



Appendix D

RF Test Data for B1WIFI(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



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1 Duty Cycle

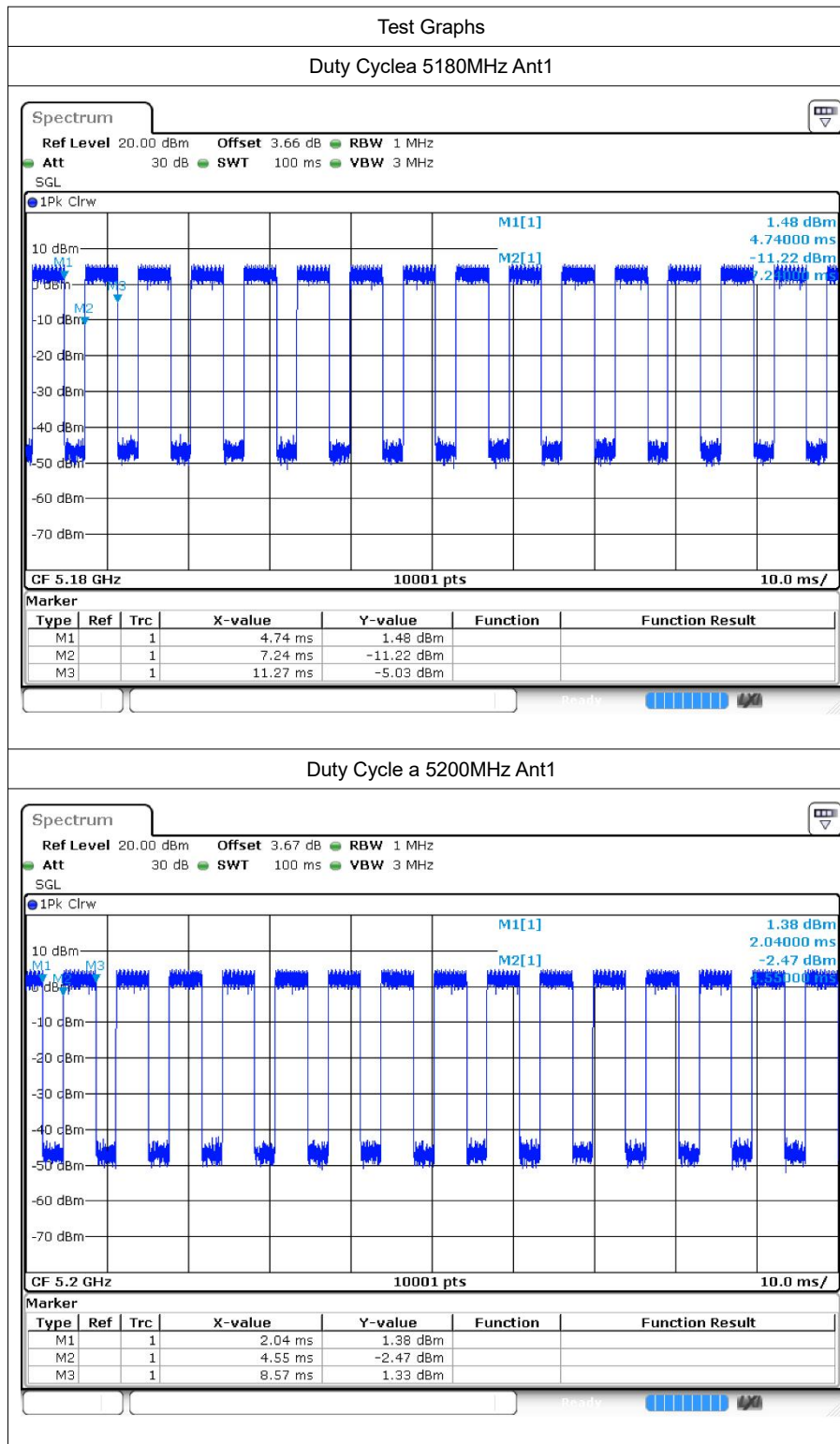
1.1 Test Result

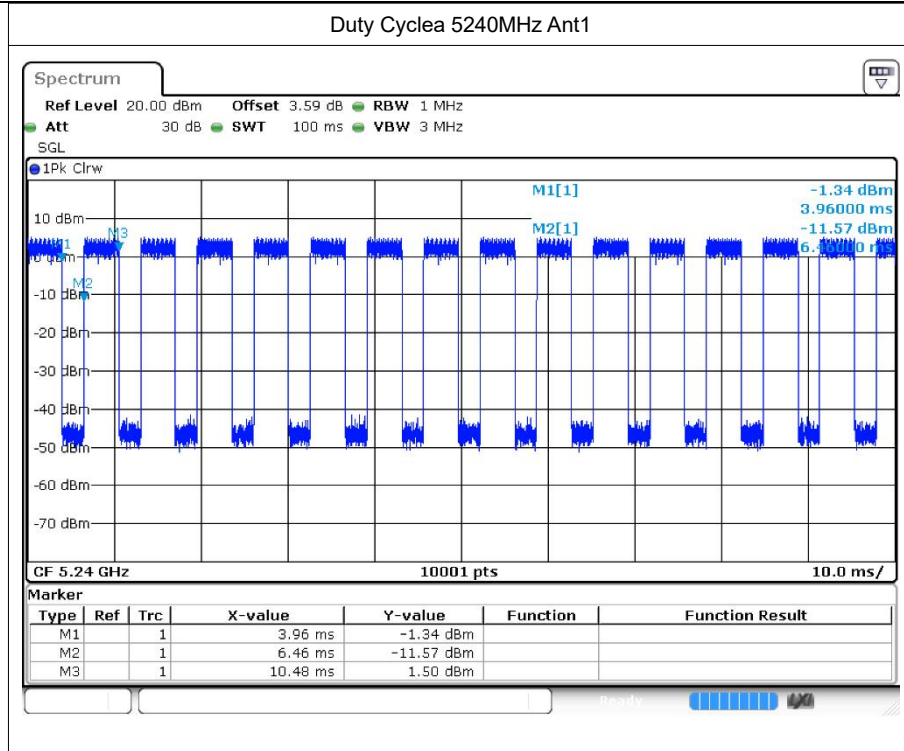
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
a	5180	Ant1	61.91	2.08	0.25
a	5200	Ant1	62.57	2.04	0.25
a	5240	Ant1	62.61	2.03	0.25
a	5180	Ant2	60.6	2.17	0.25
a	5200	Ant2	60.52	2.18	0.25
a	5240	Ant2	60.5	2.18	0.25
n20	5180	Ant1	60.13	2.21	0.27
n20	5200	Ant1	60.13	2.21	0.27
n20	5240	Ant1	59.87	2.23	0.27
n20	5180	Ant2	60.12	2.21	0.27
n20	5200	Ant2	59.87	2.23	0.27
n20	5240	Ant2	59.88	2.23	0.27
n40	5190	Ant1	54.08	2.67	0.33
n40	5230	Ant1	54.97	2.6	鑒?
n40	5190	Ant2	55.15	2.58	0.33
n40	5230	Ant2	55.14	2.58	0.33
ac20	5180	Ant1	60.14	2.21	0.27
ac20	5200	Ant1	60.15	2.21	0.27
ac20	5240	Ant1	60.13	2.21	0.27
ac20	5180	Ant2	60.13	2.21	0.27
ac20	5200	Ant2	59.94	2.22	0.27
ac20	5240	Ant2	59.94	2.22	0.27
ac40	5190	Ant1	54.25	2.66	0.33
ac40	5230	Ant1	55.01	2.6	0.33
ac40	5190	Ant2	55.15	2.58	0.33
ac40	5230	Ant2	54.32	2.65	0.33
ac80	5210	Ant1	46.92	3.29	0.45
ac80	5210	Ant2	46.79	3.3	鑒?
ax20	5180	Ant1	57.23	2.42	0.3
ax20	5200	Ant1	61.03	2.14	0.26
ax20	5240	Ant1	60.74	2.16	0.26
ax20	5180	Ant2	60.62	2.17	0.26
ax20	5200	Ant2	61.93	2.08	0.26
ax20	5240	Ant2	60.15	2.21	0.26
ax40	5190	Ant1	53.39	2.73	0.36
ax40	5230	Ant1	52.5	2.8	0.36
ax40	5190	Ant2	53.22	2.74	0.36



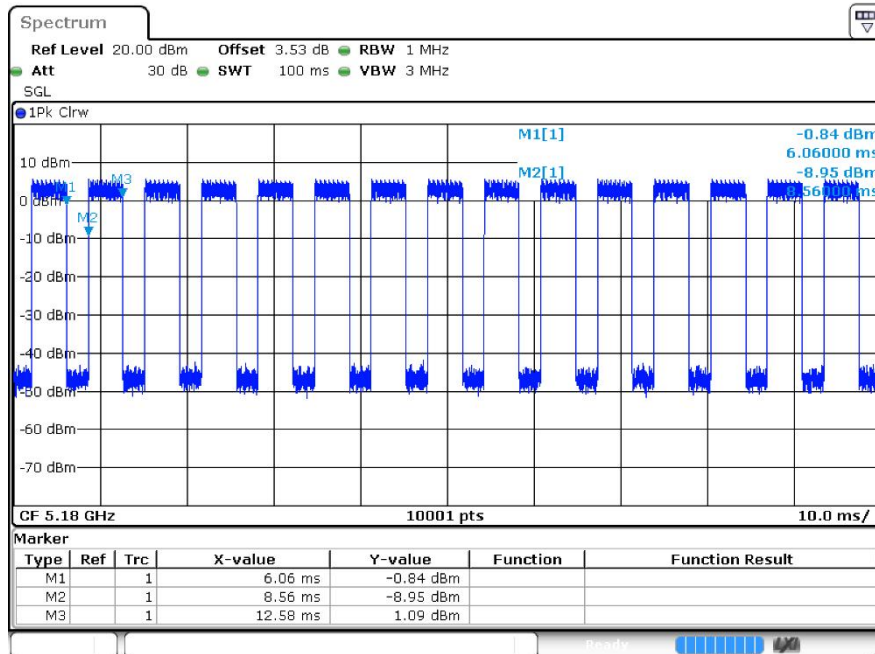
ax40	5230	Ant2	53.54	2.71	0.36
ax80	5210	Ant1	46.91	3.29	0.45
ax80	5210	Ant2	46.81	3.3	鑒?

1.2 Test Graphs

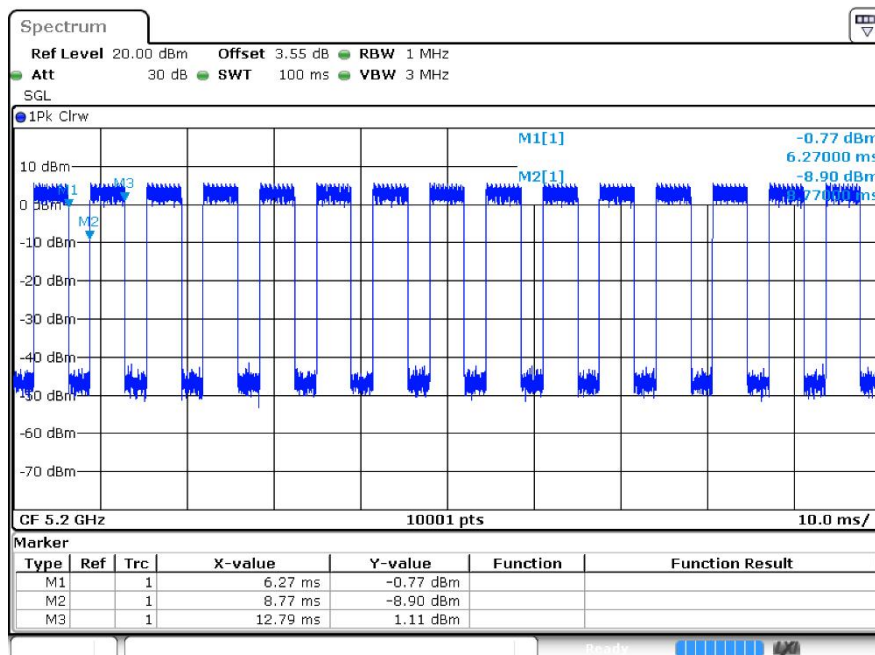


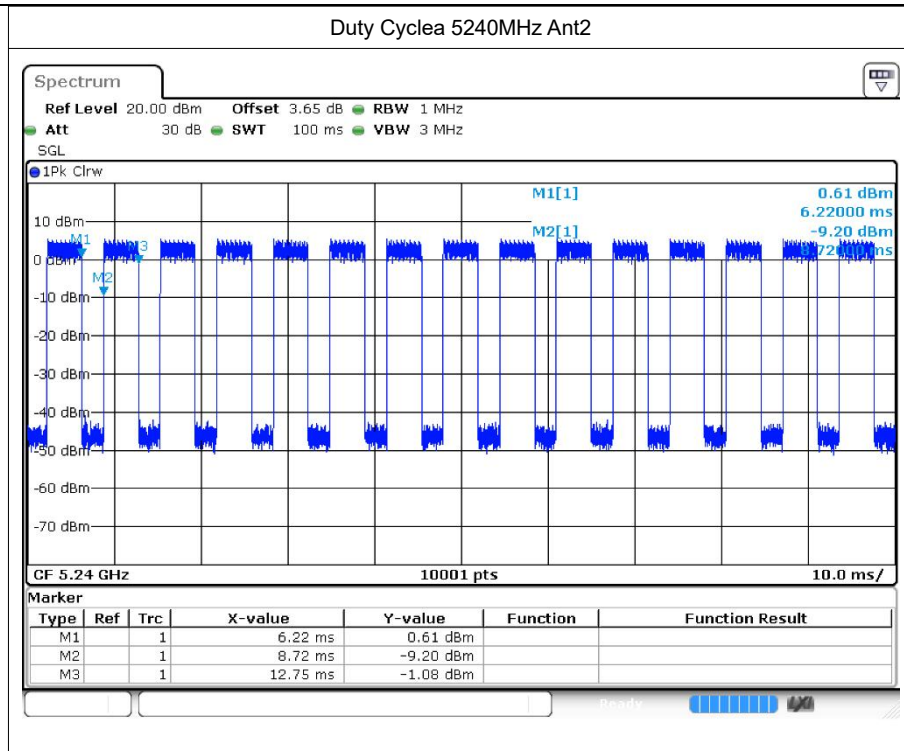


Duty Cyclea 5180MHz Ant2

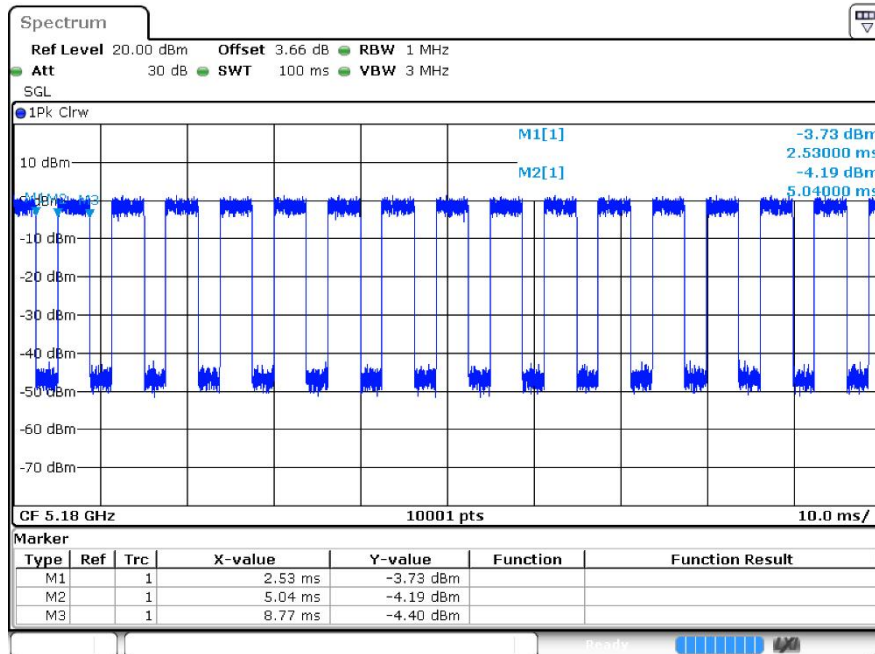


Duty Cycle a 5200MHz Ant2

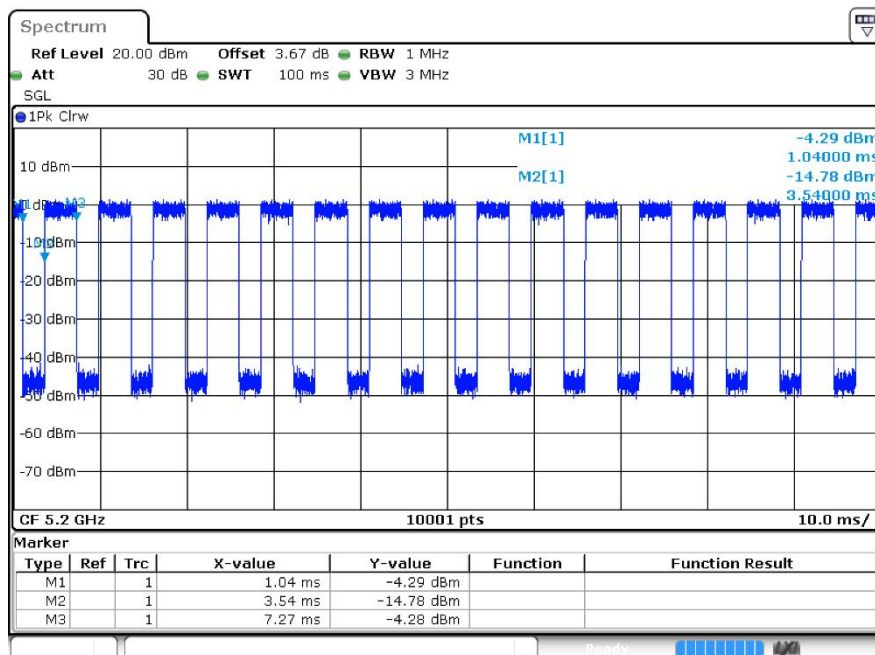


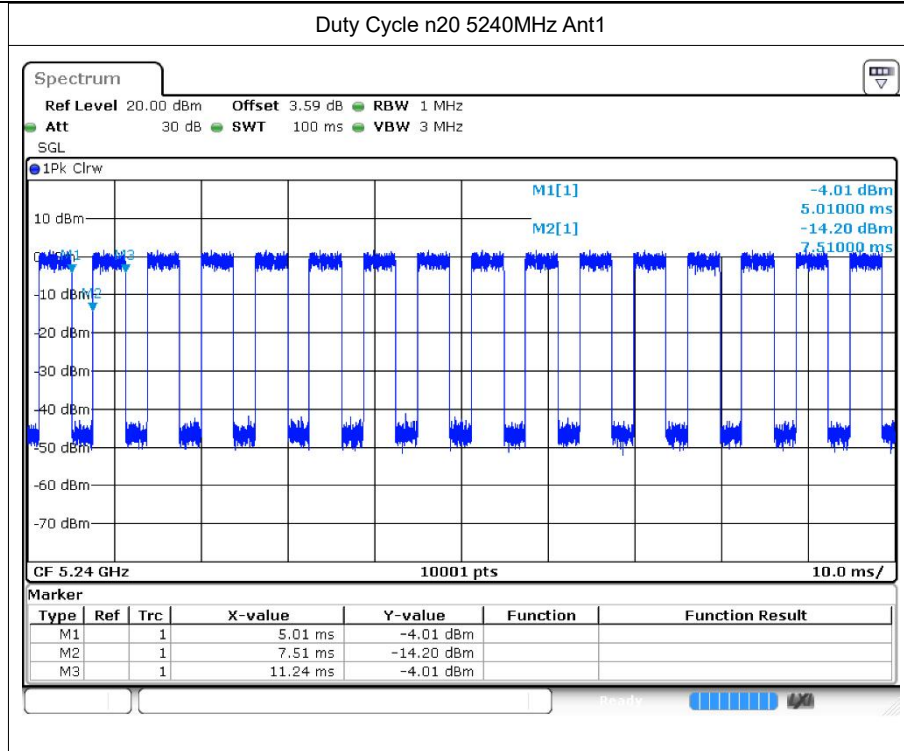


Duty Cycle n20 5180MHz Ant1

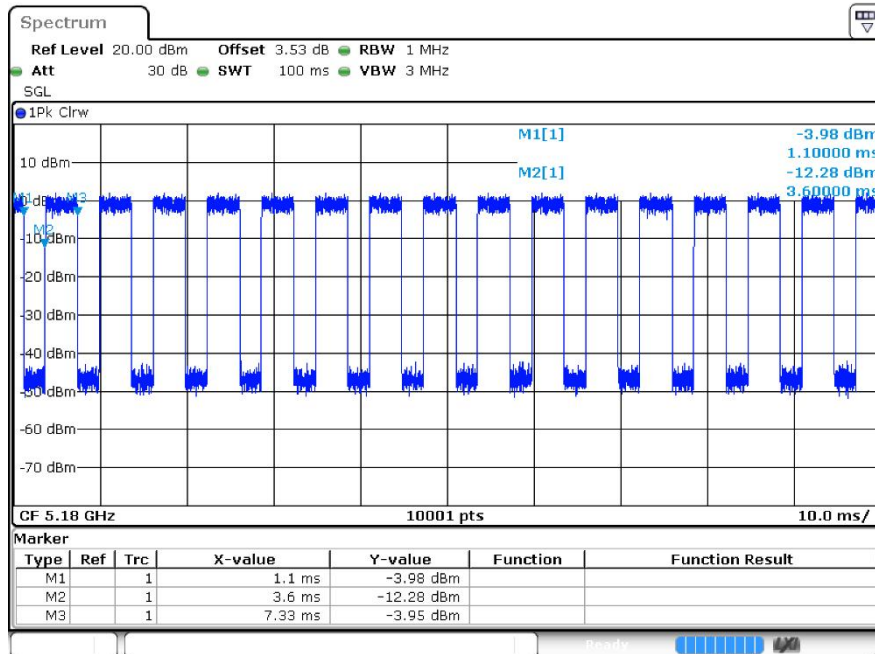


Duty Cycle n20 5200MHz Ant1

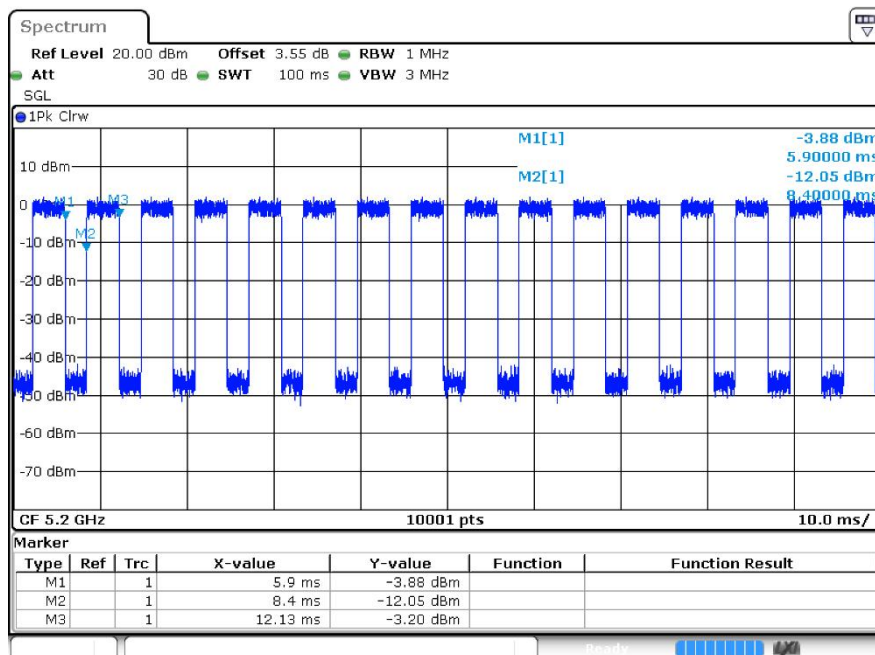


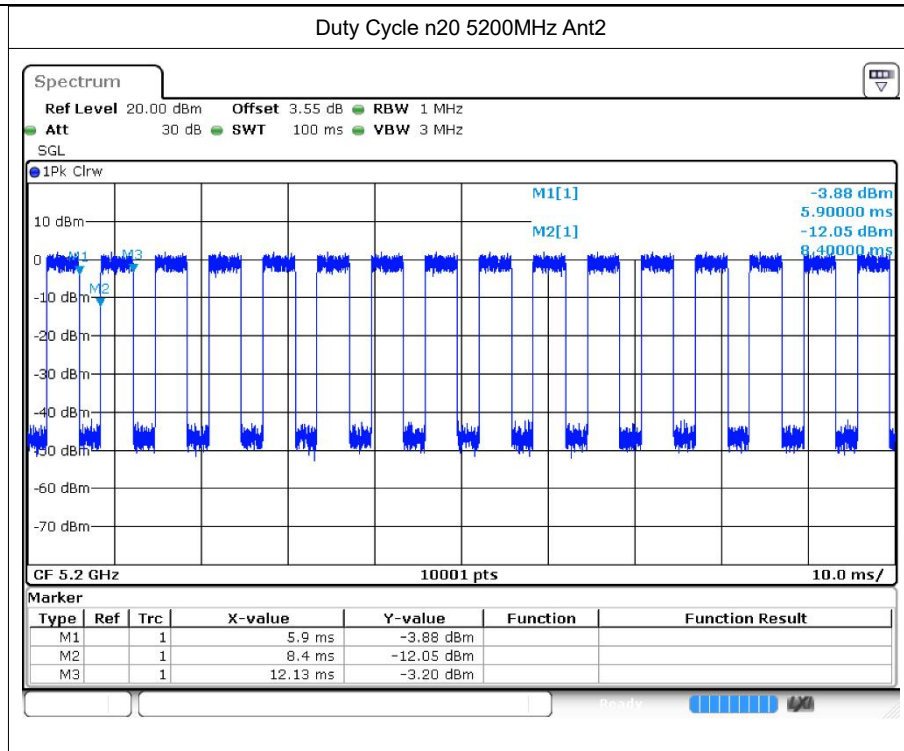


Duty Cycle n20 5180MHz Ant2

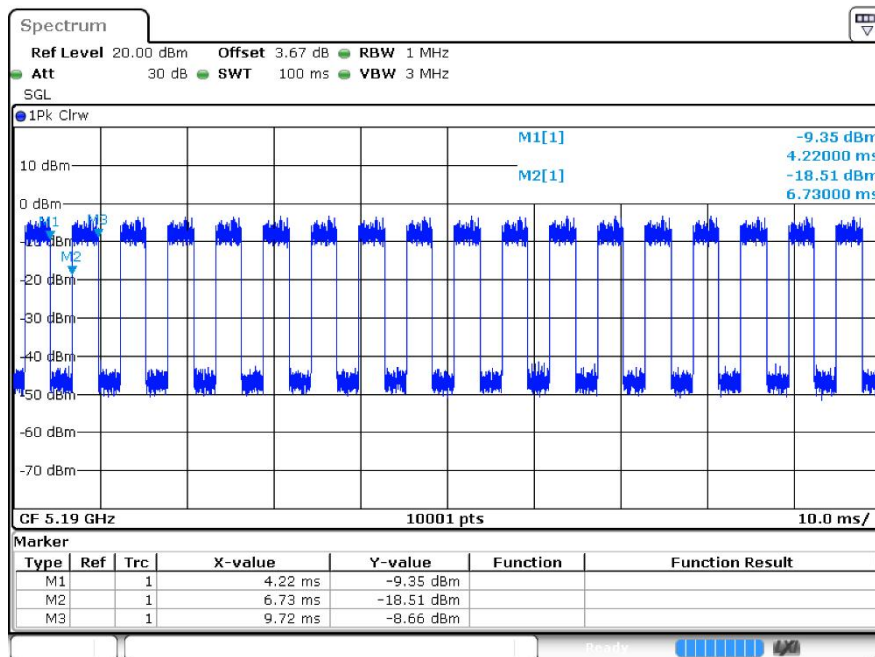


Duty Cycle n20 5200MHz Ant2

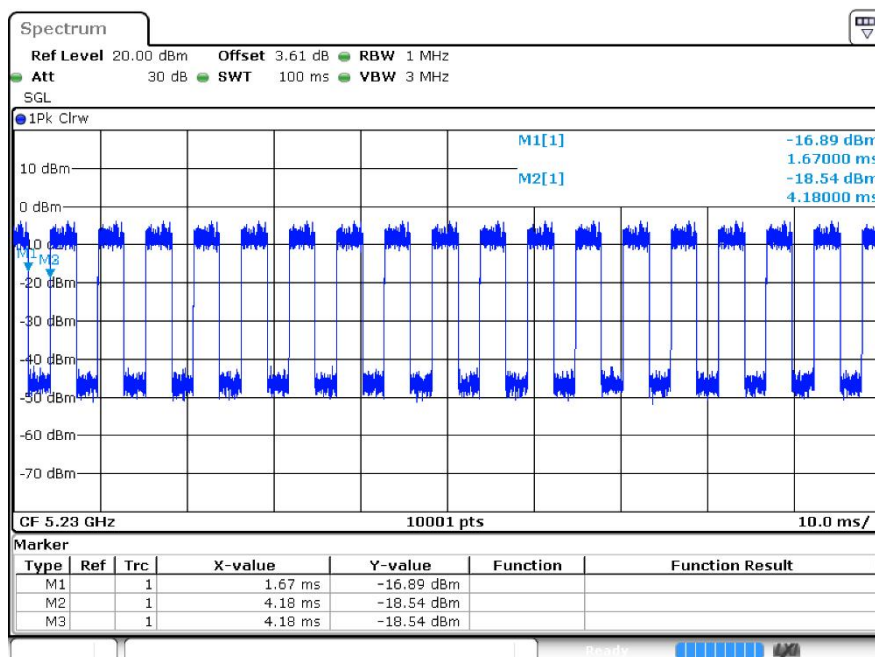




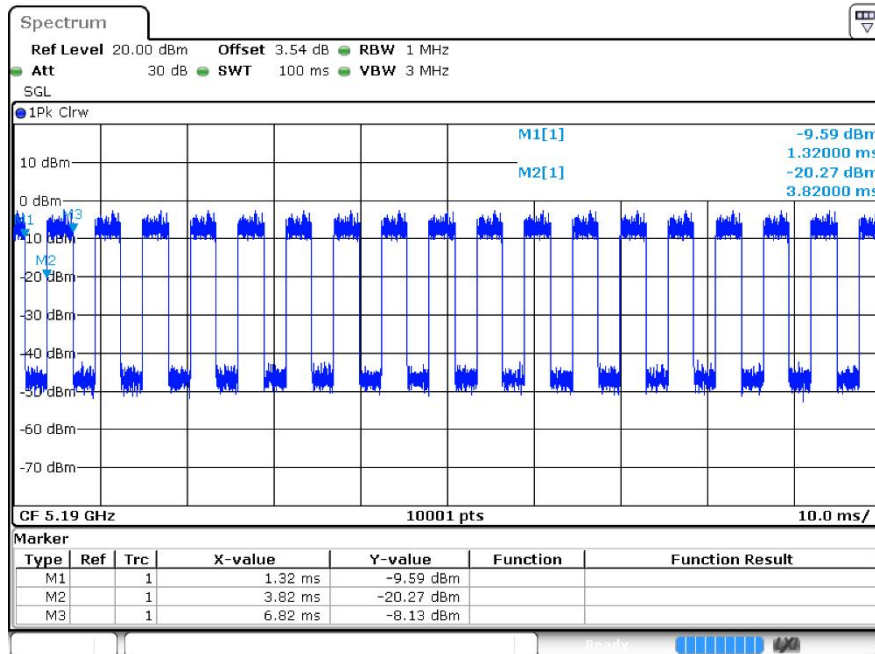
Duty Cyclen40 5190MHz Ant1



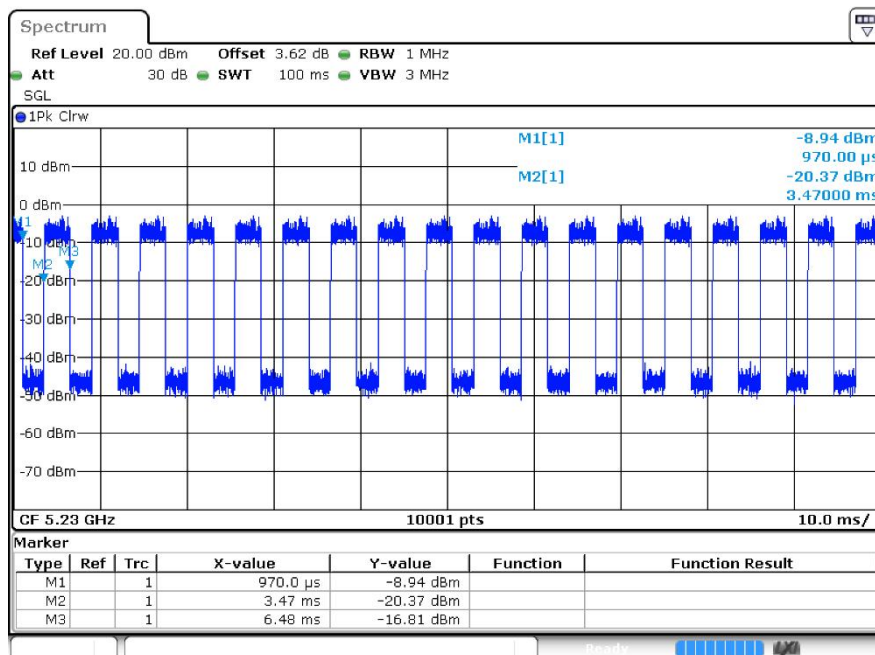
Duty Cyclen40 5230MHz Ant1



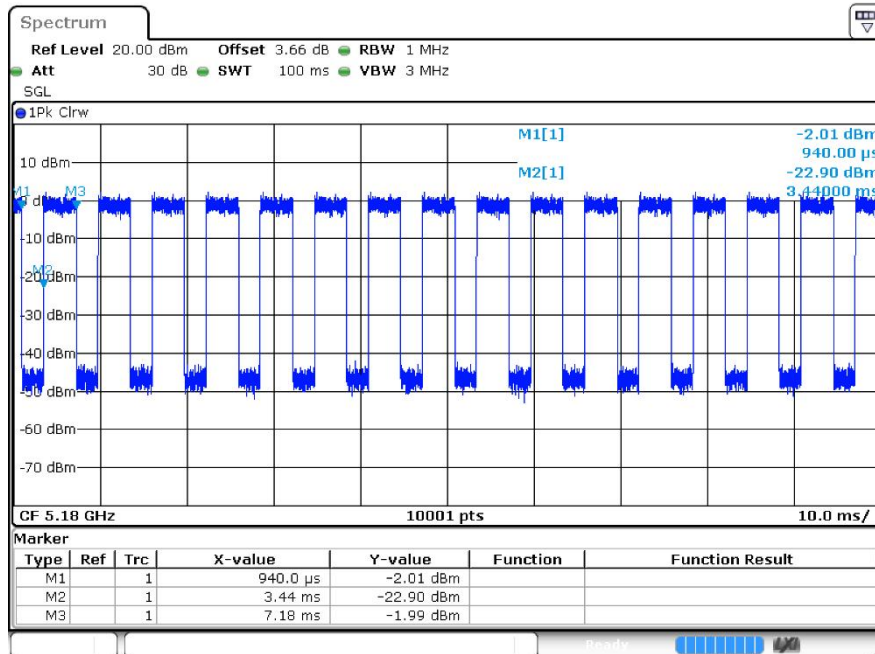
Duty Cyclen40 5190MHz Ant2



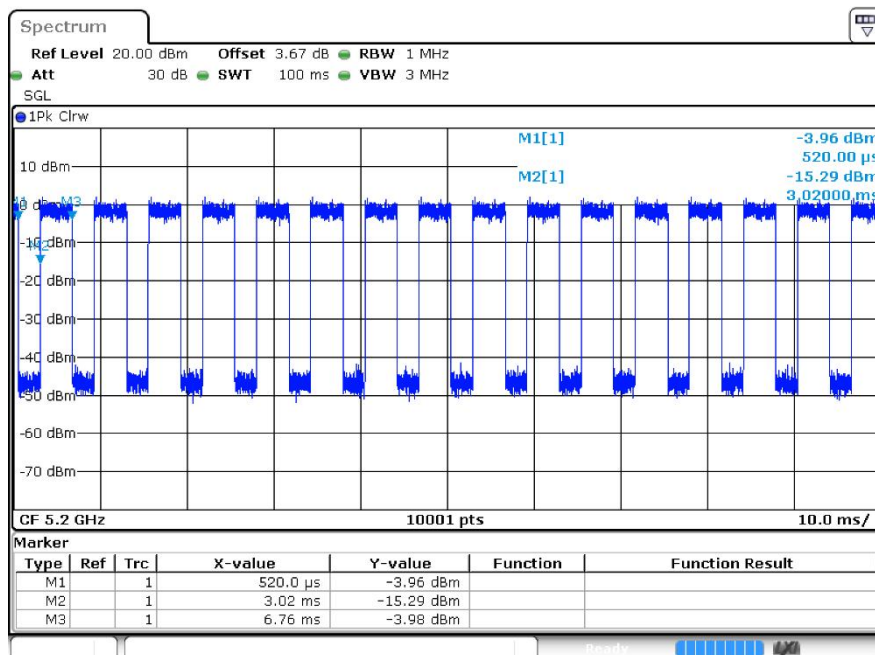
Duty Cyclen40 5230MHz Ant2

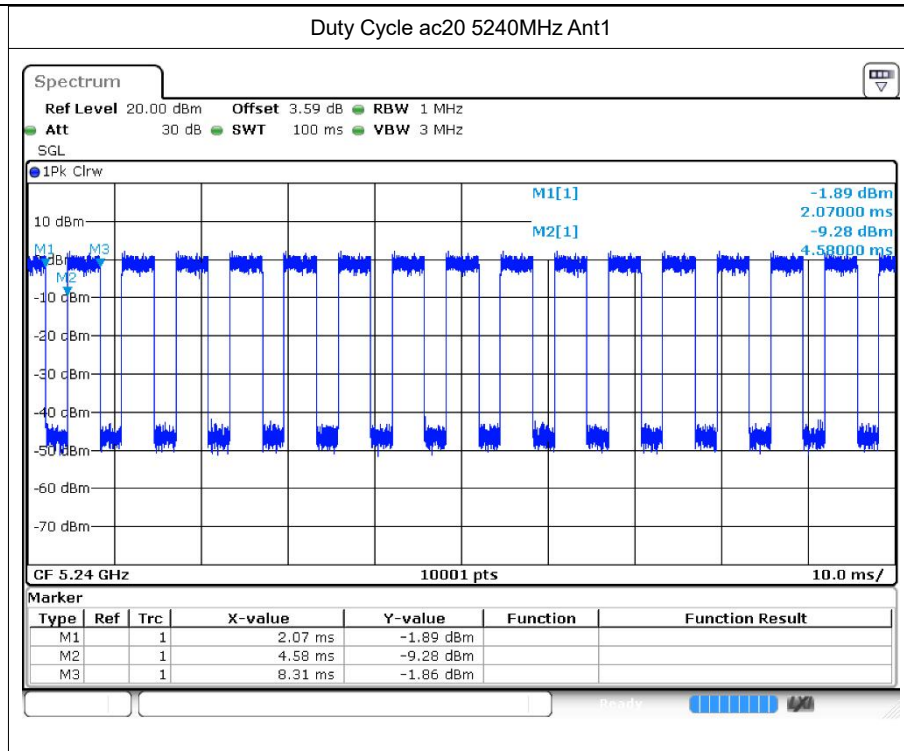


Duty Cycle ac20 5180MHz Ant1

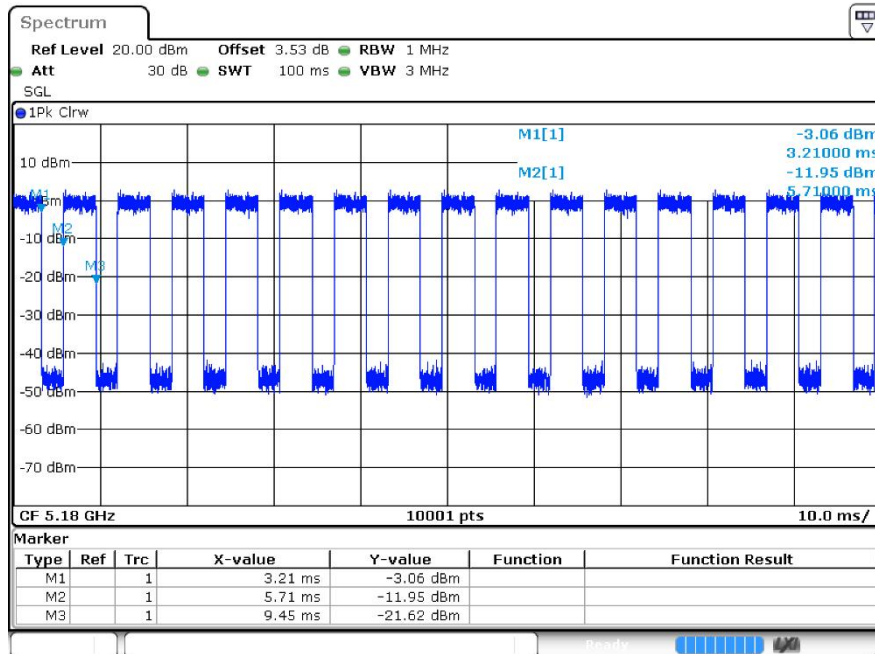


Duty Cycle ac20 5200MHz Ant1

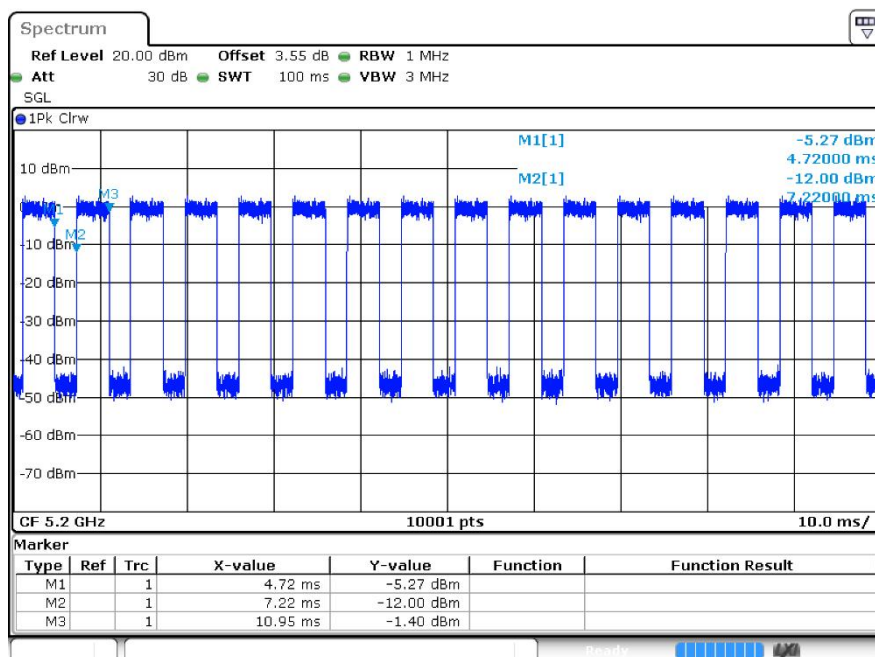


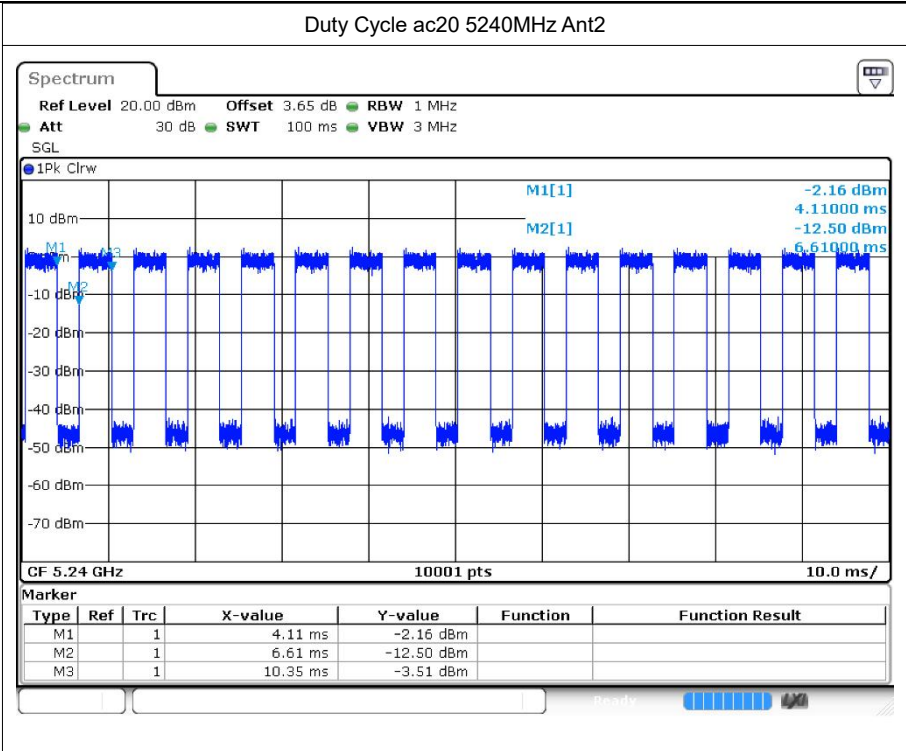


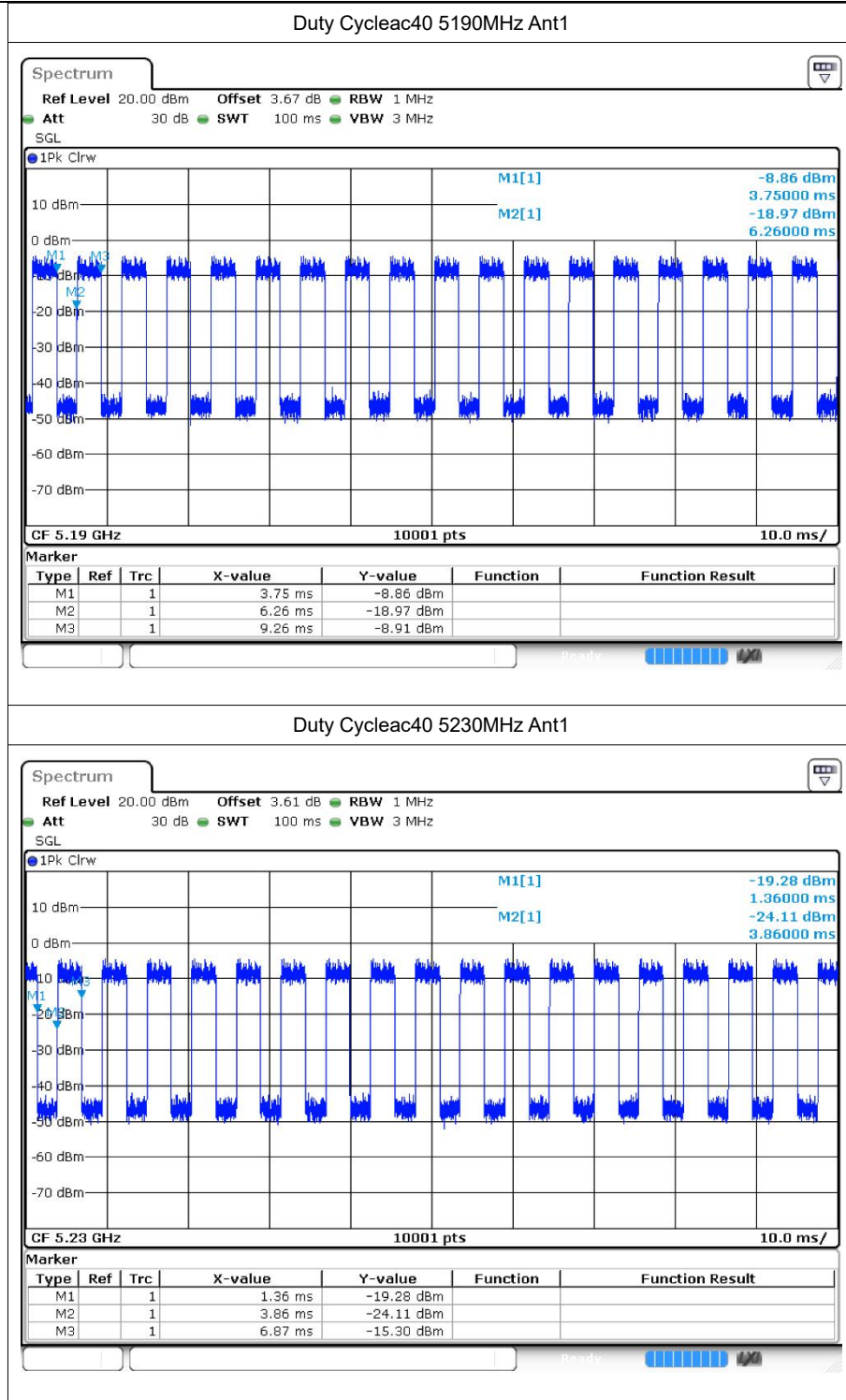
Duty Cycle ac20 5180MHz Ant2

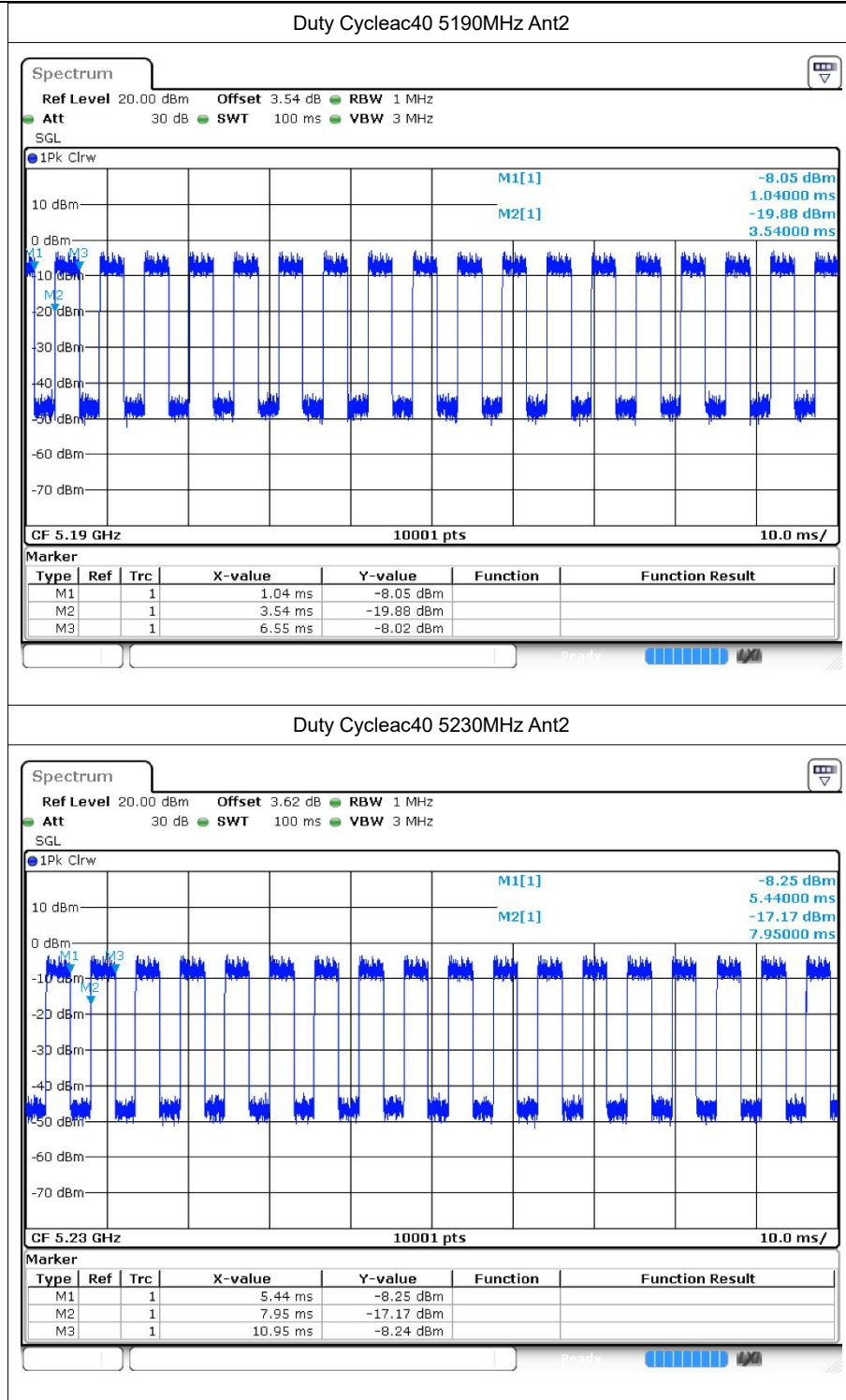


Duty Cycle ac20 5200MHz Ant2

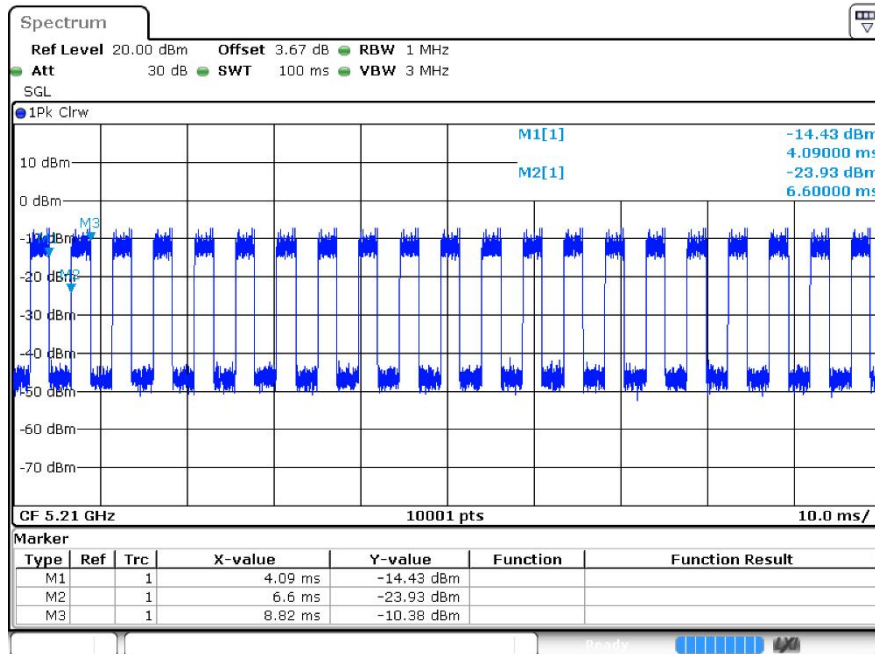




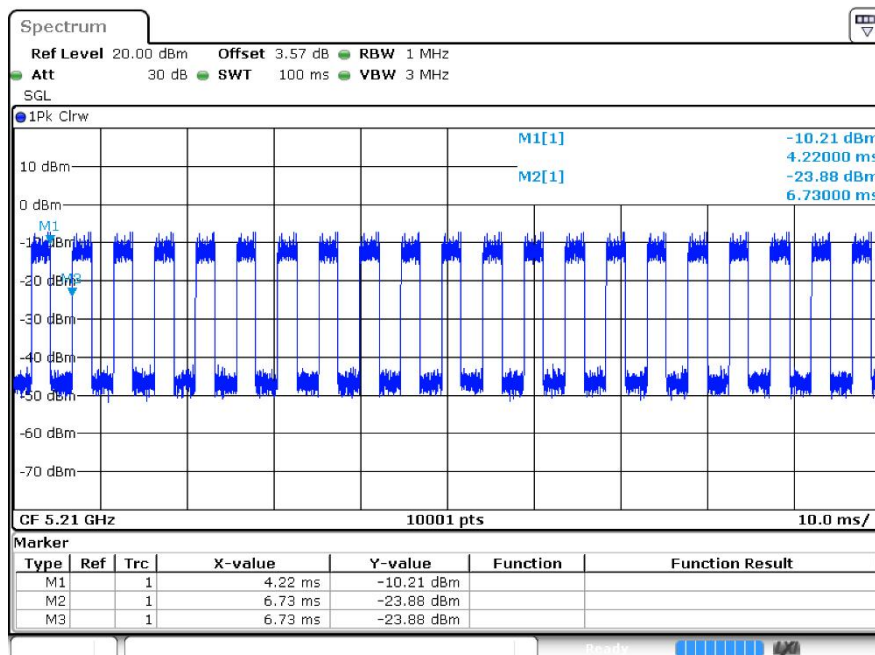




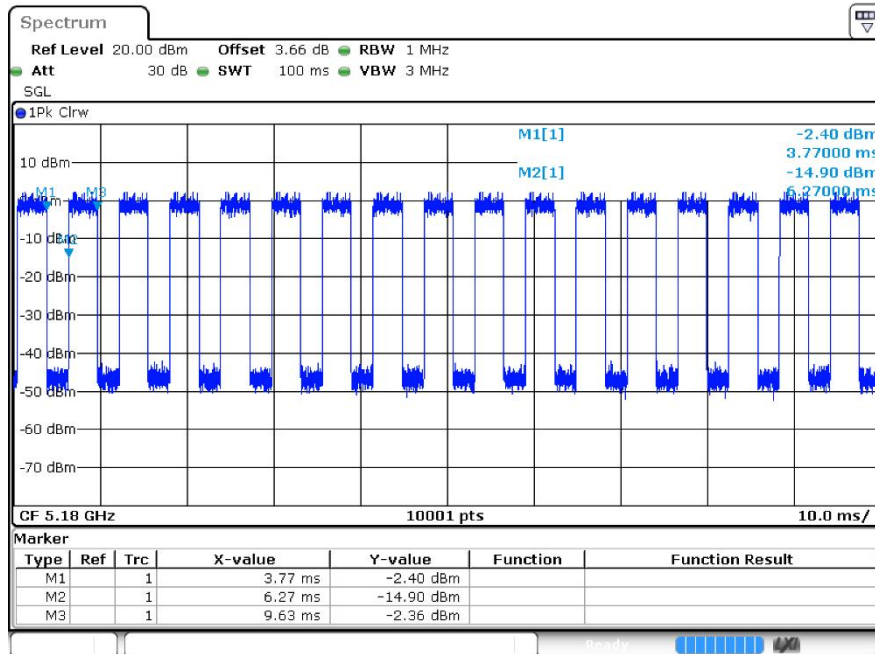
Duty Cycleac80 5210MHz Ant1



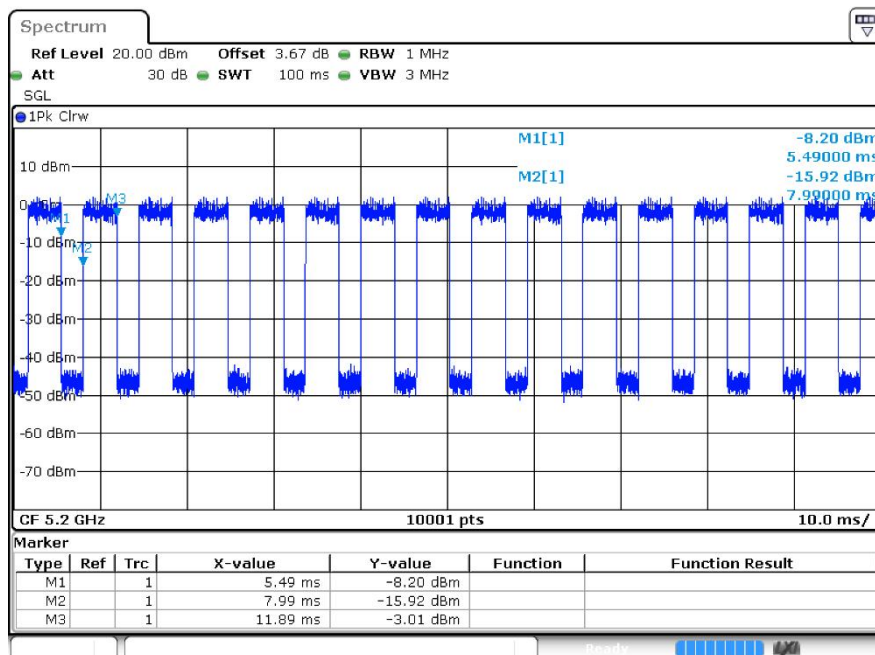
Duty Cycleac80 5210MHz Ant2

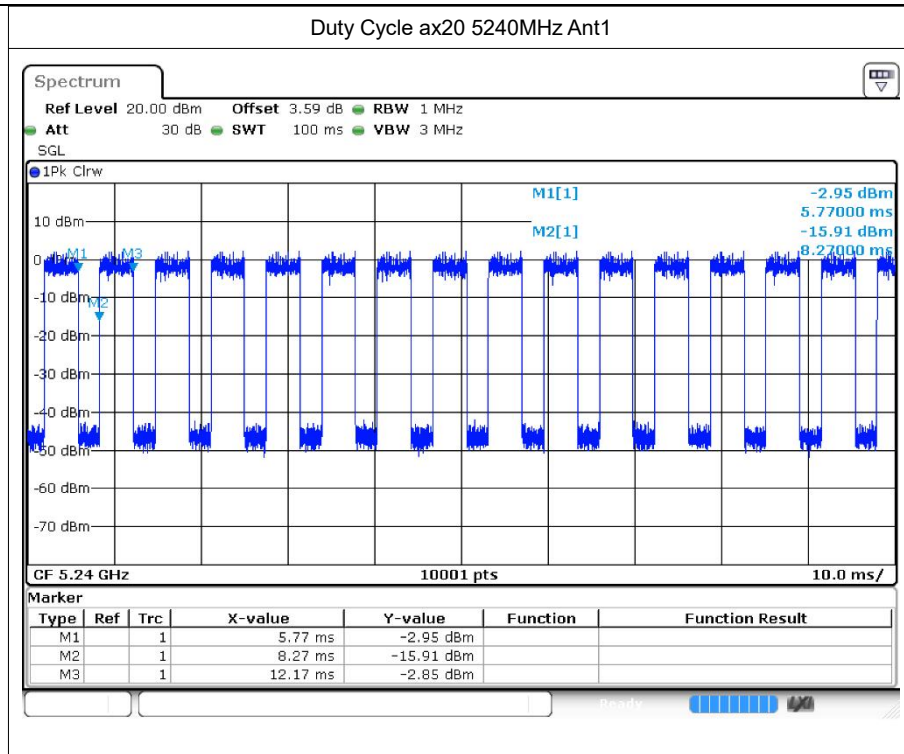


Duty Cycle ax20 5180MHz Ant1

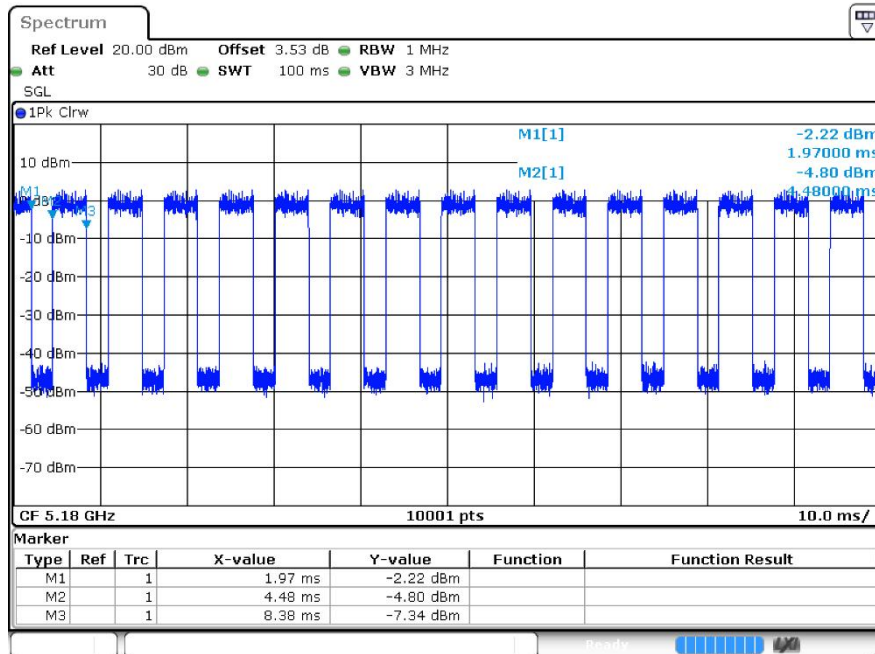


Duty Cycle ax20 5200MHz Ant1

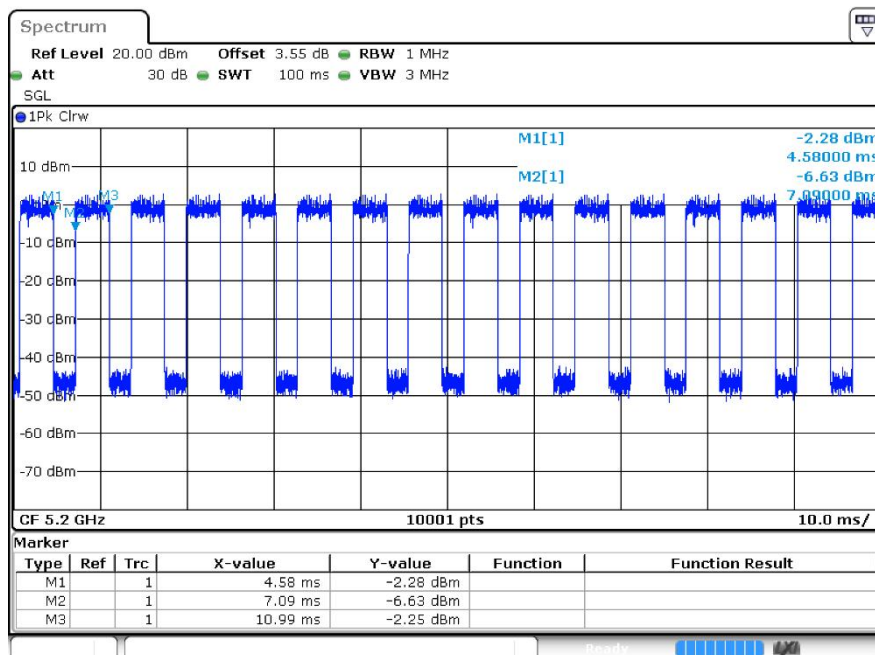


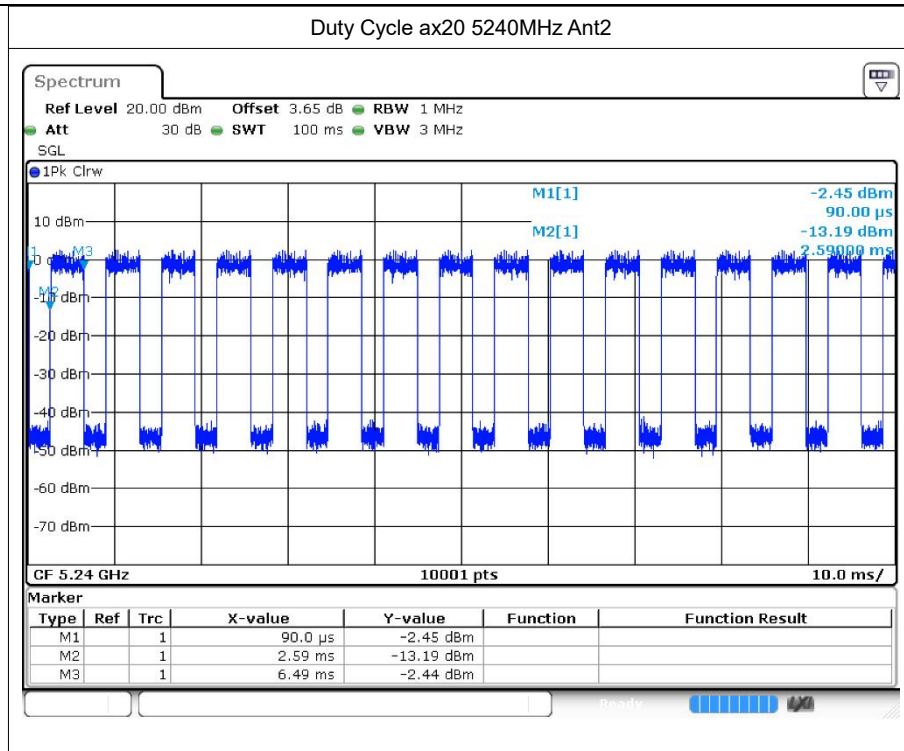


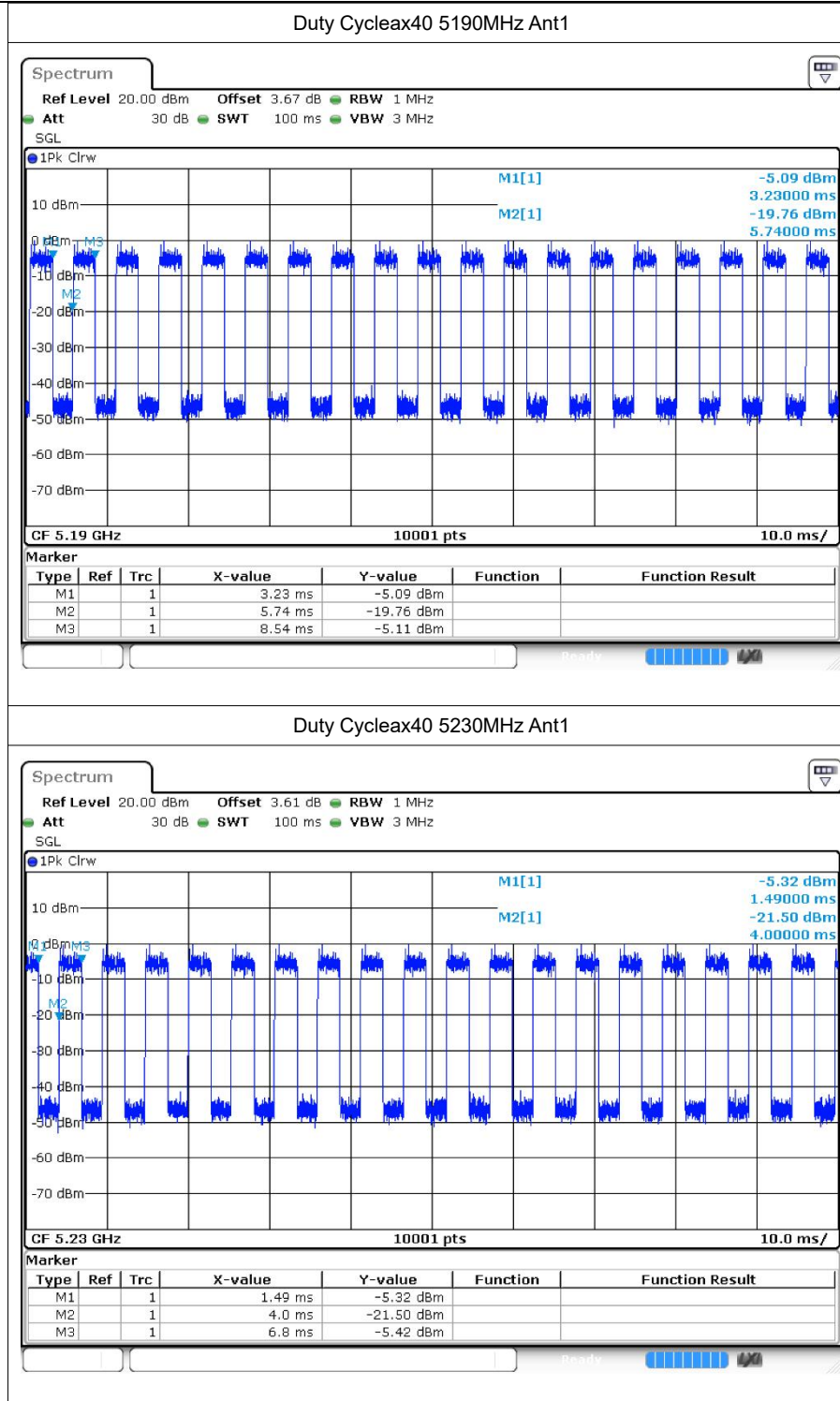
Duty Cycle ax20 5180MHz Ant2

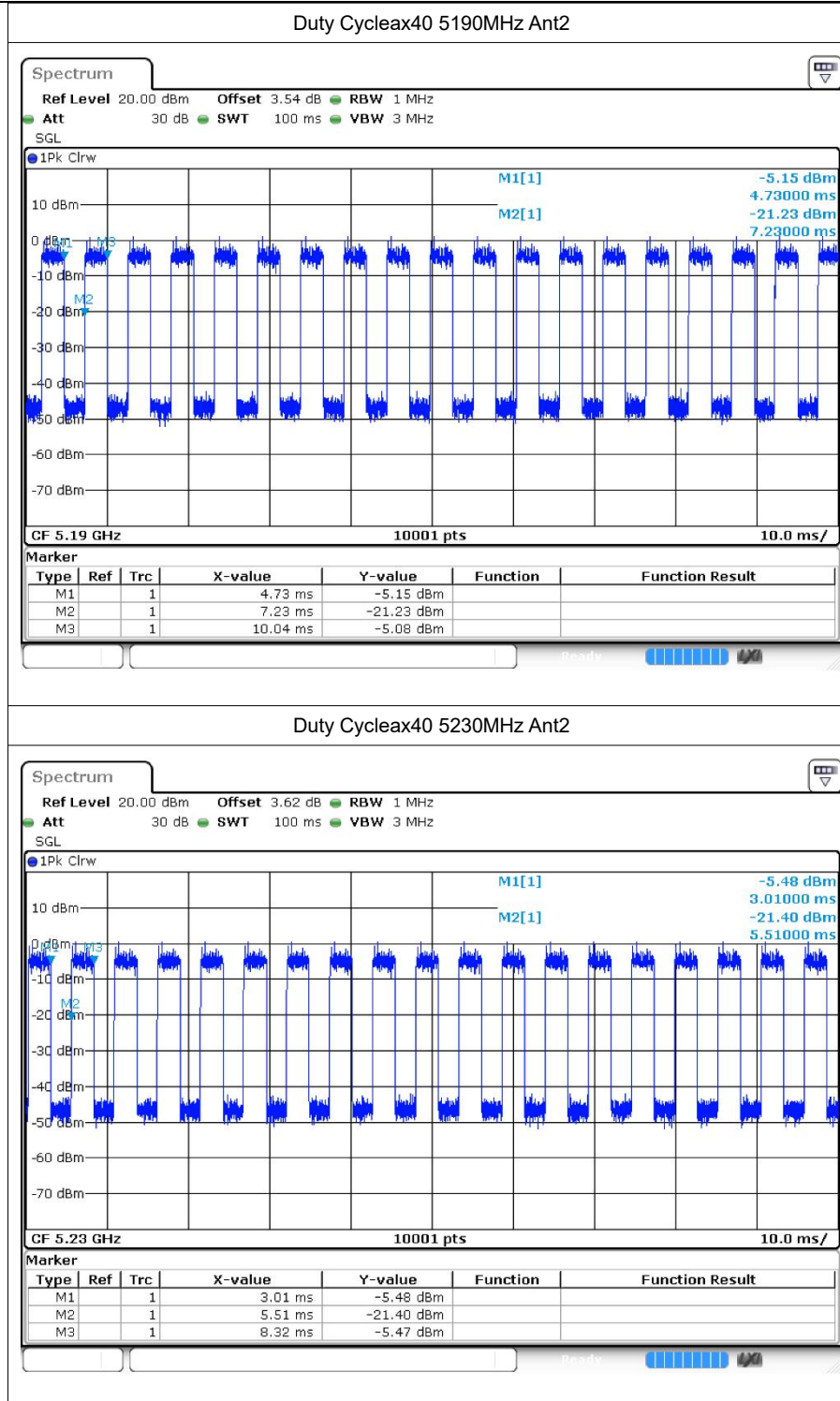


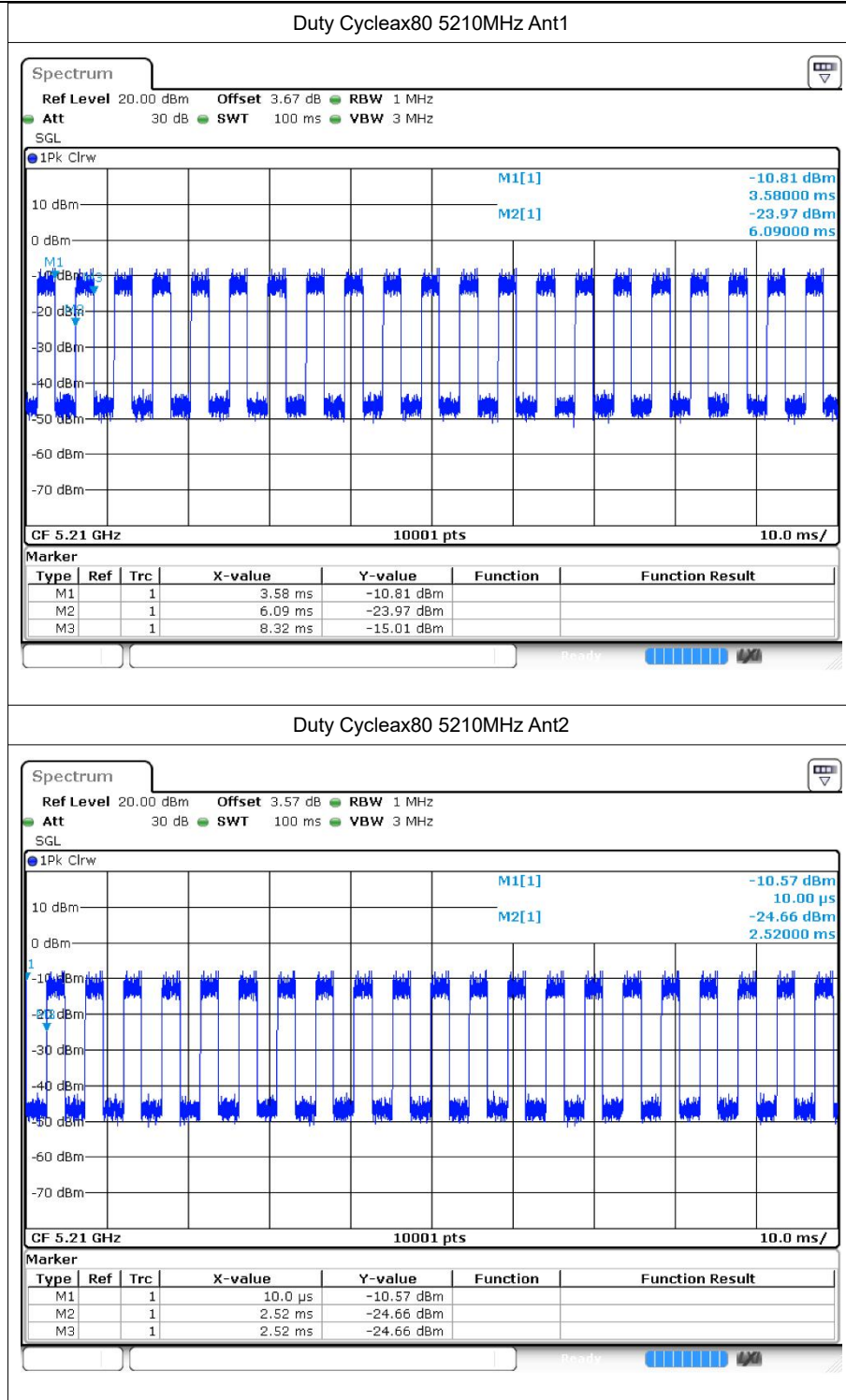
Duty Cycle ax20 5200MHz Ant2











2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
a	5180	Ant1	13.39	24	Pass
a	5200	Ant1	12.56	24	Pass
a	5240	Ant1	12.7	24	Pass
a	5180	Ant2	12.99	24	Pass
a	5200	Ant2	13	24	Pass
a	5240	Ant2	12.69	24	Pass
n20	5180	Ant1	9.24	24	Pass
n20	5180	Ant2	9.76	24	Pass
n20	5180	Sum	13.03	24	Pass
n20	5200	Ant1	9.31	24	Pass
n20	5200	Ant2	9.73	24	Pass
n20	5200	Sum	12.93	24	Pass
n20	5240	Ant1	9.53	24	Pass
n20	5240	Ant2	9.63	24	Pass
n20	5240	Sum	12.9	24	Pass
n40	5190	Ant1	9.21	24	Pass
n40	5190	Ant2	9.81	24	Pass
n40	5190	Sum	12.8	24	Pass
n40	5230	Ant1	9.05	24	Pass
n40	5230	Ant2	9.59	24	Pass
n40	5230	Sum	12.53	24	Pass
ac20	5180	Ant1	9.46	24	Pass
ac20	5180	Ant2	10.11	24	Pass
ac20	5180	Sum	12.65	24	Pass
ac20	5200	Ant1	8.97	24	Pass
ac20	5200	Ant2	10.08	24	Pass
ac20	5200	Sum	12.51	24	Pass
ac20	5240	Ant1	9.44	24	Pass
ac20	5240	Ant2	9.58	24	Pass
ac20	5240	Sum	12.37	24	Pass
ac40	5190	Ant1	9.01	24	Pass
ac40	5190	Ant2	9.79	24	Pass
ac40	5190	Sum	12.59	24	Pass
ac40	5230	Ant1	8.91	24	Pass
ac40	5230	Ant2	9.59	24	Pass



ac40	5230	Sum	12.35	24	Pass
ac80	5210	Ant1	8.68	24	Pass
ac80	5210	Ant2	9.26	24	Pass
ac80	5210	Sum	11.97	24	Pass
ax20	5180	Ant1	10.1	24	Pass
ax20	5180	Ant2	10.44	24	Pass
ax20	5180	Sum	13.19	24	Pass
ax20	5200	Ant1	9.52	24	Pass
ax20	5200	Ant2	10.32	24	Pass
ax20	5200	Sum	13.15	24	Pass
ax20	5240	Ant1	9.61	24	Pass
ax20	5240	Ant2	10.25	24	Pass
ax20	5240	Sum	12.98	24	Pass
ax40	5190	Ant1	9.92	24	Pass
ax40	5190	Ant2	10.51	24	Pass
ax40	5190	Sum	13.01	24	Pass
ax40	5230	Ant1	9.67	24	Pass
ax40	5230	Ant2	10.15	24	Pass
ax40	5230	Sum	12.91	24	Pass
ax80	5210	Ant1	8.22	24	Pass
ax80	5210	Ant2	8.87	24	Pass
ax80	5210	Sum	11.56	24	Pass

Note:

The duty factor has been compensated into the result.

The Direction Gain is 5.13 dBi.



3 -26dB Bandwidth

3.1 Test Result

Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
a	5180	Ant1	18.582	0.5	Pass
a	5200	Ant1	18.606	0.5	Pass
a	5240	Ant1	18.138	0.5	Pass
n20	5180	Ant1	19.611	0.5	Pass
n20	5200	Ant1	19.242	0.5	Pass
n20	5240	Ant1	19.305	0.5	Pass
n40	5190	Ant1	38.346	0.5	Pass
n40	5230	Ant1	38.502	0.5	Pass
ac20	5180	Ant1	19.434	0.5	Pass
ac20	5200	Ant1	19.491	0.5	Pass
ac20	5240	Ant1	19.287	0.5	Pass
ac40	5190	Ant1	38.37	0.5	Pass
ac40	5230	Ant1	38.538	0.5	Pass
ac80	5210	Ant1	83.592	0.5	Pass
ax20	5180	Ant1	20.022	0.5	Pass
ax20	5200	Ant1	20.091	0.5	Pass
ax20	5240	Ant1	20.445	0.5	Pass
ax40	5190	Ant1	39.462	0.5	Pass
ax40	5230	Ant1	39.558	0.5	Pass
ax80	5210	Ant1	81.456	0.5	Pass
a	5180	Ant2	18.627	0.5	Pass
a	5200	Ant2	18.477	0.5	Pass
a	5240	Ant2	18.66	0.5	Pass
n20	5180	Ant2	19.389	0.5	Pass
n20	5200	Ant2	19.626	0.5	Pass
n20	5240	Ant2	19.542	0.5	Pass
n40	5190	Ant2	38.436	0.5	Pass
n40	5230	Ant2	38.67	0.5	Pass
ac20	5180	Ant2	19.785	0.5	Pass
ac20	5200	Ant2	19.53	0.5	Pass
ac20	5240	Ant2	19.518	0.5	Pass
ac40	5190	Ant2	38.388	0.5	Pass
ac40	5230	Ant2	38.448	0.5	Pass
ac80	5210	Ant2	81	0.5	Pass
ax20	5180	Ant2	20.091	0.5	Pass
ax20	5200	Ant2	20.121	0.5	Pass
ax20	5240	Ant2	20.295	0.5	Pass



ax40	5190	Ant2	39.324	0.5	Pass
ax40	5230	Ant2	39.534	0.5	Pass
ax80	5210	Ant2	84.06	0.5	Pass

3.2 Test Graphs

