



Appendix D

RF Test Data for 5.2GWIFI(Conducted Measurement)

Product Name: Mini PC

Trade Mark: Blackview

Test Model: MP200

Environmental Conditions

Temperature:	25.8° C
Relative Humidity:	52.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



Contents

Page

COVER PAGE

1	Duty Cycle.....	3
1.1	Test Result	3
1.2	Test Graphs.....	5
2	Maximum Conducted Output Power	29
2.1	Test Result	29
3	-26dB Bandwidth.....	31
3.1	Test Result	31
3.2	Test Graphs.....	33
4	Occupied Channel Bandwidth	59
4.1	Test Result	59
4.2	Test Graphs.....	61
5	Maximum Power Spectral Density Level	87
5.1	Test Result	87
5.2	Test Graphs.....	89
6	Frequency Stability.....	113
6.1	Test Result	113
7	Conducted RF Spurious Emission.....	123
7.1	Test Result	123
7.2	Test Graphs.....	125
8	Restrict Band	151
8.1	Test Result	151
8.2	Test Graphs.....	159



1 Duty Cycle

1.1 Test Result

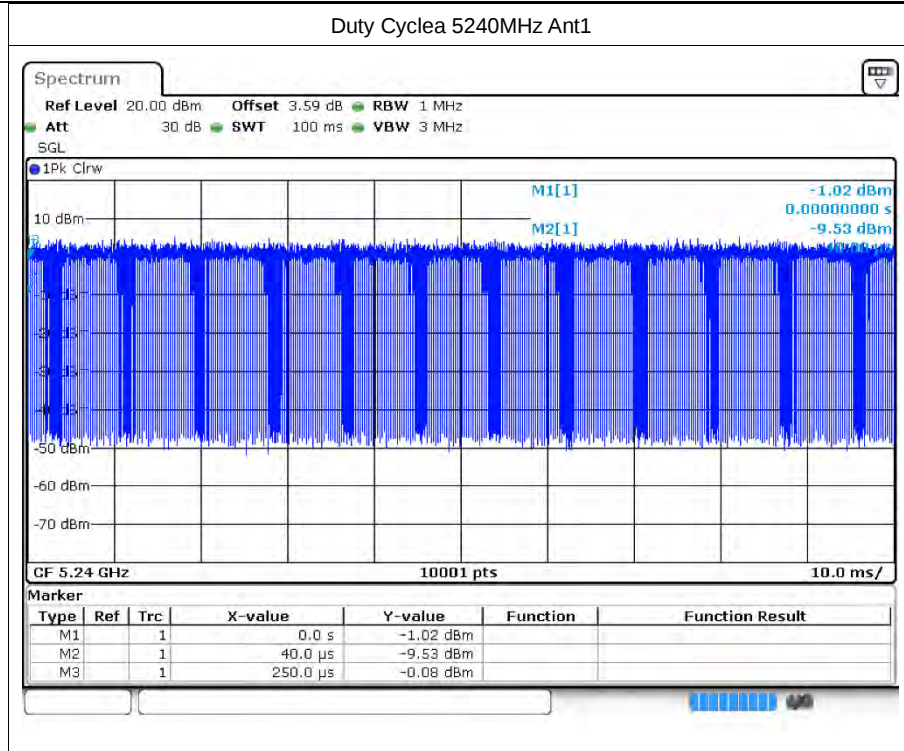
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
a	5180	Ant1	86.94	0.61	4.76
a	5200	Ant1	87.06	0.6	4.55
a	5240	Ant1	86.63	0.62	4.76
a	5180	Ant2	87.03	0.6	4.76
a	5200	Ant2	86.91	0.61	4.76
a	5240	Ant2	86.64	0.62	4.76
n20	5180	Ant1	92.88	0.32	2.22
n20	5200	Ant1	93	0.32	2.22
n20	5240	Ant1	93.02	0.31	2.22
n20	5180	Ant2	93.03	0.31	2.22
n20	5200	Ant2	93.06	0.31	2.22
n20	5240	Ant2	93.07	0.31	2.22
n40	5190	Ant1	92.94	0.32	2.27
n40	5230	Ant1	92.95	0.32	2.27
n40	5190	Ant2	91.31	0.39	2.27
n40	5230	Ant2	91.29	0.4	2.27
ac20	5180	Ant1	86.71	0.62	4.35
ac20	5200	Ant1	87.09	0.6	4.55
ac20	5240	Ant1	87.05	0.6	4.35
ac20	5180	Ant2	87.09	0.6	4.55
ac20	5200	Ant2	87.16	0.6	4.55
ac20	5240	Ant2	87.08	0.6	4.35
ac40	5190	Ant1	87.32	0.59	4.35
ac40	5230	Ant1	87.32	0.59	4.35
ac40	5190	Ant2	84.46	0.73	4.55
ac40	5230	Ant2	84.43	0.73	4.55
ac80	5210	Ant1	87.47	0.58	4.35
ac80	5210	Ant2	82.89	0.81	4.55
ax20	5180	Ant1	87.1	0.6	4.35
ax20	5200	Ant1	87.06	0.6	4.35
ax20	5240	Ant1	87.06	0.6	4.55
ax20	5180	Ant2	87.15	0.6	4.35
ax20	5200	Ant2	87.13	0.6	4.35
ax20	5240	Ant2	87.14	0.6	4.55
ax40	5190	Ant1	87.61	0.57	4.17
ax40	5230	Ant1	87.51	0.58	4
ax40	5190	Ant2	84.71	0.72	4.17



ax40	5230	Ant2	85.02	0.7	4.35
ax80	5210	Ant1	86.98	0.61	4.35
ax80	5210	Ant2	80.98	0.92	4.76

1.2 Test Graphs



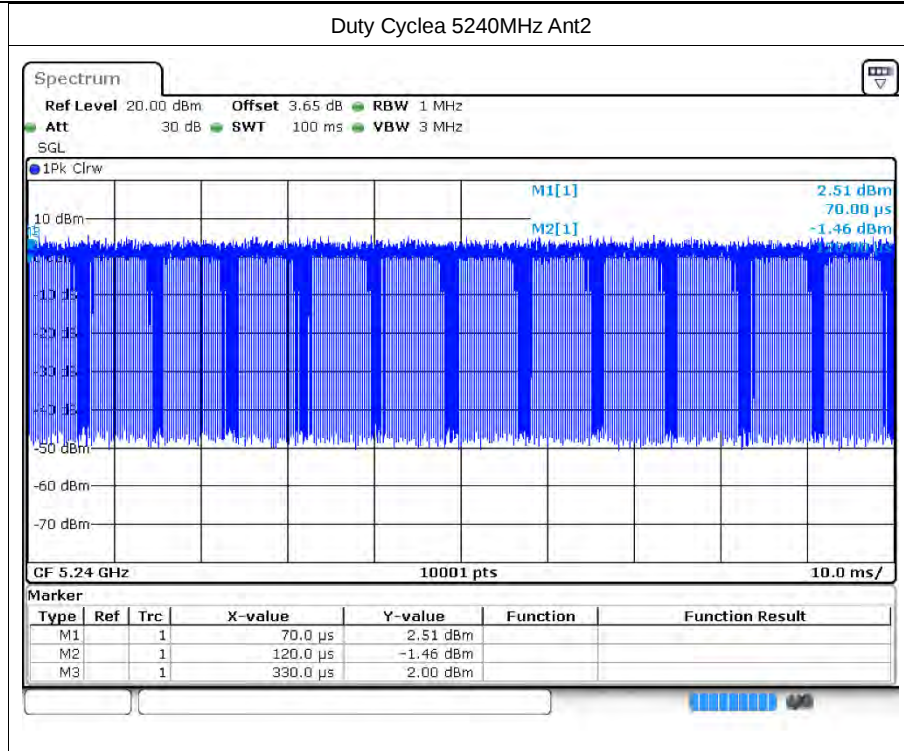


Duty Cyclea 5180MHz Ant2

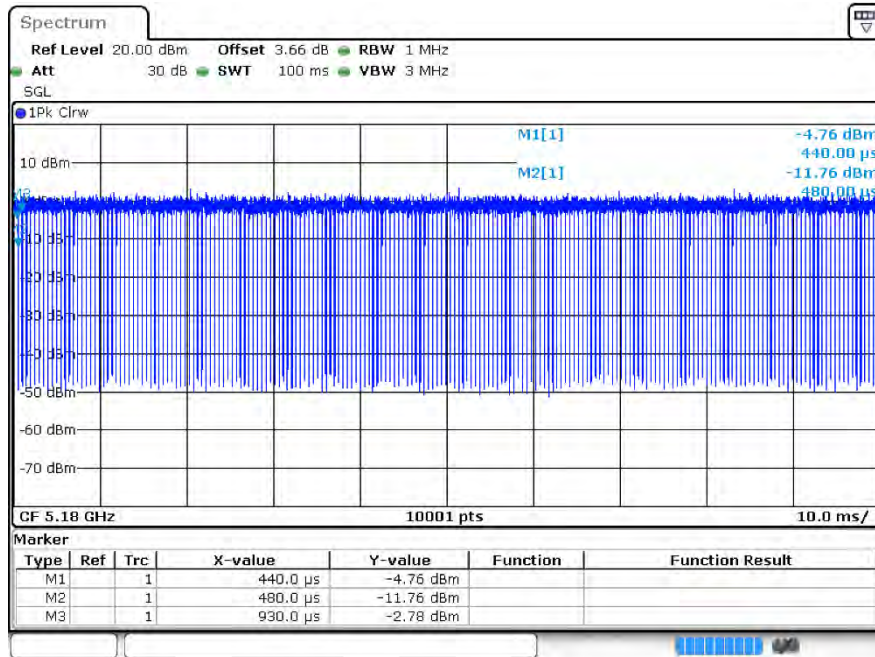


Duty Cycle a 5200MHz Ant2

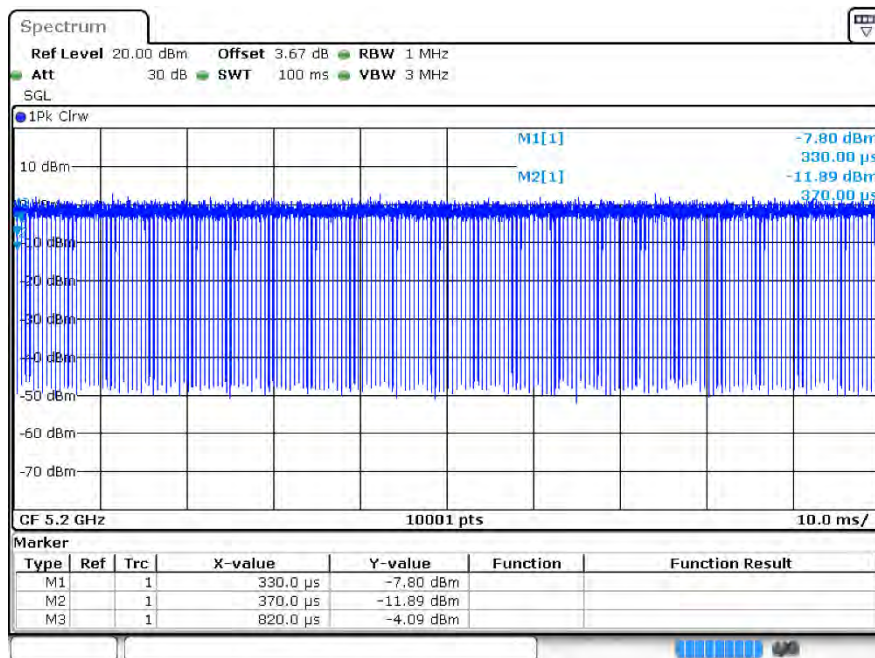


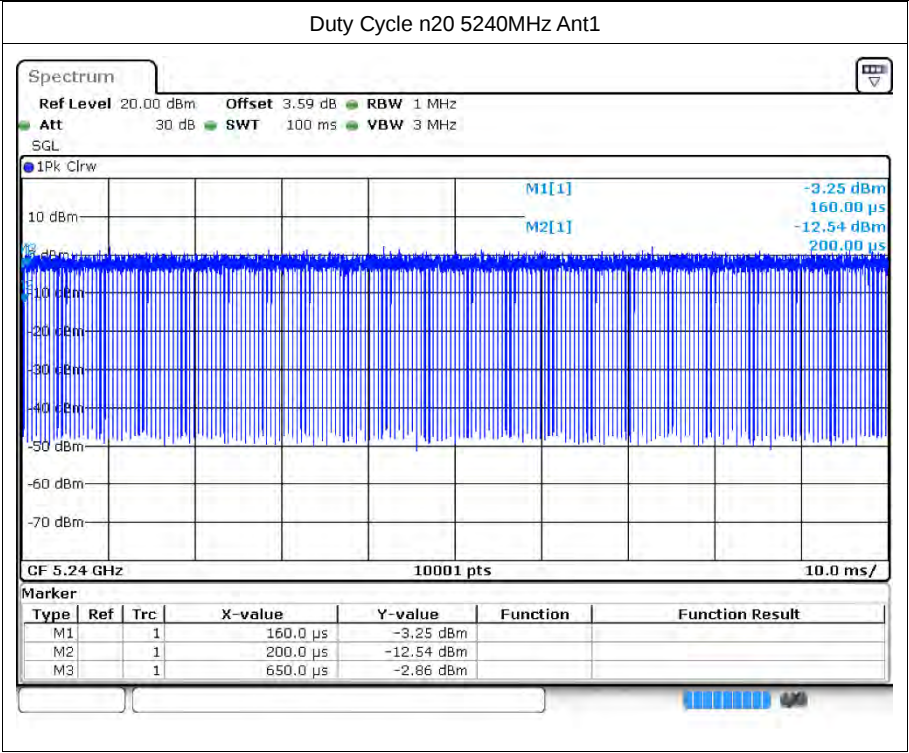


Duty Cycle n20 5180MHz Ant1

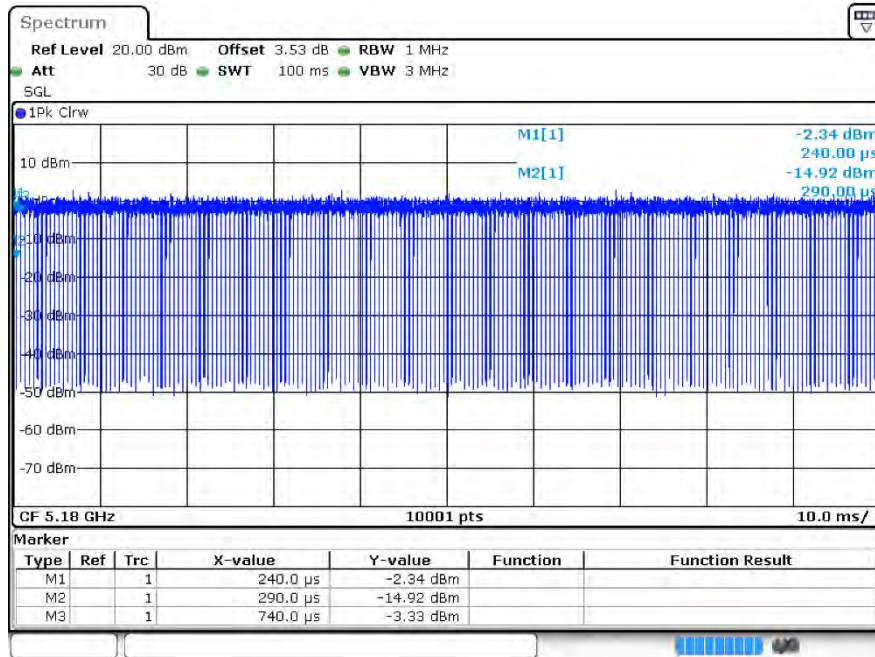


Duty Cycle n20 5200MHz Ant1

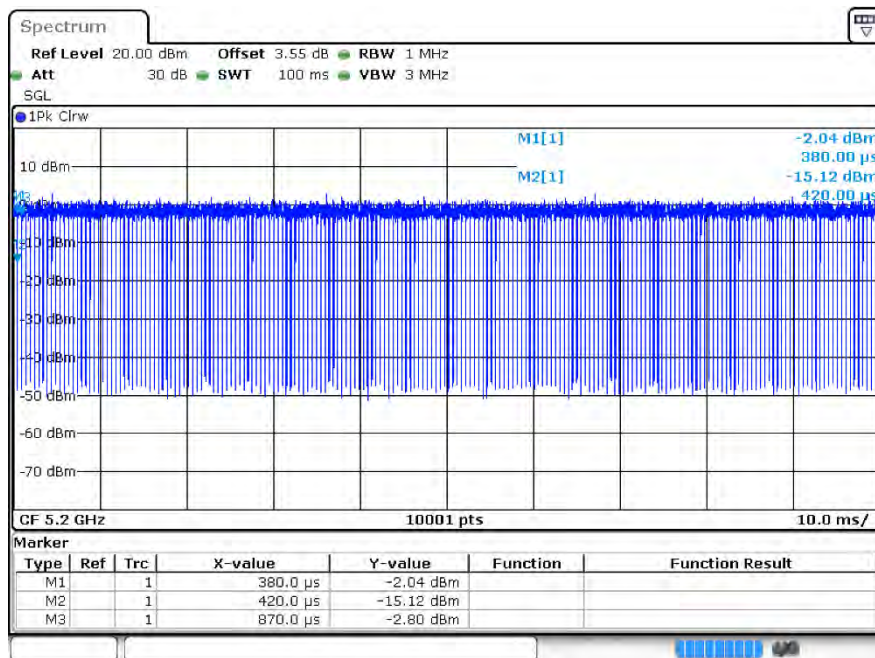


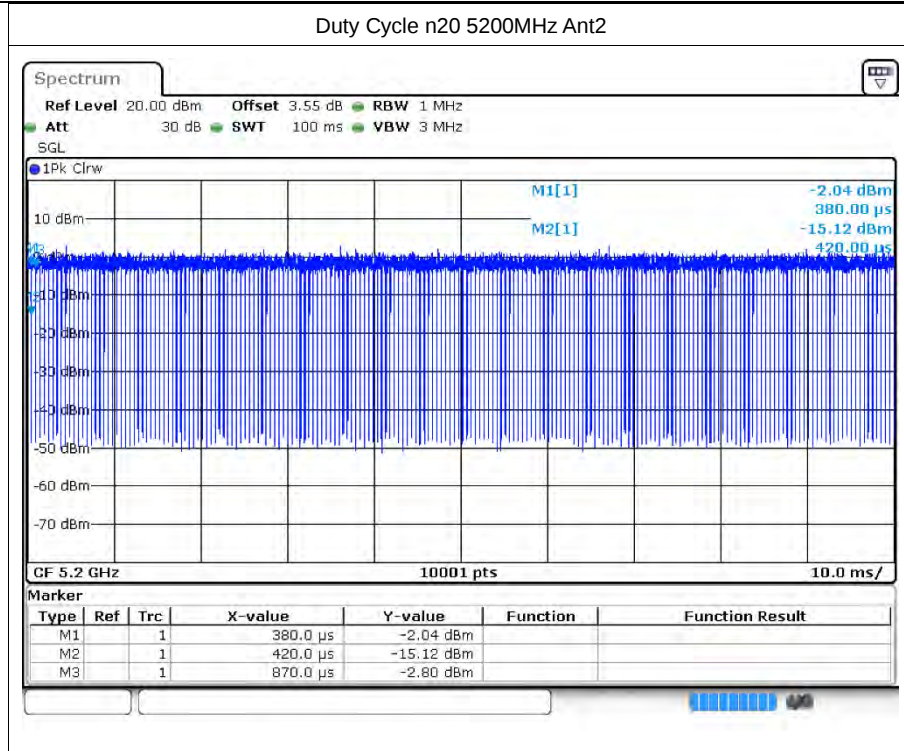


Duty Cycle n20 5180MHz Ant2

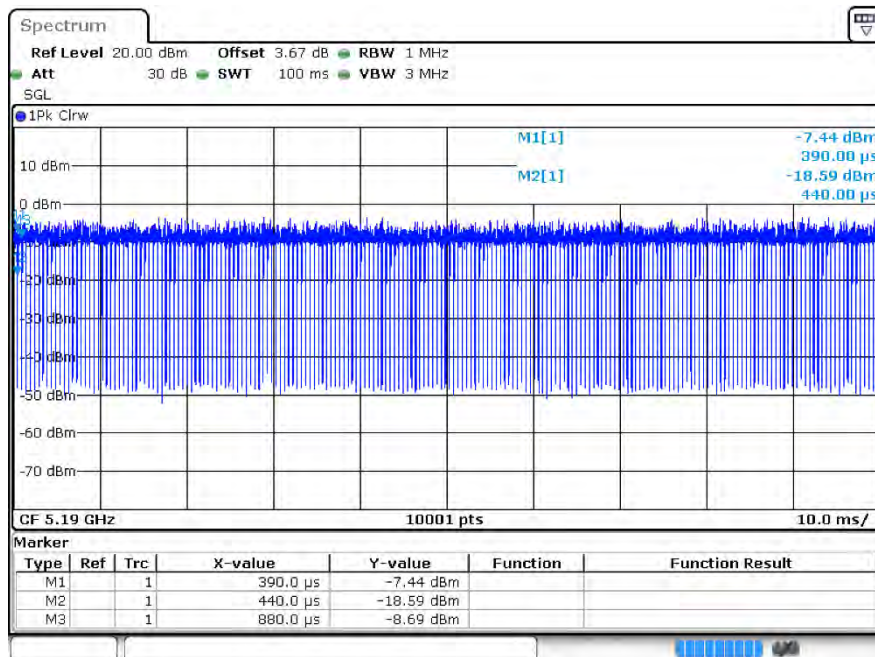


Duty Cycle n20 5200MHz Ant2

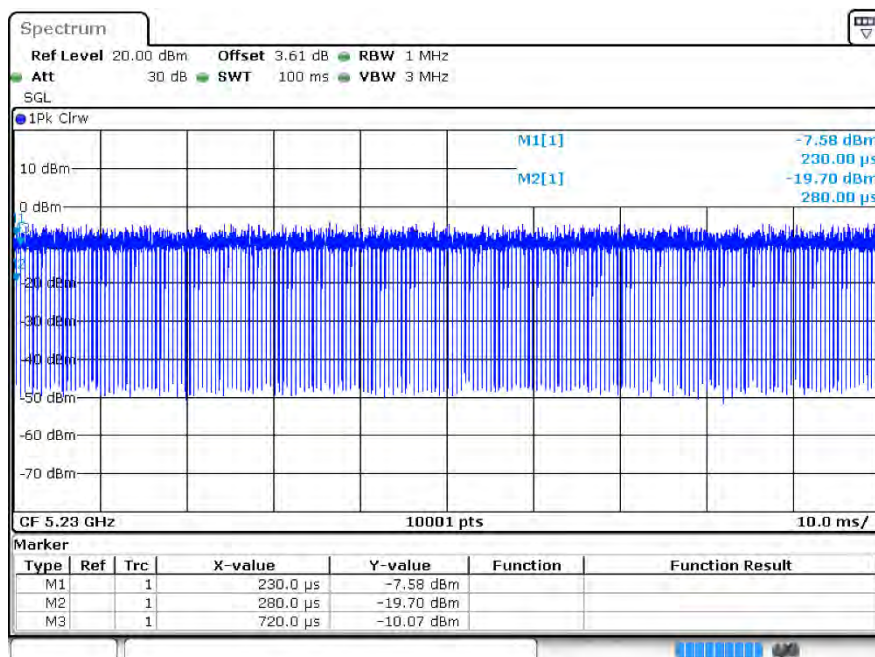




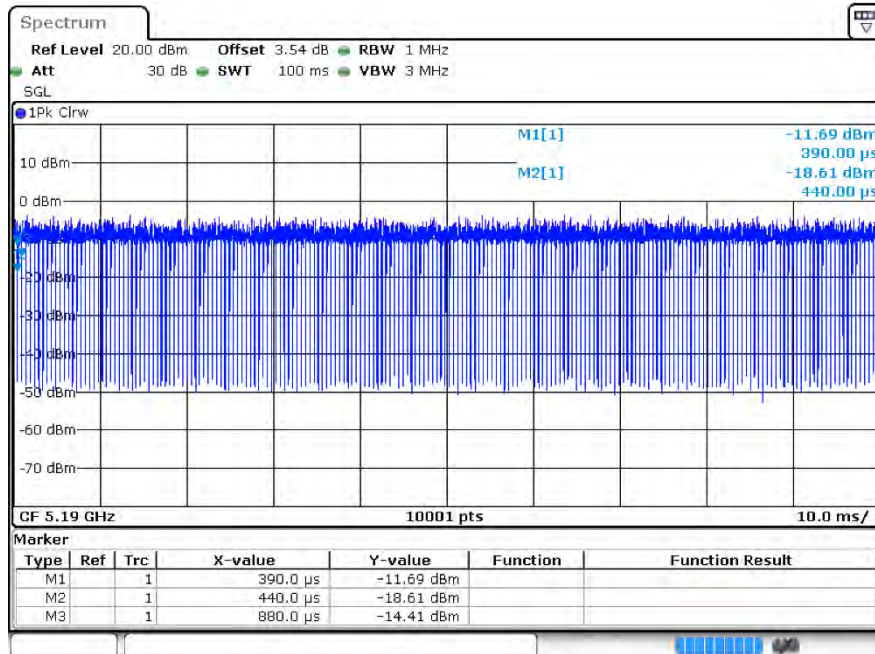
Duty Cyclen40 5190MHz Ant1



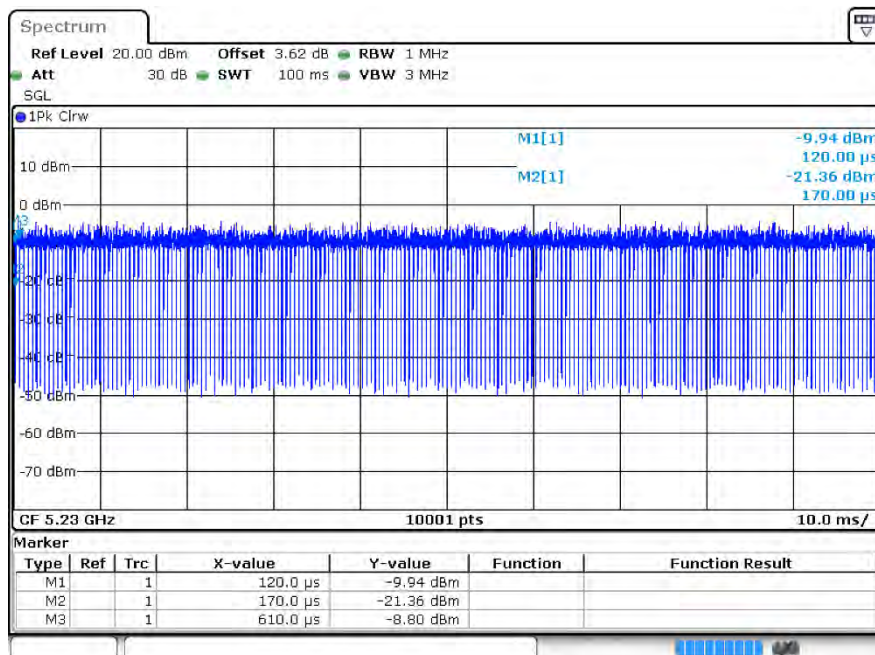
Duty Cyclen40 5230MHz Ant1



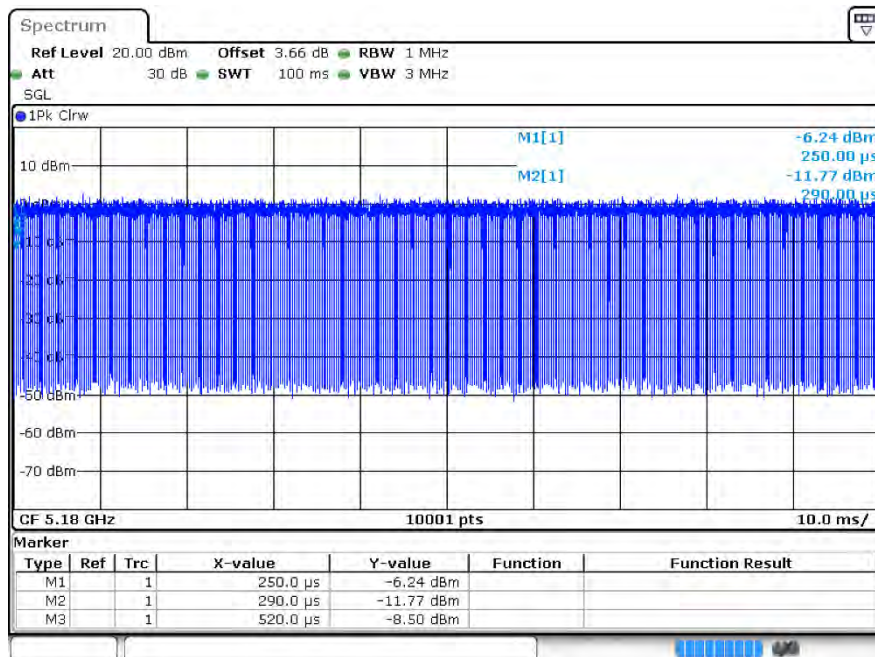
Duty Cyclen40 5190MHz Ant2



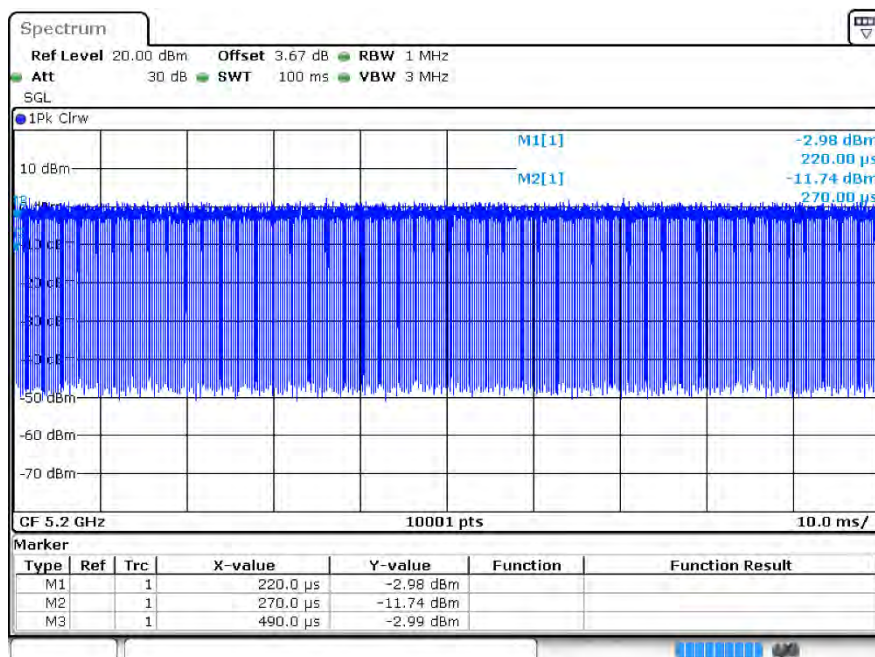
Duty Cyclen40 5230MHz Ant2

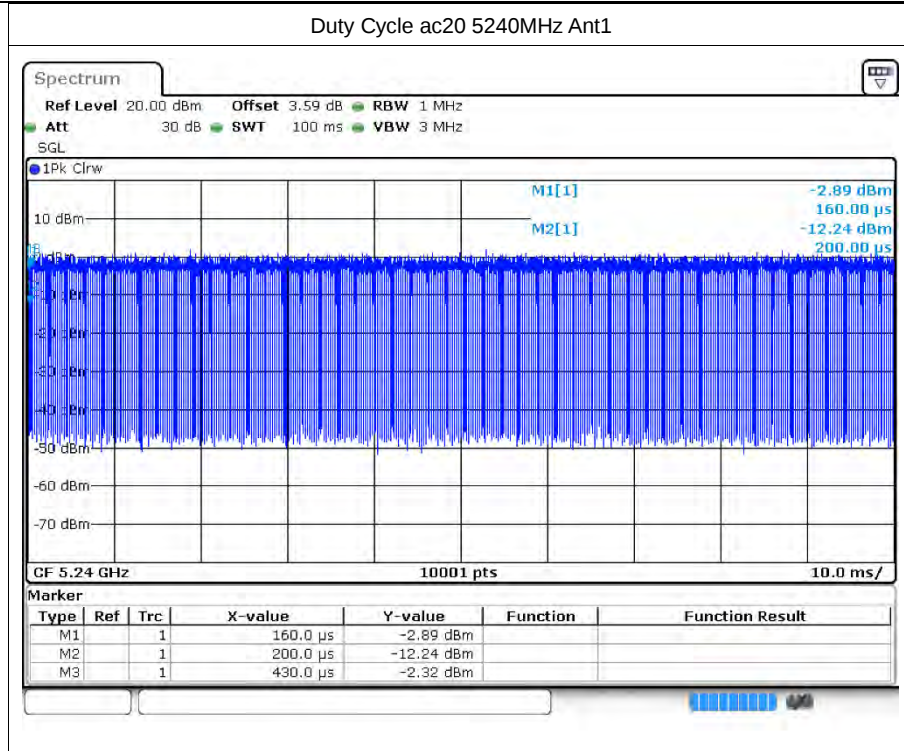


Duty Cycle ac20 5180MHz Ant1

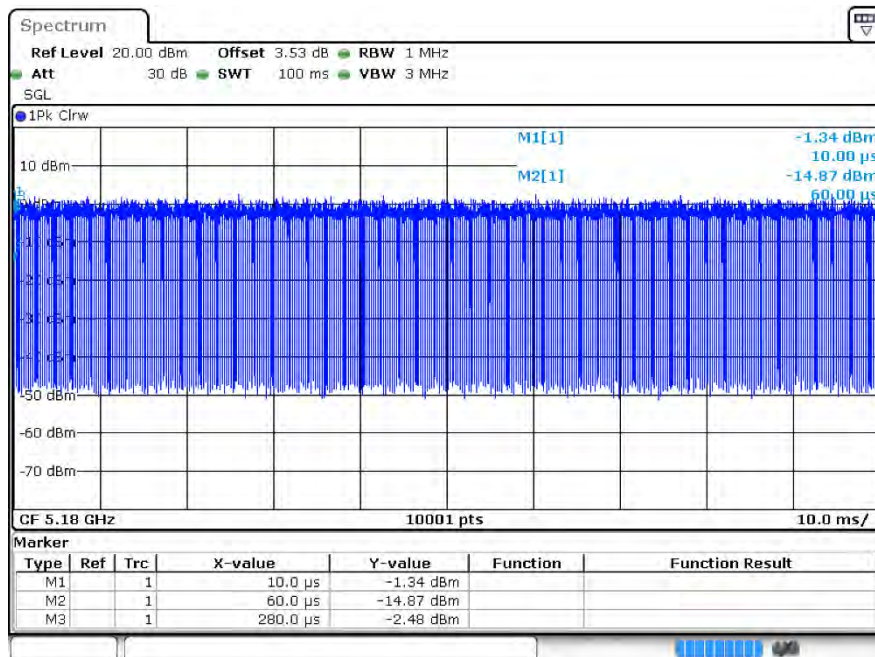


Duty Cycle ac20 5200MHz Ant1

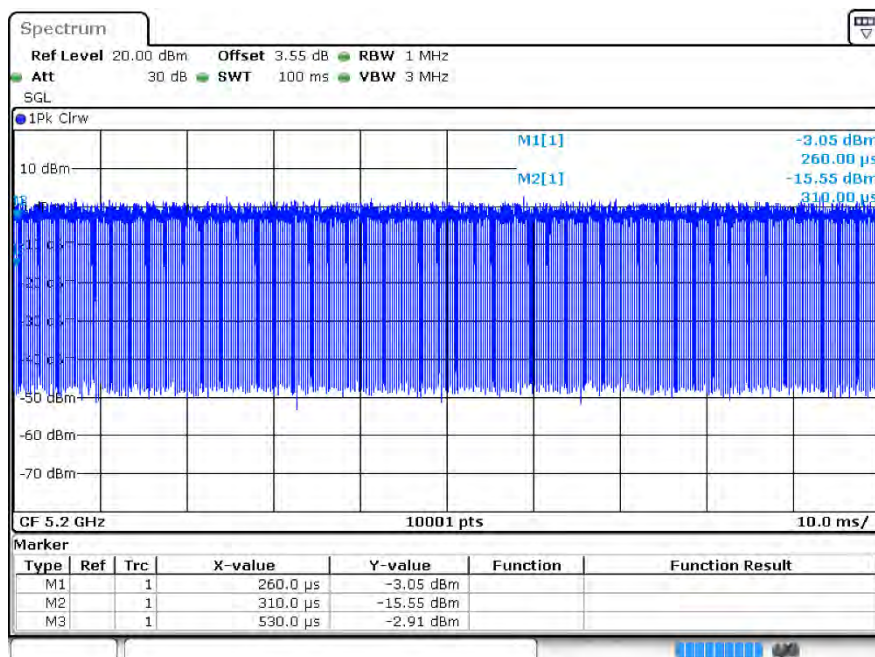


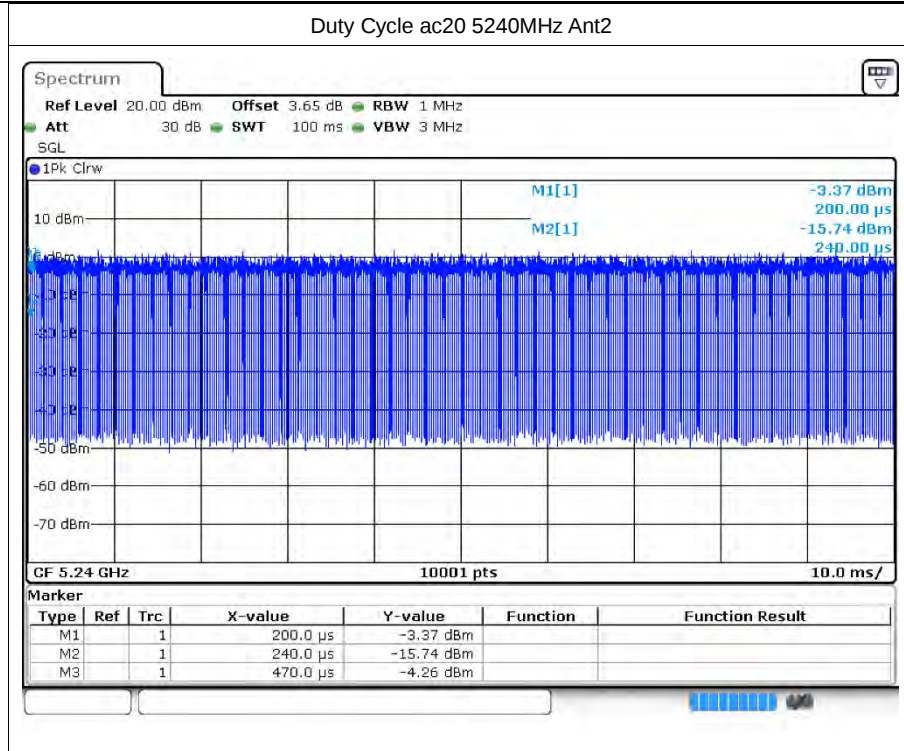


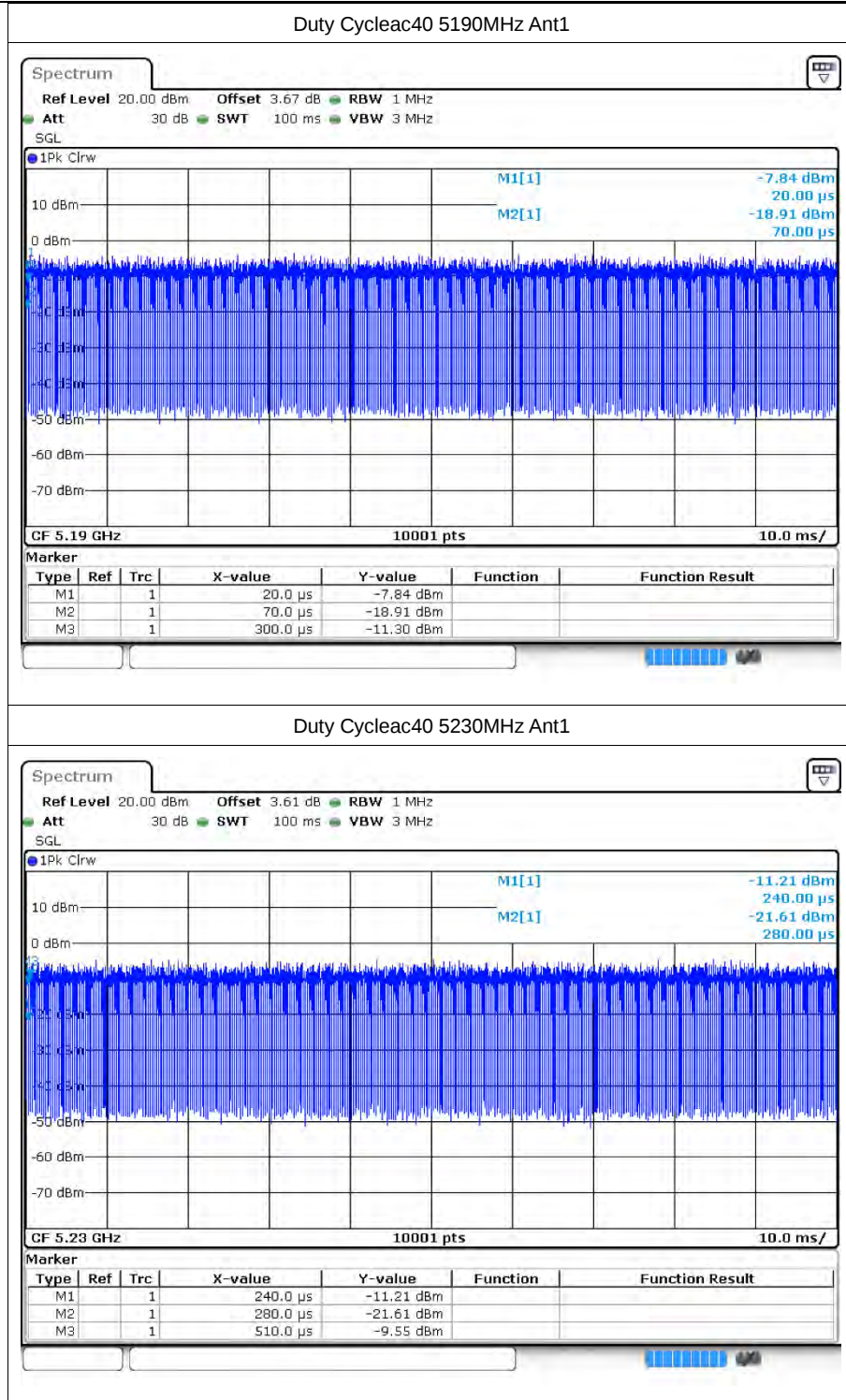
Duty Cycle ac20 5180MHz Ant2

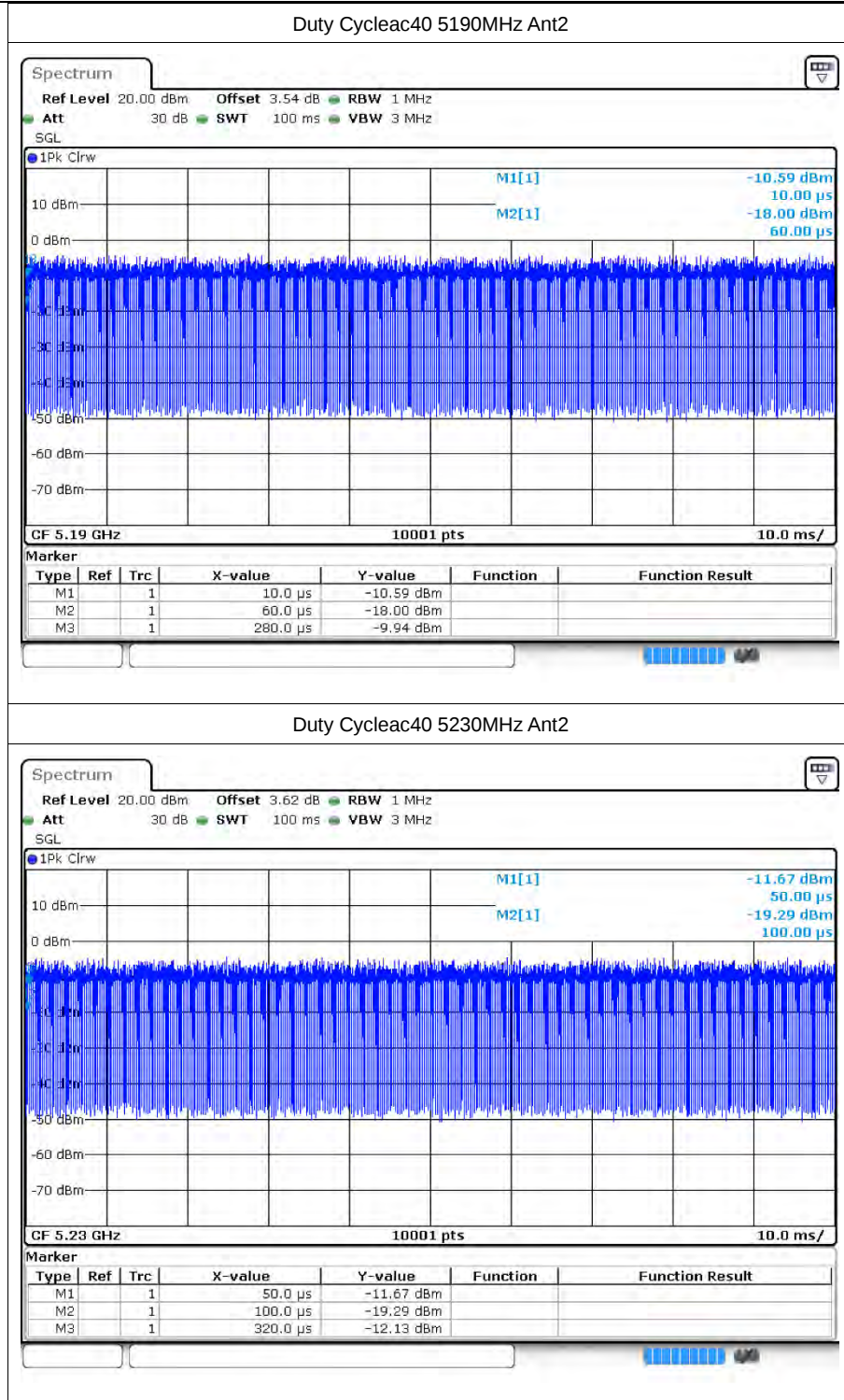


Duty Cycle ac20 5200MHz Ant2

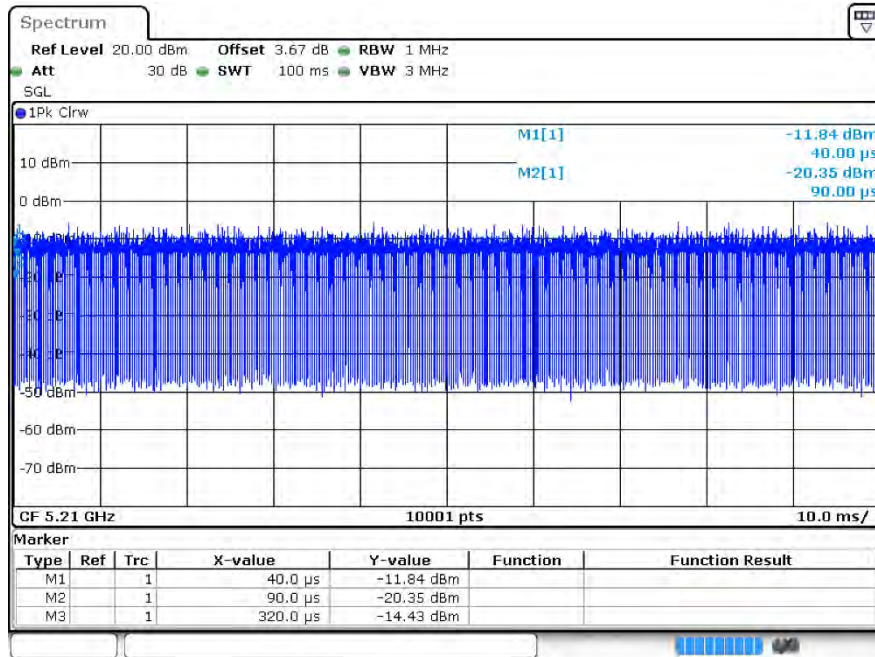




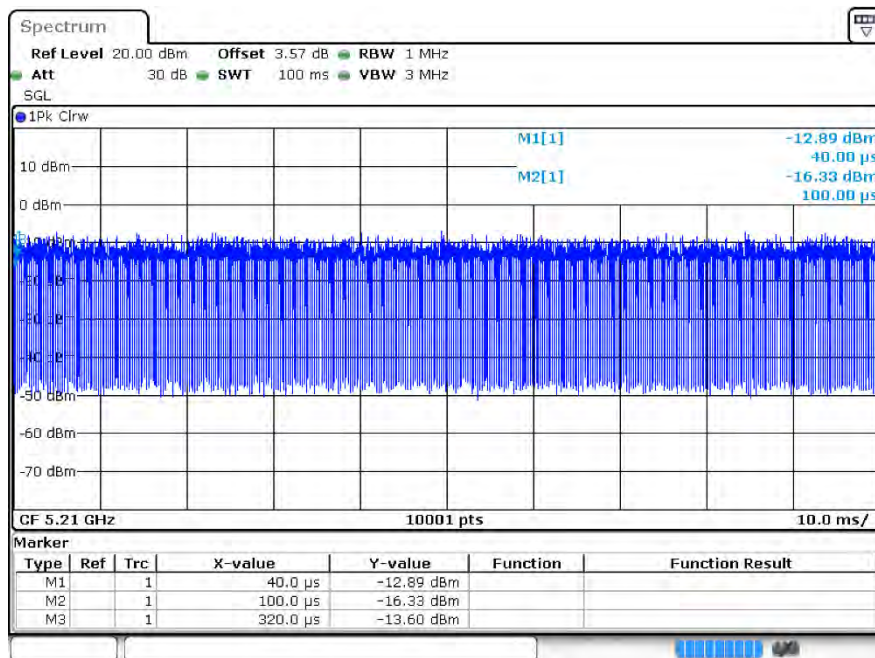




Duty Cycleac80 5210MHz Ant1



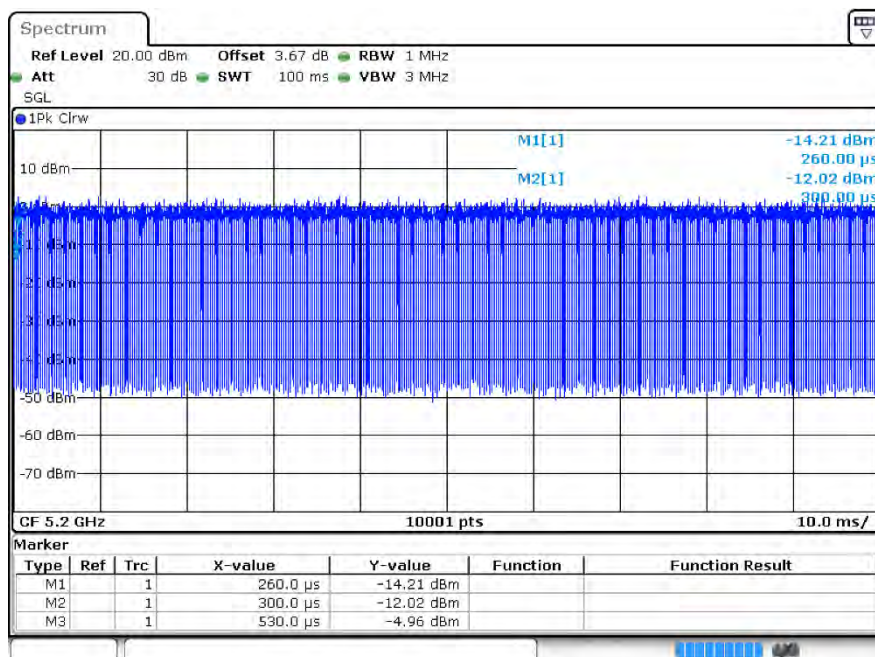
Duty Cycleac80 5210MHz Ant2

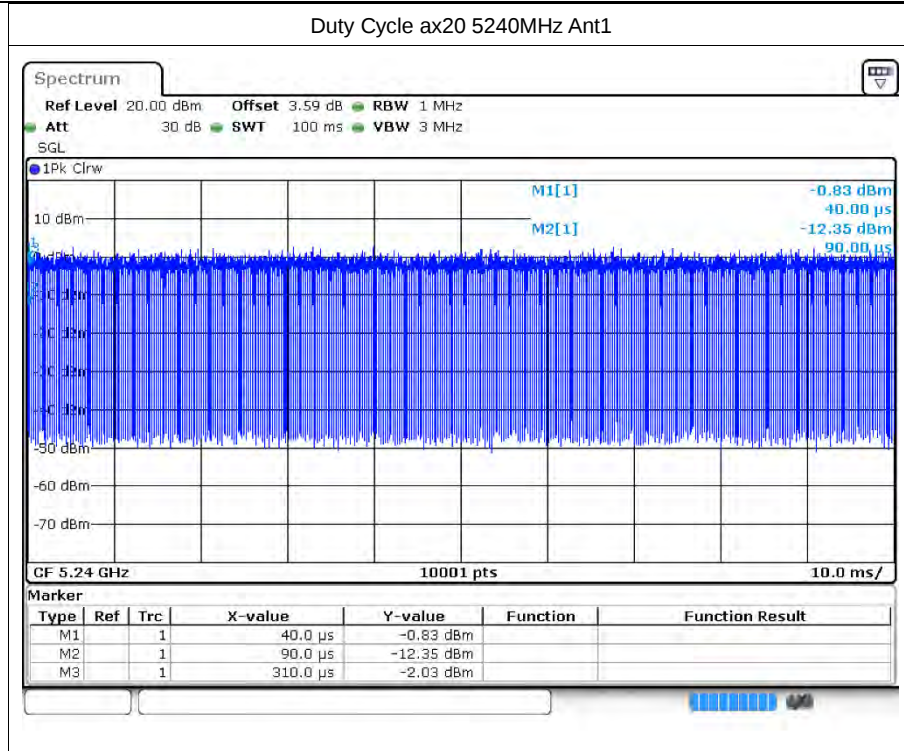


Duty Cycle ax20 5180MHz Ant1

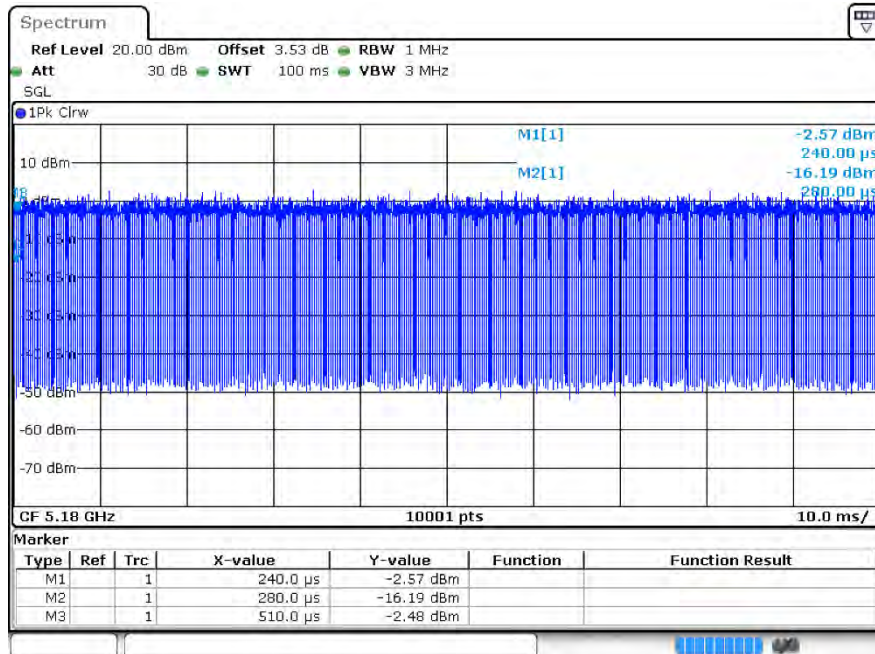


Duty Cycle ax20 5200MHz Ant1



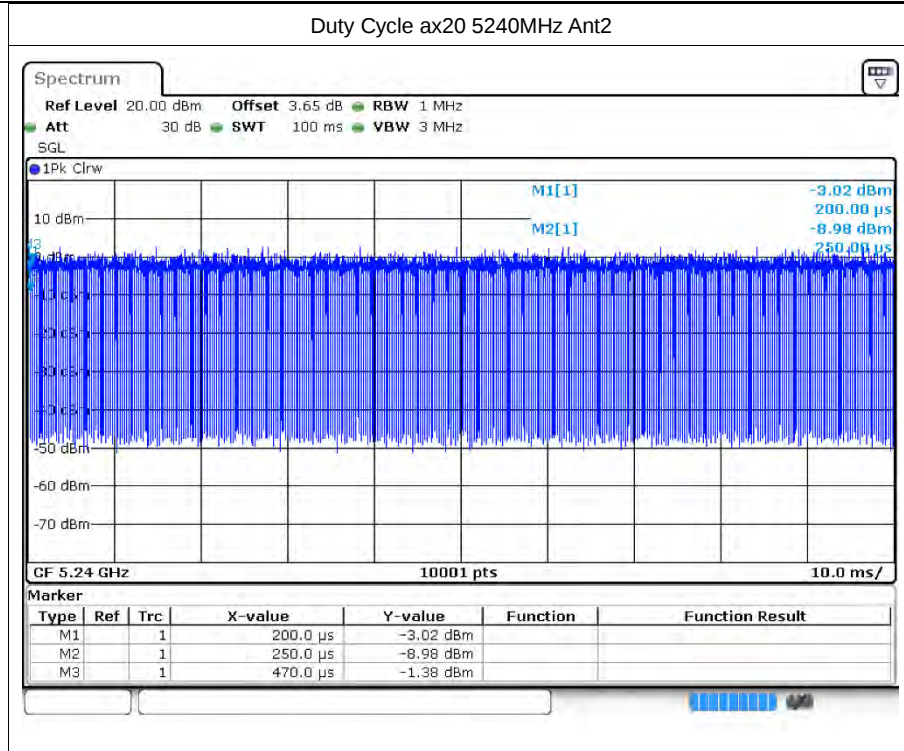


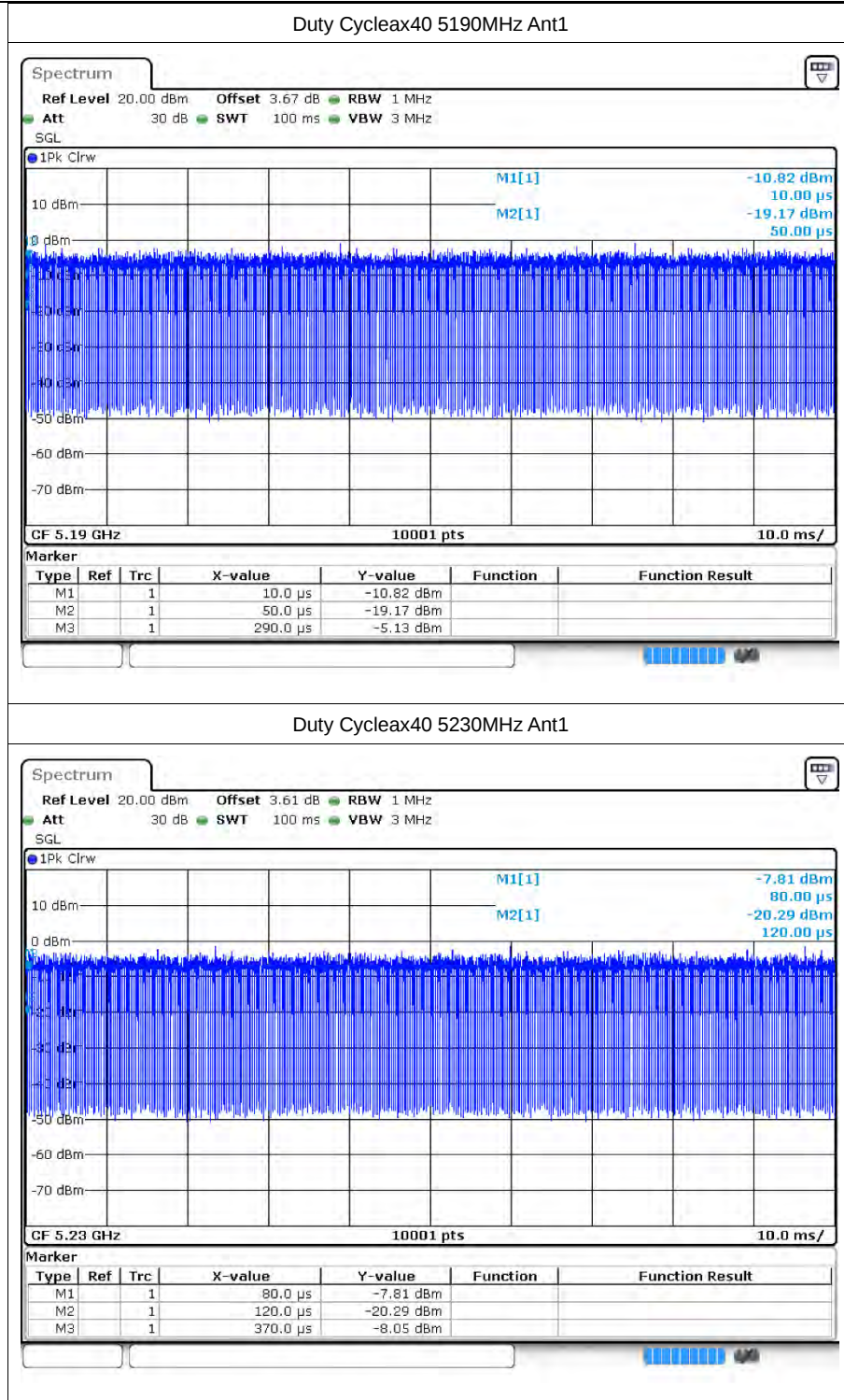
Duty Cycle ax20 5180MHz Ant2

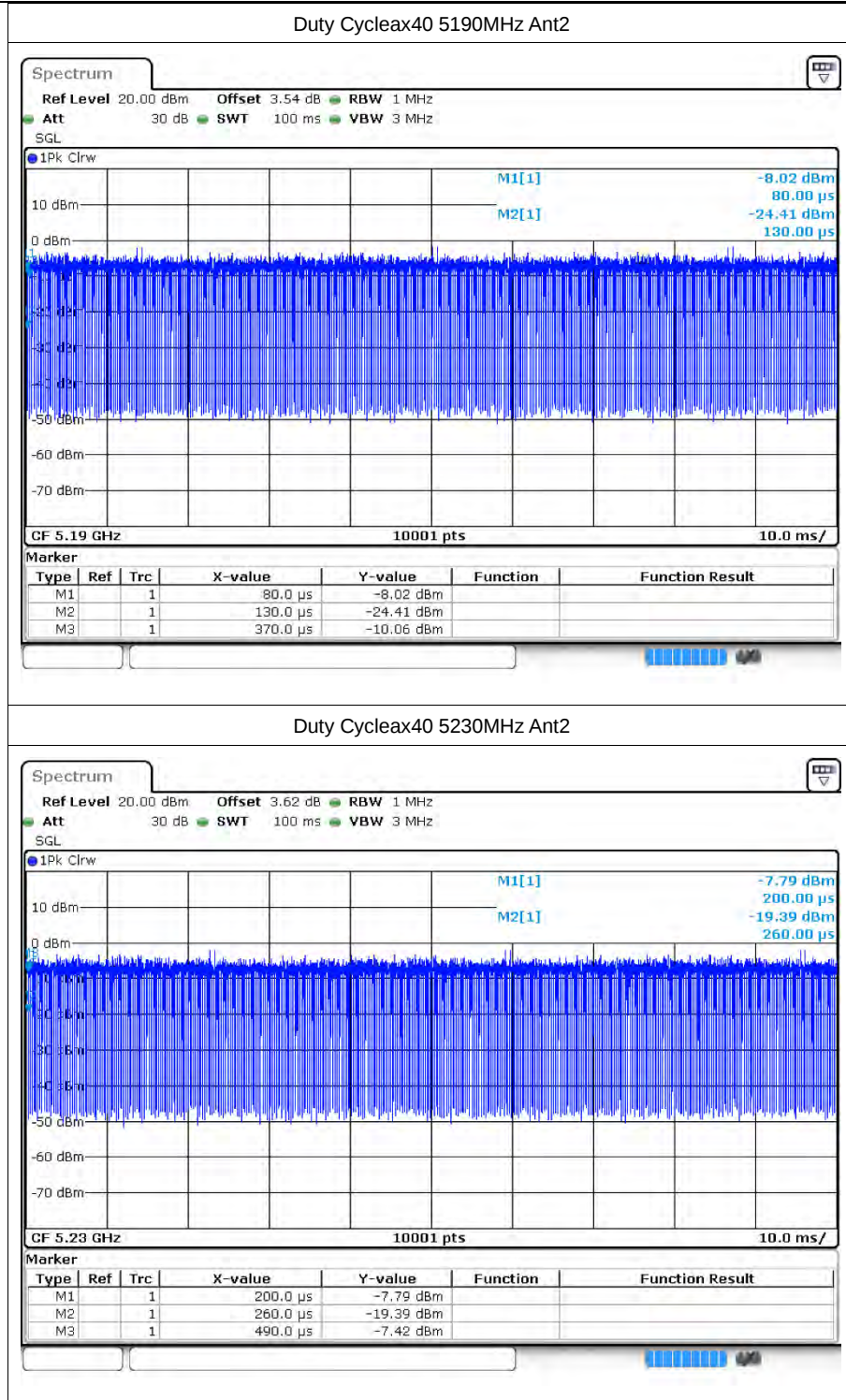


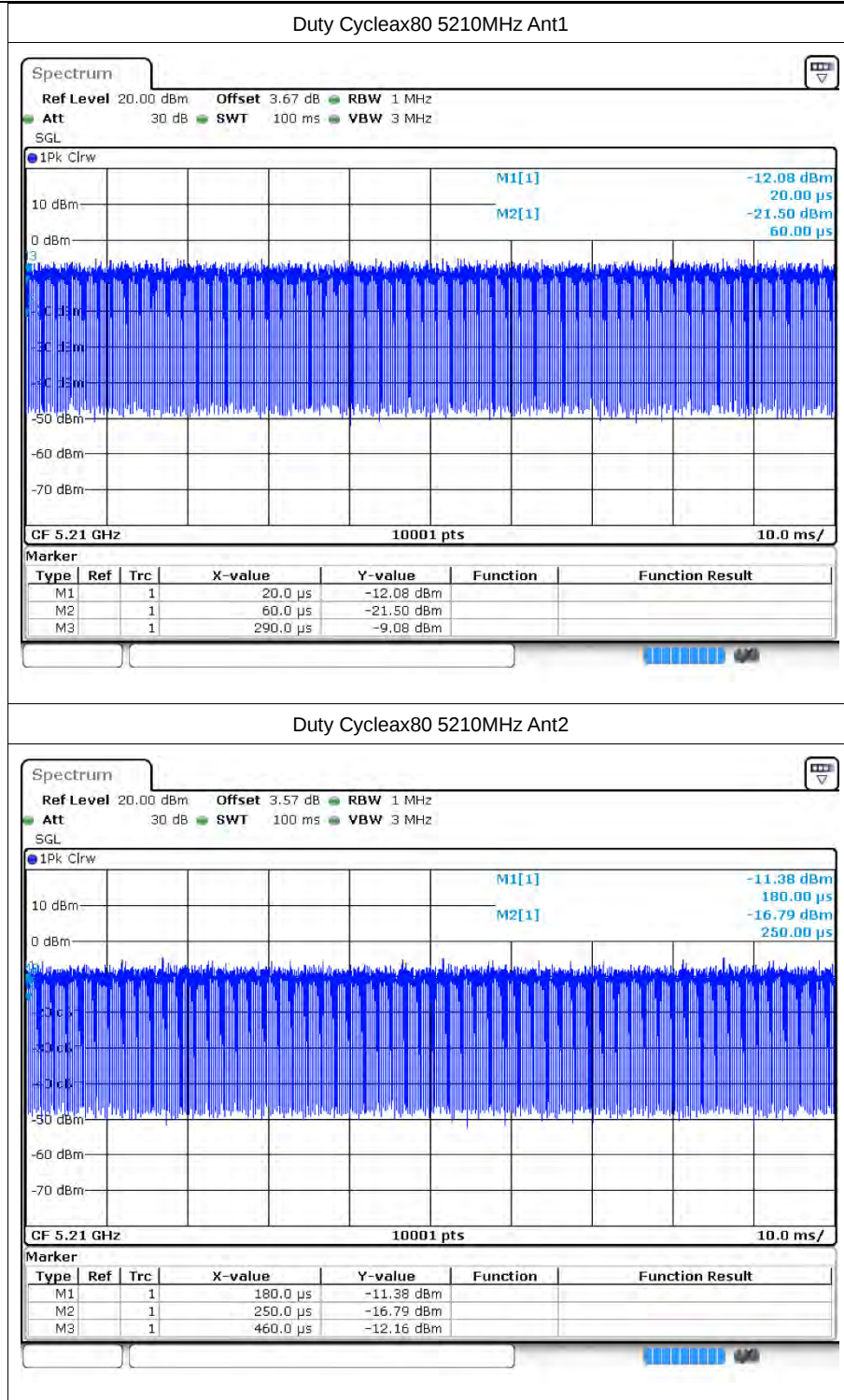
Duty Cycle ax20 5200MHz Ant2











2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
a	5180	Ant1	12.62	24	Pass
a	5200	Ant1	12.23	24	Pass
a	5240	Ant1	11.32	24	Pass
a	5180	Ant2	12.3	24	Pass
a	5200	Ant2	12.17	24	Pass
a	5240	Ant2	11.87	24	Pass
n20	5180	Ant1	9.26	24	Pass
n20	5180	Ant2	8.97	24	Pass
n20	5180	Sum	12.23	24	Pass
n20	5200	Ant1	8.89	24	Pass
n20	5200	Ant2	8.89	24	Pass
n20	5200	Sum	11.98	24	Pass
n20	5240	Ant1	8.35	24	Pass
n20	5240	Ant2	8.44	24	Pass
n20	5240	Sum	11.41	24	Pass
n40	5190	Ant1	8.75	24	Pass
n40	5190	Ant2	8.51	24	Pass
n40	5190	Sum	11.55	24	Pass
n40	5230	Ant1	7.95	24	Pass
n40	5230	Ant2	7.86	24	Pass
n40	5230	Sum	10.93	24	Pass
ac20	5180	Ant1	9.23	24	Pass
ac20	5180	Ant2	9.11	24	Pass
ac20	5180	Sum	12.27	24	Pass
ac20	5200	Ant1	8.87	24	Pass
ac20	5200	Ant2	9.01	24	Pass
ac20	5200	Sum	12.01	24	Pass
ac20	5240	Ant1	8.53	24	Pass
ac20	5240	Ant2	8.44	24	Pass
ac20	5240	Sum	11.42	24	Pass
ac40	5190	Ant1	8.76	24	Pass
ac40	5190	Ant2	8.63	24	Pass
ac40	5190	Sum	11.65	24	Pass
ac40	5230	Ant1	7.87	24	Pass
ac40	5230	Ant2	8.15	24	Pass



ac40	5230	Sum	11.04	24	Pass
ac80	5210	Ant1	8.19	24	Pass
ac80	5210	Ant2	7.97	24	Pass
ac80	5210	Sum	11.15	24	Pass
ax20	5180	Ant1	9.45	24	Pass
ax20	5180	Ant2	8.94	24	Pass
ax20	5180	Sum	12.2	24	Pass
ax20	5200	Ant1	9.4	24	Pass
ax20	5200	Ant2	8.82	24	Pass
ax20	5200	Sum	12.17	24	Pass
ax20	5240	Ant1	9.13	24	Pass
ax20	5240	Ant2	8.83	24	Pass
ax20	5240	Sum	11.92	24	Pass
ax40	5190	Ant1	9	24	Pass
ax40	5190	Ant2	7.98	24	Pass
ax40	5190	Sum	11.45	24	Pass
ax40	5230	Ant1	8.52	24	Pass
ax40	5230	Ant2	7.86	24	Pass
ax40	5230	Sum	11.4	24	Pass
ax80	5210	Ant1	8.61	24	Pass
ax80	5210	Ant2	8.04	24	Pass
ax80	5210	Sum	11.3	24	Pass

Note:

The duty factor has been compensated into the result.



3 -26dB Bandwidth

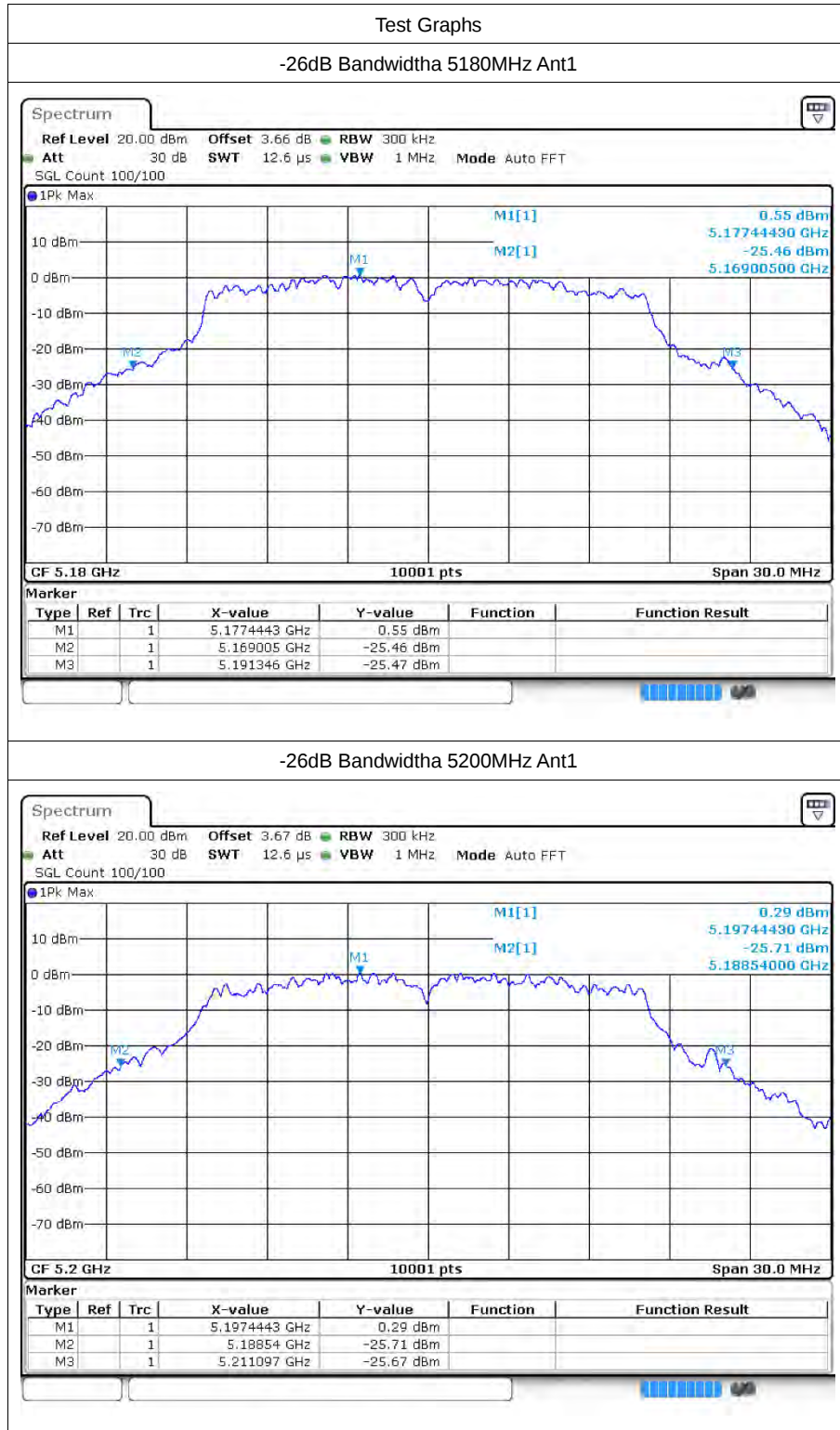
3.1 Test Result

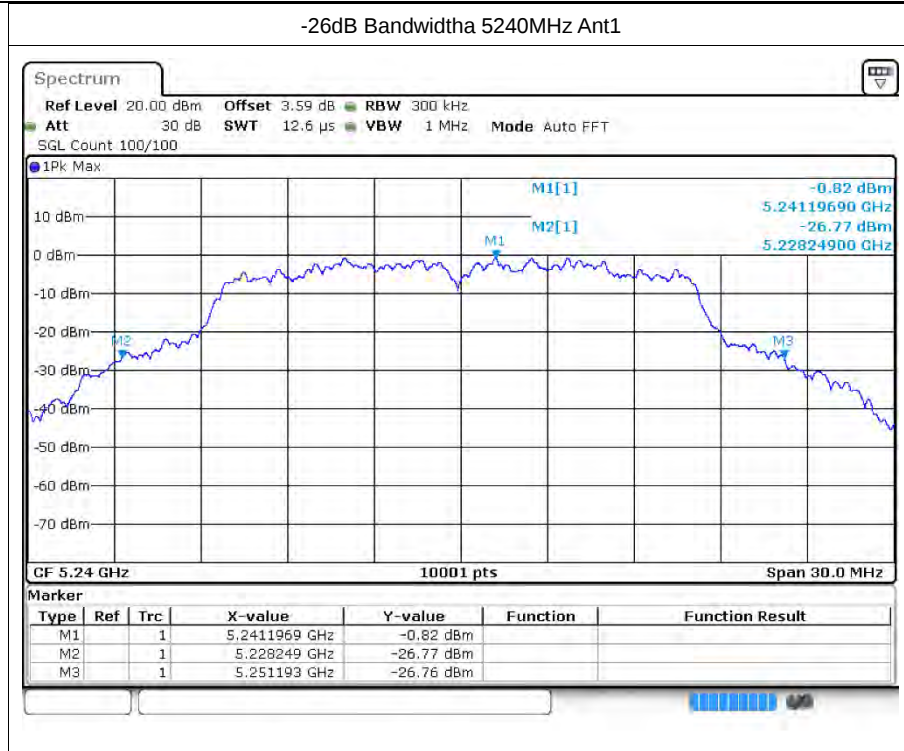
Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
a	5180	Ant1	22.341	0.5	Pass
a	5200	Ant1	22.557	0.5	Pass
a	5240	Ant1	22.944	0.5	Pass
n20	5180	Ant1	22.635	0.5	Pass
n20	5200	Ant1	23.379	0.5	Pass
n20	5240	Ant1	22.992	0.5	Pass
n40	5190	Ant1	43.404	0.5	Pass
n40	5230	Ant1	42.156	0.5	Pass
ac20	5180	Ant1	22.581	0.5	Pass
ac20	5200	Ant1	23.127	0.5	Pass
ac20	5240	Ant1	22.716	0.5	Pass
ac40	5190	Ant1	42.42	0.5	Pass
ac40	5230	Ant1	42.072	0.5	Pass
ac80	5210	Ant1	80.94	0.5	Pass
ax20	5180	Ant1	22.02	0.5	Pass
ax20	5200	Ant1	22.047	0.5	Pass
ax20	5240	Ant1	22.038	0.5	Pass
ax40	5190	Ant1	42.228	0.5	Pass
ax40	5230	Ant1	42.282	0.5	Pass
ax80	5210	Ant1	81.828	0.5	Pass
a	5180	Ant2	22.524	0.5	Pass
a	5200	Ant2	22.038	0.5	Pass
a	5240	Ant2	22.497	0.5	Pass
n20	5180	Ant2	22.56	0.5	Pass
n20	5200	Ant2	22.482	0.5	Pass
n20	5240	Ant2	22.761	0.5	Pass
n40	5190	Ant2	42.804	0.5	Pass
n40	5230	Ant2	43.176	0.5	Pass
ac20	5180	Ant2	22.056	0.5	Pass
ac20	5200	Ant2	21.885	0.5	Pass
ac20	5240	Ant2	23.961	0.5	Pass
ac40	5190	Ant2	40.65	0.5	Pass
ac40	5230	Ant2	42.678	0.5	Pass
ac80	5210	Ant2	81.744	0.5	Pass
ax20	5180	Ant2	22.302	0.5	Pass
ax20	5200	Ant2	22.29	0.5	Pass
ax20	5240	Ant2	23.262	0.5	Pass



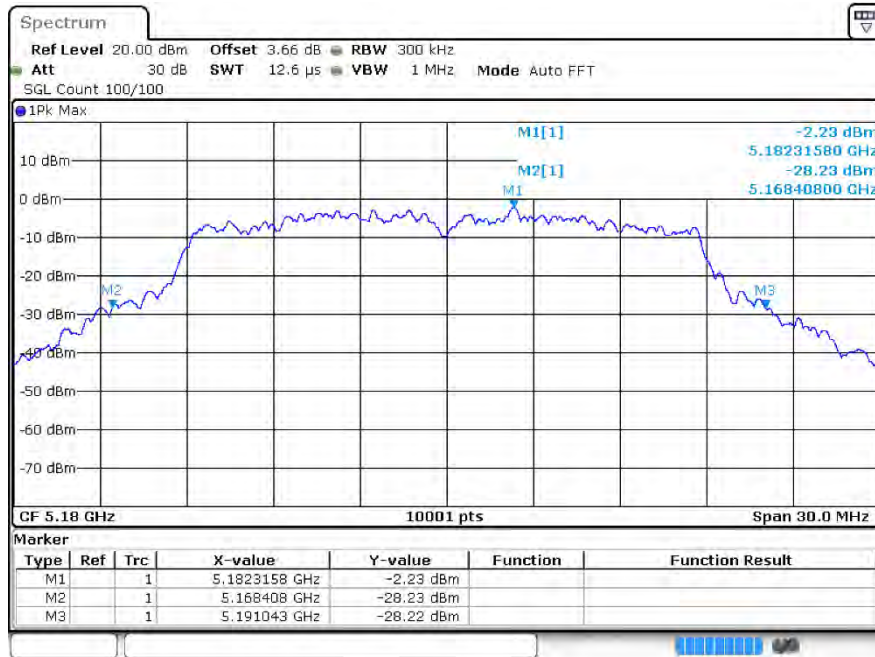
ax40	5190	Ant2	42.468	0.5	Pass
ax40	5230	Ant2	43.206	0.5	Pass
ax80	5210	Ant2	82.284	0.5	Pass

3.2 Test Graphs

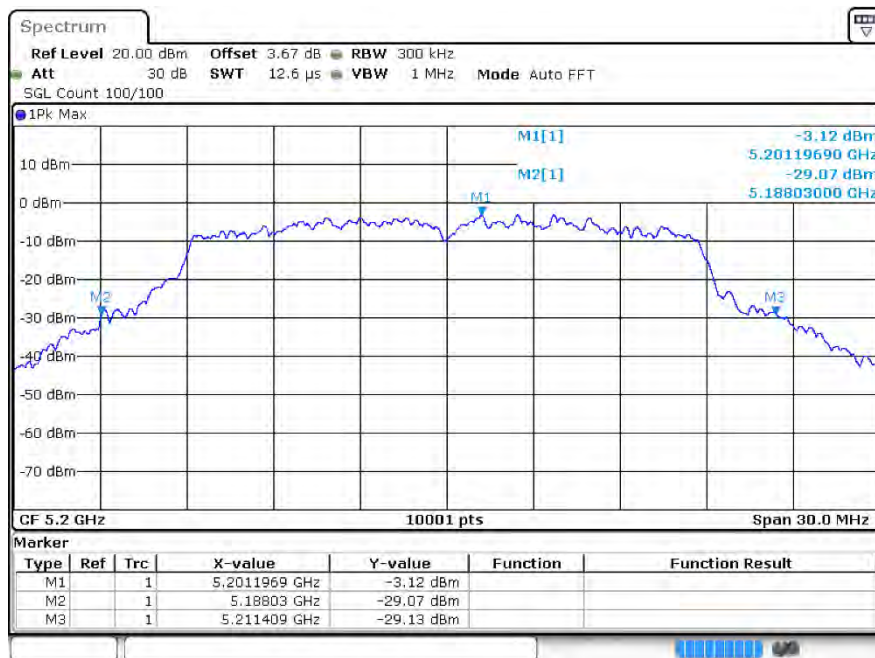


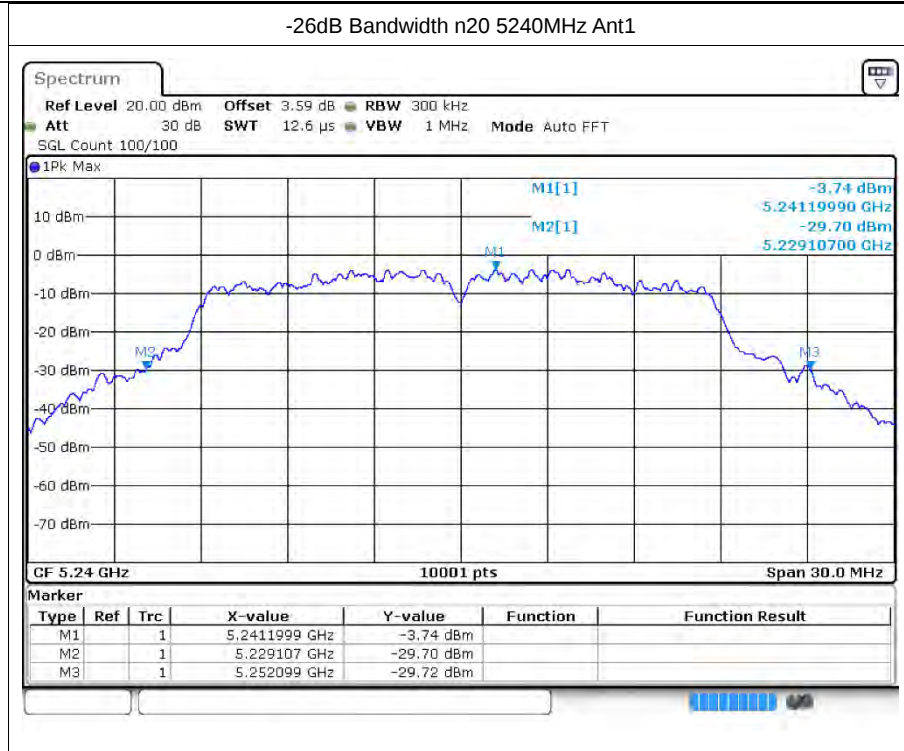


-26dB Bandwidth n20 5180MHz Ant1

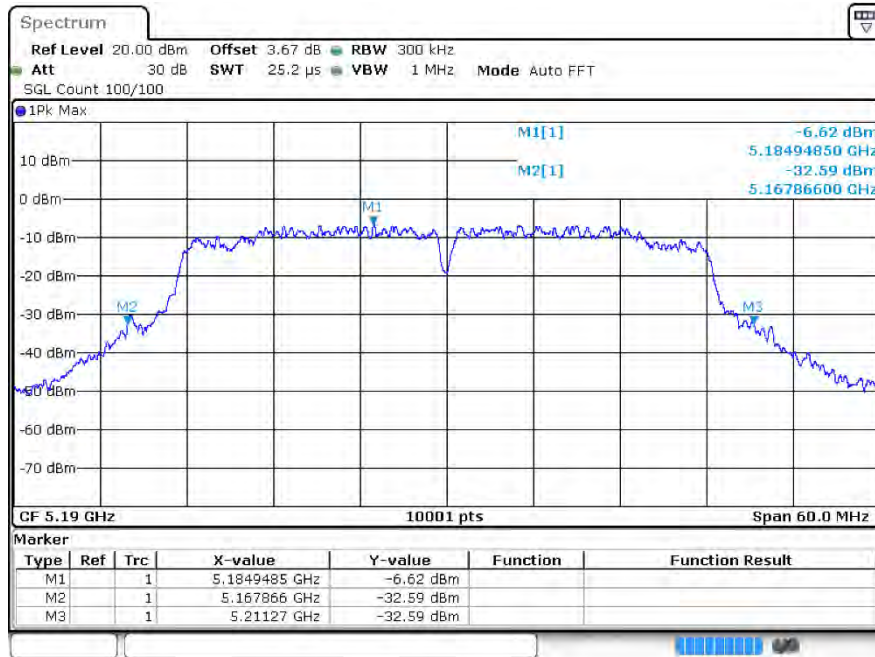


-26dB Bandwidth n20 5200MHz Ant1

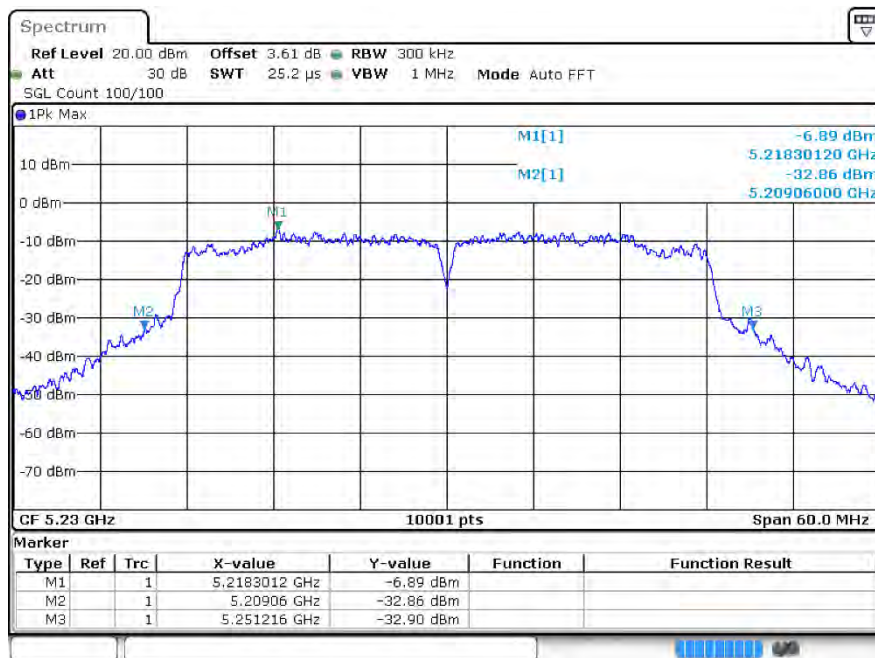




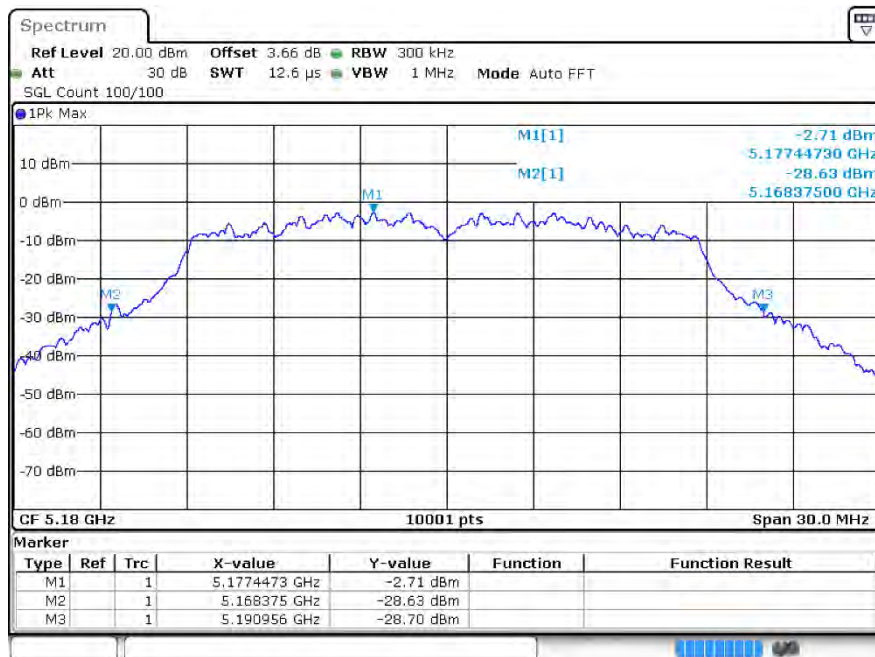
-26dB Bandwidthn40 5190MHz Ant1



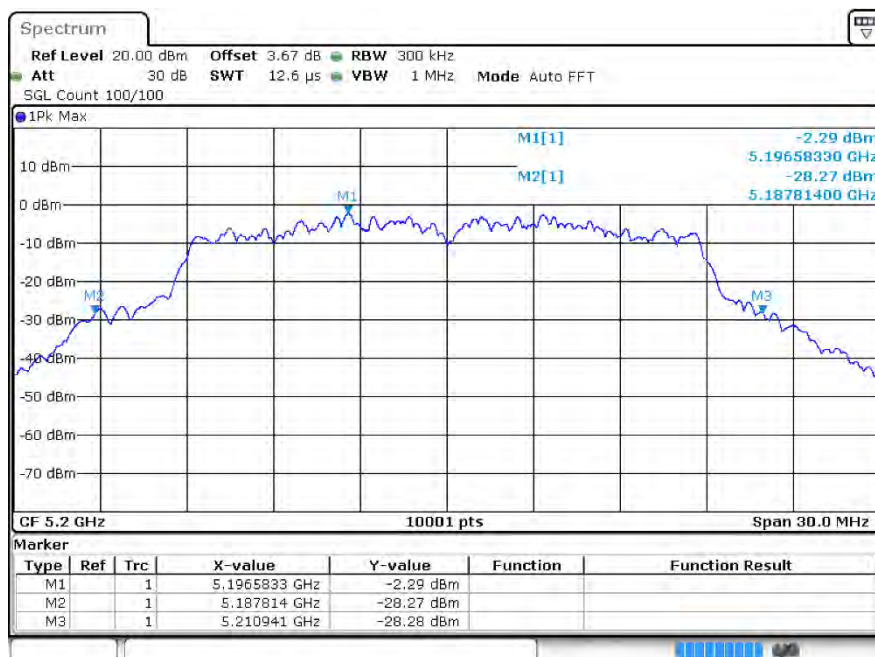
-26dB Bandwidthn40 5230MHz Ant1

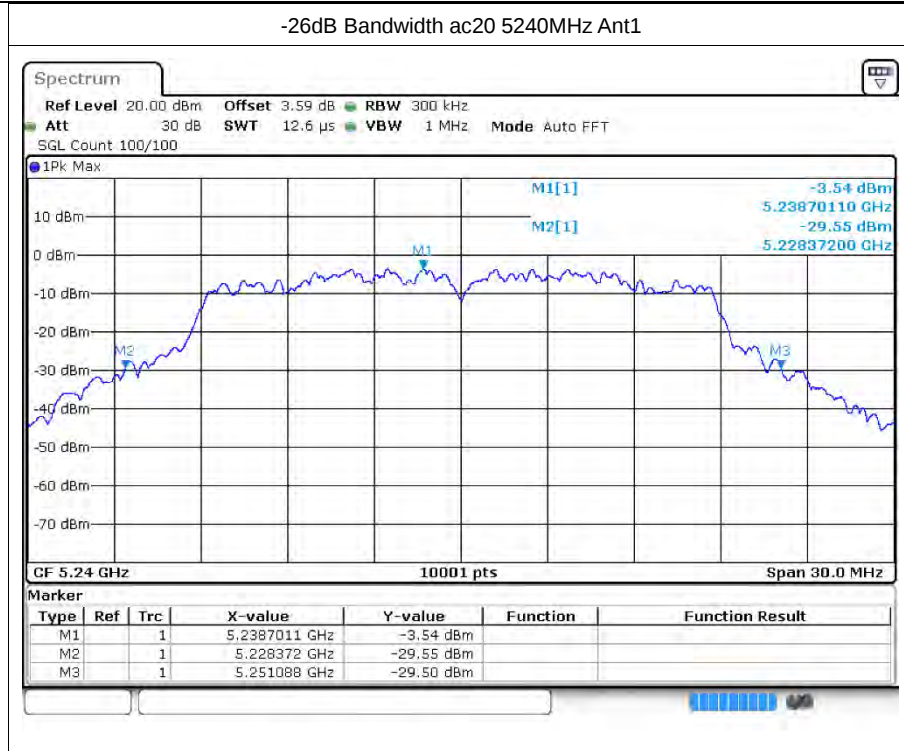


-26dB Bandwidth ac20 5180MHz Ant1

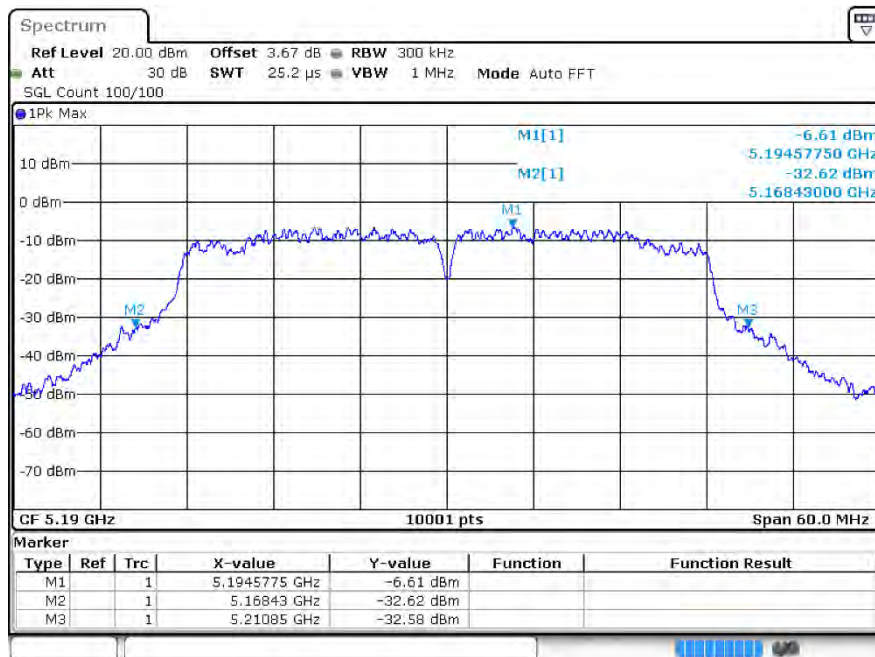


-26dB Bandwidth ac20 5200MHz Ant1

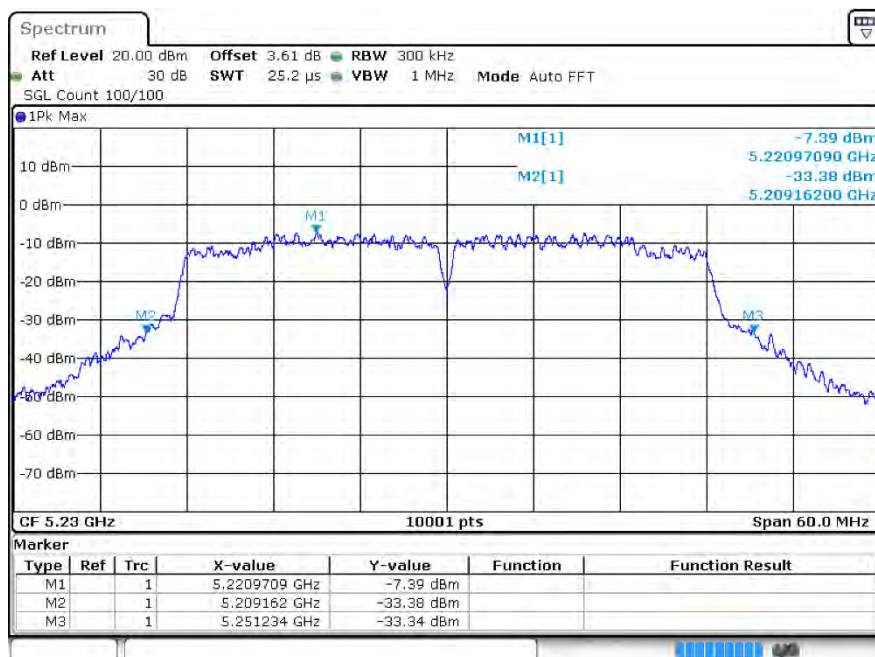


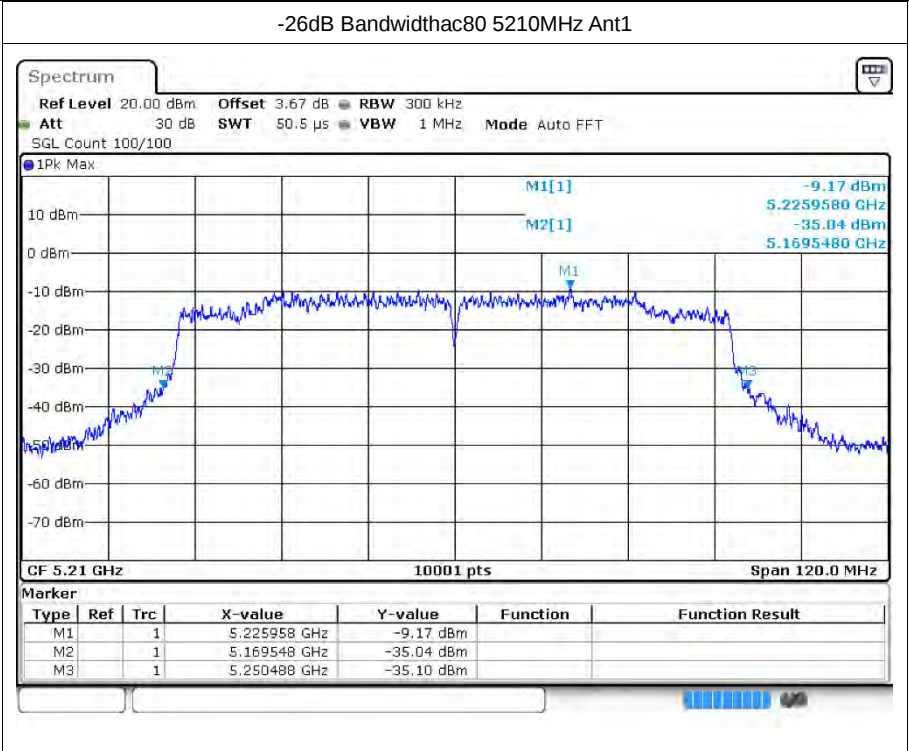


-26dB Bandwidthac40 5190MHz Ant1

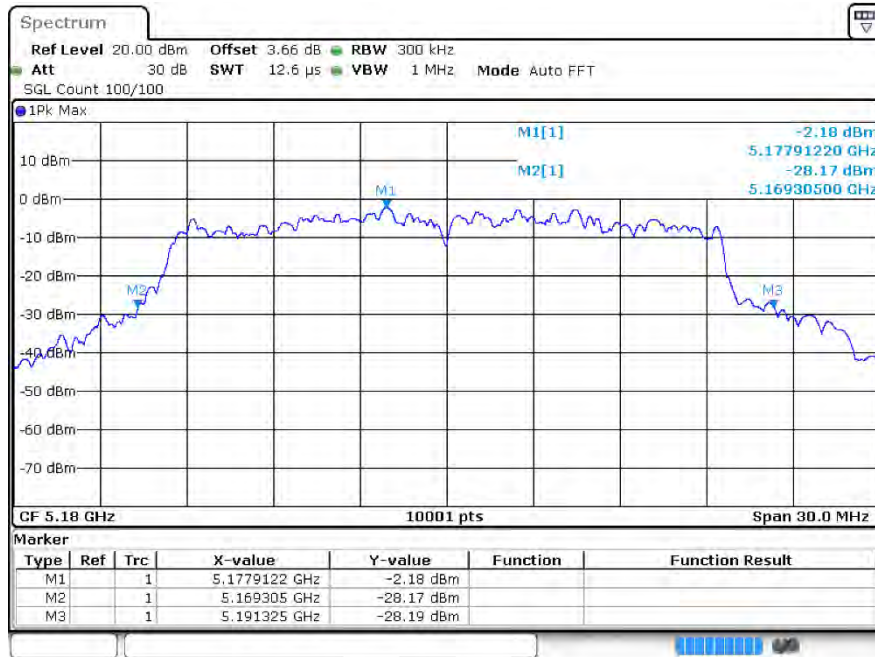


-26dB Bandwidthac40 5230MHz Ant1

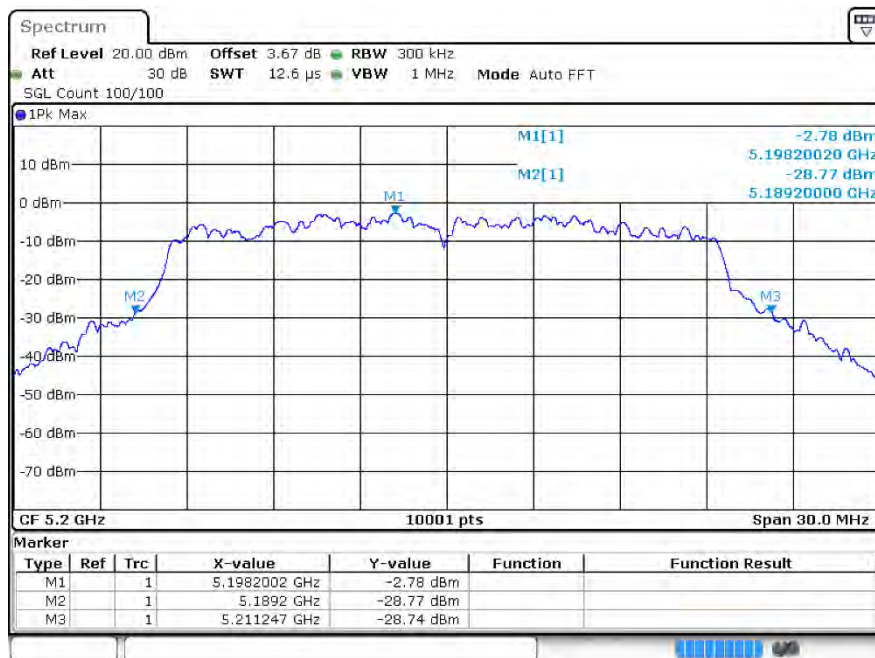


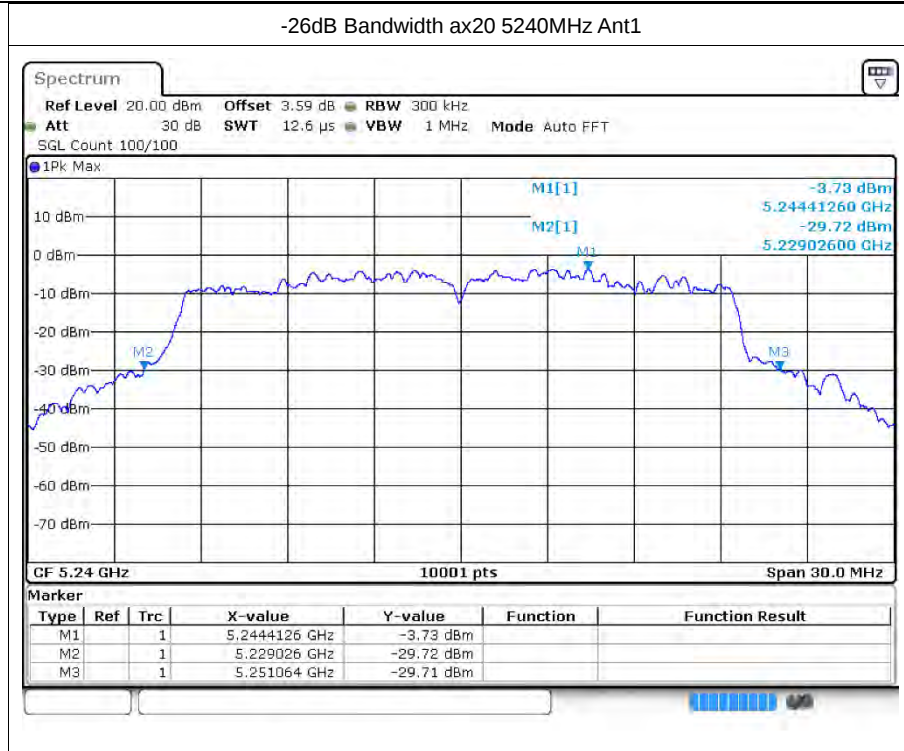


-26dB Bandwidth ax20 5180MHz Ant1

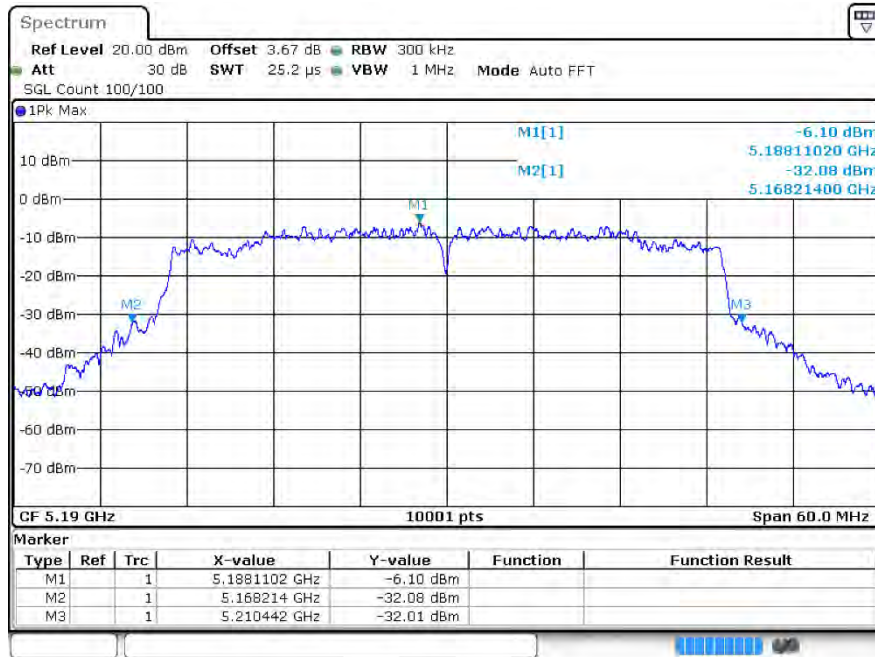


-26dB Bandwidth ax20 5200MHz Ant1

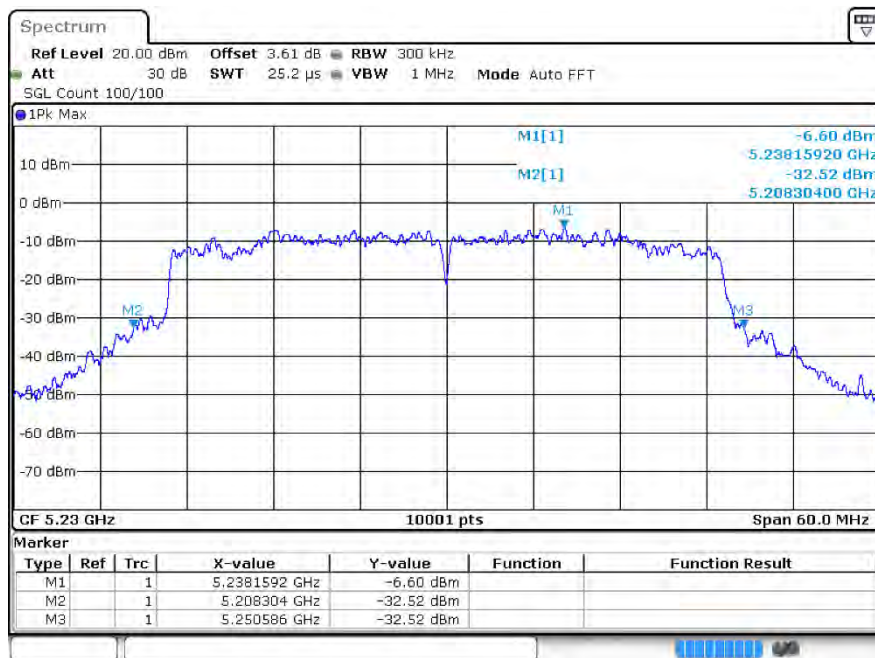


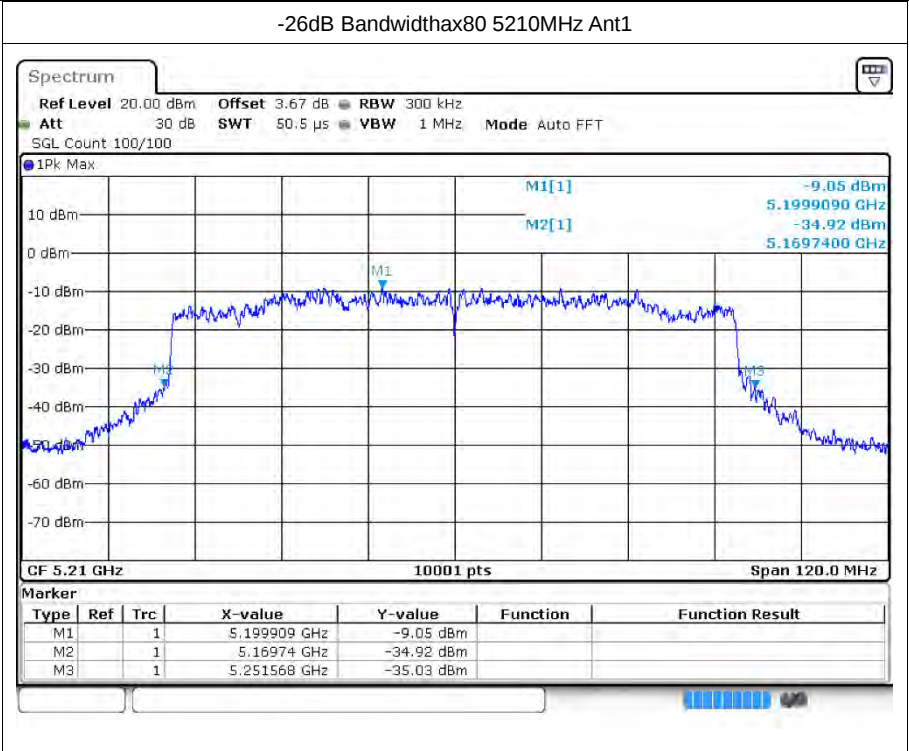


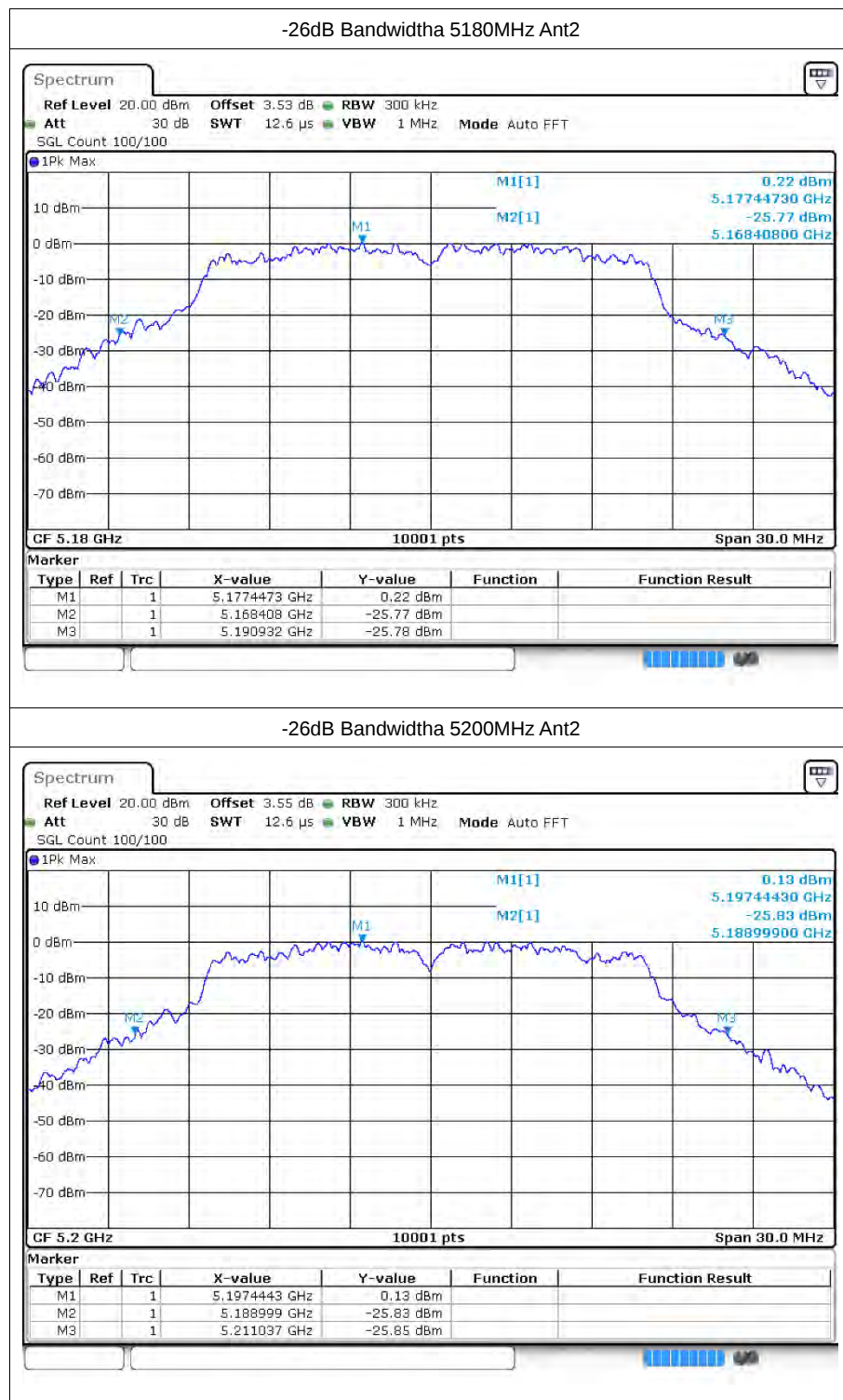
-26dB Bandwidthax40 5190MHz Ant1

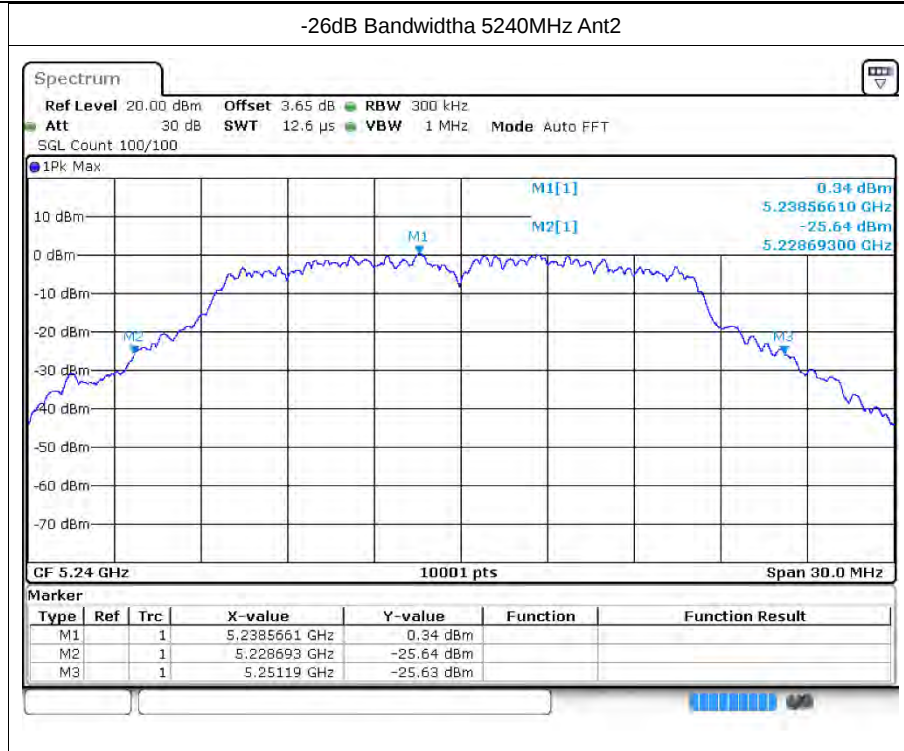


-26dB Bandwidthax40 5230MHz Ant1

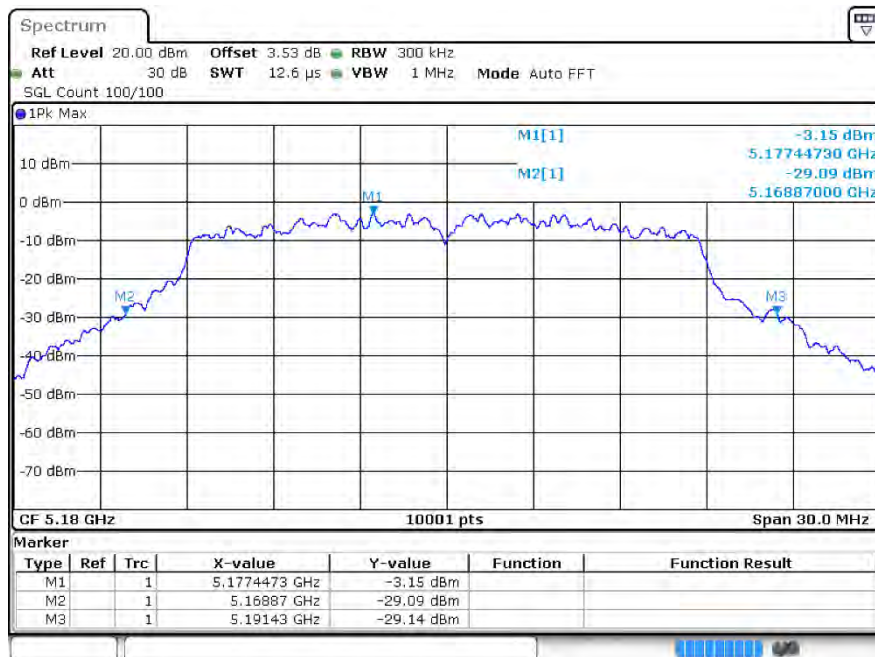




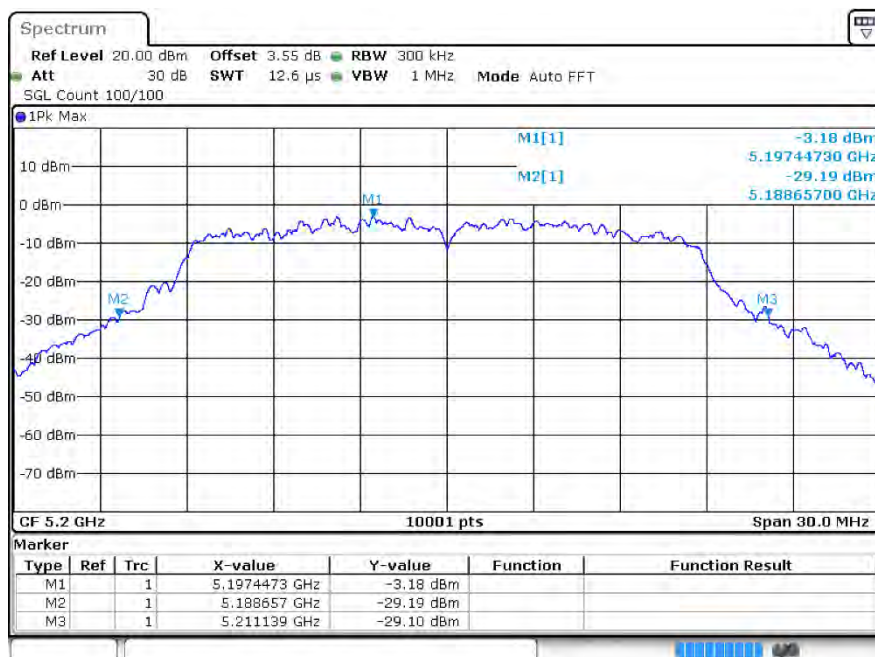


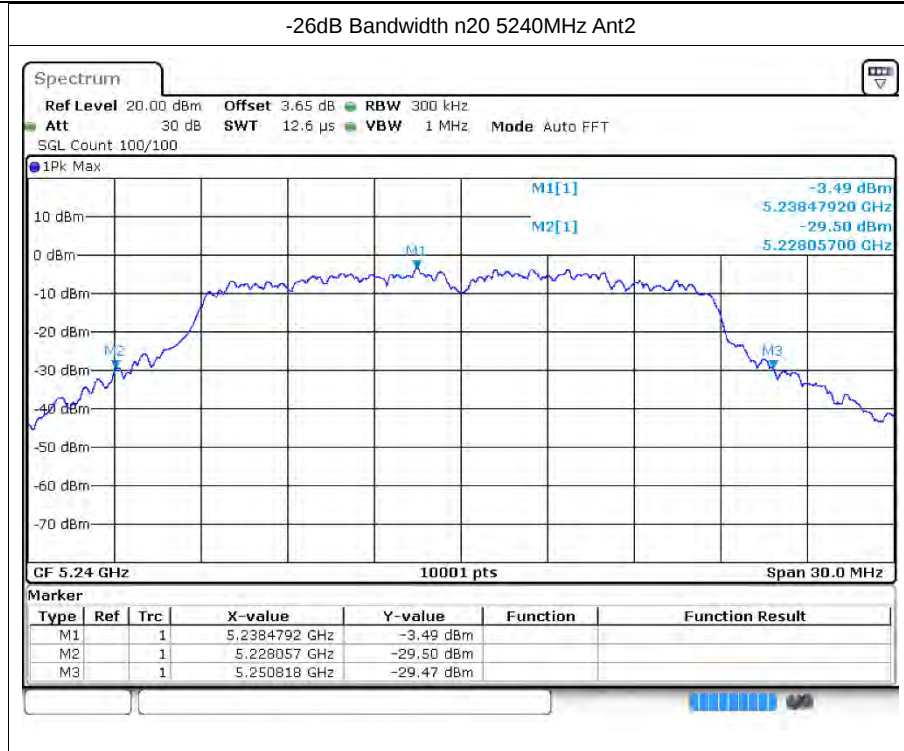


-26dB Bandwidth n20 5180MHz Ant2

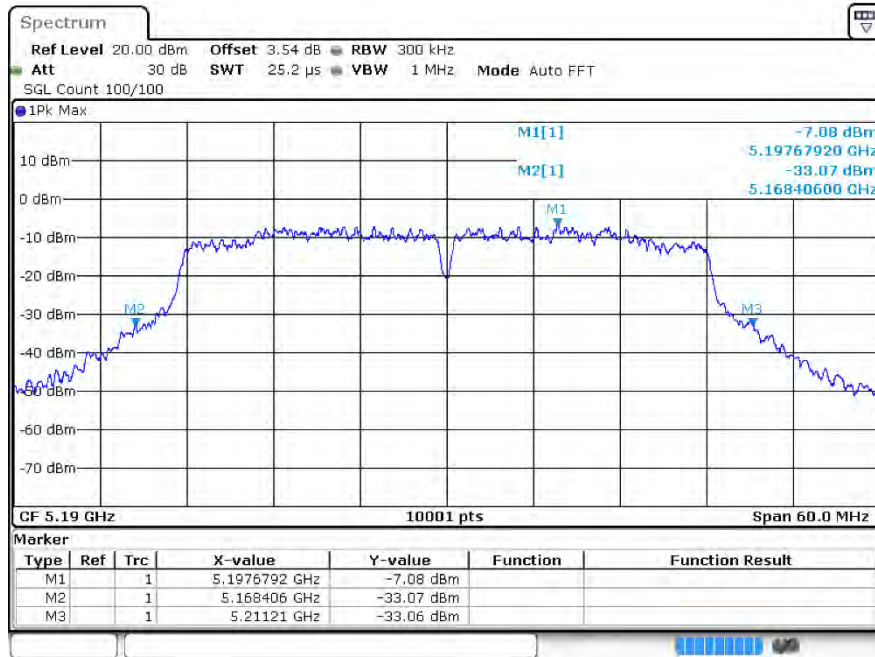


-26dB Bandwidth n20 5200MHz Ant2

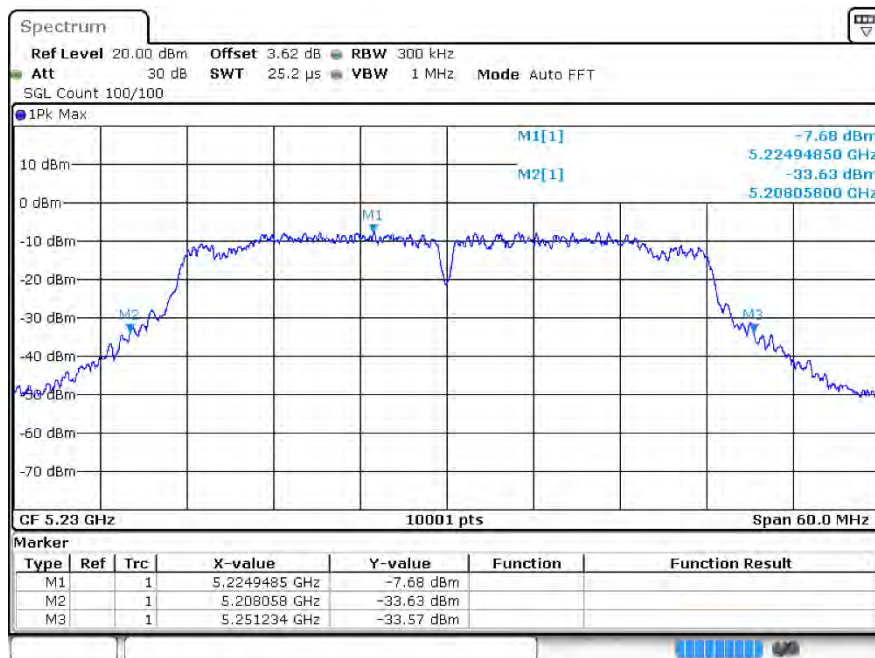




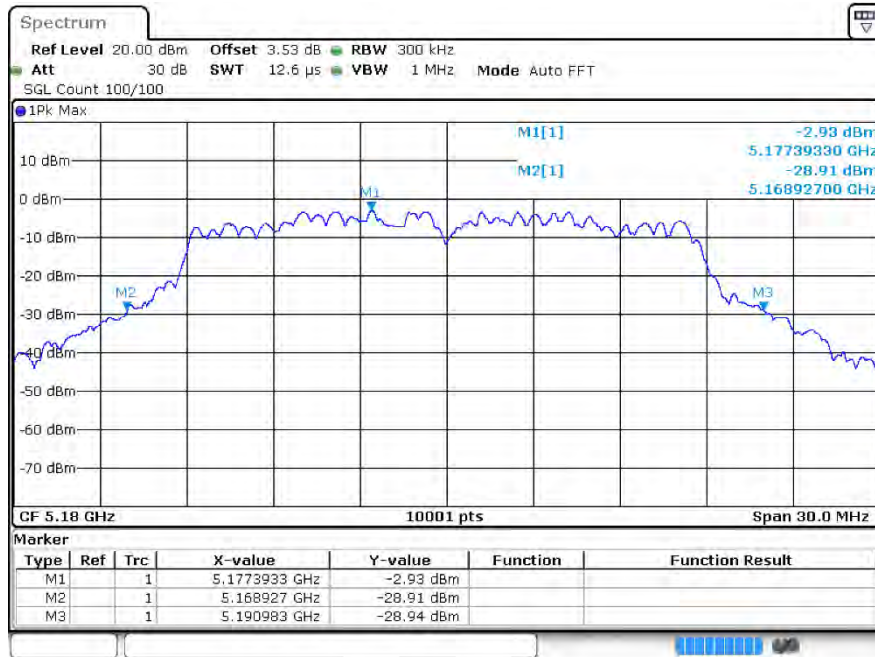
-26dB Bandwidthn40 5190MHz Ant2



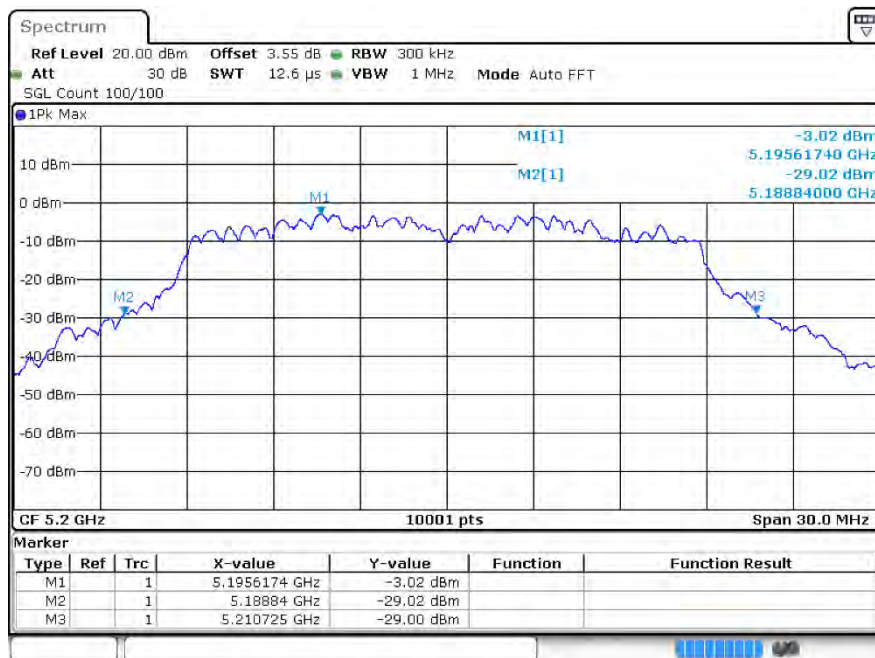
-26dB Bandwidthn40 5230MHz Ant2

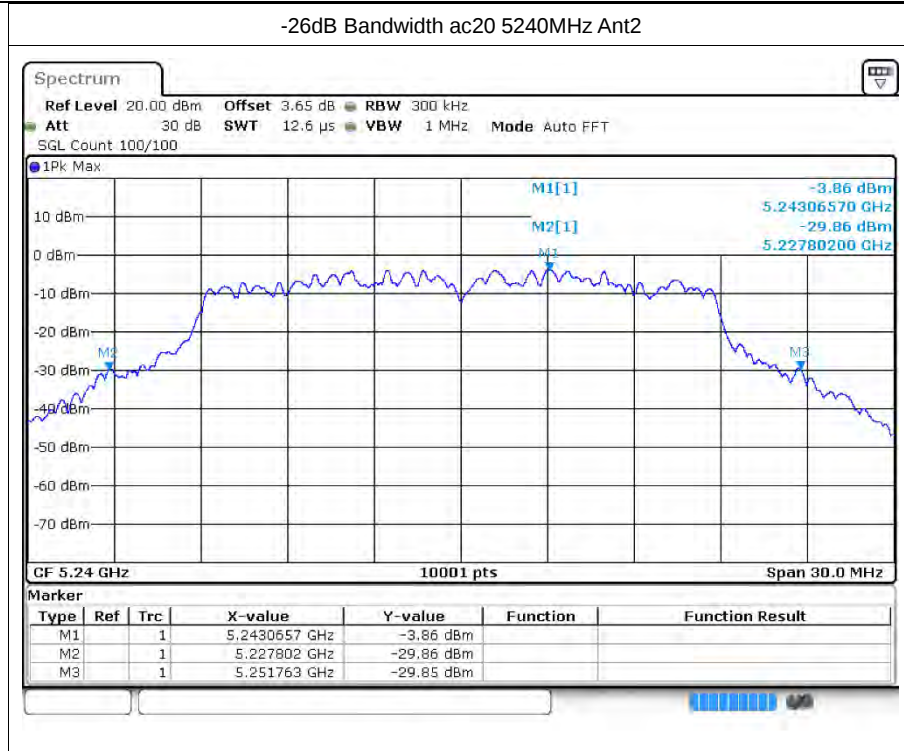


-26dB Bandwidth ac20 5180MHz Ant2

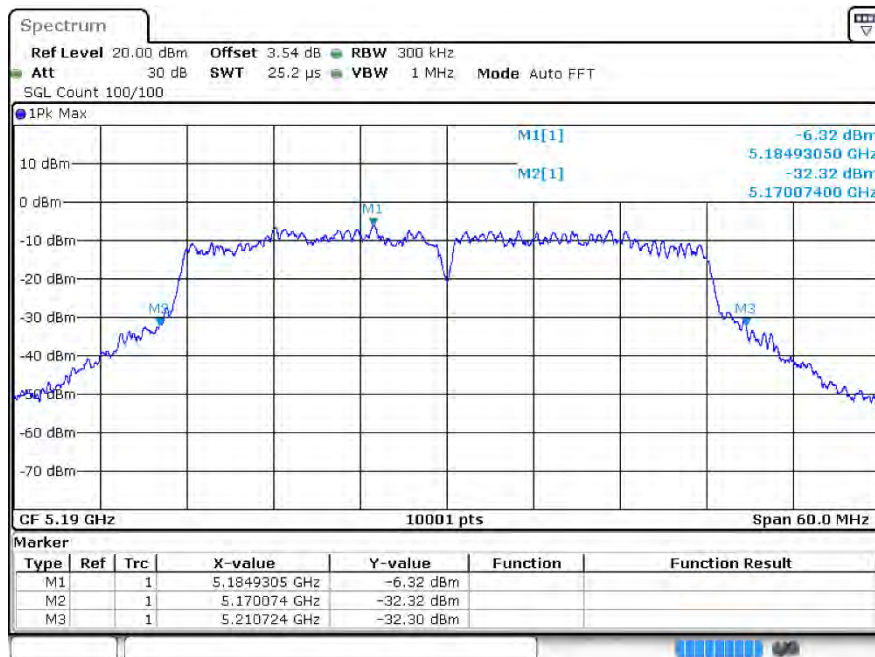


-26dB Bandwidth ac20 5200MHz Ant2

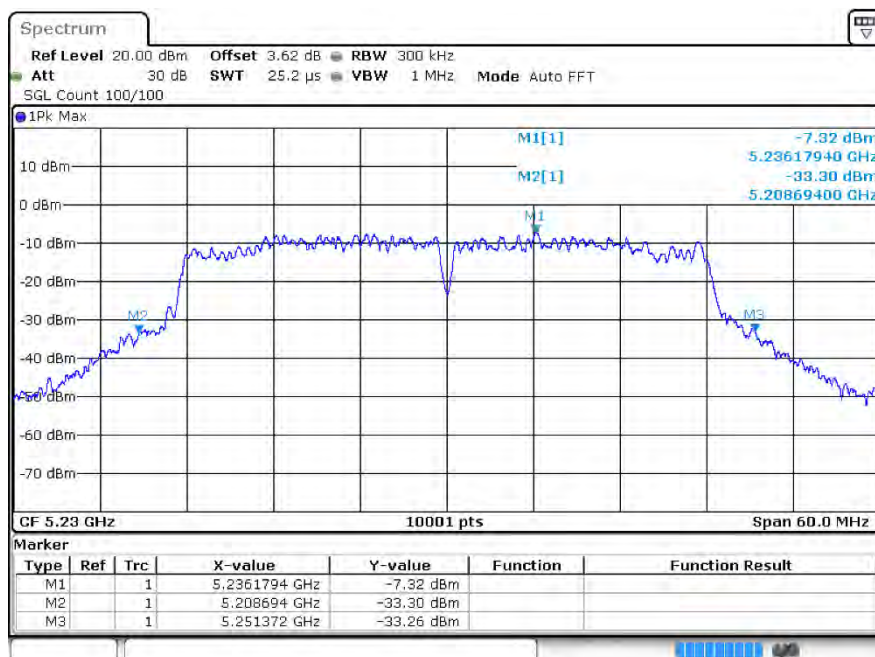


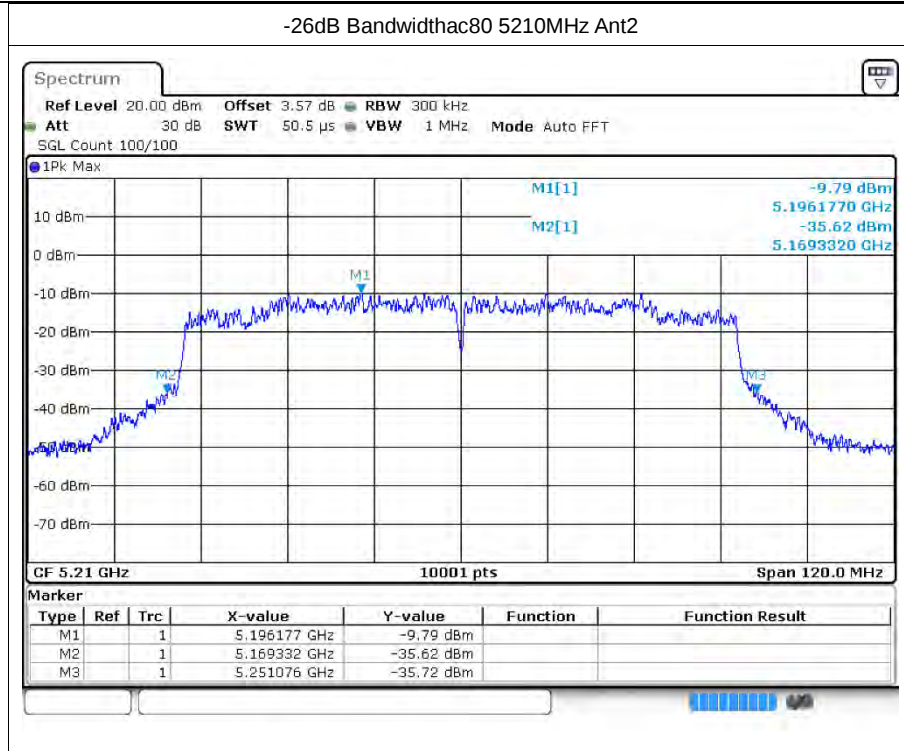


-26dB Bandwidthac40 5190MHz Ant2

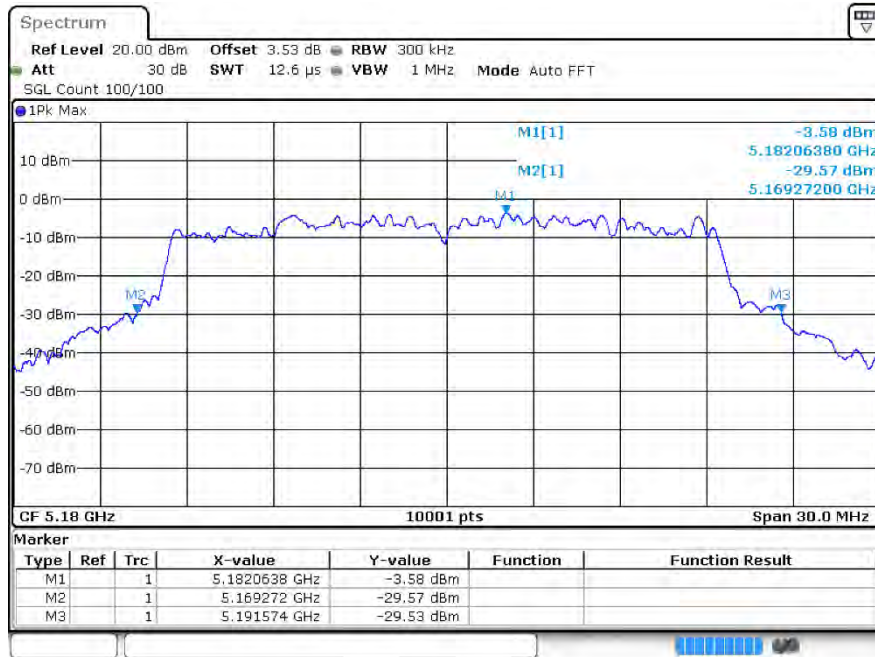


-26dB Bandwidthac40 5230MHz Ant2

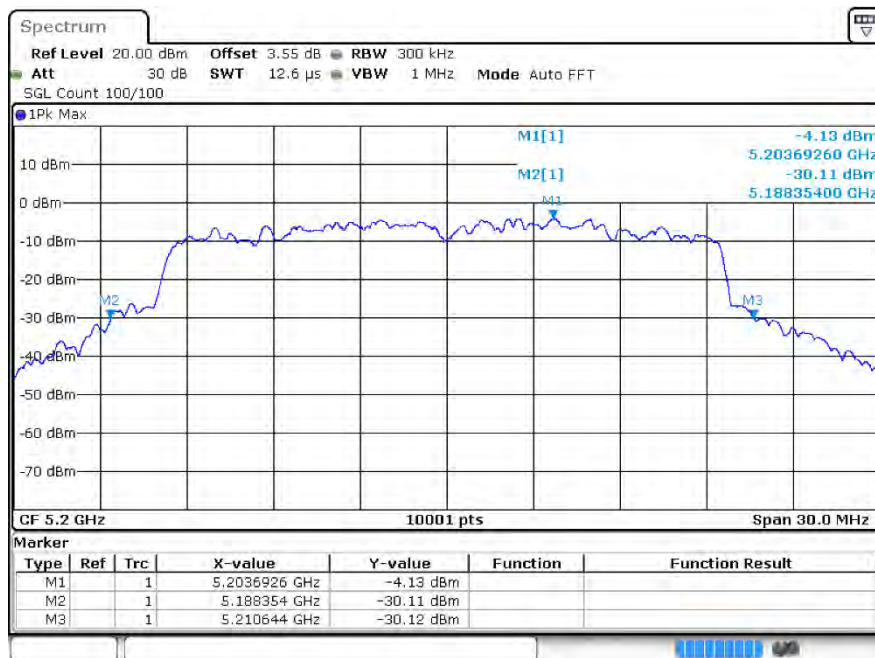


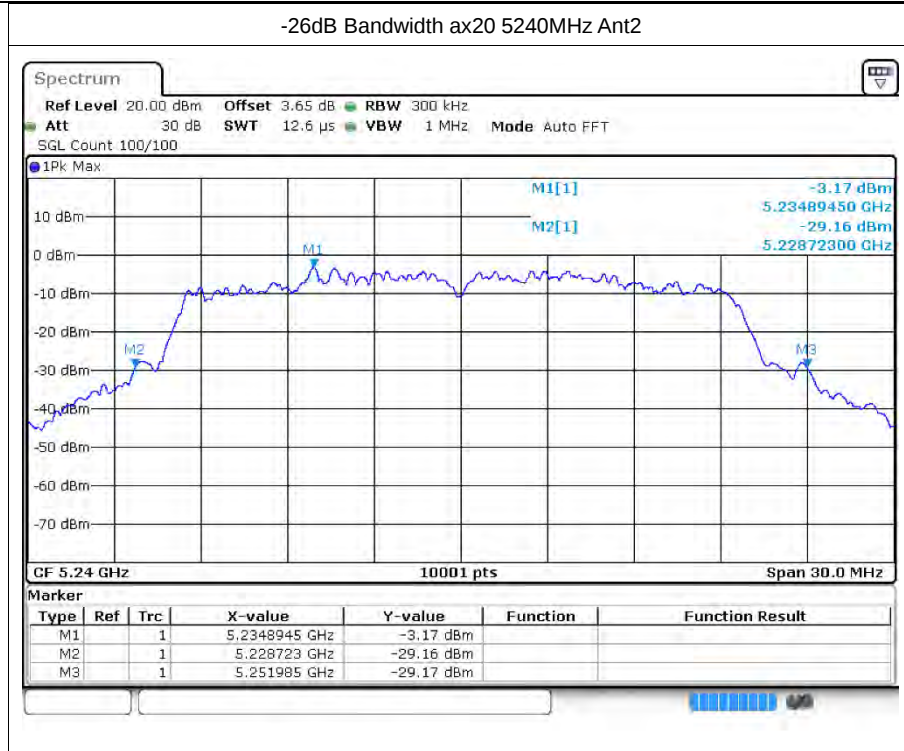


-26dB Bandwidth ax20 5180MHz Ant2

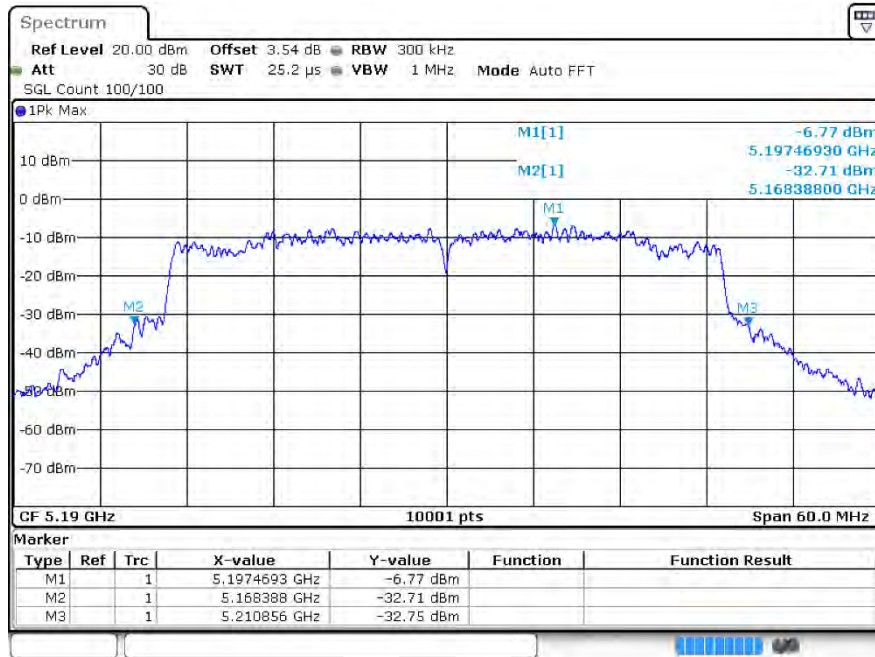


-26dB Bandwidth ax20 5200MHz Ant2

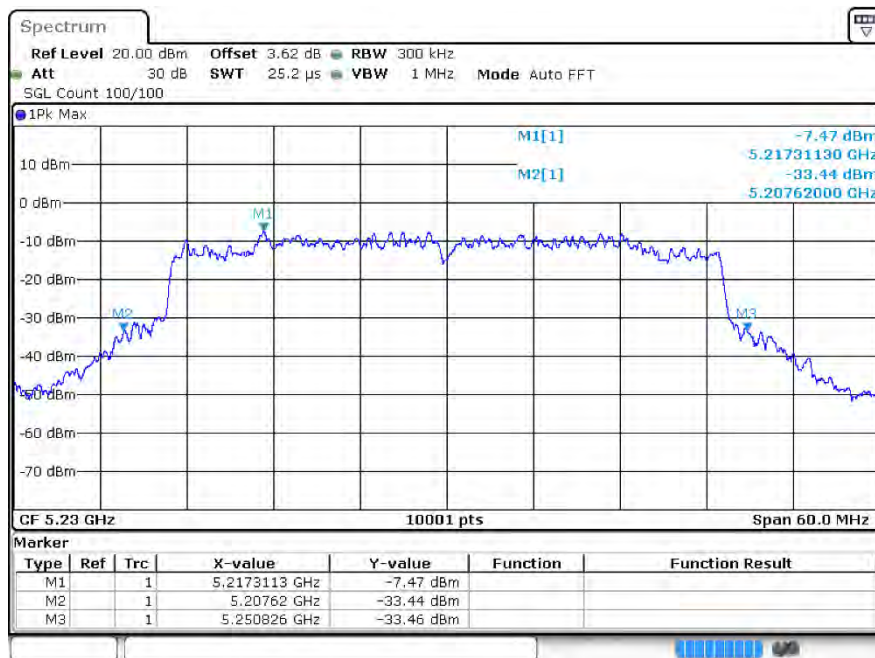


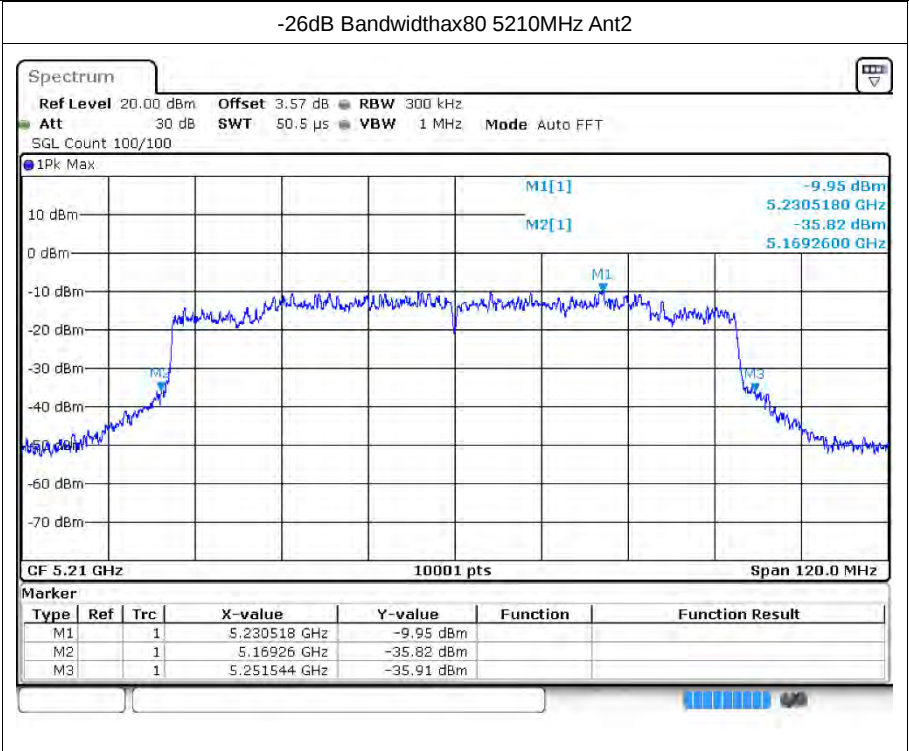


-26dB Bandwidthx40 5190MHz Ant2



-26dB Bandwidthx40 5230MHz Ant2





4 Occupied Channel Bandwidth

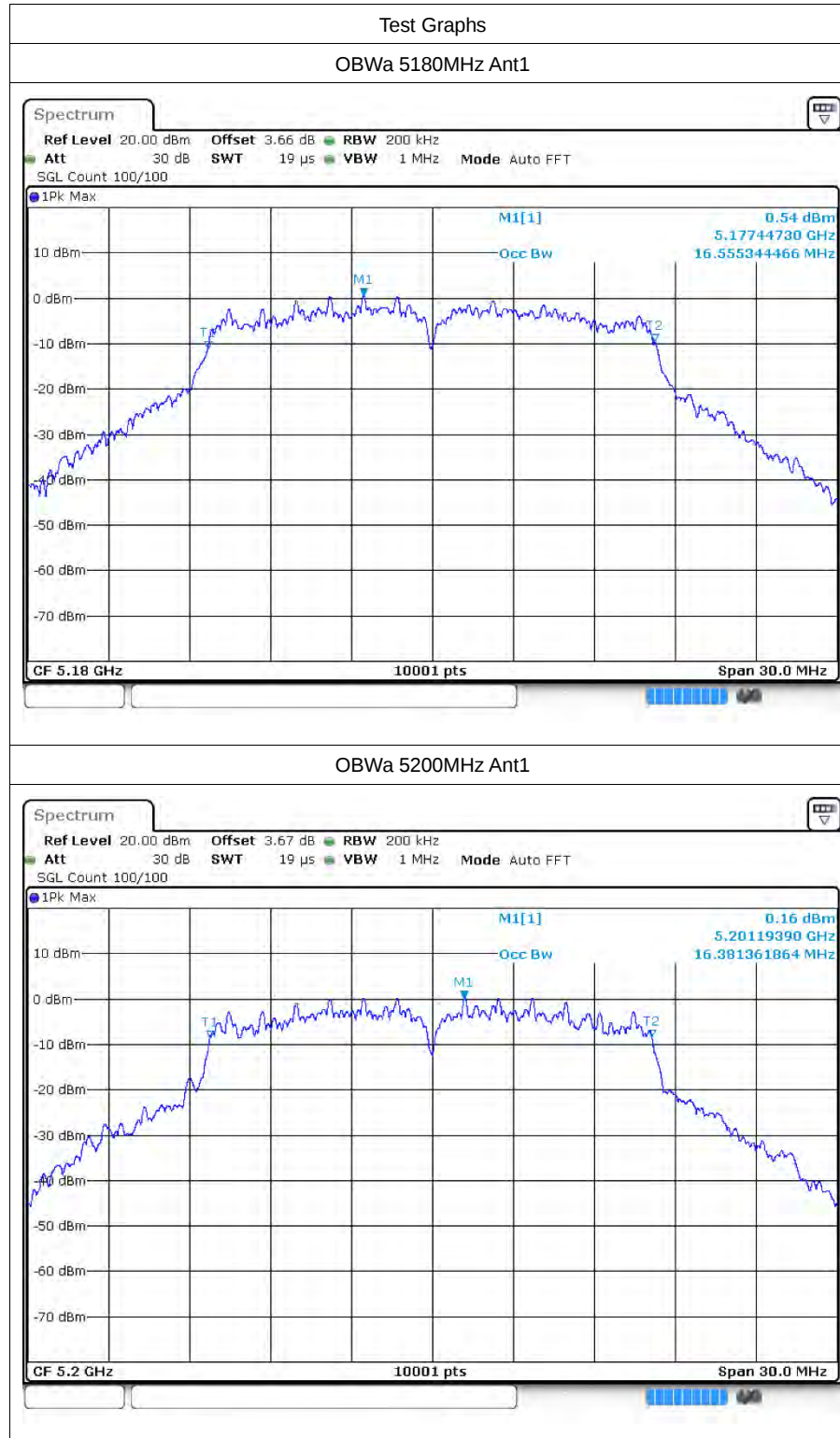
4.1 Test Result

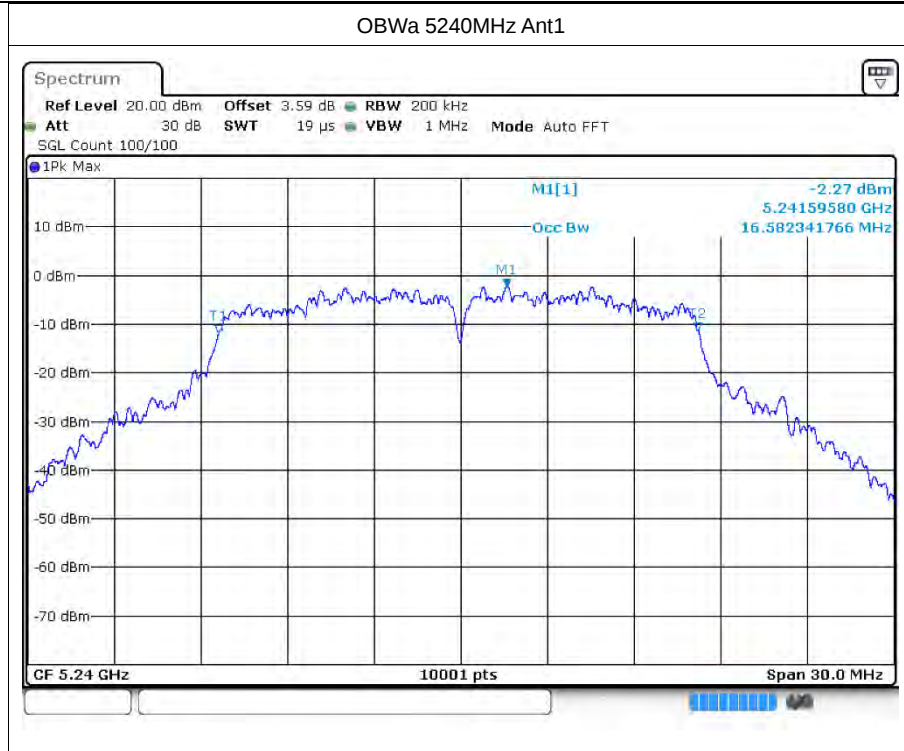
Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
a	5180	Ant1	16.555
a	5200	Ant1	16.381
a	5240	Ant1	16.582
n20	5180	Ant1	17.623
n20	5200	Ant1	17.569
n20	5240	Ant1	17.683
n40	5190	Ant1	36.116
n40	5230	Ant1	36.08
ac20	5180	Ant1	17.626
ac20	5200	Ant1	17.752
ac20	5240	Ant1	17.659
ac40	5190	Ant1	36.188
ac40	5230	Ant1	36.044
ac80	5210	Ant1	75.268
ax20	5180	Ant1	18.856
ax20	5200	Ant1	18.811
ax20	5240	Ant1	18.784
ax40	5190	Ant1	37.322
ax40	5230	Ant1	37.52
ax80	5210	Ant1	76.756
a	5180	Ant2	16.453
a	5200	Ant2	16.408
a	5240	Ant2	16.441
n20	5180	Ant2	17.569
n20	5200	Ant2	17.614
n20	5240	Ant2	17.593
n40	5190	Ant2	35.948
n40	5230	Ant2	36.032
ac20	5180	Ant2	17.59
ac20	5200	Ant2	17.593
ac20	5240	Ant2	17.65
ac40	5190	Ant2	35.996
ac40	5230	Ant2	36.098
ac80	5210	Ant2	75.112
ax20	5180	Ant2	18.838
ax20	5200	Ant2	18.859



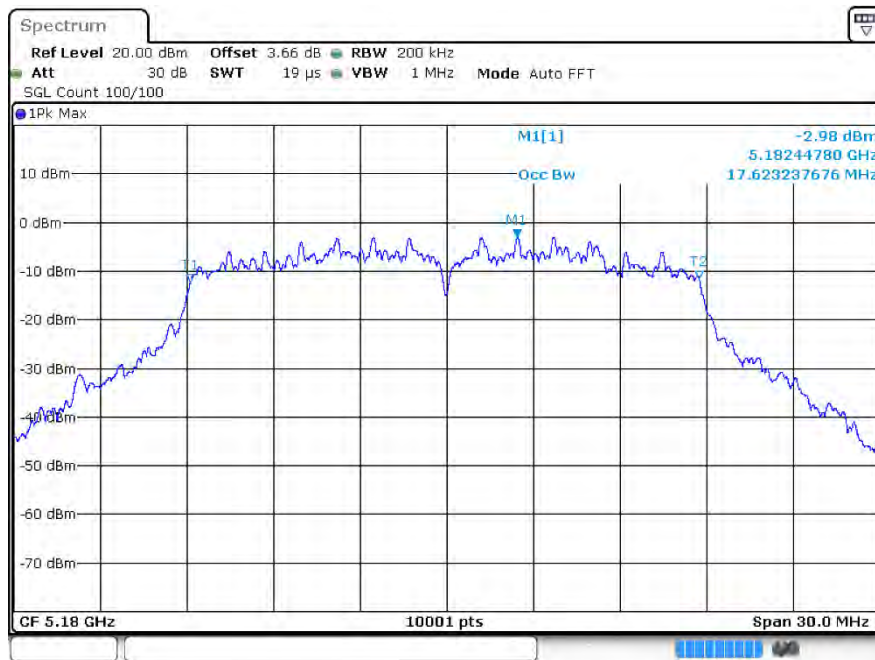
ax20	5240	Ant2	18.919
ax40	5190	Ant2	37.508
ax40	5230	Ant2	37.526
ax80	5210	Ant2	77.044

4.2 Test Graphs

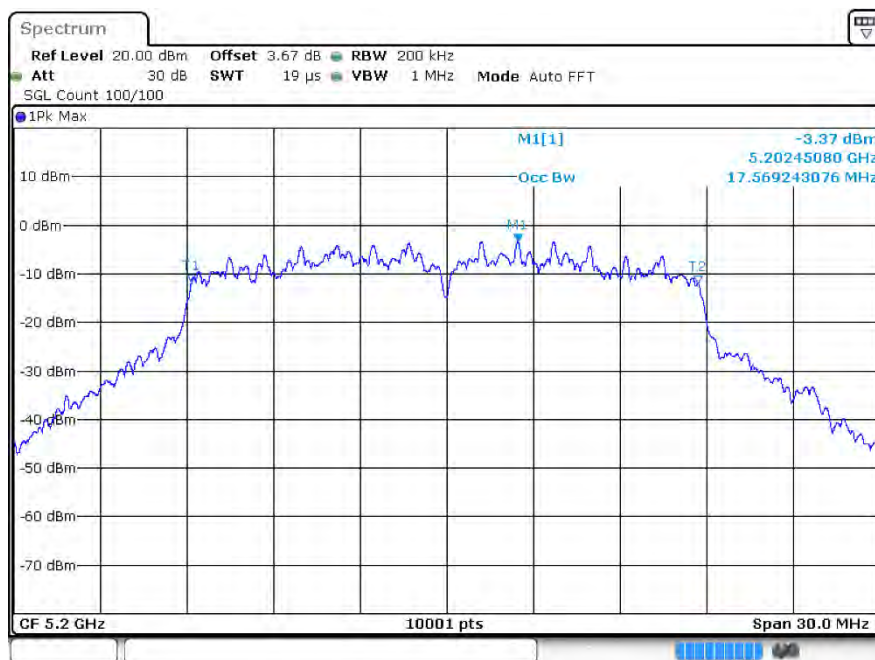


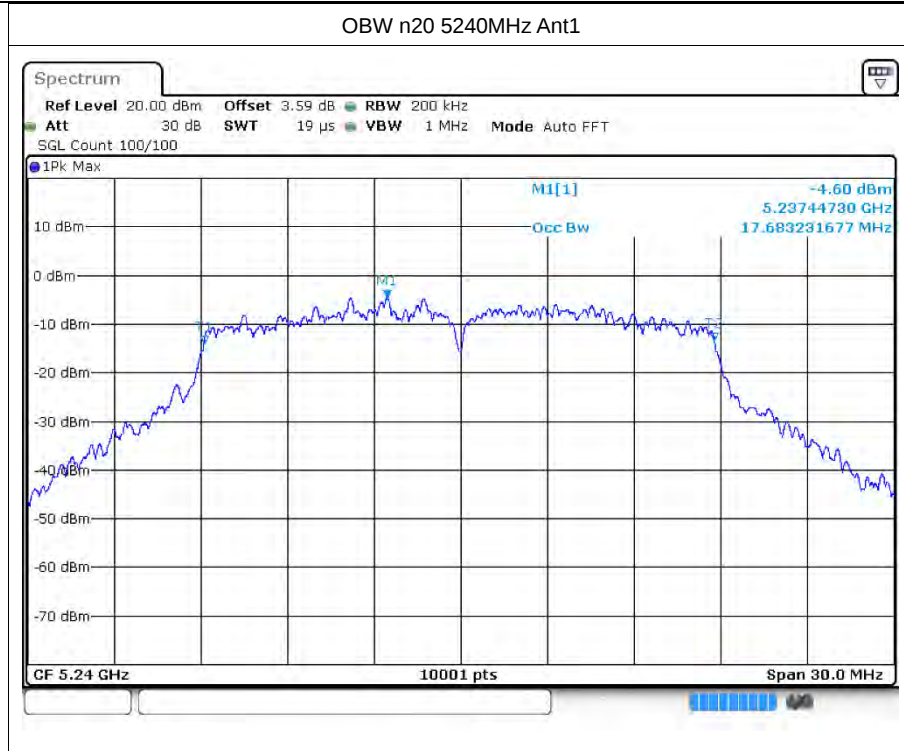


OBW n20 5180MHz Ant1

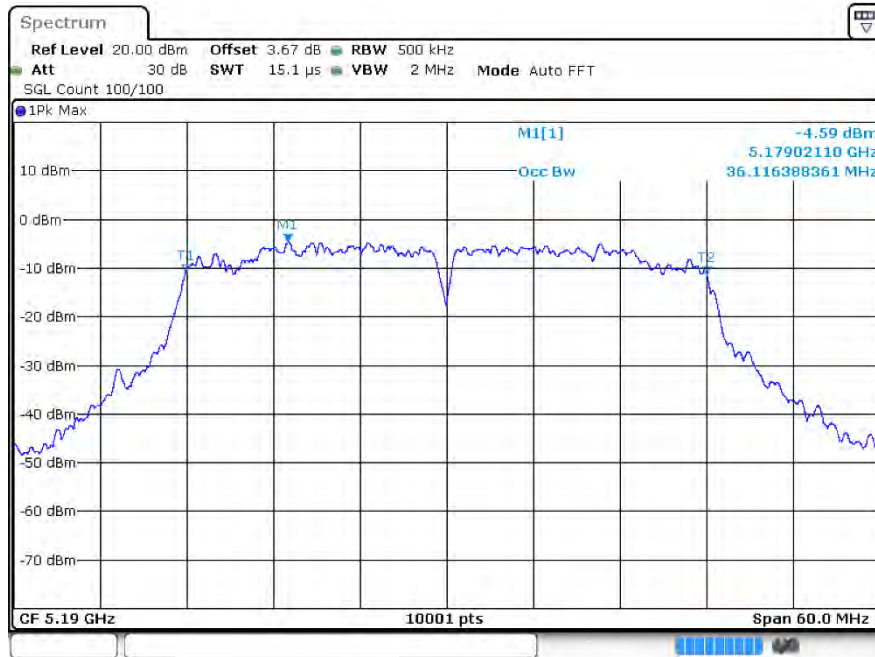


OBW n20 5200MHz Ant1





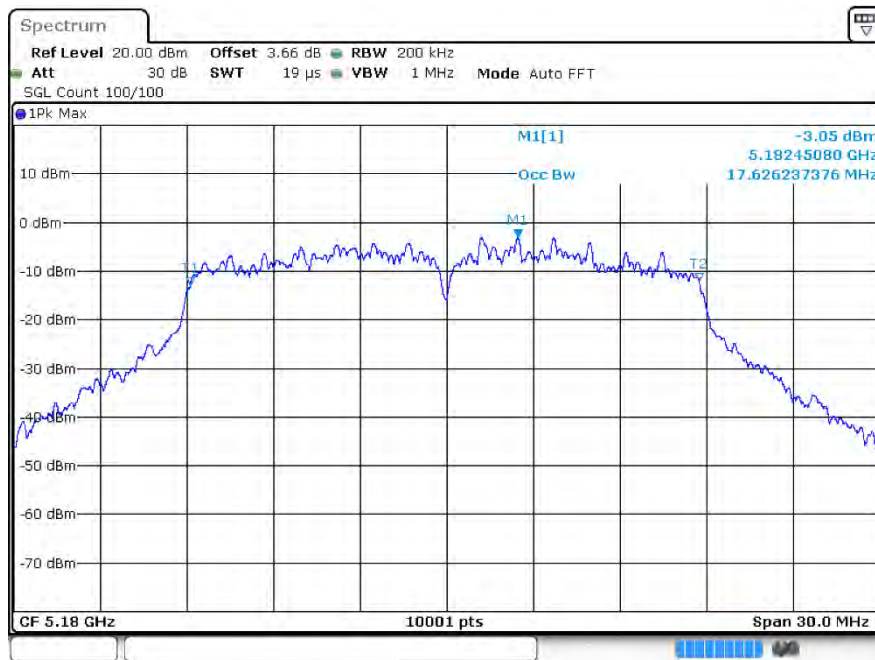
OBWn40 5190MHz Ant1



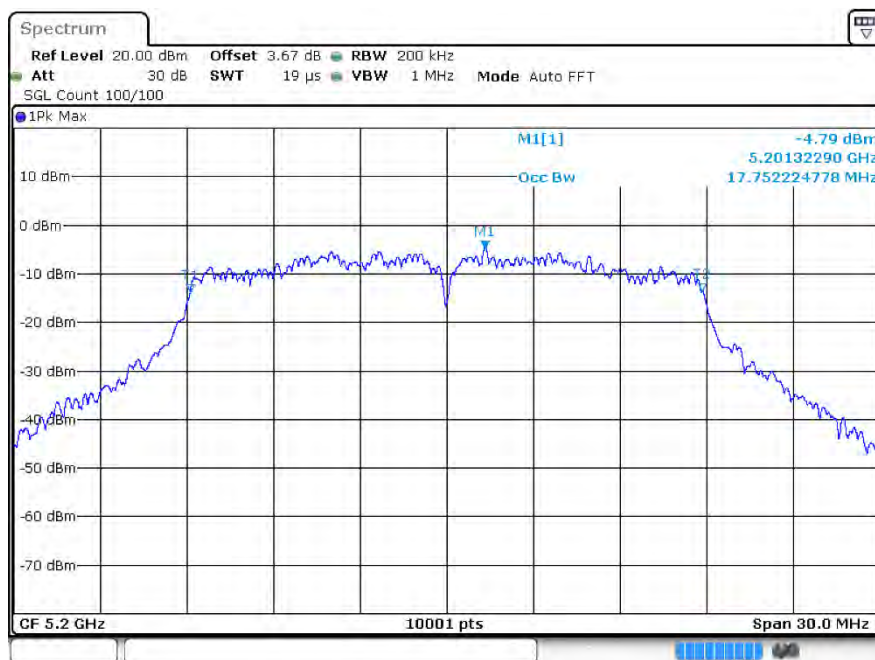
OBWn40 5230MHz Ant1

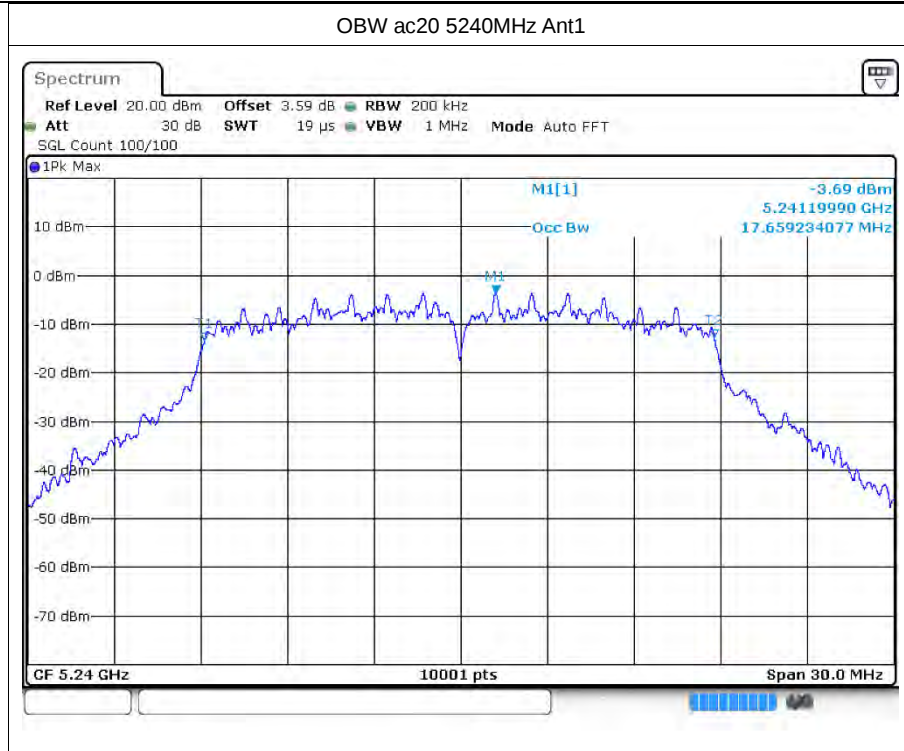


OBW ac20 5180MHz Ant1

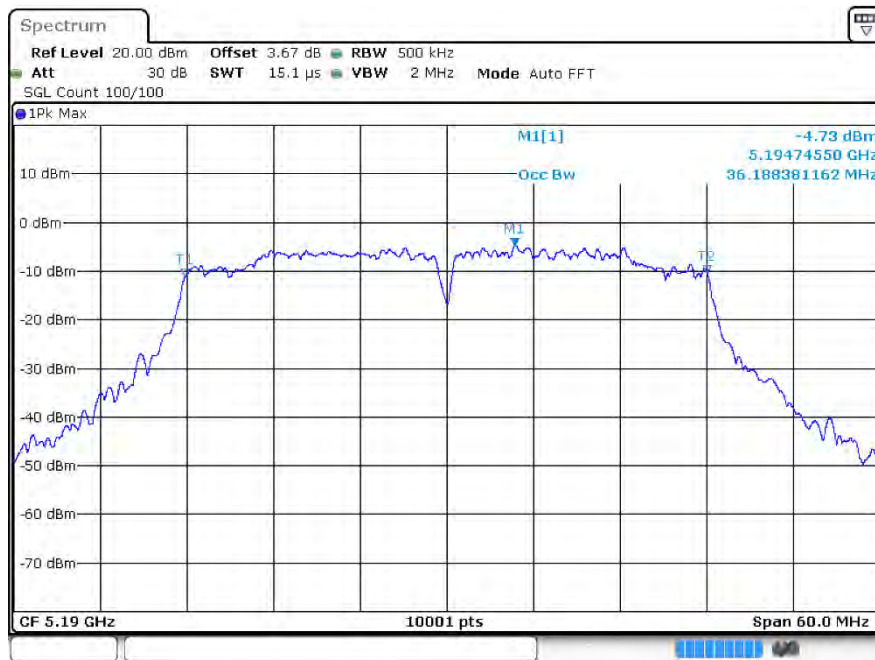


OBW ac20 5200MHz Ant1

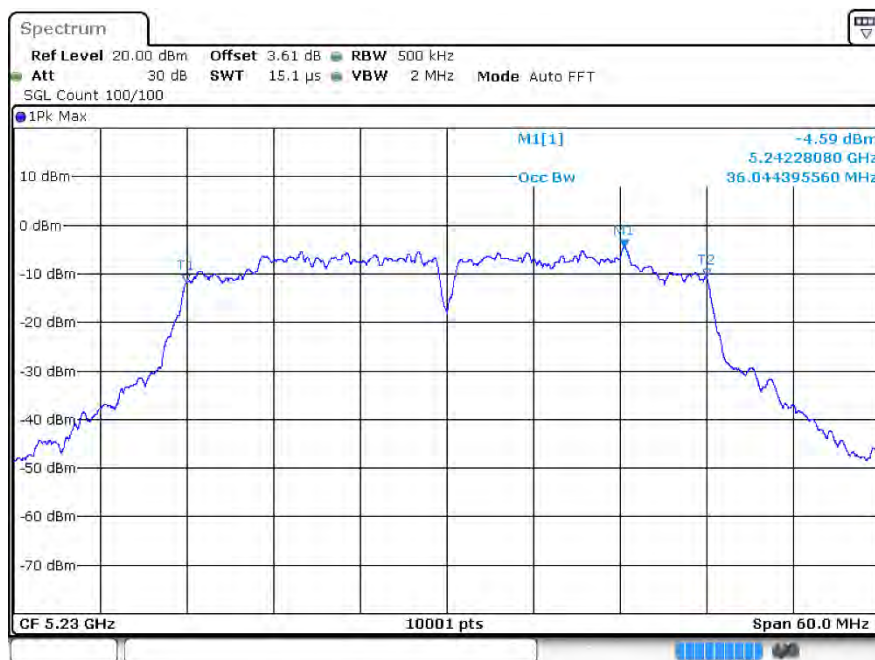


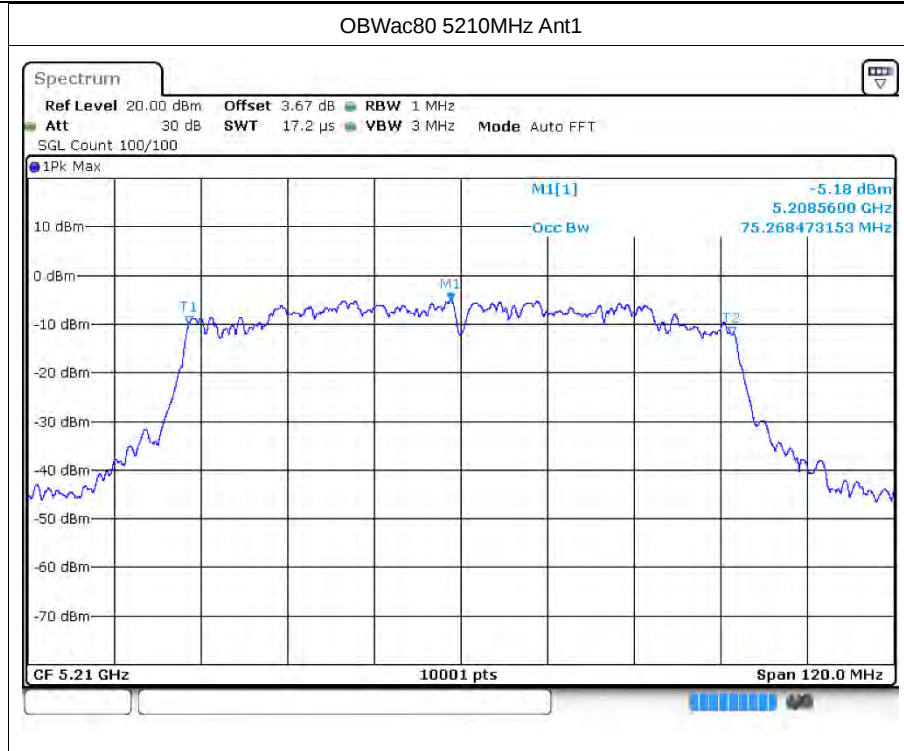


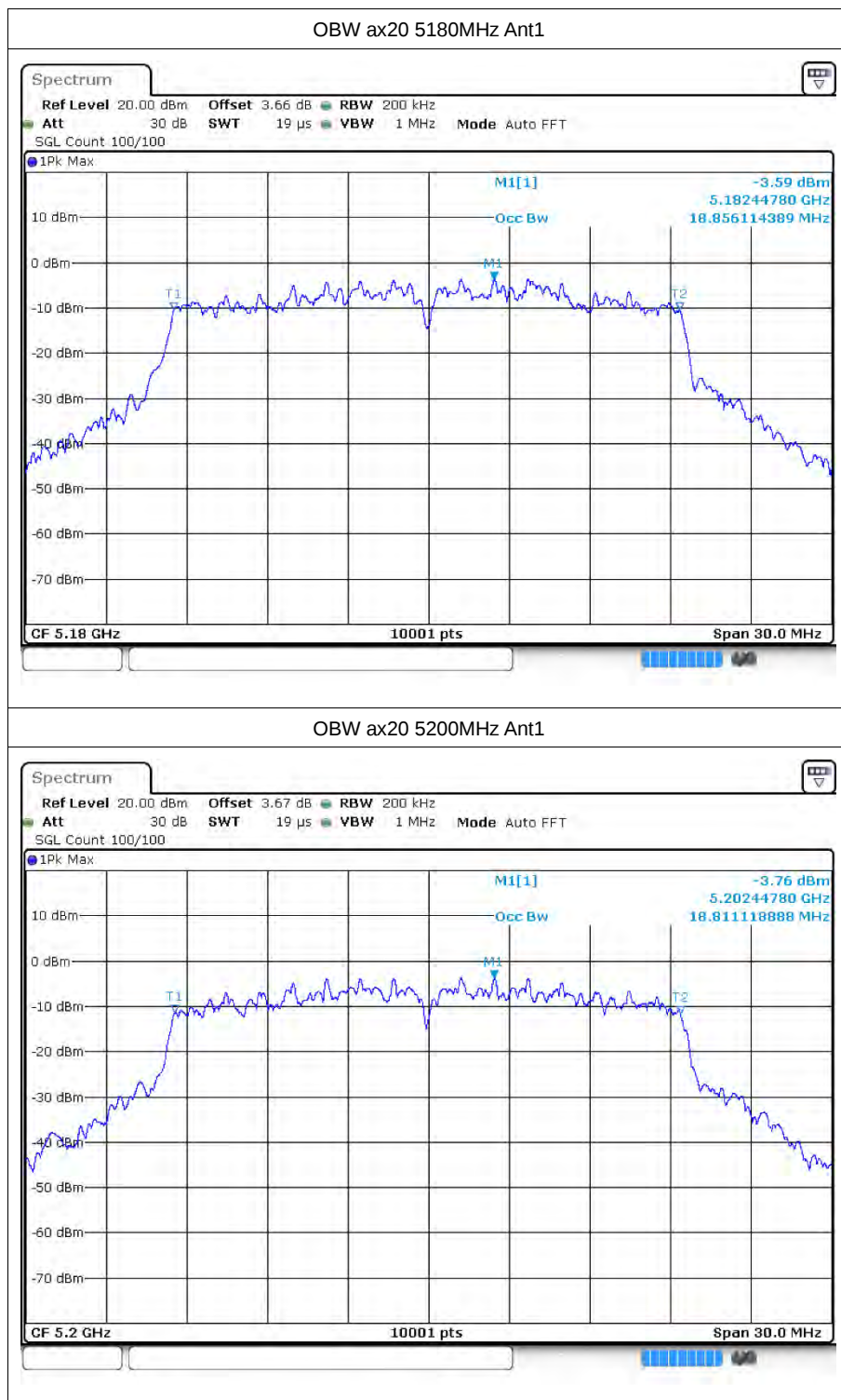
OBWac40 5190MHz Ant1

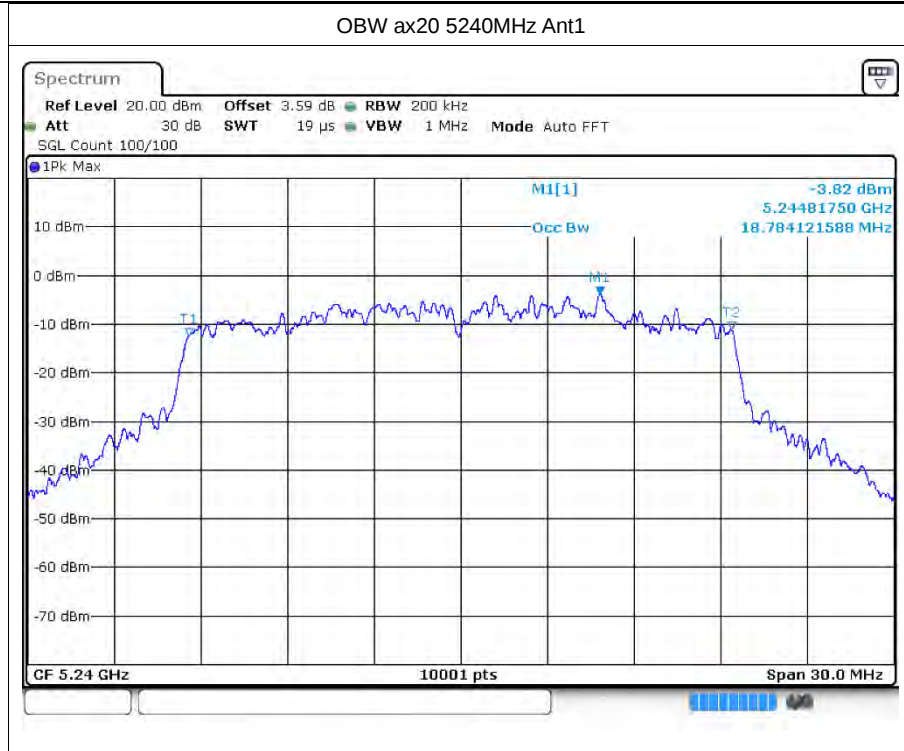


OBWac40 5230MHz Ant1

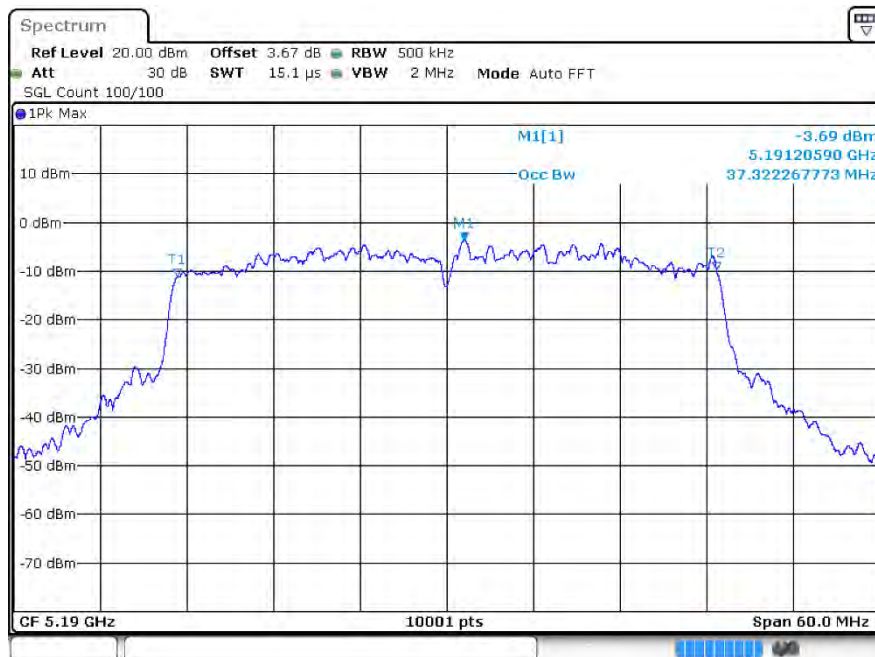




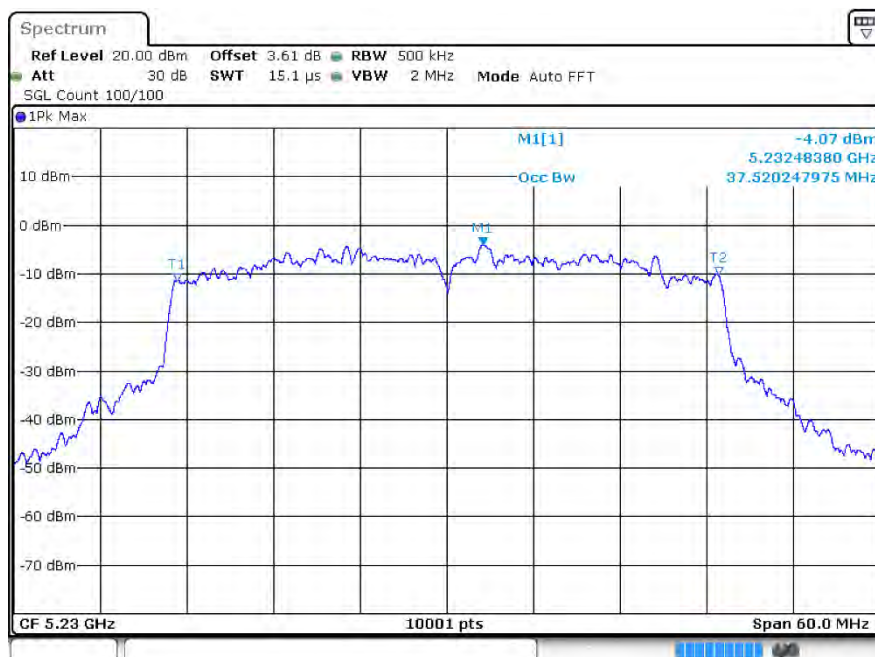


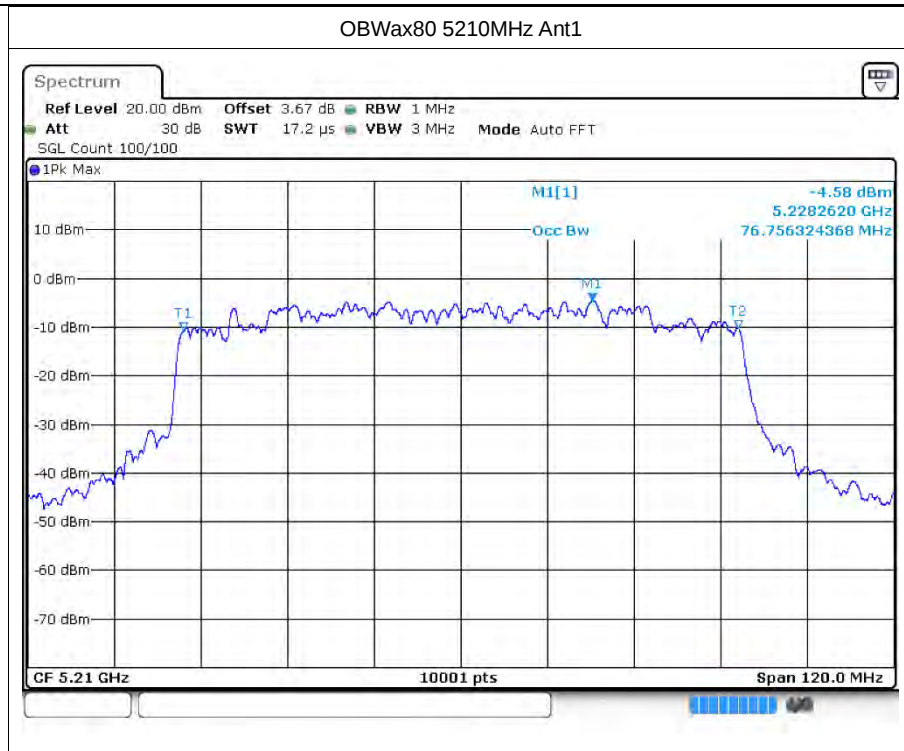


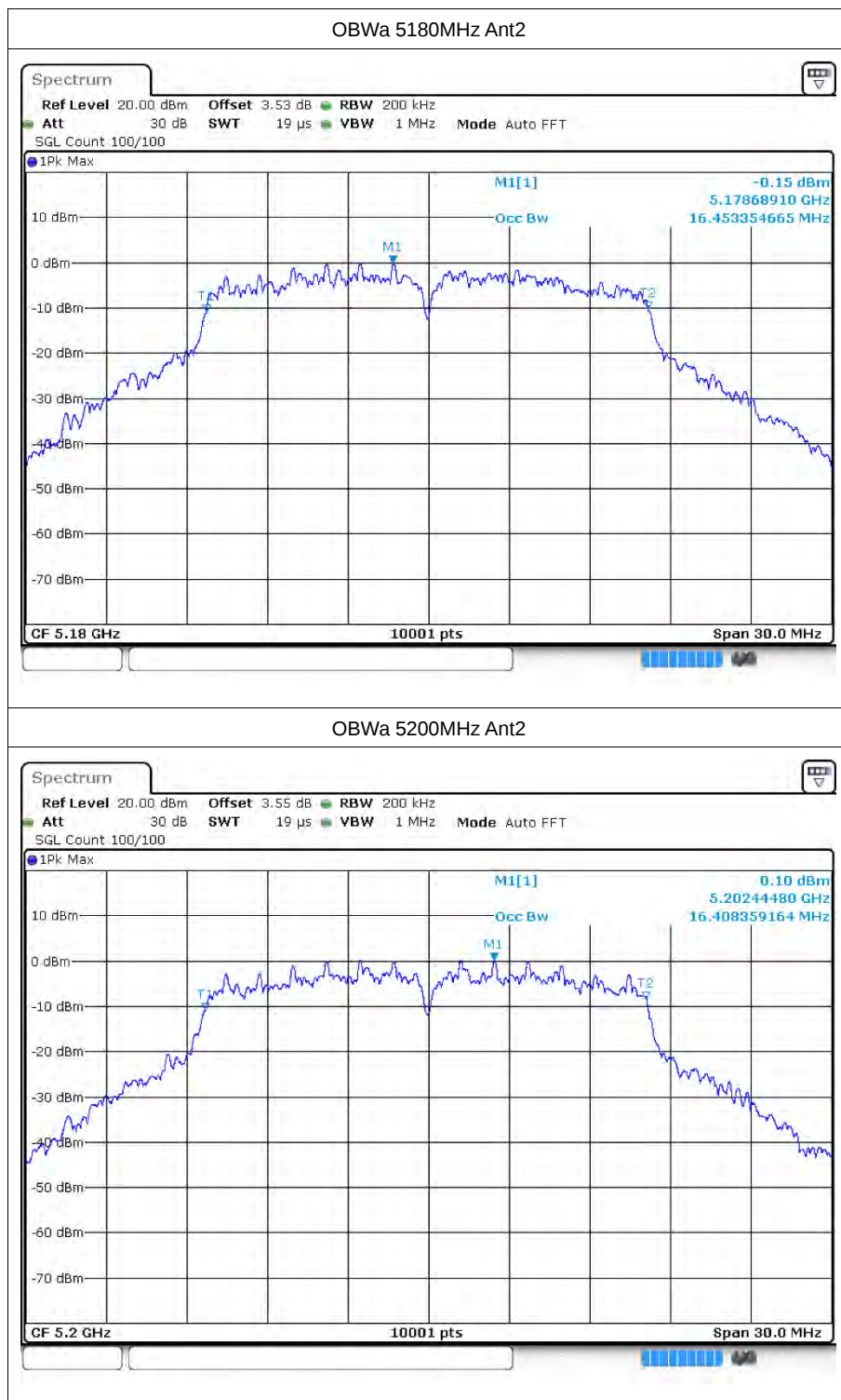
OBWax40 5190MHz Ant1

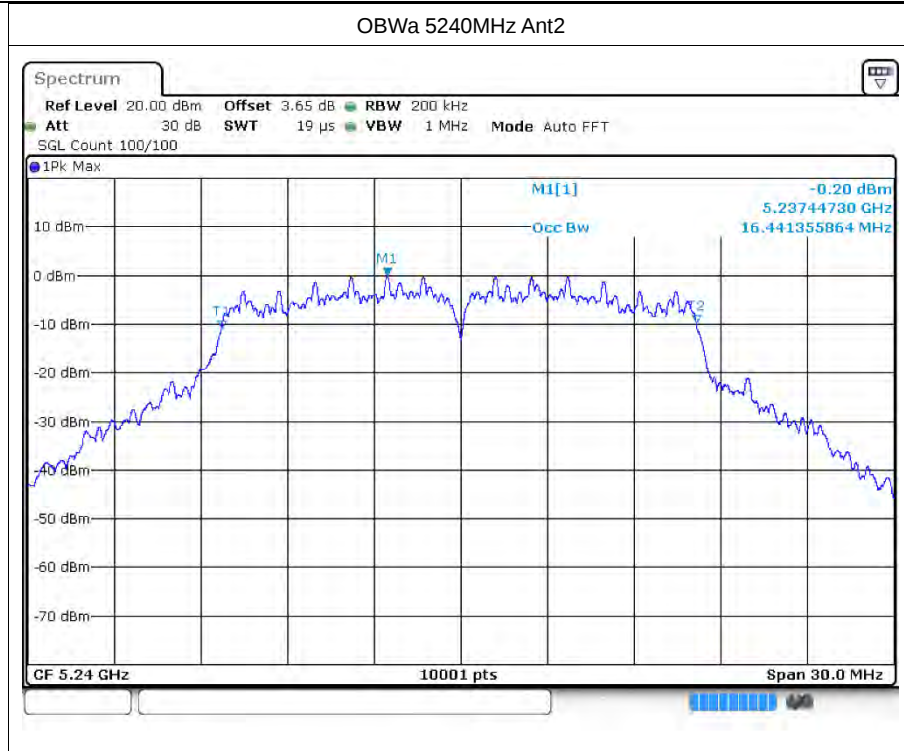


OBWax40 5230MHz Ant1

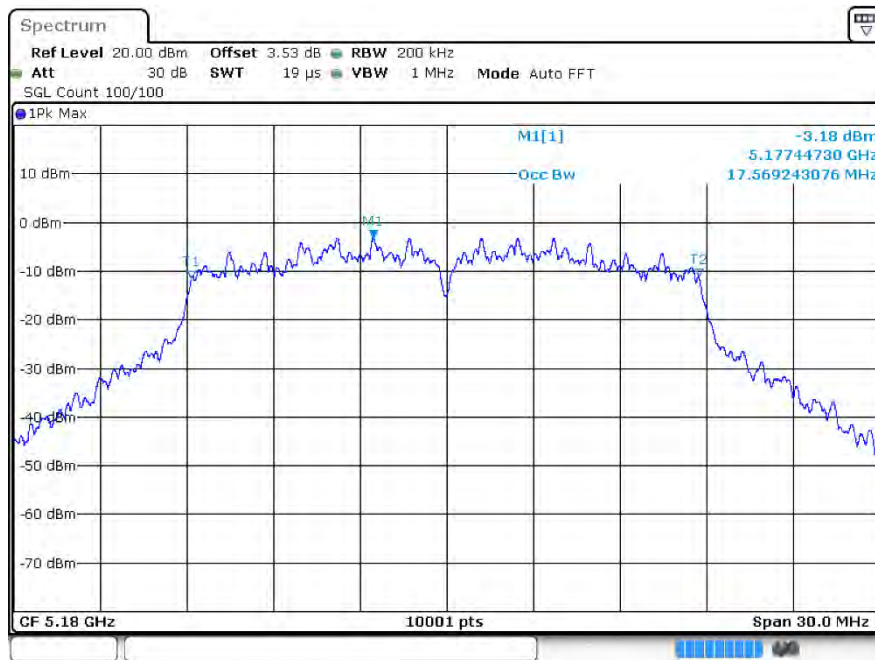




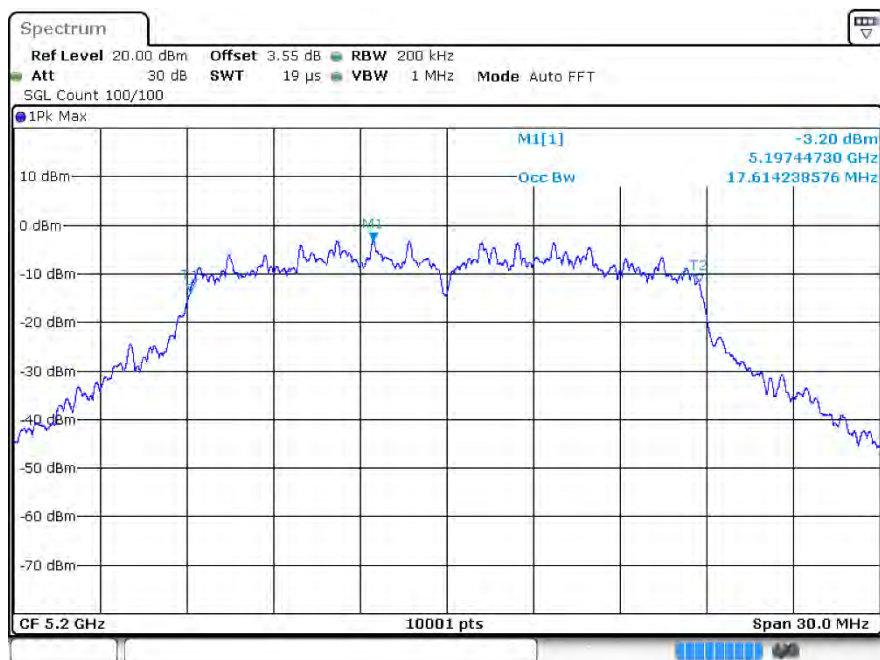


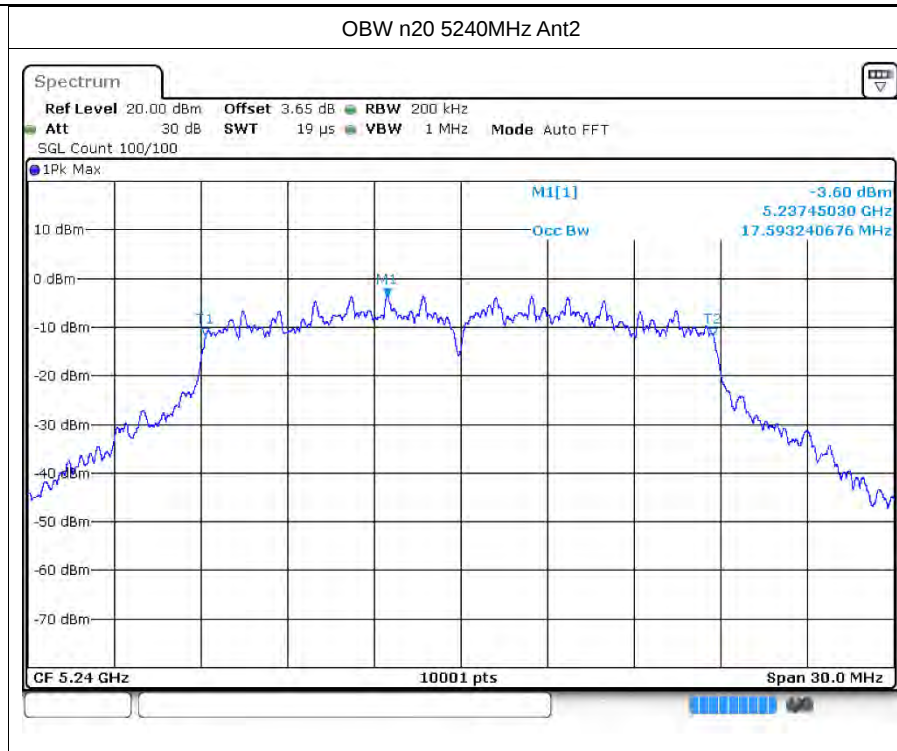


OBW n20 5180MHz Ant2

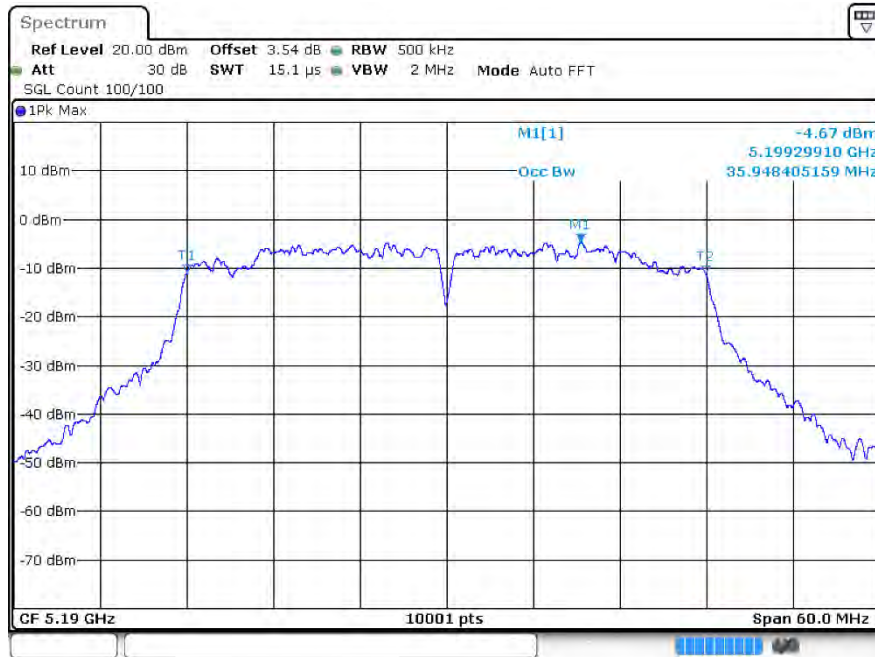


OBW n20 5200MHz Ant2

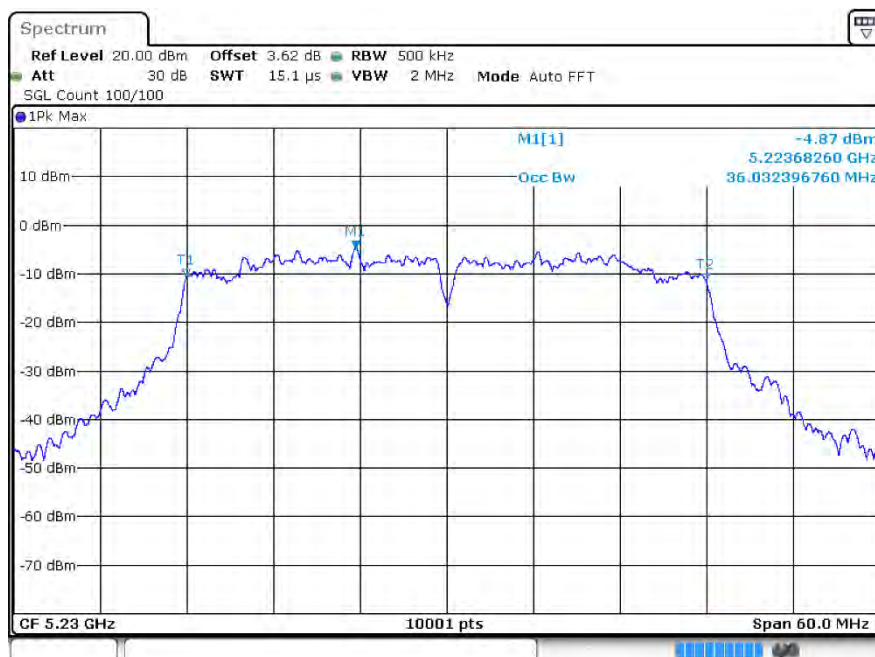




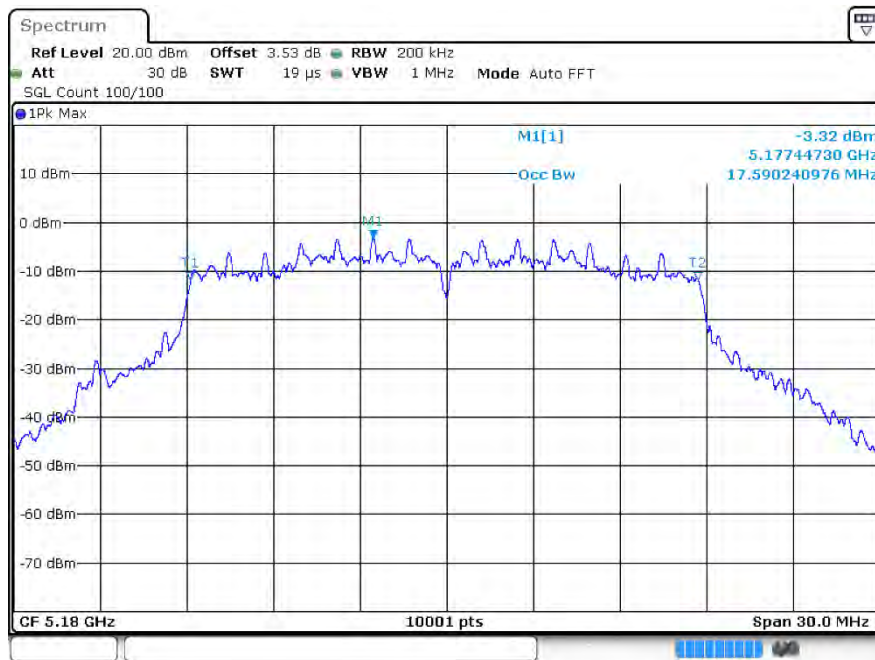
OBWn40 5190MHz Ant2



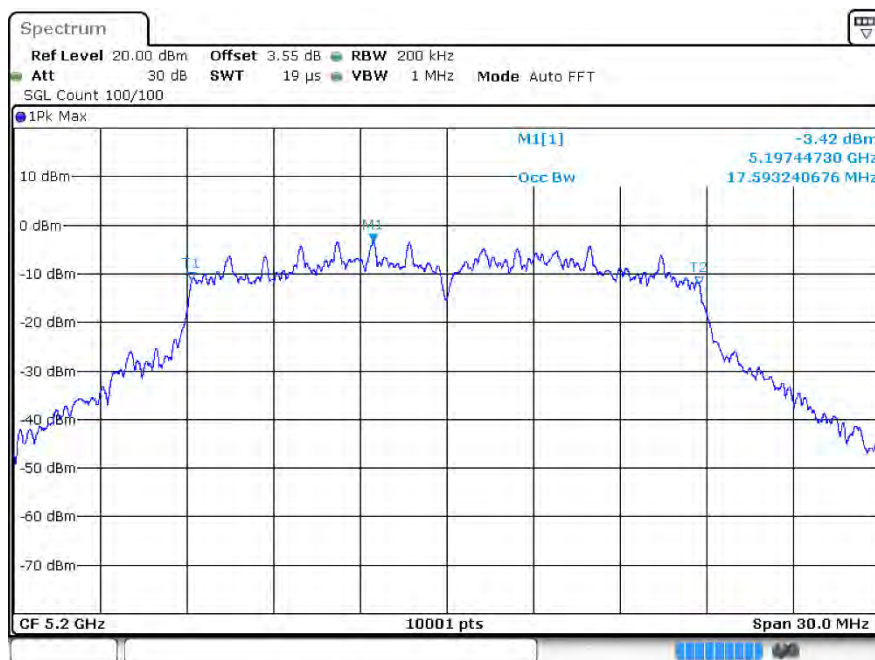
OBWn40 5230MHz Ant2

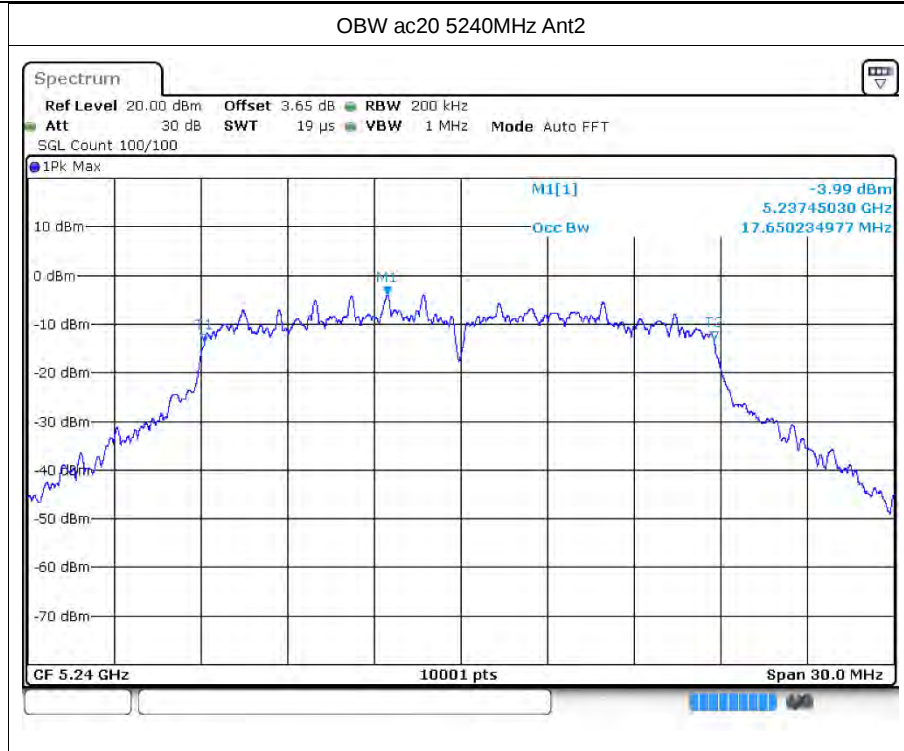


OBW ac20 5180MHz Ant2

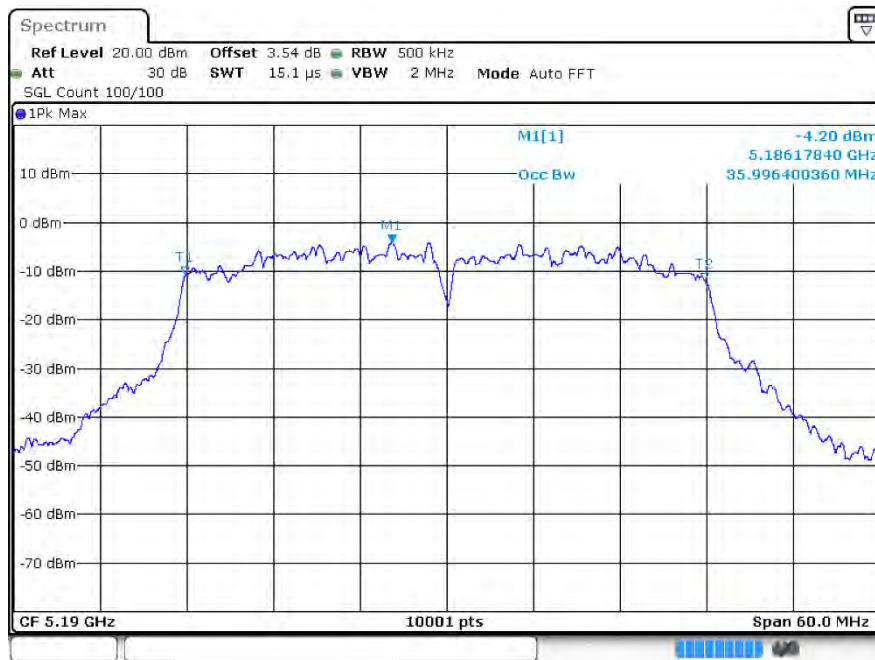


OBW ac20 5200MHz Ant2

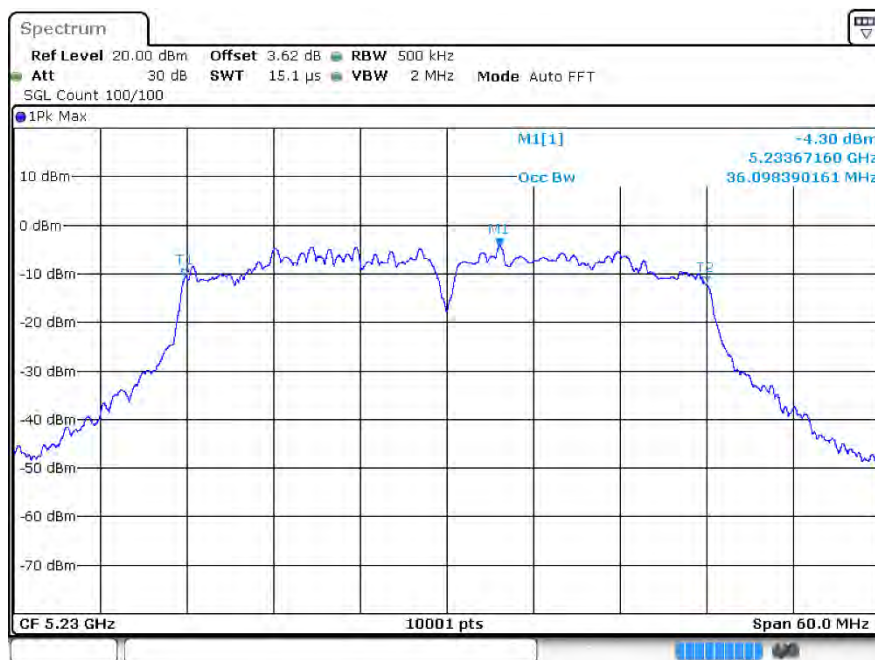


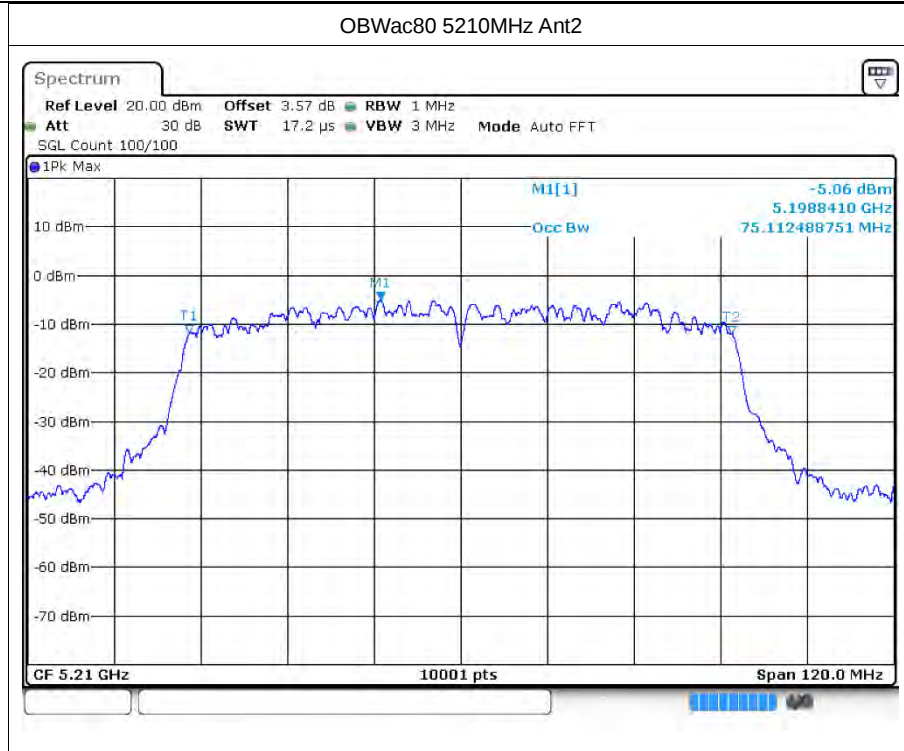


OBWac40 5190MHz Ant2

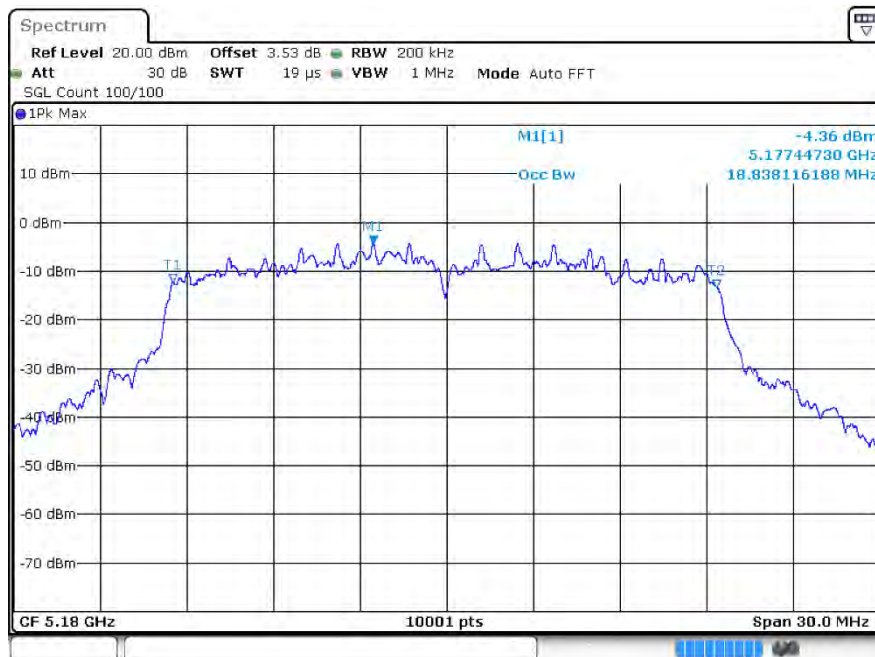


OBWac40 5230MHz Ant2

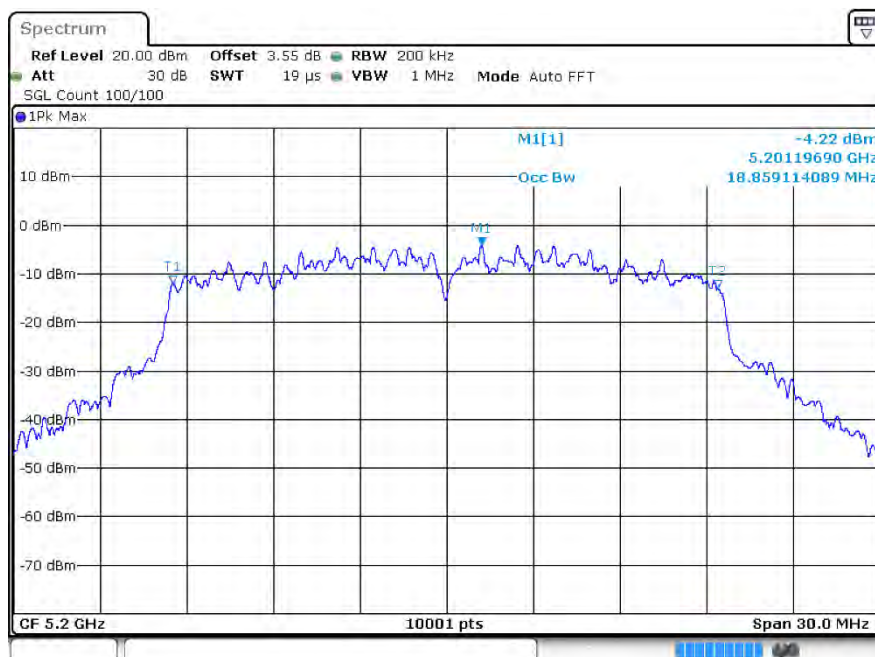


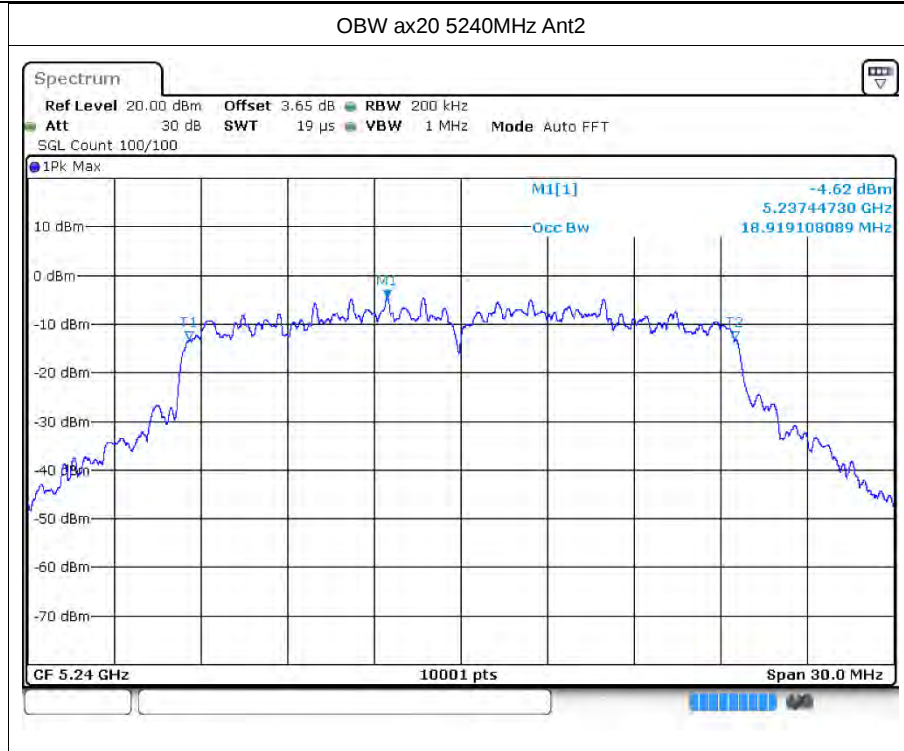


OBW ax20 5180MHz Ant2



OBW ax20 5200MHz Ant2

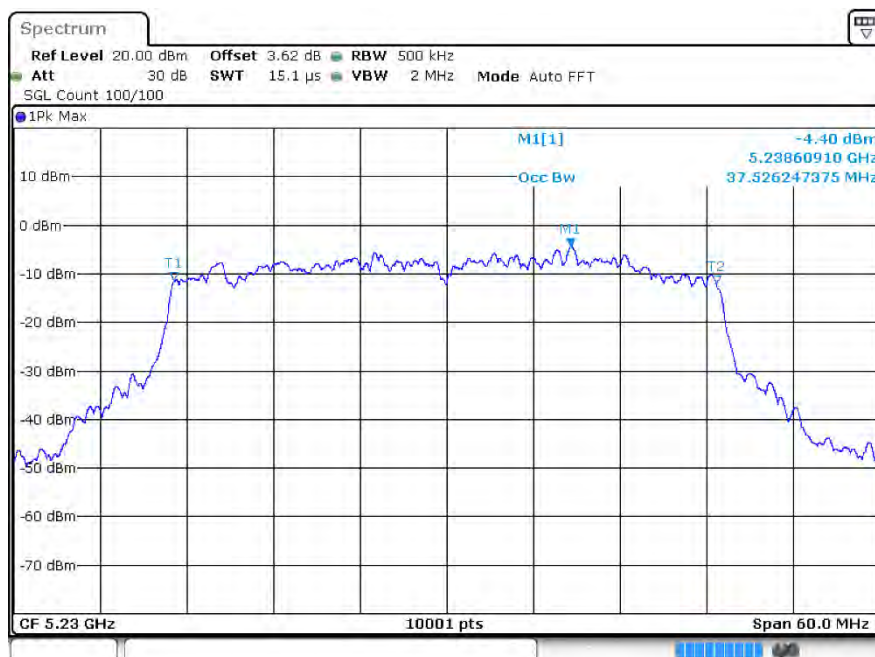


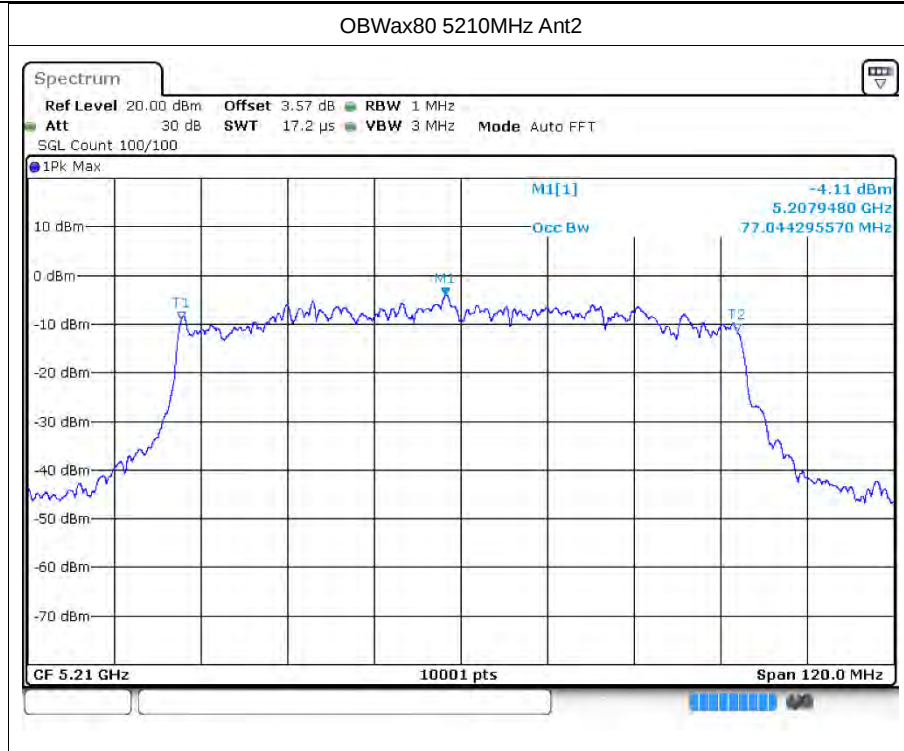


OBWax40 5190MHz Ant2



OBWax40 5230MHz Ant2





5 Maximum Power Spectral Density Level

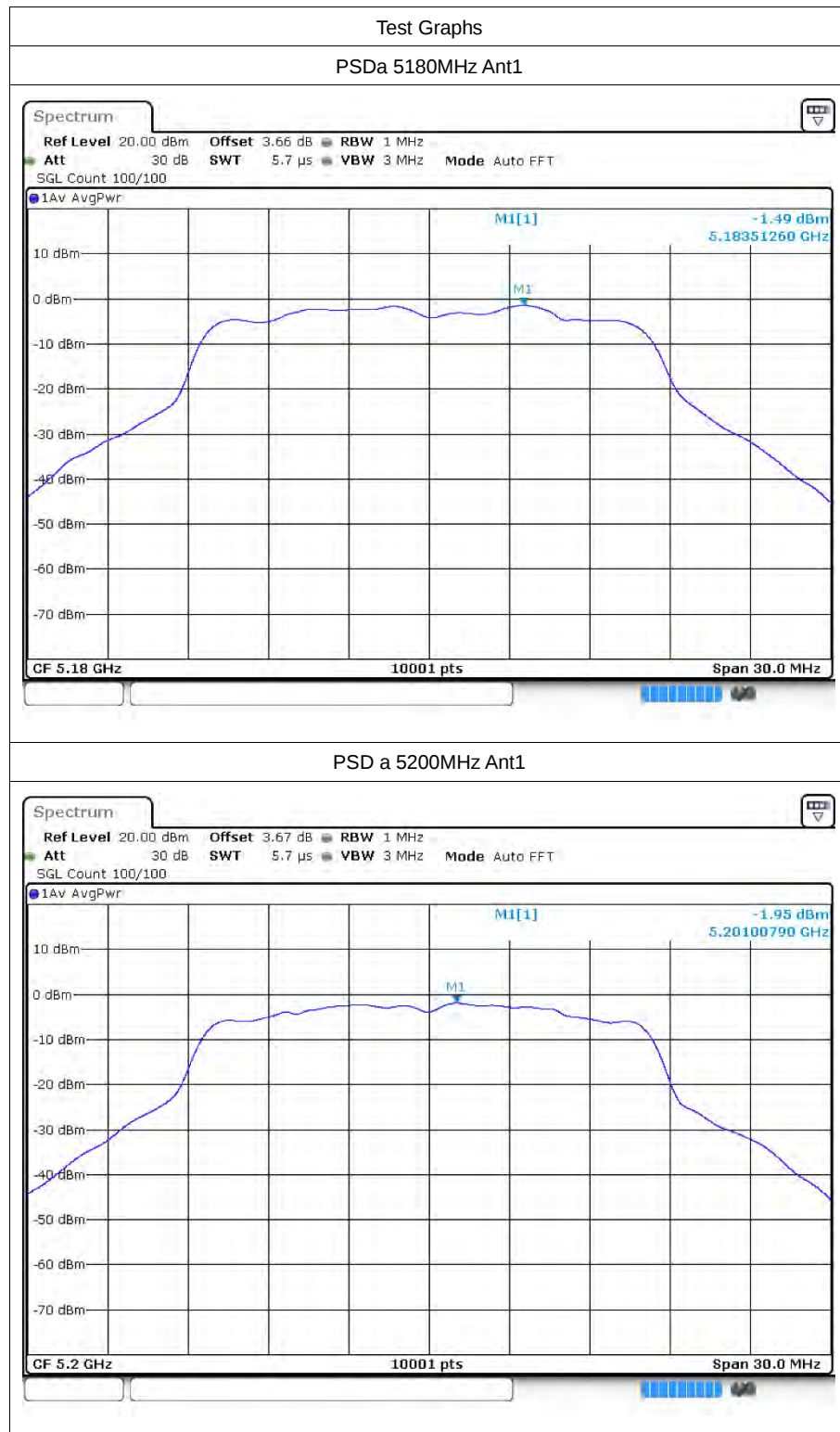
5.1 Test Result

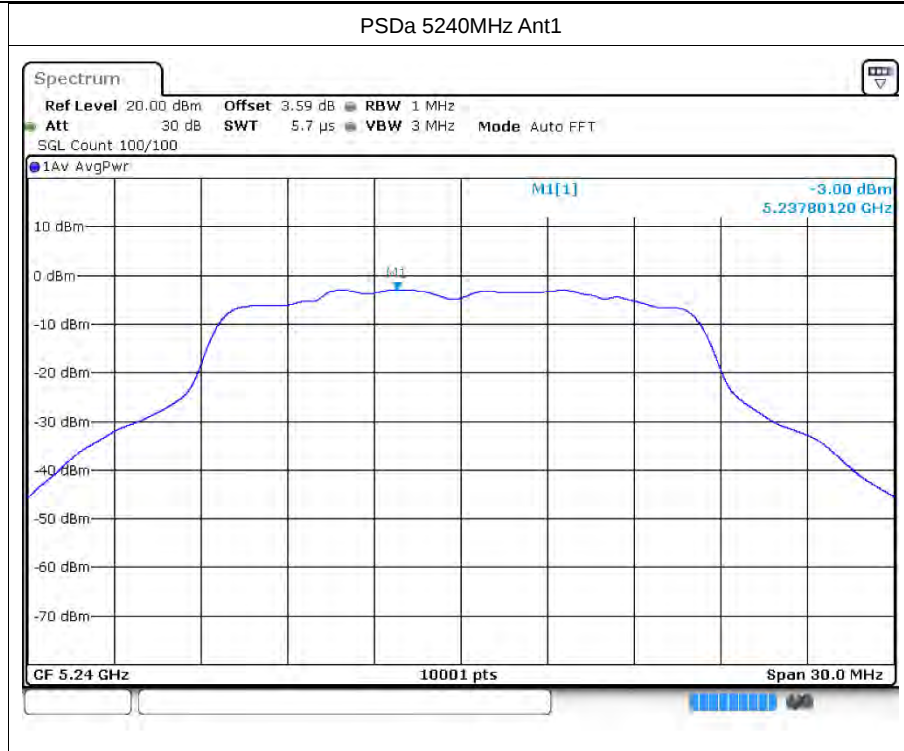
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
a	5180	Ant1	-1.49	0.61	-0.88	11	Pass
a	5200	Ant1	-1.95	0.6	-1.35	11	Pass
a	5240	Ant1	-3	0.62	-2.38	11	Pass
a	5180	Ant2	-1.73	0.6	-1.13	11	Pass
a	5200	Ant2	-3.57	0.61	-2.96	11	Pass
a	5240	Ant2	-2.59	0.62	-1.97	11	Pass
n20	5180	Ant1	-4.7	0.32	-4.38	11	Pass
n20	5180	Ant2	-5.43	0.31	-5.12	11	Pass
n20	5180	Sum	-	-	-1.72	11	Pass
n20	5200	Ant1	-5.39	0.32	-5.07	11	Pass
n20	5200	Ant2	-5.29	0.31	-4.98	11	Pass
n20	5200	Sum	-	-	-2.01	11	Pass
n20	5240	Ant1	-6.1	0.31	-5.79	11	Pass
n20	5240	Ant2	-5.77	0.31	-5.46	11	Pass
n20	5240	Sum	-	-	-2.61	11	Pass
n40	5190	Ant1	-8.74	0.32	-8.42	11	Pass
n40	5190	Ant2	-9.23	0.39	-8.84	11	Pass
n40	5190	Sum	-	-	-5.61	11	Pass
n40	5230	Ant1	-9.75	0.32	-9.43	11	Pass
n40	5230	Ant2	-10.3	0.4	-9.9	11	Pass
n40	5230	Sum	-	-	-6.65	11	Pass
ac20	5180	Ant1	-5.4	0.62	-4.78	11	Pass
ac20	5180	Ant2	-6.52	0.6	-5.92	11	Pass
ac20	5180	Sum	-	-	-2.30	11	Pass
ac20	5200	Ant1	-5.42	0.6	-4.82	11	Pass
ac20	5200	Ant2	-5.8	0.6	-5.2	11	Pass
ac20	5200	Sum	-	-	-2.00	11	Pass
ac20	5240	Ant1	-7.22	0.6	-6.62	11	Pass
ac20	5240	Ant2	-6.39	0.6	-5.79	11	Pass
ac20	5240	Sum	-	-	-3.17	11	Pass
ac40	5190	Ant1	-8.18	0.59	-7.59	11	Pass
ac40	5190	Ant2	-9.3	0.73	-8.57	11	Pass
ac40	5190	Sum	-	-	-5.04	11	Pass
ac40	5230	Ant1	-10.1	0.59	-9.51	11	Pass
ac40	5230	Ant2	-10.47	0.73	-9.74	11	Pass
ac40	5230	Sum	-	-	-6.61	11	Pass



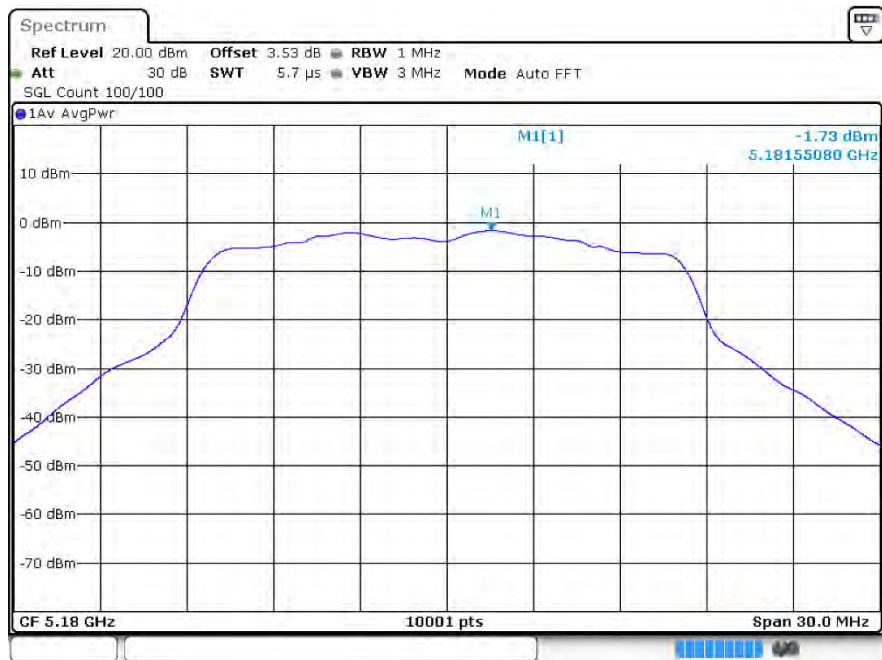
ac80	5210	Ant1	-12.88	0.62	-12.26	11	Pass
ac80	5210	Ant2	-13.05	0.81	-12.24	11	Pass
ac80	5210	Sum	-	-	-9.24	11	Pass
ax20	5180	Ant1	-6	0.6	-5.4	11	Pass
ax20	5180	Ant2	-6.49	0.6	-5.89	11	Pass
ax20	5180	Sum	-	-	-2.63	11	Pass
ax20	5200	Ant1	-5.34	0.6	-4.74	11	Pass
ax20	5200	Ant2	-6.86	0.6	-6.26	11	Pass
ax20	5200	Sum	-	-	-2.42	11	Pass
ax20	5240	Ant1	-6.34	0.6	-5.74	11	Pass
ax20	5240	Ant2	-6.23	0.6	-5.63	11	Pass
ax20	5240	Sum	-	-	-2.67	11	Pass
ax40	5190	Ant1	-9.96	0.57	-9.39	11	Pass
ax40	5190	Ant2	-11.23	0.72	-10.51	11	Pass
ax40	5190	Sum	-	-	-6.90	11	Pass
ax40	5230	Ant1	-9.89	0.58	-9.31	11	Pass
ax40	5230	Ant2	-11.4	0.7	-10.7	11	Pass
ax40	5230	Sum	-	-	-6.94	11	Pass
ax80	5210	Ant1	-13.1	0.61	-12.49	11	Pass
ax80	5210	Ant2	-12.97	0.92	-12.05	11	Pass
ax80	5210	Sum	-	-	-9.25	11	Pass

5.2 Test Graphs

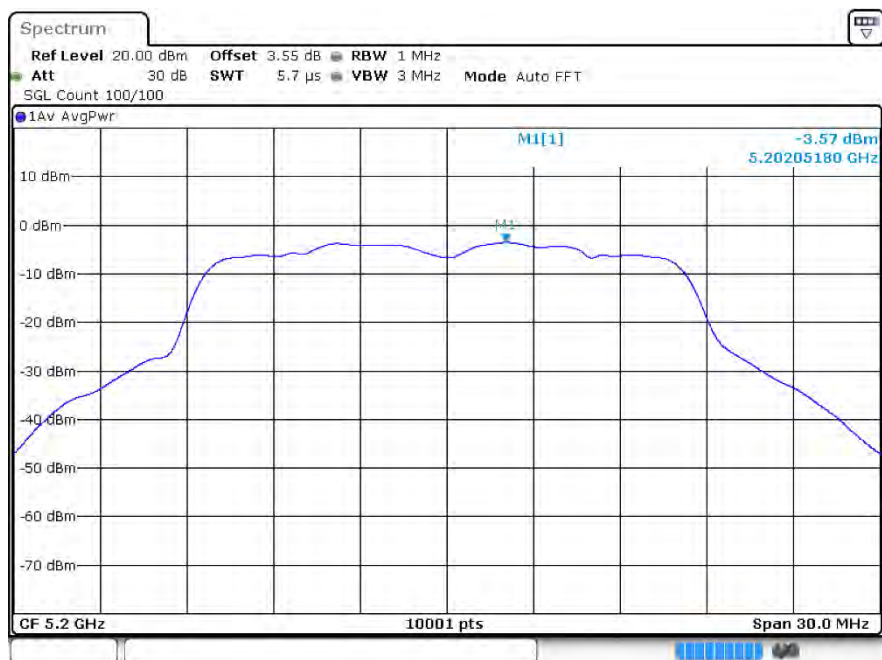


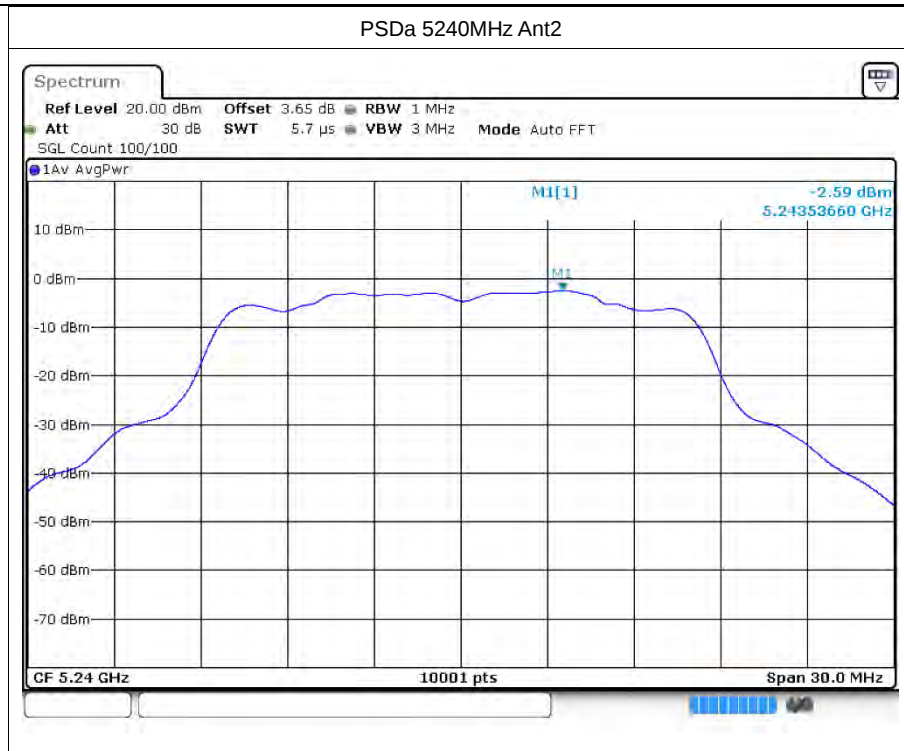


PSDa 5180MHz Ant2

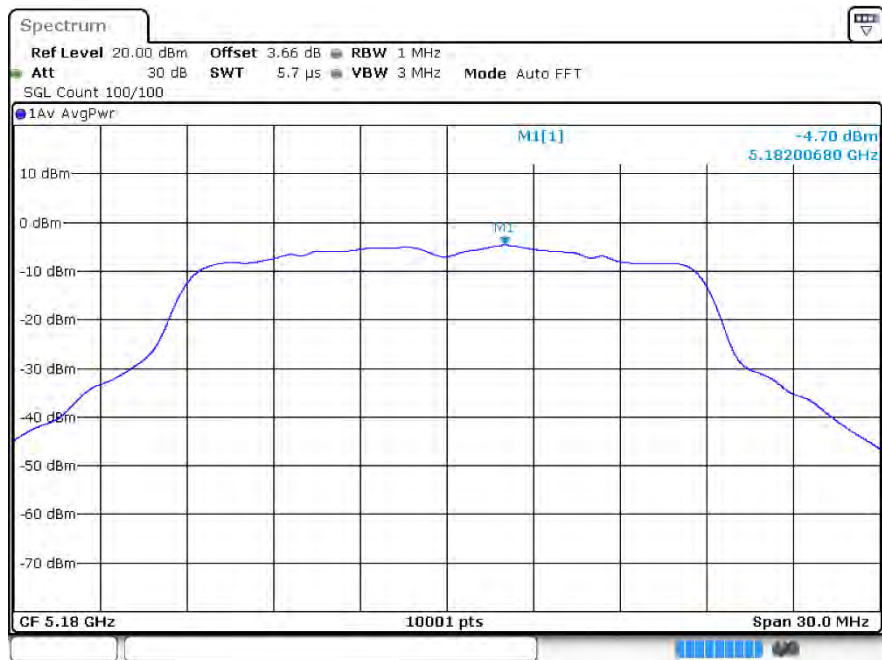


PSD a 5200MHz Ant2

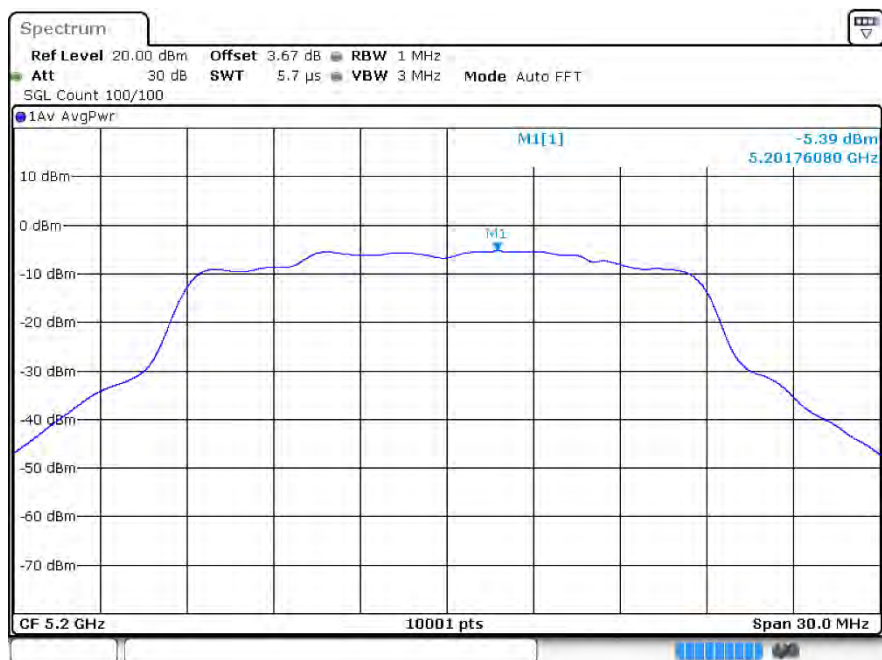


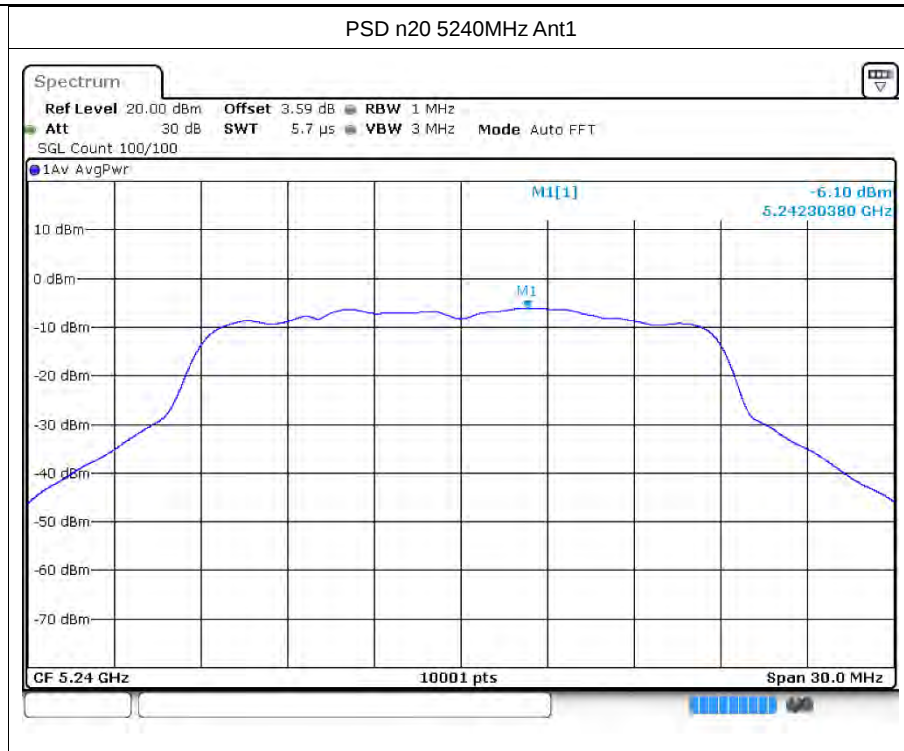


PSD n20 5180MHz Ant1



PSD n20 5200MHz Ant1

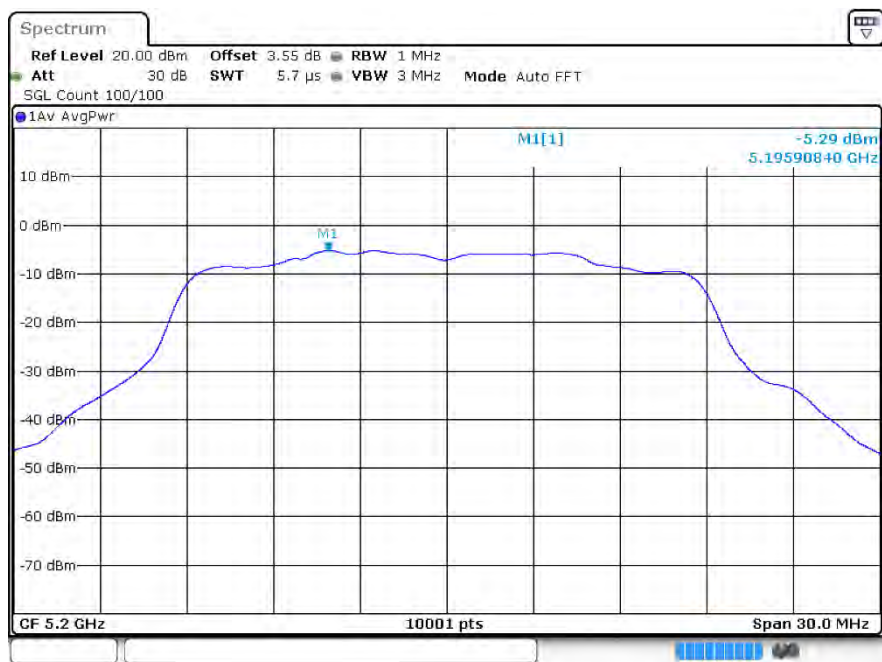


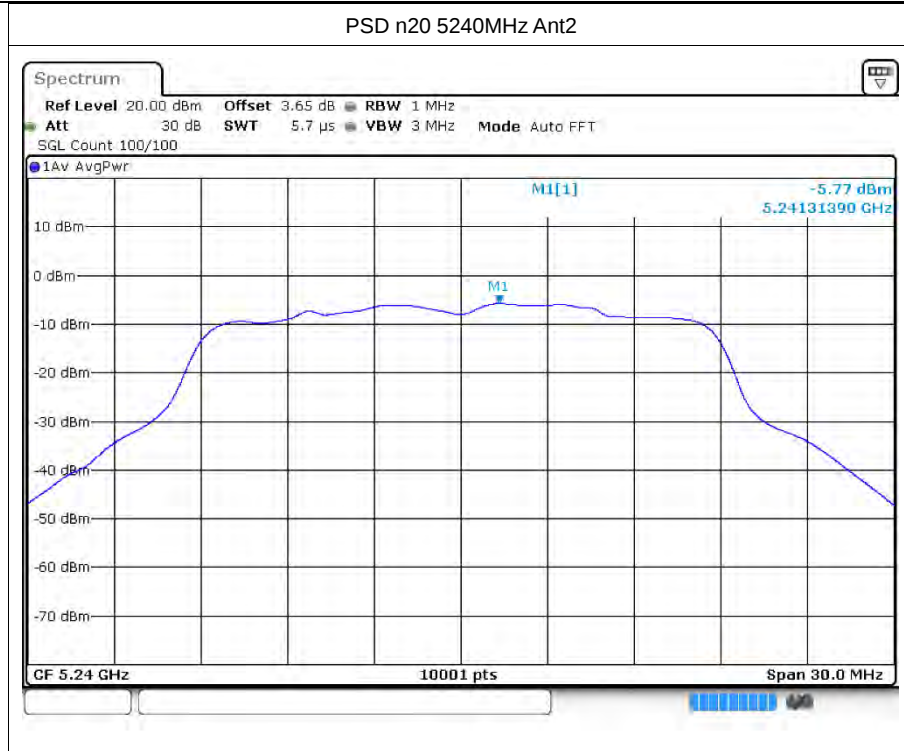


PSD n20 5180MHz Ant2

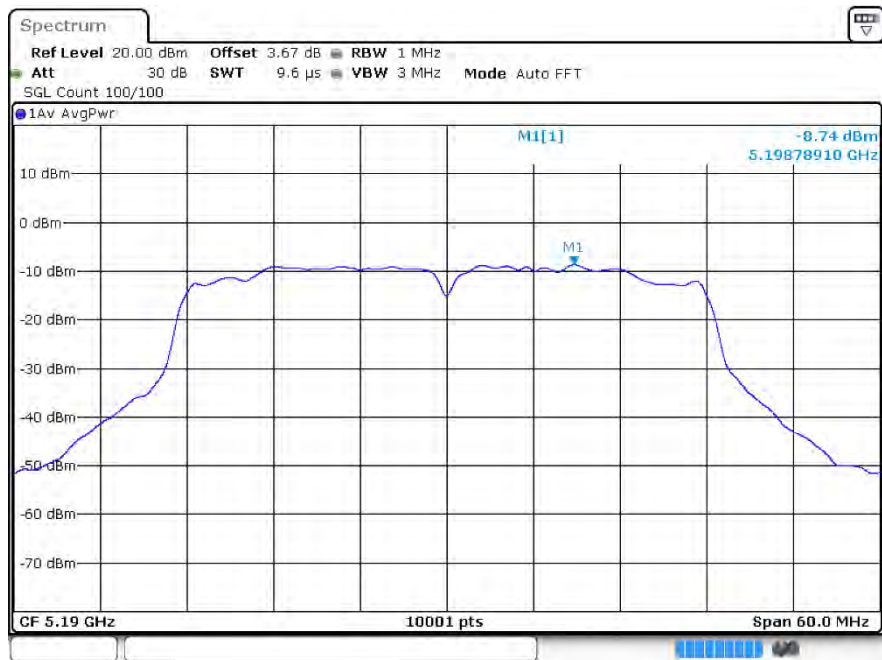


PSD n20 5200MHz Ant2

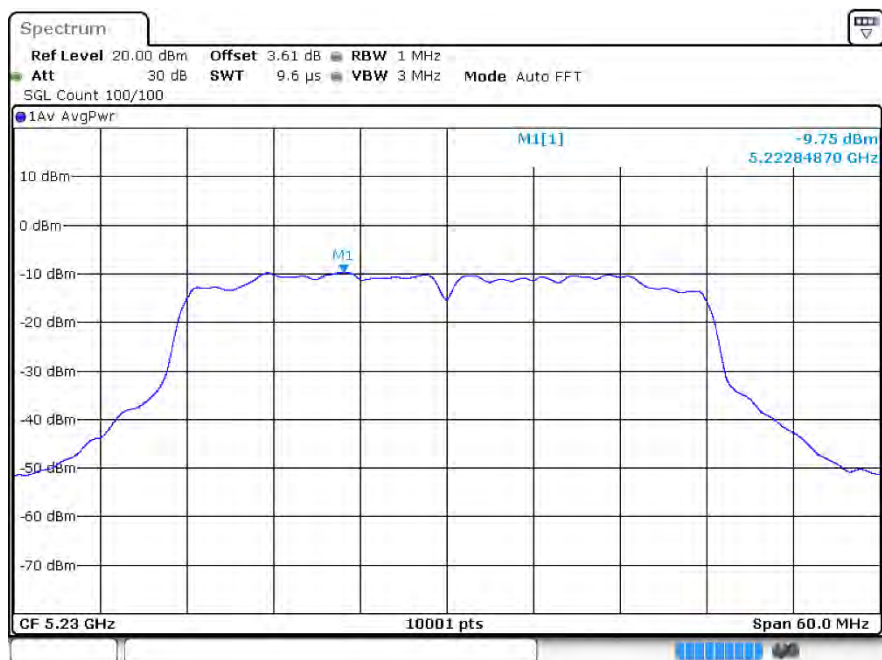




PSDn40 5190MHz Ant1



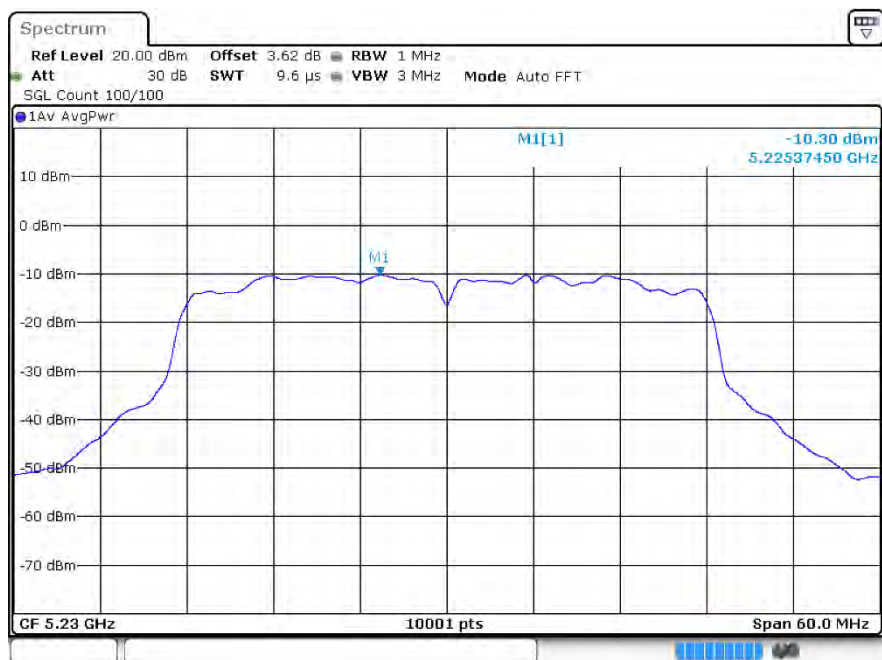
PSDn40 5230MHz Ant1



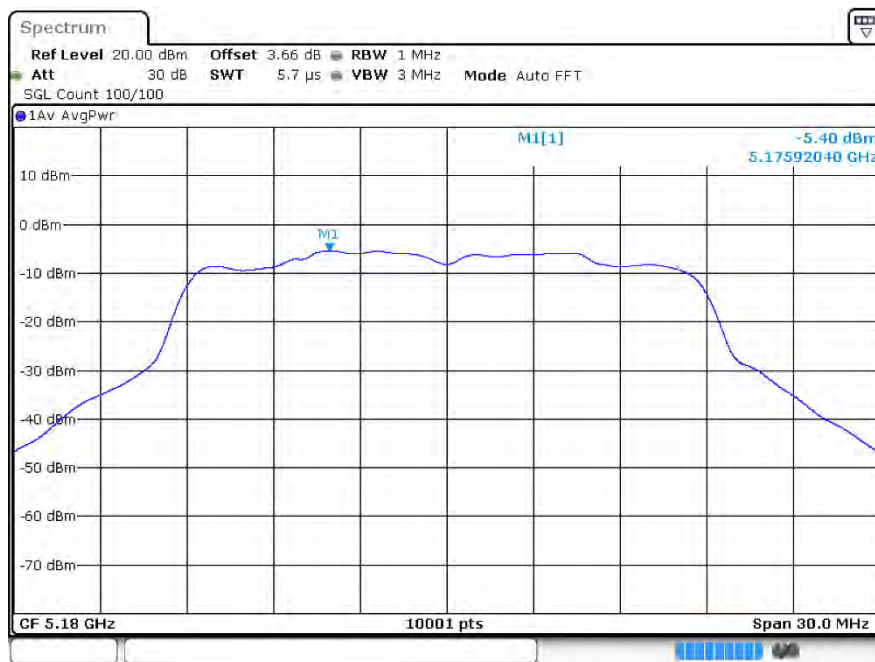
PSDn40 5190MHz Ant2



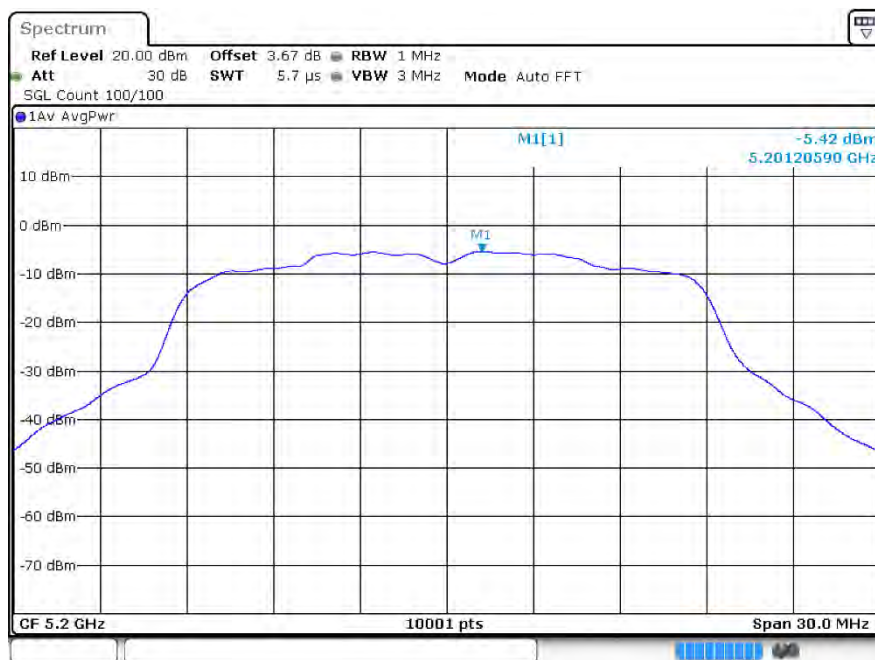
PSDn40 5230MHz Ant2

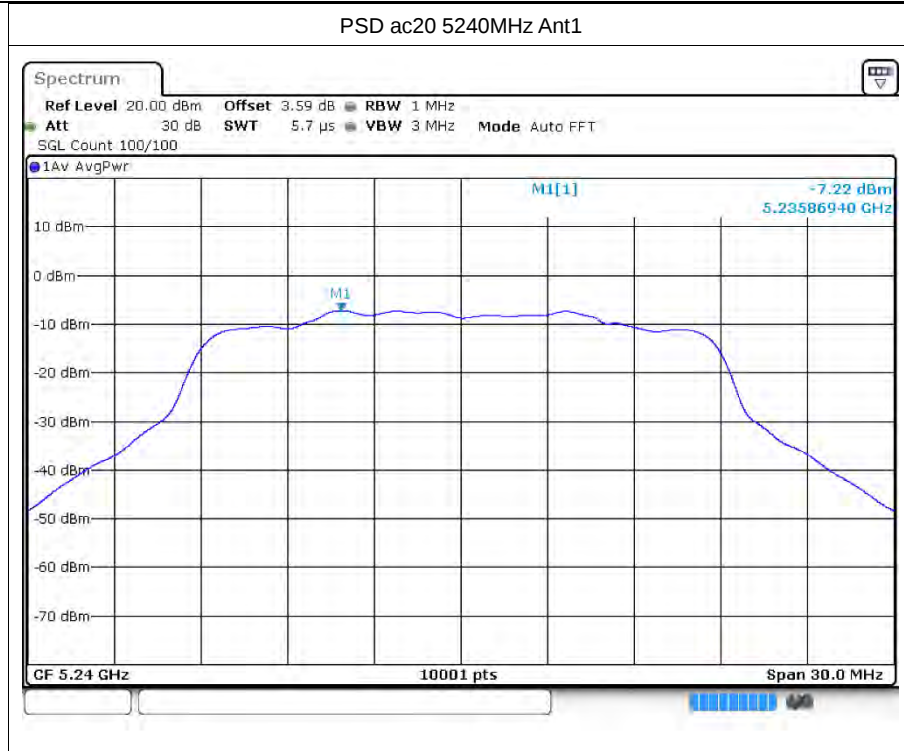


PSD ac20 5180MHz Ant1

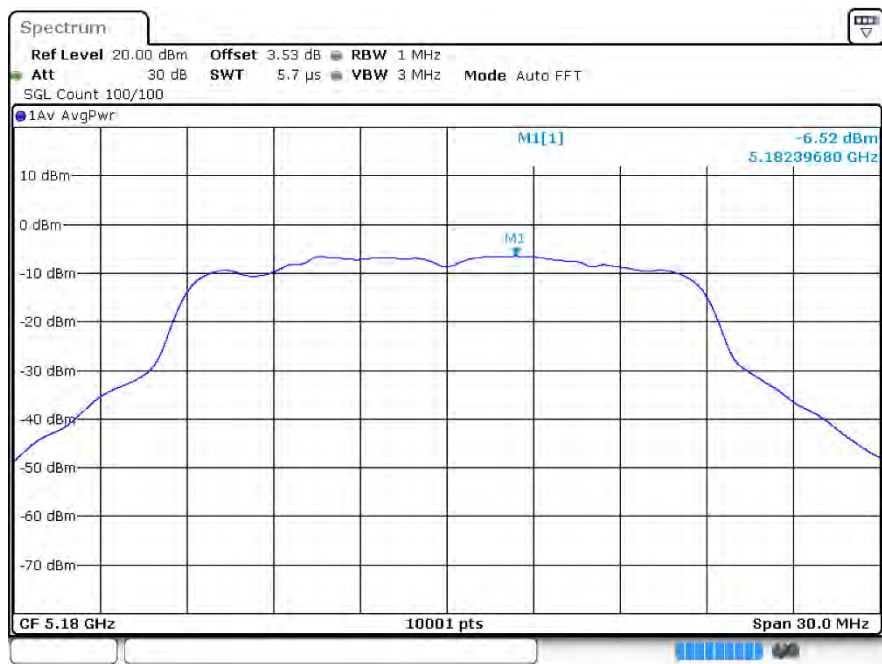


PSD ac20 5200MHz Ant1

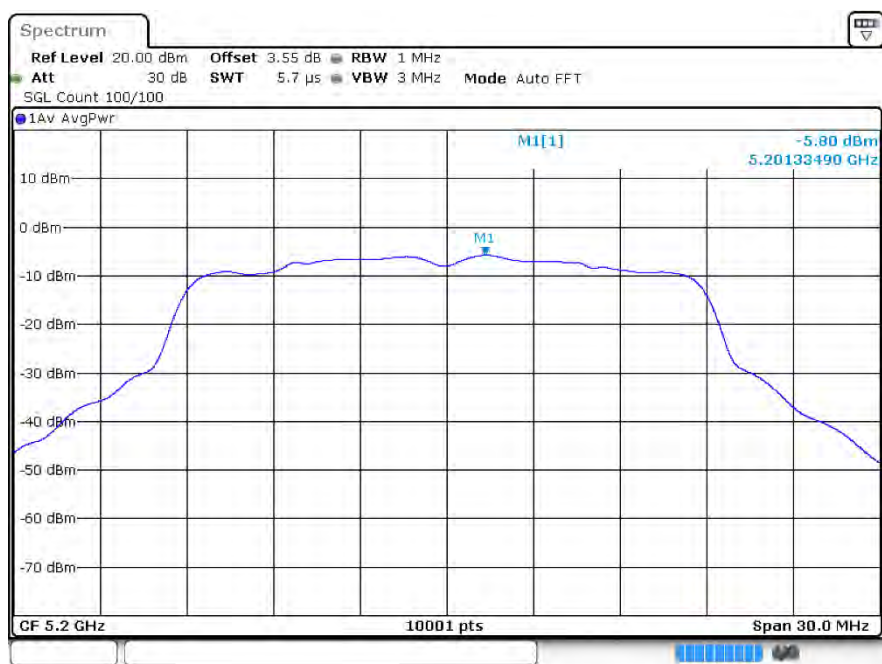


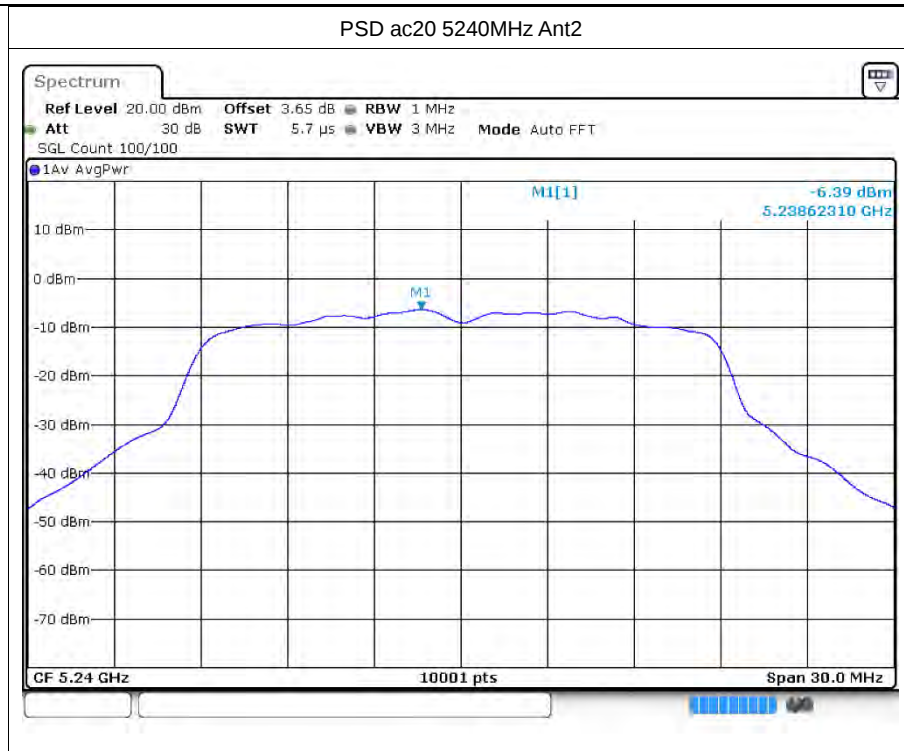


PSD ac20 5180MHz Ant2

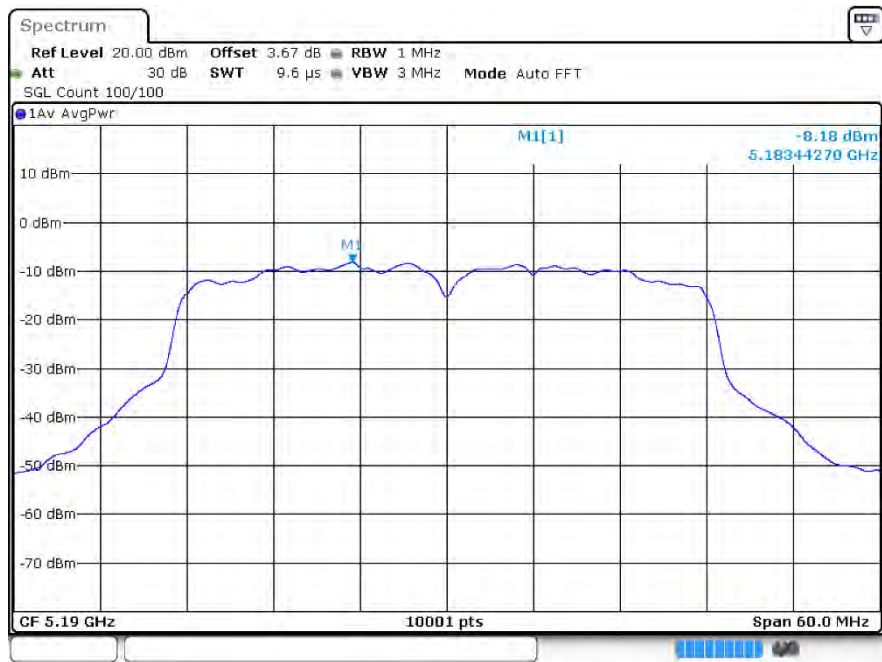


PSD ac20 5200MHz Ant2

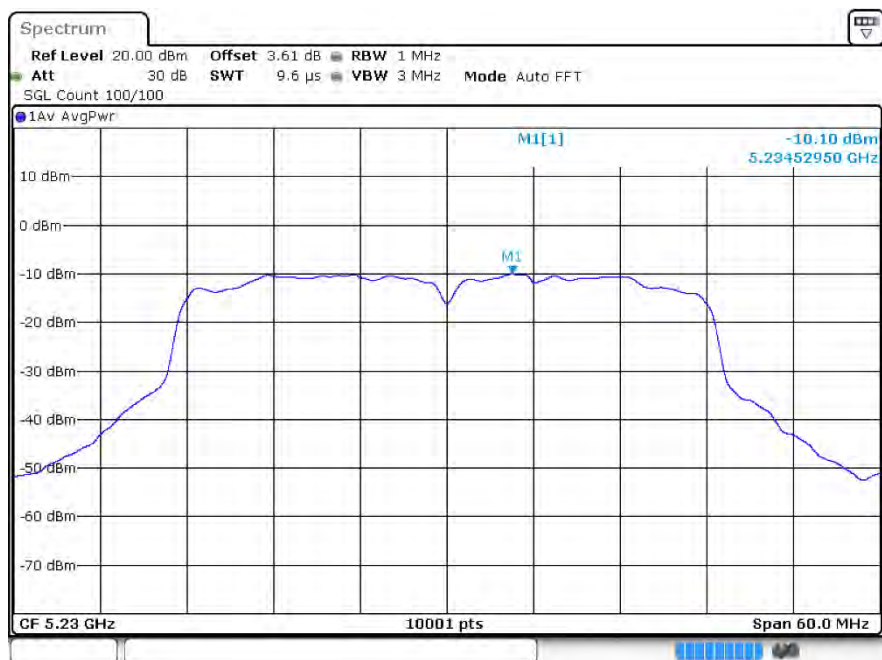




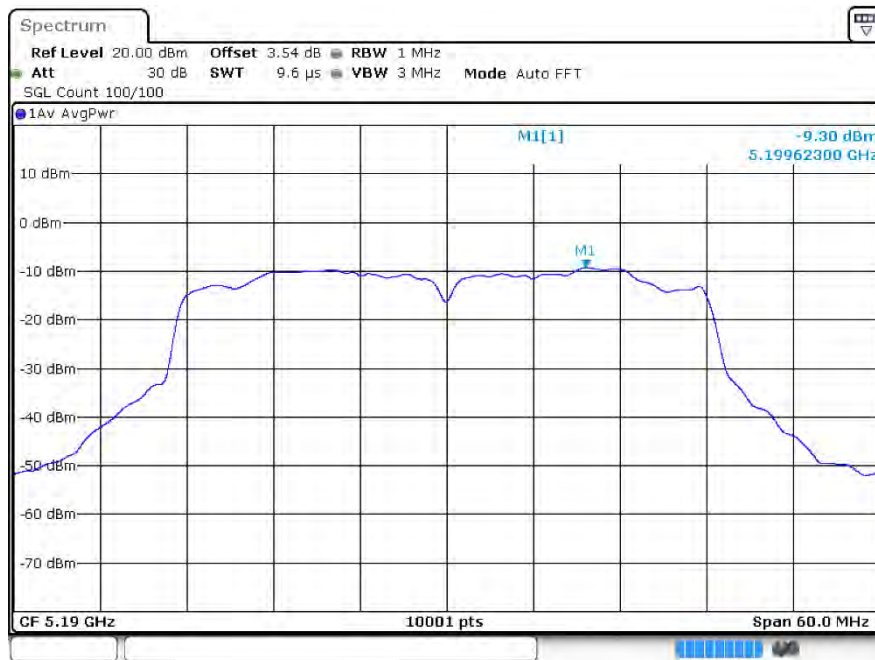
PSDac40 5190MHz Ant1



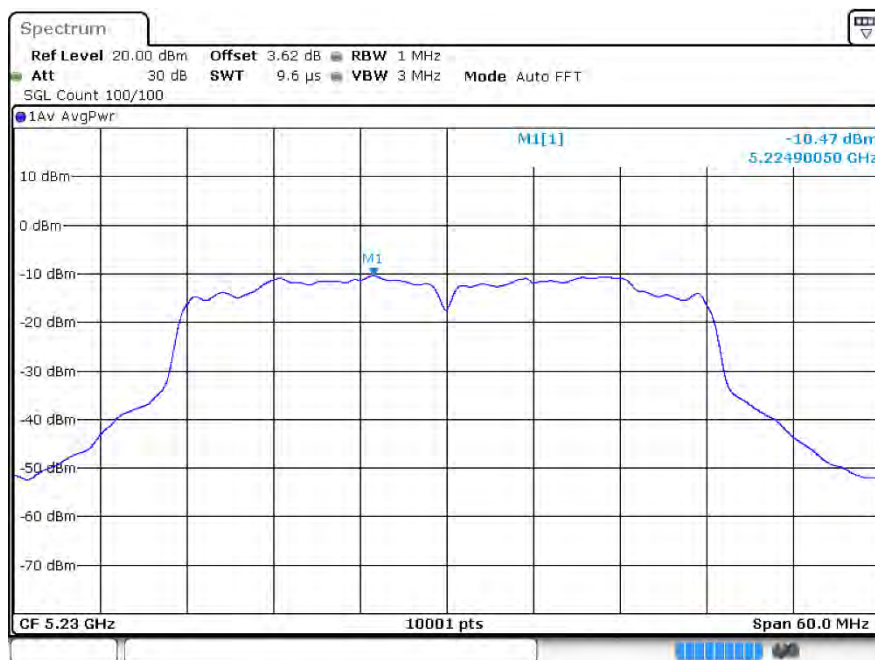
PSDac40 5230MHz Ant1



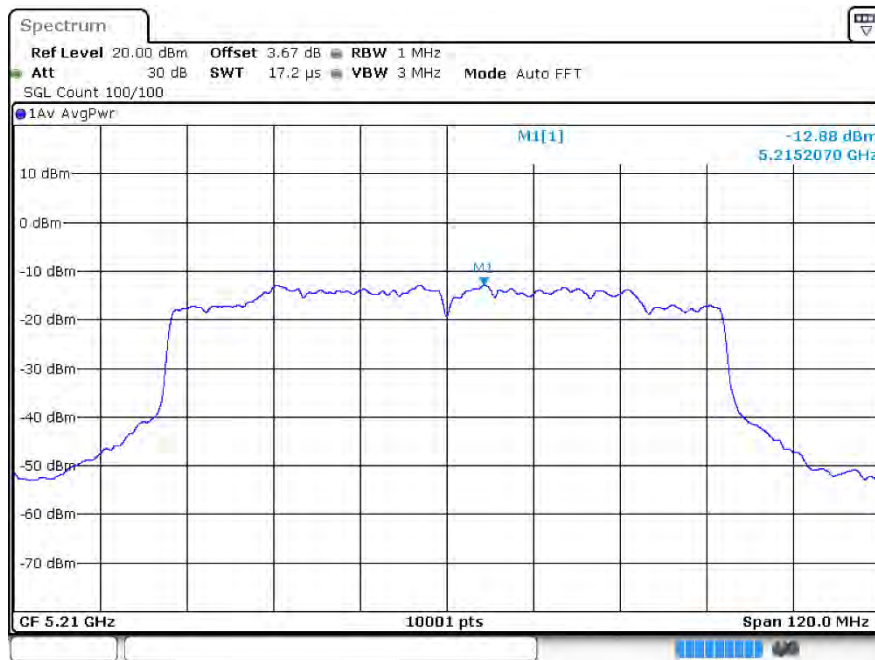
PSDac40 5190MHz Ant2



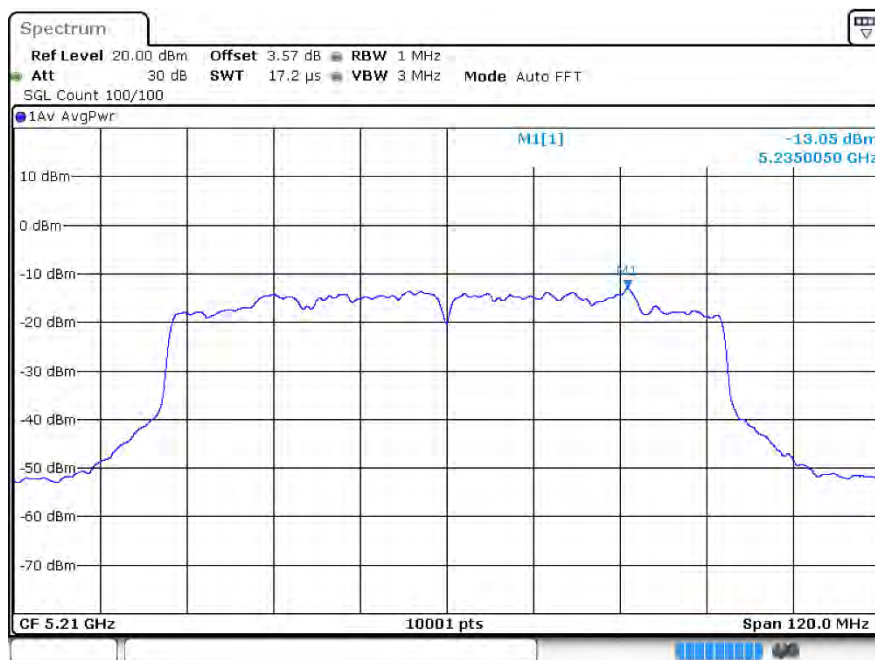
PSDac40 5230MHz Ant2



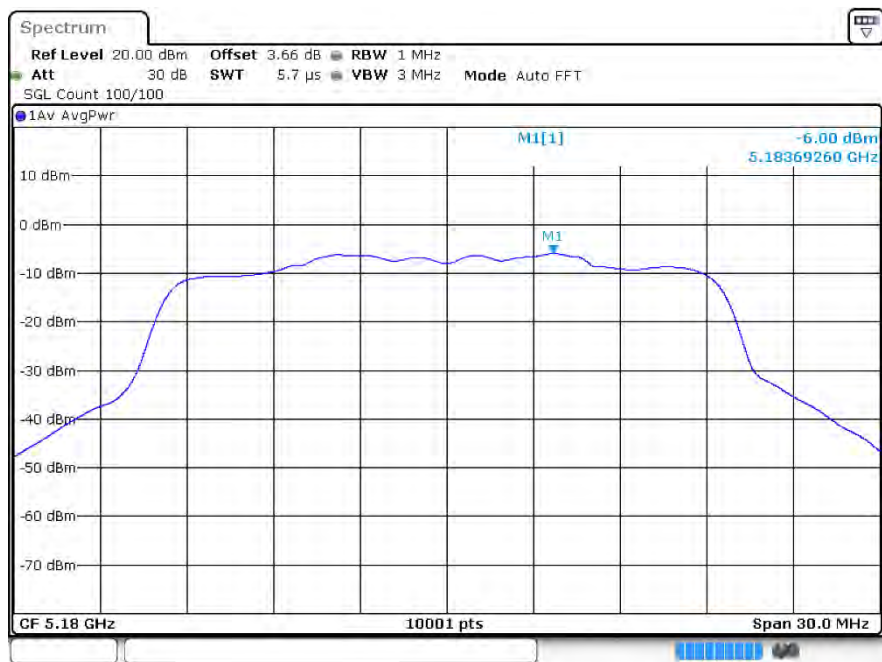
PSDac80 5210MHz Ant1



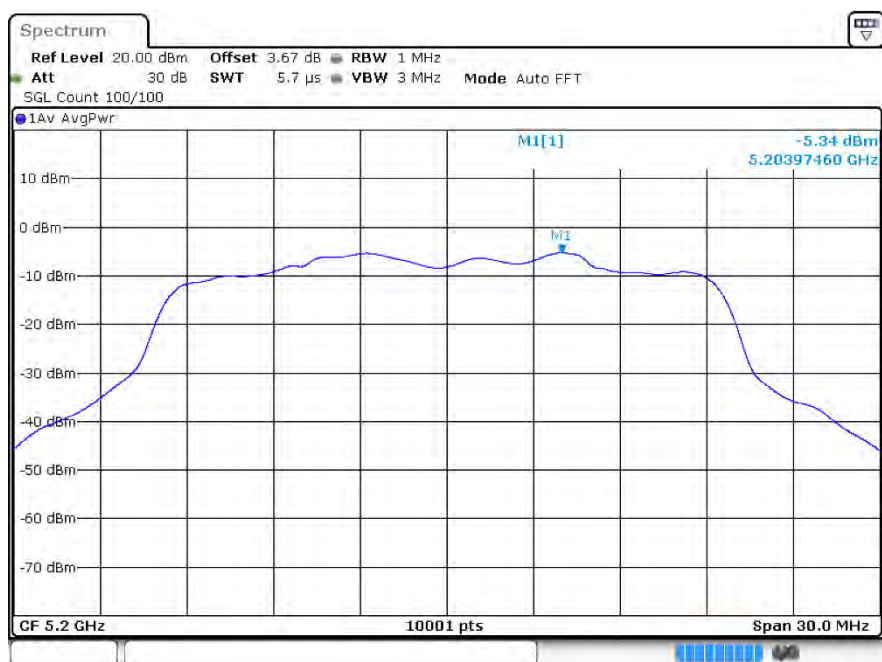
PSDac80 5210MHz Ant2

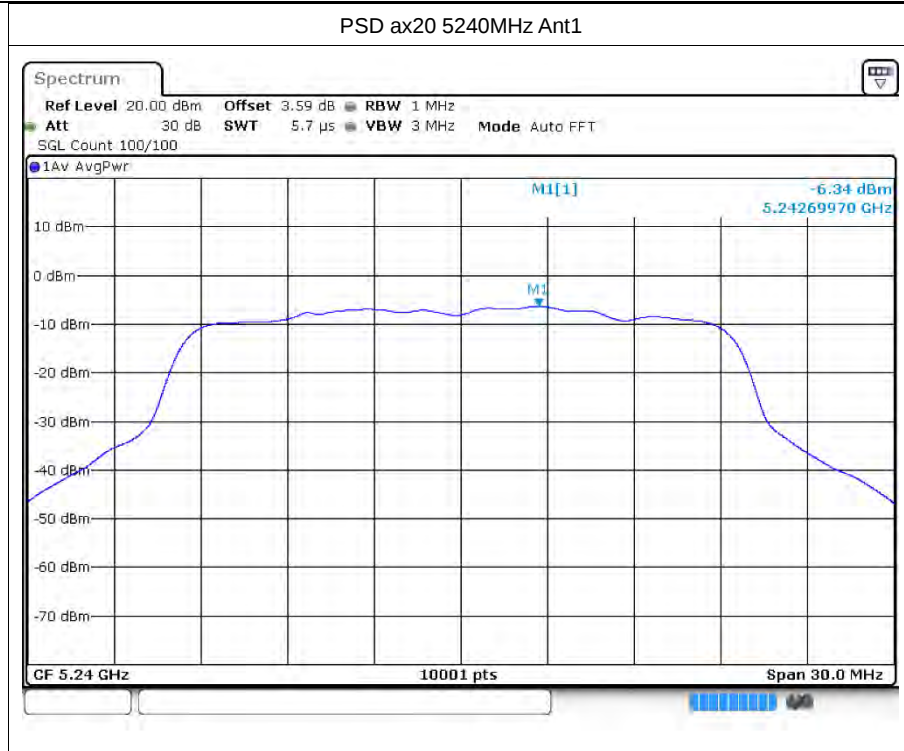


PSD ax20 5180MHz Ant1

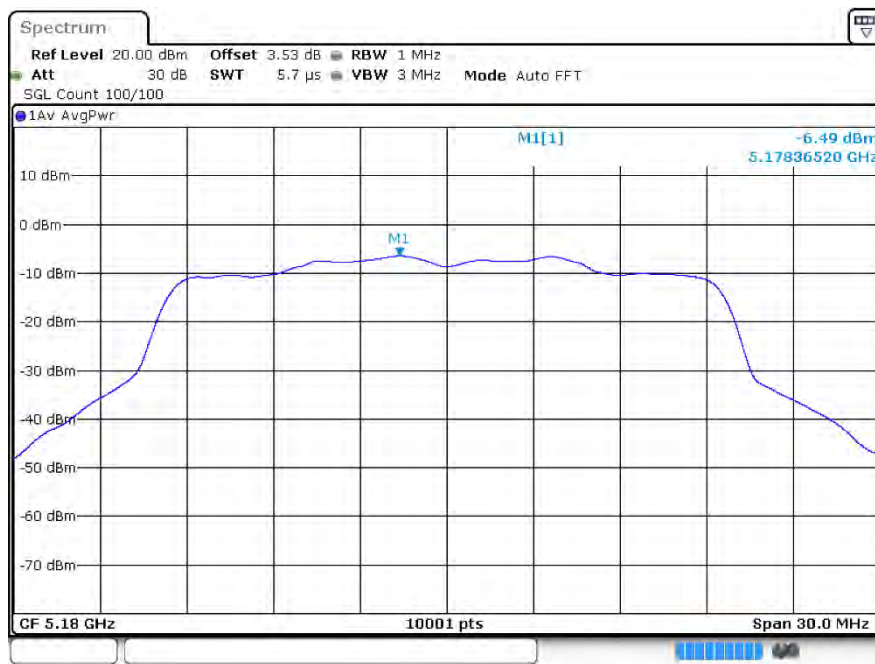


PSD ax20 5200MHz Ant1





PSD ax20 5180MHz Ant2



PSD ax20 5200MHz Ant2

