



Appendix D

RF Test Data for B1WIFI(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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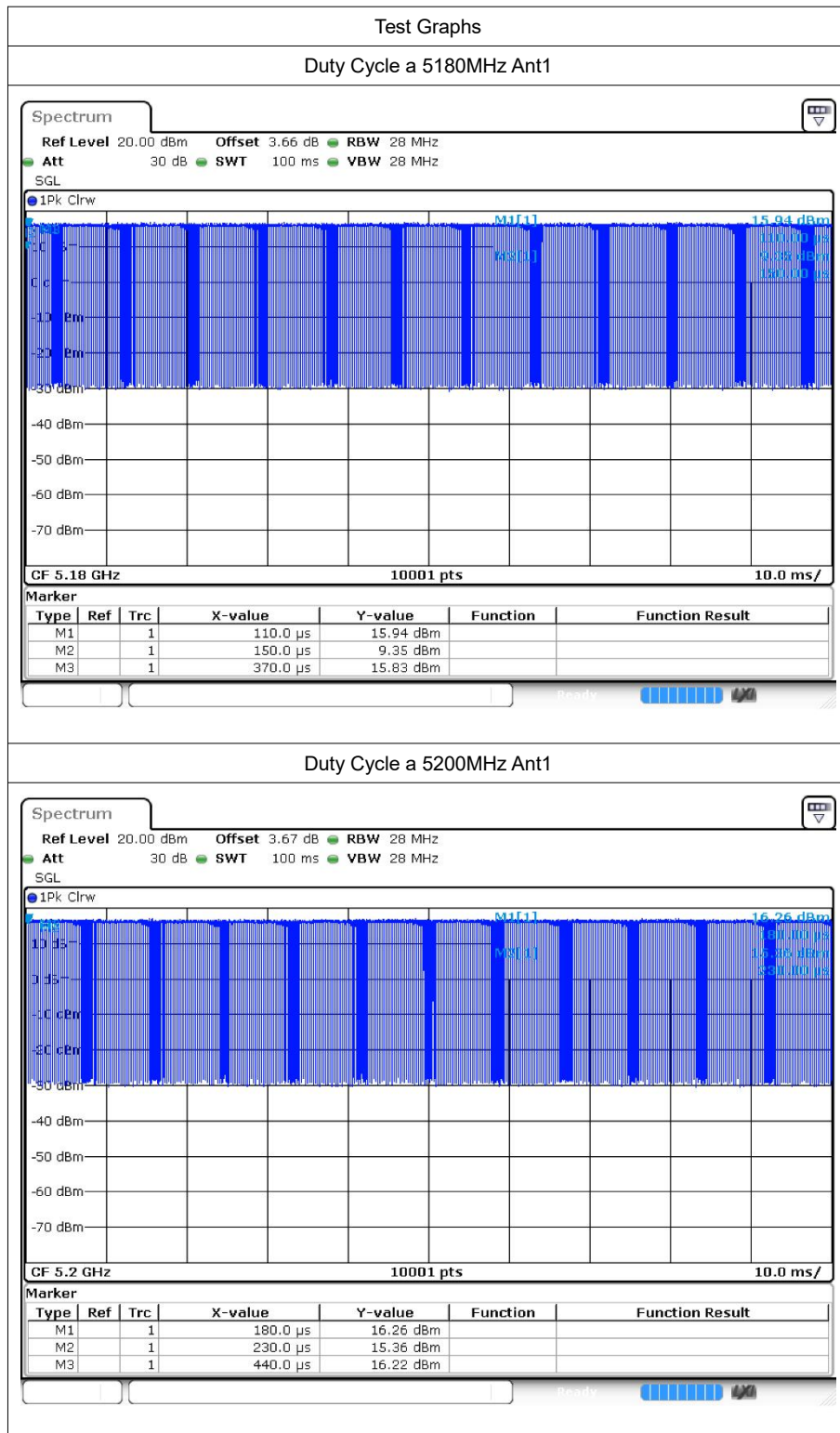


1 Duty Cycle

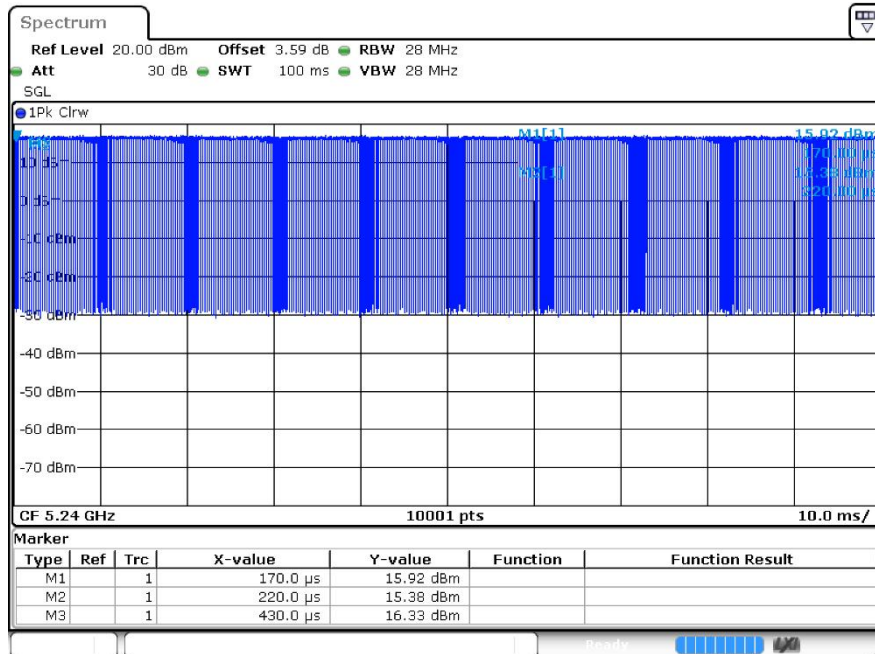
1.1 Test Result

Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
a	5180	Ant1	86.54	0.63	4.55
a	5200	Ant1	86.52	0.63	4.76
a	5240	Ant1	86.74	0.62	4.76
n20	5180	Ant1	87.53	0.58	4.17
n20	5200	Ant1	87.48	0.58	4.17
n20	5240	Ant1	87.52	0.58	4.35
n40	5190	Ant1	88	0.56	4
n40	5230	Ant1	88.01	0.55	4
ac20	5180	Ant1	87.13	0.6	4.35
ac20	5200	Ant1	87.15	0.6	4.55
ac20	5240	Ant1	87.16	0.6	4.35
ac40	5190	Ant1	88.87	0.51	4.35
ac40	5230	Ant1	87.02	0.6	4.35
ax20	5180	Ant1	87.09	0.6	4.35
ax20	5200	Ant1	87.07	0.6	4.55
ax20	5240	Ant1	87.05	0.6	4.35
ax40	5190	Ant1	87.06	0.6	4.35
ax40	5230	Ant1	87.09	0.6	4.55

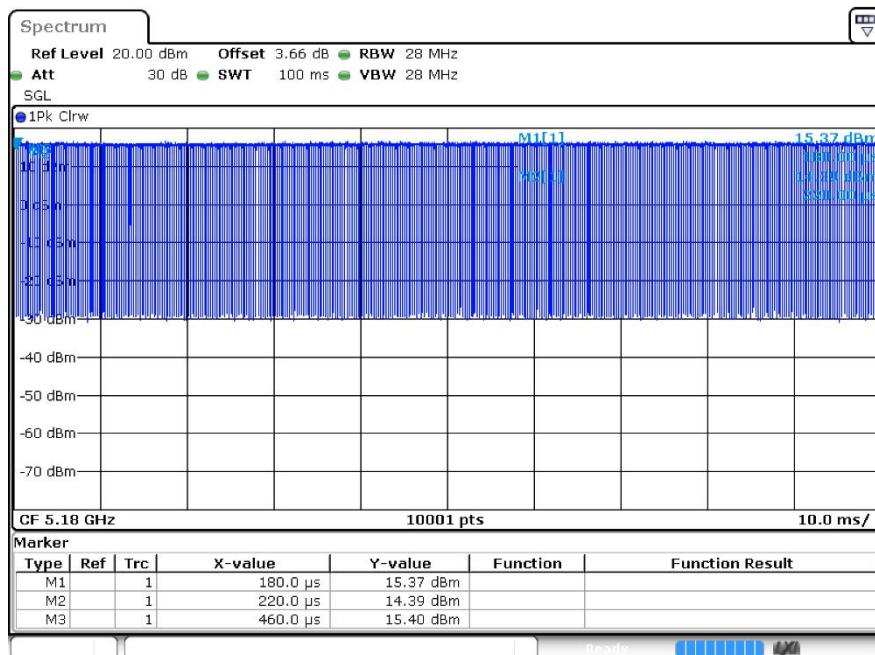
1.2 Test Graphs



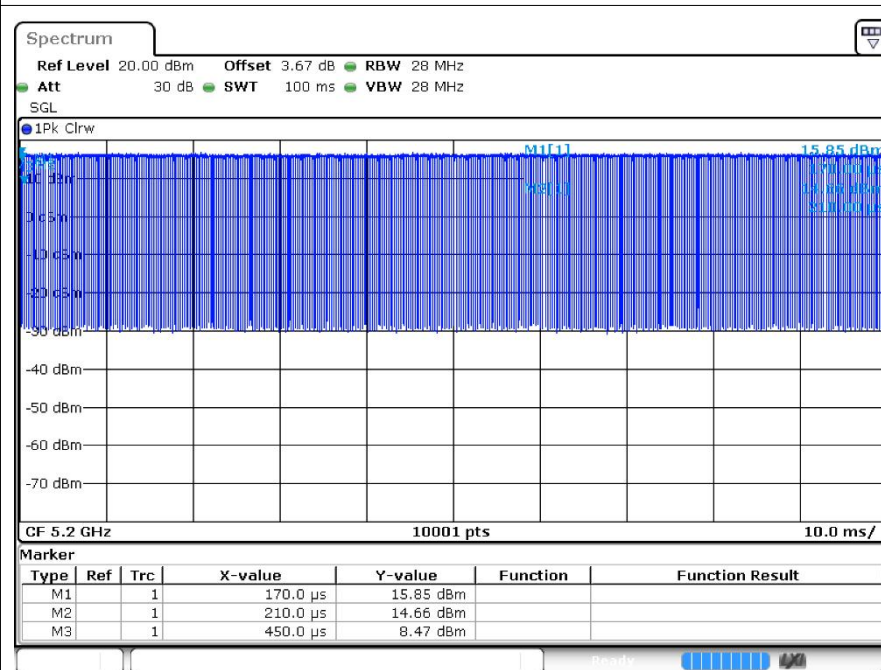
Duty Cycle a 5240MHz Ant1



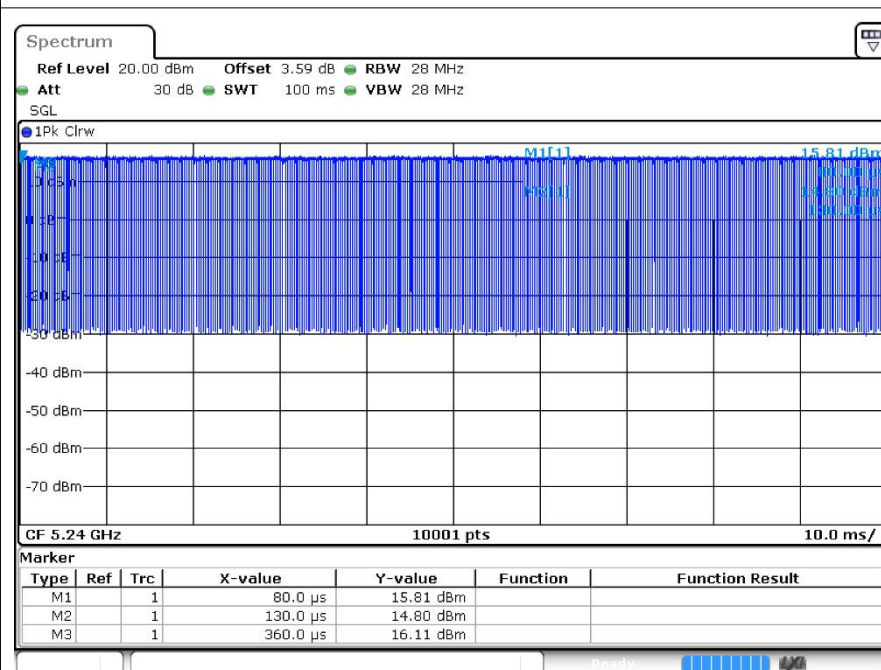
Duty Cycle n20 5180MHz Ant1



Duty Cycle a n20 5200MHz Ant1

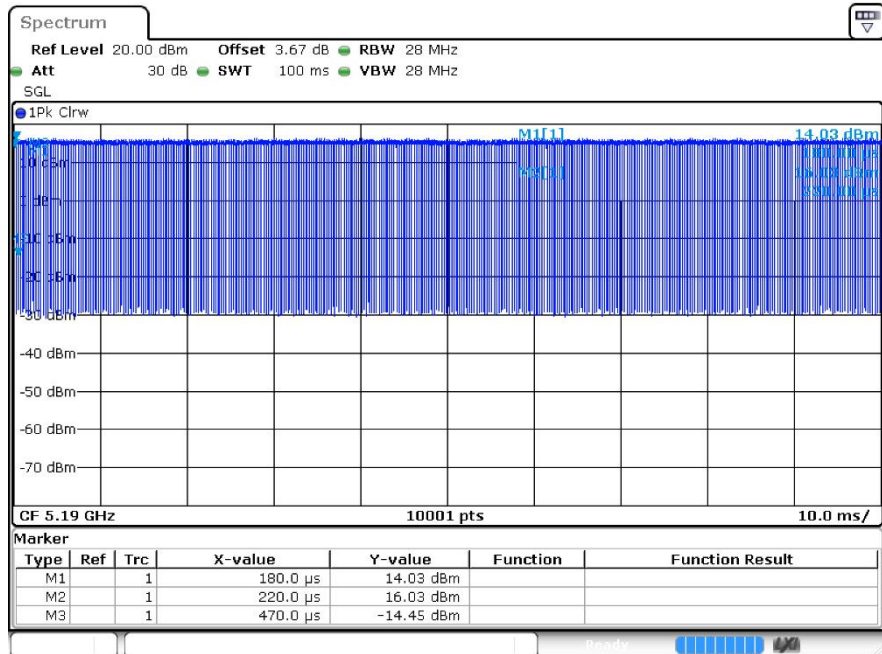


Duty Cycle n20 5240MHz Ant1

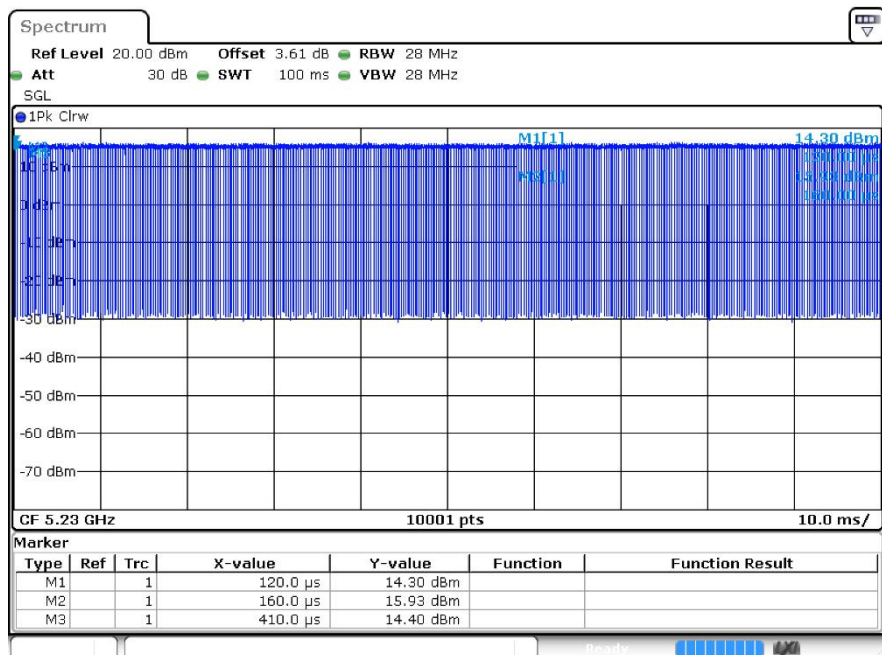




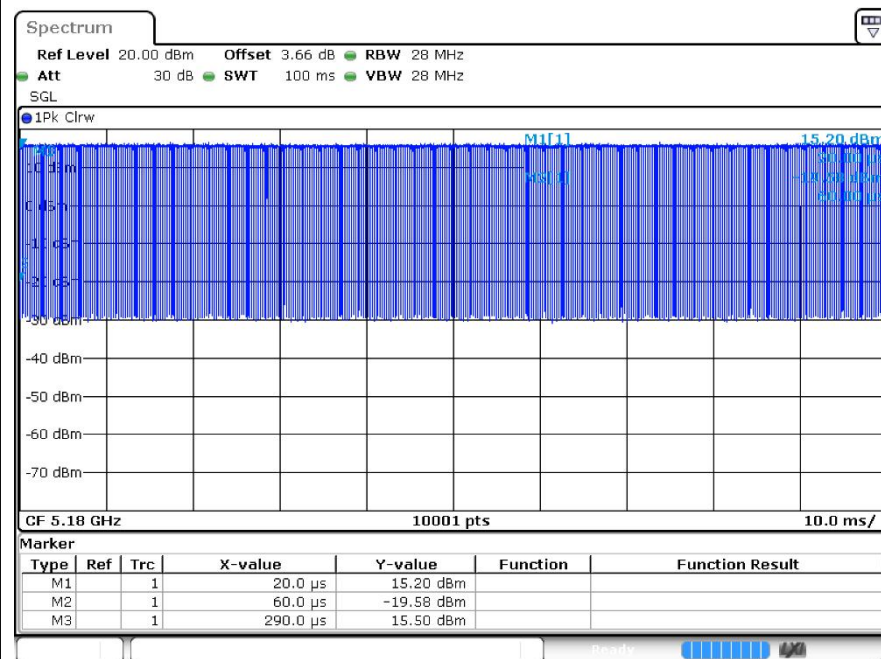
Duty Cycle n40 5190MHz Ant1



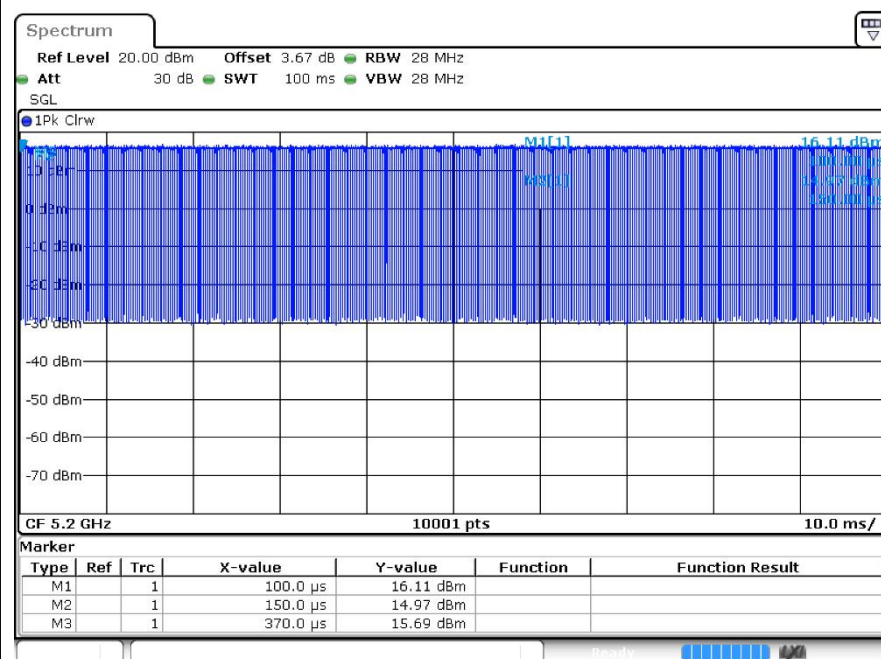
Duty Cycle n40 5230MHz Ant1



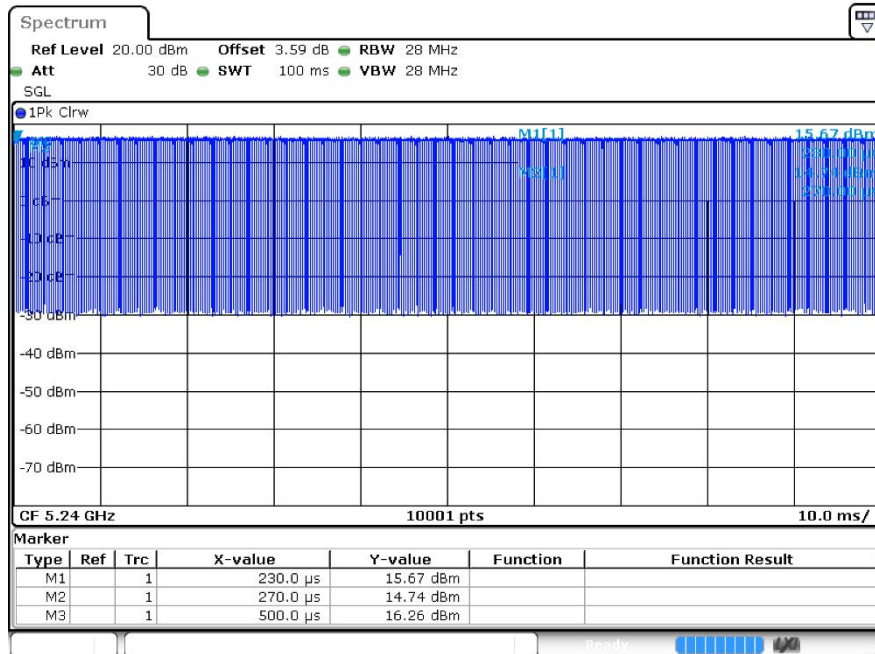
Duty Cycle ac20 5180MHz Ant1



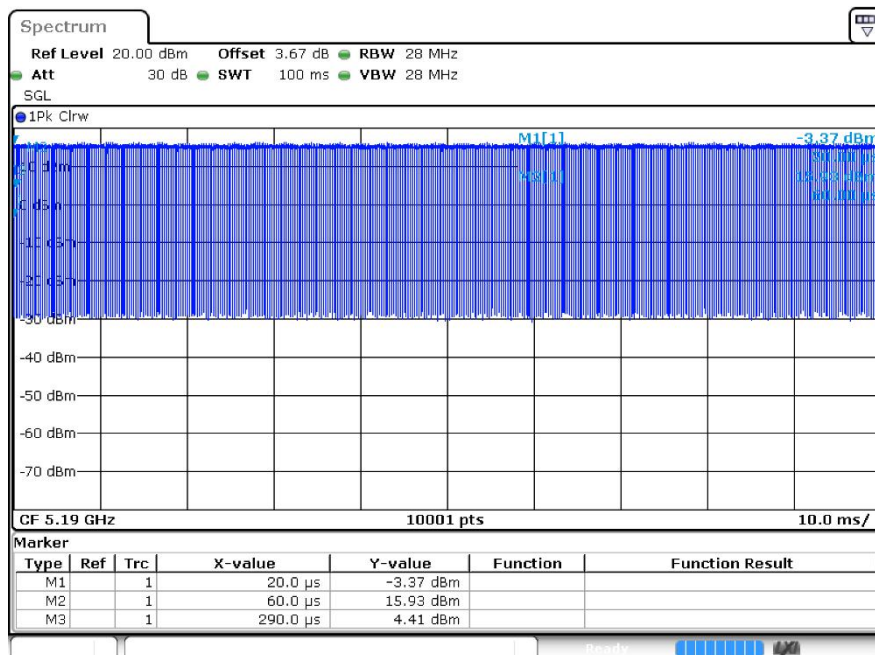
Duty Cycle ac20 5200MHz Ant1

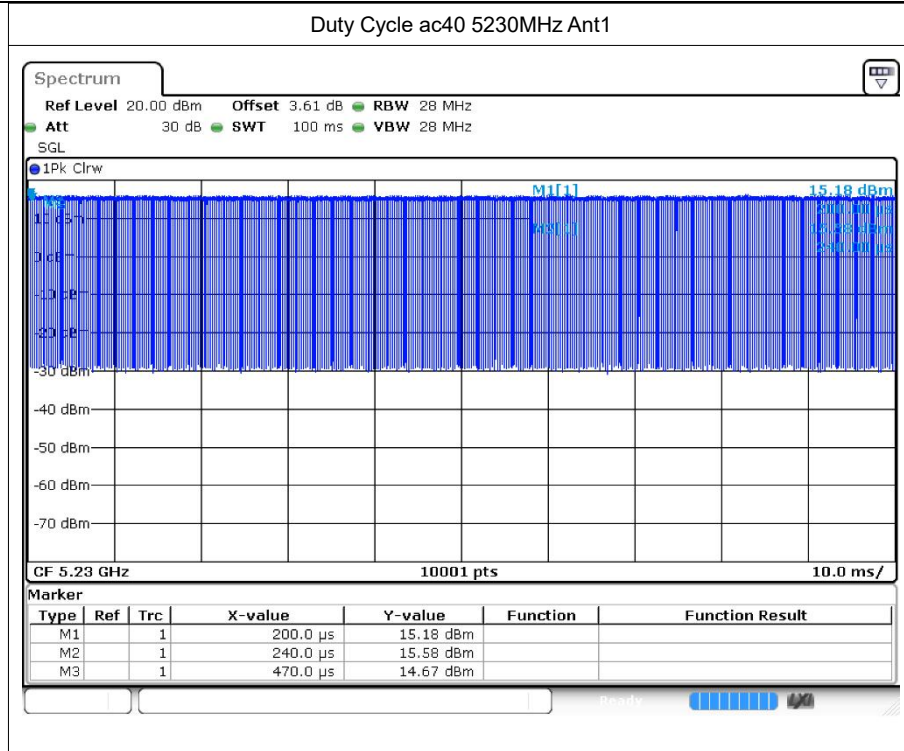


Duty Cycle ac20 5240MHz Ant1

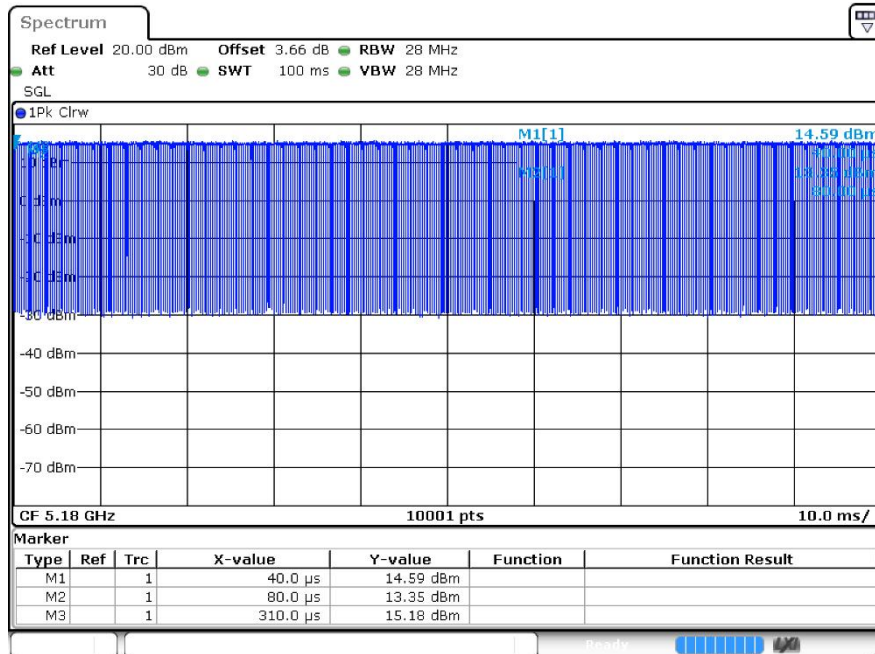


Duty Cycle ac40 5190MHz Ant1

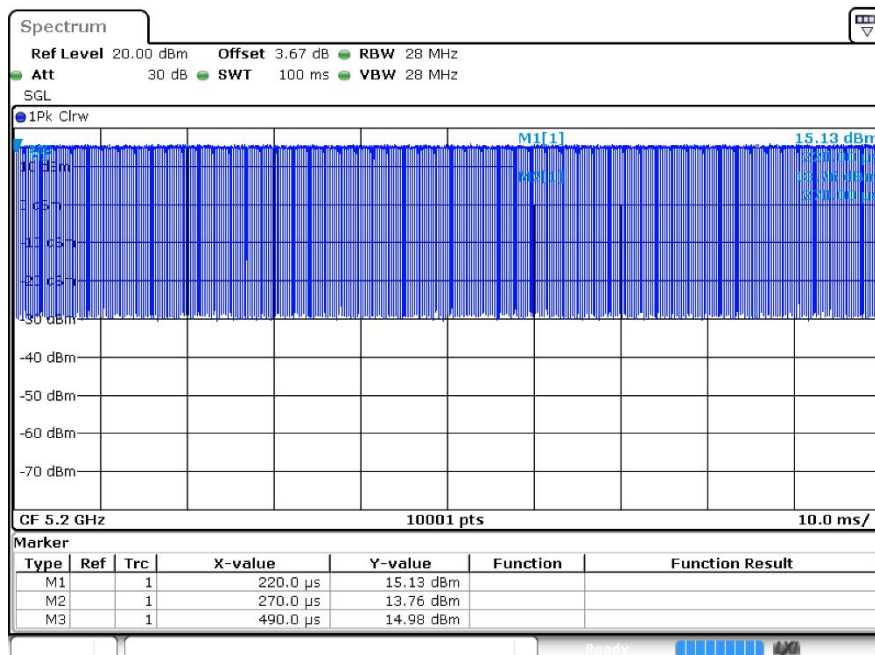




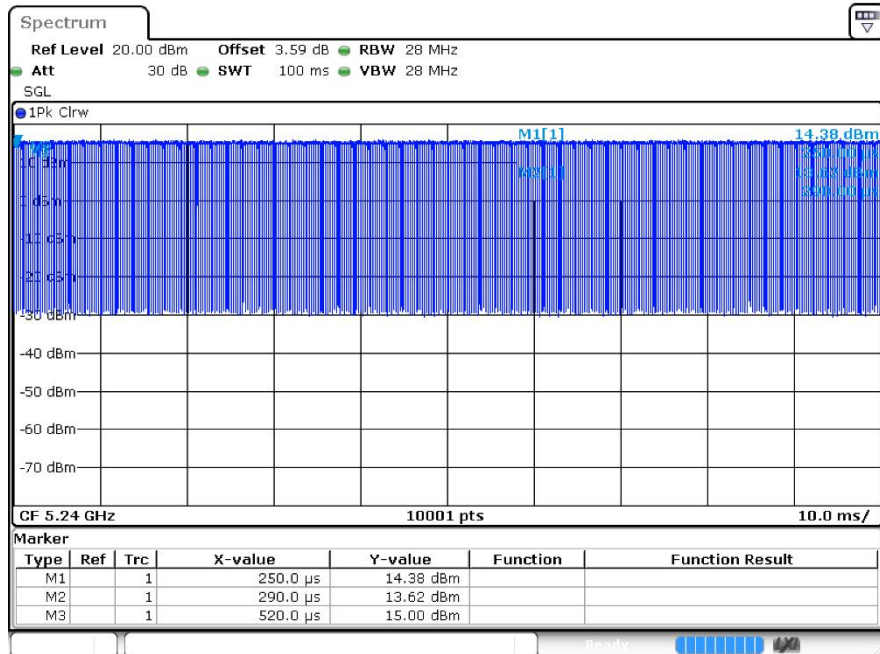
Duty Cycle ax20 5180MHz Ant1



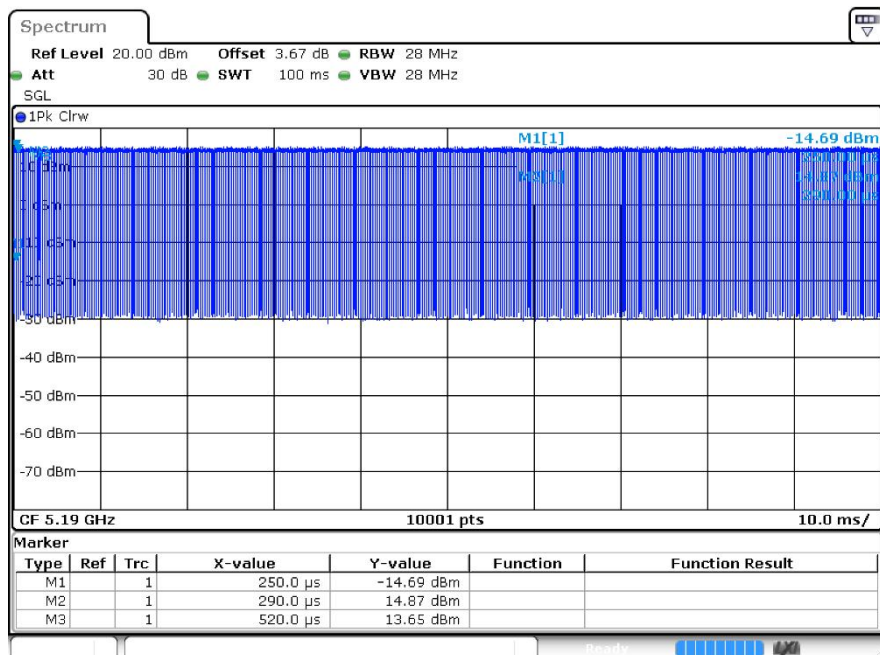
Duty Cycle ax20 5200MHz Ant1

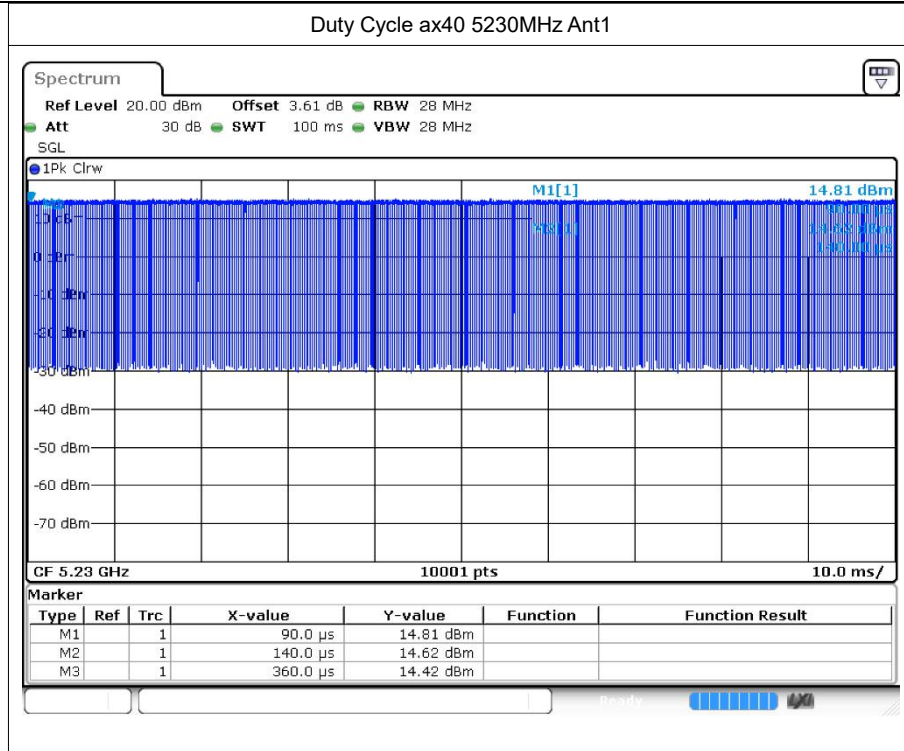


Duty Cycle ax20 5240MHz Ant1



Duty Cycle ax40 5190MHz Ant1





2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
a	5180	Ant1	15.01	24	Pass
a	5200	Ant1	15.2	24	Pass
a	5240	Ant1	15.26	24	Pass
n20	5180	Ant1	14.55	24	Pass
n20	5200	Ant1	14.72	24	Pass
n20	5240	Ant1	14.84	24	Pass
n40	5190	Ant1	14.43	24	Pass
n40	5230	Ant1	14.36	24	Pass
ac20	5180	Ant1	14.54	24	Pass
ac20	5200	Ant1	14.72	24	Pass
ac20	5240	Ant1	14.86	24	Pass
ac40	5190	Ant1	14.43	24	Pass
ac40	5230	Ant1	14.42	24	Pass
ax20	5180	Ant1	14.49	24	Pass
ax20	5200	Ant1	14.68	24	Pass
ax20	5240	Ant1	14.82	24	Pass
ax40	5190	Ant1	14.3	24	Pass
ax40	5230	Ant1	14.26	24	Pass

Note:

The duty factor has been compensated into the result.

3 -26dB Bandwidth

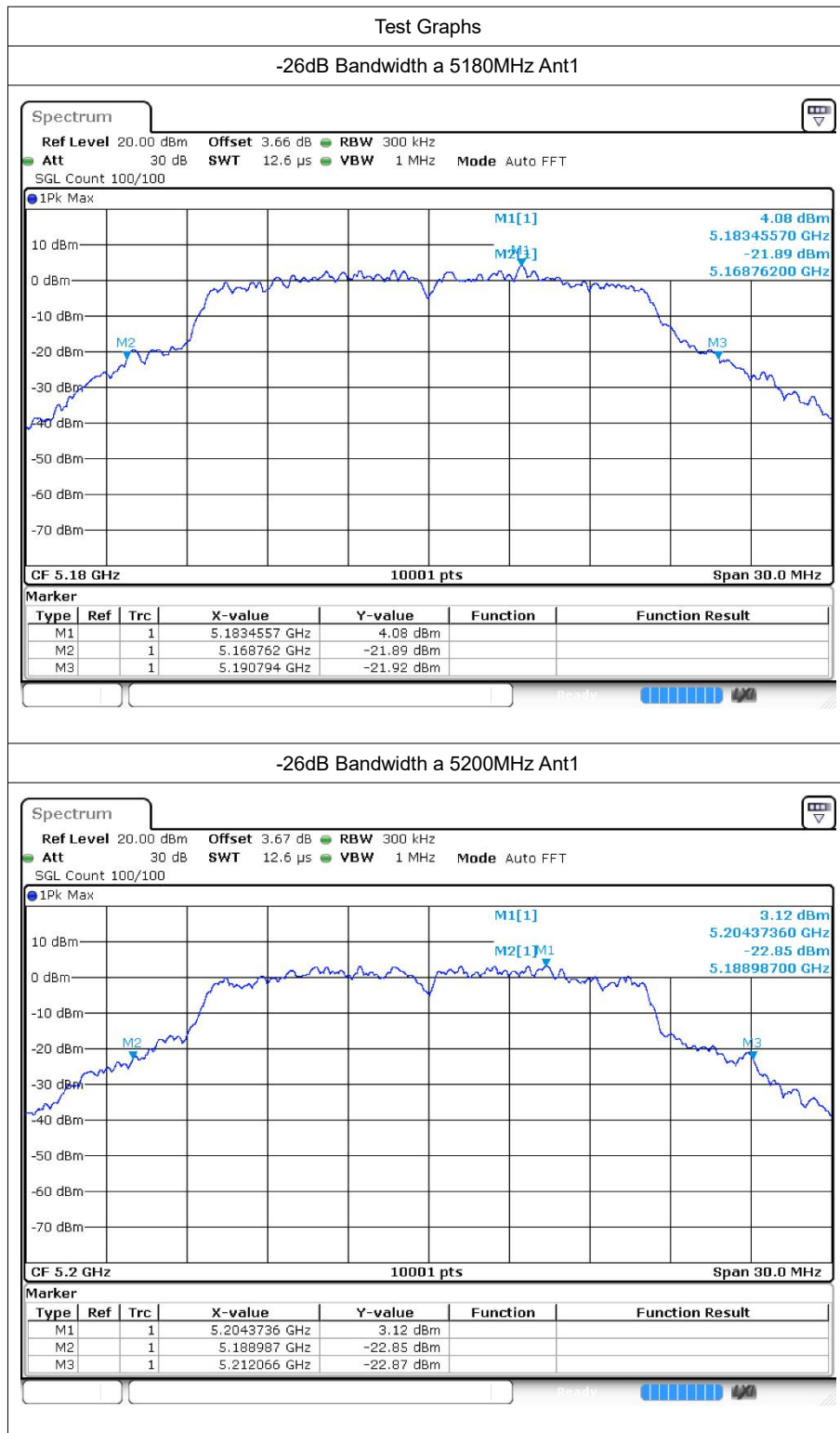
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
a	5180	Ant1	22.032	0.5	Pass
a	5200	Ant1	23.079	0.5	Pass
a	5240	Ant1	22.29	0.5	Pass
n20	5180	Ant1	23.679	0.5	Pass
n20	5200	Ant1	22.746	0.5	Pass
n20	5240	Ant1	22.134	0.5	Pass
n40	5190	Ant1	43.314	0.5	Pass
n40	5230	Ant1	43.62	0.5	Pass
ac20	5180	Ant1	22.209	0.5	Pass
ac20	5200	Ant1	22.68	0.5	Pass
ac20	5240	Ant1	22.68	0.5	Pass
ac40	5190	Ant1	41.064	0.5	Pass
ac40	5230	Ant1	41.904	0.5	Pass
ax20	5180	Ant1	22.824	0.5	Pass
ax20	5200	Ant1	22.854	0.5	Pass
ax20	5240	Ant1	22.455	0.5	Pass
ax40	5190	Ant1	41.07	0.5	Pass
ax40	5230	Ant1	41.244	0.5	Pass

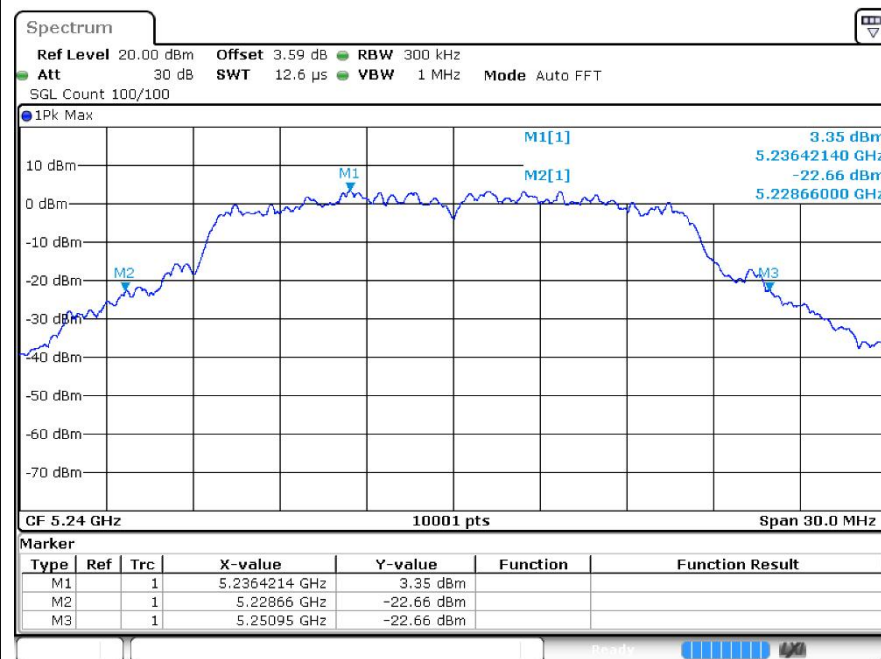
Note:

The duty factor has been compensated into the result.

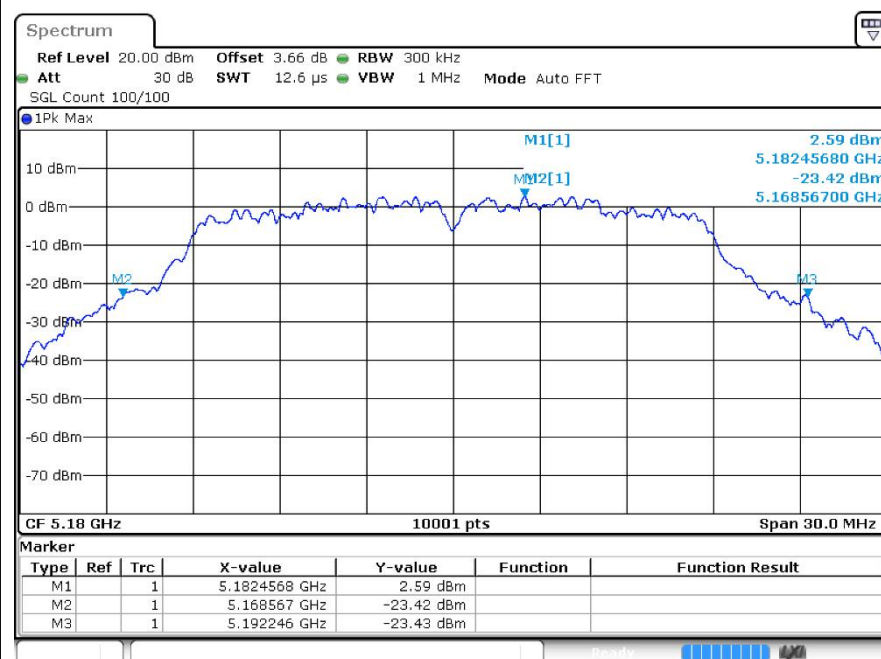
3.2 Test Graphs



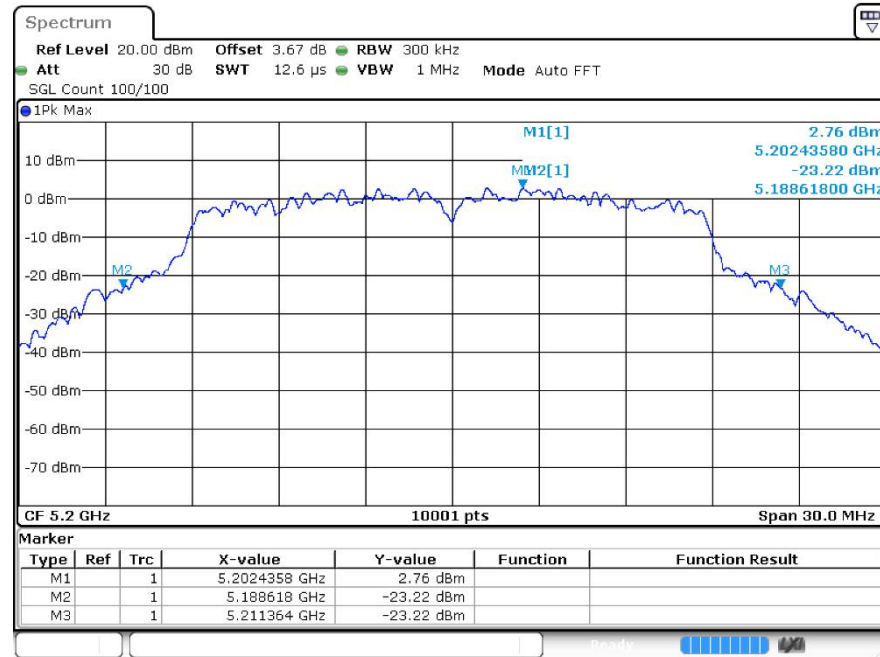
-26dB Bandwidth a 5240MHz Ant1



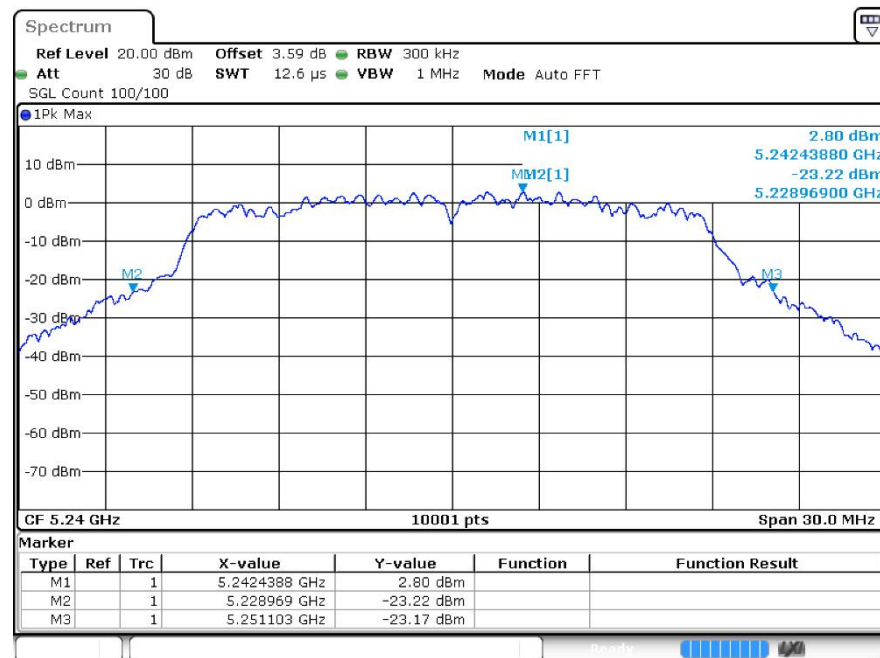
-26dB Bandwidth n20 5180MHz Ant1



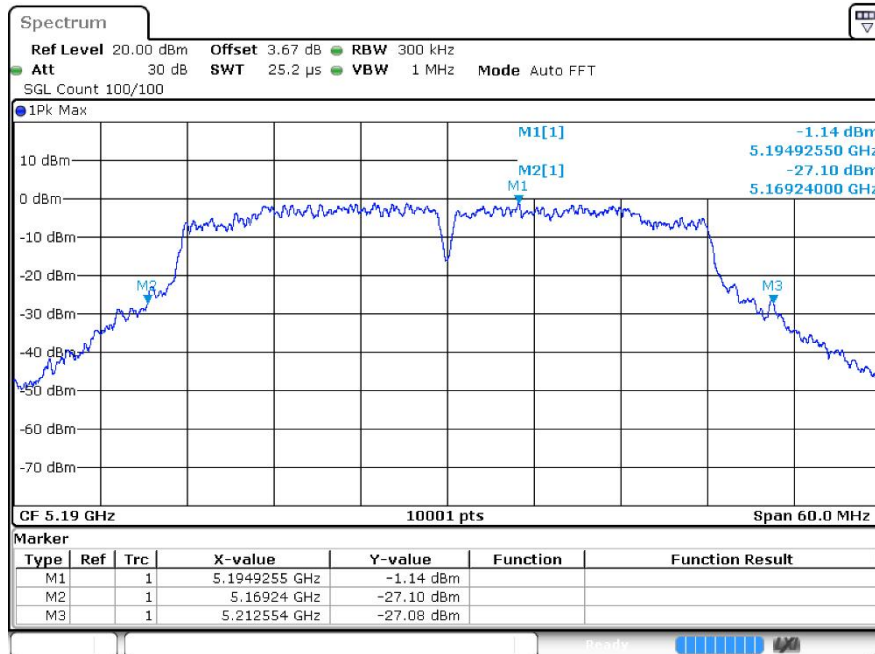
-26dB Bandwidth n20 5200MHz Ant1



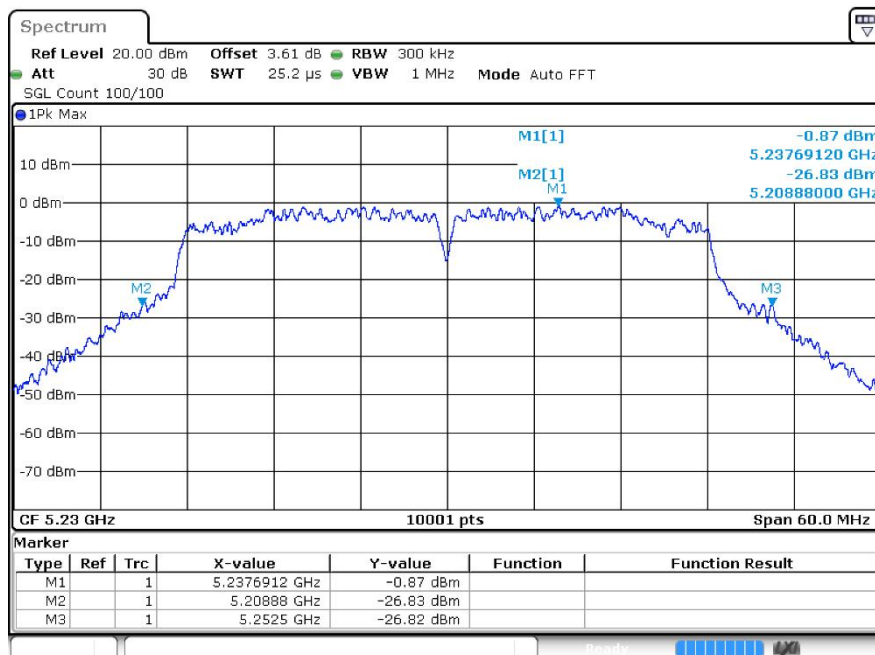
-26dB Bandwidth n20 5240MHz Ant1



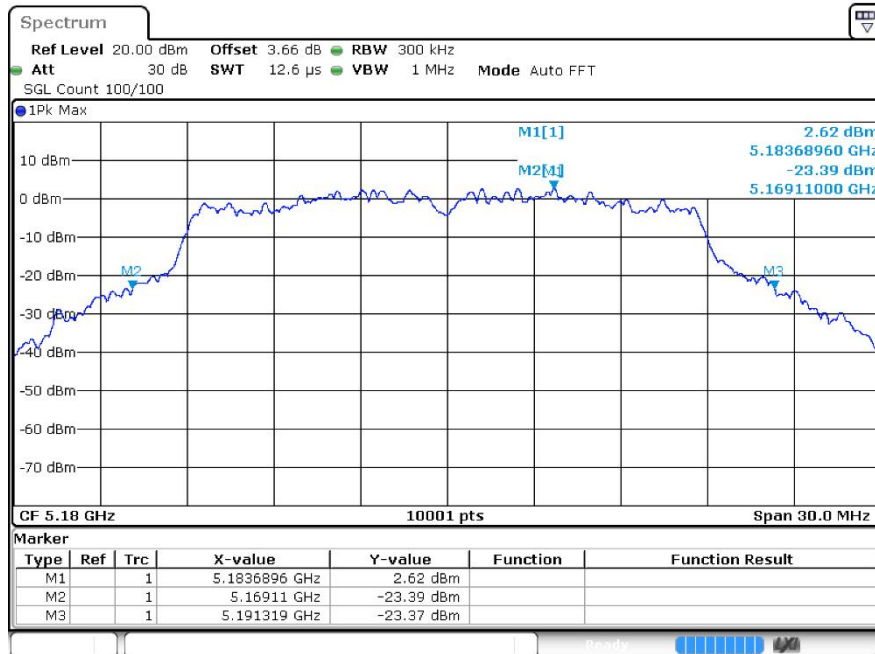
-26dB Bandwidth n40 5190MHz Ant1



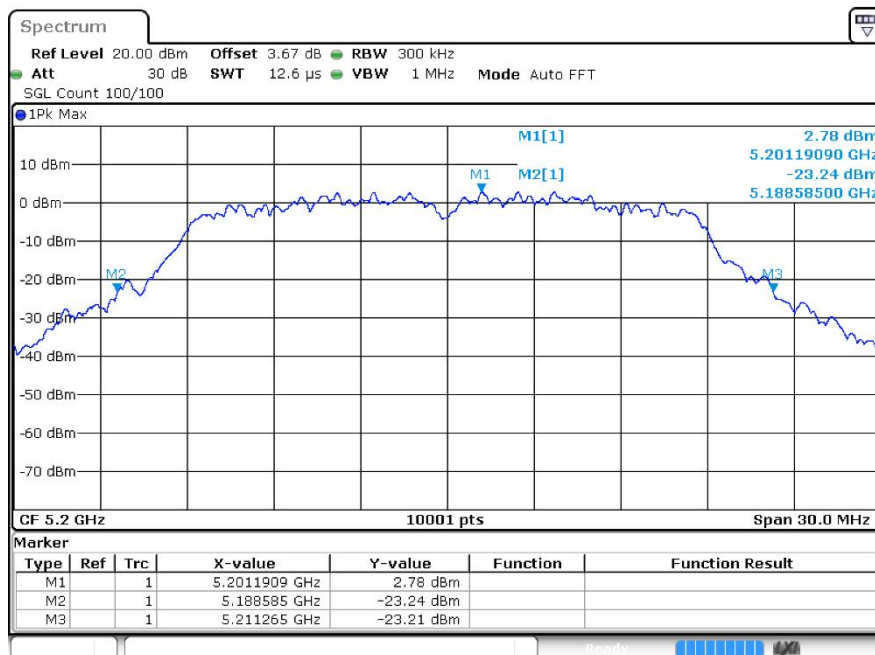
-26dB Bandwidth n40 5230MHz Ant1



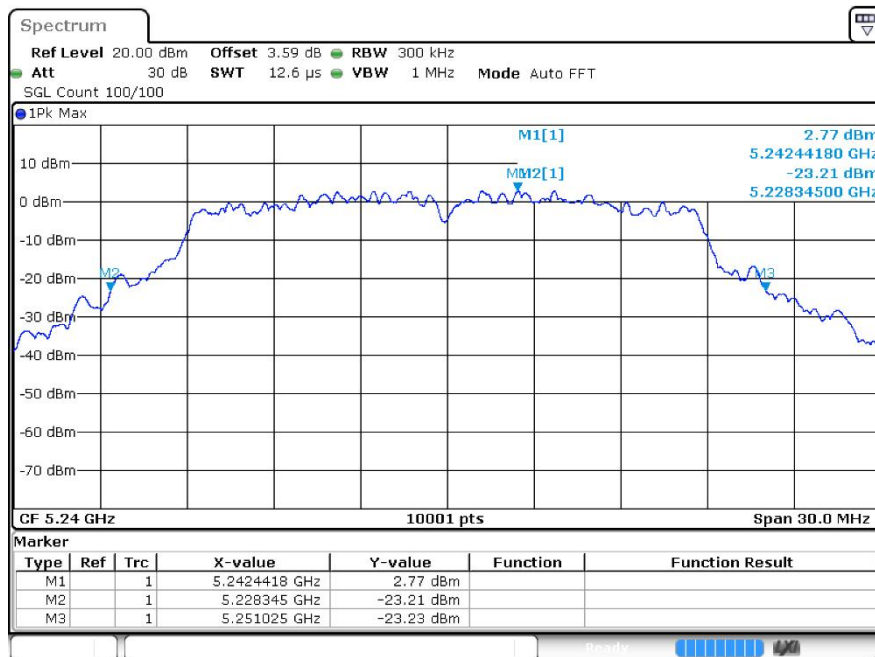
-26dB Bandwidth ac20 5180MHz Ant1



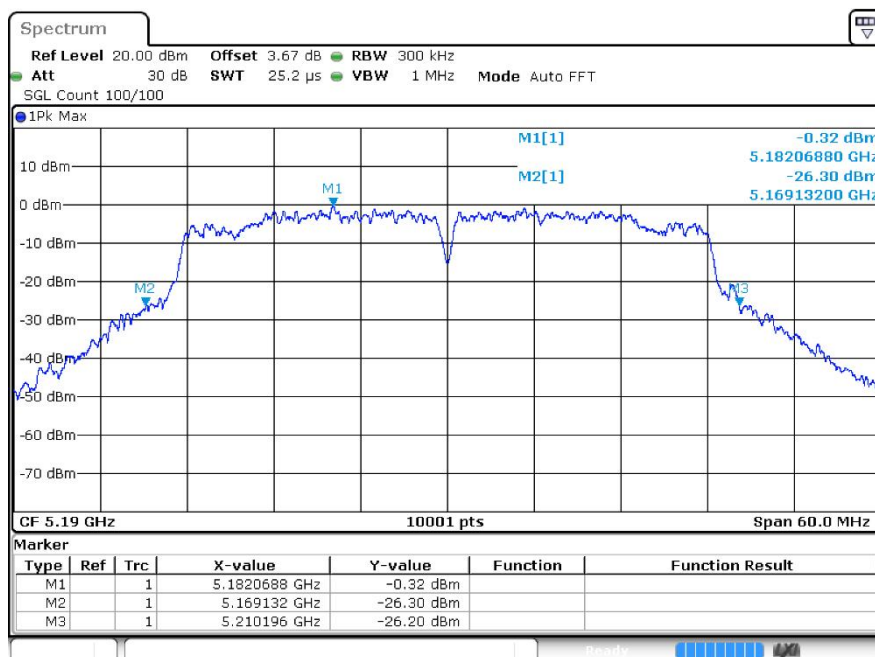
-26dB Bandwidth ac20 5200MHz Ant1

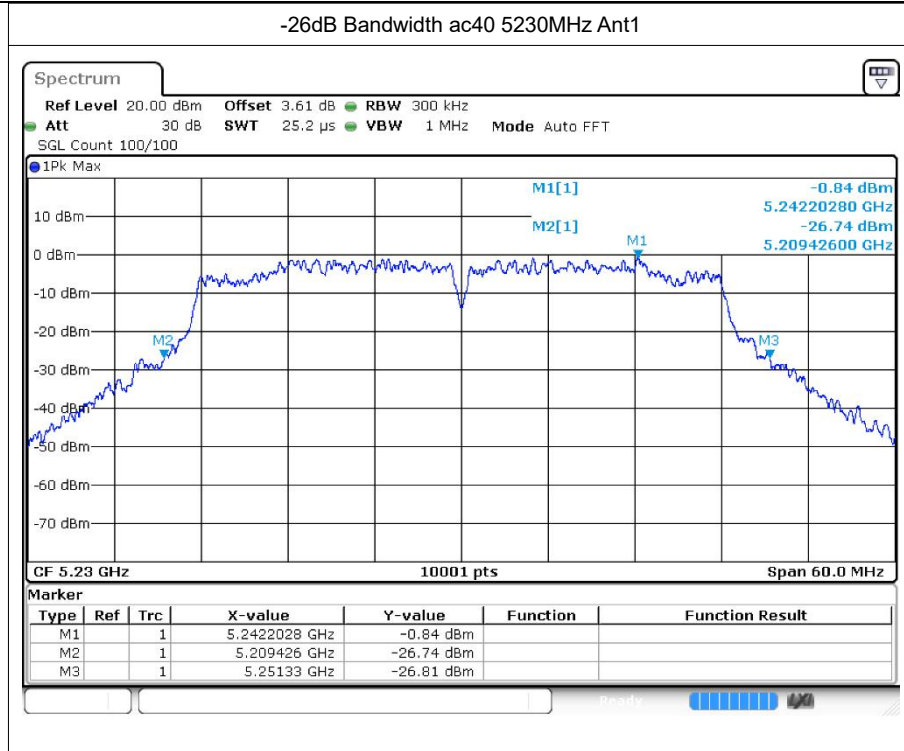


-26dB Bandwidth ac20 5240MHz Ant1

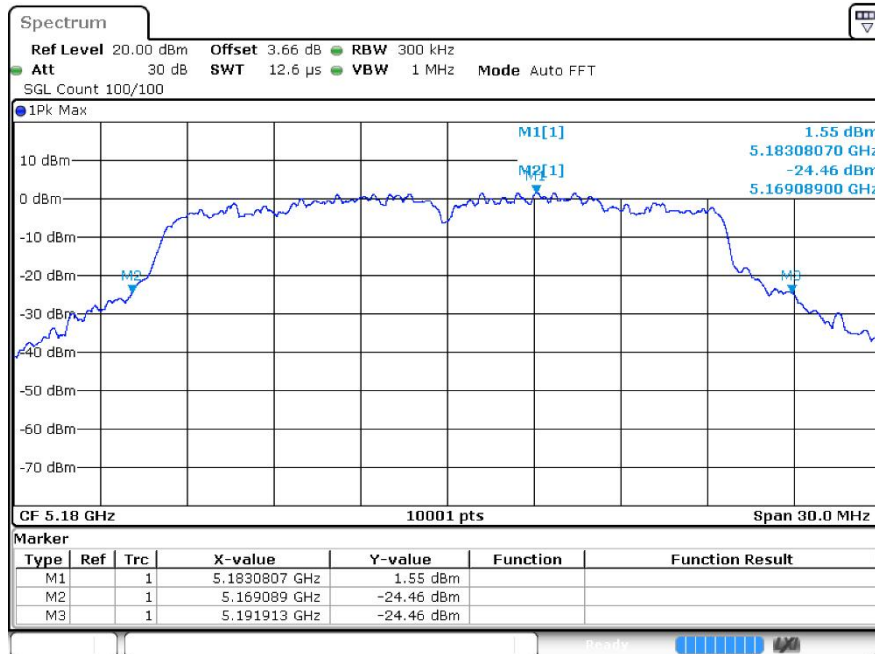


-26dB Bandwidth ac40 5190MHz Ant1

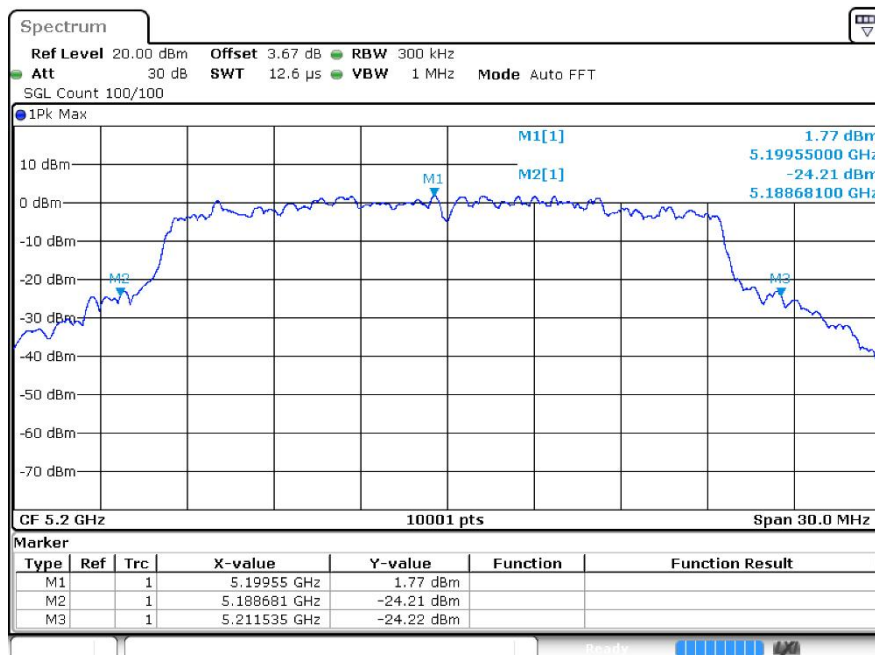




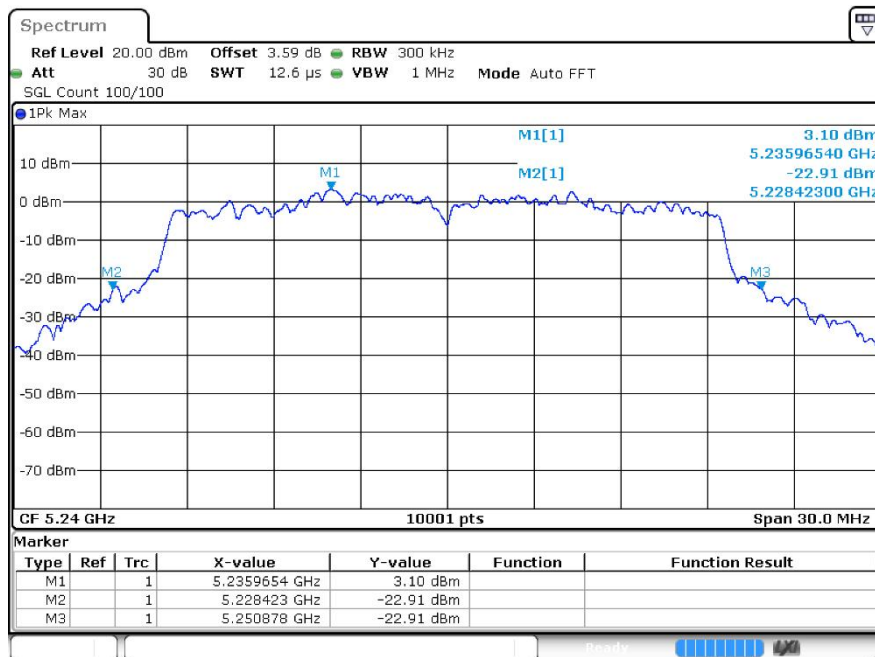
-26dB Bandwidth ax20 5180MHz Ant1



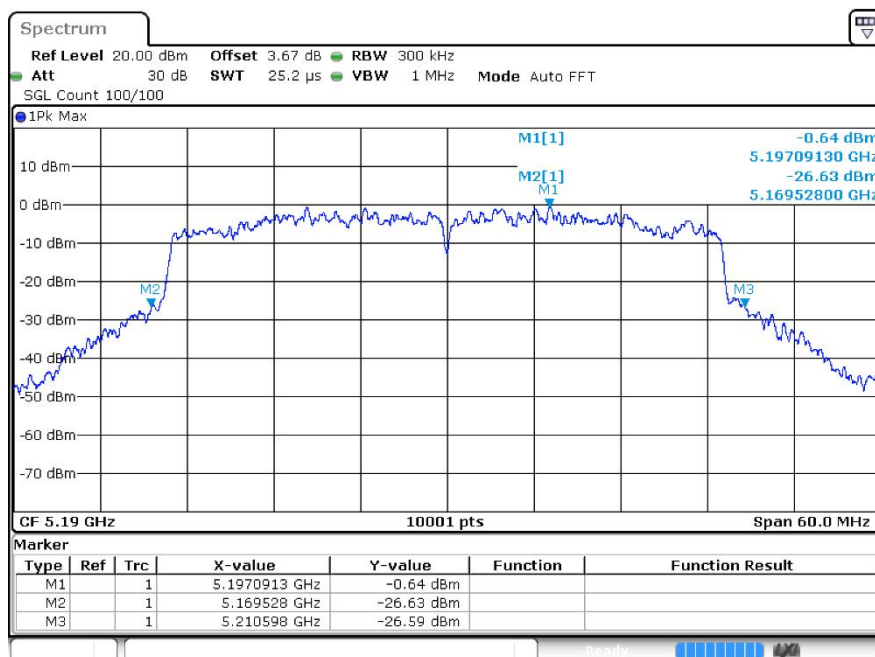
-26dB Bandwidth ax20 5200MHz Ant1

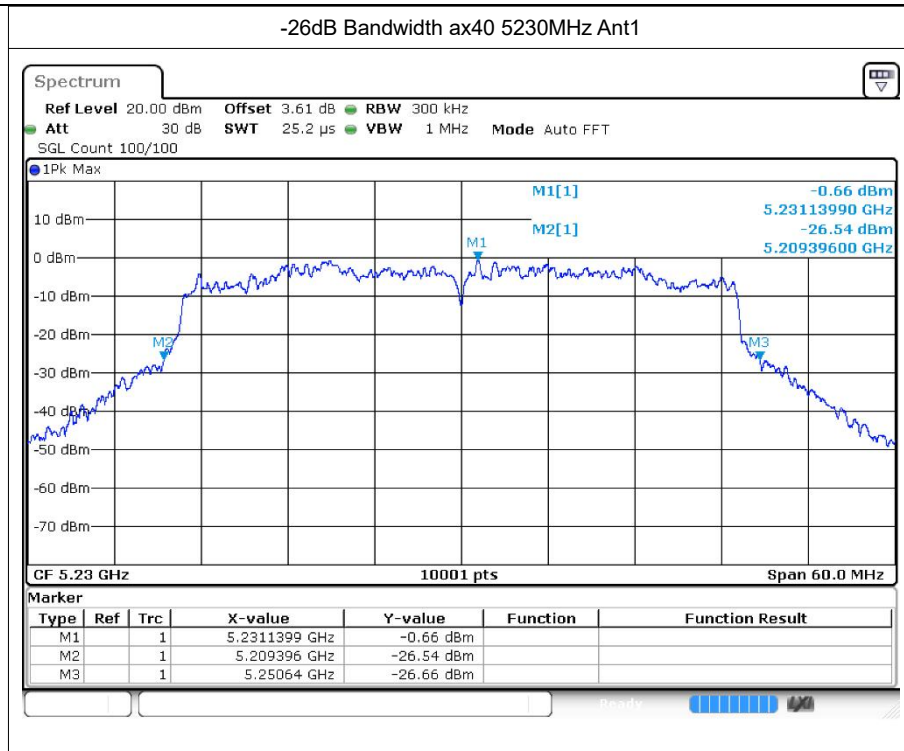


-26dB Bandwidth ax20 5240MHz Ant1



-26dB Bandwidth ax40 5190MHz Ant1





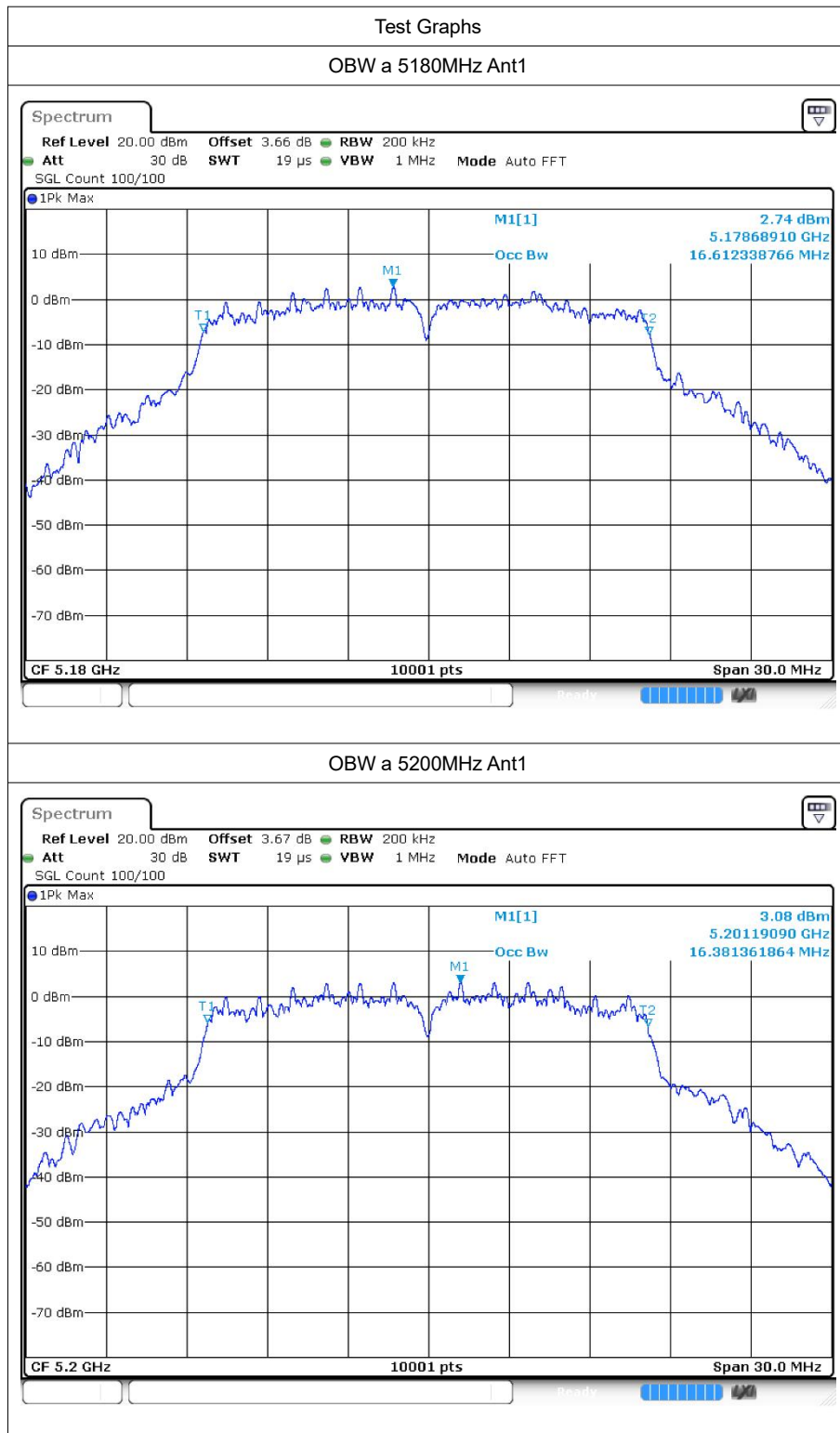


4 Occupied Channel Bandwidth

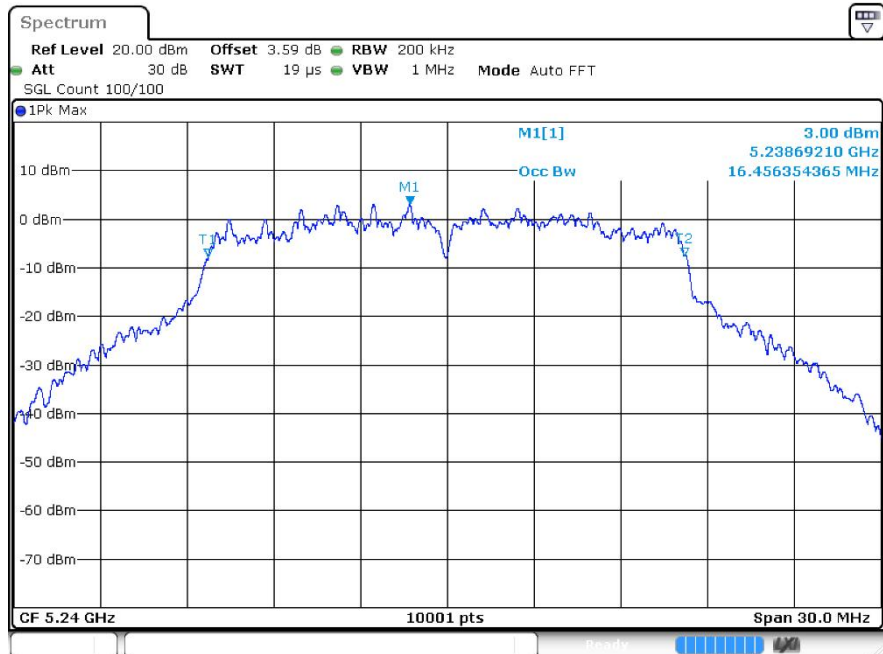
4.1 Test Result

Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
a	5180	Ant1	16.612
a	5200	Ant1	16.381
a	5240	Ant1	16.456
n20	5180	Ant1	17.587
n20	5200	Ant1	17.596
n20	5240	Ant1	17.701
n40	5190	Ant1	35.918
n40	5230	Ant1	36.11
ac20	5180	Ant1	17.56
ac20	5200	Ant1	17.581
ac20	5240	Ant1	17.647
ac40	5190	Ant1	36.002
ac40	5230	Ant1	36.068
ax20	5180	Ant1	18.826
ax20	5200	Ant1	18.856
ax20	5240	Ant1	18.838
ax40	5190	Ant1	37.562
ax40	5230	Ant1	37.502

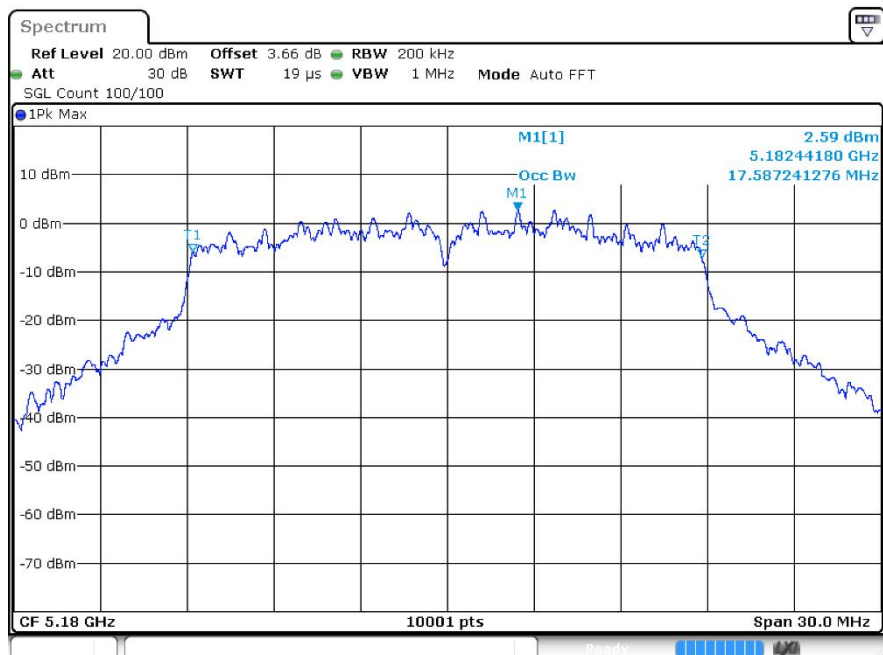
4.2 Test Graphs



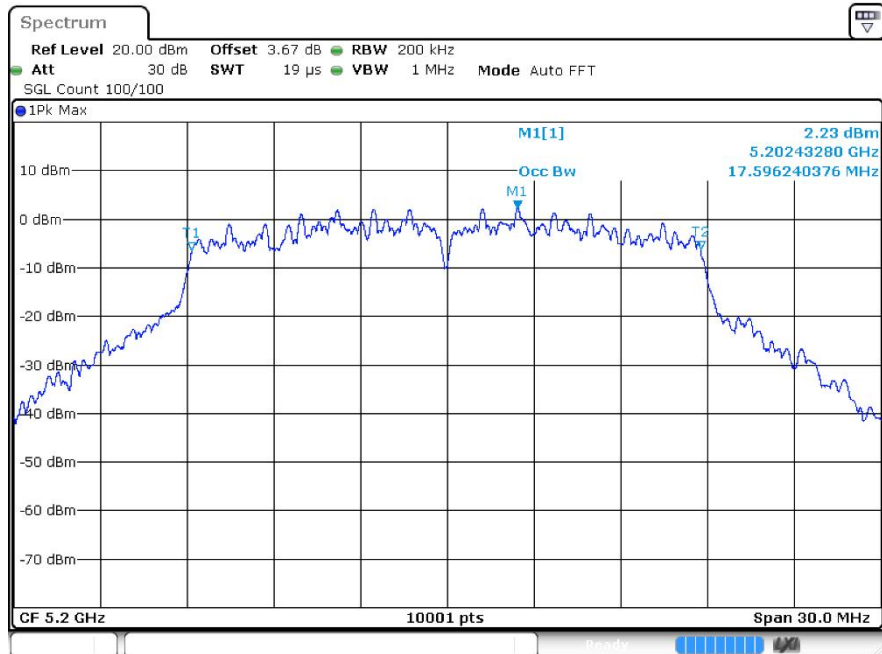
OBW a 5240MHz Ant1



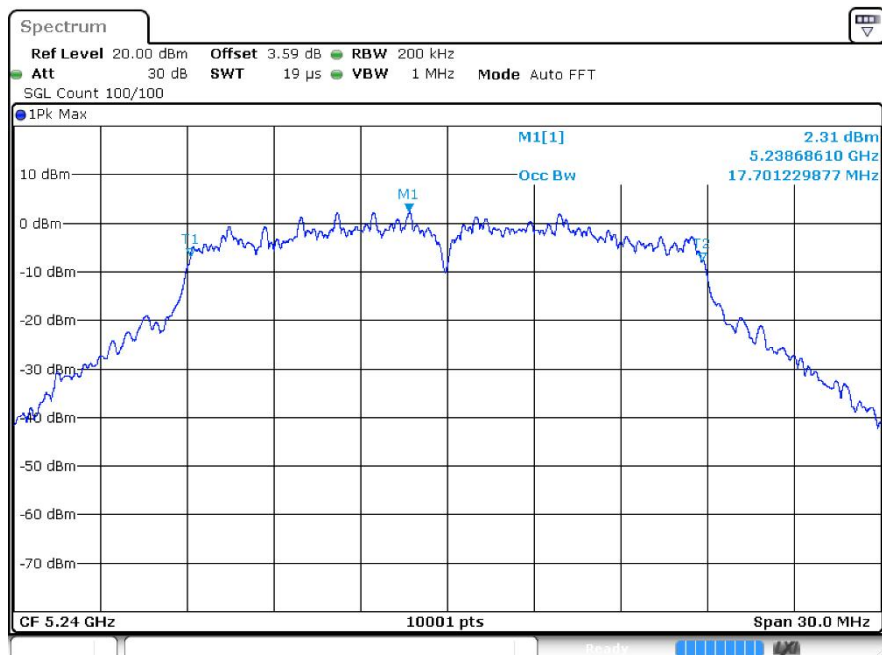
OBW n20 5180MHz Ant1



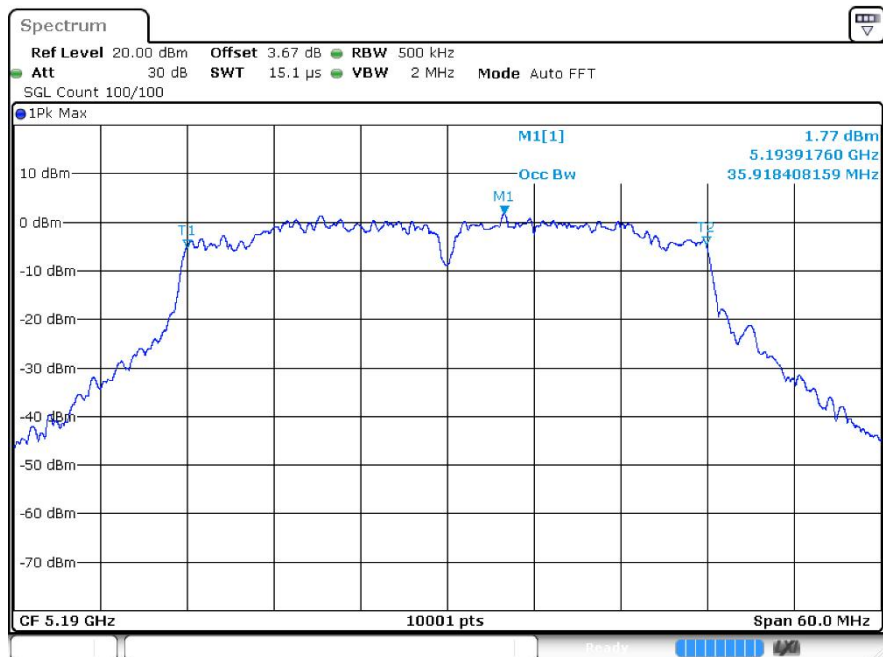
OBW n20 5200MHz Ant1



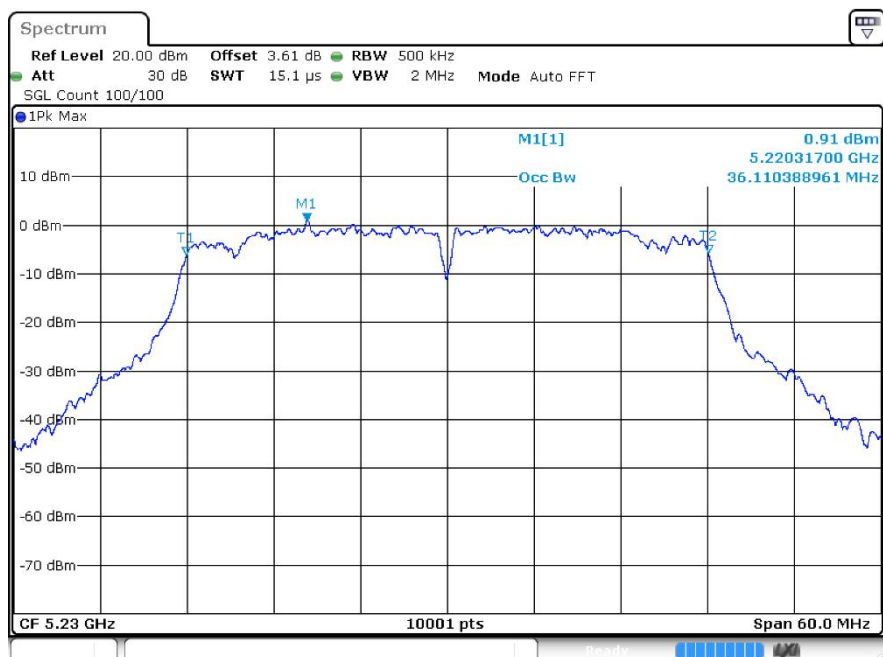
OBW n20 5240MHz Ant1



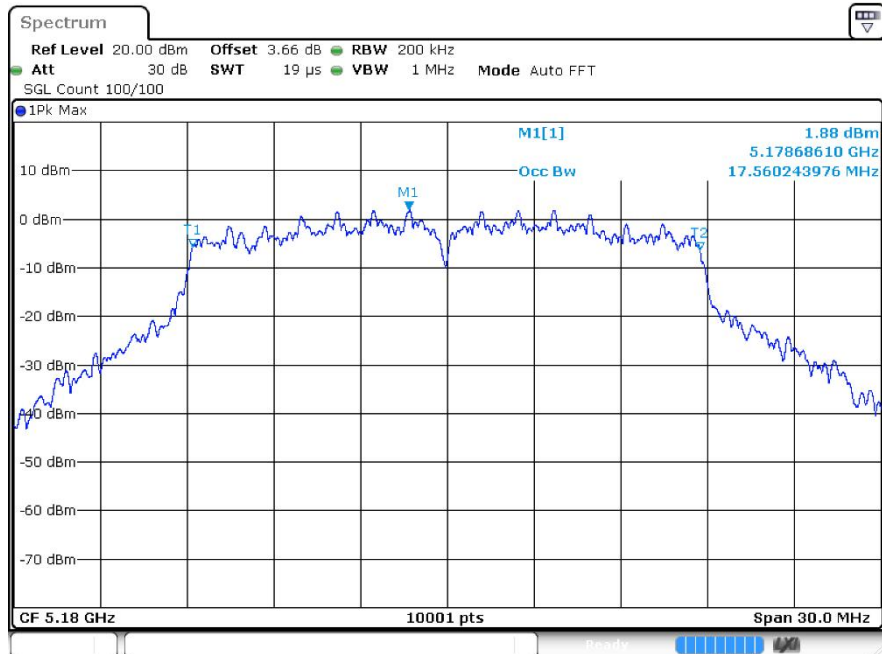
OBW n40 5190MHz Ant1



OBW n40 5230MHz Ant1



OBW ac20 5180MHz Ant1



OBW ac20 5200MHz Ant1

