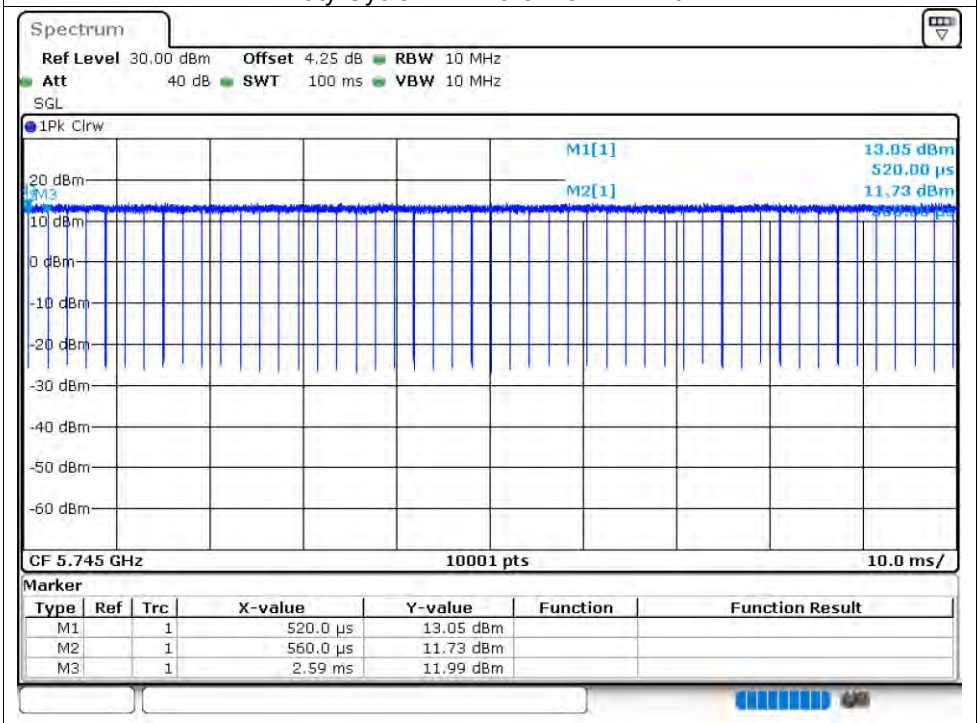
5.8G WIFI

5.1 DUTY CYCLE

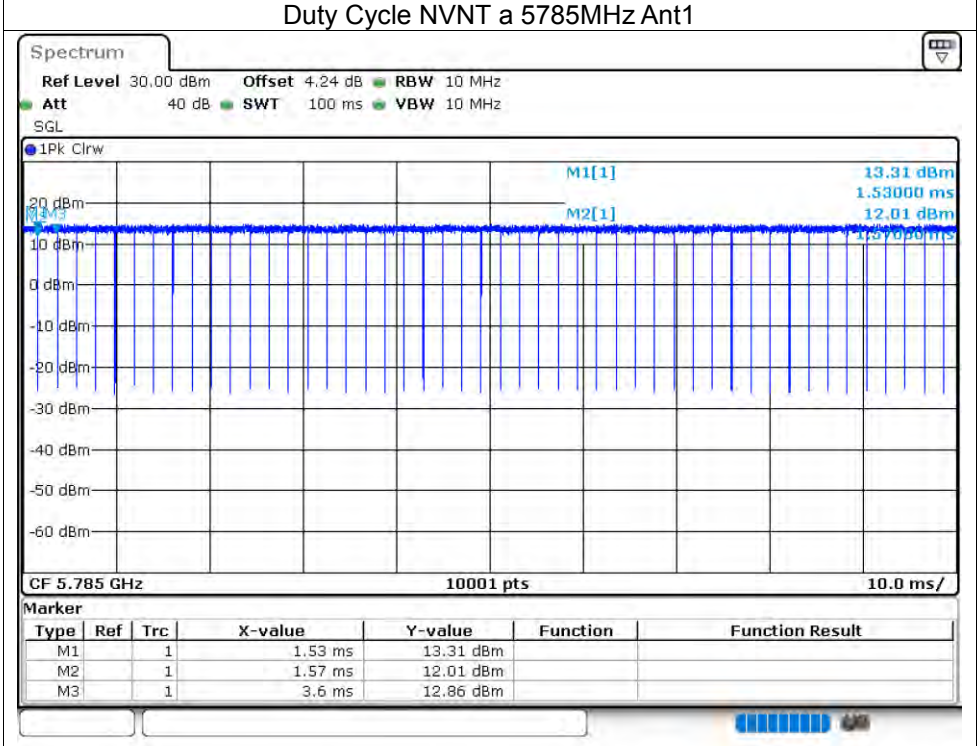
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5745	Ant1	98.77	0.05	0.49
NVNT	a	5785	Ant1	98.56	0.06	0.49
NVNT	a	5825	Ant1	98.8	0.05	0.49
NVNT	n20	5745	Ant1	98.46	0.07	0.53
NVNT	n20	5785	Ant1	98.7	0.06	0.53
NVNT	n20	5825	Ant1	98.7	0.06	0.53
NVNT	n40	5755	Ant1	97.12	0.13	1.09
NVNT	n40	5795	Ant1	97.51	0.11	1.08
NVNT	ac20	5745	Ant1	98.71	0.06	0.52
NVNT	ac20	5785	Ant1	98.54	0.06	0.53
NVNT	ac20	5825	Ant1	98.75	0.05	0.53
NVNT	ac40	5755	Ant1	97.33	0.12	1.06
NVNT	ac40	5795	Ant1	97.48	0.11	1.08
NVNT	ac80	5775	Ant1	94.45	0.25	2.22

Test Graphs

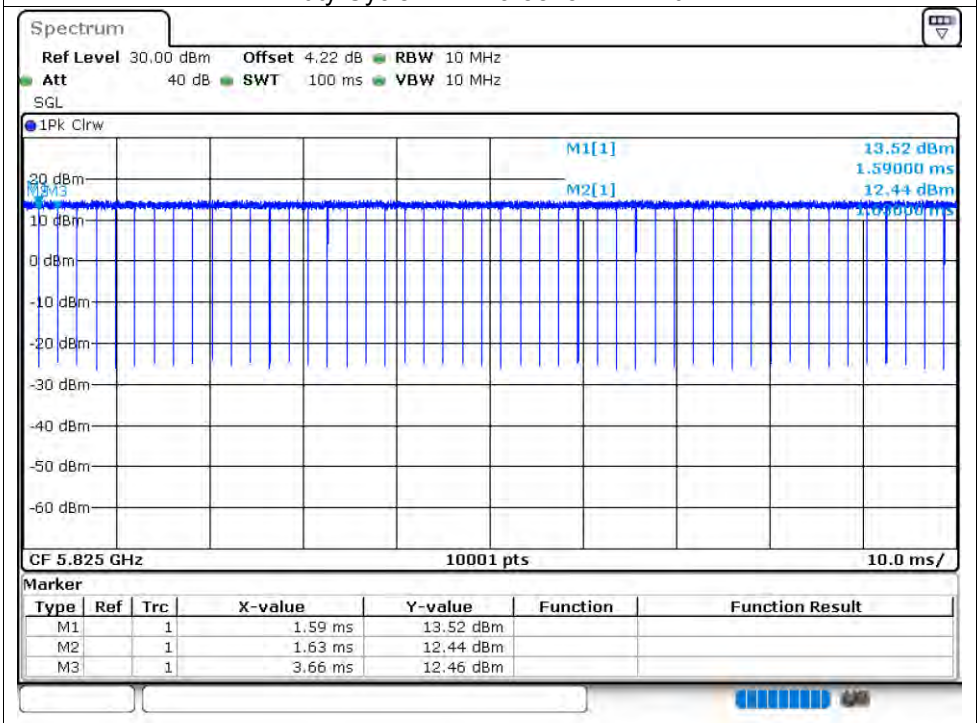
Duty Cycle NVNT a 5745MHz Ant1



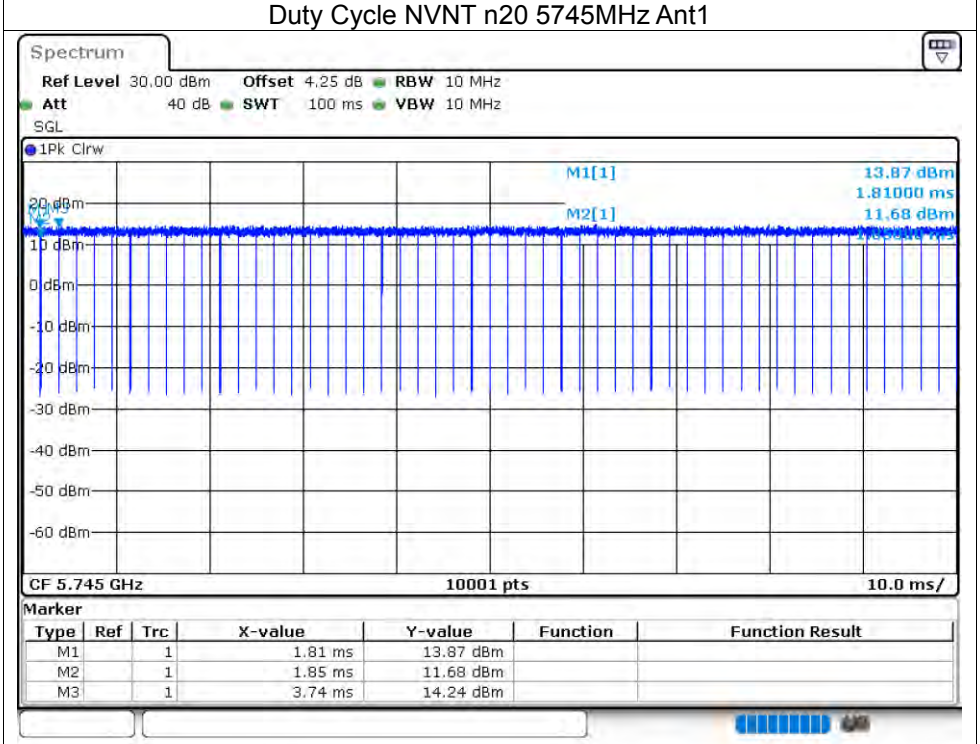
Duty Cycle NVNT a 5785MHz Ant1



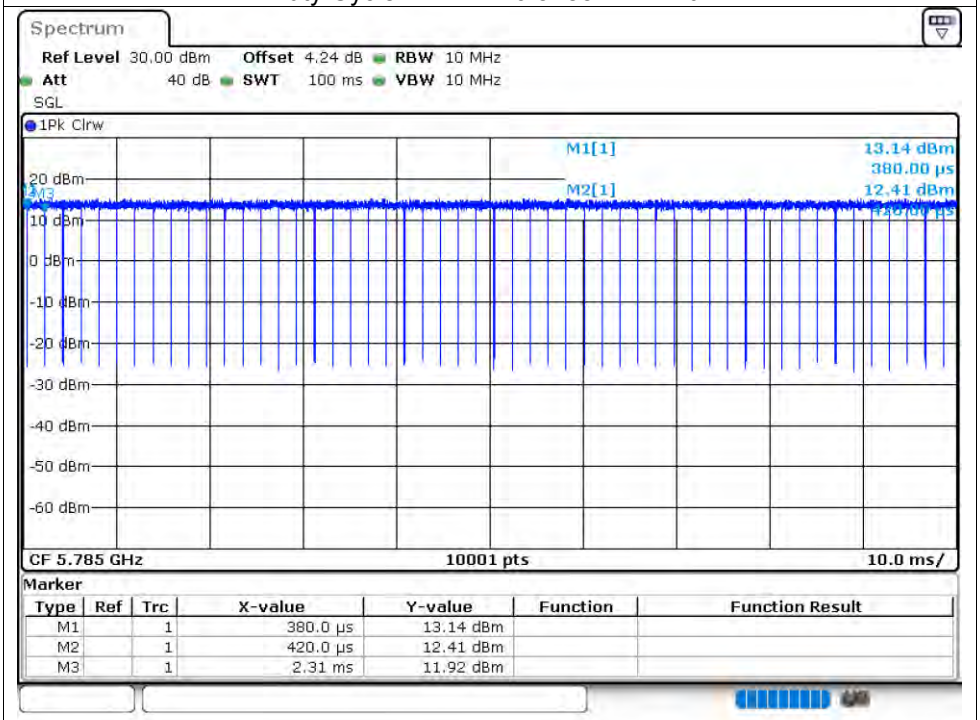
Duty Cycle NVNT a 5825MHz Ant1



Duty Cycle NVNT n20 5745MHz Ant1



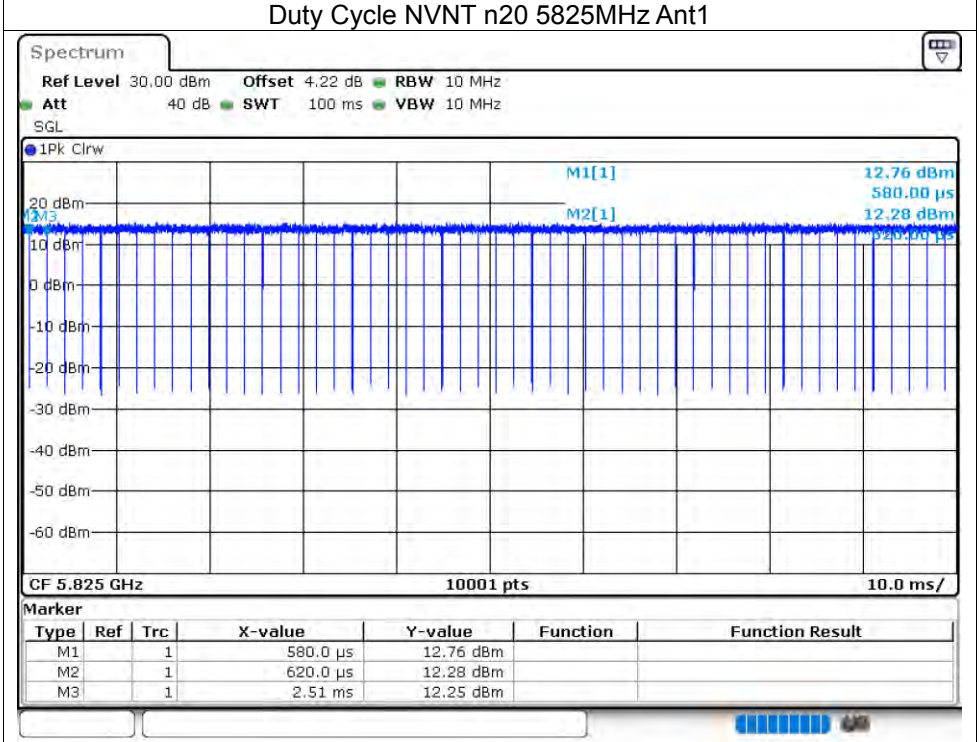
Duty Cycle NVNT n20 5785MHz Ant1



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	380.0 µs	13.14 dBm		
M2		1	420.0 µs	12.41 dBm		
M3		1	2.31 ms	11.92 dBm		

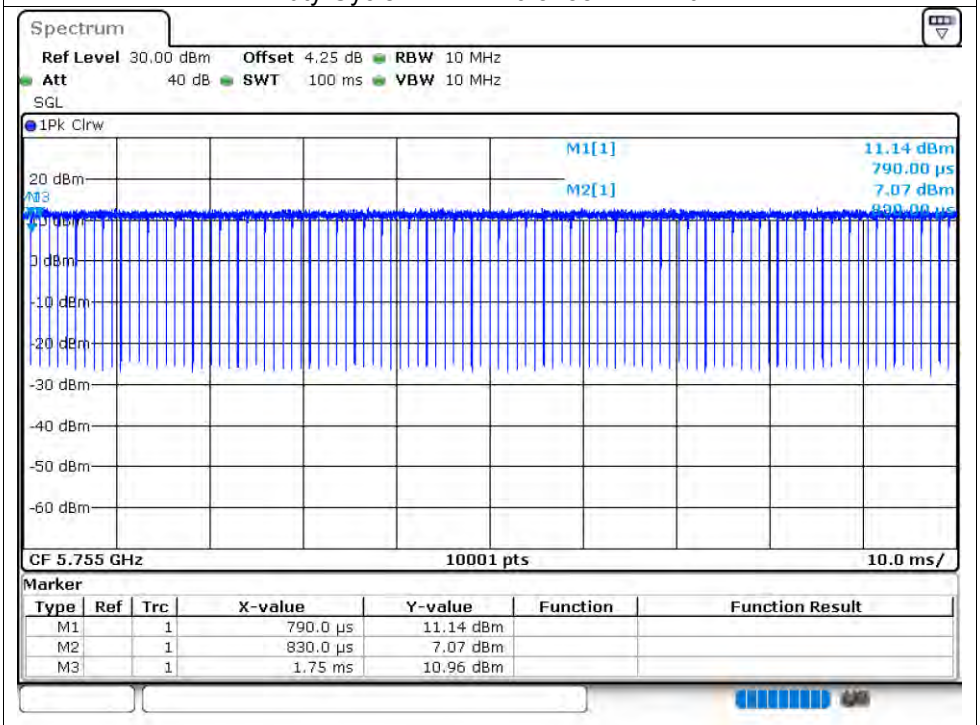
Duty Cycle NVNT n20 5825MHz Ant1



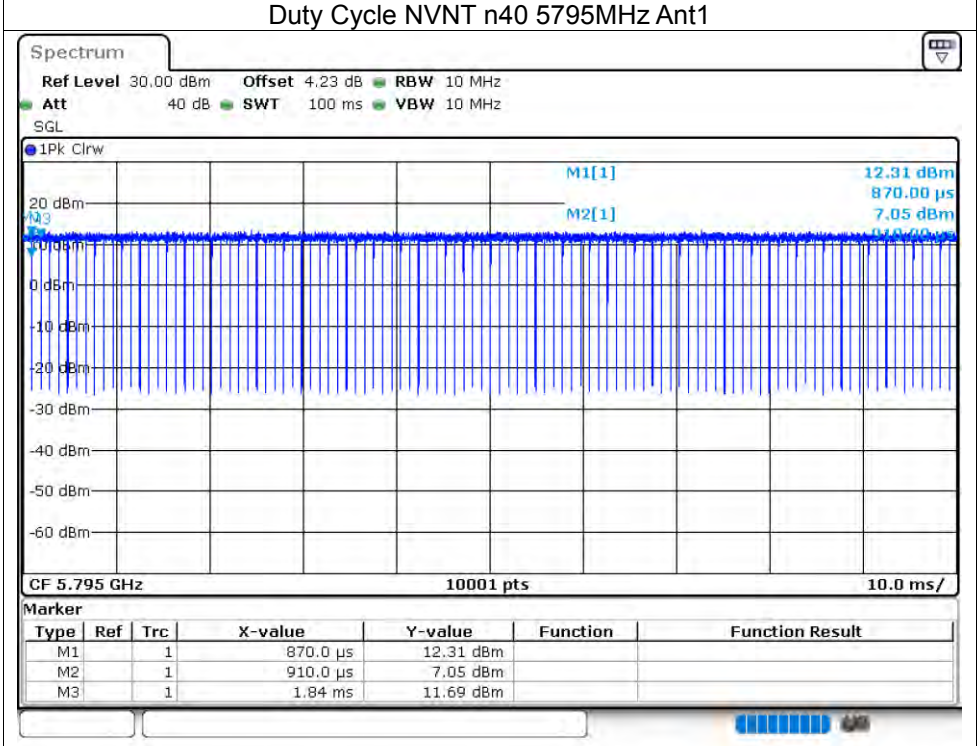
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	580.0 µs	12.76 dBm		
M2		1	620.0 µs	12.28 dBm		
M3		1	2.51 ms	12.25 dBm		

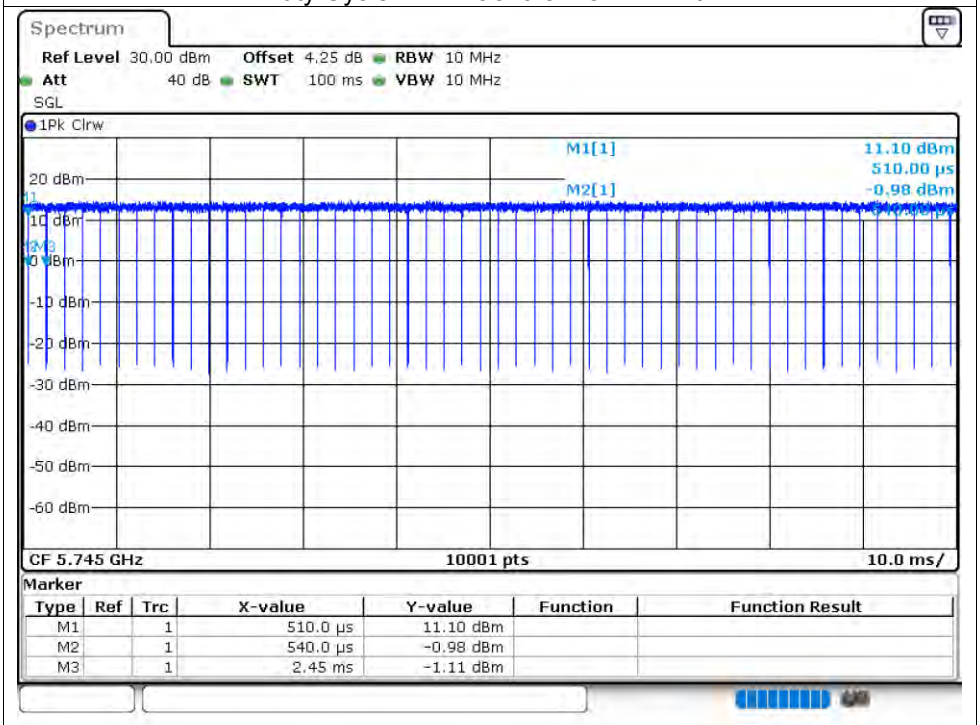
Duty Cycle NVNT n40 5755MHz Ant1



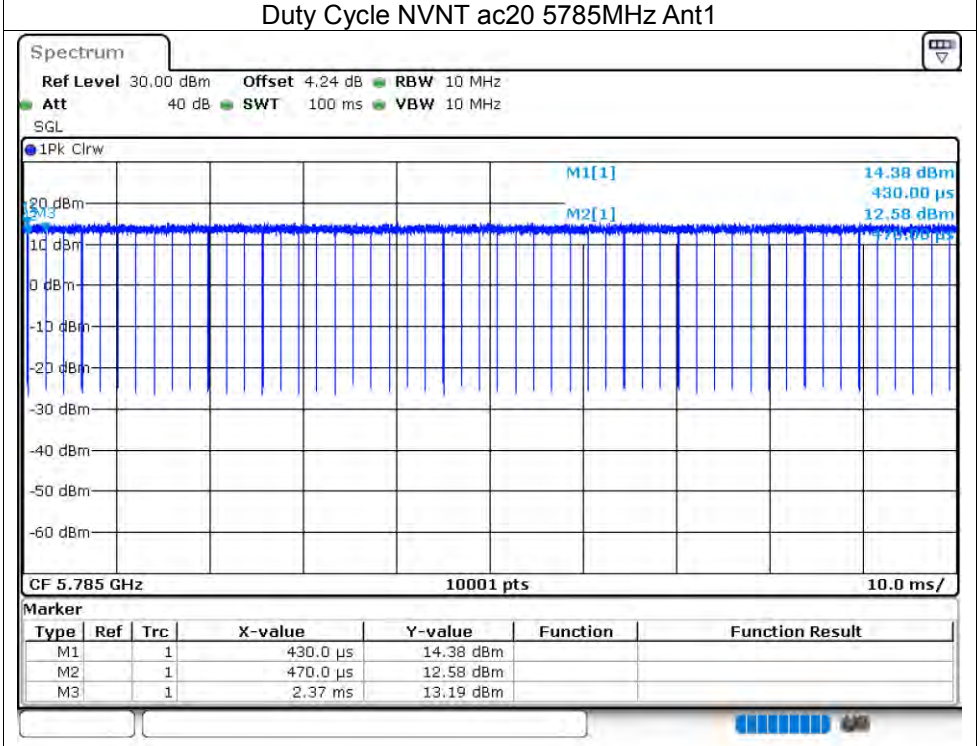
Duty Cycle NVNT n40 5795MHz Ant1



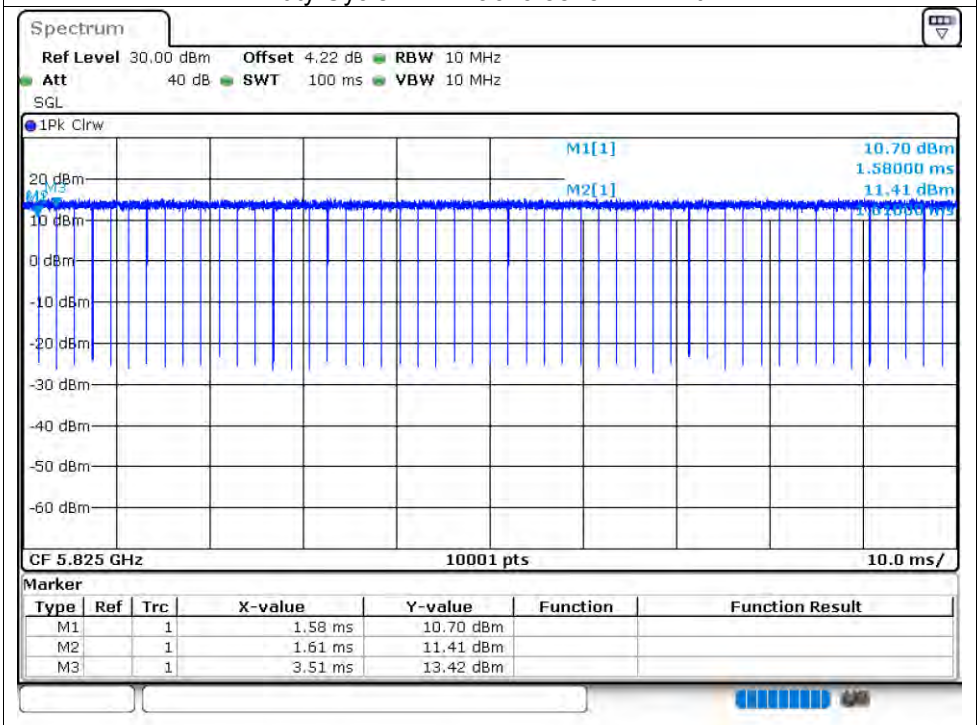
Duty Cycle NVNT ac20 5745MHz Ant1



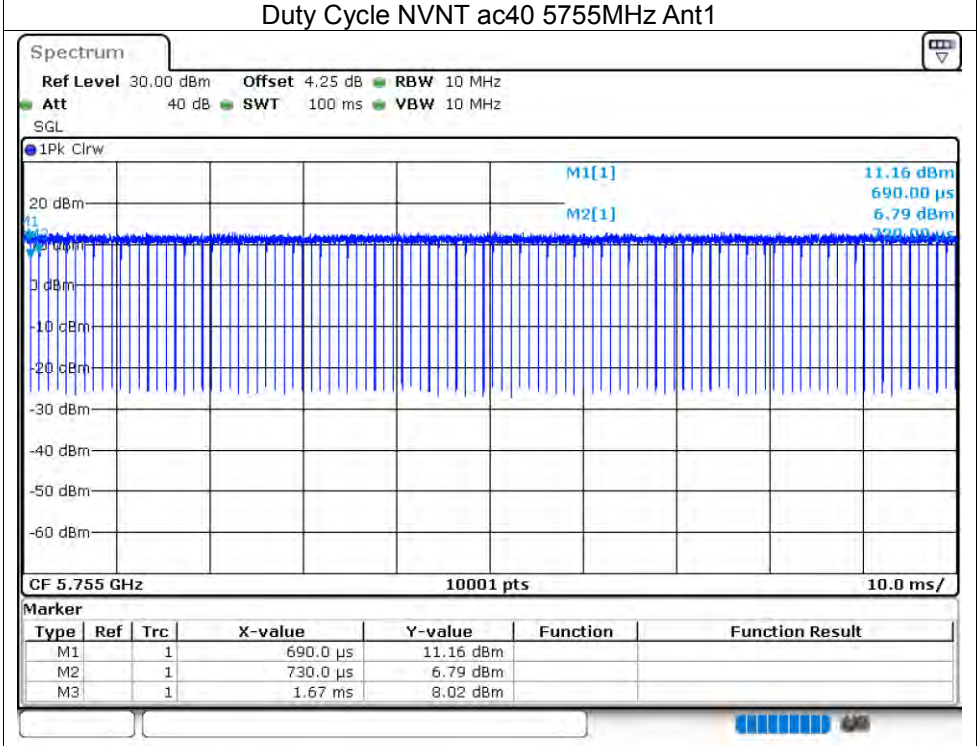
Duty Cycle NVNT ac20 5785MHz Ant1



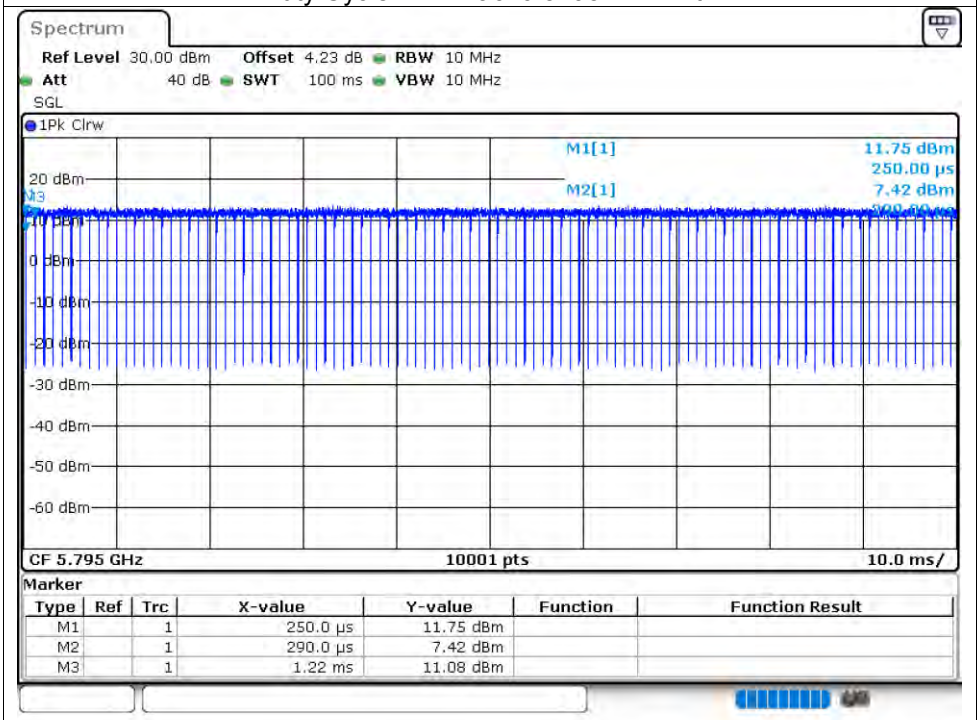
Duty Cycle NVNT ac20 5825MHz Ant1



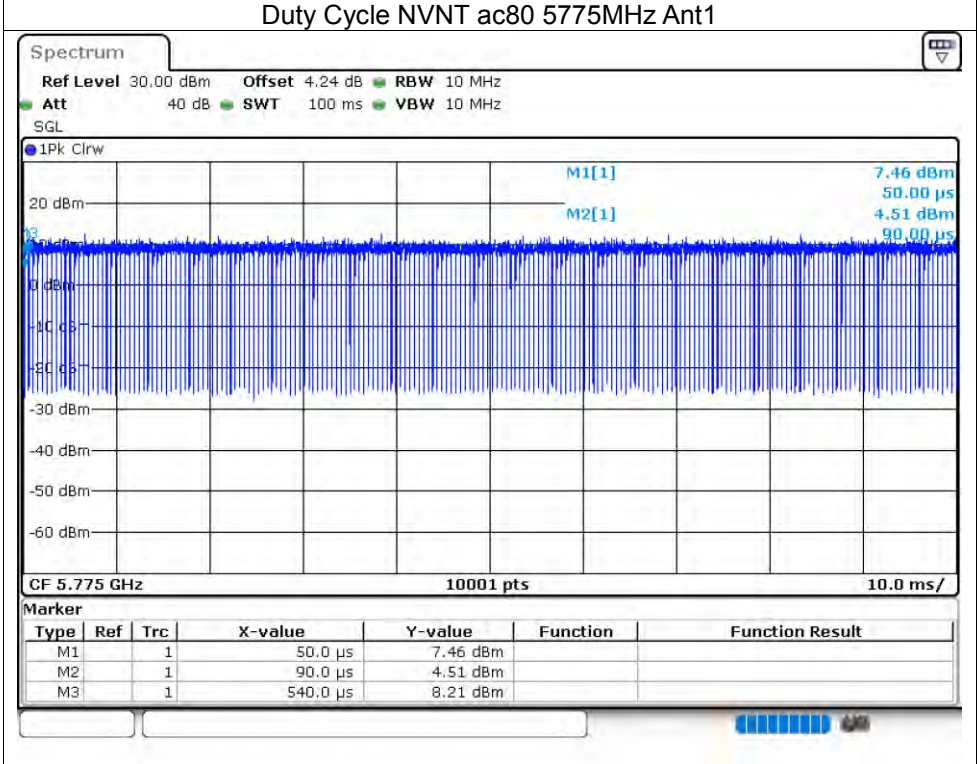
Duty Cycle NVNT ac40 5755MHz Ant1



Duty Cycle NVNT ac40 5795MHz Ant1



Duty Cycle NVNT ac80 5775MHz Ant1



5.2 MAXIMUM CONDUCTED OUTPUT POWER

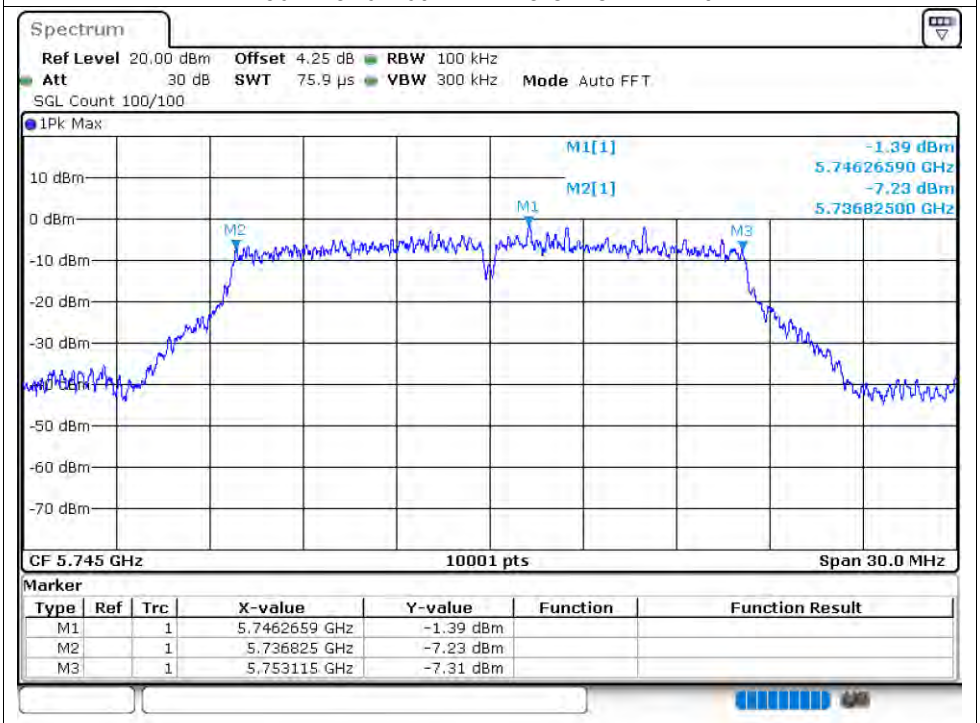
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	10.43	0.05	10.48	30	Pass
NVNT	a	5785	Ant1	10.95	0.06	11.01	30	Pass
NVNT	a	5825	Ant1	10.91	0.05	10.96	30	Pass
NVNT	n20	5745	Ant1	10.04	0.07	10.11	30	Pass
NVNT	n20	5785	Ant1	10.64	0.06	10.7	30	Pass
NVNT	n20	5825	Ant1	10.53	0.06	10.59	30	Pass
NVNT	n40	5755	Ant1	10.38	0.13	10.51	30	Pass
NVNT	n40	5795	Ant1	11.11	0.11	11.22	30	Pass
NVNT	ac20	5745	Ant1	10.02	0.06	10.08	30	Pass
NVNT	ac20	5785	Ant1	10.62	0.06	10.68	30	Pass
NVNT	ac20	5825	Ant1	10.58	0.05	10.63	30	Pass
NVNT	ac40	5755	Ant1	10.37	0.12	10.49	30	Pass
NVNT	ac40	5795	Ant1	10.98	0.11	11.09	30	Pass
NVNT	ac80	5775	Ant1	10.55	0.25	10.8	30	Pass

5.3 -6DB BANDWIDTH

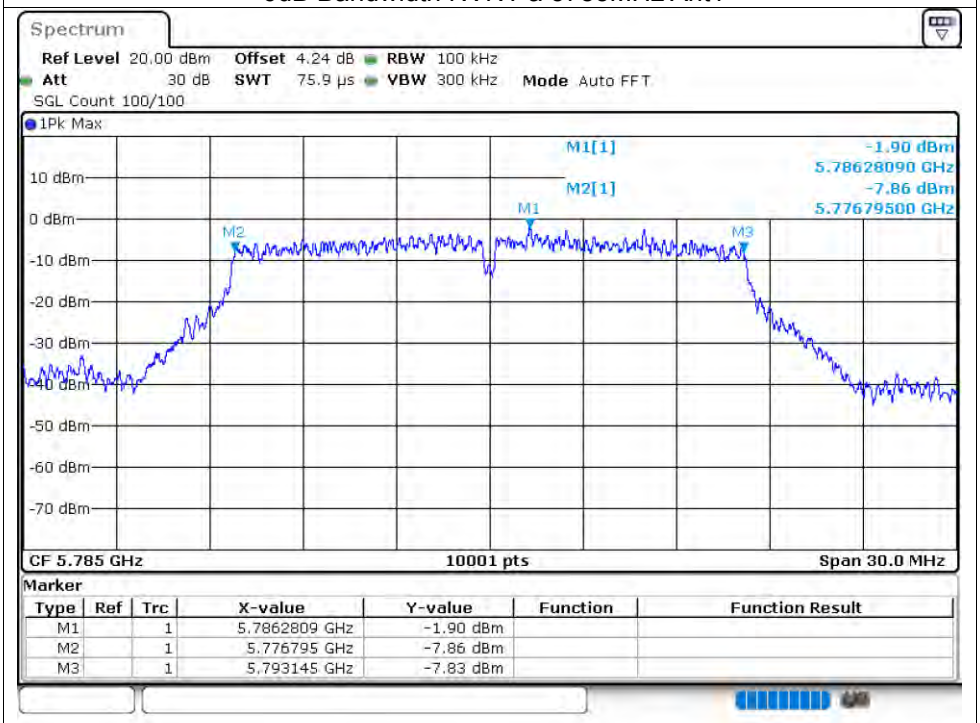
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	16.29	0.5	Pass
NVNT	a	5785	Ant1	16.35	0.5	Pass
NVNT	a	5825	Ant1	15.678	0.5	Pass
NVNT	n20	5745	Ant1	17.607	0.5	Pass
NVNT	n20	5785	Ant1	17.292	0.5	Pass
NVNT	n20	5825	Ant1	17.553	0.5	Pass
NVNT	n40	5755	Ant1	36.336	0.5	Pass
NVNT	n40	5795	Ant1	36.348	0.5	Pass
NVNT	ac20	5745	Ant1	17.628	0.5	Pass
NVNT	ac20	5785	Ant1	17.574	0.5	Pass
NVNT	ac20	5825	Ant1	17.172	0.5	Pass
NVNT	ac40	5755	Ant1	35.916	0.5	Pass
NVNT	ac40	5795	Ant1	36.042	0.5	Pass
NVNT	ac80	5775	Ant1	74.424	0.5	Pass

Test Graphs

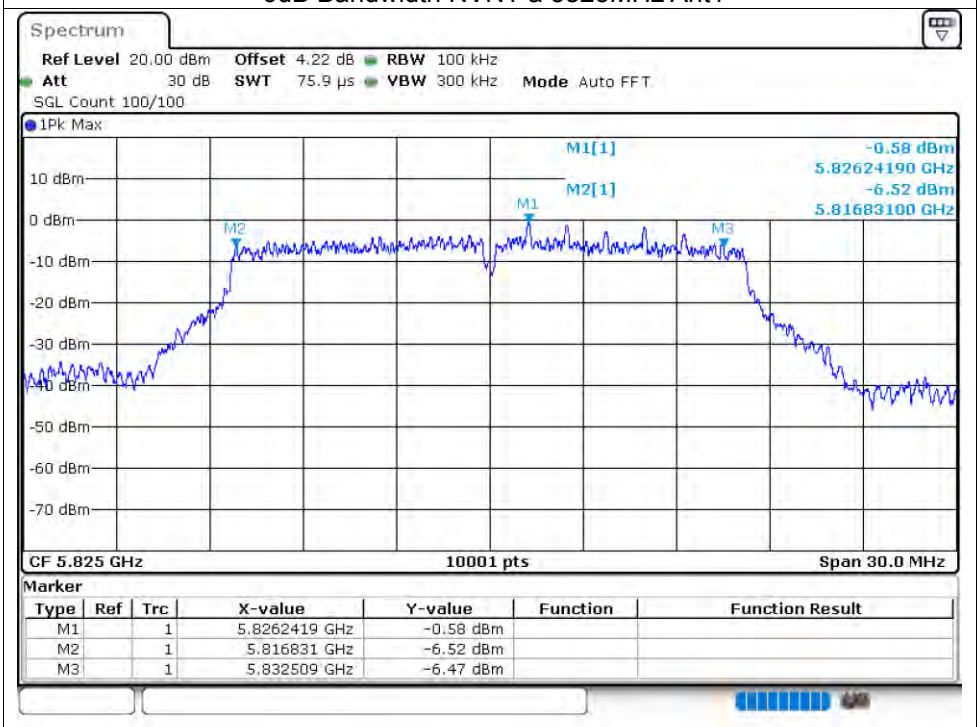
-6dB Bandwidth NVNT a 5745MHz Ant1



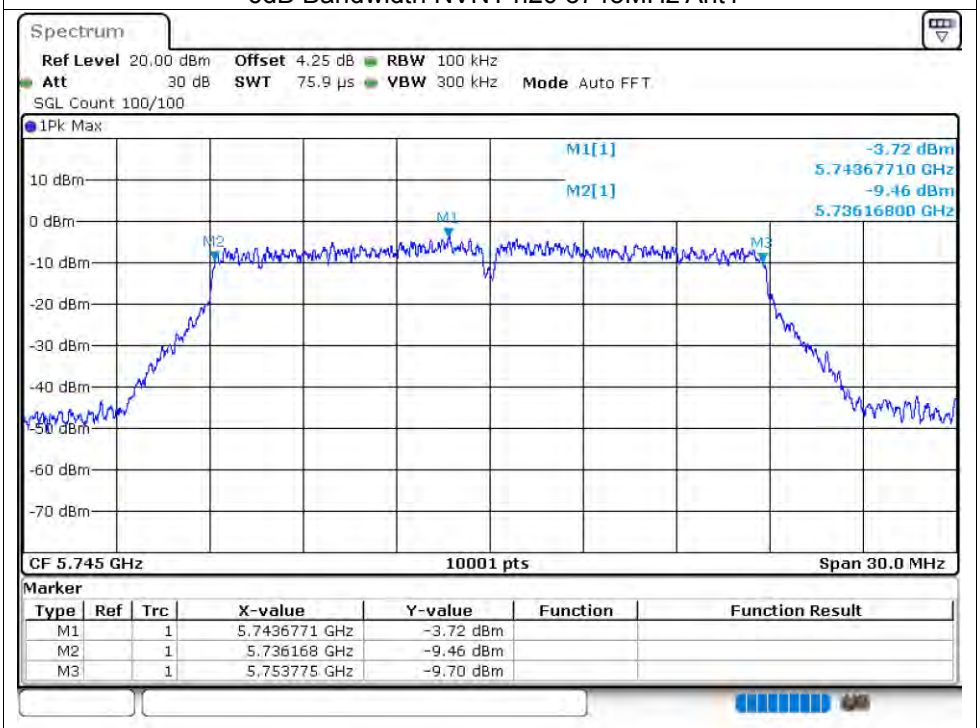
-6dB Bandwidth NVNT a 5785MHz Ant1



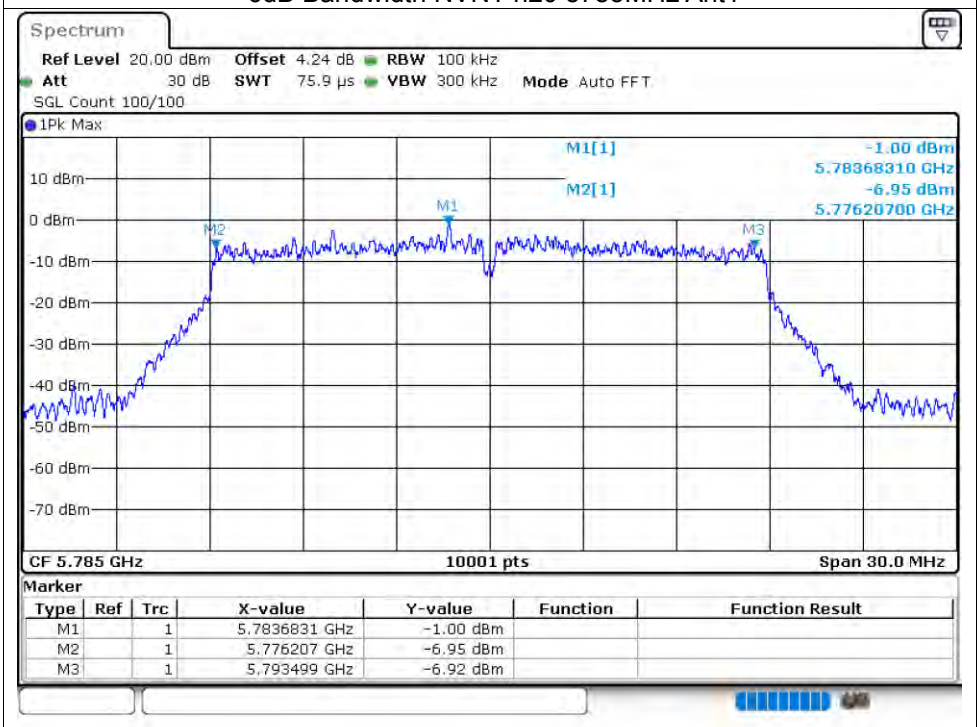
-6dB Bandwidth NVNT a 5825MHz Ant1



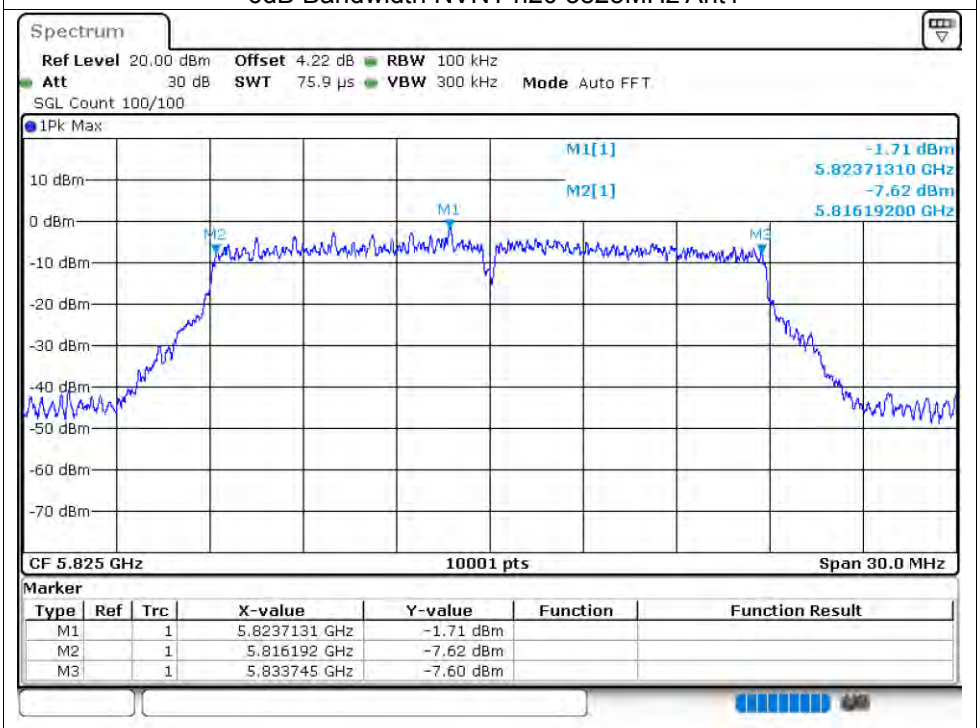
-6dB Bandwidth NVNT n20 5745MHz Ant1



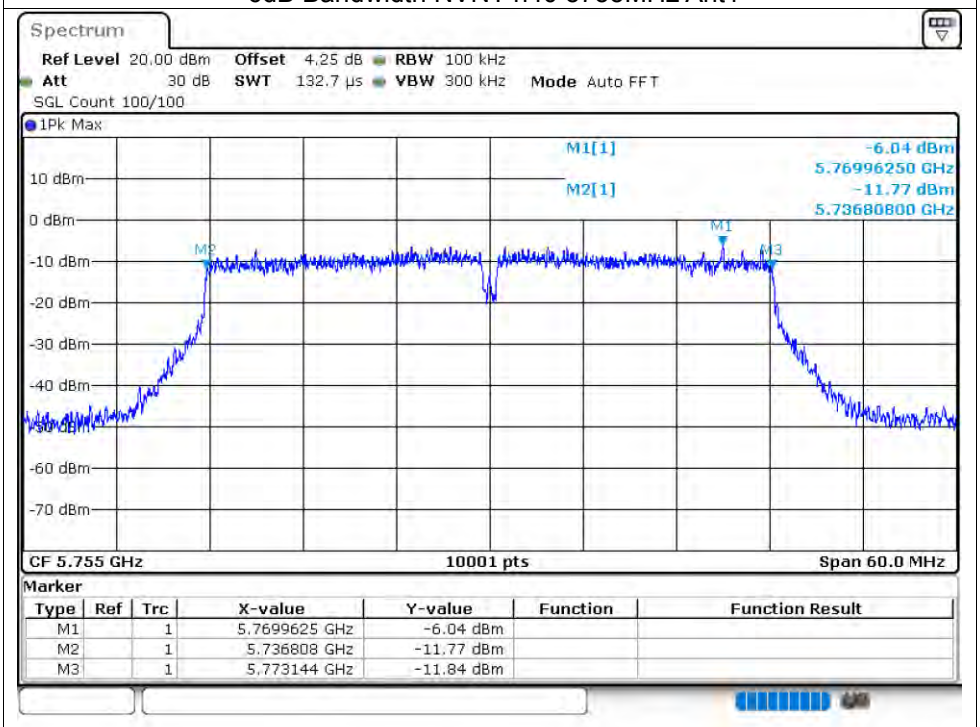
-6dB Bandwidth NVNT n20 5785MHz Ant1



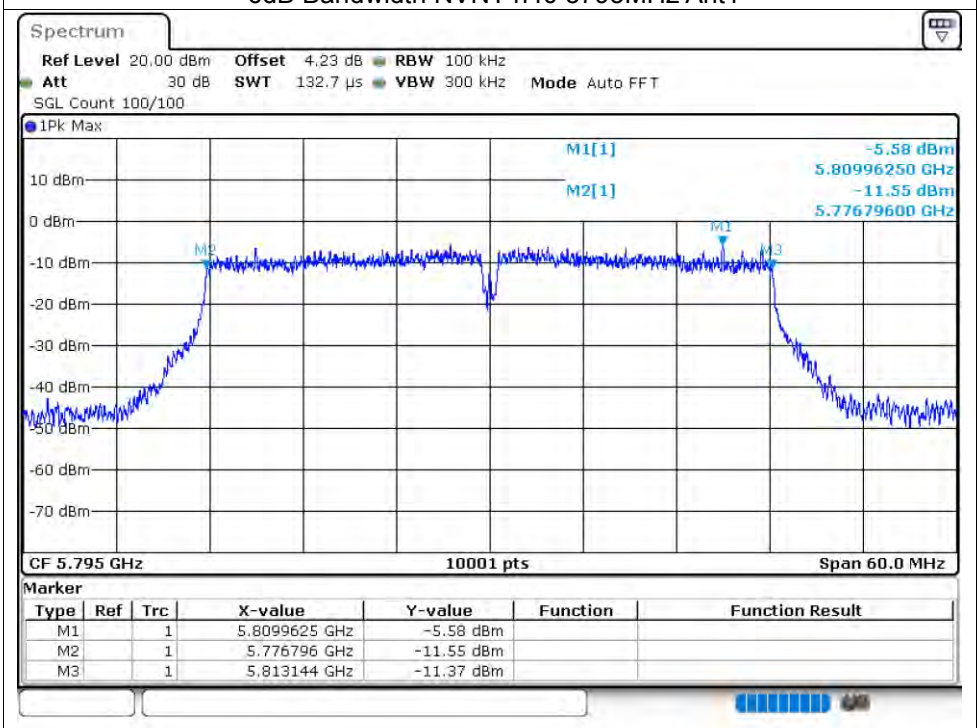
-6dB Bandwidth NVNT n20 5825MHz Ant1



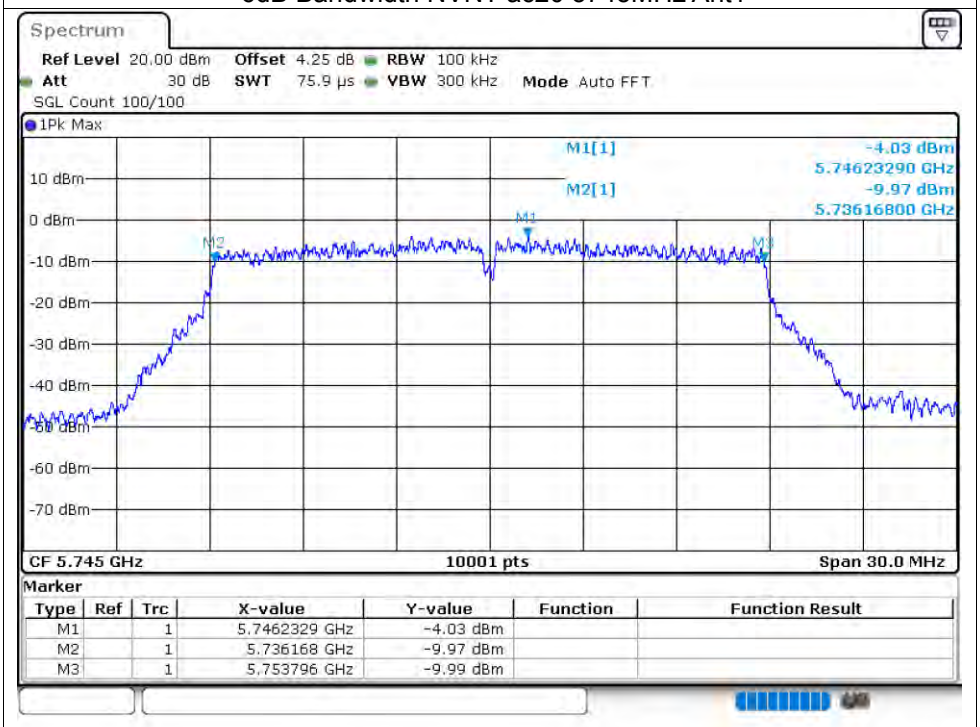
-6dB Bandwidth NVNT n40 5755MHz Ant1



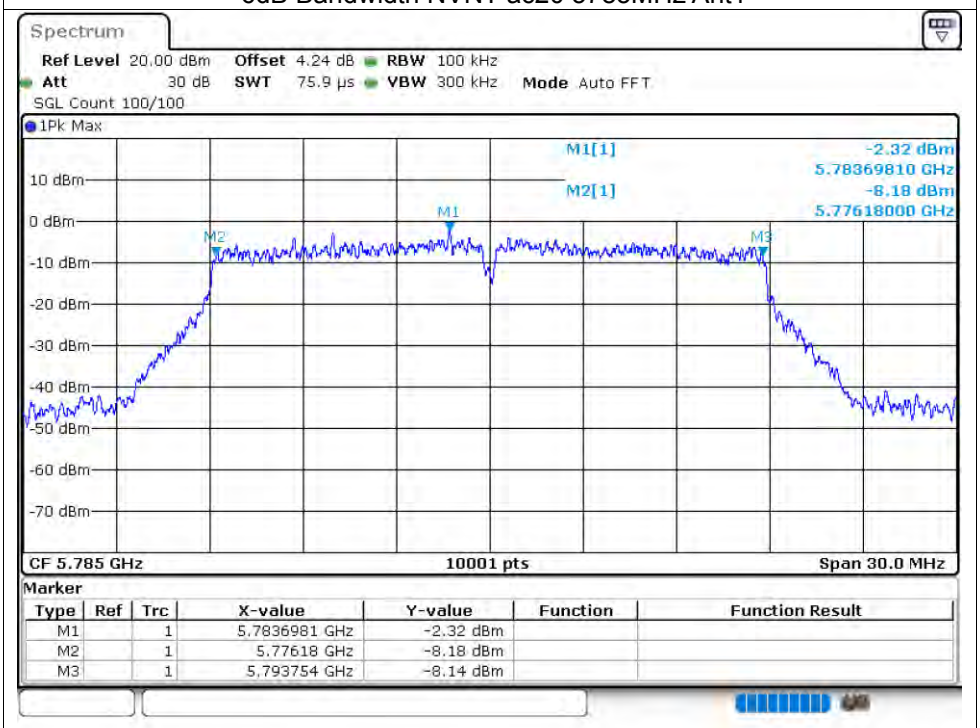
-6dB Bandwidth NVNT n40 5795MHz Ant1



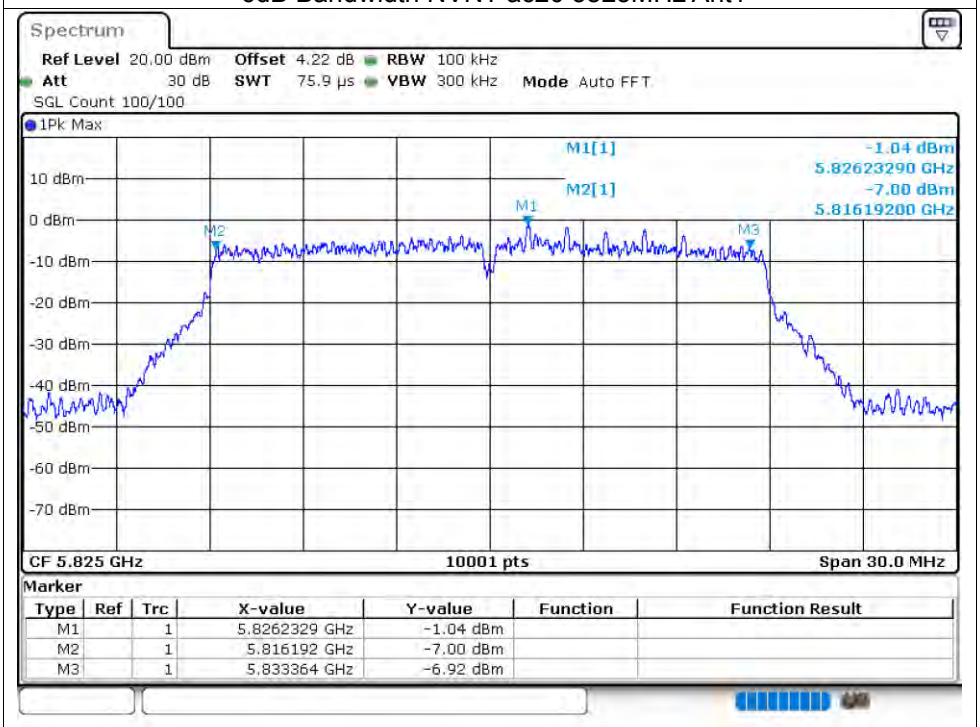
-6dB Bandwidth NVNT ac20 5745MHz Ant1



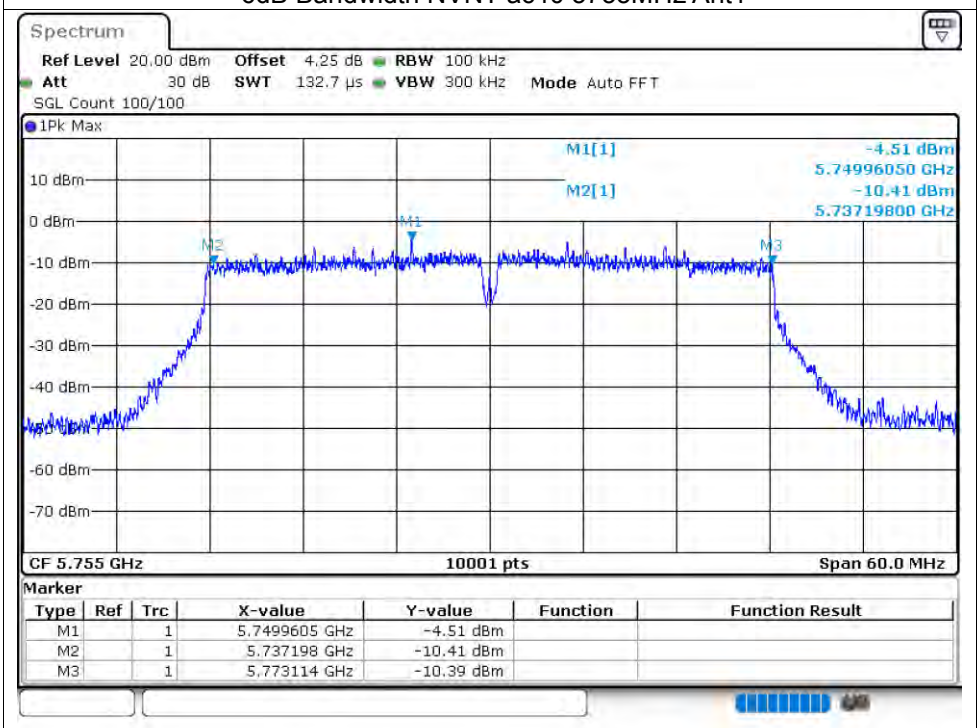
-6dB Bandwidth NVNT ac20 5785MHz Ant1



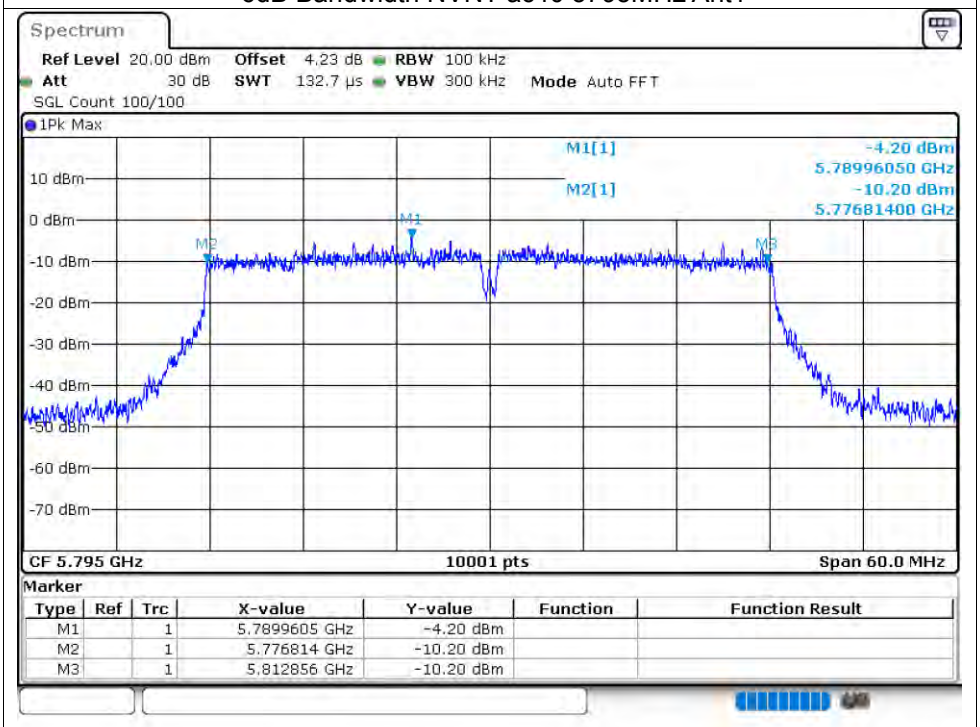
-6dB Bandwidth NVNT ac20 5825MHz Ant1



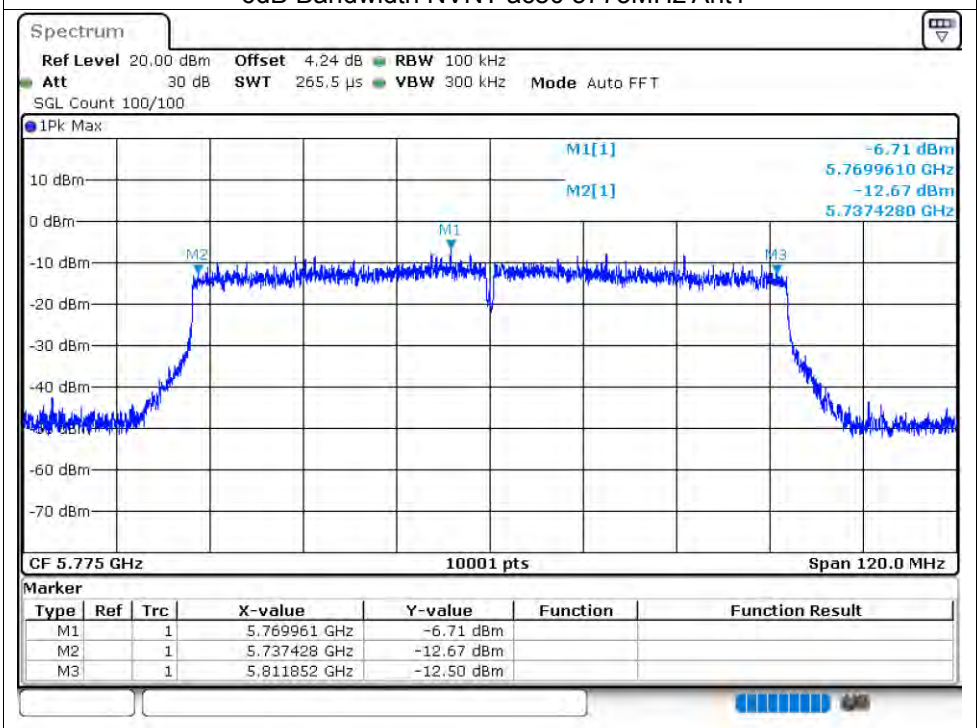
-6dB Bandwidth NVNT ac40 5755MHz Ant1



-6dB Bandwidth NVNT ac40 5795MHz Ant1



-6dB Bandwidth NVNT ac80 5775MHz Ant1

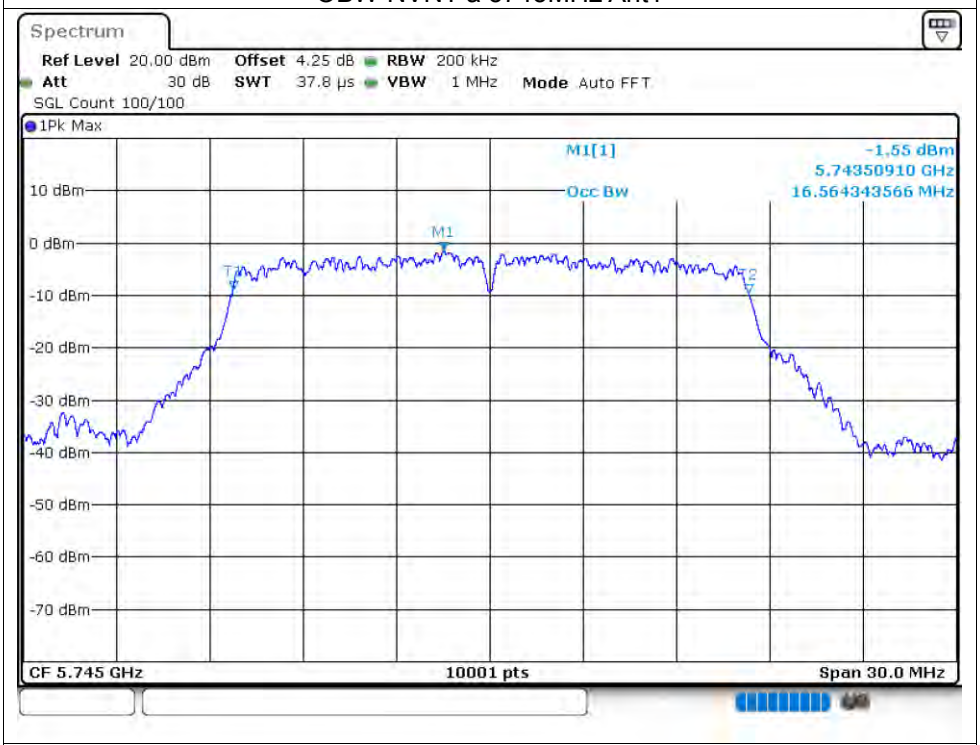


5.4 OCCUPIED CHANNEL BANDWIDTH

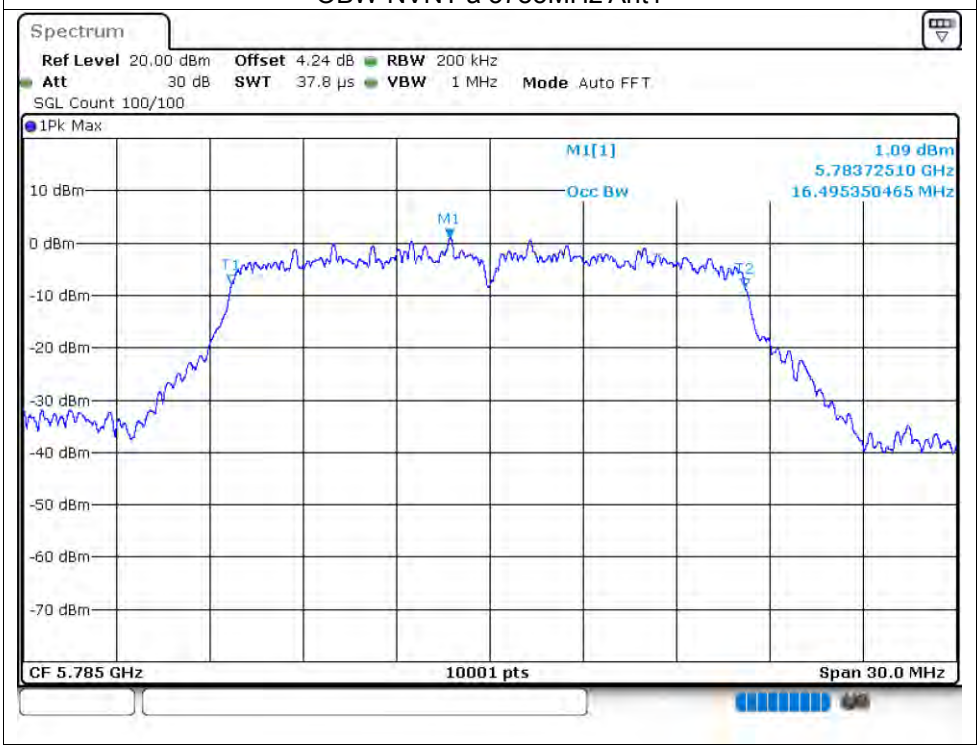
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.564
NVNT	a	5785	Ant1	16.495
NVNT	a	5825	Ant1	16.471
NVNT	n20	5745	Ant1	17.653
NVNT	n20	5785	Ant1	17.647
NVNT	n20	5825	Ant1	17.653
NVNT	n40	5755	Ant1	36.212
NVNT	n40	5795	Ant1	36.236
NVNT	ac20	5745	Ant1	17.674
NVNT	ac20	5785	Ant1	17.644
NVNT	ac20	5825	Ant1	17.602
NVNT	ac40	5755	Ant1	36.218
NVNT	ac40	5795	Ant1	36.23
NVNT	ac80	5775	Ant1	75.484

Test Graphs

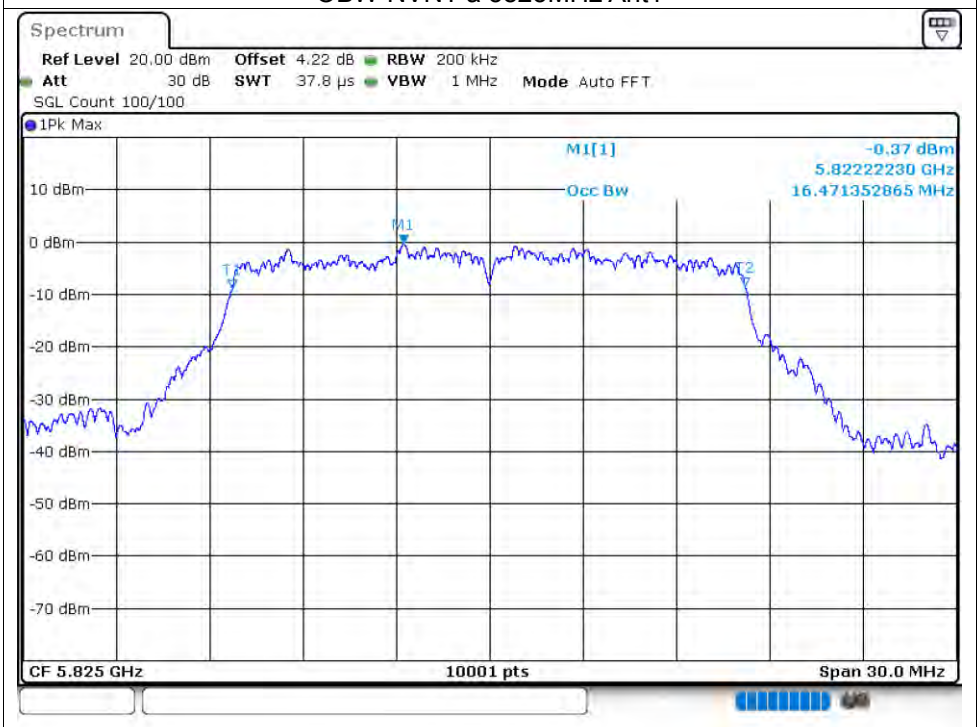
OBW NVNT a 5745MHz Ant1



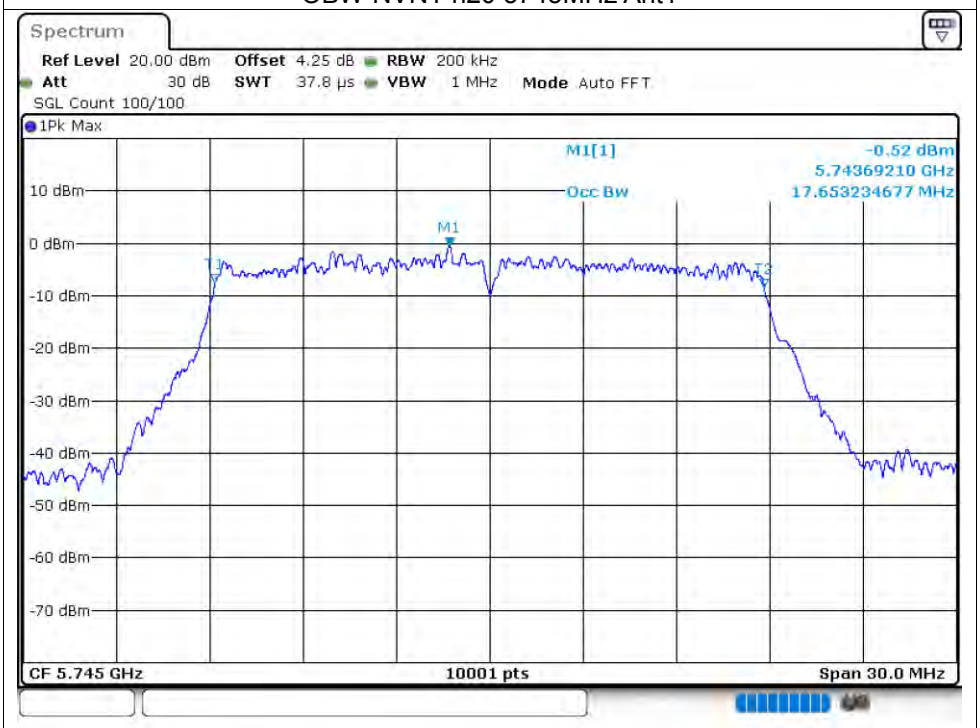
OBW NVNT a 5785MHz Ant1



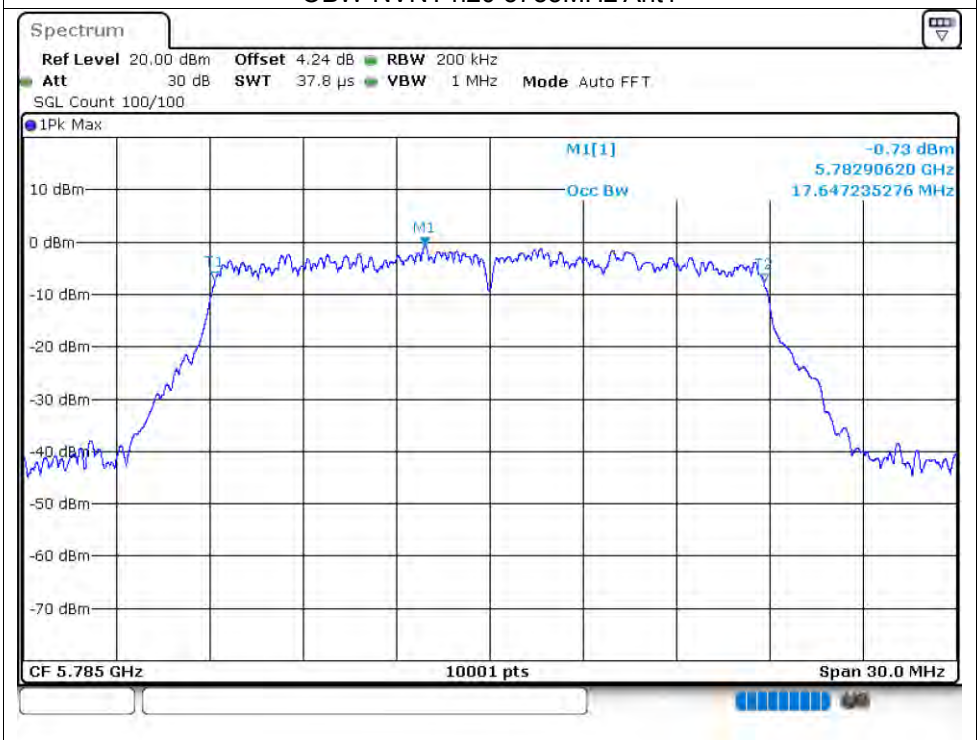
OBW NVNT a 5825MHz Ant1



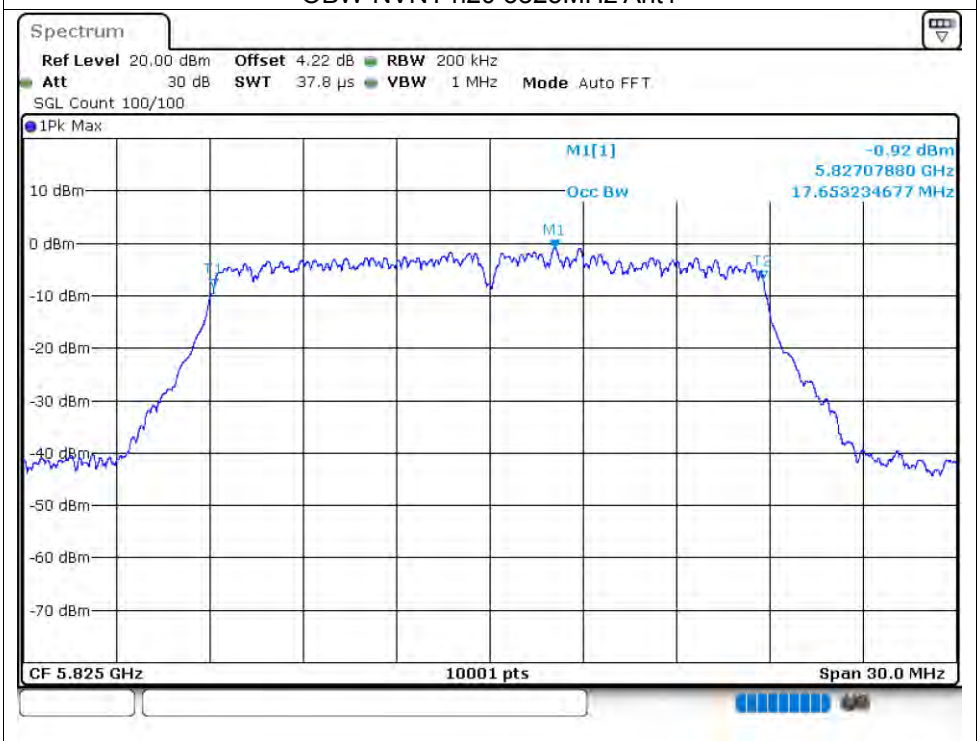
OBW NVNT n20 5745MHz Ant1



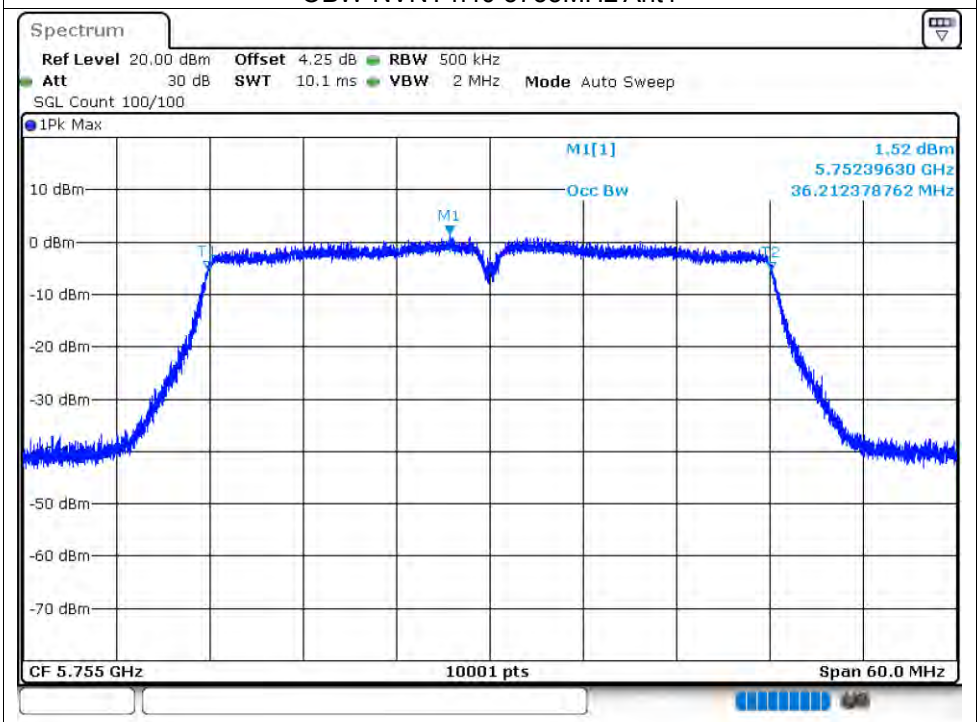
OBW NVNT n20 5785MHz Ant1



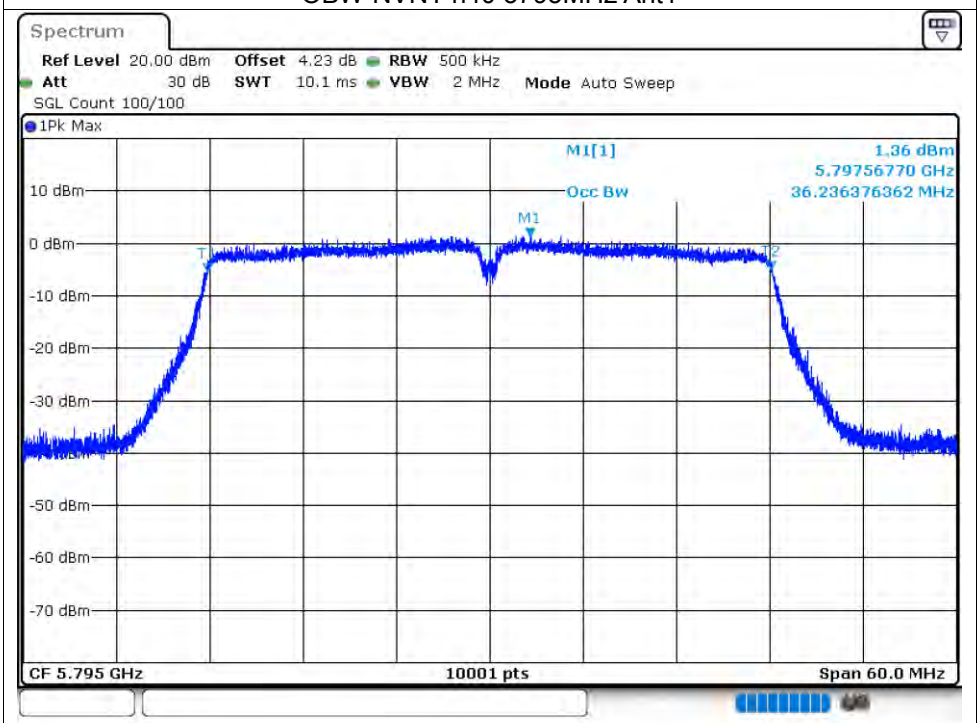
OBW NVNT n20 5825MHz Ant1



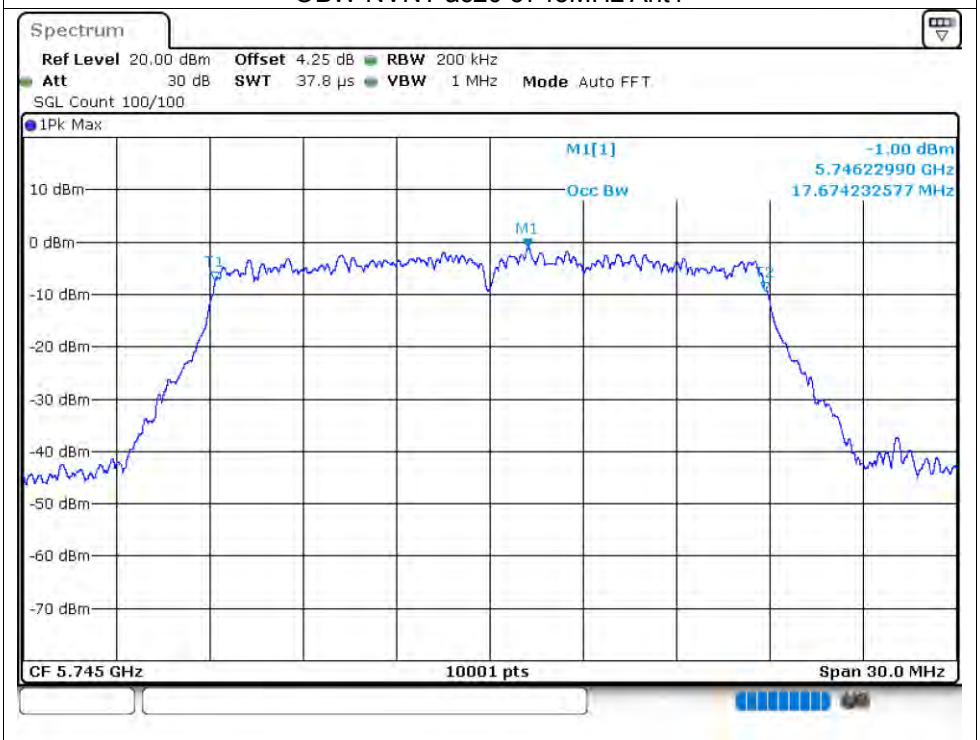
OBW NVNT n40 5755MHz Ant1



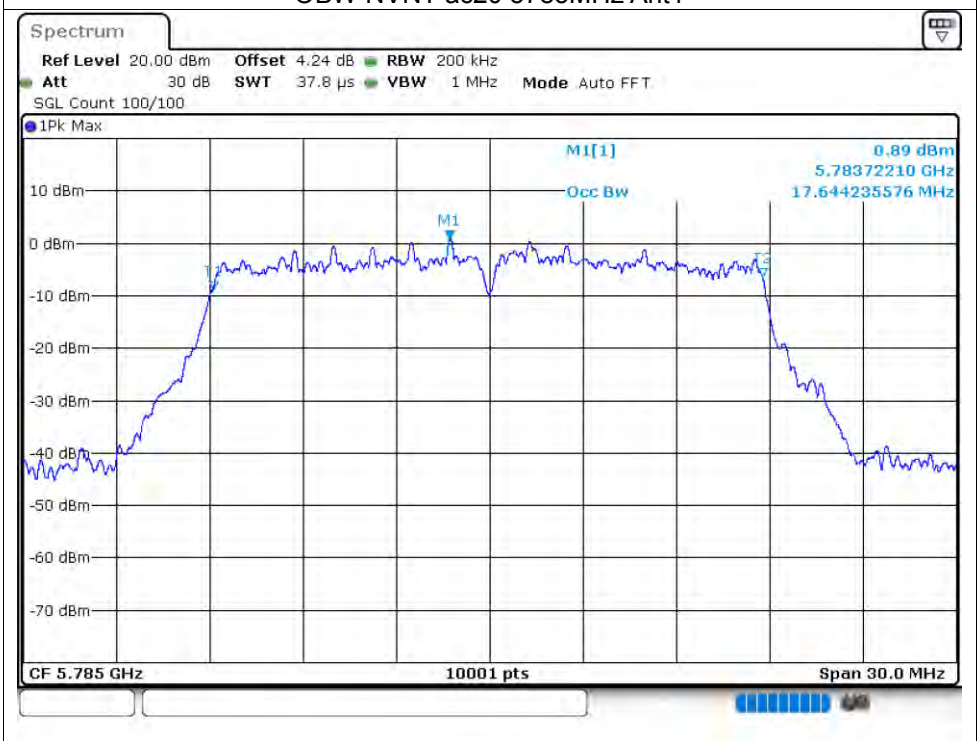
OBW NVNT n40 5795MHz Ant1



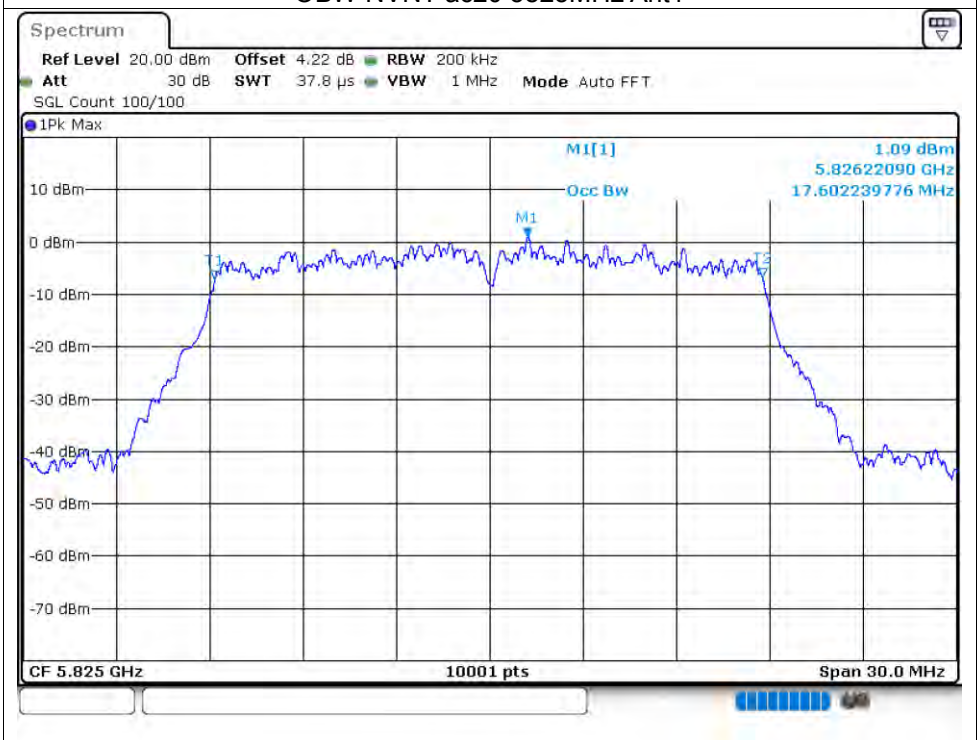
OBW NVNT ac20 5745MHz Ant1



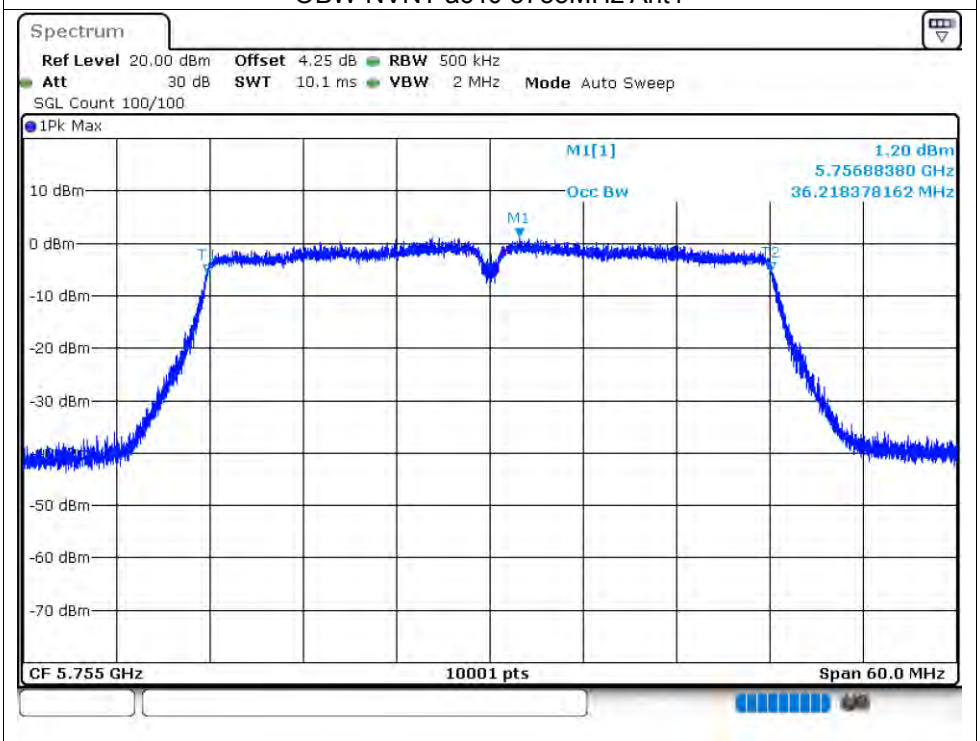
OBW NVNT ac20 5785MHz Ant1



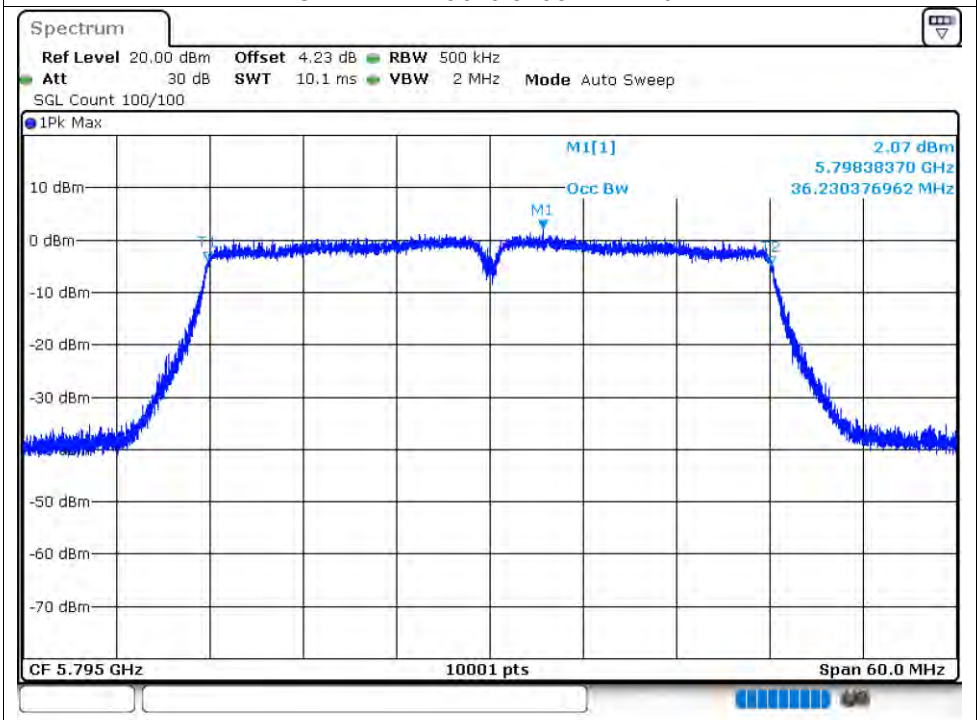
OBW NVNT ac20 5825MHz Ant1



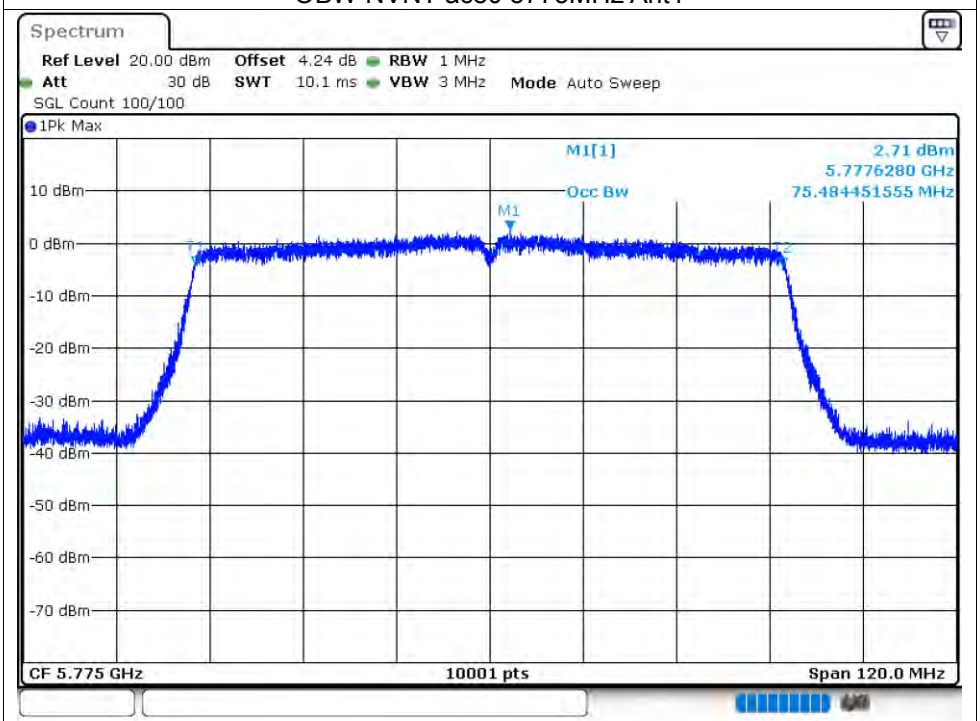
OBW NVNT ac40 5755MHz Ant1



OBW NVNT ac40 5795MHz Ant1



OBW NVNT ac80 5775MHz Ant1

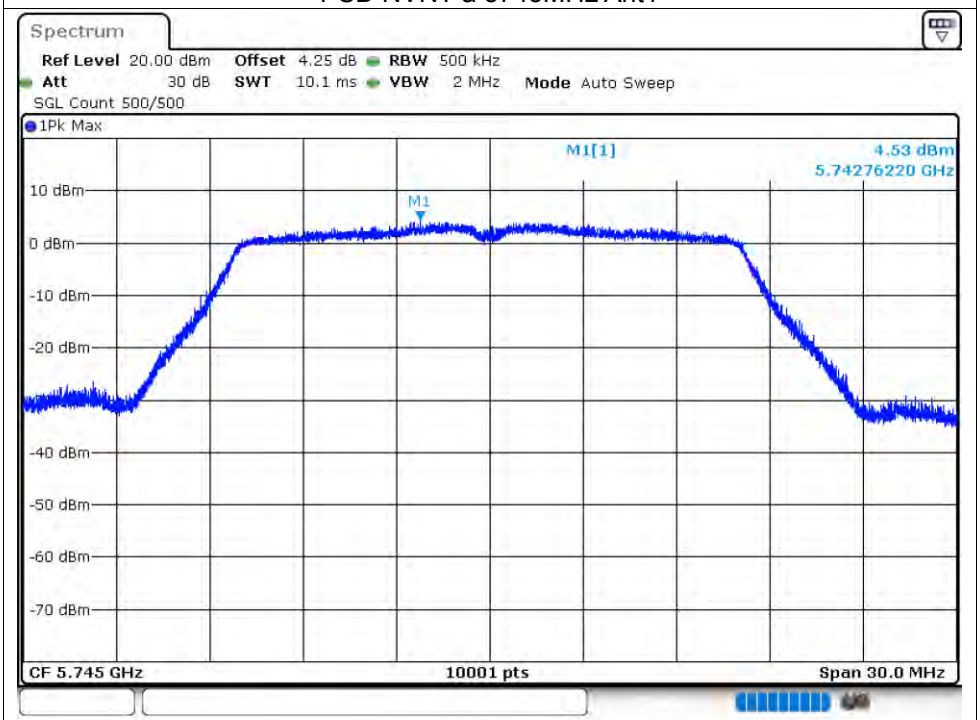


5.5 MAXIMUM POWER SPECTRAL DENSITY LEVEL

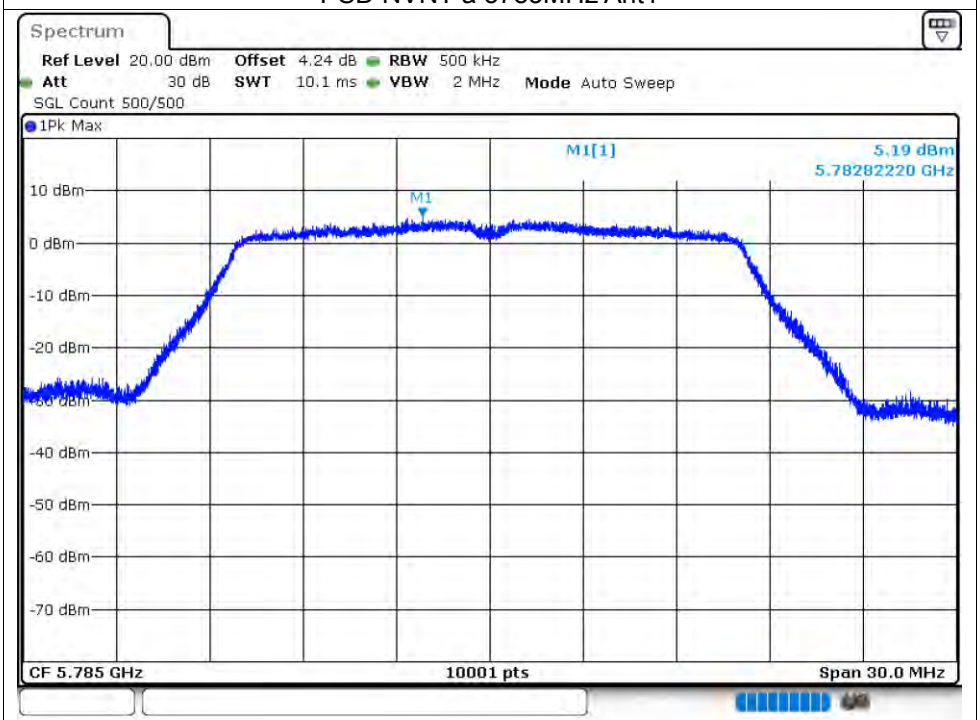
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	4.48	0.05	4.53	30	Pass
NVNT	a	5785	Ant1	5.13	0.06	5.19	30	Pass
NVNT	a	5825	Ant1	5.02	0.05	5.07	30	Pass
NVNT	n20	5745	Ant1	3.94	0.07	4.01	30	Pass
NVNT	n20	5785	Ant1	4.52	0.06	4.58	30	Pass
NVNT	n20	5825	Ant1	4.5	0.06	4.56	30	Pass
NVNT	n40	5755	Ant1	1.09	0.13	1.22	30	Pass
NVNT	n40	5795	Ant1	-9.56	0.11	-9.45	30	Pass
NVNT	ac20	5745	Ant1	3.74	0.06	3.8	30	Pass
NVNT	ac20	5785	Ant1	4.55	0.06	4.61	30	Pass
NVNT	ac20	5825	Ant1	4.34	0.05	4.39	30	Pass
NVNT	ac40	5755	Ant1	1.09	0.12	1.21	30	Pass
NVNT	ac40	5795	Ant1	1.72	0.11	1.83	30	Pass
NVNT	ac80	5775	Ant1	-1.55	0.25	-1.3	30	Pass

Test Graphs

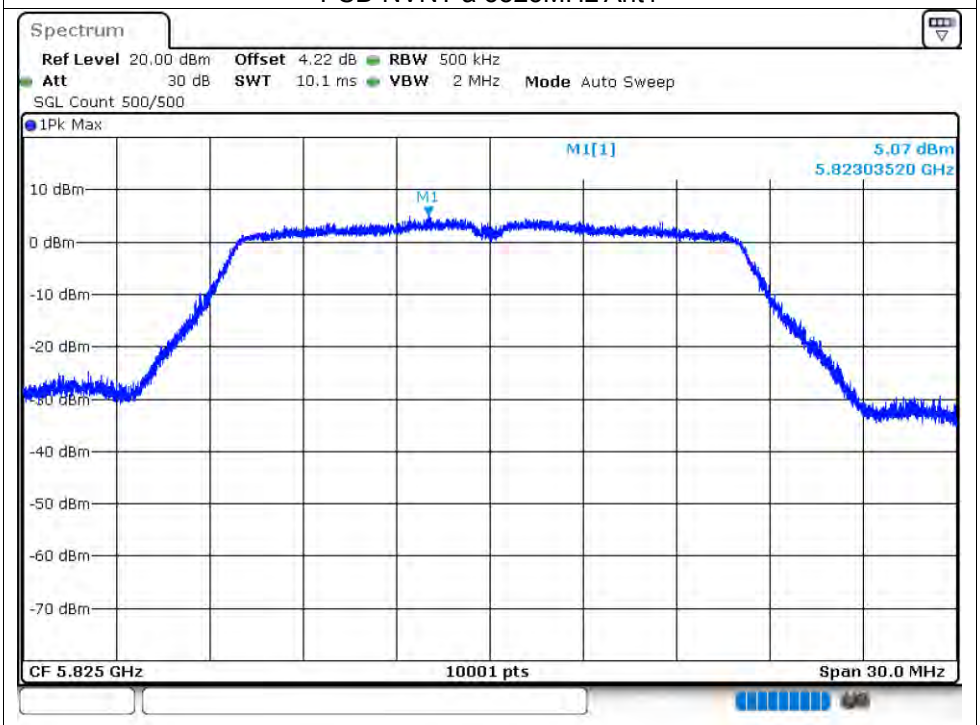
PSD NVNT a 5745MHz Ant1



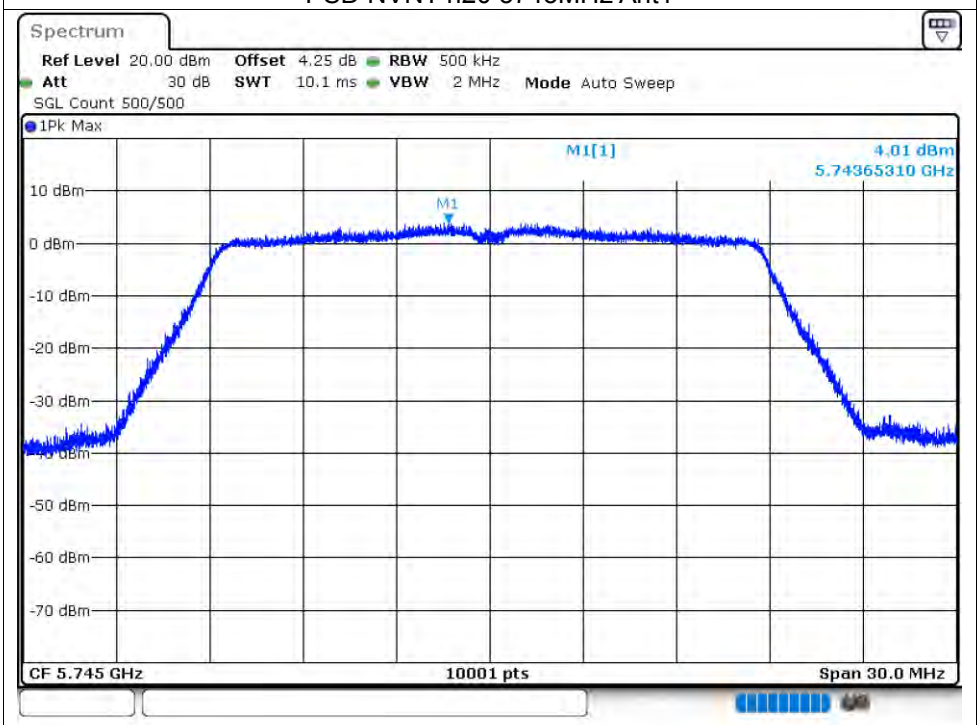
PSD NVNT a 5785MHz Ant1



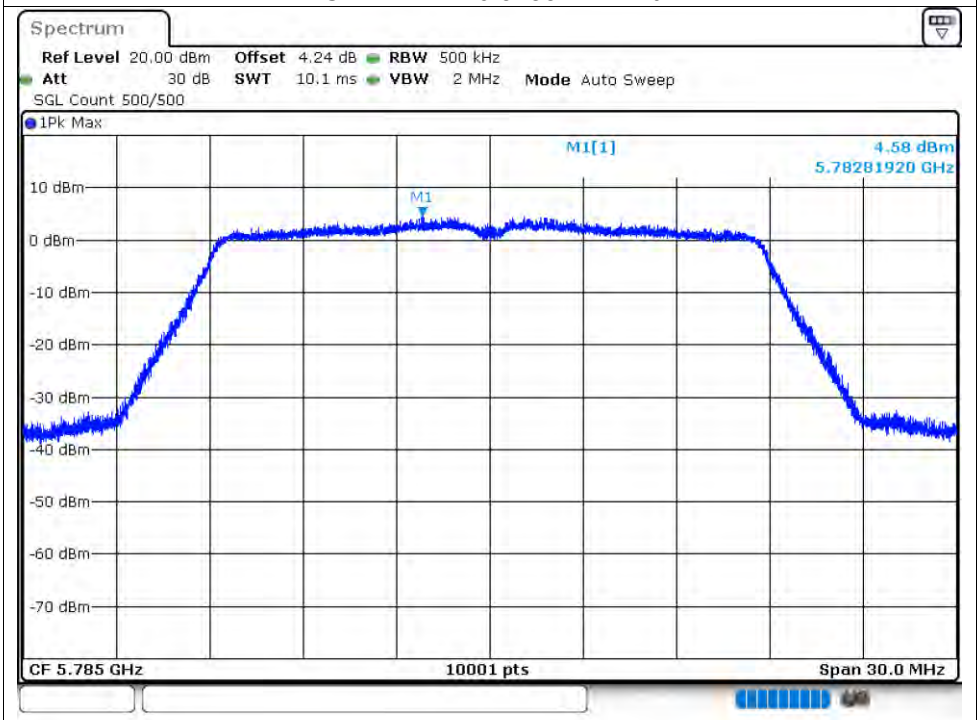
PSD NVNT a 5825MHz Ant1



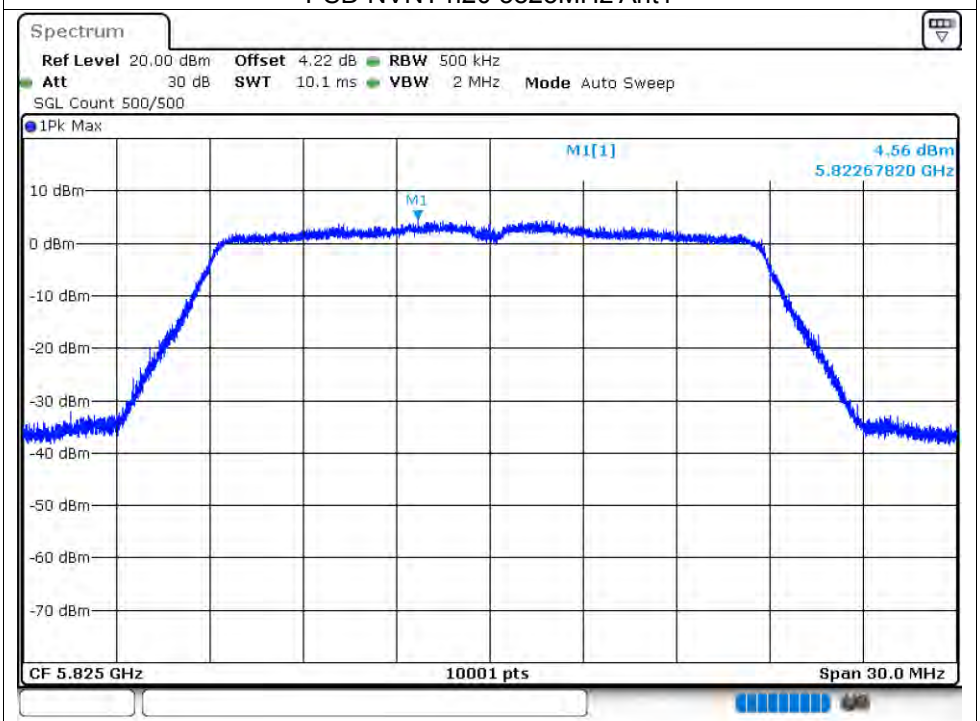
PSD NVNT n20 5745MHz Ant1



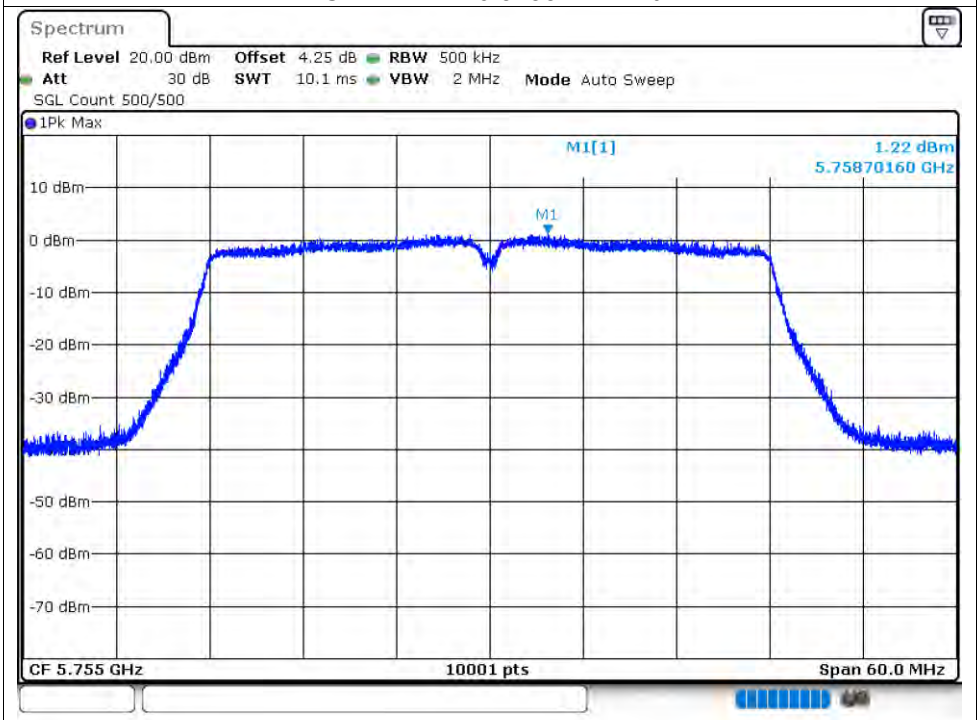
PSD NVNT n20 5785MHz Ant1



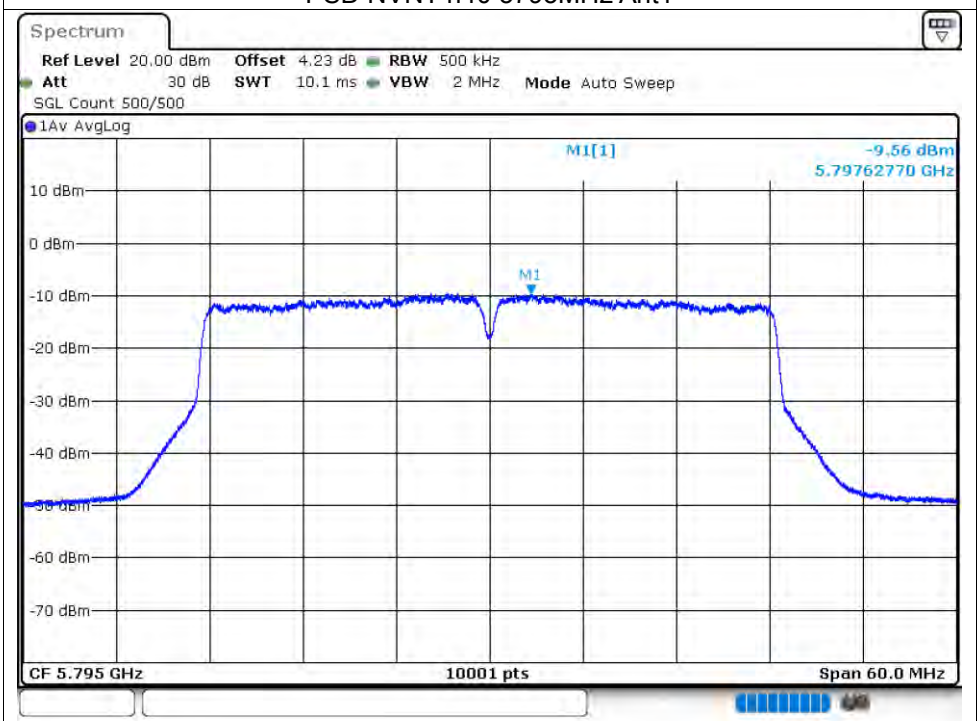
PSD NVNT n20 5825MHz Ant1



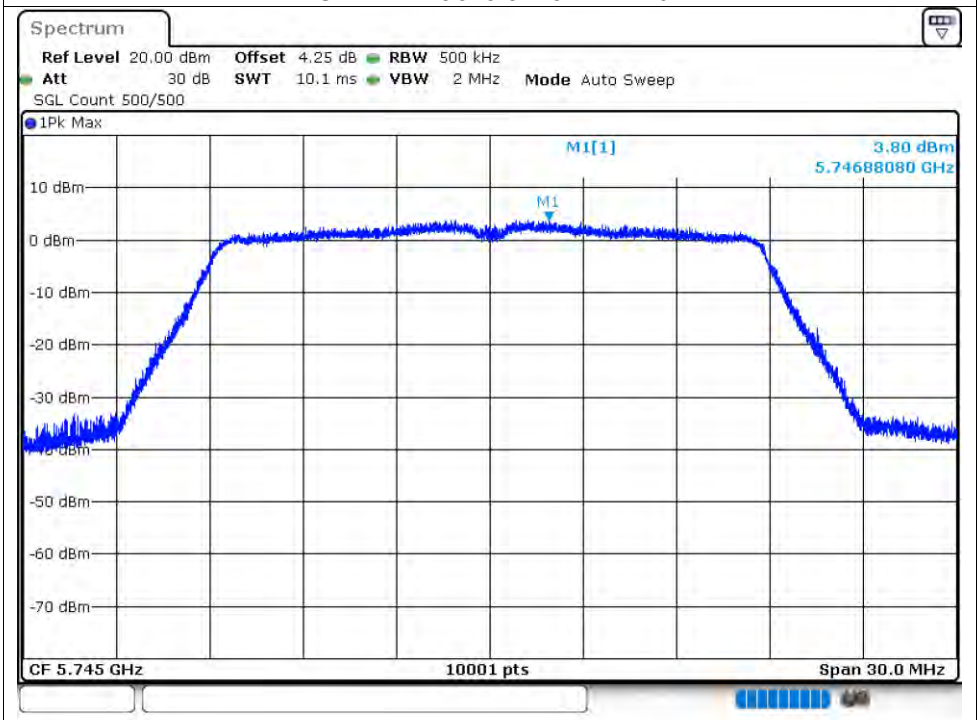
PSD NVNT n40 5755MHz Ant1



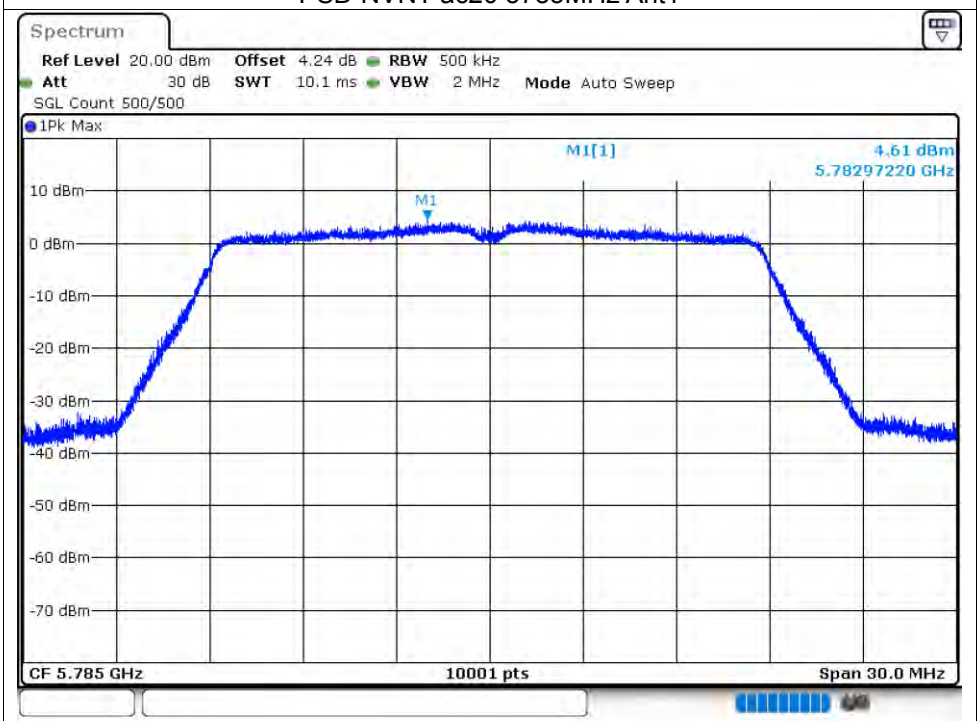
PSD NVNT n40 5795MHz Ant1



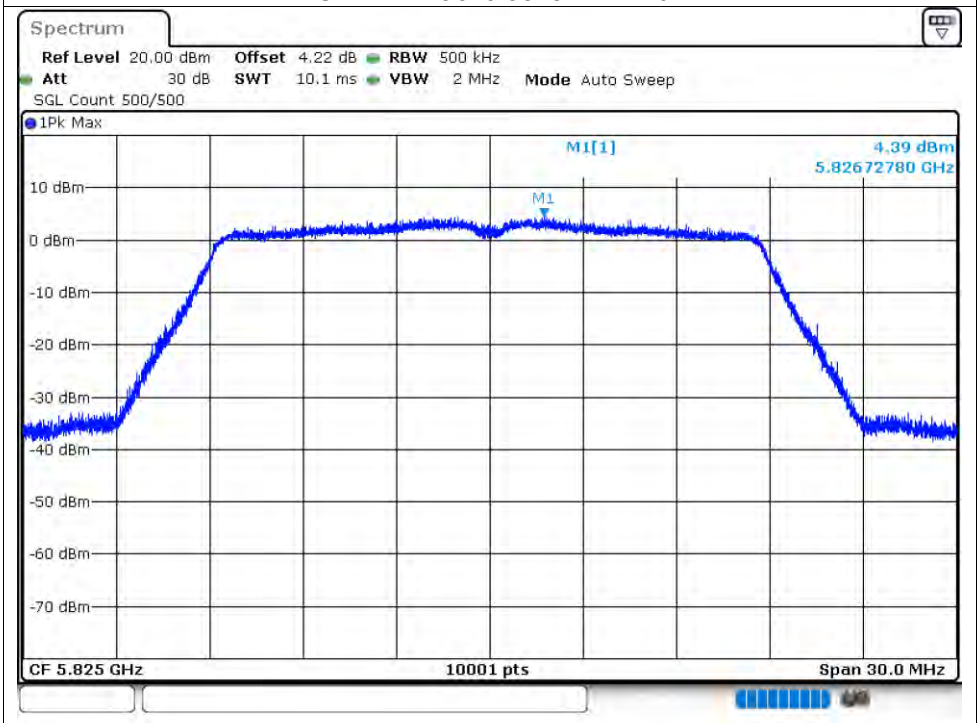
PSD NVNT ac20 5745MHz Ant1



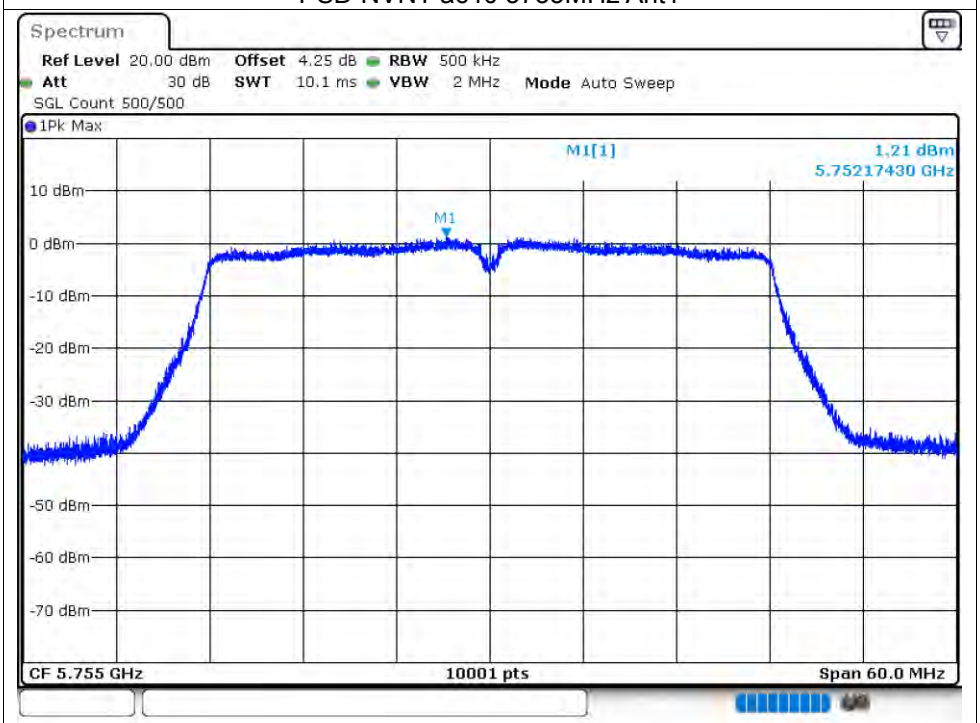
PSD NVNT ac20 5785MHz Ant1



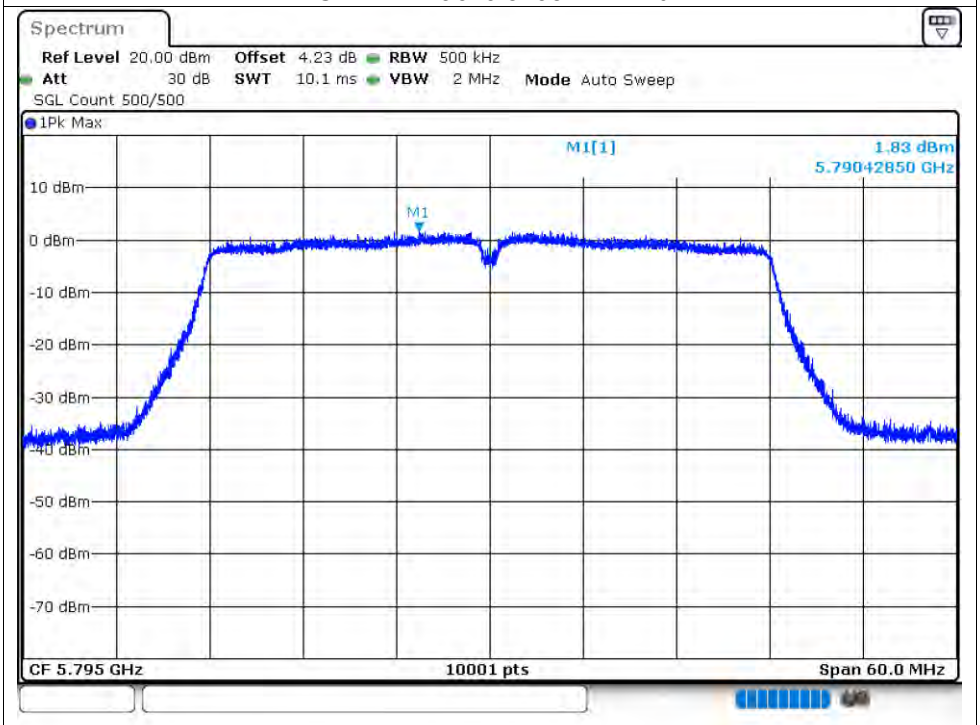
PSD NVNT ac20 5825MHz Ant1



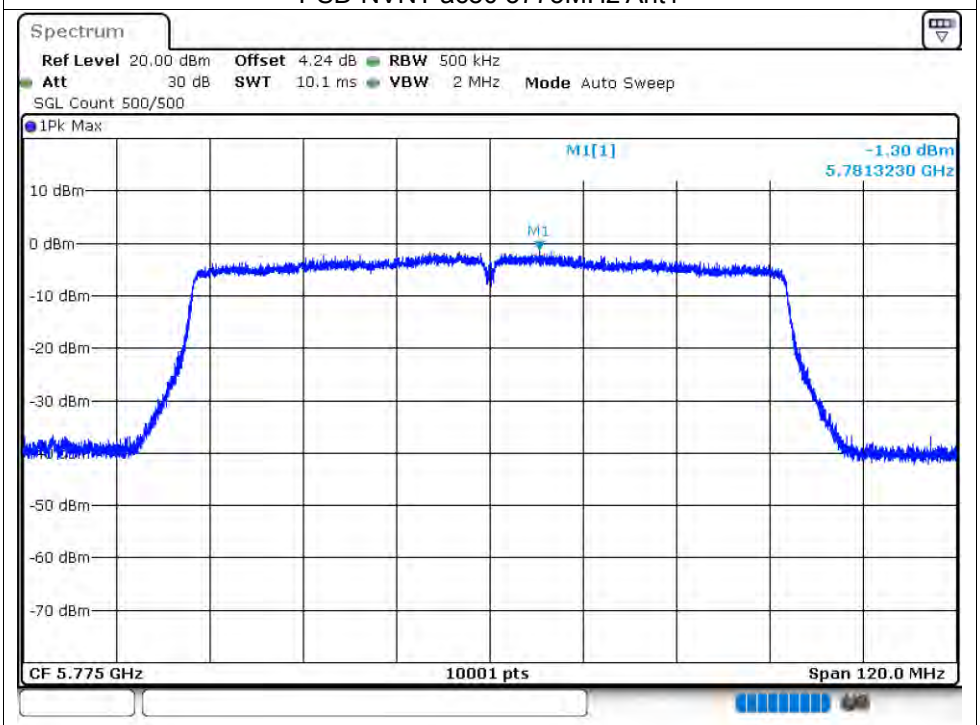
PSD NVNT ac40 5755MHz Ant1



PSD NVNT ac40 5795MHz Ant1



PSD NVNT ac80 5775MHz Ant1



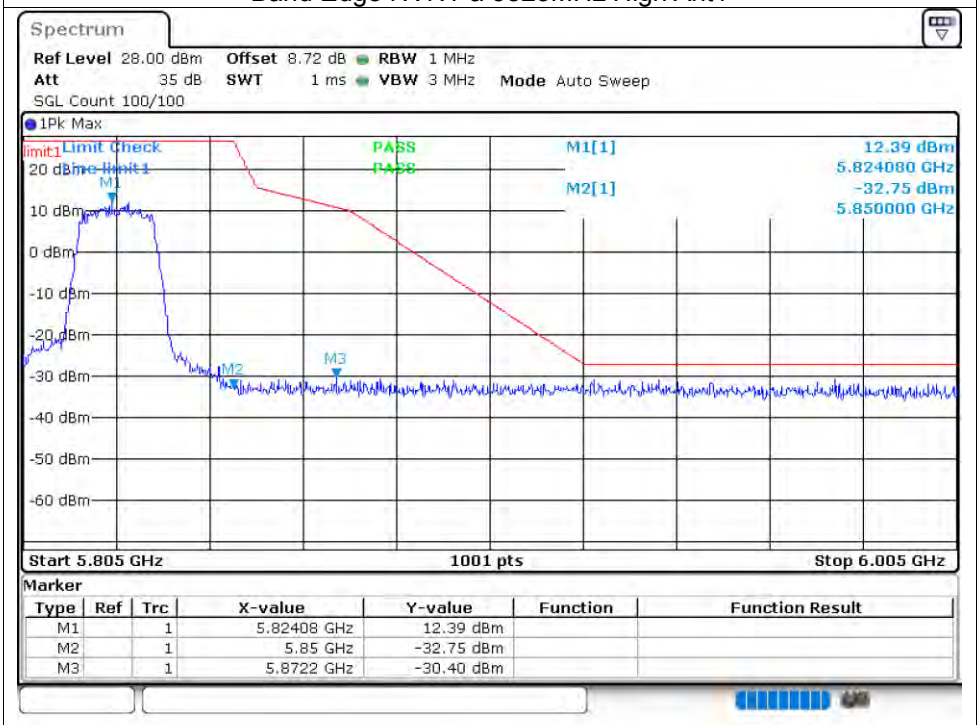
5.6 BAND EDGE

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Verdict
NVNT	a	5745	Ant1	-28.22	Pass
NVNT	a	5825	Ant1	-30.4	Pass
NVNT	n20	5745	Ant1	-28.38	Pass
NVNT	n20	5825	Ant1	-30.81	Pass
NVNT	n40	5755	Ant1	-30.22	Pass
NVNT	n40	5795	Ant1	-30.89	Pass
NVNT	ac20	5745	Ant1	-31.96	Pass
NVNT	ac20	5825	Ant1	-30.13	Pass
NVNT	ac40	5755	Ant1	-26.35	Pass
NVNT	ac40	5795	Ant1	-29.21	Pass
NVNT	ac80	5775	Ant1	-27.09	Pass

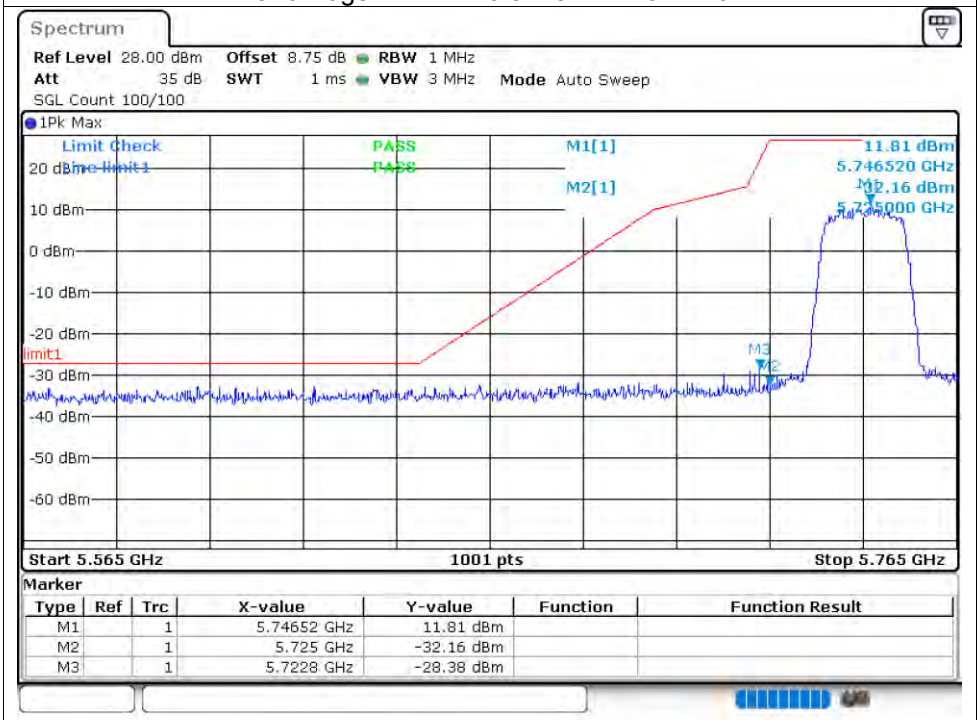
Test Graphs

Band Edge NVNT a 5745MHz Low Ant1

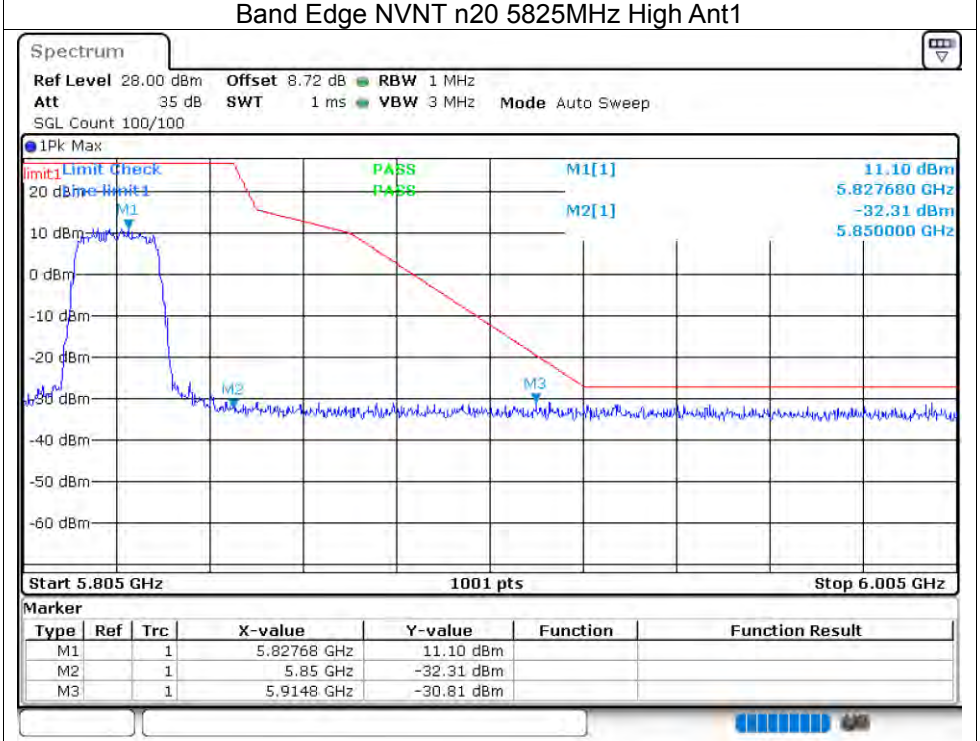
Band Edge NVNT a 5825MHz High Ant1



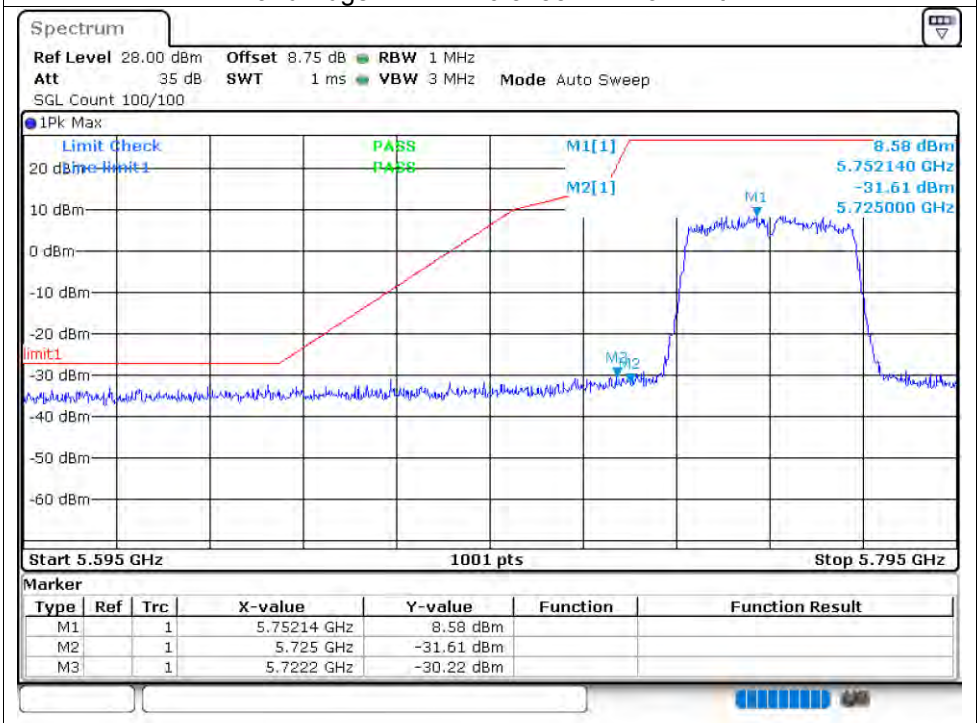
Band Edge NVNT n20 5745MHz Low Ant1



Band Edge NVNT n20 5825MHz High Ant1



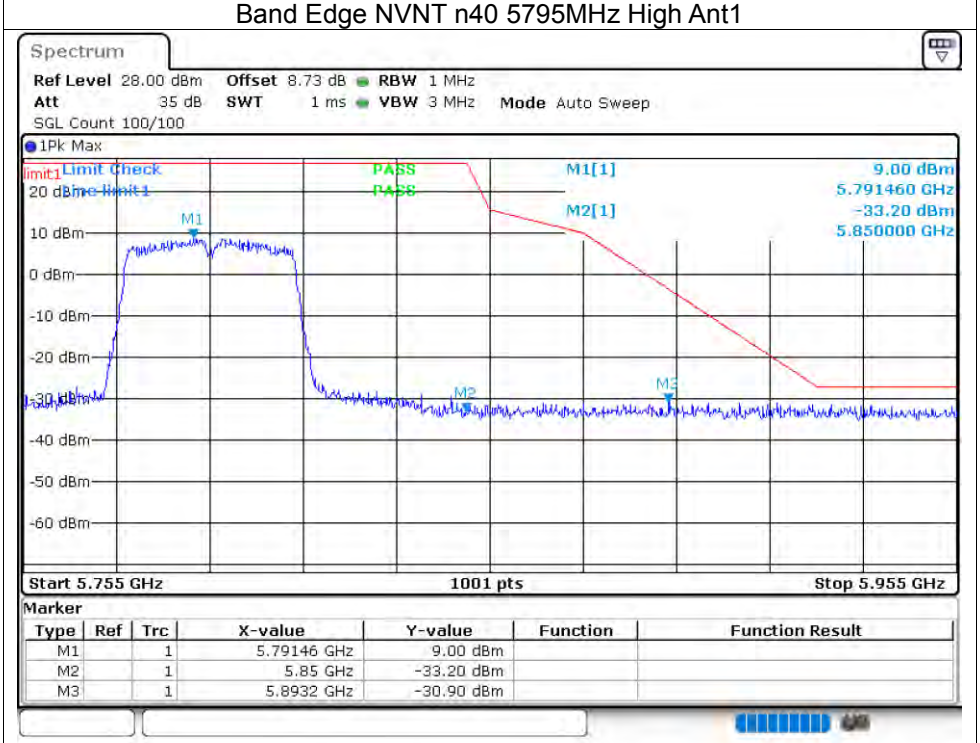
Band Edge NVNT n40 5755MHz Low Ant1



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.75214 GHz	8.58 dBm		
M2		1	5.725 GHz	-31.61 dBm		
M3		1	5.7222 GHz	-30.22 dBm		

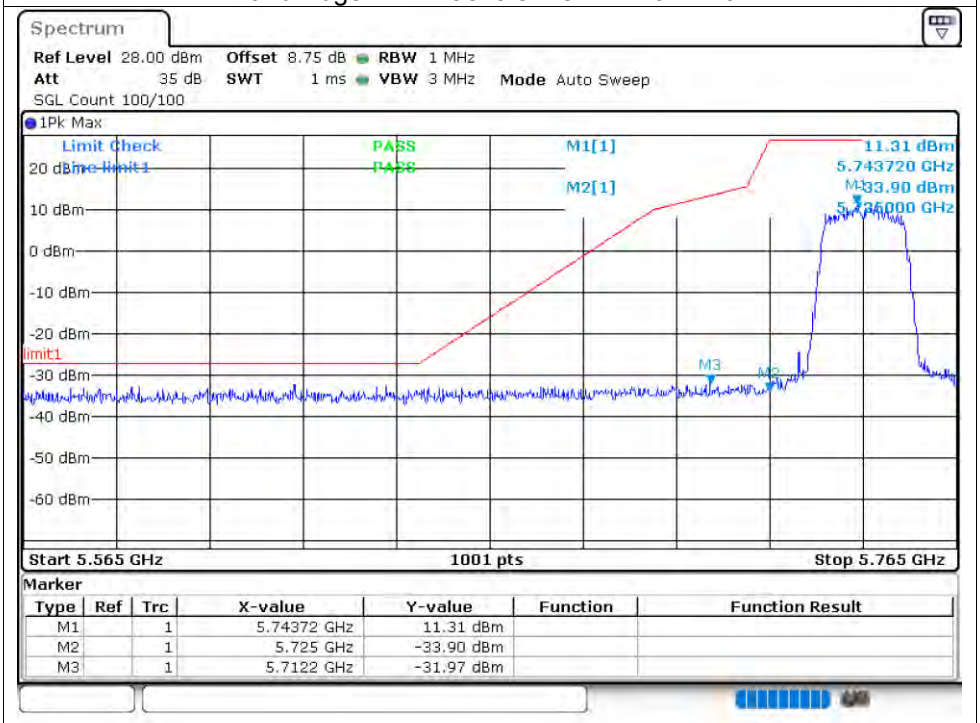
Band Edge NVNT n40 5795MHz High Ant1



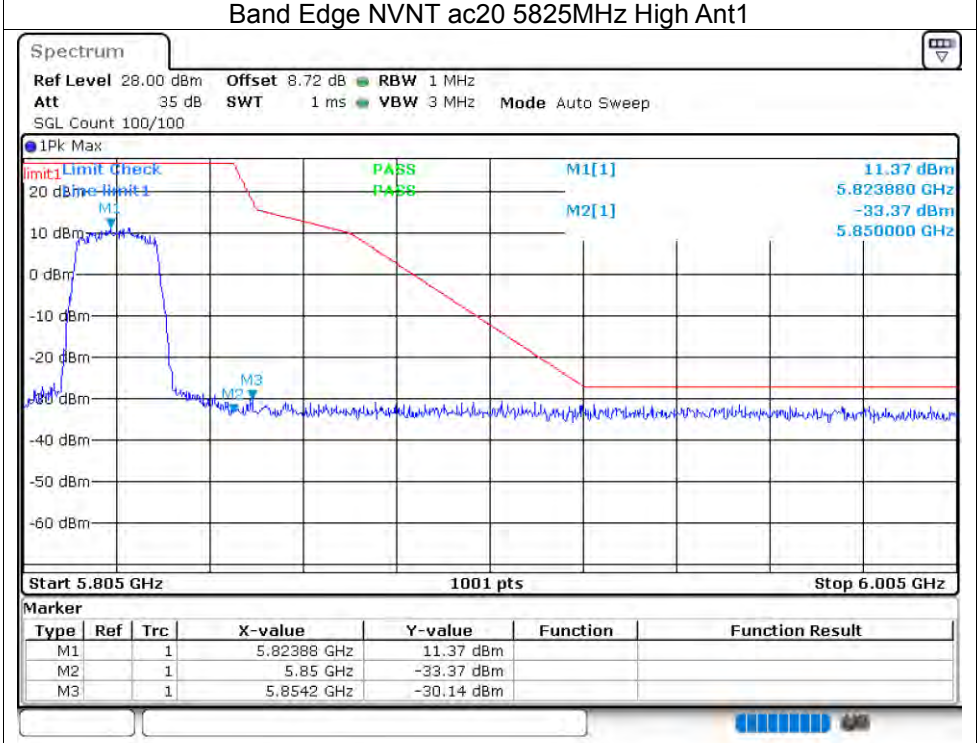
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.79146 GHz	9.00 dBm		
M2		1	5.85 GHz	-33.20 dBm		
M3		1	5.8932 GHz	-30.90 dBm		

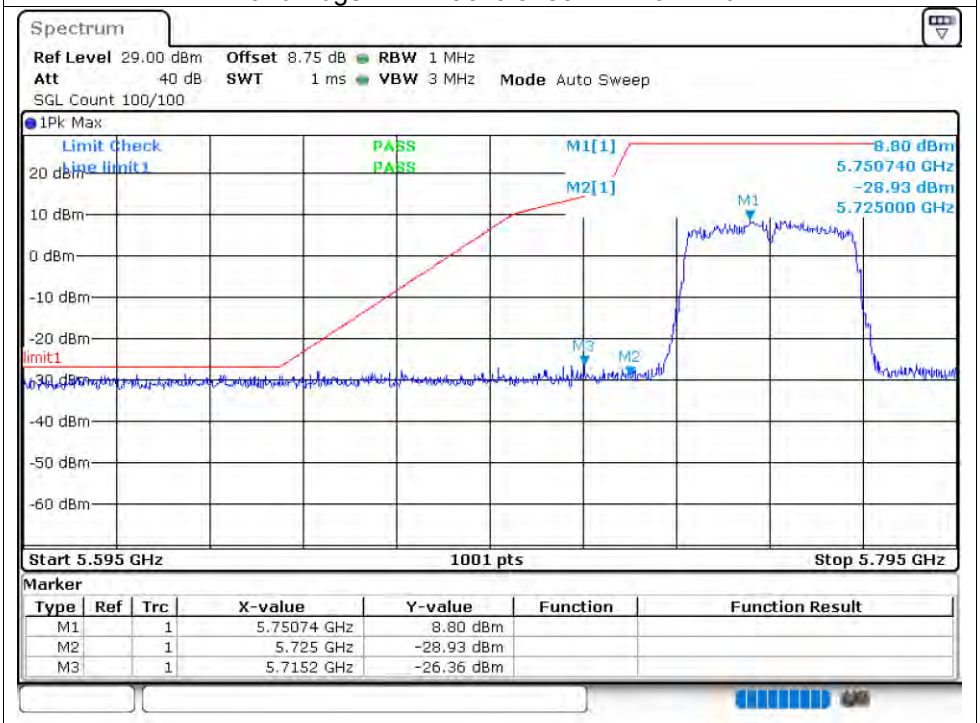
Band Edge NVNT ac20 5745MHz Low Ant1



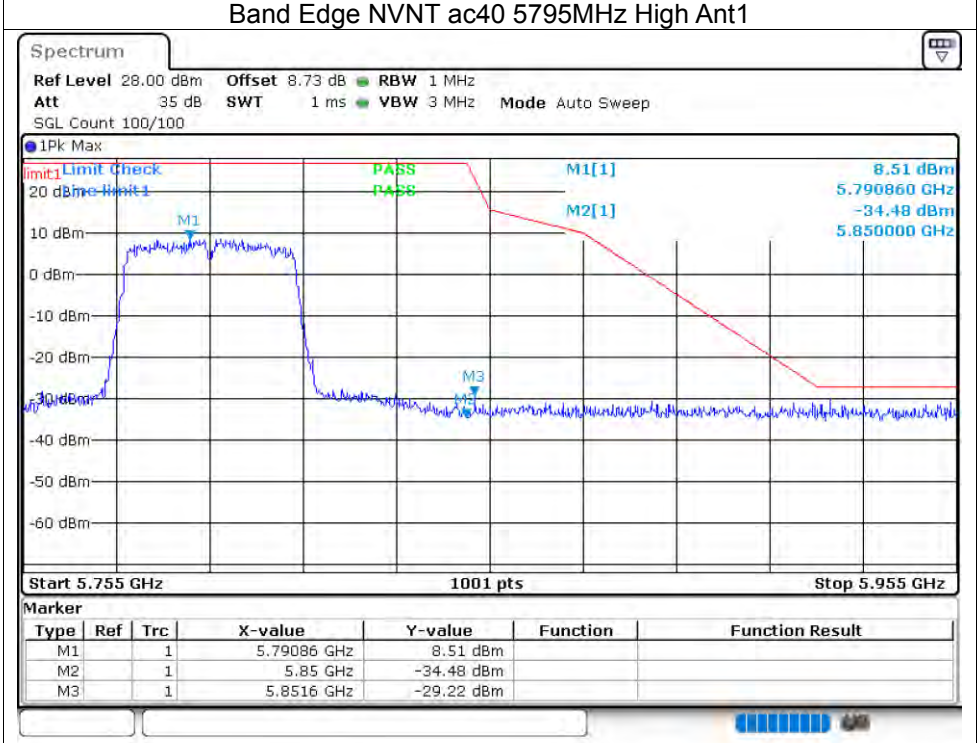
Band Edge NVNT ac20 5825MHz High Ant1



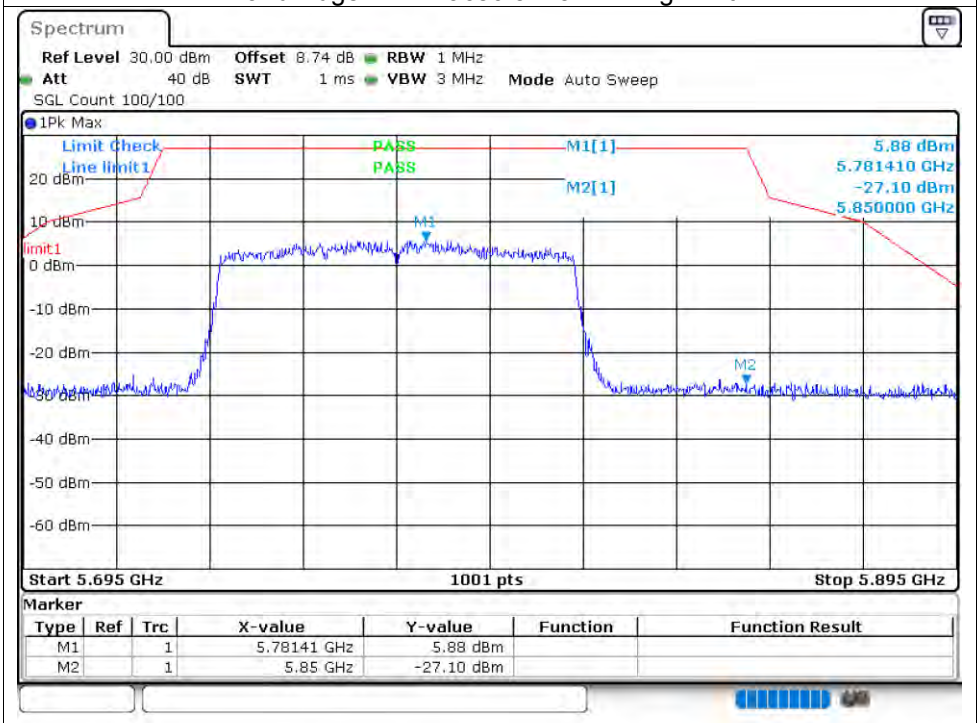
Band Edge NVNT ac40 5755MHz Low Ant1



Band Edge NVNT ac40 5795MHz High Ant1



Band Edge NVNT ac80 5775MHz High Ant1

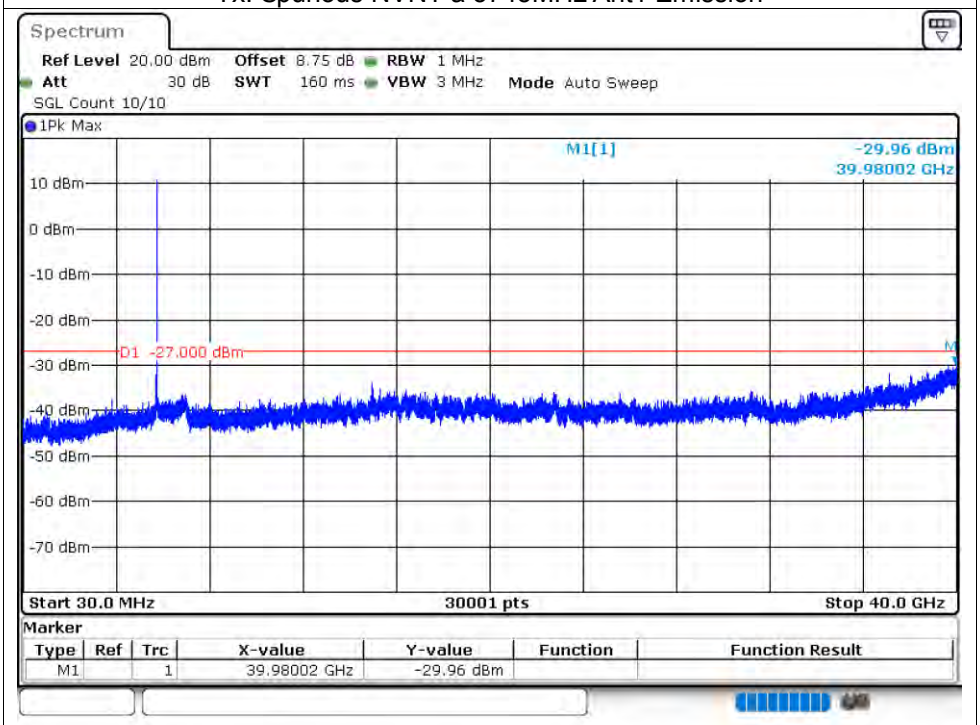


5.7 CONDUCTED RF SPURIOUS EMISSION

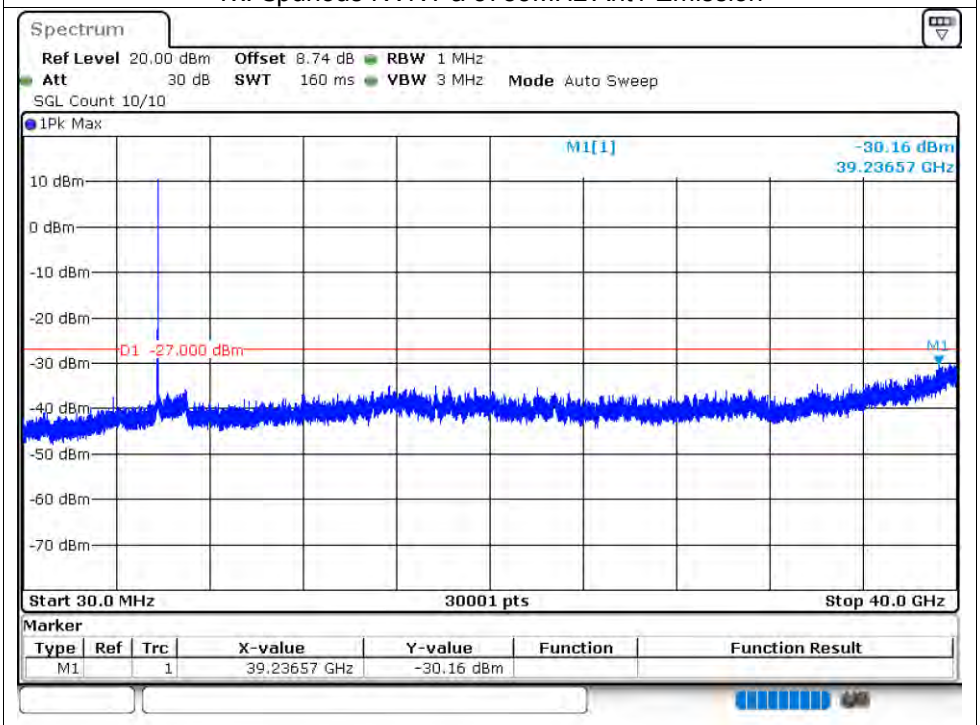
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5745	Ant1	-29.96	-27	Pass
NVNT	a	5785	Ant1	-30.16	-27	Pass
NVNT	a	5825	Ant1	-29.57	-27	Pass
NVNT	n20	5745	Ant1	-29.64	-27	Pass
NVNT	n20	5785	Ant1	-29.24	-27	Pass
NVNT	n20	5825	Ant1	-29.73	-27	Pass
NVNT	n40	5755	Ant1	-29.74	-27	Pass
NVNT	n40	5795	Ant1	-30.34	-27	Pass
NVNT	ac20	5745	Ant1	-30.18	-27	Pass
NVNT	ac20	5785	Ant1	-30.03	-27	Pass
NVNT	ac20	5825	Ant1	-29.88	-27	Pass
NVNT	ac40	5755	Ant1	-29.61	-27	Pass
NVNT	ac40	5795	Ant1	-29.55	-27	Pass
NVNT	ac80	5775	Ant1	-29.83	-27	Pass

Test Graphs

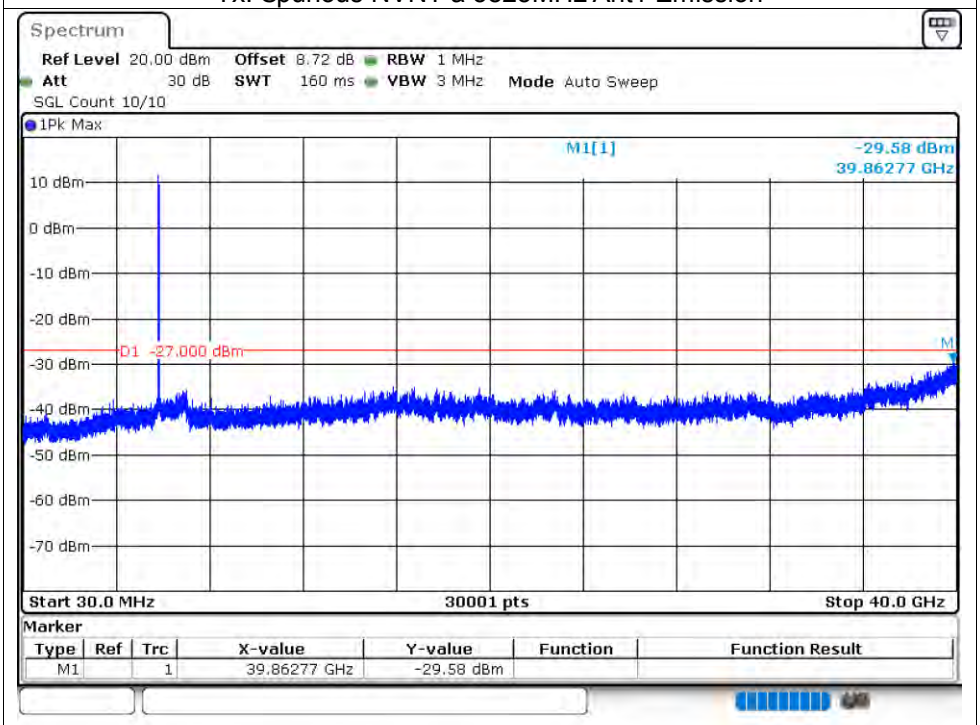
Tx. Spurious NVNT a 5745MHz Ant1 Emission



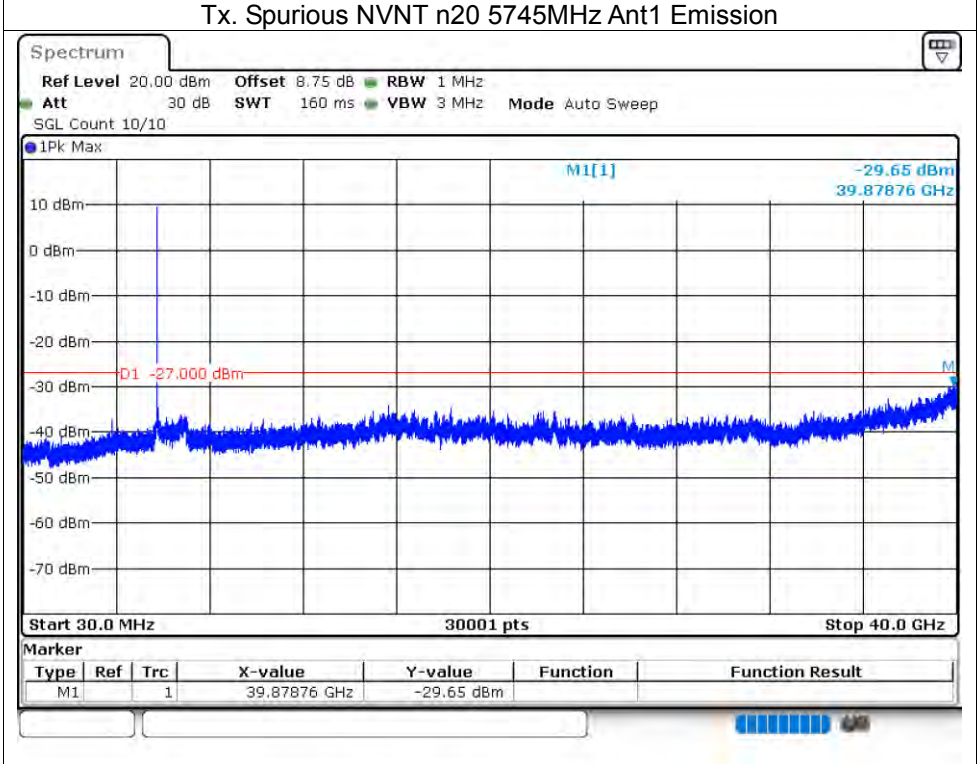
Tx. Spurious NVNT a 5785MHz Ant1 Emission



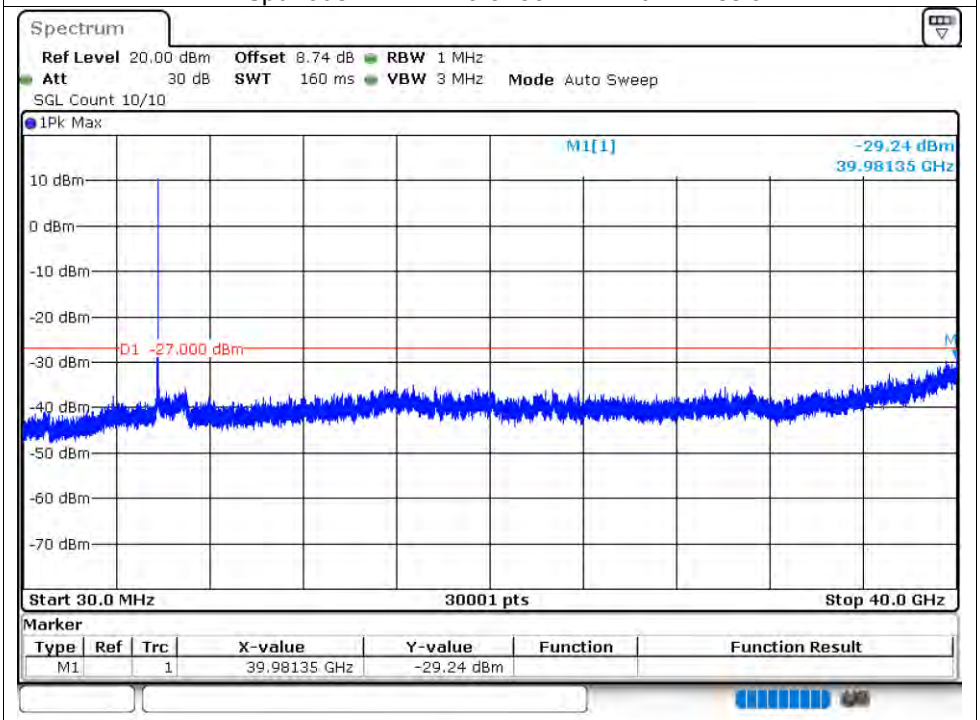
Tx. Spurious NVNT a 5825MHz Ant1 Emission



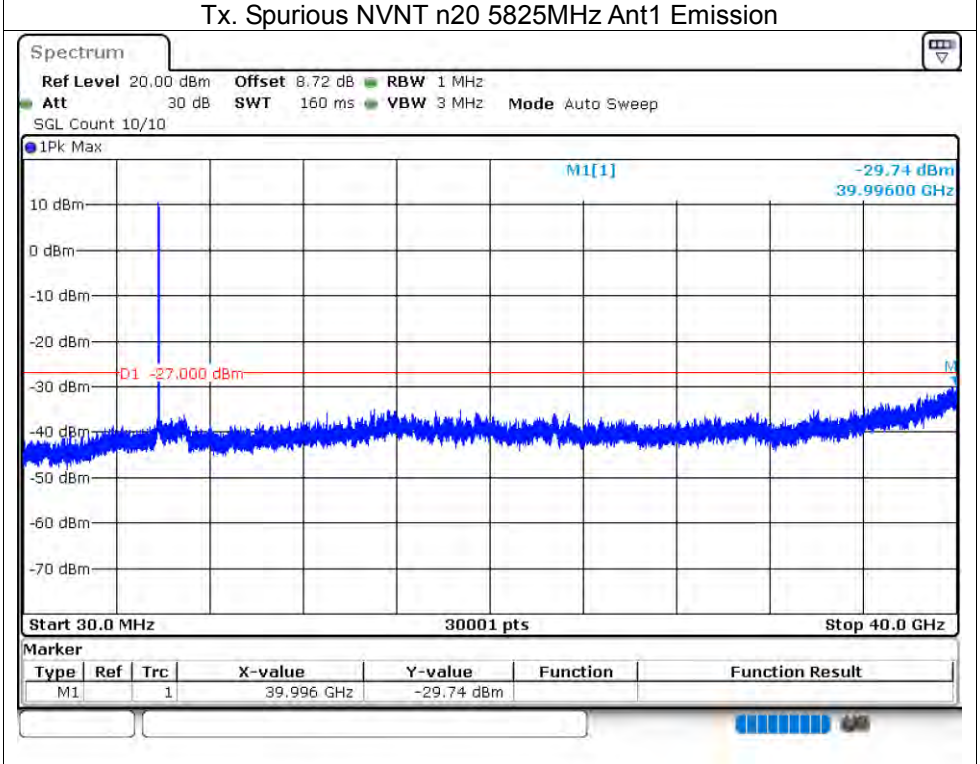
Tx. Spurious NVNT n20 5745MHz Ant1 Emission



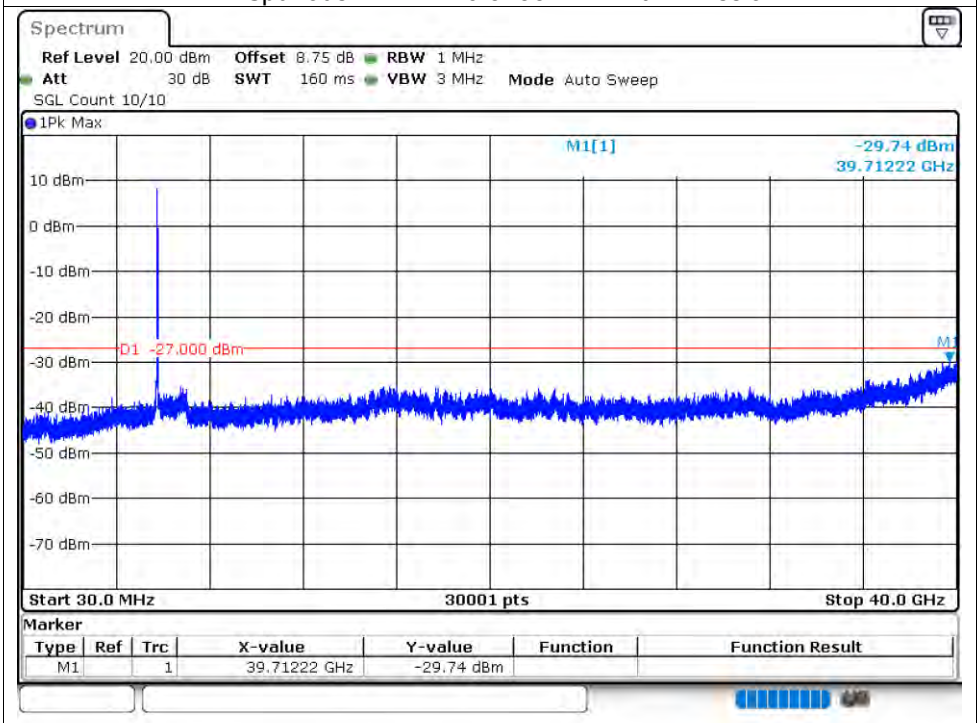
Tx. Spurious NVNT n20 5785MHz Ant1 Emission



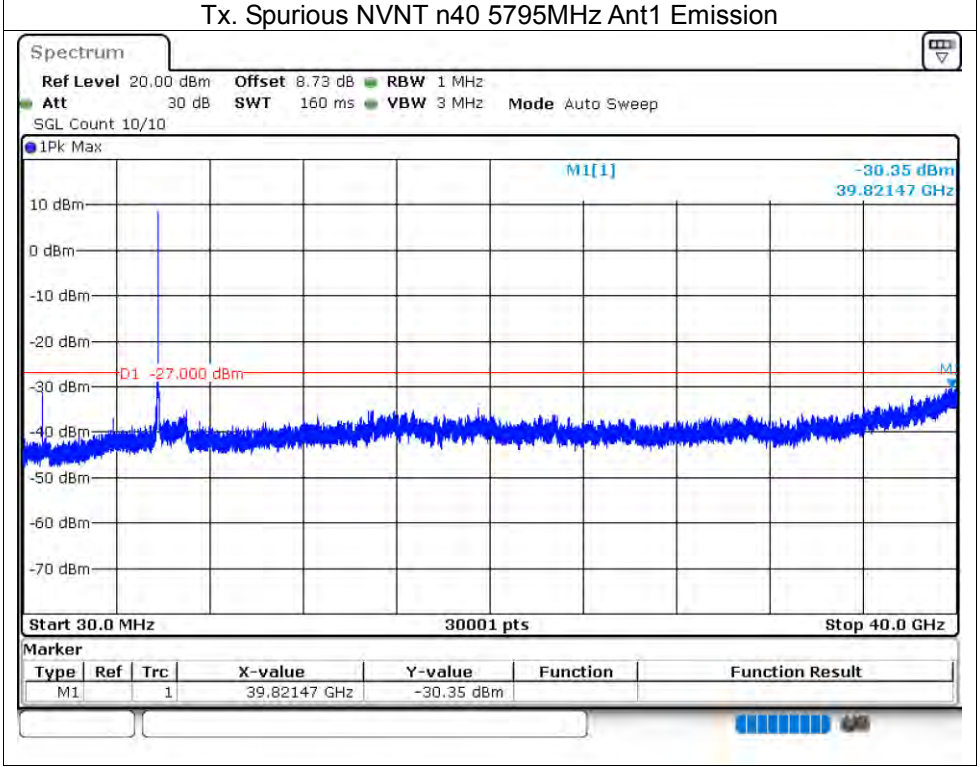
Tx. Spurious NVNT n20 5825MHz Ant1 Emission



Tx. Spurious NVNT n40 5755MHz Ant1 Emission



Tx. Spurious NVNT n40 5795MHz Ant1 Emission



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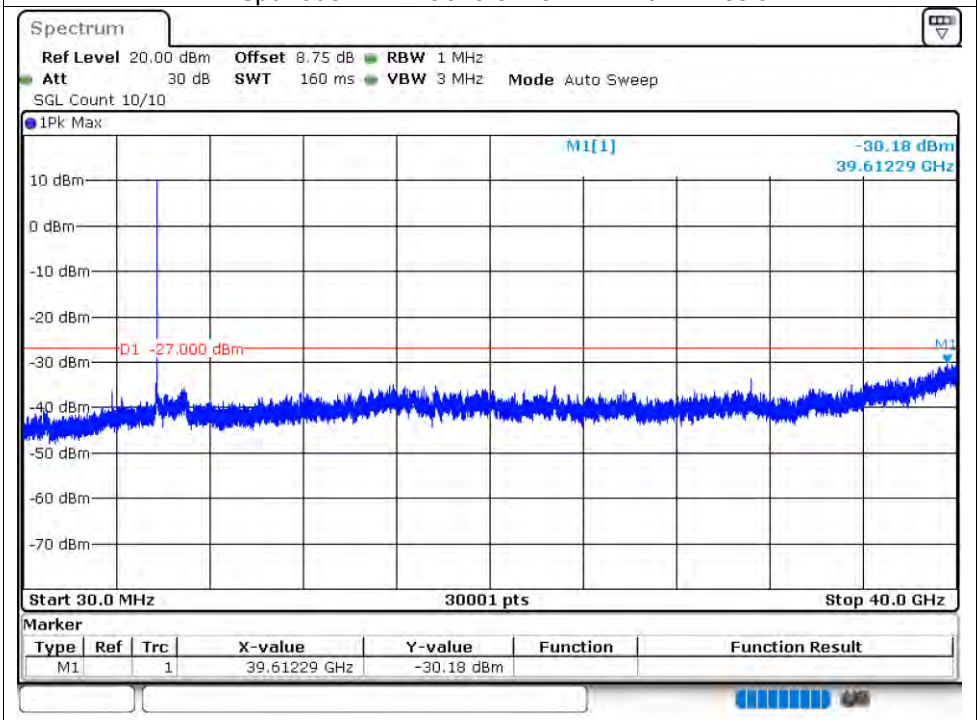

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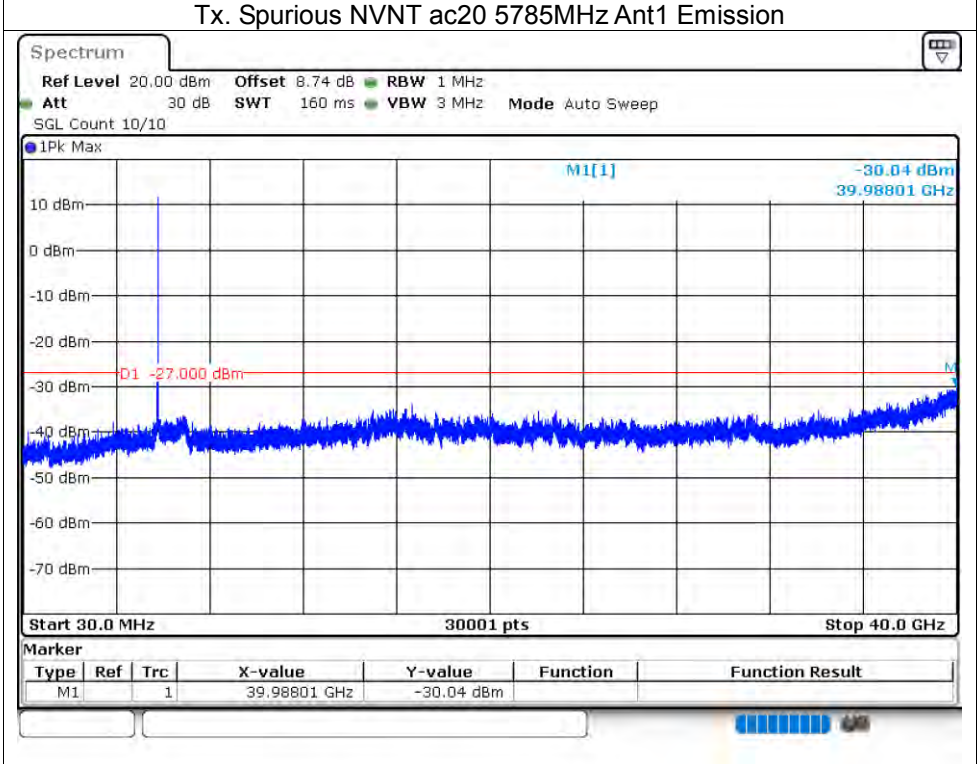

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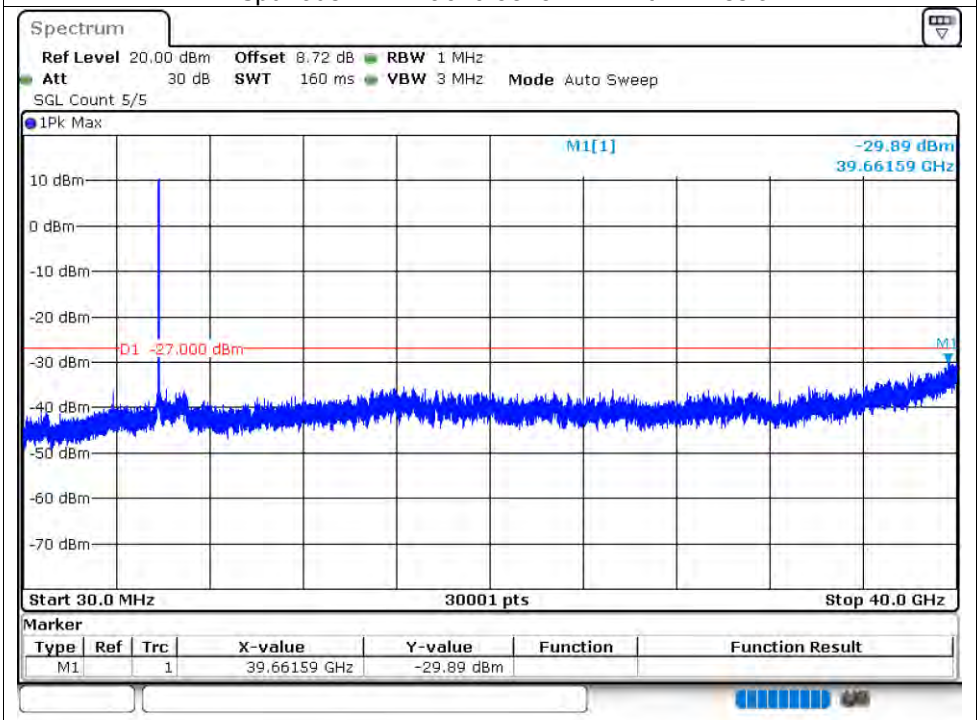

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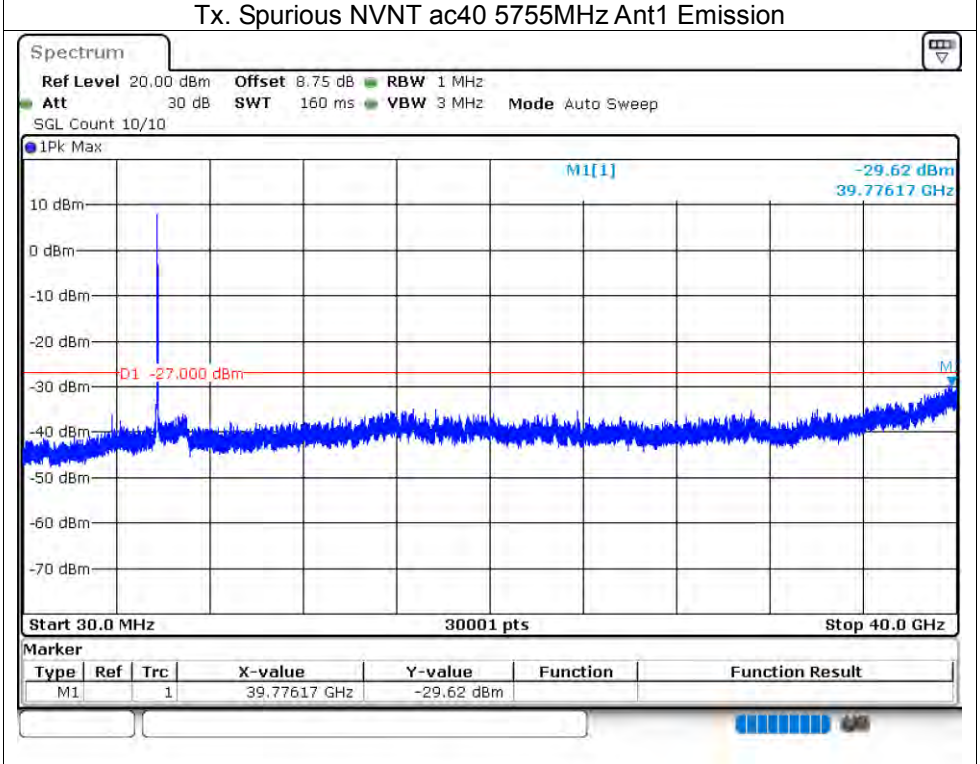
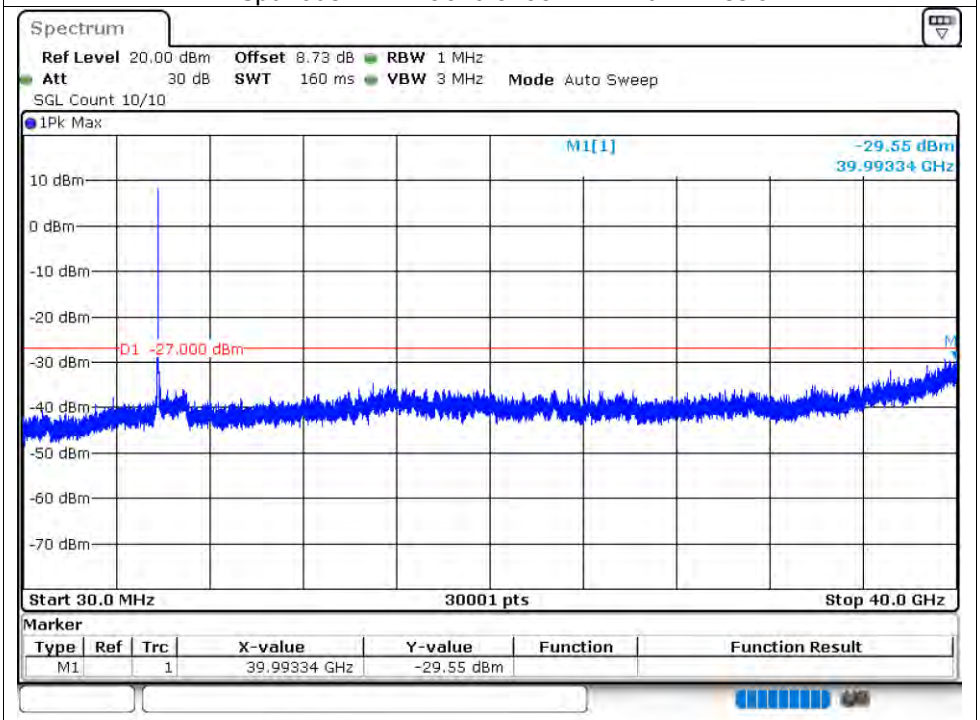
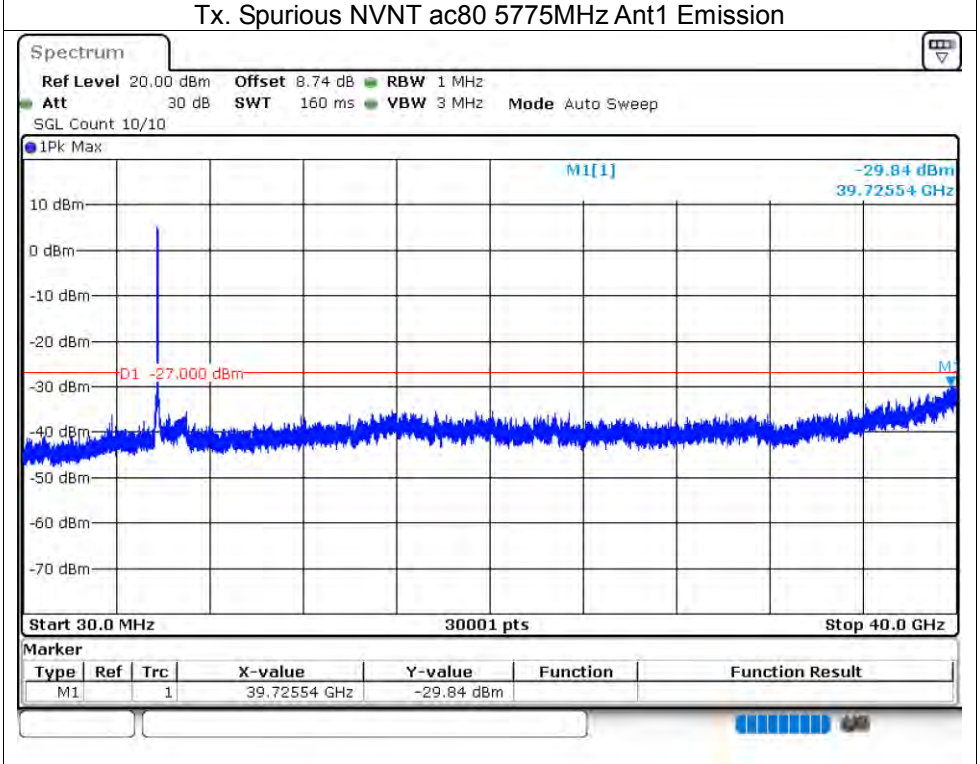


Tx. Spurious NVNT ac40 5795MHz Ant1 Emission



Tx. Spurious NVNT ac80 5775MHz Ant1 Emission



END OF REPORT