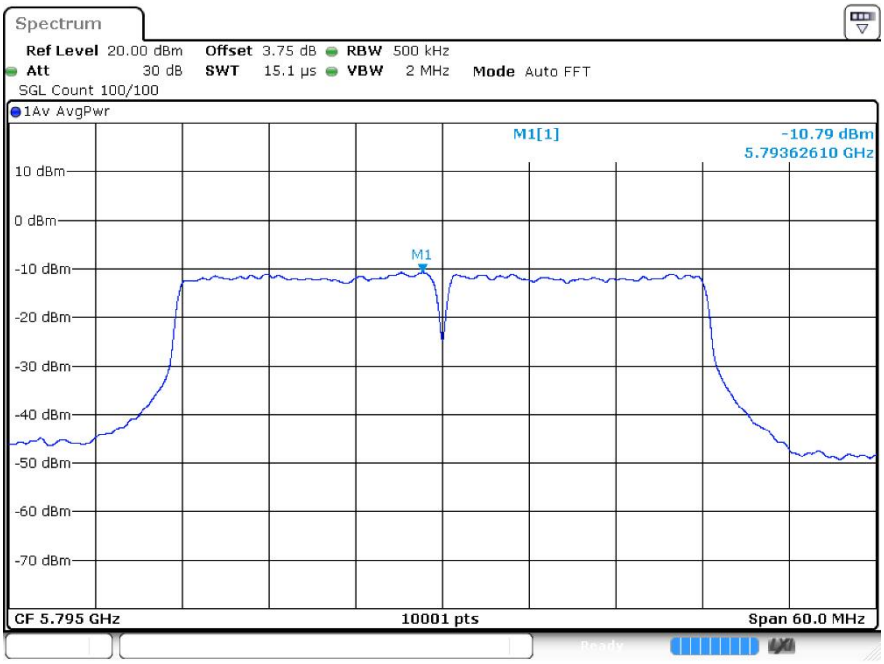
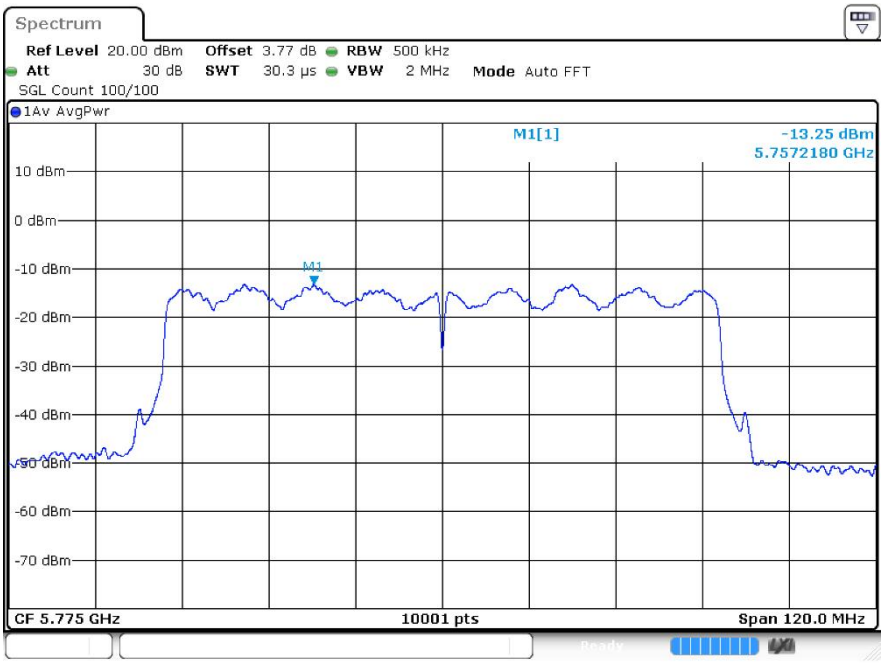
PSD ac40 5795MHz Ant1



PSD ac80 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	5745	0	0	25	Pass
20C 120V	a	5745	Ant1	5745.02	20000	3.48	25	Pass
20C 138V	a	5745	Ant1	5745.02	20000	3.48	25	Pass
-20C 120V	a	5745	Ant1	5744.98	-20000	-3.48	25	Pass
-10C 120V	a	5745	Ant1	5744.98	-20000	-3.48	25	Pass
0C 120V	a	5745	Ant1	5745	0	0	25	Pass
10C 120V	a	5745	Ant1	5745	0	0	25	Pass
30C 120V	a	5745	Ant1	5745	0	0	25	Pass
40C 120V	a	5745	Ant1	5745	0	0	25	Pass
50C 120V	a	5745	Ant1	5745	0	0	25	Pass
20C 102V	a	5785	Ant1	5785.02	20000	3.46	25	Pass
20C 120V	a	5785	Ant1	5784.96	-40000	-6.91	25	Pass
20C 138V	a	5785	Ant1	5785.02	20000	3.46	25	Pass
-20C 120V	a	5785	Ant1	5784.98	-20000	-3.46	25	Pass
-10C 120V	a	5785	Ant1	5785	0	0	25	Pass
0C 120V	a	5785	Ant1	5785	0	0	25	Pass
10C 120V	a	5785	Ant1	5785	0	0	25	Pass
30C 120V	a	5785	Ant1	5785.02	20000	3.46	25	Pass
40C 120V	a	5785	Ant1	5785	0	0	25	Pass
50C 120V	a	5785	Ant1	5784.98	-20000	-3.46	25	Pass
20C 102V	a	5825	Ant1	5824.98	-20000	-3.43	25	Pass
20C 120V	a	5825	Ant1	5825	0	0	25	Pass
20C 138V	a	5825	Ant1	5825	0	0	25	Pass
-20C 120V	a	5825	Ant1	5825	0	0	25	Pass
-10C 120V	a	5825	Ant1	5825	0	0	25	Pass
0C 120V	a	5825	Ant1	5825	0	0	25	Pass
10C 120V	a	5825	Ant1	5825.02	20000	3.43	25	Pass
30C 120V	a	5825	Ant1	5825.02	20000	3.43	25	Pass
40C 120V	a	5825	Ant1	5824.98	-20000	-3.43	25	Pass
50C 120V	a	5825	Ant1	5825	0	0	25	Pass
20C 102V	n20	5745	Ant1	5745	0	0	25	Pass
20C 120V	n20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
20C 138V	n20	5745	Ant1	5745.02	20000	3.48	25	Pass
-20C 120V	n20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
-10C 120V	n20	5745	Ant1	5745	0	0	25	Pass

0C 120V	n20	5745	Ant1	5745	0	0	25	Pass
10C 120V	n20	5745	Ant1	5745	0	0	25	Pass
30C 120V	n20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
40C 120V	n20	5745	Ant1	5745	0	0	25	Pass
50C 120V	n20	5745	Ant1	5745	0	0	25	Pass
20C 102V	n20	5785	Ant1	5785	0	0	25	Pass
20C 120V	n20	5785	Ant1	5785	0	0	25	Pass
20C 138V	n20	5785	Ant1	5785	0	0	25	Pass
-20C 120V	n20	5785	Ant1	5785	0	0	25	Pass
-10C 120V	n20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
0C 120V	n20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
10C 120V	n20	5785	Ant1	5785	0	0	25	Pass
30C 120V	n20	5785	Ant1	5785	0	0	25	Pass
40C 120V	n20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
50C 120V	n20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
20C 102V	n20	5825	Ant1	5825	0	0	25	Pass
20C 120V	n20	5825	Ant1	5825	0	0	25	Pass
20C 138V	n20	5825	Ant1	5825.02	20000	3.43	25	Pass
-20C 120V	n20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
-10C 120V	n20	5825	Ant1	5825	0	0	25	Pass
0C 120V	n20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
10C 120V	n20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
30C 120V	n20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
40C 120V	n20	5825	Ant1	5825	0	0	25	Pass
50C 120V	n20	5825	Ant1	5825	0	0	25	Pass
20C 102V	n40	5755	Ant1	5755	0	0	25	Pass
20C 120V	n40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
20C 138V	n40	5755	Ant1	5755	0	0	25	Pass
-20C 120V	n40	5755	Ant1	5755	0	0	25	Pass
-10C 120V	n40	5755	Ant1	5755	0	0	25	Pass
0C 120V	n40	5755	Ant1	5755	0	0	25	Pass
10C 120V	n40	5755	Ant1	5755.04	40000	6.95	25	Pass
30C 120V	n40	5755	Ant1	5755	0	0	25	Pass
40C 120V	n40	5755	Ant1	5755	0	0	25	Pass
50C 120V	n40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
20C 102V	n40	5795	Ant1	5795	0	0	25	Pass
20C 120V	n40	5795	Ant1	5795	0	0	25	Pass
20C 138V	n40	5795	Ant1	5795	0	0	25	Pass
-20C 120V	n40	5795	Ant1	5795	0	0	25	Pass
-10C 120V	n40	5795	Ant1	5795	0	0	25	Pass
0C 120V	n40	5795	Ant1	5795	0	0	25	Pass
10C 120V	n40	5795	Ant1	5795	0	0	25	Pass
30C 120V	n40	5795	Ant1	5795	0	0	25	Pass

40C 120V	n40	5795	Ant1	5795	0	0	25	Pass
50C 120V	n40	5795	Ant1	5795	0	0	25	Pass
20C 102V	ac20	5745	Ant1	5745	0	0	25	Pass
20C 120V	ac20	5745	Ant1	5745	0	0	25	Pass
20C 138V	ac20	5745	Ant1	5745	0	0	25	Pass
-20C 120V	ac20	5745	Ant1	5745	0	0	25	Pass
-10C 120V	ac20	5745	Ant1	5745	0	0	25	Pass
0C 120V	ac20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
10C 120V	ac20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
30C 120V	ac20	5745	Ant1	5745	0	0	25	Pass
40C 120V	ac20	5745	Ant1	5745	0	0	25	Pass
50C 120V	ac20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
20C 102V	ac20	5785	Ant1	5785	0	0	25	Pass
20C 120V	ac20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
20C 138V	ac20	5785	Ant1	5785	0	0	25	Pass
-20C 120V	ac20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
-10C 120V	ac20	5785	Ant1	5785	0	0	25	Pass
0C 120V	ac20	5785	Ant1	5785	0	0	25	Pass
10C 120V	ac20	5785	Ant1	5785	0	0	25	Pass
30C 120V	ac20	5785	Ant1	5785	0	0	25	Pass
40C 120V	ac20	5785	Ant1	5785	0	0	25	Pass
50C 120V	ac20	5785	Ant1	5785	0	0	25	Pass
20C 102V	ac20	5825	Ant1	5825.02	20000	3.43	25	Pass
20C 120V	ac20	5825	Ant1	5825	0	0	25	Pass
20C 138V	ac20	5825	Ant1	5825	0	0	25	Pass
-20C 120V	ac20	5825	Ant1	5825	0	0	25	Pass
-10C 120V	ac20	5825	Ant1	5825	0	0	25	Pass
0C 120V	ac20	5825	Ant1	5825	0	0	25	Pass
10C 120V	ac20	5825	Ant1	5825	0	0	25	Pass
30C 120V	ac20	5825	Ant1	5825	0	0	25	Pass
40C 120V	ac20	5825	Ant1	5825	0	0	25	Pass
50C 120V	ac20	5825	Ant1	5825	0	0	25	Pass
20C 102V	ac40	5755	Ant1	5755	0	0	25	Pass
20C 120V	ac40	5755	Ant1	5755	0	0	25	Pass
20C 138V	ac40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
-20C 120V	ac40	5755	Ant1	5755	0	0	25	Pass
-10C 120V	ac40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
0C 120V	ac40	5755	Ant1	5755	0	0	25	Pass
10C 120V	ac40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
30C 120V	ac40	5755	Ant1	5755.04	40000	6.95	25	Pass
40C 120V	ac40	5755	Ant1	5755	0	0	25	Pass
50C 120V	ac40	5755	Ant1	5755	0	0	25	Pass
20C 102V	ac40	5795	Ant1	5795.04	40000	6.9	25	Pass

20C 120V	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
20C 138V	ac40	5795	Ant1	5795	0	0	25	Pass
-20C 120V	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
-10C 120V	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
0C 120V	ac40	5795	Ant1	5795	0	0	25	Pass
10C 120V	ac40	5795	Ant1	5795	0	0	25	Pass
30C 120V	ac40	5795	Ant1	5795	0	0	25	Pass
40C 120V	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
50C 120V	ac40	5795	Ant1	5795	0	0	25	Pass
20C 102V	ac80	5775	Ant1	5775	0	0	25	Pass
20C 120V	ac80	5775	Ant1	5775	0	0	25	Pass
20C 138V	ac80	5775	Ant1	5775	0	0	25	Pass
-20C 120V	ac80	5775	Ant1	5775	0	0	25	Pass
-10C 120V	ac80	5775	Ant1	5775	0	0	25	Pass
0C 120V	ac80	5775	Ant1	5775	0	0	25	Pass
10C 120V	ac80	5775	Ant1	5775	0	0	25	Pass
30C 120V	ac80	5775	Ant1	5775	0	0	25	Pass
40C 120V	ac80	5775	Ant1	5775	0	0	25	Pass
50C 120V	ac80	5775	Ant1	5775	0	0	25	Pass

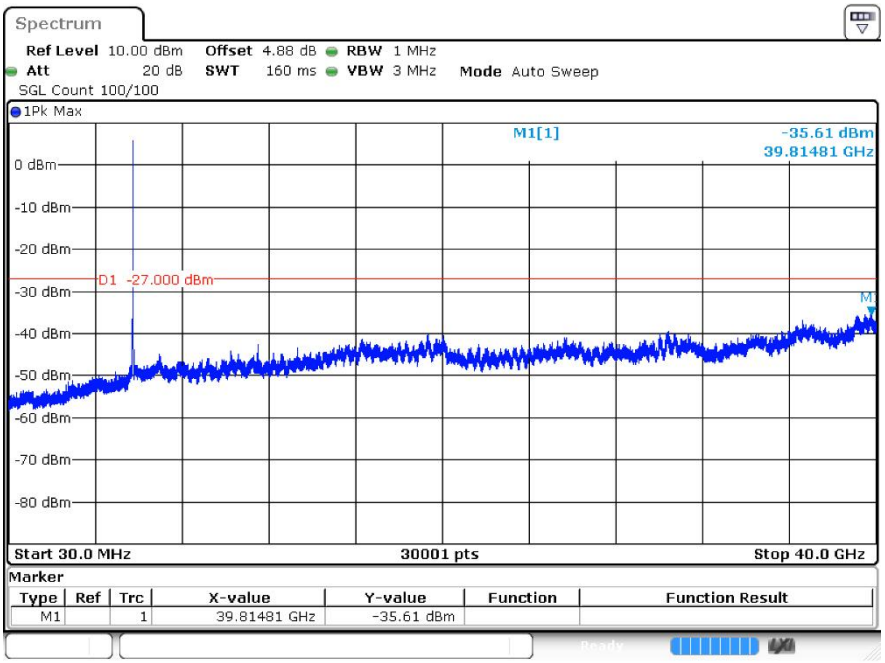
7 Conducted RF Spurious Emission

7.1 Test Result

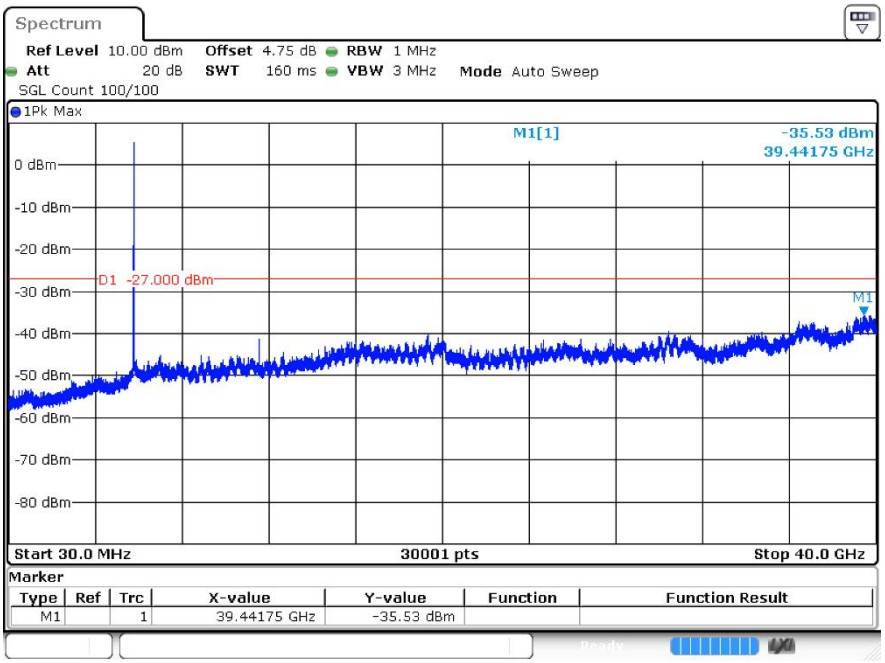
Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
a	5745	Ant1	-35.6	-27	Pass
a	5785	Ant1	-35.53	-27	Pass
a	5825	Ant1	-35.31	-27	Pass
n20	5745	Ant1	-34.85	-27	Pass
n20	5785	Ant1	-35.45	-27	Pass
n20	5825	Ant1	-35.25	-27	Pass
n40	5755	Ant1	-35.17	-27	Pass
n40	5795	Ant1	-34.8	-27	Pass
ac20	5745	Ant1	-35.1	-27	Pass
ac20	5785	Ant1	-35.29	-27	Pass
ac20	5825	Ant1	-35.39	-27	Pass
ac40	5755	Ant1	-34.78	-27	Pass
ac40	5795	Ant1	-35.29	-27	Pass
ac80	5775	Ant1	-35.28	-27	Pass

7.2 Test Graphs

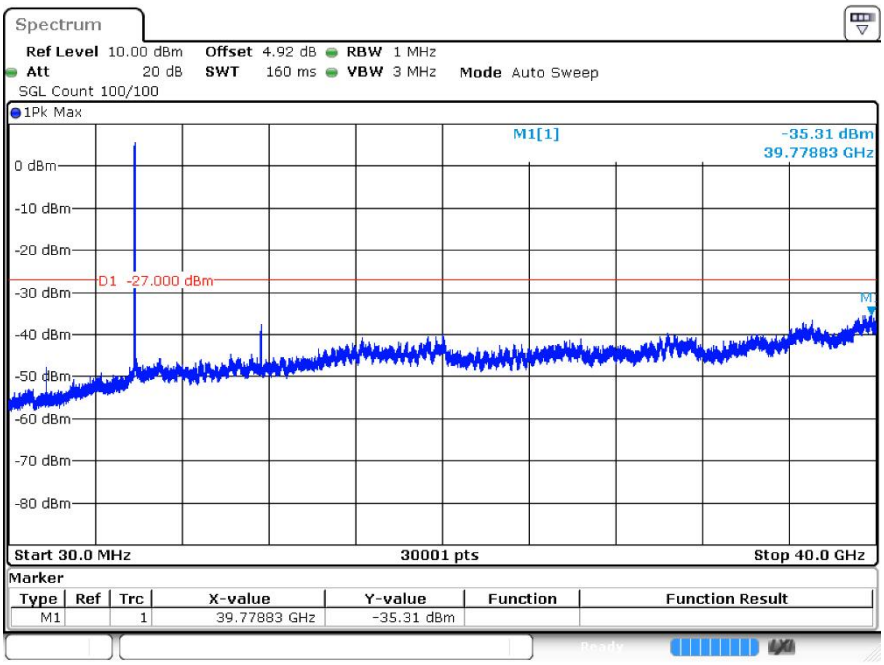
Test Graphs
Tx. Spurious a 5745MHz Ant1 Emission



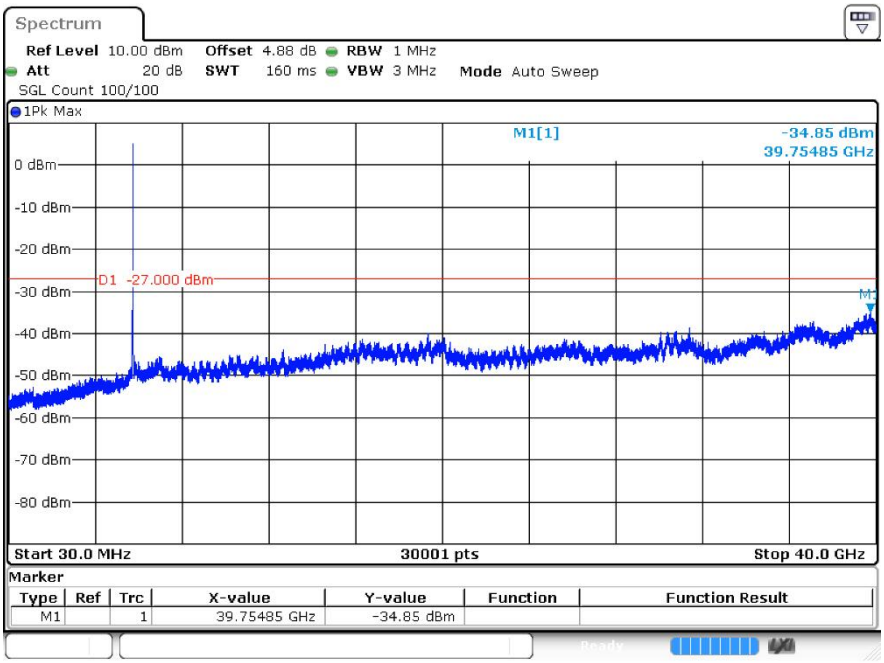
Tx. Spurious a 5785MHz Ant1 Emission



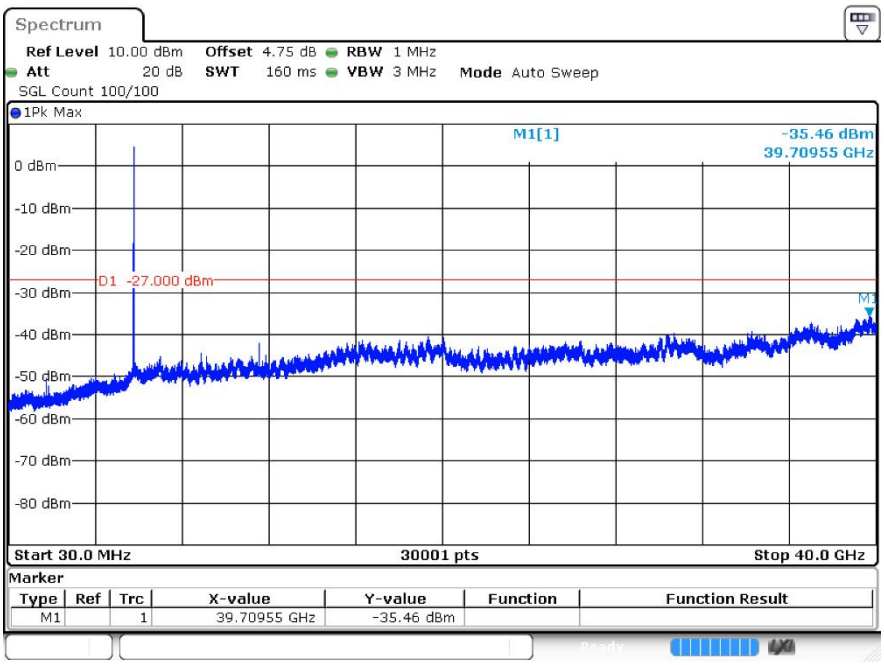
Tx. Spurious a 5825MHz Ant1 Emission



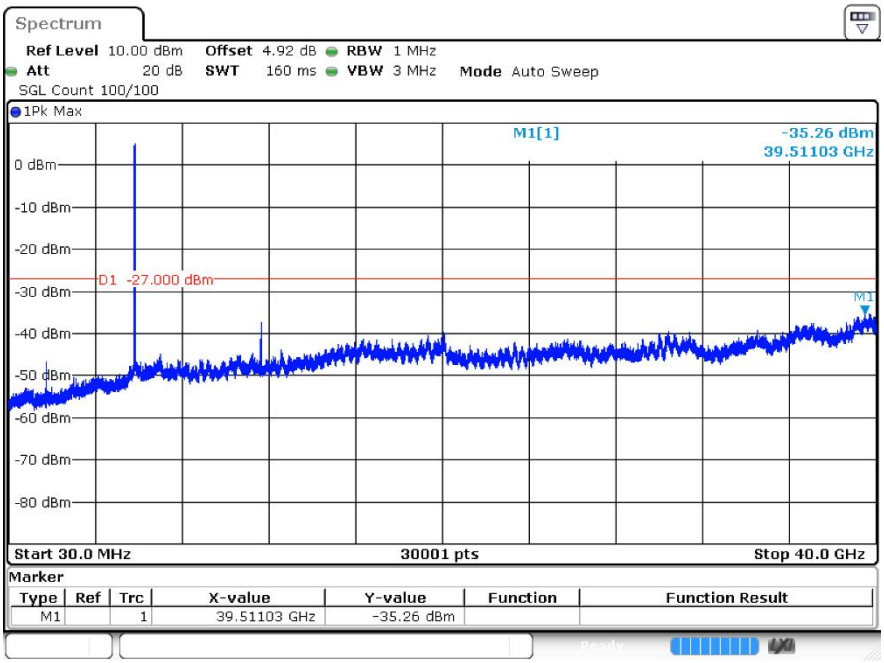
Tx. Spurious n20 5745MHz Ant1 Emission



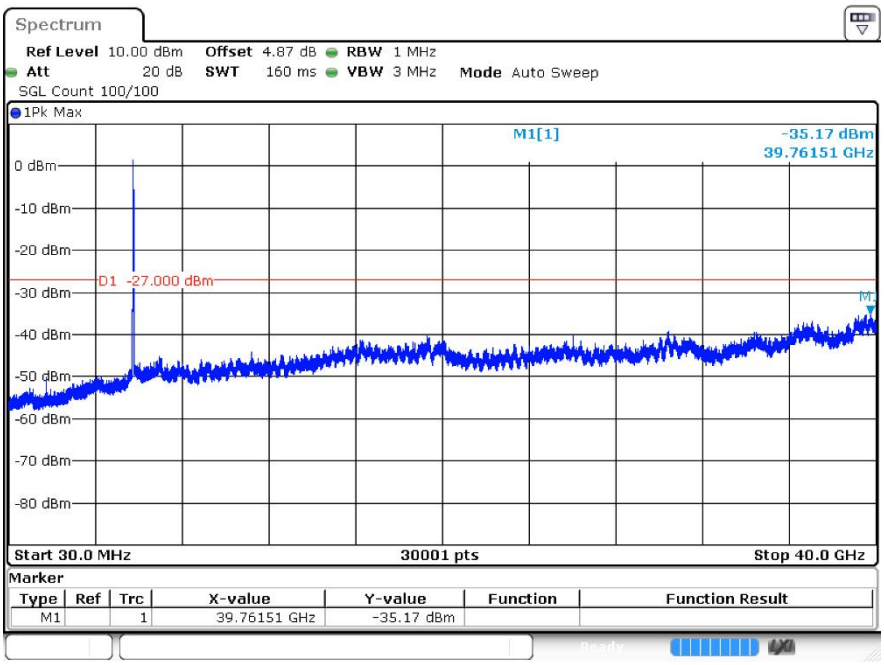
Tx. Spurious n20 5785MHz Ant1 Emission



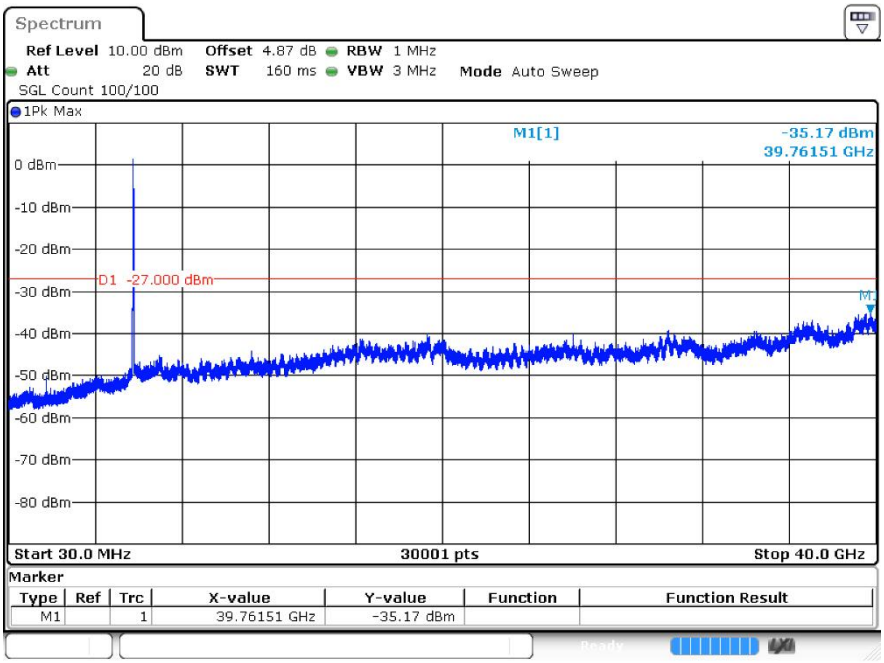
Tx. Spurious n20 5825MHz Ant1 Emission



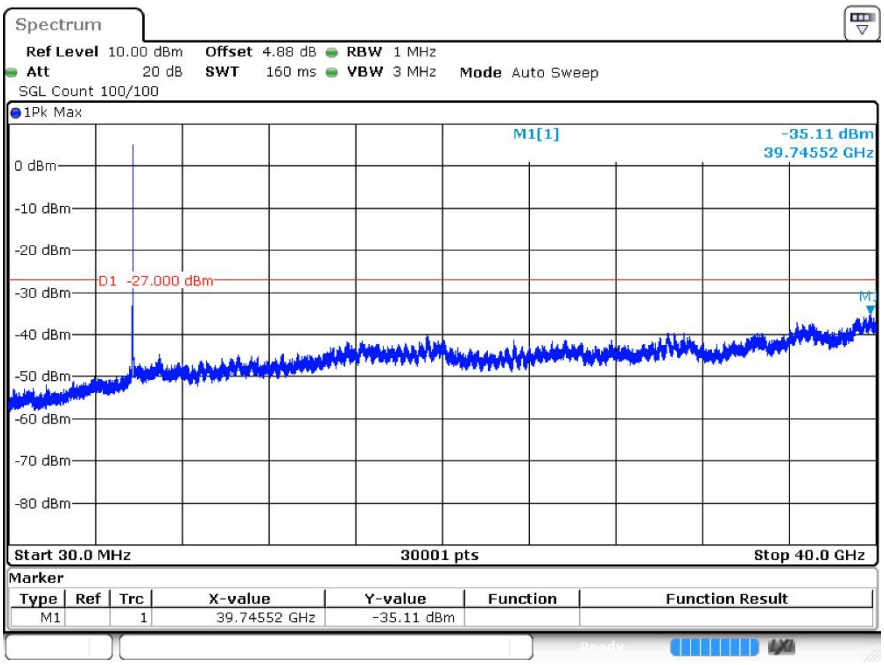
Tx. Spurious n40 5755MHz Ant1 Emission



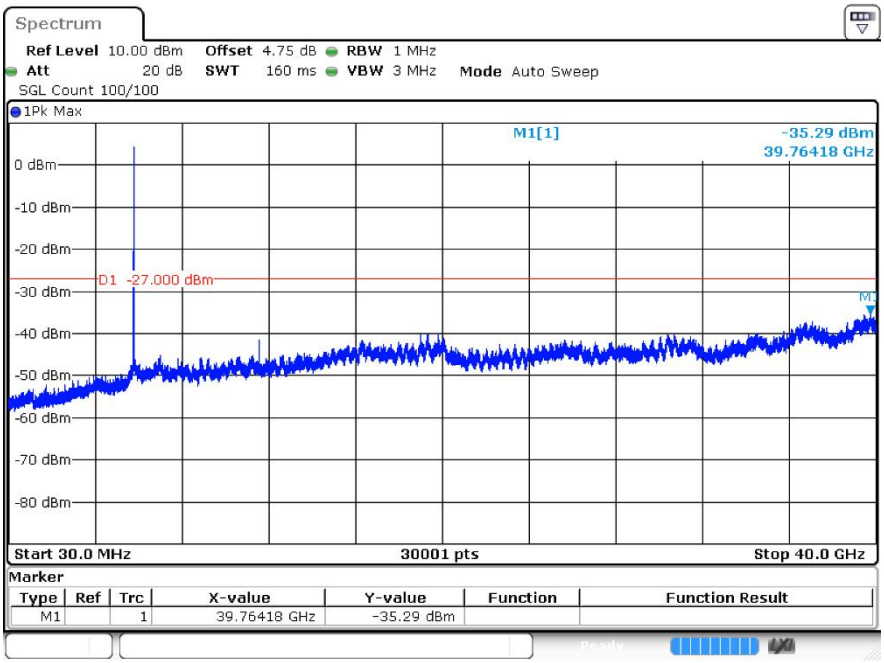
Tx. Spurious n40 5795MHz Ant1 Emission



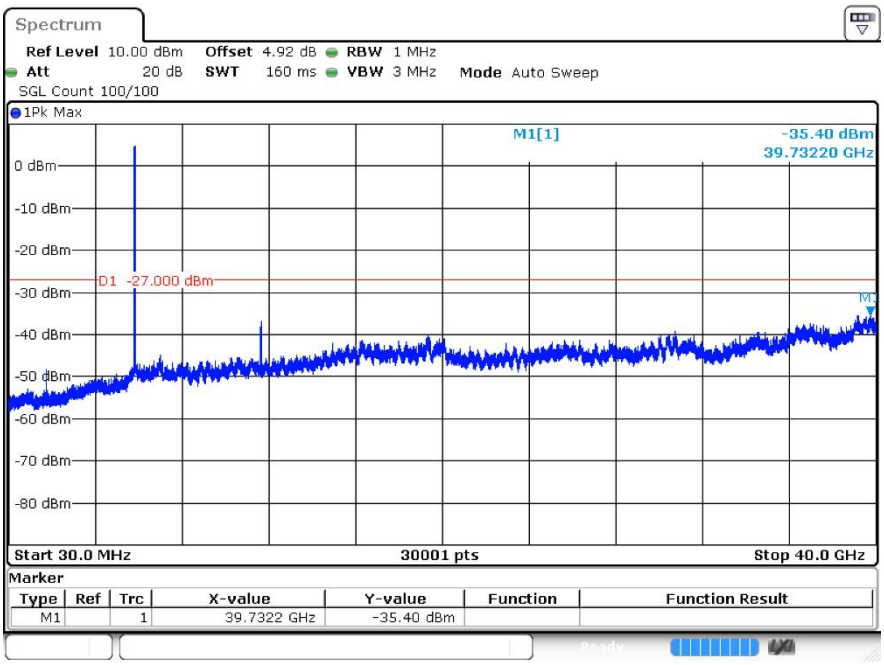
Tx. Spurious ac20 5745MHz Ant1 Emission



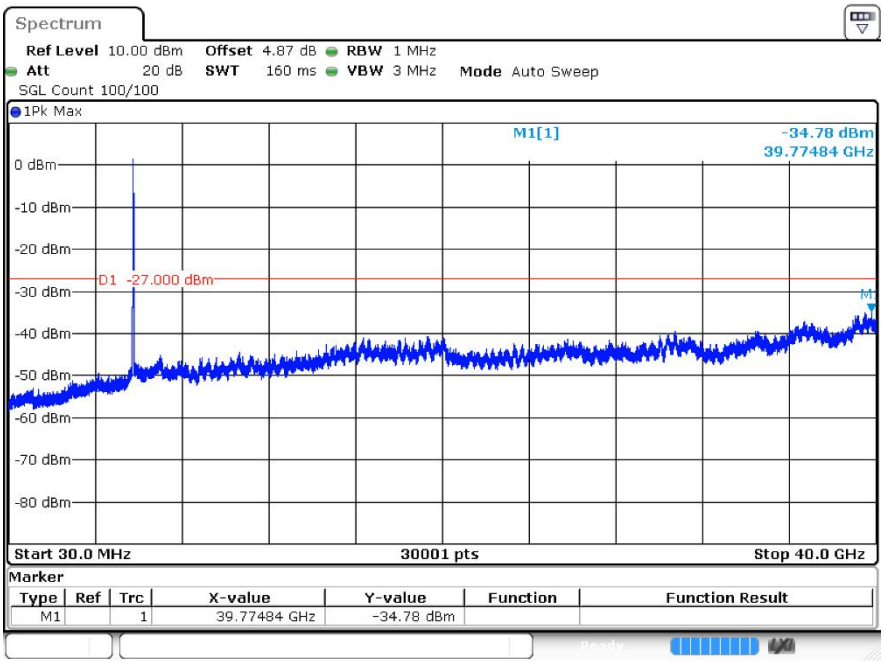
Tx. Spurious ac20 5785MHz Ant1 Emission



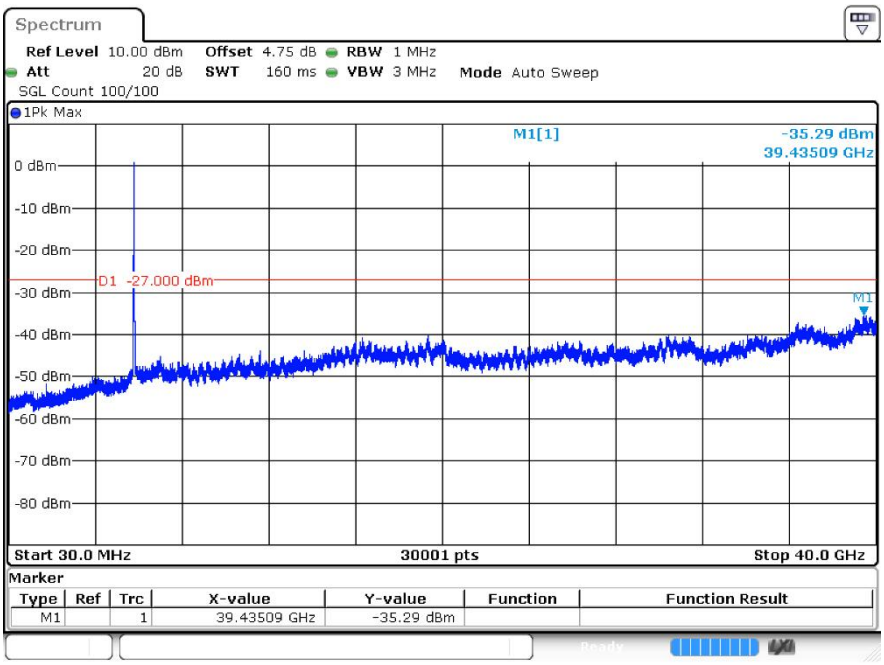
Tx. Spurious ac20 5825MHz Ant1 Emission



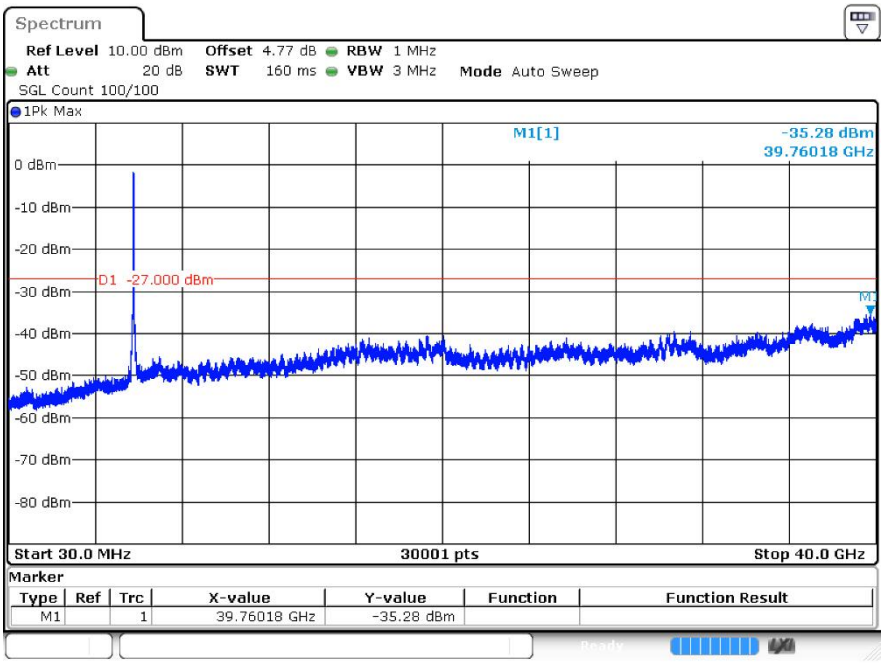
Tx. Spurious ac40 5755MHz Ant1 Emission



Tx. Spurious ac40 5795MHz Ant1 Emission



Tx. Spurious ac80 5775MHz Ant1 Emission



8 Restrict Band

8.1 Test Result

Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	EIRP Power (dBm)	Detector	Limit (dBm)	Verdict
a	5745	5650	-43	2	-	-41	Peak	-27	Pass
a	5745	5650	-50.9	2	0	-48.9	Average	-27	Pass
a	5745	5700	-44	2	-	-42	Peak	10	Pass
a	5745	5700	-50.22	2	0	-48.22	Average	10	Pass
a	5745	5720	-42.79	2	-	-40.79	Peak	15.6	Pass
a	5745	5720	-49.37	2	0	-47.37	Average	15.6	Pass
a	5745	5725	-33.02	2	-	-31.02	Peak	27	Pass
a	5745	5725	-43.17	2	0	-41.17	Average	27	Pass
a	5825	5850	-41.24	2	-	-39.24	Peak	27	Pass
a	5825	5850	-48.38	2	0	-46.38	Average	27	Pass
a	5825	5855	-44.79	2	-	-42.79	Peak	15.6	Pass
a	5825	5855	-49.59	2	0	-47.59	Average	15.6	Pass
a	5825	5875	-44.57	2	-	-42.57	Peak	10	Pass
a	5825	5875	-49.7	2	0	-47.7	Average	10	Pass
a	5825	5925	-41.44	2	-	-39.44	Peak	-27	Pass
a	5825	5925	-49.49	2	0	-47.49	Average	-27	Pass
n20	5745	5650	-44.25	2	-	-42.25	Peak	-27	Pass
n20	5745	5650	-51.27	2	0	-49.27	Average	-27	Pass
n20	5745	5700	-44.63	2	-	-42.63	Peak	10	Pass
n20	5745	5700	-50.46	2	0	-48.46	Average	10	Pass
n20	5745	5720	-43.4	2	-	-41.4	Peak	15.6	Pass
n20	5745	5720	-49.68	2	0	-47.68	Average	15.6	Pass
n20	5745	5725	-33.89	2	-	-31.89	Peak	27	Pass
n20	5745	5725	-44.28	2	0	-42.28	Average	27	Pass
n20	5825	5850	-42.29	2	-	-40.29	Peak	27	Pass
n20	5825	5850	-48.95	2	0	-46.95	Average	27	Pass
n20	5825	5855	-42.56	2	-	-40.56	Peak	15.6	Pass
n20	5825	5855	-49.31	2	0	-47.31	Average	15.6	Pass
n20	5825	5875	-43.48	2	-	-41.48	Peak	10	Pass
n20	5825	5875	-49.27	2	0	-47.27	Average	10	Pass
n20	5825	5925	-42.27	2	-	-40.27	Peak	-27	Pass
n20	5825	5925	-49.71	2	0	-47.71	Average	-27	Pass
n40	5755	5650	-44.62	2	-	-42.62	Peak	-27	Pass
n40	5755	5650	-51.32	2	0	-49.32	Average	-27	Pass
n40	5755	5700	-44.09	2	-	-42.09	Peak	10	Pass

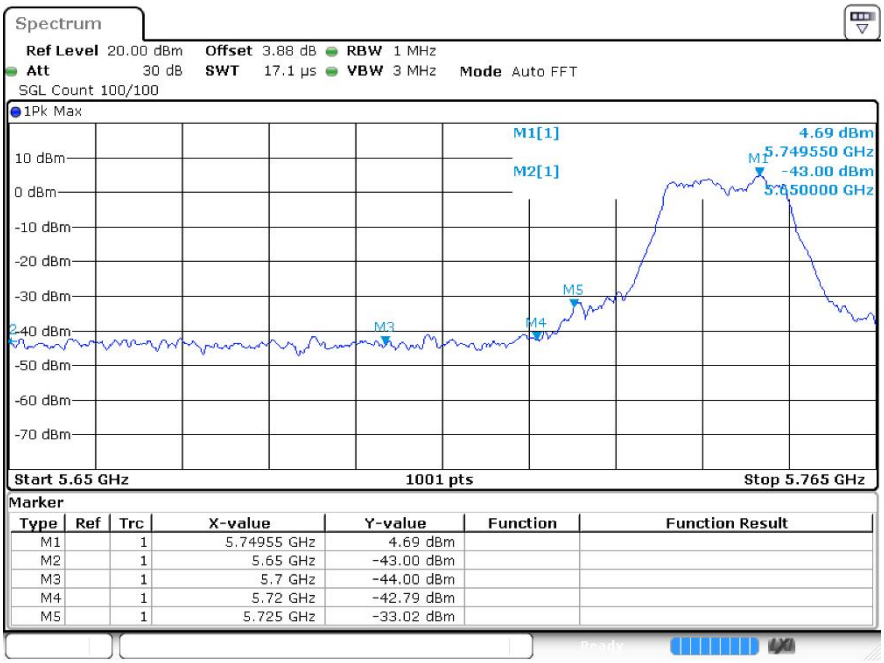
n40	5755	5700	-50.47	2	0	-48.47	Average	10	Pass
n40	5755	5720	-37.46	2	-	-35.46	Peak	15.6	Pass
n40	5755	5720	-45.09	2	0	-43.09	Average	15.6	Pass
n40	5755	5725	-35.22	2	-	-33.22	Peak	27	Pass
n40	5755	5725	-42.93	2	0	-40.93	Average	27	Pass
n40	5795	5850	-41.93	2	-	-39.93	Peak	27	Pass
n40	5795	5850	-49.91	2	0	-47.91	Average	27	Pass
n40	5795	5855	-41.09	2	-	-39.09	Peak	15.6	Pass
n40	5795	5855	-49.75	2	0	-47.75	Average	15.6	Pass
n40	5795	5875	-43.49	2	-	-41.49	Peak	10	Pass
n40	5795	5875	-49.72	2	0	-47.72	Average	10	Pass
n40	5795	5925	-39.87	2	-	-37.87	Peak	-27	Pass
n40	5795	5925	-49.68	2	0	-47.68	Average	-27	Pass
ac20	5745	5650	-42.15	2	-	-40.15	Peak	-27	Pass
ac20	5745	5650	-51.14	2	0	-49.14	Average	-27	Pass
ac20	5745	5700	-43	2	-	-41	Peak	10	Pass
ac20	5745	5700	-50.17	2	0	-48.17	Average	10	Pass
ac20	5745	5720	-42.31	2	-	-40.31	Peak	15.6	Pass
ac20	5745	5720	-49.61	2	0	-47.61	Average	15.6	Pass
ac20	5745	5725	-34.9	2	-	-32.9	Peak	27	Pass
ac20	5745	5725	-43.98	2	0	-41.98	Average	27	Pass
ac20	5825	5850	-39.49	2	-	-37.49	Peak	27	Pass
ac20	5825	5850	-49.02	2	0	-47.02	Average	27	Pass
ac20	5825	5855	-41.19	2	-	-39.19	Peak	15.6	Pass
ac20	5825	5855	-50.27	2	0	-48.27	Average	15.6	Pass
ac20	5825	5875	-41.27	2	-	-39.27	Peak	10	Pass
ac20	5825	5875	-49.97	2	0	-47.97	Average	10	Pass
ac20	5825	5925	-43.01	2	-	-41.01	Peak	-27	Pass
ac20	5825	5925	-49.56	2	0	-47.56	Average	-27	Pass
ac40	5755	5650	-45.02	2	-	-43.02	Peak	-27	Pass
ac40	5755	5650	-51.42	2	0	-49.42	Average	-27	Pass
ac40	5755	5700	-43.9	2	-	-41.9	Peak	10	Pass
ac40	5755	5700	-49.9	2	0	-47.9	Average	10	Pass
ac40	5755	5720	-37.81	2	-	-35.81	Peak	15.6	Pass
ac40	5755	5720	-45.17	2	0	-43.17	Average	15.6	Pass
ac40	5755	5725	-35.9	2	-	-33.9	Peak	27	Pass
ac40	5755	5725	-42.94	2	0	-40.94	Average	27	Pass
ac40	5795	5850	-42.18	2	-	-40.18	Peak	27	Pass
ac40	5795	5850	-50.12	2	0	-48.12	Average	27	Pass
ac40	5795	5855	-43.71	2	-	-41.71	Peak	15.6	Pass
ac40	5795	5855	-49.66	2	0	-47.66	Average	15.6	Pass
ac40	5795	5875	-43.56	2	-	-41.56	Peak	10	Pass
ac40	5795	5875	-49.65	2	0	-47.65	Average	10	Pass

ac40	5795	5925	-43.19	2	-	-41.19	Peak	-27	Pass
ac40	5795	5925	-50.32	2	0	-48.32	Average	-27	Pass
ac80	5775	5850	-41.38	2	-	-39.38	Peak	27	Pass
ac80	5775	5925	-50.1	2	0	-48.1	Average	-27	Pass
ac80	5775	5650	-42.68	2	-	-40.68	Peak	-27	Pass
ac80	5775	5650	-50.84	2	0	-48.84	Average	-27	Pass
ac80	5775	5700	-42.34	2	-	-40.34	Peak	10	Pass
ac80	5775	5700	-48.48	2	0	-46.48	Average	10	Pass
ac80	5775	5720	-39.83	2	-	-37.83	Peak	15.6	Pass
ac80	5775	5720	-47.47	2	0	-45.47	Average	15.6	Pass
ac80	5775	5725	-38.28	2	-	-36.28	Peak	27	Pass
ac80	5775	5725	-45.23	2	0	-43.23	Average	27	Pass
ac80	5775	5850	-49.23	2	0	-47.23	Average	27	Pass
ac80	5775	5855	-40.07	2	-	-38.07	Peak	15.6	Pass
ac80	5775	5855	-49.95	2	0	-47.95	Average	15.6	Pass
ac80	5775	5875	-42.7	2	-	-40.7	Peak	10	Pass
ac80	5775	5875	-49.24	2	0	-47.24	Average	10	Pass
ac80	5775	5925	-43.07	2	-	-41.07	Peak	-27	Pass

8.2 Test Graphs

Test Graphs

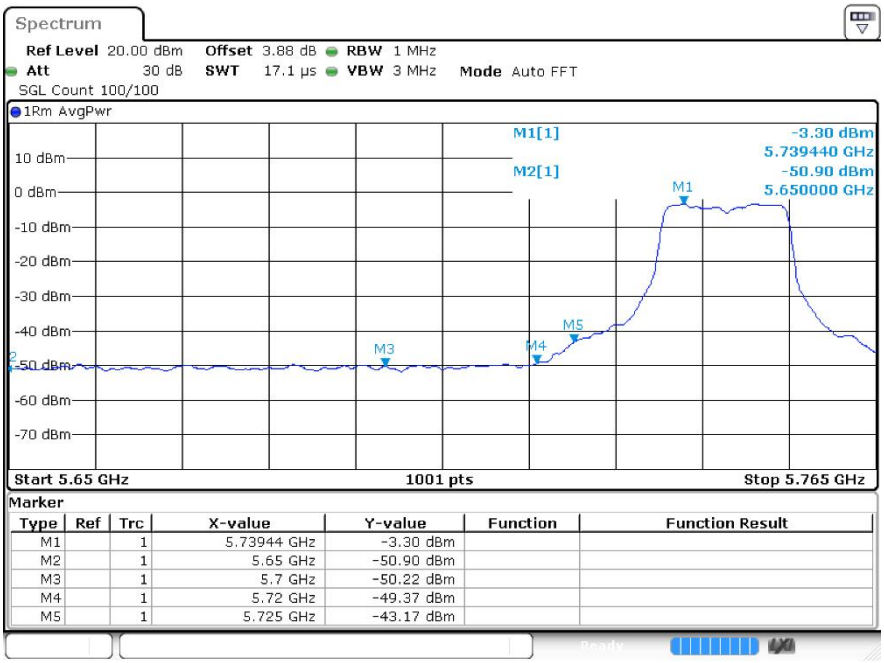
Restrict Band a 5745MHz Ant1 Peak



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.74955 GHz	4.69 dBm		
M2		1	5.65 GHz	-43.00 dBm		
M3		1	5.7 GHz	-44.00 dBm		
M4		1	5.72 GHz	-42.79 dBm		
M5		1	5.725 GHz	-33.02 dBm		

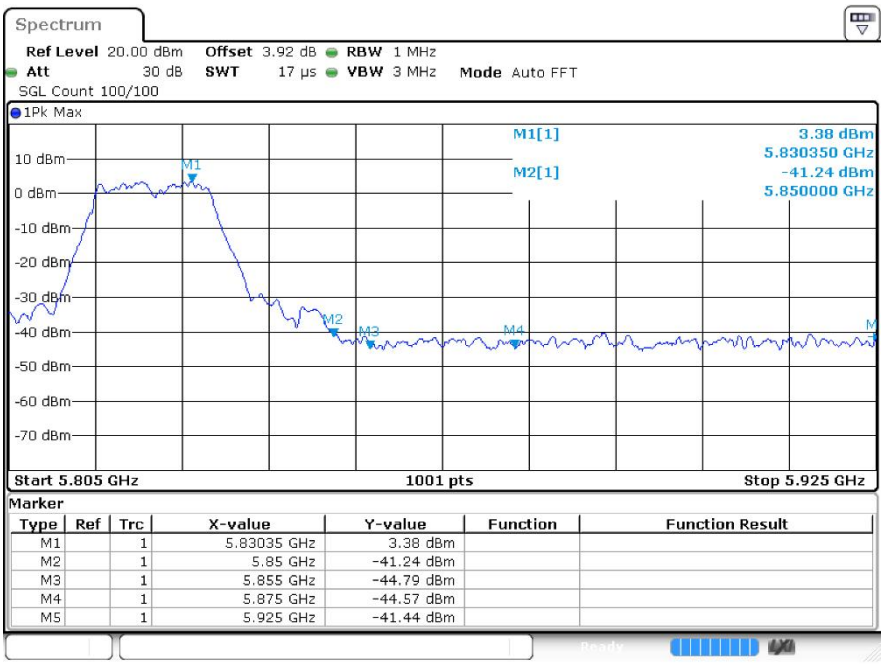
Restrict Band a 5745MHz Ant1 Average



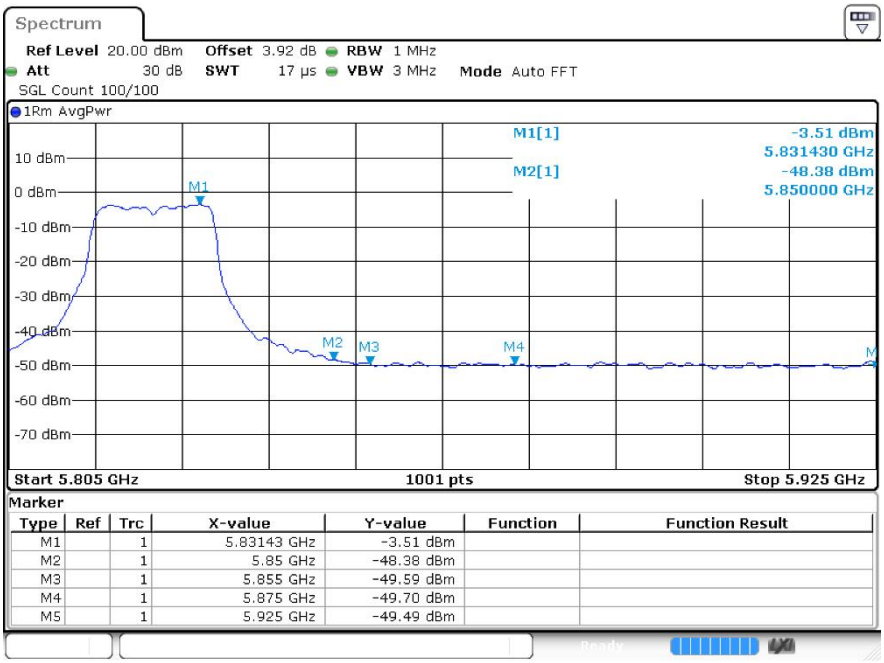
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.73944 GHz	-3.30 dBm		
M2		1	5.65 GHz	-50.90 dBm		
M3		1	5.7 GHz	-50.22 dBm		
M4		1	5.72 GHz	-49.37 dBm		
M5		1	5.725 GHz	-43.17 dBm		

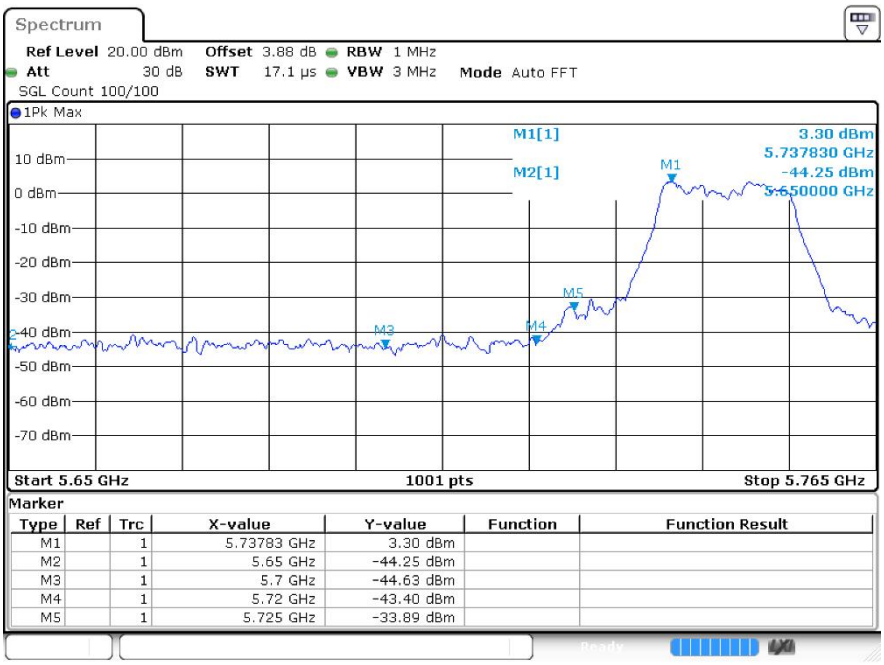
Restrict Band a 5825MHz Ant1 Peak



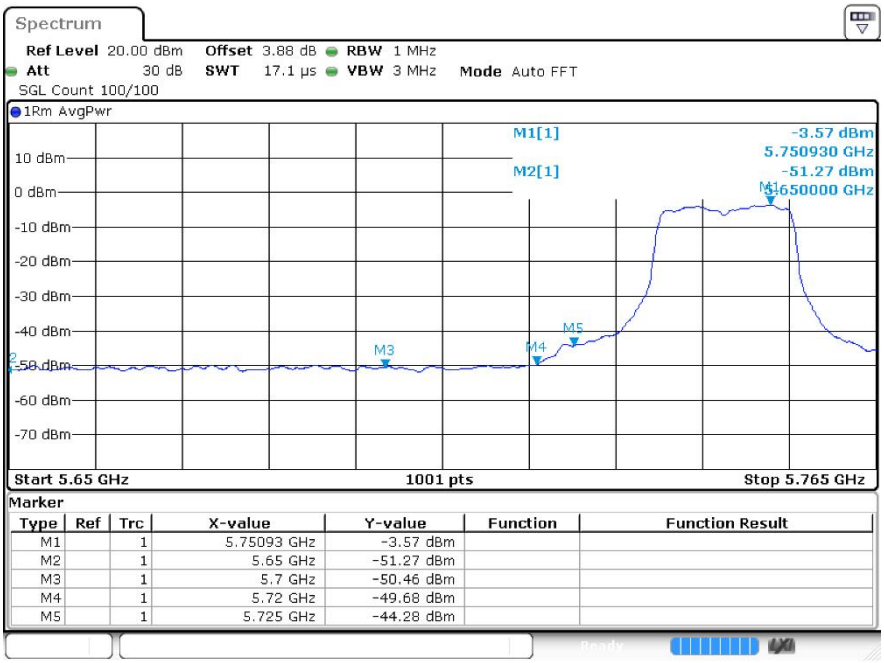
Restrict Band a 5825MHz Ant1 Average



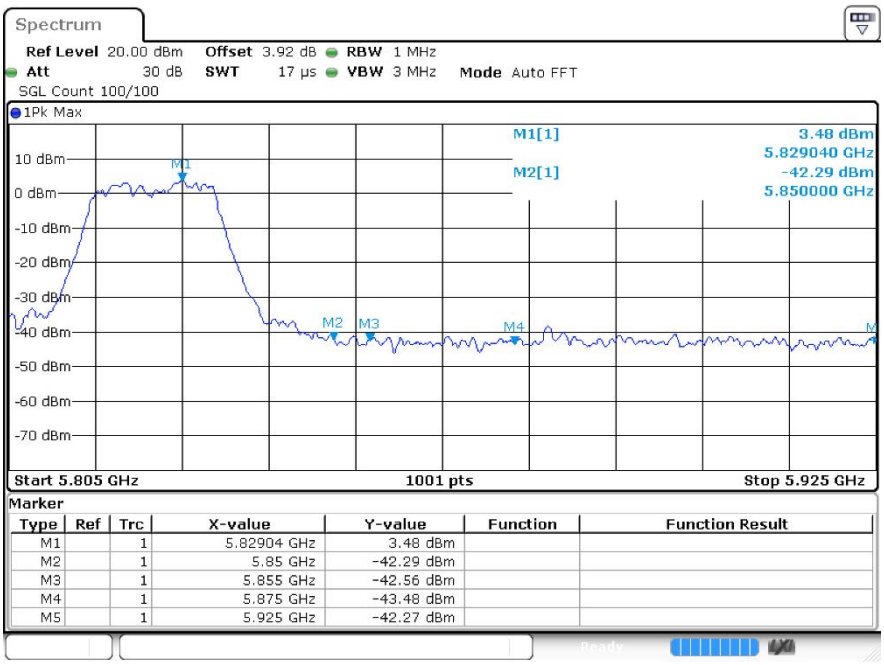
Restrict Band n20 5745MHz Ant1 Peak



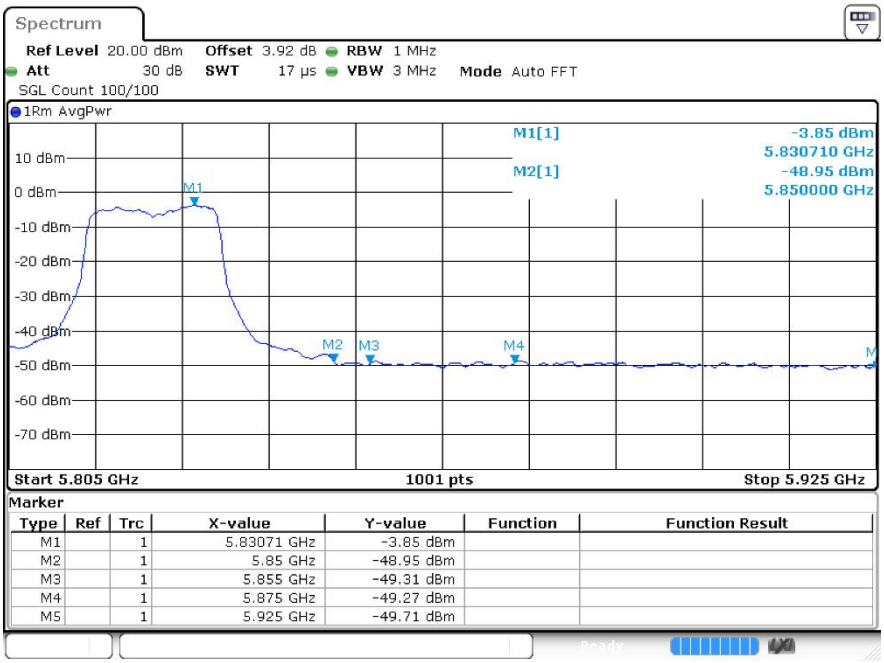
Restrict Band n20 5745MHz Ant1 Average



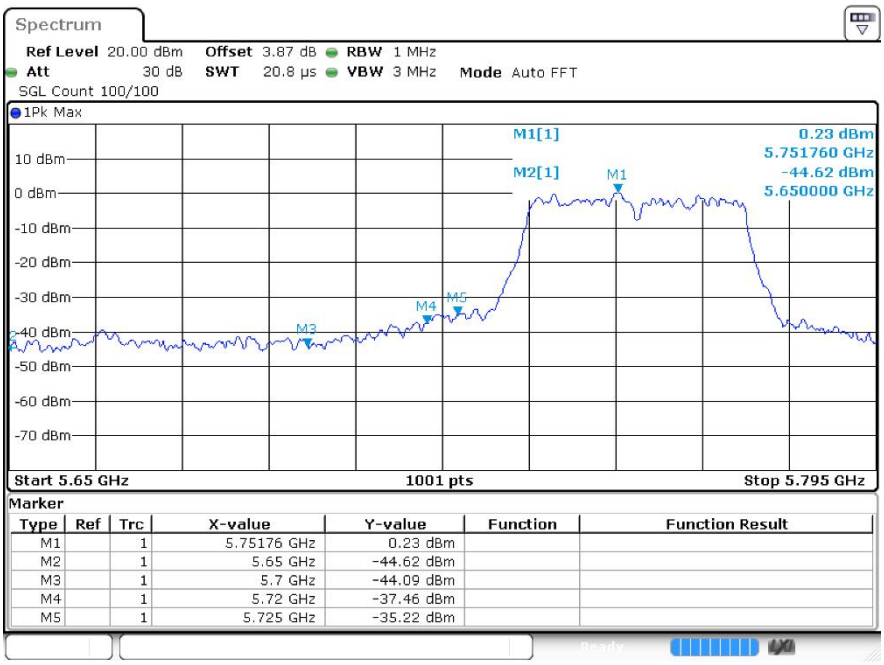
Restrict Band n20 5825MHz Ant1 Peak



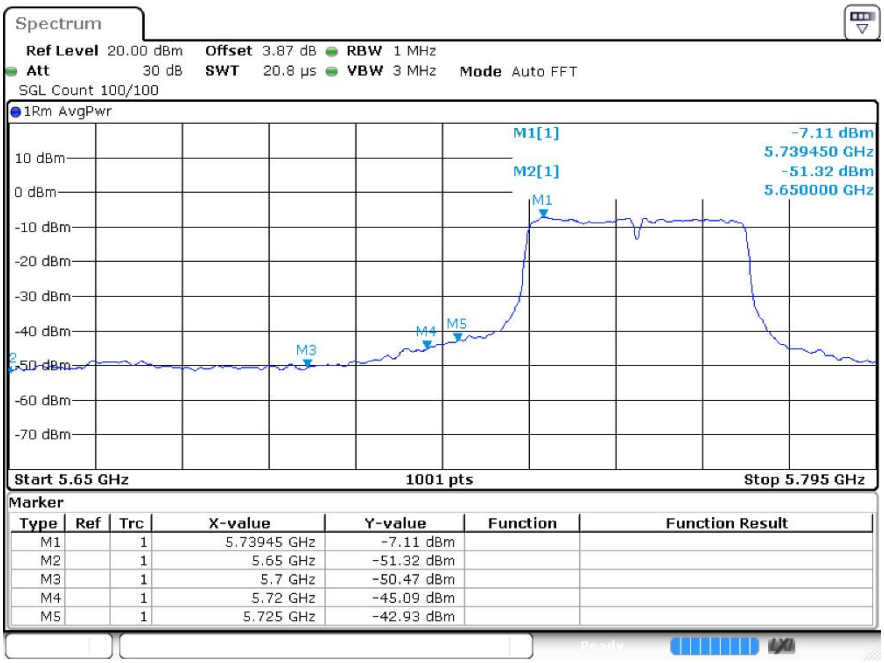
Restrict Band n20 5825MHz Ant1 Average



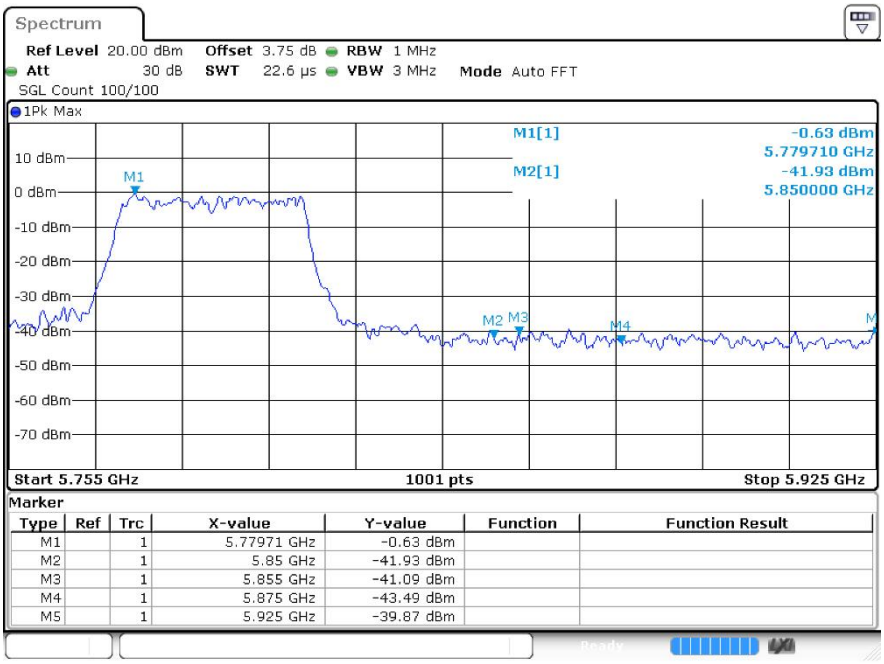
Restrict Band n40 5755MHz Ant1 Peak



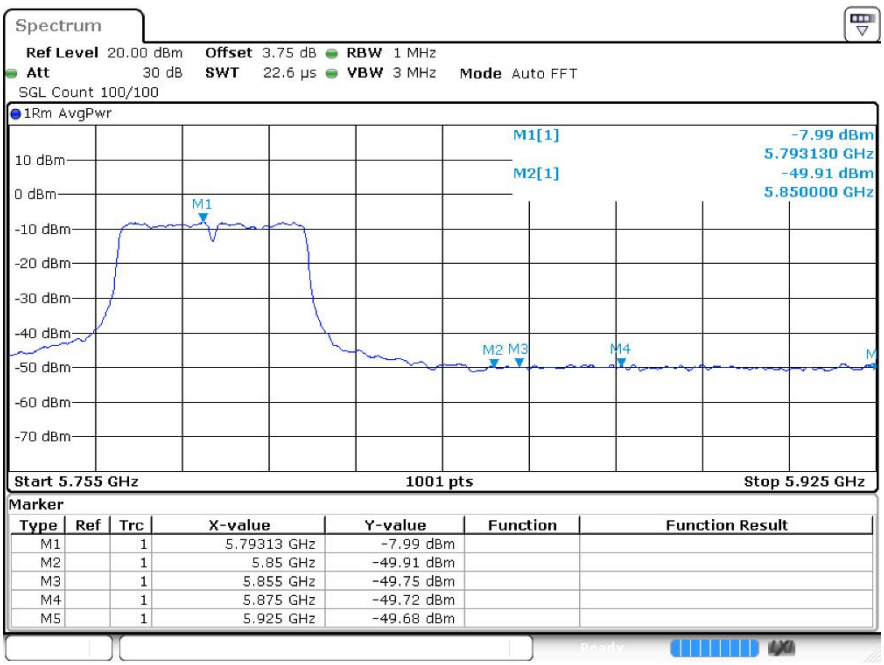
Restrict Band n40 5755MHz Ant1 Average



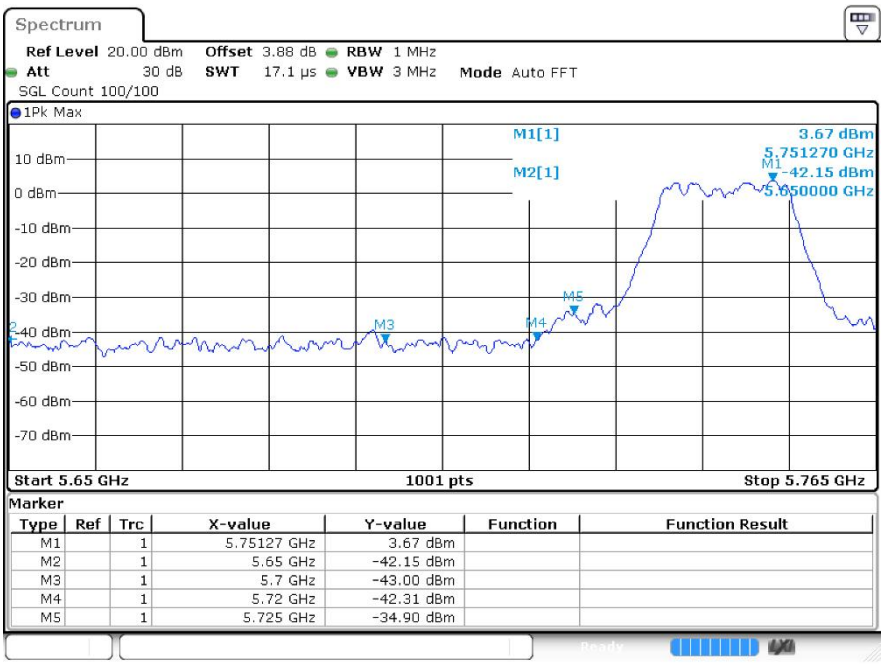
Restrict Band n40 5795MHz Ant1 Peak



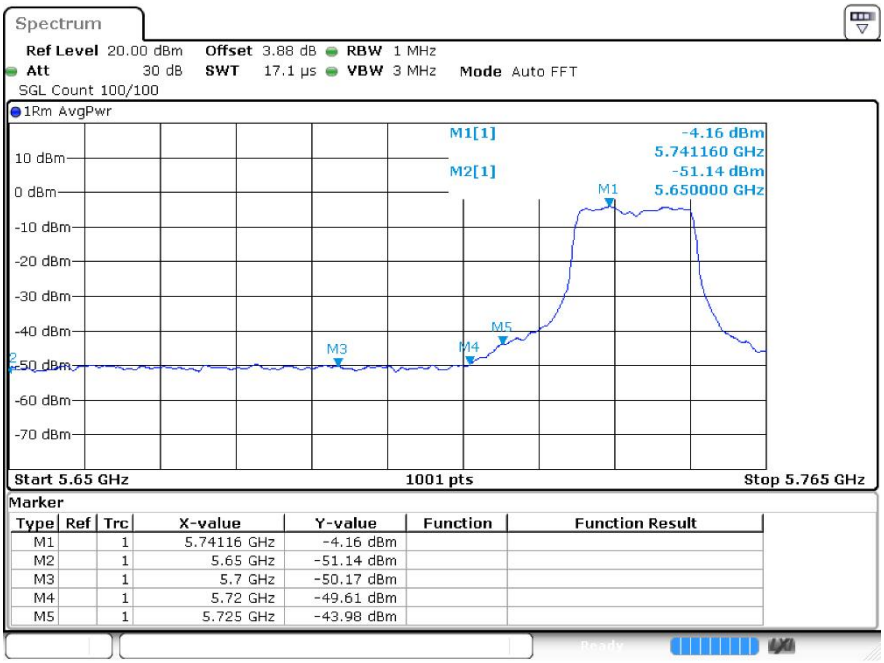
Restrict Band n40 5795MHz Ant1 Average



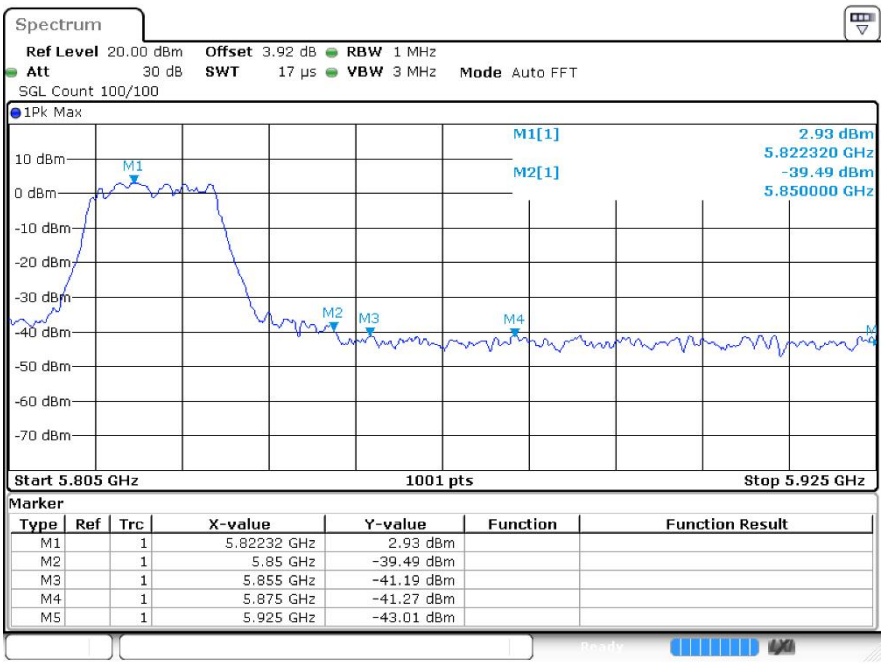
Restrict Band ac20 5745MHz Ant1 Peak



Restrict Band ac20 5745MHz Ant1 Average



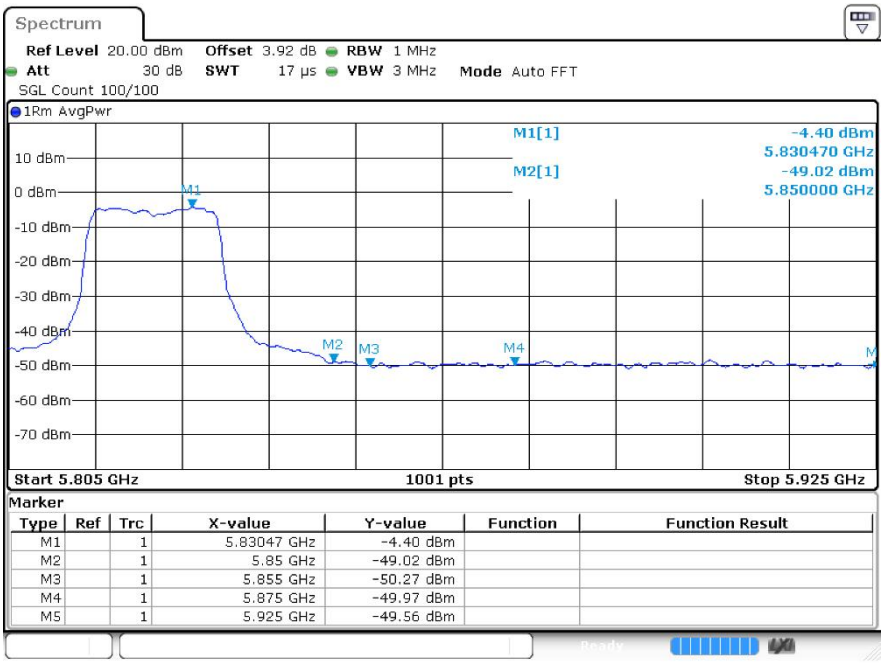
Restrict Band ac20 5825MHz Ant1 Peak



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.82232 GHz	2.93 dBm		
M2		1	5.85 GHz	-39.49 dBm		
M3		1	5.855 GHz	-41.19 dBm		
M4		1	5.875 GHz	-41.27 dBm		
M5		1	5.925 GHz	-43.01 dBm		

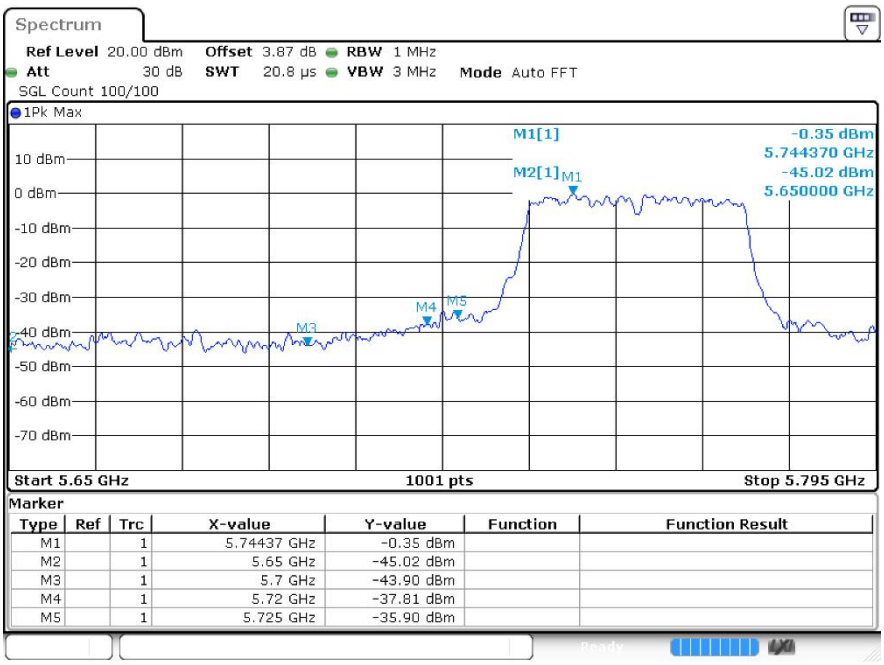
Restrict Band ac20 5825MHz Ant1 Average



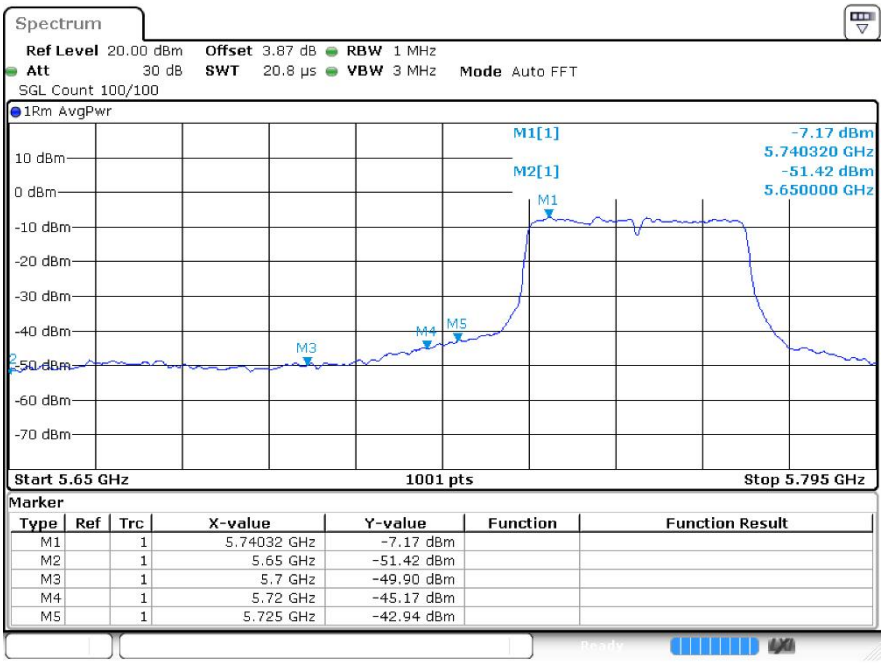
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.83047 GHz	-4.40 dBm		
M2		1	5.85 GHz	-49.02 dBm		
M3		1	5.855 GHz	-50.27 dBm		
M4		1	5.875 GHz	-49.97 dBm		
M5		1	5.925 GHz	-49.56 dBm		

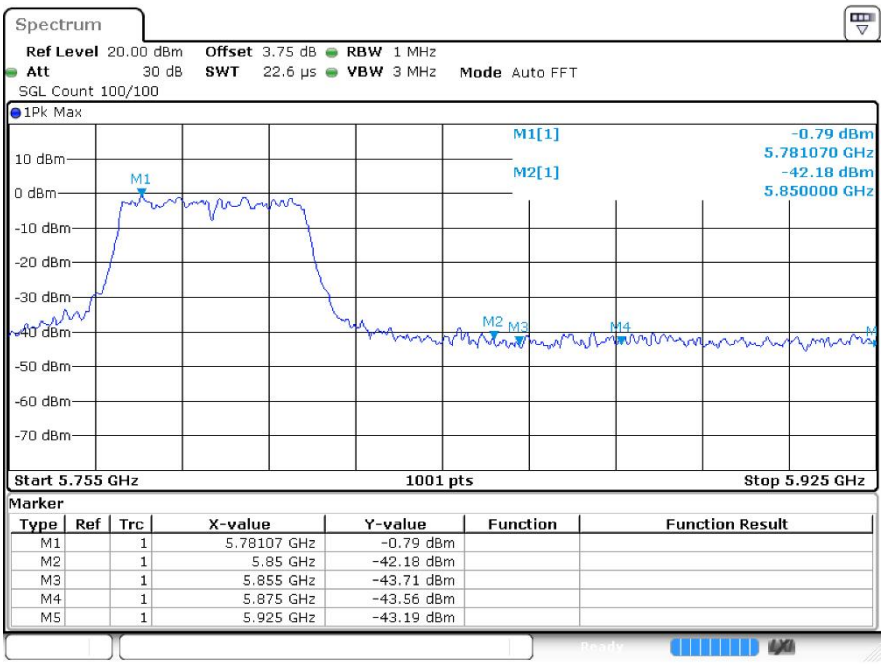
Restrict Band ac40 5755MHz Ant1 Peak



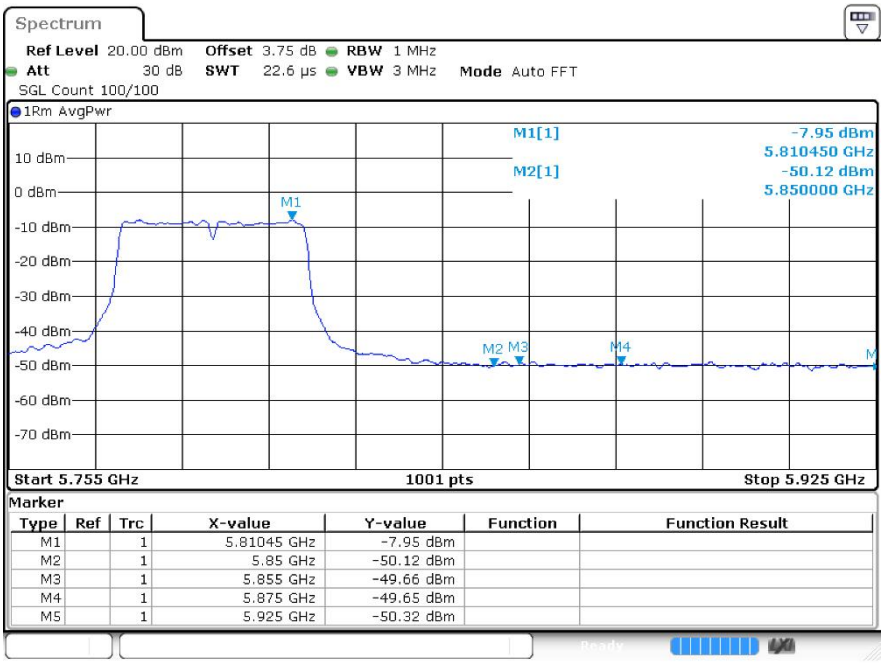
Restrict Band ac40 5755MHz Ant1 Average



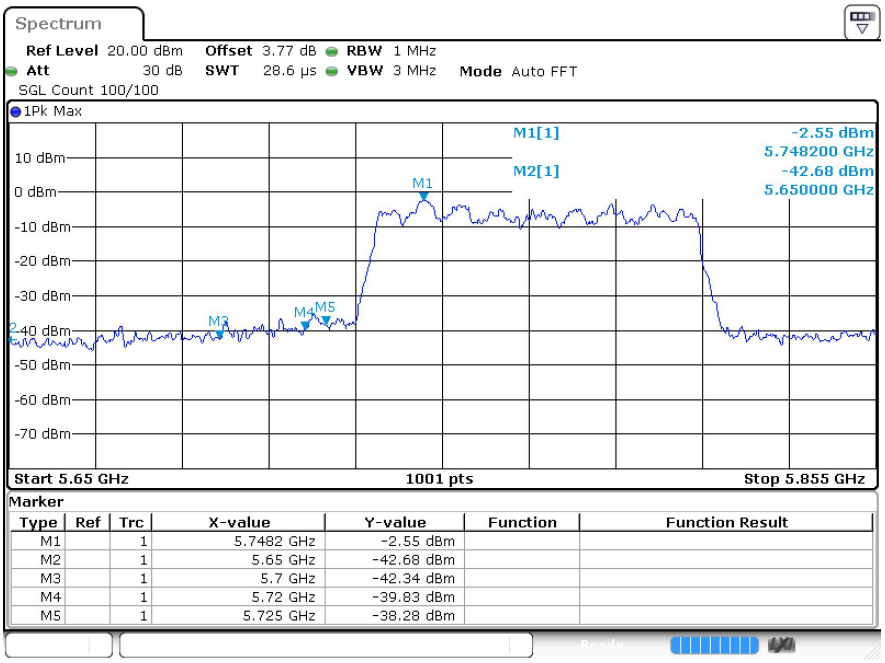
Restrict Band ac40 5795MHz Ant1 Peak



Restrict Band ac40 5795MHz Ant1 Average



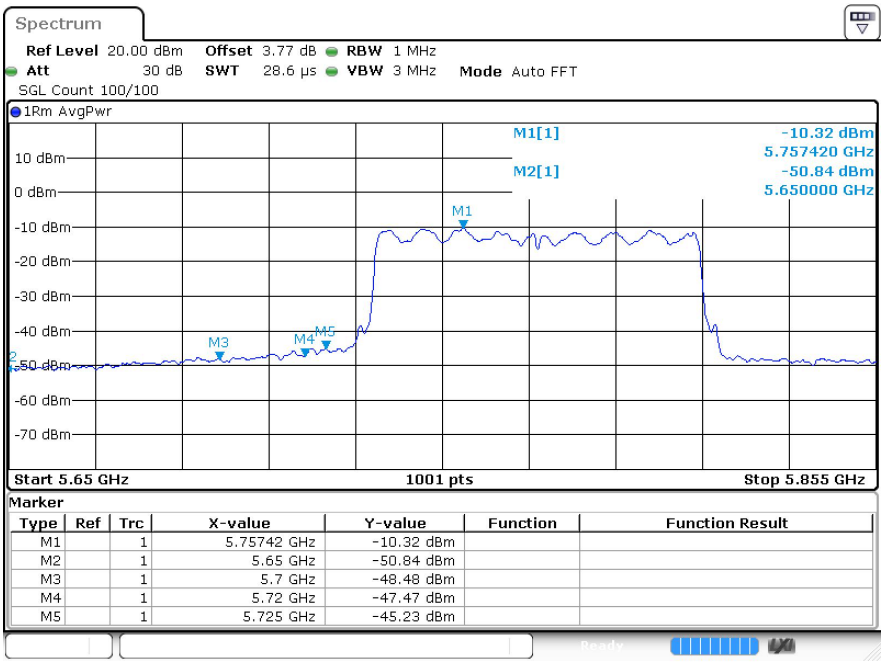
Restrict Band ac80 5775MHz Ant1 Peak



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.7482 GHz	-2.55 dBm		
M2		1	5.65 GHz	-42.68 dBm		
M3		1	5.7 GHz	-42.34 dBm		
M4		1	5.72 GHz	-39.83 dBm		
M5		1	5.725 GHz	-38.28 dBm		

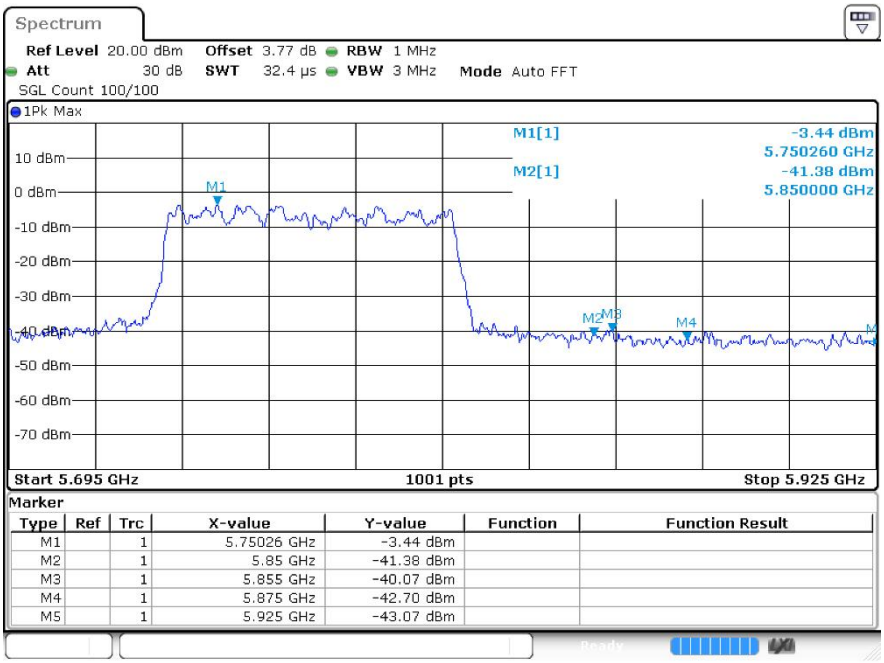
Restrict Band ac80 5775MHz Ant1 Average



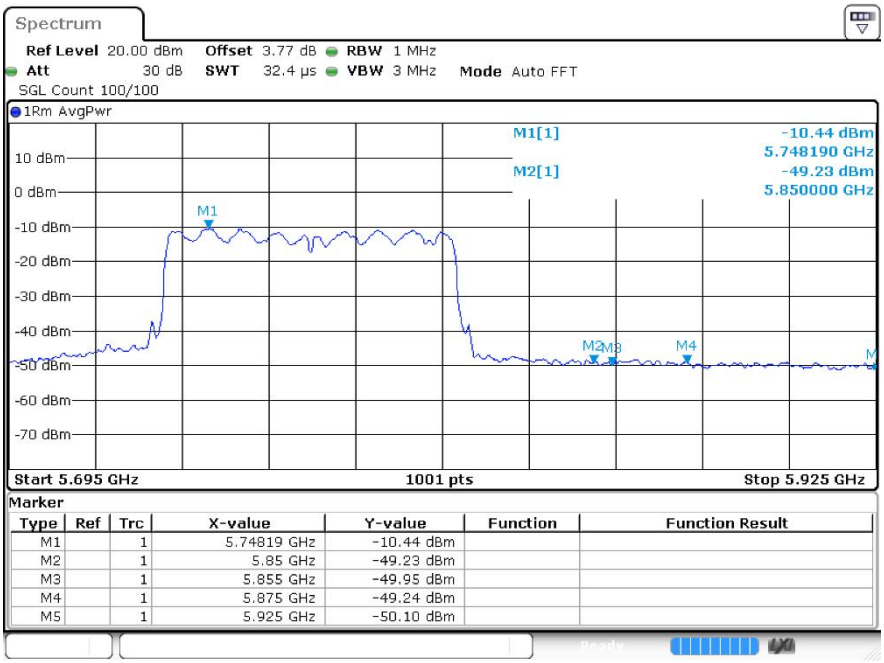
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.75742 GHz	-10.32 dBm		
M2		1	5.65 GHz	-50.84 dBm		
M3		1	5.7 GHz	-48.48 dBm		
M4		1	5.72 GHz	-47.47 dBm		
M5		1	5.725 GHz	-45.23 dBm		

Restrict Band ac80 5775MHz Ant1 Peak



Restrict Band ac80 5775MHz Ant1 Average



---The End---