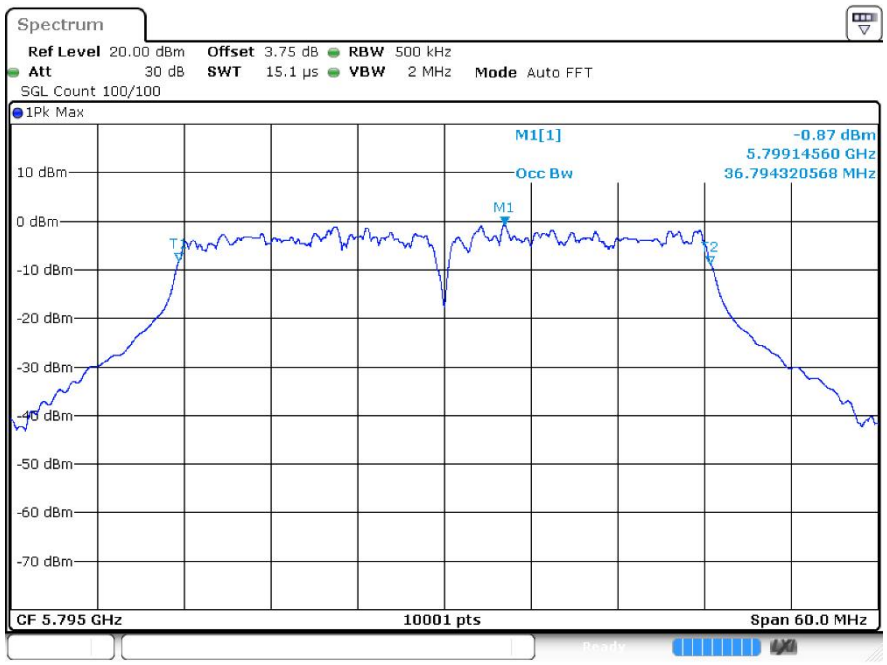
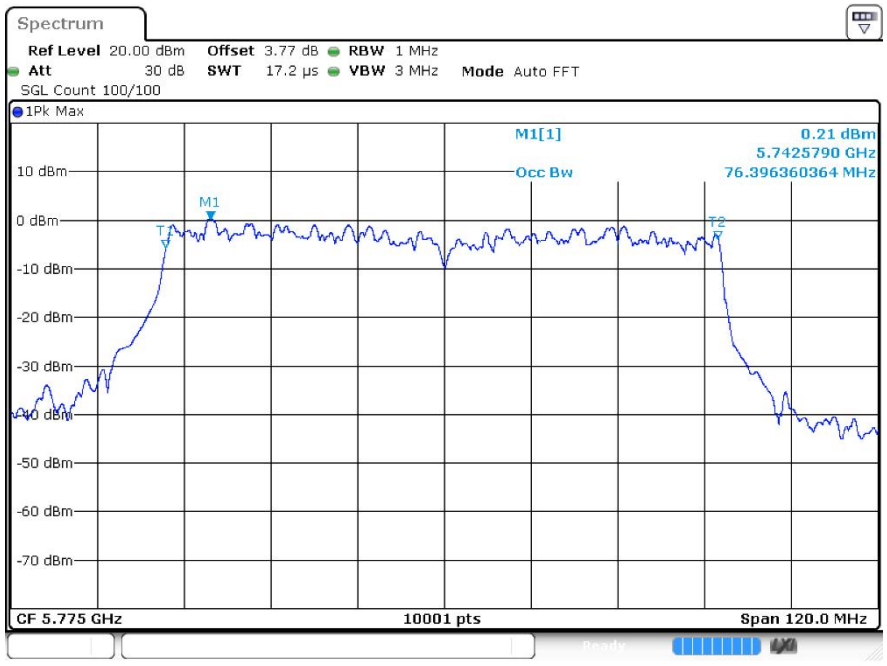
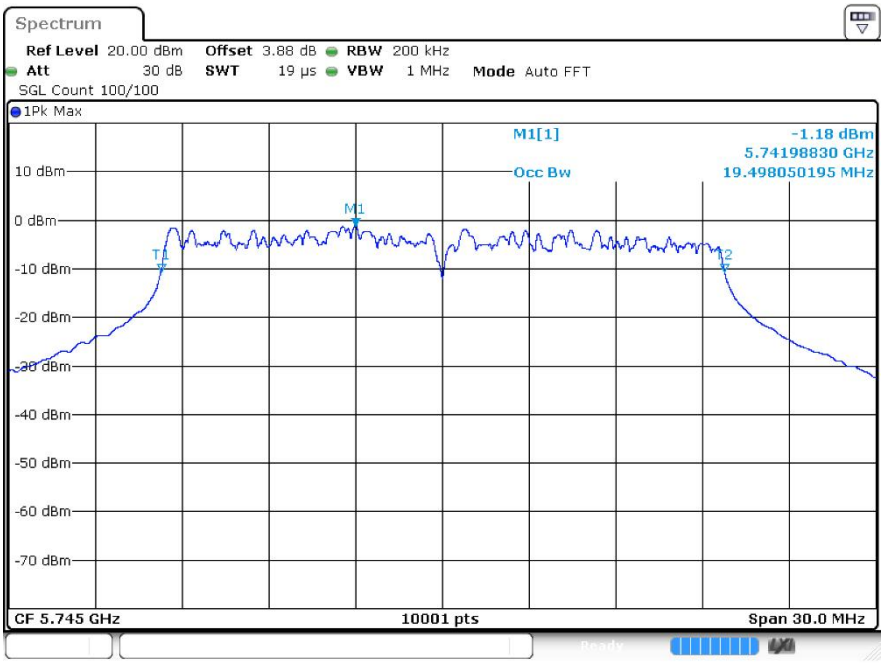
OBW ac40 5795MHz Ant1



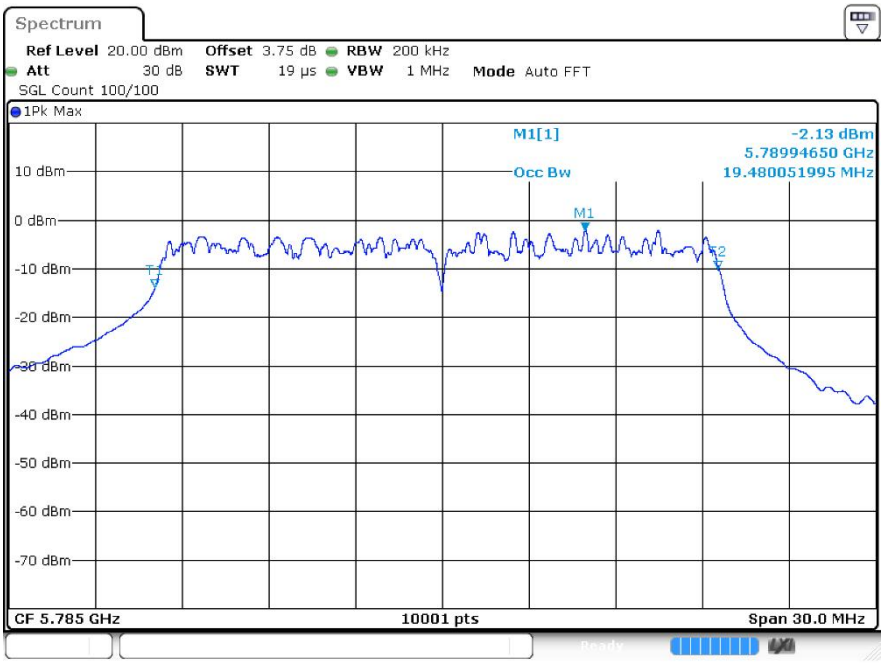
OBW ac80 5775MHz Ant1



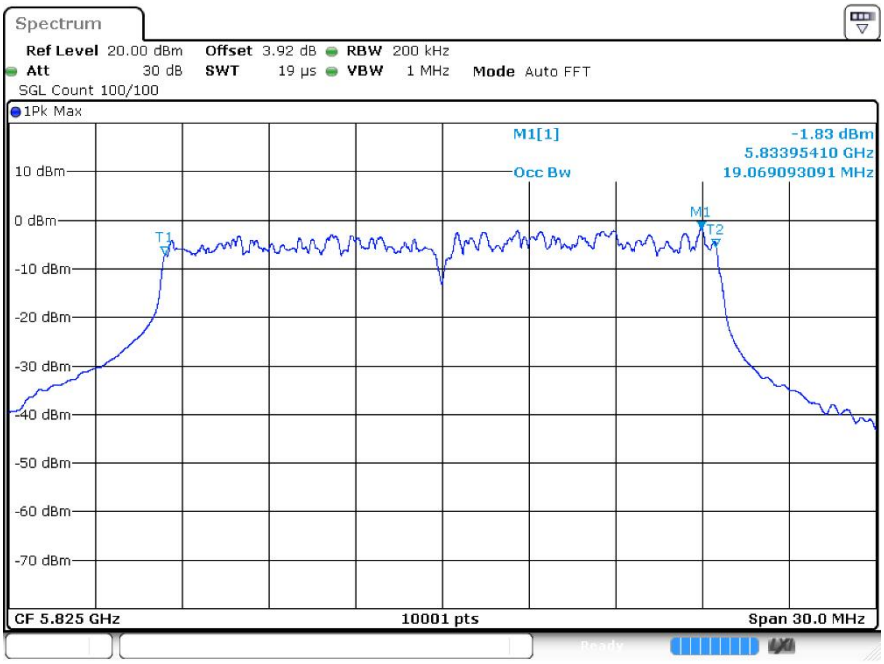
OBW ax20 5745MHz Ant1



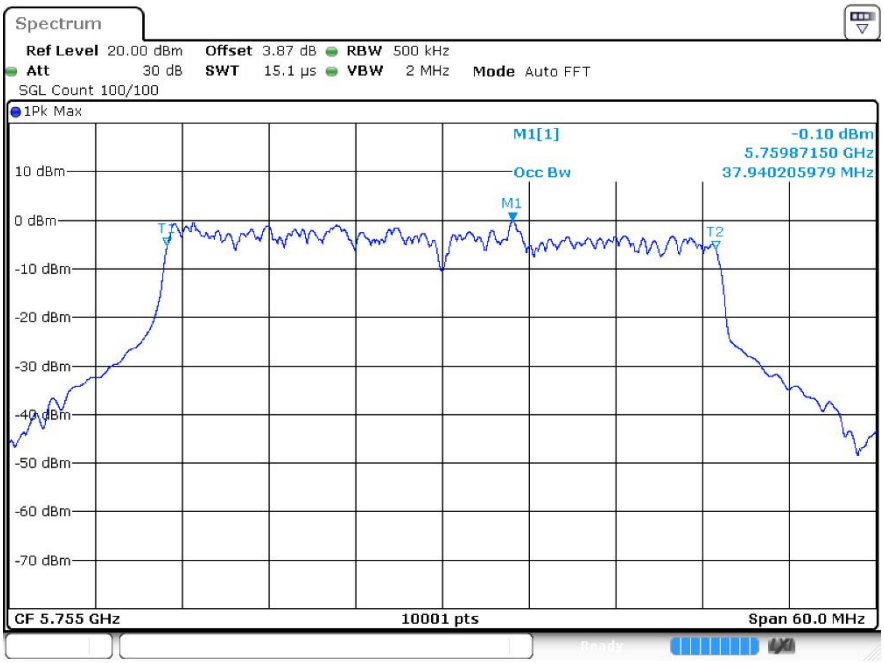
OBW ax20 5785MHz Ant1



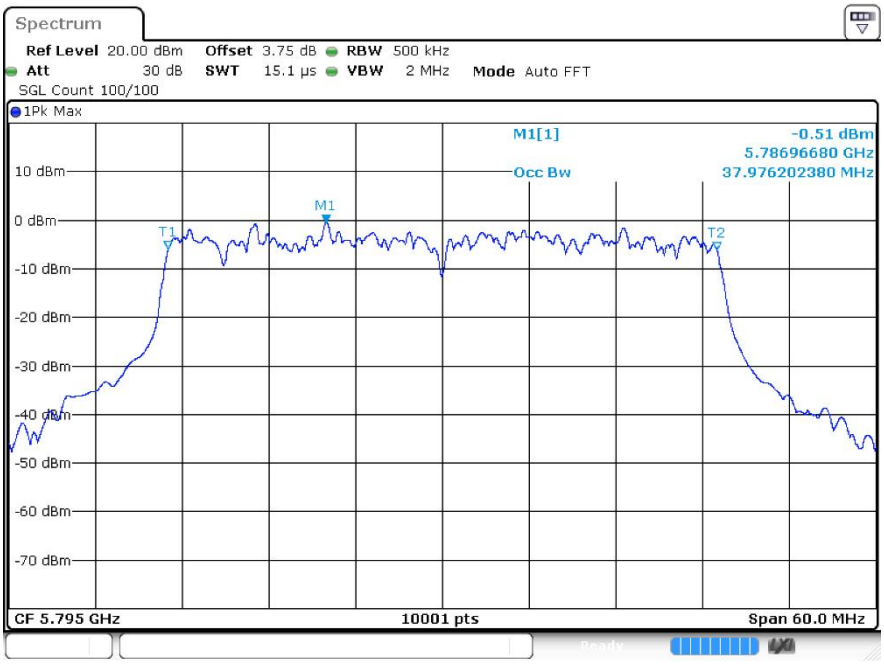
OBW ax20 5825MHz Ant1



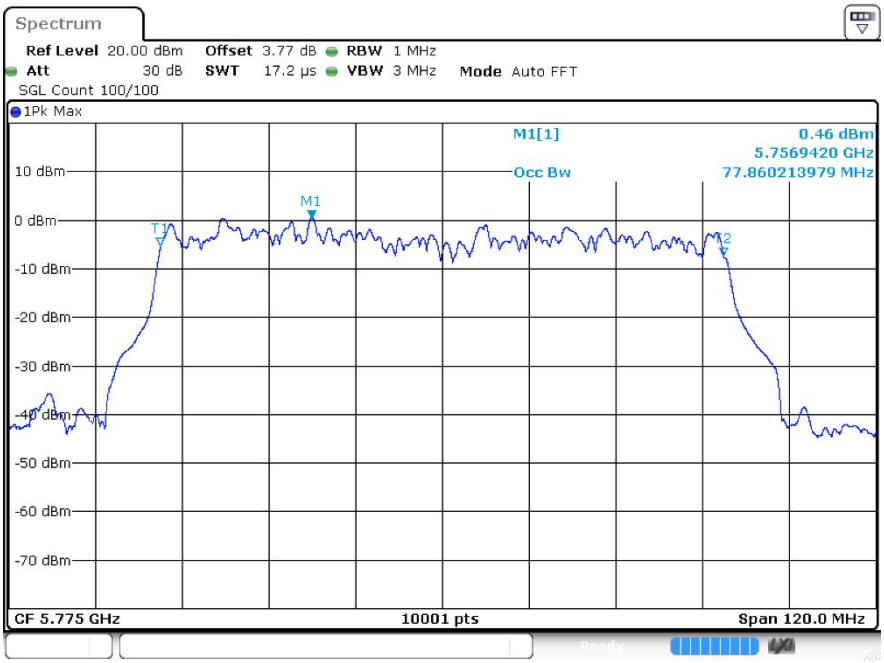
OBW ax40 5755MHz Ant1



OBW ax40 5795MHz Ant1



OBW ax80 5775MHz Ant1



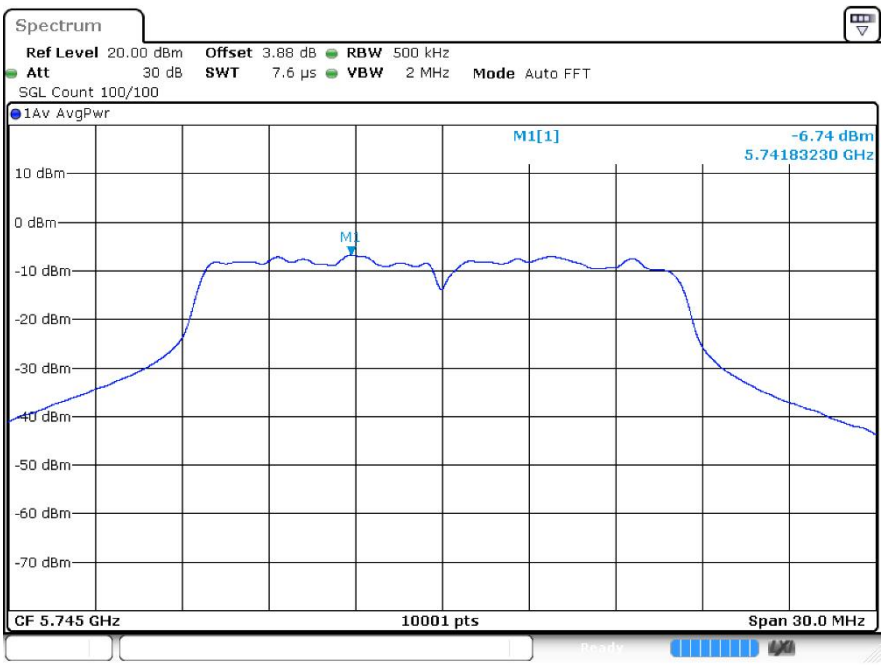
5 Maximum Power Spectral Density Level

5.1 Test Result

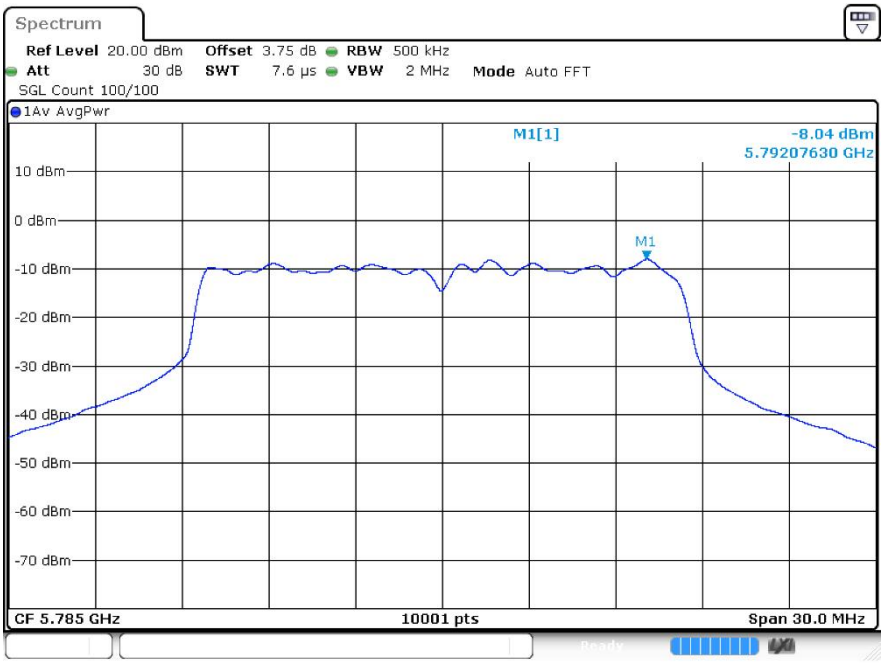
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
a	5745	Ant1	-6.74	6.27	-0.47	30	Pass
a	5785	Ant1	-8.04	5.85	-2.19	30	Pass
a	5825	Ant1	-7.24	5.69	-1.55	30	Pass
n20	5745	Ant1	-7.29	4.7	-2.59	30	Pass
n20	5785	Ant1	-8.59	5.14	-3.45	30	Pass
n20	5825	Ant1	-7.96	5.05	-2.91	30	Pass
n40	5755	Ant1	-9.25	5.15	-4.1	30	Pass
n40	5795	Ant1	-11.29	4.64	-6.65	30	Pass
ac20	5745	Ant1	-6.89	4.77	-2.12	30	Pass
ac20	5785	Ant1	-8.81	5.12	-3.69	30	Pass
ac20	5825	Ant1	-7.82	4.68	-3.14	30	Pass
ac40	5755	Ant1	-10.7	4.88	-5.82	30	Pass
ac40	5795	Ant1	-11.34	5.02	-6.32	30	Pass
ac80	5775	Ant1	-13.79	4.99	-8.8	30	Pass
ax20	5745	Ant1	-8.6	5.65	-2.95	30	Pass
ax20	5785	Ant1	-10.11	5.65	-4.46	30	Pass
ax20	5825	Ant1	-9.22	5.61	-3.61	30	Pass
ax40	5755	Ant1	-12.13	5.66	-6.47	30	Pass
ax40	5795	Ant1	-13.32	5.23	-8.09	30	Pass
ax80	5775	Ant1	-15.95	5.86	-10.09	30	Pass

5.2 Test Graphs

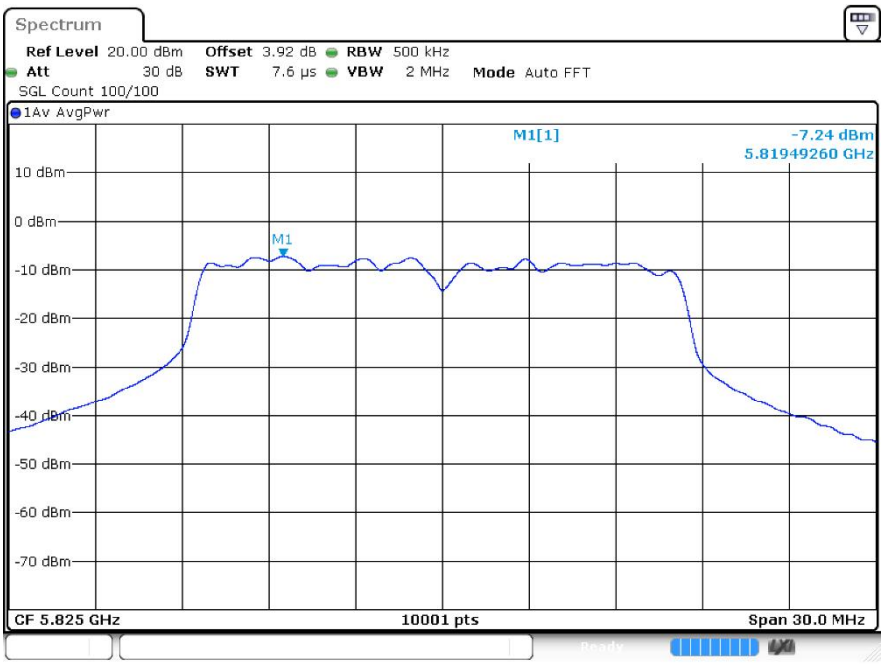
Test Graphs
PSD a 5745MHz Ant1



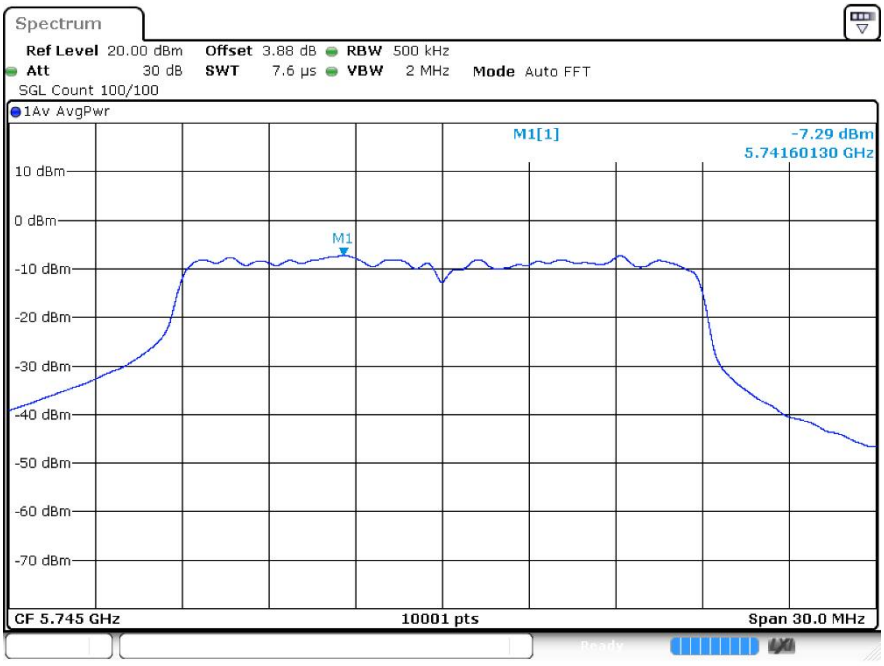
PSD a 5785MHz Ant1



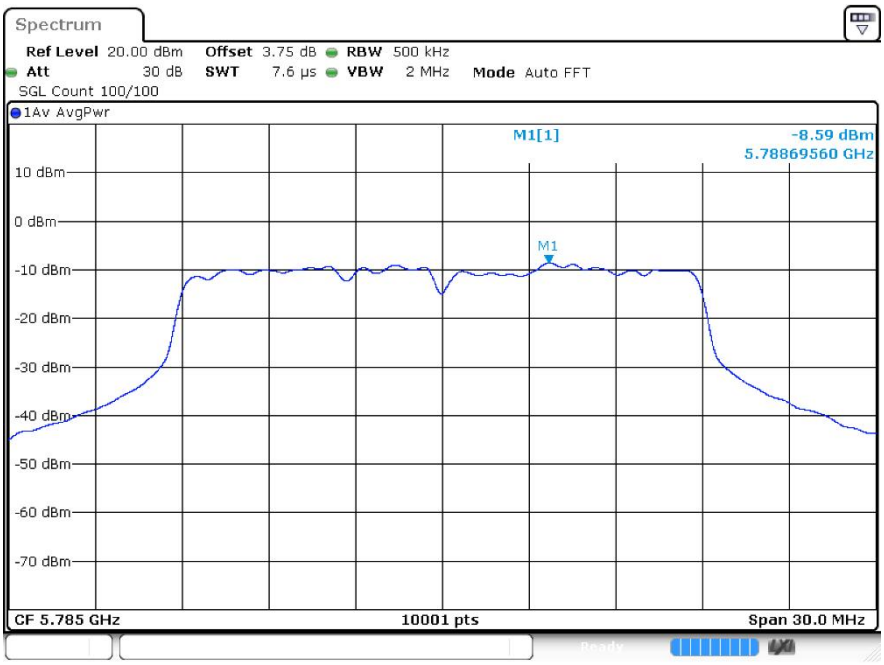
PSD a 5825MHz Ant1



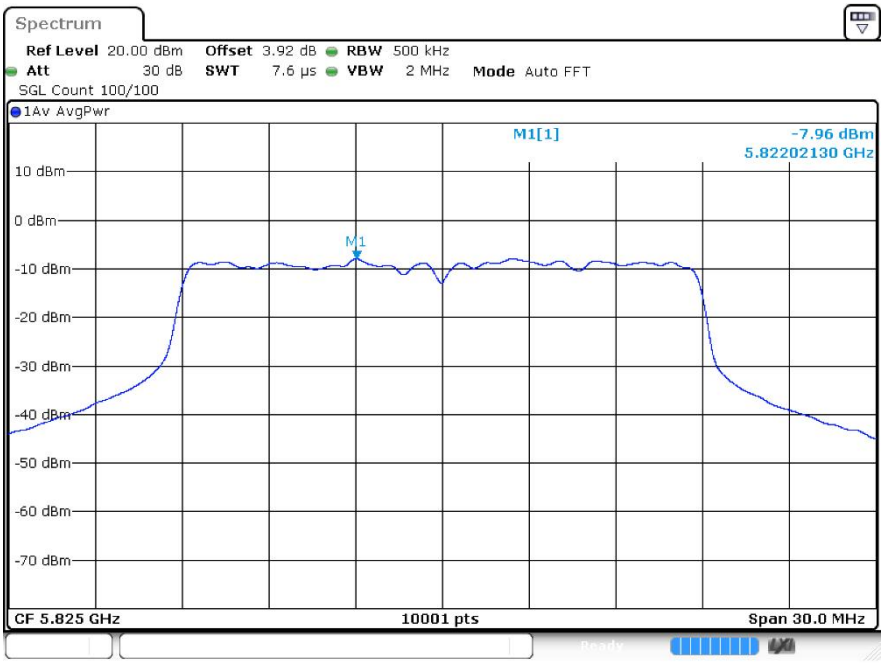
PSD n20 5745MHz Ant1



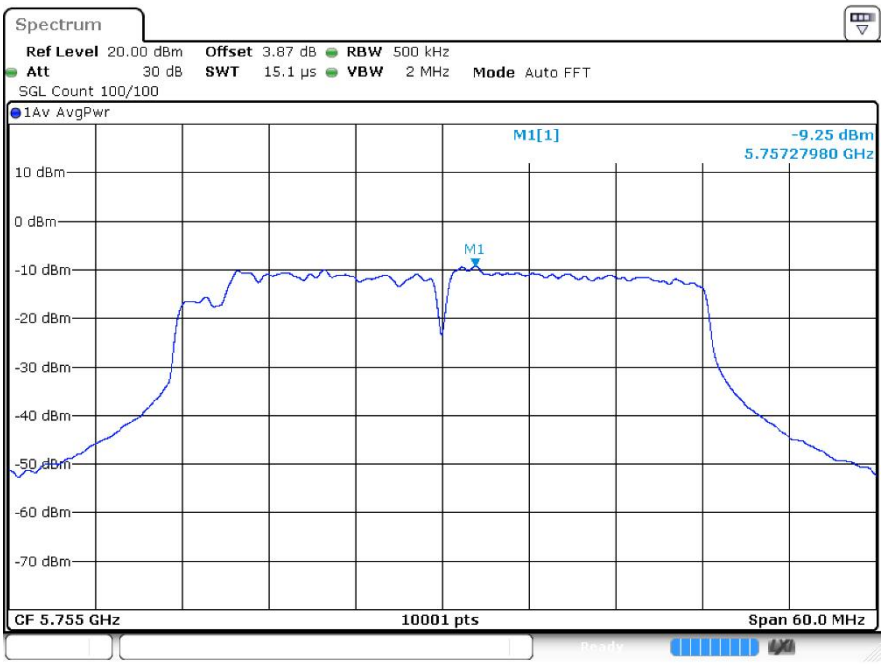
PSD n20 5785MHz Ant1



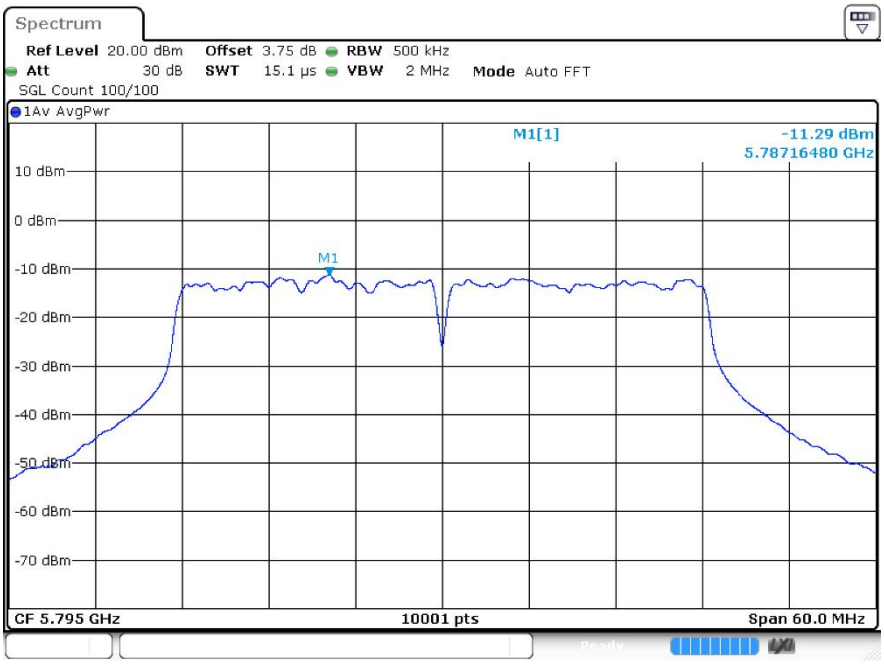
PSD n20 5825MHz Ant1



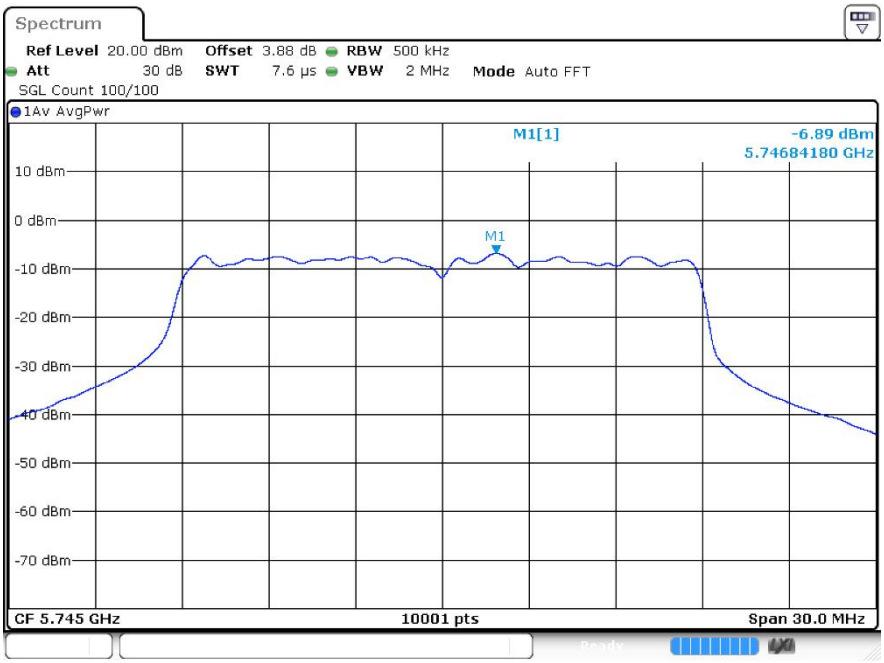
PSD n40 5755MHz Ant1



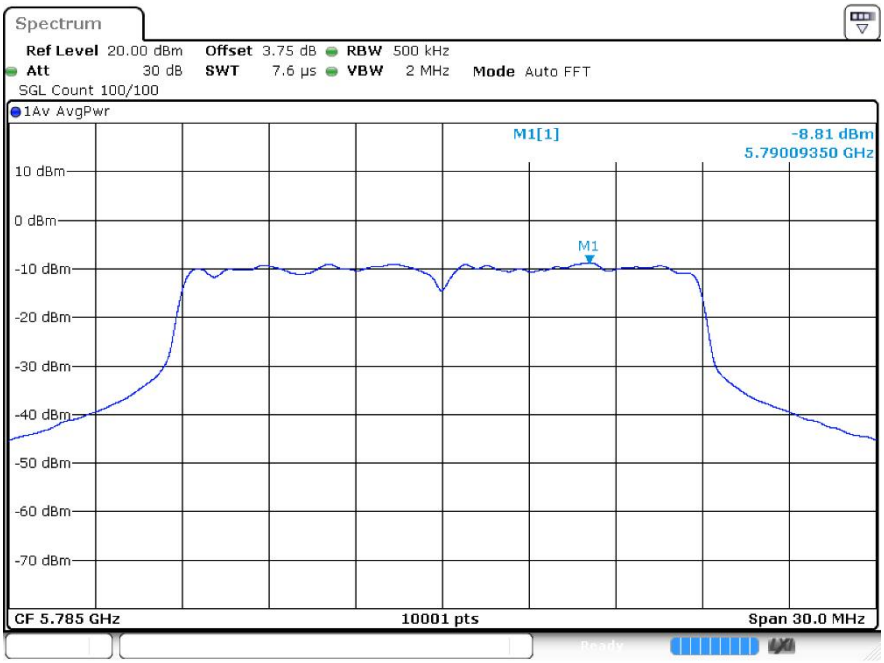
PSD n40 5795MHz Ant1



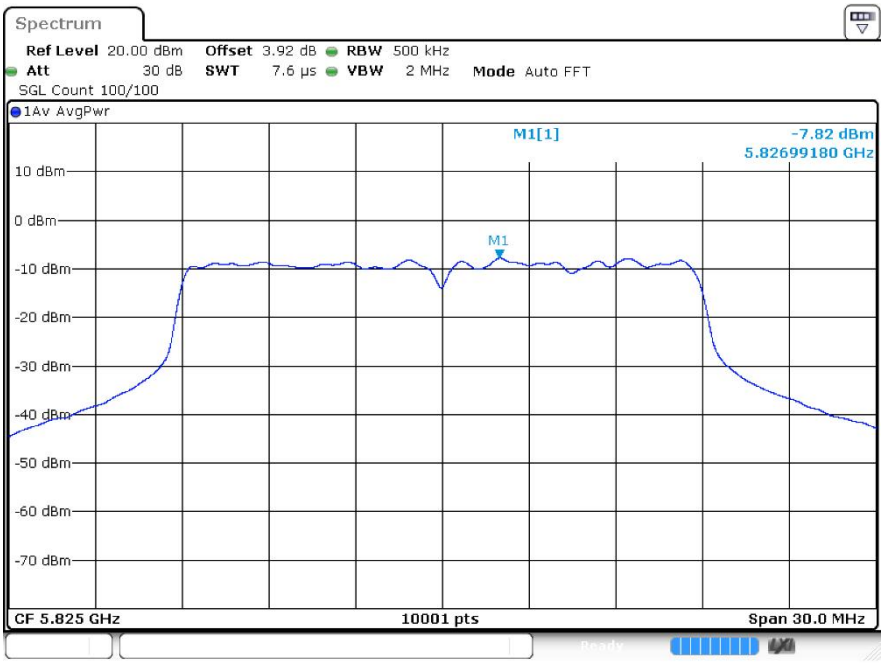
PSD ac20 5745MHz Ant1



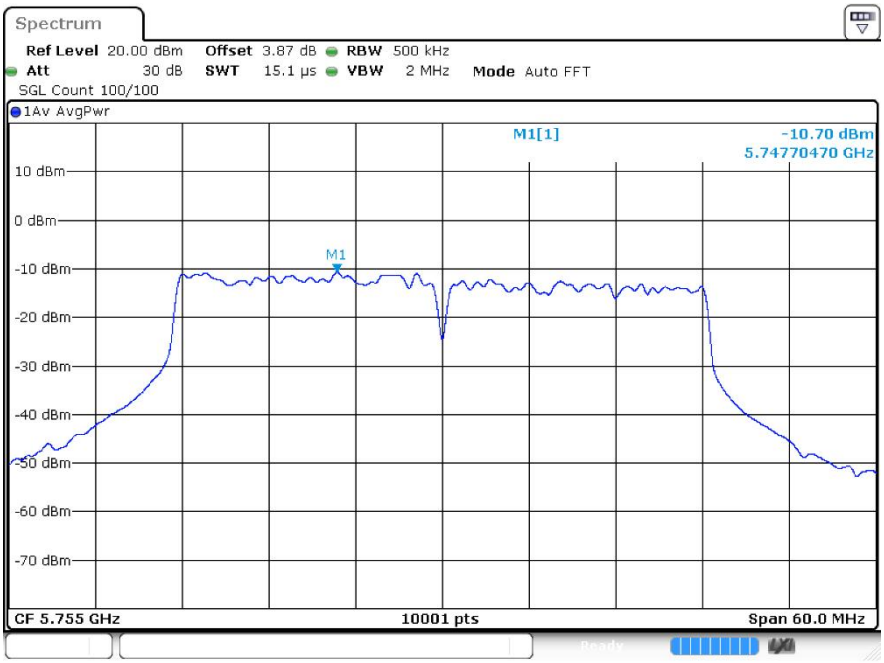
PSD ac20 5785MHz Ant1



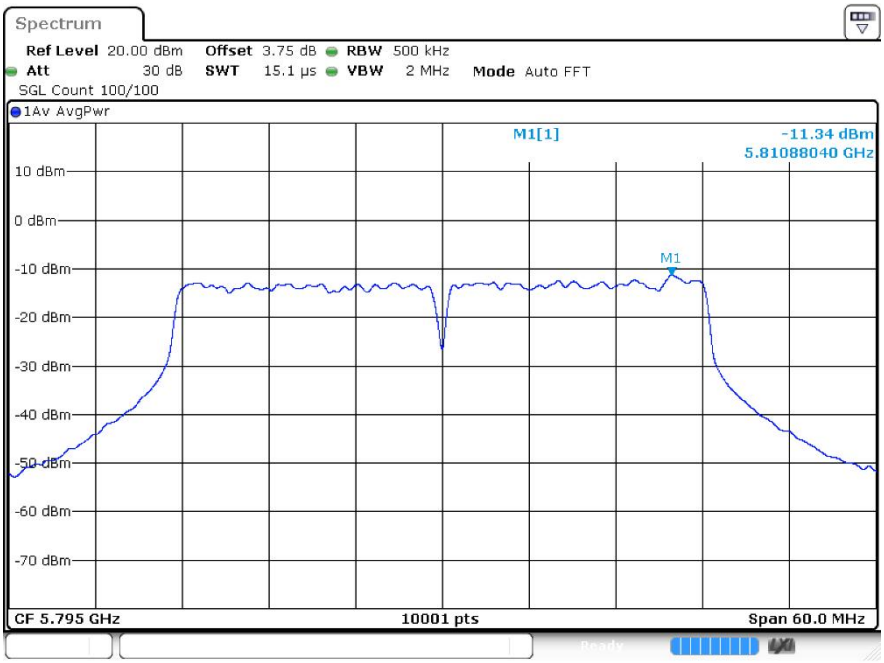
PSD ac20 5825MHz Ant1



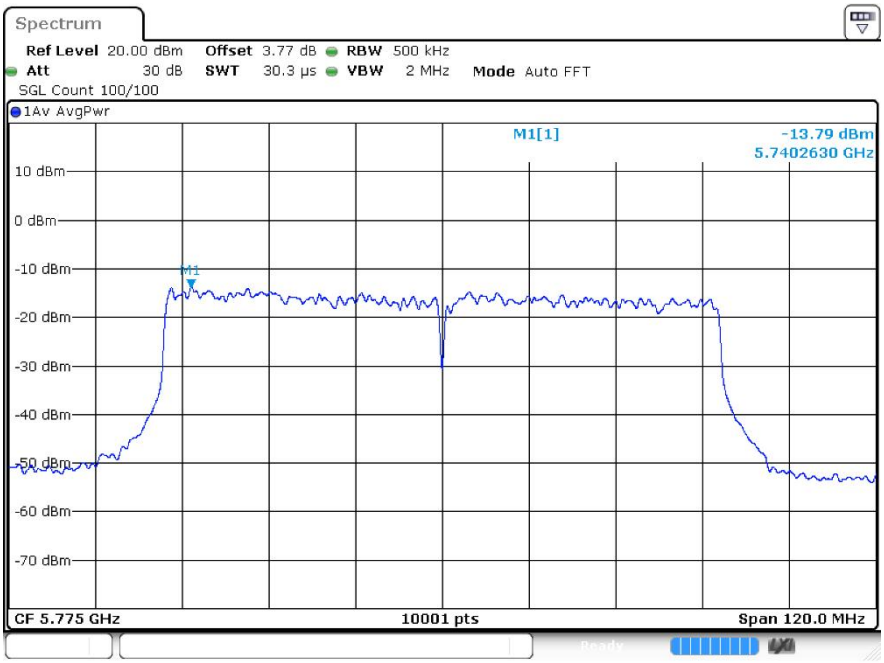
PSD ac40 5755MHz Ant1



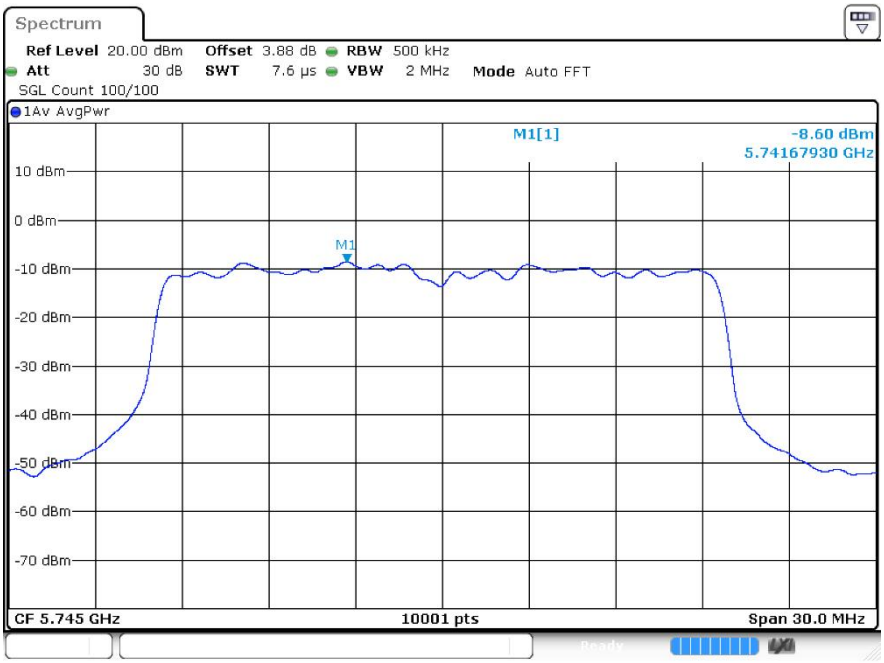
PSD ac40 5795MHz Ant1



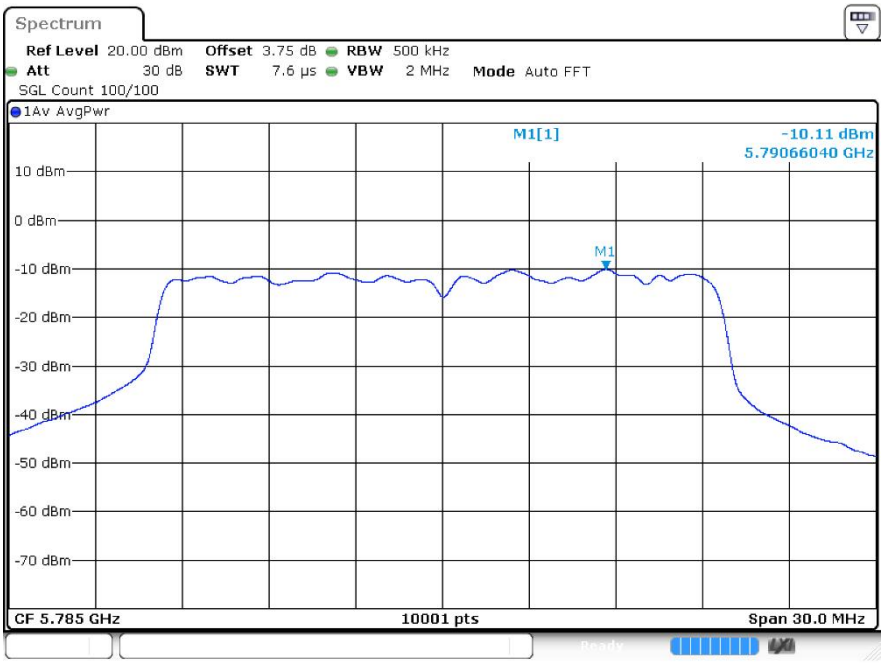
PSD ac80 5775MHz Ant1



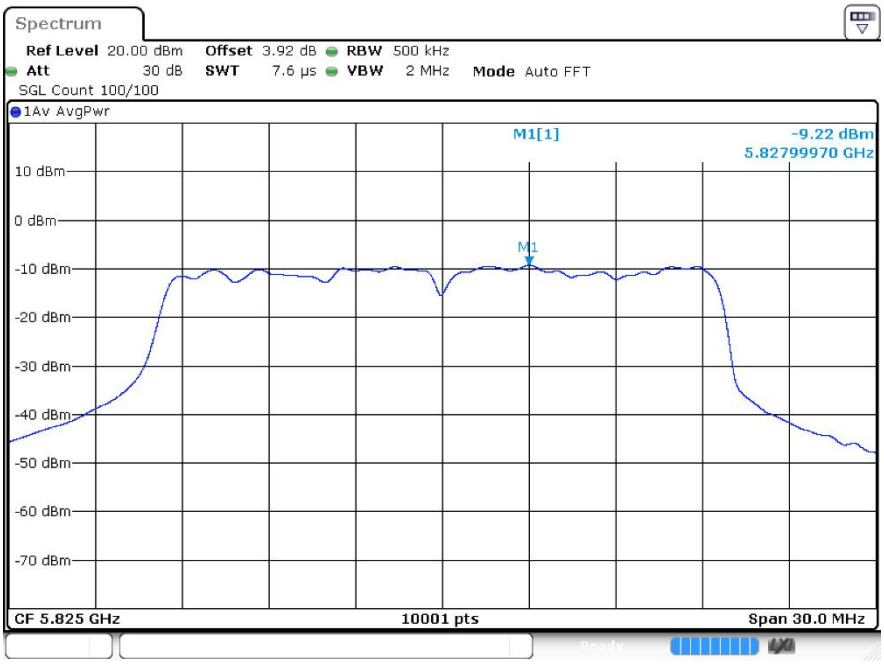
PSD ax20 5745MHz Ant1



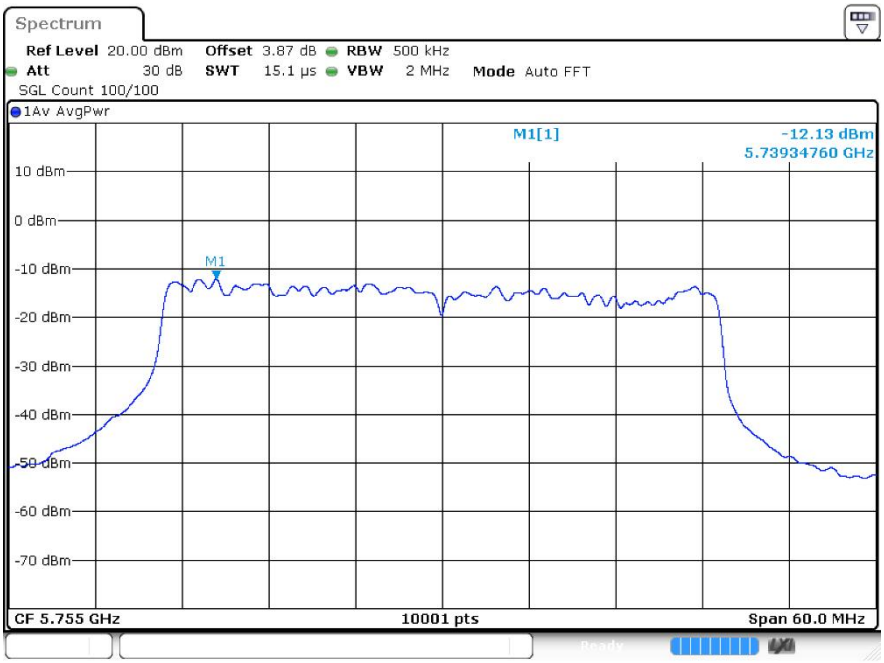
PSD ax20 5785MHz Ant1



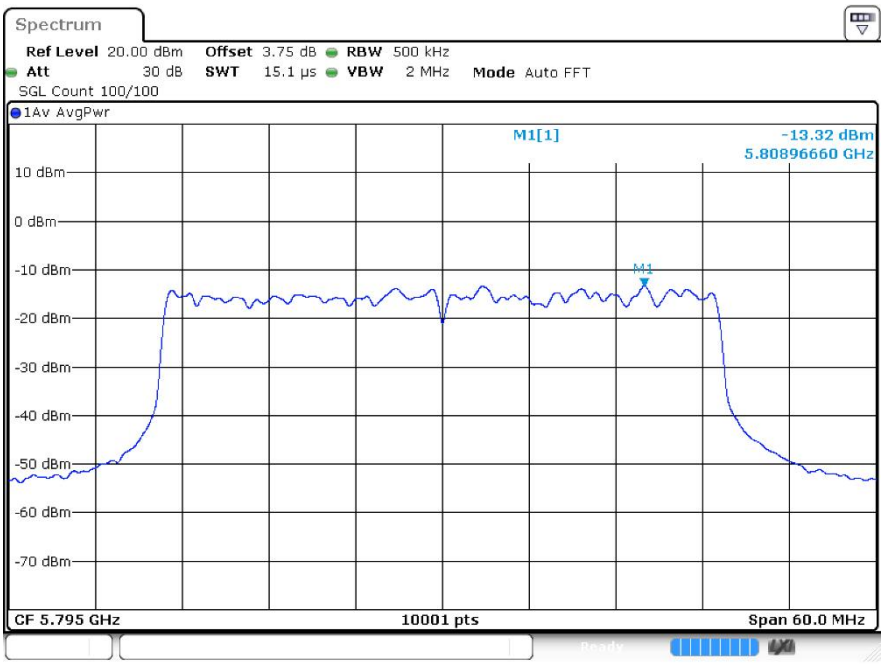
PSD ax20 5825MHz Ant1



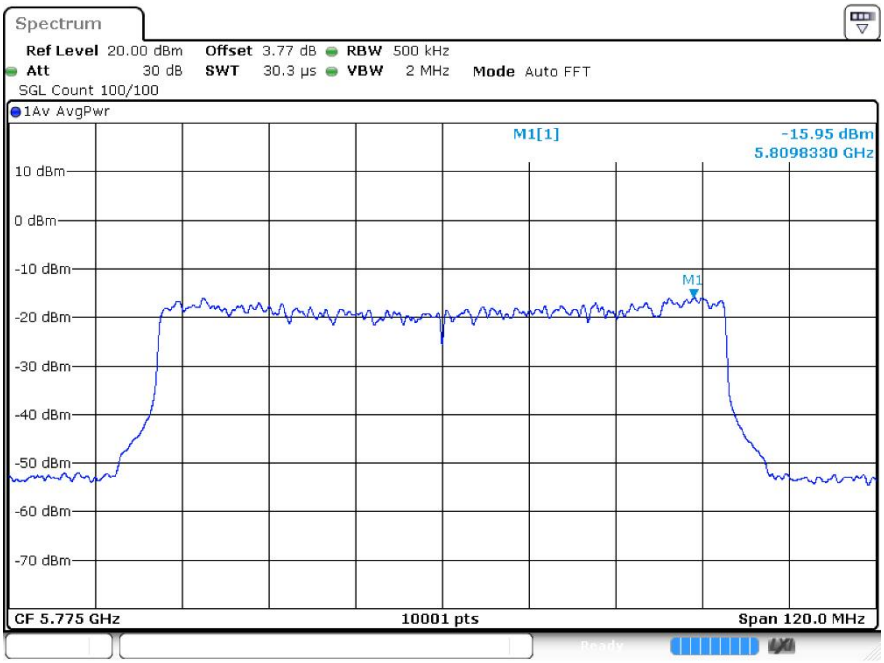
PSD ax40 5755MHz Ant1



PSD ax40 5795MHz Ant1



PSD ax80 5775MHz Ant1



6 Frequency Stability

6.1 Test Result

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20C 102V	a	5745	Ant1	5744.94	-60000	-10.44	25	Pass
20C 120V	a	5745	Ant1	5744.96	-40000	-6.96	25	Pass
20C 138V	a	5745	Ant1	5744.96	-40000	-6.96	25	Pass
-20C 120V	a	5745	Ant1	5744.96	-40000	-6.96	25	Pass
-10C 120V	a	5745	Ant1	5744.94	-60000	-10.44	25	Pass
0C 120V	a	5745	Ant1	5744.94	-60000	-10.44	25	Pass
10C 120V	a	5745	Ant1	5744.94	-60000	-10.44	25	Pass
30C 120V	a	5745	Ant1	5744.92	-80000	-13.93	25	Pass
40C 120V	a	5745	Ant1	5744.94	-60000	-10.44	25	Pass
50C 120V	a	5745	Ant1	5744.96	-40000	-6.96	25	Pass
20C 102V	a	5785	Ant1	5784.96	-40000	-6.91	25	Pass
20C 120V	a	5785	Ant1	5784.92	-80000	-13.83	25	Pass
20C 138V	a	5785	Ant1	5784.96	-40000	-6.91	25	Pass
-20C 120V	a	5785	Ant1	5784.96	-40000	-6.91	25	Pass
-10C 120V	a	5785	Ant1	5784.98	-20000	-3.46	25	Pass
0C 120V	a	5785	Ant1	5784.94	-60000	-10.37	25	Pass
10C 120V	a	5785	Ant1	5784.96	-40000	-6.91	25	Pass
30C 120V	a	5785	Ant1	5784.96	-40000	-6.91	25	Pass
40C 120V	a	5785	Ant1	5784.98	-20000	-3.46	25	Pass
50C 120V	a	5785	Ant1	5784.96	-40000	-6.91	25	Pass
20C 102V	a	5825	Ant1	5824.96	-40000	-6.87	25	Pass
20C 120V	a	5825	Ant1	5824.92	-80000	-13.73	25	Pass
20C 138V	a	5825	Ant1	5824.94	-60000	-10.3	25	Pass
-20C 120V	a	5825	Ant1	5824.94	-60000	-10.3	25	Pass
-10C 120V	a	5825	Ant1	5824.96	-40000	-6.87	25	Pass
0C 120V	a	5825	Ant1	5824.96	-40000	-6.87	25	Pass
10C 120V	a	5825	Ant1	5824.96	-40000	-6.87	25	Pass
30C 120V	a	5825	Ant1	5824.96	-40000	-6.87	25	Pass
40C 120V	a	5825	Ant1	5824.92	-80000	-13.73	25	Pass
50C 120V	a	5825	Ant1	5824.94	-60000	-10.3	25	Pass
20C 102V	n20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
20C 120V	n20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
20C 138V	n20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
-20C 120V	n20	5745	Ant1	5744.94	-60000	-10.44	25	Pass

-10C 120V	n20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
0C 120V	n20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
10C 120V	n20	5745	Ant1	5744.96	-40000	-6.96	25	Pass
30C 120V	n20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
40C 120V	n20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
50C 120V	n20	5745	Ant1	5744.92	-80000	-13.93	25	Pass
20C 102V	n20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
20C 120V	n20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
20C 138V	n20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
-20C 120V	n20	5785	Ant1	5784.96	-40000	-6.91	25	Pass
-10C 120V	n20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
0C 120V	n20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
10C 120V	n20	5785	Ant1	5784.96	-40000	-6.91	25	Pass
30C 120V	n20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
40C 120V	n20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
50C 120V	n20	5785	Ant1	5784.96	-40000	-6.91	25	Pass
20C 102V	n20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
20C 120V	n20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
20C 138V	n20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
-20C 120V	n20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
-10C 120V	n20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
0C 120V	n20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
10C 120V	n20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
30C 120V	n20	5825	Ant1	5824.96	-40000	-6.87	25	Pass
40C 120V	n20	5825	Ant1	5824.96	-40000	-6.87	25	Pass
50C 120V	n20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
20C 102V	n40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
20C 120V	n40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
20C 138V	n40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
-20C 120V	n40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
-10C 120V	n40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
0C 120V	n40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
10C 120V	n40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
30C 120V	n40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
40C 120V	n40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
50C 120V	n40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
20C 102V	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
20C 120V	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
20C 138V	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
-20C 120V	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
-10C 120V	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
0C 120V	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
10C 120V	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass

30C 120V	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
40C 120V	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
50C 120V	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
20C 102V	ac20	5745	Ant1	5744.96	-40000	-6.96	25	Pass
20C 120V	ac20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
20C 138V	ac20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
-20C 120V	ac20	5745	Ant1	5744.92	-80000	-13.93	25	Pass
-10C 120V	ac20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
0C 120V	ac20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
10C 120V	ac20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
30C 120V	ac20	5745	Ant1	5744.92	-80000	-13.93	25	Pass
40C 120V	ac20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
50C 120V	ac20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
20C 102V	ac20	5785	Ant1	5784.96	-40000	-6.91	25	Pass
20C 120V	ac20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
20C 138V	ac20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
-20C 120V	ac20	5785	Ant1	5784.96	-40000	-6.91	25	Pass
-10C 120V	ac20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
0C 120V	ac20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
10C 120V	ac20	5785	Ant1	5784.96	-40000	-6.91	25	Pass
30C 120V	ac20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
40C 120V	ac20	5785	Ant1	5784.92	-80000	-13.83	25	Pass
50C 120V	ac20	5785	Ant1	5784.96	-40000	-6.91	25	Pass
20C 102V	ac20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
20C 120V	ac20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
20C 138V	ac20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
-20C 120V	ac20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
-10C 120V	ac20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
0C 120V	ac20	5825	Ant1	5824.96	-40000	-6.87	25	Pass
10C 120V	ac20	5825	Ant1	5825	0	0	25	Pass
30C 120V	ac20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
40C 120V	ac20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
50C 120V	ac20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
20C 102V	ac40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
20C 120V	ac40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
20C 138V	ac40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
-20C 120V	ac40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
-10C 120V	ac40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
0C 120V	ac40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
10C 120V	ac40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
30C 120V	ac40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
40C 120V	ac40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
50C 120V	ac40	5755	Ant1	5754.96	-40000	-6.95	25	Pass

20C 102V	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
20C 120V	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
20C 138V	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
-20C 120V	ac40	5795	Ant1	5794.92	-80000	-13.81	25	Pass
-10C 120V	ac40	5795	Ant1	5795	0	0	25	Pass
0C 120V	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
10C 120V	ac40	5795	Ant1	5794.92	-80000	-13.81	25	Pass
30C 120V	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
40C 120V	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
50C 120V	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
20C 102V	ac80	5775	Ant1	5775	0	0	25	Pass
20C 120V	ac80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
20C 138V	ac80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
-20C 120V	ac80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
-10C 120V	ac80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
0C 120V	ac80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
10C 120V	ac80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
30C 120V	ac80	5775	Ant1	5775	0	0	25	Pass
40C 120V	ac80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
50C 120V	ac80	5775	Ant1	5775	0	0	25	Pass
20C 102V	ax20	5745	Ant1	5744.96	-40000	-6.96	25	Pass
20C 120V	ax20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
20C 138V	ax20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
-20C 120V	ax20	5745	Ant1	5744.96	-40000	-6.96	25	Pass
-10C 120V	ax20	5745	Ant1	5744.92	-80000	-13.93	25	Pass
0C 120V	ax20	5745	Ant1	5744.96	-40000	-6.96	25	Pass
10C 120V	ax20	5745	Ant1	5744.94	-60000	-10.44	25	Pass
30C 120V	ax20	5745	Ant1	5744.96	-40000	-6.96	25	Pass
40C 120V	ax20	5745	Ant1	5744.96	-40000	-6.96	25	Pass
50C 120V	ax20	5745	Ant1	5744.96	-40000	-6.96	25	Pass
20C 102V	ax20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
20C 120V	ax20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
20C 138V	ax20	5785	Ant1	5784.96	-40000	-6.91	25	Pass
-20C 120V	ax20	5785	Ant1	5784.96	-40000	-6.91	25	Pass
-10C 120V	ax20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
0C 120V	ax20	5785	Ant1	5784.96	-40000	-6.91	25	Pass
10C 120V	ax20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
30C 120V	ax20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
40C 120V	ax20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
50C 120V	ax20	5785	Ant1	5784.96	-40000	-6.91	25	Pass
20C 102V	ax20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
20C 120V	ax20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
20C 138V	ax20	5825	Ant1	5824.94	-60000	-10.3	25	Pass

-20C 120V	ax20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
-10C 120V	ax20	5825	Ant1	5824.96	-40000	-6.87	25	Pass
0C 120V	ax20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
10C 120V	ax20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
30C 120V	ax20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
40C 120V	ax20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
50C 120V	ax20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
20C 102V	ax40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
20C 120V	ax40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
20C 138V	ax40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
-20C 120V	ax40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
-10C 120V	ax40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
0C 120V	ax40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
10C 120V	ax40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
30C 120V	ax40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
40C 120V	ax40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
50C 120V	ax40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
20C 102V	ax40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
20C 120V	ax40	5795	Ant1	5794.92	-80000	-13.81	25	Pass
20C 138V	ax40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
-20C 120V	ax40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
-10C 120V	ax40	5795	Ant1	5794.92	-80000	-13.81	25	Pass
0C 120V	ax40	5795	Ant1	5794.92	-80000	-13.81	25	Pass
10C 120V	ax40	5795	Ant1	5794.92	-80000	-13.81	25	Pass
30C 120V	ax40	5795	Ant1	5794.92	-80000	-13.81	25	Pass
40C 120V	ax40	5795	Ant1	5794.92	-80000	-13.81	25	Pass
50C 120V	ax40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
20C 102V	ax80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
20C 120V	ax80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
20C 138V	ax80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
-20C 120V	ax80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
-10C 120V	ax80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
0C 120V	ax80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
10C 120V	ax80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
30C 120V	ax80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
40C 120V	ax80	5775	Ant1	5774.92	-80000	-13.85	25	Pass
50C 120V	ax80	5775	Ant1	5774.92	-80000	-13.85	25	Pass

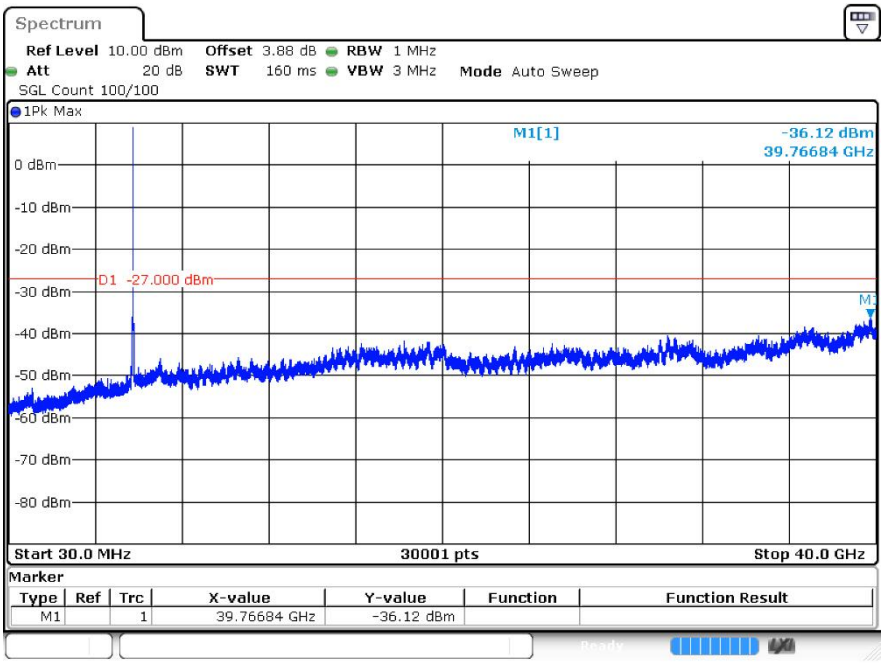
7 Conducted RF Spurious Emission

7.1 Test Result

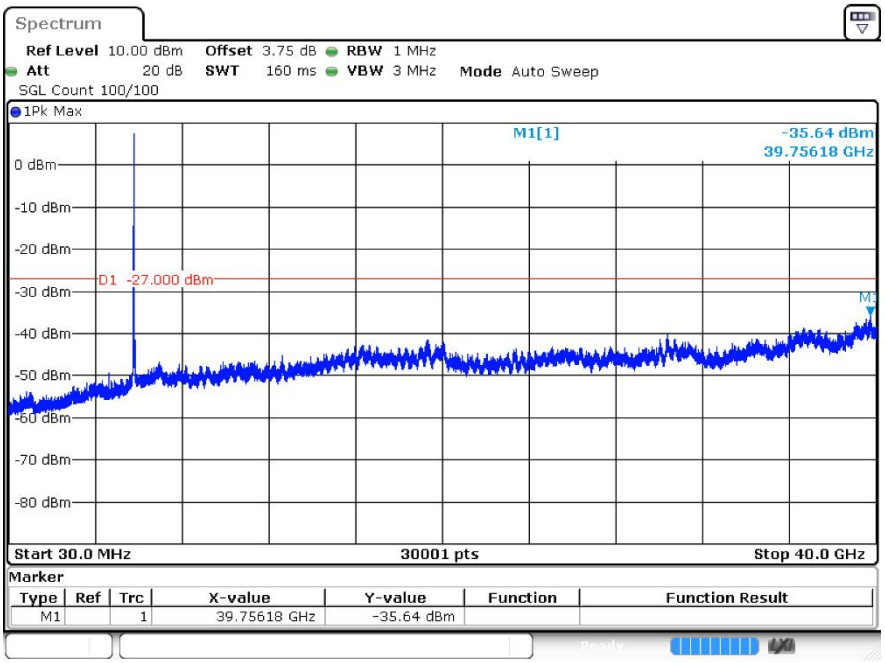
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
a	5745	Ant1	-36.11	-27	Pass
a	5785	Ant1	-35.64	-27	Pass
a	5825	Ant1	-36.05	-27	Pass
n20	5745	Ant1	-36.56	-27	Pass
n20	5785	Ant1	-36.49	-27	Pass
n20	5825	Ant1	-36.64	-27	Pass
n40	5755	Ant1	-36.66	-27	Pass
n40	5795	Ant1	-36.56	-27	Pass
ac20	5745	Ant1	-35.79	-27	Pass
ac20	5785	Ant1	-36.78	-27	Pass
ac20	5825	Ant1	-36.13	-27	Pass
ac40	5755	Ant1	-36.77	-27	Pass
ac40	5795	Ant1	-36.31	-27	Pass
ac80	5775	Ant1	-36.93	-27	Pass
ax20	5745	Ant1	-36.56	-27	Pass
ax20	5785	Ant1	-36.58	-27	Pass
ax20	5825	Ant1	-36.15	-27	Pass
ax40	5755	Ant1	-36.46	-27	Pass
ax40	5795	Ant1	-36.33	-27	Pass
ax80	5775	Ant1	-36.21	-27	Pass

7.2 Test Graphs

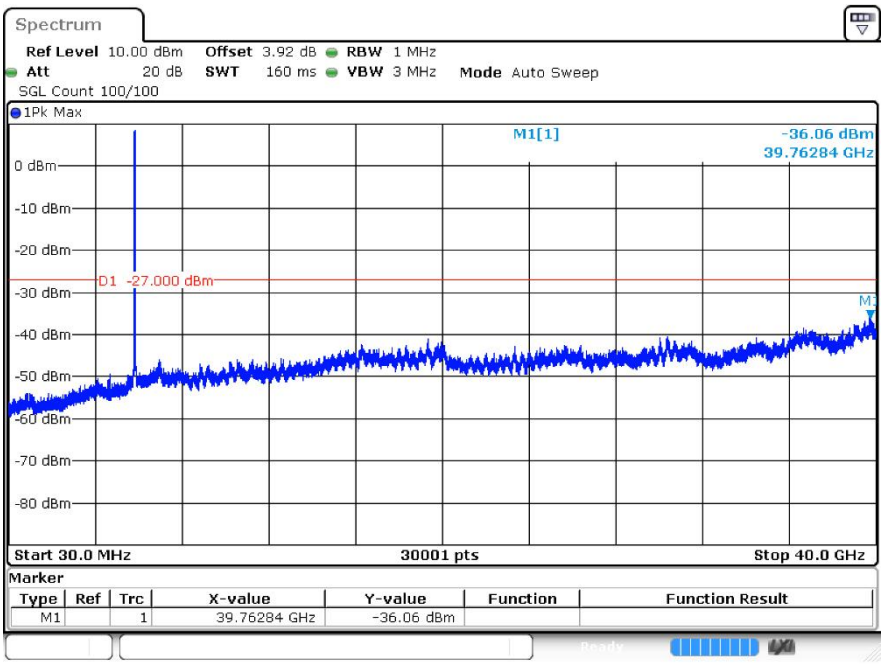
Test Graphs
Tx. Spurious a 5745MHz Ant1 Emission



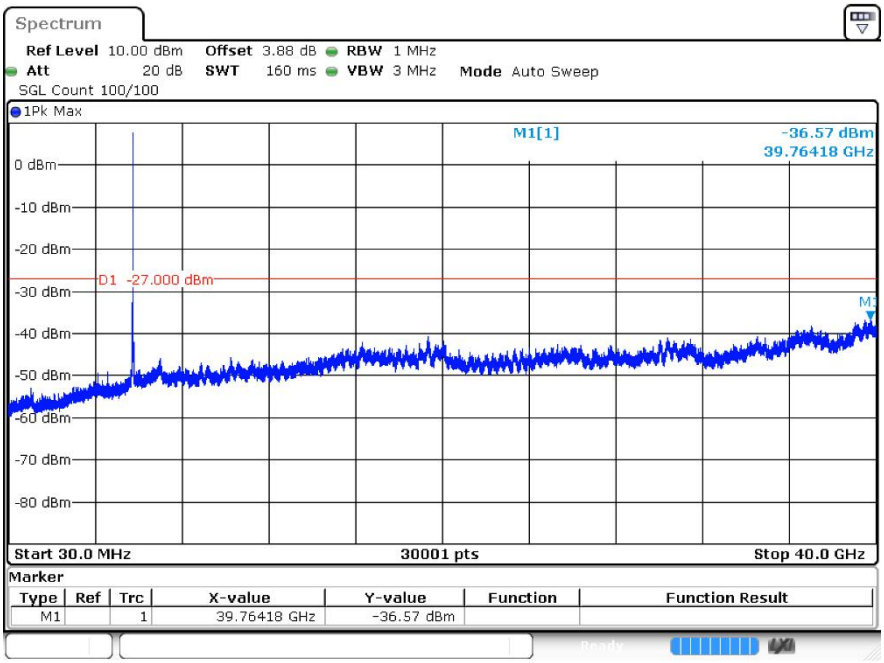
Tx. Spurious a 5785MHz Ant1 Emission



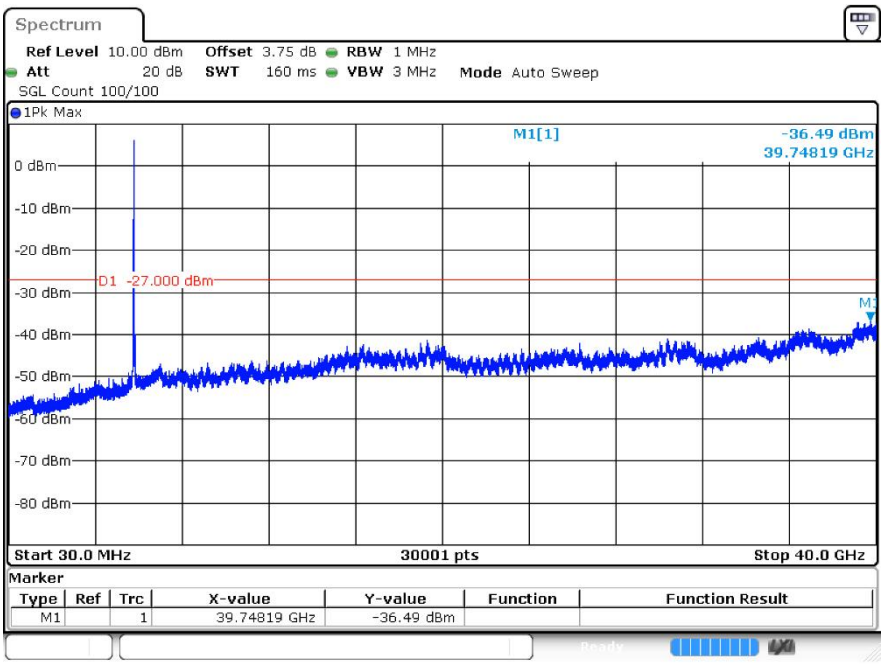
Tx. Spurious a 5825MHz Ant1 Emission



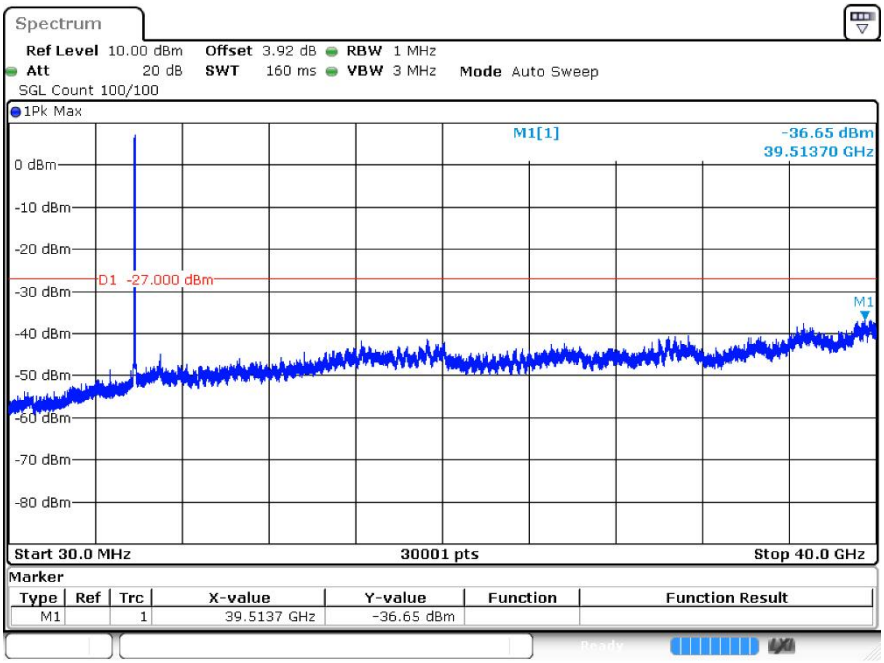
Tx. Spurious n20 5745MHz Ant1 Emission



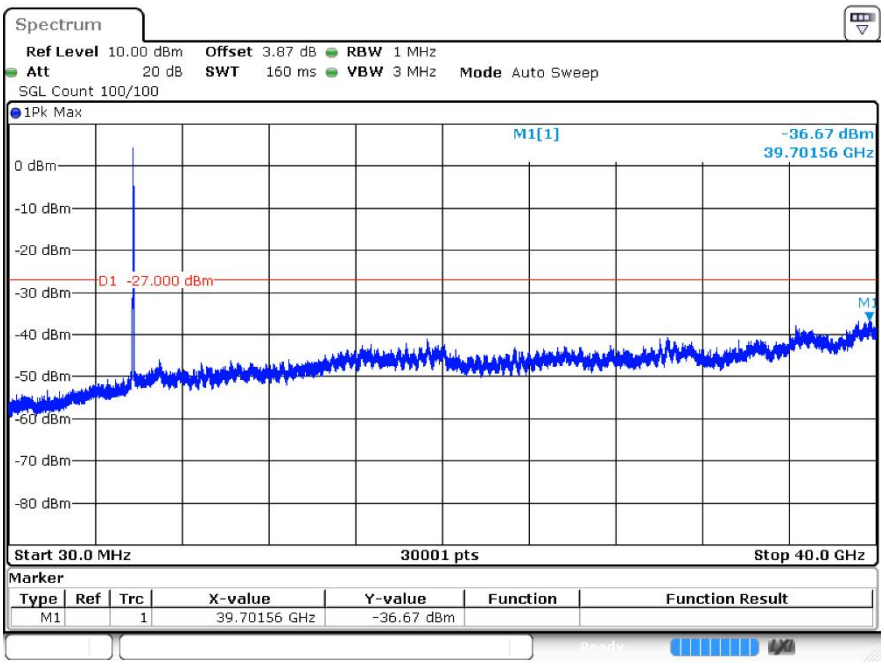
Tx. Spurious n20 5785MHz Ant1 Emission



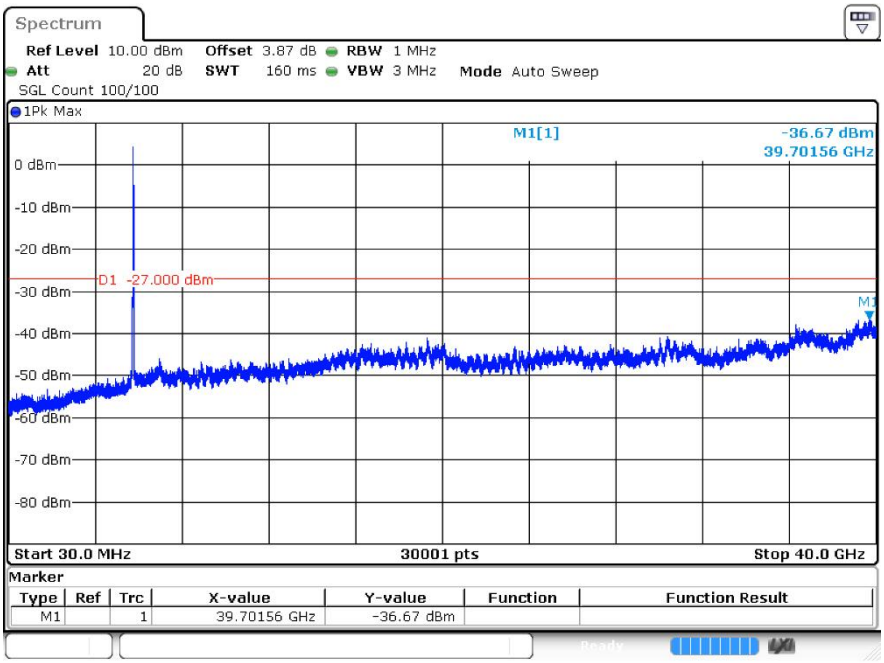
Tx. Spurious n20 5825MHz Ant1 Emission



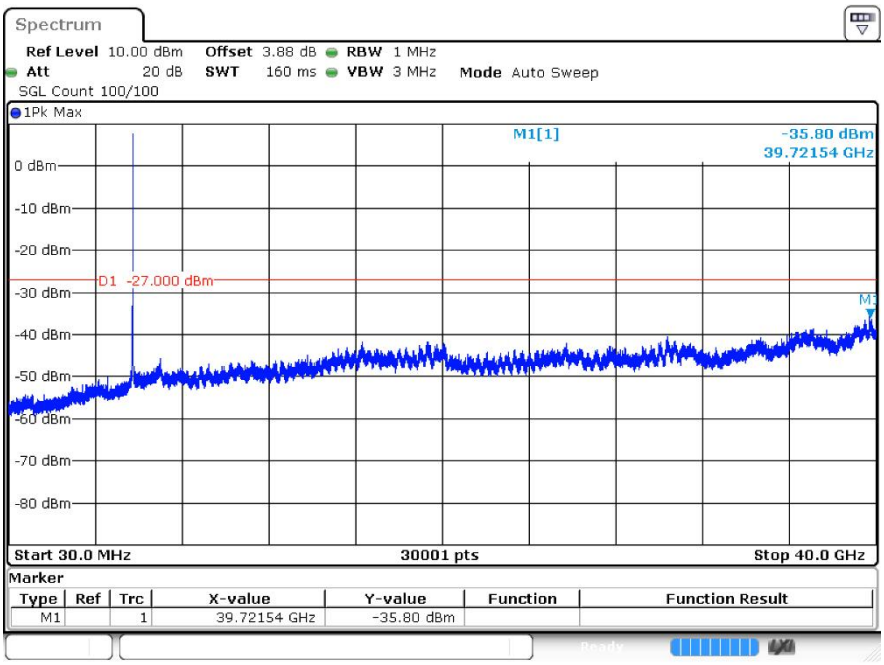
Tx. Spurious n40 5755MHz Ant1 Emission



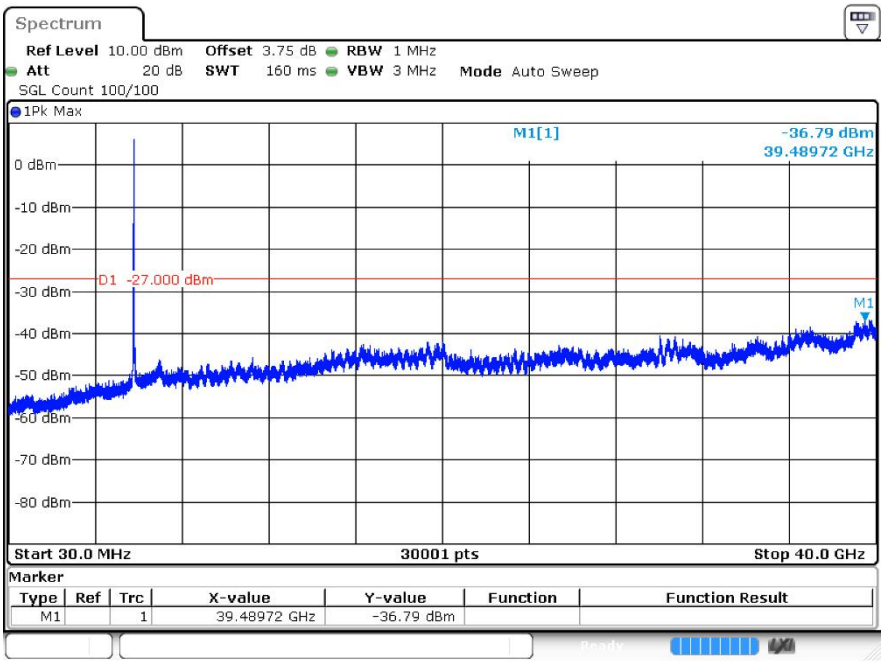
Tx. Spurious n40 5795MHz Ant1 Emission



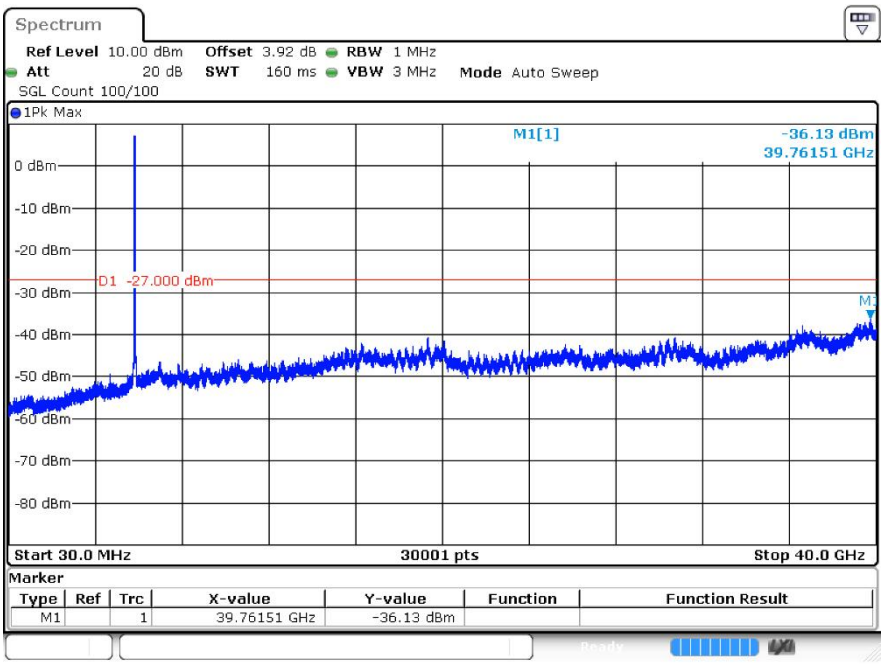
Tx. Spurious ac20 5745MHz Ant1 Emission



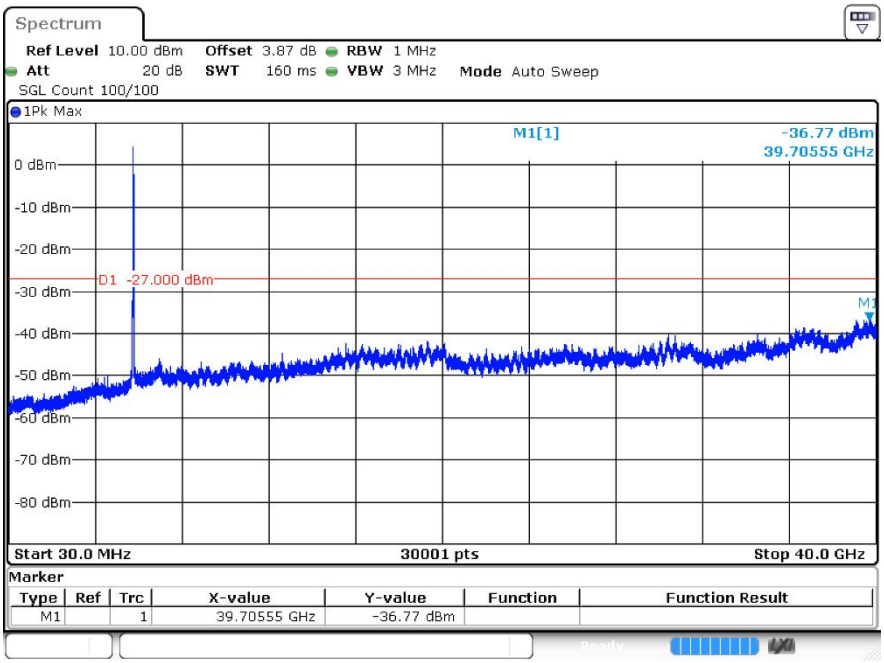
Tx. Spurious ac20 5785MHz Ant1 Emission



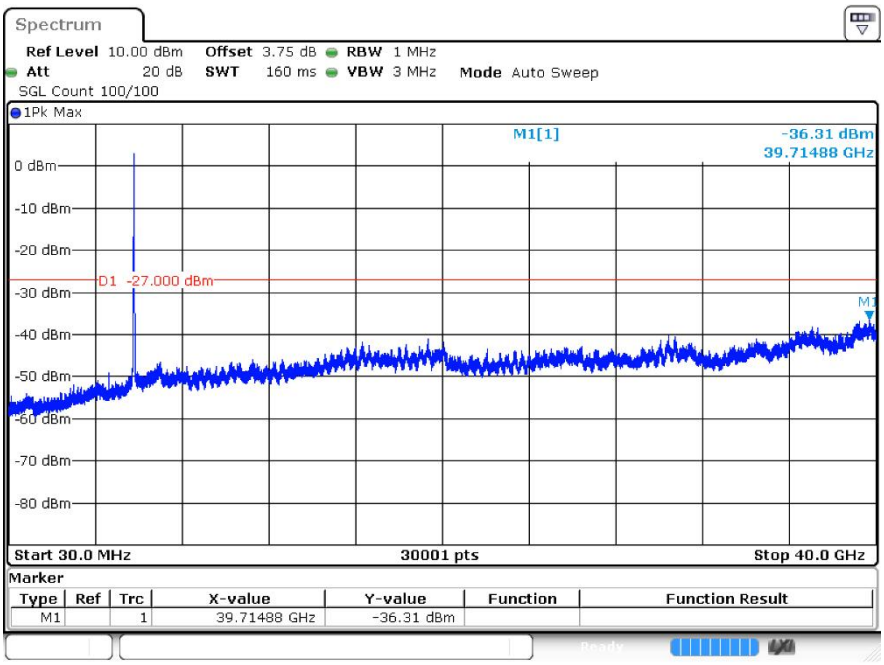
Tx. Spurious ac20 5825MHz Ant1 Emission



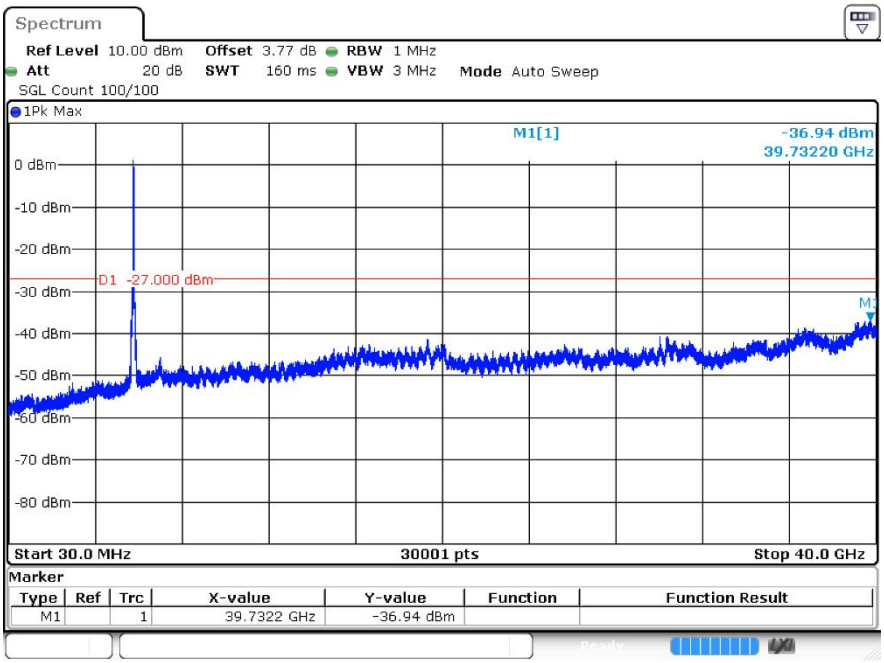
Tx. Spurious ac40 5755MHz Ant1 Emission



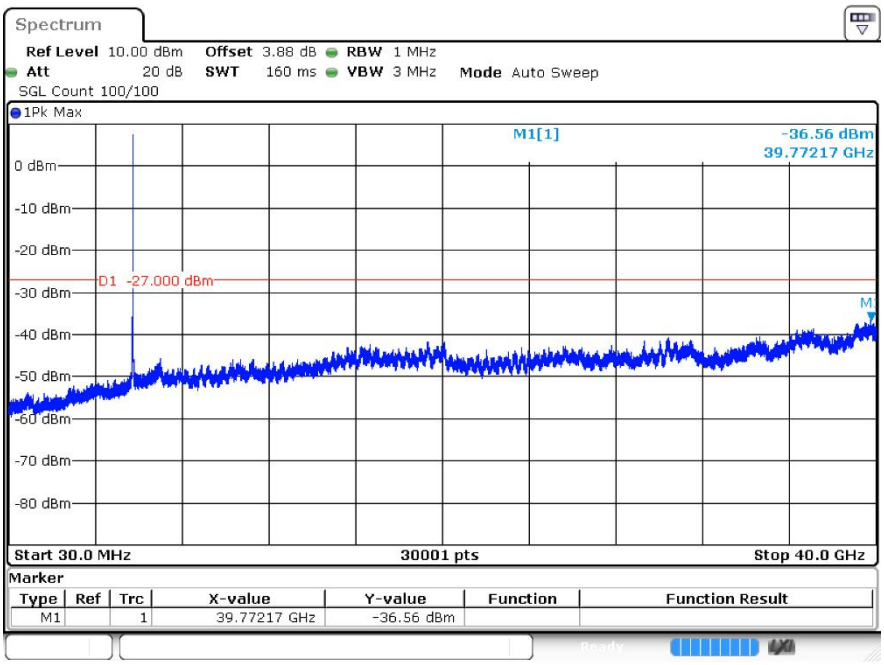
Tx. Spurious ac40 5795MHz Ant1 Emission



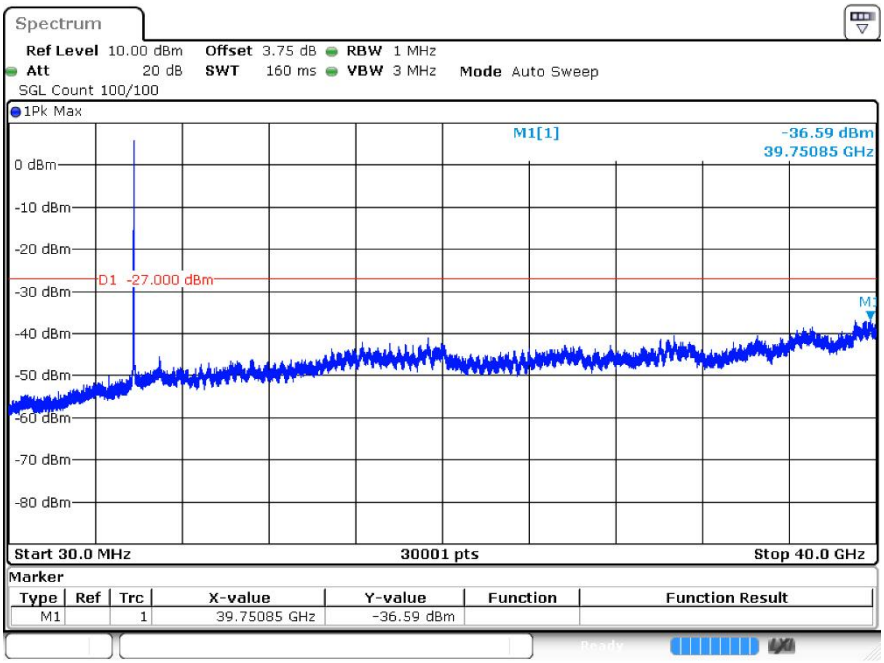
Tx. Spurious ac80 5775MHz Ant1 Emission



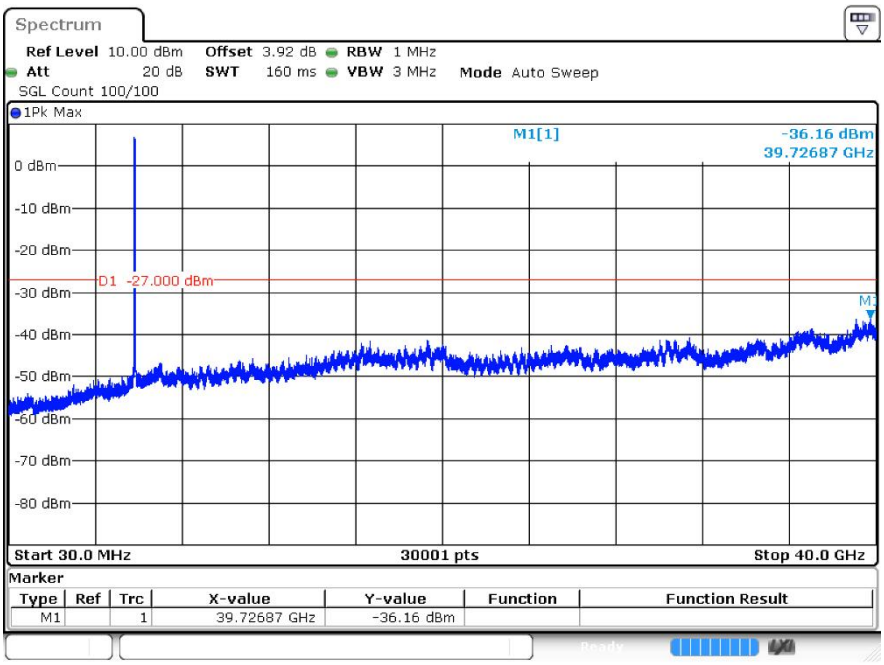
Tx. Spurious ax20 5745MHz Ant1 Emission



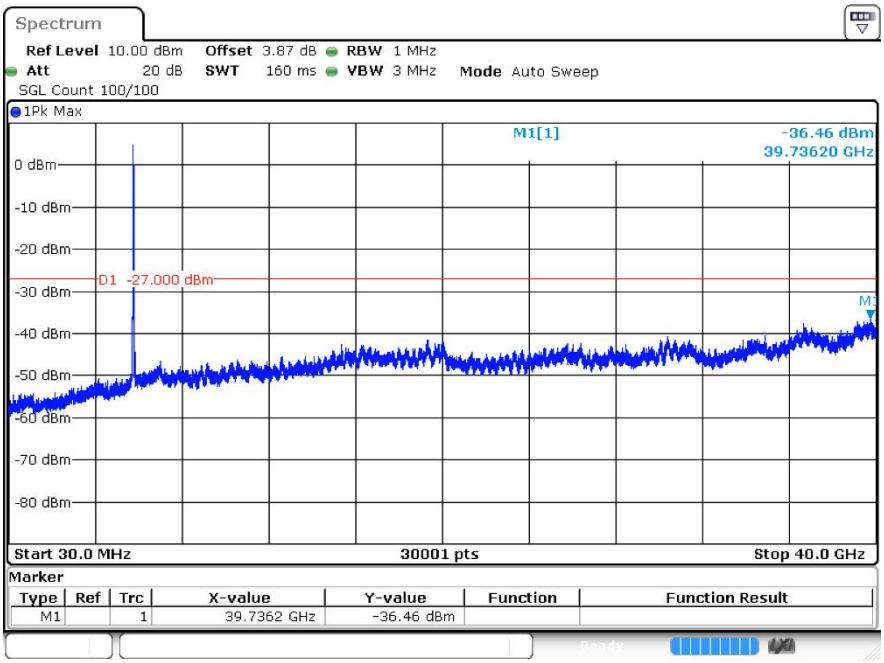
Tx. Spurious ax20 5785MHz Ant1 Emission



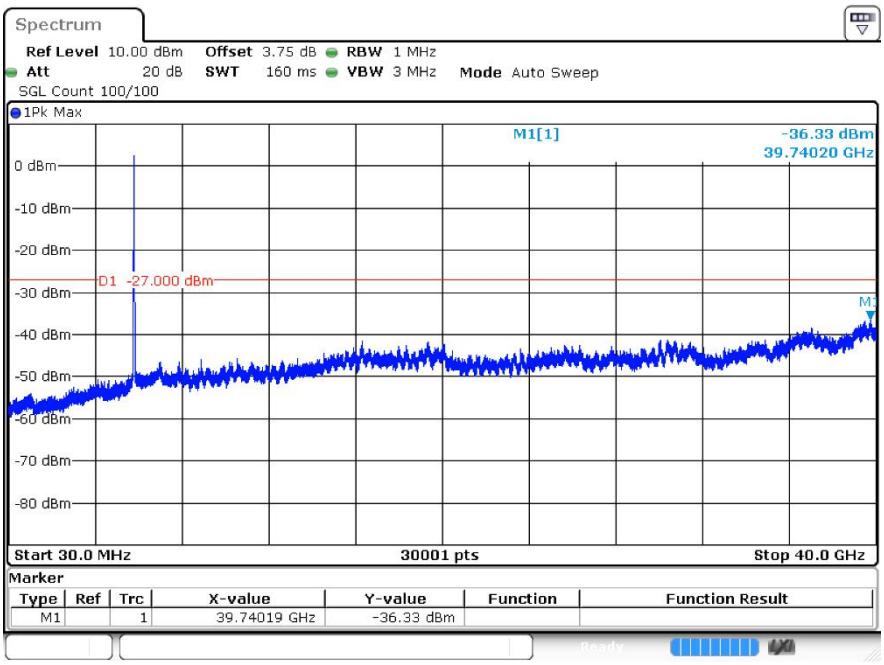
Tx. Spurious ax20 5825MHz Ant1 Emission



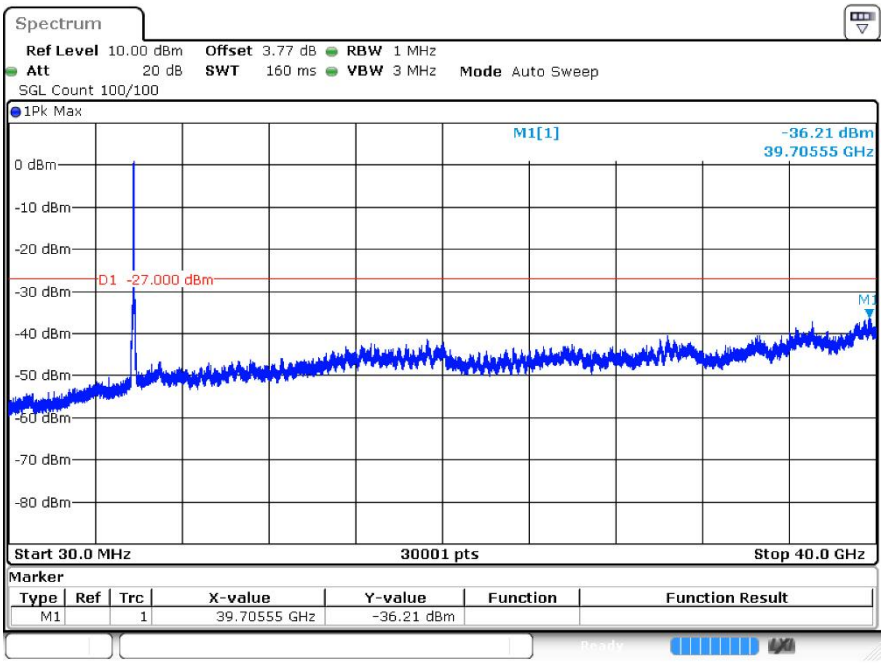
Tx. Spurious ax40 5755MHz Ant1 Emission



Tx. Spurious ax40 5795MHz Ant1 Emission



Tx. Spurious ax80 5775MHz Ant1 Emission



---The End---