



Appendix D

RF Test Data for B1WIFI(Conducted Measurement)

Product Name: LED PROJECTOR

Trade Mark: OSCAL

Test Model: PV800

Environmental Conditions

Temperature:	25.3° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya lin
Supervised by:	Simba Huang



Contents

Page

COVER PAGE

1	Duty Cycle	3
1.1	Test Result	3
1.2	Test Graphs	4
2	Maximum Conducted Output Power	14
2.1	Test Result	14
3	-26dB Bandwidth	15
3.1	Test Result	15
3.2	Test Graphs	16
4	Occupied Channel Bandwidth	26
4.1	Test Result	26
4.2	Test Graphs	27
5	Maximum Power Spectral Density Level	37
5.1	Test Result	37
5.2	Test Graphs	38
6	Frequency Stability	48
6.1	Test Result	48
7	Conducted RF Spurious Emission	53
7.1	Test Result	53
7.2	Test Graphs	54

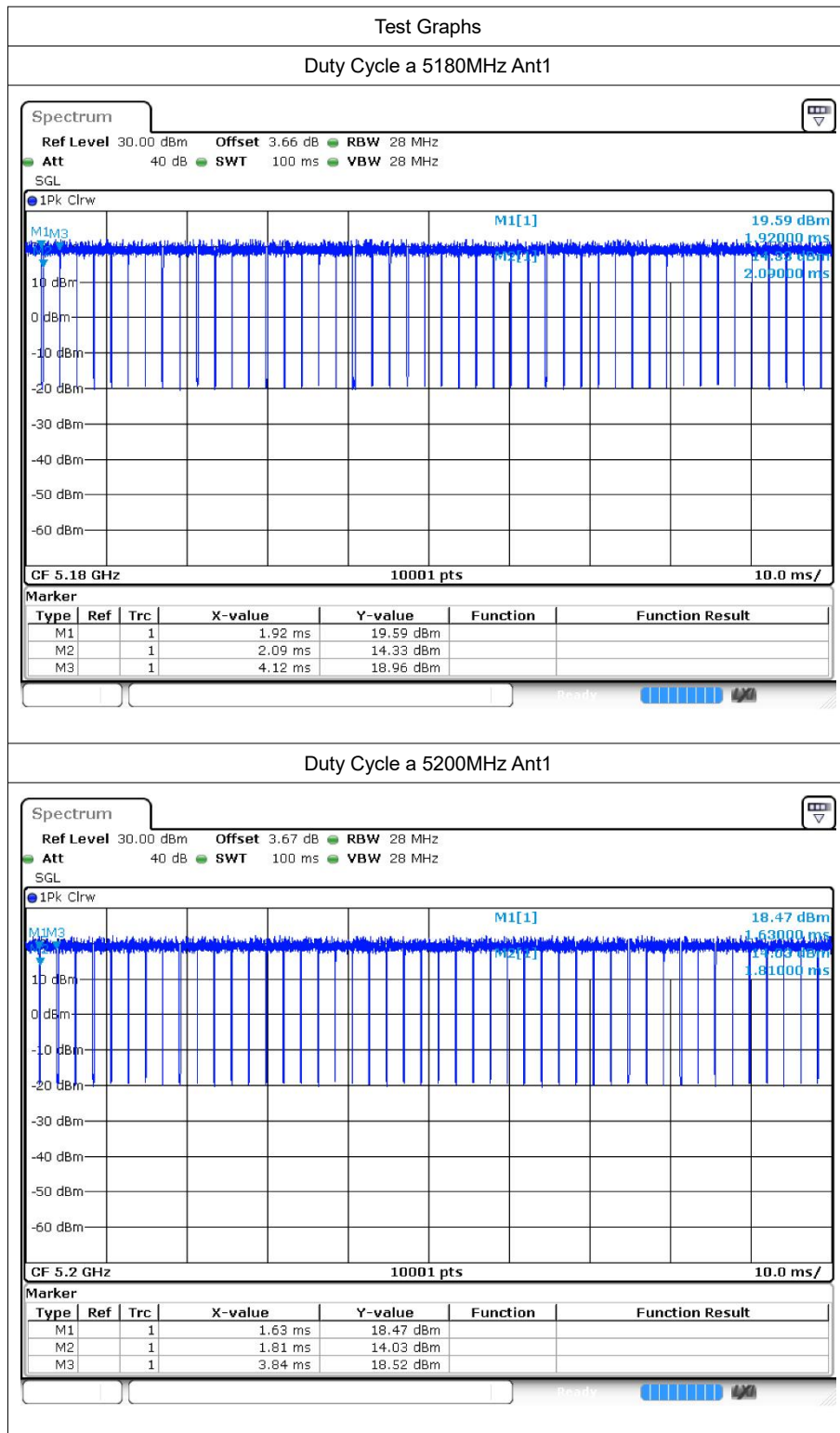


1 Duty Cycle

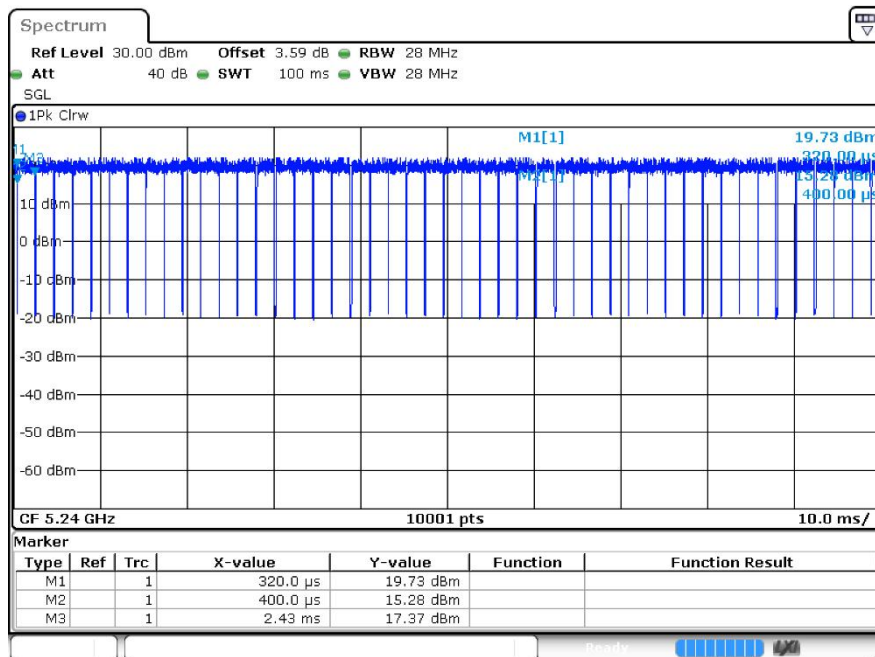
1.1 Test Result

Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
a	5180	Ant1	95.08	0.22	0.49
a	5200	Ant1	95.23	0.21	0.49
a	5240	Ant1	95.34	0.21	0.49
n20	5180	Ant1	82.11	0.86	0.53
n20	5200	Ant1	94.95	0.23	0.53
n20	5240	Ant1	94.65	0.24	0.53
n40	5190	Ant1	85.8	0.67	1.08
n40	5230	Ant1	89.79	0.47	1.08
ac20	5180	Ant1	94.62	0.24	0.53
ac20	5200	Ant1	94.94	0.23	0.53
ac20	5240	Ant1	94.77	0.23	0.53
ac40	5190	Ant1	68.84	1.62	1.08
ac40	5230	Ant1	89.87	0.46	1.06
ax20	5180	Ant1	92.99	0.32	0.68
ax20	5200	Ant1	93.23	0.3	0.68
ax20	5240	Ant1	93.09	0.31	0.68
ax40	5190	Ant1	89.35	0.49	1.32
ax40	5230	Ant1	80.11	0.96	1.32

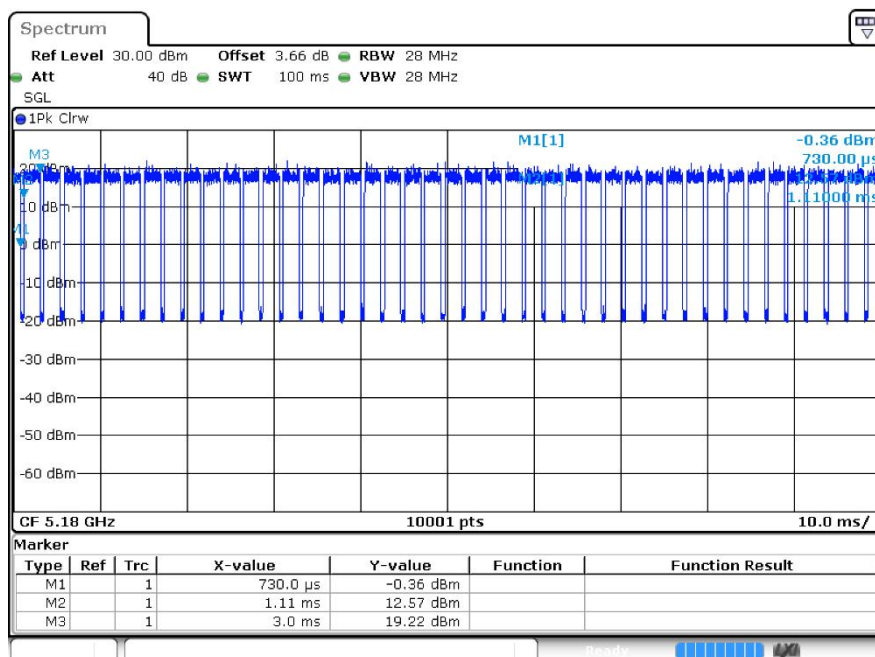
1.2 Test Graphs



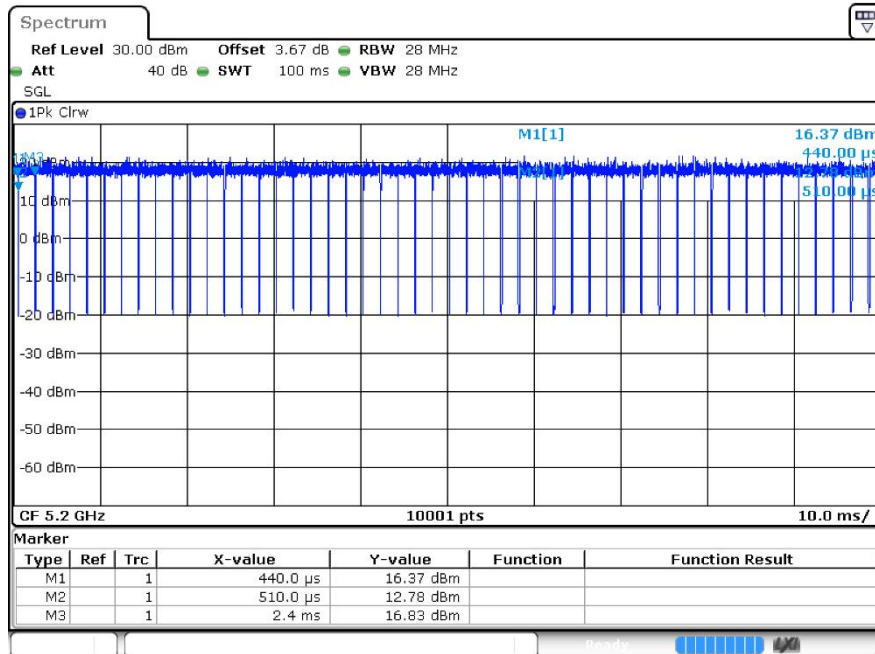
Duty Cycle a 5240MHz Ant1



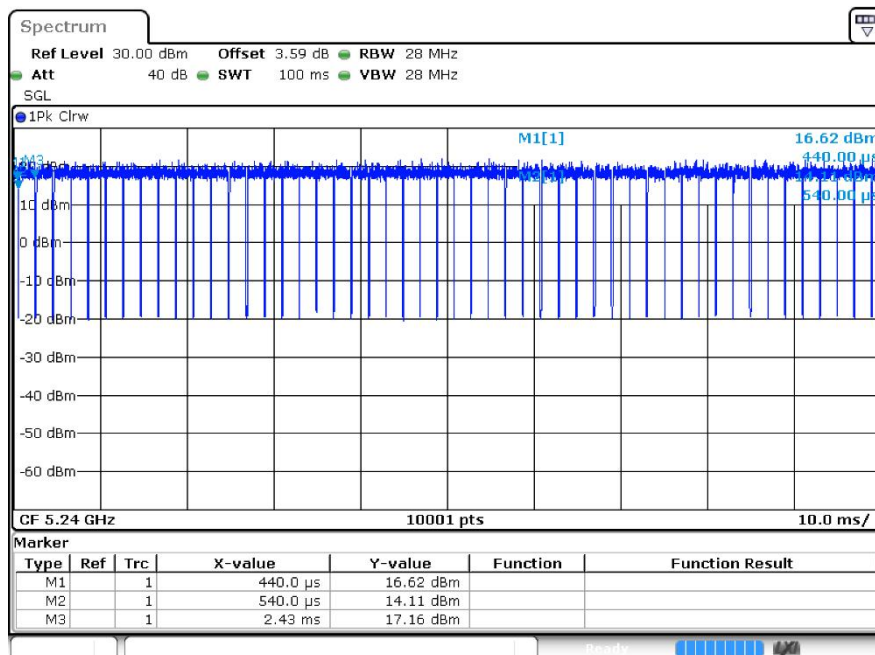
Duty Cycle n20 5180MHz Ant1



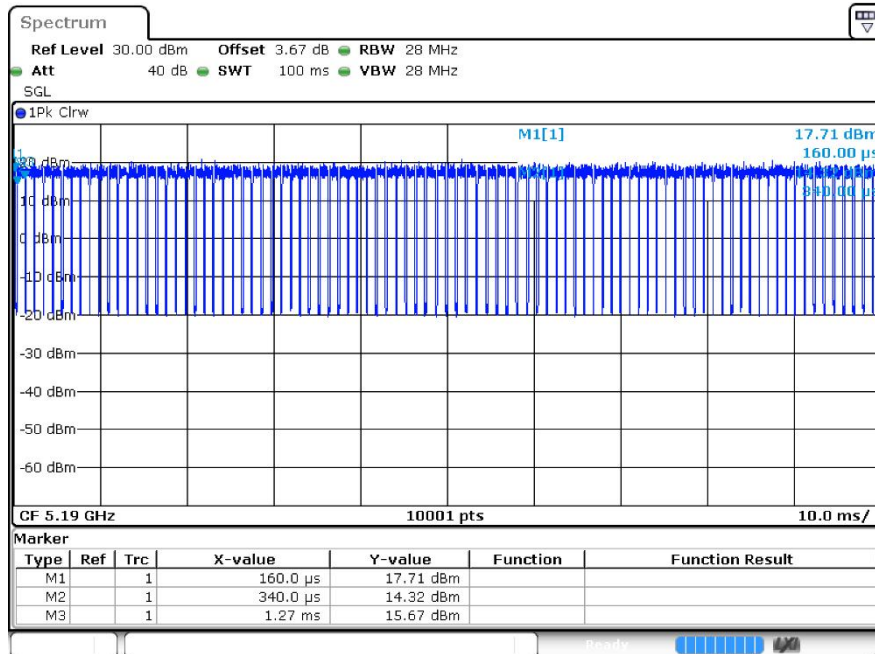
Duty Cycle a n20 5200MHz Ant1



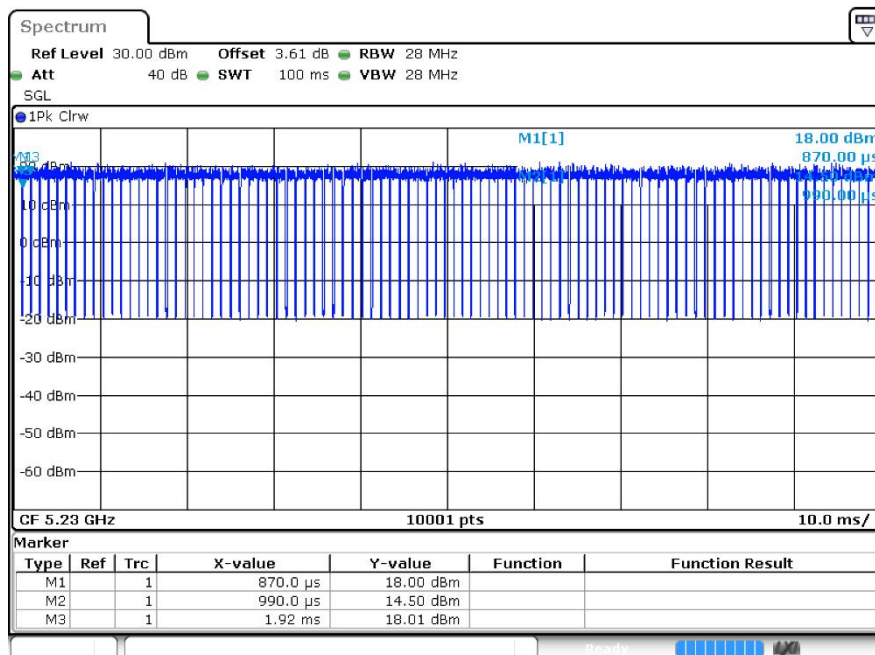
Duty Cycle n20 5240MHz Ant1



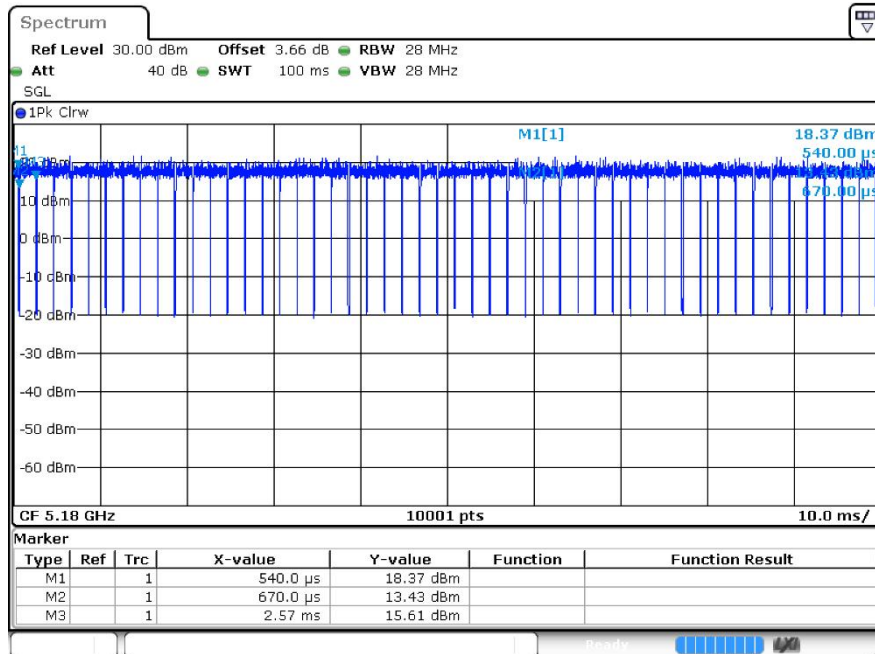
Duty Cycle n40 5190MHz Ant1



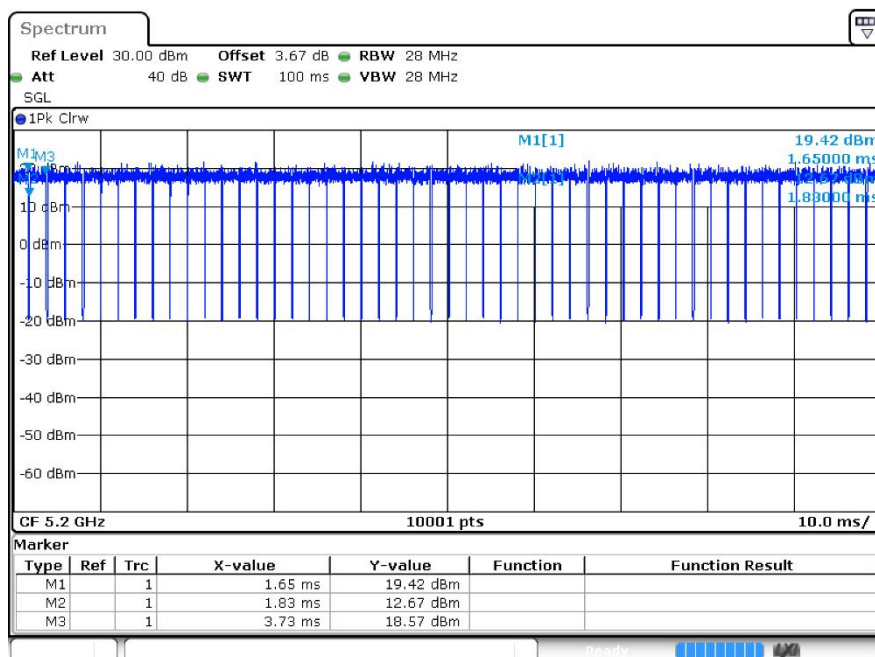
Duty Cycle n40 5230MHz Ant1



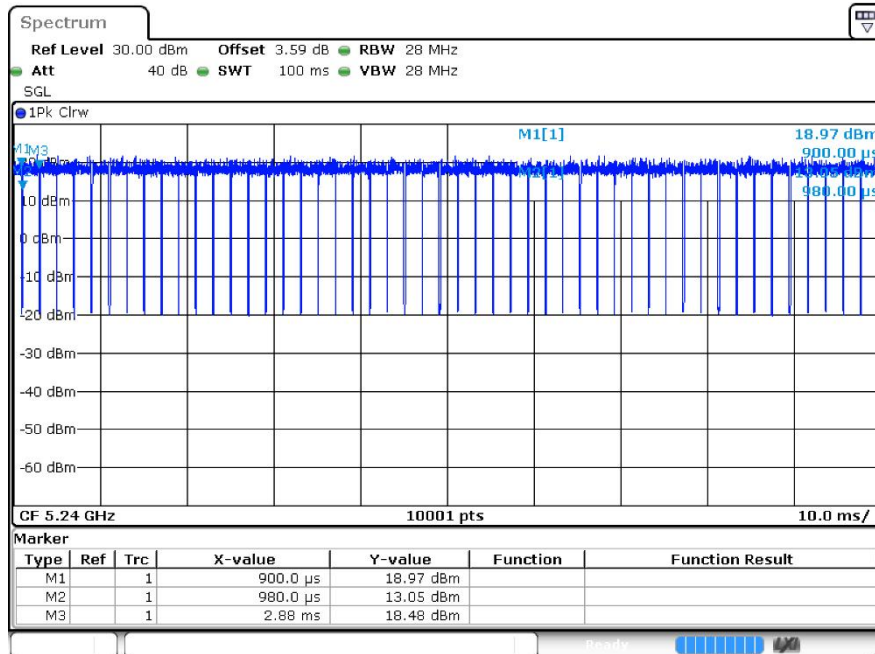
Duty Cycle ac20 5180MHz Ant1



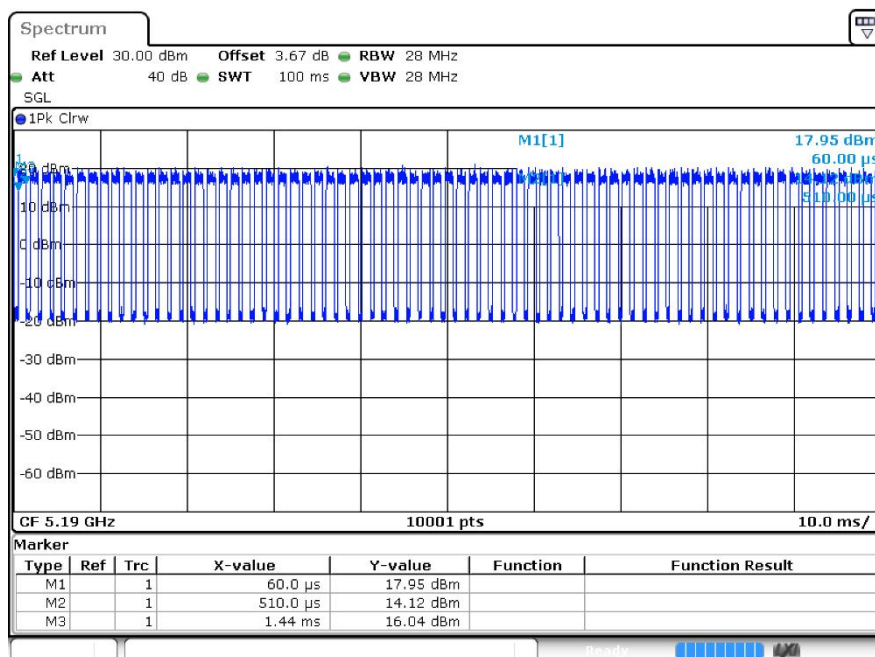
Duty Cycle ac20 5200MHz Ant1

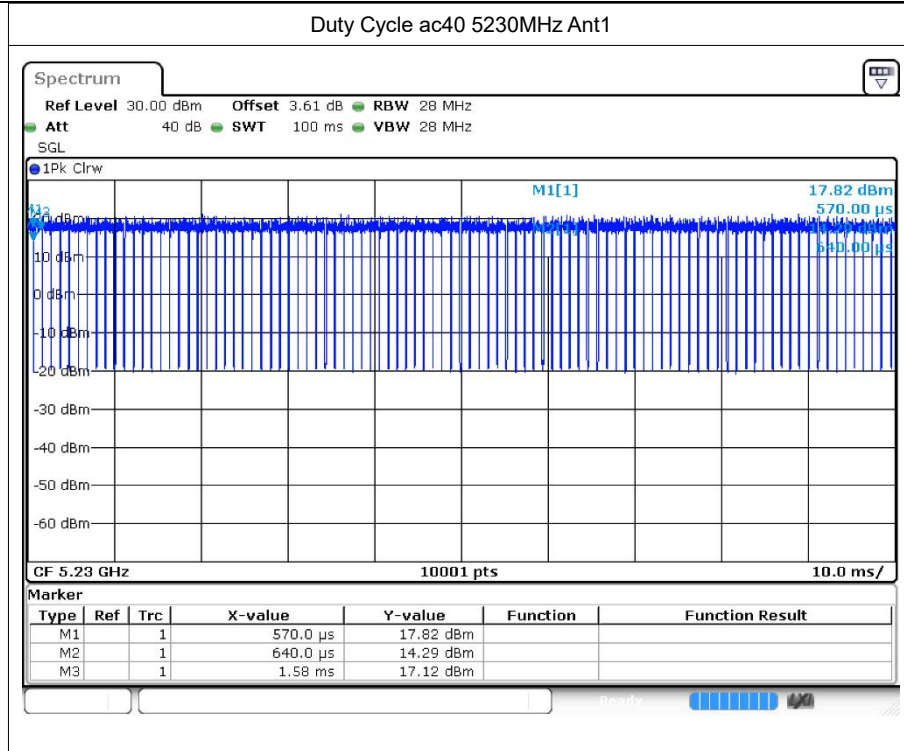


Duty Cycle ac20 5240MHz Ant1

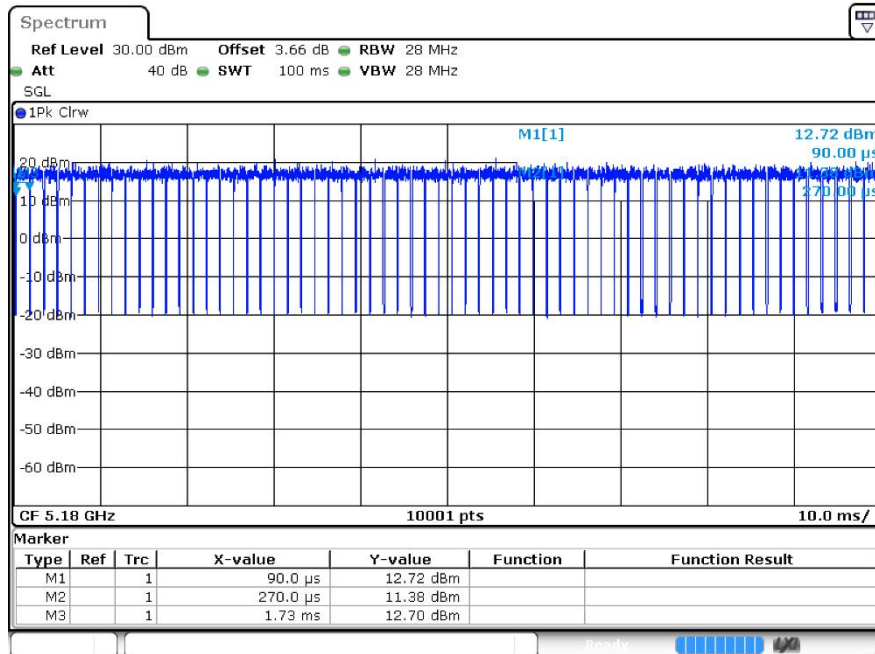


Duty Cycle ac40 5190MHz Ant1

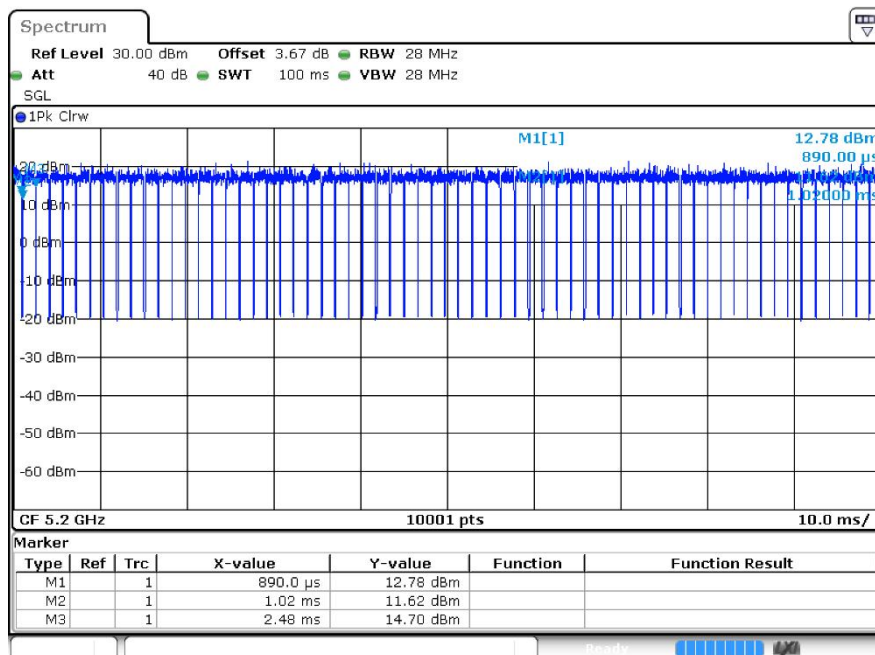




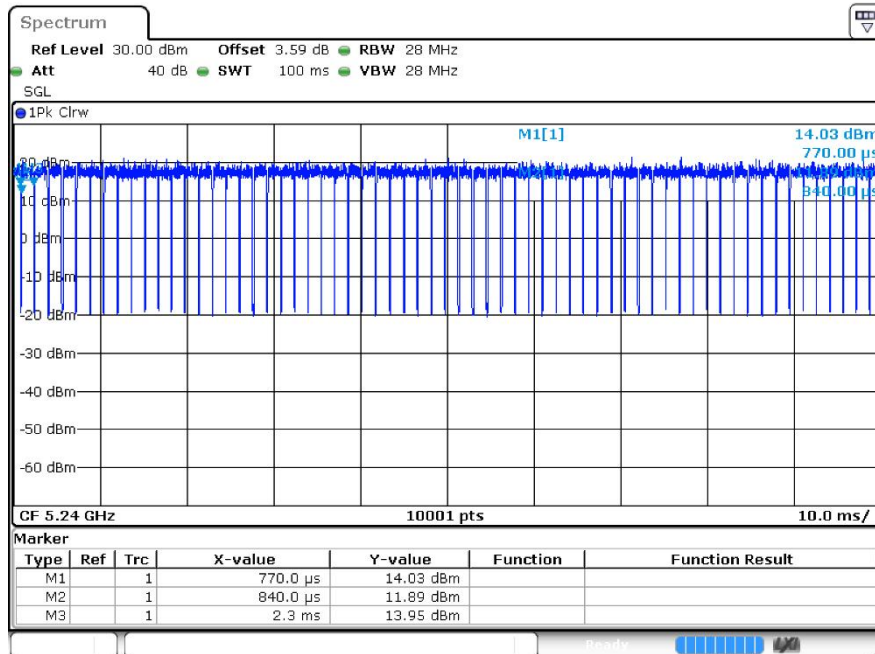
Duty Cycle ax20 5180MHz Ant1



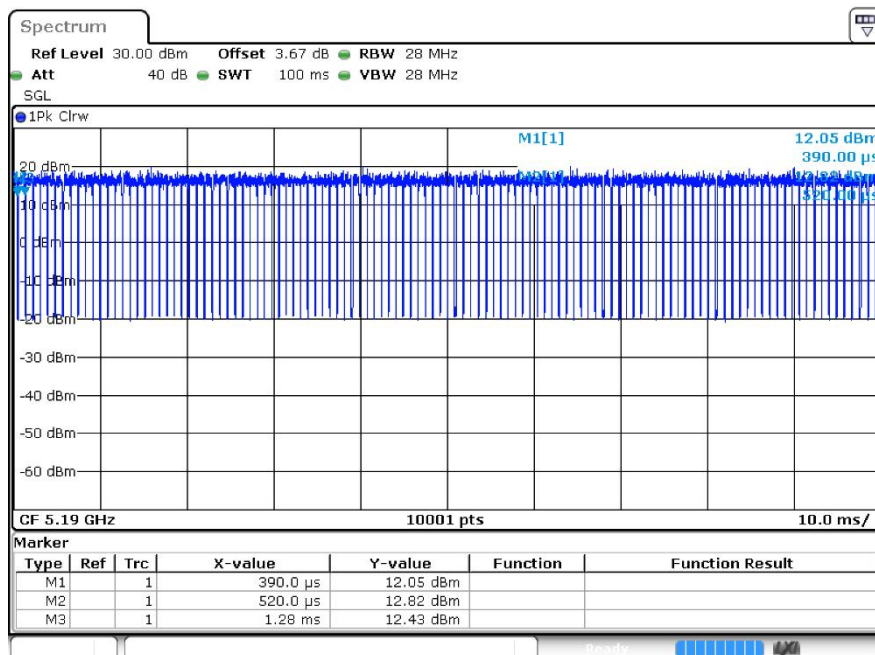
Duty Cycle ax20 5200MHz Ant1

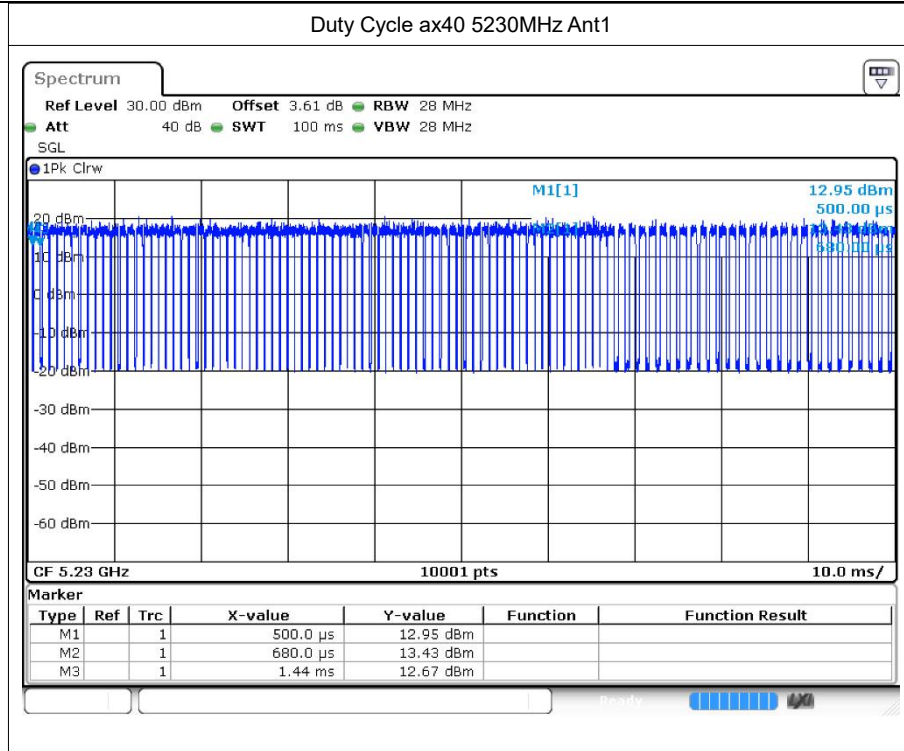


Duty Cycle ax20 5240MHz Ant1



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	15.24	24	Pass
a	5200	Ant1	15.17	24	Pass
a	5240	Ant1	15.49	24	Pass
n20	5180	Ant1	13.71	24	Pass
n20	5200	Ant1	13.83	24	Pass
n20	5240	Ant1	14.19	24	Pass
n40	5190	Ant1	13.73	24	Pass
n40	5230	Ant1	14.06	24	Pass
ac20	5180	Ant1	13.57	24	Pass
ac20	5200	Ant1	13.73	24	Pass
ac20	5240	Ant1	14.2	24	Pass
ac40	5190	Ant1	13.67	24	Pass
ac40	5230	Ant1	14.04	24	Pass
ax20	5180	Ant1	13.54	24	Pass
ax20	5200	Ant1	13.78	24	Pass
ax20	5240	Ant1	14.1	24	Pass
ax40	5190	Ant1	13.62	24	Pass
ax40	5230	Ant1	14.02	24	Pass

Note:

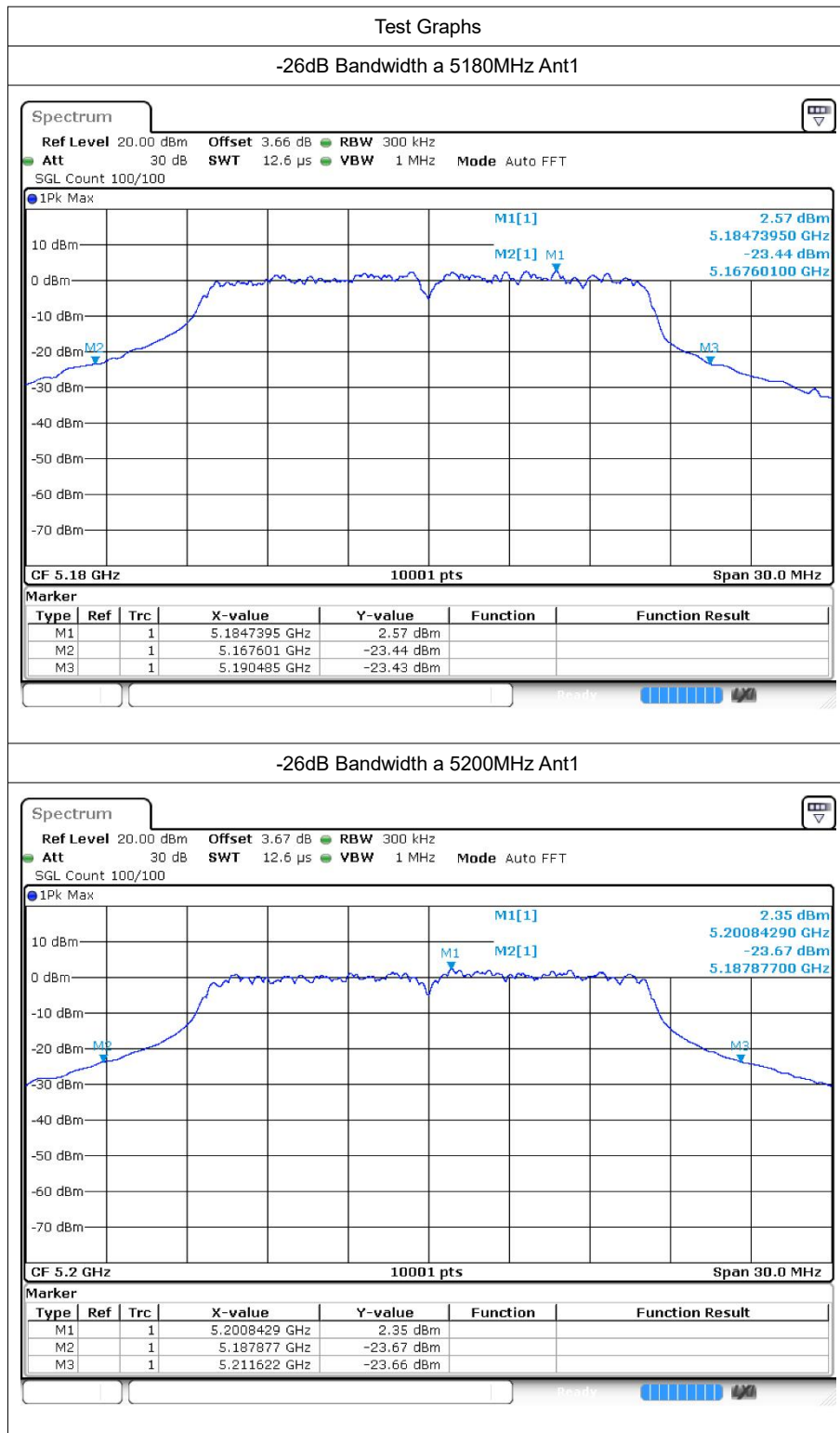
The duty factor has been compensated into the result.

3 -26dB Bandwidth

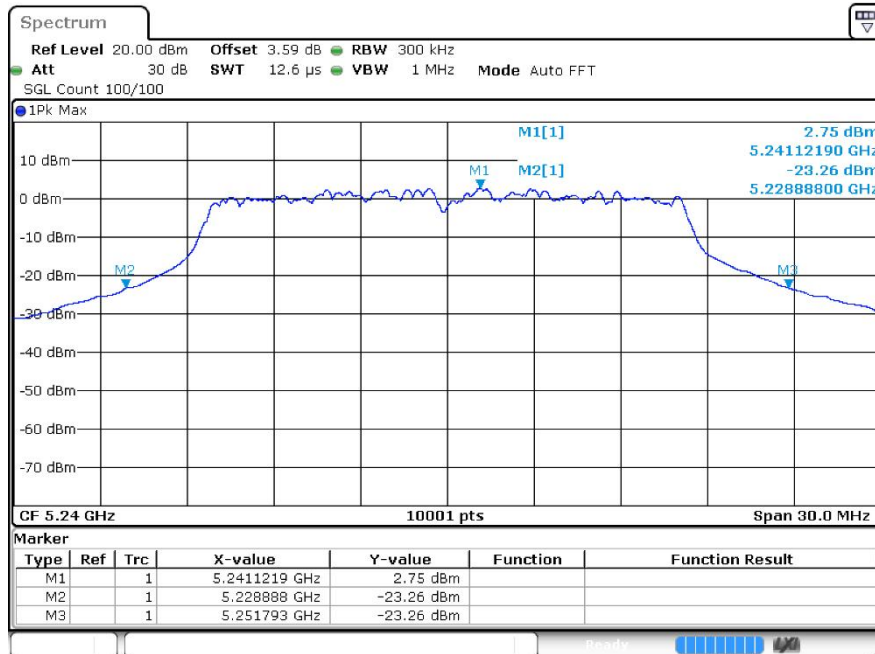
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
a	5180	Ant1	22.884	0.5	Pass
a	5200	Ant1	23.745	0.5	Pass
a	5240	Ant1	22.905	0.5	Pass
n20	5180	Ant1	24.93	0.5	Pass
n20	5200	Ant1	24.384	0.5	Pass
n20	5240	Ant1	23.967	0.5	Pass
n40	5190	Ant1	42.57	0.5	Pass
n40	5230	Ant1	42.006	0.5	Pass
ac20	5180	Ant1	26.196	0.5	Pass
ac20	5200	Ant1	23.256	0.5	Pass
ac20	5240	Ant1	23.901	0.5	Pass
ac40	5190	Ant1	41.022	0.5	Pass
ac40	5230	Ant1	43.374	0.5	Pass
ax20	5180	Ant1	23.043	0.5	Pass
ax20	5200	Ant1	22.479	0.5	Pass
ax20	5240	Ant1	23.694	0.5	Pass
ax40	5190	Ant1	41.82	0.5	Pass
ax40	5230	Ant1	43.656	0.5	Pass

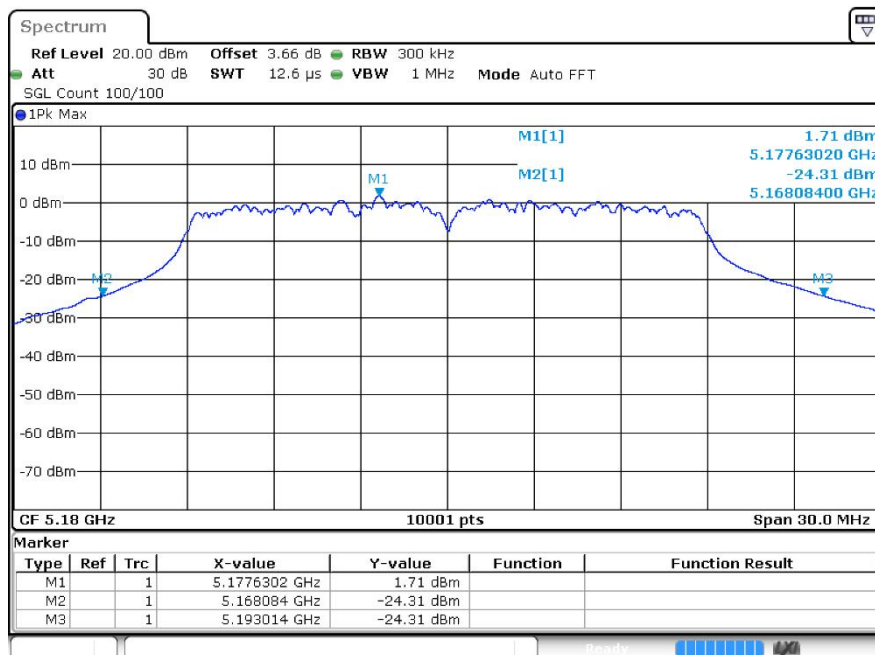
3.2 Test Graphs



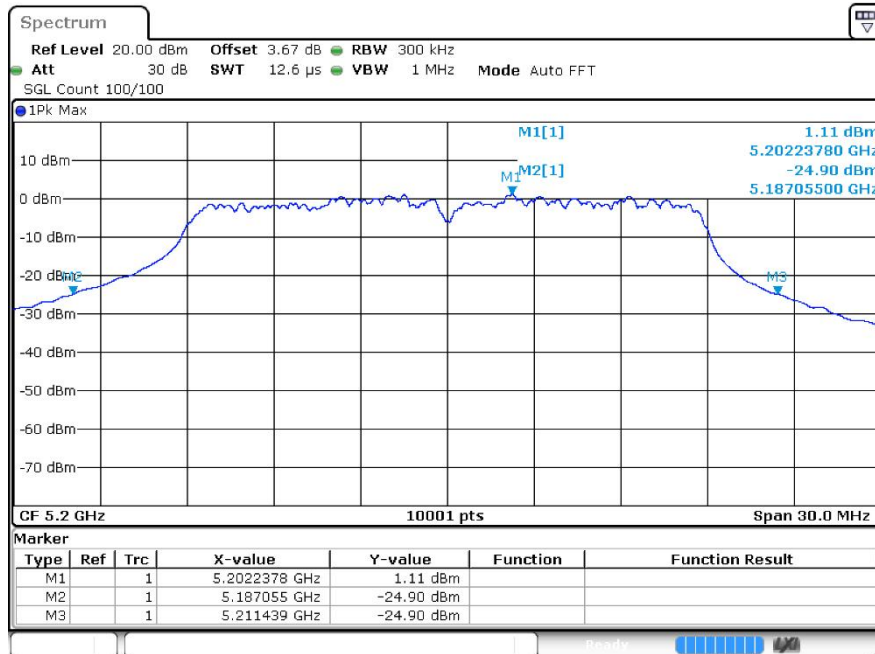
-26dB Bandwidth a 5240MHz Ant1



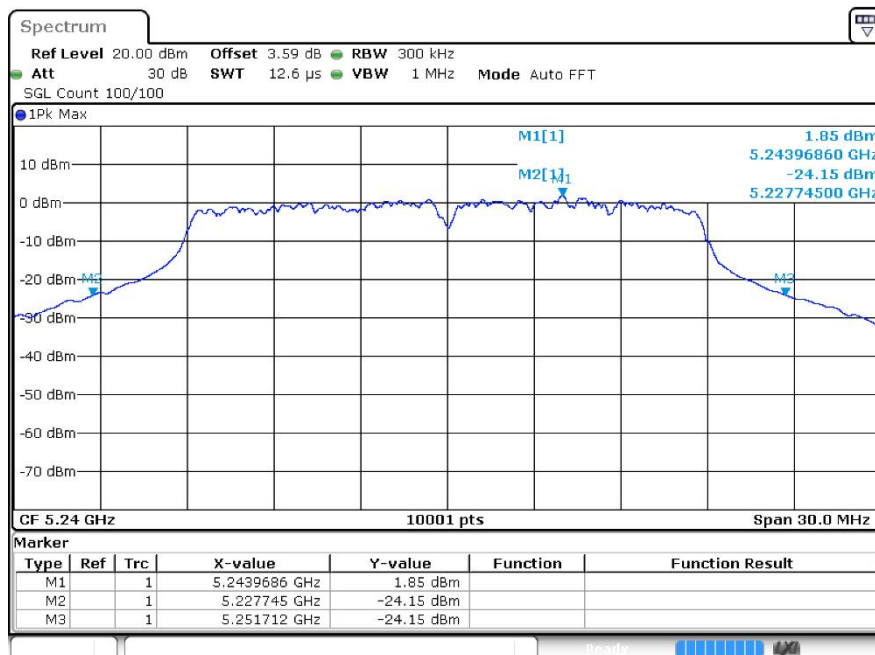
-26dB Bandwidth n20 5180MHz Ant1



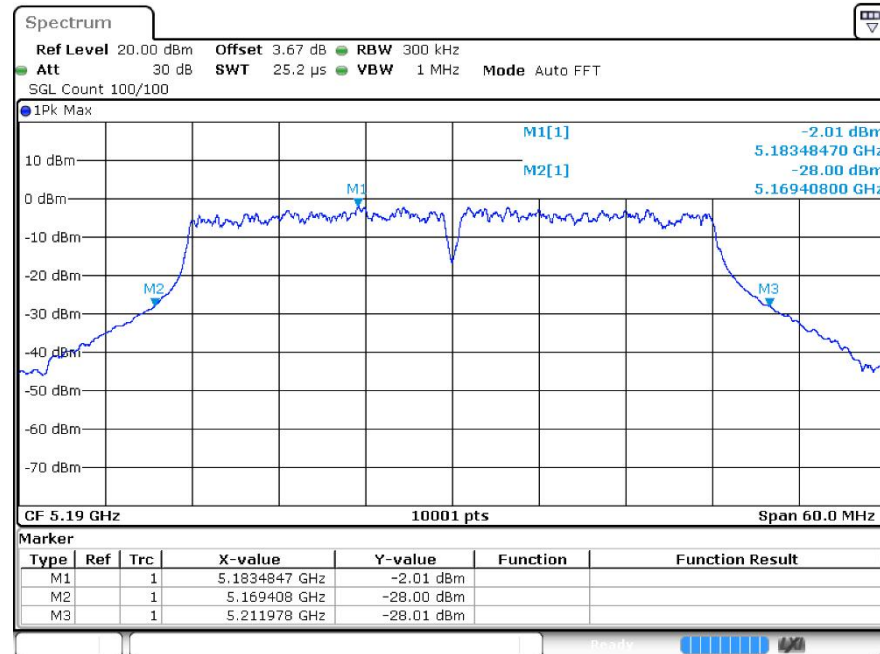
-26dB Bandwidth n20 5200MHz Ant1



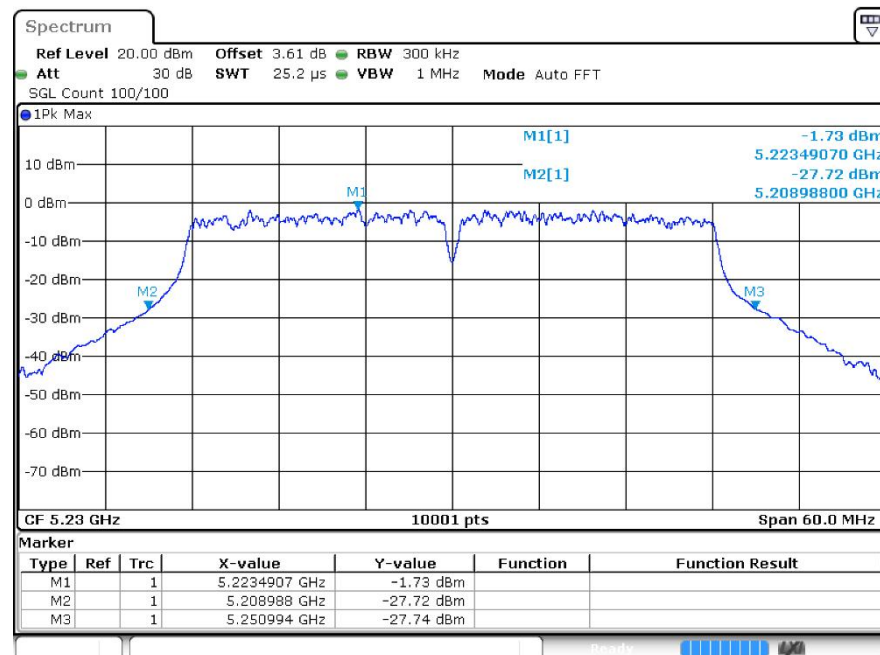
-26dB Bandwidth n20 5240MHz Ant1



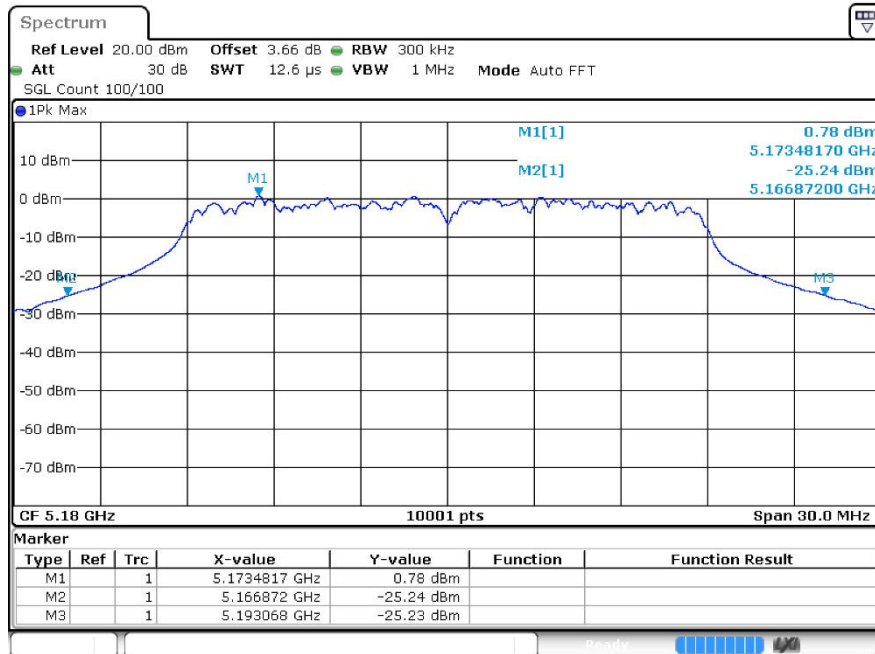
-26dB Bandwidth n40 5190MHz Ant1



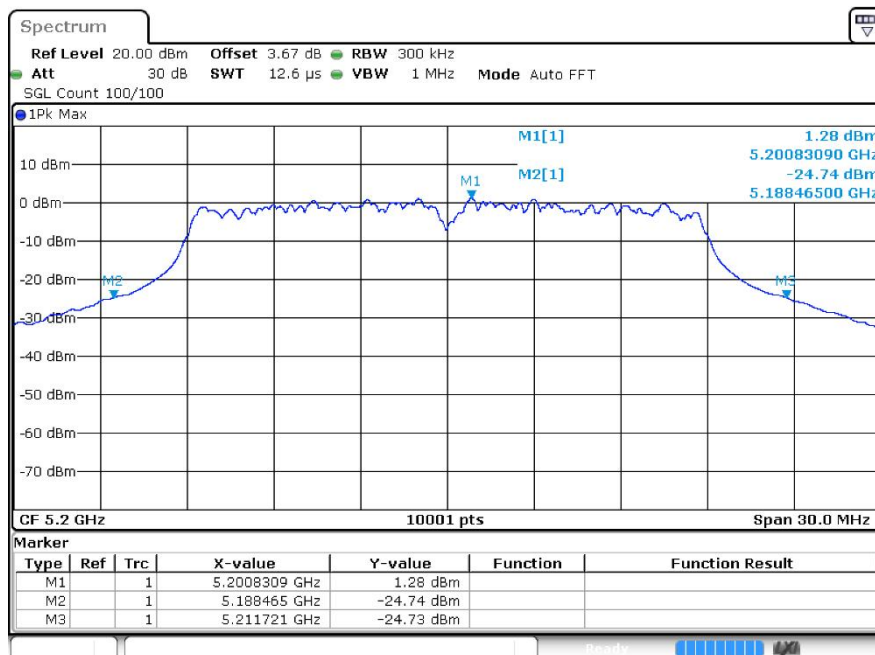
-26dB Bandwidth n40 5230MHz Ant1



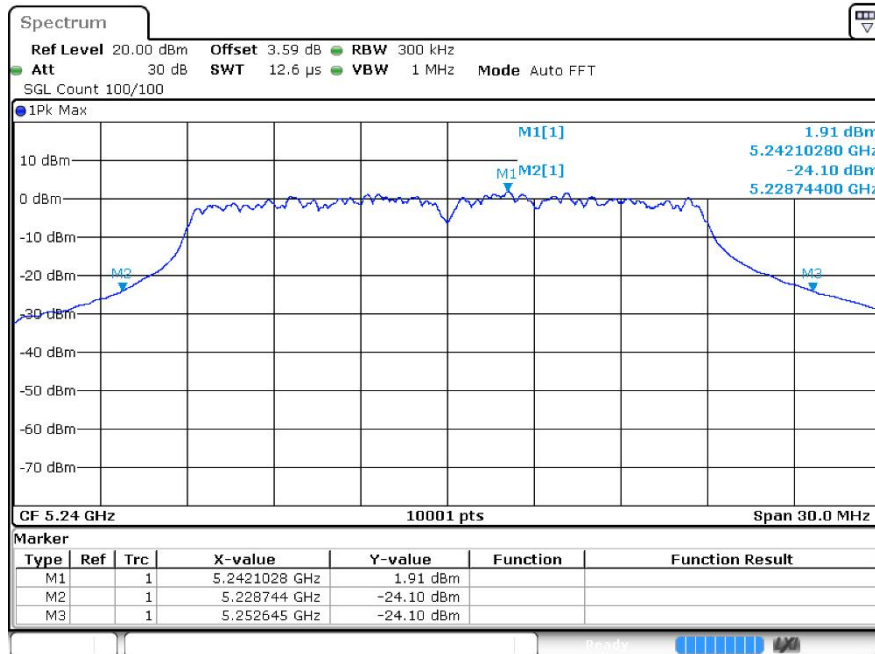
-26dB Bandwidth ac20 5180MHz Ant1



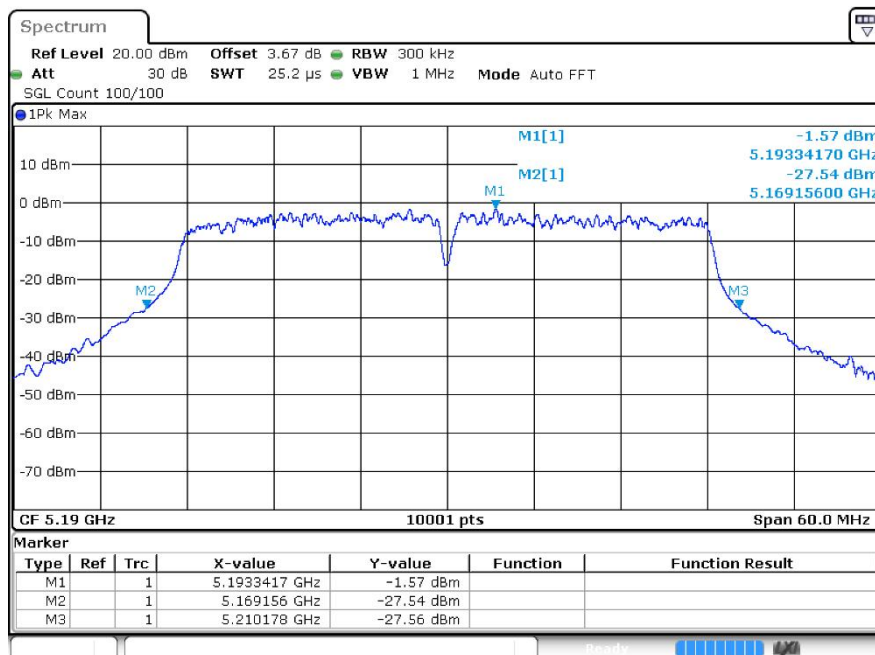
-26dB Bandwidth ac20 5200MHz Ant1

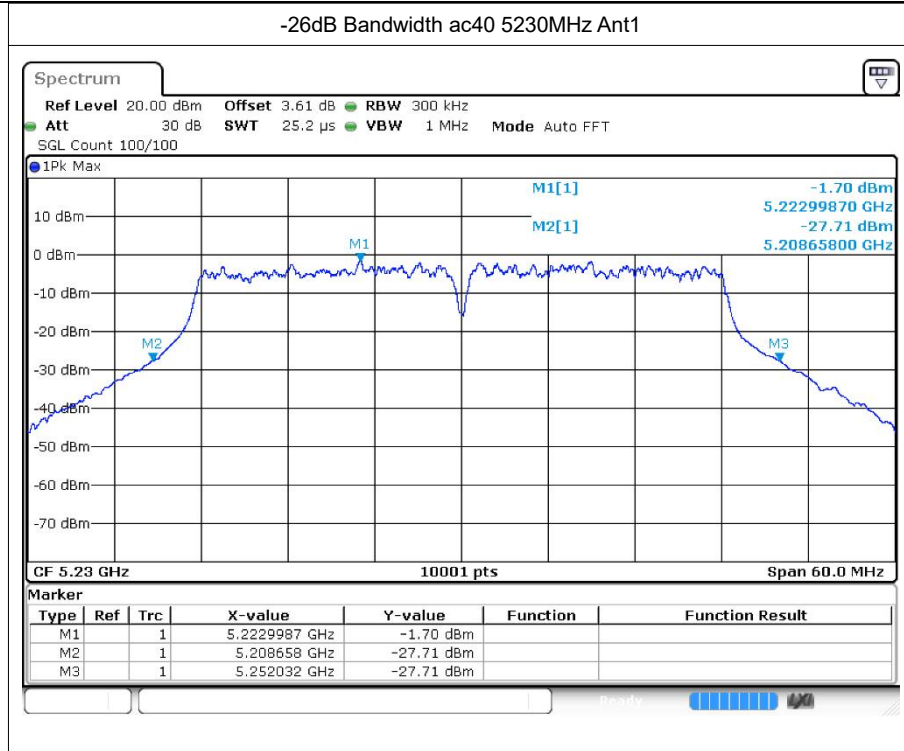


-26dB Bandwidth ac20 5240MHz Ant1

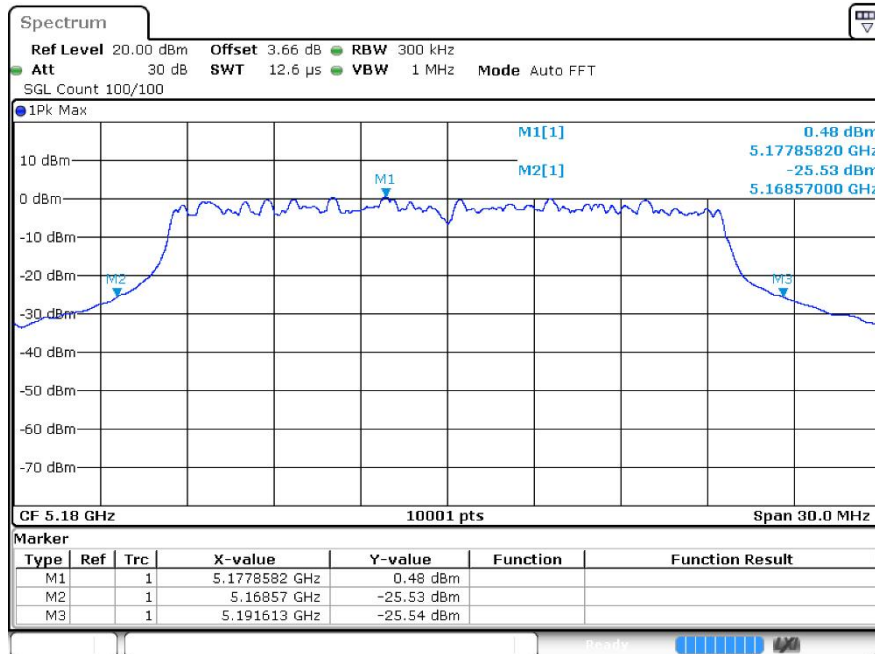


-26dB Bandwidth ac40 5190MHz Ant1

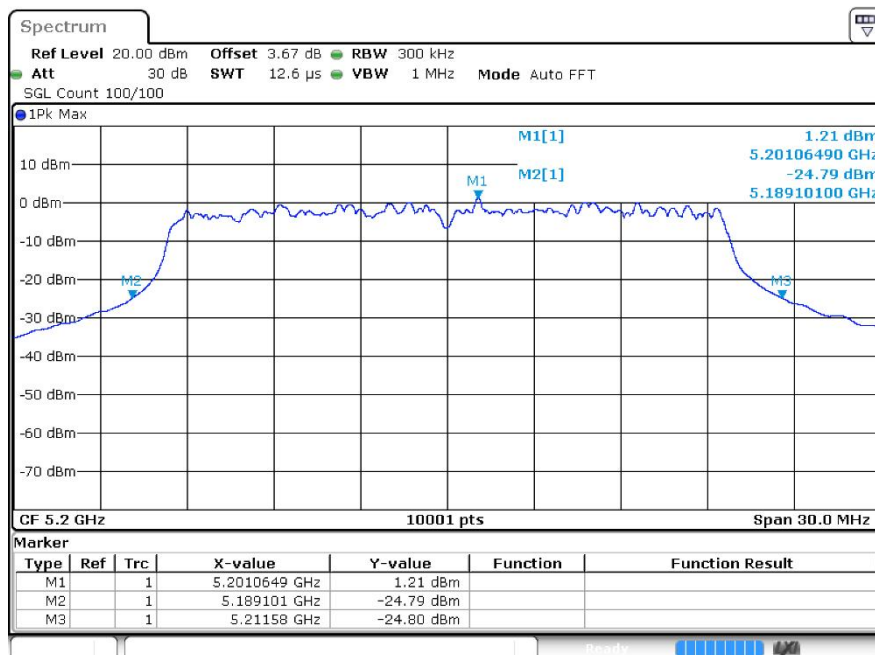




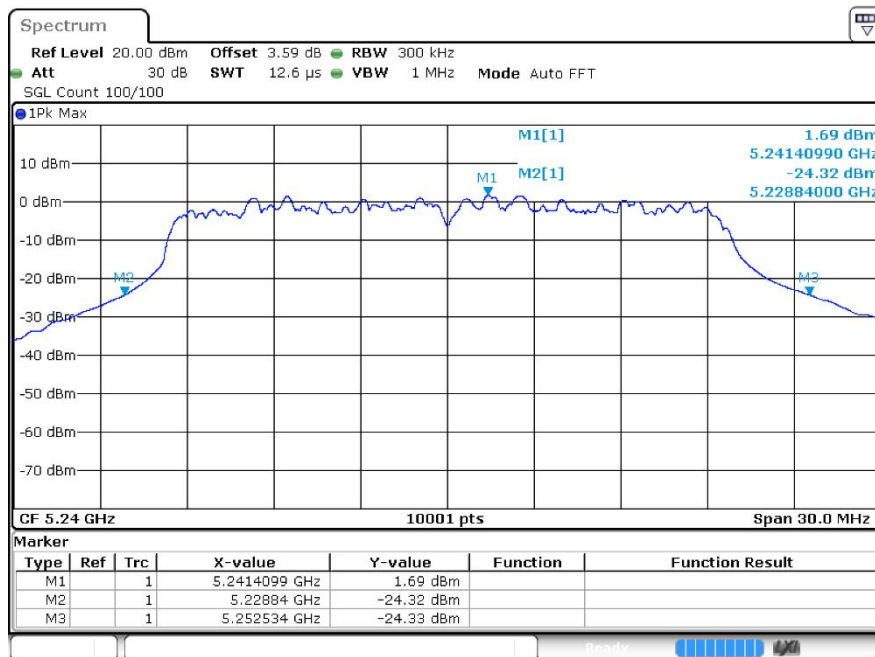
-26dB Bandwidth ax20 5180MHz Ant1



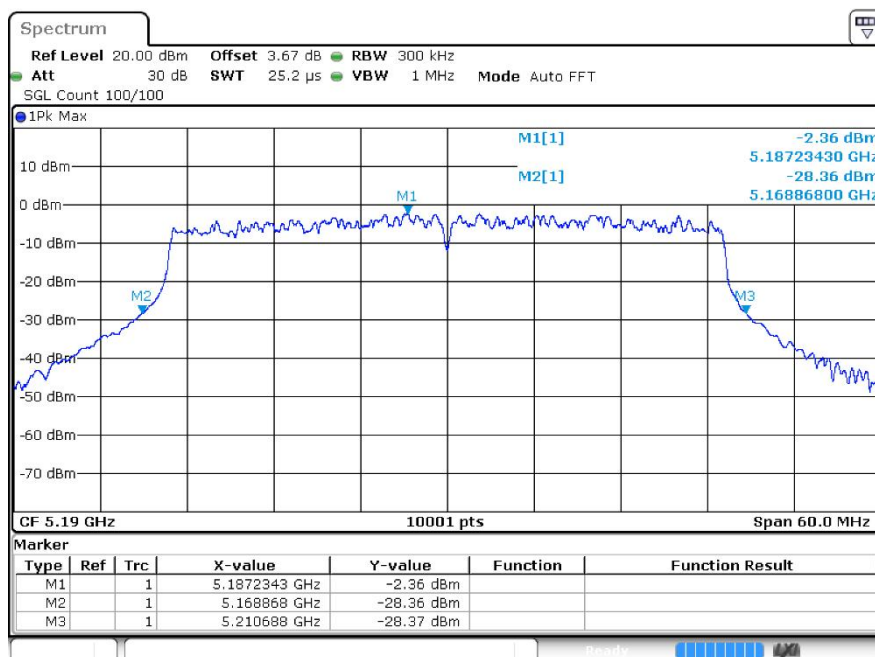
-26dB Bandwidth ax20 5200MHz Ant1

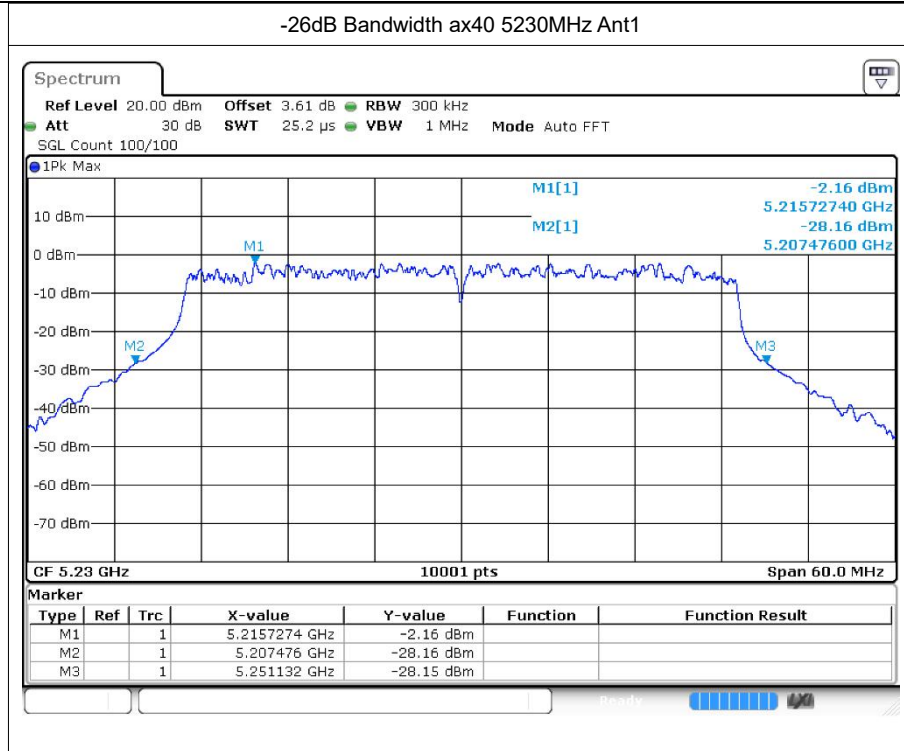


-26dB Bandwidth ax20 5240MHz Ant1



-26dB Bandwidth ax40 5190MHz Ant1





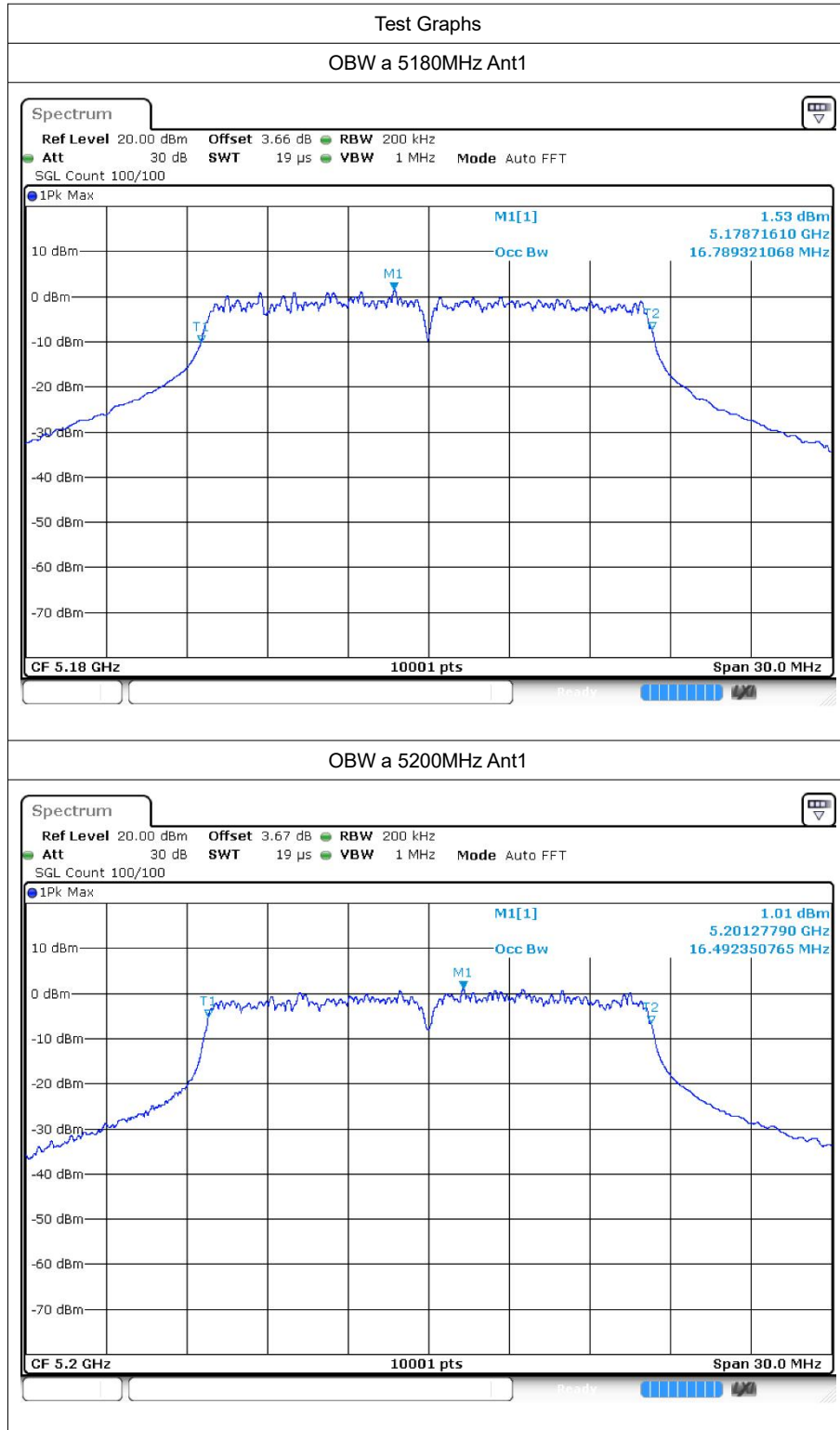


4 Occupied Channel Bandwidth

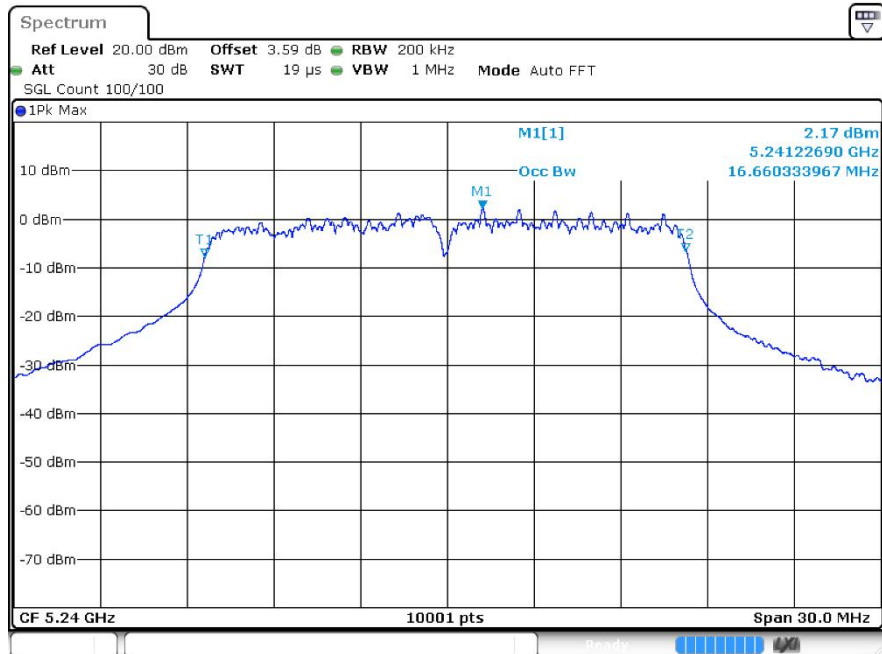
4.1 Test Result

Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
a	5180	Ant1	16.789
a	5200	Ant1	16.492
a	5240	Ant1	16.66
n20	5180	Ant1	17.851
n20	5200	Ant1	17.887
n20	5240	Ant1	17.734
n40	5190	Ant1	36.29
n40	5230	Ant1	36.89
ac20	5180	Ant1	17.95
ac20	5200	Ant1	17.812
ac20	5240	Ant1	17.983
ac40	5190	Ant1	36.38
ac40	5230	Ant1	36.956
ax20	5180	Ant1	18.994
ax20	5200	Ant1	19.027
ax20	5240	Ant1	19.117
ax40	5190	Ant1	38.024
ax40	5230	Ant1	38.114

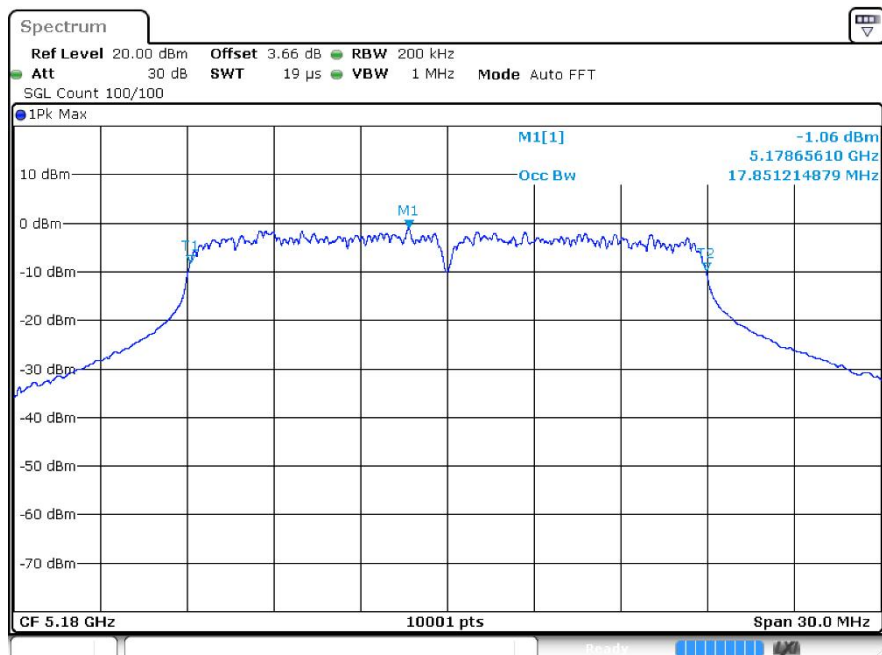
4.2 Test Graphs



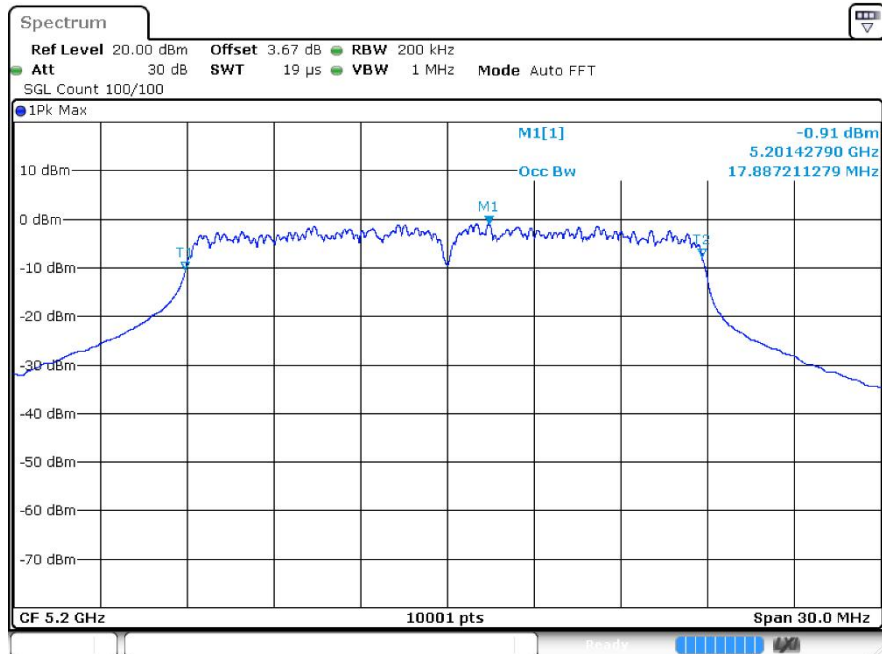
OBW a 5240MHz Ant1



OBW n20 5180MHz Ant1



OBW n20 5200MHz Ant1



OBW n20 5240MHz Ant1

