



Appendix RF test data for 5G WIFI (Conducted Measurement)

Product Name: Carplay/Android Auto

Trade Mark: N/A

Test Model: M22

Environmental Conditions

Temperature:	24.5° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Aalen.Ye
Supervised by:	Allen Wang



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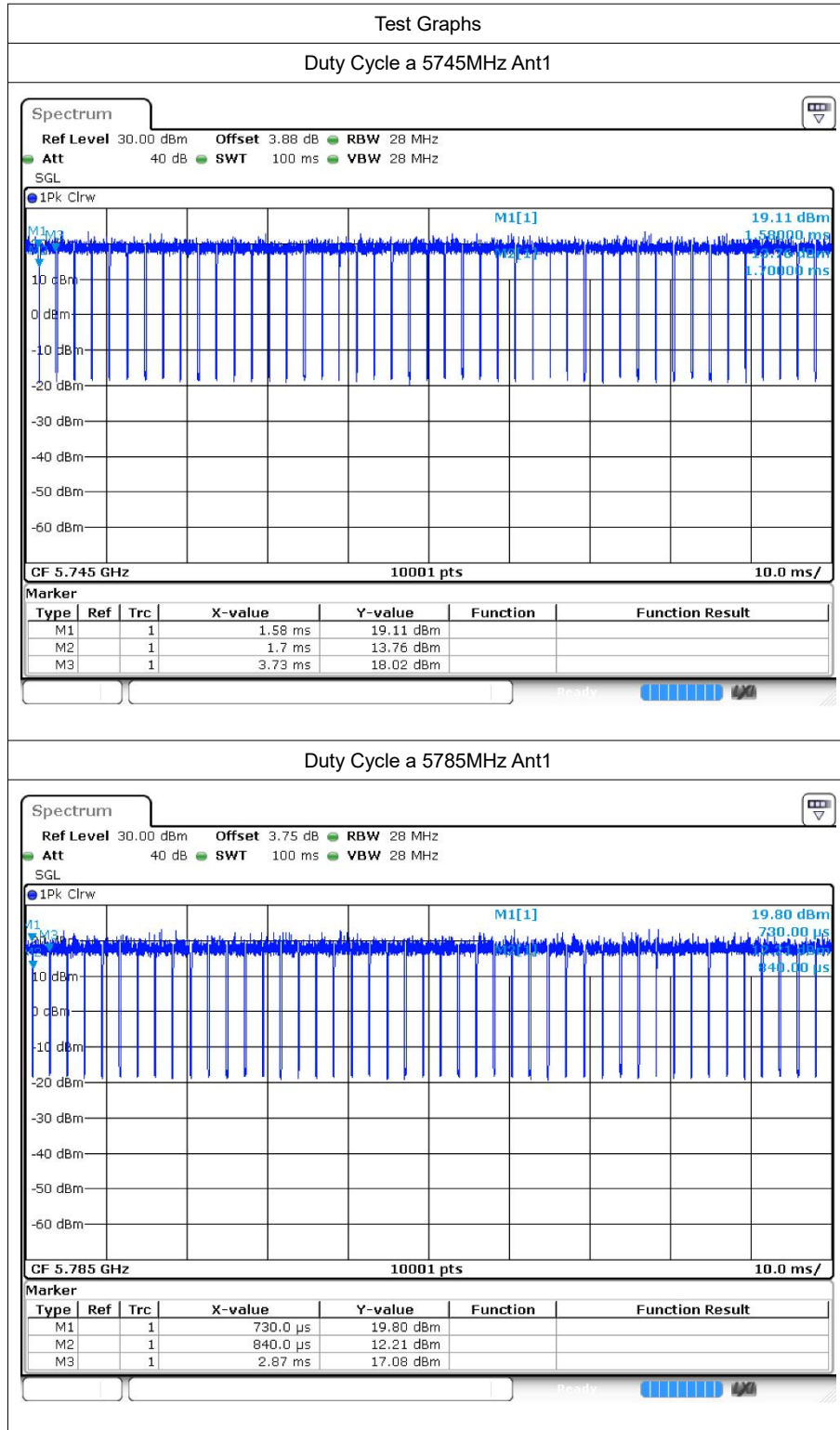
1 Duty Cycle

1.1 Test Result

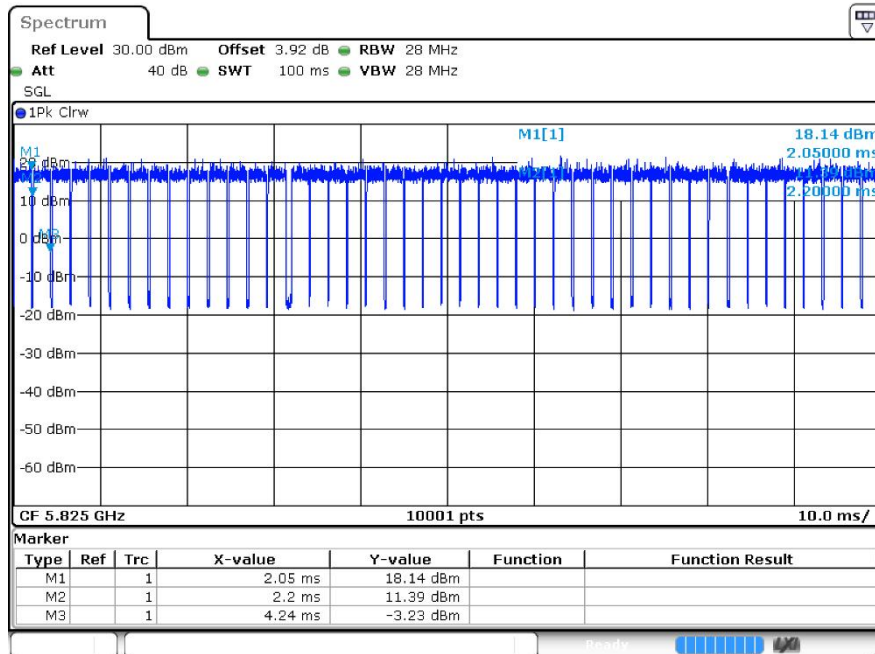
Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
a	5745	Ant1	93.32	0.3	0.49
a	5785	Ant1	92.55	0.34	0.49
a	5825	Ant1	91.86	0.37	0.49
n20	5745	Ant1	92.39	0.34	0.53
n20	5785	Ant1	91.65	0.38	0.53
n20	5825	Ant1	91.68	0.38	0.53
n40	5755	Ant1	85.67	0.67	1.06
n40	5795	Ant1	89.71	0.47	1.08
ac20	5745	Ant1	88.93	0.51	0.53
ac20	5785	Ant1	91.71	0.38	0.53
ac20	5825	Ant1	92.19	0.35	0.53
ac40	5755	Ant1	89.47	0.48	1.08
ac40	5795	Ant1	89.72	0.47	1.06
ax20	5745	Ant1	89.4	0.49	0.68
ax20	5785	Ant1	90.3	0.44	0.68
ax20	5825	Ant1	89.71	0.47	0.68
ax40	5755	Ant1	87.98	0.56	1.32
ax40	5795	Ant1	100	0	0



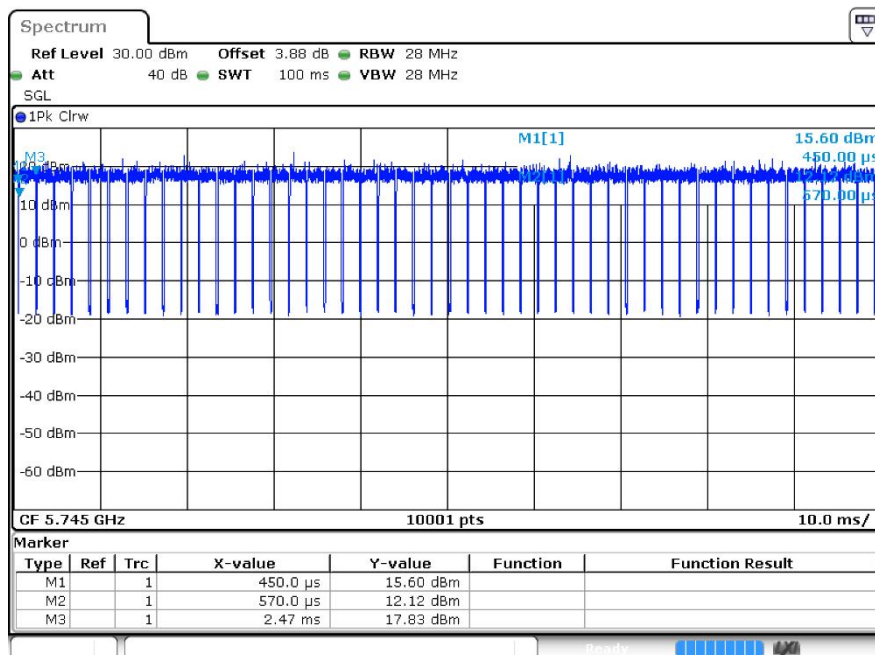
1.2 Test Graphs



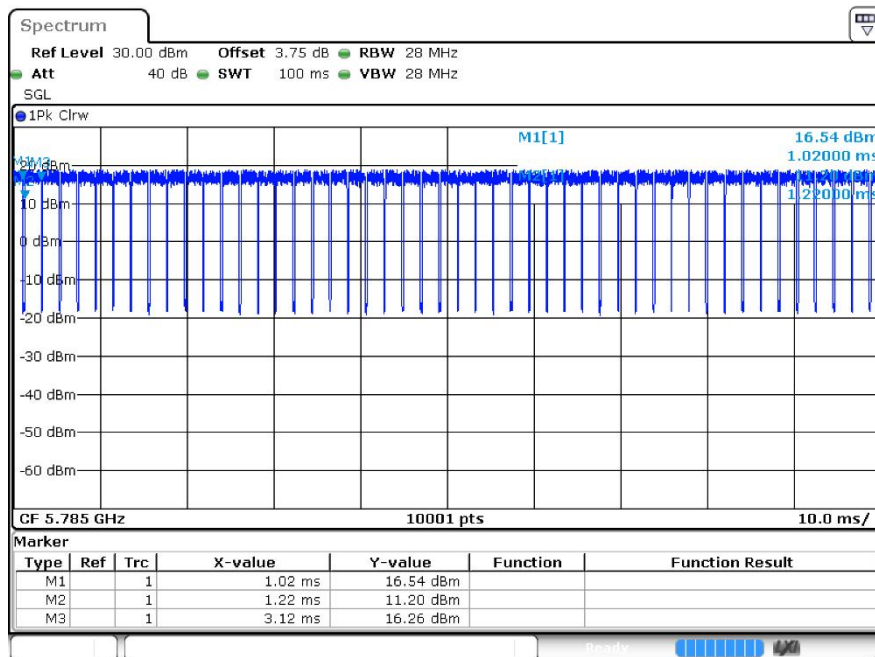
Duty Cycle a 5825MHz Ant1



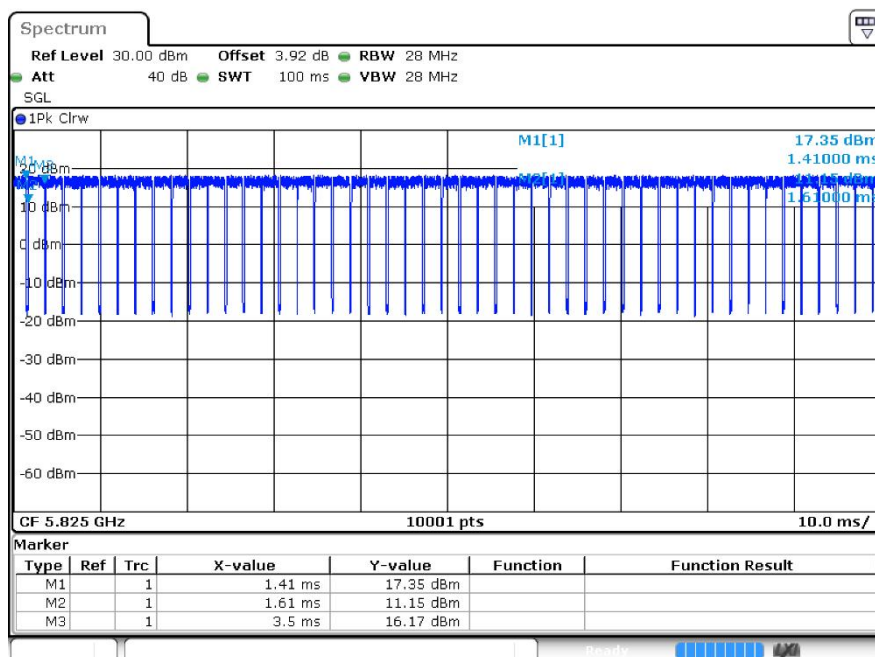
Duty Cycle n20 5745MHz Ant1



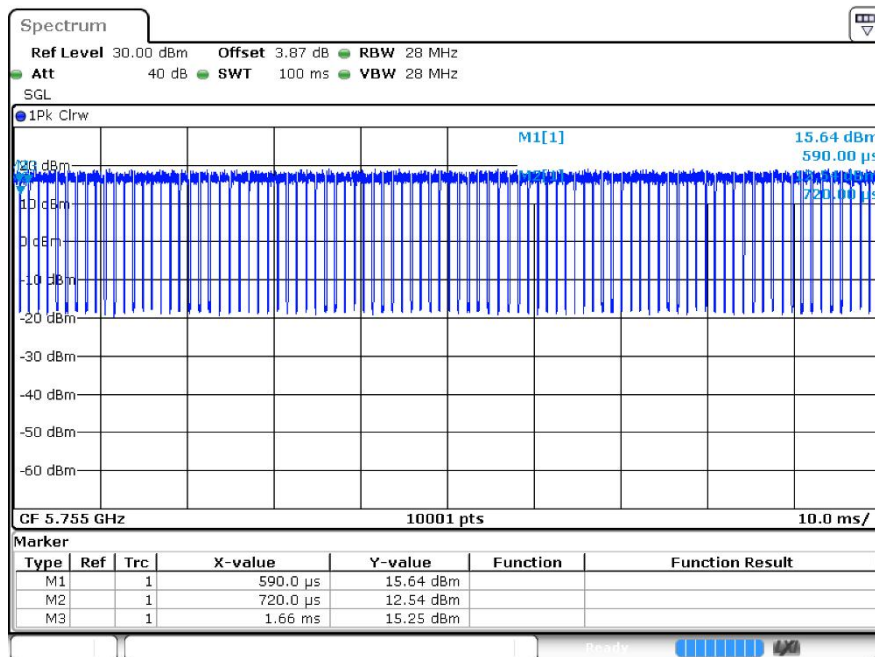
Duty Cycle n20 5785MHz Ant1



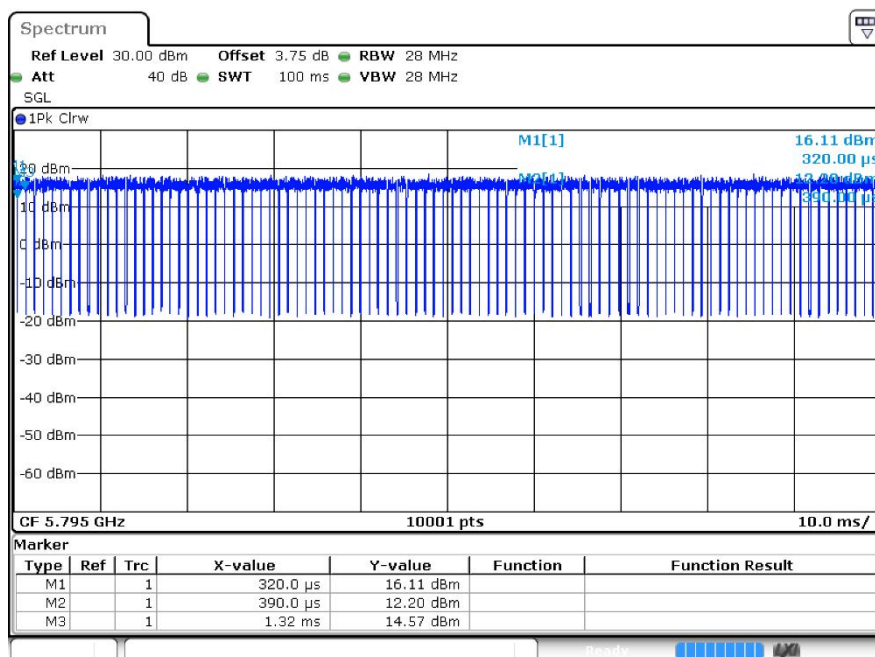
Duty Cycle n20 5825MHz Ant1



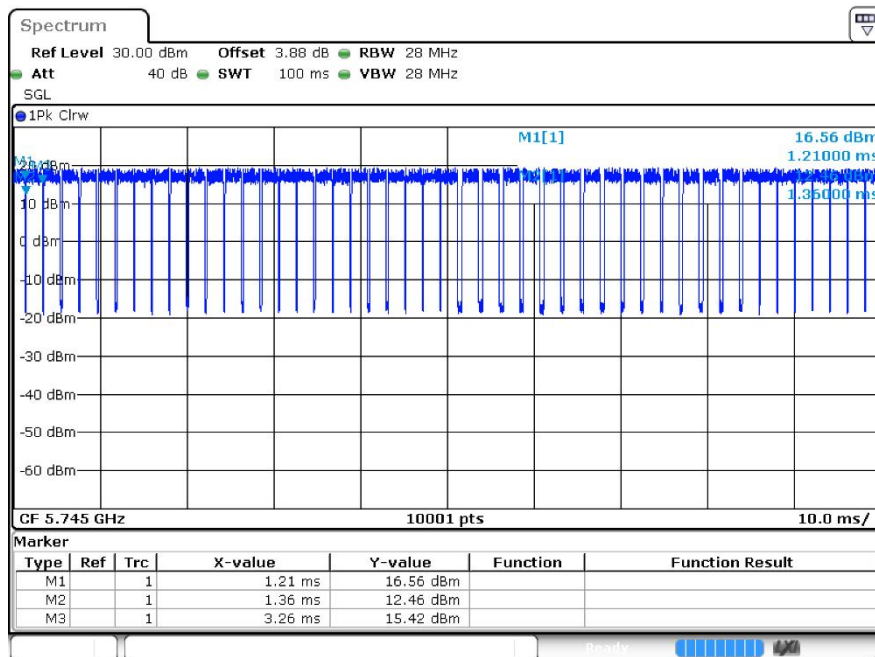
Duty Cycle n40 5755MHz Ant1



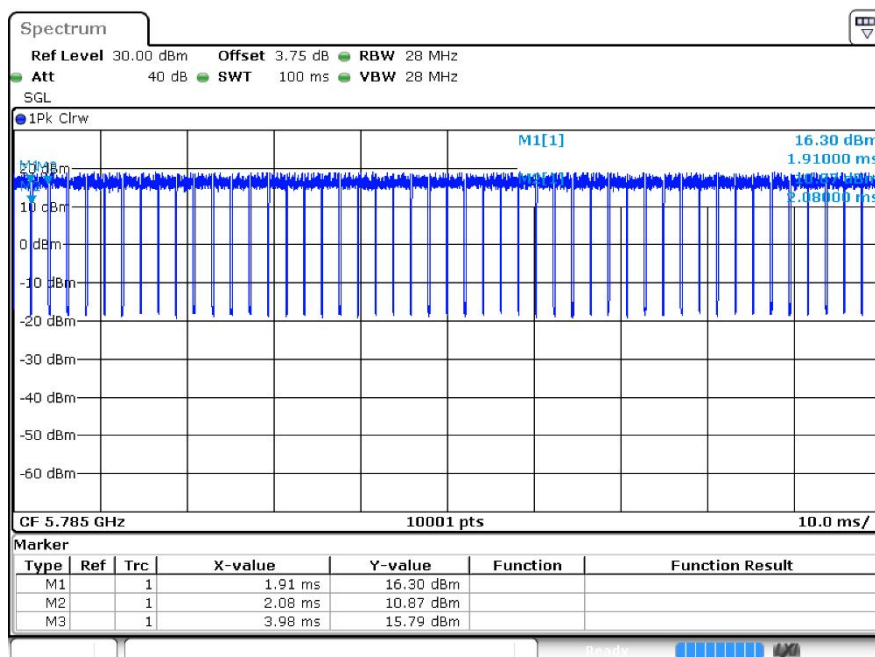
Duty Cycle n40 5795MHz Ant1



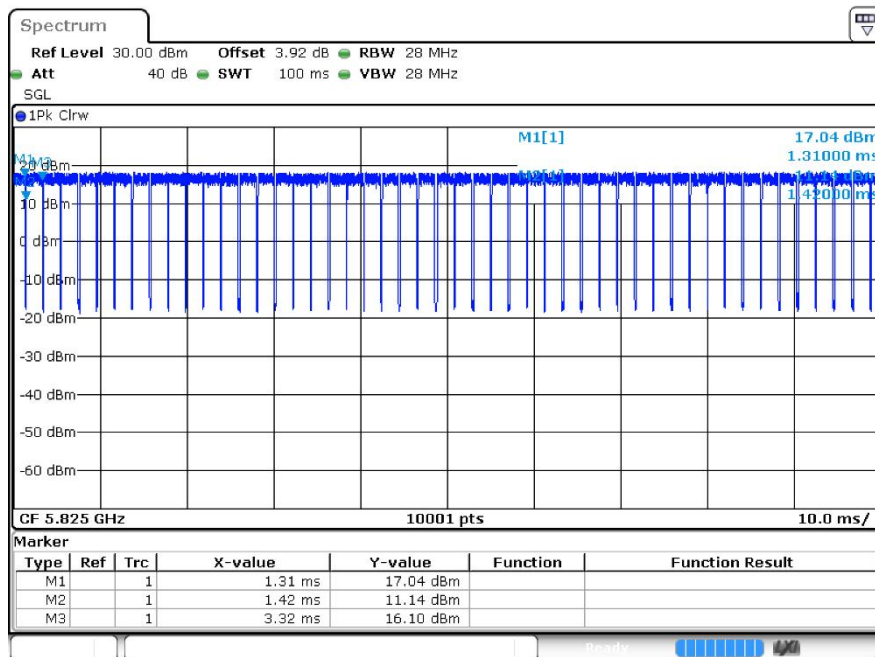
Duty Cycle ac20 5745MHz Ant1



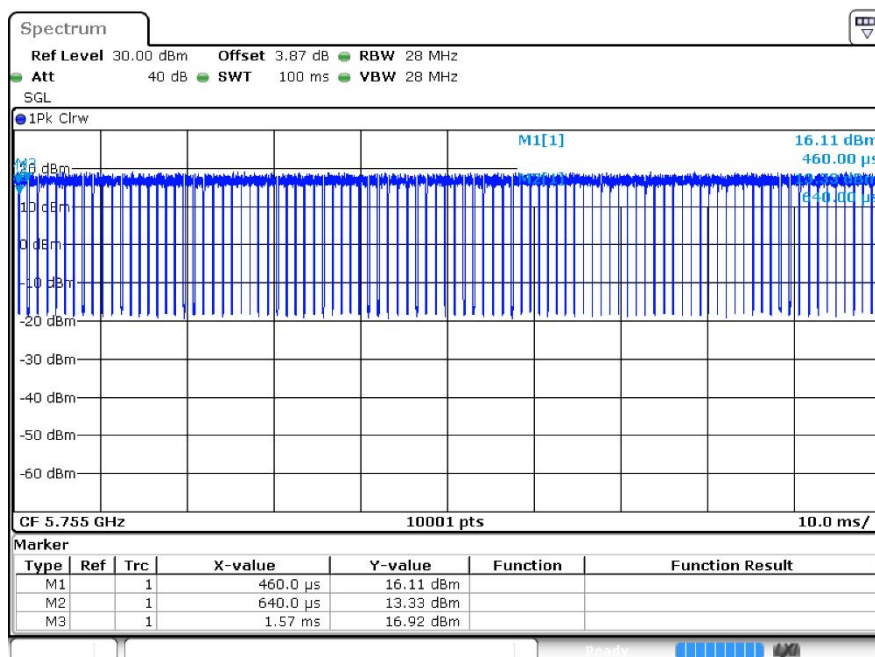
Duty Cycle ac20 5785MHz Ant1

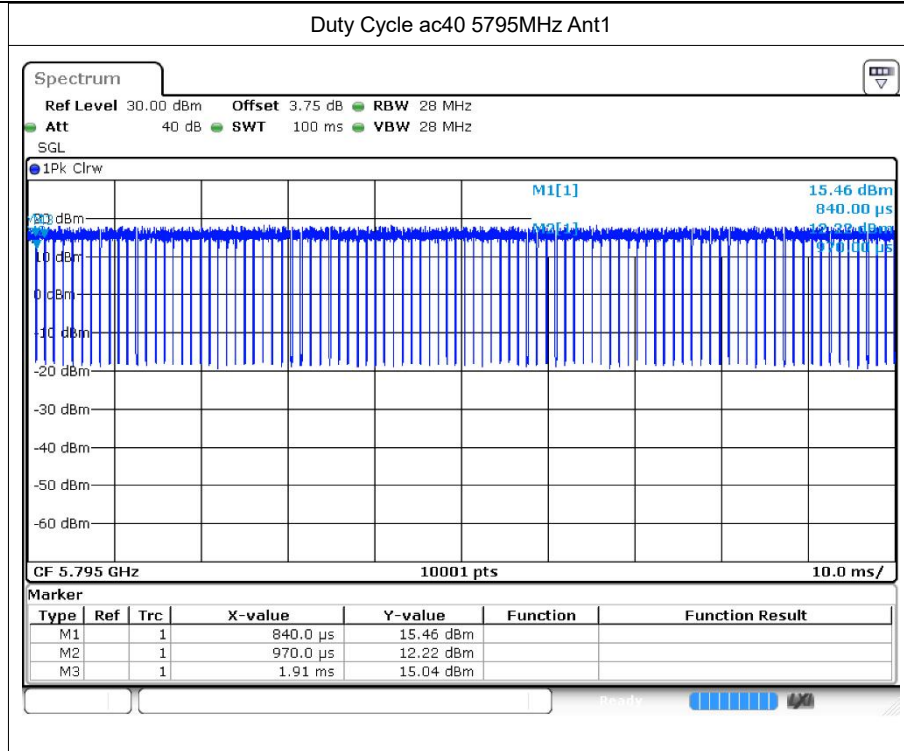


Duty Cycle ac20 5825MHz Ant1

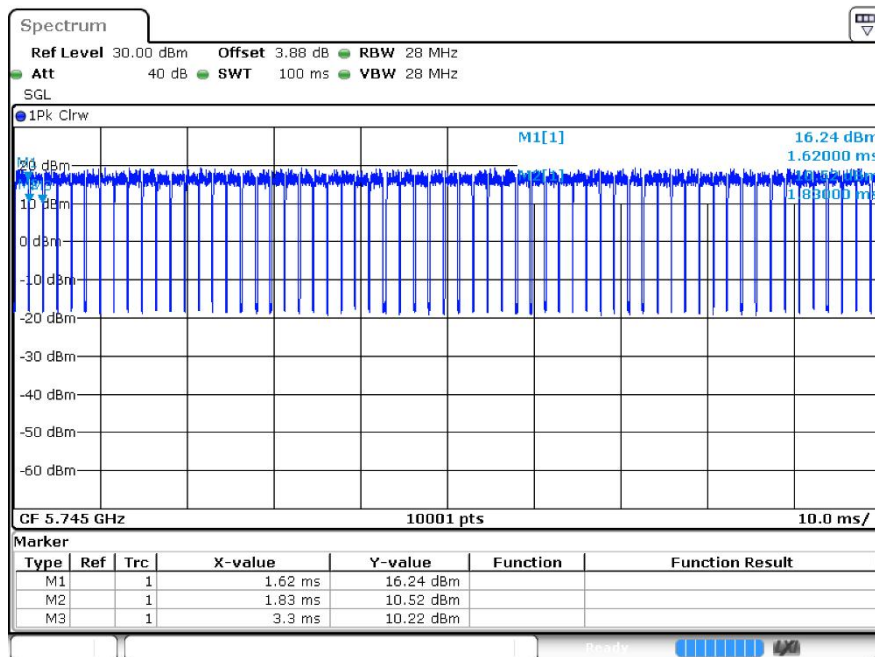


Duty Cycle ac40 5755MHz Ant1

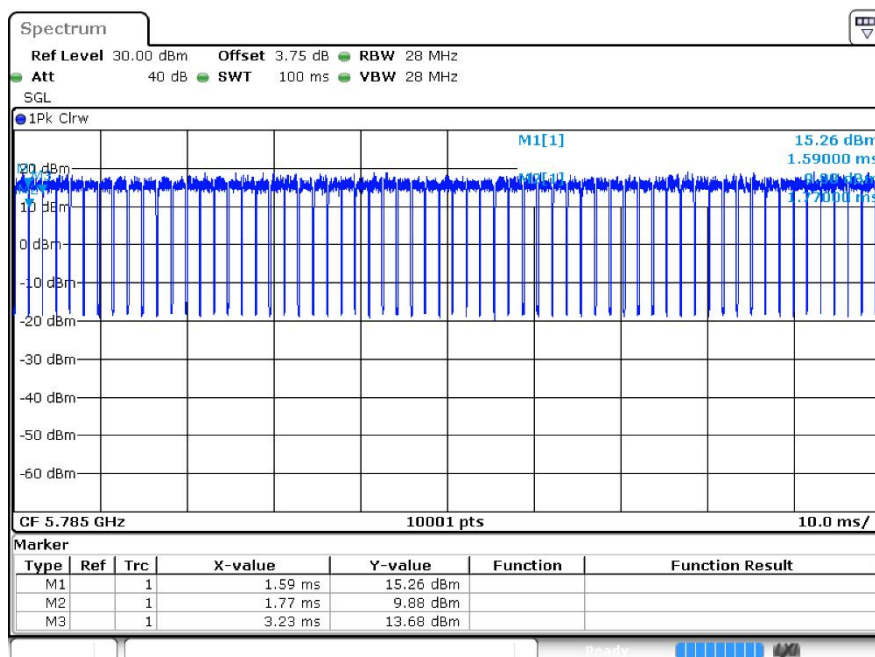




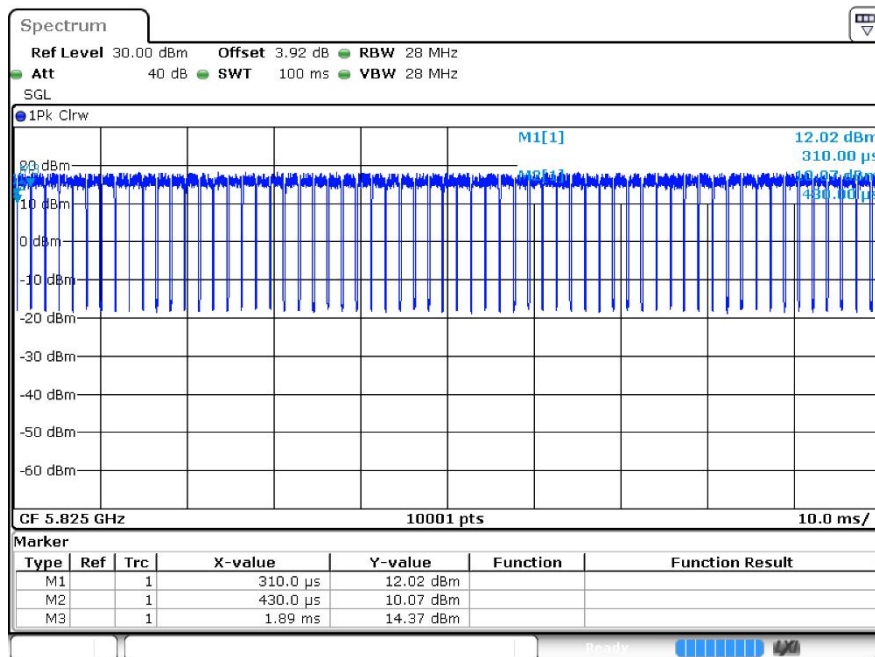
Duty Cycle ax20 5745MHz Ant1



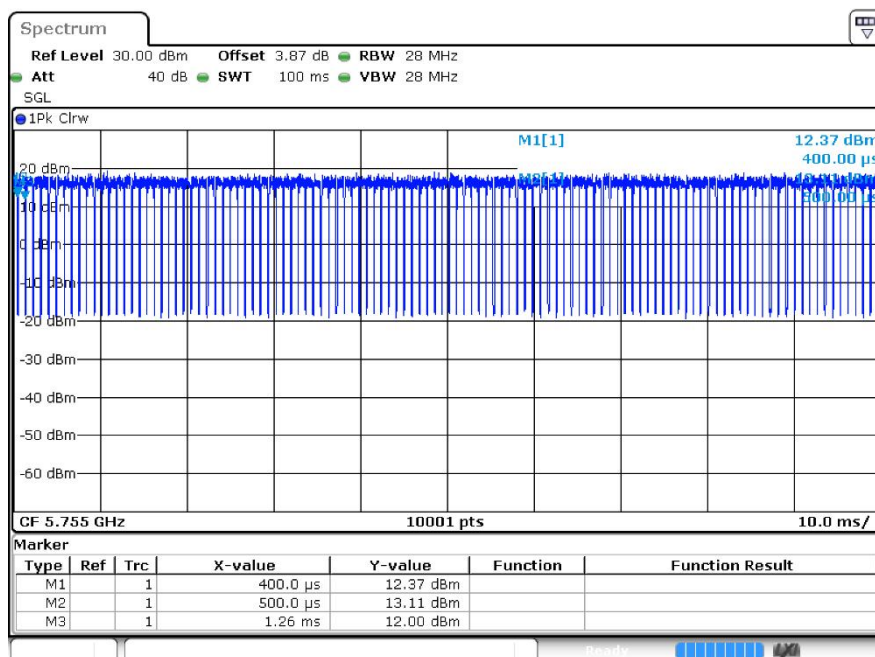
Duty Cycle ax20 5785MHz Ant1

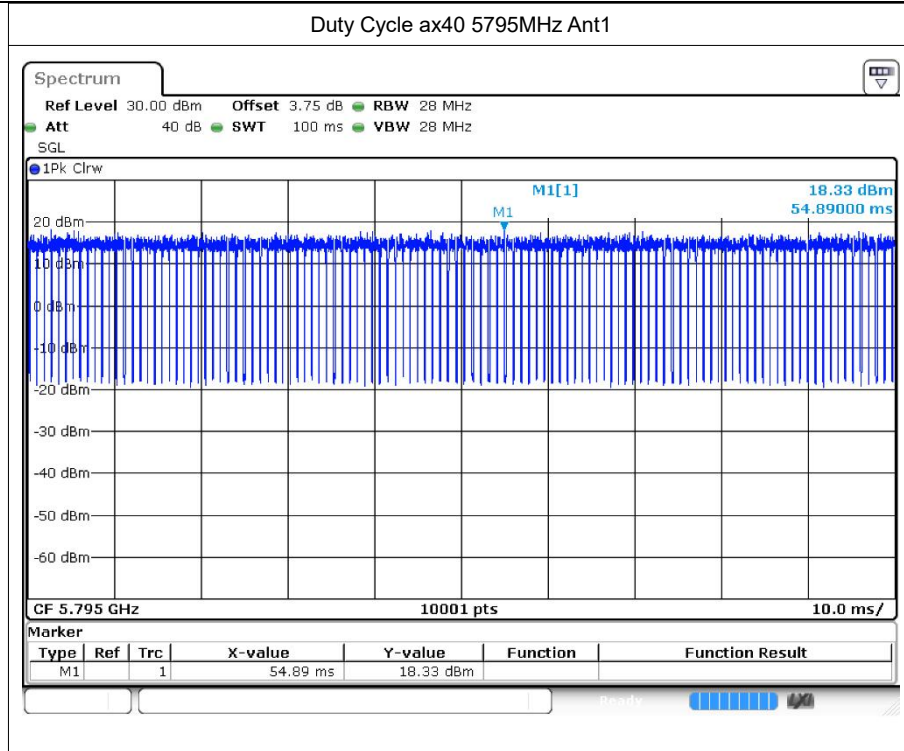


Duty Cycle ax20 5825MHz Ant1



Duty Cycle ax40 5755MHz Ant1





2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
a	5745	Ant1	14.86	30	Pass
a	5785	Ant1	13.32	30	Pass
a	5825	Ant1	12.24	30	Pass
n20	5745	Ant1	13.31	30	Pass
n20	5785	Ant1	12.35	30	Pass
n20	5825	Ant1	12.3	30	Pass
n40	5755	Ant1	13.09	30	Pass
n40	5795	Ant1	11.96	30	Pass
ac20	5745	Ant1	12.85	30	Pass
ac20	5785	Ant1	12.1	30	Pass
ac20	5825	Ant1	12.32	30	Pass
ac40	5755	Ant1	13.21	30	Pass
ac40	5795	Ant1	11.82	30	Pass
ax20	5745	Ant1	13	30	Pass
ax20	5785	Ant1	12.18	30	Pass
ax20	5825	Ant1	12.41	30	Pass
ax40	5755	Ant1	12.99	30	Pass
ax40	5795	Ant1	11.81	30	Pass

Note:

The duty factor has been compensated into the result.

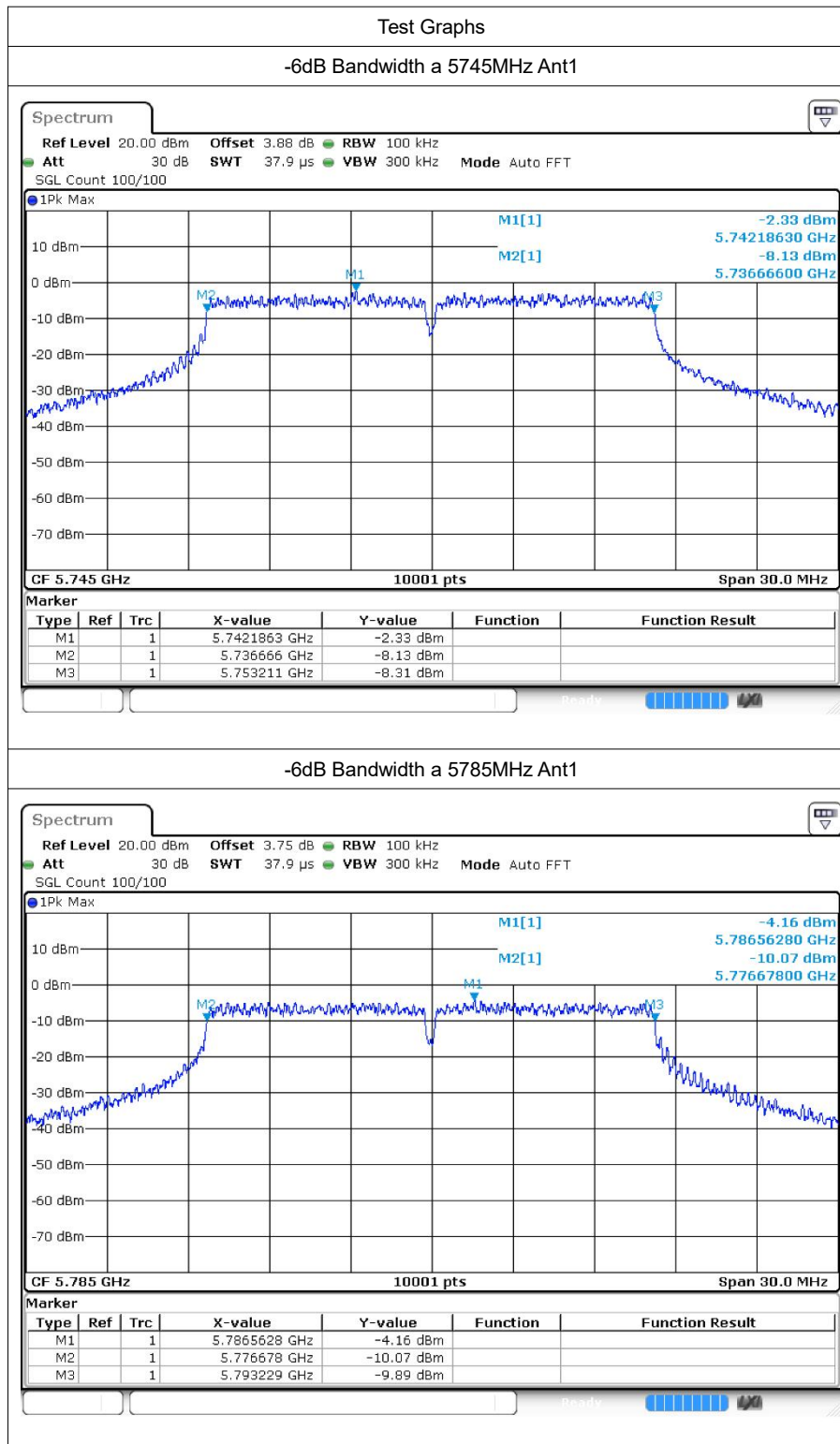


3 -6dB Bandwidth

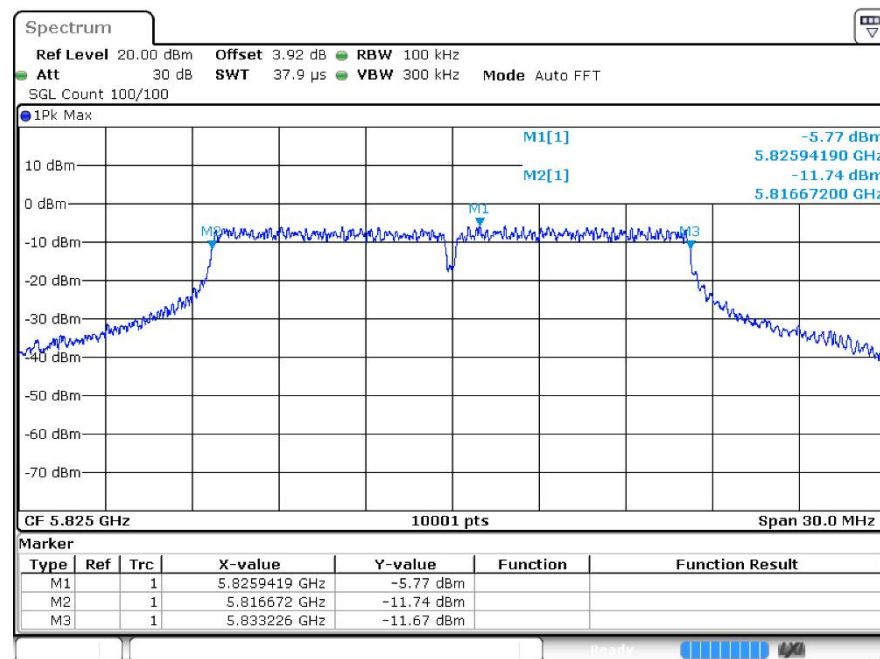
3.1 Test Result

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
a	5745	Ant1	16.545	0.5	Pass
a	5785	Ant1	16.551	0.5	Pass
a	5825	Ant1	16.554	0.5	Pass
n20	5745	Ant1	17.583	0.5	Pass
n20	5785	Ant1	17.601	0.5	Pass
n20	5825	Ant1	17.601	0.5	Pass
n40	5755	Ant1	36.318	0.5	Pass
n40	5795	Ant1	36.45	0.5	Pass
ac20	5745	Ant1	17.694	0.5	Pass
ac20	5785	Ant1	17.586	0.5	Pass
ac20	5825	Ant1	17.82	0.5	Pass
ac40	5755	Ant1	36.324	0.5	Pass
ac40	5795	Ant1	36.336	0.5	Pass
ax20	5745	Ant1	19.11	0.5	Pass
ax20	5785	Ant1	18.936	0.5	Pass
ax20	5825	Ant1	19.146	0.5	Pass
ax40	5755	Ant1	37.758	0.5	Pass
ax40	5795	Ant1	37.686	0.5	Pass

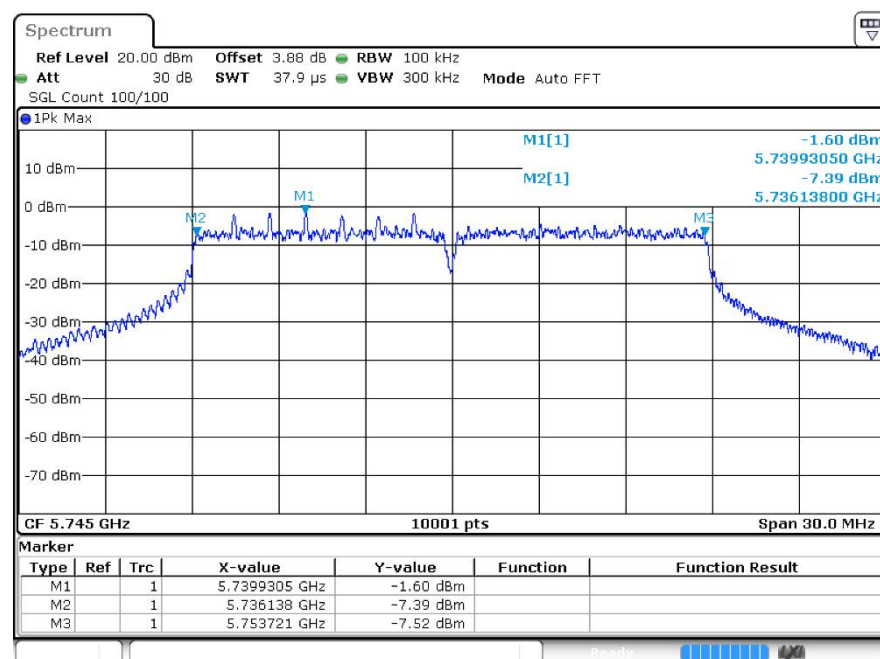
3.2 Test Graphs



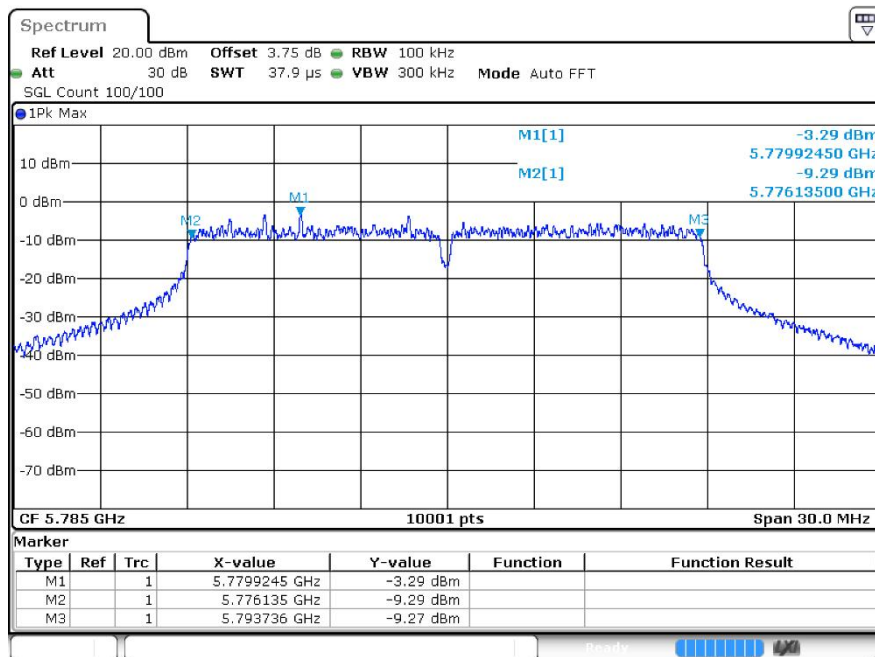
-6dB Bandwidth a 5825MHz Ant1



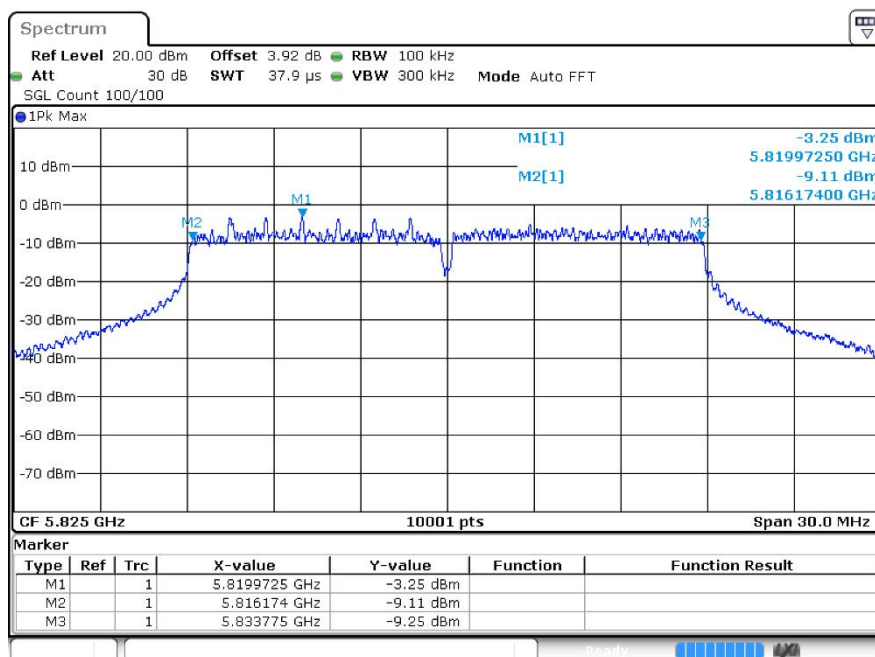
-6dB Bandwidth n20 5745MHz Ant1



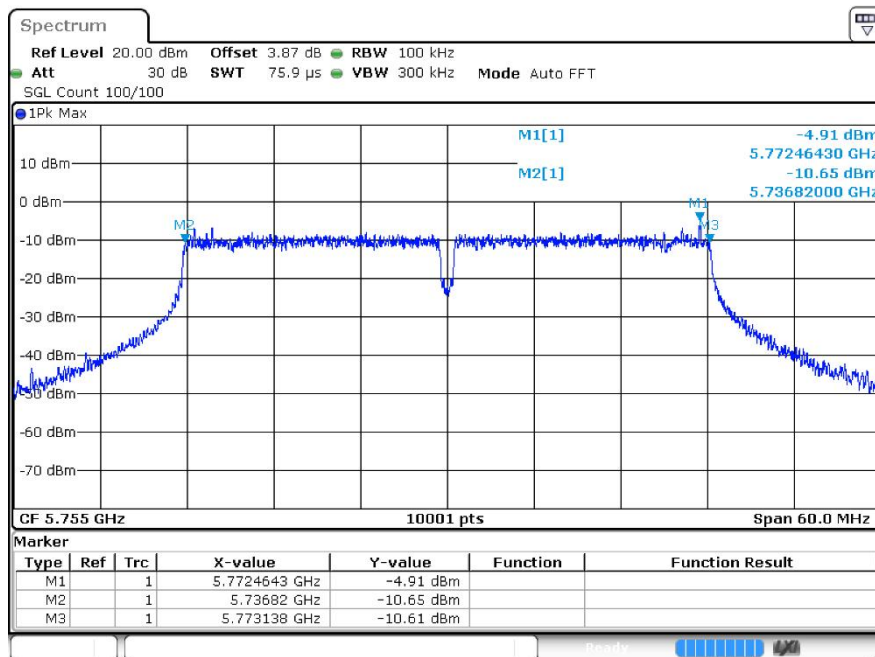
-6dB Bandwidth n20 5785MHz Ant1



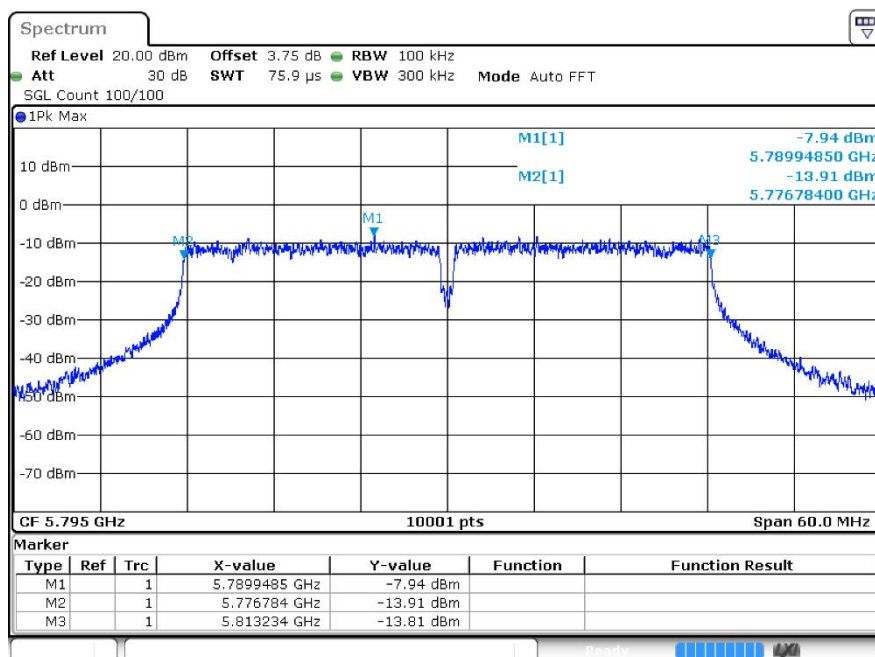
-6dB Bandwidth n20 5825MHz Ant1



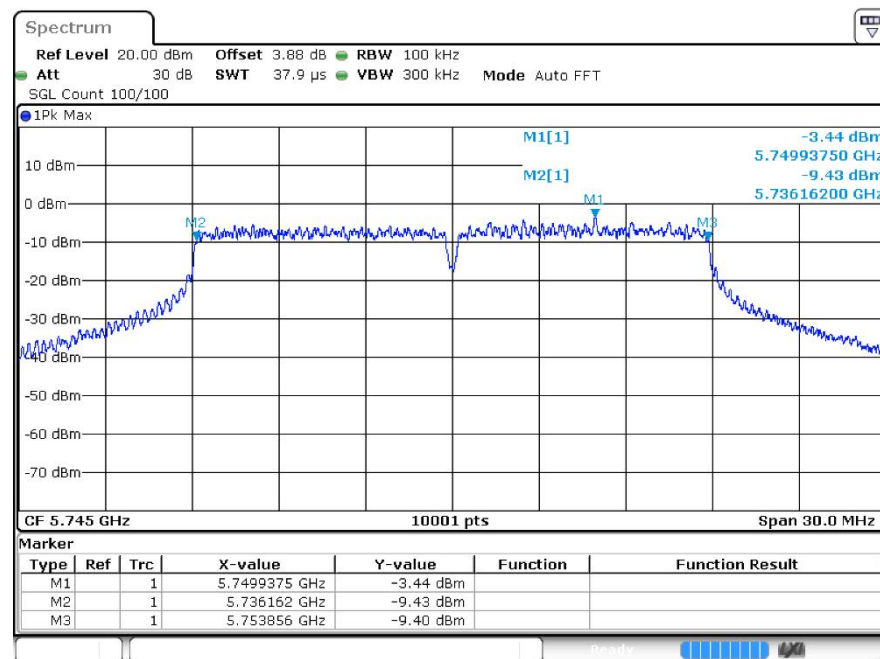
-6dB Bandwidth n40 5755MHz Ant1



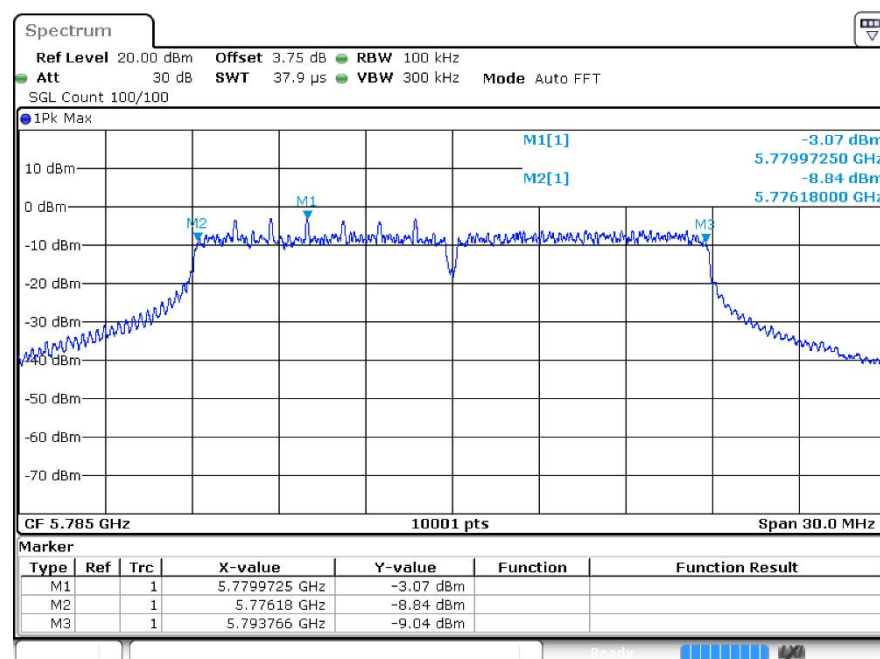
-6dB Bandwidth n40 5795MHz Ant1



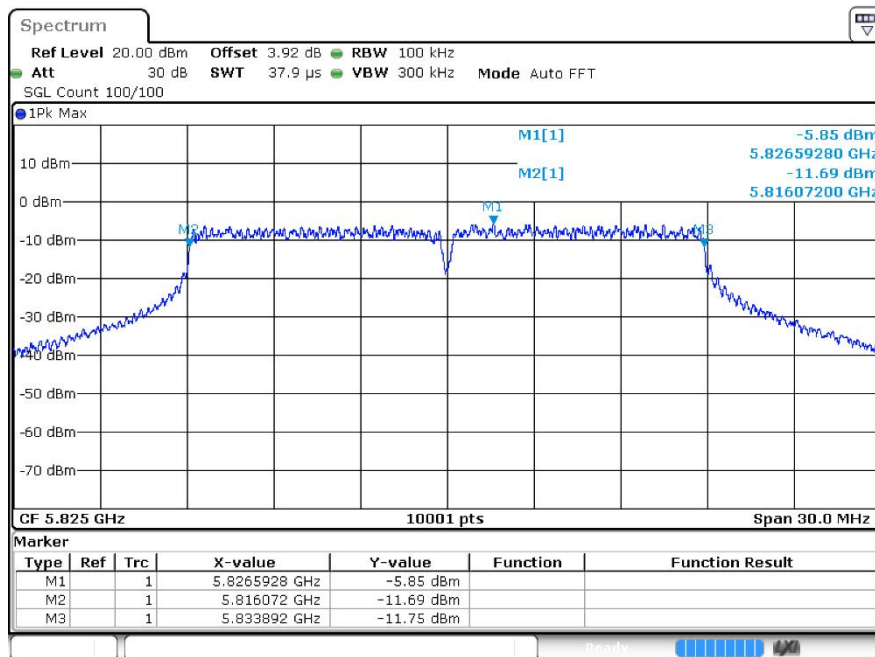
-6dB Bandwidth ac20 5745MHz Ant1



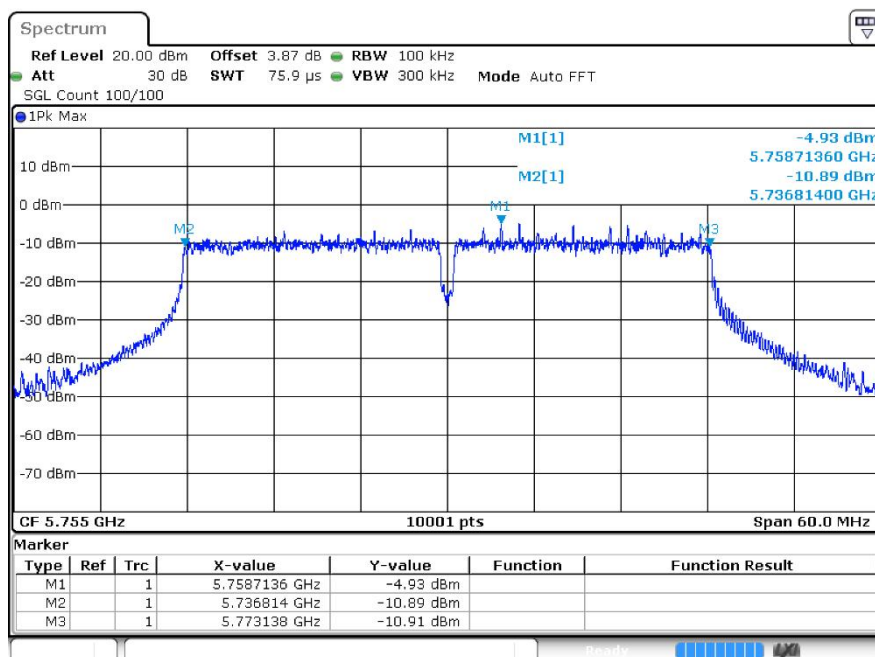
-6dB Bandwidth ac20 5785MHz Ant1

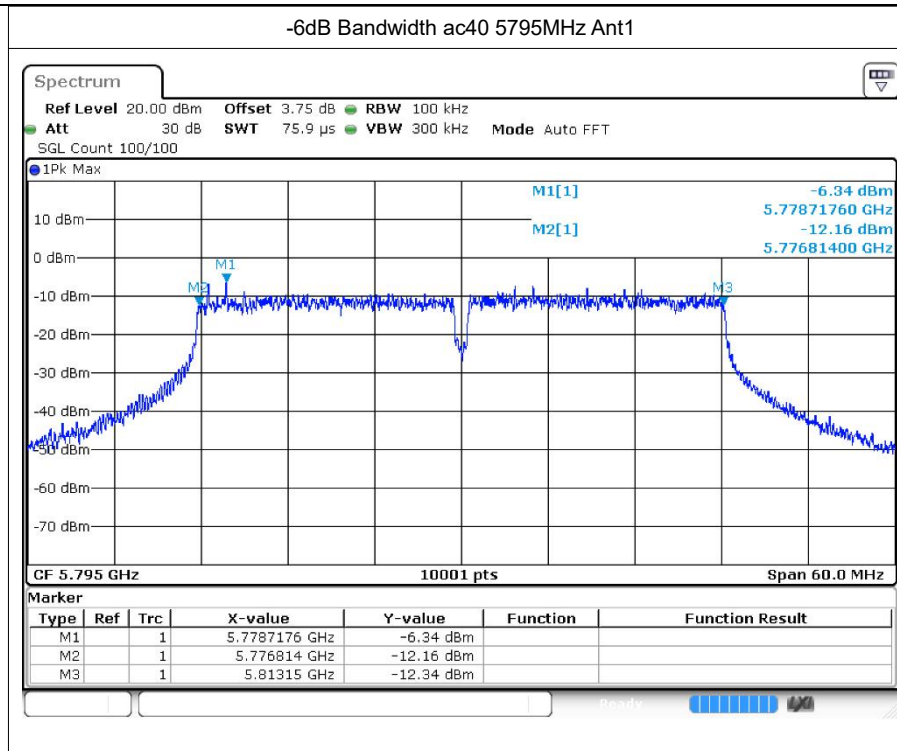


-6dB Bandwidth ac20 5825MHz Ant1

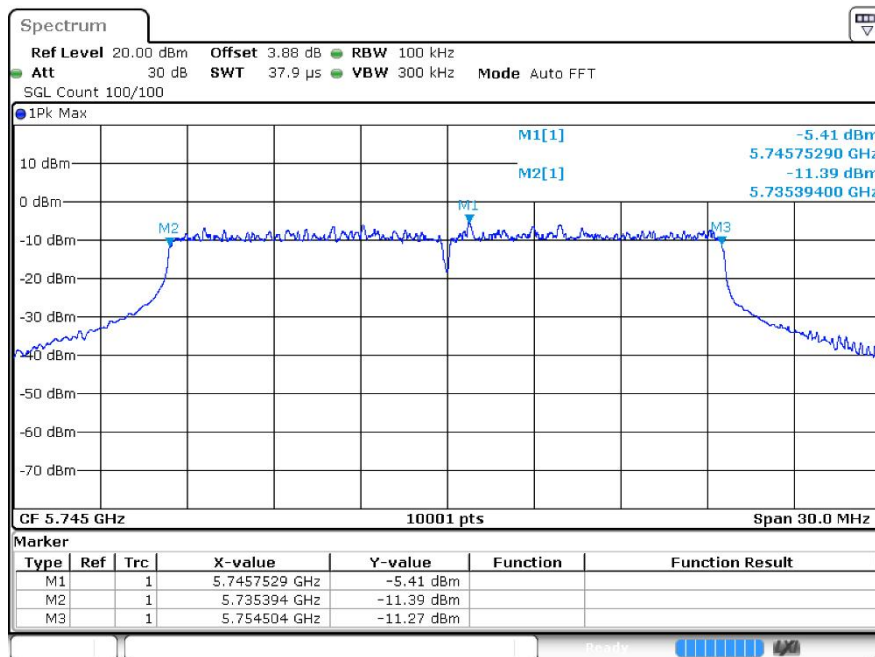


-6dB Bandwidth ac40 5755MHz Ant1

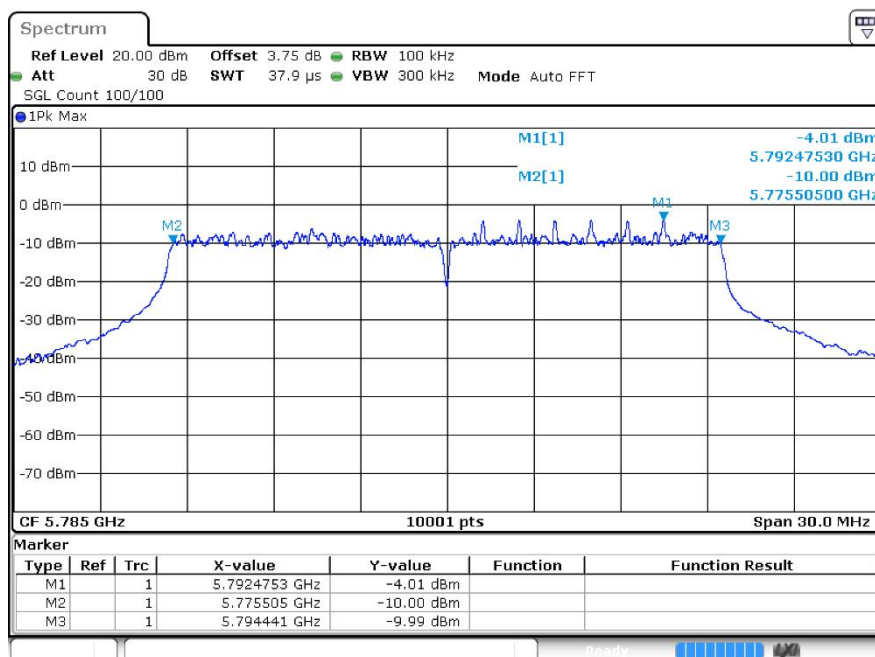




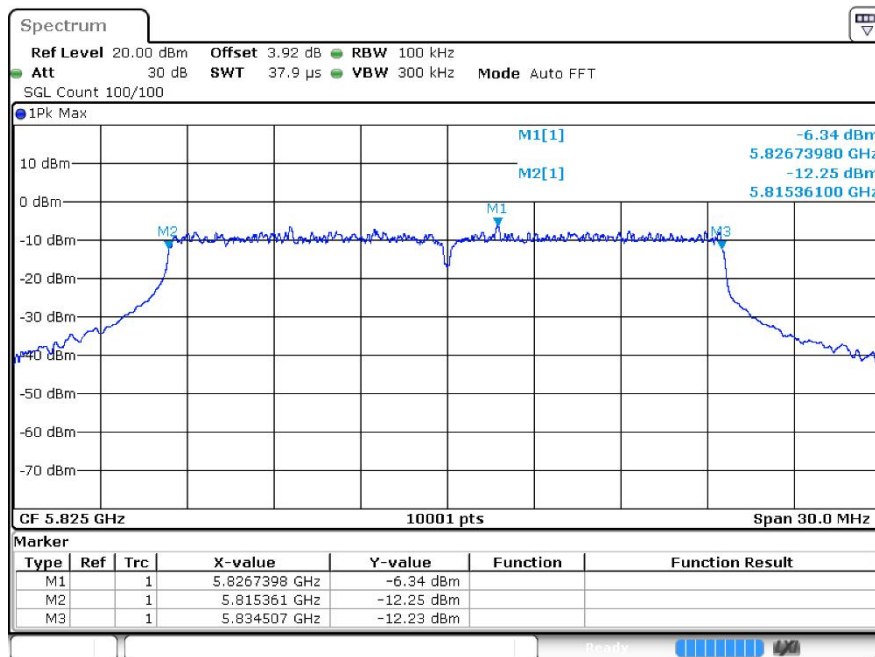
-6dB Bandwidth ax20 5745MHz Ant1



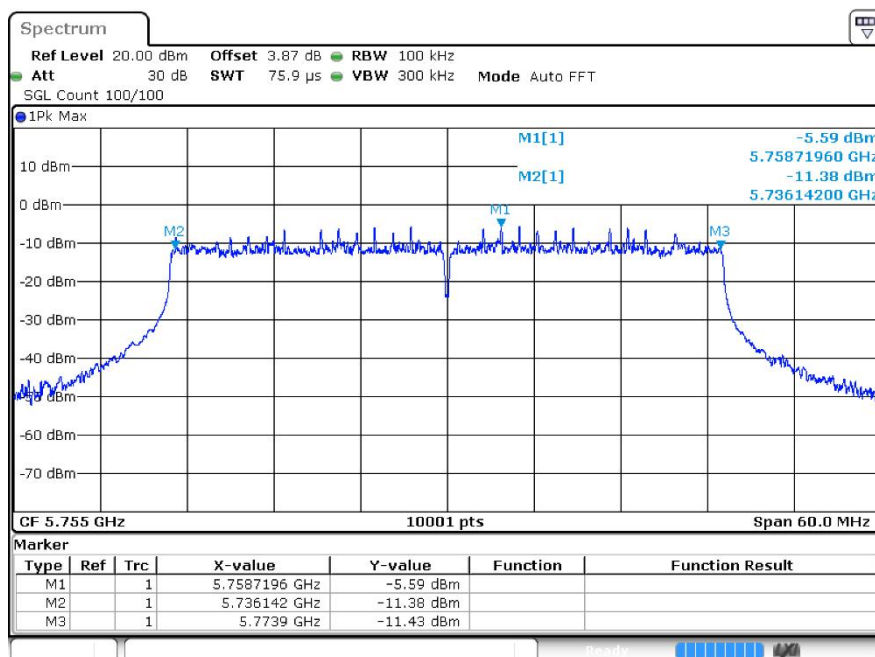
-6dB Bandwidth ax20 5785MHz Ant1

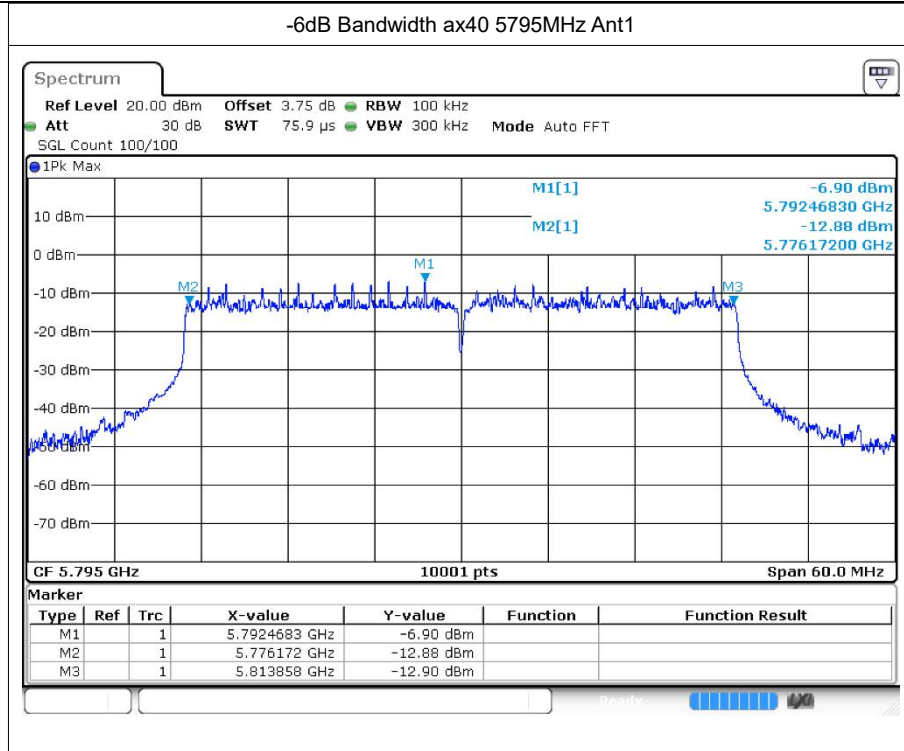


-6dB Bandwidth ax20 5825MHz Ant1



-6dB Bandwidth ax40 5755MHz Ant1



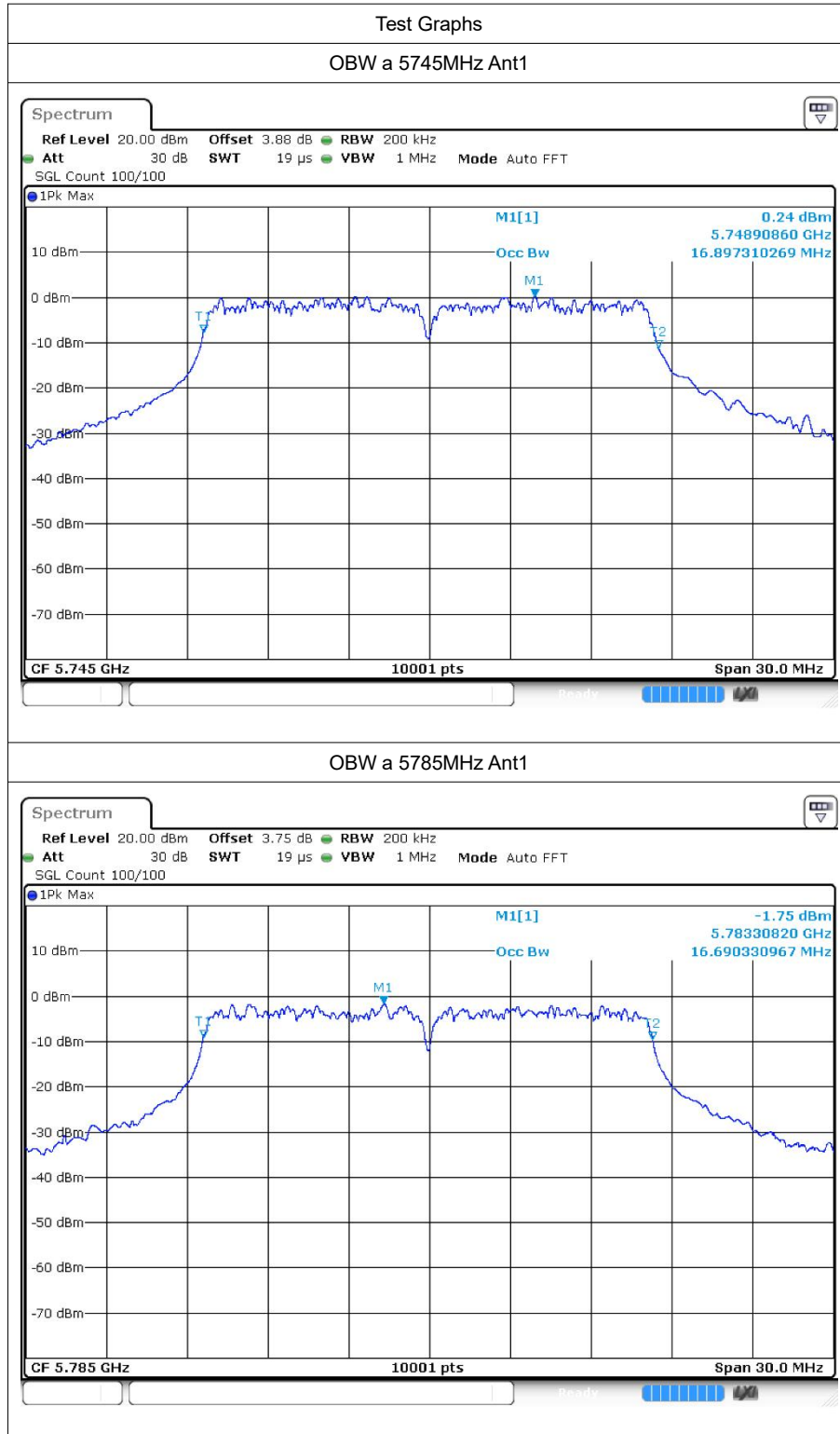


4 Occupied Channel Bandwidth

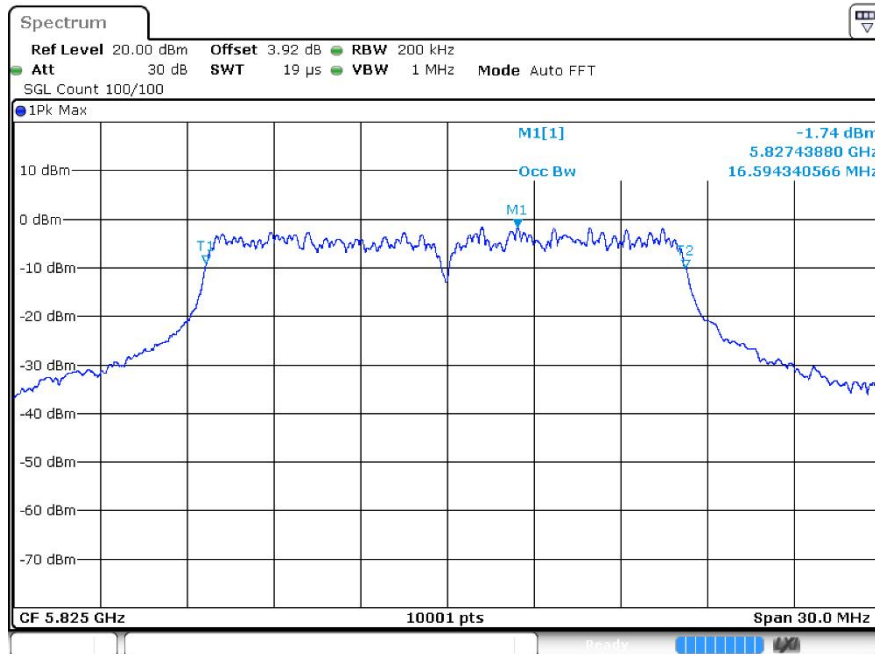
4.1 Test Result

Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
a	5745	Ant1	16.897
a	5785	Ant1	16.69
a	5825	Ant1	16.594
n20	5745	Ant1	17.98
n20	5785	Ant1	18.091
n20	5825	Ant1	17.821
n40	5755	Ant1	36.686
n40	5795	Ant1	36.968
ac20	5745	Ant1	17.932
ac20	5785	Ant1	18.07
ac20	5825	Ant1	17.827
ac40	5755	Ant1	36.506
ac40	5795	Ant1	36.812
ax20	5745	Ant1	19.09
ax20	5785	Ant1	19.045
ax20	5825	Ant1	19.246
ax40	5755	Ant1	37.928
ax40	5795	Ant1	38.552

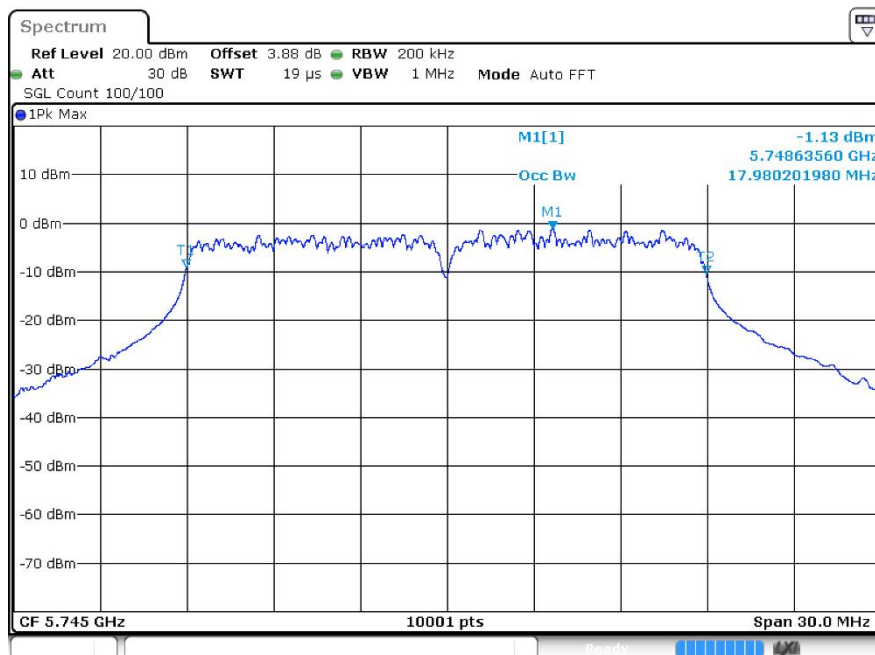
4.2 Test Graphs



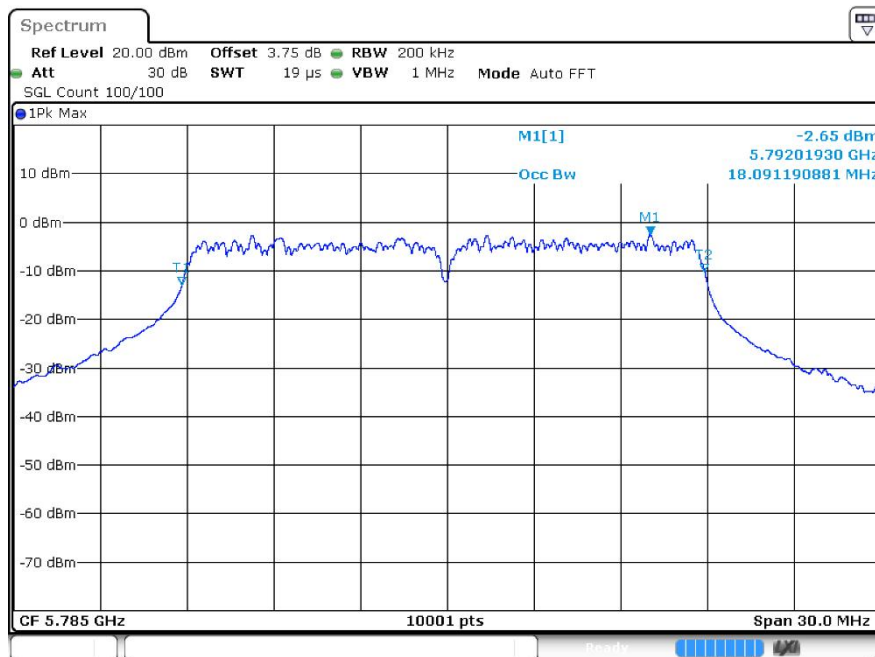
OBW a 5825MHz Ant1



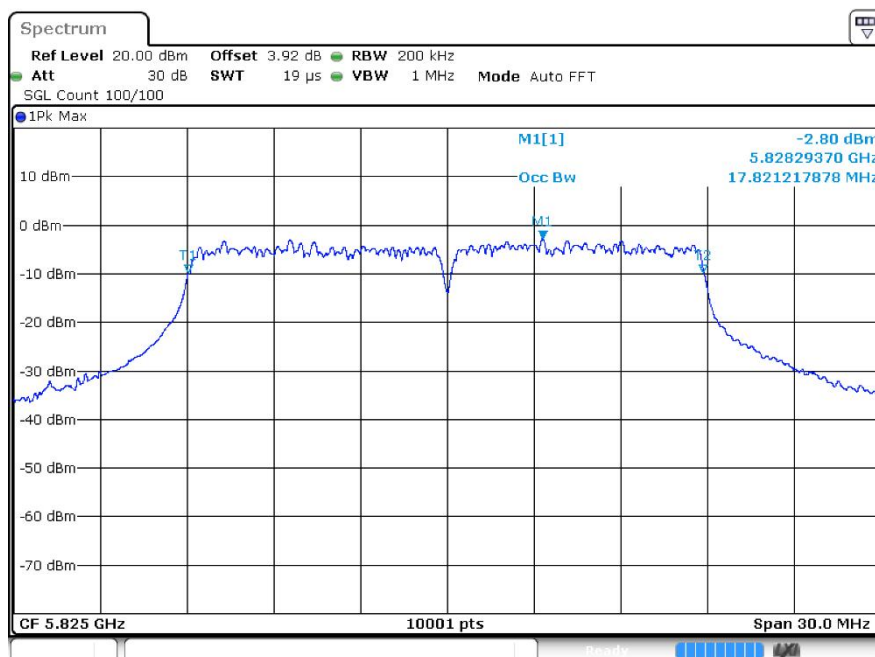
OBW n20 5745MHz Ant1



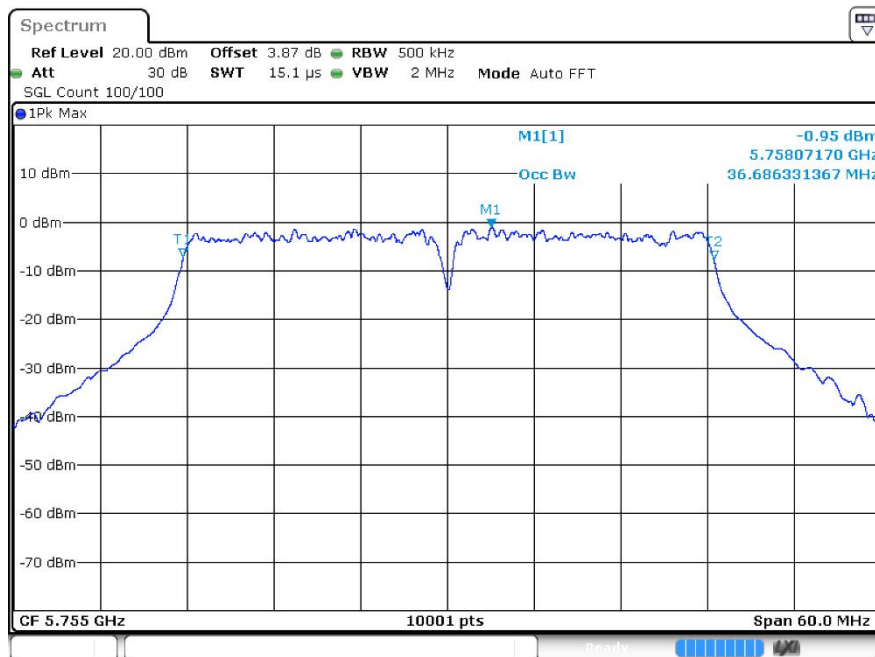
OBW n20 5785MHz Ant1



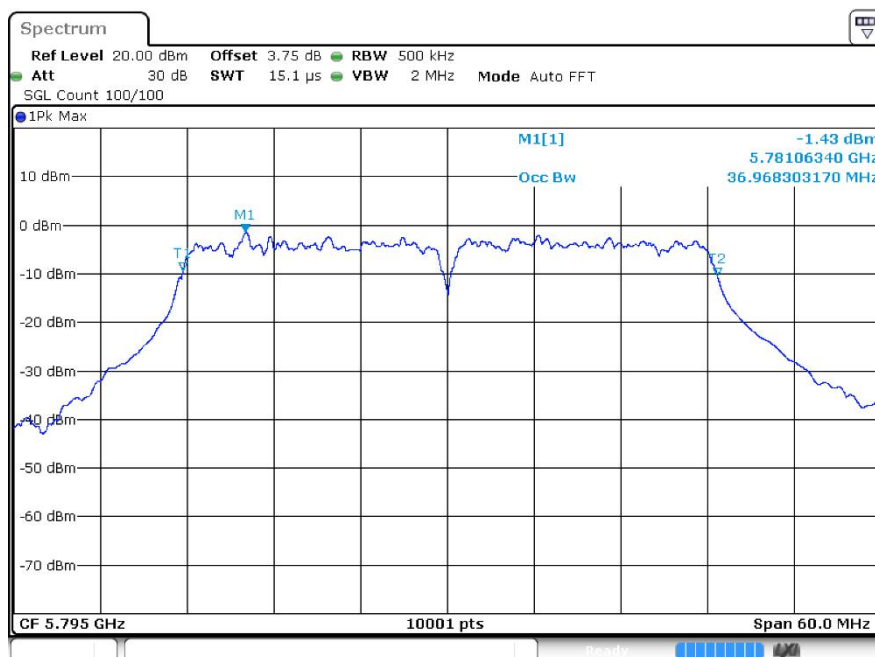
OBW n20 5825MHz Ant1



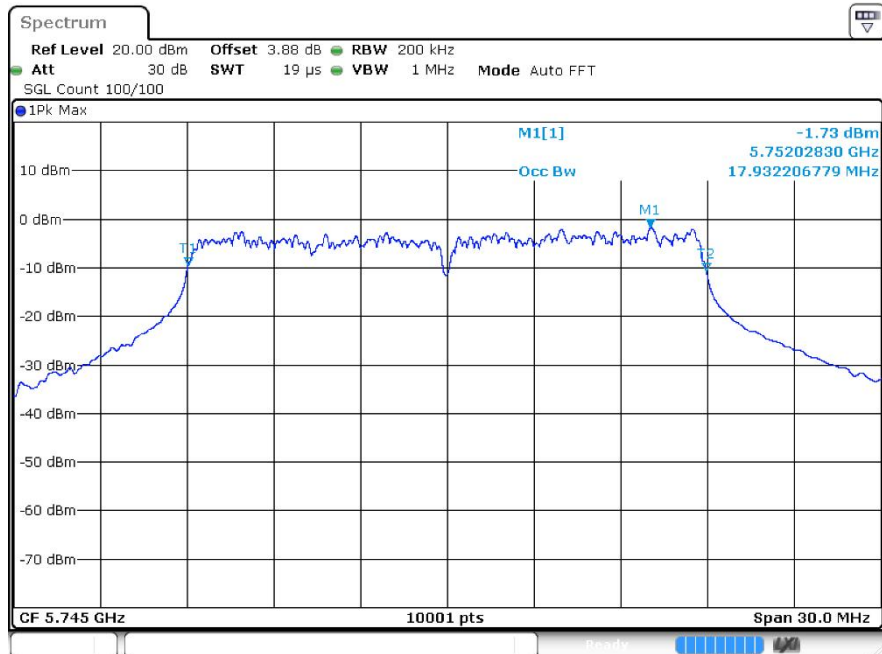
OBW n40 5755MHz Ant1



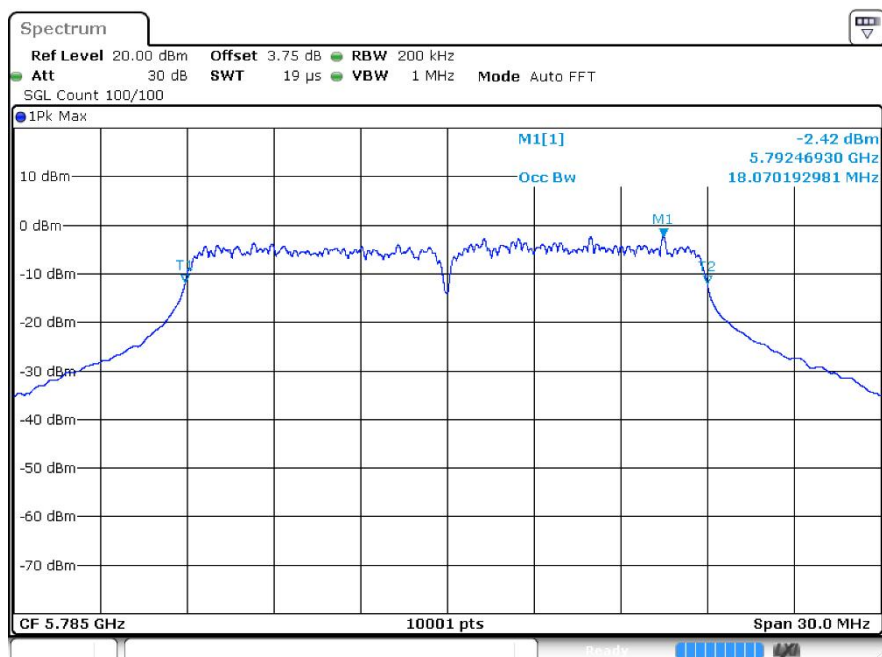
OBW n40 5795MHz Ant1



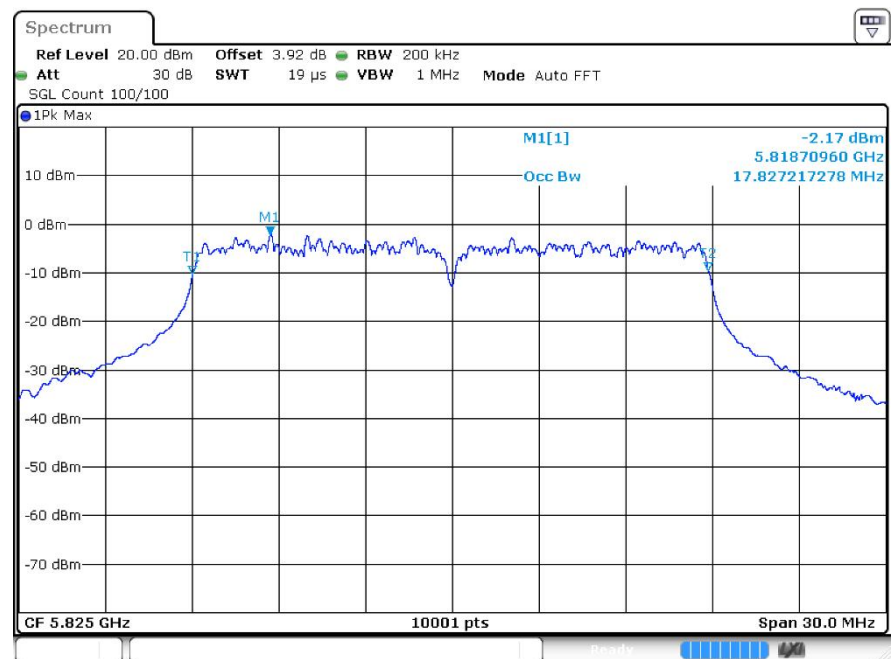
OBW ac20 5745MHz Ant1



OBW ac20 5785MHz Ant1



OBW ac20 5825MHz Ant1



OBW ac40 5755MHz Ant1

