



## Appendix D-2

### RF Test Data for B1-B3WIFI(Conducted Measurement)

Product Name: RF Wireless module

Trade Mark: INNOCN

Test Model: AW.S905D3.03

Environmental Conditions

Temperature:	25.4° C
Relative Humidity:	51.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



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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	96.44	0.16	0.72
a	5200	Ant1	96.44	0.16	0.72
a	5240	Ant1	96.44	0.16	0.72
a	5260	Ant1	96.44	0.16	0.72
a	5280	Ant1	96.45	0.16	0.71
a	5320	Ant1	96.44	0.16	0.72
a	5500	Ant1	96.49	0.16	0.72
a	5600	Ant1	96.44	0.16	0.72
a	5700	Ant1	96.45	0.16	0.71
a	5180	Ant2	96.44	0.16	0.71
a	5200	Ant2	96.44	0.16	0.72
a	5240	Ant2	96.44	0.16	0.72
a	5260	Ant2	96.42	0.16	0.72
a	5280	Ant2	96.46	0.16	0.71
a	5320	Ant2	96.5	0.15	0.71
a	5500	Ant2	96.44	0.16	0.72
a	5600	Ant2	96.43	0.16	0.72
a	5700	Ant2	96.44	0.16	0.71
n20	5180	Ant1	96.16	0.17	0.77
n20	5200	Ant1	96.17	0.17	0.77
n20	5240	Ant1	96.23	0.17	0.77
n20	5260	Ant1	96.17	0.17	0.77
n20	5280	Ant1	96.19	0.17	0.76
n20	5320	Ant1	96.22	0.17	0.77
n20	5500	Ant1	96.21	0.17	0.77
n20	5600	Ant1	96.18	0.17	0.77
n20	5700	Ant1	96.22	0.17	0.77
n20	5180	Ant2	96.22	0.17	0.77
n20	5200	Ant2	96.23	0.17	0.77
n20	5240	Ant2	96.22	0.17	0.77
n20	5260	Ant2	96.22	0.17	0.77
n20	5280	Ant2	96.19	0.17	0.76
n20	5320	Ant2	96.18	0.17	0.76
n20	5500	Ant2	96.21	0.17	0.77
n20	5600	Ant2	96.17	0.17	0.77
n20	5700	Ant2	96.23	0.17	0.77
n40	5190	Ant1	92.95	0.32	1.54



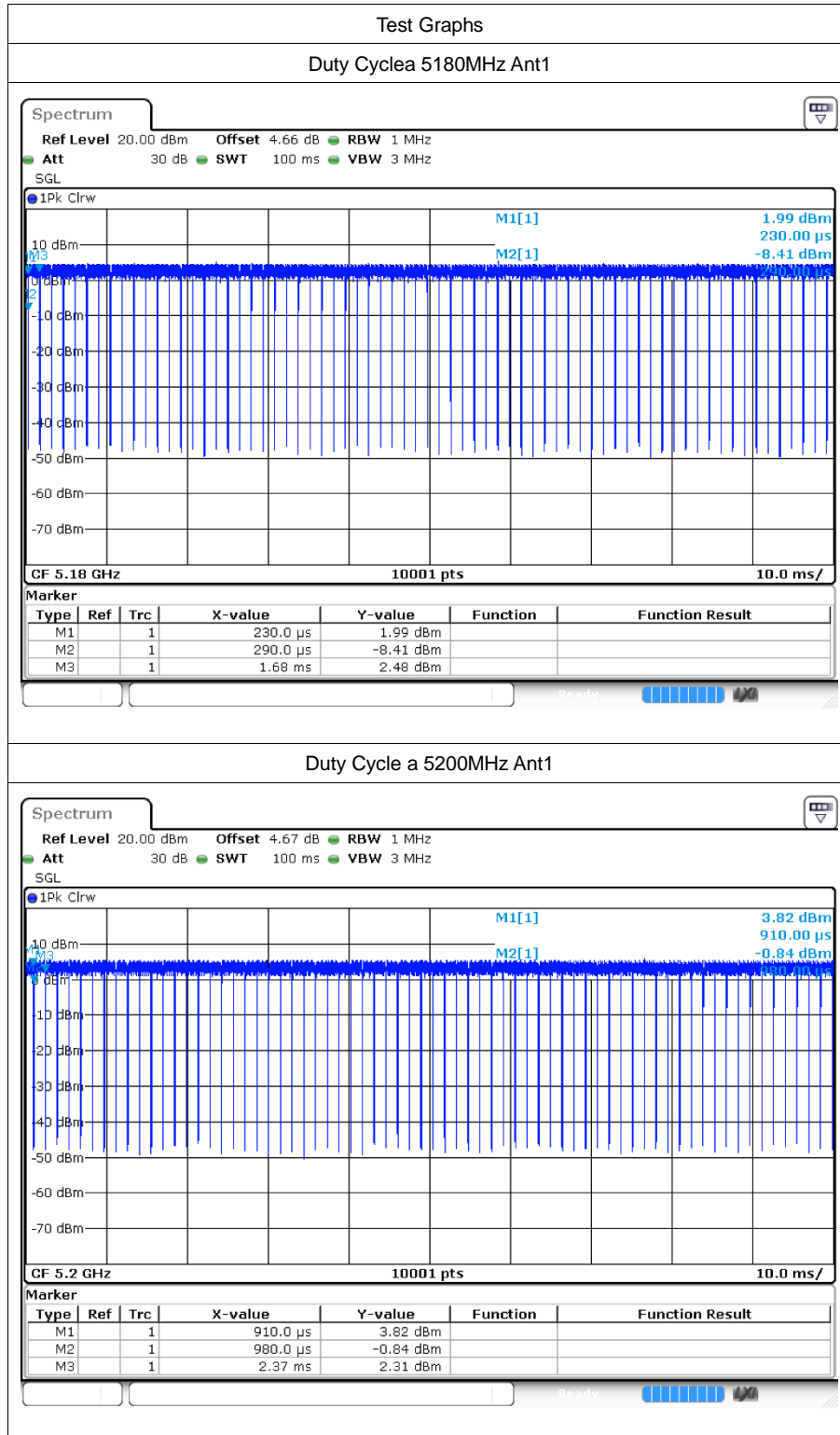
n40	5230	Ant1	92.95	0.32	1.54
n40	5270	Ant1	92.95	0.32	1.54
n40	5310	Ant1	92.95	0.32	1.54
n40	5510	Ant1	92.6	0.33	1.54
n40	5670	Ant1	92.72	0.33	1.56
n40	5190	Ant2	92.95	0.32	1.54
n40	5230	Ant2	92.42	0.34	1.54
n40	5270	Ant2	92.42	0.34	1.54
n40	5310	Ant2	92.46	0.34	1.54
n40	5510	Ant2	92.95	0.32	1.54
n40	5670	Ant2	92.84	0.32	1.56
ac20	5180	Ant1	96.22	0.17	0.76
ac20	5200	Ant1	96.21	0.17	0.76
ac20	5240	Ant1	96.24	0.17	0.76
ac20	5260	Ant1	96.24	0.17	0.76
ac20	5280	Ant1	96.24	0.17	0.76
ac20	5320	Ant1	96.29	0.16	0.76
ac20	5500	Ant1	96.23	0.17	0.76
ac20	5600	Ant1	96.23	0.17	0.76
ac20	5700	Ant1	96.28	0.16	0.76
ac20	5180	Ant2	96.22	0.17	0.76
ac20	5200	Ant2	96.23	0.17	0.76
ac20	5240	Ant2	96.27	0.17	0.76
ac20	5260	Ant2	96.24	0.17	0.76
ac20	5280	Ant2	96.23	0.17	0.76
ac20	5320	Ant2	96.23	0.17	0.76
ac20	5500	Ant2	96.27	0.17	0.76
ac20	5600	Ant2	96.29	0.16	0.76
ac20	5700	Ant2	96.23	0.17	0.76
ac40	5190	Ant1	92.78	0.33	1.54
ac40	5230	Ant1	92.78	0.33	1.54
ac40	5310	Ant1	92.82	0.32	1.52
ac40	5270	Ant1	92.8	0.32	1.54
ac40	5510	Ant1	92.81	0.32	1.54
ac40	5670	Ant1	92.81	0.32	1.54
ac40	5190	Ant2	92.65	0.33	1.52
ac40	5230	Ant2	92.77	0.33	1.52
ac40	5270	Ant2	92.8	0.32	1.54
ac40	5310	Ant2	92.79	0.32	1.54
ac40	5510	Ant2	92.73	0.33	1.54
ac40	5670	Ant2	92.8	0.32	1.52
ac80	5210	Ant1	68.88	1.62	3.13
ac80	5290	Ant1	70.11	1.54	3.12

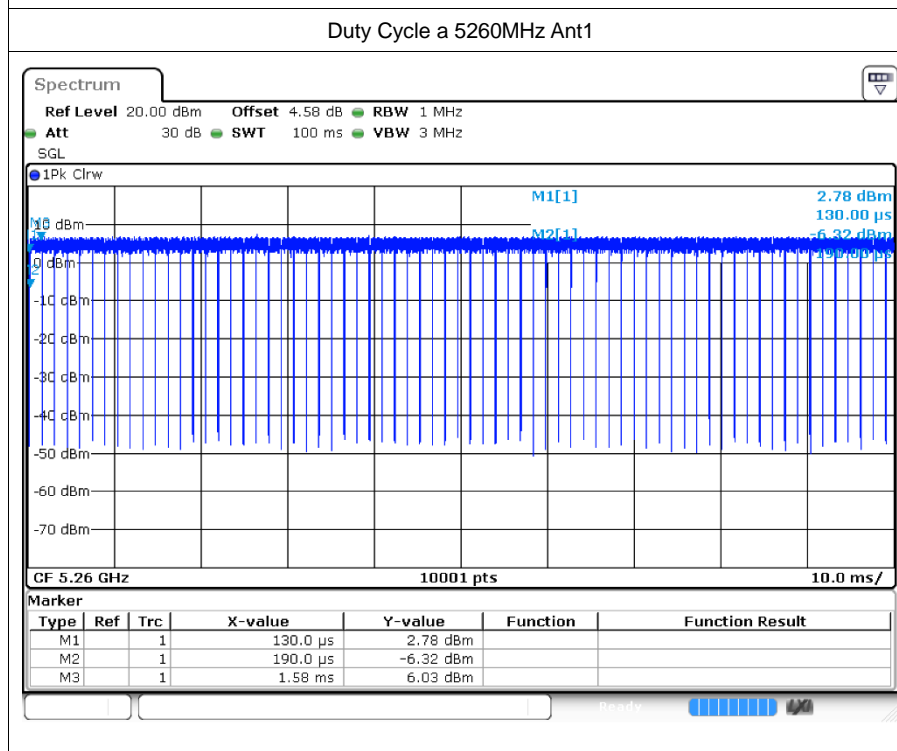
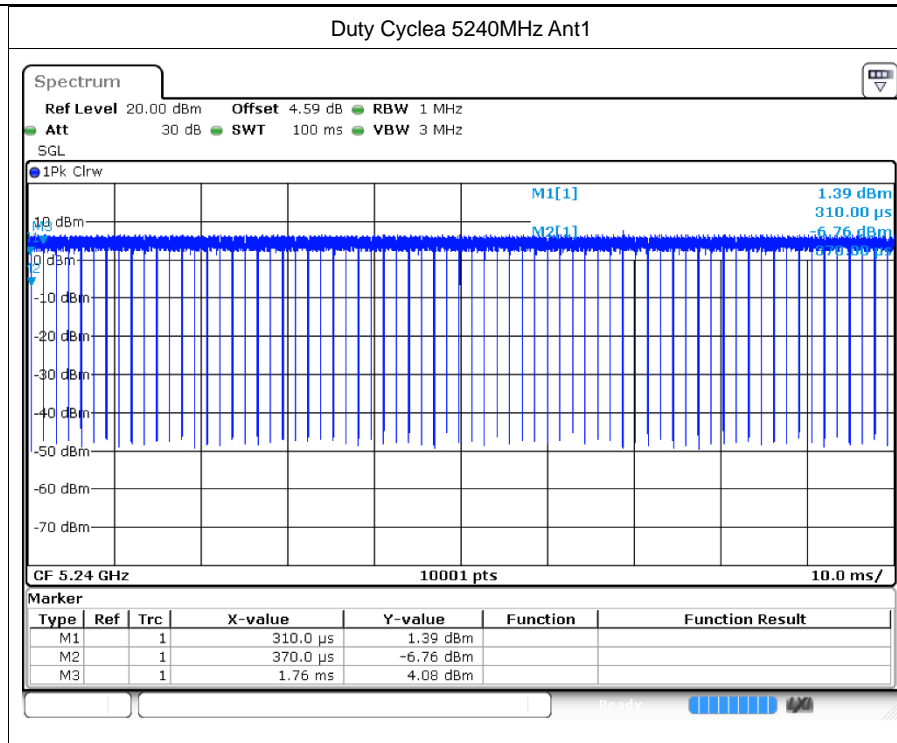


ac80	5530	Ant1	70.54	1.52	3.13
ac80	5610	Ant1	70.21	1.54	3.23
ac80	5210	Ant2	71.22	1.47	3.23
ac80	5530	Ant2	72.11	1.42	3.13
ac80	5610	Ant2	71.85	1.44	3.03



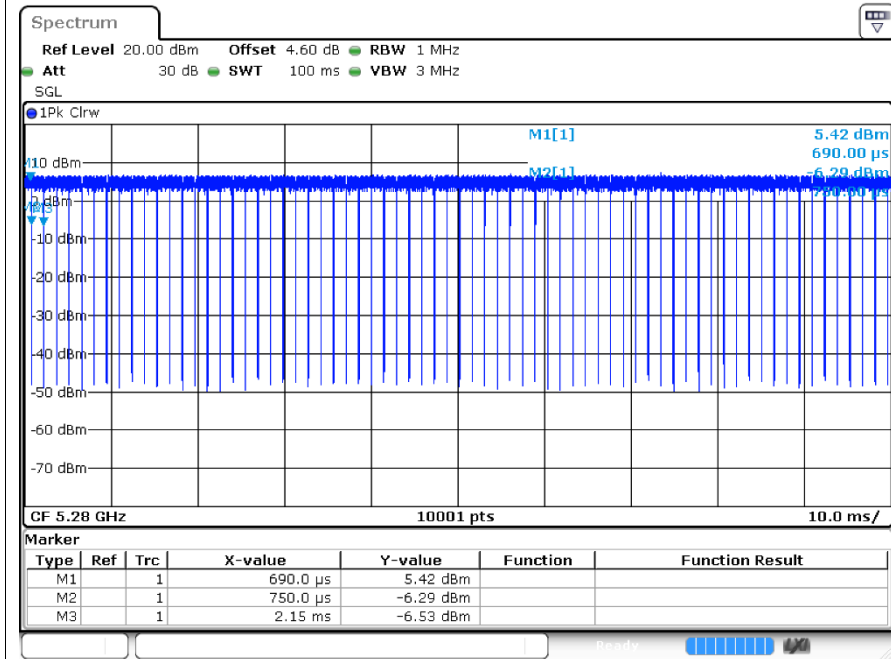
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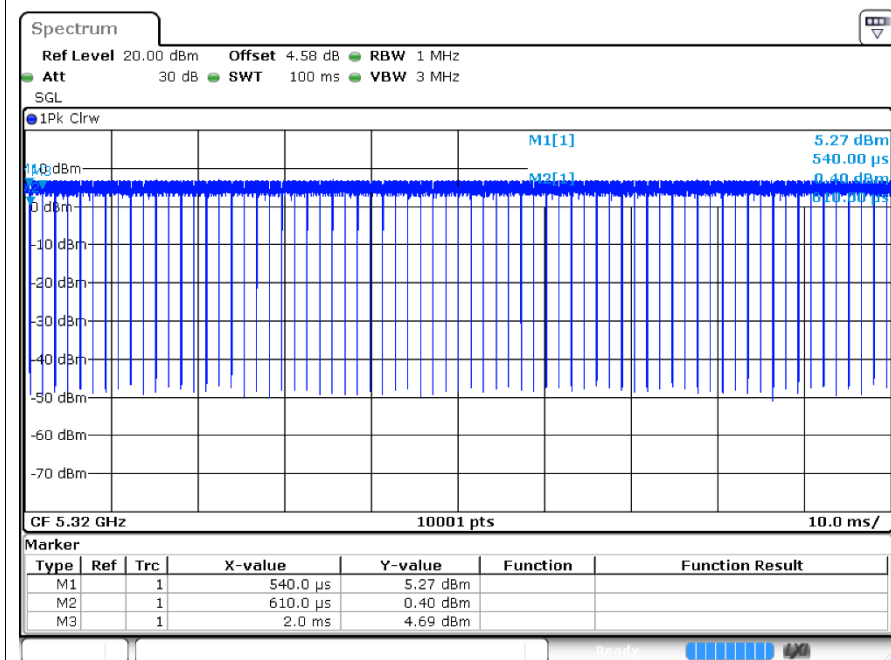




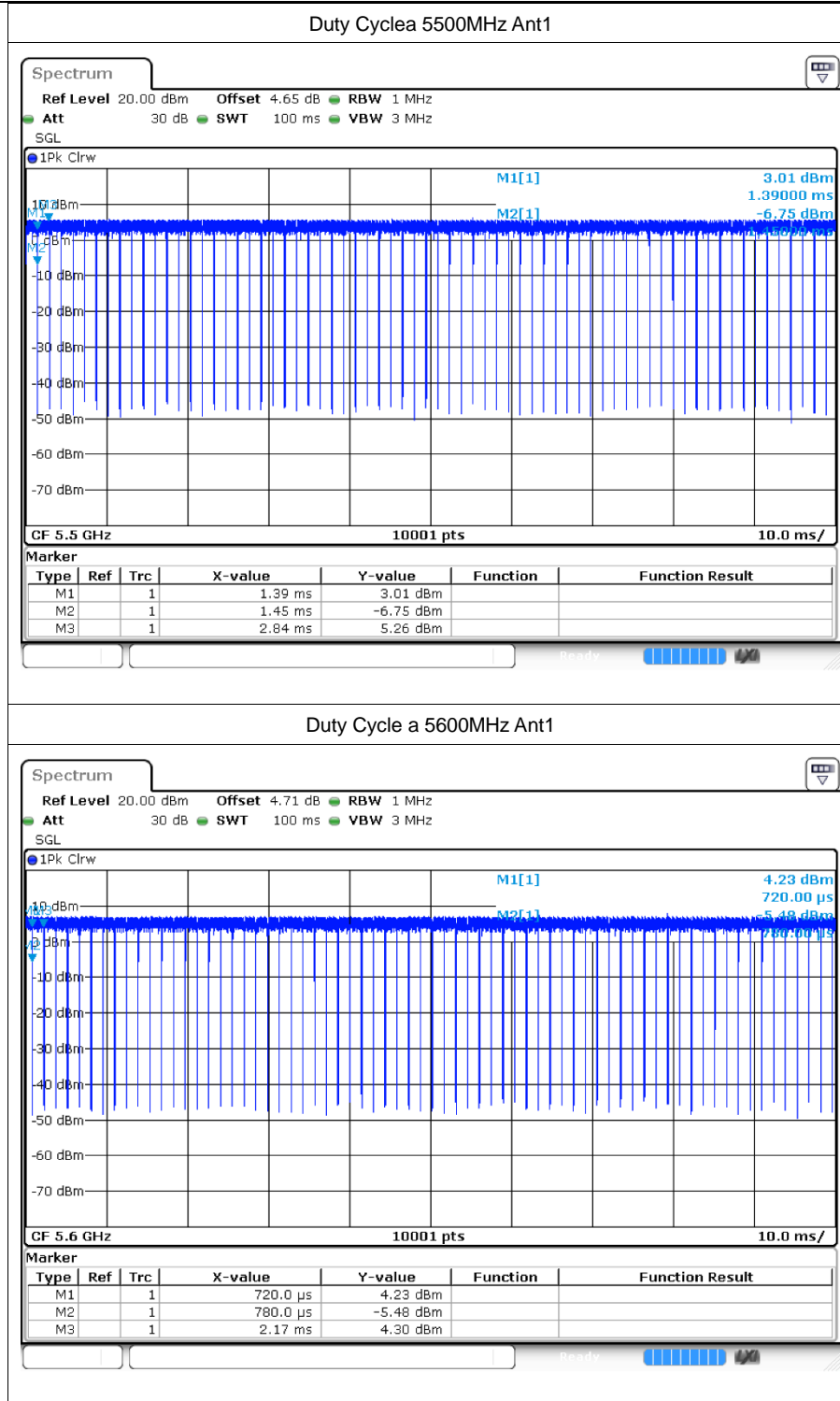
Duty Cyclea 5280MHz Ant1

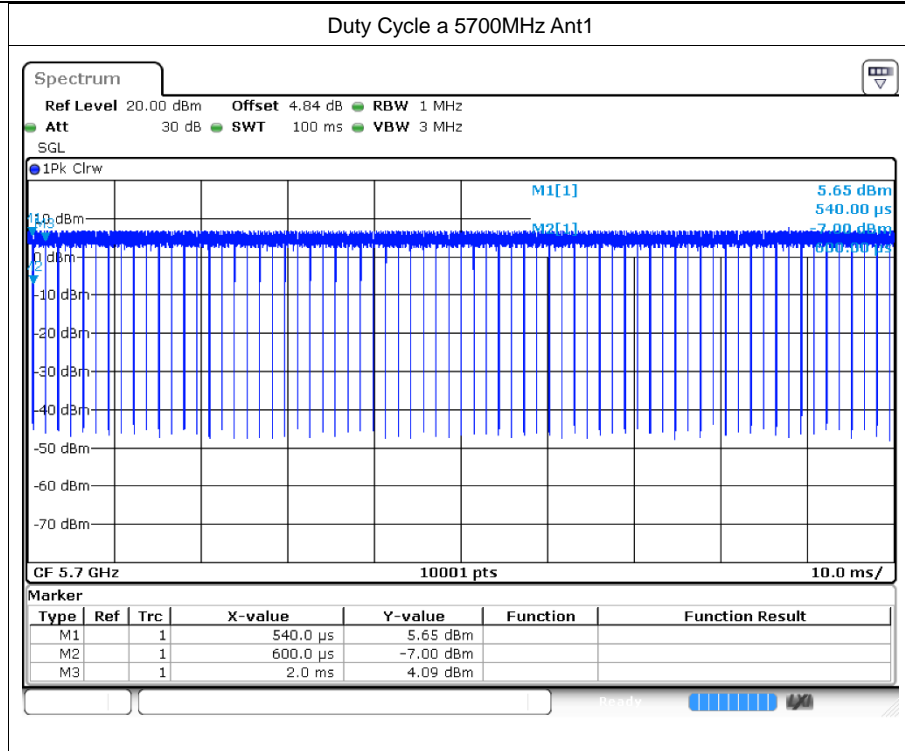


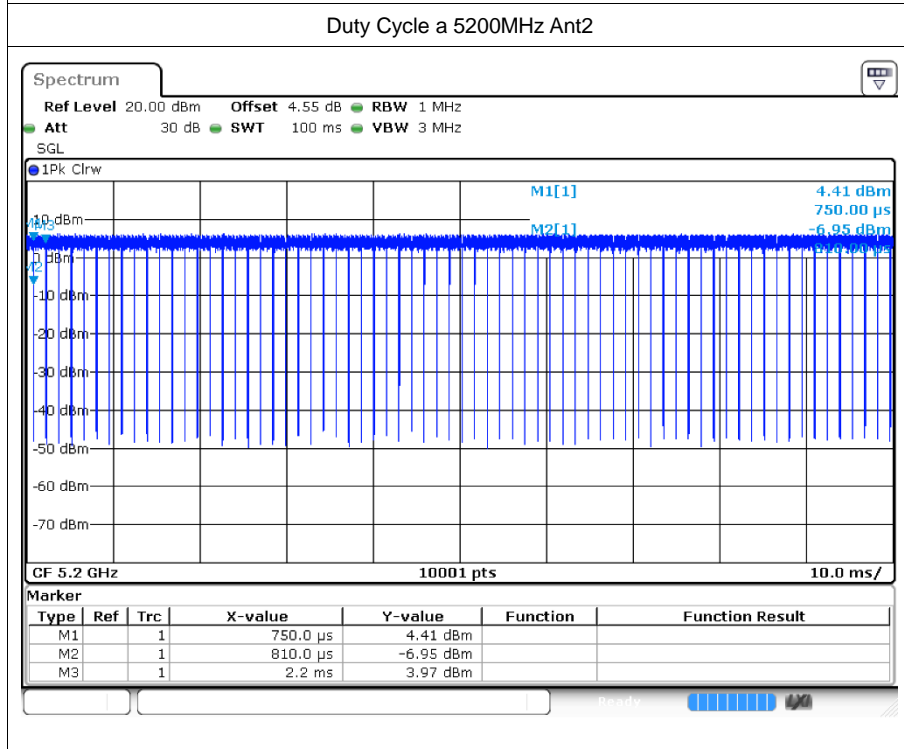
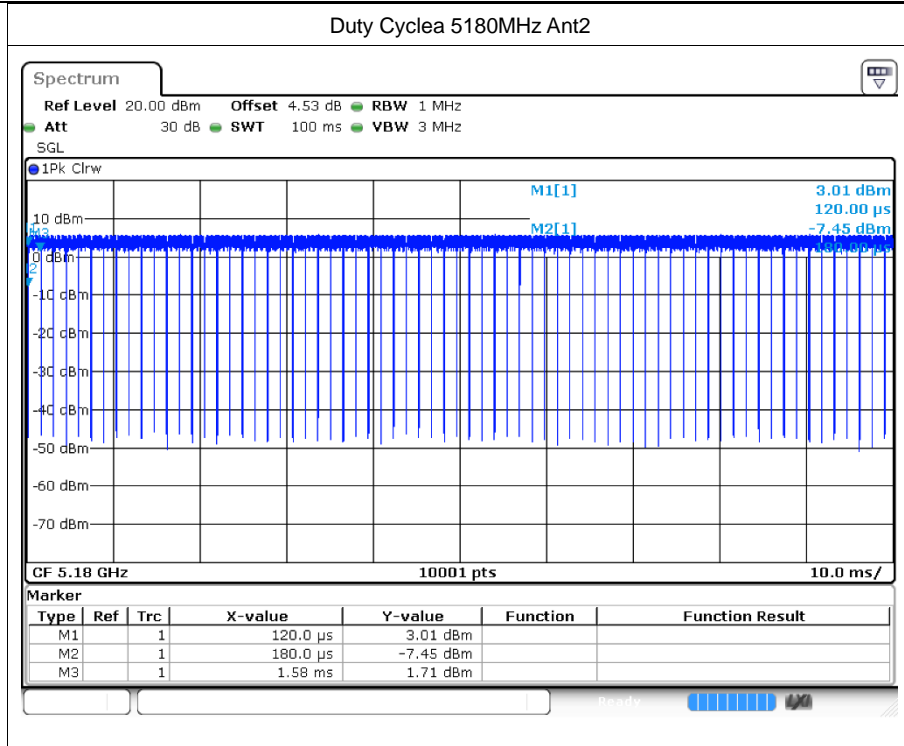
Duty Cycle a 5320MHz Ant1

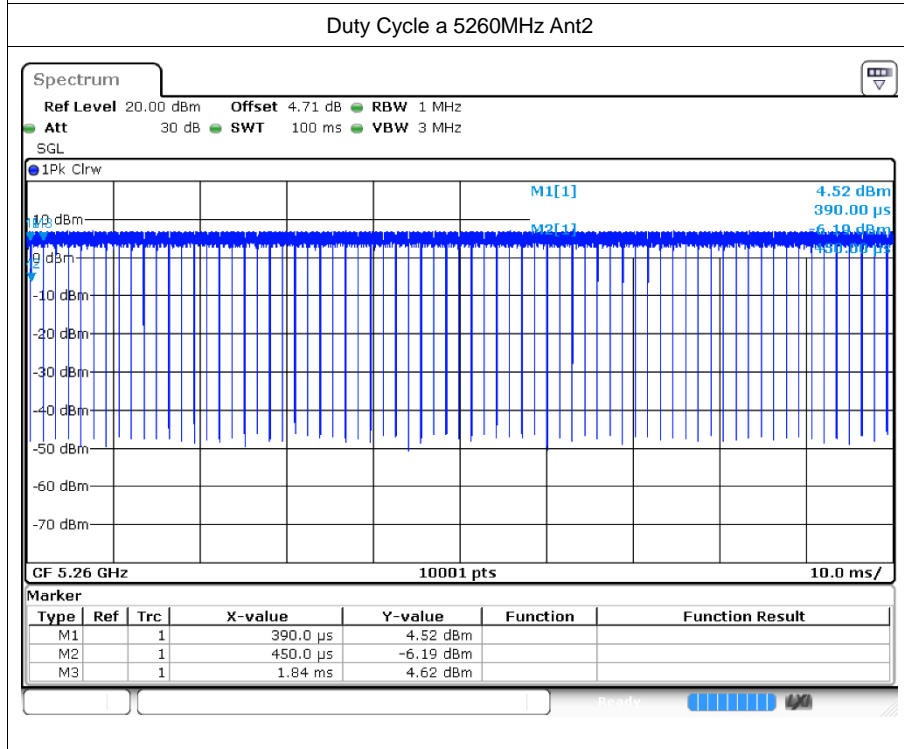
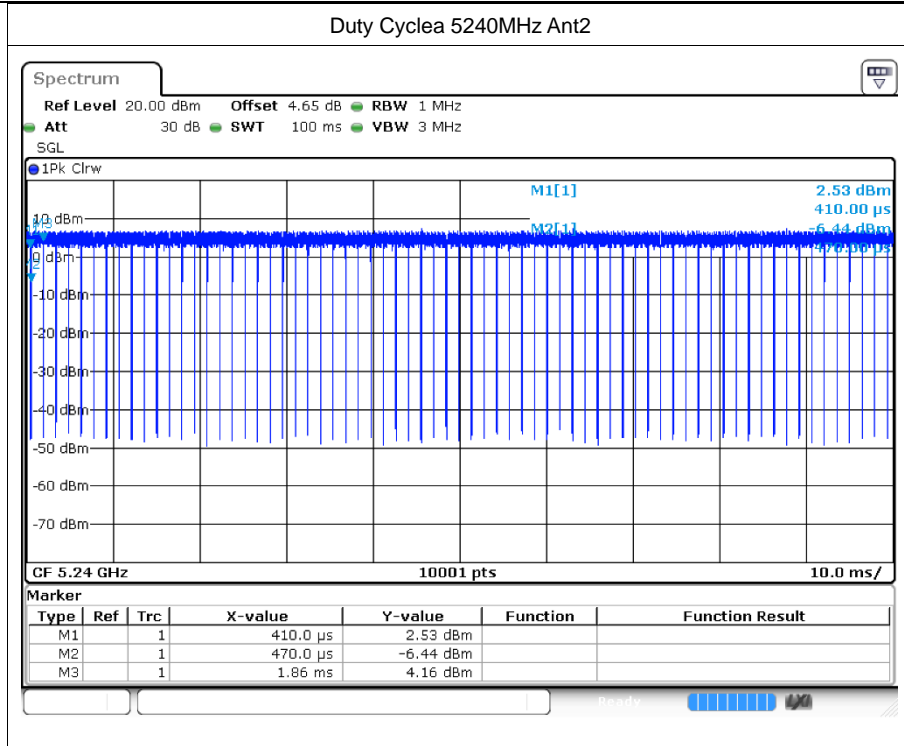


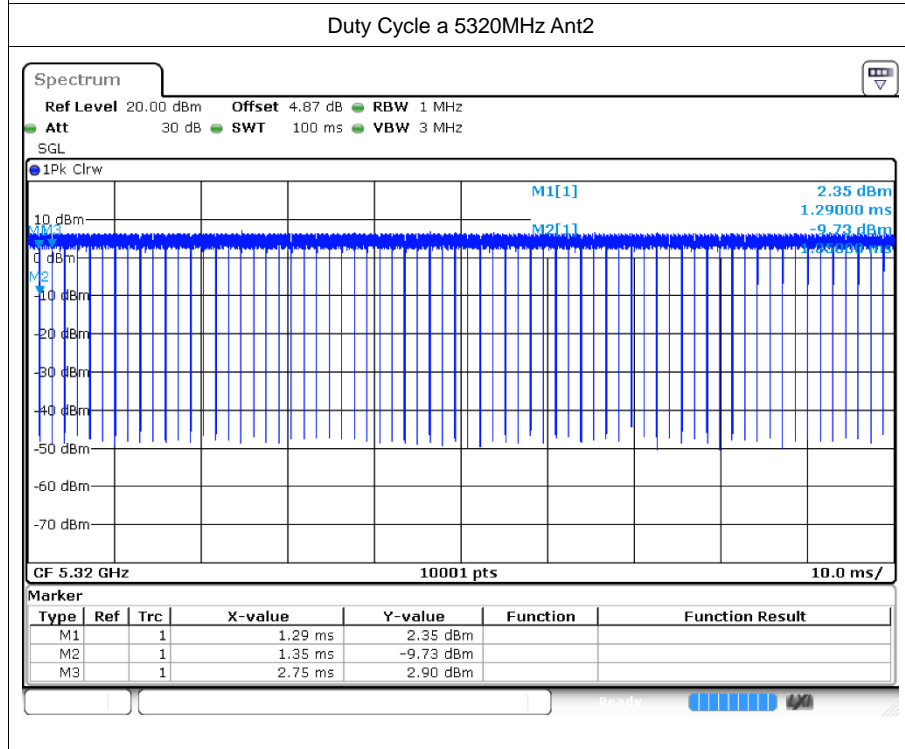
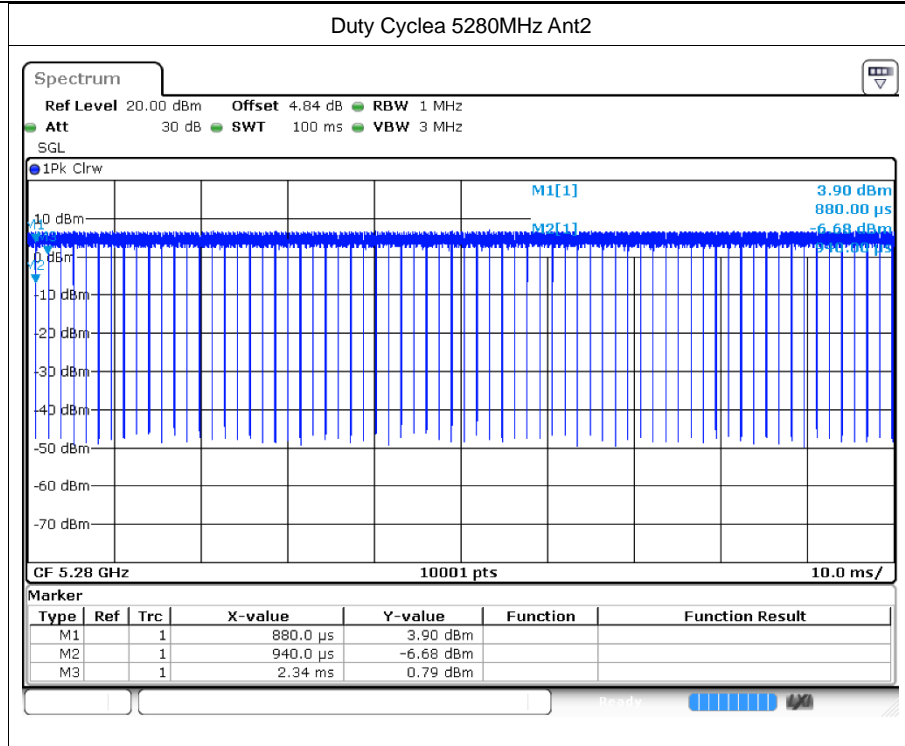


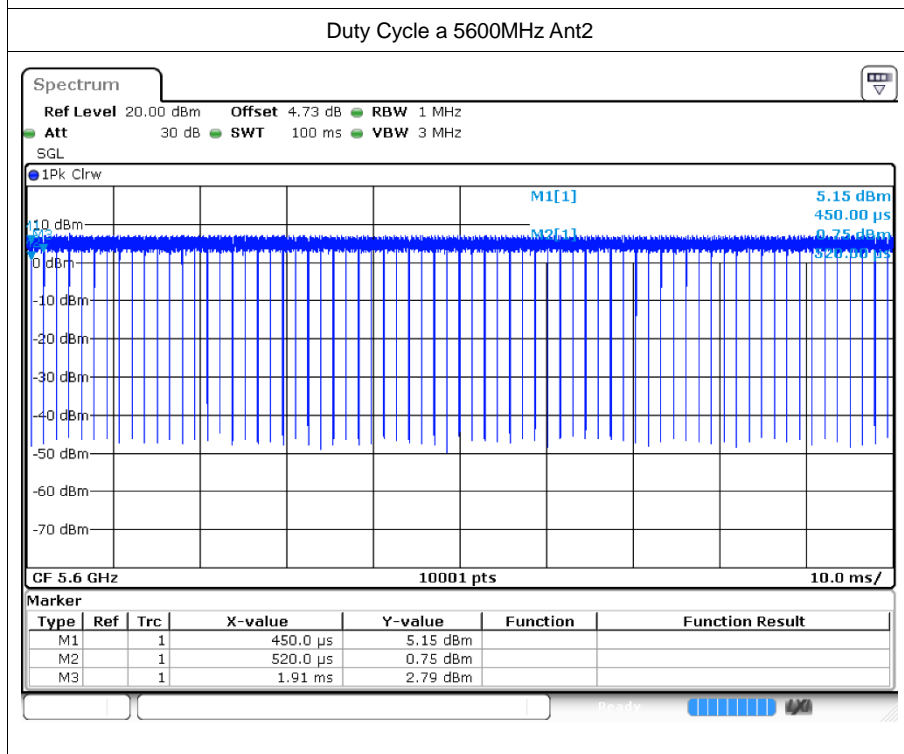
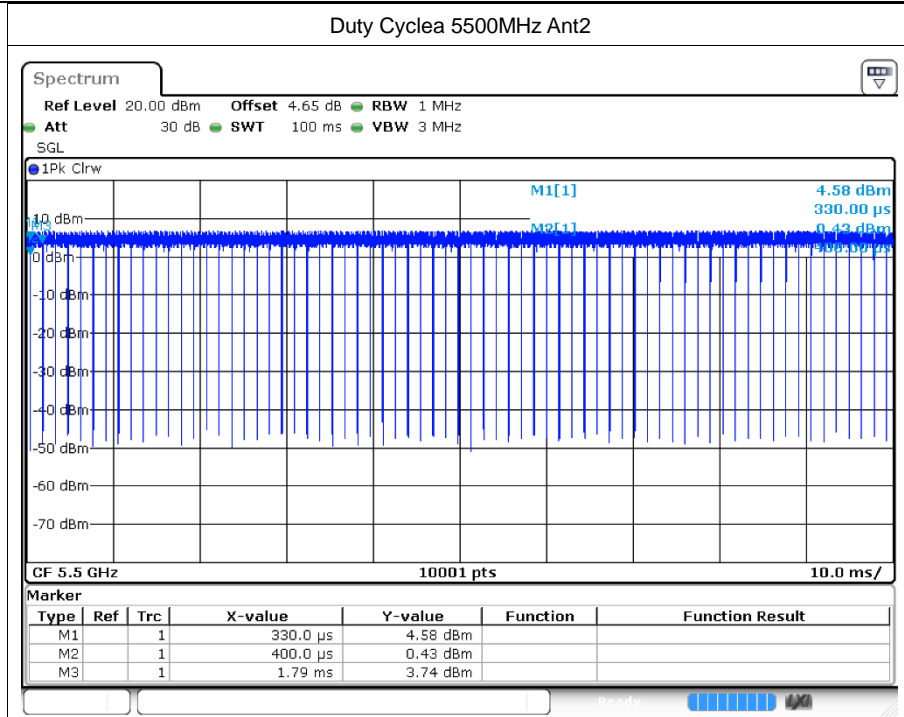


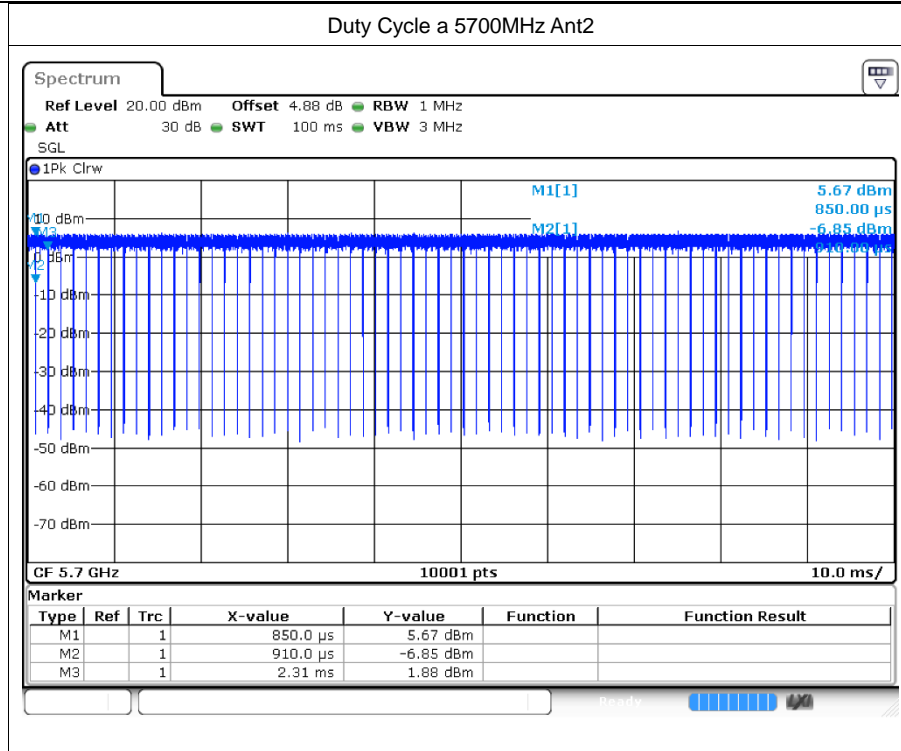


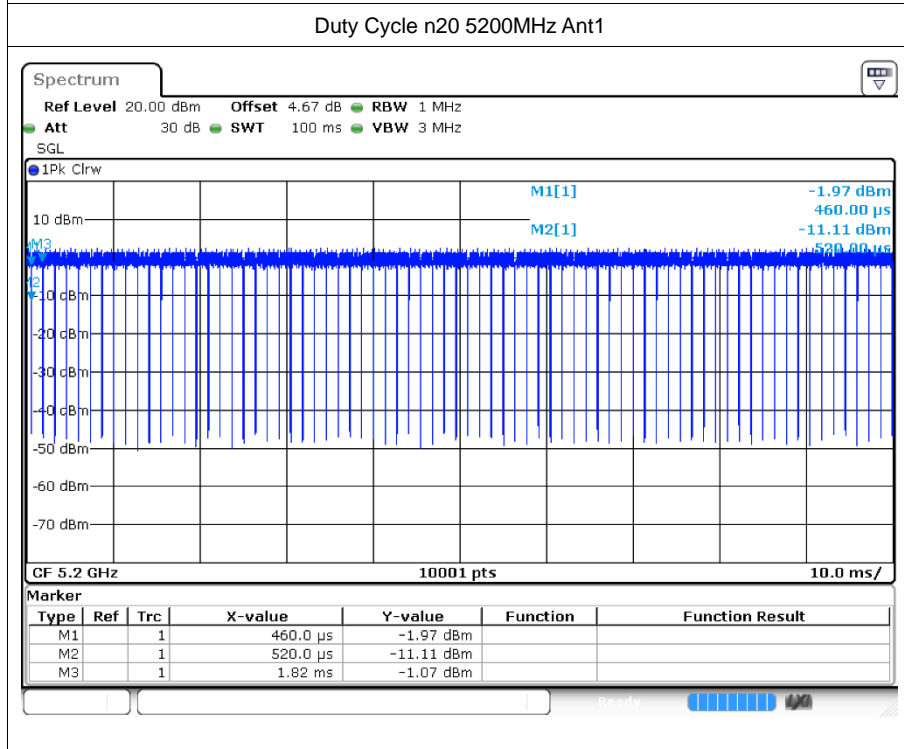
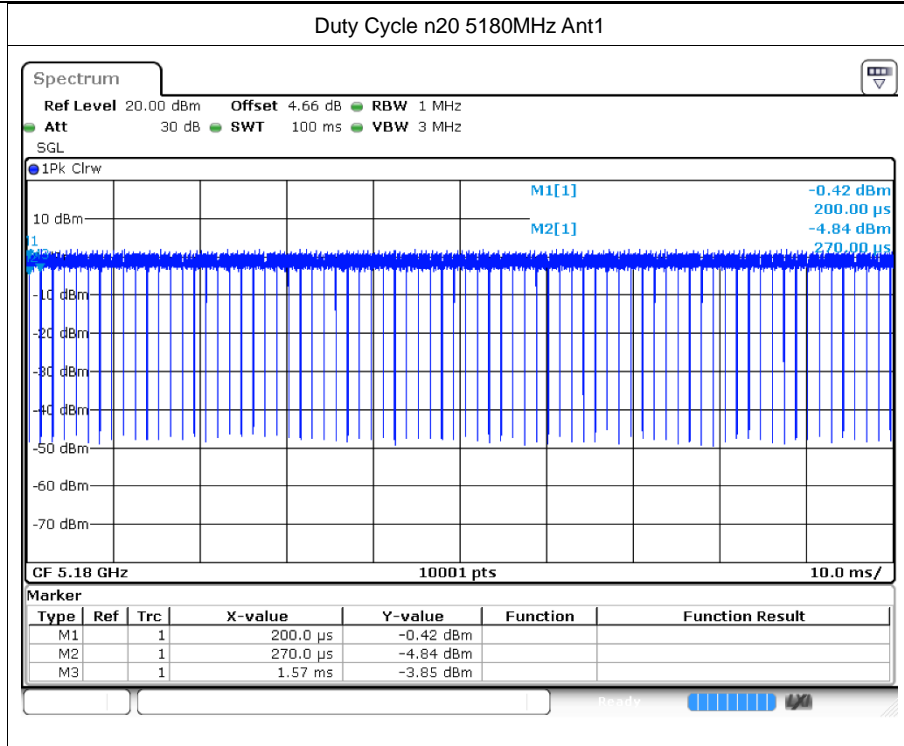




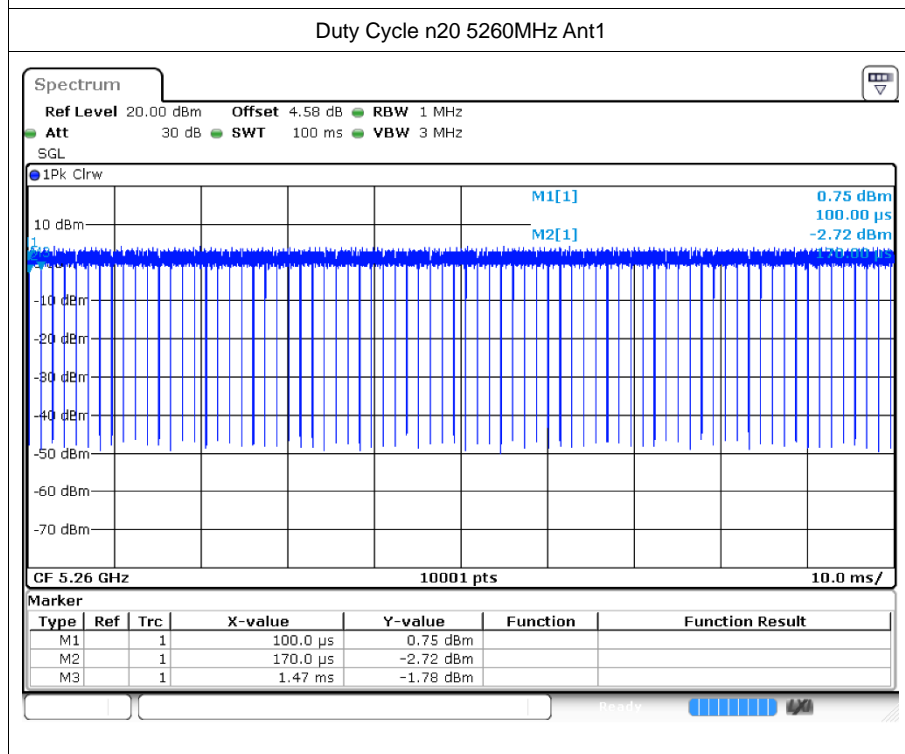
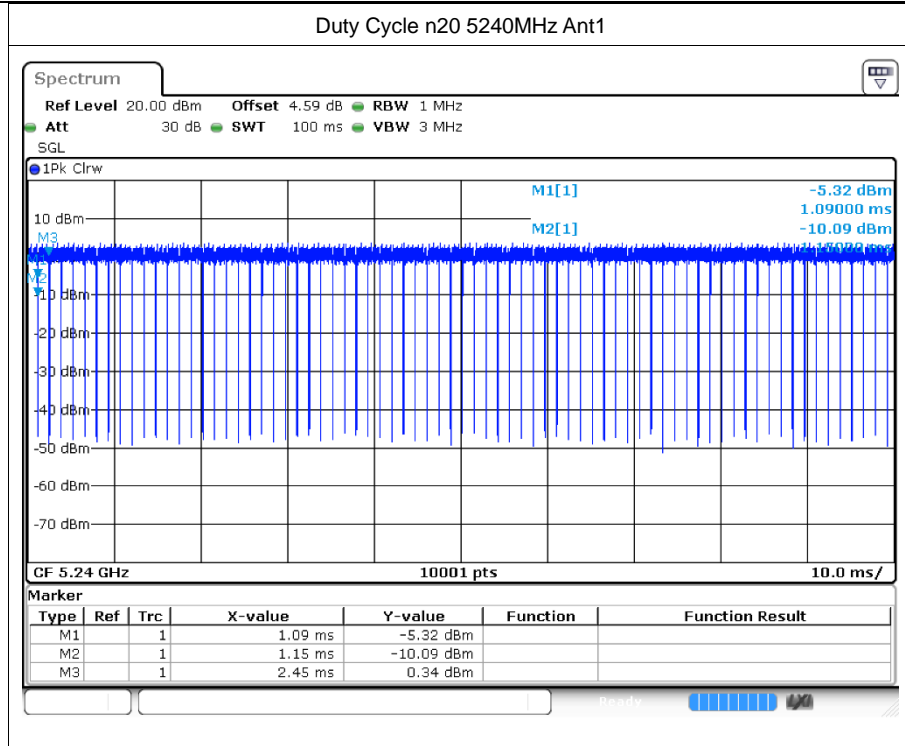


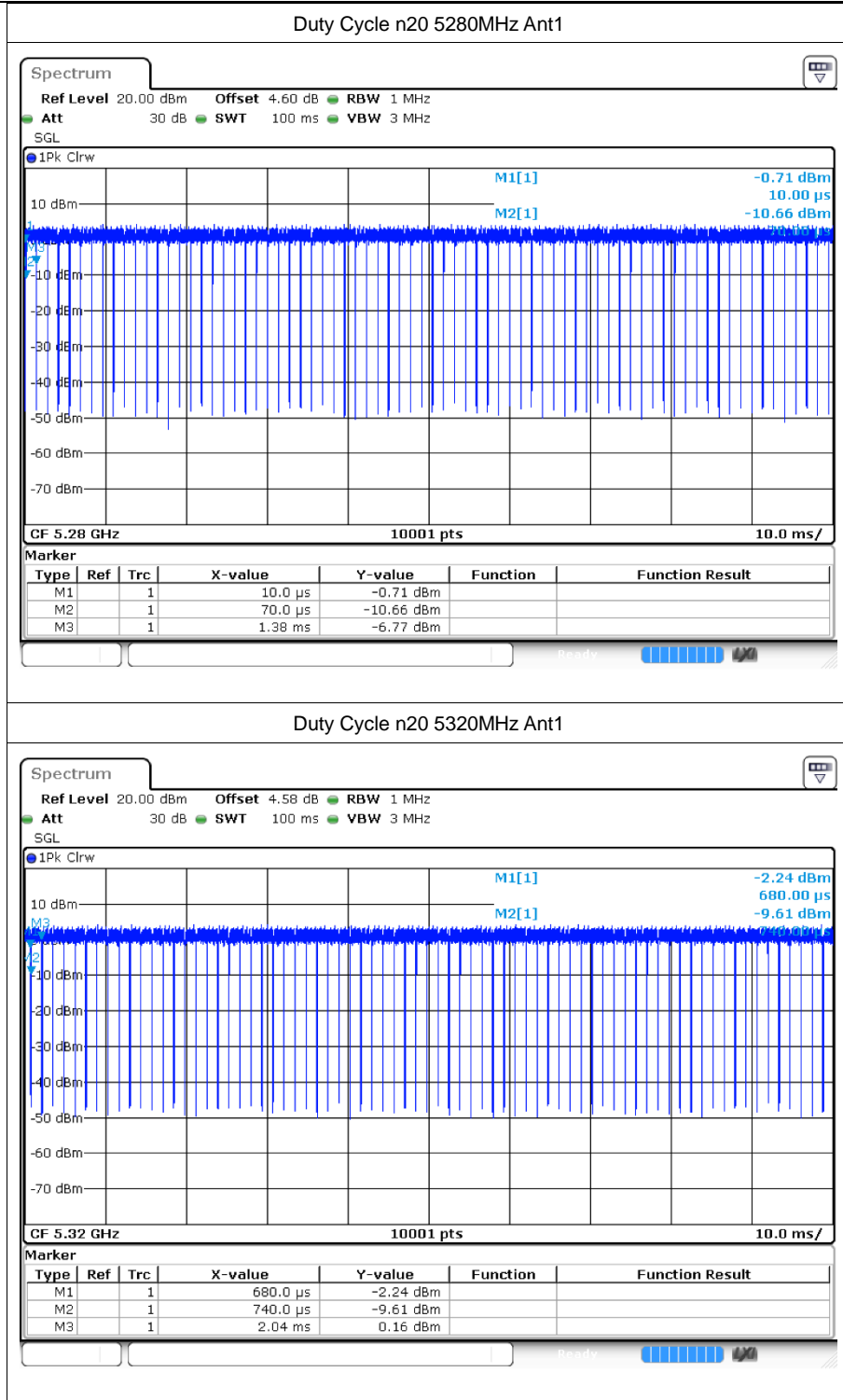


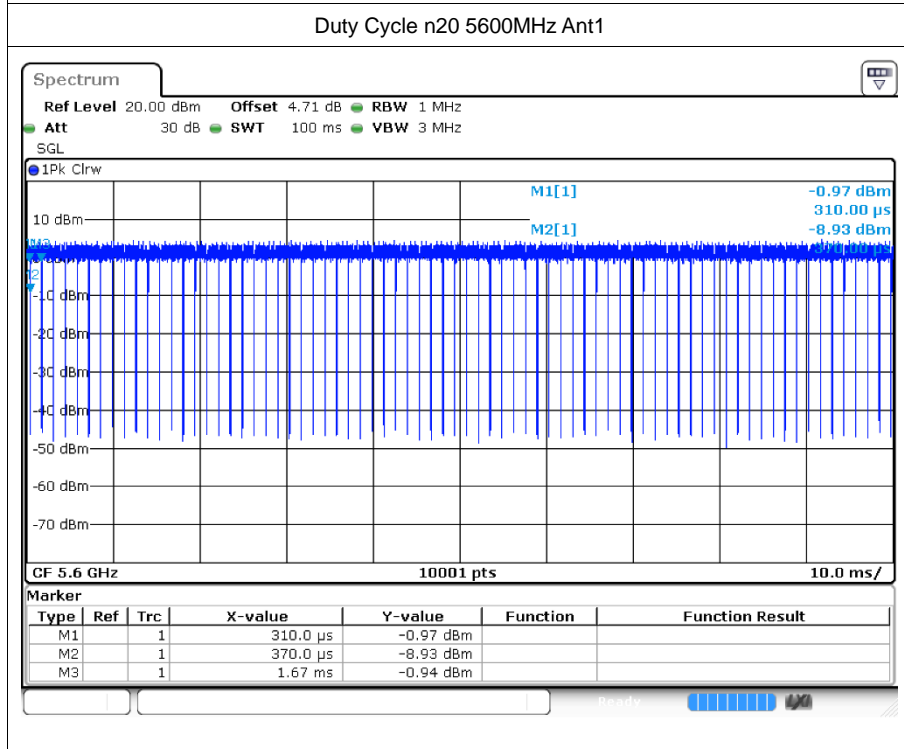
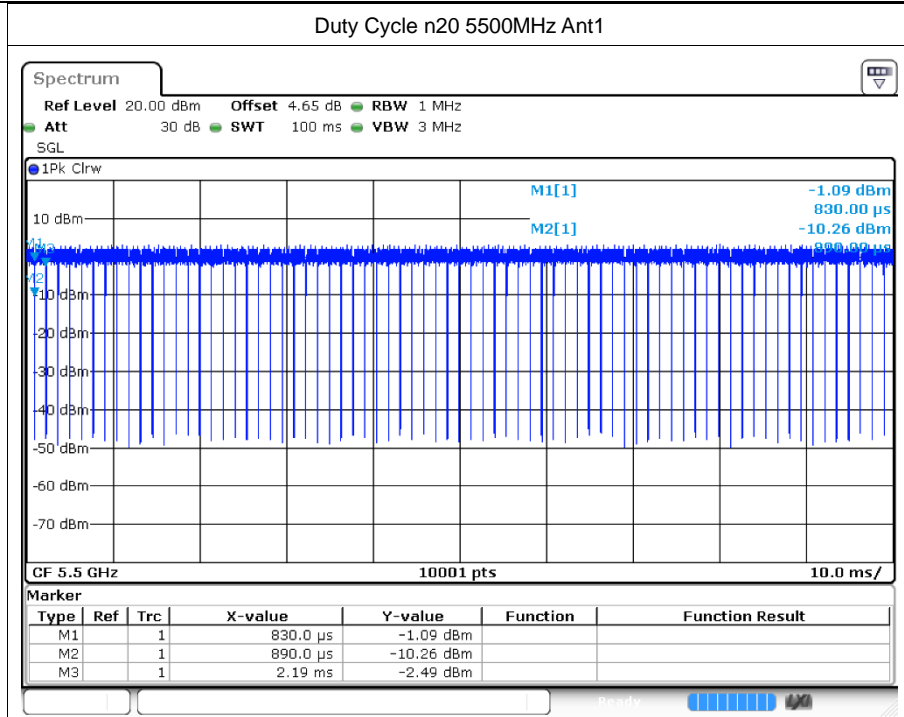


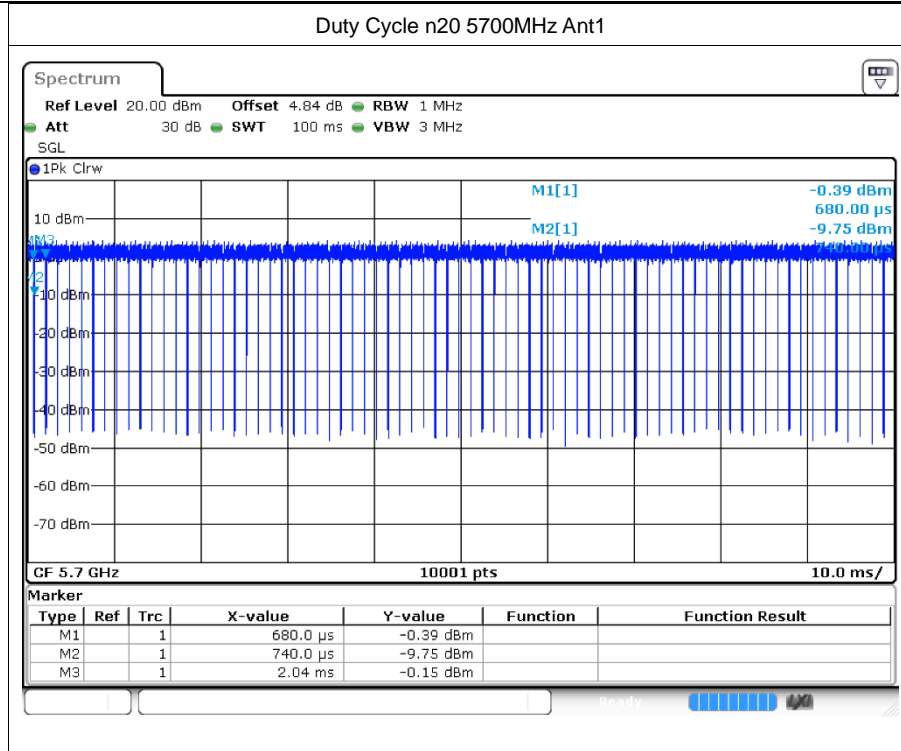


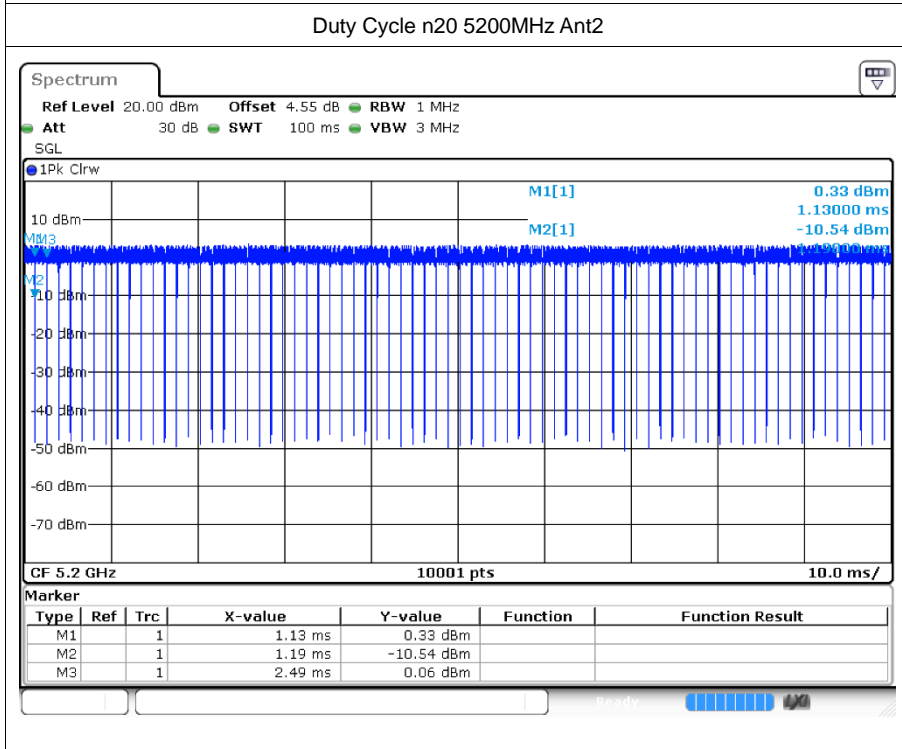
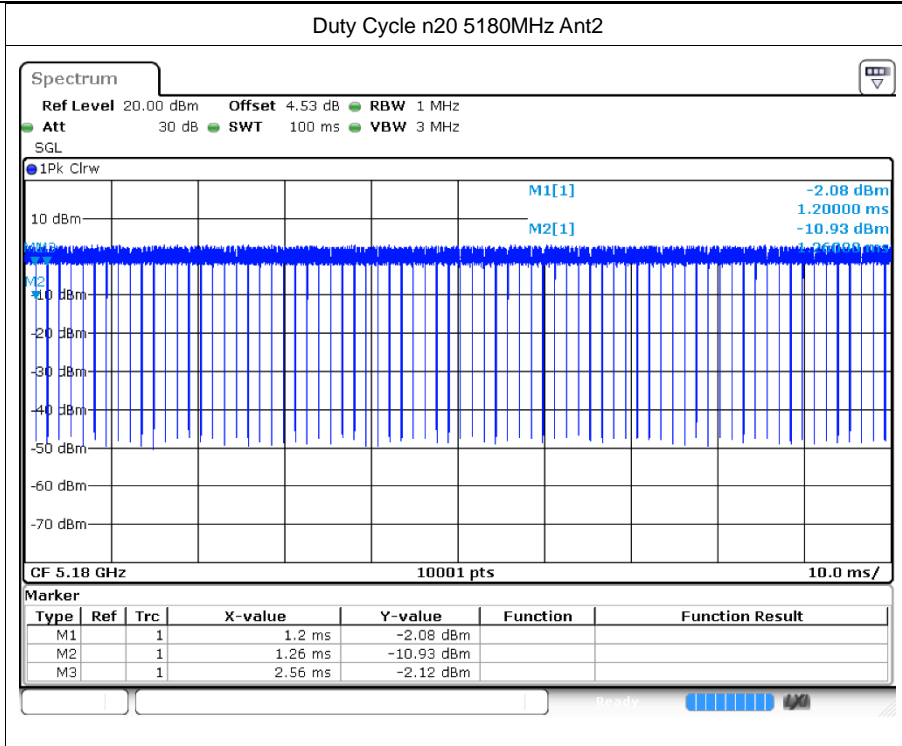


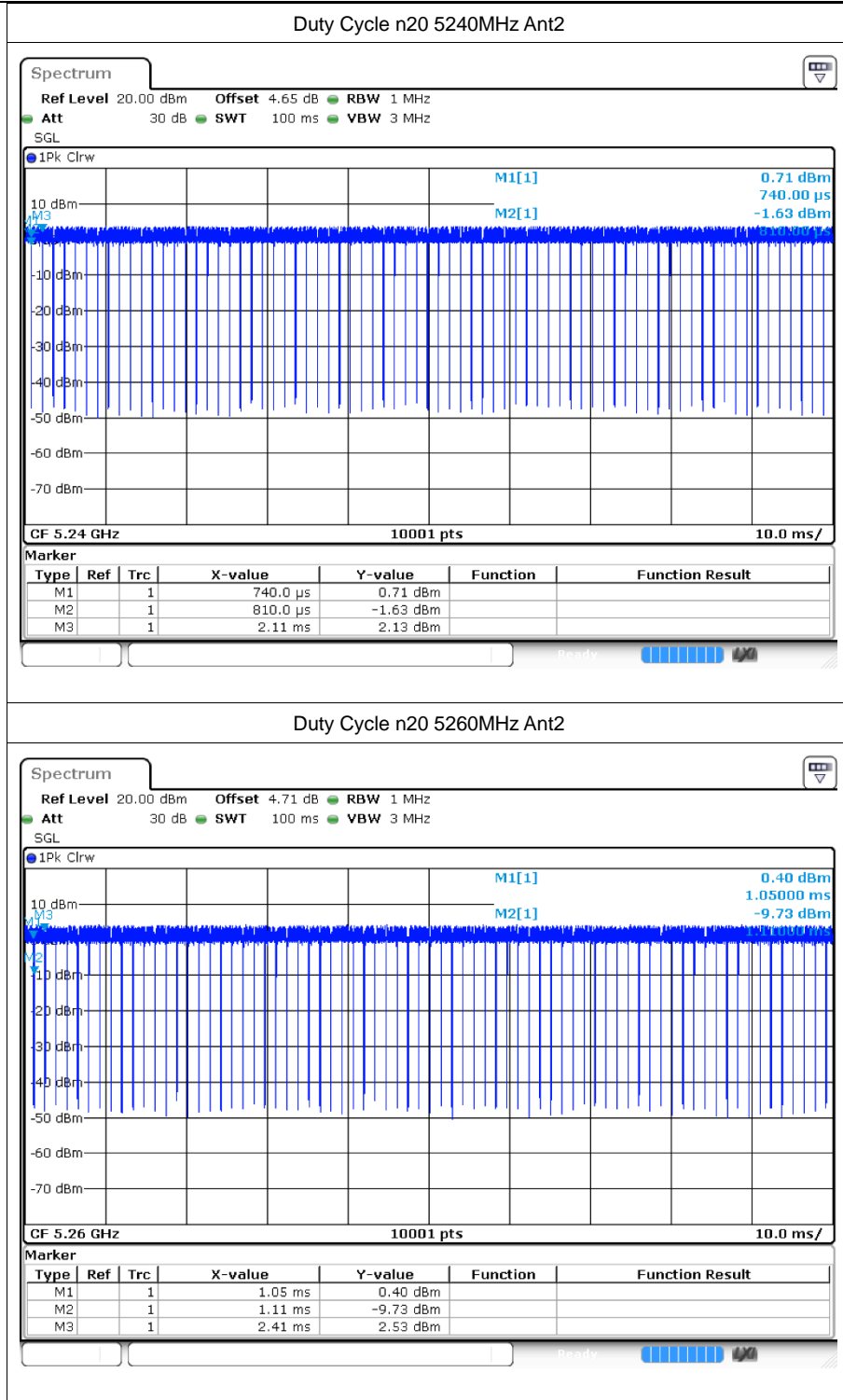


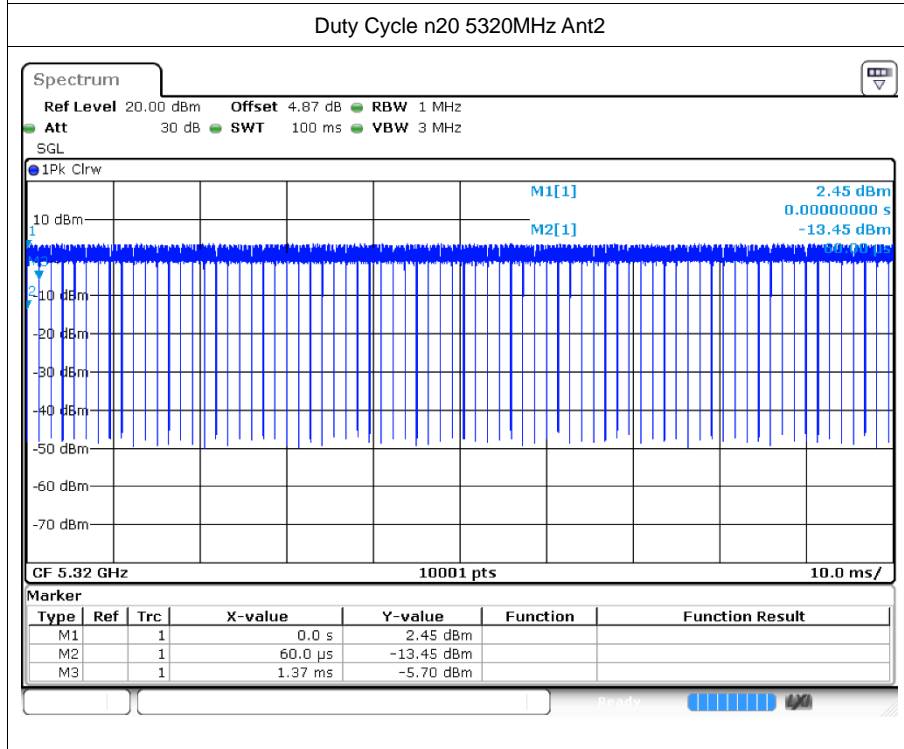
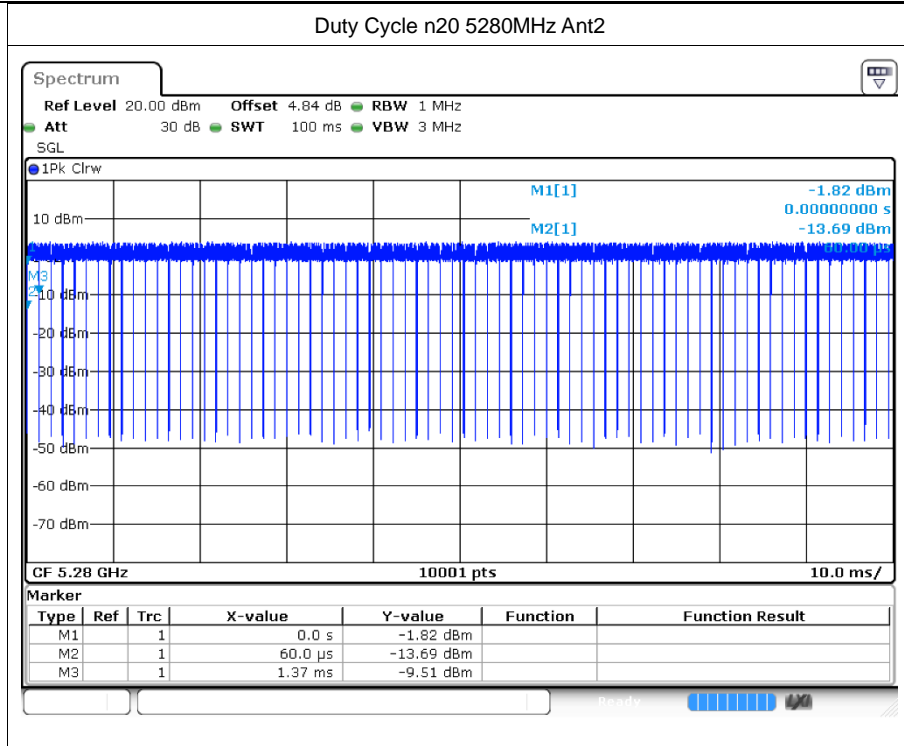


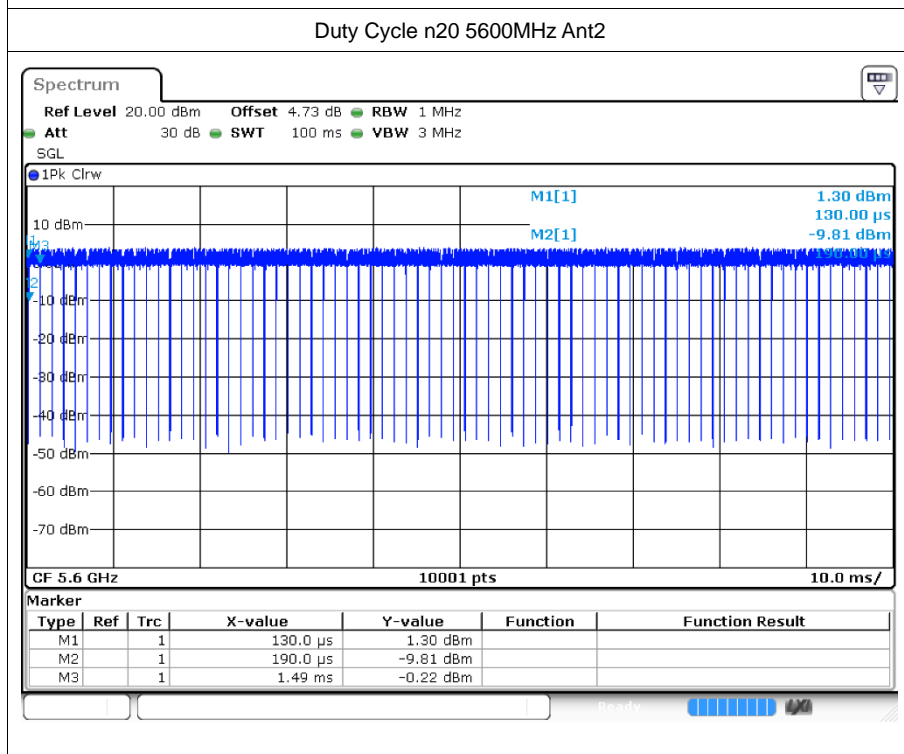
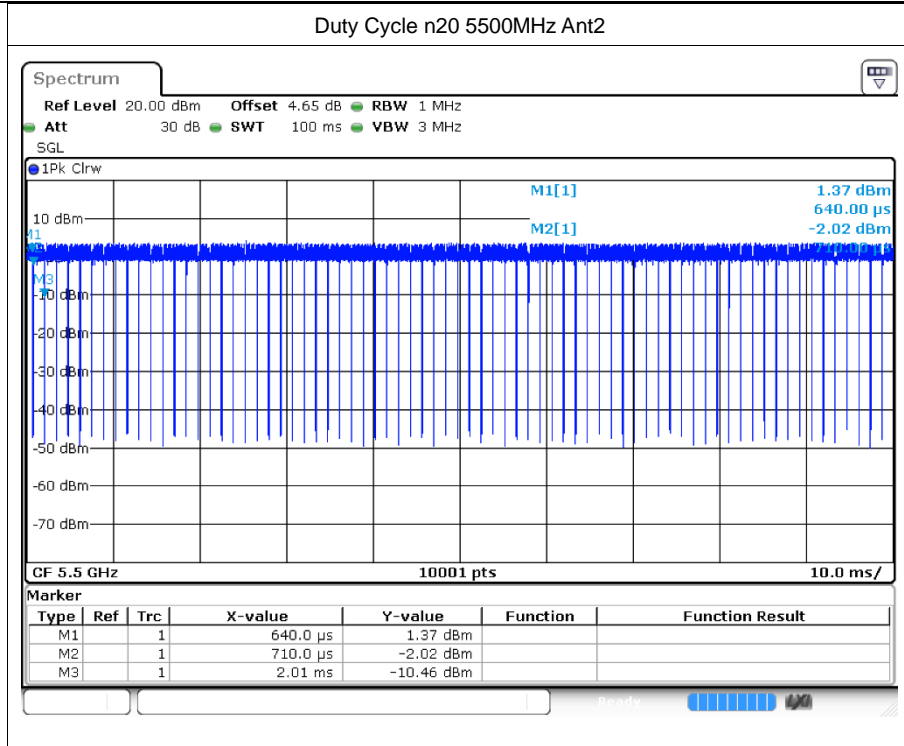




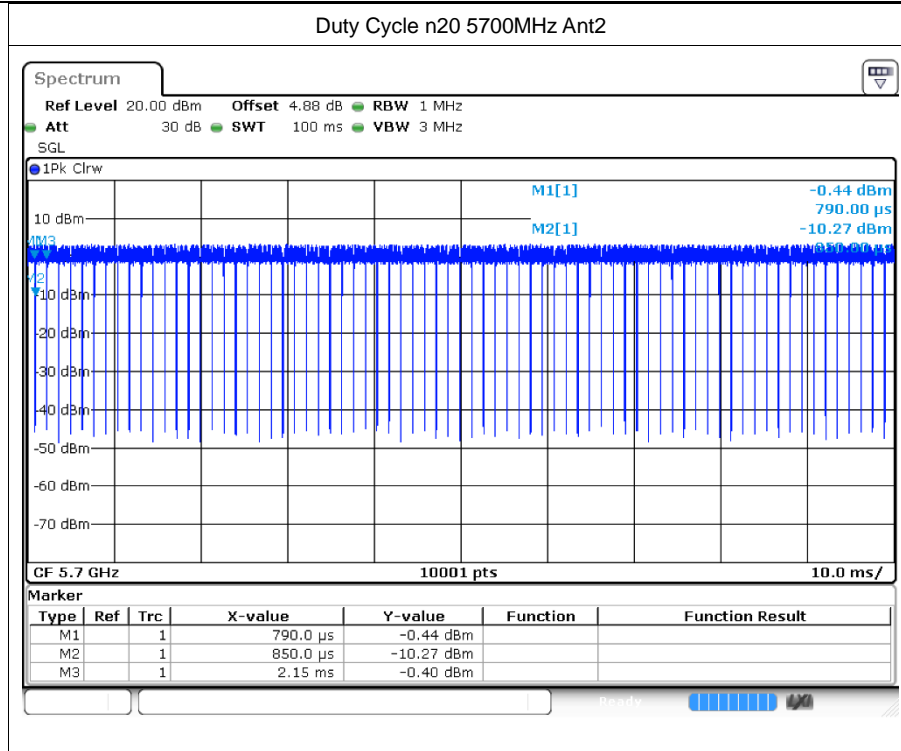


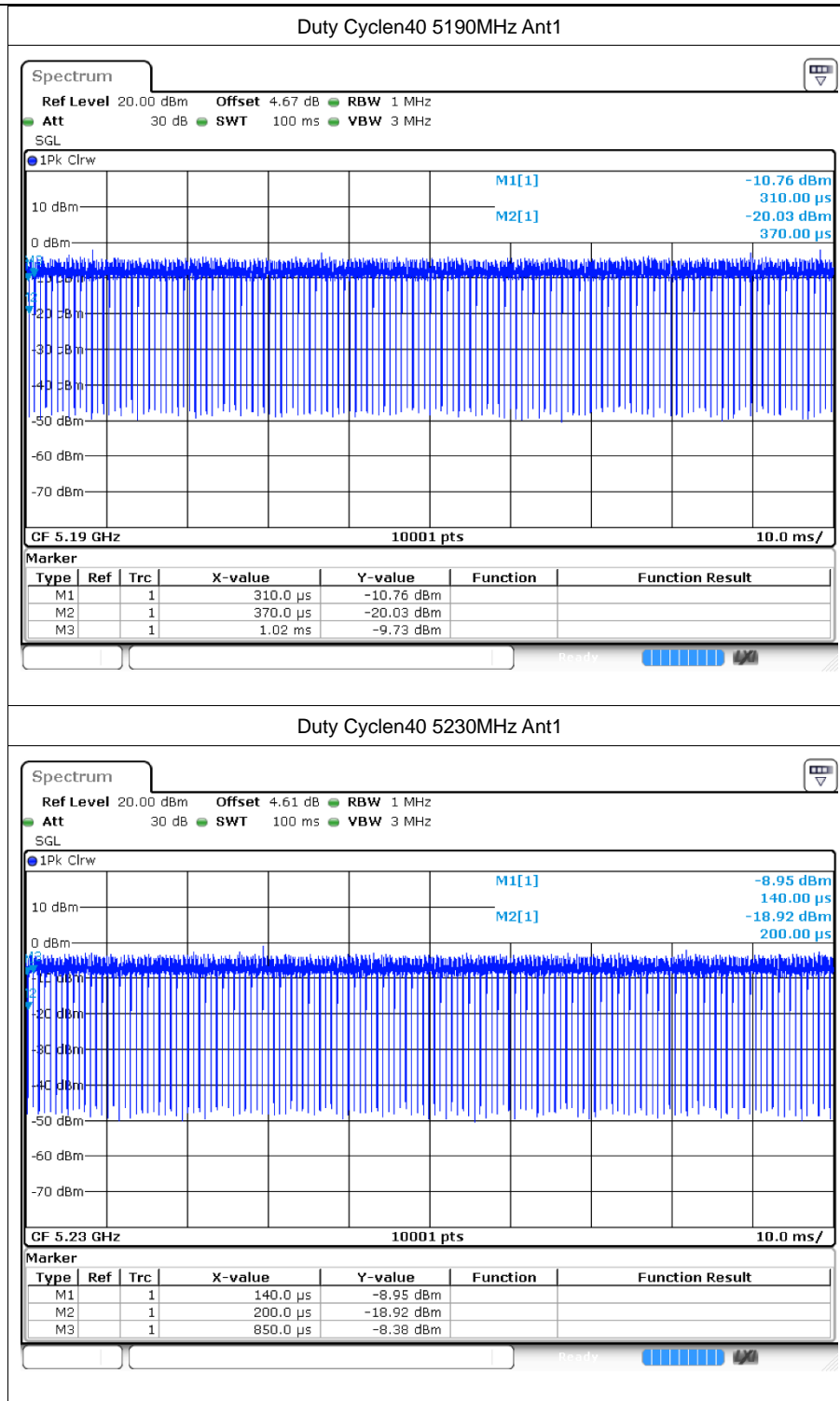


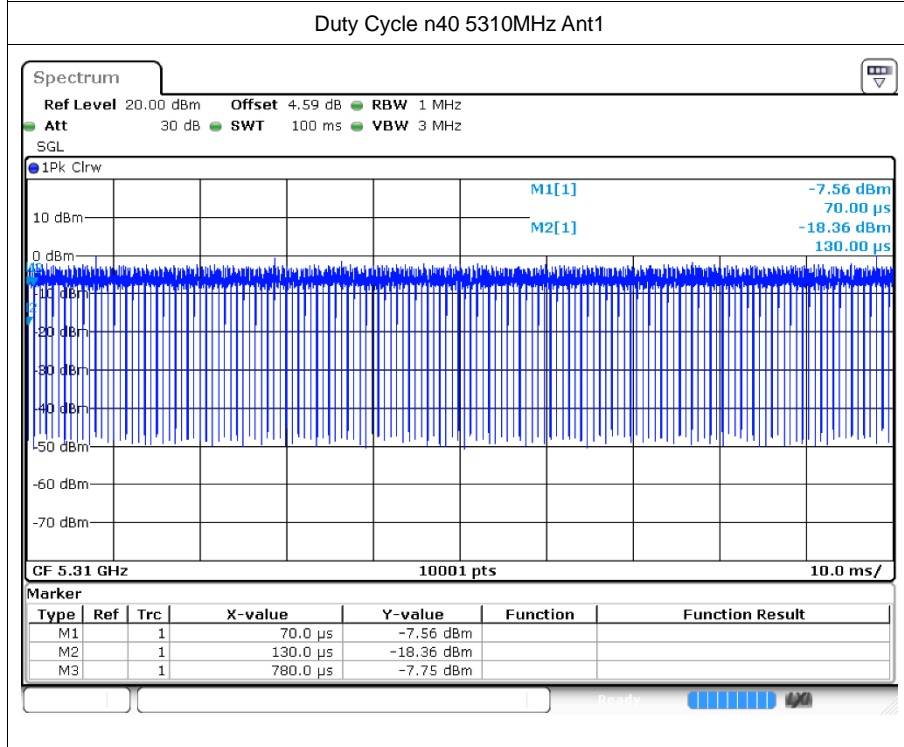
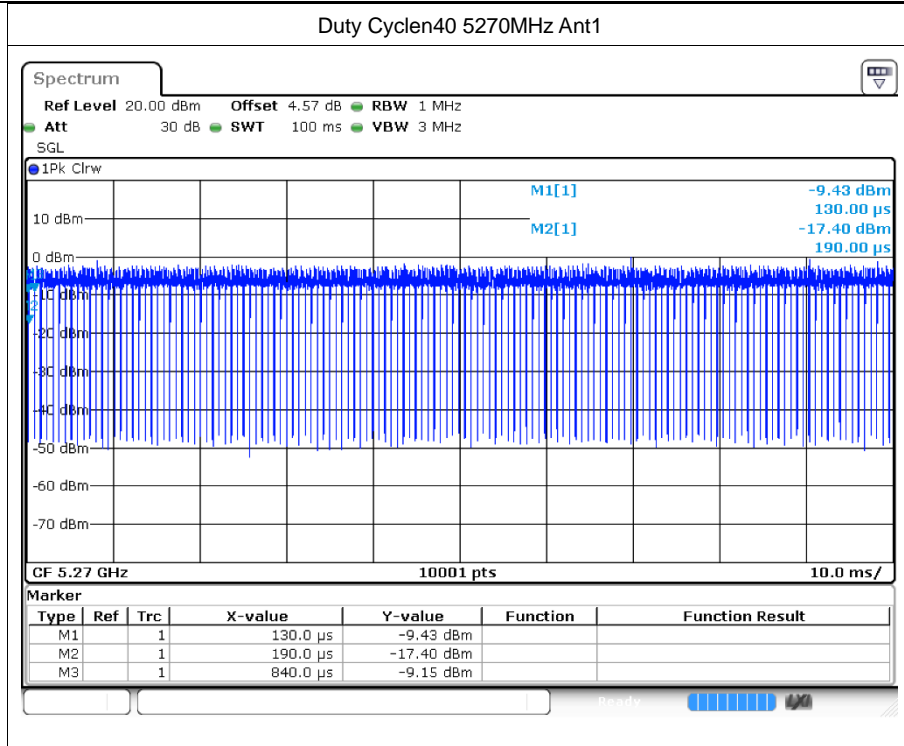


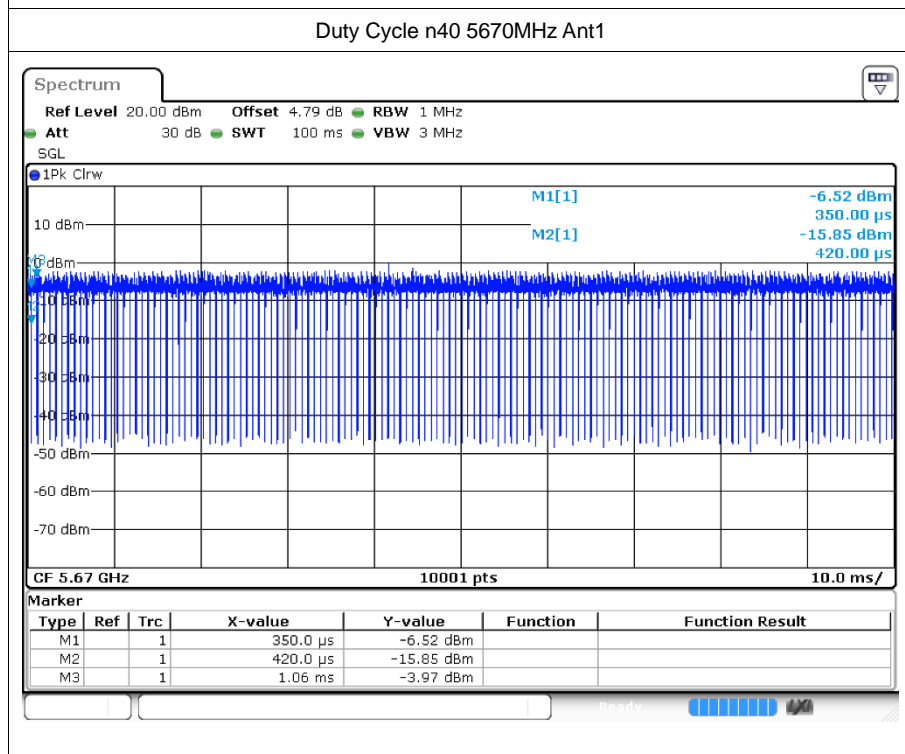
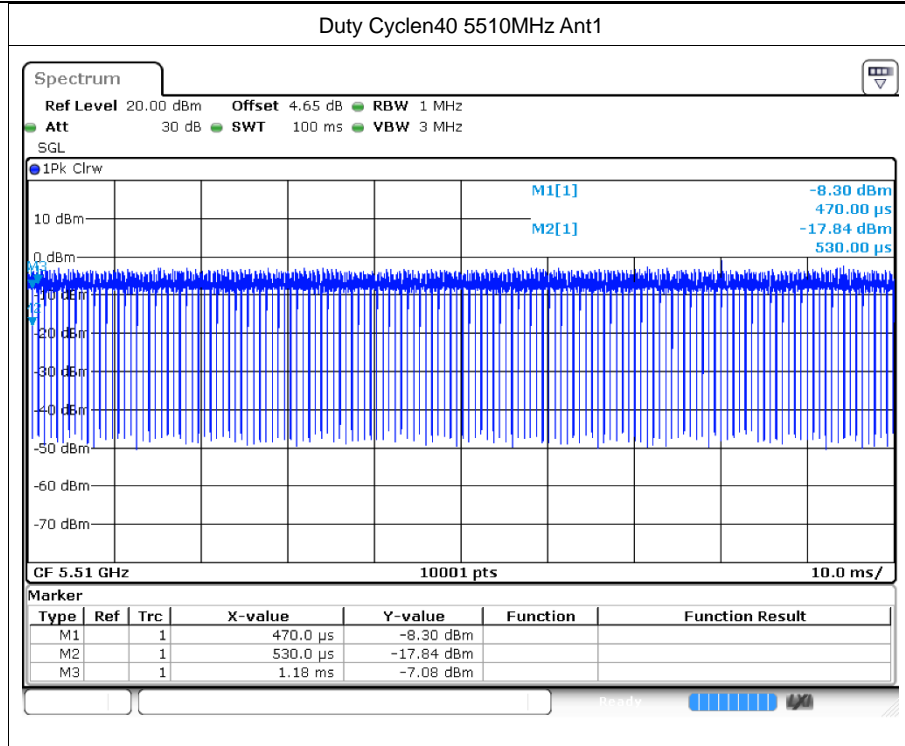


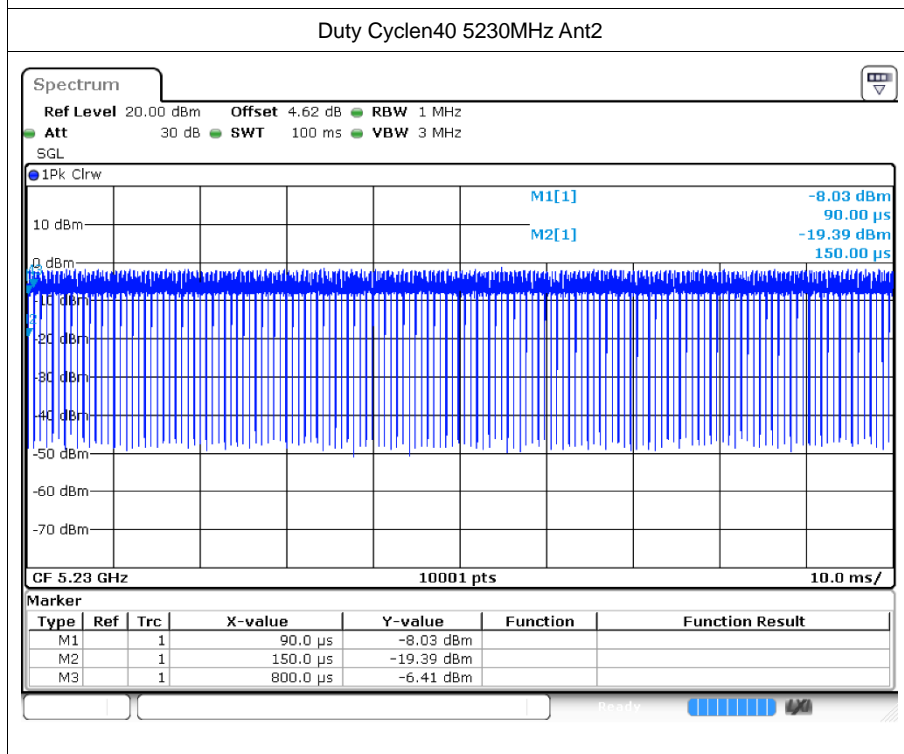
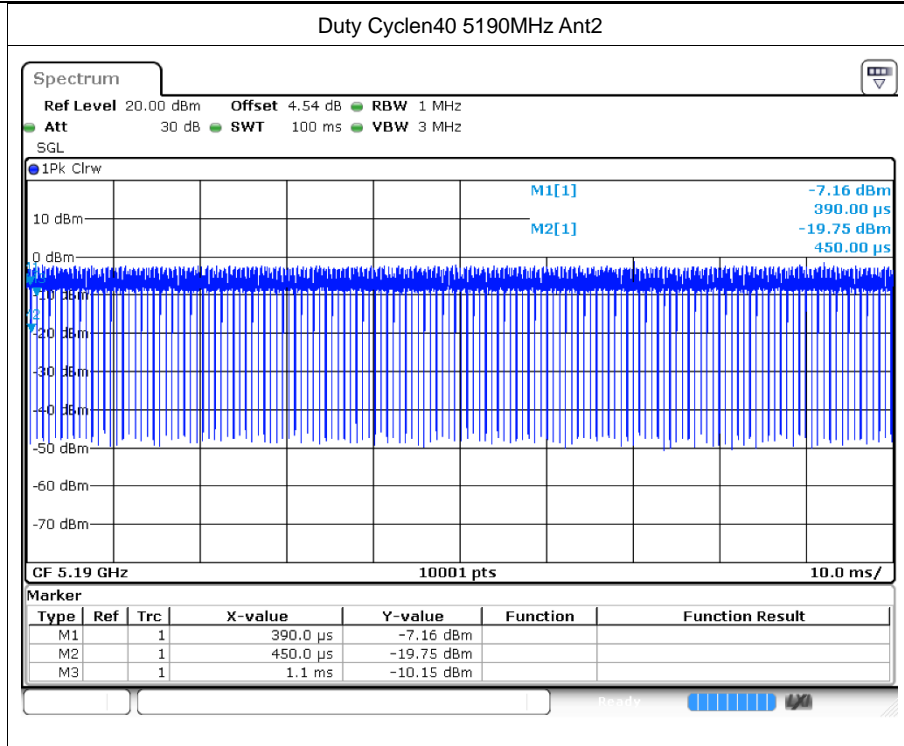


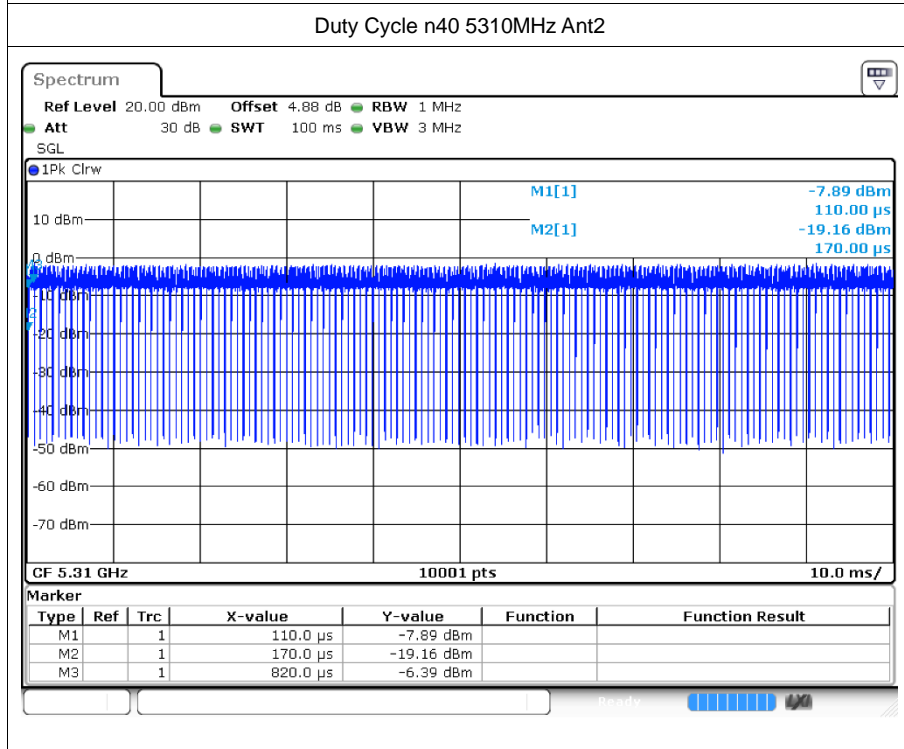
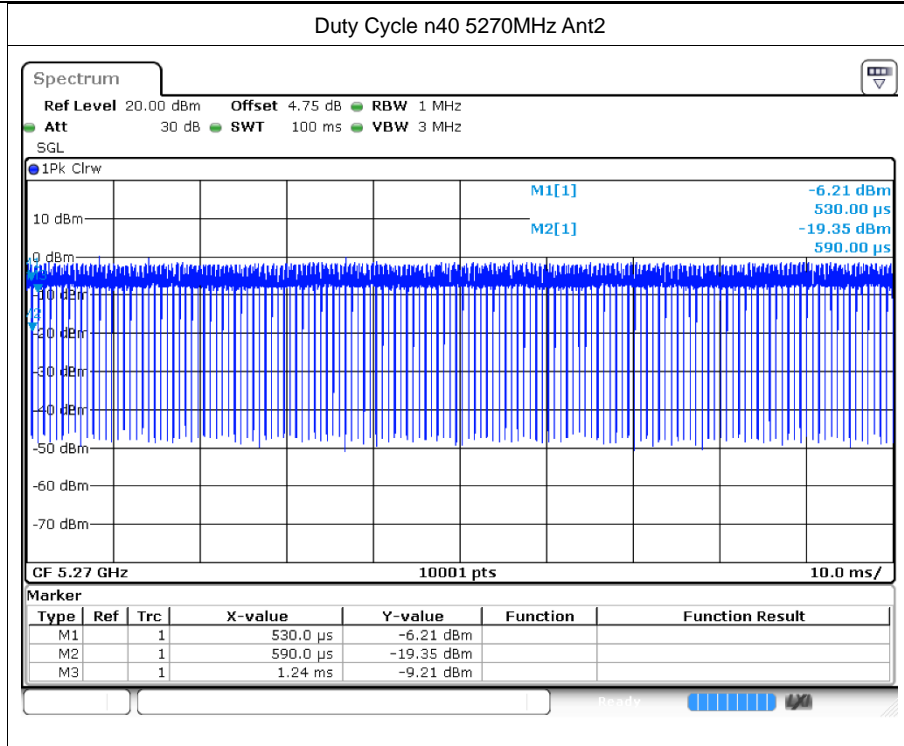


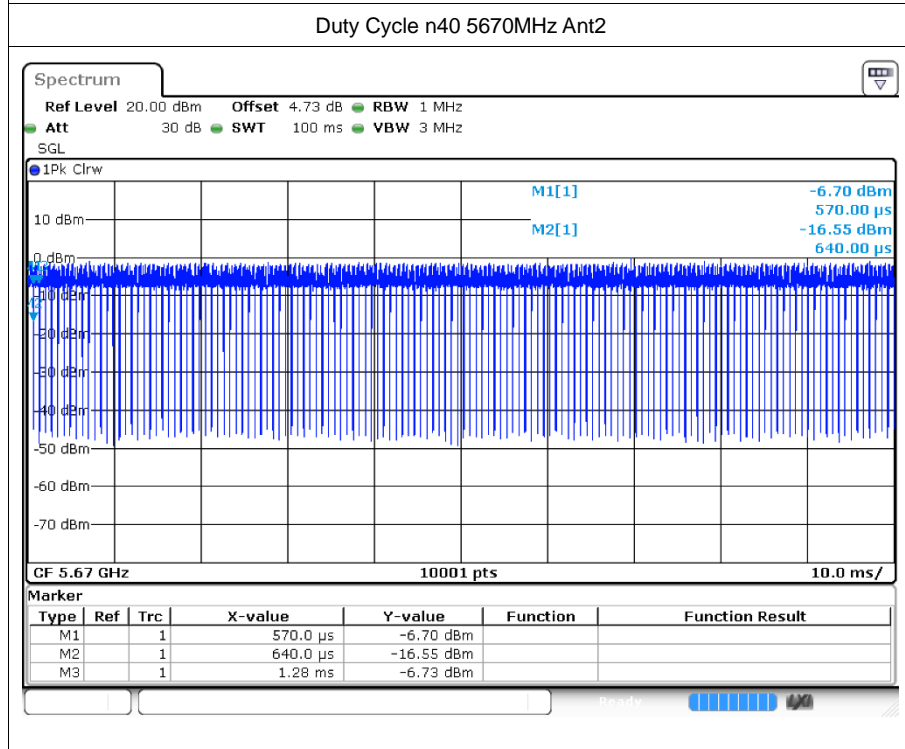
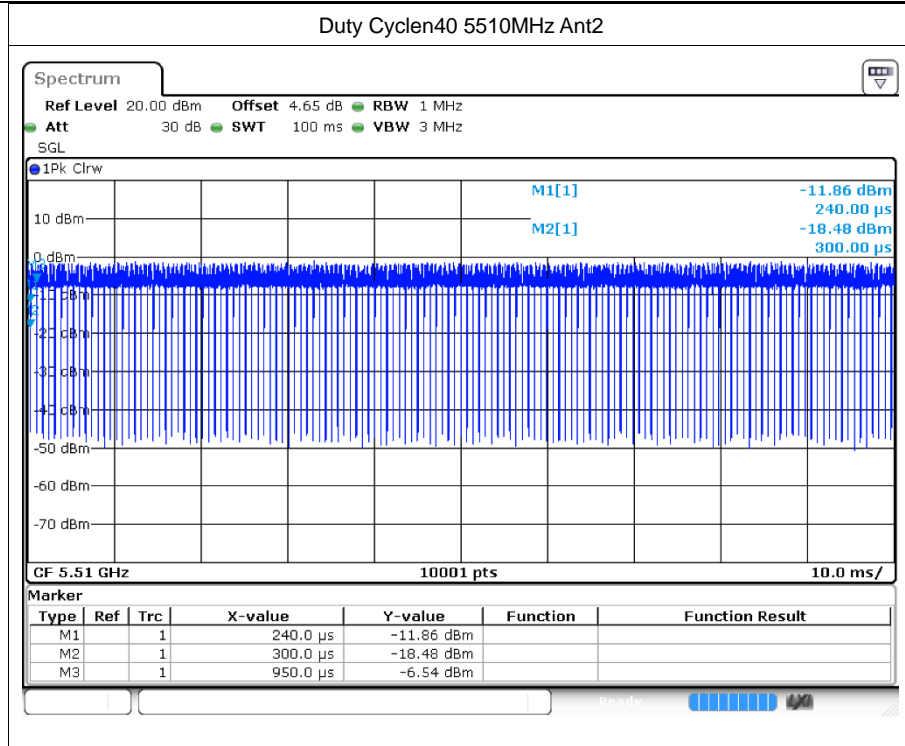






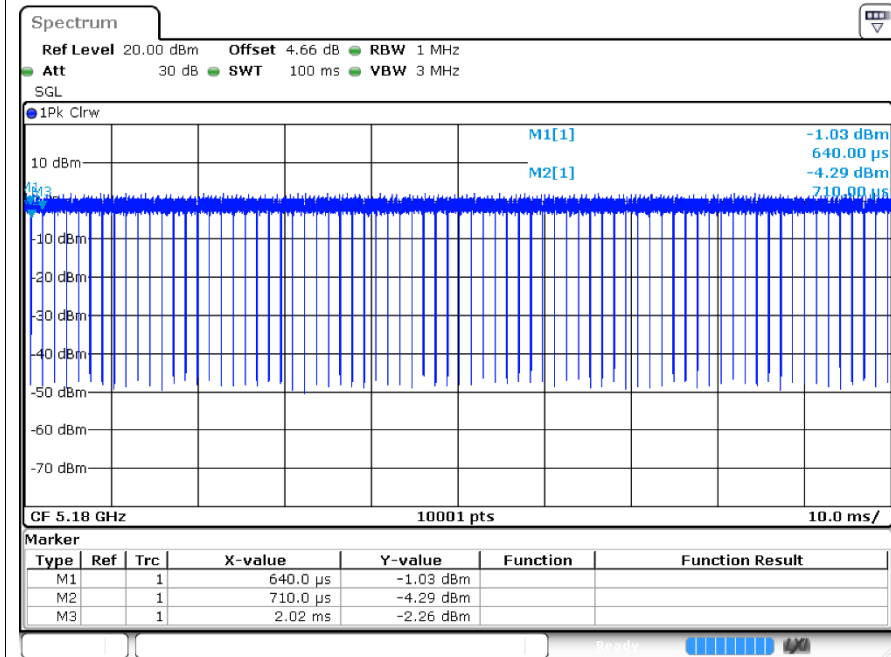




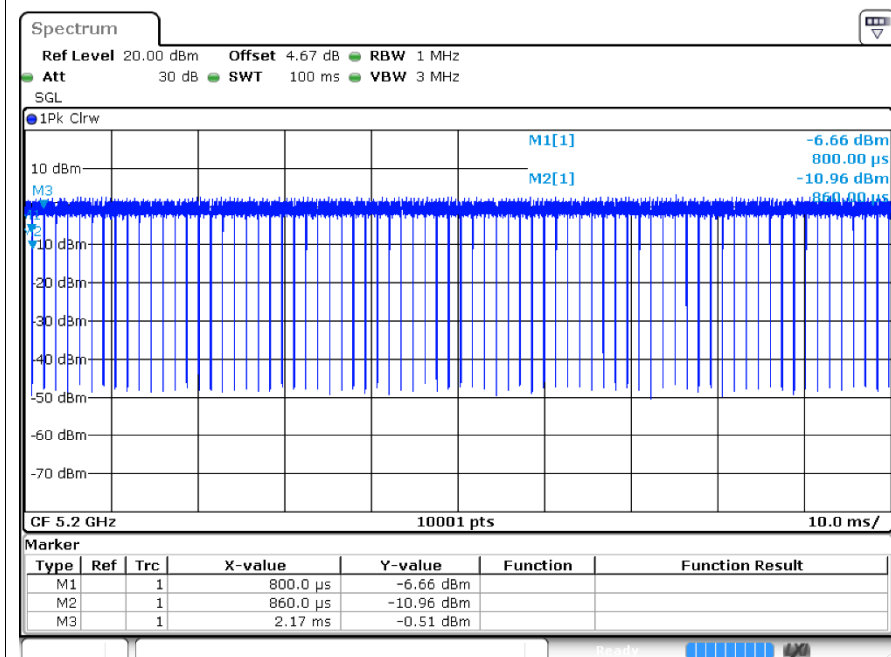




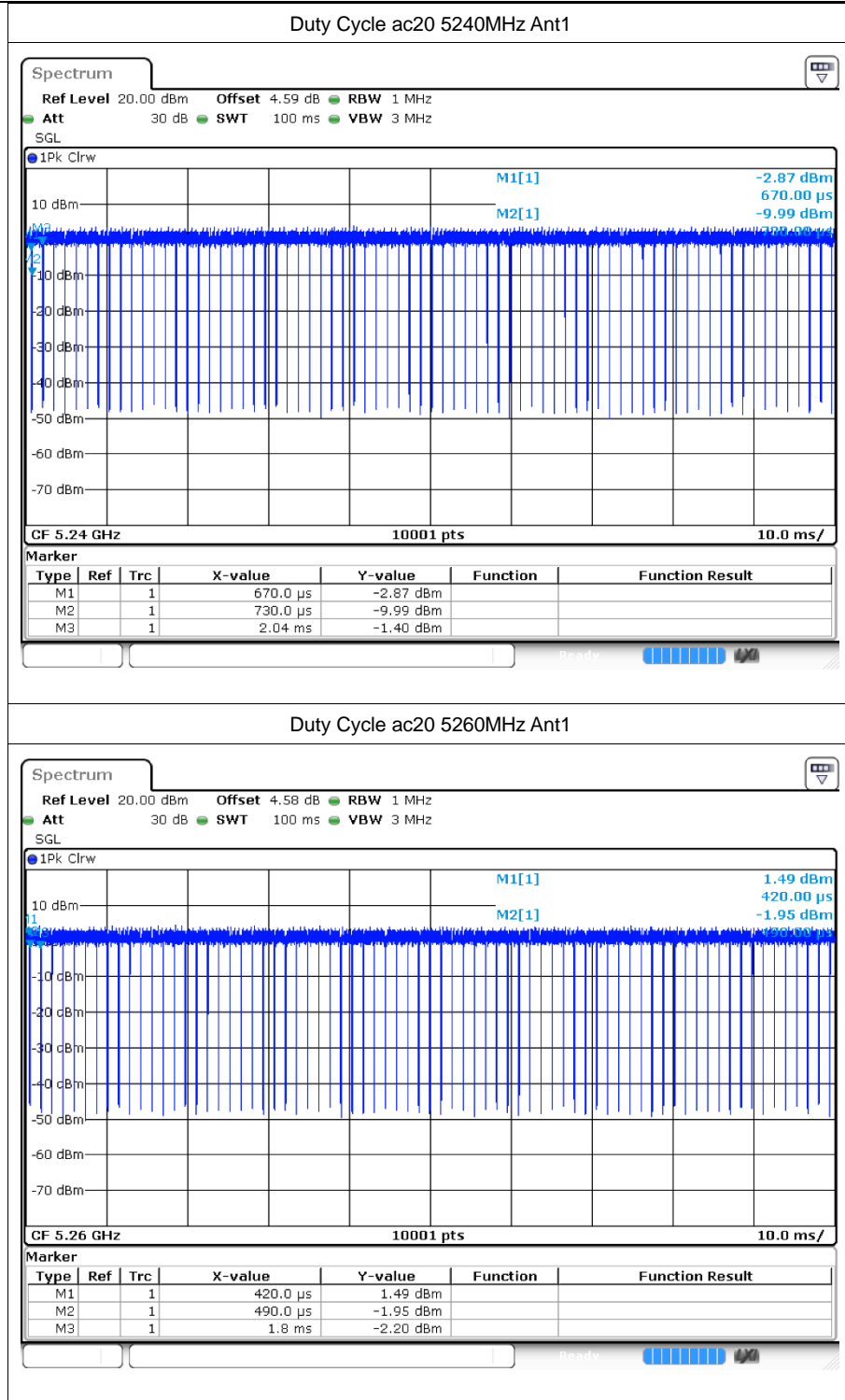
Duty Cycle ac20 5180MHz Ant1

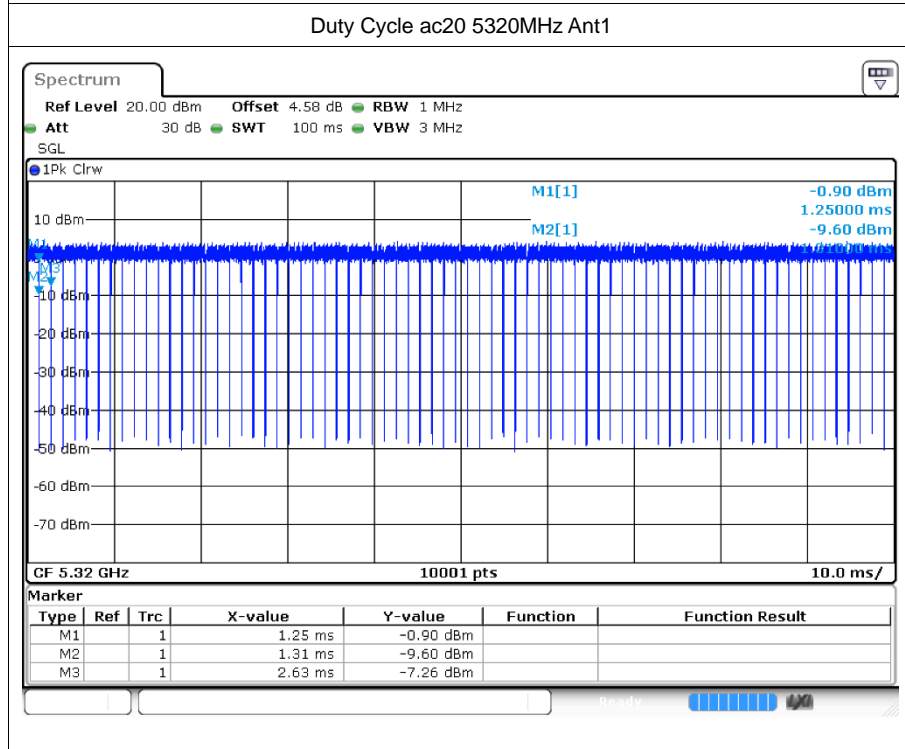
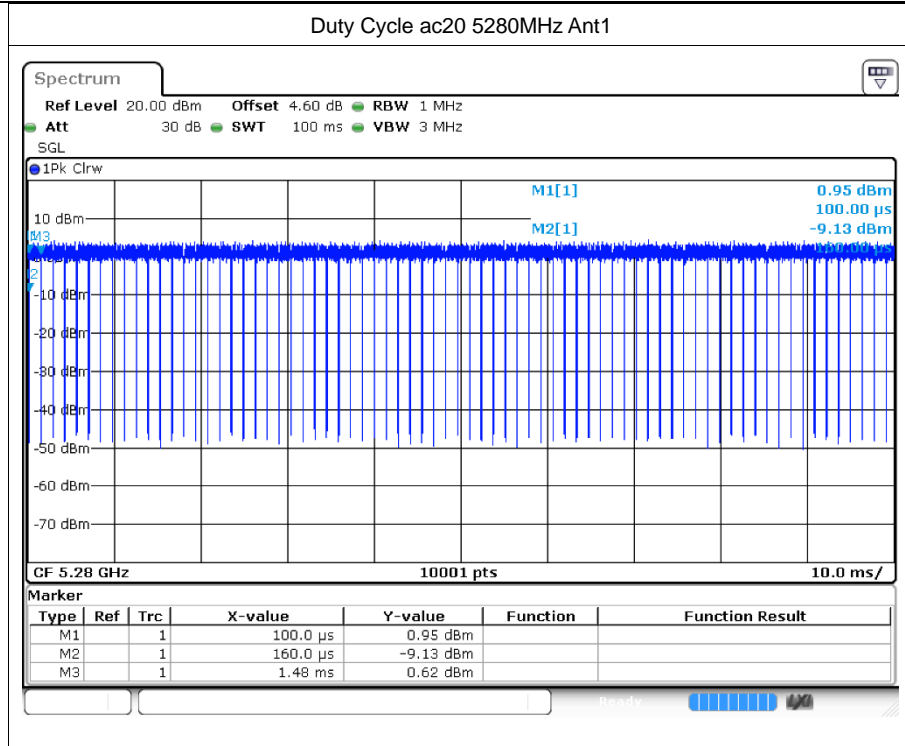


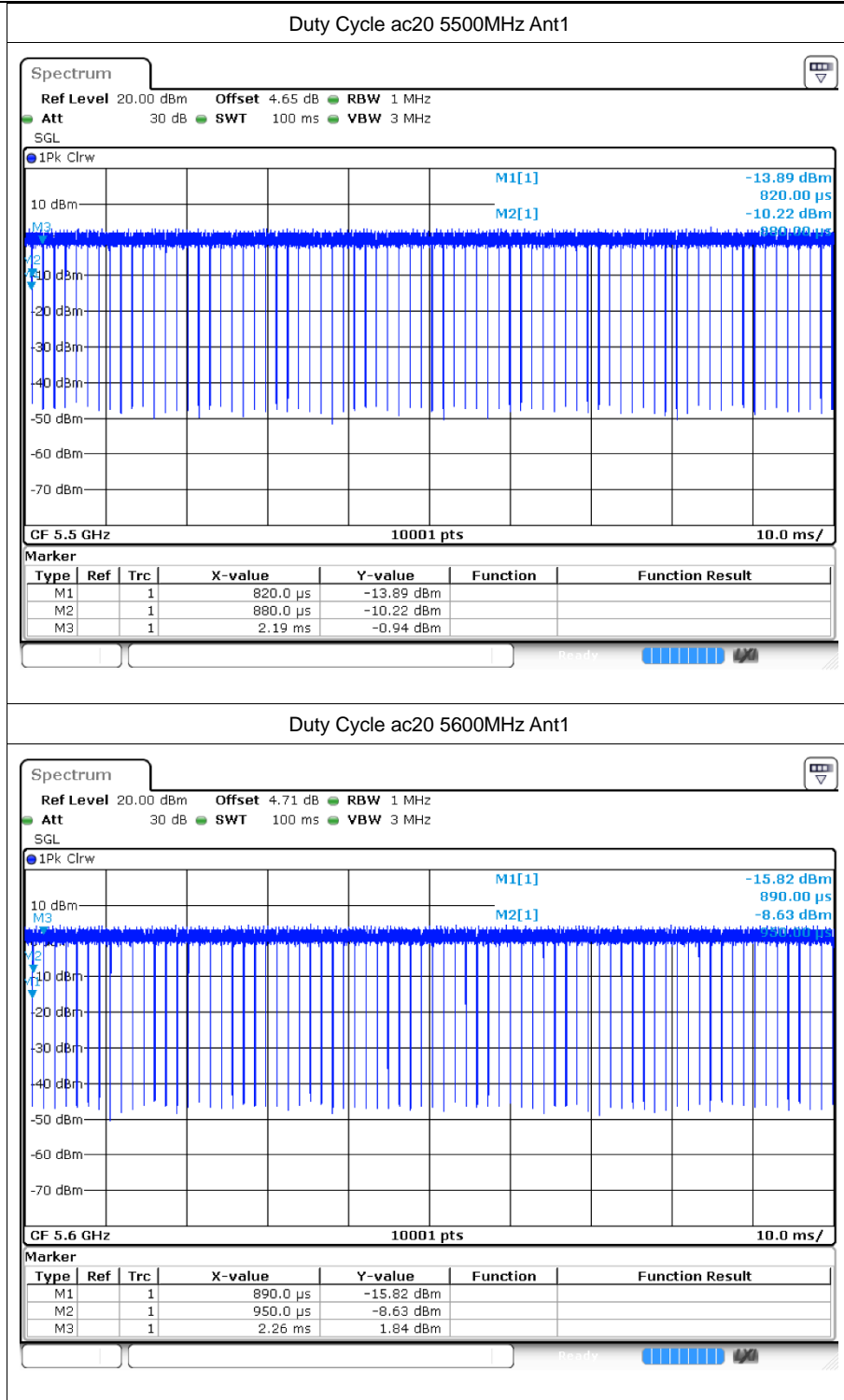
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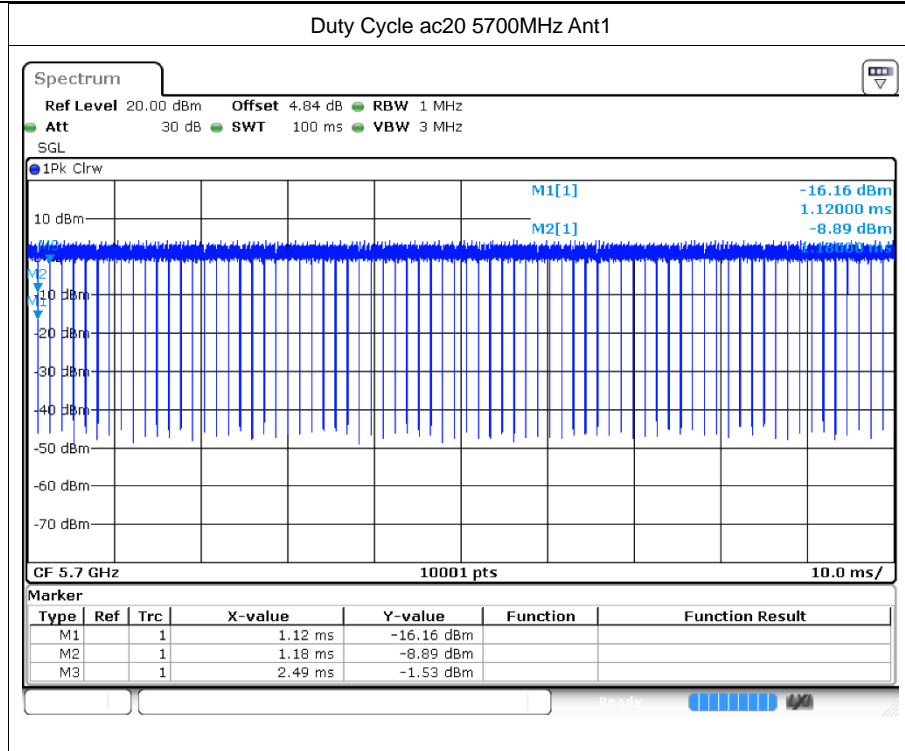


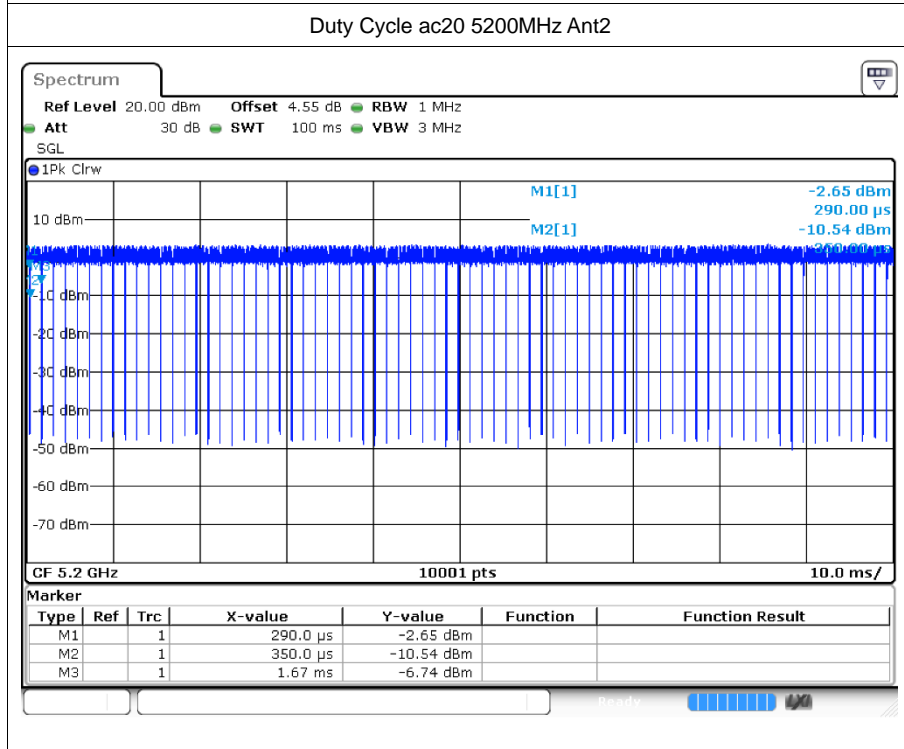
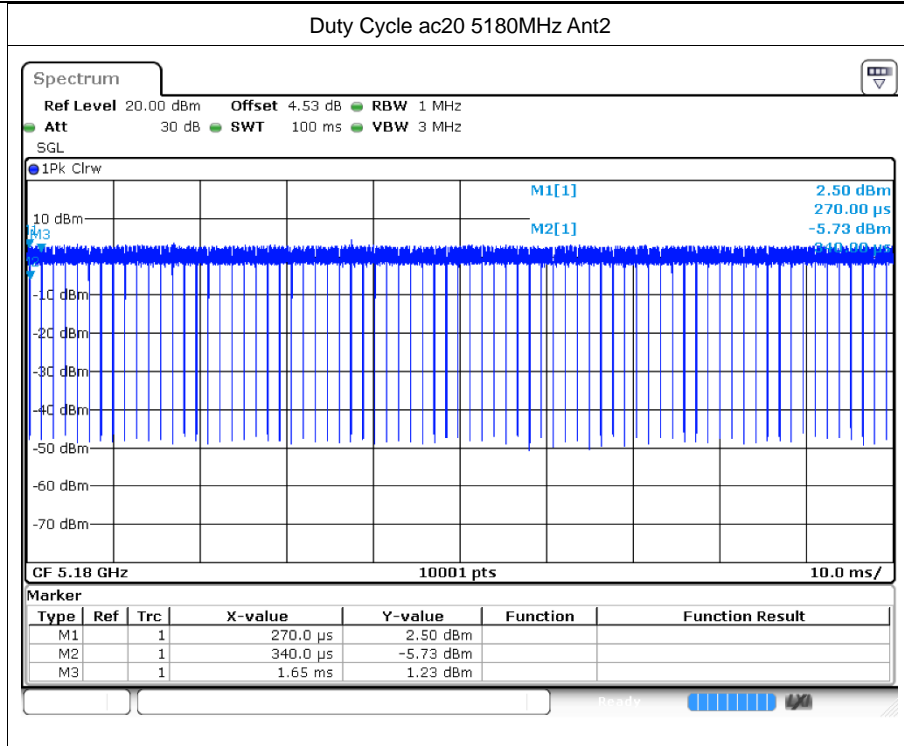


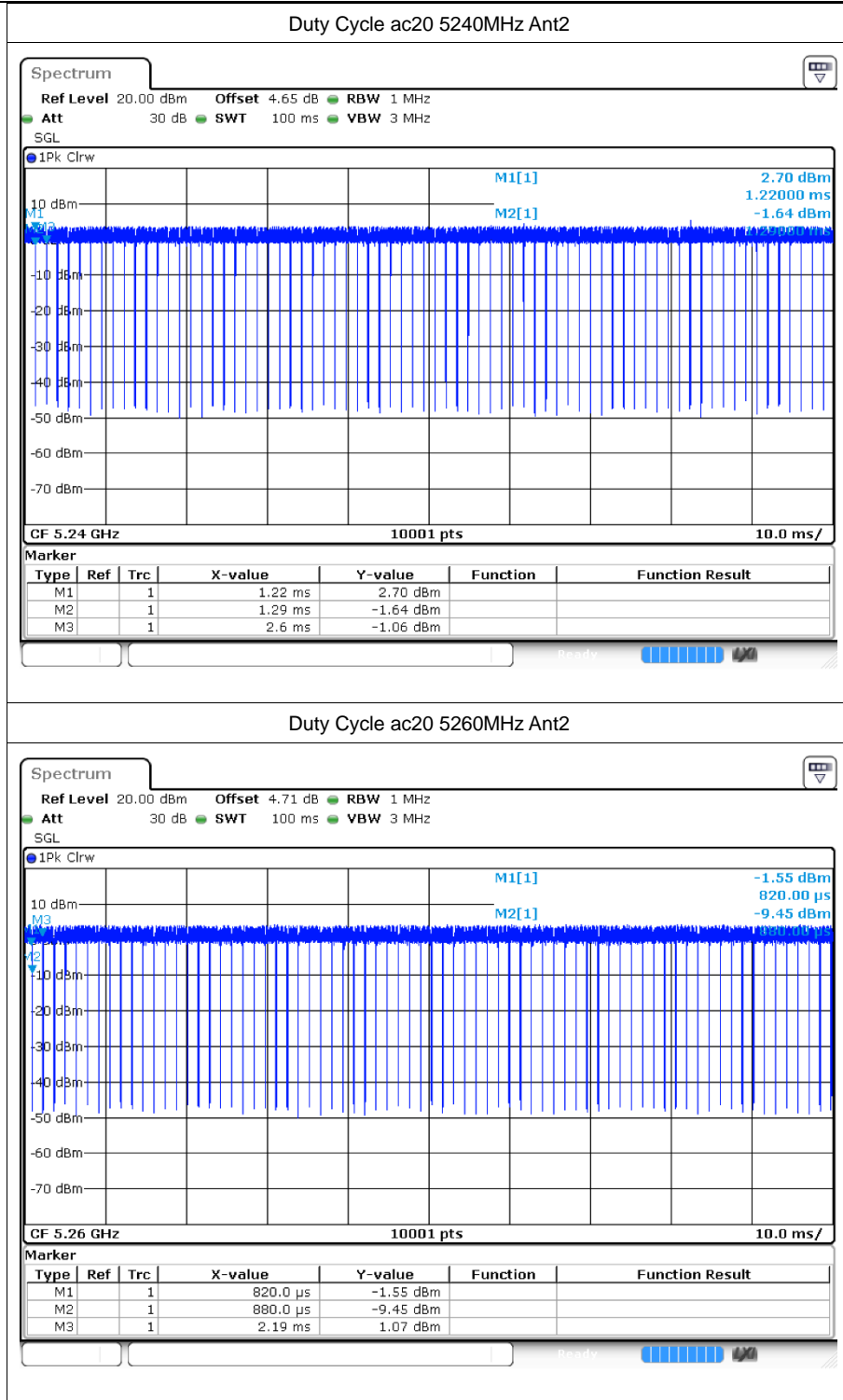


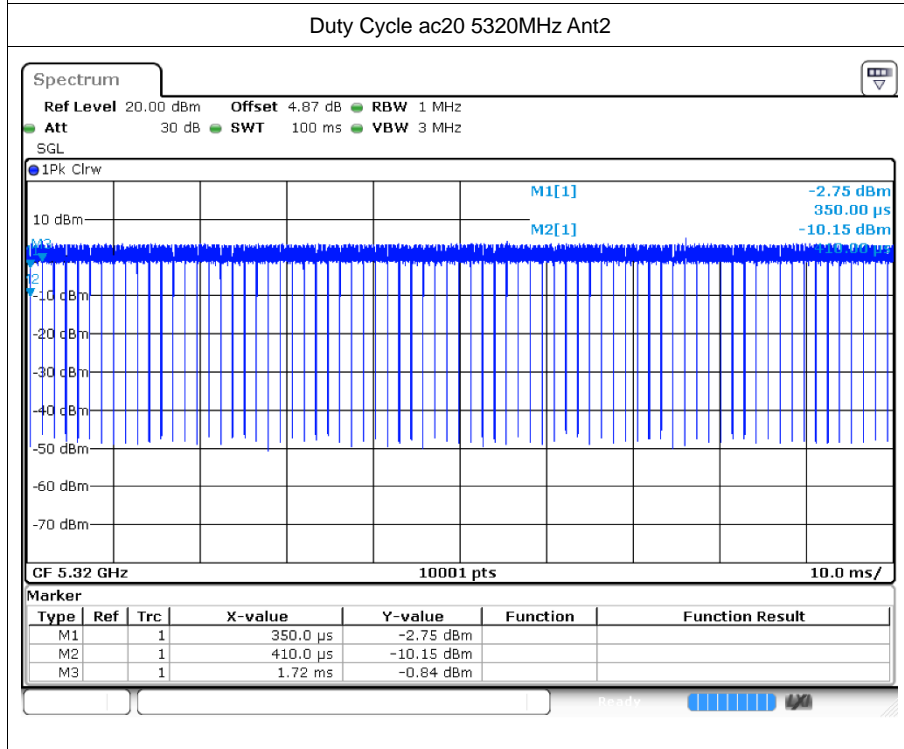
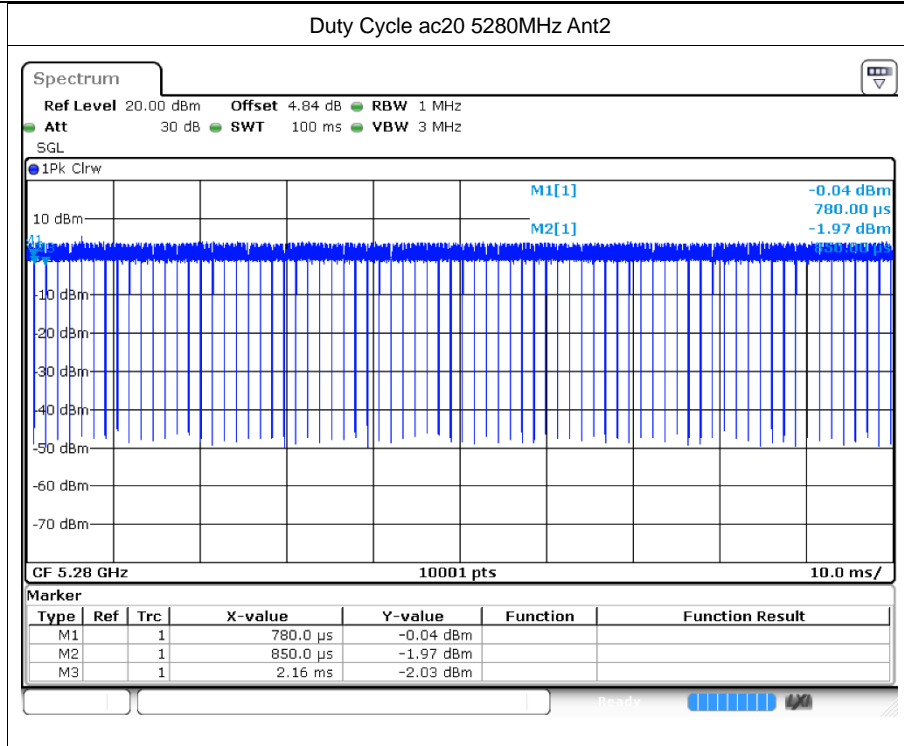


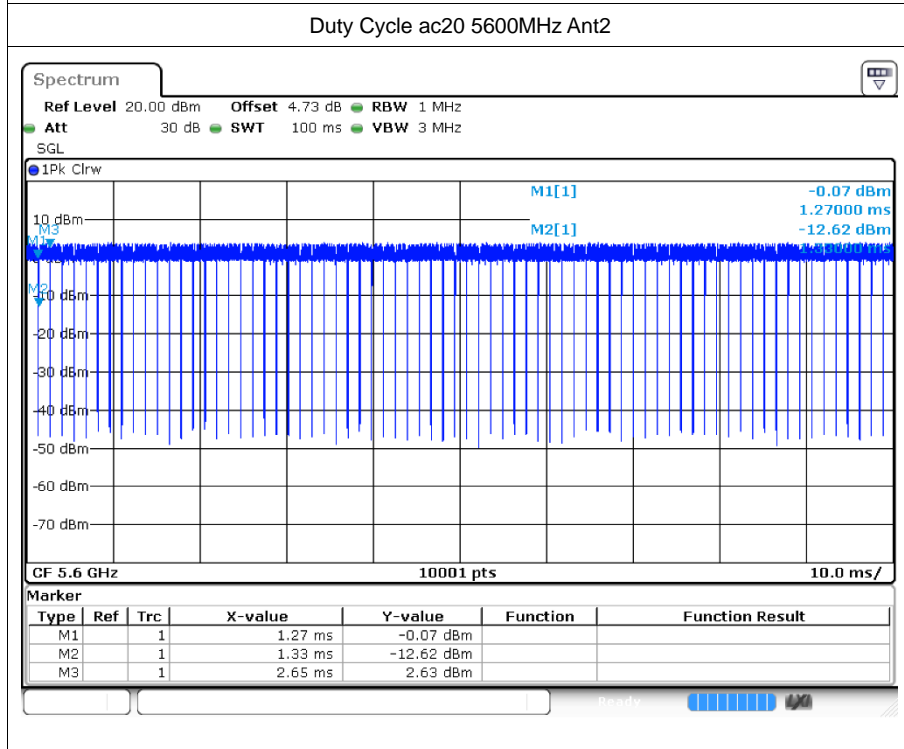
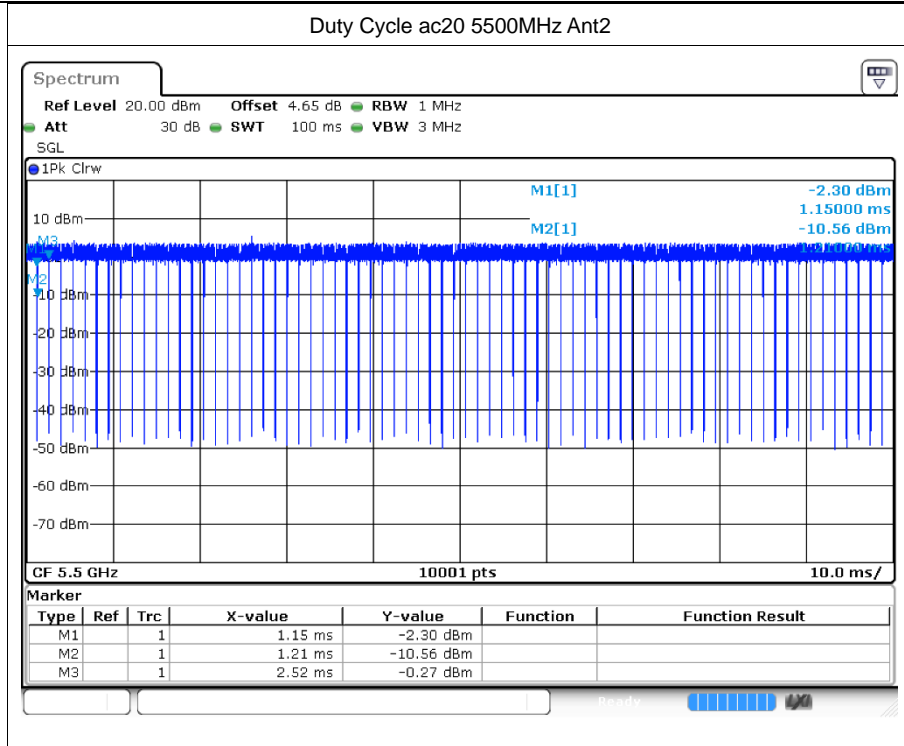




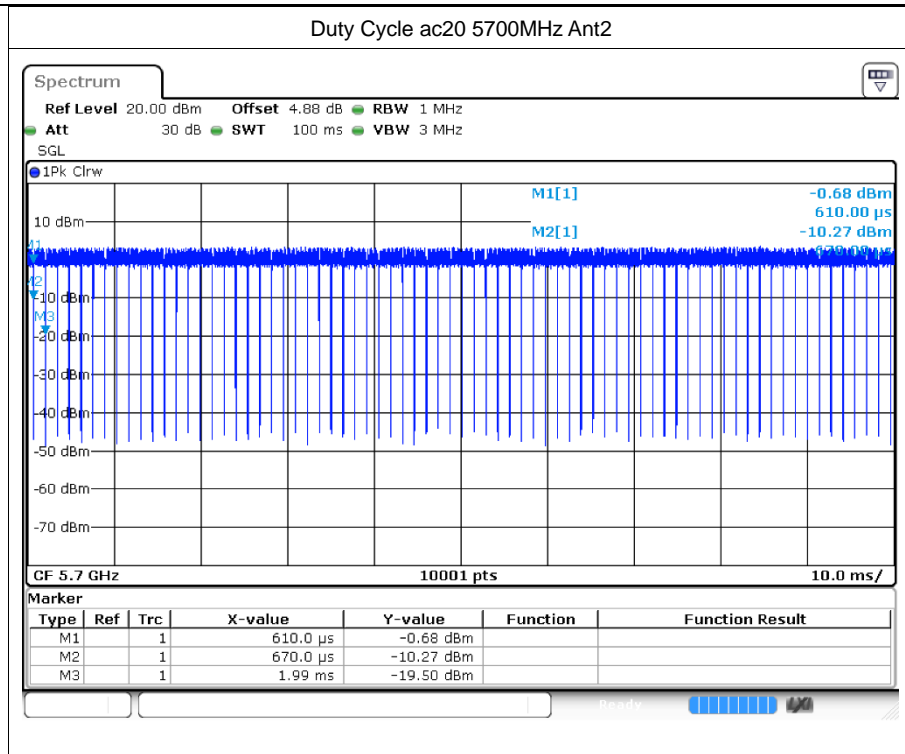


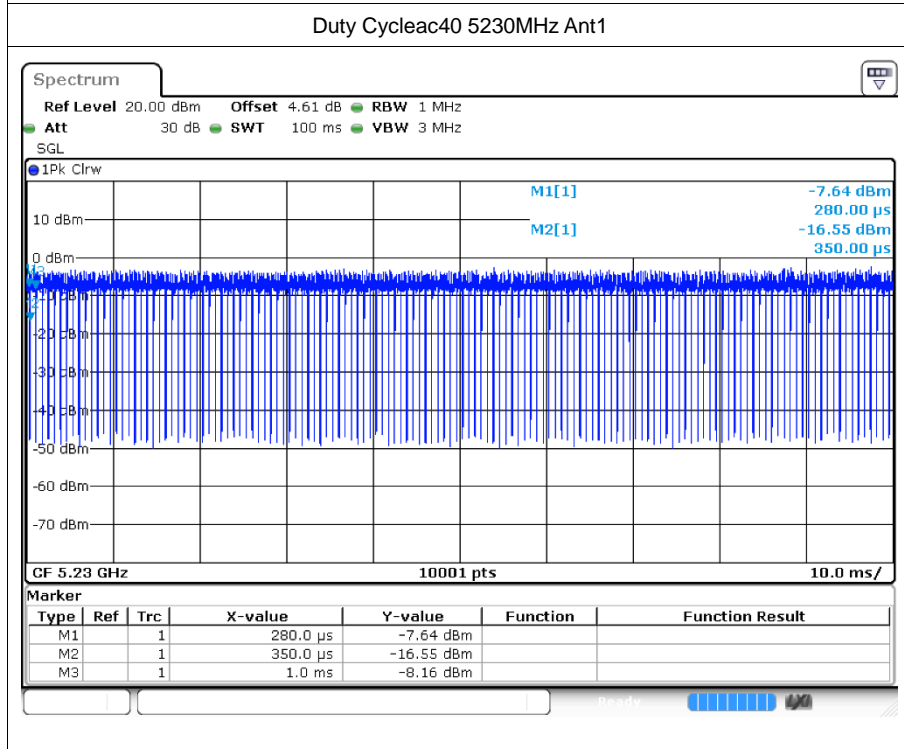
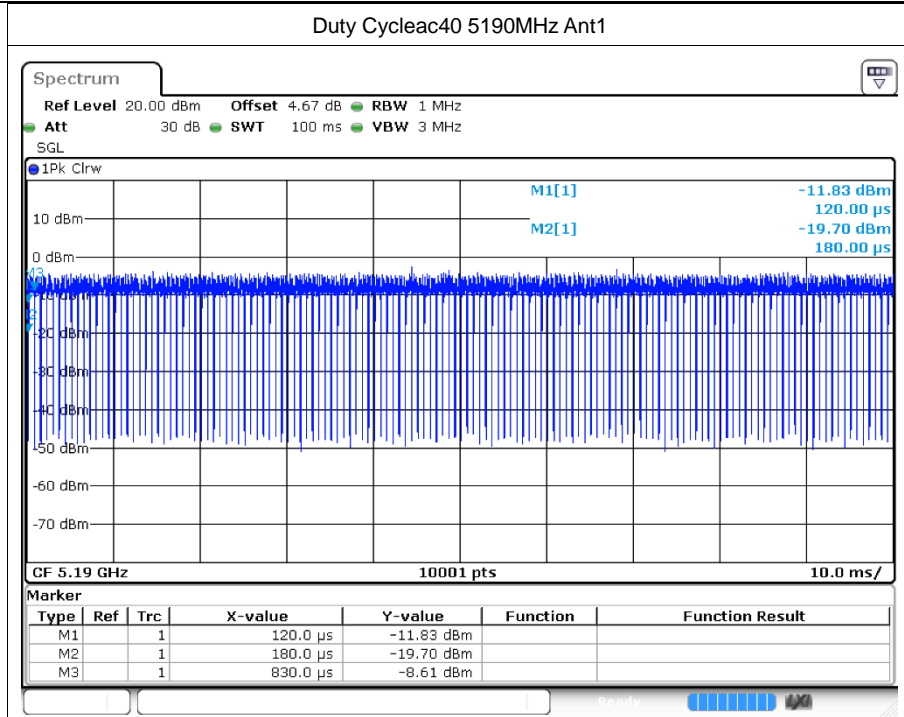


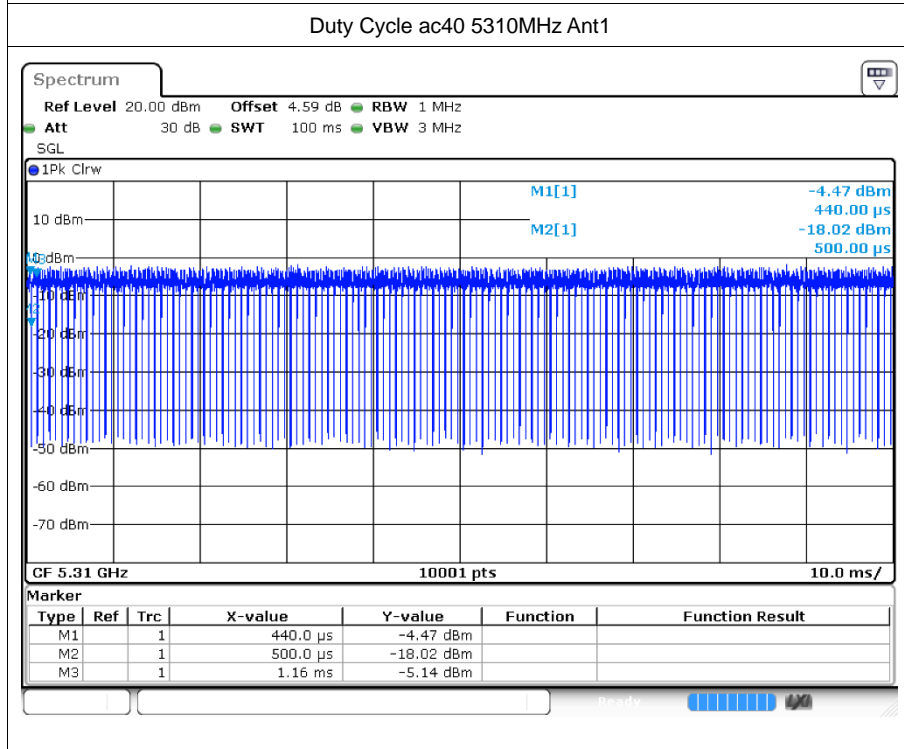
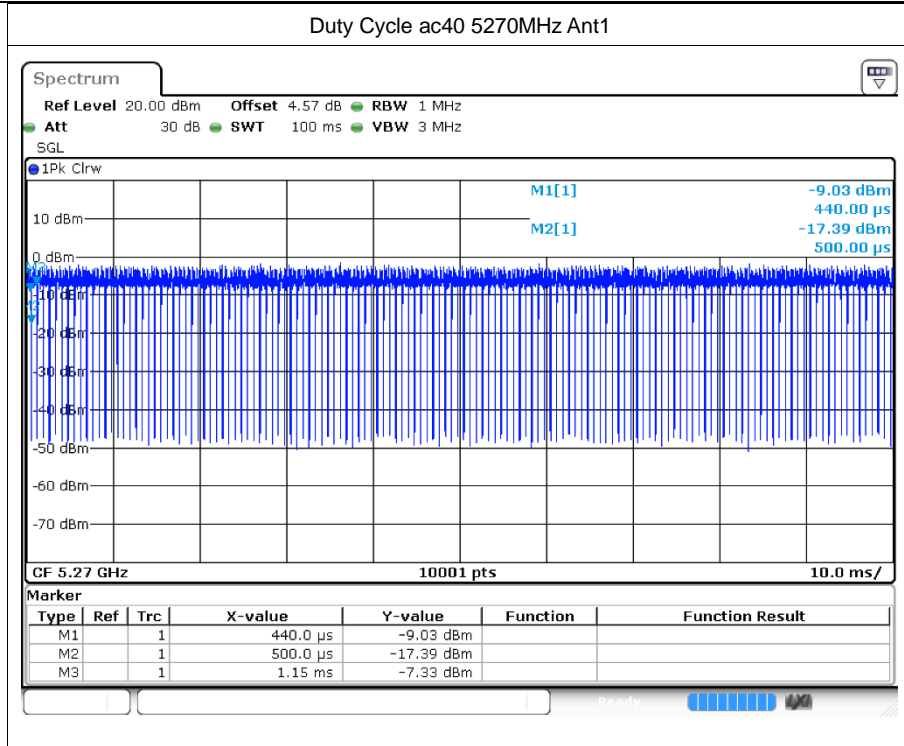


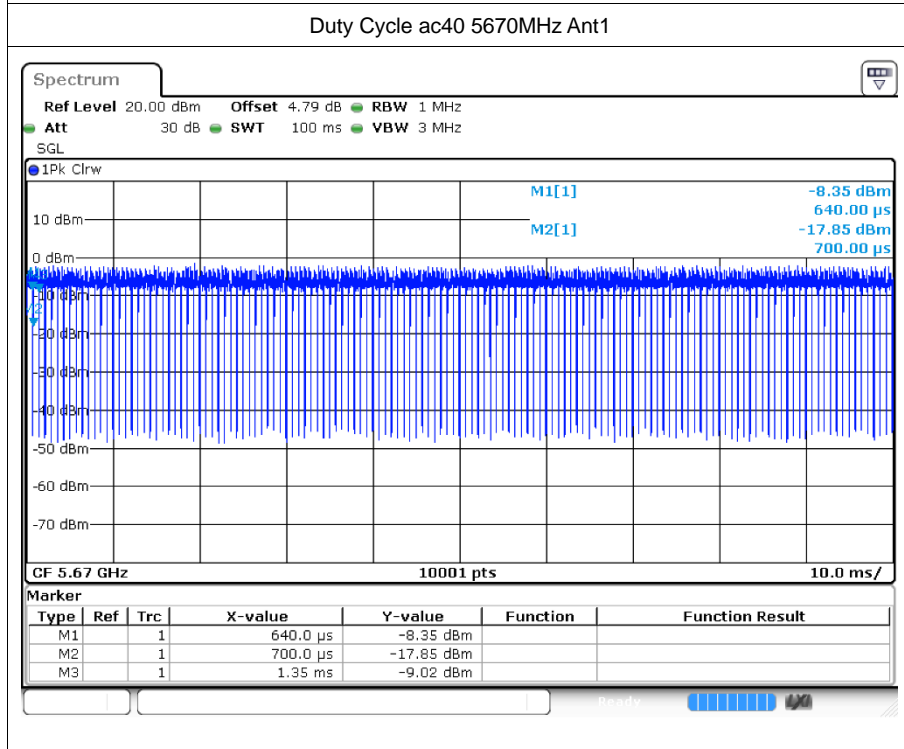
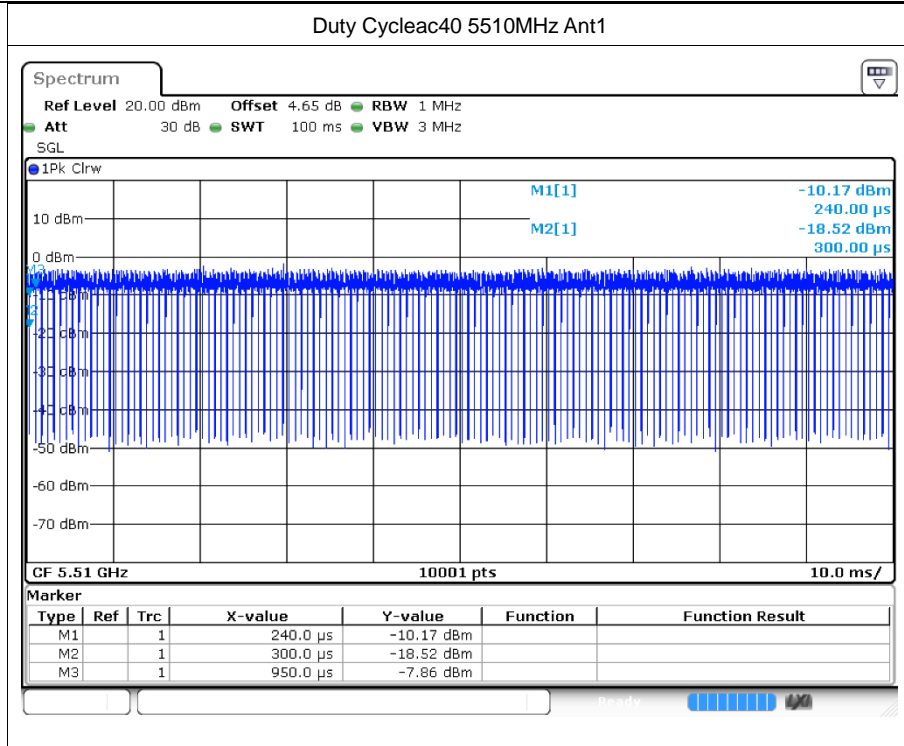


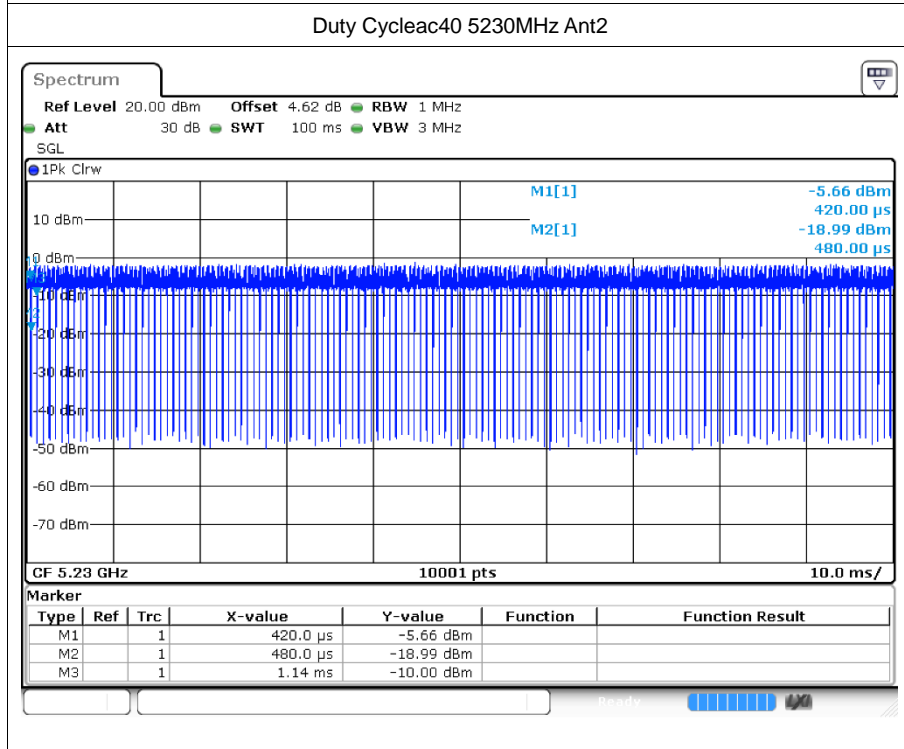
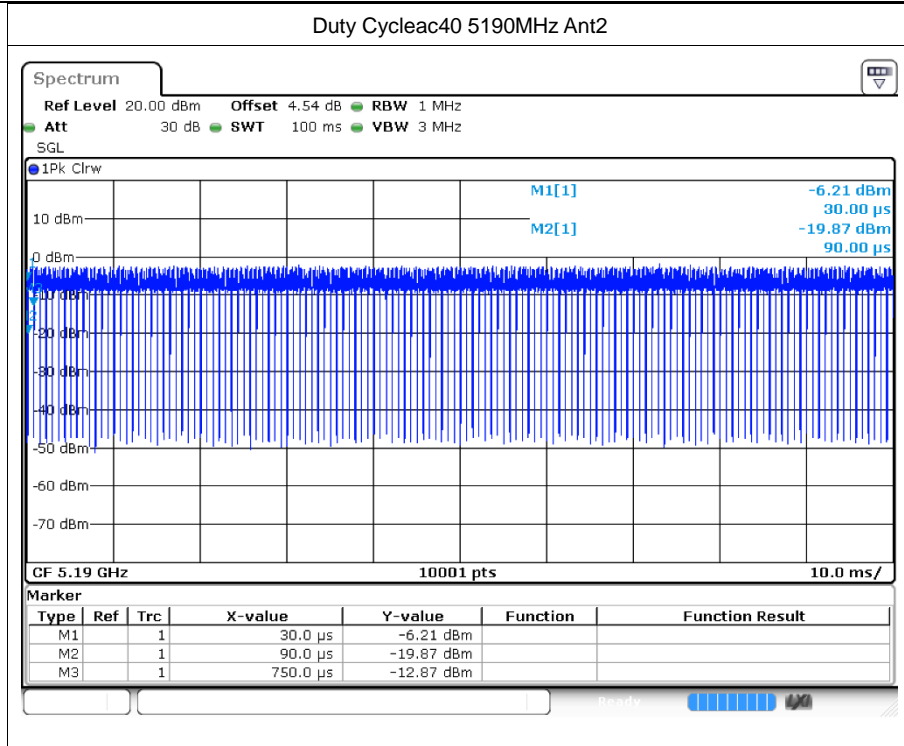


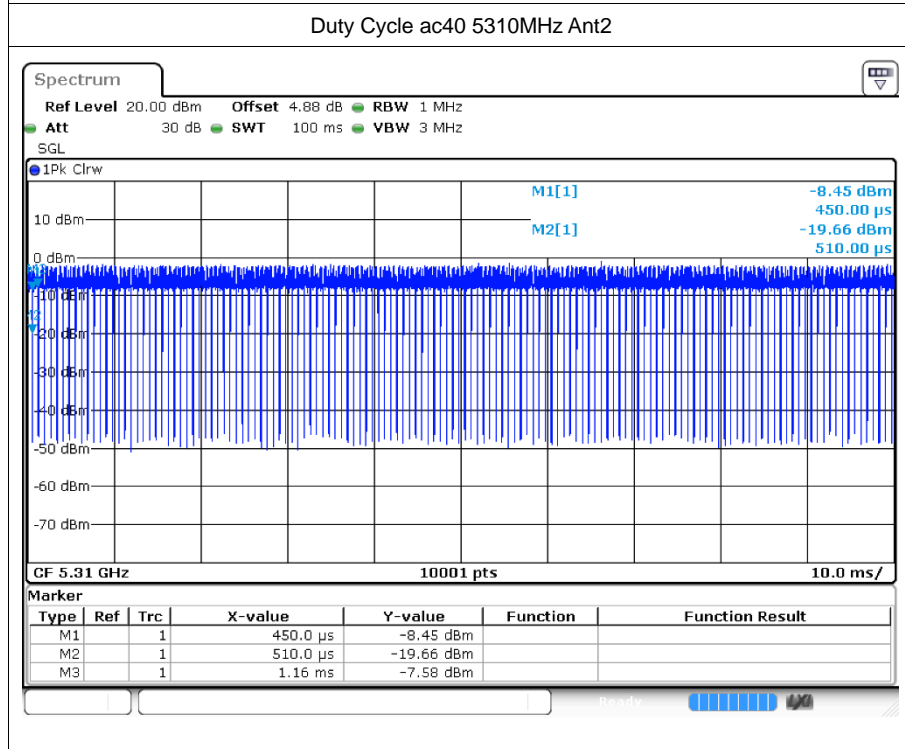
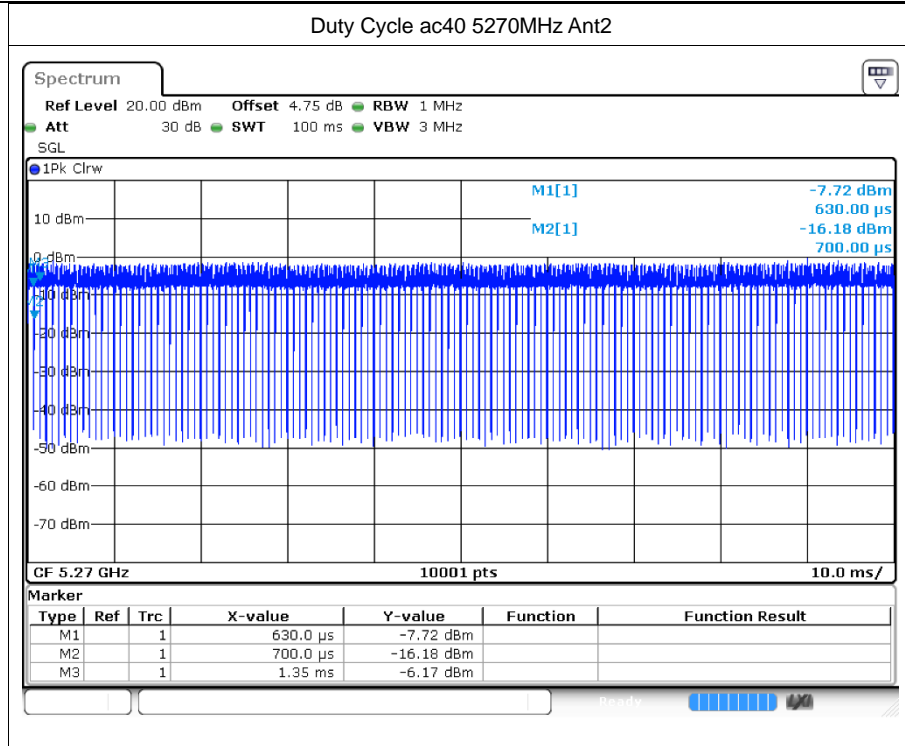


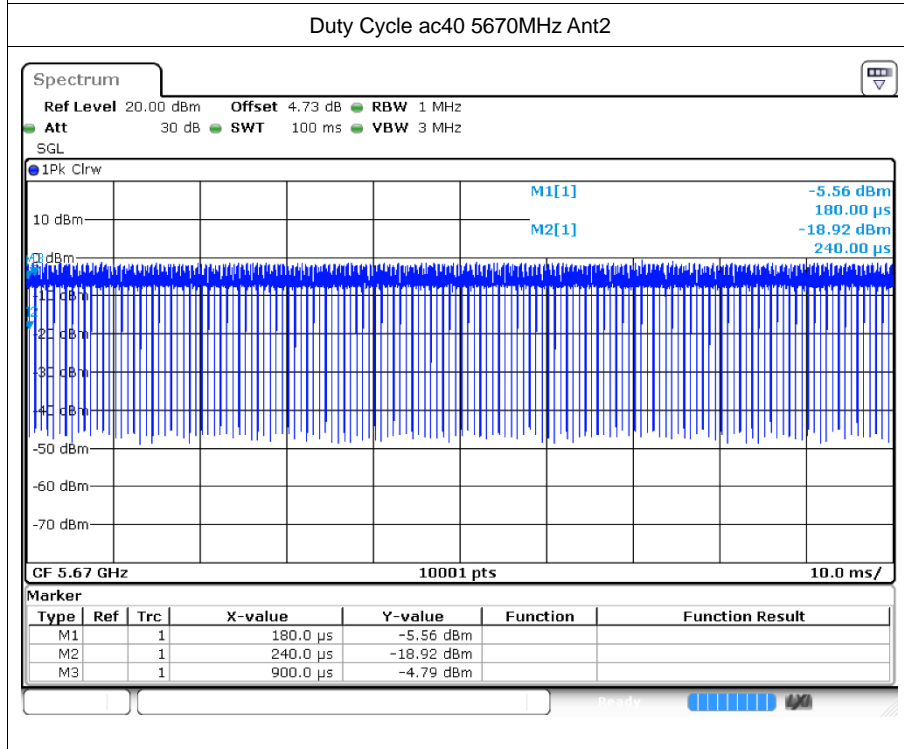
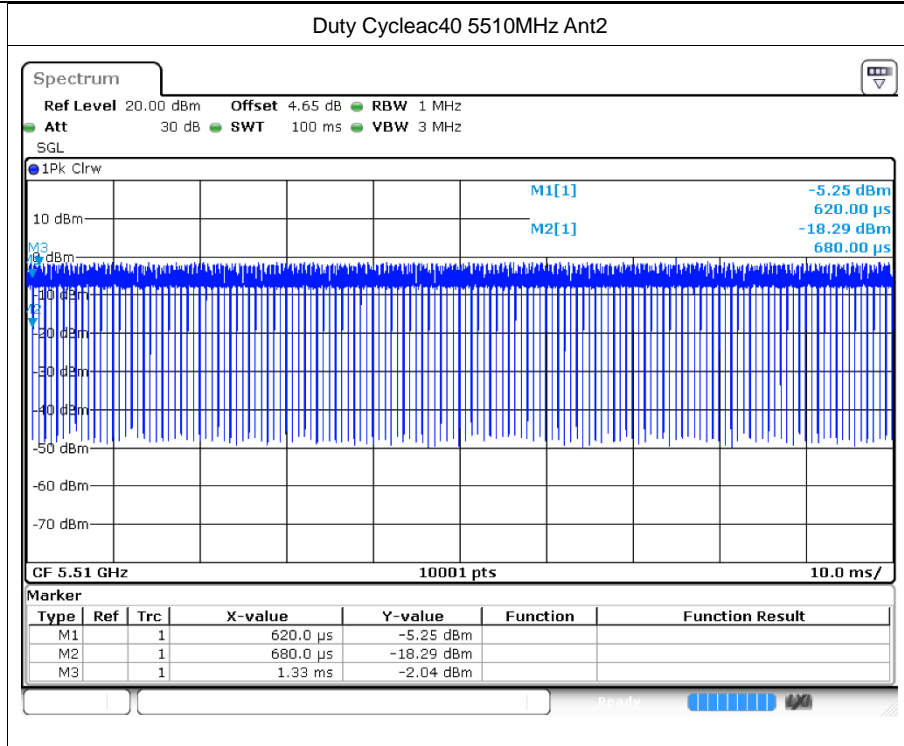


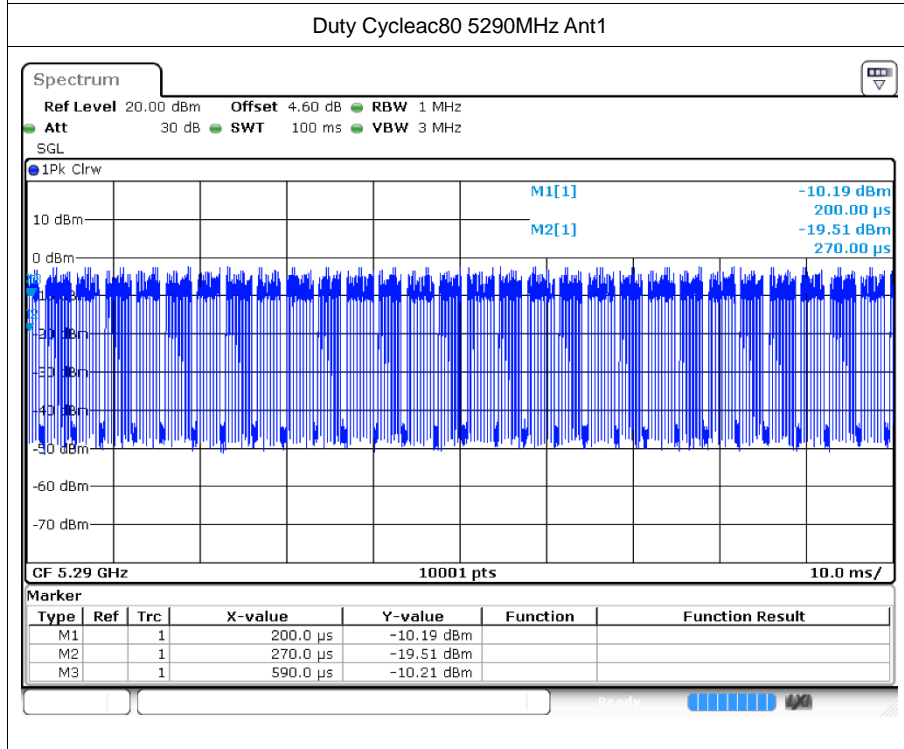
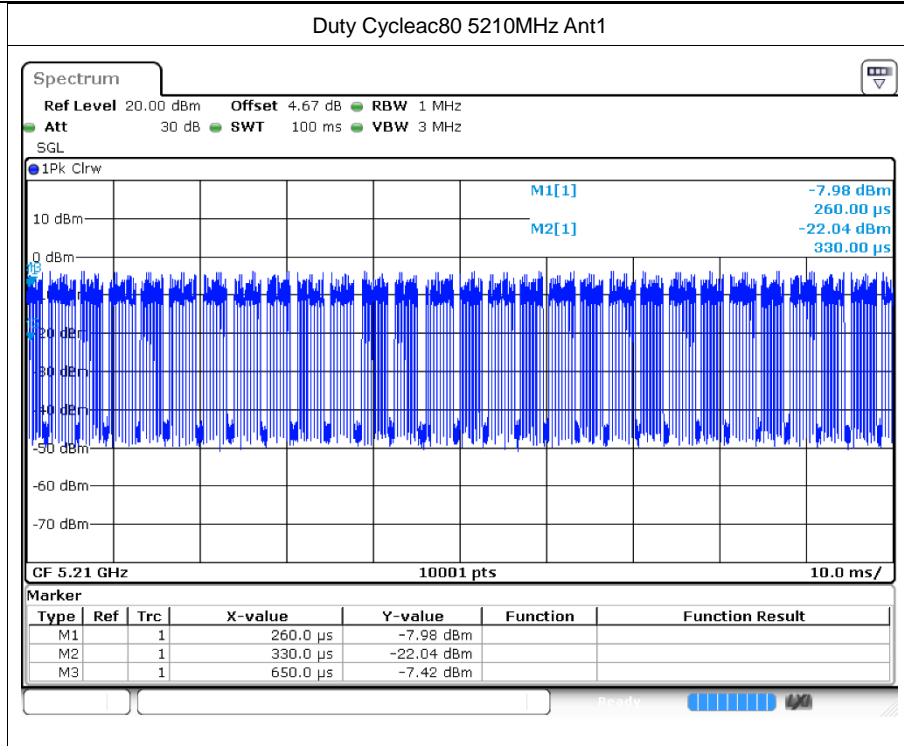




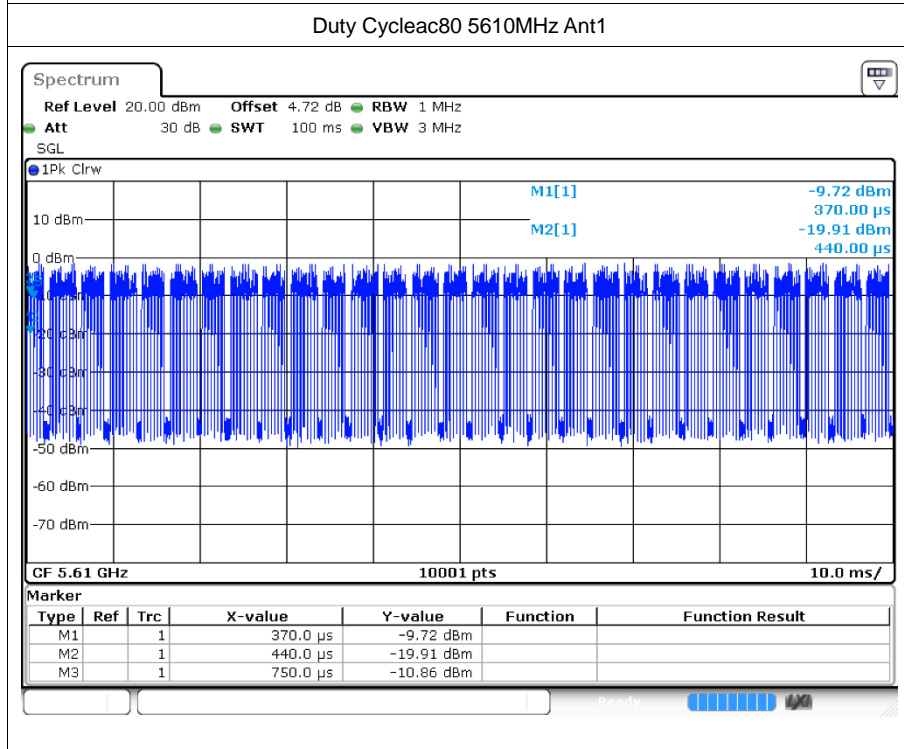
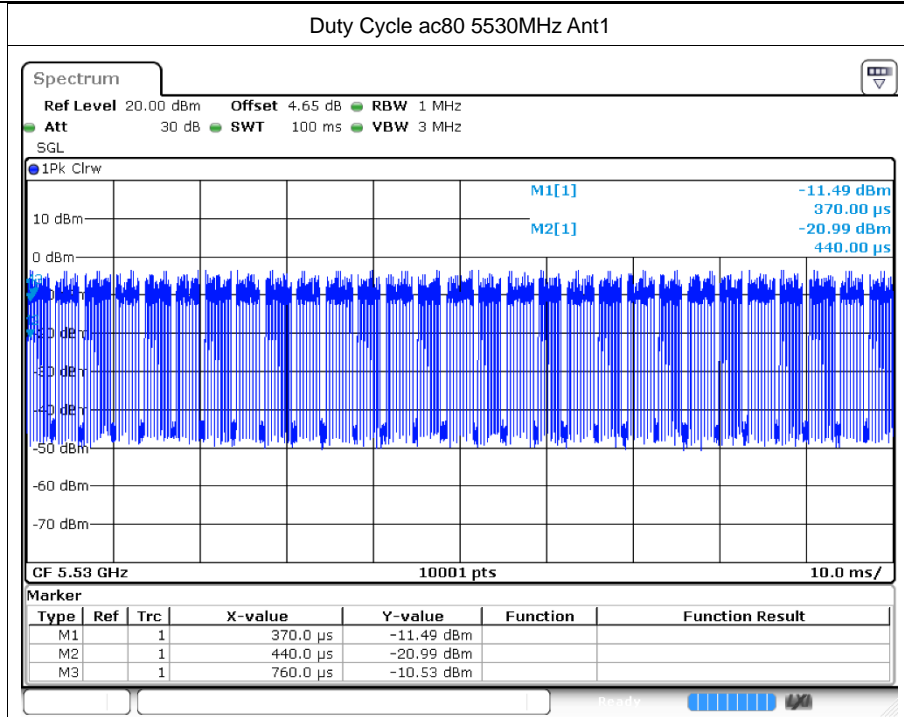


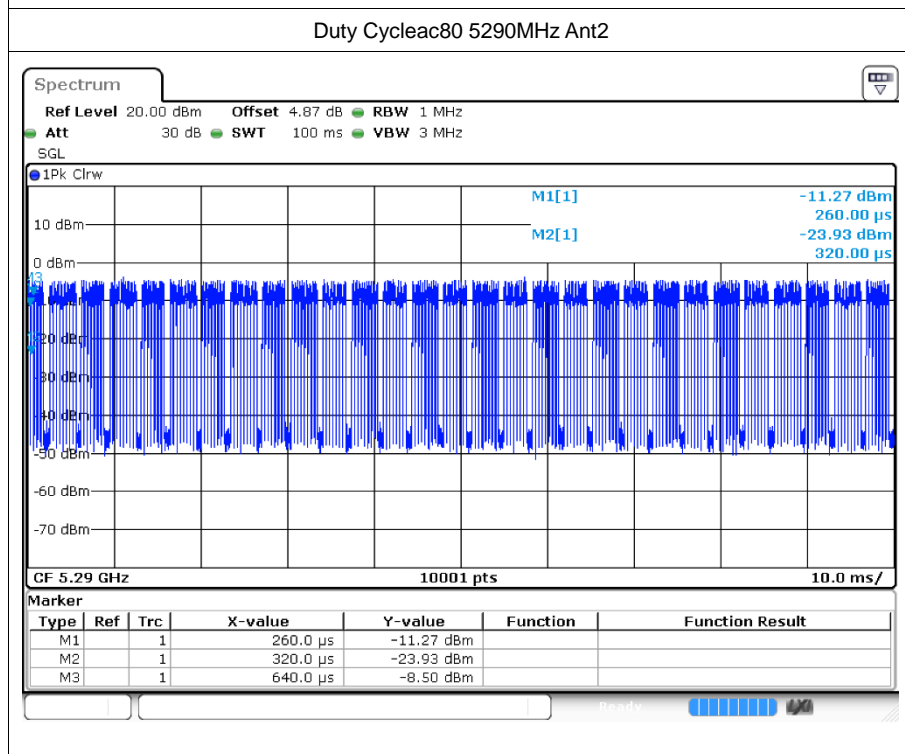
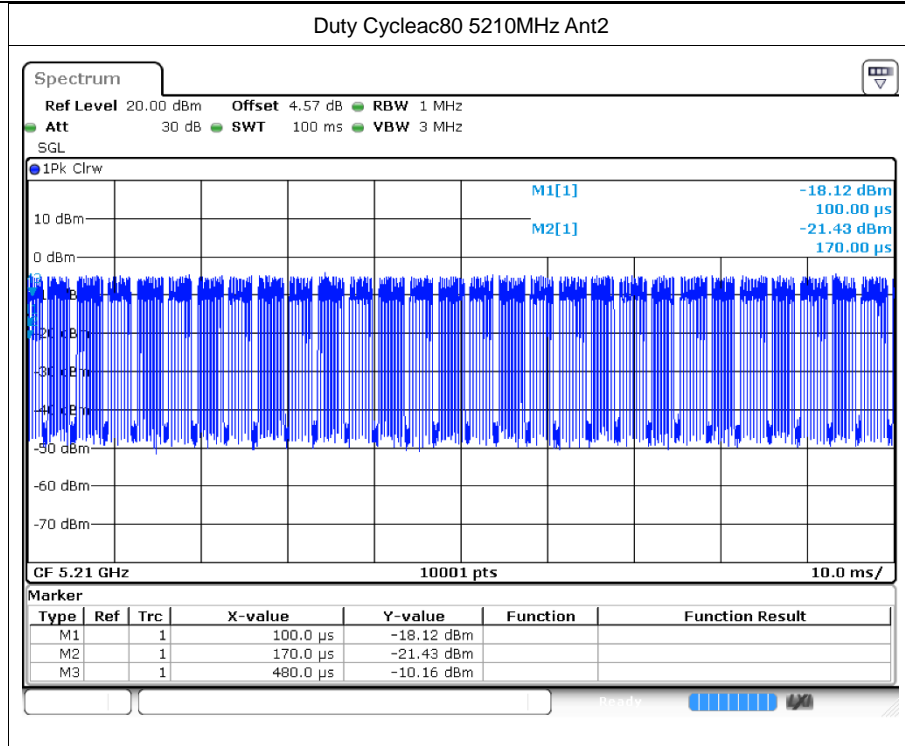


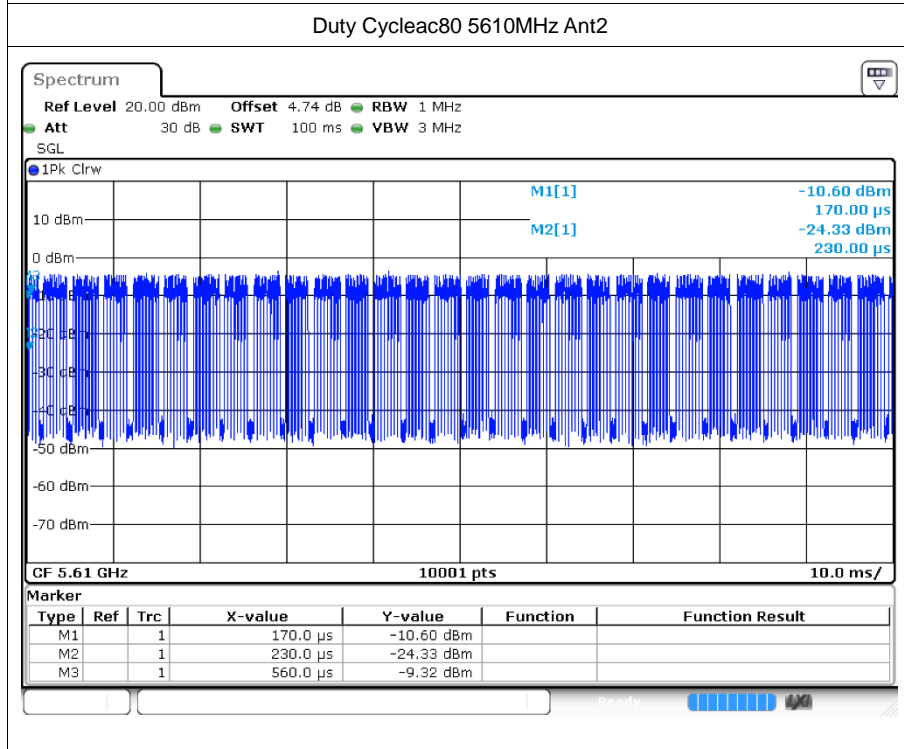
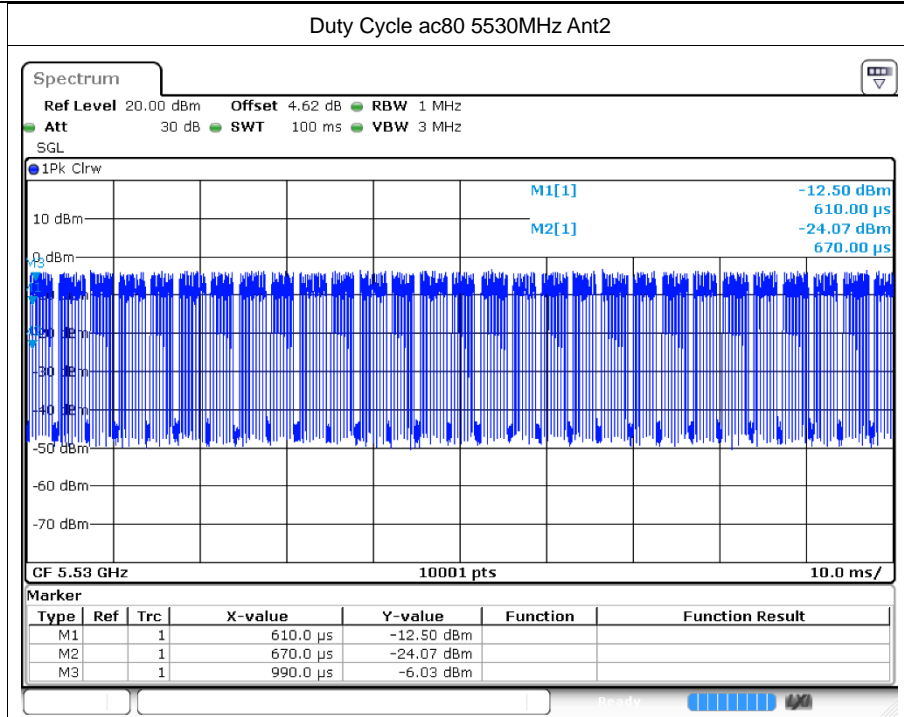












## 2 Maximum Conducted Output Power

### 2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
a	5180	Ant1	12.1	24	Pass
a	5200	Ant1	12.69	24	Pass
a	5240	Ant1	13.77	24	Pass
a	5260	Ant1	14.02	24	Pass
a	5280	Ant1	14.13	24	Pass
a	5320	Ant1	14.35	24	Pass
a	5500	Ant1	13.21	24	Pass
a	5600	Ant1	14.54	24	Pass
a	5700	Ant1	14.2	24	Pass
a	5180	Ant2	13.23	24	Pass
a	5200	Ant2	13.45	24	Pass
a	5240	Ant2	14.12	24	Pass
a	5260	Ant2	14.36	24	Pass
a	5280	Ant2	14.07	24	Pass
a	5320	Ant2	13.81	24	Pass
a	5500	Ant2	14.11	24	Pass
a	5600	Ant2	14.21	24	Pass
a	5700	Ant2	13.53	24	Pass
n20	5180	Ant1	8.42	24	Pass
n20	5180	Ant2	10.74	24	Pass
n20	5180	Sum	12.74	24	Pass
n20	5200	Ant1	8.82	24	Pass
n20	5200	Ant2	11.03	24	Pass
n20	5200	Sum	13.07	24	Pass
n20	5240	Ant1	10.25	24	Pass
n20	5240	Ant2	11.53	24	Pass
n20	5240	Sum	13.95	24	Pass
n20	5280	Ant1	10.61	24	Pass
n20	5280	Ant2	11.55	24	Pass
n20	5280	Sum	14.12	24	Pass
n20	5320	Ant1	10.87	24	Pass
n20	5320	Ant2	11.36	24	Pass
n20	5320	Sum	14.13	24	Pass
n20	5500	Ant1	9.58	24	Pass
n20	5500	Ant2	11.61	24	Pass
n20	5500	Sum	13.72	24	Pass



n20	5600	Ant1	11.04	24	Pass
n20	5600	Ant2	11.66	24	Pass
n20	5600	Sum	14.37	24	Pass
n20	5700	Ant1	10.74	24	Pass
n20	5700	Ant2	11.06	24	Pass
n20	5700	Sum	13.91	24	Pass
n40	5190	Ant1	8.84	24	Pass
n40	5190	Ant2	10.44	24	Pass
n40	5190	Sum	12.72	24	Pass
n40	5230	Ant1	9.73	24	Pass
n40	5230	Ant2	10.96	24	Pass
n40	5230	Sum	13.4	24	Pass
n40	5270	Ant1	10.66	24	Pass
n40	5270	Ant2	11.17	24	Pass
n40	5270	Sum	13.93	24	Pass
n40	5310	Ant1	10.52	24	Pass
n40	5310	Ant2	11.21	24	Pass
n40	5310	Sum	13.89	24	Pass
n40	5510	Ant1	9.83	24	Pass
n40	5510	Ant2	11.4	24	Pass
n40	5510	Sum	13.7	24	Pass
n40	5670	Ant1	10.75	24	Pass
n40	5670	Ant2	11.45	24	Pass
n40	5670	Sum	14.12	24	Pass
ac20	5180	Ant1	8.46	24	Pass
ac20	5180	Ant2	10.81	24	Pass
ac20	5180	Sum	12.8	24	Pass
ac20	5200	Ant1	9.06	24	Pass
ac20	5200	Ant2	10.9	24	Pass
ac20	5200	Sum	13.09	24	Pass
ac20	5240	Ant1	10.28	24	Pass
ac20	5240	Ant2	11.64	24	Pass
ac20	5240	Sum	14.02	24	Pass
ac20	5280	Ant1	10.78	24	Pass
ac20	5280	Ant2	11.62	24	Pass
ac20	5280	Sum	14.23	24	Pass
ac20	5320	Ant1	10.79	24	Pass
ac20	5320	Ant2	11.36	24	Pass
ac20	5320	Sum	14.09	24	Pass
ac20	5500	Ant1	9.77	24	Pass
ac20	5500	Ant2	11.5	24	Pass
ac20	5500	Sum	13.73	24	Pass
ac20	5600	Ant1	11.14	24	Pass



ac20	5600	Ant2	11.83	24	Pass
ac20	5600	Sum	14.51	24	Pass
ac20	5700	Ant1	10.78	24	Pass
ac20	5700	Ant2	11.17	24	Pass
ac20	5700	Sum	13.99	24	Pass
ac40	5190	Ant1	8.77	24	Pass
ac40	5190	Ant2	10.52	24	Pass
ac40	5190	Sum	12.74	24	Pass
ac40	5230	Ant1	9.61	24	Pass
ac40	5230	Ant2	11	24	Pass
ac40	5230	Sum	13.37	24	Pass
ac40	5270	Ant1	10.56	24	Pass
ac40	5270	Ant2	11.46	24	Pass
ac40	5270	Sum	14.04	24	Pass
ac40	5310	Ant1	10.55	24	Pass
ac40	5310	Ant2	11.1	24	Pass
ac40	5310	Sum	13.84	24	Pass
ac40	5510	Ant1	9.82	24	Pass
ac40	5510	Ant2	11.44	24	Pass
ac40	5510	Sum	13.72	24	Pass
ac40	5670	Ant1	10.73	24	Pass
ac40	5670	Ant2	11.59	24	Pass
ac40	5670	Sum	14.19	24	Pass
ac80	5210	Ant1	9.9	24	Pass
ac80	5210	Ant2	10.84	24	Pass
ac80	5210	Sum	13.41	24	Pass
ac80	5290	Ant1	10.94	24	Pass
ac80	5290	Ant2	11.57	24	Pass
ac80	5290	Sum	14.28	24	Pass
ac80	5530	Ant1	9.69	24	Pass
ac80	5530	Ant2	12.43	24	Pass
ac80	5530	Sum	14.28	24	Pass
ac80	5610	Ant1	11.79	24	Pass
ac80	5610	Ant2	11.79	24	Pass
ac80	5610	Sum	14.8	24	Pass



### 3 -26dB Bandwidth

#### 3.1 Test Result

Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
a	5180	Ant1	20.193	0.5	Pass
a	5200	Ant1	18.933	0.5	Pass
a	5240	Ant1	19.653	0.5	Pass
a	5260	Ant1	19.506	0.5	Pass
a	5280	Ant1	19.455	0.5	Pass
a	5320	Ant1	19.32	0.5	Pass
a	5500	Ant1	20.031	0.5	Pass
a	5600	Ant1	20.085	0.5	Pass
a	5700	Ant1	20.016	0.5	Pass
n20	5180	Ant1	19.881	0.5	Pass
n20	5200	Ant1	20.178	0.5	Pass
n20	5240	Ant1	20.061	0.5	Pass
n20	5280	Ant1	20.112	0.5	Pass
n20	5320	Ant1	19.794	0.5	Pass
n20	5500	Ant1	19.893	0.5	Pass
n20	5600	Ant1	19.944	0.5	Pass
n20	5700	Ant1	19.974	0.5	Pass
n40	5190	Ant1	39.51	0.5	Pass
n40	5230	Ant1	39.648	0.5	Pass
n40	5270	Ant1	39.564	0.5	Pass
n40	5310	Ant1	39.372	0.5	Pass
n40	5510	Ant1	39.822	0.5	Pass
n40	5670	Ant1	39.852	0.5	Pass
ac20	5180	Ant1	20.172	0.5	Pass
ac20	5200	Ant1	19.833	0.5	Pass
ac20	5240	Ant1	19.998	0.5	Pass
ac20	5260	Ant1	20.109	0.5	Pass
ac20	5280	Ant1	19.956	0.5	Pass
ac20	5320	Ant1	20.136	0.5	Pass
ac20	5500	Ant1	19.953	0.5	Pass
ac20	5600	Ant1	19.932	0.5	Pass
ac20	5700	Ant1	20.13	0.5	Pass
ac40	5190	Ant1	39.57	0.5	Pass
ac40	5230	Ant1	39.3	0.5	Pass
ac40	5270	Ant1	39.63	0.5	Pass
ac40	5310	Ant1	39.654	0.5	Pass
ac40	5510	Ant1	39.624	0.5	Pass



ac40	5670	Ant1	39.69	0.5	Pass
ac80	5210	Ant1	79.188	0.5	Pass
ac80	5290	Ant1	79.776	0.5	Pass
ac80	5530	Ant1	79.944	0.5	Pass
ac80	5610	Ant1	80.328	0.5	Pass
a	5180	Ant2	19.443	0.5	Pass
a	5200	Ant2	19.722	0.5	Pass
a	5240	Ant2	20.019	0.5	Pass
a	5260	Ant2	19.992	0.5	Pass
a	5280	Ant2	19.683	0.5	Pass
a	5320	Ant2	19.653	0.5	Pass
a	5500	Ant2	19.887	0.5	Pass
a	5600	Ant2	19.923	0.5	Pass
a	5700	Ant2	19.809	0.5	Pass
n20	5180	Ant2	19.377	0.5	Pass
n20	5200	Ant2	19.797	0.5	Pass
n20	5240	Ant2	19.701	0.5	Pass
n20	5280	Ant2	19.608	0.5	Pass
n20	5320	Ant2	19.863	0.5	Pass
n20	5500	Ant2	19.587	0.5	Pass
n20	5600	Ant2	19.77	0.5	Pass
n20	5700	Ant2	19.542	0.5	Pass
n40	5190	Ant2	38.988	0.5	Pass
n40	5230	Ant2	39.252	0.5	Pass
n40	5270	Ant2	38.844	0.5	Pass
n40	5310	Ant2	39.138	0.5	Pass
n40	5510	Ant2	39.102	0.5	Pass
n40	5670	Ant2	39.738	0.5	Pass
ac20	5180	Ant2	19.74	0.5	Pass
ac20	5200	Ant2	19.428	0.5	Pass
ac20	5240	Ant2	19.779	0.5	Pass
ac20	5260	Ant2	19.704	0.5	Pass
ac20	5280	Ant2	19.674	0.5	Pass
ac20	5320	Ant2	19.65	0.5	Pass
ac20	5500	Ant2	19.722	0.5	Pass
ac20	5600	Ant2	19.986	0.5	Pass
ac20	5700	Ant2	19.551	0.5	Pass
ac40	5190	Ant2	39.546	0.5	Pass
ac40	5230	Ant2	39.306	0.5	Pass
ac40	5270	Ant2	39.36	0.5	Pass
ac40	5310	Ant2	39.216	0.5	Pass
ac40	5510	Ant2	39.342	0.5	Pass
ac40	5670	Ant2	39.75	0.5	Pass

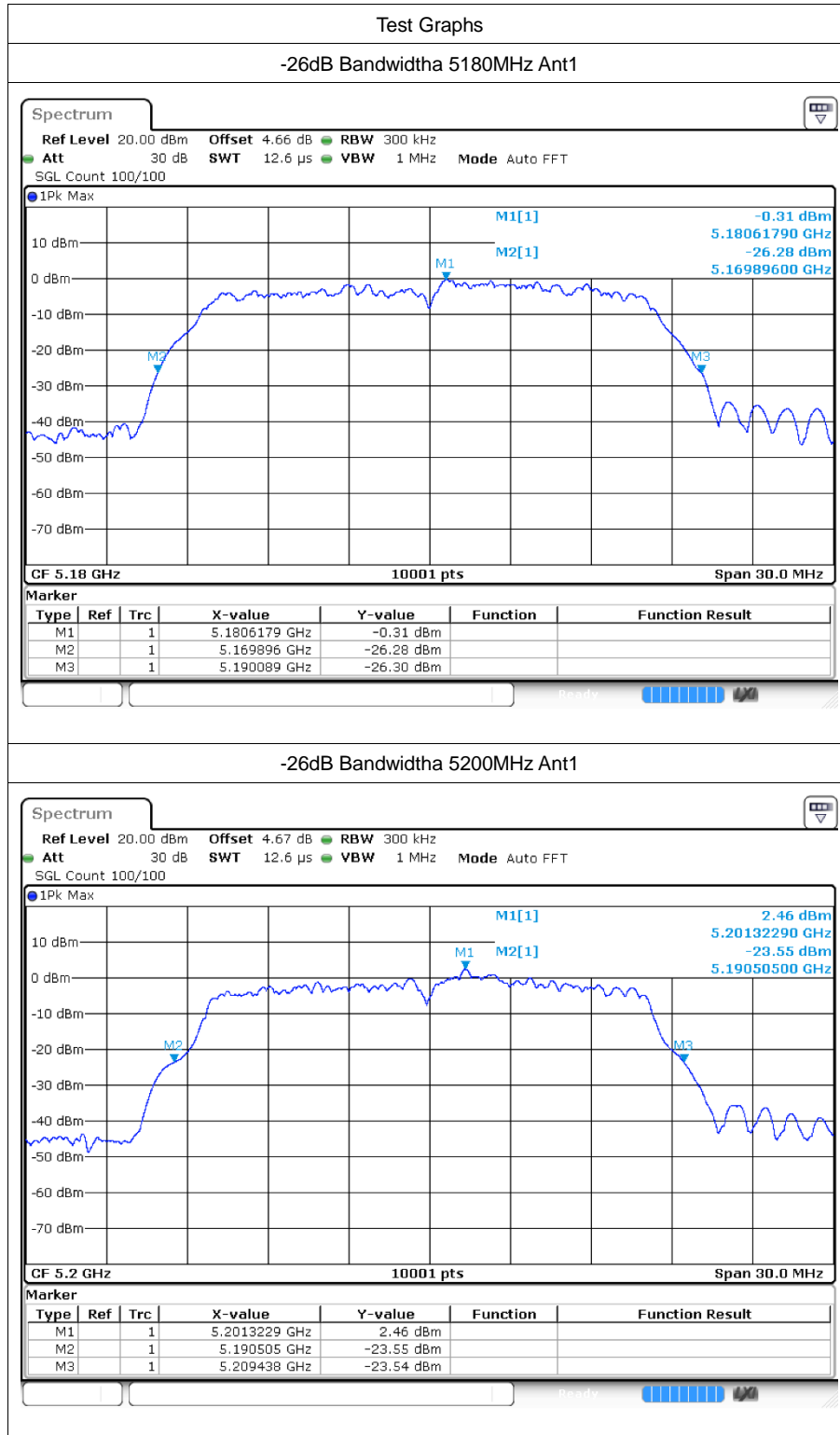




ac80	5210	Ant2	78.288	0.5	Pass
ac80	5290	Ant2	78.396	0.5	Pass
ac80	5530	Ant2	78.132	0.5	Pass
ac80	5610	Ant2	78.516	0.5	Pass

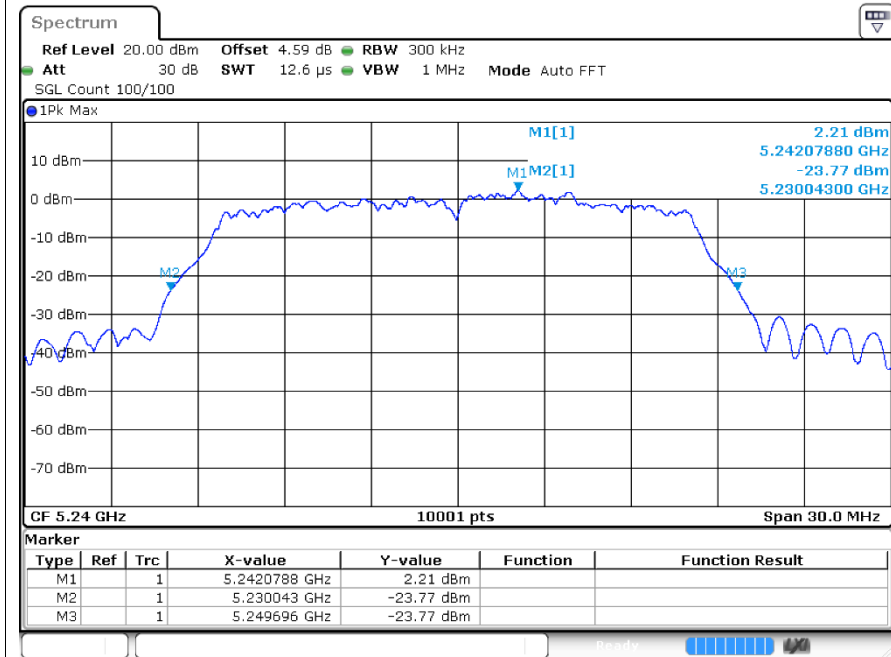


### 3.2 Test Graphs

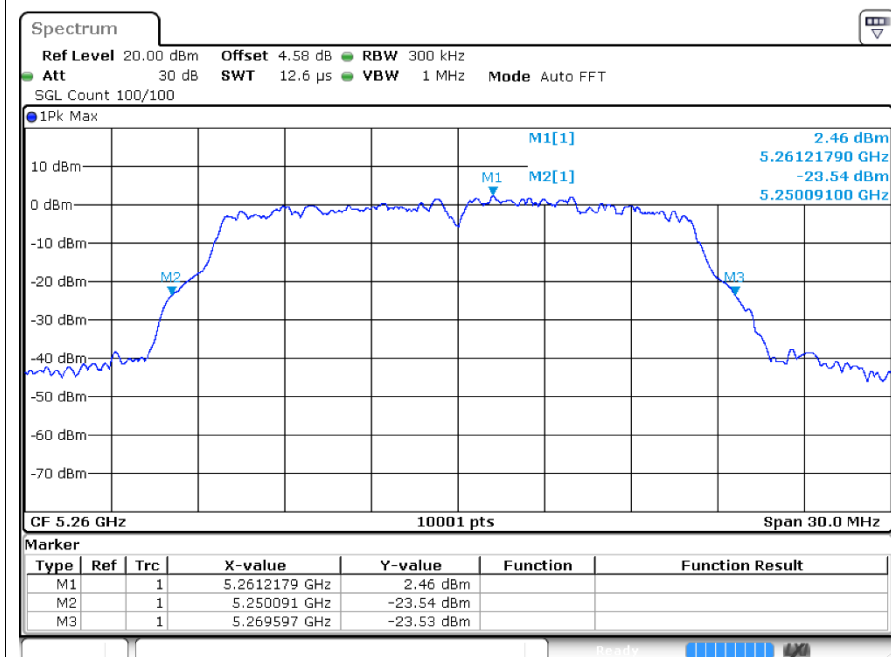




-26dB Bandwidtha 5240MHz Ant1

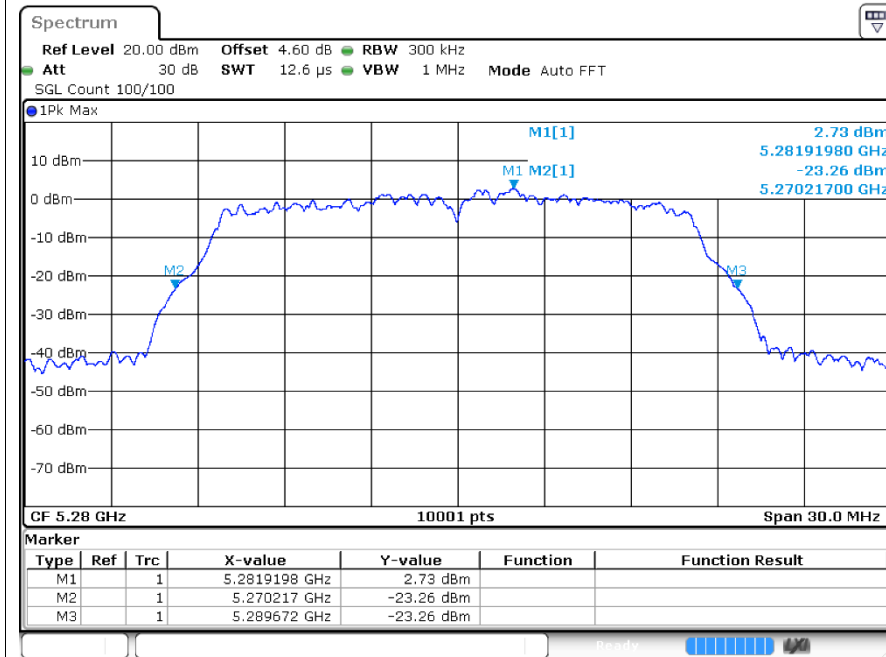


-26dB Bandwidtha 5260MHz Ant1

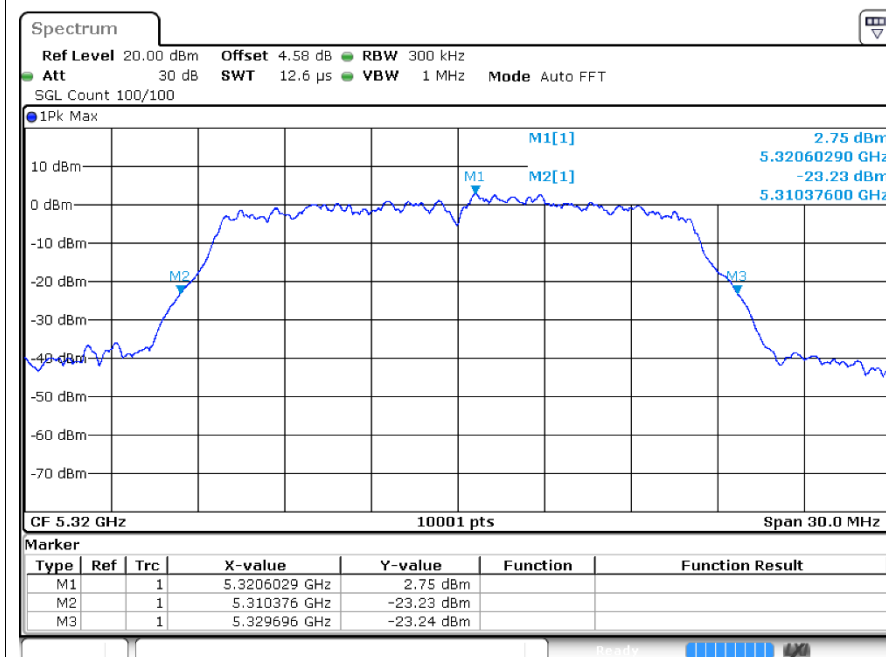




-26dB Bandwidth a 5280MHz Ant1

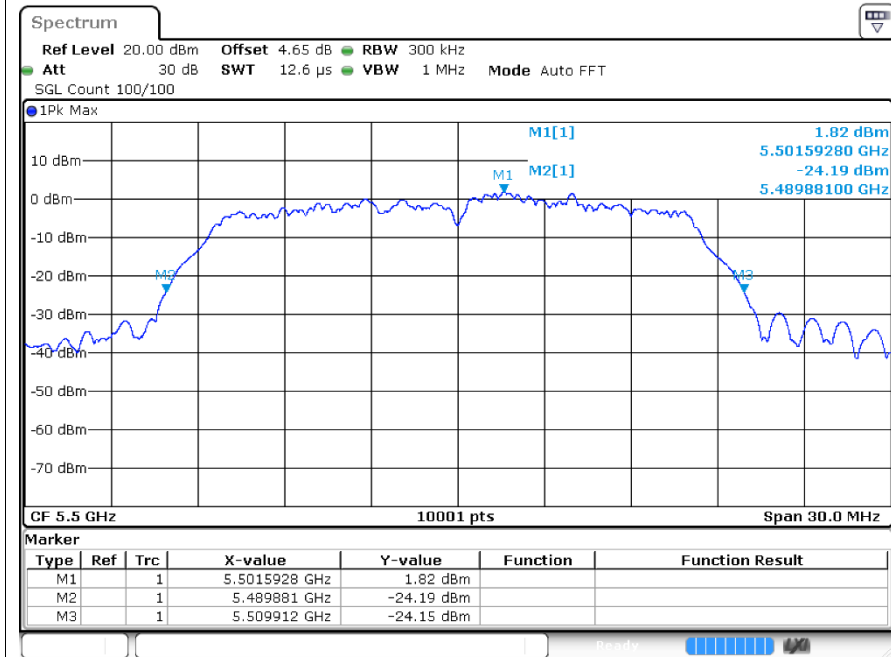


-26dB Bandwidth a 5320MHz Ant1

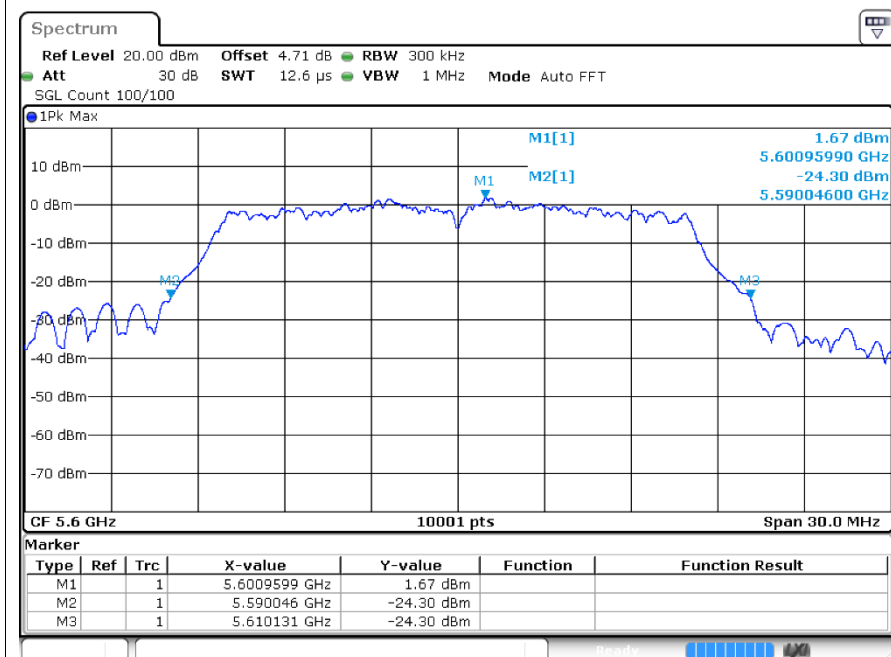


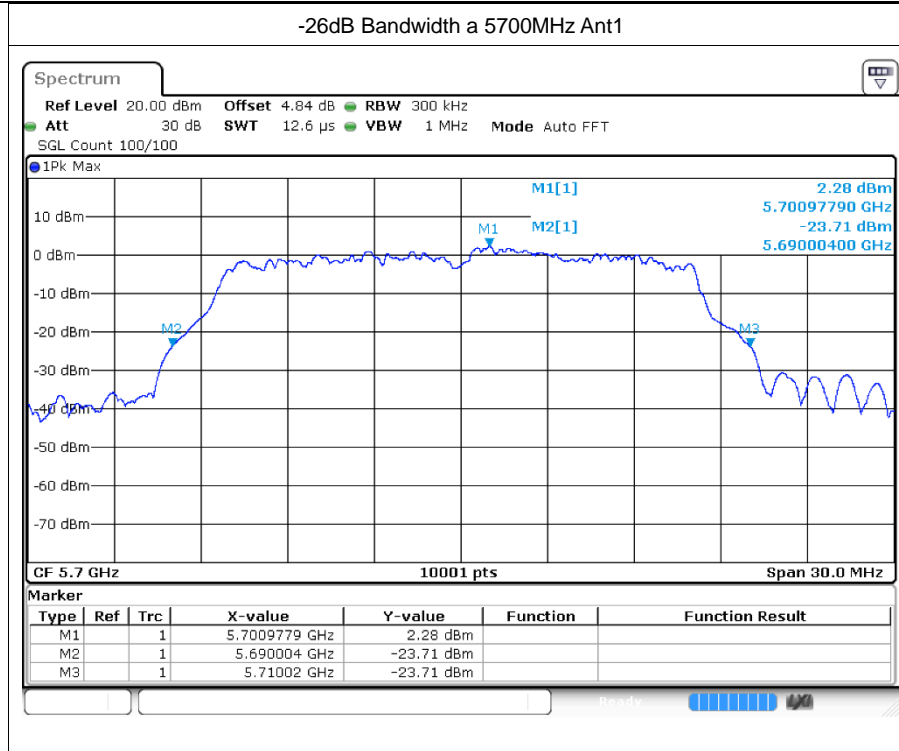


-26dB Bandwidtha 5500MHz Ant1



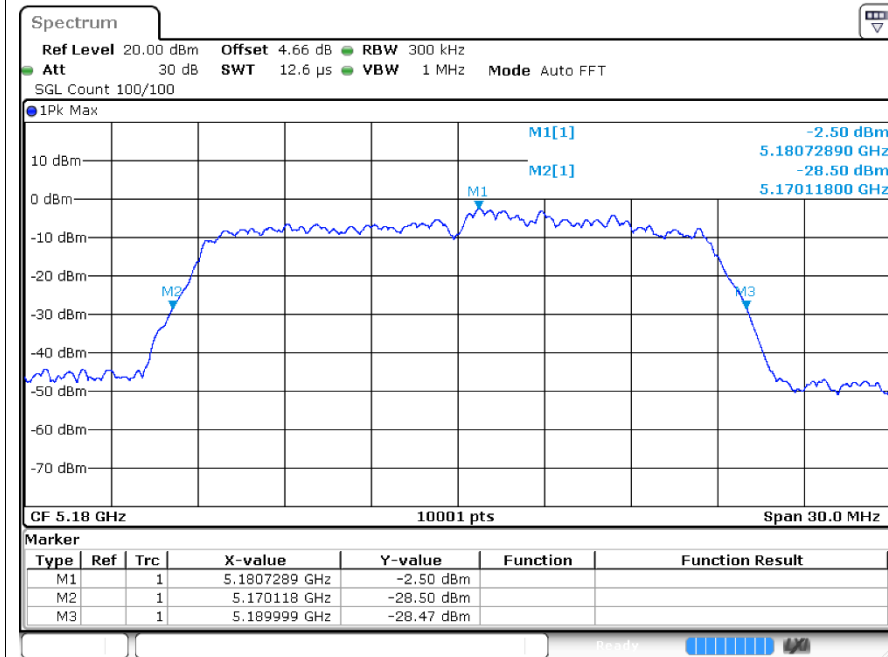
-26dB Bandwidtha 5600MHz Ant1



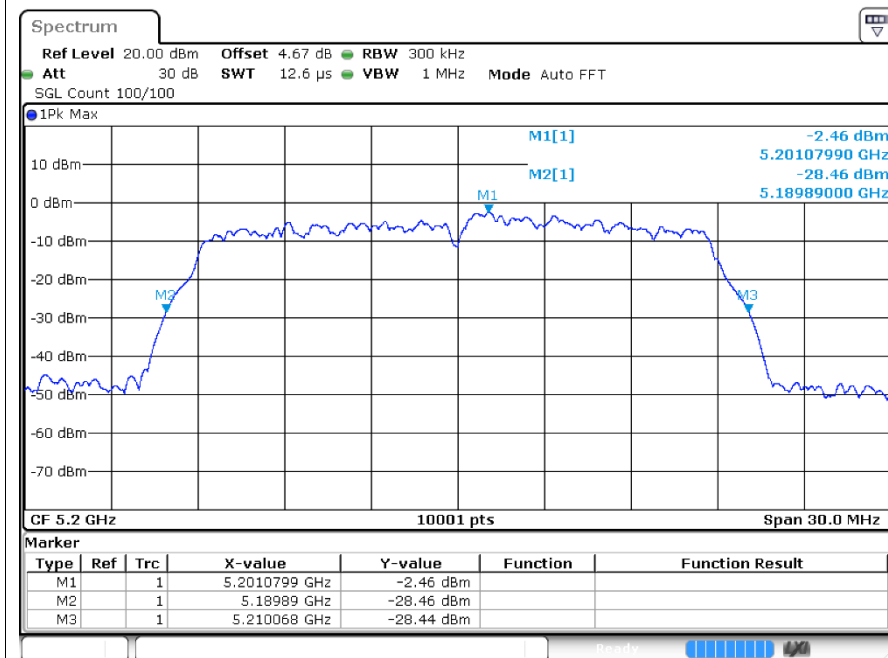




-26dB Bandwidth n20 5180MHz Ant1

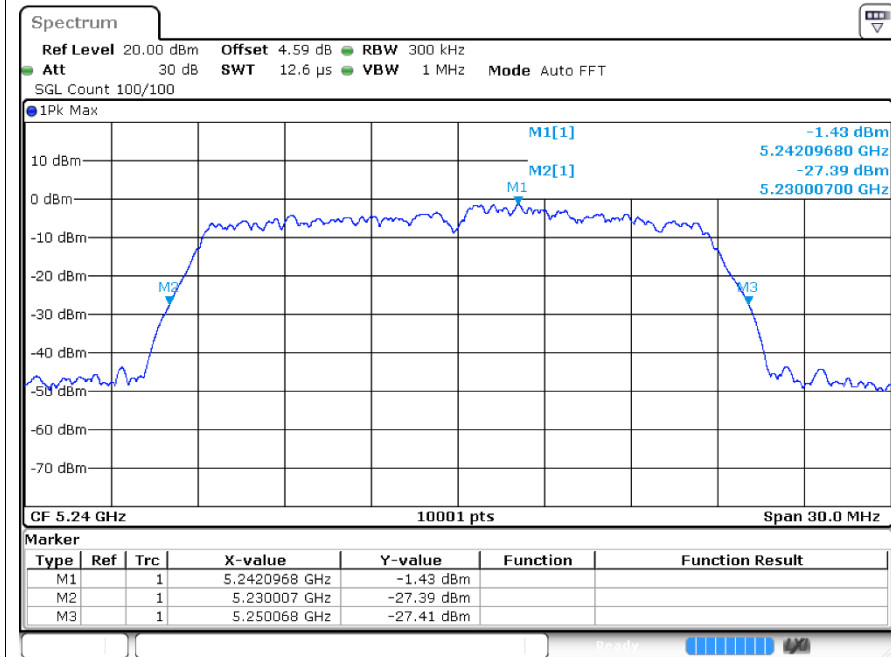


-26dB Bandwidth n20 5200MHz Ant1





-26dB Bandwidth n20 5240MHz Ant1



-26dB Bandwidth n20 5260MHz Ant1

