



Appendix E

RF Test Data for 5.8GWIFI(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

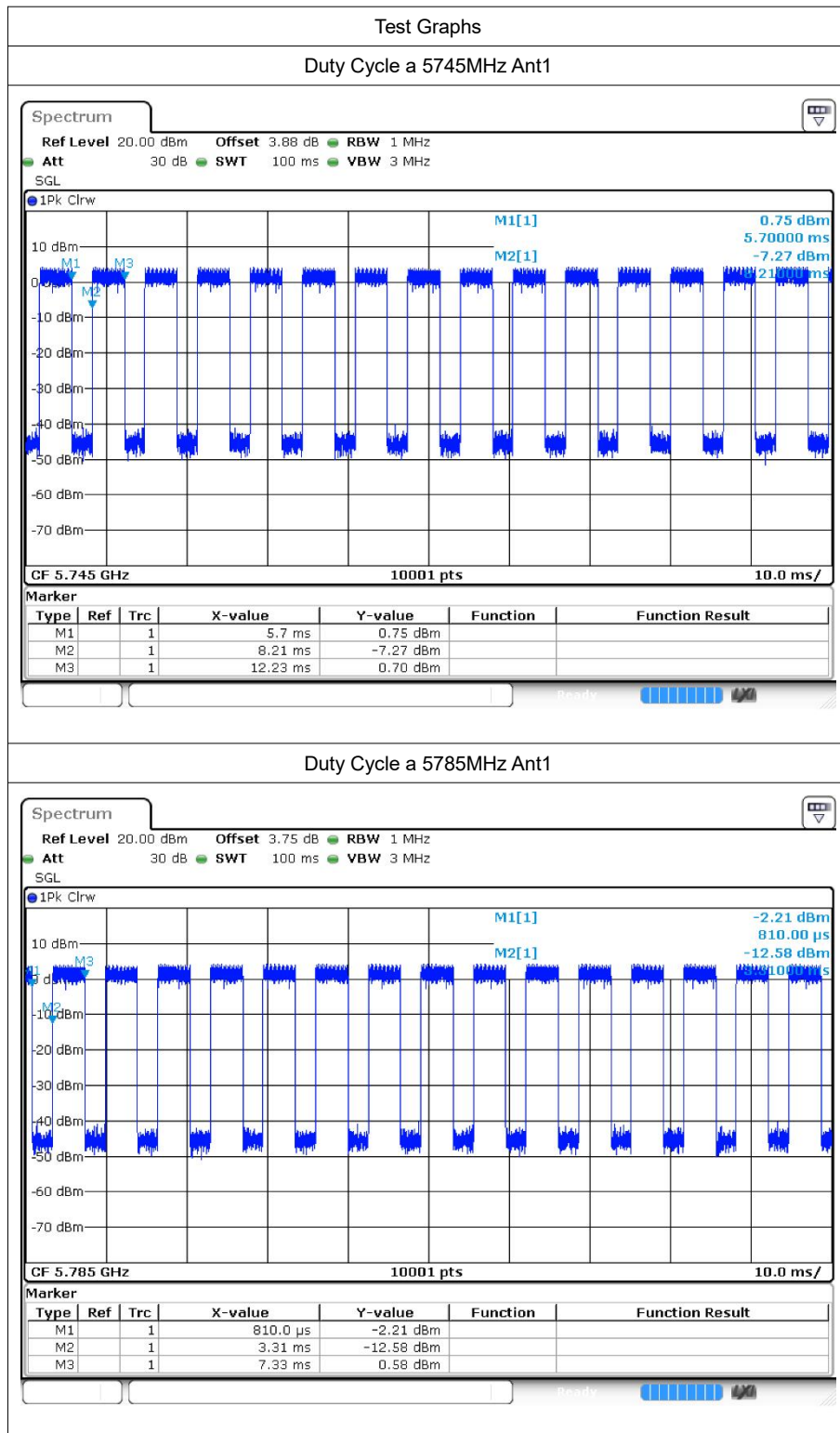
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
a	5745	Ant1	60.94	2.15	0.25
a	5785	Ant1	61.32	2.12	0.25
a	5825	Ant1	62.57	2.04	0.25
a	5745	Ant2	60.54	2.18	0.25
a	5785	Ant2	61.24	2.13	0.25
a	5825	Ant2	60.51	2.18	0.25
n20	5745	Ant1	60.13	2.21	0.27
n20	5785	Ant1	60.08	2.21	0.27
n20	5825	Ant1	60.12	2.21	0.27
n20	5745	Ant2	60.13	2.21	0.27
n20	5785	Ant2	60.13	2.21	0.27
n20	5825	Ant2	60.13	2.21	0.27
n40	5755	Ant1	54.76	2.62	0.33
n40	5795	Ant1	54.97	2.6	0.33
n40	5755	Ant2	54.89	2.6	0.33
n40	5795	Ant2	54.37	2.65	0.33
ac20	5745	Ant1	60.14	2.21	0.27
ac20	5785	Ant1	59.95	2.22	0.27
ac20	5825	Ant1	60.13	2.21	0.27
ac20	5745	Ant2	60.12	2.21	0.27
ac20	5785	Ant2	60.14	2.21	0.27
ac20	5825	Ant2	60.13	2.21	0.27
ac40	5755	Ant1	55	2.6	0.33
ac40	5795	Ant1	54.18	2.66	0.33
ac40	5755	Ant2	55.15	2.58	0.33
ac40	5795	Ant2	54.32	2.65	0.33
ac80	5775	Ant1	46.83	3.3	鑒?
ac80	5775	Ant2	46.83	3.3	0.45
ax20	5745	Ant1	57.31	2.42	0.3
ax20	5785	Ant1	57.54	2.4	0.3
ax20	5825	Ant1	57.43	2.41	0.3
ax20	5745	Ant2	57.65	2.39	0.3
ax20	5785	Ant2	57.63	2.39	0.3
ax20	5825	Ant2	57.63	2.39	0.3
ax40	5755	Ant1	53.39	2.73	0.36
ax40	5795	Ant1	52.75	2.78	0.36
ax40	5755	Ant2	52.65	2.79	0.36



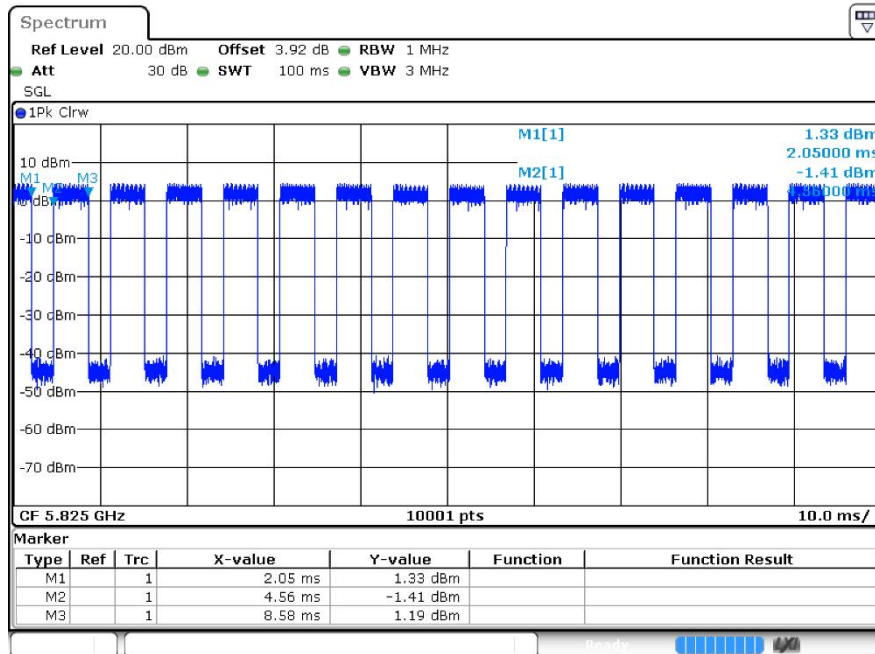
ax40	5795	Ant2	52.76	2.78	0.36
ax80	5775	Ant1	45.61	3.41	0.47
ax80	5775	Ant2	46.24	3.35	0.47



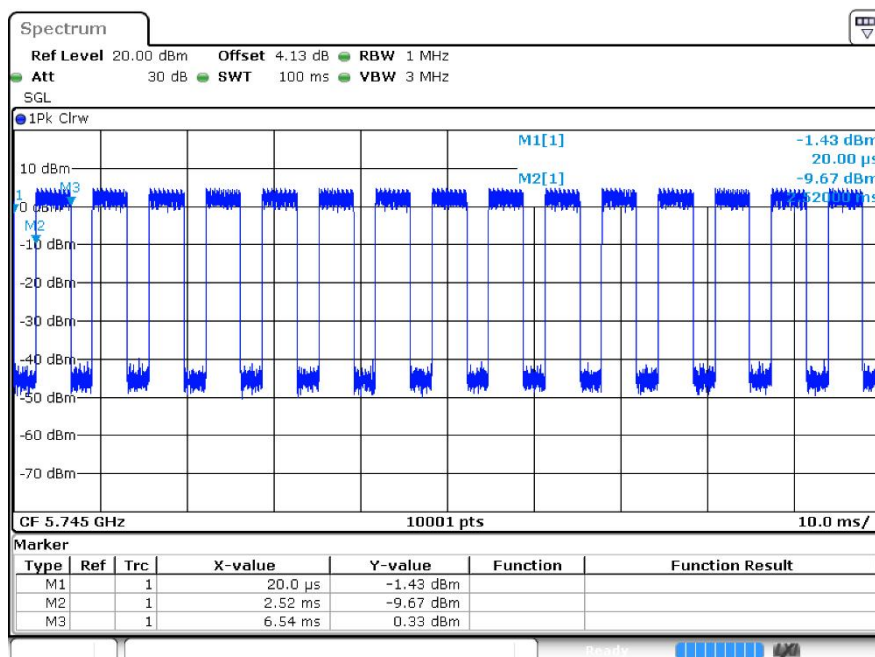
1.2 Test Graphs



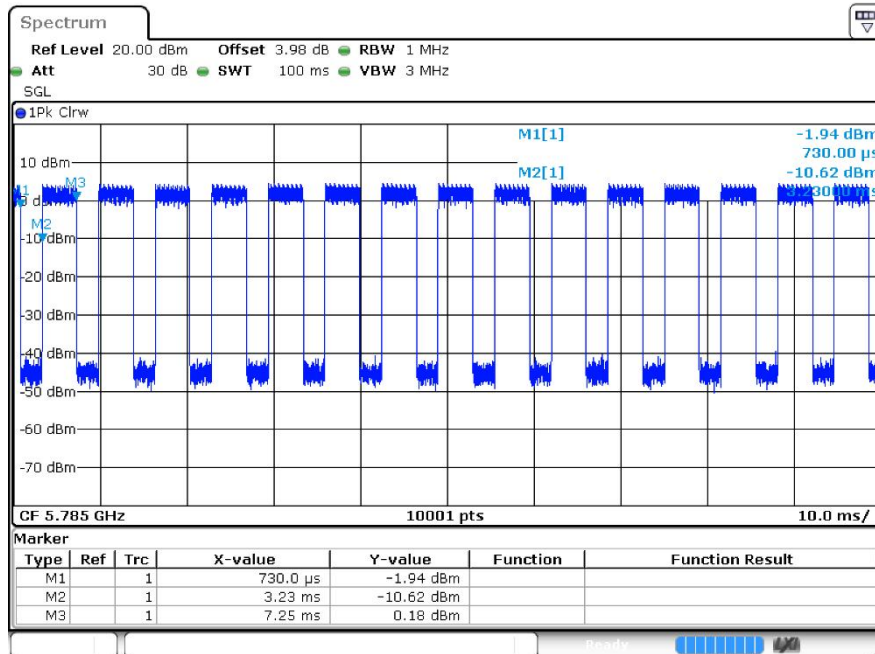
Duty Cycle a 5825MHz Ant1



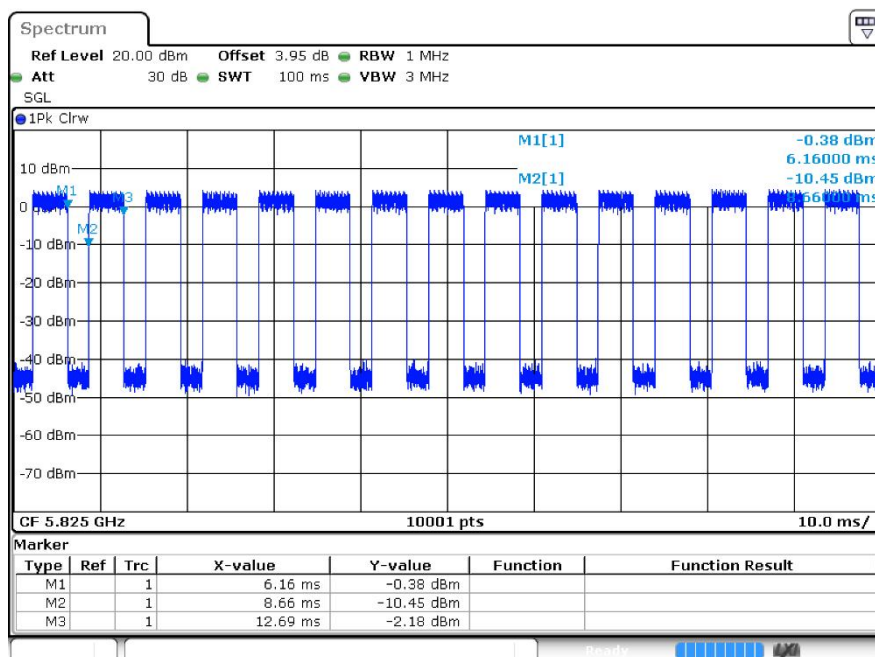
Duty Cycle a 5745MHz Ant2



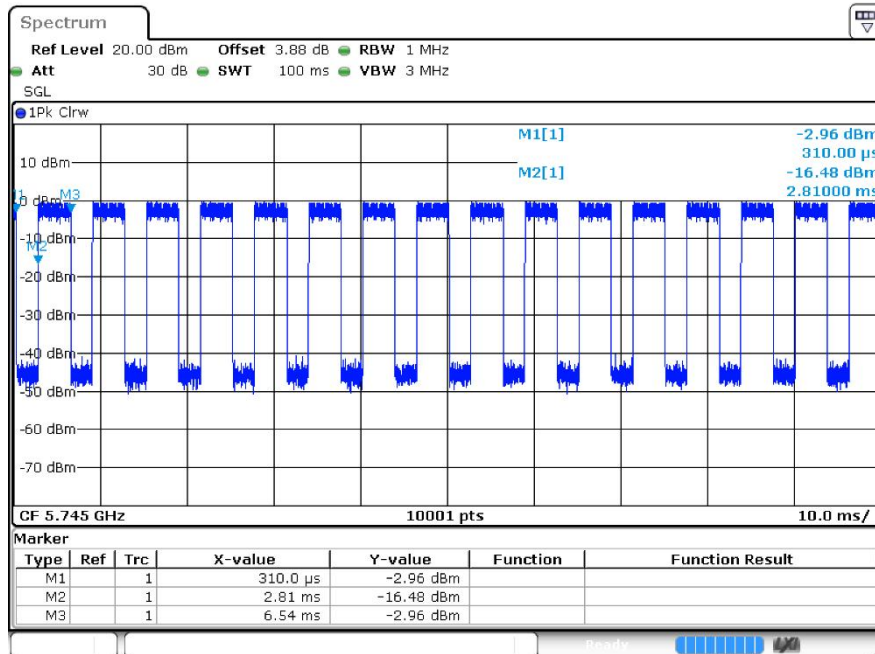
Duty Cycle a 5785MHz Ant2



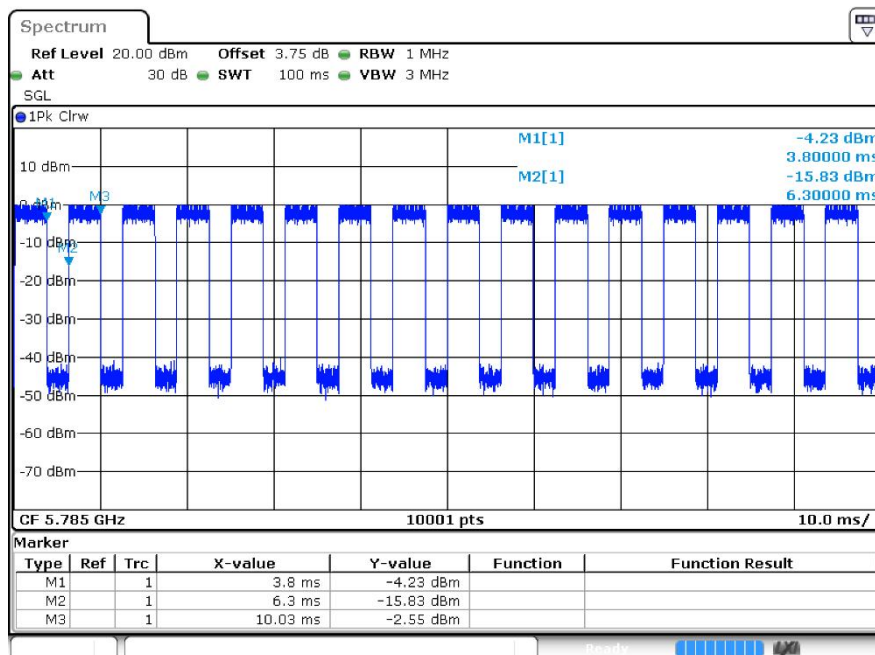
Duty Cycle a 5825MHz Ant2



Duty Cycle n20 5745MHz Ant1

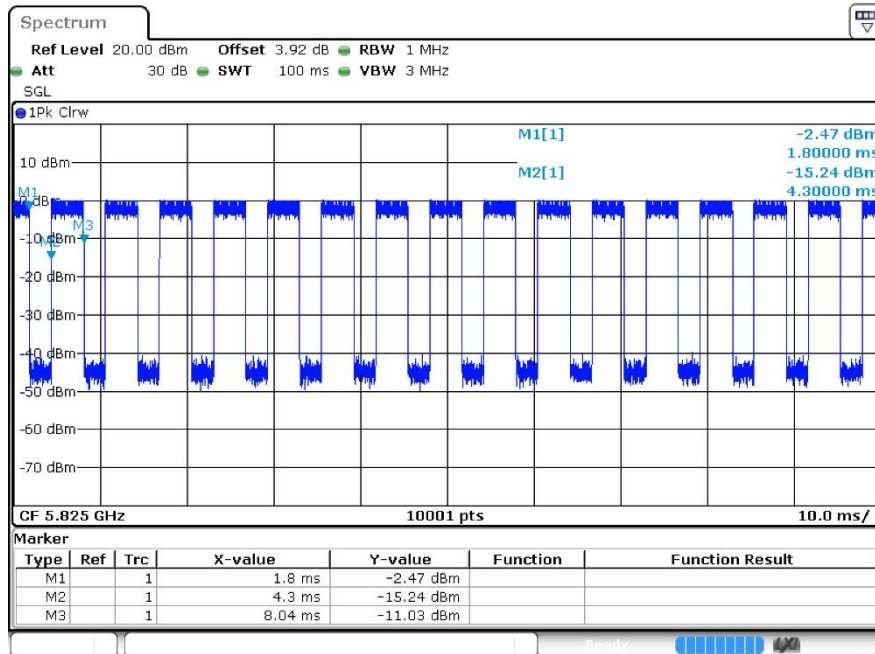


Duty Cycle n20 5785MHz Ant1

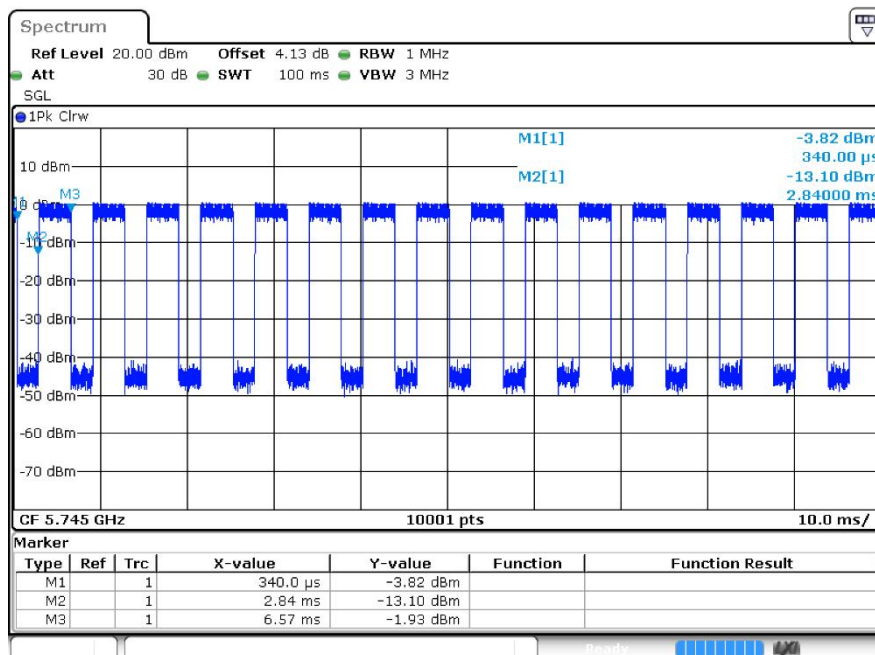




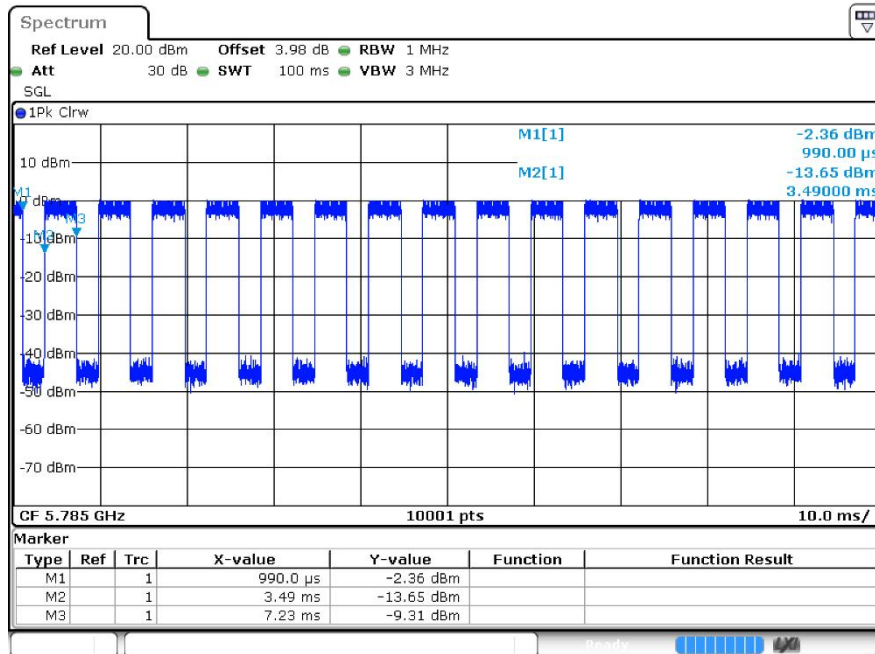
Duty Cycle n20 5825MHz Ant1



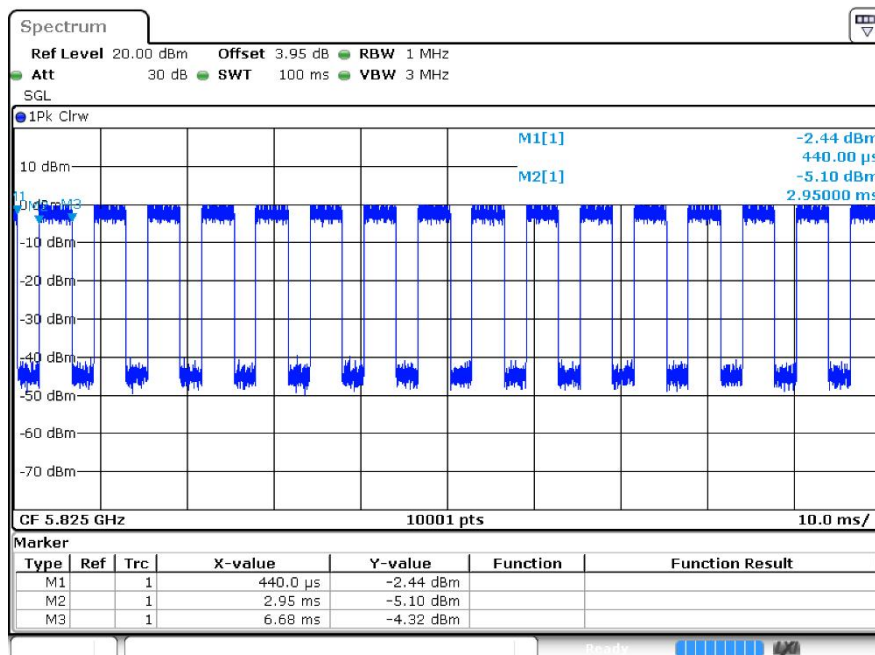
Duty Cycle n20 5745MHz Ant2



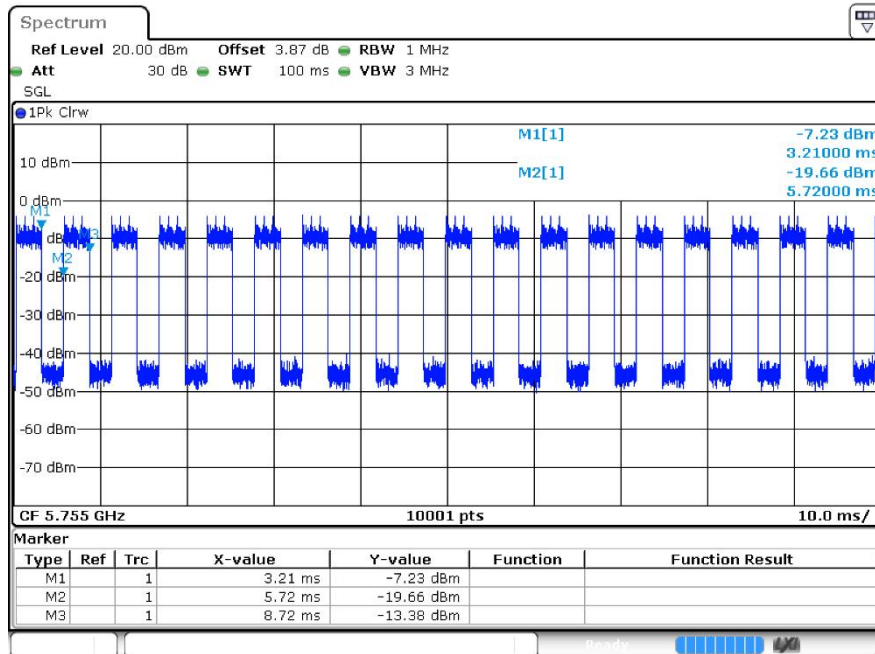
Duty Cycle n20 5785MHz Ant2



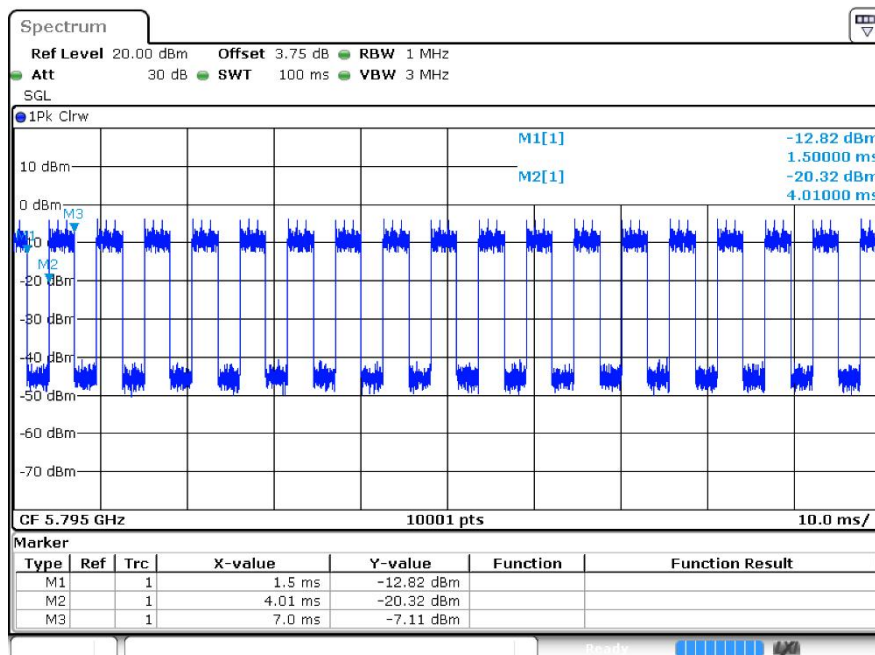
Duty Cycle n20 5825MHz Ant2



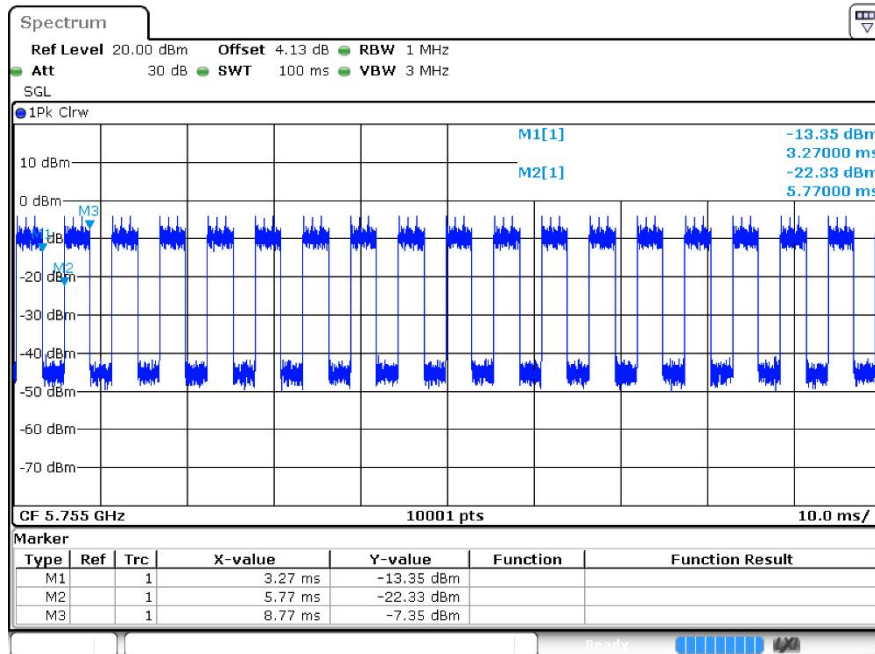
Duty Cycle n40 5755MHz Ant1



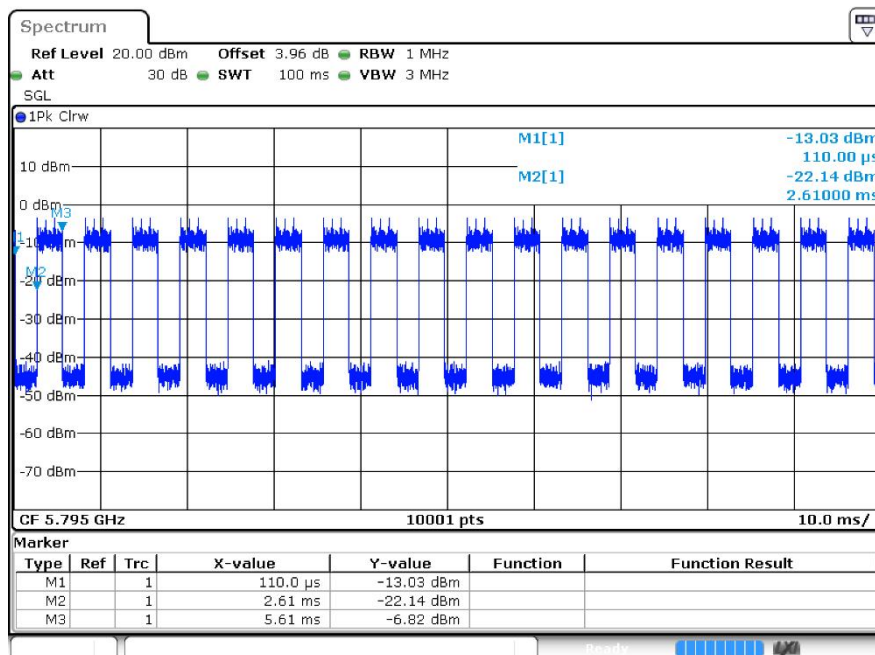
Duty Cycle n40 5795MHz Ant1



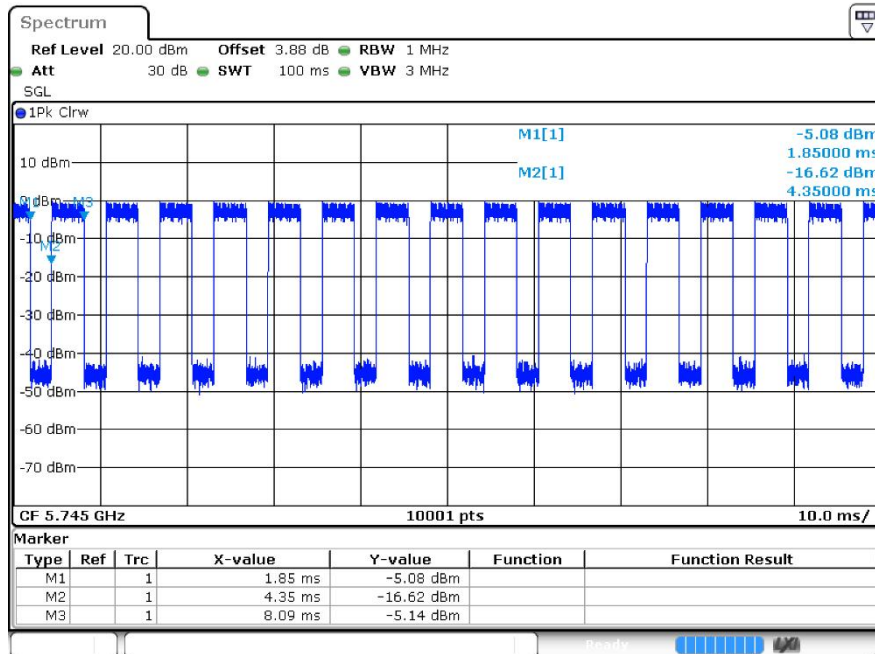
Duty Cycle n40 5755MHz Ant2



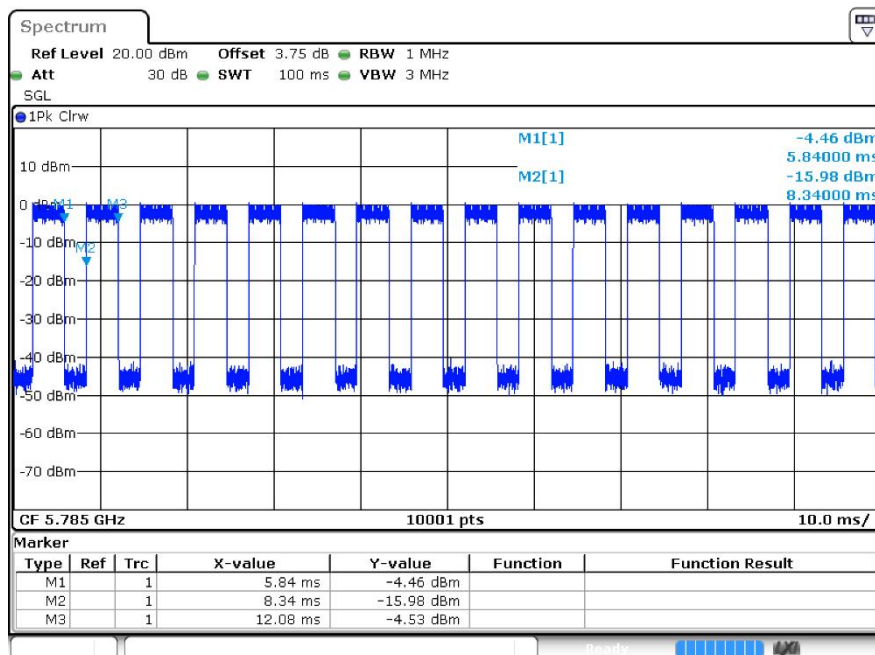
Duty Cycle n40 5795MHz Ant2



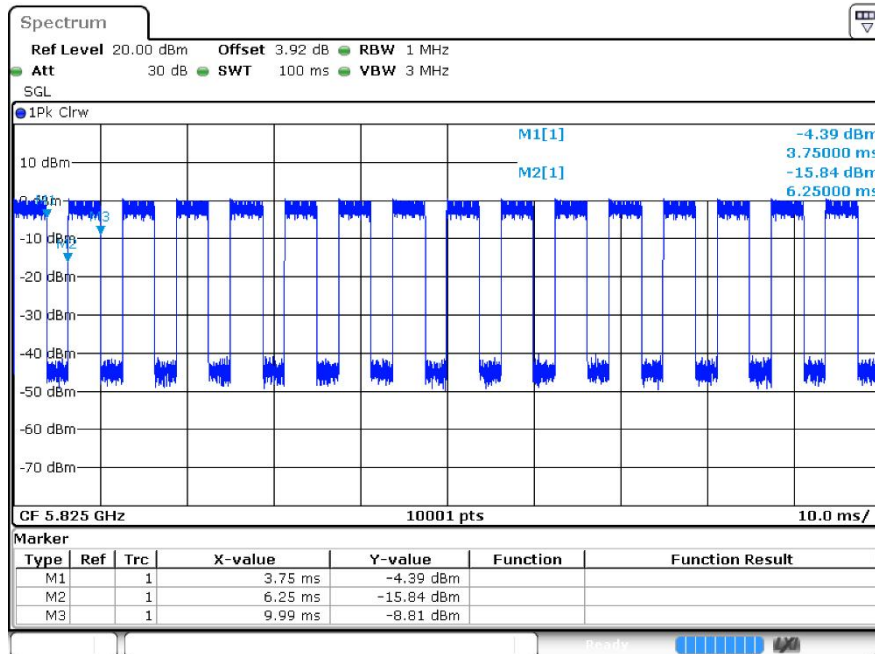
Duty Cycle ac20 5745MHz Ant1



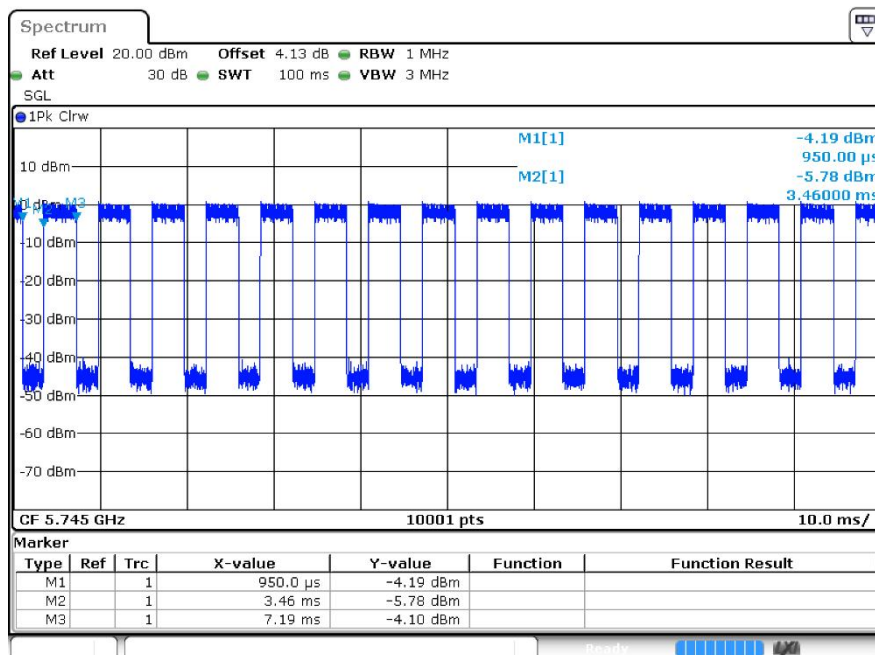
Duty Cycle ac20 5785MHz Ant1



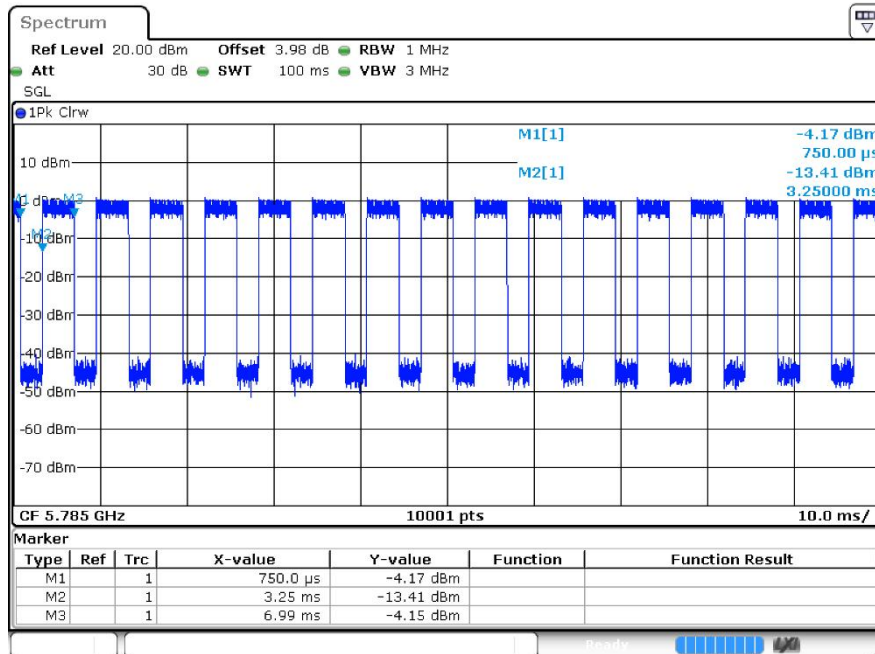
Duty Cycle ac20 5825MHz Ant1



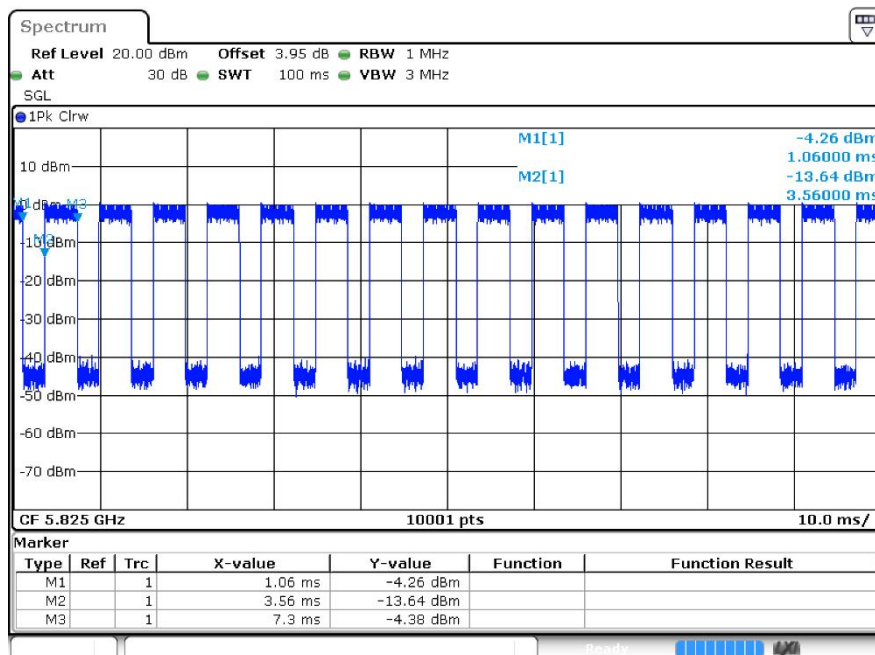
Duty Cycle ac20 5745MHz Ant2



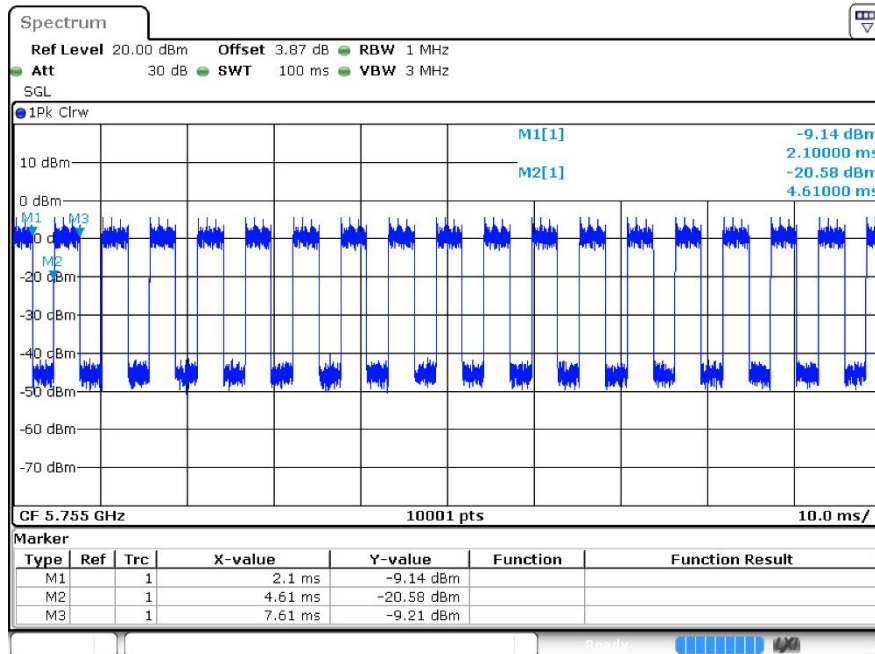
Duty Cycle ac20 5785MHz Ant2



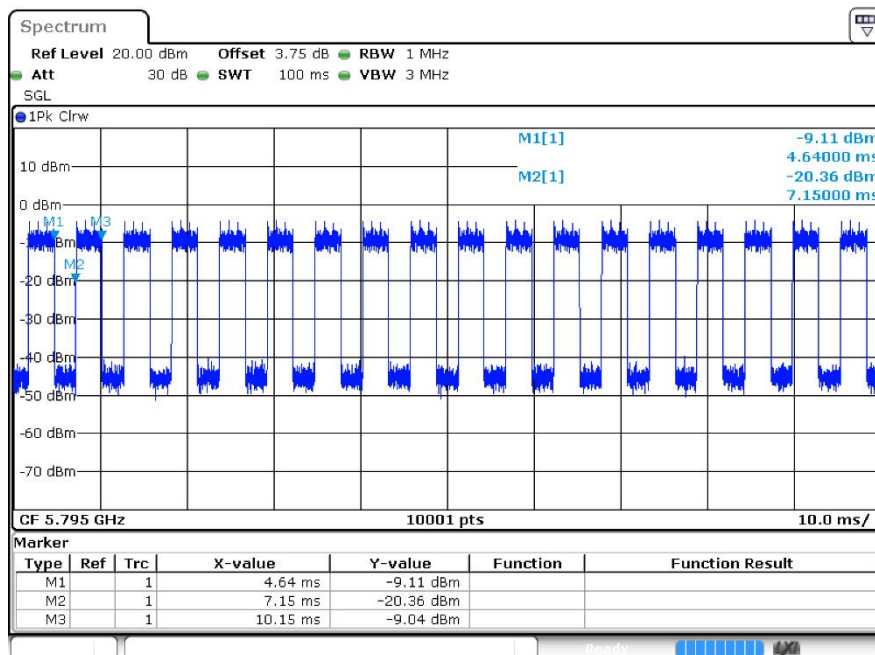
Duty Cycle ac20 5825MHz Ant2



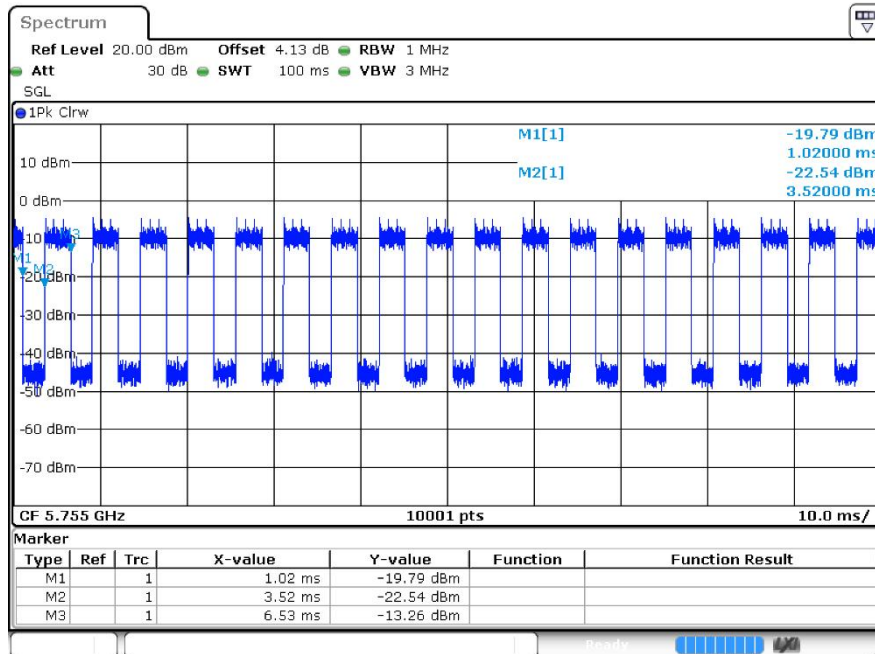
Duty Cycle ac40 5755MHz Ant1



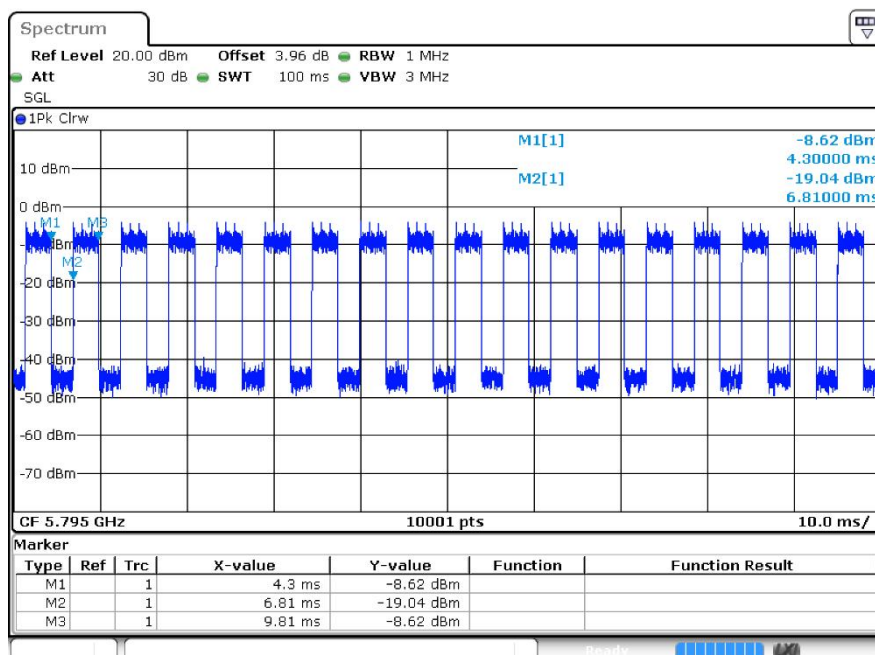
Duty Cycle ac40 5795MHz Ant1



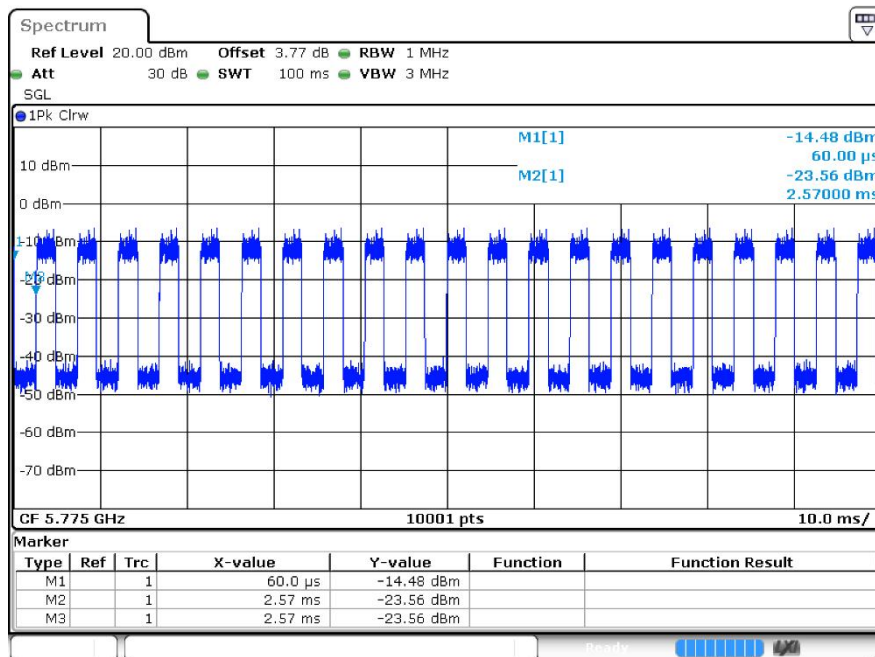
Duty Cycle ac40 5755MHz Ant2



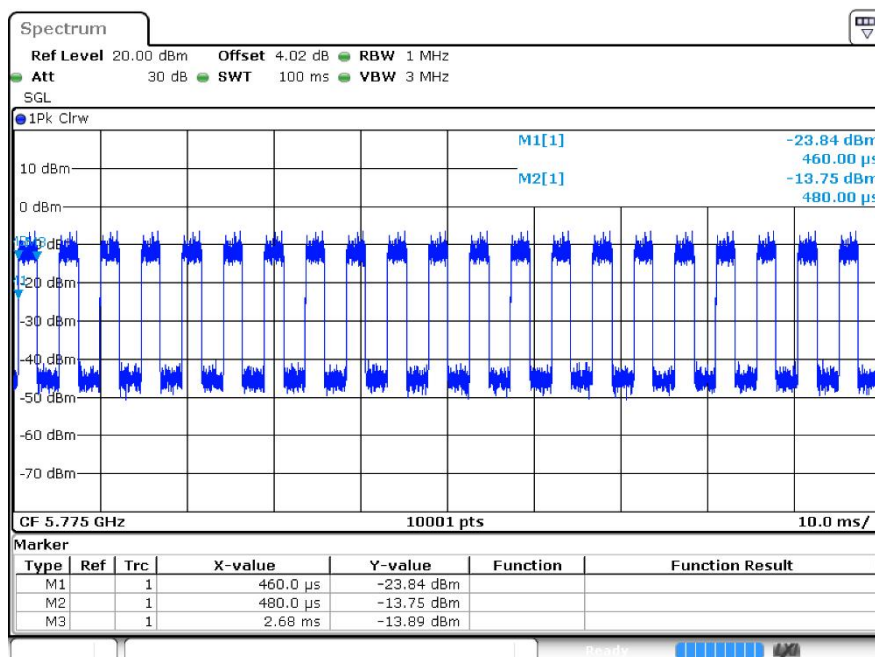
Duty Cycle ac40 5795MHz Ant2



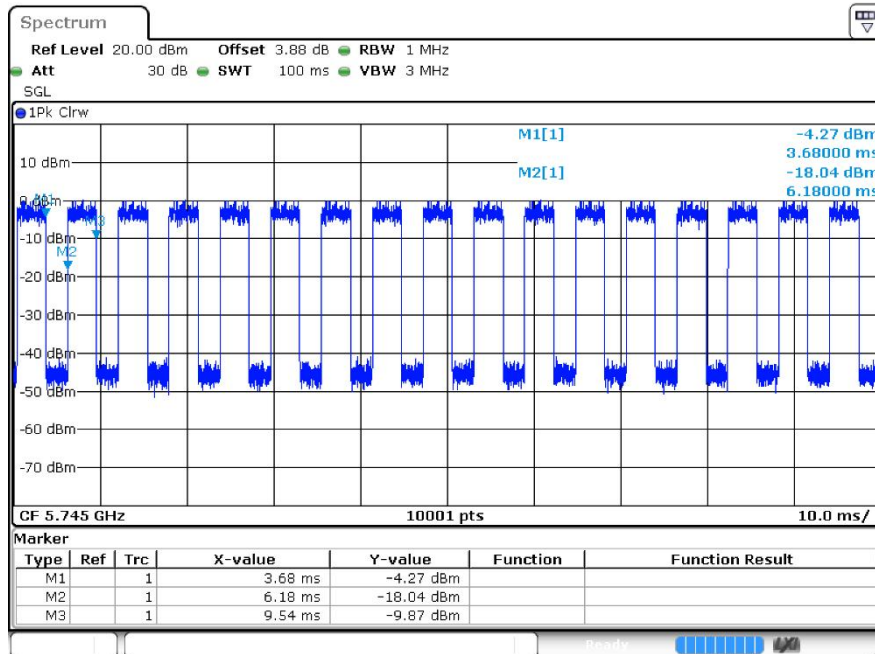
Duty Cycle ac80 5775MHz Ant1



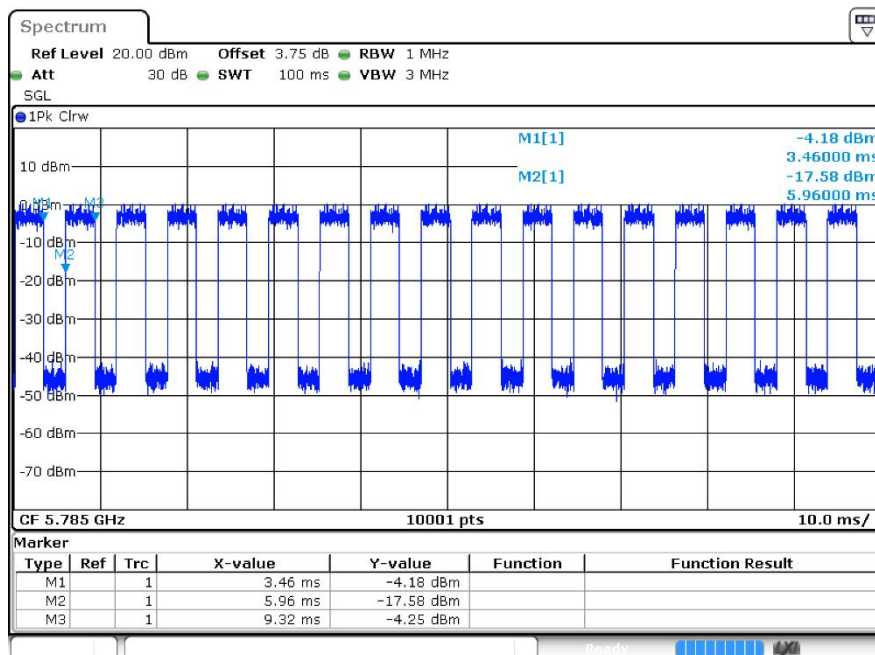
Duty Cycle ac80 5775MHz Ant2



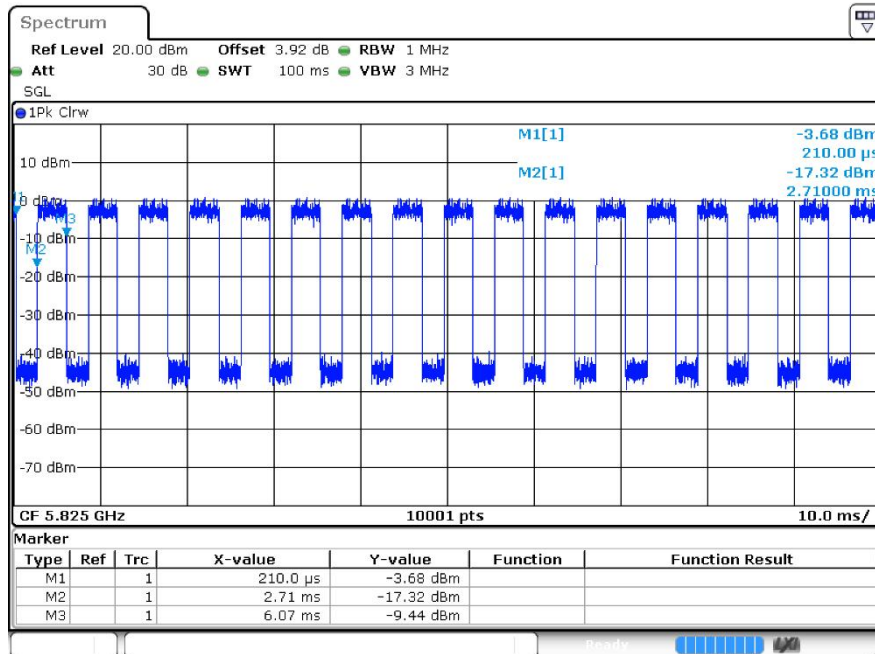
Duty Cycle ax20 5745MHz Ant1



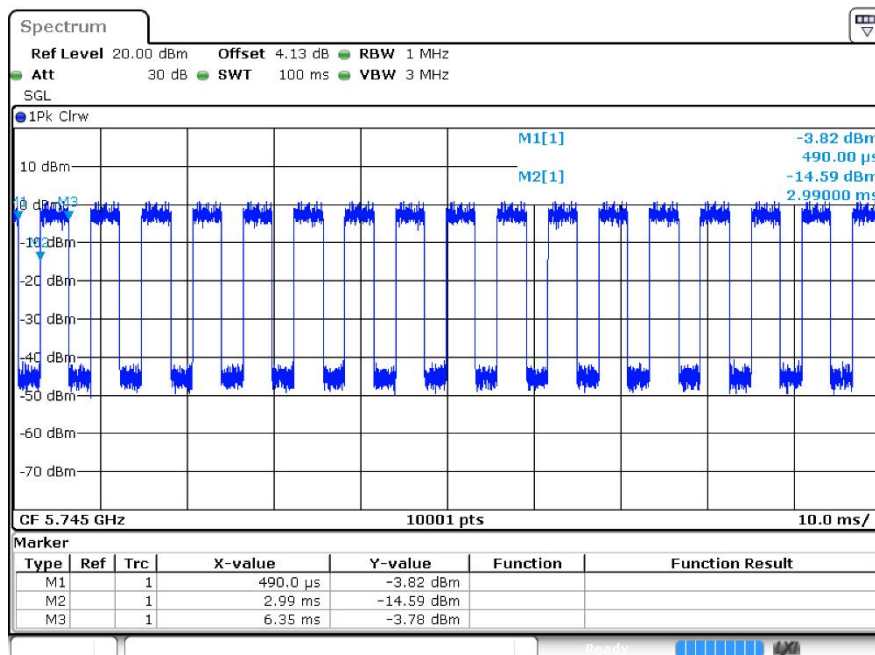
Duty Cycle ax20 5785MHz Ant1



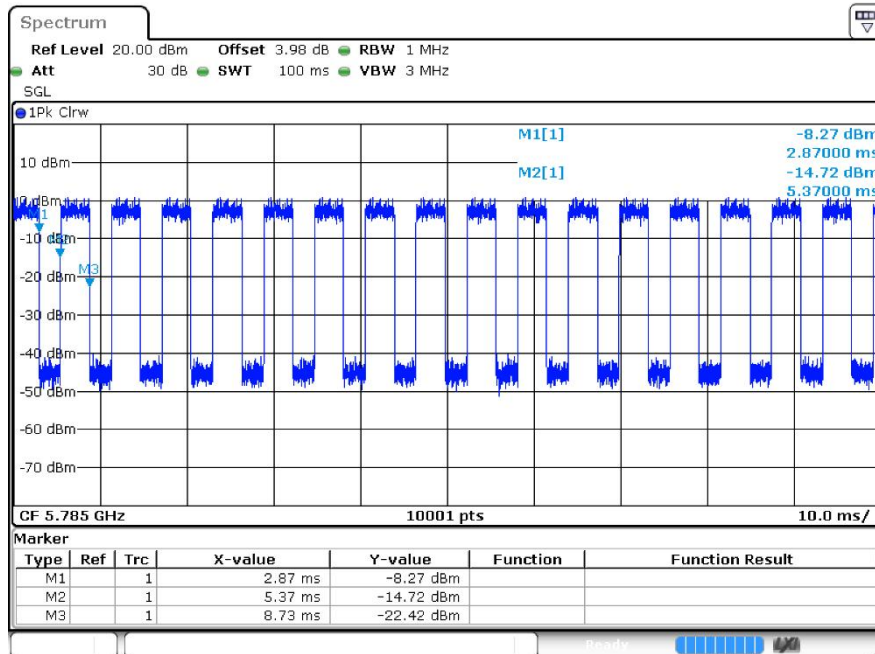
Duty Cycle ax20 5825MHz Ant1



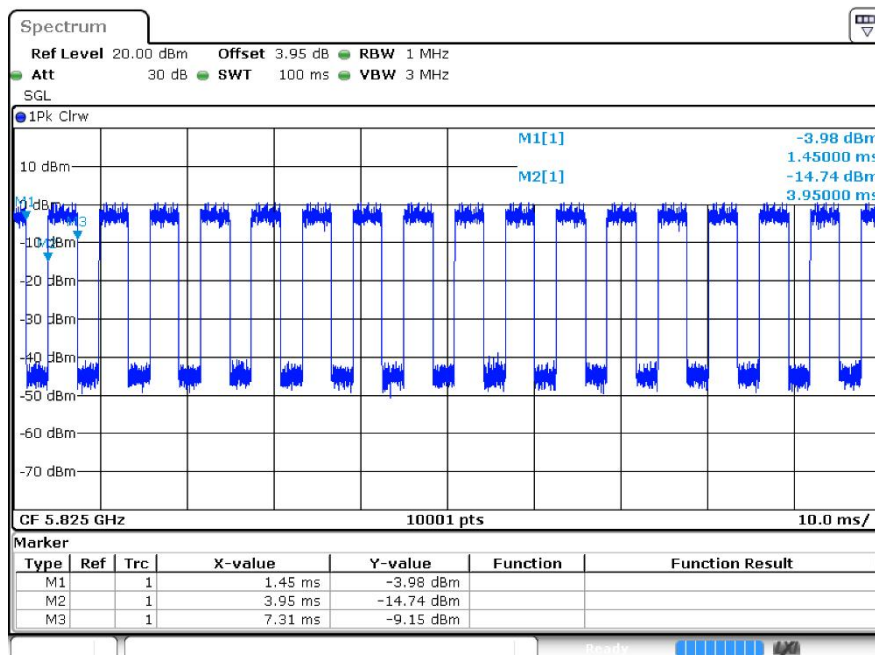
Duty Cycle ax20 5745MHz Ant2



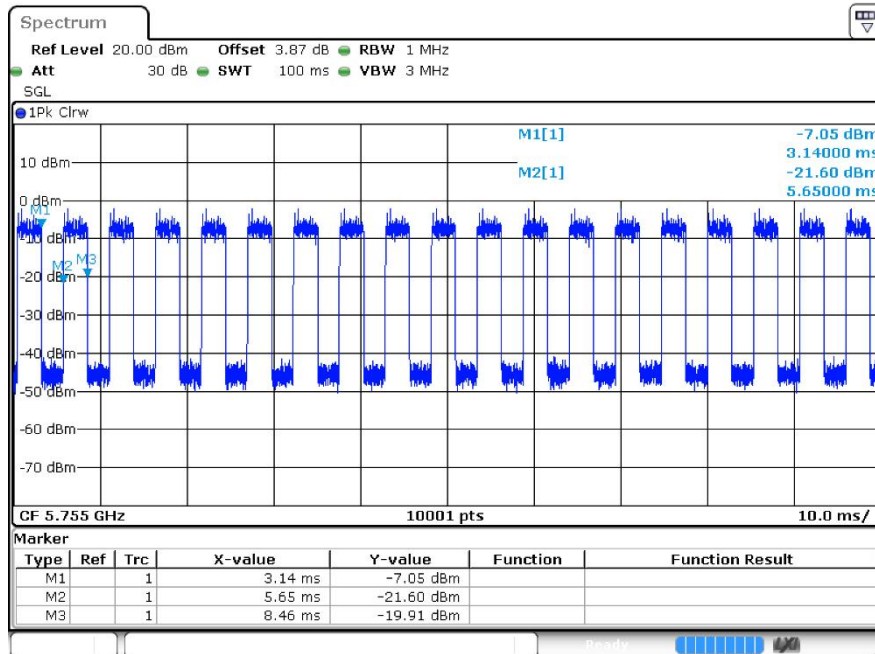
Duty Cycle ax20 5785MHz Ant2



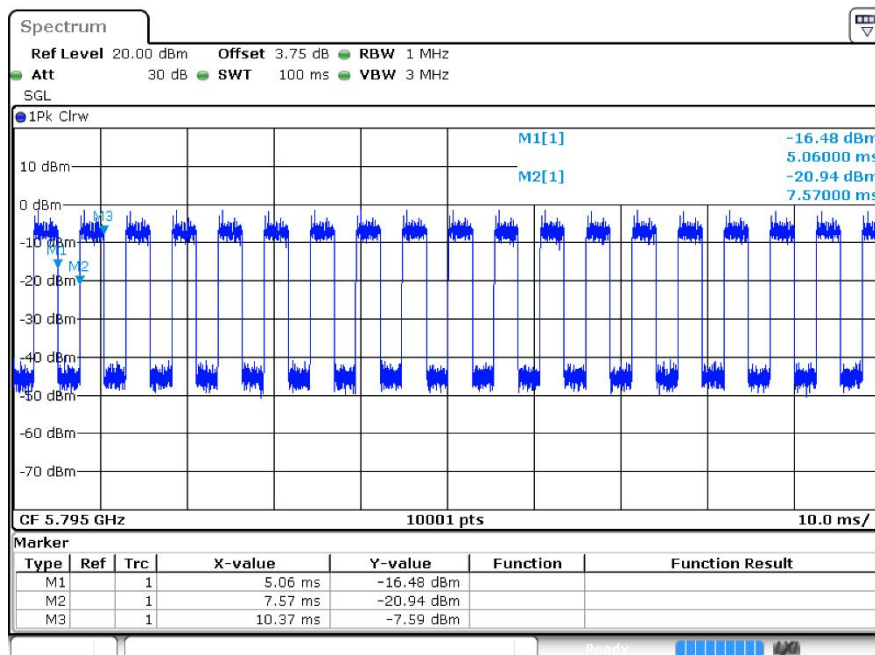
Duty Cycle ax20 5825MHz Ant2



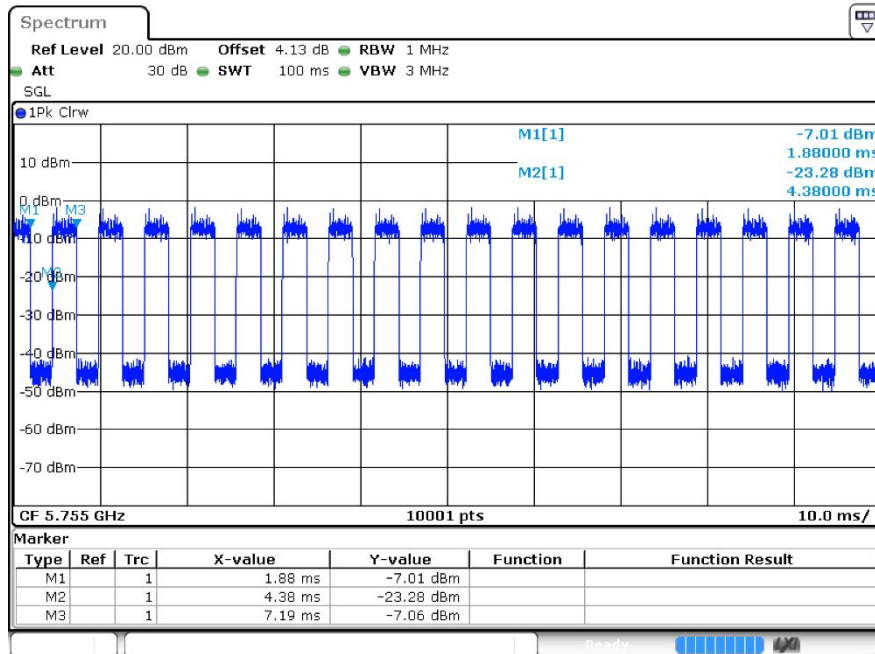
Duty Cycle ax40 5755MHz Ant1



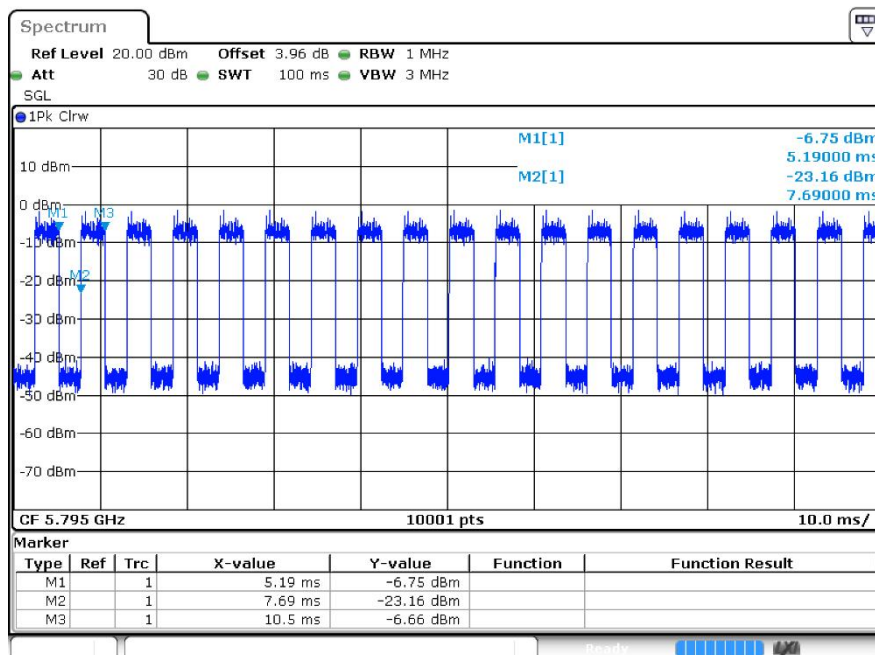
Duty Cycle ax40 5795MHz Ant1



Duty Cycle ax40 5755MHz Ant2



Duty Cycle ax40 5795MHz Ant2



2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
a	5745	Ant1	12.38	30	Pass
a	5785	Ant1	12.08	30	Pass
a	5825	Ant1	12.45	30	Pass
a	5745	Ant2	12.4	30	Pass
a	5785	Ant2	11.91	30	Pass
a	5825	Ant2	11.76	30	Pass
n20	5745	Ant1	8.07	30	Pass
n20	5745	Ant2	9.07	30	Pass
n20	5745	Sum	11.63	30	Pass
n20	5785	Ant1	8.63	30	Pass
n20	5785	Ant2	8.72	30	Pass
n20	5785	Sum	12.07	30	Pass
n20	5825	Ant1	8.76	30	Pass
n20	5825	Ant2	8.6	30	Pass
n20	5825	Sum	11.27	30	Pass
n40	5755	Ant1	7.75	30	Pass
n40	5755	Ant2	7.76	30	Pass
n40	5755	Sum	11.03	30	Pass
n40	5795	Ant1	7.69	30	Pass
n40	5795	Ant2	7.98	30	Pass
n40	5795	Sum	11.28	30	Pass
ac20	5745	Ant1	7.99	30	Pass
ac20	5745	Ant2	8.84	30	Pass
ac20	5745	Sum	11.78	30	Pass
ac20	5785	Ant1	8.69	30	Pass
ac20	5785	Ant2	8.83	30	Pass
ac20	5785	Sum	11.9	30	Pass
ac20	5825	Ant1	8.68	30	Pass
ac20	5825	Ant2	8.76	30	Pass
ac20	5825	Sum	11.26	30	Pass
ac40	5755	Ant1	7.7	30	Pass
ac40	5755	Ant2	7.76	30	Pass
ac40	5755	Sum	11.09	30	Pass
ac40	5795	Ant1	7.85	30	Pass
ac40	5795	Ant2	8.08	30	Pass
ac40	5795	Sum	11.3	30	Pass



ac80	5775	Ant1	7.67	30	Pass
ac80	5775	Ant2	7.97	30	Pass
ac80	5775	Sum	10.88	30	Pass
ax20	5745	Ant1	8.11	30	Pass
ax20	5745	Ant2	8.86	30	Pass
ax20	5745	Sum	11.58	30	Pass
ax20	5785	Ant1	8.44	30	Pass
ax20	5785	Ant2	8.9	30	Pass
ax20	5785	Sum	12.15	30	Pass
ax20	5825	Ant1	8.79	30	Pass
ax20	5825	Ant2	8.78	30	Pass
ax20	5825	Sum	11.14	30	Pass
ax40	5755	Ant1	7.54	30	Pass
ax40	5755	Ant2	8.08	30	Pass
ax40	5755	Sum	11.07	30	Pass
ax40	5795	Ant1	8.03	30	Pass
ax40	5795	Ant2	7.96	30	Pass
ax40	5795	Sum	11.53	30	Pass
ax80	5775	Ant1	7.68	30	Pass
ax80	5775	Ant2	8.04	30	Pass
ax80	5775	Sum	10.74	30	Pass

Note:

The duty factor has been compensated into the result.

The Direction Gain is 5.98 dBi.



3 -6dB Bandwidth

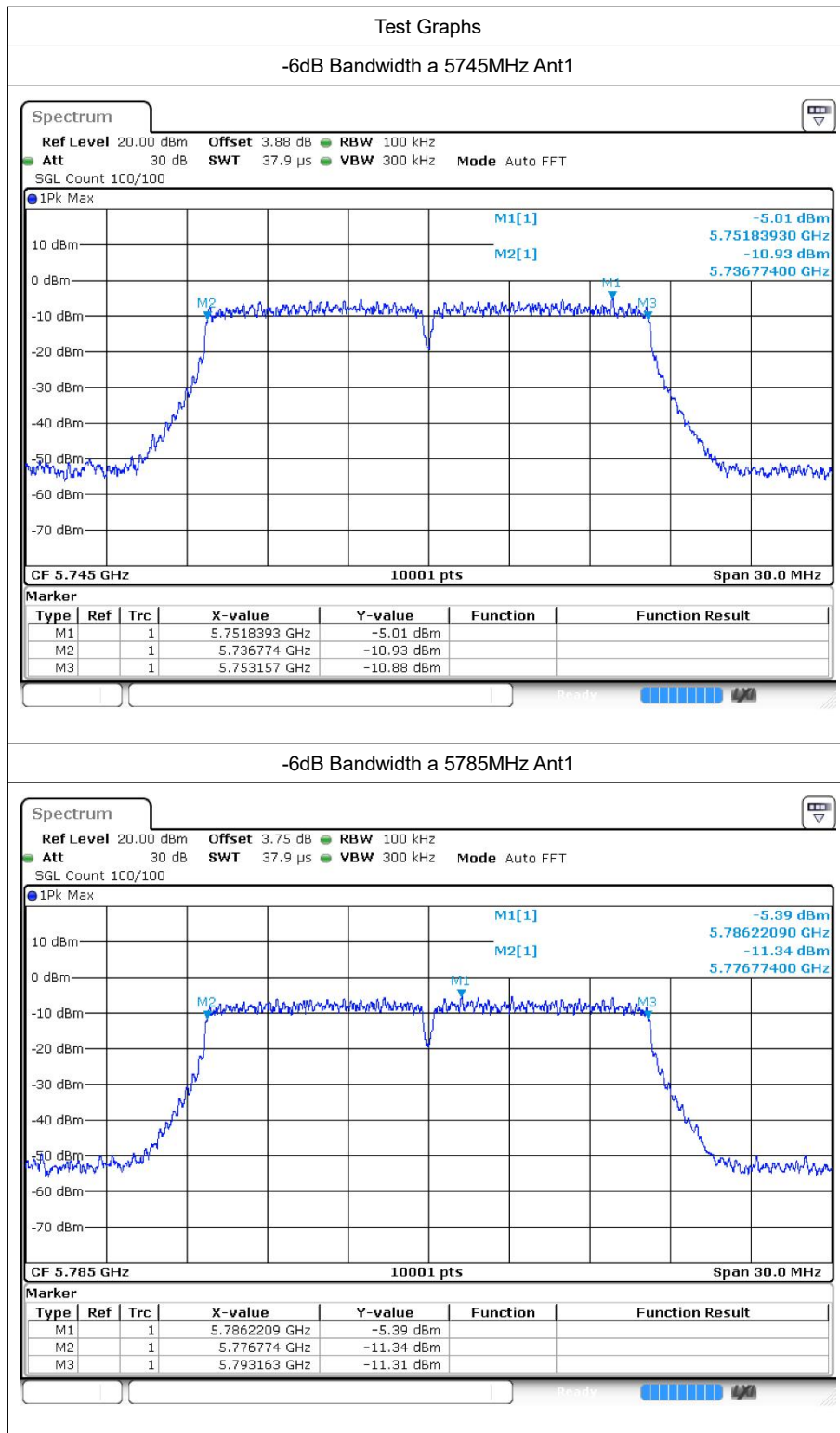
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
a	5745	Ant1	16.383	0.5	Pass
a	5785	Ant1	16.389	0.5	Pass
a	5825	Ant1	16.362	0.5	Pass
n20	5745	Ant1	17.556	0.5	Pass
n20	5785	Ant1	17.703	0.5	Pass
n20	5825	Ant1	17.631	0.5	Pass
n40	5755	Ant1	36.342	0.5	Pass
n40	5795	Ant1	36.36	0.5	Pass
ac20	5745	Ant1	17.625	0.5	Pass
ac20	5785	Ant1	17.613	0.5	Pass
ac20	5825	Ant1	17.619	0.5	Pass
ac40	5755	Ant1	36.354	0.5	Pass
ac40	5795	Ant1	36.294	0.5	Pass
ac80	5775	Ant1	72.144	0.5	Pass
ax20	5745	Ant1	19.023	0.5	Pass
ax20	5785	Ant1	19.077	0.5	Pass
ax20	5825	Ant1	18.162	0.5	Pass
ax40	5755	Ant1	38.052	0.5	Pass
ax40	5795	Ant1	38.088	0.5	Pass
ax80	5775	Ant1	77.196	0.5	Pass
a	5745	Ant2	16.338	0.5	Pass
a	5785	Ant2	16.485	0.5	Pass
a	5825	Ant2	16.515	0.5	Pass
n20	5745	Ant2	17.625	0.5	Pass
n20	5785	Ant2	17.583	0.5	Pass
n20	5825	Ant2	17.64	0.5	Pass
n40	5755	Ant2	36.39	0.5	Pass
n40	5795	Ant2	35.652	0.5	Pass
ac20	5745	Ant2	17.562	0.5	Pass
ac20	5785	Ant2	17.646	0.5	Pass
ac20	5825	Ant2	17.643	0.5	Pass
ac40	5755	Ant2	35.904	0.5	Pass
ac40	5795	Ant2	36.378	0.5	Pass
ac80	5775	Ant2	75.912	0.5	Pass
ax20	5745	Ant2	18.996	0.5	Pass
ax20	5785	Ant2	18.99	0.5	Pass
ax20	5825	Ant2	19.08	0.5	Pass

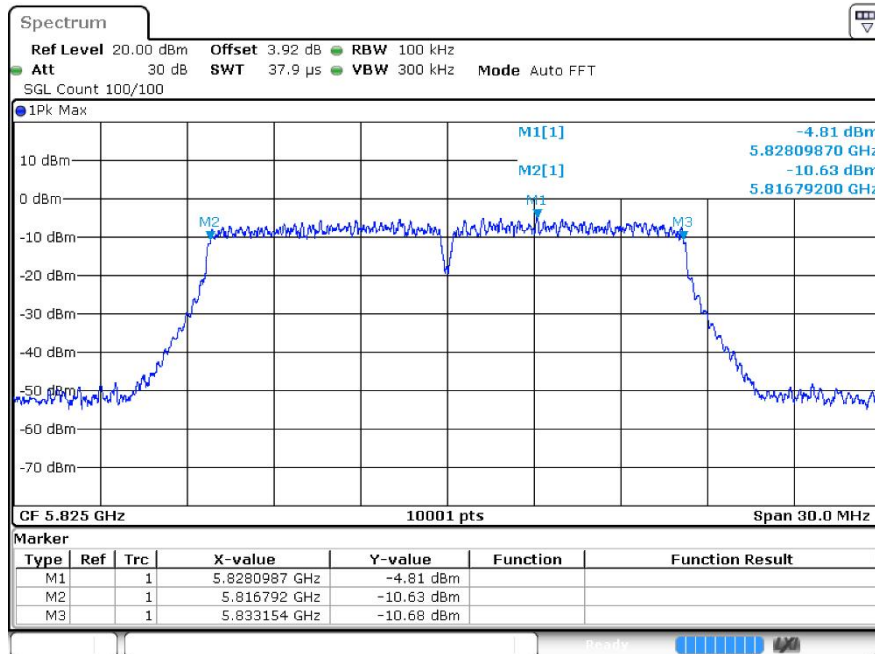


ax40	5755	Ant2	37.674	0.5	Pass
ax40	5795	Ant2	37.998	0.5	Pass
ax80	5775	Ant2	76.968	0.5	Pass

3.2 Test Graphs



-6dB Bandwidth a 5825MHz Ant1



-6dB Bandwidth n20 5745MHz Ant1

