



Appendix E

RF Test Data for 5.8GWIFI(Conducted Measurement)

Product Name: UV Photocuring 3D Printer

Trade Mark: ELEGOO

Test Model: Jupiter 2

Environmental Conditions

Temperature:	25.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



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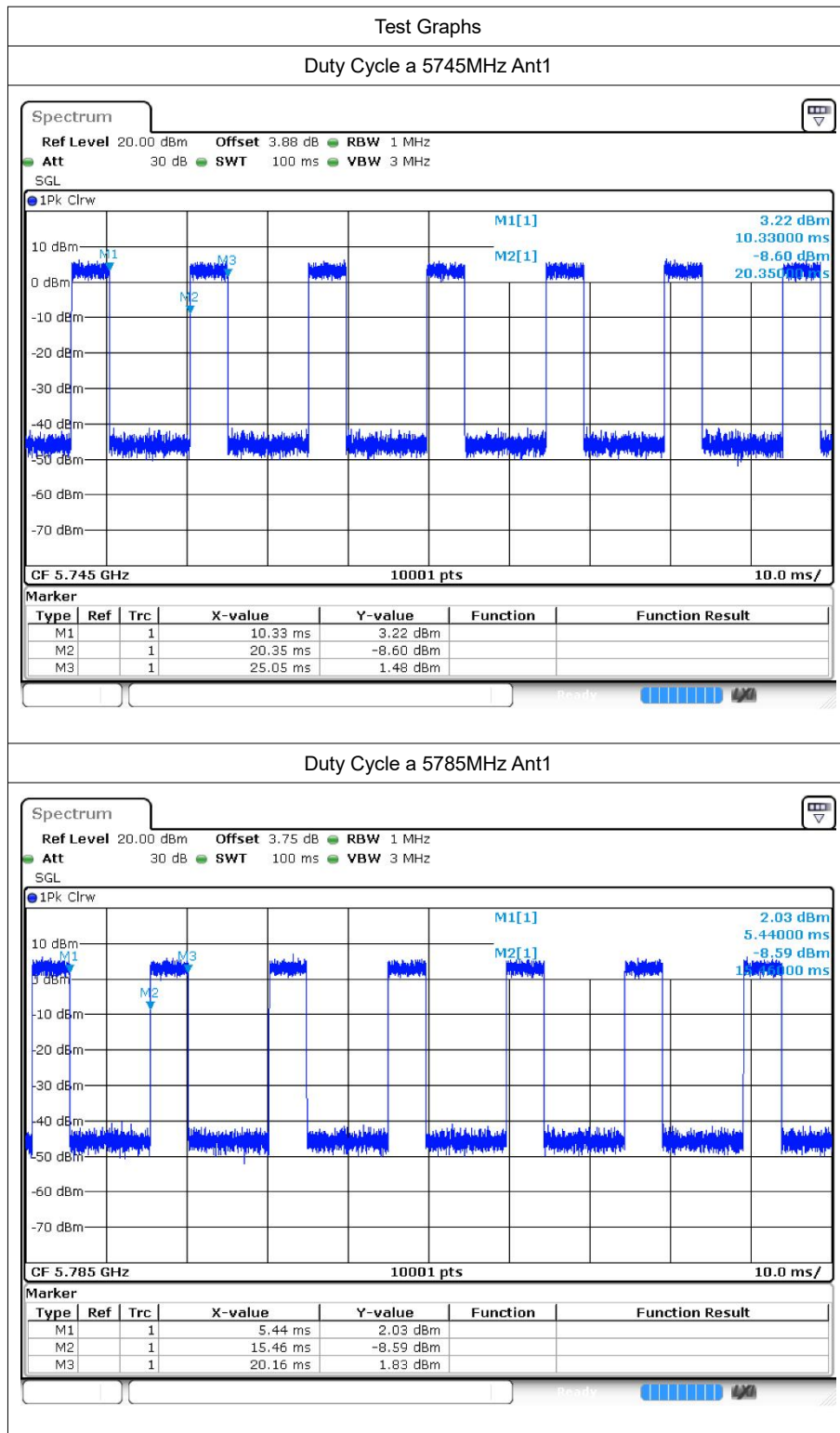
1 Duty Cycle

1.1 Test Result

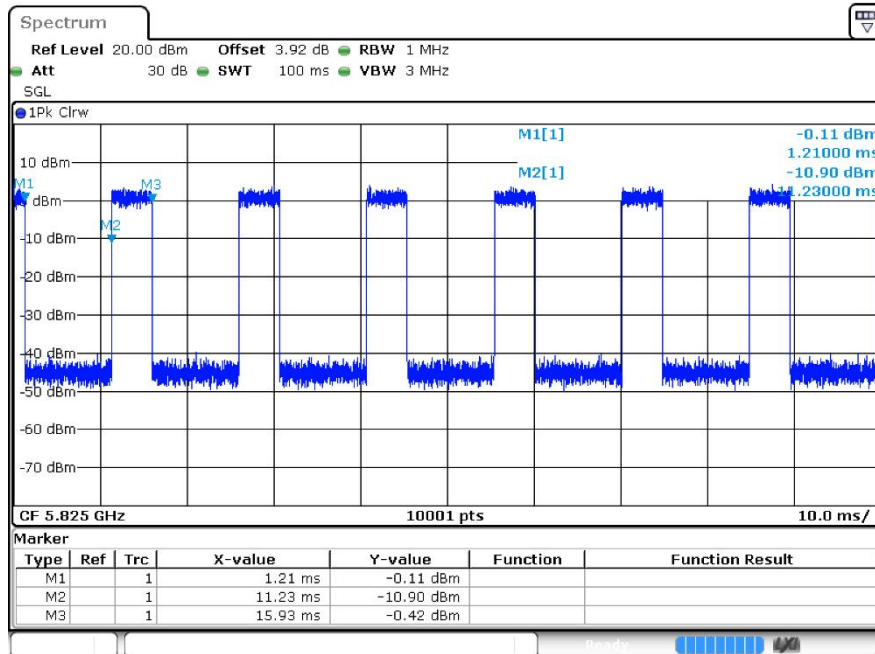
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
a	5745	Ant1	32.97	4.82	0.21
a	5785	Ant1	32.92	4.83	0.21
a	5825	Ant1	29.94	5.24	0.21
n20	5745	Ant1	34.21	4.66	0.2
n20	5785	Ant1	35.7	4.47	0.2
n20	5825	Ant1	33.33	4.77	0.2
n40	5755	Ant1	34.35	4.64	0.2
n40	5795	Ant1	30.28	5.19	0.2
ac20	5745	Ant1	32.22	4.92	0.2
ac20	5785	Ant1	33.37	4.77	0.2
ac20	5825	Ant1	35.75	4.47	0.2
ac40	5755	Ant1	34.4	4.63	0.2
ac40	5795	Ant1	29.88	5.25	0.2
ax20	5745	Ant1	27.2	5.65	0.26
ax20	5785	Ant1	29.4	5.32	0.26
ax20	5825	Ant1	27.19	5.66	0.26
ax40	5755	Ant1	27.16	5.66	0.26
ax40	5795	Ant1	27.16	5.66	0.26



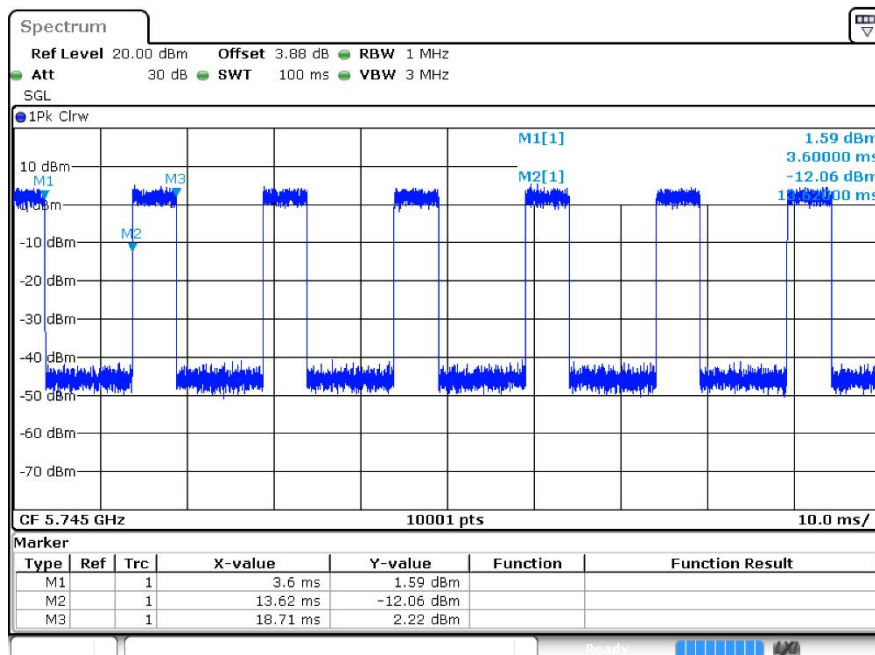
1.2 Test Graphs



Duty Cycle a 5825MHz Ant1

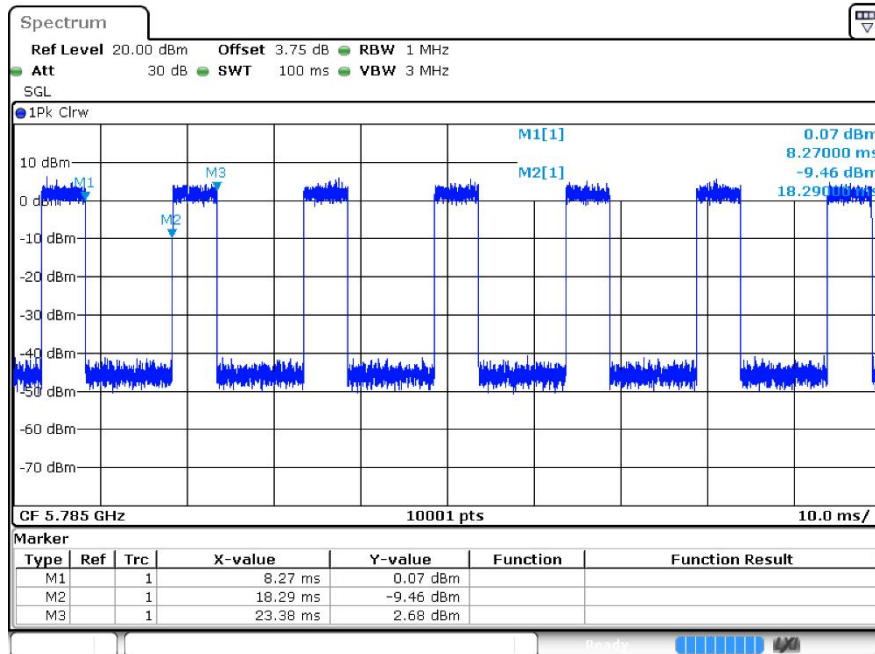


Duty Cycle n20 5745MHz Ant1

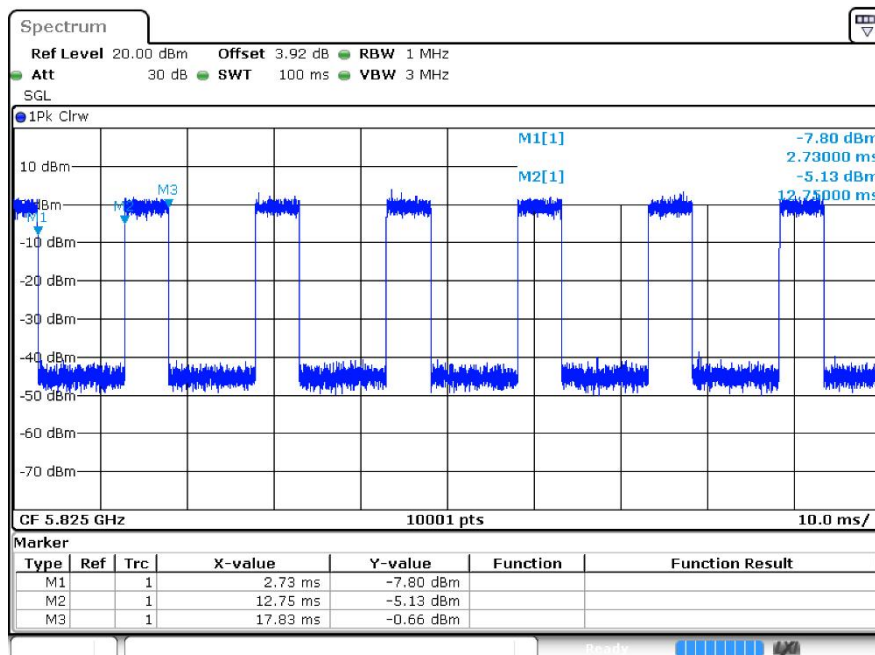




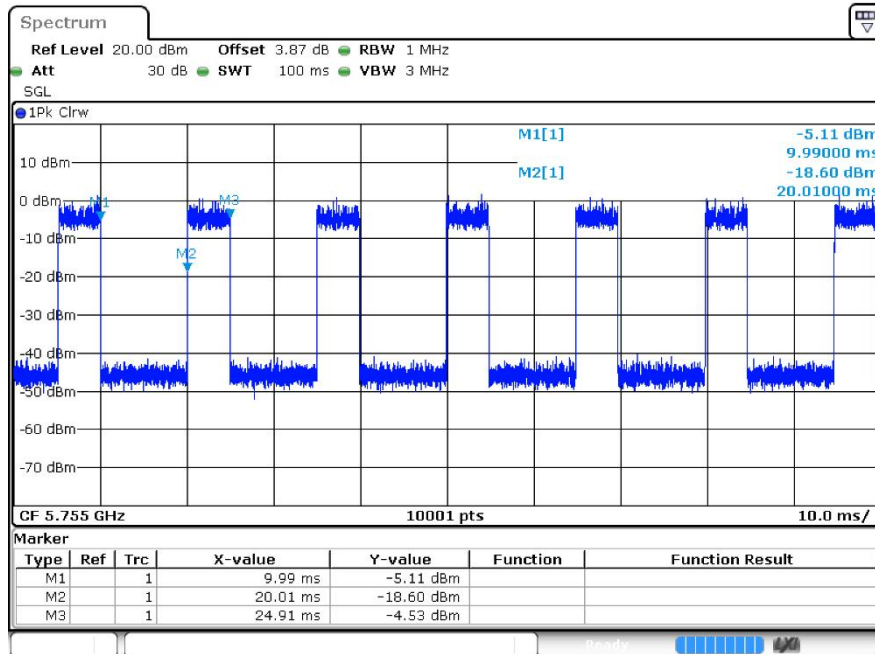
Duty Cycle n20 5785MHz Ant1



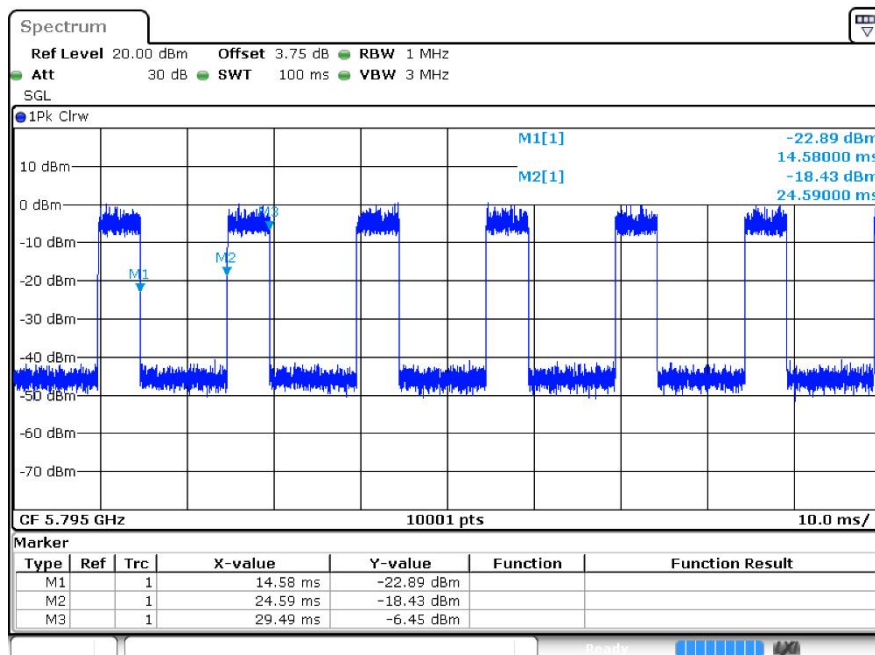
Duty Cycle n20 5825MHz Ant1



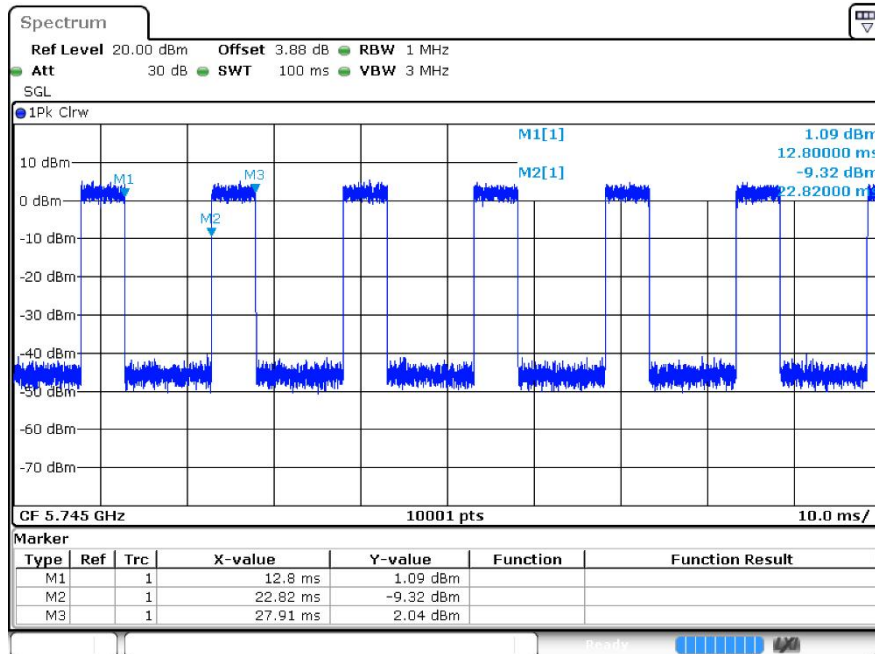
Duty Cycle n40 5755MHz Ant1



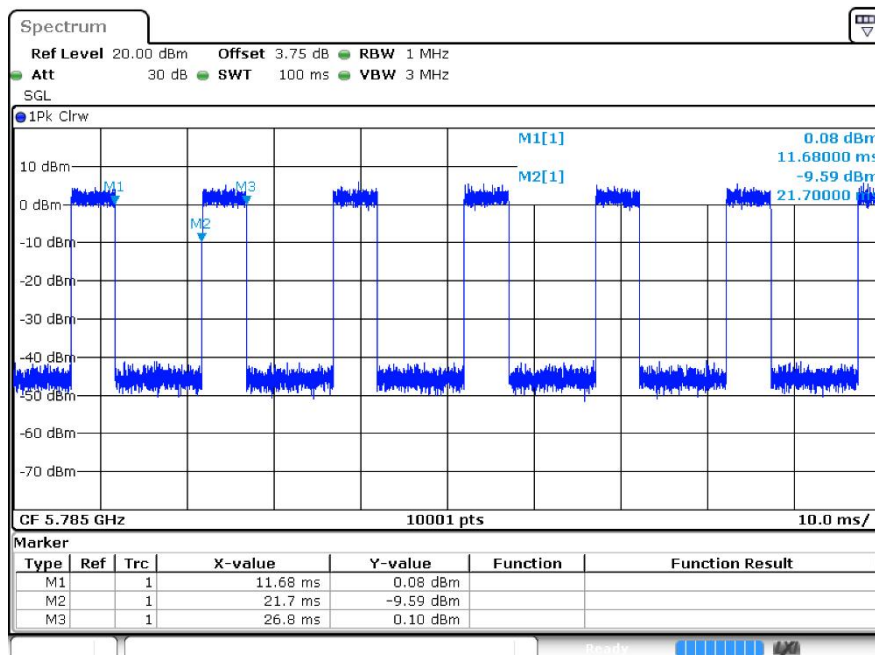
Duty Cycle n40 5795MHz Ant1



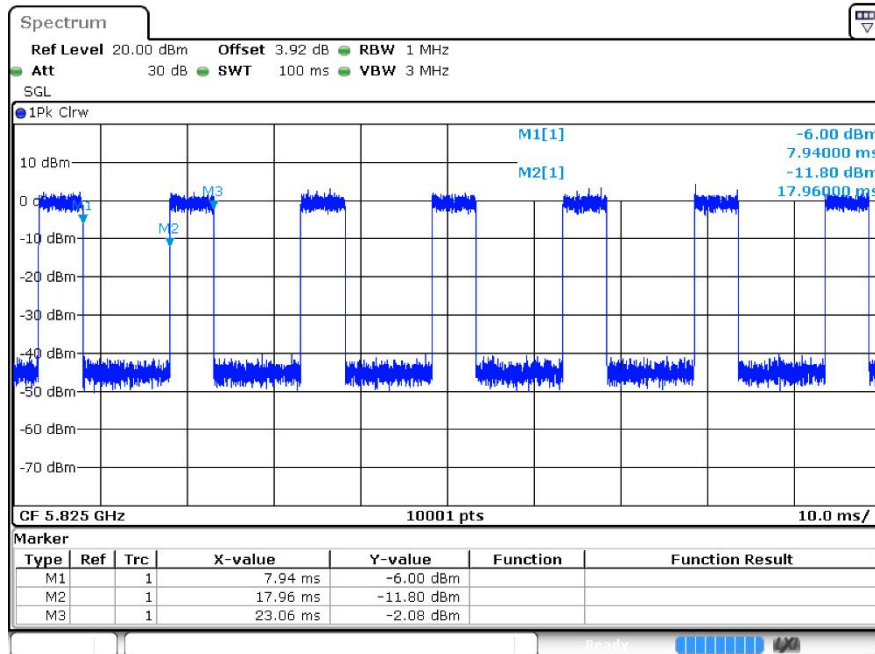
Duty Cycle ac20 5745MHz Ant1



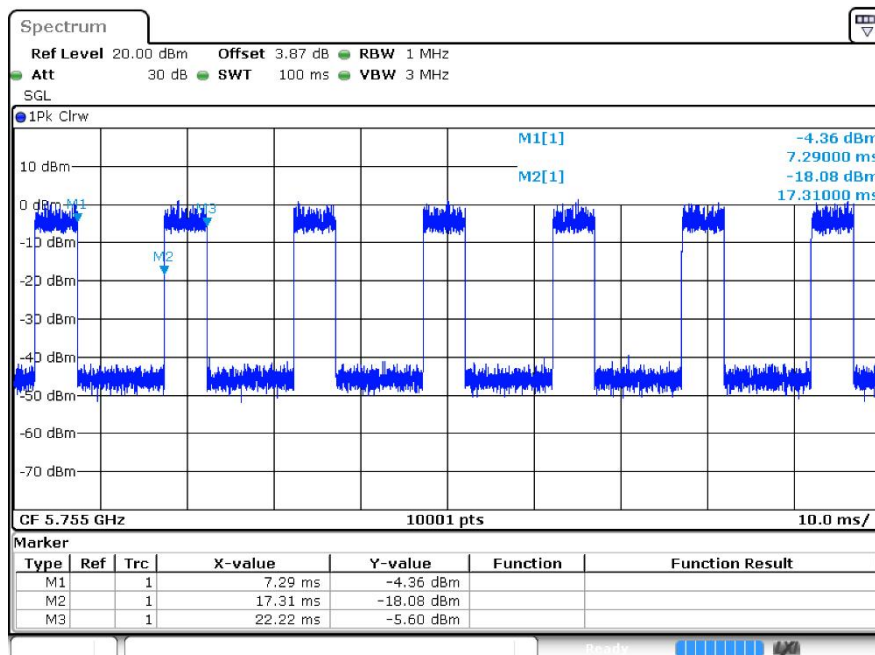
Duty Cycle ac20 5785MHz Ant1

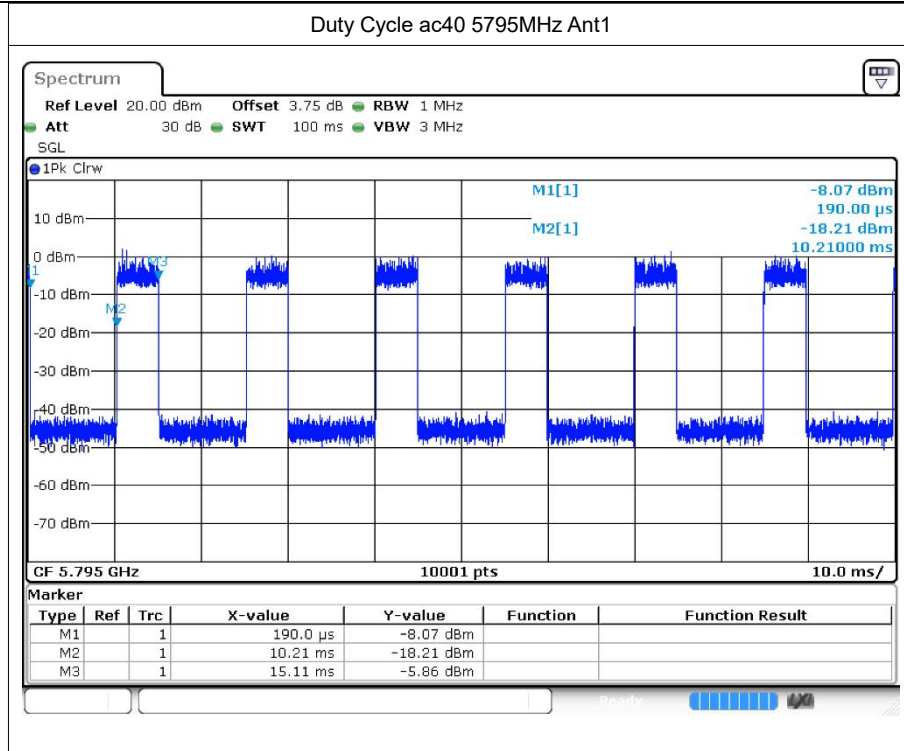


Duty Cycle ac20 5825MHz Ant1

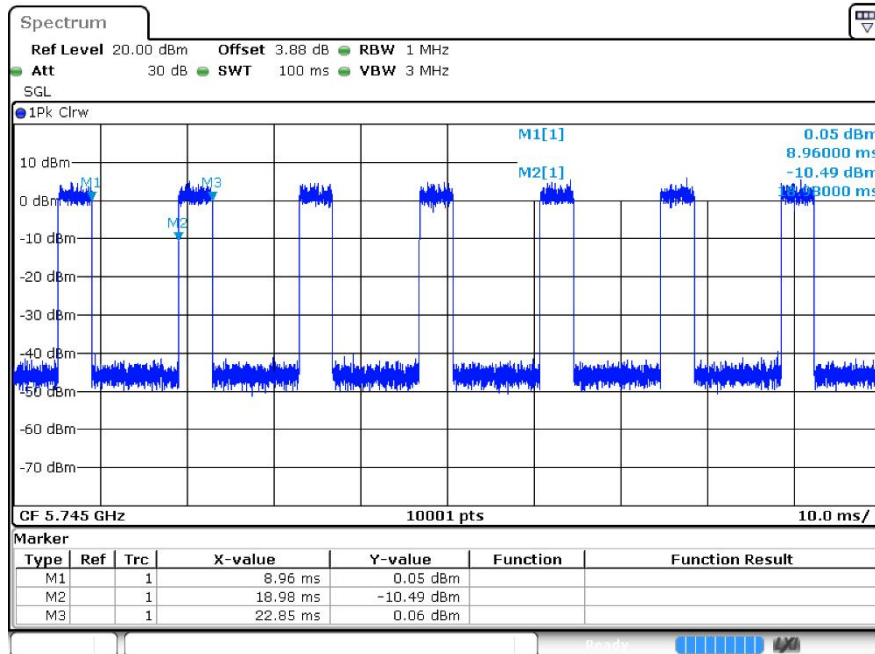


Duty Cycle ac40 5755MHz Ant1

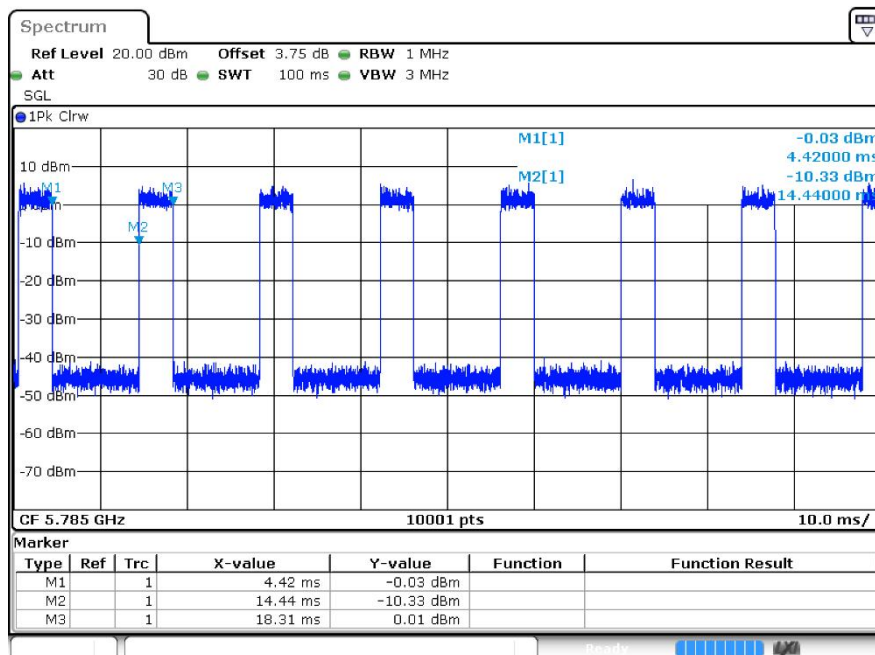




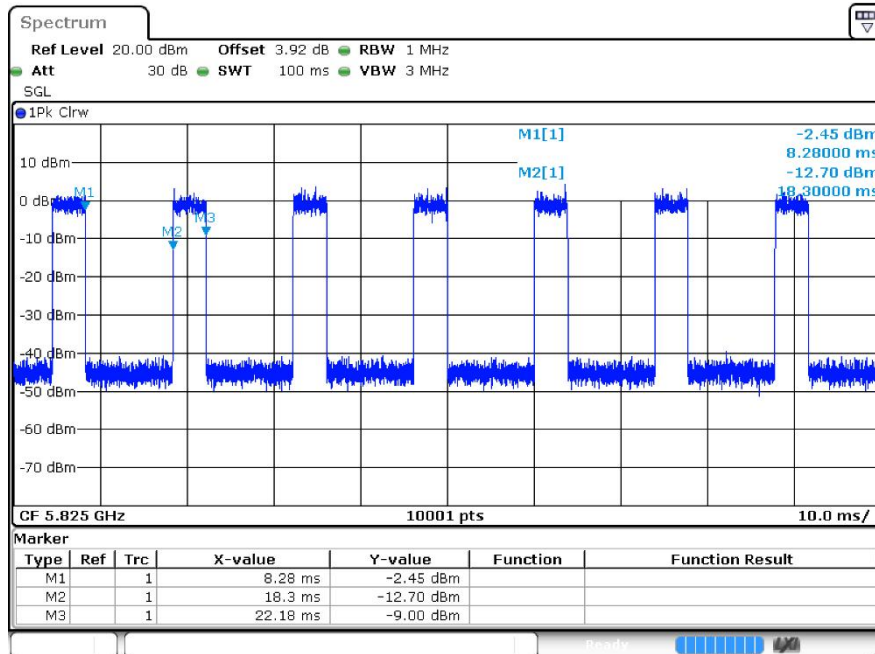
Duty Cycle ax20 5745MHz Ant1



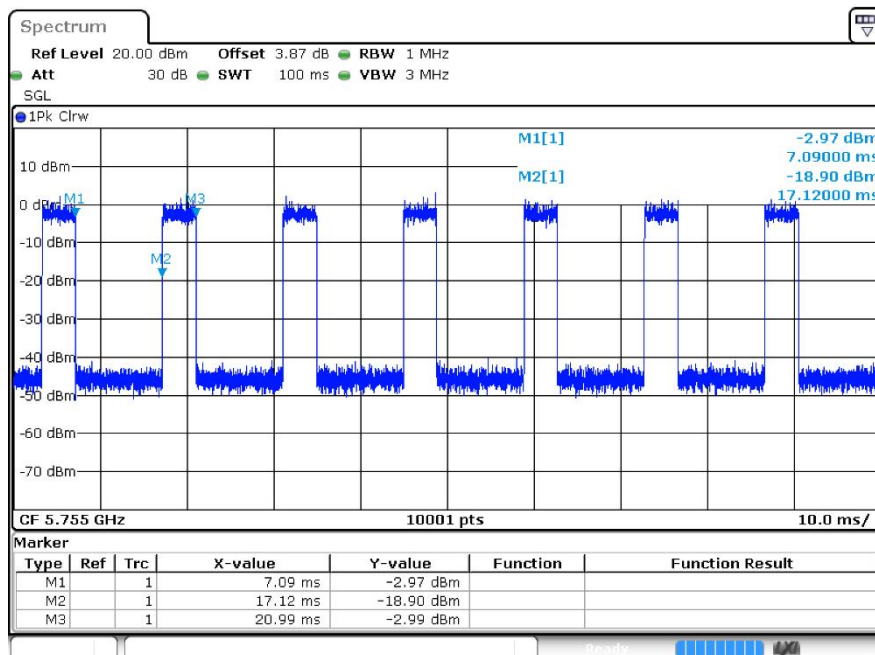
Duty Cycle ax20 5785MHz Ant1

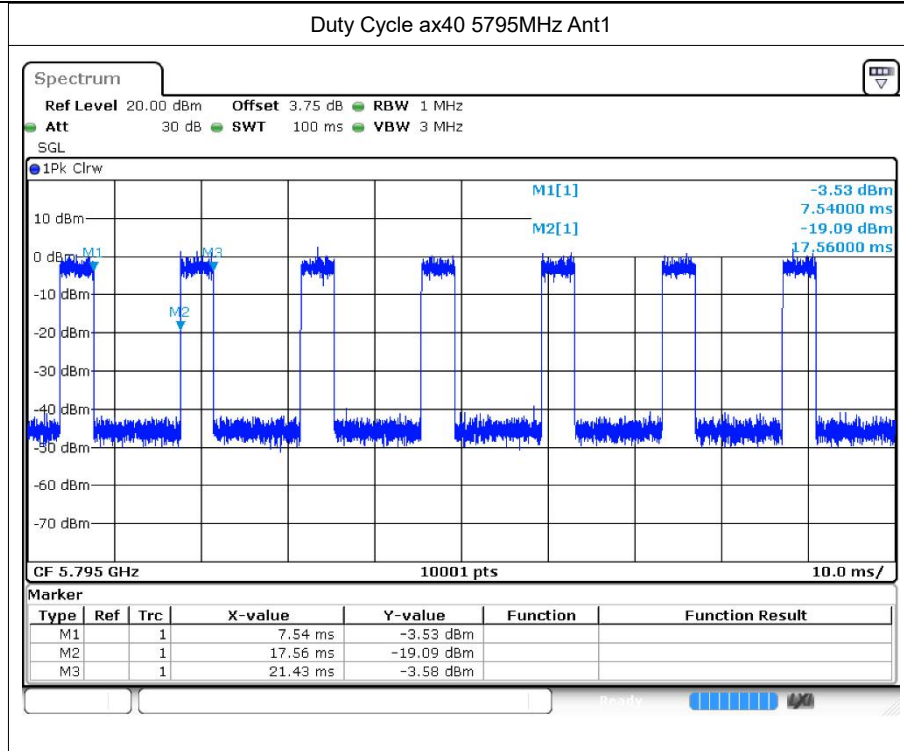


Duty Cycle ax20 5825MHz Ant1



Duty Cycle ax40 5755MHz Ant1





2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
a	5745	Ant1	13.72	30	Pass
a	5785	Ant1	13.53	30	Pass
a	5825	Ant1	11.2	30	Pass
n20	5745	Ant1	12.75	30	Pass
n20	5785	Ant1	12.61	30	Pass
n20	5825	Ant1	10.3	30	Pass
n40	5755	Ant1	12.87	30	Pass
n40	5795	Ant1	12.17	30	Pass
ac20	5745	Ant1	12.71	30	Pass
ac20	5785	Ant1	12.67	30	Pass
ac20	5825	Ant1	10.32	30	Pass
ac40	5755	Ant1	13.08	30	Pass
ac40	5795	Ant1	12.2	30	Pass
ax20	5745	Ant1	12.57	30	Pass
ax20	5785	Ant1	12.41	30	Pass
ax20	5825	Ant1	10.21	30	Pass
ax40	5755	Ant1	12.94	30	Pass
ax40	5795	Ant1	12.1	30	Pass

Note:

The duty factor has been compensated into the result.

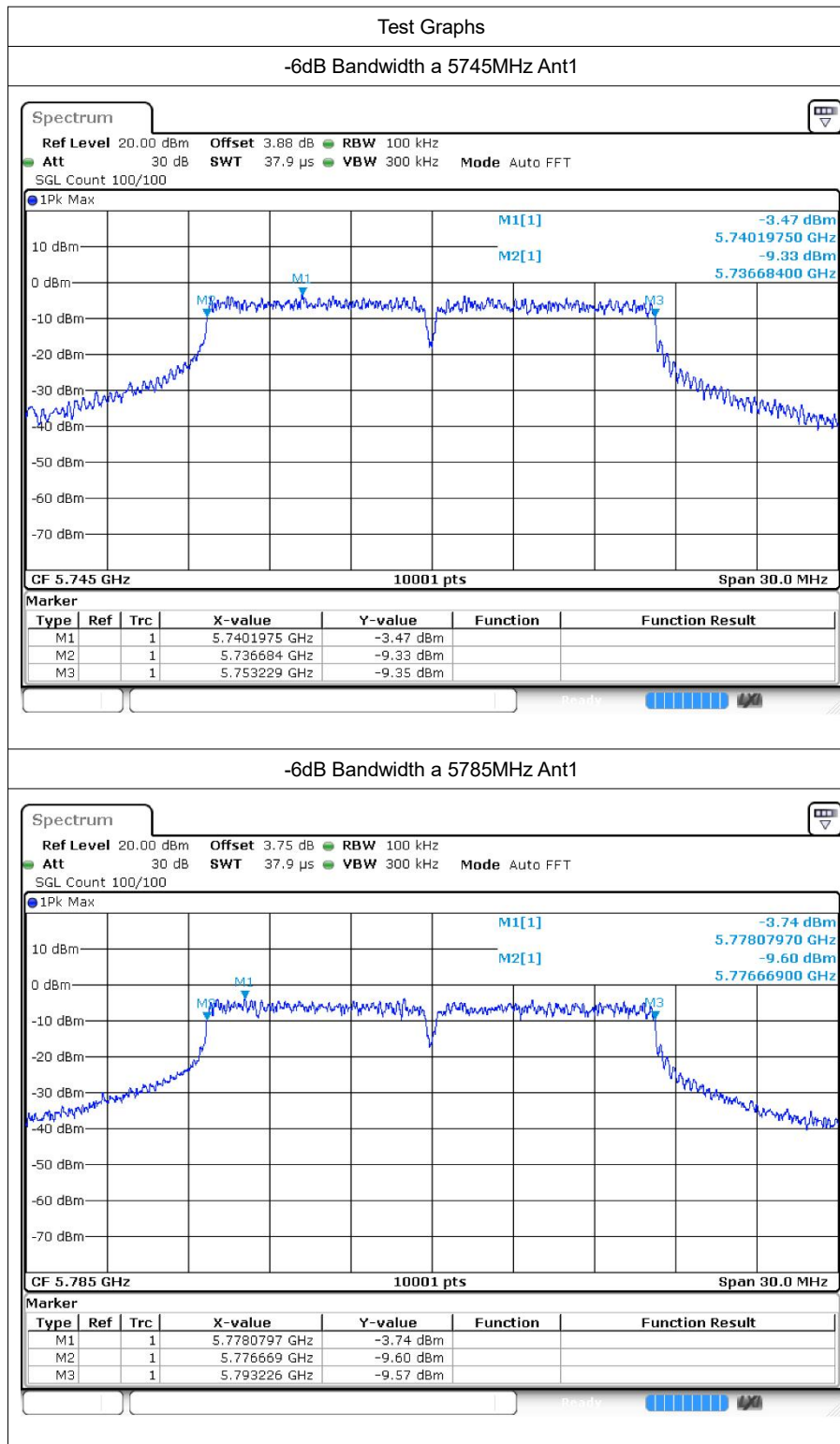


3 -6dB Bandwidth

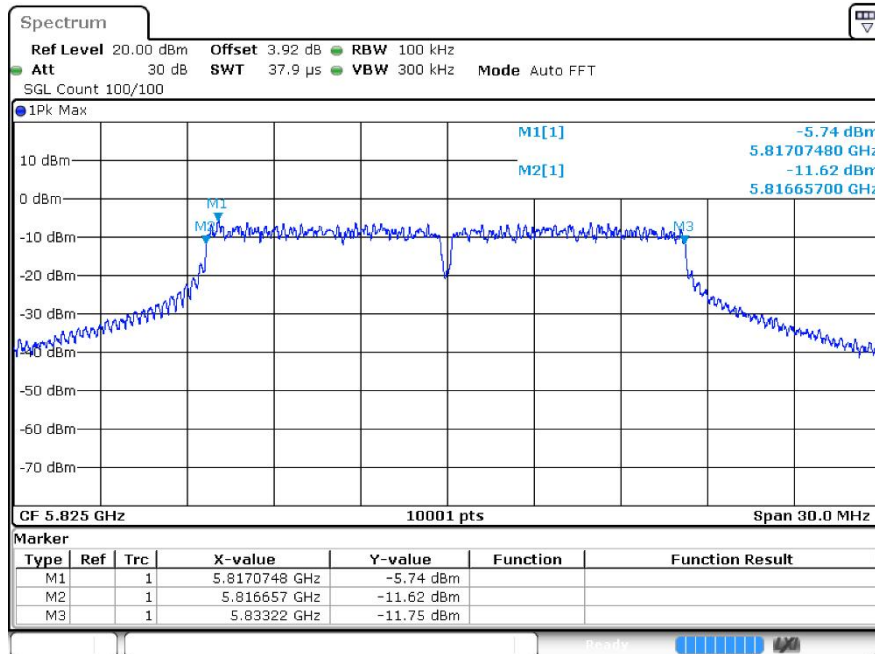
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
a	5745	Ant1	16.545	0.5	Pass
a	5785	Ant1	16.557	0.5	Pass
a	5825	Ant1	16.563	0.5	Pass
n20	5745	Ant1	17.595	0.5	Pass
n20	5785	Ant1	17.541	0.5	Pass
n20	5825	Ant1	17.769	0.5	Pass
n40	5755	Ant1	36.546	0.5	Pass
n40	5795	Ant1	36.45	0.5	Pass
ac20	5745	Ant1	17.829	0.5	Pass
ac20	5785	Ant1	17.823	0.5	Pass
ac20	5825	Ant1	17.781	0.5	Pass
ac40	5755	Ant1	36.324	0.5	Pass
ac40	5795	Ant1	36.474	0.5	Pass
ax20	5745	Ant1	18.894	0.5	Pass
ax20	5785	Ant1	18.897	0.5	Pass
ax20	5825	Ant1	19.08	0.5	Pass
ax40	5755	Ant1	38.106	0.5	Pass
ax40	5795	Ant1	38.046	0.5	Pass

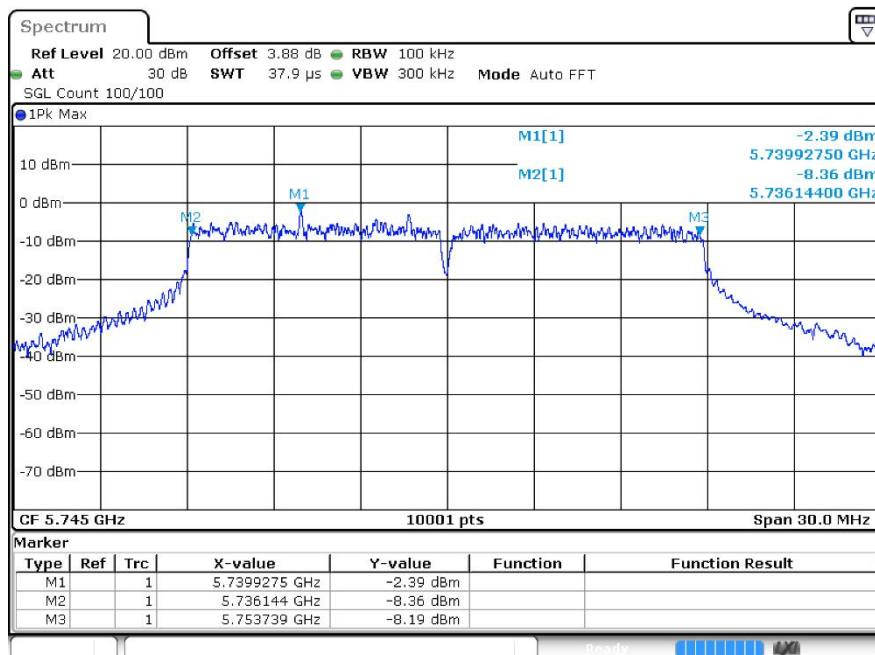
3.2 Test Graphs



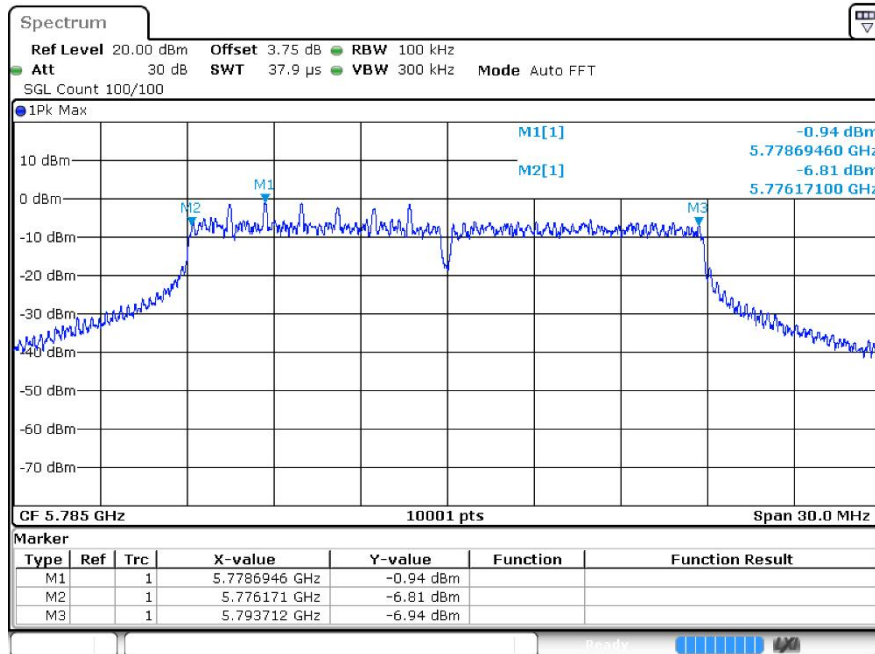
-6dB Bandwidth a 5825MHz Ant1



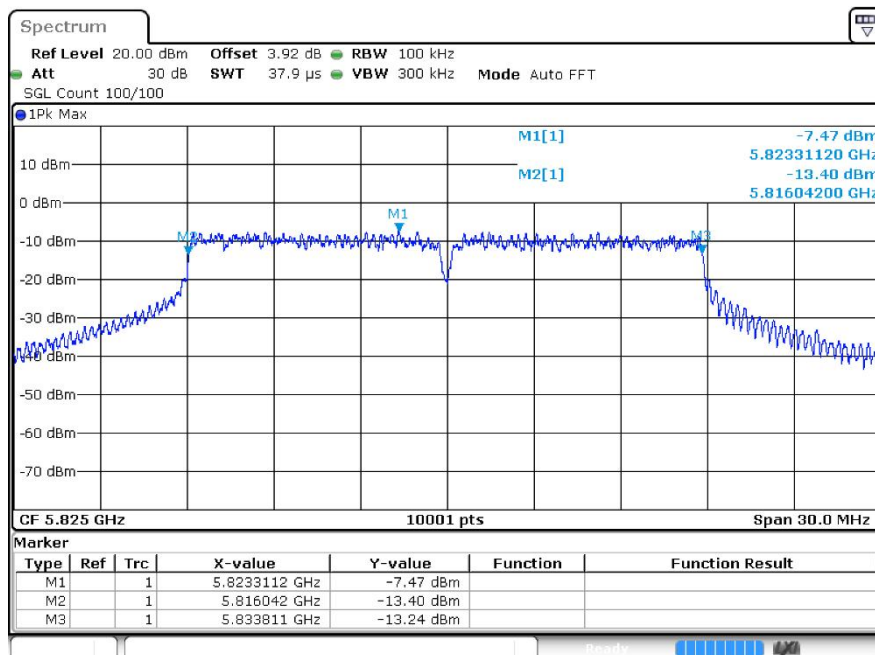
-6dB Bandwidth n20 5745MHz Ant1



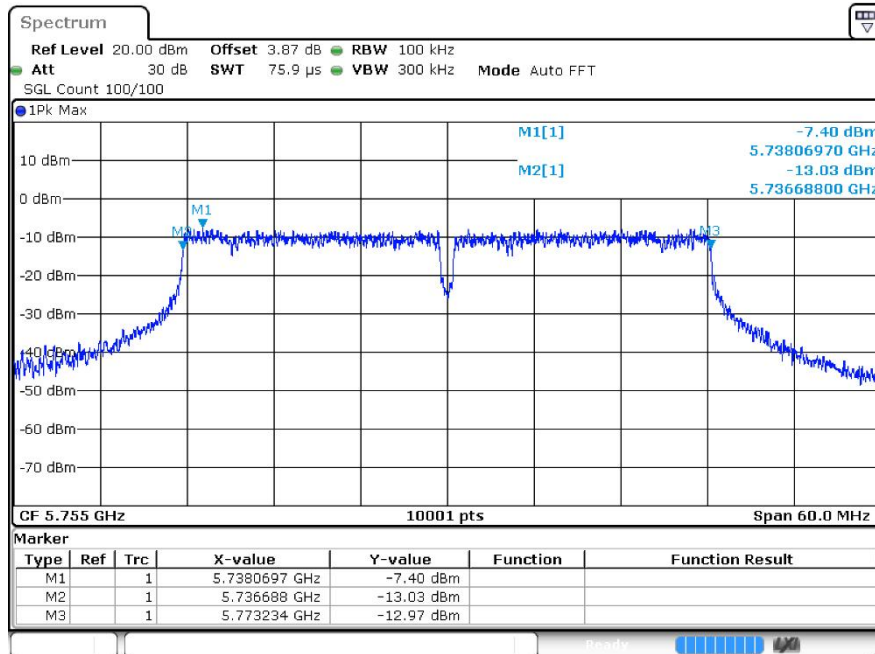
-6dB Bandwidth n20 5785MHz Ant1



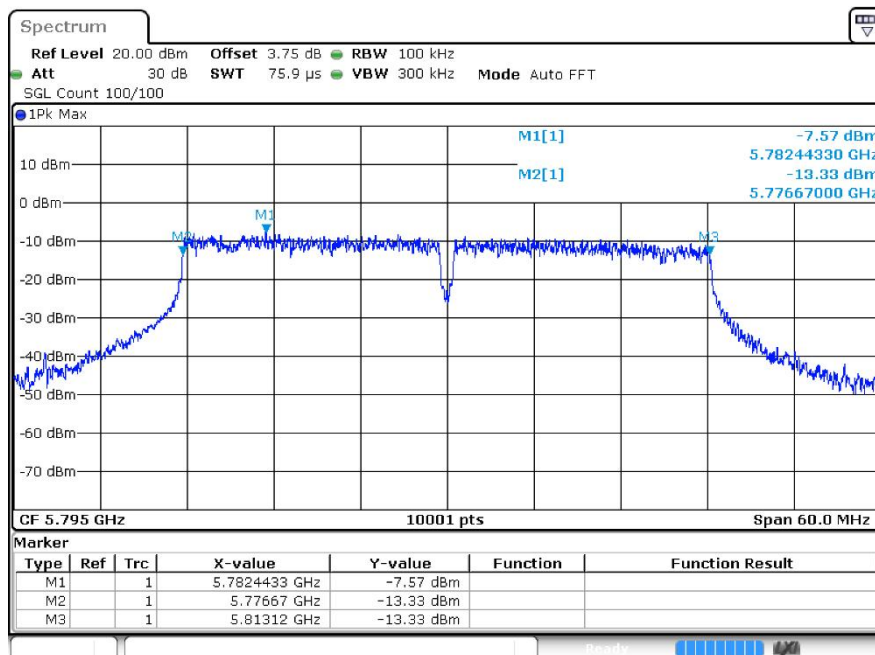
-6dB Bandwidth n20 5825MHz Ant1



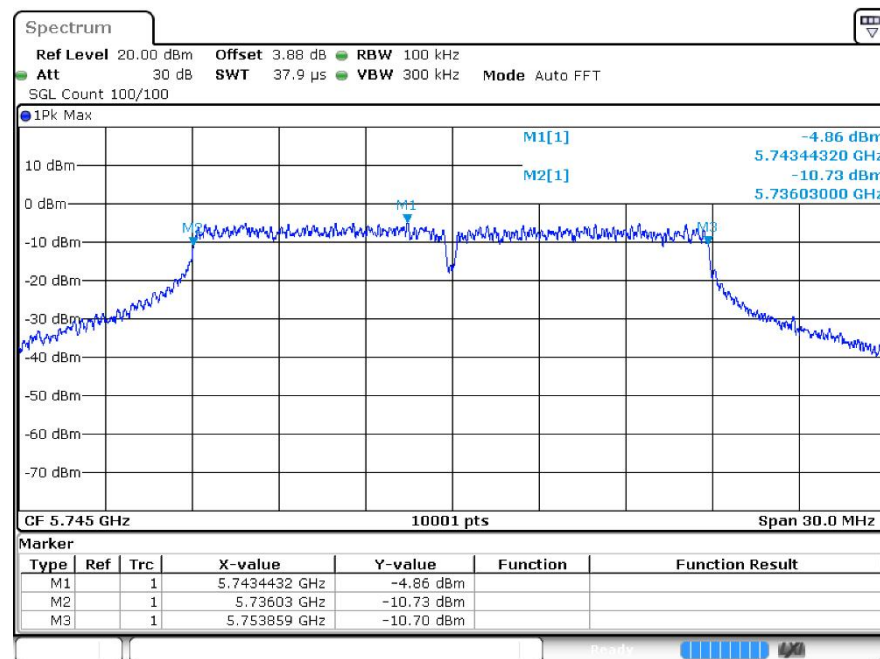
-6dB Bandwidth n40 5755MHz Ant1



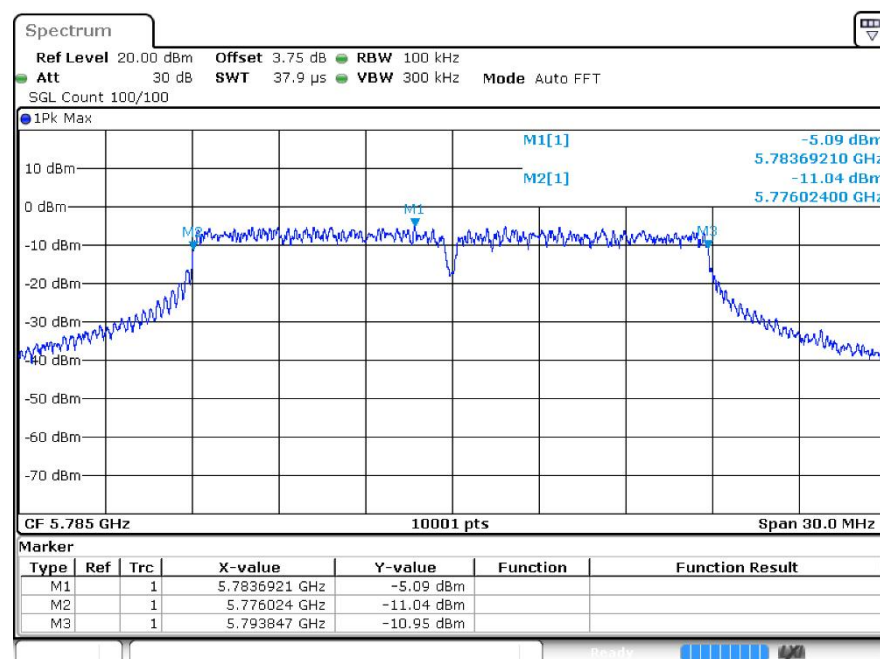
-6dB Bandwidth n40 5795MHz Ant1



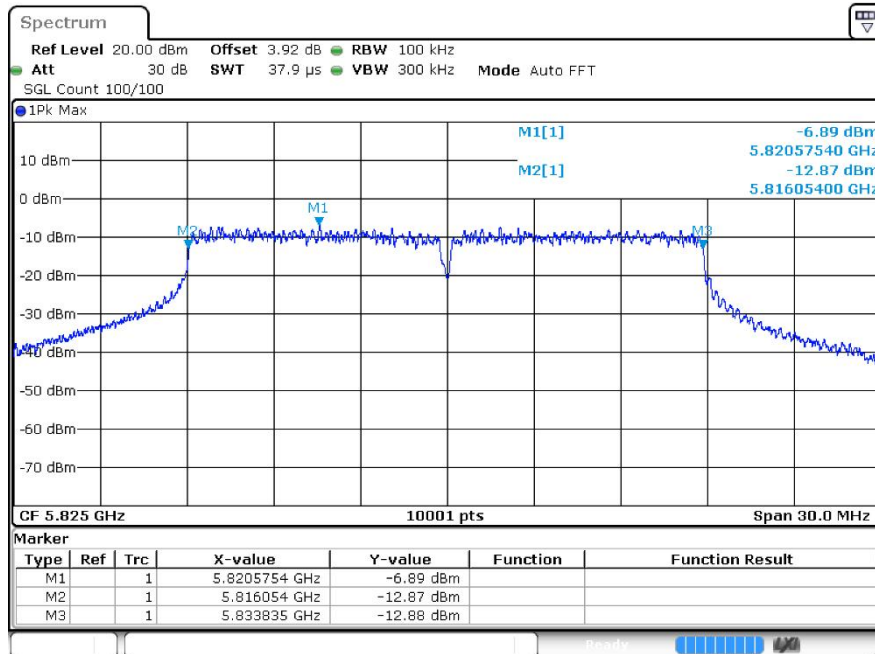
-6dB Bandwidth ac20 5745MHz Ant1



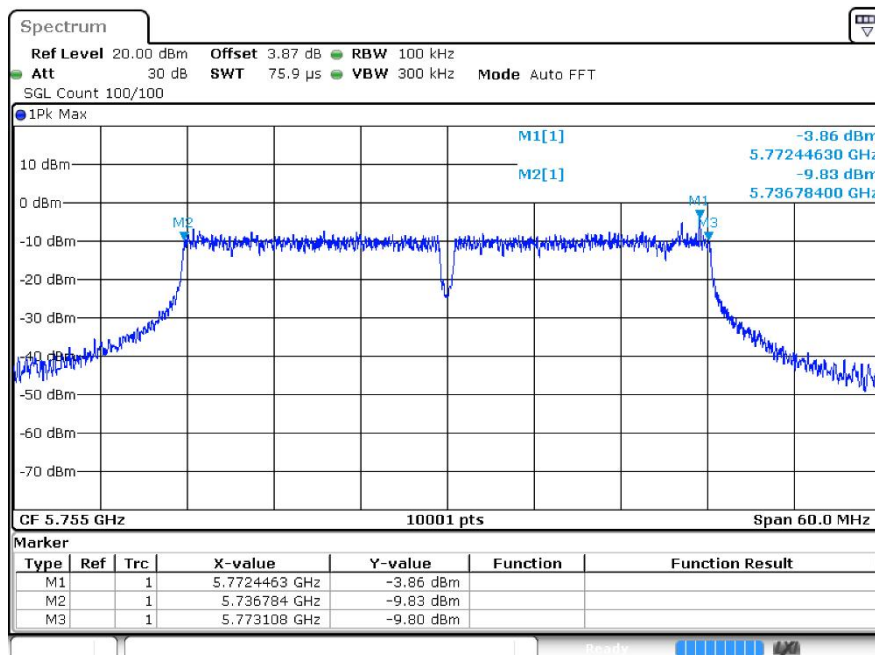
-6dB Bandwidth ac20 5785MHz Ant1

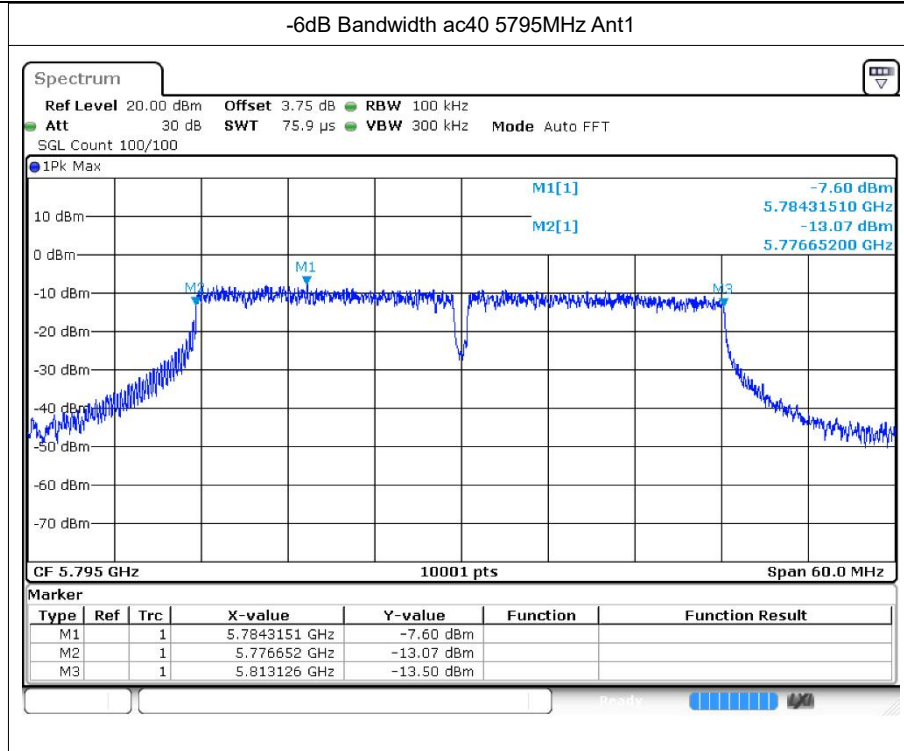


-6dB Bandwidth ac20 5825MHz Ant1

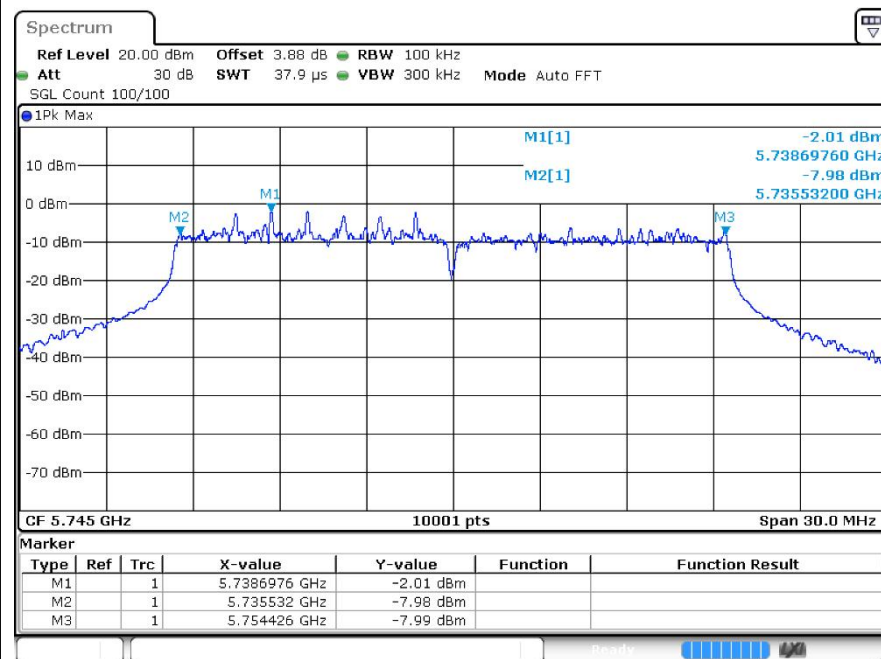


-6dB Bandwidth ac40 5755MHz Ant1

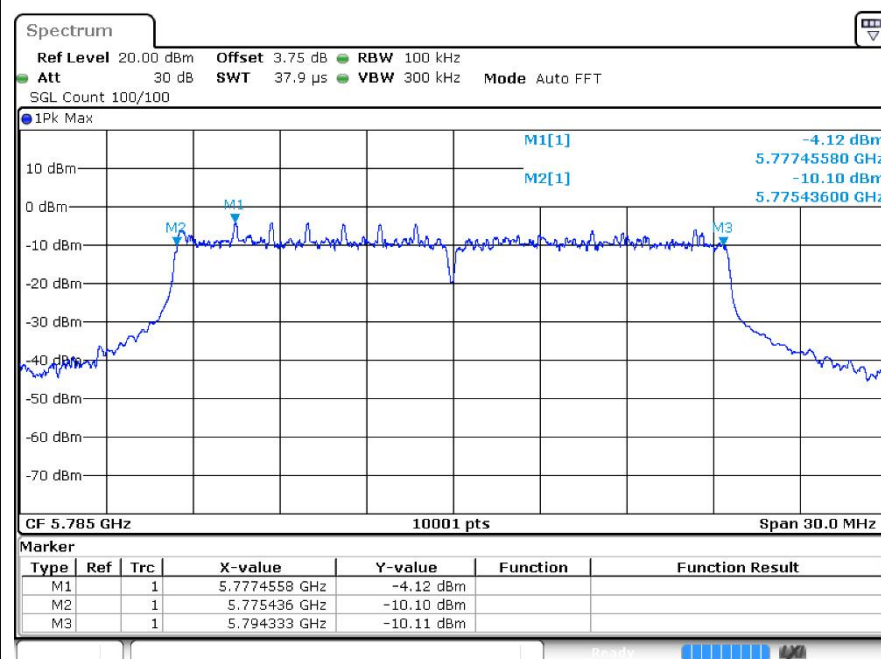




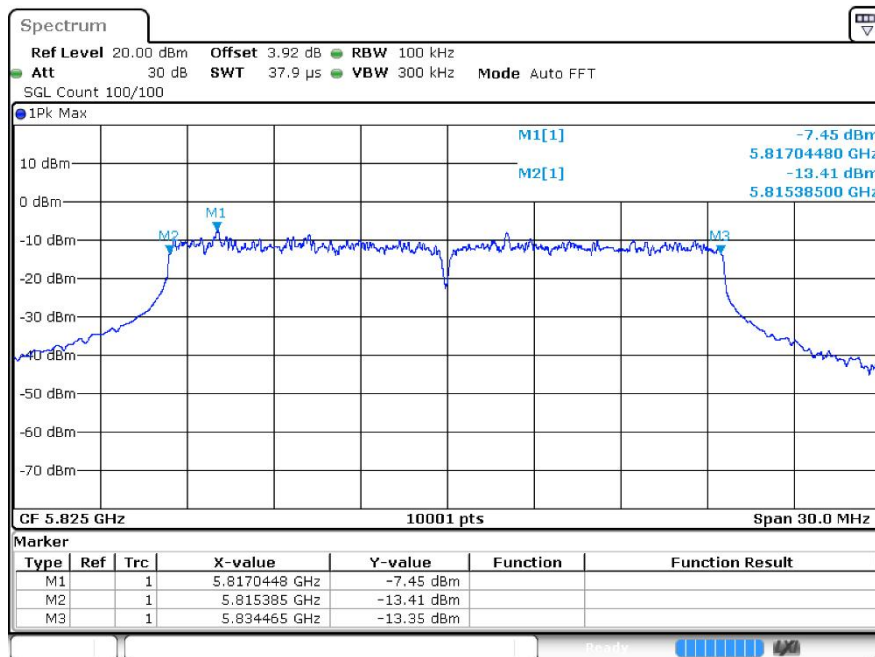
-6dB Bandwidth ax20 5745MHz Ant1



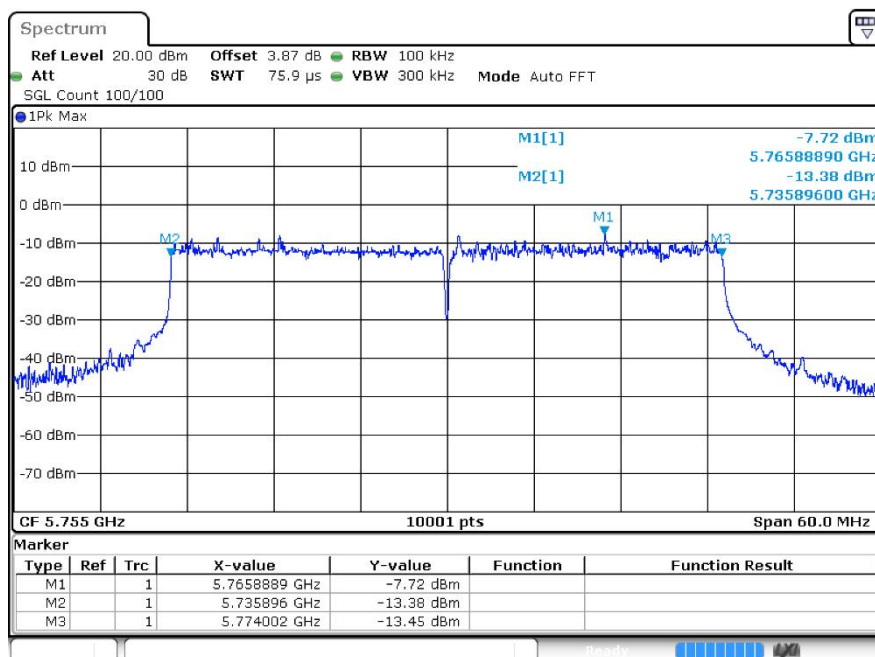
-6dB Bandwidth ax20 5785MHz Ant1

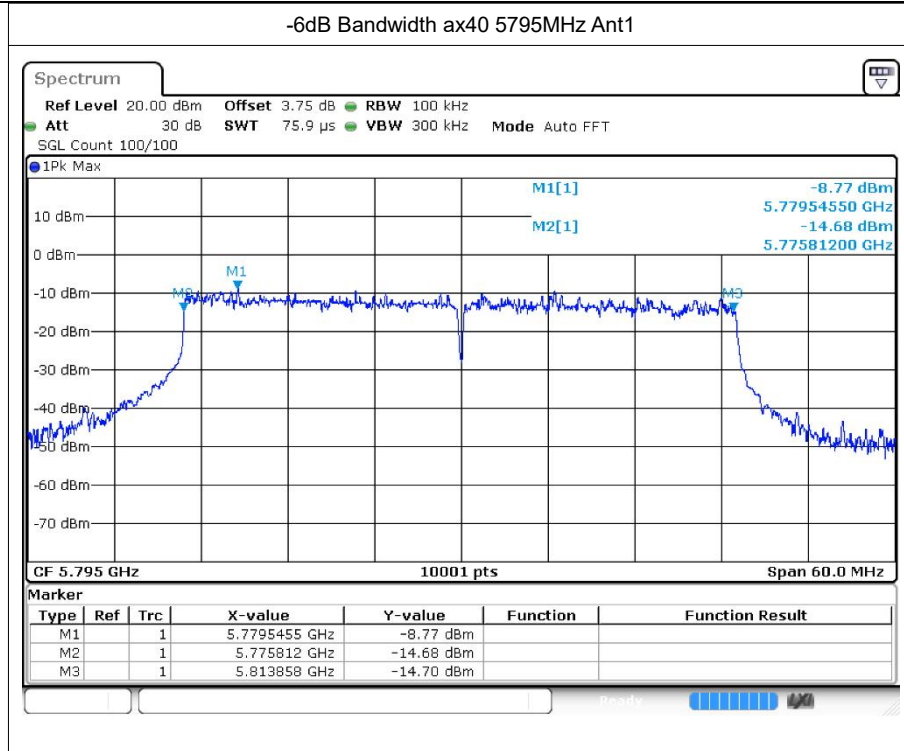


-6dB Bandwidth ax20 5825MHz Ant1



-6dB Bandwidth ax40 5755MHz Ant1





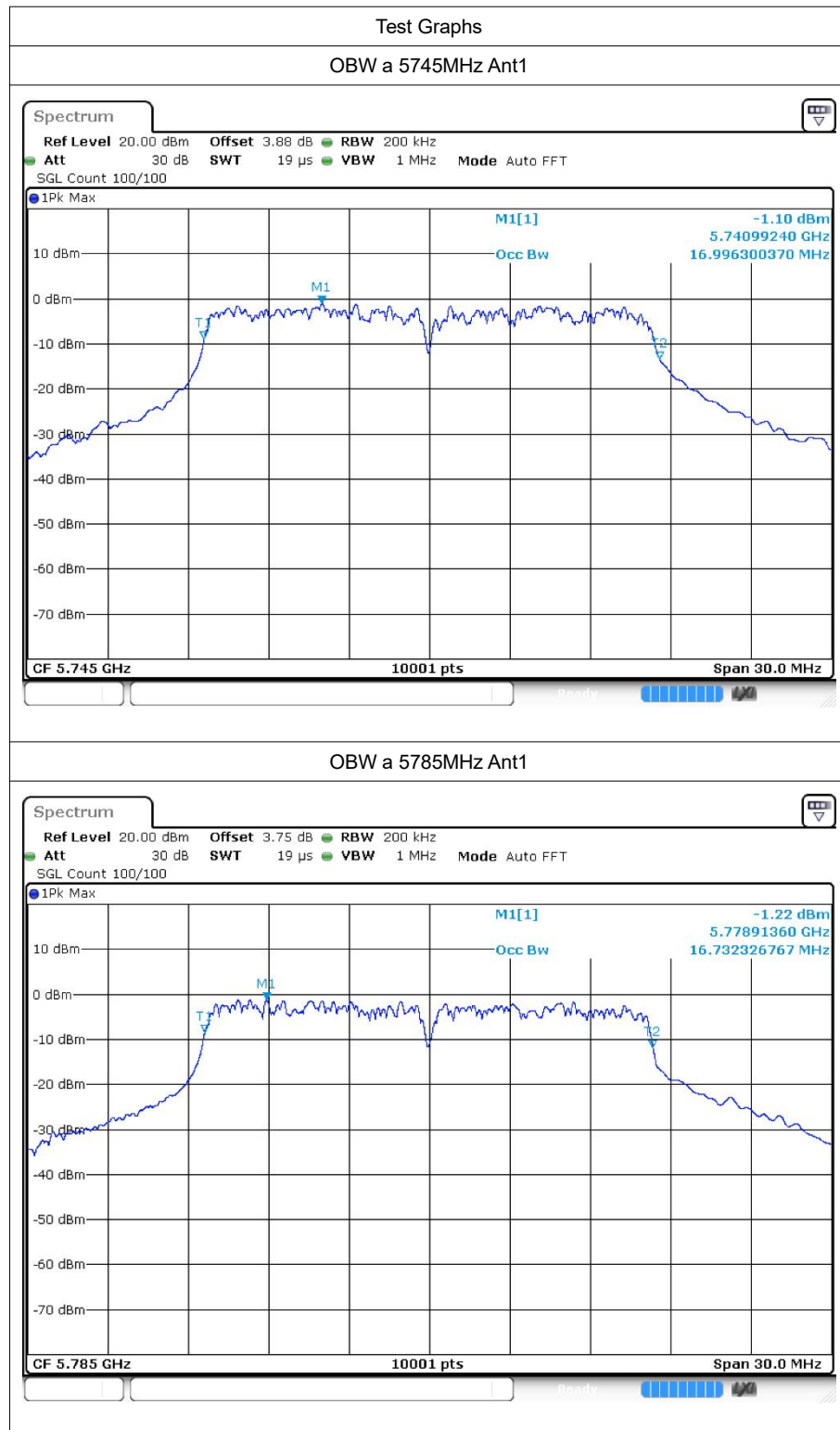


4 Occupied Channel Bandwidth

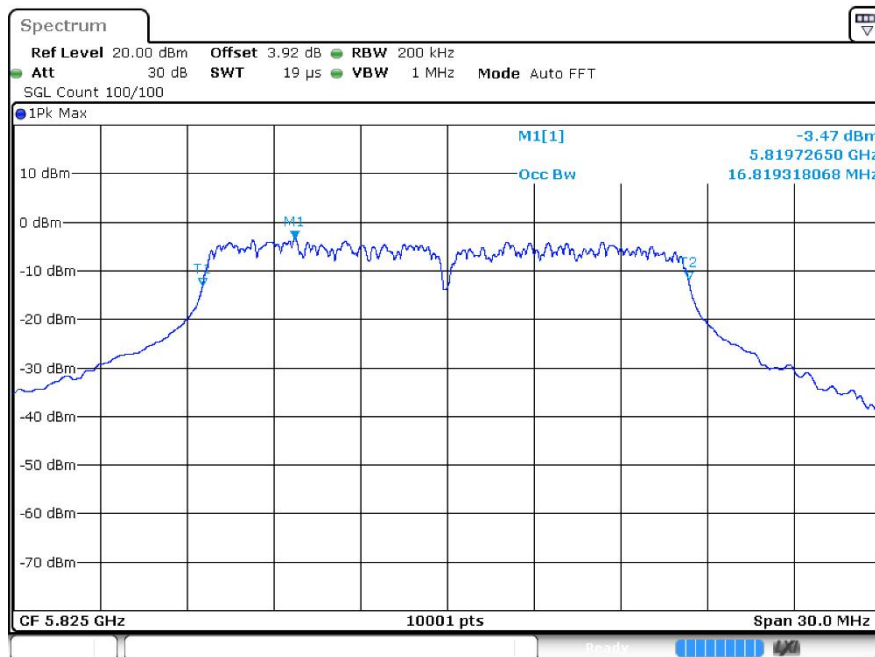
4.1 Test Result

Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
a	5745	Ant1	16.996
a	5785	Ant1	16.732
a	5825	Ant1	16.819
n20	5745	Ant1	17.863
n20	5785	Ant1	18.046
n20	5825	Ant1	18.085
n40	5755	Ant1	36.5
n40	5795	Ant1	36.752
ac20	5745	Ant1	18.073
ac20	5785	Ant1	17.866
ac20	5825	Ant1	17.881
ac40	5755	Ant1	36.518
ac40	5795	Ant1	36.494
ax20	5745	Ant1	19.105
ax20	5785	Ant1	18.991
ax20	5825	Ant1	19.003
ax40	5755	Ant1	38.21
ax40	5795	Ant1	37.976

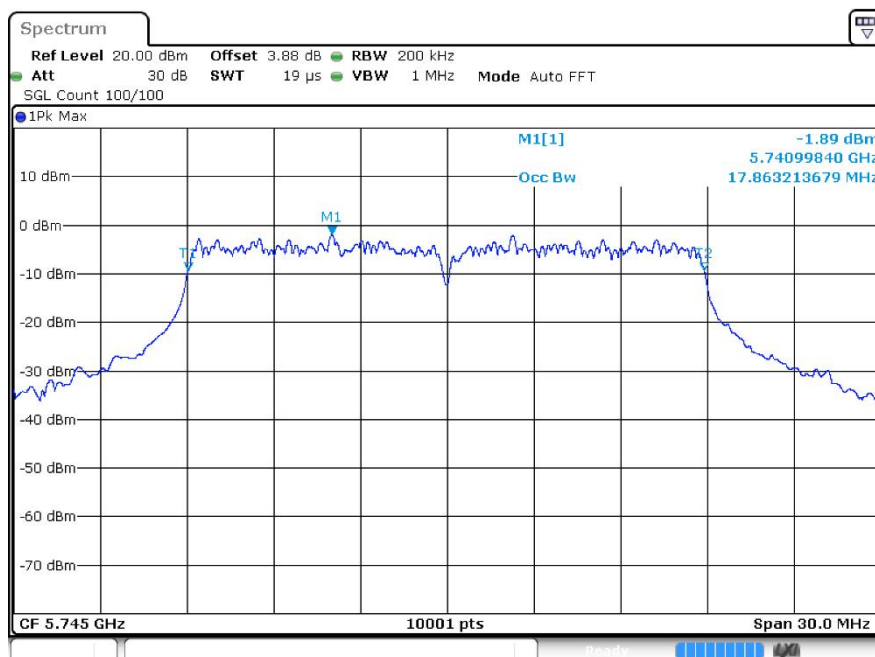
4.2 Test Graphs



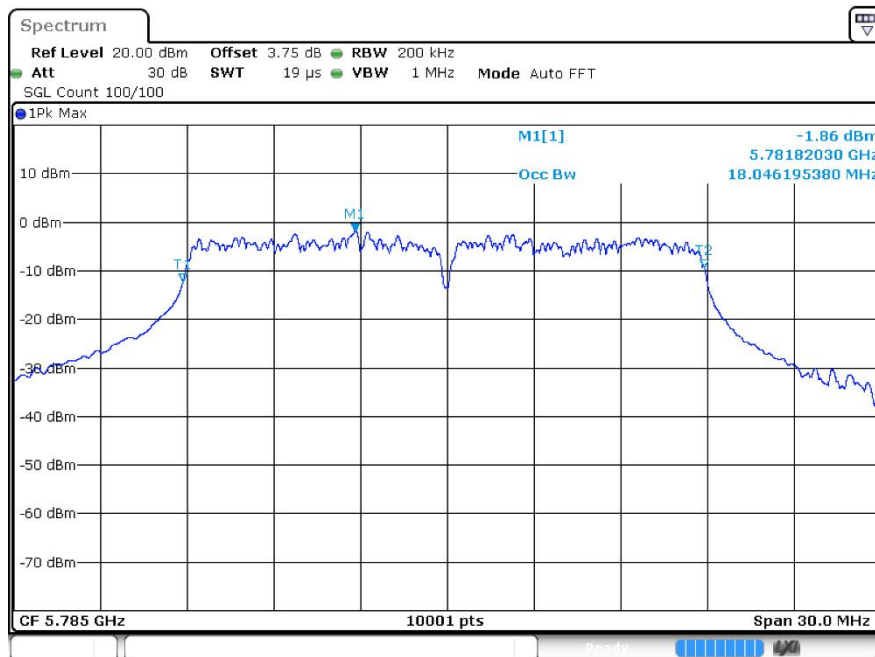
OBW a 5825MHz Ant1



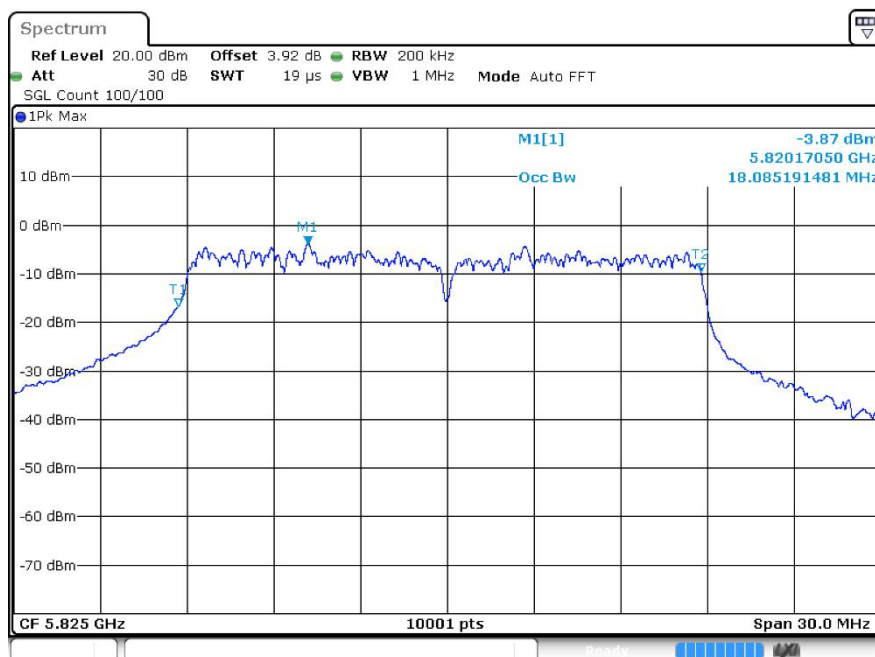
OBW n20 5745MHz Ant1



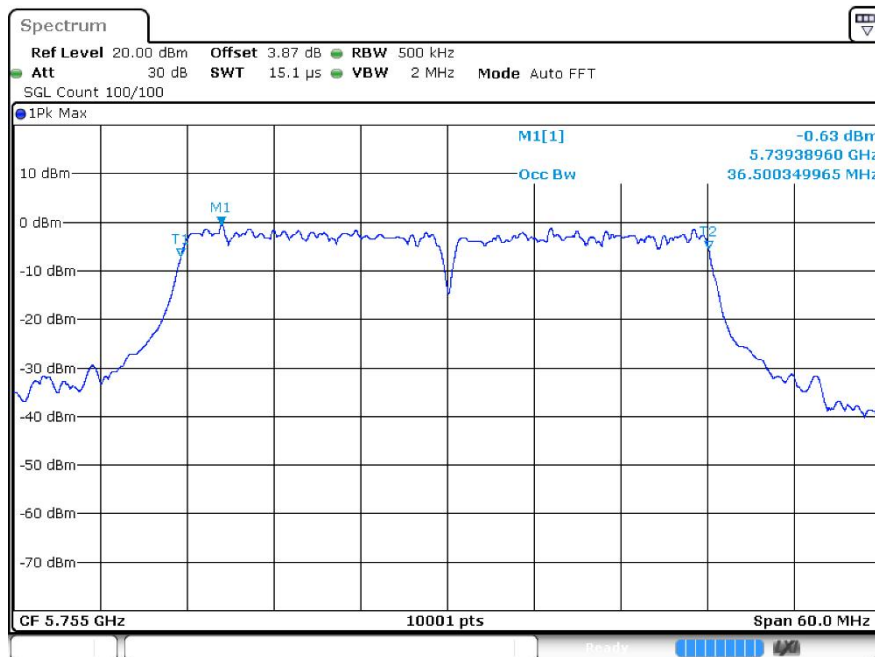
OBW n20 5785MHz Ant1



OBW n20 5825MHz Ant1



OBW n40 5755MHz Ant1



OBW n40 5795MHz Ant1

