



Appendix D

RF Test Data for B1-B3WIFI(Conducted Measurement)

Product Name: WiFi Module

Trade Mark: N/A

Test Model: IO1201B

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Leon.yi
Supervised by:	Sean She



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1 Duty Cycle

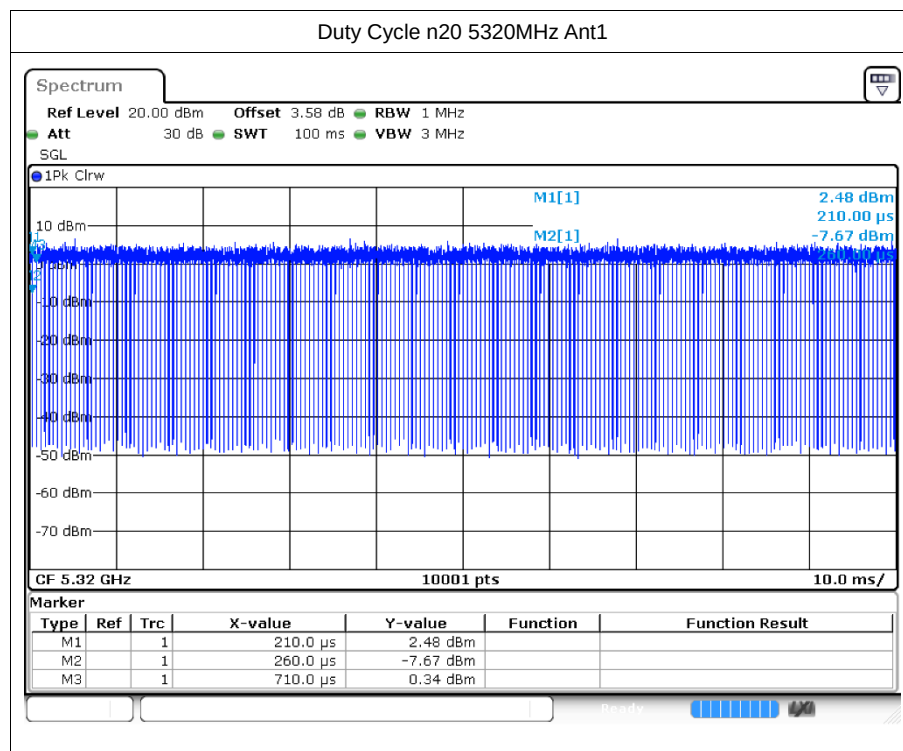
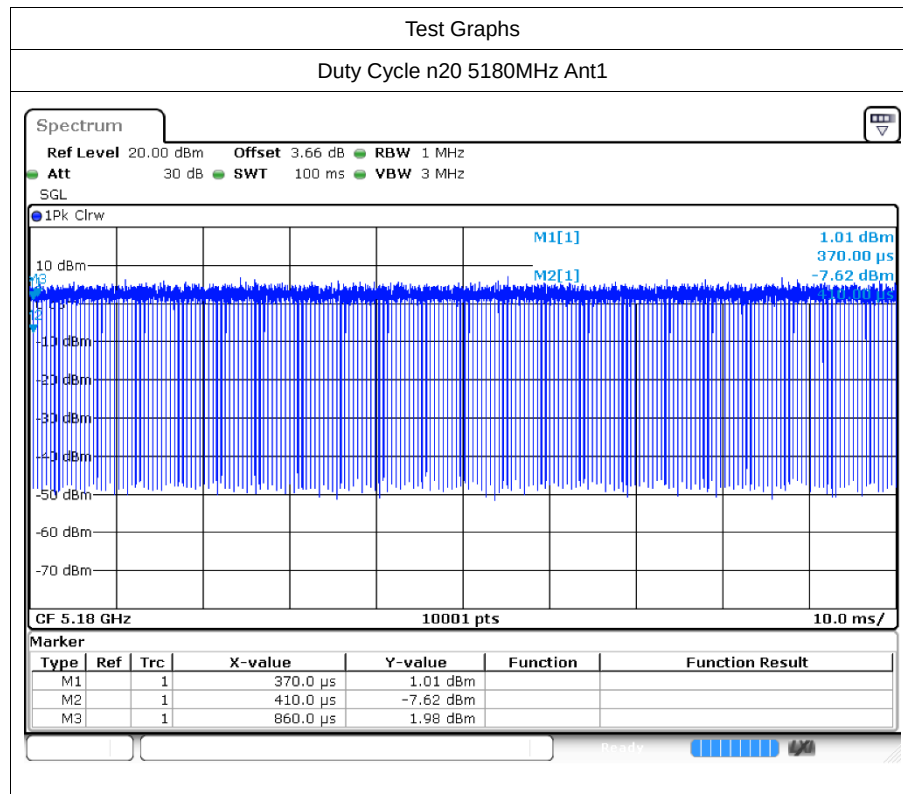
1.1 Test Result

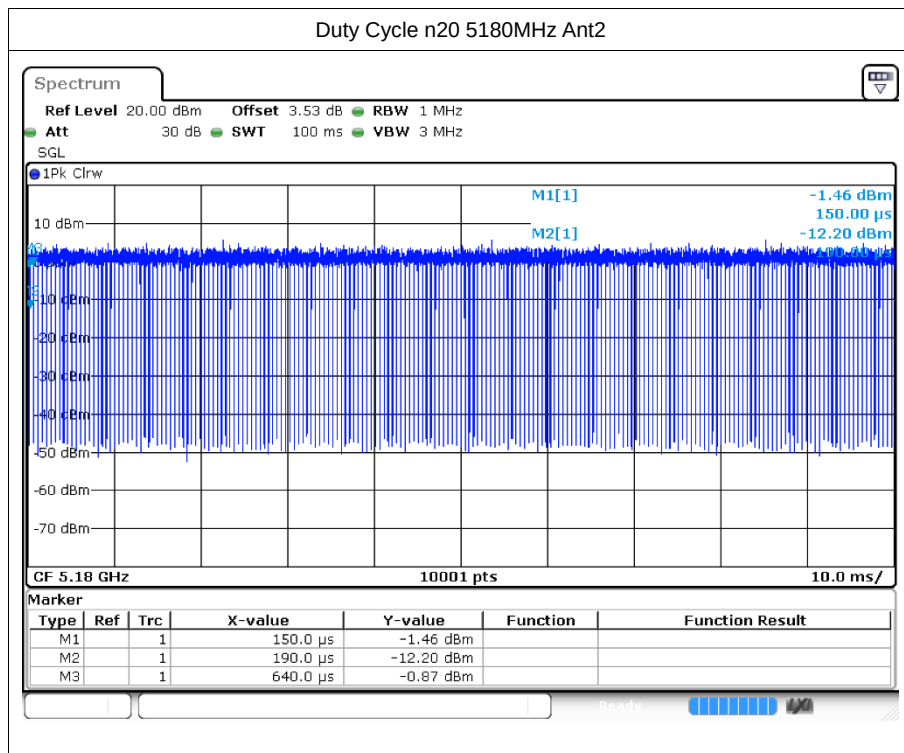
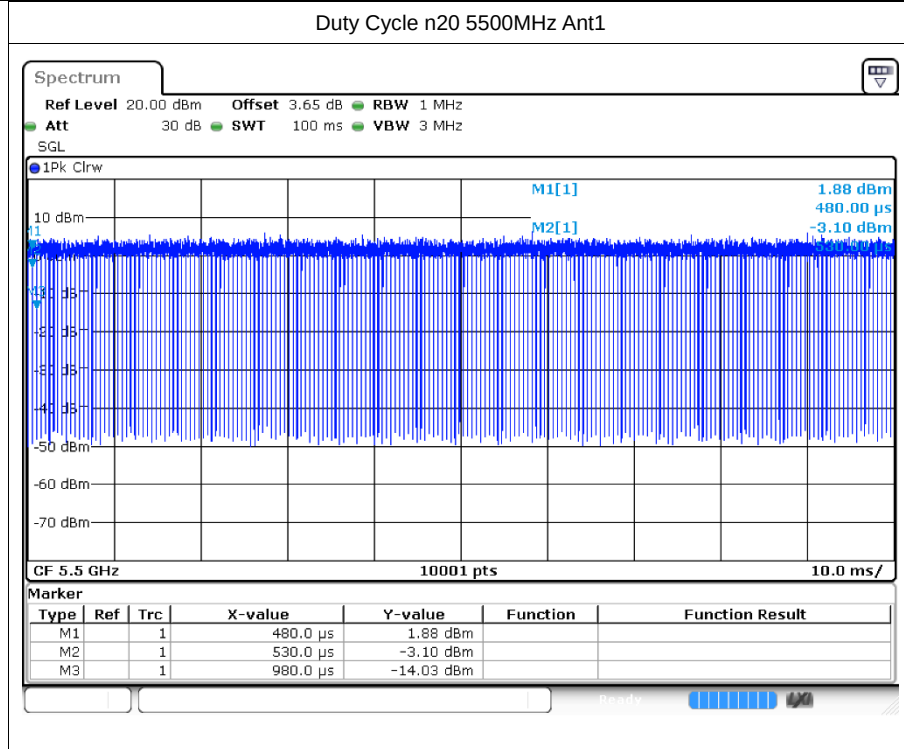
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
n20	5180	Ant1	93.06	0.31	2.22
n20	5320	Ant1	93.02	0.31	2.22
n20	5500	Ant1	93.05	0.31	2.22
n20	5180	Ant2	93.08	0.31	2.22
n20	5320	Ant2	93.06	0.31	2.27
n20	5500	Ant2	93.03	0.31	2.22
n40	5190	Ant1	93.01	0.31	2.22
n40	5310	Ant1	92.98	0.32	2.27
n40	5510	Ant1	93	0.32	2.27
n40	5190	Ant2	91.82	0.37	2.27
n40	5310	Ant2	91.83	0.37	2.27
n40	5510	Ant2	92.65	0.33	2.27
ac20	5180	Ant1	87.11	0.6	4.55
ac20	5320	Ant1	87.25	0.59	4.35
ac20	5500	Ant1	85.8	0.67	4.35
ac20	5180	Ant2	87.14	0.6	4.55
ac20	5320	Ant2	87.14	0.6	4.55
ac20	5500	Ant2	87.06	0.6	4.55
ac40	5190	Ant1	87.42	0.58	4.55
ac40	5310	Ant1	87.41	0.58	4.35
ac40	5510	Ant1	87.41	0.58	4.35
ac40	5190	Ant2	86.82	0.61	4.35
ac40	5310	Ant2	85.52	0.68	4.35
ac40	5510	Ant2	87.2	0.59	4.35
ax20	5180	Ant1	87.11	0.6	4.35
ax20	5320	Ant1	87.1	0.6	4.35
ax20	5500	Ant1	87.2	0.59	4.35
ax20	5180	Ant2	87.23	0.59	4.35
ax20	5320	Ant2	87.19	0.6	4.35
ax20	5500	Ant2	87.23	0.59	4.35
ax40	5190	Ant1	87.1	0.6	4.55
ax40	5310	Ant1	87.1	0.6	4.35
ax40	5510	Ant1	87.12	0.6	4.35
ax40	5190	Ant2	85.49	0.68	4.55
ax40	5310	Ant2	85.81	0.66	4.35
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ax80	5210	Ant1	87.56	0.58	4.35

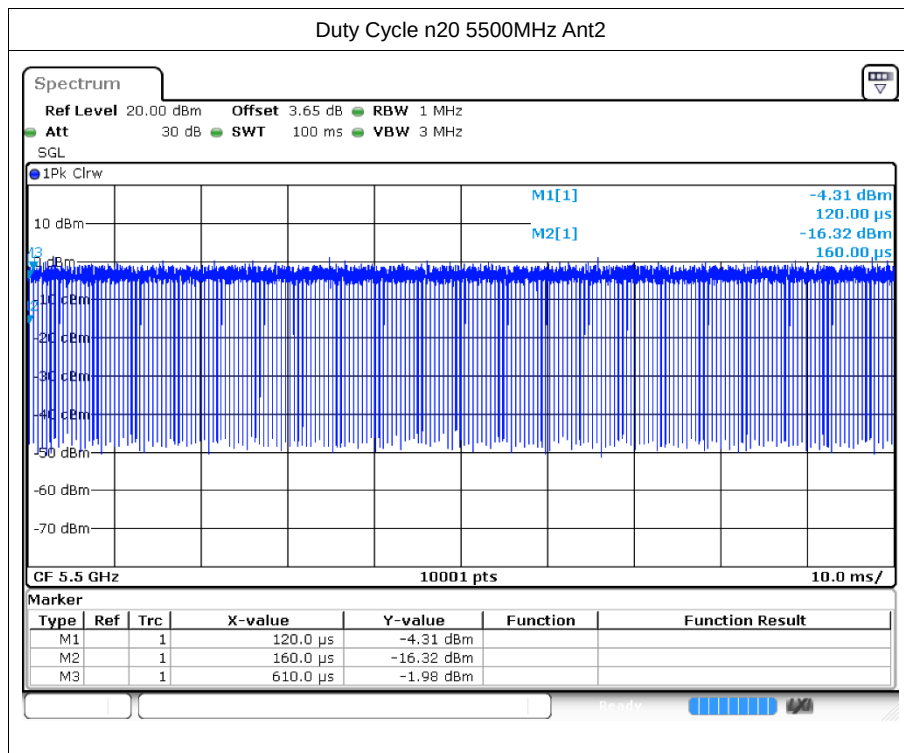
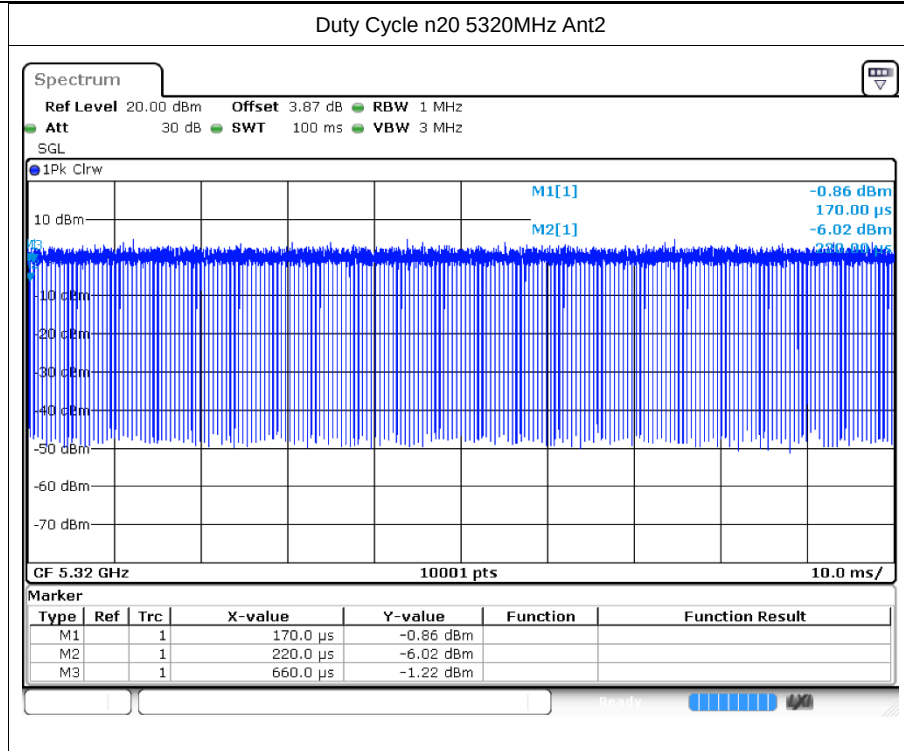


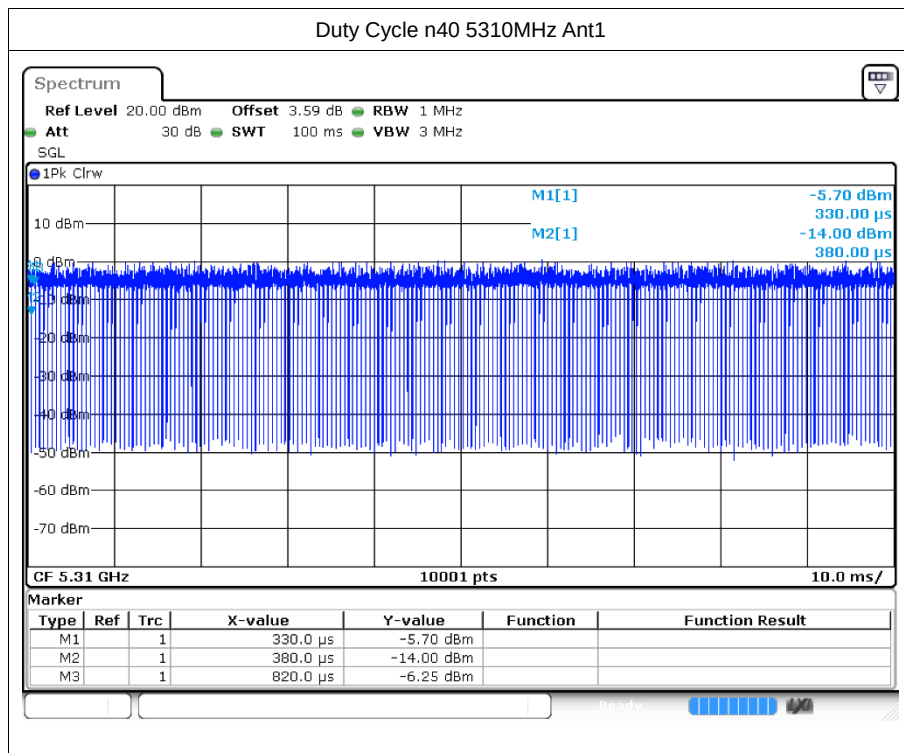
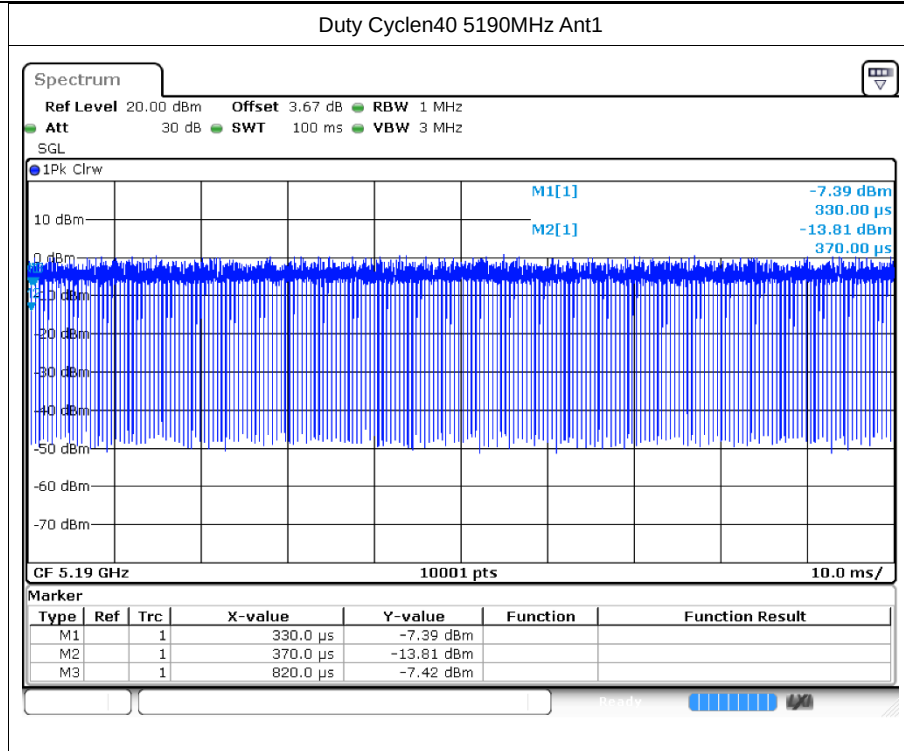
ax80	5290	Ant1	87.54	0.58	4.17
ax80	5530	Ant1	87.57	0.58	4.35
ax80	5210	Ant2	84.63	0.72	4.55
ax80	5290	Ant2	84.62	0.73	4.35
ax80	5530	Ant2	81.72	0.88	4.76

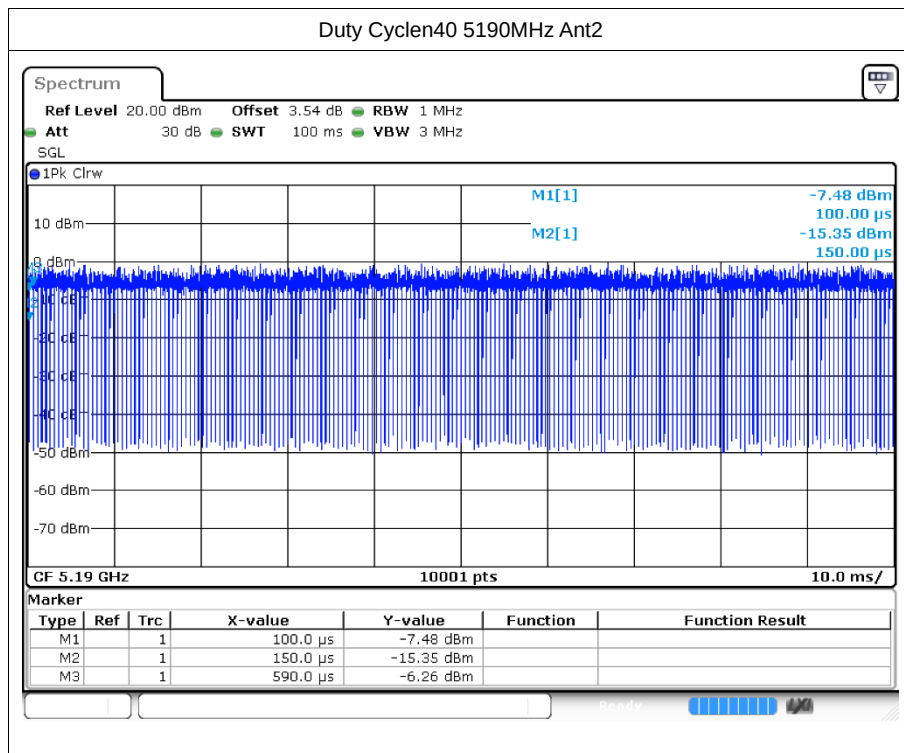
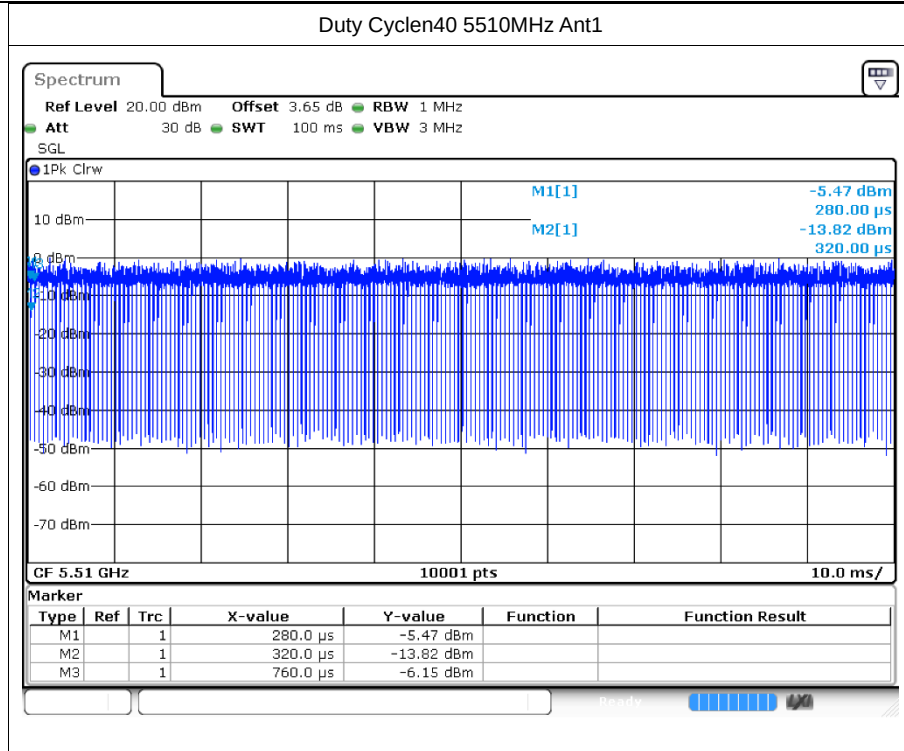
1.2 Test Graphs

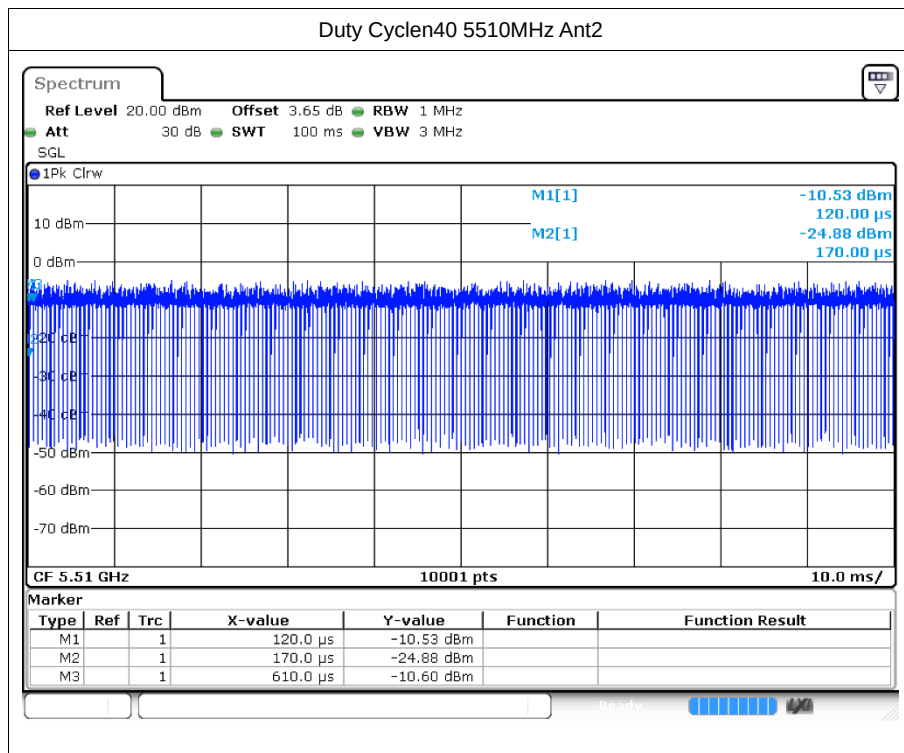
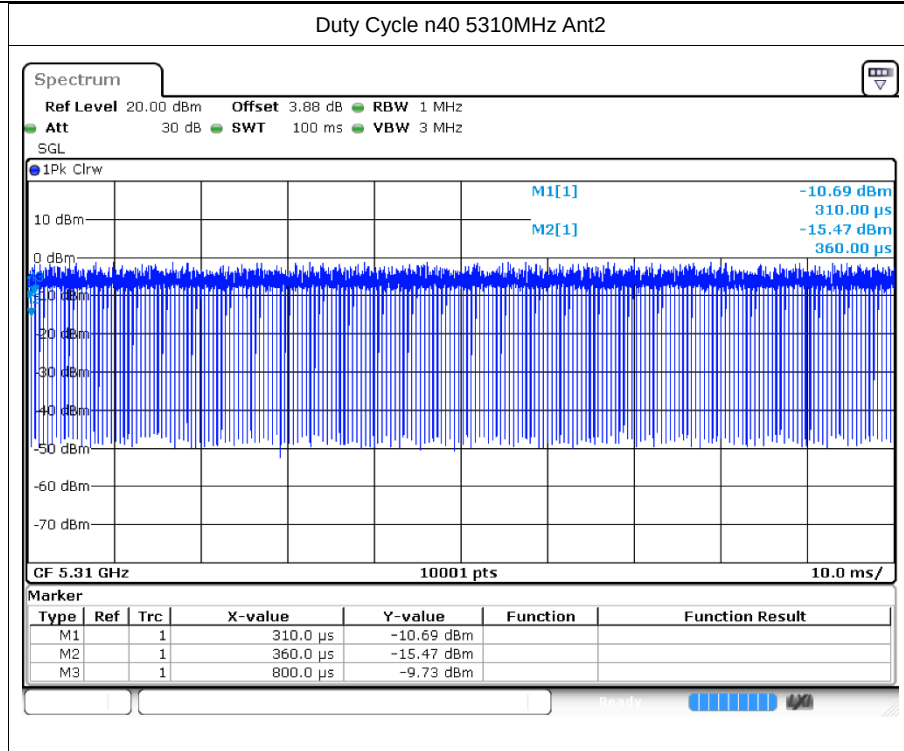


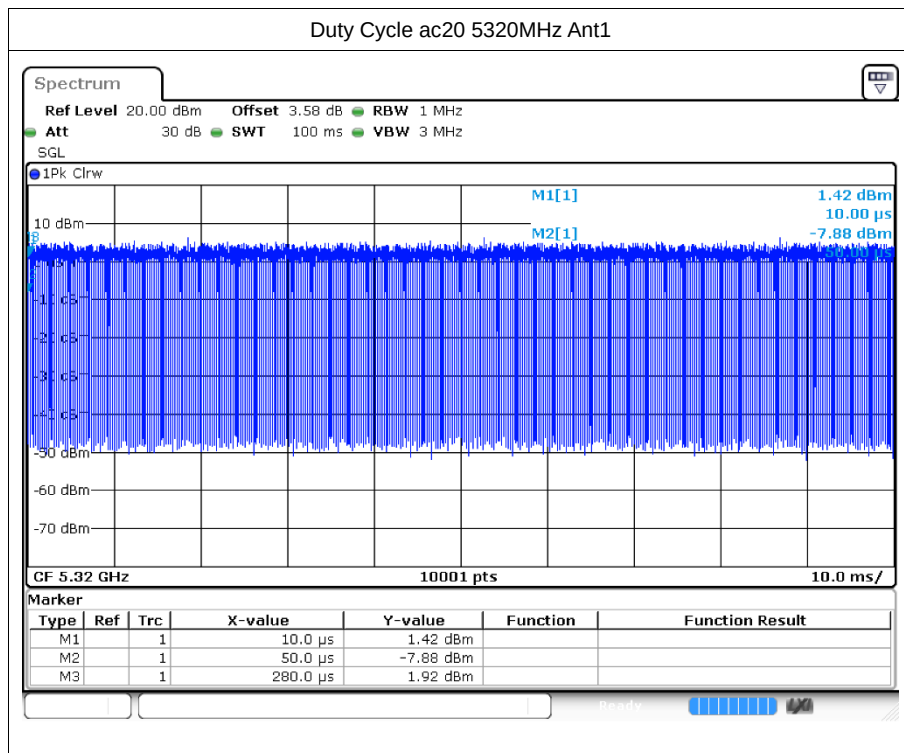
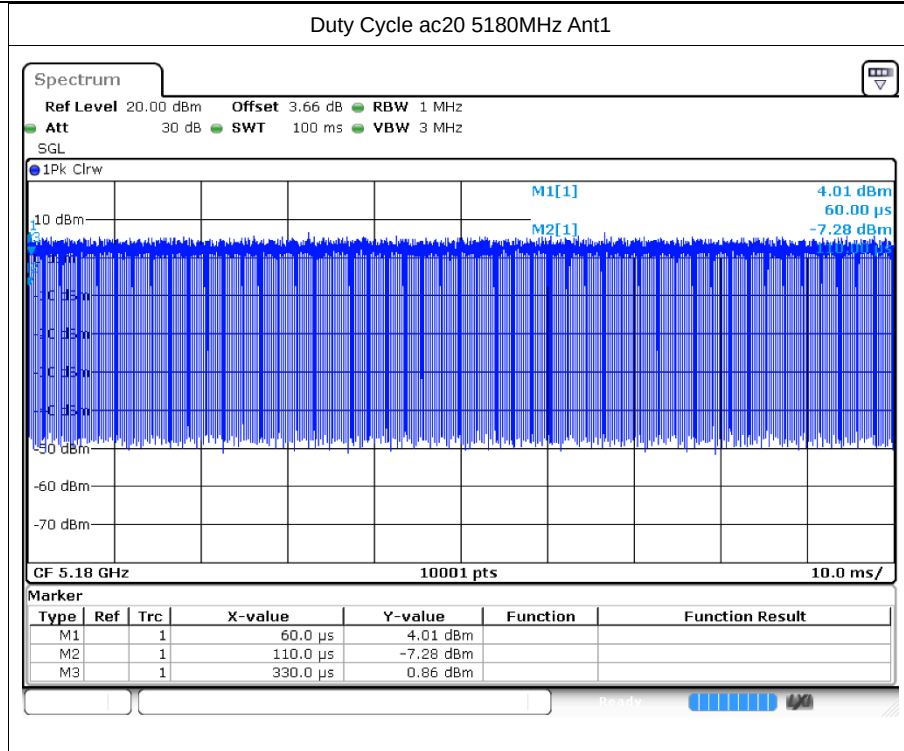


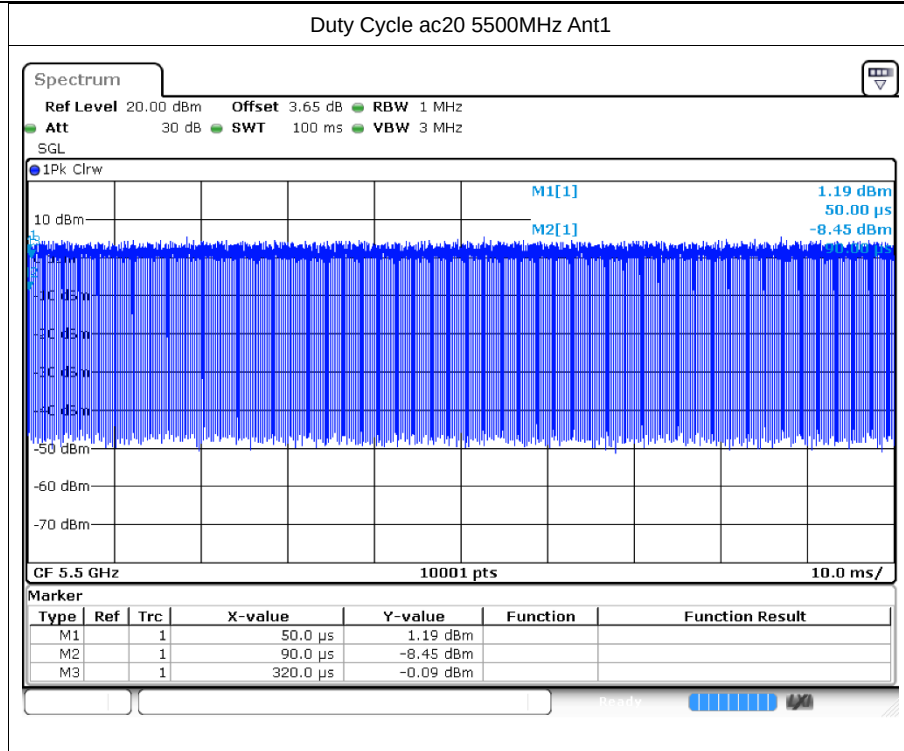


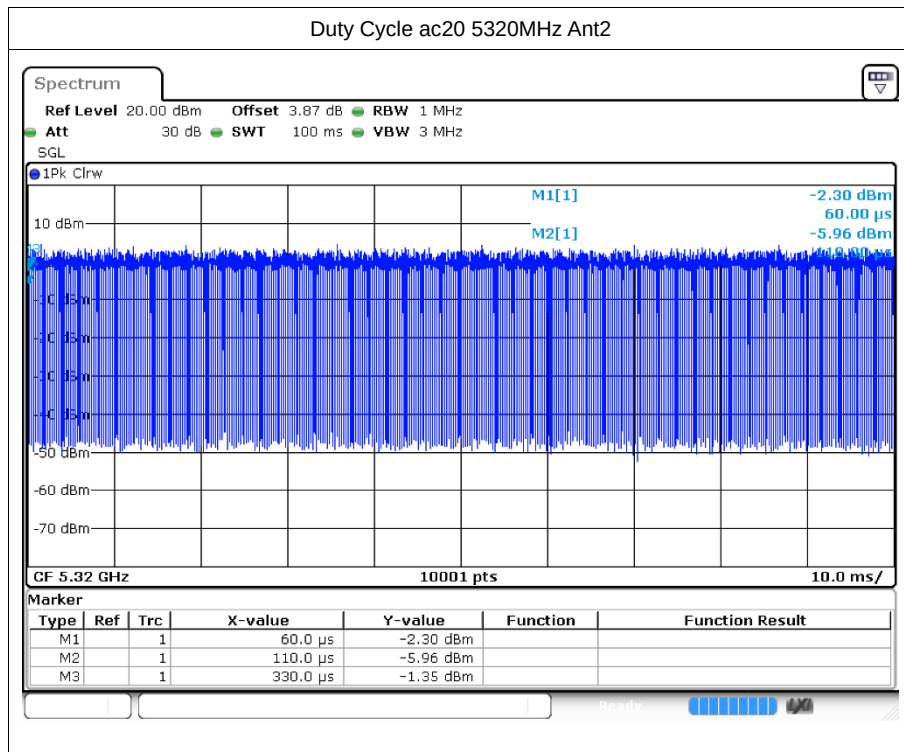
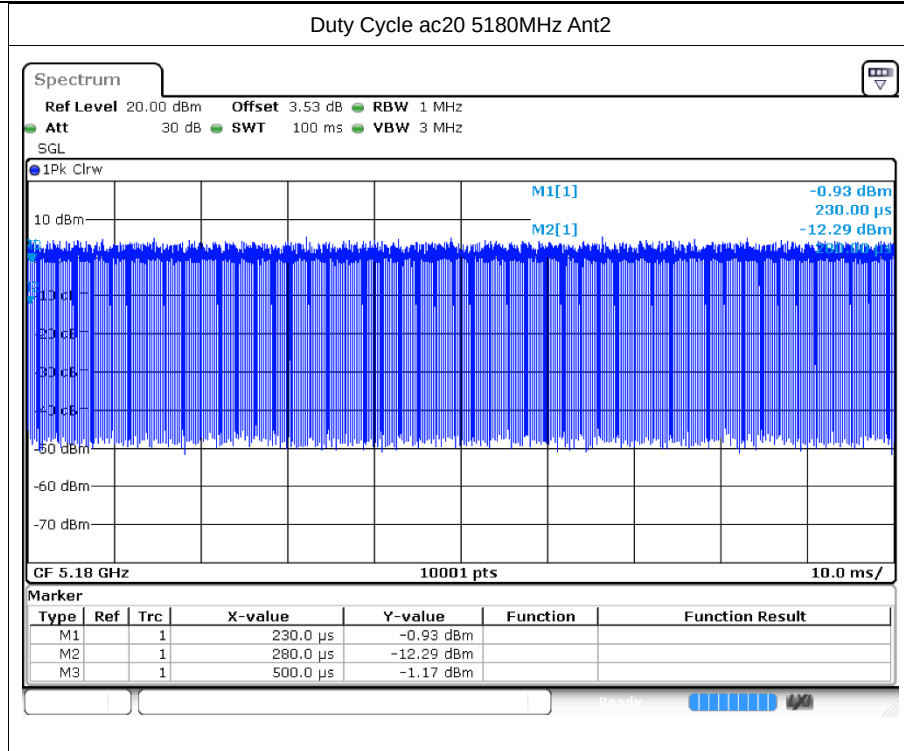


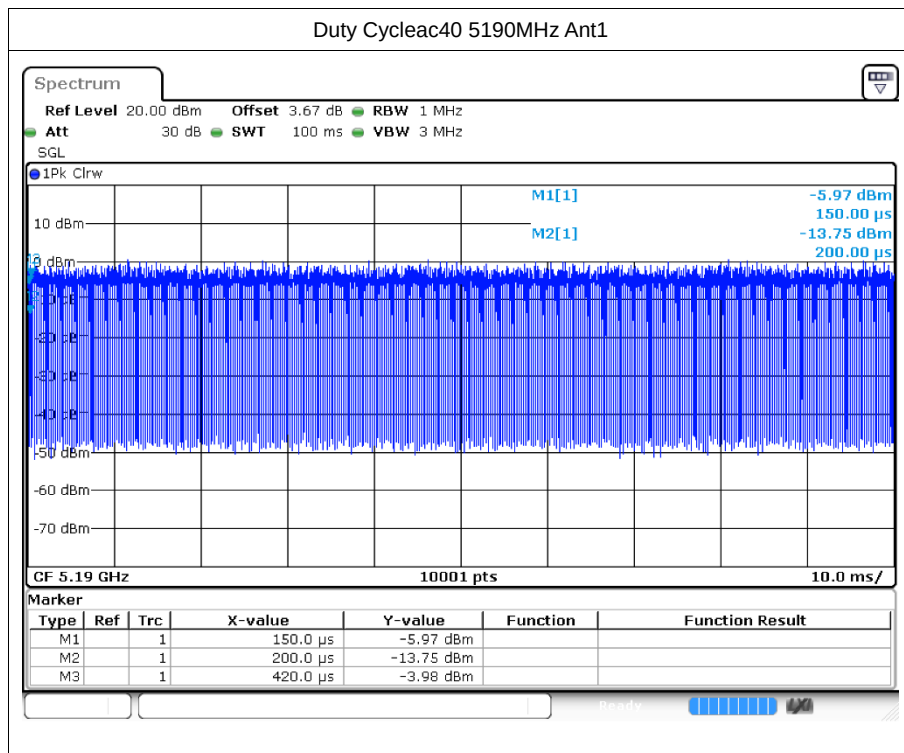
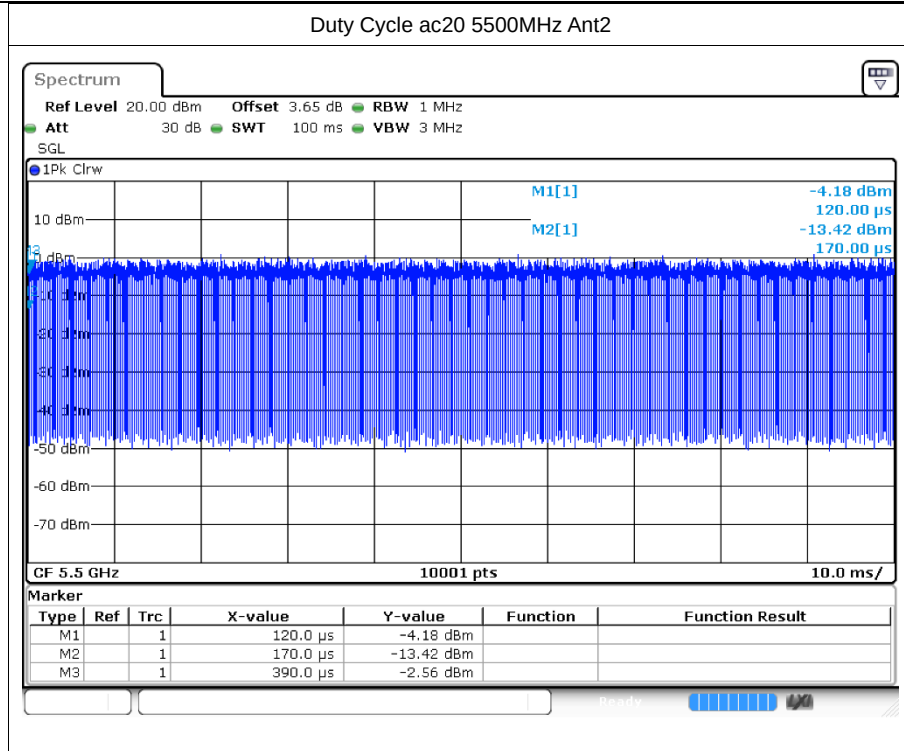


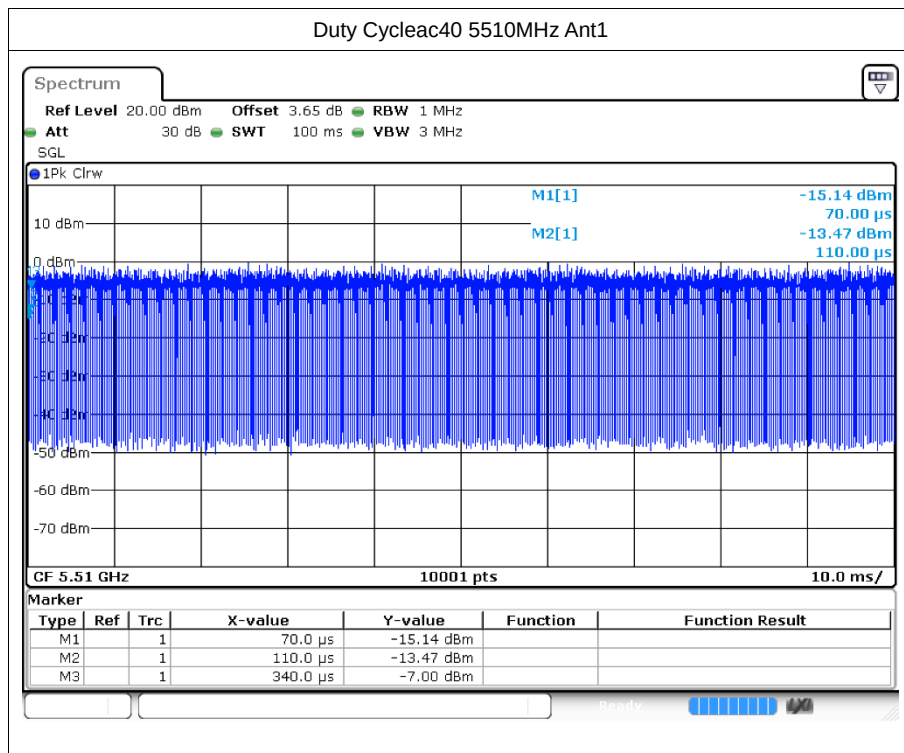
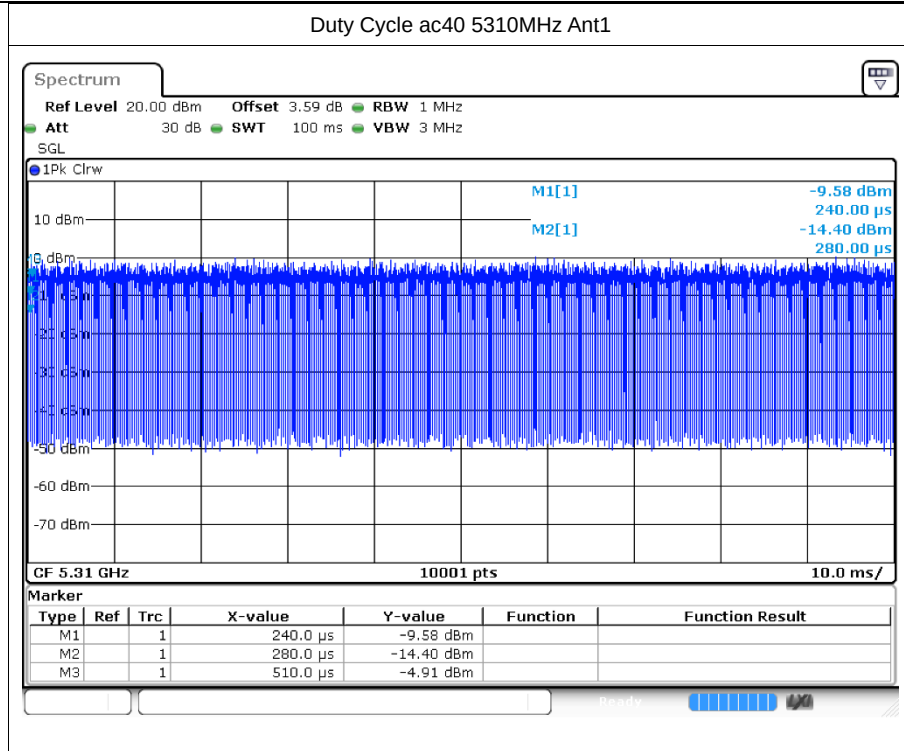


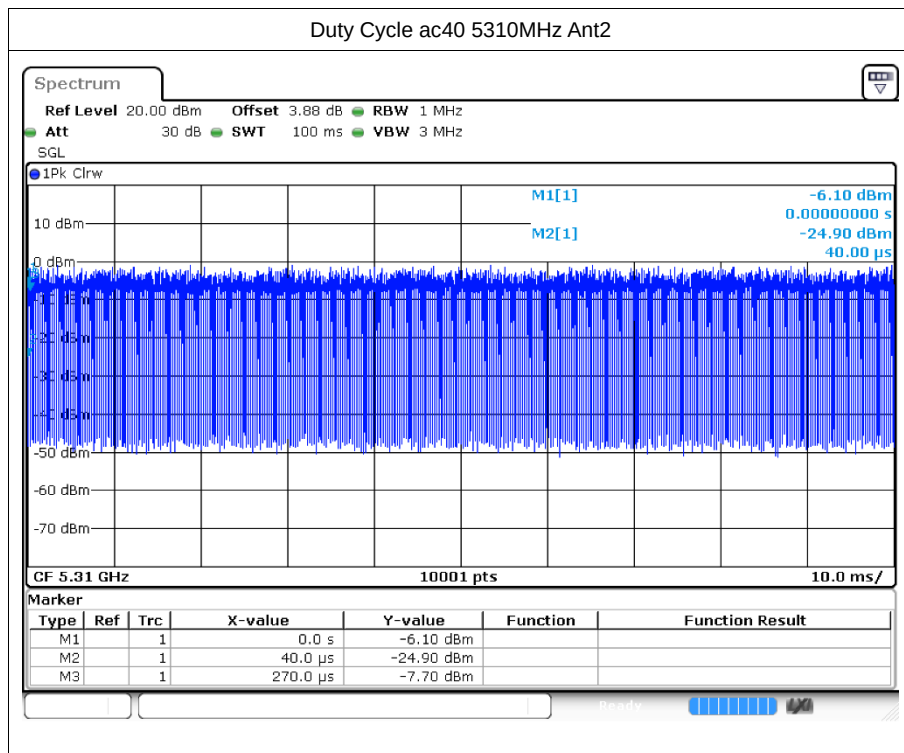
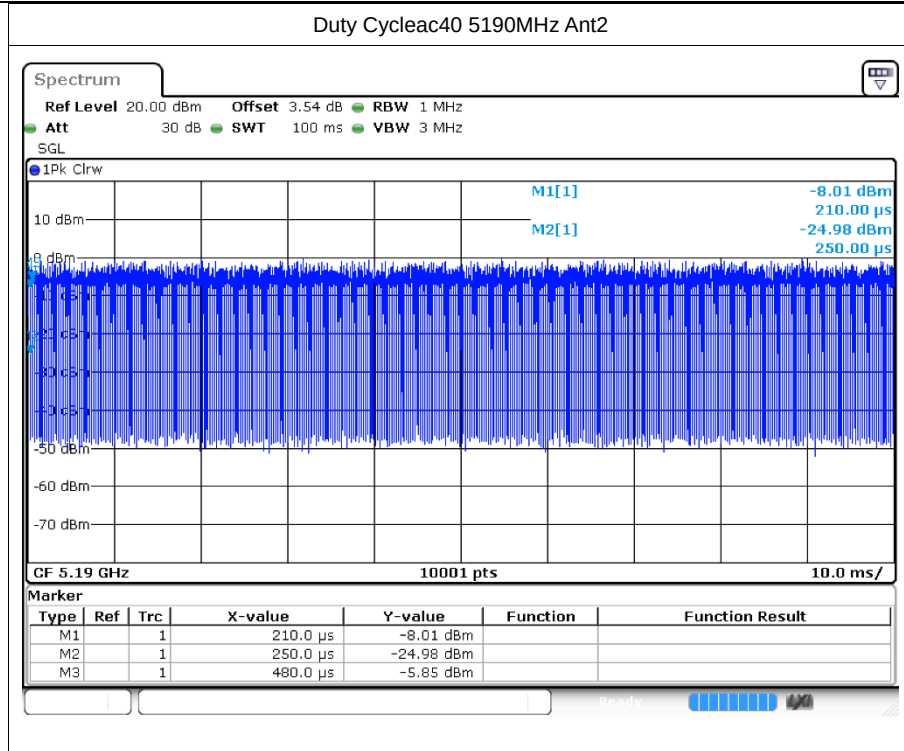


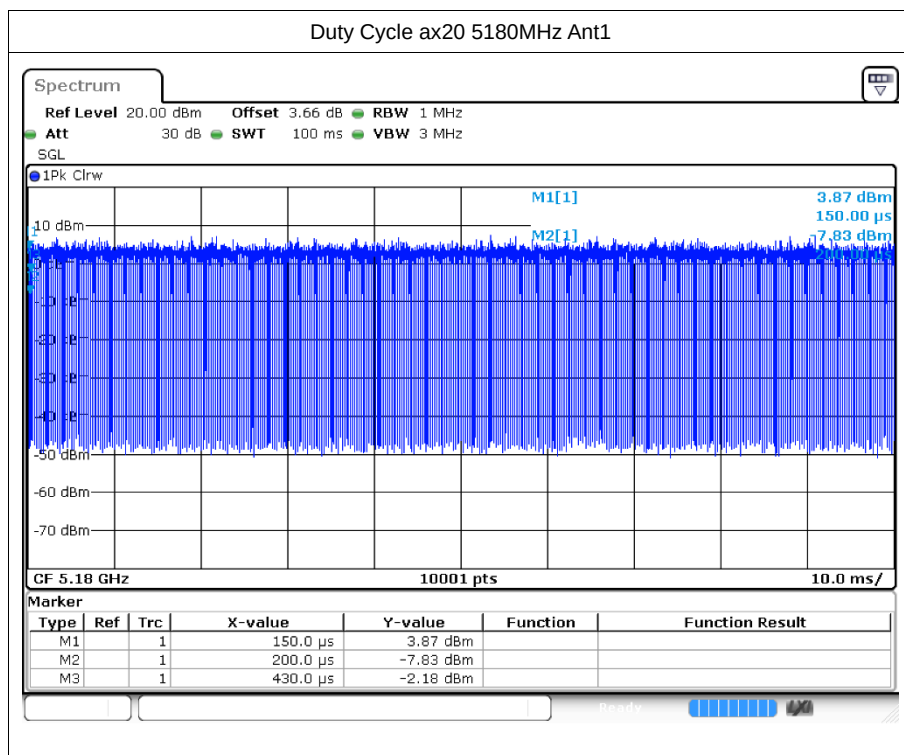
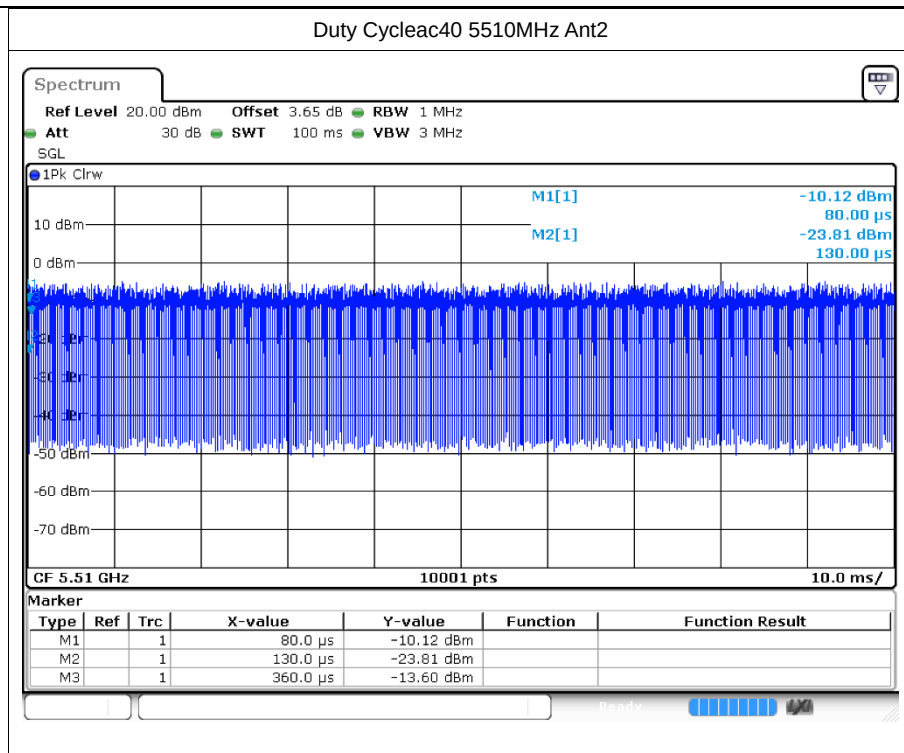


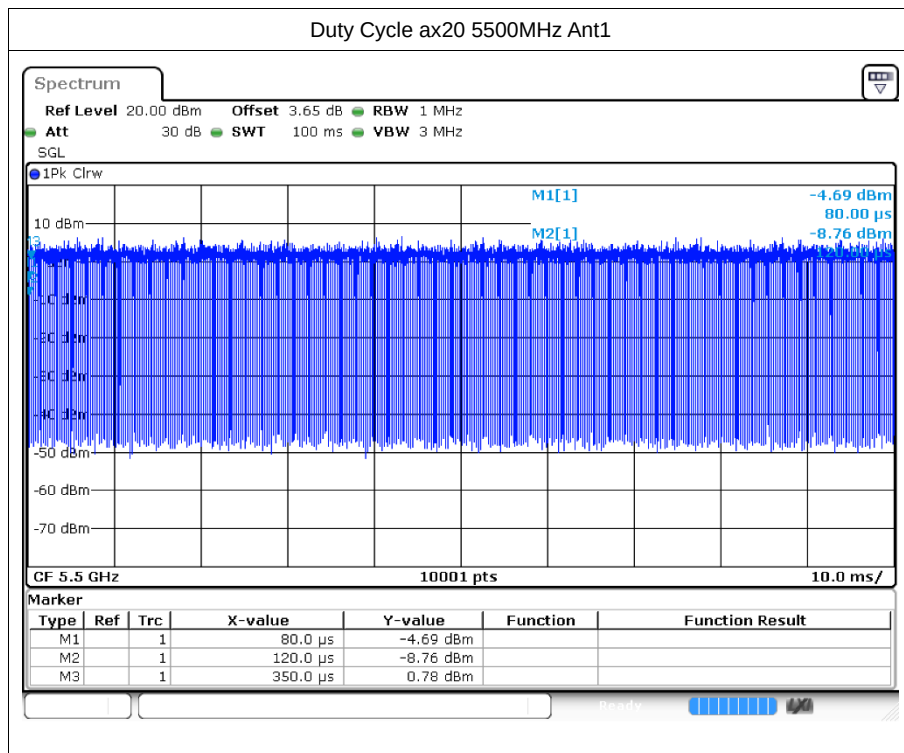
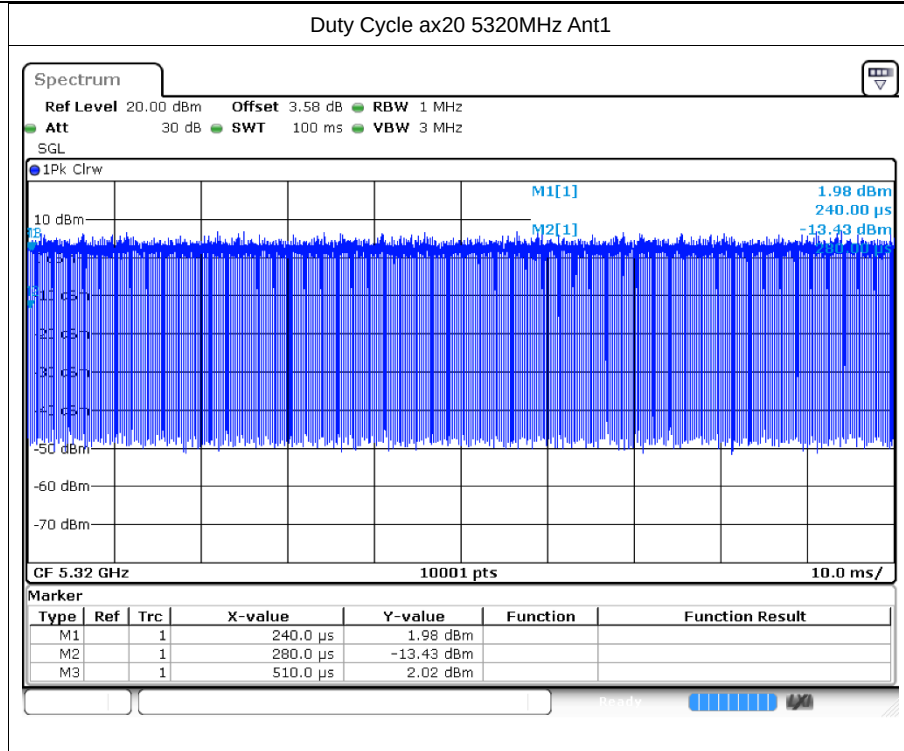


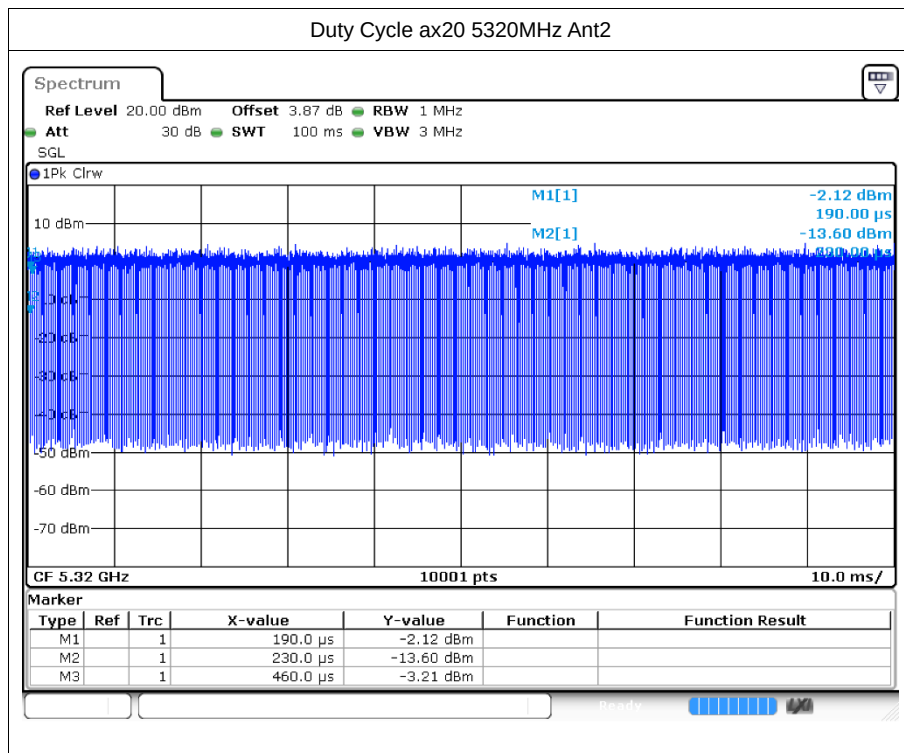
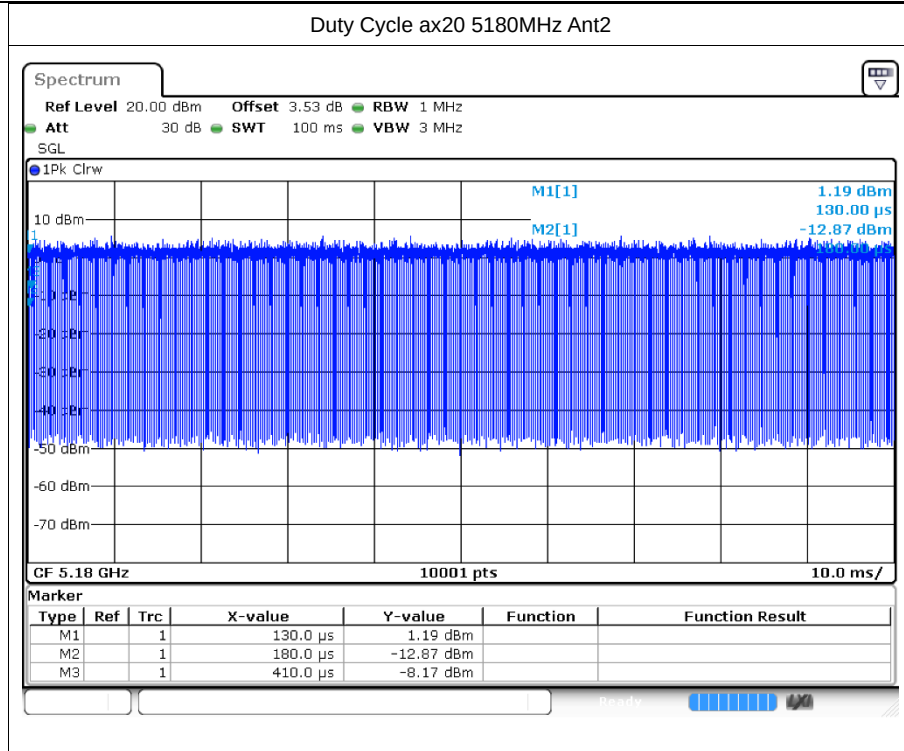


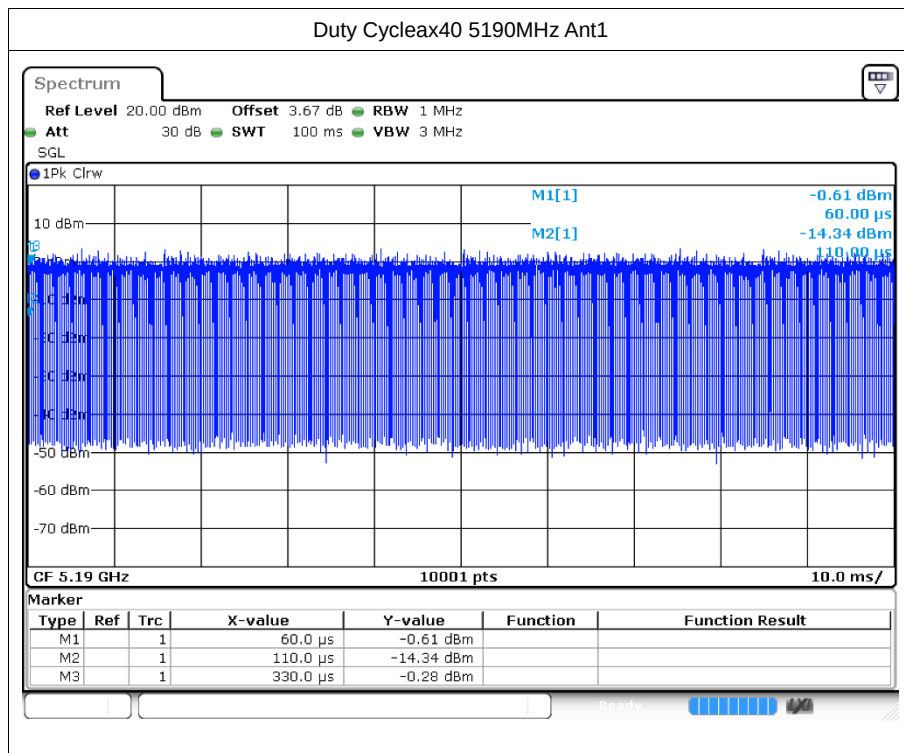
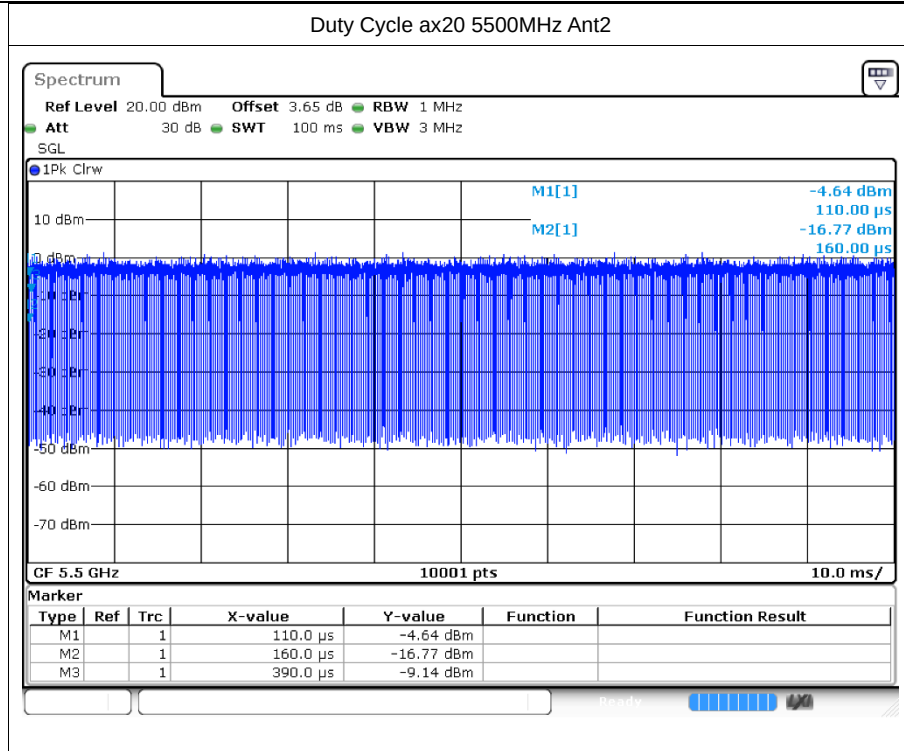


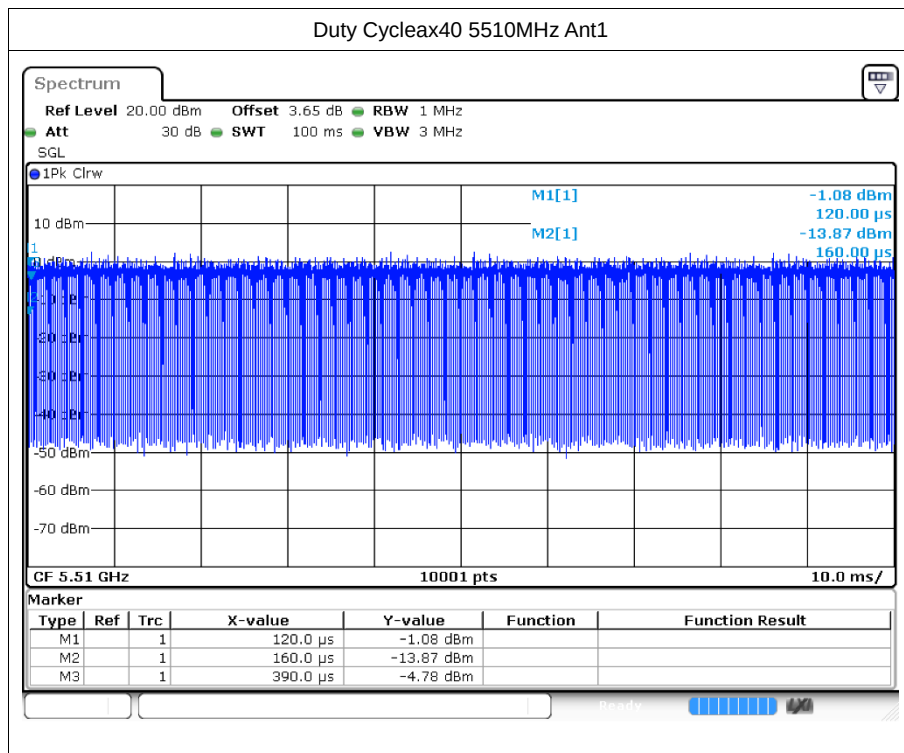
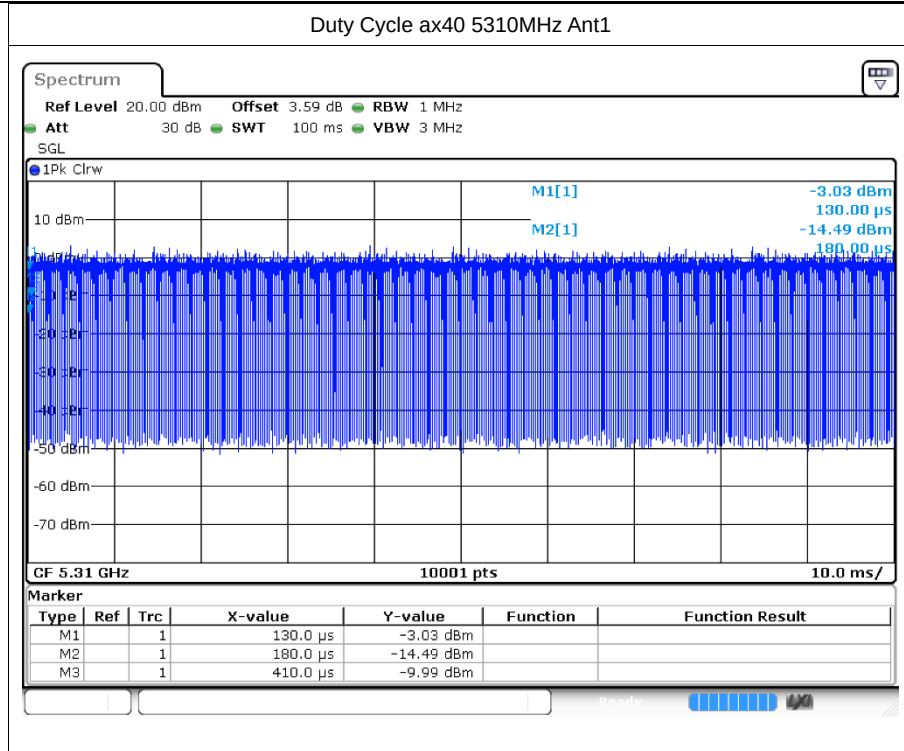


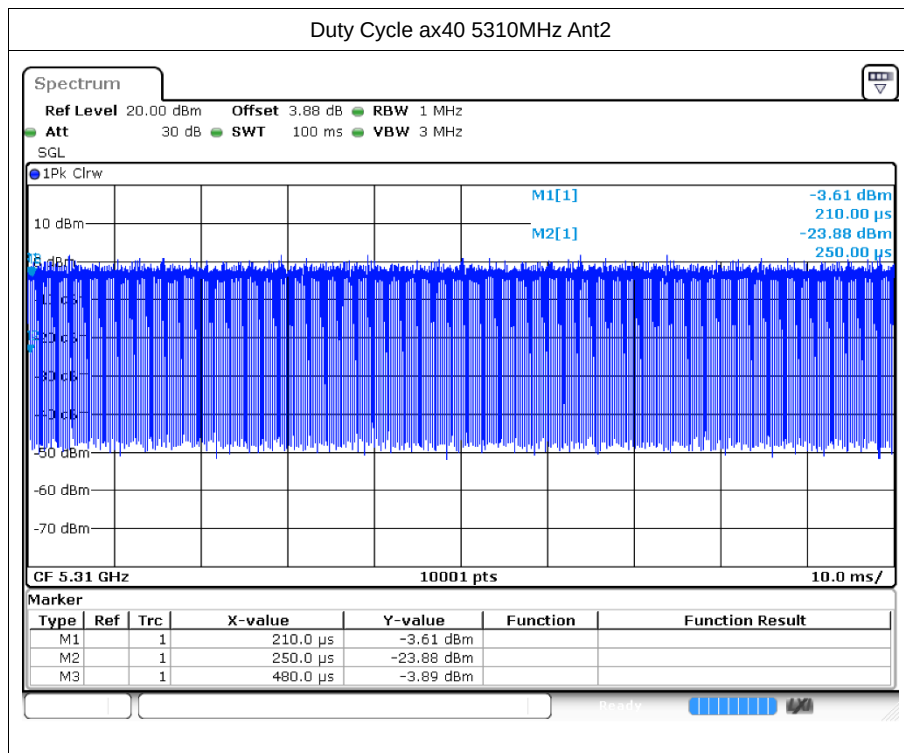
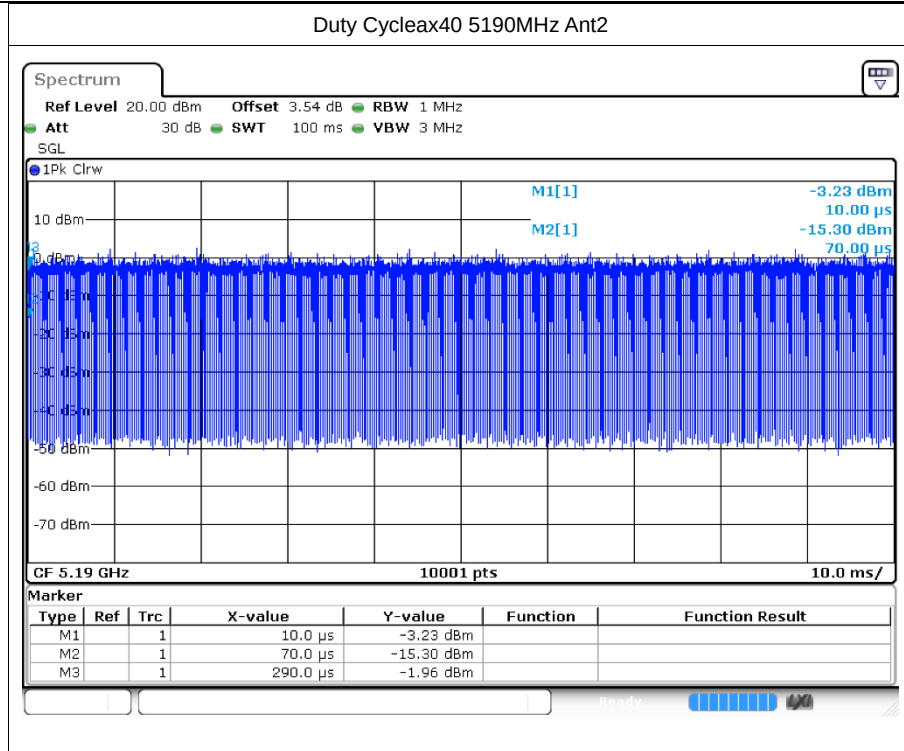


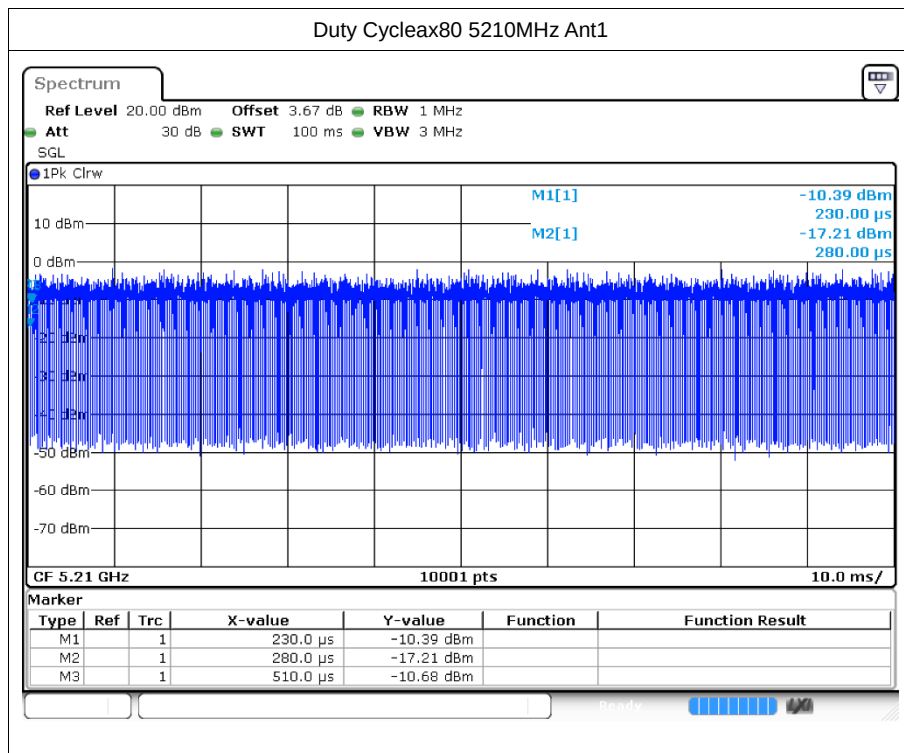
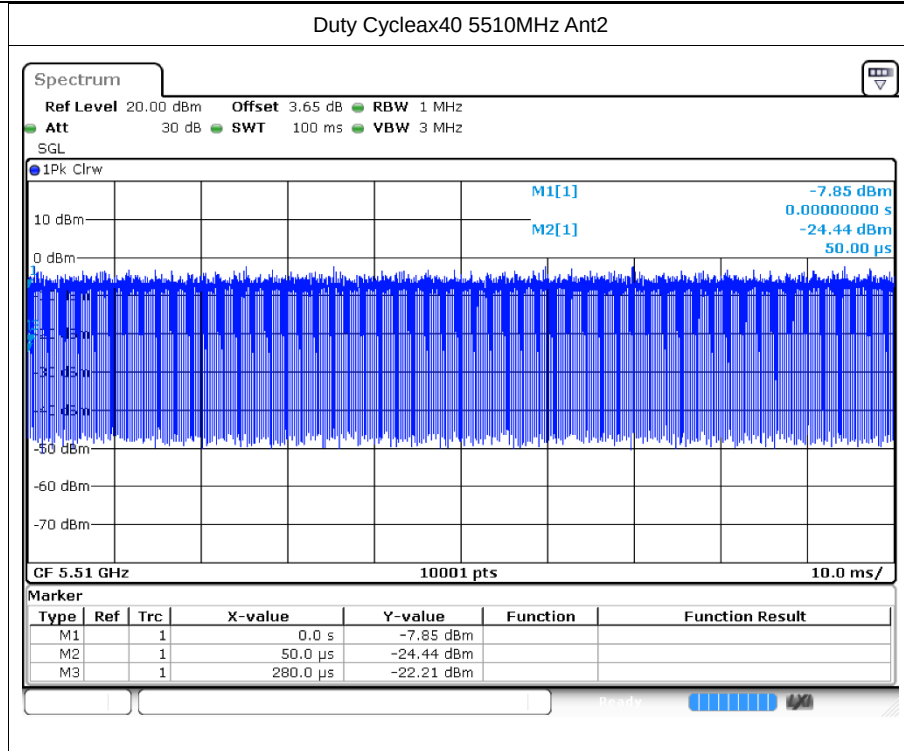


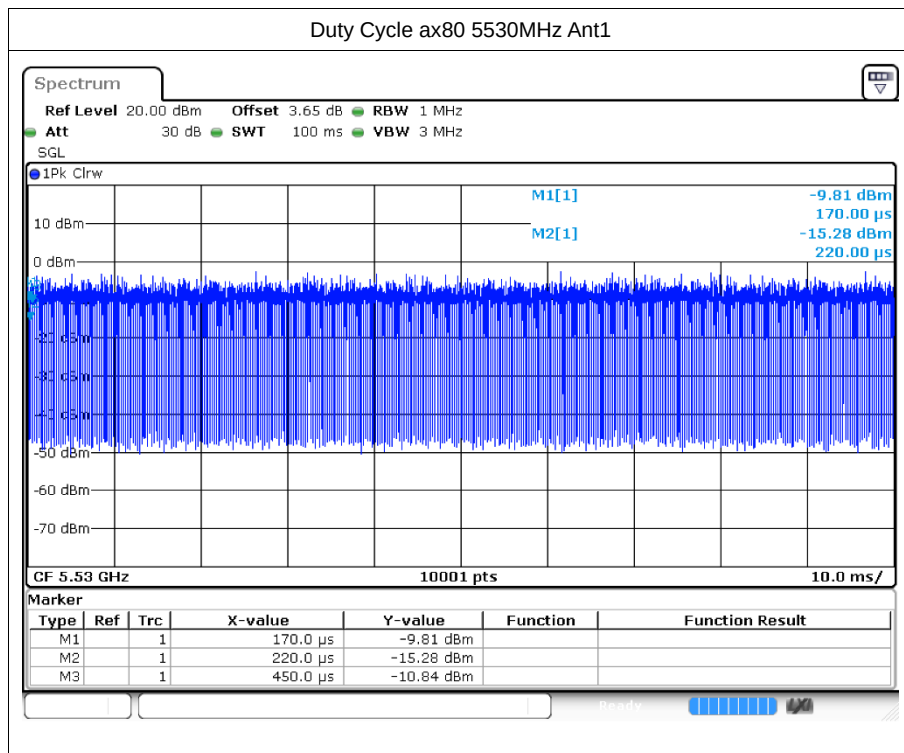
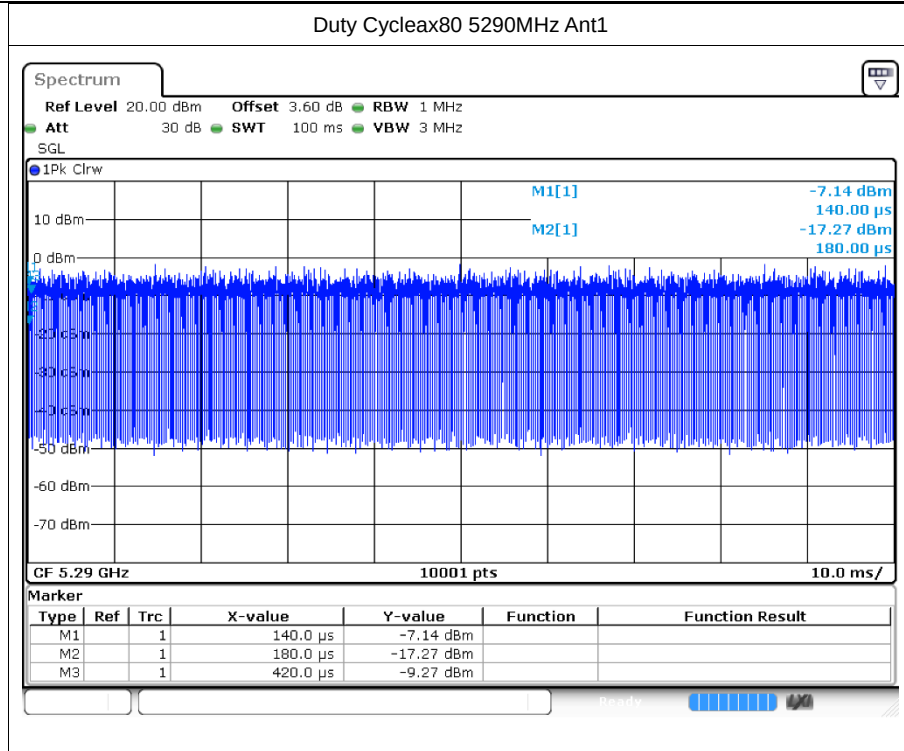


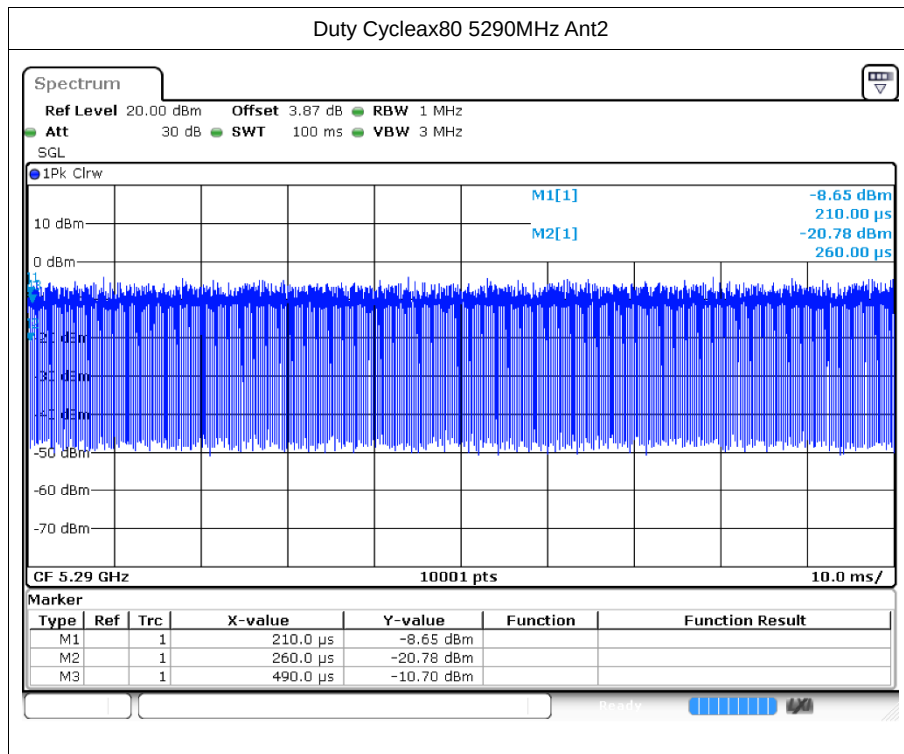
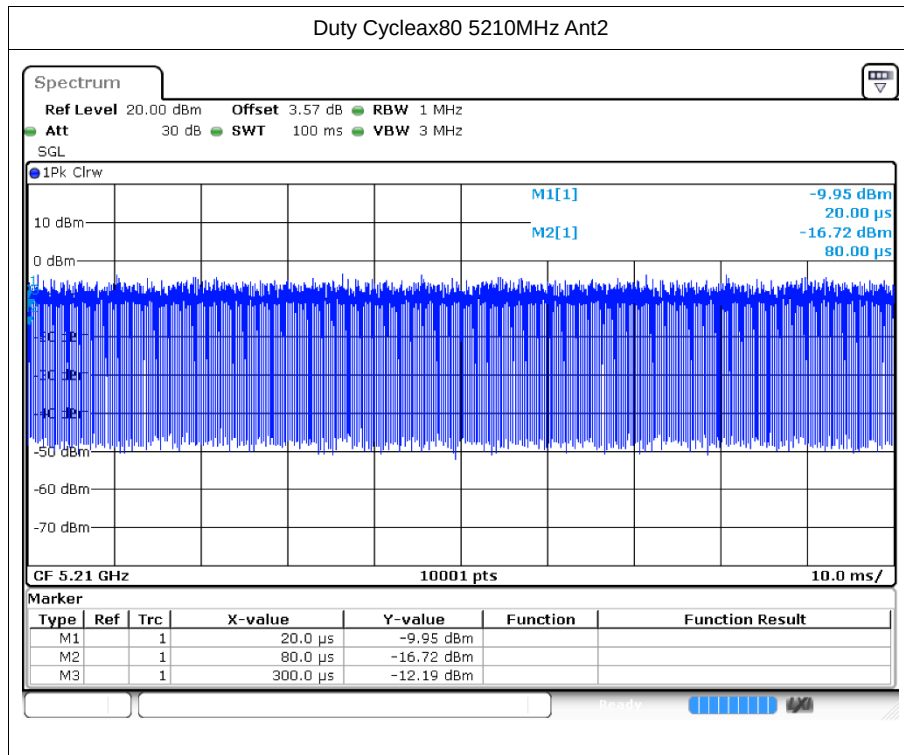


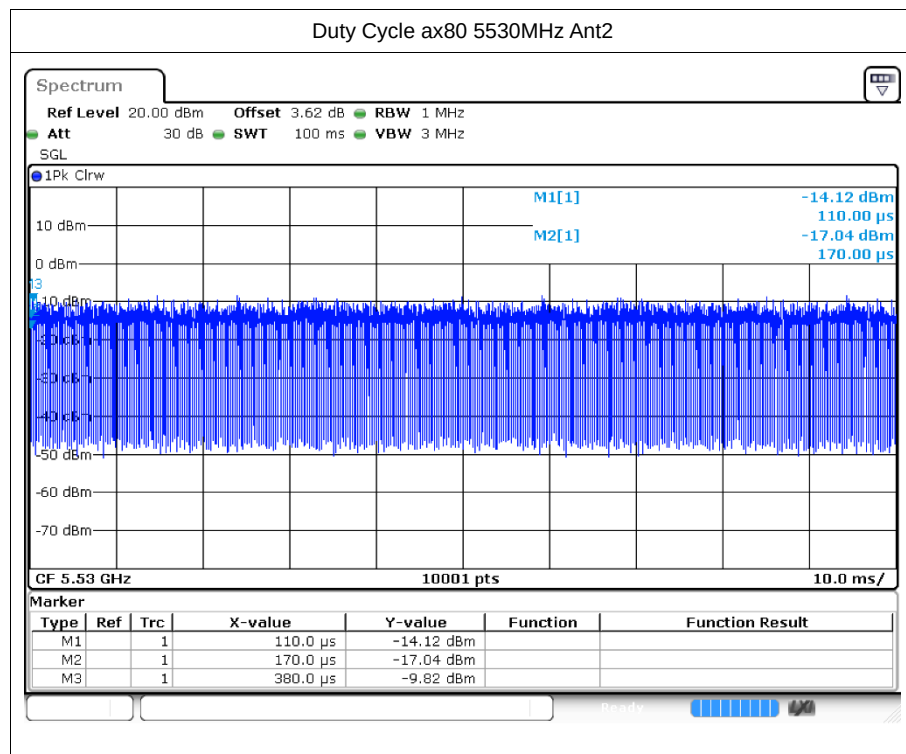












2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
n20	5180	Ant1	14.97	23.3	Pass
n40	5190	Ant1	14.85	23.3	Pass
ac20	5180	Ant1	15.08	23.3	Pass
ac40	5190	Ant1	14.77	23.3	Pass
ax20	5180	Ant1	15.7	23.3	Pass
ax40	5190	Ant1	15.36	23.3	Pass
ax80	5210	Ant1	14.24	23.3	Pass
n20	5320	Ant1	14.79	24	Pass
n40	5310	Ant1	14.56	24	Pass
ac20	5320	Ant1	14.75	24	Pass
ac40	5310	Ant1	14.52	24	Pass
ax20	5320	Ant1	15.37	24	Pass
ax40	5310	Ant1	15.04	24	Pass
ax80	5290	Ant1	13.99	24	Pass
n20	5500	Ant1	14.24	24	Pass
n40	5510	Ant1	13.93	24	Pass
ac20	5500	Ant1	14.08	24	Pass
ac40	5510	Ant1	13.86	24	Pass
ax20	5500	Ant1	14.78	24	Pass
ax40	5510	Ant1	14.46	24	Pass
ax80	5530	Ant1	13.58	24	Pass
n20	5180	Ant2	13.65	23.3	Pass
n40	5190	Ant2	13.91	23.3	Pass
ac20	5180	Ant2	14.17	23.3	Pass
ac40	5190	Ant2	14.25	23.3	Pass
ax20	5180	Ant2	14.33	23.3	Pass
ax40	5190	Ant2	14.37	23.3	Pass
ax80	5210	Ant2	13.53	23.3	Pass
n20	5320	Ant2	12.68	24	Pass
n40	5310	Ant2	13.21	24	Pass
ac20	5320	Ant2	13.16	24	Pass
ac40	5310	Ant2	13.47	24	Pass
ax20	5320	Ant2	12.76	24	Pass
ax40	5310	Ant2	13.54	24	Pass
ax80	5290	Ant2	13.08	24	Pass



n20	5500	Ant2	9.19	24	Pass
n40	5510	Ant2	9.48	24	Pass
ac20	5500	Ant2	9.52	24	Pass
ac40	5510	Ant2	9.61	24	Pass
ax20	5500	Ant2	9.78	24	Pass
ax40	5510	Ant2	9.87	24	Pass
ax80	5530	Ant2	8.98	24	Pass
n20	5180	Sum	17.37	23.3	Pass
n40	5190	Sum	17.42	23.3	Pass
ac20	5180	Sum	17.66	23.3	Pass
ac40	5190	Sum	17.53	23.3	Pass
ax20	5180	Sum	18.08	23.3	Pass
ax40	5190	Sum	17.90	23.3	Pass
ax80	5210	Sum	16.91	23.3	Pass
n20	5320	Sum	16.87	24	Pass
n40	5310	Sum	16.95	24	Pass
ac20	5320	Sum	17.04	24	Pass
ac40	5310	Sum	17.04	24	Pass
ax20	5320	Sum	17.27	24	Pass
ax40	5310	Sum	17.36	24	Pass
ax80	5290	Sum	16.57	24	Pass
n20	5500	Sum	15.42	24	Pass
n40	5510	Sum	15.26	24	Pass
ac20	5500	Sum	15.38	24	Pass
ac40	5510	Sum	15.25	24	Pass
ax20	5500	Sum	15.97	24	Pass
ax40	5510	Sum	15.76	24	Pass
ax80	5530	Sum	14.87	24	Pass

Note:

The duty factor has been compensated into the result.



3 -26dB Bandwidth

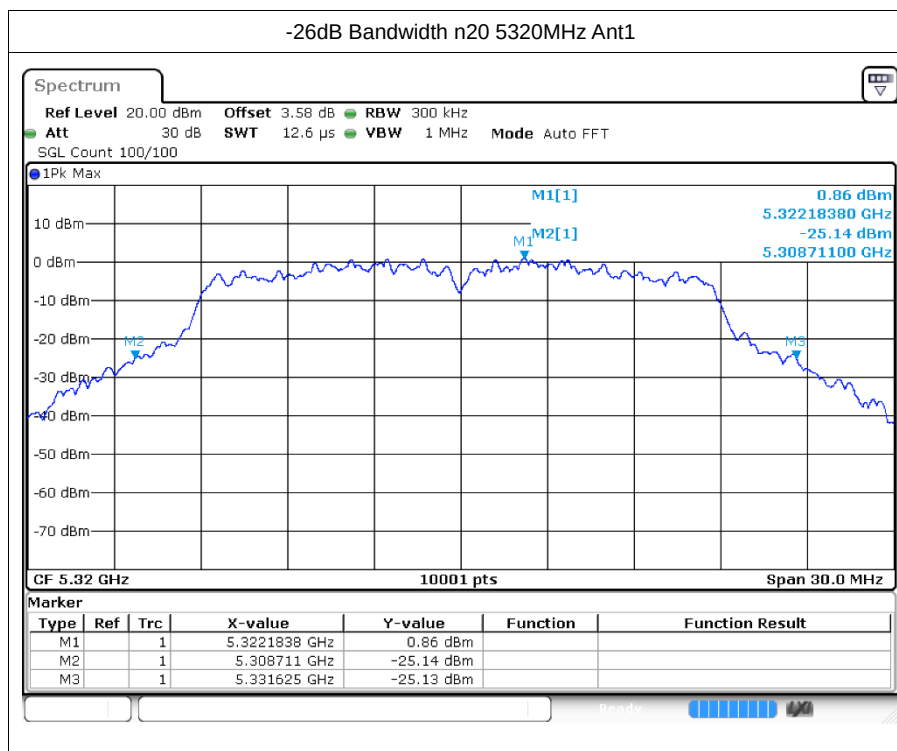
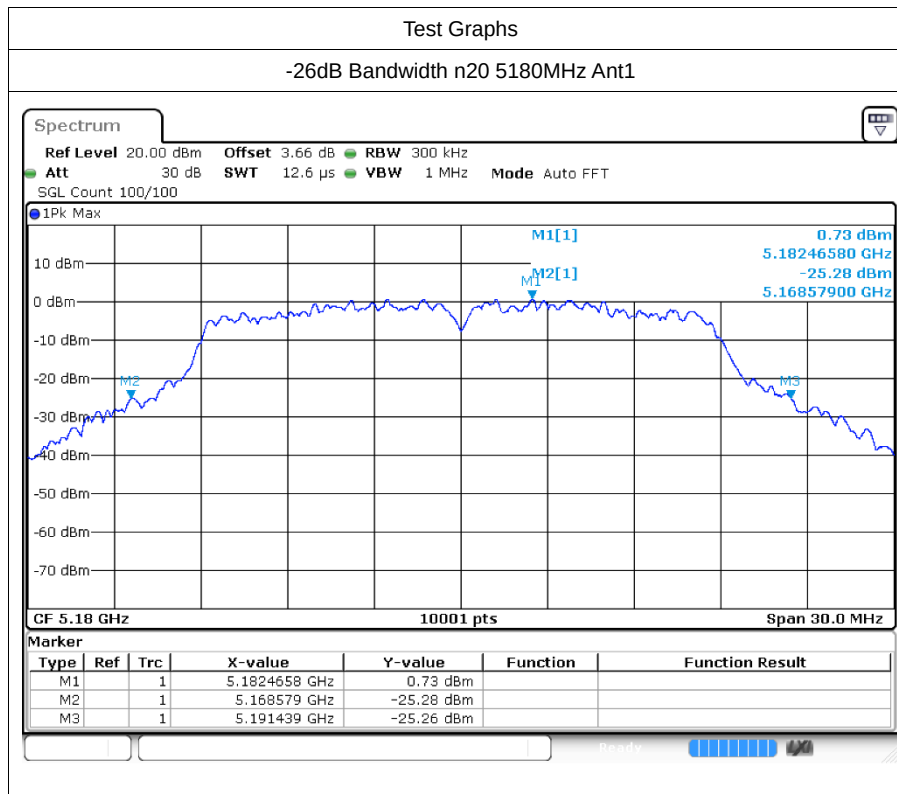
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
n20	5180	Ant1	22.86	0.5	Pass
n20	5320	Ant1	22.914	0.5	Pass
n20	5500	Ant1	22.674	0.5	Pass
n40	5190	Ant1	42.498	0.5	Pass
n40	5310	Ant1	40.776	0.5	Pass
n40	5510	Ant1	42.75	0.5	Pass
ac20	5180	Ant1	22.527	0.5	Pass
ac20	5320	Ant1	23.511	0.5	Pass
ac20	5500	Ant1	22.551	0.5	Pass
ac40	5190	Ant1	41.838	0.5	Pass
ac40	5310	Ant1	40.86	0.5	Pass
ac40	5510	Ant1	42.156	0.5	Pass
ax80	5210	Ant1	83.208	0.5	Pass
ax80	5290	Ant1	84.744	0.5	Pass
ax80	5530	Ant1	83.244	0.5	Pass
n20	5180	Ant2	22.26	0.5	Pass
n20	5320	Ant2	22.482	0.5	Pass
n20	5500	Ant2	22.674	0.5	Pass
n40	5190	Ant2	41.106	0.5	Pass
n40	5310	Ant2	40.704	0.5	Pass
n40	5510	Ant2	41.46	0.5	Pass
ac20	5180	Ant2	22.941	0.5	Pass
ac20	5320	Ant2	22.617	0.5	Pass
ac20	5500	Ant2	23.07	0.5	Pass
ac40	5190	Ant2	42.732	0.5	Pass
ac40	5310	Ant2	40.302	0.5	Pass
ac40	5510	Ant2	42.15	0.5	Pass
ax80	5210	Ant2	82.476	0.5	Pass
ax80	5290	Ant2	80.436	0.5	Pass
ax80	5530	Ant2	84.264	0.5	Pass
ax20	5180	Ant1	21.765	0.5	Pass
ax20	5320	Ant1	23.19	0.5	Pass
ax20	5500	Ant1	21.966	0.5	Pass
ax40	5190	Ant1	42.534	0.5	Pass
ax40	5310	Ant1	41.388	0.5	Pass
ax40	5510	Ant1	41.136	0.5	Pass
ax20	5180	Ant2	21.87	0.5	Pass

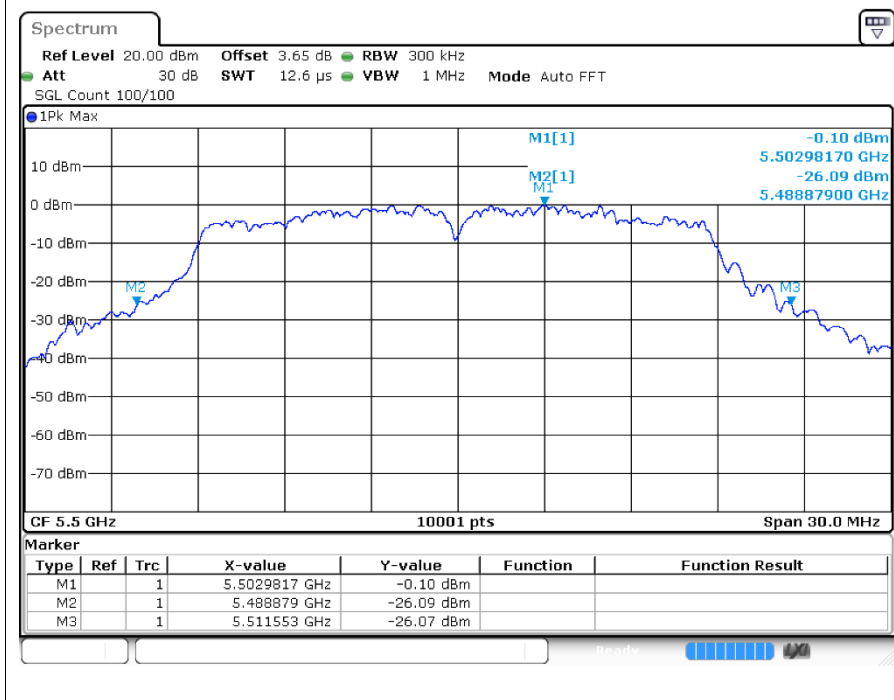


ax20	5320	Ant2	21.711	0.5	Pass
ax20	5500	Ant2	20.922	0.5	Pass
ax40	5190	Ant2	42.168	0.5	Pass
ax40	5310	Ant2	42.018	0.5	Pass
ax40	5510	Ant2	40.482	0.5	Pass

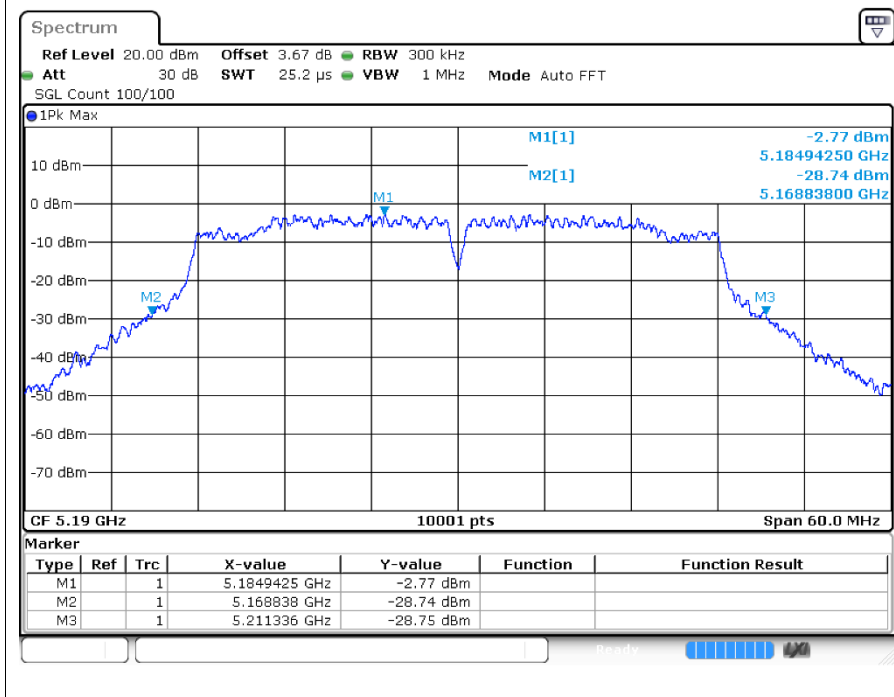
3.2 Test Graphs



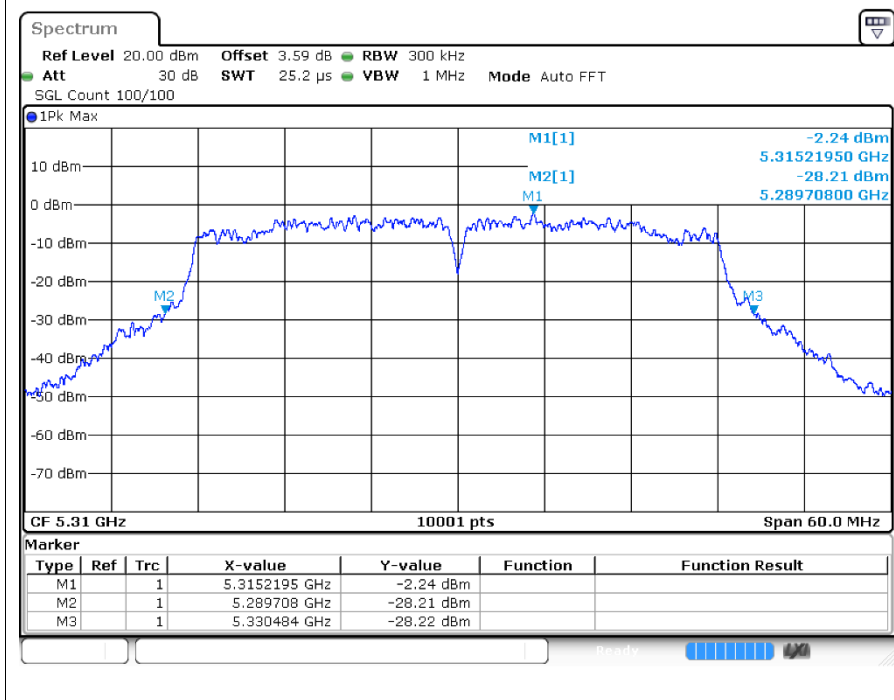
-26dB Bandwidth n20 5500MHz Ant1



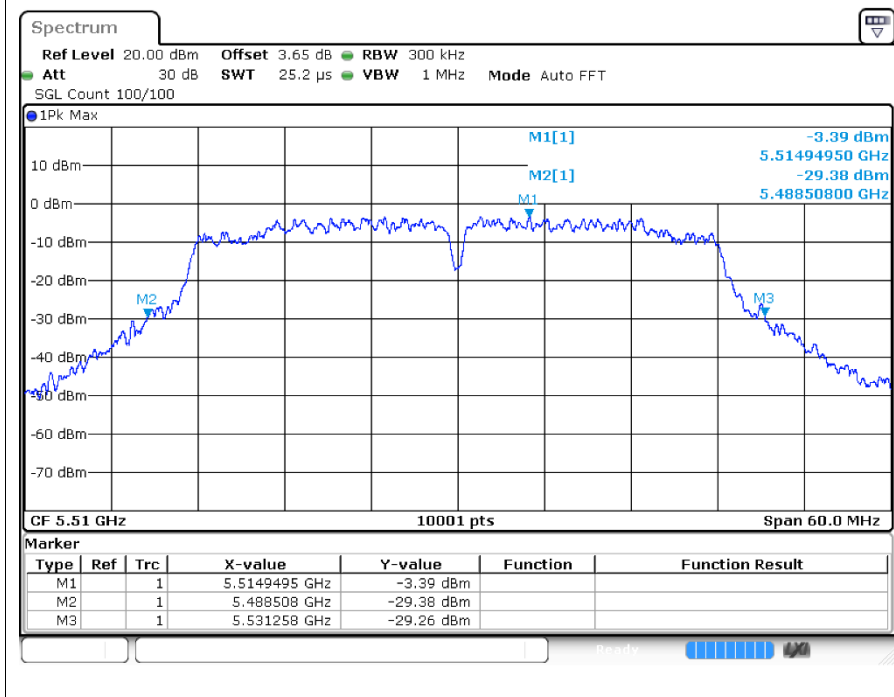
-26dB Bandwidthn40 5190MHz Ant1



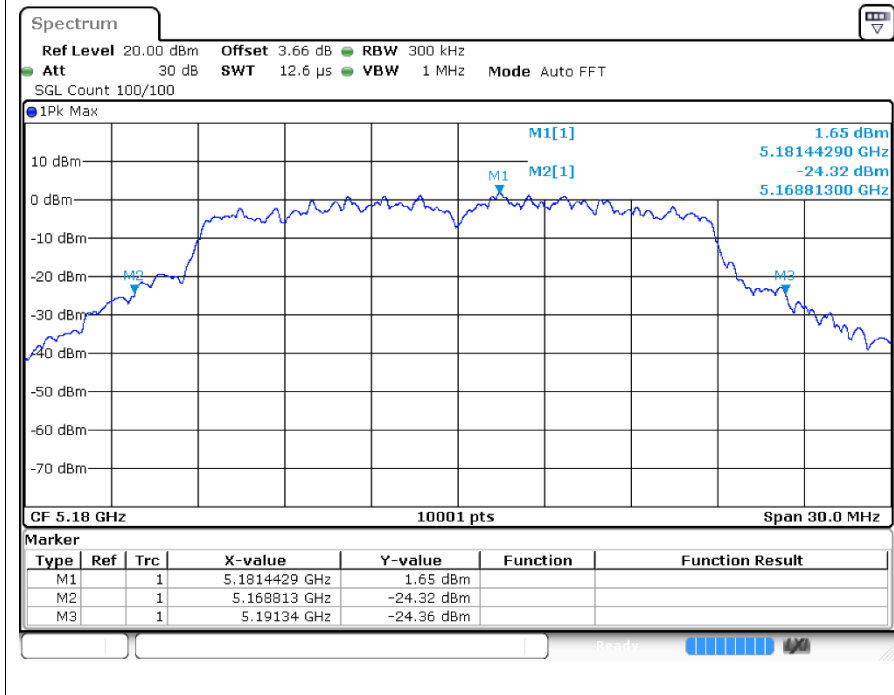
-26dB Bandwidth n40 5310MHz Ant1



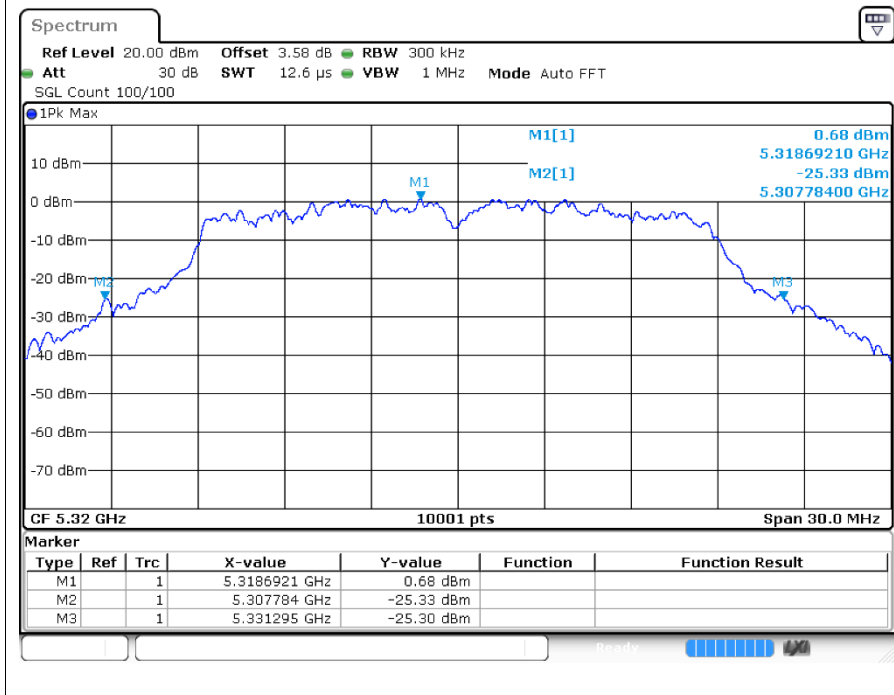
-26dB Bandwidthn40 5510MHz Ant1



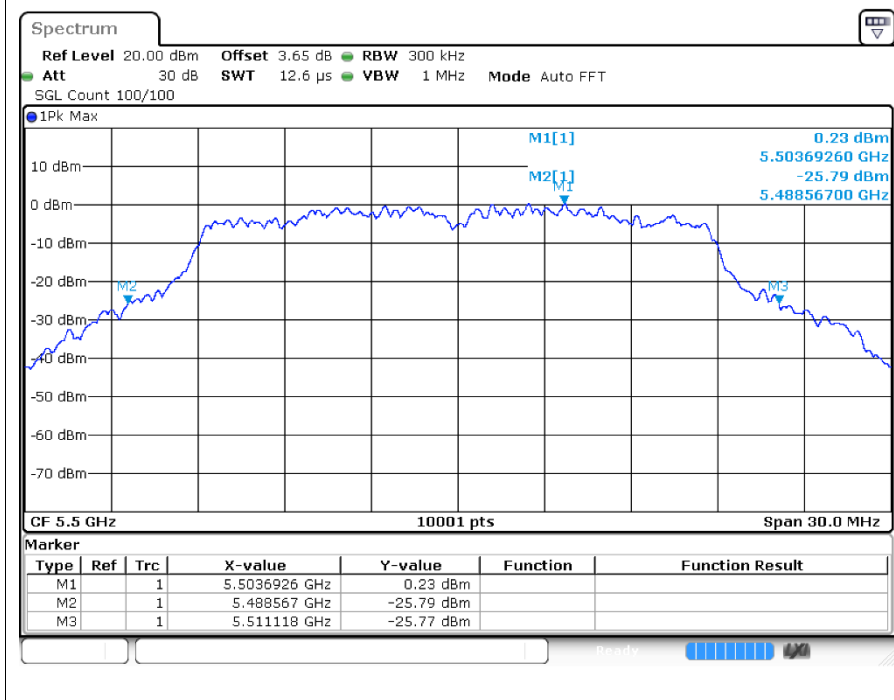
-26dB Bandwidth ac20 5180MHz Ant1



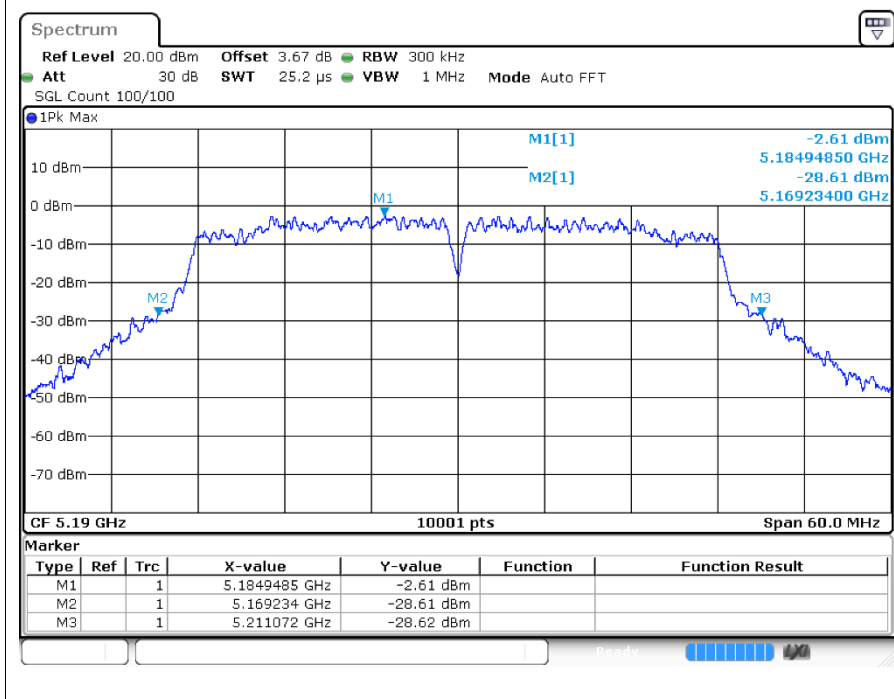
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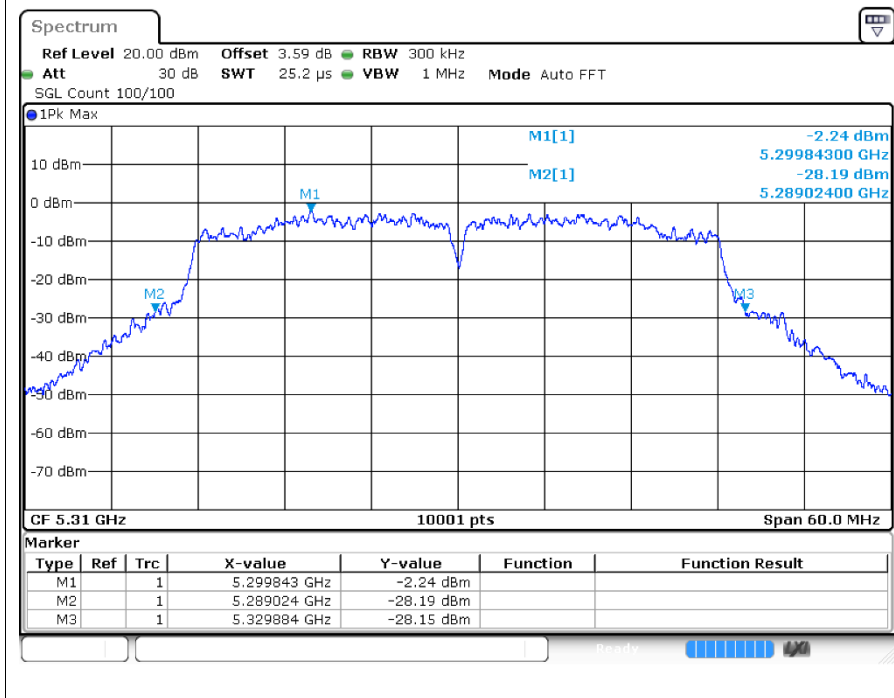
-26dB Bandwidth ac20 5500MHz Ant1



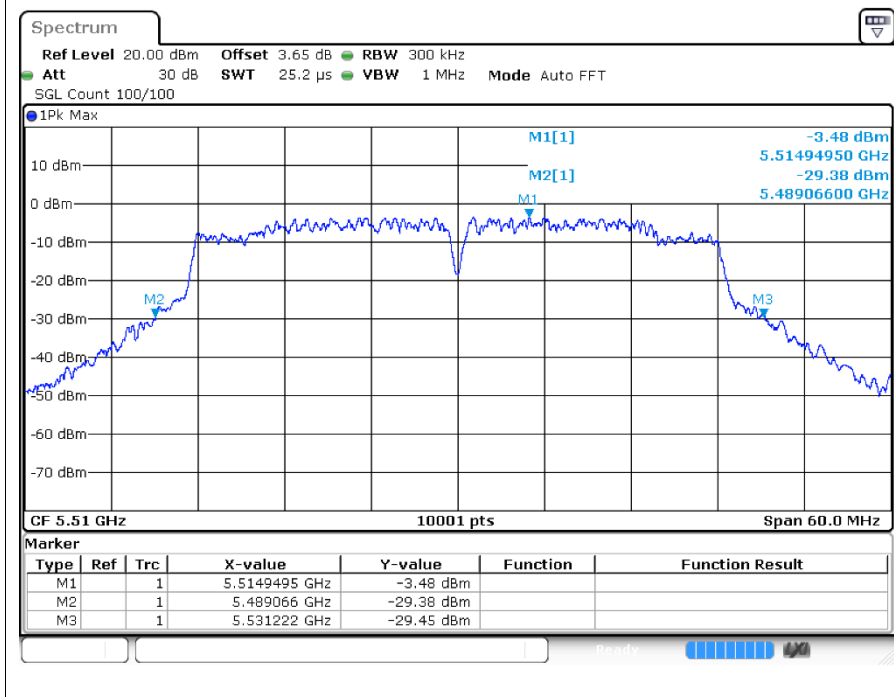
-26dB Bandwidth ac40 5190MHz Ant1



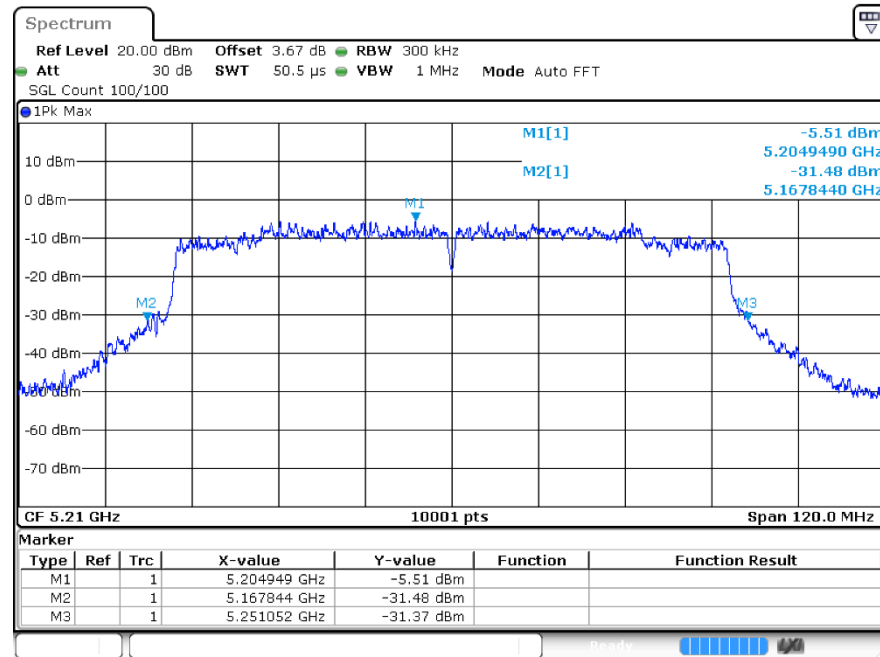
-26dB Bandwidth ac40 5310MHz Ant1



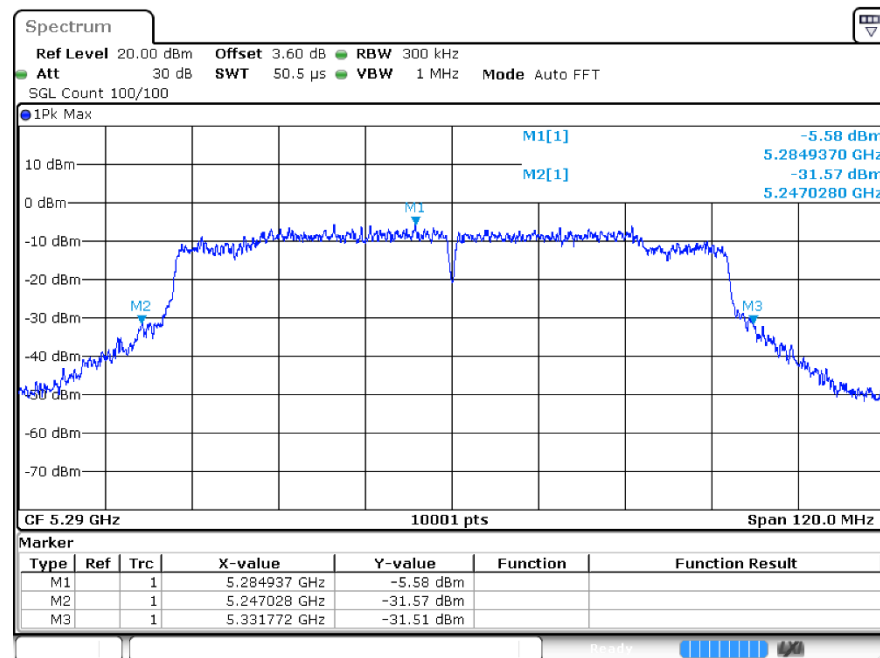
-26dB Bandwidthac40 5510MHz Ant1



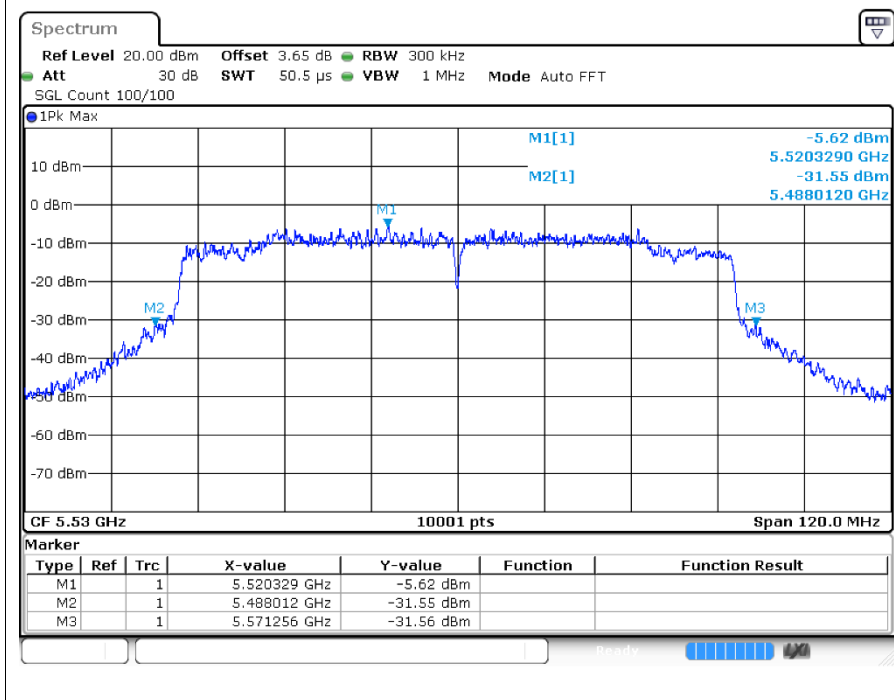
-26dB Bandwidthax80 5210MHz Ant1



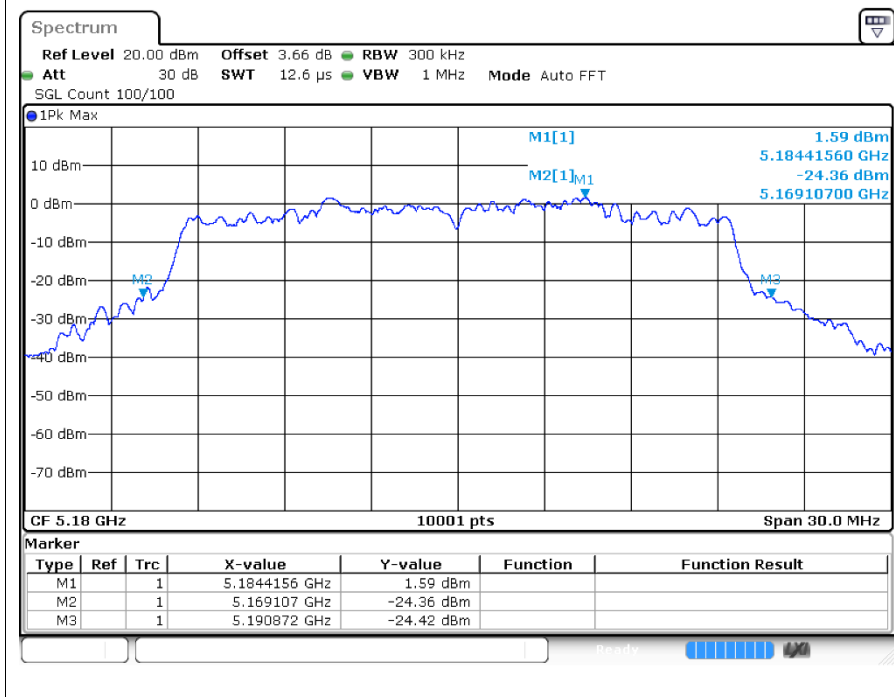
-26dB Bandwidthax80 5290MHz Ant1



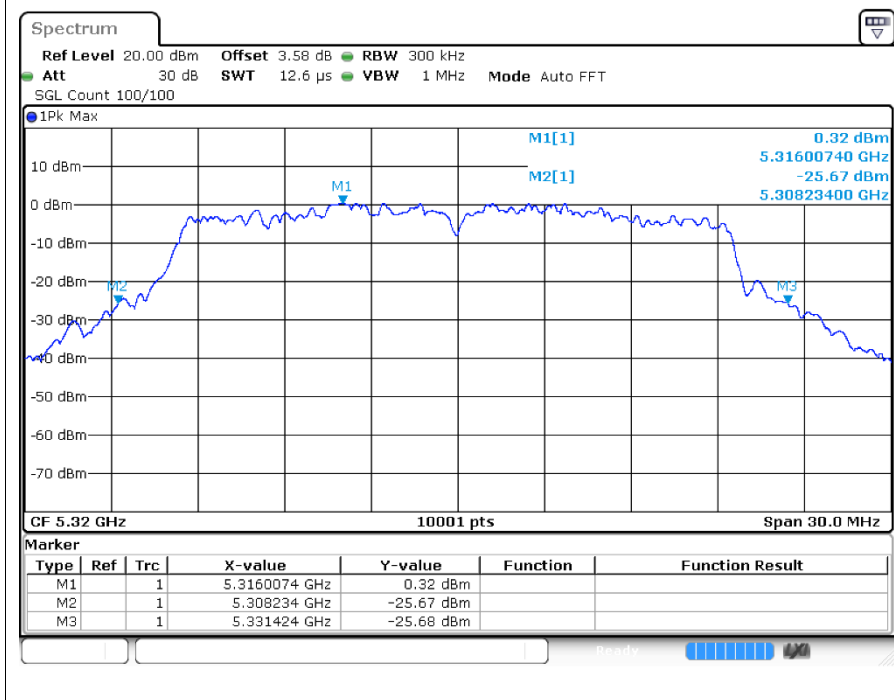
-26dB Bandwidth ax80 5530MHz Ant1



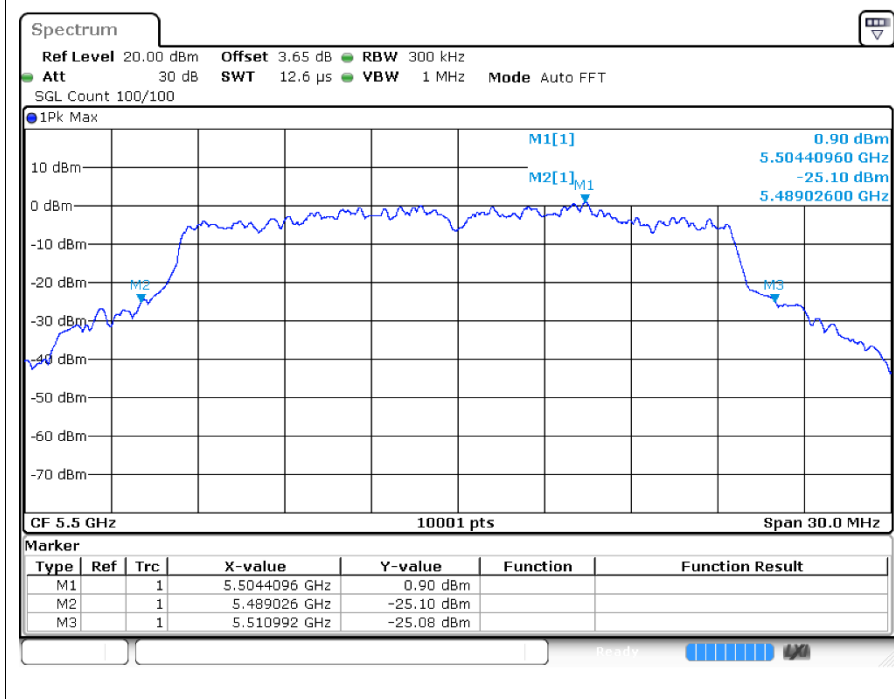
-26dB Bandwidth ax20 5180MHz Ant1



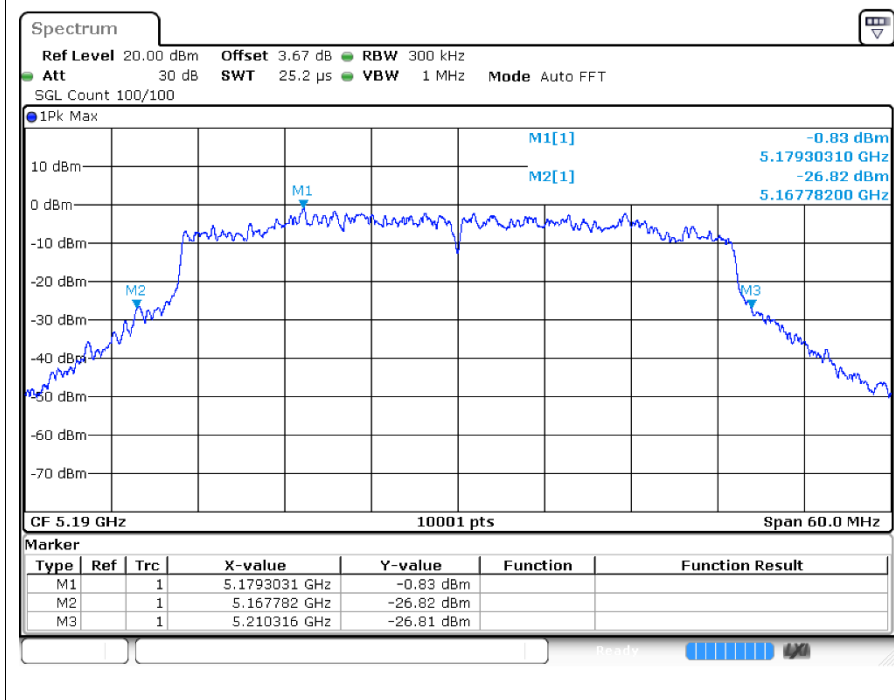
-26dB Bandwidth ax20 5320MHz Ant1



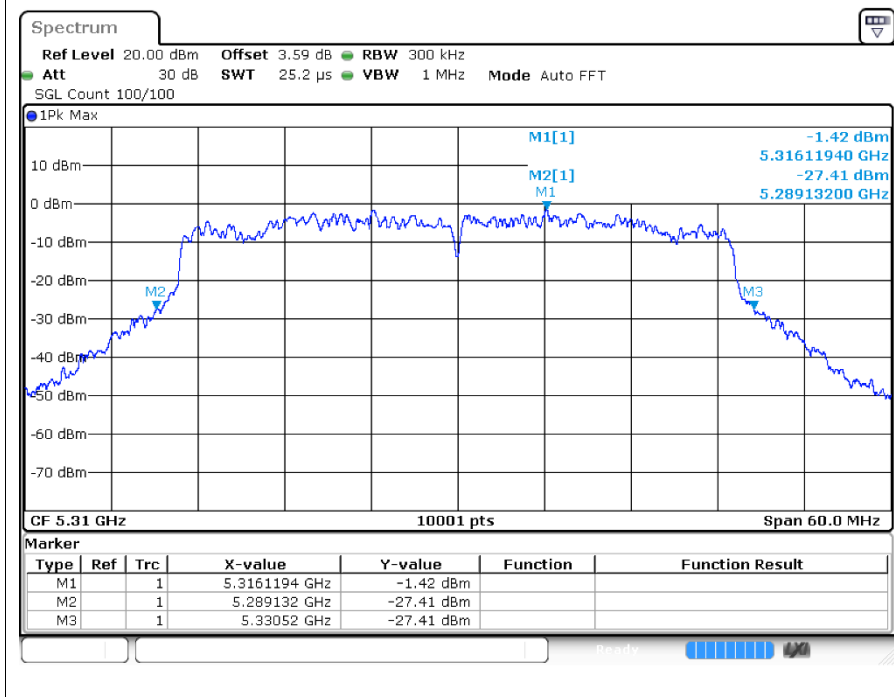
-26dB Bandwidth ax20 5500MHz Ant1



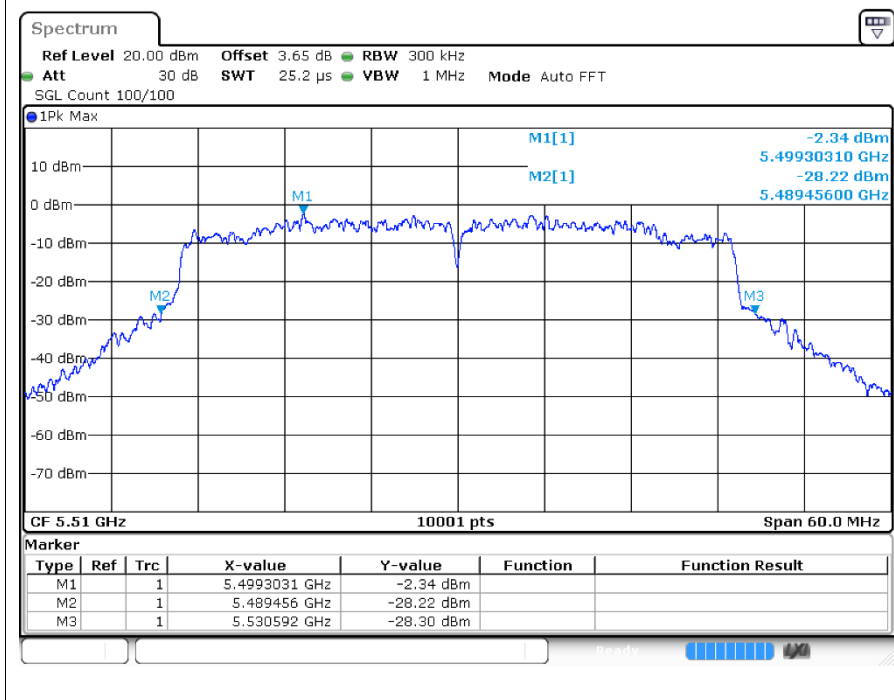
-26dB Bandwidth ax40 5190MHz Ant1



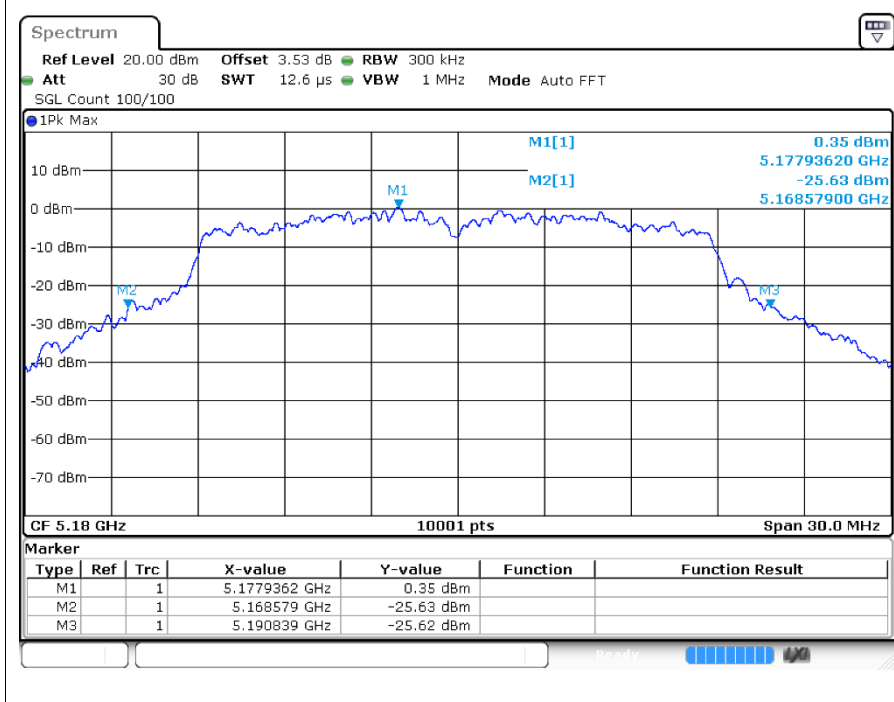
-26dB Bandwidth ax40 5310MHz Ant1



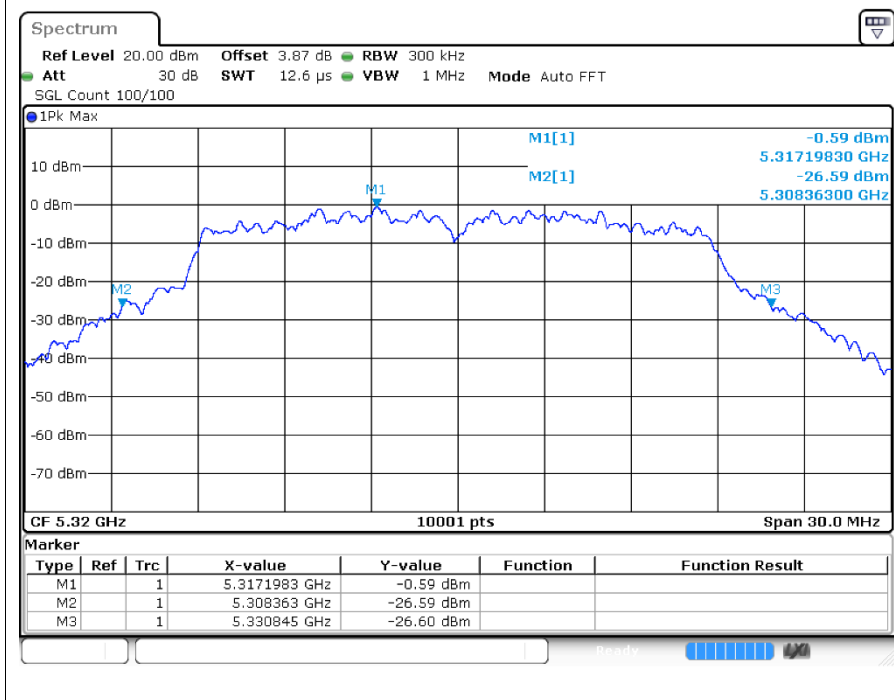
-26dB Bandwidthx40 5510MHz Ant1



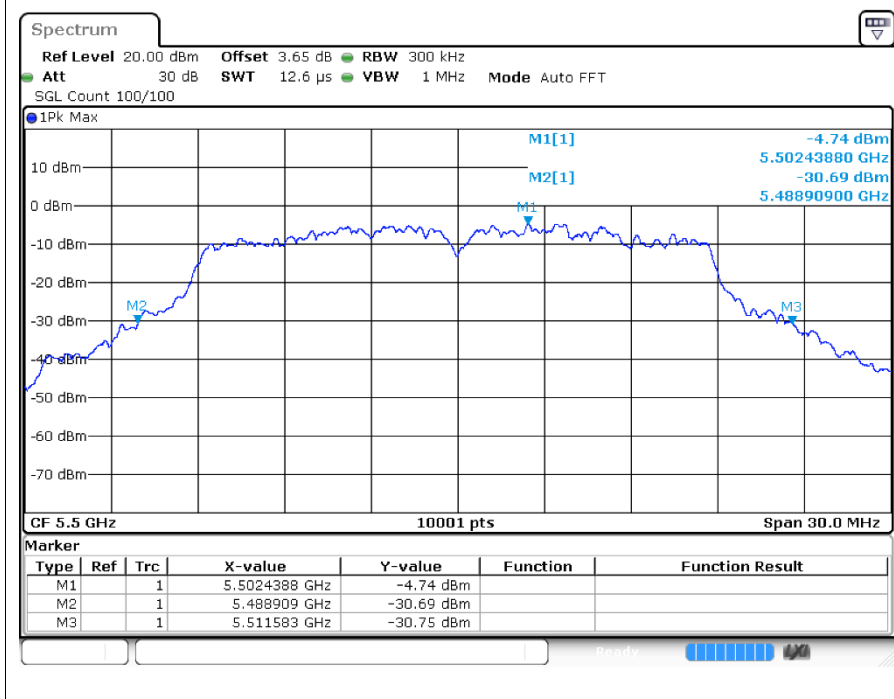
-26dB Bandwidth n20 5180MHz Ant2

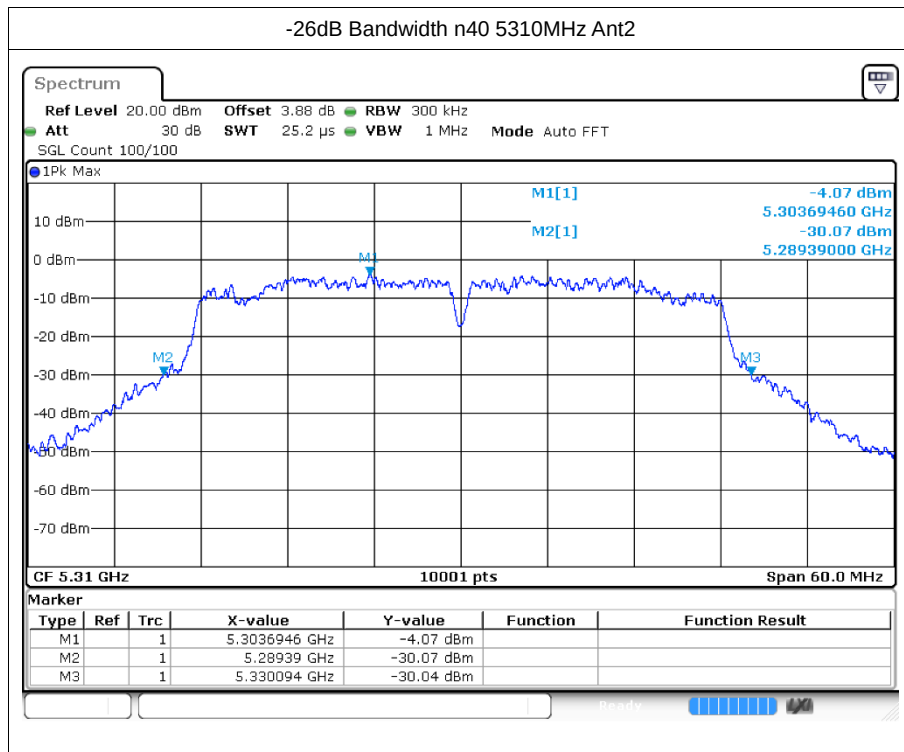
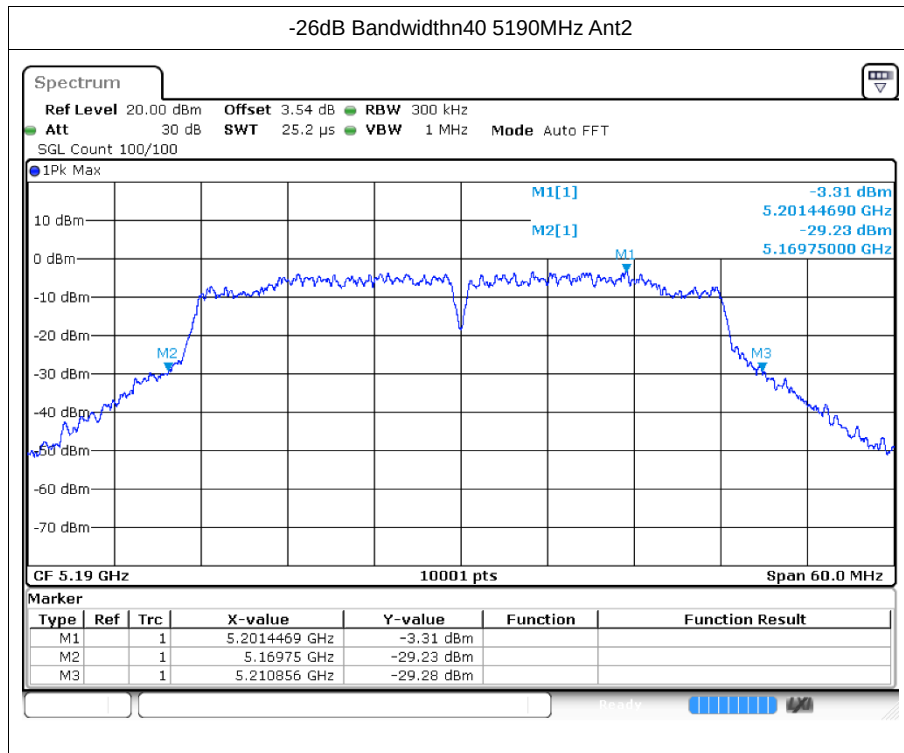


-26dB Bandwidth n20 5320MHz Ant2

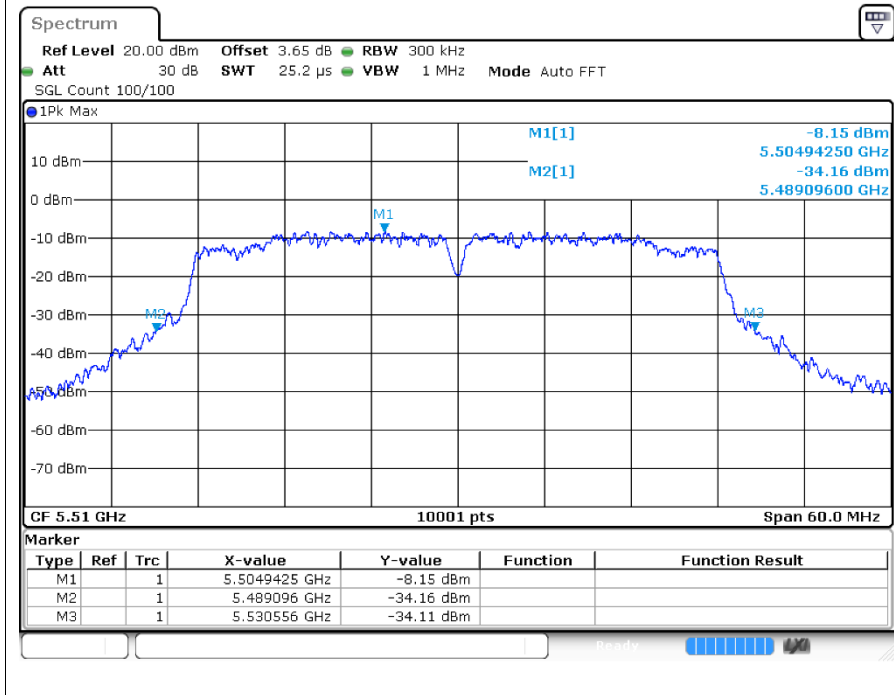


-26dB Bandwidth n20 5500MHz Ant2

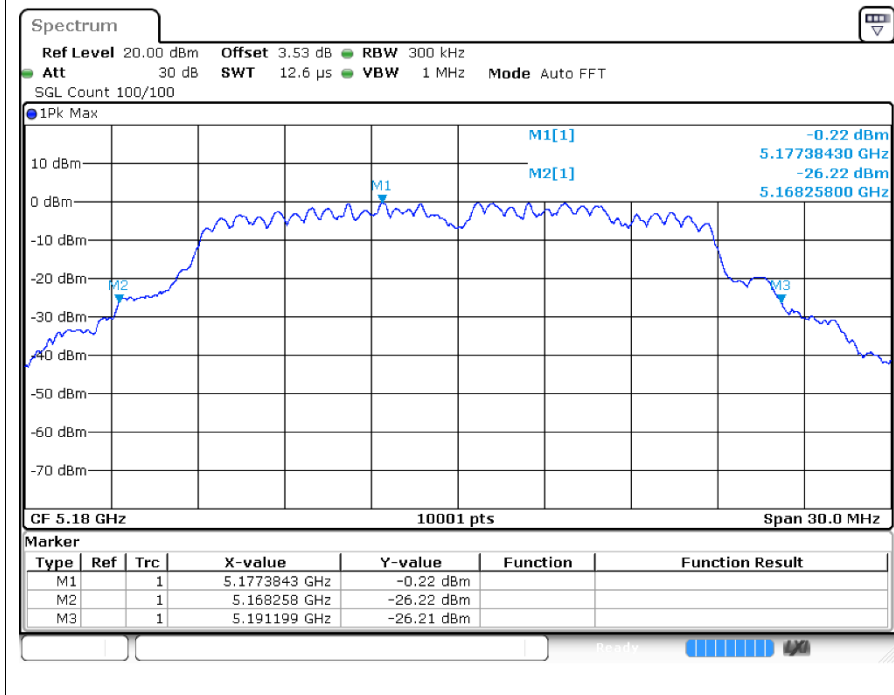




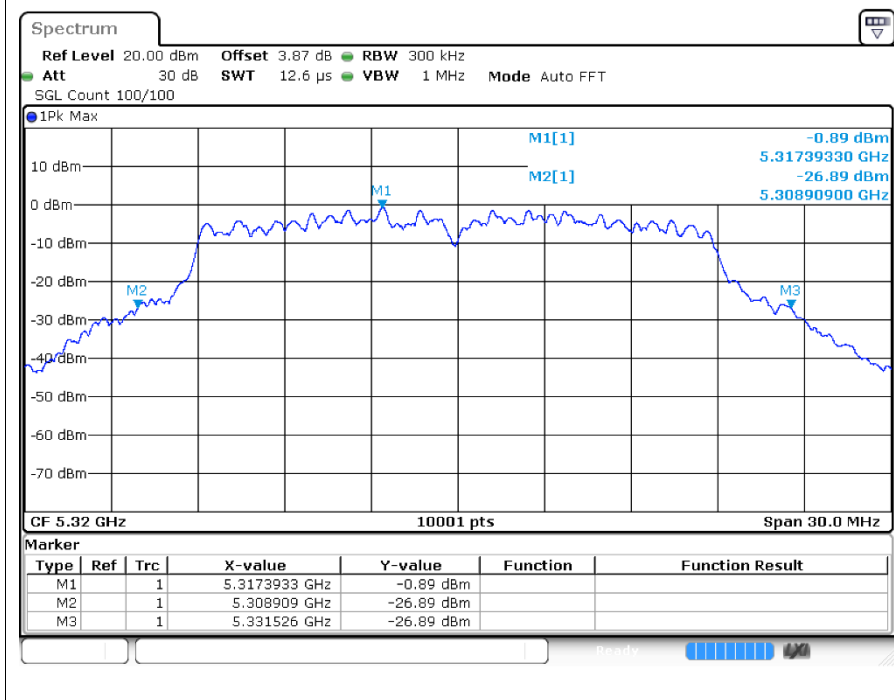
-26dB Bandwidth40 5510MHz Ant2



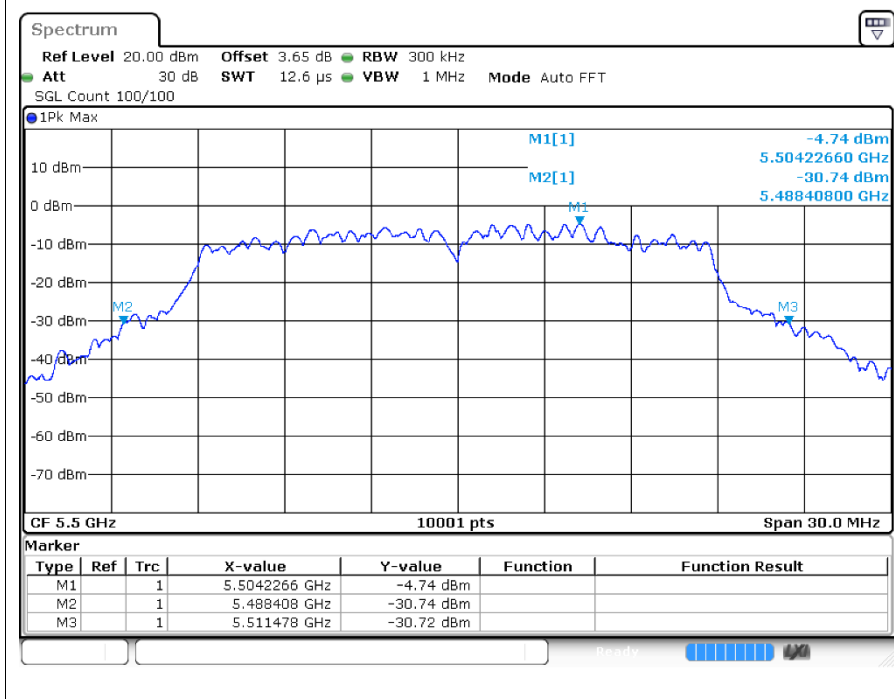
-26dB Bandwidth ac20 5180MHz Ant2

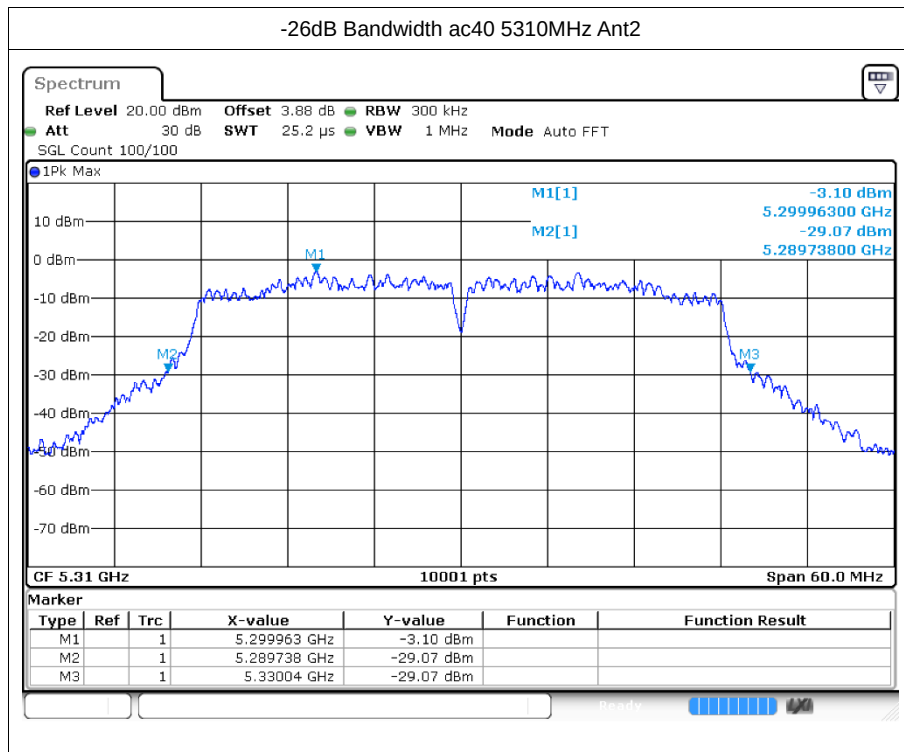
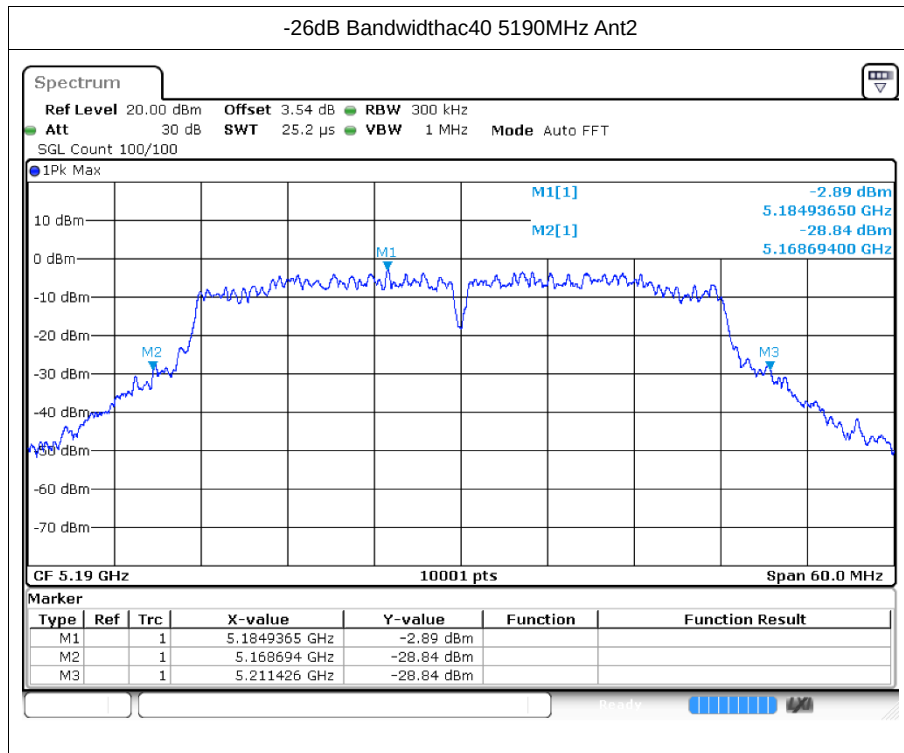


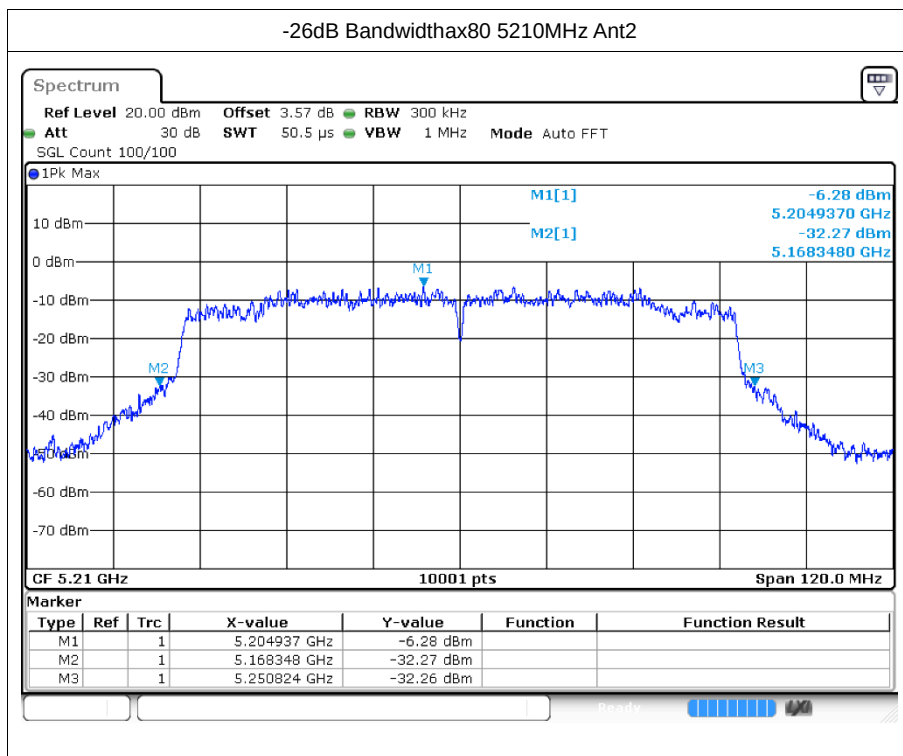
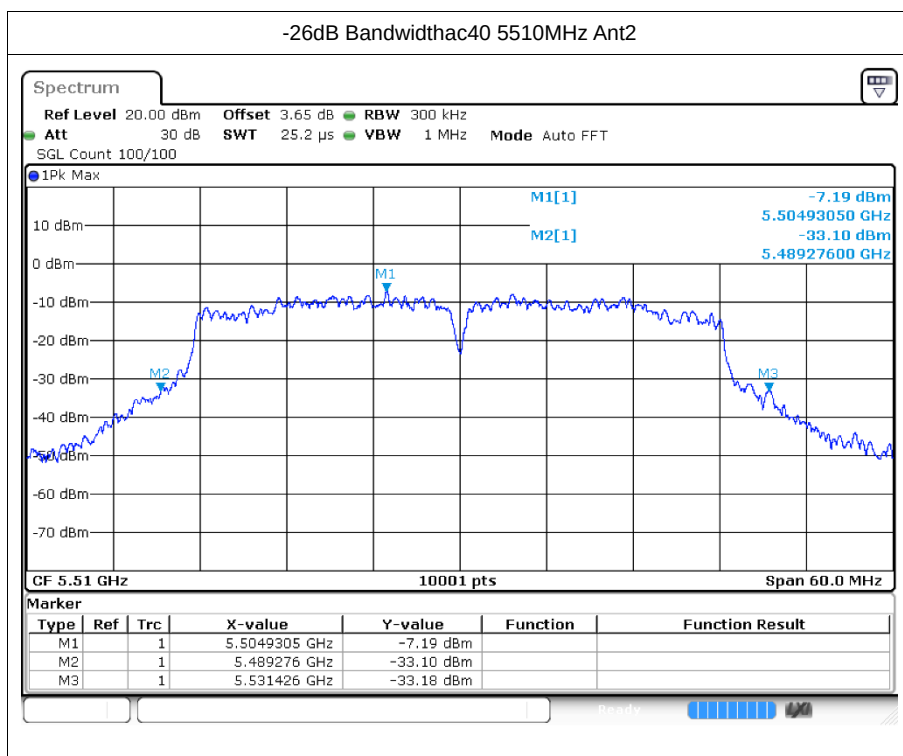
-26dB Bandwidth ac20 5320MHz Ant2



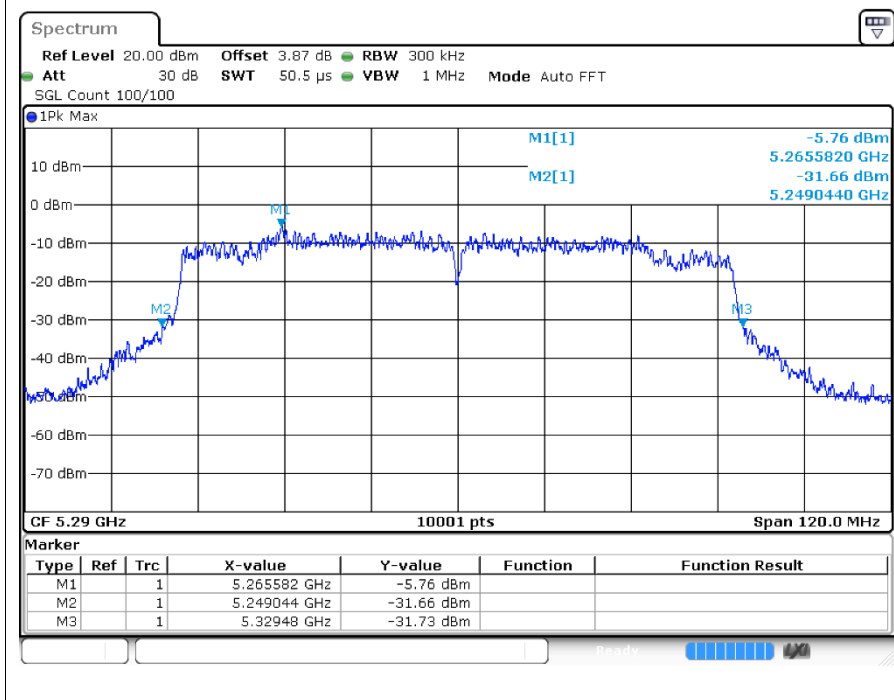
-26dB Bandwidth ac20 5500MHz Ant2



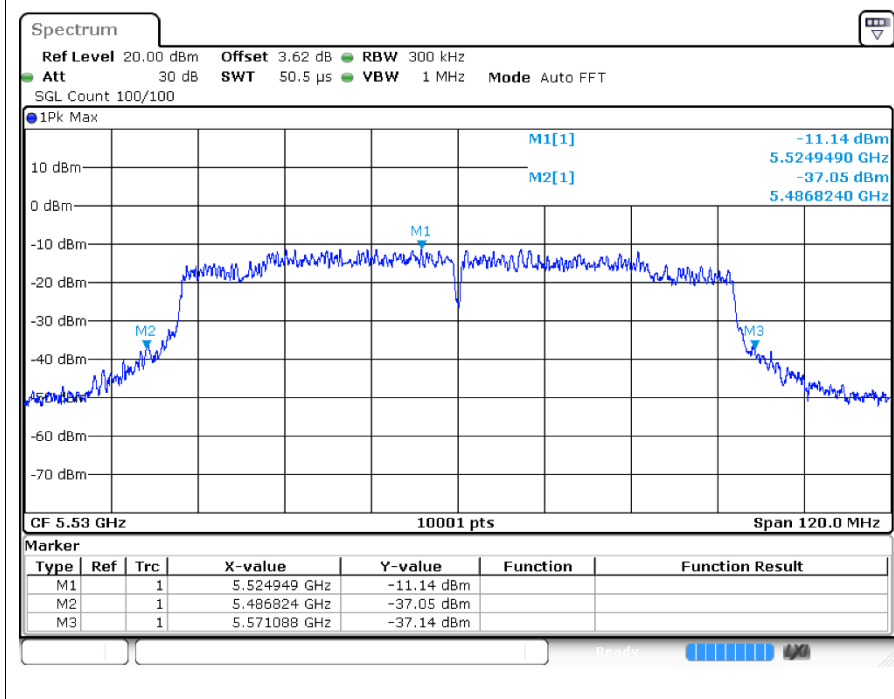




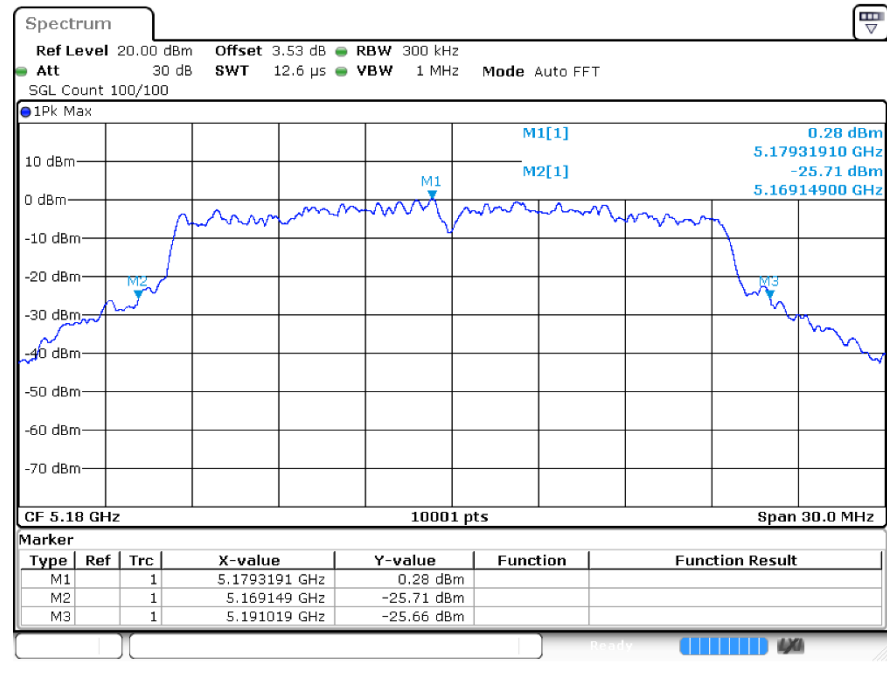
-26dB Bandwidth ax80 5290MHz Ant2



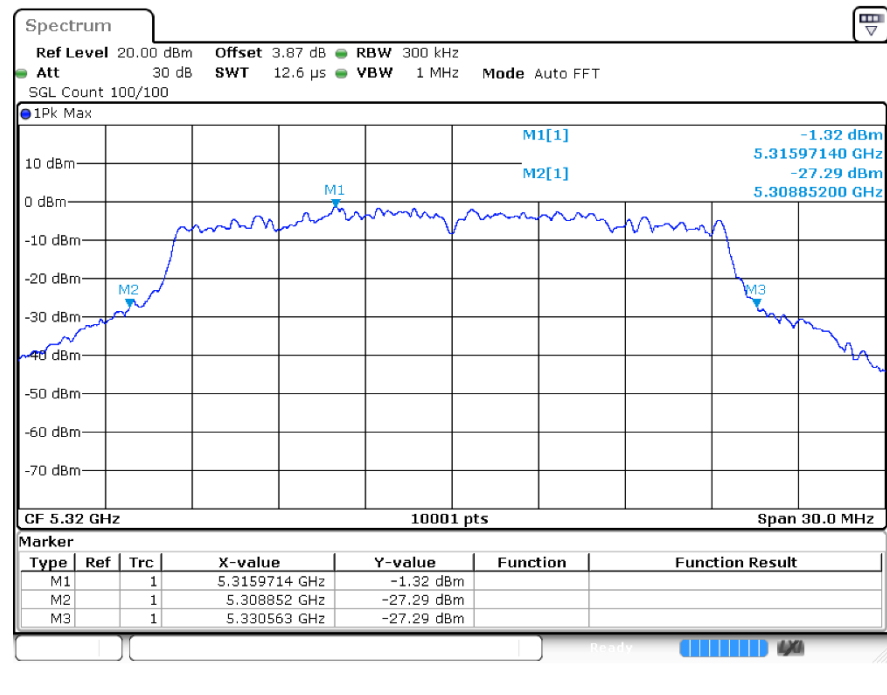
-26dB Bandwidth ax80 5530MHz Ant2



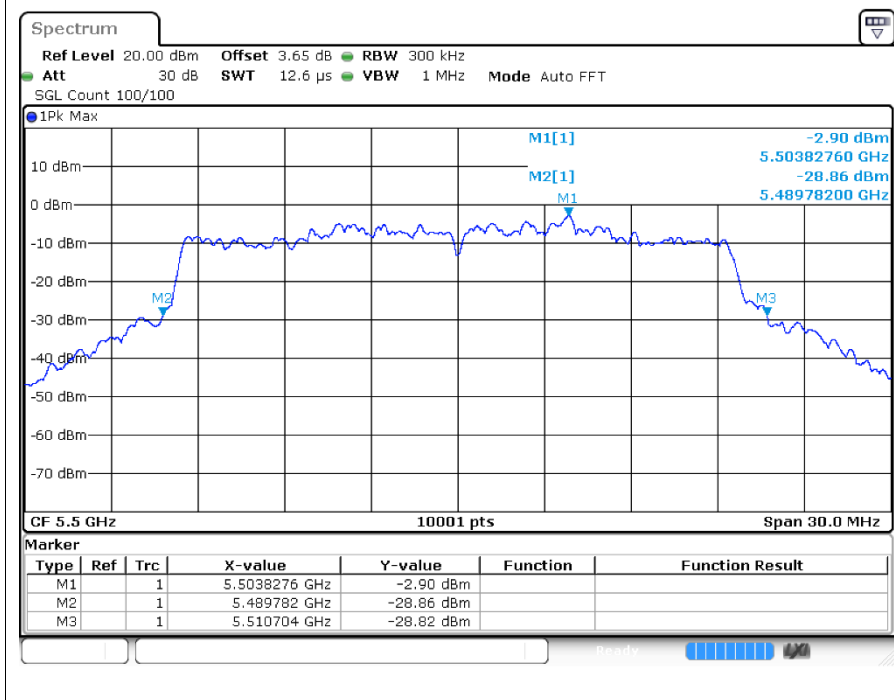
-26dB Bandwidth ax20 5180MHz Ant2



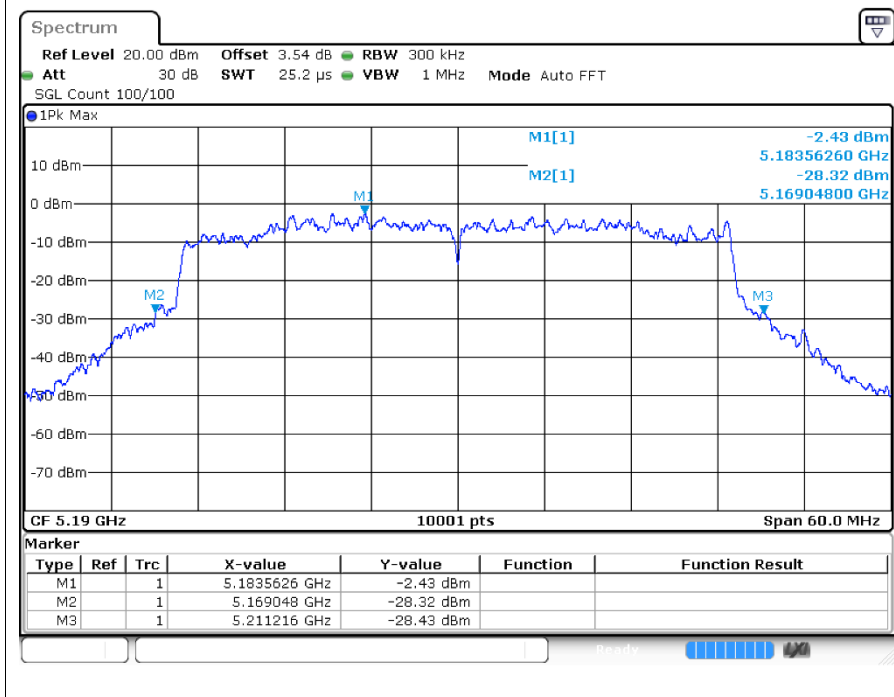
-26dB Bandwidth ax20 5320MHz Ant2



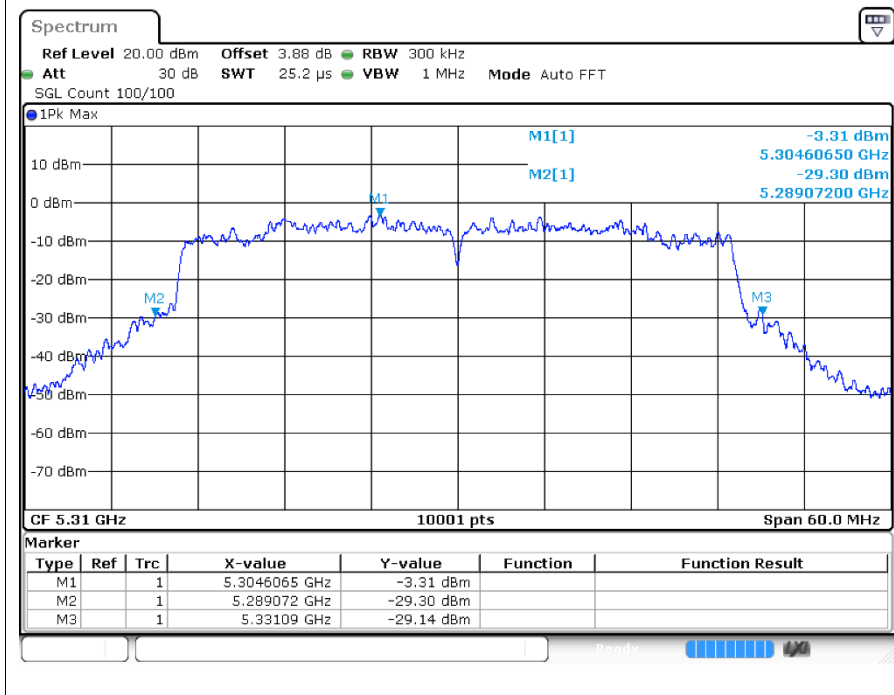
-26dB Bandwidth ax20 5500MHz Ant2



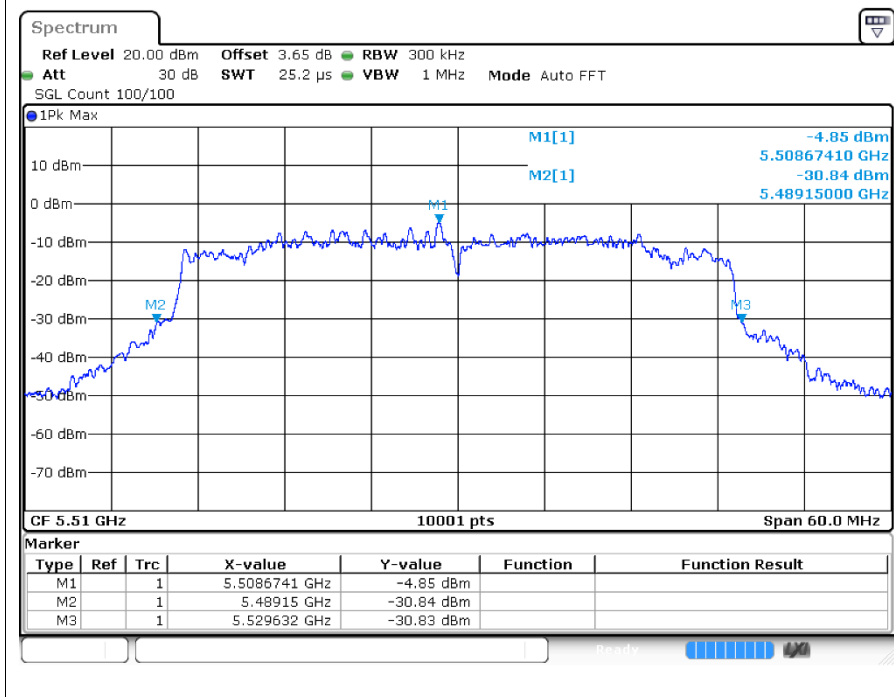
-26dB Bandwidthax40 5190MHz Ant2



-26dB Bandwidth ax40 5310MHz Ant2



-26dB Bandwidthax40 5510MHz Ant2



4 Occupied Channel Bandwidth

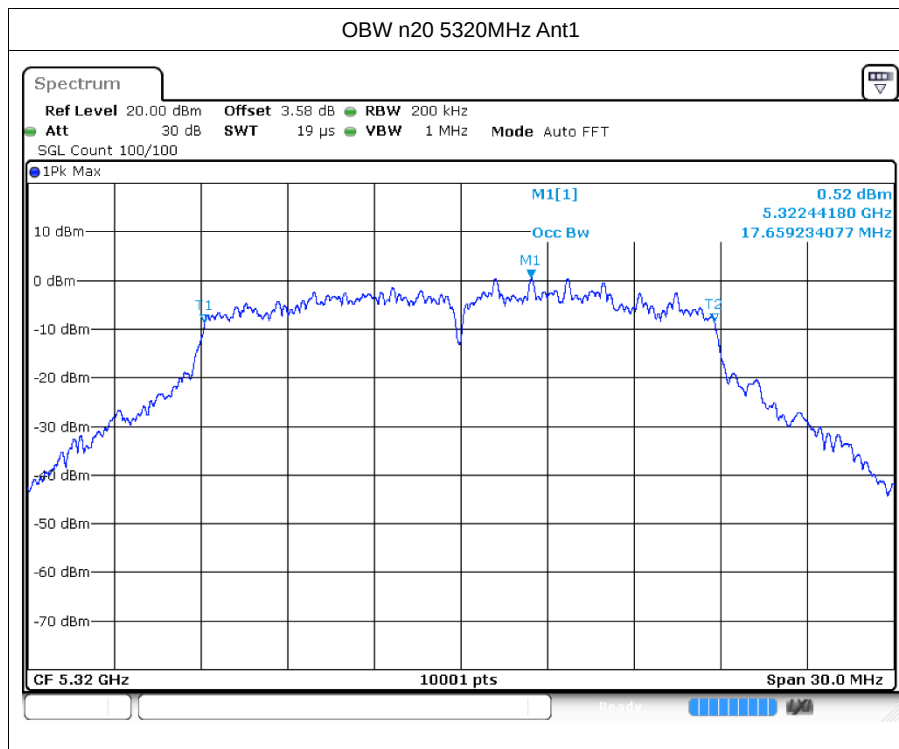
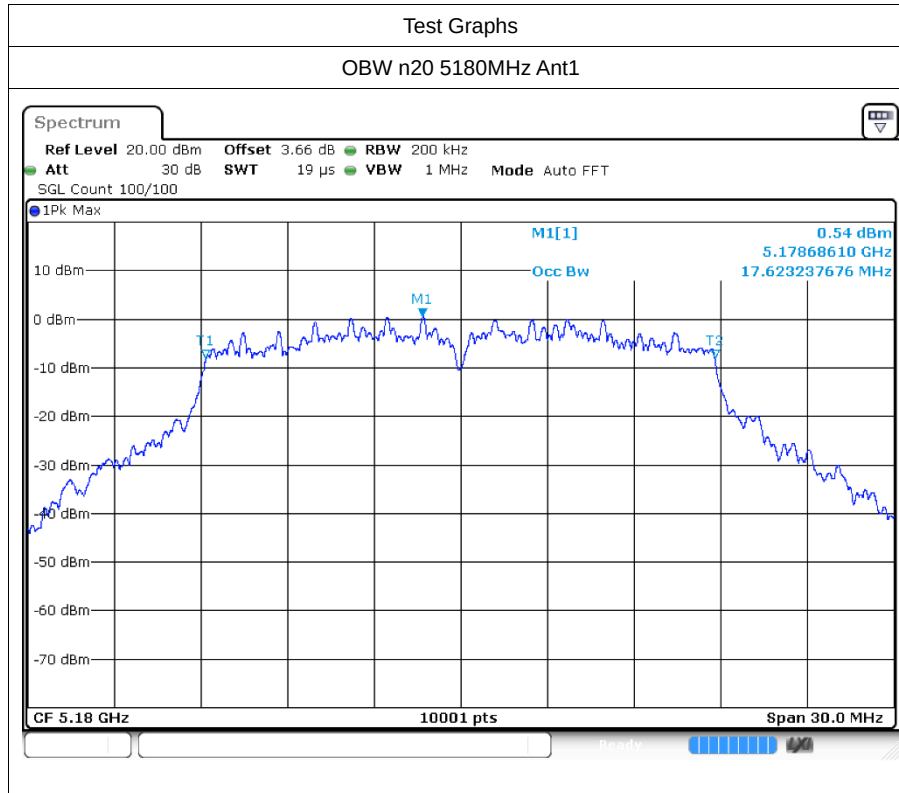
4.1 Test Result

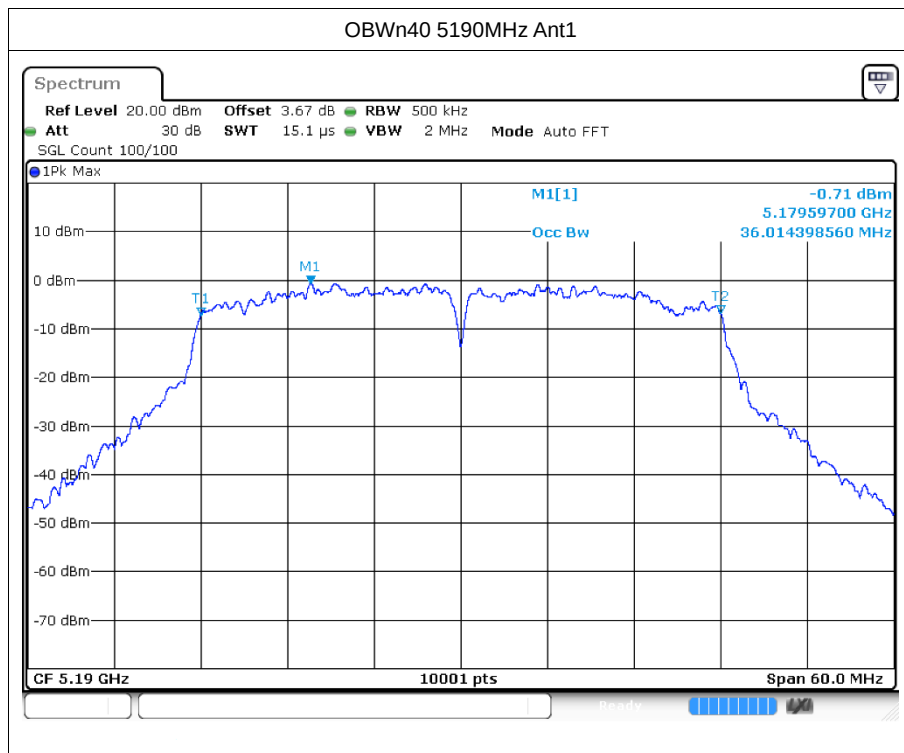
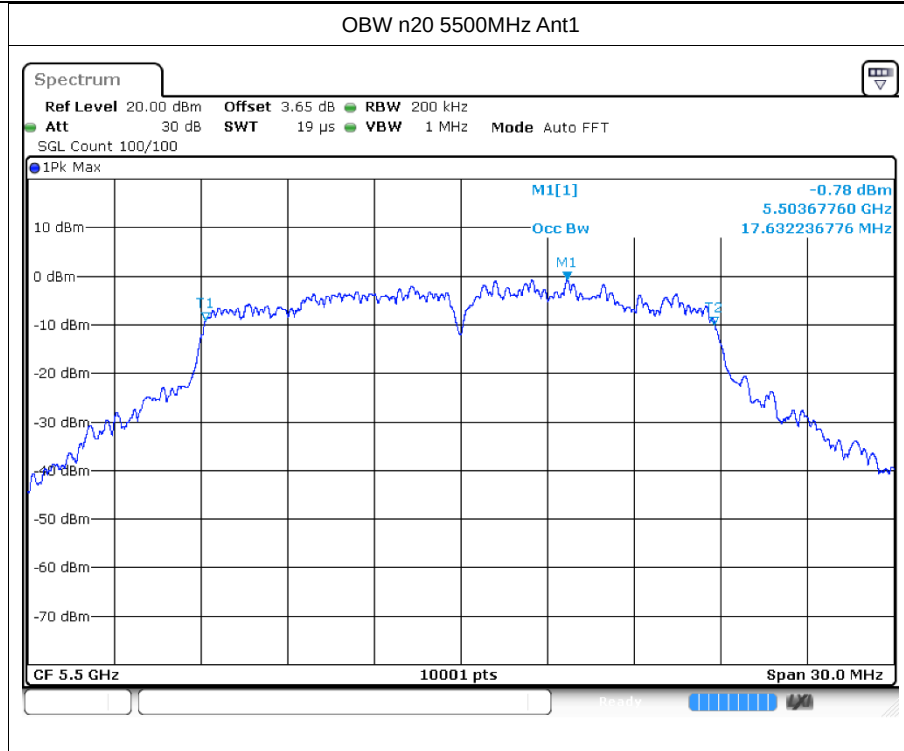
Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
n20	5180	Ant1	17.623
n20	5320	Ant1	17.659
n20	5500	Ant1	17.632
n40	5190	Ant1	36.014
n40	5310	Ant1	35.93
n40	5510	Ant1	36.104
ac20	5180	Ant1	17.614
ac20	5320	Ant1	17.593
ac20	5500	Ant1	17.608
ac40	5190	Ant1	35.996
ac40	5310	Ant1	35.996
ac40	5510	Ant1	35.948
ax80	5210	Ant1	75.4
ax80	5290	Ant1	75.232
ax80	5530	Ant1	74.933
n20	5180	Ant2	17.638
n20	5320	Ant2	17.656
n20	5500	Ant2	17.68
n40	5190	Ant2	36.026
n40	5310	Ant2	35.918
n40	5510	Ant2	35.936
ac20	5180	Ant2	17.644
ac20	5320	Ant2	17.614
ac20	5500	Ant2	17.641
ac40	5190	Ant2	35.918
ac40	5310	Ant2	35.834
ac40	5510	Ant2	35.96
ax80	5210	Ant2	74.993
ax80	5290	Ant2	75.088
ax80	5530	Ant2	75.316
ax20	5180	Ant1	18.835
ax20	5320	Ant1	18.838
ax20	5500	Ant1	18.901
ax40	5190	Ant1	37.382
ax40	5310	Ant1	37.478
ax40	5510	Ant1	37.562

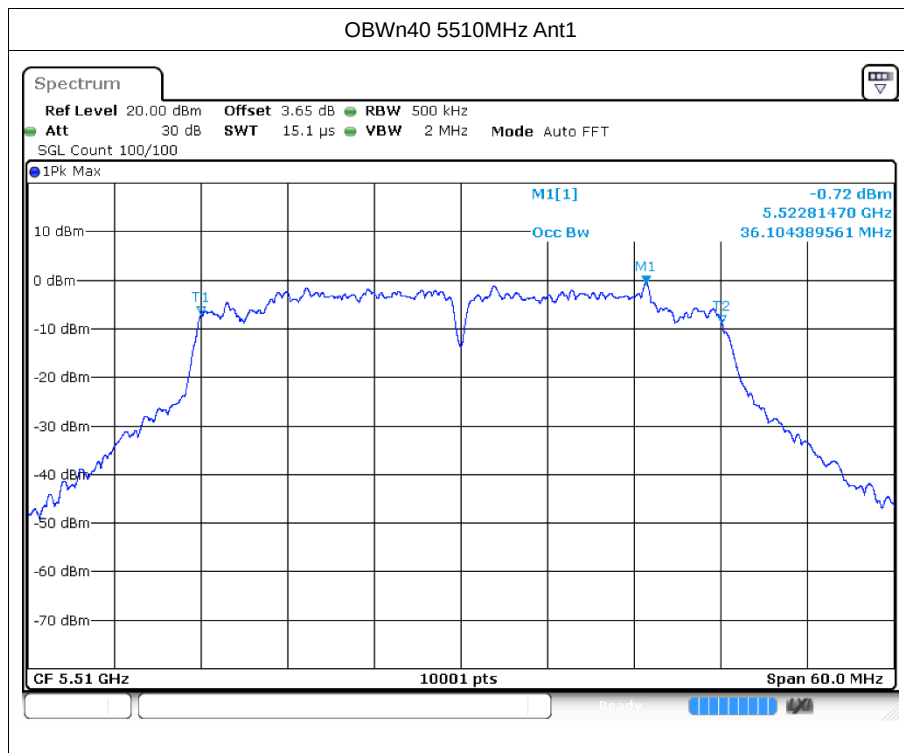
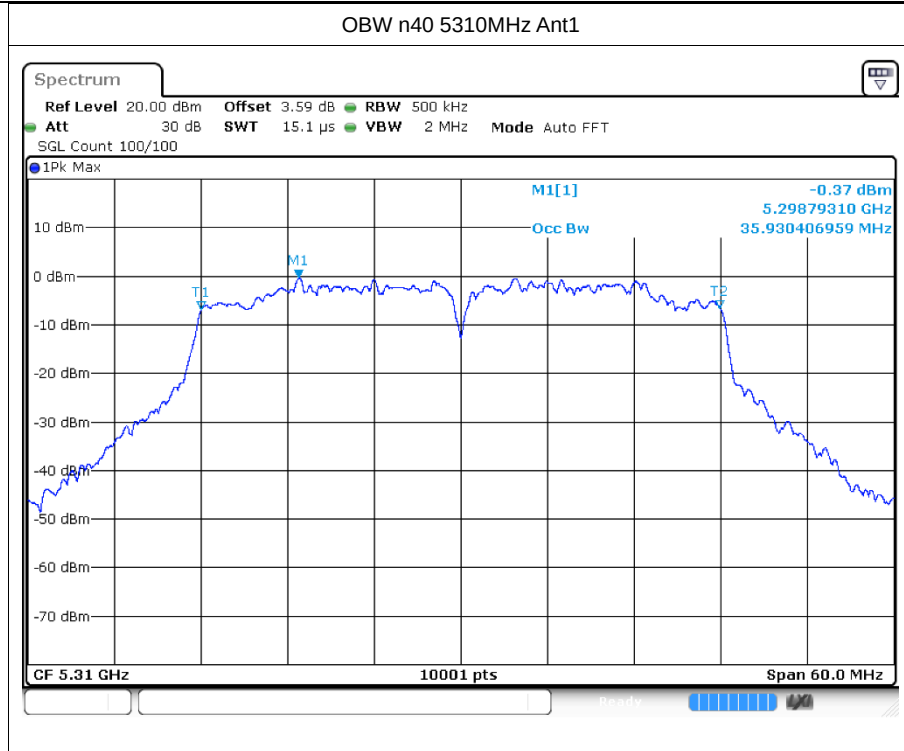


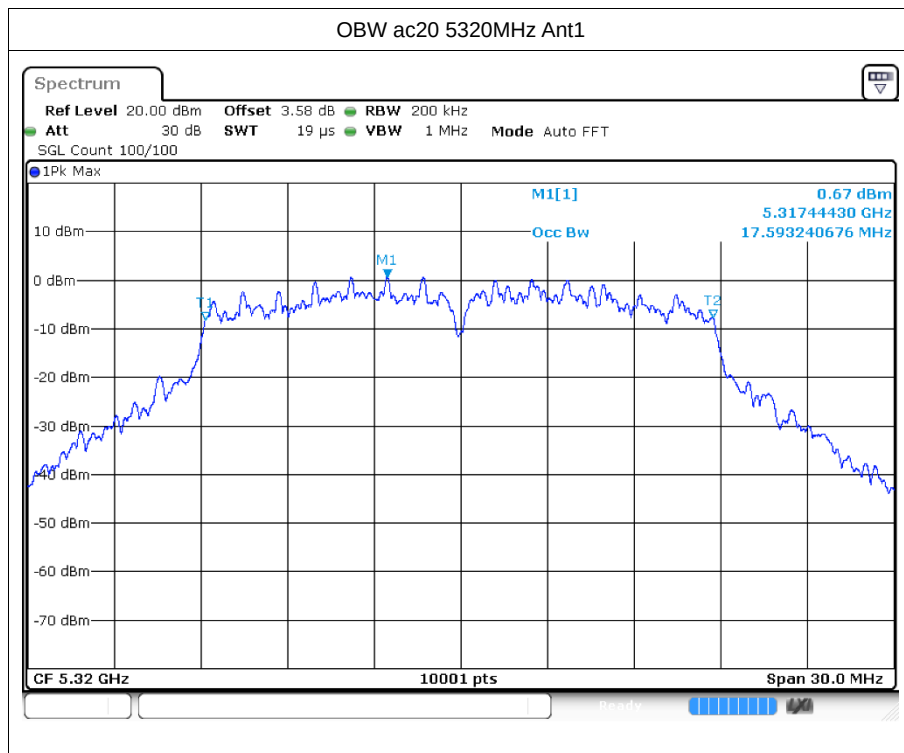
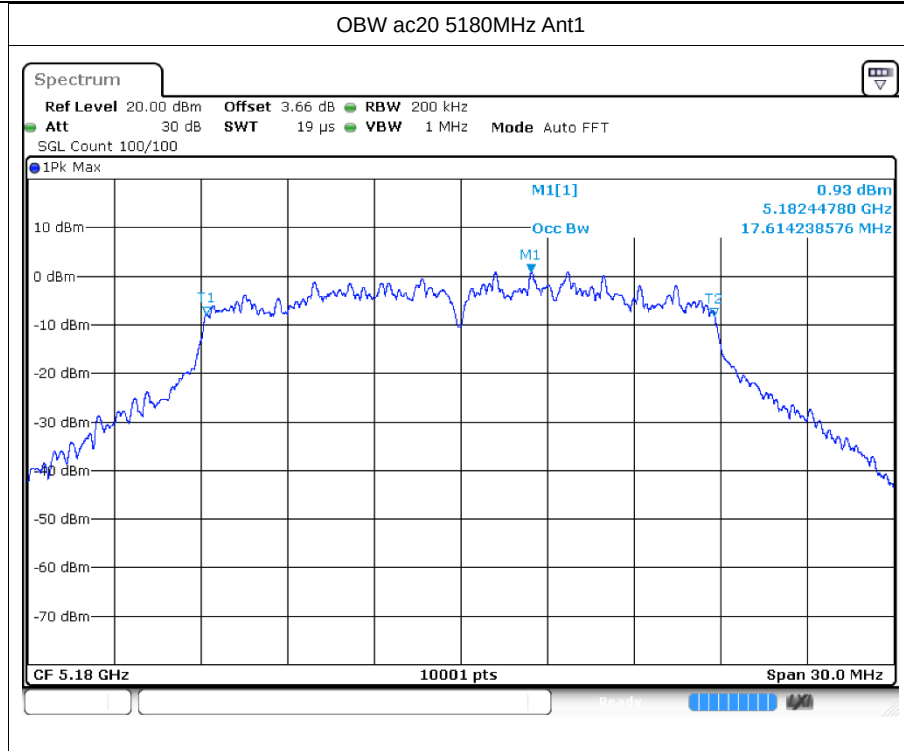
ax20	5180	Ant2	18.829
ax20	5320	Ant2	18.736
ax20	5500	Ant2	18.793
ax40	5190	Ant2	37.544
ax40	5310	Ant2	37.262
ax40	5510	Ant2	37.49

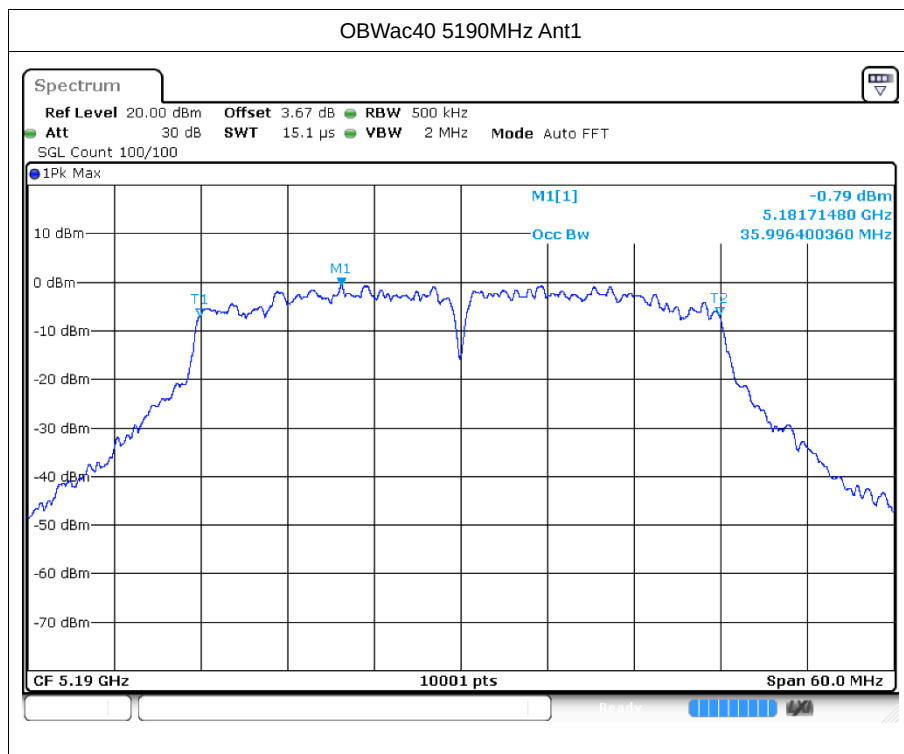
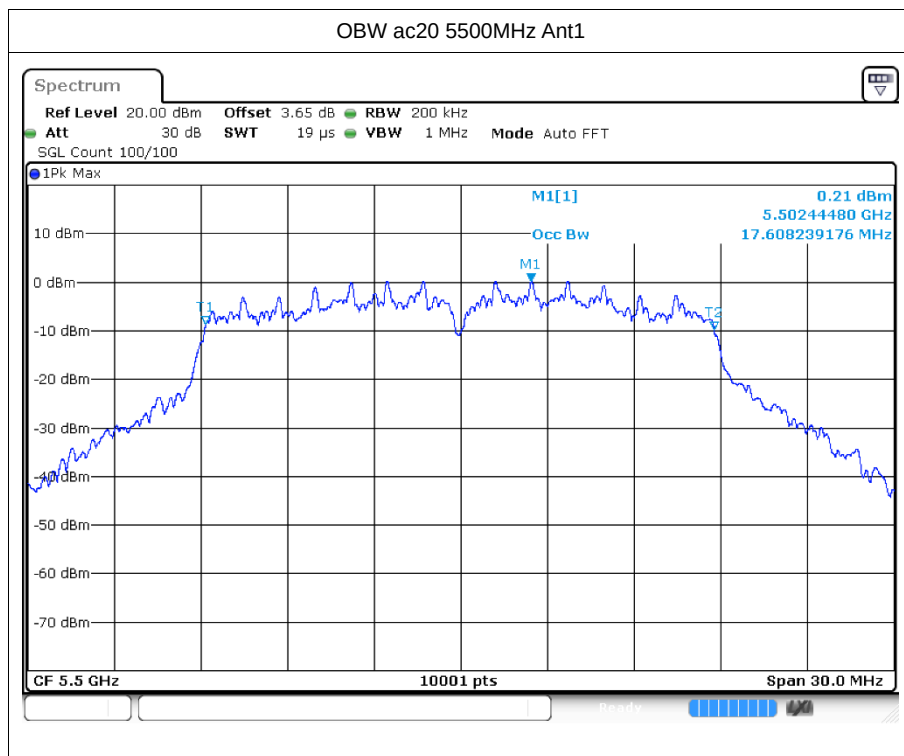
4.2 Test Graphs

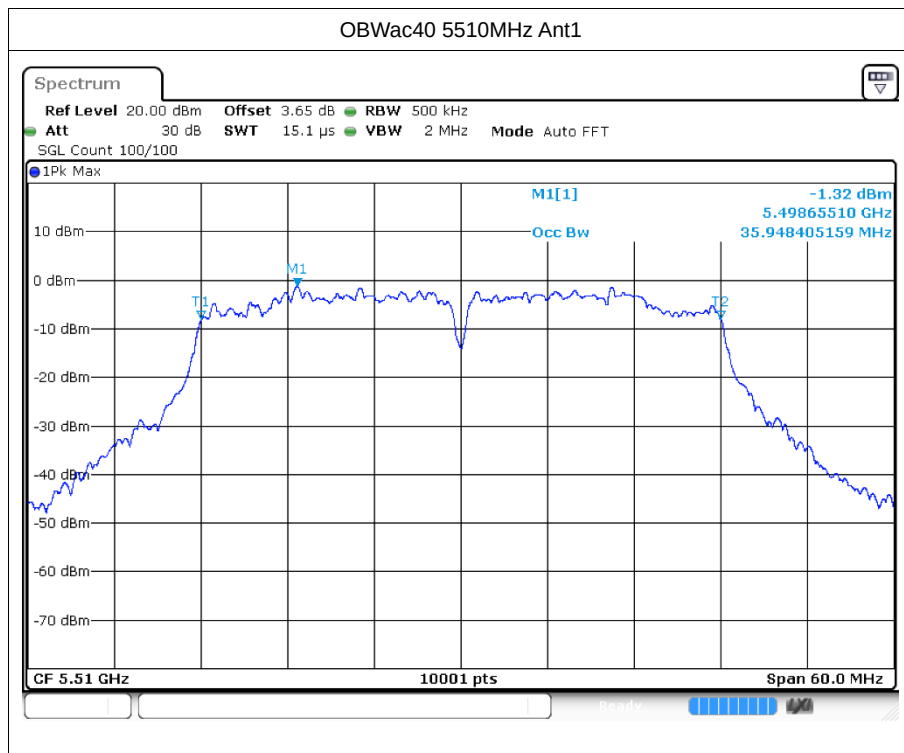
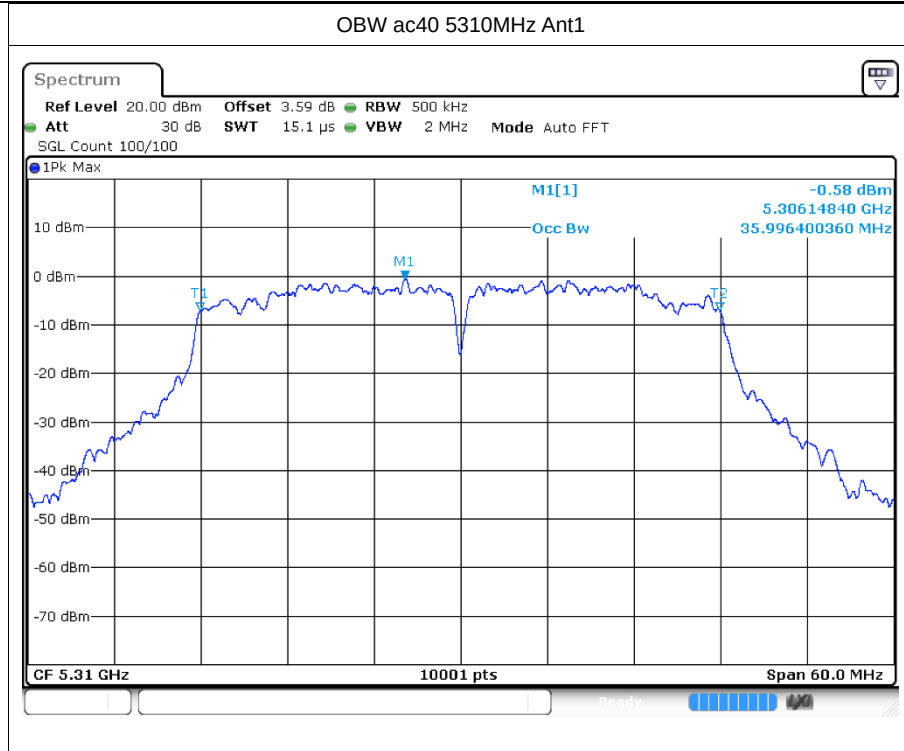




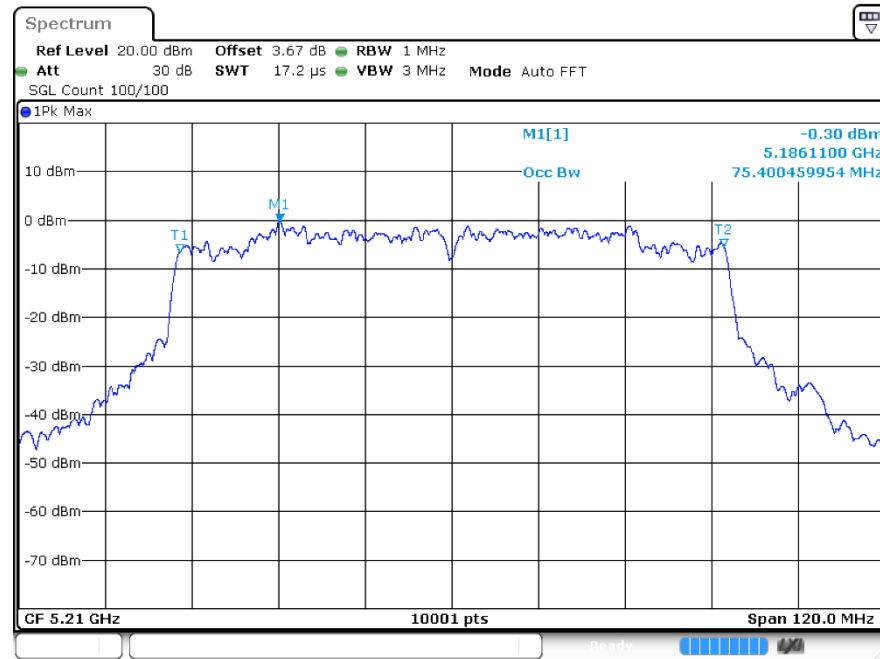








OBWax80 5210MHz Ant1



OBWax80 5290MHz Ant1

