



Appendix E

RF Test Data for 5.8GWIFI(Conducted Measurement)

Product Name: 3D printer

Trade Mark: ELEGOO

Test Model: Centauri Carbon 2

Environmental Conditions

Temperature:	24.5° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya lin
Supervised by:	Simba Huang



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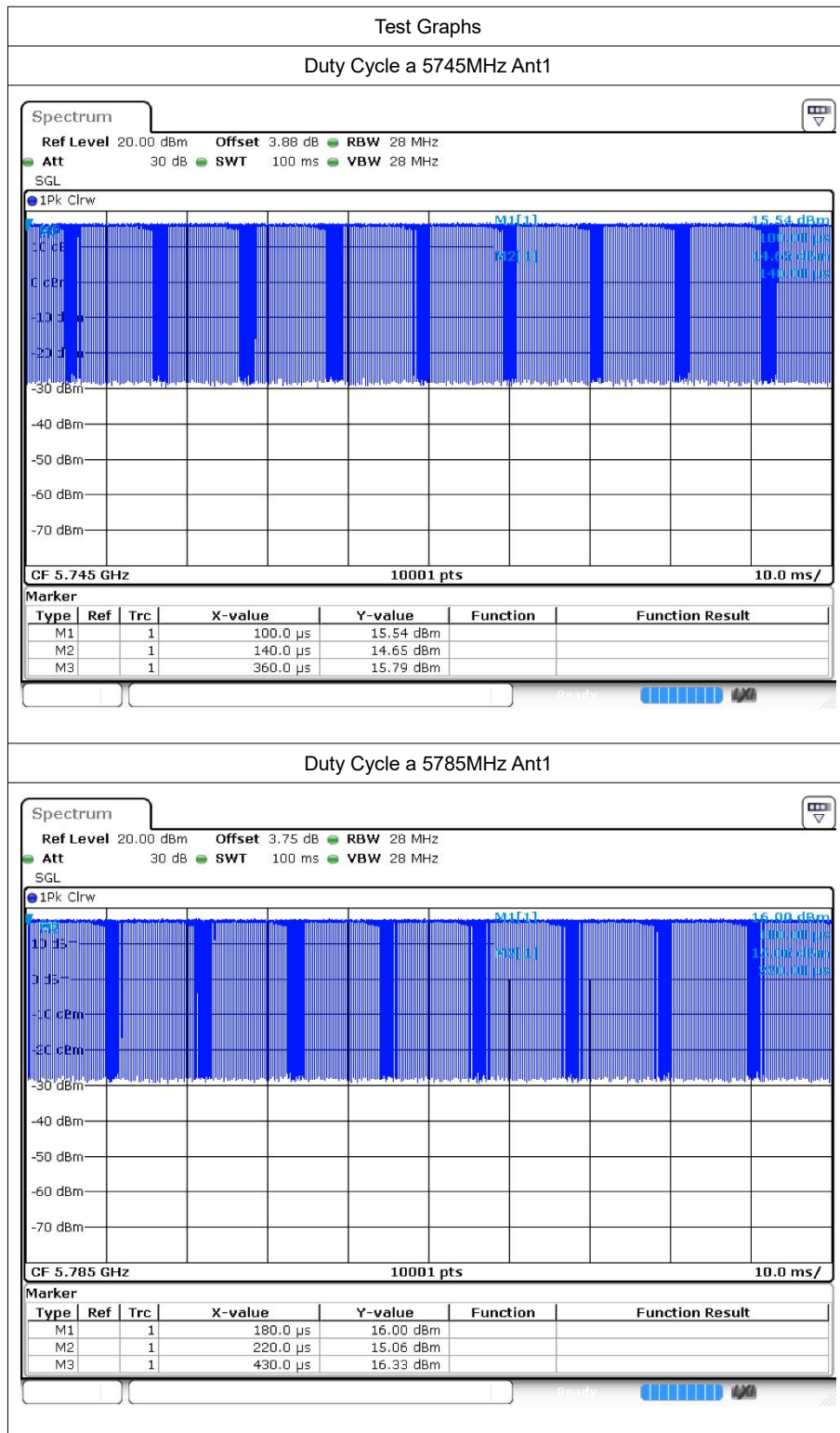


1 Duty Cycle

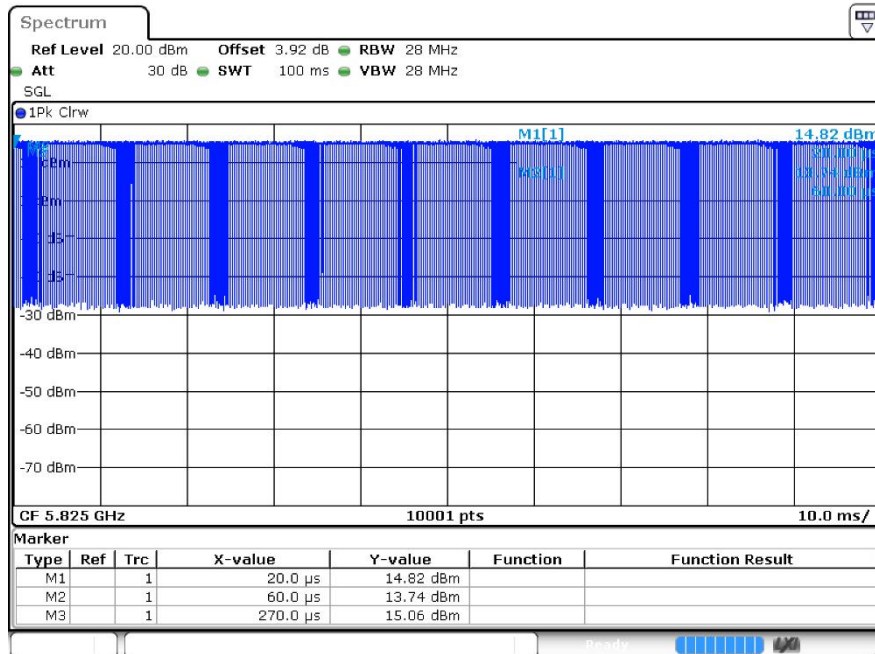
1.1 Test Result

Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
a	5745	Ant1	86.91	0.61	4.55
a	5785	Ant1	86.97	0.61	4.76
a	5825	Ant1	87.03	0.6	4.76
n20	5745	Ant1	86.94	0.61	2.56
n20	5785	Ant1	86.96	0.61	2.5
n20	5825	Ant1	81.58	0.88	4
n40	5755	Ant1	86.82	0.61	2.56
n40	5795	Ant1	86.83	0.61	2.63
ac20	5745	Ant1	85.89	0.66	2.78
ac20	5785	Ant1	85.88	0.66	2.78
ac20	5825	Ant1	86.09	0.65	2.78
ac40	5755	Ant1	86.32	0.64	2.63
ac40	5795	Ant1	86.41	0.63	2.7
ax20	5745	Ant1	86.28	0.64	2.63
ax20	5785	Ant1	86.33	0.64	2.63
ax20	5825	Ant1	86.34	0.64	2.7
ax40	5755	Ant1	86.22	0.64	2.63
ax40	5795	Ant1	86.25	0.64	2.63

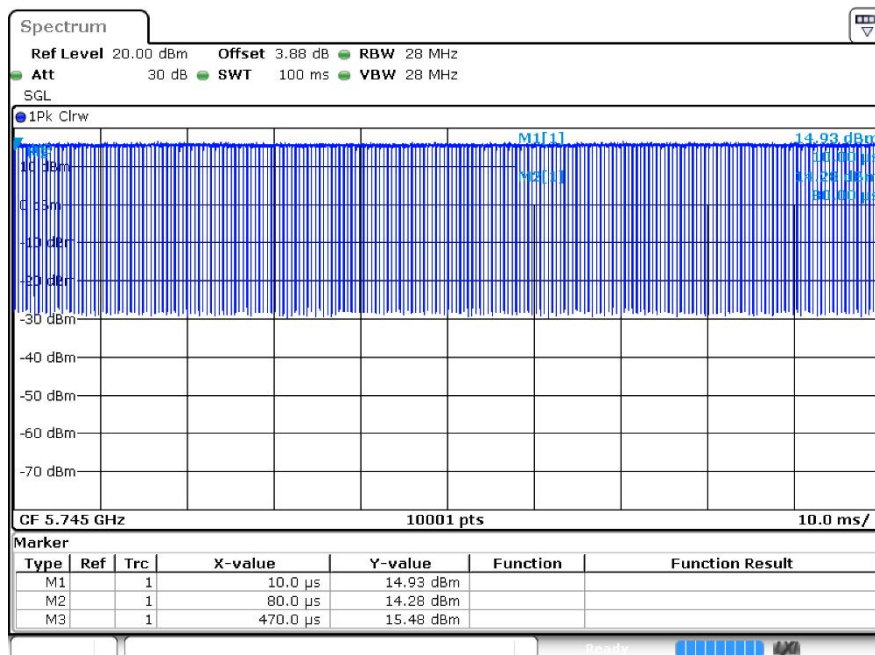
1.2 Test Graphs



Duty Cycle a 5825MHz Ant1

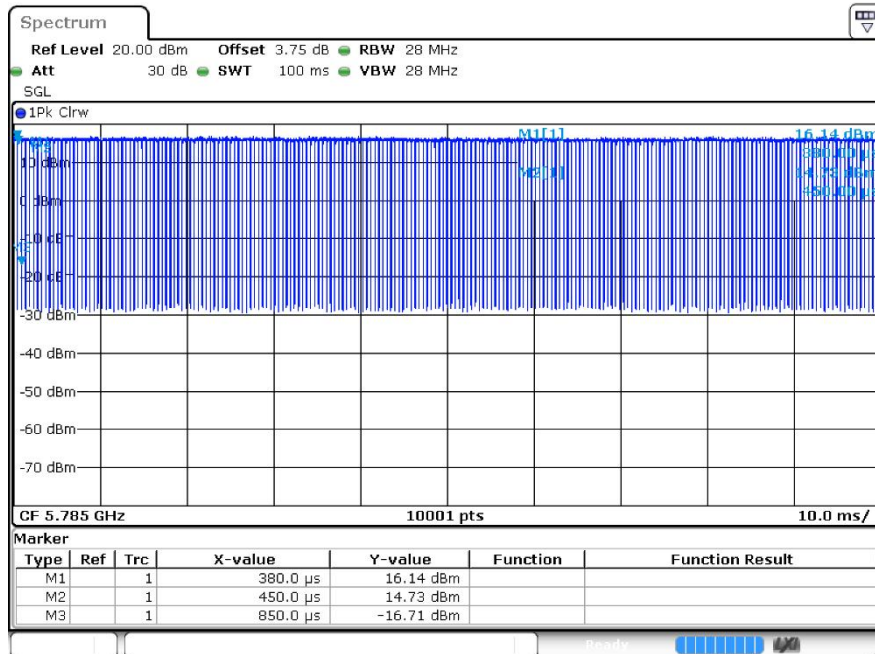


Duty Cycle n20 5745MHz Ant1

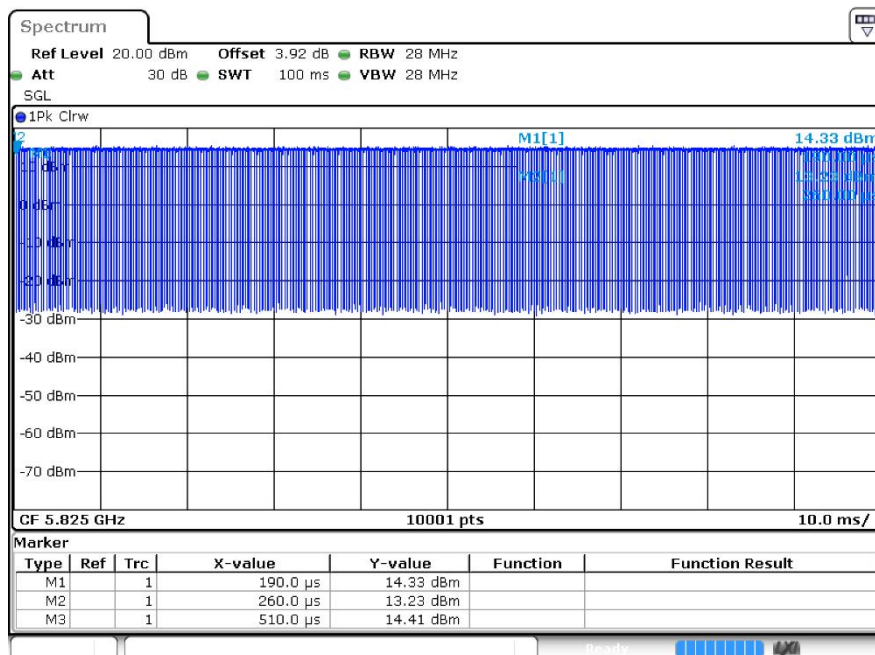




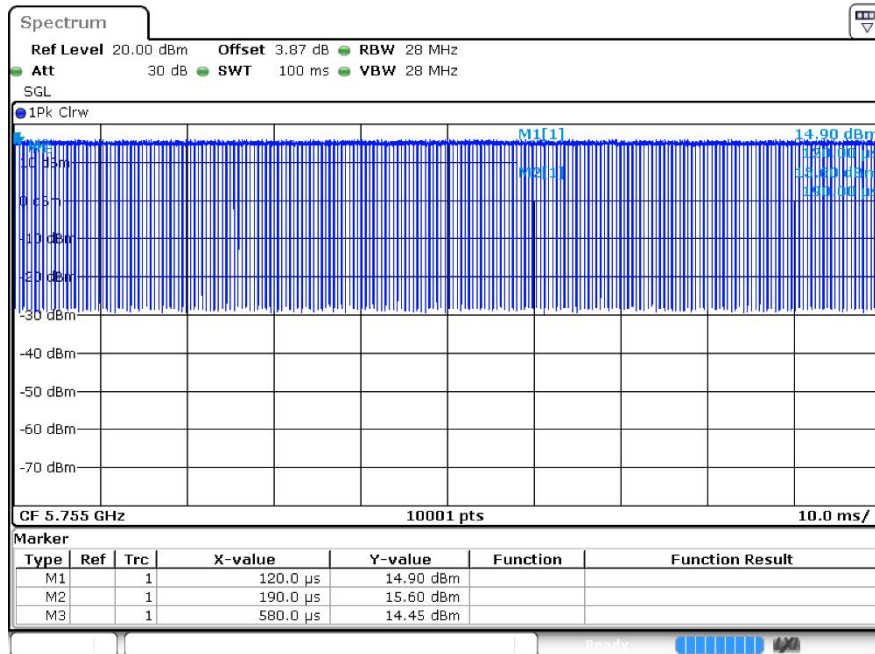
Duty Cycle n20 5785MHz Ant1



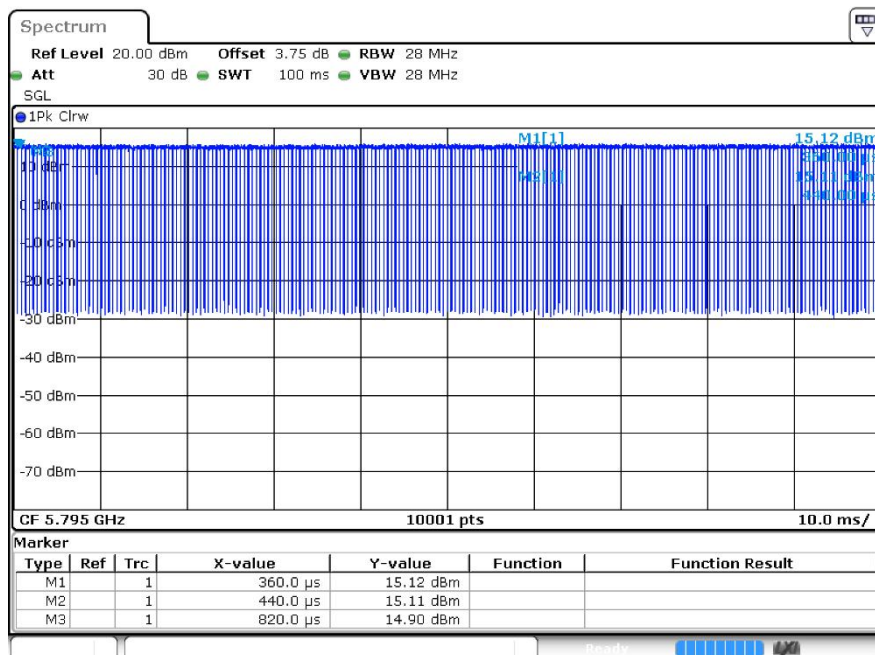
Duty Cycle n20 5825MHz Ant1



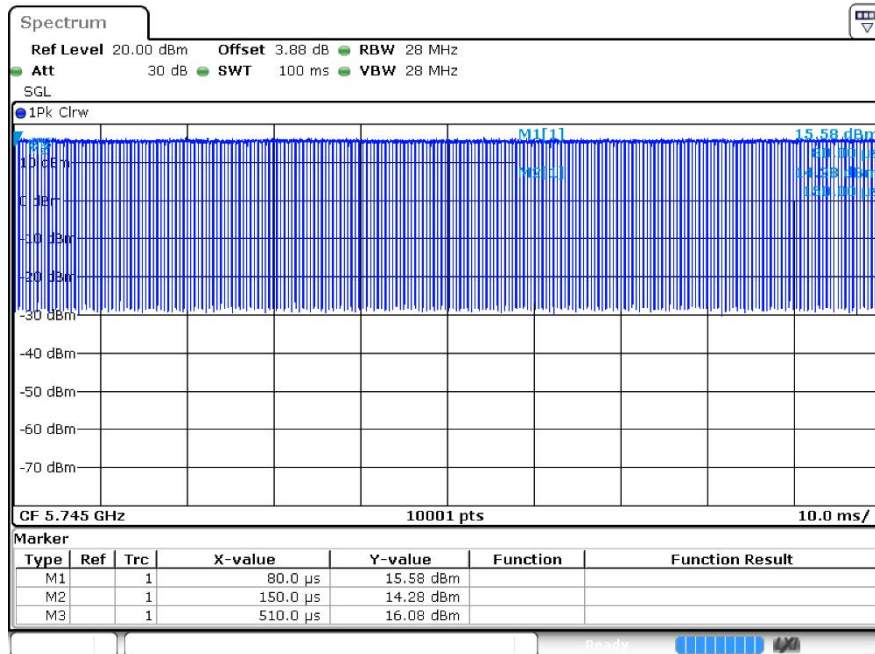
Duty Cycle n40 5755MHz Ant1



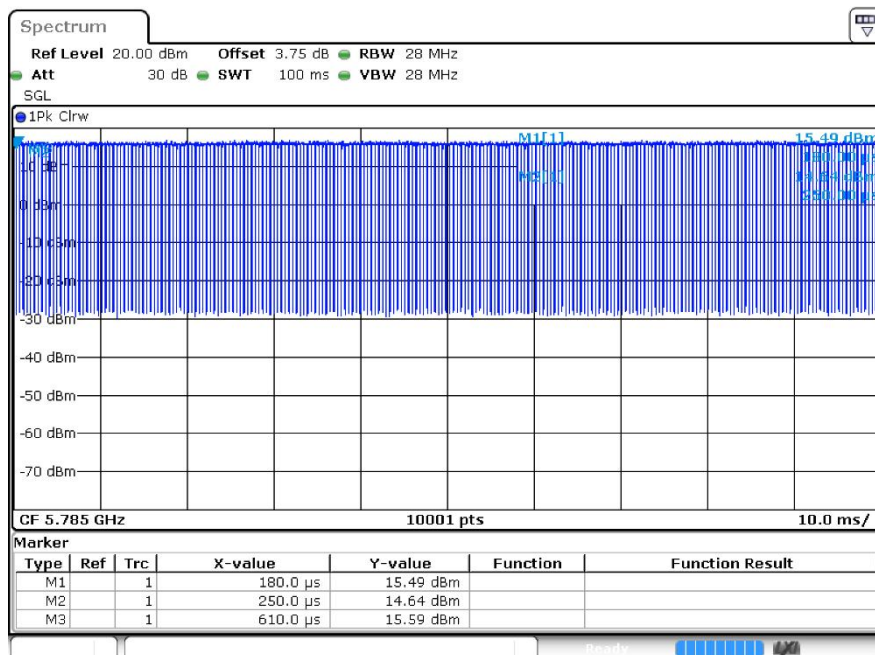
Duty Cycle n40 5795MHz Ant1



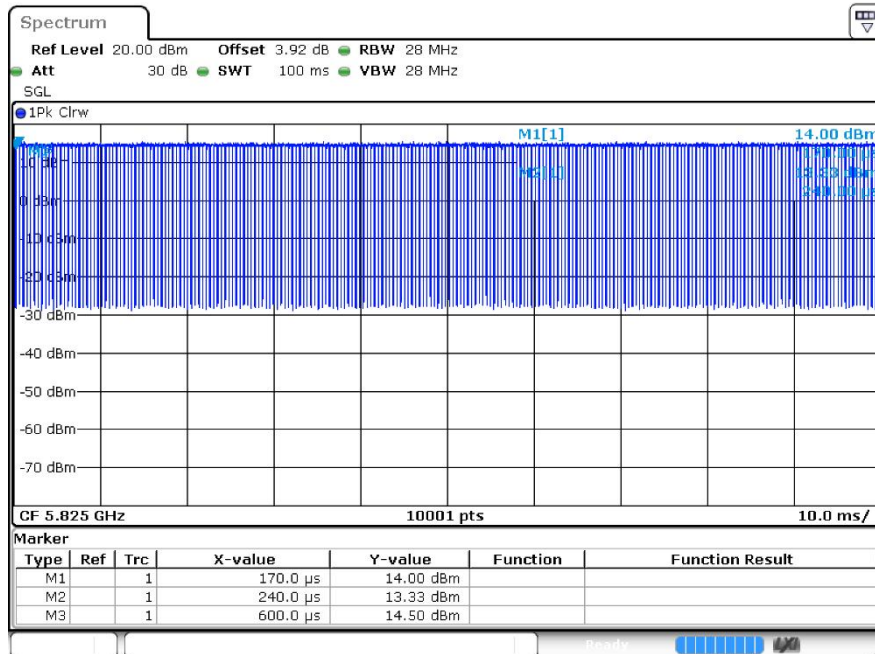
Duty Cycle ac20 5745MHz Ant1



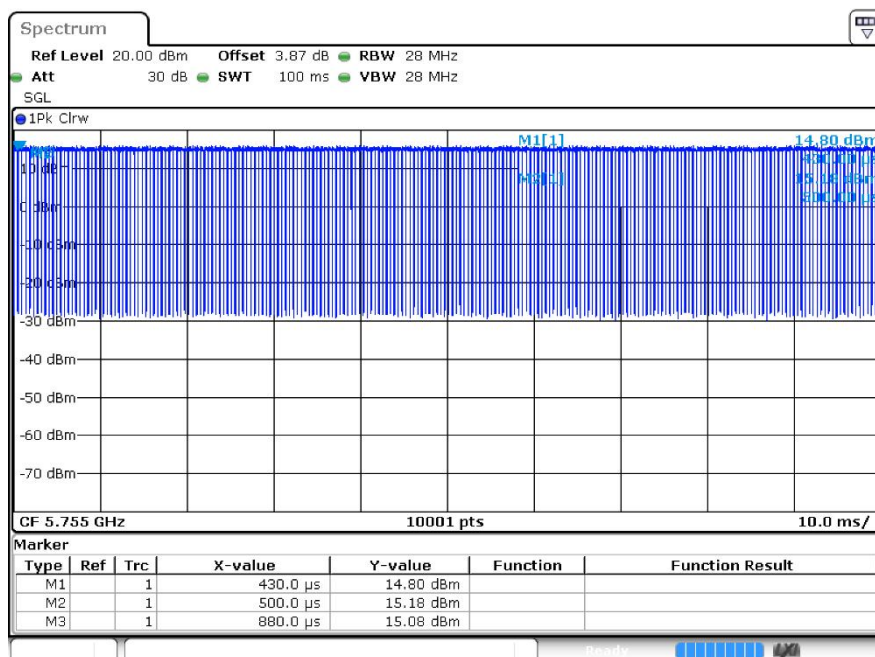
Duty Cycle ac20 5785MHz Ant1

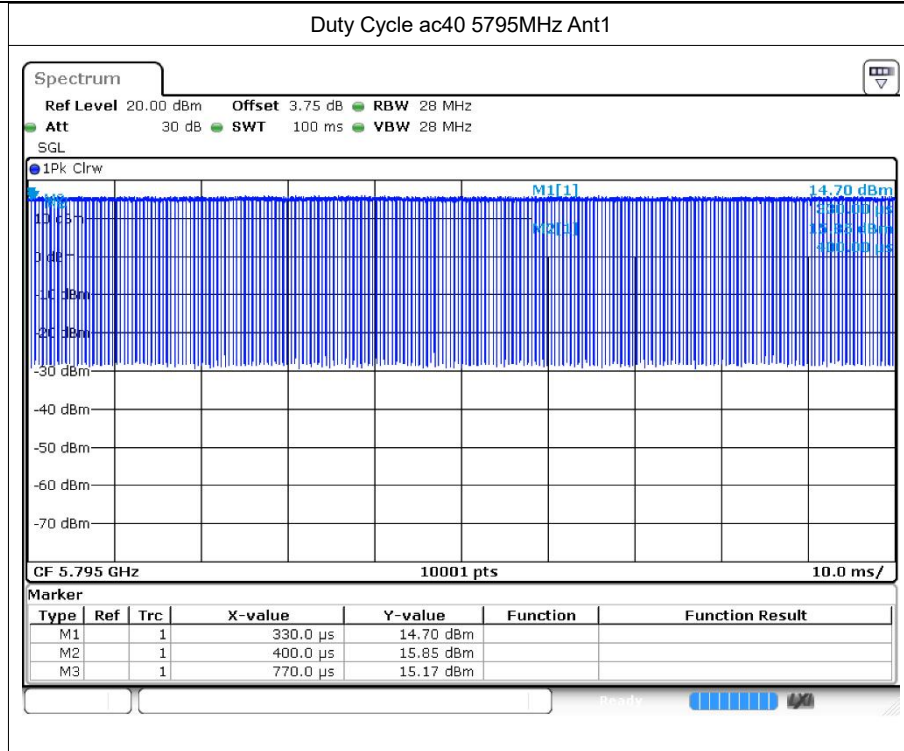


Duty Cycle ac20 5825MHz Ant1

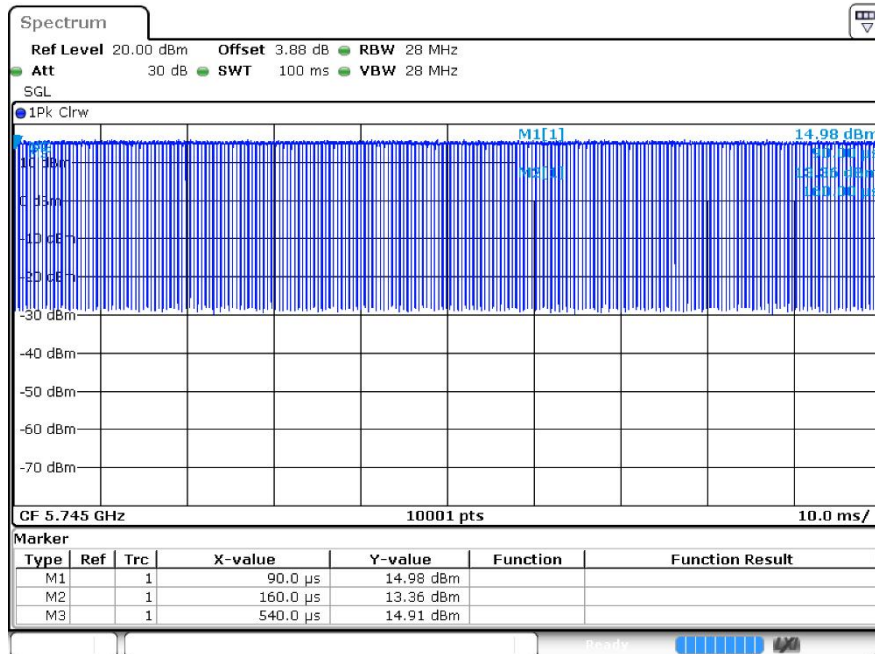


Duty Cycle ac40 5755MHz Ant1

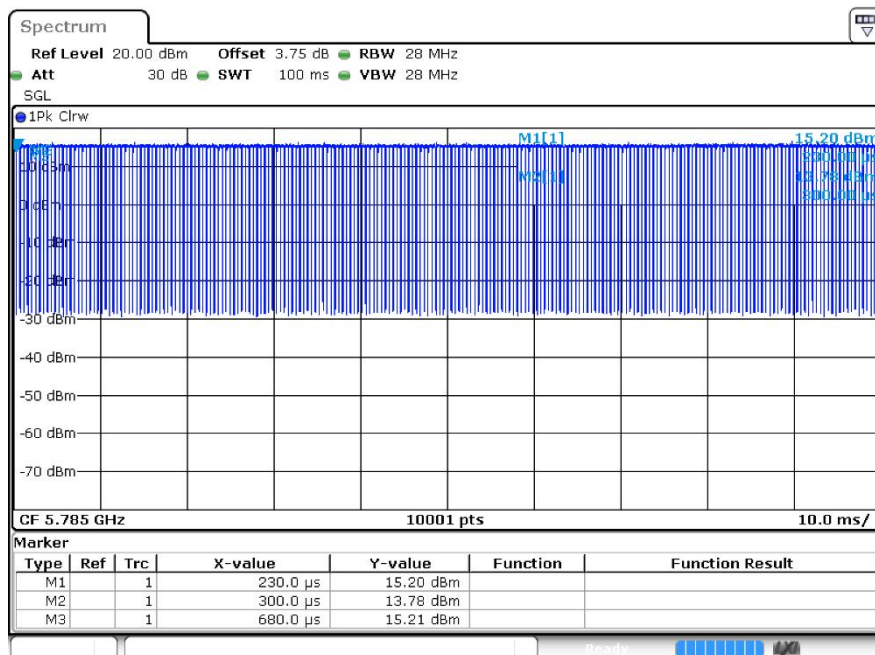




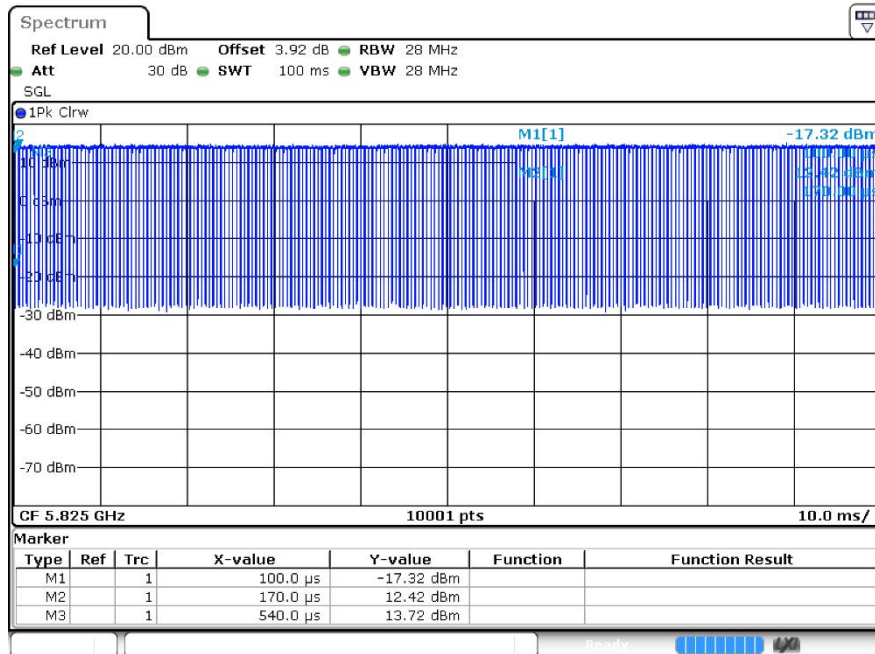
Duty Cycle ax20 5745MHz Ant1



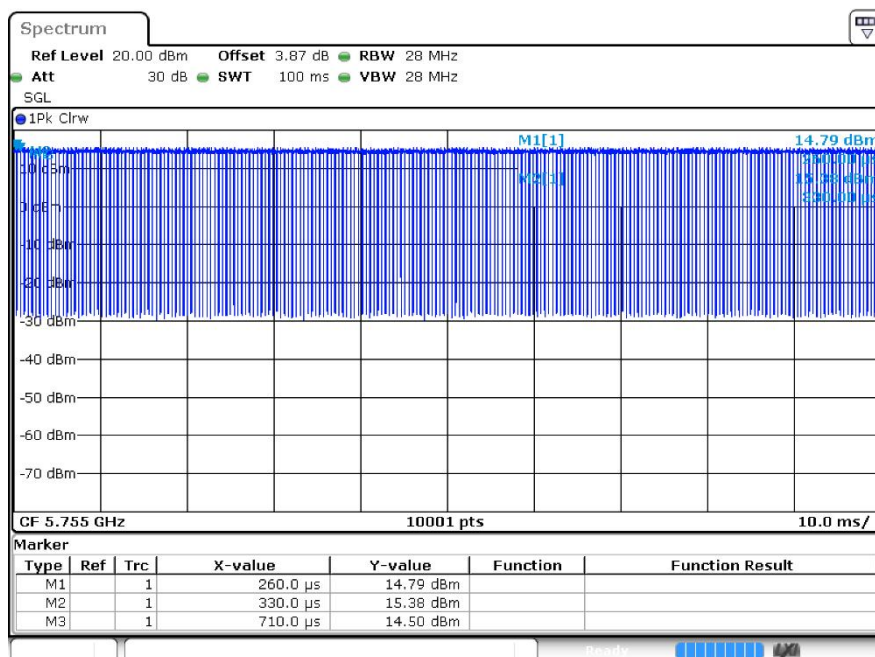
Duty Cycle ax20 5785MHz Ant1

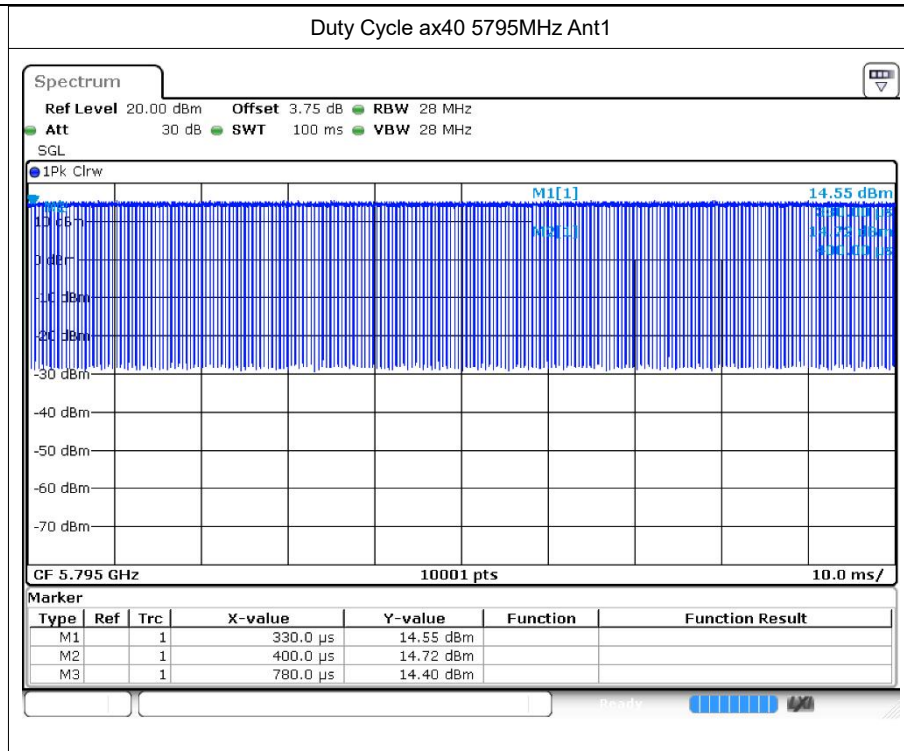


Duty Cycle ax20 5825MHz Ant1



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	15.02	30	Pass
a	5785	Ant1	15.22	30	Pass
a	5825	Ant1	14.06	30	Pass
n20	5745	Ant1	14.31	30	Pass
n20	5785	Ant1	14.8	30	Pass
n20	5825	Ant1	13.53	30	Pass
n40	5755	Ant1	14.33	30	Pass
n40	5795	Ant1	14.27	30	Pass
ac20	5745	Ant1	14.53	30	Pass
ac20	5785	Ant1	14.79	30	Pass
ac20	5825	Ant1	13.48	30	Pass
ac40	5755	Ant1	14.36	30	Pass
ac40	5795	Ant1	14.32	30	Pass
ax20	5745	Ant1	14.63	30	Pass
ax20	5785	Ant1	14.90	30	Pass
ax20	5825	Ant1	13.6	30	Pass
ax40	5755	Ant1	14.66	30	Pass
ax40	5795	Ant1	14.65	30	Pass

Note:

The duty factor has been compensated into the result.

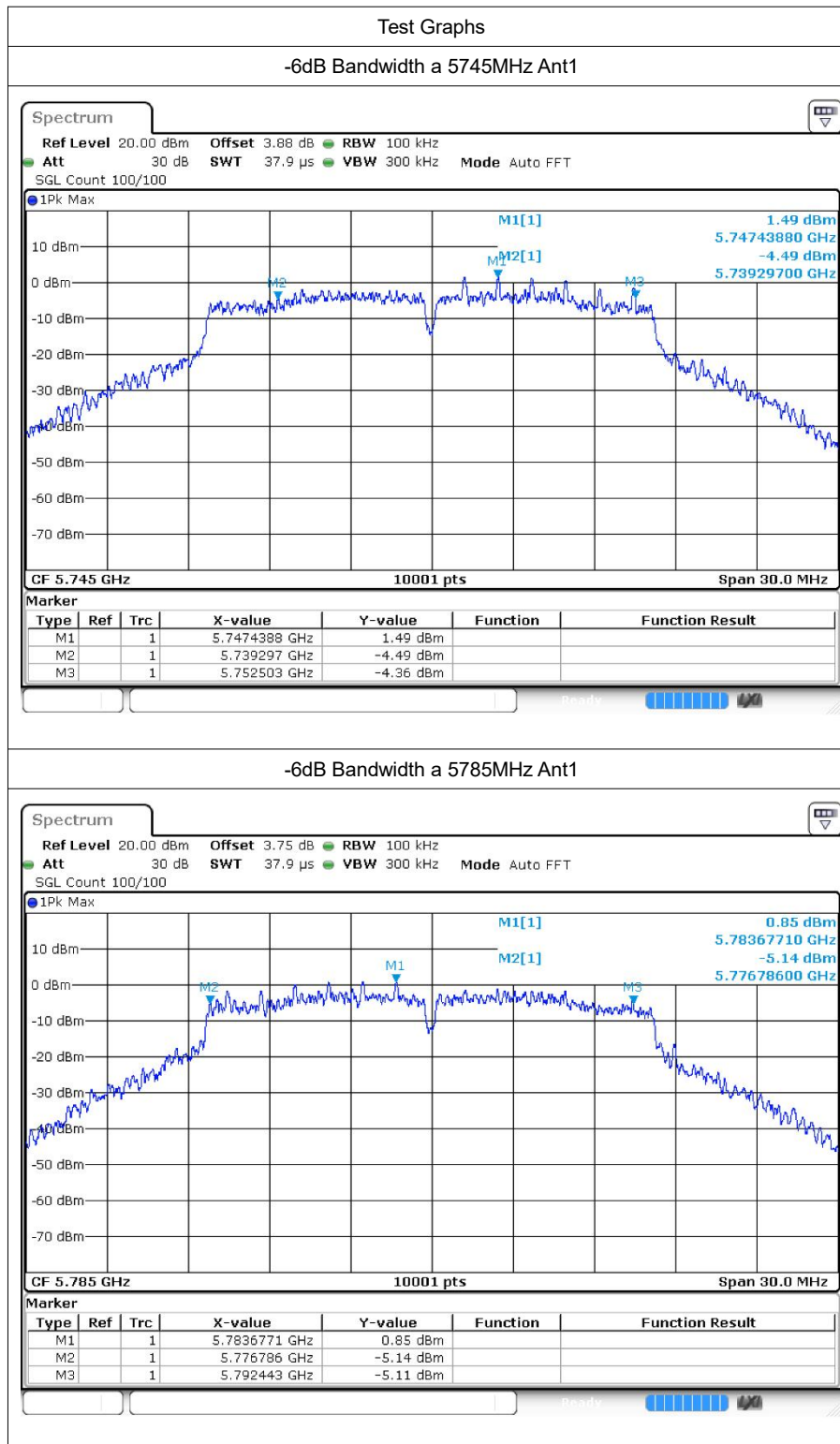


3 -6dB Bandwidth

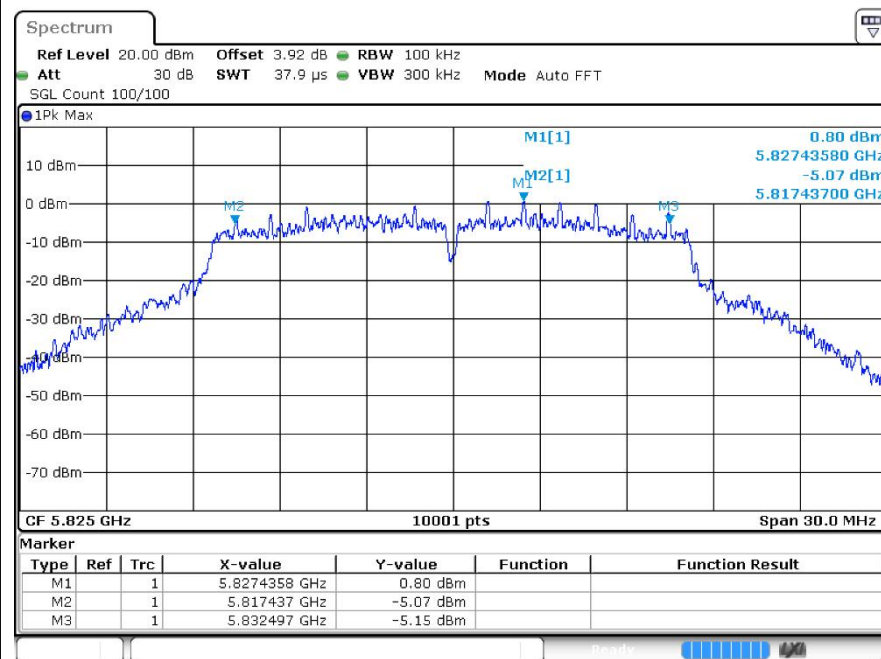
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
a	5745	Ant1	13.206	0.5	Pass
a	5785	Ant1	15.657	0.5	Pass
a	5825	Ant1	15.06	0.5	Pass
n20	5745	Ant1	15.114	0.5	Pass
n20	5785	Ant1	15.093	0.5	Pass
n20	5825	Ant1	15.123	0.5	Pass
n40	5755	Ant1	35.07	0.5	Pass
n40	5795	Ant1	35.082	0.5	Pass
ac20	5745	Ant1	15.12	0.5	Pass
ac20	5785	Ant1	15.114	0.5	Pass
ac20	5825	Ant1	15.111	0.5	Pass
ac40	5755	Ant1	35.106	0.5	Pass
ac40	5795	Ant1	32.55	0.5	Pass
ax20	5745	Ant1	15.117	0.5	Pass
ax20	5785	Ant1	15.126	0.5	Pass
ax20	5825	Ant1	17.673	0.5	Pass
ax40	5755	Ant1	33.852	0.5	Pass
ax40	5795	Ant1	35.064	0.5	Pass

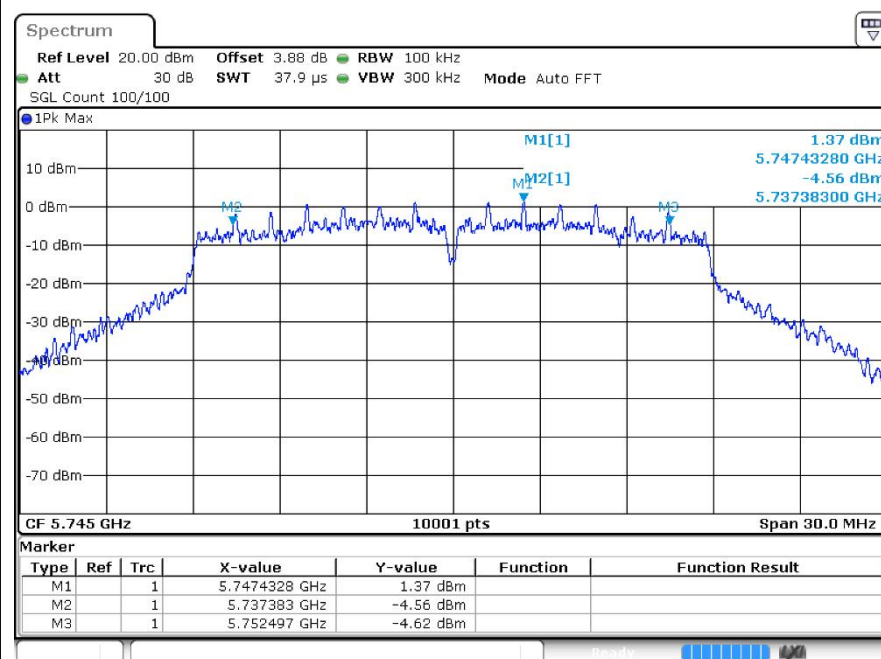
3.2 Test Graphs



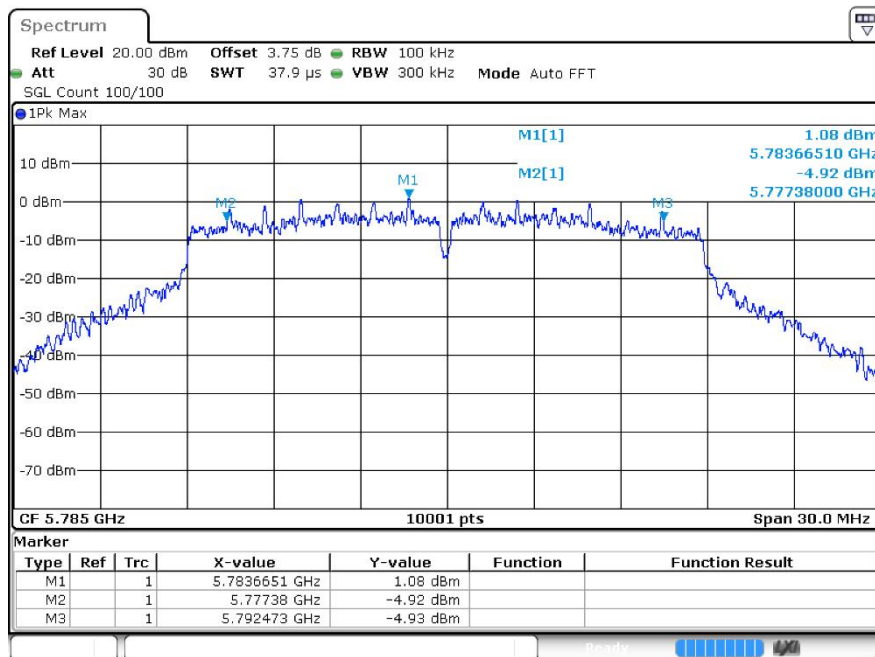
-6dB Bandwidth a 5825MHz Ant1



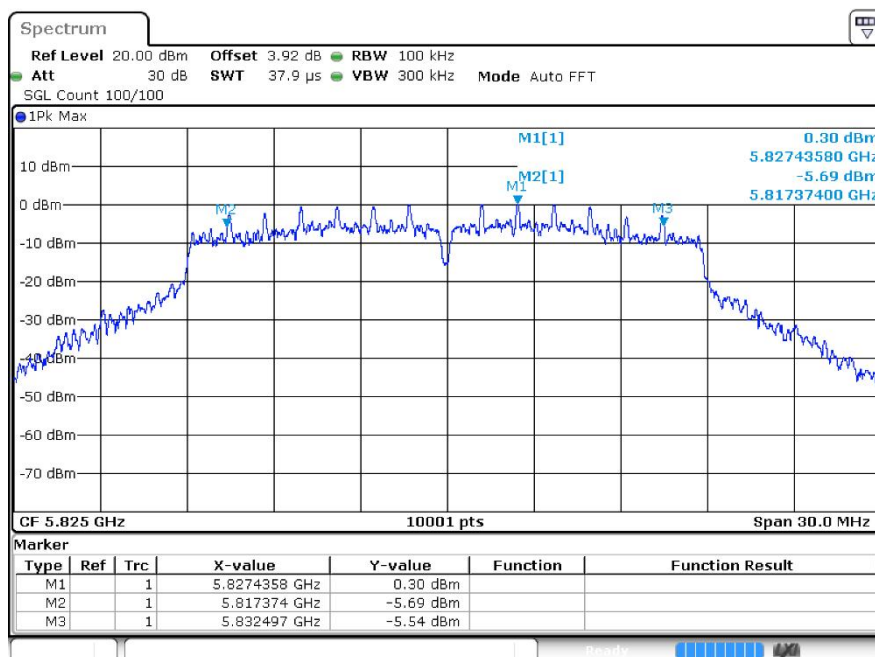
-6dB Bandwidth n20 5745MHz Ant1



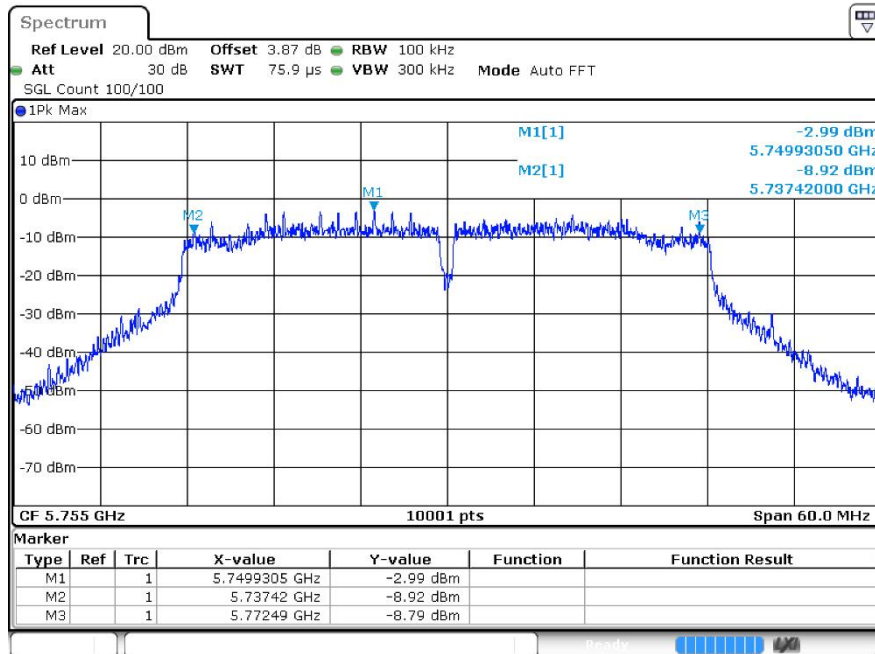
-6dB Bandwidth n20 5785MHz Ant1



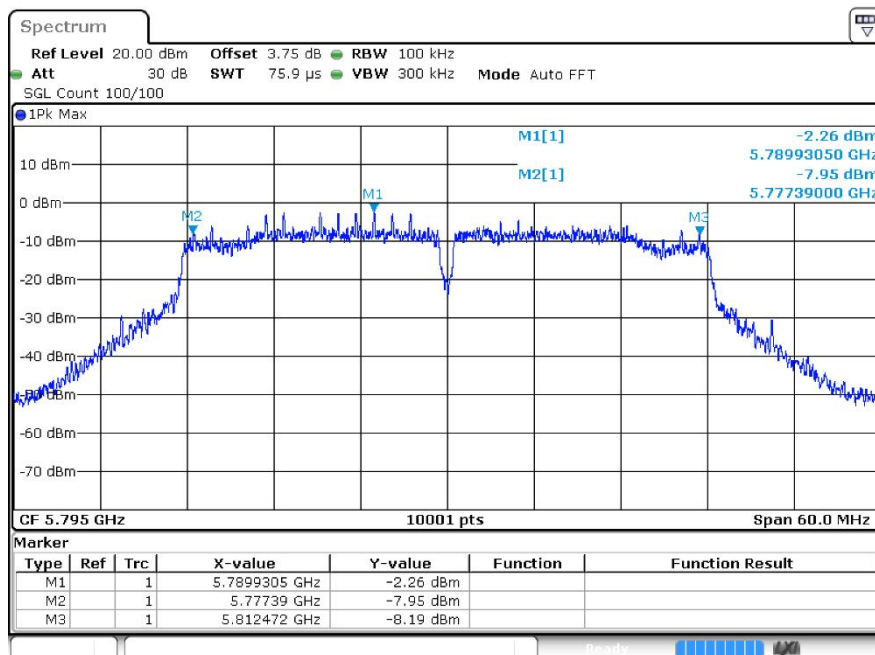
-6dB Bandwidth n20 5825MHz Ant1



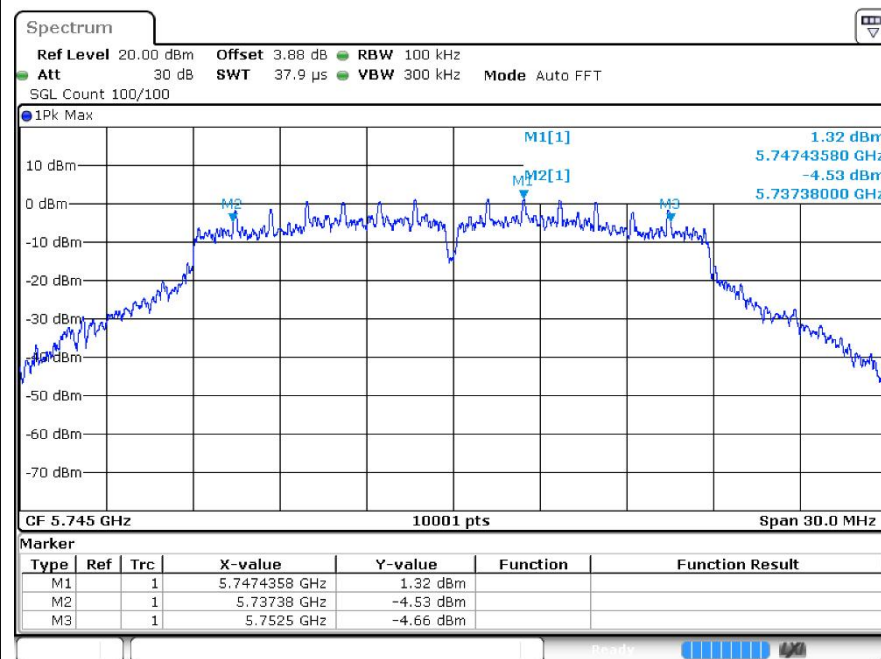
-6dB Bandwidth n40 5755MHz Ant1



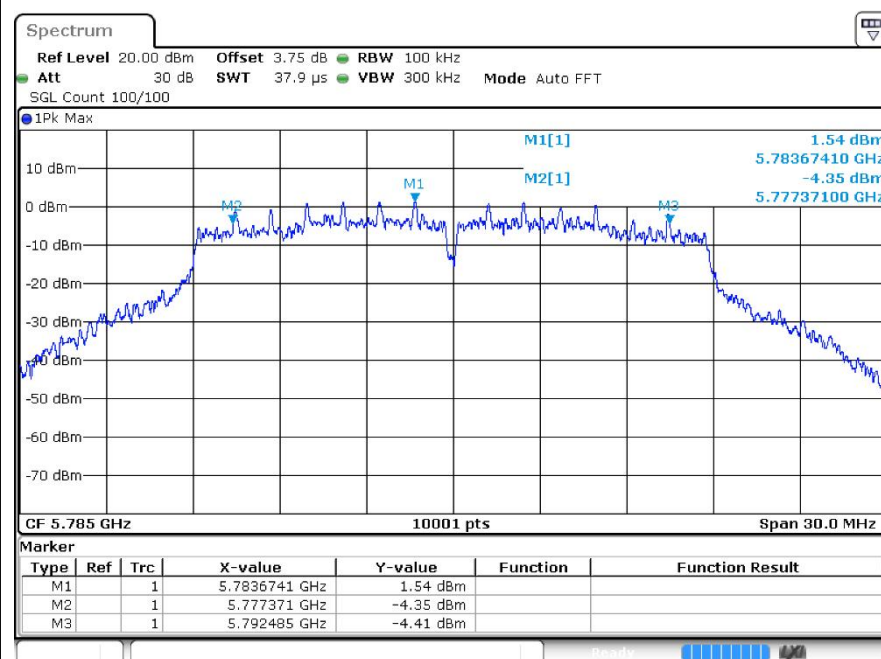
-6dB Bandwidth n40 5795MHz Ant1



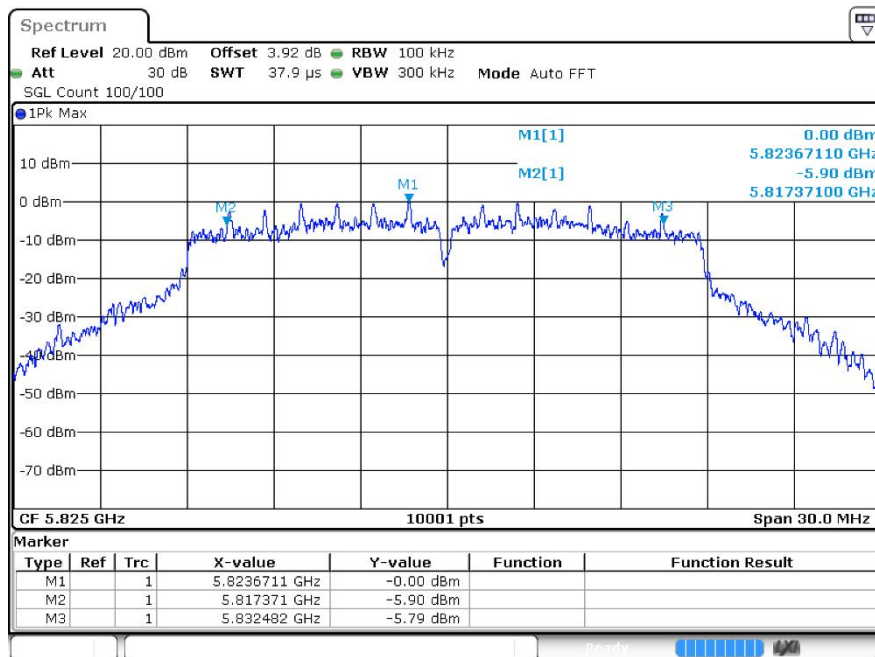
-6dB Bandwidth ac20 5745MHz Ant1



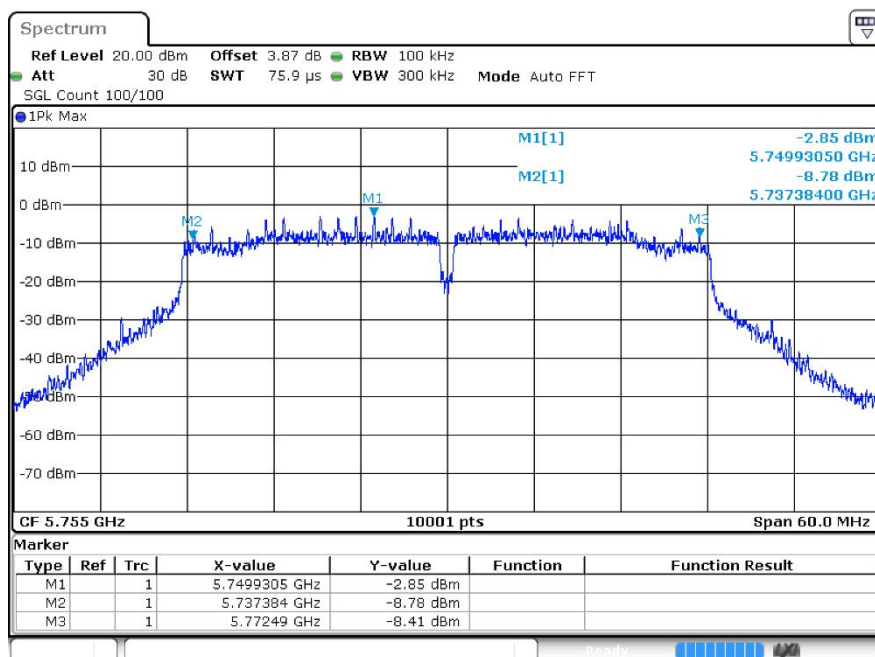
-6dB Bandwidth ac20 5785MHz Ant1

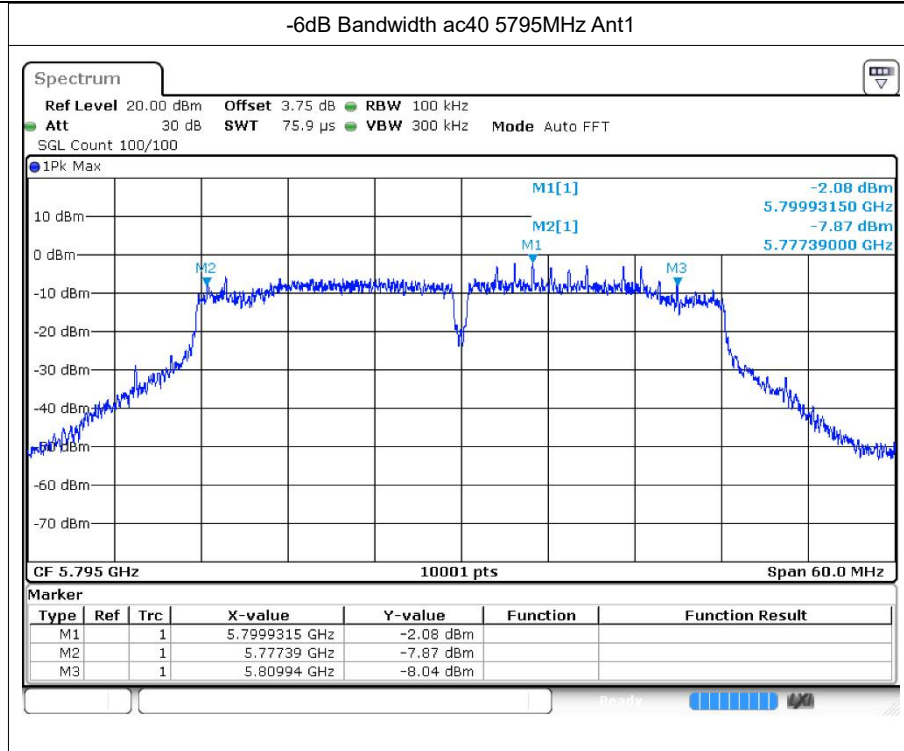


-6dB Bandwidth ac20 5825MHz Ant1

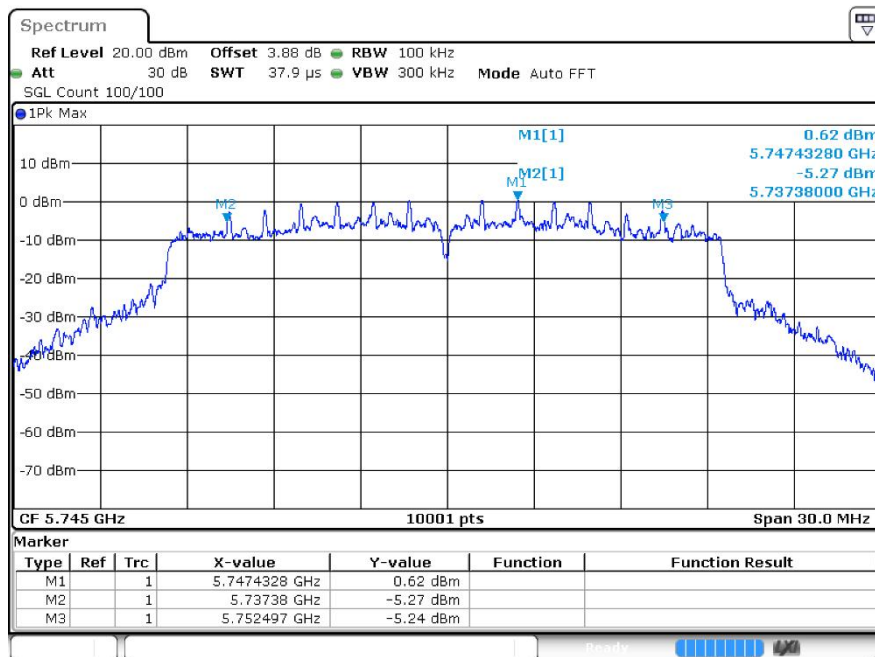


-6dB Bandwidth ac40 5755MHz Ant1

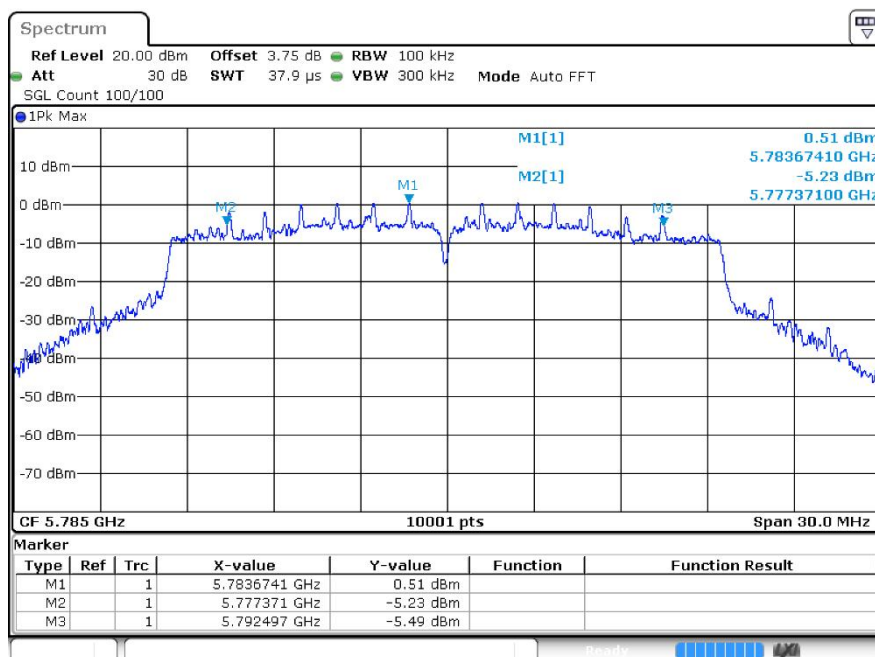




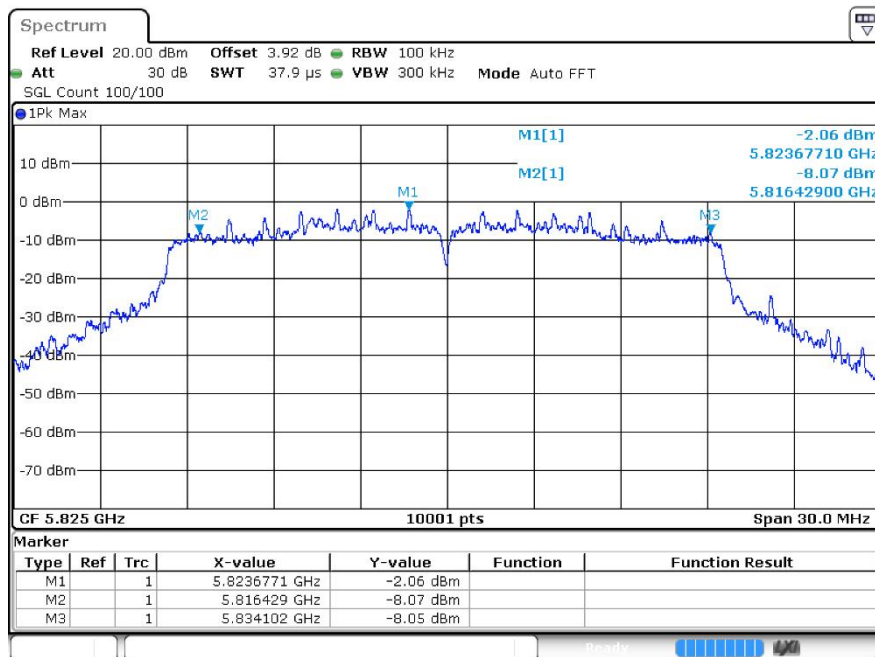
-6dB Bandwidth ax20 5745MHz Ant1



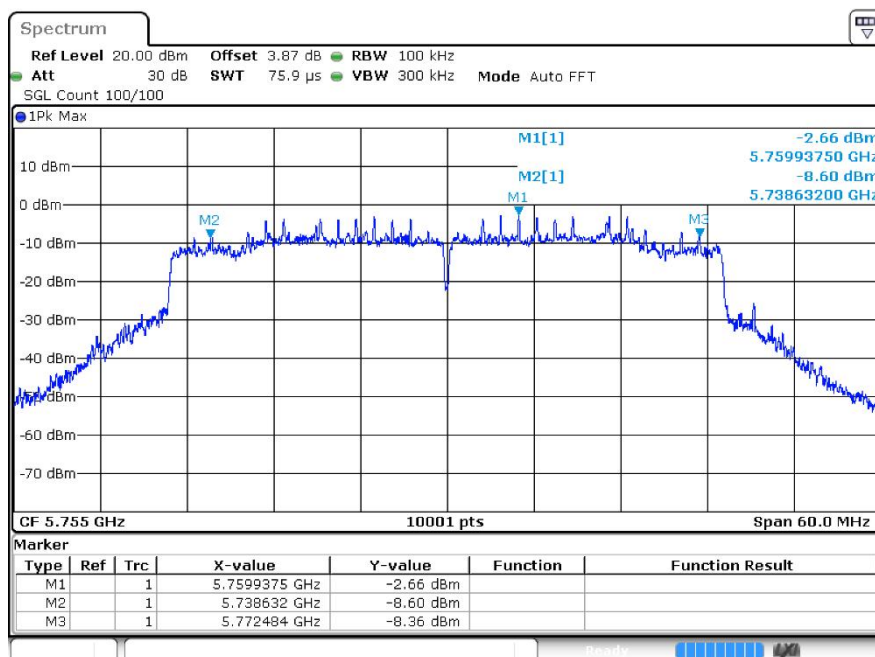
-6dB Bandwidth ax20 5785MHz Ant1

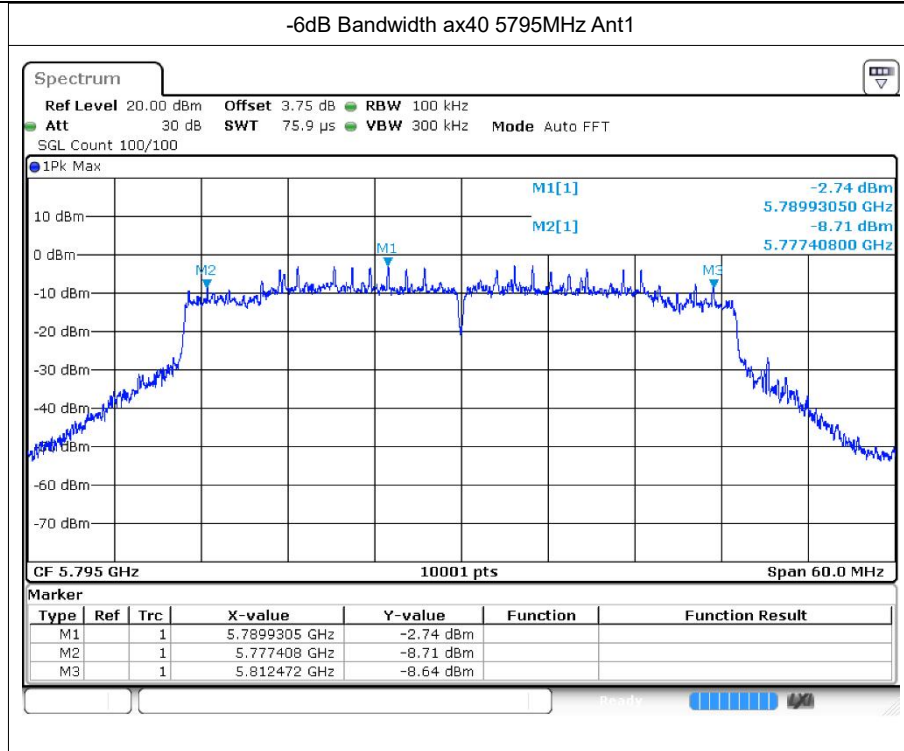


-6dB Bandwidth ax20 5825MHz Ant1



-6dB Bandwidth ax40 5755MHz Ant1





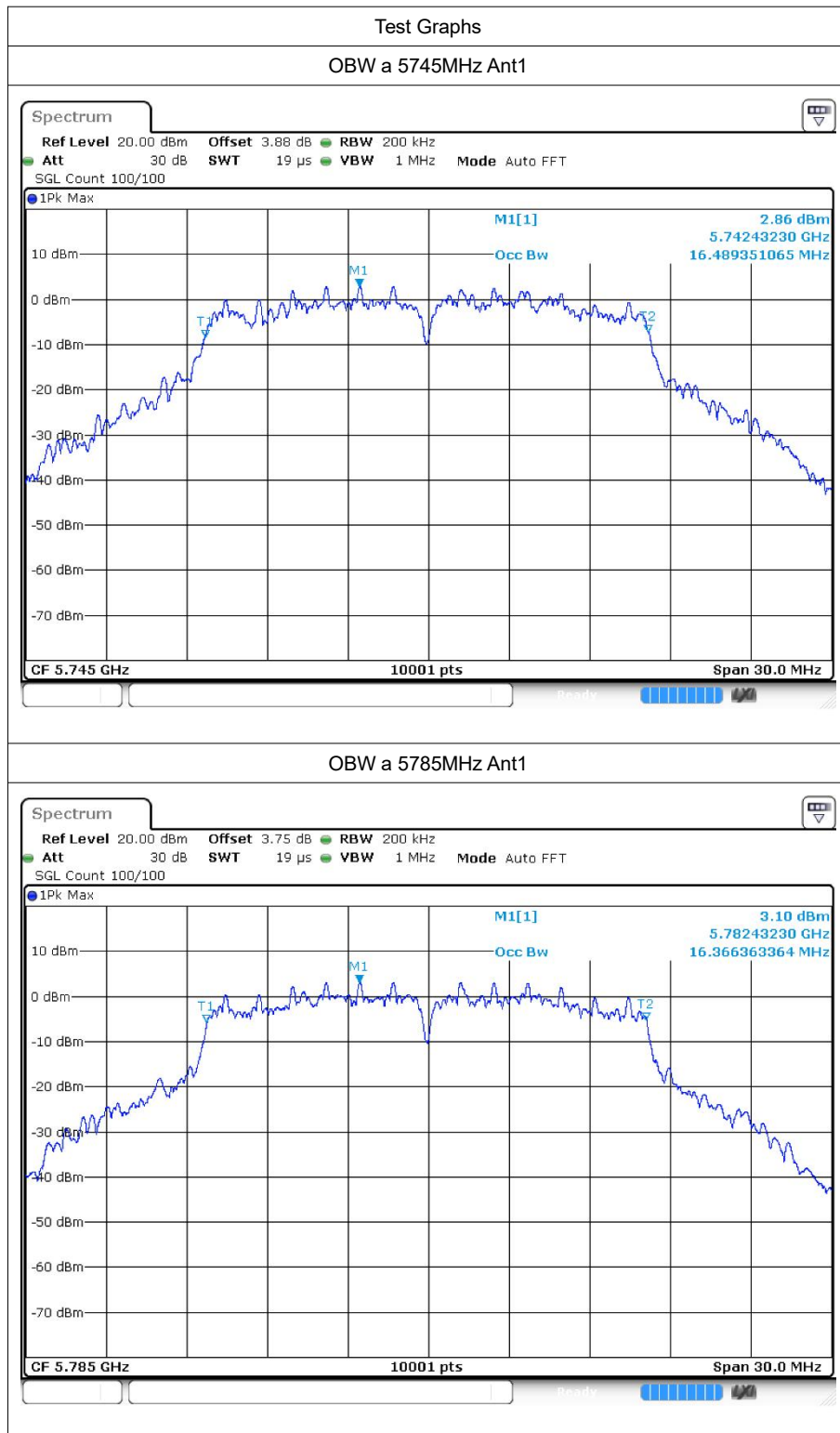


4 Occupied Channel Bandwidth

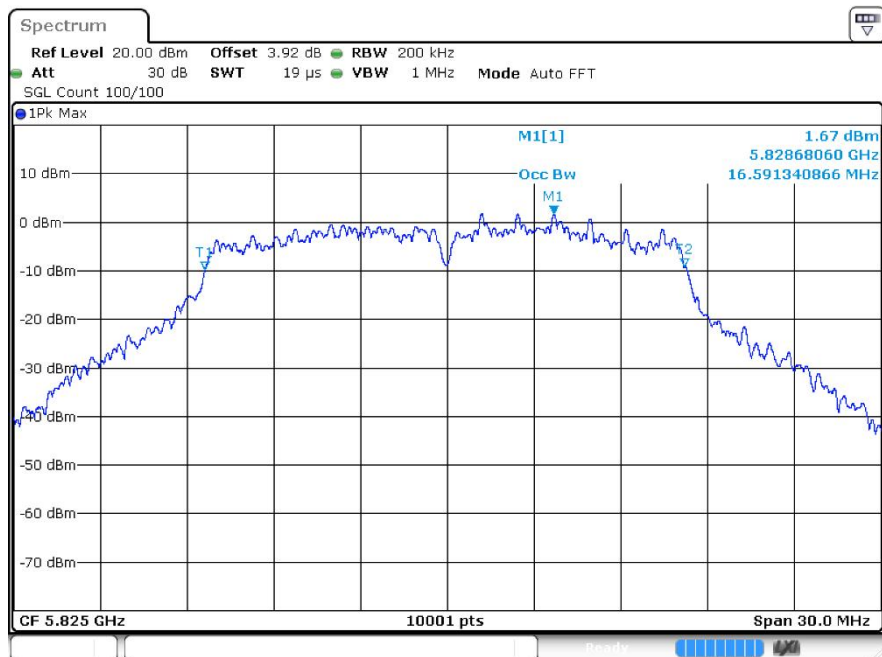
4.1 Test Result

Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
a	5745	Ant1	16.489
a	5785	Ant1	16.366
a	5825	Ant1	16.591
n20	5745	Ant1	17.626
n20	5785	Ant1	17.635
n20	5825	Ant1	17.683
n40	5755	Ant1	35.966
n40	5795	Ant1	35.978
ac20	5745	Ant1	17.59
ac20	5785	Ant1	17.554
ac20	5825	Ant1	17.677
ac40	5755	Ant1	36.014
ac40	5795	Ant1	36.02
ax20	5745	Ant1	18.79
ax20	5785	Ant1	18.871
ax20	5825	Ant1	18.883
ax40	5755	Ant1	37.652
ax40	5795	Ant1	37.424

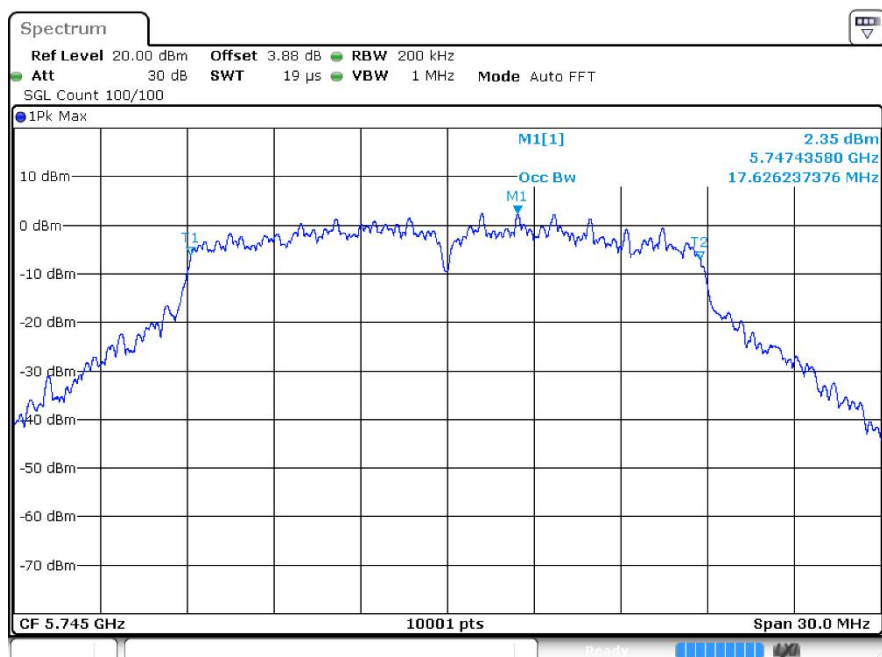
4.2 Test Graphs



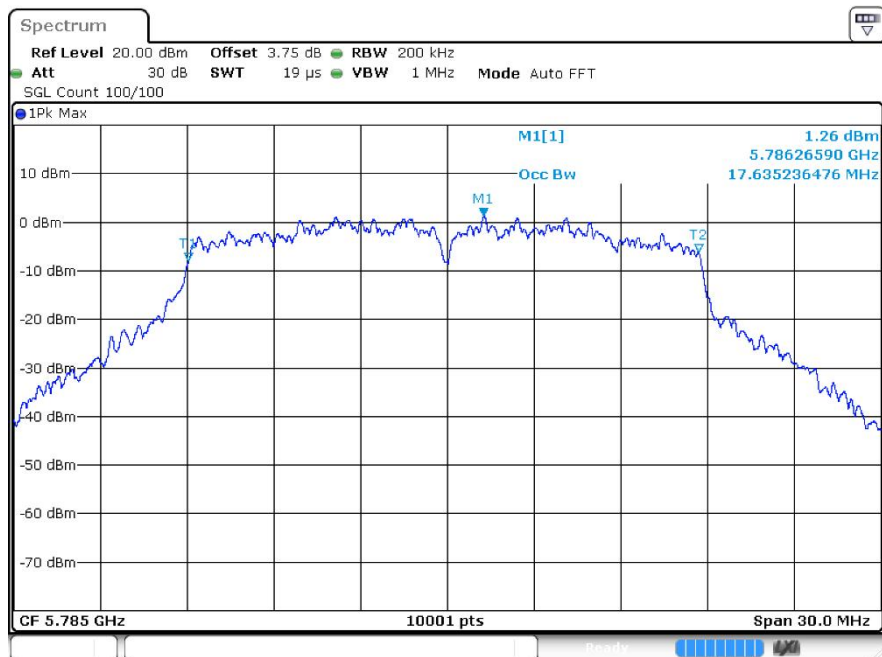
OBW a 5825MHz Ant1



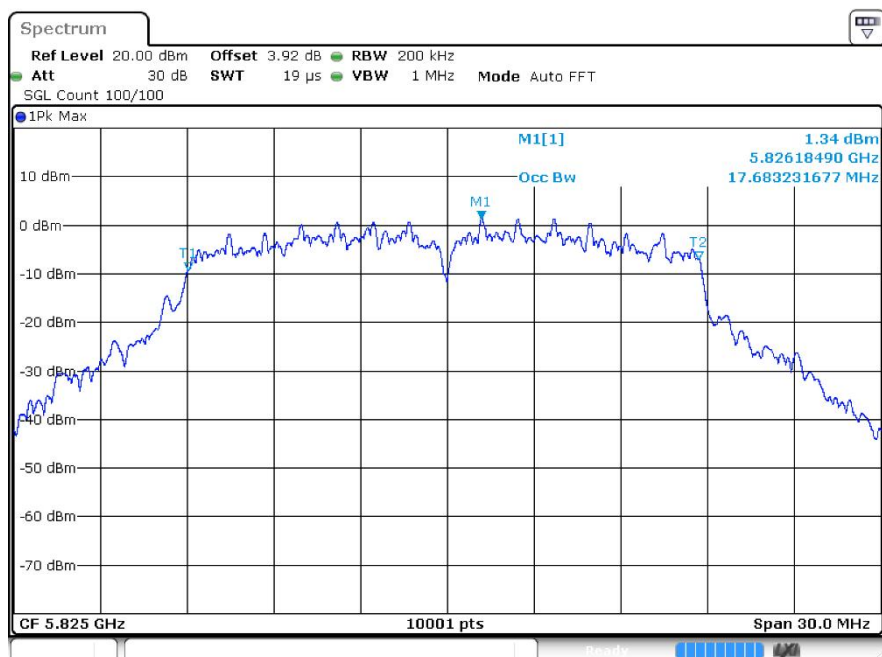
OBW n20 5745MHz Ant1



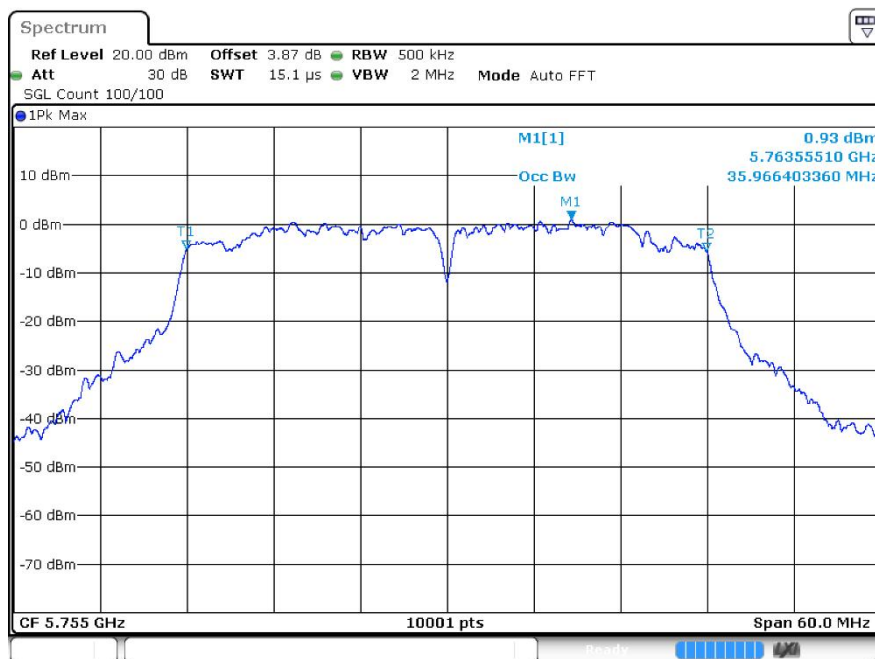
OBW n20 5785MHz Ant1



OBW n20 5825MHz Ant1



OBW n40 5755MHz Ant1



OBW n40 5795MHz Ant1

