
Appendix

Duty Cycle.....2

Maximum Conducted Output Power10

-6dB Bandwidth.....18

Occupied Channel Bandwidth26

Maximum Power Spectral Density Level.....34

Band Edge42

Frequency Stability.....48

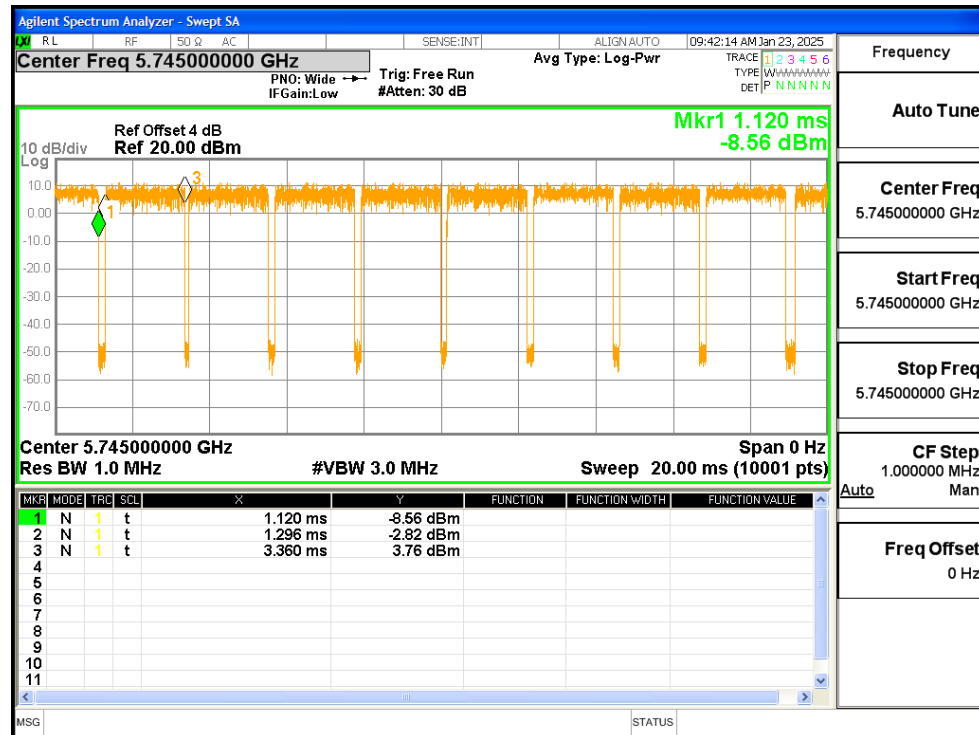
Conducted RF Spurious Emission57

Duty Cycle

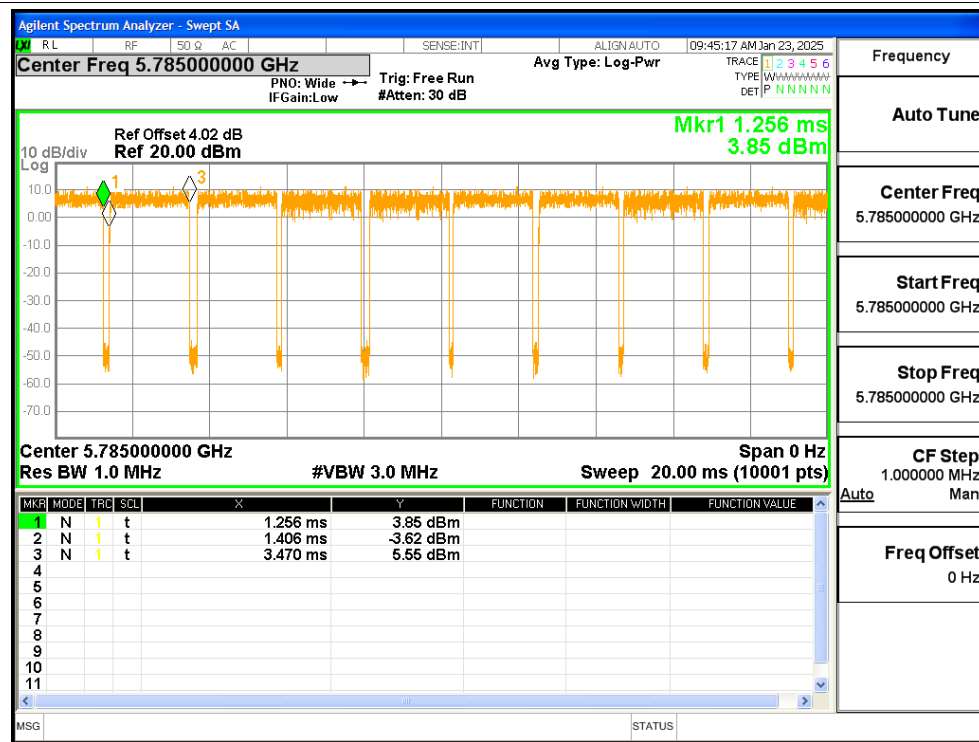
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5745	Ant1	92.14	0.36	0.48
		5785		93.22	0.3	0.48
		5825		92.56	0.34	0.48
	n20	5745		68.77	1.63	4.37
		5785		66.96	1.74	4.37
		5825		60.58	2.18	4.37
	n40	5755		41.07	3.86	7.75
		5795		37.83	4.22	7.75
	ac20	5745		53.74	2.7	4.98
		5785		46	3.37	4.98
		5825		44.18	3.55	4.98
	ac40	5755		45.2	3.45	8.85
		5795		38.31	4.17	8.85
	ac80	5775		25.04	6.01	13.7

Test Graphs

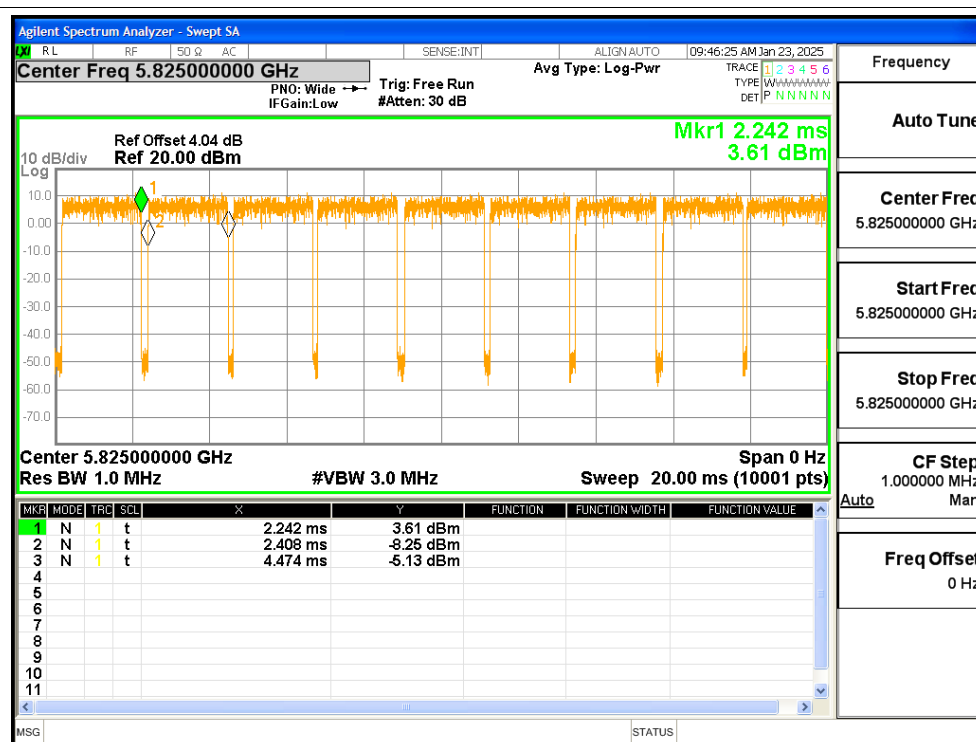
Duty Cycle NVNT a 5745MHz Ant1



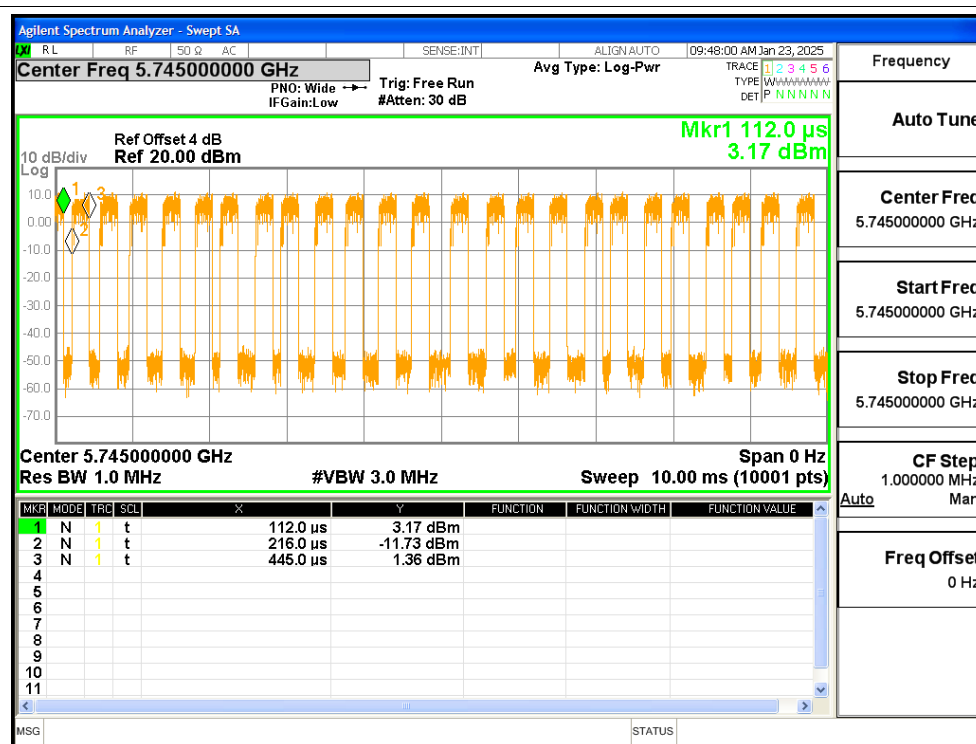
Duty Cycle NVNT a 5785MHz Ant1



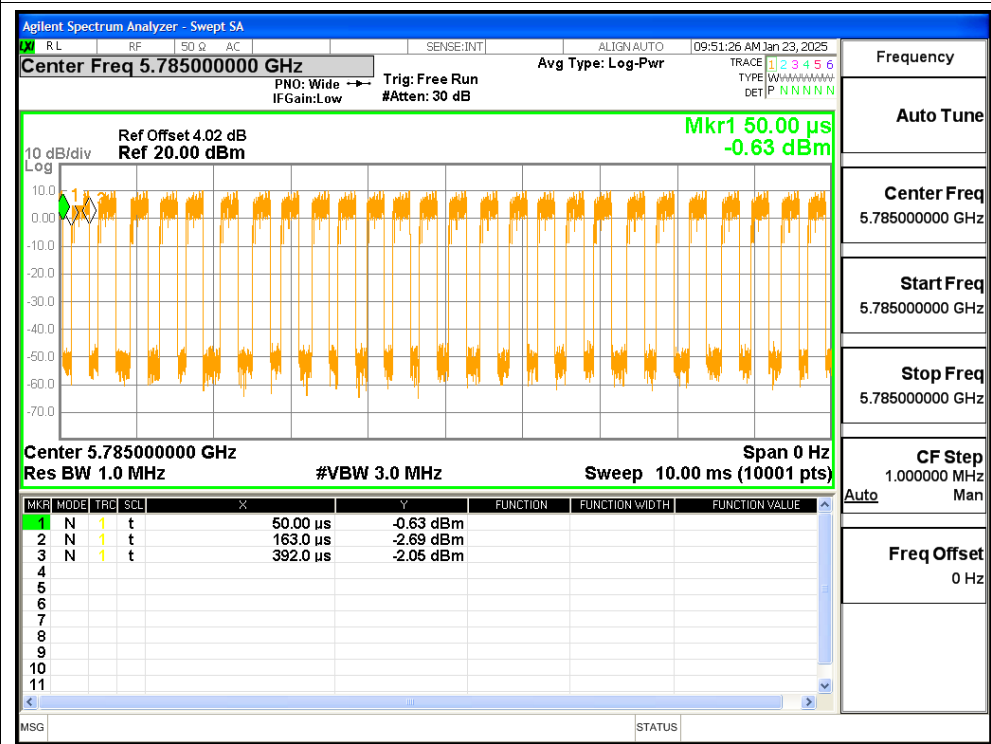
Duty Cycle NVNT a 5825MHz Ant1



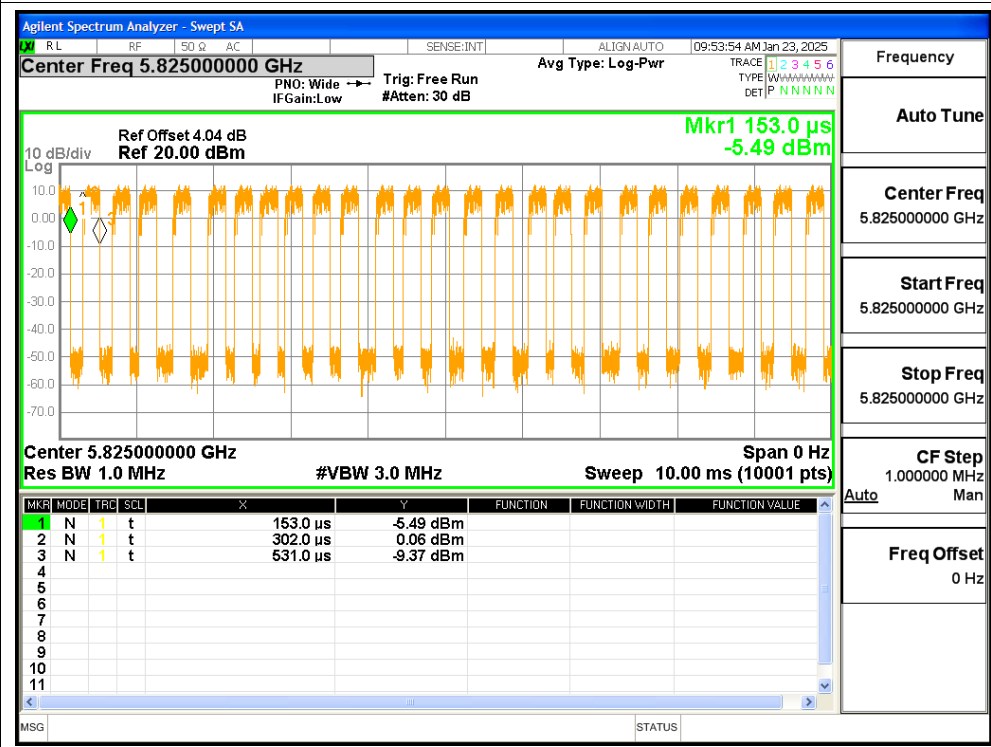
Duty Cycle NVNT n20 5745MHz Ant1



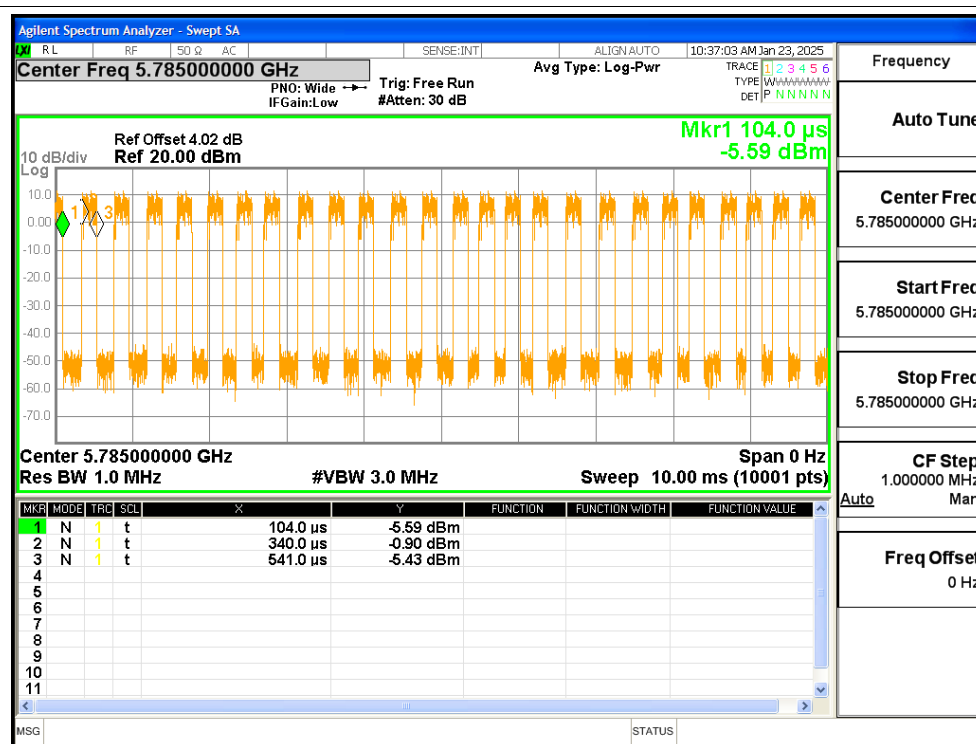
Duty Cycle NVNT n20 5785MHz Ant1



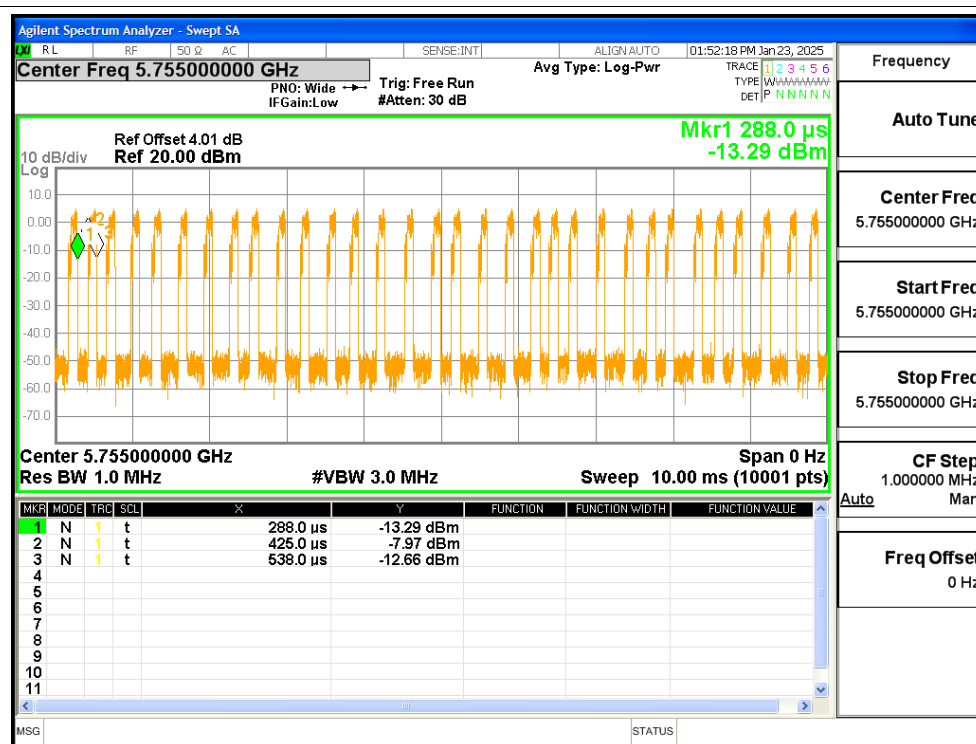
Duty Cycle NVNT n20 5825MHz Ant1



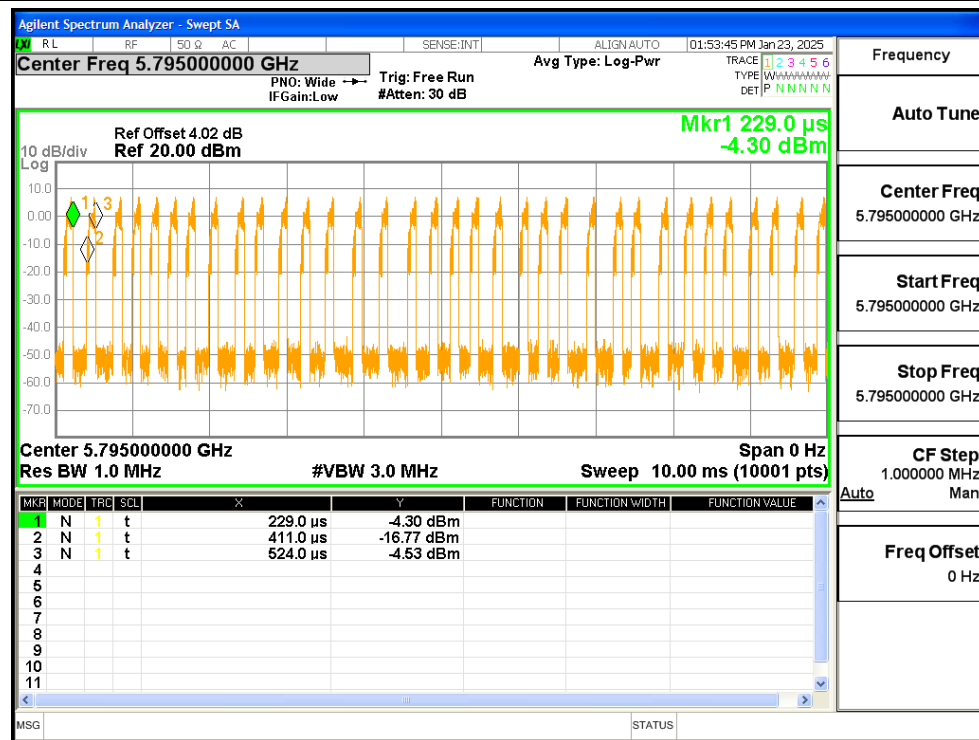
Duty Cycle NVNT ac20 5785MHz Ant1



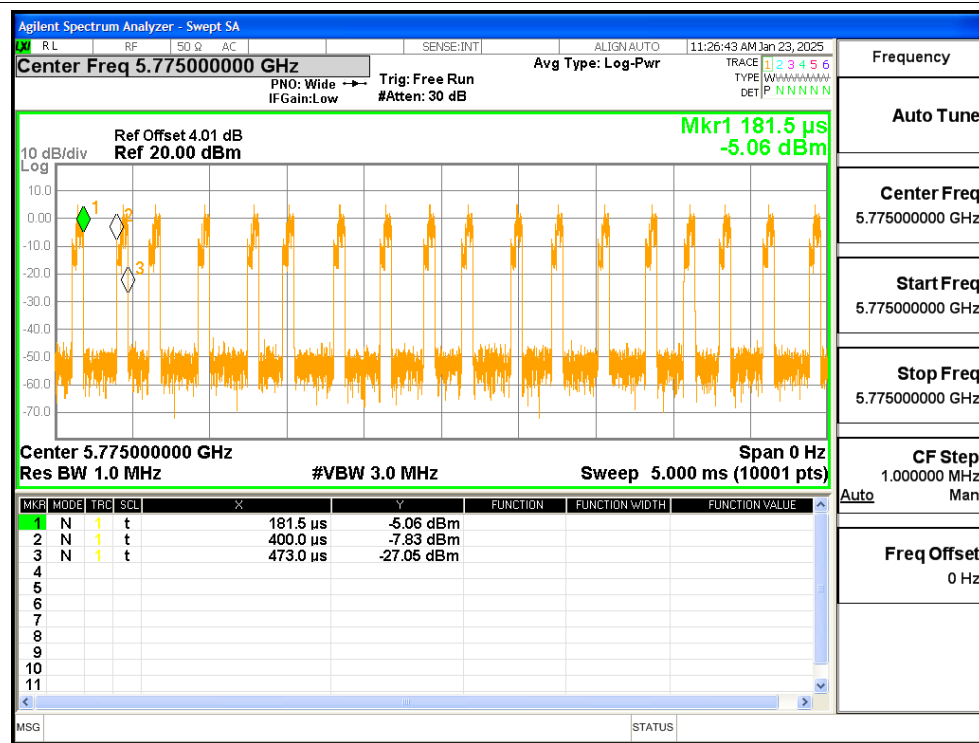
Duty Cycle NVNT ac40 5755MHz Ant1



Duty Cycle NVNT ac40 5795MHz Ant1



Duty Cycle NVNT ac80 5775MHz Ant1

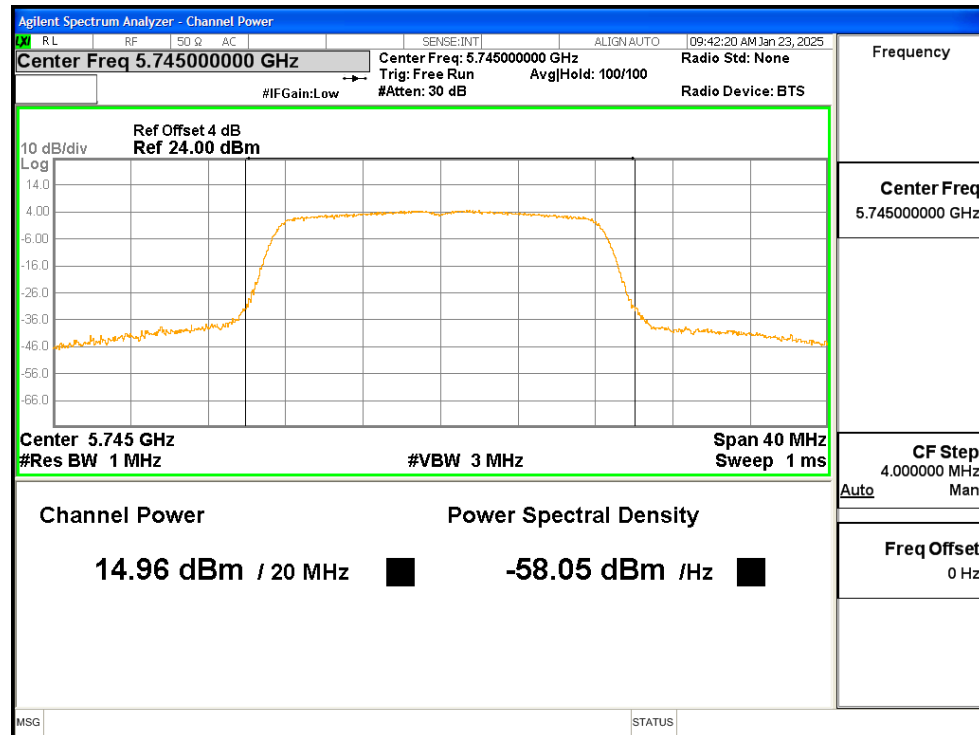


Maximum Conducted Output Power

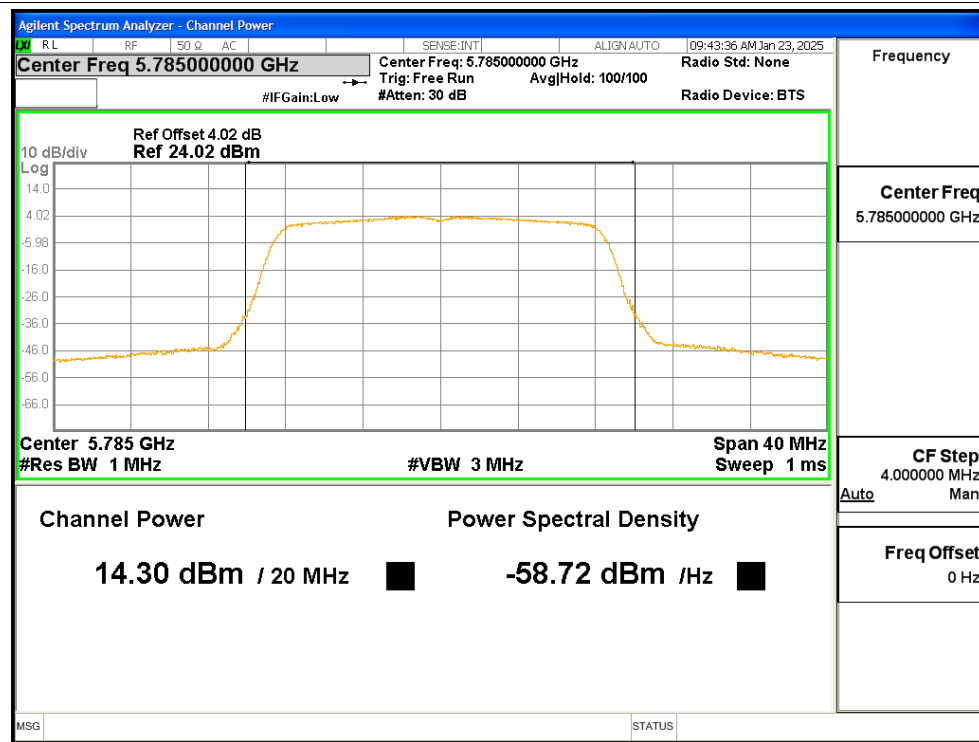
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	14.96	0.36	15.32	30	Pass
		5785		14.3	0.3	14.6	30	Pass
		5825		14.09	0.34	14.43	30	Pass
	n20	5745		13.05	1.63	14.68	30	Pass
		5785		15.09	1.74	16.83	30	Pass
		5825		14.77	2.18	16.95	30	Pass
	n40	5755		12.72	3.86	16.58	30	Pass
		5795		12.74	4.22	16.96	30	Pass
	ac20	5745		15.15	2.7	17.85	30	Pass
		5785		14.54	3.37	17.91	30	Pass
		5825		14.23	3.55	17.78	30	Pass
	ac40	5755		14.16	3.45	17.61	30	Pass
		5795		13.22	4.17	17.39	30	Pass
	ac80	5775		14.21	6.01	20.22	30	Pass

Test Graphs

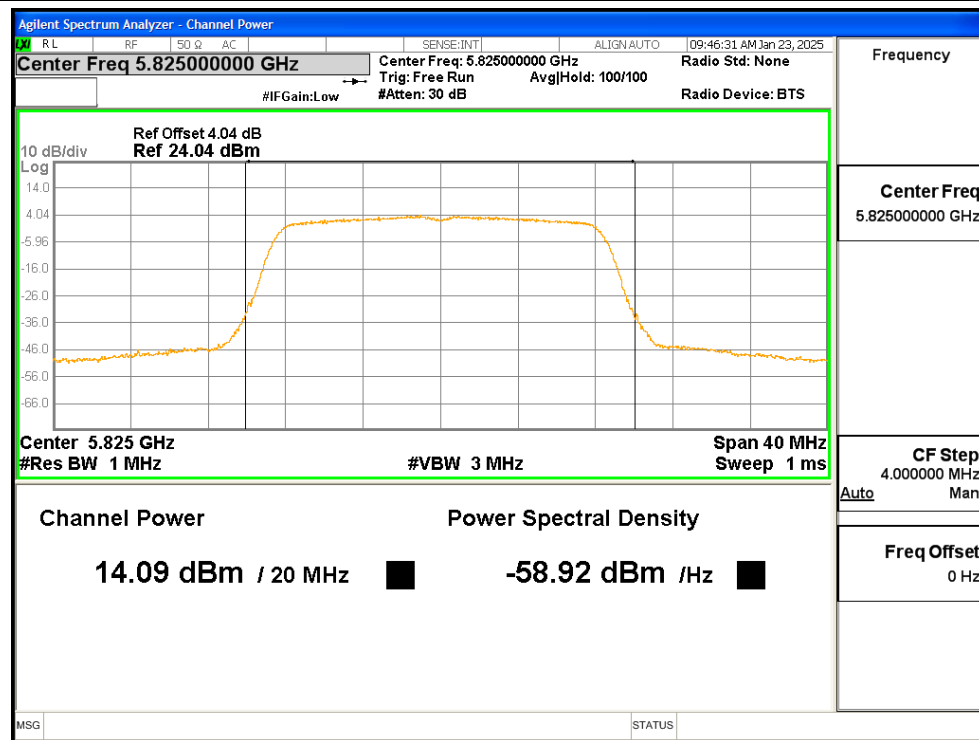
Power NVNT a 5745MHz Ant1



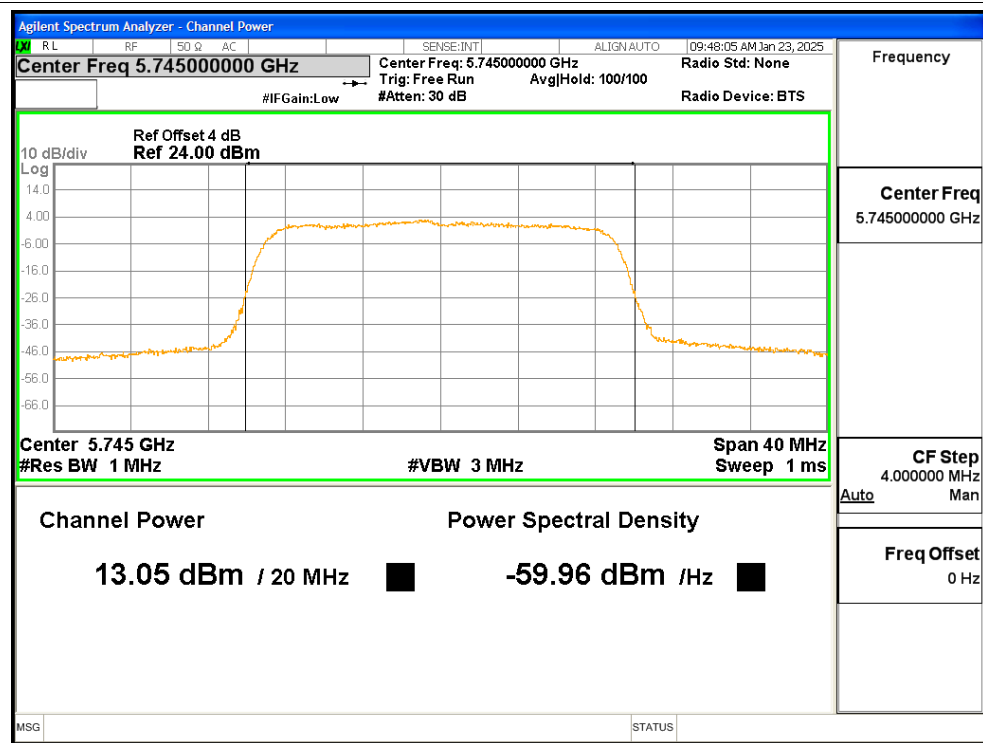
Power NVNT a 5785MHz Ant1



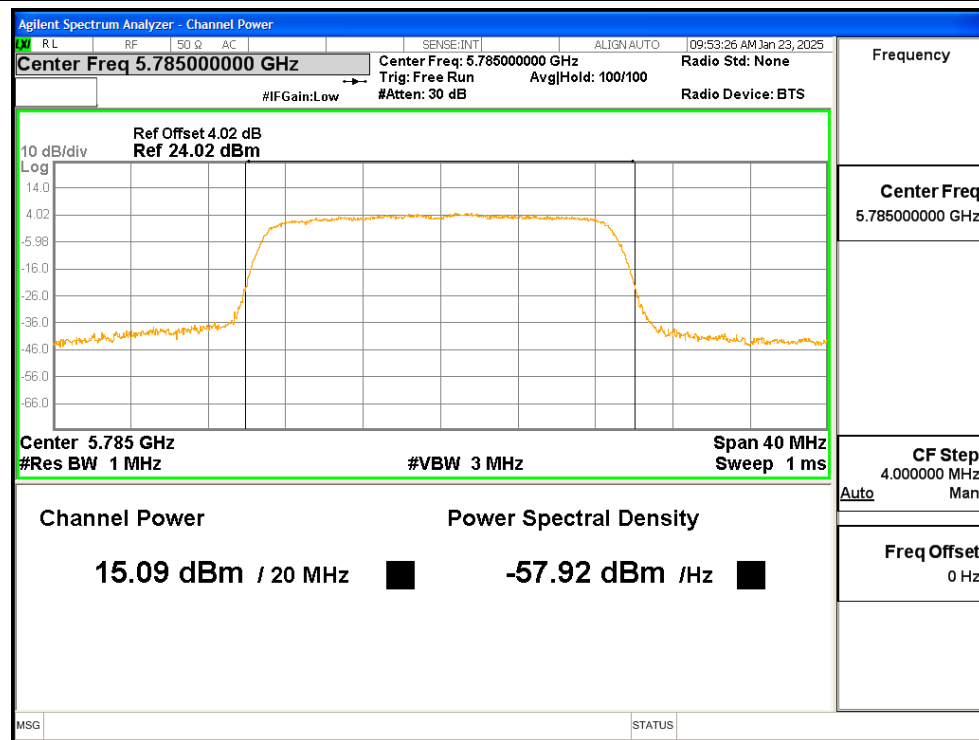
Power NVNT a 5825MHz Ant1



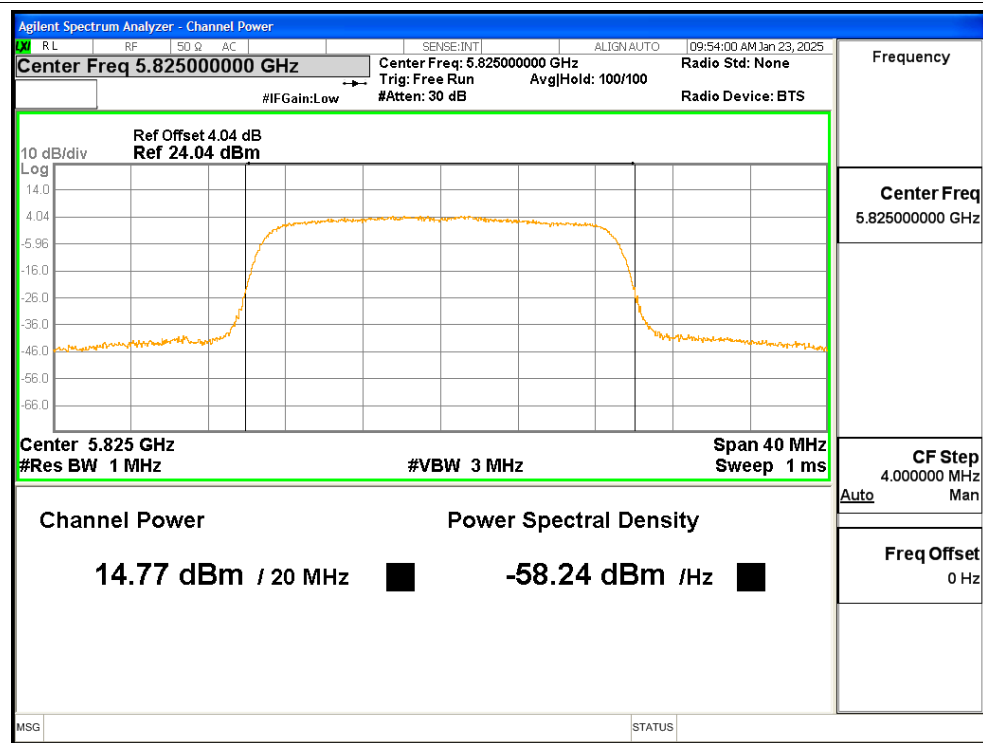
Power NVNT n20 5745MHz Ant1



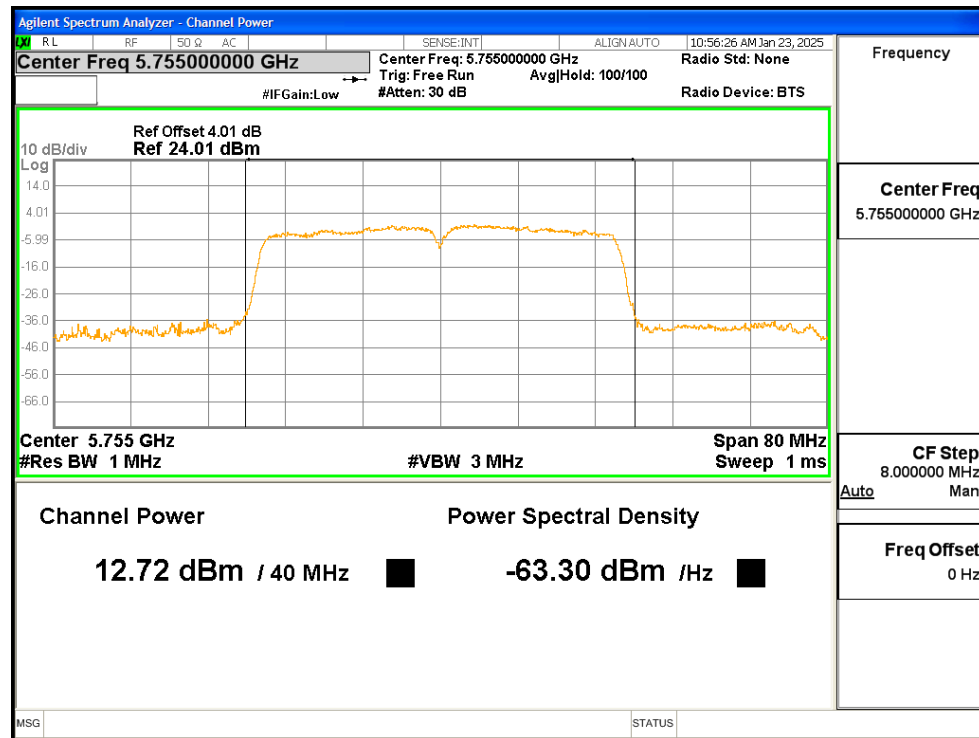
Power NVNT n20 5785MHz Ant1



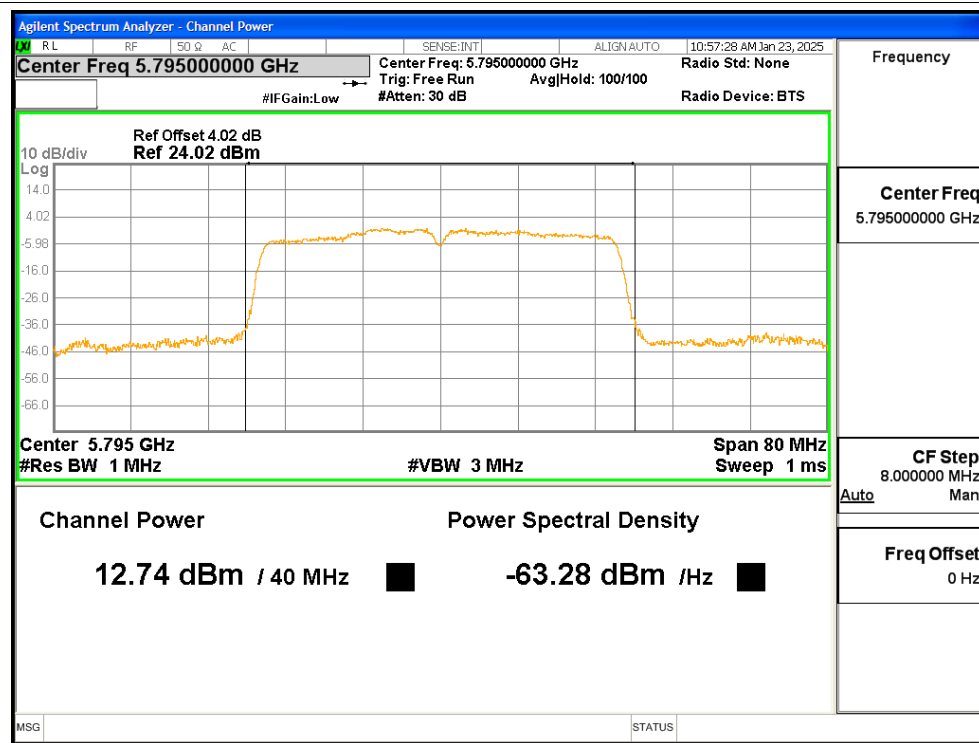
Power NVNT n20 5825MHz Ant1



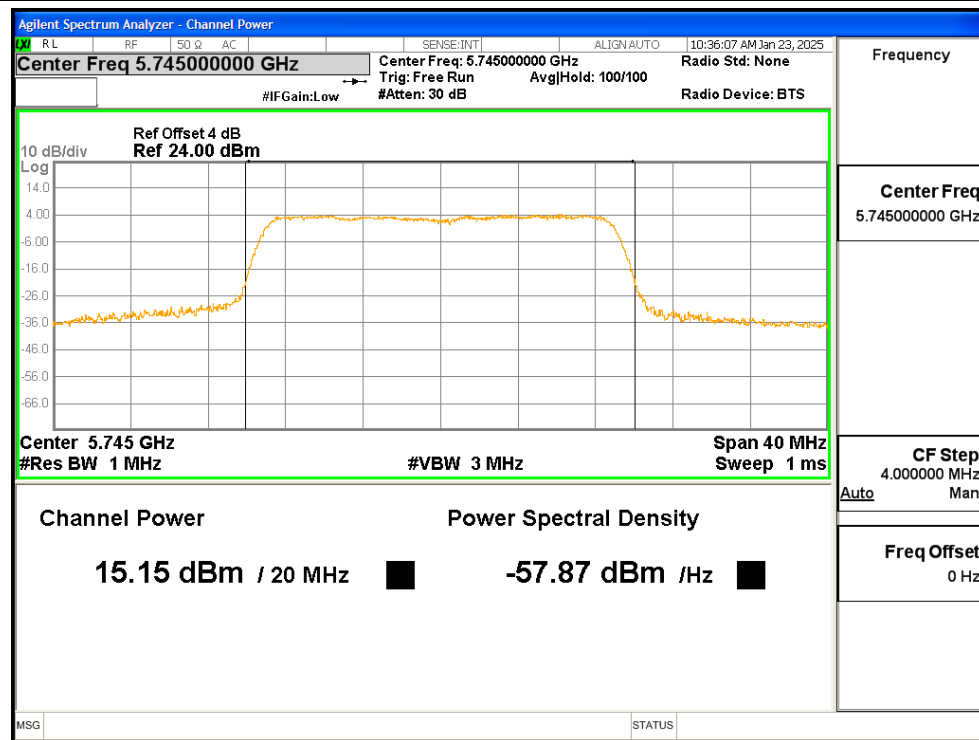
Power NVNT n40 5755MHz Ant1



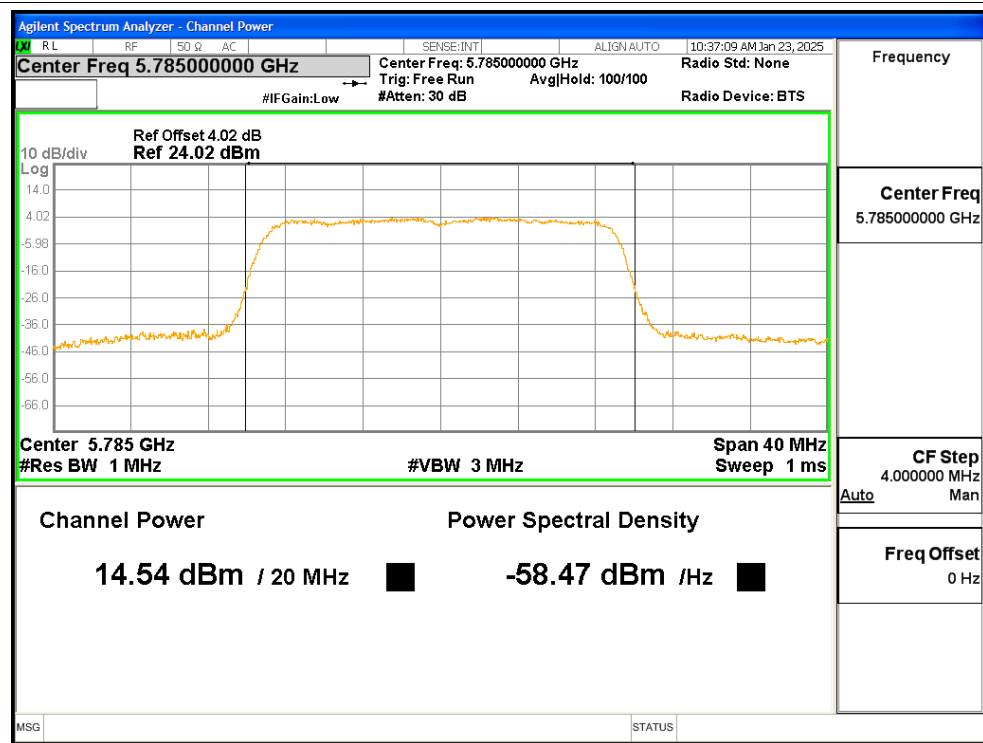
Power NVNT n40 5795MHz Ant1



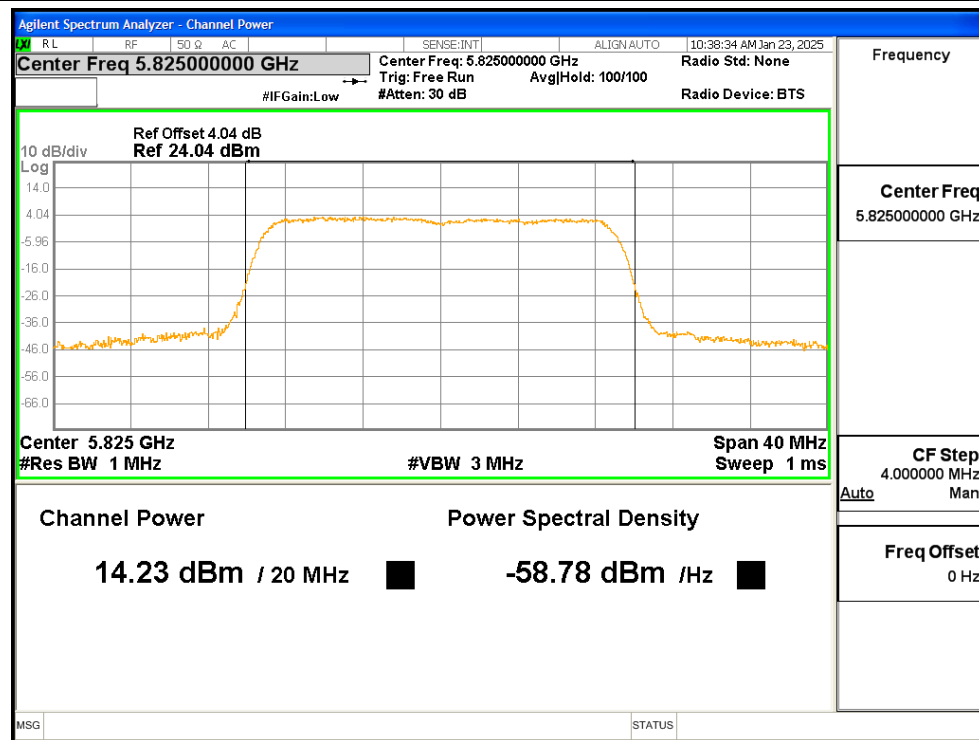
Power NVNT ac20 5745MHz Ant1



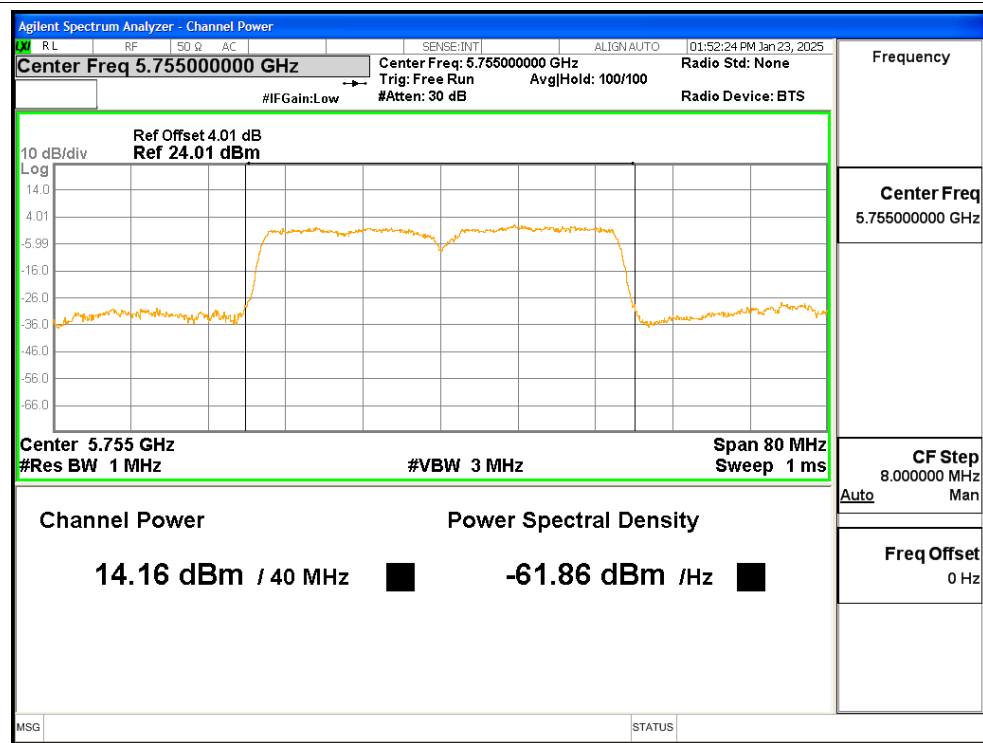
Power NVNT ac20 5785MHz Ant1



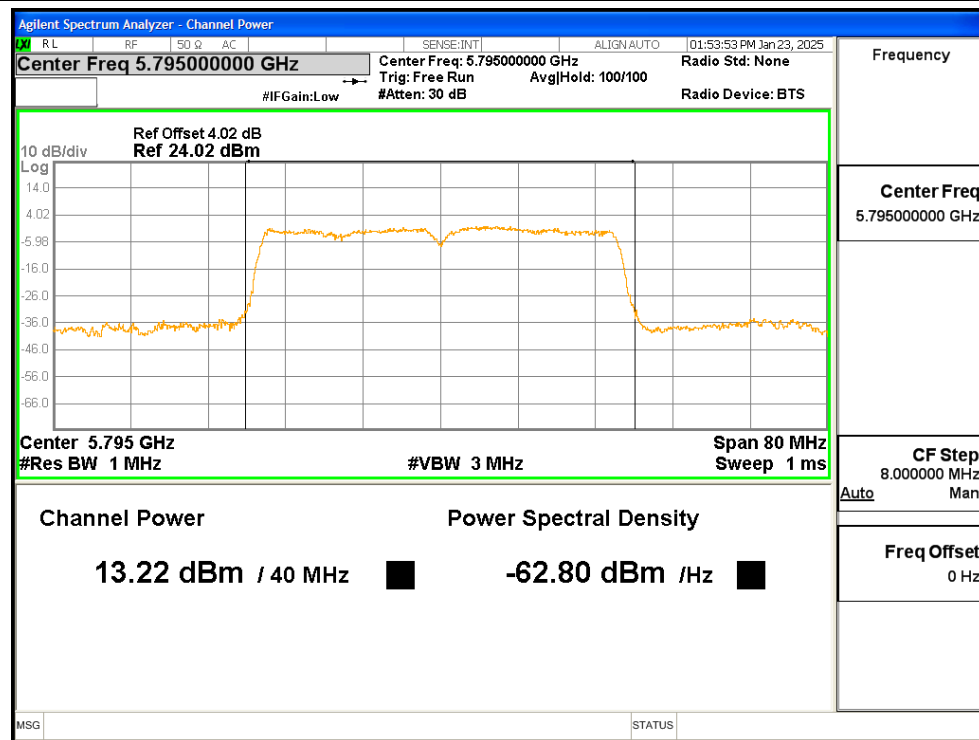
Power NVNT ac20 5825MHz Ant1



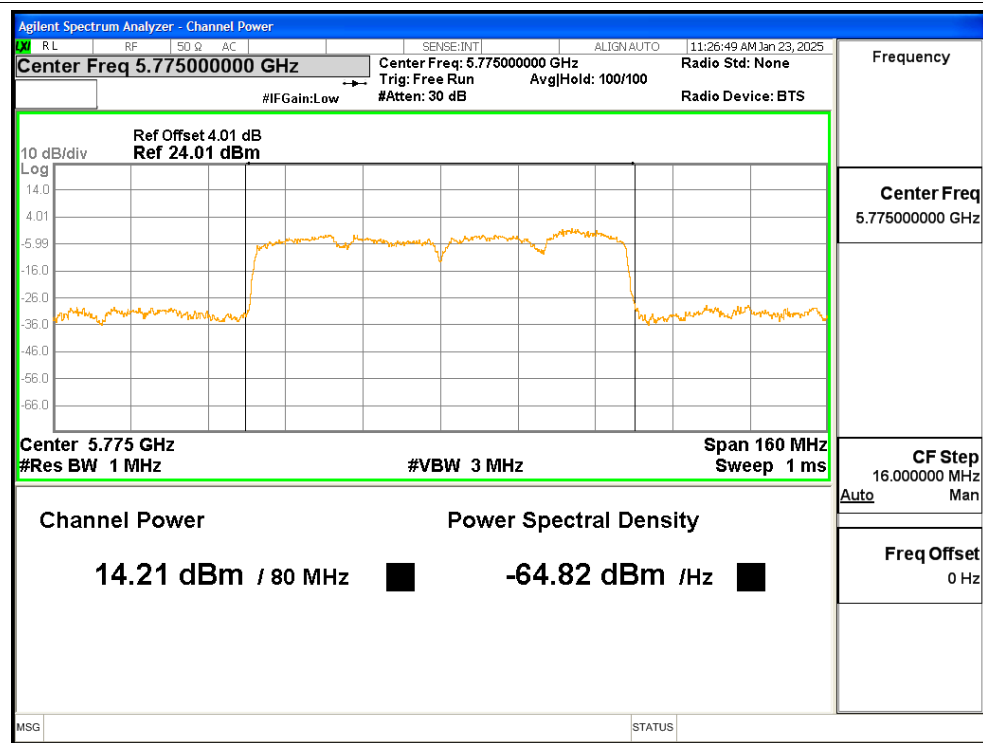
Power NVNT ac40 5755MHz Ant1



Power NVNT ac40 5795MHz Ant1



Power NVNT ac80 5775MHz Ant1

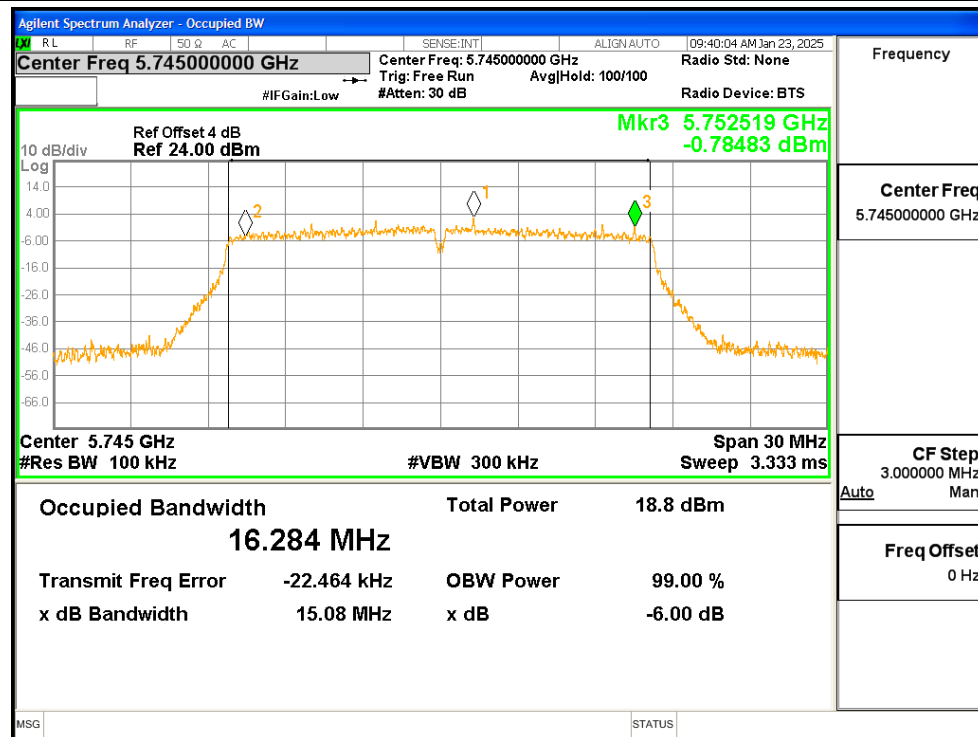


-6dB Bandwidth

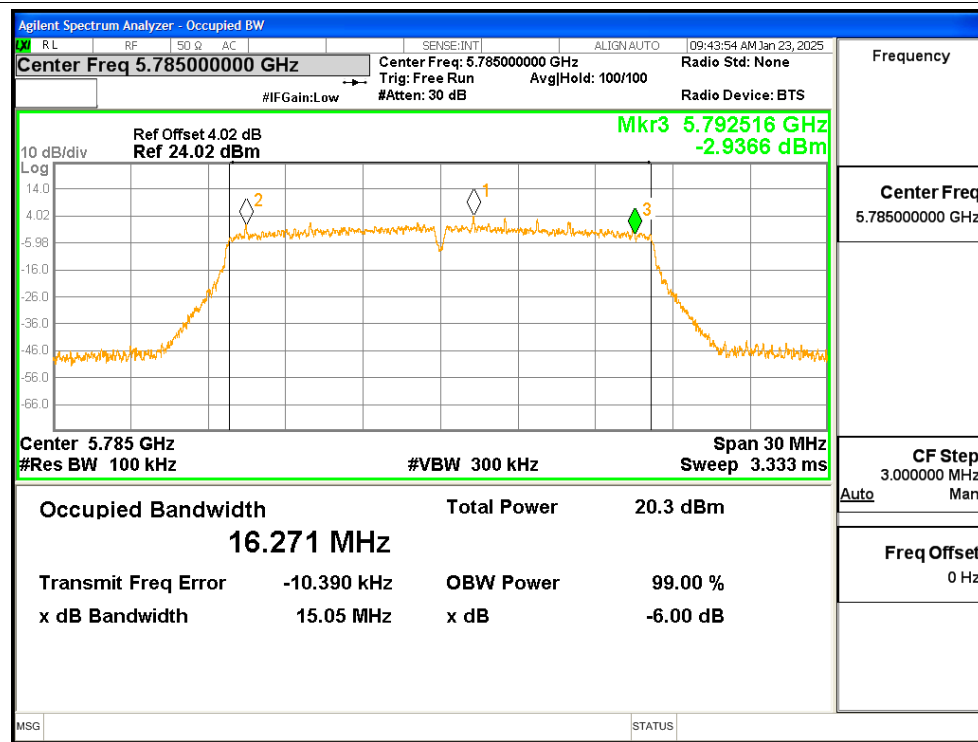
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	15.084	0.5	Pass
		5785		15.052	0.5	Pass
		5825		15.514	0.5	Pass
	n20	5745		15.93	0.5	Pass
		5785		15.429	0.5	Pass
		5825		15.315	0.5	Pass
	n40	5755		35.132	0.5	Pass
		5795		35.126	0.5	Pass
	ac20	5745		17.711	0.5	Pass
		5785		17.61	0.5	Pass
		5825		17.586	0.5	Pass
	ac40	5755		35.911	0.5	Pass
		5795		36.056	0.5	Pass
	ac80	5775		75.119	0.5	Pass

Test Graphs

-6dB Bandwidth NVNT a 5745MHz Ant1

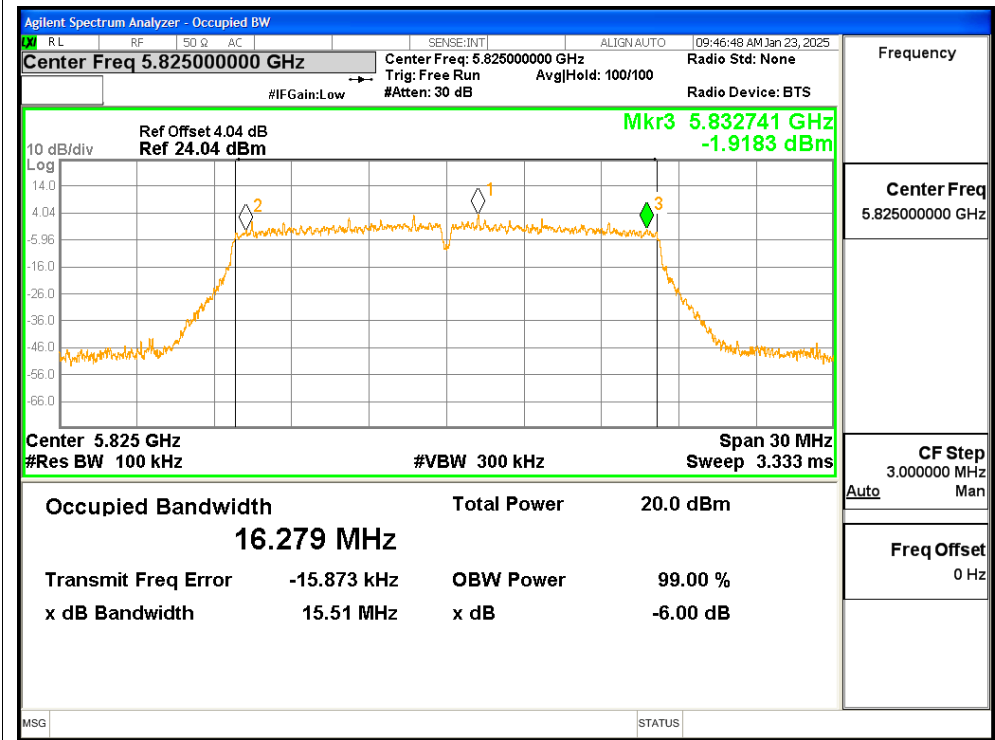


-6dB Bandwidth NVNT a 5785MHz Ant1

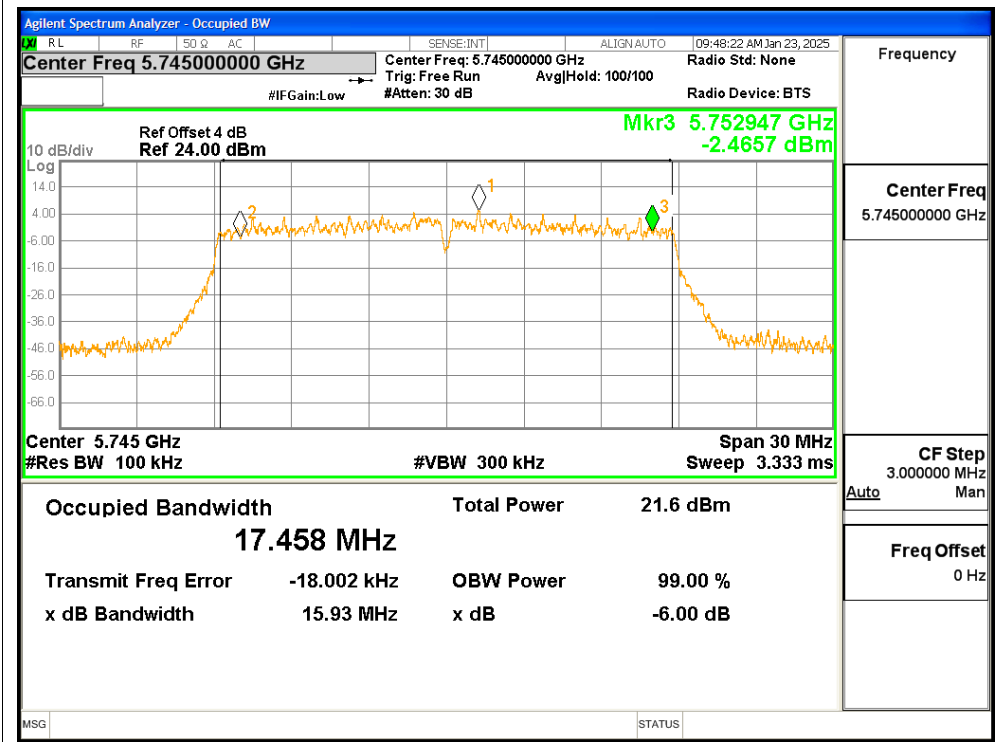


GTSL2025020051F07 5.8G WiFi

-6dB Bandwidth NVNT a 5825MHz Ant1

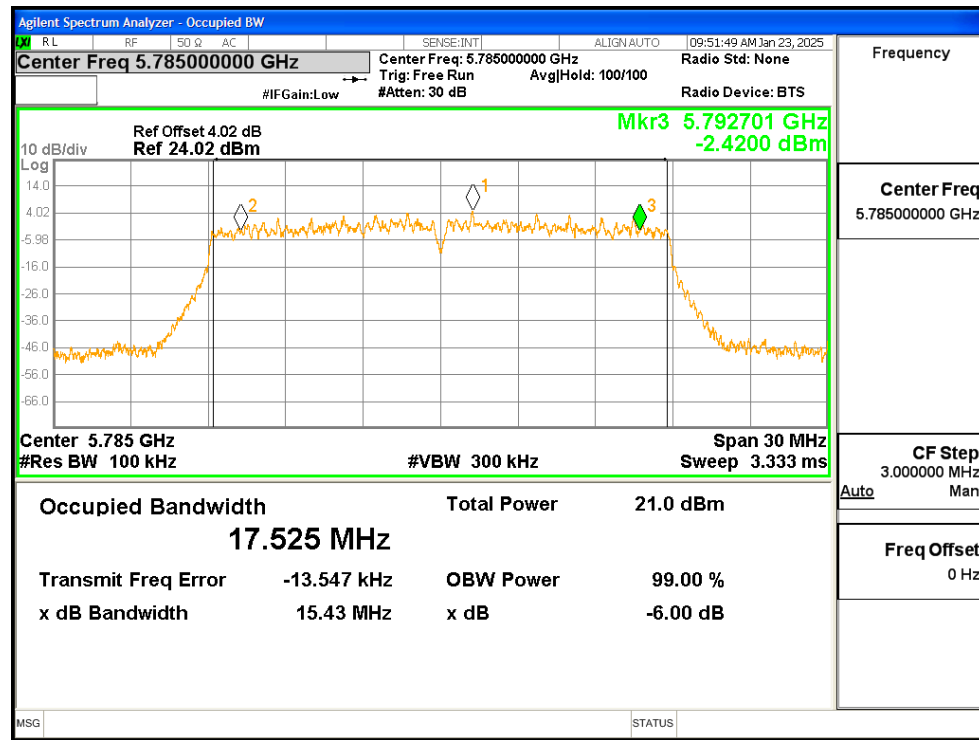


-6dB Bandwidth NVNT n20 5745MHz Ant1

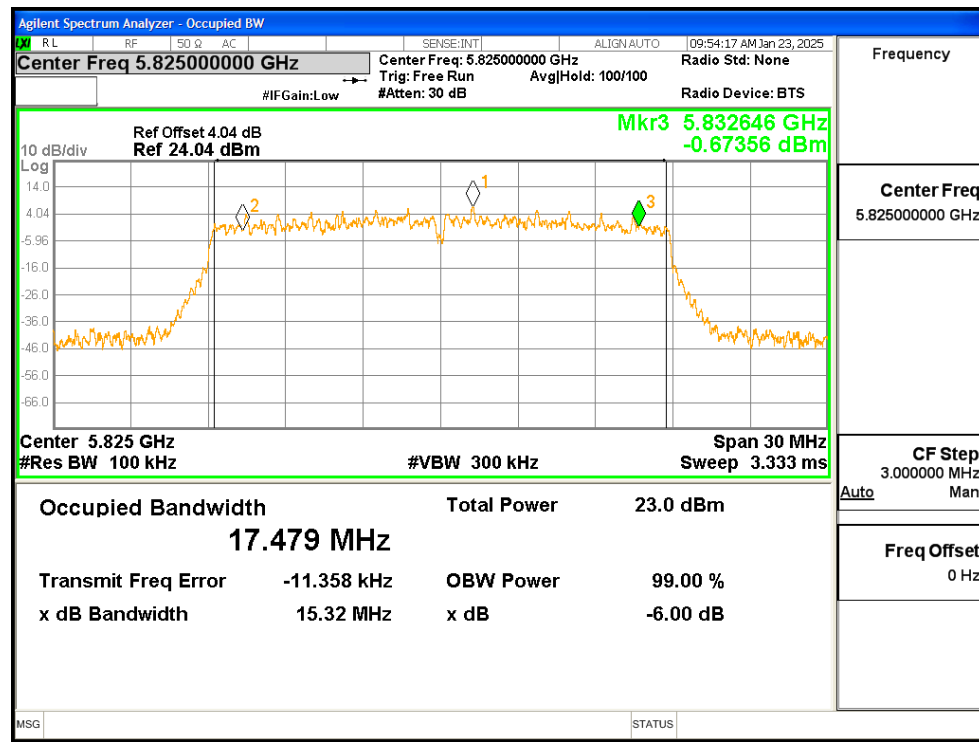


GTSL2025020051F07 5.8G WiFi

-6dB Bandwidth NVNT n20 5785MHz Ant1

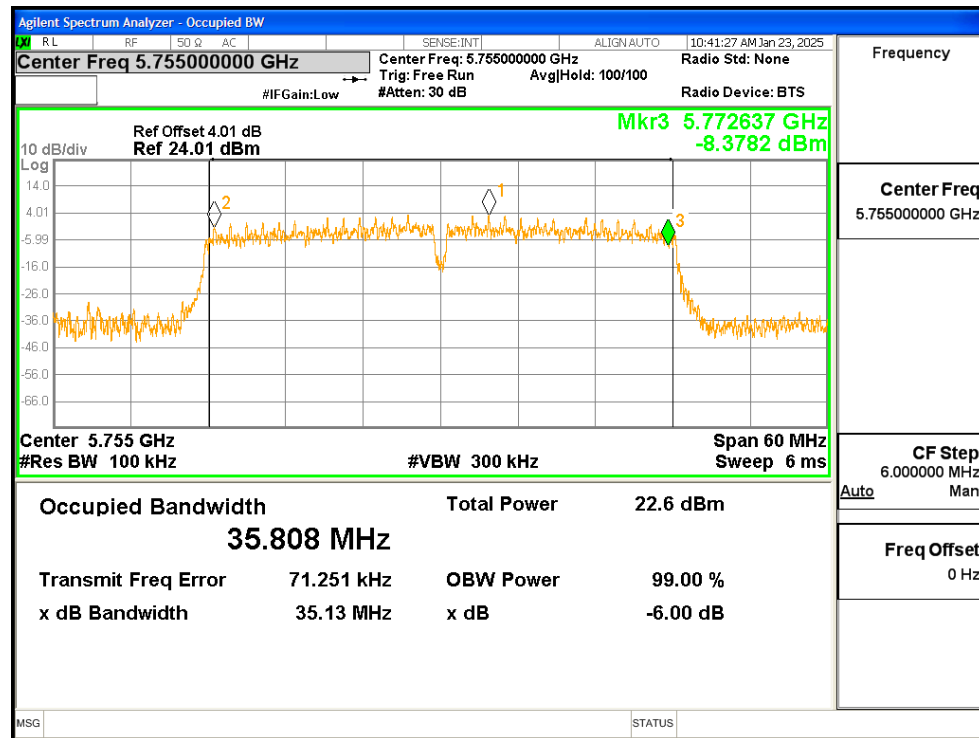


-6dB Bandwidth NVNT n20 5825MHz Ant1

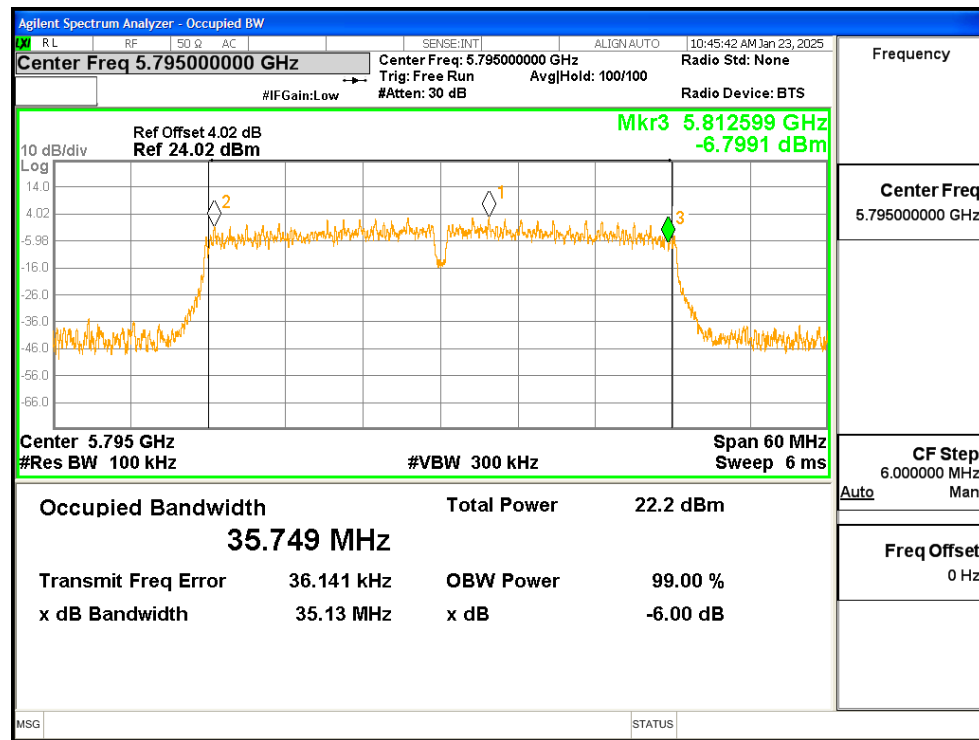


GTSL2025020051F07 5.8G WiFi

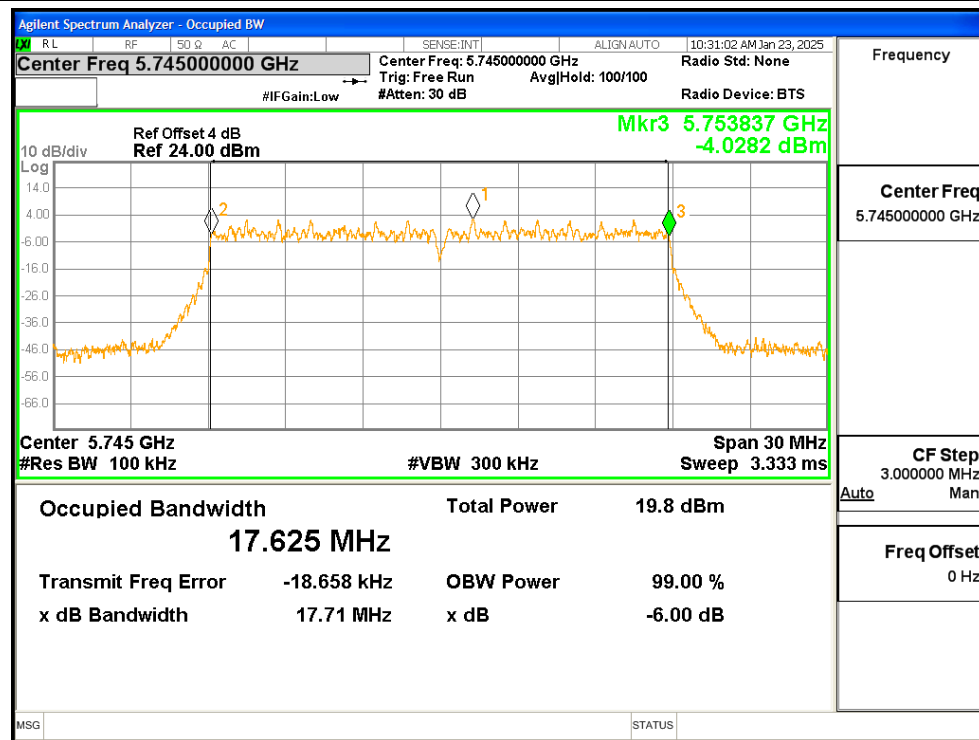
-6dB Bandwidth NVNT n40 5755MHz Ant1



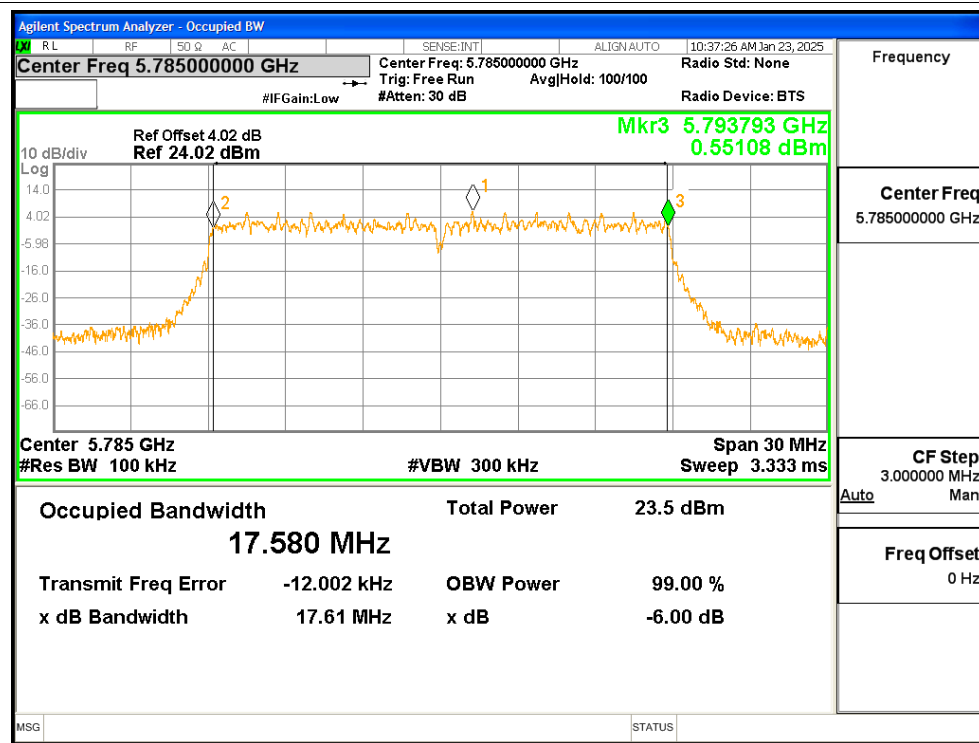
-6dB Bandwidth NVNT n40 5795MHz Ant1



-6dB Bandwidth NVNT ac20 5745MHz Ant1

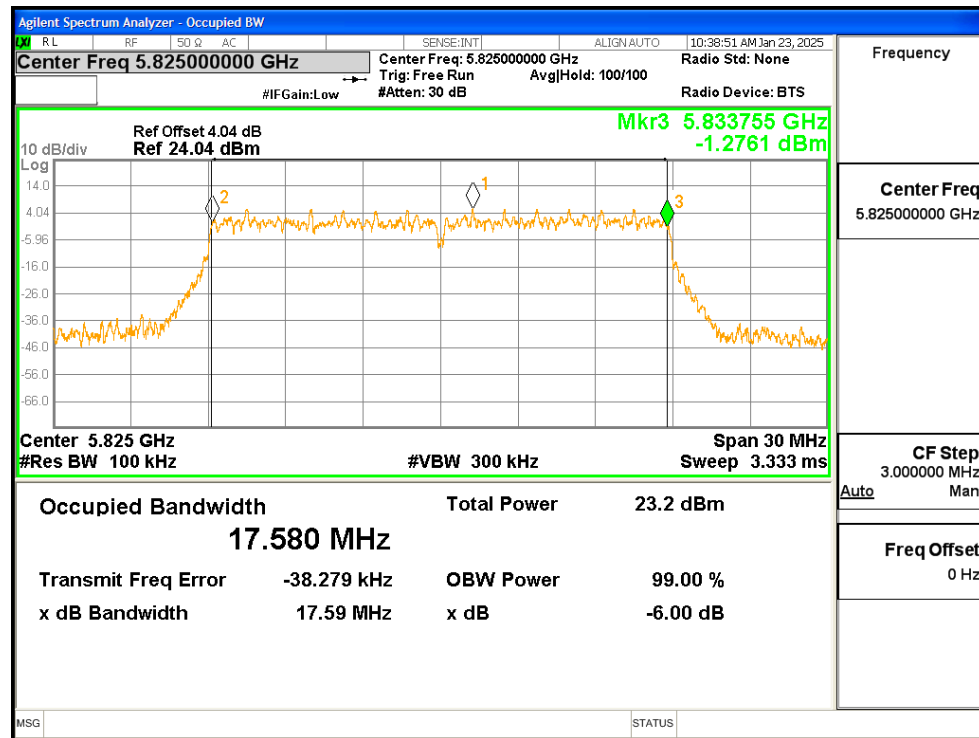


-6dB Bandwidth NVNT ac20 5785MHz Ant1

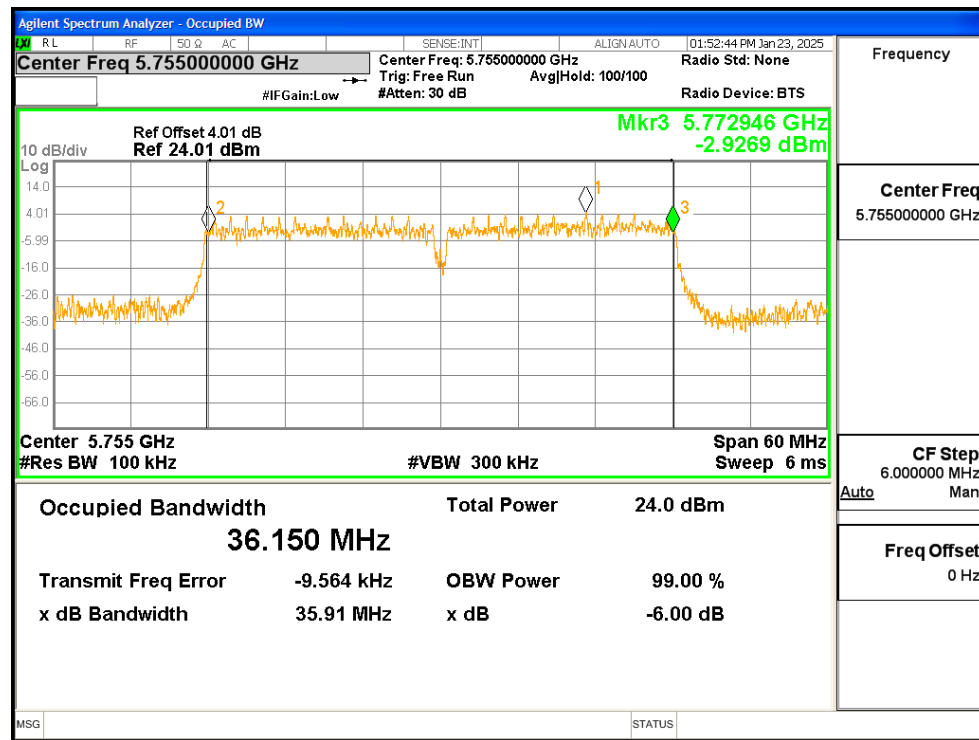


GTSL2025020051F07 5.8G WiFi

-6dB Bandwidth NVNT ac20 5825MHz Ant1

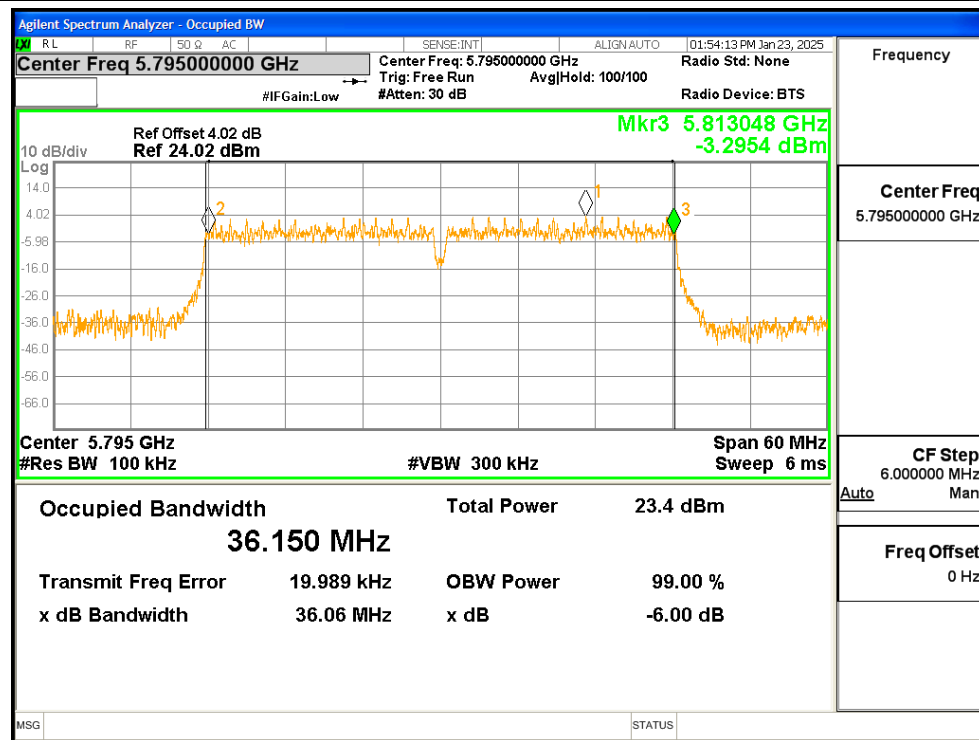


-6dB Bandwidth NVNT ac40 5755MHz Ant1

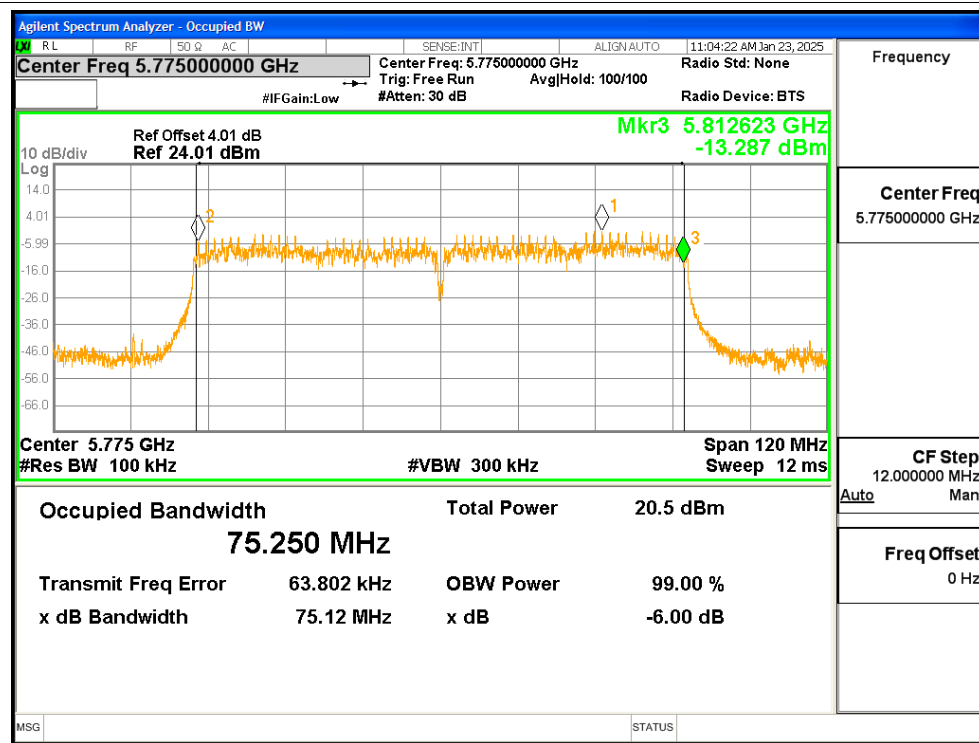


GTSL2025020051F07 5.8G WiFi

-6dB Bandwidth NVNT ac40 5795MHz Ant1



-6dB Bandwidth NVNT ac80 5775MHz Ant1

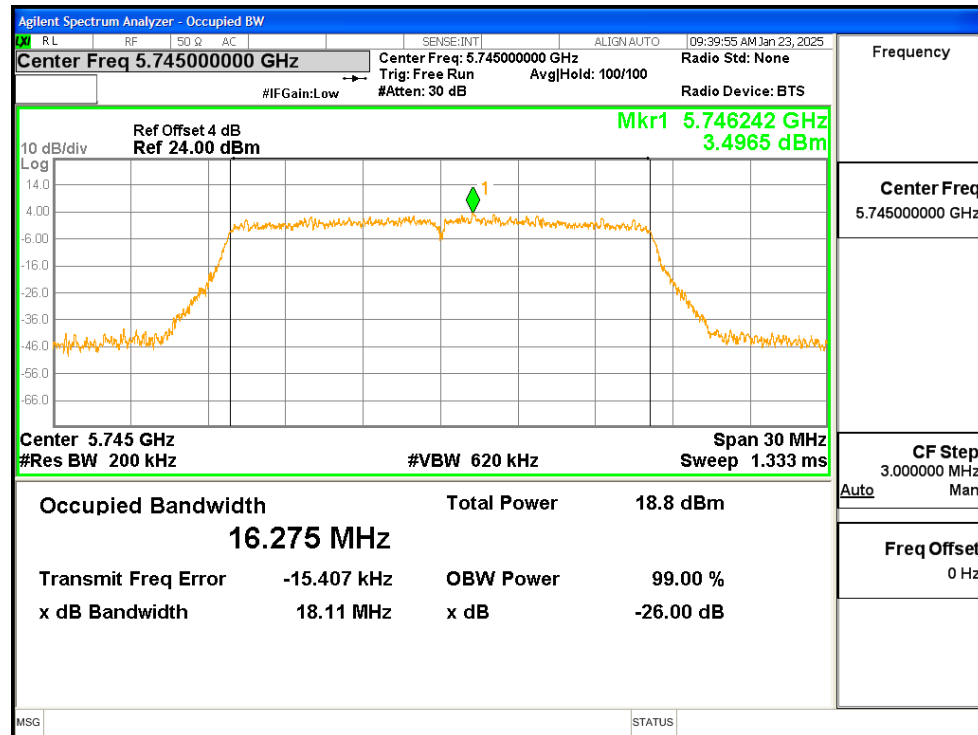


Occupied Channel Bandwidth

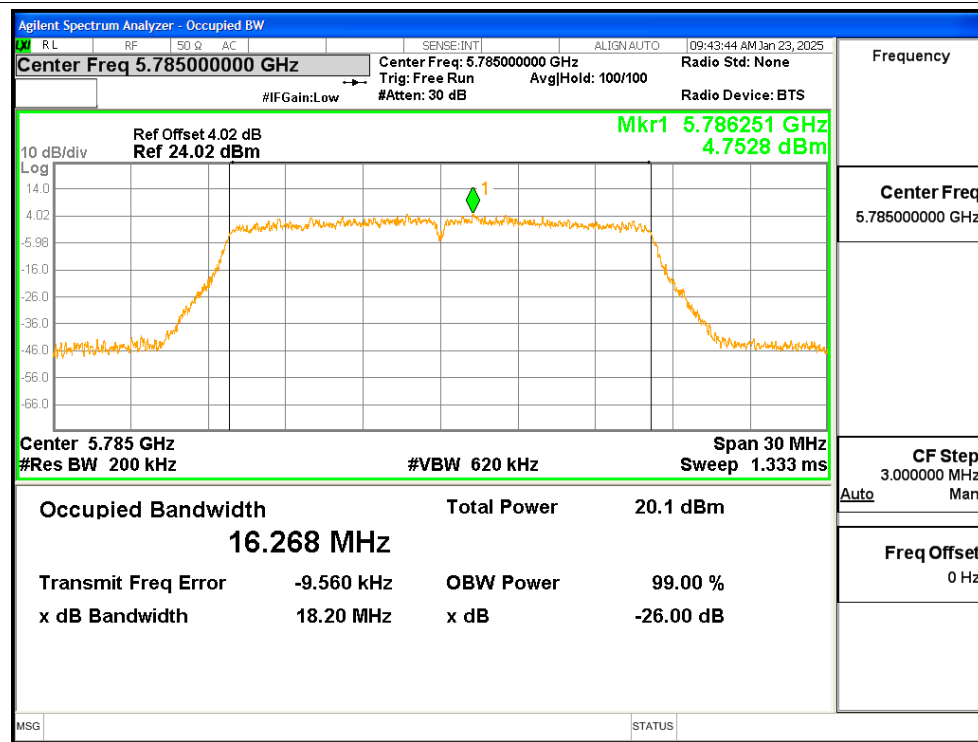
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.275
		5785		16.268
		5825		16.279
	n20	5745		17.47
		5785		17.545
		5825		17.524
	n40	5755		35.977
		5795		35.876
	ac20	5745		17.652
		5785		17.603
		5825		17.607
	ac40	5755		36.227
		5795		36.158
	ac80	5775		75.559

Test Graphs

OBW NVNT a 5745MHz Ant1

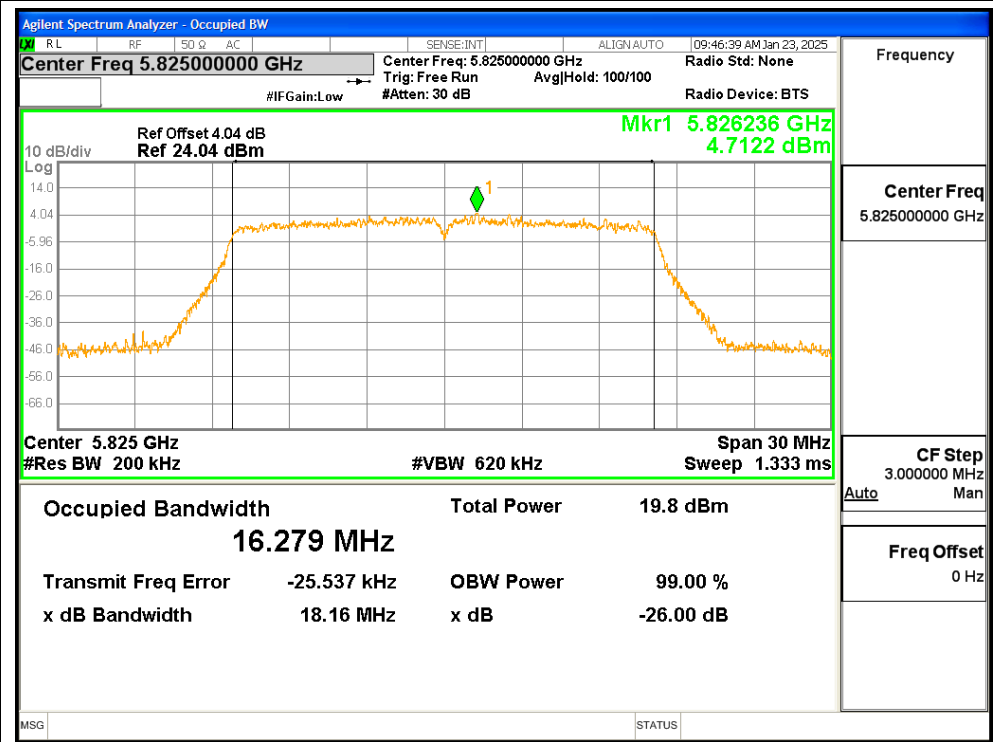


OBW NVNT a 5785MHz Ant1

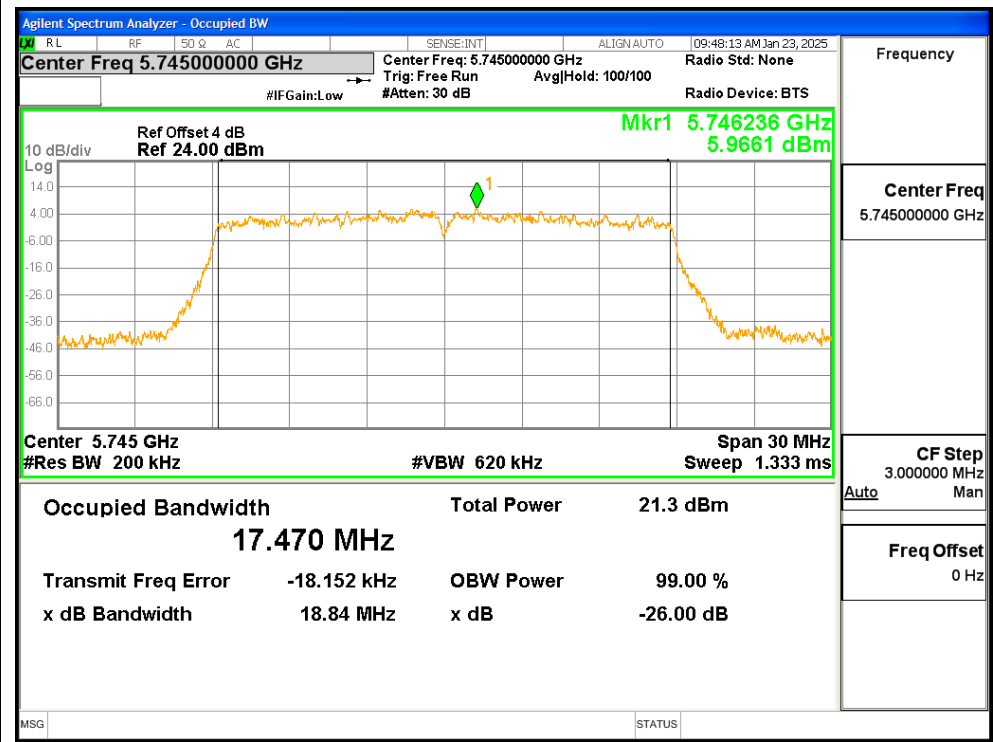


GTSL2025020051F07 5.8G WiFi

OBW NVNT a 5825MHz Ant1

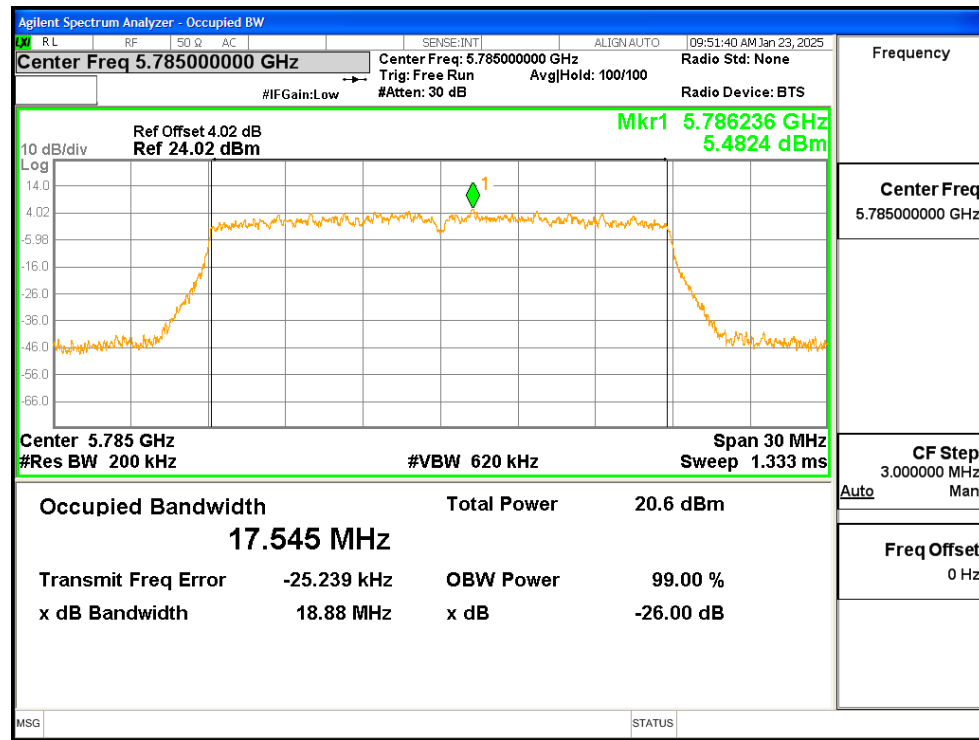


OBW NVNT n20 5745MHz Ant1

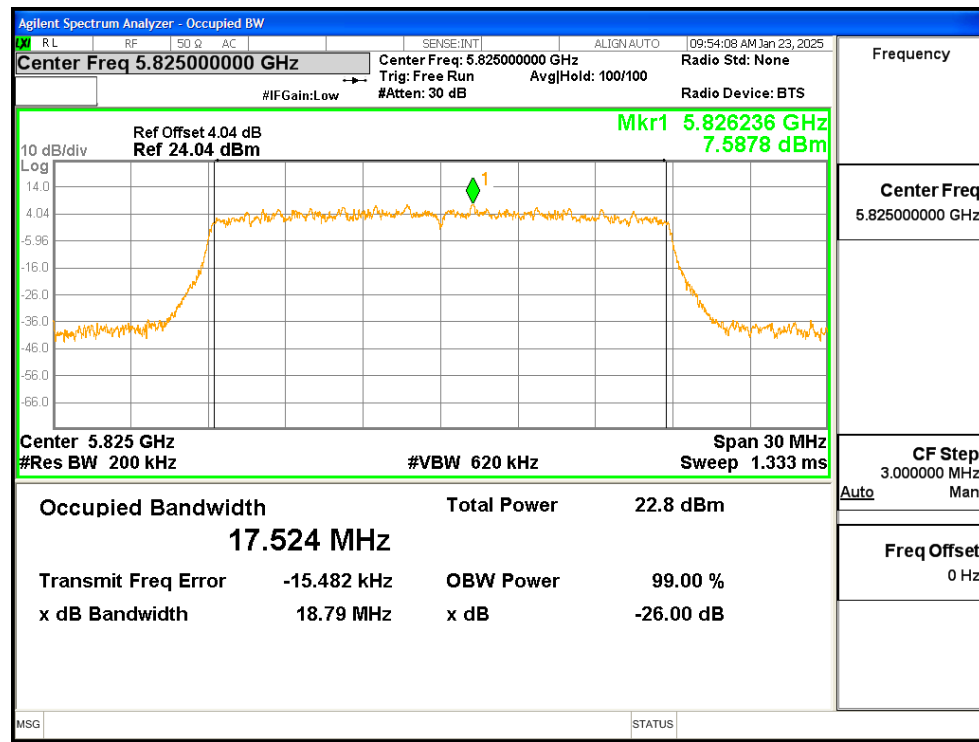


GTSL2025020051F07 5.8G WiFi

OBW NVNT n20 5785MHz Ant1

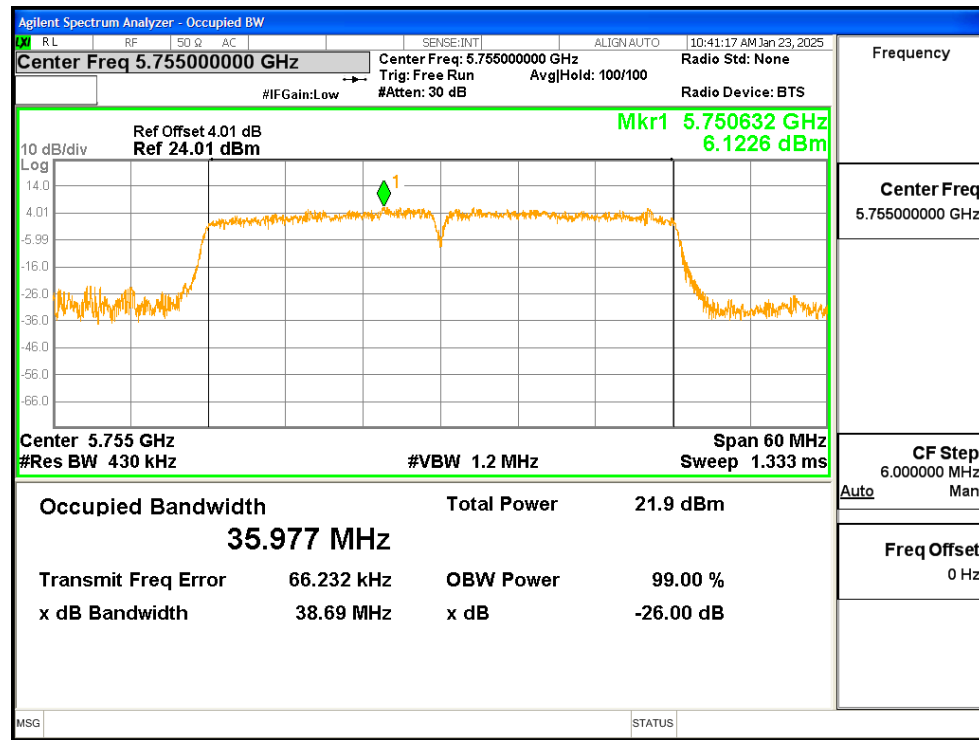


OBW NVNT n20 5825MHz Ant1

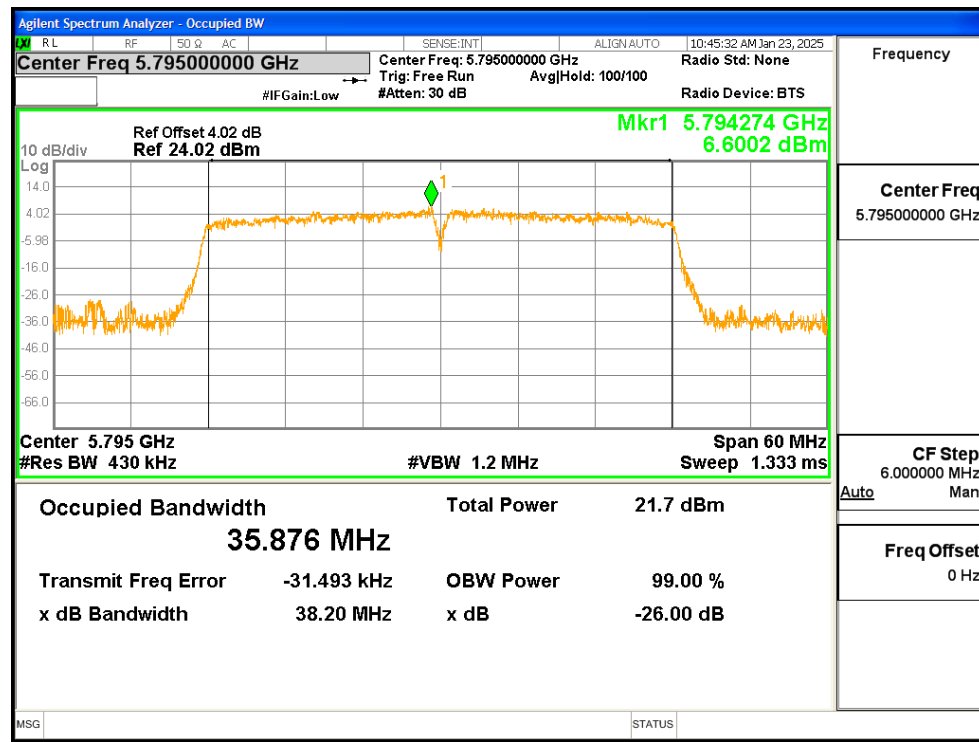


GTSL2025020051F07 5.8G WiFi

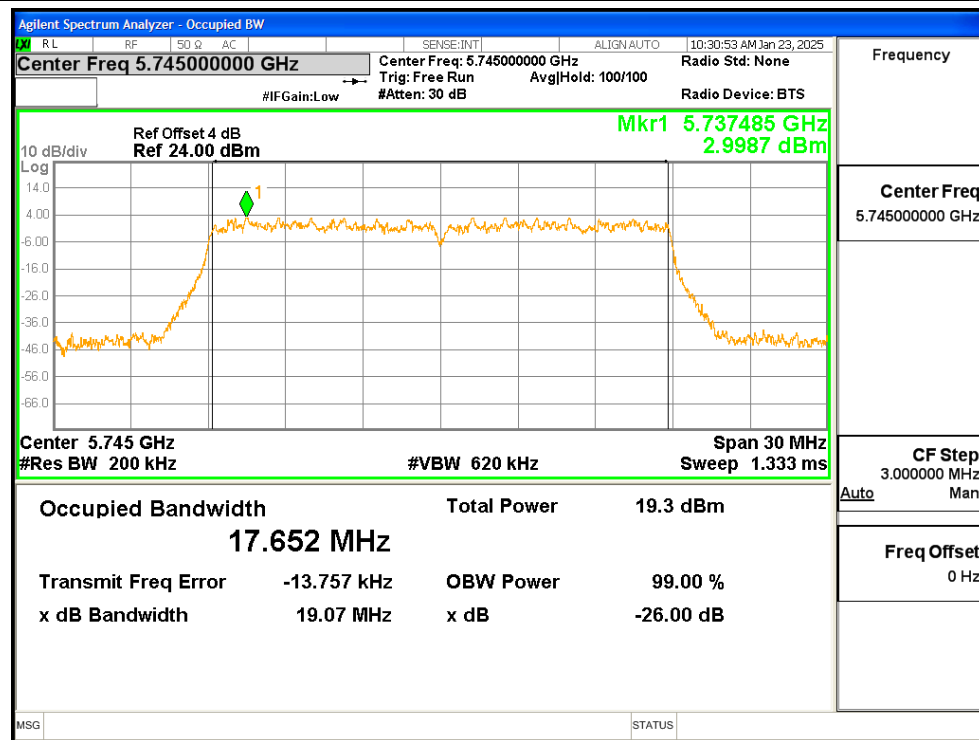
OBW NVNT n40 5755MHz Ant1



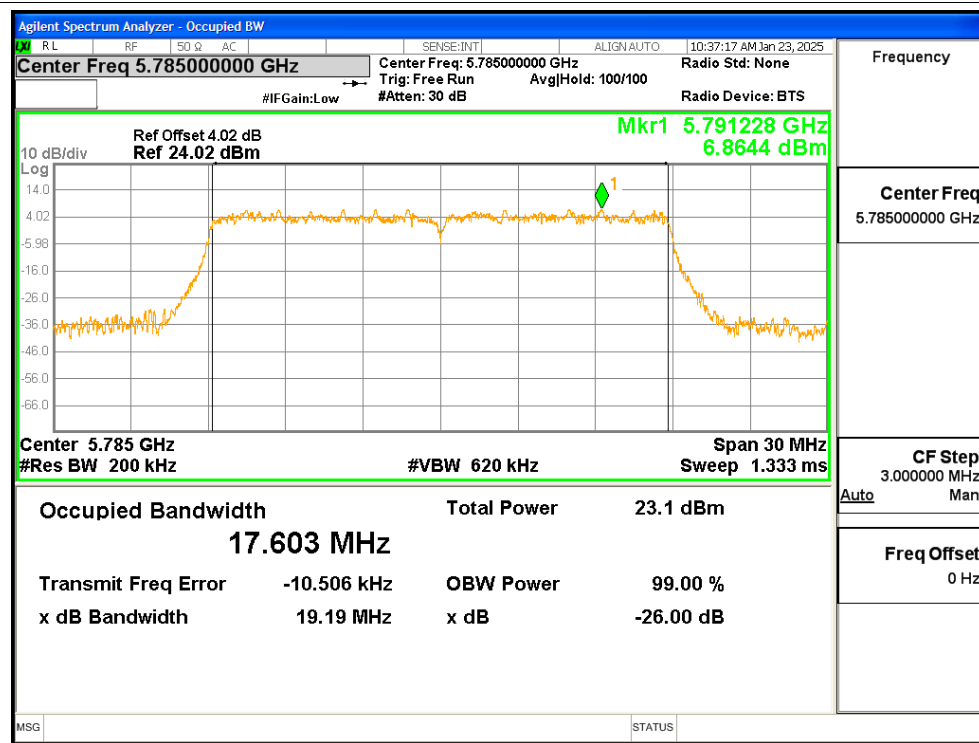
OBW NVNT n40 5795MHz Ant1



OBW NVNT ac20 5745MHz Ant1

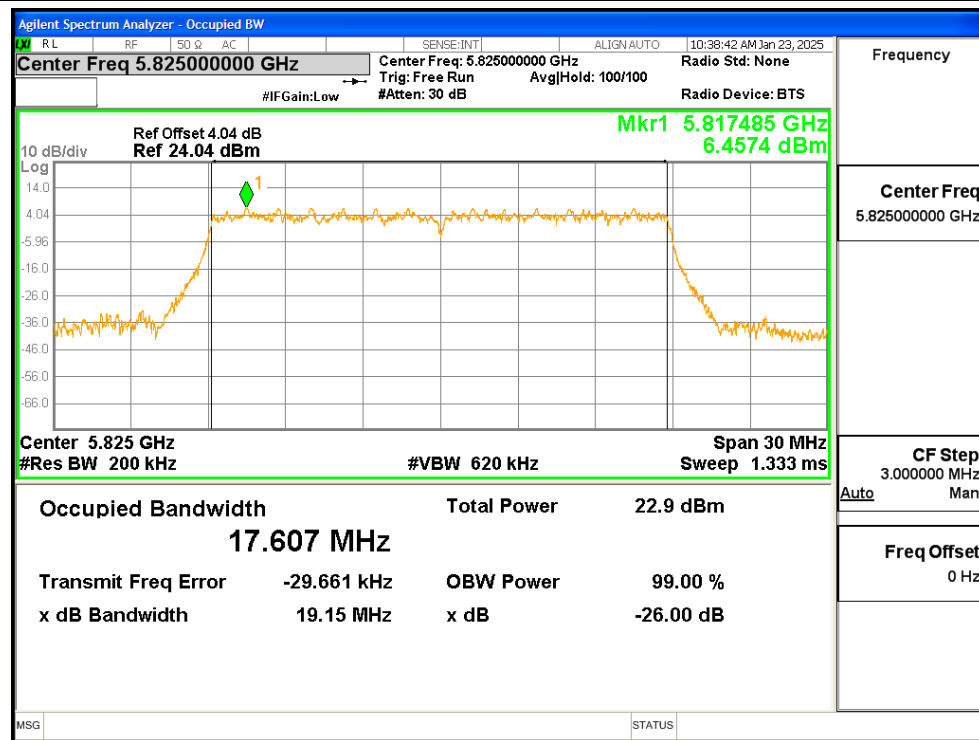


OBW NVNT ac20 5785MHz Ant1

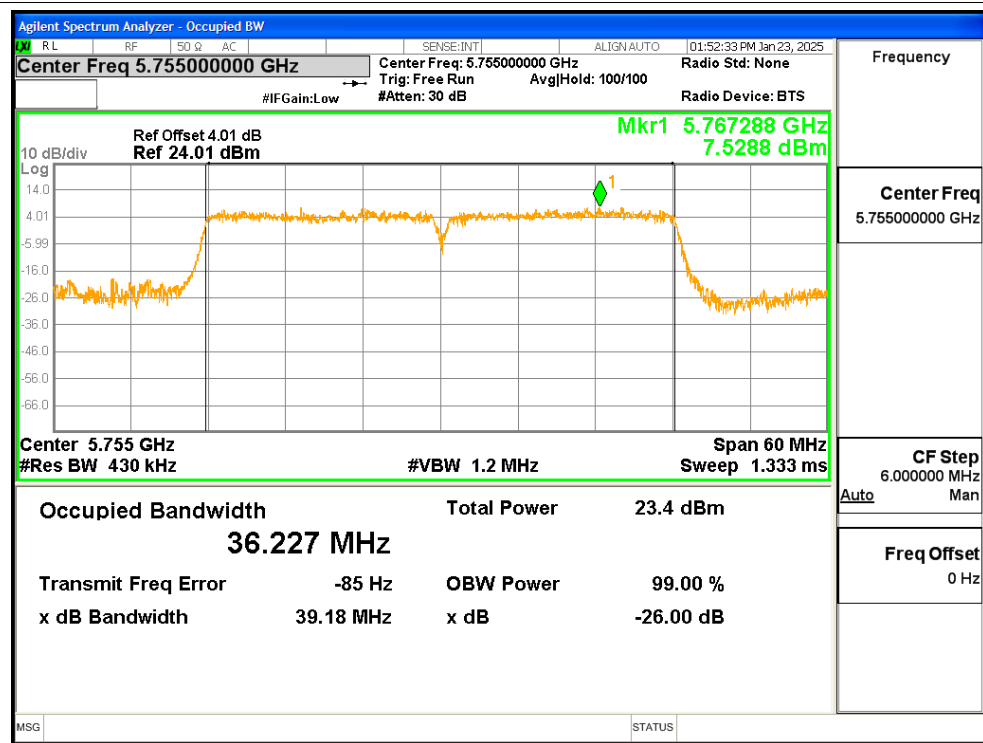


GTSL2025020051F07 5.8G WiFi

OBW NVNT ac20 5825MHz Ant1

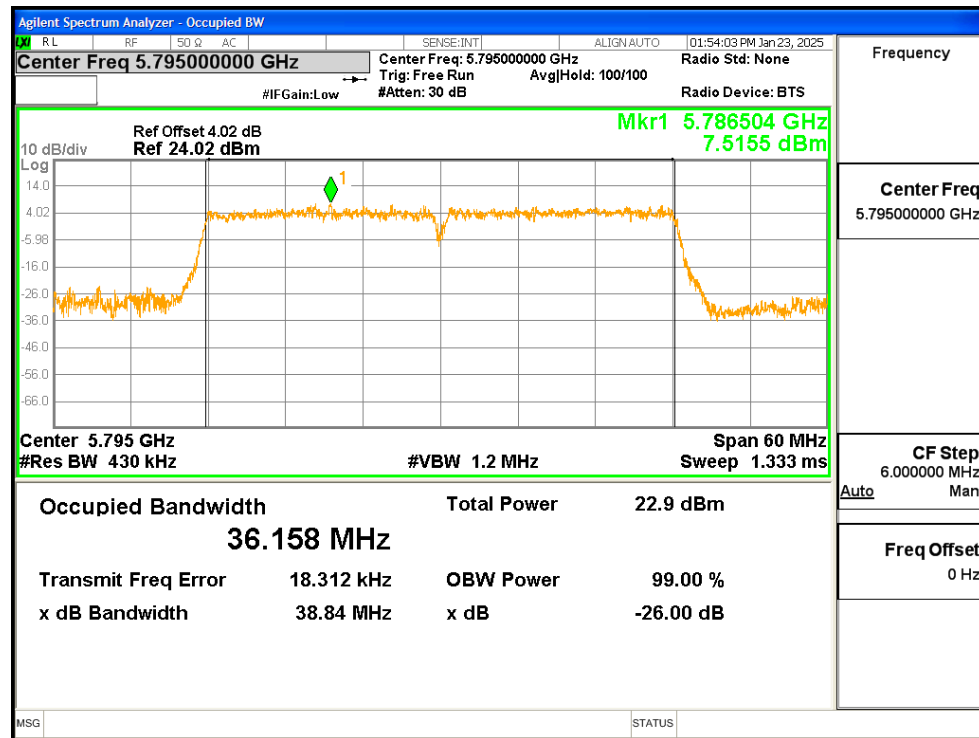


OBW NVNT ac40 5755MHz Ant1

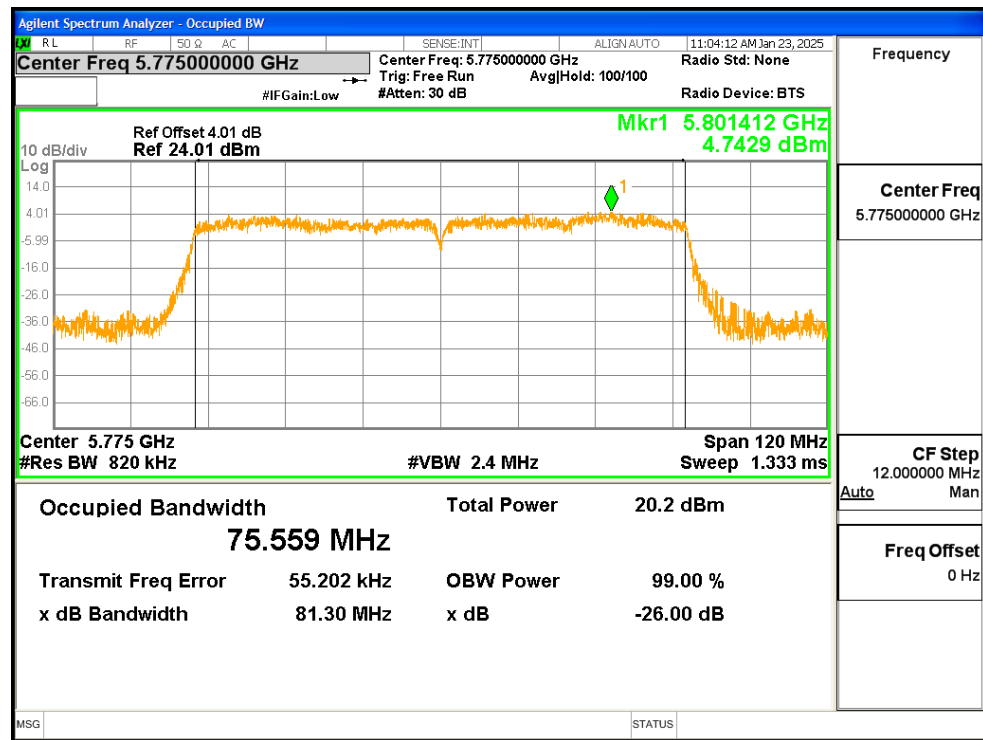


GTSL2025020051F07 5.8G WiFi

OBW NVNT ac40 5795MHz Ant1



OBW NVNT ac80 5775MHz Ant1

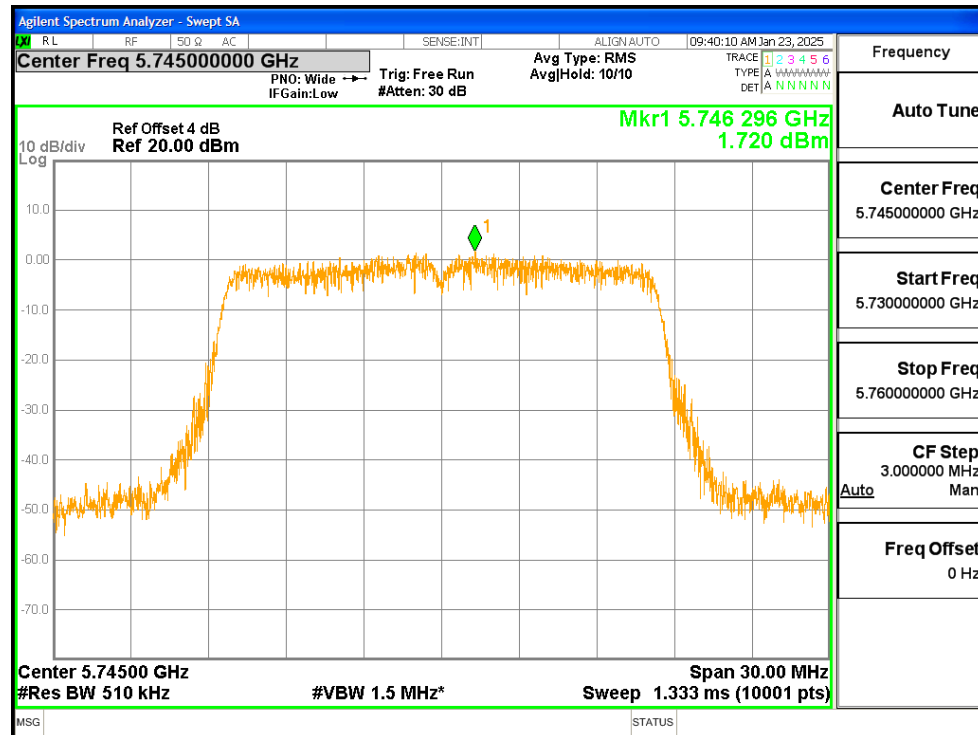


Maximum Power Spectral Density Level

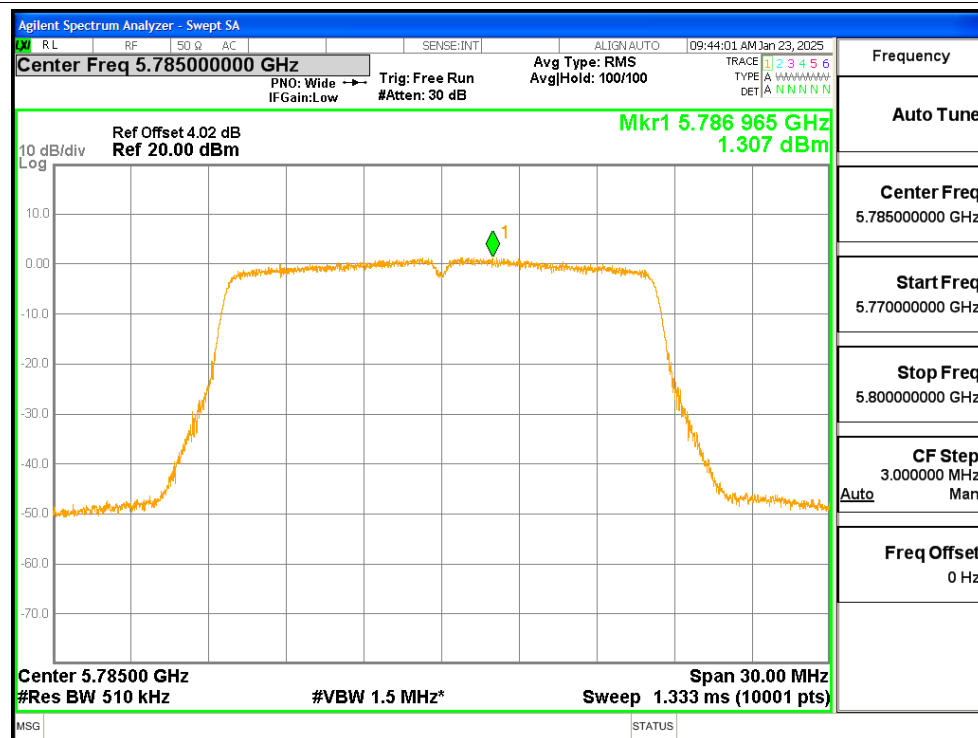
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	1.72	0.36	2.08	30	Pass
		5785		1.31	0.3	1.61	30	Pass
		5825		1.4	0.34	1.74	30	Pass
	n20	5745		0.96	1.63	2.59	30	Pass
		5785		0.5	1.74	2.24	30	Pass
		5825		2.54	2.18	4.72	30	Pass
	n40	5755		-2.05	3.86	1.81	30	Pass
		5795		-2.93	4.22	1.29	30	Pass
	ac20	5745		-2.14	2.7	0.56	30	Pass
		5785		1.63	3.37	5	30	Pass
		5825		1.62	3.55	5.17	30	Pass
	ac40	5755		-1.35	3.45	2.1	30	Pass
		5795		-2.35	4.17	1.82	30	Pass
	ac80	5775		-7.92	6.01	-1.91	30	Pass

Test Graphs

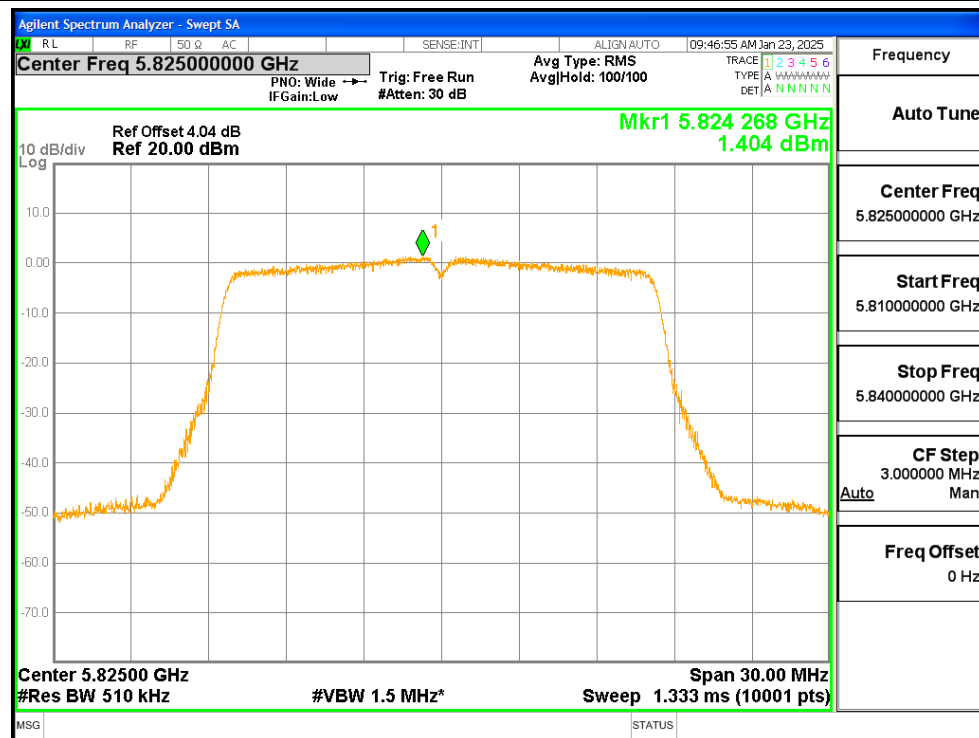
PSD NVNT a 5745MHz Ant1



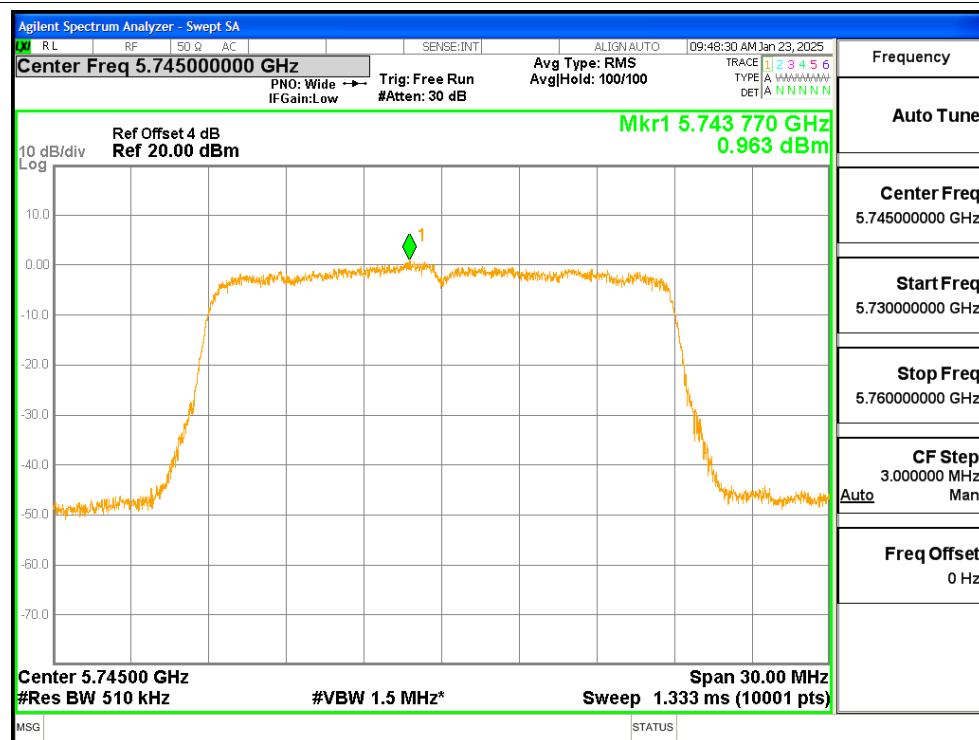
PSD NVNT a 5785MHz Ant1



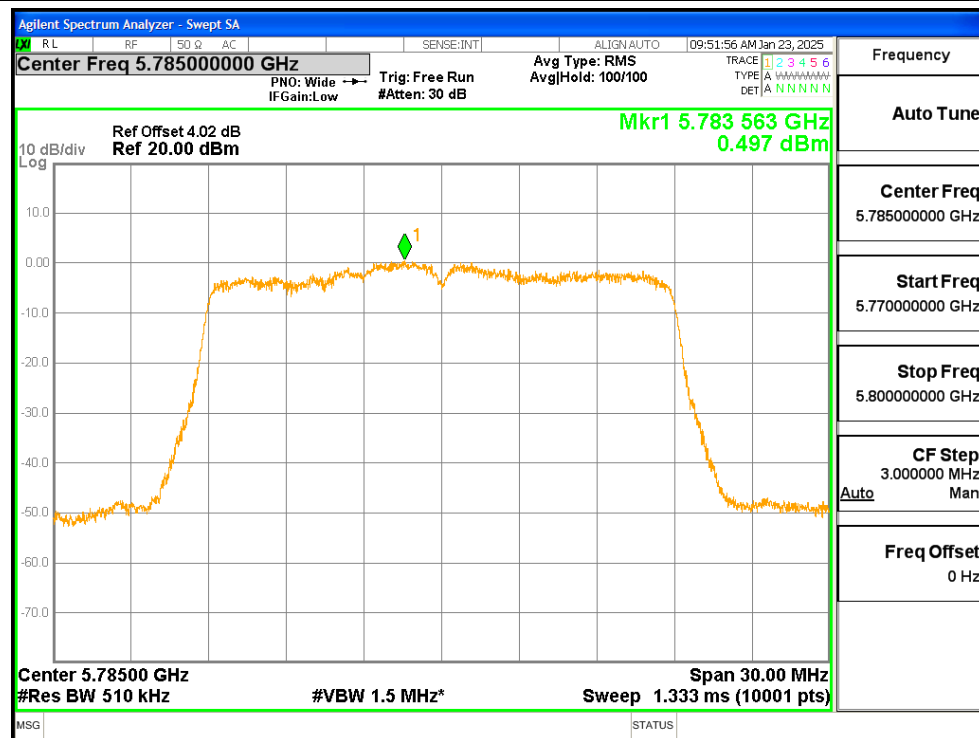
PSD NVNT a 5825MHz Ant1



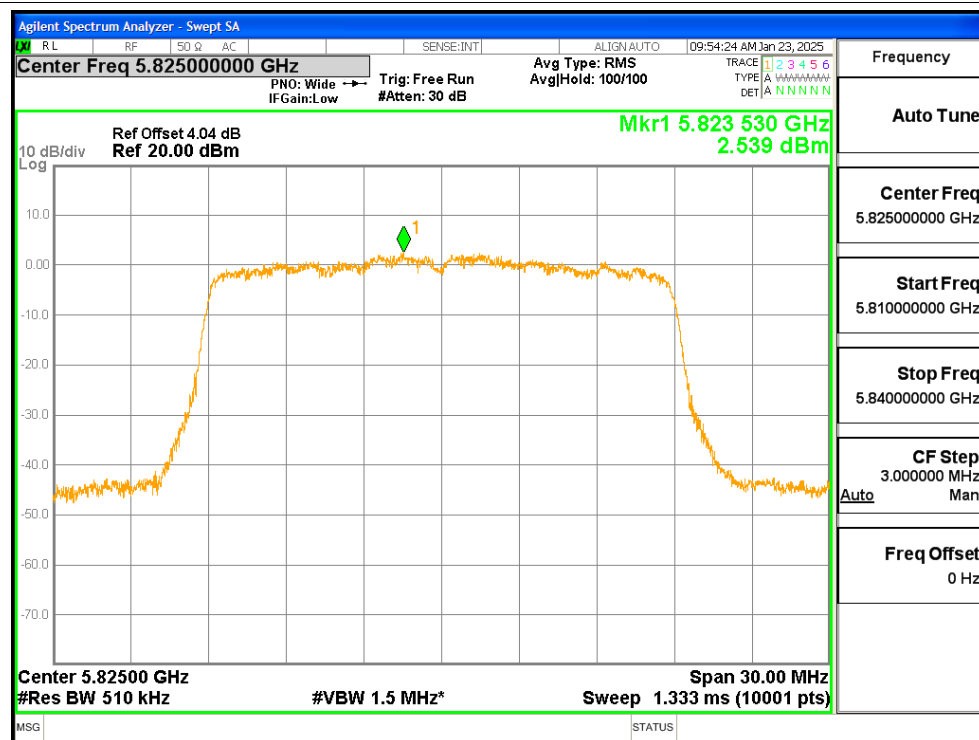
PSD NVNT n20 5745MHz Ant1



PSD NVNT n20 5785MHz Ant1

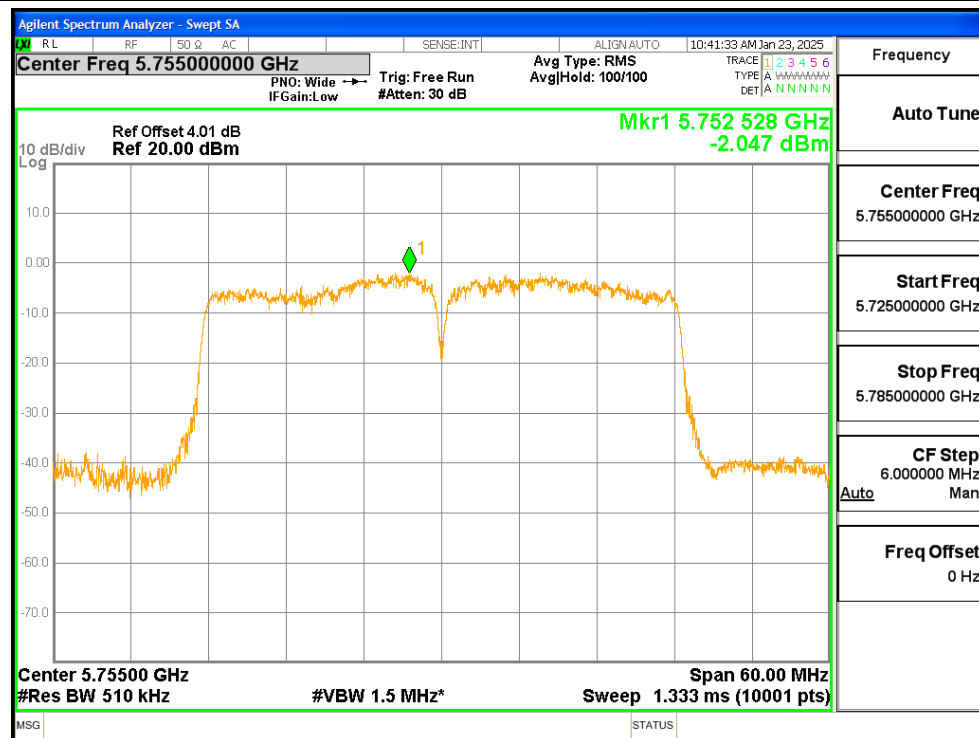


PSD NVNT n20 5825MHz Ant1

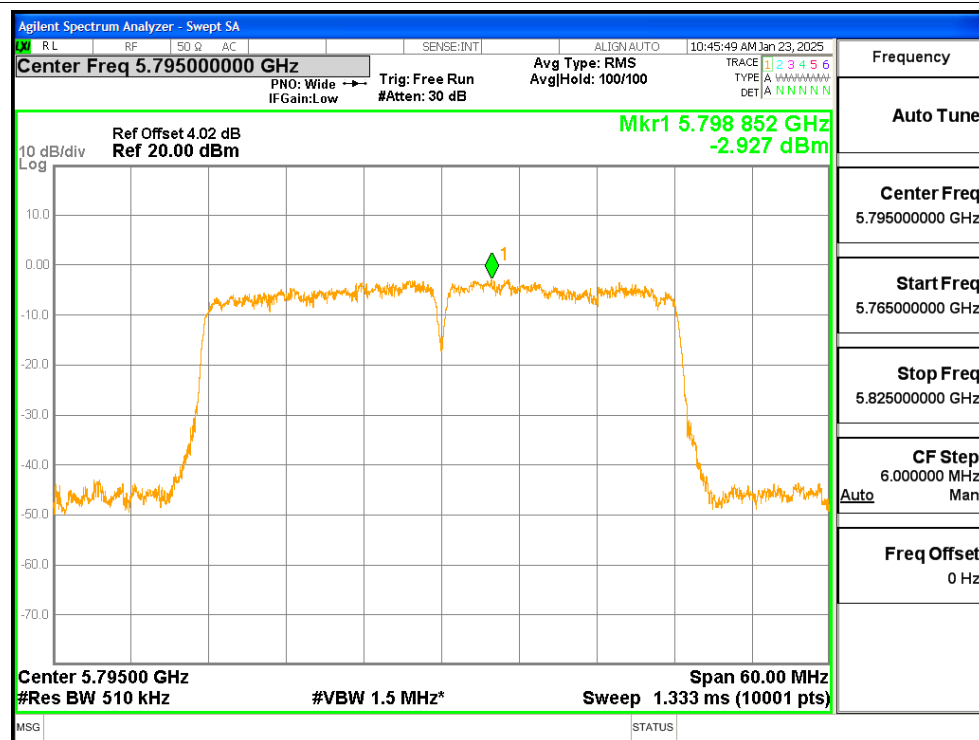


GTSL2025020051F07 5.8G WiFi

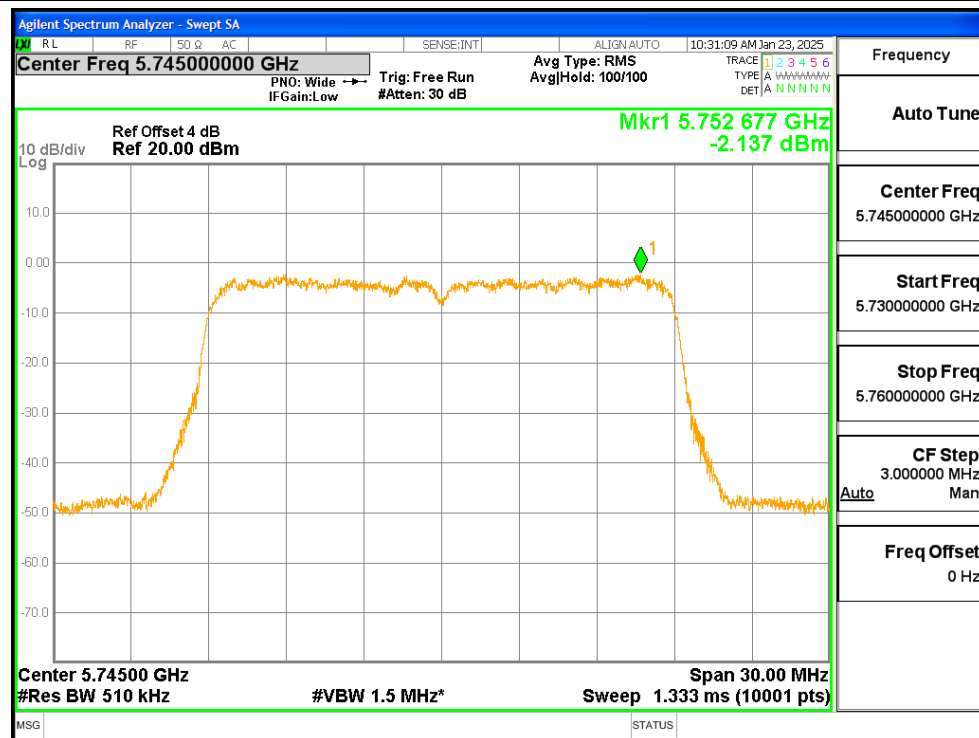
PSD NVNT n40 5755MHz Ant1



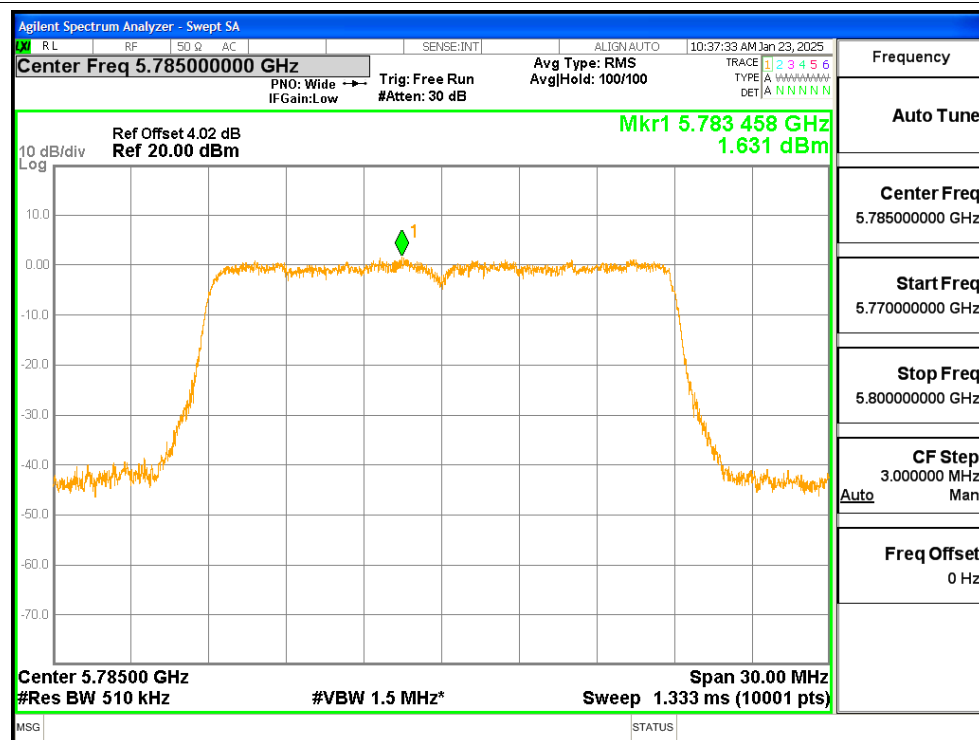
PSD NVNT n40 5795MHz Ant1



PSD NVNT ac20 5745MHz Ant1

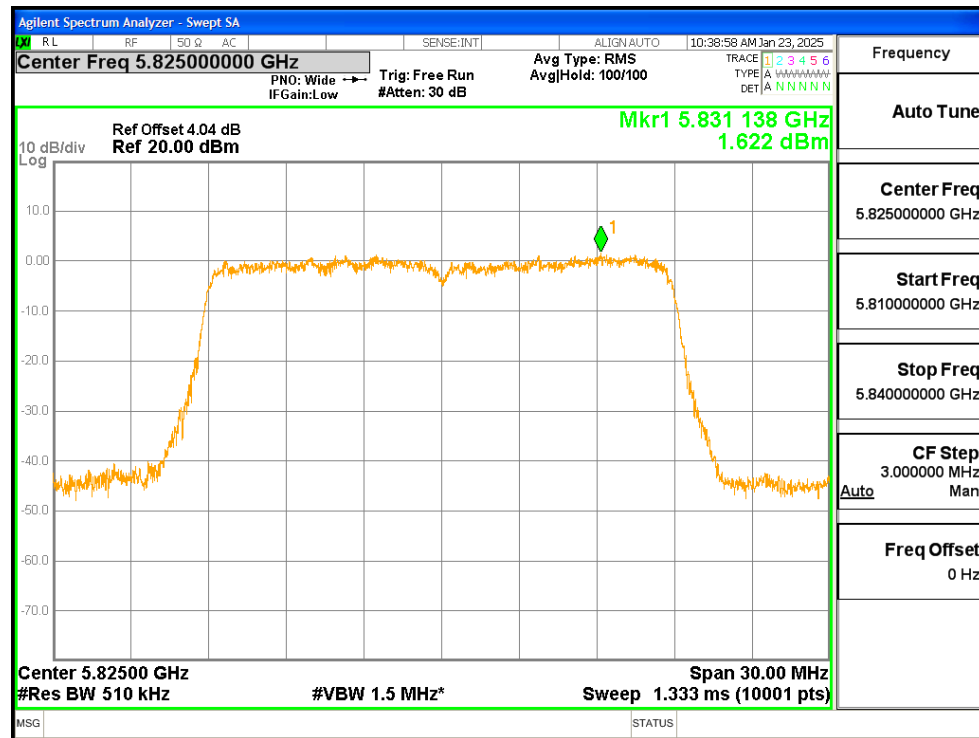


PSD NVNT ac20 5785MHz Ant1

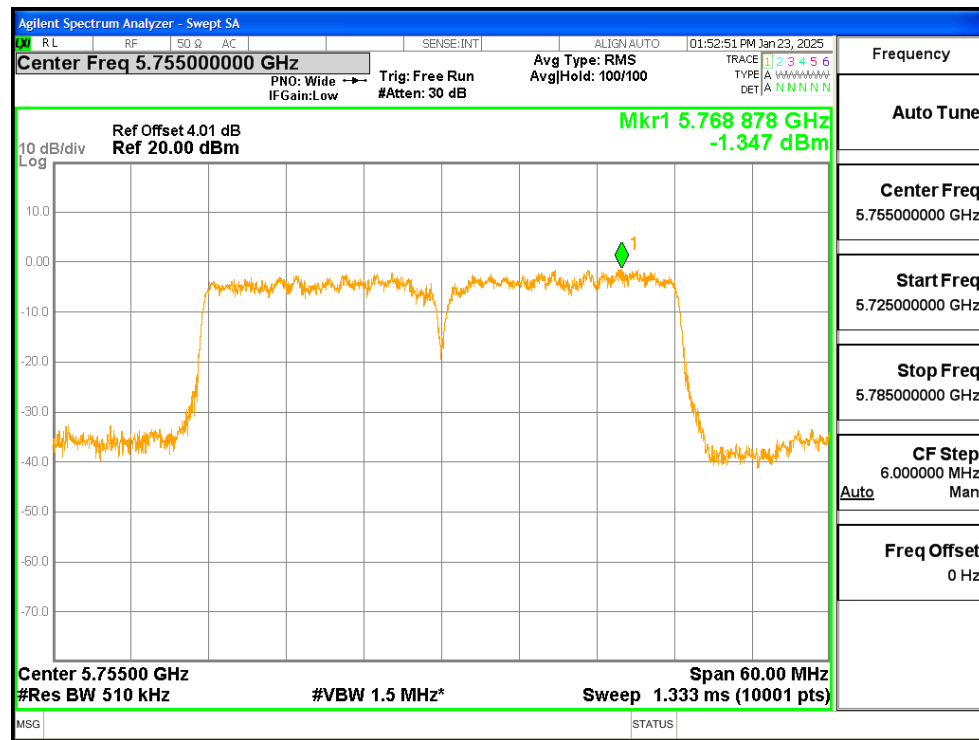


GTSL2025020051F07 5.8G WiFi

PSD NVNT ac20 5825MHz Ant1

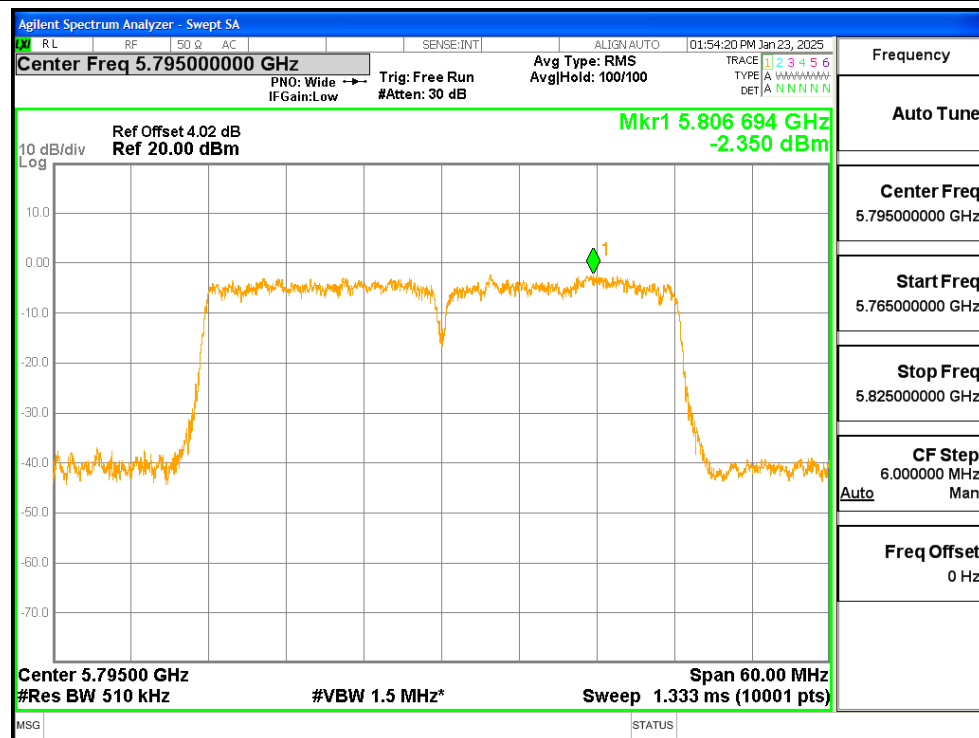


PSD NVNT ac40 5755MHz Ant1

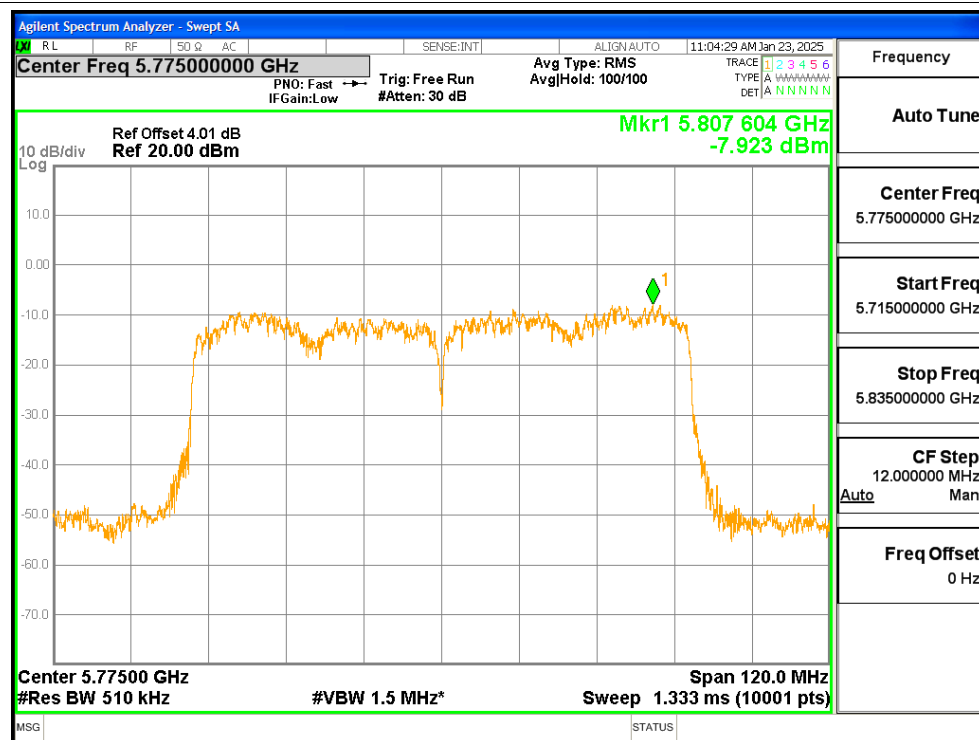


GTSL2025020051F07 5.8G WiFi

PSD NVNT ac40 5795MHz Ant1



PSD NVNT ac80 5775MHz Ant1



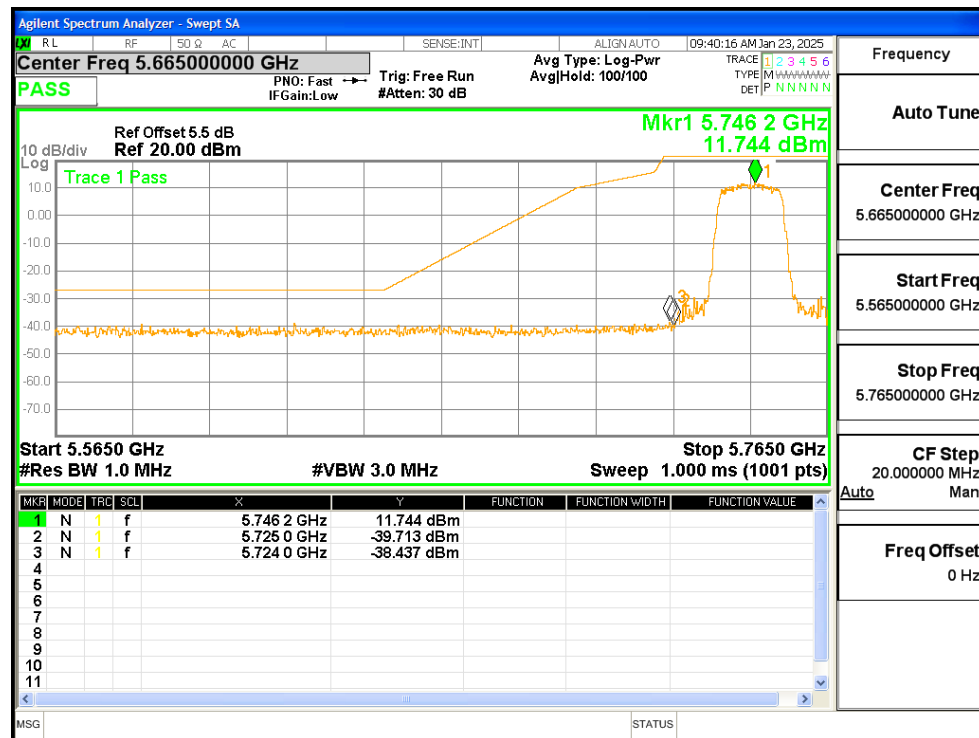
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	-38.43	Refer to test Plot	Pass
		5825	Ant1	-39.11	Refer to test Plot	Pass
	n20	5745	Ant1	-31.86	Refer to test Plot	Pass
		5825	Ant1	-32.93	Refer to test Plot	Pass
	n40	5755	Ant1	-18.17	Refer to test Plot	Pass
		5795	Ant1	-32.54	Refer to test Plot	Pass
	ac20	5745	Ant1	-34.95	Refer to test Plot	Pass
		5825	Ant1	-30.68	Refer to test Plot	Pass
	ac40	5755	Ant1	-13.55	Refer to test Plot	Pass
		5795	Ant1	-29.31	Refer to test Plot	Pass
	Ac80	5775	Ant1	-20.2	Refer to test Plot	Pass

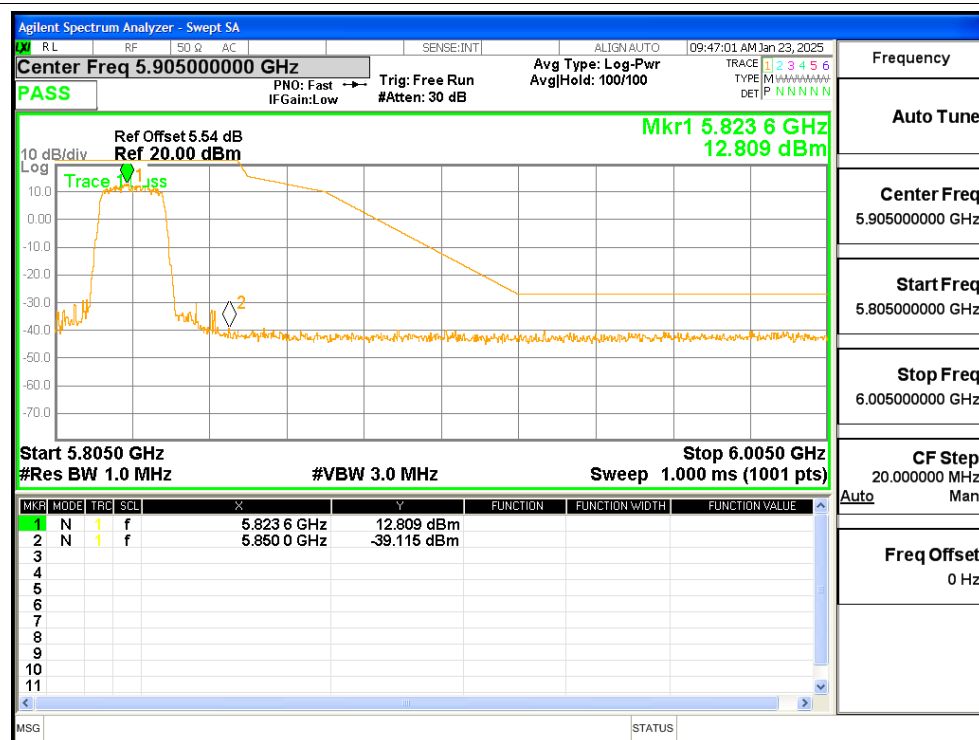
Note: the Band edge test have been add the antenna gain.

Test Graphs

Band Edge NVNT a 5745MHz Low Ant1

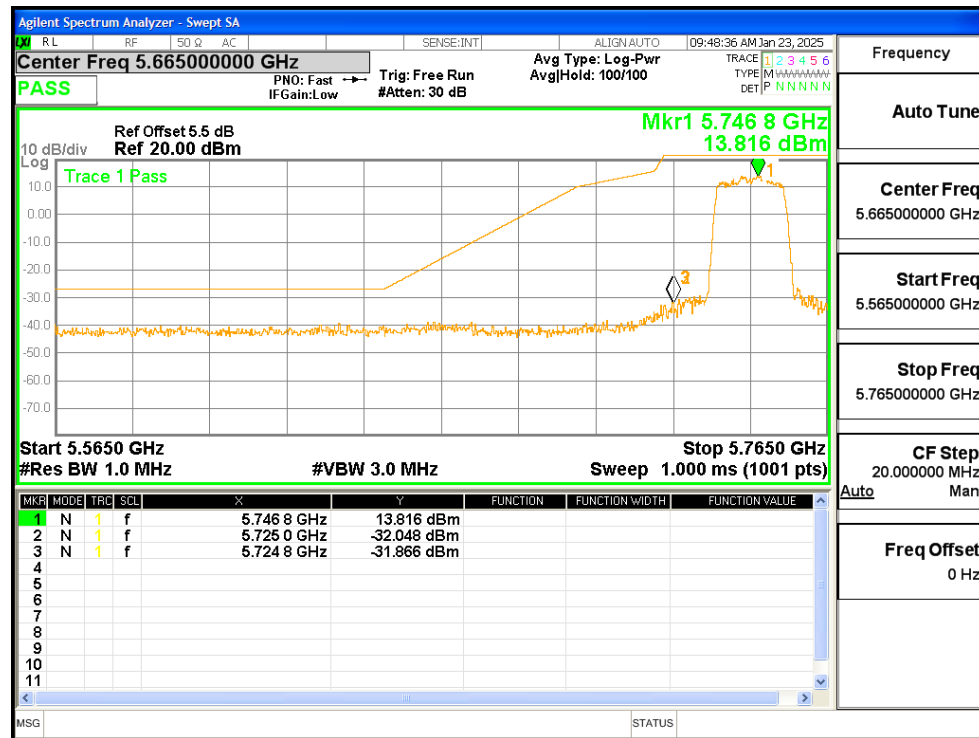


Band Edge NVNT a 5825MHz High Ant1

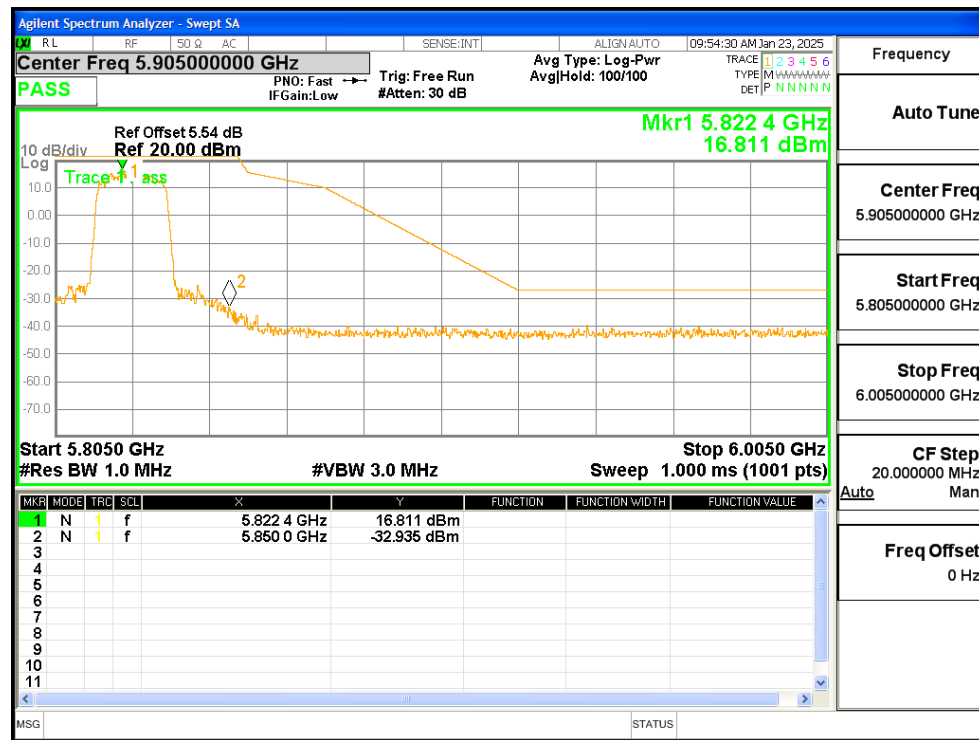


GTSL2025020051F07 5.8G WiFi

Band Edge NVNT n20 5745MHz Low Ant1

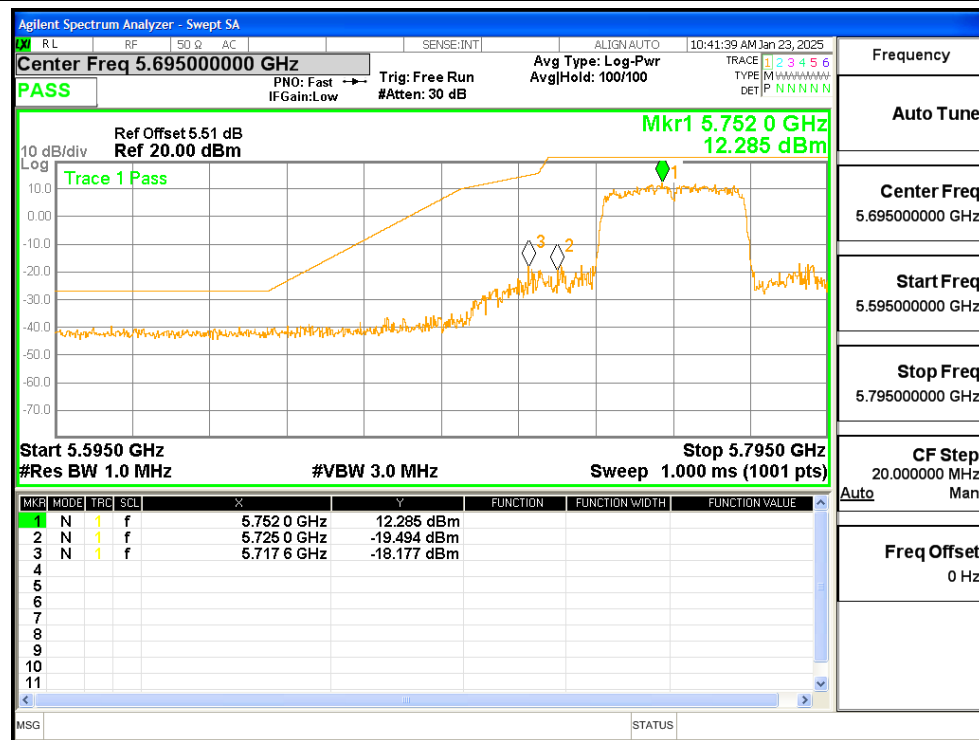


Band Edge NVNT n20 5825MHz High Ant1

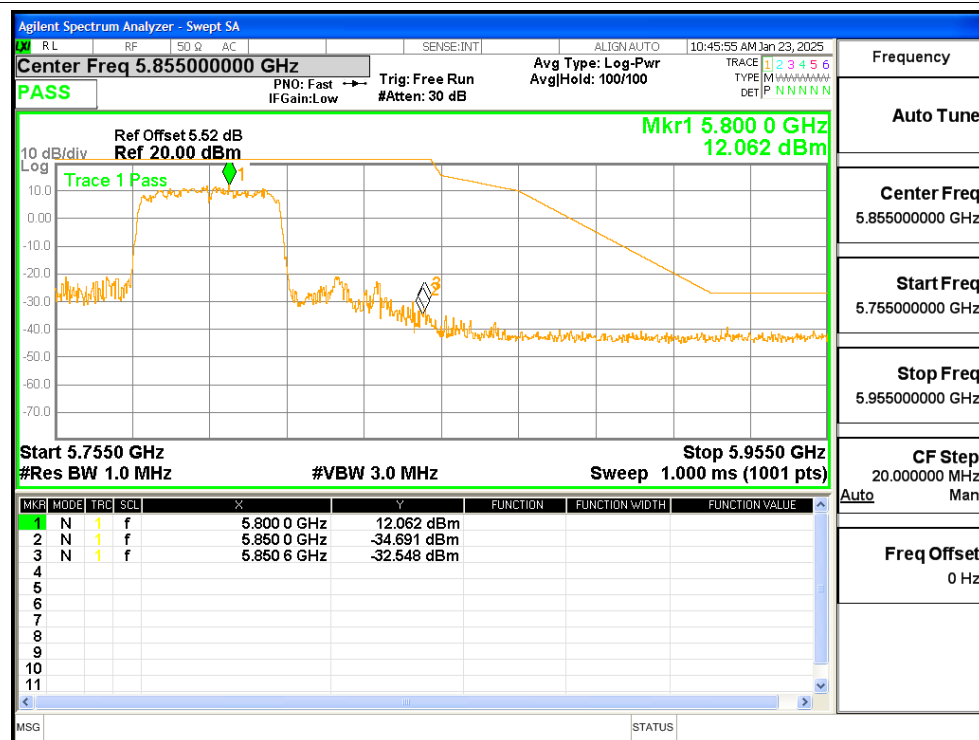


GTSL2025020051F07 5.8G WiFi

Band Edge NVNT n40 5755MHz Low Ant1

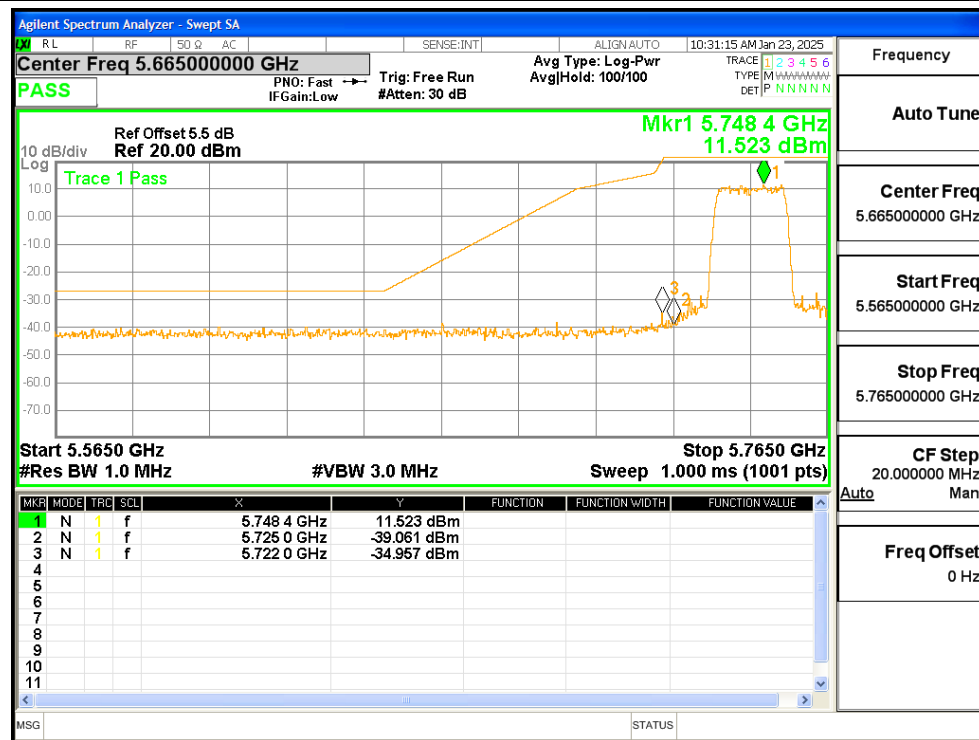


Band Edge NVNT n40 5795MHz High Ant1

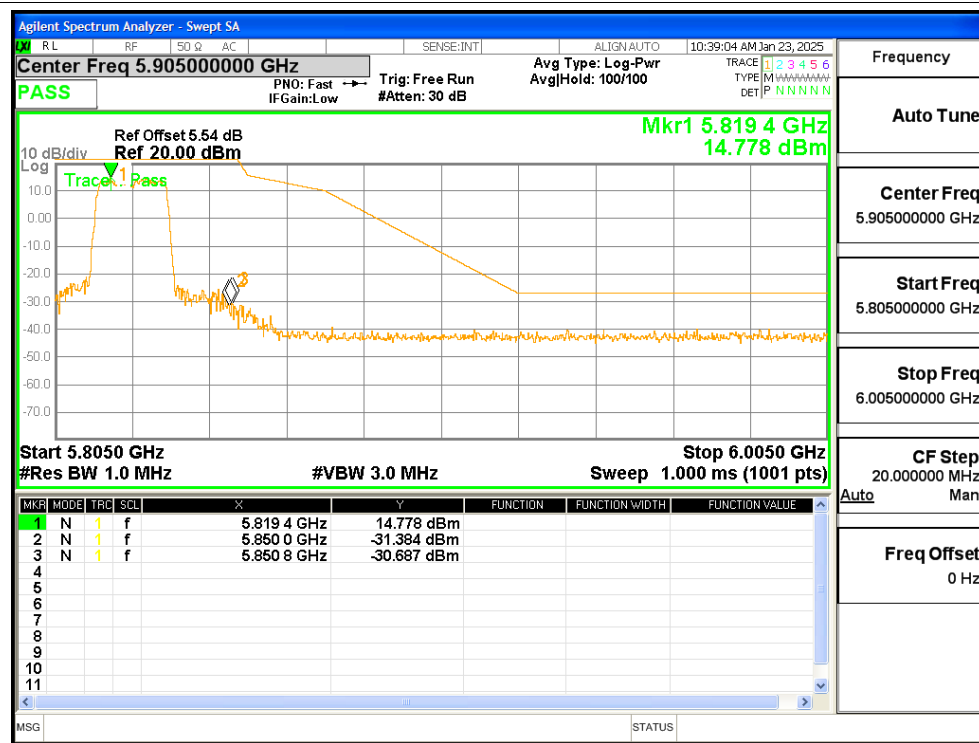


GTSL2025020051F07 5.8G WiFi

Band Edge NVNT ac20 5745MHz Low Ant1

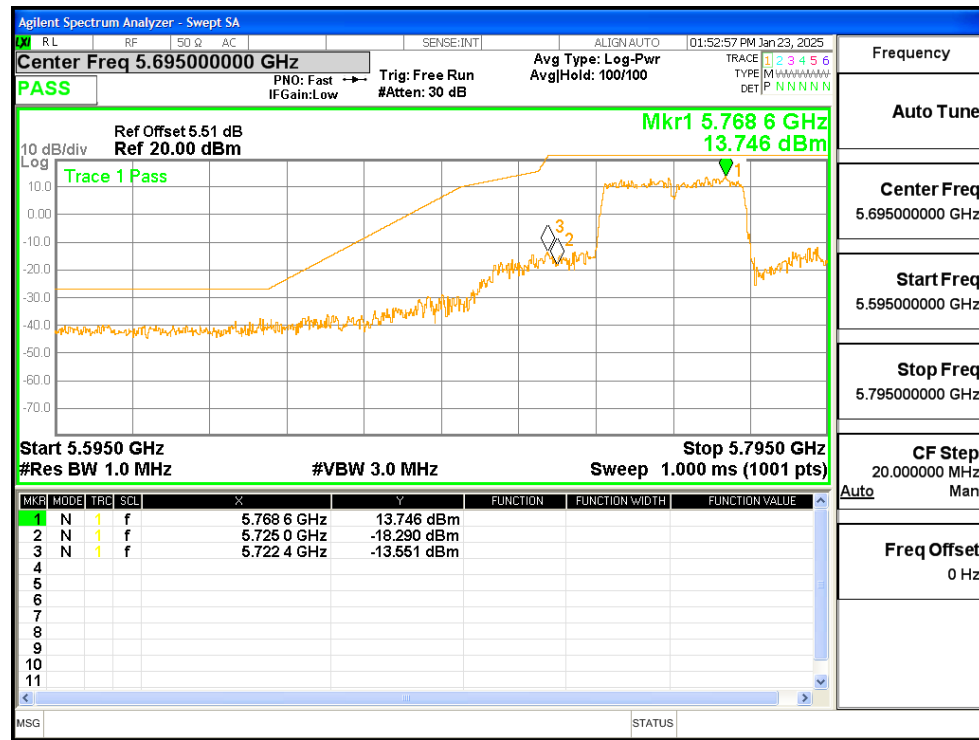


Band Edge NVNT ac20 5825MHz High Ant1

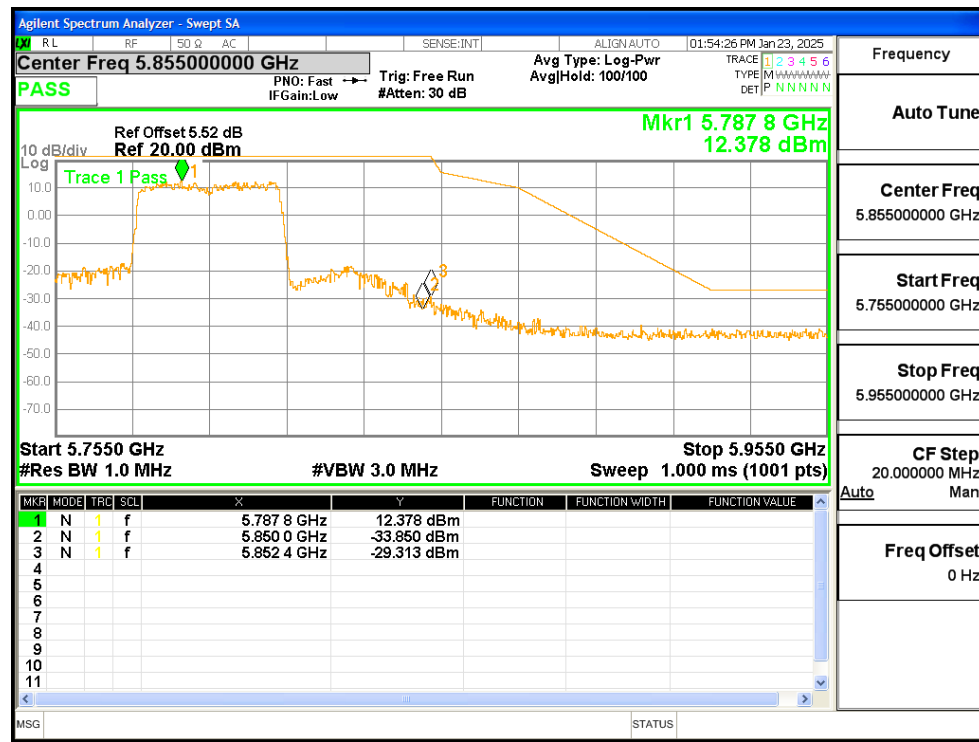


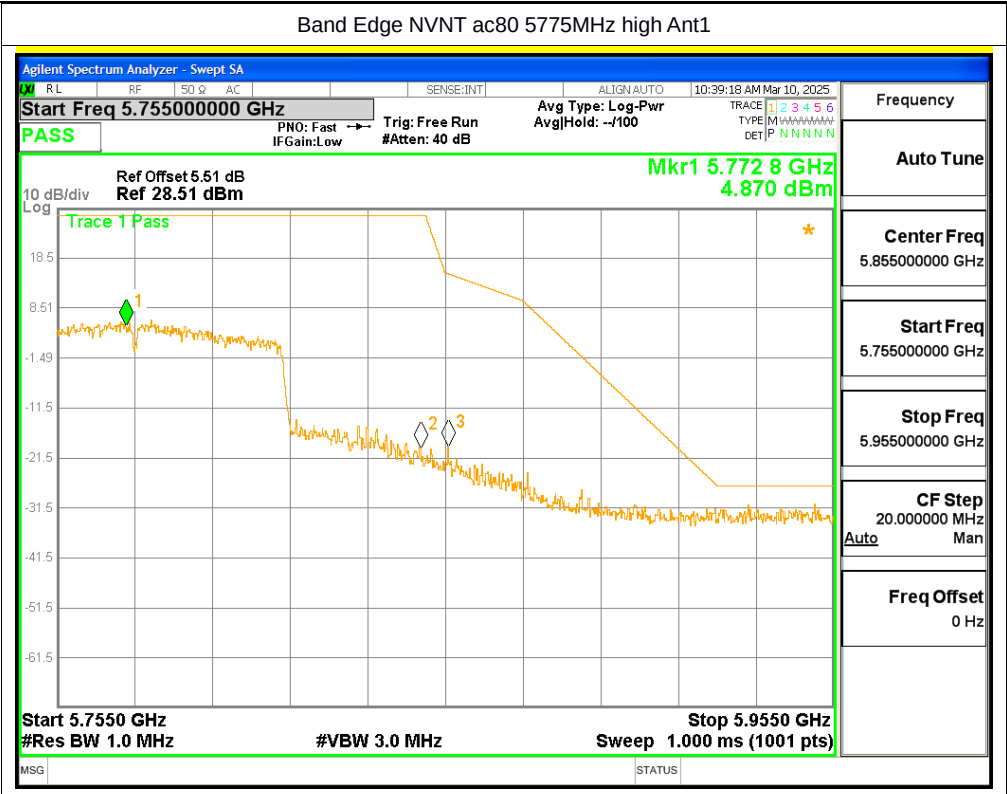
GTSL2025020051F07 5.8G WiFi

Band Edge NVNT ac40 5755MHz Low Ant1



Band Edge NVNT ac40 5795MHz High Ant1



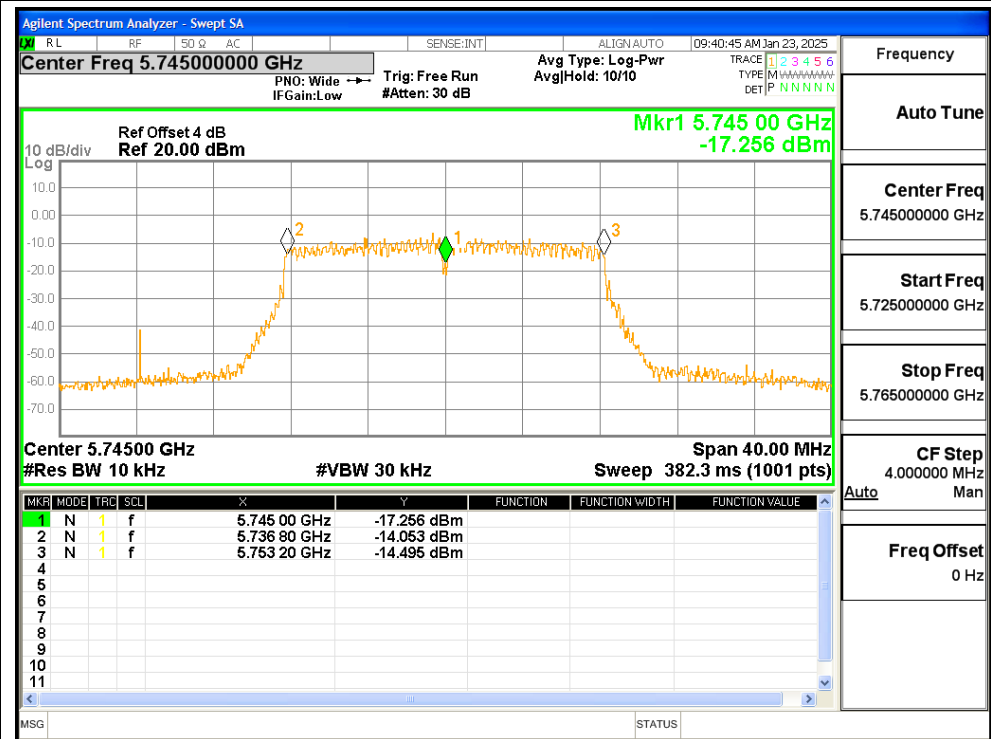


Frequency Stability

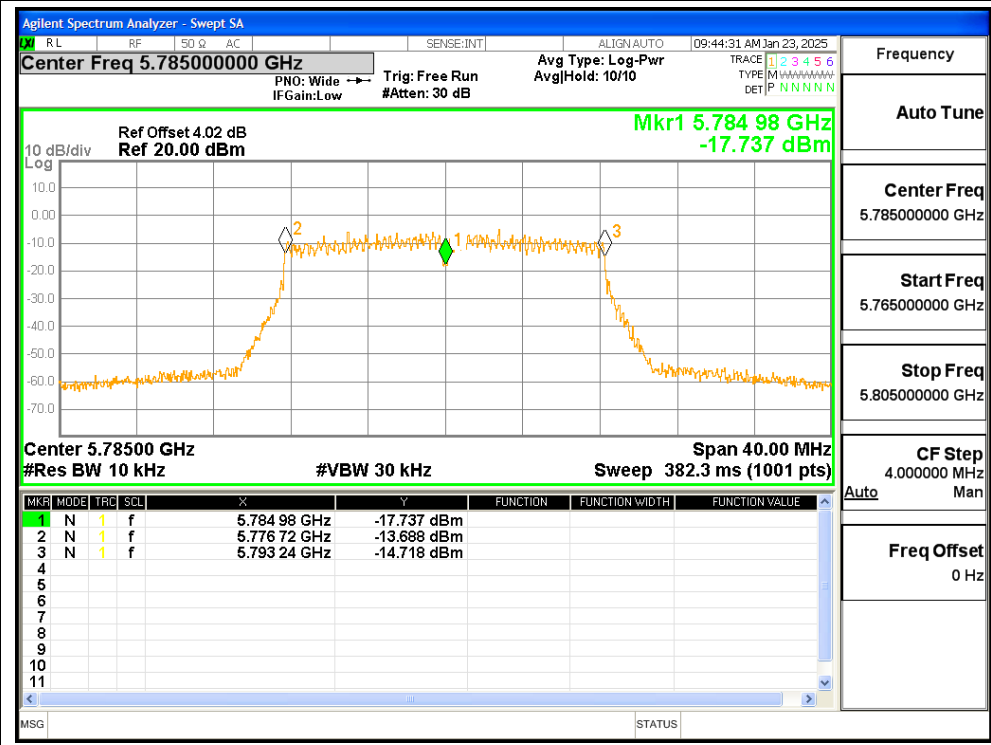
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5745	Ant1	5745	0	0	25	Pass
		5785		5784.98	-20000	-3.46	25	Pass
		5825		5825	0	0	25	Pass
	n20	5745		5744.96	-40000	-6.96	25	Pass
		5785		5785	0	0	25	Pass
		5825		5824.98	-20000	-3.43	25	Pass
	n40	5755		5755	0	0	25	Pass
		5795		5794.96	-40000	-6.9	25	Pass
	ac20	5745		5744.98	-20000	-3.48	25	Pass
		5785		5784.96	-40000	-6.91	25	Pass
		5825		5824.98	-20000	-3.43	25	Pass
	ac40	5755		5755	0	0	25	Pass
		5795		5795	0	0	25	Pass
	ac80	5775		5775	0	0	25	Pass

Test Graphs

Freq. Stability NVNT a 5745MHz Ant1

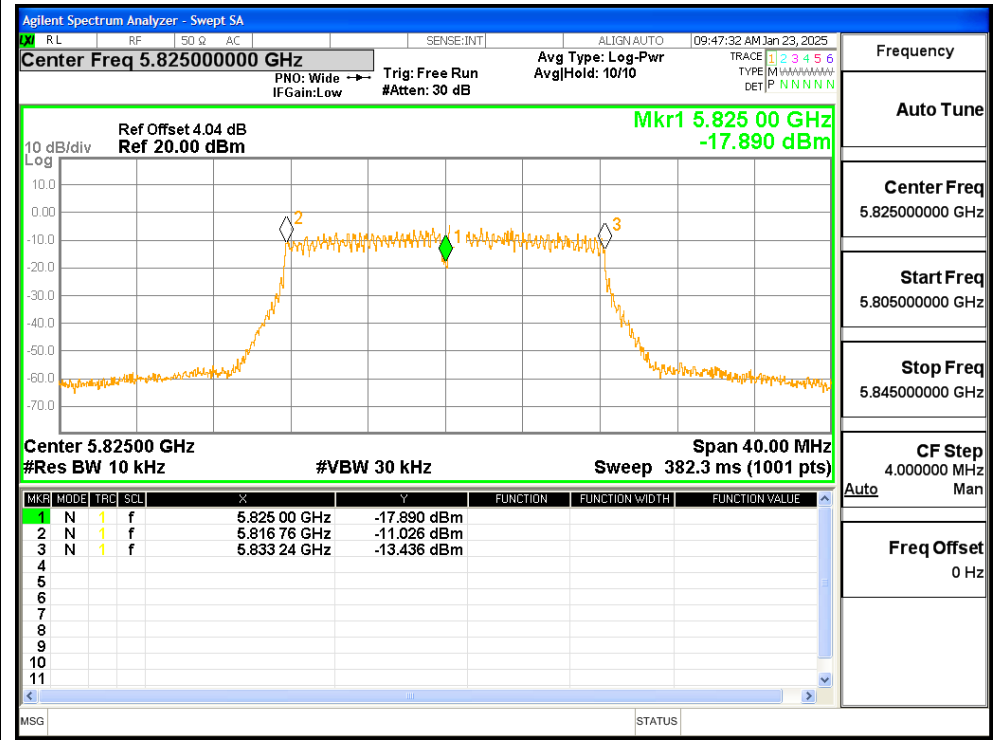


Freq. Stability NVNT a 5785MHz Ant1

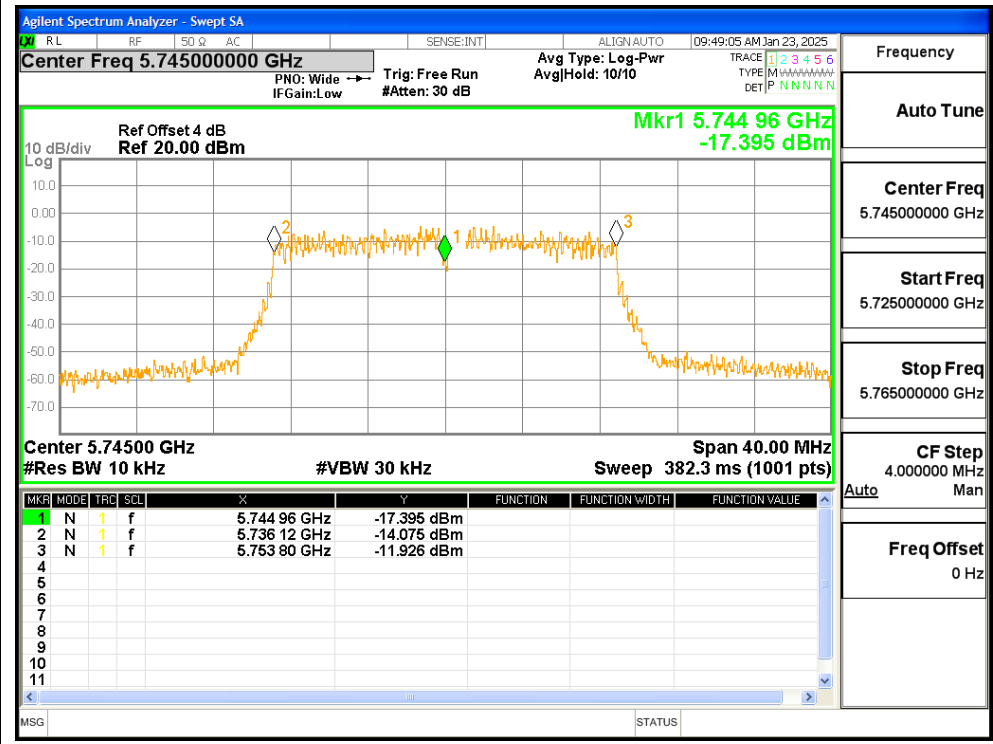


GTSL2025020051F07 5.8G WiFi

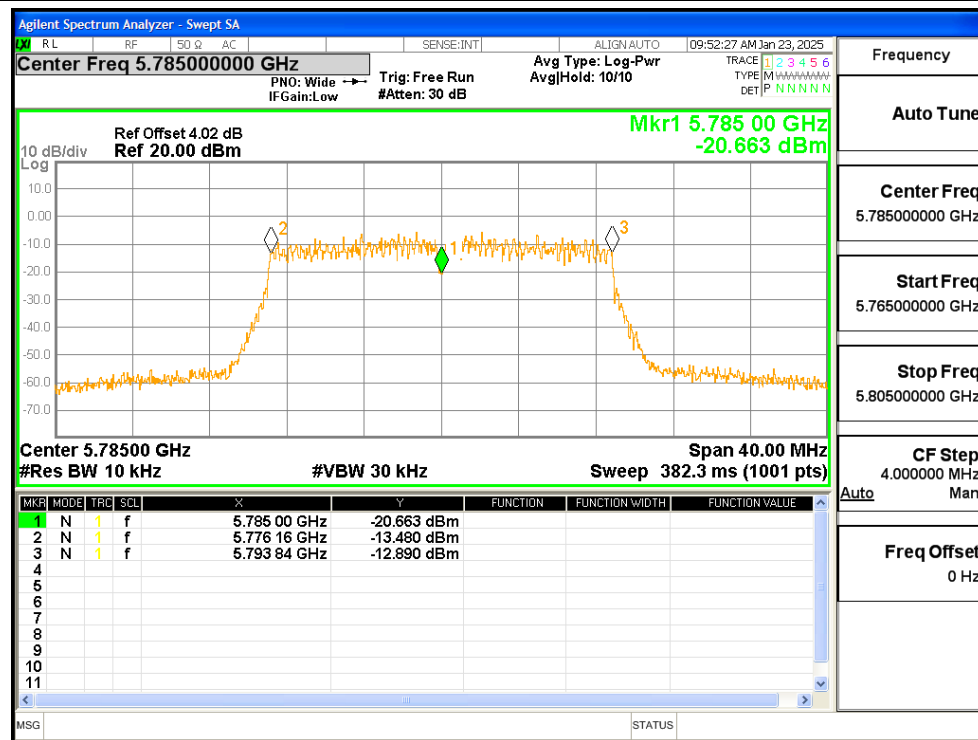
Freq. Stability NVNT a 5825MHz Ant1



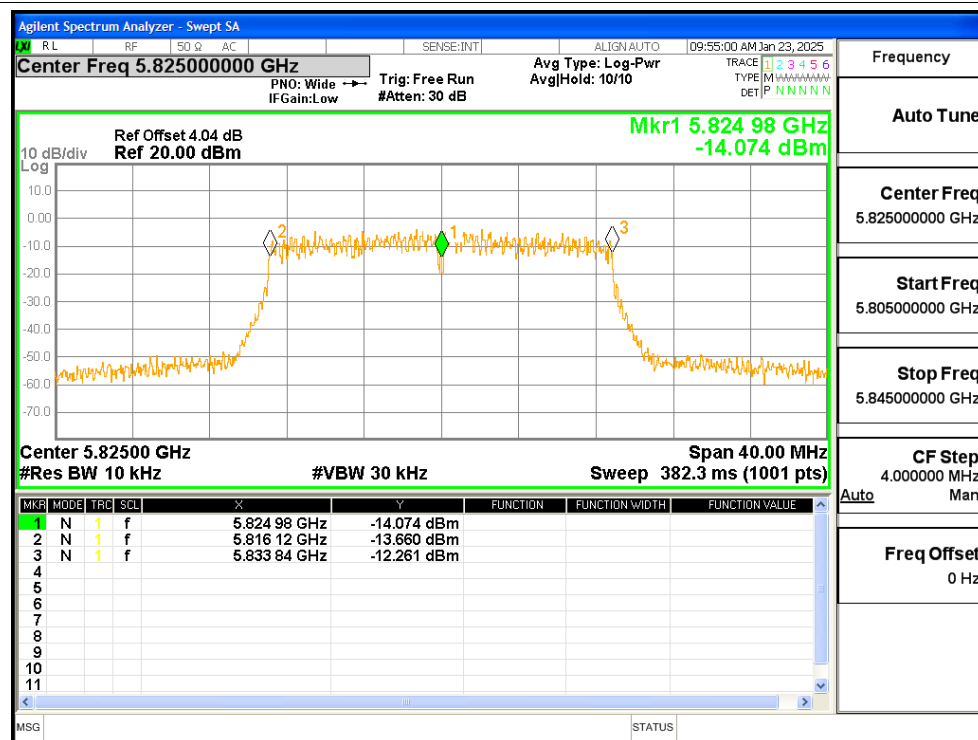
Freq. Stability NVNT n20 5745MHz Ant1



Freq. Stability NVNT n20 5785MHz Ant1

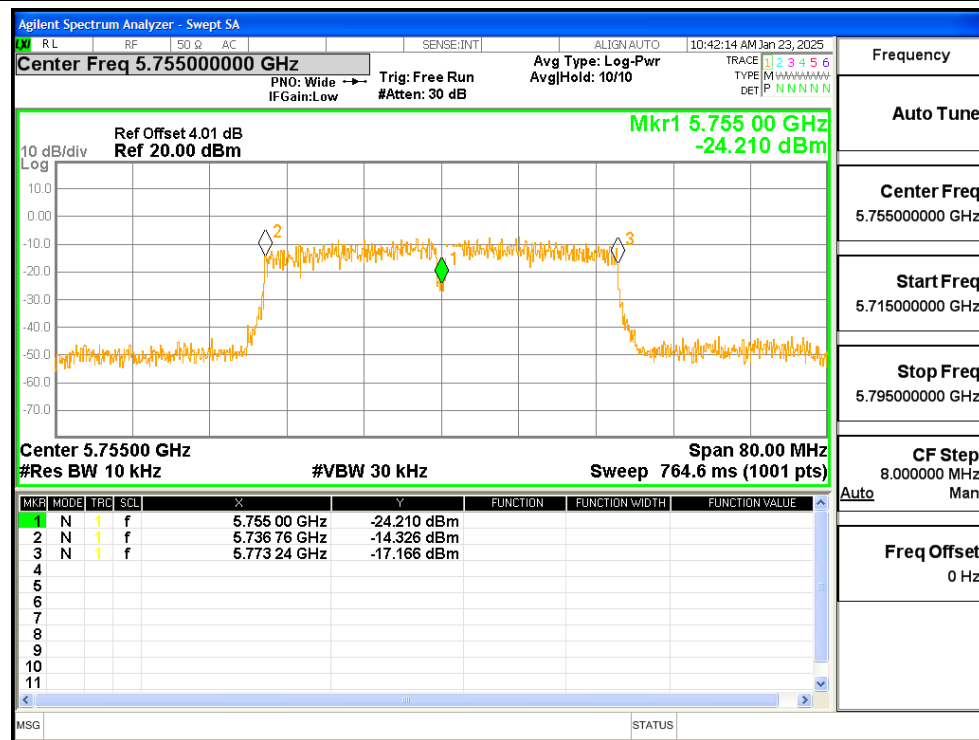


Freq. Stability NVNT n20 5825MHz Ant1

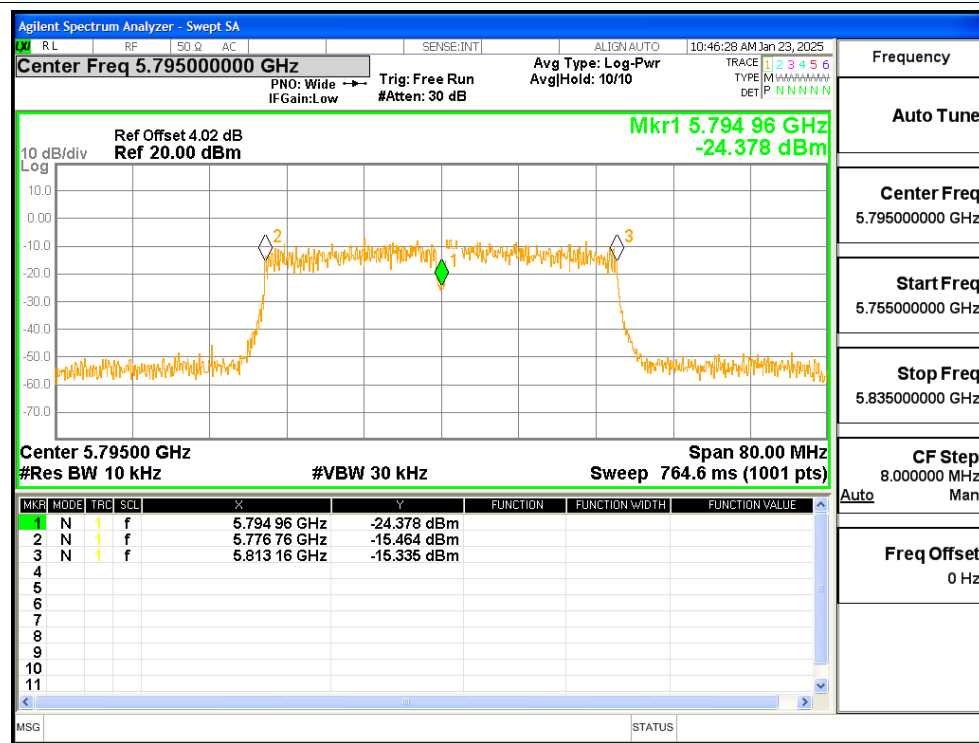


GTSL2025020051F07 5.8G WiFi

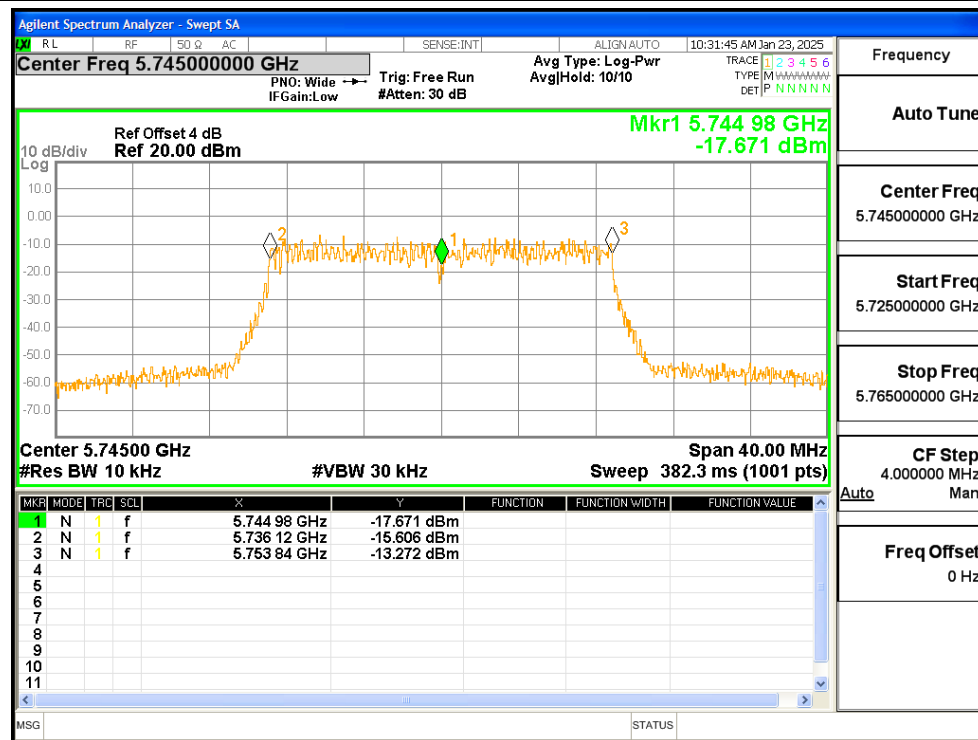
Freq. Stability NVNT n40 5755MHz Ant1



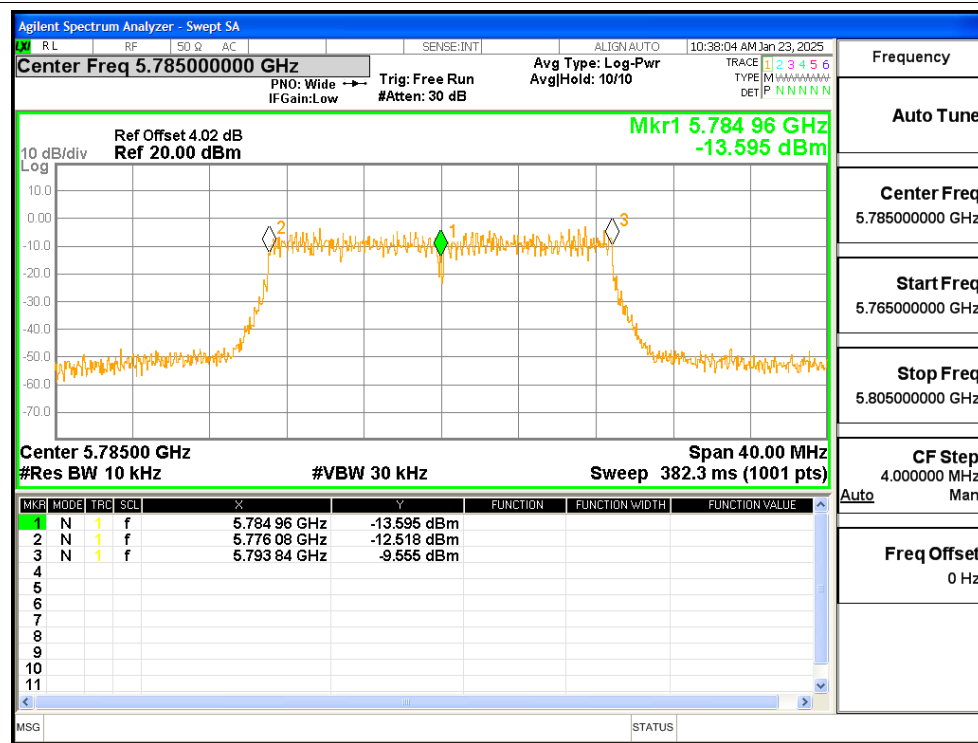
Freq. Stability NVNT n40 5795MHz Ant1



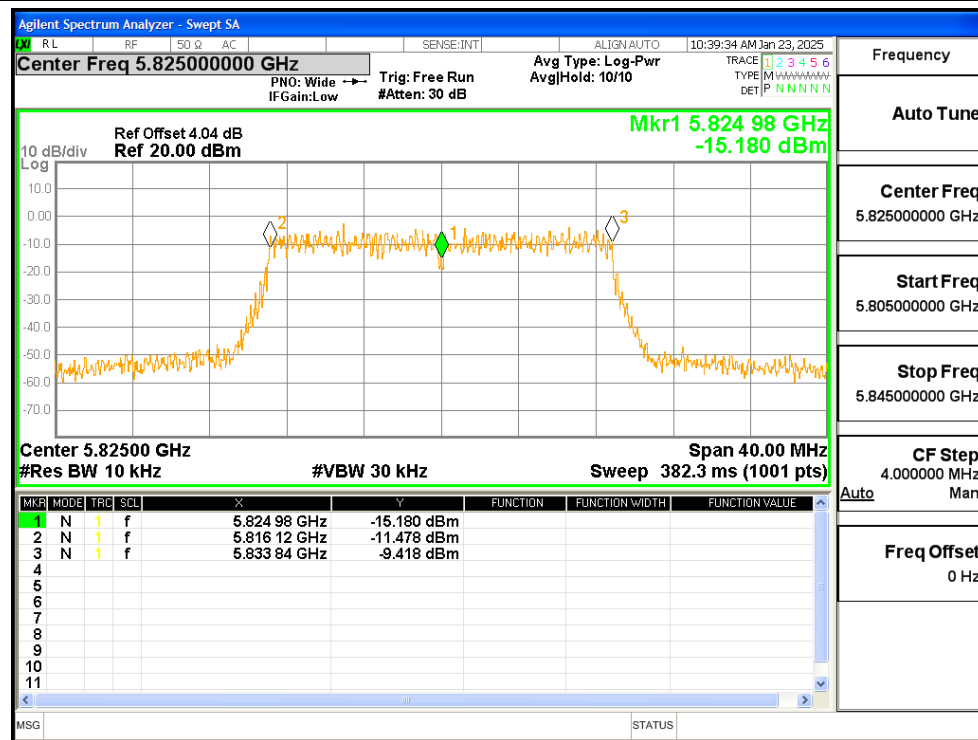
Freq. Stability NVNT ac20 5745MHz Ant1



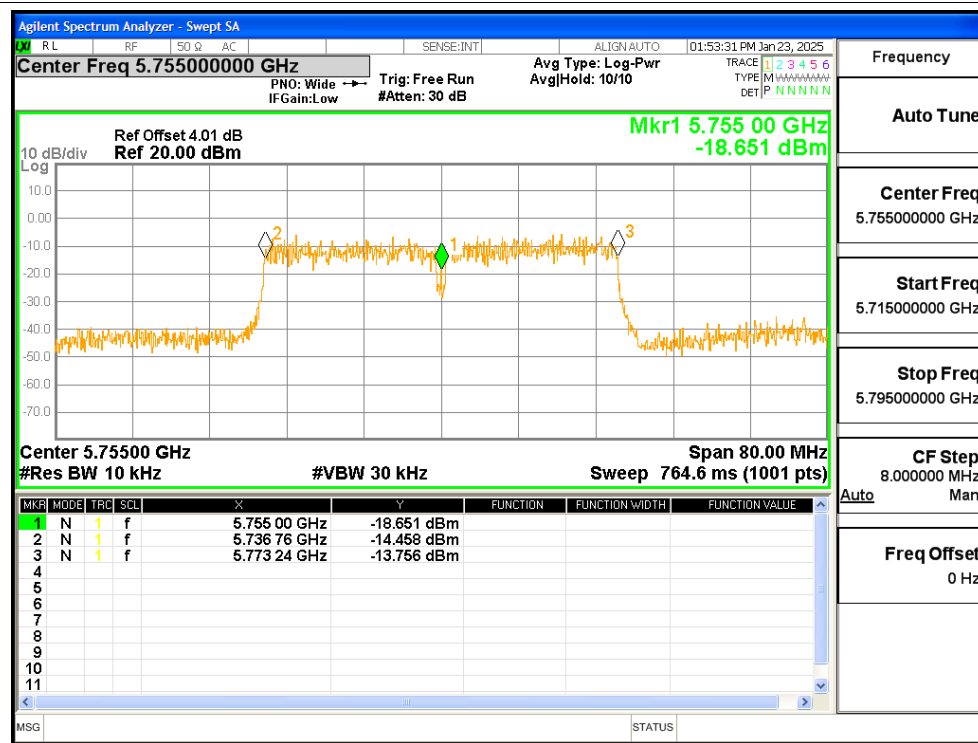
Freq. Stability NVNT ac20 5785MHz Ant1



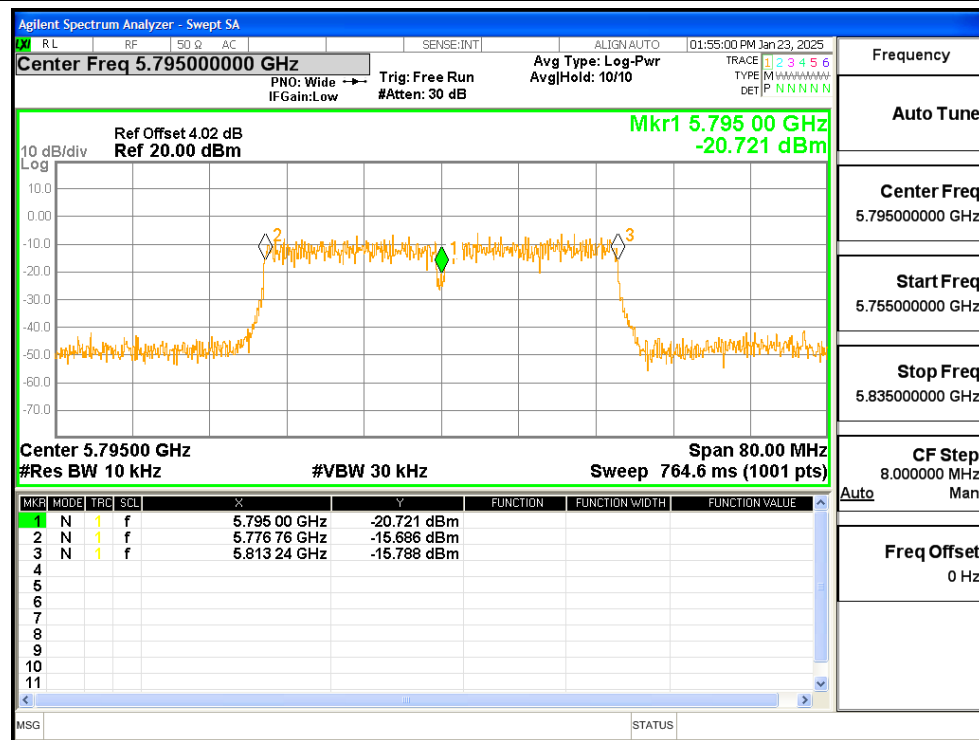
Freq. Stability NVNT ac20 5825MHz Ant1



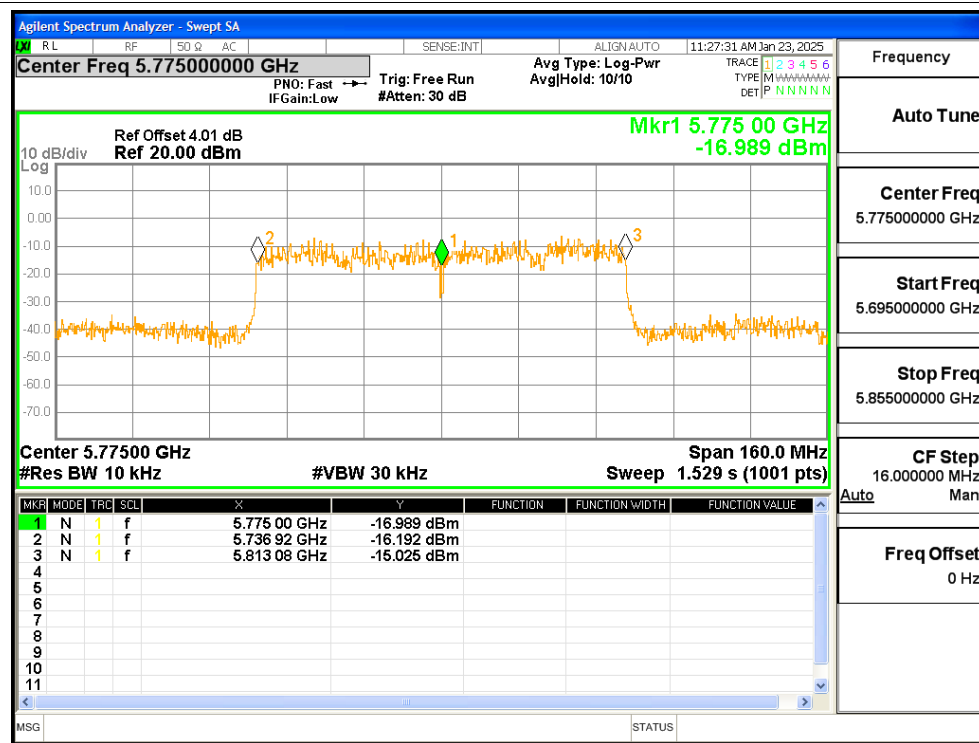
Freq. Stability NVNT ac40 5755MHz Ant1



Freq. Stability NVNT ac40 5795MHz Ant1



Freq. Stability NVNT ac80 5775MHz Ant1

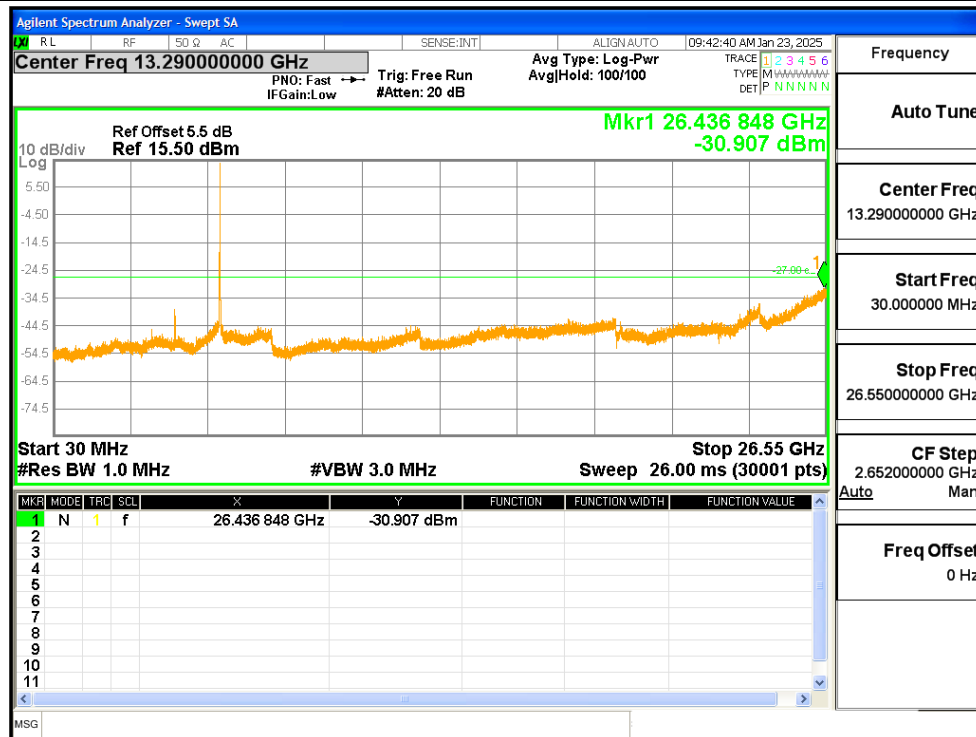


Conducted RF Spurious Emission

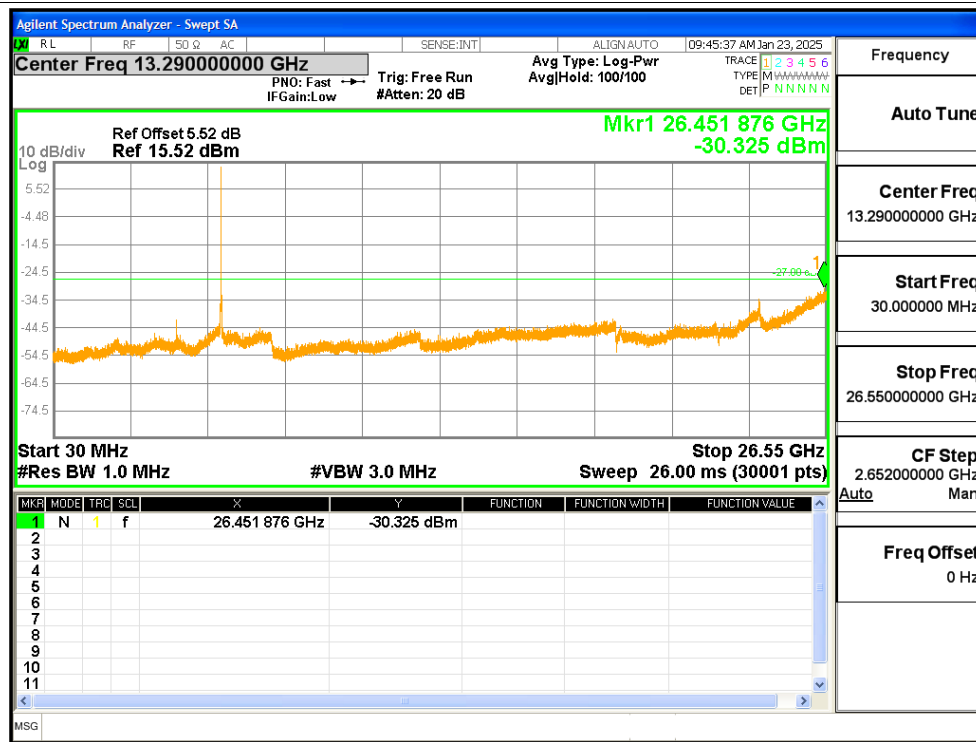
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	-30.9	-27	Pass
		5785		-30.32	-27	Pass
		5825		-30.24	-27	Pass
	n20	5745		-29.71	-27	Pass
		5785		-30.33	-27	Pass
		5825		-30.67	-27	Pass
	n40	5755		-29.73	-27	Pass
		5795		-30.55	-27	Pass
	ac20	5745		-30.4	-27	Pass
		5785		-30.32	-27	Pass
		5825		-29.72	-27	Pass
	ac40	5755		-30.35	-27	Pass
		5795		-30.98	-27	Pass
	ac80	5775		-30.64	-27	Pass

Test Graphs

Tx. Spurious NVNT a 5745MHz Ant1 Emission



Tx. Spurious NVNT a 5785MHz Ant1 Emission



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE INT ALIGN AUTO 09:47:22 AM Jan 23, 2025

Center Freq 13.29000000 GHz

PNO: Fast IF Gain: Low Trig: Free Run #Atten: 20 dB Avg Type: Log-Pwr Avg/Hold: 100/100 TRACE TYPE M DET P NNNN

Mkr	Freq	Avg Power
Mkrl	26.549 GHz	-30.243 dBm

Start 30 MHz Res BW 1.0 MHz Sweep 26.00 ms (30001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f	f	26.549 116 GHz	-30.243 dBm			

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 09:50:25 AM Jan 23, 2025

Center Freq 13.290000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 20 dB Avg Type: Log-Pwr Avg/Hold: 100/100 TRACE 1 2 3 4 5 6 TYPE M M M M M M M M DET P N N N N N N

Ref Offset 5.5 dB Ref 15.50 dBm Mkr1 26.481 932 GHz -29.718 dBm

10 dB/div Log

Start 30 MHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 26.00 ms (30001 pts) Stop 26.55 GHz

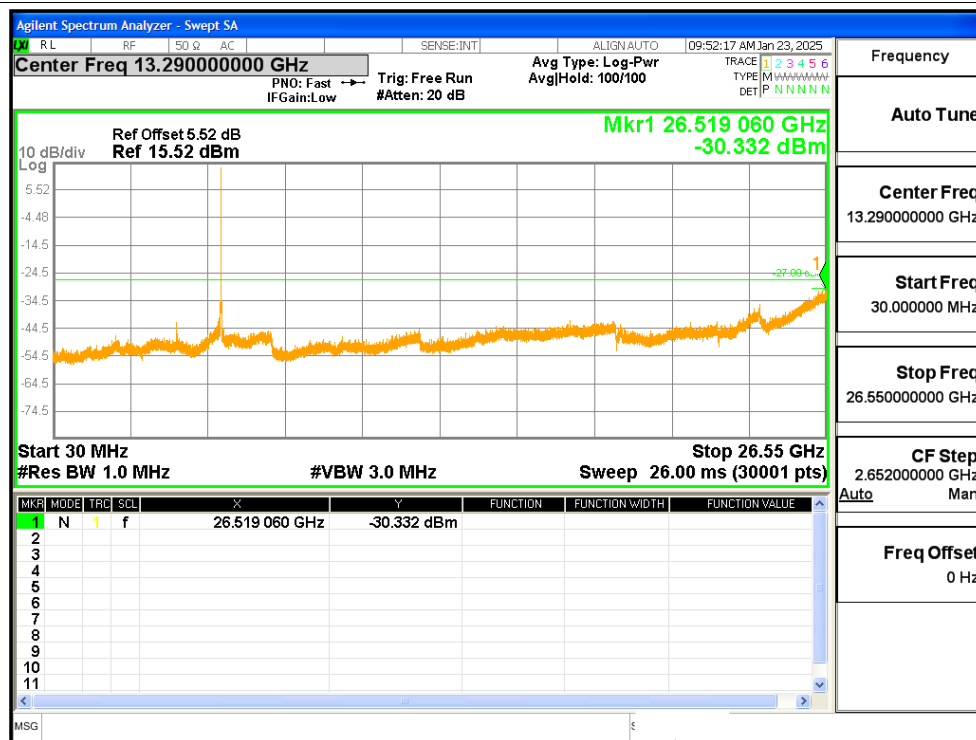
26.481 932 GHz -29.718 dBm

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		26.481 932 GHz	-29.718 dBm			
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								

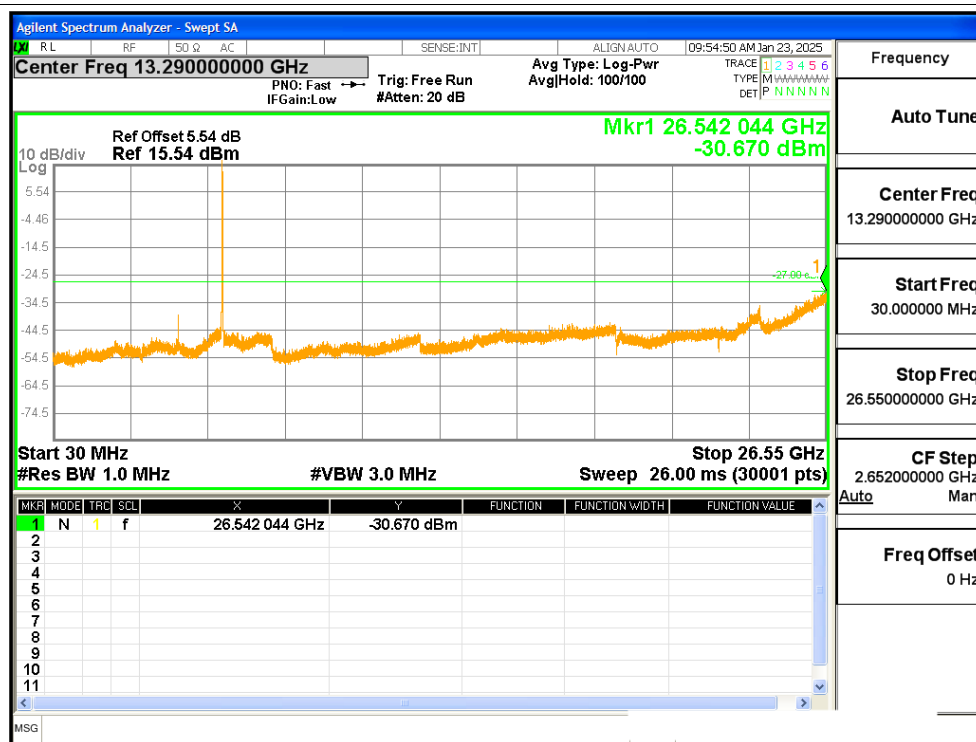
Auto

Freq Offset 0 Hz

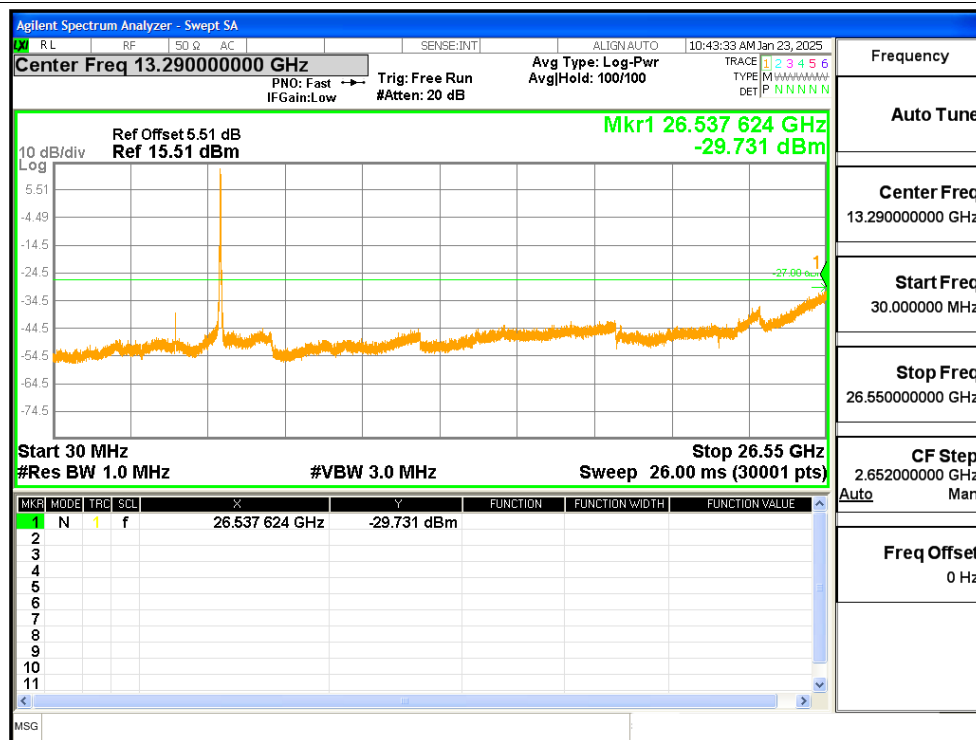
Tx. Spurious NVNT n20 5785MHz Ant1 Emission



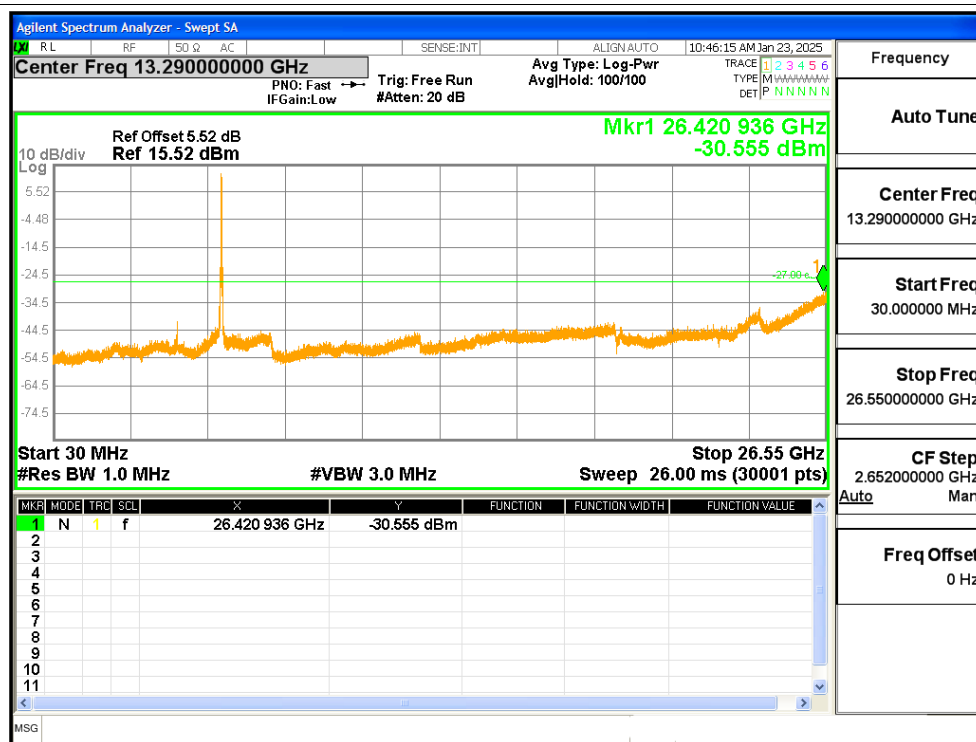
Tx. Spurious NVNT n20 5825MHz Ant1 Emission



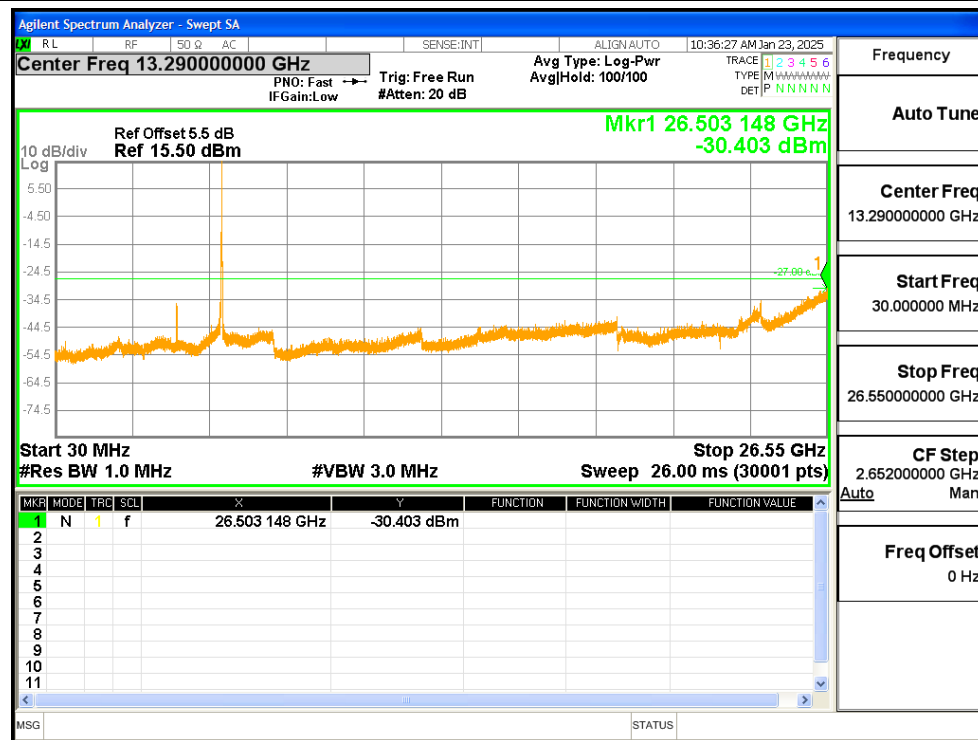
Tx. Spurious NVNT n40 5755MHz Ant1 Emission



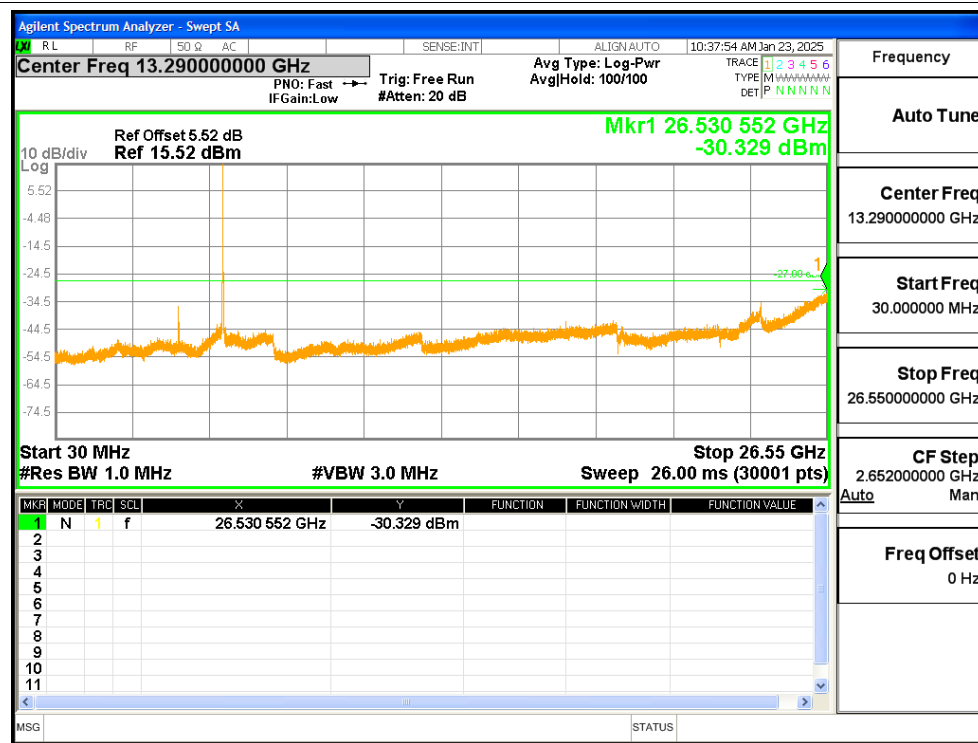
Tx. Spurious NVNT n40 5795MHz Ant1 Emission



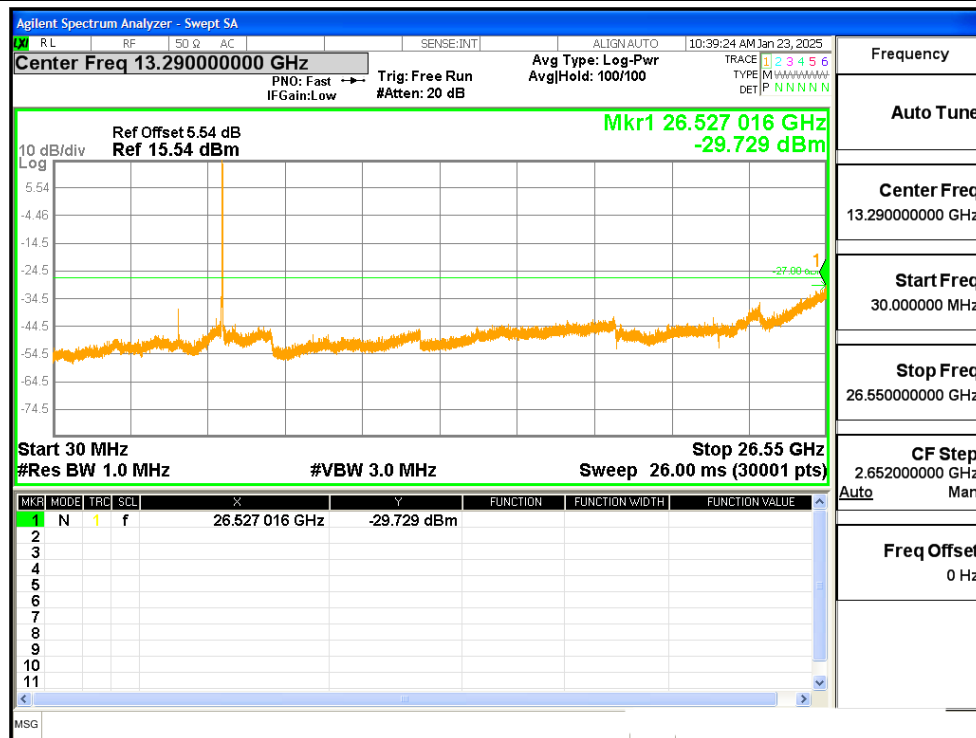
Tx. Spurious NVNT ac20 5745MHz Ant1 Emission



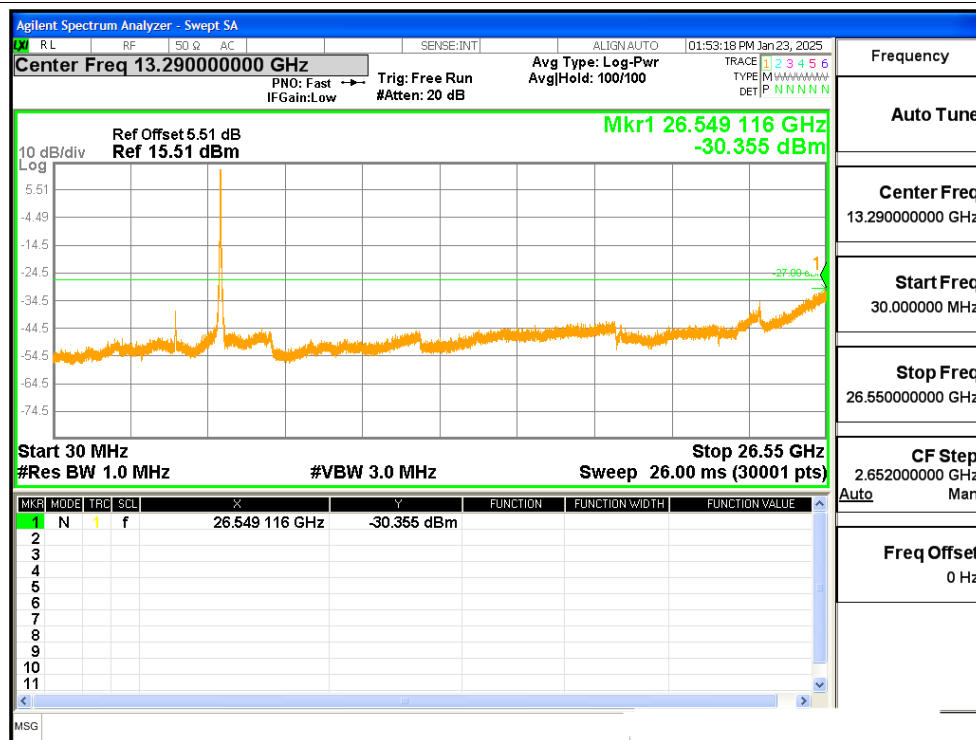
Tx. Spurious NVNT ac20 5785MHz Ant1 Emission



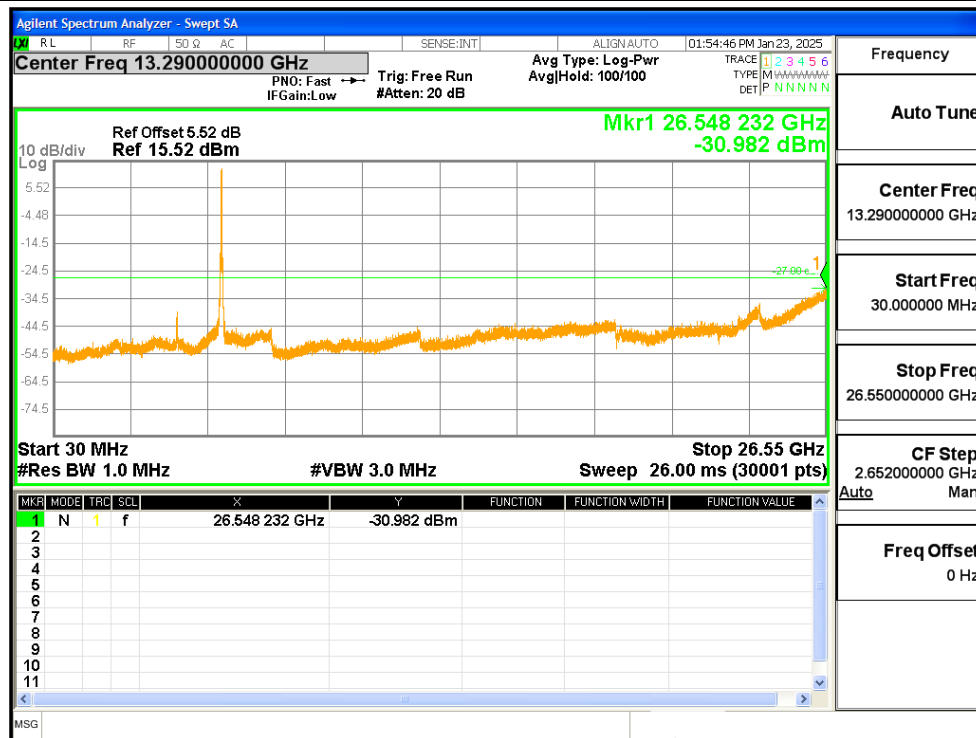
Tx. Spurious NVNT ac20 5825MHz Ant1 Emission



Tx. Spurious NVNT ac40 5755MHz Ant1 Emission



Tx. Spurious NVNT ac40 5795MHz Ant1 Emission



Tx. Spurious NVNT ac80 5775MHz Ant1 Emission

