



Appendix D

RF Test Data for B1WIFI(Conducted Measurement)

Product Name: LED PROJECTOR

Trade Mark: Blackview

Test Model: PV1000 Max

Environmental Conditions

Temperature:	24.6° 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.....	21
2.1 Test Result.....	21
3 -26dB Bandwidth.....	23
3.1 Test Result.....	23
3.2 Test Graphs.....	24
4 Occupied Channel Bandwidth.....	42
4.1 Test Result.....	42
4.2 Test Graphs.....	43
5 Maximum Power Spectral Density Level.....	61
5.1 Test Result.....	61
5.2 Test Graphs.....	63
6 Frequency Stability.....	80
6.1 Test Result.....	80
7 Conducted RF Spurious Emission.....	87
7.1 Test Result.....	87
7.2 Test Graphs.....	88
8 Restrict Band.....	106
8.1 Test Result.....	106
8.2 Test Graphs.....	110

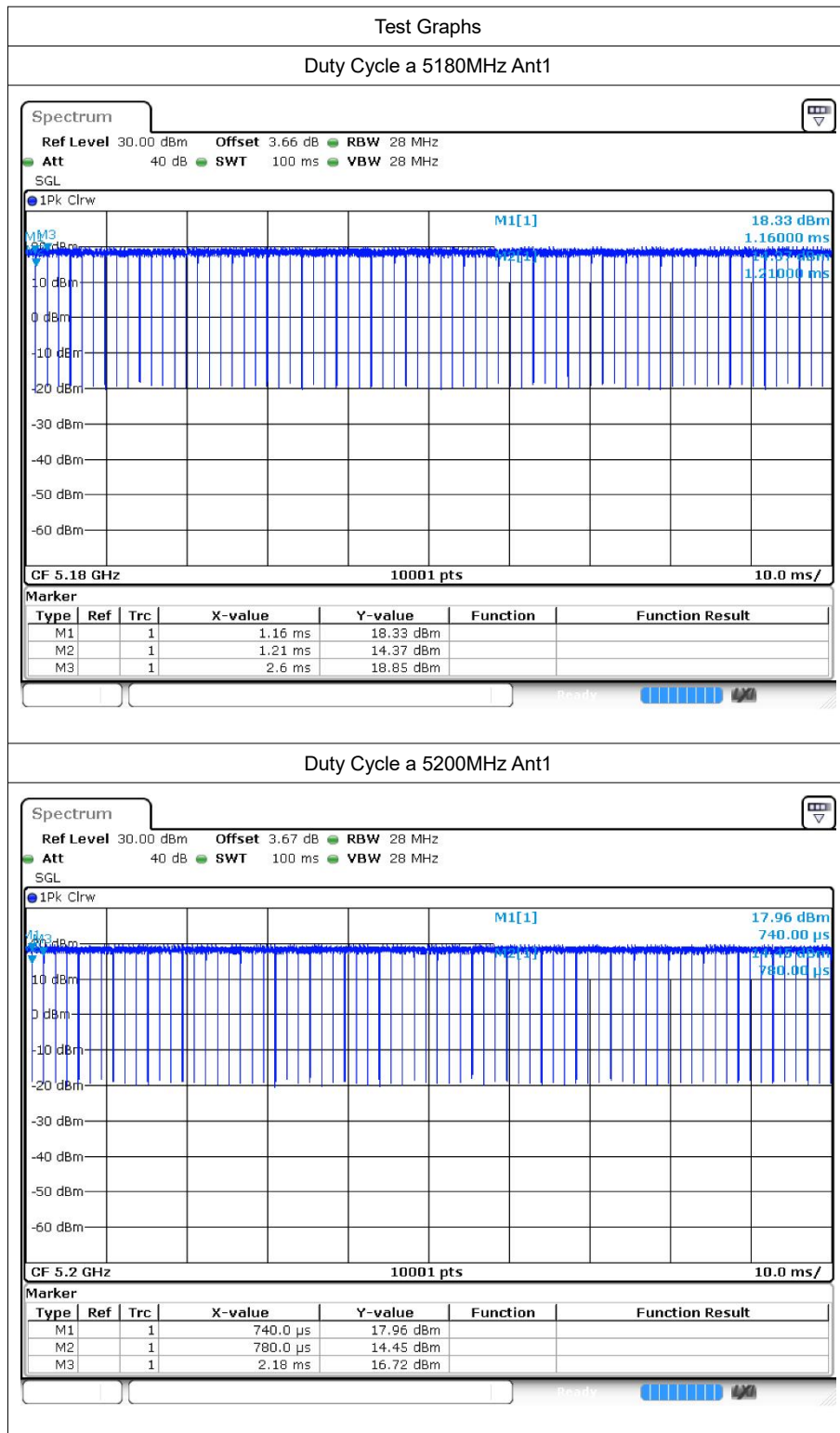


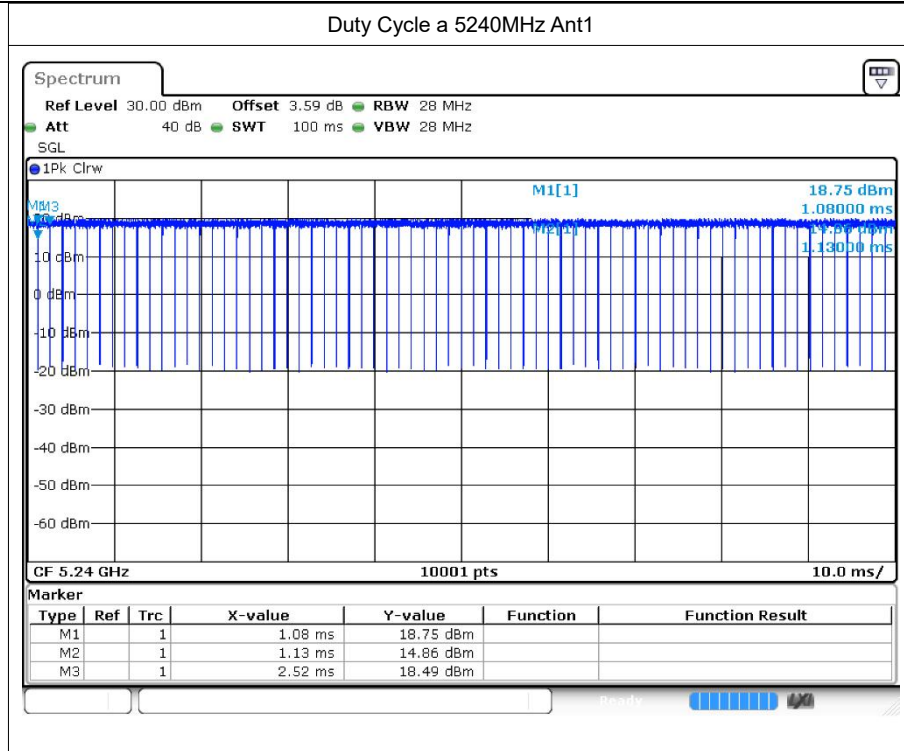
1 Duty Cycle

1.1 Test Result

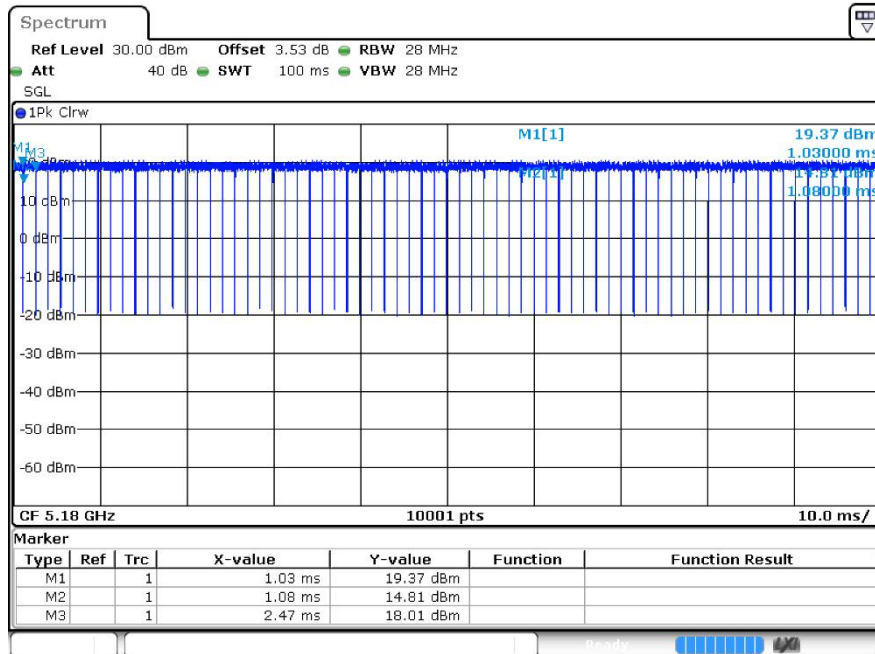
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
a	5180	Ant1	97.59	0.11	0.72
a	5200	Ant1	97.56	0.11	0.71
a	5240	Ant1	97.6	0.11	0.72
a	5180	Ant2	97.59	0.11	0.72
a	5200	Ant2	97.57	0.11	0.71
a	5240	Ant2	97.57	0.11	0.71
n20	5180	Ant1	97.43	0.11	0.77
n20	5200	Ant1	97.42	0.11	0.77
n20	5240	Ant1	97.42	0.11	0.77
n20	5180	Ant2	97.42	0.11	0.77
n20	5200	Ant2	97.43	0.11	0.77
n20	5240	Ant2	97.4	0.11	0.77
n40	5190	Ant1	95.09	0.22	1.54
n40	5230	Ant1	95.07	0.22	1.54
n40	5190	Ant2	95.07	0.22	1.54
n40	5230	Ant2	95.1	0.22	1.54
ac20	5180	Ant1	97.43	0.11	0.76
ac20	5200	Ant1	97.45	0.11	0.76
ac20	5240	Ant1	97.41	0.11	0.76
ac20	5180	Ant2	97.42	0.11	0.76
ac20	5200	Ant2	97.42	0.11	0.76
ac20	5240	Ant2	97.41	0.11	0.76
ac40	5190	Ant1	95.12	0.22	1.52
ac40	5230	Ant1	95.13	0.22	1.54
ac40	5190	Ant2	95.1	0.22	1.54
ac40	5230	Ant2	95.11	0.22	1.54
ac80	5210	Ant1	90.89	0.41	3.13

1.2 Test Graphs

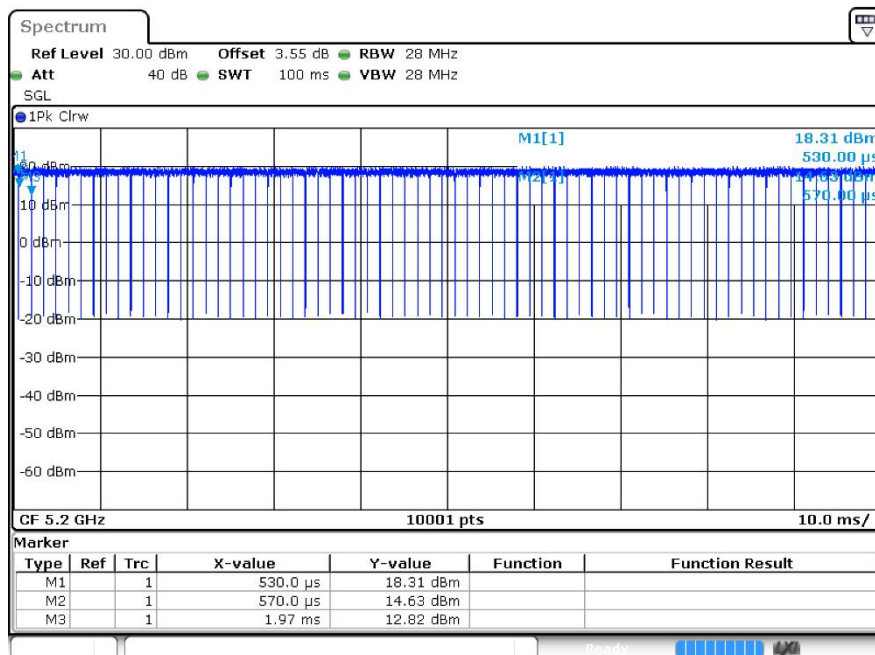


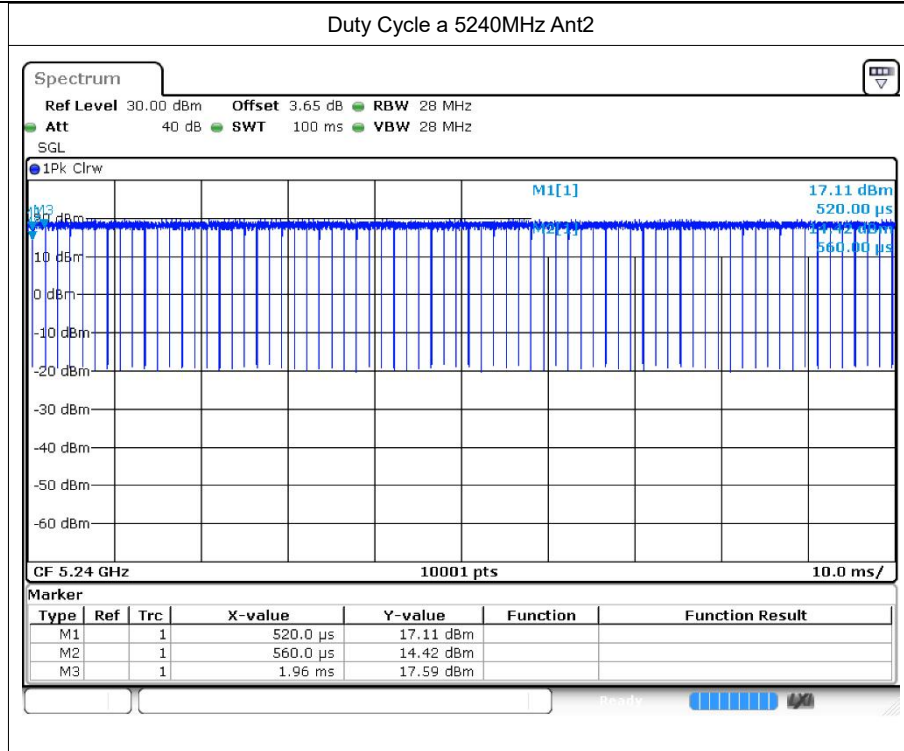


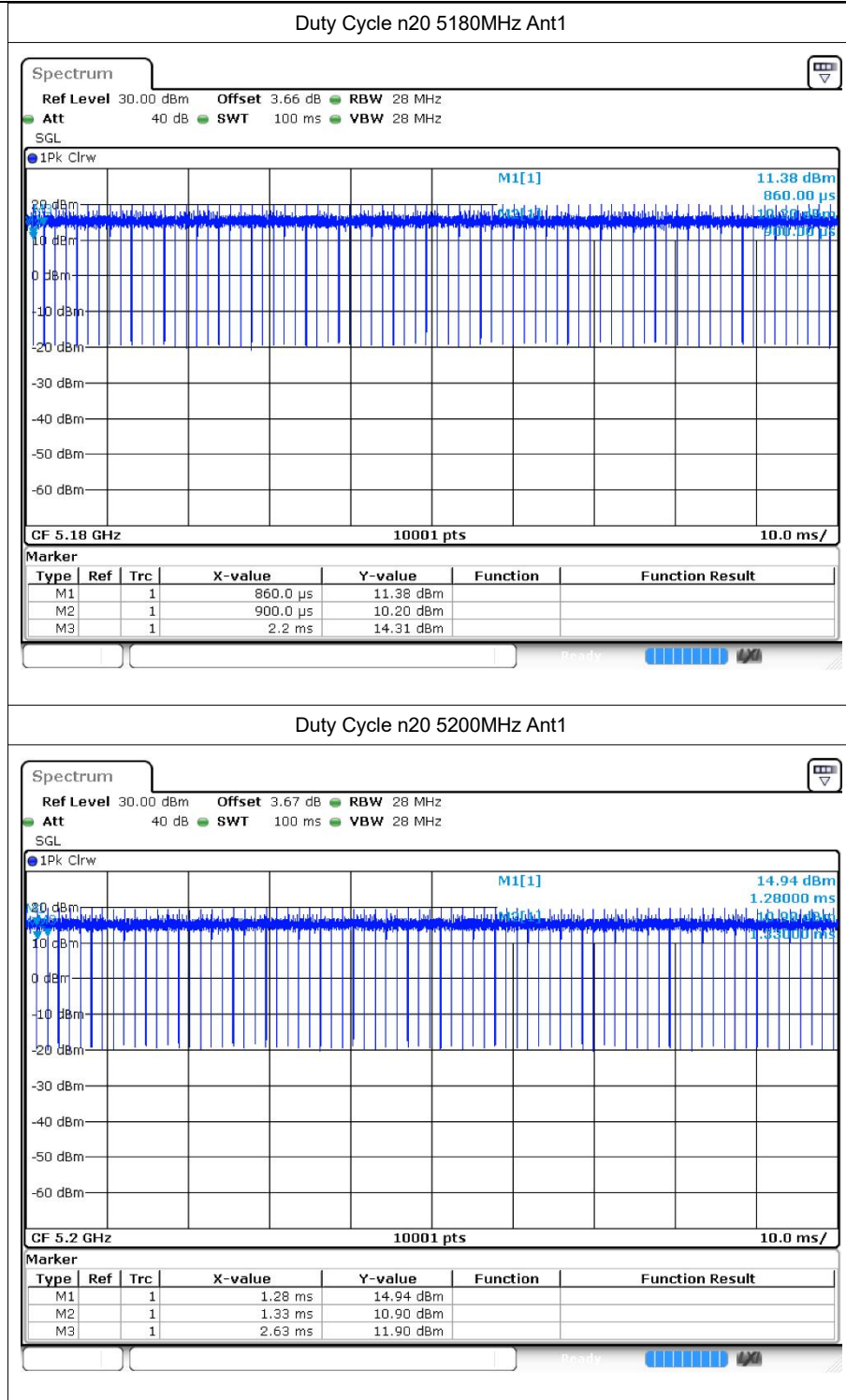
Duty Cycle a 5180MHz Ant2

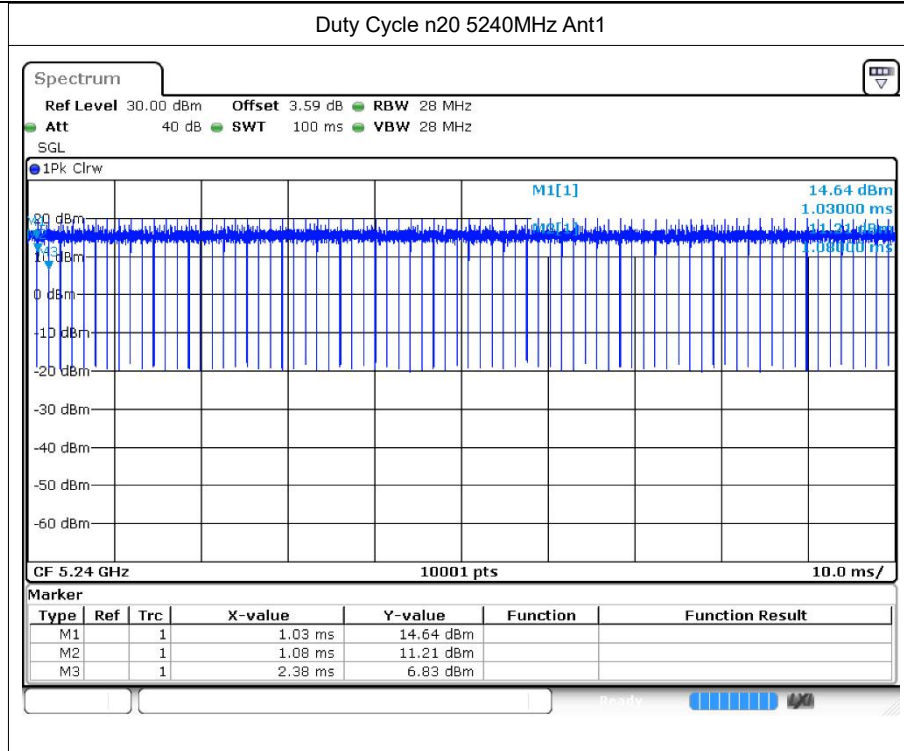


Duty Cycle a 5200MHz Ant2

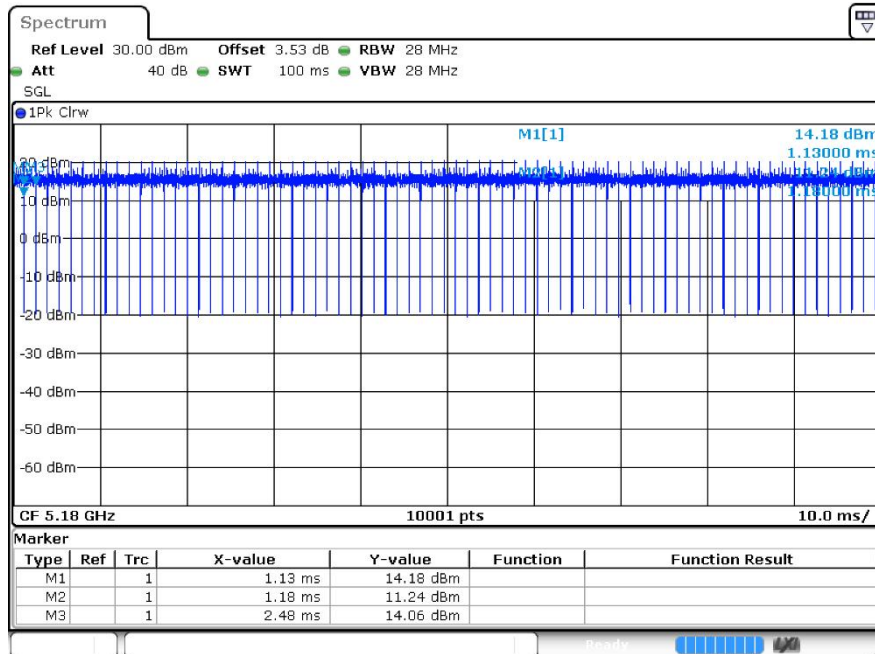




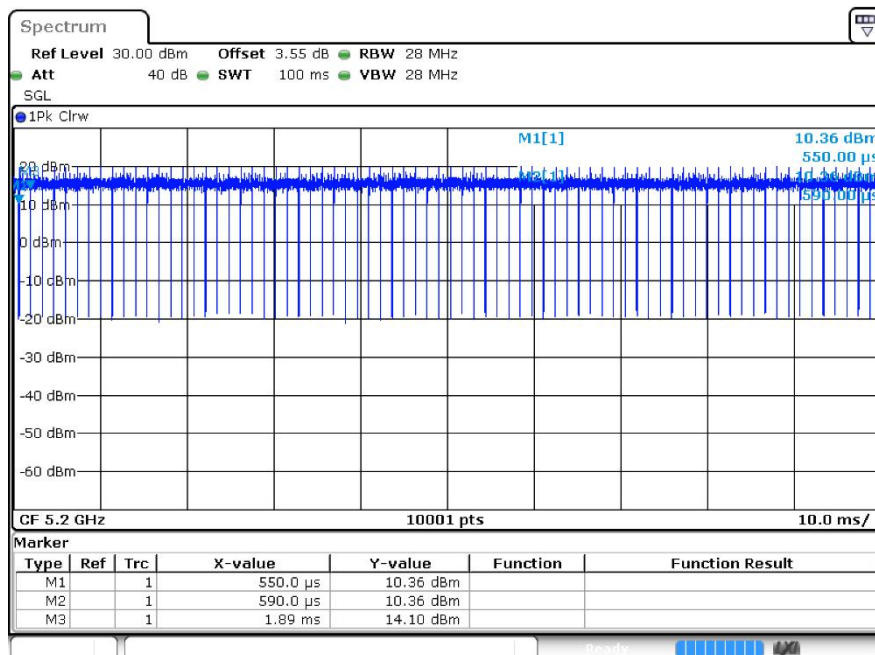


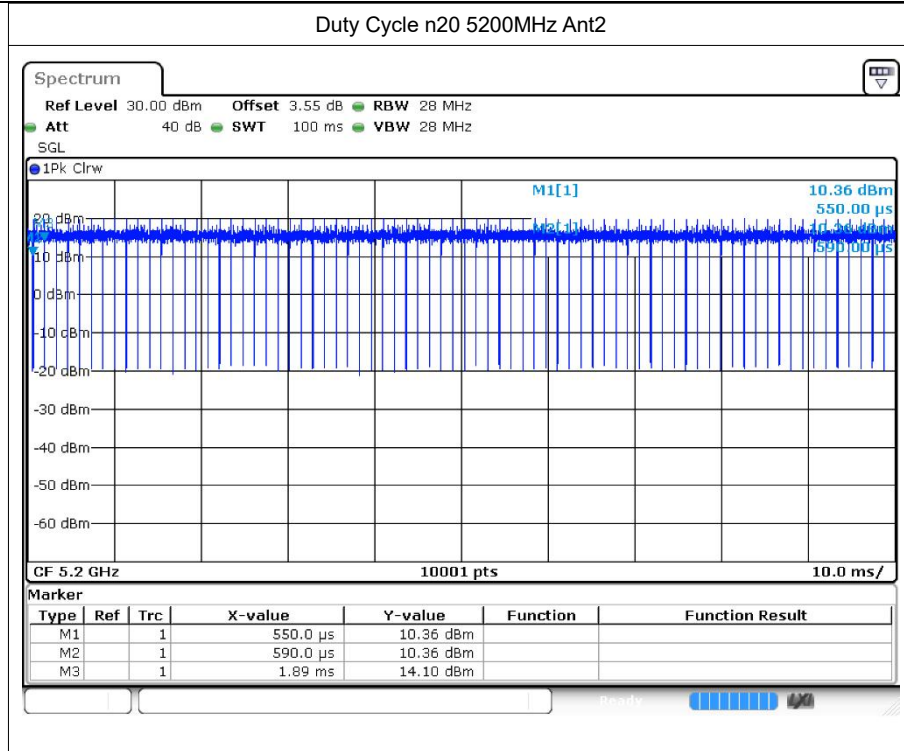


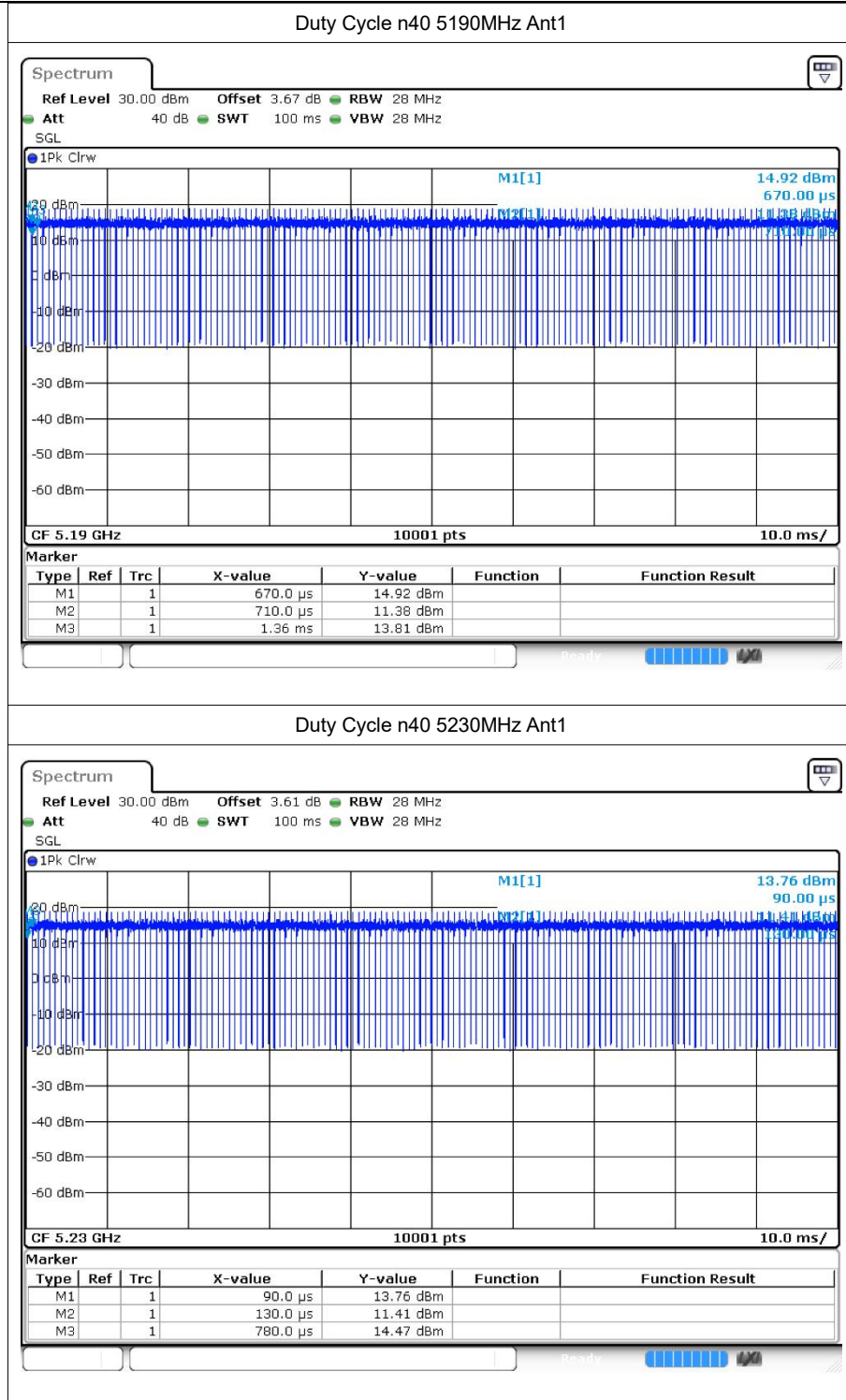
Duty Cycle n20 5180MHz Ant2



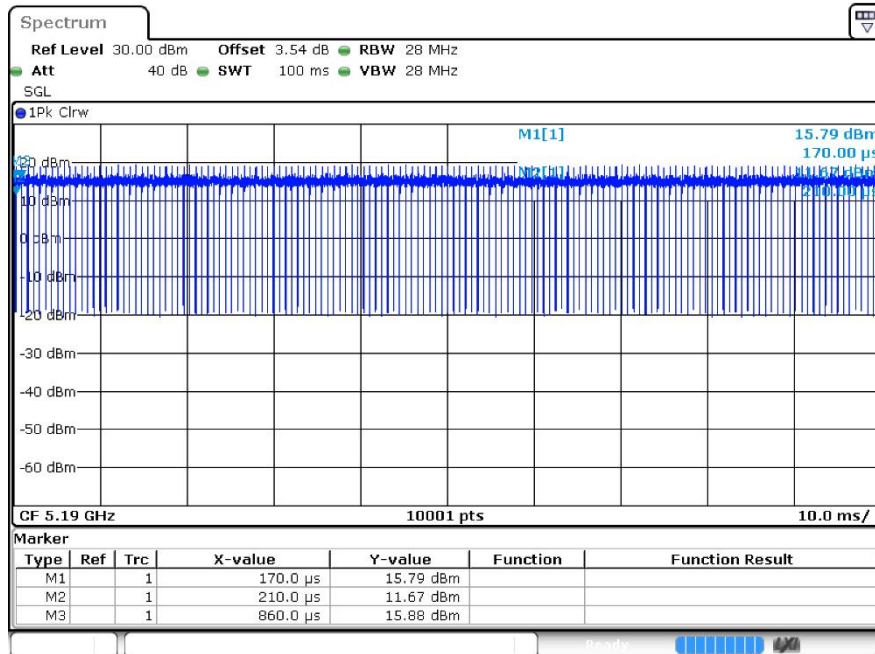
Duty Cycle n20 5200MHz Ant2



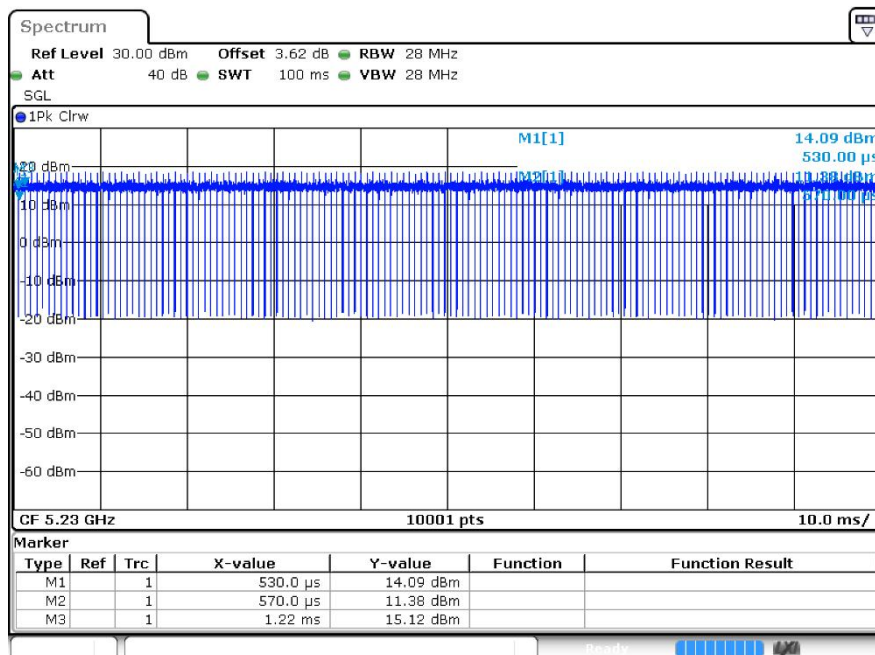




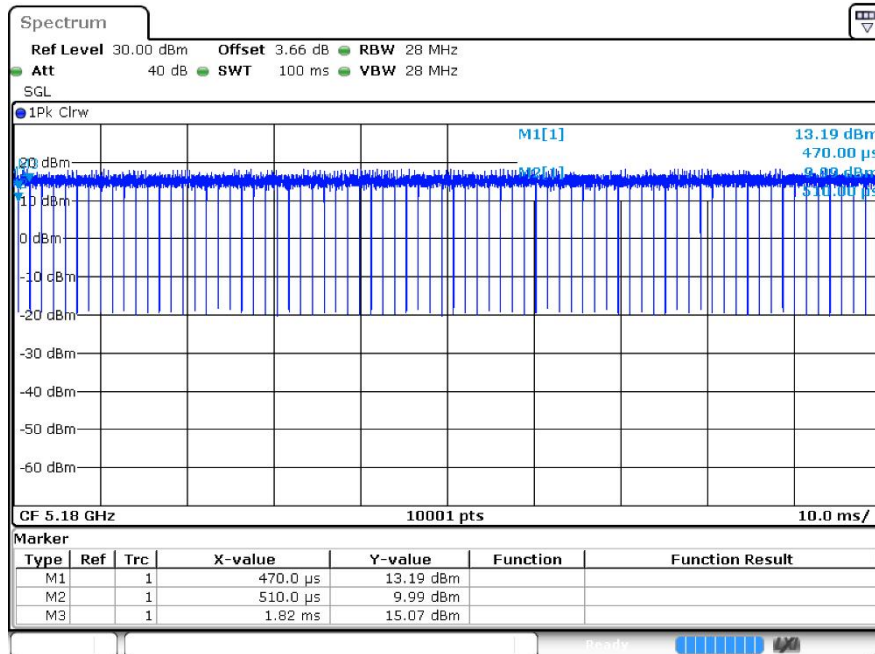
Duty Cycle n40 5190MHz Ant2



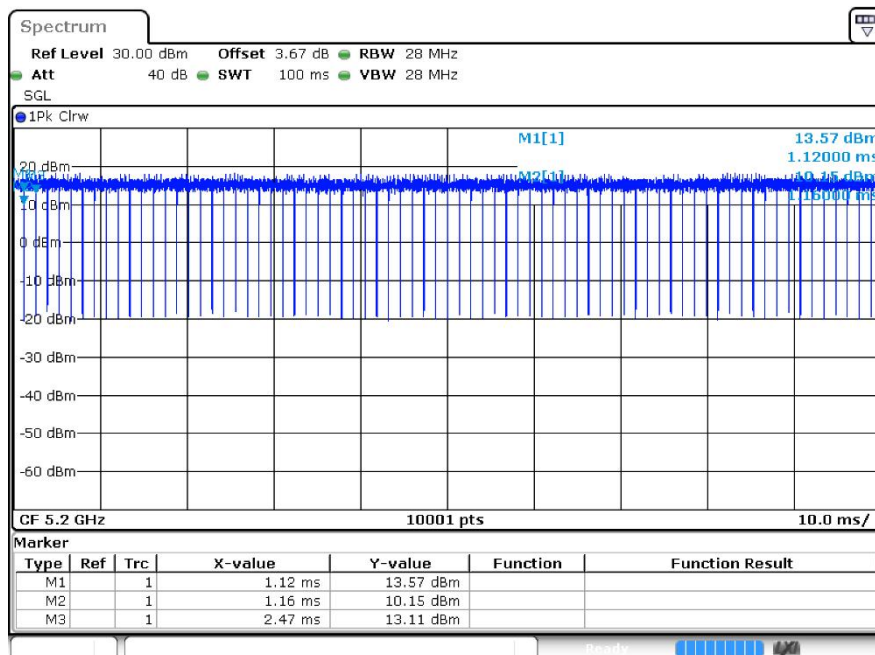
Duty Cycle n40 5230MHz Ant2

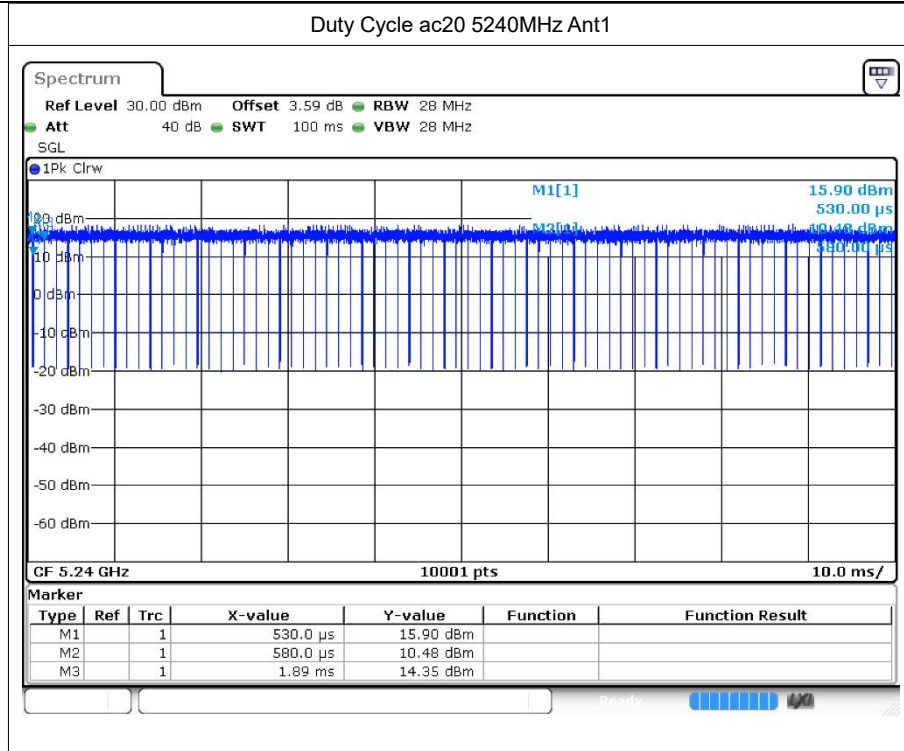


Duty Cycle ac20 5180MHz Ant1

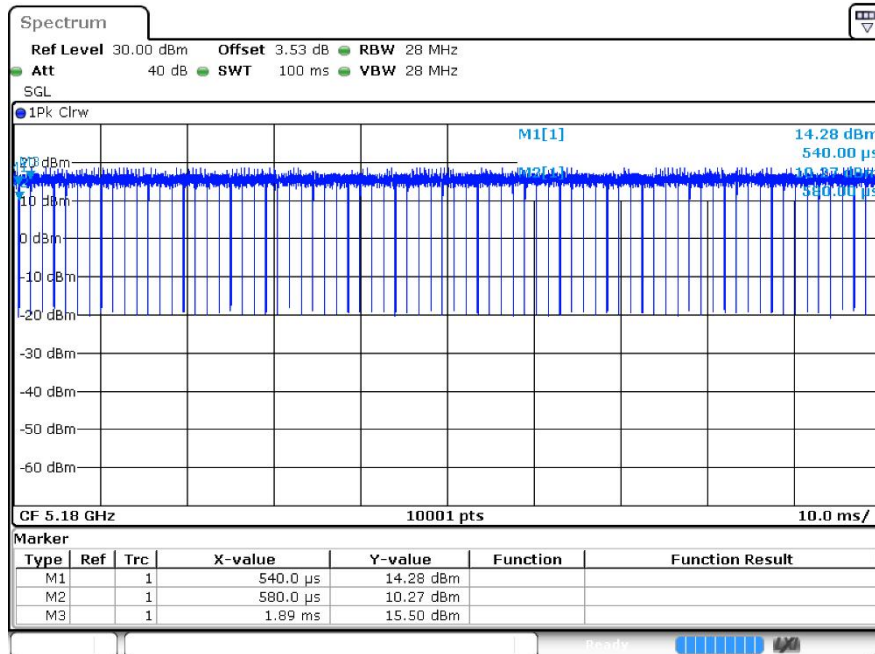


Duty Cycle ac20 5200MHz Ant1

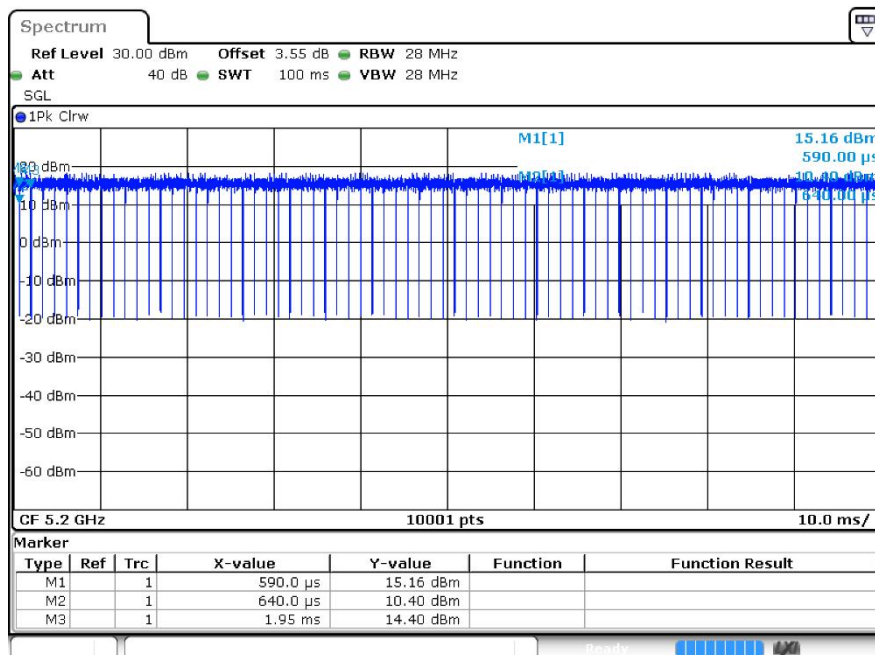


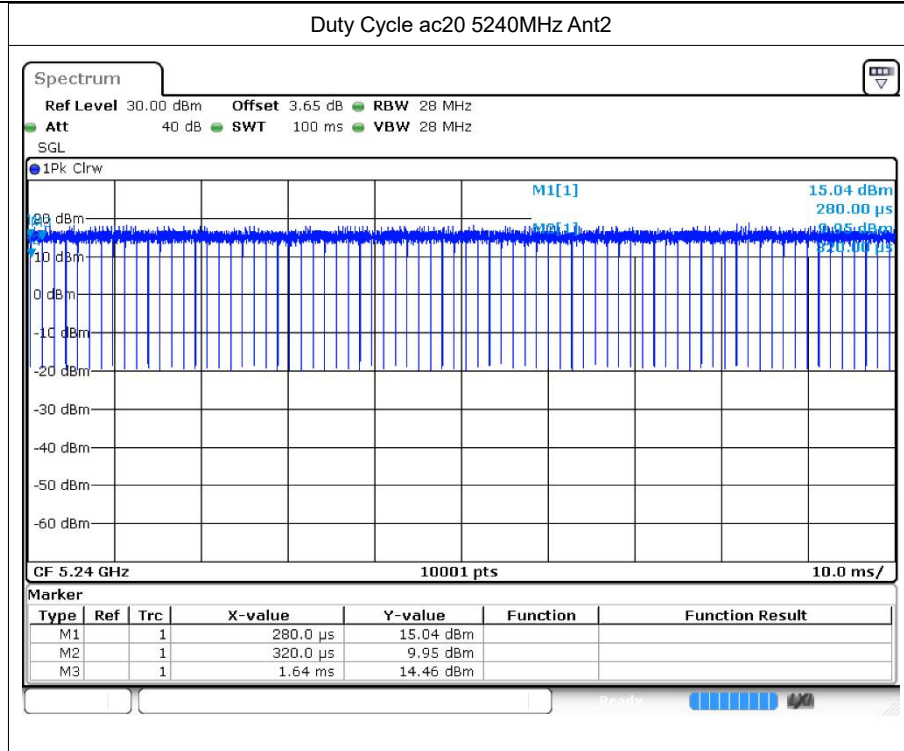


Duty Cycle ac20 5180MHz Ant2

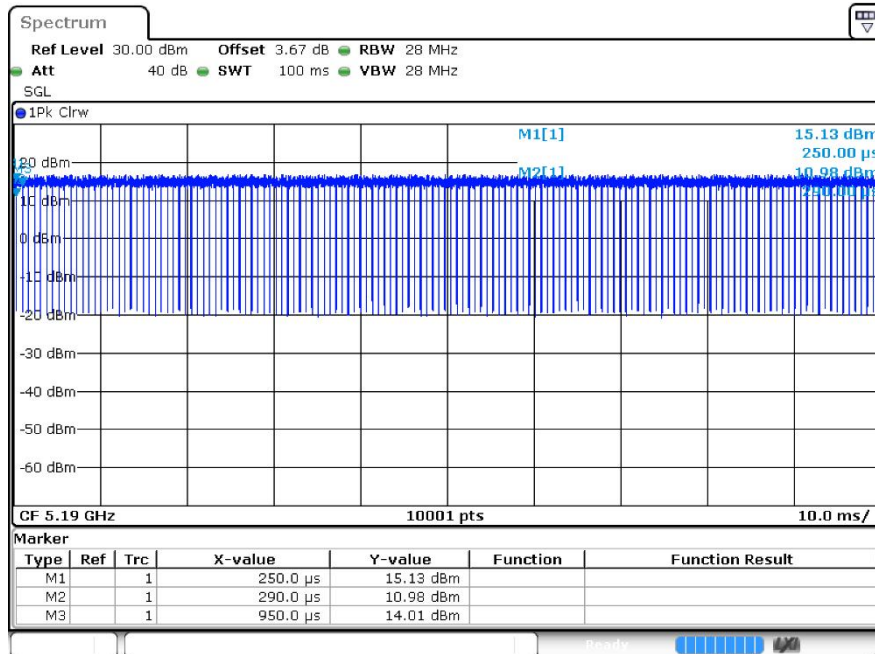


Duty Cycle ac20 5200MHz Ant2

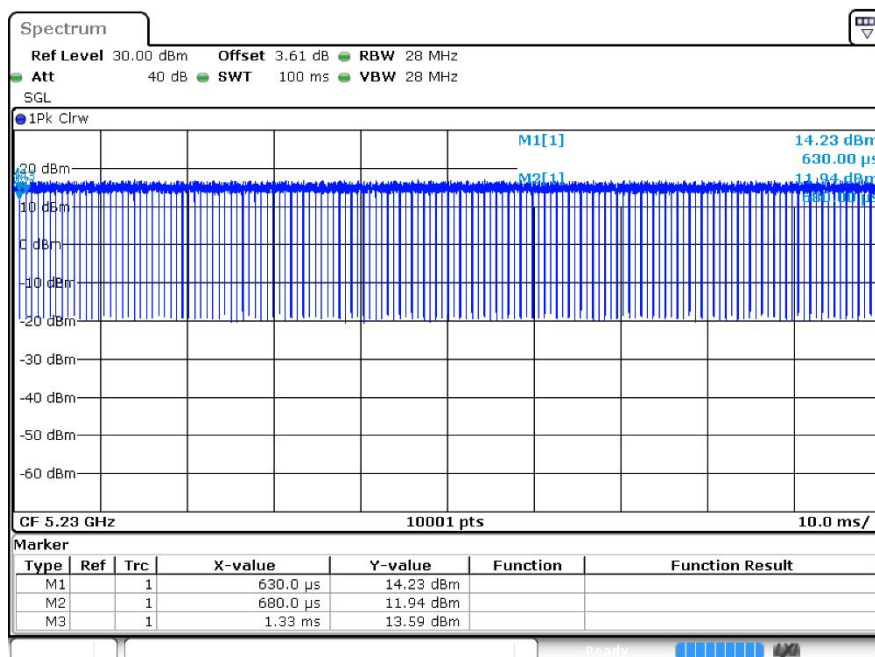




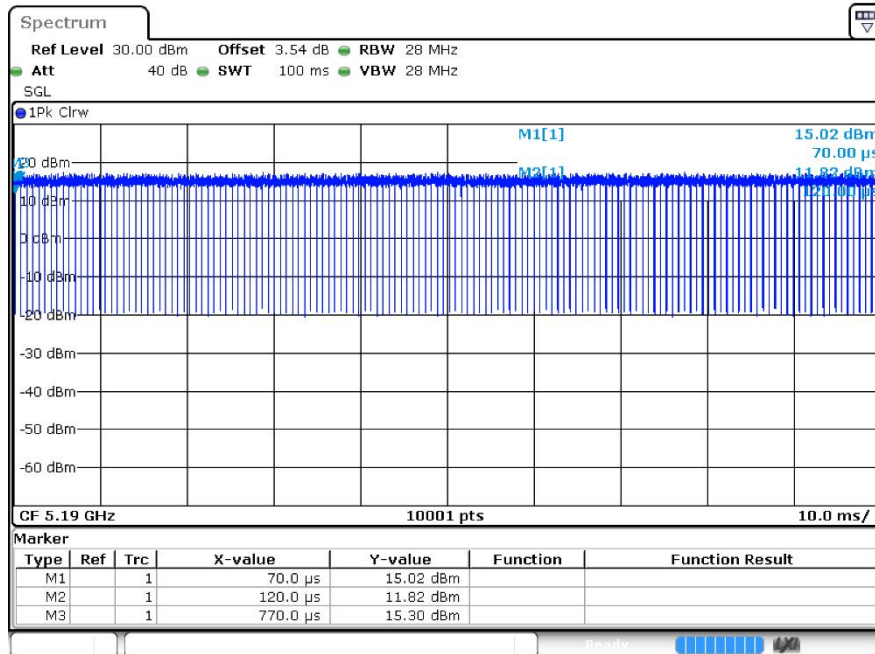
Duty Cycle ac40 5190MHz Ant1



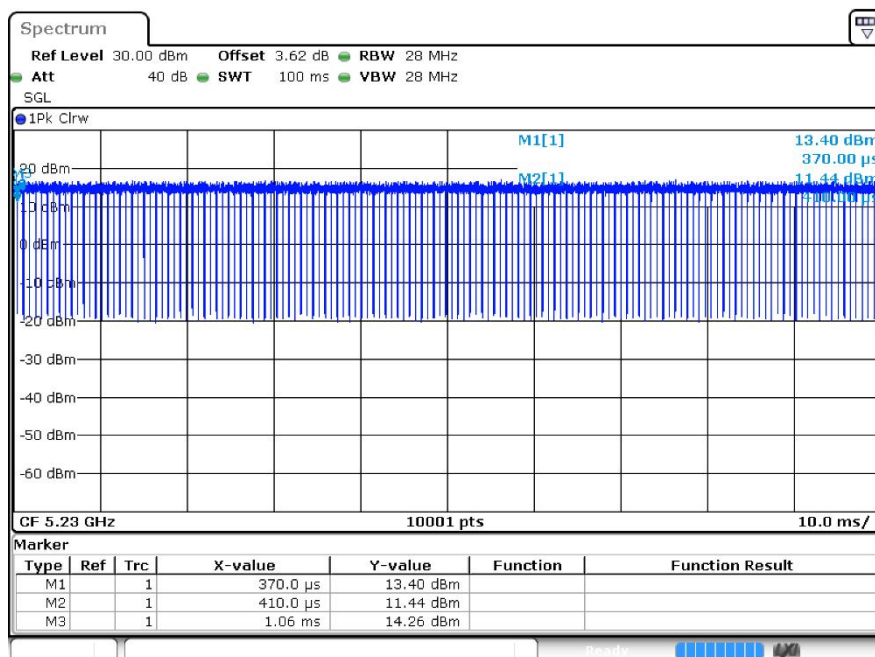
Duty Cycle ac40 5230MHz Ant1



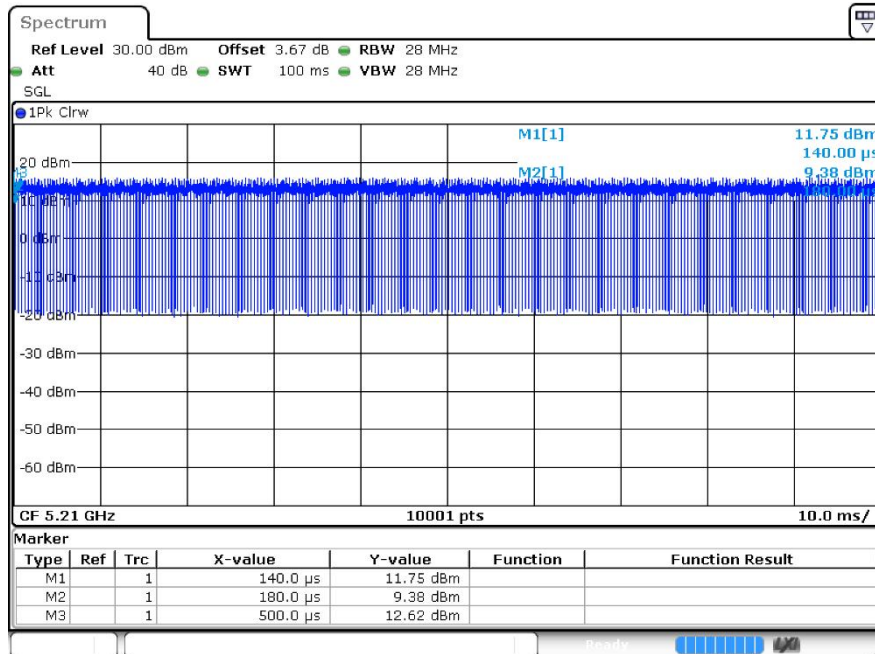
Duty Cycle ac40 5190MHz Ant2



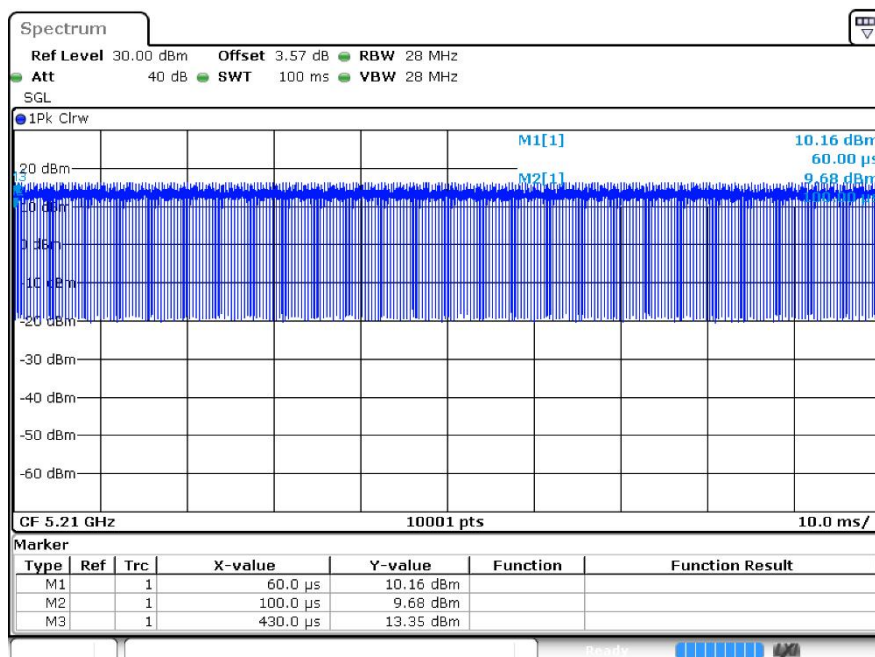
Duty Cycle ac40 5230MHz Ant2



Duty Cycle ac80 5210MHz Ant1



Duty Cycle ac80 5210MHz Ant2



2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
a	5180	Ant1	15.21	24	Pass
a	5200	Ant1	15.27	24	Pass
a	5240	Ant1	15.6	24	Pass
a	5180	Ant2	15.84	24	Pass
a	5200	Ant2	15.71	24	Pass
a	5240	Ant2	15.43	24	Pass
n20	5180	Ant1	11.09	24	Pass
n20	5180	Ant2	12.35	24	Pass
n20	5180	Sum	14.67	22.43	Pass
n20	5200	Ant1	10.84	24	Pass
n20	5200	Ant2	12.3	24	Pass
n20	5200	Sum	14.76	22.43	Pass
n20	5240	Ant1	11.35	24	Pass
n20	5240	Ant2	12.07	24	Pass
n20	5240	Sum	14.64	22.43	Pass
n40	5190	Ant1	10.99	24	Pass
n40	5190	Ant2	11.97	24	Pass
n40	5190	Sum	14.52	22.43	Pass
n40	5230	Ant1	11.04	24	Pass
n40	5230	Ant2	11.77	24	Pass
n40	5230	Sum	14.37	22.43	Pass
ac20	5180	Ant1	11	24	Pass
ac20	5180	Ant2	12.35	24	Pass
ac20	5180	Sum	14.7	22.43	Pass
ac20	5200	Ant1	10.99	24	Pass
ac20	5200	Ant2	12.2	24	Pass
ac20	5200	Sum	14.65	22.43	Pass
ac20	5240	Ant1	11.26	24	Pass
ac20	5240	Ant2	12.07	24	Pass
ac20	5240	Sum	14.61	22.43	Pass
ac40	5190	Ant1	11.04	24	Pass
ac40	5190	Ant2	12.11	24	Pass
ac40	5190	Sum	14.61	22.43	Pass
ac40	5230	Ant1	11.12	24	Pass
ac40	5230	Ant2	11.76	24	Pass
ac40	5230	Sum	14.46	22.43	Pass



ac80	5210	Ant1	10.88	24	Pass
ac80	5210	Ant2	11.52	24	Pass
ac80	5210	Sum	14.24	22.43	Pass

Note:

The duty factor has been compensated into the result.

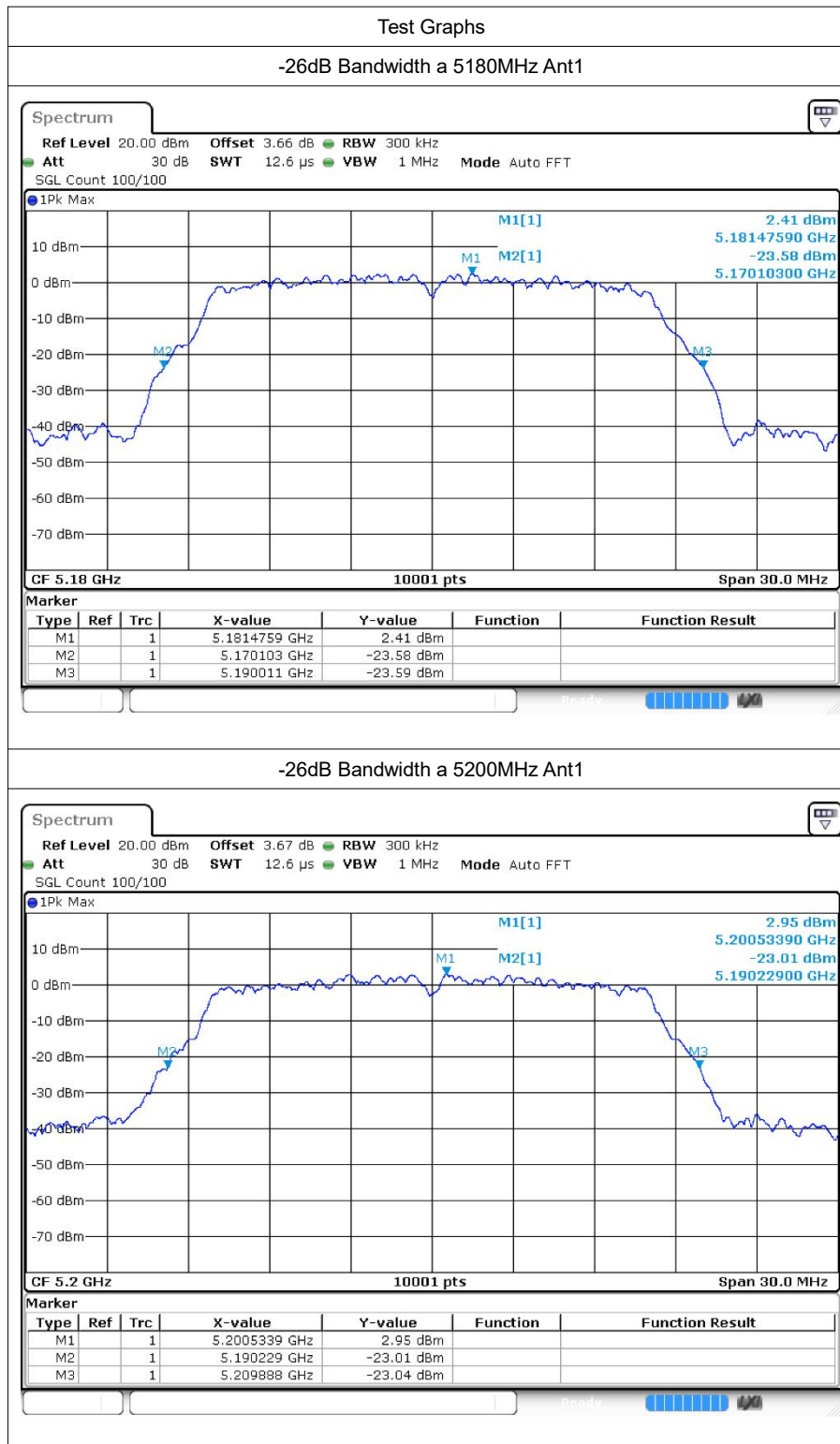
The MIMO gain of antenna is 7.57 dBi, which exceeds 6 dBi. Limit = $24 - (7.57 - 6) = 22.43$ dBm

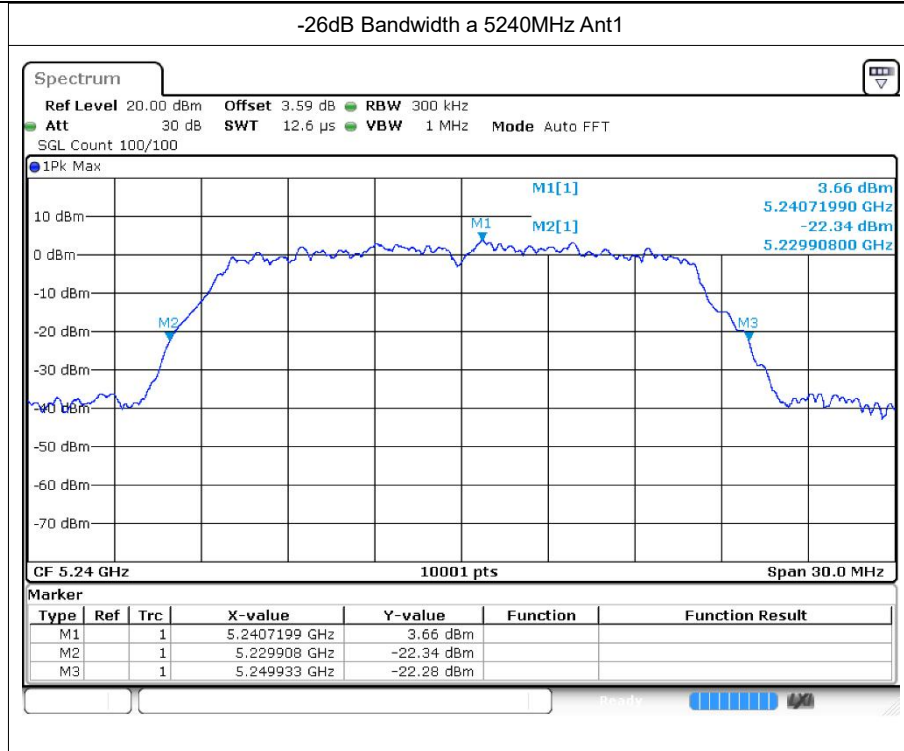
3 -26dB Bandwidth

3.1 Test Result

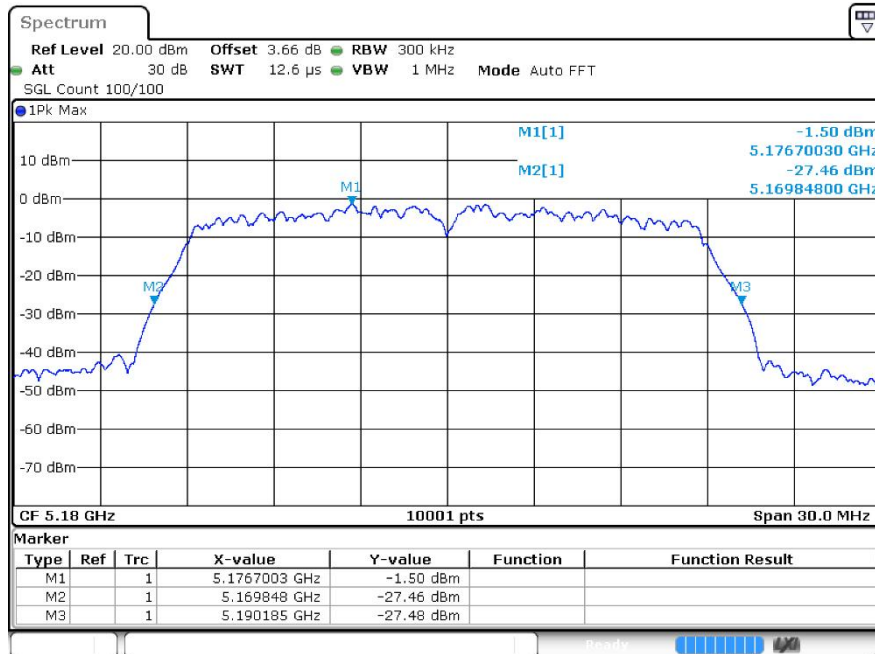
Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
a	5180	Ant1	19.908	0.5	Pass
a	5200	Ant1	19.659	0.5	Pass
a	5240	Ant1	20.025	0.5	Pass
n20	5180	Ant1	20.337	0.5	Pass
n20	5200	Ant1	20.349	0.5	Pass
n20	5240	Ant1	19.941	0.5	Pass
n40	5190	Ant1	39.51	0.5	Pass
n40	5230	Ant1	39.504	0.5	Pass
ac20	5180	Ant1	20.262	0.5	Pass
ac20	5200	Ant1	20.133	0.5	Pass
ac20	5240	Ant1	20.355	0.5	Pass
ac40	5190	Ant1	39.306	0.5	Pass
ac40	5230	Ant1	39.072	0.5	Pass
ac80	5210	Ant1	79.788	0.5	Pass
a	5180	Ant2	19.995	0.5	Pass
a	5200	Ant2	19.665	0.5	Pass
a	5240	Ant2	19.734	0.5	Pass
n20	5180	Ant2	19.677	0.5	Pass
n20	5200	Ant2	20.133	0.5	Pass
n20	5240	Ant2	19.941	0.5	Pass
n40	5190	Ant2	39.048	0.5	Pass
n40	5230	Ant2	39.03	0.5	Pass
ac20	5180	Ant2	19.32	0.5	Pass
ac20	5200	Ant2	19.908	0.5	Pass
ac20	5240	Ant2	19.749	0.5	Pass
ac40	5190	Ant2	39.468	0.5	Pass
ac40	5230	Ant2	39.024	0.5	Pass
ac80	5210	Ant2	78.084	0.5	Pass

3.2 Test Graphs

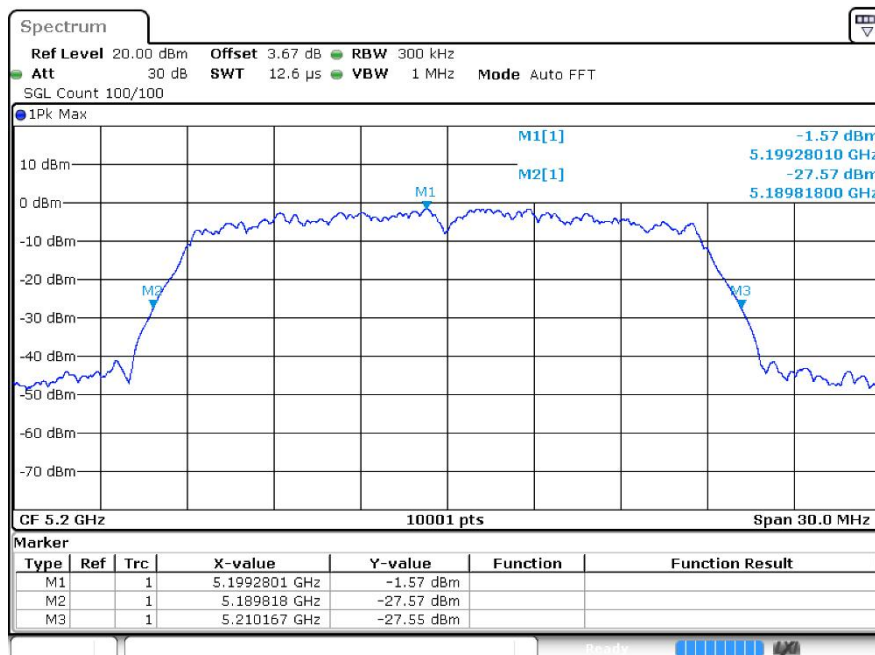


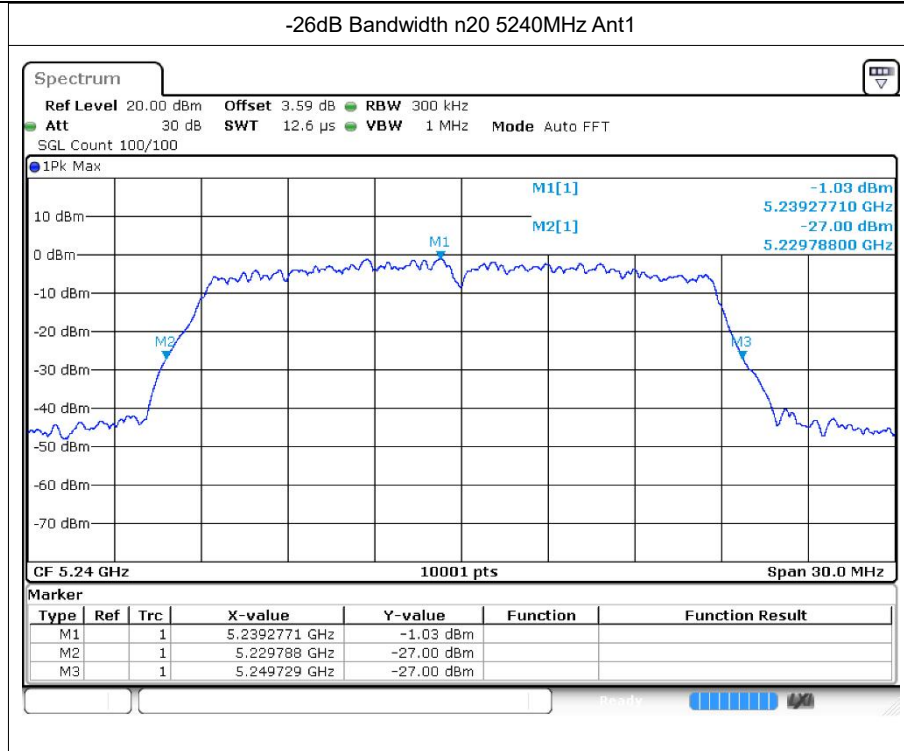


-26dB Bandwidth n20 5180MHz Ant1

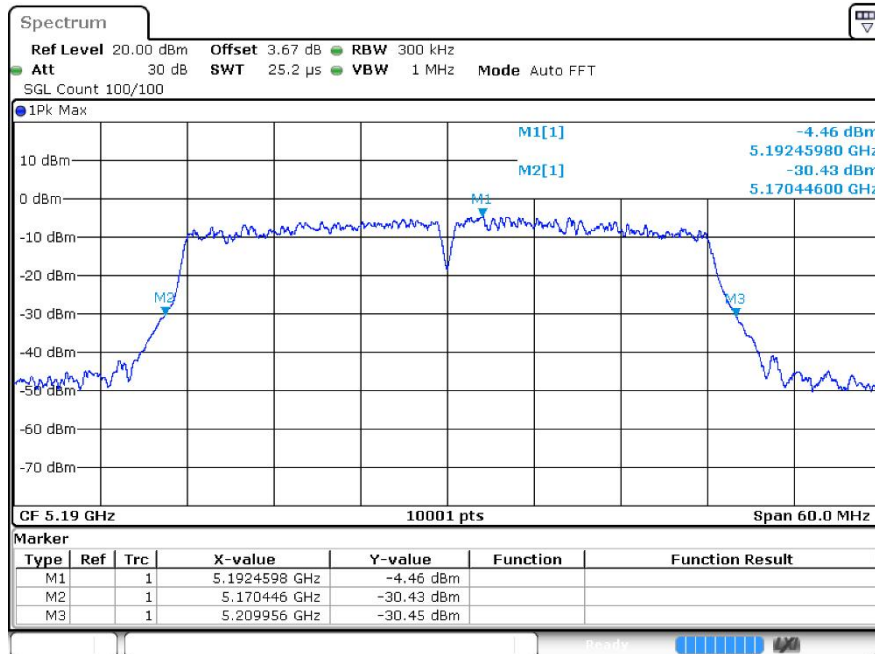


-26dB Bandwidth n20 5200MHz Ant1

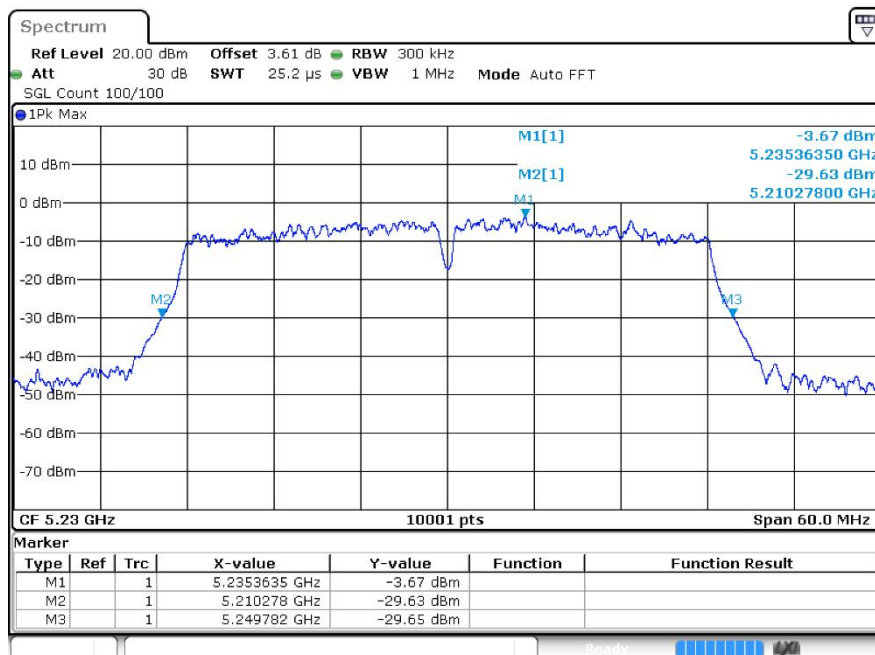




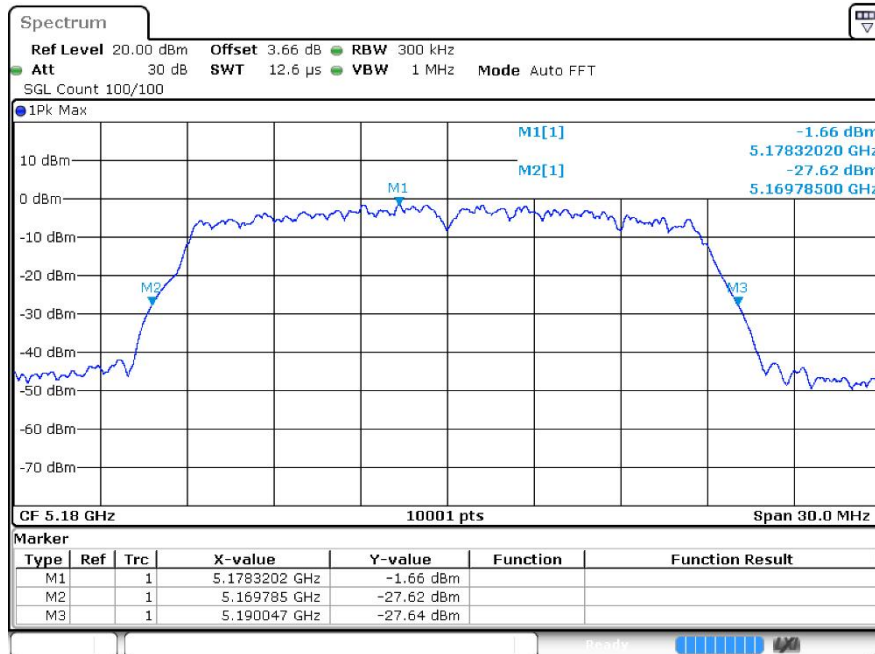
-26dB Bandwidth n40 5190MHz Ant1



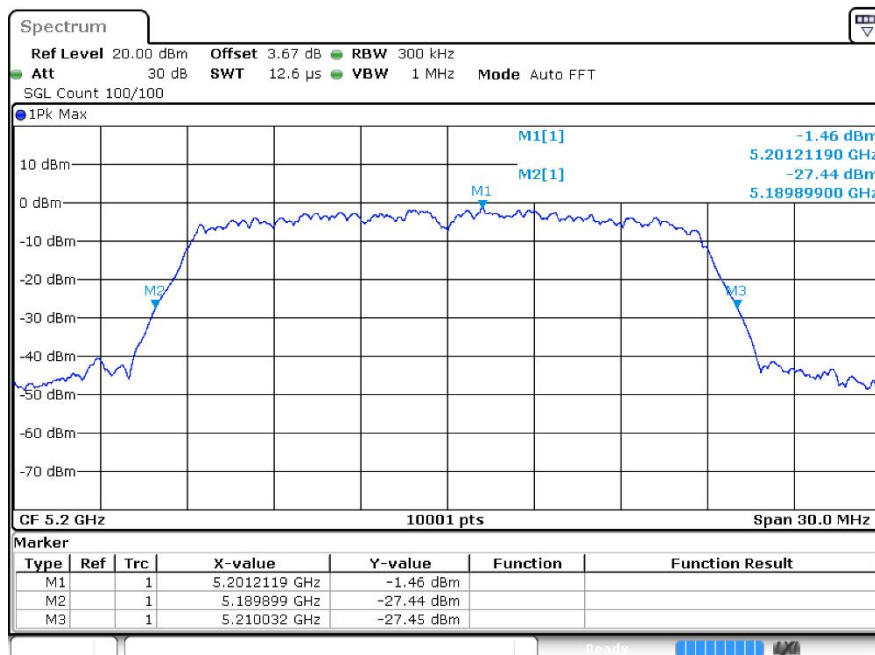
-26dB Bandwidth n40 5230MHz Ant1

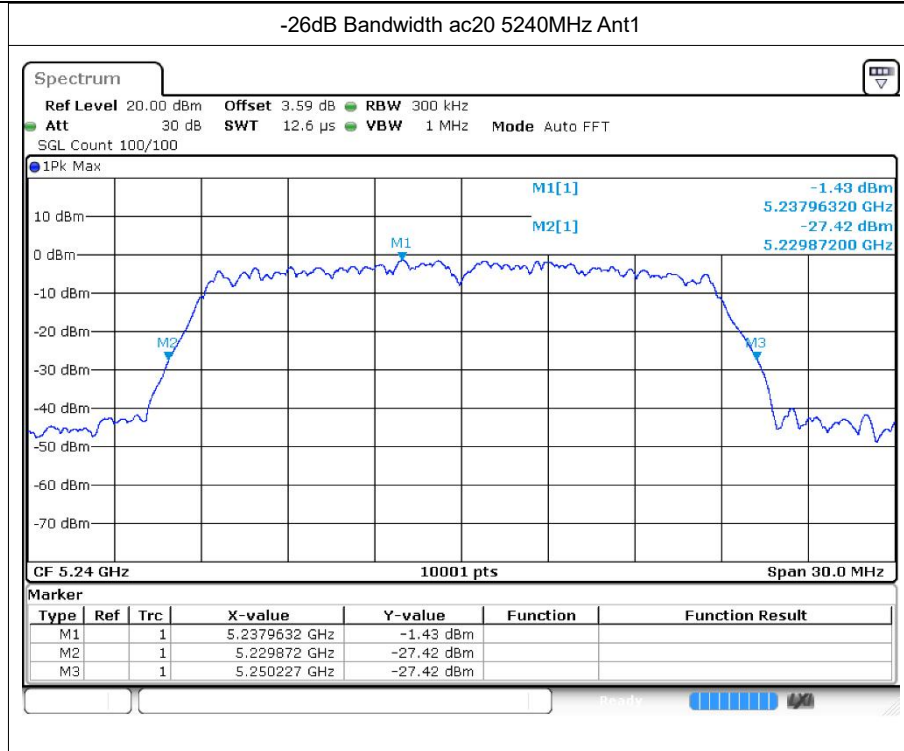


-26dB Bandwidth ac20 5180MHz Ant1

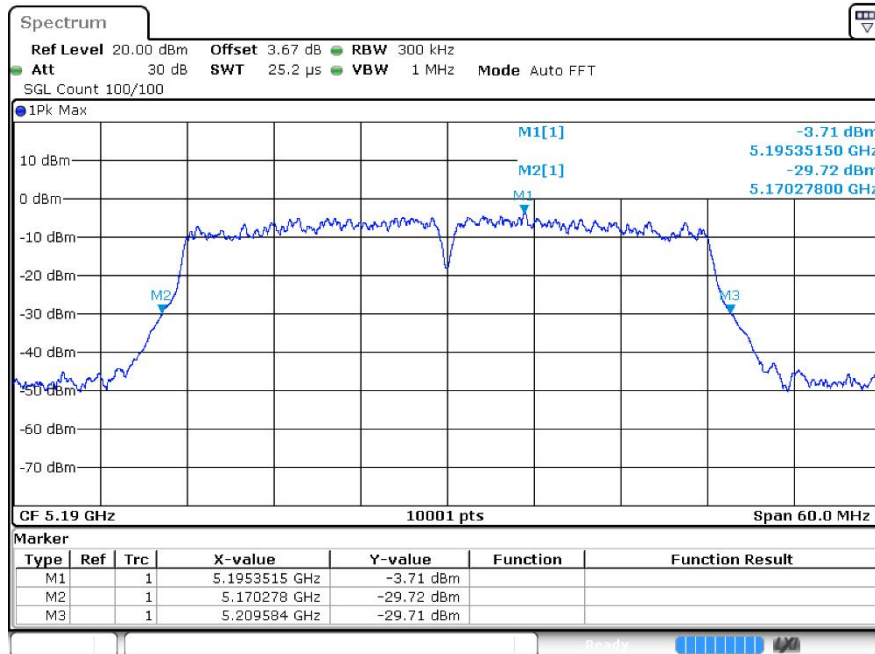


-26dB Bandwidth ac20 5200MHz Ant1





-26dB Bandwidth ac40 5190MHz Ant1



-26dB Bandwidth ac40 5230MHz Ant1

