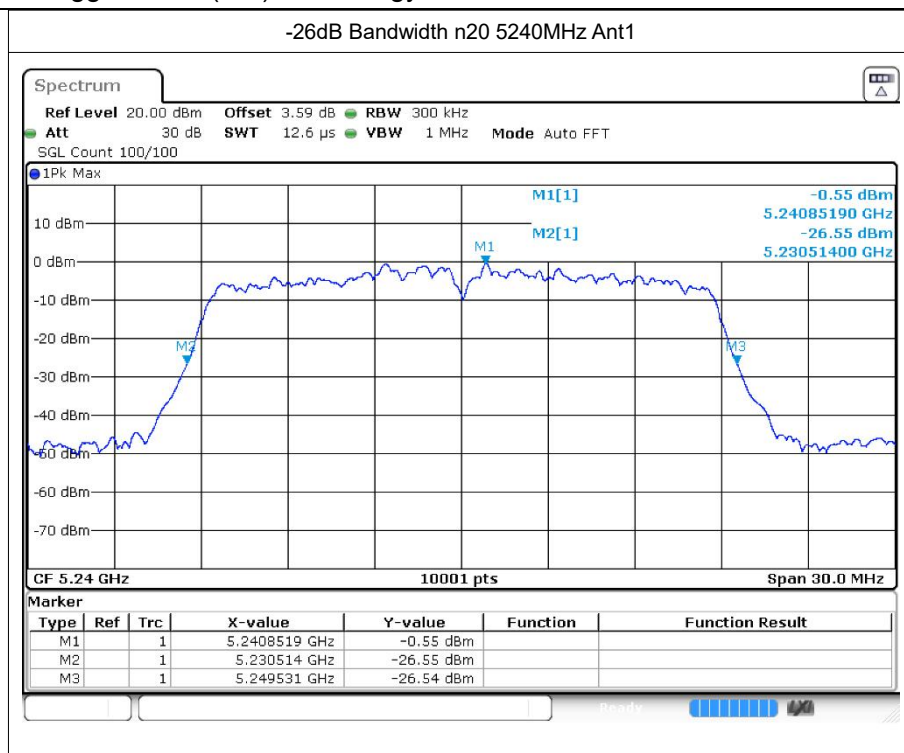


-26dB Bandwidth n20 5180MHz Ant1

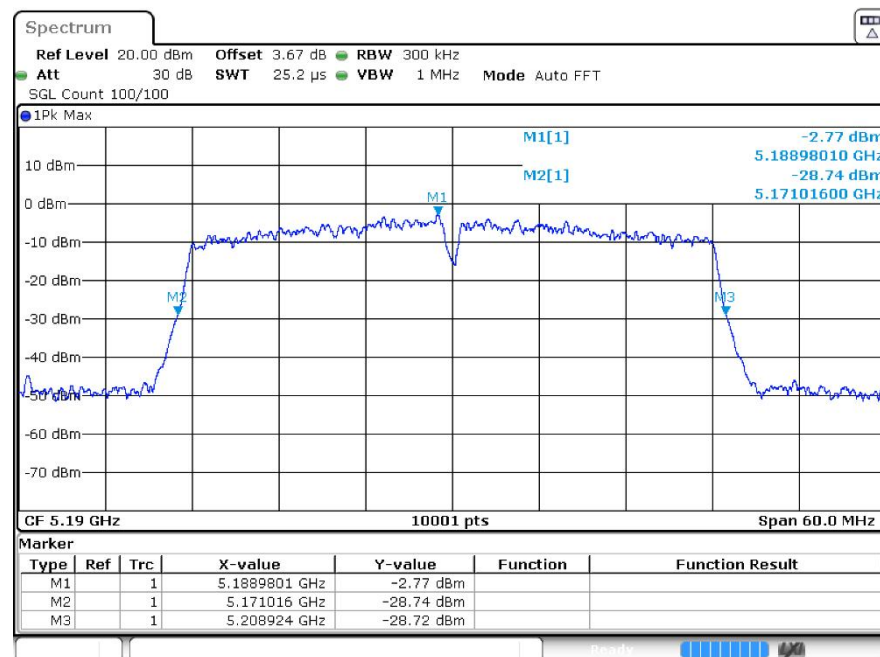


-26dB Bandwidth n20 5200MHz Ant1





-26dB Bandwidth n40 5190MHz Ant1



-26dB Bandwidth n40 5230MHz Ant1

